A counterfactual-based evaluation framework for machine learning models that use gene expression data

by

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Abstract

The evaluation metrics commonly used for machine learning models often fail to adequately reveal the inner workings of the models, which is particularly necessarily in critical fields like healthcare. Explainable AI techniques, such as counterfactual explanations, offer a way to uncover a model's internal process. However, these explanations are in literature often used for recourse actions rather than for testing a model's internal mechanism. In this paper, we propose a proof of concept for a framework which uses counterfactual explanation to evaluate the inner workings of biological machine learning models that use gene expression data. Our approach involves comparing the change of gene expression observed in the original data to the change of gene expression observed between the factual and counterfactual data. The change of gene expression is quantified using the log fold change. Additionally, we expand the definition of faithfulness and introduce a new metric that measures how faithful the generated counterfactual explanations represent the model. This metric should ensure that the explanations accurately reflect the model's true internal process.

1. Introduction

Machine learning models are increasingly used in various domains, including critical domains like healthcare, in these domains the performance of the model is particularly crucial. Currently machine learning models are generally evaluated based on their prediction performance using metrics such as accuracy, sensitivity and F1 scores. While these metrics provide a global assessment of the discriminative performance, relying on them in isolation can lead to incorrect conclusions. For instance, accuracy can be misleading when dealing with imbalanced classes. And although precision and recall can deal with imbalanced classes, they still do not offer a complete picture as they do not account for false negatives and false positives respectively. Moreover these metrics focus on assessing the discriminative performance of the model, they do not evaluate the logic or reasoning of the model.

Explainable AI (XAI) techniques offer a potential solution as they can reveal the inner workings and reasoning of the machine learning models. Commonly used XAI techniques includes Shapley Additive Explanations (SHAP)[1] and Local Interpretable Model-agnostic Explanations (LIME) [2]. SHAP provides feature importance scores, while LIME builds a more interpretable model to approximate the behaviour of the black-box model. However, these methods have limitations. For example, LIME's surrogate model may not accurately reflect the original model, and the feature importance plots from both SHAP and LIME are only useful when the features themselves are explanatory.

Counterfactual explanations are also part of the XAI domain. They address the question of what needs to change to alter the outcome of the model. This is done by randomly applying small perturbations to the input until the classification changes to the desired result. The resulting counterfactual explanations thus corresponds to a sample. Due to this approach, counterfactual explanations avoid the above limitations of LIME and SHAP, making them a promising tool for evaluating machine learning models. However, there is currently limited research on their application for model evaluation.

When using counterfactual explanations or any other XAI techniques as a testing framework, it is crucial that these techniques remain faithful to the machine learning model. How to measure faithfulness is widely debated, however there is currently no consensus on a specific measurement. Furthermore, many commonly used faithfulness metrics are not compatible with (non-deterministic) counterfactual explanations. This is often because they rely on assumptions that only hold in deterministic settings or use metrics like feature importance scores, which are not applicable to counterfactual explanations.

Mothilal et al. propose a faithfulness metric that circumvents the need for such feature importance scores [3]. They suggest creating a secondary model trained on the generated counterfactual explanations and the original input. The faithfulness of the counterfactual explanations is then evaluated by assessing the secondary model's ability to mimic the behavior of the original model. This is quantified as the accuracy of predicting the output of the original model. This concept is also known as simulatability.

Pruthi et al. propose a similar approach, but they compare the performance between two models: one trained on extra data (i.e., counterfactual explanations) and one that is not [4]. In contrast, Mothalil et al. do not make such a comparison and trains only one model. Pruthi et al. rely on the idea that if the counterfactual explanations are faithful, they should provide insights into the model's behaviour, resulting in a better performance for the model trained on the counterfactual data. They also note that including this extra information is often done using multi-task learning or attention regularization, which are both not feasible with counterfactual explanations. A new method that can evaluate the faithfulness of counterfactual explanations needs to be explored.

In this paper, we redefine the concept of faithfulness and propose a new metric, which is based on simulatibilty, that measure the faithfulness of counterfactual explanations. Additionally, we explore the potential of using counterfactual explanations to evaluate machine learning models. By creating a proof of concept for a evaluation framework. This is done in a biological setting as there is no subjectivity surrounding the data.

2. Background

Counterfactual explanations encode the changes necessary to alter the predicted output of a model. These explanations are extracted from a model by making small perturbations until the classification outcome changes. The original approach, as proposed by Wachter et al., is defined as follows [5]:

$$x' = \arg\min_{x' \in X} \ell(M(x'), y^+) + \lambda h(x') \quad (1)$$

This equation returns the counterfactual, x', that minimizes the sum of two terms: the loss $\ell(M(x'), y^+)$, which measures the difference between the predicted label $M(x')$ and the target label y^+, and the cost function $h(x')$, which quantifies how costly it is to go from the factual to the counterfactual. The parameter λ controls the trade-off, allowing the user to adjust the relative importance of the prediction loss versus the complexity penalty.

Additional penalties can be introduced to focus on desirable properties such as proximity, actionability, plausibility, sparsity, robustness, diversity and causality. Solutions to the resulting equation can be found using gradient descent, which potentially results in multiple explanations for the same factual. While this may not be a concern in scenarios where the goal is to create actions from the counterfactual explanations (recourse), it is important to acknowledge the non-deterministic nature of these outcomes for other applications.

It is possible that the introduced perturbations create situations that violate causal constraints that are defined by the data. As a consequence, the resulting actions may not be feasible, or in other words, plausible. Plausibility is a widely discussed topic in the domain of counterfactual explanations. In this paper the definition proposed by Altmeyer et al. is followed [6]:

> **Definition** (Plausible Counterfactuals): Let $X|y^+ = p(x|y^+)$ denote the true conditional distribution of samples in the target class y^+. Then for x' to be considered a plausible counterfactual, we need: $x' \sim X|y^+$.

This implies that the resulting outcomes should align with distribution of the data.

To ensure the plausibility of the explanations, counterfactual generators like REVISE encode the data within a latent space [7]. This is typically achieved by using Variantional Auto-Encoders (VAEs) or Generative Adversarial Networks (GANs), which generate latent variables based on the data distribution. One advantage of using a low dimensional latent space is its ability to handle high-dimensional data more efficiently. Additionally, Joshi et al. suggest that the latent space can be used to encode confounding variables when using causal models [7], which should improve the plausibility of the counterfactual explanations.

It should be noted that when using counterfactual explanations as a testing framework, these counterfactual explanations should faithfully represent the model. However, there is currently no consensus on what faithful means in this context. Nonetheless, we take the definition of faithful as provided by Altmeyer et al. [6]:

> **Definition** (Faithful Counterfactuals): Let $X_\theta|y^+ = p_\theta(x|y^+)$ denote the conditional distribution of x in the target class y^+, where θ denotes the parameters of model M_θ. Then for x' to be considered a faithful counterfactual, we need: $x' \sim X_\theta|y^+$.

This definition implies that the counterfactual explanations should align with the model's learned representation of the data. While faithfulness is often conflated with fidelity, it is important to note that they are not necessarily synonymous. Altmeyer et al. showed that the degree of faithfulness in full-fidelity metrics can still differ [8]. However, we believe that the concept of faithfulness is highly dependent on the specific question that is being asked, which is something the definition by Altmeyer et al. does not fully reflect. For instance, when asking 'which features need to change for the outcome to change', all valid counterfactuals are faithful, as they still reflect the model's logic. However, if the question is 'what does the model think a sample from a specific class looks like', a more faithful answer would be a sample drawn from the estimated conditional distribution, rather than one near the decision boundary.

Additionally, the definition given by Altmeyer et al. is only given for counterfactual explanations. However, properties like parameters and feature importance scores can also be faithful to a model. We would like to extend the given definition by defining faithfulness as:

> **Definition** (Faithfulness): Let $P(M)$ be the properties of model M. We define a new model M' which has the set of properties $P(M')$ where $P(M) \subseteq P(M')$. $P(M)$ is then faithful to M if $M' \approx M$

We let $X_\theta|y^+$ fall under the properties of M, meaning that if we combine the definition given by Altmeyer et al. with our definition we come to the following:

> **Definition** (Faithful Counterfactuals): Let $X_\theta|y^+ = p_\theta(x|y^+)$ denote the conditional distribution of x in the target class y^+, where θ denotes the parameters of model M_θ. Given the dataset D, take a counterfactual counterfactual x' then $x' \subseteq D$ where $x' \sim X_\theta|y^+$. For the counterfactual to be deemed faithful, the model M' trained on dataset D, must satisfy $M'(D) \approx M$

This definition implies that the counterfactual should align with the model's learned representation of the data. One might question whether the use of a latent space still follows the given definition of faithfulness. Since the model was not trained on the newly generated latent space, it may not accurately reflect the model's learned understanding of the data, instead, it would align with what the generator has learned about the data.

Researchers often focus on the plausibility of the counterfactual explanations, especially when working with highly causal datasets such as biological data. This is because violating these causal constrains can result in unrealistic or impossible outcomes. In biological datasets, for example, certain combinations of gene expression levels may be incompatible, as they could lead to cell death. However, strictly adhering to plausibility constraints may overlook the model's understanding of the data, resulting in less faithful explanations. Therefore, when looking into the reasoning of a model, it is more beneficial to prioritize faithfulness over plausibility when generating counterfactual explanations.

3. Measuring Faithfulness

As noted before, faithfulness is a widely discussed topic within the XAI domain. Despite the widespread acknowledgement of its importance, there is currently no standardized metric for measuring faithfulness. To approach this issue, we begin by exploring the three underlying assumptions introduced by Javovi et al [9].

The first assumption implies that two models yield the same prediction, if and only if they use the same reasoning, otherwise referenced to as consistency. Consequently, an explanation is deemed unfaithful if it results in different explanations of models that make the same decision.

The second assumption suggests that when presented with similar inputs, a model should reach a similar outcome if and only if its reasoning is also similar. Meaning that if varying interpretations are given for similar inputs and outputs, the interpretations are deemed unfaithful. Hence, the system should be robust. The robustness of a system can be tested by introducing a constant shift to the input space and evaluating whether the explanation significantly changes while the output remains unchanged.

The final assumption states that certain parts of the input are more important to the model's reasoning than others. Moreover, Jacovi et al. claim that the contributions of different parts of the input are independent from each other [9]. Meaning that under certain circumstances, heat-map interpretations can be faithful. This assumption can be used to test the models faithfulness by erasing the most relevant parts, as indicated by a heatmap. If the model is faithful, its decision should change after removing these important features. Conversely, when the least relevant parts are erased, the model's decision is expected to remain unchanged.

It is important to note that these assumptions may not hold when dealing with non-deterministic explanations. However, one could argue that even in the case of non-deterministic explanations, the explanations could still be considered faithful to the model.

Commonly used metrics

Commonly used metrics for assessing faithfulness, based on the previously mentioned assumptions, are removal-based metrics. These metrics evaluate the change in a model's outputs after removing important features. Chan et al. noted down several widely adopted removal-based faithfulness metrics [10]. For example:

1. **Decision flip - most Informative Token (DFMIT)** [11]: This metric considers an explanation to be faithful if and only if the prediction label changes when the most important feature is removed.
2. **Decision Flip - Fraction of Tokens (DFFOT)** [12]: This metric measures faithfulness by determining the minimum fraction of important features or tokens that must be removed to alter the model's decision.
3. **Comprehensiveness (COMP)** [13]: This metric assesses faithfulness by observing the

change in output probability for the original predicted class after removing important features or tokens.

4. **Sufficiency (SUFF)** [13]: This metric evaluates faithfulness by only keeping the important features or tokens and measuring the change in output probability compared to the original predicted class.
5. **Correlation between Importance and Output probability (CORR)** [14]: This metric assumes that the explanation is faithful if there is a positive correlation between the importance of a feature or token and the predicted probability after removing the most important token.
6. **Monotonicty (MONO)** [14]: This metric calculates the correlation between feature importance and the output probability after adding the feature.

These metrics rely on feature importance scores, which are unavailable to counterfactual explanations. Additionally, Jacovi's assumptions do not hold when working with non-deterministic explanations. Thus, there arises a need for a new metric to evaluate the faithfulness of counterfactual explanations.

A distance based approach

Our definition of faithfulness builds on the definition provided by Altmeyer et al. [6]. In their work, Altmeyer et al. introduced a metric for assessing faithfulness which aligns with their definition. This metric is derived from the implausibility metric proposed by Guidotti et al., which evaluates the distance between a counterfactual and its closest neighbour in the target class [15]. They argue that as this distance decreases, the counterfactuals should become more plausible, assuming that the nearest neighbour itself is plausible. Altmeyer et al. adapted this concept to measure unfaithfulness, suggesting that if the nearest neighbour is faithful, the corresponding counterfactual should likewise be more faithful. It is important to note that the definition of nearest neighbours differs between the calculations of plausibility and faithfulness. For plausibility, the neighbours are the observed samples, whereas for faithfulness, the neighbours are estimated using SGLD. This relationship is captured in the following formula:

$$unfaithf(x', \hat{X}_{\theta,y^+}) = \frac{1}{|\hat{X}_{\theta,y^+}|} \sum_{x \in \hat{X}_{\theta,y^+}} dist(x', x) \tag{2}$$

Here, x' represents the counterfactual, while $\hat{X}_{\theta,y^+}$ denotes a subsample of observed individuals in the target class, generated through $SGLD(\hat{X}_{\theta,y^+})$ which is a Stocastic Gradient Langevin Dynamics method used to approximate the model's learned data distribution.

To mitigate the risk of the nearest neighbour being unfaithful, i.e by being an outlier, they average over $|\hat{X}_{\theta,y^+}|$.

Lastly, they also mention that while their default choice for the distance function is the Euclidean norm, it can be adjusted depending on the specific characteristics of the data.

Simulatibilty

Simulatability is a concept that can also serve as a measurement of faithfulness. The idea is that the counterfactual explanations can be used to simulate the original model [3][4]. This can be accomplished by either using an additional external model, or by utilizing the explanations themselves directly [16].

Deriving the predictions directly from the explanations is the most reliable approach, as it eliminates the potential confounding factor of an external simulator. However, in order to simulate a model using the explanations directly, the explanations itself must function as an executable model capable of making decisions (e.g decision trees or rule lists)[16]. Additionally, Pruthi et al. note that, generating large-scale, high-quality counterfactual examples can be challenging [4]. Manual creation limits the scale of the evaluation, while automatic generation using logical rules may constrain the scope of the task.

When using an external model to simulate the original model, two commonly used methods for incorporating explanations into the dataset are attention regularization and multitask learning. In the latter approach, the learning task for the simulation model involves both the prediction and explanation generation which expects to improve the prediction due to the benefits of multitask learning. However both these methods are not viable with using counterfactual explanations.

When using an external model, or the explanations themselves, the objective is not to obtain a good prediction of the real world, but rather to evaluate the effectiveness of the provided explanations in helping to simulate the behavior of the original model. Pruthi et al. quantify this approach when using an external model as follows, though the same concept can be applied when using the external explanations directly [4]: First, assume we have the original model T, from which the counterfactual explanations are extracted. Let $f_T(x)$ denote the prediction of model T for sample x. Next, let model S represent the simulation model that tries to simulate f_T. We can then quantify how well S can simulate T using the simulation accuracy that is defined as:

$$A(f_S, f_T) = Ex[1\{fS(x) = fT(x)\}] \tag{3}$$

where $A(f_S, f_T)$ represents the expected agreement between the model S and model T. If the explanations are faithful, they would provide insights in model T, thereby increasing the simulation accuracy when used. To test this hypothesis, we create two datasets $\hat{D}$ and $\hat{E}$. $\hat{D}$ consists of n samples and their corresponding predictions from model T, represented as $\{(x_1, \hat{y}_1), \ldots, (x_n, \hat{y}_n)\}$. For $\hat{E}$, it also includes the corresponding explanations, denoted as $\{(x_1, e_1, \hat{y}_1), \ldots, (x_n, e_n, \hat{y}_n)\}$. Subsequently, two models $f_{\hat{E}}$ and $f_{\hat{D}}$ are trained on $\hat{E}$ and $\hat{D}$ respectively. If the explanations are faithful, then $f_{\hat{E}}$ should have a higher simulation accuracy than $f_{\hat{D}}$.

4. Domain and model shift

Altmeyer et al. showed that a domain shift and model shifts can occur when retraining a model with counterfactual explanations [8]. They claim that these shifts arise when the generated counterfactual explanations do not accurately reflect the underlying data-generating process.

4.1. Domain shift

It is not surprising that a domain shift can occur when the counterfactual generation differs from the true data-generating process. This is particularly evident when considering their method of measuring the domain shift. They utilize the Maximum Mean Discrepancy (MMD), which is defined as follows:

$$\begin{aligned} MMD(X', \tilde{X}') = & \frac{1}{m(m-1)} \sum_{i=1}^{m} \sum_{j \neq i}^{m} k(x_i, x_j) \\ & + \frac{1}{n(n-1)} \sum_{i=1}^{n} \sum_{j \neq i}^{n} k(\tilde{x}_i, \tilde{x}_j) \\ & - \frac{2}{mn} \sum_{i=1}^{m} \sum_{j=1}^{n} k(x_i, \tilde{x}_j) \end{aligned} \tag{4}$$

Where, $X = \{x_1, ..., x_m\}, \tilde{X} = \{\tilde{x}_1 ..., \tilde{x}_n\}$ represent the independent and identically distributed samples drawn from probability distributions X and $\tilde{X}$ respectively. The MMD is a metric that measures the distance between the kernel mean embeddings of X and $\tilde{X}$ in a Reproducing Kernel Hilbert Space. We have $MMD(X, \tilde{X}) = 0$ if and only if $X = \tilde{X}$. Conversely, if $MMD(X, \tilde{X}) > 0$ it suggest that X and $\tilde{X}$ are likely drawn from different distributions. Thus, when a generator produces samples that are dissimilar to the true data-generating process, it is expected that the resulting distributions will differ.

4.2. Model shift

Retraining a model on data that has undergone a domain shift can also affect the model itself, for example leading to a shift in the model's parameters. Altmeyer et al. quantify this by measuring the perturbations in the model's parameters, specifically the Euclidean distance between the parameter vectors before and after the model M is retrained. Additionally, they introduce a metric called predicted probability Maximum Mean Discrepancy (PP MMD), which extends Equation 4. Instead of applying this equation directly to the features, they apply it to the predicted probabilities assigned to a set of samples by the model M. If the model shifts, the probabilities assigned to each sample will also change. This metric should equal zero if and only if the two classifiers are identical.

Theoretically, it is possible for the probabilities and, consequently, the decision boundary to remain unchanged even in the presence of a domain shift. We aim to assess how and if our faithfulness metric is influenced by a model shift. Ideally, the PP MMD should equal to zero indicating there there is no significant model shift. Altmeyer et al. also utilize the disagreement Coefficient, as proposed by Hanneke et al., which estimates $p(M(x) \neq M'(x))$ that is the probability that two classifiers disagree on the predicted outcome for a randomly chosen sample [17]. This metric quantifies the overlap between the original model and the updated model, which aligns with our goal for the faithfulness metric. However, they note that a non-zero disagreement coefficient indicates a model shift, while the opposite is not necessarily true. We agree with this observation; however, for our metric, it is not as problematic, as we are discussing degrees of faithfulness rather than absolute faithfulness.

5. Proposing a new faithfulness metric

To evaluate the faithfulness of counterfactual explanations, we propose a new metric inspired by the work of Pruthi et al. [4], which relies on the concepts of simulatability and simulation accuracy. Rather than using attention regularization or multitask learning as Pruthi et al. did, we extend their framework by incorporating counterfactual explanations as samples within the training set.

We begin with the original model, referred to as model T. Next we train two models: model D and model E. Model D is trained on a dataset consisting of original samples, with labels predicted by model T. The training set is in the form of $\{(x_1, \hat{y}_1), ...(x_n, \hat{y}_n)\}$, where $\hat{y}_i = T(x_i)$. Model E is trained on the same dataset as model D, but with the addition of counterfactual explanations and their corresponding targets, resulting in a dataset of the form $\{(e_1, t_1), ..., (e_n, t_n)\}$. We then compute the simulation accuracy for both model D and model E, as defined in Equation 3. If model E achieves a higher simulation accuracy than model D, it suggests that the counterfactual explanations contain valuable information about the original model, and we argue that these explanations are thus more faithful.

This metric aligns with our definition of faithfulness: a counterfactual explanation is considered faithful if it is derived from the model's learned data distribution and if a new model is trained on these explanations it should closely approximate the original model.

6. Towards counterfactual-based model evaluation

The objective of our new testing framework is to explore beyond the accuracy and test the internal workings of the model. Naturally, this framework should be capable of distinguishing between "bad" models and "good" model. Ideally, it would also differentiate between "bad" models with high accuracy and genuinely "good" models.

It is important to note that this framework is specifically designed for testing biological machine learning models, particularly those that utilize gene expression to make predictions. This specificity arises from our use of differential gene expression between the two predicted classes. Which in our case are the cell types. We start by calculating the differential gene expression between two cell types within the dataset, using the mean log fold change defined in Equation 5.

$$meanfoldchange = mean(log_2(A)) - mean(log_2(B)) \quad (5)$$

Next, we generate counterfactual explanations between the two selected cell types and calculate the mean log fold change between the original sample and the counterfactual explanation. We then measure the distance between the original mean log fold change and the mean log fold change between the factual and counterfactual samples using the euclidean distance. If the machine learning model has correctly learned the biological reasoning, we can argue that the mean log fold change should consistent with what is observed in nature and within the data. This would also imply that the counterfactual explanations would closely resemble the gene expression of the corresponding cell type in the data. This implies that if the difference is close to zero, the reasoning of the model would be close to reality.

Given the inherent variability in gene expression within a specific cell type, it is necessary to perform this analysis multiple times.

7. Method

To evaluate the performance of our proposed faithfulness metric, we generate counterfactual explanations across various datasets and models, using a range of different generators. Specifically, we use the following generators:

- **REVISE**, introduced by Joshi et al. [7], which also aims to generate plausible counterfactual explanations, but through the use of a latent space.
- **ECCO**, a variant of ECCCo proposed by Altmeyer et al. [6], designed to create faithful counterfactual explanations using energy-based modeling.
- **Wachter**, proposed by Wachter et al. [5], which aims to find counterfactual explanations as close as possible to the original point, serving as our baseline generator.
- **Generic**, based on the generator proposed by Wachter et al. [5], but uses L1-regularization instead.
- **DiCE**, proposed by Mothilal et al. [3], capable of producing multiple diverse counterfactual explanations.
- **ClaPROAR**, proposed by Altmeyer et al. [8], which aims to generate plausible counterfactual explanations by preserving the classifier.

We perform these experiments on various datasets, including a synthetic overlapping dataset generated using the TaijaData package [18], a synthetic blobs dataset also implemented by the TaijaData package, a synthetic moons dataset from the same package, the Iris dataset, the GMCS dataset and the *C. elegans* dataset from Taylor et al. [19]. However, for evaluating our proposed framework, we only us the *C. elegans* dataset, as our proposed framework only works on gene expression data.

Given the computational demands, we cannot exhaustively test all cell types within the *C. elegans* dataset. Therefore, we focus on two specific cell types: VB01 and AIZ.

As for the machine learning models, we use a multi-layer perceptron (MLP), neural network and a deep ensemble. For the experiments with the synthetic datasets, Iris dataset and the GMCS dataset, we run three different versions. In the firs version, we use a MLP as the original model and two MLP's to simulate it. The second version uses a MLP as the original model and two deep ensembles to simulate it. In the third version, a deep ensemble is the original model, with two deep ensembles simulating it. For the experiments with the *c. elegans* dataset, we run two versions: one where both the original and simulation models are MLP's, and another where all models are deep ensembles.

To account for the stochasticity, we conduct multiple experiments using 5-fold cross-validation. For training the student models, we use a 50/50 split of the testing data. For the experiments conducted to assess how to integrate counterfactual explanations into the student model and the experiments that evaluate the faithfulness of the generators, we repeat the process 10 times within each fold. All the code that was used for these experiments can be requested by the author.

model	generator	simulation diff ↑	overlapping knn ↑	Altmeyer et al. ↑
MLP	REVISE	0.004±0.01	0.949±0.034	-20.517±1.977
	ECCo	0.001±0.012	0.923±0.042	**-19.769±1.755**
	Wachter	0.007±0.014	**0.951±0.033**	-20.514±1.98
	Generic	0.004±0.012	0.944±0.03	-20.514±1.978
	DiCE	**0.007±0.017**	0.939±0.034	-20.512±1.973
	ClaPROAR	0.004±0.013	0.947±0.028	-20.51±1.978
deep ensemble and MLP	REVISE	-0.001±0.005	0.94±0.032	-23.257±1.964
	ECCo	0.0±0.0	0.921±0.042	**-21.231±1.674**
	Wachter	**0.003±0.008**	0.948±0.038	-23.253±1.958
	Generic	0.001±0.008	**0.957±0.031**	-23.257±1.954
	DiCE	0.002±0.01	0.954±0.035	-23.256±1.958
	ClaPROAR	0.002±0.006	0.951±0.031	-23.256±1.961
deep ensemble	REVISE	-0.001±0.006	0.942±0.036	**-22.822±1.826**
	ECCo	0.002±0.006	0.95±0.034	-22.287±1.751
	Wachter	**0.003±0.008**	0.944±0.032	-22.825±1.833
	Generic	0.001±0.005	0.951±0.032	-22.836±1.832
	DiCE	0.002±0.009	**0.952±0.039**	-22.822±1.835
	ClaPROAR	0.002±0.009	0.944±0.034	-22.826±1.837

Tab. 1: An overview of the faithfulness of various generators, evaluated on the overlapping dataset using either an MLP or a deep ensemble

model	generator	simulation diff ↑	Blobs knn ↑	Altmeyer et al. ↑
MLP	REVISE	**0.003±0.012**	0.998±0.007	-63.266±9.897
	ECCo	0.0±0.0	0.996±0.009	**-59.444±10.382**
	Wachter	0.0±0.005	**0.998±0.008**	-63.279±9.904
	Generic	0.002±0.006	0.998±0.006	-63.265±9.899
	DiCE	0.002±0.009	**0.998±0.008**	-63.265±9.902
	ClaPROAR	0.001±0.005	0.997±0.008	-63.267±9.903
Deep ensemble and MLP	REVISE	0.002±0.009	0.998±0.007	-46.967±10.527
	ECCo	0.0±0.0	0.995±0.011	**-43.074±10.811**
	Wachter	0.0±0.0	0.996±0.013	-46.957±10.521
	Generic	0.001±0.004	0.996±0.01	-46.957±10.513
	DiCE	0.0±0.0	0.996±0.01	-46.94±10.512
	ClaPROAR	**0.003±0.008**	**0.998±0.008**	-46.973±10.508
Deep ensemble	REVISE	0.001±0.005	0.995±0.011	-71.558±14.142
	ECCo	0.002±0.006	0.995±0.013	**-67.272±13.872**
	Wachter	0.001±0.007	**0.998±0.008**	-71.554±14.166
	Generic	0.001±0.005	**0.998±0.008**	-71.564±14.134
	DiCE	**0.003±0.009**	0.995±0.01	-71.564±14.106
	ClaPROAR	0.001±0.005	0.996±0.01	-71.569±14.158

Tab. 2: An overview of the faithfulness of various generators, evaluated on the blobs dataset using either an MLP or a deep ensemble

model	generator	Moons simulation diff ↑	knn ↑	Altmeyer et al. ↑
MLP	REVISE	0.035±0.056	0.999±0.007	-101.993±9.707
	ECCo	**0.046±0.046**	**1.0±0.0**	-102.11±9.708
	Wachter	0.036±0.043	0.999±0.005	**-102.002±9.714**
	Generic	0.043±0.046	**1.0±0.004**	-101.992±9.712
	DiCE	0.043±0.053	1.0±0.0	-101.996±9.708
	ClaPROAR	0.032±0.045	0.998±0.006	-102.011±9.712
Deep ensemble and MLP	REVISE	0.05±0.041	1.0±0.004	**-123.452±21.276**
	ECCo	0.051±0.034	1.0±0.0	-123.743±21.62
	Wachter	**0.057±0.038**	1.0±0.0	-123.454±21.275
	Generic	0.055±0.035	1.0±0.0	-123.457±21.274
	DiCE	0.054±0.042	1.0±0.0	-123.463±21.285
	ClaPROAR	0.057±0.032	1.0±0.0	-123.463±21.28
Deep ensemble	REVISE	0.052±0.042	1.0±0.004	-123.271±21.561
	ECCo	0.054±0.035	**1.0±0.0**	-123.714±21.574
	Wachter	0.058±0.04	**1.0±0.0**	**-123.255±21.534**
	Generic	0.057±0.036	**1.0±0.0**	-123.265±21.539
	DiCE	0.056±0.042	**1.0±0.0**	-123.27±21.546
	ClaPROAR	**0.059±0.031**	**1.0±0.0**	-123.28±21.54

Tab. 3: An overview of the faithfulness of various s, evaluated on the moons dataset using either an MLP or a deep ensemble

model	generator	GMCS simulation diff ↑	knn ↑	Altmeyer et al. ↑
MLP	REVISE	**-0.001±0.013**	0.616±0.037	-83.346±24.39
	ECCo	-0.004±0.013	**0.62±0.041**	**-82.763±24.195**
	Wachter	-0.005±0.011	0.612±0.034	-83.395±24.424
	Generic	-0.002±0.013	0.611±0.034	-83.414±24.463
	DiCE	-0.003±0.013	0.618±0.034	-83.448±24.519
	ClaPROAR	-0.003±0.014	0.614±0.03	-83.39±24.44
Deep ensemble and MLP	REVISE	0.0±0.012	0.619±0.033	-78.698±17.655
	ECCo	-0.003±0.009	0.616±0.039	**-77.551±17.251**
	Wachter	-0.0±0.009	0.614±0.037	-78.671±17.625
	Generic	-0.003±0.009	0.622±0.033	-78.689±17.604
	DiCE	**0.001±0.009**	0.615±0.033	-78.737±17.698
	ClaPROAR	-0.0±0.012	**0.623±0.031**	-78.685±17.657
Deep Ensemble	REVISE	-0.002±0.007	0.615±0.034	-108.855±26.656
	ECCo	**-0.0±0.007**	0.612±0.033	**-107.201±26.606**
	Wachter	-0.001±0.008	0.606±0.037	-108.839±26.707
	Generic	-0.001±0.009	0.61±0.031	-108.86±26.674
	DiCE	-0.002±0.008	**0.62±0.039**	-108.823±26.701
	ClaPROAR	-0.002±0.008	0.599±0.037	-108.859±26.666

Tab. 4: An overview of the faithfulness of various generators, evaluated on the gmcs dataset using either an MLP or a deep ensemble

model	generator	iris simulation diff ↑	knn ↑	Altmeyer et al. ↑
MLP	REVISE	0.03±0.19	0.937±0.1	-33.643±6.892
	ECCo	0.093±0.194	0.937±0.095	**-33.138±6.807**
	Wachter	0.06±0.22	0.957±0.074	-33.389±6.759
	Generic	**0.117±0.179**	0.937±0.095	-33.89±7.003
	DiCE	0.067±0.243	**0.967±0.067**	-33.144±6.969
	ClaPROAR	0.093±0.197	0.957±0.081	-33.416±6.553
Deep ensemble and MLP	REVISE	-0.02±0.099	0.95±0.091	-34.839±4.089
	ECCo	-0.013±0.125	0.957±0.081	-34.791±4.263
	Wachter	-0.013±0.13	0.95±0.077	**-34.27±4.033**
	Generic	-0.007±0.112	**0.967±0.067**	-34.754±4.127
	DiCE	-0.01±0.119	0.94±0.11	-34.777±3.9
	ClaPROAR	**-0.0±0.175**	0.92±0.127	-34.531±4.193
Deep ensemble	REVISE	0.057±0.12	0.933±0.101	-36.986±3.959
	ECCo	0.063±0.142	0.907±0.096	-37.51±3.623
	Wachter	0.07±0.155	0.917±0.097	-37.078±3.477
	Generic	0.063±0.13	0**.953±0.076**	**-36.721±4.037**
	DiCE	0.057±0.12	0.923±0.09	-37.093±3.346
	ClaPROAR	**0.08±0.136**	0.91±0.084	-36.784±3.336

Tab. 5: An overview of the faithfulness of various generators, evaluated on the Iris dataset using either an MLP or a deep ensemble

model	Generator	ppmmd d	p d	ppmmd e	p e	dis cov d	dis cov e
MLP	REVISE	0.013±0.005	0.064±0.04	0.013±0.004	0.062±0.033	0.006±0.008	0.007±0.008
	ECCo	0.013±0.005	0.063±0.039	0.013±0.004	0.062±0.039	0.005±0.007	0.008±0.008
	Wachter	0.013±0.005	0.062±0.038	0.013±0.004	0.06±0.035	0.004±0.006	0.007±0.009
	Generic	0.013±0.004	0.06±0.033	0.013±0.004	0.06±0.034	0.006±0.008	0.008±0.009
	DiCE	0.013±0.004	0.061±0.036	0.013±0.004	0.061±0.035	0.006±0.009	0.008±0.008
	ClaPROAR	0.012±0.005	0.066±0.041	0.013±0.004	0.062±0.032	0.005±0.006	0.008±0.008
Deep Ensemble and MLP	REVISE	0.014+-0.005	0.05+-0.028	0.014+-0.005	0.05+-0.026	0.003+-0.005	0.014+-0.013
	ECCo	0.015+-0.005	0.048+-0.025	0.014+-0.005	0.053+-0.028	0.003+-0.006	0.015+-0.012
	Wachter	0.015+-0.005	0.048+-0.025	0.014+-0.005	0.051+-0.028	0.004+-0.006	0.018+-0.014
	Generic	0.015+-0.005	0.049+-0.023	0.014+-0.005	0.05+-0.028	0.003+-0.006	0.013+-0.012
	DiCE	0.014+-0.005	0.05+-0.026	0.014+-0.005	0.051+-0.028	0.005+-0.006	0.015+-0.014
	ClaPROAR	0.014+-0.005	0.05+-0.025	0.014+-0.004	0.05+-0.025	0.004+-0.005	0.013+-0.011
Deep Ensemble	REVISE	-0.002+-0.001	0.419+-0.06	-0.001+-0.001	0.401+-0.062	0.006+-0.006	0.004+-0.007
	ECCo	-0.002+-0.001	0.42+-0.068	-0.001+-0.001	0.399+-0.069	0.005+-0.007	0.004+-0.006
	Wachter	-0.001+-0.001	0.418+-0.066	-0.001+-0.001	0.394+-0.07	0.007+-0.008	0.006+-0.007
	Generic	-0.002+-0.001	0.422+-0.058	-0.001+-0.001	0.398+-0.056	0.005+-0.006	0.005+-0.005
	DiCE	-0.002+-0.001	0.433+-0.059	-0.001+-0.001	0.41+-0.051	0.006+-0.007	0.005+-0.008
	ClaPROAR	-0.001+-0.001	0.413+-0.071	-0.001+-0.001	0.392+-0.067	0.007+-0.007	0.006+-0.006

Tab. 6: Domain shift metrics for Model E and Model D compared to the original model on the overlapping dataset

model	generator	ppmmd d	p d	ppmmd e	p e	dis cov d	dis cov e
MLP	REVISE	-0.005+-0.0	0.943+-0.035	-0.005+-0.0	0.937+-0.019	0.001+-0.004	0.0+-0.001
	ECCo	-0.005+-0.0	0.949+-0.02	-0.005+-0.0	0.924+-0.014	0.0+-0.001	0.0+-0.001
	Wachter	-0.005+-0.0	0.95+-0.019	-0.005+-0.0	0.931+-0.019	0.0+-0.002	0.0+-0.003
	Generic	-0.005+-0.0	0.944+-0.022	-0.005+-0.0	0.933+-0.019	0.001+-0.004	0.0+-0.003
	DiCE	-0.005+-0.0	0.947+-0.032	-0.005+-0.0	0.934+-0.022	0.001+-0.004	0.0+-0.003
	ClaPROAR	-0.005+-0.0	0.947+-0.019	-0.005+-0.0	0.935+-0.017	0.0+-0.002	0.0+-0.0
Deep Ensemble and MLP	REVISE	-0.005+-0.0	0.936+-0.025	-0.005+-0.0	0.932+-0.018	0.0+-0.002	0.0+-0.0
	ECCo	-0.005+-0.0	0.931+-0.023	-0.005+-0.0	0.925+-0.021	0.001+-0.003	0.001+-0.002
	Wachter	-0.005+-0.0	0.933+-0.031	-0.005+-0.0	0.929+-0.014	0.0+-0.003	0.0+-0.0
	Generic	-0.005+-0.0	0.935+-0.022	-0.005+-0.0	0.928+-0.016	0.0+-0.002	0.0+-0.0
	DiCE	-0.005+-0.0	0.935+-0.034	-0.005+-0.0	0.926+-0.015	0.001+-0.004	0.0+-0.0
	ClaPROAR	-0.005+-0.0	0.934+-0.025	-0.005+-0.0	0.929+-0.014	0.0+-0.002	0.0+-0.0
Deep Ensemble	REVISE	-0.005+-0.0	0.921+-0.031	-0.005+-0.0	0.924+-0.009	0.001+-0.003	0.0+-0.0
	ECCo	-0.005+-0.0	0.926+-0.014	-0.005+-0.0	0.92+-0.01	0.0+-0.0	0.0+-0.0
	Wachter	-0.005+-0.0	0.929+-0.016	-0.005+-0.0	0.923+-0.012	0.0+-0.0	0.0+-0.0
	Generic	-0.005+-0.0	0.926+-0.013	-0.005+-0.0	0.921+-0.01	0.0+-0.001	0.0+-0.0
	DiCE	-0.005+-0.0	0.922+-0.012	-0.005+-0.0	0.922+-0.012	0.0+-0.0	0.0+-0.0
	ClaPROAR	-0.005+-0.0	0.921+-0.021	-0.005+-0.0	0.924+-0.011	0.001+-0.003	0.0+-0.0

Tab. 7: Domain shift metrics for Model E and Model D compared to the original model on the blobs dataset

model	generator	ppmmd d	p d	ppmmd e	p e	dis cov d	dis cov e
MLP	REVISE	0.004+-0.007	0.234+-0.156	0.015+-0.038	0.308+-0.28	0.068+-0.05	0.044+-0.063
	ECCo	0.002+-0.006	0.313+-0.199	0.009+-0.023	0.356+-0.275	0.05+-0.049	0.047+-0.08
	Wachter	0.004+-0.006	0.258+-0.195	0.009+-0.018	0.309+-0.26	0.066+-0.052	0.038+-0.062
	Generic	0.003+-0.005	0.253+-0.175	0.012+-0.023	0.255+-0.251	0.064+-0.047	0.052+-0.075
	DiCE	0.002+-0.005	0.321+-0.213	0.007+-0.02	0.375+-0.264	0.055+-0.047	0.026+-0.056
	ClaPROAR	0.004+-0.006	0.238+-0.164	0.011+-0.021	0.28+-0.248	0.068+-0.053	0.054+-0.102
Deep ensemble and MLP	REVISE	0.003+-0.007	0.302+-0.18	0.006+-0.008	0.199+-0.163	0.086+-0.041	0.06+-0.043
	ECCo	0.003+-0.007	0.311+-0.186	0.005+-0.005	0.197+-0.109	0.082+-0.041	0.056+-0.045
	Wachter	0.002+-0.007	0.316+-0.182	0.006+-0.007	0.186+-0.131	0.079+-0.04	0.064+-0.042
	Generic	0.003+-0.007	0.309+-0.193	0.006+-0.008	0.189+-0.135	0.081+-0.038	0.055+-0.053
	DiCE	0.003+-0.007	0.303+-0.189	0.007+-0.008	0.157+-0.096	0.083+-0.043	0.064+-0.042
	ClaPROAR	0.003+-0.007	0.308+-0.187	0.008+-0.01	0.186+-0.146	0.085+-0.045	0.075+-0.052
Deep ensemble	REVISE	-0.003+-0.002	0.547+-0.19	-0.004+-0.001	0.742+-0.16	0.094+-0.029	0.002+-0.013
	ECCo	-0.003+-0.001	0.535+-0.155	-0.004+-0.001	0.731+-0.173	0.099+-0.026	0.001+-0.003
	Wachter	-0.003+-0.001	0.561+-0.178	-0.004+-0.001	0.738+-0.145	0.098+-0.031	0.001+-0.004
	Generic	-0.003+-0.001	0.545+-0.174	-0.003+-0.003	0.684+-0.214	0.095+-0.023	0.001+-0.005
	DiCE	-0.003+-0.001	0.554+-0.162	-0.004+-0.001	0.731+-0.18	0.093+-0.025	0.001+-0.004
	ClaPROAR	-0.003+-0.001	0.556+-0.175	-0.004+-0.002	0.723+-0.196	0.094+-0.03	0.001+-0.007

Tab. 8: Domain shift metrics for Model E and Model D compared to the original model on the moons dataset

model	generator	ppmmd d	p d	ppmmd e	p e	dis cov d	dis cov e
MLP	REVISE	0.196+-0.01	0.0+-0.0	0.196+-0.011	0.0+-0.0	0.049+-0.012	0.056+-0.013
	ECCo	0.196+-0.009	0.0+-0.0	0.197+-0.011	0.0+-0.0	0.048+-0.011	0.056+-0.015
	Wachter	0.198+-0.01	0.0+-0.0	0.197+-0.011	0.0+-0.0	0.048+-0.012	0.053+-0.012
	Generic	0.195+-0.011	0.0+-0.0	0.196+-0.012	0.0+-0.0	0.049+-0.012	0.054+-0.012
	DiCE	0.196+-0.01	0.0+-0.0	0.195+-0.011	0.0+-0.0	0.049+-0.011	0.055+-0.013
	ClaPROAR	0.197+-0.01	0.0+-0.0	0.195+-0.014	0.0+-0.0	0.05+-0.012	0.057+-0.013
MLP and deep ensemble	REVISE	0.077+-0.007	0.0+-0.0	0.073+-0.006	0.0+-0.0	0.031+-0.013	0.036+-0.015
	ECCo	0.076+-0.006	0.0+-0.0	0.075+-0.006	0.0+-0.0	0.03+-0.012	0.034+-0.016
	Wachter	0.077+-0.007	0.0+-0.0	0.074+-0.006	0.0+-0.0	0.031+-0.012	0.036+-0.015
	Generic	0.076+-0.007	0.0+-0.0	0.073+-0.006	0.0+-0.0	0.031+-0.012	0.037+-0.014
	DiCE	0.076+-0.006	0.0+-0.0	0.073+-0.006	0.0+-0.0	0.03+-0.012	0.037+-0.016
	ClaPROAR	0.076+-0.006	0.0+-0.0	0.074+-0.006	0.0+-0.0	0.031+-0.012	0.035+-0.013
Deep ensemble	REVISE	0.225+-0.01	0.0+-0.0	0.224+-0.012	0.0+-0.0	0.048+-0.01	0.053+-0.014
	ECCo	0.225+-0.01	0.0+-0.0	0.219+-0.021	0.0+-0.0	0.047+-0.009	0.054+-0.015
	Wachter	0.225+-0.011	0.0+-0.0	0.222+-0.014	0.0+-0.0	0.05+-0.01	0.056+-0.015
	Generic	0.225+-0.011	0.0+-0.0	0.223+-0.014	0.0+-0.0	0.047+-0.009	0.053+-0.013
	DiCE	0.225+-0.012	0.0+-0.0	0.222+-0.018	0.0+-0.0	0.048+-0.009	0.053+-0.014
	ClaPROAR	0.225+-0.011	0.0+-0.0	0.223+-0.013	0.0+-0.0	0.047+-0.008	0.054+-0.014

Tab. 9: Domain shift metrics for Model E and Model D compared to the original model on the GMCS dataset

model	generator	ppmmd d	p d	ppmmd e	p e	dis cov d	dis cov e
MLP	REVISE	0.12+-0.111	0.074+-0.104	0.229+-0.12	0.008+-0.015	0.235+-0.211	0.472+-0.167
	ECCo	0.117+-0.105	0.08+-0.113	0.21+-0.104	0.009+-0.018	0.181+-0.205	0.445+-0.188
	Wachter	0.083+-0.069	0.103+-0.138	0.216+-0.111	0.012+-0.022	0.172+-0.16	0.415+-0.218
	Generic	0.093+-0.062	0.082+-0.129	0.216+-0.11	0.009+-0.016	0.169+-0.14	0.423+-0.217
	DiCE	0.101+-0.089	0.085+-0.111	0.204+-0.109	0.009+-0.014	0.209+-0.223	0.425+-0.207
	ClaPROAR	0.097+-0.068	0.091+-0.135	0.213+-0.117	0.011+-0.022	0.165+-0.139	0.469+-0.247
Deep Ensemble and MLP	REVISE	0.084+-0.039	0.063+-0.063	0.138+-0.097	0.054+-0.077	0.2+-0.184	0.414+-0.336
	ECCo	0.085+-0.045	0.067+-0.074	0.134+-0.077	0.044+-0.065	0.192+-0.2	0.399+-0.248
	Wachter	0.092+-0.051	0.059+-0.062	0.133+-0.08	0.044+-0.057	0.198+-0.201	0.417+-0.267
	Generic	0.082+-0.047	0.07+-0.074	0.15+-0.09	0.042+-0.074	0.197+-0.193	0.511+-0.285
	DiCE	0.095+-0.052	0.059+-0.065	0.127+-0.084	0.05+-0.089	0.191+-0.204	0.445+-0.304
	ClaPROAR	0.084+-0.043	0.067+-0.076	0.139+-0.11	0.056+-0.092	0.217+-0.219	0.383+-0.287
Deep ensemble	REVISE	0.107+-0.054	0.056+-0.079	0.006+-0.039	0.416+-0.243	0.222+-0.13	0.117+-0.092
	ECCo	0.105+-0.053	0.051+-0.067	0.005+-0.025	0.387+-0.214	0.244+-0.133	0.121+-0.105
	Wachter	0.115+-0.056	0.044+-0.063	0.001+-0.023	0.407+-0.199	0.246+-0.149	0.112+-0.093
	Generic	0.107+-0.057	0.057+-0.078	0.002+-0.026	0.406+-0.215	0.204+-0.125	0.111+-0.09
	DiCE	0.109+-0.053	0.05+-0.068	-0.002+-0.022	0.447+-0.218	0.214+-0.135	0.105+-0.086
	ClaPROAR	0.109+-0.054	0.054+-0.076	0.006+-0.032	0.392+-0.228	0.237+-0.126	0.115+-0.097

Tab. 10: Domain shift metrics for Model E and Model D compared to the original model on the Iris dataset

8. Results

Our newly developed faithfulness metric was compared against two existing methods: the faithfulness metric proposed by Altmeyer et al. [6], and the one introduced by Mothilal et al. [3]. The results of these experiments are presented in the Appendix, with an overview provided in Tables 1, 2, 3, 4 and 5. In general, the simulation differences across the datasets are close to zero, but the direction of the difference varies by dataset. For the Iris, overlapping and GMCS datasets, the difference is predominantly negative, while for the blobs and moons datasets, it is positive.

No clear trend emerged indicating that either our proposed metric or the one from Mothilal et al. consistenlty rated one generator, or a category of generators, as more faithful than others. However, a distinct trend was observed with the method from Altmeyer et al., which generally found the ECCo generator to be more faithful than the other generators.

As for the domainshift results in Tables 6, 7, 8, 9 and 10 we see that the values are relatively low and consistent across all experiments. However, a slight increase in domain shift is observed in model E.

In Table 11 we present the results of our experiments on the worm dataset. The experiments were conducted for both the MLP model, which achieved an accuracy of 99,0%, and the neural network, which achieved an accuracy of 50,6%, generating counterfactuals in both directions. The results show that the performance of the MLP and NN models is similar across both models. Additionally, the performance is slightly better when going from VB01 to AIZ, though it's important to note that the values across all generators is the same value.

Model	Generator	AIZ to VB01 ↓	VB01 to AIZ ↓
MLP	ClaPROAR	17,818	17,412
	DiCE	17,813	17,412
	ECCo	17,822	17,412
	Generic	17,816	17,412
	REVISE	17,800	17,412
	Wachter	17,818	17,412
NN	ClaPROAR	17,851	17,443
	DiCE	17,853	17,443
	ECCo	17,853	17,443
	Generic	17,856	17,443
	REVISE	17,842	17,443
	Wachter	17,853	17,443

Tab. 11: The euclidean distance of the mean log fold change for specific generators per model using the *c. elegans* dataset

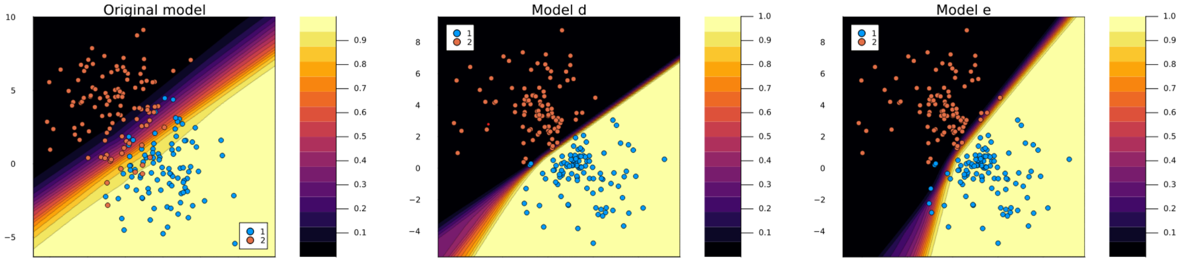

Fig. 1: The effect of a domain shift illustrated for the overlapping dataset using the REVISE generator

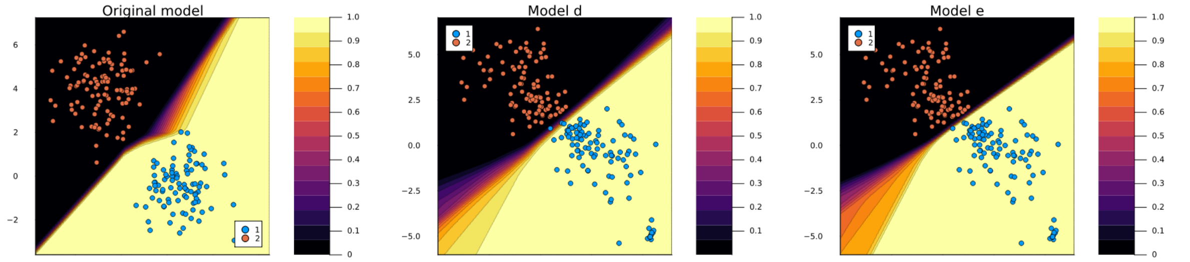

Fig. 2: The effect of a domain shift illustrated for the blobs dataset using the REVISE generator

9. Discussion

Our results in Section 8 reveal that our faithfulness metric is highly dependent on the type of data used. For example, the simulation differences observed in the overlapping, Iris and GMCS datasets differ notably from those in the blobs and moons dataset. We attribute this to the fact that the first three datasets have overlapping class distributions, which result in a greater impact from model shifts. The difference is illustrated in Figures 2 and 1 but also visible in Tables 7 and 6 which show a model shift. However, the consequences of this shift, specifically the misclassification rates, are more pronounced in the overlapping dataset than the blobs dataset. While model shifts are present in both model d and e, the shift is less severe in model d, likely due to the fact that it uses the same data distribution as the original data. Model e, on the other hand, uses data generated by the REVISE generator, which likely introduces a different data distribution, and therefore a bigger model shift.

Overall, the simulation differences are close to zero, indicating that no model significantly outperforms the other. This is expected, as the datasets used are relatively simple, leading to high model accuracy which as limited room for improvement. However, as the data becomes more complex, such as with the Iris dataset, the simulation differences increase accordingly.

An important consideration is whether our metric captures faithfulness as intended, and whether it aligns with our notion of faithful generators. Interestingly, the ranking of the faithfulness of generators varies not only between which models are used, but also across datasets. Additionally, if we would categorize generators based on which characteristic they prioritize (distance, faithfulness, plausibility), still no trend emerges, which suggest a random order. Notably, the same issue arises with the method proposed by Mothalil et al. In contrast, the method proposed by Altmeyer et al. appears more consisted, frequently ranking the ECCo generator as the most faithful generator. However, even with this method, the ranking of generators still varies depending on the dataset and model used.

We believe that developing a faithfulness metric based on simulating the original model holds promise. However, the key challenge lies in how to effectively incorporate the information provided by the counterfactual explanations to simulate the original model. We suspect that the model shift is a significant factor preventing models trained with explanations from outperforming those without. Further research is needed to explore how to better integrate counterfactual explanations and whether a model shift can be further minimized. Additionally, the method requires more extensive testing, with a broader range of generators and models to be evaluated.

In terms of domain and model shifts, the values suggest the presence of model shift, with its impact varying across different datasets and models. However, overall, the shift remains manageable. an interesting observation is that simulating an MLP with a deep ensemble results in less model shift, particularly in the case of the GMCS and Iris datasets.

As for domain and model shifts, the values indicate that the there is in fact a model shift and the effects differ per dataset and models used. However, overall it is managable. An intresting observation can be made and that is the fact that simulating a MLP with a deep ensemble suffers from a less severe model shift in the case of the GMCS and Iris datasets.

Regarding the performance of the experiments on the worm dataset, the goal was that models with a lower accuracy would score worse than those with a higher accuracy, which should indicating a better understanding of the data by higher-performing models. However, as seen in Table 11, the MLP model slightly ourperforms the NN model, though the values are quite similar, and we anticipated a more pronounced difference.

It's also important to note that for the VB01 to AIZ column, all generators produced the same values. This is likely because generating valid counterfactual explanations for that direction proved more challenging, resulting in valid explanations clustering closely together. While this similarity might seem suspicious, no alternative explanation has been found.

Furthermore, in the experiments where different values per generator do occur, they are minor. Although, it is interesting to note that the REVISE generator outperforms the other generators. This is due to the fact that REVISE focuses on plausibility, meaning that it would generate explanations that would be similar to the ones found in the dataset and thus would minimize the value.

PCA was applied to reduce the dimensionality of the dataset which would reduce computational resources. Although 80% of the variance was retained, this could still affect the final outcome. In particular, features that contribute less to the overall variance may undergo significant changes when generating a counterfactual. Such changes lead to an increase in the log fold change, thereby influencing the final result. These feature changes should be minimized in generators that prioritize distance, but not in other generators.

Our proposed framework serves as a proof of concept rather that a fully developed solution. Therefore, requires further development and evaluation before it can be used for its intended goal: assessing models beyond accuracy. Specifically, the framework should be able to detect models with high accuracy but flawed reasoning that does not align with the intended reasoning. To test this, models with high accuracy but incorrect reasoning should be constructed and evaluated.

Additionally, due to time constraints, we only tested the framework on binary classification tasks. Since multiclass prediction is known to be more challenging, it should also be included in future evaluations.

10. Conclusion

This paper extends the concept of faithfulness and introduces a new metric to measure the this notion of faithfulness of counterfactual generators. Our experiments demonstrated that this metric behaves inconsistently across different models and dataset and and although that the theoretical idea looks promising that further development is necessary.

Moreover, we also provided a proof of concept for a new evaluation metric, showing its applicability in binary classification tasks. While both the framework and faithfulness metric have areas for improvement, we believe that this work lays a foundation for future research on using counterfactual explanations in model evaluation.

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Appendices

A. Using gene expression data

The choice of data is almost as important as the machine learning model itself. If your data is unfit to answer the question you want an answer to, it is likely you will get incorrect answer.

A.1. Why biological data

When creating a new testing framework, it is natural to use synthetic data. You can form this data exactly to your needs, to test out the strengths and weaknesses of your new method. However, an important aspect of our metrics is that we need to validate the reasoning of the model. When using synthetic data, there is no right or wrong in the reasoning, the features of this data do not carry information. We could explore the use of well known datasets like the credit score dataset. However, for these types of datasets it is also hard to decide on what is right or wrong. It could be that a counterfactual explanation tells us that we would get a loan if we switch gender from a female to a male, we as a society might deems that unfair and we could conclude that the model is indeed wrong. However, it could be that we as a society subconsciously do this, and thus the data might actually reflect this behavior and the model would thus be correct.

One domain where we can find data with a non-discussable truth is in the domain of biology. In the case that we have a counterfactual explanation that says that we need a increase in gene expression for certain genes to have cancer, we could theoretically, test if these indeed cause cancer. Following this reasoning it would come naturally to use datasets of gene expressions and cancer diagnosis. Cancer is commonly researched topic, however we do not know everything about cancer yet. And although we could theoretically test if certain gene expressions correlate with cancer diagnosis, this testing takes long and brings all kind of ethical restrictions. We therefore want to look for a dataset where everything is known and we do not have to do our own experiments. One of these dataset is the cell types and gene expressions of *c. elegans*. The whole genome of *c. elegans* is known, which is why it is often used as a model organism. With extensive literature out there, which we use to validate our counterfactual explanations, we decided to go for this dataset.

A.2. Validating gene expression data

The dataset we use consists of gene expressions of certain cell types. These cell types where found using some uniform manifold approximation and projection (UMAP)[19]. Then they validate their found cell types with literature.

A natural way to validate the counterfactual explanations is to compare them to the differential gene expression between to cell types. These differential gene expressions encode the gene expression differences between two cell types, something that the counterfactual explanations can also encode. A common way to calculate the differential gene expression is using the log fold change. Which can be calculated with the following formula:

$$foldchange = log_2(\frac{A}{B}) \quad (6)$$

Where A and B are the gene expressions of a certain state. In our case it would be the gene expression of the factual and the counterfactual. This can be rewritten as

$$foldchange = log_2(A) - log_2(B) \quad (7)$$

Which makes calculation easier and faster.

Once we have the differential gene expression, we calculate the distance between the counterfactual result and the differential gene expression. The smaller the distance, the better the model performs.

A.3. Training the model

Significant challenges where encountered when training a model using gene expression data, primarily due to the dataset's size and complexity. The available memory was quickly exhausted, and thus several adjustments needed to be made. While the issues with training where largely resolved by using batches during training, the search for counterfactuals still failed due to memory limitations. To address this, we applied PCA, retaining 80% of the variance, but this was still insufficient. The search space likely remained too larger, so we reduced it by focusing on four classes, each representing a distinct cell type category: motor cells, interneuron cells, sensory cells and pharygeal cells. Although this approach worked, the model's performance was poor, with an accuracy around 8%. Additionally, we were unable to generate valid counterfactuals, likely due to the model's low performance.

As a result, we simplified the problem to two classes, selecting the two largest classes from two separate categories which resulted in AIZ and VB01. While one could argue that improving the model would be preferable to reducing the number of classes, the primary focus of this thesis is developing a new evaluation framework, rather than optimizing a model for *C. elegans* cell type prediction.

A.3.1. Performance of the models

We trained two models: one utilizing a Multi-Layer Perceptron (MLP) as defined in the Counterfactual-Explanations package [20], and the other based on a neural network implemented using the Flux package.

The neural network consists of three hidden followed by a softmax activation layer, with L1 regularization applied. All models were trained for a maximum of 100 epochs, often terminating early based on a early stopping criterion, which had a patience parameter of 15 epochs. This approach yielded an accuracy score of 50,6%.

In contrast, the second model used a predefined MLP from the CounterfactualExplanations package [20], which achieved a significant higher accuracy of 99.0%.

B. Fidelity, faithfulness and plausibility

Important topics in the field of XAI are plausibility, faithfulness and fidelity. Evaluating the XAI methods based on these criteria is essential. However, these terms are often used interchangeably are and not always formally defined. Even though they have subtle yet important differences.

B.1. Plausibility

Plausibility, often also referred to as persuaviness or understandability [16], requires that explanations closely relate to the data-generating process. When looking at plausible counterfactual explanations it would mean that counterfactual explanations need to respect the causal relations of the data. Along these lines Altmeyer et al. state that achieving plausible counterfactual explanations is equivalent to ensuring that the generated counterfactuals comply with the true and unobserved data-generating process [6]. And they came to the following definition:

> **Definition** (Plausible Counterfactuals): Let $X|y^+ = p(x|y^+)$ denote the true conditional distribution of samples in the target class y^+. Then for x' to be considered a plausible counterfactual, we need: $x' \sim X|y^+$.

Which implies that the resulting explanations should align with the true conditional distribution of the data.

B.2. Faithfulness

Even though faithfulness is a frequently addressed topic, a universal consensus on the definition of faithfulness has yet to be established. A commonly used definition is provided by Jacovi et al., they state that the faithfulness refers to the extend to which an explanation accurately reflect the model's reasoning process [9]. However, they do not give a formal definition. Instead, they advocate for a practical approach to faithfulness, suggesting a graded criterion to measure the extend and likelihood of an interpretation being faithful. In contrast, Altmeyer et al. propose a formal definition of faithfulness [8]. They define it as:

> **Definition** (Faithful Counterfactuals): Let $X_\theta|y^+ = p_\theta(x|y^+)$ denote the conditional distribution of x in the target class y^+, where θ denotes the parameters of model M_θ. Then for x' to be considered a faithful counterfactual, we need: $x' \sim X_\theta|y^+$.

Which implies that the explanations should align with the model's learned representation of the data.

B.3. Fidelity

Faithfulness is also often referred to as fidelity or reliability and is often defined as the degree to which explanations approximate the predictions of the black-box model. Despite the similar wording, Altmeyer et al demonstrate that fidelity and faithfulness are not necessarily the same thing [6]. They take counterfactual explanations as an example. By design, counterfactual explanations exhibit full fidelity because they rely on the predicted labels of the black-box model. However, as they showed in their paper, that the degree of faithfulness between full-fidelity metrics can still differ. Thus, we cannot fully depend on fidelity to establish faithfulness.

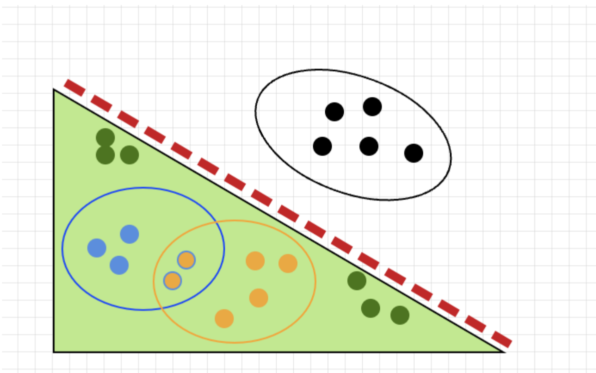

Fig. 3: fidelity (green), plausibility (blue) and faithfulness (orange) visualized.

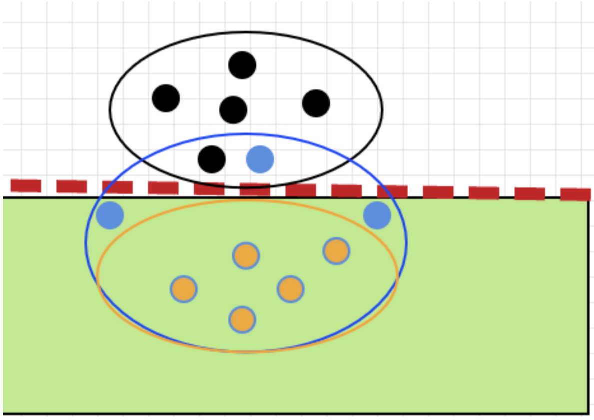

Fig. 4: The case where plausible samples (blue) are not valid (green) visualized.

B.4. The importance of getting it right

It can be seen that plausibility, faithfulness and fidelity are closely related. Yet, their subtle distinctions can have significant implications. Figure 3 illustrates the distinction between fidelity, plausibility, and faithfulness according to the definition of Altmeyer et al. The green triangle represents fidelity, showing everything correctly classified on the appropriate side of the decision boundary (red dashed line). Plausible explanations, shown in blue, are sampled from the true data distribution (blue circle). In this figure, all plausible samples are valid, but this may not always be the case. For instance in Figure 4, the true data distributions of two classes overlap. However, due to the model's higher misclassification penalty for the black class, the decision boundary shifts towards the blue class. Although the blue samples remain plausible, including those overlapping with the black distribution, these overlapping samples are no longer valid. However, it is important to note that counterfactual generators should, by design, only produce valid counterfactuals.

In Figures 3 and 4 faithful explanations are depicted in orange. These samples are drawn from the model's estimation of the conditional data distribution. When the model is well-trained, this estimation aligns with the true data distribution, as shown in Figure 4. However, when the model is not sufficiently trained this alignment may not hold.

Faithfulness has often been conflated with plausibility [16]. This misunderstanding happens because explanations that seem more intuitive to humans are more often thought to be more faithful, even though they are just more plausible. Ideally, plausibility and faithfulness would correlate, with the true conditional probability being similar to the model's learned probability. However, this alignment fails when a model is incorrect. For our purposes, we intend to use counterfactual explanations to detect these flawed models, thereby we prioritize faithfulness over plausibility.

Researchers agree that when a explanation is lacking faithfulness it can be harmful, especially in cases where the explanation appears to be plausible [16]. As this can lead to over trusting the model even if it has an unwanted biases. Despite this, Lyu et al observed that in practise faithfulness is often overlooked and that there currently is more focus on having plausible explanations.

This raises the question of why plausibility is considered at all. Why not use inherently interpretable models that eliminate the need for ad-hoc techniques? Rudin et al. even argues in favor of these models, stating that they offer more faithful interpretations compare to post-hoc analyses of black-box models [21]. However, Jacovi et al., warns against taking this argument at face-value [9]. A method being inherently interpretable is merely a claim that needs to be verified before it can be trusted. Jacovi et al. take attention mechanisms as an example, while they are considered as inherently interpretable recent work cast doubt regarding their faithfulness.

C. The effect of different counterfactual explanations generators

Counterfactual explanations aim to explain what changes are necessary to change the model's outcome. Naturally, there is an infinite amount of possible explanations, but not all are equally effective in explaining the reasoning of the model. However, criteria for a "good" explanation vary depending on the specific use case. As a result, various approaches exist for generating these explanations, each emphasizing different qualities. For instance, generators such as REVISE [7] prioritize plausibility, while other generators like ECCCo [6] focus on faithfulness or generators like Wachter focus on how close the explanation is to the original model. On top of that, even subtle adjustments in parameters, such as the convergence rate, can significantly influence the resulting explanations.

C.1. Counterfactual generators

For our experiments we use the generators that are available in the package provided by Altmeyer et al. [20]. This section introduces these generators ans assesses their respective strengths and weaknesses.

C.1.1. WachterGenerator

This method implements the counterfactual generator as proposed by Watcher et al. [5]. The objective is to find counterfactual explanations that is as close to the original point as possible, while also having the new target label.

These counterfactual explanations are found by fixing w and minimizing the following objective function:

$$\arg\min_{x'}\max_{\lambda} \lambda(f_w(x') - y')^2 + d(x_i, x') \quad (8)$$

Here $d(\cdot,\cdot)$ can represent any distance function that measures the distance between the counterfactual x' and the original data point x_i. However, Wachter et al. emphasize the critical importance of selecting an appropriate distance function. They propose the use of the L_1 norm weighted by the inverse median absolute deviation (MAD). The MAD for feature k over a set of points P is defined as:

$$MAD_k = median_{j\in P}(|X_{j,k} - median_{l\in P}(X_{l,k}|) \quad (9)$$

This results in the following distance metric:

$$d(x_i, x') = \sum_{k\in F} \frac{|x_{i,k} - x'_k|}{MAD_k} \quad (10)$$

The authors note their proposed distance metric has several desirable properties. Firstly, it would capture some of the inherent variability within the data space. If a feature k has varies widely across the dataset, a synthetic point x' may also vary this feature while maintaining the proximity to x_i under this distance metric. This approach, compared to the more commonly used standard deviation, makes the metric more resilient to outliers.

Another important property is the sparsity-inducing nature of the $L1$ norm. The $L1$ norm tends to produce sparse solutions where many entries are zero, particularly when combined with an appropriate cost function. In the context of generating human-understandable counterfactuals, this is highly desirable. It results in counterfactuals where only a small number of variables are altered while the majority remains unchanged. This characteristic makes the counterfactuals much easier to understand and communicate to others.

C.1.2. GenericGenerator

The generic generator is based on the generator proposed by Wachter et al. [5], with the key difference being the use of the $L1$ norm as the distance metric instead of the authors' suggested metric. By not weighing the $L1$ norm with the inverse median absolute deviation some desirable properties should be lost compared to the Wachter generator. Mainly its ability to capture some of the intrinsic volatility of the space and, consequently, it resilience to outliers. However, we did not find any evidence in literature to support the claim made by Wachter et al.

C.1.3. GravitationalGenerator

The gravitational generator, introduced by Altmeyer et al. [8], aims to produce more plausible explanations to minimize domain and model shifts when using these explanations for recourse. The idea is to generate counterfactual explanations that gravitate towards a sensible point in the target domain. This is achieved by extending the basic generator framework proposed by Wachter er al. [5] in the following way:

$$\begin{aligned} s' = \arg\min_{s'\in S}\{&yloss(M(f(s')), y^*\} \\ &+\lambda_1 cost(f(s')) + \lambda_2(f(s')) \end{aligned} \quad (11)$$

In this equation, $cost(f(s'))$ denotes the costs faced by the individual, while $extcost(f(s'))$ is meant to capture the external costs experienced by the collective of individuals in response to changes in s'. For the gravitational generator, this external cost is defined as:

$$extcost(f(s')) = dist(f(s')), \overline{x}^*) \quad (12)$$

where $\overline{x}$ is some sensible point in the target domain, such as the subsample average $\overline{x}^* = means(x), x \in D_1$. Within the generator there is this trade-off between the external costs and the individual costs. The parameters λ_1 and λ_2 can be adjusted to fine-tune this trade-off.

Because the explanations gravitate towards a sensible point in the target domain, they tend to be more plausible compared to generators that do not model the true data generation process in any manner. However, this comes with the cost of other desired properties such as faithfulness or similarity to the factual sample. This generator was used in several experiments. However, it stopped functioning due to updates in the package versions. Consequently, it has been excluded from the final results.

C.1.4. ClaPROARGenerator

Altmeyer et al. proposed two generators designed to produce explanations that align with the true data-generating process, thereby minimizing domain and model shift[8]. One of their proposed generators, ClaPROAR, is loosely based on the ROAR generator proposed by Upadhyay et al. [22] which aims to preserve the classifier. ClaPROAR achieves this by explicitly penalizing the loss incurred when evaluated on the counterfactual x'. This approach is based on the intuition counterfactuals that increase the classifier loss will trigger model shifts. While this is linked to selecting a higher decision threshold, the authors argue that their method is more effective at avoiding the pitfalls of highly decisive classifiers.

ClaPROAR uses the same equation as defined in Equation 11. However, for ClaPROAR, the external cost is defined as:

$$extcost(f(s')) = l(M(f(s')), y') \tag{13}$$

here l denotes the loss function used to train the model M.

Since ClaPROAR uses the loss function of the model, it can be argued that its explanations are likely highly faithful. Although the authors initially aimed to generate explanations aligned with the true-data-generating process, utilizing the loss function aligns more with the idea of creating explanations that reflect where the model thinks the data lies. Additionally, it is important to note that, due to the equation defined in Equation 11, there is an inherent trade-off between this property and other properties such as the distance to the factual sample.

C.1.5. DiCEGenerator

The DiCE generator can be used to generate multiple diverse counterfactuals for a single factual. To ensure diversity among these counterfactuals, Mothilal et al. propose a diversity constraint to the counterfactual search objective [3].

The diversity constrained is modeled using the Determinantal Point Proccesses (DDP), defined as:

$$dpp\_diversity = det(K) \tag{14}$$

where $k_{i,j} = \frac{1}{1+dist(c_i,c_j}$ and $dist(c_i, c_j$ denotes the distance metric between the two counterfactual examples. This function is used in the generator as follows:

$$\begin{aligned} C(x) = \arg\min_{c_1,\ldots,c_k} \frac{1}{k}\sum_{i=1}^{k} yloss(f(c_i), y) \\ +\frac{\lambda_1}{k}\sum_{i=1}^{k} dist(c_i, x) \\ -\lambda_2 dpp\_diversity(c_1, \ldots, c_k) \end{aligned} \tag{15}$$

Here,

$$\frac{\lambda_1}{k}\sum_{i=1}^{k} dist(c_i, x) \tag{16}$$

is used to calculate the proximity of the samples to the factual.

Schut et al. agree with the notion that counterfactuals closest to the original input are often the most useful to the user [23]. Their generator makes a trade-off between being diverse and staying close to the original sample.

This trade-off is also reflected in their choice of loss function. While the the l_1-loss or l_2-loss might seem intuitive, the authors argue that these loss functions penalize the distance of $f(c)$ from the desired y. A valid counterfactual, however, only requires $f(c)$ be greater or less than the threshold of f, not necessarily the closest desired y (1 or 0). Optimizing for $f(c)$ to be close to 0 or 1 can encourage large changes to x towards the counterfactual class, making the generated counterfactual less feasible to the user.

To address this, the authors use the hinge-loss function, which imposes no penalty as long as $f(c)$ is above a fixed threshold over 0.5, when the desired class is 1. Additionally, it imposes a penalty proportional to the difference between $f(c)$ and 0.5 when the classifier is correct, but within the threshold, and a heavier penalty when $f(c)$ does not indicate the desired counterfactual class. The hinge-loss function is defined as:

$$hinge\_loss = \max(0, 1 - z * logit(f(c))) \tag{17}$$

where z is -1 when $y = 0$ and 1 when $y = 1$. $logit(f(c))$ represents the unscaled output from the ML model (e.g., final logits that enter a softmax layer for making predictions in a neural network). For their distance metric, they use the median absolute deviation as defined by wachter et al. [5], as shown in Equation 10

C.1.6. REVISEGenerator

The REVISE generator is created with an idea that counterfactual explanations should be realistic, resembling the true data-generating process. To achieve this, Joshi et al. propose a latent space search [7]. Instead of directly traversing the feature space, this method uses a separate generative model that learns a latent space representation of the data-generating process. Assuming that the generative model is well-specified, using the learned latent embeddings of the data offers two advantages: Firstly, due to the fact that the learned data-generating process is encoded in the latent space, the generated counterfactuals will align with the learned data representation, resulting in plausible outcomes. Secondly, the latent space typically represents a lower-dimensional version of the feature space, thus reducing the computational cost of the search.

Joshi et al use a Variational Autoencoder as the generative model and use the following search function:

$$x' = \arg\min_{z}\min_{G_\theta(z)}\min_{\lambda} l(\hat{f}(G_\theta(z)), 1) + \lambda c(x^*, G_\theta(z)) \quad (18)$$

Here, $\lambda > 0$ determines the trade-off between the proximity of the generated counterfactual to the original sample and its corresponding target label. z represents the latent encoding of the sample and $G_\theta(z)$ is the latent encoding mapped back to the original data domain.

Using a latent space also has it drawbacks. Learning generative models is generally a resource intensive task. This may outweigh the benefits of navigating a lower-dimensional space. Additionally, if the generative model is poorly specified, it can impact the quality of the counterfactual explanations.

While using a latent space is effective in generating plausible results, there remains a concern about the faithfulness to the original model of these explanations. Instead, they are more likely faithful to the generative model.

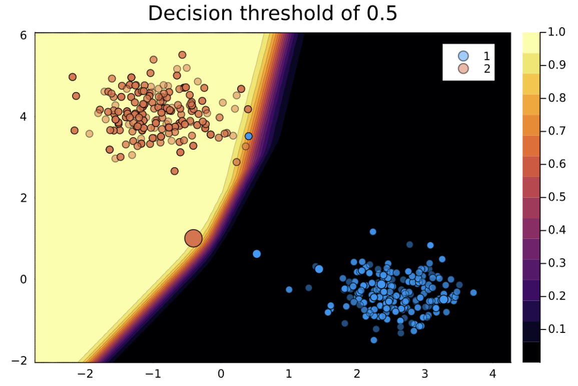

Fig. 5: The WachterGenerator's behavior when using a threshold probability of 0.5 for convergence.

C.1.7. ECCo

The ECCo generator that is implemented is bases on a generator proposed by Altmeyer et al., which is a framework for generating Energy-Constrained Conformal Counterfactuals (ECCCo) [6]. This framework prioritizes the generation of faithful counterfactual explanations, with plausibility considered as a secondary concern. Their generation formula is defined as follows:

$$min_{Z' \in Z^L}\{L_{JEM}(f(Z'); M_\theta, y^+) + \lambda(f(Z'))\} \quad (19)$$

Here, $L_{JEM}(f(Z'); M_\theta, y^+)$ represents a hybrid loss function used in joint-energy modelling, evaluated at a specific counterfactual state for a given model and target outcome. Which is defined as follows:

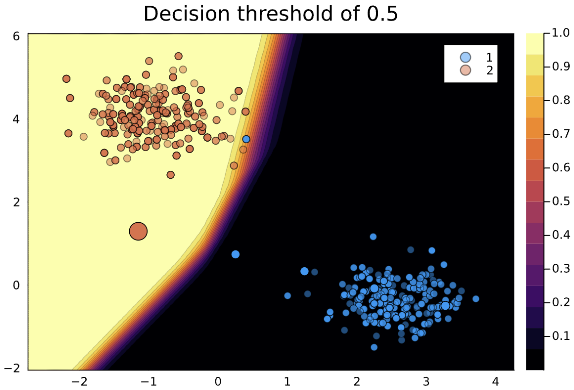

Fig. 6: The ECCoGenerator's behavior when using a threshold probability of 0.5 for convergence.

$$L_{JEM}(f(Z'); \cdot) = L_{clf}(f(Z'); \cdot) + L_{gen}(f(Z'); \cdot) \quad (20)$$

Here, L_{clf} represents any standard classification loss function, such as cross-entropy loss. The second term L_{gen}, measures the loss associated with the generative task. Within joint-energy training, L_{gen} influences the model parameters θ by lowering the energy of observed samples and raising the energy of samples generated through SGLD [24]. Altmeyer et al. suggest that focusing soley on reducing the energy of the counterfactual itself is sufficient to capture the generative properties of the underlying model, as these are implicitly embedded in the parameters θ. They argue that this approach eliminates the need to generate conditional samples via SGLD during the counterfactual search. This insight leads to the following objective function.

$$\begin{aligned} min_{Z' \in Z^L}\{&L_{JEM}(f(Z'); M_\theta, y^+) + \lambda_1(f(Z')) \\ &+\lambda_2 \epsilon\theta(f(Z')|y^+) + \lambda_3\Omega(C_\theta(f(Z'); \alpha))\} \end{aligned} \quad (21)$$

Here the cost function of λ_1 includes a proximity term similar to that of the Wachter generator. The second penalty term promotes faithfulness by constraining the energy of the generated counterfactual. The third penalty term ensures that the generated counterfactual has low predictive uncertainty, thereby enhancing plausibility.

Using the energy modeling aspect makes the counterfactuals likely more faithful, however it is also more computationally more expensive.

C.2. Convergence rate of counterfactual explanations

The generation of counterfactual explanations is an optimization problem aimed at identifying the most suitable counterfactual for a given factual sample. A critical part in this process is determine when the search is complete. One potential stopping criterion can be the threshold probability. In this case, the search can be considered converged once the predicted probability for the counterfactual surpasses a predefined threshold.

However, using this stopping criteria may result in counterfactuals that are very close to the threshold value. In the case of a threshold of 0.5 the counterfactuals would be near the decision boundary, as illustrated in Figures 5 and 6. Consequently, these counterfactuals are likely less plausible then when another convergence criteria is used.

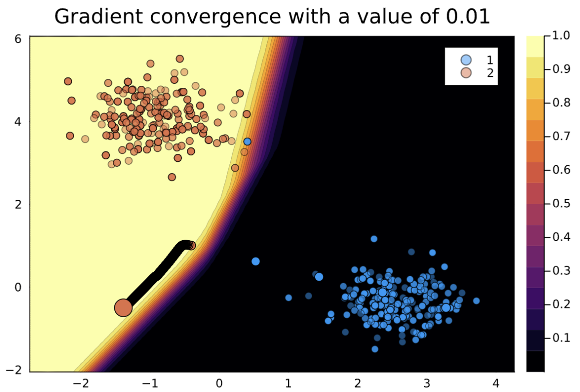

Fig. 7: The behavior of the WachterGenerator when using a gradient convergence threshold of 0.01

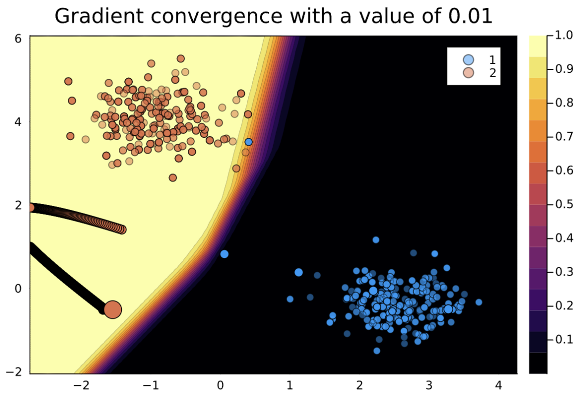

Fig. 8: The behavior of the ECCoGenerator when using a gradient convergence threshold of 0.01.

Another approach to determine convergence is by evaluating the gradients. As the gradients approach zero, it would indicate that the search is likely near a (local) optimum. This method generally provides a more reliable indication of convergence, although it is computationally more expensive. Figures 7 and 8 show that using this convergence criterion, the counterfactuals are not necessarily clustered around the decision boundary anymore. However, when using generators that favor proximity to the factual sample, such as the Wachter generator, it is logical that the counterfactual explanations still tend to end up near the decision boundary.

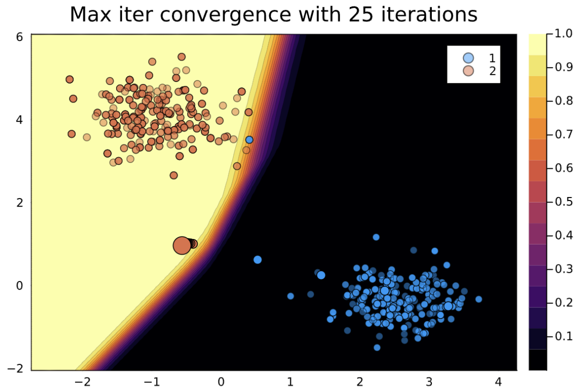

Fig. 9: The behavior of the WachterGenerator when setting the maximum iterations for convergence to 25

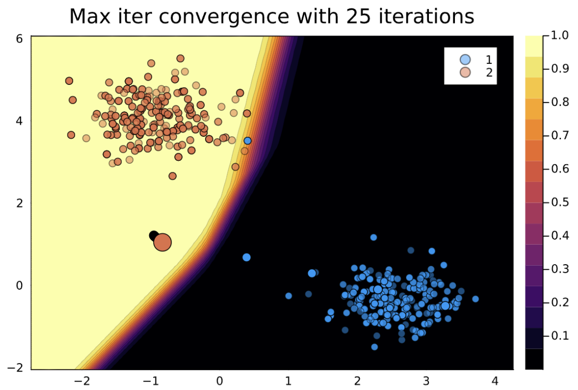

Fig. 10: The behavior of the ECCoGenerator when setting the maximum iterations for convergence to 25

The package developed by Altmeyer et al. also includes the option to terminate the search after a maximum number of iterations. While this approach can save computational resources, it has the same drawback as the threshold probabilities convergence. Namely, the search may not reach a (local) optimum. This limitation is evident in Figures 9 and 10 when comparing them to Figures 7 and 8. It is therefore that for our experiments we use a convergence criteria of both gradient convergence and maximum iterations.

Another important parameter affecting the convergence of the explanations is the step size. When the step size is larger, the newly generated counterfactual has a greater distance from the previous counterfactual compared to when the step size is smaller. This can potentially lead to convergence in fewer steps, as more of the space is explored within a given number of steps. However, the downside is that it might steps over the local optimum, resulting in a sub-optimal counterfactual explanation.

Choosing the values of the convergence criteria and the step size involve critical decision that impacts the results widely. To determine the optimal values, we conducted multiple experiments where we vary the step size and the maximum number of iterations. As for the gradient tolerance, which indicates if a local optimum has been reached, we choose a constant value of 0.1.

C.3. Finding the optimal parameters

These parameters are highly dataset-dependent, and thus must be decided on a per-dataset basis. To determine these parameters, we conducted five experiments using cross-validation and a train-test split of 80/20. The step sizes of [1.0, 0.5, 025, 0.1, 0.5, 0.01] and maximum iterations of [10. 100. 1000, 2000] were evaluated. The results were evaluated based on the time required to generate the counterfactual explanations, the percentage of valid counterfactual explanations (an explanation is valid once it is in the target class), the percentage of converged counterfactual explanations, and the faithfulness of the counterfactuals. For our use case we only consider parameters which produce valid counterfactual explanations at least 80% of the time, although a higher percentage is preferable. While we do not necessarily expect a high convergence percentage, a higher percentage is always better. A more detailed overview of the experiments and the individual results can be found in section F.1.

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	0.277±0.705	0.672±0.265	0.132±0.316
1.0, 100	0.522±0.303	0.652±0.284	0.142±0.323
1.0, 1000	5.647±3.388	0.681±0.273	0.161±0.317
1.0, 2000	11.569±6.772	0.689±0.265	0.17±0.319
0.5, 10	0.057±0.026	0.613±0.267	0.089±0.193
0.5, 100	0.519±0.29	0.645±0.255	0.157±0.331
0.5, 1000	5.352±3.125	0.605±0.278	0.168±0.329
0.5, 2000	10.873±6.576	0.614±0.282	0.172±0.328
0.25, 10	0.053±0.024	0.477±0.235	0.036±0.068
0.25, 100	0.501±0.276	0.563±0.274	0.158±0.331
0.25, 1000	5.019±3.13	0.534±0.302	0.159±0.331
0.25, 2000	9.895±5.84	0.52±0.299	0.164±0.328
0.1, 10	0.052±0.025	0.433±0.23	0.025±0.054
0.1, 100	0.471±0.251	0.519±0.292	0.154±0.332
0.1, 1000	4.981±2.858	0.517±0.292	0.165±0.328
0.1, 2000	**9.985±5.765**	**0.519±0.29**	**0.174±0.327**
0.05, 10	0.052±0.024	0.414±0.233	0.017±0.048
0.05, 100	0.498±0.251	0.504±0.257	0.102±0.189
0.05, 1000	4.89±2.92	0.512±0.297	0.175±0.33
0.05, 2000	9.613±5.714	0.5±0.299	0.177±0.33
0.01, 10	0.048±0.026	0.277±0.132	0.016±0.047
0.01, 100	0.469±0.216	0.429±0.229	0.033±0.071
0.01, 1000	4.966±2.741	0.487±0.306	0.163±0.325
0.01, 2000	9.849±5.731	0.5±0.299	0.17±0.329

Tab. 12: Grid search for the overlapping dataset with a MLP

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	2.096±6.398	0.965±0.095	0.379±0.19
1.0, 100	0.603±0.691	0.977±0.071	0.859±0.329
1.0, 1000	3.621±7.494	0.975±0.077	0.871±0.333
1.0, 2000	6.746±14.969	0.977±0.073	0.873±0.334
0.5, 10	0.151±0.065	0.949±0.117	0.264±0.129
0.5, 100	0.754±0.714	0.992±0.027	0.827±0.318
0.5, 1000	3.939±8.163	0.991±0.028	0.872±0.334
0.5, 2000	7.306±16.596	0.991±0.029	0.873±0.334
0.25, 10	0.139±0.067	0.91±0.232	0.303±0.185
0.25, 100	0.863±0.71	1.0±0.002	0.781±0.305
0.25, 1000	**4.32±8.481**	**1.0±0.002**	**0.871±0.334**
0.25, 2000	8.056±17.561	0.999±0.003	0.871±0.334
0.1, 10	0.127±0.061	0.814±0.27	0.272±0.164
0.1, 100	0.923±0.684	0.998±0.007	0.697±0.277
0.1, 1000	4.547±8.517	1.0±0.0	0.871±0.334
0.1, 2000	8.438±17.549	1.0±0.0	0.871±0.334
0.05, 10	0.106±0.05	0.511±0.212	0.147±0.093
0.05, 100	1.0±0.605	0.936±0.111	0.56±0.299
0.05, 1000	5.023±8.3	1.0±0.002	0.87±0.333
0.05, 2000	8.774±17.195	1.0±0.0	0.871±0.333
0.01, 10	0.088±0.036	0.233±0.077	0.08±0.053
0.01, 100	0.885±0.434	0.501±0.159	0.271±0.167
0.01, 1000	6.707±6.083	0.763±0.104	0.623±0.244
0.01, 2000	11.587±13.099	0.838±0.092	0.738±0.293

Tab. 13: Grid search for the overlapping dataset with a deep ensemble

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	0.992±2.681	0.946±0.068	0.178±0.316
1.0, 100	1.016±0.541	0.968±0.061	0.599±0.304
1.0, 1000	5.068±6.251	0.981±0.061	0.873±0.334
1.0, 2000	8.926±13.494	0.983±0.052	0.875±0.335
0.5, 10	0.155±0.078	0.969±0.081	0.111±0.156
0.5, 100	1.07±0.597	0.995±0.015	0.58±0.303
0.5, 1000	5.517±7.013	0.996±0.014	0.87±0.333
0.5, 2000	**9.352±14.859**	**0.997±0.01**	**0.875±0.335**
0.25, 10	0.153±0.083	0.899±0.271	0.045±0.027
0.25, 100	1.155±0.651	1.0±0.0	0.521±0.318
0.25, 1000	6.0±7.184	1.0±0.0	0.865±0.332
0.25, 2000	10.111±15.297	1.0±0.0	0.873±0.334
0.1, 10	0.153±0.094	0.876±0.331	0.049±0.033
0.1, 100	1.174±0.654	1.0±0.0	0.501±0.324
0.1, 1000	6.573±7.465	1.0±0.0	0.851±0.327
0.1, 2000	10.872±15.834	1.0±0.0	0.869±0.333
0.05, 10	0.14±0.078	0.861±0.329	0.057±0.04
0.05, 100	1.155±0.612	0.967±0.087	0.45±0.263
0.05, 1000	6.432±7.383	1.0±0.0	0.851±0.327
0.05, 2000	10.518±15.282	1.0±0.0	0.871±0.334
0.01, 10	0.105±0.058	0.623±0.267	0.062±0.045
0.01, 100	1.042±0.554	0.846±0.312	0.421±0.303
0.01, 1000	5.942±6.982	0.993±0.025	0.858±0.329
0.01, 2000	10.036±15.131	0.996±0.021	0.873±0.334

Tab. 14: Grid search for the blobs dataset with a MLP

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	0.148±0.078	0.963±0.058	0.172±0.319
1.0, 100	0.983±0.552	0.976±0.051	0.6±0.303
1.0, 1000	4.738±6.45	0.984±0.05	0.873±0.334
1.0, 2000	8.394±13.956	0.982±0.055	0.875±0.335
0.5, 10	0.146±0.074	0.966±0.081	0.111±0.155
0.5, 100	1.062±0.652	0.996±0.011	0.557±0.307
0.5, 1000	5.299±7.258	0.997±0.01	0.873±0.334
0.5, 2000	9.123±15.015	0.995±0.017	0.874±0.335
0.25, 10	0.145±0.073	0.896±0.28	0.038±0.023
0.25, 100	1.103±0.637	1.0±0.0	0.522±0.318
0.25, 1000	5.766±7.085	1.0±0.0	0.867±0.332
0.25, 2000	**9.639±14.912**	**1.0±0.0**	**0.872±0.334**
0.1, 10	0.139±0.074	0.877±0.329	0.041±0.028
0.1, 100	1.104±0.618	1.0±0.0	0.507±0.321
0.1, 1000	6.069±7.054	1.0±0.0	0.861±0.33
0.1, 2000	9.932±15.045	1.0±0.0	0.873±0.334
0.05, 10	0.127±0.067	0.856±0.329	0.052±0.036
0.05, 100	1.097±0.579	0.965±0.094	0.448±0.259
0.05, 1000	5.887±7.009	1.0±0.0	0.859±0.329
0.05, 2000	9.844±15.077	1.0±0.0	0.874±0.334
0.01, 10	0.095±0.05	0.519±0.238	0.048±0.04
0.01, 100	1.03±0.521	0.837±0.307	0.399±0.291
0.01, 1000	5.702±6.663	0.992±0.024	0.865±0.331
0.01, 2000	9.509±14.592	0.994±0.019	0.873±0.334

Tab. 15: Grid search for the blobs dataset with a deep ensemble

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	0.083±0.078	0.941±0.098	0.783±0.271
1.0, 100	0.346±0.528	0.991±0.034	0.929±0.209
1.0, 1000	**1.594±3.478**	**0.999±0.006**	**0.955±0.181**
1.0, 2000	2.888±6.887	0.999±0.005	0.956±0.184
0.5, 10	0.073±0.056	0.926±0.062	0.742±0.27
0.5, 100	0.359±0.531	0.989±0.033	0.927±0.21
0.5, 1000	1.549±3.411	0.999±0.005	0.958±0.181
0.5, 2000	2.92±6.887	0.999±0.006	0.955±0.187
0.25, 10	0.075±0.054	0.932±0.072	0.74±0.275
0.25, 100	0.397±0.603	0.991±0.028	0.927±0.208
0.25, 1000	1.573±3.483	0.999±0.005	0.961±0.176
0.25, 2000	2.904±6.909	0.998±0.008	0.959±0.183
0.1, 10	0.079±0.055	0.921±0.115	0.698±0.303
0.1, 100	0.376±0.531	0.992±0.029	0.926±0.209
0.1, 1000	1.676±3.59	1.0±0.002	0.955±0.192
0.1, 2000	2.783±6.914	1.0±0.0	0.96±0.179
0.05, 10	0.073±0.05	0.816±0.215	0.595±0.348
0.05, 100	0.383±0.524	0.989±0.028	0.921±0.209
0.05, 1000	1.632±3.481	1.0±0.003	0.957±0.185
0.05, 2000	2.845±6.913	0.999±0.005	0.958±0.183
0.01, 10	0.068±0.045	0.71±0.281	0.538±0.322
0.01, 100	0.43±0.507	0.967±0.063	0.852±0.262
0.01, 1000	1.758±3.52	0.998±0.009	0.955±0.194
0.01, 2000	2.723±6.569	1.0±0.002	0.956±0.188

Tab. 16: Grid search for the moons dataset with a MLP

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	0.061±0.049	0.934±0.137	0.838±0.299
1.0, 100	0.385±0.618	0.969±0.09	0.903±0.239
1.0, 1000	2.307±4.679	0.998±0.007	0.965±0.159
1.0, 2000	4.066±8.955	0.998±0.006	0.965±0.159
0.5, 10	0.068±0.059	0.953±0.077	0.826±0.298
0.5, 100	0.402±0.639	0.978±0.052	0.912±0.22
0.5, 1000	2.177±4.568	0.998±0.008	0.964±0.159
0.5, 2000	3.99±9.145	0.998±0.008	0.964±0.159
0.25, 10	0.068±0.051	0.945±0.069	0.79±0.286
0.25, 100	0.419±0.64	0.979±0.054	0.904±0.23
0.25, 1000	2.193±4.68	0.996±0.019	0.965±0.161
0.25, 2000	3.909±9.033	0.997±0.012	0.966±0.159
0.1, 10	0.087±0.072	0.977±0.03	0.739±0.286
0.1, 100	0.474±0.72	0.995±0.014	0.916±0.206
0.1, 1000	**2.37±4.958**	**0.999±0.003**	**0.966±0.16**
0.1, 2000	4.293±9.767	0.999±0.006	0.968±0.16
0.05, 10	0.078±0.056	0.879±0.22	0.645±0.361
0.05, 100	0.469±0.691	0.991±0.024	0.918±0.202
0.05, 1000	2.358±4.927	0.998±0.011	0.965±0.159
0.05, 2000	4.233±9.449	0.998±0.011	0.965±0.16
0.01, 10	0.075±0.054	0.744±0.296	0.565±0.332
0.01, 100	0.491±0.623	0.969±0.061	0.859±0.232
0.01, 1000	2.349±4.622	0.997±0.021	0.964±0.163
0.01, 2000	3.924±8.779	0.997±0.019	0.967±0.161

Tab. 17: Grid search for the moons dataset with a deep ensemble

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	0.176±0.17	0.968±0.077	0.166±0.318
1.0, 100	1.277±0.661	0.97±0.087	0.294±0.405
1.0, 1000	13.031±6.87	0.976±0.068	0.354±0.382
1.0, 2000	25.831±13.961	0.977±0.07	0.397±0.362
0.5, 10	0.142±0.075	0.965±0.055	0.174±0.314
0.5, 100	1.303±0.722	0.981±0.05	0.3±0.399
0.5, 1000	13.517±7.463	0.977±0.061	0.33±0.392
0.5, 2000	26.938±14.691	0.98±0.056	0.346±0.386
0.25, 10	0.142±0.072	0.961±0.045	0.187±0.265
0.25, 100	1.287±0.706	0.981±0.035	0.338±0.372
0.25, 1000	13.187±7.678	0.987±0.028	0.364±0.377
0.25, 2000	26.67±15.082	0.988±0.029	0.372±0.371
0.1, 10	0.14±0.062	0.944±0.038	0.165±0.122
0.1, 100	1.261±0.73	0.985±0.026	0.392±0.339
0.1, 1000	12.407±7.674	0.989±0.017	0.426±0.344
0.1, 2000	25.071±15.061	0.987±0.023	0.42±0.349
0.05, 10	0.135±0.066	0.853±0.052	0.145±0.074
0.05, 100	1.173±0.685	0.978±0.024	0.481±0.299
0.05, 1000	**11.337±7.811**	**0.99±0.013**	**0.498±0.314**
0.05, 2000	22.296±16.08	0.988±0.011	0.522±0.311
0.01, 10	0.115±0.057	0.632±0.076	0.092±0.056
0.01, 100	1.1±0.571	0.888±0.047	0.386±0.197
0.01, 1000	10.528±7.899	0.921±0.047	0.517±0.294
0.01, 2000	21.204±16.06	0.921±0.041	0.515±0.296

Tab. 18: Grid search for the gmcs dataset with a MLP

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	0.977±2.696	0.943±0.087	0.189±0.297
1.0, 100	1.202±0.631	0.945±0.105	0.36±0.335
1.0, 1000	10.075±6.004	0.963±0.105	0.545±0.297
1.0, 2000	18.938±12.088	0.971±0.079	0.589±0.288
0.5, 10	0.138±0.07	0.933±0.071	0.201±0.301
0.5, 100	1.225±0.626	0.954±0.079	0.369±0.32
0.5, 1000	9.89±6.021	0.973±0.074	0.569±0.293
0.5, 2000	18.471±12.261	0.975±0.074	0.598±0.286
0.25, 10	0.134±0.068	0.888±0.095	0.203±0.264
0.25, 100	1.206±0.682	0.942±0.073	0.418±0.294
0.25, 1000	9.148±5.921	0.97±0.073	0.61±0.285
0.25, 2000	17.285±12.737	0.98±0.058	0.629±0.283
0.1, 10	0.133±0.06	0.865±0.06	0.189±0.115
0.1, 100	1.034±0.635	0.94±0.049	0.527±0.269
0.1, 1000	7.56±6.687	0.976±0.054	0.693±0.287
0.1, 2000	**13.911±13.26**	**0.982±0.034**	**0.708±0.286**
0.05, 10	0.133±0.075	0.815±0.069	0.169±0.081
0.05, 100	0.979±0.634	0.918±0.054	0.559±0.263
0.05, 1000	6.835±6.921	0.957±0.054	0.718±0.285
0.05, 2000	12.506±13.5	0.96±0.044	0.726±0.285
0.01, 10	0.114±0.053	0.624±0.077	0.11±0.072
0.01, 100	0.942±0.541	0.764±0.108	0.415±0.173
0.01, 1000	6.96±5.313	0.738±0.133	0.535±0.259
0.01, 2000	13.344±10.498	0.728±0.139	0.53±0.256

Tab. 19: Grid search for the gmcs dataset with a deep ensemble

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	2.078±6.423	0.619±0.236	0.387±0.234
1.0, 100	0.291±0.218	0.632±0.234	0.474±0.276
1.0, 1000	2.948±2.524	0.625±0.226	0.488±0.289
1.0, 2000	5.727±4.487	0.616±0.225	0.488±0.277
0.5, 10	0.036±0.022	0.503±0.212	0.301±0.134
0.5, 100	0.278±0.228	0.551±0.237	0.458±0.283
0.5, 1000	2.893±2.525	0.533±0.252	0.449±0.29
0.5. 2000	5.664±4.9	0.546±0.242	0.47±0.294
0.25. 10	0.036±0.025	0.487±0.223	0.28±0.144
0.25, 100	0.293±0.244	0.551±0.284	0.431±0.283
0.25, 1000	2.872±2.771	0.568±0.288	0.461±0.306
0.25, 2000	5.905±5.613	0.559±0.283	0.455±0.295
0.1, 10	0.035±0.024	0.423±0.225	0.232±0.159
0.1, 100	0.308±0.244	0.539±0.287	0.406±0.27
0.1, 1000	2.908±2.776	0.565±0.274	0.462±0.288
0.1, 2000	5.755±5.579	0.566±0.276	0.466±0.291
0.05, 10	0.032±0.02	0.406±0.234	0.247±0.168
0.05, 100	0.309±0.241	0.518±0.261	0.354±0.181
0.05, 1000	2.975±2.735	0.527±0.297	0.419±0.296
0.05, 2000	5.999±5.585	0.552±0.282	0.449±0.287
0.01, 10	0.027±0.012	0.307±0.141	0.243±0.173
0.01, 100	0.29±0.205	0.445±0.221	0.3±0.205
0.01, 1000	2.982±2.59	0.569±0.27	0.452±0.276
0.01, 2000	5.866±5.4	0.571±0.278	0.473±0.297

Tab. 20: Grid search for the Iris dataset with a MLP.

stepsize and max iterations	time	percentage valid	percentage converged
2.0, 10	1.883±5.803	0.568±0.225	0.368±0.258
2.0, 100	0.338±0.283	0.57±0.229	0.405±0.259
2.0, 1000	3.192±2.594	0.592±0.24	0.479±0.312
2.0, 2000	6.611±5.484	0.595±0.227	0.478±0.302
2.0, 2500	8.312±6.698	0.595±0.227	0.478±0.294
2.0, 3000	10.737±8.003	0.578±0.224	0.468±0.285
2.0, 3500	13.224±10.347	0.612±0.212	0.488±0.288
2.0, 4000	16.34±11.875	0.591±0.223	0.47±0.286
1.5, 10	0.041±0.027	0.569±0.263	0.359±0.267
1.5, 100	0.353±0.28	0.573±0.27	0.376±0.268
1.5, 1000	3.718±2.619	0.556±0.265	0.397±0.282
1.5, 2000	7.655±5.538	0.585±0.262	0.424±0.288
1.5, 2500	9.608±6.861	0.569±0.274	0.415±0.304
1.5, 3000	12.431±8.454	0.578±0.257	0.429±0.289
1.5, 3500	15.339±10.194	0.579±0.271	0.432±0.305
1.5, 4000	17.597±11.33	0.581±0.268	0.442±0.314
1.0, 10	0.043±0.03	0.585±0.295	0.349±0.24
1.0, 100	**0.431±0.372**	**0.609±0.292**	**0.372±0.269**
1.0, 1000	4.475±3.899	0.591±0.291	0.366±0.259
1.0, 2000	8.927±7.085	0.594±0.289	0.379±0.256
1.0, 2500	11.973±9.328	0.587±0.3	0.352±0.255
1.0, 3000	14.759±10.746	0.586±0.299	0.374±0.264
1.0, 3500	17.99±12.342	0.608±0.281	0.386±0.258
1.0, 4000	20.783±13.521	0.597±0.278	0.396±0.262
0.5, 10	0.035±0.024	0.483±0.263	0.29±0.154
0.5, 100	0.328±0.254	0.485±0.281	0.339±0.253
0.5, 1000	3.554±2.755	0.503±0.267	0.358±0.257
0.5, 2000	7.35±5.644	0.5±0.276	0.359±0.253
0.5, 2500	9.393±6.445	0.511±0.27	0.371±0.246
0.5, 3000	12.127±7.677	0.511±0.267	0.374±0.253
0.5, 3500	14.971±9.416	0.512±0.279	0.367±0.258
0.5, 4000	18.565±11.015	0.506±0.277	0.37±0.247

Tab. 21: The extra grid search experiments for the Iris dataset with a MLP

generator	stepsize and max iterations	percentage valid	percentage converged
Gravitational	2.0, 10	0.666±0.056	0.0± 0.0
	2.0, 100	0.65±0.111	0.0± 0.0
	2.0, 1000	0.63±0.114	0.0± 0.0
	2.0, 2000	0.68±0.04	0.0± 0.0
	2.0, 2500	0.658±0.07	0.0± 0.0
	2.0, 3000	0.606±0.141	0.0± 0.0
	2.0, 3500	0.7±0.079	0.0± 0.0
	2.0, 4000	0.684±0.096	0.0± 0.0
	1.5, 10	0.688±0.153	0.0± 0.0
	1.5, 100	0.712±0.063	0.0± 0.0
	1.5, 1000	0.668±0.075	0.0± 0.0
	1.5, 2000	0.732±0.078	0.0± 0.0
	1.5, 2500	0.718±0.109	0.0± 0.0
	1.5, 3000	0.706±0.044	0.0± 0.0
	1.5, 3500	0.706±0.114	0.0± 0.0
	1.5, 4000	0.706±0.092	0.0± 0.0
	1.0, 10	0.742±0.133	0.0± 0.0
	1.0, 100	0.8±0.088	0.0± 0.0
	1.0, 1000	0.718±0.16	0.0± 0.0
	1.0, 2000	0.734±0.075	0.0± 0.0
	1.0, 2500	0.768±0.088	0.0± 0.0
	1.0, 3000	0.754±0.086	0.0± 0.0
	1.0, 3500	0.778±0.066	0.0± 0.0
	1.0, 4000	0.68±0.124	0.0± 0.0
	0.5, 10	0.85±0.085	0.006± 0.013
	0.5, 100	0.864±0.027	0.026± 0.029
	0.5, 1000	0.864±0.038	0.062± 0.037
	0.5, 2000	0.87±0.021	0.04± 0.03
	0.5, 2500	0.858±0.041	0.064± 0.061
	0.5, 3000	0.85±0.042	0.034± 0.035
	0.5, 3500	0.89±0.043	0.032± 0.025
	0.5, 4000	0.886±0.036	0.066± 0.079
Revise	2.0, 10	0.582±0.199	0.368± 0.084
	2.0, 100	0.45±0.23	0.318± 0.129
	2.0, 1000	0.498±0.21	0.466± 0.207
	2.0, 2000	0.56±0.124	0.508± 0.141
	2.0, 2500	0.53±0.156	0.48± 0.169
	2.0, 3000	0.494±0.176	0.44± 0.205
	2.0, 3500	0.494±0.117	0.452± 0.125
	2.0, 4000	0.506±0.118	0.446± 0.112
	1.5, 10	0.452±0.265	0.354± 0.176
	1.5, 100	0.484±0.24	0.334± 0.085
	1.5, 1000	0.456±0.25	0.374± 0.18
	1.5, 2000	0.474±0.196	0.396± 0.124
	1.5, 2500	0.448±0.261	0.374± 0.206
	1.5, 3000	0.556±0.197	0.486± 0.148
	1.5, 3500	0.472±0.267	0.412± 0.244
	1.5, 4000	0.44±0.256	0.374± 0.208
	1.0, 10	0.47±0.301	0.3± 0.077
	1.0, 100	0.496±0.291	0.326± 0.066
	1.0, 1000	0.532±0.262	0.34± 0.044
	1.0, 2000	0.502±0.308	0.32± 0.092
	1.0, 2500	0.492±0.287	0.288± 0.079
	1.0, 3000	0.442±0.316	0.266± 0.065

	1.0, 3500	0.512±0.279	0.348± 0.084
	1.0, 4000	0.504±0.285	0.334± 0.113
	0.5, 10	0.384±0.104	0.342± 0.08
	0.5, 100	0.308±0.09	0.26± 0.03
	0.5, 1000	0.358±0.1	0.304± 0.073
	0.5, 2000	0.434±0.111	0.4± 0.111
	0.5, 2500	0.398±0.171	0.354± 0.121
	0.5, 3000	0.304±0.109	0.26± 0.044
	0.5, 3500	0.408±0.099	0.372± 0.058
	0.5, 4000	0.388±0.127	0.36± 0.074
Ecco	2.0, 10	0.514±0.118	0.38± 0.066
	2.0, 100	0.498±0.133	0.426± 0.097
	2.0, 1000	0.58±0.218	0.532± 0.238
	2.0, 2000	0.536±0.213	0.494± 0.253
	2.0, 2500	0.518±0.175	0.492± 0.171
	2.0, 3000	0.554±0.169	0.5± 0.173
	2.0, 3500	0.538±0.184	0.492± 0.23
	2.0, 4000	0.498±0.233	0.466± 0.229
	1.5, 10	0.44±0.244	0.276± 0.093
	1.5, 100	0.458±0.251	0.332± 0.101
	1.5, 1000	0.458±0.237	0.386± 0.17
	1.5, 2000	0.562±0.205	0.486± 0.17
	1.5, 2500	0.464±0.283	0.406± 0.268
	1.5, 3000	0.52±0.178	0.446± 0.102
	1.5, 3500	0.542±0.214	0.472± 0.169
	1.5, 4000	0.556±0.22	0.52± 0.207
	1.0, 10	0.494±0.295	0.308± 0.043
	1.0, 100	0.582±0.269	0.394± 0.133
	1.0, 1000	0.508±0.301	0.334± 0.082
	1.0, 2000	0.514±0.289	0.354± 0.074
	1.0, 2500	0.55±0.265	0.38± 0.099
	1.0, 3000	0.518±0.306	0.376± 0.101
	1.0, 3500	0.546±0.266	0.388± 0.065
	1.0, 4000	0.512±0.271	0.38± 0.132
	0.5, 10	0.368±0.127	0.32± 0.092
	0.5, 100	0.336±0.145	0.28± 0.049
	0.5, 1000	0.314±0.076	0.266± 0.082
	0.5, 2000	0.366±0.145	0.324± 0.123
	0.5, 2500	0.402±0.102	0.352± 0.045
	0.5, 3000	0.41±0.124	0.374± 0.096
	0.5, 3500	0.424±0.208	0.38± 0.17
	0.5, 4000	0.376±0.146	0.346± 0.1
Wachter	2.0, 10	0.428±0.164	0.278± 0.045
	2.0, 100	0.498±0.184	0.374± 0.091
	2.0, 1000	0.494±0.257	0.446± 0.281
	2.0, 2000	0.57±0.202	0.54± 0.25
	2.0, 2500	0.52±0.217	0.474± 0.225
	2.0, 3000	0.544±0.244	0.52± 0.254
	2.0, 3500	0.578±0.201	0.548± 0.259
	2.0, 4000	0.562±0.213	0.54± 0.241
	1.5, 10	0.5±0.27	0.286± 0.07
	1.5, 100	0.526±0.262	0.366± 0.068
	1.5, 1000	0.552±0.247	0.432± 0.131
	1.5, 2000	0.478±0.262	0.36± 0.192
	1.5, 2500	0.51±0.283	0.394± 0.249
	1.5, 3000	0.532±0.269	0.478± 0.269

	1.5, 3500	0.522±0.278	0.442± 0.252
	1.5, 4000	0.516±0.259	0.446± 0.275
	1.0, 10	0.486±0.289	0.34± 0.092
	1.0, 100	0.498±0.265	0.296± 0.13
	1.0, 1000	0.462±0.311	0.332± 0.119
	1.0, 2000	0.534±0.258	0.406± 0.051
	1.0, 2500	0.428±0.318	0.296± 0.092
	1.0, 3000	0.458±0.304	0.34± 0.12
	1.0, 3500	0.512±0.275	0.372± 0.063
	1.0, 4000	0.564±0.24	0.454± 0.067
	0.5, 10	0.304±0.099	0.274± 0.062
	0.5, 100	0.324±0.086	0.286± 0.105
	0.5, 1000	0.342±0.119	0.306± 0.121
	0.5, 2000	0.33±0.102	0.306± 0.078
	0.5, 2500	0.336±0.104	0.292± 0.089
	0.5, 3000	0.412±0.095	0.388± 0.085
	0.5, 3500	0.32±0.107	0.286± 0.043
	0.5, 4000	0.328±0.108	0.306± 0.064
Generic	2.0, 10	0.428±0.18	0.32± 0.07
	2.0, 100	0.514±0.175	0.428± 0.08
	2.0, 1000	0.518±0.168	0.468± 0.202
	2.0, 2000	0.504±0.268	0.474± 0.282
	2.0, 2500	0.524±0.115	0.486± 0.128
	2.0, 3000	0.504±0.142	0.474± 0.148
	2.0, 3500	0.558±0.184	0.51± 0.182
	2.0, 4000	0.486±0.176	0.446± 0.161
	1.5, 10	0.514±0.233	0.35± 0.13
	1.5, 100	0.448±0.253	0.322± 0.103
	1.5, 1000	0.446±0.215	0.346± 0.132
	1.5, 2000	0.434±0.282	0.36± 0.247
	1.5, 2500	0.482±0.255	0.4± 0.202
	1.5, 3000	0.466±0.25	0.394± 0.219
	1.5, 3500	0.422±0.262	0.34± 0.186
	1.5, 4000	0.448±0.254	0.38± 0.237
	1.0, 10	0.44±0.322	0.302± 0.162
	1.0, 100	0.494±0.28	0.312± 0.065
	1.0, 1000	0.556±0.263	0.398± 0.095
	1.0, 2000	0.502±0.299	0.34± 0.062
	1.0, 2500	0.47±0.313	0.272± 0.054
	1.0, 3000	0.492±0.298	0.342± 0.08
	1.0, 3500	0.482±0.286	0.338± 0.115
	1.0, 4000	0.516±0.285	0.354± 0.1
	0.5, 10	0.31±0.134	0.256± 0.105
	0.5, 100	0.356±0.144	0.32± 0.095
	0.5, 1000	0.382±0.103	0.338± 0.054
	0.5, 2000	0.34±0.158	0.314± 0.126
	0.5, 2500	0.316±0.141	0.272± 0.074
	0.5, 3000	0.34±0.187	0.302± 0.108
	0.5, 3500	0.272±0.128	0.218± 0.073
	0.5, 4000	0.404±0.069	0.366± 0.065
DiCE	2.0, 10	0.47±0.193	0.302± 0.084
	2.0, 100	0.484±0.177	0.386± 0.122
	2.0, 1000	0.518±0.239	0.472± 0.259
	2.0, 2000	0.478±0.149	0.426± 0.137
	2.0, 2500	0.484±0.287	0.448± 0.313
	2.0, 3000	0.458±0.139	0.42± 0.155

	2.0, 3500	0.54±0.168	0.508± 0.149
	2.0, 4000	0.518±0.172	0.478± 0.175
	1.5, 10	0.488±0.24	0.366± 0.104
	1.5, 100	0.43±0.237	0.306± 0.084
	1.5, 1000	0.428±0.237	0.314± 0.128
	1.5, 2000	0.502±0.236	0.398± 0.147
	1.5, 2500	0.502±0.188	0.428± 0.163
	1.5, 3000	0.42±0.216	0.338± 0.124
	1.5, 3500	0.466±0.244	0.384± 0.229
	1.5, 4000	0.484±0.247	0.412± 0.235
	1.0, 10	0.554±0.259	0.372± 0.054
	1.0, 100	0.542±0.315	0.406± 0.15
	1.0, 1000	0.458±0.308	0.252± 0.087
	1.0, 2000	0.45±0.321	0.326± 0.115
	1.0, 2500	0.472±0.292	0.328± 0.08
	1.0, 3000	0.54±0.27	0.402± 0.09
	1.0, 3500	0.474±0.307	0.32± 0.077
	1.0, 4000	0.502±0.308	0.334± 0.096
	0.5, 10	0.352±0.135	0.314± 0.054
	0.5, 100	0.32±0.151	0.278± 0.103
	0.5, 1000	0.406±0.126	0.342± 0.197
	0.5, 2000	0.346±0.059	0.294± 0.105
	0.5, 2500	0.39±0.102	0.354± 0.059
	0.5, 3000	0.392±0.124	0.36± 0.092
	0.5, 3500	0.394±0.071	0.358± 0.044
	0.5, 4000	0.292±0.137	0.258± 0.083
ClaPROAR	2.0, 10	0.472±0.189	0.342± 0.044
	2.0, 100	0.472±0.21	0.368± 0.117
	2.0, 1000	0.5±0.223	0.466± 0.233
	2.0, 2000	0.444±0.204	0.408± 0.188
	2.0, 2500	0.528±0.208	0.48± 0.195
	2.0, 3000	0.464±0.183	0.44± 0.19
	2.0, 3500	0.486±0.166	0.44± 0.181
	2.0, 4000	0.476±0.176	0.428± 0.187
	1.5, 10	0.488±0.205	0.294± 0.082
	1.5, 100	0.528±0.263	0.366± 0.106
	1.5, 1000	0.444±0.242	0.334± 0.113
	1.5, 2000	0.5±0.248	0.426± 0.174
	1.5, 2500	0.426±0.239	0.332± 0.155
	1.5, 3000	0.426±0.249	0.34± 0.195
	1.5, 3500	0.504±0.252	0.426± 0.2
	1.5, 4000	0.498±0.273	0.42± 0.236
	1.0, 10	0.496±0.276	0.306± 0.108
	1.0, 100	0.46±0.316	0.282± 0.076
	1.0, 1000	0.492±0.286	0.332± 0.064
	1.0, 2000	0.514±0.271	0.34± 0.059
	1.0, 2500	0.512±0.306	0.332± 0.087
	1.0, 3000	0.484±0.3	0.308± 0.073
	1.0, 3500	0.558±0.255	0.366± 0.094
	1.0, 4000	0.496±0.292	0.358± 0.089
	0.5, 10	0.348±0.06	0.302± 0.09
	0.5, 100	0.37±0.094	0.334± 0.052
	0.5, 1000	0.358±0.056	0.308± 0.07
	0.5, 2000	0.312±0.136	0.276± 0.061
	0.5, 2500	0.388±0.163	0.354± 0.116
	0.5, 3000	0.384±0.103	0.334± 0.048

	0.5, 3500	0.388±0.131	0.354± 0.107
	0.5, 4000	0.376±0.129	0.332± 0.136
Greedy	2.0, 10	0.98±0.045	0.954± 0.064
	2.0, 100	0.994±0.013	0.94± 0.089
	2.0, 1000	1.0±0.0	0.98± 0.031
	2.0, 2000	0.988±0.016	0.974± 0.029
	2.0, 2500	1.0±0.0	0.962± 0.054
	2.0, 3000	1.0±0.0	0.946± 0.051
	2.0, 3500	1.0±0.0	0.958± 0.038
	2.0, 4000	0.994±0.013	0.954± 0.055
	1.5, 10	0.98±0.045	0.946± 0.055
	1.5, 100	1.0±0.0	0.98± 0.045
	1.5, 1000	1.0±0.0	0.986± 0.031
	1.5, 2000	1.0±0.0	0.968± 0.056
	1.5, 2500	1.0±0.0	0.986± 0.031
	1.5, 3000	1.0±0.0	0.952± 0.075
	1.5, 3500	1.0±0.0	0.98± 0.031
	1.5, 4000	1.0±0.0	0.986± 0.031
	1.0, 10	1.0±0.0	0.866± 0.093
	1.0, 100	1.0±0.0	0.96± 0.059
	1.0, 1000	1.0±0.0	0.94± 0.089
	1.0, 2000	1.0±0.0	0.946± 0.078
	1.0, 2500	1.0±0.0	0.92± 0.12
	1.0, 3000	1.0±0.0	0.96± 0.074
	1.0, 3500	1.0±0.0	0.954± 0.064
	1.0, 4000	1.0±0.0	0.954± 0.064
	0.5, 10	0.948±0.045	0.508± 0.149
	0.5, 100	1.0±0.0	0.928± 0.105
	0.5, 1000	1.0±0.0	0.94± 0.118
	0.5, 2000	1.0±0.0	0.92± 0.12
	0.5, 2500	1.0±0.0	0.926± 0.118
	0.5, 3000	1.0±0.0	0.94± 0.1
	0.5, 3500	1.0±0.0	0.94± 0.083
	0.5, 4000	1.0±0.0	0.926± 0.118

Tab. 22: An overview of the percentage of valid and converged counterfactual explanations for each generator on the Iris dataset using an MLP

stepsize and max iterations	time	percentage valid	percentage converged
1.0, 10	1.983±6.218	0.719±0.259	0.377±0.245
1.0, 100	0.451±0.35	0.738±0.245	0.455±0.283
1.0, 1000	4.461±3.478	0.741±0.248	0.459±0.294
1.0, 2000	9.082±7.315	0.745±0.249	0.474±0.289
0.5, 10	0.043±0.03	0.618±0.236	0.343±0.16
0.5, 100	0.371±0.296	0.627±0.24	0.424±0.257
0.5, 1000	3.655±3.0	0.632±0.246	0.461±0.269
0.5, 2000	7.498±6.083	0.626±0.253	0.448±0.287
0.25, 10	0.036±0.027	0.497±0.205	0.29±0.124
0.25, 100	0.324±0.282	0.552±0.274	0.384±0.267
0.25, 1000	3.253±2.97	0.589±0.255	0.469±0.263
0.25, 2000	6.307±5.868	0.603±0.263	0.495±0.286
0.1, 10	0.037±0.027	0.432±0.23	0.243±0.15
0.1, 100	0.331±0.275	0.518±0.292	0.374±0.267
0.1, 1000	3.288±2.712	0.545±0.276	0.432±0.261
0.1, 2000	6.091±4.815	0.572±0.261	0.466±0.259
0.05, 10	0.034±0.024	0.421±0.239	0.262±0.165
0.05, 100	0.321±0.224	0.497±0.272	0.32±0.146
0.05, 1000	2.782±1.652	0.533±0.288	0.428±0.257
0.05, 2000	5.427±3.26	0.541±0.286	0.444±0.262
0.01, 10	0.03±0.015	0.332±0.124	0.265±0.173
0.01, 100	0.316±0.213	0.438±0.229	0.271±0.138
0.01, 1000	2.485±1.185	0.524±0.289	0.433±0.243
0.01, 2000	4.698±2.967	0.536±0.29	0.443±0.247

Tab. 23: Grid search for the Iris dataset with a deep ensemble

stepsize and max iterations	time	percentage valid	percentage converged
1.5, 10	2.022±6.251	0.802±0.174	0.456±0.288
1.5, 100	0.438±0.373	0.811±0.169	0.47±0.312
1.5, 1000	4.834±4.137	0.801±0.172	0.468±0.301
1.5, 2000	9.476±8.065	0.811±0.167	0.487±0.298
2.0, 10	0.048±0.03	0.8±0.161	0.461±0.285
2.0, 100	0.452±0.348	0.817±0.139	0.489±0.295
2.0, 1000	4.976±3.889	0.821±0.147	0.49±0.301
2.0, 2000	9.746±7.892	0.811±0.161	0.497±0.329
2.5, 10	0.052±0.033	0.803±0.154	0.461±0.298
2.5, 100	0.478±0.354	0.805±0.152	0.465±0.314
2.5, 1000	**5.147±4.343**	**0.822±0.145**	**0.502±0.351**
2.5, 2000	9.359±7.998	0.821±0.151	0.542±0.336
3.0, 10	0.052±0.031	0.798±0.167	0.454±0.306
3.0, 100	0.474±0.385	0.803±0.161	0.496±0.323
3.0, 1000	4.932±4.045	0.801±0.178	0.517±0.361
3.0, 2000	9.422±8.094	0.815±0.164	0.536±0.356

Tab. 24: Extra grid search experiments for the Iris dataset with a deep ensemble

stepsize and max iterations	time	percentage valid	percentage converged
2.5, 10	13.108±20.344	0.524±0.081	0.522±0.08
2.5, 100	1.619±1.417	0.535±0.059	0.532±0.058
2.5, 1000	14.478±12.288	0.522±0.064	0.518±0.063
2.5, 2000	**27.975±22.471**	**0.538±0.065**	**0.532±0.062**
2.0, 10	0.308±0.348	0.53±0.053	0.528±0.052
2.0, 100	1.694±1.454	0.512±0.062	0.507±0.061
2.0, 1000	14.326±12.624	0.522±0.066	0.518±0.066
2.0, 2000	30.567±28.004	0.51±0.067	0.506±0.064
1.5, 10	0.31±0.349	0.528±0.052	0.525±0.051
1.5, 100	1.578±1.201	0.517±0.065	0.513±0.064
1.5, 1000	15.314±15.472	0.519±0.066	0.515±0.062
1.5, 2000	28.902±25.093	0.533±0.076	0.529±0.074
1.0, 10	0.306±0.351	0.504±0.053	0.502±0.053
1.0, 100	1.636±1.219	0.527±0.054	0.524±0.053
1.0, 1000	15.357±15.301	0.514±0.057	0.51±0.056
1.0, 2000	29.614±23.858	0.521±0.056	0.516±0.058
0.5, 10	0.298±0.349	0.523±0.073	0.519±0.074
0.5, 100	1.491±1.013	0.53±0.057	0.523±0.056
0.5, 1000	14.407±11.141	0.523±0.062	0.518±0.062
0.5, 2000	29.668±25.139	0.524±0.066	0.518±0.065
0.01, 10	0.325±0.401	0.508±0.055	0.508±0.055
0.01, 100	1.569±1.184	0.514±0.045	0.514±0.045
0.01, 1000	14.364±13.29	0.508±0.059	0.508±0.059
0.01, 2000	28.199±22.945	0.505±0.061	0.505±0.061

Tab. 25: Grid search for the worm dataset with a MLP

stepsize and max iterations	time	percentage valid	percentage converged
2.5, 10	15.979±24.703	0.449±0.062	0.448±0.061
2.5, 100	**3.297±2.067**	**0.488±0.069**	**0.488±0.069**
2.5, 1000	30.227±18.508	0.471±0.071	0.471±0.071
2.5, 2000	59.468±35.724	0.476±0.053	0.476±0.053
2.0, 10	0.487±0.391	0.454±0.053	0.453±0.053
2.0, 100	3.003±1.616	0.469±0.065	0.469±0.064
2.0, 1000	28.971±17.7	0.463±0.054	0.462±0.053
2.0, 2000	60.419±38.801	0.468±0.067	0.467±0.067
1.5, 10	0.502±0.39	0.475±0.056	0.47±0.053
1.5, 100	3.159±1.791	0.465±0.06	0.463±0.057
1.5, 1000	31.542±22.473	0.46±0.062	0.456±0.06
1.5, 2000	59.406±34.566	0.46±0.06	0.456±0.052
1.0, 10	0.497±0.412	0.47±0.066	0.46±0.058
1.0, 100	3.278±1.871	0.471±0.052	0.46±0.052
1.0, 1000	31.609±22.053	0.467±0.059	0.461±0.06
1.0, 2000	60.378±34.641	0.468±0.061	0.461±0.056
0.5, 10	0.528±0.418	0.47±0.049	0.452±0.042
0.5, 100	3.328±1.771	0.47±0.054	0.449±0.05
0.5, 1000	32.066±20.13	0.475±0.06	0.456±0.057
0.5, 2000	62.668±37.654	0.475±0.061	0.457±0.051
0.01, 10	0.52±0.469	0.482±0.06	0.468±0.056
0.01, 100	2.974±1.712	0.486±0.053	0.478±0.05
0.01, 1000	28.867±17.991	0.487±0.07	0.475±0.071
0.01, 2000	56.954±33.69	0.478±0.066	0.468±0.068

Tab. 26: Grid search for the worm dataset with a neural network

C.3.1. The parameters for the overlapping dataset MLP

In Table 12 the average results of the overlapping dataset using an MLP are presented. It can be observed that the faithfulness is indeed very low. The percentage converged counterfactuals increases with the maximum number of iterations, indicating that given sufficient iterations, the samples will converge. Regarding the percentage of valid counterfactuals, all experiments yield values above our minimum standard. In conclusion, we chose a step size of 0.1 and a maximum of 2000 iterations. This decision is bases on the fact that the algorithm still finishes in a reasonable amount of time, and although the differences are minimal, more iterations do lead to a higher percentage of converged counterfactual explanations.

Table 13 presents the results of applying a deep ensemble to the overlapping dataset. It is evident that a step size smaller than 0.25 significantly reduces convergence, especially when fewer iterations are used. When the step size is further reduced to 0.01, this effect becomes even more pronounced, even with a higher number of iterations. Consequently, we decided to use a step size of 0.25 and a maximum of 1000 iterations. This choice is driven primarily by the high percentages of both valid and converged counterfactual explanations.

C.3.2. The parameters for the blobs dataset

The results of the parameter search using the blobs dataset are presented in Tables 14 and 15. Table 14 highlights the parameters search for the MLP model, where a high percentage of valid counterfactual explanations is observerd across most experiments. However, the percentage of converged counterfactuals varies significantly. To balance the convergence rate with computational efficiency, we opted for a stepsize of o.5 and a maximum of 2000 iterations.

Tables 15 shows similar outcomes. In this case, a step size of 0.25 and a maximum of 2000 iterations was selected to optimize the results.

C.3.3. The parameters for the moons dataset

Tables 16 and 17 present the results of the parameter search using the moons dataset. While the percentage of valid counterfactuals is generally very high, the percentage of converged counterfactuals shows more variation. When selecting the step size and maximum number of iterations, we aimed to maximize the convergence rate while minimizing the computational time. For the MLP experiments, we chose a step size of 1.0 and a maximum of 1000 iterations. For the deep ensemble the parameters we choose are 0.1 and 1000 iterations.

C.3.4. The parameters for the gmcs dataset

Tables 18 and 19 show the results of the parameter search when using the GMCS dataset. As with the previous datasets, the percentage of valid counterfactuals is high, though the percentage of converged counterfactuals is lower. We aimed to strike an optimal balance with time, valid counterfactuals and converged counterfactuals. This led us to select parameters of 0.25 and 1000 iterations for the MLP experiments, 0.05 and 1000 iterations for the deep ensemble experiments.

C.3.5. The parameters for the iris dataset

In Table 20 the result of the iris dataset where shown. As can be seen none of the combinations of parameters meet our requirement of 80% valid counterfactuals. It is was therefore decided that additional experiments needed to be ran. The decision was made to extent the amount of iterations and step sizes. The stepsizes now include: [2.0, 1.5, 1.0, 0.5] and the maximum iterations now include: [10, 100, 1000, 2000, 2500, 3000, 3500, 4000] As for the other step sizes it would take more iterations and thus take more time. The results of these experiments can be found in Table 21

Even when doing the extra results we do not meet our requirement of 80% valid counterfactuals. Upon further inspection of the individual results which can be found in Table 22, we observe tat certain generators, such as the gravitational and greedy generators, meet the requirements. However, the other generators produce valid counterfactual explanations only about half the time.

We concluded that it is unlikely we will meet our goal of achieving 80% valid counterfactual explanations. However, we chose to proceed because some generators do meet this requirement. For the stepsize, we opted to use a value of 1.0 with a maximum of 100 iterations, as this approach balances low computation time with relatively high performance.

For the Iris dataset, when using a deep ensemble, as shown in Table 23, the results did not meet the requirement of 80% valid counterfactual explanations. Consequently, new experiments where conducted using step sizes of [1.5, 2.0, 2.5, 3.0] and maximum iterations of [10, 100, 1000, 2000]. The results are presented in Table 24, where the 80% validity threshold is met. Based on these results, a stepsize of 2.5 anda maximum of 1000 iterations where chosen. This decision was driven by the high percentage of valid counterfactual explanations, a relatively high convergence rate, and the relatively low computation time.

C.3.6. The parameters for the worm dataset

For the worm dataset, we consider different parameters compared to the other datasets due to the increased complexity of the data. The step sizes that were evaluated were [2.5, 2.0, 1.5, 1.0, 0.5, 0.01], and the maximum iterations considered where [10, 100, 1000, 2000]. The results of the grid search for both the MLP and the neural network are presented in Table 25 and Table 26. In both cases, the threshold of 80% valid counterfactual explanations was not reached, likely due to the data's complexity and the model's performance. However, due to time constraints and the fact that the framework serves as a proof of concept rather than a fully optimized metric, we proceeded with these parameters. Specifically, we chose a step size of 2.5 and 2000 iterations for the MLP, and 2.5 and 100 iterations for the neural network.

D. Why use counterfactual explanations

To uncover the reasoning of a machine learning models, two approaches can be taken. First, you could only use transparent models, these models are inherently explanatory by design. However, not all models are transparent. In our case, where we aim to test all different kind of machine learning models, restricting ourselves to transparent models is not feasible. The second approach involves using Explainable Artificial (XAI) techniques. However, critics, such as Rudin et al., argue that these techniques do not faithfully represent the original model [21]. To address these concerns, we evaluate the faithfulness of the XAI techniques used.

D.1. Why not commonly used XAI techniques

Two commonly used XAI techniques are Local Interpretable Model-agnostic Explanations (LIME) [2] and SHapley Additive exPlanations (SHAP) [1]. LIME is a model-agnostic technique that provides local explanations by approximating the decision boundary through training a surrogate model on perturbed samples. SHAP, on the other hand, uses Shapley values to provide both local en global explanations, encoding the contribution of each feature by considering all possible combinations of feature values.

These methods are already applied in the biological domain. For instance Yagin et al. identified COVID-19 biomarkers using SHAP [25], and Johnsen et al. used SHAP to identify potential interaction candidates [26]. LIME has also been used in the biological domain, such as in finding biomarkers for Alzheimer's [27], identifying genes associated with gastric tumour formations [28], and for diagnosing breast cancer [29].

As seen SHAP and LIME are widely used in the biological domain, one possible reason being that their implementation is widely available. On top of that Altmeyer et al. state that it is straightforward to measure the reliability of surrogate models [20]. However, these methods also come with its downsides. A mayor downside of LIME is that it uses a surrogate model. Due to the fact that this surrogate model is often quite simple it suffers from a inherent fidelity-interpretability trade-off [30]. Highly interpretable explanations may end up approximating too much can be inconsistent with the original model, having low fidelity. While high fidelity explanations may be as complex as the original model and thus less interpretable. Altmeyer et al. points out that even if this high-fidelity surrogate model is right 99 percent of the time, it would mean that is is incorrect 1 out of 100 times [8]. Making it also less faithful to the original model. In contrary counterfactual explanations always achieve full fidelity by construction. Due to the fact that they search with respect to the original model and not for some proxy.

Another downside is that both SHAP and LIME produce feature importance plots. While this is not inherently a downside on its own, for these plots to be truly useful, the features themselves need to be understandable. In high-dimensional image data, for example, the features by themselves can be quite unclear. Additionally, feature importance plots indicate which features are influential and how they affect the outcome, but they do not suggest what changes should be made to alter the outcome. The latter triggers the causal reasoning in humans and may explain why studies have shown that users prefer counterfactual explanations over other methods like case-based reasoning [31]. Pfeifer et al. point out another downside of feature importance plots, these methods typically present the importance of variables individually, without considering the often complex relationships between variable, such as interactions or correlations [32].

A recent study revealed that even experienced data scientists tend to put too much trust in explanations produced by LIME and SHAP [33]. Furthermore, Altmeyer et al also note that both methods can be easily deceived [20]. Because they rely on random input perturbations, adversaries can exploit this to obscure a biased black-box model. Related research found that while gradient-based counterfactual explanations can also be manipulated, there is a straightforward way to protect against this in practice.

D.2. The downsides of counterfactual explanations

Counterfactual explanations, while useful, also come with their own challenges. One significant issue is that counterfactual explanations do not always generate samples that are feasible in the real world. For our use case, however, we prioritize faithfulness over feasibility.

Altmeyer et al. highlight another downside, they show that a domain shift can occur when recourse actions are considered [8]. They hypothesize that this shift occurs because the counterfactual generator produces samples that do not match the data-generating process of the observed data, making them implausible. When these dissimilar samples are used to retain the model, the decision boundary can shift. Although we do not use recourse, we do use newly generated counterfactual explanations to train a model. When the original model is a "good" model, faithfulness and plausibility are closely aligned, so we do not expect domain shift to be an issue. However, if a model is "bad" plausibility does not equal to faithfulness. Consequently, depending on the generator used, we might produce samples that are faithful but not plausible. According to Altmeyer et al., this could lead to a domain shift which leads to a reduction in faithfulness. Therfore, we closely monitor the potential domain shift when evaluating the faithfulness metric.

D.3. A final reflection on counterfactual explanations

In conclusion, counterfactual explanations come as a natural choice for our use case. Mainly due to them having full fidelity, a quality that cannot be guaranteed when using other commonly used metrics such as LIME. Furthermore, counterfactual explanations offer clearer and more intuitive insights compared to alternatives like feature importance plots. Nonetheless, it's essential to be cautious regarding the faithfulness and plausibility of samples, as their potential impact on domain shifts requires careful consideration.

E. Creating the faithfulness metric

Currently, there is no widely accepted metric for assessing faithfulness. However, to address our first research question, we need to evaluate whether the counterfactual explanations are faithful to the model. To this end, we propose our own faithfulness metric.

As discussed in the paper, we adopted the concept of simulating a teacher model with a student model, incorporating the counterfactual explanations during the student model's training. If the counterfactual explanations are faithful, they should aid in training a more accurate student model. Consequently, the student model with counterfactual explanations should outperform the one without them.

E.1. How to include counterfactual explanations

Pruthi et al. suggest using attention regularization or multitask learning to incorporate counterfactual explanations [4]. However, these methods are not suitable for our use case. Therefore, we conducted multiple experiments to determine an efficient way to include the counterfactual explanations. We explored several approaches: considering only the counterfactuals in the $\hat{e}$ dataset, including both factuals and counterfactuals in the $\hat{e}$ dataset, randomly selecting a mix of factuals and counterfactuals (allowing both to be included), and lastly, choosing either the factual or the counterfactual exclusively.

In the early stages, we also considered including counterfactual explanations as additional features. However, this approach proved impractical, as it would require using a test set to evaluate both the student and teacher models, meaning they would need the same number of features. Moreover, this approach would not result in a fair comparison due to the difference in complexity.

When looking at Tables 27, 38, 35 and 32.It is evident that for the MLP model, the method of including counterfactual explanations only half of the time performs the worst. This is surprising, as we initially believed this approach would be the most promising in theory. Interestingly, for the deep ensemble, this method performs as well as, if not better than, the other methods.

We would also expect that the method incorporating both the factual and counterfactual samples would outperform the others, as increasing the amount of training data generally enhances model performance.

Additionally, it is surprising that the method using only counterfactual explanations performs so well. We can think of two possible reasons for this. First, if the generators produce samples near the decision boundary, they may help define a more precise boundary. Second, if the counterfactual explanations are plausible, the new samples likely follow the same data distribution as the original data, leading to similar model performance. However, if this was the case, the method that includes both factual and counterfactual explanations should perform equally well.

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.243 ± 0.077	0.0	-0.017±0.025	1.2	-0.04±0.05	0.0	-0.17±0.081	0.0
REVISE	-0.193 ± 0.084	0.0	-0.009±0.025	2.2	-0.088±0.12	0.0	-0.121±0.091	0.0
ECCo	-0.093 ± 0.065	0.4	-0.01±0.021	2.4	-0.474±0.192	0.0	-0.061±0.058	1.0
Wachter	-0.118 ± 0.068	0.0	-0.002±0.014	2.6	-0.143±0.125	0.0	-0.05±0.078	0.8
Generic	-0.101 ± 0.074	0.4	0.001±0.017	3.8	-0.15±0.118	0.0	-0.056±0.057	0.6
DiCE	-0.106 ± 0.083	0.2	0.002±0.017	3.4	-0.143±0.116	0.0	-0.049±0.059	0.8
ClaPROAR	-0.108 ± 0.065	0.2	0.002±0.016	4.6	-0.145±0.121	0.0	-0.059±0.057	0.8

Tab. 27: The performance of various methods for including counterfactual explanations on the overlapping dataset using an MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
REVISE	-0.009 +- 0.019	1.8	-0.004+-0.019	2.8	-0.016+-0.024	1.6	-0.012+-0.016	1.0
ECCo	0.004 +- 0.016	4.0	0.013+-0.013	7.0	-0.005+-0.016	2.0	0.0+-0.014	3.6
Wachter	0.003 +- 0.01	3.2	0.01+-0.01	6.8	0.002+-0.014	3.6	0.002+-0.02	3.4
Generic	0.002 +- 0.011	3.2	0.01+-0.01	7.0	-0.001+-0.013	2.6	-0.001+-0.015	3.8
DiCE	0.004 +- 0.013	3.4	0.01+-0.012	6.2	0.002+-0.012	3.0	0.001+-0.011	3.4
ClaPROAR	0.002 +- 0.014	3.8	0.01+-0.01	7.0	0.001+-0.012	2.8	0.005+-0.015	3.4

Tab. 28: The performance of various methods for including counterfactual explanations on the overlapping dataset using an Deep ensemble

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.001 ± 0.007	1.2	0.0±0.005	0.8	-0.002±0.007	0.6	-0.002±0.008	0.4
REVISE	-0.002 ± 0.006	0.8	0.001±0.005	1.2	-0.001±0.005	0.4	-0.0±0.006	0.8
ECCo	-0.004 ± 0.007	0.2	-0.178±0.176	0.0	-0.002±0.008	0.6	-0.002±0.009	1.0
Wachter	-0.0 ± 0.006	1.0	-0.0±0.007	1.0	0.0±0.007	1.2	-0.002±0.008	0.6
Generic	-0.001 ± 0.004	0.6	0.0±0.006	1.0	-0.0±0.007	1.2	-0.001±0.007	1.0
DiCE	-0.0 ± 0.006	1.2	0.002±0.006	2.0	0.001±0.006	1.2	0.001±0.006	1.2
ClaPROAR	0.0 ± 0.007	1.2	0.002±0.008	2.0	-0.0±0.007	0.8	-0.001±0.004	0.4

Tab. 29: The performance of various methods for including counterfactual explanations on the blobs dataset using MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.003 ± 0.007	0.2	0.001±0.006	1.2	-0.001±0.005	0.4	-0.002±0.008	0.6
REVISE	-0.003 ± 0.006	0.2	-0.0±0.006	0.4	-0.002±0.007	0.2	-0.001±0.007	1.2
ECCo	-0.004 ± 0.007	0.2	-0.022±0.044	0.2	-0.001±0.005	0.2	-0.002±0.005	0.2
Wachter	0.001 ± 0.003	0.6	-0.004±0.01	0.4	0.0±0.007	1.0	0.001±0.005	1.6
Generic	0.002 ± 0.006	1.6	-0.001±0.007	1.0	0.001±0.004	1.0	0.001±0.004	1.0
DiCE	0.002 ± 0.007	1.6	-0.002±0.009	0.6	0.001±0.005	1.2	0.001±0.005	1.4
ClaPROAR	0.001 ± 0.006	1.4	-0.003±0.012	0.8	0.002±0.005	1.8	0.002±0.008	1.6

Tab. 30: The performance of various methods for including counterfactual explanations on the blobs dataset using an Deep ensemble

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.004 ± 0.05	3.8	-0.091±0.068	0.4	-0.005±0.023	2.8	-0.018±0.025	2.2
REVISE	0.013 ± 0.042	4.0	-0.405±0.308	0.0	0.022±0.04	6.2	-0.017±0.021	1.0
ECCo	-0.004 ± 0.054	4.6	-0.139±0.107	0.2	-0.005±0.02	2.6	-0.01±0.02	2.2
Wachter	0.003 ± 0.057	5.2	-0.08±0.071	0.8	0.006±0.018	5.2	-0.005±0.017	1.8
Generic	0.006 ± 0.052	5.8	-0.087±0.086	0.6	0.004±0.025	3.2	-0.006±0.022	2.8
DiCE	0.003 ± 0.052	5.0	-0.077±0.082	1.0	0.001±0.021	3.2	-0.003±0.017	2.2
ClaPROAR	0.013 ± 0.053	5.6	-0.072±0.065	1.2	0.003±0.025	3.6	-0.003±0.019	2.6

Tab. 31: The average differences between the simulation accuracy of model d and of model e for the moons dataset using a MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	0.019 ± 0.027	6.8	-0.052±0.039	0.6	-0.001±0.019	3.6	0.001±0.021	4.4
REVISE	0.035 ± 0.029	8.6	-0.576±0.267	0.4	0.011±0.037	5.4	0.011±0.031	4.8
ECCo	0.016 ± 0.022	6.4	-0.067±0.038	0.4	-0.003±0.022	2.2	-0.001±0.022	3.8
Wachter	0.026 ± 0.022	8.2	-0.067±0.044	0.0	0.002±0.02	4.0	0.005±0.028	5.0
Generic	0.02 ± 0.026	7.2	-0.067±0.04	0.0	-0.001±0.019	3.6	0.006±0.022	3.8
DiCE	0.021 ± 0.025	7.6	-0.061±0.049	0.2	-0.005±0.022	3.0	-0.004±0.027	3.8
ClaPROAR	0.028 ± 0.02	9.0	-0.058±0.049	0.8	0.002±0.021	3.8	-0.0±0.026	3.2

Tab. 32: The average differences between the simulation accuracy of model d and of model e for the moons dataset using a MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.085 ± 0.023	0.0	-0.274±0.02	0.0	-0.092±0.028	0.0	-0.092±0.029	0.0
REVISE	-0.078 ± 0.022	0.0	-0.358±0.081	0.0	-0.096±0.047	0.0	-0.098±0.033	0.2
ECCo	-0.084 ± 0.022	0.0	-0.522±0.043	0.0	-0.103±0.034	0.0	-0.106±0.036	0.0
Wachter	-0.072 ± 0.024	0.0	-0.22±0.126	0.0	-0.091±0.035	0.0	-0.092±0.028	0.0
Generic	-0.074 ± 0.018	0.0	-0.224±0.118	0.0	-0.103±0.036	0.0	-0.087±0.031	0.0
DiCE	-0.073 ± 0.021	0.0	-0.227±0.111	0.0	-0.094±0.033	0.0	-0.094±0.03	0.0
ClaPROAR	-0.067 ± 0.021	0.0	-0.217±0.121	0.0	-0.092±0.03	0.0	-0.098±0.033	0.0

Tab. 33: The performance of various methods for including counterfactual explanations on the gmcs dataset using a MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.099 ± 0.025	0.0	-0.327±0.038	0.0	-0.108±0.033	0.0	-0.096±0.028	0.0
REVISE	-0.083 ± 0.025	0.0	-0.365±0.083	0.0	-0.094±0.034	0.0	-0.076±0.027	0.0
ECCo	-0.088 ± 0.022	0.0	-0.517±0.06	0.0	-0.089±0.033	0.0	-0.088±0.027	0.0
Wachter	-0.074 ± 0.027	0.0	-0.056±0.029	0.0	-0.078±0.029	0.0	-0.076±0.032	0.0
Generic	-0.073 ± 0.027	0.0	-0.06±0.027	0.0	-0.077±0.026	0.0	-0.074±0.025	0.0
DiCE	-0.075 ± 0.029	0.0	-0.061±0.023	0.0	-0.077±0.032	0.0	-0.079±0.031	0.0
ClaPROAR	-0.073 ± 0.025	0.0	-0.063±0.026	0.0	-0.083±0.028	0.0	-0.077±0.031	0.0

Tab. 34: The performance of various methods for including counterfactual explanations on the gmcs dataset using an Deep ensemble

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.02 ± 0.155	2.6	-0.233±0.214	0.6	-0.198±0.185	0.6	-0.16±0.214	1.0
REVISE	-0.038 ± 0.154	1.6	-0.452±0.249	0.2	-0.24±0.215	0.8	-0.235±0.211	0.4
ECCo	-0.024 ± 0.141	2.6	-0.518±0.217	0.2	-0.157±0.198	0.8	-0.182±0.241	1.6
Wachter	0.038 ± 0.134	4.0	-0.312±0.239	0.6	-0.204±0.219	0.6	-0.229±0.221	0.6
Generic	0.029 ± 0.13	3.8	-0.326±0.201	0.2	-0.158±0.172	0.4	-0.163±0.184	1.0
DiCE	-0.003 ± 0.14	3.4	-0.361±0.246	0.6	-0.184±0.246	1.6	-0.144±0.203	1.4
ClaPROAR	0.028 ± 0.149	3.8	-0.348±0.244	0.4	-0.166±0.206	1.0	-0.163±0.228	1.4

Tab. 35: The performance of various methods for including counterfactual explanations on the Iris dataset using an MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
REVISE	-0.049 ± 0.16	2.0	-0.357±0.186	0.0	-0.223±0.19	0.6	-0.224±0.222	0.4
ECCo	-0.011 ± 0.144	3.0	-0.39±0.222	0.2	-0.219±0.181	0.4	-0.258±0.223	1.0
Wachter	-0.033 ± 0.207	2.6	-0.215±0.225	0.8	-0.257±0.151	0.0	-0.164±0.199	1.0
Generic	0.031 ± 0.145	3.0	-0.182±0.228	1.4	-0.166±0.229	1.8	-0.162±0.201	1.8
DiCE	-0.027 ± 0.163	2.4	-0.203±0.274	1.6	-0.22±0.2	0.6	-0.178±0.203	0.8
ClaPROAR	0.022 ± 0.15	3.0	-0.175±0.203	0.6	-0.152±0.244	1.8	-0.209±0.198	0.4

Tab. 36: The performance of various methods for including counterfactual explanations on the iris dataset using an Deep ensemble

For the experiments which use the Iris dataset and a Deep Ensemble, as shown in Table 32, the results align with our expectations. The method that includes both the factual and the counterfactual samples, as well as the method that either includes the counterfactual or factual, outperforms the other approaches.

While some variation in behavior when changing the dataset and/or model is expected, such a significant shift is intriguing and should be investigated further.

E.2. Generators that are more faithful

Each type of generator has its own strengths and weaknesses. Consequently, some generators are more faithful than others. This raises the question: which generators are more faithful, and does our proposed metric capture this? The generators can be broadly categorized into three different categories.

First, there are those that aim to sample from the true data distribution, such as REVISE. Next, there are those that try to sample from the conditional distribution, like ECCo. Finally, there are generators what focus on producing explanations near the decision boundary, such as Wachter.

Let's explore the first category further. Generating mode samples from the true data distribution can improve the model performance, as more data often enhances training. However, there is an optimal amount of data to use, beyond which accuracy would not improve significantly. We do not expect that the model with explanations would perform the model without explanations in these cases, due to the fact that they would be trained on the same data distribution. However, if the model under evaluation is poorly trained, the conditional distribution might not closely align with the true data distribution. This misalignment raises doubts about whether accurate predictions can be made. And thus we do expect to see a difference in model performance between the two student models.

In the second category, which samples from the conditional distribution, we might see similar behavior as in the first category. However, in situations where the evaluated model is poorly trained, the model with the explanations may perform better than the model without the explanations.

The third category involves samples that are not necessarily drawn from any specific distribution, and thus may not be considered faithful according to the given definition. However, based on how our faithfulness metric is defined, a model trained on these samples could still score well. Since they provide insight into the location of the decision boundary, training on such samples can help refine the boundary between the classes. Although this information does not necessarily originate from a data distribution, it still reflects a property of the model itself and could, therefore, still be considered faithful under our proposed definition.

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.015 ± 0.017	1.0	-0.012±0.014	0.8	-0.0±0.002	0.0	-0.016±0.019	1.0
REVISE	-0.008 ± 0.019	2.2	-0.012±0.025	2.4	-0.001±0.002	0.0	-0.014±0.022	1.2
ECCo	-0.001 ± 0.017	3.6	0.003±0.015	4.4	-0.001±0.003	0.0	-0.004±0.02	2.6
Wachter	0.003 ± 0.017	3.8	0.008±0.018	5.4	0.0±0.0	0.0	-0.005±0.02	2.4
Generic	-0.001 ± 0.012	3.0	0.006±0.012	5.2	-0.001±0.002	0.0	-0.003±0.014	2.6
DiCE	0.002 ± 0.015	3.6	0.006±0.015	5.4	-0.002±0.004	0.0	-0.004±0.016	1.8
ClaPROAR	-0.002 ± 0.015	2.4	0.005±0.014	4.0	-0.001±0.004	0.0	-0.0±0.017	3.8

Tab. 37: The performance of various methods for including counterfactual explanations on the overlapping dataset using an Deep ensemble and MLP

	all		all counter		half		random	
generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
REVISE	-0.01 ± 0.019	1.8	-0.002±0.012	0.6	-0.002±0.006	0.6	-0.001±0.006	0.8
ECCo	-0.008 ± 0.021	2.6	-0.015±0.043	1.2	-0.003±0.006	0.2	-0.002±0.006	0.6
Wachter	0.003 ± 0.01	3.2	-0.002±0.007	0.2	0.0±0.006	0.8	-0.0±0.006	1.2
Generic	0.002 ± 0.011	3.2	-0.002±0.007	0.4	0.0±0.007	1.0	0.001±0.007	1.2
DiCE	0.004 ± 0.013	3.6	-0.002±0.009	0.6	-0.0±0.006	1.0	-0.0±0.007	0.6
ClaPROAR	0.002 ± 0.014	3.8	-0.003±0.011	0.8	0.001±0.004	0.8	0.001±0.006	1.4

Tab. 38: The performance of various methods for including counterfactual explanations on the blobs dataset using an Deep ensemble and an MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	0.016 ± 0.02	6.4	-0.04±0.026	0.4	0.007±0.022	4.6	-0.017±0.019	0.8
REVISE	0.05 ± 0.03	9.2	-0.658±0.212	0.0	0.025±0.027	8.0	-0.014±0.02	1.6
ECCo	0.02 ± 0.021	7.6	-0.078±0.033	0.0	-0.004±0.021	2.8	-0.001±0.018	2.6
Wachter	0.034 ± 0.027	8.6	-0.11±0.072	0.0	0.005±0.02	4.4	-0.006±0.02	2.6
Generic	0.03 ± 0.027	7.8	-0.121±0.088	0.4	0.004±0.023	3.6	-0.003±0.014	2.8
DiCE	0.032 ± 0.029	8.8	-0.104±0.057	0.0	0.004±0.025	4.2	-0.003±0.016	2.0
ClaPROAR	0.023 ± 0.025	7.6	-0.099±0.067	0.2	0.002±0.021	4.2	-0.001±0.02	3.8

Tab. 39: The average differences between the simulation accuracy of model d and of model e for the moons dataset using a deep ensemble

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.066 +- 0.028	0.0	-0.303+-0.034	0.0	-0.092+-0.025	0.0	-0.088+-0.031	0.0
REVISE	-0.051 +- 0.026	0.6	-0.376+-0.076	0.0	-0.093+-0.032	0.0	-0.094+-0.037	0.0
ECCo	-0.064 +- 0.031	0.2	-0.537+-0.059	0.0	-0.102+-0.034	0.0	-0.098+-0.034	0.0
Wachter	-0.046 +- 0.025	0.0	-0.145+-0.077	0.0	-0.083+-0.026	0.0	-0.093+-0.039	0.0
Generic	-0.048 +- 0.024	0.2	-0.147+-0.096	0.0	-0.091+-0.035	0.0	-0.079+-0.034	0.2
DiCE	-0.051 +- 0.028	0.0	-0.138+-0.067	0.0	-0.081+-0.028	0.0	-0.094+-0.033	0.0
ClaPROAR	-0.049 +- 0.027	0.0	-0.131+-0.062	0.0	-0.088+-0.029	0.0	-0.089+-0.03	0.0

Tab. 40: The performance of various methods for including counterfactual explanations on the gmcs dataset using an Deep ensemble and a MLP

	all		all counter		half		random	
Generator	avg diff	count	avg diff	count	avg diff	count	avg diff	count
Gravitational	-0.095 ± 0.176	1.4	-0.296±0.189	0.0	-0.016±0.19	3.2	-0.222±0.209	0.6
REVISE	-0.015 ± 0.165	2.8	-0.431±0.169	0.0	0.027±0.184	4.0	-0.166±0.205	1.0
ECCo	-0.081 ± 0.157	1.6	-0.442±0.202	0.0	-0.061±0.183	1.6	-0.189±0.218	0.8
Wachter	-0.008 ± 0.139	3.2	-0.249±0.229	0.4	0.028±0.139	4.0	-0.169±0.194	0.8
Generic	-0.011 ± 0.12	2.8	-0.261±0.221	0.4	-0.011±0.14	2.6	-0.135±0.184	1.6
DiCE	0.037 ± 0.154	3.2	-0.287±0.216	0.4	0.068±0.175	4.2	-0.165±0.183	0.8
ClaPROAR	-0.018 ± 0.158	2.2	-0.268±0.247	1.0	0.007±0.152	2.6	-0.163±0.17	0.6

Tab. 41: The average differences between the simulation accuracy of model d and of model e for the iris dataset using a deep ensemble

E.3. The effect of choosing the model

The choice of model could have an effect on how well our faithfulness metric would perform. For example, if we would choose a model that is too simple for our dataset we could get a model that underperforms and has a lot of uncertainty. When we would then try to simulate this model, we could very different results due to the uncertainty.

A more interesting problem would be if the teacher model and the student model would be a different model. It feels natural to assume that a model such as for example a decision tree could easily simulate another decision tree. However, it would probably be more difficult to have a decision tree simulate an deep ensemble.

We wanted to evaluate the effects of choosing a model. Therefore we decided to run three different kind of experiments. Firstly, having a MLP simulate a MLP. Then we have a deep ensemble that tries to simulate a deep ensemble. Lastly, we have a deep ensemble that tries to simulate a MLP.

The results of having the same model type for the teacher and for the student are already shown and discussed in Section E.1. This section will show the effects of having a different model type for the teacher as for the student. We can see that Tables 37, 29, 39. 40 and 41 show a similar trend as in Section E.1.

F. Experiment results

F.1. Parameter grid search

F.1.1. Overlapping dataset using MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.167	1.0	0.0
	1.0, 100	1.881	1.0	0.0
	1.0, 1000	20.014	1.0	0.0
	1.0, 2000	39.55	1.0	0.0
	0.5, 10	0.156	1.0	0.0
	0.5, 100	1.914	1.0	0.0
	0.5, 1000	19.721	1.0	0.0
	0.5, 2000	39.735	1.0	0.0
	0.25, 10	0.126	0.95	0.0
	0.25, 100	1.855	1.0	0.0
	0.25, 1000	19.779	1.0	0.0
	0.25, 2000	39.522	1.0	0.0
	0.1, 10	0.102	0.34	0.0
	0.1, 100	1.787	1.0	0.0
	0.1, 1000	19.687	1.0	0.0
	0.1, 2000	39.948	1.0	0.0
	0.05, 10	0.087	0.21	0.0
	0.05, 100	1.62	1.0	0.0
	0.05, 1000	19.487	1.0	0.0
	0.05, 2000	39.806	1.0	0.0
	0.01, 10	0.111	0.19	0.0
	0.01, 100	0.928	0.34	0.0
	0.01, 1000	18.175	1.0	0.0
	0.01, 2000	37.979	1.0	0.0
Revise	1.0, 10	0.442	0.99	0.38
	1.0, 100	0.381	1.0	0.91
	1.0, 1000	1.156	1.0	0.96
	1.0, 2000	2.2	1.0	0.96
	0.5, 10	0.091	1.0	0.54
	0.5, 100	0.299	1.0	0.93
	0.5, 1000	1.341	1.0	0.97
	0.5, 2000	3.68	1.0	0.96
	0.25, 10	0.087	1.0	0.47
	0.25, 100	0.352	1.0	0.92
	0.25, 1000	1.653	1.0	0.97
	0.25, 2000	2.412	1.0	0.97
	0.1, 10	0.085	0.99	0.3
	0.1, 100	0.38	1.0	0.9
	0.1, 1000	2.883	1.0	0.96
	0.1, 2000	4.448	1.0	0.95
	0.05, 10	0.065	0.61	0.17
	0.05, 100	0.456	0.98	0.83
	0.05, 1000	2.34	1.0	0.91
	0.05, 2000	3.75	1.0	0.95
	0.01, 10	0.059	0.27	0.07
	0.01, 100	0.515	0.82	0.59
	0.01, 1000	1.894	1.0	0.94
	0.01, 2000	4.422	0.97	0.94
Ecco	1.0, 10	0.242	1.0	0.36
	1.0, 100	0.418	1.0	0.98

	1.0, 1000	2.624	1.0	0.98
	1.0, 2000	1.416	1.0	1.0
	0.5, 10	0.258	1.0	0.48
	0.5, 100	0.448	1.0	0.95
	0.5, 1000	2.821	1.0	0.97
	0.5, 2000	1.569	1.0	1.0
	0.25, 10	0.207	1.0	0.46
	0.25, 100	0.383	1.0	0.95
	0.25, 1000	0.596	1.0	1.0
	0.25, 2000	1.361	1.0	1.0
	0.1, 10	0.19	0.97	0.44
	0.1, 100	0.638	1.0	0.93
	0.1, 1000	1.08	1.0	1.0
	0.1, 2000	5.198	1.0	0.99
	0.05, 10	0.174	0.67	0.19
	0.05, 100	0.615	0.99	0.91
	0.05, 1000	4.601	1.0	0.95
	0.05, 2000	5.21	1.0	0.98
	0.01, 10	0.144	0.3	0.08
	0.01, 100	1.369	0.84	0.67
	0.01, 1000	2.476	0.97	0.97
	0.01, 2000	2.079	1.0	1.0
Wachter	1.0, 10	0.113	1.0	0.38
	1.0, 100	0.432	1.0	0.9
	1.0, 1000	0.714	1.0	1.0
	1.0, 2000	2.207	1.0	0.97
	0.5, 10	0.095	1.0	0.53
	0.5, 100	0.485	1.0	0.86
	0.5, 1000	1.36	1.0	0.96
	0.5, 2000	2.358	1.0	0.96
	0.25, 10	0.086	1.0	0.54
	0.25, 100	0.391	1.0	0.94
	0.25, 1000	1.173	1.0	0.97
	0.25, 2000	2.293	1.0	0.98
	0.1, 10	0.078	0.97	0.39
	0.1, 100	0.514	1.0	0.82
	0.1, 1000	2.724	1.0	0.93
	0.1, 2000	3.807	1.0	0.96
	0.05, 10	0.076	0.71	0.15
	0.05, 100	0.534	0.99	0.78
	0.05, 1000	2.863	1.0	0.95
	0.05, 2000	5.634	1.0	0.92
	0.01, 10	0.059	0.26	0.07
	0.01, 100	0.517	0.83	0.59
	0.01, 1000	2.714	1.0	0.96
	0.01, 2000	4.986	0.97	0.94
Generic	1.0, 10	0.097	1.0	0.52
	1.0, 100	0.573	1.0	0.9
	1.0, 1000	1.96	1.0	0.94
	1.0, 2000	3.668	1.0	0.95
	0.5, 10	0.092	1.0	0.5
	0.5, 100	0.369	1.0	0.9
	0.5, 1000	2.652	1.0	0.93
	0.5, 2000	2.395	1.0	0.95
	0.25, 10	0.095	1.0	0.43
	0.25, 100	0.436	1.0	0.88

	0.25, 1000	1.073	1.0	0.99
	0.25, 2000	2.995	1.0	0.94
	0.1, 10	0.085	0.96	0.36
	0.1, 100	0.375	1.0	0.83
	0.1, 1000	2.247	1.0	0.93
	0.1, 2000	2.081	1.0	0.98
	0.05, 10	0.066	0.58	0.22
	0.05, 100	0.573	1.0	0.77
	0.05, 1000	1.487	1.0	0.96
	0.05, 2000	2.458	1.0	0.97
	0.01, 10	0.056	0.24	0.08
	0.01, 100	0.558	0.79	0.59
	0.01, 1000	2.684	0.98	0.92
	0.01, 2000	4.985	0.99	0.95
DiCE	1.0, 10	0.13	1.0	0.41
	1.0, 100	0.558	1.0	0.9
	1.0, 1000	3.105	1.0	0.92
	1.0, 2000	4.879	1.0	0.96
	0.5, 10	0.118	1.0	0.58
	0.5, 100	0.587	1.0	0.89
	0.5, 1000	1.603	1.0	0.98
	0.5, 2000	5.106	1.0	0.97
	0.25, 10	0.116	1.0	0.51
	0.25, 100	0.66	1.0	0.89
	0.25, 1000	2.956	1.0	0.94
	0.25, 2000	5.843	1.0	0.95
	0.1, 10	0.108	0.94	0.41
	0.1, 100	0.54	1.0	0.88
	0.1, 1000	2.831	1.0	0.96
	0.1, 2000	3.418	1.0	0.96
	0.05, 10	0.102	0.67	0.18
	0.05, 100	0.624	1.0	0.82
	0.05, 1000	2.818	1.0	0.98
	0.05, 2000	3.177	0.99	0.96
	0.01, 10	0.083	0.25	0.07
	0.01, 100	0.719	0.75	0.57
	0.01, 1000	3.028	0.96	0.94
	0.01, 2000	7.078	0.98	0.93
ClaPROAR	1.0, 10	0.168	1.0	0.34
	1.0, 100	0.709	1.0	0.84
	1.0, 1000	3.557	1.0	0.92
	1.0, 2000	4.264	1.0	0.97
	0.5, 10	0.15	1.0	0.43
	0.5, 100	0.486	1.0	0.89
	0.5, 1000	3.303	1.0	0.96
	0.5, 2000	3.25	1.0	0.96
	0.25, 10	0.151	1.0	0.44
	0.25, 100	0.62	1.0	0.94
	0.25, 1000	2.637	1.0	0.96
	0.25, 2000	6.736	1.0	0.9
	0.1, 10	0.128	0.97	0.43
	0.1, 100	1.018	1.0	0.83
	0.1, 1000	4.718	1.0	0.92
	0.1, 2000	6.37	1.0	0.94
	0.05, 10	0.104	0.66	0.25
	0.05, 100	0.766	0.98	0.79

	0.05, 1000	3.651	1.0	0.94
	0.05, 2000	5.875	0.99	0.95
	0.01, 10	0.09	0.26	0.09
	0.01, 100	0.687	0.8	0.65
	0.01, 1000	3.814	0.97	0.92
	0.01, 2000	7.242	0.97	0.95
Greedy	1.0, 10	0.054	0.95	0.71
	1.0, 100	0.065	1.0	1.0
	1.0, 1000	0.064	1.0	1.0
	1.0, 2000	0.08	1.0	1.0
	0.5, 10	0.06	0.69	0.14
	0.5, 100	0.119	1.0	1.0
	0.5, 1000	0.144	1.0	1.0
	0.5, 2000	0.115	1.0	1.0
	0.25, 10	0.054	0.29	0.03
	0.25, 100	0.25	1.0	1.0
	0.25, 1000	0.232	1.0	1.0
	0.25, 2000	0.225	1.0	1.0
	0.1, 10	0.054	0.16	0.0
	0.1, 100	0.543	0.96	0.64
	0.1, 1000	0.651	1.0	1.0
	0.1, 2000	0.57	1.0	1.0
	0.05, 10	0.046	0.1	0.0
	0.05, 100	0.596	0.66	0.12
	0.05, 1000	1.158	1.0	1.0
	0.05, 2000	1.251	1.0	1.0
	0.01, 10	0.048	0.1	0.0
	0.01, 100	0.436	0.09	0.0
	0.01, 1000	5.482	0.97	0.68
	0.01, 2000	6.343	1.0	1.0

Tab. 42: Parameter grid search overlapping data experiment using an MLP 1

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.207	0.82	0.0
	1.0, 100	2.048	0.67	0.0
	1.0, 1000	21.601	0.71	0.0
	1.0, 2000	43.654	0.77	0.0
	0.5, 10	0.232	0.94	0.0
	0.5, 100	2.275	0.91	0.0
	0.5, 1000	24.121	0.91	0.0
	0.5, 2000	48.111	0.88	0.0
	0.25, 10	0.26	1.0	0.0
	0.25, 100	2.477	0.98	0.0
	0.25, 1000	25.507	0.99	0.0
	0.25, 2000	50.744	1.0	0.0
	0.1, 10	0.211	0.99	0.0
	0.1, 100	2.485	1.0	0.0
	0.1, 1000	25.382	1.0	0.0
	0.1, 2000	51.291	1.0	0.0
	0.05, 10	0.212	0.9	0.0
	0.05, 100	2.472	1.0	0.0
	0.05, 1000	25.169	1.0	0.0
	0.05, 2000	50.788	1.0	0.0
	0.01, 10	0.135	0.46	0.0

	0.01, 100	2.045	0.74	0.0
	0.01, 1000	22.184	0.75	0.0
	0.01, 2000	43.195	0.72	0.0
Revise	1.0, 10	0.097	1.0	0.48
	1.0, 100	0.365	1.0	0.92
	1.0, 1000	1.386	1.0	0.97
	1.0, 2000	1.896	1.0	0.98
	0.5, 10	0.102	1.0	0.46
	0.5, 100	0.378	1.0	0.87
	0.5, 1000	2.849	1.0	0.92
	0.5, 2000	5.529	1.0	0.91
	0.25, 10	0.088	0.99	0.44
	0.25, 100	0.356	1.0	0.88
	0.25, 1000	2.188	1.0	0.91
	0.25, 2000	2.42	1.0	0.97
	0.1, 10	0.083	0.94	0.37
	0.1, 100	0.368	1.0	0.86
	0.1, 1000	2.064	1.0	0.96
	0.1, 2000	4.28	1.0	0.91
	0.05, 10	0.083	0.64	0.24
	0.05, 100	0.448	0.99	0.84
	0.05, 1000	2.319	1.0	0.91
	0.05, 2000	2.419	1.0	0.96
	0.01, 10	0.08	0.25	0.07
	0.01, 100	0.545	0.87	0.64
	0.01, 1000	2.391	0.98	0.94
	0.01, 2000	3.745	0.97	0.91
Ecco	1.0, 10	0.253	1.0	0.54
	1.0, 100	0.072	1.0	1.0
	1.0, 1000	2.727	1.0	0.98
	1.0, 2000	1.846	1.0	1.0
	0.5, 10	0.213	1.0	0.51
	0.5, 100	0.276	1.0	0.97
	0.5, 1000	0.892	1.0	1.0
	0.5, 2000	2.244	1.0	1.0
	0.25, 10	0.214	0.99	0.45
	0.25, 100	0.318	1.0	0.99
	0.25, 1000	2.917	1.0	0.97
	0.25, 2000	5.687	1.0	0.99
	0.1, 10	0.189	0.88	0.45
	0.1, 100	0.429	1.0	0.97
	0.1, 1000	2.754	1.0	0.99
	0.1, 2000	2.05	1.0	1.0
	0.05, 10	0.166	0.67	0.22
	0.05, 100	0.75	1.0	0.92
	0.05, 1000	2.762	1.0	0.99
	0.05, 2000	5.639	1.0	0.99
	0.01, 10	0.155	0.29	0.08
	0.01, 100	0.8	0.84	0.77
	0.01, 1000	2.213	1.0	0.99
	0.01, 2000	4.721	0.99	0.97
Wachter	1.0, 10	0.099	1.0	0.51
	1.0, 100	0.338	1.0	0.93
	1.0, 1000	1.295	1.0	0.97
	1.0, 2000	2.129	1.0	0.97
	0.5, 10	0.141	1.0	0.55

	0.5, 100	0.325	1.0	0.94
	0.5, 1000	2.187	1.0	0.95
	0.5, 2000	2.569	1.0	0.97
	0.25, 10	0.122	1.0	0.51
	0.25, 100	0.357	1.0	0.89
	0.25, 1000	2.756	1.0	0.95
	0.25, 2000	4.474	1.0	0.93
	0.1, 10	0.086	0.92	0.44
	0.1, 100	0.505	1.0	0.84
	0.1, 1000	2.582	1.0	0.91
	0.1, 2000	7.646	1.0	0.9
	0.05, 10	0.073	0.75	0.25
	0.05, 100	0.45	0.99	0.85
	0.05, 1000	2.717	1.0	0.93
	0.05, 2000	3.797	1.0	0.96
	0.01, 10	0.056	0.25	0.09
	0.01, 100	0.595	0.78	0.65
	0.01, 1000	3.038	0.98	0.89
	0.01, 2000	3.174	0.99	0.95
Generic	1.0, 10	0.093	1.0	0.58
	1.0, 100	0.417	1.0	0.91
	1.0, 1000	1.107	1.0	0.97
	1.0, 2000	3.653	1.0	0.95
	0.5, 10	0.085	1.0	0.54
	0.5, 100	0.402	1.0	0.89
	0.5, 1000	1.109	1.0	0.97
	0.5, 2000	2.629	1.0	0.98
	0.25, 10	0.087	1.0	0.45
	0.25, 100	0.438	1.0	0.89
	0.25, 1000	3.248	1.0	0.89
	0.25, 2000	3.77	1.0	0.94
	0.1, 10	0.077	0.91	0.36
	0.1, 100	0.377	1.0	0.87
	0.1, 1000	2.614	1.0	0.95
	0.1, 2000	3.238	1.0	0.96
	0.05, 10	0.07	0.72	0.23
	0.05, 100	0.515	0.98	0.83
	0.05, 1000	2.351	1.0	0.94
	0.05, 2000	3.681	1.0	0.97
	0.01, 10	0.058	0.29	0.12
	0.01, 100	0.429	0.85	0.64
	0.01, 1000	2.461	1.0	0.92
	0.01, 2000	2.442	0.99	0.98
DiCE	1.0, 10	0.125	1.0	0.52
	1.0, 100	0.528	1.0	0.9
	1.0, 1000	3.551	1.0	0.94
	1.0, 2000	2.873	1.0	0.97
	0.5, 10	0.131	1.0	0.49
	0.5, 100	0.613	1.0	0.9
	0.5, 1000	2.957	1.0	0.94
	0.5, 2000	7.827	1.0	0.92
	0.25, 10	0.119	1.0	0.46
	0.25, 100	0.55	1.0	0.9
	0.25, 1000	3.181	1.0	0.97
	0.25, 2000	2.89	1.0	0.98
	0.1, 10	0.109	0.95	0.34

	0.1, 100	0.7	1.0	0.86
	0.1, 1000	4.066	1.0	0.94
	0.1, 2000	6.246	1.0	0.96
	0.05, 10	0.097	0.6	0.15
	0.05, 100	0.627	0.98	0.85
	0.05, 1000	2.37	1.0	0.94
	0.05, 2000	5.083	1.0	0.96
	0.01, 10	0.074	0.21	0.08
	0.01, 100	0.79	0.79	0.53
	0.01, 1000	4.015	0.98	0.89
	0.01, 2000	4.823	0.96	0.93
ClaPROAR	1.0, 10	0.149	1.0	0.51
	1.0, 100	0.864	1.0	0.93
	1.0, 1000	1.954	1.0	0.96
	1.0, 2000	5.635	1.0	0.97
	0.5, 10	0.167	1.0	0.42
	0.5, 100	0.601	1.0	0.92
	0.5, 1000	2.135	1.0	0.94
	0.5, 2000	4.226	1.0	0.96
	0.25, 10	0.141	1.0	0.49
	0.25, 100	0.88	1.0	0.83
	0.25, 1000	3.126	1.0	0.97
	0.25, 2000	7.117	1.0	0.95
	0.1, 10	0.127	0.92	0.33
	0.1, 100	0.62	1.0	0.91
	0.1, 1000	5.635	1.0	0.94
	0.1, 2000	11.474	1.0	0.9
	0.05, 10	0.111	0.7	0.17
	0.05, 100	0.65	1.0	0.86
	0.05, 1000	3.4	1.0	0.94
	0.05, 2000	3.934	1.0	0.95
	0.01, 10	0.094	0.23	0.03
	0.01, 100	0.744	0.77	0.62
	0.01, 1000	3.837	0.94	0.91
	0.01, 2000	3.411	1.0	0.99
Greedy	1.0, 10	0.055	0.97	0.65
	1.0, 100	0.063	1.0	1.0
	1.0, 1000	0.064	1.0	1.0
	1.0, 2000	0.07	1.0	1.0
	0.5, 10	0.058	0.63	0.14
	0.5, 100	0.116	1.0	1.0
	0.5, 1000	0.116	1.0	1.0
	0.5, 2000	0.117	1.0	1.0
	0.25, 10	0.049	0.23	0.01
	0.25, 100	0.23	1.0	1.0
	0.25, 1000	0.238	1.0	1.0
	0.25, 2000	0.236	1.0	1.0
	0.1, 10	0.044	0.13	0.0
	0.1, 100	0.492	0.99	0.76
	0.1, 1000	0.69	1.0	1.0
	0.1, 2000	0.61	1.0	1.0
	0.05, 10	0.049	0.12	0.0
	0.05, 100	0.65	0.62	0.08
	0.05, 1000	1.157	1.0	1.0
	0.05, 2000	1.3	1.0	1.0
	0.01, 10	0.046	0.06	0.0

	0.01, 100	0.432	0.12	0.01
	0.01, 1000	5.959	0.98	0.76
	0.01, 2000	6.446	1.0	1.0

Tab. 43: Parameter grid search overlapping data using an MLP experiment 2

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.198	0.78	0.0
	1.0, 100	1.961	0.82	0.0
	1.0, 1000	21.627	0.77	0.0
	1.0, 2000	43.829	0.79	0.0
	0.5, 10	0.212	0.93	0.0
	0.5, 100	2.192	0.9	0.0
	0.5, 1000	23.863	0.86	0.0
	0.5, 2000	47.687	0.87	0.0
	0.25, 10	0.228	0.99	0.0
	0.25, 100	2.484	1.0	0.0
	0.25, 1000	25.256	0.97	0.0
	0.25, 2000	51.209	1.0	0.0
	0.1, 10	0.216	1.0	0.0
	0.1, 100	2.499	1.0	0.0
	0.1, 1000	25.459	1.0	0.0
	0.1, 2000	50.988	1.0	0.0
	0.05, 10	0.186	0.94	0.0
	0.05, 100	2.444	1.0	0.0
	0.05, 1000	25.371	1.0	0.0
	0.05, 2000	51.437	1.0	0.0
	0.01, 10	0.122	0.36	0.0
	0.01, 100	2.071	0.84	0.0
	0.01, 1000	20.579	0.76	0.0
	0.01, 2000	44.967	0.76	0.0
Revise	1.0, 10	0.1	1.0	0.43
	1.0, 100	0.49	1.0	0.84
	1.0, 1000	1.507	1.0	0.97
	1.0, 2000	3.743	1.0	0.95
	0.5, 10	0.102	1.0	0.41
	0.5, 100	0.527	1.0	0.83
	0.5, 1000	2.159	1.0	0.93
	0.5, 2000	2.511	1.0	0.95
	0.25, 10	0.086	1.0	0.46
	0.25, 100	0.391	1.0	0.87
	0.25, 1000	2.004	1.0	0.95
	0.25, 2000	2.696	1.0	0.99
	0.1, 10	0.093	0.93	0.32
	0.1, 100	0.593	1.0	0.79
	0.1, 1000	3.113	1.0	0.89
	0.1, 2000	4.22	1.0	0.97
	0.05, 10	0.068	0.56	0.17
	0.05, 100	0.538	1.0	0.79
	0.05, 1000	2.997	1.0	0.95
	0.05, 2000	3.899	1.0	0.93
	0.01, 10	0.061	0.21	0.05
	0.01, 100	0.595	0.8	0.57
	0.01, 1000	2.326	0.96	0.93
	0.01, 2000	3.479	1.0	0.96

Ecco	1.0, 10	0.223	1.0	0.44
	1.0, 100	0.218	1.0	0.99
	1.0, 1000	0.305	1.0	1.0
	1.0, 2000	4.589	1.0	0.98
	0.5, 10	0.295	1.0	0.36
	0.5, 100	0.309	1.0	0.97
	0.5, 1000	2.299	1.0	0.99
	0.5, 2000	4.6	1.0	0.98
	0.25, 10	0.254	1.0	0.41
	0.25, 100	0.421	1.0	0.98
	0.25, 1000	2.477	1.0	0.99
	0.25, 2000	4.839	1.0	0.99
	0.1, 10	0.186	0.9	0.36
	0.1, 100	0.422	1.0	0.96
	0.1, 1000	4.242	1.0	0.97
	0.1, 2000	1.117	1.0	1.0
	0.05, 10	0.182	0.51	0.16
	0.05, 100	0.457	0.99	0.98
	0.05, 1000	4.487	1.0	0.97
	0.05, 2000	1.357	1.0	1.0
	0.01, 10	0.184	0.28	0.08
	0.01, 100	0.882	0.83	0.76
	0.01, 1000	1.906	1.0	0.99
	0.01, 2000	1.953	1.0	1.0
Wachter	1.0, 10	0.105	1.0	0.49
	1.0, 100	0.382	1.0	0.87
	1.0, 1000	1.663	1.0	0.95
	1.0, 2000	2.608	1.0	0.96
	0.5, 10	0.104	1.0	0.39
	0.5, 100	0.42	1.0	0.88
	0.5, 1000	2.919	1.0	0.96
	0.5, 2000	2.026	1.0	0.99
	0.25, 10	0.097	0.99	0.39
	0.25, 100	0.493	1.0	0.85
	0.25, 1000	2.418	1.0	0.92
	0.25, 2000	4.032	1.0	0.99
	0.1, 10	0.079	0.9	0.33
	0.1, 100	0.389	1.0	0.84
	0.1, 1000	2.194	1.0	0.94
	0.1, 2000	2.694	1.0	0.96
	0.05, 10	0.077	0.54	0.12
	0.05, 100	0.519	0.99	0.8
	0.05, 1000	2.345	1.0	0.94
	0.05, 2000	3.342	1.0	0.96
	0.01, 10	0.065	0.31	0.1
	0.01, 100	0.549	0.82	0.58
	0.01, 1000	1.926	0.99	0.97
	0.01, 2000	2.831	0.99	0.97
Generic	1.0, 10	0.099	1.0	0.41
	1.0, 100	0.47	1.0	0.84
	1.0, 1000	1.25	1.0	0.96
	1.0, 2000	1.99	1.0	0.97
	0.5, 10	0.098	1.0	0.43
	0.5, 100	0.405	1.0	0.86
	0.5, 1000	1.681	1.0	0.98

	0.5, 2000	4.046	1.0	0.94
	0.25, 10	0.095	1.0	0.46
	0.25, 100	0.306	1.0	0.91
	0.25, 1000	1.771	1.0	0.96
	0.25, 2000	3.665	1.0	0.94
	0.1, 10	0.076	0.9	0.35
	0.1, 100	0.452	1.0	0.83
	0.1, 1000	2.064	1.0	0.95
	0.1, 2000	2.229	1.0	0.98
	0.05, 10	0.069	0.57	0.19
	0.05, 100	0.473	0.99	0.84
	0.05, 1000	3.767	1.0	0.89
	0.05, 2000	5.466	1.0	0.95
	0.01, 10	0.061	0.25	0.09
	0.01, 100	0.497	0.84	0.65
	0.01, 1000	2.879	1.0	0.94
	0.01, 2000	3.907	1.0	0.96
DiCE	1.0, 10	0.135	1.0	0.43
	1.0, 100	0.549	1.0	0.84
	1.0, 1000	1.647	1.0	0.98
	1.0, 2000	2.836	1.0	0.98
	0.5, 10	0.129	1.0	0.36
	0.5, 100	0.54	1.0	0.9
	0.5, 1000	1.977	1.0	0.95
	0.5, 2000	7.109	1.0	0.95
	0.25, 10	0.126	1.0	0.4
	0.25, 100	0.511	1.0	0.88
	0.25, 1000	3.786	1.0	0.96
	0.25, 2000	7.132	1.0	0.95
	0.1, 10	0.103	0.86	0.3
	0.1, 100	0.548	1.0	0.82
	0.1, 1000	3.694	1.0	0.95
	0.1, 2000	7.622	1.0	0.94
	0.05, 10	0.121	0.59	0.18
	0.05, 100	0.69	1.0	0.78
	0.05, 1000	3.503	0.99	0.95
	0.05, 2000	3.245	1.0	0.99
	0.01, 10	0.08	0.3	0.06
	0.01, 100	0.615	0.8	0.61
	0.01, 1000	3.479	1.0	0.92
	0.01, 2000	9.341	0.99	0.91
ClaPROAR	1.0, 10	0.153	1.0	0.42
	1.0, 100	0.485	1.0	0.95
	1.0, 1000	2.179	1.0	0.99
	1.0, 2000	5.935	1.0	0.95
	0.5, 10	0.154	1.0	0.37
	0.5, 100	0.744	1.0	0.9
	0.5, 1000	2.641	1.0	0.97
	0.5, 2000	3.962	1.0	0.97
	0.25, 10	0.146	1.0	0.37
	0.25, 100	0.625	1.0	0.87
	0.25, 1000	3.303	1.0	0.96
	0.25, 2000	3.59	1.0	0.98
	0.1, 10	0.114	0.9	0.35
	0.1, 100	0.883	1.0	0.84
	0.1, 1000	4.281	1.0	0.94

	0.1, 2000	6.413	1.0	0.92
	0.05, 10	0.118	0.55	0.14
	0.05, 100	0.805	1.0	0.82
	0.05, 1000	3.678	1.0	0.95
	0.05, 2000	7.635	1.0	0.95
	0.01, 10	0.083	0.2	0.05
	0.01, 100	0.793	0.8	0.61
	0.01, 1000	3.941	1.0	0.92
	0.01, 2000	8.063	0.99	0.93
Greedy	1.0, 10	0.058	0.96	0.58
	1.0, 100	0.07	1.0	1.0
	1.0, 1000	0.071	1.0	1.0
	1.0, 2000	0.071	1.0	1.0
	0.5, 10	0.056	0.55	0.1
	0.5, 100	0.137	1.0	1.0
	0.5, 1000	0.125	1.0	1.0
	0.5, 2000	0.165	1.0	1.0
	0.25, 10	0.057	0.27	0.01
	0.25, 100	0.249	1.0	1.0
	0.25, 1000	0.268	1.0	1.0
	0.25, 2000	0.248	1.0	1.0
	0.1, 10	0.043	0.09	0.01
	0.1, 100	0.488	0.95	0.5
	0.1, 1000	0.706	1.0	1.0
	0.1, 2000	0.696	1.0	1.0
	0.05, 10	0.041	0.06	0.0
	0.05, 100	0.594	0.59	0.13
	0.05, 1000	1.347	1.0	1.0
	0.05, 2000	1.408	1.0	1.0
	0.01, 10	0.054	0.13	0.01
	0.01, 100	0.525	0.19	0.0
	0.01, 1000	5.993	0.92	0.48
	0.01, 2000	7.019	1.0	0.99

Tab. 44: Parameter grid search overlapping data using an mlp experiment 3

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.205	0.74	0.0
	1.0, 100	2.152	0.79	0.0
	1.0, 1000	21.614	0.71	0.0
	1.0, 2000	43.682	0.81	0.0
	0.5, 10	0.232	0.91	0.0
	0.5, 100	2.32	0.83	0.0
	0.5, 1000	23.671	0.93	0.0
	0.5, 2000	47.646	0.86	0.0
	0.25, 10	0.228	1.0	0.0
	0.25, 100	2.444	0.99	0.0
	0.25, 1000	24.973	1.0	0.0
	0.25, 2000	50.566	1.0	0.0
	0.1, 10	0.235	0.99	0.0
	0.1, 100	2.383	1.0	0.0
	0.1, 1000	25.163	1.0	0.0
	0.1, 2000	51.195	1.0	0.0
	0.05, 10	0.2	0.93	0.0
	0.05, 100	2.469	1.0	0.0

	0.05, 1000	25.064	0.99	0.0
	0.05, 2000	50.953	1.0	0.0
	0.01, 10	0.123	0.33	0.0
	0.01, 100	1.947	0.72	0.0
	0.01, 1000	22.75	0.79	0.0
	0.01, 2000	43.63	0.69	0.0
Revise	1.0, 10	0.108	1.0	0.37
	1.0, 100	0.374	1.0	0.9
	1.0, 1000	1.229	1.0	0.96
	1.0, 2000	2.131	1.0	0.97
	0.5, 10	0.091	1.0	0.49
	0.5, 100	0.516	1.0	0.89
	0.5, 1000	1.599	1.0	0.93
	0.5, 2000	2.541	1.0	0.95
	0.25, 10	0.088	1.0	0.47
	0.25, 100	0.391	1.0	0.88
	0.25, 1000	1.964	1.0	0.97
	0.25, 2000	3.591	1.0	0.95
	0.1, 10	0.071	0.86	0.4
	0.1, 100	0.469	1.0	0.83
	0.1, 1000	1.239	1.0	0.97
	0.1, 2000	5.223	1.0	0.95
	0.05, 10	0.071	0.7	0.22
	0.05, 100	0.539	1.0	0.79
	0.05, 1000	2.022	1.0	0.95
	0.05, 2000	4.341	1.0	0.92
	0.01, 10	0.06	0.27	0.06
	0.01, 100	0.548	0.79	0.64
	0.01, 1000	1.743	0.99	0.95
	0.01, 2000	3.886	0.97	0.92
Ecco	1.0, 10	0.233	1.0	0.41
	1.0, 100	0.441	1.0	0.96
	1.0, 1000	3.227	1.0	1.0
	1.0, 2000	2.086	1.0	1.0
	0.5, 10	0.236	1.0	0.43
	0.5, 100	0.388	1.0	0.96
	0.5, 1000	1.299	1.0	1.0
	0.5, 2000	2.669	1.0	1.0
	0.25, 10	0.195	1.0	0.52
	0.25, 100	0.409	1.0	0.98
	0.25, 1000	2.835	1.0	0.99
	0.25, 2000	5.816	1.0	0.99
	0.1, 10	0.193	0.92	0.3
	0.1, 100	0.475	1.0	0.95
	0.1, 1000	2.857	1.0	0.98
	0.1, 2000	2.06	1.0	1.0
	0.05, 10	0.167	0.68	0.2
	0.05, 100	0.721	1.0	0.93
	0.05, 1000	2.696	1.0	0.99
	0.05, 2000	5.639	1.0	0.98
	0.01, 10	0.123	0.3	0.05
	0.01, 100	1.278	0.82	0.68
	0.01, 1000	2.915	1.0	0.99
	0.01, 2000	4.183	1.0	0.98
Wachter	1.0, 10	0.103	1.0	0.44
	1.0, 100	0.401	1.0	0.91

	1.0, 1000	1.242	1.0	0.97
	1.0, 2000	2.638	1.0	0.96
	0.5, 10	0.107	1.0	0.43
	0.5, 100	0.414	1.0	0.92
	0.5, 1000	2.104	1.0	0.95
	0.5, 2000	2.362	1.0	0.98
	0.25, 10	0.09	0.99	0.45
	0.25, 100	0.434	1.0	0.9
	0.25, 1000	2.28	1.0	0.94
	0.25, 2000	5.559	1.0	0.95
	0.1, 10	0.084	0.94	0.42
	0.1, 100	0.449	1.0	0.87
	0.1, 1000	1.278	1.0	0.99
	0.1, 2000	4.322	1.0	0.95
	0.05, 10	0.07	0.64	0.17
	0.05, 100	0.606	0.99	0.84
	0.05, 1000	1.6	1.0	0.95
	0.05, 2000	2.696	0.99	0.96
	0.01, 10	0.062	0.29	0.06
	0.01, 100	0.665	0.79	0.61
	0.01, 1000	2.296	0.99	0.95
	0.01, 2000	3.75	0.98	0.93
Generic	1.0, 10	0.096	1.0	0.38
	1.0, 100	0.35	1.0	0.88
	1.0, 1000	1.788	1.0	0.98
	1.0, 2000	1.817	1.0	0.99
	0.5, 10	0.104	1.0	0.37
	0.5, 100	0.433	1.0	0.81
	0.5, 1000	1.397	1.0	0.97
	0.5, 2000	2.323	1.0	0.97
	0.25, 10	0.091	1.0	0.47
	0.25, 100	0.519	1.0	0.85
	0.25, 1000	1.881	1.0	0.96
	0.25, 2000	2.667	1.0	0.95
	0.1, 10	0.08	0.91	0.38
	0.1, 100	0.446	1.0	0.84
	0.1, 1000	2.184	1.0	0.92
	0.1, 2000	1.948	1.0	0.99
	0.05, 10	0.079	0.7	0.15
	0.05, 100	0.445	0.98	0.83
	0.05, 1000	2.569	0.99	0.92
	0.05, 2000	4.531	1.0	0.93
	0.01, 10	0.063	0.35	0.1
	0.01, 100	0.52	0.82	0.63
	0.01, 1000	2.346	0.97	0.88
	0.01, 2000	2.548	0.98	0.96
DiCE	1.0, 10	0.13	1.0	0.43
	1.0, 100	0.551	1.0	0.92
	1.0, 1000	2.663	1.0	0.95
	1.0, 2000	2.773	1.0	0.98
	0.5, 10	0.129	1.0	0.41
	0.5, 100	0.628	1.0	0.85
	0.5, 1000	4.413	1.0	0.95
	0.5, 2000	2.794	1.0	0.97
	0.25, 10	0.151	1.0	0.45
	0.25, 100	0.502	1.0	0.86

	0.25, 1000	3.176	1.0	0.93
	0.25, 2000	3.502	1.0	0.93
	0.1, 10	0.13	0.92	0.28
	0.1, 100	0.633	1.0	0.83
	0.1, 1000	1.774	1.0	0.97
	0.1, 2000	3.781	1.0	0.96
	0.05, 10	0.097	0.65	0.19
	0.05, 100	0.623	0.98	0.83
	0.05, 1000	2.857	0.99	0.95
	0.05, 2000	5.031	1.0	0.97
	0.01, 10	0.12	0.26	0.03
	0.01, 100	0.8	0.85	0.62
	0.01, 1000	2.658	0.99	0.93
	0.01, 2000	4.797	0.97	0.93
ClaPROAR	1.0, 10	0.189	1.0	0.46
	1.0, 100	0.46	1.0	0.92
	1.0, 1000	1.98	1.0	0.97
	1.0, 2000	7.653	1.0	0.91
	0.5, 10	0.161	1.0	0.48
	0.5, 100	0.591	1.0	0.89
	0.5, 1000	3.075	1.0	0.94
	0.5, 2000	3.261	1.0	0.98
	0.25, 10	0.149	0.99	0.43
	0.25, 100	0.658	1.0	0.9
	0.25, 1000	1.803	1.0	0.97
	0.25, 2000	6.182	1.0	0.93
	0.1, 10	0.174	0.92	0.4
	0.1, 100	0.629	1.0	0.85
	0.1, 1000	2.243	1.0	0.97
	0.1, 2000	4.116	1.0	0.96
	0.05, 10	0.128	0.66	0.21
	0.05, 100	0.701	0.99	0.89
	0.05, 1000	3.837	0.99	0.96
	0.05, 2000	5.952	1.0	0.96
	0.01, 10	0.125	0.37	0.05
	0.01, 100	0.852	0.82	0.65
	0.01, 1000	2.501	0.98	0.97
	0.01, 2000	4.566	1.0	0.94
Greedy	1.0, 10	0.061	0.98	0.65
	1.0, 100	0.066	1.0	1.0
	1.0, 1000	0.063	1.0	1.0
	1.0, 2000	0.08	1.0	1.0
	0.5, 10	0.058	0.65	0.12
	0.5, 100	0.124	0.99	0.99
	0.5, 1000	0.118	1.0	1.0
	0.5, 2000	1.272	0.99	0.98
	0.25, 10	0.05	0.25	0.03
	0.25, 100	0.288	1.0	0.95
	0.25, 1000	0.934	0.99	0.97
	0.25, 2000	1.581	0.99	0.98
	0.1, 10	0.044	0.11	0.02
	0.1, 100	0.519	0.99	0.65
	0.1, 1000	1.317	1.0	0.98
	0.1, 2000	3.449	1.0	0.93
	0.05, 10	0.047	0.11	0.0
	0.05, 100	0.585	0.62	0.08

	0.05, 1000	1.861	1.0	0.97
	0.05, 2000	3.383	1.0	0.98
	0.01, 10	0.044	0.05	0.0
	0.01, 100	0.42	0.15	0.0
	0.01, 1000	5.802	0.99	0.71
	0.01, 2000	7.488	1.0	0.96

Tab. 45: Parameter grid search overlapping data using a MLP experiment 4

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.229	0.72	0.0
	1.0, 100	2.008	0.78	0.0
	1.0, 1000	21.378	0.73	0.0
	1.0, 2000	43.212	0.79	0.0
	0.5, 10	0.214	0.91	0.0
	0.5, 100	2.395	0.88	0.0
	0.5, 1000	23.748	0.88	0.0
	0.5, 2000	48.078	0.85	0.0
	0.25, 10	0.227	1.0	0.0
	0.25, 100	2.388	1.0	0.0
	0.25, 1000	24.994	1.0	0.0
	0.25, 2000	51.374	0.98	0.0
	0.1, 10	0.209	1.0	0.0
	0.1, 100	2.499	1.0	0.0
	0.1, 1000	25.23	1.0	0.0
	0.1, 2000	51.001	1.0	0.0
	0.05, 10	0.179	0.94	0.0
	0.05, 100	2.454	1.0	0.0
	0.05, 1000	25.042	0.99	0.0
	0.05, 2000	51.747	1.0	0.0
	0.01, 10	0.127	0.36	0.0
	0.01, 100	1.853	0.72	0.0
	0.01, 1000	22.117	0.73	0.0
	0.01, 2000	43.78	0.73	0.0
Revise	1.0, 10	0.13	1.0	0.39
	1.0, 100	0.407	1.0	0.85
	1.0, 1000	1.153	1.0	0.96
	1.0, 2000	5.393	1.0	0.93
	0.5, 10	0.101	1.0	0.39
	0.5, 100	0.393	1.0	0.87
	0.5, 1000	0.448	1.0	1.0
	0.5, 2000	2.232	1.0	0.96
	0.25, 10	0.136	1.0	0.55
	0.25, 100	0.415	1.0	0.88
	0.25, 1000	1.316	1.0	0.95
	0.25, 2000	3.745	1.0	0.95
	0.1, 10	0.082	0.95	0.42
	0.1, 100	0.355	1.0	0.9
	0.1, 1000	1.411	1.0	0.95
	0.1, 2000	3.582	1.0	0.95
	0.05, 10	0.059	0.5	0.19
	0.05, 100	0.481	0.99	0.85
	0.05, 1000	2.12	1.0	0.94
	0.05, 2000	1.966	0.99	0.97
	0.01, 10	0.054	0.29	0.09

	0.01, 100	0.55	0.82	0.67
	0.01, 1000	2.505	0.98	0.91
	0.01, 2000	3.269	0.96	0.94
Ecco	1.0, 10	0.252	1.0	0.4
	1.0, 100	0.04	1.0	1.0
	1.0, 1000	2.379	1.0	0.99
	1.0, 2000	1.23	1.0	1.0
	0.5, 10	0.263	1.0	0.42
	0.5, 100	0.287	1.0	0.98
	0.5, 1000	2.617	1.0	0.99
	0.5, 2000	1.199	1.0	1.0
	0.25, 10	0.26	1.0	0.41
	0.25, 100	0.293	1.0	0.96
	0.25, 1000	0.594	1.0	1.0
	0.25, 2000	5.107	1.0	0.99
	0.1, 10	0.168	0.87	0.43
	0.1, 100	0.367	1.0	0.97
	0.1, 1000	4.489	1.0	0.97
	0.1, 2000	1.228	1.0	1.0
	0.05, 10	0.16	0.53	0.18
	0.05, 100	0.662	1.0	0.92
	0.05, 1000	2.734	1.0	0.97
	0.05, 2000	4.991	0.99	0.99
	0.01, 10	0.16	0.3	0.09
	0.01, 100	1.027	0.79	0.68
	0.01, 1000	2.647	0.99	0.99
	0.01, 2000	4.98	1.0	0.99
Wachter	1.0, 10	0.106	1.0	0.42
	1.0, 100	0.417	1.0	0.93
	1.0, 1000	2.05	1.0	0.97
	1.0, 2000	4.048	1.0	0.93
	0.5, 10	0.132	1.0	0.44
	0.5, 100	0.451	1.0	0.9
	0.5, 1000	1.042	1.0	0.99
	0.5, 2000	4.062	1.0	0.93
	0.25, 10	0.088	1.0	0.49
	0.25, 100	0.552	1.0	0.87
	0.25, 1000	2.273	1.0	0.96
	0.25, 2000	4.095	1.0	0.95
	0.1, 10	0.086	0.89	0.39
	0.1, 100	0.483	1.0	0.86
	0.1, 1000	1.632	1.0	0.97
	0.1, 2000	4.599	1.0	0.92
	0.05, 10	0.075	0.66	0.22
	0.05, 100	0.632	1.0	0.83
	0.05, 1000	2.412	0.99	0.93
	0.05, 2000	4.04	1.0	0.94
	0.01, 10	0.067	0.26	0.07
	0.01, 100	0.629	0.8	0.6
	0.01, 1000	3.172	0.97	0.91
	0.01, 2000	5.126	0.99	0.93
Generic	1.0, 10	0.105	1.0	0.43
	1.0, 100	0.275	1.0	0.95
	1.0, 1000	2.132	1.0	0.97
	1.0, 2000	3.541	1.0	0.96
	0.5, 10	0.093	1.0	0.44

	0.5, 100	0.351	1.0	0.92
	0.5, 1000	1.85	1.0	0.96
	0.5, 2000	3.464	1.0	0.97
	0.25, 10	0.084	0.99	0.49
	0.25, 100	0.392	1.0	0.9
	0.25, 1000	1.118	1.0	0.97
	0.25, 2000	3.172	1.0	0.97
	0.1, 10	0.082	0.9	0.35
	0.1, 100	0.483	1.0	0.83
	0.1, 1000	2.288	1.0	0.93
	0.1, 2000	3.738	1.0	0.95
	0.05, 10	0.062	0.58	0.21
	0.05, 100	0.523	1.0	0.87
	0.05, 1000	1.672	1.0	0.95
	0.05, 2000	4.409	1.0	0.92
	0.01, 10	0.058	0.29	0.1
	0.01, 100	0.501	0.82	0.59
	0.01, 1000	3.056	0.98	0.91
	0.01, 2000	3.937	0.93	0.87
DiCE	1.0, 10	0.151	1.0	0.34
	1.0, 100	0.494	1.0	0.92
	1.0, 1000	5.117	1.0	0.91
	1.0, 2000	5.047	1.0	0.95
	0.5, 10	0.132	1.0	0.49
	0.5, 100	0.536	1.0	0.93
	0.5, 1000	2.042	1.0	0.94
	0.5, 2000	3.42	1.0	0.97
	0.25, 10	0.118	1.0	0.48
	0.25, 100	0.699	1.0	0.86
	0.25, 1000	2.088	1.0	0.97
	0.25, 2000	2.995	1.0	0.97
	0.1, 10	0.11	0.89	0.36
	0.1, 100	0.586	1.0	0.94
	0.1, 1000	2.64	1.0	0.96
	0.1, 2000	3.667	1.0	0.94
	0.05, 10	0.095	0.59	0.21
	0.05, 100	0.731	0.99	0.82
	0.05, 1000	5.115	0.98	0.92
	0.05, 2000	5.571	1.0	0.93
	0.01, 10	0.096	0.2	0.04
	0.01, 100	0.76	0.85	0.6
	0.01, 1000	3.42	0.98	0.94
	0.01, 2000	5.032	0.98	0.94
ClaPROAR	1.0, 10	0.162	1.0	0.51
	1.0, 100	0.725	1.0	0.93
	1.0, 1000	1.677	1.0	0.97
	1.0, 2000	3.365	1.0	0.97
	0.5, 10	0.153	1.0	0.35
	0.5, 100	0.674	1.0	0.91
	0.5, 1000	2.56	1.0	0.97
	0.5, 2000	5.01	1.0	0.97
	0.25, 10	0.174	0.99	0.47
	0.25, 100	0.825	1.0	0.85
	0.25, 1000	3.364	1.0	0.94
	0.25, 2000	6.164	1.0	0.95
	0.1, 10	0.117	0.92	0.43

	0.1, 100	0.688	1.0	0.9
	0.1, 1000	3.711	1.0	0.94
	0.1, 2000	6.293	1.0	0.94
	0.05, 10	0.094	0.59	0.24
	0.05, 100	0.881	1.0	0.8
	0.05, 1000	2.137	0.99	0.96
	0.05, 2000	6.306	1.0	0.95
	0.01, 10	0.102	0.25	0.11
	0.01, 100	0.945	0.75	0.48
	0.01, 1000	4.941	0.98	0.93
	0.01, 2000	6.853	0.99	0.94
Greedy	1.0, 10	0.056	0.99	0.7
	1.0, 100	0.066	1.0	1.0
	1.0, 1000	0.067	1.0	1.0
	1.0, 2000	0.065	1.0	1.0
	0.5, 10	0.053	0.56	0.14
	0.5, 100	0.148	1.0	1.0
	0.5, 1000	0.112	1.0	1.0
	0.5, 2000	0.121	1.0	1.0
	0.25, 10	0.048	0.29	0.01
	0.25, 100	0.228	1.0	1.0
	0.25, 1000	0.235	1.0	1.0
	0.25, 2000	0.223	1.0	1.0
	0.1, 10	0.047	0.14	0.0
	0.1, 100	0.538	0.97	0.68
	0.1, 1000	0.586	1.0	1.0
	0.1, 2000	0.557	1.0	1.0
	0.05, 10	0.048	0.13	0.0
	0.05, 100	0.559	0.67	0.11
	0.05, 1000	1.197	1.0	1.0
	0.05, 2000	1.113	1.0	1.0
	0.01, 10	0.059	0.08	0.01
	0.01, 100	0.574	0.19	0.0
	0.01, 1000	5.739	0.99	0.68
	0.01, 2000	6.307	1.0	1.0

Tab. 46: Parameter grid search overlapping data using a MLP experiment 5

F.1.2. Overlapping dataset using Deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	33.59	1.0	0.0
	1.0, 100	2.314	1.0	0.0
	1.0, 1000	22.562	1.0	0.0
	1.0, 2000	41.259	1.0	0.0
	0.5, 10	0.21	1.0	0.0
	0.5, 100	2.237	1.0	0.0
	0.5, 1000	20.94	1.0	0.0
	0.5, 2000	40.54	1.0	0.0
	0.25, 10	0.139	0.95	0.0
	0.25, 100	1.931	1.0	0.0
	0.25, 1000	20.246	1.0	0.0
	0.25, 2000	42.085	1.0	0.0
	0.1, 10	0.103	0.34	0.0
	0.1, 100	1.958	1.0	0.0
	0.1, 1000	21.203	1.0	0.0

	0.1, 2000	42.961	1.0	0.0
	0.05, 10	0.127	0.21	0.0
	0.05, 100	1.77	1.0	0.0
	0.05, 1000	20.961	1.0	0.0
	0.05, 2000	43.085	1.0	0.0
	0.01, 10	0.107	0.19	0.0
	0.01, 100	1.132	0.34	0.0
	0.01, 1000	19.729	1.0	0.0
	0.01, 2000	42.047	1.0	0.0
Revise	1.0, 10	22.266	1.0	0.28
	1.0, 100	0.452	1.0	0.97
	1.0, 1000	1.199	1.0	0.99
	1.0, 2000	0.788	1.0	1.0
	0.5, 10	0.11	1.0	0.34
	0.5, 100	0.533	1.0	0.92
	0.5, 1000	1.343	1.0	0.98
	0.5, 2000	0.709	1.0	1.0
	0.25, 10	0.097	1.0	0.33
	0.25, 100	0.591	1.0	0.9
	0.25, 1000	0.71	1.0	1.0
	0.25, 2000	0.874	1.0	1.0
	0.1, 10	0.087	0.96	0.31
	0.1, 100	0.653	1.0	0.75
	0.1, 1000	1.488	1.0	0.99
	0.1, 2000	1.405	1.0	1.0
	0.05, 10	0.069	0.54	0.21
	0.05, 100	0.725	0.95	0.68
	0.05, 1000	1.759	1.0	0.99
	0.05, 2000	1.812	1.0	1.0
	0.01, 10	0.061	0.2	0.09
	0.01, 100	0.628	0.65	0.44
	0.01, 1000	3.338	0.72	0.72
	0.01, 2000	4.835	0.79	0.78
Ecco	1.0, 10	10.558	1.0	0.37
	1.0, 100	0.09	1.0	1.0
	1.0, 1000	0.676	1.0	1.0
	1.0, 2000	1.783	1.0	1.0
	0.5, 10	0.276	1.0	0.25
	0.5, 100	0.101	1.0	1.0
	0.5, 1000	0.971	1.0	1.0
	0.5, 2000	2.437	1.0	1.0
	0.25, 10	0.245	1.0	0.3
	0.25, 100	0.252	1.0	1.0
	0.25, 1000	0.594	1.0	1.0
	0.25, 2000	1.83	1.0	1.0
	0.1, 10	0.214	0.95	0.32
	0.1, 100	0.68	0.99	0.95
	0.1, 1000	0.743	1.0	1.0
	0.1, 2000	2.091	1.0	1.0
	0.05, 10	0.16	0.59	0.24
	0.05, 100	1.129	0.96	0.81
	0.05, 1000	0.906	1.0	1.0
	0.05, 2000	1.913	1.0	1.0
	0.01, 10	0.157	0.26	0.07
	0.01, 100	1.117	0.57	0.43
	0.01, 1000	5.497	0.72	0.71

	0.01, 2000	11.029	0.74	0.74
Wachter	1.0, 10	3.511	1.0	0.38
	1.0, 100	0.387	1.0	0.98
	1.0, 1000	1.388	1.0	0.98
	1.0, 2000	2.1	1.0	0.99
	0.5, 10	0.124	1.0	0.28
	0.5, 100	0.554	1.0	0.93
	0.5, 1000	0.699	1.0	1.0
	0.5, 2000	2.118	1.0	0.99
	0.25, 10	0.111	1.0	0.33
	0.25, 100	0.56	1.0	0.88
	0.25, 1000	1.702	1.0	0.99
	0.25, 2000	0.945	1.0	1.0
	0.1, 10	0.097	0.98	0.32
	0.1, 100	0.573	1.0	0.81
	0.1, 1000	1.834	1.0	0.99
	0.1, 2000	1.586	1.0	1.0
	0.05, 10	0.095	0.55	0.13
	0.05, 100	0.616	0.99	0.76
	0.05, 1000	1.669	1.0	1.0
	0.05, 2000	3.324	1.0	0.99
	0.01, 10	0.063	0.22	0.1
	0.01, 100	0.662	0.6	0.4
	0.01, 1000	3.318	0.73	0.7
	0.01, 2000	6.256	0.7	0.69
Generic	1.0, 10	0.116	1.0	0.31
	1.0, 100	0.514	1.0	0.9
	1.0, 1000	0.341	1.0	1.0
	1.0, 2000	0.488	1.0	1.0
	0.5, 10	0.108	1.0	0.33
	0.5, 100	0.533	1.0	0.93
	0.5, 1000	0.644	1.0	1.0
	0.5, 2000	0.918	1.0	1.0
	0.25, 10	0.105	1.0	0.32
	0.25, 100	0.687	1.0	0.81
	0.25, 1000	1.584	1.0	0.99
	0.25, 2000	0.962	1.0	1.0
	0.1, 10	0.093	0.95	0.33
	0.1, 100	0.616	1.0	0.8
	0.1, 1000	1.523	1.0	1.0
	0.1, 2000	2.914	1.0	0.99
	0.05, 10	0.061	0.53	0.19
	0.05, 100	0.689	0.99	0.68
	0.05, 1000	1.764	1.0	1.0
	0.05, 2000	1.472	1.0	1.0
	0.01, 10	0.056	0.22	0.11
	0.01, 100	0.625	0.55	0.38
	0.01, 1000	3.106	0.73	0.72
	0.01, 2000	5.904	0.77	0.75
DiCE	1.0, 10	2.521	1.0	0.33
	1.0, 100	0.565	1.0	0.98
	1.0, 1000	1.618	1.0	0.99
	1.0, 2000	0.554	1.0	1.0
	0.5, 10	0.145	1.0	0.32
	0.5, 100	0.748	1.0	0.89
	0.5, 1000	1.947	1.0	0.99

	0.5, 2000	0.587	1.0	1.0
	0.25, 10	0.126	1.0	0.36
	0.25, 100	0.827	1.0	0.86
	0.25, 1000	1.424	1.0	1.0
	0.25, 2000	2.876	1.0	0.99
	0.1, 10	0.114	0.92	0.3
	0.1, 100	0.851	1.0	0.77
	0.1, 1000	1.553	1.0	1.0
	0.1, 2000	1.558	1.0	1.0
	0.05, 10	0.092	0.6	0.2
	0.05, 100	0.96	0.96	0.63
	0.05, 1000	2.408	1.0	1.0
	0.05, 2000	3.809	1.0	0.99
	0.01, 10	0.075	0.18	0.09
	0.01, 100	0.732	0.58	0.43
	0.01, 1000	4.401	0.72	0.72
	0.01, 2000	6.305	0.81	0.81
ClaPROAR	1.0, 10	2.578	1.0	0.34
	1.0, 100	0.727	1.0	0.91
	1.0, 1000	0.813	1.0	1.0
	1.0, 2000	4.239	1.0	0.99
	0.5, 10	0.17	1.0	0.3
	0.5, 100	0.738	1.0	0.92
	0.5, 1000	0.95	1.0	1.0
	0.5, 2000	1.268	1.0	1.0
	0.25, 10	0.164	1.0	0.26
	0.25, 100	0.675	1.0	0.89
	0.25, 1000	1.52	1.0	1.0
	0.25, 2000	1.287	1.0	1.0
	0.1, 10	0.125	0.92	0.38
	0.1, 100	0.906	1.0	0.78
	0.1, 1000	2.206	1.0	0.99
	0.1, 2000	4.463	1.0	0.98
	0.05, 10	0.113	0.57	0.19
	0.05, 100	1.132	0.98	0.7
	0.05, 1000	2.256	1.0	1.0
	0.05, 2000	4.094	1.0	0.99
	0.01, 10	0.087	0.25	0.11
	0.01, 100	0.926	0.55	0.33
	0.01, 1000	5.601	0.72	0.68
	0.01, 2000	8.373	0.75	0.74
Greedy	1.0, 10	3.145	0.98	0.78
	1.0, 100	0.069	1.0	1.0
	1.0, 1000	0.073	1.0	1.0
	1.0, 2000	0.085	1.0	1.0
	0.5, 10	0.071	0.63	0.1
	0.5, 100	0.129	1.0	1.0
	0.5, 1000	0.157	1.0	1.0
	0.5, 2000	0.154	1.0	1.0
	0.25, 10	0.067	0.33	0.0
	0.25, 100	0.278	1.0	1.0
	0.25, 1000	0.272	1.0	1.0
	0.25, 2000	0.343	1.0	1.0
	0.1, 10	0.056	0.21	0.0
	0.1, 100	0.568	0.97	0.74
	0.1, 1000	0.686	1.0	1.0

	0.1, 2000	0.763	1.0	1.0
	0.05, 10	0.056	0.09	0.0
	0.05, 100	0.676	0.7	0.11
	0.05, 1000	1.365	1.0	1.0
	0.05, 2000	1.462	1.0	1.0
	0.01, 10	0.048	0.1	0.01
	0.01, 100	0.529	0.07	0.0
	0.01, 1000	5.976	0.99	0.78
	0.01, 2000	6.992	1.0	1.0

Tab. 47: Parameter grid search overlapping data experiment 1 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.803	0.72	0.0
	1.0, 100	2.246	0.77	0.0
	1.0, 1000	23.134	0.78	0.0
	1.0, 2000	46.669	0.71	0.0
	0.5, 10	0.231	0.9	0.0
	0.5, 100	2.571	0.9	0.0
	0.5, 1000	26.184	0.9	0.0
	0.5, 2000	52.757	0.89	0.0
	0.25, 10	0.256	0.98	0.0
	0.25, 100	2.726	1.0	0.0
	0.25, 1000	27.908	1.0	0.0
	0.25, 2000	56.094	0.99	0.0
	0.1, 10	0.245	1.0	0.0
	0.1, 100	2.692	1.0	0.0
	0.1, 1000	27.982	1.0	0.0
	0.1, 2000	56.443	1.0	0.0
	0.05, 10	0.195	0.93	0.0
	0.05, 100	2.586	1.0	0.0
	0.05, 1000	27.886	1.0	0.0
	0.05, 2000	57.047	1.0	0.0
	0.01, 10	0.147	0.3	0.0
	0.01, 100	2.02	0.64	0.0
	0.01, 1000	22.297	0.66	0.0
	0.01, 2000	45.778	0.69	0.0
Revise	1.0, 10	0.142	1.0	0.33
	1.0, 100	0.258	1.0	1.0
	1.0, 1000	0.343	1.0	1.0
	1.0, 2000	0.228	1.0	1.0
	0.5, 10	0.104	1.0	0.34
	0.5, 100	0.475	1.0	0.94
	0.5, 1000	1.11	1.0	0.99
	0.5, 2000	0.565	1.0	1.0
	0.25, 10	0.097	1.0	0.35
	0.25, 100	0.627	1.0	0.82
	0.25, 1000	0.805	1.0	1.0
	0.25, 2000	0.611	1.0	1.0
	0.1, 10	0.105	0.94	0.34
	0.1, 100	0.644	1.0	0.78
	0.1, 1000	1.482	1.0	0.99
	0.1, 2000	2.331	1.0	0.99
	0.05, 10	0.067	0.56	0.19
	0.05, 100	0.621	0.97	0.65

	0.05, 1000	1.478	1.0	0.99
	0.05, 2000	1.723	1.0	1.0
	0.01, 10	0.073	0.3	0.1
	0.01, 100	0.601	0.61	0.38
	0.01, 1000	3.427	0.63	0.63
	0.01, 2000	5.642	0.82	0.8
Ecco	1.0, 10	0.316	1.0	0.38
	1.0, 100	0.457	1.0	0.99
	1.0, 1000	0.419	1.0	1.0
	1.0, 2000	0.427	1.0	1.0
	0.5, 10	0.252	1.0	0.29
	0.5, 100	0.986	1.0	0.96
	0.5, 1000	1.056	1.0	1.0
	0.5, 2000	0.959	1.0	1.0
	0.25, 10	0.239	1.0	0.45
	0.25, 100	1.393	1.0	0.83
	0.25, 1000	1.423	1.0	1.0
	0.25, 2000	1.466	1.0	1.0
	0.1, 10	0.247	0.95	0.28
	0.1, 100	1.328	1.0	0.81
	0.1, 1000	2.949	1.0	1.0
	0.1, 2000	1.515	1.0	1.0
	0.05, 10	0.198	0.52	0.14
	0.05, 100	1.252	0.96	0.81
	0.05, 1000	3.503	1.0	0.99
	0.05, 2000	1.863	1.0	1.0
	0.01, 10	0.188	0.25	0.11
	0.01, 100	1.476	0.58	0.34
	0.01, 1000	7.376	0.75	0.73
	0.01, 2000	9.359	0.88	0.87
Wachter	1.0, 10	0.151	1.0	0.39
	1.0, 100	0.335	1.0	0.95
	1.0, 1000	0.351	1.0	1.0
	1.0, 2000	0.284	1.0	1.0
	0.5, 10	0.105	1.0	0.44
	0.5, 100	0.495	1.0	0.92
	0.5, 1000	0.51	1.0	1.0
	0.5, 2000	2.176	1.0	0.99
	0.25, 10	0.095	1.0	0.49
	0.25, 100	0.601	1.0	0.91
	0.25, 1000	0.957	1.0	1.0
	0.25, 2000	2.247	1.0	0.99
	0.1, 10	0.094	0.89	0.27
	0.1, 100	0.664	1.0	0.77
	0.1, 1000	0.984	1.0	1.0
	0.1, 2000	2.4	1.0	0.99
	0.05, 10	0.074	0.44	0.16
	0.05, 100	0.702	0.99	0.75
	0.05, 1000	1.496	1.0	1.0
	0.05, 2000	2.414	1.0	0.99
	0.01, 10	0.063	0.29	0.14
	0.01, 100	0.661	0.58	0.36
	0.01, 1000	3.085	0.7	0.69
	0.01, 2000	5.426	0.81	0.81
Generic	1.0, 10	0.106	1.0	0.44
	1.0, 100	0.28	1.0	0.99

	1.0, 1000	0.292	1.0	1.0
	1.0, 2000	0.21	1.0	1.0
	0.5, 10	0.109	1.0	0.29
	0.5, 100	0.421	1.0	0.98
	0.5, 1000	1.178	1.0	0.99
	0.5, 2000	0.456	1.0	1.0
	0.25, 10	0.091	1.0	0.47
	0.25, 100	0.493	1.0	0.88
	0.25, 1000	1.322	1.0	1.0
	0.25, 2000	0.755	1.0	1.0
	0.1, 10	0.092	0.96	0.37
	0.1, 100	0.567	0.99	0.77
	0.1, 1000	0.857	1.0	1.0
	0.1, 2000	0.922	1.0	1.0
	0.05, 10	0.069	0.57	0.2
	0.05, 100	0.656	0.95	0.66
	0.05, 1000	2.821	1.0	0.99
	0.05, 2000	2.033	1.0	1.0
	0.01, 10	0.056	0.2	0.09
	0.01, 100	0.517	0.47	0.32
	0.01, 1000	3.195	0.66	0.65
	0.01, 2000	4.71	0.82	0.82
DiCE	1.0, 10	0.225	1.0	0.5
	1.0, 100	0.462	1.0	0.98
	1.0, 1000	1.631	1.0	0.99
	1.0, 2000	1.598	1.0	1.0
	0.5, 10	0.137	1.0	0.37
	0.5, 100	0.542	1.0	0.95
	0.5, 1000	1.537	1.0	1.0
	0.5, 2000	0.662	1.0	1.0
	0.25, 10	0.12	1.0	0.55
	0.25, 100	0.738	1.0	0.92
	0.25, 1000	2.049	1.0	0.98
	0.25, 2000	3.664	1.0	1.0
	0.1, 10	0.137	0.9	0.35
	0.1, 100	0.689	1.0	0.85
	0.1, 1000	1.867	1.0	1.0
	0.1, 2000	1.095	1.0	1.0
	0.05, 10	0.085	0.5	0.18
	0.05, 100	0.93	0.96	0.71
	0.05, 1000	1.453	1.0	1.0
	0.05, 2000	3.553	1.0	0.99
	0.01, 10	0.082	0.36	0.16
	0.01, 100	0.906	0.57	0.33
	0.01, 1000	5.008	0.73	0.71
	0.01, 2000	9.361	0.86	0.85
ClaPROAR	1.0, 10	0.18	1.0	0.34
	1.0, 100	0.492	1.0	0.98
	1.0, 1000	1.18	1.0	1.0
	1.0, 2000	1.527	1.0	1.0
	0.5, 10	0.166	1.0	0.36
	0.5, 100	0.684	1.0	0.91
	0.5, 1000	1.959	1.0	1.0
	0.5, 2000	1.077	1.0	1.0
	0.25, 10	0.173	1.0	0.42
	0.25, 100	0.833	1.0	0.84

	0.25, 1000	1.947	1.0	1.0
	0.25, 2000	1.398	1.0	1.0
	0.1, 10	0.138	0.97	0.4
	0.1, 100	0.773	1.0	0.88
	0.1, 1000	1.469	1.0	1.0
	0.1, 2000	3.999	1.0	0.98
	0.05, 10	0.107	0.57	0.3
	0.05, 100	1.061	0.97	0.72
	0.05, 1000	2.029	1.0	1.0
	0.05, 2000	2.105	1.0	1.0
	0.01, 10	0.095	0.26	0.14
	0.01, 100	0.972	0.55	0.28
	0.01, 1000	4.596	0.72	0.72
	0.01, 2000	8.595	0.8	0.79
Greedy	1.0, 10	0.062	0.97	0.72
	1.0, 100	0.071	1.0	1.0
	1.0, 1000	0.07	1.0	1.0
	1.0, 2000	0.078	1.0	1.0
	0.5, 10	0.06	0.67	0.14
	0.5, 100	0.132	1.0	1.0
	0.5, 1000	0.135	1.0	1.0
	0.5, 2000	0.119	1.0	1.0
	0.25, 10	0.052	0.3	0.02
	0.25, 100	0.249	1.0	1.0
	0.25, 1000	0.252	1.0	1.0
	0.25, 2000	0.236	1.0	1.0
	0.1, 10	0.059	0.15	0.0
	0.1, 100	0.551	0.99	0.7
	0.1, 1000	0.601	1.0	1.0
	0.1, 2000	0.707	1.0	1.0
	0.05, 10	0.049	0.11	0.0
	0.05, 100	0.596	0.65	0.17
	0.05, 1000	1.278	1.0	1.0
	0.05, 2000	1.333	1.0	1.0
	0.01, 10	0.052	0.09	0.0
	0.01, 100	0.444	0.09	0.0
	0.01, 1000	6.591	1.0	0.67
	0.01, 2000	6.585	1.0	1.0

Tab. 48: Parameter grid search overlapping data experiment 2 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.21	0.69	0.0
	1.0, 100	2.311	0.77	0.0
	1.0, 1000	22.878	0.76	0.0
	1.0, 2000	47.017	0.84	0.0
	0.5, 10	0.244	0.93	0.0
	0.5, 100	2.624	0.9	0.0
	0.5, 1000	26.41	0.9	0.0
	0.5, 2000	52.847	0.91	0.0
	0.25, 10	0.248	0.98	0.0
	0.25, 100	2.742	0.99	0.0
	0.25, 1000	27.635	0.99	0.0
	0.25, 2000	56.121	1.0	0.0
	0.1, 10	0.259	1.0	0.0

	0.1, 100	2.78	1.0	0.0
	0.1, 1000	28.256	1.0	0.0
	0.1, 2000	57.244	1.0	0.0
	0.05, 10	0.24	0.97	0.0
	0.05, 100	2.635	1.0	0.0
	0.05, 1000	27.964	1.0	0.0
	0.05, 2000	56.52	1.0	0.0
	0.01, 10	0.15	0.38	0.0
	0.01, 100	1.931	0.68	0.0
	0.01, 1000	23.213	0.67	0.0
	0.01, 2000	47.908	0.69	0.0
Revise	1.0, 10	0.111	1.0	0.4
	1.0, 100	0.322	1.0	0.98
	1.0, 1000	0.338	1.0	1.0
	1.0, 2000	0.322	1.0	1.0
	0.5, 10	0.12	1.0	0.33
	0.5, 100	0.423	1.0	0.95
	0.5, 1000	0.474	1.0	1.0
	0.5, 2000	0.943	1.0	1.0
	0.25, 10	0.11	1.0	0.36
	0.25, 100	0.599	1.0	0.87
	0.25, 1000	1.807	1.0	1.0
	0.25, 2000	1.268	1.0	1.0
	0.1, 10	0.079	0.92	0.39
	0.1, 100	0.569	1.0	0.81
	0.1, 1000	0.934	1.0	1.0
	0.1, 2000	1.037	1.0	1.0
	0.05, 10	0.122	0.56	0.22
	0.05, 100	0.652	0.99	0.76
	0.05, 1000	1.81	1.0	1.0
	0.05, 2000	1.134	1.0	1.0
	0.01, 10	0.065	0.21	0.09
	0.01, 100	0.726	0.55	0.34
	0.01, 1000	3.151	0.79	0.78
	0.01, 2000	4.361	0.89	0.88
Ecco	1.0, 10	0.275	1.0	0.33
	1.0, 100	0.193	1.0	1.0
	1.0, 1000	0.122	1.0	1.0
	1.0, 2000	0.408	1.0	1.0
	0.5, 10	0.266	1.0	0.27
	0.5, 100	0.326	1.0	1.0
	0.5, 1000	0.09	1.0	1.0
	0.5, 2000	0.396	1.0	1.0
	0.25, 10	0.227	1.0	0.43
	0.25, 100	0.239	1.0	1.0
	0.25, 1000	0.225	1.0	1.0
	0.25, 2000	0.576	1.0	1.0
	0.1, 10	0.209	0.93	0.34
	0.1, 100	0.439	1.0	0.98
	0.1, 1000	0.35	1.0	1.0
	0.1, 2000	0.764	1.0	1.0
	0.05, 10	0.161	0.54	0.19
	0.05, 100	0.763	0.99	0.89
	0.05, 1000	0.68	1.0	1.0
	0.05, 2000	0.76	1.0	1.0
	0.01, 10	0.126	0.15	0.06

	0.01, 100	1.167	0.55	0.44
	0.01, 1000	4.581	0.82	0.82
	0.01, 2000	6.665	0.91	0.91
Wachter	1.0, 10	0.106	1.0	0.39
	1.0, 100	0.335	1.0	0.99
	1.0, 1000	0.283	1.0	1.0
	1.0, 2000	0.352	1.0	1.0
	0.5, 10	0.115	1.0	0.28
	0.5, 100	0.557	1.0	0.9
	0.5, 1000	0.627	1.0	1.0
	0.5, 2000	0.744	1.0	1.0
	0.25, 10	0.101	1.0	0.43
	0.25, 100	0.651	1.0	0.86
	0.25, 1000	0.772	1.0	1.0
	0.25, 2000	2.508	1.0	0.98
	0.1, 10	0.098	0.92	0.39
	0.1, 100	0.57	1.0	0.77
	0.1, 1000	0.868	1.0	1.0
	0.1, 2000	2.666	1.0	0.99
	0.05, 10	0.069	0.58	0.25
	0.05, 100	0.702	0.99	0.71
	0.05, 1000	2.746	1.0	0.96
	0.05, 2000	1.444	1.0	1.0
	0.01, 10	0.07	0.32	0.14
	0.01, 100	0.667	0.61	0.38
	0.01, 1000	3.798	0.76	0.75
	0.01, 2000	5.1	0.88	0.87
Generic	1.0, 10	0.116	1.0	0.33
	1.0, 100	0.364	1.0	0.99
	1.0, 1000	1.11	1.0	0.99
	1.0, 2000	1.974	1.0	0.99
	0.5, 10	0.103	1.0	0.32
	0.5, 100	0.55	1.0	0.9
	0.5, 1000	1.107	1.0	0.99
	0.5, 2000	0.556	1.0	1.0
	0.25, 10	0.109	1.0	0.48
	0.25, 100	0.648	1.0	0.87
	0.25, 1000	0.82	1.0	1.0
	0.25, 2000	2.494	1.0	0.98
	0.1, 10	0.087	0.92	0.3
	0.1, 100	0.535	1.0	0.8
	0.1, 1000	1.479	1.0	0.99
	0.1, 2000	3.22	1.0	0.99
	0.05, 10	0.073	0.6	0.25
	0.05, 100	0.687	1.0	0.77
	0.05, 1000	0.999	1.0	1.0
	0.05, 2000	1.969	1.0	1.0
	0.01, 10	0.065	0.29	0.14
	0.01, 100	0.606	0.51	0.32
	0.01, 1000	3.294	0.76	0.75
	0.01, 2000	4.378	0.87	0.87
DiCE	1.0, 10	0.142	1.0	0.44
	1.0, 100	0.445	1.0	0.99
	1.0, 1000	0.479	1.0	1.0
	1.0, 2000	2.759	1.0	0.99
	0.5, 10	0.147	1.0	0.37

	0.5, 100	0.745	1.0	0.88
	0.5, 1000	0.916	1.0	1.0
	0.5, 2000	3.136	1.0	0.99
	0.25, 10	0.121	1.0	0.37
	0.25, 100	0.791	1.0	0.87
	0.25, 1000	1.415	1.0	1.0
	0.25, 2000	1.634	1.0	1.0
	0.1, 10	0.128	0.88	0.3
	0.1, 100	0.842	1.0	0.77
	0.1, 1000	1.441	1.0	1.0
	0.1, 2000	1.604	1.0	1.0
	0.05, 10	0.098	0.6	0.18
	0.05, 100	0.846	0.98	0.78
	0.05, 1000	2.393	1.0	0.98
	0.05, 2000	3.38	1.0	0.99
	0.01, 10	0.087	0.28	0.1
	0.01, 100	0.933	0.53	0.27
	0.01, 1000	3.532	0.87	0.86
	0.01, 2000	6.371	0.91	0.91
ClaPROAR	1.0, 10	0.16	1.0	0.42
	1.0, 100	0.508	1.0	1.0
	1.0, 1000	1.73	1.0	0.99
	1.0, 2000	3.234	1.0	0.99
	0.5, 10	0.149	1.0	0.36
	0.5, 100	0.644	1.0	0.94
	0.5, 1000	1.174	1.0	1.0
	0.5, 2000	0.978	1.0	1.0
	0.25, 10	0.148	1.0	0.42
	0.25, 100	1.034	1.0	0.81
	0.25, 1000	1.52	1.0	1.0
	0.25, 2000	3.394	1.0	0.99
	0.1, 10	0.118	0.93	0.49
	0.1, 100	1.007	1.0	0.76
	0.1, 1000	2.553	1.0	0.99
	0.1, 2000	2.053	1.0	1.0
	0.05, 10	0.106	0.52	0.19
	0.05, 100	0.811	0.96	0.78
	0.05, 1000	2.683	1.0	1.0
	0.05, 2000	4.854	1.0	0.99
	0.01, 10	0.09	0.2	0.05
	0.01, 100	1.01	0.6	0.36
	0.01, 1000	5.338	0.77	0.75
	0.01, 2000	8.059	0.88	0.86
Greedy	1.0, 10	0.062	0.99	0.72
	1.0, 100	0.07	1.0	1.0
	1.0, 1000	0.066	1.0	1.0
	1.0, 2000	0.067	1.0	1.0
	0.5, 10	0.067	0.63	0.17
	0.5, 100	0.134	1.0	1.0
	0.5, 1000	0.129	1.0	1.0
	0.5, 2000	0.169	1.0	1.0
	0.25, 10	0.05	0.29	0.01
	0.25, 100	0.243	1.0	1.0
	0.25, 1000	0.243	1.0	1.0
	0.25, 2000	0.301	1.0	1.0
	0.1, 10	0.053	0.21	0.0

	0.1, 100	0.537	0.97	0.59
	0.1, 1000	0.625	1.0	1.0
	0.1, 2000	0.622	1.0	1.0
	0.05, 10	0.05	0.1	0.0
	0.05, 100	0.575	0.66	0.13
	0.05, 1000	1.366	1.0	1.0
	0.05, 2000	1.342	1.0	1.0
	0.01, 10	0.048	0.11	0.0
	0.01, 100	0.542	0.14	0.0
	0.01, 1000	6.019	0.97	0.61
	0.01, 2000	6.871	1.0	1.0

Tab. 49: Parameter grid search overlapping data experiment 3 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.219	0.67	0.0
	1.0, 100	2.185	0.8	0.0
	1.0, 1000	23.684	0.74	0.0
	1.0, 2000	46.801	0.82	0.0
	0.5, 10	0.26	0.97	0.0
	0.5, 100	2.494	0.9	0.0
	0.5, 1000	26.042	0.92	0.0
	0.5, 2000	52.944	0.9	0.0
	0.25, 10	0.307	0.98	0.0
	0.25, 100	2.638	1.0	0.0
	0.25, 1000	28.215	0.99	0.0
	0.25, 2000	57.757	1.0	0.0
	0.1, 10	0.233	1.0	0.0
	0.1, 100	2.766	1.0	0.0
	0.1, 1000	28.316	1.0	0.0
	0.1, 2000	57.784	1.0	0.0
	0.05, 10	0.196	0.91	0.0
	0.05, 100	2.732	1.0	0.0
	0.05, 1000	28.058	1.0	0.0
	0.05, 2000	54.923	1.0	0.0
	0.01, 10	0.131	0.31	0.0
	0.01, 100	1.912	0.63	0.0
	0.01, 1000	22.664	0.73	0.0
	0.01, 2000	44.151	0.69	0.0
Revise	1.0, 10	0.099	1.0	0.37
	1.0, 100	0.236	1.0	1.0
	1.0, 1000	0.27	1.0	1.0
	1.0, 2000	0.348	1.0	1.0
	0.5, 10	0.112	1.0	0.34
	0.5, 100	0.536	1.0	0.9
	0.5, 1000	0.382	1.0	1.0
	0.5, 2000	0.458	1.0	1.0
	0.25, 10	0.095	1.0	0.49
	0.25, 100	0.5	1.0	0.85
	0.25, 1000	1.388	1.0	0.99
	0.25, 2000	2.032	1.0	0.99
	0.1, 10	0.088	0.96	0.45
	0.1, 100	0.42	1.0	0.87
	0.1, 1000	1.962	1.0	0.99
	0.1, 2000	2.694	1.0	0.99

	0.05, 10	0.074	0.62	0.26
	0.05, 100	0.653	0.97	0.68
	0.05, 1000	0.759	1.0	1.0
	0.05, 2000	0.786	1.0	1.0
	0.01, 10	0.06	0.29	0.13
	0.01, 100	0.552	0.58	0.37
	0.01, 1000	2.712	0.76	0.76
	0.01, 2000	4.453	0.83	0.83
Ecco	1.0, 10	0.253	1.0	0.46
	1.0, 100	0.14	1.0	1.0
	1.0, 1000	1.761	1.0	1.0
	1.0, 2000	2.618	1.0	1.0
	0.5, 10	0.259	1.0	0.38
	0.5, 100	0.326	1.0	1.0
	0.5, 1000	1.621	1.0	1.0
	0.5, 2000	3.341	1.0	1.0
	0.25, 10	0.242	1.0	0.45
	0.25, 100	0.284	1.0	1.0
	0.25, 1000	1.902	1.0	1.0
	0.25, 2000	3.692	1.0	1.0
	0.1, 10	0.199	0.95	0.38
	0.1, 100	0.444	1.0	0.96
	0.1, 1000	1.499	1.0	1.0
	0.1, 2000	4.091	1.0	1.0
	0.05, 10	0.155	0.54	0.17
	0.05, 100	0.832	0.98	0.89
	0.05, 1000	1.857	1.0	1.0
	0.05, 2000	3.675	1.0	1.0
	0.01, 10	0.146	0.3	0.16
	0.01, 100	0.974	0.6	0.55
	0.01, 1000	6.252	0.68	0.67
	0.01, 2000	9.678	0.87	0.87
Wachter	1.0, 10	0.118	1.0	0.4
	1.0, 100	0.219	1.0	1.0
	1.0, 1000	0.677	1.0	1.0
	1.0, 2000	0.271	1.0	1.0
	0.5, 10	0.105	1.0	0.38
	0.5, 100	0.392	1.0	0.97
	0.5, 1000	1.212	1.0	0.99
	0.5, 2000	0.681	1.0	1.0
	0.25, 10	0.108	1.0	0.43
	0.25, 100	0.455	1.0	0.88
	0.25, 1000	1.219	1.0	0.99
	0.25, 2000	2.489	1.0	0.98
	0.1, 10	0.105	0.93	0.45
	0.1, 100	0.508	1.0	0.82
	0.1, 1000	1.443	1.0	1.0
	0.1, 2000	1.209	1.0	1.0
	0.05, 10	0.094	0.54	0.17
	0.05, 100	0.741	0.99	0.69
	0.05, 1000	2.826	1.0	1.0
	0.05, 2000	1.318	1.0	1.0
	0.01, 10	0.092	0.31	0.11
	0.01, 100	0.525	0.41	0.29
	0.01, 1000	2.761	0.76	0.76
	0.01, 2000	5.116	0.84	0.83

Generic	1.0, 10	0.132	1.0	0.4
	1.0, 100	0.276	1.0	0.99
	1.0, 1000	0.282	1.0	1.0
	1.0, 2000	0.291	1.0	1.0
	0.5, 10	0.103	1.0	0.36
	0.5, 100	0.428	1.0	0.95
	0.5, 1000	0.508	1.0	1.0
	0.5, 2000	0.507	1.0	1.0
	0.25, 10	0.084	1.0	0.49
	0.25, 100	0.483	1.0	0.88
	0.25, 1000	0.503	1.0	1.0
	0.25, 2000	0.686	1.0	1.0
	0.1, 10	0.122	0.92	0.41
	0.1, 100	0.513	1.0	0.84
	0.1, 1000	1.4	1.0	0.99
	0.1, 2000	0.923	1.0	1.0
	0.05, 10	0.07	0.49	0.18
	0.05, 100	0.449	0.98	0.82
	0.05, 1000	1.858	1.0	0.98
	0.05, 2000	2.693	1.0	0.99
	0.01, 10	0.06	0.23	0.09
	0.01, 100	0.601	0.56	0.37
	0.01, 1000	3.586	0.7	0.68
	0.01, 2000	5.418	0.8	0.8
DiCE	1.0, 10	0.142	1.0	0.55
	1.0, 100	0.504	1.0	0.98
	1.0, 1000	0.474	1.0	1.0
	1.0, 2000	2.663	1.0	0.99
	0.5, 10	0.191	1.0	0.33
	0.5, 100	0.583	1.0	0.94
	0.5, 1000	0.824	1.0	1.0
	0.5, 2000	2.939	1.0	0.99
	0.25, 10	0.162	1.0	0.47
	0.25, 100	0.693	1.0	0.92
	0.25, 1000	1.616	1.0	0.99
	0.25, 2000	0.795	1.0	1.0
	0.1, 10	0.113	0.93	0.41
	0.1, 100	0.614	1.0	0.88
	0.1, 1000	1.147	1.0	1.0
	0.1, 2000	2.886	1.0	0.99
	0.05, 10	0.088	0.55	0.22
	0.05, 100	0.841	0.98	0.7
	0.05, 1000	1.71	1.0	1.0
	0.05, 2000	2.354	1.0	1.0
	0.01, 10	0.095	0.31	0.15
	0.01, 100	0.814	0.45	0.24
	0.01, 1000	4.586	0.66	0.65
	0.01, 2000	6.3	0.8	0.79
ClaPROAR	1.0, 10	0.182	1.0	0.36
	1.0, 100	0.367	1.0	1.0
	1.0, 1000	1.811	1.0	0.99
	1.0, 2000	0.414	1.0	1.0
	0.5, 10	0.153	1.0	0.34
	0.5, 100	0.596	1.0	0.95
	0.5, 1000	0.72	1.0	1.0

	0.5, 2000	3.499	1.0	0.98
	0.25, 10	0.129	1.0	0.46
	0.25, 100	0.829	1.0	0.87
	0.25, 1000	2.0	1.0	0.99
	0.25, 2000	3.52	1.0	0.98
	0.1, 10	0.134	0.92	0.37
	0.1, 100	0.898	1.0	0.86
	0.1, 1000	2.833	1.0	0.98
	0.1, 2000	1.908	1.0	1.0
	0.05, 10	0.1	0.56	0.27
	0.05, 100	1.137	0.97	0.7
	0.05, 1000	2.842	1.0	1.0
	0.05, 2000	4.103	1.0	0.99
	0.01, 10	0.104	0.17	0.09
	0.01, 100	0.905	0.61	0.41
	0.01, 1000	4.755	0.78	0.77
	0.01, 2000	10.178	0.84	0.8
Greedy	1.0, 10	0.062	0.94	0.78
	1.0, 100	0.067	1.0	1.0
	1.0, 1000	0.067	1.0	1.0
	1.0, 2000	0.067	1.0	1.0
	0.5, 10	0.06	0.66	0.11
	0.5, 100	0.125	1.0	1.0
	0.5, 1000	0.132	1.0	1.0
	0.5, 2000	0.128	1.0	1.0
	0.25, 10	0.057	0.32	0.02
	0.25, 100	0.236	1.0	1.0
	0.25, 1000	0.251	1.0	1.0
	0.25, 2000	0.254	1.0	1.0
	0.1, 10	0.061	0.16	0.02
	0.1, 100	0.531	1.0	0.7
	0.1, 1000	0.607	1.0	1.0
	0.1, 2000	0.61	1.0	1.0
	0.05, 10	0.127	0.11	0.0
	0.05, 100	0.529	0.57	0.15
	0.05, 1000	1.203	1.0	1.0
	0.05, 2000	1.342	1.0	1.0
	0.01, 10	0.045	0.05	0.0
	0.01, 100	0.515	0.16	0.01
	0.01, 1000	6.033	0.96	0.71
	0.01, 2000	6.438	1.0	1.0

Tab. 50: Parameter grid search overlapping data experiment 4 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.208	0.67	0.0
	1.0, 100	2.561	0.73	0.0
	1.0, 1000	23.262	0.71	0.0
	1.0, 2000	46.641	0.71	0.0
	0.5, 10	0.238	0.91	0.0
	0.5, 100	2.658	0.96	0.0
	0.5, 1000	26.077	0.92	0.0
	0.5, 2000	52.637	0.92	0.0
	0.25, 10	0.237	1.0	0.0
	0.25, 100	2.56	1.0	0.0

	0.25, 1000	27.199	1.0	0.0
	0.25, 2000	55.638	0.98	0.0
	0.1, 10	0.224	1.0	0.0
	0.1, 100	2.676	1.0	0.0
	0.1, 1000	27.204	1.0	0.0
	0.1, 2000	55.129	1.0	0.0
	0.05, 10	0.227	0.93	0.0
	0.05, 100	2.534	1.0	0.0
	0.05, 1000	27.417	1.0	0.0
	0.05, 2000	55.077	1.0	0.0
	0.01, 10	0.14	0.28	0.0
	0.01, 100	1.963	0.57	0.0
	0.01, 1000	23.01	0.69	0.0
	0.01, 2000	47.301	0.69	0.0
Revise	1.0, 10	0.105	1.0	0.38
	1.0, 100	0.394	1.0	0.96
	1.0, 1000	1.513	1.0	0.99
	1.0, 2000	1.427	1.0	1.0
	0.5, 10	0.1	1.0	0.3
	0.5, 100	0.492	1.0	0.93
	0.5, 1000	1.257	1.0	0.98
	0.5, 2000	0.935	1.0	1.0
	0.25, 10	0.094	1.0	0.41
	0.25, 100	0.504	1.0	0.86
	0.25, 1000	0.662	1.0	1.0
	0.25, 2000	0.785	1.0	1.0
	0.1, 10	0.077	0.81	0.35
	0.1, 100	0.559	1.0	0.78
	0.1, 1000	1.524	1.0	0.98
	0.1, 2000	2.328	1.0	0.99
	0.05, 10	0.067	0.37	0.14
	0.05, 100	0.549	0.97	0.68
	0.05, 1000	2.002	1.0	0.99
	0.05, 2000	2.16	1.0	1.0
	0.01, 10	0.059	0.21	0.07
	0.01, 100	0.519	0.47	0.29
	0.01, 1000	3.012	0.71	0.7
	0.01, 2000	5.166	0.77	0.77
Ecco	1.0, 10	0.243	1.0	0.45
	1.0, 100	1.158	1.0	0.95
	1.0, 1000	0.279	1.0	1.0
	1.0, 2000	0.095	1.0	1.0
	0.5, 10	0.238	1.0	0.38
	0.5, 100	1.1	1.0	0.93
	0.5, 1000	0.517	1.0	1.0
	0.5, 2000	0.192	1.0	1.0
	0.25, 10	0.227	1.0	0.39
	0.25, 100	1.644	1.0	0.81
	0.25, 1000	0.828	1.0	1.0
	0.25, 2000	0.155	1.0	1.0
	0.1, 10	0.214	0.84	0.3
	0.1, 100	1.657	1.0	0.73
	0.1, 1000	0.813	1.0	1.0
	0.1, 2000	0.697	1.0	1.0
	0.05, 10	0.139	0.49	0.17
	0.05, 100	1.29	0.94	0.7

	0.05, 1000	1.756	1.0	1.0
	0.05, 2000	0.776	1.0	1.0
	0.01, 10	0.127	0.19	0.07
	0.01, 100	1.261	0.43	0.29
	0.01, 1000	7.619	0.68	0.67
	0.01, 2000	10.12	0.79	0.78
Wachter	1.0, 10	0.146	1.0	0.37
	1.0, 100	0.321	1.0	0.96
	1.0, 1000	2.099	1.0	0.98
	1.0, 2000	2.061	1.0	0.99
	0.5, 10	0.107	1.0	0.32
	0.5, 100	0.456	1.0	0.92
	0.5, 1000	1.227	1.0	0.99
	0.5, 2000	2.186	1.0	0.99
	0.25, 10	0.104	1.0	0.29
	0.25, 100	0.539	1.0	0.81
	0.25, 1000	1.45	1.0	0.99
	0.25, 2000	2.588	1.0	0.99
	0.1, 10	0.077	0.83	0.39
	0.1, 100	0.664	1.0	0.71
	0.1, 1000	0.798	1.0	1.0
	0.1, 2000	1.257	1.0	1.0
	0.05, 10	0.066	0.44	0.17
	0.05, 100	0.731	0.99	0.74
	0.05, 1000	1.753	1.0	1.0
	0.05, 2000	5.291	1.0	0.97
	0.01, 10	0.058	0.22	0.09
	0.01, 100	0.522	0.57	0.41
	0.01, 1000	3.03	0.71	0.71
	0.01, 2000	5.682	0.88	0.87
Generic	1.0, 10	0.1	1.0	0.39
	1.0, 100	0.298	1.0	0.99
	1.0, 1000	0.383	1.0	1.0
	1.0, 2000	0.297	1.0	1.0
	0.5, 10	0.158	1.0	0.33
	0.5, 100	0.447	1.0	0.96
	0.5, 1000	0.706	1.0	1.0
	0.5, 2000	0.627	1.0	1.0
	0.25, 10	0.093	1.0	0.37
	0.25, 100	0.467	1.0	0.91
	0.25, 1000	1.366	1.0	0.99
	0.25, 2000	2.539	1.0	0.99
	0.1, 10	0.073	0.86	0.39
	0.1, 100	0.469	1.0	0.86
	0.1, 1000	1.522	1.0	0.98
	0.1, 2000	2.547	1.0	0.98
	0.05, 10	0.072	0.49	0.13
	0.05, 100	0.656	0.96	0.61
	0.05, 1000	2.114	0.99	0.98
	0.05, 2000	2.187	1.0	0.99
	0.01, 10	0.06	0.22	0.07
	0.01, 100	0.586	0.58	0.34
	0.01, 1000	2.845	0.74	0.74
	0.01, 2000	4.424	0.81	0.81
DiCE	1.0, 10	0.155	1.0	0.39
	1.0, 100	0.438	1.0	0.96

	1.0, 1000	1.766	1.0	0.96
	1.0, 2000	4.139	1.0	0.99
	0.5, 10	0.141	1.0	0.32
	0.5, 100	0.585	1.0	0.91
	0.5, 1000	1.879	1.0	0.97
	0.5, 2000	0.752	1.0	1.0
	0.25, 10	0.132	1.0	0.32
	0.25, 100	0.811	1.0	0.81
	0.25, 1000	2.507	1.0	0.98
	0.25, 2000	1.096	1.0	1.0
	0.1, 10	0.17	0.87	0.4
	0.1, 100	0.838	1.0	0.83
	0.1, 1000	1.695	1.0	1.0
	0.1, 2000	3.737	1.0	0.99
	0.05, 10	0.088	0.48	0.18
	0.05, 100	0.891	0.96	0.69
	0.05, 1000	2.634	1.0	0.98
	0.05, 2000	4.227	1.0	0.98
	0.01, 10	0.083	0.32	0.15
	0.01, 100	0.741	0.54	0.39
	0.01, 1000	4.937	0.73	0.71
	0.01, 2000	8.895	0.77	0.76
ClaPROAR	1.0, 10	0.171	1.0	0.37
	1.0, 100	0.619	1.0	0.97
	1.0, 1000	3.366	1.0	0.98
	1.0, 2000	3.207	1.0	0.99
	0.5, 10	0.157	1.0	0.34
	0.5, 100	0.934	1.0	0.88
	0.5, 1000	2.008	1.0	1.0
	0.5, 2000	3.03	1.0	0.99
	0.25, 10	0.149	1.0	0.39
	0.25, 100	1.164	1.0	0.84
	0.25, 1000	2.296	1.0	0.98
	0.25, 2000	2.009	1.0	1.0
	0.1, 10	0.116	0.78	0.35
	0.1, 100	0.868	1.0	0.73
	0.1, 1000	2.568	1.0	1.0
	0.1, 2000	2.63	1.0	1.0
	0.05, 10	0.103	0.48	0.21
	0.05, 100	1.115	0.97	0.63
	0.05, 1000	4.911	1.0	0.97
	0.05, 2000	4.117	1.0	0.99
	0.01, 10	0.086	0.22	0.11
	0.01, 100	0.942	0.54	0.34
	0.01, 1000	5.05	0.67	0.66
	0.01, 2000	6.456	0.87	0.86
Greedy	1.0, 10	0.067	0.96	0.57
	1.0, 100	0.068	1.0	1.0
	1.0, 1000	0.065	1.0	1.0
	1.0, 2000	0.069	1.0	1.0
	0.5, 10	0.055	0.66	0.07
	0.5, 100	0.128	1.0	1.0
	0.5, 1000	0.207	1.0	1.0
	0.5, 2000	0.129	1.0	1.0
	0.25, 10	0.049	0.29	0.01
	0.25, 100	0.292	1.0	0.99

	0.25, 1000	0.25	1.0	1.0
	0.25, 2000	0.246	1.0	1.0
	0.1, 10	0.053	0.1	0.01
	0.1, 100	0.514	0.99	0.68
	0.1, 1000	0.615	1.0	1.0
	0.1, 2000	0.717	1.0	1.0
	0.05, 10	0.052	0.11	0.0
	0.05, 100	0.538	0.68	0.08
	0.05, 1000	1.564	1.0	1.0
	0.05, 2000	1.484	1.0	1.0
	0.01, 10	0.044	0.08	0.0
	0.01, 100	0.519	0.16	0.0
	0.01, 1000	5.945	0.97	0.59
	0.01, 2000	6.79	1.0	1.0

Tab. 51: Parameter grid search overlapping data experiment 5 deep ensemble

F.1.3. Blobs dataset using MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	13.967	1.0	0.0
	1.0, 100	1.864	1.0	0.0
	1.0, 1000	16.365	1.0	0.0
	1.0, 2000	33.749	1.0	0.0
	0.5, 10	0.181	1.0	0.0
	0.5, 100	1.676	1.0	0.0
	0.5, 1000	17.202	1.0	0.0
	0.5, 2000	35.119	1.0	0.0
	0.25, 10	0.163	1.0	0.0
	0.25, 100	1.805	1.0	0.0
	0.25, 1000	18.365	1.0	0.0
	0.25, 2000	35.589	1.0	0.0
	0.1, 10	0.156	1.0	0.0
	0.1, 100	1.737	1.0	0.0
	0.1, 1000	18.006	1.0	0.0
	0.1, 2000	36.071	1.0	0.0
	0.05, 10	0.105	0.73	0.0
	0.05, 100	1.731	1.0	0.0
	0.05, 1000	18.143	1.0	0.0
	0.05, 2000	36.136	1.0	0.0
	0.01, 10	0.09	0.06	0.0
	0.01, 100	1.379	1.0	0.0
	0.01, 1000	18.429	1.0	0.0
	0.01, 2000	37.874	1.0	0.0
Revise	1.0, 10	9.399	0.96	0.05
	1.0, 100	0.767	0.98	0.55
	1.0, 1000	1.59	1.0	1.0
	1.0, 2000	1.858	1.0	1.0
	0.5, 10	0.132	1.0	0.07
	0.5, 100	0.883	1.0	0.53
	0.5, 1000	2.157	1.0	1.0
	0.5, 2000	1.809	1.0	1.0
	0.25, 10	0.107	1.0	0.05
	0.25, 100	1.106	1.0	0.5
	0.25, 1000	2.902	1.0	0.98
	0.25, 2000	2.54	1.0	1.0

	0.1, 10	0.093	1.0	0.05
	0.1, 100	0.832	1.0	0.47
	0.1, 1000	2.712	1.0	0.96
	0.1, 2000	3.801	1.0	0.98
	0.05, 10	0.088	1.0	0.07
	0.05, 100	0.893	1.0	0.42
	0.05, 1000	3.058	1.0	0.96
	0.05, 2000	3.085	1.0	0.99
	0.01, 10	0.065	0.74	0.06
	0.01, 100	0.756	0.98	0.46
	0.01, 1000	2.007	1.0	1.0
	0.01, 2000	2.273	1.0	1.0
Ecco	1.0, 10	5.094	0.92	0.07
	1.0, 100	1.117	1.0	1.0
	1.0, 1000	10.513	1.0	1.0
	1.0, 2000	19.0	1.0	1.0
	0.5, 10	0.267	1.0	0.05
	0.5, 100	0.72	1.0	1.0
	0.5, 1000	9.527	1.0	1.0
	0.5, 2000	17.606	1.0	1.0
	0.25, 10	0.264	1.0	0.03
	0.25, 100	0.779	1.0	1.0
	0.25, 1000	8.612	1.0	1.0
	0.25, 2000	16.814	1.0	1.0
	0.1, 10	0.442	1.0	0.07
	0.1, 100	0.993	1.0	1.0
	0.1, 1000	7.627	1.0	1.0
	0.1, 2000	15.912	1.0	1.0
	0.05, 10	0.263	0.99	0.05
	0.05, 100	0.789	1.0	1.0
	0.05, 1000	7.208	1.0	1.0
	0.05, 2000	14.972	1.0	1.0
	0.01, 10	0.183	0.69	0.1
	0.01, 100	0.843	1.0	1.0
	0.01, 1000	6.449	1.0	1.0
	0.01, 2000	13.979	1.0	1.0
Wachter	1.0, 10	2.009	0.97	0.13
	1.0, 100	1.016	0.99	0.49
	1.0, 1000	1.691	1.0	1.0
	1.0, 2000	2.174	1.0	1.0
	0.5, 10	0.112	1.0	0.04
	0.5, 100	0.895	1.0	0.52
	0.5, 1000	2.121	1.0	0.99
	0.5, 2000	2.12	1.0	1.0
	0.25, 10	0.252	1.0	0.05
	0.25, 100	0.963	1.0	0.45
	0.25, 1000	2.731	1.0	0.99
	0.25, 2000	3.436	1.0	1.0
	0.1, 10	0.099	1.0	0.08
	0.1, 100	0.993	1.0	0.44
	0.1, 1000	3.06	1.0	0.97
	0.1, 2000	2.653	1.0	1.0
	0.05, 10	0.09	1.0	0.09
	0.05, 100	0.893	1.0	0.42
	0.05, 1000	3.303	1.0	0.98
	0.05, 2000	2.892	1.0	0.99

	0.01, 10	0.065	0.71	0.07
	0.01, 100	0.738	0.99	0.51
	0.01, 1000	1.974	1.0	0.99
	0.01, 2000	2.721	1.0	1.0
Generic	1.0, 10	0.099	0.99	0.1
	1.0, 100	0.848	0.98	0.48
	1.0, 1000	1.723	1.0	1.0
	1.0, 2000	1.924	1.0	1.0
	0.5, 10	0.097	1.0	0.07
	0.5, 100	0.918	1.0	0.52
	0.5, 1000	2.156	1.0	1.0
	0.5, 2000	1.741	1.0	1.0
	0.25, 10	0.094	1.0	0.06
	0.25, 100	0.898	1.0	0.51
	0.25, 1000	1.943	1.0	0.99
	0.25, 2000	2.38	1.0	1.0
	0.1, 10	0.097	1.0	0.08
	0.1, 100	0.823	1.0	0.42
	0.1, 1000	3.625	1.0	0.95
	0.1, 2000	2.71	1.0	1.0
	0.05, 10	0.089	1.0	0.06
	0.05, 100	0.907	1.0	0.37
	0.05, 1000	3.311	1.0	0.96
	0.05, 2000	2.146	1.0	1.0
	0.01, 10	0.061	0.72	0.02
	0.01, 100	0.771	0.99	0.56
	0.01, 1000	2.314	1.0	0.98
	0.01, 2000	2.315	1.0	1.0
DiCE	1.0, 10	1.265	0.97	0.09
	1.0, 100	1.11	1.0	0.59
	1.0, 1000	2.479	1.0	1.0
	1.0, 2000	2.355	1.0	1.0
	0.5, 10	0.142	1.0	0.11
	0.5, 100	1.165	1.0	0.54
	0.5, 1000	2.552	1.0	1.0
	0.5, 2000	3.073	1.0	1.0
	0.25, 10	0.156	1.0	0.06
	0.25, 100	1.515	1.0	0.38
	0.25, 1000	3.375	1.0	1.0
	0.25, 2000	3.845	1.0	0.99
	0.1, 10	0.128	1.0	0.06
	0.1, 100	1.222	1.0	0.4
	0.1, 1000	3.94	1.0	0.97
	0.1, 2000	5.265	1.0	0.99
	0.05, 10	0.124	1.0	0.02
	0.05, 100	1.122	1.0	0.46
	0.05, 1000	4.723	1.0	0.97
	0.05, 2000	3.941	1.0	0.99
	0.01, 10	0.085	0.7	0.08
	0.01, 100	1.102	0.99	0.39
	0.01, 1000	3.485	1.0	0.97
	0.01, 2000	3.894	1.0	1.0
ClaPROAR	1.0, 10	1.495	0.99	0.09
	1.0, 100	1.21	0.98	0.55
	1.0, 1000	2.834	0.99	0.99
	1.0, 2000	2.755	1.0	1.0

	0.5, 10	0.155	1.0	0.09
	0.5, 100	1.335	1.0	0.52
	0.5, 1000	3.075	1.0	0.99
	0.5, 2000	2.894	1.0	1.0
	0.25, 10	0.159	1.0	0.07
	0.25, 100	1.476	1.0	0.44
	0.25, 1000	3.613	1.0	1.0
	0.25, 2000	3.707	1.0	1.0
	0.1, 10	0.153	1.0	0.1
	0.1, 100	1.465	1.0	0.45
	0.1, 1000	4.458	1.0	0.98
	0.1, 2000	5.19	1.0	1.0
	0.05, 10	0.144	1.0	0.07
	0.05, 100	1.665	1.0	0.38
	0.05, 1000	5.401	1.0	0.97
	0.05, 2000	5.514	1.0	0.99
	0.01, 10	0.106	0.8	0.11
	0.01, 100	1.253	0.95	0.49
	0.01, 1000	3.34	1.0	0.99
	0.01, 2000	4.505	1.0	1.0
Greedy	1.0, 10	1.129	1.0	1.0
	1.0, 100	0.028	1.0	1.0
	1.0, 1000	0.027	1.0	1.0
	1.0, 2000	0.026	1.0	1.0
	0.5, 10	0.037	0.75	0.48
	0.5, 100	0.046	1.0	1.0
	0.5, 1000	0.044	1.0	1.0
	0.5, 2000	0.059	1.0	1.0
	0.25, 10	0.031	0.18	0.03
	0.25, 100	0.083	1.0	1.0
	0.25, 1000	0.1	1.0	1.0
	0.25, 2000	0.082	1.0	1.0
	0.1, 10	0.029	0.0	0.0
	0.1, 100	0.208	1.0	1.0
	0.1, 1000	0.207	1.0	1.0
	0.1, 2000	0.203	1.0	1.0
	0.05, 10	0.029	0.01	0.0
	0.05, 100	0.331	0.75	0.47
	0.05, 1000	0.462	1.0	1.0
	0.05, 2000	0.439	1.0	1.0
	0.01, 10	0.029	0.0	0.0
	0.01, 100	0.301	0.08	0.02
	0.01, 1000	2.419	1.0	1.0
	0.01, 2000	2.439	1.0	1.0

Tab. 52: Parameter grid search blobs data experiment 1 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.489	0.76	0.0
	1.0, 100	1.951	0.78	0.0
	1.0, 1000	20.774	0.84	0.0
	1.0, 2000	42.314	0.85	0.0
	0.5, 10	0.302	0.99	0.0
	0.5, 100	2.328	0.96	0.0
	0.5, 1000	23.951	0.97	0.0

	0.5, 2000	48.999	0.98	0.0
	0.25, 10	0.233	1.0	0.0
	0.25, 100	2.399	1.0	0.0
	0.25, 1000	24.145	1.0	0.0
	0.25, 2000	48.806	1.0	0.0
	0.1, 10	0.238	1.0	0.0
	0.1, 100	2.515	1.0	0.0
	0.1, 1000	24.435	1.0	0.0
	0.1, 2000	49.207	1.0	0.0
	0.05, 10	0.214	0.99	0.0
	0.05, 100	2.397	1.0	0.0
	0.05, 1000	24.724	1.0	0.0
	0.05, 2000	49.724	1.0	0.0
	0.01, 10	0.15	0.69	0.0
	0.01, 100	2.225	0.96	0.0
	0.01, 1000	23.255	0.85	0.0
	0.01, 2000	47.01	0.87	0.0
Revise	1.0, 10	0.117	0.92	0.07
	1.0, 100	0.849	0.98	0.62
	1.0, 1000	2.196	1.0	1.0
	1.0, 2000	2.102	1.0	1.0
	0.5, 10	0.115	1.0	0.03
	0.5, 100	0.952	1.0	0.49
	0.5, 1000	1.888	1.0	1.0
	0.5, 2000	2.219	1.0	1.0
	0.25, 10	0.096	1.0	0.09
	0.25, 100	0.963	1.0	0.28
	0.25, 1000	2.147	1.0	0.97
	0.25, 2000	3.126	1.0	0.99
	0.1, 10	0.11	1.0	0.04
	0.1, 100	0.891	1.0	0.44
	0.1, 1000	3.414	1.0	0.97
	0.1, 2000	3.84	1.0	1.0
	0.05, 10	0.107	0.98	0.04
	0.05, 100	0.993	1.0	0.4
	0.05, 1000	3.076	1.0	0.96
	0.05, 2000	2.95	1.0	1.0
	0.01, 10	0.08	0.66	0.09
	0.01, 100	0.772	0.82	0.39
	0.01, 1000	2.321	1.0	0.98
	0.01, 2000	3.528	1.0	0.99
Ecco	1.0, 10	0.291	0.92	0.06
	1.0, 100	0.368	1.0	1.0
	1.0, 1000	4.84	1.0	1.0
	1.0, 2000	12.222	1.0	1.0
	0.5, 10	0.286	1.0	0.04
	0.5, 100	0.414	1.0	1.0
	0.5, 1000	5.527	1.0	1.0
	0.5, 2000	10.136	1.0	1.0
	0.25, 10	0.287	1.0	0.04
	0.25, 100	0.354	1.0	1.0
	0.25, 1000	5.345	1.0	1.0
	0.25, 2000	12.601	1.0	1.0
	0.1, 10	0.267	1.0	0.06
	0.1, 100	0.431	1.0	1.0
	0.1, 1000	5.902	1.0	1.0

	0.1, 2000	11.375	1.0	1.0
	0.05, 10	0.235	0.9	0.04
	0.05, 100	0.324	1.0	1.0
	0.05, 1000	4.715	1.0	1.0
	0.05, 2000	11.461	1.0	1.0
	0.01, 10	0.179	0.68	0.13
	0.01, 100	0.496	0.96	0.94
	0.01, 1000	4.124	1.0	1.0
	0.01, 2000	7.589	1.0	1.0
Wachter	1.0, 10	0.126	0.94	0.03
	1.0, 100	0.793	0.99	0.58
	1.0, 1000	2.565	1.0	1.0
	1.0, 2000	2.081	1.0	1.0
	0.5, 10	0.123	1.0	0.06
	0.5, 100	0.854	1.0	0.56
	0.5, 1000	2.396	1.0	0.96
	0.5, 2000	2.062	1.0	1.0
	0.25, 10	0.117	1.0	0.05
	0.25, 100	0.974	1.0	0.35
	0.25, 1000	3.675	1.0	0.99
	0.25, 2000	3.032	1.0	1.0
	0.1, 10	0.097	1.0	0.06
	0.1, 100	0.923	1.0	0.43
	0.1, 1000	2.856	1.0	0.97
	0.1, 2000	4.195	1.0	0.98
	0.05, 10	0.108	0.92	0.1
	0.05, 100	0.924	1.0	0.44
	0.05, 1000	3.354	1.0	0.96
	0.05, 2000	3.855	1.0	1.0
	0.01, 10	0.067	0.65	0.07
	0.01, 100	0.753	0.83	0.33
	0.01, 1000	2.624	0.99	0.96
	0.01, 2000	2.96	1.0	1.0
Generic	1.0, 10	0.093	0.94	0.03
	1.0, 100	0.819	0.95	0.49
	1.0, 1000	1.758	1.0	0.99
	1.0, 2000	1.761	1.0	1.0
	0.5, 10	0.119	1.0	0.05
	0.5, 100	0.91	1.0	0.43
	0.5, 1000	2.067	1.0	1.0
	0.5, 2000	2.382	1.0	0.99
	0.25, 10	0.095	1.0	0.09
	0.25, 100	0.958	1.0	0.41
	0.25, 1000	2.851	1.0	0.98
	0.25, 2000	3.425	1.0	0.99
	0.1, 10	0.09	0.99	0.06
	0.1, 100	0.995	1.0	0.25
	0.1, 1000	2.744	1.0	0.99
	0.1, 2000	3.106	1.0	1.0
	0.05, 10	0.089	0.97	0.08
	0.05, 100	0.899	1.0	0.38
	0.05, 1000	2.771	1.0	0.95
	0.05, 2000	2.98	1.0	0.99
	0.01, 10	0.062	0.6	0.06
	0.01, 100	0.795	0.85	0.34
	0.01, 1000	2.625	0.99	0.97

	0.01, 2000	2.865	1.0	1.0
DiCE	1.0, 10	0.134	0.93	0.06
	1.0, 100	1.123	0.99	0.61
	1.0, 1000	3.111	1.0	0.99
	1.0, 2000	2.287	1.0	1.0
	0.5, 10	0.146	1.0	0.04
	0.5, 100	1.169	1.0	0.53
	0.5, 1000	2.428	1.0	1.0
	0.5, 2000	2.307	1.0	1.0
	0.25, 10	0.133	1.0	0.07
	0.25, 100	1.156	1.0	0.44
	0.25, 1000	3.991	1.0	0.98
	0.25, 2000	4.475	1.0	0.99
	0.1, 10	0.13	1.0	0.07
	0.1, 100	1.311	1.0	0.31
	0.1, 1000	4.889	1.0	0.93
	0.1, 2000	4.371	1.0	0.99
	0.05, 10	0.118	0.95	0.07
	0.05, 100	1.185	0.99	0.48
	0.05, 1000	3.505	1.0	0.99
	0.05, 2000	4.786	1.0	1.0
	0.01, 10	0.091	0.63	0.06
	0.01, 100	1.097	0.86	0.33
	0.01, 1000	2.985	0.98	0.98
	0.01, 2000	3.249	1.0	1.0
ClaPROAR	1.0, 10	0.156	0.9	0.07
	1.0, 100	1.432	1.0	0.48
	1.0, 1000	3.792	1.0	0.98
	1.0, 2000	3.814	1.0	0.99
	0.5, 10	0.154	1.0	0.07
	0.5, 100	1.322	1.0	0.53
	0.5, 1000	3.451	1.0	1.0
	0.5, 2000	3.214	1.0	1.0
	0.25, 10	0.155	1.0	0.05
	0.25, 100	1.537	1.0	0.34
	0.25, 1000	4.127	1.0	0.99
	0.25, 2000	3.911	1.0	1.0
	0.1, 10	0.148	1.0	0.08
	0.1, 100	1.546	1.0	0.33
	0.1, 1000	4.89	1.0	0.97
	0.1, 2000	4.998	1.0	1.0
	0.05, 10	0.135	0.97	0.06
	0.05, 100	1.42	0.99	0.43
	0.05, 1000	5.156	1.0	0.97
	0.05, 2000	5.684	1.0	1.0
	0.01, 10	0.096	0.63	0.08
	0.01, 100	1.15	0.84	0.41
	0.01, 1000	4.099	1.0	0.95
	0.01, 2000	5.179	1.0	1.0
Greedy	1.0, 10	0.029	1.0	1.0
	1.0, 100	0.027	1.0	1.0
	1.0, 1000	0.027	1.0	1.0
	1.0, 2000	0.028	1.0	1.0
	0.5, 10	0.035	0.69	0.37
	0.5, 100	0.046	1.0	1.0
	0.5, 1000	0.048	1.0	1.0

	0.5, 2000	0.046	1.0	1.0
	0.25, 10	0.031	0.19	0.04
	0.25, 100	0.088	1.0	1.0
	0.25, 1000	0.102	1.0	1.0
	0.25, 2000	0.104	1.0	1.0
	0.1, 10	0.03	0.01	0.0
	0.1, 100	0.201	1.0	1.0
	0.1, 1000	0.216	1.0	1.0
	0.1, 2000	0.236	1.0	1.0
	0.05, 10	0.03	0.01	0.0
	0.05, 100	0.356	0.73	0.48
	0.05, 1000	0.501	1.0	1.0
	0.05, 2000	0.45	1.0	1.0
	0.01, 10	0.03	0.0	0.0
	0.01, 100	0.327	0.05	0.01
	0.01, 1000	2.316	1.0	1.0
	0.01, 2000	2.456	1.0	1.0

Tab. 53: Parameter grid search blobs data experiment 2 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.197	0.78	0.0
	1.0, 100	1.926	0.78	0.0
	1.0, 1000	20.384	0.71	0.0
	1.0, 2000	42.119	0.85	0.0
	0.5, 10	0.213	0.99	0.0
	0.5, 100	2.273	0.96	0.0
	0.5, 1000	23.785	0.93	0.0
	0.5, 2000	47.317	0.97	0.0
	0.25, 10	0.235	1.0	0.0
	0.25, 100	2.334	1.0	0.0
	0.25, 1000	24.211	1.0	0.0
	0.25, 2000	48.383	1.0	0.0
	0.1, 10	0.244	1.0	0.0
	0.1, 100	2.361	1.0	0.0
	0.1, 1000	24.191	1.0	0.0
	0.1, 2000	48.455	1.0	0.0
	0.05, 10	0.224	1.0	0.0
	0.05, 100	2.337	1.0	0.0
	0.05, 1000	23.528	1.0	0.0
	0.05, 2000	48.21	1.0	0.0
	0.01, 10	0.144	0.77	0.0
	0.01, 100	2.239	0.98	0.0
	0.01, 1000	23.525	0.99	0.0
	0.01, 2000	47.404	0.99	0.0
Revise	1.0, 10	0.096	0.94	0.04
	1.0, 100	0.844	0.95	0.38
	1.0, 1000	1.962	1.0	1.0
	1.0, 2000	2.408	1.0	1.0
	0.5, 10	0.097	1.0	0.07
	0.5, 100	0.837	1.0	0.51
	0.5, 1000	2.937	1.0	0.96
	0.5, 2000	2.637	1.0	1.0
	0.25, 10	0.094	1.0	0.04
	0.25, 100	0.903	1.0	0.38

	0.25, 1000	3.022	1.0	0.96
	0.25, 2000	4.657	1.0	0.98
	0.1, 10	0.098	1.0	0.08
	0.1, 100	0.945	1.0	0.34
	0.1, 1000	4.542	1.0	0.93
	0.1, 2000	4.84	1.0	0.97
	0.05, 10	0.097	1.0	0.07
	0.05, 100	0.879	1.0	0.41
	0.05, 1000	4.538	1.0	0.88
	0.05, 2000	4.295	1.0	0.99
	0.01, 10	0.073	0.67	0.06
	0.01, 100	0.998	1.0	0.45
	0.01, 1000	3.683	1.0	0.94
	0.01, 2000	2.741	1.0	1.0
Ecco	1.0, 10	0.266	0.97	0.05
	1.0, 100	0.793	1.0	1.0
	1.0, 1000	8.35	1.0	1.0
	1.0, 2000	16.051	1.0	1.0
	0.5, 10	0.271	1.0	0.09
	0.5, 100	0.861	1.0	1.0
	0.5, 1000	6.822	1.0	1.0
	0.5, 2000	13.952	1.0	1.0
	0.25, 10	0.294	1.0	0.02
	0.25, 100	0.647	1.0	1.0
	0.25, 1000	8.011	1.0	1.0
	0.25, 2000	17.332	1.0	1.0
	0.1, 10	0.263	1.0	0.05
	0.1, 100	0.662	1.0	1.0
	0.1, 1000	7.875	1.0	1.0
	0.1, 2000	15.673	1.0	1.0
	0.05, 10	0.257	1.0	0.1
	0.05, 100	0.852	1.0	1.0
	0.05, 1000	8.472	1.0	1.0
	0.05, 2000	18.27	1.0	1.0
	0.01, 10	0.22	0.82	0.1
	0.01, 100	0.817	1.0	1.0
	0.01, 1000	9.469	1.0	1.0
	0.01, 2000	18.573	1.0	1.0
Wachter	1.0, 10	0.154	0.97	0.02
	1.0, 100	1.076	0.96	0.42
	1.0, 1000	2.517	1.0	0.99
	1.0, 2000	2.642	1.0	1.0
	0.5, 10	0.142	1.0	0.05
	0.5, 100	0.974	1.0	0.51
	0.5, 1000	3.765	1.0	0.98
	0.5, 2000	3.586	1.0	1.0
	0.25, 10	0.147	1.0	0.04
	0.25, 100	1.245	1.0	0.34
	0.25, 1000	4.323	1.0	0.93
	0.25, 2000	4.764	1.0	1.0
	0.1, 10	0.145	1.0	0.07
	0.1, 100	1.143	1.0	0.35
	0.1, 1000	6.299	1.0	0.9
	0.1, 2000	6.412	1.0	0.95
	0.05, 10	0.096	1.0	0.06
	0.05, 100	1.041	1.0	0.31

	0.05, 1000	4.732	1.0	0.89
	0.05, 2000	4.859	1.0	0.99
	0.01, 10	0.066	0.69	0.09
	0.01, 100	0.871	0.99	0.41
	0.01, 1000	3.702	1.0	0.92
	0.01, 2000	4.64	1.0	0.98
Generic	1.0, 10	0.095	0.97	0.05
	1.0, 100	0.868	0.95	0.44
	1.0, 1000	2.459	1.0	1.0
	1.0, 2000	2.405	1.0	1.0
	0.5, 10	0.098	1.0	0.06
	0.5, 100	0.885	1.0	0.42
	0.5, 1000	2.871	1.0	0.98
	0.5, 2000	3.298	1.0	1.0
	0.25, 10	0.097	1.0	0.02
	0.25, 100	0.949	1.0	0.43
	0.25, 1000	3.386	1.0	0.96
	0.25, 2000	3.123	1.0	0.99
	0.1, 10	0.096	1.0	0.02
	0.1, 100	0.987	1.0	0.39
	0.1, 1000	4.657	1.0	0.85
	0.1, 2000	4.371	1.0	0.98
	0.05, 10	0.092	1.0	0.07
	0.05, 100	1.016	1.0	0.26
	0.05, 1000	4.249	1.0	0.9
	0.05, 2000	6.204	1.0	0.99
	0.01, 10	0.063	0.77	0.15
	0.01, 100	0.777	1.0	0.44
	0.01, 1000	3.167	1.0	0.91
	0.01, 2000	3.535	1.0	0.98
DiCE	1.0, 10	0.138	0.91	0.08
	1.0, 100	1.159	0.98	0.49
	1.0, 1000	3.122	1.0	0.99
	1.0, 2000	5.231	1.0	1.0
	0.5, 10	0.135	1.0	0.05
	0.5, 100	1.184	1.0	0.51
	0.5, 1000	3.605	1.0	1.0
	0.5, 2000	3.277	1.0	1.0
	0.25, 10	0.139	1.0	0.06
	0.25, 100	1.407	1.0	0.44
	0.25, 1000	4.956	1.0	0.95
	0.25, 2000	4.174	1.0	1.0
	0.1, 10	0.161	1.0	0.03
	0.1, 100	1.443	1.0	0.26
	0.1, 1000	6.133	1.0	0.9
	0.1, 2000	9.207	1.0	0.99
	0.05, 10	0.126	1.0	0.04
	0.05, 100	1.319	1.0	0.36
	0.05, 1000	5.605	1.0	0.92
	0.05, 2000	6.213	1.0	0.99
	0.01, 10	0.095	0.81	0.07
	0.01, 100	1.152	0.98	0.48
	0.01, 1000	4.435	1.0	0.93
	0.01, 2000	4.812	1.0	1.0
ClaPROAR	1.0, 10	0.156	0.96	0.06
	1.0, 100	1.512	0.98	0.46

	1.0, 1000	3.909	1.0	1.0
	1.0, 2000	4.307	1.0	1.0
	0.5, 10	0.16	1.0	0.05
	0.5, 100	1.313	1.0	0.6
	0.5, 1000	5.55	1.0	0.95
	0.5, 2000	5.203	1.0	1.0
	0.25, 10	0.16	1.0	0.06
	0.25, 100	1.545	1.0	0.41
	0.25, 1000	4.824	1.0	0.96
	0.25, 2000	6.974	1.0	1.0
	0.1, 10	0.165	1.0	0.1
	0.1, 100	1.477	1.0	0.44
	0.1, 1000	7.847	1.0	0.91
	0.1, 2000	7.127	1.0	0.99
	0.05, 10	0.158	1.0	0.07
	0.05, 100	1.491	1.0	0.39
	0.05, 1000	6.471	1.0	0.88
	0.05, 2000	7.093	1.0	0.98
	0.01, 10	0.111	0.76	0.05
	0.01, 100	1.362	0.99	0.51
	0.01, 1000	5.293	1.0	0.93
	0.01, 2000	6.323	1.0	0.99
Greedy	1.0, 10	0.029	1.0	1.0
	1.0, 100	0.026	1.0	1.0
	1.0, 1000	0.027	1.0	1.0
	1.0, 2000	0.035	1.0	1.0
	0.5, 10	0.035	0.8	0.55
	0.5, 100	0.046	1.0	1.0
	0.5, 1000	0.056	1.0	1.0
	0.5, 2000	0.046	1.0	1.0
	0.25, 10	0.033	0.21	0.09
	0.25, 100	0.094	1.0	1.0
	0.25, 1000	0.086	1.0	1.0
	0.25, 2000	0.079	1.0	1.0
	0.1, 10	0.03	0.03	0.0
	0.1, 100	0.228	1.0	1.0
	0.1, 1000	0.195	1.0	1.0
	0.1, 2000	0.217	1.0	1.0
	0.05, 10	0.029	0.01	0.0
	0.05, 100	0.343	0.71	0.52
	0.05, 1000	0.444	1.0	1.0
	0.05, 2000	0.462	1.0	1.0
	0.01, 10	0.032	0.01	0.0
	0.01, 100	0.33	0.03	0.02
	0.01, 1000	2.408	1.0	1.0
	0.01, 2000	2.546	1.0	1.0

Tab. 54: Parameter grid search blobs data experiment 3 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.212	0.74	0.0
	1.0, 100	1.987	0.84	0.0
	1.0, 1000	20.786	0.86	0.0
	1.0, 2000	43.295	0.82	0.0
	0.5, 10	0.241	1.0	0.0

	0.5, 100	2.307	0.93	0.0
	0.5, 1000	23.755	0.96	0.0
	0.5, 2000	50.514	0.95	0.0
	0.25, 10	0.237	1.0	0.0
	0.25, 100	2.64	1.0	0.0
	0.25, 1000	27.4	1.0	0.0
	0.25, 2000	56.011	1.0	0.0
	0.1, 10	0.322	1.0	0.0
	0.1, 100	3.156	1.0	0.0
	0.1, 1000	32.131	1.0	0.0
	0.1, 2000	64.834	1.0	0.0
	0.05, 10	0.284	1.0	0.0
	0.05, 100	3.025	1.0	0.0
	0.05, 1000	31.178	1.0	0.0
	0.05, 2000	56.983	1.0	0.0
	0.01, 10	0.203	0.84	0.0
	0.01, 100	2.762	0.99	0.0
	0.01, 1000	26.832	0.99	0.0
	0.01, 2000	56.655	0.99	0.0
Revise	1.0, 10	0.135	0.99	0.09
	1.0, 100	0.938	0.98	0.65
	1.0, 1000	1.58	1.0	1.0
	1.0, 2000	1.766	1.0	1.0
	0.5, 10	0.107	1.0	0.06
	0.5, 100	1.023	1.0	0.59
	0.5, 1000	2.018	1.0	1.0
	0.5, 2000	2.418	1.0	1.0
	0.25, 10	0.115	1.0	0.01
	0.25, 100	1.083	1.0	0.5
	0.25, 1000	2.498	1.0	1.0
	0.25, 2000	2.634	1.0	1.0
	0.1, 10	0.103	1.0	0.07
	0.1, 100	1.1	1.0	0.39
	0.1, 1000	2.926	1.0	0.99
	0.1, 2000	3.512	1.0	1.0
	0.05, 10	0.121	1.0	0.15
	0.05, 100	0.974	1.0	0.48
	0.05, 1000	2.568	1.0	1.0
	0.05, 2000	3.346	1.0	1.0
	0.01, 10	0.085	0.79	0.14
	0.01, 100	0.899	0.96	0.62
	0.01, 1000	2.031	1.0	1.0
	0.01, 2000	2.517	1.0	1.0
Ecco	1.0, 10	0.349	0.98	0.1
	1.0, 100	1.18	1.0	1.0
	1.0, 1000	13.308	1.0	1.0
	1.0, 2000	27.453	1.0	1.0
	0.5, 10	0.355	1.0	0.1
	0.5, 100	1.284	1.0	1.0
	0.5, 1000	12.927	1.0	1.0
	0.5, 2000	20.898	1.0	1.0
	0.25, 10	0.398	1.0	0.04
	0.25, 100	1.337	1.0	1.0
	0.25, 1000	10.538	1.0	1.0
	0.25, 2000	18.827	1.0	1.0
	0.1, 10	0.386	1.0	0.07

	0.1, 100	1.355	1.0	1.0
	0.1, 1000	11.217	1.0	1.0
	0.1, 2000	17.514	1.0	1.0
	0.05, 10	0.372	1.0	0.08
	0.05, 100	1.22	1.0	1.0
	0.05, 1000	9.084	1.0	1.0
	0.05, 2000	16.732	1.0	1.0
	0.01, 10	0.194	0.76	0.09
	0.01, 100	1.179	1.0	1.0
	0.01, 1000	8.27	1.0	1.0
	0.01, 2000	16.432	1.0	1.0
Wachter	1.0, 10	0.19	0.96	0.08
	1.0, 100	1.209	0.99	0.64
	1.0, 1000	2.017	1.0	1.0
	1.0, 2000	2.001	1.0	1.0
	0.5, 10	0.158	1.0	0.07
	0.5, 100	1.162	0.99	0.58
	0.5, 1000	2.322	1.0	1.0
	0.5, 2000	2.625	1.0	1.0
	0.25, 10	0.153	1.0	0.09
	0.25, 100	1.502	1.0	0.5
	0.25, 1000	3.257	1.0	1.0
	0.25, 2000	2.698	1.0	1.0
	0.1, 10	0.123	1.0	0.09
	0.1, 100	1.325	1.0	0.44
	0.1, 1000	2.904	1.0	1.0
	0.1, 2000	3.67	1.0	1.0
	0.05, 10	0.128	1.0	0.09
	0.05, 100	1.11	1.0	0.57
	0.05, 1000	2.939	1.0	1.0
	0.05, 2000	2.88	1.0	1.0
	0.01, 10	0.074	0.7	0.08
	0.01, 100	0.972	0.97	0.51
	0.01, 1000	2.194	1.0	0.99
	0.01, 2000	2.511	1.0	1.0
Generic	1.0, 10	0.193	0.95	0.09
	1.0, 100	1.142	1.0	0.64
	1.0, 1000	2.002	1.0	1.0
	1.0, 2000	2.041	1.0	1.0
	0.5, 10	0.171	1.0	0.06
	0.5, 100	1.301	1.0	0.56
	0.5, 1000	1.793	1.0	1.0
	0.5, 2000	2.493	1.0	1.0
	0.25, 10	0.106	1.0	0.08
	0.25, 100	1.046	1.0	0.47
	0.25, 1000	2.22	1.0	1.0
	0.25, 2000	1.843	1.0	1.0
	0.1, 10	0.111	1.0	0.07
	0.1, 100	0.903	1.0	0.52
	0.1, 1000	2.225	1.0	1.0
	0.1, 2000	5.153	1.0	0.97
	0.05, 10	0.093	1.0	0.09
	0.05, 100	1.039	1.0	0.48
	0.05, 1000	2.789	1.0	0.99
	0.05, 2000	2.726	1.0	1.0
	0.01, 10	0.085	0.73	0.08

	0.01, 100	1.487	1.0	0.45
	0.01, 1000	2.328	1.0	0.98
	0.01, 2000	2.585	1.0	1.0
DiCE	1.0, 10	0.226	0.97	0.04
	1.0, 100	1.447	0.99	0.66
	1.0, 1000	2.384	1.0	1.0
	1.0, 2000	2.942	1.0	1.0
	0.5, 10	0.214	1.0	0.07
	0.5, 100	1.479	1.0	0.64
	0.5, 1000	3.086	1.0	1.0
	0.5, 2000	3.161	1.0	1.0
	0.25, 10	0.185	1.0	0.05
	0.25, 100	1.592	1.0	0.47
	0.25, 1000	4.66	1.0	1.0
	0.25, 2000	3.817	1.0	1.0
	0.1, 10	0.213	1.0	0.06
	0.1, 100	1.796	1.0	0.38
	0.1, 1000	4.767	1.0	0.97
	0.1, 2000	4.088	1.0	1.0
	0.05, 10	0.18	1.0	0.09
	0.05, 100	1.784	1.0	0.36
	0.05, 1000	4.563	1.0	0.99
	0.05, 2000	6.435	1.0	1.0
	0.01, 10	0.164	0.8	0.11
	0.01, 100	1.122	0.98	0.57
	0.01, 1000	2.887	1.0	1.0
	0.01, 2000	3.342	1.0	1.0
ClaPROAR	1.0, 10	0.199	0.99	0.07
	1.0, 100	1.743	0.99	0.61
	1.0, 1000	2.59	1.0	1.0
	1.0, 2000	2.835	1.0	1.0
	0.5, 10	0.201	1.0	0.08
	0.5, 100	1.622	1.0	0.57
	0.5, 1000	3.117	1.0	1.0
	0.5, 2000	2.952	1.0	1.0
	0.25, 10	0.177	1.0	0.06
	0.25, 100	1.453	1.0	0.54
	0.25, 1000	4.095	1.0	0.99
	0.25, 2000	3.439	1.0	1.0
	0.1, 10	0.172	1.0	0.03
	0.1, 100	1.702	1.0	0.45
	0.1, 1000	3.854	1.0	1.0
	0.1, 2000	5.555	1.0	1.0
	0.05, 10	0.174	1.0	0.05
	0.05, 100	1.601	1.0	0.39
	0.05, 1000	5.397	1.0	1.0
	0.05, 2000	4.27	1.0	1.0
	0.01, 10	0.116	0.85	0.08
	0.01, 100	1.261	0.98	0.6
	0.01, 1000	3.405	1.0	0.99
	0.01, 2000	5.06	1.0	1.0
Greedy	1.0, 10	0.032	1.0	1.0
	1.0, 100	0.029	1.0	1.0
	1.0, 1000	0.028	1.0	1.0
	1.0, 2000	0.034	1.0	1.0
	0.5, 10	0.038	0.83	0.59

	0.5, 100	0.05	1.0	1.0
	0.5, 1000	0.048	1.0	1.0
	0.5, 2000	0.05	1.0	1.0
	0.25, 10	0.039	0.24	0.09
	0.25, 100	0.096	1.0	1.0
	0.25, 1000	0.105	1.0	1.0
	0.25, 2000	0.095	1.0	1.0
	0.1, 10	0.034	0.02	0.0
	0.1, 100	0.224	1.0	1.0
	0.1, 1000	0.232	1.0	1.0
	0.1, 2000	0.212	1.0	1.0
	0.05, 10	0.036	0.01	0.0
	0.05, 100	0.365	0.8	0.52
	0.05, 1000	0.504	1.0	1.0
	0.05, 2000	0.438	1.0	1.0
	0.01, 10	0.029	0.0	0.0
	0.01, 100	0.311	0.02	0.0
	0.01, 1000	2.675	1.0	1.0
	0.01, 2000	2.518	1.0	1.0

Tab. 55: Parameter grid search blobs data experiment 4 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.2	0.76	0.0
	1.0, 100	1.885	0.78	0.0
	1.0, 1000	20.308	0.83	0.0
	1.0, 2000	42.082	0.8	0.0
	0.5, 10	0.213	0.97	0.0
	0.5, 100	2.373	0.96	0.0
	0.5, 1000	23.48	0.98	0.0
	0.5, 2000	47.187	0.98	0.0
	0.25, 10	0.208	1.0	0.0
	0.25, 100	2.7	1.0	0.0
	0.25, 1000	24.143	1.0	0.0
	0.25, 2000	49.955	1.0	0.0
	0.1, 10	0.236	1.0	0.0
	0.1, 100	2.409	1.0	0.0
	0.1, 1000	24.433	1.0	0.0
	0.1, 2000	50.886	1.0	0.0
	0.05, 10	0.24	1.0	0.0
	0.05, 100	2.455	1.0	0.0
	0.05, 1000	25.302	1.0	0.0
	0.05, 2000	51.011	1.0	0.0
	0.01, 10	0.2	0.85	0.0
	0.01, 100	2.337	0.96	0.0
	0.01, 1000	25.285	0.94	0.0
	0.01, 2000	50.417	0.97	0.0
Revise	1.0, 10	0.097	0.99	0.09
	1.0, 100	0.776	0.99	0.65
	1.0, 1000	2.258	1.0	1.0
	1.0, 2000	1.711	1.0	1.0
	0.5, 10	0.099	1.0	0.07
	0.5, 100	0.956	1.0	0.41
	0.5, 1000	1.727	1.0	1.0
	0.5, 2000	2.628	1.0	1.0

	0.25, 10	0.096	1.0	0.05
	0.25, 100	0.895	1.0	0.47
	0.25, 1000	2.023	1.0	1.0
	0.25, 2000	2.098	1.0	1.0
	0.1, 10	0.094	1.0	0.07
	0.1, 100	0.931	1.0	0.4
	0.1, 1000	2.321	1.0	0.99
	0.1, 2000	2.778	1.0	0.99
	0.05, 10	0.089	1.0	0.09
	0.05, 100	1.024	1.0	0.38
	0.05, 1000	1.832	1.0	0.99
	0.05, 2000	3.63	1.0	0.99
	0.01, 10	0.066	0.79	0.1
	0.01, 100	0.998	0.97	0.56
	0.01, 1000	2.292	1.0	0.98
	0.01, 2000	1.534	1.0	1.0
Ecco	1.0, 10	0.279	0.98	0.09
	1.0, 100	0.674	1.0	1.0
	1.0, 1000	7.776	1.0	1.0
	1.0, 2000	15.53	1.0	1.0
	0.5, 10	0.275	1.0	0.04
	0.5, 100	0.771	1.0	1.0
	0.5, 1000	7.58	1.0	1.0
	0.5, 2000	14.831	1.0	1.0
	0.25, 10	0.289	1.0	0.03
	0.25, 100	0.74	1.0	1.0
	0.25, 1000	6.923	1.0	1.0
	0.25, 2000	12.983	1.0	1.0
	0.1, 10	0.269	1.0	0.07
	0.1, 100	0.756	1.0	1.0
	0.1, 1000	6.735	1.0	1.0
	0.1, 2000	12.525	1.0	1.0
	0.05, 10	0.257	1.0	0.08
	0.05, 100	0.688	1.0	1.0
	0.05, 1000	6.444	1.0	1.0
	0.05, 2000	11.828	1.0	1.0
	0.01, 10	0.172	0.77	0.11
	0.01, 100	0.647	1.0	1.0
	0.01, 1000	6.215	1.0	1.0
	0.01, 2000	10.39	1.0	1.0
Wachter	1.0, 10	0.104	0.97	0.11
	1.0, 100	0.879	0.99	0.6
	1.0, 1000	1.611	1.0	1.0
	1.0, 2000	1.728	1.0	1.0
	0.5, 10	0.127	1.0	0.05
	0.5, 100	0.875	1.0	0.53
	0.5, 1000	1.735	1.0	1.0
	0.5, 2000	1.73	1.0	1.0
	0.25, 10	0.101	1.0	0.03
	0.25, 100	0.966	1.0	0.43
	0.25, 1000	2.504	1.0	0.99
	0.25, 2000	2.626	1.0	0.99
	0.1, 10	0.099	1.0	0.04
	0.1, 100	1.034	1.0	0.42
	0.1, 1000	3.028	1.0	0.98
	0.1, 2000	3.017	1.0	1.0

	0.05, 10	0.094	1.0	0.1
	0.05, 100	0.894	1.0	0.54
	0.05, 1000	2.899	1.0	0.99
	0.05, 2000	3.165	1.0	0.99
	0.01, 10	0.248	0.68	0.07
	0.01, 100	0.806	0.97	0.52
	0.01, 1000	2.155	1.0	0.99
	0.01, 2000	1.965	1.0	1.0
Generic	1.0, 10	0.094	0.97	0.07
	1.0, 100	0.75	0.99	0.68
	1.0, 1000	1.475	1.0	1.0
	1.0, 2000	2.434	1.0	0.99
	0.5, 10	0.095	1.0	0.06
	0.5, 100	0.879	1.0	0.51
	0.5, 1000	1.341	1.0	1.0
	0.5, 2000	2.031	1.0	1.0
	0.25, 10	0.096	1.0	0.06
	0.25, 100	0.944	1.0	0.5
	0.25, 1000	2.203	1.0	0.99
	0.25, 2000	2.609	1.0	1.0
	0.1, 10	0.104	1.0	0.08
	0.1, 100	0.887	1.0	0.49
	0.1, 1000	2.819	1.0	0.98
	0.1, 2000	3.568	1.0	0.99
	0.05, 10	0.101	1.0	0.09
	0.05, 100	0.959	1.0	0.38
	0.05, 1000	3.087	1.0	0.97
	0.05, 2000	2.694	1.0	0.99
	0.01, 10	0.075	0.71	0.1
	0.01, 100	0.799	0.94	0.5
	0.01, 1000	1.72	1.0	1.0
	0.01, 2000	2.226	1.0	0.99
DiCE	1.0, 10	0.155	0.99	0.06
	1.0, 100	1.113	0.98	0.59
	1.0, 1000	2.57	1.0	1.0
	1.0, 2000	2.565	1.0	1.0
	0.5, 10	0.152	1.0	0.06
	0.5, 100	1.136	1.0	0.51
	0.5, 1000	2.763	1.0	1.0
	0.5, 2000	2.993	1.0	1.0
	0.25, 10	0.147	1.0	0.03
	0.25, 100	1.327	1.0	0.39
	0.25, 1000	3.408	1.0	1.0
	0.25, 2000	4.041	1.0	1.0
	0.1, 10	0.142	1.0	0.09
	0.1, 100	1.233	1.0	0.47
	0.1, 1000	3.912	1.0	0.98
	0.1, 2000	3.44	1.0	1.0
	0.05, 10	0.143	1.0	0.11
	0.05, 100	1.079	1.0	0.57
	0.05, 1000	2.493	1.0	0.98
	0.05, 2000	3.553	1.0	1.0
	0.01, 10	0.11	0.69	0.03
	0.01, 100	1.273	0.97	0.48
	0.01, 1000	2.632	0.99	0.99
	0.01, 2000	2.109	1.0	1.0

ClaPROAR	1.0, 10	0.177	0.97	0.08
	1.0, 100	1.334	0.98	0.59
	1.0, 1000	3.002	1.0	0.99
	1.0, 2000	2.935	1.0	1.0
	0.5, 10	0.183	1.0	0.08
	0.5, 100	1.524	1.0	0.57
	0.5, 1000	2.958	1.0	0.99
	0.5, 2000	2.417	1.0	1.0
	0.25, 10	0.19	1.0	0.04
	0.25, 100	1.574	1.0	0.46
	0.25, 1000	3.108	1.0	1.0
	0.25, 2000	3.332	1.0	1.0
	0.1, 10	0.174	1.0	0.05
	0.1, 100	1.588	1.0	0.37
	0.1, 1000	4.478	1.0	0.99
	0.1, 2000	4.475	1.0	0.99
	0.05, 10	0.164	1.0	0.09
	0.05, 100	1.512	1.0	0.43
	0.05, 1000	4.301	1.0	0.98
	0.05, 2000	3.942	1.0	1.0
	0.01, 10	0.117	0.7	0.04
	0.01, 100	1.22	0.98	0.55
	0.01, 1000	3.806	1.0	0.99
	0.01, 2000	3.043	1.0	1.0
Greedy	1.0, 10	0.028	1.0	1.0
	1.0, 100	0.027	1.0	1.0
	1.0, 1000	0.028	1.0	1.0
	1.0, 2000	0.027	1.0	1.0
	0.5, 10	0.037	0.75	0.54
	0.5, 100	0.049	1.0	1.0
	0.5, 1000	0.046	1.0	1.0
	0.5, 2000	0.049	1.0	1.0
	0.25, 10	0.031	0.14	0.04
	0.25, 100	0.108	1.0	1.0
	0.25, 1000	0.09	1.0	1.0
	0.25, 2000	0.093	1.0	1.0
	0.1, 10	0.029	0.0	0.0
	0.1, 100	0.212	1.0	1.0
	0.1, 1000	0.217	1.0	1.0
	0.1, 2000	0.218	1.0	1.0
	0.05, 10	0.059	0.01	0.0
	0.05, 100	0.376	0.72	0.51
	0.05, 1000	0.466	1.0	1.0
	0.05, 2000	0.466	1.0	1.0
	0.01, 10	0.03	0.0	0.0
	0.01, 100	0.323	0.02	0.0
	0.01, 1000	2.524	1.0	1.0
	0.01, 2000	2.721	1.0	1.0

Tab. 56: Parameter grid search blobs data experiment 5 using a MLP

F.1.4. Blobs dataset using Deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.168	1.0	0.0
	1.0, 100	1.732	1.0	0.0

	1.0, 1000	16.894	1.0	0.0
	1.0, 2000	37.576	1.0	0.0
	0.5, 10	0.174	1.0	0.0
	0.5, 100	1.764	1.0	0.0
	0.5, 1000	17.748	1.0	0.0
	0.5, 2000	36.342	1.0	0.0
	0.25, 10	0.172	1.0	0.0
	0.25, 100	1.77	1.0	0.0
	0.25, 1000	19.014	1.0	0.0
	0.25, 2000	36.712	1.0	0.0
	0.1, 10	0.155	1.0	0.0
	0.1, 100	1.768	1.0	0.0
	0.1, 1000	18.395	1.0	0.0
	0.1, 2000	37.046	1.0	0.0
	0.05, 10	0.105	0.73	0.0
	0.05, 100	1.722	1.0	0.0
	0.05, 1000	18.579	1.0	0.0
	0.05, 2000	37.498	1.0	0.0
	0.01, 10	0.074	0.06	0.0
	0.01, 100	1.816	1.0	0.0
	0.01, 1000	18.776	1.0	0.0
	0.01, 2000	37.352	1.0	0.0
Revise	1.0, 10	0.269	0.97	0.03
	1.0, 100	0.913	0.99	0.54
	1.0, 1000	1.374	1.0	1.0
	1.0, 2000	1.961	1.0	1.0
	0.5, 10	0.196	1.0	0.04
	0.5, 100	0.862	1.0	0.56
	0.5, 1000	1.715	1.0	1.0
	0.5, 2000	2.364	1.0	1.0
	0.25, 10	0.128	1.0	0.06
	0.25, 100	0.86	1.0	0.54
	0.25, 1000	2.505	1.0	0.98
	0.25, 2000	3.111	1.0	1.0
	0.1, 10	0.094	1.0	0.03
	0.1, 100	0.882	1.0	0.38
	0.1, 1000	2.471	1.0	0.99
	0.1, 2000	2.5	1.0	1.0
	0.05, 10	0.086	0.97	0.06
	0.05, 100	0.821	1.0	0.46
	0.05, 1000	3.183	1.0	0.97
	0.05, 2000	3.238	1.0	1.0
	0.01, 10	0.062	0.64	0.09
	0.01, 100	1.226	0.95	0.42
	0.01, 1000	2.274	0.99	0.98
	0.01, 2000	2.177	1.0	1.0
Ecco	1.0, 10	0.304	0.98	0.07
	1.0, 100	1.157	1.0	1.0
	1.0, 1000	11.712	1.0	1.0
	1.0, 2000	20.798	1.0	1.0
	0.5, 10	0.282	1.0	0.1
	0.5, 100	0.83	1.0	1.0
	0.5, 1000	10.209	1.0	1.0
	0.5, 2000	20.741	1.0	1.0
	0.25, 10	0.296	1.0	0.05
	0.25, 100	0.903	1.0	1.0

	0.25, 1000	9.616	1.0	1.0
	0.25, 2000	19.38	1.0	1.0
	0.1, 10	0.299	1.0	0.04
	0.1, 100	1.016	1.0	1.0
	0.1, 1000	9.831	1.0	1.0
	0.1, 2000	18.582	1.0	1.0
	0.05, 10	0.261	0.98	0.09
	0.05, 100	0.936	1.0	1.0
	0.05, 1000	8.856	1.0	1.0
	0.05, 2000	15.953	1.0	1.0
	0.01, 10	0.169	0.66	0.03
	0.01, 100	0.986	1.0	0.97
	0.01, 1000	7.477	1.0	1.0
	0.01, 2000	15.865	1.0	1.0
Wachter	1.0, 10	0.103	0.99	0.08
	1.0, 100	0.81	1.0	0.53
	1.0, 1000	1.91	1.0	1.0
	1.0, 2000	1.687	1.0	1.0
	0.5, 10	0.102	1.0	0.02
	0.5, 100	0.909	1.0	0.48
	0.5, 1000	2.569	1.0	0.99
	0.5, 2000	1.923	1.0	1.0
	0.25, 10	0.099	1.0	0.06
	0.25, 100	0.981	1.0	0.37
	0.25, 1000	2.962	1.0	0.99
	0.25, 2000	2.483	1.0	1.0
	0.1, 10	0.1	1.0	0.05
	0.1, 100	1.02	1.0	0.42
	0.1, 1000	2.844	1.0	1.0
	0.1, 2000	3.453	1.0	0.99
	0.05, 10	0.09	1.0	0.08
	0.05, 100	0.923	1.0	0.49
	0.05, 1000	3.64	1.0	0.98
	0.05, 2000	2.771	1.0	1.0
	0.01, 10	0.063	0.65	0.08
	0.01, 100	0.751	0.95	0.46
	0.01, 1000	1.604	1.0	1.0
	0.01, 2000	1.806	1.0	1.0
Generic	1.0, 10	0.094	1.0	0.1
	1.0, 100	0.861	1.0	0.56
	1.0, 1000	1.224	1.0	1.0
	1.0, 2000	1.382	1.0	1.0
	0.5, 10	0.098	1.0	0.08
	0.5, 100	0.885	1.0	0.48
	0.5, 1000	2.101	1.0	1.0
	0.5, 2000	1.674	1.0	1.0
	0.25, 10	0.095	1.0	0.05
	0.25, 100	0.876	1.0	0.45
	0.25, 1000	2.492	1.0	0.98
	0.25, 2000	1.845	1.0	1.0
	0.1, 10	0.09	1.0	0.06
	0.1, 100	0.943	1.0	0.36
	0.1, 1000	2.402	1.0	0.97
	0.1, 2000	2.123	1.0	1.0
	0.05, 10	0.086	0.99	0.05
	0.05, 100	0.874	1.0	0.45

	0.05, 1000	2.046	1.0	0.98
	0.05, 2000	2.525	1.0	0.99
	0.01, 10	0.062	0.64	0.06
	0.01, 100	0.684	0.98	0.52
	0.01, 1000	2.304	1.0	0.99
	0.01, 2000	1.937	1.0	1.0
DiCE	1.0, 10	0.138	0.97	0.07
	1.0, 100	1.075	0.99	0.58
	1.0, 1000	1.783	1.0	1.0
	1.0, 2000	2.428	1.0	1.0
	0.5, 10	0.131	1.0	0.08
	0.5, 100	1.299	1.0	0.48
	0.5, 1000	2.083	1.0	0.99
	0.5, 2000	2.562	1.0	1.0
	0.25, 10	0.132	1.0	0.06
	0.25, 100	1.28	1.0	0.47
	0.25, 1000	3.479	1.0	1.0
	0.25, 2000	4.228	1.0	1.0
	0.1, 10	0.128	1.0	0.04
	0.1, 100	1.155	1.0	0.47
	0.1, 1000	4.032	1.0	1.0
	0.1, 2000	3.976	1.0	1.0
	0.05, 10	0.119	0.97	0.1
	0.05, 100	1.493	1.0	0.37
	0.05, 1000	3.427	1.0	0.98
	0.05, 2000	3.475	1.0	1.0
	0.01, 10	0.081	0.62	0.04
	0.01, 100	1.13	0.96	0.45
	0.01, 1000	3.22	1.0	0.98
	0.01, 2000	3.957	1.0	1.0
ClaPROAR	1.0, 10	0.157	0.98	0.03
	1.0, 100	1.237	1.0	0.57
	1.0, 1000	2.288	1.0	1.0
	1.0, 2000	1.955	1.0	1.0
	0.5, 10	0.158	1.0	0.08
	0.5, 100	1.49	1.0	0.51
	0.5, 1000	3.077	1.0	1.0
	0.5, 2000	2.798	1.0	1.0
	0.25, 10	0.156	1.0	0.05
	0.25, 100	1.566	1.0	0.38
	0.25, 1000	4.351	1.0	0.99
	0.25, 2000	3.838	1.0	1.0
	0.1, 10	0.148	1.0	0.06
	0.1, 100	1.48	1.0	0.43
	0.1, 1000	4.595	1.0	0.96
	0.1, 2000	5.099	1.0	1.0
	0.05, 10	0.152	1.0	0.1
	0.05, 100	1.506	1.0	0.35
	0.05, 1000	4.698	1.0	0.97
	0.05, 2000	4.319	1.0	1.0
	0.01, 10	0.105	0.64	0.12
	0.01, 100	1.226	0.97	0.5
	0.01, 1000	4.693	1.0	0.99
	0.01, 2000	3.737	1.0	1.0
Greedy	1.0, 10	0.041	1.0	1.0
	1.0, 100	0.027	1.0	1.0

	1.0, 1000	0.027	1.0	1.0
	1.0, 2000	0.026	1.0	1.0
	0.5, 10	0.036	0.77	0.51
	0.5, 100	0.055	1.0	1.0
	0.5, 1000	0.044	1.0	1.0
	0.5, 2000	0.046	1.0	1.0
	0.25, 10	0.031	0.17	0.04
	0.25, 100	0.086	1.0	1.0
	0.25, 1000	0.085	1.0	1.0
	0.25, 2000	0.101	1.0	1.0
	0.1, 10	0.028	0.0	0.0
	0.1, 100	0.216	1.0	1.0
	0.1, 1000	0.217	1.0	1.0
	0.1, 2000	0.209	1.0	1.0
	0.05, 10	0.029	0.0	0.0
	0.05, 100	0.335	0.73	0.52
	0.05, 1000	0.477	1.0	1.0
	0.05, 2000	0.491	1.0	1.0
	0.01, 10	0.029	0.0	0.0
	0.01, 100	0.31	0.07	0.02
	0.01, 1000	2.431	1.0	1.0
	0.01, 2000	2.458	1.0	1.0

Tab. 57: Parameter grid search blobs data experiment 1 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.223	0.79	0.0
	1.0, 100	1.939	0.8	0.0
	1.0, 1000	21.345	0.82	0.0
	1.0, 2000	43.373	0.81	0.0
	0.5, 10	0.215	0.97	0.0
	0.5, 100	2.569	0.97	0.0
	0.5, 1000	23.927	0.98	0.0
	0.5, 2000	48.035	0.94	0.0
	0.25, 10	0.231	1.0	0.0
	0.25, 100	2.369	1.0	0.0
	0.25, 1000	23.975	1.0	0.0
	0.25, 2000	49.058	1.0	0.0
	0.1, 10	0.254	1.0	0.0
	0.1, 100	2.546	1.0	0.0
	0.1, 1000	24.597	1.0	0.0
	0.1, 2000	49.147	1.0	0.0
	0.05, 10	0.206	1.0	0.0
	0.05, 100	2.342	1.0	0.0
	0.05, 1000	24.118	1.0	0.0
	0.05, 2000	48.792	1.0	0.0
	0.01, 10	0.14	0.64	0.0
	0.01, 100	2.176	0.9	0.0
	0.01, 1000	23.223	0.93	0.0
	0.01, 2000	47.583	0.95	0.0
Revise	1.0, 10	0.1	1.0	0.06
	1.0, 100	0.622	1.0	0.79
	1.0, 1000	1.42	1.0	1.0
	1.0, 2000	1.184	1.0	1.0
	0.5, 10	0.106	1.0	0.06

	0.5, 100	0.819	1.0	0.6
	0.5, 1000	1.449	1.0	1.0
	0.5, 2000	1.622	1.0	0.99
	0.25, 10	0.109	1.0	0.03
	0.25, 100	0.827	1.0	0.54
	0.25, 1000	3.032	1.0	1.0
	0.25, 2000	2.09	1.0	1.0
	0.1, 10	0.103	1.0	0.09
	0.1, 100	0.813	1.0	0.52
	0.1, 1000	3.045	1.0	0.99
	0.1, 2000	2.494	1.0	1.0
	0.05, 10	0.104	1.0	0.09
	0.05, 100	0.898	1.0	0.48
	0.05, 1000	2.355	1.0	1.0
	0.05, 2000	2.583	1.0	1.0
	0.01, 10	0.071	0.6	0.11
	0.01, 100	0.792	0.97	0.4
	0.01, 1000	2.021	1.0	0.99
	0.01, 2000	2.318	1.0	1.0
Ecco	1.0, 10	0.29	0.98	0.12
	1.0, 100	0.743	1.0	1.0
	1.0, 1000	8.824	1.0	1.0
	1.0, 2000	15.898	1.0	1.0
	0.5, 10	0.286	1.0	0.04
	0.5, 100	0.77	1.0	1.0
	0.5, 1000	7.588	1.0	1.0
	0.5, 2000	13.683	1.0	1.0
	0.25, 10	0.297	1.0	0.1
	0.25, 100	0.819	1.0	1.0
	0.25, 1000	6.421	1.0	1.0
	0.25, 2000	12.011	1.0	1.0
	0.1, 10	0.27	1.0	0.09
	0.1, 100	0.75	1.0	1.0
	0.1, 1000	6.002	1.0	1.0
	0.1, 2000	11.408	1.0	1.0
	0.05, 10	0.256	0.99	0.04
	0.05, 100	0.715	1.0	1.0
	0.05, 1000	6.056	1.0	1.0
	0.05, 2000	10.459	1.0	1.0
	0.01, 10	0.192	0.72	0.08
	0.01, 100	0.736	1.0	0.99
	0.01, 1000	5.668	1.0	1.0
	0.01, 2000	9.658	1.0	1.0
Wachter	1.0, 10	0.105	0.98	0.07
	1.0, 100	0.908	0.99	0.52
	1.0, 1000	1.886	1.0	1.0
	1.0, 2000	1.767	1.0	1.0
	0.5, 10	0.17	1.0	0.1
	0.5, 100	0.922	1.0	0.51
	0.5, 1000	1.779	1.0	1.0
	0.5, 2000	2.749	1.0	0.99
	0.25, 10	0.126	1.0	0.02
	0.25, 100	1.017	1.0	0.57
	0.25, 1000	2.292	1.0	1.0
	0.25, 2000	3.02	1.0	0.99
	0.1, 10	0.117	1.0	0.05

	0.1, 100	1.021	1.0	0.5
	0.1, 1000	2.912	1.0	0.97
	0.1, 2000	2.967	1.0	1.0
	0.05, 10	0.112	1.0	0.07
	0.05, 100	0.893	1.0	0.48
	0.05, 1000	2.217	1.0	1.0
	0.05, 2000	2.69	1.0	1.0
	0.01, 10	0.06	0.55	0.07
	0.01, 100	0.868	0.94	0.43
	0.01, 1000	2.254	1.0	1.0
	0.01, 2000	2.255	1.0	1.0
Generic	1.0, 10	0.095	1.0	0.08
	1.0, 100	0.769	1.0	0.61
	1.0, 1000	1.442	1.0	1.0
	1.0, 2000	1.44	1.0	1.0
	0.5, 10	0.097	1.0	0.08
	0.5, 100	1.035	1.0	0.51
	0.5, 1000	1.745	1.0	1.0
	0.5, 2000	2.036	1.0	1.0
	0.25, 10	0.114	1.0	0.07
	0.25, 100	0.903	1.0	0.57
	0.25, 1000	2.658	1.0	0.99
	0.25, 2000	2.549	1.0	1.0
	0.1, 10	0.095	1.0	0.07
	0.1, 100	0.839	1.0	0.58
	0.1, 1000	2.691	1.0	0.99
	0.1, 2000	2.356	1.0	1.0
	0.05, 10	0.088	0.99	0.06
	0.05, 100	0.889	1.0	0.49
	0.05, 1000	2.037	1.0	0.99
	0.05, 2000	2.159	1.0	1.0
	0.01, 10	0.05	0.47	0.05
	0.01, 100	0.81	0.96	0.5
	0.01, 1000	2.206	1.0	0.99
	0.01, 2000	2.123	1.0	1.0
DiCE	1.0, 10	0.17	0.99	0.11
	1.0, 100	1.094	1.0	0.68
	1.0, 1000	1.933	1.0	1.0
	1.0, 2000	1.966	1.0	1.0
	0.5, 10	0.138	1.0	0.06
	0.5, 100	1.208	1.0	0.52
	0.5, 1000	2.377	1.0	1.0
	0.5, 2000	2.593	1.0	1.0
	0.25, 10	0.16	1.0	0.05
	0.25, 100	1.395	1.0	0.38
	0.25, 1000	3.43	1.0	0.99
	0.25, 2000	4.376	1.0	1.0
	0.1, 10	0.135	1.0	0.06
	0.1, 100	1.312	1.0	0.46
	0.1, 1000	3.207	1.0	1.0
	0.1, 2000	3.531	1.0	1.0
	0.05, 10	0.122	1.0	0.05
	0.05, 100	1.403	1.0	0.5
	0.05, 1000	2.913	1.0	1.0
	0.05, 2000	3.23	1.0	1.0
	0.01, 10	0.091	0.73	0.09

	0.01, 100	1.043	0.93	0.61
	0.01, 1000	2.584	1.0	0.99
	0.01, 2000	2.905	1.0	1.0
ClaPROAR	1.0, 10	0.168	0.98	0.04
	1.0, 100	1.518	1.0	0.65
	1.0, 1000	2.853	1.0	0.99
	1.0, 2000	2.534	1.0	1.0
	0.5, 10	0.168	1.0	0.11
	0.5, 100	1.368	1.0	0.59
	0.5, 1000	2.638	1.0	1.0
	0.5, 2000	2.514	1.0	1.0
	0.25, 10	0.165	1.0	0.04
	0.25, 100	1.549	1.0	0.41
	0.25, 1000	4.06	1.0	1.0
	0.25, 2000	3.713	1.0	1.0
	0.1, 10	0.153	1.0	0.04
	0.1, 100	1.517	1.0	0.46
	0.1, 1000	3.733	1.0	1.0
	0.1, 2000	4.087	1.0	1.0
	0.05, 10	0.143	0.99	0.11
	0.05, 100	1.423	1.0	0.46
	0.05, 1000	3.878	1.0	0.98
	0.05, 2000	4.025	1.0	0.99
	0.01, 10	0.094	0.66	0.15
	0.01, 100	1.289	1.0	0.53
	0.01, 1000	3.62	1.0	0.98
	0.01, 2000	2.973	1.0	1.0
Greedy	1.0, 10	0.029	1.0	1.0
	1.0, 100	0.028	1.0	1.0
	1.0, 1000	0.028	1.0	1.0
	1.0, 2000	0.035	1.0	1.0
	0.5, 10	0.035	0.7	0.39
	0.5, 100	0.046	1.0	1.0
	0.5, 1000	0.049	1.0	1.0
	0.5, 2000	0.048	1.0	1.0
	0.25, 10	0.04	0.16	0.03
	0.25, 100	0.084	1.0	1.0
	0.25, 1000	0.086	1.0	1.0
	0.25, 2000	0.094	1.0	1.0
	0.1, 10	0.03	0.01	0.0
	0.1, 100	0.237	1.0	0.99
	0.1, 1000	0.234	1.0	1.0
	0.1, 2000	0.225	1.0	1.0
	0.05, 10	0.031	0.0	0.0
	0.05, 100	0.386	0.71	0.52
	0.05, 1000	0.523	1.0	1.0
	0.05, 2000	0.526	1.0	1.0
	0.01, 10	0.043	0.0	0.0
	0.01, 100	0.327	0.06	0.01
	0.01, 1000	2.575	1.0	1.0
	0.01, 2000	2.855	1.0	1.0

Tab. 58: Parameter grid search blobs data experiment 2 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged

Gravitational	1.0, 10	0.237	0.78	0.0
	1.0, 100	2.011	0.87	0.0
	1.0, 1000	20.813	0.84	0.0
	1.0, 2000	44.766	0.79	0.0
	0.5, 10	0.21	0.94	0.0
	0.5, 100	2.537	0.96	0.0
	0.5, 1000	25.142	0.96	0.0
	0.5, 2000	50.027	0.92	0.0
	0.25, 10	0.233	1.0	0.0
	0.25, 100	2.48	1.0	0.0
	0.25, 1000	25.584	1.0	0.0
	0.25, 2000	51.758	1.0	0.0
	0.1, 10	0.213	1.0	0.0
	0.1, 100	2.572	1.0	0.0
	0.1, 1000	25.41	1.0	0.0
	0.1, 2000	51.75	1.0	0.0
	0.05, 10	0.234	0.99	0.0
	0.05, 100	2.47	0.99	0.0
	0.05, 1000	25.725	1.0	0.0
	0.05, 2000	53.328	1.0	0.0
	0.01, 10	0.189	0.51	0.0
	0.01, 100	2.293	0.91	0.0
	0.01, 1000	24.782	0.91	0.0
	0.01, 2000	47.43	0.93	0.0
Revise	1.0, 10	0.097	0.98	0.08
	1.0, 100	0.835	0.98	0.51
	1.0, 1000	1.845	1.0	1.0
	1.0, 2000	1.922	1.0	1.0
	0.5, 10	0.096	1.0	0.04
	0.5, 100	0.83	1.0	0.52
	0.5, 1000	2.196	1.0	1.0
	0.5, 2000	2.221	1.0	1.0
	0.25, 10	0.108	1.0	0.05
	0.25, 100	0.986	1.0	0.37
	0.25, 1000	3.39	1.0	0.94
	0.25, 2000	2.732	1.0	1.0
	0.1, 10	0.089	1.0	0.07
	0.1, 100	0.913	1.0	0.46
	0.1, 1000	3.965	1.0	0.96
	0.1, 2000	4.688	1.0	0.99
	0.05, 10	0.079	0.96	0.07
	0.05, 100	0.946	1.0	0.37
	0.05, 1000	3.212	1.0	0.98
	0.05, 2000	2.483	1.0	1.0
	0.01, 10	0.056	0.47	0.07
	0.01, 100	0.848	0.9	0.32
	0.01, 1000	2.209	1.0	0.98
	0.01, 2000	2.571	1.0	1.0
Ecco	1.0, 10	0.273	0.98	0.04
	1.0, 100	0.189	1.0	1.0
	1.0, 1000	3.089	1.0	1.0
	1.0, 2000	6.102	1.0	1.0
	0.5, 10	0.279	1.0	0.05
	0.5, 100	0.236	1.0	1.0
	0.5, 1000	3.133	1.0	1.0

	0.5, 2000	6.632	1.0	1.0
	0.25, 10	0.263	1.0	0.05
	0.25, 100	0.213	1.0	1.0
	0.25, 1000	3.374	1.0	1.0
	0.25, 2000	6.689	1.0	1.0
	0.1, 10	0.264	1.0	0.06
	0.1, 100	0.212	1.0	1.0
	0.1, 1000	3.081	1.0	1.0
	0.1, 2000	6.491	1.0	1.0
	0.05, 10	0.21	0.95	0.06
	0.05, 100	0.185	1.0	1.0
	0.05, 1000	3.212	1.0	1.0
	0.05, 2000	7.252	1.0	1.0
	0.01, 10	0.167	0.59	0.04
	0.01, 100	0.505	0.98	0.93
	0.01, 1000	2.741	1.0	1.0
	0.01, 2000	6.071	1.0	1.0
Wachter	1.0, 10	0.104	0.99	0.02
	1.0, 100	0.937	1.0	0.51
	1.0, 1000	2.258	1.0	0.99
	1.0, 2000	2.175	1.0	1.0
	0.5, 10	0.101	1.0	0.06
	0.5, 100	0.979	1.0	0.49
	0.5, 1000	2.328	1.0	0.99
	0.5, 2000	3.03	1.0	1.0
	0.25, 10	0.102	1.0	0.04
	0.25, 100	1.224	1.0	0.44
	0.25, 1000	3.183	1.0	1.0
	0.25, 2000	3.408	1.0	1.0
	0.1, 10	0.111	1.0	0.04
	0.1, 100	1.051	1.0	0.36
	0.1, 1000	4.011	1.0	0.98
	0.1, 2000	5.126	1.0	0.97
	0.05, 10	0.084	0.93	0.04
	0.05, 100	1.106	1.0	0.34
	0.05, 1000	3.532	1.0	0.96
	0.05, 2000	3.797	1.0	1.0
	0.01, 10	0.078	0.51	0.05
	0.01, 100	0.913	0.93	0.33
	0.01, 1000	2.79	1.0	0.97
	0.01, 2000	2.566	1.0	1.0
Generic	1.0, 10	0.111	0.97	0.05
	1.0, 100	0.894	0.96	0.48
	1.0, 1000	2.308	1.0	0.99
	1.0, 2000	2.242	1.0	1.0
	0.5, 10	0.109	1.0	0.04
	0.5, 100	0.936	1.0	0.44
	0.5, 1000	2.785	1.0	0.99
	0.5, 2000	2.75	1.0	0.99
	0.25, 10	0.114	1.0	0.06
	0.25, 100	0.98	1.0	0.34
	0.25, 1000	3.6	1.0	0.98
	0.25, 2000	4.385	1.0	0.98
	0.1, 10	0.123	1.0	0.03
	0.1, 100	0.977	1.0	0.37
	0.1, 1000	3.212	1.0	0.99

	0.1, 2000	3.076	1.0	1.0
	0.05, 10	0.081	0.92	0.04
	0.05, 100	0.938	0.99	0.37
	0.05, 1000	3.775	1.0	0.96
	0.05, 2000	3.188	1.0	1.0
	0.01, 10	0.176	0.54	0.04
	0.01, 100	1.059	0.92	0.38
	0.01, 1000	2.98	0.99	0.97
	0.01, 2000	3.656	0.99	0.98
DiCE	1.0, 10	0.139	0.97	0.06
	1.0, 100	1.295	0.99	0.51
	1.0, 1000	2.902	1.0	0.99
	1.0, 2000	2.117	1.0	1.0
	0.5, 10	0.135	1.0	0.08
	0.5, 100	1.303	1.0	0.48
	0.5, 1000	2.719	1.0	1.0
	0.5, 2000	2.691	1.0	1.0
	0.25, 10	0.151	1.0	0.06
	0.25, 100	1.385	1.0	0.38
	0.25, 1000	3.844	1.0	1.0
	0.25, 2000	3.588	1.0	1.0
	0.1, 10	0.156	1.0	0.03
	0.1, 100	1.268	1.0	0.41
	0.1, 1000	4.651	1.0	0.95
	0.1, 2000	4.951	1.0	1.0
	0.05, 10	0.117	0.96	0.06
	0.05, 100	1.247	1.0	0.41
	0.05, 1000	4.505	1.0	0.97
	0.05, 2000	4.522	1.0	1.0
	0.01, 10	0.07	0.44	0.05
	0.01, 100	1.168	0.88	0.4
	0.01, 1000	3.896	0.99	0.97
	0.01, 2000	4.163	0.99	0.98
ClaPROAR	1.0, 10	0.187	0.97	0.02
	1.0, 100	1.353	0.95	0.46
	1.0, 1000	3.695	1.0	0.98
	1.0, 2000	2.811	1.0	1.0
	0.5, 10	0.156	1.0	0.07
	0.5, 100	1.446	1.0	0.45
	0.5, 1000	4.739	1.0	1.0
	0.5, 2000	3.541	1.0	1.0
	0.25, 10	0.156	1.0	0.01
	0.25, 100	1.554	1.0	0.44
	0.25, 1000	3.565	1.0	1.0
	0.25, 2000	6.217	1.0	0.98
	0.1, 10	0.144	1.0	0.07
	0.1, 100	1.555	1.0	0.39
	0.1, 1000	5.547	1.0	0.98
	0.1, 2000	6.588	1.0	1.0
	0.05, 10	0.136	0.96	0.1
	0.05, 100	1.5	1.0	0.43
	0.05, 1000	5.556	1.0	0.96
	0.05, 2000	5.619	1.0	0.99
	0.01, 10	0.085	0.48	0.0
	0.01, 100	1.271	0.86	0.38
	0.01, 1000	3.951	1.0	0.98

	0.01, 2000	5.393	1.0	0.99
Greedy	1.0, 10	0.029	1.0	1.0
	1.0, 100	0.027	1.0	1.0
	1.0, 1000	0.031	1.0	1.0
	1.0, 2000	0.026	1.0	1.0
	0.5, 10	0.036	0.79	0.62
	0.5, 100	0.047	1.0	1.0
	0.5, 1000	0.045	1.0	1.0
	0.5, 2000	0.044	1.0	1.0
	0.25, 10	0.032	0.21	0.03
	0.25, 100	0.083	1.0	1.0
	0.25, 1000	0.085	1.0	1.0
	0.25, 2000	0.084	1.0	1.0
	0.1, 10	0.029	0.05	0.0
	0.1, 100	0.214	1.0	1.0
	0.1, 1000	0.21	1.0	1.0
	0.1, 2000	0.213	1.0	1.0
	0.05, 10	0.029	0.01	0.0
	0.05, 100	0.321	0.71	0.48
	0.05, 1000	0.442	1.0	1.0
	0.05, 2000	0.465	1.0	1.0
	0.01, 10	0.032	0.02	0.0
	0.01, 100	0.291	0.01	0.0
	0.01, 1000	2.336	1.0	1.0
	0.01, 2000	3.322	1.0	1.0

Tab. 59: Parameter grid search blobs data experiment 3 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.198	0.8	0.0
	1.0, 100	1.931	0.84	0.0
	1.0, 1000	20.755	0.81	0.0
	1.0, 2000	42.177	0.82	0.0
	0.5, 10	0.233	0.95	0.0
	0.5, 100	2.278	0.96	0.0
	0.5, 1000	23.223	0.98	0.0
	0.5, 2000	47.723	0.96	0.0
	0.25, 10	0.232	1.0	0.0
	0.25, 100	2.363	1.0	0.0
	0.25, 1000	24.36	1.0	0.0
	0.25, 2000	48.604	1.0	0.0
	0.1, 10	0.225	1.0	0.0
	0.1, 100	2.358	1.0	0.0
	0.1, 1000	24.571	1.0	0.0
	0.1, 2000	50.032	1.0	0.0
	0.05, 10	0.221	1.0	0.0
	0.05, 100	2.389	1.0	0.0
	0.05, 1000	24.857	1.0	0.0
	0.05, 2000	49.298	1.0	0.0
	0.01, 10	0.172	0.81	0.0
	0.01, 100	2.269	0.97	0.0
	0.01, 1000	23.892	0.98	0.0
	0.01, 2000	51.08	0.99	0.0
Revise	1.0, 10	0.133	0.99	0.02
	1.0, 100	0.866	0.98	0.57

	1.0, 1000	1.74	1.0	1.0
	1.0, 2000	1.691	1.0	1.0
	0.5, 10	0.096	1.0	0.05
	0.5, 100	0.878	1.0	0.52
	0.5, 1000	2.593	1.0	0.99
	0.5, 2000	3.316	1.0	1.0
	0.25, 10	0.097	1.0	0.05
	0.25, 100	0.992	1.0	0.41
	0.25, 1000	2.983	1.0	1.0
	0.25, 2000	3.05	1.0	1.0
	0.1, 10	0.094	1.0	0.04
	0.1, 100	1.009	1.0	0.33
	0.1, 1000	4.006	1.0	0.96
	0.1, 2000	3.298	1.0	1.0
	0.05, 10	0.092	1.0	0.08
	0.05, 100	0.888	1.0	0.43
	0.05, 1000	3.311	1.0	0.96
	0.05, 2000	4.133	1.0	1.0
	0.01, 10	0.065	0.78	0.07
	0.01, 100	0.826	0.94	0.6
	0.01, 1000	3.684	1.0	0.98
	0.01, 2000	2.618	1.0	1.0
Ecco	1.0, 10	0.273	0.98	0.1
	1.0, 100	1.103	1.0	1.0
	1.0, 1000	10.031	1.0	1.0
	1.0, 2000	20.034	1.0	1.0
	0.5, 10	0.283	1.0	0.05
	0.5, 100	1.082	1.0	1.0
	0.5, 1000	10.589	1.0	1.0
	0.5, 2000	17.79	1.0	1.0
	0.25, 10	0.275	1.0	0.05
	0.25, 100	1.018	1.0	1.0
	0.25, 1000	8.939	1.0	1.0
	0.25, 2000	17.968	1.0	1.0
	0.1, 10	0.276	1.0	0.06
	0.1, 100	0.898	1.0	1.0
	0.1, 1000	10.167	1.0	1.0
	0.1, 2000	21.641	1.0	1.0
	0.05, 10	0.268	1.0	0.03
	0.05, 100	0.874	1.0	1.0
	0.05, 1000	8.137	1.0	1.0
	0.05, 2000	20.231	1.0	1.0
	0.01, 10	0.185	0.73	0.06
	0.01, 100	0.715	1.0	1.0
	0.01, 1000	8.151	1.0	1.0
	0.01, 2000	19.998	1.0	1.0
Wachter	1.0, 10	0.106	0.97	0.05
	1.0, 100	0.852	0.99	0.56
	1.0, 1000	1.564	1.0	1.0
	1.0, 2000	2.164	1.0	1.0
	0.5, 10	0.1	1.0	0.04
	0.5, 100	1.012	1.0	0.4
	0.5, 1000	2.492	1.0	1.0
	0.5, 2000	3.026	1.0	1.0
	0.25, 10	0.101	1.0	0.04
	0.25, 100	1.003	1.0	0.4

	0.25, 1000	2.592	1.0	0.98
	0.25, 2000	2.875	1.0	1.0
	0.1, 10	0.098	1.0	0.07
	0.1, 100	1.045	1.0	0.34
	0.1, 1000	3.911	1.0	0.95
	0.1, 2000	3.475	1.0	0.99
	0.05, 10	0.1	1.0	0.07
	0.05, 100	1.001	1.0	0.39
	0.05, 1000	3.447	1.0	0.93
	0.05, 2000	3.271	1.0	1.0
	0.01, 10	0.079	0.77	0.1
	0.01, 100	0.924	0.98	0.42
	0.01, 1000	2.685	1.0	1.0
	0.01, 2000	2.773	1.0	1.0
Generic	1.0, 10	0.094	0.99	0.07
	1.0, 100	0.939	0.97	0.49
	1.0, 1000	1.78	1.0	0.99
	1.0, 2000	2.442	1.0	1.0
	0.5, 10	0.105	1.0	0.07
	0.5, 100	0.961	1.0	0.48
	0.5, 1000	2.209	1.0	0.99
	0.5, 2000	1.854	1.0	1.0
	0.25, 10	0.095	1.0	0.01
	0.25, 100	1.032	1.0	0.44
	0.25, 1000	3.39	1.0	0.97
	0.25, 2000	3.71	1.0	1.0
	0.1, 10	0.114	1.0	0.04
	0.1, 100	0.988	1.0	0.39
	0.1, 1000	2.916	1.0	0.98
	0.1, 2000	3.273	1.0	1.0
	0.05, 10	0.101	1.0	0.06
	0.05, 100	0.905	1.0	0.37
	0.05, 1000	3.583	1.0	0.97
	0.05, 2000	3.706	1.0	0.99
	0.01, 10	0.078	0.77	0.08
	0.01, 100	0.834	1.0	0.48
	0.01, 1000	3.079	1.0	0.97
	0.01, 2000	2.907	1.0	1.0
DiCE	1.0, 10	0.162	0.95	0.06
	1.0, 100	1.189	0.99	0.57
	1.0, 1000	2.25	1.0	1.0
	1.0, 2000	3.272	1.0	1.0
	0.5, 10	0.134	1.0	0.09
	0.5, 100	1.36	1.0	0.37
	0.5, 1000	3.197	1.0	0.99
	0.5, 2000	3.779	1.0	0.99
	0.25, 10	0.16	1.0	0.01
	0.25, 100	1.354	1.0	0.42
	0.25, 1000	4.217	1.0	0.97
	0.25, 2000	4.385	1.0	0.99
	0.1, 10	0.153	1.0	0.05
	0.1, 100	1.447	1.0	0.33
	0.1, 1000	3.661	1.0	0.99
	0.1, 2000	4.979	1.0	1.0
	0.05, 10	0.14	1.0	0.12
	0.05, 100	1.299	1.0	0.41

	0.05, 1000	4.088	1.0	0.96
	0.05, 2000	5.494	1.0	1.0
	0.01, 10	0.101	0.75	0.09
	0.01, 100	1.179	0.99	0.47
	0.01, 1000	4.201	1.0	0.98
	0.01, 2000	3.803	1.0	1.0
ClaPROAR	1.0, 10	0.153	0.96	0.07
	1.0, 100	1.381	0.98	0.58
	1.0, 1000	2.619	1.0	1.0
	1.0, 2000	2.951	1.0	1.0
	0.5, 10	0.173	1.0	0.11
	0.5, 100	1.548	1.0	0.44
	0.5, 1000	3.426	1.0	1.0
	0.5, 2000	4.054	1.0	1.0
	0.25, 10	0.159	1.0	0.02
	0.25, 100	1.661	1.0	0.43
	0.25, 1000	4.707	1.0	0.98
	0.25, 2000	5.309	1.0	0.99
	0.1, 10	0.192	1.0	0.03
	0.1, 100	1.621	1.0	0.4
	0.1, 1000	6.311	1.0	0.95
	0.1, 2000	6.007	1.0	1.0
	0.05, 10	0.169	1.0	0.07
	0.05, 100	1.643	1.0	0.34
	0.05, 1000	4.886	1.0	0.96
	0.05, 2000	5.952	1.0	0.99
	0.01, 10	0.113	0.68	0.08
	0.01, 100	1.383	0.94	0.39
	0.01, 1000	4.36	1.0	0.96
	0.01, 2000	4.82	1.0	1.0
Greedy	1.0, 10	0.029	1.0	1.0
	1.0, 100	0.028	1.0	1.0
	1.0, 1000	0.028	1.0	1.0
	1.0, 2000	0.027	1.0	1.0
	0.5, 10	0.035	0.77	0.5
	0.5, 100	0.047	1.0	1.0
	0.5, 1000	0.045	1.0	1.0
	0.5, 2000	0.046	1.0	1.0
	0.25, 10	0.03	0.09	0.01
	0.25, 100	0.084	1.0	1.0
	0.25, 1000	0.112	1.0	1.0
	0.25, 2000	0.088	1.0	1.0
	0.1, 10	0.03	0.0	0.0
	0.1, 100	0.239	1.0	1.0
	0.1, 1000	0.194	1.0	1.0
	0.1, 2000	0.219	1.0	1.0
	0.05, 10	0.03	0.01	0.0
	0.05, 100	0.351	0.75	0.54
	0.05, 1000	0.474	1.0	1.0
	0.05, 2000	0.495	1.0	1.0
	0.01, 10	0.03	0.0	0.0
	0.01, 100	0.323	0.02	0.0
	0.01, 1000	2.852	1.0	1.0
	0.01, 2000	2.56	1.0	1.0

Tab. 60: Parameter grid search blobs data experiment 4 deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.236	0.82	0.0
	1.0, 100	2.02	0.81	0.0
	1.0, 1000	21.594	0.88	0.0
	1.0, 2000	45.258	0.86	0.0
	0.5, 10	0.238	0.97	0.0
	0.5, 100	2.499	0.97	0.0
	0.5, 1000	25.754	0.96	0.0
	0.5, 2000	49.93	0.99	0.0
	0.25, 10	0.209	1.0	0.0
	0.25, 100	2.401	1.0	0.0
	0.25, 1000	24.341	1.0	0.0
	0.25, 2000	48.213	1.0	0.0
	0.1, 10	0.207	1.0	0.0
	0.1, 100	2.346	1.0	0.0
	0.1, 1000	24.614	1.0	0.0
	0.1, 2000	48.75	1.0	0.0
	0.05, 10	0.192	1.0	0.0
	0.05, 100	2.316	1.0	0.0
	0.05, 1000	23.973	1.0	0.0
	0.05, 2000	49.318	1.0	0.0
	0.01, 10	0.161	0.59	0.0
	0.01, 100	2.134	0.9	0.0
	0.01, 1000	22.548	0.89	0.0
	0.01, 2000	47.707	0.91	0.0
Revise	1.0, 10	0.097	0.95	0.08
	1.0, 100	0.837	0.99	0.5
	1.0, 1000	1.576	1.0	1.0
	1.0, 2000	1.715	1.0	1.0
	0.5, 10	0.096	1.0	0.05
	0.5, 100	0.832	1.0	0.51
	0.5, 1000	1.917	1.0	1.0
	0.5, 2000	1.915	1.0	1.0
	0.25, 10	0.118	1.0	0.05
	0.25, 100	0.939	1.0	0.41
	0.25, 1000	2.058	1.0	0.99
	0.25, 2000	2.55	1.0	1.0
	0.1, 10	0.087	1.0	0.06
	0.1, 100	0.891	1.0	0.37
	0.1, 1000	2.507	1.0	0.99
	0.1, 2000	3.002	1.0	1.0
	0.05, 10	0.082	0.98	0.05
	0.05, 100	0.874	1.0	0.42
	0.05, 1000	2.761	1.0	0.99
	0.05, 2000	2.933	1.0	1.0
	0.01, 10	0.076	0.52	0.04
	0.01, 100	0.79	0.94	0.38
	0.01, 1000	2.052	1.0	1.0
	0.01, 2000	2.146	1.0	1.0
Ecco	1.0, 10	0.296	0.96	0.03
	1.0, 100	0.289	1.0	1.0
	1.0, 1000	3.633	1.0	1.0
	1.0, 2000	6.924	1.0	1.0
	0.5, 10	0.292	1.0	0.08
	0.5, 100	0.252	1.0	1.0

	0.5, 1000	2.951	1.0	1.0
	0.5, 2000	7.631	1.0	1.0
	0.25, 10	0.279	1.0	0.03
	0.25, 100	0.26	1.0	1.0
	0.25, 1000	3.359	1.0	1.0
	0.25, 2000	6.616	1.0	1.0
	0.1, 10	0.271	1.0	0.05
	0.1, 100	0.303	1.0	1.0
	0.1, 1000	3.726	1.0	1.0
	0.1, 2000	7.42	1.0	1.0
	0.05, 10	0.25	0.99	0.08
	0.05, 100	0.399	1.0	0.99
	0.05, 1000	3.521	1.0	1.0
	0.05, 2000	8.107	1.0	1.0
	0.01, 10	0.182	0.55	0.02
	0.01, 100	0.759	0.98	0.88
	0.01, 1000	3.228	1.0	1.0
	0.01, 2000	6.81	1.0	1.0
Wachter	1.0, 10	0.106	0.98	0.1
	1.0, 100	0.902	0.98	0.62
	1.0, 1000	1.668	1.0	1.0
	1.0, 2000	1.901	1.0	1.0
	0.5, 10	0.11	1.0	0.04
	0.5, 100	0.944	1.0	0.51
	0.5, 1000	1.8	1.0	1.0
	0.5, 2000	2.8	1.0	1.0
	0.25, 10	0.101	1.0	0.05
	0.25, 100	0.949	1.0	0.46
	0.25, 1000	2.605	1.0	1.0
	0.25, 2000	2.837	1.0	0.98
	0.1, 10	0.093	1.0	0.05
	0.1, 100	0.83	1.0	0.46
	0.1, 1000	2.841	1.0	0.99
	0.1, 2000	2.299	1.0	1.0
	0.05, 10	0.082	1.0	0.09
	0.05, 100	0.842	1.0	0.45
	0.05, 1000	2.645	1.0	0.98
	0.05, 2000	4.266	1.0	1.0
	0.01, 10	0.058	0.38	0.05
	0.01, 100	0.827	0.95	0.49
	0.01, 1000	2.331	1.0	0.99
	0.01, 2000	3.653	1.0	0.99
Generic	1.0, 10	0.093	0.96	0.05
	1.0, 100	1.514	1.0	0.6
	1.0, 1000	1.43	1.0	1.0
	1.0, 2000	2.765	1.0	0.98
	0.5, 10	0.096	1.0	0.02
	0.5, 100	0.848	1.0	0.52
	0.5, 1000	1.891	1.0	0.99
	0.5, 2000	2.708	1.0	1.0
	0.25, 10	0.095	1.0	0.04
	0.25, 100	0.909	1.0	0.45
	0.25, 1000	2.701	1.0	0.98
	0.25, 2000	2.896	1.0	0.99
	0.1, 10	0.091	1.0	0.06
	0.1, 100	0.91	1.0	0.33

	0.1, 1000	3.429	1.0	0.95
	0.1, 2000	2.761	1.0	1.0
	0.05, 10	0.085	0.98	0.04
	0.05, 100	0.859	1.0	0.41
	0.05, 1000	2.541	1.0	0.97
	0.05, 2000	2.887	1.0	1.0
	0.01, 10	0.055	0.62	0.06
	0.01, 100	0.694	0.95	0.55
	0.01, 1000	2.59	1.0	0.99
	0.01, 2000	1.997	1.0	1.0
DiCE	1.0, 10	0.138	0.98	0.05
	1.0, 100	1.055	0.98	0.6
	1.0, 1000	2.503	1.0	1.0
	1.0, 2000	1.685	1.0	1.0
	0.5, 10	0.136	1.0	0.09
	0.5, 100	1.431	1.0	0.44
	0.5, 1000	3.294	1.0	0.99
	0.5, 2000	2.846	1.0	1.0
	0.25, 10	0.133	1.0	0.06
	0.25, 100	1.37	1.0	0.34
	0.25, 1000	3.75	1.0	0.99
	0.25, 2000	3.684	1.0	0.99
	0.1, 10	0.126	1.0	0.07
	0.1, 100	1.287	1.0	0.39
	0.1, 1000	4.446	1.0	0.98
	0.1, 2000	4.007	1.0	0.99
	0.05, 10	0.118	1.0	0.04
	0.05, 100	1.211	1.0	0.42
	0.05, 1000	4.295	1.0	0.97
	0.05, 2000	4.025	1.0	1.0
	0.01, 10	0.076	0.48	0.02
	0.01, 100	1.317	0.91	0.36
	0.01, 1000	4.02	1.0	0.96
	0.01, 2000	3.681	1.0	0.98
ClaPROAR	1.0, 10	0.158	0.98	0.05
	1.0, 100	1.429	0.99	0.42
	1.0, 1000	2.438	1.0	1.0
	1.0, 2000	2.543	1.0	1.0
	0.5, 10	0.16	1.0	0.03
	0.5, 100	1.328	1.0	0.49
	0.5, 1000	2.361	1.0	1.0
	0.5, 2000	2.775	1.0	1.0
	0.25, 10	0.159	1.0	0.07
	0.25, 100	1.497	1.0	0.48
	0.25, 1000	3.372	1.0	0.99
	0.25, 2000	5.223	1.0	0.98
	0.1, 10	0.148	1.0	0.07
	0.1, 100	1.494	1.0	0.4
	0.1, 1000	3.904	1.0	0.99
	0.1, 2000	3.769	1.0	1.0
	0.05, 10	0.158	1.0	0.06
	0.05, 100	1.417	1.0	0.4
	0.05, 1000	3.486	1.0	1.0
	0.05, 2000	3.801	1.0	1.0
	0.01, 10	0.094	0.49	0.02
	0.01, 100	1.359	0.95	0.39

	0.01, 1000	3.355	1.0	1.0
	0.01, 2000	4.2	1.0	1.0
Greedy	1.0, 10	0.029	1.0	1.0
	1.0, 100	0.029	1.0	1.0
	1.0, 1000	0.028	1.0	1.0
	1.0, 2000	0.027	1.0	1.0
	0.5, 10	0.036	0.77	0.49
	0.5, 100	0.048	1.0	1.0
	0.5, 1000	0.046	1.0	1.0
	0.5, 2000	0.047	1.0	1.0
	0.25, 10	0.032	0.2	0.04
	0.25, 100	0.097	1.0	1.0
	0.25, 1000	0.089	1.0	1.0
	0.25, 2000	0.087	1.0	1.0
	0.1, 10	0.03	0.03	0.0
	0.1, 100	0.231	1.0	1.0
	0.1, 1000	0.243	1.0	1.0
	0.1, 2000	0.255	1.0	1.0
	0.05, 10	0.05	0.0	0.0
	0.05, 100	0.345	0.7	0.37
	0.05, 1000	0.521	1.0	1.0
	0.05, 2000	0.453	1.0	1.0
	0.01, 10	0.03	0.0	0.0
	0.01, 100	0.344	0.04	0.01
	0.01, 1000	2.445	1.0	1.0
	0.01, 2000	2.48	1.0	1.0

Tab. 61: Parameter grid search blobs data experiment 4 deep ensemble

F.1.5. Moons dataset using MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.371	0.98	0.0
	1.0, 100	1.747	0.98	0.0
	1.0, 1000	17.065	0.96	0.0
	1.0, 2000	34.942	0.97	0.0
	0.5, 10	0.201	0.97	0.0
	0.5, 100	1.733	0.93	0.0
	0.5, 1000	17.593	0.97	0.0
	0.5, 2000	35.574	0.96	0.0
	0.25, 10	0.16	0.99	0.0
	0.25, 100	1.943	0.99	0.0
	0.25, 1000	17.201	0.97	0.0
	0.25, 2000	35.006	0.95	0.0
	0.1, 10	0.161	1.0	0.0
	0.1, 100	1.709	0.98	0.0
	0.1, 1000	17.54	0.99	0.0
	0.1, 2000	36.292	1.0	0.0
	0.05, 10	0.189	1.0	0.0
	0.05, 100	1.756	1.0	0.0
	0.05, 1000	17.52	1.0	0.02
	0.05, 2000	36.961	1.0	0.01
	0.01, 10	0.156	1.0	0.0
	0.01, 100	1.776	1.0	0.0
	0.01, 1000	18.379	1.0	0.0
	0.01, 2000	37.042	1.0	0.0

Revise	1.0, 10	0.286	0.92	0.86
	1.0, 100	0.043	1.0	1.0
	1.0, 1000	0.051	1.0	1.0
	1.0, 2000	0.054	1.0	1.0
	0.5, 10	0.035	0.92	0.83
	0.5, 100	0.04	1.0	1.0
	0.5, 1000	0.047	1.0	1.0
	0.5, 2000	0.057	1.0	1.0
	0.25, 10	0.034	0.98	0.89
	0.25, 100	0.033	1.0	1.0
	0.25, 1000	0.036	1.0	1.0
	0.25, 2000	0.048	1.0	1.0
	0.1, 10	0.033	0.99	0.95
	0.1, 100	0.034	1.0	1.0
	0.1, 1000	0.035	1.0	1.0
	0.1, 2000	0.034	1.0	1.0
	0.05, 10	0.032	0.95	0.9
	0.05, 100	0.043	1.0	1.0
	0.05, 1000	0.054	1.0	1.0
	0.05, 2000	0.051	1.0	1.0
	0.01, 10	0.027	0.91	0.83
	0.01, 100	0.045	1.0	1.0
	0.01, 1000	0.063	1.0	1.0
	0.01, 2000	0.053	1.0	1.0
Ecco	1.0, 10	0.099	0.92	0.83
	1.0, 100	0.84	1.0	1.0
	1.0, 1000	5.819	1.0	1.0
	1.0, 2000	11.745	1.0	1.0
	0.5, 10	0.09	0.96	0.87
	0.5, 100	0.924	0.99	0.98
	0.5, 1000	5.21	1.0	1.0
	0.5, 2000	11.071	1.0	1.0
	0.25, 10	0.084	0.97	0.97
	0.25, 100	0.875	1.0	1.0
	0.25, 1000	5.805	1.0	1.0
	0.25, 2000	12.465	1.0	1.0
	0.1, 10	0.116	0.97	0.91
	0.1, 100	1.16	1.0	1.0
	0.1, 1000	6.919	1.0	1.0
	0.1, 2000	12.424	1.0	1.0
	0.05, 10	0.119	0.96	0.89
	0.05, 100	0.939	1.0	0.99
	0.05, 1000	6.213	1.0	1.0
	0.05, 2000	11.957	1.0	1.0
	0.01, 10	0.111	0.88	0.8
	0.01, 100	1.107	0.98	0.95
	0.01, 1000	6.288	1.0	1.0
	0.01, 2000	9.077	1.0	1.0
Wachter	1.0, 10	0.044	0.98	0.9
	1.0, 100	0.043	1.0	1.0
	1.0, 1000	0.051	1.0	1.0
	1.0, 2000	0.061	1.0	1.0
	0.5, 10	0.037	0.96	0.9
	0.5, 100	0.062	1.0	1.0
	0.5, 1000	0.041	1.0	1.0

	0.5, 2000	0.053	1.0	1.0
	0.25, 10	0.036	0.97	0.91
	0.25, 100	0.04	1.0	1.0
	0.25, 1000	0.04	1.0	1.0
	0.25, 2000	0.038	1.0	1.0
	0.1, 10	0.05	1.0	0.93
	0.1, 100	0.033	1.0	1.0
	0.1, 1000	0.068	1.0	1.0
	0.1, 2000	0.038	1.0	1.0
	0.05, 10	0.038	0.94	0.88
	0.05, 100	0.04	1.0	1.0
	0.05, 1000	0.041	1.0	1.0
	0.05, 2000	0.041	1.0	1.0
	0.01, 10	0.038	0.82	0.77
	0.01, 100	0.038	1.0	1.0
	0.01, 1000	0.08	1.0	1.0
	0.01, 2000	0.054	1.0	1.0
Generic	1.0, 10	0.04	0.93	0.84
	1.0, 100	0.047	1.0	1.0
	1.0, 1000	0.037	1.0	1.0
	1.0, 2000	0.036	1.0	1.0
	0.5, 10	0.035	0.96	0.9
	0.5, 100	0.038	1.0	1.0
	0.5, 1000	0.047	1.0	1.0
	0.5, 2000	0.039	1.0	1.0
	0.25, 10	0.038	0.97	0.86
	0.25, 100	0.062	1.0	1.0
	0.25, 1000	0.045	1.0	1.0
	0.25, 2000	0.051	1.0	1.0
	0.1, 10	0.03	0.99	0.95
	0.1, 100	0.029	1.0	1.0
	0.1, 1000	0.038	1.0	1.0
	0.1, 2000	0.036	1.0	1.0
	0.05, 10	0.051	0.98	0.9
	0.05, 100	0.036	1.0	1.0
	0.05, 1000	0.039	1.0	1.0
	0.05, 2000	0.04	1.0	1.0
	0.01, 10	0.033	0.87	0.79
	0.01, 100	0.053	1.0	1.0
	0.01, 1000	0.049	1.0	1.0
	0.01, 2000	0.062	1.0	1.0
DiCE	1.0, 10	0.054	0.97	0.87
	1.0, 100	0.053	1.0	1.0
	1.0, 1000	0.059	1.0	1.0
	1.0, 2000	0.07	1.0	1.0
	0.5, 10	0.054	0.92	0.85
	0.5, 100	0.058	1.0	1.0
	0.5, 1000	0.078	1.0	1.0
	0.5, 2000	0.061	1.0	1.0
	0.25, 10	0.045	0.98	0.92
	0.25, 100	0.056	1.0	1.0
	0.25, 1000	0.048	1.0	1.0
	0.25, 2000	0.062	1.0	1.0
	0.1, 10	0.047	1.0	0.94
	0.1, 100	0.068	1.0	1.0
	0.1, 1000	0.063	1.0	1.0

	0.1, 2000	0.078	1.0	1.0
	0.05, 10	0.052	0.93	0.87
	0.05, 100	0.057	1.0	1.0
	0.05, 1000	0.06	1.0	1.0
	0.05, 2000	0.067	1.0	1.0
	0.01, 10	0.054	0.87	0.8
	0.01, 100	0.076	1.0	1.0
	0.01, 1000	0.068	1.0	1.0
	0.01, 2000	0.058	1.0	1.0
ClaPROAR	1.0, 10	0.068	0.97	0.89
	1.0, 100	0.057	1.0	1.0
	1.0, 1000	0.084	1.0	1.0
	1.0, 2000	0.079	1.0	1.0
	0.5, 10	0.077	0.94	0.87
	0.5, 100	0.065	1.0	1.0
	0.5, 1000	0.067	1.0	1.0
	0.5, 2000	0.066	1.0	1.0
	0.25, 10	0.059	0.97	0.92
	0.25, 100	0.06	1.0	1.0
	0.25, 1000	0.065	1.0	1.0
	0.25, 2000	0.09	1.0	1.0
	0.1, 10	0.049	0.98	0.93
	0.1, 100	0.077	1.0	1.0
	0.1, 1000	0.063	1.0	1.0
	0.1, 2000	0.067	1.0	1.0
	0.05, 10	0.057	0.98	0.91
	0.05, 100	0.07	1.0	1.0
	0.05, 1000	0.058	1.0	1.0
	0.05, 2000	0.067	1.0	1.0
	0.01, 10	0.052	0.89	0.83
	0.01, 100	0.115	1.0	1.0
	0.01, 1000	0.107	1.0	1.0
	0.01, 2000	0.102	1.0	1.0
Greedy	1.0, 10	0.015	1.0	1.0
	1.0, 100	0.016	1.0	1.0
	1.0, 1000	0.015	1.0	1.0
	1.0, 2000	0.015	1.0	1.0
	0.5, 10	0.019	1.0	1.0
	0.5, 100	0.018	1.0	1.0
	0.5, 1000	0.02	1.0	1.0
	0.5, 2000	0.02	1.0	1.0
	0.25, 10	0.024	1.0	1.0
	0.25, 100	0.025	1.0	1.0
	0.25, 1000	0.026	1.0	1.0
	0.25, 2000	0.04	1.0	1.0
	0.1, 10	0.223	0.97	0.66
	0.1, 100	0.159	1.0	1.0
	0.1, 1000	0.053	1.0	1.0
	0.1, 2000	0.049	1.0	1.0
	0.05, 10	0.046	0.35	0.07
	0.05, 100	0.1	1.0	1.0
	0.05, 1000	0.087	1.0	1.0
	0.05, 2000	0.09	1.0	1.0
	0.01, 10	0.039	0.0	0.0
	0.01, 100	0.395	0.94	0.66
	0.01, 1000	0.442	1.0	1.0

	0.01, 2000	0.451	1.0	1.0

Tab. 62: Parameter grid search for the moons dataset experiment 1 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.193	0.64	0.17
	1.0, 100	1.098	0.93	0.78
	1.0, 1000	1.168	1.0	0.92
	1.0, 2000	1.483	1.0	0.97
	0.5, 10	0.194	0.84	0.14
	0.5, 100	0.779	0.96	0.86
	0.5, 1000	1.295	1.0	0.96
	0.5, 2000	1.318	1.0	0.95
	0.25, 10	0.229	0.99	0.19
	0.25, 100	1.196	1.0	0.88
	0.25, 1000	1.34	1.0	0.98
	0.25, 2000	1.181	1.0	0.99
	0.1, 10	0.2	0.83	0.14
	0.1, 100	1.023	0.99	0.85
	0.1, 1000	1.396	1.0	0.98
	0.1, 2000	1.374	1.0	0.99
	0.05, 10	0.195	0.62	0.13
	0.05, 100	1.047	0.98	0.82
	0.05, 1000	1.477	1.0	0.98
	0.05, 2000	0.971	1.0	0.98
	0.01, 10	0.146	0.64	0.15
	0.01, 100	0.948	0.91	0.74
	0.01, 1000	2.09	1.0	0.97
	0.01, 2000	1.54	1.0	0.93
Revise	1.0, 10	0.04	0.93	0.83
	1.0, 100	0.063	1.0	1.0
	1.0, 1000	0.077	1.0	1.0
	1.0, 2000	0.057	1.0	1.0
	0.5, 10	0.043	0.87	0.77
	0.5, 100	0.094	1.0	1.0
	0.5, 1000	0.059	1.0	1.0
	0.5, 2000	0.074	1.0	1.0
	0.25, 10	0.049	0.99	0.79
	0.25, 100	0.054	1.0	1.0
	0.25, 1000	0.049	1.0	1.0
	0.25, 2000	0.054	1.0	1.0
	0.1, 10	0.061	0.95	0.78
	0.1, 100	0.051	1.0	1.0
	0.1, 1000	0.048	1.0	1.0
	0.1, 2000	0.06	1.0	1.0
	0.05, 10	0.044	0.9	0.72
	0.05, 100	0.082	1.0	1.0
	0.05, 1000	0.077	1.0	1.0
	0.05, 2000	0.102	1.0	1.0
	0.01, 10	0.042	0.8	0.64
	0.01, 100	0.101	1.0	1.0
	0.01, 1000	0.06	1.0	1.0
	0.01, 2000	0.073	1.0	1.0
Ecco	1.0, 10	0.099	0.92	0.83
	1.0, 100	1.162	1.0	0.97

	1.0, 1000	7.283	1.0	1.0
	1.0, 2000	13.296	1.0	1.0
	0.5, 10	0.192	0.91	0.71
	0.5, 100	1.041	0.99	0.98
	0.5, 1000	6.489	1.0	1.0
	0.5, 2000	12.312	1.0	1.0
	0.25, 10	0.179	0.99	0.83
	0.25, 100	1.328	1.0	0.99
	0.25, 1000	9.223	1.0	1.0
	0.25, 2000	16.723	1.0	1.0
	0.1, 10	0.15	0.97	0.76
	0.1, 100	1.192	0.99	0.95
	0.1, 1000	9.842	1.0	1.0
	0.1, 2000	16.472	1.0	1.0
	0.05, 10	0.122	0.93	0.76
	0.05, 100	1.077	1.0	0.97
	0.05, 1000	7.791	1.0	1.0
	0.05, 2000	14.167	1.0	1.0
	0.01, 10	0.1	0.84	0.7
	0.01, 100	1.103	0.98	0.95
	0.01, 1000	6.441	1.0	1.0
	0.01, 2000	10.797	1.0	1.0
Wachter	1.0, 10	0.046	0.87	0.76
	1.0, 100	0.073	1.0	1.0
	1.0, 1000	0.084	1.0	1.0
	1.0, 2000	0.062	1.0	1.0
	0.5, 10	0.045	0.87	0.73
	0.5, 100	0.076	1.0	1.0
	0.5, 1000	0.07	1.0	1.0
	0.5, 2000	0.076	1.0	1.0
	0.25, 10	0.054	0.96	0.82
	0.25, 100	0.052	1.0	1.0
	0.25, 1000	0.069	1.0	1.0
	0.25, 2000	0.059	1.0	1.0
	0.1, 10	0.058	0.94	0.79
	0.1, 100	0.057	1.0	1.0
	0.1, 1000	0.074	1.0	1.0
	0.1, 2000	0.097	1.0	1.0
	0.05, 10	0.052	0.9	0.66
	0.05, 100	0.079	1.0	1.0
	0.05, 1000	0.061	1.0	1.0
	0.05, 2000	0.09	1.0	1.0
	0.01, 10	0.047	0.74	0.59
	0.01, 100	0.085	1.0	1.0
	0.01, 1000	0.107	1.0	1.0
	0.01, 2000	0.084	1.0	1.0
Generic	1.0, 10	0.042	0.94	0.77
	1.0, 100	0.054	1.0	1.0
	1.0, 1000	0.068	1.0	1.0
	1.0, 2000	0.071	1.0	1.0
	0.5, 10	0.044	0.87	0.7
	0.5, 100	0.058	1.0	1.0
	0.5, 1000	0.077	1.0	1.0
	0.5, 2000	0.087	1.0	1.0
	0.25, 10	0.1	0.99	0.9
	0.25, 100	0.061	1.0	1.0

	0.25, 1000	0.066	1.0	1.0
	0.25, 2000	0.073	1.0	1.0
	0.1, 10	0.046	0.99	0.84
	0.1, 100	0.055	1.0	1.0
	0.1, 1000	0.058	1.0	1.0
	0.1, 2000	0.047	1.0	1.0
	0.05, 10	0.047	0.91	0.7
	0.05, 100	0.063	1.0	1.0
	0.05, 1000	0.081	1.0	1.0
	0.05, 2000	0.049	1.0	1.0
	0.01, 10	0.05	0.79	0.62
	0.01, 100	0.107	1.0	0.99
	0.01, 1000	0.076	1.0	1.0
	0.01, 2000	0.071	1.0	1.0
DiCE	1.0, 10	0.062	0.96	0.86
	1.0, 100	0.09	1.0	1.0
	1.0, 1000	0.091	1.0	1.0
	1.0, 2000	0.086	1.0	1.0
	0.5, 10	0.067	0.9	0.8
	0.5, 100	0.104	1.0	1.0
	0.5, 1000	0.089	1.0	1.0
	0.5, 2000	0.072	1.0	1.0
	0.25, 10	0.066	0.99	0.84
	0.25, 100	0.077	1.0	1.0
	0.25, 1000	0.073	1.0	1.0
	0.25, 2000	0.085	1.0	1.0
	0.1, 10	0.076	0.96	0.78
	0.1, 100	0.092	1.0	1.0
	0.1, 1000	0.104	1.0	1.0
	0.1, 2000	0.117	1.0	1.0
	0.05, 10	0.074	0.89	0.64
	0.05, 100	0.101	1.0	1.0
	0.05, 1000	0.111	1.0	1.0
	0.05, 2000	0.117	1.0	1.0
	0.01, 10	0.056	0.83	0.68
	0.01, 100	0.113	1.0	1.0
	0.01, 1000	0.131	1.0	1.0
	0.01, 2000	0.153	1.0	1.0
ClaPROAR	1.0, 10	0.069	0.89	0.76
	1.0, 100	0.116	1.0	1.0
	1.0, 1000	0.129	1.0	1.0
	1.0, 2000	0.079	1.0	1.0
	0.5, 10	0.077	0.85	0.73
	0.5, 100	0.095	1.0	1.0
	0.5, 1000	0.145	1.0	1.0
	0.5, 2000	0.138	1.0	1.0
	0.25, 10	0.077	0.98	0.85
	0.25, 100	0.097	1.0	1.0
	0.25, 1000	0.104	1.0	1.0
	0.25, 2000	0.097	1.0	1.0
	0.1, 10	0.079	0.94	0.81
	0.1, 100	0.096	1.0	1.0
	0.1, 1000	0.102	1.0	1.0
	0.1, 2000	0.171	1.0	1.0
	0.05, 10	0.063	0.92	0.78
	0.05, 100	0.116	1.0	1.0

	0.05, 1000	0.119	1.0	1.0
	0.05, 2000	0.132	1.0	1.0
	0.01, 10	0.061	0.85	0.72
	0.01, 100	0.141	1.0	1.0
	0.01, 1000	0.132	1.0	1.0
	0.01, 2000	0.189	1.0	1.0
Greedy	1.0, 10	0.019	1.0	1.0
	1.0, 100	0.016	1.0	1.0
	1.0, 1000	0.016	1.0	1.0
	1.0, 2000	0.016	1.0	1.0
	0.5, 10	0.025	1.0	1.0
	0.5, 100	0.023	1.0	1.0
	0.5, 1000	0.025	1.0	1.0
	0.5, 2000	0.023	1.0	1.0
	0.25, 10	0.038	1.0	0.97
	0.25, 100	0.046	1.0	1.0
	0.25, 1000	0.041	1.0	1.0
	0.25, 2000	0.041	1.0	1.0
	0.1, 10	0.046	0.98	0.4
	0.1, 100	0.086	1.0	1.0
	0.1, 1000	0.077	1.0	1.0
	0.1, 2000	0.099	1.0	1.0
	0.05, 10	0.036	0.47	0.03
	0.05, 100	0.157	1.0	1.0
	0.05, 1000	0.173	1.0	1.0
	0.05, 2000	0.139	1.0	1.0
	0.01, 10	0.042	0.02	0.0
	0.01, 100	0.482	0.97	0.35
	0.01, 1000	0.916	1.0	1.0
	0.01, 2000	0.74	1.0	1.0

Tab. 63: Parameter grid search for the moons dataset experiment 2 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.234	1.0	0.14
	1.0, 100	1.439	1.0	0.31
	1.0, 1000	3.366	1.0	0.41
	1.0, 2000	6.983	1.0	0.38
	0.5, 10	0.204	0.98	0.11
	0.5, 100	1.088	0.99	0.33
	0.5, 1000	4.161	1.0	0.41
	0.5, 2000	9.707	1.0	0.34
	0.25, 10	0.173	0.82	0.11
	0.25, 100	1.279	0.93	0.27
	0.25, 1000	2.583	1.0	0.48
	0.25, 2000	5.913	0.99	0.39
	0.1, 10	0.151	0.62	0.05
	0.1, 100	1.172	0.82	0.2
	0.1, 1000	4.853	0.99	0.28
	0.1, 2000	2.86	1.0	0.44
	0.05, 10	0.152	0.61	0.09
	0.05, 100	1.188	0.87	0.28
	0.05, 1000	4.736	0.98	0.33
	0.05, 2000	7.265	0.97	0.37
	0.01, 10	0.142	0.62	0.06

	0.01, 100	1.348	0.73	0.26
	0.01, 1000	6.451	0.94	0.26
	0.01, 2000	6.993	0.99	0.33
Revise	1.0, 10	0.065	1.0	0.8
	1.0, 100	0.073	1.0	1.0
	1.0, 1000	0.083	1.0	1.0
	1.0, 2000	0.059	1.0	1.0
	0.5, 10	0.052	0.95	0.76
	0.5, 100	0.102	1.0	1.0
	0.5, 1000	0.098	1.0	1.0
	0.5, 2000	0.088	1.0	1.0
	0.25, 10	0.067	0.87	0.61
	0.25, 100	0.121	1.0	1.0
	0.25, 1000	0.146	1.0	1.0
	0.25, 2000	0.146	1.0	1.0
	0.1, 10	0.047	0.68	0.54
	0.1, 100	0.147	1.0	0.99
	0.1, 1000	0.13	1.0	1.0
	0.1, 2000	0.141	1.0	1.0
	0.05, 10	0.054	0.59	0.47
	0.05, 100	0.149	0.96	0.96
	0.05, 1000	0.133	1.0	1.0
	0.05, 2000	0.202	1.0	1.0
	0.01, 10	0.051	0.62	0.42
	0.01, 100	0.141	0.98	0.98
	0.01, 1000	0.161	1.0	1.0
	0.01, 2000	0.19	1.0	1.0
Ecco	1.0, 10	0.146	0.99	0.75
	1.0, 100	0.824	1.0	1.0
	1.0, 1000	9.635	1.0	1.0
	1.0, 2000	17.864	1.0	1.0
	0.5, 10	0.154	0.91	0.63
	0.5, 100	1.063	1.0	0.99
	0.5, 1000	7.41	1.0	1.0
	0.5, 2000	16.114	1.0	1.0
	0.25, 10	0.16	0.85	0.56
	0.25, 100	1.087	0.97	0.95
	0.25, 1000	6.819	1.0	1.0
	0.25, 2000	14.033	1.0	1.0
	0.1, 10	0.151	0.7	0.43
	0.1, 100	0.968	0.97	0.92
	0.1, 1000	5.881	1.0	1.0
	0.1, 2000	12.715	1.0	1.0
	0.05, 10	0.164	0.69	0.46
	0.05, 100	0.876	0.96	0.93
	0.05, 1000	6.53	1.0	1.0
	0.05, 2000	12.392	1.0	1.0
	0.01, 10	0.154	0.59	0.39
	0.01, 100	0.828	0.96	0.92
	0.01, 1000	6.594	1.0	1.0
	0.01, 2000	11.64	1.0	1.0
Wachter	1.0, 10	0.098	1.0	0.82
	1.0, 100	0.106	1.0	1.0
	1.0, 1000	0.088	1.0	1.0
	1.0, 2000	0.069	1.0	1.0
	0.5, 10	0.058	0.9	0.69

	0.5, 100	0.114	1.0	1.0
	0.5, 1000	0.092	1.0	1.0
	0.5, 2000	0.102	1.0	1.0
	0.25, 10	0.056	0.82	0.56
	0.25, 100	0.103	0.99	0.99
	0.25, 1000	0.148	1.0	1.0
	0.25, 2000	0.17	1.0	1.0
	0.1, 10	0.056	0.72	0.46
	0.1, 100	0.165	0.99	0.98
	0.1, 1000	0.125	1.0	1.0
	0.1, 2000	0.163	1.0	1.0
	0.05, 10	0.055	0.74	0.45
	0.05, 100	0.16	0.99	0.98
	0.05, 1000	0.152	1.0	1.0
	0.05, 2000	0.174	1.0	1.0
	0.01, 10	0.067	0.61	0.48
	0.01, 100	0.232	0.99	0.96
	0.01, 1000	0.162	1.0	1.0
	0.01, 2000	0.189	1.0	1.0
Generic	1.0, 10	0.059	1.0	0.81
	1.0, 100	0.072	1.0	1.0
	1.0, 1000	0.073	1.0	1.0
	1.0, 2000	0.068	1.0	1.0
	0.5, 10	0.064	0.86	0.57
	0.5, 100	0.077	1.0	1.0
	0.5, 1000	0.109	1.0	1.0
	0.5, 2000	0.085	1.0	1.0
	0.25, 10	0.067	0.79	0.57
	0.25, 100	0.132	1.0	0.99
	0.25, 1000	0.125	1.0	1.0
	0.25, 2000	0.13	1.0	1.0
	0.1, 10	0.05	0.7	0.52
	0.1, 100	0.168	1.0	0.99
	0.1, 1000	0.176	1.0	1.0
	0.1, 2000	0.172	1.0	1.0
	0.05, 10	0.052	0.8	0.51
	0.05, 100	0.174	0.96	0.95
	0.05, 1000	0.158	1.0	1.0
	0.05, 2000	0.159	1.0	1.0
	0.01, 10	0.056	0.7	0.45
	0.01, 100	0.139	0.99	0.99
	0.01, 1000	0.141	1.0	1.0
	0.01, 2000	0.223	1.0	1.0
DiCE	1.0, 10	0.073	1.0	0.83
	1.0, 100	0.127	1.0	1.0
	1.0, 1000	0.136	1.0	1.0
	1.0, 2000	0.093	1.0	1.0
	0.5, 10	0.078	0.92	0.67
	0.5, 100	0.306	1.0	1.0
	0.5, 1000	0.165	1.0	1.0
	0.5, 2000	0.167	1.0	1.0
	0.25, 10	0.083	0.76	0.56
	0.25, 100	0.17	1.0	1.0
	0.25, 1000	0.211	1.0	1.0
	0.25, 2000	0.155	1.0	1.0
	0.1, 10	0.078	0.71	0.49

	0.1, 100	0.188	1.0	0.99
	0.1, 1000	0.232	1.0	1.0
	0.1, 2000	0.193	1.0	1.0
	0.05, 10	0.087	0.56	0.37
	0.05, 100	0.207	1.0	0.99
	0.05, 1000	0.159	1.0	1.0
	0.05, 2000	0.207	1.0	1.0
	0.01, 10	0.074	0.72	0.54
	0.01, 100	0.2	0.98	0.96
	0.01, 1000	0.252	1.0	1.0
	0.01, 2000	0.194	1.0	1.0
ClaPROAR	1.0, 10	0.083	0.99	0.84
	1.0, 100	0.13	1.0	1.0
	1.0, 1000	0.126	1.0	1.0
	1.0, 2000	0.141	1.0	1.0
	0.5, 10	0.1	0.9	0.61
	0.5, 100	0.153	1.0	1.0
	0.5, 1000	0.222	1.0	1.0
	0.5, 2000	0.204	1.0	1.0
	0.25, 10	0.099	0.85	0.65
	0.25, 100	0.201	0.99	0.99
	0.25, 1000	0.216	1.0	1.0
	0.25, 2000	0.185	1.0	1.0
	0.1, 10	0.088	0.68	0.46
	0.1, 100	0.237	1.0	0.99
	0.1, 1000	0.228	1.0	1.0
	0.1, 2000	0.234	1.0	1.0
	0.05, 10	0.081	0.68	0.46
	0.05, 100	0.308	1.0	1.0
	0.05, 1000	0.204	1.0	1.0
	0.05, 2000	0.236	1.0	1.0
	0.01, 10	0.095	0.63	0.43
	0.01, 100	0.285	0.98	0.98
	0.01, 1000	0.204	1.0	1.0
	0.01, 2000	0.241	1.0	1.0
Greedy	1.0, 10	0.022	1.0	1.0
	1.0, 100	0.021	1.0	1.0
	1.0, 1000	0.031	1.0	1.0
	1.0, 2000	0.02	1.0	1.0
	0.5, 10	0.03	1.0	1.0
	0.5, 100	0.032	1.0	1.0
	0.5, 1000	0.034	1.0	1.0
	0.5, 2000	0.033	1.0	1.0
	0.25, 10	0.056	1.0	0.7
	0.25, 100	0.059	1.0	1.0
	0.25, 1000	0.06	1.0	1.0
	0.25, 2000	0.068	1.0	1.0
	0.1, 10	0.052	0.9	0.25
	0.1, 100	0.135	1.0	1.0
	0.1, 1000	0.151	1.0	1.0
	0.1, 2000	0.137	1.0	1.0
	0.05, 10	0.043	0.38	0.0
	0.05, 100	0.275	1.0	1.0
	0.05, 1000	0.253	1.0	1.0
	0.05, 2000	0.272	1.0	1.0
	0.01, 10	0.037	0.14	0.0

	0.01, 100	0.512	0.94	0.17
	0.01, 1000	1.429	1.0	1.0
	0.01, 2000	1.523	1.0	1.0

Tab. 64: Parameter grid search for the moons dataset experiment 3 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.163	0.55	0.06
	1.0, 100	1.156	0.9	0.62
	1.0, 1000	2.043	1.0	0.95
	1.0, 2000	2.198	1.0	0.91
	0.5, 10	0.165	0.74	0.16
	0.5, 100	1.435	0.87	0.56
	0.5, 1000	2.55	1.0	0.97
	0.5, 2000	3.151	1.0	0.98
	0.25, 10	0.172	0.74	0.1
	0.25, 100	1.346	0.87	0.59
	0.25, 1000	2.289	1.0	0.99
	0.25, 2000	2.861	1.0	0.98
	0.1, 10	0.199	0.94	0.13
	0.1, 100	1.466	0.98	0.65
	0.1, 1000	2.633	1.0	0.97
	0.1, 2000	2.661	1.0	0.98
	0.05, 10	0.182	0.83	0.11
	0.05, 100	1.52	0.95	0.58
	0.05, 1000	2.061	1.0	0.96
	0.05, 2000	2.677	1.0	0.98
	0.01, 10	0.182	0.68	0.07
	0.01, 100	1.443	0.8	0.53
	0.01, 1000	2.874	1.0	0.97
	0.01, 2000	3.107	1.0	1.0
Revise	1.0, 10	0.033	0.96	0.92
	1.0, 100	0.041	1.0	1.0
	1.0, 1000	0.035	1.0	1.0
	1.0, 2000	0.035	1.0	1.0
	0.5, 10	0.03	0.98	0.91
	0.5, 100	0.036	1.0	1.0
	0.5, 1000	0.046	1.0	1.0
	0.5, 2000	0.039	1.0	1.0
	0.25, 10	0.035	0.95	0.87
	0.25, 100	0.033	1.0	1.0
	0.25, 1000	0.039	1.0	1.0
	0.25, 2000	0.031	1.0	1.0
	0.1, 10	0.035	1.0	0.92
	0.1, 100	0.032	1.0	1.0
	0.1, 1000	0.035	1.0	1.0
	0.1, 2000	0.033	1.0	1.0
	0.05, 10	0.039	0.97	0.88
	0.05, 100	0.037	1.0	1.0
	0.05, 1000	0.05	1.0	1.0
	0.05, 2000	0.038	1.0	1.0
	0.01, 10	0.034	0.87	0.81
	0.01, 100	0.047	1.0	1.0
	0.01, 1000	0.038	1.0	1.0
	0.01, 2000	0.059	1.0	1.0

Ecco	1.0, 10	0.1	0.98	0.94
	1.0, 100	1.321	0.99	0.98
	1.0, 1000	5.839	1.0	1.0
	1.0, 2000	9.943	1.0	1.0
	0.5, 10	0.097	0.95	0.88
	0.5, 100	1.561	0.99	0.95
	0.5, 1000	6.348	1.0	1.0
	0.5, 2000	9.567	1.0	1.0
	0.25, 10	0.083	0.96	0.88
	0.25, 100	1.381	0.99	0.95
	0.25, 1000	5.32	1.0	1.0
	0.25, 2000	7.768	1.0	1.0
	0.1, 10	0.076	0.99	0.95
	0.1, 100	1.285	1.0	0.97
	0.1, 1000	4.984	1.0	1.0
	0.1, 2000	8.613	1.0	1.0
	0.05, 10	0.092	0.96	0.88
	0.05, 100	1.215	1.0	0.97
	0.05, 1000	5.28	1.0	1.0
	0.05, 2000	8.721	1.0	1.0
	0.01, 10	0.09	0.88	0.82
	0.01, 100	1.331	0.93	0.91
	0.01, 1000	4.663	1.0	1.0
	0.01, 2000	7.645	1.0	1.0
Wachter	1.0, 10	0.036	0.96	0.88
	1.0, 100	0.038	1.0	1.0
	1.0, 1000	0.056	1.0	1.0
	1.0, 2000	0.032	1.0	1.0
	0.5, 10	0.032	0.95	0.92
	0.5, 100	0.036	1.0	1.0
	0.5, 1000	0.041	1.0	1.0
	0.5, 2000	0.04	1.0	1.0
	0.25, 10	0.029	0.98	0.92
	0.25, 100	0.059	1.0	1.0
	0.25, 1000	0.047	1.0	1.0
	0.25, 2000	0.042	1.0	1.0
	0.1, 10	0.027	1.0	0.98
	0.1, 100	0.037	1.0	1.0
	0.1, 1000	0.038	1.0	1.0
	0.1, 2000	0.046	1.0	1.0
	0.05, 10	0.039	0.99	0.92
	0.05, 100	0.038	1.0	1.0
	0.05, 1000	0.031	1.0	1.0
	0.05, 2000	0.038	1.0	1.0
	0.01, 10	0.029	0.9	0.83
	0.01, 100	0.046	1.0	1.0
	0.01, 1000	0.044	1.0	1.0
	0.01, 2000	0.049	1.0	1.0
Generic	1.0, 10	0.03	0.99	0.93
	1.0, 100	0.034	1.0	1.0
	1.0, 1000	0.038	1.0	1.0
	1.0, 2000	0.03	1.0	1.0
	0.5, 10	0.035	0.93	0.88
	0.5, 100	0.048	1.0	1.0
	0.5, 1000	0.037	1.0	1.0

	0.5, 2000	0.047	1.0	1.0
	0.25, 10	0.029	0.95	0.9
	0.25, 100	0.041	1.0	1.0
	0.25, 1000	0.034	1.0	1.0
	0.25, 2000	0.047	1.0	1.0
	0.1, 10	0.029	1.0	0.97
	0.1, 100	0.031	1.0	1.0
	0.1, 1000	0.038	1.0	1.0
	0.1, 2000	0.032	1.0	1.0
	0.05, 10	0.04	0.98	0.91
	0.05, 100	0.034	1.0	1.0
	0.05, 1000	0.039	1.0	1.0
	0.05, 2000	0.036	1.0	1.0
	0.01, 10	0.032	0.95	0.84
	0.01, 100	0.054	1.0	1.0
	0.01, 1000	0.055	1.0	1.0
	0.01, 2000	0.049	1.0	1.0
DiCE	1.0, 10	0.045	0.94	0.89
	1.0, 100	0.051	1.0	1.0
	1.0, 1000	0.05	1.0	1.0
	1.0, 2000	0.066	1.0	1.0
	0.5, 10	0.04	0.97	0.9
	0.5, 100	0.041	1.0	1.0
	0.5, 1000	0.054	1.0	1.0
	0.5, 2000	0.069	1.0	1.0
	0.25, 10	0.046	0.96	0.88
	0.25, 100	0.063	1.0	1.0
	0.25, 1000	0.048	1.0	1.0
	0.25, 2000	0.052	1.0	1.0
	0.1, 10	0.042	0.99	0.94
	0.1, 100	0.057	1.0	1.0
	0.1, 1000	0.047	1.0	1.0
	0.1, 2000	0.051	1.0	1.0
	0.05, 10	0.051	1.0	0.91
	0.05, 100	0.066	1.0	1.0
	0.05, 1000	0.054	1.0	1.0
	0.05, 2000	0.057	1.0	1.0
	0.01, 10	0.042	0.92	0.86
	0.01, 100	0.063	1.0	1.0
	0.01, 1000	0.054	1.0	1.0
	0.01, 2000	0.115	1.0	1.0
ClaPROAR	1.0, 10	0.05	0.98	0.95
	1.0, 100	0.063	1.0	1.0
	1.0, 1000	0.06	1.0	1.0
	1.0, 2000	0.052	1.0	1.0
	0.5, 10	0.047	0.93	0.87
	0.5, 100	0.067	1.0	1.0
	0.5, 1000	0.066	1.0	1.0
	0.5, 2000	0.068	1.0	1.0
	0.25, 10	0.05	0.91	0.88
	0.25, 100	0.071	1.0	1.0
	0.25, 1000	0.058	1.0	1.0
	0.25, 2000	0.057	1.0	1.0
	0.1, 10	0.056	1.0	0.95
	0.1, 100	0.055	1.0	1.0
	0.1, 1000	0.058	1.0	1.0

	0.1, 2000	0.043	1.0	1.0
	0.05, 10	0.051	0.99	0.89
	0.05, 100	0.066	1.0	1.0
	0.05, 1000	0.058	1.0	1.0
	0.05, 2000	0.056	1.0	1.0
	0.01, 10	0.062	0.81	0.74
	0.01, 100	0.213	1.0	1.0
	0.01, 1000	0.071	1.0	1.0
	0.01, 2000	0.077	1.0	1.0
Greedy	1.0, 10	0.015	1.0	1.0
	1.0, 100	0.012	1.0	1.0
	1.0, 1000	0.013	1.0	1.0
	1.0, 2000	0.013	1.0	1.0
	0.5, 10	0.018	1.0	1.0
	0.5, 100	0.018	1.0	1.0
	0.5, 1000	0.019	1.0	1.0
	0.5, 2000	0.016	1.0	1.0
	0.25, 10	0.024	1.0	1.0
	0.25, 100	0.022	1.0	1.0
	0.25, 1000	0.022	1.0	1.0
	0.25, 2000	0.024	1.0	1.0
	0.1, 10	0.042	0.97	0.83
	0.1, 100	0.041	1.0	1.0
	0.1, 1000	0.043	1.0	1.0
	0.1, 2000	0.042	1.0	1.0
	0.05, 10	0.034	0.34	0.07
	0.05, 100	0.076	1.0	1.0
	0.05, 1000	0.087	1.0	1.0
	0.05, 2000	0.078	1.0	1.0
	0.01, 10	0.029	0.01	0.0
	0.01, 100	0.353	0.93	0.74
	0.01, 1000	0.64	1.0	1.0
	0.01, 2000	0.374	1.0	1.0

Tab. 65: Parameter grid search for the moons dataset experiment 4 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.208	0.68	0.13
	1.0, 100	1.374	0.82	0.51
	1.0, 1000	3.41	0.99	0.93
	1.0, 2000	2.518	1.0	0.96
	0.5, 10	0.172	0.74	0.09
	0.5, 100	1.386	0.85	0.48
	0.5, 1000	2.211	1.0	0.96
	0.5, 2000	2.194	1.0	0.94
	0.25, 10	0.19	0.84	0.09
	0.25, 100	1.383	0.9	0.59
	0.25, 1000	2.279	1.0	0.98
	0.25, 2000	3.022	1.0	0.99
	0.1, 10	0.189	0.88	0.13
	0.1, 100	1.375	0.98	0.67
	0.1, 1000	2.647	1.0	0.97
	0.1, 2000	2.314	1.0	0.99
	0.05, 10	0.182	0.8	0.08
	0.05, 100	1.471	0.9	0.56

	0.05, 1000	2.905	1.0	0.99
	0.05, 2000	2.373	1.0	0.96
	0.01, 10	0.178	0.61	0.05
	0.01, 100	1.361	0.77	0.45
	0.01, 1000	2.733	1.0	0.99
	0.01, 2000	3.21	1.0	0.97
Revise	1.0, 10	0.034	0.94	0.9
	1.0, 100	0.037	1.0	1.0
	1.0, 1000	0.047	1.0	1.0
	1.0, 2000	0.051	1.0	1.0
	0.5, 10	0.035	0.91	0.8
	0.5, 100	0.052	1.0	1.0
	0.5, 1000	0.043	1.0	1.0
	0.5, 2000	0.042	1.0	1.0
	0.25, 10	0.039	0.9	0.83
	0.25, 100	0.044	1.0	1.0
	0.25, 1000	0.036	1.0	1.0
	0.25, 2000	0.036	1.0	1.0
	0.1, 10	0.03	0.98	0.94
	0.1, 100	0.035	1.0	1.0
	0.1, 1000	0.051	1.0	1.0
	0.1, 2000	0.029	1.0	1.0
	0.05, 10	0.036	0.96	0.86
	0.05, 100	0.031	1.0	1.0
	0.05, 1000	0.055	1.0	1.0
	0.05, 2000	0.037	1.0	1.0
	0.01, 10	0.036	0.93	0.8
	0.01, 100	0.064	1.0	1.0
	0.01, 1000	0.044	1.0	1.0
	0.01, 2000	0.052	1.0	1.0
Ecco	1.0, 10	0.087	0.98	0.93
	1.0, 100	1.224	1.0	0.98
	1.0, 1000	6.308	1.0	1.0
	1.0, 2000	12.949	1.0	1.0
	0.5, 10	0.086	0.95	0.88
	0.5, 100	1.278	0.99	0.97
	0.5, 1000	6.721	1.0	1.0
	0.5, 2000	13.761	1.0	1.0
	0.25, 10	0.091	0.9	0.85
	0.25, 100	2.026	0.99	0.9
	0.25, 1000	7.97	1.0	1.0
	0.25, 2000	15.089	1.0	1.0
	0.1, 10	0.097	0.98	0.93
	0.1, 100	1.275	0.99	0.89
	0.1, 1000	7.963	1.0	1.0
	0.1, 2000	13.143	1.0	1.0
	0.05, 10	0.074	0.96	0.93
	0.05, 100	1.342	0.99	0.88
	0.05, 1000	8.048	1.0	1.0
	0.05, 2000	13.463	1.0	1.0
	0.01, 10	0.094	0.91	0.8
	0.01, 100	1.198	0.93	0.87
	0.01, 1000	7.548	1.0	1.0
	0.01, 2000	11.807	1.0	1.0
Wachter	1.0, 10	0.037	0.97	0.9
	1.0, 100	0.047	1.0	1.0

	1.0, 1000	0.036	1.0	1.0
	1.0, 2000	0.035	1.0	1.0
	0.5, 10	0.033	0.97	0.91
	0.5, 100	0.052	1.0	1.0
	0.5, 1000	0.039	1.0	1.0
	0.5, 2000	0.081	1.0	1.0
	0.25, 10	0.038	0.92	0.84
	0.25, 100	0.048	1.0	1.0
	0.25, 1000	0.044	1.0	1.0
	0.25, 2000	0.037	1.0	1.0
	0.1, 10	0.035	1.0	0.97
	0.1, 100	0.039	1.0	1.0
	0.1, 1000	0.047	1.0	1.0
	0.1, 2000	0.038	1.0	1.0
	0.05, 10	0.035	0.95	0.91
	0.05, 100	0.047	1.0	1.0
	0.05, 1000	0.055	1.0	1.0
	0.05, 2000	0.048	1.0	1.0
	0.01, 10	0.034	0.9	0.82
	0.01, 100	0.061	1.0	1.0
	0.01, 1000	0.051	1.0	1.0
	0.01, 2000	0.043	1.0	1.0
Generic	1.0, 10	0.029	0.99	0.9
	1.0, 100	0.032	1.0	1.0
	1.0, 1000	0.039	1.0	1.0
	1.0, 2000	0.035	1.0	1.0
	0.5, 10	0.044	0.91	0.82
	0.5, 100	0.046	1.0	1.0
	0.5, 1000	0.031	1.0	1.0
	0.5, 2000	0.047	1.0	1.0
	0.25, 10	0.027	0.97	0.91
	0.25, 100	0.041	1.0	1.0
	0.25, 1000	0.049	1.0	1.0
	0.25, 2000	0.039	1.0	1.0
	0.1, 10	0.034	1.0	0.89
	0.1, 100	0.033	1.0	1.0
	0.1, 1000	0.032	1.0	1.0
	0.1, 2000	0.042	1.0	1.0
	0.05, 10	0.029	0.98	0.92
	0.05, 100	0.044	1.0	1.0
	0.05, 1000	0.059	1.0	1.0
	0.05, 2000	0.047	1.0	1.0
	0.01, 10	0.038	0.88	0.82
	0.01, 100	0.058	1.0	1.0
	0.01, 1000	0.064	1.0	1.0
	0.01, 2000	0.059	1.0	1.0
DiCE	1.0, 10	0.042	0.98	0.96
	1.0, 100	0.049	1.0	1.0
	1.0, 1000	0.051	1.0	1.0
	1.0, 2000	0.044	1.0	1.0
	0.5, 10	0.047	0.99	0.94
	0.5, 100	0.061	1.0	1.0
	0.5, 1000	0.055	1.0	1.0
	0.5, 2000	0.051	1.0	1.0
	0.25, 10	0.041	0.93	0.88
	0.25, 100	0.058	1.0	1.0

	0.25, 1000	0.056	1.0	1.0
	0.25, 2000	0.063	1.0	1.0
	0.1, 10	0.046	1.0	0.92
	0.1, 100	0.066	1.0	1.0
	0.1, 1000	0.062	1.0	1.0
	0.1, 2000	0.056	1.0	1.0
	0.05, 10	0.042	0.99	0.91
	0.05, 100	0.071	1.0	1.0
	0.05, 1000	0.066	1.0	1.0
	0.05, 2000	0.065	1.0	1.0
	0.01, 10	0.042	0.84	0.77
	0.01, 100	0.088	1.0	1.0
	0.01, 1000	0.08	1.0	1.0
	0.01, 2000	0.088	1.0	1.0
ClaPROAR	1.0, 10	0.064	0.95	0.87
	1.0, 100	0.052	1.0	1.0
	1.0, 1000	0.068	1.0	1.0
	1.0, 2000	0.071	1.0	1.0
	0.5, 10	0.052	0.95	0.89
	0.5, 100	0.085	1.0	1.0
	0.5, 1000	0.04	1.0	1.0
	0.5, 2000	0.085	1.0	1.0
	0.25, 10	0.06	0.9	0.81
	0.25, 100	0.076	1.0	1.0
	0.25, 1000	0.064	1.0	1.0
	0.25, 2000	0.073	1.0	1.0
	0.1, 10	0.06	0.98	0.93
	0.1, 100	0.068	1.0	1.0
	0.1, 1000	0.045	1.0	1.0
	0.1, 2000	0.052	1.0	1.0
	0.05, 10	0.052	0.98	0.9
	0.05, 100	0.067	1.0	1.0
	0.05, 1000	0.066	1.0	1.0
	0.05, 2000	0.054	1.0	1.0
	0.01, 10	0.049	0.91	0.81
	0.01, 100	0.089	1.0	1.0
	0.01, 1000	0.097	1.0	1.0
	0.01, 2000	0.061	1.0	1.0
Greedy	1.0, 10	0.013	1.0	1.0
	1.0, 100	0.014	1.0	1.0
	1.0, 1000	0.014	1.0	1.0
	1.0, 2000	0.014	1.0	1.0
	0.5, 10	0.018	1.0	1.0
	0.5, 100	0.019	1.0	1.0
	0.5, 1000	0.017	1.0	1.0
	0.5, 2000	0.016	1.0	1.0
	0.25, 10	0.026	1.0	0.99
	0.25, 100	0.025	1.0	1.0
	0.25, 1000	0.025	1.0	1.0
	0.25, 2000	0.022	1.0	1.0
	0.1, 10	0.049	0.98	0.77
	0.1, 100	0.043	1.0	1.0
	0.1, 1000	0.046	1.0	1.0
	0.1, 2000	0.045	1.0	1.0
	0.05, 10	0.032	0.27	0.06
	0.05, 100	0.078	1.0	1.0

	0.05, 1000	0.08	1.0	1.0
	0.05, 2000	0.079	1.0	1.0
	0.01, 10	0.028	0.0	0.0
	0.01, 100	0.354	0.97	0.73
	0.01, 1000	0.43	1.0	1.0
	0.01, 2000	0.389	1.0	1.0

Tab. 66: Parameter grid search for the moons dataset experiment 5 using a MLP

F.1.6. Moons dataset using Deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.174	0.98	0.0
	1.0, 100	1.641	0.98	0.0
	1.0, 1000	17.096	0.96	0.0
	1.0, 2000	36.001	0.97	0.0
	0.5, 10	0.199	0.97	0.0
	0.5, 100	1.745	0.93	0.0
	0.5, 1000	18.001	0.97	0.0
	0.5, 2000	37.423	0.96	0.0
	0.25, 10	0.166	0.99	0.0
	0.25, 100	1.824	0.99	0.0
	0.25, 1000	18.324	0.97	0.0
	0.25, 2000	38.917	0.95	0.0
	0.1, 10	0.182	1.0	0.0
	0.1, 100	1.87	0.98	0.0
	0.1, 1000	18.396	0.99	0.0
	0.1, 2000	37.897	1.0	0.0
	0.05, 10	0.184	1.0	0.0
	0.05, 100	1.834	1.0	0.0
	0.05, 1000	18.436	1.0	0.02
	0.05, 2000	38.616	1.0	0.01
	0.01, 10	0.181	1.0	0.0
	0.01, 100	1.839	1.0	0.0
	0.01, 1000	18.685	1.0	0.0
	0.01, 2000	39.105	1.0	0.0
Revise	1.0, 10	0.19	0.98	0.96
	1.0, 100	0.041	1.0	1.0
	1.0, 1000	0.046	1.0	1.0
	1.0, 2000	0.039	1.0	1.0
	0.5, 10	0.035	0.96	0.91
	0.5, 100	0.038	1.0	1.0
	0.5, 1000	0.045	1.0	1.0
	0.5, 2000	0.036	1.0	1.0
	0.25, 10	0.036	0.96	0.93
	0.25, 100	0.047	1.0	1.0
	0.25, 1000	0.044	1.0	1.0
	0.25, 2000	0.055	1.0	1.0
	0.1, 10	0.047	1.0	0.97
	0.1, 100	0.04	1.0	1.0
	0.1, 1000	0.039	1.0	1.0
	0.1, 2000	0.04	1.0	1.0
	0.05, 10	0.034	1.0	0.92
	0.05, 100	0.052	1.0	1.0
	0.05, 1000	0.042	1.0	1.0
	0.05, 2000	0.051	1.0	1.0

	0.01, 10	0.041	0.87	0.79
	0.01, 100	0.051	1.0	1.0
	0.01, 1000	0.043	1.0	1.0
	0.01, 2000	0.047	1.0	1.0
Ecco	1.0, 10	0.088	0.95	0.91
	1.0, 100	1.433	0.99	0.99
	1.0, 1000	8.743	1.0	1.0
	1.0, 2000	17.25	1.0	1.0
	0.5, 10	0.111	0.98	0.95
	0.5, 100	1.251	0.99	0.97
	0.5, 1000	8.015	1.0	1.0
	0.5, 2000	17.017	1.0	1.0
	0.25, 10	0.1	0.94	0.87
	0.25, 100	1.183	1.0	0.98
	0.25, 1000	7.646	1.0	1.0
	0.25, 2000	17.071	1.0	1.0
	0.1, 10	0.135	1.0	0.88
	0.1, 100	1.414	1.0	0.96
	0.1, 1000	10.132	1.0	1.0
	0.1, 2000	18.178	1.0	1.0
	0.05, 10	0.122	0.99	0.92
	0.05, 100	1.303	1.0	0.99
	0.05, 1000	9.125	1.0	1.0
	0.05, 2000	19.264	1.0	1.0
	0.01, 10	0.102	0.9	0.8
	0.01, 100	1.444	0.95	0.9
	0.01, 1000	8.709	1.0	1.0
	0.01, 2000	13.439	1.0	1.0
Wachter	1.0, 10	0.032	0.98	0.95
	1.0, 100	0.035	1.0	1.0
	1.0, 1000	0.041	1.0	1.0
	1.0, 2000	0.034	1.0	1.0
	0.5, 10	0.033	0.96	0.89
	0.5, 100	0.037	1.0	1.0
	0.5, 1000	0.037	1.0	1.0
	0.5, 2000	0.04	1.0	1.0
	0.25, 10	0.056	0.92	0.83
	0.25, 100	0.045	1.0	1.0
	0.25, 1000	0.046	1.0	1.0
	0.25, 2000	0.038	1.0	1.0
	0.1, 10	0.036	0.99	0.9
	0.1, 100	0.042	1.0	1.0
	0.1, 1000	0.037	1.0	1.0
	0.1, 2000	0.048	1.0	1.0
	0.05, 10	0.043	0.99	0.92
	0.05, 100	0.049	1.0	1.0
	0.05, 1000	0.063	1.0	1.0
	0.05, 2000	0.078	1.0	1.0
	0.01, 10	0.049	0.92	0.81
	0.01, 100	0.061	1.0	1.0
	0.01, 1000	0.055	1.0	1.0
	0.01, 2000	0.064	1.0	1.0
Generic	1.0, 10	0.03	0.98	0.97
	1.0, 100	0.029	1.0	1.0
	1.0, 1000	0.032	1.0	1.0
	1.0, 2000	0.038	1.0	1.0

	0.5, 10	0.051	0.99	0.93
	0.5, 100	0.037	1.0	1.0
	0.5, 1000	0.04	1.0	1.0
	0.5, 2000	0.037	1.0	1.0
	0.25, 10	0.043	0.94	0.86
	0.25, 100	0.036	1.0	1.0
	0.25, 1000	0.048	1.0	1.0
	0.25, 2000	0.043	1.0	1.0
	0.1, 10	0.039	0.99	0.94
	0.1, 100	0.037	1.0	1.0
	0.1, 1000	0.042	1.0	1.0
	0.1, 2000	0.05	1.0	1.0
	0.05, 10	0.037	0.99	0.9
	0.05, 100	0.055	1.0	1.0
	0.05, 1000	0.041	1.0	1.0
	0.05, 2000	0.051	1.0	1.0
	0.01, 10	0.037	0.94	0.77
	0.01, 100	0.055	1.0	1.0
	0.01, 1000	0.059	1.0	1.0
	0.01, 2000	0.066	1.0	1.0
DiCE	1.0, 10	0.043	0.98	0.96
	1.0, 100	0.044	1.0	1.0
	1.0, 1000	0.046	1.0	1.0
	1.0, 2000	0.051	1.0	1.0
	0.5, 10	0.047	0.98	0.95
	0.5, 100	0.051	1.0	1.0
	0.5, 1000	0.044	1.0	1.0
	0.5, 2000	0.039	1.0	1.0
	0.25, 10	0.052	0.94	0.87
	0.25, 100	0.067	1.0	1.0
	0.25, 1000	0.051	1.0	1.0
	0.25, 2000	0.071	1.0	1.0
	0.1, 10	0.043	0.99	0.95
	0.1, 100	0.062	1.0	1.0
	0.1, 1000	0.062	1.0	1.0
	0.1, 2000	0.061	1.0	1.0
	0.05, 10	0.064	0.98	0.82
	0.05, 100	0.06	1.0	1.0
	0.05, 1000	0.052	1.0	1.0
	0.05, 2000	0.073	1.0	1.0
	0.01, 10	0.052	0.88	0.8
	0.01, 100	0.098	1.0	1.0
	0.01, 1000	0.074	1.0	1.0
	0.01, 2000	0.102	1.0	1.0
ClaPROAR	1.0, 10	0.065	0.98	0.95
	1.0, 100	0.066	1.0	1.0
	1.0, 1000	0.067	1.0	1.0
	1.0, 2000	0.044	1.0	1.0
	0.5, 10	0.052	0.97	0.9
	0.5, 100	0.055	1.0	1.0
	0.5, 1000	0.056	1.0	1.0
	0.5, 2000	0.054	1.0	1.0
	0.25, 10	0.054	0.95	0.88
	0.25, 100	0.072	1.0	1.0
	0.25, 1000	0.074	1.0	1.0
	0.25, 2000	0.081	1.0	1.0

	0.1, 10	0.064	0.99	0.9
	0.1, 100	0.066	1.0	1.0
	0.1, 1000	0.077	1.0	1.0
	0.1, 2000	0.077	1.0	1.0
	0.05, 10	0.065	0.97	0.86
	0.05, 100	0.071	1.0	1.0
	0.05, 1000	0.077	1.0	1.0
	0.05, 2000	0.1	1.0	1.0
	0.01, 10	0.078	0.9	0.76
	0.01, 100	0.128	1.0	1.0
	0.01, 1000	0.115	1.0	1.0
	0.01, 2000	0.116	1.0	1.0
Greedy	1.0, 10	0.017	1.0	1.0
	1.0, 100	0.016	1.0	1.0
	1.0, 1000	0.015	1.0	1.0
	1.0, 2000	0.016	1.0	1.0
	0.5, 10	0.02	1.0	1.0
	0.5, 100	0.019	1.0	1.0
	0.5, 1000	0.018	1.0	1.0
	0.5, 2000	0.02	1.0	1.0
	0.25, 10	0.025	1.0	1.0
	0.25, 100	0.026	1.0	1.0
	0.25, 1000	0.025	1.0	1.0
	0.25, 2000	0.025	1.0	1.0
	0.1, 10	0.041	0.94	0.6
	0.1, 100	0.046	1.0	1.0
	0.1, 1000	0.064	1.0	1.0
	0.1, 2000	0.045	1.0	1.0
	0.05, 10	0.035	0.32	0.05
	0.05, 100	0.085	1.0	1.0
	0.05, 1000	0.088	1.0	1.0
	0.05, 2000	0.113	1.0	1.0
	0.01, 10	0.031	0.01	0.0
	0.01, 100	0.401	1.0	0.78
	0.01, 1000	0.452	1.0	1.0
	0.01, 2000	0.511	1.0	1.0

Tab. 67: Parameter grid search for the moons dataset experiment 1 using a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.156	0.53	0.1
	1.0, 100	1.214	0.69	0.37
	1.0, 1000	3.497	0.99	0.92
	1.0, 2000	4.563	0.98	0.92
	0.5, 10	0.208	0.69	0.07
	0.5, 100	1.375	0.83	0.54
	0.5, 1000	3.58	1.0	0.87
	0.5, 2000	2.956	1.0	0.87
	0.25, 10	0.193	0.77	0.06
	0.25, 100	1.53	0.86	0.36
	0.25, 1000	2.959	1.0	0.95
	0.25, 2000	2.598	1.0	0.95
	0.1, 10	0.233	0.99	0.12
	0.1, 100	1.592	0.97	0.55
	0.1, 1000	2.602	1.0	0.94

	0.1, 2000	3.298	1.0	0.99
	0.05, 10	0.221	0.9	0.15
	0.05, 100	1.906	0.97	0.57
	0.05, 1000	3.36	1.0	0.97
	0.05, 2000	3.358	1.0	0.95
	0.01, 10	0.184	0.65	0.04
	0.01, 100	1.682	0.84	0.42
	0.01, 1000	4.612	0.99	0.93
	0.01, 2000	3.283	1.0	0.99
Revise	1.0, 10	0.026	0.99	0.96
	1.0, 100	0.032	1.0	1.0
	1.0, 1000	0.032	1.0	1.0
	1.0, 2000	0.029	1.0	1.0
	0.5, 10	0.044	1.0	0.98
	0.5, 100	0.032	1.0	1.0
	0.5, 1000	0.036	1.0	1.0
	0.5, 2000	0.035	1.0	1.0
	0.25, 10	0.033	0.97	0.91
	0.25, 100	0.037	1.0	1.0
	0.25, 1000	0.045	1.0	1.0
	0.25, 2000	0.039	1.0	1.0
	0.1, 10	0.044	1.0	0.85
	0.1, 100	0.066	1.0	1.0
	0.1, 1000	0.048	1.0	1.0
	0.1, 2000	0.052	1.0	1.0
	0.05, 10	0.035	0.98	0.9
	0.05, 100	0.053	1.0	1.0
	0.05, 1000	0.045	1.0	1.0
	0.05, 2000	0.046	1.0	1.0
	0.01, 10	0.038	0.92	0.85
	0.01, 100	0.062	1.0	1.0
	0.01, 1000	0.062	1.0	1.0
	0.01, 2000	0.053	1.0	1.0
Ecco	1.0, 10	0.08	0.97	0.93
	1.0, 100	1.635	0.98	0.95
	1.0, 1000	14.425	1.0	1.0
	1.0, 2000	24.639	1.0	1.0
	0.5, 10	0.111	0.96	0.86
	0.5, 100	1.522	0.98	0.93
	0.5, 1000	13.047	1.0	0.99
	0.5, 2000	26.367	1.0	1.0
	0.25, 10	0.116	0.96	0.87
	0.25, 100	1.473	0.96	0.92
	0.25, 1000	12.245	1.0	1.0
	0.25, 2000	22.765	1.0	1.0
	0.1, 10	0.37	1.0	0.89
	0.1, 100	1.97	1.0	0.92
	0.1, 1000	15.561	1.0	1.0
	0.1, 2000	27.351	1.0	1.0
	0.05, 10	0.126	1.0	0.88
	0.05, 100	1.824	0.98	0.87
	0.05, 1000	14.777	1.0	1.0
	0.05, 2000	26.081	1.0	1.0
	0.01, 10	0.1	0.88	0.78
	0.01, 100	1.649	0.96	0.84
	0.01, 1000	12.889	1.0	1.0

	0.01, 2000	25.119	1.0	1.0
Wachter	1.0, 10	0.033	0.96	0.93
	1.0, 100	0.03	1.0	1.0
	1.0, 1000	0.033	1.0	1.0
	1.0, 2000	0.043	1.0	1.0
	0.5, 10	0.031	0.97	0.93
	0.5, 100	0.033	1.0	1.0
	0.5, 1000	0.038	1.0	1.0
	0.5, 2000	0.036	1.0	1.0
	0.25, 10	0.034	0.95	0.89
	0.25, 100	0.043	1.0	1.0
	0.25, 1000	0.034	1.0	1.0
	0.25, 2000	0.046	1.0	1.0
	0.1, 10	0.047	1.0	0.91
	0.1, 100	0.039	1.0	1.0
	0.1, 1000	0.048	1.0	1.0
	0.1, 2000	0.055	1.0	1.0
	0.05, 10	0.047	0.99	0.87
	0.05, 100	0.039	1.0	1.0
	0.05, 1000	0.142	1.0	1.0
	0.05, 2000	0.042	1.0	1.0
	0.01, 10	0.038	0.82	0.68
	0.01, 100	0.065	1.0	1.0
	0.01, 1000	0.071	1.0	1.0
	0.01, 2000	0.052	1.0	1.0
Generic	1.0, 10	0.032	0.98	0.97
	1.0, 100	0.036	1.0	1.0
	1.0, 1000	0.032	1.0	1.0
	1.0, 2000	0.031	1.0	1.0
	0.5, 10	0.04	0.95	0.87
	0.5, 100	0.043	1.0	1.0
	0.5, 1000	0.031	1.0	1.0
	0.5, 2000	0.03	1.0	1.0
	0.25, 10	0.037	0.96	0.87
	0.25, 100	0.051	1.0	1.0
	0.25, 1000	0.042	1.0	1.0
	0.25, 2000	0.036	1.0	1.0
	0.1, 10	0.039	0.99	0.93
	0.1, 100	0.041	1.0	1.0
	0.1, 1000	0.042	1.0	1.0
	0.1, 2000	0.033	1.0	1.0
	0.05, 10	0.038	0.98	0.94
	0.05, 100	0.049	1.0	1.0
	0.05, 1000	0.037	1.0	1.0
	0.05, 2000	0.054	1.0	1.0
	0.01, 10	0.047	0.96	0.86
	0.01, 100	0.056	1.0	1.0
	0.01, 1000	0.057	1.0	1.0
	0.01, 2000	0.065	1.0	1.0
DiCE	1.0, 10	0.048	1.0	0.93
	1.0, 100	0.052	1.0	1.0
	1.0, 1000	0.037	1.0	1.0
	1.0, 2000	0.036	1.0	1.0
	0.5, 10	0.047	0.99	0.95
	0.5, 100	0.047	1.0	1.0
	0.5, 1000	0.039	1.0	1.0

	0.5, 2000	0.048	1.0	1.0
	0.25, 10	0.047	0.94	0.88
	0.25, 100	0.067	1.0	1.0
	0.25, 1000	0.057	1.0	1.0
	0.25, 2000	0.06	1.0	1.0
	0.1, 10	0.05	1.0	0.92
	0.1, 100	0.047	1.0	1.0
	0.1, 1000	0.075	1.0	1.0
	0.1, 2000	0.066	1.0	1.0
	0.05, 10	0.045	0.99	0.93
	0.05, 100	0.084	1.0	1.0
	0.05, 1000	0.066	1.0	1.0
	0.05, 2000	0.075	1.0	1.0
	0.01, 10	0.05	0.94	0.8
	0.01, 100	0.094	1.0	1.0
	0.01, 1000	0.072	1.0	1.0
	0.01, 2000	0.096	1.0	1.0
ClaPROAR	1.0, 10	0.053	0.98	0.96
	1.0, 100	0.045	1.0	1.0
	1.0, 1000	0.059	1.0	1.0
	1.0, 2000	0.05	1.0	1.0
	0.5, 10	0.05	0.95	0.92
	0.5, 100	0.048	1.0	1.0
	0.5, 1000	0.056	1.0	1.0
	0.5, 2000	0.065	1.0	1.0
	0.25, 10	0.055	0.94	0.88
	0.25, 100	0.067	1.0	1.0
	0.25, 1000	0.068	1.0	1.0
	0.25, 2000	0.075	1.0	1.0
	0.1, 10	0.066	1.0	0.92
	0.1, 100	0.06	1.0	1.0
	0.1, 1000	0.076	1.0	1.0
	0.1, 2000	0.07	1.0	1.0
	0.05, 10	0.069	1.0	0.9
	0.05, 100	0.086	1.0	1.0
	0.05, 1000	0.073	1.0	1.0
	0.05, 2000	0.063	1.0	1.0
	0.01, 10	0.065	0.9	0.8
	0.01, 100	0.1	1.0	1.0
	0.01, 1000	0.098	1.0	1.0
	0.01, 2000	0.099	1.0	1.0
Greedy	1.0, 10	0.014	1.0	1.0
	1.0, 100	0.014	1.0	1.0
	1.0, 1000	0.013	1.0	1.0
	1.0, 2000	0.013	1.0	1.0
	0.5, 10	0.018	1.0	1.0
	0.5, 100	0.017	1.0	1.0
	0.5, 1000	0.018	1.0	1.0
	0.5, 2000	0.017	1.0	1.0
	0.25, 10	0.025	1.0	1.0
	0.25, 100	0.033	1.0	1.0
	0.25, 1000	0.025	1.0	1.0
	0.25, 2000	0.024	1.0	1.0
	0.1, 10	0.041	0.96	0.65
	0.1, 100	0.058	1.0	1.0
	0.1, 1000	0.045	1.0	1.0

	0.1, 2000	0.046	1.0	1.0
	0.05, 10	0.032	0.25	0.04
	0.05, 100	0.089	1.0	1.0
	0.05, 1000	0.095	1.0	1.0
	0.05, 2000	0.1	1.0	1.0
	0.01, 10	0.028	0.01	0.0
	0.01, 100	0.369	0.95	0.71
	0.01, 1000	0.428	1.0	1.0
	0.01, 2000	0.412	1.0	1.0

Tab. 68: Parameter grid search for the moons dataset experiment 2 using a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.155	0.59	0.11
	1.0, 100	1.27	0.68	0.37
	1.0, 1000	4.102	0.99	0.9
	1.0, 2000	3.169	0.99	0.91
	0.5, 10	0.173	0.78	0.05
	0.5, 100	1.35	0.87	0.53
	0.5, 1000	2.551	1.0	0.93
	0.5, 2000	2.737	1.0	0.91
	0.25, 10	0.171	0.7	0.07
	0.25, 100	1.466	0.81	0.4
	0.25, 1000	2.706	1.0	0.96
	0.25, 2000	2.688	1.0	0.95
	0.1, 10	0.198	0.93	0.07
	0.1, 100	1.721	1.0	0.51
	0.1, 1000	2.842	1.0	0.95
	0.1, 2000	3.017	1.0	0.97
	0.05, 10	0.192	0.88	0.1
	0.05, 100	1.613	0.91	0.56
	0.05, 1000	2.856	1.0	0.93
	0.05, 2000	3.436	1.0	0.93
	0.01, 10	0.155	0.66	0.1
	0.01, 100	1.453	0.8	0.44
	0.01, 1000	2.996	1.0	0.96
	0.01, 2000	3.689	1.0	0.97
Revise	1.0, 10	0.033	1.0	0.96
	1.0, 100	0.034	1.0	1.0
	1.0, 1000	0.034	1.0	1.0
	1.0, 2000	0.041	1.0	1.0
	0.5, 10	0.03	0.98	0.91
	0.5, 100	0.032	1.0	1.0
	0.5, 1000	0.036	1.0	1.0
	0.5, 2000	0.052	1.0	1.0
	0.25, 10	0.034	1.0	0.96
	0.25, 100	0.042	1.0	1.0
	0.25, 1000	0.033	1.0	1.0
	0.25, 2000	0.035	1.0	1.0
	0.1, 10	0.038	0.96	0.9
	0.1, 100	0.047	1.0	1.0
	0.1, 1000	0.059	1.0	1.0
	0.1, 2000	0.054	1.0	1.0
	0.05, 10	0.039	1.0	0.92
	0.05, 100	0.051	1.0	1.0

	0.05, 1000	0.043	1.0	1.0
	0.05, 2000	0.064	1.0	1.0
	0.01, 10	0.045	0.9	0.82
	0.01, 100	0.09	1.0	1.0
	0.01, 1000	0.07	1.0	1.0
	0.01, 2000	0.056	1.0	1.0
Ecco	1.0, 10	0.08	0.98	0.96
	1.0, 100	1.386	1.0	1.0
	1.0, 1000	10.199	1.0	1.0
	1.0, 2000	19.193	1.0	1.0
	0.5, 10	0.079	0.98	0.92
	0.5, 100	1.365	1.0	1.0
	0.5, 1000	9.821	1.0	1.0
	0.5, 2000	18.663	1.0	1.0
	0.25, 10	0.097	0.95	0.91
	0.25, 100	1.281	0.99	0.97
	0.25, 1000	9.133	1.0	1.0
	0.25, 2000	16.551	1.0	1.0
	0.1, 10	0.11	1.0	0.91
	0.1, 100	1.648	1.0	1.0
	0.1, 1000	10.158	1.0	1.0
	0.1, 2000	19.056	1.0	1.0
	0.05, 10	0.108	0.99	0.91
	0.05, 100	1.702	0.99	0.94
	0.05, 1000	10.358	1.0	1.0
	0.05, 2000	22.301	1.0	1.0
	0.01, 10	0.187	0.86	0.74
	0.01, 100	1.415	0.95	0.84
	0.01, 1000	10.453	1.0	1.0
	0.01, 2000	18.437	1.0	1.0
Wachter	1.0, 10	0.03	0.98	0.96
	1.0, 100	0.033	1.0	1.0
	1.0, 1000	0.032	1.0	1.0
	1.0, 2000	0.033	1.0	1.0
	0.5, 10	0.032	0.99	0.96
	0.5, 100	0.041	1.0	1.0
	0.5, 1000	0.046	1.0	1.0
	0.5, 2000	0.03	1.0	1.0
	0.25, 10	0.039	0.96	0.88
	0.25, 100	0.044	1.0	1.0
	0.25, 1000	0.052	1.0	1.0
	0.25, 2000	0.042	1.0	1.0
	0.1, 10	0.044	0.99	0.91
	0.1, 100	0.057	1.0	1.0
	0.1, 1000	0.065	1.0	1.0
	0.1, 2000	0.044	1.0	1.0
	0.05, 10	0.045	0.94	0.82
	0.05, 100	0.061	1.0	1.0
	0.05, 1000	0.05	1.0	1.0
	0.05, 2000	0.051	1.0	1.0
	0.01, 10	0.039	0.92	0.76
	0.01, 100	0.075	1.0	1.0
	0.01, 1000	0.085	1.0	1.0
	0.01, 2000	0.064	1.0	1.0
Generic	1.0, 10	0.026	0.97	0.93
	1.0, 100	0.037	1.0	1.0

	1.0, 1000	0.032	1.0	1.0
	1.0, 2000	0.026	1.0	1.0
	0.5, 10	0.029	1.0	0.94
	0.5, 100	0.03	1.0	1.0
	0.5, 1000	0.031	1.0	1.0
	0.5, 2000	0.039	1.0	1.0
	0.25, 10	0.034	0.97	0.9
	0.25, 100	0.042	1.0	1.0
	0.25, 1000	0.037	1.0	1.0
	0.25, 2000	0.05	1.0	1.0
	0.1, 10	0.04	1.0	0.89
	0.1, 100	0.041	1.0	1.0
	0.1, 1000	0.054	1.0	1.0
	0.1, 2000	0.046	1.0	1.0
	0.05, 10	0.041	1.0	0.88
	0.05, 100	0.057	1.0	1.0
	0.05, 1000	0.052	1.0	1.0
	0.05, 2000	0.062	1.0	1.0
	0.01, 10	0.04	0.88	0.75
	0.01, 100	0.068	1.0	1.0
	0.01, 1000	0.064	1.0	1.0
	0.01, 2000	0.066	1.0	1.0
DiCE	1.0, 10	0.044	0.98	0.93
	1.0, 100	0.058	1.0	1.0
	1.0, 1000	0.054	1.0	1.0
	1.0, 2000	0.056	1.0	1.0
	0.5, 10	0.042	0.98	0.97
	0.5, 100	0.055	1.0	1.0
	0.5, 1000	0.042	1.0	1.0
	0.5, 2000	0.039	1.0	1.0
	0.25, 10	0.047	0.97	0.89
	0.25, 100	0.067	1.0	1.0
	0.25, 1000	0.057	1.0	1.0
	0.25, 2000	0.054	1.0	1.0
	0.1, 10	0.052	1.0	0.97
	0.1, 100	0.067	1.0	1.0
	0.1, 1000	0.073	1.0	1.0
	0.1, 2000	0.06	1.0	1.0
	0.05, 10	0.064	1.0	0.88
	0.05, 100	0.068	1.0	1.0
	0.05, 1000	0.075	1.0	1.0
	0.05, 2000	0.064	1.0	1.0
	0.01, 10	0.048	0.85	0.82
	0.01, 100	0.08	1.0	1.0
	0.01, 1000	0.091	1.0	1.0
	0.01, 2000	0.07	1.0	1.0
ClaPROAR	1.0, 10	0.056	0.98	0.91
	1.0, 100	0.055	1.0	1.0
	1.0, 1000	0.049	1.0	1.0
	1.0, 2000	0.048	1.0	1.0
	0.5, 10	0.048	0.97	0.93
	0.5, 100	0.052	1.0	1.0
	0.5, 1000	0.048	1.0	1.0
	0.5, 2000	0.055	1.0	1.0
	0.25, 10	0.057	0.97	0.9
	0.25, 100	0.065	1.0	1.0

	0.25, 1000	0.079	1.0	1.0
	0.25, 2000	0.057	1.0	1.0
	0.1, 10	0.062	1.0	0.86
	0.1, 100	0.121	1.0	1.0
	0.1, 1000	0.074	1.0	1.0
	0.1, 2000	0.076	1.0	1.0
	0.05, 10	0.058	1.0	0.91
	0.05, 100	0.067	1.0	1.0
	0.05, 1000	0.098	1.0	1.0
	0.05, 2000	0.083	1.0	1.0
	0.01, 10	0.068	0.86	0.75
	0.01, 100	0.1	1.0	1.0
	0.01, 1000	0.103	1.0	1.0
	0.01, 2000	0.094	1.0	1.0
Greedy	1.0, 10	0.013	1.0	1.0
	1.0, 100	0.013	1.0	1.0
	1.0, 1000	0.014	1.0	1.0
	1.0, 2000	0.013	1.0	1.0
	0.5, 10	0.017	1.0	1.0
	0.5, 100	0.017	1.0	1.0
	0.5, 1000	0.019	1.0	1.0
	0.5, 2000	0.028	1.0	1.0
	0.25, 10	0.022	1.0	1.0
	0.25, 100	0.202	1.0	1.0
	0.25, 1000	0.027	1.0	1.0
	0.25, 2000	0.024	1.0	1.0
	0.1, 10	0.04	0.96	0.62
	0.1, 100	0.045	1.0	1.0
	0.1, 1000	0.048	1.0	1.0
	0.1, 2000	0.048	1.0	1.0
	0.05, 10	0.035	0.37	0.04
	0.05, 100	0.088	1.0	1.0
	0.05, 1000	0.083	1.0	1.0
	0.05, 2000	0.086	1.0	1.0
	0.01, 10	0.03	0.02	0.0
	0.01, 100	0.392	0.98	0.71
	0.01, 1000	0.421	1.0	1.0
	0.01, 2000	0.45	1.0	1.0

Tab. 69: Parameter grid search for the moons dataset experiment 3 using a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.142	0.46	0.06
	1.0, 100	1.339	0.63	0.27
	1.0, 1000	4.97	0.98	0.89
	1.0, 2000	5.745	1.0	0.87
	0.5, 10	0.187	0.72	0.07
	0.5, 100	1.608	0.79	0.28
	0.5, 1000	3.709	1.0	0.94
	0.5, 2000	3.463	1.0	0.94
	0.25, 10	0.199	0.71	0.09
	0.25, 100	1.501	0.77	0.37
	0.25, 1000	4.081	1.0	0.94
	0.25, 2000	4.183	1.0	0.92
	0.1, 10	0.207	0.85	0.05

	0.1, 100	1.666	0.94	0.48
	0.1, 1000	4.35	1.0	0.93
	0.1, 2000	4.084	1.0	0.99
	0.05, 10	0.216	0.96	0.09
	0.05, 100	1.701	0.98	0.49
	0.05, 1000	3.674	1.0	0.98
	0.05, 2000	4.652	1.0	0.95
	0.01, 10	0.231	0.67	0.06
	0.01, 100	1.532	0.82	0.39
	0.01, 1000	4.212	1.0	0.98
	0.01, 2000	5.442	1.0	0.97
Revise	1.0, 10	0.028	1.0	0.99
	1.0, 100	0.028	1.0	1.0
	1.0, 1000	0.025	1.0	1.0
	1.0, 2000	0.027	1.0	1.0
	0.5, 10	0.028	1.0	0.97
	0.5, 100	0.029	1.0	1.0
	0.5, 1000	0.023	1.0	1.0
	0.5, 2000	0.035	1.0	1.0
	0.25, 10	0.027	0.98	0.96
	0.25, 100	0.025	1.0	1.0
	0.25, 1000	0.031	1.0	1.0
	0.25, 2000	0.034	1.0	1.0
	0.1, 10	0.026	0.99	0.95
	0.1, 100	0.038	1.0	1.0
	0.1, 1000	0.033	1.0	1.0
	0.1, 2000	0.036	1.0	1.0
	0.05, 10	0.036	0.99	0.92
	0.05, 100	0.029	1.0	1.0
	0.05, 1000	0.033	1.0	1.0
	0.05, 2000	0.035	1.0	1.0
	0.01, 10	0.032	0.92	0.83
	0.01, 100	0.063	1.0	1.0
	0.01, 1000	0.045	1.0	1.0
	0.01, 2000	0.052	1.0	1.0
Ecco	1.0, 10	0.072	1.0	0.96
	1.0, 100	1.812	0.95	0.75
	1.0, 1000	13.157	1.0	1.0
	1.0, 2000	23.43	1.0	1.0
	0.5, 10	0.077	0.98	0.98
	0.5, 100	1.804	0.92	0.81
	0.5, 1000	12.115	0.98	0.98
	0.5, 2000	22.061	1.0	1.0
	0.25, 10	0.102	0.97	0.96
	0.25, 100	1.656	0.96	0.86
	0.25, 1000	12.036	1.0	1.0
	0.25, 2000	22.189	1.0	1.0
	0.1, 10	0.086	0.99	0.94
	0.1, 100	1.71	0.98	0.87
	0.1, 1000	11.918	1.0	1.0
	0.1, 2000	22.521	1.0	1.0
	0.05, 10	0.104	0.98	0.95
	0.05, 100	1.653	0.99	0.91
	0.05, 1000	12.259	1.0	1.0
	0.05, 2000	21.185	1.0	1.0
	0.01, 10	0.1	0.89	0.81

	0.01, 100	1.565	0.95	0.87
	0.01, 1000	11.7	1.0	1.0
	0.01, 2000	18.482	1.0	1.0
Wachter	1.0, 10	0.034	0.97	0.96
	1.0, 100	0.029	1.0	1.0
	1.0, 1000	0.028	1.0	1.0
	1.0, 2000	0.033	1.0	1.0
	0.5, 10	0.025	0.99	0.96
	0.5, 100	0.029	1.0	1.0
	0.5, 1000	0.026	1.0	1.0
	0.5, 2000	0.029	1.0	1.0
	0.25, 10	0.035	0.98	0.94
	0.25, 100	0.035	1.0	1.0
	0.25, 1000	0.04	1.0	1.0
	0.25, 2000	0.045	1.0	1.0
	0.1, 10	0.041	0.99	0.92
	0.1, 100	0.048	1.0	1.0
	0.1, 1000	0.036	1.0	1.0
	0.1, 2000	0.039	1.0	1.0
	0.05, 10	0.045	1.0	0.95
	0.05, 100	0.044	1.0	1.0
	0.05, 1000	0.041	1.0	1.0
	0.05, 2000	0.039	1.0	1.0
	0.01, 10	0.038	0.93	0.89
	0.01, 100	0.039	1.0	1.0
	0.01, 1000	0.05	1.0	1.0
	0.01, 2000	0.037	1.0	1.0
Generic	1.0, 10	0.035	0.98	0.96
	1.0, 100	0.027	1.0	1.0
	1.0, 1000	0.029	1.0	1.0
	1.0, 2000	0.023	1.0	1.0
	0.5, 10	0.024	0.99	0.98
	0.5, 100	0.027	1.0	1.0
	0.5, 1000	0.03	1.0	1.0
	0.5, 2000	0.028	1.0	1.0
	0.25, 10	0.035	1.0	0.95
	0.25, 100	0.035	1.0	1.0
	0.25, 1000	0.042	1.0	1.0
	0.25, 2000	0.03	1.0	1.0
	0.1, 10	0.11	0.97	0.91
	0.1, 100	0.026	1.0	1.0
	0.1, 1000	0.034	1.0	1.0
	0.1, 2000	0.036	1.0	1.0
	0.05, 10	0.036	0.98	0.93
	0.05, 100	0.038	1.0	1.0
	0.05, 1000	0.032	1.0	1.0
	0.05, 2000	0.046	1.0	1.0
	0.01, 10	0.029	0.95	0.9
	0.01, 100	0.041	1.0	1.0
	0.01, 1000	0.045	1.0	1.0
	0.01, 2000	0.049	1.0	1.0
DiCE	1.0, 10	0.039	0.99	0.98
	1.0, 100	0.037	1.0	1.0
	1.0, 1000	0.039	1.0	1.0
	1.0, 2000	0.046	1.0	1.0
	0.5, 10	0.034	1.0	0.99

	0.5, 100	0.039	1.0	1.0
	0.5, 1000	0.037	1.0	1.0
	0.5, 2000	0.032	1.0	1.0
	0.25, 10	0.039	0.99	0.98
	0.25, 100	0.039	1.0	1.0
	0.25, 1000	0.048	1.0	1.0
	0.25, 2000	0.035	1.0	1.0
	0.1, 10	0.047	0.96	0.93
	0.1, 100	0.054	1.0	1.0
	0.1, 1000	0.046	1.0	1.0
	0.1, 2000	0.045	1.0	1.0
	0.05, 10	0.047	0.99	0.95
	0.05, 100	0.055	1.0	1.0
	0.05, 1000	0.041	1.0	1.0
	0.05, 2000	0.062	1.0	1.0
	0.01, 10	0.052	0.89	0.8
	0.01, 100	0.074	1.0	1.0
	0.01, 1000	0.057	1.0	1.0
	0.01, 2000	0.061	1.0	1.0
ClaPROAR	1.0, 10	0.039	0.99	0.98
	1.0, 100	0.044	1.0	1.0
	1.0, 1000	0.051	1.0	1.0
	1.0, 2000	0.046	1.0	1.0
	0.5, 10	0.039	0.99	0.99
	0.5, 100	0.046	1.0	1.0
	0.5, 1000	0.049	1.0	1.0
	0.5, 2000	0.045	1.0	1.0
	0.25, 10	0.047	0.97	0.93
	0.25, 100	0.052	1.0	1.0
	0.25, 1000	0.049	1.0	1.0
	0.25, 2000	0.056	1.0	1.0
	0.1, 10	0.053	0.99	0.93
	0.1, 100	0.054	1.0	1.0
	0.1, 1000	0.044	1.0	1.0
	0.1, 2000	0.054	1.0	1.0
	0.05, 10	0.047	0.98	0.96
	0.05, 100	0.071	1.0	1.0
	0.05, 1000	0.047	1.0	1.0
	0.05, 2000	0.059	1.0	1.0
	0.01, 10	0.062	0.92	0.86
	0.01, 100	0.07	1.0	1.0
	0.01, 1000	0.075	1.0	1.0
	0.01, 2000	0.076	1.0	1.0
Greedy	1.0, 10	0.015	1.0	1.0
	1.0, 100	0.013	1.0	1.0
	1.0, 1000	0.013	1.0	1.0
	1.0, 2000	0.013	1.0	1.0
	0.5, 10	0.019	1.0	1.0
	0.5, 100	0.016	1.0	1.0
	0.5, 1000	0.017	1.0	1.0
	0.5, 2000	0.016	1.0	1.0
	0.25, 10	0.023	1.0	1.0
	0.25, 100	0.025	1.0	1.0
	0.25, 1000	0.023	1.0	1.0
	0.25, 2000	0.023	1.0	1.0
	0.1, 10	0.038	0.99	0.8

	0.1, 100	0.051	1.0	1.0
	0.1, 1000	0.04	1.0	1.0
	0.1, 2000	0.043	1.0	1.0
	0.05, 10	0.034	0.37	0.07
	0.05, 100	0.083	1.0	1.0
	0.05, 1000	0.076	1.0	1.0
	0.05, 2000	0.074	1.0	1.0
	0.01, 10	0.028	0.0	0.0
	0.01, 100	0.367	0.96	0.72
	0.01, 1000	0.377	1.0	1.0
	0.01, 2000	0.414	1.0	1.0

Tab. 70: Parameter grid search for the moons dataset experiment 4 using a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.163	0.56	0.04
	1.0, 100	1.023	0.86	0.56
	1.0, 1000	2.626	1.0	0.95
	1.0, 2000	3.141	1.0	0.9
	0.5, 10	0.166	0.75	0.1
	0.5, 100	1.299	0.87	0.59
	0.5, 1000	2.251	1.0	0.93
	0.5, 2000	2.301	1.0	0.91
	0.25, 10	0.184	0.89	0.13
	0.25, 100	1.307	0.92	0.67
	0.25, 1000	1.525	1.0	0.97
	0.25, 2000	1.99	1.0	0.96
	0.1, 10	0.193	0.92	0.1
	0.1, 100	1.225	0.95	0.74
	0.1, 1000	1.991	1.0	0.98
	0.1, 2000	2.089	1.0	0.98
	0.05, 10	0.167	0.71	0.09
	0.05, 100	1.121	0.92	0.69
	0.05, 1000	1.72	1.0	0.95
	0.05, 2000	2.277	1.0	0.99
	0.01, 10	0.16	0.6	0.12
	0.01, 100	1.063	0.82	0.62
	0.01, 1000	2.472	1.0	0.98
	0.01, 2000	2.182	1.0	0.98
Revise	1.0, 10	0.04	0.97	0.92
	1.0, 100	0.05	1.0	1.0
	1.0, 1000	0.035	1.0	1.0
	1.0, 2000	0.039	1.0	1.0
	0.5, 10	0.044	0.95	0.87
	0.5, 100	0.059	1.0	1.0
	0.5, 1000	0.067	1.0	1.0
	0.5, 2000	0.05	1.0	1.0
	0.25, 10	0.048	0.92	0.79
	0.25, 100	0.069	1.0	1.0
	0.25, 1000	0.076	1.0	1.0
	0.25, 2000	0.081	1.0	1.0
	0.1, 10	0.073	0.96	0.73
	0.1, 100	0.149	1.0	0.99
	0.1, 1000	0.126	1.0	1.0
	0.1, 2000	0.127	1.0	1.0

	0.05, 10	0.062	0.91	0.53
	0.05, 100	0.152	1.0	1.0
	0.05, 1000	0.17	1.0	1.0
	0.05, 2000	0.129	1.0	1.0
	0.01, 10	0.051	0.74	0.51
	0.01, 100	0.143	1.0	0.99
	0.01, 1000	0.168	1.0	1.0
	0.01, 2000	0.133	1.0	1.0
Ecco	1.0, 10	0.124	0.94	0.88
	1.0, 100	1.491	0.98	0.88
	1.0, 1000	12.34	1.0	0.95
	1.0, 2000	24.429	0.99	0.98
	0.5, 10	0.133	0.93	0.81
	0.5, 100	1.515	0.92	0.82
	0.5, 1000	12.788	0.96	0.91
	0.5, 2000	25.393	0.97	0.93
	0.25, 10	0.139	0.99	0.76
	0.25, 100	1.763	0.88	0.65
	0.25, 1000	15.458	0.88	0.76
	0.25, 2000	25.834	0.94	0.87
	0.1, 10	0.174	0.97	0.68
	0.1, 100	2.057	0.98	0.65
	0.1, 1000	14.735	0.98	0.83
	0.1, 2000	32.113	0.96	0.79
	0.05, 10	0.173	0.88	0.57
	0.05, 100	1.667	0.9	0.7
	0.05, 1000	15.292	0.93	0.74
	0.05, 2000	25.69	0.93	0.76
	0.01, 10	0.167	0.76	0.52
	0.01, 100	1.619	0.8	0.6
	0.01, 1000	12.698	0.87	0.72
	0.01, 2000	23.223	0.88	0.77
Wachter	1.0, 10	0.039	0.97	0.91
	1.0, 100	0.049	1.0	1.0
	1.0, 1000	0.063	1.0	1.0
	1.0, 2000	0.047	1.0	1.0
	0.5, 10	0.217	0.95	0.86
	0.5, 100	0.047	1.0	1.0
	0.5, 1000	0.045	1.0	1.0
	0.5, 2000	0.057	1.0	1.0
	0.25, 10	0.05	0.94	0.75
	0.25, 100	0.088	1.0	1.0
	0.25, 1000	0.095	1.0	1.0
	0.25, 2000	0.079	1.0	1.0
	0.1, 10	0.08	0.95	0.69
	0.1, 100	0.157	1.0	0.99
	0.1, 1000	0.167	1.0	1.0
	0.1, 2000	0.138	1.0	1.0
	0.05, 10	0.084	0.9	0.59
	0.05, 100	0.145	1.0	1.0
	0.05, 1000	0.169	1.0	1.0
	0.05, 2000	0.175	1.0	1.0
	0.01, 10	0.066	0.85	0.59
	0.01, 100	0.151	1.0	1.0
	0.01, 1000	0.179	1.0	1.0
	0.01, 2000	0.119	1.0	1.0

Generic	1.0, 10	0.035	0.97	0.9
	1.0, 100	0.036	1.0	1.0
	1.0, 1000	0.041	1.0	1.0
	1.0, 2000	0.06	1.0	1.0
	0.5, 10	0.038	0.93	0.86
	0.5, 100	0.061	1.0	1.0
	0.5, 1000	0.051	1.0	1.0
	0.5, 2000	0.045	1.0	1.0
	0.25, 10	0.043	0.92	0.79
	0.25, 100	0.088	1.0	1.0
	0.25, 1000	0.071	1.0	1.0
	0.25, 2000	0.093	1.0	1.0
	0.1, 10	0.059	0.95	0.68
	0.1, 100	0.111	1.0	1.0
	0.1, 1000	0.156	1.0	1.0
	0.1, 2000	0.127	1.0	1.0
	0.05, 10	0.053	0.86	0.56
	0.05, 100	0.159	1.0	1.0
	0.05, 1000	0.112	1.0	1.0
	0.05, 2000	0.125	1.0	1.0
	0.01, 10	0.057	0.73	0.51
	0.01, 100	0.143	1.0	1.0
	0.01, 1000	0.197	1.0	1.0
	0.01, 2000	0.145	1.0	1.0
DiCE	1.0, 10	0.052	0.89	0.85
	1.0, 100	0.06	1.0	1.0
	1.0, 1000	0.048	1.0	1.0
	1.0, 2000	0.046	1.0	1.0
	0.5, 10	0.046	0.98	0.96
	0.5, 100	0.1	1.0	1.0
	0.5, 1000	0.1	1.0	1.0
	0.5, 2000	0.07	1.0	1.0
	0.25, 10	0.07	0.93	0.71
	0.25, 100	0.111	1.0	1.0
	0.25, 1000	0.118	1.0	1.0
	0.25, 2000	0.102	1.0	1.0
	0.1, 10	0.096	0.99	0.71
	0.1, 100	0.156	1.0	1.0
	0.1, 1000	0.171	1.0	1.0
	0.1, 2000	0.218	1.0	1.0
	0.05, 10	0.102	0.92	0.64
	0.05, 100	0.193	1.0	1.0
	0.05, 1000	0.195	1.0	1.0
	0.05, 2000	0.155	1.0	1.0
	0.01, 10	0.074	0.68	0.44
	0.01, 100	0.246	0.99	0.99
	0.01, 1000	0.198	1.0	1.0
	0.01, 2000	0.208	1.0	1.0
ClaPROAR	1.0, 10	0.052	0.97	0.9
	1.0, 100	0.081	1.0	1.0
	1.0, 1000	0.073	1.0	1.0
	1.0, 2000	0.058	1.0	1.0
	0.5, 10	0.063	0.94	0.85
	0.5, 100	0.089	1.0	1.0
	0.5, 1000	0.073	1.0	1.0

	0.5, 2000	0.08	1.0	1.0
	0.25, 10	0.092	0.96	0.74
	0.25, 100	0.122	1.0	1.0
	0.25, 1000	0.125	1.0	1.0
	0.25, 2000	0.113	1.0	1.0
	0.1, 10	0.102	0.97	0.64
	0.1, 100	0.206	1.0	0.99
	0.1, 1000	0.194	1.0	1.0
	0.1, 2000	0.193	1.0	1.0
	0.05, 10	0.102	0.9	0.53
	0.05, 100	0.221	1.0	1.0
	0.05, 1000	0.216	1.0	1.0
	0.05, 2000	0.224	1.0	1.0
	0.01, 10	0.092	0.77	0.48
	0.01, 100	0.272	0.99	0.99
	0.01, 1000	0.25	1.0	1.0
	0.01, 2000	0.193	1.0	1.0
Greedy	1.0, 10	0.017	1.0	1.0
	1.0, 100	0.014	1.0	1.0
	1.0, 1000	0.015	1.0	1.0
	1.0, 2000	0.018	1.0	1.0
	0.5, 10	0.021	1.0	1.0
	0.5, 100	0.039	1.0	1.0
	0.5, 1000	0.019	1.0	1.0
	0.5, 2000	0.019	1.0	1.0
	0.25, 10	0.029	1.0	1.0
	0.25, 100	0.031	1.0	1.0
	0.25, 1000	0.031	1.0	1.0
	0.25, 2000	0.029	1.0	1.0
	0.1, 10	0.044	0.94	0.45
	0.1, 100	0.066	1.0	1.0
	0.1, 1000	0.055	1.0	1.0
	0.1, 2000	0.074	1.0	1.0
	0.05, 10	0.033	0.32	0.02
	0.05, 100	0.095	1.0	1.0
	0.05, 1000	0.095	1.0	1.0
	0.05, 2000	0.098	1.0	1.0
	0.01, 10	0.029	0.02	0.0
	0.01, 100	0.415	0.98	0.55
	0.01, 1000	0.493	1.0	1.0
	0.01, 2000	0.577	1.0	1.0

Tab. 71: Parameter grid search for the moons dataset experiment 5 using a deep ensemble

F.1.7. GMCS dataset using MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.219	0.89	0.0
	1.0, 100	1.959	0.96	0.0
	1.0, 1000	19.037	0.97	0.0
	1.0, 2000	41.161	1.0	0.0
	0.5, 10	0.205	0.9	0.0
	0.5, 100	1.922	0.95	0.0
	0.5, 1000	20.078	0.9	0.0
	0.5, 2000	41.548	0.92	0.0
	0.25, 10	0.182	0.92	0.0

	0.25, 100	2.099	0.97	0.0
	0.25, 1000	21.243	0.97	0.0
	0.25, 2000	43.914	0.96	0.0
	0.1, 10	0.176	0.97	0.0
	0.1, 100	2.209	0.99	0.0
	0.1, 1000	22.384	0.99	0.0
	0.1, 2000	45.671	0.98	0.0
	0.05, 10	0.199	1.0	0.0
	0.05, 100	2.452	1.0	0.0
	0.05, 1000	23.624	1.0	0.0
	0.05, 2000	46.718	1.0	0.0
	0.01, 10	0.216	0.96	0.0
	0.01, 100	2.144	0.98	0.0
	0.01, 1000	24.05	1.0	0.0
	0.01, 2000	48.239	1.0	0.0
Revise	1.0, 10	1.074	1.0	0.03
	1.0, 100	1.127	1.0	0.09
	1.0, 1000	13.042	1.0	0.12
	1.0, 2000	22.811	1.0	0.32
	0.5, 10	0.096	0.97	0.04
	0.5, 100	1.113	1.0	0.1
	0.5, 1000	13.517	1.0	0.11
	0.5, 2000	24.469	1.0	0.19
	0.25, 10	0.101	0.98	0.09
	0.25, 100	1.1	1.0	0.11
	0.25, 1000	11.999	1.0	0.18
	0.25, 2000	25.92	1.0	0.17
	0.1, 10	0.091	0.93	0.14
	0.1, 100	1.133	1.0	0.27
	0.1, 1000	12.131	1.0	0.24
	0.1, 2000	20.293	0.98	0.32
	0.05, 10	0.082	0.88	0.17
	0.05, 100	0.782	0.97	0.35
	0.05, 1000	9.205	0.99	0.39
	0.05, 2000	14.415	0.98	0.49
	0.01, 10	0.069	0.61	0.13
	0.01, 100	0.77	0.85	0.33
	0.01, 1000	7.059	0.91	0.5
	0.01, 2000	14.475	0.89	0.43
Ecco	1.0, 10	0.378	0.98	0.08
	1.0, 100	0.917	1.0	1.0
	1.0, 1000	9.057	1.0	1.0
	1.0, 2000	17.961	1.0	1.0
	0.5, 10	0.267	0.98	0.04
	0.5, 100	0.656	1.0	1.0
	0.5, 1000	8.972	1.0	1.0
	0.5, 2000	15.78	1.0	1.0
	0.25, 10	0.251	0.98	0.05
	0.25, 100	0.87	0.98	0.98
	0.25, 1000	9.006	1.0	1.0
	0.25, 2000	18.041	1.0	1.0
	0.1, 10	0.236	0.97	0.16
	0.1, 100	0.915	1.0	0.97
	0.1, 1000	9.413	1.0	1.0
	0.1, 2000	18.723	0.99	0.99
	0.05, 10	0.219	0.86	0.24

	0.05, 100	1.268	1.0	0.92
	0.05, 1000	7.886	0.99	0.99
	0.05, 2000	18.878	0.98	0.98
	0.01, 10	0.23	0.62	0.09
	0.01, 100	1.367	0.84	0.7
	0.01, 1000	9.031	0.94	0.94
	0.01, 2000	18.117	0.94	0.94
Wachter	1.0, 10	0.105	1.0	0.07
	1.0, 100	1.08	1.0	0.08
	1.0, 1000	10.097	0.99	0.21
	1.0, 2000	22.32	1.0	0.26
	0.5, 10	0.103	0.98	0.02
	0.5, 100	1.089	1.0	0.1
	0.5, 1000	12.139	1.0	0.15
	0.5, 2000	23.367	1.0	0.16
	0.25, 10	0.124	0.98	0.1
	0.25, 100	1.138	1.0	0.09
	0.25, 1000	11.006	1.0	0.21
	0.25, 2000	21.733	1.0	0.22
	0.1, 10	0.092	0.96	0.2
	0.1, 100	0.988	1.0	0.26
	0.1, 1000	9.647	0.99	0.33
	0.1, 2000	18.745	1.0	0.36
	0.05, 10	0.087	0.85	0.18
	0.05, 100	0.954	0.98	0.32
	0.05, 1000	8.904	0.98	0.37
	0.05, 2000	16.452	0.98	0.44
	0.01, 10	0.071	0.57	0.09
	0.01, 100	0.877	0.95	0.42
	0.01, 1000	7.802	0.89	0.4
	0.01, 2000	16.965	0.87	0.35
Generic	1.0, 10	0.095	0.98	0.06
	1.0, 100	1.151	1.0	0.08
	1.0, 1000	11.529	1.0	0.14
	1.0, 2000	21.85	1.0	0.25
	0.5, 10	0.091	0.98	0.09
	0.5, 100	1.217	1.0	0.09
	0.5, 1000	11.372	1.0	0.16
	0.5, 2000	22.67	1.0	0.17
	0.25, 10	0.088	0.96	0.11
	0.25, 100	1.018	0.99	0.16
	0.25, 1000	10.616	1.0	0.24
	0.25, 2000	24.234	1.0	0.15
	0.1, 10	0.115	0.99	0.13
	0.1, 100	0.896	1.0	0.28
	0.1, 1000	9.552	0.99	0.27
	0.1, 2000	20.965	1.0	0.31
	0.05, 10	0.256	0.9	0.2
	0.05, 100	0.945	0.99	0.38
	0.05, 1000	8.262	0.99	0.45
	0.05, 2000	15.046	0.99	0.51
	0.01, 10	0.067	0.62	0.14
	0.01, 100	0.677	0.93	0.4
	0.01, 1000	8.101	0.94	0.43
	0.01, 2000	14.112	0.84	0.39
DiCE	1.0, 10	0.144	0.99	0.05

	1.0, 100	1.733	1.0	0.09
	1.0, 1000	16.037	1.0	0.19
	1.0, 2000	34.012	1.0	0.16
	0.5, 10	0.132	0.98	0.07
	0.5, 100	1.69	1.0	0.1
	0.5, 1000	16.325	1.0	0.17
	0.5, 2000	35.425	1.0	0.09
	0.25, 10	0.163	0.98	0.14
	0.25, 100	1.369	1.0	0.17
	0.25, 1000	16.399	0.99	0.14
	0.25, 2000	34.541	1.0	0.11
	0.1, 10	0.169	0.97	0.18
	0.1, 100	1.461	0.99	0.22
	0.1, 1000	15.186	1.0	0.28
	0.1, 2000	26.815	0.99	0.33
	0.05, 10	0.114	0.85	0.15
	0.05, 100	1.241	1.0	0.41
	0.05, 1000	11.933	1.0	0.41
	0.05, 2000	24.046	0.98	0.45
	0.01, 10	0.102	0.68	0.1
	0.01, 100	1.042	0.9	0.43
	0.01, 1000	10.79	0.86	0.38
	0.01, 2000	20.362	0.91	0.47
ClaPROAR	1.0, 10	0.154	1.0	0.05
	1.0, 100	2.133	1.0	0.08
	1.0, 1000	20.299	1.0	0.11
	1.0, 2000	40.075	1.0	0.23
	0.5, 10	0.16	1.0	0.09
	0.5, 100	1.883	1.0	0.07
	0.5, 1000	21.299	1.0	0.11
	0.5, 2000	34.476	1.0	0.21
	0.25, 10	0.176	0.97	0.1
	0.25, 100	1.732	1.0	0.18
	0.25, 1000	16.198	0.99	0.19
	0.25, 2000	37.167	1.0	0.18
	0.1, 10	0.144	0.94	0.15
	0.1, 100	1.566	0.98	0.23
	0.1, 1000	13.751	1.0	0.33
	0.1, 2000	32.603	0.99	0.23
	0.05, 10	0.127	0.83	0.22
	0.05, 100	1.358	1.0	0.41
	0.05, 1000	13.414	1.0	0.4
	0.05, 2000	23.375	1.0	0.49
	0.01, 10	0.142	0.67	0.09
	0.01, 100	1.176	0.89	0.35
	0.01, 1000	10.708	0.88	0.47
	0.01, 2000	23.621	0.9	0.41
Greedy	1.0, 10	0.022	1.0	1.0
	1.0, 100	0.021	1.0	1.0
	1.0, 1000	0.018	1.0	1.0
	1.0, 2000	0.026	1.0	1.0
	0.5, 10	0.027	1.0	1.0
	0.5, 100	0.026	1.0	1.0
	0.5, 1000	0.043	1.0	1.0
	0.5, 2000	0.028	1.0	1.0
	0.25, 10	0.044	0.99	0.86

	0.25, 100	0.051	1.0	1.0
	0.25, 1000	0.172	0.99	0.99
	0.25, 2000	0.049	1.0	1.0
	0.1, 10	0.059	0.98	0.42
	0.1, 100	0.116	0.98	0.98
	0.1, 1000	0.211	0.99	0.99
	0.1, 2000	0.342	0.99	0.99
	0.05, 10	0.059	0.88	0.24
	0.05, 100	0.259	0.97	0.97
	0.05, 1000	0.457	0.97	0.97
	0.05, 2000	0.648	0.97	0.97
	0.01, 10	0.197	0.58	0.0
	0.01, 100	0.627	0.91	0.43
	0.01, 1000	1.292	0.97	0.97
	0.01, 2000	1.402	0.99	0.99

Tab. 72: Parameter grid search using the GMCS dataset experiment 1 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.305	0.74	0.0
	1.0, 100	2.189	0.68	0.0
	1.0, 1000	24.133	0.76	0.0
	1.0, 2000	51.124	0.81	0.01
	0.5, 10	0.268	0.85	0.0
	0.5, 100	2.624	0.85	0.0
	0.5, 1000	26.655	0.87	0.0
	0.5, 2000	53.856	0.86	0.0
	0.25, 10	0.208	0.86	0.0
	0.25, 100	2.727	0.87	0.0
	0.25, 1000	28.035	0.91	0.0
	0.25, 2000	56.63	0.9	0.0
	0.1, 10	0.224	0.87	0.0
	0.1, 100	2.876	0.89	0.01
	0.1, 1000	32.814	0.98	0.0
	0.1, 2000	63.875	0.92	0.0
	0.05, 10	0.275	0.8	0.0
	0.05, 100	2.785	0.94	0.0
	0.05, 1000	30.259	0.97	0.01
	0.05, 2000	61.801	1.0	0.0
	0.01, 10	0.178	0.71	0.0
	0.01, 100	2.622	0.84	0.0
	0.01, 1000	31.132	0.93	0.0
	0.01, 2000	61.853	0.96	0.01
Revise	1.0, 10	0.097	0.99	0.08
	1.0, 100	1.189	1.0	0.07
	1.0, 1000	11.999	1.0	0.21
	1.0, 2000	24.655	1.0	0.16
	0.5, 10	0.095	0.99	0.05
	0.5, 100	1.138	1.0	0.03
	0.5, 1000	12.566	1.0	0.16
	0.5, 2000	25.838	1.0	0.1
	0.25, 10	0.09	0.95	0.13
	0.25, 100	1.046	1.0	0.16
	0.25, 1000	12.232	1.0	0.22
	0.25, 2000	24.276	1.0	0.17

	0.1, 10	0.094	0.91	0.11
	0.1, 100	0.975	1.0	0.29
	0.1, 1000	12.13	1.0	0.28
	0.1, 2000	24.868	0.99	0.21
	0.05, 10	0.079	0.88	0.14
	0.05, 100	0.847	0.96	0.38
	0.05, 1000	9.342	1.0	0.43
	0.05, 2000	19.2	0.98	0.33
	0.01, 10	0.072	0.66	0.1
	0.01, 100	0.745	0.83	0.32
	0.01, 1000	8.06	0.91	0.41
	0.01, 2000	14.714	0.89	0.41
Ecco	1.0, 10	0.296	1.0	0.03
	1.0, 100	0.656	1.0	1.0
	1.0, 1000	9.55	1.0	1.0
	1.0, 2000	19.271	1.0	1.0
	0.5, 10	0.245	0.98	0.06
	0.5, 100	0.775	1.0	1.0
	0.5, 1000	8.058	1.0	1.0
	0.5, 2000	15.989	1.0	1.0
	0.25, 10	0.257	0.97	0.07
	0.25, 100	0.947	1.0	1.0
	0.25, 1000	8.542	1.0	1.0
	0.25, 2000	21.922	1.0	1.0
	0.1, 10	0.272	0.96	0.12
	0.1, 100	0.974	1.0	0.98
	0.1, 1000	10.155	0.97	0.97
	0.1, 2000	18.68	1.0	1.0
	0.05, 10	0.237	0.8	0.2
	0.05, 100	1.227	0.99	0.91
	0.05, 1000	8.979	1.0	1.0
	0.05, 2000	20.306	0.98	0.98
	0.01, 10	0.198	0.63	0.12
	0.01, 100	1.228	0.86	0.76
	0.01, 1000	9.122	0.96	0.96
	0.01, 2000	18.682	0.92	0.92
Wachter	1.0, 10	0.108	0.99	0.04
	1.0, 100	1.089	1.0	0.08
	1.0, 1000	11.15	1.0	0.16
	1.0, 2000	24.327	1.0	0.2
	0.5, 10	0.129	0.98	0.06
	0.5, 100	1.184	1.0	0.13
	0.5, 1000	12.242	1.0	0.18
	0.5, 2000	23.699	1.0	0.18
	0.25, 10	0.099	0.94	0.06
	0.25, 100	1.2	0.99	0.12
	0.25, 1000	11.874	1.0	0.19
	0.25, 2000	24.688	1.0	0.13
	0.1, 10	0.091	0.93	0.15
	0.1, 100	0.994	1.0	0.31
	0.1, 1000	11.635	0.99	0.23
	0.1, 2000	21.625	0.99	0.26
	0.05, 10	0.087	0.86	0.19
	0.05, 100	0.767	1.0	0.46
	0.05, 1000	8.779	1.0	0.41
	0.05, 2000	16.983	1.0	0.46

	0.01, 10	0.075	0.61	0.16
	0.01, 100	0.87	0.89	0.38
	0.01, 1000	7.667	0.97	0.5
	0.01, 2000	14.528	0.96	0.47
Generic	1.0, 10	0.093	0.99	0.04
	1.0, 100	1.15	1.0	0.1
	1.0, 1000	11.026	1.0	0.21
	1.0, 2000	22.352	1.0	0.22
	0.5, 10	0.092	0.95	0.05
	0.5, 100	1.021	1.0	0.12
	0.5, 1000	12.082	1.0	0.09
	0.5, 2000	23.8	1.0	0.16
	0.25, 10	0.094	0.99	0.06
	0.25, 100	0.948	1.0	0.25
	0.25, 1000	11.929	1.0	0.17
	0.25, 2000	23.049	1.0	0.15
	0.1, 10	0.091	0.96	0.16
	0.1, 100	0.981	0.99	0.3
	0.1, 1000	9.48	1.0	0.35
	0.1, 2000	19.19	1.0	0.32
	0.05, 10	0.082	0.9	0.17
	0.05, 100	0.798	0.99	0.47
	0.05, 1000	10.419	1.0	0.43
	0.05, 2000	18.064	0.99	0.44
	0.01, 10	0.071	0.63	0.1
	0.01, 100	0.705	0.87	0.44
	0.01, 1000	7.74	0.92	0.5
	0.01, 2000	14.738	0.86	0.42
DiCE	1.0, 10	0.147	1.0	0.01
	1.0, 100	1.908	1.0	0.11
	1.0, 1000	17.459	1.0	0.18
	1.0, 2000	33.401	1.0	0.2
	0.5, 10	0.139	0.99	0.07
	0.5, 100	1.859	1.0	0.09
	0.5, 1000	17.567	1.0	0.13
	0.5, 2000	36.476	1.0	0.11
	0.25, 10	0.159	0.97	0.14
	0.25, 100	1.755	1.0	0.1
	0.25, 1000	16.558	1.0	0.22
	0.25, 2000	33.969	1.0	0.25
	0.1, 10	0.136	0.95	0.15
	0.1, 100	1.408	0.99	0.31
	0.1, 1000	15.993	1.0	0.31
	0.1, 2000	32.461	1.0	0.28
	0.05, 10	0.191	0.84	0.15
	0.05, 100	1.375	0.99	0.42
	0.05, 1000	13.387	0.98	0.41
	0.05, 2000	24.832	0.99	0.49
	0.01, 10	0.102	0.6	0.08
	0.01, 100	1.293	0.85	0.34
	0.01, 1000	12.944	0.92	0.42
	0.01, 2000	24.468	0.93	0.48
ClaPROAR	1.0, 10	0.171	1.0	0.05
	1.0, 100	2.068	1.0	0.09
	1.0, 1000	20.376	1.0	0.23
	1.0, 2000	42.394	1.0	0.24

	0.5, 10	0.161	0.99	0.08
	0.5, 100	2.428	1.0	0.1
	0.5, 1000	23.411	1.0	0.13
	0.5, 2000	47.246	1.0	0.11
	0.25, 10	0.322	0.96	0.07
	0.25, 100	1.901	1.0	0.22
	0.25, 1000	20.806	1.0	0.18
	0.25, 2000	39.603	1.0	0.28
	0.1, 10	0.222	0.97	0.14
	0.1, 100	2.006	0.98	0.21
	0.1, 1000	18.553	1.0	0.32
	0.1, 2000	41.22	1.0	0.24
	0.05, 10	0.169	0.86	0.16
	0.05, 100	1.557	0.99	0.35
	0.05, 1000	16.25	1.0	0.44
	0.05, 2000	32.884	1.0	0.4
	0.01, 10	0.123	0.61	0.11
	0.01, 100	1.266	0.85	0.36
	0.01, 1000	15.484	0.94	0.4
	0.01, 2000	22.182	0.95	0.48
Greedy	1.0, 10	0.029	0.98	0.98
	1.0, 100	0.021	1.0	1.0
	1.0, 1000	0.019	1.0	1.0
	1.0, 2000	0.02	1.0	1.0
	0.5, 10	0.047	1.0	1.0
	0.5, 100	0.034	1.0	1.0
	0.5, 1000	0.131	0.99	0.99
	0.5, 2000	0.242	0.99	0.99
	0.25, 10	0.045	1.0	0.8
	0.25, 100	0.059	0.99	0.99
	0.25, 1000	0.057	1.0	1.0
	0.25, 2000	0.05	1.0	1.0
	0.1, 10	0.082	0.99	0.43
	0.1, 100	0.119	0.98	0.98
	0.1, 1000	0.216	0.99	0.99
	0.1, 2000	0.229	1.0	1.0
	0.05, 10	0.061	0.94	0.23
	0.05, 100	0.32	0.98	0.98
	0.05, 1000	0.446	0.98	0.98
	0.05, 2000	0.265	1.0	1.0
	0.01, 10	0.047	0.47	0.0
	0.01, 100	0.621	0.98	0.46
	0.01, 1000	1.377	1.0	1.0
	0.01, 2000	1.515	0.99	0.99

Tab. 73: Parameter grid search using the GMCS dataset experiment 2 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.216	0.73	0.0
	1.0, 100	2.238	0.75	0.0
	1.0, 1000	22.905	0.81	0.0
	1.0, 2000	45.764	0.69	0.0
	0.5, 10	0.213	0.85	0.0
	0.5, 100	2.401	0.84	0.0
	0.5, 1000	26.171	0.75	0.0

	0.5, 2000	50.972	0.77	0.0
	0.25, 10	0.244	0.77	0.0
	0.25, 100	2.671	0.9	0.0
	0.25, 1000	30.164	0.88	0.01
	0.25, 2000	57.354	0.88	0.01
	0.1, 10	0.205	0.89	0.0
	0.1, 100	2.969	0.88	0.0
	0.1, 1000	29.535	0.98	0.0
	0.1, 2000	54.982	0.9	0.02
	0.05, 10	0.199	0.91	0.01
	0.05, 100	2.887	0.91	0.0
	0.05, 1000	31.537	0.99	0.0
	0.05, 2000	67.454	0.98	0.0
	0.01, 10	0.199	0.53	0.0
	0.01, 100	2.542	0.9	0.0
	0.01, 1000	33.462	0.93	0.02
	0.01, 2000	66.679	0.94	0.0
Revise	1.0, 10	0.233	1.0	0.06
	1.0, 100	1.196	1.0	0.09
	1.0, 1000	13.723	1.0	0.15
	1.0, 2000	25.987	1.0	0.16
	0.5, 10	0.096	0.98	0.07
	0.5, 100	1.213	1.0	0.07
	0.5, 1000	13.416	1.0	0.1
	0.5, 2000	25.879	1.0	0.13
	0.25, 10	0.095	0.97	0.08
	0.25, 100	1.079	1.0	0.11
	0.25, 1000	11.489	1.0	0.2
	0.25, 2000	25.318	1.0	0.18
	0.1, 10	0.088	0.96	0.17
	0.1, 100	1.09	1.0	0.17
	0.1, 1000	10.357	1.0	0.35
	0.1, 2000	23.326	1.0	0.24
	0.05, 10	0.087	0.81	0.12
	0.05, 100	0.981	0.99	0.31
	0.05, 1000	8.896	0.99	0.38
	0.05, 2000	20.775	1.0	0.38
	0.01, 10	0.07	0.59	0.11
	0.01, 100	0.879	0.89	0.34
	0.01, 1000	8.364	0.9	0.41
	0.01, 2000	17.466	0.92	0.4
Ecco	1.0, 10	0.281	0.99	0.09
	1.0, 100	0.853	1.0	0.99
	1.0, 1000	7.902	1.0	1.0
	1.0, 2000	17.165	1.0	1.0
	0.5, 10	0.251	0.99	0.07
	0.5, 100	0.735	1.0	1.0
	0.5, 1000	7.927	1.0	1.0
	0.5, 2000	16.658	1.0	1.0
	0.25, 10	0.251	0.97	0.03
	0.25, 100	0.822	1.0	1.0
	0.25, 1000	8.393	1.0	1.0
	0.25, 2000	16.793	1.0	1.0
	0.1, 10	0.263	0.95	0.13
	0.1, 100	0.776	1.0	0.97
	0.1, 1000	7.431	1.0	1.0

	0.1, 2000	16.339	1.0	1.0
	0.05, 10	0.231	0.89	0.09
	0.05, 100	1.01	0.98	0.92
	0.05, 1000	7.162	0.99	0.99
	0.05, 2000	19.887	1.0	1.0
	0.01, 10	0.175	0.61	0.16
	0.01, 100	1.281	0.87	0.75
	0.01, 1000	6.952	0.91	0.91
	0.01, 2000	15.169	0.89	0.89
Wachter	1.0, 10	0.106	1.0	0.03
	1.0, 100	1.149	1.0	0.08
	1.0, 1000	12.961	1.0	0.14
	1.0, 2000	24.894	0.99	0.22
	0.5, 10	0.103	0.98	0.09
	0.5, 100	1.197	1.0	0.08
	0.5, 1000	13.391	1.0	0.11
	0.5, 2000	26.008	1.0	0.11
	0.25, 10	0.104	0.96	0.13
	0.25, 100	1.184	0.99	0.12
	0.25, 1000	12.097	1.0	0.16
	0.25, 2000	25.152	1.0	0.22
	0.1, 10	0.105	0.95	0.1
	0.1, 100	1.976	0.96	0.19
	0.1, 1000	9.688	1.0	0.26
	0.1, 2000	21.394	0.99	0.2
	0.05, 10	0.09	0.87	0.1
	0.05, 100	1.033	0.99	0.43
	0.05, 1000	8.587	1.0	0.39
	0.05, 2000	14.785	1.0	0.49
	0.01, 10	0.079	0.71	0.14
	0.01, 100	0.782	0.9	0.29
	0.01, 1000	7.985	0.94	0.42
	0.01, 2000	14.057	0.92	0.44
Generic	1.0, 10	0.093	1.0	0.08
	1.0, 100	1.098	0.98	0.08
	1.0, 1000	10.655	1.0	0.16
	1.0, 2000	22.042	1.0	0.25
	0.5, 10	0.093	1.0	0.07
	0.5, 100	1.097	1.0	0.08
	0.5, 1000	10.192	1.0	0.18
	0.5, 2000	22.882	1.0	0.09
	0.25, 10	0.126	0.97	0.11
	0.25, 100	0.966	1.0	0.16
	0.25, 1000	10.699	1.0	0.17
	0.25, 2000	20.836	1.0	0.22
	0.1, 10	0.089	0.93	0.08
	0.1, 100	0.896	0.98	0.23
	0.1, 1000	9.356	0.98	0.29
	0.1, 2000	20.366	0.99	0.25
	0.05, 10	0.076	0.81	0.16
	0.05, 100	0.837	0.99	0.36
	0.05, 1000	8.64	1.0	0.35
	0.05, 2000	16.319	0.98	0.41
	0.01, 10	0.068	0.7	0.14
	0.01, 100	0.684	0.9	0.37
	0.01, 1000	7.275	0.96	0.46

	0.01, 2000	14.787	0.95	0.45
DiCE	1.0, 10	0.141	1.0	0.04
	1.0, 100	1.502	1.0	0.09
	1.0, 1000	15.003	1.0	0.22
	1.0, 2000	31.638	1.0	0.24
	0.5, 10	0.134	1.0	0.03
	0.5, 100	1.65	0.99	0.12
	0.5, 1000	16.197	1.0	0.09
	0.5, 2000	32.62	1.0	0.18
	0.25, 10	0.131	0.97	0.11
	0.25, 100	1.388	1.0	0.18
	0.25, 1000	15.507	1.0	0.15
	0.25, 2000	33.384	1.0	0.13
	0.1, 10	0.14	0.94	0.1
	0.1, 100	1.277	1.0	0.28
	0.1, 1000	14.185	1.0	0.31
	0.1, 2000	31.019	1.0	0.19
	0.05, 10	0.116	0.89	0.14
	0.05, 100	1.153	0.99	0.48
	0.05, 1000	11.064	1.0	0.46
	0.05, 2000	24.336	0.99	0.39
	0.01, 10	0.103	0.63	0.09
	0.01, 100	1.01	0.81	0.28
	0.01, 1000	8.69	0.93	0.5
	0.01, 2000	20.81	0.87	0.43
ClaPROAR	1.0, 10	0.203	1.0	0.06
	1.0, 100	1.734	1.0	0.09
	1.0, 1000	18.513	0.99	0.17
	1.0, 2000	39.274	1.0	0.19
	0.5, 10	0.259	1.0	0.08
	0.5, 100	1.89	0.99	0.02
	0.5, 1000	19.248	1.0	0.1
	0.5, 2000	39.504	1.0	0.15
	0.25, 10	0.155	0.97	0.1
	0.25, 100	1.861	1.0	0.15
	0.25, 1000	17.762	1.0	0.19
	0.25, 2000	39.537	1.0	0.13
	0.1, 10	0.146	0.95	0.13
	0.1, 100	1.403	1.0	0.33
	0.1, 1000	17.652	1.0	0.19
	0.1, 2000	33.909	0.99	0.3
	0.05, 10	0.158	0.83	0.14
	0.05, 100	1.531	1.0	0.37
	0.05, 1000	13.263	0.99	0.43
	0.05, 2000	28.787	1.0	0.4
	0.01, 10	0.114	0.56	0.13
	0.01, 100	0.992	0.91	0.4
	0.01, 1000	11.006	0.93	0.5
	0.01, 2000	29.566	0.93	0.47
Greedy	1.0, 10	0.024	1.0	1.0
	1.0, 100	0.021	1.0	1.0
	1.0, 1000	0.127	0.99	0.99
	1.0, 2000	0.018	1.0	1.0
	0.5, 10	0.025	0.99	0.99
	0.5, 100	0.025	1.0	1.0
	0.5, 1000	0.142	0.98	0.98

	0.5, 2000	0.045	1.0	1.0
	0.25, 10	0.044	0.98	0.88
	0.25, 100	0.055	0.99	0.99
	0.25, 1000	0.044	1.0	1.0
	0.25, 2000	0.496	0.97	0.97
	0.1, 10	0.067	0.98	0.4
	0.1, 100	0.104	0.96	0.96
	0.1, 1000	0.206	0.98	0.98
	0.1, 2000	0.11	1.0	1.0
	0.05, 10	0.065	0.95	0.17
	0.05, 100	0.191	0.99	0.99
	0.05, 1000	0.357	0.98	0.98
	0.05, 2000	0.599	0.99	0.99
	0.01, 10	0.057	0.54	0.01
	0.01, 100	0.549	0.99	0.46
	0.01, 1000	1.268	0.99	0.99
	0.01, 2000	1.25	1.0	1.0

Tab. 74: Parameter grid search using the GMCS dataset experiment 3 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.237	0.74	0.0
	1.0, 100	2.534	0.74	0.0
	1.0, 1000	26.401	0.77	0.0
	1.0, 2000	54.013	0.83	0.01
	0.5, 10	0.287	0.79	0.0
	0.5, 100	2.687	0.84	0.0
	0.5, 1000	28.512	0.77	0.0
	0.5, 2000	57.359	0.83	0.01
	0.25, 10	0.213	0.95	0.0
	0.25, 100	2.823	0.9	0.0
	0.25, 1000	31.337	0.92	0.0
	0.25, 2000	57.914	0.94	0.02
	0.1, 10	0.217	0.86	0.01
	0.1, 100	2.436	0.98	0.01
	0.1, 1000	25.05	0.96	0.0
	0.1, 2000	49.035	0.95	0.01
	0.05, 10	0.201	0.83	0.0
	0.05, 100	2.553	0.95	0.01
	0.05, 1000	27.368	1.0	0.01
	0.05, 2000	54.596	0.99	0.0
	0.01, 10	0.175	0.6	0.0
	0.01, 100	2.299	0.83	0.0
	0.01, 1000	26.886	0.9	0.0
	0.01, 2000	55.752	0.93	0.0
Revise	1.0, 10	0.095	0.99	0.05
	1.0, 100	1.046	1.0	0.08
	1.0, 1000	11.954	1.0	0.1
	1.0, 2000	22.076	1.0	0.25
	0.5, 10	0.095	0.99	0.04
	0.5, 100	1.015	1.0	0.1
	0.5, 1000	11.492	1.0	0.14
	0.5, 2000	25.225	1.0	0.17
	0.25, 10	0.09	1.0	0.07
	0.25, 100	0.968	0.97	0.16

	0.25, 1000	10.941	0.98	0.17
	0.25, 2000	20.846	1.0	0.3
	0.1, 10	0.081	0.94	0.24
	0.1, 100	0.997	0.99	0.22
	0.1, 1000	10.675	1.0	0.22
	0.1, 2000	21.14	1.0	0.28
	0.05, 10	0.078	0.8	0.14
	0.05, 100	0.715	0.97	0.43
	0.05, 1000	9.138	0.99	0.37
	0.05, 2000	18.128	0.99	0.39
	0.01, 10	0.064	0.64	0.14
	0.01, 100	0.713	0.92	0.41
	0.01, 1000	6.299	0.87	0.49
	0.01, 2000	13.761	0.92	0.49
Ecco	1.0, 10	0.316	1.0	0.08
	1.0, 100	1.364	1.0	0.84
	1.0, 1000	8.036	1.0	1.0
	1.0, 2000	15.168	1.0	1.0
	0.5, 10	0.248	0.99	0.08
	0.5, 100	1.632	1.0	0.83
	0.5, 1000	7.742	1.0	1.0
	0.5, 2000	20.656	1.0	1.0
	0.25, 10	0.233	0.95	0.15
	0.25, 100	1.714	0.99	0.77
	0.25, 1000	9.901	1.0	1.0
	0.25, 2000	17.048	1.0	1.0
	0.1, 10	0.231	0.94	0.19
	0.1, 100	2.24	1.0	0.7
	0.1, 1000	9.157	1.0	1.0
	0.1, 2000	17.888	1.0	1.0
	0.05, 10	0.257	0.8	0.18
	0.05, 100	1.37	0.97	0.83
	0.05, 1000	9.818	0.95	0.95
	0.05, 2000	16.968	0.99	0.99
	0.01, 10	0.187	0.67	0.09
	0.01, 100	1.587	0.9	0.74
	0.01, 1000	9.935	0.93	0.93
	0.01, 2000	21.699	0.94	0.94
Wachter	1.0, 10	0.111	1.0	0.03
	1.0, 100	1.152	1.0	0.07
	1.0, 1000	12.093	0.99	0.2
	1.0, 2000	23.255	1.0	0.27
	0.5, 10	0.101	0.98	0.06
	0.5, 100	1.098	0.99	0.13
	0.5, 1000	12.983	1.0	0.08
	0.5, 2000	26.397	1.0	0.14
	0.25, 10	0.11	0.96	0.14
	0.25, 100	1.158	1.0	0.16
	0.25, 1000	11.797	1.0	0.25
	0.25, 2000	23.821	1.0	0.22
	0.1, 10	0.093	0.99	0.18
	0.1, 100	1.092	0.99	0.2
	0.1, 1000	10.674	1.0	0.29
	0.1, 2000	21.001	0.98	0.31
	0.05, 10	0.085	0.8	0.14
	0.05, 100	0.743	1.0	0.49

	0.05, 1000	8.004	1.0	0.48
	0.05, 2000	15.101	1.0	0.52
	0.01, 10	0.077	0.63	0.09
	0.01, 100	0.789	0.85	0.36
	0.01, 1000	7.656	0.89	0.44
	0.01, 2000	14.648	0.93	0.52
Generic	1.0, 10	0.095	0.99	0.08
	1.0, 100	1.149	1.0	0.06
	1.0, 1000	11.944	1.0	0.16
	1.0, 2000	22.514	1.0	0.27
	0.5, 10	0.113	0.94	0.08
	0.5, 100	1.015	1.0	0.09
	0.5, 1000	12.089	1.0	0.16
	0.5, 2000	24.619	1.0	0.19
	0.25, 10	0.088	0.98	0.18
	0.25, 100	1.177	1.0	0.21
	0.25, 1000	11.999	1.0	0.17
	0.25, 2000	23.551	1.0	0.18
	0.1, 10	0.168	0.91	0.18
	0.1, 100	0.893	1.0	0.22
	0.1, 1000	10.029	0.97	0.31
	0.1, 2000	23.505	1.0	0.28
	0.05, 10	0.084	0.89	0.15
	0.05, 100	0.668	0.98	0.44
	0.05, 1000	7.973	1.0	0.44
	0.05, 2000	16.303	0.98	0.43
	0.01, 10	0.069	0.6	0.13
	0.01, 100	0.694	0.87	0.37
	0.01, 1000	7.164	0.81	0.37
	0.01, 2000	15.887	0.89	0.48
DiCE	1.0, 10	0.148	1.0	0.06
	1.0, 100	1.669	1.0	0.03
	1.0, 1000	18.463	1.0	0.14
	1.0, 2000	34.428	1.0	0.23
	0.5, 10	0.13	0.98	0.07
	0.5, 100	1.6	1.0	0.09
	0.5, 1000	18.085	1.0	0.14
	0.5, 2000	35.754	1.0	0.19
	0.25, 10	0.128	1.0	0.16
	0.25, 100	1.649	1.0	0.16
	0.25, 1000	17.565	1.0	0.15
	0.25, 2000	32.814	1.0	0.21
	0.1, 10	0.122	0.95	0.14
	0.1, 100	1.531	1.0	0.26
	0.1, 1000	14.69	0.96	0.26
	0.1, 2000	31.255	0.99	0.31
	0.05, 10	0.123	0.81	0.18
	0.05, 100	1.33	0.98	0.38
	0.05, 1000	12.114	0.98	0.41
	0.05, 2000	22.96	0.99	0.55
	0.01, 10	0.109	0.68	0.15
	0.01, 100	1.388	0.87	0.29
	0.01, 1000	8.771	0.91	0.57
	0.01, 2000	21.66	0.91	0.44
ClaPROAR	1.0, 10	0.165	0.99	0.06
	1.0, 100	1.994	1.0	0.04

	1.0, 1000	20.899	1.0	0.14
	1.0, 2000	38.933	0.99	0.26
	0.5, 10	0.154	0.98	0.11
	0.5, 100	1.837	1.0	0.13
	0.5, 1000	20.372	1.0	0.14
	0.5, 2000	38.722	1.0	0.2
	0.25, 10	0.151	0.98	0.08
	0.25, 100	1.428	0.99	0.23
	0.25, 1000	17.742	0.98	0.15
	0.25, 2000	31.04	0.99	0.25
	0.1, 10	0.173	0.95	0.12
	0.1, 100	1.61	1.0	0.23
	0.1, 1000	15.886	0.99	0.28
	0.1, 2000	28.668	0.99	0.31
	0.05, 10	0.129	0.83	0.21
	0.05, 100	1.247	0.96	0.46
	0.05, 1000	13.025	1.0	0.45
	0.05, 2000	24.948	1.0	0.46
	0.01, 10	0.141	0.68	0.14
	0.01, 100	1.01	0.85	0.46
	0.01, 1000	12.047	0.94	0.47
	0.01, 2000	21.418	0.88	0.44
Greedy	1.0, 10	0.023	0.99	0.99
	1.0, 100	0.02	1.0	1.0
	1.0, 1000	0.021	1.0	1.0
	1.0, 2000	0.028	1.0	1.0
	0.5, 10	0.03	1.0	1.0
	0.5, 100	0.037	0.99	0.99
	0.5, 1000	0.141	0.98	0.98
	0.5, 2000	0.033	1.0	1.0
	0.25, 10	0.045	0.98	0.88
	0.25, 100	0.088	0.96	0.96
	0.25, 1000	0.058	1.0	1.0
	0.25, 2000	0.099	1.0	1.0
	0.1, 10	0.057	0.97	0.42
	0.1, 100	0.127	0.96	0.96
	0.1, 1000	0.221	0.98	0.98
	0.1, 2000	0.501	0.96	0.96
	0.05, 10	0.061	0.87	0.14
	0.05, 100	0.278	1.0	1.0
	0.05, 1000	0.229	1.0	1.0
	0.05, 2000	0.68	0.97	0.97
	0.01, 10	0.057	0.58	0.01
	0.01, 100	0.598	0.93	0.38
	0.01, 1000	1.281	0.98	0.98
	0.01, 2000	1.605	0.99	0.99

Tab. 75: Parameter grid search using the GMCS dataset experiment 4 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.223	0.78	0.0
	1.0, 100	2.178	0.69	0.0
	1.0, 1000	24.033	0.76	0.0
	1.0, 2000	49.046	0.77	0.0
	0.5, 10	0.204	0.78	0.0

	0.5, 100	2.496	0.81	0.0
	0.5, 1000	26.216	0.85	0.0
	0.5, 2000	50.887	0.83	0.01
	0.25, 10	0.238	0.84	0.0
	0.25, 100	2.646	0.86	0.0
	0.25, 1000	27.888	0.92	0.0
	0.25, 2000	56.414	0.92	0.0
	0.1, 10	0.209	0.81	0.0
	0.1, 100	2.754	0.96	0.0
	0.1, 1000	29.714	0.91	0.0
	0.1, 2000	58.945	0.93	0.0
	0.05, 10	0.201	0.79	0.0
	0.05, 100	2.835	0.9	0.0
	0.05, 1000	31.28	1.0	0.0
	0.05, 2000	62.044	0.98	0.0
	0.01, 10	0.173	0.61	0.0
	0.01, 100	2.469	0.8	0.0
	0.01, 1000	30.702	0.95	0.01
	0.01, 2000	62.099	0.95	0.0
Revise	1.0, 10	0.098	1.0	0.04
	1.0, 100	1.145	1.0	0.07
	1.0, 1000	12.41	1.0	0.2
	1.0, 2000	24.077	1.0	0.24
	0.5, 10	0.093	0.99	0.1
	0.5, 100	1.263	1.0	0.07
	0.5, 1000	12.497	1.0	0.12
	0.5, 2000	24.187	1.0	0.16
	0.25, 10	0.084	0.94	0.17
	0.25, 100	1.104	1.0	0.15
	0.25, 1000	12.389	0.99	0.13
	0.25, 2000	22.823	0.99	0.2
	0.1, 10	0.093	0.96	0.13
	0.1, 100	0.929	1.0	0.19
	0.1, 1000	10.215	1.0	0.28
	0.1, 2000	20.804	1.0	0.29
	0.05, 10	0.08	0.78	0.15
	0.05, 100	1.062	0.98	0.32
	0.05, 1000	9.588	0.99	0.36
	0.05, 2000	16.567	0.96	0.4
	0.01, 10	0.075	0.61	0.15
	0.01, 100	0.641	0.86	0.42
	0.01, 1000	7.157	0.87	0.44
	0.01, 2000	14.961	0.87	0.45
Ecco	1.0, 10	0.277	0.99	0.03
	1.0, 100	0.883	1.0	1.0
	1.0, 1000	7.704	1.0	1.0
	1.0, 2000	16.331	1.0	1.0
	0.5, 10	0.251	0.93	0.04
	0.5, 100	0.608	0.99	0.99
	0.5, 1000	8.12	1.0	1.0
	0.5, 2000	17.138	1.0	1.0
	0.25, 10	0.252	0.96	0.09
	0.25, 100	0.907	0.99	0.97
	0.25, 1000	8.487	1.0	1.0
	0.25, 2000	17.057	0.99	0.99
	0.1, 10	0.232	0.91	0.13

	0.1, 100	0.769	1.0	0.99
	0.1, 1000	7.754	1.0	1.0
	0.1, 2000	15.379	1.0	1.0
	0.05, 10	0.216	0.78	0.16
	0.05, 100	1.239	0.98	0.88
	0.05, 1000	6.923	0.97	0.97
	0.05, 2000	11.431	1.0	1.0
	0.01, 10	0.243	0.63	0.11
	0.01, 100	1.041	0.89	0.79
	0.01, 1000	8.816	0.83	0.83
	0.01, 2000	13.354	0.89	0.89
Wachter	1.0, 10	0.11	0.99	0.08
	1.0, 100	1.079	1.0	0.08
	1.0, 1000	12.582	1.0	0.22
	1.0, 2000	23.853	1.0	0.3
	0.5, 10	0.101	0.98	0.12
	0.5, 100	1.093	1.0	0.08
	0.5, 1000	13.137	1.0	0.13
	0.5, 2000	25.511	1.0	0.19
	0.25, 10	0.099	1.0	0.13
	0.25, 100	1.159	0.97	0.2
	0.25, 1000	12.362	0.99	0.19
	0.25, 2000	25.244	1.0	0.22
	0.1, 10	0.105	0.97	0.09
	0.1, 100	1.148	1.0	0.3
	0.1, 1000	10.853	1.0	0.32
	0.1, 2000	23.347	0.99	0.28
	0.05, 10	0.13	0.8	0.08
	0.05, 100	0.754	0.93	0.33
	0.05, 1000	10.51	1.0	0.39
	0.05, 2000	19.95	0.98	0.37
	0.01, 10	0.073	0.67	0.16
	0.01, 100	0.67	0.92	0.46
	0.01, 1000	8.636	0.87	0.37
	0.01, 2000	17.343	0.88	0.43
Generic	1.0, 10	0.091	1.0	0.12
	1.0, 100	1.256	1.0	0.07
	1.0, 1000	13.608	1.0	0.15
	1.0, 2000	21.892	1.0	0.18
	0.5, 10	0.092	0.98	0.06
	0.5, 100	1.303	1.0	0.1
	0.5, 1000	11.496	1.0	0.08
	0.5, 2000	21.983	1.0	0.17
	0.25, 10	0.089	0.98	0.08
	0.25, 100	1.135	0.99	0.1
	0.25, 1000	9.536	0.99	0.23
	0.25, 2000	20.617	1.0	0.25
	0.1, 10	0.084	0.91	0.19
	0.1, 100	0.961	1.0	0.23
	0.1, 1000	8.981	1.0	0.33
	0.1, 2000	18.621	0.99	0.3
	0.05, 10	0.079	0.87	0.16
	0.05, 100	0.845	0.98	0.34
	0.05, 1000	8.354	0.97	0.38
	0.05, 2000	13.929	0.96	0.45
	0.01, 10	0.069	0.67	0.12

	0.01, 100	0.683	0.93	0.46
	0.01, 1000	6.921	0.97	0.48
	0.01, 2000	13.788	0.88	0.47
DiCE	1.0, 10	0.141	1.0	0.04
	1.0, 100	1.532	1.0	0.06
	1.0, 1000	15.371	1.0	0.13
	1.0, 2000	27.466	1.0	0.3
	0.5, 10	0.172	0.99	0.07
	0.5, 100	1.521	1.0	0.09
	0.5, 1000	14.885	1.0	0.17
	0.5, 2000	31.088	1.0	0.17
	0.25, 10	0.131	0.99	0.14
	0.25, 100	1.562	0.98	0.09
	0.25, 1000	15.571	1.0	0.13
	0.25, 2000	30.318	0.99	0.18
	0.1, 10	0.125	0.96	0.13
	0.1, 100	1.359	0.99	0.2
	0.1, 1000	12.579	0.99	0.28
	0.1, 2000	30.418	1.0	0.19
	0.05, 10	0.126	0.82	0.1
	0.05, 100	1.081	0.98	0.37
	0.05, 1000	13.685	0.98	0.32
	0.05, 2000	23.634	1.0	0.47
	0.01, 10	0.101	0.75	0.16
	0.01, 100	0.835	0.88	0.43
	0.01, 1000	9.647	0.83	0.4
	0.01, 2000	23.815	0.91	0.38
ClaPROAR	1.0, 10	0.159	0.99	0.03
	1.0, 100	1.884	1.0	0.06
	1.0, 1000	19.079	1.0	0.15
	1.0, 2000	35.586	1.0	0.26
	0.5, 10	0.155	1.0	0.06
	0.5, 100	2.019	1.0	0.04
	0.5, 1000	19.756	1.0	0.11
	0.5, 2000	38.466	1.0	0.13
	0.25, 10	0.151	0.98	0.08
	0.25, 100	1.869	1.0	0.14
	0.25, 1000	17.005	0.99	0.19
	0.25, 2000	38.065	1.0	0.23
	0.1, 10	0.136	0.93	0.16
	0.1, 100	1.383	0.98	0.24
	0.1, 1000	17.865	0.99	0.24
	0.1, 2000	34.451	1.0	0.25
	0.05, 10	0.137	0.82	0.07
	0.05, 100	1.356	0.96	0.42
	0.05, 1000	14.218	0.97	0.33
	0.05, 2000	27.515	0.99	0.39
	0.01, 10	0.119	0.6	0.12
	0.01, 100	1.272	0.85	0.32
	0.01, 1000	10.788	0.88	0.44
	0.01, 2000	24.757	0.88	0.46
Greedy	1.0, 10	0.019	1.0	1.0
	1.0, 100	0.02	1.0	1.0
	1.0, 1000	0.018	1.0	1.0
	1.0, 2000	0.017	1.0	1.0
	0.5, 10	0.028	0.98	0.96

	0.5, 100	0.048	1.0	0.98
	0.5, 1000	0.026	1.0	1.0
	0.5, 2000	0.037	1.0	1.0
	0.25, 10	0.043	0.99	0.92
	0.25, 100	0.104	0.97	0.97
	0.25, 1000	0.06	1.0	1.0
	0.25, 2000	0.478	0.98	0.98
	0.1, 10	0.089	0.98	0.55
	0.1, 100	0.107	0.98	0.98
	0.1, 1000	0.259	0.99	0.99
	0.1, 2000	0.12	1.0	1.0
	0.05, 10	0.063	0.95	0.36
	0.05, 100	0.267	0.99	0.96
	0.05, 1000	0.208	1.0	1.0
	0.05, 2000	0.242	1.0	1.0
	0.01, 10	0.057	0.58	0.03
	0.01, 100	0.566	0.98	0.52
	0.01, 1000	1.042	0.98	0.98
	0.01, 2000	1.857	0.97	0.97

Tab. 76: Parameter grid search using the GMCS dataset experiment 5 using a MLP

F.1.8. GMCS dataset using Deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	14.154	0.91	0.0
	1.0, 100	1.811	0.95	0.0
	1.0, 1000	16.451	0.97	0.0
	1.0, 2000	35.848	0.97	0.0
	0.5, 10	0.182	0.96	0.0
	0.5, 100	1.722	0.87	0.0
	0.5, 1000	17.114	0.96	0.0
	0.5, 2000	35.458	0.96	0.0
	0.25, 10	0.191	0.97	0.0
	0.25, 100	1.905	0.94	0.0
	0.25, 1000	17.786	0.89	0.0
	0.25, 2000	35.841	0.9	0.0
	0.1, 10	0.187	0.99	0.0
	0.1, 100	1.807	0.96	0.0
	0.1, 1000	18.52	0.97	0.0
	0.1, 2000	37.365	0.97	0.0
	0.05, 10	0.199	0.99	0.0
	0.05, 100	1.845	1.0	0.0
	0.05, 1000	19.287	1.0	0.0
	0.05, 2000	39.507	1.0	0.0
	0.01, 10	0.202	0.92	0.0
	0.01, 100	1.875	0.99	0.0
	0.01, 1000	18.652	1.0	0.0
	0.01, 2000	37.796	1.0	0.0
Revise	1.0, 10	9.334	0.96	0.07
	1.0, 100	0.987	0.98	0.24
	1.0, 1000	7.135	1.0	0.55
	1.0, 2000	12.852	1.0	0.56
	0.5, 10	0.091	0.94	0.1
	0.5, 100	0.898	0.97	0.29
	0.5, 1000	9.135	0.99	0.42

	0.5, 2000	14.183	1.0	0.54
	0.25, 10	0.103	0.9	0.07
	0.25, 100	0.932	0.96	0.3
	0.25, 1000	6.619	1.0	0.6
	0.25, 2000	13.085	0.99	0.56
	0.1, 10	0.078	0.83	0.27
	0.1, 100	0.737	0.9	0.47
	0.1, 1000	4.947	0.99	0.73
	0.1, 2000	7.774	0.98	0.77
	0.05, 10	0.095	0.82	0.22
	0.05, 100	0.668	0.87	0.55
	0.05, 1000	4.737	0.96	0.73
	0.05, 2000	6.031	0.94	0.79
	0.01, 10	0.103	0.59	0.16
	0.01, 100	0.5	0.77	0.52
	0.01, 1000	4.595	0.64	0.46
	0.01, 2000	8.901	0.72	0.54
Ecco	1.0, 10	5.047	0.97	0.06
	1.0, 100	2.342	1.0	0.57
	1.0, 1000	24.315	1.0	0.49
	1.0, 2000	48.392	1.0	0.55
	0.5, 10	0.285	0.96	0.1
	0.5, 100	2.161	0.99	0.53
	0.5, 1000	24.298	1.0	0.55
	0.5, 2000	47.219	1.0	0.57
	0.25, 10	0.24	0.87	0.14
	0.25, 100	2.362	1.0	0.55
	0.25, 1000	21.205	1.0	0.56
	0.25, 2000	41.548	1.0	0.61
	0.1, 10	0.222	0.81	0.18
	0.1, 100	1.806	0.95	0.57
	0.1, 1000	17.606	0.99	0.71
	0.1, 2000	33.421	1.0	0.59
	0.05, 10	0.23	0.85	0.14
	0.05, 100	1.553	0.93	0.62
	0.05, 1000	12.438	0.99	0.77
	0.05, 2000	26.08	0.98	0.69
	0.01, 10	0.175	0.65	0.2
	0.01, 100	1.785	0.77	0.5
	0.01, 1000	12.277	0.7	0.45
	0.01, 2000	25.665	0.53	0.34
Wachter	1.0, 10	1.769	0.97	0.09
	1.0, 100	1.046	0.98	0.17
	1.0, 1000	8.315	0.99	0.48
	1.0, 2000	16.85	1.0	0.5
	0.5, 10	0.095	0.95	0.11
	0.5, 100	0.952	0.97	0.24
	0.5, 1000	7.239	0.98	0.53
	0.5, 2000	13.442	1.0	0.6
	0.25, 10	0.094	0.88	0.04
	0.25, 100	0.889	0.93	0.32
	0.25, 1000	6.534	1.0	0.62
	0.25, 2000	10.085	1.0	0.67
	0.1, 10	0.091	0.84	0.2
	0.1, 100	0.813	0.94	0.47
	0.1, 1000	5.9	0.98	0.63

	0.1, 2000	7.209	0.99	0.76
	0.05, 10	0.084	0.79	0.21
	0.05, 100	0.483	0.93	0.66
	0.05, 1000	3.695	0.95	0.78
	0.05, 2000	7.186	0.99	0.8
	0.01, 10	0.087	0.6	0.11
	0.01, 100	0.563	0.7	0.4
	0.01, 1000	4.193	0.71	0.55
	0.01, 2000	8.907	0.69	0.52
Generic	1.0, 10	0.159	0.97	0.1
	1.0, 100	0.937	0.97	0.3
	1.0, 1000	7.363	1.0	0.53
	1.0, 2000	13.381	0.99	0.56
	0.5, 10	0.184	0.96	0.11
	0.5, 100	0.988	0.97	0.36
	0.5, 1000	6.697	0.99	0.54
	0.5, 2000	13.176	1.0	0.58
	0.25, 10	0.12	0.91	0.13
	0.25, 100	0.745	0.98	0.43
	0.25, 1000	7.295	1.0	0.58
	0.25, 2000	12.893	1.0	0.57
	0.1, 10	0.08	0.83	0.18
	0.1, 100	0.811	0.94	0.46
	0.1, 1000	4.863	1.0	0.75
	0.1, 2000	8.806	0.99	0.75
	0.05, 10	0.075	0.8	0.24
	0.05, 100	0.643	0.9	0.54
	0.05, 1000	3.134	0.97	0.83
	0.05, 2000	6.322	0.98	0.81
	0.01, 10	0.071	0.67	0.19
	0.01, 100	0.527	0.67	0.43
	0.01, 1000	3.986	0.76	0.58
	0.01, 2000	8.944	0.79	0.53
DiCE	1.0, 10	1.115	0.97	0.09
	1.0, 100	1.277	0.96	0.24
	1.0, 1000	11.7	1.0	0.41
	1.0, 2000	19.13	1.0	0.58
	0.5, 10	0.121	0.92	0.12
	0.5, 100	1.369	0.98	0.2
	0.5, 1000	9.304	1.0	0.59
	0.5, 2000	13.665	1.0	0.69
	0.25, 10	0.11	0.84	0.19
	0.25, 100	1.124	0.93	0.35
	0.25, 1000	8.738	1.0	0.57
	0.25, 2000	17.586	1.0	0.58
	0.1, 10	0.111	0.82	0.2
	0.1, 100	0.931	0.96	0.46
	0.1, 1000	6.503	0.99	0.73
	0.1, 2000	9.333	0.99	0.79
	0.05, 10	0.112	0.8	0.19
	0.05, 100	0.751	0.9	0.64
	0.05, 1000	5.983	0.94	0.72
	0.05, 2000	11.237	0.96	0.76
	0.01, 10	0.098	0.63	0.15
	0.01, 100	0.741	0.72	0.47
	0.01, 1000	4.902	0.73	0.62

	0.01, 2000	10.641	0.62	0.48
ClaPROAR	1.0, 10	1.436	0.97	0.14
	1.0, 100	1.619	0.99	0.27
	1.0, 1000	12.939	1.0	0.51
	1.0, 2000	23.6	0.98	0.5
	0.5, 10	0.153	0.92	0.13
	0.5, 100	1.402	0.98	0.32
	0.5, 1000	10.596	0.99	0.57
	0.5, 2000	18.971	1.0	0.62
	0.25, 10	0.15	0.88	0.14
	0.25, 100	1.293	0.96	0.41
	0.25, 1000	10.634	1.0	0.64
	0.25, 2000	18.582	1.0	0.62
	0.1, 10	0.156	0.88	0.15
	0.1, 100	1.302	0.94	0.49
	0.1, 1000	7.315	1.0	0.72
	0.1, 2000	15.626	0.99	0.68
	0.05, 10	0.143	0.74	0.11
	0.05, 100	1.168	0.81	0.47
	0.05, 1000	5.626	0.98	0.79
	0.05, 2000	10.267	0.97	0.8
	0.01, 10	0.129	0.58	0.15
	0.01, 100	1.052	0.71	0.44
	0.01, 1000	6.023	0.76	0.6
	0.01, 2000	11.319	0.69	0.52
Greedy	1.0, 10	1.126	0.98	0.91
	1.0, 100	0.028	0.99	0.99
	1.0, 1000	0.123	0.99	0.99
	1.0, 2000	0.03	1.0	1.0
	0.5, 10	0.028	0.99	0.95
	0.5, 100	0.032	0.98	0.98
	0.5, 1000	0.047	1.0	1.0
	0.5, 2000	0.029	1.0	1.0
	0.25, 10	0.043	1.0	0.93
	0.25, 100	0.066	1.0	1.0
	0.25, 1000	0.564	0.99	0.99
	0.25, 2000	0.101	1.0	1.0
	0.1, 10	0.058	0.98	0.41
	0.1, 100	0.206	1.0	0.98
	0.1, 1000	0.176	1.0	1.0
	0.1, 2000	0.174	1.0	1.0
	0.05, 10	0.065	0.92	0.27
	0.05, 100	0.257	0.98	0.92
	0.05, 1000	0.34	0.99	0.99
	0.05, 2000	0.251	1.0	1.0
	0.01, 10	0.053	0.51	0.01
	0.01, 100	0.635	0.93	0.44
	0.01, 1000	1.701	0.97	0.91
	0.01, 2000	1.222	0.99	0.99

Tab. 77: Parameter grid search using the GMCS dataset experiment 1 for a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.518	0.73	0.0
	1.0, 100	1.857	0.62	0.0

	1.0, 1000	18.788	0.63	0.0
	1.0, 2000	39.466	0.75	0.03
	0.5, 10	0.188	0.69	0.0
	0.5, 100	1.962	0.74	0.0
	0.5, 1000	19.925	0.79	0.01
	0.5, 2000	37.945	0.7	0.04
	0.25, 10	0.202	0.59	0.0
	0.25, 100	2.047	0.77	0.0
	0.25, 1000	20.108	0.75	0.0
	0.25, 2000	41.216	0.83	0.03
	0.1, 10	0.216	0.77	0.0
	0.1, 100	2.139	0.88	0.01
	0.1, 1000	21.466	0.82	0.02
	0.1, 2000	40.52	0.91	0.02
	0.05, 10	0.223	0.73	0.01
	0.05, 100	2.23	0.86	0.01
	0.05, 1000	22.263	0.9	0.02
	0.05, 2000	42.407	0.89	0.04
	0.01, 10	0.181	0.64	0.0
	0.01, 100	1.826	0.57	0.0
	0.01, 1000	19.462	0.52	0.0
	0.01, 2000	35.769	0.5	0.01
Revise	1.0, 10	0.103	0.96	0.11
	1.0, 100	0.952	0.98	0.22
	1.0, 1000	8.588	1.0	0.4
	1.0, 2000	16.425	0.99	0.52
	0.5, 10	0.102	0.94	0.05
	0.5, 100	0.937	0.97	0.25
	0.5, 1000	7.802	1.0	0.54
	0.5, 2000	13.923	1.0	0.58
	0.25, 10	0.085	0.9	0.11
	0.25, 100	0.911	0.98	0.25
	0.25, 1000	6.484	0.99	0.58
	0.25, 2000	15.133	1.0	0.6
	0.1, 10	0.096	0.8	0.14
	0.1, 100	0.677	0.95	0.53
	0.1, 1000	5.695	1.0	0.63
	0.1, 2000	8.922	1.0	0.7
	0.05, 10	0.076	0.77	0.16
	0.05, 100	0.661	0.91	0.52
	0.05, 1000	3.571	1.0	0.79
	0.05, 2000	8.604	0.97	0.76
	0.01, 10	0.071	0.69	0.15
	0.01, 100	0.551	0.75	0.41
	0.01, 1000	4.714	0.66	0.48
	0.01, 2000	8.38	0.78	0.59
Ecco	1.0, 10	0.291	0.96	0.06
	1.0, 100	1.607	0.99	0.66
	1.0, 1000	6.267	1.0	1.0
	1.0, 2000	15.24	1.0	1.0
	0.5, 10	0.262	0.94	0.12
	0.5, 100	1.839	0.99	0.56
	0.5, 1000	6.677	1.0	0.99
	0.5, 2000	15.019	1.0	1.0
	0.25, 10	0.245	0.95	0.12
	0.25, 100	1.914	0.99	0.58

	0.25, 1000	8.141	1.0	0.99
	0.25, 2000	11.319	1.0	1.0
	0.1, 10	0.242	0.86	0.2
	0.1, 100	1.738	0.96	0.61
	0.1, 1000	4.071	1.0	1.0
	0.1, 2000	9.086	1.0	0.99
	0.05, 10	0.243	0.82	0.1
	0.05, 100	1.333	1.0	0.78
	0.05, 1000	6.554	0.96	0.91
	0.05, 2000	4.335	0.99	0.99
	0.01, 10	0.22	0.58	0.05
	0.01, 100	1.437	0.71	0.5
	0.01, 1000	9.844	0.65	0.54
	0.01, 2000	8.997	0.69	0.69
Wachter	1.0, 10	0.119	0.99	0.09
	1.0, 100	1.115	0.95	0.25
	1.0, 1000	8.684	1.0	0.52
	1.0, 2000	15.341	0.99	0.52
	0.5, 10	0.094	0.94	0.08
	0.5, 100	1.05	0.96	0.17
	0.5, 1000	8.874	0.99	0.46
	0.5, 2000	14.535	0.99	0.56
	0.25, 10	0.098	0.94	0.07
	0.25, 100	1.04	0.95	0.32
	0.25, 1000	8.85	1.0	0.54
	0.25, 2000	13.437	1.0	0.6
	0.1, 10	0.088	0.86	0.2
	0.1, 100	0.731	0.96	0.51
	0.1, 1000	5.81	0.99	0.71
	0.1, 2000	7.504	1.0	0.82
	0.05, 10	0.084	0.79	0.14
	0.05, 100	0.645	0.93	0.54
	0.05, 1000	5.155	0.97	0.69
	0.05, 2000	8.818	0.98	0.74
	0.01, 10	0.083	0.65	0.15
	0.01, 100	0.737	0.7	0.35
	0.01, 1000	5.036	0.8	0.52
	0.01, 2000	11.072	0.68	0.5
Generic	1.0, 10	0.09	0.99	0.1
	1.0, 100	0.966	0.96	0.21
	1.0, 1000	7.678	1.0	0.47
	1.0, 2000	14.675	0.99	0.5
	0.5, 10	0.09	0.94	0.08
	0.5, 100	0.933	0.97	0.26
	0.5, 1000	6.998	1.0	0.52
	0.5, 2000	14.977	1.0	0.5
	0.25, 10	0.084	0.93	0.21
	0.25, 100	0.9	0.97	0.29
	0.25, 1000	6.213	1.0	0.55
	0.25, 2000	11.92	1.0	0.64
	0.1, 10	0.088	0.84	0.19
	0.1, 100	0.639	0.96	0.51
	0.1, 1000	6.141	1.0	0.63
	0.1, 2000	10.818	0.99	0.67
	0.05, 10	0.092	0.78	0.15
	0.05, 100	0.651	0.92	0.57

	0.05, 1000	4.879	0.95	0.67
	0.05, 2000	6.71	0.96	0.75
	0.01, 10	0.085	0.52	0.11
	0.01, 100	0.586	0.72	0.43
	0.01, 1000	4.403	0.76	0.56
	0.01, 2000	10.765	0.75	0.52
DiCE	1.0, 10	0.156	1.0	0.07
	1.0, 100	1.251	0.98	0.25
	1.0, 1000	11.933	1.0	0.5
	1.0, 2000	20.904	1.0	0.57
	0.5, 10	0.151	0.95	0.11
	0.5, 100	1.325	0.98	0.24
	0.5, 1000	13.593	1.0	0.36
	0.5, 2000	18.89	1.0	0.6
	0.25, 10	0.153	0.96	0.13
	0.25, 100	1.254	0.98	0.32
	0.25, 1000	9.335	0.98	0.62
	0.25, 2000	20.447	1.0	0.57
	0.1, 10	0.146	0.87	0.13
	0.1, 100	1.093	0.94	0.45
	0.1, 1000	7.256	1.0	0.71
	0.1, 2000	12.335	1.0	0.69
	0.05, 10	0.109	0.74	0.15
	0.05, 100	1.063	0.94	0.53
	0.05, 1000	6.158	0.96	0.69
	0.05, 2000	8.247	0.97	0.8
	0.01, 10	0.105	0.67	0.1
	0.01, 100	0.939	0.76	0.5
	0.01, 1000	5.104	0.71	0.58
	0.01, 2000	12.78	0.7	0.48
ClaPROAR	1.0, 10	0.164	0.98	0.07
	1.0, 100	1.643	0.99	0.26
	1.0, 1000	12.719	1.0	0.53
	1.0, 2000	21.168	1.0	0.62
	0.5, 10	0.156	0.97	0.1
	0.5, 100	1.716	1.0	0.21
	0.5, 1000	13.439	1.0	0.43
	0.5, 2000	23.086	1.0	0.54
	0.25, 10	0.147	0.92	0.15
	0.25, 100	1.588	0.98	0.34
	0.25, 1000	10.343	1.0	0.63
	0.25, 2000	20.525	1.0	0.6
	0.1, 10	0.136	0.86	0.16
	0.1, 100	1.233	0.95	0.51
	0.1, 1000	9.426	0.99	0.68
	0.1, 2000	13.169	0.99	0.76
	0.05, 10	0.135	0.8	0.15
	0.05, 100	1.171	0.91	0.52
	0.05, 1000	7.143	0.99	0.74
	0.05, 2000	14.532	0.99	0.76
	0.01, 10	0.115	0.59	0.13
	0.01, 100	1.014	0.74	0.43
	0.01, 1000	9.388	0.7	0.47
	0.01, 2000	16.139	0.72	0.54
Greedy	1.0, 10	0.021	1.0	1.0
	1.0, 100	0.026	1.0	1.0

	1.0, 1000	0.026	1.0	1.0
	1.0, 2000	0.024	1.0	1.0
	0.5, 10	0.031	0.99	0.99
	0.5, 100	0.027	1.0	1.0
	0.5, 1000	0.034	1.0	1.0
	0.5, 2000	0.046	1.0	1.0
	0.25, 10	0.044	1.0	0.91
	0.25, 100	0.049	1.0	1.0
	0.25, 1000	0.062	1.0	1.0
	0.25, 2000	0.045	1.0	1.0
	0.1, 10	0.06	0.99	0.48
	0.1, 100	0.111	1.0	1.0
	0.1, 1000	0.102	1.0	1.0
	0.1, 2000	0.178	1.0	1.0
	0.05, 10	0.073	0.95	0.19
	0.05, 100	0.22	0.99	0.99
	0.05, 1000	0.201	1.0	1.0
	0.05, 2000	0.374	1.0	1.0
	0.01, 10	0.053	0.46	0.01
	0.01, 100	0.598	0.98	0.49
	0.01, 1000	1.228	1.0	0.99
	0.01, 2000	1.16	1.0	1.0

Tab. 78: Parameter grid search using the GMCS dataset experiment 2 for a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.226	0.7	0.0
	1.0, 100	1.938	0.67	0.0
	1.0, 1000	20.364	0.68	0.0
	1.0, 2000	40.622	0.71	0.0
	0.5, 10	0.22	0.7	0.0
	0.5, 100	2.079	0.66	0.0
	0.5, 1000	21.086	0.69	0.01
	0.5, 2000	42.16	0.73	0.0
	0.25, 10	0.209	0.69	0.0
	0.25, 100	2.946	0.77	0.0
	0.25, 1000	22.497	0.76	0.0
	0.25, 2000	50.182	0.8	0.01
	0.1, 10	0.232	0.78	0.0
	0.1, 100	2.754	0.79	0.01
	0.1, 1000	25.285	0.82	0.01
	0.1, 2000	47.768	0.86	0.01
	0.05, 10	0.217	0.84	0.0
	0.05, 100	2.263	0.82	0.0
	0.05, 1000	23.242	0.8	0.01
	0.05, 2000	47.239	0.89	0.02
	0.01, 10	0.23	0.67	0.0
	0.01, 100	2.494	0.58	0.01
	0.01, 1000	19.695	0.51	0.0
	0.01, 2000	39.167	0.52	0.0
Revise	1.0, 10	0.091	1.0	0.15
	1.0, 100	1.01	0.97	0.21
	1.0, 1000	8.538	1.0	0.5
	1.0, 2000	13.297	1.0	0.62
	0.5, 10	0.089	0.93	0.14

	0.5, 100	0.992	0.97	0.26
	0.5, 1000	8.293	1.0	0.55
	0.5, 2000	14.245	1.0	0.59
	0.25, 10	0.097	0.88	0.14
	0.25, 100	0.766	0.96	0.39
	0.25, 1000	6.385	1.0	0.59
	0.25, 2000	11.623	1.0	0.61
	0.1, 10	0.099	0.88	0.19
	0.1, 100	0.607	0.94	0.56
	0.1, 1000	5.262	1.0	0.71
	0.1, 2000	8.38	0.99	0.73
	0.05, 10	0.097	0.76	0.11
	0.05, 100	0.595	0.91	0.54
	0.05, 1000	4.362	0.95	0.72
	0.05, 2000	6.986	0.98	0.78
	0.01, 10	0.065	0.7	0.18
	0.01, 100	0.565	0.73	0.45
	0.01, 1000	5.096	0.79	0.55
	0.01, 2000	7.732	0.74	0.56
Ecco	1.0, 10	0.249	0.95	0.1
	1.0, 100	0.674	1.0	0.95
	1.0, 1000	7.254	1.0	1.0
	1.0, 2000	14.409	1.0	0.99
	0.5, 10	0.252	0.97	0.14
	0.5, 100	1.025	1.0	0.99
	0.5, 1000	8.401	1.0	0.99
	0.5, 2000	14.809	1.0	1.0
	0.25, 10	0.246	0.93	0.13
	0.25, 100	0.865	1.0	0.93
	0.25, 1000	7.61	1.0	1.0
	0.25, 2000	13.636	1.0	1.0
	0.1, 10	0.214	0.84	0.18
	0.1, 100	0.937	1.0	0.92
	0.1, 1000	5.272	1.0	1.0
	0.1, 2000	11.838	1.0	1.0
	0.05, 10	0.24	0.75	0.18
	0.05, 100	1.259	0.99	0.84
	0.05, 1000	4.403	0.99	0.99
	0.05, 2000	6.981	0.97	0.97
	0.01, 10	0.196	0.7	0.17
	0.01, 100	0.889	0.8	0.73
	0.01, 1000	5.394	0.68	0.68
	0.01, 2000	11.25	0.64	0.64
Wachter	1.0, 10	0.134	0.98	0.08
	1.0, 100	1.012	0.96	0.24
	1.0, 1000	8.346	1.0	0.52
	1.0, 2000	12.228	1.0	0.6
	0.5, 10	0.209	0.95	0.11
	0.5, 100	1.078	0.99	0.22
	0.5, 1000	8.087	1.0	0.54
	0.5, 2000	14.235	1.0	0.55
	0.25, 10	0.091	0.88	0.15
	0.25, 100	0.916	0.92	0.28
	0.25, 1000	6.812	0.99	0.59
	0.25, 2000	11.814	1.0	0.7
	0.1, 10	0.115	0.87	0.22

	0.1, 100	0.714	0.97	0.63
	0.1, 1000	4.752	1.0	0.76
	0.1, 2000	8.331	0.99	0.76
	0.05, 10	0.082	0.86	0.22
	0.05, 100	0.649	0.94	0.54
	0.05, 1000	3.476	0.97	0.81
	0.05, 2000	8.362	0.99	0.8
	0.01, 10	0.079	0.64	0.13
	0.01, 100	0.545	0.72	0.49
	0.01, 1000	4.886	0.78	0.57
	0.01, 2000	7.193	0.77	0.62
Generic	1.0, 10	0.095	0.95	0.09
	1.0, 100	0.899	0.97	0.31
	1.0, 1000	7.378	1.0	0.55
	1.0, 2000	13.023	1.0	0.59
	0.5, 10	0.11	0.94	0.12
	0.5, 100	0.992	0.99	0.24
	0.5, 1000	7.172	1.0	0.58
	0.5, 2000	14.269	1.0	0.56
	0.25, 10	0.086	0.93	0.17
	0.25, 100	0.862	0.97	0.27
	0.25, 1000	6.58	1.0	0.59
	0.25, 2000	15.35	1.0	0.52
	0.1, 10	0.082	0.88	0.11
	0.1, 100	0.69	0.94	0.48
	0.1, 1000	4.769	0.99	0.7
	0.1, 2000	9.07	1.0	0.75
	0.05, 10	0.078	0.9	0.21
	0.05, 100	0.637	0.93	0.52
	0.05, 1000	4.247	0.97	0.72
	0.05, 2000	5.323	0.96	0.83
	0.01, 10	0.073	0.54	0.1
	0.01, 100	0.473	0.87	0.57
	0.01, 1000	5.33	0.74	0.5
	0.01, 2000	8.832	0.76	0.55
DiCE	1.0, 10	0.2	0.98	0.07
	1.0, 100	1.579	0.95	0.18
	1.0, 1000	9.63	1.0	0.55
	1.0, 2000	22.328	1.0	0.48
	0.5, 10	0.128	0.98	0.11
	0.5, 100	1.872	0.99	0.26
	0.5, 1000	11.668	1.0	0.51
	0.5, 2000	18.183	1.0	0.65
	0.25, 10	0.125	0.87	0.07
	0.25, 100	1.237	0.96	0.33
	0.25, 1000	10.58	1.0	0.53
	0.25, 2000	16.125	1.0	0.63
	0.1, 10	0.115	0.87	0.22
	0.1, 100	1.151	0.96	0.51
	0.1, 1000	7.3	0.99	0.69
	0.1, 2000	13.507	0.99	0.7
	0.05, 10	0.12	0.86	0.17
	0.05, 100	0.887	0.91	0.51
	0.05, 1000	4.89	0.98	0.82
	0.05, 2000	10.809	0.97	0.79
	0.01, 10	0.106	0.67	0.12

	0.01, 100	0.689	0.74	0.53
	0.01, 1000	5.129	0.69	0.55
	0.01, 2000	17.082	0.75	0.51
ClaPROAR	1.0, 10	0.162	0.97	0.08
	1.0, 100	1.696	0.99	0.18
	1.0, 1000	15.325	1.0	0.46
	1.0, 2000	22.473	1.0	0.59
	0.5, 10	0.147	0.96	0.12
	0.5, 100	1.821	0.97	0.21
	0.5, 1000	11.726	1.0	0.62
	0.5, 2000	22.015	1.0	0.53
	0.25, 10	0.156	0.87	0.14
	0.25, 100	1.452	0.95	0.31
	0.25, 1000	9.762	1.0	0.63
	0.25, 2000	15.257	1.0	0.68
	0.1, 10	0.145	0.91	0.24
	0.1, 100	1.045	0.89	0.53
	0.1, 1000	6.908	1.0	0.78
	0.1, 2000	16.243	0.99	0.7
	0.05, 10	0.142	0.76	0.16
	0.05, 100	0.9	0.94	0.64
	0.05, 1000	5.35	0.98	0.8
	0.05, 2000	11.83	0.95	0.74
	0.01, 10	0.131	0.67	0.13
	0.01, 100	0.894	0.82	0.49
	0.01, 1000	5.144	0.77	0.64
	0.01, 2000	14.646	0.7	0.48
Greedy	1.0, 10	0.018	0.98	0.98
	1.0, 100	0.025	1.0	1.0
	1.0, 1000	0.015	1.0	1.0
	1.0, 2000	0.016	1.0	1.0
	0.5, 10	0.025	0.99	0.99
	0.5, 100	0.024	1.0	1.0
	0.5, 1000	0.024	1.0	1.0
	0.5, 2000	0.042	1.0	1.0
	0.25, 10	0.05	1.0	0.94
	0.25, 100	0.047	1.0	1.0
	0.25, 1000	0.042	1.0	1.0
	0.25, 2000	0.041	1.0	1.0
	0.1, 10	0.062	0.97	0.43
	0.1, 100	0.117	0.99	0.99
	0.1, 1000	0.194	1.0	1.0
	0.1, 2000	0.119	1.0	1.0
	0.05, 10	0.067	0.94	0.28
	0.05, 100	0.197	1.0	1.0
	0.05, 1000	0.323	0.99	0.99
	0.05, 2000	0.198	1.0	1.0
	0.01, 10	0.055	0.5	0.0
	0.01, 100	0.774	1.0	0.4
	0.01, 1000	1.303	0.99	0.98
	0.01, 2000	1.51	0.97	0.97

Tab. 79: Parameter grid search using the GMCS dataset experiment 3 for a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged

Gravitational	1.0, 10	0.233	0.63	0.0
	1.0, 100	2.745	0.58	0.0
	1.0, 1000	20.263	0.61	0.01
	1.0, 2000	41.06	0.73	0.0
	0.5, 10	0.227	0.75	0.0
	0.5, 100	2.088	0.74	0.01
	0.5, 1000	20.993	0.72	0.01
	0.5, 2000	43.769	0.78	0.01
	0.25, 10	0.235	0.58	0.0
	0.25, 100	2.195	0.7	0.01
	0.25, 1000	22.651	0.77	0.02
	0.25, 2000	47.46	0.76	0.0
	0.1, 10	0.226	0.8	0.0
	0.1, 100	2.543	0.83	0.0
	0.1, 1000	24.801	0.85	0.04
	0.1, 2000	54.162	0.9	0.03
	0.05, 10	0.444	0.79	0.0
	0.05, 100	2.979	0.8	0.01
	0.05, 1000	28.217	0.73	0.0
	0.05, 2000	54.016	0.85	0.03
	0.01, 10	0.205	0.51	0.0
	0.01, 100	2.436	0.64	0.0
	0.01, 1000	21.811	0.51	0.0
	0.01, 2000	43.827	0.52	0.0
Revise	1.0, 10	0.093	0.96	0.12
	1.0, 100	1.185	0.96	0.14
	1.0, 1000	9.205	1.0	0.48
	1.0, 2000	17.757	1.0	0.46
	0.5, 10	0.114	0.96	0.05
	0.5, 100	1.214	0.93	0.14
	0.5, 1000	8.624	1.0	0.51
	0.5, 2000	15.44	1.0	0.57
	0.25, 10	0.106	0.89	0.11
	0.25, 100	1.187	0.92	0.26
	0.25, 1000	8.798	0.98	0.55
	0.25, 2000	15.115	1.0	0.56
	0.1, 10	0.091	0.81	0.15
	0.1, 100	0.758	0.93	0.48
	0.1, 1000	5.437	0.96	0.66
	0.1, 2000	11.493	0.99	0.7
	0.05, 10	0.078	0.82	0.18
	0.05, 100	0.717	0.88	0.47
	0.05, 1000	4.021	0.96	0.72
	0.05, 2000	8.755	0.91	0.69
	0.01, 10	0.074	0.65	0.15
	0.01, 100	0.662	0.8	0.41
	0.01, 1000	6.421	0.65	0.37
	0.01, 2000	10.151	0.67	0.46
Ecco	1.0, 10	0.265	0.97	0.06
	1.0, 100	1.244	1.0	0.91
	1.0, 1000	11.509	1.0	1.0
	1.0, 2000	22.414	1.0	1.0
	0.5, 10	0.259	0.9	0.04
	0.5, 100	1.662	1.0	0.82
	0.5, 1000	11.301	1.0	1.0

	0.5, 2000	22.669	1.0	1.0
	0.25, 10	0.242	0.91	0.15
	0.25, 100	1.86	0.97	0.73
	0.25, 1000	10.873	1.0	1.0
	0.25, 2000	16.835	1.0	1.0
	0.1, 10	0.245	0.91	0.15
	0.1, 100	1.434	0.95	0.75
	0.1, 1000	5.945	1.0	1.0
	0.1, 2000	10.653	1.0	1.0
	0.05, 10	0.218	0.79	0.17
	0.05, 100	1.48	0.95	0.68
	0.05, 1000	7.364	0.9	0.86
	0.05, 2000	10.248	0.87	0.87
	0.01, 10	0.181	0.65	0.13
	0.01, 100	1.431	0.81	0.58
	0.01, 1000	6.152	0.64	0.64
	0.01, 2000	12.2	0.54	0.54
Wachter	1.0, 10	0.105	0.98	0.08
	1.0, 100	1.059	0.95	0.15
	1.0, 1000	9.23	1.0	0.46
	1.0, 2000	15.35	1.0	0.6
	0.5, 10	0.092	0.96	0.13
	0.5, 100	1.037	0.97	0.18
	0.5, 1000	7.451	1.0	0.63
	0.5, 2000	14.793	0.99	0.57
	0.25, 10	0.093	0.91	0.09
	0.25, 100	1.4	0.98	0.3
	0.25, 1000	9.051	1.0	0.5
	0.25, 2000	14.88	1.0	0.58
	0.1, 10	0.127	0.86	0.13
	0.1, 100	0.837	0.92	0.43
	0.1, 1000	5.798	0.98	0.68
	0.1, 2000	8.45	0.99	0.77
	0.05, 10	0.088	0.71	0.16
	0.05, 100	0.725	0.87	0.54
	0.05, 1000	4.41	0.93	0.74
	0.05, 2000	11.939	0.92	0.64
	0.01, 10	0.076	0.6	0.09
	0.01, 100	0.547	0.71	0.42
	0.01, 1000	5.263	0.7	0.46
	0.01, 2000	8.145	0.68	0.55
Generic	1.0, 10	0.091	0.96	0.05
	1.0, 100	1.192	0.96	0.15
	1.0, 1000	8.794	1.0	0.53
	1.0, 2000	15.223	1.0	0.54
	0.5, 10	0.089	0.95	0.09
	0.5, 100	1.135	0.98	0.21
	0.5, 1000	8.276	1.0	0.52
	0.5, 2000	15.738	1.0	0.55
	0.25, 10	0.087	0.91	0.08
	0.25, 100	1.184	0.94	0.22
	0.25, 1000	9.268	0.99	0.45
	0.25, 2000	16.711	1.0	0.5
	0.1, 10	0.088	0.92	0.13
	0.1, 100	0.752	0.92	0.41
	0.1, 1000	6.449	0.99	0.65

	0.1, 2000	10.71	0.99	0.67
	0.05, 10	0.082	0.77	0.13
	0.05, 100	0.741	0.86	0.41
	0.05, 1000	4.627	0.91	0.71
	0.05, 2000	8.884	0.92	0.71
	0.01, 10	0.108	0.6	0.1
	0.01, 100	0.629	0.69	0.39
	0.01, 1000	4.55	0.74	0.57
	0.01, 2000	9.569	0.73	0.52
DiCE	1.0, 10	0.134	0.94	0.14
	1.0, 100	1.477	0.95	0.18
	1.0, 1000	12.724	0.97	0.46
	1.0, 2000	22.592	1.0	0.57
	0.5, 10	0.133	0.97	0.04
	0.5, 100	1.593	0.98	0.19
	0.5, 1000	11.831	0.99	0.49
	0.5, 2000	21.298	1.0	0.57
	0.25, 10	0.122	0.91	0.07
	0.25, 100	1.246	0.92	0.27
	0.25, 1000	9.857	0.99	0.61
	0.25, 2000	15.036	1.0	0.69
	0.1, 10	0.143	0.89	0.11
	0.1, 100	1.019	0.91	0.43
	0.1, 1000	9.725	0.99	0.62
	0.1, 2000	13.961	1.0	0.67
	0.05, 10	0.113	0.78	0.14
	0.05, 100	0.924	0.91	0.53
	0.05, 1000	6.616	0.95	0.69
	0.05, 2000	9.606	0.93	0.75
	0.01, 10	0.105	0.71	0.15
	0.01, 100	0.802	0.67	0.4
	0.01, 1000	7.362	0.63	0.4
	0.01, 2000	13.374	0.75	0.52
ClaPROAR	1.0, 10	0.191	0.93	0.09
	1.0, 100	1.629	0.99	0.15
	1.0, 1000	13.732	1.0	0.46
	1.0, 2000	24.713	1.0	0.59
	0.5, 10	0.154	0.94	0.03
	0.5, 100	1.699	0.99	0.16
	0.5, 1000	13.745	0.98	0.44
	0.5, 2000	23.96	1.0	0.55
	0.25, 10	0.314	0.94	0.11
	0.25, 100	1.646	0.99	0.28
	0.25, 1000	10.522	0.99	0.57
	0.25, 2000	19.875	1.0	0.58
	0.1, 10	0.161	0.85	0.15
	0.1, 100	1.287	0.93	0.38
	0.1, 1000	6.617	0.97	0.73
	0.1, 2000	14.976	0.98	0.73
	0.05, 10	0.126	0.85	0.23
	0.05, 100	1.13	0.87	0.48
	0.05, 1000	7.299	0.89	0.69
	0.05, 2000	11.588	0.89	0.73
	0.01, 10	0.117	0.61	0.1
	0.01, 100	0.982	0.74	0.41
	0.01, 1000	8.849	0.7	0.47

	0.01, 2000	13.008	0.76	0.55
Greedy	1.0, 10	0.025	0.98	0.91
	1.0, 100	0.029	1.0	1.0
	1.0, 1000	0.024	1.0	1.0
	1.0, 2000	0.027	1.0	1.0
	0.5, 10	0.028	0.99	0.97
	0.5, 100	0.038	1.0	0.99
	0.5, 1000	0.033	1.0	1.0
	0.5, 2000	0.036	1.0	1.0
	0.25, 10	0.046	0.98	0.73
	0.25, 100	0.062	0.99	0.99
	0.25, 1000	0.077	1.0	1.0
	0.25, 2000	0.069	1.0	1.0
	0.1, 10	0.089	0.93	0.35
	0.1, 100	0.111	1.0	1.0
	0.1, 1000	0.178	1.0	1.0
	0.1, 2000	0.17	1.0	1.0
	0.05, 10	0.095	0.92	0.26
	0.05, 100	0.285	0.99	0.98
	0.05, 1000	0.281	1.0	1.0
	0.05, 2000	0.401	1.0	1.0
	0.01, 10	0.063	0.64	0.0
	0.01, 100	0.595	0.96	0.43
	0.01, 1000	1.64	0.99	0.99
	0.01, 2000	1.62	0.98	0.98

Tab. 80: Parameter grid search using the GMCS dataset experiment 4 for a deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.3	0.71	0.0
	1.0, 100	2.172	0.69	0.0
	1.0, 1000	23.909	0.7	0.02
	1.0, 2000	46.737	0.77	0.05
	0.5, 10	0.203	0.81	0.0
	0.5, 100	2.57	0.8	0.01
	0.5, 1000	22.83	0.85	0.04
	0.5, 2000	48.852	0.83	0.05
	0.25, 10	0.177	0.7	0.02
	0.25, 100	2.545	0.73	0.0
	0.25, 1000	21.773	0.76	0.08
	0.25, 2000	45.818	0.9	0.13
	0.1, 10	0.243	0.78	0.0
	0.1, 100	2.334	0.8	0.01
	0.1, 1000	24.525	0.79	0.04
	0.1, 2000	43.633	0.87	0.08
	0.05, 10	0.203	0.76	0.0
	0.05, 100	2.365	0.83	0.01
	0.05, 1000	25.211	0.92	0.09
	0.05, 2000	43.55	0.85	0.05
	0.01, 10	0.186	0.58	0.0
	0.01, 100	1.874	0.58	0.0
	0.01, 1000	17.692	0.48	0.0
	0.01, 2000	31.805	0.44	0.02
Revise	1.0, 10	0.093	0.97	0.11
	1.0, 100	1.007	0.97	0.21

	1.0, 1000	7.897	0.98	0.44
	1.0, 2000	13.953	1.0	0.57
	0.5, 10	0.084	0.96	0.14
	0.5, 100	0.965	0.98	0.29
	0.5, 1000	7.35	0.99	0.59
	0.5, 2000	12.91	1.0	0.62
	0.25, 10	0.082	0.89	0.11
	0.25, 100	0.801	0.96	0.43
	0.25, 1000	6.027	1.0	0.68
	0.25, 2000	9.872	1.0	0.7
	0.1, 10	0.077	0.85	0.26
	0.1, 100	0.749	0.96	0.56
	0.1, 1000	3.124	0.99	0.87
	0.1, 2000	5.558	0.98	0.84
	0.05, 10	0.1	0.84	0.21
	0.05, 100	0.542	0.87	0.6
	0.05, 1000	2.665	0.99	0.89
	0.05, 2000	4.415	0.99	0.86
	0.01, 10	0.07	0.6	0.16
	0.01, 100	0.475	0.78	0.51
	0.01, 1000	3.007	0.77	0.67
	0.01, 2000	7.576	0.77	0.6
Ecco	1.0, 10	0.247	0.99	0.13
	1.0, 100	0.728	1.0	0.94
	1.0, 1000	5.487	1.0	1.0
	1.0, 2000	11.354	1.0	0.99
	0.5, 10	0.228	0.97	0.2
	0.5, 100	0.855	1.0	0.88
	0.5, 1000	6.56	1.0	0.99
	0.5, 2000	9.987	1.0	1.0
	0.25, 10	0.225	0.86	0.1
	0.25, 100	1.323	0.95	0.77
	0.25, 1000	6.179	1.0	1.0
	0.25, 2000	9.454	1.0	1.0
	0.1, 10	0.214	0.82	0.17
	0.1, 100	1.203	0.98	0.76
	0.1, 1000	3.163	0.99	0.99
	0.1, 2000	6.761	0.99	0.99
	0.05, 10	0.203	0.79	0.23
	0.05, 100	1.174	0.94	0.78
	0.05, 1000	3.632	0.99	0.99
	0.05, 2000	5.11	1.0	0.99
	0.01, 10	0.191	0.69	0.23
	0.01, 100	1.222	0.73	0.61
	0.01, 1000	5.103	0.75	0.75
	0.01, 2000	11.232	0.7	0.69
Wachter	1.0, 10	0.106	0.98	0.08
	1.0, 100	1.137	1.0	0.21
	1.0, 1000	7.703	1.0	0.54
	1.0, 2000	11.377	0.99	0.66
	0.5, 10	0.113	0.91	0.11
	0.5, 100	0.973	0.98	0.28
	0.5, 1000	9.185	1.0	0.47
	0.5, 2000	12.786	1.0	0.57
	0.25, 10	0.093	0.87	0.12
	0.25, 100	0.88	0.97	0.37

	0.25, 1000	6.751	1.0	0.62
	0.25, 2000	10.017	1.0	0.79
	0.1, 10	0.096	0.85	0.17
	0.1, 100	0.788	0.92	0.52
	0.1, 1000	4.468	1.0	0.79
	0.1, 2000	6.822	0.98	0.81
	0.05, 10	0.082	0.74	0.24
	0.05, 100	0.557	0.93	0.63
	0.05, 1000	2.973	0.99	0.86
	0.05, 2000	4.932	0.99	0.86
	0.01, 10	0.072	0.58	0.16
	0.01, 100	0.474	0.74	0.5
	0.01, 1000	4.062	0.76	0.65
	0.01, 2000	7.122	0.69	0.56
Generic	1.0, 10	0.092	0.96	0.13
	1.0, 100	0.924	0.98	0.23
	1.0, 1000	8.806	0.99	0.42
	1.0, 2000	15.541	0.99	0.51
	0.5, 10	0.088	0.97	0.17
	0.5, 100	0.889	0.96	0.32
	0.5, 1000	7.272	0.99	0.55
	0.5, 2000	15.072	1.0	0.51
	0.25, 10	0.082	0.91	0.17
	0.25, 100	0.799	0.97	0.36
	0.25, 1000	6.563	0.99	0.62
	0.25, 2000	11.329	1.0	0.67
	0.1, 10	0.078	0.8	0.19
	0.1, 100	0.663	0.92	0.53
	0.1, 1000	3.386	1.0	0.82
	0.1, 2000	6.105	0.99	0.83
	0.05, 10	0.106	0.75	0.25
	0.05, 100	0.54	0.95	0.63
	0.05, 1000	2.965	1.0	0.87
	0.05, 2000	6.843	1.0	0.8
	0.01, 10	0.07	0.59	0.19
	0.01, 100	0.483	0.82	0.56
	0.01, 1000	4.746	0.65	0.49
	0.01, 2000	9.5	0.74	0.53
DiCE	1.0, 10	0.139	0.97	0.06
	1.0, 100	1.489	0.97	0.22
	1.0, 1000	10.536	1.0	0.53
	1.0, 2000	22.062	1.0	0.54
	0.5, 10	0.133	0.94	0.12
	0.5, 100	1.443	0.96	0.29
	0.5, 1000	9.786	1.0	0.59
	0.5, 2000	21.837	1.0	0.5
	0.25, 10	0.107	0.91	0.16
	0.25, 100	1.236	0.95	0.4
	0.25, 1000	7.627	1.0	0.67
	0.25, 2000	19.301	1.0	0.55
	0.1, 10	0.116	0.85	0.29
	0.1, 100	0.918	0.97	0.65
	0.1, 1000	5.462	1.0	0.77
	0.1, 2000	11.437	1.0	0.77
	0.05, 10	0.106	0.82	0.3
	0.05, 100	0.912	0.92	0.62

	0.05, 1000	4.581	0.99	0.84
	0.05, 2000	9.404	0.99	0.84
	0.01, 10	0.092	0.62	0.18
	0.01, 100	0.789	0.73	0.5
	0.01, 1000	5.275	0.73	0.58
	0.01, 2000	15.095	0.7	0.51
ClaPROAR	1.0, 10	0.174	0.97	0.08
	1.0, 100	1.74	0.98	0.2
	1.0, 1000	13.287	0.99	0.5
	1.0, 2000	25.624	1.0	0.58
	0.5, 10	0.149	0.96	0.09
	0.5, 100	1.588	1.0	0.23
	0.5, 1000	12.092	1.0	0.63
	0.5, 2000	25.162	1.0	0.56
	0.25, 10	0.143	0.86	0.15
	0.25, 100	1.707	0.9	0.35
	0.25, 1000	10.678	0.99	0.61
	0.25, 2000	21.806	1.0	0.6
	0.1, 10	0.14	0.85	0.17
	0.1, 100	1.05	0.97	0.53
	0.1, 1000	7.619	0.99	0.76
	0.1, 2000	13.834	0.99	0.79
	0.05, 10	0.124	0.76	0.22
	0.05, 100	1.179	0.94	0.53
	0.05, 1000	6.719	0.98	0.77
	0.05, 2000	11.652	0.99	0.79
	0.01, 10	0.112	0.68	0.23
	0.01, 100	0.986	0.76	0.46
	0.01, 1000	7.685	0.81	0.59
	0.01, 2000	12.345	0.74	0.6
Greedy	1.0, 10	0.021	0.99	0.99
	1.0, 100	0.019	1.0	1.0
	1.0, 1000	0.02	1.0	1.0
	1.0, 2000	0.019	1.0	1.0
	0.5, 10	0.031	0.99	0.99
	0.5, 100	0.038	0.99	0.99
	0.5, 1000	0.03	1.0	1.0
	0.5, 2000	0.029	1.0	1.0
	0.25, 10	0.041	0.99	0.87
	0.25, 100	0.05	1.0	1.0
	0.25, 1000	0.048	1.0	1.0
	0.25, 2000	0.04	1.0	1.0
	0.1, 10	0.057	1.0	0.44
	0.1, 100	0.131	1.0	1.0
	0.1, 1000	0.145	1.0	1.0
	0.1, 2000	0.22	1.0	1.0
	0.05, 10	0.063	0.94	0.29
	0.05, 100	0.166	1.0	1.0
	0.05, 1000	0.355	1.0	1.0
	0.05, 2000	0.257	1.0	1.0
	0.01, 10	0.061	0.62	0.01
	0.01, 100	0.616	0.97	0.43
	0.01, 1000	1.304	0.99	0.99
	0.01, 2000	1.321	0.99	0.99

Tab. 81: Parameter grid search using the GMCS dataset experiment 5 for a deep ensemble

F.1.9. Iris dataset using MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	1.803	0.89	0.0
	1.0, 100	0.801	0.89	0.0
	1.0, 1000	8.181	0.82	0.0
	1.0, 2000	16.986	0.89	0.0
	0.5, 10	0.085	0.97	0.0
	0.5, 100	0.809	0.99	0.0
	0.5, 1000	8.736	0.97	0.0
	0.5, 2000	17.701	0.97	0.0
	0.25, 10	0.08	1.0	0.0
	0.25, 100	0.854	1.0	0.0
	0.25, 1000	9.049	1.0	0.0
	0.25, 2000	17.837	0.99	0.0
	0.1, 10	0.079	1.0	0.0
	0.1, 100	0.864	1.0	0.0
	0.1, 1000	9.115	1.0	0.0
	0.1, 2000	18.033	1.0	0.0
	0.05, 10	0.064	1.0	0.0
	0.05, 100	0.966	1.0	0.0
	0.05, 1000	8.904	1.0	0.0
	0.05, 2000	18.067	1.0	0.0
	0.01, 10	0.041	0.1	0.0
	0.01, 100	0.672	1.0	0.0
	0.01, 1000	8.774	1.0	0.0
	0.01, 2000	18.146	1.0	0.0
Revise	1.0, 10	0.114	0.2	0.0
	1.0, 100	0.361	0.3	0.03
	1.0, 1000	3.199	0.27	0.0
	1.0, 2000	9.292	0.47	0.0
	0.5, 10	0.054	0.47	0.0
	0.5, 100	0.366	0.33	0.0
	0.5, 1000	3.999	0.33	0.0
	0.5, 2000	7.904	0.37	0.03
	0.25, 10	0.03	0.2	0.0
	0.25, 100	0.365	0.23	0.0
	0.25, 1000	3.908	0.3	0.0
	0.25, 2000	8.104	0.37	0.03
	0.1, 10	0.039	0.27	0.0
	0.1, 100	0.308	0.2	0.0
	0.1, 1000	4.703	0.4	0.0
	0.1, 2000	8.189	0.33	0.0
	0.05, 10	0.035	0.27	0.0
	0.05, 100	0.355	0.4	0.0
	0.05, 1000	4.595	0.4	0.07
	0.05, 2000	7.731	0.27	0.0
	0.01, 10	0.044	0.43	0.0
	0.01, 100	0.357	0.43	0.03
	0.01, 1000	3.777	0.3	0.0
	0.01, 2000	7.802	0.3	0.0
Ecco	1.0, 10	0.818	0.3	0.0
	1.0, 100	0.923	0.33	0.0
	1.0, 1000	10.055	0.4	0.0
	1.0, 2000	18.297	0.23	0.07
	0.5, 10	0.095	0.27	0.0

	0.5, 100	1.188	0.5	0.03
	0.5, 1000	8.992	0.33	0.0
	0.5, 2000	24.017	0.5	0.03
	0.25, 10	0.079	0.13	0.0
	0.25, 100	1.006	0.37	0.0
	0.25, 1000	11.776	0.4	0.0
	0.25, 2000	15.027	0.17	0.0
	0.1, 10	0.073	0.27	0.0
	0.1, 100	0.921	0.4	0.0
	0.1, 1000	9.639	0.33	0.0
	0.1, 2000	18.235	0.37	0.03
	0.05, 10	0.112	0.37	0.0
	0.05, 100	1.0	0.47	0.07
	0.05, 1000	12.001	0.53	0.03
	0.05, 2000	17.742	0.3	0.0
	0.01, 10	0.091	0.27	0.0
	0.01, 100	0.938	0.33	0.03
	0.01, 1000	9.472	0.27	0.0
	0.01, 2000	19.564	0.37	0.07
Wachter	1.0, 10	3.37	0.47	0.0
	1.0, 100	0.482	0.43	0.0
	1.0, 1000	4.782	0.37	0.03
	1.0, 2000	9.019	0.3	0.07
	0.5, 10	0.052	0.37	0.0
	0.5, 100	0.532	0.5	0.0
	0.5, 1000	4.802	0.33	0.0
	0.5, 2000	7.461	0.27	0.03
	0.25, 10	0.055	0.43	0.0
	0.25, 100	0.446	0.4	0.03
	0.25, 1000	4.788	0.33	0.0
	0.25, 2000	9.341	0.33	0.03
	0.1, 10	0.046	0.5	0.0
	0.1, 100	0.341	0.3	0.0
	0.1, 1000	5.71	0.57	0.1
	0.1, 2000	8.391	0.3	0.03
	0.05, 10	0.059	0.33	0.0
	0.05, 100	0.425	0.37	0.03
	0.05, 1000	4.797	0.4	0.03
	0.05, 2000	6.95	0.17	0.03
	0.01, 10	0.054	0.47	0.0
	0.01, 100	0.458	0.33	0.03
	0.01, 1000	4.983	0.47	0.0
	0.01, 2000	10.153	0.5	0.03
Generic	1.0, 10	0.04	0.37	0.0
	1.0, 100	0.34	0.27	0.0
	1.0, 1000	3.021	0.27	0.03
	1.0, 2000	7.824	0.37	0.03
	0.5, 10	0.041	0.53	0.0
	0.5, 100	0.363	0.33	0.0
	0.5, 1000	3.791	0.3	0.0
	0.5, 2000	7.72	0.3	0.0
	0.25, 10	0.047	0.37	0.0
	0.25, 100	0.349	0.23	0.0
	0.25, 1000	3.867	0.3	0.0
	0.25, 2000	6.786	0.23	0.0
	0.1, 10	0.036	0.3	0.0

	0.1, 100	0.327	0.43	0.03
	0.1, 1000	3.179	0.3	0.0
	0.1, 2000	7.653	0.23	0.0
	0.05, 10	0.039	0.4	0.0
	0.05, 100	0.358	0.43	0.0
	0.05, 1000	3.867	0.3	0.0
	0.05, 2000	8.005	0.37	0.0
	0.01, 10	0.047	0.37	0.0
	0.01, 100	0.356	0.4	0.0
	0.01, 1000	3.611	0.23	0.0
	0.01, 2000	6.945	0.27	0.0
DiCE	1.0, 10	0.063	0.53	0.0
	1.0, 100	0.333	0.23	0.0
	1.0, 1000	4.3	0.23	0.0
	1.0, 2000	11.885	0.33	0.0
	0.5, 10	0.047	0.37	0.0
	0.5, 100	0.463	0.47	0.0
	0.5, 1000	4.013	0.23	0.0
	0.5, 2000	11.347	0.47	0.03
	0.25, 10	0.05	0.4	0.0
	0.25, 100	0.522	0.23	0.0
	0.25, 1000	4.86	0.2	0.0
	0.25, 2000	10.201	0.3	0.0
	0.1, 10	0.05	0.4	0.0
	0.1, 100	0.475	0.47	0.0
	0.1, 1000	4.925	0.23	0.0
	0.1, 2000	13.102	0.53	0.0
	0.05, 10	0.054	0.33	0.0
	0.05, 100	0.466	0.3	0.0
	0.05, 1000	5.185	0.43	0.0
	0.05, 2000	11.786	0.3	0.0
	0.01, 10	0.046	0.33	0.0
	0.01, 100	0.549	0.33	0.0
	0.01, 1000	4.766	0.23	0.0
	0.01, 2000	12.421	0.5	0.0
ClaPROAR	1.0, 10	0.059	0.43	0.0
	1.0, 100	0.504	0.27	0.0
	1.0, 1000	5.588	0.37	0.0
	1.0, 2000	12.817	0.33	0.03
	0.5, 10	0.046	0.33	0.03
	0.5, 100	0.445	0.37	0.0
	0.5, 1000	6.402	0.3	0.0
	0.5, 2000	11.183	0.37	0.0
	0.25, 10	0.05	0.3	0.0
	0.25, 100	0.535	0.47	0.0
	0.25, 1000	5.142	0.37	0.0
	0.25, 2000	13.184	0.37	0.0
	0.1, 10	0.054	0.27	0.0
	0.1, 100	0.515	0.4	0.0
	0.1, 1000	4.984	0.3	0.03
	0.1, 2000	10.638	0.33	0.07
	0.05, 10	0.053	0.33	0.0
	0.05, 100	0.574	0.3	0.0
	0.05, 1000	5.452	0.3	0.0
	0.05, 2000	13.008	0.37	0.0
	0.01, 10	0.072	0.23	0.0

	0.01, 100	0.5	0.37	0.0
	0.01, 1000	5.194	0.23	0.03
	0.01, 2000	11.446	0.4	0.0
Greedy	1.0, 10	2.643	1.0	1.0
	1.0, 100	0.017	1.0	1.0
	1.0, 1000	0.019	1.0	1.0
	1.0, 2000	0.016	1.0	1.0
	0.5, 10	0.103	0.87	0.47
	0.5, 100	0.025	1.0	1.0
	0.5, 1000	0.026	1.0	1.0
	0.5, 2000	0.029	1.0	1.0
	0.25, 10	0.021	0.47	0.1
	0.25, 100	0.052	1.0	1.0
	0.25, 1000	0.05	1.0	1.0
	0.25, 2000	0.052	1.0	1.0
	0.1, 10	0.017	0.37	0.0
	0.1, 100	0.195	1.0	1.0
	0.1, 1000	0.131	1.0	1.0
	0.1, 2000	0.13	1.0	1.0
	0.05, 10	0.018	0.17	0.0
	0.05, 100	0.166	0.77	0.53
	0.05, 1000	0.267	1.0	1.0
	0.05, 2000	0.22	1.0	1.0
	0.01, 10	0.014	0.07	0.0
	0.01, 100	0.156	0.2	0.0
	0.01, 1000	1.477	1.0	1.0
	0.01, 2000	1.198	1.0	1.0

Tab. 82: Parameter grid search iris data experiment using an MLP 1

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.08	0.85	0.0
	1.0, 100	0.784	0.85	0.0
	1.0, 1000	8.391	0.9	0.0
	1.0, 2000	16.215	0.82	0.0
	0.5, 10	0.078	0.87	0.0
	0.5, 100	0.741	0.87	0.0
	0.5, 1000	8.354	0.95	0.0
	0.5, 2000	17.481	0.94	0.0
	0.25, 10	0.088	0.99	0.0
	0.25, 100	0.773	1.0	0.0
	0.25, 1000	8.962	1.0	0.0
	0.25, 2000	18.394	1.0	0.0
	0.1, 10	0.074	1.0	0.0
	0.1, 100	0.767	1.0	0.0
	0.1, 1000	8.865	1.0	0.0
	0.1, 2000	18.224	1.0	0.0
	0.05, 10	0.069	0.91	0.0
	0.05, 100	0.813	1.0	0.0
	0.05, 1000	8.917	1.0	0.0
	0.05, 2000	18.14	1.0	0.0
	0.01, 10	0.053	0.37	0.0
	0.01, 100	0.735	1.0	0.0
	0.01, 1000	8.915	1.0	0.0
	0.01, 2000	18.047	1.0	0.0

Revise	1.0, 10	0.111	0.29	0.03
	1.0, 100	0.262	0.23	0.1
	1.0, 1000	1.693	0.36	0.33
	1.0, 2000	5.102	0.21	0.13
	0.5, 10	0.028	0.21	0.1
	0.5, 100	0.271	0.31	0.2
	0.5, 1000	3.133	0.34	0.27
	0.5, 2000	4.361	0.27	0.23
	0.25, 10	0.024	0.23	0.2
	0.25, 100	0.251	0.27	0.17
	0.25, 1000	1.824	0.27	0.23
	0.25, 2000	5.218	0.3	0.23
	0.1, 10	0.032	0.4	0.2
	0.1, 100	0.247	0.4	0.3
	0.1, 1000	1.837	0.2	0.2
	0.1, 2000	4.433	0.27	0.23
	0.05, 10	0.029	0.33	0.1
	0.05, 100	0.346	0.47	0.23
	0.05, 1000	2.111	0.4	0.33
	0.05, 2000	3.634	0.3	0.3
	0.01, 10	0.025	0.37	0.23
	0.01, 100	0.218	0.37	0.3
	0.01, 1000	1.779	0.3	0.3
	0.01, 2000	4.274	0.4	0.33
Ecco	1.0, 10	0.09	0.49	0.1
	1.0, 100	0.564	0.24	0.17
	1.0, 1000	5.608	0.21	0.17
	1.0, 2000	13.208	0.4	0.23
	0.5, 10	0.083	0.41	0.17
	0.5, 100	0.63	0.4	0.3
	0.5, 1000	5.368	0.34	0.3
	0.5, 2000	14.922	0.37	0.27
	0.25, 10	0.082	0.33	0.1
	0.25, 100	0.566	0.4	0.27
	0.25, 1000	4.442	0.34	0.3
	0.25, 2000	13.763	0.27	0.13
	0.1, 10	0.066	0.23	0.07
	0.1, 100	0.608	0.23	0.17
	0.1, 1000	5.444	0.23	0.2
	0.1, 2000	14.459	0.4	0.3
	0.05, 10	0.11	0.4	0.1
	0.05, 100	0.848	0.2	0.1
	0.05, 1000	8.512	0.47	0.27
	0.05, 2000	11.848	0.23	0.17
	0.01, 10	0.099	0.33	0.07
	0.01, 100	0.481	0.37	0.3
	0.01, 1000	5.995	0.23	0.13
	0.01, 2000	12.437	0.27	0.23
Wachter	1.0, 10	0.036	0.18	0.03
	1.0, 100	0.332	0.22	0.03
	1.0, 1000	3.638	0.25	0.03
	1.0, 2000	9.245	0.27	0.0
	0.5, 10	0.043	0.31	0.13
	0.5, 100	0.407	0.34	0.07
	0.5, 1000	4.317	0.31	0.1

	0.5, 2000	7.197	0.23	0.07
	0.25, 10	0.052	0.3	0.03
	0.25, 100	0.349	0.33	0.13
	0.25, 1000	2.807	0.1	0.07
	0.25, 2000	6.943	0.17	0.07
	0.1, 10	0.043	0.33	0.1
	0.1, 100	0.337	0.2	0.07
	0.1, 1000	3.662	0.23	0.03
	0.1, 2000	9.307	0.53	0.17
	0.05, 10	0.037	0.2	0.1
	0.05, 100	0.34	0.4	0.2
	0.05, 1000	4.161	0.4	0.2
	0.05, 2000	8.906	0.43	0.17
	0.01, 10	0.035	0.2	0.07
	0.01, 100	0.44	0.37	0.1
	0.01, 1000	2.743	0.27	0.2
	0.01, 2000	9.388	0.4	0.07
Generic	1.0, 10	0.029	0.41	0.27
	1.0, 100	0.245	0.18	0.13
	1.0, 1000	3.399	0.29	0.17
	1.0, 2000	3.536	0.38	0.37
	0.5, 10	0.024	0.23	0.17
	0.5, 100	0.257	0.41	0.23
	0.5, 1000	2.223	0.33	0.27
	0.5, 2000	5.236	0.27	0.23
	0.25, 10	0.023	0.23	0.13
	0.25, 100	0.281	0.4	0.27
	0.25, 1000	2.508	0.3	0.27
	0.25, 2000	4.617	0.3	0.27
	0.1, 10	0.036	0.43	0.13
	0.1, 100	0.166	0.37	0.3
	0.1, 1000	2.693	0.3	0.2
	0.1, 2000	3.825	0.2	0.2
	0.05, 10	0.034	0.4	0.13
	0.05, 100	0.159	0.3	0.3
	0.05, 1000	2.548	0.3	0.23
	0.05, 2000	3.664	0.27	0.27
	0.01, 10	0.032	0.37	0.17
	0.01, 100	0.277	0.2	0.1
	0.01, 1000	2.14	0.37	0.3
	0.01, 2000	4.511	0.27	0.23
DiCE	1.0, 10	0.038	0.21	0.0
	1.0, 100	0.437	0.35	0.0
	1.0, 1000	3.713	0.45	0.3
	1.0, 2000	7.477	0.49	0.3
	0.5, 10	0.046	0.4	0.0
	0.5, 100	0.432	0.51	0.03
	0.5, 1000	4.713	0.34	0.13
	0.5, 2000	7.537	0.27	0.13
	0.25, 10	0.047	0.3	0.0
	0.25, 100	0.577	0.4	0.0
	0.25, 1000	3.722	0.27	0.13
	0.25, 2000	9.101	0.4	0.2
	0.1, 10	0.041	0.23	0.0
	0.1, 100	0.429	0.23	0.0
	0.1, 1000	4.377	0.37	0.17

	0.1, 2000	7.718	0.27	0.1
	0.05, 10	0.037	0.23	0.0
	0.05, 100	0.454	0.3	0.0
	0.05, 1000	4.681	0.27	0.1
	0.05, 2000	9.382	0.4	0.17
	0.01, 10	0.062	0.4	0.0
	0.01, 100	0.466	0.27	0.0
	0.01, 1000	3.69	0.3	0.17
	0.01, 2000	7.416	0.27	0.13
ClaPROAR	1.0, 10	0.035	0.18	0.1
	1.0, 100	0.372	0.53	0.37
	1.0, 1000	3.643	0.28	0.2
	1.0, 2000	6.173	0.31	0.27
	0.5, 10	0.052	0.28	0.1
	0.5, 100	0.366	0.4	0.2
	0.5, 1000	3.683	0.27	0.2
	0.5, 2000	9.578	0.47	0.3
	0.25, 10	0.062	0.4	0.17
	0.25, 100	0.381	0.3	0.23
	0.25, 1000	3.755	0.23	0.17
	0.25, 2000	8.759	0.27	0.13
	0.1, 10	0.042	0.33	0.2
	0.1, 100	0.342	0.27	0.2
	0.1, 1000	2.888	0.33	0.3
	0.1, 2000	8.138	0.37	0.27
	0.05, 10	0.05	0.37	0.23
	0.05, 100	0.45	0.4	0.27
	0.05, 1000	2.541	0.33	0.33
	0.05, 2000	5.72	0.5	0.43
	0.01, 10	0.046	0.23	0.07
	0.01, 100	0.385	0.23	0.07
	0.01, 1000	3.208	0.17	0.13
	0.01, 2000	5.042	0.27	0.27
Greedy	1.0, 10	0.017	1.0	0.97
	1.0, 100	0.024	1.0	1.0
	1.0, 1000	0.019	1.0	1.0
	1.0, 2000	0.019	1.0	1.0
	0.5, 10	0.019	0.87	0.6
	0.5, 100	0.028	1.0	1.0
	0.5, 1000	0.024	1.0	1.0
	0.5, 2000	0.024	1.0	1.0
	0.25, 10	0.017	0.53	0.23
	0.25, 100	0.049	1.0	1.0
	0.25, 1000	0.047	1.0	1.0
	0.25, 2000	0.042	1.0	1.0
	0.1, 10	0.019	0.33	0.13
	0.1, 100	0.105	1.0	1.0
	0.1, 1000	0.111	1.0	1.0
	0.1, 2000	0.102	1.0	1.0
	0.05, 10	0.015	0.2	0.0
	0.05, 100	0.161	0.9	0.6
	0.05, 1000	0.216	1.0	1.0
	0.05, 2000	0.224	1.0	1.0
	0.01, 10	0.013	0.0	0.0
	0.01, 100	0.187	0.47	0.13
	0.01, 1000	1.16	1.0	1.0

	0.01, 2000	1.11	1.0	1.0

Tab. 83: Parameter grid search iris data experiment using an MLP 2

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.07	0.66	0.0
	1.0, 100	0.724	0.83	0.0
	1.0, 1000	7.908	0.75	0.0
	1.0, 2000	15.696	0.81	0.0
	0.5, 10	0.076	0.91	0.0
	0.5, 100	0.756	0.95	0.0
	0.5, 1000	8.514	0.89	0.0
	0.5, 2000	17.259	0.92	0.0
	0.25, 10	0.089	1.0	0.0
	0.25, 100	0.805	1.0	0.0
	0.25, 1000	8.94	0.99	0.0
	0.25, 2000	18.103	0.99	0.0
	0.1, 10	0.08	1.0	0.0
	0.1, 100	0.79	1.0	0.0
	0.1, 1000	9.121	1.0	0.0
	0.1, 2000	18.052	1.0	0.0
	0.05, 10	0.065	1.0	0.0
	0.05, 100	0.81	1.0	0.0
	0.05, 1000	9.13	1.0	0.0
	0.05, 2000	18.232	1.0	0.0
	0.01, 10	0.046	0.4	0.0
	0.01, 100	0.776	1.0	0.0
	0.01, 1000	8.945	1.0	0.0
	0.01, 2000	17.877	1.0	0.0
Revise	1.0, 10	0.124	0.63	0.0
	1.0, 100	0.467	0.63	0.0
	1.0, 1000	5.298	0.72	0.0
	1.0, 2000	10.649	0.62	0.0
	0.5, 10	0.043	0.66	0.0
	0.5, 100	0.469	0.61	0.0
	0.5, 1000	4.609	0.55	0.0
	0.5, 2000	9.69	0.65	0.0
	0.25, 10	0.038	0.3	0.0
	0.25, 100	0.34	0.45	0.0
	0.25, 1000	4.475	0.41	0.0
	0.25, 2000	6.875	0.35	0.0
	0.1, 10	0.038	0.43	0.0
	0.1, 100	0.331	0.37	0.0
	0.1, 1000	3.852	0.47	0.0
	0.1, 2000	7.708	0.37	0.0
	0.05, 10	0.041	0.48	0.0
	0.05, 100	0.302	0.37	0.0
	0.05, 1000	2.854	0.29	0.0
	0.05, 2000	7.274	0.34	0.0
	0.01, 10	0.033	0.36	0.0
	0.01, 100	0.389	0.35	0.0
	0.01, 1000	3.606	0.31	0.0
	0.01, 2000	7.128	0.28	0.03
Ecco	1.0, 10	0.121	0.73	0.0
	1.0, 100	1.292	0.83	0.0

	1.0, 1000	13.727	0.8	0.0
	1.0, 2000	26.68	0.7	0.0
	0.5, 10	0.106	0.7	0.0
	0.5, 100	1.106	0.53	0.0
	0.5, 1000	11.853	0.63	0.0
	0.5, 2000	23.655	0.52	0.0
	0.25, 10	0.106	0.47	0.0
	0.25, 100	0.997	0.49	0.0
	0.25, 1000	11.56	0.48	0.0
	0.25, 2000	19.126	0.43	0.0
	0.1, 10	0.111	0.39	0.0
	0.1, 100	1.043	0.39	0.0
	0.1, 1000	9.477	0.37	0.0
	0.1, 2000	19.348	0.41	0.0
	0.05, 10	0.076	0.33	0.0
	0.05, 100	0.815	0.42	0.0
	0.05, 1000	9.574	0.43	0.0
	0.05, 2000	17.271	0.29	0.0
	0.01, 10	0.093	0.38	0.0
	0.01, 100	0.826	0.51	0.0
	0.01, 1000	10.381	0.39	0.0
	0.01, 2000	19.188	0.47	0.0
Wachter	1.0, 10	0.06	0.59	0.0
	1.0, 100	0.551	0.69	0.0
	1.0, 1000	6.252	0.67	0.0
	1.0, 2000	12.725	0.7	0.0
	0.5, 10	0.059	0.69	0.0
	0.5, 100	0.514	0.63	0.0
	0.5, 1000	6.0	0.65	0.0
	0.5, 2000	9.106	0.43	0.0
	0.25, 10	0.052	0.47	0.0
	0.25, 100	0.531	0.44	0.0
	0.25, 1000	4.588	0.4	0.0
	0.25, 2000	9.975	0.51	0.0
	0.1, 10	0.046	0.5	0.0
	0.1, 100	0.496	0.48	0.0
	0.1, 1000	5.268	0.4	0.0
	0.1, 2000	9.118	0.35	0.0
	0.05, 10	0.056	0.39	0.0
	0.05, 100	0.351	0.33	0.0
	0.05, 1000	4.581	0.41	0.0
	0.05, 2000	7.682	0.36	0.0
	0.01, 10	0.044	0.35	0.0
	0.01, 100	0.374	0.29	0.0
	0.01, 1000	4.595	0.31	0.0
	0.01, 2000	8.916	0.35	0.0
Generic	1.0, 10	0.046	0.73	0.0
	1.0, 100	0.513	0.66	0.0
	1.0, 1000	5.168	0.67	0.0
	1.0, 2000	10.141	0.63	0.0
	0.5, 10	0.043	0.69	0.0
	0.5, 100	0.426	0.73	0.0
	0.5, 1000	5.081	0.67	0.0
	0.5, 2000	9.276	0.57	0.0
	0.25, 10	0.044	0.52	0.0
	0.25, 100	0.405	0.44	0.0

	0.25, 1000	4.851	0.53	0.0
	0.25, 2000	8.104	0.5	0.0
	0.1, 10	0.032	0.33	0.0
	0.1, 100	0.35	0.43	0.0
	0.1, 1000	4.226	0.37	0.0
	0.1, 2000	6.657	0.38	0.0
	0.05, 10	0.036	0.29	0.0
	0.05, 100	0.331	0.41	0.0
	0.05, 1000	3.589	0.39	0.0
	0.05, 2000	7.122	0.35	0.0
	0.01, 10	0.036	0.44	0.0
	0.01, 100	0.324	0.42	0.0
	0.01, 1000	3.623	0.39	0.0
	0.01, 2000	7.152	0.35	0.0
DiCE	1.0, 10	0.065	0.76	0.0
	1.0, 100	0.582	0.66	0.0
	1.0, 1000	6.625	0.63	0.0
	1.0, 2000	14.434	0.86	0.0
	0.5, 10	0.059	0.69	0.0
	0.5, 100	0.523	0.56	0.0
	0.5, 1000	5.724	0.44	0.0
	0.5, 2000	10.941	0.55	0.0
	0.25, 10	0.047	0.41	0.0
	0.25, 100	0.448	0.57	0.0
	0.25, 1000	5.957	0.54	0.0
	0.25, 2000	9.845	0.41	0.0
	0.1, 10	0.05	0.36	0.0
	0.1, 100	0.416	0.3	0.0
	0.1, 1000	4.988	0.43	0.0
	0.1, 2000	11.219	0.46	0.0
	0.05, 10	0.065	0.46	0.0
	0.05, 100	0.441	0.31	0.0
	0.05, 1000	3.4	0.14	0.0
	0.05, 2000	7.95	0.29	0.0
	0.01, 10	0.039	0.23	0.0
	0.01, 100	0.415	0.3	0.0
	0.01, 1000	4.574	0.35	0.0
	0.01, 2000	9.33	0.31	0.0
ClaPROAR	1.0, 10	0.074	0.77	0.0
	1.0, 100	0.659	0.53	0.0
	1.0, 1000	7.617	0.76	0.0
	1.0, 2000	15.521	0.83	0.0
	0.5, 10	0.059	0.4	0.0
	0.5, 100	0.689	0.75	0.0
	0.5, 1000	5.949	0.57	0.0
	0.5, 2000	13.575	0.61	0.0
	0.25, 10	0.054	0.33	0.0
	0.25, 100	0.539	0.35	0.0
	0.25, 1000	5.228	0.41	0.0
	0.25, 2000	12.18	0.32	0.0
	0.1, 10	0.048	0.44	0.0
	0.1, 100	0.453	0.33	0.0
	0.1, 1000	5.228	0.35	0.0
	0.1, 2000	12.253	0.34	0.0
	0.05, 10	0.045	0.34	0.0
	0.05, 100	0.583	0.47	0.0

	0.05, 1000	4.744	0.41	0.0
	0.05, 2000	8.667	0.25	0.0
	0.01, 10	0.046	0.32	0.0
	0.01, 100	0.472	0.4	0.0
	0.01, 1000	4.518	0.29	0.0
	0.01, 2000	11.805	0.34	0.0
Greedy	1.0, 10	0.015	1.0	1.0
	1.0, 100	0.015	1.0	1.0
	1.0, 1000	0.017	1.0	1.0
	1.0, 2000	0.014	1.0	1.0
	0.5, 10	0.017	1.0	0.77
	0.5, 100	0.021	1.0	1.0
	0.5, 1000	0.024	1.0	1.0
	0.5, 2000	0.02	1.0	1.0
	0.25, 10	0.019	0.67	0.13
	0.25, 100	0.045	1.0	1.0
	0.25, 1000	0.04	1.0	1.0
	0.25, 2000	0.038	1.0	1.0
	0.1, 10	0.018	0.4	0.07
	0.1, 100	0.085	1.0	1.0
	0.1, 1000	0.1	1.0	1.0
	0.1, 2000	0.079	1.0	1.0
	0.05, 10	0.015	0.2	0.0
	0.05, 100	0.139	0.9	0.57
	0.05, 1000	0.187	1.0	1.0
	0.05, 2000	0.218	1.0	1.0
	0.01, 10	0.013	0.0	0.0
	0.01, 100	0.187	0.37	0.0
	0.01, 1000	0.836	1.0	1.0
	0.01, 2000	1.008	1.0	1.0

Tab. 84: Parameter grid search iris data experiment using an MLP 3

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.075	0.72	0.0
	1.0, 100	0.712	0.78	0.0
	1.0, 1000	7.664	0.75	0.0
	1.0, 2000	16.289	0.81	0.0
	0.5, 10	0.079	0.83	0.0
	0.5, 100	0.732	0.85	0.0
	0.5, 1000	8.157	0.85	0.0
	0.5, 2000	16.256	0.86	0.0
	0.25, 10	0.082	1.0	0.0
	0.25, 100	1.023	1.0	0.0
	0.25, 1000	9.379	1.0	0.0
	0.25, 2000	18.366	1.0	0.0
	0.1, 10	0.083	1.0	0.0
	0.1, 100	0.83	1.0	0.0
	0.1, 1000	9.024	1.0	0.0
	0.1, 2000	18.167	1.0	0.0
	0.05, 10	0.075	1.0	0.0
	0.05, 100	0.868	1.0	0.0
	0.05, 1000	9.037	1.0	0.0
	0.05, 2000	18.097	1.0	0.0
	0.01, 10	0.049	0.27	0.0

	0.01, 100	0.799	1.0	0.0
	0.01, 1000	8.951	1.0	0.0
	0.01, 2000	17.979	1.0	0.0
Revise	1.0, 10	0.126	0.74	0.0
	1.0, 100	0.368	0.61	0.0
	1.0, 1000	4.383	0.72	0.17
	1.0, 2000	7.752	0.61	0.1
	0.5, 10	0.052	0.57	0.0
	0.5, 100	0.353	0.35	0.1
	0.5, 1000	3.938	0.55	0.17
	0.5, 2000	7.744	0.46	0.13
	0.25, 10	0.06	0.41	0.0
	0.25, 100	0.37	0.47	0.07
	0.25, 1000	3.895	0.3	0.0
	0.25, 2000	5.119	0.23	0.13
	0.1, 10	0.031	0.2	0.0
	0.1, 100	0.366	0.43	0.03
	0.1, 1000	3.914	0.27	0.07
	0.1, 2000	7.16	0.31	0.17
	0.05, 10	0.039	0.27	0.0
	0.05, 100	0.379	0.33	0.07
	0.05, 1000	3.672	0.2	0.0
	0.05, 2000	7.498	0.33	0.1
	0.01, 10	0.035	0.33	0.03
	0.01, 100	0.35	0.4	0.07
	0.01, 1000	3.939	0.4	0.07
	0.01, 2000	7.693	0.33	0.2
Ecco	1.0, 10	0.133	0.71	0.0
	1.0, 100	0.965	0.61	0.0
	1.0, 1000	11.536	0.69	0.03
	1.0, 2000	23.916	0.75	0.03
	0.5, 10	0.098	0.57	0.03
	0.5, 100	0.884	0.36	0.03
	0.5, 1000	9.224	0.32	0.0
	0.5, 2000	15.819	0.37	0.13
	0.25, 10	0.086	0.3	0.0
	0.25, 100	0.922	0.34	0.03
	0.25, 1000	8.586	0.37	0.1
	0.25, 2000	19.062	0.27	0.0
	0.1, 10	0.125	0.3	0.0
	0.1, 100	0.7	0.2	0.0
	0.1, 1000	9.536	0.3	0.07
	0.1, 2000	18.13	0.3	0.1
	0.05, 10	0.091	0.37	0.03
	0.05, 100	0.953	0.38	0.0
	0.05, 1000	7.912	0.27	0.0
	0.05, 2000	16.445	0.47	0.2
	0.01, 10	0.142	0.33	0.0
	0.01, 100	0.93	0.4	0.07
	0.01, 1000	9.359	0.3	0.13
	0.01, 2000	17.328	0.27	0.03
Wachter	1.0, 10	0.053	0.68	0.0
	1.0, 100	0.421	0.52	0.0
	1.0, 1000	6.133	0.77	0.0
	1.0, 2000	11.04	0.68	0.03
	0.5, 10	0.037	0.29	0.0

	0.5, 100	0.517	0.47	0.0
	0.5, 1000	4.602	0.37	0.03
	0.5, 2000	9.513	0.28	0.0
	0.25, 10	0.047	0.38	0.0
	0.25, 100	0.571	0.31	0.0
	0.25, 1000	4.394	0.18	0.0
	0.25, 2000	8.875	0.24	0.03
	0.1, 10	0.06	0.47	0.0
	0.1, 100	0.47	0.4	0.03
	0.1, 1000	4.915	0.41	0.0
	0.1, 2000	9.879	0.5	0.07
	0.05, 10	0.045	0.33	0.0
	0.05, 100	0.492	0.4	0.0
	0.05, 1000	4.447	0.23	0.03
	0.05, 2000	9.447	0.3	0.0
	0.01, 10	0.046	0.47	0.0
	0.01, 100	0.397	0.4	0.0
	0.01, 1000	4.339	0.33	0.0
	0.01, 2000	7.68	0.3	0.03
Generic	1.0, 10	0.038	0.61	0.0
	1.0, 100	0.401	0.61	0.0
	1.0, 1000	4.284	0.72	0.1
	1.0, 2000	8.305	0.59	0.13
	0.5, 10	0.037	0.27	0.0
	0.5, 100	0.353	0.4	0.0
	0.5, 1000	3.622	0.37	0.13
	0.5, 2000	6.539	0.19	0.03
	0.25, 10	0.036	0.27	0.0
	0.25, 100	0.356	0.3	0.0
	0.25, 1000	2.814	0.1	0.0
	0.25, 2000	7.705	0.27	0.07
	0.1, 10	0.062	0.43	0.0
	0.1, 100	0.454	0.57	0.03
	0.1, 1000	3.767	0.3	0.1
	0.1, 2000	6.171	0.3	0.1
	0.05, 10	0.037	0.33	0.0
	0.05, 100	0.382	0.43	0.03
	0.05, 1000	3.475	0.5	0.2
	0.05, 2000	7.99	0.47	0.13
	0.01, 10	0.036	0.33	0.0
	0.01, 100	0.329	0.3	0.07
	0.01, 1000	3.556	0.17	0.07
	0.01, 2000	6.568	0.3	0.1
DiCE	1.0, 10	0.049	0.59	0.0
	1.0, 100	0.485	0.6	0.0
	1.0, 1000	6.383	0.72	0.0
	1.0, 2000	13.709	0.75	0.03
	0.5, 10	0.044	0.23	0.0
	0.5, 100	0.482	0.33	0.0
	0.5, 1000	4.924	0.34	0.03
	0.5, 2000	11.459	0.39	0.03
	0.25, 10	0.046	0.3	0.0
	0.25, 100	0.463	0.44	0.0
	0.25, 1000	5.068	0.35	0.0
	0.25, 2000	8.798	0.23	0.03
	0.1, 10	0.05	0.27	0.0

	0.1, 100	0.482	0.34	0.0
	0.1, 1000	5.073	0.37	0.03
	0.05, 10	0.044	0.27	0.0
	0.05, 100	0.497	0.27	0.0
	0.05, 1000	5.105	0.4	0.07
	0.05, 2000	10.448	0.33	0.0
	0.01, 10	0.039	0.2	0.0
	0.01, 100	0.363	0.27	0.0
	0.01, 1000	4.974	0.27	0.0
	0.01, 2000	9.812	0.27	0.03
ClaPROAR	1.0, 10	0.054	0.72	0.0
	1.0, 100	0.507	0.59	0.03
	1.0, 1000	5.347	0.68	0.1
	1.0, 2000	10.644	0.7	0.13
	0.5, 10	0.05	0.32	0.03
	0.5, 100	0.52	0.41	0.1
	0.5, 1000	5.341	0.38	0.1
	0.5, 2000	9.878	0.49	0.2
	0.25, 10	0.044	0.23	0.0
	0.25, 100	0.581	0.43	0.1
	0.25, 1000	5.298	0.33	0.07
	0.25, 2000	8.467	0.43	0.2
	0.1, 10	0.041	0.3	0.03
	0.1, 100	0.474	0.3	0.0
	0.1, 1000	5.735	0.5	0.1
	0.1, 2000	8.77	0.4	0.13
	0.05, 10	0.066	0.51	0.0
	0.05, 100	0.449	0.4	0.03
	0.05, 1000	4.399	0.27	0.1
	0.05, 2000	10.516	0.37	0.13
	0.01, 10	0.037	0.1	0.0
	0.01, 100	0.529	0.37	0.0
	0.01, 1000	5.441	0.4	0.07
	0.01, 2000	11.3	0.4	0.03
Greedy	1.0, 10	0.014	1.0	0.83
	1.0, 100	0.117	1.0	0.83
	1.0, 1000	1.268	1.0	0.77
	1.0, 2000	2.478	1.0	0.83
	0.5, 10	0.02	1.0	0.6
	0.5, 100	0.034	1.0	1.0
	0.5, 1000	0.033	1.0	1.0
	0.5, 2000	0.027	1.0	1.0
	0.25, 10	0.021	0.47	0.2
	0.25, 100	0.05	1.0	1.0
	0.25, 1000	0.063	1.0	1.0
	0.25, 2000	0.05	1.0	1.0
	0.1, 10	0.018	0.23	0.03
	0.1, 100	0.141	1.0	1.0
	0.1, 1000	0.129	1.0	1.0
	0.1, 2000	0.136	1.0	1.0
	0.05, 10	0.017	0.17	0.0
	0.05, 100	0.156	0.8	0.53
	0.05, 1000	0.25	1.0	1.0
	0.05, 2000	0.192	1.0	1.0
	0.01, 10	0.013	0.0	0.0
	0.01, 100	0.213	0.37	0.0

	0.01, 1000	1.158	1.0	1.0
	0.01, 2000	0.978	1.0	1.0

Tab. 85: Parameter grid search iris data experiment using an MLP 4

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.076	0.67	0.0
	1.0, 100	0.74	0.66	0.0
	1.0, 1000	7.812	0.78	0.0
	1.0, 2000	16.559	0.78	0.0
	0.5, 10	0.08	0.92	0.0
	0.5, 100	0.781	0.89	0.0
	0.5, 1000	8.373	0.89	0.0
	0.5, 2000	16.928	0.9	0.0
	0.25, 10	0.089	1.0	0.0
	0.25, 100	0.845	1.0	0.0
	0.25, 1000	9.002	1.0	0.0
	0.25, 2000	18.268	1.0	0.0
	0.1, 10	0.076	1.0	0.0
	0.1, 100	0.86	1.0	0.0
	0.1, 1000	9.06	1.0	0.0
	0.1, 2000	18.221	1.0	0.0
	0.05, 10	0.063	0.92	0.0
	0.05, 100	0.77	1.0	0.0
	0.05, 1000	9.107	1.0	0.0
	0.05, 2000	18.154	1.0	0.0
	0.01, 10	0.048	0.23	0.0
	0.01, 100	0.714	1.0	0.0
	0.01, 1000	8.974	1.0	0.0
	0.01, 2000	18.285	1.0	0.0
Revise	1.0, 10	0.126	0.82	0.0
	1.0, 100	0.56	1.0	0.0
	1.0, 1000	5.879	0.99	0.0
	1.0, 2000	11.469	0.99	0.0
	0.5, 10	0.049	0.88	0.0
	0.5, 100	0.556	0.95	0.0
	0.5, 1000	5.462	0.88	0.0
	0.5, 2000	11.244	0.85	0.0
	0.25, 10	0.046	0.59	0.0
	0.25, 100	0.448	0.63	0.0
	0.25, 1000	3.977	0.57	0.0
	0.25, 2000	8.049	0.46	0.0
	0.1, 10	0.036	0.38	0.0
	0.1, 100	0.364	0.42	0.0
	0.1, 1000	4.592	0.43	0.0
	0.1, 2000	8.32	0.5	0.0
	0.05, 10	0.047	0.51	0.0
	0.05, 100	0.338	0.3	0.0
	0.05, 1000	3.89	0.41	0.0
	0.05, 2000	7.632	0.29	0.0
	0.01, 10	0.032	0.35	0.0
	0.01, 100	0.308	0.24	0.0
	0.01, 1000	4.51	0.42	0.0
	0.01, 2000	6.6	0.27	0.0
Ecco	1.0, 10	0.139	1.0	0.0

	1.0, 100	1.36	0.98	0.0
	1.0, 1000	14.876	0.99	0.0
	1.0, 2000	30.023	0.99	0.0
	0.5, 10	0.122	0.88	0.0
	0.5, 100	1.165	0.84	0.0
	0.5, 1000	14.255	0.87	0.0
	0.5, 2000	28.615	0.89	0.0
	0.25, 10	0.099	0.55	0.0
	0.25, 100	1.009	0.62	0.0
	0.25, 1000	11.096	0.63	0.0
	0.25, 2000	21.891	0.64	0.0
	0.1, 10	0.102	0.39	0.0
	0.1, 100	0.993	0.44	0.0
	0.1, 1000	9.706	0.46	0.0
	0.1, 2000	18.858	0.35	0.0
	0.05, 10	0.097	0.47	0.0
	0.05, 100	0.896	0.35	0.0
	0.05, 1000	7.118	0.19	0.0
	0.05, 2000	21.389	0.35	0.0
	0.01, 10	0.08	0.28	0.0
	0.01, 100	0.925	0.37	0.0
	0.01, 1000	10.73	0.35	0.0
	0.01, 2000	21.805	0.37	0.0
Wachter	1.0, 10	0.065	0.99	0.0
	1.0, 100	0.677	1.0	0.0
	1.0, 1000	7.028	0.99	0.0
	1.0, 2000	14.357	0.99	0.0
	0.5, 10	0.061	0.93	0.0
	0.5, 100	0.586	0.84	0.0
	0.5, 1000	5.62	0.76	0.0
	0.5, 2000	13.208	0.88	0.0
	0.25, 10	0.048	0.53	0.0
	0.25, 100	0.443	0.58	0.0
	0.25, 1000	5.908	0.65	0.0
	0.25, 2000	9.821	0.57	0.0
	0.1, 10	0.05	0.41	0.0
	0.1, 100	0.43	0.41	0.0
	0.1, 1000	4.652	0.34	0.0
	0.1, 2000	10.707	0.31	0.0
	0.05, 10	0.079	0.4	0.0
	0.05, 100	0.482	0.35	0.0
	0.05, 1000	4.484	0.29	0.0
	0.05, 2000	9.112	0.3	0.0
	0.01, 10	0.04	0.22	0.0
	0.01, 100	0.487	0.37	0.0
	0.01, 1000	4.688	0.37	0.0
	0.01, 2000	9.301	0.32	0.0
Generic	1.0, 10	0.055	0.99	0.0
	1.0, 100	0.528	1.0	0.0
	1.0, 1000	5.757	0.99	0.0
	1.0, 2000	11.747	1.0	0.0
	0.5, 10	0.056	0.85	0.0
	0.5, 100	0.529	0.89	0.0
	0.5, 1000	5.578	0.91	0.0
	0.5, 2000	11.457	0.96	0.0
	0.25, 10	0.044	0.59	0.0

	0.25, 100	0.371	0.52	0.0
	0.25, 1000	4.189	0.68	0.0
	0.25, 2000	7.872	0.42	0.0
	0.1, 10	0.042	0.33	0.0
	0.1, 100	0.261	0.27	0.0
	0.1, 1000	3.74	0.31	0.0
	0.1, 2000	8.046	0.41	0.0
	0.05, 10	0.035	0.35	0.0
	0.05, 100	0.328	0.19	0.0
	0.05, 1000	3.499	0.29	0.0
	0.05, 2000	7.515	0.27	0.0
	0.01, 10	0.037	0.25	0.0
	0.01, 100	0.402	0.43	0.0
	0.01, 1000	3.728	0.35	0.0
	0.01, 2000	7.349	0.32	0.0
DiCE	1.0, 10	0.065	0.99	0.0
	1.0, 100	0.654	0.99	0.0
	1.0, 1000	7.503	0.99	0.0
	1.0, 2000	15.092	0.99	0.0
	0.5, 10	0.066	0.85	0.0
	0.5, 100	0.676	0.88	0.0
	0.5, 1000	6.834	0.8	0.0
	0.5, 2000	14.165	0.86	0.0
	0.25, 10	0.052	0.59	0.0
	0.25, 100	0.543	0.53	0.0
	0.25, 1000	5.32	0.59	0.0
	0.25, 2000	12.114	0.5	0.0
	0.1, 10	0.045	0.27	0.0
	0.1, 100	0.516	0.39	0.0
	0.1, 1000	5.278	0.45	0.0
	0.1, 2000	11.203	0.31	0.0
	0.05, 10	0.064	0.44	0.0
	0.05, 100	0.553	0.45	0.0
	0.05, 1000	5.894	0.49	0.0
	0.05, 2000	9.969	0.4	0.0
	0.01, 10	0.056	0.37	0.0
	0.01, 100	0.423	0.25	0.0
	0.01, 1000	4.91	0.39	0.0
	0.01, 2000	8.692	0.32	0.0
ClaPROAR	1.0, 10	0.075	1.0	0.0
	1.0, 100	0.766	0.99	0.0
	1.0, 1000	8.131	0.99	0.0
	1.0, 2000	16.402	0.99	0.0
	0.5, 10	0.069	0.91	0.0
	0.5, 100	0.751	0.87	0.0
	0.5, 1000	7.769	0.84	0.0
	0.5, 2000	14.809	0.85	0.0
	0.25, 10	0.06	0.58	0.0
	0.25, 100	0.524	0.57	0.0
	0.25, 1000	4.571	0.43	0.0
	0.25, 2000	9.671	0.57	0.0
	0.1, 10	0.07	0.5	0.0
	0.1, 100	0.489	0.38	0.0
	0.1, 1000	5.457	0.38	0.0
	0.1, 2000	10.165	0.26	0.0
	0.05, 10	0.062	0.41	0.0

	0.05, 100	0.553	0.43	0.0
	0.05, 1000	6.277	0.33	0.0
	0.05, 2000	10.435	0.32	0.0
	0.01, 10	0.082	0.33	0.0
	0.01, 100	0.482	0.39	0.0
	0.01, 1000	5.245	0.34	0.0
	0.01, 2000	9.176	0.22	0.0
Greedy	1.0, 10	0.018	1.0	0.93
	1.0, 100	0.017	1.0	1.0
	1.0, 1000	0.017	1.0	1.0
	1.0, 2000	0.018	1.0	1.0
	0.5, 10	0.019	0.73	0.37
	0.5, 100	0.025	1.0	1.0
	0.5, 1000	0.028	1.0	1.0
	0.5, 2000	0.028	1.0	1.0
	0.25, 10	0.021	0.5	0.13
	0.25, 100	0.048	1.0	1.0
	0.25, 1000	0.049	1.0	1.0
	0.25, 2000	0.051	1.0	1.0
	0.1, 10	0.019	0.33	0.03
	0.1, 100	0.11	1.0	1.0
	0.1, 1000	0.12	1.0	1.0
	0.1, 2000	0.112	1.0	1.0
	0.05, 10	0.013	0.07	0.0
	0.05, 100	0.166	0.87	0.53
	0.05, 1000	0.231	1.0	1.0
	0.05, 2000	0.229	1.0	1.0
	0.01, 10	0.012	0.0	0.0
	0.01, 100	0.165	0.3	0.0
	0.01, 1000	1.369	1.0	0.93
	0.01, 2000	1.114	1.0	1.0

Tab. 86: Parameter grid search iris data experiment using an MLP 5

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	2.0, 10	30.897	0.67	0.0
	2.0, 100	1.249	0.71	0.0
	2.0, 1000	8.279	0.46	0.0
	2.0, 2000	18.243	0.65	0.0
	2.0, 2500	22.958	0.67	0.0
	2.0, 3000	26.19	0.46	0.0
	2.0, 3500	33.06	0.62	0.0
	2.0, 4000	38.437	0.6	0.0
	1.5, 10	0.1	0.79	0.0
	1.5, 100	0.806	0.63	0.0
	1.5, 1000	9.095	0.72	0.0
	1.5, 2000	17.746	0.73	0.0
	1.5, 2500	22.03	0.56	0.0
	1.5, 3000	26.997	0.72	0.0
	1.5, 3500	32.265	0.7	0.0
	1.5, 4000	33.807	0.58	0.0
	1.0, 10	0.084	0.72	0.0
	1.0, 100	0.856	0.73	0.0
	1.0, 1000	8.154	0.45	0.0
	1.0, 2000	17.896	0.65	0.0

	1.0, 2500	22.6	0.67	0.0
	1.0, 3000	26.212	0.61	0.0
	1.0, 3500	29.698	0.7	0.0
	1.0, 4000	37.51	0.62	0.0
	0.5, 10	0.087	0.92	0.0
	0.5, 100	0.898	0.88	0.03
	0.5, 1000	8.643	0.81	0.07
	0.5, 2000	18.027	0.85	0.07
	0.5, 2500	20.407	0.85	0.03
	0.5, 3000	27.612	0.84	0.0
	0.5, 3500	28.696	0.85	0.03
	0.5, 4000	37.768	0.84	0.03
Revise	2.0, 10	18.485	0.35	0.27
	2.0, 100	0.186	0.44	0.3
	2.0, 1000	1.956	0.44	0.33
	2.0, 2000	3.982	0.44	0.37
	2.0, 2500	5.554	0.42	0.3
	2.0, 3000	7.935	0.38	0.23
	2.0, 3500	9.712	0.4	0.33
	2.0, 4000	9.402	0.52	0.4
	1.5, 10	0.025	0.49	0.37
	1.5, 100	0.141	0.57	0.37
	1.5, 1000	2.042	0.43	0.3
	1.5, 2000	4.277	0.39	0.3
	1.5, 2500	5.422	0.53	0.37
	1.5, 3000	6.422	0.6	0.43
	1.5, 3500	8.604	0.48	0.33
	1.5, 4000	11.029	0.41	0.27
	1.0, 10	0.021	0.49	0.3
	1.0, 100	0.194	0.53	0.37
	1.0, 1000	2.197	0.58	0.3
	1.0, 2000	4.036	0.64	0.47
	1.0, 2500	5.868	0.49	0.27
	1.0, 3000	7.543	0.51	0.3
	1.0, 3500	7.367	0.51	0.4
	1.0, 4000	11.575	0.46	0.27
	0.5, 10	0.021	0.37	0.37
	0.5, 100	0.185	0.27	0.27
	0.5, 1000	1.842	0.4	0.4
	0.5, 2000	4.552	0.37	0.37
	0.5, 2500	5.444	0.37	0.37
	0.5, 3000	7.743	0.31	0.3
	0.5, 3500	6.924	0.43	0.43
	0.5, 4000	9.584	0.41	0.4
Ecco	2.0, 10	8.981	0.53	0.43
	2.0, 100	0.446	0.5	0.43
	2.0, 1000	5.39	0.41	0.3
	2.0, 2000	12.013	0.36	0.2
	2.0, 2500	13.088	0.49	0.4
	2.0, 3000	16.711	0.46	0.33
	2.0, 3500	20.944	0.35	0.2
	2.0, 4000	22.746	0.4	0.33
	1.5, 10	0.063	0.33	0.17
	1.5, 100	0.537	0.35	0.23
	1.5, 1000	5.174	0.55	0.4
	1.5, 2000	11.013	0.52	0.33

	1.5, 2500	14.41	0.4	0.23
	1.5, 3000	15.381	0.57	0.43
	1.5, 3500	18.829	0.6	0.4
	1.5, 4000	20.986	0.57	0.43
	1.0, 10	0.056	0.59	0.37
	1.0, 100	0.562	0.67	0.5
	1.0, 1000	6.039	0.58	0.37
	1.0, 2000	10.835	0.59	0.43
	1.0, 2500	17.537	0.5	0.33
	1.0, 3000	19.783	0.67	0.47
	1.0, 3500	22.238	0.6	0.43
	1.0, 4000	30.833	0.54	0.27
	0.5, 10	0.044	0.47	0.47
	0.5, 100	0.541	0.3	0.3
	0.5, 1000	5.641	0.24	0.23
	0.5, 2000	8.101	0.43	0.43
	0.5, 2500	13.687	0.31	0.3
	0.5, 3000	16.752	0.33	0.33
	0.5, 3500	21.435	0.3	0.3
	0.5, 4000	20.266	0.34	0.33
Wachter	2.0, 10	7.634	0.45	0.23
	2.0, 100	0.19	0.49	0.37
	2.0, 1000	2.671	0.53	0.3
	2.0, 2000	5.888	0.43	0.27
	2.0, 2500	6.651	0.57	0.37
	2.0, 3000	7.464	0.61	0.5
	2.0, 3500	10.456	0.5	0.33
	2.0, 4000	11.83	0.59	0.43
	1.5, 10	0.045	0.63	0.2
	1.5, 100	0.346	0.69	0.43
	1.5, 1000	3.75	0.71	0.43
	1.5, 2000	9.512	0.57	0.27
	1.5, 2500	12.288	0.65	0.27
	1.5, 3000	11.466	0.62	0.43
	1.5, 3500	18.541	0.69	0.4
	1.5, 4000	19.418	0.54	0.27
	1.0, 10	0.025	0.38	0.3
	1.0, 100	0.167	0.48	0.37
	1.0, 1000	2.53	0.45	0.33
	1.0, 2000	4.92	0.52	0.4
	1.0, 2500	6.962	0.35	0.27
	1.0, 3000	7.277	0.46	0.37
	1.0, 3500	10.083	0.57	0.47
	1.0, 4000	9.824	0.57	0.47
	0.5, 10	0.025	0.34	0.33
	0.5, 100	0.215	0.44	0.43
	0.5, 1000	1.841	0.4	0.4
	0.5, 2000	5.049	0.33	0.33
	0.5, 2500	7.095	0.3	0.3
	0.5, 3000	8.632	0.37	0.37
	0.5, 3500	12.542	0.27	0.27
	0.5, 4000	15.318	0.23	0.23
Generic	2.0, 10	0.018	0.41	0.33
	2.0, 100	0.123	0.54	0.47
	2.0, 1000	1.956	0.42	0.3
	2.0, 2000	4.243	0.36	0.27

	2.0, 2500	5.645	0.44	0.33
	2.0, 3000	6.173	0.53	0.47
	2.0, 3500	6.072	0.58	0.47
	2.0, 4000	9.729	0.48	0.4
	1.5, 10	0.02	0.67	0.53
	1.5, 100	0.174	0.55	0.43
	1.5, 1000	2.051	0.52	0.33
	1.5, 2000	4.419	0.4	0.23
	1.5, 2500	5.022	0.54	0.4
	1.5, 3000	6.373	0.52	0.33
	1.5, 3500	8.324	0.55	0.4
	1.5, 4000	12.496	0.41	0.23
	1.0, 10	0.023	0.3	0.13
	1.0, 100	0.165	0.49	0.37
	1.0, 1000	1.422	0.65	0.53
	1.0, 2000	4.117	0.61	0.43
	1.0, 2500	5.668	0.53	0.33
	1.0, 3000	7.29	0.54	0.37
	1.0, 3500	11.027	0.47	0.23
	1.0, 4000	12.465	0.56	0.33
	0.5, 10	0.017	0.37	0.37
	0.5, 100	0.184	0.31	0.3
	0.5, 1000	1.848	0.43	0.43
	0.5, 2000	4.089	0.3	0.3
	0.5, 2500	5.923	0.24	0.23
	0.5, 3000	8.097	0.17	0.17
	0.5, 3500	11.624	0.13	0.13
	0.5, 4000	10.628	0.44	0.43
DiCE	2.0, 10	1.987	0.42	0.33
	2.0, 100	0.155	0.61	0.53
	2.0, 1000	3.3	0.41	0.3
	2.0, 2000	6.901	0.45	0.3
	2.0, 2500	9.468	0.38	0.27
	2.0, 3000	14.282	0.34	0.27
	2.0, 3500	9.287	0.66	0.57
	2.0, 4000	14.984	0.4	0.33
	1.5, 10	0.026	0.42	0.3
	1.5, 100	0.239	0.39	0.27
	1.5, 1000	3.311	0.39	0.23
	1.5, 2000	5.751	0.59	0.4
	1.5, 2500	8.869	0.48	0.27
	1.5, 3500	17.06	0.45	0.23
	1.5, 4000	18.792	0.51	0.3
	1.0, 10	0.033	0.61	0.4
	1.0, 100	0.219	0.75	0.6
	1.0, 1000	3.361	0.48	0.33
	1.0, 2000	5.065	0.53	0.47
	1.0, 2500	9.255	0.53	0.3
	1.0, 3000	10.931	0.57	0.4
	1.0, 3500	14.891	0.56	0.37
	1.0, 4000	16.809	0.66	0.43
	0.5, 10	0.025	0.33	0.33
	0.5, 100	0.257	0.3	0.3
	0.5, 1000	2.06	0.57	0.57
	0.5, 2000	5.765	0.3	0.3
	0.5, 2500	9.265	0.34	0.33

	0.5, 3000	8.378	0.5	0.5
	0.5, 3500	14.235	0.37	0.37
	0.5, 4000	20.658	0.27	0.27
ClaPROAR	2.0, 10	2.079	0.46	0.37
	2.0, 100	0.243	0.46	0.37
	2.0, 1000	2.859	0.32	0.23
	2.0, 2000	5.282	0.43	0.37
	2.0, 2500	4.618	0.59	0.53
	2.0, 3000	9.757	0.33	0.3
	2.0, 3500	12.002	0.45	0.33
	2.0, 4000	17.267	0.3	0.2
	1.5, 10	0.022	0.49	0.3
	1.5, 100	0.248	0.56	0.33
	1.5, 1000	2.315	0.38	0.27
	1.5, 2000	5.598	0.55	0.4
	1.5, 2500	7.882	0.36	0.23
	1.5, 3000	8.605	0.56	0.4
	1.5, 3500	10.471	0.61	0.43
	1.5, 4000	13.64	0.6	0.37
	1.0, 10	0.03	0.48	0.2
	1.0, 100	0.272	0.5	0.27
	1.0, 1000	2.925	0.51	0.33
	1.0, 2000	6.098	0.54	0.27
	1.0, 2500	5.486	0.7	0.47
	1.0, 3000	9.188	0.53	0.37
	1.0, 3500	12.834	0.56	0.3
	1.0, 4000	12.65	0.52	0.43
	0.5, 10	0.021	0.37	0.37
	0.5, 100	0.25	0.27	0.27
	0.5, 1000	2.641	0.3	0.3
	0.5, 2000	5.78	0.27	0.27
	0.5, 2500	5.817	0.44	0.43
	0.5, 3000	10.784	0.3	0.3
	0.5, 3500	9.371	0.4	0.4
	0.5, 4000	13.653	0.34	0.33
Greedy	2.0, 10	3.413	1.0	1.0
	2.0, 100	0.008	1.0	1.0
	2.0, 1000	0.009	1.0	1.0
	2.0, 2000	0.009	1.0	1.0
	2.0, 2500	1.327	1.0	0.97
	2.0, 3000	1.529	1.0	0.9
	2.0, 3500	2.002	1.0	0.93
	2.0, 4000	2.05	1.0	0.97
	1.5, 10	0.012	1.0	0.93
	1.5, 100	0.011	1.0	1.0
	1.5, 1000	0.009	1.0	1.0
	1.5, 2000	0.011	1.0	1.0
	1.5, 2500	0.011	1.0	1.0
	1.5, 3000	1.804	1.0	0.93
	1.5, 3500	0.011	1.0	1.0
	1.5, 4000	0.021	1.0	1.0
	1.0, 10	0.015	1.0	0.93
	1.0, 100	0.016	1.0	1.0
	1.0, 1000	0.027	1.0	1.0
	1.0, 2000	0.018	1.0	1.0
	1.0, 2500	0.025	1.0	1.0

	1.0, 3000	0.023	1.0	1.0
	1.0, 3500	0.025	1.0	1.0
	1.0, 4000	0.023	1.0	1.0
	0.5, 10	0.019	0.9	0.57
	0.5, 100	0.018	1.0	1.0
	0.5, 1000	0.024	1.0	1.0
	0.5, 2000	0.018	1.0	1.0
	0.5, 2500	0.024	1.0	1.0
	0.5, 3000	0.021	1.0	1.0
	0.5, 3500	0.031	1.0	1.0
	0.5, 4000	0.034	1.0	1.0

Tab. 87: Parameter grid search iris data experiment using an MLP extra experiment 1

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	2.0, 10	0.082	0.62	0.0
	2.0, 100	0.651	0.52	0.0
	2.0, 1000	8.198	0.63	0.0
	2.0, 2000	18.623	0.67	0.0
	2.0, 2500	19.821	0.57	0.0
	2.0, 3000	22.872	0.51	0.0
	2.0, 3500	34.673	0.69	0.0
	2.0, 4000	40.415	0.76	0.0
	1.5, 10	0.091	0.45	0.0
	1.5, 100	0.878	0.74	0.0
	1.5, 1000	8.409	0.59	0.0
	1.5, 2000	18.288	0.69	0.0
	1.5, 2500	23.97	0.76	0.0
	1.5, 3000	27.383	0.69	0.0
	1.5, 3500	36.188	0.83	0.0
	1.5, 4000	38.477	0.7	0.0
	1.0, 10	0.094	0.88	0.0
	1.0, 100	0.806	0.73	0.0
	1.0, 1000	8.01	0.78	0.0
	1.0, 2000	16.271	0.74	0.0
	1.0, 2500	23.468	0.81	0.0
	1.0, 3000	28.879	0.81	0.0
	1.0, 3500	34.372	0.79	0.0
	1.0, 4000	38.467	0.71	0.0
	0.5, 10	0.091	0.93	0.0
	0.5, 100	0.808	0.87	0.0
	0.5, 1000	9.995	0.9	0.0
	0.5, 2000	20.082	0.88	0.0
	0.5, 2500	23.884	0.84	0.0
	0.5, 3000	26.609	0.84	0.0
	0.5, 3500	35.817	0.95	0.03
	0.5, 4000	41.8	0.93	0.0
Revise	2.0, 10	0.089	0.68	0.37
	2.0, 100	0.177	0.34	0.33
	2.0, 1000	1.919	0.37	0.37
	2.0, 2000	3.449	0.55	0.53
	2.0, 2500	5.231	0.35	0.33
	2.0, 3000	6.687	0.41	0.4
	2.0, 3500	8.277	0.38	0.37
	2.0, 4000	10.091	0.44	0.43

	1.5, 10	0.02	0.38	0.37
	1.5, 100	0.168	0.41	0.4
	1.5, 1000	1.994	0.31	0.3
	1.5, 2000	3.669	0.47	0.47
	1.5, 2500	5.648	0.24	0.23
	1.5, 3000	8.011	0.34	0.33
	1.5, 3500	7.874	0.4	0.4
	1.5, 4000	12.233	0.37	0.37
	1.0, 10	0.019	0.37	0.37
	1.0, 100	0.188	0.23	0.23
	1.0, 1000	1.843	0.4	0.4
	1.0, 2000	4.15	0.34	0.33
	1.0, 2500	5.284	0.38	0.37
	1.0, 3000	7.752	0.33	0.33
	1.0, 3500	8.923	0.47	0.47
	1.0, 4000	14.273	0.27	0.27
	0.5, 10	0.02	0.27	0.27
	0.5, 100	0.186	0.23	0.23
	0.5, 1000	2.035	0.23	0.23
	0.5, 2000	3.659	0.53	0.53
	0.5, 2500	4.914	0.5	0.5
	0.5, 3000	8.626	0.23	0.23
	0.5, 3500	8.775	0.43	0.43
	0.5, 4000	11.725	0.3	0.3
Ecco	2.0, 10	0.05	0.38	0.37
	2.0, 100	0.517	0.3	0.3
	2.0, 1000	3.705	0.47	0.47
	2.0, 2000	11.003	0.31	0.3
	2.0, 2500	14.083	0.31	0.3
	2.0, 3000	15.58	0.43	0.43
	2.0, 3500	17.998	0.44	0.43
	2.0, 4000	24.675	0.27	0.27
	1.5, 10	0.05	0.37	0.37
	1.5, 100	0.495	0.3	0.3
	1.5, 1000	5.731	0.24	0.23
	1.5, 2000	9.898	0.47	0.47
	1.5, 2500	15.082	0.23	0.23
	1.5, 3000	16.388	0.38	0.37
	1.5, 3500	20.346	0.34	0.33
	1.5, 4000	18.718	0.4	0.4
	1.0, 10	0.051	0.3	0.3
	1.0, 100	0.32	0.5	0.5
	1.0, 1000	4.936	0.44	0.43
	1.0, 2000	10.455	0.37	0.37
	1.0, 2500	9.705	0.47	0.47
	1.0, 3000	17.798	0.27	0.27
	1.0, 3500	20.062	0.37	0.37
	1.0, 4000	25.127	0.3	0.3
	0.5, 10	0.055	0.27	0.27
	0.5, 100	0.5	0.33	0.33
	0.5, 1000	5.255	0.33	0.33
	0.5, 2000	11.051	0.33	0.33
	0.5, 2500	13.472	0.33	0.33
	0.5, 3000	16.557	0.37	0.37
	0.5, 3500	15.7	0.43	0.43
	0.5, 4000	27.951	0.2	0.2

Wachter	2.0, 10	0.025	0.3	0.3
	2.0, 100	0.205	0.45	0.43
	2.0, 1000	2.564	0.3	0.3
	2.0, 2000	3.712	0.45	0.43
	2.0, 2500	6.582	0.44	0.43
	2.0, 3000	9.309	0.37	0.37
	2.0, 3500	8.3	0.48	0.47
	2.0, 4000	14.597	0.37	0.37
	1.5, 10	0.028	0.24	0.23
	1.5, 100	0.253	0.27	0.27
	1.5, 1000	2.466	0.34	0.33
	1.5, 2000	5.386	0.3	0.3
	1.5, 2500	7.225	0.27	0.27
	1.5, 3000	6.829	0.47	0.47
	1.5, 3500	10.481	0.37	0.37
	1.5, 4000	13.17	0.33	0.33
	1.0, 10	0.025	0.44	0.43
	1.0, 100	0.22	0.37	0.37
	1.0, 1000	2.65	0.23	0.23
	1.0, 2000	4.933	0.4	0.4
	1.0, 2500	6.991	0.27	0.27
	1.0, 3000	10.406	0.23	0.23
	1.0, 3500	11.173	0.33	0.33
	1.0, 4000	9.489	0.5	0.5
	0.5, 10	0.025	0.17	0.17
	0.5, 100	0.231	0.3	0.3
	0.5, 1000	2.808	0.13	0.13
	0.5, 2000	5.116	0.33	0.33
	0.5, 2500	7.344	0.2	0.2
	0.5, 3000	7.149	0.53	0.53
	0.5, 3500	11.093	0.33	0.33
	0.5, 4000	13.322	0.33	0.33
Generic	2.0, 10	0.02	0.37	0.37
	2.0, 100	0.217	0.3	0.3
	2.0, 1000	1.487	0.41	0.4
	2.0, 2000	4.275	0.27	0.27
	2.0, 2500	4.91	0.47	0.47
	2.0, 3000	7.226	0.41	0.4
	2.0, 3500	8.233	0.48	0.47
	2.0, 4000	14.644	0.27	0.27
	1.5, 10	0.02	0.24	0.23
	1.5, 100	0.172	0.27	0.27
	1.5, 1000	1.943	0.33	0.33
	1.5, 2000	4.318	0.27	0.27
	1.5, 2500	4.083	0.4	0.4
	1.5, 3000	7.646	0.38	0.37
	1.5, 3500	12.804	0.17	0.17
	1.5, 4000	16.107	0.27	0.27
	1.0, 10	0.02	0.27	0.27
	1.0, 100	0.176	0.34	0.33
	1.0, 1000	1.412	0.47	0.47
	1.0, 2000	4.067	0.34	0.33
	1.0, 2500	5.587	0.3	0.3
	1.0, 3000	6.983	0.37	0.37
	1.0, 3500	9.79	0.33	0.33

	1.0, 4000	12.587	0.37	0.37
	0.5, 10	0.018	0.37	0.37
	0.5, 100	0.183	0.2	0.2
	0.5, 1000	1.959	0.3	0.3
	0.5, 2000	4.635	0.1	0.1
	0.5, 2500	6.485	0.23	0.23
	0.5, 3000	8.282	0.3	0.3
	0.5, 3500	8.634	0.33	0.33
	0.5, 4000	12.206	0.3	0.3
DiCE	2.0, 10	0.02	0.37	0.37
	2.0, 100	0.233	0.32	0.3
	2.0, 1000	3.147	0.35	0.33
	2.0, 2000	6.622	0.34	0.33
	2.0, 2500	11.088	0.15	0.13
	2.0, 3000	10.271	0.43	0.43
	2.0, 3500	13.909	0.37	0.37
	2.0, 4000	16.866	0.4	0.4
	1.5, 10	0.023	0.41	0.4
	1.5, 100	0.227	0.3	0.3
	1.5, 1000	3.037	0.37	0.37
	1.5, 2000	7.505	0.24	0.23
	1.5, 2500	7.967	0.43	0.43
	1.5, 3000	12.542	0.34	0.33
	1.5, 3500	15.464	0.41	0.4
	1.5, 4000	22.758	0.28	0.27
	1.0, 10	0.025	0.4	0.4
	1.0, 100	0.277	0.33	0.33
	1.0, 1000	2.542	0.34	0.33
	1.0, 2000	7.95	0.24	0.23
	1.0, 2500	9.931	0.3	0.3
	1.0, 3000	9.058	0.5	0.5
	1.0, 3500	17.442	0.3	0.3
	1.0, 4000	18.008	0.4	0.4
	0.5, 10	0.025	0.3	0.3
	0.5, 100	0.222	0.4	0.4
	0.5, 1000	2.884	0.47	0.47
	0.5, 2000	7.46	0.27	0.27
	0.5, 2500	9.174	0.37	0.37
	0.5, 3000	13.33	0.33	0.33
	0.5, 3500	13.777	0.43	0.43
	0.5, 4000	21.01	0.33	0.33
ClaPROAR	2.0, 10	0.027	0.37	0.37
	2.0, 100	0.174	0.37	0.37
	2.0, 1000	2.68	0.31	0.3
	2.0, 2000	5.704	0.27	0.27
	2.0, 2500	5.534	0.37	0.37
	2.0, 3000	10.16	0.25	0.23
	2.0, 3500	13.452	0.35	0.33
	2.0, 4000	13.556	0.47	0.47
	1.5, 10	0.025	0.4	0.4
	1.5, 100	0.162	0.47	0.47
	1.5, 1000	2.655	0.34	0.33
	1.5, 2000	5.473	0.3	0.3
	1.5, 2500	6.978	0.34	0.33
	1.5, 3000	12.064	0.2	0.2
	1.5, 3500	12.457	0.3	0.3

	1.5, 4000	13.511	0.37	0.37
	1.0, 10	0.021	0.41	0.4
	1.0, 100	0.243	0.27	0.27
	1.0, 1000	1.918	0.4	0.4
	1.0, 2000	5.481	0.3	0.3
	1.0, 2500	6.882	0.34	0.33
	1.0, 3000	8.822	0.33	0.33
	1.0, 3500	9.208	0.5	0.5
	1.0, 4000	15.825	0.23	0.23
	0.5, 10	0.027	0.3	0.3
	0.5, 100	0.236	0.3	0.3
	0.5, 1000	2.631	0.37	0.37
	0.5, 2000	5.861	0.2	0.2
	0.5, 2500	6.996	0.37	0.37
	0.5, 3000	8.915	0.37	0.37
	0.5, 3500	10.536	0.5	0.5
	0.5, 4000	13.127	0.43	0.43
Greedy	2.0, 10	0.016	1.0	1.0
	2.0, 100	0.02	1.0	1.0
	2.0, 1000	0.014	1.0	1.0
	2.0, 2000	0.932	0.97	0.97
	2.0, 2500	0.017	1.0	1.0
	2.0, 3000	0.019	1.0	1.0
	2.0, 3500	0.018	1.0	1.0
	2.0, 4000	0.015	1.0	1.0
	1.5, 10	0.018	1.0	0.93
	1.5, 100	0.02	1.0	1.0
	1.5, 1000	0.018	1.0	1.0
	1.5, 2000	0.018	1.0	1.0
	1.5, 2500	0.014	1.0	1.0
	1.5, 3000	0.015	1.0	1.0
	1.5, 3500	0.016	1.0	1.0
	1.5, 4000	0.018	1.0	1.0
	1.0, 10	0.019	1.0	0.83
	1.0, 100	0.029	1.0	1.0
	1.0, 1000	0.023	1.0	1.0
	1.0, 2000	0.023	1.0	1.0
	1.0, 2500	0.019	1.0	1.0
	1.0, 3000	0.026	1.0	1.0
	1.0, 3500	0.016	1.0	1.0
	1.0, 4000	0.022	1.0	1.0
	0.5, 10	0.027	0.9	0.33
	0.5, 100	0.03	1.0	1.0
	0.5, 1000	0.033	1.0	1.0
	0.5, 2000	0.032	1.0	1.0
	0.5, 2500	0.077	1.0	1.0
	0.5, 3000	0.034	1.0	1.0
	0.5, 3500	0.042	1.0	1.0
	0.5, 4000	0.033	1.0	1.0

Tab. 88: Parameter grid search iris data experiment using an MLP extra experiment 2

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	2.0, 10	0.081	0.71	0.0
	2.0, 100	0.829	0.8	0.0

	2.0, 1000	9.15	0.78	0.0
	2.0, 2000	17.746	0.66	0.0
	2.0, 2500	23.493	0.76	0.0
	2.0, 3000	23.468	0.56	0.0
	2.0, 3500	36.244	0.83	0.0
	2.0, 4000	41.721	0.74	0.0
	1.5, 10	0.092	0.84	0.0
	1.5, 100	0.897	0.76	0.0
	1.5, 1000	9.04	0.77	0.0
	1.5, 2000	19.448	0.85	0.0
	1.5, 2500	24.482	0.85	0.0
	1.5, 3000	29.154	0.77	0.0
	1.5, 3500	36.351	0.81	0.0
	1.5, 4000	39.068	0.8	0.0
	1.0, 10	0.094	0.82	0.0
	1.0, 100	0.871	0.88	0.0
	1.0, 1000	9.73	0.88	0.0
	1.0, 2000	18.305	0.83	0.0
	1.0, 2500	24.947	0.89	0.0
	1.0, 3000	27.8	0.77	0.0
	1.0, 3500	35.58	0.87	0.0
	1.0, 4000	39.753	0.82	0.0
	0.5, 10	0.095	0.87	0.0
	0.5, 100	0.822	0.89	0.03
	0.5, 1000	9.351	0.9	0.07
	0.5, 2000	19.621	0.87	0.03
	0.5, 2500	24.211	0.92	0.03
	0.5, 3000	27.761	0.88	0.07
	0.5, 3500	35.067	0.92	0.0
	0.5, 4000	43.089	0.89	0.0
Revise	2.0, 10	0.096	0.51	0.3
	2.0, 100	0.183	0.3	0.2
	2.0, 1000	1.861	0.48	0.53
	2.0, 2000	2.621	0.66	0.7
	2.0, 2500	3.237	0.64	0.67
	2.0, 3000	4.23	0.63	0.7
	2.0, 3500	5.49	0.56	0.63
	2.0, 4000	8.231	0.56	0.6
	1.5, 10	0.02	0.25	0.2
	1.5, 100	0.204	0.26	0.2
	1.5, 1000	1.913	0.42	0.4
	1.5, 2000	4.317	0.31	0.27
	1.5, 2500	5.962	0.3	0.27
	1.5, 3000	4.629	0.6	0.57
	1.5, 3500	11.874	0.23	0.2
	1.5, 4000	13.45	0.32	0.3
	1.0, 10	0.022	0.18	0.17
	1.0, 100	0.166	0.4	0.4
	1.0, 1000	1.871	0.34	0.33
	1.0, 2000	4.233	0.31	0.3
	1.0, 2500	5.912	0.37	0.37
	1.0, 3000	8.241	0.24	0.23
	1.0, 3500	9.814	0.3	0.3
	1.0, 4000	13.541	0.28	0.27
	0.5, 10	0.015	0.47	0.47
	0.5, 100	0.178	0.31	0.3

	0.5, 1000	1.896	0.33	0.33
	0.5, 2000	4.137	0.27	0.27
	0.5, 2500	5.622	0.33	0.33
	0.5, 3000	9.361	0.2	0.2
	0.5, 3500	10.968	0.3	0.3
	0.5, 4000	13.344	0.3	0.3
Ecco	2.0, 10	0.04	0.5	0.43
	2.0, 100	0.392	0.54	0.57
	2.0, 1000	2.586	0.78	0.83
	2.0, 2000	5.891	0.65	0.73
	2.0, 2500	9.039	0.54	0.6
	2.0, 3000	12.904	0.66	0.7
	2.0, 3500	9.798	0.71	0.8
	2.0, 4000	13.61	0.66	0.7
	1.5, 10	0.053	0.41	0.37
	1.5, 100	0.439	0.42	0.33
	1.5, 1000	4.359	0.35	0.33
	1.5, 2000	7.337	0.54	0.57
	1.5, 2500	9.157	0.55	0.57
	1.5, 3000	15.081	0.52	0.57
	1.5, 3500	17.299	0.56	0.6
	1.5, 4000	18.494	0.6	0.67
	1.0, 10	0.053	0.34	0.33
	1.0, 100	0.434	0.48	0.47
	1.0, 1000	5.75	0.3	0.27
	1.0, 2000	10.663	0.39	0.37
	1.0, 2500	9.612	0.52	0.5
	1.0, 3000	16.589	0.4	0.4
	1.0, 3500	22.447	0.31	0.3
	1.0, 4000	25.343	0.35	0.33
	0.5, 10	0.056	0.24	0.23
	0.5, 100	0.492	0.27	0.27
	0.5, 1000	5.317	0.37	0.37
	0.5, 2000	10.002	0.44	0.43
	0.5, 2500	13.441	0.4	0.4
	0.5, 3000	14.306	0.54	0.53
	0.5, 3500	25.92	0.15	0.13
	0.5, 4000	19.792	0.41	0.4
Wachter	2.0, 10	0.022	0.42	0.33
	2.0, 100	0.223	0.48	0.37
	2.0, 1000	2.208	0.49	0.53
	2.0, 2000	3.181	0.67	0.73
	2.0, 2500	4.479	0.53	0.57
	2.0, 3000	7.297	0.55	0.6
	2.0, 3500	5.851	0.7	0.77
	2.0, 4000	9.663	0.61	0.67
	1.5, 10	0.024	0.36	0.3
	1.5, 100	0.223	0.42	0.37
	1.5, 1000	2.304	0.51	0.47
	1.5, 2000	5.592	0.29	0.23
	1.5, 2500	7.894	0.3	0.23
	1.5, 3000	8.862	0.36	0.33
	1.5, 3500	11.1	0.4	0.37
	1.5, 4000	14.561	0.44	0.4
	1.0, 10	0.028	0.22	0.2
	1.0, 100	0.21	0.37	0.37

	1.0, 1000	2.793	0.21	0.2
	1.0, 2000	5.244	0.34	0.33
	1.0, 2500	6.794	0.37	0.37
	1.0, 3000	6.94	0.44	0.43
	1.0, 3500	13.014	0.35	0.33
	1.0, 4000	13.499	0.38	0.37
	0.5, 10	0.025	0.27	0.27
	0.5, 100	0.211	0.34	0.33
	0.5, 1000	2.443	0.37	0.37
	0.5, 2000	3.966	0.37	0.37
	0.5, 2500	6.316	0.43	0.43
	0.5, 3000	8.312	0.37	0.37
	0.5, 3500	12.577	0.27	0.27
	0.5, 4000	15.004	0.27	0.27
Generic	2.0, 10	0.02	0.32	0.23
	2.0, 100	0.177	0.51	0.47
	2.0, 1000	1.283	0.71	0.77
	2.0, 2000	2.521	0.66	0.73
	2.0, 2500	3.536	0.58	0.63
	2.0, 3000	4.881	0.55	0.63
	2.0, 3500	7.822	0.53	0.57
	2.0, 4000	9.145	0.57	0.63
	1.5, 10	0.017	0.48	0.43
	1.5, 100	0.175	0.4	0.37
	1.5, 1000	2.05	0.32	0.27
	1.5, 2000	4.255	0.3	0.27
	1.5, 2500	5.244	0.4	0.37
	1.5, 3000	7.514	0.34	0.3
	1.5, 3500	10.171	0.36	0.3
	1.5, 4000	13.327	0.38	0.33
	1.0, 10	0.015	0.48	0.47
	1.0, 100	0.176	0.33	0.33
	1.0, 1000	1.564	0.35	0.33
	1.0, 2000	4.155	0.28	0.27
	1.0, 2500	6.216	0.22	0.2
	1.0, 3000	7.241	0.37	0.37
	1.0, 3500	10.676	0.29	0.27
	1.0, 4000	8.982	0.47	0.47
	0.5, 10	0.02	0.17	0.17
	0.5, 100	0.134	0.44	0.43
	0.5, 1000	1.993	0.34	0.33
	0.5, 2000	3.819	0.37	0.37
	0.5, 2500	5.517	0.37	0.37
	0.5, 3000	8.634	0.27	0.27
	0.5, 3500	11.062	0.24	0.23
	0.5, 4000	11.67	0.44	0.43
DiCE	2.0, 10	0.027	0.34	0.17
	2.0, 100	0.163	0.53	0.47
	2.0, 1000	2.264	0.64	0.7
	2.0, 2000	5.651	0.46	0.5
	2.0, 2500	4.409	0.72	0.8
	2.0, 3000	8.558	0.56	0.63
	2.0, 3500	11.604	0.54	0.6
	2.0, 4000	10.023	0.64	0.7
	1.5, 10	0.027	0.44	0.4
	1.5, 100	0.185	0.38	0.33

	1.5, 1000	3.513	0.35	0.3
	1.5, 2000	6.945	0.44	0.4
	1.5, 2500	10.651	0.38	0.37
	1.5, 3000	20.299	0.26	0.23
	1.5, 3500	17.948	0.45	0.43
	1.5, 4000	26.222	0.36	0.33
	1.0, 10	0.022	0.45	0.43
	1.0, 100	0.272	0.22	0.2
	1.0, 1000	4.535	0.22	0.2
	1.0, 2000	9.41	0.27	0.27
	1.0, 2500	12.319	0.3	0.3
	1.0, 3000	16.446	0.28	0.27
	1.0, 3500	21.874	0.34	0.33
	1.0, 4000	25.703	0.22	0.2
	0.5, 10	0.029	0.27	0.27
	0.5, 100	0.279	0.14	0.13
	0.5, 1000	3.738	0.23	0.23
	0.5, 2000	6.591	0.41	0.4
	0.5, 2500	11.018	0.27	0.27
	0.5, 3000	15.011	0.28	0.27
	0.5, 3500	17.644	0.34	0.33
	0.5, 4000	27.329	0.13	0.13
ClaPROAR	2.0, 10	0.023	0.4	0.33
	2.0, 100	0.24	0.45	0.37
	2.0, 1000	2.062	0.64	0.7
	2.0, 2000	5.119	0.41	0.47
	2.0, 2500	6.155	0.59	0.63
	2.0, 3000	6.277	0.6	0.67
	2.0, 3500	9.521	0.6	0.67
	2.0, 4000	11.314	0.57	0.63
	1.5, 10	0.066	0.37	0.3
	1.5, 100	0.237	0.42	0.4
	1.5, 1000	2.81	0.41	0.37
	1.5, 2000	5.695	0.39	0.37
	1.5, 2500	8.464	0.28	0.23
	1.5, 3000	13.369	0.18	0.1
	1.5, 3500	13.478	0.35	0.3
	1.5, 4000	18.596	0.27	0.23
	1.0, 10	0.026	0.44	0.43
	1.0, 100	0.241	0.38	0.37
	1.0, 1000	2.829	0.35	0.33
	1.0, 2000	4.226	0.42	0.4
	1.0, 2500	8.418	0.25	0.23
	1.0, 3000	11.997	0.21	0.2
	1.0, 3500	12.379	0.45	0.43
	1.0, 4000	18.559	0.32	0.3
	0.5, 10	0.025	0.4	0.4
	0.5, 100	0.228	0.4	0.4
	0.5, 1000	2.866	0.31	0.3
	0.5, 2000	6.148	0.27	0.27
	0.5, 2500	7.645	0.34	0.33
	0.5, 3000	10.878	0.3	0.3
	0.5, 3500	16.22	0.24	0.23
	0.5, 4000	14.261	0.5	0.5
Greedy	2.0, 10	0.01	1.0	1.0
	2.0, 100	0.011	1.0	1.0

	2.0, 1000	0.012	1.0	1.0
	2.0, 2000	0.008	1.0	1.0
	2.0, 2500	0.014	1.0	1.0
	2.0, 3000	0.012	1.0	1.0
	2.0, 3500	0.013	1.0	1.0
	2.0, 4000	0.014	1.0	1.0
	1.5, 10	0.011	1.0	1.0
	1.5, 100	0.016	1.0	1.0
	1.5, 1000	0.011	1.0	1.0
	1.5, 2000	0.012	1.0	1.0
	1.5, 2500	0.01	1.0	1.0
	1.5, 3000	0.011	1.0	1.0
	1.5, 3500	0.014	1.0	1.0
	1.5, 4000	0.013	1.0	1.0
	1.0, 10	0.017	1.0	0.97
	1.0, 100	0.016	1.0	1.0
	1.0, 1000	0.014	1.0	1.0
	1.0, 2000	0.02	1.0	1.0
	1.0, 2500	0.019	1.0	1.0
	1.0, 3000	0.02	1.0	1.0
	1.0, 3500	0.018	1.0	1.0
	1.0, 4000	0.017	1.0	1.0
	0.5, 10	0.018	0.97	0.67
	0.5, 100	0.028	1.0	1.0
	0.5, 1000	0.027	1.0	1.0
	0.5, 2000	0.028	1.0	1.0
	0.5, 2500	0.028	1.0	1.0
	0.5, 3000	0.021	1.0	1.0
	0.5, 3500	0.027	1.0	1.0
	0.5, 4000	0.027	1.0	1.0

Tab. 89: Parameter grid search iris data experiment using an MLP extra experiment 3

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	2.0, 10	0.082	0.6	0.0
	2.0, 100	0.887	0.65	0.0
	2.0, 1000	10.239	0.66	0.0
	2.0, 2000	20.061	0.67	0.0
	2.0, 2500	24.822	0.67	0.0
	2.0, 3000	31.914	0.7	0.0
	2.0, 3500	38.934	0.7	0.0
	2.0, 4000	43.748	0.56	0.0
	1.5, 10	0.086	0.72	0.0
	1.5, 100	0.85	0.66	0.0
	1.5, 1000	9.809	0.62	0.0
	1.5, 2000	19.9	0.64	0.0
	1.5, 2500	25.361	0.75	0.0
	1.5, 3000	30.988	0.7	0.0
	1.5, 3500	35.511	0.57	0.0
	1.5, 4000	46.401	0.79	0.0
	1.0, 10	0.076	0.53	0.0
	1.0, 100	0.945	0.75	0.0
	1.0, 1000	10.403	0.74	0.0
	1.0, 2000	21.033	0.78	0.0
	1.0, 2500	26.002	0.7	0.0

	1.0, 3000	31.36	0.75	0.0
	1.0, 3500	38.521	0.73	0.0
	1.0, 4000	36.855	0.5	0.0
	0.5, 10	0.093	0.8	0.0
	0.5, 100	1.057	0.82	0.0
	0.5, 1000	9.757	0.85	0.1
	0.5, 2000	20.226	0.9	0.07
	0.5, 2500	20.877	0.81	0.13
	0.5, 3000	27.078	0.79	0.03
	0.5, 3500	36.871	0.86	0.03
	0.5, 4000	42.055	0.91	0.17
Revise	2.0, 10	0.098	0.5	0.47
	2.0, 100	0.196	0.32	0.23
	2.0, 1000	2.147	0.34	0.3
	2.0, 2000	4.322	0.44	0.37
	2.0, 2500	5.573	0.51	0.47
	2.0, 3000	9.325	0.32	0.27
	2.0, 3500	11.563	0.47	0.4
	2.0, 4000	16.416	0.35	0.3
	1.5, 10	0.021	0.25	0.2
	1.5, 100	0.182	0.32	0.3
	1.5, 1000	2.3	0.24	0.2
	1.5, 2000	4.262	0.39	0.37
	1.5, 2500	6.302	0.3	0.27
	1.5, 3000	8.439	0.4	0.4
	1.5, 3500	12.36	0.33	0.3
	1.5, 4000	18.731	0.22	0.2
	1.0, 10	0.022	0.34	0.33
	1.0, 100	0.189	0.34	0.33
	1.0, 1000	1.85	0.37	0.37
	1.0, 2000	4.792	0.24	0.23
	1.0, 2500	7.118	0.24	0.23
	1.0, 3000	10.568	0.17	0.17
	1.0, 3500	12.205	0.3	0.3
	1.0, 4000	9.879	0.54	0.53
	0.5, 10	0.02	0.3	0.3
	0.5, 100	0.188	0.27	0.27
	0.5, 1000	2.129	0.33	0.33
	0.5, 2000	3.025	0.5	0.5
	0.5, 2500	6.906	0.17	0.17
	0.5, 3000	7.412	0.3	0.3
	0.5, 3500	11.529	0.33	0.33
	0.5, 4000	14.996	0.33	0.33
Ecco	2.0, 10	0.059	0.46	0.4
	2.0, 100	0.475	0.48	0.43
	2.0, 1000	5.945	0.39	0.33
	2.0, 2000	10.646	0.53	0.47
	2.0, 2500	13.81	0.46	0.43
	2.0, 3000	18.014	0.42	0.37
	2.0, 3500	21.415	0.43	0.4
	2.0, 4000	28.575	0.34	0.3
	1.5, 10	0.054	0.23	0.2
	1.5, 100	0.508	0.32	0.3
	1.5, 1000	5.993	0.32	0.3
	1.5, 2000	12.076	0.37	0.33
	1.5, 2500	16.766	0.23	0.2

	1.5, 3000	19.514	0.34	0.33
	1.5, 3500	23.909	0.35	0.33
	1.5, 4000	27.898	0.32	0.3
	1.0, 10	0.061	0.27	0.27
	1.0, 100	0.447	0.27	0.27
	1.0, 1000	6.375	0.23	0.23
	1.0, 2000	12.85	0.24	0.23
	1.0, 2500	15.668	0.27	0.27
	1.0, 3000	20.095	0.27	0.27
	1.0, 3500	16.423	0.47	0.47
	1.0, 4000	21.671	0.4	0.4
	0.5, 10	0.055	0.33	0.33
	0.5, 100	0.544	0.2	0.2
	0.5, 1000	6.354	0.23	0.23
	0.5, 2000	13.619	0.13	0.13
	0.5, 2500	14.736	0.4	0.4
	0.5, 3000	19.323	0.27	0.27
	0.5, 3500	15.249	0.57	0.57
	0.5, 4000	26.873	0.33	0.33
Wachter	2.0, 10	0.028	0.28	0.23
	2.0, 100	0.242	0.28	0.23
	2.0, 1000	3.004	0.25	0.2
	2.0, 2000	5.269	0.42	0.4
	2.0, 2500	8.372	0.23	0.2
	2.0, 3000	11.352	0.28	0.23
	2.0, 3500	14.004	0.35	0.3
	2.0, 4000	17.48	0.36	0.33
	1.5, 10	0.024	0.36	0.33
	1.5, 100	0.232	0.35	0.33
	1.5, 1000	2.644	0.31	0.3
	1.5, 2000	5.567	0.33	0.3
	1.5, 2500	7.368	0.39	0.37
	1.5, 3000	11.509	0.26	0.23
	1.5, 3500	16.459	0.23	0.2
	1.5, 4000	17.223	0.32	0.3
	1.0, 10	0.024	0.41	0.4
	1.0, 100	0.525	0.31	0.3
	1.0, 1000	1.785	0.44	0.43
	1.0, 2000	5.221	0.43	0.43
	1.0, 2500	8.729	0.17	0.17
	1.0, 3000	11.505	0.2	0.2
	1.0, 3500	14.371	0.34	0.33
	1.0, 4000	15.059	0.4	0.4
	0.5, 10	0.026	0.3	0.3
	0.5, 100	0.249	0.2	0.2
	0.5, 1000	2.571	0.4	0.4
	0.5, 2000	6.075	0.17	0.17
	0.5, 2500	7.675	0.3	0.3
	0.5, 3000	10.853	0.3	0.3
	0.5, 3500	13.782	0.23	0.23
	0.5, 4000	15.458	0.3	0.3
Generic	2.0, 10	0.32	0.3	0.27
	2.0, 100	0.164	0.44	0.4
	2.0, 1000	2.209	0.36	0.3
	2.0, 2000	4.581	0.33	0.27
	2.0, 2500	5.865	0.43	0.4

	2.0, 3000	8.973	0.33	0.27
	2.0, 3500	11.909	0.35	0.27
	2.0, 4000	14.255	0.38	0.33
	1.5, 10	0.021	0.36	0.33
	1.5, 100	0.197	0.19	0.17
	1.5, 1000	2.182	0.27	0.23
	1.5, 2000	4.743	0.27	0.23
	1.5, 2500	7.12	0.19	0.13
	1.5, 3000	9.699	0.22	0.2
	1.5, 3500	13.665	0.22	0.2
	1.5, 4000	14.75	0.29	0.27
	1.0, 10	0.02	0.17	0.17
	1.0, 100	0.181	0.33	0.33
	1.0, 1000	2.107	0.34	0.33
	1.0, 2000	4.486	0.3	0.3
	1.0, 2500	6.056	0.31	0.3
	1.0, 3000	9.657	0.2	0.2
	1.0, 3500	12.338	0.34	0.33
	1.0, 4000	20.164	0.21	0.2
	0.5, 10	0.02	0.17	0.17
	0.5, 100	0.195	0.27	0.27
	0.5, 1000	1.696	0.3	0.3
	0.5, 2000	4.244	0.4	0.4
	0.5, 2500	6.691	0.2	0.2
	0.5, 3000	8.821	0.3	0.3
	0.5, 3500	12.511	0.2	0.2
	0.5, 4000	14.284	0.37	0.37
DiCE	2.0, 10	0.023	0.41	0.37
	2.0, 100	0.24	0.28	0.23
	2.0, 1000	4.598	0.31	0.23
	2.0, 2000	8.16	0.41	0.37
	2.0, 2500	12.316	0.33	0.27
	2.0, 3000	16.737	0.32	0.27
	2.0, 3500	23.792	0.38	0.33
	2.0, 4000	25.55	0.39	0.33
	1.5, 10	0.028	0.27	0.23
	1.5, 100	0.26	0.24	0.2
	1.5, 1000	4.854	0.2	0.17
	1.5, 2000	8.362	0.38	0.33
	1.5, 2500	10.005	0.39	0.37
	1.5, 3000	20.922	0.25	0.23
	1.5, 3500	27.873	0.17	0.13
	1.5, 4000	26.126	0.37	0.33
	1.0, 10	0.028	0.33	0.33
	1.0, 100	1.199	0.43	0.43
	1.0, 1000	3.721	0.27	0.27
	1.0, 2000	10.916	0.23	0.23
	1.0, 2500	13.981	0.27	0.27
	1.0, 3000	17.119	0.37	0.37
	1.0, 3500	29.069	0.2	0.2
	1.0, 4000	32.608	0.27	0.27
	0.5, 10	0.026	0.27	0.27
	0.5, 100	0.262	0.23	0.23
	0.5, 1000	3.429	0.37	0.37
	0.5, 2000	7.176	0.37	0.37
	0.5, 2500	8.067	0.43	0.43

	0.5, 3000	14.86	0.3	0.3
	0.5, 3500	18.513	0.33	0.33
	0.5, 4000	26.759	0.23	0.23
ClaPROAR	2.0, 10	0.029	0.33	0.27
	2.0, 100	0.317	0.26	0.2
	2.0, 1000	2.849	0.41	0.37
	2.0, 2000	6.369	0.32	0.23
	2.0, 2500	8.634	0.28	0.2
	2.0, 3000	9.439	0.45	0.4
	2.0, 3500	14.109	0.32	0.27
	2.0, 4000	19.617	0.32	0.27
	1.5, 10	0.03	0.34	0.3
	1.5, 100	0.252	0.24	0.2
	1.5, 1000	3.052	0.23	0.2
	1.5, 2000	5.839	0.35	0.33
	1.5, 2500	8.235	0.3	0.27
	1.5, 3000	9.975	0.42	0.4
	1.5, 3500	14.06	0.36	0.33
	1.5, 4000	19.012	0.32	0.3
	1.0, 10	0.03	0.2	0.2
	1.0, 100	0.28	0.17	0.17
	1.0, 1000	3.062	0.23	0.23
	1.0, 2000	5.781	0.34	0.33
	1.0, 2500	8.077	0.31	0.3
	1.0, 3000	10.105	0.37	0.37
	1.0, 3500	13.732	0.3	0.3
	1.0, 4000	14.451	0.43	0.43
	0.5, 10	0.028	0.27	0.27
	0.5, 100	0.237	0.37	0.37
	0.5, 1000	2.778	0.37	0.37
	0.5, 2000	6.188	0.27	0.27
	0.5, 2500	8.986	0.17	0.17
	0.5, 3000	10.427	0.4	0.4
	0.5, 3500	15.95	0.27	0.27
	0.5, 4000	20.264	0.17	0.17
Greedy	2.0, 10	0.015	0.9	0.87
	2.0, 100	0.105	0.97	0.8
	2.0, 1000	0.557	1.0	0.97
	2.0, 2000	1.178	0.97	0.93
	2.0, 2500	1.594	1.0	0.87
	2.0, 3000	1.674	1.0	0.93
	2.0, 3500	2.668	1.0	0.93
	2.0, 4000	3.2	0.97	0.87
	1.5, 10	0.019	0.9	0.87
	1.5, 100	0.072	1.0	0.9
	1.5, 1000	0.575	1.0	0.93
	1.5, 2000	2.786	1.0	0.87
	1.5, 2500	1.649	1.0	0.93
	1.5, 3000	4.35	1.0	0.83
	1.5, 3500	2.614	1.0	0.93
	1.5, 4000	2.671	1.0	0.93
	1.0, 10	0.022	1.0	0.73
	1.0, 100	0.125	1.0	0.93
	1.0, 1000	0.691	1.0	0.9
	1.0, 2000	1.469	1.0	0.9
	1.0, 2500	4.137	1.0	0.73

	1.0, 3000	2.206	1.0	0.97
	1.0, 3500	2.579	1.0	0.9
	1.0, 4000	2.938	1.0	0.9
	0.5, 10	0.023	1.0	0.37
	0.5, 100	0.146	1.0	0.77
	0.5, 1000	2.023	1.0	0.73
	0.5, 2000	3.176	1.0	0.73
	0.5, 2500	4.042	1.0	0.73
	0.5, 3000	5.344	1.0	0.77
	0.5, 3500	3.426	1.0	0.83
	0.5, 4000	8.476	1.0	0.73

Tab. 90: Parameter grid search iris data experiment using an MLP extra experiment 4

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	2.0, 10	0.088	0.73	0.0
	2.0, 100	0.742	0.57	0.0
	2.0, 1000	9.517	0.62	0.0
	2.0, 2000	20.707	0.75	0.0
	2.0, 2500	25.173	0.62	0.0
	2.0, 3000	34.575	0.8	0.0
	2.0, 3500	38.312	0.66	0.0
	2.0, 4000	47.318	0.76	0.0
	1.5, 10	0.078	0.64	0.0
	1.5, 100	0.911	0.77	0.0
	1.5, 1000	8.44	0.64	0.0
	1.5, 2000	20.799	0.75	0.0
	1.5, 2500	25.204	0.67	0.0
	1.5, 3000	30.636	0.65	0.0
	1.5, 3500	38.751	0.62	0.0
	1.5, 4000	46.271	0.66	0.0
	1.0, 10	0.081	0.76	0.0
	1.0, 100	1.012	0.91	0.0
	1.0, 1000	9.908	0.74	0.0
	1.0, 2000	16.863	0.67	0.0
	1.0, 2500	25.563	0.77	0.0
	1.0, 3000	32.657	0.83	0.0
	1.0, 3500	38.025	0.8	0.0
	1.0, 4000	45.213	0.75	0.0
	0.5, 10	0.078	0.73	0.03
	0.5, 100	0.852	0.86	0.07
	0.5, 1000	9.977	0.86	0.07
	0.5, 2000	20.901	0.85	0.03
	0.5, 2500	25.64	0.87	0.13
	0.5, 3000	31.01	0.9	0.07
	0.5, 3500	34.606	0.87	0.07
	0.5, 4000	41.119	0.86	0.13
Revise	2.0, 10	0.114	0.87	0.43
	2.0, 100	0.484	0.85	0.53
	2.0, 1000	1.61	0.86	0.8
	2.0, 2000	3.744	0.71	0.57
	2.0, 2500	4.257	0.73	0.63
	2.0, 3000	6.899	0.73	0.6
	2.0, 3500	7.551	0.66	0.53
	2.0, 4000	11.443	0.66	0.5

	1.5, 10	0.032	0.89	0.63
	1.5, 100	0.347	0.86	0.4
	1.5, 1000	3.359	0.88	0.67
	1.5, 2000	5.988	0.81	0.57
	1.5, 2500	5.023	0.87	0.73
	1.5, 3000	6.44	0.84	0.7
	1.5, 3500	5.898	0.92	0.83
	1.5, 4000	10.842	0.88	0.73
	1.0, 10	0.052	0.97	0.33
	1.0, 100	0.522	0.98	0.3
	1.0, 1000	6.024	0.97	0.3
	1.0, 2000	12.513	0.98	0.27
	1.0, 2500	17.837	0.98	0.2
	1.0, 3000	19.95	0.96	0.3
	1.0, 3500	26.293	0.98	0.27
	1.0, 4000	30.655	0.97	0.33
	0.5, 10	0.018	0.51	0.3
	0.5, 100	0.314	0.46	0.23
	0.5, 1000	2.276	0.5	0.23
	0.5, 2000	4.503	0.5	0.33
	0.5, 2500	6.54	0.62	0.4
	0.5, 3000	9.502	0.48	0.27
	0.5, 3500	11.328	0.55	0.37
	0.5, 4000	14.542	0.6	0.47
Ecco	2.0, 10	0.109	0.7	0.27
	2.0, 100	1.043	0.67	0.4
	2.0, 1000	3.692	0.85	0.73
	2.0, 2000	6.862	0.83	0.77
	2.0, 2500	9.721	0.79	0.73
	2.0, 3000	12.091	0.8	0.67
	2.0, 3500	15.431	0.76	0.63
	2.0, 4000	15.395	0.82	0.73
	1.5, 10	0.104	0.86	0.27
	1.5, 100	1.126	0.9	0.5
	1.5, 1000	5.632	0.83	0.67
	1.5, 2000	16.848	0.91	0.73
	1.5, 2500	14.726	0.91	0.8
	1.5, 3000	22.562	0.79	0.53
	1.5, 3500	27.742	0.86	0.7
	1.5, 4000	18.697	0.89	0.8
	1.0, 10	0.149	0.97	0.27
	1.0, 100	1.699	0.99	0.23
	1.0, 1000	17.02	0.99	0.37
	1.0, 2000	34.199	0.98	0.37
	1.0, 2500	45.292	0.99	0.33
	1.0, 3000	47.978	0.98	0.47
	1.0, 3500	50.349	0.98	0.37
	1.0, 4000	45.73	0.97	0.6
	0.5, 10	0.063	0.53	0.3
	0.5, 100	0.555	0.58	0.3
	0.5, 1000	6.884	0.4	0.17
	0.5, 2000	12.959	0.5	0.3
	0.5, 2500	16.475	0.57	0.33
	0.5, 3000	20.229	0.54	0.37
	0.5, 3500	21.932	0.67	0.47
	0.5, 4000	20.599	0.6	0.47

Wachter	2.0, 10	0.046	0.69	0.3
	2.0, 100	0.382	0.79	0.47
	2.0, 1000	2.699	0.9	0.9
	2.0, 2000	3.802	0.88	0.87
	2.0, 2500	4.471	0.83	0.8
	2.0, 3000	4.536	0.91	0.9
	2.0, 3500	4.133	0.86	0.87
	2.0, 4000	5.51	0.88	0.9
	1.5, 10	0.065	0.91	0.37
	1.5, 100	0.582	0.9	0.43
	1.5, 1000	4.314	0.89	0.63
	1.5, 2000	7.526	0.9	0.7
	1.5, 2500	8.175	0.94	0.83
	1.5, 3000	7.082	0.95	0.93
	1.5, 3500	11.707	0.92	0.87
	1.5, 4000	9.398	0.95	0.93
	1.0, 10	0.081	0.98	0.37
	1.0, 100	0.756	0.96	0.07
	1.0, 1000	7.165	0.98	0.47
	1.0, 2000	13.388	0.98	0.47
	1.0, 2500	18.613	0.98	0.4
	1.0, 3000	23.448	0.96	0.47
	1.0, 3500	29.347	0.97	0.4
	1.0, 4000	30.707	0.97	0.53
	0.5, 10	0.026	0.44	0.3
	0.5, 100	0.262	0.34	0.17
	0.5, 1000	2.907	0.41	0.23
	0.5, 2000	5.611	0.45	0.33
	0.5, 2500	8.118	0.45	0.23
	0.5, 3000	9.732	0.49	0.37
	0.5, 3500	14.332	0.5	0.33
	0.5, 4000	16.5	0.51	0.4
Generic	2.0, 10	0.036	0.74	0.4
	2.0, 100	0.283	0.78	0.5
	2.0, 1000	1.892	0.69	0.57
	2.0, 2000	2.451	0.9	0.83
	2.0, 2500	3.891	0.7	0.6
	2.0, 3000	5.276	0.7	0.6
	2.0, 3500	5.797	0.85	0.77
	2.0, 4000	9.144	0.73	0.6
	1.5, 10	0.047	0.82	0.23
	1.5, 100	0.423	0.83	0.37
	1.5, 1000	2.801	0.79	0.57
	1.5, 2000	5.725	0.93	0.8
	1.5, 2500	8.287	0.88	0.7
	1.5, 3000	8.174	0.87	0.77
	1.5, 3500	10.735	0.81	0.63
	1.5, 4000	10.063	0.89	0.8
	1.0, 10	0.054	0.98	0.47
	1.0, 100	0.564	0.98	0.2
	1.0, 1000	6.146	0.97	0.33
	1.0, 2000	12.013	0.98	0.37
	1.0, 2500	16.542	0.99	0.23
	1.0, 3000	18.429	0.98	0.4
	1.0, 3500	17.214	0.98	0.53

	1.0, 4000	26.494	0.97	0.4
	0.5, 10	0.021	0.47	0.2
	0.5, 100	0.149	0.56	0.4
	0.5, 1000	1.947	0.54	0.33
	0.5, 2000	4.343	0.53	0.4
	0.5, 2500	5.41	0.54	0.33
	0.5, 3000	8.201	0.66	0.47
	0.5, 3500	14.164	0.46	0.2
	0.5, 4000	16.881	0.47	0.3
DiCE	2.0, 10	0.07	0.81	0.27
	2.0, 100	0.56	0.68	0.4
	2.0, 1000	3.163	0.88	0.8
	2.0, 2000	7.947	0.73	0.63
	2.0, 2500	5.456	0.84	0.77
	2.0, 3000	10.297	0.64	0.5
	2.0, 3500	13.389	0.75	0.67
	2.0, 4000	16.617	0.76	0.63
	1.5, 10	0.043	0.9	0.5
	1.5, 100	0.401	0.84	0.43
	1.5, 1000	6.641	0.83	0.5
	1.5, 2000	12.045	0.86	0.63
	1.5, 2500	11.124	0.83	0.7
	1.5, 3000	19.509	0.77	0.53
	1.5, 3500	12.388	0.85	0.73
	1.5, 4000	16.782	0.9	0.83
	1.0, 10	0.073	0.98	0.3
	1.0, 100	0.797	0.98	0.47
	1.0, 1000	14.875	0.98	0.13
	1.0, 2000	20.761	0.98	0.43
	1.0, 2500	26.643	0.96	0.47
	1.0, 3000	35.187	0.98	0.47
	1.0, 3500	42.601	0.97	0.4
	1.0, 4000	55.99	0.96	0.37
	0.5, 10	0.026	0.59	0.4
	0.5, 100	0.472	0.53	0.33
	0.5, 1000	4.084	0.39	0.07
	0.5, 2000	11.181	0.38	0.13
	0.5, 2500	13.198	0.54	0.37
	0.5, 3000	17.727	0.55	0.4
	0.5, 3500	22.728	0.5	0.33
	0.5, 4000	26.39	0.5	0.33
ClaPROAR	2.0, 10	0.054	0.8	0.37
	2.0, 100	0.325	0.82	0.53
	2.0, 1000	1.509	0.82	0.73
	2.0, 2000	3.711	0.79	0.7
	2.0, 2500	6.11	0.81	0.67
	2.0, 3000	6.616	0.69	0.6
	2.0, 3500	9.003	0.71	0.6
	2.0, 4000	11.615	0.72	0.57
	1.5, 10	0.066	0.84	0.17
	1.5, 100	0.498	0.95	0.43
	1.5, 1000	6.098	0.86	0.5
	1.5, 2000	6.118	0.91	0.73
	1.5, 2500	10.197	0.85	0.6
	1.5, 3000	8.866	0.77	0.6
	1.5, 3500	9.692	0.9	0.77

	1.5, 4000	10.096	0.93	0.83
	1.0, 10	0.074	0.95	0.3
	1.0, 100	0.834	0.98	0.33
	1.0, 1000	7.558	0.97	0.37
	1.0, 2000	15.443	0.97	0.4
	1.0, 2500	19.884	0.96	0.33
	1.0, 3000	24.221	0.98	0.27
	1.0, 3500	28.939	0.98	0.3
	1.0, 4000	26.071	0.98	0.4
	0.5, 10	0.032	0.4	0.17
	0.5, 100	0.242	0.51	0.33
	0.5, 1000	2.932	0.44	0.2
	0.5, 2000	5.646	0.55	0.37
	0.5, 2500	6.798	0.62	0.47
	0.5, 3000	10.508	0.55	0.3
	0.5, 3500	10.528	0.53	0.37
	0.5, 4000	17.543	0.44	0.23
Greedy	2.0, 10	0.012	1.0	0.9
	2.0, 100	0.067	1.0	0.9
	2.0, 1000	0.509	1.0	0.93
	2.0, 2000	1.029	1.0	0.97
	2.0, 2500	1.483	1.0	0.97
	2.0, 3000	1.953	1.0	0.9
	2.0, 3500	2.205	1.0	0.93
	2.0, 4000	2.682	1.0	0.93
	1.5, 10	0.012	1.0	1.0
	1.5, 100	0.015	1.0	1.0
	1.5, 1000	0.009	1.0	1.0
	1.5, 2000	1.146	1.0	0.97
	1.5, 2500	0.013	1.0	1.0
	1.5, 3000	0.011	1.0	1.0
	1.5, 3500	2.221	1.0	0.97
	1.5, 4000	0.01	1.0	1.0
	1.0, 10	0.017	1.0	0.87
	1.0, 100	0.077	1.0	0.87
	1.0, 1000	1.237	1.0	0.8
	1.0, 2000	2.781	1.0	0.83
	1.0, 2500	3.257	1.0	0.87
	1.0, 3000	2.621	1.0	0.83
	1.0, 3500	2.625	1.0	0.87
	1.0, 4000	5.97	1.0	0.87
	0.5, 10	0.016	0.97	0.6
	0.5, 100	0.099	1.0	0.87
	0.5, 1000	0.652	1.0	0.97
	0.5, 2000	1.543	1.0	0.87
	0.5, 2500	1.742	1.0	0.9
	0.5, 3000	2.26	1.0	0.93
	0.5, 3500	2.678	1.0	0.87
	0.5, 4000	6.274	1.0	0.9

Tab. 91: Parameter grid search iris data experiment using an MLP extra experiment 5

F.1.10. Iris dataset using deep ensemble

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	33.657	0.88	0.0

	1.0, 100	1.25	0.87	0.0
	1.0, 1000	10.164	0.89	0.0
	1.0, 2000	20.11	0.88	0.07
	0.5, 10	0.098	0.88	0.0
	0.5, 100	0.852	0.85	0.03
	0.5, 1000	9.546	0.91	0.13
	0.5, 2000	18.546	0.83	0.03
	0.25, 10	0.12	1.0	0.0
	0.25, 100	1.045	1.0	0.03
	0.25, 1000	10.666	1.0	0.07
	0.25, 2000	20.297	1.0	0.0
	0.1, 10	0.094	1.0	0.0
	0.1, 100	0.941	1.0	0.07
	0.1, 1000	9.656	1.0	0.17
	0.1, 2000	12.409	1.0	0.17
	0.05, 10	0.084	0.99	0.07
	0.05, 100	0.557	1.0	0.37
	0.05, 1000	2.926	1.0	0.3
	0.05, 2000	7.064	1.0	0.17
	0.01, 10	0.054	0.23	0.0
	0.01, 100	0.646	1.0	0.23
	0.01, 1000	1.037	1.0	0.43
	0.01, 2000	1.429	1.0	0.3
Revise	1.0, 10	19.149	0.47	0.4
	1.0, 100	0.211	0.37	0.3
	1.0, 1000	1.953	0.4	0.37
	1.0, 2000	4.283	0.32	0.23
	0.5, 10	0.019	0.31	0.3
	0.5, 100	0.169	0.38	0.33
	0.5, 1000	1.943	0.37	0.33
	0.5, 2000	4.117	0.32	0.3
	0.25, 10	0.017	0.4	0.4
	0.25, 100	0.116	0.61	0.6
	0.25, 1000	2.005	0.33	0.33
	0.25, 2000	4.337	0.17	0.17
	0.1, 10	0.017	0.4	0.4
	0.1, 100	0.187	0.2	0.2
	0.1, 1000	1.919	0.37	0.37
	0.1, 2000	3.774	0.39	0.4
	0.05, 10	0.019	0.37	0.37
	0.05, 100	0.171	0.3	0.3
	0.05, 1000	1.835	0.43	0.43
	0.05, 2000	3.955	0.33	0.33
	0.01, 10	0.02	0.46	0.47
	0.01, 100	0.218	0.17	0.17
	0.01, 1000	1.871	0.33	0.33
	0.01, 2000	3.883	0.37	0.37
Ecco	1.0, 10	9.355	0.37	0.33
	1.0, 100	0.635	0.38	0.33
	1.0, 1000	5.06	0.39	0.33
	1.0, 2000	11.71	0.3	0.23
	0.5, 10	0.07	0.37	0.33
	0.5, 100	0.552	0.32	0.3
	0.5, 1000	5.279	0.36	0.33
	0.5, 2000	10.858	0.3	0.27
	0.25, 10	0.051	0.34	0.33

	0.25, 100	0.512	0.3	0.3
	0.25, 1000	4.732	0.46	0.47
	0.25, 2000	10.462	0.37	0.37
	0.1, 10	0.053	0.34	0.33
	0.1, 100	0.422	0.47	0.47
	0.1, 1000	3.712	0.47	0.47
	0.1, 2000	10.54	0.35	0.33
	0.05, 10	0.05	0.34	0.33
	0.05, 100	0.524	0.3	0.3
	0.05, 1000	5.213	0.36	0.37
	0.05, 2000	10.976	0.33	0.33
	0.01, 10	0.051	0.47	0.47
	0.01, 100	0.499	0.23	0.23
	0.01, 1000	5.671	0.3	0.3
	0.01, 2000	11.197	0.3	0.3
Wachter	1.0, 10	7.604	0.4	0.3
	1.0, 100	0.243	0.31	0.2
	1.0, 1000	2.61	0.36	0.3
	1.0, 2000	4.645	0.49	0.43
	0.5, 10	0.026	0.36	0.33
	0.5, 100	0.215	0.32	0.3
	0.5, 1000	2.225	0.53	0.5
	0.5, 2000	5.05	0.36	0.33
	0.25, 10	0.023	0.37	0.37
	0.25, 100	0.228	0.24	0.23
	0.25, 1000	2.534	0.3	0.3
	0.25, 2000	5.271	0.23	0.23
	0.1, 10	0.017	0.6	0.6
	0.1, 100	0.233	0.3	0.3
	0.1, 1000	2.595	0.3	0.3
	0.1, 2000	4.69	0.43	0.43
	0.05, 10	0.024	0.36	0.37
	0.05, 100	0.229	0.23	0.23
	0.05, 1000	2.556	0.3	0.3
	0.05, 2000	6.05	0.17	0.17
	0.01, 10	0.022	0.43	0.43
	0.01, 100	0.205	0.43	0.43
	0.01, 1000	2.4	0.33	0.33
	0.01, 2000	5.135	0.3	0.3
Generic	1.0, 10	0.019	0.3	0.2
	1.0, 100	0.14	0.45	0.37
	1.0, 1000	2.036	0.37	0.3
	1.0, 2000	3.754	0.44	0.4
	0.5, 10	0.015	0.43	0.4
	0.5, 100	0.14	0.38	0.37
	0.5, 1000	1.843	0.42	0.4
	0.5, 2000	4.362	0.3	0.27
	0.25, 10	0.016	0.36	0.37
	0.25, 100	0.175	0.41	0.4
	0.25, 1000	1.999	0.3	0.3
	0.25, 2000	4.038	0.34	0.33
	0.1, 10	0.016	0.37	0.37
	0.1, 100	0.181	0.33	0.33
	0.1, 1000	1.832	0.43	0.43
	0.1, 2000	4.1	0.44	0.43
	0.05, 10	0.013	0.63	0.63

	0.05, 100	0.194	0.27	0.27
	0.05, 1000	2.142	0.17	0.17
	0.05, 2000	3.904	0.36	0.37
	0.01, 10	0.019	0.37	0.37
	0.01, 100	0.131	0.43	0.43
	0.01, 1000	2.15	0.16	0.17
	0.01, 2000	4.049	0.33	0.33
DiCE	1.0, 10	2.082	0.24	0.17
	1.0, 100	0.233	0.34	0.27
	1.0, 1000	3.172	0.26	0.23
	1.0, 2000	5.888	0.38	0.33
	0.5, 10	0.026	0.25	0.23
	0.5, 100	0.22	0.41	0.4
	0.5, 1000	3.218	0.26	0.23
	0.5, 2000	6.332	0.24	0.23
	0.25, 10	0.024	0.4	0.4
	0.25, 100	0.242	0.24	0.23
	0.25, 1000	3.268	0.2	0.2
	0.25, 2000	5.51	0.43	0.43
	0.1, 10	0.027	0.24	0.23
	0.1, 100	0.258	0.3	0.3
	0.1, 1000	2.653	0.43	0.43
	0.1, 2000	5.603	0.37	0.37
	0.05, 10	0.025	0.3	0.3
	0.05, 100	0.241	0.24	0.23
	0.05, 1000	3.015	0.3	0.3
	0.05, 2000	6.649	0.23	0.23
	0.01, 10	0.026	0.3	0.3
	0.01, 100	0.273	0.37	0.37
	0.01, 1000	2.962	0.33	0.33
	0.01, 2000	7.009	0.2	0.2
ClaPROAR	1.0, 10	2.12	0.4	0.37
	1.0, 100	0.231	0.44	0.37
	1.0, 1000	2.549	0.45	0.4
	1.0, 2000	5.933	0.22	0.17
	0.5, 10	0.026	0.34	0.3
	0.5, 100	0.229	0.39	0.37
	0.5, 1000	2.787	0.29	0.27
	0.5, 2000	5.191	0.35	0.33
	0.25, 10	0.026	0.3	0.3
	0.25, 100	0.182	0.37	0.37
	0.25, 1000	2.35	0.54	0.53
	0.25, 2000	5.44	0.34	0.33
	0.1, 10	0.03	0.27	0.27
	0.1, 100	0.262	0.33	0.33
	0.1, 1000	2.575	0.33	0.33
	0.1, 2000	5.119	0.4	0.4
	0.05, 10	0.028	0.3	0.3
	0.05, 100	0.266	0.3	0.3
	0.05, 1000	2.748	0.27	0.27
	0.05, 2000	4.975	0.43	0.43
	0.01, 10	0.024	0.29	0.3
	0.01, 100	0.237	0.3	0.3
	0.01, 1000	2.499	0.4	0.4
	0.01, 2000	5.689	0.27	0.27
Greedy	1.0, 10	3.337	1.0	0.9

	1.0, 100	0.015	1.0	1.0
	1.0, 1000	0.021	1.0	1.0
	1.0, 2000	0.017	1.0	1.0
	0.5, 10	0.017	0.87	0.57
	0.5, 100	0.024	1.0	1.0
	0.5, 1000	0.025	1.0	1.0
	0.5, 2000	0.038	1.0	1.0
	0.25, 10	0.016	0.63	0.47
	0.25, 100	0.051	1.0	1.0
	0.25, 1000	0.079	1.0	1.0
	0.25, 2000	0.087	1.0	1.0
	0.1, 10	0.017	0.33	0.03
	0.1, 100	0.122	1.0	0.97
	0.1, 1000	0.195	1.0	1.0
	0.1, 2000	0.117	1.0	1.0
	0.05, 10	0.018	0.23	0.0
	0.05, 100	0.155	0.77	0.37
	0.05, 1000	0.366	1.0	1.0
	0.05, 2000	0.379	1.0	1.0
	0.01, 10	0.015	0.1	0.0
	0.01, 100	0.252	0.43	0.03
	0.01, 1000	1.205	1.0	1.0
	0.01, 2000	1.524	1.0	0.97

Tab. 92: Parameter grid search iris data experiment using an deep ensemble 1

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.084	0.72	0.0
	1.0, 100	0.929	0.77	0.0
	1.0, 1000	9.644	0.82	0.03
	1.0, 2000	17.738	0.79	0.0
	0.5, 10	0.099	0.84	0.0
	0.5, 100	0.902	0.83	0.03
	0.5, 1000	9.719	0.89	0.03
	0.5, 2000	18.439	0.87	0.03
	0.25, 10	0.102	1.0	0.0
	0.25, 100	1.015	1.0	0.07
	0.25, 1000	10.116	1.0	0.1
	0.25, 2000	20.404	1.0	0.03
	0.1, 10	0.12	1.0	0.0
	0.1, 100	1.003	1.0	0.07
	0.1, 1000	10.231	1.0	0.07
	0.1, 2000	18.823	1.0	0.0
	0.05, 10	0.088	1.0	0.0
	0.05, 100	0.955	1.0	0.03
	0.05, 1000	6.215	1.0	0.07
	0.05, 2000	9.619	1.0	0.1
	0.01, 10	0.055	0.36	0.0
	0.01, 100	0.841	1.0	0.03
	0.01, 1000	1.209	1.0	0.1
	0.01, 2000	1.406	1.0	0.2
Revise	1.0, 10	0.108	0.67	0.5
	1.0, 100	0.17	0.6	0.47
	1.0, 1000	2.621	0.57	0.27
	1.0, 2000	4.268	0.68	0.47

	0.5, 10	0.024	0.31	0.27
	0.5, 100	0.169	0.4	0.37
	0.5, 1000	2.066	0.37	0.33
	0.5, 2000	4.223	0.32	0.3
	0.25, 10	0.016	0.37	0.37
	0.25, 100	0.187	0.2	0.2
	0.25, 1000	1.405	0.44	0.43
	0.25, 2000	3.925	0.34	0.33
	0.1, 10	0.019	0.27	0.27
	0.1, 100	0.177	0.3	0.3
	0.1, 1000	1.491	0.4	0.4
	0.1, 2000	2.849	0.5	0.5
	0.05, 10	0.018	0.37	0.37
	0.05, 100	0.203	0.33	0.33
	0.05, 1000	2.031	0.27	0.27
	0.05, 2000	3.876	0.37	0.37
	0.01, 10	0.017	0.4	0.4
	0.01, 100	0.131	0.43	0.43
	0.01, 1000	2.04	0.3	0.3
	0.01, 2000	2.789	0.5	0.5
Ecco	1.0, 10	0.051	0.56	0.43
	1.0, 100	0.798	0.59	0.2
	1.0, 1000	6.312	0.64	0.4
	1.0, 2000	14.704	0.56	0.33
	0.5, 10	0.046	0.48	0.47
	0.5, 100	0.554	0.28	0.23
	0.5, 1000	4.263	0.39	0.37
	0.5, 2000	10.465	0.4	0.37
	0.25, 10	0.046	0.4	0.4
	0.25, 100	0.46	0.37	0.37
	0.25, 1000	3.962	0.43	0.43
	0.25, 2000	11.793	0.24	0.23
	0.1, 10	0.067	0.33	0.33
	0.1, 100	0.558	0.27	0.27
	0.1, 1000	5.272	0.33	0.33
	0.1, 2000	10.041	0.4	0.4
	0.05, 10	0.056	0.24	0.23
	0.05, 100	0.516	0.37	0.37
	0.05, 1000	5.364	0.33	0.33
	0.05, 2000	10.651	0.33	0.33
	0.01, 10	0.048	0.36	0.37
	0.01, 100	0.46	0.37	0.37
	0.01, 1000	5.181	0.4	0.4
	0.01, 2000	9.989	0.43	0.43
Wachter	1.0, 10	0.024	0.62	0.47
	1.0, 100	0.261	0.47	0.23
	1.0, 1000	2.217	0.52	0.5
	1.0, 2000	5.918	0.45	0.33
	0.5, 10	0.025	0.38	0.33
	0.5, 100	0.238	0.26	0.23
	0.5, 1000	2.545	0.31	0.3
	0.5, 2000	5.669	0.19	0.17
	0.25, 10	0.022	0.37	0.37
	0.25, 100	0.248	0.33	0.33
	0.25, 1000	2.526	0.3	0.3
	0.25, 2000	4.81	0.37	0.37

	0.1, 10	0.025	0.3	0.3
	0.1, 100	0.194	0.57	0.57
	0.1, 1000	2.4	0.33	0.33
	0.1, 2000	5.055	0.33	0.33
	0.05, 10	0.024	0.37	0.37
	0.05, 100	0.226	0.3	0.3
	0.05, 1000	2.709	0.23	0.23
	0.05, 2000	5.186	0.27	0.27
	0.01, 10	0.022	0.37	0.37
	0.01, 100	0.206	0.4	0.4
	0.01, 1000	2.659	0.23	0.23
	0.01, 2000	4.133	0.57	0.57
Generic	1.0, 10	0.024	0.53	0.27
	1.0, 100	0.276	0.45	0.17
	1.0, 1000	2.622	0.54	0.23
	1.0, 2000	4.724	0.54	0.3
	0.5, 10	0.019	0.4	0.37
	0.5, 100	0.139	0.42	0.4
	0.5, 1000	1.955	0.34	0.33
	0.5, 2000	4.02	0.36	0.33
	0.25, 10	0.021	0.31	0.3
	0.25, 100	0.146	0.34	0.33
	0.25, 1000	1.291	0.53	0.53
	0.25, 2000	4.092	0.3	0.3
	0.1, 10	0.02	0.33	0.33
	0.1, 100	0.161	0.36	0.37
	0.1, 1000	1.905	0.33	0.33
	0.1, 2000	3.803	0.47	0.47
	0.05, 10	0.019	0.37	0.37
	0.05, 100	0.185	0.33	0.33
	0.05, 1000	2.015	0.3	0.3
	0.05, 2000	3.733	0.43	0.43
	0.01, 10	0.018	0.47	0.47
	0.01, 100	0.153	0.47	0.47
	0.01, 1000	1.995	0.3	0.3
	0.01, 2000	4.413	0.2	0.2
DiCE	1.0, 10	0.037	0.42	0.17
	1.0, 100	0.323	0.65	0.4
	1.0, 1000	3.564	0.4	0.3
	1.0, 2000	7.23	0.59	0.37
	0.5, 10	0.024	0.4	0.37
	0.5, 100	0.284	0.35	0.33
	0.5, 1000	3.031	0.35	0.33
	0.5, 2000	6.516	0.39	0.33
	0.25, 10	0.026	0.33	0.33
	0.25, 100	0.152	0.47	0.47
	0.25, 1000	2.893	0.41	0.4
	0.25, 2000	7.313	0.23	0.23
	0.1, 10	0.024	0.33	0.33
	0.1, 100	0.152	0.47	0.47
	0.1, 1000	3.115	0.37	0.37
	0.1, 2000	6.653	0.27	0.27
	0.05, 10	0.025	0.27	0.27
	0.05, 100	0.224	0.33	0.33
	0.05, 1000	3.356	0.3	0.3
	0.05, 2000	6.596	0.3	0.3

	0.01, 10	0.025	0.37	0.37
	0.01, 100	0.232	0.3	0.3
	0.01, 1000	3.522	0.23	0.23
	0.01, 2000	6.378	0.37	0.37
ClaPROAR	1.0, 10	0.033	0.51	0.23
	1.0, 100	0.254	0.68	0.47
	1.0, 1000	3.373	0.65	0.43
	1.0, 2000	6.821	0.43	0.23
	0.5, 10	0.023	0.48	0.43
	0.5, 100	0.178	0.43	0.4
	0.5, 1000	2.514	0.39	0.37
	0.5, 2000	5.281	0.35	0.33
	0.25, 10	0.024	0.4	0.4
	0.25, 100	0.247	0.27	0.27
	0.25, 1000	2.818	0.2	0.2
	0.25, 2000	3.493	0.57	0.57
	0.1, 10	0.023	0.4	0.4
	0.1, 100	0.227	0.33	0.33
	0.1, 1000	2.567	0.37	0.37
	0.1, 2000	5.78	0.27	0.27
	0.05, 10	0.027	0.37	0.37
	0.05, 100	0.257	0.27	0.27
	0.05, 1000	2.426	0.47	0.47
	0.05, 2000	5.659	0.27	0.27
	0.01, 10	0.031	0.2	0.2
	0.01, 100	0.264	0.2	0.2
	0.01, 1000	2.645	0.4	0.4
	0.01, 2000	6.153	0.16	0.17
Greedy	1.0, 10	0.017	1.0	0.87
	1.0, 100	0.073	1.0	0.93
	1.0, 1000	0.745	1.0	0.83
	1.0, 2000	1.444	1.0	0.9
	0.5, 10	0.021	0.87	0.57
	0.5, 100	0.155	1.0	0.73
	0.5, 1000	0.701	1.0	0.93
	0.5, 2000	2.776	1.0	0.9
	0.25, 10	0.02	0.67	0.37
	0.25, 100	0.089	1.0	1.0
	0.25, 1000	0.045	1.0	1.0
	0.25, 2000	0.074	1.0	1.0
	0.1, 10	0.016	0.3	0.0
	0.1, 100	0.122	1.0	1.0
	0.1, 1000	0.112	1.0	1.0
	0.1, 2000	0.131	1.0	1.0
	0.05, 10	0.016	0.17	0.0
	0.05, 100	0.154	0.77	0.53
	0.05, 1000	0.234	1.0	1.0
	0.05, 2000	0.212	1.0	1.0
	0.01, 10	0.014	0.0	0.0
	0.01, 100	0.162	0.37	0.0
	0.01, 1000	1.085	1.0	1.0
	0.01, 2000	1.092	1.0	1.0

Tab. 93: Parameter grid search iris data experiment using an deep ensemble 2

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.091	0.67	0.0
	1.0, 100	0.909	0.65	0.03
	1.0, 1000	9.292	0.66	0.03
	1.0, 2000	19.819	0.74	0.03
	0.5, 10	0.084	0.81	0.0
	0.5, 100	0.961	0.93	0.03
	0.5, 1000	8.809	0.79	0.0
	0.5, 2000	19.32	0.87	0.03
	0.25, 10	0.102	1.0	0.03
	0.25, 100	1.023	1.0	0.03
	0.25, 1000	10.526	1.0	0.1
	0.25, 2000	21.459	1.0	0.07
	0.1, 10	0.101	1.0	0.0
	0.1, 100	1.111	1.0	0.0
	0.1, 1000	9.426	1.0	0.1
	0.1, 2000	19.424	1.0	0.0
	0.05, 10	0.096	1.0	0.0
	0.05, 100	0.956	1.0	0.0
	0.05, 1000	5.679	1.0	0.07
	0.05, 2000	10.556	1.0	0.17
	0.01, 10	0.047	0.44	0.0
	0.01, 100	0.911	1.0	0.17
	0.01, 1000	2.31	1.0	0.17
	0.01, 2000	1.065	1.0	0.13
Revise	1.0, 10	0.106	0.55	0.57
	1.0, 100	0.173	0.55	0.6
	1.0, 1000	1.243	0.55	0.67
	1.0, 2000	2.414	0.59	0.7
	0.5, 10	0.02	0.4	0.33
	0.5, 100	0.126	0.54	0.57
	0.5, 1000	1.479	0.48	0.57
	0.5, 2000	3.568	0.54	0.67
	0.25, 10	0.023	0.31	0.23
	0.25, 100	0.187	0.36	0.3
	0.25, 1000	1.634	0.57	0.63
	0.25, 2000	2.675	0.55	0.63
	0.1, 10	0.021	0.28	0.2
	0.1, 100	0.203	0.42	0.33
	0.1, 1000	1.674	0.62	0.73
	0.1, 2000	4.14	0.47	0.53
	0.05, 10	0.024	0.3	0.3
	0.05, 100	0.23	0.47	0.43
	0.05, 1000	1.73	0.53	0.6
	0.05, 2000	3.719	0.59	0.63
	0.01, 10	0.02	0.3	0.3
	0.01, 100	0.197	0.32	0.3
	0.01, 1000	1.826	0.55	0.57
	0.01, 2000	2.886	0.54	0.6
Ecco	1.0, 10	0.056	0.39	0.27
	1.0, 100	0.396	0.5	0.57
	1.0, 1000	3.978	0.48	0.57
	1.0, 2000	7.74	0.51	0.63
	0.5, 10	0.05	0.48	0.37
	0.5, 100	0.468	0.5	0.4

	0.5, 1000	4.527	0.4	0.47
	0.5, 2000	9.586	0.52	0.63
	0.25, 10	0.053	0.43	0.37
	0.25, 100	0.566	0.43	0.33
	0.25, 1000	5.367	0.44	0.5
	0.25, 2000	6.649	0.66	0.8
	0.1, 10	0.053	0.4	0.33
	0.1, 100	0.599	0.35	0.3
	0.1, 1000	5.952	0.33	0.37
	0.1, 2000	7.365	0.59	0.7
	0.05, 10	0.052	0.46	0.4
	0.05, 100	0.507	0.48	0.47
	0.05, 1000	4.231	0.44	0.47
	0.05, 2000	7.3	0.54	0.63
	0.01, 10	0.059	0.39	0.33
	0.01, 100	0.496	0.4	0.4
	0.01, 1000	3.885	0.53	0.6
	0.01, 2000	10.155	0.51	0.6
Wachter	1.0, 10	0.024	0.49	0.4
	1.0, 100	0.219	0.52	0.57
	1.0, 1000	0.695	0.72	0.87
	1.0, 2000	2.562	0.71	0.83
	0.5, 10	0.03	0.38	0.33
	0.5, 100	0.217	0.39	0.4
	0.5, 1000	1.735	0.54	0.63
	0.5, 2000	3.65	0.53	0.63
	0.25, 10	0.03	0.35	0.3
	0.25, 100	0.236	0.42	0.33
	0.25, 1000	1.662	0.59	0.67
	0.25, 2000	3.022	0.68	0.8
	0.1, 10	0.029	0.35	0.27
	0.1, 100	0.238	0.24	0.23
	0.1, 1000	2.437	0.5	0.57
	0.1, 2000	3.556	0.6	0.73
	0.05, 10	0.026	0.46	0.47
	0.05, 100	0.181	0.5	0.43
	0.05, 1000	2.554	0.44	0.47
	0.05, 2000	4.059	0.61	0.73
	0.01, 10	0.027	0.36	0.33
	0.01, 100	0.254	0.28	0.2
	0.01, 1000	2.687	0.44	0.5
	0.01, 2000	4.8	0.47	0.53
Generic	1.0, 10	0.022	0.52	0.47
	1.0, 100	0.169	0.53	0.6
	1.0, 1000	1.132	0.64	0.77
	1.0, 2000	2.246	0.65	0.77
	0.5, 10	0.02	0.38	0.33
	0.5, 100	0.177	0.45	0.4
	0.5, 1000	1.001	0.67	0.8
	0.5, 2000	3.564	0.57	0.7
	0.25, 10	0.021	0.47	0.47
	0.25, 100	0.226	0.35	0.3
	0.25, 1000	1.659	0.53	0.6
	0.25, 2000	3.819	0.51	0.6
	0.1, 10	0.024	0.35	0.27
	0.1, 100	0.194	0.33	0.23

	0.1, 1000	1.504	0.52	0.6
	0.1, 2000	2.873	0.47	0.53
	0.05, 10	0.023	0.39	0.33
	0.05, 100	0.185	0.44	0.4
	0.05, 1000	1.414	0.46	0.5
	0.05, 2000	3.628	0.56	0.63
	0.01, 10	0.019	0.42	0.4
	0.01, 100	0.197	0.31	0.27
	0.01, 1000	1.753	0.47	0.5
	0.01, 2000	3.399	0.56	0.6
DiCE	1.0, 10	0.026	0.39	0.3
	1.0, 100	0.156	0.56	0.63
	1.0, 1000	1.674	0.66	0.77
	1.0, 2000	3.328	0.61	0.73
	0.5, 10	0.028	0.38	0.3
	0.5, 100	0.247	0.47	0.4
	0.5, 1000	2.148	0.5	0.6
	0.5, 2000	5.603	0.48	0.57
	0.25, 10	0.029	0.45	0.4
	0.25, 100	0.247	0.39	0.37
	0.25, 1000	2.299	0.54	0.6
	0.25, 2000	4.031	0.62	0.7
	0.1, 10	0.03	0.51	0.5
	0.1, 100	0.24	0.44	0.37
	0.1, 1000	2.84	0.48	0.5
	0.1, 2000	3.908	0.61	0.7
	0.05, 10	0.023	0.41	0.43
	0.05, 100	0.23	0.38	0.37
	0.05, 1000	3.168	0.46	0.5
	0.05, 2000	4.823	0.54	0.6
	0.01, 10	0.051	0.36	0.27
	0.01, 100	0.214	0.49	0.47
	0.01, 1000	2.411	0.49	0.53
	0.01, 2000	4.177	0.63	0.67
ClaPROAR	1.0, 10	0.025	0.45	0.43
	1.0, 100	0.243	0.49	0.53
	1.0, 1000	2.504	0.39	0.47
	1.0, 2000	3.421	0.52	0.63
	0.5, 10	0.026	0.43	0.37
	0.5, 100	0.229	0.47	0.47
	0.5, 1000	2.462	0.46	0.53
	0.5, 2000	4.746	0.48	0.57
	0.25, 10	0.026	0.45	0.4
	0.25, 100	0.23	0.48	0.43
	0.25, 1000	1.733	0.56	0.6
	0.25, 2000	3.317	0.6	0.7
	0.1, 10	0.027	0.21	0.17
	0.1, 100	0.248	0.27	0.23
	0.1, 1000	2.487	0.42	0.43
	0.1, 2000	3.446	0.5	0.6
	0.05, 10	0.023	0.45	0.47
	0.05, 100	0.241	0.41	0.33
	0.05, 1000	1.895	0.58	0.67
	0.05, 2000	3.627	0.6	0.7
	0.01, 10	0.028	0.4	0.4
	0.01, 100	0.228	0.51	0.47

	0.01, 1000	2.427	0.46	0.5
	0.01, 2000	5.054	0.44	0.43
Greedy	1.0, 10	0.019	1.0	0.93
	1.0, 100	0.062	1.0	0.97
	1.0, 1000	0.019	1.0	1.0
	1.0, 2000	0.016	1.0	1.0
	0.5, 10	0.018	0.97	0.43
	0.5, 100	0.017	1.0	1.0
	0.5, 1000	0.031	1.0	1.0
	0.5, 2000	0.024	1.0	1.0
	0.25, 10	0.019	0.67	0.27
	0.25, 100	0.036	1.0	1.0
	0.25, 1000	0.037	1.0	1.0
	0.25, 2000	0.041	1.0	1.0
	0.1, 10	0.018	0.3	0.03
	0.1, 100	0.094	1.0	1.0
	0.1, 1000	0.115	1.0	1.0
	0.1, 2000	0.09	1.0	1.0
	0.05, 10	0.014	0.23	0.0
	0.05, 100	0.146	1.0	0.57
	0.05, 1000	0.163	1.0	1.0
	0.05, 2000	0.173	1.0	1.0
	0.01, 10	0.015	0.07	0.0
	0.01, 100	0.212	0.37	0.03
	0.01, 1000	0.963	1.0	1.0
	0.01, 2000	0.862	1.0	1.0

Tab. 94: Parameter grid search iris data experiment using an deep ensemble 3

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.091	0.78	0.0
	1.0, 100	0.904	0.73	0.0
	1.0, 1000	7.918	0.69	0.0
	1.0, 2000	19.624	0.83	0.0
	0.5, 10	0.116	0.77	0.0
	0.5, 100	0.833	0.77	0.0
	0.5, 1000	9.464	0.77	0.0
	0.5, 2000	18.484	0.75	0.0
	0.25, 10	0.08	0.89	0.0
	0.25, 100	0.918	0.97	0.0
	0.25, 1000	10.12	0.95	0.0
	0.25, 2000	20.058	0.97	0.03
	0.1, 10	0.094	1.0	0.0
	0.1, 100	0.907	1.0	0.03
	0.1, 1000	9.893	1.0	0.0
	0.1, 2000	16.091	1.0	0.13
	0.05, 10	0.09	1.0	0.1
	0.05, 100	0.83	1.0	0.1
	0.05, 1000	4.762	1.0	0.2
	0.05, 2000	13.691	1.0	0.13
	0.01, 10	0.063	0.42	0.0
	0.01, 100	0.869	1.0	0.17
	0.01, 1000	2.915	1.0	0.3
	0.01, 2000	5.082	1.0	0.37
Revise	1.0, 10	0.122	1.0	0.27

	1.0, 100	0.449	0.99	0.47
	1.0, 1000	5.995	1.0	0.2
	1.0, 2000	11.391	1.0	0.27
	0.5, 10	0.041	0.83	0.37
	0.5, 100	0.306	0.84	0.43
	0.5, 1000	3.594	0.85	0.37
	0.5, 2000	10.352	0.8	0.17
	0.25, 10	0.019	0.44	0.3
	0.25, 100	0.183	0.5	0.33
	0.25, 1000	1.944	0.5	0.37
	0.25, 2000	3.549	0.59	0.5
	0.1, 10	0.019	0.32	0.3
	0.1, 100	0.165	0.44	0.4
	0.1, 1000	1.902	0.4	0.4
	0.1, 2000	3.902	0.4	0.37
	0.05, 10	0.023	0.31	0.3
	0.05, 100	0.148	0.44	0.43
	0.05, 1000	1.715	0.58	0.57
	0.05, 2000	3.892	0.34	0.33
	0.01, 10	0.013	0.55	0.57
	0.01, 100	0.186	0.3	0.3
	0.01, 1000	2.002	0.27	0.27
	0.01, 2000	3.31	0.35	0.33
Ecco	1.0, 10	0.149	0.99	0.37
	1.0, 100	1.414	0.99	0.4
	1.0, 1000	14.262	0.99	0.4
	1.0, 2000	29.987	0.99	0.33
	0.5, 10	0.121	0.87	0.23
	0.5, 100	1.198	0.79	0.3
	0.5, 1000	9.576	0.85	0.5
	0.5, 2000	24.903	0.83	0.27
	0.25, 10	0.052	0.36	0.2
	0.25, 100	0.404	0.55	0.4
	0.25, 1000	5.358	0.47	0.33
	0.25, 2000	10.493	0.51	0.37
	0.1, 10	0.053	0.39	0.37
	0.1, 100	0.544	0.21	0.2
	0.1, 1000	5.005	0.41	0.4
	0.1, 2000	10.861	0.35	0.33
	0.05, 10	0.052	0.28	0.27
	0.05, 100	0.504	0.37	0.37
	0.05, 1000	5.47	0.34	0.33
	0.05, 2000	10.893	0.29	0.27
	0.01, 10	0.045	0.45	0.47
	0.01, 100	0.494	0.38	0.37
	0.01, 1000	4.942	0.45	0.43
	0.01, 2000	10.96	0.27	0.27
Wachter	1.0, 10	0.066	0.99	0.33
	1.0, 100	0.635	0.98	0.37
	1.0, 1000	6.806	1.0	0.37
	1.0, 2000	13.24	0.98	0.43
	0.5, 10	0.045	0.89	0.57
	0.5, 100	0.491	0.83	0.27
	0.5, 1000	6.266	0.89	0.37
	0.5, 2000	11.11	0.87	0.27
	0.25, 10	0.022	0.5	0.37

	0.25, 100	0.228	0.49	0.33
	0.25, 1000	2.336	0.53	0.43
	0.25, 2000	4.774	0.57	0.43
	0.1, 10	0.026	0.22	0.2
	0.1, 100	0.206	0.43	0.43
	0.1, 1000	2.724	0.21	0.2
	0.1, 2000	3.813	0.42	0.4
	0.05, 10	0.025	0.43	0.43
	0.05, 100	0.25	0.2	0.2
	0.05, 1000	2.6	0.26	0.27
	0.05, 2000	4.66	0.44	0.43
	0.01, 10	0.024	0.37	0.37
	0.01, 100	0.249	0.31	0.3
	0.01, 1000	2.312	0.43	0.43
	0.01, 2000	5.008	0.37	0.37
Generic	1.0, 10	0.052	0.99	0.47
	1.0, 100	0.494	0.99	0.37
	1.0, 1000	5.977	0.99	0.2
	1.0, 2000	10.145	0.99	0.43
	0.5, 10	0.041	0.86	0.4
	0.5, 100	0.45	0.8	0.3
	0.5, 1000	4.078	0.8	0.4
	0.5, 2000	8.342	0.86	0.37
	0.25, 10	0.022	0.48	0.33
	0.25, 100	0.173	0.53	0.4
	0.25, 1000	1.989	0.49	0.33
	0.25, 2000	2.734	0.59	0.5
	0.1, 10	0.019	0.29	0.27
	0.1, 100	0.183	0.31	0.27
	0.1, 1000	2.128	0.27	0.27
	0.1, 2000	4.102	0.34	0.3
	0.05, 10	0.016	0.41	0.4
	0.05, 100	0.164	0.46	0.47
	0.05, 1000	1.881	0.37	0.37
	0.05, 2000	2.854	0.46	0.47
	0.01, 10	0.02	0.3	0.3
	0.01, 100	0.192	0.24	0.23
	0.01, 1000	1.474	0.37	0.37
	0.01, 2000	3.234	0.33	0.33
DiCE	1.0, 10	0.064	0.98	0.4
	1.0, 100	0.848	0.99	0.2
	1.0, 1000	8.786	0.99	0.2
	1.0, 2000	15.956	0.99	0.33
	0.5, 10	0.035	0.8	0.47
	0.5, 100	0.498	0.75	0.33
	0.5, 1000	5.722	0.85	0.33
	0.5, 2000	12.351	0.88	0.3
	0.25, 10	0.025	0.43	0.23
	0.25, 100	0.231	0.42	0.27
	0.25, 1000	2.668	0.58	0.4
	0.25, 2000	4.157	0.61	0.5
	0.1, 10	0.023	0.45	0.43
	0.1, 100	0.261	0.27	0.27
	0.1, 1000	2.984	0.35	0.33
	0.1, 2000	5.591	0.4	0.4
	0.05, 10	0.019	0.35	0.33

	0.05, 100	0.174	0.38	0.37
	0.05, 1000	1.737	0.59	0.6
	0.05, 2000	6.243	0.3	0.3
	0.01, 10	0.022	0.36	0.37
	0.01, 100	0.164	0.4	0.4
	0.01, 1000	3.352	0.25	0.23
	0.01, 2000	6.25	0.31	0.3
ClaPROAR	1.0, 10	0.06	0.99	0.5
	1.0, 100	0.525	0.99	0.43
	1.0, 1000	7.957	0.98	0.23
	1.0, 2000	14.596	0.98	0.33
	0.5, 10	0.058	0.88	0.47
	0.5, 100	0.423	0.88	0.5
	0.5, 1000	6.833	0.88	0.3
	0.5, 2000	9.055	0.87	0.47
	0.25, 10	0.041	0.44	0.23
	0.25, 100	0.233	0.48	0.3
	0.25, 1000	2.554	0.48	0.37
	0.25, 2000	4.691	0.6	0.5
	0.1, 10	0.022	0.46	0.43
	0.1, 100	0.179	0.41	0.4
	0.1, 1000	2.649	0.28	0.27
	0.1, 2000	5.046	0.41	0.4
	0.05, 10	0.023	0.4	0.4
	0.05, 100	0.276	0.37	0.37
	0.05, 1000	2.589	0.37	0.37
	0.05, 2000	5.578	0.25	0.23
	0.01, 10	0.026	0.36	0.37
	0.01, 100	0.229	0.44	0.43
	0.01, 1000	2.638	0.37	0.37
	0.01, 2000	5.156	0.37	0.37
Greedy	1.0, 10	0.016	1.0	0.83
	1.0, 100	0.018	1.0	1.0
	1.0, 1000	0.669	1.0	0.93
	1.0, 2000	1.425	1.0	0.87
	0.5, 10	0.019	1.0	0.53
	0.5, 100	0.026	1.0	1.0
	0.5, 1000	0.036	1.0	1.0
	0.5, 2000	0.031	1.0	1.0
	0.25, 10	0.017	0.6	0.27
	0.25, 100	0.047	1.0	1.0
	0.25, 1000	0.048	1.0	1.0
	0.25, 2000	0.037	1.0	1.0
	0.1, 10	0.018	0.43	0.17
	0.1, 100	0.07	1.0	1.0
	0.1, 1000	0.086	1.0	1.0
	0.1, 2000	0.091	1.0	1.0
	0.05, 10	0.017	0.27	0.0
	0.05, 100	0.169	0.93	0.5
	0.05, 1000	0.207	1.0	1.0
	0.05, 2000	0.163	1.0	1.0
	0.01, 10	0.017	0.07	0.0
	0.01, 100	0.169	0.4	0.1
	0.01, 1000	0.952	1.0	1.0
	0.01, 2000	0.853	1.0	1.0

Tab. 95: Parameter grid search iris data experiment using an deep ensemble 4

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.0, 10	0.085	0.77	0.0
	1.0, 100	0.918	0.84	0.0
	1.0, 1000	9.647	0.84	0.0
	1.0, 2000	19.366	0.85	0.0
	0.5, 10	0.092	0.97	0.0
	0.5, 100	0.958	0.91	0.03
	0.5, 1000	9.551	0.95	0.07
	0.5, 2000	18.232	0.9	0.03
	0.25, 10	0.094	1.0	0.07
	0.25, 100	0.95	1.0	0.03
	0.25, 1000	9.544	1.0	0.1
	0.25, 2000	17.738	1.0	0.13
	0.1, 10	0.084	1.0	0.07
	0.1, 100	0.913	1.0	0.03
	0.1, 1000	7.651	1.0	0.03
	0.1, 2000	14.435	1.0	0.17
	0.05, 10	0.098	1.0	0.0
	0.05, 100	0.8	1.0	0.03
	0.05, 1000	5.39	1.0	0.17
	0.05, 2000	6.521	1.0	0.2
	0.01, 10	0.059	0.3	0.0
	0.01, 100	0.733	1.0	0.13
	0.01, 1000	1.476	1.0	0.37
	0.01, 2000	1.408	1.0	0.27
Revise	1.0, 10	0.117	0.86	0.17
	1.0, 100	0.429	0.98	0.67
	1.0, 1000	2.945	0.97	0.7
	1.0, 2000	7.072	0.96	0.6
	0.5, 10	0.036	0.62	0.37
	0.5, 100	0.18	0.69	0.6
	0.5, 1000	1.157	0.68	0.67
	0.5, 2000	2.523	0.63	0.63
	0.25, 10	0.023	0.46	0.3
	0.25, 100	0.221	0.3	0.2
	0.25, 1000	1.816	0.54	0.6
	0.25, 2000	3.735	0.49	0.57
	0.1, 10	0.021	0.43	0.27
	0.1, 100	0.187	0.48	0.43
	0.1, 1000	1.947	0.44	0.4
	0.1, 2000	4.03	0.48	0.4
	0.05, 10	0.02	0.25	0.2
	0.05, 100	0.192	0.24	0.13
	0.05, 1000	2.162	0.39	0.3
	0.05, 2000	3.268	0.45	0.43
	0.01, 10	0.021	0.45	0.37
	0.01, 100	0.201	0.24	0.1
	0.01, 1000	2.161	0.32	0.27
	0.01, 2000	3.731	0.49	0.47
Ecco	1.0, 10	0.141	0.95	0.37
	1.0, 100	0.915	0.96	0.67
	1.0, 1000	10.361	0.96	0.63

	1.0, 2000	25.033	0.98	0.67
	0.5, 10	0.092	0.72	0.47
	0.5, 100	0.741	0.61	0.53
	0.5, 1000	6.363	0.51	0.5
	0.5, 2000	6.971	0.63	0.67
	0.25, 10	0.058	0.44	0.33
	0.25, 100	0.509	0.45	0.33
	0.25, 1000	5.286	0.43	0.47
	0.25, 2000	7.982	0.55	0.67
	0.1, 10	0.056	0.38	0.23
	0.1, 100	0.482	0.44	0.33
	0.1, 1000	5.655	0.36	0.3
	0.1, 2000	11.289	0.43	0.37
	0.05, 10	0.051	0.39	0.3
	0.05, 100	0.486	0.45	0.4
	0.05, 1000	5.875	0.38	0.23
	0.05, 2000	10.52	0.4	0.4
	0.01, 10	0.053	0.31	0.27
	0.01, 100	0.493	0.38	0.33
	0.01, 1000	5.366	0.42	0.33
	0.01, 2000	12.181	0.29	0.23
Wachter	1.0, 10	0.063	0.94	0.33
	1.0, 100	0.517	0.97	0.6
	1.0, 1000	4.288	0.97	0.67
	1.0, 2000	9.365	0.96	0.57
	0.5, 10	0.051	0.5	0.23
	0.5, 100	0.305	0.61	0.6
	0.5, 1000	1.727	0.53	0.5
	0.5, 2000	3.512	0.59	0.57
	0.25, 10	0.027	0.41	0.33
	0.25, 100	0.229	0.53	0.4
	0.25, 1000	2.568	0.44	0.47
	0.25, 2000	4.228	0.59	0.7
	0.1, 10	0.026	0.36	0.27
	0.1, 100	0.226	0.43	0.33
	0.1, 1000	2.659	0.34	0.3
	0.1, 2000	5.414	0.34	0.27
	0.05, 10	0.029	0.3	0.2
	0.05, 100	0.231	0.33	0.2
	0.05, 1000	2.675	0.28	0.23
	0.05, 2000	5.415	0.32	0.27
	0.01, 10	0.024	0.4	0.3
	0.01, 100	0.224	0.41	0.3
	0.01, 1000	2.736	0.28	0.2
	0.01, 2000	4.794	0.4	0.4
Generic	1.0, 10	0.05	0.99	0.4
	1.0, 100	0.341	0.96	0.7
	1.0, 1000	3.529	0.98	0.53
	1.0, 2000	6.571	0.97	0.67
	0.5, 10	0.024	0.66	0.53
	0.5, 100	0.206	0.65	0.6
	0.5, 1000	1.315	0.59	0.6
	0.5, 2000	2.174	0.71	0.73
	0.25, 10	0.023	0.46	0.2
	0.25, 100	0.172	0.47	0.43
	0.25, 1000	1.728	0.54	0.6

	0.25, 2000	3.845	0.37	0.43
	0.1, 10	0.03	0.37	0.27
	0.1, 100	0.193	0.42	0.3
	0.1, 1000	2.017	0.47	0.47
	0.1, 2000	3.602	0.48	0.57
	0.05, 10	0.022	0.33	0.23
	0.05, 100	0.187	0.32	0.27
	0.05, 1000	1.852	0.45	0.43
	0.05, 2000	3.399	0.44	0.43
	0.01, 10	0.024	0.35	0.27
	0.01, 100	0.183	0.36	0.27
	0.01, 1000	2.108	0.35	0.33
	0.01, 2000	3.862	0.47	0.43
DiCE	1.0, 10	0.068	0.98	0.4
	1.0, 100	0.72	0.99	0.53
	1.0, 1000	5.81	0.96	0.57
	1.0, 2000	9.482	0.98	0.7
	0.5, 10	0.048	0.62	0.4
	0.5, 100	0.382	0.6	0.5
	0.5, 1000	2.345	0.63	0.63
	0.5, 2000	5.209	0.57	0.53
	0.25, 10	0.028	0.28	0.17
	0.25, 100	0.24	0.39	0.33
	0.25, 1000	2.079	0.51	0.57
	0.25, 2000	3.873	0.59	0.67
	0.1, 10	0.026	0.33	0.3
	0.1, 100	0.248	0.27	0.2
	0.1, 1000	2.606	0.51	0.53
	0.1, 2000	5.462	0.46	0.5
	0.05, 10	0.026	0.24	0.2
	0.05, 100	0.255	0.34	0.2
	0.05, 1000	3.313	0.34	0.33
	0.05, 2000	6.551	0.38	0.33
	0.01, 10	0.028	0.28	0.2
	0.01, 100	0.224	0.45	0.33
	0.01, 1000	2.882	0.4	0.37
	0.01, 2000	6.373	0.34	0.3
ClaPROAR	1.0, 10	0.072	0.98	0.37
	1.0, 100	0.529	0.97	0.57
	1.0, 1000	4.284	0.96	0.67
	1.0, 2000	9.289	0.96	0.67
	0.5, 10	0.041	0.64	0.43
	0.5, 100	0.345	0.56	0.5
	0.5, 1000	2.308	0.49	0.43
	0.5, 2000	4.711	0.59	0.57
	0.25, 10	0.033	0.44	0.33
	0.25, 100	0.303	0.43	0.33
	0.25, 1000	2.443	0.43	0.43
	0.25, 2000	3.961	0.53	0.6
	0.1, 10	0.033	0.32	0.17
	0.1, 100	0.252	0.35	0.3
	0.1, 1000	2.851	0.45	0.37
	0.1, 2000	5.498	0.5	0.47
	0.05, 10	0.027	0.39	0.37
	0.05, 100	0.272	0.34	0.2
	0.05, 1000	2.834	0.35	0.33

	0.05, 2000	5.896	0.33	0.33
	0.01, 10	0.028	0.3	0.2
	0.01, 100	0.252	0.32	0.33
	0.01, 1000	2.614	0.41	0.43
	0.01, 2000	6.162	0.3	0.23
Greedy	1.0, 10	0.022	1.0	0.9
	1.0, 100	0.019	1.0	1.0
	1.0, 1000	0.022	1.0	1.0
	1.0, 2000	0.02	1.0	1.0
	0.5, 10	0.017	0.9	0.53
	0.5, 100	0.035	1.0	1.0
	0.5, 1000	0.03	1.0	1.0
	0.5, 2000	0.029	1.0	1.0
	0.25, 10	0.02	0.47	0.3
	0.25, 100	0.055	1.0	1.0
	0.25, 1000	0.037	1.0	1.0
	0.25, 2000	0.048	1.0	1.0
	0.1, 10	0.024	0.33	0.03
	0.1, 100	0.102	1.0	1.0
	0.1, 1000	0.103	1.0	1.0
	0.1, 2000	0.104	1.0	1.0
	0.05, 10	0.017	0.1	0.0
	0.05, 100	0.17	0.93	0.7
	0.05, 1000	0.216	1.0	1.0
	0.05, 2000	0.174	1.0	1.0
	0.01, 10	0.017	0.07	0.0
	0.01, 100	0.16	0.3	0.03
	0.01, 1000	1.088	1.0	1.0
	0.01, 2000	0.893	1.0	1.0

Tab. 96: Parameter grid search iris data experiment using an deep ensemble 5

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.5, 10	33.544	0.8	0.0
	1.5, 100	0.897	0.72	0.0
	1.5, 1000	9.447	0.74	0.0
	1.5, 2000	17.983	0.74	0.0
	2.0, 10	0.092	0.79	0.0
	2.0, 100	0.868	0.71	0.0
	2.0, 1000	9.16	0.73	0.0
	2.0, 2000	18.862	0.73	0.0
	2.5, 10	0.085	0.73	0.0
	2.5, 100	0.891	0.74	0.0
	2.5, 1000	9.824	0.84	0.0
	2.5, 2000	19.565	0.8	0.0
	3.0, 10	0.089	0.77	0.0
	3.0, 100	0.699	0.64	0.0
	3.0, 1000	9.02	0.67	0.0
	3.0, 2000	16.389	0.71	0.0
Revise	1.5, 10	19.448	0.74	0.63
	1.5, 100	0.099	0.88	0.9
	1.5, 1000	0.619	0.84	0.87
	1.5, 2000	2.513	0.75	0.7
	2.0, 10	0.017	0.72	0.57
	2.0, 100	0.119	0.72	0.6

	2.0, 1000	1.267	0.71	0.63
	2.0, 2000	3.632	0.69	0.57
	2.5, 10	0.015	0.75	0.73
	2.5, 100	0.156	0.75	0.7
	2.5, 1000	1.52	0.74	0.67
	2.5, 2000	2.175	0.75	0.77
	3.0, 10	0.021	0.64	0.57
	3.0, 100	0.138	0.75	0.67
	3.0, 1000	1.034	0.8	0.77
	3.0, 2000	2.621	0.65	0.6
Ecco	1.5, 10	9.615	0.64	0.53
	1.5, 100	0.331	0.75	0.7
	1.5, 1000	3.713	0.77	0.67
	1.5, 2000	6.373	0.78	0.73
	2.0, 10	0.041	0.73	0.63
	2.0, 100	0.5	0.7	0.6
	2.0, 1000	3.061	0.76	0.73
	2.0, 2000	4.152	0.77	0.73
	2.5, 10	0.047	0.72	0.67
	2.5, 100	0.32	0.77	0.7
	2.5, 1000	1.804	0.82	0.8
	2.5, 2000	7.169	0.71	0.6
	3.0, 10	0.04	0.71	0.67
	3.0, 100	0.416	0.76	0.77
	3.0, 1000	4.185	0.72	0.67
	3.0, 2000	6.426	0.73	0.7
Wachter	1.5, 10	8.3	0.73	0.63
	1.5, 100	0.161	0.75	0.7
	1.5, 1000	1.987	0.71	0.57
	1.5, 2000	4.833	0.66	0.53
	2.0, 10	0.024	0.79	0.8
	2.0, 100	0.13	0.79	0.73
	2.0, 1000	1.637	0.71	0.6
	2.0, 2000	2.612	0.8	0.83
	2.5, 10	0.021	0.77	0.73
	2.5, 100	0.165	0.71	0.63
	2.5, 1000	1.68	0.69	0.57
	2.5, 2000	2.884	0.81	0.77
	3.0, 10	0.015	0.81	0.73
	3.0, 100	0.148	0.69	0.67
	3.0, 1000	1.77	0.68	0.6
	3.0, 2000	2.716	0.77	0.73
Generic	1.5, 10	0.016	0.74	0.63
	1.5, 100	0.116	0.75	0.7
	1.5, 1000	1.219	0.76	0.73
	1.5, 2000	2.121	0.84	0.87
	2.0, 10	0.022	0.63	0.5
	2.0, 100	0.127	0.73	0.67
	2.0, 1000	1.274	0.73	0.67
	2.0, 2000	3.14	0.81	0.8
	2.5, 10	0.019	0.71	0.63
	2.5, 100	0.11	0.75	0.7
	2.5, 1000	1.156	0.72	0.7
	2.5, 2000	2.417	0.76	0.7
	3.0, 10	0.015	0.69	0.6
	3.0, 100	0.163	0.73	0.67

	3.0, 1000	0.622	0.81	0.8
	3.0, 2000	2.108	0.79	0.8
DiCE	1.5, 10	2.064	0.74	0.6
	1.5, 100	0.118	0.78	0.73
	1.5, 1000	1.887	0.74	0.6
	1.5, 2000	3.686	0.72	0.63
	2.0, 10	0.02	0.76	0.7
	2.0, 100	0.139	0.77	0.73
	2.0, 1000	2.341	0.71	0.63
	2.0, 2000	3.183	0.76	0.73
	2.5, 10	0.035	0.69	0.67
	2.5, 100	0.13	0.79	0.8
	2.5, 1000	0.664	0.87	0.93
	2.5, 2000	3.422	0.73	0.67
	3.0, 10	0.023	0.7	0.6
	3.0, 100	0.2	0.77	0.73
	3.0, 1000	1.388	0.78	0.8
	3.0, 2000	2.875	0.79	0.8
ClaPROAR	1.5, 10	2.3	0.66	0.47
	1.5, 100	0.181	0.68	0.57
	1.5, 1000	1.974	0.7	0.53
	1.5, 2000	1.84	0.78	0.8
	2.0, 10	0.02	0.82	0.87
	2.0, 100	0.172	0.75	0.73
	2.0, 1000	1.743	0.76	0.67
	2.0, 2000	3.287	0.76	0.7
	2.5, 10	0.022	0.73	0.67
	2.5, 100	0.152	0.74	0.67
	2.5, 1000	1.648	0.73	0.67
	2.5, 2000	1.738	0.79	0.8
	3.0, 10	0.02	0.85	0.9
	3.0, 100	0.151	0.68	0.63
	3.0, 1000	1.657	0.75	0.67
	3.0, 2000	3.39	0.75	0.7
Greedy	1.5, 10	3.581	1.0	1.0
	1.5, 100	0.015	1.0	1.0
	1.5, 1000	0.011	1.0	1.0
	1.5, 2000	0.012	1.0	1.0
	2.0, 10	0.011	1.0	1.0
	2.0, 100	0.01	1.0	1.0
	2.0, 1000	0.01	1.0	1.0
	2.0, 2000	0.01	1.0	1.0
	2.5, 10	0.01	1.0	1.0
	2.5, 100	0.01	1.0	1.0
	2.5, 1000	0.01	1.0	1.0
	2.5, 2000	0.01	1.0	1.0
	3.0, 10	0.008	1.0	1.0
	3.0, 100	0.007	1.0	1.0
	3.0, 1000	0.01	1.0	1.0
	3.0, 2000	0.008	1.0	1.0

Tab. 97: Parameter grid search iris data extra experiment using an deep ensemble 1

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.5, 10	0.089	0.6	0.0

	1.5, 100	0.84	0.77	0.0
	1.5, 1000	10.175	0.77	0.0
	1.5, 2000	18.97	0.74	0.0
	2.0, 10	0.075	0.67	0.0
	2.0, 100	0.772	0.76	0.0
	2.0, 1000	9.234	0.7	0.0
	2.0, 2000	16.545	0.7	0.0
	2.5, 10	0.092	0.65	0.0
	2.5, 100	0.864	0.68	0.0
	2.5, 1000	9.52	0.72	0.0
	2.5, 2000	19.604	0.74	0.0
	3.0, 10	0.081	0.58	0.0
	3.0, 100	1.001	0.76	0.0
	3.0, 1000	8.658	0.74	0.0
	3.0, 2000	19.935	0.78	0.0
Revise	1.5, 10	0.097	0.51	0.37
	1.5, 100	0.197	0.45	0.3
	1.5, 1000	2.214	0.41	0.33
	1.5, 2000	5.274	0.52	0.33
	2.0, 10	0.029	0.56	0.3
	2.0, 100	0.302	0.62	0.37
	2.0, 1000	3.184	0.62	0.4
	2.0, 2000	8.21	0.58	0.27
	2.5, 10	0.052	0.69	0.43
	2.5, 100	0.408	0.62	0.3
	2.5, 1000	4.036	0.6	0.33
	2.5, 2000	8.851	0.48	0.17
	3.0, 10	0.032	0.64	0.4
	3.0, 100	0.407	0.65	0.33
	3.0, 1000	4.41	0.51	0.2
	3.0, 2000	8.282	0.59	0.33
Ecco	1.5, 10	0.078	0.57	0.33
	1.5, 100	0.737	0.47	0.2
	1.5, 1000	7.503	0.52	0.3
	1.5, 2000	17.219	0.6	0.3
	2.0, 10	0.089	0.56	0.33
	2.0, 100	0.981	0.67	0.37
	2.0, 1000	11.278	0.72	0.37
	2.0, 2000	25.219	0.58	0.23
	2.5, 10	0.105	0.74	0.43
	2.5, 100	1.127	0.63	0.27
	2.5, 1000	10.661	0.58	0.3
	2.5, 2000	22.51	0.66	0.37
	3.0, 10	0.115	0.66	0.4
	3.0, 100	1.388	0.64	0.3
	3.0, 1000	14.374	0.67	0.23
	3.0, 2000	20.041	0.68	0.4
Wachter	1.5, 10	0.029	0.34	0.27
	1.5, 100	0.259	0.46	0.33
	1.5, 1000	2.608	0.49	0.37
	1.5, 2000	4.962	0.44	0.37
	2.0, 10	0.027	0.52	0.33
	2.0, 100	0.334	0.49	0.23
	2.0, 1000	3.589	0.43	0.2
	2.0, 2000	5.504	0.52	0.43
	2.5, 10	0.037	0.57	0.3

	2.5, 100	0.507	0.61	0.27
	2.5, 1000	5.425	0.57	0.33
	2.5, 2000	6.0	0.61	0.5
	3.0, 10	0.053	0.55	0.23
	3.0, 100	0.397	0.75	0.57
	3.0, 1000	5.672	0.63	0.23
	3.0, 2000	9.033	0.55	0.3
Generic	1.5, 10	0.018	0.49	0.3
	1.5, 100	0.222	0.61	0.37
	1.5, 1000	2.648	0.45	0.27
	1.5, 2000	4.691	0.58	0.33
	2.0, 10	0.029	0.49	0.37
	2.0, 100	0.327	0.57	0.33
	2.0, 1000	3.984	0.68	0.4
	2.0, 2000	6.709	0.7	0.43
	2.5, 10	0.039	0.65	0.3
	2.5, 100	0.316	0.58	0.3
	2.5, 1000	3.835	0.68	0.33
	2.5, 2000	6.522	0.69	0.47
	3.0, 10	0.036	0.66	0.37
	3.0, 100	0.297	0.62	0.43
	3.0, 1000	4.992	0.73	0.4
	3.0, 2000	7.352	0.78	0.47
DiCE	1.5, 10	0.026	0.59	0.5
	1.5, 100	0.271	0.48	0.33
	1.5, 1000	3.848	0.46	0.23
	1.5, 2000	6.423	0.54	0.4
	2.0, 10	0.039	0.43	0.2
	2.0, 100	0.588	0.68	0.43
	2.0, 1000	5.538	0.62	0.4
	2.0, 2000	13.324	0.49	0.23
	2.5, 10	0.052	0.77	0.4
	2.5, 100	0.578	0.55	0.27
	2.5, 1000	9.078	0.74	0.23
	2.5, 2000	10.105	0.76	0.57
	3.0, 10	0.064	0.6	0.23
	3.0, 100	0.401	0.61	0.33
	3.0, 1000	6.308	0.52	0.3
	3.0, 2000	12.104	0.51	0.23
ClaPROAR	1.5, 10	0.025	0.54	0.4
	1.5, 100	0.283	0.5	0.3
	1.5, 1000	3.299	0.59	0.37
	1.5, 2000	5.268	0.37	0.3
	2.0, 10	0.04	0.79	0.47
	2.0, 100	0.328	0.64	0.4
	2.0, 1000	4.594	0.59	0.4
	2.0, 2000	10.427	0.46	0.27
	2.5, 10	0.038	0.52	0.33
	2.5, 100	0.425	0.6	0.37
	2.5, 1000	4.807	0.67	0.4
	2.5, 2000	9.408	0.55	0.37
	3.0, 10	0.061	0.67	0.33
	3.0, 100	0.576	0.49	0.17
	3.0, 1000	5.722	0.52	0.23
	3.0, 2000	10.129	0.74	0.4
Greedy	1.5, 10	0.011	1.0	1.0

	1.5, 100	0.012	1.0	1.0
	1.5, 1000	0.012	1.0	1.0
	1.5, 2000	0.013	1.0	1.0
	2.0, 10	0.007	1.0	1.0
	2.0, 100	0.008	1.0	1.0
	2.0, 1000	0.009	1.0	1.0
	2.0, 2000	0.011	1.0	1.0
	2.5, 10	0.011	1.0	1.0
	2.5, 100	0.008	1.0	1.0
	2.5, 1000	0.009	1.0	1.0
	2.5, 2000	0.01	1.0	1.0
	3.0, 10	0.009	0.97	0.97
	3.0, 100	0.008	1.0	1.0
	3.0, 1000	0.008	1.0	1.0
	3.0, 2000	0.011	1.0	1.0

Tab. 98: Parameter grid search iris data extra experiment using an deep ensemble 2

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.5, 10	0.09	0.72	0.0
	1.5, 100	0.818	0.74	0.0
	1.5, 1000	9.303	0.77	0.0
	1.5, 2000	19.833	0.87	0.0
	2.0, 10	0.086	0.69	0.0
	2.0, 100	0.852	0.77	0.0
	2.0, 1000	9.718	0.78	0.0
	2.0, 2000	18.645	0.68	0.0
	2.5, 10	0.121	0.74	0.0
	2.5, 100	0.864	0.71	0.0
	2.5, 1000	9.765	0.78	0.0
	2.5, 2000	16.024	0.7	0.0
	3.0, 10	0.089	0.89	0.0
	3.0, 100	0.86	0.72	0.0
	3.0, 1000	9.633	0.77	0.0
	3.0, 2000	19.494	0.79	0.0
Revise	1.5, 10	0.125	0.98	0.27
	1.5, 100	0.508	1.0	0.33
	1.5, 1000	6.208	0.99	0.2
	1.5, 2000	12.392	0.99	0.27
	2.0, 10	0.054	1.0	0.3
	2.0, 100	0.62	1.0	0.23
	2.0, 1000	5.945	1.0	0.27
	2.0, 2000	12.441	1.0	0.23
	2.5, 10	0.055	1.0	0.33
	2.5, 100	0.58	1.0	0.33
	2.5, 1000	5.903	1.0	0.27
	2.5, 2000	10.938	1.0	0.4
	3.0, 10	0.051	1.0	0.3
	3.0, 100	0.518	1.0	0.3
	3.0, 1000	5.774	1.0	0.37
	3.0, 2000	10.939	1.0	0.43
Ecco	1.5, 10	0.169	0.99	0.23
	1.5, 100	1.681	0.99	0.3
	1.5, 1000	17.654	0.99	0.23
	1.5, 2000	35.109	0.99	0.27

	2.0, 10	0.14	1.0	0.37
	2.0, 100	1.53	0.99	0.4
	2.0, 1000	15.269	0.99	0.4
	2.0, 2000	33.708	1.0	0.3
	2.5, 10	0.147	1.0	0.3
	2.5, 100	1.664	1.0	0.27
	2.5, 1000	17.566	1.0	0.23
	2.5, 2000	33.567	1.0	0.4
	3.0, 10	0.12	1.0	0.37
	3.0, 100	1.774	1.0	0.2
	3.0, 1000	15.616	1.0	0.4
	3.0, 2000	32.481	1.0	0.37
Wachter	1.5, 10	0.081	0.99	0.2
	1.5, 100	0.733	1.0	0.33
	1.5, 1000	8.186	1.0	0.17
	1.5, 2000	14.437	1.0	0.37
	2.0, 10	0.081	1.0	0.37
	2.0, 100	0.678	1.0	0.37
	2.0, 1000	7.835	1.0	0.23
	2.0, 2000	14.363	1.0	0.37
	2.5, 10	0.061	1.0	0.4
	2.5, 100	0.706	1.0	0.3
	2.5, 1000	7.796	1.0	0.27
	2.5, 2000	14.732	1.0	0.33
	3.0, 10	0.064	1.0	0.4
	3.0, 100	0.783	1.0	0.1
	3.0, 1000	6.764	1.0	0.43
	3.0, 2000	14.479	1.0	0.4
Generic	1.5, 10	0.049	1.0	0.3
	1.5, 100	0.508	1.0	0.33
	1.5, 1000	5.561	0.99	0.37
	1.5, 2000	11.701	0.99	0.33
	2.0, 10	0.061	1.0	0.43
	2.0, 100	0.508	1.0	0.37
	2.0, 1000	6.253	1.0	0.23
	2.0, 2000	12.037	1.0	0.3
	2.5, 10	0.054	1.0	0.3
	2.5, 100	0.51	1.0	0.37
	2.5, 1000	5.835	1.0	0.3
	2.5, 2000	11.516	1.0	0.33
	3.0, 10	0.068	1.0	0.37
	3.0, 100	0.525	1.0	0.33
	3.0, 1000	5.608	1.0	0.37
	3.0, 2000	12.605	1.0	0.2
DiCE	1.5, 10	0.079	1.0	0.3
	1.5, 100	0.9	0.99	0.23
	1.5, 1000	8.478	1.0	0.33
	1.5, 2000	14.553	0.99	0.43
	2.0, 10	0.071	1.0	0.37
	2.0, 100	0.807	0.99	0.17
	2.0, 1000	9.918	1.0	0.23
	2.0, 2000	18.391	1.0	0.33
	2.5, 10	0.061	1.0	0.23
	2.5, 100	0.749	1.0	0.27
	2.5, 1000	10.013	1.0	0.2
	2.5, 2000	17.851	1.0	0.37

	3.0, 10	0.074	1.0	0.3
	3.0, 100	0.525	1.0	0.47
	3.0, 1000	9.143	1.0	0.33
	3.0, 2000	21.127	1.0	0.2
ClaPROAR	1.5, 10	0.07	1.0	0.3
	1.5, 100	0.697	0.99	0.33
	1.5, 1000	7.552	1.0	0.4
	1.5, 2000	16.227	0.99	0.33
	2.0, 10	0.067	1.0	0.4
	2.0, 100	0.729	1.0	0.4
	2.0, 1000	8.562	1.0	0.2
	2.0, 2000	17.566	1.0	0.17
	2.5, 10	0.074	1.0	0.27
	2.5, 100	0.781	1.0	0.33
	2.5, 1000	8.119	1.0	0.27
	2.5, 2000	16.717	1.0	0.23
	3.0, 10	0.076	1.0	0.2
	3.0, 100	0.531	1.0	0.47
	3.0, 1000	7.989	1.0	0.3
	3.0, 2000	16.411	1.0	0.23
Greedy	1.5, 10	0.017	1.0	0.97
	1.5, 100	0.015	1.0	1.0
	1.5, 1000	0.013	1.0	1.0
	1.5, 2000	0.016	1.0	1.0
	2.0, 10	0.012	1.0	1.0
	2.0, 100	0.014	1.0	1.0
	2.0, 1000	0.016	1.0	1.0
	2.0, 2000	0.014	1.0	1.0
	2.5, 10	0.015	1.0	0.9
	2.5, 100	0.018	1.0	1.0
	2.5, 1000	0.014	1.0	1.0
	2.5, 2000	0.012	1.0	1.0
	3.0, 10	0.014	1.0	0.9
	3.0, 100	0.013	1.0	1.0
	3.0, 1000	0.013	1.0	1.0
	3.0, 2000	0.011	1.0	1.0

Tab. 99: Parameter grid search iris data extra experiment using an deep ensemble 3

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.5, 10	0.118	0.84	0.0
	1.5, 100	0.935	0.78	0.0
	1.5, 1000	9.617	0.7	0.0
	1.5, 2000	19.156	0.75	0.0
	2.0, 10	0.085	0.69	0.0
	2.0, 100	0.871	0.69	0.0
	2.0, 1000	9.157	0.6	0.0
	2.0, 2000	18.072	0.58	0.0
	2.5, 10	0.083	0.56	0.0
	2.5, 100	0.913	0.75	0.0
	2.5, 1000	9.669	0.67	0.0
	2.5, 2000	18.84	0.58	0.0
	3.0, 10	0.076	0.59	0.0
	3.0, 100	0.762	0.63	0.0
	3.0, 1000	10.087	0.79	0.0

	3.0, 2000	17.788	0.53	0.0
Revise	1.5, 10	0.103	0.81	0.67
	1.5, 100	0.132	0.79	0.67
	1.5, 1000	1.361	0.74	0.6
	1.5, 2000	3.683	0.78	0.63
	2.0, 10	0.028	0.85	0.53
	2.0, 100	0.171	0.86	0.7
	2.0, 1000	2.645	0.88	0.7
	2.0, 2000	4.051	0.86	0.7
	2.5, 10	0.029	0.9	0.63
	2.5, 100	0.207	0.89	0.7
	2.5, 1000	1.769	0.93	0.9
	2.5, 2000	2.201	0.94	0.97
	3.0, 10	0.021	0.94	0.83
	3.0, 100	0.272	0.91	0.73
	3.0, 1000	1.469	0.94	0.97
	3.0, 2000	2.292	0.94	0.97
Ecco	1.5, 10	0.057	0.84	0.73
	1.5, 100	0.4	0.84	0.67
	1.5, 1000	5.522	0.76	0.57
	1.5, 2000	8.931	0.76	0.5
	2.0, 10	0.065	0.89	0.8
	2.0, 100	0.545	0.88	0.63
	2.0, 1000	5.785	0.88	0.67
	2.0, 2000	10.56	0.93	0.77
	2.5, 10	0.07	0.9	0.77
	2.5, 100	0.571	0.92	0.73
	2.5, 1000	7.215	0.9	0.73
	2.5, 2000	7.056	0.9	0.9
	3.0, 10	0.116	0.87	0.57
	3.0, 100	0.641	0.95	0.83
	3.0, 1000	6.352	0.94	1.0
	3.0, 2000	5.969	0.96	1.0
Wachter	1.5, 10	0.02	0.81	0.73
	1.5, 100	0.178	0.85	0.73
	1.5, 1000	1.465	0.89	0.8
	1.5, 2000	2.959	0.85	0.8
	2.0, 10	0.031	0.83	0.57
	2.0, 100	0.199	0.84	0.7
	2.0, 1000	2.04	0.89	0.83
	2.0, 2000	2.897	0.9	0.9
	2.5, 10	0.031	0.9	0.7
	2.5, 100	0.27	0.88	0.8
	2.5, 1000	1.403	0.9	0.93
	2.5, 2000	2.593	0.92	0.97
	3.0, 10	0.046	0.88	0.7
	3.0, 100	0.246	0.92	0.9
	3.0, 1000	0.672	0.96	1.0
	3.0, 2000	2.605	0.93	1.0
Generic	1.5, 10	0.015	0.82	0.67
	1.5, 100	0.177	0.76	0.57
	1.5, 1000	1.311	0.83	0.7
	1.5, 2000	2.878	0.73	0.6
	2.0, 10	0.025	0.85	0.63
	2.0, 100	0.182	0.85	0.63
	2.0, 1000	1.677	0.89	0.67

	2.0, 2000	3.424	0.9	0.83
	2.5, 10	0.028	0.88	0.73
	2.5, 100	0.285	0.9	0.63
	2.5, 1000	1.443	0.94	0.93
	2.5, 2000	2.231	0.94	0.97
	3.0, 10	0.034	0.93	0.77
	3.0, 100	0.236	0.93	0.73
	3.0, 1000	0.94	0.93	1.0
	3.0, 2000	0.818	0.95	1.0
DiCE	1.5, 10	0.025	0.74	0.63
	1.5, 100	0.156	0.83	0.67
	1.5, 1000	2.715	0.72	0.57
	1.5, 2000	4.102	0.81	0.7
	2.0, 10	0.031	0.85	0.7
	2.0, 100	0.21	0.88	0.7
	2.0, 1000	2.287	0.89	0.77
	2.0, 2000	5.643	0.87	0.77
	2.5, 10	0.032	0.89	0.7
	2.5, 100	0.291	0.93	0.8
	2.5, 1000	1.532	0.93	0.97
	2.5, 2000	3.107	0.92	0.9
	3.0, 10	0.042	0.93	0.63
	3.0, 100	0.163	0.95	0.87
	3.0, 1000	1.581	0.97	0.97
	3.0, 2000	1.391	0.96	1.0
ClaPROAR	1.5, 10	0.024	0.85	0.77
	1.5, 100	0.167	0.77	0.63
	1.5, 1000	1.685	0.82	0.73
	1.5, 2000	3.253	0.87	0.77
	2.0, 10	0.034	0.8	0.53
	2.0, 100	0.231	0.86	0.73
	2.0, 1000	2.519	0.89	0.7
	2.0, 2000	4.242	0.89	0.87
	2.5, 10	0.037	0.89	0.67
	2.5, 100	0.418	0.89	0.6
	2.5, 1000	1.681	0.94	0.97
	2.5, 2000	3.15	0.93	0.97
	3.0, 10	0.043	0.91	0.63
	3.0, 100	0.364	0.91	0.7
	3.0, 1000	1.402	0.97	1.0
	3.0, 2000	2.482	0.95	1.0
Greedy	1.5, 10	0.015	1.0	0.87
	1.5, 100	0.012	1.0	1.0
	1.5, 1000	0.025	1.0	1.0
	1.5, 2000	0.025	1.0	1.0
	2.0, 10	0.013	1.0	0.83
	2.0, 100	0.018	1.0	1.0
	2.0, 1000	0.013	1.0	1.0
	2.0, 2000	0.022	1.0	1.0
	2.5, 10	0.014	1.0	0.87
	2.5, 100	0.017	1.0	1.0
	2.5, 1000	0.012	1.0	1.0
	2.5, 2000	0.018	1.0	1.0
	3.0, 10	0.012	1.0	0.87
	3.0, 100	0.051	0.97	0.97
	3.0, 1000	0.016	1.0	1.0

	3.0, 2000	0.028	1.0	1.0

Tab. 100: Parameter grid search iris data extra experiment using an deep ensemble 4

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Gravitational	1.5, 10	0.092	0.66	0.0
	1.5, 100	0.877	0.7	0.0
	1.5, 1000	9.493	0.63	0.0
	1.5, 2000	19.346	0.71	0.0
	2.0, 10	0.079	0.62	0.0
	2.0, 100	0.884	0.71	0.0
	2.0, 1000	9.905	0.71	0.0
	2.0, 2000	19.293	0.66	0.0
	2.5, 10	0.099	0.54	0.0
	2.5, 100	0.899	0.76	0.0
	2.5, 1000	9.844	0.71	0.0
	2.5, 2000	19.671	0.7	0.0
	3.0, 10	0.068	0.47	0.0
	3.0, 100	0.917	0.69	0.0
	3.0, 1000	7.673	0.5	0.0
	3.0, 2000	19.74	0.74	0.0
Revise	1.5, 10	0.119	0.89	0.27
	1.5, 100	0.421	0.86	0.37
	1.5, 1000	5.419	0.91	0.3
	1.5, 2000	10.56	0.89	0.33
	2.0, 10	0.041	0.77	0.23
	2.0, 100	0.522	0.86	0.27
	2.0, 1000	2.77	0.76	0.43
	2.0, 2000	8.899	0.79	0.3
	2.5, 10	0.046	0.74	0.27
	2.5, 100	0.413	0.62	0.17
	2.5, 1000	4.248	0.69	0.3
	2.5, 2000	8.566	0.65	0.33
	3.0, 10	0.041	0.71	0.2
	3.0, 100	0.323	0.48	0.23
	3.0, 1000	4.156	0.71	0.4
	3.0, 2000	8.601	0.72	0.4
Ecco	1.5, 10	0.105	0.91	0.47
	1.5, 100	1.044	0.88	0.4
	1.5, 1000	14.513	0.86	0.43
	1.5, 2000	25.93	0.84	0.27
	2.0, 10	0.106	0.77	0.37
	2.0, 100	0.967	0.76	0.47
	2.0, 1000	12.557	0.78	0.33
	2.0, 2000	21.128	0.79	0.4
	2.5, 10	0.118	0.73	0.27
	2.5, 100	0.704	0.64	0.4
	2.5, 1000	14.88	0.66	0.17
	2.5, 2000	22.572	0.7	0.33
	3.0, 10	0.106	0.68	0.33
	3.0, 100	1.105	0.73	0.4
	3.0, 1000	11.849	0.5	0.2
	3.0, 2000	25.079	0.48	0.07
Wachter	1.5, 10	0.07	0.95	0.23
	1.5, 100	0.747	0.92	0.1

	1.5, 1000	6.575	0.86	0.4
	1.5, 2000	14.499	0.95	0.47
	2.0, 10	0.052	0.8	0.33
	2.0, 100	0.663	0.85	0.37
	2.0, 1000	5.734	0.86	0.5
	2.0, 2000	7.503	0.77	0.43
	2.5, 10	0.079	0.76	0.1
	2.5, 100	0.418	0.73	0.33
	2.5, 1000	3.991	0.8	0.57
	2.5, 2000	9.432	0.8	0.43
	3.0, 10	0.055	0.59	0.07
	3.0, 100	0.599	0.63	0.23
	3.0, 1000	5.731	0.66	0.2
	3.0, 2000	7.308	0.6	0.47
Generic	1.5, 10	0.048	0.83	0.47
	1.5, 100	0.591	0.92	0.1
	1.5, 1000	4.28	0.92	0.33
	1.5, 2000	10.325	0.85	0.33
	2.0, 10	0.05	0.91	0.3
	2.0, 100	0.336	0.8	0.4
	2.0, 1000	4.418	0.9	0.47
	2.0, 2000	10.583	0.82	0.13
	2.5, 10	0.044	0.72	0.3
	2.5, 100	0.414	0.65	0.2
	2.5, 1000	4.295	0.67	0.3
	2.5, 2000	10.436	0.84	0.4
	3.0, 10	0.036	0.58	0.2
	3.0, 100	0.221	0.74	0.57
	3.0, 1000	3.432	0.55	0.2
	3.0, 2000	7.948	0.78	0.53
DiCE	1.5, 10	0.063	0.89	0.3
	1.5, 100	0.511	0.86	0.53
	1.5, 1000	7.708	0.84	0.33
	1.5, 2000	12.163	0.88	0.47
	2.0, 10	0.066	0.71	0.23
	2.0, 100	0.447	0.72	0.33
	2.0, 1000	7.173	0.82	0.37
	2.0, 2000	12.667	0.89	0.43
	2.5, 10	0.054	0.61	0.23
	2.5, 100	0.48	0.67	0.23
	2.5, 1000	6.739	0.68	0.3
	2.5, 2000	7.392	0.68	0.47
	3.0, 10	0.063	0.78	0.27
	3.0, 100	0.548	0.68	0.3
	3.0, 1000	5.701	0.61	0.27
	3.0, 2000	11.862	0.75	0.37
ClaPROAR	1.5, 10	0.063	0.89	0.27
	1.5, 100	0.547	0.91	0.4
	1.5, 1000	5.278	0.89	0.47
	1.5, 2000	13.569	0.91	0.4
	2.0, 10	0.059	0.76	0.27
	2.0, 100	0.349	0.77	0.5
	2.0, 1000	4.917	0.86	0.5
	2.0, 2000	8.846	0.75	0.43
	2.5, 10	0.049	0.67	0.23
	2.5, 100	0.731	0.73	0.2

	2.5, 1000	6.449	0.72	0.2
	2.5, 2000	13.333	0.81	0.23
	3.0, 10	0.061	0.66	0.23
	3.0, 100	0.584	0.74	0.23
	3.0, 1000	5.847	0.71	0.37
	3.0, 2000	12.002	0.7	0.33
Greedy	1.5, 10	0.014	1.0	0.93
	1.5, 100	0.023	1.0	1.0
	1.5, 1000	0.258	0.97	0.97
	1.5, 2000	1.204	1.0	0.93
	2.0, 10	0.018	0.97	0.8
	2.0, 100	0.03	1.0	1.0
	2.0, 1000	0.017	1.0	1.0
	2.0, 2000	0.017	1.0	1.0
	2.5, 10	0.016	1.0	0.93
	2.5, 100	0.067	1.0	0.97
	2.5, 1000	0.013	1.0	1.0
	2.5, 2000	0.013	1.0	1.0
	3.0, 10	0.012	1.0	1.0
	3.0, 100	0.012	1.0	1.0
	3.0, 1000	0.015	1.0	1.0
	3.0, 2000	0.013	1.0	1.0

Tab. 101: Parameter grid search iris data extra experiment using an deep ensemble 5

F.1.11. Worm dataset using MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	53.328	0.58	0.58
	2.5, 100	1.051	0.56	0.56
	2.5, 1000	7.238	0.59	0.59
	2.5, 2000	16.816	0.61	0.61
	2.0, 10	0.078	0.58	0.58
	2.0, 100	0.717	0.57	0.57
	2.0, 1000	8.165	0.48	0.48
	2.0, 2000	13.653	0.56	0.56
	1.5, 10	0.089	0.52	0.52
	1.5, 100	0.747	0.54	0.54
	1.5, 1000	6.753	0.54	0.54
	1.5, 2000	14.688	0.6	0.6
	1.0, 10	0.07	0.57	0.57
	1.0, 100	0.751	0.52	0.52
	1.0, 1000	7.87	0.58	0.58
	1.0, 2000	14.731	0.59	0.59
	0.5, 10	0.071	0.64	0.64
	0.5, 100	0.916	0.43	0.43
	0.5, 1000	7.395	0.6	0.6
	0.5, 2000	11.861	0.59	0.59
	0.01, 10	0.102	0.44	0.44
	0.01, 100	0.73	0.53	0.53
	0.01, 1000	7.928	0.6	0.6
	0.01, 2000	16.564	0.51	0.51
Ecco	2.5, 10	10.457	0.5	0.5
	2.5, 100	1.543	0.58	0.58
	2.5, 1000	17.275	0.52	0.52
	2.5, 2000	33.981	0.57	0.57

	2.0, 10	0.187	0.55	0.55
	2.0, 100	1.708	0.56	0.56
	2.0, 1000	16.888	0.56	0.56
	2.0, 2000	34.975	0.47	0.47
	1.5, 10	0.188	0.55	0.55
	1.5, 100	1.837	0.48	0.48
	1.5, 1000	14.544	0.61	0.61
	1.5, 2000	29.394	0.61	0.61
	1.0, 10	0.197	0.54	0.54
	1.0, 100	1.612	0.6	0.6
	1.0, 1000	17.462	0.58	0.58
	1.0, 2000	30.591	0.52	0.52
	0.5, 10	0.206	0.51	0.51
	0.5, 100	1.597	0.58	0.58
	0.5, 1000	13.158	0.61	0.61
	0.5, 2000	36.116	0.49	0.49
	0.01, 10	0.163	0.62	0.62
	0.01, 100	1.758	0.48	0.48
	0.01, 1000	17.964	0.5	0.5
	0.01, 2000	35.874	0.49	0.49
Wachter	2.5, 10	4.399	0.46	0.46
	2.5, 100	1.633	0.59	0.59
	2.5, 1000	8.945	0.51	0.51
	2.5, 2000	17.228	0.55	0.55
	2.0, 10	0.92	0.52	0.52
	2.0, 100	1.598	0.54	0.54
	2.0, 1000	8.26	0.52	0.52
	2.0, 2000	18.446	0.5	0.5
	1.5, 10	0.901	0.56	0.56
	1.5, 100	1.556	0.54	0.54
	1.5, 1000	8.43	0.52	0.52
	1.5, 2000	14.889	0.52	0.52
	1.0, 10	0.896	0.52	0.52
	1.0, 100	1.508	0.51	0.51
	1.0, 1000	7.369	0.57	0.57
	1.0, 2000	15.335	0.56	0.56
	0.5, 10	0.919	0.56	0.56
	0.5, 100	1.634	0.49	0.49
	0.5, 1000	6.691	0.59	0.59
	0.5, 2000	13.804	0.65	0.65
	0.01, 10	0.901	0.46	0.46
	0.01, 100	1.782	0.58	0.58
	0.01, 1000	7.448	0.52	0.52
	0.01, 2000	18.152	0.5	0.5
Generic	2.5, 10	0.085	0.56	0.56
	2.5, 100	0.756	0.53	0.53
	2.5, 1000	6.828	0.58	0.58
	2.5, 2000	14.049	0.54	0.54
	2.0, 10	0.067	0.63	0.63
	2.0, 100	0.877	0.47	0.47
	2.0, 1000	6.389	0.53	0.53
	2.0, 2000	12.561	0.6	0.6
	1.5, 10	0.08	0.55	0.55
	1.5, 100	0.675	0.59	0.59
	1.5, 1000	6.238	0.57	0.57
	1.5, 2000	16.322	0.55	0.55

	1.0, 10	0.08	0.53	0.53
	1.0, 100	0.699	0.53	0.53
	1.0, 1000	6.11	0.62	0.62
	1.0, 2000	13.86	0.56	0.56
	0.5, 10	0.083	0.57	0.57
	0.5, 100	0.917	0.51	0.51
	0.5, 1000	6.879	0.56	0.56
	0.5, 2000	16.175	0.55	0.55
	0.01, 10	0.071	0.56	0.56
	0.01, 100	0.749	0.5	0.5
	0.01, 1000	7.453	0.51	0.51
	0.01, 2000	13.962	0.5	0.5
DiCE	2.5, 10	3.168	0.6	0.6
	2.5, 100	0.876	0.48	0.48
	2.5, 1000	10.251	0.54	0.54
	2.5, 2000	16.963	0.56	0.56
	2.0, 10	0.095	0.54	0.54
	2.0, 100	0.857	0.51	0.51
	2.0, 1000	9.296	0.51	0.51
	2.0, 2000	18.716	0.53	0.53
	1.5, 10	0.088	0.57	0.57
	1.5, 100	0.856	0.52	0.52
	1.5, 1000	9.133	0.57	0.57
	1.5, 2000	15.264	0.61	0.61
	1.0, 10	0.109	0.47	0.47
	1.0, 100	0.753	0.59	0.59
	1.0, 1000	8.485	0.53	0.53
	1.0, 2000	17.183	0.54	0.54
	0.5, 10	0.096	0.51	0.51
	0.5, 100	0.698	0.6	0.6
	0.5, 1000	7.66	0.55	0.55
	0.5, 2000	15.613	0.55	0.55
	0.01, 10	0.105	0.46	0.46
	0.01, 100	0.837	0.54	0.54
	0.01, 1000	10.088	0.48	0.48
	0.01, 2000	18.838	0.5	0.5
ClaPROAR	2.5, 10	2.092	0.59	0.59
	2.5, 100	0.954	0.58	0.58
	2.5, 1000	11.275	0.49	0.49
	2.5, 2000	18.621	0.6	0.6
	2.0, 10	0.099	0.52	0.52
	2.0, 100	0.926	0.55	0.55
	2.0, 1000	10.257	0.51	0.51
	2.0, 2000	23.205	0.52	0.52
	1.5, 10	0.108	0.55	0.55
	1.5, 100	1.029	0.57	0.57
	1.5, 1000	11.3	0.51	0.51
	1.5, 2000	16.686	0.61	0.61
	1.0, 10	0.131	0.53	0.53
	1.0, 100	0.929	0.55	0.55
	1.0, 1000	11.284	0.49	0.49
	1.0, 2000	28.406	0.48	0.48
	0.5, 10	0.132	0.51	0.51
	0.5, 100	1.029	0.49	0.49
	0.5, 1000	10.307	0.53	0.53
	0.5, 2000	18.545	0.6	0.6

	0.01, 10	0.116	0.56	0.56
	0.01, 100	1.217	0.47	0.47
	0.01, 1000	11.963	0.5	0.5
	0.01, 2000	22.559	0.5	0.5

Tab. 102: Parameter grid search for the c. elegans dataset experiment 1 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	48.814	0.51	0.51
	2.5, 100	0.788	0.65	0.63
	2.5, 1000	8.147	0.43	0.42
	2.5, 2000	14.037	0.56	0.53
	2.0, 10	0.073	0.56	0.56
	2.0, 100	0.896	0.56	0.54
	2.0, 1000	5.859	0.59	0.59
	2.0, 2000	18.27	0.51	0.5
	1.5, 10	0.077	0.54	0.51
	1.5, 100	0.83	0.54	0.52
	1.5, 1000	10.867	0.6	0.57
	1.5, 2000	15.526	0.52	0.51
	1.0, 10	0.08	0.54	0.53
	1.0, 100	0.707	0.53	0.52
	1.0, 1000	8.863	0.53	0.51
	1.0, 2000	14.145	0.6	0.58
	0.5, 10	0.076	0.61	0.6
	0.5, 100	0.718	0.59	0.57
	0.5, 1000	7.732	0.55	0.53
	0.5, 2000	17.895	0.47	0.46
	0.01, 10	0.089	0.54	0.54
	0.01, 100	0.746	0.53	0.53
	0.01, 1000	8.922	0.44	0.44
	0.01, 2000	14.081	0.53	0.53
Ecco	2.5, 10	10.145	0.55	0.54
	2.5, 100	1.554	0.61	0.59
	2.5, 1000	15.788	0.62	0.6
	2.5, 2000	35.337	0.55	0.53
	2.0, 10	0.169	0.57	0.56
	2.0, 100	2.95	0.51	0.47
	2.0, 1000	20.159	0.57	0.56
	2.0, 2000	32.674	0.61	0.59
	1.5, 10	0.206	0.54	0.53
	1.5, 100	1.971	0.57	0.53
	1.5, 1000	19.031	0.49	0.46
	1.5, 2000	42.504	0.59	0.56
	1.0, 10	0.196	0.47	0.46
	1.0, 100	1.966	0.52	0.5
	1.0, 1000	18.356	0.51	0.49
	1.0, 2000	35.099	0.53	0.52
	0.5, 10	0.224	0.43	0.43
	0.5, 100	1.592	0.49	0.49
	0.5, 1000	21.225	0.51	0.49
	0.5, 2000	36.864	0.64	0.6
	0.01, 10	0.163	0.53	0.53
	0.01, 100	1.763	0.49	0.49
	0.01, 1000	17.641	0.5	0.5

	0.01, 2000	31.731	0.55	0.55
Wachter	2.5, 10	4.141	0.69	0.68
	2.5, 100	1.602	0.61	0.61
	2.5, 1000	11.836	0.54	0.5
	2.5, 2000	17.853	0.59	0.54
	2.0, 10	1.009	0.53	0.52
	2.0, 100	1.819	0.57	0.54
	2.0, 1000	11.14	0.52	0.5
	2.0, 2000	19.647	0.51	0.5
	1.5, 10	0.999	0.57	0.57
	1.5, 100	1.785	0.53	0.51
	1.5, 1000	7.612	0.51	0.51
	1.5, 2000	14.36	0.59	0.57
	1.0, 10	0.991	0.52	0.52
	1.0, 100	1.636	0.55	0.54
	1.0, 1000	7.443	0.56	0.56
	1.0, 2000	20.476	0.52	0.47
	0.5, 10	0.994	0.46	0.45
	0.5, 100	1.774	0.57	0.53
	0.5, 1000	8.12	0.54	0.54
	0.5, 2000	23.002	0.54	0.52
	0.01, 10	1.012	0.5	0.5
	0.01, 100	1.709	0.49	0.49
	0.01, 1000	8.794	0.57	0.57
	0.01, 2000	16.672	0.58	0.58
Generic	2.5, 10	0.078	0.54	0.54
	2.5, 100	0.81	0.55	0.54
	2.5, 1000	7.322	0.6	0.6
	2.5, 2000	13.742	0.6	0.57
	2.0, 10	0.071	0.55	0.54
	2.0, 100	0.819	0.52	0.49
	2.0, 1000	8.161	0.55	0.49
	2.0, 2000	13.227	0.54	0.53
	1.5, 10	0.1	0.6	0.58
	1.5, 100	0.718	0.53	0.51
	1.5, 1000	8.407	0.6	0.57
	1.5, 2000	15.495	0.67	0.65
	1.0, 10	0.081	0.49	0.48
	1.0, 100	0.972	0.56	0.52
	1.0, 1000	8.565	0.56	0.53
	1.0, 2000	18.946	0.49	0.48
	0.5, 10	0.091	0.52	0.5
	0.5, 100	0.878	0.54	0.51
	0.5, 1000	6.438	0.58	0.57
	0.5, 2000	14.059	0.6	0.58
	0.01, 10	0.083	0.55	0.55
	0.01, 100	0.826	0.46	0.46
	0.01, 1000	7.634	0.51	0.51
	0.01, 2000	14.443	0.49	0.49
DiCE	2.5, 10	3.221	0.45	0.45
	2.5, 100	0.886	0.56	0.55
	2.5, 1000	9.044	0.58	0.55
	2.5, 2000	15.569	0.6	0.59
	2.0, 10	0.133	0.53	0.52
	2.0, 100	1.078	0.51	0.49
	2.0, 1000	9.232	0.58	0.57

	2.0, 2000	20.283	0.54	0.51
	1.5, 10	0.134	0.5	0.49
	1.5, 100	1.068	0.53	0.52
	1.5, 1000	9.916	0.63	0.59
	1.5, 2000	21.913	0.47	0.46
	1.0, 10	0.109	0.55	0.53
	1.0, 100	0.827	0.62	0.61
	1.0, 1000	10.542	0.57	0.55
	1.0, 2000	18.222	0.59	0.57
	0.5, 10	0.09	0.55	0.54
	0.5, 100	0.997	0.57	0.54
	0.5, 1000	12.287	0.54	0.49
	0.5, 2000	20.147	0.51	0.49
	0.01, 10	0.093	0.47	0.47
	0.01, 100	0.905	0.56	0.56
	0.01, 1000	11.27	0.44	0.44
	0.01, 2000	17.757	0.54	0.54
ClaPROAR	2.5, 10	2.085	0.58	0.55
	2.5, 100	1.392	0.48	0.46
	2.5, 1000	10.482	0.57	0.56
	2.5, 2000	25.247	0.58	0.54
	2.0, 10	0.123	0.59	0.57
	2.0, 100	1.116	0.59	0.58
	2.0, 1000	16.587	0.5	0.47
	2.0, 2000	27.569	0.6	0.56
	1.5, 10	0.107	0.56	0.55
	1.5, 100	1.196	0.55	0.53
	1.5, 1000	9.969	0.6	0.59
	1.5, 2000	26.106	0.56	0.52
	1.0, 10	0.118	0.5	0.5
	1.0, 100	1.34	0.53	0.51
	1.0, 1000	11.685	0.52	0.51
	1.0, 2000	36.344	0.42	0.38
	0.5, 10	0.122	0.62	0.58
	0.5, 100	1.107	0.62	0.59
	0.5, 1000	11.326	0.57	0.54
	0.5, 2000	25.332	0.52	0.5
	0.01, 10	0.11	0.57	0.57
	0.01, 100	0.924	0.61	0.61
	0.01, 1000	10.372	0.48	0.48
	0.01, 2000	22.71	0.54	0.54

Tab. 103: Parameter grid search for the c. elegans dataset experiment 2 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	55.408	0.55	0.55
	2.5, 100	0.927	0.45	0.45
	2.5, 1000	9.824	0.45	0.45
	2.5, 2000	16.528	0.5	0.5
	2.0, 10	0.102	0.58	0.58
	2.0, 100	1.057	0.44	0.44
	2.0, 1000	7.594	0.51	0.51
	2.0, 2000	18.626	0.51	0.51
	1.5, 10	0.09	0.55	0.55
	1.5, 100	0.981	0.48	0.48

	1.5, 1000	8.034	0.5	0.5
	1.5, 2000	19.956	0.47	0.47
	1.0, 10	0.116	0.47	0.47
	1.0, 100	0.844	0.47	0.47
	1.0, 1000	8.359	0.53	0.53
	1.0, 2000	18.205	0.48	0.48
	0.5, 10	0.083	0.53	0.53
	0.5, 100	0.719	0.63	0.63
	0.5, 1000	7.852	0.62	0.62
	0.5, 2000	14.539	0.58	0.58
	0.01, 10	0.101	0.54	0.54
	0.01, 100	0.856	0.56	0.56
	0.01, 1000	7.314	0.55	0.55
	0.01, 2000	17.961	0.46	0.46
Ecco	2.5, 10	11.481	0.47	0.47
	2.5, 100	2.317	0.43	0.43
	2.5, 1000	19.709	0.49	0.49
	2.5, 2000	37.433	0.49	0.49
	2.0, 10	0.225	0.53	0.53
	2.0, 100	2.27	0.51	0.51
	2.0, 1000	19.152	0.5	0.5
	2.0, 2000	39.3	0.5	0.5
	1.5, 10	0.24	0.57	0.57
	1.5, 100	1.914	0.47	0.47
	1.5, 1000	18.785	0.5	0.5
	1.5, 2000	37.523	0.59	0.59
	1.0, 10	0.273	0.54	0.54
	1.0, 100	2.078	0.57	0.57
	1.0, 1000	20.923	0.57	0.57
	1.0, 2000	41.28	0.48	0.48
	0.5, 10	0.214	0.55	0.55
	0.5, 100	2.137	0.55	0.55
	0.5, 1000	20.685	0.52	0.52
	0.5, 2000	40.921	0.47	0.47
	0.01, 10	0.203	0.54	0.54
	0.01, 100	2.003	0.48	0.48
	0.01, 1000	18.105	0.55	0.55
	0.01, 2000	34.076	0.49	0.49
Wachter	2.5, 10	4.224	0.45	0.45
	2.5, 100	1.594	0.54	0.54
	2.5, 1000	7.286	0.63	0.63
	2.5, 2000	11.071	0.68	0.68
	2.0, 10	0.942	0.58	0.58
	2.0, 100	1.698	0.48	0.48
	2.0, 1000	8.309	0.46	0.46
	2.0, 2000	15.421	0.52	0.52
	1.5, 10	0.962	0.56	0.56
	1.5, 100	1.521	0.56	0.56
	1.5, 1000	9.475	0.48	0.48
	1.5, 2000	14.344	0.55	0.55
	1.0, 10	0.926	0.51	0.51
	1.0, 100	2.34	0.49	0.49
	1.0, 1000	8.61	0.5	0.5
	1.0, 2000	15.724	0.49	0.49
	0.5, 10	0.976	0.56	0.56
	0.5, 100	1.518	0.61	0.61

	0.5, 1000	9.412	0.44	0.44
	0.5, 2000	15.672	0.49	0.49
	0.01, 10	0.955	0.54	0.54
	0.01, 100	1.503	0.55	0.55
	0.01, 1000	7.334	0.6	0.6
	0.01, 2000	12.597	0.62	0.62
Generic	2.5, 10	0.181	0.52	0.52
	2.5, 100	0.701	0.5	0.5
	2.5, 1000	7.583	0.51	0.51
	2.5, 2000	16.619	0.5	0.5
	2.0, 10	0.087	0.47	0.47
	2.0, 100	0.689	0.5	0.5
	2.0, 1000	6.755	0.57	0.57
	2.0, 2000	15.42	0.53	0.53
	1.5, 10	0.087	0.46	0.46
	1.5, 100	0.778	0.51	0.51
	1.5, 1000	6.117	0.59	0.59
	1.5, 2000	13.946	0.53	0.53
	1.0, 10	0.083	0.51	0.51
	1.0, 100	0.737	0.61	0.61
	1.0, 1000	7.964	0.52	0.52
	1.0, 2000	14.132	0.57	0.57
	0.5, 10	0.07	0.57	0.57
	0.5, 100	0.785	0.54	0.54
	0.5, 1000	8.225	0.44	0.44
	0.5, 2000	12.849	0.53	0.53
	0.01, 10	0.077	0.47	0.47
	0.01, 100	0.619	0.55	0.55
	0.01, 1000	5.549	0.57	0.57
	0.01, 2000	11.612	0.55	0.55
DiCE	2.5, 10	3.257	0.45	0.45
	2.5, 100	0.914	0.59	0.59
	2.5, 1000	7.154	0.56	0.56
	2.5, 2000	17.104	0.58	0.58
	2.0, 10	0.105	0.55	0.55
	2.0, 100	0.805	0.53	0.53
	2.0, 1000	7.664	0.53	0.53
	2.0, 2000	16.87	0.55	0.55
	1.5, 10	0.097	0.53	0.53
	1.5, 100	0.821	0.54	0.54
	1.5, 1000	9.967	0.52	0.52
	1.5, 2000	17.037	0.53	0.53
	1.0, 10	0.083	0.5	0.5
	1.0, 100	0.857	0.51	0.51
	1.0, 1000	8.451	0.51	0.51
	1.0, 2000	14.081	0.64	0.64
	0.5, 10	0.099	0.38	0.38
	0.5, 100	0.678	0.55	0.55
	0.5, 1000	9.978	0.45	0.45
	0.5, 2000	17.339	0.5	0.5
	0.01, 10	0.321	0.53	0.53
	0.01, 100	0.969	0.53	0.53
	0.01, 1000	10.508	0.49	0.49
	0.01, 2000	17.003	0.48	0.48
ClaPROAR	2.5, 10	2.068	0.59	0.59
	2.5, 100	0.974	0.59	0.59

	2.5, 1000	10.006	0.55	0.55
	2.5, 2000	20.692	0.5	0.5
	2.0, 10	0.115	0.57	0.57
	2.0, 100	0.902	0.55	0.55
	2.0, 1000	9.137	0.56	0.56
	2.0, 2000	18.534	0.52	0.52
	1.5, 10	0.094	0.49	0.49
	1.5, 100	1.106	0.48	0.48
	1.5, 1000	11.663	0.54	0.54
	1.5, 2000	18.248	0.52	0.52
	1.0, 10	0.099	0.55	0.55
	1.0, 100	1.175	0.49	0.49
	1.0, 1000	11.878	0.43	0.43
	1.0, 2000	18.302	0.52	0.52
	0.5, 10	0.081	0.64	0.64
	0.5, 100	1.071	0.51	0.51
	0.5, 1000	10.259	0.48	0.48
	0.5, 2000	23.563	0.54	0.54
	0.01, 10	0.114	0.54	0.54
	0.01, 100	1.011	0.54	0.54
	0.01, 1000	9.876	0.56	0.56
	0.01, 2000	19.745	0.58	0.58

Tab. 104: Parameter grid search for the c. elegans dataset experiment 3 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	56.625	0.65	0.65
	2.5, 100	0.886	0.58	0.58
	2.5, 1000	8.656	0.5	0.5
	2.5, 2000	14.138	0.6	0.6
	2.0, 10	0.1	0.53	0.53
	2.0, 100	0.835	0.54	0.54
	2.0, 1000	6.758	0.58	0.58
	2.0, 2000	16.313	0.62	0.62
	1.5, 10	0.104	0.54	0.54
	1.5, 100	0.845	0.52	0.52
	1.5, 1000	9.828	0.49	0.49
	1.5, 2000	17.067	0.49	0.49
	1.0, 10	0.078	0.51	0.51
	1.0, 100	0.717	0.54	0.54
	1.0, 1000	9.305	0.49	0.49
	1.0, 2000	17.076	0.51	0.51
	0.5, 10	0.106	0.49	0.49
	0.5, 100	1.054	0.45	0.45
	0.5, 1000	9.049	0.51	0.51
	0.5, 2000	13.971	0.59	0.59
	0.01, 10	0.098	0.53	0.53
	0.01, 100	0.827	0.55	0.55
	0.01, 1000	8.38	0.5	0.5
	0.01, 2000	15.213	0.56	0.56
Ecco	2.5, 10	11.824	0.53	0.53
	2.5, 100	1.845	0.55	0.55
	2.5, 1000	18.42	0.61	0.61
	2.5, 2000	44.214	0.49	0.49
	2.0, 10	0.247	0.52	0.52

	2.0, 100	1.784	0.61	0.61
	2.0, 1000	17.76	0.59	0.59
	2.0, 2000	37.297	0.52	0.52
	1.5, 10	0.226	0.47	0.47
	1.5, 100	1.529	0.63	0.63
	1.5, 1000	18.157	0.57	0.57
	1.5, 2000	36.124	0.58	0.58
	1.0, 10	0.21	0.55	0.55
	1.0, 100	1.974	0.57	0.57
	1.0, 1000	21.247	0.56	0.56
	1.0, 2000	45.482	0.48	0.48
	0.5, 10	0.226	0.57	0.57
	0.5, 100	2.353	0.54	0.54
	0.5, 1000	16.039	0.58	0.58
	0.5, 2000	43.616	0.52	0.52
	0.01, 10	0.206	0.54	0.54
	0.01, 100	1.862	0.56	0.56
	0.01, 1000	17.672	0.55	0.55
	0.01, 2000	40.166	0.53	0.53
Wachter	2.5, 10	4.504	0.55	0.55
	2.5, 100	1.816	0.53	0.53
	2.5, 1000	9.576	0.51	0.51
	2.5, 2000	18.125	0.54	0.54
	2.0, 10	1.07	0.53	0.53
	2.0, 100	1.874	0.57	0.57
	2.0, 1000	8.262	0.59	0.59
	2.0, 2000	16.336	0.53	0.53
	1.5, 10	1.077	0.5	0.5
	1.5, 100	1.673	0.61	0.61
	1.5, 1000	10.534	0.48	0.48
	1.5, 2000	15.883	0.57	0.57
	1.0, 10	1.064	0.5	0.5
	1.0, 100	1.882	0.51	0.51
	1.0, 1000	8.254	0.54	0.54
	1.0, 2000	18.455	0.53	0.53
	0.5, 10	1.019	0.59	0.59
	0.5, 100	1.724	0.55	0.55
	0.5, 1000	11.012	0.49	0.49
	0.5, 2000	16.99	0.54	0.54
	0.01, 10	1.036	0.53	0.53
	0.01, 100	1.779	0.53	0.53
	0.01, 1000	8.203	0.57	0.57
	0.01, 2000	15.461	0.6	0.6
Generic	2.5, 10	0.12	0.55	0.55
	2.5, 100	0.905	0.5	0.5
	2.5, 1000	7.628	0.49	0.49
	2.5, 2000	12.445	0.61	0.61
	2.0, 10	0.093	0.57	0.57
	2.0, 100	0.74	0.5	0.5
	2.0, 1000	5.994	0.66	0.66
	2.0, 2000	17.773	0.47	0.47
	1.5, 10	0.069	0.66	0.66
	1.5, 100	0.623	0.64	0.64
	1.5, 1000	8.45	0.44	0.44
	1.5, 2000	16.57	0.51	0.51
	1.0, 10	0.074	0.5	0.5

	1.0, 100	0.945	0.53	0.53
	1.0, 1000	8.1	0.51	0.51
	1.0, 2000	10.994	0.62	0.62
	0.5, 10	0.063	0.63	0.63
	0.5, 100	0.602	0.6	0.6
	0.5, 1000	7.615	0.54	0.54
	0.5, 2000	17.337	0.43	0.43
	0.01, 10	0.077	0.56	0.56
	0.01, 100	0.828	0.52	0.52
	0.01, 1000	9.158	0.4	0.4
	0.01, 2000	13.609	0.58	0.58
DiCE	2.5, 10	3.396	0.59	0.59
	2.5, 100	0.908	0.6	0.6
	2.5, 1000	11.863	0.44	0.44
	2.5, 2000	16.755	0.55	0.55
	2.0, 10	0.117	0.48	0.48
	2.0, 100	0.791	0.61	0.61
	2.0, 1000	10.05	0.49	0.49
	2.0, 2000	16.992	0.52	0.52
	1.5, 10	0.085	0.57	0.57
	1.5, 100	1.09	0.47	0.47
	1.5, 1000	10.99	0.46	0.46
	1.5, 2000	16.435	0.66	0.66
	1.0, 10	0.111	0.56	0.56
	1.0, 100	0.888	0.57	0.57
	1.0, 1000	9.113	0.51	0.51
	1.0, 2000	20.408	0.52	0.52
	0.5, 10	0.099	0.52	0.52
	0.5, 100	0.829	0.57	0.57
	0.5, 1000	8.134	0.61	0.61
	0.5, 2000	18.387	0.58	0.58
	0.01, 10	0.098	0.52	0.52
	0.01, 100	0.836	0.52	0.52
	0.01, 1000	8.243	0.58	0.58
	0.01, 2000	20.451	0.51	0.51
ClaPROAR	2.5, 10	2.272	0.63	0.63
	2.5, 100	1.471	0.5	0.5
	2.5, 1000	10.774	0.62	0.62
	2.5, 2000	24.71	0.46	0.46
	2.0, 10	0.104	0.57	0.57
	2.0, 100	1.282	0.48	0.48
	2.0, 1000	8.88	0.62	0.62
	2.0, 2000	21.01	0.59	0.59
	1.5, 10	0.136	0.52	0.52
	1.5, 100	1.016	0.55	0.55
	1.5, 1000	10.903	0.55	0.55
	1.5, 2000	22.296	0.56	0.56
	1.0, 10	0.094	0.63	0.63
	1.0, 100	1.083	0.58	0.58
	1.0, 1000	12.201	0.47	0.47
	1.0, 2000	20.294	0.58	0.58
	0.5, 10	0.122	0.53	0.53
	0.5, 100	1.19	0.5	0.5
	0.5, 1000	9.894	0.55	0.55
	0.5, 2000	20.146	0.56	0.56
	0.01, 10	0.135	0.48	0.48

	0.01, 100	1.211	0.47	0.47
	0.01, 1000	11.973	0.48	0.48
	0.01, 2000	22.897	0.45	0.45

Tab. 105: Parameter grid search for the c. elegans dataset experiment 4 using a MLP

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	68.956	0.48	0.48
	2.5, 100	1.533	0.48	0.48
	2.5, 1000	17.15	0.51	0.51
	2.5, 2000	34.784	0.49	0.49
	2.0, 10	0.216	0.41	0.41
	2.0, 100	1.789	0.39	0.39
	2.0, 1000	18.144	0.41	0.41
	2.0, 2000	40.178	0.45	0.45
	1.5, 10	0.165	0.52	0.52
	1.5, 100	1.593	0.4	0.4
	1.5, 1000	23.631	0.37	0.37
	1.5, 2000	42.537	0.38	0.38
	1.0, 10	0.216	0.41	0.41
	1.0, 100	1.939	0.51	0.51
	1.0, 1000	17.599	0.43	0.43
	1.0, 2000	38.239	0.51	0.5
	0.5, 10	0.2	0.35	0.34
	0.5, 100	1.443	0.46	0.45
	0.5, 1000	23.394	0.44	0.43
	0.5, 2000	42.172	0.38	0.37
	0.01, 10	0.202	0.46	0.46
	0.01, 100	1.993	0.45	0.45
	0.01, 1000	16.352	0.51	0.51
	0.01, 2000	45.935	0.35	0.35
Ecco	2.5, 10	15.389	0.4	0.4
	2.5, 100	8.307	0.4	0.4
	2.5, 1000	67.5	0.46	0.46
	2.5, 2000	123.865	0.43	0.43
	2.0, 10	0.721	0.52	0.52
	2.0, 100	7.743	0.49	0.49
	2.0, 1000	70.639	0.39	0.39
	2.0, 2000	155.526	0.41	0.41
	1.5, 10	0.82	0.45	0.45
	1.5, 100	6.278	0.52	0.52
	1.5, 1000	88.9	0.38	0.38
	1.5, 2000	135.749	0.37	0.37
	1.0, 10	0.591	0.47	0.47
	1.0, 100	6.127	0.54	0.54
	1.0, 1000	86.43	0.35	0.35
	1.0, 2000	123.542	0.47	0.47
	0.5, 10	0.612	0.46	0.45
	0.5, 100	5.694	0.49	0.49
	0.5, 1000	59.73	0.52	0.52
	0.5, 2000	131.007	0.5	0.49
	0.01, 10	0.729	0.47	0.47
	0.01, 100	6.768	0.5	0.5
	0.01, 1000	78.969	0.44	0.44
	0.01, 2000	130.771	0.41	0.41

Wachter	2.5, 10	4.443	0.47	0.47
	2.5, 100	2.268	0.5	0.5
	2.5, 1000	17.035	0.48	0.48
	2.5, 2000	38.423	0.45	0.45
	2.0, 10	1.109	0.47	0.47
	2.0, 100	2.749	0.36	0.36
	2.0, 1000	19.26	0.44	0.44
	2.0, 2000	44.92	0.41	0.41
	1.5, 10	1.072	0.45	0.45
	1.5, 100	2.815	0.4	0.4
	1.5, 1000	17.592	0.54	0.54
	1.5, 2000	34.668	0.49	0.49
	1.0, 10	1.257	0.43	0.42
	1.0, 100	2.798	0.46	0.46
	1.0, 1000	16.475	0.49	0.49
	1.0, 2000	40.291	0.44	0.44
	0.5, 10	1.216	0.47	0.47
	0.5, 100	3.125	0.45	0.44
	0.5, 1000	18.884	0.45	0.45
	0.5, 2000	34.996	0.48	0.48
	0.01, 10	1.702	0.36	0.36
	0.01, 100	3.077	0.47	0.47
	0.01, 1000	22.903	0.34	0.34
	0.01, 2000	45.666	0.43	0.43
Generic	2.5, 10	0.255	0.37	0.37
	2.5, 100	1.806	0.56	0.56
	2.5, 1000	17.309	0.46	0.46
	2.5, 2000	37.11	0.45	0.45
	2.0, 10	0.154	0.53	0.53
	2.0, 100	1.734	0.46	0.46
	2.0, 1000	18.347	0.44	0.44
	2.0, 2000	41.062	0.42	0.42
	1.5, 10	0.191	0.41	0.41
	1.5, 100	1.736	0.4	0.4
	1.5, 1000	14.547	0.55	0.55
	1.5, 2000	36.977	0.45	0.45
	1.0, 10	0.178	0.38	0.38
	1.0, 100	1.683	0.46	0.46
	1.0, 1000	20.625	0.43	0.43
	1.0, 2000	39.263	0.45	0.45
	0.5, 10	0.154	0.47	0.46
	0.5, 100	1.527	0.43	0.42
	0.5, 1000	23.639	0.49	0.48
	0.5, 2000	39.077	0.44	0.43
	0.01, 10	0.184	0.45	0.45
	0.01, 100	1.53	0.54	0.54
	0.01, 1000	17.36	0.47	0.47
	0.01, 2000	39.599	0.45	0.45
DiCE	2.5, 10	3.804	0.33	0.33
	2.5, 100	1.782	0.47	0.47
	2.5, 1000	18.983	0.41	0.41
	2.5, 2000	45.887	0.39	0.39
	2.0, 10	0.202	0.4	0.4
	2.0, 100	1.676	0.51	0.51
	2.0, 1000	19.007	0.4	0.4

	2.0, 2000	48.344	0.34	0.34
	1.5, 10	0.213	0.46	0.46
	1.5, 100	2.072	0.44	0.44
	1.5, 1000	19.737	0.43	0.43
	1.5, 2000	44.325	0.39	0.39
	1.0, 10	0.209	0.47	0.47
	1.0, 100	2.443	0.39	0.39
	1.0, 1000	18.17	0.5	0.5
	1.0, 2000	38.627	0.5	0.5
	0.5, 10	0.186	0.46	0.46
	0.5, 100	1.6	0.49	0.48
	0.5, 1000	21.541	0.37	0.37
	0.5, 2000	46.78	0.46	0.46
	0.01, 10	0.238	0.41	0.41
	0.01, 100	2.565	0.42	0.42
	0.01, 1000	19.264	0.52	0.52
	0.01, 2000	41.823	0.45	0.45
ClaPROAR	2.5, 10	3.024	0.52	0.52
	2.5, 100	3.762	0.5	0.5
	2.5, 1000	43.46	0.41	0.41
	2.5, 2000	69.912	0.52	0.52
	2.0, 10	0.51	0.43	0.43
	2.0, 100	5.035	0.38	0.38
	2.0, 1000	37.681	0.5	0.5
	2.0, 2000	83.876	0.4	0.4
	1.5, 10	0.486	0.52	0.52
	1.5, 100	4.694	0.4	0.4
	1.5, 1000	39.903	0.44	0.44
	1.5, 2000	84.228	0.46	0.46
	1.0, 10	0.452	0.41	0.41
	1.0, 100	4.867	0.41	0.41
	1.0, 1000	42.971	0.45	0.45
	1.0, 2000	90.683	0.44	0.44
	0.5, 10	0.307	0.44	0.43
	0.5, 100	2.822	0.5	0.48
	0.5, 1000	37.642	0.45	0.45
	0.5, 2000	91.263	0.41	0.4
	0.01, 10	0.273	0.52	0.52
	0.01, 100	2.891	0.44	0.44
	0.01, 1000	26.265	0.5	0.5
	0.01, 2000	58.046	0.43	0.43

Tab. 106: Parameter grid search for the c. elegans dataset experiment 5 using a MLP

F.1.12. Worm dataset using NN

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	68.956	0.48	0.48
	2.5, 100	1.533	0.48	0.48
	2.5, 1000	17.15	0.51	0.51
	2.5, 2000	34.784	0.49	0.49
	2.0, 10	0.216	0.41	0.41
	2.0, 100	1.789	0.39	0.39
	2.0, 1000	18.144	0.41	0.41
	2.0, 2000	40.178	0.45	0.45
	1.5, 10	0.165	0.52	0.52

	1.5, 100	1.593	0.4	0.4
	1.5, 1000	23.631	0.37	0.37
	1.5, 2000	42.537	0.38	0.38
	1.0, 10	0.216	0.41	0.41
	1.0, 100	1.939	0.51	0.51
	1.0, 1000	17.599	0.43	0.43
	1.0, 2000	38.239	0.51	0.5
	0.5, 10	0.2	0.35	0.34
	0.5, 100	1.443	0.46	0.45
	0.5, 1000	23.394	0.44	0.43
	0.5, 2000	42.172	0.38	0.37
	0.01, 10	0.202	0.46	0.46
	0.01, 100	1.993	0.45	0.45
	0.01, 1000	16.352	0.51	0.51
	0.01, 2000	45.935	0.35	0.35
Ecco	2.5, 10	15.389	0.4	0.4
	2.5, 100	8.307	0.4	0.4
	2.5, 1000	67.5	0.46	0.46
	2.5, 2000	123.865	0.43	0.43
	2.0, 10	0.721	0.52	0.52
	2.0, 100	7.743	0.49	0.49
	2.0, 1000	70.639	0.39	0.39
	2.0, 2000	155.526	0.41	0.41
	1.5, 10	0.82	0.45	0.45
	1.5, 100	6.278	0.52	0.52
	1.5, 1000	88.9	0.38	0.38
	1.5, 2000	135.749	0.37	0.37
	1.0, 10	0.591	0.47	0.47
	1.0, 100	6.127	0.54	0.54
	1.0, 1000	86.43	0.35	0.35
	1.0, 2000	123.542	0.47	0.47
	0.5, 10	0.612	0.46	0.45
	0.5, 100	5.694	0.49	0.49
	0.5, 1000	59.73	0.52	0.52
	0.5, 2000	131.007	0.5	0.49
	0.01, 10	0.729	0.47	0.47
	0.01, 100	6.768	0.5	0.5
	0.01, 1000	78.969	0.44	0.44
	0.01, 2000	130.771	0.41	0.41
Wachter	2.5, 10	4.443	0.47	0.47
	2.5, 100	2.268	0.5	0.5
	2.5, 1000	17.035	0.48	0.48
	2.5, 2000	38.423	0.45	0.45
	2.0, 10	1.109	0.47	0.47
	2.0, 100	2.749	0.36	0.36
	2.0, 1000	19.26	0.44	0.44
	2.0, 2000	44.92	0.41	0.41
	1.5, 10	1.072	0.45	0.45
	1.5, 100	2.815	0.4	0.4
	1.5, 1000	17.592	0.54	0.54
	1.5, 2000	34.668	0.49	0.49
	1.0, 10	1.257	0.43	0.42
	1.0, 100	2.798	0.46	0.46
	1.0, 1000	16.475	0.49	0.49
	1.0, 2000	40.291	0.44	0.44
	0.5, 10	1.216	0.47	0.47

	0.5, 100	3.125	0.45	0.44
	0.5, 1000	18.884	0.45	0.45
	0.5, 2000	34.996	0.48	0.48
	0.01, 10	1.702	0.36	0.36
	0.01, 100	3.077	0.47	0.47
	0.01, 1000	22.903	0.34	0.34
	0.01, 2000	45.666	0.43	0.43
Generic	2.5, 10	0.255	0.37	0.37
	2.5, 100	1.806	0.56	0.56
	2.5, 1000	17.309	0.46	0.46
	2.5, 2000	37.11	0.45	0.45
	2.0, 10	0.154	0.53	0.53
	2.0, 100	1.734	0.46	0.46
	2.0, 1000	18.347	0.44	0.44
	2.0, 2000	41.062	0.42	0.42
	1.5, 10	0.191	0.41	0.41
	1.5, 100	1.736	0.4	0.4
	1.5, 1000	14.547	0.55	0.55
	1.5, 2000	36.977	0.45	0.45
	1.0, 10	0.178	0.38	0.38
	1.0, 100	1.683	0.46	0.46
	1.0, 1000	20.625	0.43	0.43
	1.0, 2000	39.263	0.45	0.45
	0.5, 10	0.154	0.47	0.46
	0.5, 100	1.527	0.43	0.42
	0.5, 1000	23.639	0.49	0.48
	0.5, 2000	39.077	0.44	0.43
	0.01, 10	0.184	0.45	0.45
	0.01, 100	1.53	0.54	0.54
	0.01, 1000	17.36	0.47	0.47
	0.01, 2000	39.599	0.45	0.45
DiCE	2.5, 10	3.804	0.33	0.33
	2.5, 100	1.782	0.47	0.47
	2.5, 1000	18.983	0.41	0.41
	2.5, 2000	45.887	0.39	0.39
	2.0, 10	0.202	0.4	0.4
	2.0, 100	1.676	0.51	0.51
	2.0, 1000	19.007	0.4	0.4
	2.0, 2000	48.344	0.34	0.34
	1.5, 10	0.213	0.46	0.46
	1.5, 100	2.072	0.44	0.44
	1.5, 1000	19.737	0.43	0.43
	1.5, 2000	44.325	0.39	0.39
	1.0, 10	0.209	0.47	0.47
	1.0, 100	2.443	0.39	0.39
	1.0, 1000	18.17	0.5	0.5
	1.0, 2000	38.627	0.5	0.5
	0.5, 10	0.186	0.46	0.46
	0.5, 100	1.6	0.49	0.48
	0.5, 1000	21.541	0.37	0.37
	0.5, 2000	46.78	0.46	0.46
	0.01, 10	0.238	0.41	0.41
	0.01, 100	2.565	0.42	0.42
	0.01, 1000	19.264	0.52	0.52
	0.01, 2000	41.823	0.45	0.45
ClaPROAR	2.5, 10	3.024	0.52	0.52

	2.5, 100	3.762	0.5	0.5
	2.5, 1000	43.46	0.41	0.41
	2.5, 2000	69.912	0.52	0.52
	2.0, 10	0.51	0.43	0.43
	2.0, 100	5.035	0.38	0.38
	2.0, 1000	37.681	0.5	0.5
	2.0, 2000	83.876	0.4	0.4
	1.5, 10	0.486	0.52	0.52
	1.5, 100	4.694	0.4	0.4
	1.5, 1000	39.903	0.44	0.44
	1.5, 2000	84.228	0.46	0.46
	1.0, 10	0.452	0.41	0.41
	1.0, 100	4.867	0.41	0.41
	1.0, 1000	42.971	0.45	0.45
	1.0, 2000	90.683	0.44	0.44
	0.5, 10	0.307	0.44	0.43
	0.5, 100	2.822	0.5	0.48
	0.5, 1000	37.642	0.45	0.45
	0.5, 2000	91.263	0.41	0.4
	0.01, 10	0.273	0.52	0.52
	0.01, 100	2.891	0.44	0.44
	0.01, 1000	26.265	0.5	0.5
	0.01, 2000	58.046	0.43	0.43

Tab. 107: Parameter grid search for the c. elegans dataset experiment 1 using a neural network

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	68.555	0.52	0.52
	2.5, 100	1.631	0.48	0.48
	2.5, 1000	19.975	0.41	0.41
	2.5, 2000	36.022	0.48	0.48
	2.0, 10	0.172	0.45	0.45
	2.0, 100	1.766	0.42	0.42
	2.0, 1000	14.412	0.55	0.55
	2.0, 2000	36.289	0.41	0.41
	1.5, 10	0.177	0.53	0.53
	1.5, 100	1.586	0.5	0.5
	1.5, 1000	14.606	0.49	0.49
	1.5, 2000	40.457	0.39	0.39
	1.0, 10	0.252	0.34	0.33
	1.0, 100	1.649	0.41	0.4
	1.0, 1000	19.234	0.42	0.42
	1.0, 2000	32.353	0.49	0.49
	0.5, 10	0.245	0.42	0.41
	0.5, 100	2.379	0.45	0.43
	0.5, 1000	18.094	0.53	0.52
	0.5, 2000	40.598	0.53	0.49
	0.01, 10	0.235	0.49	0.44
	0.01, 100	1.852	0.42	0.39
	0.01, 1000	19.736	0.58	0.53
	0.01, 2000	42.231	0.44	0.37
Ecco	2.5, 10	15.409	0.44	0.44
	2.5, 100	6.891	0.48	0.48
	2.5, 1000	70.162	0.45	0.45
	2.5, 2000	132.579	0.49	0.49

	2.0, 10	0.537	0.41	0.41
	2.0, 100	4.506	0.52	0.52
	2.0, 1000	63.761	0.48	0.48
	2.0, 2000	101.704	0.58	0.58
	1.5, 10	0.609	0.53	0.53
	1.5, 100	5.944	0.45	0.45
	1.5, 1000	71.6	0.4	0.4
	1.5, 2000	129.565	0.4	0.4
	1.0, 10	0.744	0.52	0.5
	1.0, 100	6.647	0.47	0.45
	1.0, 1000	80.62	0.45	0.43
	1.0, 2000	149.535	0.43	0.42
	0.5, 10	0.918	0.53	0.48
	0.5, 100	7.062	0.47	0.45
	0.5, 1000	86.372	0.39	0.35
	0.5, 2000	149.302	0.51	0.46
	0.01, 10	0.846	0.48	0.42
	0.01, 100	6.19	0.56	0.49
	0.01, 1000	70.335	0.57	0.5
	0.01, 2000	133.048	0.56	0.5
Wachter	2.5, 10	5.071	0.42	0.42
	2.5, 100	3.976	0.38	0.38
	2.5, 1000	20.728	0.41	0.41
	2.5, 2000	35.661	0.48	0.48
	2.0, 10	1.32	0.43	0.43
	2.0, 100	3.091	0.4	0.4
	2.0, 1000	20.361	0.49	0.49
	2.0, 2000	31.318	0.58	0.58
	1.5, 10	1.354	0.48	0.48
	1.5, 100	3.348	0.38	0.38
	1.5, 1000	18.412	0.48	0.48
	1.5, 2000	36.752	0.45	0.45
	1.0, 10	1.377	0.47	0.44
	1.0, 100	3.053	0.49	0.46
	1.0, 1000	18.238	0.51	0.5
	1.0, 2000	48.378	0.4	0.38
	0.5, 10	1.247	0.45	0.4
	0.5, 100	3.665	0.41	0.39
	0.5, 1000	23.839	0.42	0.37
	0.5, 2000	40.336	0.47	0.47
	0.01, 10	1.408	0.55	0.5
	0.01, 100	3.378	0.48	0.46
	0.01, 1000	25.136	0.44	0.38
	0.01, 2000	42.262	0.44	0.41
Generic	2.5, 10	0.287	0.31	0.31
	2.5, 100	2.07	0.46	0.46
	2.5, 1000	17.501	0.42	0.42
	2.5, 2000	33.905	0.47	0.47
	2.0, 10	0.227	0.44	0.44
	2.0, 100	1.835	0.55	0.55
	2.0, 1000	18.735	0.39	0.39
	2.0, 2000	36.939	0.4	0.4
	1.5, 10	0.23	0.4	0.4
	1.5, 100	2.071	0.39	0.38
	1.5, 1000	19.271	0.48	0.48
	1.5, 2000	34.792	0.47	0.47

	1.0, 10	0.178	0.46	0.46
	1.0, 100	2.091	0.43	0.41
	1.0, 1000	19.891	0.46	0.45
	1.0, 2000	34.979	0.48	0.47
	0.5, 10	0.219	0.5	0.48
	0.5, 100	2.1	0.44	0.39
	0.5, 1000	22.467	0.51	0.46
	0.5, 2000	38.167	0.49	0.48
	0.01, 10	0.198	0.43	0.4
	0.01, 100	1.425	0.53	0.5
	0.01, 1000	23.51	0.49	0.42
	0.01, 2000	39.614	0.53	0.48
DiCE	2.5, 10	3.896	0.37	0.37
	2.5, 100	2.343	0.49	0.49
	2.5, 1000	24.081	0.39	0.39
	2.5, 2000	43.222	0.5	0.5
	2.0, 10	0.292	0.37	0.37
	2.0, 100	2.254	0.41	0.41
	2.0, 1000	20.139	0.38	0.38
	2.0, 2000	39.439	0.5	0.5
	1.5, 10	0.184	0.47	0.47
	1.5, 100	1.769	0.42	0.42
	1.5, 1000	24.697	0.39	0.39
	1.5, 2000	37.077	0.49	0.48
	1.0, 10	0.126	0.58	0.57
	1.0, 100	2.374	0.37	0.37
	1.0, 1000	25.396	0.39	0.38
	1.0, 2000	54.621	0.35	0.35
	0.5, 10	0.223	0.46	0.44
	0.5, 100	2.632	0.42	0.38
	0.5, 1000	28.86	0.42	0.38
	0.5, 2000	53.262	0.51	0.47
	0.01, 10	0.29	0.57	0.49
	0.01, 100	2.162	0.46	0.43
	0.01, 1000	27.238	0.52	0.48
	0.01, 2000	53.16	0.52	0.5
ClaPROAR	2.5, 10	3.222	0.53	0.53
	2.5, 100	4.052	0.45	0.45
	2.5, 1000	53.104	0.46	0.46
	2.5, 2000	80.357	0.46	0.46
	2.0, 10	0.314	0.45	0.45
	2.0, 100	3.602	0.41	0.41
	2.0, 1000	26.509	0.5	0.5
	2.0, 2000	54.588	0.42	0.42
	1.5, 10	0.322	0.47	0.46
	1.5, 100	2.272	0.57	0.57
	1.5, 1000	27.099	0.42	0.42
	1.5, 2000	58.492	0.48	0.48
	1.0, 10	0.288	0.42	0.42
	1.0, 100	2.938	0.4	0.39
	1.0, 1000	20.819	0.58	0.58
	1.0, 2000	59.499	0.47	0.45
	0.5, 10	0.399	0.53	0.48
	0.5, 100	3.755	0.38	0.32
	0.5, 1000	25.995	0.5	0.49
	0.5, 2000	57.783	0.4	0.4

	0.01, 10	0.376	0.41	0.37
	0.01, 100	2.704	0.6	0.55
	0.01, 1000	34.527	0.44	0.38
	0.01, 2000	72.105	0.44	0.38

Tab. 108: Parameter grid search for the c. elegans dataset experiment 2 using a neural network

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	71.635	0.44	0.44
	2.5, 100	2.805	0.53	0.53
	2.5, 1000	17.344	0.49	0.49
	2.5, 2000	32.954	0.52	0.52
	2.0, 10	0.213	0.39	0.39
	2.0, 100	1.748	0.43	0.43
	2.0, 1000	19.082	0.42	0.42
	2.0, 2000	30.304	0.56	0.56
	1.5, 10	0.184	0.51	0.51
	1.5, 100	1.872	0.45	0.45
	1.5, 1000	22.121	0.36	0.36
	1.5, 2000	41.427	0.42	0.42
	1.0, 10	0.208	0.51	0.51
	1.0, 100	1.761	0.45	0.45
	1.0, 1000	15.725	0.58	0.58
	1.0, 2000	42.683	0.4	0.4
	0.5, 10	0.199	0.5	0.5
	0.5, 100	2.112	0.46	0.46
	0.5, 1000	16.998	0.6	0.6
	0.5, 2000	28.931	0.57	0.57
	0.01, 10	0.171	0.58	0.58
	0.01, 100	2.005	0.51	0.51
	0.01, 1000	19.651	0.42	0.42
	0.01, 2000	38.302	0.43	0.43
Ecco	2.5, 10	16.195	0.42	0.42
	2.5, 100	7.324	0.49	0.49
	2.5, 1000	57.158	0.43	0.43
	2.5, 2000	141.787	0.35	0.35
	2.0, 10	0.718	0.34	0.34
	2.0, 100	5.371	0.37	0.37
	2.0, 1000	57.886	0.44	0.44
	2.0, 2000	135.951	0.48	0.48
	1.5, 10	0.653	0.49	0.49
	1.5, 100	7.088	0.39	0.39
	1.5, 1000	59.412	0.49	0.49
	1.5, 2000	133.4	0.49	0.49
	1.0, 10	0.804	0.45	0.45
	1.0, 100	7.608	0.52	0.52
	1.0, 1000	57.876	0.5	0.5
	1.0, 2000	116.217	0.49	0.49
	0.5, 10	0.846	0.44	0.44
	0.5, 100	6.419	0.49	0.49
	0.5, 1000	70.687	0.4	0.4
	0.5, 2000	139.154	0.43	0.43
	0.01, 10	0.662	0.47	0.47
	0.01, 100	6.689	0.42	0.42
	0.01, 1000	59.17	0.41	0.41

	0.01, 2000	128.387	0.36	0.36
Wachter	2.5, 10	4.483	0.38	0.38
	2.5, 100	2.946	0.59	0.59
	2.5, 1000	18.336	0.48	0.48
	2.5, 2000	41.674	0.46	0.46
	2.0, 10	1.076	0.44	0.44
	2.0, 100	3.079	0.5	0.5
	2.0, 1000	19.142	0.51	0.51
	2.0, 2000	37.828	0.44	0.44
	1.5, 10	1.16	0.45	0.45
	1.5, 100	2.479	0.53	0.53
	1.5, 1000	21.832	0.39	0.39
	1.5, 2000	42.65	0.37	0.37
	1.0, 10	1.204	0.45	0.45
	1.0, 100	3.098	0.46	0.46
	1.0, 1000	20.921	0.49	0.49
	1.0, 2000	36.81	0.46	0.46
	0.5, 10	1.472	0.42	0.42
	0.5, 100	3.018	0.44	0.44
	0.5, 1000	18.178	0.47	0.47
	0.5, 2000	38.374	0.46	0.46
	0.01, 10	1.521	0.39	0.39
	0.01, 100	4.11	0.49	0.49
	0.01, 1000	19.067	0.48	0.48
	0.01, 2000	37.755	0.47	0.47
Generic	2.5, 10	0.264	0.49	0.49
	2.5, 100	1.995	0.45	0.45
	2.5, 1000	19.587	0.43	0.43
	2.5, 2000	36.219	0.49	0.49
	2.0, 10	0.171	0.46	0.46
	2.0, 100	1.693	0.5	0.5
	2.0, 1000	16.48	0.48	0.48
	2.0, 2000	33.074	0.47	0.47
	1.5, 10	0.223	0.4	0.4
	1.5, 100	1.588	0.5	0.5
	1.5, 1000	17.896	0.42	0.42
	1.5, 2000	35.337	0.44	0.44
	1.0, 10	0.184	0.49	0.49
	1.0, 100	1.631	0.44	0.44
	1.0, 1000	12.077	0.58	0.58
	1.0, 2000	30.952	0.52	0.52
	0.5, 10	0.204	0.45	0.45
	0.5, 100	1.634	0.45	0.45
	0.5, 1000	18.235	0.48	0.48
	0.5, 2000	32.519	0.58	0.58
	0.01, 10	0.198	0.41	0.41
	0.01, 100	1.748	0.48	0.48
	0.01, 1000	16.595	0.51	0.51
	0.01, 2000	36.142	0.47	0.47
DiCE	2.5, 10	4.107	0.5	0.5
	2.5, 100	1.785	0.52	0.52
	2.5, 1000	17.607	0.55	0.55
	2.5, 2000	43.359	0.43	0.43
	2.0, 10	0.184	0.44	0.44
	2.0, 100	1.914	0.42	0.42
	2.0, 1000	23.517	0.45	0.45

	2.0, 2000	37.596	0.54	0.54
	1.5, 10	0.238	0.43	0.43
	1.5, 100	1.87	0.47	0.47
	1.5, 1000	19.667	0.47	0.47
	1.5, 2000	42.414	0.44	0.44
	1.0, 10	0.199	0.47	0.47
	1.0, 100	3.002	0.54	0.54
	1.0, 1000	24.002	0.49	0.49
	1.0, 2000	46.871	0.43	0.43
	0.5, 10	0.203	0.48	0.48
	0.5, 100	2.006	0.48	0.48
	0.5, 1000	21.7	0.44	0.44
	0.5, 2000	39.861	0.42	0.42
	0.01, 10	0.23	0.49	0.49
	0.01, 100	2.373	0.49	0.49
	0.01, 1000	21.626	0.51	0.51
	0.01, 2000	31.808	0.54	0.54
ClaPROAR	2.5, 10	2.823	0.49	0.49
	2.5, 100	3.08	0.47	0.47
	2.5, 1000	46.226	0.36	0.36
	2.5, 2000	74.816	0.47	0.47
	2.0, 10	0.372	0.49	0.49
	2.0, 100	3.678	0.4	0.4
	2.0, 1000	42.227	0.49	0.49
	2.0, 2000	75.051	0.42	0.42
	1.5, 10	0.532	0.4	0.4
	1.5, 100	4.48	0.41	0.41
	1.5, 1000	39.265	0.48	0.48
	1.5, 2000	63.944	0.43	0.43
	1.0, 10	0.272	0.47	0.47
	1.0, 100	2.795	0.53	0.53
	1.0, 1000	36.905	0.49	0.49
	1.0, 2000	79.897	0.42	0.42
	0.5, 10	0.445	0.48	0.48
	0.5, 100	3.515	0.45	0.45
	0.5, 1000	28.852	0.46	0.46
	0.5, 2000	55.348	0.46	0.46
	0.01, 10	0.309	0.52	0.52
	0.01, 100	2.243	0.49	0.49
	0.01, 1000	28.605	0.45	0.45
	0.01, 2000	48.113	0.5	0.5

Tab. 109: Parameter grid search for the c. elegans dataset experiment 3 using a neural network

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	68.819	0.4	0.4
	2.5, 100	1.836	0.5	0.5
	2.5, 1000	19.08	0.39	0.39
	2.5, 2000	40.56	0.41	0.41
	2.0, 10	0.223	0.42	0.42
	2.0, 100	1.871	0.43	0.43
	2.0, 1000	16.708	0.45	0.45
	2.0, 2000	36.471	0.43	0.43
	1.5, 10	0.204	0.45	0.45
	1.5, 100	2.32	0.4	0.4

	1.5, 1000	15.904	0.52	0.52
	1.5, 2000	29.651	0.5	0.5
	1.0, 10	0.174	0.42	0.42
	1.0, 100	1.47	0.48	0.48
	1.0, 1000	18.698	0.42	0.42
	1.0, 2000	38.875	0.37	0.37
	0.5, 10	0.162	0.46	0.46
	0.5, 100	1.706	0.44	0.44
	0.5, 1000	17.854	0.44	0.44
	0.5, 2000	39.469	0.38	0.38
	0.01, 10	0.159	0.47	0.47
	0.01, 100	1.554	0.48	0.48
	0.01, 1000	15.925	0.56	0.56
	0.01, 2000	38.7	0.43	0.43
Ecco	2.5, 10	13.202	0.41	0.41
	2.5, 100	6.966	0.3	0.3
	2.5, 1000	64.706	0.4	0.4
	2.5, 2000	140.577	0.46	0.46
	2.0, 10	0.714	0.51	0.51
	2.0, 100	6.838	0.47	0.47
	2.0, 1000	73.986	0.43	0.43
	2.0, 2000	149.917	0.44	0.44
	1.5, 10	0.7	0.56	0.56
	1.5, 100	7.27	0.47	0.47
	1.5, 1000	54.075	0.54	0.54
	1.5, 2000	125.862	0.45	0.45
	1.0, 10	0.83	0.39	0.39
	1.0, 100	7.894	0.47	0.47
	1.0, 1000	74.482	0.34	0.34
	1.0, 2000	121.22	0.49	0.49
	0.5, 10	0.788	0.49	0.49
	0.5, 100	7.048	0.49	0.49
	0.5, 1000	69.116	0.45	0.45
	0.5, 2000	132.721	0.48	0.48
	0.01, 10	0.753	0.45	0.45
	0.01, 100	7.626	0.42	0.42
	0.01, 1000	57.982	0.53	0.53
	0.01, 2000	117.431	0.43	0.43
Wachter	2.5, 10	4.835	0.42	0.42
	2.5, 100	2.425	0.6	0.6
	2.5, 1000	23.564	0.39	0.39
	2.5, 2000	32.695	0.47	0.47
	2.0, 10	1.283	0.41	0.41
	2.0, 100	3.582	0.48	0.48
	2.0, 1000	20.123	0.47	0.47
	2.0, 2000	35.598	0.45	0.45
	1.5, 10	1.302	0.37	0.37
	1.5, 100	3.124	0.44	0.44
	1.5, 1000	18.418	0.45	0.45
	1.5, 2000	35.666	0.47	0.47
	1.0, 10	1.286	0.44	0.44
	1.0, 100	2.807	0.48	0.48
	1.0, 1000	20.964	0.44	0.44
	1.0, 2000	38.279	0.37	0.37
	0.5, 10	1.113	0.43	0.43
	0.5, 100	2.525	0.55	0.55

	0.5, 1000	17.981	0.49	0.49
	0.5, 2000	39.844	0.43	0.43
	0.01, 10	1.326	0.42	0.42
	0.01, 100	3.252	0.39	0.39
	0.01, 1000	17.476	0.49	0.49
	0.01, 2000	34.248	0.53	0.53
Generic	2.5, 10	0.232	0.5	0.5
	2.5, 100	1.986	0.44	0.44
	2.5, 1000	17.484	0.5	0.5
	2.5, 2000	32.86	0.49	0.49
	2.0, 10	0.229	0.4	0.4
	2.0, 100	1.594	0.56	0.56
	2.0, 1000	18.842	0.41	0.41
	2.0, 2000	35.325	0.55	0.55
	1.5, 10	0.206	0.42	0.42
	1.5, 100	1.635	0.5	0.5
	1.5, 1000	19.701	0.45	0.45
	1.5, 2000	35.19	0.43	0.43
	1.0, 10	0.19	0.42	0.42
	1.0, 100	1.975	0.46	0.46
	1.0, 1000	20.434	0.42	0.42
	1.0, 2000	33.236	0.5	0.5
	0.5, 10	0.174	0.45	0.45
	0.5, 100	1.571	0.45	0.45
	0.5, 1000	20.149	0.43	0.43
	0.5, 2000	26.87	0.49	0.49
	0.01, 10	0.157	0.42	0.42
	0.01, 100	1.279	0.54	0.54
	0.01, 1000	18.476	0.34	0.34
	0.01, 2000	30.812	0.53	0.53
DiCE	2.5, 10	3.813	0.49	0.49
	2.5, 100	1.813	0.43	0.43
	2.5, 1000	17.334	0.51	0.51
	2.5, 2000	49.895	0.39	0.39
	2.0, 10	0.245	0.47	0.47
	2.0, 100	2.065	0.48	0.48
	2.0, 1000	22.677	0.41	0.41
	2.0, 2000	44.435	0.37	0.37
	1.5, 10	0.252	0.39	0.39
	1.5, 100	2.053	0.48	0.48
	1.5, 1000	22.27	0.42	0.42
	1.5, 2000	36.908	0.47	0.47
	1.0, 10	0.267	0.51	0.51
	1.0, 100	1.987	0.49	0.49
	1.0, 1000	20.315	0.4	0.4
	1.0, 2000	31.109	0.47	0.47
	0.5, 10	0.245	0.4	0.4
	0.5, 100	2.552	0.41	0.41
	0.5, 1000	22.207	0.45	0.45
	0.5, 2000	48.156	0.38	0.38
	0.01, 10	0.287	0.54	0.54
	0.01, 100	2.405	0.45	0.45
	0.01, 1000	26.16	0.33	0.33
	0.01, 2000	52.54	0.45	0.45
ClaPROAR	2.5, 10	2.85	0.43	0.43
	2.5, 100	4.394	0.39	0.39

	2.5, 1000	41.616	0.46	0.46
	2.5, 2000	80.235	0.44	0.44
	2.0, 10	0.427	0.5	0.5
	2.0, 100	4.207	0.47	0.47
	2.0, 1000	43.483	0.44	0.44
	2.0, 2000	87.691	0.42	0.42
	1.5, 10	0.407	0.53	0.53
	1.5, 100	3.939	0.48	0.48
	1.5, 1000	44.213	0.36	0.36
	1.5, 2000	78.709	0.46	0.46
	1.0, 10	0.446	0.41	0.41
	1.0, 100	4.1	0.41	0.41
	1.0, 1000	38.93	0.44	0.44
	1.0, 2000	77.465	0.4	0.4
	0.5, 10	0.42	0.41	0.41
	0.5, 100	4.298	0.38	0.38
	0.5, 1000	33.468	0.53	0.53
	0.5, 2000	78.312	0.37	0.37
	0.01, 10	0.258	0.52	0.52
	0.01, 100	2.818	0.42	0.42
	0.01, 1000	25.941	0.49	0.49
	0.01, 2000	50.01	0.43	0.43

Tab. 110: Parameter grid search for the c. elegans dataset experiment 1 using a neural network

Generator	stepsize and max iterations	time	percentage valid	percentage converged
Revise	2.5, 10	68.736	0.51	0.51
	2.5, 100	2.267	0.53	0.53
	2.5, 1000	16.75	0.6	0.6
	2.5, 2000	31.445	0.57	0.57
	2.0, 10	0.143	0.54	0.54
	2.0, 100	1.489	0.49	0.49
	2.0, 1000	14.05	0.6	0.59
	2.0, 2000	34.616	0.56	0.56
	1.5, 10	0.209	0.47	0.45
	1.5, 100	1.986	0.52	0.5
	1.5, 1000	15.518	0.6	0.59
	1.5, 2000	35.927	0.45	0.45
	1.0, 10	0.201	0.54	0.46
	1.0, 100	1.685	0.54	0.48
	1.0, 1000	19.372	0.5	0.48
	1.0, 2000	41.42	0.52	0.47
	0.5, 10	0.221	0.56	0.5
	0.5, 100	2.301	0.63	0.58
	0.5, 1000	18.534	0.53	0.49
	0.5, 2000	37.908	0.49	0.48
	0.01, 10	0.272	0.56	0.53
	0.01, 100	1.826	0.52	0.52
	0.01, 1000	17.913	0.48	0.48
	0.01, 2000	32.736	0.53	0.53
Ecco	2.5, 10	12.683	0.57	0.56
	2.5, 100	7.854	0.51	0.51
	2.5, 1000	61.212	0.61	0.61
	2.5, 2000	111.47	0.56	0.56
	2.0, 10	0.699	0.43	0.42

	2.0, 100	4.17	0.51	0.51
	2.0, 1000	50.929	0.47	0.47
	2.0, 2000	129.381	0.52	0.52
	1.5, 10	0.619	0.52	0.52
	1.5, 100	6.208	0.5	0.5
	1.5, 1000	101.801	0.45	0.41
	1.5, 2000	113.804	0.64	0.61
	1.0, 10	0.507	0.54	0.52
	1.0, 100	5.792	0.46	0.42
	1.0, 1000	80.714	0.5	0.48
	1.0, 2000	129.659	0.57	0.55
	0.5, 10	0.851	0.5	0.48
	0.5, 100	7.285	0.5	0.46
	0.5, 1000	80.486	0.47	0.43
	0.5, 2000	135.917	0.55	0.5
	0.01, 10	0.546	0.57	0.55
	0.01, 100	4.335	0.57	0.57
	0.01, 1000	64.88	0.51	0.51
	0.01, 2000	125.987	0.54	0.54
Wachter	2.5, 10	5.59	0.41	0.41
	2.5, 100	3.078	0.53	0.53
	2.5, 1000	14.352	0.58	0.58
	2.5, 2000	33.696	0.58	0.58
	2.0, 10	1.42	0.51	0.5
	2.0, 100	2.908	0.56	0.56
	2.0, 1000	16.299	0.56	0.56
	2.0, 2000	28.933	0.53	0.53
	1.5, 10	1.367	0.56	0.55
	1.5, 100	2.733	0.52	0.52
	1.5, 1000	18.558	0.54	0.51
	1.5, 2000	38.107	0.5	0.5
	1.0, 10	1.371	0.64	0.59
	1.0, 100	3.106	0.52	0.46
	1.0, 1000	18.926	0.49	0.48
	1.0, 2000	41.431	0.54	0.51
	0.5, 10	1.437	0.56	0.53
	0.5, 100	4.043	0.57	0.49
	0.5, 1000	26.02	0.58	0.47
	0.5, 2000	49.121	0.52	0.46
	0.01, 10	1.337	0.53	0.52
	0.01, 100	2.725	0.52	0.52
	0.01, 1000	14.692	0.58	0.58
	0.01, 2000	24.072	0.61	0.61
Generic	2.5, 10	0.244	0.49	0.49
	2.5, 100	1.591	0.54	0.54
	2.5, 1000	15.638	0.59	0.59
	2.5, 2000	34.791	0.5	0.5
	2.0, 10	0.202	0.48	0.47
	2.0, 100	1.958	0.56	0.55
	2.0, 1000	19.205	0.53	0.51
	2.0, 2000	30.228	0.55	0.55
	1.5, 10	0.189	0.54	0.53
	1.5, 100	1.444	0.5	0.5
	1.5, 1000	20.851	0.49	0.48
	1.5, 2000	46.122	0.57	0.53
	1.0, 10	0.216	0.53	0.5

	1.0, 100	1.471	0.6	0.6
	1.0, 1000	13.728	0.52	0.52
	1.0, 2000	34.131	0.61	0.59
	0.5, 10	0.312	0.45	0.36
	0.5, 100	2.305	0.49	0.44
	0.5, 1000	21.853	0.49	0.42
	0.5, 2000	46.563	0.55	0.5
	0.01, 10	0.188	0.48	0.47
	0.01, 100	1.518	0.51	0.51
	0.01, 1000	13.879	0.54	0.54
	0.01, 2000	35.833	0.51	0.51
DiCE	2.5, 10	3.548	0.47	0.46
	2.5, 100	1.335	0.65	0.64
	2.5, 1000	15.993	0.58	0.58
	2.5, 2000	37.821	0.52	0.52
	2.0, 10	0.173	0.53	0.53
	2.0, 100	1.559	0.56	0.56
	2.0, 1000	15.123	0.51	0.51
	2.0, 2000	37.484	0.53	0.52
	1.5, 10	0.247	0.55	0.5
	1.5, 100	2.255	0.51	0.5
	1.5, 1000	18.668	0.52	0.51
	1.5, 2000	41.642	0.56	0.53
	1.0, 10	0.242	0.58	0.57
	1.0, 100	2.413	0.45	0.43
	1.0, 1000	23.452	0.47	0.44
	1.0, 2000	47.093	0.5	0.49
	0.5, 10	0.284	0.55	0.48
	0.5, 100	2.916	0.55	0.45
	0.5, 1000	23.257	0.43	0.39
	0.5, 2000	50.465	0.54	0.43
	0.01, 10	0.214	0.48	0.46
	0.01, 100	1.748	0.44	0.44
	0.01, 1000	16.31	0.56	0.56
	0.01, 2000	31.47	0.63	0.63
ClaPROAR	2.5, 10	2.999	0.49	0.47
	2.5, 100	2.997	0.52	0.52
	2.5, 1000	35.826	0.52	0.52
	2.5, 2000	75.449	0.55	0.55
	2.0, 10	0.343	0.54	0.54
	2.0, 100	2.595	0.58	0.58
	2.0, 1000	32.371	0.45	0.45
	2.0, 2000	98.517	0.46	0.44
	1.5, 10	0.551	0.52	0.47
	1.5, 100	4.237	0.62	0.59
	1.5, 1000	36.086	0.47	0.46
	1.5, 2000	89.809	0.5	0.48
	1.0, 10	0.451	0.47	0.45
	1.0, 100	5.122	0.49	0.44
	1.0, 1000	44.279	0.48	0.43
	1.0, 2000	73.983	0.55	0.53
	0.5, 10	0.544	0.52	0.49
	0.5, 100	4.794	0.48	0.43
	0.5, 1000	45.937	0.63	0.57
	0.5, 2000	95.75	0.56	0.48
	0.01, 10	0.33	0.55	0.53

	0.01, 100	2.445	0.57	0.57
	0.01, 1000	30.07	0.6	0.6
	0.01, 2000	70.003	0.49	0.49

Tab. 111: Parameter grid search for the c. elegans dataset experiment 5 using a neural network

F.2. Including counterfactual explanations

F.2.1. Overlapping dataset using MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.97	0.92	-0.05	0.97	0.98	0.01	0.97	0.55	-0.42	0.97	0.69	-0.28
	1.0	0.95	-0.05	1.0	0.99	-0.01	1.0	0.88	-0.12	1.0	0.98	-0.02
	0.99	0.86	-0.13	0.99	1.0	0.01	0.99	0.86	-0.13	0.97	0.82	-0.15
	0.98	0.97	-0.01	0.98	1.0	0.02	0.98	0.78	-0.2	1.0	0.94	-0.06
	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	0.83	-0.17	1.0	0.88	-0.12
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.9	-0.1	0.99	0.95	-0.04
	0.98	0.97	-0.01	0.98	0.99	0.01	0.98	0.88	-0.1	0.99	0.93	-0.06
	0.97	0.96	-0.01	0.97	0.98	0.01	0.97	0.87	-0.1	0.99	0.81	-0.18
	0.97	0.96	-0.01	0.97	1.0	0.03	0.97	0.88	-0.09	1.0	0.95	-0.05
	0.97	0.92	-0.05	0.97	0.98	0.01	0.97	0.49	-0.48	0.99	0.9	-0.09
REVISE	1.0	0.85	-0.15	1.0	1.0	0.0	1.0	0.74	-0.26	0.99	0.95	-0.04
	1.0	0.91	-0.09	1.0	0.99	-0.01	1.0	0.93	-0.07	0.99	0.97	-0.02
	1.0	0.91	-0.09	1.0	1.0	0.0	1.0	0.95	-0.05	1.0	0.81	-0.19
	0.97	0.62	-0.35	0.97	1.0	0.03	0.97	0.84	-0.13	1.0	0.92	-0.08
	1.0	0.72	-0.28	1.0	0.97	-0.03	1.0	0.85	-0.15	0.99	0.97	-0.02
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.92	-0.08	0.98	0.82	-0.16
	0.98	0.68	-0.3	0.98	0.98	0.0	0.98	0.86	-0.12	1.0	0.93	-0.07
	1.0	0.76	-0.24	1.0	0.95	-0.05	1.0	0.83	-0.17	1.0	0.86	-0.14
	0.99	0.74	-0.25	0.99	1.0	0.01	0.99	0.82	-0.17	1.0	0.83	-0.17
	1.0	0.89	-0.11	1.0	1.0	0.0	1.0	0.5	-0.5	0.99	0.92	-0.07
ECCo	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	0.77	-0.23	0.99	0.81	-0.18
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.95	-0.04	0.98	0.95	-0.03
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.78	-0.22	0.99	0.94	-0.05
	0.98	0.92	-0.06	0.98	0.99	0.01	0.98	0.88	-0.1	0.99	0.88	-0.11
	0.99	0.93	-0.06	0.99	0.99	0.0	0.99	0.53	-0.46	1.0	0.92	-0.08
	0.98	0.96	-0.02	0.98	1.0	0.02	0.98	0.97	-0.01	0.99	0.93	-0.06
	0.97	0.89	-0.08	0.97	0.98	0.01	0.97	0.77	-0.2	0.96	0.85	-0.11
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.88	-0.12	1.0	0.99	-0.01
	0.99	0.9	-0.09	0.99	0.99	0.0	0.99	0.86	-0.13	0.99	0.87	-0.12
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.81	-0.19	0.97	0.97	0.0
Wachter	0.98	0.96	-0.02	0.98	0.99	0.01	0.98	0.75	-0.23	0.99	0.79	-0.2
	0.99	0.97	-0.02	0.99	1.0	0.01	0.99	0.64	-0.35	1.0	0.91	-0.09
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.72	-0.28	1.0	0.99	-0.01
	1.0	0.88	-0.12	1.0	0.99	-0.01	1.0	0.87	-0.13	0.99	0.79	-0.2
	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	0.91	-0.09	0.99	0.87	-0.12
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	0.78	-0.22	1.0	0.97	-0.03
	1.0	0.87	-0.13	1.0	1.0	0.0	1.0	0.7	-0.3	1.0	0.8	-0.2
	0.98	0.89	-0.09	0.98	1.0	0.02	0.98	0.77	-0.21	0.99	0.57	-0.42
	0.98	0.92	-0.06	0.98	1.0	0.02	0.98	0.71	-0.27	1.0	0.93	-0.07
	0.98	0.93	-0.05	0.98	0.98	0.0	0.98	0.72	-0.26	0.99	0.92	-0.07
Generic	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.72	-0.28	0.98	0.96	-0.02
	0.97	0.88	-0.09	0.97	0.97	0.0	0.97	0.72	-0.25	1.0	0.93	-0.07
	1.0	0.93	-0.07	1.0	1.0	0.0	1.0	0.82	-0.18	0.99	0.8	-0.19
	0.95	0.94	-0.01	0.95	1.0	0.05	0.95	0.95	0.0	1.0	0.95	-0.05
	0.98	0.97	-0.01	0.98	0.99	0.01	0.98	0.86	-0.12	0.99	0.79	-0.2

	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.87	-0.12	0.98	0.8	-0.18
	0.99	0.96	-0.03	0.99	1.0	0.01	0.99	0.87	-0.12	1.0	0.98	-0.02
	0.99	0.95	-0.04	0.99	0.98	-0.01	0.99	0.76	-0.23	1.0	0.79	-0.21
	0.97	0.95	-0.02	0.97	0.97	0.0	0.97	0.87	-0.1	0.97	0.82	-0.15
	0.99	0.96	-0.03	0.99	1.0	0.01	0.99	0.77	-0.22	0.99	0.87	-0.12
DiCE	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.87	-0.13	1.0	0.8	-0.2
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	0.85	-0.15	1.0	0.98	-0.02
	1.0	0.91	-0.09	1.0	1.0	0.0	1.0	0.81	-0.19	0.99	0.96	-0.03
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.8	-0.19	1.0	0.92	-0.08
	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	0.66	-0.34	0.99	0.99	0.0
	0.99	0.96	-0.03	0.99	0.99	0.0	0.99	0.79	-0.2	0.94	0.84	-0.1
	0.99	0.95	-0.04	0.99	1.0	0.01	0.99	0.93	-0.06	1.0	1.0	0.0
	0.99	0.94	-0.05	0.99	1.0	0.01	0.99	0.71	-0.28	0.98	0.8	-0.18
	0.96	0.99	0.03	0.96	1.0	0.04	0.96	0.93	-0.03	0.99	0.93	-0.06
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.84	-0.16	0.98	0.7	-0.28
ClaPROARG	0.99	0.9	-0.09	0.99	1.0	0.01	0.99	0.84	-0.15	0.99	0.87	-0.12
	0.99	0.96	-0.03	0.99	0.99	0.0	0.99	0.87	-0.12	0.99	0.96	-0.03
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.78	-0.22	1.0	0.69	-0.31
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.81	-0.17	0.97	0.9	-0.07
	0.97	0.96	-0.01	0.97	0.97	0.0	0.97	0.87	-0.1	0.99	0.96	-0.03
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.53	-0.47	1.0	0.82	-0.18
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.82	-0.18	0.98	0.79	-0.19
	1.0	0.94	-0.06	1.0	0.99	-0.01	1.0	0.76	-0.24	0.99	0.83	-0.16
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.7	-0.29	0.98	0.74	-0.24
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.9	-0.09	0.97	0.9	-0.07

Tab. 112: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.99	0.93	-0.06	0.99	0.98	-0.01	0.99	0.82	-0.17	1.0	0.99	-0.01
	0.99	0.88	-0.11	0.99	0.97	-0.02	0.99	0.78	-0.21	0.99	0.73	-0.26
	0.96	0.82	-0.14	0.96	0.96	0.0	0.96	0.7	-0.26	0.99	0.82	-0.17
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	0.78	-0.22	0.99	0.83	-0.16
	1.0	0.74	-0.26	1.0	1.0	0.0	1.0	0.76	-0.24	0.99	0.9	-0.09
	0.99	0.94	-0.05	0.99	1.0	0.01	0.99	0.72	-0.27	0.99	0.92	-0.07
	0.99	0.91	-0.08	0.99	0.99	0.0	0.99	0.81	-0.18	0.99	0.95	-0.04
	0.97	0.92	-0.05	0.97	0.99	0.02	0.97	0.6	-0.37	0.97	0.77	-0.2
	0.99	0.98	-0.01	0.99	0.97	-0.02	0.99	0.84	-0.15	0.99	0.91	-0.08
	1.0	0.93	-0.07	1.0	1.0	0.0	1.0	0.74	-0.26	0.99	0.88	-0.11
REVISE	1.0	0.73	-0.27	1.0	0.99	-0.01	1.0	0.88	-0.12	0.99	0.97	-0.02
	1.0	0.63	-0.37	1.0	0.98	-0.02	1.0	0.58	-0.42	0.97	0.87	-0.1
	1.0	0.69	-0.31	1.0	0.99	-0.01	1.0	0.76	-0.24	0.92	0.89	-0.03
	0.98	0.89	-0.09	0.98	0.99	0.01	0.98	0.96	-0.02	0.99	0.92	-0.07
	0.98	0.78	-0.2	0.98	0.99	0.01	0.98	0.68	-0.3	0.96	0.93	-0.03
	0.99	0.78	-0.21	0.99	1.0	0.01	0.99	0.77	-0.22	0.99	0.87	-0.12
	1.0	0.78	-0.22	1.0	0.98	-0.02	1.0	0.73	-0.27	0.99	0.91	-0.08
	0.99	0.85	-0.14	0.99	0.99	0.0	0.99	0.75	-0.24	0.99	0.94	-0.05
	0.98	0.82	-0.16	0.98	0.98	0.0	0.98	0.86	-0.12	0.99	0.84	-0.15
	0.99	0.77	-0.22	0.99	0.98	-0.01	0.99	0.79	-0.2	0.98	0.92	-0.06
ECCo	0.99	0.77	-0.22	0.99	0.99	0.0	0.99	0.59	-0.4	0.99	0.74	-0.25
	1.0	0.78	-0.22	1.0	0.97	-0.03	1.0	0.59	-0.41	0.99	0.94	-0.05
	0.97	0.92	-0.05	0.97	0.96	-0.01	0.97	0.97	0.0	1.0	0.86	-0.14
	1.0	0.87	-0.13	1.0	0.97	-0.03	1.0	0.69	-0.31	0.99	0.77	-0.22

	0.98	0.84	-0.14	0.98	1.0	0.02	0.98	0.82	-0.16	0.99	0.84	-0.15
	0.99	0.95	-0.04	0.99	1.0	0.01	0.99	0.86	-0.13	0.99	0.96	-0.03
	0.95	0.95	0.0	0.95	0.98	0.03	0.95	0.9	-0.05	0.99	0.92	-0.07
	0.99	0.97	-0.02	0.99	0.97	-0.02	0.99	0.8	-0.19	0.98	0.87	-0.11
	1.0	0.93	-0.07	1.0	0.99	-0.01	1.0	0.79	-0.21	0.99	0.84	-0.15
	1.0	0.92	-0.08	1.0	0.98	-0.02	1.0	0.74	-0.26	0.99	0.84	-0.15
Wachter	0.98	0.93	-0.05	0.98	0.99	0.01	0.98	0.94	-0.04	0.96	0.9	-0.06
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.88	-0.1	0.98	0.71	-0.27
	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	0.9	-0.1	0.96	0.91	-0.05
	0.99	0.85	-0.14	0.99	0.97	-0.02	0.99	0.72	-0.27	0.99	0.94	-0.05
	0.97	0.87	-0.1	0.97	0.98	0.01	0.97	0.81	-0.16	0.96	0.96	0.0
	0.99	0.82	-0.17	0.99	0.98	-0.01	0.99	0.76	-0.23	0.96	0.63	-0.33
	1.0	0.95	-0.05	1.0	0.99	-0.01	1.0	0.88	-0.12	0.99	0.9	-0.09
	1.0	0.89	-0.11	1.0	0.99	-0.01	1.0	0.84	-0.16	0.98	0.98	0.0
	1.0	0.71	-0.29	1.0	0.99	-0.01	1.0	0.78	-0.22	0.97	0.83	-0.14
	1.0	0.73	-0.27	1.0	0.98	-0.02	1.0	0.76	-0.24	0.99	0.88	-0.11
Generic	1.0	0.89	-0.11	1.0	0.98	-0.02	1.0	0.84	-0.16	0.99	0.94	-0.05
	0.99	0.95	-0.04	0.99	0.98	-0.01	0.99	0.94	-0.05	0.99	0.79	-0.2
	0.99	0.86	-0.13	0.99	0.98	-0.01	0.99	0.88	-0.11	0.98	0.97	-0.01
	0.98	0.93	-0.05	0.98	1.0	0.02	0.98	0.98	0.0	0.98	0.87	-0.11
	1.0	0.75	-0.25	1.0	1.0	0.0	1.0	0.88	-0.12	0.99	0.93	-0.06
	1.0	0.87	-0.13	1.0	1.0	0.0	1.0	0.7	-0.3	0.99	0.79	-0.2
	0.96	0.95	-0.01	0.96	0.97	0.01	0.96	0.71	-0.25	0.99	0.92	-0.07
	1.0	0.92	-0.08	1.0	0.99	-0.01	1.0	0.87	-0.13	0.95	0.89	-0.06
	0.99	0.76	-0.23	0.99	0.99	0.0	0.99	0.82	-0.17	0.98	0.93	-0.05
	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	0.81	-0.19	1.0	0.9	-0.1
DiCE	1.0	0.77	-0.23	1.0	1.0	0.0	1.0	0.56	-0.44	0.95	0.96	0.01
	1.0	0.91	-0.09	1.0	0.98	-0.02	1.0	0.73	-0.27	0.98	0.91	-0.07
	1.0	0.82	-0.18	1.0	0.98	-0.02	1.0	0.85	-0.15	0.97	0.9	-0.07
	0.98	0.92	-0.06	0.98	0.97	-0.01	0.98	0.93	-0.05	0.98	0.96	-0.02
	0.97	0.9	-0.07	0.97	0.99	0.02	0.97	0.86	-0.11	0.96	0.85	-0.11
	0.98	0.91	-0.07	0.98	0.98	0.0	0.98	0.68	-0.3	0.98	0.75	-0.23
	1.0	0.95	-0.05	1.0	0.98	-0.02	1.0	0.86	-0.14	0.98	0.97	-0.01
	0.99	0.83	-0.16	0.99	0.98	-0.01	0.99	0.59	-0.4	0.96	0.83	-0.13
	1.0	0.91	-0.09	1.0	1.0	0.0	1.0	0.81	-0.19	1.0	0.88	-0.12
	1.0	0.84	-0.16	1.0	0.99	-0.01	1.0	0.58	-0.42	1.0	0.81	-0.19
ClaPROAR	1.0	0.87	-0.13	1.0	0.98	-0.02	1.0	0.87	-0.13	0.98	0.87	-0.11
	0.97	0.93	-0.04	0.97	0.99	0.02	0.97	0.84	-0.13	0.99	0.94	-0.05
	0.97	0.84	-0.13	0.97	0.99	0.02	0.97	0.97	0.0	0.95	0.69	-0.26
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.74	-0.26	0.99	0.97	-0.02
	0.98	0.89	-0.09	0.98	0.98	0.0	0.98	0.73	-0.25	0.99	0.87	-0.12
	0.99	0.87	-0.12	0.99	0.97	-0.02	0.99	0.8	-0.19	0.98	0.87	-0.11
	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	0.86	-0.14	0.98	0.96	-0.02
	0.99	0.84	-0.15	0.99	0.98	-0.01	0.99	0.94	-0.05	0.99	0.88	-0.11
	0.99	0.94	-0.05	0.99	0.99	0.0	0.99	0.74	-0.25	0.99	0.77	-0.22
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	0.85	-0.15	0.99	0.85	-0.14

Tab. 113: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.99	0.96	-0.03	0.99	0.98	-0.01	0.99	0.48	-0.51	0.98	0.92	-0.06
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.93	-0.07	0.97	0.77	-0.2
	0.98	0.98	0.0	0.98	0.98	0.0	0.98	0.75	-0.23	1.0	0.86	-0.14

	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.87	-0.12	0.99	0.87	-0.12
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.83	-0.16	0.98	0.95	-0.03
	0.98	0.9	-0.08	0.98	0.98	0.0	0.98	0.72	-0.26	0.99	0.95	-0.04
	0.96	0.94	-0.02	0.96	0.99	0.03	0.96	0.91	-0.05	0.99	0.9	-0.09
	0.99	0.95	-0.04	0.99	1.0	0.01	0.99	0.89	-0.1	0.99	0.96	-0.03
	0.97	0.89	-0.08	0.97	0.99	0.02	0.97	0.77	-0.2	1.0	0.94	-0.06
	0.99	0.86	-0.13	0.99	0.99	0.0	0.99	0.96	-0.03	0.99	0.86	-0.13
REVISE	0.99	0.89	-0.1	0.99	1.0	0.01	0.99	0.96	-0.03	0.99	0.88	-0.11
	1.0	0.69	-0.31	1.0	0.98	-0.02	1.0	0.97	-0.03	0.98	0.87	-0.11
	0.98	0.84	-0.14	0.98	0.99	0.01	0.98	0.94	-0.04	1.0	0.92	-0.08
	0.98	0.93	-0.05	0.98	0.96	-0.02	0.98	0.94	-0.04	0.99	0.98	-0.01
	0.99	0.81	-0.18	0.99	0.98	-0.01	0.99	0.78	-0.21	0.99	0.97	-0.02
	0.97	0.86	-0.11	0.97	0.98	0.01	0.97	0.83	-0.14	1.0	0.98	-0.02
	1.0	0.87	-0.13	1.0	1.0	0.0	1.0	0.8	-0.2	0.98	0.95	-0.03
	0.97	0.91	-0.06	0.97	0.99	0.02	0.97	0.97	0.0	0.98	0.91	-0.07
	0.98	0.88	-0.1	0.98	0.98	0.0	0.98	0.9	-0.08	1.0	0.81	-0.19
	0.97	0.81	-0.16	0.97	0.99	0.02	0.97	0.72	-0.25	1.0	0.98	-0.02
ECCo	0.99	0.84	-0.15	0.99	1.0	0.01	0.99	0.71	-0.28	0.99	0.89	-0.1
	0.94	0.94	0.0	0.94	0.99	0.05	0.94	0.91	-0.03	0.99	0.98	-0.01
	0.98	0.96	-0.02	0.98	0.98	0.0	0.98	0.81	-0.17	1.0	0.82	-0.18
	0.99	0.94	-0.05	0.99	0.99	0.0	0.99	0.93	-0.06	0.99	0.69	-0.3
	1.0	0.92	-0.08	1.0	1.0	0.0	1.0	0.94	-0.06	1.0	0.75	-0.25
	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	0.9	-0.1	1.0	0.92	-0.08
	0.98	0.89	-0.09	0.98	0.99	0.01	0.98	0.52	-0.46	0.95	0.86	-0.09
	0.98	0.9	-0.08	0.98	0.98	0.0	0.98	0.78	-0.2	0.98	0.91	-0.07
	0.96	0.94	-0.02	0.96	0.99	0.03	0.96	0.77	-0.19	0.99	0.88	-0.11
	0.99	0.97	-0.02	0.99	1.0	0.01	0.99	0.84	-0.15	0.99	0.97	-0.02
Wachter	0.99	0.97	-0.02	0.99	1.0	0.01	0.99	0.92	-0.07	1.0	0.99	-0.01
	0.97	0.87	-0.1	0.97	0.99	0.02	0.97	0.8	-0.17	0.97	0.96	-0.01
	0.99	0.96	-0.03	0.99	1.0	0.01	0.99	0.97	-0.02	0.99	0.98	-0.01
	0.98	0.97	-0.01	0.98	0.99	0.01	0.98	0.87	-0.11	0.99	0.94	-0.05
	0.98	0.87	-0.11	0.98	0.99	0.01	0.98	0.7	-0.28	0.97	0.8	-0.17
	0.95	0.9	-0.05	0.95	1.0	0.05	0.95	0.66	-0.29	0.97	0.93	-0.04
	0.99	0.97	-0.02	0.99	0.99	0.0	0.99	0.81	-0.18	0.99	0.93	-0.06
	0.99	0.9	-0.09	0.99	1.0	0.01	0.99	0.8	-0.19	0.99	0.79	-0.2
	0.98	0.9	-0.08	0.98	0.99	0.01	0.98	0.36	-0.62	1.0	0.88	-0.12
	0.97	0.88	-0.09	0.97	0.99	0.02	0.97	0.79	-0.18	0.99	0.52	-0.47
Generic	1.0	0.92	-0.08	1.0	1.0	0.0	1.0	0.83	-0.17	0.99	0.92	-0.07
	0.98	0.96	-0.02	0.98	0.97	-0.01	0.98	0.84	-0.14	1.0	0.75	-0.25
	0.99	0.95	-0.04	0.99	0.98	-0.01	0.99	0.65	-0.34	0.99	0.87	-0.12
	0.98	0.93	-0.05	0.98	0.98	0.0	0.98	0.76	-0.22	0.98	0.89	-0.09
	0.98	0.97	-0.01	0.98	0.99	0.01	0.98	0.8	-0.18	1.0	0.95	-0.05
	0.99	0.88	-0.11	0.99	1.0	0.01	0.99	0.82	-0.17	1.0	0.93	-0.07
	0.98	0.91	-0.07	0.98	0.99	0.01	0.98	0.73	-0.25	0.97	0.87	-0.1
	0.99	0.92	-0.07	0.99	0.97	-0.02	0.99	0.88	-0.11	1.0	0.95	-0.05
	0.98	0.95	-0.03	0.98	1.0	0.02	0.98	0.91	-0.07	0.98	0.89	-0.09
	0.98	0.98	0.0	0.98	0.98	0.0	0.98	0.86	-0.12	0.99	0.98	-0.01
DiCE	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.83	-0.17	1.0	0.97	-0.03
	0.97	0.88	-0.09	0.97	1.0	0.03	0.97	0.73	-0.24	1.0	1.0	0.0
	1.0	0.9	-0.1	1.0	0.99	-0.01	1.0	0.86	-0.14	0.99	0.87	-0.12
	0.99	0.95	-0.04	0.99	0.99	0.0	0.99	0.68	-0.31	1.0	0.93	-0.07
	0.99	0.94	-0.05	0.99	1.0	0.01	0.99	0.89	-0.1	0.99	0.87	-0.12
	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	0.91	-0.09	1.0	0.98	-0.02
	0.98	0.96	-0.02	0.98	0.99	0.01	0.98	0.91	-0.07	0.99	0.92	-0.07
	0.98	0.81	-0.17	0.98	0.99	0.01	0.98	0.66	-0.32	0.99	0.88	-0.11
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	0.83	-0.17	1.0	0.96	-0.04

	0.98	0.97	-0.01	0.98	0.98	0.0	0.98	0.7	-0.28	0.99	0.97	-0.02
ClaPROAR	0.99	0.89	-0.1	0.99	1.0	0.01	0.99	0.9	-0.09	0.99	0.91	-0.08
	0.99	0.97	-0.02	0.99	0.99	0.0	0.99	0.76	-0.23	1.0	0.92	-0.08
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.86	-0.13	0.99	0.87	-0.12
	1.0	0.91	-0.09	1.0	1.0	0.0	1.0	0.77	-0.23	1.0	0.89	-0.11
	0.96	0.9	-0.06	0.96	0.99	0.03	0.96	0.84	-0.12	0.98	0.98	0.0
	1.0	0.88	-0.12	1.0	1.0	0.0	1.0	0.71	-0.29	0.99	0.83	-0.16
	0.98	0.95	-0.03	0.98	0.99	0.01	0.98	0.72	-0.26	1.0	0.67	-0.33
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	0.64	-0.36	0.99	0.93	-0.06
	0.98	0.96	-0.02	0.98	0.98	0.0	0.98	0.94	-0.04	0.99	0.91	-0.08
	0.99	0.99	0.0	0.99	0.95	-0.04	0.99	0.68	-0.31	1.0	0.89	-0.11

Tab. 114: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.74	-0.26	1.0	0.99	-0.01	1.0	0.92	-0.08	0.97	0.88	-0.09
	0.94	0.96	0.02	0.94	1.0	0.06	0.94	0.89	-0.05	0.99	0.93	-0.06
	0.95	0.77	-0.18	0.95	0.99	0.04	0.95	0.79	-0.16	0.97	0.94	-0.03
	1.0	0.73	-0.27	1.0	1.0	0.0	1.0	0.95	-0.05	0.99	0.93	-0.06
	0.97	0.83	-0.14	0.97	0.99	0.02	0.97	0.82	-0.15	1.0	0.98	-0.02
	0.98	0.89	-0.09	0.98	1.0	0.02	0.98	0.84	-0.14	0.97	0.83	-0.14
	1.0	0.78	-0.22	1.0	0.99	-0.01	1.0	0.95	-0.05	0.99	0.95	-0.04
	0.99	0.65	-0.34	0.99	1.0	0.01	0.99	0.88	-0.11	0.97	0.96	-0.01
	0.96	0.81	-0.15	0.96	0.98	0.02	0.96	0.71	-0.25	0.99	0.97	-0.02
	0.98	0.89	-0.09	0.98	0.98	0.0	0.98	0.93	-0.05	0.97	0.84	-0.13
REVISE	0.96	0.86	-0.1	0.96	0.98	0.02	0.96	0.95	-0.01	1.0	0.93	-0.07
	0.98	0.81	-0.17	0.98	0.99	0.01	0.98	0.93	-0.05	0.98	0.91	-0.07
	0.98	0.75	-0.23	0.98	0.96	-0.02	0.98	0.94	-0.04	0.99	0.79	-0.2
	0.94	0.74	-0.2	0.94	0.98	0.04	0.94	0.94	0.0	1.0	0.84	-0.16
	0.97	0.96	-0.01	0.97	0.99	0.02	0.97	0.92	-0.05	0.96	0.83	-0.13
	0.97	0.74	-0.23	0.97	0.98	0.01	0.97	0.79	-0.18	0.99	0.84	-0.15
	0.98	0.81	-0.17	0.98	0.97	-0.01	0.98	0.94	-0.04	1.0	0.96	-0.04
	0.99	0.85	-0.14	0.99	0.98	-0.01	0.99	0.89	-0.1	0.97	0.85	-0.12
	1.0	0.85	-0.15	1.0	0.99	-0.01	1.0	0.75	-0.25	0.98	0.87	-0.11
	0.99	0.85	-0.14	0.99	0.99	0.0	0.99	0.86	-0.13	0.99	0.71	-0.28
ECCo	0.98	0.64	-0.34	0.98	0.97	-0.01	0.98	0.76	-0.22	0.99	0.94	-0.05
	0.97	0.66	-0.31	0.97	0.96	-0.01	0.97	0.67	-0.3	0.98	0.93	-0.05
	0.99	0.98	-0.01	0.99	0.98	-0.01	0.99	0.85	-0.14	1.0	0.82	-0.18
	0.95	0.65	-0.3	0.95	0.98	0.03	0.95	0.78	-0.17	0.99	0.88	-0.11
	0.98	0.72	-0.26	0.98	0.96	-0.02	0.98	0.72	-0.26	0.95	0.95	0.0
	0.98	0.97	-0.01	0.98	0.96	-0.02	0.98	0.99	0.01	0.97	0.92	-0.05
	0.93	0.91	-0.02	0.93	0.92	-0.01	0.93	0.83	-0.1	1.0	0.86	-0.14
	1.0	0.99	-0.01	1.0	0.96	-0.04	1.0	0.88	-0.12	1.0	0.88	-0.12
	0.97	0.96	-0.01	0.97	0.97	0.0	0.97	0.89	-0.08	0.98	0.89	-0.09
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	0.9	-0.1	1.0	0.85	-0.15
Wachter	0.98	0.64	-0.34	0.98	0.98	0.0	0.98	0.8	-0.18	0.95	0.75	-0.2
	0.98	0.63	-0.35	0.98	0.98	0.0	0.98	0.55	-0.43	0.98	0.97	-0.01
	0.98	0.67	-0.31	0.98	0.96	-0.02	0.98	0.71	-0.27	1.0	0.89	-0.11
	0.97	0.93	-0.04	0.97	0.93	-0.04	0.97	0.82	-0.15	0.98	0.84	-0.14
	0.99	0.95	-0.04	0.99	0.98	-0.01	0.99	0.58	-0.41	1.0	0.85	-0.15
	0.96	0.91	-0.05	0.96	0.89	-0.07	0.96	0.74	-0.22	1.0	0.95	-0.05
	0.98	0.93	-0.05	0.98	0.96	-0.02	0.98	0.79	-0.19	0.97	0.9	-0.07
	1.0	0.97	-0.03	1.0	0.98	-0.02	1.0	0.87	-0.13	0.97	0.93	-0.04

	1.0	0.77	-0.23	1.0	0.97	-0.03	1.0	0.68	-0.32	0.99	0.88	-0.11
	0.99	0.77	-0.22	0.99	0.98	-0.01	0.99	0.6	-0.39	1.0	0.97	-0.03
Generic	0.94	0.96	0.02	0.94	0.97	0.03	0.94	0.87	-0.07	0.97	0.93	-0.04
	0.98	0.96	-0.02	0.98	0.98	0.0	0.98	0.95	-0.03	0.99	0.86	-0.13
	0.96	0.73	-0.23	0.96	0.97	0.01	0.96	0.93	-0.03	1.0	0.92	-0.08
	0.96	0.96	0.0	0.96	0.97	0.01	0.96	0.83	-0.13	0.97	0.88	-0.09
	0.98	0.98	0.0	0.98	0.94	-0.04	0.98	0.92	-0.06	0.96	0.81	-0.15
	0.97	0.96	-0.01	0.97	0.96	-0.01	0.97	0.89	-0.08	0.97	0.88	-0.09
	0.98	0.96	-0.02	0.98	0.95	-0.03	0.98	0.82	-0.16	1.0	0.94	-0.06
	0.98	0.79	-0.19	0.98	0.97	-0.01	0.98	0.72	-0.26	1.0	0.8	-0.2
	0.99	0.94	-0.05	0.99	0.97	-0.02	0.99	0.96	-0.03	1.0	0.77	-0.23
	1.0	0.6	-0.4	1.0	0.97	-0.03	1.0	0.78	-0.22	1.0	0.92	-0.08
DiCE	0.98	0.7	-0.28	0.98	0.97	-0.01	0.98	0.65	-0.33	0.97	0.96	-0.01
	0.98	0.67	-0.31	0.98	0.98	0.0	0.98	0.74	-0.24	0.99	0.85	-0.14
	0.98	0.96	-0.02	0.98	0.99	0.01	0.98	0.71	-0.27	0.95	0.97	0.02
	0.99	0.93	-0.06	0.99	0.98	-0.01	0.99	0.96	-0.03	1.0	0.96	-0.04
	0.98	0.96	-0.02	0.98	0.96	-0.02	0.98	0.87	-0.11	0.98	0.97	-0.01
	0.96	0.78	-0.18	0.96	0.96	0.0	0.96	0.84	-0.12	0.99	0.95	-0.04
	0.94	0.78	-0.16	0.94	0.99	0.05	0.94	0.54	-0.4	0.99	0.71	-0.28
	0.99	0.89	-0.1	0.99	0.99	0.0	0.99	0.85	-0.14	0.99	0.89	-0.1
	0.98	0.96	-0.02	0.98	0.98	0.0	0.98	0.77	-0.21	1.0	0.96	-0.04
	0.96	0.91	-0.05	0.96	0.97	0.01	0.96	0.9	-0.06	1.0	0.87	-0.13
ClaPROAR	0.96	0.96	0.0	0.96	0.96	0.0	0.96	0.96	0.0	1.0	0.96	-0.04
	1.0	0.96	-0.04	1.0	0.96	-0.04	1.0	0.97	-0.03	0.95	0.94	-0.01
	0.97	0.85	-0.12	0.97	0.97	0.0	0.97	0.75	-0.22	0.98	0.79	-0.19
	1.0	0.91	-0.09	1.0	0.98	-0.02	1.0	0.84	-0.16	1.0	0.92	-0.08
	0.95	0.7	-0.25	0.95	0.98	0.03	0.95	0.8	-0.15	0.97	0.97	0.0
	0.99	0.78	-0.21	0.99	0.97	-0.02	0.99	0.75	-0.24	0.99	0.79	-0.2
	0.99	0.79	-0.2	0.99	0.97	-0.02	0.99	0.49	-0.5	0.99	0.86	-0.13
	1.0	0.67	-0.33	1.0	1.0	0.0	1.0	0.73	-0.27	0.99	0.92	-0.07
	0.99	0.78	-0.21	0.99	0.97	-0.02	0.99	0.76	-0.23	1.0	0.98	-0.02
	0.97	0.93	-0.04	0.97	0.96	-0.01	0.97	0.65	-0.32	0.99	0.98	-0.01

Tab. 115: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.97	0.97	0.0	0.97	1.0	0.03	0.97	0.9	-0.07	0.99	0.94	-0.05
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	0.93	-0.05	0.98	0.85	-0.13
	0.99	0.79	-0.2	0.99	0.98	-0.01	0.99	0.64	-0.35	0.98	0.94	-0.04
	0.97	0.97	0.0	0.97	0.98	0.01	0.97	0.62	-0.35	0.95	0.93	-0.02
	0.97	0.95	-0.02	0.97	0.99	0.02	0.97	0.7	-0.27	0.99	0.96	-0.03
	0.99	0.94	-0.05	0.99	0.99	0.0	0.99	0.93	-0.06	0.98	0.94	-0.04
	0.99	0.86	-0.13	0.99	1.0	0.01	0.99	0.9	-0.09	0.99	0.87	-0.12
	0.98	0.84	-0.14	0.98	0.99	0.01	0.98	0.74	-0.24	0.98	0.96	-0.02
	0.95	0.95	0.0	0.95	0.98	0.03	0.95	0.92	-0.03	0.98	0.9	-0.08
	0.97	0.94	-0.03	0.97	1.0	0.03	0.97	0.89	-0.08	0.98	0.77	-0.21
REVISE	0.96	0.84	-0.12	0.96	1.0	0.04	0.96	0.9	-0.06	0.96	0.92	-0.04
	0.99	0.9	-0.09	0.99	0.97	-0.02	0.99	0.94	-0.05	0.99	1.0	0.01
	0.99	0.68	-0.31	0.99	0.97	-0.02	0.99	0.85	-0.14	0.98	0.76	-0.22
	0.98	0.87	-0.11	0.98	1.0	0.02	0.98	0.84	-0.14	0.99	0.91	-0.08
	0.99	0.78	-0.21	0.99	1.0	0.01	0.99	0.76	-0.23	0.99	0.85	-0.14
	0.97	0.8	-0.17	0.97	0.99	0.02	0.97	0.88	-0.09	0.98	0.93	-0.05
	0.98	0.81	-0.17	0.98	0.98	0.0	0.98	0.79	-0.19	0.97	0.76	-0.21

	1.0	0.86	-0.14	1.0	0.99	-0.01	1.0	0.81	-0.19	0.94	0.88	-0.06
	0.98	0.81	-0.17	0.98	0.99	0.01	0.98	0.92	-0.06	0.97	0.93	-0.04
	0.96	0.83	-0.13	0.96	0.99	0.03	0.96	0.88	-0.08	0.99	0.91	-0.08
ECCo	0.99	0.91	-0.08	0.99	0.98	-0.01	0.99	0.92	-0.07	0.96	0.81	-0.15
	0.96	0.96	0.0	0.96	0.98	0.02	0.96	0.48	-0.48	0.99	0.79	-0.2
	0.97	0.98	0.01	0.97	0.96	-0.01	0.97	0.72	-0.25	0.99	0.87	-0.12
	0.97	0.94	-0.03	0.97	0.99	0.02	0.97	0.88	-0.09	0.97	0.69	-0.28
	1.0	0.95	-0.05	1.0	1.0	0.0	1.0	0.57	-0.43	0.97	0.75	-0.22
	0.98	0.94	-0.04	0.98	1.0	0.02	0.98	0.67	-0.31	0.99	0.94	-0.05
	0.99	0.89	-0.1	0.99	0.99	0.0	0.99	0.87	-0.12	0.97	0.86	-0.11
	0.96	0.94	-0.02	0.96	0.98	0.02	0.96	0.88	-0.08	0.98	0.9	-0.08
	0.99	0.92	-0.07	0.99	1.0	0.01	0.99	0.87	-0.12	0.99	0.7	-0.29
	0.97	0.92	-0.05	0.97	0.98	0.01	0.97	0.66	-0.31	0.99	0.89	-0.1
Wachter	0.97	0.92	-0.05	0.97	0.97	0.0	0.97	0.88	-0.09	0.97	0.92	-0.05
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.86	-0.12	0.98	0.98	0.0
	0.98	0.8	-0.18	0.98	0.99	0.01	0.98	0.66	-0.32	0.99	0.86	-0.13
	0.98	0.93	-0.05	0.98	0.97	-0.01	0.98	0.82	-0.16	0.93	0.75	-0.18
	0.98	0.97	-0.01	0.98	0.99	0.01	0.98	0.82	-0.16	0.99	0.93	-0.06
	0.99	0.96	-0.03	0.99	0.99	0.0	0.99	0.62	-0.37	0.97	0.9	-0.07
	0.98	0.92	-0.06	0.98	0.98	0.0	0.98	0.81	-0.17	0.99	0.83	-0.16
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	0.9	-0.1	0.97	0.96	-0.01
	0.99	0.8	-0.19	0.99	0.96	-0.03	0.99	0.87	-0.12	0.99	0.91	-0.08
	0.98	0.96	-0.02	0.98	0.99	0.01	0.98	0.9	-0.08	0.99	0.92	-0.07
Generic	0.99	0.89	-0.1	0.99	0.99	0.0	0.99	0.86	-0.13	0.95	0.91	-0.04
	0.98	0.86	-0.12	0.98	0.99	0.01	0.98	0.88	-0.1	0.99	0.87	-0.12
	0.98	0.8	-0.18	0.98	0.97	-0.01	0.98	0.7	-0.28	0.98	0.6	-0.38
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	0.87	-0.13	0.96	0.94	-0.02
	0.97	0.93	-0.04	0.97	0.99	0.02	0.97	0.93	-0.04	0.97	0.92	-0.05
	0.98	0.87	-0.11	0.98	0.99	0.01	0.98	0.86	-0.12	0.99	0.95	-0.04
	0.99	0.95	-0.04	0.99	0.98	-0.01	0.99	0.87	-0.12	0.98	0.83	-0.15
	0.95	0.93	-0.02	0.95	0.97	0.02	0.95	0.8	-0.15	0.98	0.85	-0.13
	0.98	0.96	-0.02	0.98	0.99	0.01	0.98	0.82	-0.16	0.99	0.97	-0.02
	0.99	0.76	-0.23	0.99	0.97	-0.02	0.99	0.8	-0.19	0.99	0.71	-0.28
DiCE	0.99	0.95	-0.04	0.99	0.99	0.0	0.99	0.89	-0.1	0.99	0.94	-0.05
	0.93	0.74	-0.19	0.93	0.98	0.05	0.93	0.92	-0.01	1.0	0.98	-0.02
	0.99	0.56	-0.43	0.99	1.0	0.01	0.99	0.72	-0.27	0.98	0.85	-0.13
	0.97	0.91	-0.06	0.97	0.98	0.01	0.97	0.81	-0.16	0.98	0.99	0.01
	0.95	0.87	-0.08	0.95	0.99	0.04	0.95	0.84	-0.11	0.97	0.88	-0.09
	0.95	0.93	-0.02	0.95	0.98	0.03	0.95	0.92	-0.03	0.97	0.93	-0.04
	0.95	0.85	-0.1	0.95	0.99	0.04	0.95	0.8	-0.15	0.98	0.63	-0.35
	0.98	0.96	-0.02	0.98	1.0	0.02	0.98	0.82	-0.16	0.99	0.68	-0.31
	0.98	0.92	-0.06	0.98	0.98	0.0	0.98	0.45	-0.53	1.0	0.92	-0.08
	0.98	0.91	-0.07	0.98	0.99	0.01	0.98	0.77	-0.21	0.99	0.87	-0.12
ClaPROAR	0.97	0.95	-0.02	0.97	0.99	0.02	0.97	0.87	-0.1	0.99	0.85	-0.14
	0.97	0.98	0.01	0.97	0.98	0.01	0.97	0.85	-0.12	0.96	0.96	0.0
	0.99	0.89	-0.1	0.99	0.97	-0.02	0.99	0.6	-0.39	1.0	0.96	-0.04
	1.0	0.93	-0.07	1.0	0.99	-0.01	1.0	0.81	-0.19	0.95	0.87	-0.08
	0.98	0.94	-0.04	0.98	1.0	0.02	0.98	0.75	-0.23	0.98	0.86	-0.12
	0.99	0.88	-0.11	0.99	1.0	0.01	0.99	0.87	-0.12	0.98	0.87	-0.11
	0.98	0.86	-0.12	0.98	0.97	-0.01	0.98	0.83	-0.15	0.99	0.94	-0.05
	0.96	0.95	-0.01	0.96	0.99	0.03	0.96	0.75	-0.21	0.99	0.79	-0.2
	0.98	0.96	-0.02	0.98	0.99	0.01	0.98	0.75	-0.23	0.99	0.93	-0.06
	0.99	0.9	-0.09	0.99	0.99	0.0	0.99	0.77	-0.22	1.0	0.91	-0.09

Tab. 116: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP, experiment 5

F.2.2. Overlapping dataset using Deep ensemble using a MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.98	0.94	-0.04	0.98	0.97	-0.01	1.0	1.0	0.0	0.98	0.97	-0.01
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	0.94	-0.05
	1.0	0.95	-0.05	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.93	-0.07	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.95	-0.05
	0.98	0.96	-0.02	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.94	-0.04	0.98	0.96	-0.02	1.0	1.0	0.0	0.99	0.98	-0.01
	0.96	0.94	-0.02	0.96	0.99	0.03	1.0	1.0	0.0	1.0	0.97	-0.03
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.97	0.94	-0.03	0.97	0.95	-0.02	1.0	1.0	0.0	0.98	0.97	-0.01
	0.98	0.95	-0.03	0.98	0.98	0.0	1.0	1.0	0.0	0.97	0.94	-0.03
REVISE	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	0.97	0.95	-0.02
	0.97	0.95	-0.02	0.97	0.93	-0.04	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.99	0.01	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.97	-0.03
	0.98	0.98	0.0	0.98	0.94	-0.04	1.0	1.0	0.0	0.97	0.97	0.0
	0.99	0.97	-0.02	0.99	0.98	-0.01	1.0	1.0	0.0	0.97	0.96	-0.01
	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.97	-0.02
	0.97	0.95	-0.02	0.97	0.97	0.0	1.0	1.0	0.0	0.98	0.97	-0.01
	0.99	0.97	-0.02	0.99	0.98	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.97	-0.01
	0.97	0.96	-0.01	0.97	0.97	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
ECCo	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.94	-0.05
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.97	0.97	0.0
	0.97	0.97	0.0	0.97	0.97	0.0	1.0	1.0	0.0	0.97	0.97	0.0
	0.97	0.97	0.0	0.97	0.97	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.97	-0.02	0.99	0.98	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.99	0.96	-0.03
Wachter	0.94	1.0	0.06	0.94	1.0	0.06	1.0	1.0	0.0	0.99	0.97	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	0.97	0.97	0.0	0.97	1.0	0.03	1.0	1.0	0.0	0.97	0.97	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.97	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.97	-0.01	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.96	-0.04
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.97	0.97	0.0
Generic	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.98	0.98	0.0
	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.99	0.98	-0.01
	0.96	0.99	0.03	0.96	1.0	0.04	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.97	-0.01	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.97	-0.02
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	0.97	0.97	0.0	0.97	0.99	0.02	1.0	1.0	0.0	0.99	0.99	0.0

	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	0.97	0.97	0.0	0.97	1.0	0.03	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	0.97	0.97	0.0	0.97	1.0	0.03	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.99	0.01	0.98	1.0	0.02	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.98	-0.02
ClaPROAR	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	0.97	0.96	-0.01	0.97	1.0	0.03	1.0	1.0	0.0	0.99	0.99	0.0
	0.97	0.96	-0.01	0.97	0.99	0.02	1.0	1.0	0.0	1.0	0.97	-0.03
	0.97	0.97	0.0	0.97	0.99	0.02	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.96	-0.02
	0.97	0.97	0.0	0.97	1.0	0.03	1.0	1.0	0.0	0.99	0.97	-0.02
	0.97	0.97	0.0	0.97	0.99	0.02	1.0	1.0	0.0	0.96	0.98	0.02
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	1.0	0.0	1.0	0.98	-0.02

Tab. 117: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP and a deep ensemble, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.97	-0.03	1.0	0.98	-0.02	1.0	1.0	0.0	0.949	0.939	-0.01
	0.97	0.97	0.0	0.97	0.97	0.0	1.0	1.0	0.0	0.99	0.97	-0.02
	1.0	0.98	-0.02	1.0	0.97	-0.03	1.0	1.0	0.0	0.99	0.939	-0.051
	0.96	0.97	0.01	0.96	0.949	-0.01	1.0	1.0	0.0	0.97	0.949	-0.02
	0.99	0.96	-0.03	0.99	0.949	-0.04	1.0	1.0	0.0	1.0	0.99	-0.01
	0.96	0.949	-0.01	0.96	0.949	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.97	0.97	0.0	0.97	0.949	-0.02	1.0	1.0	0.0	0.97	0.97	0.0
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	0.96	0.909	-0.051
	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	1.0	0.0	0.949	0.949	0.0
	0.97	0.949	-0.02	0.97	0.949	-0.02	1.0	1.0	0.0	0.99	0.949	-0.04
REVISE	0.98	0.96	-0.02	0.98	0.99	0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	0.949	-0.051	1.0	1.0	0.0	0.97	0.96	-0.01
	1.0	0.96	-0.04	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.949	-0.051	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.949	-0.03	0.98	0.939	-0.04	1.0	1.0	0.0	0.96	0.949	-0.01
	1.0	0.949	-0.051	1.0	0.97	-0.03	1.0	1.0	0.0	0.99	0.96	-0.03
	0.98	0.919	-0.061	0.98	0.96	-0.02	1.0	1.0	0.0	1.0	0.96	-0.04
	1.0	0.97	-0.03	1.0	0.929	-0.071	1.0	1.0	0.0	1.0	0.939	-0.061
	0.98	0.96	-0.02	0.98	0.97	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.96	-0.04	1.0	0.899	-0.101	1.0	1.0	0.0	1.0	0.97	-0.03
ECCo	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.99	0.01	0.98	1.0	0.02	1.0	1.0	0.0	0.98	1.0	0.02
	0.97	0.99	0.02	0.97	0.99	0.02	1.0	1.0	0.0	0.99	0.96	-0.03
	1.0	0.96	-0.04	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.97	-0.03
	0.97	0.99	0.02	0.97	0.99	0.02	1.0	1.0	0.0	0.99	0.97	-0.02
	0.949	0.98	0.03	0.949	0.97	0.02	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.97	-0.03	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	0.929	0.97	0.04
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	1.0	0.0	0.97	0.97	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.96	-0.04

	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.949	0.98	0.03
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	0.97	1.0	0.03
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.97	-0.03
	0.929	0.98	0.051	0.929	1.0	0.071	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.949	0.97	0.02
Generic	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.98	0.99	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.99	0.97	-0.02	0.99	1.0	0.01	1.0	1.0	0.0	0.98	0.98	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01
DiCE	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	0.98	0.96	-0.02
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	0.96	0.97	0.01
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.97	-0.03
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.99	0.99	0.0
	0.99	0.96	-0.03	0.99	0.98	-0.01	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.949	0.99	0.04	0.949	0.99	0.04	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.97	-0.02	0.99	0.99	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	0.97	0.98	0.01
	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.97	1.0	0.03	0.97	1.0	0.03	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0	0.97	0.99	0.02
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.929	0.939	0.01
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.98	-0.01

Tab. 118: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP and a deep ensemble, experiment 2

	all			all counter			half			
Generator	d	e	diff	d	e	diff	d	e	diff	c
Generator	sim acc d	sim acc e	diff	sim acc d	sim acc e	diff	sim acc d	sim acc e	diff	sim a
Gravitational	0.99	0.97	-0.02	0.99	0.97	-0.02	1.0	1.0	0.0	0.9
	1.0	0.99	-0.01	1.0	0.98	-0.02	1.0	1.0	0.0	0.9
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	1.
	0.98	0.98	0.0	0.98	0.97	-0.01	1.0	1.0	0.0	1.
	0.99	0.96	-0.03	0.99	0.98	-0.01	1.0	1.0	0.0	1.
	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.9
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.9
	0.99	0.97	-0.02	0.99	0.96	-0.03	1.0	1.0	0.0	1.
	0.98	0.96	-0.02	0.98	0.97	-0.01	1.0	1.0	0.0	0.9

	0.99	0.96	-0.03	0.99	0.97	-0.02	1.0	1.0	0.0	1.
REVISE	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	1.
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.9
	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	0.99	-0.01	0.9
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.99	-0.01	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	1.
	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	1.0	0.0	0.9
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	0.99	-0.01	0.9
	0.98	0.96	-0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.97	0.97	0.0	0.97	0.97	0.0	1.0	1.0	0.0	0.9
ECCo	0.98	1.0	0.02	0.98	0.98	0.0	1.0	1.0	0.0	1.
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.9
	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.9
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.97	0.99	0.02	0.97	1.0	0.03	1.0	1.0	0.0	0.9
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.9
	0.97	0.98	0.01	0.97	0.98	0.01	1.0	1.0	0.0	0.9
Wachter	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.
	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.9
	0.97	1.0	0.03	0.97	1.0	0.03	1.0	1.0	0.0	1.
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.9
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.9
	0.97	0.99	0.02	0.97	0.99	0.02	1.0	1.0	0.0	1.
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.9
Generic	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.9
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	0.99	-0.01	1.
	0.97	0.99	0.02	0.97	1.0	0.03	1.0	1.0	0.0	1.
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.9
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.9
DiCE	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	1.
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	0.99	-0.01	0.9
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	1.
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.9
	0.97	0.99	0.02	0.97	0.98	0.01	1.0	0.99	-0.01	1.
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	0.99	-0.01	0.9
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	0.99	-0.01	1.
ClaPROAR	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.9
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.9
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.9
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.
	0.94	0.98	0.04	0.94	1.0	0.06	1.0	1.0	0.0	0.9

	0.97	1.0	0.03	0.97	1.0	0.03	1.0	1.0	0.0	0.9
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	1.
	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	1.0	0.0	0.9
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.9
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	0.99	-0.01	0.9

Tab. 119: The simulation accuracy of models d and e when using different ways to include counterfactual explanation du
training for the overlapping dataset using a MLP and a deep ensemble, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.97	0.99	0.02	0.97	0.99	0.02	1.0	0.99	-0.01	0.99	1.0	0.01
	0.99	0.97	-0.02	0.99	0.99	0.0	1.0	1.0	0.0	0.96	0.97	0.01
	0.98	0.95	-0.03	0.98	0.97	-0.01	1.0	0.99	-0.01	0.96	0.96	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	0.98	-0.02	1.0	1.0	0.0	0.98	0.98	0.0
	0.98	0.96	-0.02	0.98	0.99	0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	0.98	1.0	0.02	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
REVISE	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.98	1.0	0.02
	0.99	0.96	-0.03	0.99	0.98	-0.01	1.0	1.0	0.0	0.97	0.99	0.02
	0.97	0.98	0.01	0.97	0.98	0.01	1.0	1.0	0.0	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	0.98	-0.01	1.0	1.0	0.0	1.0	0.97	-0.03
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.97	-0.02
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.97	0.99	0.02
	0.97	1.0	0.03	0.97	1.0	0.03	1.0	1.0	0.0	0.97	1.0	0.03
	0.96	0.99	0.03	0.96	0.98	0.02	1.0	1.0	0.0	0.98	0.97	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01
ECCo	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	0.96	-0.04	1.0	1.0	0.0	0.99	0.99	0.0
	0.99	0.97	-0.02	0.99	0.99	0.0	1.0	0.98	-0.02	0.98	0.99	0.01
	0.99	1.0	0.01	0.99	0.98	-0.01	1.0	0.99	-0.01	0.98	0.98	0.0
	0.97	0.99	0.02	0.97	0.98	0.01	1.0	1.0	0.0	0.99	1.0	0.01
	0.97	0.99	0.02	0.97	0.99	0.02	1.0	1.0	0.0	0.98	0.98	0.0
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	0.95	0.99	0.04	0.95	0.98	0.03	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.97	0.97	0.0
Wachter	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.98	-0.02
	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	1.0	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.95	0.98	0.03	0.95	0.99	0.04	1.0	1.0	0.0	0.97	0.97	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	0.97	1.0	0.03
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	0.98	-0.02	1.0	1.0	0.0	0.98	0.99	0.01
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.97	0.99	0.02
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	0.97	-0.02
	0.97	0.99	0.02	0.97	0.98	0.01	1.0	1.0	0.0	0.97	0.98	0.01
Generic	0.97	0.98	0.01	0.97	0.99	0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.99	0.0	0.99	0.97	-0.02	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	0.97	0.99	0.02	0.97	0.98	0.01	1.0	1.0	0.0	1.0	0.99	-0.01

	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.97	0.99	0.02
	1.0	0.97	-0.03	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.99	0.01	0.98	0.99	0.01	1.0	0.99	-0.01	0.99	0.98	-0.01
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.97	1.0	0.03
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.98	0.99	0.01
DiCE	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	0.99	0.0
	0.97	1.0	0.03	0.97	0.98	0.01	1.0	1.0	0.0	0.97	0.99	0.02
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.97	-0.01
	0.97	0.99	0.02	0.97	0.98	0.01	1.0	0.99	-0.01	0.97	0.97	0.0
	0.97	1.0	0.03	0.97	0.99	0.02	1.0	1.0	0.0	0.97	1.0	0.03
	0.97	0.99	0.02	0.97	0.96	-0.01	1.0	0.98	-0.02	1.0	0.99	-0.01
	0.99	1.0	0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.96	1.0	0.04
	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	0.99	-0.01	0.99	0.99	0.0
ClaPROAR	0.99	0.99	0.0	0.99	0.99	0.0	1.0	0.99	-0.01	0.98	1.0	0.02
	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	1.0	0.0	0.98	0.99	0.01
	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.97	0.98	0.01
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.99	0.99	0.0
	0.98	0.98	0.0	0.98	0.97	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	0.97	-0.01	1.0	0.98	-0.02	0.99	0.99	0.0
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.94	0.96	0.02
	0.99	1.0	0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.99	0.99	0.0

Tab. 120: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP and a deep ensemble, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.97	0.98	0.01	0.97	0.97	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	0.95	-0.04	1.0	1.0	0.0	0.99	0.94	-0.05
	0.97	0.96	-0.01	0.97	0.97	0.0	1.0	1.0	0.0	0.96	0.97	0.01
	0.99	0.97	-0.02	0.99	0.97	-0.02	1.0	1.0	0.0	0.99	0.93	-0.06
	0.99	0.98	-0.01	0.99	0.95	-0.04	1.0	1.0	0.0	0.98	0.94	-0.04
	0.97	0.95	-0.02	0.97	0.94	-0.03	1.0	1.0	0.0	0.99	0.96	-0.03
	0.97	0.96	-0.01	0.97	0.94	-0.03	1.0	1.0	0.0	0.97	0.97	0.0
	0.97	0.98	0.01	0.97	0.97	0.0	1.0	1.0	0.0	0.99	0.97	-0.02
	0.99	0.98	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0	0.98	0.99	0.01
	0.98	0.97	-0.01	0.98	0.96	-0.02	1.0	1.0	0.0	0.99	0.98	-0.01
REVISE	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	1.0	0.02	0.98	0.96	-0.02	1.0	1.0	0.0	0.97	0.97	0.0
	0.99	0.98	-0.01	0.99	0.96	-0.03	1.0	1.0	0.0	0.97	0.97	0.0
	0.98	0.98	0.0	0.98	0.96	-0.02	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	0.96	0.9	-0.06
	0.97	0.98	0.01	0.97	0.95	-0.02	1.0	1.0	0.0	0.97	0.96	-0.01
	0.99	1.0	0.01	0.99	0.92	-0.07	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.96	-0.03
	0.98	0.96	-0.02	0.98	0.98	0.0	1.0	1.0	0.0	0.97	0.98	0.01
	0.98	0.98	0.0	0.98	0.96	-0.02	1.0	1.0	0.0	1.0	0.92	-0.08
ECCo	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.96	0.96	0.0
	0.95	0.95	0.0	0.95	0.99	0.04	1.0	1.0	0.0	0.97	0.96	-0.01
	0.96	0.99	0.03	0.96	0.97	0.01	1.0	1.0	0.0	0.97	0.96	-0.01

	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	0.97	0.99	0.02
	0.98	0.97	-0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.95	-0.04
	0.99	0.97	-0.02	0.99	1.0	0.01	1.0	1.0	0.0	0.97	0.95	-0.02
	0.97	0.97	0.0	0.97	0.99	0.02	1.0	1.0	0.0	0.94	0.98	0.04
	0.97	0.99	0.02	0.97	0.98	0.01	1.0	1.0	0.0	0.99	0.99	0.0
	0.97	0.96	-0.01	0.97	0.99	0.02	1.0	1.0	0.0	1.0	0.96	-0.04
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.97	0.98	0.01
Wachter	0.95	0.98	0.03	0.95	0.98	0.03	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.98	0.94	-0.04
	0.97	0.98	0.01	0.97	0.99	0.02	1.0	1.0	0.0	0.97	0.99	0.02
	0.97	0.98	0.01	0.97	0.98	0.01	1.0	1.0	0.0	0.98	0.98	0.0
	0.96	0.98	0.02	0.96	0.98	0.02	1.0	1.0	0.0	0.98	0.96	-0.02
	0.97	0.97	0.0	0.97	0.99	0.02	1.0	1.0	0.0	0.97	0.99	0.02
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.98	1.0	0.02
	0.98	0.96	-0.02	0.98	1.0	0.02	1.0	1.0	0.0	0.97	0.94	-0.03
	0.99	0.97	-0.02	0.99	0.98	-0.01	1.0	1.0	0.0	0.96	0.96	0.0
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	1.0	0.0	1.0	1.0	0.0
Generic	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.98	0.97	-0.01
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	0.97	0.99	0.02
	0.97	0.97	0.0	0.97	1.0	0.03	1.0	1.0	0.0	0.95	0.98	0.03
	0.97	0.98	0.01	0.97	0.98	0.01	1.0	1.0	0.0	0.97	0.98	0.01
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.98	0.97	-0.01
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.97	0.98	0.01
	0.97	0.98	0.01	0.97	0.98	0.01	1.0	1.0	0.0	0.96	0.99	0.03
	0.98	0.97	-0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.98	0.96	-0.02
	0.98	0.97	-0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.99	0.0
DiCE	0.96	0.98	0.02	0.96	0.97	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.96	-0.02	0.98	1.0	0.02	1.0	1.0	0.0	0.94	0.99	0.05
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.98	0.97	-0.01
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.98	0.96	-0.02
	0.97	0.96	-0.01	0.97	0.97	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	0.93	0.97	0.04	0.93	0.98	0.05	1.0	1.0	0.0	0.98	0.97	-0.01
	0.96	0.97	0.01	0.96	0.98	0.02	1.0	1.0	0.0	0.97	0.94	-0.03
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.97	0.98	0.01
	0.96	0.96	0.0	0.96	0.97	0.01	1.0	1.0	0.0	0.98	0.99	0.01
ClaPROAR	0.98	0.96	-0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.94	0.99	0.05
	0.99	0.97	-0.02	0.99	0.99	0.0	1.0	1.0	0.0	0.96	0.98	0.02
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	1.0	0.0	0.99	0.97	-0.02
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.95	-0.04
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0	0.95	0.97	0.02
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.97	0.98	0.01
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	1.0	0.0	0.95	0.97	0.02
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	0.97	0.98	0.01	0.97	0.97	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.96	-0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.98	0.96	-0.02

Tab. 121: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a MLP and a deep ensemble, experiment 5

F.2.3. Overlapping dataset using Deep ensemble

	all			all counter			half			random		
	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.98	-0.01	0.99	0.98	-0.01

	0.95	0.99	0.04	0.95	1.0	0.05	0.95	0.99	0.04	0.99	0.96	-0.03
	0.99	0.95	-0.04	0.99	0.98	-0.01	0.99	0.96	-0.03	0.99	0.99	0.0
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	0.96	-0.02	0.98	0.98	0.0
	0.99	0.96	-0.03	0.99	0.98	-0.01	0.99	0.97	-0.02	0.98	0.95	-0.03
	0.98	0.95	-0.03	0.98	0.99	0.01	0.98	0.96	-0.02	0.98	0.98	0.0
	0.99	0.96	-0.03	0.99	0.94	-0.05	0.99	0.96	-0.03	0.99	0.97	-0.02
	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	0.96	-0.04	0.98	0.96	-0.02
	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.98	-0.01
	0.99	0.97	-0.02	0.99	0.98	-0.01	0.99	0.97	-0.02	0.99	0.99	0.0
ECCo	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.98	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.97	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.96	-0.03	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.97	-0.02	0.98	0.97	-0.01
	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.98	-0.01	0.99	0.97	-0.02
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.98	0.0	0.98	0.98	0.0
	0.97	1.0	0.03	0.97	0.99	0.02	0.97	1.0	0.03	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	0.98	0.98	0.0
Wachter	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.96	-0.03	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.98	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.98	0.0
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.98	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.95	1.0	0.05
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.98	0.0	0.99	0.99	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.98	0.0	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.98	0.0	0.98	0.99	0.01
	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.98	0.0
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.98	0.0	0.98	0.99	0.01
DiCE	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.98	0.98	0.0
	0.96	1.0	0.04	0.96	0.99	0.03	0.96	1.0	0.04	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.98	0.0	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.99	0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0
ClaPROAR	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.98	-0.01	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.98	0.98	0.0
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.97	-0.01	0.94	1.0	0.06
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.98	0.0	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.98	0.0	0.99	0.99	0.0

	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.97	-0.02
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01

Tab. 122: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a deep ensemble, experiment 1

	all			all counter			half			random		
	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.99	0.96	-0.03	0.99	0.949	-0.04	0.99	0.96	-0.03	0.97	0.97	0.0
	0.99	1.0	0.01	0.99	0.98	-0.01	0.98	0.98	0.0	0.98	0.97	-0.01
	0.99	0.98	-0.01	0.99	0.98	-0.01	0.99	0.98	-0.01	0.98	0.97	-0.01
	0.99	0.99	0.0	0.99	0.98	-0.01	0.97	0.96	-0.01	1.0	0.99	-0.01
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	0.99	0.01	0.96	0.98	0.02
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	0.929	-0.071	0.99	0.949	-0.04
	0.98	0.97	-0.01	0.98	0.96	-0.02	0.99	0.97	-0.02	0.99	0.99	0.0
	0.97	0.99	0.02	0.97	0.99	0.02	0.99	1.0	0.01	1.0	0.98	-0.02
	0.98	0.98	0.0	0.98	0.929	-0.051	0.97	0.98	0.01	0.98	0.929	-0.051
	0.99	0.99	0.0	0.99	0.99	0.0	0.97	0.96	-0.01	0.97	0.97	0.0
ECCo	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	1.0	0.01	0.99	0.99	0.0
	0.96	0.99	0.03	0.96	0.99	0.03	0.98	0.99	0.01	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.99	0.0	0.99	0.99	0.0
	0.97	0.98	0.01	0.97	1.0	0.03	0.98	0.98	0.0	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.99	0.0	0.949	0.99	0.04
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.98	-0.01	0.99	1.0	0.01
	0.97	0.99	0.02	0.97	0.99	0.02	1.0	0.99	-0.01	0.98	0.99	0.01
	0.97	1.0	0.03	0.97	0.99	0.02	0.98	0.98	0.0	0.98	1.0	0.02
	0.97	0.99	0.02	0.97	1.0	0.03	0.99	0.99	0.0	0.98	0.99	0.01
	0.949	0.99	0.04	0.949	1.0	0.051	0.98	0.96	-0.02	0.98	0.99	0.01
Wachter	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.98	1.0	0.02
	0.98	0.99	0.01	0.98	1.0	0.02	0.99	0.98	-0.01	0.97	0.98	0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.99	0.0	0.99	0.99	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.97	0.98	0.01	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.99	0.01	0.97	1.0	0.03
	0.98	0.99	0.01	0.98	0.99	0.01	0.949	0.99	0.04	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	0.949	1.0	0.051	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.97	-0.01	0.97	0.99	0.02
Generic	0.99	0.99	0.0	0.99	1.0	0.01	0.98	1.0	0.02	1.0	0.97	-0.03
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.97	-0.02	0.98	0.99	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	1.0	0.02	0.99	0.99	0.0
	0.98	0.99	0.01	0.98	1.0	0.02	0.99	0.99	0.0	0.99	0.98	-0.01
	0.97	0.99	0.02	0.97	1.0	0.03	1.0	1.0	0.0	0.99	0.99	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	1.0	0.02	0.98	0.949	-0.03	0.97	1.0	0.03
	0.98	0.99	0.01	0.98	0.99	0.01	0.98	0.98	0.0	0.97	0.98	0.01
	0.97	0.99	0.02	0.97	1.0	0.03	0.97	0.99	0.02	0.99	0.98	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	0.98	0.99	0.01
DiCE	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	0.99	1.0	0.01
	0.96	0.99	0.03	0.96	0.99	0.03	0.99	1.0	0.01	0.98	0.98	0.0
	0.97	0.99	0.02	0.97	1.0	0.03	0.99	0.99	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	0.99	-0.01	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	0.99	0.0	0.98	0.99	0.01	0.98	0.98	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.98	0.0	0.97	0.98	0.01
	0.98	0.99	0.01	0.98	1.0	0.02	0.99	0.98	-0.01	0.98	0.99	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	0.98	0.97	-0.01	0.99	0.97	-0.02
ClaPROAR	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.99	0.0	0.98	0.98	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	1.0	0.02	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	0.97	0.99	0.02	0.97	0.99	0.02	0.97	1.0	0.03	1.0	1.0	0.0
	0.97	1.0	0.03	0.97	0.99	0.02	0.98	0.98	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.97	0.98	0.01	1.0	1.0	0.0
	0.96	0.99	0.03	0.96	0.99	0.03	0.98	1.0	0.02	0.97	0.96	-0.01

Tab. 123: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a deep ensemble, experiment 2

	all			all counter			half			random		
	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	1.0	0.01	0.99	0.98	-0.01
	0.99	0.96	-0.03	0.99	0.99	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.99	0.98	-0.01
	0.98	0.97	-0.01	0.98	0.99	0.01	0.99	0.98	-0.01	0.99	0.98	-0.01
	0.98	0.97	-0.01	0.98	0.96	-0.02	0.99	0.91	-0.08	1.0	0.96	-0.04
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	0.98	-0.01
	0.98	0.97	-0.01	0.98	0.96	-0.02	0.99	0.92	-0.07	0.99	0.99	0.0
	0.99	0.97	-0.02	0.99	0.99	0.0	0.99	0.96	-0.03	0.99	1.0	0.01
	0.98	0.97	-0.01	0.98	0.98	0.0	1.0	0.96	-0.04	0.99	0.96	-0.03
	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.98	-0.01
ECCo	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.97	-0.02	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0	0.99	0.98	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.96	-0.03	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.99	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	0.99	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.98	-0.01	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.99	1.0	0.01
Wachter	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01	0.99	0.99	0.0
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.9	-0.09
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	1.0	0.0
Generic	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	1.0	0.99	-0.01
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.97	-0.02
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0

	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	1.0	0.99	-0.01
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.97	-0.02	1.0	0.99	-0.01
	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.98	-0.01	0.99	0.99	0.0
DiCE	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.99	0.0	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.97	0.99	0.02
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.99	0.01	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	0.99	0.01	0.99	0.99	0.0	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.97	-0.02	0.99	0.98	-0.01
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.98	1.0	0.02
	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	0.99	0.0	1.0	0.99	-0.01
ClaPROAR	0.99	1.0	0.01	0.99	0.99	0.0	0.98	0.98	0.0	0.98	0.97	-0.01
	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.98	-0.01	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.97	-0.03	1.0	0.99	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	0.99	0.01	0.99	1.0	0.01	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.98	0.0	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	1.0	0.99	-0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01

Tab. 124: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a deep ensemble, experiment 3

	all			all counter			half			random		
	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	1.0	1.0	0.0
	0.99	0.97	-0.02	0.99	0.99	0.0	0.99	0.97	-0.02	0.98	0.96	-0.02
	0.98	0.97	-0.01	0.98	1.0	0.02	0.99	0.96	-0.03	0.98	0.99	0.01
	0.99	0.97	-0.02	0.99	0.98	-0.01	0.99	0.97	-0.02	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	0.98	-0.01	0.99	0.98	-0.01	0.98	0.97	-0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.99	0.0
	0.96	0.98	0.02	0.96	1.0	0.04	0.97	0.96	-0.01	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	0.99	0.01	0.99	0.99	0.0	1.0	0.97	-0.03
	0.99	0.99	0.0	0.99	0.99	0.0	0.98	0.98	0.0	0.96	0.98	0.02
ECCo	0.96	0.99	0.03	0.96	1.0	0.04	0.96	0.99	0.03	0.98	0.98	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.98	-0.01	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.97	0.99	0.02
	0.98	1.0	0.02	0.98	1.0	0.02	0.98	0.95	-0.03	0.98	0.98	0.0
	0.98	0.97	-0.01	0.98	1.0	0.02	1.0	0.97	-0.03	0.98	0.99	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.97	0.99	0.02
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.97	-0.02	0.98	0.99	0.01
	0.98	1.0	0.02	0.98	1.0	0.02	0.98	0.98	0.0	0.98	0.99	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.98	-0.01	0.99	1.0	0.01
Wachter	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.99	0.0	0.99	1.0	0.01
	0.98	0.99	0.01	0.98	1.0	0.02	0.99	0.99	0.0	0.99	0.99	0.0
	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.98	-0.01	0.98	0.98	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.99	-0.01	1.0	1.0	0.0

	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	0.99	0.01	0.98	0.99	0.01	0.97	0.99	0.02
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	0.99	0.01	0.99	0.99	0.0
	0.97	0.99	0.02	0.97	0.99	0.02	0.99	0.99	0.0	0.96	0.98	0.02
	0.99	0.99	0.0	0.99	0.99	0.0	0.97	0.99	0.02	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.99	0.01	0.99	0.99	0.0
Generic	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.98	0.0
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.99	0.0
	0.99	0.98	-0.01	0.99	0.99	0.0	0.99	0.98	-0.01	0.99	0.99	0.0
	0.97	1.0	0.03	0.97	1.0	0.03	0.96	0.96	0.0	0.98	0.99	0.01
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.99	0.0	0.98	0.99	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.97	-0.02	0.99	1.0	0.01
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	1.0	0.02	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.98	-0.01	0.98	0.99	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	0.99	0.99	0.0	0.99	1.0	0.01
DiCE	0.98	0.99	0.01	0.98	0.99	0.01	0.99	1.0	0.01	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.96	0.99	0.03	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01	0.99	0.99	0.0
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.99	0.0	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	0.98	0.0	0.99	0.98	-0.01	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.98	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.99	0.0	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.97	1.0	0.03	0.99	1.0	0.01
	0.96	0.99	0.03	0.96	1.0	0.04	0.99	0.98	-0.01	0.97	0.99	0.02
	0.95	0.99	0.04	0.95	0.99	0.04	0.99	0.98	-0.01	0.98	0.99	0.01
ClaPROAR	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.98	0.0	0.98	0.98	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.97	-0.01	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.99	0.0	0.98	0.99	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.99	0.0	0.95	0.99	0.04
	0.95	0.99	0.04	0.95	0.99	0.04	0.98	0.99	0.01	0.99	0.99	0.0
	0.98	0.99	0.01	0.98	1.0	0.02	0.99	1.0	0.01	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	0.99	0.01	0.99	0.98	-0.01	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.95	0.98	0.03	0.99	0.99	0.0

Tab. 125: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a deep ensemble, experiment 4

	all			all counter			half			random		
	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.99	0.96	-0.03	0.99	0.97	-0.02	0.98	0.94	-0.04	1.0	0.95	-0.05
	0.98	1.0	0.02	0.98	0.99	0.01	0.95	0.99	0.04	0.99	0.98	-0.01
	0.98	0.97	-0.01	0.98	0.96	-0.02	0.99	0.96	-0.03	0.99	0.97	-0.02
	0.99	0.99	0.0	0.99	0.98	-0.01	0.98	0.95	-0.03	0.98	0.95	-0.03
	0.99	0.97	-0.02	0.99	0.97	-0.02	0.93	0.94	0.01	0.99	0.98	-0.01
	1.0	0.96	-0.04	1.0	0.97	-0.03	0.98	0.96	-0.02	0.98	0.95	-0.03
	0.94	0.97	0.03	0.94	0.94	0.0	0.99	0.96	-0.03	0.99	1.0	0.01
	1.0	0.97	-0.03	1.0	0.98	-0.02	0.98	0.92	-0.06	0.99	0.99	0.0
	1.0	0.96	-0.04	1.0	0.99	-0.01	0.94	0.92	-0.02	1.0	0.96	-0.04
	0.98	0.96	-0.02	0.98	0.96	-0.02	0.99	0.98	-0.01	0.99	0.96	-0.03
ECCo	0.99	0.96	-0.03	0.99	1.0	0.01	0.99	0.97	-0.02	0.99	0.97	-0.02
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.98	-0.01	1.0	0.97	-0.03
	0.97	1.0	0.03	0.97	1.0	0.03	0.98	0.98	0.0	0.97	0.98	0.01

	0.98	0.96	-0.02	0.98	1.0	0.02	0.96	0.99	0.03	0.98	0.97	-0.01
	0.96	0.97	0.01	0.96	1.0	0.04	0.98	0.96	-0.02	0.98	0.96	-0.02
	0.99	0.96	-0.03	0.99	1.0	0.01	1.0	0.98	-0.02	0.99	0.97	-0.02
	1.0	0.97	-0.03	1.0	1.0	0.0	0.99	0.96	-0.03	1.0	0.96	-0.04
	0.99	0.96	-0.03	0.99	1.0	0.01	0.96	0.95	-0.01	1.0	0.99	-0.01
	0.97	0.99	0.02	0.97	1.0	0.03	0.96	0.97	0.01	1.0	0.99	-0.01
	0.98	0.99	0.01	0.98	1.0	0.02	0.96	1.0	0.04	0.98	0.98	0.0
Wachter	0.97	0.98	0.01	0.97	1.0	0.03	0.99	0.97	-0.02	0.99	0.96	-0.03
	0.98	0.97	-0.01	0.98	1.0	0.02	0.96	0.97	0.01	0.98	0.99	0.01
	0.96	0.98	0.02	0.96	1.0	0.04	0.98	0.96	-0.02	0.99	0.96	-0.03
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.97	-0.01	0.94	0.98	0.04
	0.99	0.98	-0.01	0.99	1.0	0.01	0.98	0.98	0.0	0.99	0.98	-0.01
	0.96	1.0	0.04	0.96	1.0	0.04	0.96	0.98	0.02	0.98	0.95	-0.03
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	1.0	0.02	0.99	0.99	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	0.99	-0.01	0.99	0.99	0.0
	0.99	0.98	-0.01	0.99	1.0	0.01	0.96	0.98	0.02	0.98	1.0	0.02
	0.97	1.0	0.03	0.97	1.0	0.03	0.98	0.99	0.01	0.99	0.99	0.0
Generic	0.96	0.98	0.02	0.96	1.0	0.04	0.99	1.0	0.01	0.98	0.99	0.01
	0.98	1.0	0.02	0.98	1.0	0.02	0.99	0.97	-0.02	1.0	0.96	-0.04
	0.98	0.99	0.01	0.98	1.0	0.02	0.99	0.98	-0.01	0.99	0.96	-0.03
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.99	0.01	0.98	0.99	0.01
	0.98	1.0	0.02	0.98	1.0	0.02	0.97	0.96	-0.01	0.96	0.98	0.02
	0.99	0.96	-0.03	0.99	1.0	0.01	0.98	0.99	0.01	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.99	0.95	-0.04	0.96	0.99	0.03
	0.99	0.97	-0.02	0.99	1.0	0.01	0.98	0.99	0.01	0.98	0.95	-0.03
	0.99	0.97	-0.02	0.99	1.0	0.01	0.97	1.0	0.03	0.98	0.97	-0.01
	0.98	0.99	0.01	0.98	1.0	0.02	1.0	0.99	-0.01	0.99	0.96	-0.03
DiCE	0.98	0.99	0.01	0.98	1.0	0.02	0.99	0.99	0.0	0.99	0.99	0.0
	0.99	0.97	-0.02	0.99	1.0	0.01	0.97	0.99	0.02	0.98	0.99	0.01
	0.96	0.98	0.02	0.96	1.0	0.04	0.99	0.98	-0.01	0.98	0.96	-0.02
	0.99	0.99	0.0	0.99	1.0	0.01	0.94	0.96	0.02	0.99	1.0	0.01
	0.98	0.97	-0.01	0.98	1.0	0.02	0.99	0.99	0.0	0.99	0.99	0.0
	0.99	0.97	-0.02	0.99	1.0	0.01	0.97	0.97	0.0	0.98	0.98	0.0
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.98	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.96	0.96	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.98	-0.01	0.98	0.94	-0.04
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.98	-0.01	0.97	0.98	0.01
ClaPROAR	0.99	0.96	-0.03	0.99	1.0	0.01	0.97	0.98	0.01	0.97	0.97	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.98	0.0	0.95	0.98	0.03
	0.99	0.98	-0.01	0.99	1.0	0.01	0.99	0.97	-0.02	0.98	1.0	0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.97	-0.01	0.94	0.98	0.04
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	0.97	-0.03	0.99	1.0	0.01
	0.99	0.97	-0.02	0.99	1.0	0.01	0.99	0.99	0.0	1.0	0.99	-0.01
	0.96	0.98	0.02	0.96	1.0	0.04	0.96	0.99	0.03	0.98	0.97	-0.01
	0.97	0.97	0.0	0.97	1.0	0.03	0.99	0.98	-0.01	1.0	0.98	-0.02
	0.98	1.0	0.02	0.98	1.0	0.02	0.99	0.99	0.0	0.97	1.0	0.03
	0.99	0.97	-0.02	0.99	1.0	0.01	0.97	0.95	-0.02	0.96	0.98	0.02

Tab. 126: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the overlapping dataset using a deep ensemble, experiment 5

F.2.4. Blobs dataset using MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.84	-0.16	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.59	-0.41	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.55	-0.45	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.93	-0.07	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.52	-0.48	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 127: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.808	-0.192	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.566	-0.434	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.525	-0.475	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.606	-0.394	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.879	-0.121	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.657	-0.343	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.566	-0.434	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 128: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.98	-0.02	1.0	1.0	0.0	0.98	0.97	-0.01	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.98	-0.02
	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	0.98	-0.02	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	0.98	0.97	-0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	0.98	0.98	0.0	1.0	0.97	-0.03
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	0.98	-0.02
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.98	-0.02	1.0	1.0	0.0
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	1.0	0.99	-0.01
REVISE	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.99	0.01	1.0	0.99	-0.01

	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	0.99	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.98	-0.01	1.0	1.0	0.0
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
ECCo	1.0	0.98	-0.02	1.0	0.8	-0.2	0.98	0.96	-0.02	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.98	-0.02	0.99	1.0	0.01	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.65	-0.35	1.0	1.0	0.0	1.0	0.98	-0.02
	0.98	0.97	-0.01	0.98	0.47	-0.51	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.83	-0.17	0.99	0.98	-0.01	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.76	-0.24	0.99	0.97	-0.02	0.98	1.0	0.02
	1.0	0.98	-0.02	1.0	0.89	-0.11	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.82	-0.18	1.0	0.97	-0.03	1.0	0.99	-0.01
	0.99	0.97	-0.02	0.99	0.97	-0.02	1.0	0.99	-0.01	0.98	0.98	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.98	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	0.98	0.98	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
Generic	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.98	-0.02
	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.98	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	0.99	0.98	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0
DiCE	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01
ClaPROAR	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	0.98	-0.02	1.0	1.0	0.0
	0.99	0.98	-0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.99	-0.01	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01

Tab. 129: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	0.99	1.0	0.01	0.99	0.99	0.0	0.98	0.98	0.0	0.99	0.99	0.0
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	0.99	0.01	1.0	0.99	-0.01
	0.99	1.0	0.01	0.99	0.99	0.0	0.99	0.98	-0.01	1.0	0.99	-0.01
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.97	-0.02	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	0.99	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	0.98	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	1.0	0.01	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	0.99	0.0	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.98	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0
ECCo	0.99	1.0	0.01	0.99	0.94	-0.05	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	0.97	-0.03	0.98	0.98	0.0	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	0.95	-0.04	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	0.82	-0.18	0.98	1.0	0.02	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	0.93	-0.07	0.98	0.99	0.01	0.98	1.0	0.02
	0.98	0.98	0.0	0.98	0.97	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02	0.99	0.96	-0.03
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	1.0	0.01	0.99	0.99	0.0
	0.98	1.0	0.02	0.98	1.0	0.02	0.98	0.98	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	0.99	0.01	0.98	0.99	0.01	0.99	1.0	0.01	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02	1.0	0.97	-0.03
Generic	0.99	1.0	0.01	0.99	1.0	0.01	0.98	1.0	0.02	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.99	0.98	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.97	-0.02	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	0.99	0.98	-0.01	0.99	1.0	0.01

	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01	1.0	0.99	-0.01
DiCE	0.99	1.0	0.01	0.99	1.0	0.01	0.98	1.0	0.02	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	0.98	0.99	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	1.0	0.02	0.98	0.99	0.01
	0.99	0.99	0.0	0.99	1.0	0.01	0.98	0.98	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.98	1.0	0.02
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	0.98	0.99	0.01
	0.99	0.98	-0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	0.98	0.99	0.01	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	0.99	0.0	0.99	1.0	0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.97	-0.03	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	0.98	1.0	0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	1.0	0.01	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0

Tab. 130: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.91	-0.09	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.93	-0.07	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.5	-0.5	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.93	-0.07	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.56	-0.44	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.56	-0.44	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	0.6	-0.4	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.65	-0.35	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 131: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP, experiment 5

F.2.5. Blobs dataset using Deep ensemble using a MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.82	-0.18	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 132: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP and a deep ensamble, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.949	-0.051	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 133: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP and a deep ensemble, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.98	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.98	-0.02
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.97	-0.03
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.97	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.98	0.0	1.0	0.98	-0.02
REVISE	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.97	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.98	-0.02	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.98	-0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.98	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	0.98	-0.02

ECCo	1.0	0.98	-0.02	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	1.0	0.99	-0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	1.0	0.02	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	1.0	0.02	0.99	0.99	0.0	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
ClaPROAR	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	1.0	0.01	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	0.99	1.0	0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02

Tab. 134: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP and a deep ensemble, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	1.0	0.01	0.98	0.98	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.97	0.99	0.02
	0.98	0.98	0.0	0.98	0.99	0.01	0.99	1.0	0.01	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.99	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.98	0.98	0.0
REVISE	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.98	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	0.99	1.0	0.01
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.97	-0.02	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.97	-0.03	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	0.94	-0.06	0.98	0.98	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.97	-0.03	0.98	1.0	0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	0.99	0.98	-0.01	0.99	0.87	-0.12	0.99	0.99	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	0.99	-0.01	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.97	-0.01
	0.98	1.0	0.02	0.98	0.98	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.98	1.0	0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.97	-0.03	0.98	1.0	0.02	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	0.98	1.0	0.02	0.99	1.0	0.01
Generic	0.98	0.99	0.01	0.98	0.97	-0.01	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.99	0.01
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	0.98	-0.01	0.98	1.0	0.02	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01	0.99	1.0	0.01
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	0.97	-0.01	0.99	1.0	0.01	0.98	0.97	-0.01
DiCE	1.0	1.0	0.0	1.0	0.97	-0.03	0.98	1.0	0.02	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.98	1.0	0.02	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	1.0	0.99	-0.01

	0.98	1.0	0.02	0.98	0.98	0.0	0.98	0.98	0.0	0.99	0.99	0.0
	0.98	1.0	0.02	0.98	0.97	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	0.97	-0.02	1.0	1.0	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.97	-0.03	0.99	1.0	0.01	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	1.0	0.02	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
ClaPROAR	0.99	1.0	0.01	0.99	0.96	-0.03	0.98	1.0	0.02	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	1.0	0.01	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.96	-0.04	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	0.98	1.0	0.02	1.0	0.98	-0.02
	0.99	1.0	0.01	0.99	0.97	-0.02	1.0	1.0	0.0	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	0.95	-0.04	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 135: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP and a deep ensemble, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.77	-0.23	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 136: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a MLP and a deep ensamble, experiment 5

F.2.6. Blobs dataset using Deep ensemble

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.82	-0.18	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 137: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a deep ensemble, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.949	-0.051	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 138: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a deep ensemble, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.98	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.98	-0.02
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.97	-0.03
	1.0	0.97	-0.03	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.97	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	0.98	0.98	0.0	1.0	0.98	-0.02
REVISE	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.97	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.98	-0.02	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.98	-0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.98	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	0.98	-0.02
ECCo	1.0	0.98	-0.02	1.0	0.96	-0.04	1.0	0.99	-0.01	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	1.0	0.99	-0.01

	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.98	-0.02	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	0.98	-0.01	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	0.97	-0.01	0.98	0.99	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	1.0	0.02	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	1.0	0.02	0.99	0.99	0.0	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.99	0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
ClaPROAR	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	1.0	0.01	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	0.99	1.0	0.01
	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.98	1.0	0.02

Tab. 139: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a deep ensemble, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	1.0	0.01	0.98	0.98	0.0

	0.99	1.0	0.01	0.99	1.0	0.01	1.0	1.0	0.0	0.97	0.99	0.02
	0.98	0.98	0.0	0.98	0.99	0.01	0.99	1.0	0.01	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	1.0	0.0	0.98	0.98	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	0.99	0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	1.0	0.02	0.99	0.99	0.0	1.0	0.98	-0.02
	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.99	-0.01	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01	0.98	0.98	0.0
REVISE	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01
	0.98	0.98	0.0	0.98	1.0	0.02	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.98	0.0	1.0	1.0	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	0.99	-0.01	1.0	1.0	0.0	0.99	0.99	0.0	0.99	1.0	0.01
	0.98	0.99	0.01	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	0.99	-0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	0.97	-0.02	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	1.0	0.0	0.99	0.98	-0.01
	0.98	0.98	0.0	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.97	-0.03	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	0.99	-0.01	1.0	0.94	-0.06	0.98	0.98	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.97	-0.03	0.98	1.0	0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	0.99	0.99	0.0	1.0	1.0	0.0
	0.99	0.98	-0.01	0.99	0.87	-0.12	0.99	0.99	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	0.97	-0.03	1.0	0.99	-0.01	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	0.98	0.99	0.01
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.97	-0.01
	0.98	1.0	0.02	0.98	0.98	0.0	1.0	1.0	0.0	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.98	1.0	0.02	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.97	-0.03	0.98	1.0	0.02	0.99	1.0	0.01
	0.99	0.99	0.0	0.99	0.99	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	0.98	-0.02	0.98	1.0	0.02	0.99	1.0	0.01
Generic	0.98	0.99	0.01	0.98	0.97	-0.01	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	0.98	0.99	0.01
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	0.98	-0.01	0.98	1.0	0.02	0.98	0.98	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01	0.99	1.0	0.01
	0.98	1.0	0.02	0.98	0.99	0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.98	0.99	0.01	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	0.97	-0.01	0.99	1.0	0.01	0.98	0.97	-0.01
DiCE	1.0	1.0	0.0	1.0	0.97	-0.03	0.98	1.0	0.02	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.98	1.0	0.02	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	0.98	0.0	0.98	0.98	0.0	0.99	0.99	0.0
	0.98	1.0	0.02	0.98	0.97	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	0.99	1.0	0.01	0.99	0.97	-0.02	1.0	1.0	0.0	0.99	1.0	0.01
	0.99	1.0	0.01	0.99	0.99	0.0	1.0	0.99	-0.01	0.99	1.0	0.01
	1.0	1.0	0.0	1.0	0.97	-0.03	0.99	1.0	0.01	0.98	1.0	0.02

	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	0.99	1.0	0.01
	0.98	1.0	0.02	0.98	0.98	0.0	1.0	1.0	0.0	1.0	0.99	-0.01
ClaPROAR	0.99	1.0	0.01	0.99	0.96	-0.03	0.98	1.0	0.02	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.99	-0.01	0.99	1.0	0.01	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	1.0	0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	0.99	-0.01	1.0	0.98	-0.02
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.96	-0.04	0.99	1.0	0.01	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	0.98	1.0	0.02	1.0	0.98	-0.02
	0.99	1.0	0.01	0.99	0.97	-0.02	1.0	1.0	0.0	0.98	1.0	0.02
	1.0	1.0	0.0	1.0	0.98	-0.02	0.99	1.0	0.01	0.98	1.0	0.02
	0.99	1.0	0.01	0.99	0.95	-0.04	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 140: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a deep ensemble, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0	1.0	0.99	-0.01
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	0.99	-0.01	1.0	1.0	0.0
ECCo	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.77	-0.23	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.98	-0.02	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.94	-0.06	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.96	-0.04	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Wachter	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Generic	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
DiCE	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
ClaPROAR	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0

Tab. 141: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the blobs dataset using a deep ensemble, experiment 5

F.2.7. GMCS dataset using MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.95	0.886	-0.064	0.948	0.668	-0.28	0.972	0.838	-0.134	0.954	0.828	-0.126
	0.95	0.852	-0.098	0.952	0.672	-0.28	0.958	0.854	-0.104	0.96	0.842	-0.118
	0.964	0.852	-0.112	0.946	0.67	-0.276	0.948	0.832	-0.116	0.95	0.866	-0.084
	0.96	0.878	-0.082	0.938	0.652	-0.286	0.96	0.88	-0.08	0.944	0.872	-0.072
	0.966	0.85	-0.116	0.928	0.678	-0.25	0.966	0.876	-0.09	0.936	0.822	-0.114
	0.97	0.848	-0.122	0.94	0.664	-0.276	0.96	0.95	-0.01	0.952	0.808	-0.144
	0.954	0.842	-0.112	0.946	0.666	-0.28	0.968	0.794	-0.174	0.946	0.844	-0.102
	0.956	0.884	-0.072	0.928	0.676	-0.252	0.948	0.856	-0.092	0.944	0.842	-0.102
	0.95	0.874	-0.076	0.952	0.656	-0.296	0.938	0.834	-0.104	0.964	0.884	-0.08
	0.958	0.85	-0.108	0.964	0.69	-0.274	0.948	0.86	-0.088	0.946	0.886	-0.06
REVISE	0.946	0.854	-0.092	0.92	0.668	-0.252	0.942	0.866	-0.076	0.94	0.824	-0.116
	0.962	0.848	-0.114	0.946	0.616	-0.33	0.946	0.87	-0.076	0.952	0.85	-0.102
	0.954	0.882	-0.072	0.96	0.586	-0.374	0.95	0.826	-0.124	0.946	0.818	-0.128
	0.962	0.888	-0.074	0.938	0.576	-0.362	0.95	0.884	-0.066	0.93	0.814	-0.116
	0.956	0.876	-0.08	0.946	0.52	-0.426	0.97	0.806	-0.164	0.946	0.792	-0.154

	0.954	0.878	-0.076	0.926	0.676	-0.25	0.936	0.876	-0.06	0.95	0.862	-0.088
	0.958	0.844	-0.114	0.942	0.66	-0.282	0.946	0.856	-0.09	0.962	0.868	-0.094
	0.96	0.872	-0.088	0.954	0.684	-0.27	0.918	0.888	-0.03	0.956	0.914	-0.042
	0.966	0.842	-0.124	0.938	0.736	-0.202	0.94	0.862	-0.078	0.948	0.852	-0.096
	0.964	0.868	-0.096	0.944	0.664	-0.28	0.964	0.88	-0.084	0.942	0.874	-0.068
ECCo	0.962	0.84	-0.122	0.948	0.424	-0.524	0.936	0.844	-0.092	0.948	0.832	-0.116
	0.96	0.886	-0.074	0.948	0.426	-0.522	0.936	0.832	-0.104	0.962	0.824	-0.138
	0.964	0.878	-0.086	0.944	0.442	-0.502	0.978	0.858	-0.12	0.954	0.844	-0.11
	0.96	0.85	-0.11	0.938	0.418	-0.52	0.936	0.864	-0.072	0.93	0.778	-0.152
	0.966	0.872	-0.094	0.96	0.436	-0.524	0.952	0.85	-0.102	0.938	0.878	-0.06
	0.956	0.868	-0.088	0.966	0.452	-0.514	0.938	0.818	-0.12	0.96	0.836	-0.124
	0.964	0.876	-0.088	0.958	0.416	-0.542	0.936	0.808	-0.128	0.948	0.844	-0.104
	0.966	0.872	-0.094	0.936	0.432	-0.504	0.942	0.866	-0.076	0.956	0.844	-0.112
	0.966	0.892	-0.074	0.946	0.424	-0.522	0.958	0.822	-0.136	0.956	0.84	-0.116
	0.952	0.92	-0.032	0.95	0.404	-0.546	0.938	0.83	-0.108	0.964	0.784	-0.18
Wachter	0.95	0.848	-0.102	0.942	0.87	-0.072	0.974	0.852	-0.122	0.952	0.858	-0.094
	0.98	0.884	-0.096	0.95	0.78	-0.17	0.944	0.846	-0.098	0.962	0.85	-0.112
	0.968	0.884	-0.084	0.94	0.81	-0.13	0.95	0.88	-0.07	0.946	0.86	-0.086
	0.964	0.884	-0.08	0.96	0.826	-0.134	0.948	0.822	-0.126	0.942	0.852	-0.09
	0.96	0.848	-0.112	0.956	0.832	-0.124	0.94	0.836	-0.104	0.96	0.86	-0.1
	0.958	0.878	-0.08	0.946	0.754	-0.192	0.944	0.85	-0.094	0.956	0.878	-0.078
	0.956	0.856	-0.1	0.916	0.784	-0.132	0.936	0.876	-0.06	0.946	0.826	-0.12
	0.966	0.916	-0.05	0.952	0.832	-0.12	0.958	0.788	-0.17	0.948	0.912	-0.036
	0.942	0.882	-0.06	0.944	0.722	-0.222	0.942	0.9	-0.042	0.956	0.846	-0.11
	0.964	0.876	-0.088	0.938	0.838	-0.1	0.946	0.908	-0.038	0.954	0.794	-0.16
Generic	0.95	0.91	-0.04	0.934	0.758	-0.176	0.942	0.862	-0.08	0.964	0.804	-0.16
	0.97	0.888	-0.082	0.93	0.754	-0.176	0.95	0.864	-0.086	0.938	0.808	-0.13
	0.966	0.886	-0.08	0.95	0.808	-0.142	0.948	0.826	-0.122	0.956	0.886	-0.07
	0.968	0.914	-0.054	0.958	0.814	-0.144	0.936	0.826	-0.11	0.958	0.84	-0.118
	0.976	0.912	-0.064	0.958	0.718	-0.24	0.942	0.866	-0.076	0.954	0.876	-0.078
	0.962	0.882	-0.08	0.97	0.704	-0.266	0.95	0.832	-0.118	0.936	0.848	-0.088
	0.974	0.894	-0.08	0.946	0.788	-0.158	0.948	0.834	-0.114	0.946	0.886	-0.06
	0.962	0.92	-0.042	0.942	0.818	-0.124	0.938	0.892	-0.046	0.948	0.88	-0.068
	0.964	0.888	-0.076	0.94	0.782	-0.158	0.928	0.868	-0.06	0.944	0.878	-0.066
	0.964	0.874	-0.09	0.96	0.836	-0.124	0.956	0.868	-0.088	0.974	0.862	-0.112
DiCE	0.956	0.892	-0.064	0.954	0.832	-0.122	0.928	0.82	-0.108	0.956	0.842	-0.114
	0.96	0.906	-0.054	0.936	0.792	-0.144	0.952	0.83	-0.122	0.932	0.882	-0.05
	0.966	0.914	-0.052	0.958	0.832	-0.126	0.958	0.89	-0.068	0.95	0.846	-0.104
	0.964	0.89	-0.074	0.95	0.688	-0.262	0.938	0.874	-0.064	0.958	0.84	-0.118
	0.958	0.866	-0.092	0.936	0.766	-0.17	0.934	0.846	-0.088	0.962	0.806	-0.156
	0.968	0.878	-0.09	0.944	0.744	-0.2	0.932	0.856	-0.076	0.946	0.864	-0.082
	0.958	0.856	-0.102	0.96	0.774	-0.186	0.954	0.794	-0.16	0.96	0.838	-0.122
	0.964	0.926	-0.038	0.964	0.754	-0.21	0.962	0.842	-0.12	0.938	0.886	-0.052
	0.954	0.882	-0.072	0.962	0.81	-0.152	0.942	0.826	-0.116	0.962	0.864	-0.098
	0.948	0.854	-0.094	0.924	0.846	-0.078	0.948	0.886	-0.062	0.95	0.886	-0.064
ClaPROAR	0.952	0.868	-0.084	0.928	0.844	-0.084	0.924	0.862	-0.062	0.958	0.808	-0.15
	0.962	0.884	-0.078	0.942	0.86	-0.082	0.956	0.846	-0.11	0.958	0.874	-0.084
	0.952	0.898	-0.054	0.948	0.896	-0.052	0.952	0.87	-0.082	0.95	0.84	-0.11
	0.954	0.882	-0.072	0.94	0.832	-0.108	0.916	0.854	-0.062	0.966	0.866	-0.1
	0.956	0.892	-0.064	0.958	0.8	-0.158	0.95	0.85	-0.1	0.964	0.842	-0.122
	0.944	0.866	-0.078	0.958	0.812	-0.146	0.962	0.896	-0.066	0.952	0.828	-0.124
	0.948	0.884	-0.064	0.932	0.796	-0.136	0.948	0.806	-0.142	0.956	0.862	-0.094
	0.954	0.87	-0.084	0.942	0.762	-0.18	0.94	0.866	-0.074	0.952	0.852	-0.1
	0.964	0.932	-0.032	0.954	0.742	-0.212	0.95	0.85	-0.1	0.954	0.87	-0.084
	0.946	0.858	-0.088	0.946	0.814	-0.132	0.938	0.852	-0.086	0.96	0.774	-0.186

Tab. 142: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.954	0.848	-0.106	0.934	0.666	-0.268	0.948	0.878	-0.07	0.936	0.832	-0.104
	0.95	0.86	-0.09	0.918	0.688	-0.23	0.942	0.908	-0.034	0.958	0.882	-0.076
	0.948	0.87	-0.078	0.914	0.686	-0.228	0.938	0.868	-0.07	0.936	0.876	-0.06
	0.96	0.884	-0.076	0.94	0.652	-0.288	0.956	0.848	-0.108	0.944	0.872	-0.072
	0.95	0.888	-0.062	0.918	0.684	-0.234	0.936	0.842	-0.094	0.958	0.86	-0.098
	0.938	0.884	-0.054	0.946	0.67	-0.276	0.954	0.858	-0.096	0.97	0.892	-0.078
	0.956	0.846	-0.11	0.96	0.7	-0.26	0.944	0.834	-0.11	0.946	0.882	-0.064
	0.95	0.834	-0.116	0.928	0.686	-0.242	0.936	0.844	-0.092	0.93	0.842	-0.088
	0.928	0.83	-0.098	0.946	0.68	-0.266	0.932	0.866	-0.066	0.956	0.824	-0.132
	0.96	0.868	-0.092	0.93	0.658	-0.272	0.944	0.88	-0.064	0.944	0.844	-0.1
REVISE	0.942	0.868	-0.074	0.924	0.634	-0.29	0.92	0.848	-0.072	0.93	0.83	-0.1
	0.954	0.882	-0.072	0.918	0.644	-0.274	0.934	0.772	-0.162	0.936	0.872	-0.064
	0.968	0.882	-0.086	0.948	0.554	-0.394	0.948	0.866	-0.082	0.93	0.864	-0.066
	0.948	0.874	-0.074	0.9	0.464	-0.436	0.93	0.882	-0.048	0.948	0.882	-0.066
	0.936	0.872	-0.064	0.954	0.56	-0.394	0.944	0.83	-0.114	0.942	0.786	-0.156
	0.952	0.878	-0.074	0.942	0.652	-0.29	0.946	0.876	-0.07	0.954	0.87	-0.084
	0.952	0.876	-0.076	0.946	0.684	-0.262	0.956	0.662	-0.294	0.946	0.862	-0.084
	0.954	0.88	-0.074	0.92	0.496	-0.424	0.948	0.808	-0.14	0.924	0.816	-0.108
	0.964	0.904	-0.06	0.938	0.616	-0.322	0.952	0.864	-0.088	0.948	0.82	-0.128
	0.946	0.898	-0.048	0.934	0.6	-0.334	0.938	0.876	-0.062	0.952	0.83	-0.122
ECCo	0.948	0.858	-0.09	0.942	0.454	-0.488	0.952	0.88	-0.072	0.94	0.888	-0.052
	0.95	0.864	-0.086	0.932	0.454	-0.478	0.938	0.88	-0.058	0.95	0.866	-0.084
	0.954	0.908	-0.046	0.942	0.454	-0.488	0.934	0.854	-0.08	0.944	0.826	-0.118
	0.962	0.84	-0.122	0.938	0.456	-0.482	0.918	0.884	-0.034	0.946	0.77	-0.176
	0.948	0.846	-0.102	0.924	0.43	-0.494	0.928	0.806	-0.122	0.954	0.876	-0.078
	0.964	0.864	-0.1	0.932	0.456	-0.476	0.944	0.886	-0.058	0.952	0.834	-0.118
	0.948	0.894	-0.054	0.91	0.464	-0.446	0.932	0.876	-0.056	0.952	0.808	-0.144
	0.952	0.852	-0.1	0.942	0.462	-0.48	0.934	0.81	-0.124	0.944	0.87	-0.074
	0.94	0.864	-0.076	0.944	0.444	-0.5	0.944	0.848	-0.096	0.95	0.83	-0.12
	0.938	0.858	-0.08	0.92	0.442	-0.478	0.944	0.882	-0.062	0.972	0.804	-0.168
Wachter	0.956	0.856	-0.1	0.944	0.79	-0.154	0.942	0.862	-0.08	0.95	0.85	-0.1
	0.942	0.904	-0.038	0.926	0.788	-0.138	0.92	0.89	-0.03	0.942	0.812	-0.13
	0.946	0.83	-0.116	0.936	0.728	-0.208	0.936	0.91	-0.026	0.956	0.848	-0.108
	0.966	0.878	-0.088	0.934	0.732	-0.202	0.936	0.878	-0.058	0.932	0.898	-0.034
	0.95	0.87	-0.08	0.95	0.75	-0.2	0.924	0.85	-0.074	0.93	0.886	-0.044
	0.93	0.906	-0.024	0.946	0.716	-0.23	0.92	0.886	-0.034	0.946	0.842	-0.104
	0.942	0.898	-0.044	0.954	0.802	-0.152	0.934	0.888	-0.046	0.958	0.898	-0.06
	0.958	0.902	-0.056	0.916	0.742	-0.174	0.942	0.856	-0.086	0.92	0.822	-0.098
	0.956	0.906	-0.05	0.942	0.812	-0.13	0.938	0.864	-0.074	0.934	0.864	-0.07
	0.944	0.89	-0.054	0.922	0.764	-0.158	0.928	0.866	-0.062	0.936	0.83	-0.106
Generic	0.944	0.86	-0.084	0.91	0.75	-0.16	0.946	0.802	-0.144	0.908	0.822	-0.086
	0.95	0.894	-0.056	0.95	0.748	-0.202	0.952	0.87	-0.082	0.956	0.846	-0.11
	0.93	0.844	-0.086	0.934	0.762	-0.172	0.93	0.808	-0.122	0.948	0.832	-0.116
	0.948	0.862	-0.086	0.936	0.762	-0.174	0.932	0.87	-0.062	0.94	0.852	-0.088
	0.956	0.894	-0.062	0.91	0.764	-0.146	0.936	0.854	-0.082	0.942	0.778	-0.164
	0.95	0.858	-0.092	0.934	0.834	-0.1	0.944	0.866	-0.078	0.928	0.886	-0.042
	0.96	0.884	-0.076	0.954	0.782	-0.172	0.946	0.876	-0.07	0.928	0.89	-0.038
	0.948	0.86	-0.088	0.926	0.796	-0.13	0.94	0.86	-0.08	0.938	0.854	-0.084
	0.962	0.878	-0.084	0.924	0.808	-0.116	0.964	0.802	-0.162	0.946	0.858	-0.088

	0.934	0.858	-0.076	0.908	0.742	-0.166	0.942	0.878	-0.064	0.954	0.868	-0.086
DiCE	0.946	0.88	-0.066	0.944	0.804	-0.14	0.952	0.878	-0.074	0.934	0.858	-0.076
	0.942	0.886	-0.056	0.926	0.782	-0.144	0.932	0.778	-0.154	0.948	0.864	-0.084
	0.94	0.904	-0.036	0.938	0.792	-0.146	0.928	0.868	-0.06	0.926	0.84	-0.086
	0.952	0.912	-0.04	0.944	0.822	-0.122	0.926	0.876	-0.05	0.932	0.844	-0.088
	0.952	0.892	-0.06	0.924	0.81	-0.114	0.926	0.842	-0.084	0.938	0.848	-0.09
	0.944	0.856	-0.088	0.908	0.768	-0.14	0.932	0.906	-0.026	0.94	0.808	-0.132
	0.964	0.886	-0.078	0.938	0.79	-0.148	0.95	0.838	-0.112	0.948	0.874	-0.074
	0.956	0.874	-0.082	0.946	0.776	-0.17	0.934	0.848	-0.086	0.94	0.908	-0.032
	0.96	0.864	-0.096	0.948	0.726	-0.222	0.948	0.846	-0.102	0.938	0.868	-0.07
	0.952	0.88	-0.072	0.908	0.708	-0.2	0.942	0.888	-0.054	0.946	0.86	-0.086
ClaPROAR	0.938	0.872	-0.066	0.936	0.75	-0.186	0.95	0.842	-0.108	0.942	0.866	-0.076
	0.948	0.842	-0.106	0.936	0.794	-0.142	0.936	0.868	-0.068	0.934	0.838	-0.096
	0.956	0.854	-0.102	0.926	0.764	-0.162	0.944	0.868	-0.076	0.962	0.906	-0.056
	0.962	0.858	-0.104	0.942	0.744	-0.198	0.926	0.876	-0.05	0.95	0.878	-0.072
	0.968	0.908	-0.06	0.918	0.742	-0.176	0.952	0.85	-0.102	0.95	0.87	-0.08
	0.932	0.888	-0.044	0.928	0.724	-0.204	0.946	0.844	-0.102	0.958	0.908	-0.05
	0.962	0.868	-0.094	0.926	0.786	-0.14	0.934	0.87	-0.064	0.956	0.842	-0.114
	0.962	0.872	-0.09	0.908	0.776	-0.132	0.942	0.852	-0.09	0.93	0.876	-0.054
	0.938	0.902	-0.036	0.922	0.812	-0.11	0.938	0.874	-0.064	0.946	0.822	-0.124
	0.95	0.882	-0.068	0.94	0.81	-0.13	0.93	0.848	-0.082	0.942	0.828	-0.114

Tab. 143: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.956	0.896	-0.06	0.952	0.683	-0.269	0.936	0.884	-0.052	0.928	0.834	-0.094
	0.952	0.89	-0.062	0.962	0.665	-0.297	0.944	0.874	-0.07	0.918	0.832	-0.086
	0.966	0.894	-0.072	0.956	0.655	-0.301	0.94	0.874	-0.066	0.938	0.81	-0.128
	0.96	0.86	-0.1	0.926	0.661	-0.265	0.952	0.834	-0.118	0.926	0.816	-0.11
	0.964	0.88	-0.084	0.962	0.657	-0.305	0.944	0.822	-0.122	0.94	0.83	-0.11
	0.95	0.86	-0.09	0.95	0.645	-0.305	0.946	0.84	-0.106	0.934	0.854	-0.08
	0.97	0.848	-0.122	0.966	0.671	-0.295	0.934	0.858	-0.076	0.938	0.866	-0.072
	0.956	0.852	-0.104	0.958	0.669	-0.289	0.948	0.846	-0.102	0.93	0.87	-0.06
	0.974	0.92	-0.054	0.964	0.639	-0.325	0.954	0.856	-0.098	0.922	0.878	-0.044
	0.948	0.892	-0.056	0.944	0.659	-0.285	0.946	0.882	-0.064	0.922	0.892	-0.03
REVISE	0.948	0.914	-0.034	0.954	0.557	-0.397	0.948	0.89	-0.058	0.908	0.912	0.004
	0.952	0.87	-0.082	0.964	0.551	-0.413	0.962	0.862	-0.1	0.934	0.768	-0.166
	0.952	0.916	-0.036	0.962	0.681	-0.281	0.956	0.878	-0.078	0.92	0.85	-0.07
	0.972	0.9	-0.072	0.956	0.731	-0.224	0.962	0.924	-0.038	0.946	0.876	-0.07
	0.948	0.88	-0.068	0.95	0.459	-0.491	0.936	0.874	-0.062	0.934	0.774	-0.16
	0.972	0.882	-0.09	0.96	0.593	-0.367	0.93	0.868	-0.062	0.934	0.866	-0.068
	0.94	0.866	-0.074	0.952	0.487	-0.465	0.952	0.858	-0.094	0.926	0.82	-0.106
	0.964	0.846	-0.118	0.94	0.673	-0.267	0.926	0.88	-0.046	0.918	0.874	-0.044
	0.956	0.878	-0.078	0.978	0.583	-0.395	0.952	0.868	-0.084	0.928	0.858	-0.07
	0.97	0.876	-0.094	0.97	0.563	-0.407	0.944	0.876	-0.068	0.922	0.828	-0.094
ECCo	0.972	0.878	-0.094	0.94	0.425	-0.515	0.952	0.768	-0.184	0.934	0.852	-0.082
	0.972	0.848	-0.124	0.94	0.393	-0.547	0.926	0.782	-0.144	0.928	0.822	-0.106
	0.954	0.892	-0.062	0.944	0.437	-0.507	0.952	0.82	-0.132	0.93	0.836	-0.094
	0.946	0.88	-0.066	0.95	0.399	-0.551	0.954	0.868	-0.086	0.92	0.832	-0.088
	0.964	0.858	-0.106	0.954	0.419	-0.535	0.944	0.886	-0.058	0.922	0.886	-0.036
	0.962	0.888	-0.074	0.944	0.413	-0.531	0.95	0.772	-0.178	0.924	0.88	-0.044
	0.96	0.88	-0.08	0.962	0.419	-0.543	0.96	0.818	-0.142	0.932	0.88	-0.052
	0.968	0.864	-0.104	0.956	0.395	-0.561	0.938	0.826	-0.112	0.934	0.86	-0.074

	0.974	0.878	-0.096	0.93	0.419	-0.511	0.948	0.858	-0.09	0.946	0.856	-0.09
	0.96	0.876	-0.084	0.942	0.427	-0.515	0.936	0.798	-0.138	0.922	0.838	-0.084
Wachter	0.962	0.912	-0.05	0.966	0.683	-0.283	0.942	0.784	-0.158	0.916	0.86	-0.056
	0.956	0.93	-0.026	0.95	0.717	-0.232	0.928	0.852	-0.076	0.928	0.844	-0.084
	0.966	0.86	-0.106	0.954	0.629	-0.325	0.942	0.882	-0.06	0.956	0.848	-0.108
	0.96	0.87	-0.09	0.96	0.808	-0.152	0.942	0.778	-0.164	0.946	0.838	-0.108
	0.94	0.882	-0.058	0.962	0.707	-0.255	0.96	0.874	-0.086	0.948	0.844	-0.104
	0.952	0.916	-0.036	0.968	0.649	-0.319	0.918	0.818	-0.1	0.946	0.822	-0.124
	0.966	0.866	-0.1	0.958	0.729	-0.228	0.934	0.852	-0.082	0.934	0.826	-0.108
	0.962	0.87	-0.092	0.952	0.747	-0.204	0.924	0.836	-0.088	0.94	0.84	-0.1
	0.956	0.89	-0.066	0.952	0.723	-0.228	0.942	0.822	-0.12	0.94	0.858	-0.082
	0.952	0.902	-0.05	0.946	0.639	-0.307	0.942	0.86	-0.082	0.93	0.862	-0.068
Generic	0.956	0.898	-0.058	0.94	0.567	-0.373	0.928	0.848	-0.08	0.93	0.83	-0.1
	0.96	0.892	-0.068	0.954	0.683	-0.271	0.962	0.772	-0.19	0.92	0.846	-0.074
	0.954	0.87	-0.084	0.938	0.719	-0.218	0.936	0.778	-0.158	0.936	0.872	-0.064
	0.978	0.858	-0.12	0.958	0.617	-0.341	0.95	0.836	-0.114	0.94	0.858	-0.082
	0.946	0.872	-0.074	0.942	0.794	-0.148	0.922	0.788	-0.134	0.932	0.884	-0.048
	0.934	0.898	-0.036	0.96	0.747	-0.212	0.938	0.738	-0.2	0.934	0.848	-0.086
	0.97	0.904	-0.066	0.938	0.659	-0.279	0.942	0.842	-0.1	0.91	0.852	-0.058
	0.956	0.896	-0.06	0.948	0.715	-0.232	0.946	0.844	-0.102	0.946	0.874	-0.072
	0.97	0.892	-0.078	0.94	0.687	-0.253	0.948	0.862	-0.086	0.926	0.874	-0.052
	0.946	0.868	-0.078	0.948	0.758	-0.19	0.94	0.832	-0.108	0.946	0.822	-0.124
DiCE	0.958	0.896	-0.062	0.95	0.673	-0.277	0.95	0.818	-0.132	0.924	0.866	-0.058
	0.932	0.872	-0.06	0.938	0.739	-0.198	0.95	0.844	-0.106	0.956	0.862	-0.094
	0.956	0.854	-0.102	0.95	0.683	-0.267	0.934	0.866	-0.068	0.928	0.852	-0.076
	0.958	0.908	-0.05	0.944	0.715	-0.228	0.958	0.806	-0.152	0.93	0.798	-0.132
	0.944	0.896	-0.048	0.948	0.709	-0.238	0.95	0.84	-0.11	0.942	0.9	-0.042
	0.96	0.912	-0.048	0.954	0.675	-0.279	0.948	0.816	-0.132	0.926	0.798	-0.128
	0.956	0.87	-0.086	0.94	0.643	-0.297	0.936	0.874	-0.062	0.926	0.874	-0.052
	0.958	0.88	-0.078	0.958	0.699	-0.259	0.94	0.814	-0.126	0.91	0.832	-0.078
	0.958	0.852	-0.106	0.956	0.557	-0.399	0.942	0.858	-0.084	0.94	0.818	-0.122
	0.96	0.892	-0.068	0.95	0.635	-0.315	0.94	0.804	-0.136	0.93	0.858	-0.072
ClaPROAR	0.96	0.872	-0.088	0.962	0.715	-0.246	0.946	0.796	-0.15	0.95	0.884	-0.066
	0.972	0.876	-0.096	0.94	0.673	-0.267	0.936	0.8	-0.136	0.924	0.848	-0.076
	0.96	0.892	-0.068	0.944	0.713	-0.23	0.946	0.834	-0.112	0.954	0.87	-0.084
	0.976	0.908	-0.068	0.94	0.76	-0.18	0.926	0.846	-0.08	0.936	0.838	-0.098
	0.946	0.918	-0.028	0.94	0.703	-0.236	0.952	0.838	-0.114	0.92	0.75	-0.17
	0.96	0.908	-0.052	0.956	0.685	-0.271	0.944	0.878	-0.066	0.94	0.842	-0.098
	0.948	0.89	-0.058	0.94	0.635	-0.305	0.944	0.852	-0.092	0.946	0.898	-0.048
	0.962	0.908	-0.054	0.956	0.667	-0.289	0.928	0.866	-0.062	0.928	0.878	-0.05
	0.942	0.88	-0.062	0.962	0.679	-0.283	0.954	0.856	-0.098	0.946	0.858	-0.088
	0.95	0.912	-0.038	0.954	0.593	-0.361	0.938	0.826	-0.112	0.93	0.86	-0.07

Tab. 144: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.948	0.862	-0.086	0.946	0.662	-0.284	0.942	0.854	-0.088	0.95	0.866	-0.084
	0.952	0.87	-0.082	0.958	0.678	-0.28	0.944	0.824	-0.12	0.964	0.786	-0.178
	0.944	0.896	-0.048	0.938	0.686	-0.252	0.954	0.854	-0.1	0.962	0.88	-0.082
	0.956	0.848	-0.108	0.952	0.682	-0.27	0.956	0.79	-0.166	0.96	0.9	-0.06
	0.942	0.89	-0.052	0.95	0.66	-0.29	0.962	0.84	-0.122	0.96	0.898	-0.062
	0.952	0.876	-0.076	0.932	0.662	-0.27	0.926	0.832	-0.094	0.95	0.826	-0.124
	0.958	0.84	-0.118	0.934	0.68	-0.254	0.958	0.88	-0.078	0.952	0.85	-0.102

	0.942	0.86	-0.082	0.956	0.676	-0.28	0.962	0.856	-0.106	0.948	0.864	-0.084
	0.938	0.874	-0.064	0.948	0.664	-0.284	0.946	0.844	-0.102	0.952	0.882	-0.07
	0.952	0.874	-0.078	0.922	0.658	-0.264	0.938	0.838	-0.1	0.95	0.85	-0.1
REVISE	0.956	0.872	-0.084	0.952	0.614	-0.338	0.948	0.854	-0.094	0.96	0.832	-0.128
	0.956	0.88	-0.076	0.928	0.608	-0.32	0.95	0.844	-0.106	0.946	0.862	-0.084
	0.966	0.852	-0.114	0.908	0.554	-0.354	0.96	0.872	-0.088	0.946	0.894	-0.052
	0.942	0.864	-0.078	0.95	0.606	-0.344	0.954	0.864	-0.09	0.956	0.86	-0.096
	0.96	0.878	-0.082	0.938	0.532	-0.406	0.958	0.816	-0.142	0.958	0.886	-0.072
	0.936	0.852	-0.084	0.948	0.512	-0.436	0.962	0.782	-0.18	0.944	0.814	-0.13
	0.952	0.824	-0.128	0.926	0.682	-0.244	0.95	0.862	-0.088	0.948	0.84	-0.108
	0.958	0.872	-0.086	0.942	0.622	-0.32	0.956	0.84	-0.116	0.958	0.878	-0.08
	0.948	0.884	-0.064	0.954	0.678	-0.276	0.94	0.864	-0.076	0.958	0.838	-0.12
	0.952	0.868	-0.084	0.946	0.536	-0.41	0.964	0.762	-0.202	0.962	0.822	-0.14
ECCo	0.968	0.894	-0.074	0.92	0.362	-0.558	0.946	0.868	-0.078	0.962	0.836	-0.126
	0.964	0.886	-0.078	0.948	0.376	-0.572	0.948	0.806	-0.142	0.956	0.84	-0.116
	0.966	0.866	-0.1	0.95	0.376	-0.574	0.966	0.858	-0.108	0.958	0.836	-0.122
	0.934	0.854	-0.08	0.954	0.336	-0.618	0.938	0.848	-0.09	0.952	0.882	-0.07
	0.946	0.836	-0.11	0.942	0.342	-0.6	0.96	0.864	-0.096	0.968	0.822	-0.146
	0.942	0.894	-0.048	0.932	0.316	-0.616	0.962	0.848	-0.114	0.946	0.828	-0.118
	0.958	0.904	-0.054	0.944	0.358	-0.586	0.966	0.848	-0.118	0.942	0.828	-0.114
	0.964	0.858	-0.106	0.964	0.364	-0.6	0.956	0.814	-0.142	0.926	0.88	-0.046
	0.948	0.872	-0.076	0.944	0.346	-0.598	0.956	0.826	-0.13	0.946	0.898	-0.048
	0.938	0.876	-0.062	0.942	0.38	-0.562	0.954	0.802	-0.152	0.962	0.878	-0.084
Wachter	0.964	0.908	-0.056	0.944	0.384	-0.56	0.958	0.874	-0.084	0.954	0.884	-0.07
	0.97	0.882	-0.088	0.94	0.64	-0.3	0.958	0.81	-0.148	0.966	0.806	-0.16
	0.946	0.894	-0.052	0.926	0.474	-0.452	0.956	0.844	-0.112	0.956	0.91	-0.046
	0.956	0.86	-0.096	0.934	0.528	-0.406	0.936	0.81	-0.126	0.944	0.884	-0.06
	0.94	0.876	-0.064	0.92	0.54	-0.38	0.95	0.844	-0.106	0.946	0.868	-0.078
	0.952	0.86	-0.092	0.93	0.544	-0.386	0.954	0.84	-0.114	0.952	0.856	-0.096
	0.96	0.864	-0.096	0.952	0.416	-0.536	0.956	0.82	-0.136	0.934	0.87	-0.064
	0.962	0.878	-0.084	0.956	0.51	-0.446	0.972	0.864	-0.108	0.958	0.866	-0.092
	0.952	0.862	-0.09	0.93	0.486	-0.444	0.962	0.804	-0.158	0.944	0.854	-0.09
	0.952	0.87	-0.082	0.944	0.584	-0.36	0.946	0.876	-0.07	0.962	0.89	-0.072
Generic	0.968	0.866	-0.102	0.936	0.578	-0.358	0.96	0.832	-0.128	0.952	0.878	-0.074
	0.95	0.874	-0.076	0.932	0.544	-0.388	0.956	0.824	-0.132	0.924	0.86	-0.064
	0.956	0.868	-0.088	0.942	0.532	-0.41	0.962	0.894	-0.068	0.942	0.88	-0.062
	0.934	0.866	-0.068	0.94	0.516	-0.424	0.938	0.862	-0.076	0.946	0.908	-0.038
	0.932	0.856	-0.076	0.962	0.632	-0.33	0.958	0.766	-0.192	0.946	0.866	-0.08
	0.918	0.856	-0.062	0.942	0.476	-0.466	0.962	0.874	-0.088	0.95	0.884	-0.066
	0.936	0.862	-0.074	0.946	0.46	-0.486	0.952	0.838	-0.114	0.97	0.868	-0.102
	0.946	0.834	-0.112	0.936	0.546	-0.39	0.944	0.83	-0.114	0.966	0.872	-0.094
	0.966	0.87	-0.096	0.934	0.422	-0.512	0.96	0.872	-0.088	0.952	0.904	-0.048
	0.962	0.882	-0.08	0.95	0.552	-0.398	0.946	0.826	-0.12	0.944	0.878	-0.066
DiCE	0.948	0.846	-0.102	0.944	0.6	-0.344	0.932	0.86	-0.072	0.948	0.84	-0.108
	0.946	0.85	-0.096	0.962	0.554	-0.408	0.944	0.866	-0.078	0.962	0.848	-0.114
	0.948	0.888	-0.06	0.968	0.646	-0.322	0.938	0.874	-0.064	0.932	0.81	-0.122
	0.944	0.858	-0.086	0.946	0.472	-0.474	0.936	0.838	-0.098	0.946	0.888	-0.058
	0.952	0.9	-0.052	0.95	0.49	-0.46	0.964	0.834	-0.13	0.93	0.85	-0.08
	0.976	0.89	-0.086	0.926	0.502	-0.424	0.948	0.848	-0.1	0.946	0.854	-0.092
	0.954	0.842	-0.112	0.944	0.514	-0.43	0.942	0.842	-0.1	0.95	0.866	-0.084
	0.96	0.868	-0.092	0.956	0.58	-0.376	0.952	0.808	-0.144	0.954	0.896	-0.058
	0.964	0.876	-0.088	0.95	0.564	-0.386	0.954	0.84	-0.114	0.942	0.83	-0.112
	0.95	0.866	-0.084	0.962	0.588	-0.374	0.944	0.832	-0.112	0.928	0.852	-0.076
ClaPROAR	0.954	0.862	-0.092	0.936	0.624	-0.312	0.954	0.846	-0.108	0.956	0.908	-0.048
	0.922	0.902	-0.02	0.932	0.582	-0.35	0.946	0.852	-0.094	0.944	0.842	-0.102
	0.952	0.91	-0.042	0.962	0.49	-0.472	0.952	0.868	-0.084	0.96	0.876	-0.084

	0.946	0.872	-0.074	0.944	0.652	-0.292	0.942	0.802	-0.14	0.958	0.896	-0.062
	0.964	0.902	-0.062	0.946	0.514	-0.432	0.954	0.812	-0.142	0.952	0.884	-0.068
	0.946	0.844	-0.102	0.93	0.446	-0.484	0.97	0.774	-0.196	0.962	0.838	-0.124
	0.952	0.864	-0.088	0.958	0.41	-0.548	0.96	0.86	-0.1	0.946	0.858	-0.088
	0.968	0.898	-0.07	0.908	0.502	-0.406	0.948	0.846	-0.102	0.96	0.894	-0.066
	0.954	0.884	-0.07	0.956	0.588	-0.368	0.942	0.87	-0.072	0.952	0.83	-0.122
	0.94	0.89	-0.05	0.952	0.516	-0.436	0.93	0.852	-0.078	0.96	0.862	-0.098

Tab. 145: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.962	0.856	-0.106	0.942	0.681	-0.261	0.928	0.828	-0.1	0.944	0.866	-0.078
	0.964	0.906	-0.058	0.938	0.661	-0.277	0.942	0.844	-0.098	0.946	0.786	-0.16
	0.966	0.852	-0.114	0.958	0.669	-0.289	0.938	0.846	-0.092	0.946	0.856	-0.09
	0.968	0.864	-0.104	0.946	0.663	-0.283	0.916	0.838	-0.078	0.958	0.846	-0.112
	0.97	0.868	-0.102	0.938	0.671	-0.267	0.948	0.888	-0.06	0.96	0.876	-0.084
	0.96	0.908	-0.052	0.938	0.677	-0.261	0.944	0.85	-0.094	0.952	0.902	-0.05
	0.968	0.892	-0.076	0.948	0.673	-0.275	0.958	0.858	-0.1	0.972	0.844	-0.128
	0.968	0.88	-0.088	0.938	0.709	-0.228	0.93	0.88	-0.05	0.956	0.868	-0.088
	0.964	0.912	-0.052	0.932	0.657	-0.275	0.934	0.852	-0.082	0.96	0.882	-0.078
	0.968	0.918	-0.05	0.942	0.659	-0.283	0.936	0.85	-0.086	0.958	0.872	-0.086
REVISE	0.966	0.904	-0.062	0.95	0.341	-0.609	0.964	0.856	-0.108	0.972	0.85	-0.122
	0.966	0.894	-0.072	0.948	0.545	-0.403	0.91	0.89	-0.02	0.958	0.856	-0.102
	0.968	0.902	-0.066	0.946	0.583	-0.363	0.93	0.77	-0.16	0.97	0.864	-0.106
	0.97	0.924	-0.046	0.942	0.545	-0.397	0.946	0.85	-0.096	0.972	0.864	-0.108
	0.954	0.918	-0.036	0.946	0.531	-0.415	0.94	0.83	-0.11	0.97	0.88	-0.09
	0.954	0.874	-0.08	0.964	0.577	-0.387	0.952	0.854	-0.098	0.954	0.87	-0.084
	0.95	0.888	-0.062	0.946	0.533	-0.413	0.942	0.872	-0.07	0.954	0.868	-0.086
	0.968	0.906	-0.062	0.95	0.433	-0.517	0.952	0.834	-0.118	0.968	0.858	-0.11
	0.968	0.922	-0.046	0.948	0.531	-0.417	0.954	0.854	-0.1	0.974	0.85	-0.124
	0.958	0.844	-0.114	0.938	0.557	-0.381	0.956	0.868	-0.088	0.96	0.836	-0.124
ECCo	0.972	0.86	-0.112	0.95	0.465	-0.485	0.932	0.866	-0.066	0.974	0.82	-0.154
	0.97	0.89	-0.08	0.964	0.453	-0.511	0.952	0.842	-0.11	0.964	0.848	-0.116
	0.972	0.922	-0.05	0.952	0.471	-0.481	0.96	0.88	-0.08	0.964	0.79	-0.174
	0.97	0.866	-0.104	0.94	0.445	-0.495	0.938	0.876	-0.062	0.958	0.828	-0.13
	0.972	0.878	-0.094	0.95	0.431	-0.519	0.934	0.854	-0.08	0.948	0.808	-0.14
	0.956	0.884	-0.072	0.962	0.467	-0.495	0.934	0.892	-0.042	0.95	0.86	-0.09
	0.964	0.856	-0.108	0.946	0.479	-0.467	0.94	0.808	-0.132	0.964	0.834	-0.13
	0.97	0.93	-0.04	0.938	0.479	-0.459	0.954	0.84	-0.114	0.956	0.838	-0.118
	0.97	0.9	-0.07	0.958	0.473	-0.485	0.96	0.862	-0.098	0.95	0.862	-0.088
	0.974	0.918	-0.056	0.956	0.501	-0.455	0.944	0.832	-0.112	0.968	0.892	-0.076
Wachter	0.98	0.932	-0.048	0.936	0.802	-0.134	0.956	0.9	-0.056	0.964	0.872	-0.092
	0.966	0.88	-0.086	0.956	0.896	-0.06	0.952	0.816	-0.136	0.954	0.872	-0.082
	0.952	0.92	-0.032	0.93	0.836	-0.094	0.936	0.844	-0.092	0.958	0.878	-0.08
	0.968	0.9	-0.068	0.942	0.834	-0.108	0.932	0.854	-0.078	0.968	0.88	-0.088
	0.97	0.894	-0.076	0.952	0.85	-0.102	0.934	0.85	-0.084	0.968	0.894	-0.074
	0.964	0.9	-0.064	0.94	0.846	-0.094	0.952	0.876	-0.076	0.944	0.86	-0.084
	0.962	0.932	-0.03	0.94	0.756	-0.184	0.954	0.882	-0.072	0.964	0.862	-0.102
	0.962	0.88	-0.082	0.958	0.86	-0.098	0.93	0.834	-0.096	0.962	0.824	-0.138
	0.96	0.886	-0.074	0.95	0.87	-0.08	0.948	0.83	-0.118	0.962	0.804	-0.158
	0.964	0.878	-0.086	0.94	0.83	-0.11	0.91	0.832	-0.078	0.96	0.868	-0.092
Generic	0.968	0.898	-0.07	0.936	0.91	-0.026	0.948	0.866	-0.082	0.954	0.8	-0.154
	0.952	0.854	-0.098	0.934	0.858	-0.076	0.936	0.844	-0.092	0.964	0.832	-0.132

	0.97	0.89	-0.08	0.958	0.76	-0.198	0.966	0.866	-0.1	0.96	0.904	-0.056
	0.962	0.906	-0.056	0.944	0.836	-0.108	0.95	0.792	-0.158	0.97	0.882	-0.088
	0.974	0.878	-0.096	0.944	0.784	-0.16	0.946	0.842	-0.104	0.97	0.874	-0.096
	0.97	0.928	-0.042	0.946	0.749	-0.196	0.944	0.838	-0.106	0.952	0.814	-0.138
	0.956	0.92	-0.036	0.958	0.862	-0.096	0.938	0.88	-0.058	0.956	0.862	-0.094
	0.956	0.9	-0.056	0.946	0.79	-0.156	0.94	0.854	-0.086	0.952	0.884	-0.068
	0.976	0.908	-0.068	0.936	0.784	-0.152	0.942	0.902	-0.04	0.968	0.848	-0.12
	0.978	0.92	-0.058	0.948	0.86	-0.088	0.932	0.832	-0.1	0.968	0.886	-0.082
DiCE	0.952	0.914	-0.038	0.944	0.749	-0.194	0.944	0.88	-0.064	0.968	0.822	-0.146
	0.972	0.89	-0.082	0.942	0.747	-0.194	0.95	0.806	-0.144	0.968	0.844	-0.124
	0.98	0.88	-0.1	0.95	0.762	-0.188	0.954	0.846	-0.108	0.97	0.87	-0.1
	0.966	0.892	-0.074	0.934	0.846	-0.088	0.922	0.892	-0.03	0.964	0.884	-0.08
	0.972	0.898	-0.074	0.95	0.701	-0.248	0.934	0.888	-0.046	0.962	0.864	-0.098
	0.958	0.92	-0.038	0.962	0.856	-0.106	0.94	0.86	-0.08	0.974	0.864	-0.11
	0.968	0.884	-0.084	0.93	0.786	-0.144	0.936	0.882	-0.054	0.948	0.846	-0.102
	0.968	0.932	-0.036	0.962	0.892	-0.07	0.932	0.846	-0.086	0.974	0.82	-0.154
	0.97	0.91	-0.06	0.928	0.874	-0.054	0.94	0.87	-0.07	0.962	0.814	-0.148
	0.97	0.866	-0.104	0.96	0.83	-0.13	0.95	0.862	-0.088	0.948	0.864	-0.084
ClaPROAR	0.968	0.884	-0.084	0.948	0.872	-0.076	0.95	0.876	-0.074	0.964	0.814	-0.15
	0.97	0.916	-0.054	0.946	0.76	-0.186	0.944	0.862	-0.082	0.958	0.874	-0.084
	0.974	0.916	-0.058	0.952	0.848	-0.104	0.936	0.918	-0.018	0.966	0.826	-0.14
	0.98	0.9	-0.08	0.944	0.826	-0.118	0.934	0.826	-0.108	0.956	0.808	-0.148
	0.962	0.89	-0.072	0.952	0.82	-0.132	0.936	0.826	-0.11	0.944	0.852	-0.092
	0.968	0.932	-0.036	0.946	0.816	-0.13	0.922	0.866	-0.056	0.96	0.836	-0.124
	0.972	0.898	-0.074	0.942	0.804	-0.138	0.952	0.87	-0.082	0.966	0.816	-0.15
	0.952	0.9	-0.052	0.96	0.802	-0.158	0.962	0.868	-0.094	0.96	0.872	-0.088
	0.958	0.918	-0.04	0.928	0.826	-0.102	0.944	0.866	-0.078	0.96	0.858	-0.102
	0.958	0.888	-0.07	0.946	0.866	-0.08	0.936	0.864	-0.072	0.968	0.844	-0.124

Tab. 146: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP, experiment 5

F.2.8. GMCS dataset using Deep ensemble using a MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.932	0.89	-0.042	0.964	0.682	-0.282	0.936	0.808	-0.128	0.95	0.912	-0.038
	0.942	0.916	-0.026	0.946	0.69	-0.256	0.938	0.856	-0.082	0.962	0.888	-0.074
	0.932	0.872	-0.06	0.962	0.64	-0.322	0.956	0.854	-0.102	0.956	0.856	-0.1
	0.942	0.9	-0.042	0.962	0.664	-0.298	0.968	0.886	-0.082	0.954	0.834	-0.12
	0.95	0.92	-0.03	0.972	0.702	-0.27	0.942	0.846	-0.096	0.95	0.876	-0.074
	0.938	0.87	-0.068	0.96	0.624	-0.336	0.96	0.866	-0.094	0.958	0.862	-0.096
	0.958	0.92	-0.038	0.958	0.68	-0.278	0.944	0.848	-0.096	0.956	0.888	-0.068
	0.928	0.886	-0.042	0.96	0.622	-0.338	0.958	0.872	-0.086	0.962	0.902	-0.06
	0.92	0.912	-0.008	0.966	0.676	-0.29	0.926	0.9	-0.026	0.946	0.808	-0.138
	0.936	0.9	-0.036	0.962	0.642	-0.32	0.956	0.846	-0.11	0.938	0.844	-0.094
REVISE	0.93	0.906	-0.024	0.956	0.548	-0.408	0.944	0.84	-0.104	0.954	0.858	-0.096
	0.948	0.91	-0.038	0.956	0.474	-0.482	0.93	0.862	-0.068	0.96	0.9	-0.06
	0.914	0.924	0.01	0.95	0.516	-0.434	0.938	0.854	-0.084	0.946	0.884	-0.062
	0.94	0.884	-0.056	0.95	0.478	-0.472	0.962	0.818	-0.144	0.952	0.934	-0.018
	0.932	0.924	-0.008	0.974	0.534	-0.44	0.954	0.856	-0.098	0.954	0.866	-0.088
	0.95	0.912	-0.038	0.952	0.548	-0.404	0.952	0.83	-0.122	0.958	0.902	-0.056
	0.942	0.908	-0.034	0.97	0.508	-0.462	0.962	0.92	-0.042	0.952	0.854	-0.098
	0.932	0.898	-0.034	0.972	0.59	-0.382	0.94	0.868	-0.072	0.958	0.896	-0.062
	0.922	0.9	-0.022	0.958	0.484	-0.474	0.948	0.904	-0.044	0.954	0.84	-0.114
	0.936	0.918	-0.018	0.944	0.476	-0.468	0.946	0.844	-0.102	0.95	0.862	-0.088

ECCo	0.958	0.93	-0.028	0.96	0.46	-0.5	0.946	0.888	-0.058	0.954	0.878	-0.076
	0.94	0.914	-0.026	0.952	0.49	-0.462	0.964	0.922	-0.042	0.95	0.842	-0.108
	0.94	0.91	-0.03	0.942	0.452	-0.49	0.95	0.886	-0.064	0.956	0.874	-0.082
	0.922	0.93	0.008	0.966	0.45	-0.516	0.954	0.83	-0.124	0.96	0.85	-0.11
	0.946	0.906	-0.04	0.968	0.464	-0.504	0.952	0.868	-0.084	0.946	0.848	-0.098
	0.922	0.888	-0.034	0.958	0.47	-0.488	0.96	0.902	-0.058	0.95	0.802	-0.148
	0.944	0.908	-0.036	0.966	0.464	-0.502	0.948	0.864	-0.084	0.94	0.888	-0.052
	0.938	0.906	-0.032	0.952	0.446	-0.506	0.942	0.88	-0.062	0.956	0.894	-0.062
	0.932	0.91	-0.022	0.958	0.45	-0.508	0.94	0.838	-0.102	0.966	0.89	-0.076
	0.936	0.912	-0.024	0.972	0.46	-0.512	0.956	0.9	-0.056	0.942	0.86	-0.082
Wachter	0.948	0.924	-0.024	0.962	0.828	-0.134	0.946	0.884	-0.062	0.952	0.902	-0.05
	0.94	0.904	-0.036	0.956	0.824	-0.132	0.958	0.884	-0.074	0.956	0.854	-0.102
	0.94	0.898	-0.042	0.956	0.828	-0.128	0.958	0.924	-0.034	0.956	0.866	-0.09
	0.926	0.912	-0.014	0.958	0.714	-0.244	0.95	0.854	-0.096	0.946	0.88	-0.066
	0.956	0.93	-0.026	0.954	0.818	-0.136	0.948	0.854	-0.094	0.958	0.798	-0.16
	0.908	0.894	-0.014	0.96	0.85	-0.11	0.942	0.88	-0.062	0.96	0.902	-0.058
	0.946	0.902	-0.044	0.97	0.604	-0.366	0.938	0.868	-0.07	0.956	0.81	-0.146
	0.95	0.908	-0.042	0.972	0.724	-0.248	0.952	0.896	-0.056	0.958	0.872	-0.086
	0.924	0.894	-0.03	0.95	0.774	-0.176	0.956	0.87	-0.086	0.94	0.906	-0.034
	0.936	0.928	-0.008	0.964	0.814	-0.15	0.944	0.878	-0.066	0.964	0.872	-0.092
Generic	0.928	0.908	-0.02	0.958	0.778	-0.18	0.928	0.816	-0.112	0.944	0.828	-0.116
	0.942	0.928	-0.014	0.948	0.788	-0.16	0.948	0.872	-0.076	0.964	0.896	-0.068
	0.92	0.876	-0.044	0.95	0.776	-0.174	0.952	0.832	-0.12	0.95	0.88	-0.07
	0.926	0.902	-0.024	0.958	0.818	-0.14	0.934	0.862	-0.072	0.962	0.874	-0.088
	0.916	0.878	-0.038	0.932	0.84	-0.092	0.952	0.894	-0.058	0.96	0.874	-0.086
	0.942	0.902	-0.04	0.952	0.802	-0.15	0.926	0.836	-0.09	0.938	0.922	-0.016
	0.94	0.898	-0.042	0.96	0.524	-0.436	0.956	0.876	-0.08	0.96	0.838	-0.122
	0.944	0.91	-0.034	0.944	0.814	-0.13	0.962	0.82	-0.142	0.948	0.806	-0.142
	0.936	0.894	-0.042	0.966	0.7	-0.266	0.948	0.906	-0.042	0.958	0.878	-0.08
	0.936	0.926	-0.01	0.942	0.792	-0.15	0.952	0.76	-0.192	0.948	0.934	-0.014
DiCE	0.926	0.904	-0.022	0.964	0.828	-0.136	0.936	0.868	-0.068	0.964	0.91	-0.054
	0.944	0.924	-0.02	0.966	0.74	-0.226	0.948	0.932	-0.016	0.954	0.884	-0.07
	0.95	0.87	-0.08	0.954	0.738	-0.216	0.958	0.814	-0.144	0.942	0.82	-0.122
	0.93	0.882	-0.048	0.96	0.766	-0.194	0.954	0.882	-0.072	0.956	0.84	-0.116
	0.924	0.918	-0.006	0.956	0.86	-0.096	0.944	0.888	-0.056	0.952	0.85	-0.102
	0.93	0.912	-0.018	0.958	0.732	-0.226	0.934	0.87	-0.064	0.952	0.9	-0.052
	0.946	0.934	-0.012	0.956	0.75	-0.206	0.944	0.88	-0.064	0.958	0.94	-0.018
	0.946	0.908	-0.038	0.948	0.766	-0.182	0.94	0.892	-0.048	0.948	0.864	-0.084
	0.942	0.9	-0.042	0.958	0.804	-0.154	0.946	0.882	-0.064	0.96	0.874	-0.086
	0.93	0.9	-0.03	0.97	0.824	-0.146	0.962	0.834	-0.128	0.958	0.906	-0.052
ClaPROAR	0.938	0.92	-0.018	0.952	0.87	-0.082	0.94	0.858	-0.082	0.95	0.86	-0.09
	0.938	0.902	-0.036	0.946	0.864	-0.082	0.948	0.836	-0.112	0.978	0.912	-0.066
	0.94	0.894	-0.046	0.966	0.84	-0.126	0.948	0.892	-0.056	0.96	0.932	-0.028
	0.938	0.912	-0.026	0.952	0.782	-0.17	0.958	0.882	-0.076	0.956	0.864	-0.092
	0.944	0.89	-0.054	0.956	0.846	-0.11	0.952	0.884	-0.068	0.928	0.844	-0.084
	0.94	0.912	-0.028	0.97	0.79	-0.18	0.936	0.878	-0.058	0.932	0.836	-0.096
	0.928	0.892	-0.036	0.962	0.786	-0.176	0.942	0.882	-0.06	0.958	0.828	-0.13
	0.944	0.93	-0.014	0.958	0.822	-0.136	0.958	0.824	-0.134	0.95	0.912	-0.038
	0.932	0.898	-0.034	0.952	0.73	-0.222	0.936	0.862	-0.074	0.956	0.87	-0.086
	0.944	0.926	-0.018	0.962	0.814	-0.148	0.944	0.868	-0.076	0.952	0.886	-0.066

Tab. 147: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP and a deep ensemble, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.958	0.9	-0.058	0.962	0.623	-0.339	0.954	0.864	-0.09	0.966	0.878	-0.088
	0.936	0.904	-0.032	0.962	0.647	-0.315	0.948	0.892	-0.056	0.948	0.834	-0.114
	0.95	0.91	-0.04	0.972	0.665	-0.307	0.946	0.86	-0.086	0.962	0.876	-0.086
	0.936	0.896	-0.04	0.966	0.663	-0.303	0.958	0.854	-0.104	0.952	0.93	-0.022
	0.934	0.878	-0.056	0.962	0.621	-0.341	0.938	0.832	-0.106	0.948	0.844	-0.104
	0.94	0.866	-0.074	0.958	0.609	-0.349	0.95	0.88	-0.07	0.956	0.86	-0.096
	0.942	0.866	-0.076	0.964	0.659	-0.305	0.958	0.864	-0.094	0.948	0.862	-0.086
	0.932	0.904	-0.028	0.974	0.605	-0.369	0.934	0.816	-0.118	0.958	0.886	-0.072
	0.944	0.88	-0.064	0.954	0.641	-0.313	0.962	0.878	-0.084	0.964	0.866	-0.098
	0.958	0.886	-0.072	0.954	0.625	-0.329	0.938	0.818	-0.12	0.956	0.918	-0.038
REVISE	0.956	0.922	-0.034	0.958	0.497	-0.461	0.936	0.872	-0.064	0.958	0.926	-0.032
	0.942	0.852	-0.09	0.964	0.489	-0.475	0.936	0.846	-0.09	0.962	0.914	-0.048
	0.948	0.876	-0.072	0.97	0.435	-0.535	0.934	0.864	-0.07	0.974	0.788	-0.186
	0.95	0.878	-0.072	0.966	0.631	-0.335	0.958	0.894	-0.064	0.968	0.866	-0.102
	0.964	0.892	-0.072	0.968	0.623	-0.345	0.942	0.83	-0.112	0.972	0.856	-0.116
	0.938	0.862	-0.076	0.96	0.649	-0.311	0.942	0.83	-0.112	0.952	0.936	-0.016
	0.942	0.922	-0.02	0.966	0.585	-0.381	0.942	0.896	-0.046	0.958	0.866	-0.092
	0.934	0.864	-0.07	0.966	0.681	-0.285	0.93	0.878	-0.052	0.958	0.894	-0.064
	0.944	0.88	-0.064	0.964	0.645	-0.319	0.956	0.846	-0.11	0.944	0.812	-0.132
	0.926	0.928	0.002	0.95	0.605	-0.345	0.952	0.892	-0.06	0.962	0.838	-0.124
ECCo	0.972	0.896	-0.076	0.96	0.405	-0.555	0.926	0.848	-0.078	0.962	0.864	-0.098
	0.96	0.85	-0.11	0.958	0.351	-0.607	0.934	0.824	-0.11	0.956	0.896	-0.06
	0.95	0.898	-0.052	0.962	0.309	-0.653	0.964	0.878	-0.086	0.962	0.852	-0.11
	0.94	0.906	-0.034	0.952	0.563	-0.389	0.948	0.886	-0.062	0.96	0.854	-0.106
	0.95	0.89	-0.06	0.956	0.517	-0.439	0.936	0.88	-0.056	0.954	0.892	-0.062
	0.942	0.916	-0.026	0.948	0.407	-0.541	0.938	0.878	-0.06	0.96	0.856	-0.104
	0.938	0.938	0.0	0.956	0.395	-0.561	0.934	0.836	-0.098	0.956	0.918	-0.038
	0.96	0.902	-0.058	0.972	0.383	-0.589	0.946	0.838	-0.108	0.954	0.926	-0.028
	0.94	0.914	-0.026	0.958	0.403	-0.555	0.948	0.854	-0.094	0.954	0.86	-0.094
	0.954	0.9	-0.054	0.962	0.323	-0.639	0.934	0.84	-0.094	0.954	0.866	-0.088
Wachter	0.938	0.922	-0.016	0.974	0.842	-0.132	0.94	0.87	-0.07	0.95	0.906	-0.044
	0.934	0.91	-0.024	0.962	0.822	-0.14	0.948	0.908	-0.04	0.958	0.924	-0.034
	0.934	0.932	-0.002	0.966	0.79	-0.176	0.964	0.904	-0.06	0.952	0.904	-0.048
	0.94	0.902	-0.038	0.982	0.816	-0.166	0.944	0.838	-0.106	0.964	0.854	-0.11
	0.936	0.874	-0.062	0.97	0.77	-0.2	0.95	0.866	-0.084	0.964	0.888	-0.076
	0.944	0.926	-0.018	0.956	0.814	-0.142	0.95	0.908	-0.042	0.974	0.848	-0.126
	0.916	0.894	-0.022	0.964	0.806	-0.158	0.936	0.818	-0.118	0.96	0.848	-0.112
	0.952	0.892	-0.06	0.96	0.776	-0.184	0.932	0.85	-0.082	0.958	0.836	-0.122
	0.948	0.92	-0.028	0.956	0.846	-0.11	0.95	0.844	-0.106	0.936	0.892	-0.044
	0.942	0.908	-0.034	0.974	0.79	-0.184	0.95	0.874	-0.076	0.968	0.89	-0.078
Generic	0.94	0.89	-0.05	0.966	0.842	-0.124	0.936	0.882	-0.054	0.966	0.888	-0.078
	0.96	0.886	-0.074	0.954	0.844	-0.11	0.932	0.886	-0.046	0.956	0.904	-0.052
	0.946	0.894	-0.052	0.966	0.884	-0.082	0.942	0.882	-0.06	0.946	0.912	-0.034
	0.948	0.888	-0.06	0.956	0.8	-0.156	0.954	0.888	-0.066	0.942	0.908	-0.034
	0.93	0.892	-0.038	0.962	0.842	-0.12	0.922	0.898	-0.024	0.954	0.88	-0.074
	0.94	0.934	-0.006	0.96	0.778	-0.182	0.956	0.874	-0.082	0.962	0.904	-0.058
	0.932	0.906	-0.026	0.97	0.806	-0.164	0.932	0.816	-0.116	0.95	0.89	-0.06
	0.928	0.89	-0.038	0.96	0.794	-0.166	0.936	0.86	-0.076	0.964	0.9	-0.064
	0.96	0.922	-0.038	0.966	0.798	-0.168	0.934	0.856	-0.078	0.95	0.908	-0.042
	0.936	0.896	-0.04	0.944	0.85	-0.094	0.956	0.902	-0.054	0.966	0.914	-0.052
DiCE	0.944	0.906	-0.038	0.954	0.786	-0.168	0.962	0.872	-0.09	0.958	0.856	-0.102
	0.94	0.928	-0.012	0.964	0.844	-0.12	0.942	0.908	-0.034	0.958	0.926	-0.032
	0.936	0.912	-0.024	0.966	0.832	-0.134	0.962	0.864	-0.098	0.954	0.85	-0.104

	0.926	0.9	-0.026	0.968	0.784	-0.184	0.96	0.886	-0.074	0.956	0.848	-0.108
	0.956	0.898	-0.058	0.964	0.834	-0.13	0.948	0.864	-0.084	0.944	0.868	-0.076
	0.942	0.912	-0.03	0.956	0.826	-0.13	0.946	0.9	-0.046	0.952	0.836	-0.116
	0.938	0.892	-0.046	0.97	0.848	-0.122	0.952	0.894	-0.058	0.96	0.86	-0.1
	0.946	0.93	-0.016	0.96	0.778	-0.182	0.954	0.872	-0.082	0.966	0.926	-0.04
	0.938	0.896	-0.042	0.964	0.906	-0.058	0.948	0.89	-0.058	0.96	0.842	-0.118
	0.94	0.884	-0.056	0.97	0.85	-0.12	0.944	0.842	-0.102	0.95	0.878	-0.072
ClaPROAR	0.938	0.934	-0.004	0.966	0.884	-0.082	0.942	0.828	-0.114	0.958	0.904	-0.054
	0.94	0.91	-0.03	0.962	0.794	-0.168	0.95	0.822	-0.128	0.966	0.908	-0.058
	0.948	0.912	-0.036	0.958	0.772	-0.186	0.946	0.852	-0.094	0.952	0.844	-0.108
	0.944	0.924	-0.02	0.968	0.86	-0.108	0.928	0.858	-0.07	0.964	0.882	-0.082
	0.946	0.904	-0.042	0.954	0.86	-0.094	0.944	0.832	-0.112	0.96	0.884	-0.076
	0.942	0.894	-0.048	0.968	0.77	-0.198	0.946	0.888	-0.058	0.96	0.83	-0.13
	0.946	0.902	-0.044	0.958	0.79	-0.168	0.944	0.878	-0.066	0.966	0.858	-0.108
	0.934	0.916	-0.018	0.978	0.798	-0.18	0.944	0.866	-0.078	0.952	0.872	-0.08
	0.94	0.908	-0.032	0.962	0.784	-0.178	0.946	0.87	-0.076	0.96	0.892	-0.068
	0.954	0.914	-0.04	0.968	0.854	-0.114	0.95	0.876	-0.074	0.972	0.922	-0.05

Tab. 148: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP and a deep ensemble, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.95	0.832	-0.118	0.964	0.646	-0.318	0.96	0.892	-0.068	0.966	0.86	-0.106
	0.95	0.902	-0.048	0.97	0.642	-0.328	0.954	0.9	-0.054	0.95	0.868	-0.082
	0.948	0.866	-0.082	0.97	0.62	-0.35	0.948	0.888	-0.06	0.974	0.842	-0.132
	0.946	0.862	-0.084	0.966	0.642	-0.324	0.962	0.848	-0.114	0.97	0.798	-0.172
	0.938	0.892	-0.046	0.958	0.626	-0.332	0.948	0.872	-0.076	0.96	0.862	-0.098
	0.95	0.87	-0.08	0.966	0.646	-0.32	0.942	0.888	-0.054	0.966	0.878	-0.088
	0.94	0.868	-0.072	0.972	0.648	-0.324	0.94	0.852	-0.088	0.972	0.814	-0.158
	0.946	0.876	-0.07	0.956	0.644	-0.312	0.964	0.878	-0.086	0.972	0.9	-0.072
	0.97	0.892	-0.078	0.964	0.68	-0.284	0.954	0.892	-0.062	0.956	0.834	-0.122
	0.936	0.864	-0.072	0.968	0.636	-0.332	0.942	0.86	-0.082	0.974	0.842	-0.132
REVISE	0.956	0.906	-0.05	0.954	0.526	-0.428	0.944	0.868	-0.076	0.966	0.862	-0.104
	0.952	0.866	-0.086	0.952	0.474	-0.478	0.954	0.828	-0.126	0.972	0.834	-0.138
	0.96	0.876	-0.084	0.966	0.63	-0.336	0.942	0.836	-0.106	0.98	0.836	-0.144
	0.96	0.904	-0.056	0.966	0.506	-0.46	0.964	0.834	-0.13	0.962	0.886	-0.076
	0.946	0.896	-0.05	0.95	0.54	-0.41	0.95	0.892	-0.058	0.96	0.91	-0.05
	0.946	0.884	-0.062	0.962	0.49	-0.472	0.948	0.816	-0.132	0.966	0.83	-0.136
	0.942	0.89	-0.052	0.978	0.57	-0.408	0.948	0.812	-0.136	0.974	0.82	-0.154
	0.922	0.852	-0.07	0.958	0.654	-0.304	0.94	0.85	-0.09	0.966	0.87	-0.096
	0.938	0.904	-0.034	0.96	0.58	-0.38	0.964	0.824	-0.14	0.966	0.84	-0.126
	0.934	0.85	-0.084	0.95	0.704	-0.246	0.952	0.814	-0.138	0.948	0.866	-0.082
ECCo	0.938	0.88	-0.058	0.964	0.45	-0.514	0.956	0.868	-0.088	0.962	0.832	-0.13
	0.952	0.874	-0.078	0.966	0.436	-0.53	0.934	0.832	-0.102	0.984	0.778	-0.206
	0.946	0.858	-0.088	0.964	0.43	-0.534	0.952	0.904	-0.048	0.962	0.832	-0.13
	0.932	0.86	-0.072	0.952	0.47	-0.482	0.954	0.84	-0.114	0.974	0.838	-0.136
	0.942	0.862	-0.08	0.956	0.482	-0.474	0.956	0.886	-0.07	0.954	0.836	-0.118
	0.946	0.87	-0.076	0.97	0.414	-0.556	0.956	0.856	-0.1	0.966	0.834	-0.132
	0.968	0.862	-0.106	0.958	0.466	-0.492	0.948	0.816	-0.132	0.966	0.846	-0.12
	0.96	0.858	-0.102	0.946	0.474	-0.472	0.944	0.882	-0.062	0.962	0.854	-0.108
	0.932	0.84	-0.092	0.97	0.45	-0.52	0.93	0.852	-0.078	0.97	0.82	-0.15
	0.954	0.89	-0.064	0.972	0.454	-0.518	0.95	0.834	-0.116	0.952	0.78	-0.172
Wachter	0.948	0.888	-0.06	0.952	0.712	-0.24	0.958	0.83	-0.128	0.964	0.88	-0.084
	0.938	0.896	-0.042	0.962	0.692	-0.27	0.952	0.892	-0.06	0.964	0.788	-0.176

	0.948	0.894	-0.054	0.956	0.804	-0.152	0.956	0.874	-0.082	0.972	0.83	-0.142
	0.954	0.85	-0.104	0.96	0.67	-0.29	0.934	0.878	-0.056	0.976	0.792	-0.184
	0.956	0.872	-0.084	0.958	0.728	-0.23	0.962	0.844	-0.118	0.96	0.824	-0.136
	0.956	0.912	-0.044	0.962	0.758	-0.204	0.964	0.906	-0.058	0.956	0.846	-0.11
	0.944	0.854	-0.09	0.978	0.71	-0.268	0.954	0.882	-0.072	0.972	0.892	-0.08
	0.948	0.896	-0.052	0.974	0.734	-0.24	0.95	0.862	-0.088	0.96	0.836	-0.124
	0.94	0.896	-0.044	0.95	0.774	-0.176	0.95	0.838	-0.112	0.956	0.868	-0.088
	0.93	0.898	-0.032	0.942	0.698	-0.244	0.946	0.856	-0.09	0.954	0.77	-0.184
Generic	0.948	0.914	-0.034	0.962	0.596	-0.366	0.936	0.856	-0.08	0.95	0.822	-0.128
	0.916	0.904	-0.012	0.968	0.808	-0.16	0.946	0.888	-0.058	0.958	0.888	-0.07
	0.95	0.904	-0.046	0.962	0.714	-0.248	0.954	0.844	-0.11	0.966	0.844	-0.122
	0.952	0.896	-0.056	0.962	0.696	-0.266	0.952	0.864	-0.088	0.974	0.872	-0.102
	0.964	0.93	-0.034	0.938	0.768	-0.17	0.962	0.884	-0.078	0.96	0.904	-0.056
	0.948	0.876	-0.072	0.96	0.59	-0.37	0.934	0.856	-0.078	0.964	0.85	-0.114
	0.948	0.888	-0.06	0.952	0.742	-0.21	0.956	0.848	-0.108	0.962	0.818	-0.144
	0.926	0.866	-0.06	0.972	0.634	-0.338	0.95	0.874	-0.076	0.958	0.826	-0.132
	0.94	0.886	-0.054	0.96	0.708	-0.252	0.952	0.818	-0.134	0.95	0.828	-0.122
	0.944	0.894	-0.05	0.984	0.662	-0.322	0.926	0.872	-0.054	0.964	0.868	-0.096
DiCE	0.948	0.838	-0.11	0.96	0.732	-0.228	0.938	0.856	-0.082	0.96	0.838	-0.122
	0.95	0.886	-0.064	0.952	0.792	-0.16	0.964	0.906	-0.058	0.966	0.846	-0.12
	0.94	0.848	-0.092	0.97	0.794	-0.176	0.948	0.866	-0.082	0.962	0.832	-0.13
	0.938	0.884	-0.054	0.968	0.678	-0.29	0.94	0.854	-0.086	0.97	0.818	-0.152
	0.94	0.862	-0.078	0.96	0.644	-0.316	0.956	0.86	-0.096	0.972	0.828	-0.144
	0.954	0.898	-0.056	0.958	0.8	-0.158	0.936	0.888	-0.048	0.976	0.8	-0.176
	0.962	0.912	-0.05	0.956	0.766	-0.19	0.954	0.86	-0.094	0.962	0.89	-0.072
	0.95	0.924	-0.026	0.968	0.74	-0.228	0.952	0.882	-0.07	0.966	0.834	-0.132
	0.938	0.886	-0.052	0.956	0.878	-0.078	0.946	0.894	-0.052	0.978	0.844	-0.134
	0.926	0.88	-0.046	0.966	0.692	-0.274	0.946	0.896	-0.05	0.966	0.8	-0.166
ClaPROAR	0.954	0.904	-0.05	0.962	0.7	-0.262	0.944	0.862	-0.082	0.954	0.85	-0.104
	0.944	0.91	-0.034	0.958	0.74	-0.218	0.952	0.886	-0.066	0.96	0.838	-0.122
	0.934	0.898	-0.036	0.974	0.758	-0.216	0.954	0.866	-0.088	0.97	0.85	-0.12
	0.948	0.904	-0.044	0.962	0.822	-0.14	0.948	0.892	-0.056	0.968	0.874	-0.094
	0.944	0.876	-0.068	0.964	0.802	-0.162	0.954	0.914	-0.04	0.974	0.844	-0.13
	0.956	0.854	-0.102	0.954	0.718	-0.236	0.968	0.86	-0.108	0.952	0.862	-0.09
	0.95	0.902	-0.048	0.962	0.868	-0.094	0.956	0.884	-0.072	0.96	0.828	-0.132
	0.952	0.894	-0.058	0.978	0.72	-0.258	0.954	0.886	-0.068	0.966	0.824	-0.142
	0.968	0.862	-0.106	0.956	0.782	-0.174	0.944	0.872	-0.072	0.948	0.846	-0.102
	0.962	0.898	-0.064	0.96	0.692	-0.268	0.958	0.81	-0.148	0.964	0.882	-0.082

Tab. 149: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP and a deep ensemble, experiment 5

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.962	0.836	-0.126	0.946	0.725	-0.22	0.94	0.858	-0.082	0.962	0.878	-0.084
	0.944	0.836	-0.108	0.948	0.637	-0.311	0.946	0.864	-0.082	0.966	0.854	-0.112
	0.944	0.876	-0.068	0.95	0.695	-0.255	0.95	0.838	-0.112	0.964	0.898	-0.066
	0.956	0.852	-0.104	0.972	0.665	-0.307	0.956	0.844	-0.112	0.962	0.876	-0.086
	0.952	0.846	-0.106	0.966	0.679	-0.287	0.948	0.812	-0.136	0.964	0.886	-0.078
	0.956	0.866	-0.09	0.962	0.671	-0.291	0.958	0.822	-0.136	0.972	0.906	-0.066
	0.966	0.846	-0.12	0.954	0.679	-0.275	0.952	0.784	-0.168	0.966	0.892	-0.074
	0.944	0.854	-0.09	0.954	0.639	-0.315	0.968	0.84	-0.128	0.966	0.884	-0.082
	0.958	0.876	-0.082	0.94	0.673	-0.267	0.948	0.846	-0.102	0.97	0.902	-0.068
	0.946	0.86	-0.086	0.958	0.695	-0.263	0.966	0.88	-0.086	0.966	0.852	-0.114
REVISE	0.954	0.876	-0.078	0.958	0.637	-0.321	0.956	0.888	-0.068	0.958	0.846	-0.112

	0.956	0.858	-0.098	0.968	0.549	-0.419	0.962	0.822	-0.14	0.96	0.87	-0.09
	0.958	0.88	-0.078	0.952	0.796	-0.156	0.932	0.858	-0.074	0.956	0.868	-0.088
	0.95	0.928	-0.022	0.956	0.557	-0.399	0.954	0.88	-0.074	0.966	0.894	-0.072
	0.96	0.904	-0.056	0.96	0.667	-0.293	0.964	0.88	-0.084	0.962	0.84	-0.122
	0.958	0.89	-0.068	0.952	0.641	-0.311	0.96	0.798	-0.162	0.97	0.794	-0.176
	0.954	0.872	-0.082	0.978	0.655	-0.323	0.944	0.846	-0.098	0.96	0.874	-0.086
	0.966	0.9	-0.066	0.962	0.555	-0.407	0.948	0.836	-0.112	0.972	0.884	-0.088
	0.946	0.868	-0.078	0.954	0.503	-0.451	0.956	0.858	-0.098	0.966	0.902	-0.064
	0.938	0.878	-0.06	0.968	0.623	-0.345	0.956	0.87	-0.086	0.97	0.85	-0.12
ECCo	0.96	0.906	-0.054	0.95	0.475	-0.475	0.938	0.838	-0.1	0.962	0.864	-0.098
	0.948	0.9	-0.048	0.952	0.435	-0.517	0.946	0.81	-0.136	0.966	0.87	-0.096
	0.97	0.868	-0.102	0.96	0.439	-0.521	0.944	0.804	-0.14	0.97	0.932	-0.038
	0.952	0.878	-0.074	0.96	0.441	-0.519	0.96	0.812	-0.148	0.972	0.87	-0.102
	0.95	0.848	-0.102	0.954	0.449	-0.505	0.956	0.812	-0.144	0.97	0.902	-0.068
	0.948	0.84	-0.108	0.96	0.473	-0.487	0.93	0.756	-0.174	0.976	0.874	-0.102
	0.964	0.826	-0.138	0.944	0.431	-0.513	0.936	0.852	-0.084	0.97	0.842	-0.128
	0.96	0.85	-0.11	0.962	0.449	-0.513	0.946	0.84	-0.106	0.978	0.864	-0.114
	0.966	0.878	-0.088	0.962	0.433	-0.529	0.946	0.808	-0.138	0.976	0.892	-0.084
	0.946	0.86	-0.086	0.96	0.441	-0.519	0.934	0.804	-0.13	0.976	0.882	-0.094
Wachter	0.952	0.886	-0.066	0.964	0.876	-0.088	0.958	0.856	-0.102	0.982	0.884	-0.098
	0.968	0.884	-0.084	0.954	0.866	-0.088	0.956	0.804	-0.152	0.97	0.892	-0.078
	0.946	0.894	-0.052	0.944	0.874	-0.07	0.95	0.884	-0.066	0.968	0.9	-0.068
	0.958	0.886	-0.072	0.954	0.902	-0.052	0.958	0.864	-0.094	0.956	0.872	-0.084
	0.938	0.908	-0.03	0.952	0.866	-0.086	0.962	0.884	-0.078	0.97	0.902	-0.068
	0.962	0.88	-0.082	0.954	0.828	-0.126	0.944	0.828	-0.116	0.964	0.892	-0.072
	0.956	0.87	-0.086	0.968	0.884	-0.084	0.94	0.836	-0.104	0.964	0.856	-0.108
	0.964	0.87	-0.094	0.958	0.886	-0.072	0.94	0.814	-0.126	0.96	0.92	-0.04
	0.948	0.864	-0.084	0.962	0.886	-0.076	0.946	0.85	-0.096	0.976	0.894	-0.082
	0.942	0.886	-0.056	0.964	0.794	-0.17	0.952	0.85	-0.102	0.968	0.89	-0.078
Generic	0.94	0.884	-0.056	0.96	0.826	-0.134	0.958	0.842	-0.116	0.97	0.886	-0.084
	0.96	0.886	-0.074	0.946	0.89	-0.056	0.964	0.908	-0.056	0.964	0.894	-0.07
	0.958	0.858	-0.1	0.962	0.888	-0.074	0.96	0.838	-0.122	0.974	0.878	-0.096
	0.962	0.842	-0.12	0.958	0.836	-0.122	0.96	0.804	-0.156	0.966	0.908	-0.058
	0.942	0.87	-0.072	0.946	0.886	-0.06	0.956	0.85	-0.106	0.974	0.932	-0.042
	0.956	0.904	-0.052	0.96	0.898	-0.062	0.954	0.866	-0.088	0.962	0.846	-0.116
	0.94	0.872	-0.068	0.966	0.882	-0.084	0.942	0.77	-0.172	0.962	0.856	-0.106
	0.954	0.898	-0.056	0.962	0.896	-0.066	0.944	0.86	-0.084	0.972	0.898	-0.074
	0.956	0.87	-0.086	0.952	0.828	-0.124	0.96	0.82	-0.14	0.96	0.888	-0.072
	0.952	0.878	-0.074	0.962	0.902	-0.06	0.94	0.83	-0.11	0.962	0.868	-0.094
DiCE	0.962	0.886	-0.076	0.942	0.826	-0.116	0.94	0.828	-0.112	0.974	0.89	-0.084
	0.948	0.89	-0.058	0.968	0.874	-0.094	0.958	0.88	-0.078	0.962	0.898	-0.064
	0.968	0.884	-0.084	0.966	0.888	-0.078	0.956	0.876	-0.08	0.958	0.894	-0.064
	0.954	0.894	-0.06	0.956	0.804	-0.152	0.95	0.826	-0.124	0.966	0.874	-0.092
	0.95	0.884	-0.066	0.964	0.872	-0.092	0.94	0.864	-0.076	0.964	0.88	-0.084
	0.956	0.864	-0.092	0.956	0.876	-0.08	0.948	0.872	-0.076	0.962	0.888	-0.074
	0.964	0.852	-0.112	0.968	0.89	-0.078	0.95	0.832	-0.118	0.978	0.91	-0.068
	0.968	0.826	-0.142	0.964	0.864	-0.1	0.946	0.862	-0.084	0.968	0.866	-0.102
	0.932	0.872	-0.06	0.956	0.862	-0.094	0.96	0.872	-0.088	0.974	0.888	-0.086
	0.95	0.89	-0.06	0.946	0.886	-0.06	0.946	0.892	-0.054	0.958	0.86	-0.098
ClaPROAR	0.948	0.85	-0.098	0.954	0.874	-0.08	0.952	0.864	-0.088	0.966	0.86	-0.106
	0.978	0.88	-0.098	0.954	0.822	-0.132	0.944	0.856	-0.088	0.958	0.858	-0.1
	0.946	0.86	-0.086	0.956	0.842	-0.114	0.95	0.846	-0.104	0.964	0.892	-0.072
	0.942	0.89	-0.052	0.95	0.858	-0.092	0.962	0.846	-0.116	0.962	0.866	-0.096
	0.956	0.88	-0.076	0.958	0.894	-0.064	0.95	0.83	-0.12	0.964	0.85	-0.114
	0.948	0.894	-0.054	0.962	0.892	-0.07	0.954	0.862	-0.092	0.974	0.892	-0.082
	0.942	0.87	-0.072	0.94	0.856	-0.084	0.94	0.784	-0.156	0.96	0.884	-0.076

	0.95	0.878	-0.072	0.966	0.898	-0.068	0.94	0.88	-0.06	0.966	0.932	-0.034
	0.964	0.836	-0.128	0.968	0.864	-0.104	0.956	0.836	-0.12	0.96	0.9	-0.06
	0.96	0.872	-0.088	0.952	0.812	-0.14	0.946	0.806	-0.14	0.972	0.848	-0.124

Tab. 150: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP and a deep ensemble, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.91	0.828	-0.082	0.974	0.658	-0.316	0.96	0.864	-0.096	0.942	0.844	-0.098
	0.916	0.826	-0.09	0.956	0.696	-0.26	0.942	0.848	-0.094	0.932	0.866	-0.066
	0.912	0.828	-0.084	0.95	0.656	-0.294	0.948	0.892	-0.056	0.936	0.848	-0.088
	0.928	0.848	-0.08	0.958	0.628	-0.33	0.952	0.868	-0.084	0.964	0.876	-0.088
	0.928	0.872	-0.056	0.956	0.682	-0.274	0.95	0.878	-0.072	0.914	0.86	-0.054
	0.916	0.91	-0.006	0.964	0.646	-0.318	0.962	0.848	-0.114	0.94	0.854	-0.086
	0.922	0.888	-0.034	0.956	0.768	-0.188	0.954	0.866	-0.088	0.934	0.898	-0.036
	0.898	0.852	-0.046	0.974	0.698	-0.276	0.944	0.866	-0.078	0.926	0.894	-0.032
	0.928	0.842	-0.086	0.95	0.668	-0.282	0.944	0.834	-0.11	0.944	0.804	-0.14
	0.906	0.84	-0.066	0.966	0.648	-0.318	0.938	0.836	-0.102	0.952	0.882	-0.07
REVISE	0.904	0.872	-0.032	0.95	0.654	-0.296	0.962	0.908	-0.054	0.934	0.81	-0.124
	0.916	0.868	-0.048	0.956	0.634	-0.322	0.948	0.9	-0.048	0.932	0.876	-0.056
	0.94	0.874	-0.066	0.97	0.654	-0.316	0.946	0.858	-0.088	0.924	0.81	-0.114
	0.918	0.872	-0.046	0.942	0.628	-0.314	0.96	0.87	-0.09	0.926	0.856	-0.07
	0.926	0.928	0.002	0.96	0.666	-0.294	0.97	0.894	-0.076	0.938	0.856	-0.082
	0.908	0.902	-0.006	0.956	0.57	-0.386	0.968	0.886	-0.082	0.938	0.874	-0.064
	0.902	0.86	-0.042	0.95	0.592	-0.358	0.952	0.888	-0.064	0.938	0.87	-0.068
	0.918	0.87	-0.048	0.974	0.628	-0.346	0.952	0.808	-0.144	0.936	0.792	-0.144
	0.92	0.876	-0.044	0.964	0.658	-0.306	0.952	0.81	-0.142	0.932	0.822	-0.11
	0.934	0.868	-0.066	0.944	0.656	-0.288	0.932	0.872	-0.06	0.93	0.822	-0.108
ECCo	0.924	0.862	-0.062	0.96	0.352	-0.608	0.962	0.852	-0.11	0.93	0.82	-0.11
	0.936	0.854	-0.082	0.956	0.34	-0.616	0.954	0.812	-0.142	0.91	0.874	-0.036
	0.93	0.846	-0.084	0.974	0.342	-0.632	0.924	0.838	-0.086	0.936	0.834	-0.102
	0.908	0.84	-0.068	0.962	0.332	-0.63	0.952	0.78	-0.172	0.94	0.852	-0.088
	0.928	0.86	-0.068	0.96	0.338	-0.622	0.964	0.87	-0.094	0.924	0.848	-0.076
	0.916	0.856	-0.06	0.964	0.34	-0.624	0.952	0.828	-0.124	0.93	0.844	-0.086
	0.912	0.868	-0.044	0.962	0.326	-0.636	0.946	0.802	-0.144	0.938	0.844	-0.094
	0.922	0.848	-0.074	0.964	0.374	-0.59	0.926	0.792	-0.134	0.938	0.8	-0.138
	0.914	0.828	-0.086	0.952	0.366	-0.586	0.962	0.828	-0.134	0.934	0.84	-0.094
	0.928	0.836	-0.092	0.956	0.346	-0.61	0.948	0.8	-0.148	0.924	0.86	-0.064
Wachter	0.928	0.836	-0.092	0.954	0.934	-0.02	0.94	0.846	-0.094	0.9	0.784	-0.116
	0.916	0.878	-0.038	0.954	0.914	-0.04	0.958	0.868	-0.09	0.948	0.896	-0.052
	0.934	0.888	-0.046	0.972	0.904	-0.068	0.942	0.876	-0.066	0.928	0.854	-0.074
	0.924	0.888	-0.036	0.958	0.914	-0.044	0.948	0.852	-0.096	0.932	0.838	-0.094
	0.912	0.898	-0.014	0.97	0.898	-0.072	0.952	0.848	-0.104	0.938	0.86	-0.078
	0.918	0.88	-0.038	0.976	0.926	-0.05	0.944	0.856	-0.088	0.948	0.864	-0.084
	0.926	0.884	-0.042	0.954	0.838	-0.116	0.94	0.884	-0.056	0.94	0.78	-0.16
	0.918	0.88	-0.038	0.962	0.924	-0.038	0.946	0.872	-0.074	0.932	0.858	-0.074
	0.942	0.896	-0.046	0.948	0.834	-0.114	0.942	0.88	-0.062	0.918	0.814	-0.104
	0.916	0.882	-0.034	0.962	0.902	-0.06	0.95	0.92	-0.03	0.924	0.882	-0.042
Generic	0.908	0.858	-0.05	0.958	0.868	-0.09	0.958	0.872	-0.086	0.93	0.85	-0.08
	0.904	0.884	-0.02	0.96	0.934	-0.026	0.966	0.874	-0.092	0.926	0.87	-0.056
	0.928	0.864	-0.064	0.972	0.902	-0.07	0.956	0.864	-0.092	0.94	0.846	-0.094
	0.938	0.856	-0.082	0.97	0.936	-0.034	0.954	0.856	-0.098	0.936	0.874	-0.062
	0.904	0.886	-0.018	0.962	0.924	-0.038	0.96	0.84	-0.12	0.924	0.926	0.002
	0.938	0.878	-0.06	0.962	0.898	-0.064	0.956	0.824	-0.132	0.932	0.844	-0.088

	0.912	0.85	-0.062	0.96	0.86	-0.1	0.944	0.91	-0.034	0.928	0.884	-0.044
	0.924	0.888	-0.036	0.956	0.91	-0.046	0.958	0.862	-0.096	0.934	0.884	-0.05
	0.926	0.874	-0.052	0.958	0.896	-0.062	0.97	0.922	-0.048	0.932	0.802	-0.13
	0.89	0.892	0.002	0.952	0.904	-0.048	0.944	0.852	-0.092	0.956	0.874	-0.082
DiCE	0.938	0.902	-0.036	0.954	0.886	-0.068	0.966	0.834	-0.132	0.952	0.832	-0.12
	0.922	0.882	-0.04	0.946	0.862	-0.084	0.934	0.854	-0.08	0.936	0.826	-0.11
	0.906	0.846	-0.06	0.97	0.932	-0.038	0.934	0.86	-0.074	0.928	0.824	-0.104
	0.93	0.888	-0.042	0.962	0.846	-0.116	0.964	0.832	-0.132	0.928	0.872	-0.056
	0.938	0.904	-0.034	0.962	0.854	-0.108	0.96	0.91	-0.05	0.914	0.8	-0.114
	0.912	0.856	-0.056	0.966	0.894	-0.072	0.96	0.842	-0.118	0.944	0.854	-0.09
	0.904	0.888	-0.016	0.968	0.92	-0.048	0.968	0.852	-0.116	0.942	0.894	-0.048
	0.92	0.856	-0.064	0.946	0.89	-0.056	0.958	0.822	-0.136	0.94	0.844	-0.096
	0.922	0.862	-0.06	0.954	0.906	-0.048	0.95	0.866	-0.084	0.938	0.85	-0.088
	0.92	0.894	-0.026	0.962	0.88	-0.082	0.95	0.874	-0.076	0.952	0.864	-0.088
ClaPROAR	0.94	0.874	-0.066	0.96	0.894	-0.066	0.956	0.886	-0.07	0.942	0.876	-0.066
	0.924	0.892	-0.032	0.964	0.87	-0.094	0.952	0.878	-0.074	0.95	0.86	-0.09
	0.918	0.882	-0.036	0.962	0.888	-0.074	0.956	0.872	-0.084	0.952	0.798	-0.154
	0.912	0.868	-0.044	0.948	0.838	-0.11	0.964	0.866	-0.098	0.94	0.866	-0.074
	0.922	0.894	-0.028	0.966	0.856	-0.11	0.938	0.86	-0.078	0.93	0.85	-0.08
	0.916	0.862	-0.054	0.964	0.886	-0.078	0.936	0.86	-0.076	0.962	0.918	-0.044
	0.918	0.906	-0.012	0.958	0.91	-0.048	0.938	0.862	-0.076	0.924	0.878	-0.046
	0.914	0.842	-0.072	0.968	0.944	-0.024	0.942	0.882	-0.06	0.922	0.864	-0.058
	0.91	0.886	-0.024	0.952	0.946	-0.006	0.958	0.908	-0.05	0.928	0.796	-0.132
	0.916	0.868	-0.048	0.966	0.888	-0.078	0.966	0.804	-0.162	0.944	0.826	-0.118

Tab. 151: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a MLP and a deep ensemble, experiment 5

F.2.9. GMCS dataset using Deep ensemble

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.962	0.886	-0.076	0.95	0.638	-0.312	0.958	0.876	-0.082	0.952	0.858	-0.094
	0.96	0.842	-0.118	0.948	0.616	-0.332	0.94	0.808	-0.132	0.952	0.874	-0.078
	0.934	0.832	-0.102	0.96	0.624	-0.336	0.95	0.84	-0.11	0.932	0.886	-0.046
	0.966	0.896	-0.07	0.95	0.632	-0.318	0.976	0.898	-0.078	0.938	0.866	-0.072
	0.97	0.826	-0.144	0.95	0.664	-0.286	0.966	0.85	-0.116	0.952	0.868	-0.084
	0.966	0.89	-0.076	0.94	0.63	-0.31	0.956	0.796	-0.16	0.95	0.842	-0.108
	0.96	0.876	-0.084	0.95	0.62	-0.33	0.972	0.862	-0.11	0.944	0.86	-0.084
	0.964	0.888	-0.076	0.964	0.694	-0.27	0.978	0.876	-0.102	0.954	0.896	-0.058
	0.952	0.882	-0.07	0.948	0.626	-0.322	0.978	0.82	-0.158	0.946	0.856	-0.09
	0.974	0.87	-0.104	0.954	0.66	-0.294	0.962	0.846	-0.116	0.942	0.848	-0.094
REVISE	0.958	0.894	-0.064	0.948	0.49	-0.458	0.952	0.91	-0.042	0.966	0.86	-0.106
	0.948	0.872	-0.076	0.94	0.61	-0.33	0.968	0.94	-0.028	0.952	0.88	-0.072
	0.96	0.888	-0.072	0.96	0.64	-0.32	0.962	0.882	-0.08	0.932	0.86	-0.072
	0.958	0.878	-0.08	0.966	0.638	-0.328	0.972	0.782	-0.19	0.954	0.822	-0.132
	0.962	0.878	-0.084	0.966	0.594	-0.372	0.966	0.874	-0.092	0.952	0.912	-0.04
	0.94	0.904	-0.036	0.956	0.626	-0.33	0.974	0.898	-0.076	0.958	0.902	-0.056
	0.964	0.89	-0.074	0.96	0.708	-0.252	0.956	0.892	-0.064	0.942	0.898	-0.044
	0.946	0.878	-0.068	0.962	0.468	-0.494	0.978	0.898	-0.08	0.954	0.844	-0.11
	0.956	0.858	-0.098	0.93	0.556	-0.374	0.966	0.86	-0.106	0.946	0.85	-0.096
	0.946	0.86	-0.086	0.952	0.56	-0.392	0.962	0.874	-0.088	0.936	0.846	-0.09
ECCo	0.934	0.884	-0.05	0.954	0.426	-0.528	0.962	0.884	-0.078	0.944	0.88	-0.064
	0.972	0.868	-0.104	0.938	0.45	-0.488	0.976	0.912	-0.064	0.95	0.862	-0.088
	0.956	0.91	-0.046	0.952	0.436	-0.516	0.956	0.886	-0.07	0.966	0.89	-0.076
	0.954	0.878	-0.076	0.958	0.418	-0.54	0.972	0.866	-0.106	0.94	0.868	-0.072

	0.954	0.838	-0.116	0.964	0.454	-0.51	0.958	0.91	-0.048	0.96	0.87	-0.09
	0.968	0.874	-0.094	0.968	0.434	-0.534	0.974	0.82	-0.154	0.954	0.854	-0.1
	0.962	0.848	-0.114	0.948	0.444	-0.504	0.968	0.934	-0.034	0.958	0.902	-0.056
	0.96	0.848	-0.112	0.95	0.454	-0.496	0.968	0.9	-0.068	0.946	0.876	-0.07
	0.958	0.848	-0.11	0.952	0.442	-0.51	0.966	0.83	-0.136	0.954	0.908	-0.046
	0.958	0.878	-0.08	0.964	0.452	-0.512	0.95	0.85	-0.1	0.95	0.826	-0.124
Wachter	0.962	0.898	-0.064	0.962	0.872	-0.09	0.976	0.9	-0.076	0.952	0.882	-0.07
	0.976	0.926	-0.05	0.962	0.862	-0.1	0.956	0.878	-0.078	0.954	0.802	-0.152
	0.948	0.916	-0.032	0.952	0.88	-0.072	0.96	0.884	-0.076	0.93	0.888	-0.042
	0.972	0.888	-0.084	0.95	0.916	-0.034	0.958	0.87	-0.088	0.96	0.852	-0.108
	0.962	0.88	-0.082	0.966	0.856	-0.11	0.952	0.89	-0.062	0.94	0.882	-0.058
	0.952	0.896	-0.056	0.954	0.866	-0.088	0.976	0.862	-0.114	0.962	0.9	-0.062
	0.946	0.94	-0.006	0.966	0.876	-0.09	0.962	0.884	-0.078	0.988	0.94	-0.048
	0.946	0.91	-0.036	0.95	0.862	-0.088	0.974	0.882	-0.092	0.96	0.86	-0.1
	0.946	0.866	-0.08	0.966	0.89	-0.076	0.972	0.916	-0.056	0.952	0.898	-0.054
	0.952	0.904	-0.048	0.956	0.888	-0.068	0.97	0.926	-0.044	0.954	0.898	-0.056
Generic	0.968	0.896	-0.072	0.94	0.872	-0.068	0.972	0.94	-0.032	0.96	0.92	-0.04
	0.956	0.902	-0.054	0.958	0.91	-0.048	0.968	0.874	-0.094	0.946	0.864	-0.082
	0.96	0.904	-0.056	0.962	0.882	-0.08	0.97	0.878	-0.092	0.952	0.848	-0.104
	0.956	0.9	-0.056	0.96	0.838	-0.122	0.948	0.862	-0.086	0.958	0.898	-0.06
	0.96	0.942	-0.018	0.962	0.886	-0.076	0.97	0.922	-0.048	0.96	0.912	-0.048
	0.964	0.912	-0.052	0.946	0.85	-0.096	0.966	0.9	-0.066	0.96	0.918	-0.042
	0.94	0.91	-0.03	0.954	0.872	-0.082	0.956	0.906	-0.05	0.932	0.868	-0.064
	0.976	0.916	-0.06	0.944	0.836	-0.108	0.978	0.882	-0.096	0.976	0.884	-0.092
	0.96	0.89	-0.07	0.952	0.902	-0.05	0.958	0.876	-0.082	0.95	0.898	-0.052
	0.962	0.896	-0.066	0.954	0.88	-0.074	0.962	0.892	-0.07	0.95	0.892	-0.058
DiCE	0.958	0.934	-0.024	0.95	0.886	-0.064	0.968	0.886	-0.082	0.968	0.846	-0.122
	0.966	0.896	-0.07	0.958	0.858	-0.1	0.954	0.882	-0.072	0.962	0.844	-0.118
	0.956	0.92	-0.036	0.938	0.828	-0.11	0.964	0.888	-0.076	0.942	0.866	-0.076
	0.942	0.898	-0.044	0.97	0.894	-0.076	0.968	0.906	-0.062	0.96	0.88	-0.08
	0.966	0.89	-0.076	0.964	0.856	-0.108	0.972	0.892	-0.08	0.946	0.832	-0.114
	0.958	0.918	-0.04	0.948	0.878	-0.07	0.962	0.902	-0.06	0.938	0.868	-0.07
	0.956	0.912	-0.044	0.97	0.892	-0.078	0.966	0.876	-0.09	0.948	0.902	-0.046
	0.96	0.924	-0.036	0.942	0.892	-0.05	0.968	0.924	-0.044	0.96	0.878	-0.082
	0.962	0.89	-0.072	0.938	0.884	-0.054	0.966	0.868	-0.098	0.96	0.916	-0.044
	0.964	0.92	-0.044	0.964	0.878	-0.086	0.96	0.918	-0.042	0.944	0.92	-0.024
ClaPROAR	0.972	0.924	-0.048	0.938	0.876	-0.062	0.962	0.924	-0.038	0.96	0.91	-0.05
	0.966	0.882	-0.084	0.958	0.886	-0.072	0.968	0.894	-0.074	0.958	0.906	-0.052
	0.946	0.928	-0.018	0.95	0.892	-0.058	0.966	0.94	-0.026	0.948	0.842	-0.106
	0.958	0.924	-0.034	0.946	0.872	-0.074	0.966	0.924	-0.042	0.948	0.892	-0.056
	0.956	0.876	-0.08	0.95	0.864	-0.086	0.976	0.884	-0.092	0.952	0.926	-0.026
	0.96	0.89	-0.07	0.956	0.844	-0.112	0.958	0.834	-0.124	0.958	0.918	-0.04
	0.966	0.898	-0.068	0.948	0.858	-0.09	0.976	0.914	-0.062	0.968	0.874	-0.094
	0.958	0.902	-0.056	0.958	0.862	-0.096	0.974	0.848	-0.126	0.958	0.872	-0.086
	0.974	0.856	-0.118	0.946	0.872	-0.074	0.962	0.868	-0.094	0.942	0.888	-0.054
	0.958	0.882	-0.076	0.958	0.88	-0.078	0.968	0.9	-0.068	0.962	0.874	-0.088

Tab. 152: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a Deep ensemble, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.966	0.868	-0.098	0.98	0.643	-0.337	0.968	0.888	-0.08	0.956	0.844	-0.112
	0.966	0.886	-0.08	0.966	0.657	-0.309	0.948	0.856	-0.092	0.962	0.828	-0.134
	0.97	0.9	-0.07	0.95	0.657	-0.293	0.952	0.9	-0.052	0.956	0.838	-0.118

	0.97	0.86	-0.11	0.968	0.643	-0.325	0.948	0.808	-0.14	0.934	0.822	-0.112
	0.956	0.924	-0.032	0.956	0.613	-0.343	0.954	0.91	-0.044	0.948	0.838	-0.11
	0.944	0.87	-0.074	0.958	0.611	-0.347	0.96	0.836	-0.124	0.94	0.868	-0.072
	0.972	0.834	-0.138	0.99	0.601	-0.389	0.952	0.824	-0.128	0.948	0.88	-0.068
	0.958	0.876	-0.082	0.962	0.633	-0.329	0.962	0.918	-0.044	0.932	0.874	-0.058
	0.974	0.866	-0.108	0.972	0.603	-0.369	0.964	0.864	-0.1	0.958	0.872	-0.086
	0.968	0.862	-0.106	0.972	0.675	-0.297	0.952	0.874	-0.078	0.944	0.842	-0.102
REVISE	0.96	0.918	-0.042	0.956	0.627	-0.329	0.954	0.86	-0.094	0.962	0.856	-0.106
	0.966	0.908	-0.058	0.956	0.569	-0.387	0.978	0.936	-0.042	0.956	0.91	-0.046
	0.954	0.918	-0.036	0.96	0.567	-0.393	0.962	0.894	-0.068	0.946	0.854	-0.092
	0.966	0.894	-0.072	0.958	0.657	-0.301	0.952	0.9	-0.052	0.938	0.89	-0.048
	0.956	0.872	-0.084	0.95	0.691	-0.259	0.972	0.896	-0.076	0.962	0.914	-0.048
	0.96	0.904	-0.056	0.968	0.657	-0.311	0.954	0.834	-0.12	0.94	0.898	-0.042
	0.97	0.918	-0.052	0.958	0.784	-0.174	0.964	0.896	-0.068	0.956	0.868	-0.088
	0.974	0.91	-0.064	0.948	0.824	-0.124	0.96	0.882	-0.078	0.954	0.864	-0.09
	0.966	0.924	-0.042	0.952	0.599	-0.353	0.952	0.87	-0.082	0.96	0.886	-0.074
	0.942	0.908	-0.034	0.97	0.511	-0.459	0.966	0.846	-0.12	0.942	0.86	-0.082
ECCo	0.97	0.922	-0.048	0.968	0.415	-0.553	0.964	0.876	-0.088	0.968	0.894	-0.074
	0.968	0.882	-0.086	0.968	0.401	-0.567	0.968	0.84	-0.128	0.958	0.872	-0.086
	0.978	0.89	-0.088	0.966	0.403	-0.563	0.966	0.894	-0.072	0.942	0.826	-0.116
	0.972	0.858	-0.114	0.968	0.417	-0.551	0.948	0.914	-0.034	0.93	0.832	-0.098
	0.984	0.894	-0.09	0.966	0.427	-0.539	0.97	0.918	-0.052	0.938	0.876	-0.062
	0.964	0.89	-0.074	0.968	0.427	-0.541	0.958	0.87	-0.088	0.962	0.866	-0.096
	0.962	0.856	-0.106	0.968	0.397	-0.571	0.962	0.894	-0.068	0.938	0.81	-0.128
	0.964	0.842	-0.122	0.962	0.397	-0.565	0.966	0.858	-0.108	0.946	0.896	-0.05
	0.976	0.896	-0.08	0.964	0.411	-0.553	0.958	0.89	-0.068	0.952	0.89	-0.062
	0.972	0.904	-0.068	0.964	0.425	-0.539	0.952	0.91	-0.042	0.952	0.884	-0.068
Wachter	0.97	0.902	-0.068	0.96	0.906	-0.054	0.948	0.874	-0.074	0.944	0.868	-0.076
	0.968	0.918	-0.05	0.966	0.944	-0.022	0.97	0.906	-0.064	0.956	0.886	-0.07
	0.958	0.912	-0.046	0.956	0.938	-0.018	0.93	0.82	-0.11	0.94	0.874	-0.066
	0.97	0.872	-0.098	0.974	0.902	-0.072	0.972	0.896	-0.076	0.926	0.878	-0.048
	0.956	0.89	-0.066	0.954	0.922	-0.032	0.95	0.902	-0.048	0.924	0.91	-0.014
	0.964	0.898	-0.066	0.958	0.93	-0.028	0.95	0.934	-0.016	0.958	0.904	-0.054
	0.962	0.922	-0.04	0.968	0.922	-0.046	0.958	0.876	-0.082	0.946	0.92	-0.026
	0.964	0.918	-0.046	0.956	0.938	-0.018	0.966	0.834	-0.132	0.94	0.882	-0.058
	0.96	0.898	-0.062	0.954	0.932	-0.022	0.966	0.938	-0.028	0.952	0.804	-0.148
	0.96	0.912	-0.048	0.972	0.902	-0.07	0.966	0.912	-0.054	0.956	0.898	-0.058
Generic	0.978	0.914	-0.064	0.96	0.93	-0.03	0.968	0.924	-0.044	0.936	0.9	-0.036
	0.964	0.906	-0.058	0.966	0.948	-0.018	0.962	0.914	-0.048	0.938	0.874	-0.064
	0.952	0.916	-0.036	0.97	0.942	-0.028	0.956	0.884	-0.072	0.958	0.902	-0.056
	0.964	0.92	-0.044	0.952	0.92	-0.032	0.952	0.886	-0.066	0.948	0.854	-0.094
	0.976	0.91	-0.066	0.964	0.938	-0.026	0.958	0.914	-0.044	0.976	0.892	-0.084
	0.978	0.944	-0.034	0.972	0.908	-0.064	0.954	0.886	-0.068	0.952	0.886	-0.066
	0.97	0.906	-0.064	0.976	0.918	-0.058	0.962	0.852	-0.11	0.96	0.884	-0.076
	0.972	0.932	-0.04	0.958	0.918	-0.04	0.948	0.874	-0.074	0.94	0.842	-0.098
	0.96	0.894	-0.066	0.964	0.896	-0.068	0.954	0.924	-0.03	0.956	0.866	-0.09
	0.962	0.908	-0.054	0.972	0.888	-0.084	0.978	0.878	-0.1	0.95	0.846	-0.104
DiCE	0.98	0.892	-0.088	0.966	0.914	-0.052	0.962	0.858	-0.104	0.918	0.844	-0.074
	0.966	0.89	-0.076	0.958	0.908	-0.05	0.97	0.914	-0.056	0.946	0.898	-0.048
	0.968	0.932	-0.036	0.974	0.934	-0.04	0.96	0.926	-0.034	0.954	0.918	-0.036
	0.978	0.924	-0.054	0.974	0.936	-0.038	0.966	0.896	-0.07	0.932	0.872	-0.06
	0.97	0.906	-0.064	0.978	0.896	-0.082	0.966	0.892	-0.074	0.944	0.87	-0.074
	0.968	0.906	-0.062	0.97	0.928	-0.042	0.96	0.898	-0.062	0.956	0.89	-0.066
	0.97	0.9	-0.07	0.954	0.926	-0.028	0.97	0.882	-0.088	0.956	0.856	-0.1
	0.968	0.916	-0.052	0.984	0.932	-0.052	0.946	0.884	-0.062	0.958	0.918	-0.04
	0.964	0.946	-0.018	0.968	0.936	-0.032	0.96	0.91	-0.05	0.934	0.914	-0.02

	0.968	0.87	-0.098	0.96	0.942	-0.018	0.954	0.898	-0.056	0.956	0.846	-0.11
ClaPROAR	0.954	0.924	-0.03	0.97	0.942	-0.028	0.954	0.918	-0.036	0.96	0.884	-0.076
	0.956	0.906	-0.05	0.974	0.888	-0.086	0.958	0.88	-0.078	0.958	0.868	-0.09
	0.946	0.894	-0.052	0.974	0.946	-0.028	0.96	0.884	-0.076	0.954	0.862	-0.092
	0.964	0.882	-0.082	0.978	0.942	-0.036	0.958	0.9	-0.058	0.946	0.858	-0.088
	0.97	0.89	-0.08	0.96	0.916	-0.044	0.964	0.864	-0.1	0.948	0.836	-0.112
	0.972	0.928	-0.044	0.968	0.868	-0.1	0.96	0.87	-0.09	0.964	0.872	-0.092
	0.962	0.898	-0.064	0.974	0.894	-0.08	0.964	0.868	-0.096	0.95	0.898	-0.052
	0.962	0.93	-0.032	0.964	0.946	-0.018	0.966	0.9	-0.066	0.954	0.898	-0.056
	0.968	0.908	-0.06	0.968	0.936	-0.032	0.946	0.868	-0.078	0.944	0.888	-0.056
	0.974	0.878	-0.096	0.98	0.916	-0.064	0.954	0.844	-0.11	0.948	0.928	-0.02

Tab. 153: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a Deep ensemble, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.96	0.844	-0.116	0.956	0.596	-0.36	0.966	0.882	-0.084	0.936	0.83	-0.106
	0.95	0.858	-0.092	0.966	0.654	-0.312	0.98	0.87	-0.11	0.94	0.866	-0.074
	0.968	0.818	-0.15	0.966	0.626	-0.34	0.952	0.862	-0.09	0.956	0.88	-0.076
	0.956	0.842	-0.114	0.968	0.616	-0.352	0.958	0.894	-0.064	0.954	0.862	-0.092
	0.956	0.798	-0.158	0.956	0.64	-0.316	0.966	0.882	-0.084	0.94	0.834	-0.106
	0.964	0.84	-0.124	0.966	0.606	-0.36	0.962	0.87	-0.092	0.958	0.862	-0.096
	0.964	0.864	-0.1	0.95	0.66	-0.29	0.958	0.858	-0.1	0.966	0.802	-0.164
	0.95	0.844	-0.106	0.968	0.618	-0.35	0.974	0.842	-0.132	0.958	0.912	-0.046
	0.97	0.866	-0.104	0.966	0.606	-0.36	0.96	0.878	-0.082	0.952	0.838	-0.114
	0.96	0.85	-0.11	0.964	0.632	-0.332	0.964	0.83	-0.134	0.93	0.852	-0.078
REVISE	0.968	0.862	-0.106	0.954	0.602	-0.352	0.964	0.858	-0.106	0.954	0.832	-0.122
	0.96	0.808	-0.152	0.968	0.498	-0.47	0.978	0.844	-0.134	0.952	0.84	-0.112
	0.964	0.932	-0.032	0.952	0.552	-0.4	0.954	0.886	-0.068	0.962	0.896	-0.066
	0.968	0.862	-0.106	0.966	0.504	-0.462	0.962	0.864	-0.098	0.938	0.874	-0.064
	0.962	0.848	-0.114	0.954	0.434	-0.52	0.95	0.834	-0.116	0.946	0.894	-0.052
	0.976	0.856	-0.12	0.95	0.512	-0.438	0.97	0.808	-0.162	0.936	0.876	-0.06
	0.966	0.892	-0.074	0.956	0.51	-0.446	0.954	0.872	-0.082	0.962	0.894	-0.068
	0.97	0.874	-0.096	0.964	0.504	-0.46	0.976	0.852	-0.124	0.966	0.888	-0.078
	0.966	0.886	-0.08	0.968	0.556	-0.412	0.972	0.878	-0.094	0.962	0.88	-0.082
	0.966	0.874	-0.092	0.954	0.572	-0.382	0.96	0.86	-0.1	0.956	0.898	-0.058
ECCo	0.964	0.864	-0.1	0.954	0.434	-0.52	0.962	0.884	-0.078	0.94	0.844	-0.096
	0.962	0.858	-0.104	0.978	0.432	-0.546	0.958	0.842	-0.116	0.954	0.838	-0.116
	0.964	0.846	-0.118	0.972	0.43	-0.542	0.958	0.898	-0.06	0.938	0.898	-0.04
	0.942	0.848	-0.094	0.964	0.416	-0.548	0.95	0.9	-0.05	0.958	0.834	-0.124
	0.96	0.858	-0.102	0.96	0.422	-0.538	0.968	0.878	-0.09	0.964	0.828	-0.136
	0.96	0.85	-0.11	0.974	0.416	-0.558	0.97	0.904	-0.066	0.96	0.9	-0.06
	0.954	0.884	-0.07	0.976	0.432	-0.544	0.962	0.862	-0.1	0.954	0.826	-0.128
	0.974	0.85	-0.124	0.942	0.428	-0.514	0.948	0.888	-0.06	0.958	0.868	-0.09
	0.968	0.868	-0.1	0.96	0.43	-0.53	0.97	0.798	-0.172	0.948	0.872	-0.076
	0.966	0.868	-0.098	0.976	0.394	-0.582	0.954	0.872	-0.082	0.966	0.82	-0.146
Wachter	0.964	0.904	-0.06	0.948	0.898	-0.05	0.966	0.9	-0.066	0.958	0.858	-0.1
	0.956	0.932	-0.024	0.96	0.922	-0.038	0.94	0.882	-0.058	0.948	0.878	-0.07
	0.974	0.92	-0.054	0.95	0.924	-0.026	0.956	0.882	-0.074	0.974	0.876	-0.098
	0.964	0.846	-0.118	0.956	0.836	-0.12	0.972	0.942	-0.03	0.954	0.884	-0.07
	0.964	0.912	-0.052	0.96	0.896	-0.064	0.968	0.876	-0.092	0.952	0.856	-0.096
	0.958	0.852	-0.106	0.95	0.938	-0.012	0.972	0.904	-0.068	0.94	0.872	-0.068
	0.97	0.864	-0.106	0.948	0.94	-0.008	0.96	0.896	-0.064	0.958	0.902	-0.056
	0.964	0.868	-0.096	0.96	0.944	-0.016	0.968	0.904	-0.064	0.964	0.888	-0.076

	0.966	0.91	-0.056	0.97	0.898	-0.072	0.942	0.866	-0.076	0.948	0.882	-0.066
	0.948	0.86	-0.088	0.972	0.898	-0.074	0.962	0.832	-0.13	0.972	0.874	-0.098
Generic	0.958	0.866	-0.092	0.96	0.916	-0.044	0.962	0.86	-0.102	0.958	0.854	-0.104
	0.96	0.896	-0.064	0.962	0.894	-0.068	0.962	0.9	-0.062	0.938	0.886	-0.052
	0.97	0.882	-0.088	0.956	0.902	-0.054	0.948	0.898	-0.05	0.948	0.83	-0.118
	0.972	0.874	-0.098	0.948	0.884	-0.064	0.97	0.84	-0.13	0.942	0.896	-0.046
	0.964	0.912	-0.052	0.96	0.92	-0.04	0.956	0.89	-0.066	0.932	0.848	-0.084
	0.96	0.828	-0.132	0.97	0.908	-0.062	0.976	0.892	-0.084	0.972	0.878	-0.094
	0.96	0.872	-0.088	0.97	0.906	-0.064	0.96	0.932	-0.028	0.97	0.914	-0.056
	0.954	0.862	-0.092	0.952	0.878	-0.074	0.97	0.908	-0.062	0.954	0.906	-0.048
	0.964	0.844	-0.12	0.96	0.918	-0.042	0.968	0.902	-0.066	0.952	0.858	-0.094
	0.964	0.906	-0.058	0.95	0.878	-0.072	0.952	0.898	-0.054	0.944	0.868	-0.076
DiCE	0.954	0.812	-0.142	0.958	0.884	-0.074	0.944	0.944	0.0	0.966	0.9	-0.066
	0.956	0.9	-0.056	0.954	0.898	-0.056	0.96	0.888	-0.072	0.958	0.888	-0.07
	0.96	0.876	-0.084	0.948	0.896	-0.052	0.946	0.906	-0.04	0.948	0.872	-0.076
	0.954	0.85	-0.104	0.974	0.918	-0.056	0.958	0.854	-0.104	0.964	0.848	-0.116
	0.954	0.836	-0.118	0.956	0.884	-0.072	0.946	0.86	-0.086	0.952	0.916	-0.036
	0.952	0.846	-0.106	0.966	0.908	-0.058	0.952	0.888	-0.064	0.96	0.882	-0.078
	0.97	0.848	-0.122	0.95	0.908	-0.042	0.952	0.912	-0.04	0.95	0.85	-0.1
	0.96	0.876	-0.084	0.94	0.89	-0.05	0.958	0.89	-0.068	0.946	0.852	-0.094
	0.962	0.884	-0.078	0.964	0.874	-0.09	0.962	0.868	-0.094	0.964	0.866	-0.098
	0.97	0.864	-0.106	0.966	0.864	-0.102	0.948	0.912	-0.036	0.964	0.904	-0.06
ClaPROAR	0.96	0.872	-0.088	0.978	0.836	-0.142	0.966	0.866	-0.1	0.95	0.904	-0.046
	0.98	0.896	-0.084	0.962	0.898	-0.064	0.966	0.824	-0.142	0.958	0.902	-0.056
	0.964	0.87	-0.094	0.97	0.926	-0.044	0.956	0.872	-0.084	0.966	0.852	-0.114
	0.962	0.838	-0.124	0.972	0.948	-0.024	0.958	0.882	-0.076	0.95	0.916	-0.034
	0.962	0.892	-0.07	0.97	0.95	-0.02	0.976	0.864	-0.112	0.942	0.83	-0.112
	0.958	0.852	-0.106	0.968	0.888	-0.08	0.964	0.894	-0.07	0.972	0.87	-0.102
	0.97	0.874	-0.096	0.96	0.904	-0.056	0.966	0.878	-0.088	0.956	0.86	-0.096
	0.958	0.886	-0.072	0.948	0.9	-0.048	0.944	0.854	-0.09	0.944	0.912	-0.032
	0.96	0.894	-0.066	0.966	0.902	-0.064	0.952	0.9	-0.052	0.958	0.85	-0.108
	0.95	0.888	-0.062	0.964	0.932	-0.032	0.956	0.932	-0.024	0.95	0.852	-0.098

Tab. 154: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a Deep ensemble, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.946	0.874	-0.072	0.96	0.631	-0.329	0.95	0.874	-0.076	0.952	0.846	-0.106
	0.96	0.842	-0.118	0.976	0.615	-0.361	0.974	0.828	-0.146	0.948	0.88	-0.068
	0.966	0.882	-0.084	0.956	0.597	-0.359	0.964	0.876	-0.088	0.932	0.836	-0.096
	0.966	0.864	-0.102	0.96	0.603	-0.357	0.96	0.87	-0.09	0.95	0.844	-0.106
	0.952	0.87	-0.082	0.97	0.583	-0.387	0.952	0.836	-0.116	0.932	0.878	-0.054
	0.964	0.874	-0.09	0.984	0.589	-0.395	0.956	0.79	-0.166	0.946	0.862	-0.084
	0.974	0.854	-0.12	0.976	0.587	-0.389	0.946	0.878	-0.068	0.952	0.854	-0.098
	0.962	0.868	-0.094	0.98	0.595	-0.385	0.952	0.862	-0.09	0.934	0.846	-0.088
	0.952	0.874	-0.078	0.97	0.579	-0.391	0.956	0.78	-0.176	0.956	0.874	-0.082
	0.96	0.852	-0.108	0.96	0.587	-0.373	0.95	0.844	-0.106	0.95	0.9	-0.05
REVISE	0.97	0.906	-0.064	0.972	0.713	-0.259	0.946	0.876	-0.07	0.946	0.906	-0.04
	0.966	0.872	-0.094	0.968	0.629	-0.339	0.934	0.868	-0.066	0.946	0.864	-0.082
	0.94	0.87	-0.07	0.972	0.627	-0.345	0.96	0.876	-0.084	0.948	0.844	-0.104
	0.956	0.866	-0.09	0.968	0.557	-0.411	0.962	0.826	-0.136	0.962	0.888	-0.074
	0.95	0.86	-0.09	0.97	0.509	-0.461	0.958	0.844	-0.114	0.942	0.938	-0.004
	0.964	0.866	-0.098	0.978	0.661	-0.317	0.964	0.85	-0.114	0.948	0.868	-0.08
	0.962	0.868	-0.094	0.958	0.605	-0.353	0.962	0.834	-0.128	0.946	0.874	-0.072

	0.952	0.868	-0.084	0.968	0.457	-0.511	0.96	0.784	-0.176	0.95	0.882	-0.068
	0.95	0.85	-0.1	0.97	0.437	-0.533	0.952	0.884	-0.068	0.936	0.892	-0.044
	0.934	0.85	-0.084	0.97	0.623	-0.347	0.96	0.92	-0.04	0.934	0.86	-0.074
ECCo	0.956	0.866	-0.09	0.964	0.415	-0.549	0.956	0.852	-0.104	0.932	0.876	-0.056
	0.944	0.876	-0.068	0.964	0.377	-0.587	0.944	0.804	-0.14	0.954	0.868	-0.086
	0.96	0.874	-0.086	0.974	0.423	-0.551	0.958	0.916	-0.042	0.932	0.842	-0.09
	0.962	0.88	-0.082	0.966	0.407	-0.559	0.96	0.862	-0.098	0.942	0.868	-0.074
	0.964	0.9	-0.064	0.968	0.409	-0.559	0.968	0.844	-0.124	0.948	0.856	-0.092
	0.948	0.83	-0.118	0.972	0.381	-0.591	0.942	0.854	-0.088	0.94	0.878	-0.062
	0.96	0.858	-0.102	0.97	0.393	-0.577	0.954	0.878	-0.076	0.948	0.87	-0.078
	0.954	0.864	-0.09	0.976	0.401	-0.575	0.96	0.834	-0.126	0.948	0.878	-0.07
	0.952	0.88	-0.072	0.96	0.417	-0.543	0.968	0.882	-0.086	0.946	0.866	-0.08
	0.94	0.906	-0.034	0.982	0.395	-0.587	0.938	0.9	-0.038	0.944	0.862	-0.082
Wachter	0.96	0.878	-0.082	0.966	0.906	-0.06	0.958	0.88	-0.078	0.95	0.858	-0.092
	0.962	0.86	-0.102	0.962	0.932	-0.03	0.964	0.916	-0.048	0.924	0.856	-0.068
	0.956	0.88	-0.076	0.964	0.862	-0.102	0.956	0.884	-0.072	0.95	0.874	-0.076
	0.96	0.86	-0.1	0.972	0.908	-0.064	0.956	0.908	-0.048	0.94	0.876	-0.064
	0.944	0.852	-0.092	0.962	0.89	-0.072	0.94	0.882	-0.058	0.94	0.876	-0.064
	0.95	0.866	-0.084	0.964	0.914	-0.05	0.952	0.88	-0.072	0.954	0.89	-0.064
	0.956	0.878	-0.078	0.966	0.92	-0.046	0.936	0.846	-0.09	0.938	0.906	-0.032
	0.97	0.862	-0.108	0.972	0.882	-0.09	0.972	0.852	-0.12	0.936	0.87	-0.066
	0.974	0.906	-0.068	0.968	0.952	-0.016	0.948	0.892	-0.056	0.928	0.904	-0.024
	0.972	0.882	-0.09	0.958	0.86	-0.098	0.95	0.904	-0.046	0.944	0.862	-0.082
Generic	0.94	0.868	-0.072	0.966	0.85	-0.116	0.96	0.868	-0.092	0.946	0.872	-0.074
	0.964	0.858	-0.106	0.968	0.894	-0.074	0.964	0.862	-0.102	0.946	0.88	-0.066
	0.964	0.882	-0.082	0.968	0.95	-0.018	0.946	0.852	-0.094	0.948	0.914	-0.034
	0.946	0.828	-0.118	0.974	0.93	-0.044	0.958	0.878	-0.08	0.948	0.888	-0.06
	0.962	0.888	-0.074	0.98	0.96	-0.02	0.948	0.866	-0.082	0.934	0.886	-0.048
	0.952	0.856	-0.096	0.966	0.852	-0.114	0.95	0.882	-0.068	0.926	0.832	-0.094
	0.952	0.854	-0.098	0.962	0.912	-0.05	0.946	0.88	-0.066	0.95	0.922	-0.028
	0.964	0.892	-0.072	0.972	0.896	-0.076	0.944	0.87	-0.074	0.938	0.85	-0.088
	0.954	0.854	-0.1	0.96	0.922	-0.038	0.956	0.862	-0.094	0.936	0.92	-0.016
	0.958	0.844	-0.114	0.972	0.912	-0.06	0.954	0.902	-0.052	0.94	0.864	-0.076
DiCE	0.972	0.854	-0.118	0.968	0.894	-0.074	0.932	0.884	-0.048	0.962	0.874	-0.088
	0.96	0.884	-0.076	0.978	0.91	-0.068	0.954	0.898	-0.056	0.946	0.816	-0.13
	0.96	0.882	-0.078	0.966	0.898	-0.068	0.95	0.864	-0.086	0.966	0.88	-0.086
	0.956	0.878	-0.078	0.97	0.908	-0.062	0.962	0.926	-0.036	0.952	0.864	-0.088
	0.94	0.872	-0.068	0.956	0.876	-0.08	0.95	0.854	-0.096	0.954	0.874	-0.08
	0.95	0.888	-0.062	0.972	0.926	-0.046	0.958	0.838	-0.12	0.942	0.888	-0.054
	0.956	0.89	-0.066	0.962	0.884	-0.078	0.952	0.83	-0.122	0.934	0.874	-0.06
	0.97	0.834	-0.136	0.958	0.864	-0.094	0.938	0.9	-0.038	0.946	0.89	-0.056
	0.946	0.906	-0.04	0.968	0.942	-0.026	0.956	0.874	-0.082	0.954	0.89	-0.064
	0.938	0.884	-0.054	0.972	0.928	-0.044	0.944	0.854	-0.09	0.958	0.9	-0.058
ClaPROAR	0.958	0.908	-0.05	0.96	0.932	-0.028	0.964	0.898	-0.066	0.944	0.888	-0.056
	0.984	0.86	-0.124	0.976	0.928	-0.048	0.936	0.842	-0.094	0.928	0.888	-0.04
	0.95	0.858	-0.092	0.978	0.92	-0.058	0.944	0.864	-0.08	0.928	0.898	-0.03
	0.96	0.854	-0.106	0.972	0.93	-0.042	0.962	0.858	-0.104	0.944	0.858	-0.086
	0.962	0.904	-0.058	0.96	0.916	-0.044	0.96	0.866	-0.094	0.964	0.908	-0.056
	0.96	0.886	-0.074	0.968	0.914	-0.054	0.94	0.884	-0.056	0.938	0.884	-0.054
	0.962	0.882	-0.08	0.98	0.932	-0.048	0.954	0.834	-0.12	0.946	0.89	-0.056
	0.95	0.868	-0.082	0.976	0.894	-0.082	0.948	0.886	-0.062	0.946	0.9	-0.046
	0.964	0.892	-0.072	0.974	0.87	-0.104	0.946	0.824	-0.122	0.93	0.836	-0.094
	0.962	0.852	-0.11	0.984	0.908	-0.076	0.96	0.868	-0.092	0.952	0.862	-0.09

Tab. 155: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a Deep ensemble, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.942	0.844	-0.098	0.966	0.658	-0.308	0.972	0.876	-0.096	0.97	0.834	-0.136
	0.958	0.838	-0.12	0.958	0.67	-0.288	0.974	0.858	-0.116	0.958	0.856	-0.102
	0.96	0.896	-0.064	0.944	0.654	-0.29	0.976	0.816	-0.16	0.96	0.818	-0.142
	0.946	0.81	-0.136	0.948	0.678	-0.27	0.97	0.836	-0.134	0.954	0.766	-0.188
	0.97	0.832	-0.138	0.946	0.67	-0.276	0.96	0.764	-0.196	0.958	0.822	-0.136
	0.93	0.84	-0.09	0.928	0.676	-0.252	0.984	0.872	-0.112	0.95	0.83	-0.12
	0.954	0.862	-0.092	0.954	0.7	-0.254	0.97	0.854	-0.116	0.942	0.844	-0.098
	0.956	0.864	-0.092	0.946	0.668	-0.278	0.968	0.846	-0.122	0.956	0.846	-0.11
	0.968	0.848	-0.12	0.946	0.652	-0.294	0.978	0.872	-0.106	0.968	0.874	-0.094
	0.956	0.9	-0.056	0.956	0.66	-0.296	0.966	0.878	-0.088	0.946	0.842	-0.104
REVISE	0.97	0.854	-0.116	0.94	0.594	-0.346	0.968	0.874	-0.094	0.948	0.882	-0.066
	0.964	0.886	-0.078	0.96	0.624	-0.336	0.966	0.862	-0.104	0.952	0.898	-0.054
	0.954	0.856	-0.098	0.952	0.61	-0.342	0.966	0.896	-0.07	0.956	0.828	-0.128
	0.966	0.876	-0.09	0.938	0.646	-0.292	0.98	0.906	-0.074	0.956	0.846	-0.11
	0.958	0.872	-0.086	0.952	0.656	-0.296	0.968	0.874	-0.094	0.952	0.864	-0.088
	0.946	0.86	-0.086	0.954	0.56	-0.394	0.972	0.81	-0.162	0.96	0.86	-0.1
	0.962	0.842	-0.12	0.94	0.58	-0.36	0.984	0.918	-0.066	0.952	0.912	-0.04
	0.966	0.858	-0.108	0.946	0.588	-0.358	0.974	0.85	-0.124	0.968	0.924	-0.044
	0.96	0.85	-0.11	0.932	0.668	-0.264	0.972	0.866	-0.106	0.936	0.838	-0.098
	0.974	0.858	-0.116	0.954	0.652	-0.302	0.976	0.888	-0.088	0.97	0.854	-0.116
ECCo	0.958	0.89	-0.068	0.938	0.552	-0.386	0.966	0.828	-0.138	0.958	0.83	-0.128
	0.944	0.872	-0.072	0.94	0.56	-0.38	0.984	0.894	-0.09	0.966	0.892	-0.074
	0.964	0.864	-0.1	0.954	0.526	-0.428	0.982	0.89	-0.092	0.952	0.816	-0.136
	0.95	0.85	-0.1	0.944	0.544	-0.4	0.988	0.878	-0.11	0.94	0.822	-0.118
	0.946	0.89	-0.056	0.936	0.534	-0.402	0.974	0.848	-0.126	0.952	0.894	-0.058
	0.958	0.856	-0.102	0.964	0.54	-0.424	0.972	0.86	-0.112	0.964	0.87	-0.094
	0.942	0.864	-0.078	0.942	0.532	-0.41	0.968	0.84	-0.128	0.948	0.888	-0.06
	0.94	0.888	-0.052	0.958	0.536	-0.422	0.982	0.89	-0.092	0.934	0.798	-0.136
	0.952	0.898	-0.054	0.948	0.528	-0.42	0.966	0.916	-0.05	0.968	0.87	-0.098
	0.962	0.858	-0.104	0.956	0.538	-0.418	0.994	0.88	-0.114	0.946	0.836	-0.11
Wachter	0.968	0.892	-0.076	0.94	0.906	-0.034	0.976	0.842	-0.134	0.958	0.86	-0.098
	0.958	0.828	-0.13	0.944	0.88	-0.064	0.974	0.858	-0.116	0.948	0.856	-0.092
	0.956	0.9	-0.056	0.914	0.89	-0.024	0.974	0.882	-0.092	0.944	0.86	-0.084
	0.962	0.862	-0.1	0.956	0.884	-0.072	0.98	0.834	-0.146	0.952	0.772	-0.18
	0.952	0.878	-0.074	0.95	0.898	-0.052	0.978	0.854	-0.124	0.948	0.872	-0.076
	0.948	0.894	-0.054	0.928	0.854	-0.074	0.976	0.902	-0.074	0.968	0.838	-0.13
	0.966	0.866	-0.1	0.952	0.904	-0.048	0.966	0.868	-0.098	0.964	0.872	-0.092
	0.962	0.832	-0.13	0.932	0.91	-0.022	0.952	0.874	-0.078	0.962	0.874	-0.088
	0.958	0.854	-0.104	0.936	0.888	-0.048	0.974	0.858	-0.116	0.97	0.852	-0.118
	0.978	0.878	-0.1	0.954	0.906	-0.048	0.976	0.91	-0.066	0.948	0.89	-0.058
Generic	0.938	0.908	-0.03	0.93	0.908	-0.022	0.97	0.836	-0.134	0.962	0.868	-0.094
	0.938	0.836	-0.102	0.958	0.886	-0.072	0.974	0.858	-0.116	0.958	0.874	-0.084
	0.956	0.896	-0.06	0.954	0.926	-0.028	0.972	0.868	-0.104	0.966	0.88	-0.086
	0.958	0.852	-0.106	0.954	0.876	-0.078	0.962	0.908	-0.054	0.956	0.884	-0.072
	0.974	0.87	-0.104	0.948	0.908	-0.04	0.97	0.9	-0.07	0.946	0.874	-0.072
	0.97	0.902	-0.068	0.946	0.914	-0.032	0.97	0.864	-0.106	0.966	0.862	-0.104
	0.942	0.874	-0.068	0.958	0.908	-0.05	0.966	0.866	-0.1	0.954	0.858	-0.096
	0.958	0.844	-0.114	0.958	0.914	-0.044	0.972	0.882	-0.09	0.962	0.828	-0.134
	0.954	0.848	-0.106	0.954	0.91	-0.044	0.96	0.816	-0.144	0.954	0.856	-0.098
	0.962	0.922	-0.04	0.94	0.818	-0.122	0.974	0.904	-0.07	0.954	0.856	-0.098
DiCE	0.95	0.882	-0.068	0.946	0.872	-0.074	0.964	0.906	-0.058	0.958	0.908	-0.05
	0.962	0.91	-0.052	0.934	0.896	-0.038	0.978	0.872	-0.106	0.964	0.938	-0.026
	0.942	0.87	-0.072	0.95	0.92	-0.03	0.972	0.86	-0.112	0.968	0.89	-0.078

	0.966	0.842	-0.124	0.95	0.902	-0.048	0.972	0.882	-0.09	0.96	0.834	-0.126
	0.942	0.858	-0.084	0.946	0.87	-0.076	0.982	0.874	-0.108	0.972	0.868	-0.104
	0.966	0.864	-0.102	0.944	0.862	-0.082	0.962	0.824	-0.138	0.956	0.824	-0.132
	0.942	0.844	-0.098	0.946	0.918	-0.028	0.966	0.838	-0.128	0.948	0.86	-0.088
	0.968	0.86	-0.108	0.94	0.884	-0.056	0.96	0.848	-0.112	0.952	0.866	-0.086
	0.96	0.852	-0.108	0.954	0.924	-0.03	0.968	0.892	-0.076	0.964	0.826	-0.138
	0.966	0.89	-0.076	0.952	0.896	-0.056	0.984	0.808	-0.176	0.948	0.806	-0.142
ClaPROAR	0.958	0.866	-0.092	0.942	0.898	-0.044	0.978	0.83	-0.148	0.95	0.854	-0.096
	0.956	0.874	-0.082	0.948	0.842	-0.106	0.976	0.908	-0.068	0.966	0.822	-0.144
	0.95	0.908	-0.042	0.938	0.862	-0.076	0.966	0.888	-0.078	0.952	0.884	-0.068
	0.96	0.878	-0.082	0.958	0.904	-0.054	0.958	0.902	-0.056	0.952	0.85	-0.102
	0.962	0.858	-0.104	0.96	0.908	-0.052	0.988	0.882	-0.106	0.978	0.87	-0.108
	0.95	0.872	-0.078	0.952	0.898	-0.054	0.972	0.896	-0.076	0.96	0.874	-0.086
	0.934	0.872	-0.062	0.95	0.88	-0.07	0.968	0.874	-0.094	0.954	0.882	-0.072
	0.936	0.904	-0.032	0.954	0.856	-0.098	0.966	0.872	-0.094	0.966	0.812	-0.154
	0.95	0.872	-0.078	0.938	0.868	-0.07	0.976	0.884	-0.092	0.934	0.862	-0.072
	0.936	0.884	-0.052	0.956	0.888	-0.068	0.974	0.922	-0.052	0.96	0.822	-0.138

Tab. 156: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the GMCS dataset using a Deep ensemble, experiment 5

F.2.10. Iris dataset using MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.8	0.9	0.1	1.0	0.778	-0.222	0.667	0.667	0.0	0.778	0.778	0.0
	0.8	1.0	0.2	0.778	0.667	-0.111	1.0	0.778	-0.222	0.778	0.778	0.0
	0.8	1.0	0.2	0.778	0.778	0.0	0.889	0.889	0.0	1.0	0.778	-0.222
	0.8	0.9	0.1	0.778	0.667	-0.111	0.889	0.889	0.0	1.0	0.889	-0.111
	0.7	0.8	0.1	1.0	0.667	-0.333	1.0	0.778	-0.222	0.444	1.0	0.556
	0.9	0.9	0.0	0.889	0.444	-0.444	0.889	0.556	-0.333	0.778	0.778	0.0
	0.7	0.8	0.1	0.778	0.778	0.0	0.667	0.667	0.0	0.778	1.0	0.222
	0.9	0.9	0.0	0.889	0.778	-0.111	0.889	0.667	-0.222	0.778	0.778	0.0
	0.7	0.8	0.1	0.778	0.222	-0.556	1.0	1.0	0.0	0.889	0.556	-0.333
	1.0	1.0	0.0	1.0	0.667	-0.333	1.0	0.778	-0.222	1.0	0.778	-0.222
REVISE	1.0	0.8	-0.2	1.0	0.333	-0.667	0.778	0.222	-0.556	0.778	0.778	0.0
	0.9	0.8	-0.1	0.778	0.556	-0.222	0.889	0.444	-0.444	0.778	0.778	0.0
	1.0	0.8	-0.2	0.778	0.667	-0.111	0.889	0.778	-0.111	0.778	0.444	-0.333
	0.9	0.9	0.0	0.889	0.333	-0.556	0.889	0.333	-0.556	0.778	0.778	0.0
	0.9	0.8	-0.1	0.778	0.333	-0.444	1.0	0.667	-0.333	0.778	0.778	0.0
	1.0	0.9	-0.1	0.889	0.222	-0.667	0.667	0.667	0.0	0.889	0.778	-0.111
	0.8	0.8	0.0	0.778	0.0	-0.778	1.0	0.444	-0.556	0.889	0.444	-0.444
	0.8	0.8	0.0	0.889	0.333	-0.556	1.0	0.444	-0.556	0.778	0.667	-0.111
	0.9	0.9	0.0	0.889	0.444	-0.444	0.889	0.778	-0.111	0.889	0.778	-0.111
	0.9	0.8	-0.1	0.889	0.778	-0.111	0.889	0.667	-0.222	1.0	0.333	-0.667
ECCo	0.9	0.8	-0.1	1.0	0.333	-0.667	0.889	0.444	-0.444	0.778	0.889	0.111
	0.9	0.8	-0.1	0.889	0.333	-0.556	0.889	0.778	-0.111	0.778	0.778	0.0
	1.0	0.7	-0.3	0.778	0.333	-0.444	1.0	0.778	-0.222	0.778	0.778	0.0
	0.8	0.8	0.0	0.889	0.333	-0.556	0.889	0.667	-0.222	1.0	0.778	-0.222
	0.9	0.8	-0.1	0.778	0.333	-0.444	0.778	0.667	-0.111	0.778	0.778	0.0
	0.8	0.8	0.0	0.889	0.333	-0.556	1.0	0.778	-0.222	0.778	0.778	0.0
	0.7	0.8	0.1	1.0	0.333	-0.667	0.667	1.0	0.333	0.778	0.778	0.0
	0.9	0.7	-0.2	0.889	0.333	-0.556	1.0	0.667	-0.333	0.778	0.778	0.0
	1.0	0.7	-0.3	0.778	0.556	-0.222	1.0	0.889	-0.111	0.778	0.778	0.0
	0.8	0.8	0.0	1.0	0.333	-0.667	1.0	0.778	-0.222	1.0	0.778	-0.222
Wachter	0.7	0.8	0.1	0.889	0.444	-0.444	0.778	0.778	0.0	0.889	1.0	0.111

	0.9	0.9	0.0	0.889	0.444	-0.444	0.667	1.0	0.333	0.889	0.556	-0.333
	0.8	0.9	0.1	1.0	0.333	-0.667	0.778	0.667	-0.111	0.778	0.556	-0.222
	0.7	0.9	0.2	1.0	0.333	-0.667	1.0	0.333	-0.667	0.778	0.778	0.0
	0.7	0.9	0.2	0.889	0.333	-0.556	1.0	0.778	-0.222	1.0	0.778	-0.222
	0.8	0.7	-0.1	0.778	0.333	-0.444	1.0	0.333	-0.667	1.0	0.556	-0.444
	1.0	0.9	-0.1	1.0	0.333	-0.667	0.778	0.667	-0.111	1.0	0.444	-0.556
	0.7	0.8	0.1	0.889	0.333	-0.556	1.0	0.556	-0.444	0.778	0.667	-0.111
	0.8	0.6	-0.2	1.0	0.333	-0.667	0.889	0.667	-0.222	0.778	1.0	0.222
	0.9	0.5	-0.4	0.778	0.556	-0.222	1.0	1.0	0.0	1.0	1.0	0.0
Generic	0.8	0.8	0.0	1.0	0.333	-0.667	1.0	0.667	-0.333	0.778	1.0	0.222
	0.8	0.9	0.1	1.0	0.556	-0.444	0.667	0.667	0.0	0.889	0.556	-0.333
	0.9	1.0	0.1	1.0	0.444	-0.556	0.667	0.667	0.0	1.0	0.778	-0.222
	1.0	0.7	-0.3	0.778	0.556	-0.222	0.778	0.778	0.0	0.778	0.778	0.0
	0.9	0.9	0.0	0.778	0.444	-0.333	0.778	0.444	-0.333	1.0	0.556	-0.444
	0.8	0.9	0.1	0.778	0.667	-0.111	1.0	0.667	-0.333	0.778	0.667	-0.111
	1.0	1.0	0.0	1.0	0.333	-0.667	0.667	0.667	0.0	0.778	0.444	-0.333
	0.9	0.8	-0.1	1.0	0.333	-0.667	0.778	0.667	-0.111	0.778	0.444	-0.333
	0.7	0.7	0.0	1.0	0.333	-0.667	1.0	1.0	0.0	0.889	0.778	-0.111
	0.8	0.9	0.1	0.889	0.333	-0.556	0.889	0.667	-0.222	1.0	0.889	-0.111
DiCE	1.0	0.5	-0.5	0.889	0.333	-0.556	1.0	0.556	-0.444	0.778	1.0	0.222
	0.9	0.6	-0.3	0.889	0.333	-0.556	0.778	1.0	0.222	0.778	0.778	0.0
	1.0	0.9	-0.1	0.889	0.333	-0.556	0.889	0.667	-0.222	0.778	0.778	0.0
	0.7	0.8	0.1	1.0	0.556	-0.444	1.0	0.889	-0.111	0.778	0.778	0.0
	0.9	0.9	0.0	0.778	0.444	-0.333	0.667	0.667	0.0	1.0	1.0	0.0
	0.7	0.8	0.1	1.0	0.444	-0.556	0.778	1.0	0.222	0.889	0.667	-0.222
	0.9	0.9	0.0	0.889	0.444	-0.444	0.778	0.889	0.111	0.778	0.778	0.0
	0.8	0.9	0.1	0.778	0.333	-0.444	0.667	0.667	0.0	0.778	1.0	0.222
	0.8	0.6	-0.2	1.0	0.333	-0.667	0.889	0.333	-0.556	0.889	0.444	-0.444
	0.9	0.9	0.0	1.0	0.222	-0.778	0.778	1.0	0.222	1.0	0.556	-0.444
ClaPROAR	0.8	1.0	0.2	0.889	0.222	-0.667	0.778	0.667	-0.111	0.778	0.778	0.0
	0.7	0.9	0.2	1.0	0.667	-0.333	0.889	1.0	0.111	0.778	0.889	0.111
	0.7	1.0	0.3	0.889	1.0	0.111	0.889	0.778	-0.111	0.778	0.778	0.0
	0.6	0.8	0.2	0.889	0.444	-0.444	1.0	1.0	0.0	0.778	0.778	0.0
	0.8	0.8	0.0	1.0	0.333	-0.667	1.0	0.333	-0.667	0.778	0.667	-0.111
	0.9	0.5	-0.4	1.0	0.556	-0.444	1.0	0.889	-0.111	0.778	1.0	0.222
	0.8	0.8	0.0	1.0	0.222	-0.778	1.0	0.556	-0.444	0.778	0.778	0.0
	0.8	0.7	-0.1	0.778	0.333	-0.444	0.889	0.778	-0.111	0.889	1.0	0.111
	0.8	0.7	-0.1	1.0	0.333	-0.667	0.889	0.778	-0.111	0.778	0.778	0.0
	0.7	0.8	0.1	0.778	0.333	-0.444	0.667	0.667	0.0	0.778	0.444	-0.333

Tab. 157: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.778	-0.222	0.667	1.0	0.333	1.0	0.889	-0.111	1.0	0.625	-0.375
	0.889	0.889	0.0	1.0	0.667	-0.333	1.0	0.889	-0.111	0.625	0.625	0.0
	0.778	0.778	0.0	0.889	0.556	-0.333	0.889	1.0	0.111	1.0	0.625	-0.375
	1.0	0.778	-0.222	0.889	0.556	-0.333	0.889	0.333	-0.556	1.0	0.375	-0.625
	1.0	0.778	-0.222	0.778	1.0	0.222	1.0	0.889	-0.111	1.0	0.625	-0.375
	0.778	0.778	0.0	0.889	0.556	-0.333	0.889	0.889	0.0	1.0	0.625	-0.375
	1.0	0.778	-0.222	0.778	0.778	0.0	0.889	0.889	0.0	0.875	0.375	-0.5
	0.778	0.778	0.0	0.889	0.222	-0.667	0.889	0.889	0.0	0.75	0.75	0.0
	0.778	0.778	0.0	0.889	0.222	-0.667	0.889	0.889	0.0	1.0	0.625	-0.375
	0.889	1.0	0.111	0.889	0.556	-0.333	1.0	0.889	-0.111	0.875	0.875	0.0

REVISE	0.889	0.889	0.0	0.889	0.556	-0.333	0.889	0.556	-0.333	1.0	0.75	-0.25
	0.778	0.444	-0.333	1.0	0.444	-0.556	0.889	0.889	0.0	1.0	0.375	-0.625
	0.778	0.778	0.0	0.778	0.222	-0.556	1.0	0.889	-0.111	1.0	0.625	-0.375
	0.778	0.778	0.0	0.889	0.444	-0.444	0.889	0.889	0.0	0.875	0.625	-0.25
	0.778	0.778	0.0	0.889	0.778	-0.111	0.889	0.444	-0.444	0.875	1.0	0.125
	1.0	0.778	-0.222	1.0	0.556	-0.444	0.889	0.667	-0.222	1.0	0.625	-0.375
	0.778	1.0	0.222	0.889	0.111	-0.778	0.889	0.889	0.0	1.0	0.375	-0.625
	0.778	0.778	0.0	0.889	0.111	-0.778	0.889	0.667	-0.222	1.0	0.375	-0.625
	0.778	0.778	0.0	1.0	0.111	-0.889	1.0	0.889	-0.111	1.0	0.625	-0.375
	0.778	0.778	0.0	0.889	0.222	-0.667	1.0	0.889	-0.111	1.0	0.375	-0.625
ECCo	0.889	0.778	-0.111	0.778	0.444	-0.333	0.889	0.889	0.0	0.875	0.375	-0.5
	0.778	1.0	0.222	0.889	0.222	-0.667	1.0	0.889	-0.111	1.0	0.375	-0.625
	0.778	1.0	0.222	1.0	0.222	-0.778	1.0	0.889	-0.111	0.875	0.5	-0.375
	0.778	1.0	0.222	1.0	0.556	-0.444	1.0	0.889	-0.111	0.625	0.75	0.125
	0.778	1.0	0.222	0.889	0.667	-0.222	0.889	0.889	0.0	1.0	0.625	-0.375
	0.889	1.0	0.111	1.0	0.444	-0.556	0.889	0.889	0.0	0.875	0.375	-0.5
	0.889	0.778	-0.111	1.0	0.333	-0.667	1.0	0.667	-0.333	0.75	0.625	-0.125
	1.0	1.0	0.0	1.0	0.111	-0.889	0.889	0.889	0.0	0.75	0.625	-0.125
	1.0	1.0	0.0	1.0	0.556	-0.444	0.889	0.667	-0.222	0.75	0.625	-0.125
	0.889	0.889	0.0	1.0	0.222	-0.778	0.889	0.889	0.0	1.0	0.75	-0.25
Wachter	0.889	0.889	0.0	0.778	0.556	-0.222	0.889	0.667	-0.222	1.0	0.375	-0.625
	1.0	1.0	0.0	1.0	0.556	-0.444	0.889	0.889	0.0	1.0	0.5	-0.5
	0.778	0.889	0.111	1.0	0.778	-0.222	1.0	0.889	-0.111	0.875	0.625	-0.25
	0.778	1.0	0.222	0.889	0.333	-0.556	0.889	0.889	0.0	1.0	0.625	-0.375
	0.778	1.0	0.222	1.0	0.778	-0.222	0.889	0.889	0.0	1.0	0.75	-0.25
	0.778	1.0	0.222	0.889	0.444	-0.444	0.889	0.889	0.0	1.0	0.75	-0.25
	0.778	1.0	0.222	1.0	1.0	0.0	0.889	0.667	-0.222	0.625	0.75	0.125
	1.0	1.0	0.0	0.778	0.889	0.111	0.889	0.889	0.0	0.875	0.875	0.0
	0.889	1.0	0.111	0.778	0.444	-0.333	0.889	0.667	-0.222	1.0	0.5	-0.5
	0.778	1.0	0.222	0.778	0.778	0.0	0.889	0.889	0.0	1.0	0.5	-0.5
Generic	0.889	0.778	-0.111	1.0	0.556	-0.444	0.889	0.889	0.0	1.0	0.875	-0.125
	0.889	1.0	0.111	1.0	0.667	-0.333	1.0	0.889	-0.111	0.75	0.5	-0.25
	0.778	1.0	0.222	0.778	0.444	-0.333	0.889	0.889	0.0	0.875	0.625	-0.25
	0.778	1.0	0.222	1.0	0.556	-0.444	0.889	0.889	0.0	0.75	0.625	-0.125
	1.0	1.0	0.0	0.889	0.556	-0.333	0.889	0.667	-0.222	1.0	0.625	-0.375
	1.0	1.0	0.0	1.0	0.889	-0.111	0.889	0.556	-0.333	0.875	0.625	-0.25
	0.889	1.0	0.111	0.889	0.444	-0.444	0.889	0.889	0.0	1.0	0.625	-0.375
	1.0	1.0	0.0	0.667	0.444	-0.222	0.889	0.667	-0.222	1.0	0.75	-0.25
	0.889	1.0	0.111	0.889	0.556	-0.333	0.889	0.889	0.0	0.75	0.875	0.125
	0.778	0.889	0.111	1.0	0.556	-0.444	0.889	0.889	0.0	1.0	0.625	-0.375
DiCE	1.0	1.0	0.0	0.889	0.111	-0.778	0.889	0.889	0.0	0.875	0.625	-0.25
	1.0	1.0	0.0	1.0	0.556	-0.444	0.889	0.889	0.0	0.625	0.75	0.125
	0.889	0.778	-0.111	0.778	0.333	-0.444	0.889	1.0	0.111	1.0	0.625	-0.375
	0.778	1.0	0.222	1.0	0.444	-0.556	0.889	0.889	0.0	0.875	0.625	-0.25
	0.778	0.667	-0.111	0.889	0.889	0.0	0.889	0.667	-0.222	1.0	0.625	-0.375
	0.778	0.889	0.111	1.0	0.444	-0.556	0.889	1.0	0.111	0.75	0.625	-0.125
	0.778	0.889	0.111	1.0	0.444	-0.556	0.889	0.778	-0.111	0.875	0.75	-0.125
	0.778	1.0	0.222	0.778	0.556	-0.222	1.0	0.889	-0.111	1.0	0.625	-0.375
	0.889	1.0	0.111	0.778	0.778	0.0	0.889	0.889	0.0	0.625	0.625	0.0
	0.778	0.778	0.0	1.0	0.333	-0.667	0.889	0.889	0.0	0.875	0.625	-0.25
ClaPROAR	0.778	0.889	0.111	0.778	0.556	-0.222	0.889	0.667	-0.222	1.0	0.375	-0.625
	0.778	0.778	0.0	0.778	0.556	-0.222	0.889	0.667	-0.222	1.0	0.625	-0.375
	0.889	1.0	0.111	1.0	0.444	-0.556	0.889	0.889	0.0	1.0	0.375	-0.625
	0.889	0.889	0.0	0.889	0.667	-0.222	0.889	0.889	0.0	1.0	0.625	-0.375
	0.889	0.889	0.0	0.889	0.556	-0.333	1.0	1.0	0.0	1.0	0.625	-0.375

	0.778	1.0	0.222	0.889	0.889	0.0	0.889	0.889	0.0	1.0	0.875	-0.125
	0.889	1.0	0.111	1.0	0.222	-0.778	0.889	0.556	-0.333	1.0	0.625	-0.375
	0.778	1.0	0.222	0.889	0.556	-0.333	1.0	0.889	-0.111	0.75	0.375	-0.375
	1.0	0.889	-0.111	1.0	0.556	-0.444	0.889	1.0	0.111	0.75	0.75	0.0
	1.0	0.889	-0.111	1.0	0.556	-0.444	1.0	0.889	-0.111	1.0	1.0	0.0

Tab. 158: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.889	1.0	0.111	1.0	0.444	-0.556	0.889	0.778	-0.111	0.778	0.778	0.0
	0.889	0.889	0.0	0.778	0.556	-0.222	1.0	0.444	-0.556	0.778	0.556	-0.222
	0.889	0.889	0.0	0.778	0.556	-0.222	1.0	0.667	-0.333	1.0	0.778	-0.222
	1.0	0.889	-0.111	0.778	0.778	0.0	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.889	0.889	0.0	0.778	0.778	0.0	0.889	1.0	0.111	0.667	0.778	0.111
	0.778	0.778	0.0	0.778	0.778	0.0	0.556	0.444	-0.111	1.0	0.778	-0.222
	1.0	1.0	0.0	0.889	0.778	-0.111	1.0	0.556	-0.444	1.0	0.667	-0.333
	1.0	1.0	0.0	0.778	0.222	-0.556	1.0	0.667	-0.333	0.889	0.667	-0.222
	0.889	0.889	0.0	1.0	0.889	-0.111	0.778	0.556	-0.222	1.0	1.0	0.0
	0.889	0.778	-0.111	0.778	0.778	0.0	0.778	0.556	-0.222	0.667	0.333	-0.333
REVISE	0.778	0.778	0.0	0.889	0.556	-0.333	0.556	0.556	0.0	1.0	0.556	-0.444
	0.889	1.0	0.111	1.0	0.444	-0.556	0.444	0.556	0.111	1.0	0.778	-0.222
	1.0	0.778	-0.222	0.778	0.556	-0.222	1.0	0.333	-0.667	0.667	0.556	-0.111
	1.0	0.778	-0.222	0.778	0.778	0.0	0.778	0.556	-0.222	1.0	0.556	-0.444
	1.0	0.778	-0.222	1.0	0.222	-0.778	0.556	0.667	0.111	0.889	0.778	-0.111
	1.0	1.0	0.0	0.778	0.667	-0.111	0.778	0.333	-0.444	1.0	0.667	-0.333
	0.889	0.778	-0.111	0.778	0.444	-0.333	1.0	0.667	-0.333	1.0	0.778	-0.222
	1.0	0.889	-0.111	0.778	0.444	-0.333	0.889	0.778	-0.111	1.0	0.778	-0.222
	0.889	0.778	-0.111	0.889	0.444	-0.444	1.0	0.667	-0.333	0.778	0.556	-0.222
	0.889	0.778	-0.111	0.889	0.444	-0.444	1.0	0.667	-0.333	1.0	0.778	-0.222
ECCo	1.0	1.0	0.0	0.889	0.222	-0.667	1.0	0.778	-0.222	1.0	0.556	-0.444
	1.0	0.889	-0.111	0.778	0.222	-0.556	0.889	0.889	0.0	0.778	0.667	-0.111
	0.889	1.0	0.111	1.0	0.111	-0.889	1.0	0.667	-0.333	0.667	0.667	0.0
	1.0	1.0	0.0	0.778	0.444	-0.333	1.0	1.0	0.0	1.0	0.778	-0.222
	0.889	0.889	0.0	1.0	0.444	-0.556	1.0	0.333	-0.667	1.0	1.0	0.0
	0.889	0.889	0.0	1.0	0.222	-0.778	1.0	0.667	-0.333	1.0	0.667	-0.333
	1.0	1.0	0.0	0.778	0.444	-0.333	1.0	0.556	-0.444	1.0	1.0	0.0
	0.778	1.0	0.222	1.0	0.333	-0.667	1.0	0.778	-0.222	0.778	0.667	-0.111
	1.0	1.0	0.0	1.0	0.444	-0.556	0.667	0.778	0.111	1.0	0.444	-0.556
	0.889	0.889	0.0	1.0	0.222	-0.778	1.0	1.0	0.0	1.0	0.778	-0.222
Wachter	1.0	1.0	0.0	0.778	0.222	-0.556	0.889	0.333	-0.556	1.0	0.778	-0.222
	0.889	0.889	0.0	0.778	0.444	-0.333	0.667	0.778	0.111	0.889	0.778	-0.111
	0.889	1.0	0.111	0.889	0.333	-0.556	0.333	0.556	0.222	1.0	0.333	-0.667
	1.0	1.0	0.0	0.778	0.444	-0.333	0.889	0.667	-0.222	1.0	0.444	-0.556
	0.889	1.0	0.111	0.778	0.444	-0.333	1.0	0.667	-0.333	0.889	0.778	-0.111
	1.0	1.0	0.0	0.889	0.222	-0.667	1.0	0.667	-0.333	1.0	0.667	-0.333
	1.0	1.0	0.0	1.0	0.556	-0.444	1.0	0.556	-0.444	1.0	0.444	-0.556
	0.778	1.0	0.222	0.778	0.222	-0.556	1.0	0.667	-0.333	0.889	0.778	-0.111
	0.778	1.0	0.222	0.778	0.333	-0.444	1.0	0.667	-0.333	0.889	0.778	-0.111
	0.889	0.889	0.0	0.778	0.444	-0.333	0.778	0.556	-0.222	1.0	0.778	-0.222
Generic	1.0	1.0	0.0	0.889	0.556	-0.333	1.0	1.0	0.0	0.778	0.667	-0.111
	0.889	0.889	0.0	0.889	0.222	-0.667	1.0	0.889	-0.111	1.0	0.667	-0.333
	0.889	0.889	0.0	0.889	0.444	-0.444	1.0	0.556	-0.444	1.0	1.0	0.0
	0.889	0.889	0.0	0.778	0.222	-0.556	0.889	0.556	-0.333	0.889	0.667	-0.222

	1.0	1.0	0.0	1.0	0.778	-0.222	1.0	0.556	-0.444	1.0	0.778	-0.222
	1.0	1.0	0.0	1.0	0.667	-0.333	1.0	0.556	-0.444	0.667	0.889	0.222
	1.0	0.778	-0.222	0.889	0.556	-0.333	0.889	0.889	0.0	1.0	0.778	-0.222
	0.889	0.889	0.0	0.778	0.222	-0.556	0.889	0.889	0.0	0.778	0.556	-0.222
	0.778	1.0	0.222	0.889	0.778	-0.111	0.778	0.444	-0.333	0.778	0.556	-0.222
	0.889	0.889	0.0	0.778	0.333	-0.444	1.0	0.778	-0.222	1.0	0.778	-0.222
DiCE	0.778	1.0	0.222	0.778	0.556	-0.222	1.0	0.667	-0.333	1.0	0.556	-0.444
	0.889	1.0	0.111	1.0	0.889	-0.111	1.0	1.0	0.0	1.0	1.0	0.0
	0.889	0.889	0.0	0.778	0.333	-0.444	0.889	0.889	0.0	1.0	0.556	-0.444
	0.889	0.889	0.0	0.778	0.222	-0.556	0.889	0.667	-0.222	1.0	0.778	-0.222
	0.889	0.889	0.0	0.778	0.444	-0.333	0.889	0.556	-0.333	0.778	0.778	0.0
	1.0	1.0	0.0	0.889	0.222	-0.667	0.889	0.444	-0.444	0.889	0.667	-0.222
	0.889	1.0	0.111	0.889	0.111	-0.778	1.0	0.667	-0.333	1.0	0.778	-0.222
	0.889	1.0	0.111	0.889	0.222	-0.667	1.0	0.333	-0.667	0.889	0.444	-0.444
	0.889	1.0	0.111	0.889	0.556	-0.333	1.0	0.444	-0.556	1.0	0.667	-0.333
	0.889	1.0	0.111	0.889	0.222	-0.667	0.778	0.667	-0.111	0.778	0.667	-0.111
ClaPROAR	0.889	0.889	0.0	0.889	0.889	0.0	0.778	0.778	0.0	0.778	0.778	0.0
	1.0	1.0	0.0	0.778	0.444	-0.333	1.0	0.889	-0.111	1.0	0.667	-0.333
	0.889	1.0	0.111	0.778	0.222	-0.556	0.556	0.444	-0.111	0.889	0.667	-0.222
	0.778	1.0	0.222	0.778	0.222	-0.556	0.889	0.556	-0.333	0.889	0.667	-0.222
	0.889	1.0	0.111	0.778	0.222	-0.556	0.778	0.333	-0.444	0.778	0.667	-0.111
	0.778	1.0	0.222	1.0	0.556	-0.444	1.0	0.667	-0.333	0.778	0.0	-0.778
	0.889	0.889	0.0	0.889	0.444	-0.444	1.0	0.444	-0.556	1.0	0.889	-0.111
	1.0	0.889	-0.111	0.778	0.222	-0.556	0.889	0.556	-0.333	0.889	0.778	-0.111
	1.0	0.778	-0.222	0.889	0.111	-0.778	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.889	0.889	0.0	0.778	0.222	-0.556	1.0	1.0	0.0	1.0	0.778	-0.222

Tab. 159: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.889	0.889	0.0	1.0	0.667	-0.333	0.889	0.667	-0.222	1.0	1.0	0.0
	1.0	1.0	0.0	1.0	0.667	-0.333	1.0	0.778	-0.222	1.0	0.667	-0.333
	0.667	0.889	0.222	0.889	0.778	-0.111	1.0	0.778	-0.222	0.778	0.778	0.0
	0.556	1.0	0.444	1.0	0.778	-0.222	1.0	0.778	-0.222	0.889	0.778	-0.111
	1.0	0.556	-0.444	1.0	0.778	-0.222	1.0	0.556	-0.444	0.889	0.667	-0.222
	0.667	0.667	0.0	0.889	0.333	-0.556	0.889	0.778	-0.111	0.889	0.889	0.0
	0.778	0.667	-0.111	0.889	0.667	-0.222	0.889	0.667	-0.222	0.889	0.778	-0.111
	0.889	0.889	0.0	1.0	0.778	-0.222	1.0	0.889	-0.111	0.778	0.222	-0.556
	0.889	0.778	-0.111	1.0	0.778	-0.222	1.0	0.778	-0.222	0.889	0.778	-0.111
	1.0	1.0	0.0	1.0	0.444	-0.556	0.889	0.667	-0.222	1.0	1.0	0.0
REVISE	1.0	1.0	0.0	0.778	0.889	0.111	0.778	0.667	-0.111	0.889	0.778	-0.111
	1.0	0.667	-0.333	0.778	0.667	-0.111	0.667	0.667	0.0	0.778	0.889	0.111
	0.778	1.0	0.222	0.889	0.333	-0.556	0.889	0.889	0.0	0.778	0.778	0.0
	0.778	0.778	0.0	0.667	0.333	-0.333	0.778	0.444	-0.333	1.0	0.778	-0.222
	0.889	0.667	-0.222	1.0	0.778	-0.222	1.0	0.444	-0.556	0.778	0.778	0.0
	0.889	1.0	0.111	1.0	0.222	-0.778	0.889	0.778	-0.111	0.889	0.778	-0.111
	1.0	0.778	-0.222	0.889	0.222	-0.667	1.0	0.556	-0.444	0.889	0.667	-0.222
	1.0	0.778	-0.222	0.889	0.778	-0.111	0.667	0.333	-0.333	0.778	0.778	0.0
	0.667	0.889	0.222	0.667	0.556	-0.111	0.889	0.778	-0.111	0.778	0.667	-0.111
	0.889	0.889	0.0	1.0	0.222	-0.778	0.889	1.0	0.111	0.778	0.778	0.0
ECCo	0.889	1.0	0.111	1.0	0.333	-0.667	0.667	0.667	0.0	0.778	0.444	-0.333
	1.0	0.667	-0.333	1.0	0.444	-0.556	1.0	1.0	0.0	1.0	0.444	-0.556
	1.0	0.889	-0.111	0.667	0.333	-0.333	1.0	0.778	-0.222	0.889	0.556	-0.333

	0.667	0.778	0.111	1.0	0.778	-0.222	1.0	1.0	0.0	0.778	1.0	0.222
	0.778	0.778	0.0	0.889	0.333	-0.556	1.0	1.0	0.0	0.889	0.333	-0.556
	0.889	1.0	0.111	1.0	0.333	-0.667	0.889	0.556	-0.333	0.778	0.333	-0.444
	1.0	0.778	-0.222	1.0	0.333	-0.667	0.889	0.667	-0.222	0.889	0.667	-0.222
	1.0	1.0	0.0	0.778	0.333	-0.444	0.889	0.333	-0.556	0.889	0.778	-0.111
	1.0	1.0	0.0	0.778	0.778	0.0	1.0	0.778	-0.222	0.778	1.0	0.222
	0.667	0.778	0.111	0.889	0.222	-0.667	1.0	0.889	-0.111	0.778	0.889	0.111
Wachter	0.778	1.0	0.222	0.778	1.0	0.222	1.0	0.889	-0.111	0.889	0.667	-0.222
	0.778	1.0	0.222	0.778	0.667	-0.111	0.778	0.333	-0.444	0.778	0.222	-0.556
	1.0	1.0	0.0	1.0	0.778	-0.222	1.0	0.778	-0.222	1.0	0.778	-0.222
	1.0	0.889	-0.111	1.0	0.778	-0.222	1.0	0.333	-0.667	0.778	0.778	0.0
	0.889	0.889	0.0	0.333	0.667	0.333	0.778	0.333	-0.444	0.889	0.778	-0.111
	1.0	1.0	0.0	0.778	0.778	0.0	1.0	0.889	-0.111	0.889	0.778	-0.111
	0.889	1.0	0.111	1.0	0.778	-0.222	0.778	0.556	-0.222	0.778	0.778	0.0
	0.889	0.889	0.0	0.778	0.778	0.0	0.778	0.778	0.0	0.778	0.778	0.0
	1.0	1.0	0.0	1.0	0.778	-0.222	1.0	1.0	0.0	0.778	0.778	0.0
	0.889	1.0	0.111	0.778	0.556	-0.222	0.778	0.778	0.0	0.889	0.889	0.0
Generic	0.889	1.0	0.111	1.0	0.667	-0.333	1.0	0.889	-0.111	0.778	0.778	0.0
	0.889	1.0	0.111	1.0	0.667	-0.333	1.0	0.778	-0.222	0.889	0.667	-0.222
	0.889	1.0	0.111	0.778	0.333	-0.444	1.0	0.556	-0.444	0.778	0.778	0.0
	1.0	1.0	0.0	0.889	0.778	-0.111	0.889	0.889	0.0	0.889	0.556	-0.333
	1.0	1.0	0.0	0.889	0.667	-0.222	0.889	0.889	0.0	0.778	0.778	0.0
	0.667	1.0	0.333	0.778	0.333	-0.444	0.889	0.778	-0.111	0.778	0.778	0.0
	0.889	1.0	0.111	1.0	0.889	-0.111	0.889	0.778	-0.111	0.778	0.778	0.0
	1.0	1.0	0.0	0.778	0.667	-0.111	0.889	0.556	-0.333	0.778	0.778	0.0
	1.0	1.0	0.0	0.778	0.667	-0.111	0.667	0.667	0.0	0.778	1.0	0.222
	0.889	0.667	-0.222	0.889	0.556	-0.333	0.889	0.889	0.0	0.889	0.667	-0.222
DiCE	1.0	1.0	0.0	0.889	0.778	-0.111	0.667	0.556	-0.111	0.778	0.667	-0.111
	0.889	1.0	0.111	0.667	0.667	0.0	1.0	1.0	0.0	1.0	0.778	-0.222
	0.778	1.0	0.222	0.889	0.778	-0.111	0.778	0.667	-0.111	0.778	0.778	0.0
	1.0	0.778	-0.222	0.667	0.333	-0.333	1.0	0.556	-0.444	0.778	0.778	0.0
	1.0	0.889	-0.111	1.0	0.778	-0.222	0.778	0.889	0.111	0.778	0.778	0.0
	1.0	0.889	-0.111	1.0	0.667	-0.333	0.889	0.778	-0.111	0.889	0.778	-0.111
	1.0	1.0	0.0	0.778	0.667	-0.111	1.0	0.556	-0.444	0.889	0.889	0.0
	1.0	1.0	0.0	1.0	0.556	-0.444	1.0	0.556	-0.444	0.778	0.889	0.111
	1.0	1.0	0.0	0.778	0.667	-0.111	1.0	0.778	-0.222	1.0	1.0	0.0
	0.889	0.889	0.0	1.0	0.667	-0.333	0.667	0.778	0.111	0.778	0.889	0.111
ClaPROAR	0.889	0.778	-0.111	1.0	0.778	-0.222	0.889	0.778	-0.111	0.889	0.778	-0.111
	0.889	0.889	0.0	0.778	0.778	0.0	0.889	0.667	-0.222	1.0	0.778	-0.222
	0.889	1.0	0.111	1.0	0.778	-0.222	1.0	0.778	-0.222	0.778	0.889	0.111
	1.0	0.889	-0.111	0.778	0.333	-0.444	0.889	0.556	-0.333	0.778	0.667	-0.111
	0.667	1.0	0.333	1.0	0.556	-0.444	1.0	0.667	-0.333	0.778	0.667	-0.111
	0.889	1.0	0.111	0.778	0.667	-0.111	0.778	0.667	-0.111	0.778	0.667	-0.111
	1.0	0.889	-0.111	0.667	0.667	0.0	0.778	0.556	-0.222	0.778	0.778	0.0
	1.0	1.0	0.0	0.889	0.889	0.0	0.444	0.778	0.333	0.889	0.667	-0.222
	0.667	1.0	0.333	1.0	0.667	-0.333	1.0	1.0	0.0	0.778	0.778	0.0
	1.0	0.889	-0.111	0.778	0.778	0.0	0.778	0.444	-0.333	0.778	0.778	0.0

Tab. 160: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.889	0.778	-0.111	0.9	0.6	-0.3	1.0	0.625	-0.375	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.8	0.6	-0.2	1.0	1.0	0.0	0.889	0.556	-0.333

	1.0	0.778	-0.222	1.0	0.6	-0.4	1.0	0.875	-0.125	0.889	0.667	-0.222
	1.0	1.0	0.0	0.9	0.8	-0.1	0.875	0.5	-0.375	0.778	0.667	-0.111
	1.0	0.778	-0.222	0.7	0.6	-0.1	1.0	0.75	-0.25	0.556	0.667	0.111
	0.889	1.0	0.111	1.0	0.7	-0.3	1.0	0.625	-0.375	1.0	0.667	-0.333
	0.778	1.0	0.222	0.6	0.7	0.1	0.625	0.75	0.125	0.889	0.778	-0.111
	1.0	0.667	-0.333	1.0	0.6	-0.4	0.75	0.25	-0.5	0.778	0.667	-0.111
	0.889	0.778	-0.111	1.0	0.7	-0.3	0.875	0.375	-0.5	0.889	0.556	-0.333
	1.0	0.889	-0.111	0.9	0.7	-0.2	1.0	0.375	-0.625	0.667	0.778	0.111
REVISE	0.778	0.778	0.0	0.9	0.3	-0.6	0.75	0.75	0.0	0.778	0.444	-0.333
	0.778	0.778	0.0	1.0	0.4	-0.6	1.0	0.5	-0.5	0.667	0.667	0.0
	0.667	1.0	0.333	0.9	0.7	-0.2	0.875	0.375	-0.5	0.667	0.444	-0.222
	1.0	1.0	0.0	1.0	0.3	-0.7	0.875	0.5	-0.375	1.0	0.778	-0.222
	0.778	1.0	0.222	1.0	0.7	-0.3	1.0	0.75	-0.25	1.0	0.444	-0.556
	1.0	1.0	0.0	0.8	0.4	-0.4	0.5	0.625	0.125	0.556	0.556	0.0
	0.889	0.889	0.0	1.0	0.2	-0.8	0.875	0.375	-0.5	0.889	0.667	-0.222
	1.0	0.778	-0.222	1.0	0.4	-0.6	0.875	0.5	-0.375	0.778	0.556	-0.222
	0.667	1.0	0.333	1.0	0.3	-0.7	0.75	0.5	-0.25	1.0	0.444	-0.556
	1.0	1.0	0.0	1.0	0.5	-0.5	0.875	0.625	-0.25	1.0	0.556	-0.444
ECCo	1.0	1.0	0.0	0.9	0.4	-0.5	0.625	0.75	0.125	1.0	0.778	-0.222
	1.0	1.0	0.0	0.9	0.4	-0.5	0.875	0.875	0.0	0.778	0.889	0.111
	0.889	0.778	-0.111	0.5	0.4	-0.1	0.625	0.625	0.0	0.778	1.0	0.222
	1.0	0.778	-0.222	0.6	0.8	0.2	0.75	0.625	-0.125	0.556	0.333	-0.222
	0.889	1.0	0.111	1.0	0.7	-0.3	0.625	0.625	0.0	0.889	0.889	0.0
	1.0	0.889	-0.111	0.6	0.3	-0.3	1.0	0.75	-0.25	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.9	0.3	-0.6	1.0	0.625	-0.375	1.0	0.333	-0.667
	1.0	0.778	-0.222	1.0	0.4	-0.6	1.0	0.5	-0.5	1.0	0.667	-0.333
	1.0	0.889	-0.111	1.0	0.4	-0.6	0.5	0.625	0.125	1.0	0.444	-0.556
	1.0	0.889	-0.111	1.0	0.4	-0.6	0.75	0.25	-0.5	0.556	0.667	0.111
Wachter	1.0	1.0	0.0	0.9	0.4	-0.5	0.875	0.625	-0.25	1.0	0.444	-0.556
	1.0	1.0	0.0	0.6	0.6	0.0	0.875	0.75	-0.125	1.0	0.667	-0.333
	1.0	0.889	-0.111	1.0	0.8	-0.2	1.0	0.5	-0.5	0.667	0.556	-0.111
	1.0	1.0	0.0	0.5	0.5	0.0	1.0	0.75	-0.25	0.889	0.333	-0.556
	1.0	1.0	0.0	0.9	0.5	-0.4	1.0	0.875	-0.125	1.0	0.667	-0.333
	1.0	0.889	-0.111	1.0	0.7	-0.3	0.875	0.625	-0.25	0.778	0.667	-0.111
	0.889	0.778	-0.111	1.0	0.7	-0.3	0.875	0.625	-0.25	0.778	0.667	-0.111
	1.0	1.0	0.0	0.7	0.5	-0.2	0.625	0.5	-0.125	1.0	1.0	0.0
	1.0	0.778	-0.222	1.0	0.7	-0.3	0.875	0.375	-0.5	0.778	0.667	-0.111
	1.0	1.0	0.0	1.0	0.5	-0.5	0.875	0.625	-0.25	0.778	0.444	-0.333
Generic	1.0	0.889	-0.111	0.6	0.6	0.0	0.75	0.5	-0.25	0.778	0.333	-0.444
	0.778	0.889	0.111	0.8	0.6	-0.2	0.875	0.625	-0.25	1.0	1.0	0.0
	1.0	1.0	0.0	0.9	0.7	-0.2	0.875	0.625	-0.25	1.0	0.667	-0.333
	1.0	1.0	0.0	0.8	0.6	-0.2	0.875	0.625	-0.25	1.0	0.667	-0.333
	0.778	0.778	0.0	0.8	0.6	-0.2	1.0	0.625	-0.375	1.0	0.889	-0.111
	1.0	0.778	-0.222	0.9	0.4	-0.5	0.625	0.75	0.125	0.667	0.333	-0.333
	1.0	0.889	-0.111	0.9	0.6	-0.3	0.75	0.25	-0.5	0.889	0.667	-0.222
	0.556	0.778	0.222	0.8	0.8	0.0	0.75	0.75	0.0	1.0	0.667	-0.333
	0.667	1.0	0.333	0.9	0.9	0.0	0.625	0.75	0.125	0.778	0.556	-0.222
	1.0	0.889	-0.111	0.8	1.0	0.2	1.0	0.625	-0.375	0.667	1.0	0.333
DiCE	1.0	1.0	0.0	0.8	0.6	-0.2	0.875	0.625	-0.25	1.0	0.333	-0.667
	1.0	0.778	-0.222	0.6	0.7	0.1	0.875	0.625	-0.25	0.778	0.778	0.0
	1.0	1.0	0.0	1.0	0.7	-0.3	1.0	0.375	-0.625	0.889	1.0	0.111
	1.0	0.889	-0.111	0.6	0.7	0.1	0.75	0.5	-0.25	1.0	0.667	-0.333
	0.889	1.0	0.111	1.0	0.7	-0.3	1.0	0.625	-0.375	1.0	0.667	-0.333
	1.0	1.0	0.0	1.0	0.7	-0.3	1.0	0.375	-0.625	0.778	0.556	-0.222
	1.0	1.0	0.0	0.8	0.7	-0.1	1.0	0.375	-0.625	0.778	0.889	0.111
	1.0	0.778	-0.222	0.6	0.5	-0.1	0.75	0.625	-0.125	1.0	0.778	-0.222

	1.0	0.889	-0.111	1.0	0.4	-0.6	1.0	0.875	-0.125	0.889	0.889	0.0
	1.0	1.0	0.0	0.7	0.8	0.1	0.875	0.375	-0.5	1.0	0.667	-0.333
ClaPROAR	0.778	0.889	0.111	1.0	0.9	-0.1	1.0	0.75	-0.25	0.778	0.556	-0.222
	0.889	0.889	0.0	1.0	0.7	-0.3	0.875	0.625	-0.25	0.889	0.556	-0.333
	1.0	0.778	-0.222	1.0	0.3	-0.7	0.75	0.5	-0.25	1.0	0.444	-0.556
	0.889	0.889	0.0	0.7	0.8	0.1	1.0	0.625	-0.375	0.778	1.0	0.222
	1.0	1.0	0.0	1.0	0.7	-0.3	0.875	0.75	-0.125	1.0	0.889	-0.111
	0.889	0.778	-0.111	0.8	0.7	-0.1	1.0	0.5	-0.5	0.667	0.444	-0.222
	1.0	1.0	0.0	0.9	0.5	-0.4	0.625	0.75	0.125	0.889	1.0	0.111
	1.0	1.0	0.0	0.9	0.4	-0.5	0.75	0.625	-0.125	1.0	0.778	-0.222
	1.0	0.889	-0.111	0.6	0.6	0.0	0.5	0.875	0.375	1.0	0.444	-0.556
	1.0	1.0	0.0	0.9	0.7	-0.2	0.875	0.5	-0.375	0.556	0.778	0.222

Tab. 161: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP, experiment 5

F.2.11. Iris dataset using Deep ensemble using a MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.75	-0.25	1.0	0.333	-0.667	0.6	0.8	0.2	0.889	0.667	-0.222
	1.0	0.75	-0.25	1.0	1.0	0.0	1.0	0.667	-0.333	0.889	0.667	-0.222
	0.75	0.75	0.0	1.0	0.667	-0.333	0.933	0.667	-0.267	1.0	0.778	-0.222
	0.875	1.0	0.125	1.0	0.556	-0.444	0.933	0.733	-0.2	0.889	0.333	-0.556
	1.0	1.0	0.0	1.0	0.444	-0.556	0.667	0.933	0.267	0.889	0.333	-0.556
	1.0	0.75	-0.25	0.889	0.444	-0.444	1.0	0.667	-0.333	0.889	0.667	-0.222
	1.0	0.875	-0.125	1.0	0.444	-0.556	0.733	0.6	-0.133	0.889	1.0	0.111
	1.0	0.75	-0.25	1.0	0.778	-0.222	0.667	0.933	0.267	0.889	0.667	-0.222
	1.0	0.75	-0.25	1.0	0.667	-0.333	1.0	0.667	-0.333	0.667	0.444	-0.222
	1.0	0.625	-0.375	1.0	0.667	-0.333	0.667	0.733	0.067	0.556	0.333	-0.222
REVISE	1.0	1.0	0.0	1.0	0.333	-0.667	0.933	0.667	-0.267	0.778	0.889	0.111
	0.875	0.75	-0.125	1.0	0.778	-0.222	0.733	0.933	0.2	0.889	0.778	-0.111
	0.875	1.0	0.125	0.889	0.333	-0.556	0.6	0.6	0.0	0.778	0.778	0.0
	1.0	1.0	0.0	1.0	0.333	-0.667	0.733	0.6	-0.133	0.889	0.667	-0.222
	0.875	1.0	0.125	1.0	0.444	-0.556	0.933	0.667	-0.267	1.0	0.778	-0.222
	0.75	0.875	0.125	1.0	0.222	-0.778	0.667	0.733	0.067	0.889	1.0	0.111
	0.75	1.0	0.25	1.0	0.333	-0.667	0.667	0.667	0.0	0.778	0.444	-0.333
	1.0	0.625	-0.375	0.889	0.333	-0.556	0.933	1.0	0.067	0.667	0.222	-0.444
	1.0	1.0	0.0	1.0	0.333	-0.667	0.733	0.667	-0.067	0.667	0.778	0.111
	0.75	0.75	0.0	1.0	0.333	-0.667	0.733	0.733	0.0	1.0	0.667	-0.333
ECCo	0.875	0.75	-0.125	1.0	0.222	-0.778	1.0	0.533	-0.467	0.667	0.556	-0.111
	0.875	1.0	0.125	1.0	0.667	-0.333	1.0	0.667	-0.333	0.889	0.333	-0.556
	1.0	0.625	-0.375	1.0	0.444	-0.556	1.0	0.333	-0.667	0.889	0.556	-0.333
	1.0	1.0	0.0	1.0	0.222	-0.778	0.733	0.8	0.067	1.0	0.778	-0.222
	1.0	0.875	-0.125	1.0	0.333	-0.667	1.0	0.667	-0.333	0.889	0.333	-0.556
	1.0	1.0	0.0	1.0	0.222	-0.778	0.933	0.667	-0.267	0.889	0.667	-0.222
	1.0	0.875	-0.125	1.0	0.333	-0.667	0.6	0.6	0.0	0.889	0.667	-0.222
	1.0	0.625	-0.375	0.778	0.333	-0.444	0.667	0.667	0.0	0.778	0.778	0.0
	0.875	0.75	-0.125	1.0	0.333	-0.667	0.933	0.8	-0.133	0.667	0.556	-0.111
	0.875	1.0	0.125	1.0	0.333	-0.667	0.933	0.667	-0.267	0.889	0.889	0.0
Wachter	0.875	1.0	0.125	1.0	0.444	-0.556	0.933	0.733	-0.2	0.778	1.0	0.222
	0.875	1.0	0.125	1.0	0.556	-0.444	0.933	0.8	-0.133	0.889	0.778	-0.111
	1.0	1.0	0.0	1.0	0.778	-0.222	0.6	0.733	0.133	0.778	0.444	-0.333
	0.875	0.875	0.0	0.778	0.444	-0.333	0.6	0.6	0.0	0.889	0.667	-0.222
	1.0	1.0	0.0	1.0	0.444	-0.556	0.6	0.8	0.2	0.889	0.889	0.0
	1.0	0.625	-0.375	1.0	0.444	-0.556	0.667	0.733	0.067	0.667	0.556	-0.111

	1.0	1.0	0.0	1.0	1.0	0.0	0.933	0.667	-0.267	0.889	0.778	-0.111
	1.0	0.75	-0.25	1.0	0.444	-0.556	0.8	1.0	0.2	0.667	0.556	-0.111
	0.875	0.75	-0.125	1.0	0.444	-0.556	1.0	0.667	-0.333	1.0	0.556	-0.444
	0.875	1.0	0.125	1.0	0.889	-0.111	0.6	0.733	0.133	0.889	0.778	-0.111
Generic	0.625	0.625	0.0	1.0	0.667	-0.333	0.733	0.6	-0.133	0.778	0.556	-0.222
	0.75	0.75	0.0	1.0	0.778	-0.222	0.733	0.933	0.2	0.889	0.556	-0.333
	0.75	0.875	0.125	1.0	0.667	-0.333	0.867	0.6	-0.267	1.0	0.667	-0.333
	1.0	0.75	-0.25	1.0	0.444	-0.556	0.933	0.867	-0.067	0.889	1.0	0.111
	1.0	1.0	0.0	0.778	0.444	-0.333	1.0	0.733	-0.267	0.556	0.889	0.333
	1.0	0.75	-0.25	1.0	0.667	-0.333	0.6	0.867	0.267	0.889	0.889	0.0
	1.0	0.75	-0.25	0.889	0.667	-0.222	0.6	0.6	0.0	0.667	0.778	0.111
	1.0	1.0	0.0	1.0	0.444	-0.556	0.867	0.667	-0.2	0.889	0.778	-0.111
	0.875	0.75	-0.125	1.0	0.444	-0.556	0.733	0.867	0.133	0.778	0.778	0.0
	0.75	0.625	-0.125	1.0	0.778	-0.222	0.6	0.6	0.0	0.667	0.778	0.111
DiCE	0.875	0.75	-0.125	1.0	0.556	-0.444	0.6	0.8	0.2	0.889	0.556	-0.333
	1.0	0.75	-0.25	0.889	0.667	-0.222	0.6	0.733	0.133	0.556	0.778	0.222
	1.0	0.75	-0.25	1.0	0.667	-0.333	1.0	0.867	-0.133	0.889	0.889	0.0
	0.875	1.0	0.125	0.889	0.333	-0.556	0.933	0.933	0.0	0.778	0.889	0.111
	1.0	1.0	0.0	1.0	0.778	-0.222	0.733	0.733	0.0	0.889	0.667	-0.222
	1.0	1.0	0.0	1.0	0.444	-0.556	0.6	0.6	0.0	0.667	0.778	0.111
	0.625	0.625	0.0	1.0	0.667	-0.333	1.0	0.667	-0.333	0.889	0.778	-0.111
	1.0	0.75	-0.25	1.0	0.667	-0.333	0.6	0.6	0.0	0.889	0.889	0.0
	0.875	0.875	0.0	1.0	0.444	-0.556	0.667	1.0	0.333	0.778	0.667	-0.111
	0.625	1.0	0.375	1.0	0.667	-0.333	0.733	0.733	0.0	0.889	0.889	0.0
ClaPROAR	1.0	0.875	-0.125	1.0	0.444	-0.556	0.933	0.933	0.0	0.889	0.333	-0.556
	0.875	0.875	0.0	1.0	0.444	-0.556	0.6	0.6	0.0	0.778	0.556	-0.222
	1.0	1.0	0.0	1.0	0.444	-0.556	0.933	0.933	0.0	0.889	0.333	-0.556
	0.875	0.875	0.0	1.0	0.444	-0.556	0.6	0.733	0.133	0.889	0.667	-0.222
	0.875	1.0	0.125	1.0	0.444	-0.556	0.867	0.6	-0.267	0.556	0.556	0.0
	1.0	0.625	-0.375	1.0	0.444	-0.556	0.6	0.6	0.0	1.0	0.667	-0.333
	1.0	1.0	0.0	1.0	0.444	-0.556	0.6	1.0	0.4	0.889	0.667	-0.222
	1.0	0.875	-0.125	0.889	1.0	0.111	0.6	0.8	0.2	1.0	0.556	-0.444
	1.0	0.75	-0.25	1.0	0.444	-0.556	1.0	0.8	-0.2	0.667	0.444	-0.222
	1.0	0.875	-0.125	1.0	0.778	-0.222	0.6	0.733	0.133	0.889	0.667	-0.222

Tab. 162: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP and a deep ensemble, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.75	-0.25	0.889	0.778	-0.111	0.667	0.533	-0.133	0.889	0.889	0.0
	0.75	0.875	0.125	0.778	0.556	-0.222	0.667	0.667	0.0	0.778	0.778	0.0
	1.0	0.75	-0.25	0.778	0.333	-0.444	0.667	0.733	0.067	0.778	0.778	0.0
	0.75	0.75	0.0	0.778	0.556	-0.222	0.667	0.933	0.267	0.778	0.667	-0.111
	0.75	0.75	0.0	0.889	0.222	-0.667	0.667	0.667	0.0	0.778	0.667	-0.111
	0.75	0.75	0.0	0.667	0.667	0.0	0.733	0.667	-0.067	0.778	0.778	0.0
	0.875	0.75	-0.125	1.0	0.333	-0.667	0.667	0.333	-0.333	0.889	0.556	-0.333
	0.75	1.0	0.25	0.889	0.556	-0.333	0.667	0.667	0.0	1.0	0.889	-0.111
	0.75	0.75	0.0	0.667	0.333	-0.333	0.667	0.667	0.0	0.778	0.778	0.0
	0.75	0.875	0.125	0.778	0.556	-0.222	0.667	1.0	0.333	0.778	0.667	-0.111
REVISE	0.75	0.75	0.0	0.889	0.444	-0.444	0.667	0.933	0.267	0.889	0.889	0.0
	0.75	0.75	0.0	0.667	0.667	0.0	0.667	0.933	0.267	0.778	1.0	0.222
	0.75	0.75	0.0	0.667	0.667	0.0	0.667	0.6	-0.067	0.778	0.778	0.0
	0.75	0.75	0.0	0.667	0.556	-0.111	0.667	0.667	0.0	0.778	0.778	0.0
	0.875	0.75	-0.125	0.889	0.444	-0.444	0.667	0.667	0.0	0.778	0.778	0.0

	0.75	0.75	0.0	0.778	0.444	-0.333	0.667	0.667	0.0	1.0	0.889	-0.111
	0.875	1.0	0.125	0.667	0.333	-0.333	0.667	0.867	0.2	0.778	0.778	0.0
	0.75	0.875	0.125	1.0	0.556	-0.444	0.733	0.667	-0.067	0.778	0.667	-0.111
	0.875	0.875	0.0	0.667	0.333	-0.333	0.667	0.333	-0.333	0.889	0.889	0.0
	0.875	1.0	0.125	0.667	0.333	-0.333	0.667	0.667	0.0	0.778	0.778	0.0
ECCo	0.875	0.75	-0.125	0.889	0.333	-0.556	0.733	0.667	-0.067	0.778	0.778	0.0
	0.75	0.75	0.0	0.778	0.444	-0.333	0.667	0.667	0.0	0.778	0.778	0.0
	0.75	0.75	0.0	0.667	0.333	-0.333	0.667	0.667	0.0	0.889	0.778	-0.111
	0.875	0.75	-0.125	0.667	0.333	-0.333	0.667	0.8	0.133	0.889	0.556	-0.333
	0.875	0.75	-0.125	0.667	0.333	-0.333	0.667	0.667	0.0	0.889	0.889	0.0
	1.0	0.75	-0.25	0.778	0.556	-0.222	0.667	0.867	0.2	0.778	0.778	0.0
	1.0	0.75	-0.25	0.889	0.444	-0.444	0.667	0.667	0.0	0.778	0.778	0.0
	0.875	0.75	-0.125	0.778	0.444	-0.333	0.8	0.533	-0.267	0.889	0.889	0.0
	1.0	0.75	-0.25	0.778	0.222	-0.556	0.667	0.6	-0.067	0.778	0.778	0.0
	0.875	0.75	-0.125	0.778	0.556	-0.222	0.667	0.667	0.0	0.889	0.889	0.0
Wachter	0.75	0.75	0.0	0.889	0.556	-0.333	0.667	0.667	0.0	0.778	0.778	0.0
	0.875	1.0	0.125	0.667	0.889	0.222	0.667	0.867	0.2	0.778	0.889	0.111
	0.875	0.875	0.0	0.778	0.556	-0.222	0.667	0.667	0.0	0.889	0.889	0.0
	0.875	0.875	0.0	0.778	0.778	0.0	0.733	0.733	0.0	0.778	0.778	0.0
	0.75	0.875	0.125	0.667	0.667	0.0	0.667	0.667	0.0	0.778	0.667	-0.111
	0.75	1.0	0.25	1.0	0.444	-0.556	0.667	0.667	0.0	0.778	0.333	-0.444
	0.75	1.0	0.25	0.667	0.333	-0.333	0.667	0.867	0.2	0.778	0.778	0.0
	0.875	0.875	0.0	0.667	0.333	-0.333	0.667	0.8	0.133	0.778	0.778	0.0
	0.875	0.875	0.0	0.778	0.778	0.0	0.667	0.667	0.0	0.778	0.778	0.0
	0.75	0.75	0.0	0.778	0.667	-0.111	0.667	0.733	0.067	0.778	0.778	0.0
Generic	0.75	0.75	0.0	0.889	0.556	-0.333	0.667	0.733	0.067	0.778	0.778	0.0
	0.875	0.875	0.0	0.778	0.778	0.0	0.667	0.667	0.0	0.778	0.333	-0.444
	0.75	0.875	0.125	0.889	0.889	0.0	0.667	0.933	0.267	0.778	0.556	-0.222
	0.75	0.75	0.0	1.0	1.0	0.0	0.667	0.667	0.0	1.0	0.889	-0.111
	0.75	0.875	0.125	0.889	1.0	0.111	0.667	0.867	0.2	0.778	0.444	-0.333
	0.75	1.0	0.25	0.667	0.667	0.0	0.667	0.667	0.0	0.889	1.0	0.111
	0.75	0.75	0.0	0.778	0.556	-0.222	0.733	0.667	-0.067	0.778	0.667	-0.111
	0.75	0.875	0.125	0.778	0.556	-0.222	0.667	0.667	0.0	0.889	0.667	-0.222
	0.875	1.0	0.125	0.889	0.778	-0.111	0.667	0.8	0.133	0.889	0.444	-0.444
	0.75	0.875	0.125	1.0	0.889	-0.111	0.667	0.667	0.0	0.778	0.778	0.0
DiCE	0.75	0.75	0.0	0.889	0.444	-0.444	0.667	0.933	0.267	1.0	0.778	-0.222
	0.75	0.75	0.0	0.778	0.778	0.0	0.667	0.667	0.0	0.778	0.667	-0.111
	0.75	0.75	0.0	1.0	0.889	-0.111	0.667	1.0	0.333	1.0	0.889	-0.111
	0.75	0.75	0.0	0.778	0.778	0.0	0.667	1.0	0.333	0.778	1.0	0.222
	0.875	0.875	0.0	0.778	0.889	0.111	0.667	0.667	0.0	0.778	0.667	-0.111
	0.75	0.875	0.125	0.667	0.667	0.0	0.667	0.667	0.0	0.778	0.444	-0.333
	0.75	1.0	0.25	0.778	0.556	-0.222	0.667	0.667	0.0	0.778	0.778	0.0
	0.75	0.75	0.0	0.889	0.889	0.0	0.667	0.733	0.067	0.889	0.889	0.0
	0.75	1.0	0.25	1.0	0.889	-0.111	0.667	0.667	0.0	0.778	0.444	-0.333
	0.75	1.0	0.25	0.667	0.556	-0.111	0.667	0.667	0.0	0.778	0.778	0.0
ClaPROAR	0.75	1.0	0.25	0.778	0.778	0.0	0.667	0.667	0.0	0.778	0.778	0.0
	0.875	0.75	-0.125	0.778	0.556	-0.222	0.667	0.667	0.0	0.778	0.778	0.0
	0.75	1.0	0.25	0.778	0.667	-0.111	0.667	0.667	0.0	0.778	0.778	0.0
	0.875	0.75	-0.125	0.667	0.778	0.111	0.867	0.667	-0.2	0.778	0.778	0.0
	0.875	0.75	-0.125	1.0	0.778	-0.222	0.667	0.733	0.067	0.778	0.778	0.0
	0.875	0.75	-0.125	0.778	0.667	-0.111	0.667	0.867	0.2	0.778	0.889	0.111
	0.875	0.875	0.0	0.778	0.556	-0.222	0.667	0.533	-0.133	1.0	0.556	-0.444
	0.75	0.75	0.0	0.778	0.556	-0.222	0.667	0.667	0.0	0.778	0.556	-0.222
	0.875	0.75	-0.125	0.889	0.889	0.0	0.667	0.667	0.0	0.778	0.778	0.0
	0.75	0.75	0.0	0.667	0.889	0.222	0.667	0.933	0.267	0.778	0.778	0.0

Tab. 163: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP and a deep ensemble, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.778	0.778	0.0	0.667	0.556	-0.111	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.778	0.0	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.667	-0.111	0.667	0.667	0.0	0.667	0.667	0.0	1.0	0.333	-0.667
	0.778	0.778	0.0	0.889	0.667	-0.222	0.667	0.6	-0.067	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.444	-0.333	0.667	1.0	0.333	1.0	0.333	-0.667
	0.778	0.778	0.0	0.889	0.778	-0.111	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.444	-0.444	0.667	0.667	0.0	1.0	0.556	-0.444
	0.778	0.778	0.0	0.667	0.667	0.0	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.778	0.0	0.778	0.444	-0.333	0.667	0.667	0.0	1.0	0.333	-0.667
	0.778	0.778	0.0	0.667	0.333	-0.333	0.667	0.667	0.0	1.0	0.667	-0.333
REVISE	0.778	0.778	0.0	0.667	0.333	-0.333	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.667	0.333	-0.333	0.667	0.8	0.133	0.889	0.667	-0.222
	0.778	0.778	0.0	0.778	0.222	-0.556	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.444	-0.333	0.667	0.667	0.0	1.0	0.333	-0.667
	0.778	0.778	0.0	0.889	0.222	-0.667	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.444	-0.444	0.667	1.0	0.333	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.444	-0.444	0.667	0.8	0.133	0.889	0.667	-0.222
	0.778	0.778	0.0	0.667	0.333	-0.333	0.667	0.667	0.0	0.667	0.667	0.0
	0.778	1.0	0.222	0.778	0.222	-0.556	0.667	0.733	0.067	1.0	0.667	-0.333
	0.778	0.556	-0.222	0.778	0.556	-0.222	0.667	0.667	0.0	1.0	0.889	-0.111
ECCo	0.778	0.778	0.0	0.889	0.778	-0.111	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.778	0.0	0.778	0.778	0.0	0.667	0.667	0.0	0.778	0.667	-0.111
	0.778	0.778	0.0	0.778	0.444	-0.333	0.667	0.333	-0.333	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.556	-0.333	0.667	0.933	0.267	1.0	0.444	-0.556
	0.778	0.778	0.0	0.889	0.333	-0.556	0.667	0.667	0.0	1.0	1.0	0.0
	0.778	0.778	0.0	0.667	0.556	-0.111	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.778	0.0	0.667	0.667	0.0	1.0	0.333	-0.667
	0.778	0.778	0.0	0.889	0.333	-0.556	0.667	0.667	0.0	0.778	0.667	-0.111
	0.778	0.778	0.0	0.667	0.444	-0.222	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.778	0.0	1.0	0.778	-0.222	0.667	0.333	-0.333	1.0	0.333	-0.667
Wachter	0.778	0.778	0.0	0.889	0.778	-0.111	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.444	-0.333	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.667	0.333	-0.333	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.889	0.111	1.0	0.889	-0.111	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.778	0.0	0.667	0.667	0.0	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.778	0.0	0.889	0.222	-0.667	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.889	0.111	0.667	0.333	-0.333	0.667	0.667	0.0	0.889	0.333	-0.556
	0.778	0.889	0.111	0.667	0.556	-0.111	0.667	0.933	0.267	1.0	0.667	-0.333
	0.778	0.889	0.111	0.889	0.778	-0.111	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.889	0.111	0.667	0.667	0.0	0.667	0.867	0.2	0.889	0.667	-0.222
Generic	0.778	0.778	0.0	0.778	0.556	-0.222	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.333	-0.444	0.667	0.8	0.133	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.444	-0.444	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.556	-0.222	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.222	-0.667	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	1.0	0.556	-0.444	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.889	0.111	0.889	0.444	-0.444	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.889	0.111	0.889	0.222	-0.667	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.778	0.0	0.778	0.667	-0.111	0.667	0.733	0.067	1.0	0.667	-0.333

	0.778	0.889	0.111	0.667	0.333	-0.333	0.667	0.667	0.0	1.0	1.0	0.0
DiCE	0.778	0.778	0.0	0.778	0.222	-0.556	0.667	0.667	0.0	1.0	0.556	-0.444
	0.778	0.778	0.0	1.0	0.556	-0.444	0.667	0.667	0.0	0.778	0.778	0.0
	0.778	0.778	0.0	0.778	0.778	0.0	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	1.0	0.111	0.667	0.667	0.0	1.0	0.333	-0.667
	0.778	0.778	0.0	0.889	0.444	-0.444	0.667	1.0	0.333	0.778	0.667	-0.111
	0.778	0.889	0.111	0.778	0.667	-0.111	0.667	0.933	0.267	0.778	0.667	-0.111
	0.778	0.778	0.0	0.889	0.889	0.0	0.667	0.6	-0.067	1.0	0.778	-0.222
	0.778	0.778	0.0	0.778	0.222	-0.556	0.733	0.667	-0.067	1.0	0.667	-0.333
	0.778	0.778	0.0	1.0	0.778	-0.222	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.778	0.0	0.889	0.444	-0.444	0.667	1.0	0.333	1.0	0.667	-0.333
ClaPROAR	0.778	0.778	0.0	0.667	0.667	0.0	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.889	0.111	0.778	0.222	-0.556	0.667	0.667	0.0	0.889	0.556	-0.333
	0.778	0.778	0.0	0.778	0.667	-0.111	0.667	0.667	0.0	1.0	0.889	-0.111
	0.778	0.778	0.0	0.889	0.778	-0.111	0.667	0.667	0.0	0.889	0.778	-0.111
	0.778	0.778	0.0	0.889	0.222	-0.667	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.889	0.111	0.889	0.556	-0.333	0.667	0.467	-0.2	1.0	0.667	-0.333
	0.778	0.889	0.111	0.778	0.778	0.0	0.667	0.667	0.0	1.0	0.778	-0.222
	0.778	0.778	0.0	1.0	0.556	-0.444	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.333	-0.556	0.667	0.733	0.067	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.222	-0.667	0.667	0.667	0.0	1.0	0.667	-0.333

Tab. 164: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP and a deep ensemble, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.667	0.778	0.111	0.889	0.444	-0.444	0.933	0.667	-0.267	0.7	0.4	-0.3
	0.667	0.889	0.222	1.0	0.444	-0.556	0.933	0.867	-0.067	1.0	0.7	-0.3
	0.889	0.667	-0.222	0.667	0.667	0.0	1.0	0.667	-0.333	0.8	0.7	-0.1
	1.0	0.333	-0.667	0.889	0.667	-0.222	0.867	0.667	-0.2	1.0	0.8	-0.2
	0.556	0.444	-0.111	0.778	0.333	-0.444	0.6	0.733	0.133	0.8	0.7	-0.1
	1.0	0.778	-0.222	0.778	0.444	-0.333	0.8	0.667	-0.133	1.0	0.7	-0.3
	1.0	0.667	-0.333	0.889	0.333	-0.556	0.6	0.733	0.133	0.9	0.7	-0.2
	0.889	0.667	-0.222	0.778	0.333	-0.444	0.933	0.667	-0.267	1.0	0.3	-0.7
	1.0	0.667	-0.333	0.778	0.444	-0.333	0.8	0.733	-0.067	0.7	0.8	0.1
	1.0	1.0	0.0	0.889	0.667	-0.222	0.6	0.733	0.133	0.9	1.0	0.1
REVISE	1.0	0.778	-0.222	0.667	0.333	-0.333	0.6	0.6	0.0	1.0	0.7	-0.3
	0.556	0.778	0.222	0.778	0.333	-0.444	0.6	0.8	0.2	0.7	0.7	0.0
	0.556	1.0	0.444	1.0	0.444	-0.556	1.0	0.667	-0.333	0.9	0.8	-0.1
	0.778	0.667	-0.111	0.889	0.444	-0.444	0.933	0.733	-0.2	0.9	0.7	-0.2
	0.667	0.778	0.111	0.778	0.333	-0.444	1.0	0.667	-0.333	0.9	0.7	-0.2
	0.778	1.0	0.222	0.889	0.222	-0.667	0.933	0.667	-0.267	0.8	0.7	-0.1
	0.667	0.778	0.111	0.778	0.444	-0.333	0.933	0.667	-0.267	0.7	0.7	0.0
	0.889	0.667	-0.222	0.889	0.444	-0.444	0.667	0.933	0.267	0.9	0.7	-0.2
	1.0	0.667	-0.333	0.667	0.333	-0.333	0.6	0.8	0.2	1.0	0.7	-0.3
	0.556	0.778	0.222	0.889	0.444	-0.444	0.8	0.667	-0.133	0.8	0.7	-0.1
ECCo	0.889	0.556	-0.333	1.0	0.333	-0.667	0.6	0.6	0.0	0.7	0.7	0.0
	0.889	0.667	-0.222	0.889	0.333	-0.556	0.6	0.733	0.133	1.0	0.7	-0.3
	0.556	0.778	0.222	0.889	0.333	-0.556	0.6	0.6	0.0	1.0	0.7	-0.3
	0.667	0.778	0.111	0.778	0.333	-0.444	0.667	0.6	-0.067	0.8	0.8	0.0
	0.889	0.667	-0.222	0.778	0.333	-0.444	0.933	0.733	-0.2	1.0	0.7	-0.3
	0.556	0.778	0.222	0.667	0.333	-0.333	0.6	0.933	0.333	0.8	0.3	-0.5
	0.556	0.889	0.333	0.889	0.667	-0.222	0.8	0.6	-0.2	0.9	0.7	-0.2
	1.0	0.667	-0.333	0.889	0.333	-0.556	0.6	0.6	0.0	1.0	0.7	-0.3

	0.667	0.778	0.111	0.889	0.333	-0.556	0.6	0.6	0.0	1.0	0.3	-0.7
	0.667	0.778	0.111	0.889	0.333	-0.556	0.6	0.6	0.0	1.0	0.7	-0.3
Wachter	0.889	0.667	-0.222	0.889	0.556	-0.333	0.667	0.733	0.067	0.9	0.7	-0.2
	1.0	1.0	0.0	0.889	0.667	-0.222	0.933	0.667	-0.267	1.0	0.7	-0.3
	0.778	0.889	0.111	0.778	0.333	-0.444	0.6	0.6	0.0	1.0	0.7	-0.3
	0.889	0.556	-0.333	0.667	0.556	-0.111	0.933	0.933	0.0	0.8	0.7	-0.1
	1.0	0.667	-0.333	0.889	0.333	-0.556	0.667	0.6	-0.067	0.9	0.7	-0.2
	0.778	0.778	0.0	0.667	0.667	0.0	0.667	0.6	-0.067	0.9	0.6	-0.3
	0.889	0.889	0.0	0.778	0.889	0.111	0.933	0.933	0.0	0.7	0.7	0.0
	1.0	1.0	0.0	1.0	0.667	-0.333	1.0	0.667	-0.333	1.0	0.7	-0.3
	0.889	1.0	0.111	1.0	0.333	-0.667	0.6	0.733	0.133	0.8	0.7	-0.1
	0.889	0.889	0.0	0.667	0.667	0.0	0.6	0.867	0.267	0.9	0.8	-0.1
Generic	0.556	0.778	0.222	0.889	0.667	-0.222	0.6	0.6	0.0	0.8	0.7	-0.1
	1.0	0.778	-0.222	0.778	0.667	-0.111	0.867	0.733	-0.133	0.7	0.7	0.0
	0.889	0.778	-0.111	0.667	1.0	0.333	0.6	0.467	-0.133	0.9	0.7	-0.2
	1.0	0.889	-0.111	1.0	1.0	0.0	0.933	0.733	-0.2	0.9	0.7	-0.2
	0.889	0.889	0.0	0.889	0.667	-0.222	0.6	0.6	0.0	0.8	0.7	-0.1
	1.0	0.889	-0.111	0.778	0.556	-0.222	0.933	0.667	-0.267	0.8	0.9	0.1
	0.667	0.778	0.111	0.889	0.667	-0.222	0.8	0.733	-0.067	1.0	0.7	-0.3
	0.889	0.889	0.0	0.778	0.667	-0.111	1.0	0.667	-0.333	0.9	0.7	-0.2
	0.889	1.0	0.111	0.778	0.667	-0.111	1.0	0.8	-0.2	1.0	0.9	-0.1
	1.0	0.889	-0.111	0.889	0.889	0.0	1.0	0.733	-0.267	0.8	0.7	-0.1
DiCE	0.556	1.0	0.444	0.667	0.556	-0.111	0.6	0.933	0.333	0.9	0.7	-0.2
	0.889	0.778	-0.111	0.778	0.667	-0.111	0.6	0.867	0.267	0.7	0.7	0.0
	0.667	0.889	0.222	0.889	0.444	-0.444	1.0	0.667	-0.333	0.9	0.4	-0.5
	0.778	1.0	0.222	0.889	0.667	-0.222	0.6	0.733	0.133	0.7	0.3	-0.4
	0.667	1.0	0.333	0.667	0.556	-0.111	0.867	0.933	0.067	0.8	0.7	-0.1
	0.778	1.0	0.222	0.778	0.556	-0.222	0.733	1.0	0.267	0.8	0.7	-0.1
	0.889	1.0	0.111	0.667	0.444	-0.222	1.0	0.933	-0.067	0.8	0.7	-0.1
	0.889	1.0	0.111	0.889	0.444	-0.444	0.933	0.867	-0.067	0.8	0.7	-0.1
	0.556	0.778	0.222	0.889	0.444	-0.444	0.733	0.667	-0.067	1.0	0.8	-0.2
	1.0	1.0	0.0	0.889	0.556	-0.333	1.0	1.0	0.0	0.8	0.7	-0.1
ClaPROAR	0.889	1.0	0.111	1.0	0.556	-0.444	0.933	0.6	-0.333	1.0	0.8	-0.2
	1.0	0.667	-0.333	0.778	0.333	-0.444	0.6	0.933	0.333	0.8	0.7	-0.1
	0.667	0.889	0.222	0.667	0.889	0.222	0.6	0.6	0.0	0.8	0.7	-0.1
	0.556	1.0	0.444	0.778	0.444	-0.333	0.933	0.733	-0.2	0.7	0.7	0.0
	0.667	1.0	0.333	0.778	0.667	-0.111	0.733	0.6	-0.133	0.9	0.7	-0.2
	0.889	0.889	0.0	1.0	0.667	-0.333	0.933	0.667	-0.267	1.0	0.8	-0.2
	0.889	0.889	0.0	1.0	0.667	-0.333	0.933	0.667	-0.267	1.0	0.7	-0.3
	0.889	0.667	-0.222	0.778	0.444	-0.333	0.6	0.733	0.133	0.9	0.8	-0.1
	1.0	0.889	-0.111	0.889	0.444	-0.444	0.6	0.8	0.2	0.9	0.7	-0.2
	1.0	0.667	-0.333	0.667	1.0	0.333	0.6	0.733	0.133	0.9	0.7	-0.2

Tab. 165: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP and a deep ensemble, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.889	0.778	-0.111	0.625	0.375	-0.25	0.6	0.4	-0.2	0.778	0.778	0.0
	0.889	0.778	-0.111	1.0	0.75	-0.25	0.6	0.8	0.2	0.778	0.778	0.0
	1.0	1.0	0.0	1.0	0.75	-0.25	0.667	0.667	0.0	0.667	0.556	-0.111
	1.0	1.0	0.0	0.625	0.625	0.0	0.667	0.667	0.0	0.778	0.667	-0.111
	0.778	0.778	0.0	0.875	0.5	-0.375	0.667	0.867	0.2	0.778	0.556	-0.222
	0.778	0.556	-0.222	0.75	0.625	-0.125	0.6	0.8	0.2	0.667	0.556	-0.111
	1.0	0.556	-0.444	0.75	0.625	-0.125	0.667	0.8	0.133	0.778	0.222	-0.556

	1.0	0.778	-0.222	1.0	0.5	-0.5	0.6	0.333	-0.267	0.889	0.667	-0.222
	1.0	0.889	-0.111	0.625	0.5	-0.125	0.667	0.667	0.0	0.778	0.667	-0.111
	0.889	1.0	0.111	0.625	0.375	-0.25	0.667	0.933	0.267	0.778	0.778	0.0
REVISE	1.0	0.889	-0.111	1.0	0.5	-0.5	0.667	0.8	0.133	0.778	0.222	-0.556
	1.0	0.778	-0.222	0.75	0.375	-0.375	0.6	0.6	0.0	0.889	0.222	-0.667
	1.0	0.778	-0.222	1.0	0.75	-0.25	0.6	0.8	0.2	0.667	0.333	-0.333
	1.0	0.889	-0.111	0.875	0.375	-0.5	0.6	1.0	0.4	0.667	0.667	0.0
	1.0	0.778	-0.222	0.875	0.25	-0.625	0.6	0.733	0.133	0.667	0.667	0.0
	0.778	0.778	0.0	1.0	0.5	-0.5	0.6	0.933	0.333	0.778	0.222	-0.556
	1.0	0.778	-0.222	0.75	0.375	-0.375	0.6	0.867	0.267	0.778	0.889	0.111
	1.0	0.778	-0.222	0.75	0.375	-0.375	0.6	0.6	0.0	0.667	0.667	0.0
	1.0	1.0	0.0	0.75	0.375	-0.375	0.6	0.6	0.0	1.0	0.778	-0.222
	1.0	0.778	-0.222	0.625	0.375	-0.25	0.667	0.867	0.2	0.667	0.333	-0.333
ECCo	1.0	0.778	-0.222	0.75	0.25	-0.5	0.6	0.733	0.133	0.889	1.0	0.111
	0.889	0.778	-0.111	0.875	0.25	-0.625	0.667	0.667	0.0	0.667	0.556	-0.111
	1.0	0.778	-0.222	1.0	0.25	-0.75	0.667	0.6	-0.067	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.625	0.375	-0.25	0.667	0.667	0.0	0.667	0.667	0.0
	0.778	0.778	0.0	0.625	0.25	-0.375	0.667	0.667	0.0	0.667	0.778	0.111
	1.0	0.778	-0.222	0.875	0.75	-0.125	0.6	0.6	0.0	0.778	0.889	0.111
	0.889	0.778	-0.111	0.875	0.25	-0.625	0.667	0.733	0.067	0.778	0.667	-0.111
	1.0	0.778	-0.222	0.75	0.25	-0.5	0.667	0.667	0.0	0.667	0.333	-0.333
	0.889	0.778	-0.111	0.75	0.25	-0.5	0.667	0.667	0.0	0.778	0.667	-0.111
	1.0	0.778	-0.222	0.875	0.375	-0.5	0.667	0.333	-0.333	0.778	0.889	0.111
Wachter	1.0	0.889	-0.111	1.0	0.5	-0.5	0.667	0.667	0.0	0.667	0.889	0.222
	1.0	0.889	-0.111	1.0	0.375	-0.625	0.6	0.667	0.067	1.0	0.778	-0.222
	0.889	0.889	0.0	0.625	0.5	-0.125	0.6	0.6	0.0	0.778	0.222	-0.556
	0.889	1.0	0.111	0.875	0.625	-0.25	0.667	0.733	0.067	0.667	0.444	-0.222
	1.0	0.778	-0.222	0.625	0.625	0.0	0.6	0.867	0.267	0.889	0.778	-0.111
	1.0	0.778	-0.222	0.625	0.375	-0.25	0.667	0.667	0.0	0.889	0.222	-0.667
	1.0	0.889	-0.111	0.625	0.625	0.0	0.6	0.733	0.133	0.667	0.556	-0.111
	0.889	1.0	0.111	0.625	0.5	-0.125	0.667	0.667	0.0	0.778	0.667	-0.111
	1.0	1.0	0.0	0.625	0.625	0.0	0.667	0.8	0.133	0.667	0.889	0.222
	1.0	0.889	-0.111	0.75	0.375	-0.375	0.6	0.733	0.133	0.778	0.778	0.0
Generic	0.889	0.889	0.0	1.0	0.5	-0.5	0.667	0.667	0.0	0.778	0.778	0.0
	0.889	0.889	0.0	0.625	0.625	0.0	0.6	0.667	0.067	1.0	0.889	-0.111
	1.0	0.889	-0.111	0.75	0.25	-0.5	0.6	0.8	0.2	1.0	0.667	-0.333
	0.889	0.778	-0.111	0.875	0.25	-0.625	0.6	0.733	0.133	0.667	0.556	-0.111
	1.0	0.889	-0.111	0.875	0.25	-0.625	0.667	0.667	0.0	0.667	0.889	0.222
	1.0	1.0	0.0	0.625	0.625	0.0	0.667	0.667	0.0	0.778	0.667	-0.111
	0.778	0.889	0.111	0.875	0.5	-0.375	0.6	0.8	0.2	0.667	0.556	-0.111
	1.0	0.778	-0.222	1.0	0.75	-0.25	0.667	0.667	0.0	0.889	0.889	0.0
	0.889	0.778	-0.111	1.0	0.75	-0.25	0.667	0.667	0.0	0.778	1.0	0.222
	1.0	0.889	-0.111	0.875	0.375	-0.5	0.667	0.667	0.0	0.889	0.667	-0.222
DiCE	1.0	0.889	-0.111	0.75	0.375	-0.375	0.6	0.867	0.267	0.778	0.444	-0.333
	1.0	0.889	-0.111	1.0	0.25	-0.75	0.667	0.667	0.0	0.889	0.667	-0.222
	1.0	0.778	-0.222	0.75	0.625	-0.125	0.667	1.0	0.333	0.778	0.667	-0.111
	0.889	0.889	0.0	0.625	0.375	-0.25	0.667	0.733	0.067	0.667	0.444	-0.222
	0.889	0.889	0.0	1.0	0.75	-0.25	0.6	0.6	0.0	0.667	0.667	0.0
	0.889	0.889	0.0	1.0	0.375	-0.625	0.667	0.333	-0.333	1.0	0.667	-0.333
	0.889	0.889	0.0	0.75	0.625	-0.125	0.6	0.733	0.133	0.889	0.667	-0.222
	0.889	1.0	0.111	0.875	0.25	-0.625	0.6	0.6	0.0	0.778	0.667	-0.111
	1.0	0.889	-0.111	0.875	0.375	-0.5	0.6	0.933	0.333	0.778	0.556	-0.222
	1.0	0.889	-0.111	1.0	0.375	-0.625	0.6	0.667	0.067	0.778	0.222	-0.556
ClaPROAR	0.778	0.778	0.0	0.625	0.625	0.0	0.667	0.667	0.0	0.667	0.667	0.0
	0.889	0.889	0.0	1.0	0.75	-0.25	0.6	0.6	0.0	0.667	0.556	-0.111
	1.0	0.778	-0.222	0.75	0.375	-0.375	0.6	0.6	0.0	0.778	0.667	-0.111

	0.889	0.778	-0.111	0.875	0.625	-0.25	0.667	0.667	0.0	0.667	0.667	0.0
	0.889	0.889	0.0	1.0	0.75	-0.25	0.667	0.933	0.267	0.667	0.889	0.222
	1.0	0.889	-0.111	1.0	0.625	-0.375	0.6	0.6	0.0	0.667	0.667	0.0
	0.889	0.889	0.0	0.875	0.5	-0.375	0.667	0.667	0.0	0.667	0.667	0.0
	0.778	0.778	0.0	0.625	0.5	-0.125	0.667	0.667	0.0	0.778	0.889	0.111
	0.889	0.889	0.0	0.75	0.5	-0.25	0.6	0.6	0.0	0.667	0.556	-0.111
	0.889	1.0	0.111	0.875	0.75	-0.125	0.667	0.667	0.0	0.889	0.556	-0.333

Tab. 166: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a MLP and a deep ensemble, experiment 5

F.2.12. Iris dataset using Deep ensemble

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.778	0.778	0.0	0.875	0.625	-0.25	1.0	0.667	-0.333	0.889	0.556	-0.333
	0.778	0.778	0.0	0.875	0.125	-0.75	1.0	0.667	-0.333	0.667	0.667	0.0
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	1.0	0.444	-0.556
	0.778	0.889	0.111	0.875	0.125	-0.75	1.0	0.333	-0.667	0.667	0.333	-0.333
	0.778	0.778	0.0	0.75	0.75	0.0	1.0	0.667	-0.333	0.667	0.667	0.0
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	0.667	0.889	0.222
	0.778	0.778	0.0	0.875	0.5	-0.375	1.0	0.667	-0.333	0.667	0.333	-0.333
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	0.778	0.778	0.0
	0.778	0.889	0.111	0.875	0.25	-0.625	1.0	0.667	-0.333	0.778	0.667	-0.111
	0.889	0.778	-0.111	0.75	0.5	-0.25	1.0	0.667	-0.333	1.0	0.778	-0.222
ECCo	0.778	0.778	0.0	0.875	0.625	-0.25	1.0	0.667	-0.333	0.889	0.333	-0.556
	0.778	0.778	0.0	0.875	0.125	-0.75	1.0	0.667	-0.333	0.889	0.556	-0.333
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.556	-0.444	0.778	0.556	-0.222
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	1.0	0.889	-0.111
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	0.667	0.667	0.0
	0.778	0.778	0.0	0.875	0.625	-0.25	1.0	0.667	-0.333	0.889	0.444	-0.444
	0.778	0.778	0.0	0.75	0.25	-0.5	1.0	0.556	-0.444	1.0	0.444	-0.556
	0.778	0.778	0.0	0.875	0.125	-0.75	0.889	0.667	-0.222	1.0	0.444	-0.556
	0.778	0.778	0.0	0.75	0.375	-0.375	1.0	0.667	-0.333	0.667	0.889	0.222
	0.778	0.778	0.0	0.75	0.75	0.0	1.0	0.667	-0.333	0.889	0.444	-0.444
Wachter	0.778	1.0	0.222	0.875	0.625	-0.25	1.0	0.667	-0.333	0.778	0.556	-0.222
	0.778	1.0	0.222	0.75	0.25	-0.5	1.0	0.667	-0.333	0.667	0.667	0.0
	0.889	0.778	-0.111	0.875	0.875	0.0	1.0	0.667	-0.333	0.889	0.778	-0.111
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.556	-0.444	0.889	1.0	0.111
	0.778	0.778	0.0	0.875	0.625	-0.25	1.0	0.667	-0.333	1.0	0.333	-0.667
	0.778	0.778	0.0	0.875	0.125	-0.75	1.0	0.667	-0.333	1.0	0.778	-0.222
	0.778	0.778	0.0	0.75	0.75	0.0	1.0	0.667	-0.333	0.667	0.667	0.0
	0.778	0.778	0.0	0.875	0.375	-0.5	1.0	0.333	-0.667	0.778	0.667	-0.111
	0.778	0.889	0.111	0.75	0.5	-0.25	1.0	0.556	-0.444	0.667	0.667	0.0
	0.778	0.889	0.111	0.75	0.625	-0.125	1.0	0.667	-0.333	0.889	0.778	-0.111
Generic	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	0.889	0.889	0.0
	0.778	0.778	0.0	0.875	0.375	-0.5	1.0	0.333	-0.667	1.0	0.556	-0.444
	0.778	0.778	0.0	0.75	0.75	0.0	1.0	0.667	-0.333	0.889	0.556	-0.333
	0.778	0.778	0.0	0.875	0.875	0.0	1.0	0.667	-0.333	0.889	0.556	-0.333
	0.778	0.778	0.0	0.875	0.75	-0.125	1.0	0.667	-0.333	0.889	0.444	-0.444
	0.778	0.778	0.0	0.875	0.625	-0.25	1.0	0.667	-0.333	0.889	0.778	-0.111
	0.778	0.889	0.111	0.75	0.25	-0.5	1.0	0.889	-0.111	0.667	0.667	0.0
	0.778	0.778	0.0	0.75	0.875	0.125	1.0	0.333	-0.667	0.778	0.222	-0.556
	0.778	0.889	0.111	0.875	0.625	-0.25	1.0	0.667	-0.333	1.0	0.778	-0.222
	0.778	0.778	0.0	0.875	0.625	-0.25	1.0	0.667	-0.333	0.889	0.444	-0.444
DiCE	0.778	0.889	0.111	0.75	0.5	-0.25	1.0	0.667	-0.333	1.0	0.556	-0.444

	0.778	0.778	0.0	0.75	0.625	-0.125	0.889	0.667	-0.222	0.778	0.444	-0.333
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.333	-0.667	0.778	0.778	0.0
	0.778	0.778	0.0	0.75	0.25	-0.5	1.0	0.667	-0.333	0.778	0.667	-0.111
	0.778	0.889	0.111	0.875	0.625	-0.25	1.0	0.889	-0.111	0.778	0.778	0.0
	0.778	0.778	0.0	0.75	0.875	0.125	0.889	0.667	-0.222	0.889	0.667	-0.222
	0.778	0.889	0.111	0.875	0.125	-0.75	1.0	0.667	-0.333	0.667	0.667	0.0
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	0.778	0.667	-0.111
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	0.889	0.778	-0.111
	0.778	1.0	0.222	0.875	0.125	-0.75	1.0	0.667	-0.333	0.667	0.444	-0.222
ClaPROAR	0.778	0.889	0.111	0.75	0.5	-0.25	1.0	0.667	-0.333	1.0	0.556	-0.444
	0.889	0.889	0.0	0.875	0.25	-0.625	1.0	0.667	-0.333	0.889	0.556	-0.333
	0.778	1.0	0.222	0.75	0.75	0.0	1.0	0.667	-0.333	1.0	0.556	-0.444
	0.778	0.778	0.0	0.75	0.5	-0.25	1.0	0.667	-0.333	0.889	0.556	-0.333
	0.778	1.0	0.222	0.875	0.625	-0.25	1.0	0.667	-0.333	0.667	0.333	-0.333
	0.778	1.0	0.222	0.75	0.5	-0.25	1.0	0.667	-0.333	1.0	0.778	-0.222
	0.778	0.778	0.0	0.75	0.25	-0.5	1.0	0.667	-0.333	0.667	0.667	0.0
	0.889	0.778	-0.111	0.875	0.875	0.0	1.0	0.667	-0.333	0.889	0.778	-0.111
	0.778	0.778	0.0	0.75	0.25	-0.5	1.0	0.667	-0.333	0.889	0.778	-0.111
	0.778	0.778	0.0	0.875	0.625	-0.25	1.0	0.667	-0.333	0.667	0.667	0.0

Tab. 167: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a deep ensembles, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.778	0.778	0.0	0.889	0.444	-0.444	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.556	-0.222	0.778	0.556	-0.222	0.889	0.667	-0.222	1.0	0.667	-0.333
	1.0	0.889	-0.111	0.778	0.444	-0.333	0.889	0.333	-0.556	1.0	1.0	0.0
	1.0	0.556	-0.444	0.778	0.444	-0.333	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.667	-0.111	0.778	0.444	-0.333	0.667	0.333	-0.333	1.0	1.0	0.0
	0.667	0.667	0.0	0.778	0.444	-0.333	0.778	0.667	-0.111	1.0	1.0	0.0
	1.0	0.667	-0.333	0.889	0.111	-0.778	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.778	0.222	-0.556	0.667	0.667	0.0	1.0	0.667	-0.333
	0.556	0.778	0.222	0.889	0.444	-0.444	0.778	0.667	-0.111	1.0	0.667	-0.333
	1.0	0.667	-0.333	0.778	0.444	-0.333	0.778	0.667	-0.111	1.0	0.667	-0.333
ECCo	0.667	0.778	0.111	0.889	0.222	-0.667	0.778	0.667	-0.111	1.0	0.444	-0.556
	1.0	0.667	-0.333	0.889	0.333	-0.556	0.667	0.667	0.0	0.889	0.667	-0.222
	0.556	0.778	0.222	1.0	0.111	-0.889	0.778	0.556	-0.222	0.889	0.667	-0.222
	1.0	0.667	-0.333	0.778	0.222	-0.556	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.778	0.778	0.0	1.0	0.111	-0.889	0.778	0.667	-0.111	1.0	0.333	-0.667
	0.556	0.778	0.222	0.778	0.556	-0.222	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.889	0.111	-0.778	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.667	0.667	0.0	0.778	0.222	-0.556	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.889	0.444	-0.444	0.889	0.667	-0.222	1.0	0.667	-0.333
	1.0	0.667	-0.333	0.778	0.333	-0.444	0.667	0.333	-0.333	1.0	0.667	-0.333
Wachter	0.889	0.667	-0.222	0.778	0.778	0.0	0.778	0.667	-0.111	1.0	0.889	-0.111
	0.556	0.889	0.333	0.778	0.444	-0.333	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.778	0.556	-0.222	1.0	0.889	-0.111	0.889	0.667	-0.222	1.0	0.444	-0.556
	0.556	1.0	0.444	0.778	0.556	-0.222	0.778	0.667	-0.111	1.0	0.889	-0.111
	0.889	0.778	-0.111	0.778	0.556	-0.222	0.667	0.667	0.0	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.778	0.333	-0.444	0.778	0.333	-0.444	1.0	0.667	-0.333
	0.667	0.889	0.222	0.889	0.556	-0.333	0.778	0.667	-0.111	1.0	0.889	-0.111
	0.889	0.667	-0.222	0.778	0.444	-0.333	0.667	0.667	0.0	1.0	0.667	-0.333
	0.778	0.667	-0.111	0.778	1.0	0.222	0.778	0.667	-0.111	1.0	0.333	-0.667
	1.0	0.556	-0.444	0.778	0.778	0.0	0.889	0.667	-0.222	0.889	0.667	-0.222

Generic	0.889	0.889	0.0	0.778	0.556	-0.222	0.889	0.333	-0.556	1.0	0.556	-0.444
	0.889	0.667	-0.222	0.778	0.556	-0.222	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.667	1.0	0.333	1.0	0.667	-0.333	0.889	1.0	0.111	1.0	0.667	-0.333
	0.556	1.0	0.444	1.0	0.556	-0.444	0.667	0.778	0.111	1.0	1.0	0.0
	0.556	0.889	0.333	0.778	0.667	-0.111	0.778	0.667	-0.111	0.889	0.667	-0.222
	0.778	0.667	-0.111	0.778	0.667	-0.111	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.556	1.0	0.444	0.778	0.889	0.111	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.778	-0.111	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.778	0.778	0.0	0.889	0.889	0.0	0.667	0.667	0.0	0.889	0.667	-0.222
	0.778	0.667	-0.111	0.778	0.778	0.0	1.0	0.556	-0.444	0.889	0.778	-0.111
DiCE	1.0	0.667	-0.333	0.889	0.778	-0.111	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.889	1.0	0.111	0.778	1.0	0.222	0.889	0.667	-0.222	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.778	0.556	-0.222	0.889	0.667	-0.222	1.0	0.667	-0.333
	1.0	0.556	-0.444	1.0	0.889	-0.111	0.889	0.333	-0.556	1.0	0.667	-0.333
	0.889	0.889	0.0	0.778	0.778	0.0	1.0	0.667	-0.333	1.0	0.444	-0.556
	1.0	1.0	0.0	0.778	0.556	-0.222	0.778	0.667	-0.111	1.0	1.0	0.0
	1.0	1.0	0.0	0.778	0.556	-0.222	0.778	0.667	-0.111	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.778	0.222	-0.556	0.778	0.667	-0.111	1.0	0.778	-0.222
	1.0	0.778	-0.222	0.778	0.333	-0.444	0.778	0.667	-0.111	1.0	0.333	-0.667
	1.0	0.778	-0.222	0.778	0.778	0.0	0.778	0.667	-0.111	1.0	0.667	-0.333
ClaPROAR	1.0	1.0	0.0	0.778	0.556	-0.222	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.667	0.889	0.222	0.778	0.778	0.0	0.778	0.667	-0.111	1.0	0.889	-0.111
	0.778	0.778	0.0	0.778	0.444	-0.333	0.889	0.667	-0.222	0.889	0.333	-0.556
	0.667	0.889	0.222	0.778	0.778	0.0	0.778	0.667	-0.111	1.0	0.667	-0.333
	1.0	1.0	0.0	0.778	0.222	-0.556	0.778	0.778	0.0	1.0	1.0	0.0
	0.889	1.0	0.111	0.778	0.778	0.0	0.889	1.0	0.111	0.889	0.667	-0.222
	1.0	0.556	-0.444	0.889	0.778	-0.111	0.889	0.667	-0.222	0.889	0.667	-0.222
	0.556	1.0	0.444	0.889	0.778	-0.111	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.778	0.778	0.0	0.778	0.444	-0.333	0.778	0.667	-0.111	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.778	0.444	-0.333	0.778	0.778	0.0	1.0	0.667	-0.333

Tab. 168: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a deep ensembles, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.889	1.0	0.111	1.0	0.444	-0.556	0.667	0.333	-0.333	0.889	0.111	-0.778
	0.889	0.889	0.0	0.889	0.889	0.0	0.667	0.333	-0.333	0.889	0.667	-0.222
	1.0	0.889	-0.111	0.889	0.444	-0.444	0.667	0.333	-0.333	0.889	0.778	-0.111
	1.0	1.0	0.0	1.0	0.444	-0.556	0.778	0.222	-0.556	0.889	0.667	-0.222
	1.0	0.667	-0.333	0.889	0.333	-0.556	0.667	0.444	-0.222	0.889	0.889	0.0
	0.667	1.0	0.333	1.0	0.444	-0.556	0.667	0.667	0.0	0.778	0.556	-0.222
	1.0	0.889	-0.111	1.0	0.444	-0.556	1.0	0.667	-0.333	0.778	0.778	0.0
	0.889	0.778	-0.111	0.778	0.444	-0.333	0.556	0.444	-0.111	0.889	0.889	0.0
	0.889	1.0	0.111	1.0	0.444	-0.556	0.667	0.333	-0.333	0.889	0.889	0.0
	0.889	0.667	-0.222	0.889	0.333	-0.556	0.667	0.556	-0.111	0.889	0.889	0.0
ECCo	0.778	0.889	0.111	0.667	0.444	-0.222	0.667	0.667	0.0	0.889	0.889	0.0
	0.778	0.889	0.111	0.667	0.222	-0.444	0.667	0.333	-0.333	0.778	0.667	-0.111
	0.778	0.889	0.111	0.889	0.444	-0.444	0.778	0.222	-0.556	0.778	0.556	-0.222
	0.778	0.889	0.111	0.889	0.444	-0.444	0.667	0.556	-0.111	0.889	0.667	-0.222
	0.778	0.889	0.111	0.889	0.333	-0.556	0.667	0.556	-0.111	0.889	0.667	-0.222
	0.889	0.889	0.0	1.0	0.444	-0.556	0.667	0.333	-0.333	0.778	0.778	0.0
	0.889	0.889	0.0	0.889	0.444	-0.444	0.778	0.333	-0.444	0.889	0.667	-0.222
	0.667	0.889	0.222	0.556	0.444	-0.111	0.556	1.0	0.444	0.889	0.889	0.0
	1.0	0.889	-0.111	0.889	0.333	-0.556	0.667	0.667	0.0	0.889	0.778	-0.111

	0.778	0.667	-0.111	0.778	0.889	0.111	0.667	0.333	-0.333	0.889	0.889	0.0
Wachter	0.778	0.778	0.0	0.778	0.778	0.0	0.667	0.667	0.0	0.889	0.889	0.0
	0.667	1.0	0.333	1.0	0.778	-0.222	0.667	0.333	-0.333	0.778	0.556	-0.222
	0.889	1.0	0.111	1.0	0.889	-0.111	0.778	0.333	-0.444	0.889	0.667	-0.222
	0.667	0.889	0.222	1.0	0.556	-0.444	0.667	0.333	-0.333	0.778	0.444	-0.333
	1.0	0.889	-0.111	0.778	0.111	-0.667	0.778	0.556	-0.222	0.778	1.0	0.222
	1.0	0.667	-0.333	1.0	0.556	-0.444	0.667	0.667	0.0	0.889	0.778	-0.111
	0.667	0.667	0.0	0.889	0.556	-0.333	0.778	0.556	-0.222	0.778	0.778	0.0
	1.0	0.556	-0.444	1.0	0.889	-0.111	0.778	0.778	0.0	1.0	1.0	0.0
	0.889	0.778	-0.111	0.889	0.556	-0.333	0.889	0.556	-0.333	0.889	0.889	0.0
	0.667	0.889	0.222	0.778	0.778	0.0	0.556	0.444	-0.111	0.889	0.556	-0.333
Generic	0.778	0.889	0.111	1.0	0.667	-0.333	0.667	0.333	-0.333	0.889	0.889	0.0
	0.778	0.889	0.111	0.889	1.0	0.111	0.667	0.778	0.111	0.889	0.889	0.0
	0.778	1.0	0.222	0.778	0.778	0.0	0.667	0.556	-0.111	0.889	0.889	0.0
	1.0	0.889	-0.111	1.0	0.556	-0.444	0.778	0.889	0.111	0.889	1.0	0.111
	1.0	1.0	0.0	0.889	0.444	-0.444	0.778	0.444	-0.333	0.889	0.667	-0.222
	1.0	1.0	0.0	1.0	0.444	-0.556	0.667	1.0	0.333	0.778	0.667	-0.111
	0.889	1.0	0.111	0.778	0.778	0.0	0.556	0.889	0.333	0.778	0.778	0.0
	0.778	1.0	0.222	0.889	0.667	-0.222	0.667	0.667	0.0	0.778	0.444	-0.333
	1.0	1.0	0.0	0.889	0.667	-0.222	0.889	0.889	0.0	0.889	0.889	0.0
	1.0	1.0	0.0	0.889	0.778	-0.111	0.778	0.222	-0.556	0.778	0.778	0.0
DiCE	0.778	1.0	0.222	0.778	0.889	0.111	0.667	0.667	0.0	0.778	0.778	0.0
	0.778	0.778	0.0	0.889	0.889	0.0	0.556	0.444	-0.111	0.778	0.778	0.0
	1.0	1.0	0.0	0.889	0.667	-0.222	0.556	0.778	0.222	0.889	0.889	0.0
	0.778	0.778	0.0	0.667	1.0	0.333	0.667	0.333	-0.333	0.889	0.667	-0.222
	1.0	1.0	0.0	0.889	0.444	-0.444	0.556	0.667	0.111	0.778	0.778	0.0
	0.778	0.778	0.0	0.667	0.556	-0.111	0.778	0.222	-0.556	0.889	0.889	0.0
	1.0	0.667	-0.333	0.778	0.778	0.0	0.778	0.778	0.0	0.889	0.889	0.0
	0.778	0.889	0.111	0.778	0.667	-0.111	0.778	0.778	0.0	0.889	0.889	0.0
	0.778	0.778	0.0	0.778	0.556	-0.222	0.667	0.444	-0.222	0.889	0.889	0.0
	1.0	0.889	-0.111	0.889	0.667	-0.222	0.667	0.667	0.0	0.889	0.667	-0.222
ClaPROAR	1.0	1.0	0.0	0.778	0.778	0.0	0.778	0.444	-0.333	1.0	1.0	0.0
	1.0	1.0	0.0	0.778	0.444	-0.333	0.667	0.667	0.0	0.889	0.889	0.0
	0.889	1.0	0.111	0.778	0.667	-0.111	1.0	0.111	-0.889	1.0	0.0	-1.0
	0.889	0.667	-0.222	1.0	0.556	-0.444	0.889	0.667	-0.222	0.889	0.889	0.0
	0.889	0.889	0.0	0.778	0.889	0.111	0.556	0.667	0.111	0.778	0.556	-0.222
	0.778	0.778	0.0	0.778	0.778	0.0	0.667	0.556	-0.111	0.778	0.778	0.0
	0.778	0.778	0.0	0.778	0.778	0.0	0.778	0.778	0.0	0.889	0.889	0.0
	0.778	0.889	0.111	0.667	0.778	0.111	0.556	1.0	0.444	0.889	0.889	0.0
	0.889	1.0	0.111	1.0	0.444	-0.556	0.778	0.778	0.0	0.889	0.667	-0.222
	0.889	0.889	0.0	1.0	0.889	-0.111	0.778	0.444	-0.333	0.889	0.889	0.0

Tab. 169: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a deep ensembles, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	0.778	0.778	0.0	1.0	0.889	-0.111	0.9	0.7	-0.2	0.778	0.333	-0.444
	0.889	0.778	-0.111	0.778	0.444	-0.333	0.9	0.7	-0.2	0.778	1.0	0.222
	1.0	0.667	-0.333	1.0	0.556	-0.444	0.9	0.7	-0.2	0.889	0.222	-0.667
	0.889	0.556	-0.333	0.778	0.444	-0.333	0.7	1.0	0.3	0.889	0.222	-0.667
	0.889	0.889	0.0	0.889	0.889	0.0	1.0	0.7	-0.3	1.0	0.667	-0.333
	0.778	0.556	-0.222	1.0	0.889	-0.111	0.9	0.7	-0.2	0.889	0.889	0.0
	0.778	0.889	0.111	0.778	0.444	-0.333	0.8	0.7	-0.1	0.667	0.333	-0.333
	1.0	1.0	0.0	0.778	0.444	-0.333	0.9	0.7	-0.2	1.0	0.778	-0.222

	1.0	1.0	0.0	0.778	0.444	-0.333	1.0	0.8	-0.2	0.667	0.667	0.0
	0.667	0.889	0.222	0.889	0.556	-0.333	0.8	0.7	-0.1	0.667	0.667	0.0
ECCo	0.889	1.0	0.111	0.778	0.444	-0.333	0.9	0.7	-0.2	0.667	0.778	0.111
	0.667	0.667	0.0	0.778	0.556	-0.222	1.0	0.7	-0.3	0.667	0.778	0.111
	0.778	1.0	0.222	0.778	0.778	0.0	0.9	0.7	-0.2	0.778	0.778	0.0
	1.0	0.778	-0.222	0.889	0.333	-0.556	0.7	0.7	0.0	1.0	0.667	-0.333
	0.889	0.889	0.0	0.778	0.778	0.0	0.8	0.3	-0.5	0.889	0.667	-0.222
	1.0	0.778	-0.222	0.778	0.222	-0.556	1.0	0.5	-0.5	0.889	0.667	-0.222
	0.889	1.0	0.111	0.778	0.444	-0.333	0.8	0.7	-0.1	0.889	0.333	-0.556
	0.778	0.889	0.111	0.778	0.778	0.0	0.9	0.7	-0.2	0.889	0.778	-0.111
	0.889	1.0	0.111	0.778	0.444	-0.333	1.0	0.9	-0.1	0.667	0.778	0.111
	1.0	0.889	-0.111	0.778	0.556	-0.222	0.9	0.7	-0.2	0.667	0.778	0.111
Wachter	0.778	0.778	0.0	0.778	0.778	0.0	1.0	0.8	-0.2	0.667	0.889	0.222
	1.0	1.0	0.0	0.778	0.444	-0.333	1.0	0.8	-0.2	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.778	0.556	-0.222	1.0	0.7	-0.3	0.889	0.667	-0.222
	0.889	0.889	0.0	0.778	0.333	-0.444	0.8	0.7	-0.1	0.667	0.778	0.111
	0.889	0.889	0.0	0.778	0.444	-0.333	1.0	0.7	-0.3	0.667	0.667	0.0
	0.667	1.0	0.333	0.778	0.222	-0.556	1.0	0.7	-0.3	0.667	0.667	0.0
	0.667	0.667	0.0	1.0	0.889	-0.111	1.0	0.5	-0.5	0.667	0.778	0.111
	0.778	0.667	-0.111	0.778	1.0	0.222	0.9	0.7	-0.2	0.667	0.667	0.0
	0.889	0.556	-0.333	0.778	0.333	-0.444	1.0	0.7	-0.3	1.0	0.778	-0.222
	0.889	0.556	-0.333	0.778	0.444	-0.333	0.9	0.8	-0.1	0.667	0.667	0.0
Generic	1.0	1.0	0.0	0.778	0.556	-0.222	0.9	0.9	0.0	0.667	0.778	0.111
	1.0	1.0	0.0	0.778	0.556	-0.222	1.0	0.7	-0.3	1.0	0.778	-0.222
	0.889	0.667	-0.222	0.778	0.556	-0.222	0.7	0.7	0.0	0.667	0.667	0.0
	0.778	0.889	0.111	0.778	1.0	0.222	0.9	0.7	-0.2	0.667	0.778	0.111
	0.889	0.778	-0.111	0.778	0.667	-0.111	0.7	0.5	-0.2	0.667	0.778	0.111
	0.889	0.889	0.0	0.778	0.333	-0.444	1.0	0.7	-0.3	0.778	0.556	-0.222
	0.889	1.0	0.111	0.778	0.222	-0.556	0.9	1.0	0.1	0.667	0.667	0.0
	0.889	0.667	-0.222	1.0	0.111	-0.889	0.8	0.7	-0.1	0.667	0.778	0.111
	0.889	1.0	0.111	0.778	0.333	-0.444	0.9	0.7	-0.2	0.667	0.778	0.111
	0.889	0.889	0.0	0.778	0.556	-0.222	0.9	0.7	-0.2	0.667	0.889	0.222
DiCE	0.889	0.556	-0.333	1.0	0.667	-0.333	0.9	0.7	-0.2	0.667	0.778	0.111
	0.667	1.0	0.333	0.889	0.889	0.0	0.8	0.7	-0.1	0.667	0.667	0.0
	0.778	1.0	0.222	1.0	0.444	-0.556	0.9	0.5	-0.4	0.667	1.0	0.333
	0.889	1.0	0.111	0.889	0.333	-0.556	0.9	0.7	-0.2	0.667	0.444	-0.222
	0.889	1.0	0.111	0.889	0.444	-0.444	0.9	0.7	-0.2	0.778	0.778	0.0
	0.889	0.889	0.0	0.778	0.333	-0.444	1.0	0.7	-0.3	1.0	0.444	-0.556
	1.0	0.667	-0.333	0.778	0.222	-0.556	1.0	0.7	-0.3	0.667	0.778	0.111
	0.889	0.889	0.0	0.889	0.111	-0.778	0.9	0.7	-0.2	0.667	0.778	0.111
	0.889	0.889	0.0	1.0	0.444	-0.556	0.8	0.7	-0.1	1.0	0.778	-0.222
	1.0	0.889	-0.111	0.778	0.556	-0.222	0.8	0.7	-0.1	0.889	0.778	-0.111
ClaPROAR	0.889	0.667	-0.222	0.889	0.889	0.0	0.9	0.7	-0.2	0.778	0.667	-0.111
	0.889	1.0	0.111	0.778	0.556	-0.222	0.9	0.7	-0.2	0.889	0.778	-0.111
	1.0	1.0	0.0	0.778	0.222	-0.556	1.0	0.7	-0.3	0.667	0.556	-0.111
	1.0	0.889	-0.111	0.889	0.778	-0.111	1.0	0.7	-0.3	0.778	0.667	-0.111
	0.889	0.778	-0.111	0.778	0.333	-0.444	0.9	0.7	-0.2	0.667	0.778	0.111
	0.667	1.0	0.333	0.889	0.444	-0.444	0.8	0.7	-0.1	0.667	0.667	0.0
	0.889	0.889	0.0	0.778	0.778	0.0	0.8	0.9	0.1	0.667	0.667	0.0
	0.889	0.889	0.0	0.778	0.556	-0.222	0.9	0.7	-0.2	0.667	0.333	-0.333
	0.889	0.889	0.0	0.778	0.556	-0.222	0.9	0.4	-0.5	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.778	0.556	-0.222	0.8	1.0	0.2	0.667	0.778	0.111

Tab. 170: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a deep ensembles, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
REVISE	1.0	1.0	0.0	0.667	0.667	0.0	0.778	0.556	-0.222	1.0	0.667	-0.333
	0.889	0.889	0.0	0.667	0.333	-0.333	0.889	0.889	0.0	1.0	1.0	0.0
	0.889	1.0	0.111	0.667	0.444	-0.222	0.556	0.778	0.222	1.0	0.667	-0.333
	1.0	1.0	0.0	0.667	0.333	-0.333	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.667	0.667	0.0	0.667	0.333	-0.333	0.556	0.222	-0.333	1.0	0.444	-0.556
	0.889	1.0	0.111	0.667	0.333	-0.333	0.556	0.778	0.222	1.0	0.556	-0.444
	1.0	1.0	0.0	0.667	0.556	-0.111	1.0	0.667	-0.333	0.889	0.667	-0.222
	0.778	0.778	0.0	0.667	0.333	-0.333	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.778	0.778	0.0	0.667	0.333	-0.333	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.667	0.333	-0.333	0.889	0.333	-0.556	1.0	0.667	-0.333
ECCo	0.889	0.889	0.0	0.778	0.333	-0.444	0.556	0.667	0.111	1.0	0.667	-0.333
	0.778	0.667	-0.111	0.667	0.333	-0.333	1.0	0.667	-0.333	1.0	0.333	-0.667
	1.0	0.889	-0.111	0.778	0.333	-0.444	0.778	0.778	0.0	1.0	0.778	-0.222
	1.0	1.0	0.0	0.667	0.333	-0.333	0.889	0.778	-0.111	1.0	0.667	-0.333
	0.778	1.0	0.222	0.889	0.444	-0.444	0.889	0.667	-0.222	0.889	0.667	-0.222
	0.778	0.778	0.0	0.667	0.333	-0.333	0.778	0.667	-0.111	1.0	0.444	-0.556
	1.0	1.0	0.0	0.667	0.333	-0.333	1.0	0.667	-0.333	0.889	0.333	-0.556
	0.889	0.778	-0.111	0.667	0.333	-0.333	1.0	0.667	-0.333	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.667	0.333	-0.333	1.0	0.667	-0.333	1.0	0.556	-0.444
	0.889	0.889	0.0	0.667	0.333	-0.333	0.556	0.556	0.0	1.0	0.556	-0.444
Wachter	0.889	1.0	0.111	0.778	0.333	-0.444	0.778	0.444	-0.333	1.0	0.667	-0.333
	0.889	0.778	-0.111	0.667	0.556	-0.111	0.778	0.556	-0.222	1.0	0.667	-0.333
	0.889	0.889	0.0	0.667	0.667	0.0	1.0	0.667	-0.333	1.0	1.0	0.0
	1.0	1.0	0.0	0.778	0.444	-0.333	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.889	0.889	0.0	0.667	0.667	0.0	1.0	0.667	-0.333	1.0	0.889	-0.111
	1.0	0.667	-0.333	0.667	0.667	0.0	0.889	0.333	-0.556	1.0	0.889	-0.111
	0.889	0.889	0.0	0.667	0.667	0.0	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.667	0.778	0.111	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.889	0.889	0.0	0.667	0.889	0.222	1.0	0.889	-0.111	1.0	0.667	-0.333
	1.0	0.667	-0.333	0.667	0.333	-0.333	0.778	0.667	-0.111	0.889	0.667	-0.222
Generic	1.0	1.0	0.0	0.889	0.667	-0.222	0.556	0.444	-0.111	1.0	0.667	-0.333
	1.0	1.0	0.0	0.667	0.778	0.111	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.889	0.889	0.0	0.667	0.667	0.0	0.556	0.667	0.111	1.0	0.667	-0.333
	0.889	1.0	0.111	0.667	0.778	0.111	0.889	0.667	-0.222	0.778	0.889	0.111
	1.0	1.0	0.0	0.667	0.889	0.222	1.0	0.667	-0.333	0.889	0.667	-0.222
	1.0	1.0	0.0	0.667	0.667	0.0	1.0	1.0	0.0	0.889	1.0	0.111
	0.889	0.889	0.0	0.667	0.444	-0.222	0.889	0.667	-0.222	1.0	0.667	-0.333
	1.0	0.889	-0.111	0.667	0.333	-0.333	1.0	0.667	-0.333	1.0	0.667	-0.333
	1.0	1.0	0.0	0.667	0.667	0.0	0.556	0.778	0.222	1.0	0.667	-0.333
	0.889	0.667	-0.222	0.667	0.667	0.0	0.556	0.556	0.0	1.0	0.667	-0.333
DiCE	1.0	1.0	0.0	0.667	0.889	0.222	1.0	0.556	-0.444	1.0	0.889	-0.111
	0.889	0.778	-0.111	0.667	0.778	0.111	0.889	0.667	-0.222	0.889	0.333	-0.556
	1.0	1.0	0.0	0.667	0.333	-0.333	0.889	0.667	-0.222	1.0	0.667	-0.333
	1.0	0.778	-0.222	0.667	0.667	0.0	1.0	0.667	-0.333	0.889	0.667	-0.222
	1.0	1.0	0.0	0.778	0.889	0.111	1.0	0.333	-0.667	1.0	0.667	-0.333
	0.778	0.778	0.0	0.667	0.667	0.0	0.556	0.778	0.222	0.889	0.667	-0.222
	0.889	0.889	0.0	0.667	0.667	0.0	1.0	0.333	-0.667	1.0	0.667	-0.333
	0.667	0.889	0.222	0.667	0.333	-0.333	1.0	0.667	-0.333	1.0	0.667	-0.333
	0.889	0.889	0.0	0.667	1.0	0.333	0.556	0.556	0.0	1.0	0.667	-0.333
	0.889	0.778	-0.111	0.667	0.667	0.0	0.889	0.889	0.0	1.0	0.778	-0.222
ClaPROAR	1.0	1.0	0.0	0.667	0.667	0.0	1.0	0.667	-0.333	1.0	0.667	-0.333
	1.0	1.0	0.0	0.667	0.667	0.0	0.889	0.667	-0.222	1.0	0.667	-0.333
	1.0	1.0	0.0	0.667	0.667	0.0	0.556	1.0	0.444	1.0	0.667	-0.333

	0.889	0.889	0.0	0.778	0.778	0.0	1.0	0.667	-0.333	1.0	0.778	-0.222
	0.889	0.889	0.0	0.667	0.444	-0.222	0.889	0.667	-0.222	1.0	0.667	-0.333
	0.889	1.0	0.111	0.667	0.667	0.0	0.556	0.778	0.222	1.0	0.778	-0.222
	0.889	0.889	0.0	0.667	0.667	0.0	0.889	0.778	-0.111	1.0	0.667	-0.333
	0.667	0.889	0.222	0.778	0.778	0.0	0.556	0.222	-0.333	1.0	0.778	-0.222
	0.889	0.778	-0.111	0.667	0.667	0.0	0.556	0.778	0.222	1.0	0.667	-0.333
	1.0	1.0	0.0	0.667	0.778	0.111	0.556	0.889	0.333	1.0	0.667	-0.333

Tab. 171: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the iris dataset using a deep ensembles, experiment 5

F.2.13. Moons dataset using MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.97	0.96	-0.01	0.97	0.92	-0.05	0.95	0.95	0.0	0.98	0.9	-0.08
	0.92	0.93	0.01	0.92	0.83	-0.09	0.96	0.96	0.0	0.99	0.98	-0.01
	0.92	0.99	0.07	0.92	0.92	0.0	0.92	0.94	0.02	0.98	0.93	-0.05
	0.96	1.0	0.04	0.96	0.77	-0.19	0.94	0.92	-0.02	1.0	0.99	-0.01
	0.91	0.97	0.06	0.91	0.88	-0.03	0.91	0.89	-0.02	0.99	0.93	-0.06
	0.98	0.97	-0.01	0.98	0.84	-0.14	0.9	0.93	0.03	0.97	0.94	-0.03
	0.95	0.99	0.04	0.95	0.76	-0.19	0.94	0.95	0.01	0.97	0.96	-0.01
	0.93	0.97	0.04	0.93	0.9	-0.03	0.96	0.96	0.0	0.96	0.97	0.01
	0.95	0.94	-0.01	0.95	0.88	-0.07	0.95	0.94	-0.01	1.0	1.0	0.0
	0.95	0.95	0.0	0.95	0.88	-0.07	0.97	0.95	-0.02	1.0	0.98	-0.02
REVISE	0.97	1.0	0.03	0.97	0.23	-0.74	0.95	0.95	0.0	1.0	0.94	-0.06
	0.94	1.0	0.06	0.94	0.49	-0.45	0.9	0.99	0.09	0.96	0.95	-0.01
	0.91	1.0	0.09	0.91	0.36	-0.55	0.95	0.92	-0.03	0.99	0.96	-0.03
	0.96	1.0	0.04	0.96	0.15	-0.81	0.92	0.99	0.07	0.97	0.92	-0.05
	0.9	0.99	0.09	0.9	0.39	-0.51	0.98	0.98	0.0	1.0	0.98	-0.02
	0.96	0.98	0.02	0.96	0.35	-0.61	0.94	0.92	-0.02	1.0	0.98	-0.02
	0.96	1.0	0.04	0.96	0.31	-0.65	0.93	0.92	-0.01	0.99	0.95	-0.04
	0.93	0.99	0.06	0.93	0.63	-0.3	0.96	0.96	0.0	0.98	0.98	0.0
	0.97	1.0	0.03	0.97	0.37	-0.6	0.94	0.96	0.02	0.99	0.96	-0.03
	0.93	0.92	-0.01	0.93	0.23	-0.7	0.95	0.87	-0.08	0.99	0.97	-0.02
ECCo	0.93	0.97	0.04	0.93	0.88	-0.05	0.93	0.94	0.01	0.99	0.96	-0.03
	0.97	0.97	0.0	0.97	0.75	-0.22	0.96	0.95	-0.01	1.0	0.99	-0.01
	0.97	0.97	0.0	0.97	0.84	-0.13	0.94	0.94	0.0	0.98	0.94	-0.04
	0.93	0.96	0.03	0.93	0.82	-0.11	0.96	0.95	-0.01	0.99	0.97	-0.02
	0.98	0.97	-0.01	0.98	0.92	-0.06	0.95	0.94	-0.01	1.0	0.97	-0.03
	0.94	0.98	0.04	0.94	0.73	-0.21	0.95	0.94	-0.01	0.96	0.97	0.01
	0.92	0.98	0.06	0.92	0.93	0.01	0.97	0.97	0.0	1.0	1.0	0.0
	0.95	0.97	0.02	0.95	0.93	-0.02	0.96	0.95	-0.01	1.0	0.91	-0.09
	0.94	0.94	0.0	0.94	0.92	-0.02	0.95	0.97	0.02	1.0	0.98	-0.02
	0.97	0.94	-0.03	0.97	0.94	-0.03	0.98	0.95	-0.03	0.97	0.96	-0.01
Wachter	0.96	0.99	0.03	0.96	0.93	-0.03	0.93	0.94	0.01	0.97	0.97	0.0
	0.97	0.99	0.02	0.97	0.98	0.01	0.92	0.94	0.02	1.0	0.98	-0.02
	0.97	0.95	-0.02	0.97	0.96	-0.01	0.96	0.96	0.0	1.0	0.99	-0.01
	0.96	0.99	0.03	0.96	0.97	0.01	0.95	0.93	-0.02	0.99	0.99	0.0
	0.96	1.0	0.04	0.96	0.95	-0.01	0.92	0.93	0.01	1.0	0.99	-0.01
	0.94	0.99	0.05	0.94	0.94	0.0	0.95	0.95	0.0	1.0	0.99	-0.01
	0.91	1.0	0.09	0.91	0.94	0.03	0.93	0.95	0.02	1.0	0.98	-0.02
	0.95	0.91	-0.04	0.95	0.95	0.0	0.95	0.95	0.0	1.0	0.98	-0.02
	0.98	1.0	0.02	0.98	0.95	-0.03	0.92	0.96	0.04	1.0	0.99	-0.01
	0.97	0.96	-0.01	0.97	0.97	0.0	0.95	0.94	-0.01	0.98	0.97	-0.01
Generic	0.95	1.0	0.05	0.95	0.95	0.0	0.96	0.96	0.0	1.0	1.0	0.0

	0.92	1.0	0.08	0.92	0.94	0.02	0.93	0.91	-0.02	1.0	0.98	-0.02
	0.97	1.0	0.03	0.97	0.97	0.0	0.95	0.95	0.0	1.0	0.99	-0.01
	0.96	0.99	0.03	0.96	0.96	0.0	0.95	0.95	0.0	0.99	0.99	0.0
	0.97	1.0	0.03	0.97	0.97	0.0	0.92	0.93	0.01	0.99	0.99	0.0
	0.95	0.99	0.04	0.95	0.95	0.0	0.95	0.97	0.02	1.0	0.98	-0.02
	0.94	0.93	-0.01	0.94	0.92	-0.02	0.97	0.97	0.0	0.95	0.96	0.01
	0.95	0.96	0.01	0.95	0.95	0.0	0.94	0.93	-0.01	0.97	0.97	0.0
	0.96	1.0	0.04	0.96	0.96	0.0	0.96	0.95	-0.01	0.99	0.97	-0.02
	0.92	1.0	0.08	0.92	0.95	0.03	0.89	0.92	0.03	0.98	0.97	-0.01
DiCE	0.98	1.0	0.02	0.98	0.96	-0.02	0.96	0.96	0.0	1.0	0.99	-0.01
	0.96	1.0	0.04	0.96	0.96	0.0	0.95	0.94	-0.01	0.99	0.98	-0.01
	0.98	1.0	0.02	0.98	0.97	-0.01	0.93	0.92	-0.01	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	0.96	-0.02	0.92	0.96	0.04	1.0	0.98	-0.02
	0.94	0.92	-0.02	0.94	0.94	0.0	0.96	0.96	0.0	1.0	0.97	-0.03
	0.95	1.0	0.05	0.95	0.92	-0.03	0.92	0.92	0.0	1.0	0.99	-0.01
	0.94	1.0	0.06	0.94	0.95	0.01	0.95	0.94	-0.01	1.0	0.96	-0.04
	0.94	0.96	0.02	0.94	0.96	0.02	0.96	0.95	-0.01	1.0	0.99	-0.01
	0.96	0.98	0.02	0.96	0.97	0.01	0.94	0.96	0.02	1.0	1.0	0.0
	0.96	0.98	0.02	0.96	0.95	-0.01	0.94	0.94	0.0	1.0	0.99	-0.01
ClaPROAR	0.94	1.0	0.06	0.94	0.93	-0.01	0.94	0.93	-0.01	0.98	0.97	-0.01
	0.94	0.94	0.0	0.94	0.93	-0.01	0.99	0.96	-0.03	0.99	0.99	0.0
	0.93	0.99	0.06	0.93	0.93	0.0	0.92	0.96	0.04	1.0	0.98	-0.02
	0.92	1.0	0.08	0.92	0.94	0.02	0.96	0.93	-0.03	0.99	0.97	-0.02
	0.93	0.99	0.06	0.93	0.93	0.0	0.94	0.94	0.0	0.97	0.97	0.0
	0.97	0.99	0.02	0.97	0.98	0.01	0.92	0.93	0.01	0.98	0.97	-0.01
	0.96	1.0	0.04	0.96	0.93	-0.03	0.96	0.95	-0.01	1.0	0.97	-0.03
	0.93	1.0	0.07	0.93	0.92	-0.01	0.97	0.96	-0.01	1.0	0.99	-0.01
	0.99	0.97	-0.02	0.99	0.96	-0.03	0.95	0.95	0.0	0.99	0.98	-0.01
	0.97	1.0	0.03	0.97	0.98	0.01	0.97	0.97	0.0	0.98	0.98	0.0

Tab. 172: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.99	0.93	-0.06	0.99	0.92	-0.07	0.94	0.91	-0.03	1.0	0.909	-0.091
	0.98	0.96	-0.02	0.98	0.91	-0.07	0.91	0.91	0.0	0.99	0.96	-0.03
	0.98	0.98	0.0	0.98	0.87	-0.11	0.94	0.9	-0.04	0.98	0.97	-0.01
	1.0	0.92	-0.08	1.0	0.96	-0.04	0.94	0.9	-0.04	0.99	0.98	-0.01
	0.99	0.94	-0.05	0.99	0.91	-0.08	0.92	0.92	0.0	0.99	0.939	-0.051
	1.0	0.96	-0.04	1.0	0.82	-0.18	0.91	0.94	0.03	0.99	0.99	0.0
	0.97	0.98	0.01	0.97	0.96	-0.01	0.99	0.96	-0.03	0.98	0.99	0.01
	0.98	0.96	-0.02	0.98	0.91	-0.07	0.94	0.94	0.0	0.97	0.98	0.01
	0.99	0.95	-0.04	0.99	0.93	-0.06	0.93	0.91	-0.02	0.98	0.97	-0.01
	0.98	0.92	-0.06	0.98	0.92	-0.06	0.92	0.9	-0.02	0.98	0.98	0.0
REVISE	1.0	0.97	-0.03	1.0	0.96	-0.04	0.95	0.93	-0.02	0.99	0.919	-0.071
	1.0	1.0	0.0	1.0	0.98	-0.02	0.89	0.95	0.06	1.0	0.97	-0.03
	0.97	0.96	-0.01	0.97	0.96	-0.01	0.98	0.98	0.0	0.99	0.98	-0.01
	0.98	0.95	-0.03	0.98	0.98	0.0	0.96	0.93	-0.03	0.99	0.97	-0.02
	0.96	0.96	0.0	0.96	0.93	-0.03	0.94	0.99	0.05	0.99	0.96	-0.03
	0.97	0.96	-0.01	0.97	0.91	-0.06	0.93	0.94	0.01	1.0	0.98	-0.02
	0.99	0.98	-0.01	0.99	0.94	-0.05	0.91	0.95	0.04	0.99	0.99	0.0
	1.0	0.98	-0.02	1.0	0.97	-0.03	0.94	0.95	0.01	0.98	0.929	-0.051
	0.99	0.97	-0.02	0.99	0.93	-0.06	0.94	0.94	0.0	0.97	0.96	-0.01
	1.0	0.98	-0.02	1.0	0.94	-0.06	0.95	0.97	0.02	0.98	1.0	0.02

ECCo	0.99	0.95	-0.04	0.99	0.91	-0.08	0.92	0.93	0.01	0.96	0.97	0.01
	0.99	0.9	-0.09	0.99	0.92	-0.07	0.91	0.91	0.0	0.99	0.99	0.0
	0.96	0.97	0.01	0.96	0.48	-0.48	0.97	0.93	-0.04	0.99	0.949	-0.04
	0.99	0.95	-0.04	0.99	0.85	-0.14	0.93	0.94	0.01	0.98	0.99	0.01
	1.0	0.95	-0.05	1.0	0.84	-0.16	0.96	0.94	-0.02	0.99	0.96	-0.03
	0.99	0.93	-0.06	0.99	0.79	-0.2	0.97	0.95	-0.02	0.99	0.99	0.0
	0.99	0.91	-0.08	0.99	0.83	-0.16	0.97	0.94	-0.03	0.98	0.99	0.01
	0.96	0.95	-0.01	0.96	0.94	-0.02	0.95	0.95	0.0	0.98	0.98	0.0
	0.98	0.99	0.01	0.98	0.82	-0.16	0.93	0.94	0.01	0.99	0.97	-0.02
	0.99	0.96	-0.03	0.99	0.89	-0.1	0.95	0.95	0.0	0.99	0.98	-0.01
Wachter	1.0	0.97	-0.03	1.0	0.97	-0.03	0.93	0.96	0.03	0.99	0.96	-0.03
	1.0	0.91	-0.09	1.0	0.84	-0.16	0.95	0.94	-0.01	0.99	0.98	-0.01
	1.0	0.97	-0.03	1.0	0.78	-0.22	0.93	0.94	0.01	1.0	0.97	-0.03
	1.0	0.95	-0.05	1.0	0.89	-0.11	0.96	0.95	-0.01	0.97	0.98	0.01
	0.98	0.94	-0.04	0.98	0.79	-0.19	0.94	0.95	0.01	0.97	0.97	0.0
	1.0	0.91	-0.09	1.0	0.88	-0.12	0.95	0.95	0.0	0.98	0.96	-0.02
	0.99	0.97	-0.02	0.99	0.88	-0.11	0.93	0.93	0.0	0.98	1.0	0.02
	0.98	0.94	-0.04	0.98	0.9	-0.08	0.95	0.95	0.0	0.98	0.96	-0.02
	1.0	0.97	-0.03	1.0	0.97	-0.03	0.95	0.95	0.0	0.97	0.97	0.0
	0.99	0.94	-0.05	0.99	0.82	-0.17	0.92	0.92	0.0	0.99	0.97	-0.02
Generic	1.0	0.95	-0.05	1.0	0.81	-0.19	0.93	0.94	0.01	0.949	1.0	0.051
	1.0	0.92	-0.08	1.0	0.83	-0.17	0.95	0.93	-0.02	0.99	1.0	0.01
	1.0	0.95	-0.05	1.0	0.78	-0.22	0.87	0.92	0.05	0.949	0.97	0.02
	0.99	0.95	-0.04	0.99	0.94	-0.05	0.95	0.95	0.0	0.99	0.98	-0.01
	0.98	0.91	-0.07	0.98	0.84	-0.14	0.93	0.93	0.0	0.98	0.98	0.0
	0.97	0.93	-0.04	0.97	0.77	-0.2	0.99	0.98	-0.01	0.96	0.99	0.03
	0.97	0.97	0.0	0.97	0.84	-0.13	0.89	0.93	0.04	0.99	0.99	0.0
	0.97	0.94	-0.03	0.97	0.89	-0.08	0.96	0.94	-0.02	0.97	0.96	-0.01
	1.0	0.96	-0.04	1.0	0.64	-0.36	0.97	0.94	-0.03	0.99	0.98	-0.01
	0.99	0.95	-0.04	0.99	0.86	-0.13	0.97	0.96	-0.01	0.99	0.99	0.0
DiCE	0.99	0.92	-0.07	0.99	0.93	-0.06	0.95	0.96	0.01	0.97	0.97	0.0
	0.99	0.96	-0.03	0.99	0.96	-0.03	0.97	0.95	-0.02	0.98	0.99	0.01
	0.98	0.98	0.0	0.98	0.96	-0.02	0.94	0.96	0.02	0.98	0.98	0.0
	1.0	0.98	-0.02	1.0	0.99	-0.01	0.97	0.96	-0.01	0.99	0.99	0.0
	0.99	0.92	-0.07	0.99	0.86	-0.13	0.95	0.94	-0.01	1.0	0.98	-0.02
	0.99	0.92	-0.07	0.99	0.81	-0.18	0.95	0.96	0.01	0.949	0.99	0.04
	0.95	0.91	-0.04	0.95	0.95	0.0	0.93	0.94	0.01	0.99	1.0	0.01
	0.98	0.96	-0.02	0.98	0.95	-0.03	0.98	0.94	-0.04	1.0	0.98	-0.02
	0.99	0.94	-0.05	0.99	0.84	-0.15	0.94	0.96	0.02	0.99	0.97	-0.02
	0.98	0.95	-0.03	0.98	0.99	0.01	0.96	0.93	-0.03	0.99	0.98	-0.01
ClaPROAR	0.98	0.97	-0.01	0.98	0.84	-0.14	0.98	0.97	-0.01	0.98	0.99	0.01
	0.99	0.94	-0.05	0.99	0.93	-0.06	0.93	0.94	0.01	0.949	0.98	0.03
	0.98	0.92	-0.06	0.98	0.88	-0.1	0.94	0.96	0.02	0.99	1.0	0.01
	0.97	0.96	-0.01	0.97	0.9	-0.07	0.98	0.96	-0.02	1.0	0.97	-0.03
	0.98	0.95	-0.03	0.98	0.88	-0.1	0.97	0.96	-0.01	0.96	0.96	0.0
	0.97	0.96	-0.01	0.97	0.95	-0.02	0.96	0.95	-0.01	0.98	0.97	-0.01
	0.97	0.96	-0.01	0.97	0.85	-0.12	0.95	0.95	0.0	0.99	0.98	-0.01
	1.0	0.91	-0.09	1.0	0.86	-0.14	0.93	0.92	-0.01	1.0	0.99	-0.01
	0.98	1.0	0.02	0.98	0.88	-0.1	0.94	0.97	0.03	0.949	0.939	-0.01
	0.96	0.95	-0.01	0.96	0.89	-0.07	0.95	0.92	-0.03	0.96	1.0	0.04

Tab. 173: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.939	0.919	-0.02	0.939	0.838	-0.101	0.939	0.919	-0.02	0.99	0.97	-0.02
	0.949	0.939	-0.01	0.949	0.899	-0.051	0.919	0.929	0.01	0.97	0.98	0.01
	0.919	0.939	0.02	0.919	0.889	-0.03	0.97	0.96	-0.01	0.97	0.92	-0.05
	0.939	0.939	0.0	0.939	0.859	-0.081	0.939	0.929	-0.01	0.99	0.98	-0.01
	0.909	0.949	0.04	0.909	0.869	-0.04	0.899	0.939	0.04	0.97	0.98	0.01
	0.929	0.99	0.061	0.929	0.859	-0.071	0.949	0.939	-0.01	0.98	0.95	-0.03
	0.919	0.909	-0.01	0.919	0.859	-0.061	0.949	0.929	-0.02	1.0	0.97	-0.03
	0.98	0.96	-0.02	0.98	0.798	-0.182	0.949	0.919	-0.03	0.99	0.96	-0.03
	0.939	0.949	0.01	0.939	0.909	-0.03	0.919	0.909	-0.01	1.0	0.99	-0.01
	0.98	0.97	-0.01	0.98	0.869	-0.111	0.909	0.889	-0.02	0.98	0.94	-0.04
REVISE	0.949	1.0	0.051	0.949	0.303	-0.646	0.939	1.0	0.061	0.99	0.99	0.0
	0.919	1.0	0.081	0.919	0.515	-0.404	0.939	1.0	0.061	0.98	0.95	-0.03
	0.96	0.96	0.0	0.96	0.071	-0.889	0.96	0.929	-0.03	0.98	0.97	-0.01
	0.939	0.929	-0.01	0.939	0.111	-0.828	0.939	0.939	0.0	0.98	0.98	0.0
	0.949	0.99	0.04	0.949	0.111	-0.838	0.939	1.0	0.061	1.0	0.97	-0.03
	0.949	0.869	-0.081	0.949	0.232	-0.717	0.949	0.99	0.04	0.99	0.99	0.0
	0.909	1.0	0.091	0.909	0.192	-0.717	0.949	1.0	0.051	0.99	0.99	0.0
	1.0	1.0	0.0	1.0	0.131	-0.869	0.929	1.0	0.071	1.0	1.0	0.0
	0.98	1.0	0.02	0.98	0.495	-0.485	0.939	0.99	0.051	0.99	0.99	0.0
	0.99	1.0	0.01	0.99	0.343	-0.646	0.909	1.0	0.091	1.0	0.98	-0.02
ECCo	0.949	0.939	-0.01	0.949	0.909	-0.04	0.96	0.929	-0.03	0.98	0.97	-0.01
	0.98	0.97	-0.01	0.98	0.919	-0.061	0.929	0.96	0.03	0.98	0.99	0.01
	0.949	1.0	0.051	0.949	0.768	-0.182	0.939	0.929	-0.01	0.98	0.98	0.0
	0.949	0.97	0.02	0.949	0.808	-0.141	0.939	0.939	0.0	1.0	0.99	-0.01
	0.98	0.99	0.01	0.98	0.535	-0.444	0.939	0.929	-0.01	0.97	0.98	0.01
	0.949	0.98	0.03	0.949	0.798	-0.152	0.96	0.929	-0.03	0.98	0.98	0.0
	0.919	0.98	0.061	0.919	0.798	-0.121	0.939	0.899	-0.04	0.99	0.99	0.0
	0.949	0.98	0.03	0.949	0.949	0.0	0.939	0.939	0.0	0.99	0.95	-0.04
	0.909	1.0	0.091	0.909	0.899	-0.01	0.97	0.96	-0.01	0.98	1.0	0.02
	0.96	0.96	0.0	0.96	0.848	-0.111	0.96	0.97	0.01	0.98	0.98	0.0
Wachter	0.949	1.0	0.051	0.949	0.949	0.0	0.97	0.939	-0.03	0.98	0.97	-0.01
	0.97	1.0	0.03	0.97	0.939	-0.03	0.939	0.939	0.0	0.98	0.99	0.01
	0.97	1.0	0.03	0.97	0.949	-0.02	0.97	0.96	-0.01	0.98	0.99	0.01
	0.96	1.0	0.04	0.96	1.0	0.04	0.97	0.96	-0.01	0.99	0.98	-0.01
	0.96	0.899	-0.061	0.96	0.909	-0.051	0.919	0.939	0.02	0.93	0.99	0.06
	0.97	1.0	0.03	0.97	0.939	-0.03	0.899	0.96	0.061	0.98	0.98	0.0
	0.949	0.98	0.03	0.949	0.929	-0.02	0.939	0.97	0.03	0.98	0.98	0.0
	0.97	1.0	0.03	0.97	0.939	-0.03	0.949	0.96	0.01	0.99	0.99	0.0
	0.949	1.0	0.051	0.949	0.879	-0.071	0.919	0.949	0.03	0.98	0.98	0.0
	0.96	1.0	0.04	0.96	0.96	0.0	0.919	0.929	0.01	0.98	0.98	0.0
Generic	0.99	1.0	0.01	0.99	0.919	-0.071	0.949	0.96	0.01	0.98	0.99	0.01
	0.949	1.0	0.051	0.949	0.949	0.0	0.919	0.889	-0.03	0.98	0.99	0.01
	0.929	1.0	0.071	0.929	0.929	0.0	0.949	0.939	-0.01	0.98	0.98	0.0
	0.929	0.929	0.0	0.929	0.929	0.0	0.939	0.929	-0.01	1.0	0.98	-0.02
	0.96	0.98	0.02	0.96	0.929	-0.03	0.949	0.96	0.01	0.97	0.99	0.02
	0.98	1.0	0.02	0.98	0.889	-0.091	0.949	0.96	0.01	1.0	0.98	-0.02
	0.98	1.0	0.02	0.98	0.98	0.0	0.96	0.919	-0.04	0.99	1.0	0.01
	0.98	1.0	0.02	0.98	0.929	-0.051	0.98	0.98	0.0	0.97	0.98	0.01
	0.939	1.0	0.061	0.939	0.919	-0.02	0.909	0.96	0.051	1.0	0.99	-0.01
	0.919	1.0	0.081	0.919	0.929	0.01	0.909	0.939	0.03	0.98	0.99	0.01
DiCE	0.96	1.0	0.04	0.96	0.909	-0.051	0.929	0.929	0.0	0.99	0.99	0.0
	0.929	1.0	0.071	0.929	0.929	0.0	0.98	0.97	-0.01	0.99	0.99	0.0
	0.97	1.0	0.03	0.97	0.929	-0.04	0.96	0.96	0.0	0.99	0.99	0.0

	0.98	0.949	-0.03	0.98	0.929	-0.051	0.879	0.889	0.01	0.97	0.99	0.02
	0.949	0.949	0.0	0.949	0.939	-0.01	0.919	0.949	0.03	0.98	0.99	0.01
	0.939	1.0	0.061	0.939	0.909	-0.03	0.96	0.949	-0.01	0.98	0.98	0.0
	0.96	1.0	0.04	0.96	0.919	-0.04	0.939	0.939	0.0	0.98	0.99	0.01
	0.949	1.0	0.051	0.949	0.96	0.01	0.939	0.919	-0.02	0.99	0.99	0.0
	0.949	1.0	0.051	0.949	0.919	-0.03	0.96	0.96	0.0	0.98	0.97	-0.01
	0.939	1.0	0.061	0.939	0.929	-0.01	0.939	0.939	0.0	0.98	0.99	0.01
ClaPROAR	0.99	1.0	0.01	0.99	0.929	-0.061	0.939	0.97	0.03	0.95	0.99	0.04
	0.949	1.0	0.051	0.949	0.899	-0.051	0.939	0.909	-0.03	0.97	0.99	0.02
	0.929	1.0	0.071	0.929	0.99	0.061	0.929	0.96	0.03	0.98	0.98	0.0
	0.97	1.0	0.03	0.97	0.909	-0.061	0.929	0.929	0.0	1.0	0.99	-0.01
	0.99	1.0	0.01	0.99	0.919	-0.071	0.919	0.929	0.01	0.96	0.96	0.0
	0.96	1.0	0.04	0.96	0.929	-0.03	0.939	0.949	0.01	0.97	0.98	0.01
	0.949	1.0	0.051	0.949	0.96	0.01	0.909	0.939	0.03	0.96	0.98	0.02
	0.939	1.0	0.061	0.939	0.949	0.01	0.949	0.939	-0.01	1.0	0.99	-0.01
	0.97	0.98	0.01	0.97	0.929	-0.04	0.919	0.919	0.0	0.97	0.97	0.0
	0.949	0.879	-0.071	0.949	0.889	-0.061	0.96	0.96	0.0	0.99	0.98	-0.01

Tab. 174: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	1.0	0.929	-0.071	1.0	0.869	-0.131	0.899	0.879	-0.02	0.99	0.98	-0.01
	0.99	0.99	0.0	0.99	0.899	-0.091	0.879	0.899	0.02	0.99	0.96	-0.03
	1.0	0.939	-0.061	1.0	0.889	-0.111	0.909	0.899	-0.01	1.0	0.97	-0.03
	0.99	0.96	-0.03	0.99	0.929	-0.061	0.939	0.929	-0.01	0.99	0.94	-0.05
	0.99	0.919	-0.071	0.99	0.828	-0.162	0.909	0.919	0.01	0.98	0.98	0.0
	1.0	0.98	-0.02	1.0	0.848	-0.152	0.97	0.919	-0.051	0.99	0.96	-0.03
	0.97	0.889	-0.081	0.97	0.869	-0.101	0.949	0.939	-0.01	0.98	0.99	0.01
	0.99	0.96	-0.03	0.99	0.869	-0.121	0.929	0.879	-0.051	0.98	0.99	0.01
	1.0	0.909	-0.091	1.0	0.909	-0.091	0.899	0.929	0.03	0.98	0.95	-0.03
	0.98	0.869	-0.111	0.98	0.869	-0.111	0.899	0.899	0.0	0.99	1.0	0.01
REVISE	1.0	0.99	-0.01	1.0	0.838	-0.162	0.879	0.949	0.071	0.98	0.98	0.0
	0.97	0.97	0.0	0.97	0.899	-0.071	0.889	0.98	0.091	0.98	0.98	0.0
	1.0	0.99	-0.01	1.0	0.859	-0.141	0.869	0.879	0.01	0.99	0.98	-0.01
	1.0	0.98	-0.02	1.0	0.899	-0.101	0.919	0.97	0.051	0.99	1.0	0.01
	0.98	0.97	-0.01	0.98	0.919	-0.061	0.939	0.859	-0.081	0.98	0.96	-0.02
	0.99	0.99	0.0	0.99	0.879	-0.111	0.949	0.949	0.0	0.99	0.98	-0.01
	0.97	0.97	0.0	0.97	0.848	-0.121	0.929	0.929	0.0	0.97	0.99	0.02
	0.99	0.96	-0.03	0.99	0.909	-0.081	0.879	0.939	0.061	0.98	0.99	0.01
	1.0	0.949	-0.051	1.0	0.929	-0.071	0.929	0.939	0.01	0.97	0.97	0.0
	0.97	1.0	0.03	0.97	0.899	-0.071	0.919	0.939	0.02	0.99	0.94	-0.05
ECCo	1.0	0.97	-0.03	1.0	0.919	-0.081	0.909	0.899	-0.01	0.98	0.98	0.0
	1.0	0.899	-0.101	1.0	0.909	-0.091	0.909	0.949	0.04	0.98	0.97	-0.01
	1.0	0.919	-0.081	1.0	0.929	-0.071	0.939	0.919	-0.02	0.98	0.96	-0.02
	0.99	0.949	-0.04	0.99	0.747	-0.242	0.889	0.909	0.02	0.98	0.99	0.01
	1.0	0.919	-0.081	1.0	0.798	-0.202	0.899	0.899	0.0	0.99	0.97	-0.02
	1.0	0.919	-0.081	1.0	0.808	-0.192	0.919	0.949	0.03	0.98	0.97	-0.01
	0.98	0.919	-0.061	0.98	0.808	-0.172	0.949	0.939	-0.01	0.98	0.99	0.01
	0.96	0.949	-0.01	0.96	0.838	-0.121	0.879	0.879	0.0	0.99	0.99	0.0
	0.98	0.879	-0.101	0.98	0.606	-0.374	0.949	0.919	-0.03	0.98	0.97	-0.01
	0.99	0.859	-0.131	0.99	0.768	-0.222	0.929	0.869	-0.061	1.0	0.96	-0.04
Wachter	1.0	0.97	-0.03	1.0	0.859	-0.141	0.899	0.909	0.01	0.99	0.99	0.0
	1.0	0.879	-0.121	1.0	0.899	-0.101	0.929	0.899	-0.03	0.97	0.99	0.02

	0.99	0.98	-0.01	0.99	0.798	-0.192	0.889	0.879	-0.01	0.96	0.99	0.03
	0.99	0.97	-0.02	0.99	0.778	-0.212	0.899	0.919	0.02	0.98	0.98	0.0
	0.99	0.909	-0.081	0.99	0.808	-0.182	0.889	0.909	0.02	0.98	0.97	-0.01
	0.99	0.909	-0.081	0.99	0.889	-0.101	0.939	0.939	0.0	0.98	0.98	0.0
	1.0	0.97	-0.03	1.0	0.778	-0.222	0.96	0.939	-0.02	0.96	0.95	-0.01
	0.98	0.97	-0.01	0.98	0.838	-0.141	0.929	0.919	-0.01	0.98	0.97	-0.01
	0.98	0.889	-0.091	0.98	0.919	-0.061	0.899	0.909	0.01	0.99	0.99	0.0
	1.0	0.899	-0.101	1.0	0.879	-0.121	0.919	0.939	0.02	0.99	0.98	-0.01
Generic	0.99	0.879	-0.111	0.99	0.97	-0.02	0.919	0.919	0.0	0.98	0.99	0.01
	1.0	0.96	-0.04	1.0	0.788	-0.212	0.899	0.899	0.0	0.99	0.97	-0.02
	1.0	0.929	-0.071	1.0	0.96	-0.04	0.919	0.909	-0.01	0.98	0.98	0.0
	0.99	0.96	-0.03	0.99	0.768	-0.222	0.939	0.919	-0.02	1.0	0.97	-0.03
	0.97	0.98	0.01	0.97	0.778	-0.192	0.859	0.929	0.071	0.99	0.98	-0.01
	0.98	0.909	-0.071	0.98	0.919	-0.061	0.949	0.929	-0.02	1.0	0.99	-0.01
	1.0	0.97	-0.03	1.0	0.909	-0.091	0.909	0.909	0.0	0.98	0.98	0.0
	0.98	0.899	-0.081	0.98	0.798	-0.182	0.919	0.919	0.0	0.98	0.94	-0.04
	1.0	0.939	-0.061	1.0	0.818	-0.182	0.919	0.919	0.0	1.0	0.99	-0.01
	1.0	0.99	-0.01	1.0	0.97	-0.03	0.919	0.919	0.0	0.99	0.96	-0.03
DiCE	0.99	0.99	0.0	0.99	0.687	-0.303	0.848	0.889	0.04	0.98	0.97	-0.01
	0.99	0.899	-0.091	0.99	0.778	-0.212	0.879	0.869	-0.01	0.98	0.98	0.0
	1.0	0.929	-0.071	1.0	0.818	-0.182	0.899	0.889	-0.01	0.98	0.98	0.0
	0.97	0.909	-0.061	0.97	0.848	-0.121	1.0	0.949	-0.051	0.99	0.99	0.0
	0.99	0.899	-0.091	0.99	0.768	-0.222	0.919	0.939	0.02	0.98	0.98	0.0
	1.0	0.929	-0.071	1.0	0.697	-0.303	0.96	0.919	-0.04	0.97	0.99	0.02
	1.0	0.909	-0.091	1.0	0.828	-0.172	0.909	0.939	0.03	0.99	0.99	0.0
	0.99	0.939	-0.051	0.99	0.949	-0.04	0.899	0.899	0.0	0.99	0.99	0.0
	0.97	0.949	-0.02	0.97	0.798	-0.172	0.909	0.909	0.0	0.96	0.98	0.02
	0.99	0.939	-0.051	0.99	0.909	-0.081	0.96	0.949	-0.01	1.0	1.0	0.0
ClaPROAR	0.99	0.96	-0.03	0.99	0.949	-0.04	0.879	0.879	0.0	0.98	0.99	0.01
	0.97	0.879	-0.091	0.97	0.879	-0.091	0.848	0.919	0.071	0.98	0.97	-0.01
	1.0	0.949	-0.051	1.0	0.889	-0.111	0.919	0.909	-0.01	0.99	0.98	-0.01
	0.98	0.919	-0.061	0.98	0.899	-0.081	0.949	0.919	-0.03	0.99	0.97	-0.02
	1.0	0.98	-0.02	1.0	0.808	-0.192	0.939	0.939	0.0	0.99	0.98	-0.01
	1.0	0.929	-0.071	1.0	0.808	-0.192	0.929	0.929	0.0	0.98	1.0	0.02
	0.97	0.939	-0.03	0.97	0.859	-0.111	0.889	0.909	0.02	0.97	0.95	-0.02
	0.99	0.98	-0.01	0.99	0.788	-0.202	0.869	0.869	0.0	0.96	0.99	0.03
	0.99	0.949	-0.04	0.99	0.848	-0.141	0.939	0.929	-0.01	0.99	0.99	0.0
	0.97	0.919	-0.051	0.97	0.707	-0.263	0.929	0.889	-0.04	0.96	1.0	0.04

Tab. 175: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.939	0.96	0.02	0.939	0.828	-0.111	0.889	0.909	0.02	0.95	0.94	-0.01
	0.949	1.0	0.051	0.949	0.737	-0.212	0.879	0.909	0.03	0.98	0.96	-0.02
	0.919	1.0	0.081	0.919	0.758	-0.162	0.909	0.919	0.01	1.0	0.99	-0.01
	0.929	1.0	0.071	0.929	0.879	-0.051	0.939	0.909	-0.03	0.99	1.0	0.01
	0.919	1.0	0.081	0.919	0.879	-0.04	0.879	0.879	0.0	0.99	0.97	-0.02
	0.909	0.99	0.081	0.909	0.99	0.081	0.919	0.909	-0.01	0.99	0.96	-0.03
	0.939	0.919	-0.02	0.939	0.788	-0.152	0.949	0.939	-0.01	0.96	0.97	0.01
	0.96	1.0	0.04	0.96	0.616	-0.343	0.909	0.899	-0.01	1.0	0.96	-0.04
	0.919	1.0	0.081	0.919	0.929	0.01	0.919	0.97	0.051	0.99	0.97	-0.02
	0.949	0.919	-0.03	0.949	0.889	-0.061	0.909	0.929	0.02	0.96	0.99	0.03
REVISE	0.949	0.99	0.04	0.949	0.172	-0.778	0.939	0.939	0.0	1.0	0.97	-0.03

	0.96	0.929	-0.03	0.96	0.283	-0.677	0.909	0.99	0.081	1.0	0.95	-0.05
	0.97	0.96	-0.01	0.97	0.404	-0.566	0.97	0.98	0.01	1.0	0.96	-0.04
	0.909	1.0	0.091	0.909	0.263	-0.646	0.909	0.939	0.03	0.97	0.99	0.02
	0.98	0.97	-0.01	0.98	0.071	-0.909	0.939	0.929	-0.01	1.0	0.98	-0.02
	0.929	0.929	0.0	0.929	0.253	-0.677	0.909	0.919	0.01	0.99	0.97	-0.02
	0.929	0.929	0.0	0.929	0.414	-0.515	0.929	0.96	0.03	0.98	0.98	0.0
	0.899	0.97	0.071	0.899	0.444	-0.455	0.929	0.98	0.051	0.98	0.94	-0.04
	0.879	1.0	0.121	0.879	0.505	-0.374	0.939	0.939	0.0	0.95	0.94	-0.01
	0.939	0.939	0.0	0.939	0.616	-0.323	0.919	0.949	0.03	0.97	0.97	0.0
ECCo	0.919	0.96	0.04	0.919	0.717	-0.202	0.879	0.919	0.04	1.0	0.98	-0.02
	0.889	0.99	0.101	0.889	0.778	-0.111	0.96	0.96	0.0	0.97	0.95	-0.02
	0.96	0.96	0.0	0.96	0.859	-0.101	0.929	0.929	0.0	1.0	0.97	-0.03
	0.929	1.0	0.071	0.929	0.545	-0.384	0.96	0.939	-0.02	0.97	0.96	-0.01
	0.889	0.939	0.051	0.889	0.778	-0.111	0.919	0.929	0.01	0.99	0.97	-0.02
	0.879	0.96	0.081	0.879	0.879	0.0	0.96	0.96	0.0	0.97	0.99	0.02
	0.929	0.97	0.04	0.929	0.788	-0.141	0.919	0.919	0.0	0.99	0.99	0.0
	0.97	0.99	0.02	0.97	0.869	-0.101	0.929	0.939	0.01	0.98	0.96	-0.02
	0.909	0.949	0.04	0.909	0.727	-0.182	0.929	0.919	-0.01	0.96	0.97	0.01
	0.98	0.99	0.01	0.98	0.828	-0.152	0.919	0.909	-0.01	1.0	0.99	-0.01
Wachter	0.939	1.0	0.061	0.939	0.859	-0.081	0.97	0.949	-0.02	0.96	0.97	0.01
	0.899	1.0	0.101	0.899	0.768	-0.131	0.949	0.97	0.02	0.95	0.98	0.03
	0.909	0.99	0.081	0.909	0.848	-0.061	0.909	0.929	0.02	0.99	0.95	-0.04
	0.939	1.0	0.061	0.939	0.859	-0.081	0.96	0.97	0.01	1.0	0.97	-0.03
	0.909	1.0	0.091	0.909	0.808	-0.101	0.939	0.96	0.02	0.99	0.98	-0.01
	0.97	1.0	0.03	0.97	0.869	-0.101	0.929	0.909	-0.02	0.99	0.97	-0.02
	0.929	1.0	0.071	0.929	0.778	-0.152	0.939	0.97	0.03	0.98	0.96	-0.02
	0.929	1.0	0.071	0.929	0.808	-0.121	0.919	0.929	0.01	0.96	0.96	0.0
	0.949	1.0	0.051	0.949	0.798	-0.152	0.949	0.939	-0.01	1.0	0.99	-0.01
	0.919	1.0	0.081	0.919	0.818	-0.101	0.939	0.949	0.01	0.96	0.96	0.0
Generic	0.899	1.0	0.101	0.899	0.828	-0.071	0.939	0.919	-0.02	0.99	0.96	-0.03
	0.939	0.98	0.04	0.939	0.788	-0.152	0.879	0.899	0.02	0.99	0.97	-0.02
	0.949	1.0	0.051	0.949	0.768	-0.182	0.97	0.97	0.0	0.99	0.97	-0.02
	0.939	1.0	0.061	0.939	0.848	-0.091	0.939	0.929	-0.01	1.0	0.98	-0.02
	0.98	1.0	0.02	0.98	0.838	-0.141	0.869	0.939	0.071	0.99	0.9	-0.09
	0.97	1.0	0.03	0.97	0.859	-0.111	0.96	0.939	-0.02	0.97	0.98	0.01
	0.909	1.0	0.091	0.909	0.798	-0.111	0.909	0.98	0.071	0.97	0.97	0.0
	0.97	1.0	0.03	0.97	0.828	-0.141	0.929	0.949	0.02	0.96	0.99	0.03
	0.949	1.0	0.051	0.949	0.828	-0.121	0.909	0.909	0.0	0.99	0.99	0.0
	0.96	0.99	0.03	0.96	0.838	-0.121	0.919	0.919	0.0	0.99	0.93	-0.06
DiCE	0.929	0.99	0.061	0.929	0.838	-0.091	0.919	0.919	0.0	0.99	1.0	0.01
	0.96	1.0	0.04	0.96	0.818	-0.141	0.879	0.909	0.03	1.0	0.99	-0.01
	0.96	0.96	0.0	0.96	0.788	-0.172	0.96	0.929	-0.03	0.99	0.99	0.0
	0.96	1.0	0.04	0.96	0.788	-0.172	0.949	0.96	0.01	0.99	0.98	-0.01
	0.909	1.0	0.091	0.909	0.808	-0.101	0.939	0.97	0.03	0.99	0.92	-0.07
	0.929	1.0	0.071	0.929	0.838	-0.091	0.949	0.949	0.0	0.94	0.97	0.03
	0.949	1.0	0.051	0.949	0.838	-0.111	0.929	0.919	-0.01	0.95	0.95	0.0
	0.929	1.0	0.071	0.929	0.838	-0.091	0.909	0.909	0.0	0.99	0.99	0.0
	0.929	0.929	0.0	0.929	0.838	-0.091	0.889	0.939	0.051	1.0	0.98	-0.02
	0.919	1.0	0.081	0.919	0.818	-0.101	0.919	0.919	0.0	1.0	0.99	-0.01
ClaPROAR	0.889	1.0	0.111	0.889	0.848	-0.04	0.929	0.949	0.02	0.99	0.97	-0.02
	0.939	1.0	0.061	0.939	0.828	-0.111	0.909	0.939	0.03	1.0	0.97	-0.03
	0.899	1.0	0.101	0.899	0.859	-0.04	0.929	0.949	0.02	1.0	1.0	0.0
	0.919	1.0	0.081	0.919	0.859	-0.061	0.929	0.889	-0.04	0.98	0.94	-0.04
	0.98	1.0	0.02	0.98	0.818	-0.162	0.96	0.949	-0.01	0.99	0.98	-0.01
	0.919	1.0	0.081	0.919	0.788	-0.131	0.909	0.949	0.04	1.0	0.97	-0.03
	0.949	1.0	0.051	0.949	0.848	-0.101	0.919	0.939	0.02	1.0	0.98	-0.02

	0.919	1.0	0.081	0.919	0.838	-0.081	0.899	0.98	0.081	0.96	0.97	0.01
	0.909	1.0	0.091	0.909	0.838	-0.071	0.929	0.919	-0.01	0.94	0.94	0.0
	0.96	1.0	0.04	0.96	0.838	-0.121	0.949	0.949	0.0	0.98	0.98	0.0

Tab. 176: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP, experiment 5

F.2.14. Moons dataset using Deep ensemble using a MLP

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.95	0.95	0.0	0.95	0.91	-0.04	0.95	0.92	-0.03	0.98	0.97	-0.01
	0.96	0.95	-0.01	0.96	0.94	-0.02	0.96	0.96	0.0	0.99	0.94	-0.05
	0.92	0.94	0.02	0.92	0.94	0.02	0.92	0.94	0.02	0.99	0.99	0.0
	0.94	0.96	0.02	0.94	0.94	0.0	0.94	0.94	0.0	1.0	0.95	-0.05
	0.91	0.96	0.05	0.91	0.91	0.0	0.91	0.91	0.0	1.0	0.99	-0.01
	0.9	0.96	0.06	0.9	0.91	0.01	0.9	0.93	0.03	0.99	0.98	-0.01
	0.94	0.98	0.04	0.94	0.9	-0.04	0.94	0.98	0.04	1.0	0.97	-0.03
	0.96	0.96	0.0	0.96	0.93	-0.03	0.96	0.96	0.0	1.0	0.98	-0.02
	0.95	0.95	0.0	0.95	0.92	-0.03	0.95	0.95	0.0	0.98	0.97	-0.01
	0.97	0.99	0.02	0.97	0.94	-0.03	0.97	0.95	-0.02	0.97	0.94	-0.03
REVISE	0.95	0.98	0.03	0.95	0.11	-0.84	0.95	0.96	0.01	0.97	0.93	-0.04
	0.9	1.0	0.1	0.9	0.11	-0.79	0.9	0.97	0.07	0.99	0.98	-0.01
	0.95	0.98	0.03	0.95	0.11	-0.84	0.95	0.94	-0.01	1.0	0.94	-0.06
	0.92	0.99	0.07	0.92	0.17	-0.75	0.92	0.99	0.07	0.97	0.96	-0.01
	0.98	0.98	0.0	0.98	0.13	-0.85	0.98	0.98	0.0	0.97	0.96	-0.01
	0.94	1.0	0.06	0.94	0.1	-0.84	0.94	0.93	-0.01	0.99	0.98	-0.01
	0.93	0.99	0.06	0.93	0.47	-0.46	0.93	0.92	-0.01	0.98	0.98	0.0
	0.96	1.0	0.04	0.96	0.13	-0.83	0.96	0.98	0.02	1.0	0.97	-0.03
	0.94	0.97	0.03	0.94	0.26	-0.68	0.94	0.97	0.03	0.98	0.97	-0.01
	0.95	0.94	-0.01	0.95	0.07	-0.88	0.95	0.96	0.01	1.0	0.97	-0.03
ECCo	0.93	0.94	0.01	0.93	0.88	-0.05	0.93	0.94	0.01	0.99	0.99	0.0
	0.96	0.96	0.0	0.96	0.87	-0.09	0.96	0.95	-0.01	1.0	0.99	-0.01
	0.94	0.95	0.01	0.94	0.85	-0.09	0.94	0.94	0.0	0.99	0.97	-0.02
	0.96	0.98	0.02	0.96	0.9	-0.06	0.96	0.95	-0.01	1.0	0.98	-0.02
	0.95	0.95	0.0	0.95	0.88	-0.07	0.95	0.94	-0.01	0.97	0.97	0.0
	0.95	0.94	-0.01	0.95	0.88	-0.07	0.95	0.94	-0.01	0.97	0.97	0.0
	0.97	0.98	0.01	0.97	0.87	-0.1	0.97	0.97	0.0	0.98	0.98	0.0
	0.96	0.97	0.01	0.96	0.91	-0.05	0.96	0.95	-0.01	1.0	0.99	-0.01
	0.95	0.98	0.03	0.95	0.92	-0.03	0.95	0.97	0.02	1.0	1.0	0.0
	0.98	0.97	-0.01	0.98	0.91	-0.07	0.98	0.94	-0.04	0.99	0.97	-0.02
Wachter	0.93	0.97	0.04	0.93	0.84	-0.09	0.93	0.96	0.03	0.99	0.97	-0.02
	0.92	0.99	0.07	0.92	0.63	-0.29	0.92	0.95	0.03	1.0	0.99	-0.01
	0.96	0.96	0.0	0.96	0.81	-0.15	0.96	0.96	0.0	1.0	0.99	-0.01
	0.95	0.96	0.01	0.95	0.82	-0.13	0.95	0.92	-0.03	0.97	0.97	0.0
	0.92	0.95	0.03	0.92	0.87	-0.05	0.92	0.93	0.01	0.99	0.99	0.0
	0.95	0.96	0.01	0.95	0.84	-0.11	0.95	0.95	0.0	0.98	0.97	-0.01
	0.93	0.99	0.06	0.93	0.83	-0.1	0.93	0.97	0.04	1.0	0.99	-0.01
	0.95	0.96	0.01	0.95	0.87	-0.08	0.95	0.94	-0.01	1.0	0.96	-0.04
	0.92	0.99	0.07	0.92	0.81	-0.11	0.92	0.97	0.05	0.98	0.98	0.0
	0.95	0.98	0.03	0.95	0.89	-0.06	0.95	0.93	-0.02	0.97	0.97	0.0
Generic	0.96	0.96	0.0	0.96	0.91	-0.05	0.96	0.96	0.0	0.98	0.98	0.0
	0.93	0.96	0.03	0.93	0.85	-0.08	0.93	0.93	0.0	0.99	0.99	0.0
	0.95	0.97	0.02	0.95	0.86	-0.09	0.95	0.94	-0.01	0.99	0.99	0.0
	0.95	0.97	0.02	0.95	0.76	-0.19	0.95	0.97	0.02	0.99	0.98	-0.01
	0.92	0.98	0.06	0.92	0.84	-0.08	0.92	0.92	0.0	1.0	0.99	-0.01

	0.95	0.99	0.04	0.95	0.83	-0.12	0.95	0.97	0.02	0.99	0.98	-0.01
	0.97	0.97	0.0	0.97	0.89	-0.08	0.97	0.97	0.0	1.0	0.99	-0.01
	0.94	0.95	0.01	0.94	0.83	-0.11	0.94	0.93	-0.01	1.0	0.99	-0.01
	0.96	0.98	0.02	0.96	0.9	-0.06	0.96	0.95	-0.01	1.0	0.98	-0.02
	0.89	0.95	0.06	0.89	0.9	0.01	0.89	0.92	0.03	0.99	0.97	-0.02
DiCE	0.96	0.96	0.0	0.96	0.9	-0.06	0.96	0.98	0.02	0.98	0.98	0.0
	0.95	0.96	0.01	0.95	0.8	-0.15	0.95	0.91	-0.04	0.99	0.99	0.0
	0.93	0.96	0.03	0.93	0.83	-0.1	0.93	0.96	0.03	0.99	0.98	-0.01
	0.92	0.98	0.06	0.92	0.85	-0.07	0.92	0.97	0.05	0.99	0.98	-0.01
	0.96	0.97	0.01	0.96	0.84	-0.12	0.96	0.96	0.0	1.0	1.0	0.0
	0.92	0.99	0.07	0.92	0.81	-0.11	0.92	0.92	0.0	1.0	1.0	0.0
	0.95	0.95	0.0	0.95	0.81	-0.14	0.95	0.94	-0.01	1.0	0.99	-0.01
	0.96	0.97	0.01	0.96	0.88	-0.08	0.96	0.96	0.0	0.99	0.98	-0.01
	0.94	0.95	0.01	0.94	0.75	-0.19	0.94	0.95	0.01	0.99	0.98	-0.01
	0.94	0.98	0.04	0.94	0.84	-0.1	0.94	0.96	0.02	1.0	0.98	-0.02
ClaPROAR	0.94	0.95	0.01	0.94	0.89	-0.05	0.94	0.93	-0.01	1.0	0.99	-0.01
	0.99	0.97	-0.02	0.99	0.9	-0.09	0.99	0.98	-0.01	1.0	0.99	-0.01
	0.92	0.99	0.07	0.92	0.89	-0.03	0.92	0.95	0.03	0.99	0.99	0.0
	0.96	0.97	0.01	0.96	0.85	-0.11	0.96	0.93	-0.03	0.99	0.99	0.0
	0.94	0.96	0.02	0.94	0.85	-0.09	0.94	0.95	0.01	1.0	0.97	-0.03
	0.92	0.98	0.06	0.92	0.82	-0.1	0.92	0.92	0.0	0.98	0.98	0.0
	0.96	0.94	-0.02	0.96	0.85	-0.11	0.96	0.94	-0.02	0.98	0.96	-0.02
	0.97	0.96	-0.01	0.97	0.84	-0.13	0.97	0.95	-0.02	0.99	0.97	-0.02
	0.95	0.95	0.0	0.95	0.84	-0.11	0.95	0.92	-0.03	0.96	0.98	0.02
	0.97	0.97	0.0	0.97	0.8	-0.17	0.97	0.97	0.0	1.0	0.98	-0.02

Tab. 177: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP and deep ensembles, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.94	0.97	0.03	0.94	0.89	-0.05	0.94	0.91	-0.03	0.949	0.939	-0.01
	0.91	0.93	0.02	0.91	0.89	-0.02	0.91	0.91	0.0	0.99	0.97	-0.02
	0.94	0.95	0.01	0.94	0.92	-0.02	0.94	0.93	-0.01	0.99	0.939	-0.051
	0.94	0.95	0.01	0.94	0.93	-0.01	0.94	0.94	0.0	0.97	0.949	-0.02
	0.92	0.95	0.03	0.92	0.89	-0.03	0.92	0.93	0.01	1.0	0.99	-0.01
	0.91	0.95	0.04	0.91	0.89	-0.02	0.91	0.94	0.03	1.0	0.98	-0.02
	0.99	0.98	-0.01	0.99	0.94	-0.05	0.99	0.97	-0.02	0.97	0.97	0.0
	0.94	0.99	0.05	0.94	0.93	-0.01	0.94	0.97	0.03	0.96	0.909	-0.051
	0.93	0.96	0.03	0.93	0.87	-0.06	0.93	0.96	0.03	0.949	0.949	0.0
	0.92	0.94	0.02	0.92	0.86	-0.06	0.92	0.93	0.01	0.99	0.949	-0.04
REVISE	0.95	0.99	0.04	0.95	0.45	-0.5	0.95	0.96	0.01	1.0	1.0	0.0
	0.89	1.0	0.11	0.89	0.22	-0.67	0.89	0.92	0.03	0.97	0.919	-0.051
	0.98	0.99	0.01	0.98	0.19	-0.79	0.98	0.98	0.0	1.0	1.0	0.0
	0.96	1.0	0.04	0.96	0.24	-0.72	0.96	0.98	0.02	1.0	0.99	-0.01
	0.94	1.0	0.06	0.94	0.17	-0.77	0.94	1.0	0.06	0.96	0.909	-0.051
	0.93	0.99	0.06	0.93	0.12	-0.81	0.93	0.94	0.01	0.99	0.96	-0.03
	0.91	0.96	0.05	0.91	0.2	-0.71	0.91	0.93	0.02	1.0	0.96	-0.04
	0.94	1.0	0.06	0.94	0.15	-0.79	0.94	0.97	0.03	1.0	0.98	-0.02
	0.94	0.99	0.05	0.94	0.09	-0.85	0.94	0.95	0.01	1.0	0.97	-0.03
	0.95	1.0	0.05	0.95	0.16	-0.79	0.95	0.99	0.04	1.0	0.97	-0.03
ECCo	0.92	0.93	0.01	0.92	0.86	-0.06	0.92	0.93	0.01	0.99	0.98	-0.01
	0.91	0.95	0.04	0.91	0.88	-0.03	0.91	0.9	-0.01	0.98	1.0	0.02
	0.97	0.97	0.0	0.97	0.88	-0.09	0.97	0.93	-0.04	0.99	0.96	-0.03
	0.93	0.97	0.04	0.93	0.87	-0.06	0.93	0.94	0.01	1.0	0.97	-0.03

	0.96	0.96	0.0	0.96	0.84	-0.12	0.96	0.94	-0.02	0.99	0.98	-0.01
	0.97	0.98	0.01	0.97	0.9	-0.07	0.97	0.95	-0.02	0.99	0.99	0.0
	0.97	0.95	-0.02	0.97	0.88	-0.09	0.97	0.94	-0.03	1.0	0.98	-0.02
	0.95	0.96	0.01	0.95	0.89	-0.06	0.95	0.95	0.0	1.0	0.98	-0.02
	0.93	0.95	0.02	0.93	0.9	-0.03	0.93	0.94	0.01	0.929	0.97	0.04
	0.95	0.95	0.0	0.95	0.84	-0.11	0.95	0.95	0.0	0.97	0.97	0.0
Wachter	0.93	0.97	0.04	0.93	0.83	-0.1	0.93	0.96	0.03	1.0	0.97	-0.03
	0.95	0.99	0.04	0.95	0.82	-0.13	0.95	0.95	0.0	0.949	0.98	0.03
	0.93	0.97	0.04	0.93	0.87	-0.06	0.93	0.96	0.03	1.0	0.98	-0.02
	0.96	0.96	0.0	0.96	0.92	-0.04	0.96	0.95	-0.01	1.0	0.99	-0.01
	0.94	0.97	0.03	0.94	0.92	-0.02	0.94	0.92	-0.02	1.0	0.98	-0.02
	0.95	0.96	0.01	0.95	0.82	-0.13	0.95	0.94	-0.01	0.97	1.0	0.03
	0.93	0.97	0.04	0.93	0.92	-0.01	0.93	0.94	0.01	1.0	0.99	-0.01
	0.95	0.97	0.02	0.95	0.89	-0.06	0.95	0.95	0.0	1.0	0.97	-0.03
	0.95	0.95	0.0	0.95	0.85	-0.1	0.95	0.95	0.0	1.0	0.99	-0.01
	0.92	0.97	0.05	0.92	0.83	-0.09	0.92	0.93	0.01	0.949	0.97	0.02
Generic	0.93	0.97	0.04	0.93	0.87	-0.06	0.93	0.94	0.01	1.0	0.98	-0.02
	0.95	0.95	0.0	0.95	0.84	-0.11	0.95	0.93	-0.02	1.0	1.0	0.0
	0.87	0.93	0.06	0.87	0.81	-0.06	0.87	0.9	0.03	0.99	0.98	-0.01
	0.95	0.96	0.01	0.95	0.88	-0.07	0.95	0.97	0.02	0.98	0.99	0.01
	0.93	0.97	0.04	0.93	0.91	-0.02	0.93	0.94	0.01	0.98	0.99	0.01
	0.99	0.96	-0.03	0.99	0.95	-0.04	0.99	0.98	-0.01	1.0	0.99	-0.01
	0.89	0.96	0.07	0.89	0.91	0.02	0.89	0.93	0.04	1.0	0.98	-0.02
	0.96	0.99	0.03	0.96	0.86	-0.1	0.96	0.95	-0.01	0.98	0.98	0.0
	0.97	0.98	0.01	0.97	0.87	-0.1	0.97	0.96	-0.01	1.0	0.99	-0.01
	0.97	0.97	0.0	0.97	0.85	-0.12	0.97	0.95	-0.02	1.0	0.99	-0.01
DiCE	0.95	0.98	0.03	0.95	0.92	-0.03	0.95	0.96	0.01	0.98	0.96	-0.02
	0.97	0.99	0.02	0.97	0.82	-0.15	0.97	0.97	0.0	0.99	0.98	-0.01
	0.94	0.97	0.03	0.94	0.87	-0.07	0.94	0.96	0.02	1.0	0.98	-0.02
	0.97	0.99	0.02	0.97	0.88	-0.09	0.97	0.95	-0.02	0.96	0.97	0.01
	0.95	0.97	0.02	0.95	0.81	-0.14	0.95	0.95	0.0	1.0	0.97	-0.03
	0.95	0.97	0.02	0.95	0.85	-0.1	0.95	0.95	0.0	1.0	0.98	-0.02
	0.93	0.96	0.03	0.93	0.86	-0.07	0.93	0.94	0.01	0.99	1.0	0.01
	0.98	0.98	0.0	0.98	0.87	-0.11	0.98	0.96	-0.02	0.99	0.99	0.0
	0.94	0.98	0.04	0.94	0.91	-0.03	0.94	0.96	0.02	1.0	0.98	-0.02
	0.96	0.96	0.0	0.96	0.83	-0.13	0.96	0.93	-0.03	1.0	1.0	0.0
ClaPROAR	0.98	0.99	0.01	0.98	0.93	-0.05	0.98	0.97	-0.01	1.0	0.99	-0.01
	0.93	0.98	0.05	0.93	0.92	-0.01	0.93	0.93	0.0	1.0	0.99	-0.01
	0.94	0.96	0.02	0.94	0.91	-0.03	0.94	0.96	0.02	0.97	0.98	0.01
	0.98	0.98	0.0	0.98	0.94	-0.04	0.98	0.97	-0.01	1.0	0.98	-0.02
	0.97	0.97	0.0	0.97	0.92	-0.05	0.97	0.96	-0.01	0.99	1.0	0.01
	0.96	0.97	0.01	0.96	0.85	-0.11	0.96	0.98	0.02	0.99	0.98	-0.01
	0.95	0.98	0.03	0.95	0.82	-0.13	0.95	0.94	-0.01	0.97	0.99	0.02
	0.93	0.97	0.04	0.93	0.82	-0.11	0.93	0.92	-0.01	1.0	0.98	-0.02
	0.94	0.97	0.03	0.94	0.81	-0.13	0.94	0.95	0.01	0.929	0.949	0.02
	0.95	0.97	0.02	0.95	0.88	-0.07	0.95	0.91	-0.04	0.99	0.98	-0.01

Tab. 178: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP and deep ensembles, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.939	0.929	-0.01	0.939	0.909	-0.03	0.939	0.929	-0.01	0.99	0.94	-0.05
	0.96	0.96	0.0	0.96	0.889	-0.071	0.919	0.939	0.02	0.99	0.98	-0.01
	0.939	0.929	-0.01	0.939	0.879	-0.061	0.97	0.97	0.0	1.0	0.99	-0.01

	0.919	0.949	0.03	0.919	0.869	-0.051	0.939	0.949	0.01	1.0	1.0	0.0
	0.96	0.97	0.01	0.96	0.899	-0.061	0.899	0.939	0.04	1.0	0.99	-0.01
	0.939	0.96	0.02	0.939	0.899	-0.04	0.949	0.949	0.0	0.99	0.98	-0.01
	0.949	0.96	0.01	0.949	0.909	-0.04	0.949	0.939	-0.01	0.99	0.99	0.0
	0.899	0.97	0.071	0.899	0.869	-0.03	0.949	0.949	0.0	1.0	0.99	-0.01
	0.929	0.949	0.02	0.929	0.889	-0.04	0.919	0.909	-0.01	0.99	0.96	-0.03
	0.919	0.919	0.0	0.919	0.909	-0.01	0.909	0.949	0.04	1.0	1.0	0.0
REVISE	0.949	1.0	0.051	0.949	0.111	-0.838	0.939	0.949	0.01	1.0	1.0	0.0
	0.939	1.0	0.061	0.939	0.091	-0.848	0.939	1.0	0.061	0.99	0.97	-0.02
	0.919	0.99	0.071	0.919	0.444	-0.475	0.96	1.0	0.04	0.99	0.93	-0.06
	0.98	1.0	0.02	0.98	0.192	-0.788	0.939	0.97	0.03	0.99	1.0	0.01
	0.929	1.0	0.071	0.929	0.111	-0.818	0.939	0.98	0.04	1.0	0.99	-0.01
	0.919	1.0	0.081	0.919	0.212	-0.707	0.949	0.99	0.04	0.99	0.98	-0.01
	0.899	1.0	0.101	0.899	0.131	-0.768	0.949	0.96	0.01	1.0	1.0	0.0
	0.929	1.0	0.071	0.929	0.152	-0.778	0.929	0.98	0.051	0.99	0.97	-0.02
	0.939	1.0	0.061	0.939	0.172	-0.768	0.939	0.98	0.04	0.99	0.98	-0.01
	0.949	1.0	0.051	0.949	0.131	-0.818	0.909	1.0	0.091	0.99	0.98	-0.01
ECCo	0.949	0.97	0.02	0.949	0.869	-0.081	0.96	0.929	-0.03	1.0	0.98	-0.02
	0.939	0.97	0.03	0.939	0.899	-0.04	0.929	0.96	0.03	0.95	0.99	0.04
	0.939	0.97	0.03	0.939	0.869	-0.071	0.939	0.939	0.0	0.99	1.0	0.01
	0.96	1.0	0.04	0.96	0.929	-0.03	0.939	0.939	0.0	0.95	0.99	0.04
	0.909	0.949	0.04	0.909	0.848	-0.061	0.939	0.929	-0.01	0.99	1.0	0.01
	0.909	0.929	0.02	0.909	0.889	-0.02	0.96	0.929	-0.03	0.99	0.99	0.0
	0.939	0.97	0.03	0.939	0.828	-0.111	0.939	0.909	-0.03	0.99	0.99	0.0
	0.929	0.97	0.04	0.929	0.859	-0.071	0.939	0.939	0.0	0.99	0.99	0.0
	0.939	0.949	0.01	0.939	0.929	-0.01	0.97	0.97	0.0	0.99	1.0	0.01
	0.939	0.929	-0.01	0.939	0.798	-0.141	0.96	0.97	0.01	0.99	1.0	0.01
Wachter	0.939	0.97	0.03	0.939	0.687	-0.253	0.97	0.97	0.0	0.99	0.98	-0.01
	0.909	0.98	0.071	0.909	0.737	-0.172	0.939	0.96	0.02	1.0	0.97	-0.03
	0.939	0.96	0.02	0.939	0.616	-0.323	0.97	0.96	-0.01	0.99	0.99	0.0
	0.939	0.96	0.02	0.939	0.788	-0.152	0.97	0.96	-0.01	1.0	0.99	-0.01
	0.919	0.939	0.02	0.919	0.889	-0.03	0.919	0.929	0.01	0.99	0.92	-0.07
	0.949	0.949	0.0	0.949	0.808	-0.141	0.899	0.97	0.071	0.99	0.99	0.0
	0.909	0.97	0.061	0.909	0.657	-0.253	0.939	0.96	0.02	0.99	0.99	0.0
	0.97	0.96	-0.01	0.97	0.768	-0.202	0.949	0.96	0.01	1.0	1.0	0.0
	0.919	0.929	0.01	0.919	0.768	-0.152	0.919	0.929	0.01	0.99	0.97	-0.02
	0.939	0.96	0.02	0.939	0.747	-0.192	0.919	0.919	0.0	0.99	1.0	0.01
Generic	0.949	0.97	0.02	0.949	0.657	-0.293	0.949	0.96	0.01	0.99	1.0	0.01
	0.96	0.949	-0.01	0.96	0.727	-0.232	0.919	0.909	-0.01	0.99	0.98	-0.01
	0.939	0.97	0.03	0.939	0.798	-0.141	0.949	0.949	0.0	0.99	0.97	-0.02
	0.939	0.96	0.02	0.939	0.737	-0.202	0.939	0.939	0.0	0.99	0.98	-0.01
	0.909	0.96	0.051	0.909	0.798	-0.111	0.949	0.949	0.0	1.0	1.0	0.0
	0.98	0.97	-0.01	0.98	0.556	-0.424	0.949	0.96	0.01	1.0	0.98	-0.02
	0.949	0.97	0.02	0.949	0.758	-0.192	0.96	0.949	-0.01	0.99	0.99	0.0
	0.919	0.97	0.051	0.919	0.818	-0.101	0.98	0.98	0.0	0.98	0.96	-0.02
	0.98	0.98	0.0	0.98	0.727	-0.253	0.909	0.98	0.071	0.99	1.0	0.01
	0.929	0.96	0.03	0.929	0.636	-0.293	0.909	0.96	0.051	0.99	0.97	-0.02
DiCE	0.949	0.97	0.02	0.949	0.717	-0.232	0.929	0.929	0.0	1.0	1.0	0.0
	0.929	0.97	0.04	0.929	0.667	-0.263	0.98	0.98	0.0	0.99	0.99	0.0
	0.889	0.96	0.071	0.889	0.838	-0.051	0.96	0.929	-0.03	1.0	0.98	-0.02
	0.949	0.98	0.03	0.949	0.899	-0.051	0.879	0.949	0.071	1.0	0.98	-0.02
	0.939	0.949	0.01	0.939	0.828	-0.111	0.919	0.96	0.04	1.0	0.99	-0.01
	0.909	0.949	0.04	0.909	0.768	-0.141	0.96	0.96	0.0	0.99	1.0	0.01
	0.939	0.98	0.04	0.939	0.717	-0.222	0.939	0.929	-0.01	1.0	0.99	-0.01
	0.939	0.97	0.03	0.939	0.899	-0.04	0.939	0.929	-0.01	0.99	0.99	0.0
	0.96	0.97	0.01	0.96	0.828	-0.131	0.96	0.96	0.0	0.98	0.99	0.01

	0.949	0.96	0.01	0.949	0.768	-0.182	0.939	0.939	0.0	1.0	1.0	0.0
ClaPROAR	0.929	0.96	0.03	0.929	0.909	-0.02	0.939	0.96	0.02	0.99	0.99	0.0
	0.96	0.949	-0.01	0.96	0.717	-0.242	0.939	0.939	0.0	0.99	0.93	-0.06
	0.939	0.96	0.02	0.939	0.828	-0.111	0.929	0.96	0.03	0.99	0.96	-0.03
	0.929	0.96	0.03	0.929	0.869	-0.061	0.929	0.939	0.01	1.0	1.0	0.0
	0.97	0.97	0.0	0.97	0.626	-0.343	0.919	0.949	0.03	0.97	0.99	0.02
	0.919	0.96	0.04	0.919	0.929	0.01	0.939	0.949	0.01	0.99	0.98	-0.01
	0.929	0.949	0.02	0.929	0.727	-0.202	0.909	0.949	0.04	1.0	0.99	-0.01
	0.97	0.949	-0.02	0.97	0.687	-0.283	0.949	0.949	0.0	0.99	0.99	0.0
	0.97	0.98	0.01	0.97	0.889	-0.081	0.919	0.939	0.02	0.97	1.0	0.03
	0.929	0.98	0.051	0.929	0.859	-0.071	0.96	0.939	-0.02	0.99	1.0	0.01

Tab. 179: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP and deep ensembles, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.919	0.919	0.0	0.919	0.869	-0.051	0.899	0.899	0.0	0.99	1.0	0.01
	0.929	0.96	0.03	0.929	0.848	-0.081	0.879	0.909	0.03	0.96	0.96	0.0
	0.899	0.909	0.01	0.899	0.848	-0.051	0.909	0.939	0.03	0.96	0.96	0.0
	0.909	0.949	0.04	0.909	0.859	-0.051	0.939	0.949	0.01	1.0	0.98	-0.02
	0.929	0.919	-0.01	0.929	0.838	-0.091	0.909	0.899	-0.01	0.98	0.99	0.01
	0.929	0.919	-0.01	0.929	0.848	-0.081	0.97	0.949	-0.02	0.98	0.98	0.0
	0.919	0.919	0.0	0.919	0.859	-0.061	0.949	0.939	-0.01	1.0	0.98	-0.02
	0.949	0.949	0.0	0.949	0.889	-0.061	0.929	0.899	-0.03	1.0	0.98	-0.02
	0.939	0.939	0.0	0.939	0.838	-0.101	0.899	0.919	0.02	1.0	0.99	-0.01
	0.879	0.909	0.03	0.879	0.869	-0.01	0.899	0.879	-0.02	0.99	0.98	-0.01
REVISE	0.889	0.929	0.04	0.889	0.394	-0.495	0.879	0.889	0.01	0.98	0.98	0.0
	0.889	0.949	0.061	0.889	0.192	-0.697	0.889	0.919	0.03	0.97	0.98	0.01
	0.919	1.0	0.081	0.919	0.172	-0.747	0.869	0.929	0.061	0.99	0.99	0.0
	0.97	0.98	0.01	0.97	0.111	-0.859	0.919	0.929	0.01	1.0	0.97	-0.03
	0.909	1.0	0.091	0.909	0.182	-0.727	0.939	0.919	-0.02	0.99	0.97	-0.02
	0.909	0.929	0.02	0.909	0.495	-0.414	0.949	0.96	0.01	0.98	0.98	0.0
	0.949	0.949	0.0	0.949	0.152	-0.798	0.929	0.919	-0.01	0.97	0.99	0.02
	0.949	0.97	0.02	0.949	0.475	-0.475	0.879	0.919	0.04	0.97	0.98	0.01
	0.889	1.0	0.111	0.889	0.778	-0.111	0.929	0.889	-0.04	0.98	0.97	-0.01
	0.939	0.96	0.02	0.939	0.354	-0.586	0.919	0.949	0.03	0.98	1.0	0.02
ECCo	0.909	0.909	0.0	0.909	0.808	-0.101	0.909	0.889	-0.02	1.0	0.99	-0.01
	0.848	0.939	0.091	0.848	0.798	-0.051	0.909	0.949	0.04	1.0	0.99	-0.01
	0.929	0.97	0.04	0.929	0.859	-0.071	0.939	0.919	-0.02	0.99	0.99	0.0
	0.909	0.96	0.051	0.909	0.818	-0.091	0.889	0.909	0.02	0.98	0.99	0.01
	0.919	0.96	0.04	0.919	0.848	-0.071	0.899	0.909	0.01	0.98	0.99	0.01
	0.939	0.949	0.01	0.939	0.859	-0.081	0.919	0.939	0.02	0.99	1.0	0.01
	0.899	0.929	0.03	0.899	0.838	-0.061	0.949	0.939	-0.01	0.98	0.98	0.0
	0.929	0.949	0.02	0.929	0.848	-0.081	0.879	0.879	0.0	1.0	0.99	-0.01
	0.899	0.939	0.04	0.899	0.788	-0.111	0.949	0.909	-0.04	0.99	0.99	0.0
	0.899	0.929	0.03	0.899	0.828	-0.071	0.929	0.869	-0.061	0.97	0.97	0.0
Wachter	0.889	1.0	0.111	0.889	0.818	-0.071	0.899	0.919	0.02	1.0	0.98	-0.02
	0.899	0.97	0.071	0.899	0.838	-0.061	0.929	0.889	-0.04	0.99	1.0	0.01
	0.929	0.96	0.03	0.929	0.818	-0.111	0.889	0.899	0.01	1.0	1.0	0.0
	0.949	0.97	0.02	0.949	0.737	-0.212	0.899	0.899	0.0	0.97	0.97	0.0
	0.909	0.97	0.061	0.909	0.869	-0.04	0.889	0.879	-0.01	0.97	1.0	0.03
	0.919	0.99	0.071	0.919	0.869	-0.051	0.939	0.939	0.0	0.98	0.99	0.01
	0.899	0.96	0.061	0.899	0.798	-0.101	0.96	0.939	-0.02	0.98	0.99	0.01
	0.899	0.97	0.071	0.899	0.818	-0.081	0.929	0.929	0.0	0.97	0.99	0.02

	0.909	0.939	0.03	0.909	0.717	-0.192	0.899	0.899	0.0	0.99	0.96	-0.03
	0.939	0.99	0.051	0.939	0.818	-0.121	0.919	0.949	0.03	0.97	0.98	0.01
Generic	0.929	0.99	0.061	0.929	0.707	-0.222	0.919	0.909	-0.01	1.0	1.0	0.0
	0.909	0.939	0.03	0.909	0.778	-0.131	0.899	0.929	0.03	0.99	1.0	0.01
	0.869	0.949	0.081	0.869	0.848	-0.02	0.919	0.909	-0.01	1.0	0.98	-0.02
	0.929	0.949	0.02	0.929	0.768	-0.162	0.939	0.909	-0.03	1.0	0.99	-0.01
	0.96	0.96	0.0	0.96	0.667	-0.293	0.859	0.909	0.051	0.97	0.99	0.02
	0.899	0.949	0.051	0.899	0.788	-0.111	0.949	0.929	-0.02	1.0	0.99	-0.01
	0.889	0.96	0.071	0.889	0.697	-0.192	0.909	0.929	0.02	0.99	0.98	-0.01
	0.909	0.99	0.081	0.909	0.828	-0.081	0.919	0.929	0.01	0.97	1.0	0.03
	0.949	0.98	0.03	0.949	0.727	-0.222	0.919	0.889	-0.03	0.99	1.0	0.01
	0.919	0.97	0.051	0.919	0.798	-0.121	0.919	0.919	0.0	0.98	0.99	0.01
DiCE	0.899	0.99	0.091	0.899	0.808	-0.091	0.848	0.879	0.03	0.98	0.98	0.0
	0.929	0.97	0.04	0.929	0.848	-0.081	0.879	0.929	0.051	0.99	0.99	0.0
	0.939	0.949	0.01	0.939	0.747	-0.192	0.899	0.909	0.01	0.97	1.0	0.03
	0.939	0.98	0.04	0.939	0.727	-0.212	1.0	0.939	-0.061	1.0	0.99	-0.01
	0.869	1.0	0.131	0.869	0.828	-0.04	0.919	0.939	0.02	0.98	0.97	-0.01
	0.97	0.99	0.02	0.97	0.828	-0.141	0.96	0.939	-0.02	0.97	0.97	0.0
	0.859	0.949	0.091	0.859	0.798	-0.061	0.909	0.939	0.03	0.97	1.0	0.03
	0.889	0.97	0.081	0.889	0.828	-0.061	0.899	0.919	0.02	1.0	0.99	-0.01
	0.949	0.98	0.03	0.949	0.828	-0.121	0.909	0.909	0.0	0.96	1.0	0.04
	0.909	0.98	0.071	0.909	0.828	-0.081	0.96	0.919	-0.04	0.99	0.99	0.0
ClaPROAR	0.939	0.98	0.04	0.939	0.788	-0.152	0.879	0.919	0.04	0.98	1.0	0.02
	0.909	0.97	0.061	0.909	0.747	-0.162	0.848	0.899	0.051	0.98	0.99	0.01
	0.929	0.98	0.051	0.929	0.828	-0.101	0.919	0.939	0.02	0.97	0.99	0.02
	0.97	0.98	0.01	0.97	0.808	-0.162	0.949	0.919	-0.03	0.99	0.99	0.0
	0.919	0.98	0.061	0.919	0.788	-0.131	0.939	0.949	0.01	1.0	0.99	-0.01
	0.899	0.939	0.04	0.899	0.788	-0.111	0.929	0.939	0.01	0.99	1.0	0.01
	0.939	0.97	0.03	0.939	0.848	-0.091	0.889	0.909	0.02	1.0	1.0	0.0
	0.909	0.99	0.081	0.909	0.818	-0.091	0.869	0.879	0.01	0.99	0.99	0.0
	0.929	0.939	0.01	0.929	0.818	-0.111	0.939	0.939	0.0	0.94	0.97	0.03
	0.889	0.949	0.061	0.889	0.808	-0.081	0.929	0.889	-0.04	0.99	0.99	0.0

Tab. 180: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP and deep ensembles, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.96	0.949	-0.01	0.96	0.919	-0.04	0.889	0.939	0.051	0.99	0.98	-0.01
	0.899	0.939	0.04	0.899	0.889	-0.01	0.879	0.939	0.061	0.99	0.94	-0.05
	0.949	0.96	0.01	0.949	0.869	-0.081	0.909	0.929	0.02	0.96	0.96	0.0
	0.899	0.939	0.04	0.899	0.869	-0.03	0.939	0.909	-0.03	0.99	0.93	-0.06
	0.929	0.909	-0.02	0.929	0.869	-0.061	0.879	0.879	0.0	0.98	0.93	-0.05
	0.929	0.929	0.0	0.929	0.879	-0.051	0.919	0.919	0.0	0.99	0.96	-0.03
	0.939	0.96	0.02	0.939	0.919	-0.02	0.949	0.97	0.02	0.97	0.98	0.01
	0.919	0.949	0.03	0.919	0.869	-0.051	0.909	0.919	0.01	0.99	0.97	-0.02
	0.929	0.939	0.01	0.929	0.889	-0.04	0.919	0.939	0.02	0.98	0.99	0.01
	0.919	0.929	0.01	0.919	0.859	-0.061	0.909	0.919	0.01	0.99	0.99	0.0
REVISE	0.939	0.949	0.01	0.939	0.313	-0.626	0.939	0.99	0.051	0.99	0.97	-0.02
	0.909	0.949	0.04	0.909	0.677	-0.232	0.909	0.99	0.081	0.97	0.98	0.01
	0.889	0.96	0.071	0.889	0.616	-0.273	0.97	0.98	0.01	0.97	0.97	0.0
	0.929	0.99	0.061	0.929	0.222	-0.707	0.909	0.96	0.051	0.98	0.99	0.01
	0.909	0.99	0.081	0.909	0.808	-0.101	0.939	0.939	0.0	0.96	0.93	-0.03
	0.869	0.949	0.081	0.869	0.747	-0.121	0.909	0.929	0.02	0.97	0.96	-0.01
	0.939	0.96	0.02	0.939	0.333	-0.606	0.929	0.929	0.0	1.0	0.98	-0.02

	0.929	0.98	0.051	0.929	0.394	-0.535	0.929	0.97	0.04	0.99	0.95	-0.04
	0.949	0.949	0.0	0.949	0.293	-0.657	0.939	0.949	0.01	0.97	0.98	0.01
	0.919	0.98	0.061	0.919	0.576	-0.343	0.919	0.939	0.02	1.0	0.98	-0.02
ECCo	0.889	0.909	0.02	0.889	0.758	-0.131	0.879	0.929	0.051	0.96	0.96	0.0
	0.909	0.949	0.04	0.909	0.828	-0.081	0.96	0.96	0.0	0.97	0.96	-0.01
	0.929	0.949	0.02	0.929	0.818	-0.111	0.929	0.929	0.0	0.97	0.97	0.0
	0.919	0.939	0.02	0.919	0.838	-0.081	0.96	0.949	-0.01	0.97	0.99	0.02
	0.909	0.919	0.01	0.909	0.798	-0.111	0.919	0.949	0.03	0.99	0.96	-0.03
	0.899	0.949	0.051	0.899	0.848	-0.051	0.96	0.96	0.0	0.97	0.96	-0.01
	0.99	0.97	-0.02	0.99	0.848	-0.141	0.919	0.919	0.0	0.94	0.99	0.05
	0.899	0.949	0.051	0.899	0.808	-0.091	0.929	0.939	0.01	0.99	0.99	0.0
	0.96	0.96	0.0	0.96	0.808	-0.152	0.929	0.929	0.0	1.0	0.97	-0.03
	0.919	0.939	0.02	0.919	0.788	-0.131	0.919	0.909	-0.01	0.97	0.97	0.0
Wachter	0.899	0.97	0.071	0.899	0.889	-0.01	0.97	0.96	-0.01	0.99	0.98	-0.01
	0.919	0.909	-0.01	0.919	0.869	-0.051	0.949	0.97	0.02	0.98	0.94	-0.04
	0.929	0.939	0.01	0.929	0.838	-0.091	0.909	0.899	-0.01	0.97	0.99	0.02
	0.949	0.96	0.01	0.949	0.828	-0.121	0.96	0.949	-0.01	0.98	0.98	0.0
	0.929	0.97	0.04	0.929	0.879	-0.051	0.939	0.939	0.0	0.98	0.96	-0.02
	0.899	0.939	0.04	0.899	0.869	-0.03	0.929	0.939	0.01	0.97	0.99	0.02
	0.919	0.98	0.061	0.919	0.828	-0.091	0.939	0.96	0.02	0.98	1.0	0.02
	0.949	0.97	0.02	0.949	0.818	-0.131	0.919	0.929	0.01	0.97	0.94	-0.03
	0.879	0.939	0.061	0.879	0.859	-0.02	0.949	0.939	-0.01	0.96	0.96	0.0
	0.949	0.939	-0.01	0.949	0.879	-0.071	0.939	0.929	-0.01	1.0	1.0	0.0
Generic	0.889	0.96	0.071	0.889	0.838	-0.051	0.939	0.939	0.0	0.98	0.97	-0.01
	0.919	0.949	0.03	0.919	0.828	-0.091	0.879	0.889	0.01	0.97	0.99	0.02
	0.939	0.929	-0.01	0.939	0.889	-0.051	0.97	0.97	0.0	0.95	0.98	0.03
	0.909	0.96	0.051	0.909	0.838	-0.071	0.939	0.919	-0.02	0.97	0.98	0.01
	0.909	0.939	0.03	0.909	0.778	-0.131	0.869	0.929	0.061	0.98	0.97	-0.01
	0.98	0.98	0.0	0.98	0.818	-0.162	0.96	0.919	-0.04	1.0	1.0	0.0
	0.899	0.98	0.081	0.899	0.869	-0.03	0.909	0.909	0.0	0.97	0.98	0.01
	0.949	0.98	0.03	0.949	0.899	-0.051	0.929	0.919	-0.01	0.96	0.98	0.02
	0.919	0.97	0.051	0.919	0.879	-0.04	0.909	0.889	-0.02	0.98	0.96	-0.02
	0.949	0.97	0.02	0.949	0.879	-0.071	0.919	0.909	-0.01	0.99	0.99	0.0
DiCE	0.929	0.97	0.04	0.929	0.919	-0.01	0.919	0.939	0.02	0.99	0.98	-0.01
	0.899	0.919	0.02	0.899	0.848	-0.051	0.879	0.909	0.03	0.94	0.99	0.05
	0.919	0.949	0.03	0.919	0.798	-0.121	0.96	0.949	-0.01	0.98	0.97	-0.01
	0.929	0.939	0.01	0.929	0.889	-0.04	0.949	0.949	0.0	0.99	0.98	-0.01
	0.899	0.96	0.061	0.899	0.838	-0.061	0.939	0.96	0.02	0.98	0.96	-0.02
	0.929	0.98	0.051	0.929	0.818	-0.111	0.949	0.939	-0.01	0.98	0.97	-0.01
	0.929	0.96	0.03	0.929	0.889	-0.04	0.929	0.909	-0.02	0.98	0.97	-0.01
	0.919	0.939	0.02	0.919	0.859	-0.061	0.909	0.899	-0.01	0.97	0.94	-0.03
	0.949	0.939	-0.01	0.949	0.869	-0.081	0.889	0.919	0.03	0.97	0.98	0.01
	0.949	0.929	-0.02	0.949	0.869	-0.081	0.919	0.919	0.0	0.98	0.99	0.01
ClaPROAR	0.949	0.96	0.01	0.949	0.929	-0.02	0.929	0.949	0.02	0.94	0.99	0.05
	0.899	0.939	0.04	0.899	0.869	-0.03	0.909	0.909	0.0	0.96	0.98	0.02
	0.939	0.97	0.03	0.939	0.859	-0.081	0.929	0.929	0.0	0.99	0.97	-0.02
	0.929	0.929	0.0	0.929	0.838	-0.091	0.929	0.919	-0.01	0.99	0.94	-0.05
	0.96	0.97	0.01	0.96	0.869	-0.091	0.96	0.949	-0.01	0.95	0.97	0.02
	0.909	0.97	0.061	0.909	0.808	-0.101	0.909	0.909	0.0	0.97	0.98	0.01
	0.919	0.929	0.01	0.919	0.859	-0.061	0.919	0.919	0.0	0.95	0.97	0.02
	0.949	0.929	-0.02	0.949	0.899	-0.051	0.899	0.919	0.02	0.98	0.99	0.01
	0.949	0.98	0.03	0.949	0.919	-0.03	0.929	0.919	-0.01	0.99	0.98	-0.01
	0.919	0.929	0.01	0.919	0.859	-0.061	0.949	0.929	-0.02	0.98	0.96	-0.02

Tab. 181: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a MLP and deep ensembles, experiment 5

F.2.15. Moons dataset using Deep ensemble

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.95	0.93	-0.02	0.95	0.91	-0.04	0.95	0.93	-0.02	0.95	0.94	-0.01
	0.94	0.98	0.04	0.94	0.9	-0.04	0.94	0.94	0.0	0.96	0.93	-0.03
	0.95	0.94	-0.01	0.95	0.92	-0.03	0.95	0.91	-0.04	0.93	0.9	-0.03
	0.93	0.93	0.0	0.93	0.91	-0.02	0.93	0.93	0.0	0.95	0.97	0.02
	0.95	0.95	0.0	0.95	0.94	-0.01	0.95	0.97	0.02	0.96	0.95	-0.01
	0.97	0.99	0.02	0.97	0.93	-0.04	0.97	0.95	-0.02	0.94	0.96	0.02
	0.94	0.96	0.02	0.94	0.94	0.0	0.94	0.93	-0.01	0.96	0.95	-0.01
	0.95	0.94	-0.01	0.95	0.94	-0.01	0.95	0.93	-0.02	0.92	0.94	0.02
	0.94	0.94	0.0	0.94	0.93	-0.01	0.94	0.94	0.0	0.93	0.97	0.04
	0.96	0.96	0.0	0.96	0.95	-0.01	0.96	0.97	0.01	0.94	0.92	-0.02
REVISE	0.95	0.99	0.04	0.95	0.08	-0.87	0.95	0.98	0.03	0.95	0.97	0.02
	0.95	1.0	0.05	0.95	0.21	-0.74	0.95	0.96	0.01	0.96	0.98	0.02
	0.98	0.97	-0.01	0.98	0.18	-0.8	0.98	0.96	-0.02	0.96	0.94	-0.02
	0.95	0.96	0.01	0.95	0.36	-0.59	0.95	0.95	0.0	0.96	0.95	-0.01
	0.98	0.97	-0.01	0.98	0.14	-0.84	0.98	0.96	-0.02	0.94	0.94	0.0
	0.97	1.0	0.03	0.97	0.31	-0.66	0.97	0.98	0.01	0.97	0.95	-0.02
	0.96	1.0	0.04	0.96	0.29	-0.67	0.96	0.96	0.0	0.95	0.99	0.04
	0.92	0.95	0.03	0.92	0.34	-0.58	0.92	0.96	0.04	0.94	0.95	0.01
	0.94	0.96	0.02	0.94	0.83	-0.11	0.94	0.88	-0.06	0.95	0.94	-0.01
	0.95	0.97	0.02	0.95	0.37	-0.58	0.95	0.93	-0.02	0.91	0.98	0.07
ECCo	0.94	0.94	0.0	0.94	0.91	-0.03	0.94	0.94	0.0	0.94	0.95	0.01
	0.93	0.92	-0.01	0.93	0.84	-0.09	0.93	0.92	-0.01	0.96	0.95	-0.01
	0.94	0.97	0.03	0.94	0.96	0.02	0.94	0.96	0.02	0.92	0.93	0.01
	0.91	0.97	0.06	0.91	0.88	-0.03	0.91	0.96	0.05	0.93	0.96	0.03
	0.92	0.93	0.01	0.92	0.82	-0.1	0.92	0.92	0.0	0.89	0.9	0.01
	0.96	0.95	-0.01	0.96	0.91	-0.05	0.96	0.94	-0.02	0.96	0.94	-0.02
	0.93	0.93	0.0	0.93	0.87	-0.06	0.93	0.93	0.0	0.96	0.97	0.01
	0.94	0.95	0.01	0.94	0.89	-0.05	0.94	0.95	0.01	0.94	0.94	0.0
	0.97	0.99	0.02	0.97	0.94	-0.03	0.97	0.97	0.0	0.93	0.97	0.04
	0.95	0.95	0.0	0.95	0.88	-0.07	0.95	0.95	0.0	0.96	0.95	-0.01
Wachter	0.95	0.96	0.01	0.95	0.89	-0.06	0.95	0.94	-0.01	0.9	0.93	0.03
	0.92	0.99	0.07	0.92	0.91	-0.01	0.92	0.92	0.0	0.96	0.96	0.0
	0.9	0.96	0.06	0.9	0.87	-0.03	0.9	0.9	0.0	0.94	0.93	-0.01
	0.95	0.96	0.01	0.95	0.89	-0.06	0.95	0.95	0.0	0.92	0.9	-0.02
	0.95	0.98	0.03	0.95	0.9	-0.05	0.95	0.94	-0.01	0.92	0.89	-0.03
	0.97	0.98	0.01	0.97	0.89	-0.08	0.97	0.94	-0.03	0.96	0.89	-0.07
	0.95	0.96	0.01	0.95	0.89	-0.06	0.95	0.92	-0.03	0.95	0.96	0.01
	0.94	0.97	0.03	0.94	0.87	-0.07	0.94	0.93	-0.01	0.99	0.97	-0.02
	0.98	0.99	0.01	0.98	0.89	-0.09	0.98	0.96	-0.02	0.94	0.93	-0.01
	0.95	0.96	0.01	0.95	0.92	-0.03	0.95	0.93	-0.02	0.94	0.92	-0.02
Generic	0.99	0.98	-0.01	0.99	0.89	-0.1	0.99	0.96	-0.03	0.97	0.96	-0.01
	0.93	0.98	0.05	0.93	0.89	-0.04	0.93	0.89	-0.04	0.96	0.96	0.0
	0.95	0.98	0.03	0.95	0.86	-0.09	0.95	0.96	0.01	0.94	0.95	0.01
	0.91	0.94	0.03	0.91	0.88	-0.03	0.91	0.91	0.0	0.98	0.96	-0.02
	0.92	0.97	0.05	0.92	0.89	-0.03	0.92	0.93	0.01	0.98	0.97	-0.01
	0.92	1.0	0.08	0.92	0.86	-0.06	0.92	0.93	0.01	0.95	0.95	0.0
	0.96	0.98	0.02	0.96	0.9	-0.06	0.96	0.96	0.0	0.96	0.95	-0.01
	0.93	0.98	0.05	0.93	0.92	-0.01	0.93	0.93	0.0	0.91	0.93	0.02
	0.9	0.97	0.07	0.9	0.86	-0.04	0.9	0.92	0.02	0.91	0.91	0.0
	0.97	0.97	0.0	0.97	0.93	-0.04	0.97	0.96	-0.01	0.96	0.95	-0.01
DiCE	0.94	0.96	0.02	0.94	0.84	-0.1	0.94	0.93	-0.01	0.96	0.94	-0.02
	0.94	0.96	0.02	0.94	0.87	-0.07	0.94	0.95	0.01	0.95	0.94	-0.01

	0.95	0.97	0.02	0.95	0.87	-0.08	0.95	0.94	-0.01	0.94	0.91	-0.03
	0.96	0.96	0.0	0.96	0.91	-0.05	0.96	0.92	-0.04	0.97	0.95	-0.02
	0.93	1.0	0.07	0.93	0.84	-0.09	0.93	0.93	0.0	0.9	0.94	0.04
	0.94	0.94	0.0	0.94	0.92	-0.02	0.94	0.93	-0.01	0.95	0.93	-0.02
	0.95	0.96	0.01	0.95	0.9	-0.05	0.95	0.9	-0.05	0.95	0.95	0.0
	0.96	0.96	0.0	0.96	0.9	-0.06	0.96	0.94	-0.02	0.96	0.95	-0.01
	0.94	0.95	0.01	0.94	0.91	-0.03	0.94	0.93	-0.01	0.88	0.9	0.02
	0.9	0.96	0.06	0.9	0.9	0.0	0.9	0.9	0.0	0.96	0.95	-0.01
ClaPROAR	0.95	0.97	0.02	0.95	0.9	-0.05	0.95	0.94	-0.01	0.92	0.92	0.0
	0.97	0.98	0.01	0.97	0.88	-0.09	0.97	0.96	-0.01	0.94	0.94	0.0
	0.95	0.97	0.02	0.95	0.84	-0.11	0.95	0.93	-0.02	0.93	0.97	0.04
	0.98	0.98	0.0	0.98	0.89	-0.09	0.98	0.94	-0.04	0.98	0.96	-0.02
	0.94	0.97	0.03	0.94	0.88	-0.06	0.94	0.96	0.02	0.95	0.94	-0.01
	0.96	0.98	0.02	0.96	0.91	-0.05	0.96	0.96	0.0	0.95	0.95	0.0
	0.94	0.96	0.02	0.94	0.92	-0.02	0.94	0.96	0.02	0.95	0.95	0.0
	0.96	0.96	0.0	0.96	0.89	-0.07	0.96	0.94	-0.02	0.93	0.95	0.02
	0.95	1.0	0.05	0.95	0.86	-0.09	0.95	0.98	0.03	0.93	0.94	0.01
	0.89	0.92	0.03	0.89	0.88	-0.01	0.89	0.91	0.02	0.93	0.93	0.0

Tab. 182: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a deep ensembles, experiment 1

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.95	0.94	-0.01	0.95	0.87	-0.08	0.95	0.93	-0.02	0.96	0.96	0.0
	0.93	0.96	0.03	0.93	0.85	-0.08	0.93	0.92	-0.01	0.96	0.99	0.03
	0.94	0.96	0.02	0.94	0.9	-0.04	0.94	0.94	0.0	0.96	0.99	0.03
	0.98	0.95	-0.03	0.98	0.9	-0.08	0.98	0.95	-0.03	0.96	0.96	0.0
	0.95	0.97	0.02	0.95	0.91	-0.04	0.95	0.97	0.02	0.98	0.99	0.01
	0.93	0.95	0.02	0.93	0.89	-0.04	0.93	0.95	0.02	0.98	0.95	-0.03
	0.96	0.96	0.0	0.96	0.91	-0.05	0.96	0.94	-0.02	0.96	0.97	0.01
	0.96	0.96	0.0	0.96	0.91	-0.05	0.96	0.95	-0.01	0.98	0.97	-0.01
	0.95	0.97	0.02	0.95	0.92	-0.03	0.95	0.95	0.0	0.99	0.99	0.0
	0.94	0.96	0.02	0.94	0.9	-0.04	0.94	0.96	0.02	0.96	0.98	0.02
REVISE	0.93	0.99	0.06	0.93	0.26	-0.67	0.93	0.96	0.03	0.97	1.0	0.03
	0.94	0.98	0.04	0.94	0.74	-0.2	0.94	0.95	0.01	0.95	0.96	0.01
	0.95	1.0	0.05	0.95	0.85	-0.1	0.95	0.99	0.04	0.97	0.97	0.0
	0.96	1.0	0.04	0.96	0.17	-0.79	0.96	0.96	0.0	1.0	0.99	-0.01
	0.93	0.99	0.06	0.93	0.21	-0.72	0.93	0.96	0.03	0.94	0.96	0.02
	0.96	1.0	0.04	0.96	0.16	-0.8	0.96	0.92	-0.04	0.97	0.99	0.02
	0.97	0.95	-0.02	0.97	0.32	-0.65	0.97	0.95	-0.02	0.98	0.95	-0.03
	0.95	0.99	0.04	0.95	0.16	-0.79	0.95	1.0	0.05	0.98	0.97	-0.01
	0.97	0.98	0.01	0.97	0.12	-0.85	0.97	0.96	-0.01	0.98	0.98	0.0
	0.95	0.99	0.04	0.95	0.1	-0.85	0.95	0.92	-0.03	0.99	0.99	0.0
ECCo	0.95	0.93	-0.02	0.95	0.91	-0.04	0.95	0.94	-0.01	0.97	0.97	0.0
	0.96	0.96	0.0	0.96	0.93	-0.03	0.96	0.94	-0.02	0.97	0.94	-0.03
	0.97	0.97	0.0	0.97	0.93	-0.04	0.97	0.97	0.0	0.98	0.96	-0.02
	0.94	0.94	0.0	0.94	0.89	-0.05	0.94	0.92	-0.02	0.95	0.98	0.03
	0.98	0.98	0.0	0.98	0.94	-0.04	0.98	0.96	-0.02	0.95	0.98	0.03
	0.96	0.97	0.01	0.96	0.87	-0.09	0.96	0.95	-0.01	0.96	0.98	0.02
	0.98	0.98	0.0	0.98	0.91	-0.07	0.98	0.97	-0.01	0.97	0.99	0.02
	0.93	0.95	0.02	0.93	0.88	-0.05	0.93	0.94	0.01	0.98	0.98	0.0
	0.96	0.97	0.01	0.96	0.94	-0.02	0.96	0.96	0.0	0.97	0.94	-0.03
	0.95	0.96	0.01	0.95	0.87	-0.08	0.95	0.95	0.0	0.97	0.98	0.01
Wachter	0.94	0.94	0.0	0.94	0.84	-0.1	0.94	0.94	0.0	0.97	0.96	-0.01

	0.95	0.94	-0.01	0.95	0.9	-0.05	0.95	0.92	-0.03	0.94	0.98	0.04
	0.97	0.97	0.0	0.97	0.84	-0.13	0.97	0.96	-0.01	0.99	0.98	-0.01
	0.97	0.97	0.0	0.97	0.9	-0.07	0.97	0.96	-0.01	0.96	0.98	0.02
	0.94	0.97	0.03	0.94	0.85	-0.09	0.94	0.95	0.01	0.94	0.97	0.03
	0.94	0.96	0.02	0.94	0.85	-0.09	0.94	0.94	0.0	0.97	0.99	0.02
	0.94	0.98	0.04	0.94	0.85	-0.09	0.94	0.95	0.01	0.98	0.98	0.0
	0.95	0.98	0.03	0.95	0.94	-0.01	0.95	0.98	0.03	0.98	0.98	0.0
	0.94	0.96	0.02	0.94	0.88	-0.06	0.94	0.93	-0.01	0.98	0.96	-0.02
	0.91	0.96	0.05	0.91	0.82	-0.09	0.91	0.95	0.04	0.95	0.95	0.0
Generic	0.94	0.93	-0.01	0.94	0.9	-0.04	0.94	0.94	0.0	0.98	0.97	-0.01
	0.95	0.97	0.02	0.95	0.93	-0.02	0.95	0.97	0.02	0.98	0.98	0.0
	0.95	0.93	-0.02	0.95	0.81	-0.14	0.95	0.92	-0.03	0.93	0.97	0.04
	0.93	0.94	0.01	0.93	0.89	-0.04	0.93	0.92	-0.01	0.96	0.98	0.02
	0.97	0.97	0.0	0.97	0.93	-0.04	0.97	0.97	0.0	0.98	0.98	0.0
	0.97	0.95	-0.02	0.97	0.85	-0.12	0.97	0.95	-0.02	0.96	0.97	0.01
	0.92	0.96	0.04	0.92	0.86	-0.06	0.92	0.92	0.0	0.97	0.97	0.0
	0.93	0.98	0.05	0.93	0.9	-0.03	0.93	0.92	-0.01	0.97	0.96	-0.01
	0.98	0.98	0.0	0.98	0.88	-0.1	0.98	0.96	-0.02	0.98	0.98	0.0
	0.94	0.96	0.02	0.94	0.82	-0.12	0.94	0.94	0.0	0.98	0.98	0.0
DiCE	0.96	0.94	-0.02	0.96	0.92	-0.04	0.96	0.95	-0.01	0.97	0.98	0.01
	0.93	0.95	0.02	0.93	0.9	-0.03	0.93	0.93	0.0	0.97	0.99	0.02
	0.93	0.96	0.03	0.93	0.91	-0.02	0.93	0.95	0.02	0.96	0.95	-0.01
	0.95	0.95	0.0	0.95	0.9	-0.05	0.95	0.91	-0.04	0.98	0.97	-0.01
	0.93	0.96	0.03	0.93	0.91	-0.02	0.93	0.92	-0.01	0.97	0.94	-0.03
	0.97	0.97	0.0	0.97	0.82	-0.15	0.97	0.96	-0.01	0.98	0.98	0.0
	0.97	0.97	0.0	0.97	0.92	-0.05	0.97	0.97	0.0	0.97	0.96	-0.01
	0.95	0.93	-0.02	0.95	0.85	-0.1	0.95	0.94	-0.01	0.98	0.97	-0.01
	0.91	0.95	0.04	0.91	0.88	-0.03	0.91	0.92	0.01	0.96	0.95	-0.01
	0.94	0.93	-0.01	0.94	0.92	-0.02	0.94	0.91	-0.03	0.98	0.95	-0.03
ClaPROAR	0.96	0.97	0.01	0.96	0.9	-0.06	0.96	0.95	-0.01	0.99	0.97	-0.02
	0.93	0.95	0.02	0.93	0.86	-0.07	0.93	0.94	0.01	0.98	0.96	-0.02
	0.92	0.95	0.03	0.92	0.89	-0.03	0.92	0.92	0.0	0.99	0.98	-0.01
	0.92	0.96	0.04	0.92	0.85	-0.07	0.92	0.95	0.03	0.96	0.95	-0.01
	0.94	0.96	0.02	0.94	0.85	-0.09	0.94	0.96	0.02	0.98	0.97	-0.01
	0.96	0.97	0.01	0.96	0.94	-0.02	0.96	0.94	-0.02	0.98	0.98	0.0
	0.98	0.96	-0.02	0.98	0.93	-0.05	0.98	0.94	-0.04	0.98	0.98	0.0
	0.96	0.98	0.02	0.96	0.82	-0.14	0.96	0.96	0.0	0.98	0.94	-0.04
	0.92	0.97	0.05	0.92	0.88	-0.04	0.92	0.94	0.02	0.97	0.99	0.02
	0.93	0.95	0.02	0.93	0.91	-0.02	0.93	0.91	-0.02	0.97	0.97	0.0

Tab. 183: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a deep ensembles, experiment 2

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.949	0.96	0.01	0.949	0.848	-0.101	0.949	0.929	-0.02	0.939	0.939	0.0
	0.909	0.97	0.061	0.909	0.869	-0.04	0.96	0.939	-0.02	0.929	0.899	-0.03
	0.869	0.99	0.121	0.869	0.889	0.02	0.909	0.929	0.02	0.939	0.929	-0.01
	0.929	0.98	0.051	0.929	0.838	-0.091	0.929	0.939	0.01	0.909	0.939	0.03
	0.939	0.949	0.01	0.939	0.889	-0.051	0.949	0.939	-0.01	0.909	0.939	0.03
	0.919	0.96	0.04	0.919	0.889	-0.03	0.909	0.889	-0.02	0.97	0.929	-0.04
	0.899	0.97	0.071	0.899	0.869	-0.03	0.899	0.909	0.01	0.96	0.97	0.01
	0.96	0.97	0.01	0.96	0.879	-0.081	0.919	0.919	0.0	0.929	0.939	0.01
	0.909	0.949	0.04	0.909	0.859	-0.051	0.939	0.929	-0.01	0.899	0.899	0.0
	0.929	0.939	0.01	0.929	0.848	-0.081	0.949	0.96	0.01	0.949	0.949	0.0

REVISE	0.929	1.0	0.071	0.929	0.121	-0.808	0.939	1.0	0.061	0.919	0.919	0.0
	0.97	1.0	0.03	0.97	0.444	-0.525	0.96	0.919	-0.04	0.919	0.99	0.071
	0.889	0.99	0.101	0.889	0.172	-0.717	0.939	0.99	0.051	0.96	0.97	0.01
	0.949	1.0	0.051	0.949	0.202	-0.747	0.929	0.879	-0.051	0.949	0.909	-0.04
	0.97	1.0	0.03	0.97	0.192	-0.778	0.96	0.889	-0.071	0.96	0.949	-0.01
	0.99	1.0	0.01	0.99	0.222	-0.768	0.919	1.0	0.081	0.939	0.99	0.051
	0.939	0.98	0.04	0.939	0.162	-0.778	0.929	0.98	0.051	0.97	0.99	0.02
	0.949	1.0	0.051	0.949	0.121	-0.828	0.98	0.96	-0.02	0.949	0.97	0.02
	0.97	1.0	0.03	0.97	0.515	-0.455	0.929	0.929	0.0	0.98	0.929	-0.051
	0.949	0.99	0.04	0.949	0.505	-0.444	0.919	0.97	0.051	0.949	0.949	0.0
ECCo	0.949	0.949	0.0	0.949	0.879	-0.071	0.939	0.939	0.0	0.96	0.949	-0.01
	0.939	0.939	0.0	0.939	0.919	-0.02	0.939	0.939	0.0	0.889	0.949	0.061
	0.899	0.929	0.03	0.899	0.838	-0.061	0.96	0.919	-0.04	0.919	0.939	0.02
	0.919	0.97	0.051	0.919	0.848	-0.071	0.939	0.899	-0.04	0.949	0.949	0.0
	0.939	0.949	0.01	0.939	0.889	-0.051	0.929	0.98	0.051	0.939	0.949	0.01
	0.949	0.949	0.0	0.949	0.869	-0.081	0.97	0.929	-0.04	0.929	0.909	-0.02
	0.939	0.98	0.04	0.939	0.889	-0.051	0.949	0.96	0.01	0.929	0.919	-0.01
	0.929	0.939	0.01	0.929	0.909	-0.02	0.929	0.949	0.02	0.929	0.919	-0.01
	0.96	0.98	0.02	0.96	0.929	-0.03	0.96	0.96	0.0	0.939	0.929	-0.01
	0.939	0.949	0.01	0.939	0.828	-0.111	0.96	0.96	0.0	0.939	0.919	-0.02
Wachter	0.96	0.96	0.0	0.96	0.838	-0.121	0.919	0.949	0.03	0.929	0.98	0.051
	0.949	0.98	0.03	0.949	0.939	-0.01	0.97	0.96	-0.01	0.909	0.949	0.04
	0.929	0.96	0.03	0.929	0.889	-0.04	0.939	0.949	0.01	0.919	0.899	-0.02
	0.889	0.949	0.061	0.889	0.869	-0.02	0.96	0.949	-0.01	0.929	0.939	0.01
	0.939	0.97	0.03	0.939	0.899	-0.04	0.909	0.949	0.04	0.939	0.96	0.02
	0.949	0.949	0.0	0.949	0.818	-0.131	0.949	0.97	0.02	0.929	0.909	-0.02
	0.929	0.97	0.04	0.929	0.869	-0.061	0.939	0.899	-0.04	0.909	0.949	0.04
	0.909	0.949	0.04	0.909	0.869	-0.04	0.899	0.939	0.04	0.949	0.96	0.01
	0.949	0.949	0.0	0.949	0.879	-0.071	0.949	0.97	0.02	0.96	0.949	-0.01
	0.909	0.98	0.071	0.909	0.808	-0.101	0.949	0.96	0.01	0.96	0.96	0.0
Generic	0.919	0.939	0.02	0.919	0.869	-0.051	0.939	0.949	0.01	0.949	0.929	-0.02
	0.929	0.939	0.01	0.929	0.889	-0.04	0.96	0.96	0.0	0.919	0.96	0.04
	0.939	0.96	0.02	0.939	0.838	-0.101	0.949	0.96	0.01	0.929	0.919	-0.01
	0.949	0.96	0.01	0.949	0.869	-0.081	0.949	0.96	0.01	0.939	0.929	-0.01
	0.97	0.97	0.0	0.97	0.899	-0.071	0.929	0.96	0.03	0.98	0.97	-0.01
	0.97	0.97	0.0	0.97	0.879	-0.091	0.939	0.939	0.0	0.939	0.929	-0.01
	0.98	0.98	0.0	0.98	0.889	-0.091	0.949	0.899	-0.051	0.919	0.899	-0.02
	0.939	0.96	0.02	0.939	0.818	-0.121	0.929	0.949	0.02	0.96	0.949	-0.01
	0.949	0.97	0.02	0.949	0.808	-0.141	0.96	0.919	-0.04	0.929	0.929	0.0
	0.939	0.97	0.03	0.939	0.869	-0.071	0.919	0.939	0.02	0.939	0.929	-0.01
DiCE	0.98	0.98	0.0	0.98	0.869	-0.111	0.96	0.899	-0.061	0.919	0.97	0.051
	0.96	0.97	0.01	0.96	0.889	-0.071	0.97	0.97	0.0	0.939	0.96	0.02
	0.939	0.96	0.02	0.939	0.879	-0.061	0.949	0.949	0.0	0.939	0.889	-0.051
	0.929	0.96	0.03	0.929	0.889	-0.04	0.929	0.949	0.02	0.949	0.929	-0.02
	0.97	0.98	0.01	0.97	0.899	-0.071	0.96	0.939	-0.02	0.939	0.939	0.0
	0.869	0.97	0.101	0.869	0.869	0.0	0.949	0.96	0.01	0.879	0.939	0.061
	0.929	0.949	0.02	0.929	0.869	-0.061	0.98	0.98	0.0	0.929	0.949	0.02
	0.949	0.97	0.02	0.949	0.889	-0.061	0.949	0.899	-0.051	0.939	0.949	0.01
	0.939	0.949	0.01	0.939	0.838	-0.101	0.939	0.939	0.0	0.939	0.939	0.0
	0.97	0.98	0.01	0.97	0.899	-0.071	0.919	0.919	0.0	0.949	0.919	-0.03
ClaPROAR	0.909	0.96	0.051	0.909	0.889	-0.02	0.929	0.939	0.01	0.939	0.939	0.0
	0.97	0.98	0.01	0.97	0.929	-0.04	0.96	0.96	0.0	0.939	0.939	0.0
	0.949	0.97	0.02	0.949	0.879	-0.071	0.939	0.909	-0.03	0.869	0.97	0.101
	0.949	0.97	0.02	0.949	0.838	-0.111	0.929	0.919	-0.01	0.949	0.939	-0.01
	0.919	0.97	0.051	0.919	0.929	0.01	0.919	0.96	0.04	0.939	0.869	-0.071

	0.939	0.96	0.02	0.939	0.889	-0.051	0.879	0.939	0.061	0.929	0.939	0.01
	0.919	0.96	0.04	0.919	0.949	0.03	0.919	0.939	0.02	0.919	0.919	0.0
	0.929	0.949	0.02	0.929	0.899	-0.03	0.97	0.97	0.0	0.96	0.949	-0.01
	0.889	0.97	0.081	0.889	0.838	-0.051	0.929	0.949	0.02	0.939	0.949	0.01
	0.889	0.949	0.061	0.889	0.869	-0.02	0.929	0.96	0.03	0.929	0.929	0.0

Tab. 184: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a deep ensembles, experiment 3

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.879	0.909	0.03	0.879	0.909	0.03	0.889	0.919	0.03	0.899	0.879	-0.02
	0.909	0.909	0.0	0.909	0.879	-0.03	0.869	0.899	0.03	0.909	0.909	0.0
	0.909	0.929	0.02	0.909	0.808	-0.101	0.929	0.919	-0.01	0.929	0.939	0.01
	0.909	0.909	0.0	0.909	0.808	-0.101	0.909	0.899	-0.01	0.879	0.919	0.04
	0.909	0.919	0.01	0.909	0.869	-0.04	0.929	0.909	-0.02	0.929	0.909	-0.02
	0.939	0.919	-0.02	0.939	0.869	-0.071	0.929	0.909	-0.02	0.889	0.909	0.02
	0.899	0.949	0.051	0.899	0.869	-0.03	0.899	0.909	0.01	0.899	0.909	0.01
	0.869	0.899	0.03	0.869	0.838	-0.03	0.929	0.899	-0.03	0.919	0.919	0.0
	0.929	0.96	0.03	0.929	0.909	-0.02	0.909	0.949	0.04	0.939	0.919	-0.02
	0.828	0.919	0.091	0.828	0.859	0.03	0.889	0.899	0.01	0.919	0.909	-0.01
REVISE	0.919	1.0	0.081	0.919	0.697	-0.222	0.889	0.98	0.091	0.919	0.97	0.051
	0.939	0.929	-0.01	0.939	0.222	-0.717	0.919	0.96	0.04	0.909	0.98	0.071
	0.949	0.98	0.03	0.949	0.364	-0.586	0.909	0.939	0.03	0.919	0.98	0.061
	0.919	1.0	0.081	0.919	0.202	-0.717	0.919	0.899	-0.02	0.889	0.919	0.03
	0.929	0.96	0.03	0.929	0.152	-0.778	0.899	0.919	0.02	0.909	0.98	0.071
	0.909	0.97	0.061	0.909	0.212	-0.697	0.909	0.889	-0.02	0.939	0.929	-0.01
	0.899	0.949	0.051	0.899	0.394	-0.505	0.939	0.919	-0.02	0.909	0.97	0.061
	0.939	1.0	0.061	0.939	0.091	-0.848	0.929	0.929	0.0	0.949	0.949	0.0
	0.879	0.97	0.091	0.879	0.192	-0.687	0.929	0.96	0.03	0.929	0.929	0.0
	0.889	0.99	0.101	0.889	0.172	-0.717	0.96	0.98	0.02	0.929	0.909	-0.02
ECCo	0.939	0.949	0.01	0.939	0.788	-0.152	0.939	0.919	-0.02	0.869	0.879	0.01
	0.949	0.929	-0.02	0.949	0.808	-0.141	0.848	0.899	0.051	0.889	0.929	0.04
	0.889	0.96	0.071	0.889	0.808	-0.081	0.899	0.879	-0.02	0.909	0.889	-0.02
	0.909	0.97	0.061	0.909	0.788	-0.121	0.939	0.939	0.0	0.929	0.919	-0.01
	0.889	0.939	0.051	0.889	0.848	-0.04	0.909	0.889	-0.02	0.909	0.909	0.0
	0.909	0.909	0.0	0.909	0.848	-0.061	0.949	0.919	-0.03	0.889	0.889	0.0
	0.899	0.899	0.0	0.899	0.828	-0.071	0.909	0.889	-0.02	0.939	0.929	-0.01
	0.929	0.949	0.02	0.929	0.838	-0.091	0.869	0.929	0.061	0.96	0.949	-0.01
	0.879	0.919	0.04	0.879	0.768	-0.111	0.909	0.909	0.0	0.949	0.929	-0.02
	0.879	0.949	0.071	0.879	0.808	-0.071	0.96	0.96	0.0	0.909	0.909	0.0
Wachter	0.929	0.96	0.03	0.929	0.798	-0.131	0.949	0.949	0.0	0.909	0.96	0.051
	0.929	0.97	0.04	0.929	0.818	-0.111	0.929	0.929	0.0	0.909	0.929	0.02
	0.939	0.98	0.04	0.939	0.828	-0.111	0.939	0.929	-0.01	0.889	0.949	0.061
	0.929	0.96	0.03	0.929	0.808	-0.121	0.939	0.919	-0.02	0.909	0.919	0.01
	0.939	0.98	0.04	0.939	0.778	-0.162	0.848	0.869	0.02	0.929	0.96	0.03
	0.929	0.97	0.04	0.929	0.818	-0.111	0.889	0.899	0.01	0.939	0.939	0.0
	0.909	0.96	0.051	0.909	0.848	-0.061	0.929	0.929	0.0	0.919	0.939	0.02
	0.939	0.97	0.03	0.939	0.788	-0.152	0.869	0.859	-0.01	0.909	0.879	-0.03
	0.879	0.98	0.101	0.879	0.879	0.0	0.899	0.939	0.04	0.909	0.939	0.03
	0.919	0.919	0.0	0.919	0.758	-0.162	0.919	0.929	0.01	0.919	0.949	0.03
Generic	0.899	0.97	0.071	0.899	0.828	-0.071	0.899	0.899	0.0	0.869	0.909	0.04
	0.939	0.96	0.02	0.939	0.869	-0.071	0.929	0.929	0.0	0.909	0.919	0.01
	0.899	0.99	0.091	0.899	0.788	-0.111	0.96	0.949	-0.01	0.869	0.909	0.04
	0.939	0.96	0.02	0.939	0.879	-0.061	0.939	0.949	0.01	0.859	0.929	0.071

	0.929	0.939	0.01	0.929	0.869	-0.061	0.949	0.97	0.02	0.919	0.889	-0.03
	0.97	0.939	-0.03	0.97	0.798	-0.172	0.949	0.929	-0.02	0.889	0.939	0.051
	0.919	0.97	0.051	0.919	0.838	-0.081	0.889	0.899	0.01	0.939	0.939	0.0
	0.909	0.929	0.02	0.909	0.768	-0.141	0.869	0.899	0.03	0.96	0.99	0.03
	0.929	0.96	0.03	0.929	0.818	-0.111	0.899	0.889	-0.01	0.919	0.929	0.01
	0.919	0.939	0.02	0.919	0.808	-0.111	0.949	0.939	-0.01	0.949	0.929	-0.02
DiCE	0.949	0.97	0.02	0.949	0.788	-0.162	0.879	0.909	0.03	0.909	0.939	0.03
	0.889	0.909	0.02	0.889	0.848	-0.04	0.869	0.899	0.03	0.889	0.879	-0.01
	0.96	0.97	0.01	0.96	0.788	-0.172	0.899	0.909	0.01	0.899	0.909	0.01
	0.919	0.949	0.03	0.919	0.758	-0.162	0.909	0.899	-0.01	0.96	0.96	0.0
	0.909	0.96	0.051	0.909	0.859	-0.051	0.909	0.939	0.03	0.98	0.99	0.01
	0.859	0.939	0.081	0.859	0.869	0.01	0.97	0.96	-0.01	0.96	0.919	-0.04
	0.929	0.97	0.04	0.929	0.808	-0.121	0.939	0.929	-0.01	0.919	0.929	0.01
	0.929	0.949	0.02	0.929	0.768	-0.162	0.939	0.899	-0.04	0.929	0.919	-0.01
	0.929	0.949	0.02	0.929	0.798	-0.131	0.919	0.909	-0.01	0.929	0.909	-0.02
	0.939	0.909	-0.03	0.939	0.798	-0.141	0.889	0.929	0.04	0.909	0.919	0.01
ClaPROAR	0.939	0.98	0.04	0.939	0.778	-0.162	0.96	0.949	-0.01	0.929	0.919	-0.01
	0.929	0.96	0.03	0.929	0.818	-0.111	0.909	0.909	0.0	0.919	0.929	0.01
	0.939	0.97	0.03	0.939	0.828	-0.111	0.909	0.909	0.0	0.889	0.909	0.02
	0.909	0.97	0.061	0.909	0.747	-0.162	0.909	0.899	-0.01	0.939	0.949	0.01
	0.899	0.939	0.04	0.899	0.768	-0.131	0.919	0.889	-0.03	0.919	0.909	-0.01
	0.919	0.97	0.051	0.919	0.818	-0.101	0.96	0.949	-0.01	0.919	0.909	-0.01
	0.889	0.97	0.081	0.889	0.747	-0.141	0.899	0.919	0.02	0.949	0.929	-0.02
	0.939	0.97	0.03	0.939	0.788	-0.152	0.929	0.929	0.0	0.919	0.909	-0.01
	0.929	0.919	-0.01	0.929	0.859	-0.071	0.909	0.909	0.0	0.909	0.919	0.01
	0.899	0.939	0.04	0.899	0.818	-0.081	0.919	0.889	-0.03	0.939	0.939	0.0

Tab. 185: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a deep ensembles, experiment 4

	all			all counter			half			random		
Generator	d	e	diff	d	e	diff	d	e	diff	d	e	diff
Gravitational	0.96	0.98	0.02	0.96	0.889	-0.071	0.929	0.929	0.0	0.949	0.96	0.01
	0.949	0.98	0.03	0.949	0.848	-0.101	0.909	0.919	0.01	0.96	0.949	-0.01
	0.939	0.96	0.02	0.939	0.798	-0.141	0.929	0.919	-0.01	0.96	0.96	0.0
	0.949	0.97	0.02	0.949	0.889	-0.061	0.939	0.929	-0.01	0.97	0.939	-0.03
	0.96	0.96	0.0	0.96	0.818	-0.141	0.919	0.939	0.02	0.949	0.96	0.01
	0.949	0.96	0.01	0.949	0.848	-0.101	0.919	0.929	0.01	0.949	0.96	0.01
	0.96	0.99	0.03	0.96	0.879	-0.081	0.889	0.949	0.061	0.949	0.99	0.04
	0.949	0.96	0.01	0.949	0.859	-0.091	0.939	0.939	0.0	0.97	0.98	0.01
	0.949	0.949	0.0	0.949	0.869	-0.081	0.919	0.919	0.0	0.96	0.929	-0.03
	0.96	0.97	0.01	0.96	0.869	-0.091	0.909	0.909	0.0	0.939	0.939	0.0
REVISE	0.939	0.98	0.04	0.939	0.616	-0.323	0.919	0.97	0.051	0.96	0.96	0.0
	0.97	0.97	0.0	0.97	0.909	-0.061	0.939	0.949	0.01	0.98	0.96	-0.02
	0.96	0.97	0.01	0.96	0.333	-0.626	0.889	0.939	0.051	0.97	0.98	0.01
	0.97	0.97	0.0	0.97	0.97	0.0	0.929	0.98	0.051	0.98	0.929	-0.051
	0.98	0.96	-0.02	0.98	0.909	-0.071	0.909	0.899	-0.01	0.96	0.97	0.01
	0.949	0.96	0.01	0.949	0.97	0.02	0.899	0.929	0.03	0.939	0.98	0.04
	0.939	0.97	0.03	0.939	0.293	-0.646	0.899	0.889	-0.01	0.97	0.97	0.0
	0.97	0.99	0.02	0.97	0.455	-0.515	0.848	0.909	0.061	0.939	0.939	0.0
	0.949	0.99	0.04	0.949	0.495	-0.455	0.939	0.909	-0.03	0.949	0.98	0.03
	0.949	0.97	0.02	0.949	0.99	0.04	0.939	0.949	0.01	0.98	0.98	0.0
ECCo	0.97	0.99	0.02	0.97	0.838	-0.131	0.919	0.929	0.01	0.99	0.96	-0.03
	0.96	0.98	0.02	0.96	0.848	-0.111	0.929	0.939	0.01	0.96	0.97	0.01
	0.929	0.98	0.051	0.929	0.939	0.01	0.909	0.899	-0.01	0.96	0.97	0.01

	0.96	0.99	0.03	0.96	0.848	-0.111	0.939	0.929	-0.01	0.98	0.939	-0.04
	0.98	0.99	0.01	0.98	0.919	-0.061	0.949	0.929	-0.02	0.96	0.96	0.0
	0.97	0.98	0.01	0.97	0.869	-0.101	0.919	0.919	0.0	0.98	0.919	-0.061
	0.97	0.99	0.02	0.97	0.838	-0.131	0.939	0.939	0.0	0.96	0.96	0.0
	0.97	0.98	0.01	0.97	0.919	-0.051	0.939	0.929	-0.01	0.949	0.96	0.01
	0.949	0.97	0.02	0.949	0.838	-0.111	0.929	0.919	-0.01	0.96	0.949	-0.01
	0.99	0.98	-0.01	0.99	0.939	-0.051	0.97	0.939	-0.03	0.949	0.939	-0.01
Wachter	0.949	0.99	0.04	0.949	0.939	-0.01	0.939	0.949	0.01	0.96	0.98	0.02
	0.96	0.98	0.02	0.96	0.919	-0.04	0.919	0.889	-0.03	0.96	0.98	0.02
	0.97	0.98	0.01	0.97	0.899	-0.071	0.889	0.919	0.03	0.929	0.939	0.01
	0.96	0.97	0.01	0.96	0.919	-0.04	0.919	0.919	0.0	0.97	0.96	-0.01
	0.96	0.98	0.02	0.96	0.96	0.0	0.919	0.909	-0.01	0.97	0.96	-0.01
	0.939	0.98	0.04	0.939	0.909	-0.03	0.949	0.949	0.0	0.96	0.879	-0.081
	0.97	0.99	0.02	0.97	0.939	-0.03	0.909	0.919	0.01	0.96	0.96	0.0
	0.97	0.98	0.01	0.97	0.97	0.0	0.889	0.899	0.01	0.949	0.98	0.03
	0.949	0.97	0.02	0.949	0.929	-0.02	0.899	0.909	0.01	0.96	0.99	0.03
	0.97	0.97	0.0	0.97	0.939	-0.03	0.919	0.919	0.0	0.98	0.97	-0.01
Generic	0.96	0.98	0.02	0.96	0.939	-0.02	0.929	0.949	0.02	0.96	0.97	0.01
	0.97	0.98	0.01	0.97	0.919	-0.051	0.949	0.949	0.0	0.98	0.98	0.0
	0.98	1.0	0.02	0.98	0.949	-0.03	0.899	0.939	0.04	0.939	0.98	0.04
	0.96	0.97	0.01	0.96	0.939	-0.02	0.939	0.939	0.0	0.97	0.96	-0.01
	0.99	0.99	0.0	0.99	0.96	-0.03	0.909	0.919	0.01	0.96	0.96	0.0
	0.98	0.98	0.0	0.98	0.919	-0.061	0.909	0.909	0.0	0.939	0.98	0.04
	0.96	0.99	0.03	0.96	0.949	-0.01	0.949	0.919	-0.03	0.939	0.97	0.03
	0.949	0.99	0.04	0.949	0.899	-0.051	0.919	0.919	0.0	0.949	0.97	0.02
	0.97	0.949	-0.02	0.97	0.949	-0.02	0.899	0.879	-0.02	0.96	0.98	0.02
	0.97	0.98	0.01	0.97	0.949	-0.02	0.909	0.909	0.0	0.97	0.97	0.0
DiCE	0.97	1.0	0.03	0.97	0.939	-0.03	0.909	0.919	0.01	0.96	0.97	0.01
	0.97	0.98	0.01	0.97	0.949	-0.02	0.909	0.939	0.03	0.939	0.939	0.0
	0.939	1.0	0.061	0.939	0.929	-0.01	0.919	0.909	-0.01	0.96	0.949	-0.01
	0.96	0.98	0.02	0.96	0.919	-0.04	0.899	0.919	0.02	0.949	0.96	0.01
	0.949	0.98	0.03	0.949	0.929	-0.02	0.949	0.929	-0.02	0.98	0.97	-0.01
	0.949	0.97	0.02	0.949	0.909	-0.04	0.899	0.909	0.01	0.97	0.929	-0.04
	0.97	0.98	0.01	0.97	0.96	-0.01	0.949	0.949	0.0	0.949	0.97	0.02
	0.98	0.97	-0.01	0.98	0.97	-0.01	0.919	0.919	0.0	0.929	0.818	-0.111
	0.96	0.99	0.03	0.96	0.96	0.0	0.939	0.909	-0.03	0.97	0.98	0.01
	0.939	0.99	0.051	0.939	0.899	-0.04	0.939	0.949	0.01	0.939	0.949	0.01
ClaPROAR	0.96	0.99	0.03	0.96	0.99	0.03	0.949	0.939	-0.01	0.929	0.939	0.01
	0.97	0.99	0.02	0.97	0.949	-0.02	0.929	0.929	0.0	0.98	0.97	-0.01
	0.96	0.97	0.01	0.96	0.939	-0.02	0.929	0.919	-0.01	0.96	0.909	-0.051
	0.949	0.99	0.04	0.949	0.96	0.01	0.939	0.939	0.0	0.949	0.97	0.02
	0.929	0.98	0.051	0.929	0.929	0.0	0.949	0.96	0.01	0.949	0.97	0.02
	0.96	0.99	0.03	0.96	0.919	-0.04	0.949	0.949	0.0	0.99	0.949	-0.04
	0.97	0.99	0.02	0.97	0.97	0.0	0.919	0.899	-0.02	0.96	0.98	0.02
	0.96	0.99	0.03	0.96	0.939	-0.02	0.879	0.899	0.02	0.96	0.949	-0.01
	0.96	0.98	0.02	0.96	0.96	0.0	0.889	0.919	0.03	0.929	0.99	0.061
	0.98	0.98	0.0	0.98	0.939	-0.04	0.929	0.939	0.01	0.96	0.96	0.0

Tab. 186: The simulation accuracy of models d and e when using different ways to include counterfactual explanation during training for the moons dataset using a deep ensembles, experiment 5

F.3. Domain shift

F.3.1. Overlapping dataset using MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.017	0.024	0.021	0.019	0.01	0.03

	0.016	0.035	0.014	0.038	0.0	0.01
	0.017	0.042	0.019	0.018	0.0	0.04
	0.017	0.026	0.017	0.032	0.0	0.0
	0.018	0.024	0.017	0.033	0.0	0.02
	0.017	0.032	0.016	0.027	0.02	0.02
	0.015	0.029	0.014	0.049	0.0	0.02
	0.017	0.023	0.015	0.037	0.01	0.02
	0.018	0.021	0.015	0.035	0.0	0.0
	0.015	0.031	0.021	0.027	0.01	0.03
REVISE	0.018	0.019	0.016	0.032	0.01	0.0
	0.017	0.029	0.015	0.037	0.0	0.0
	0.016	0.035	0.016	0.035	0.0	0.0
	0.015	0.037	0.017	0.036	0.0	0.0
	0.017	0.039	0.017	0.032	0.0	0.01
	0.016	0.034	0.016	0.038	0.0	0.0
	0.017	0.029	0.014	0.047	0.0	0.0
	0.017	0.027	0.015	0.037	0.0	0.01
	0.016	0.031	0.015	0.042	0.0	0.02
	0.016	0.036	0.021	0.015	0.0	0.03
ECCo	0.016	0.038	0.016	0.027	0.0	0.0
	0.017	0.024	0.016	0.028	0.0	0.0
	0.015	0.044	0.014	0.044	0.0	0.0
	0.016	0.028	0.021	0.02	0.0	0.03
	0.018	0.023	0.016	0.043	0.0	0.01
	0.016	0.039	0.013	0.041	0.0	0.0
	0.016	0.023	0.015	0.037	0.0	0.0
	0.018	0.026	0.021	0.027	0.0	0.03
	0.016	0.028	0.021	0.012	0.02	0.03
	0.017	0.025	0.012	0.06	0.0	0.05
Wachter	0.017	0.036	0.018	0.029	0.01	0.0
	0.016	0.035	0.015	0.039	0.0	0.01
	0.017	0.03	0.016	0.036	0.0	0.0
	0.017	0.027	0.021	0.019	0.02	0.03
	0.016	0.02	0.017	0.033	0.0	0.0
	0.017	0.024	0.017	0.048	0.0	0.0
	0.017	0.021	0.021	0.017	0.0	0.03
	0.015	0.043	0.017	0.034	0.0	0.0
	0.017	0.032	0.017	0.04	0.0	0.0
	0.016	0.038	0.02	0.017	0.0	0.03
Generic	0.015	0.042	0.021	0.014	0.0	0.03
	0.016	0.033	0.021	0.025	0.0	0.03
	0.017	0.025	0.02	0.009	0.02	0.03
	0.017	0.03	0.018	0.027	0.02	0.01
	0.017	0.027	0.018	0.026	0.0	0.03
	0.017	0.029	0.014	0.048	0.0	0.01
	0.017	0.022	0.019	0.018	0.0	0.03
	0.017	0.035	0.017	0.022	0.0	0.01
	0.017	0.033	0.018	0.03	0.0	0.0
	0.017	0.04	0.015	0.039	0.0	0.0
DiCE	0.017	0.039	0.017	0.031	0.0	0.01
	0.017	0.041	0.017	0.03	0.0	0.0
	0.017	0.022	0.019	0.02	0.0	0.03
	0.018	0.023	0.016	0.042	0.0	0.0
	0.018	0.021	0.021	0.021	0.0	0.03
	0.017	0.032	0.017	0.026	0.0	0.0
	0.017	0.029	0.017	0.023	0.0	0.0

	0.014	0.054	0.015	0.042	0.03	0.03
	0.016	0.042	0.021	0.018	0.02	0.03
	0.016	0.049	0.016	0.029	0.0	0.0
ClaPROAR	0.017	0.042	0.017	0.03	0.0	0.0
	0.017	0.037	0.016	0.04	0.0	0.0
	0.017	0.033	0.016	0.026	0.0	0.02
	0.017	0.033	0.021	0.019	0.01	0.03
	0.017	0.025	0.021	0.02	0.0	0.03
	0.015	0.036	0.017	0.042	0.0	0.02
	0.014	0.039	0.016	0.04	0.01	0.0
	0.016	0.023	0.015	0.028	0.0	0.0
	0.017	0.036	0.016	0.052	0.0	0.02
	0.016	0.038	0.02	0.029	0.0	0.03

Tab. 187: Domain shifts for the overlapping data experiment 1 using a MLP.

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.008	0.108	0.01	0.056	0.0	0.07
	0.008	0.097	0.009	0.09	0.0	0.0
	0.009	0.096	0.008	0.087	0.0	0.05
	0.009	0.074	0.009	0.078	0.0	0.02
	0.008	0.098	0.008	0.088	0.0	0.04
	0.011	0.063	0.008	0.11	0.02	0.05
	0.011	0.059	0.01	0.05	0.01	0.01
	0.008	0.095	0.007	0.122	0.01	0.0
	0.011	0.066	0.01	0.079	0.01	0.03
	0.009	0.089	0.006	0.116	0.0	0.01
REVISE	0.009	0.091	0.007	0.102	0.0	0.01
	0.008	0.096	0.009	0.091	0.02	0.02
	0.008	0.101	0.01	0.081	0.01	0.02
	0.011	0.066	0.009	0.083	0.02	0.02
	0.009	0.091	0.011	0.081	0.01	0.03
	0.008	0.099	0.007	0.117	0.0	0.0
	0.009	0.067	0.011	0.057	0.0	0.01
	0.008	0.091	0.012	0.058	0.0	0.01
	0.011	0.077	0.01	0.072	0.02	0.0
	0.009	0.081	0.01	0.094	0.0	0.04
ECCo	0.012	0.058	0.008	0.07	0.02	0.0
	0.007	0.106	0.009	0.089	0.0	0.0
	0.01	0.076	0.011	0.069	0.0	0.02
	0.009	0.087	0.009	0.089	0.0	0.04
	0.008	0.095	0.006	0.128	0.0	0.0
	0.009	0.088	0.009	0.073	0.0	0.02
	0.009	0.09	0.008	0.095	0.0	0.06
	0.009	0.09	0.008	0.097	0.0	0.0
	0.008	0.092	0.01	0.083	0.0	0.02
	0.008	0.094	0.01	0.086	0.01	0.02
Wachter	0.008	0.087	0.01	0.076	0.0	0.02
	0.011	0.063	0.01	0.059	0.01	0.02
	0.009	0.082	0.006	0.126	0.0	0.03
	0.009	0.08	0.011	0.051	0.0	0.03
	0.009	0.085	0.009	0.099	0.0	0.0
	0.008	0.096	0.011	0.065	0.0	0.03
	0.008	0.097	0.01	0.076	0.0	0.04
	0.008	0.093	0.008	0.098	0.0	0.0

	0.009	0.082	0.009	0.087	0.0	0.02
	0.008	0.1	0.009	0.082	0.0	0.03
Generic	0.009	0.08	0.007	0.123	0.0	0.04
	0.009	0.089	0.01	0.071	0.0	0.03
	0.008	0.087	0.009	0.081	0.0	0.02
	0.007	0.111	0.011	0.078	0.0	0.03
	0.01	0.096	0.009	0.097	0.0	0.0
	0.008	0.097	0.01	0.073	0.01	0.04
	0.009	0.091	0.006	0.108	0.0	0.0
	0.008	0.097	0.009	0.083	0.0	0.0
	0.008	0.084	0.011	0.063	0.01	0.01
	0.011	0.066	0.01	0.061	0.01	0.02
DiCE	0.011	0.073	0.008	0.094	0.02	0.01
	0.008	0.096	0.008	0.083	0.0	0.02
	0.012	0.064	0.01	0.073	0.01	0.01
	0.011	0.071	0.011	0.056	0.01	0.02
	0.009	0.082	0.01	0.066	0.0	0.02
	0.01	0.075	0.01	0.078	0.0	0.02
	0.009	0.09	0.006	0.116	0.0	0.0
	0.009	0.078	0.009	0.096	0.0	0.0
	0.008	0.098	0.008	0.117	0.0	0.0
	0.011	0.07	0.011	0.066	0.01	0.03
ClaPROAR	0.007	0.098	0.008	0.108	0.0	0.01
	0.011	0.06	0.011	0.084	0.01	0.03
	0.007	0.136	0.007	0.104	0.0	0.0
	0.01	0.078	0.01	0.066	0.01	0.01
	0.007	0.123	0.006	0.128	0.0	0.0
	0.008	0.118	0.007	0.121	0.0	0.0
	0.006	0.108	0.008	0.09	0.01	0.01
	0.007	0.111	0.009	0.097	0.0	0.02
	0.01	0.072	0.012	0.053	0.01	0.03
	0.007	0.109	0.007	0.125	0.0	0.0

Tab. 188: Domain shifts for the overlapping data experiment 2 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.006	0.136	0.008	0.107	0.02	0.04
	0.006	0.136	0.008	0.09	0.01	0.02
	0.009	0.084	0.008	0.099	0.01	0.02
	0.007	0.115	0.008	0.1	0.01	0.02
	0.006	0.137	0.008	0.086	0.02	0.02
	0.006	0.129	0.005	0.126	0.01	0.01
	0.006	0.137	0.005	0.134	0.01	0.02
	0.007	0.09	0.005	0.137	0.0	0.02
	0.006	0.119	0.008	0.095	0.01	0.02
	0.006	0.126	0.007	0.103	0.02	0.01
REVISE	0.006	0.144	0.009	0.105	0.02	0.01
	0.005	0.155	0.008	0.084	0.01	0.01
	0.006	0.132	0.008	0.103	0.01	0.02
	0.006	0.137	0.008	0.102	0.01	0.02
	0.006	0.143	0.007	0.103	0.01	0.01
	0.009	0.088	0.007	0.103	0.02	0.02
	0.006	0.121	0.006	0.129	0.02	0.01
	0.006	0.136	0.007	0.111	0.0	0.01
	0.006	0.116	0.005	0.154	0.01	0.01

	0.009	0.098	0.008	0.113	0.01	0.02
ECCo	0.006	0.13	0.006	0.142	0.02	0.02
	0.006	0.106	0.008	0.089	0.01	0.01
	0.008	0.1	0.007	0.103	0.01	0.05
	0.006	0.149	0.005	0.172	0.02	0.01
	0.006	0.12	0.008	0.09	0.02	0.02
	0.007	0.107	0.008	0.106	0.01	0.03
	0.006	0.131	0.009	0.096	0.01	0.02
	0.006	0.144	0.008	0.112	0.01	0.01
	0.006	0.12	0.005	0.149	0.01	0.02
	0.006	0.116	0.004	0.192	0.01	0.04
Wachter	0.006	0.124	0.008	0.093	0.01	0.05
	0.006	0.118	0.006	0.123	0.01	0.01
	0.006	0.14	0.006	0.129	0.02	0.01
	0.009	0.079	0.008	0.107	0.01	0.01
	0.006	0.117	0.007	0.106	0.0	0.01
	0.006	0.131	0.009	0.089	0.02	0.02
	0.006	0.116	0.007	0.116	0.01	0.02
	0.006	0.132	0.007	0.128	0.0	0.02
	0.006	0.137	0.006	0.123	0.0	0.02
	0.009	0.098	0.008	0.102	0.01	0.02
Generic	0.007	0.106	0.006	0.116	0.02	0.01
	0.007	0.111	0.008	0.095	0.0	0.02
	0.006	0.123	0.007	0.118	0.01	0.01
	0.006	0.128	0.006	0.133	0.0	0.01
	0.008	0.092	0.006	0.135	0.03	0.01
	0.009	0.091	0.009	0.078	0.01	0.01
	0.006	0.128	0.006	0.125	0.02	0.01
	0.009	0.083	0.008	0.1	0.01	0.02
	0.009	0.091	0.008	0.112	0.01	0.01
	0.009	0.071	0.009	0.085	0.03	0.02
DiCE	0.006	0.131	0.005	0.138	0.01	0.0
	0.009	0.088	0.008	0.089	0.01	0.02
	0.007	0.112	0.008	0.107	0.01	0.01
	0.006	0.142	0.008	0.094	0.02	0.02
	0.005	0.148	0.007	0.12	0.0	0.01
	0.006	0.135	0.008	0.091	0.0	0.02
	0.006	0.129	0.008	0.107	0.01	0.02
	0.009	0.098	0.006	0.13	0.02	0.01
	0.007	0.109	0.006	0.12	0.02	0.01
	0.008	0.09	0.008	0.115	0.01	0.02
ClaPROAR	0.007	0.118	0.007	0.106	0.02	0.01
	0.006	0.129	0.006	0.127	0.02	0.01
	0.006	0.13	0.006	0.136	0.01	0.01
	0.008	0.096	0.008	0.095	0.02	0.01
	0.009	0.093	0.008	0.091	0.02	0.02
	0.005	0.14	0.006	0.116	0.01	0.0
	0.006	0.145	0.007	0.107	0.01	0.02
	0.007	0.119	0.007	0.118	0.0	0.01
	0.008	0.101	0.008	0.082	0.01	0.02
	0.006	0.152	0.006	0.114	0.01	0.02

Tab. 189: Domain shifts for the overlapping data experiment 2 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e

Gravitational	0.014	0.048	0.012	0.046	0.0	0.01
	0.014	0.033	0.012	0.066	0.0	0.03
	0.014	0.03	0.015	0.03	0.0	0.04
	0.014	0.037	0.011	0.06	0.0	0.01
	0.013	0.056	0.013	0.041	0.0	0.02
	0.013	0.055	0.012	0.051	0.0	0.02
	0.013	0.045	0.013	0.059	0.0	0.0
	0.013	0.06	0.013	0.051	0.01	0.03
	0.014	0.051	0.011	0.061	0.0	0.06
	0.013	0.044	0.012	0.068	0.01	0.02
REVISE	0.013	0.053	0.012	0.042	0.03	0.0
	0.012	0.058	0.011	0.054	0.0	0.02
	0.012	0.067	0.013	0.049	0.01	0.01
	0.014	0.044	0.014	0.042	0.0	0.0
	0.013	0.04	0.011	0.071	0.0	0.0
	0.013	0.056	0.012	0.06	0.0	0.0
	0.013	0.051	0.013	0.056	0.01	0.0
	0.014	0.038	0.013	0.046	0.0	0.0
	0.013	0.038	0.014	0.043	0.0	0.0
	0.014	0.038	0.012	0.06	0.0	0.0
ECCo	0.013	0.05	0.012	0.058	0.01	0.01
	0.013	0.031	0.012	0.048	0.0	0.01
	0.014	0.045	0.012	0.066	0.0	0.01
	0.013	0.046	0.013	0.048	0.01	0.01
	0.012	0.065	0.013	0.043	0.0	0.02
	0.014	0.048	0.013	0.031	0.0	0.0
	0.014	0.056	0.013	0.042	0.0	0.01
	0.014	0.042	0.013	0.056	0.0	0.0
	0.014	0.043	0.013	0.05	0.0	0.0
	0.014	0.046	0.012	0.051	0.0	0.02
Wachter	0.013	0.041	0.013	0.046	0.0	0.0
	0.013	0.053	0.014	0.037	0.0	0.0
	0.014	0.051	0.013	0.048	0.0	0.0
	0.013	0.055	0.011	0.066	0.0	0.01
	0.014	0.05	0.012	0.061	0.0	0.0
	0.014	0.046	0.013	0.042	0.0	0.0
	0.013	0.043	0.011	0.043	0.0	0.0
	0.013	0.05	0.011	0.073	0.0	0.01
	0.013	0.041	0.013	0.057	0.0	0.0
	0.014	0.045	0.012	0.067	0.0	0.0
Generic	0.013	0.047	0.012	0.059	0.01	0.0
	0.013	0.052	0.012	0.055	0.0	0.02
	0.013	0.056	0.012	0.057	0.0	0.0
	0.014	0.036	0.012	0.059	0.0	0.01
	0.013	0.057	0.012	0.055	0.0	0.01
	0.013	0.047	0.013	0.045	0.02	0.0
	0.014	0.031	0.014	0.039	0.0	0.0
	0.013	0.039	0.014	0.051	0.0	0.01
	0.013	0.049	0.011	0.055	0.0	0.0
	0.013	0.052	0.013	0.053	0.0	0.0
DiCE	0.013	0.04	0.012	0.06	0.0	0.01
	0.013	0.059	0.014	0.041	0.0	0.02
	0.013	0.06	0.011	0.062	0.01	0.01
	0.013	0.047	0.012	0.059	0.0	0.01
	0.013	0.044	0.012	0.063	0.01	0.0

	0.013	0.049	0.012	0.045	0.0	0.01
	0.013	0.04	0.012	0.053	0.0	0.01
	0.014	0.051	0.013	0.056	0.0	0.0
	0.013	0.045	0.013	0.053	0.01	0.01
	0.013	0.044	0.014	0.032	0.0	0.0
ClaPROAR	0.013	0.041	0.012	0.062	0.0	0.01
	0.013	0.047	0.014	0.042	0.01	0.0
	0.013	0.053	0.012	0.068	0.01	0.01
	0.014	0.036	0.013	0.053	0.0	0.0
	0.014	0.037	0.014	0.036	0.0	0.0
	0.014	0.052	0.014	0.052	0.0	0.01
	0.014	0.036	0.013	0.04	0.0	0.01
	0.014	0.04	0.013	0.049	0.0	0.0
	0.013	0.051	0.012	0.075	0.0	0.0
	0.014	0.045	0.013	0.068	0.0	0.01

Tab. 190: Domain shifts for the overlapping data experiment 4 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.015	0.024	0.018	0.028	0.0	0.03
	0.018	0.02	0.017	0.021	0.01	0.06
	0.019	0.02	0.018	0.025	0.01	0.01
	0.019	0.018	0.014	0.035	0.0	0.01
	0.015	0.035	0.014	0.028	0.0	0.02
	0.02	0.019	0.019	0.019	0.01	0.03
	0.02	0.017	0.015	0.043	0.01	0.03
	0.019	0.021	0.017	0.027	0.0	0.01
	0.02	0.011	0.02	0.016	0.03	0.04
	0.018	0.025	0.019	0.024	0.01	0.03
REVISE	0.018	0.031	0.019	0.027	0.01	0.03
	0.018	0.026	0.018	0.023	0.0	0.01
	0.02	0.016	0.018	0.022	0.0	0.0
	0.015	0.04	0.016	0.028	0.0	0.01
	0.021	0.017	0.016	0.036	0.01	0.01
	0.013	0.039	0.017	0.026	0.01	0.01
	0.016	0.034	0.016	0.039	0.0	0.01
	0.02	0.022	0.015	0.039	0.01	0.0
	0.021	0.022	0.015	0.036	0.01	0.0
	0.015	0.046	0.019	0.015	0.0	0.02
ECCo	0.019	0.029	0.018	0.027	0.0	0.01
	0.017	0.02	0.018	0.019	0.01	0.01
	0.018	0.023	0.02	0.012	0.01	0.02
	0.018	0.029	0.017	0.035	0.0	0.01
	0.019	0.019	0.019	0.028	0.01	0.02
	0.018	0.031	0.018	0.024	0.01	0.02
	0.018	0.036	0.016	0.031	0.01	0.01
	0.017	0.024	0.019	0.021	0.01	0.02
	0.019	0.022	0.016	0.028	0.0	0.0
	0.017	0.027	0.016	0.038	0.0	0.01
Wachter	0.018	0.025	0.016	0.033	0.0	0.01
	0.019	0.023	0.016	0.025	0.0	0.01
	0.02	0.03	0.017	0.024	0.01	0.01
	0.015	0.038	0.018	0.025	0.01	0.01
	0.02	0.022	0.018	0.023	0.02	0.02
	0.019	0.019	0.019	0.022	0.0	0.01

	0.019	0.026	0.018	0.024	0.0	0.01
	0.019	0.025	0.014	0.041	0.01	0.01
	0.022	0.017	0.019	0.016	0.01	0.01
	0.017	0.024	0.014	0.037	0.0	0.02
Generic	0.02	0.029	0.015	0.045	0.0	0.0
	0.015	0.03	0.019	0.018	0.0	0.0
	0.017	0.022	0.019	0.02	0.0	0.01
	0.016	0.046	0.018	0.031	0.0	0.01
	0.014	0.048	0.017	0.037	0.01	0.02
	0.016	0.035	0.016	0.035	0.01	0.01
	0.018	0.022	0.013	0.04	0.0	0.0
	0.02	0.017	0.02	0.017	0.01	0.02
	0.019	0.02	0.019	0.032	0.01	0.03
	0.015	0.038	0.018	0.023	0.0	0.0
DiCE	0.021	0.022	0.016	0.04	0.0	0.01
	0.016	0.034	0.018	0.024	0.02	0.02
	0.018	0.017	0.016	0.028	0.0	0.0
	0.018	0.025	0.017	0.029	0.0	0.04
	0.02	0.019	0.02	0.015	0.01	0.03
	0.018	0.014	0.019	0.017	0.0	0.01
	0.012	0.054	0.013	0.046	0.03	0.0
	0.016	0.023	0.016	0.034	0.0	0.02
	0.017	0.028	0.017	0.033	0.0	0.01
	0.021	0.024	0.014	0.049	0.02	0.04
ClaPROAR	0.021	0.017	0.019	0.023	0.01	0.02
	0.021	0.016	0.016	0.029	0.01	0.0
	0.019	0.019	0.018	0.029	0.0	0.01
	0.02	0.017	0.017	0.02	0.0	0.01
	0.017	0.032	0.012	0.041	0.0	0.01
	0.021	0.023	0.021	0.024	0.01	0.02
	0.013	0.039	0.018	0.028	0.0	0.0
	0.016	0.05	0.019	0.017	0.0	0.02
	0.013	0.054	0.018	0.021	0.0	0.01
	0.015	0.037	0.016	0.03	0.0	0.02

Tab. 191: Domain shifts for the overlapping data experiment 5 using a MLP

F.3.2. Overlapping dataset using Deep ensemble using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.019	0.018	0.018	0.022	0.01	0.01
	0.02	0.021	0.021	0.017	0.0	0.03
	0.019	0.036	0.015	0.034	0.0	0.01
	0.019	0.018	0.016	0.028	0.0	0.04
	0.019	0.025	0.018	0.029	0.0	0.0
	0.019	0.026	0.017	0.025	0.0	0.01
	0.019	0.023	0.021	0.021	0.0	0.03
	0.019	0.021	0.018	0.028	0.0	0.0
	0.017	0.03	0.021	0.022	0.01	0.03
	0.019	0.016	0.017	0.031	0.0	0.01
REVISE	0.019	0.017	0.02	0.015	0.0	0.03
	0.018	0.02	0.015	0.035	0.0	0.01
	0.019	0.024	0.018	0.026	0.0	0.0
	0.019	0.024	0.017	0.033	0.0	0.01
	0.018	0.033	0.019	0.025	0.0	0.0
	0.018	0.026	0.018	0.031	0.0	0.0

	0.019	0.022	0.017	0.02	0.0	0.01
	0.018	0.021	0.017	0.034	0.0	0.0
	0.017	0.034	0.019	0.025	0.01	0.04
	0.018	0.025	0.016	0.028	0.0	0.02
ECCo	0.018	0.026	0.017	0.027	0.0	0.02
	0.019	0.024	0.018	0.021	0.0	0.01
	0.019	0.034	0.021	0.025	0.01	0.03
	0.018	0.028	0.016	0.036	0.0	0.02
	0.018	0.025	0.018	0.034	0.0	0.01
	0.019	0.032	0.019	0.024	0.0	0.01
	0.019	0.016	0.017	0.028	0.0	0.01
	0.018	0.028	0.018	0.03	0.0	0.0
	0.019	0.018	0.018	0.016	0.01	0.02
	0.019	0.02	0.016	0.03	0.0	0.0
Wachter	0.019	0.028	0.017	0.032	0.0	0.0
	0.018	0.028	0.019	0.027	0.0	0.01
	0.018	0.025	0.021	0.027	0.0	0.03
	0.019	0.024	0.021	0.019	0.0	0.03
	0.019	0.016	0.017	0.033	0.0	0.01
	0.019	0.018	0.021	0.028	0.01	0.03
	0.019	0.02	0.018	0.022	0.0	0.0
	0.019	0.027	0.021	0.015	0.0	0.03
	0.019	0.024	0.021	0.026	0.0	0.03
	0.018	0.028	0.016	0.021	0.0	0.01
Generic	0.019	0.028	0.021	0.013	0.0	0.03
	0.019	0.027	0.017	0.036	0.0	0.01
	0.019	0.027	0.021	0.007	0.0	0.03
	0.019	0.029	0.016	0.028	0.0	0.0
	0.018	0.028	0.016	0.039	0.0	0.01
	0.018	0.026	0.021	0.02	0.0	0.03
	0.018	0.023	0.016	0.026	0.01	0.01
	0.018	0.028	0.018	0.022	0.0	0.0
	0.019	0.027	0.019	0.021	0.0	0.01
	0.019	0.029	0.019	0.026	0.0	0.0
DiCE	0.019	0.024	0.019	0.029	0.0	0.0
	0.018	0.041	0.018	0.026	0.01	0.0
	0.019	0.019	0.018	0.023	0.01	0.01
	0.018	0.026	0.017	0.036	0.0	0.01
	0.019	0.015	0.019	0.019	0.01	0.01
	0.019	0.029	0.017	0.03	0.01	0.02
	0.019	0.024	0.018	0.02	0.0	0.01
	0.018	0.029	0.019	0.029	0.0	0.01
	0.018	0.029	0.019	0.025	0.0	0.01
	0.018	0.035	0.017	0.023	0.0	0.01
ClaPROAR	0.018	0.032	0.018	0.024	0.0	0.0
	0.018	0.033	0.017	0.038	0.01	0.01
	0.018	0.025	0.019	0.022	0.0	0.01
	0.019	0.024	0.017	0.033	0.0	0.01
	0.019	0.02	0.018	0.032	0.01	0.01
	0.018	0.024	0.021	0.026	0.0	0.03
	0.018	0.035	0.017	0.033	0.0	0.01
	0.018	0.019	0.018	0.022	0.0	0.01
	0.019	0.033	0.018	0.031	0.0	0.01
	0.018	0.028	0.019	0.029	0.01	0.0

Tab. 192: Domain shifts for the overlapping data experiment 1 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.011	0.062	0.009	0.066	0.0	0.02
	0.01	0.064	0.01	0.073	0.01	0.0
	0.011	0.075	0.009	0.085	0.0	0.01
	0.01	0.082	0.013	0.053	0.01	0.03
	0.011	0.064	0.011	0.064	0.01	0.02
	0.011	0.062	0.01	0.085	0.01	0.02
	0.012	0.053	0.01	0.067	0.0	0.02
	0.011	0.053	0.01	0.089	0.0	0.0
	0.01	0.072	0.011	0.055	0.0	0.03
	0.011	0.06	0.008	0.083	0.0	0.04
REVISE	0.012	0.048	0.01	0.064	0.01	0.01
	0.011	0.07	0.011	0.07	0.0	0.03
	0.011	0.069	0.013	0.05	0.0	0.03
	0.011	0.067	0.012	0.057	0.02	0.03
	0.011	0.078	0.01	0.068	0.0	0.02
	0.011	0.067	0.01	0.066	0.01	0.0
	0.011	0.049	0.01	0.056	0.0	0.0
	0.011	0.077	0.013	0.05	0.01	0.03
	0.01	0.091	0.011	0.078	0.01	0.02
	0.011	0.074	0.01	0.072	0.0	0.02
ECCo	0.011	0.063	0.011	0.06	0.0	0.02
	0.011	0.062	0.013	0.05	0.0	0.03
	0.011	0.065	0.013	0.045	0.01	0.02
	0.011	0.061	0.012	0.064	0.01	0.02
	0.011	0.069	0.009	0.074	0.0	0.01
	0.011	0.057	0.011	0.057	0.0	0.02
	0.011	0.062	0.011	0.06	0.01	0.01
	0.011	0.061	0.01	0.073	0.01	0.0
	0.012	0.059	0.011	0.067	0.0	0.01
	0.011	0.064	0.011	0.077	0.01	0.02
Wachter	0.011	0.054	0.01	0.081	0.0	0.0
	0.011	0.065	0.013	0.04	0.0	0.03
	0.013	0.049	0.013	0.046	0.02	0.02
	0.012	0.044	0.011	0.052	0.01	0.04
	0.012	0.052	0.012	0.059	0.03	0.02
	0.01	0.079	0.011	0.058	0.01	0.02
	0.011	0.055	0.012	0.055	0.01	0.03
	0.011	0.058	0.01	0.081	0.0	0.0
	0.011	0.071	0.01	0.071	0.01	0.01
	0.011	0.07	0.009	0.08	0.0	0.03
Generic	0.011	0.065	0.013	0.054	0.01	0.02
	0.011	0.064	0.01	0.068	0.0	0.02
	0.01	0.066	0.01	0.075	0.0	0.01
	0.011	0.068	0.01	0.083	0.0	0.0
	0.011	0.079	0.011	0.076	0.0	0.01
	0.01	0.061	0.011	0.076	0.0	0.01
	0.011	0.066	0.011	0.05	0.0	0.01
	0.011	0.065	0.011	0.064	0.0	0.01
	0.011	0.063	0.011	0.053	0.01	0.0
	0.011	0.064	0.01	0.064	0.0	0.0
DiCE	0.011	0.06	0.011	0.056	0.01	0.02
	0.011	0.068	0.01	0.054	0.01	0.0
	0.011	0.05	0.01	0.079	0.0	0.0
	0.011	0.069	0.011	0.066	0.01	0.0

	0.012	0.068	0.013	0.041	0.01	0.02
	0.013	0.052	0.012	0.066	0.02	0.02
	0.01	0.074	0.011	0.066	0.01	0.03
	0.011	0.063	0.011	0.077	0.0	0.01
	0.011	0.052	0.01	0.075	0.01	0.01
	0.011	0.063	0.013	0.047	0.01	0.03
ClaPROAR	0.011	0.058	0.012	0.062	0.01	0.02
	0.01	0.084	0.013	0.052	0.01	0.03
	0.011	0.077	0.011	0.067	0.0	0.01
	0.009	0.07	0.011	0.061	0.01	0.05
	0.011	0.066	0.015	0.035	0.01	0.05
	0.011	0.067	0.01	0.088	0.01	0.01
	0.011	0.054	0.013	0.044	0.02	0.02
	0.011	0.06	0.01	0.083	0.0	0.01
	0.011	0.066	0.011	0.053	0.01	0.01
	0.011	0.06	0.012	0.057	0.01	0.02

Tab. 193: Domain shifts for the overlapping data experiment 2 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.01	0.075	0.007	0.127	0.0	0.02
	0.009	0.104	0.008	0.085	0.0	0.01
	0.01	0.087	0.009	0.09	0.0	0.0
	0.01	0.075	0.009	0.081	0.0	0.0
	0.009	0.08	0.01	0.078	0.0	0.01
	0.009	0.075	0.008	0.081	0.0	0.0
	0.01	0.076	0.008	0.086	0.0	0.01
	0.01	0.055	0.009	0.084	0.0	0.01
	0.01	0.068	0.009	0.083	0.0	0.0
	0.01	0.077	0.009	0.092	0.0	0.0
REVISE	0.01	0.081	0.008	0.11	0.01	0.02
	0.01	0.089	0.009	0.072	0.0	0.0
	0.009	0.084	0.01	0.079	0.0	0.01
	0.009	0.091	0.008	0.088	0.01	0.01
	0.01	0.076	0.01	0.081	0.01	0.01
	0.01	0.072	0.01	0.075	0.0	0.0
	0.009	0.092	0.009	0.087	0.0	0.05
	0.01	0.076	0.009	0.072	0.01	0.01
	0.009	0.097	0.009	0.089	0.0	0.0
	0.01	0.089	0.01	0.082	0.0	0.01
ECCo	0.01	0.08	0.007	0.095	0.01	0.0
	0.01	0.063	0.009	0.079	0.0	0.0
	0.01	0.087	0.009	0.071	0.0	0.01
	0.01	0.087	0.009	0.098	0.0	0.0
	0.01	0.076	0.008	0.092	0.01	0.01
	0.009	0.088	0.009	0.094	0.02	0.01
	0.009	0.077	0.009	0.092	0.0	0.02
	0.01	0.084	0.008	0.12	0.0	0.03
	0.009	0.083	0.01	0.07	0.0	0.01
	0.009	0.082	0.009	0.106	0.0	0.02
Wachter	0.01	0.085	0.009	0.098	0.0	0.01
	0.01	0.071	0.01	0.086	0.0	0.01
	0.009	0.096	0.009	0.098	0.0	0.01
	0.01	0.078	0.01	0.088	0.0	0.01
	0.01	0.076	0.009	0.078	0.01	0.01

	0.01	0.079	0.009	0.086	0.01	0.01
	0.01	0.072	0.01	0.076	0.0	0.01
	0.009	0.075	0.009	0.104	0.01	0.01
	0.009	0.091	0.008	0.087	0.0	0.02
	0.01	0.092	0.008	0.099	0.01	0.02
Generic	0.01	0.073	0.009	0.071	0.0	0.0
	0.01	0.077	0.009	0.081	0.0	0.0
	0.01	0.07	0.008	0.105	0.0	0.06
	0.009	0.092	0.008	0.096	0.0	0.02
	0.01	0.077	0.01	0.087	0.01	0.01
	0.01	0.07	0.01	0.07	0.01	0.01
	0.01	0.068	0.008	0.102	0.01	0.02
	0.01	0.069	0.009	0.084	0.01	0.01
	0.01	0.087	0.009	0.09	0.0	0.02
	0.01	0.07	0.009	0.091	0.01	0.02
DiCE	0.009	0.085	0.008	0.099	0.01	0.01
	0.009	0.087	0.009	0.086	0.0	0.02
	0.009	0.087	0.009	0.091	0.02	0.02
	0.009	0.08	0.009	0.085	0.0	0.01
	0.01	0.079	0.01	0.073	0.0	0.0
	0.01	0.095	0.009	0.086	0.02	0.02
	0.01	0.086	0.009	0.101	0.0	0.0
	0.009	0.086	0.009	0.09	0.0	0.01
	0.01	0.074	0.008	0.096	0.0	0.03
	0.008	0.101	0.009	0.101	0.01	0.02
ClaPROAR	0.01	0.076	0.009	0.097	0.0	0.0
	0.01	0.072	0.009	0.091	0.01	0.01
	0.009	0.081	0.009	0.068	0.01	0.01
	0.009	0.088	0.009	0.082	0.0	0.01
	0.01	0.075	0.01	0.073	0.01	0.01
	0.01	0.068	0.008	0.089	0.0	0.01
	0.009	0.097	0.009	0.087	0.0	0.0
	0.01	0.077	0.01	0.083	0.0	0.01
	0.01	0.072	0.009	0.077	0.0	0.01
	0.01	0.093	0.009	0.082	0.0	0.02

Tab. 194: Domain shifts for the overlapping data experiment 3 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.013	0.052	0.014	0.044	0.0	0.04
	0.012	0.056	0.011	0.069	0.0	0.01
	0.012	0.041	0.011	0.048	0.0	0.02
	0.012	0.066	0.012	0.05	0.01	0.02
	0.012	0.057	0.011	0.051	0.01	0.0
	0.012	0.068	0.012	0.056	0.01	0.0
	0.011	0.06	0.01	0.07	0.01	0.01
	0.012	0.064	0.014	0.041	0.0	0.04
	0.012	0.054	0.011	0.071	0.0	0.01
	0.013	0.069	0.012	0.061	0.0	0.03
REVISE	0.012	0.049	0.012	0.049	0.0	0.01
	0.012	0.07	0.012	0.046	0.0	0.01
	0.012	0.076	0.013	0.058	0.0	0.01
	0.012	0.061	0.012	0.054	0.0	0.0
	0.012	0.046	0.011	0.073	0.0	0.03
	0.012	0.06	0.012	0.064	0.01	0.01

	0.012	0.053	0.013	0.062	0.0	0.01
	0.013	0.063	0.012	0.049	0.0	0.02
	0.011	0.059	0.012	0.05	0.0	0.0
	0.013	0.041	0.012	0.073	0.0	0.01
ECCo	0.011	0.073	0.011	0.057	0.01	0.03
	0.012	0.041	0.012	0.058	0.0	0.01
	0.011	0.071	0.012	0.063	0.02	0.01
	0.012	0.054	0.011	0.061	0.0	0.0
	0.011	0.062	0.011	0.068	0.0	0.02
	0.012	0.053	0.01	0.064	0.0	0.02
	0.012	0.052	0.012	0.055	0.0	0.01
	0.012	0.059	0.011	0.061	0.0	0.01
	0.012	0.057	0.01	0.069	0.0	0.03
	0.012	0.045	0.01	0.068	0.0	0.04
Wachter	0.011	0.051	0.011	0.072	0.01	0.03
	0.012	0.064	0.011	0.062	0.01	0.02
	0.013	0.054	0.012	0.056	0.0	0.0
	0.012	0.063	0.012	0.053	0.0	0.07
	0.012	0.059	0.014	0.05	0.0	0.03
	0.012	0.058	0.011	0.059	0.0	0.03
	0.013	0.036	0.012	0.049	0.0	0.01
	0.012	0.061	0.013	0.054	0.0	0.01
	0.012	0.056	0.012	0.055	0.0	0.0
	0.012	0.068	0.012	0.061	0.01	0.03
Generic	0.012	0.067	0.01	0.07	0.01	0.03
	0.013	0.044	0.011	0.061	0.0	0.02
	0.012	0.062	0.012	0.053	0.0	0.01
	0.013	0.047	0.011	0.057	0.0	0.02
	0.013	0.052	0.012	0.051	0.0	0.02
	0.013	0.054	0.01	0.061	0.0	0.02
	0.012	0.062	0.011	0.06	0.0	0.0
	0.012	0.047	0.012	0.053	0.0	0.0
	0.013	0.065	0.012	0.044	0.0	0.0
	0.013	0.058	0.012	0.057	0.0	0.02
DiCE	0.013	0.049	0.011	0.073	0.0	0.0
	0.012	0.055	0.012	0.058	0.0	0.01
	0.012	0.064	0.01	0.073	0.0	0.03
	0.012	0.058	0.012	0.056	0.0	0.0
	0.012	0.053	0.012	0.058	0.0	0.01
	0.011	0.059	0.013	0.039	0.02	0.02
	0.012	0.049	0.011	0.06	0.0	0.03
	0.013	0.06	0.011	0.067	0.0	0.0
	0.012	0.058	0.012	0.053	0.01	0.01
	0.012	0.049	0.012	0.06	0.0	0.02
ClaPROAR	0.012	0.057	0.012	0.067	0.01	0.02
	0.013	0.049	0.011	0.06	0.0	0.01
	0.012	0.062	0.013	0.059	0.0	0.01
	0.012	0.045	0.012	0.057	0.0	0.01
	0.012	0.054	0.013	0.056	0.0	0.01
	0.012	0.08	0.01	0.071	0.0	0.03
	0.012	0.041	0.012	0.043	0.0	0.0
	0.012	0.066	0.013	0.053	0.01	0.01
	0.013	0.054	0.013	0.063	0.0	0.01
	0.012	0.056	0.012	0.065	0.0	0.02

Tab. 195: Domain shifts for the overlapping data experiment 4 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.021	0.013	0.019	0.017	0.0	0.02
	0.021	0.009	0.018	0.027	0.0	0.05
	0.022	0.011	0.018	0.027	0.0	0.01
	0.021	0.02	0.02	0.017	0.0	0.02
	0.02	0.016	0.02	0.01	0.0	0.0
	0.022	0.012	0.018	0.014	0.0	0.02
	0.021	0.026	0.022	0.011	0.0	0.01
	0.021	0.011	0.019	0.023	0.0	0.03
	0.02	0.01	0.017	0.028	0.0	0.02
	0.021	0.021	0.022	0.017	0.0	0.01
REVISE	0.023	0.015	0.021	0.019	0.01	0.01
	0.024	0.016	0.023	0.014	0.01	0.01
	0.02	0.02	0.023	0.014	0.01	0.06
	0.021	0.014	0.02	0.013	0.0	0.02
	0.021	0.016	0.022	0.017	0.0	0.01
	0.02	0.018	0.022	0.024	0.0	0.01
	0.022	0.018	0.021	0.024	0.0	0.02
	0.023	0.012	0.02	0.018	0.01	0.01
	0.02	0.015	0.018	0.039	0.01	0.0
	0.021	0.016	0.023	0.012	0.0	0.01
ECCo	0.021	0.02	0.02	0.015	0.0	0.01
	0.023	0.012	0.02	0.01	0.01	0.01
	0.021	0.011	0.019	0.017	0.0	0.02
	0.021	0.014	0.019	0.024	0.0	0.0
	0.022	0.017	0.017	0.028	0.0	0.02
	0.023	0.017	0.022	0.021	0.01	0.01
	0.021	0.015	0.019	0.015	0.0	0.0
	0.02	0.013	0.019	0.021	0.0	0.04
	0.022	0.017	0.02	0.021	0.0	0.0
	0.022	0.015	0.022	0.016	0.0	0.05
Wachter	0.022	0.013	0.02	0.018	0.01	0.01
	0.023	0.014	0.021	0.02	0.01	0.01
	0.021	0.025	0.02	0.019	0.0	0.01
	0.021	0.02	0.022	0.011	0.0	0.01
	0.021	0.012	0.021	0.014	0.0	0.0
	0.022	0.013	0.019	0.027	0.0	0.03
	0.021	0.016	0.022	0.015	0.01	0.01
	0.02	0.018	0.02	0.028	0.0	0.0
	0.019	0.018	0.017	0.024	0.0	0.04
	0.023	0.021	0.024	0.014	0.01	0.03
Generic	0.021	0.025	0.023	0.014	0.0	0.01
	0.021	0.013	0.02	0.018	0.0	0.0
	0.02	0.018	0.022	0.013	0.0	0.01
	0.021	0.021	0.021	0.02	0.0	0.02
	0.021	0.026	0.019	0.03	0.0	0.01
	0.024	0.009	0.024	0.015	0.03	0.04
	0.022	0.019	0.022	0.011	0.0	0.0
	0.023	0.01	0.025	0.016	0.01	0.03
	0.021	0.022	0.018	0.02	0.0	0.0
	0.02	0.027	0.02	0.017	0.0	0.02
DiCE	0.019	0.031	0.021	0.019	0.0	0.0
	0.02	0.017	0.024	0.009	0.0	0.05
	0.023	0.013	0.023	0.006	0.01	0.06
	0.02	0.021	0.02	0.022	0.0	0.02

	0.02	0.018	0.02	0.014	0.01	0.04
	0.022	0.011	0.023	0.01	0.01	0.03
	0.021	0.019	0.019	0.015	0.0	0.03
	0.021	0.021	0.019	0.02	0.0	0.0
	0.023	0.014	0.018	0.035	0.01	0.03
	0.022	0.016	0.019	0.02	0.0	0.0
ClaPROAR	0.021	0.022	0.02	0.017	0.0	0.0
	0.021	0.021	0.021	0.017	0.0	0.0
	0.02	0.023	0.019	0.019	0.0	0.02
	0.021	0.014	0.02	0.023	0.0	0.0
	0.02	0.017	0.018	0.029	0.0	0.01
	0.023	0.014	0.021	0.018	0.01	0.01
	0.021	0.022	0.019	0.025	0.0	0.0
	0.021	0.022	0.021	0.019	0.0	0.01
	0.02	0.014	0.024	0.013	0.01	0.04
	0.021	0.019	0.02	0.009	0.0	0.01

Tab. 196: Domain shifts for the overlapping data experiment 5 using a MLP and a deep ensemble

F.3.3. Overlapping dataset using Deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.001	0.394	-0.001	0.384	0.01	0.0
	-0.001	0.398	-0.001	0.395	0.0	0.0
	-0.002	0.438	-0.001	0.405	0.0	0.0
	-0.001	0.421	-0.001	0.384	0.0	0.0
	-0.001	0.394	-0.001	0.369	0.01	0.0
	-0.001	0.379	-0.001	0.399	0.01	0.0
	-0.001	0.405	-0.001	0.389	0.0	0.0
	-0.001	0.401	-0.001	0.399	0.01	0.0
	-0.001	0.411	-0.001	0.404	0.01	0.0
	-0.002	0.393	-0.001	0.412	0.0	0.0
ECCo	-0.001	0.392	-0.001	0.378	0.01	0.0
	-0.001	0.432	-0.001	0.367	0.0	0.0
	-0.001	0.367	-0.001	0.39	0.01	0.0
	-0.001	0.404	-0.001	0.391	0.0	0.0
	-0.001	0.387	-0.0	0.332	0.01	0.01
	-0.0	0.326	-0.001	0.368	0.02	0.02
	-0.001	0.384	-0.001	0.373	0.01	0.0
	-0.0	0.334	-0.0	0.353	0.02	0.02
	-0.001	0.397	-0.001	0.397	0.02	0.0
	-0.001	0.345	-0.0	0.327	0.01	0.01
Wachter	-0.001	0.396	-0.0	0.306	0.01	0.01
	-0.001	0.354	-0.0	0.347	0.01	0.01
	-0.0	0.341	-0.0	0.332	0.02	0.02
	-0.0	0.337	-0.0	0.316	0.02	0.02
	-0.001	0.391	-0.001	0.378	0.01	0.01
	-0.001	0.404	-0.001	0.4	0.0	0.0
	-0.001	0.34	-0.0	0.324	0.01	0.01
	-0.001	0.372	-0.0	0.33	0.01	0.01
	-0.0	0.317	-0.0	0.33	0.02	0.01
	-0.001	0.391	-0.001	0.391	0.01	0.0
Generic	-0.001	0.392	-0.001	0.382	0.0	0.0
	-0.001	0.401	-0.001	0.383	0.01	0.0
	-0.001	0.379	-0.0	0.366	0.01	0.01
	-0.0	0.362	-0.0	0.332	0.01	0.01

	-0.001	0.41	-0.001	0.403	0.0	0.01
	-0.0	0.332	-0.0	0.372	0.02	0.01
	-0.001	0.405	-0.001	0.414	0.0	0.0
	-0.001	0.431	-0.001	0.406	0.0	0.0
	-0.001	0.419	-0.001	0.397	0.0	0.0
	-0.001	0.391	-0.001	0.392	0.0	0.0
DiCE	-0.001	0.377	-0.001	0.412	0.0	0.0
	-0.001	0.433	-0.001	0.389	0.0	0.0
	-0.001	0.39	-0.001	0.393	0.01	0.0
	-0.001	0.398	-0.001	0.393	0.01	0.0
	-0.001	0.42	-0.001	0.38	0.01	0.0
	-0.001	0.369	-0.001	0.351	0.01	0.01
	-0.0	0.327	-0.001	0.346	0.02	0.02
	-0.001	0.398	-0.001	0.413	0.01	0.01
	-0.001	0.418	-0.001	0.407	0.0	0.0
	-0.001	0.381	-0.001	0.386	0.01	0.01
ClaPROAR	-0.001	0.423	-0.001	0.366	0.0	0.0
	-0.0	0.354	-0.0	0.341	0.02	0.02
	-0.0	0.337	-0.0	0.348	0.02	0.01
	-0.001	0.38	-0.001	0.342	0.01	0.01
	-0.0	0.353	-0.0	0.338	0.02	0.01
	-0.001	0.33	-0.0	0.342	0.02	0.02
	-0.001	0.38	-0.001	0.378	0.0	0.0
	-0.001	0.376	-0.0	0.314	0.01	0.01
	-0.001	0.361	-0.0	0.334	0.01	0.01
	-0.0	0.321	0.0	0.307	0.02	0.02

Tab. 197: Domain shifts for the overlapping data experiment 1 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.002	0.45	-0.001	0.387	0.01	0.01
	-0.002	0.427	-0.001	0.385	0.01	0.01
	-0.003	0.493	-0.002	0.496	0.01	0.0
	-0.003	0.481	-0.002	0.518	0.02	0.02
	-0.001	0.388	-0.001	0.361	0.02	0.02
	-0.001	0.382	-0.001	0.344	0.02	0.02
	-0.003	0.547	-0.002	0.465	0.01	0.0
	-0.002	0.426	-0.001	0.395	0.01	0.01
	-0.002	0.417	-0.001	0.425	0.01	0.01
	-0.003	0.528	-0.002	0.445	0.0	0.0
ECCo	-0.003	0.507	-0.002	0.405	0.01	0.01
	-0.003	0.527	-0.002	0.5	0.01	0.0
	-0.002	0.509	-0.002	0.453	0.01	0.01
	-0.003	0.521	-0.002	0.482	0.0	0.0
	-0.002	0.429	-0.001	0.369	0.01	0.01
	-0.003	0.546	-0.002	0.511	0.01	0.01
	-0.003	0.507	-0.002	0.475	0.0	0.01
	-0.003	0.501	-0.002	0.498	0.0	0.0
	-0.003	0.491	-0.002	0.457	0.0	0.0
	-0.003	0.504	-0.002	0.489	0.02	0.02
Wachter	-0.002	0.391	-0.001	0.394	0.02	0.01
	-0.002	0.461	-0.001	0.391	0.01	0.01
	-0.002	0.525	-0.002	0.473	0.01	0.02
	-0.003	0.502	-0.002	0.483	0.0	0.01
	-0.003	0.527	-0.002	0.475	0.01	0.01

	-0.003	0.499	-0.002	0.494	0.02	0.01
	-0.003	0.523	-0.002	0.474	0.0	0.0
	-0.002	0.449	-0.001	0.422	0.01	0.01
	-0.001	0.408	-0.001	0.374	0.02	0.02
	-0.002	0.502	-0.002	0.473	0.01	0.02
Generic	-0.003	0.508	-0.002	0.48	0.01	0.01
	-0.001	0.401	-0.001	0.414	0.02	0.02
	-0.003	0.514	-0.002	0.473	0.01	0.01
	-0.002	0.494	-0.002	0.48	0.01	0.01
	-0.002	0.444	-0.001	0.37	0.01	0.01
	-0.002	0.417	-0.001	0.367	0.01	0.01
	-0.002	0.473	-0.002	0.475	0.0	0.0
	-0.002	0.438	-0.001	0.396	0.01	0.01
	-0.002	0.43	-0.001	0.399	0.01	0.01
	-0.002	0.43	-0.002	0.418	0.01	0.01
DiCE	-0.003	0.486	-0.002	0.468	0.01	0.01
	-0.003	0.522	-0.002	0.449	0.01	0.01
	-0.002	0.472	-0.001	0.407	0.03	0.03
	-0.002	0.484	-0.002	0.46	0.01	0.01
	-0.003	0.502	-0.002	0.48	0.0	0.0
	-0.002	0.506	-0.002	0.464	0.01	0.02
	-0.003	0.519	-0.002	0.478	0.02	0.02
	-0.002	0.423	-0.002	0.434	0.01	0.01
	-0.002	0.459	-0.002	0.402	0.01	0.01
	-0.002	0.48	-0.002	0.491	0.01	0.02
ClaPROAR	-0.002	0.502	-0.002	0.465	0.01	0.02
	-0.003	0.51	-0.002	0.488	0.0	0.01
	-0.002	0.428	-0.001	0.416	0.01	0.01
	-0.002	0.47	-0.001	0.382	0.01	0.01
	-0.002	0.509	-0.002	0.463	0.01	0.01
	-0.002	0.416	-0.001	0.392	0.01	0.01
	-0.003	0.564	-0.003	0.507	0.0	0.0
	-0.002	0.413	-0.002	0.406	0.01	0.01
	-0.003	0.529	-0.002	0.454	0.0	0.0
	-0.003	0.494	-0.002	0.494	0.01	0.01

Tab. 198: Domain shifts for the overlapping data experiment 2 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.002	0.449	-0.002	0.417	0.0	0.0
	-0.002	0.446	-0.002	0.456	0.0	0.0
	-0.002	0.454	-0.002	0.48	0.01	0.01
	-0.002	0.455	-0.002	0.446	0.0	0.0
	-0.002	0.457	-0.002	0.465	0.01	0.01
	-0.002	0.437	-0.002	0.424	0.01	0.01
	-0.002	0.446	-0.002	0.451	0.0	0.0
	-0.002	0.449	-0.002	0.439	0.0	0.0
	-0.002	0.448	-0.002	0.417	0.01	0.01
	-0.002	0.434	-0.002	0.443	0.0	0.0
ECCo	-0.002	0.441	-0.002	0.438	0.0	0.0
	-0.002	0.453	-0.002	0.448	0.0	0.0
	-0.002	0.414	-0.002	0.429	0.01	0.01
	-0.002	0.456	-0.002	0.409	0.0	0.0
	-0.002	0.445	-0.002	0.461	0.0	0.0
	-0.002	0.443	-0.002	0.446	0.01	0.01

	-0.002	0.452	-0.002	0.444	0.0	0.0
	-0.002	0.445	-0.002	0.417	0.01	0.01
	-0.002	0.423	-0.002	0.422	0.0	0.0
	-0.002	0.439	-0.002	0.432	0.0	0.0
Wachter	-0.002	0.479	-0.002	0.497	0.01	0.01
	-0.002	0.48	-0.002	0.439	0.0	0.0
	-0.002	0.45	-0.002	0.417	0.0	0.0
	-0.002	0.426	-0.002	0.418	0.0	0.0
	-0.002	0.452	-0.002	0.442	0.0	0.0
	-0.002	0.457	-0.002	0.434	0.0	0.0
	-0.002	0.431	-0.002	0.442	0.0	0.0
	-0.002	0.431	-0.002	0.415	0.0	0.0
	-0.002	0.437	-0.002	0.434	0.0	0.0
	-0.002	0.412	-0.002	0.422	0.0	0.0
Generic	-0.002	0.433	-0.002	0.475	0.01	0.01
	-0.002	0.466	-0.002	0.418	0.0	0.0
	-0.002	0.461	-0.002	0.444	0.0	0.0
	-0.002	0.473	-0.002	0.426	0.01	0.01
	-0.002	0.421	-0.002	0.412	0.01	0.01
	-0.002	0.447	-0.002	0.426	0.0	0.0
	-0.002	0.487	-0.002	0.437	0.0	0.0
	-0.002	0.415	-0.002	0.434	0.01	0.01
	-0.002	0.45	-0.002	0.451	0.0	0.0
	-0.002	0.432	-0.002	0.449	0.0	0.0
DiCE	-0.002	0.465	-0.002	0.438	0.01	0.01
	-0.002	0.436	-0.002	0.422	0.0	0.0
	-0.002	0.467	-0.002	0.393	0.0	0.0
	-0.002	0.425	-0.002	0.464	0.0	0.0
	-0.002	0.448	-0.002	0.426	0.01	0.01
	-0.002	0.479	-0.002	0.47	0.02	0.02
	-0.002	0.467	-0.002	0.414	0.0	0.0
	-0.002	0.478	-0.002	0.433	0.0	0.0
	-0.002	0.449	-0.002	0.414	0.0	0.0
	-0.002	0.442	-0.002	0.452	0.0	0.0
ClaPROAR	-0.002	0.437	-0.002	0.402	0.0	0.0
	-0.002	0.432	-0.002	0.431	0.0	0.0
	-0.002	0.448	-0.002	0.457	0.0	0.0
	-0.002	0.476	-0.002	0.434	0.0	0.0
	-0.002	0.444	-0.002	0.426	0.01	0.01
	-0.002	0.468	-0.002	0.428	0.01	0.01
	-0.002	0.438	-0.002	0.443	0.0	0.0
	-0.002	0.456	-0.002	0.49	0.01	0.0
	-0.002	0.47	-0.002	0.446	0.0	0.0
	-0.002	0.444	-0.002	0.411	0.01	0.01

Tab. 199: Domain shifts for the overlapping data experiment 3 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.002	0.411	-0.002	0.425	0.0	0.0
	-0.002	0.482	-0.002	0.469	0.01	0.01
	-0.002	0.466	-0.002	0.427	0.0	0.0
	-0.002	0.414	-0.002	0.437	0.0	0.0
	-0.002	0.422	-0.002	0.427	0.0	0.0
	-0.003	0.535	-0.002	0.46	0.0	0.0
	-0.002	0.481	-0.002	0.394	0.0	0.0

	-0.002	0.489	-0.002	0.487	0.0	0.0
	-0.002	0.438	-0.002	0.461	0.0	0.0
	-0.002	0.458	-0.002	0.447	0.0	0.0
ECCo	-0.002	0.446	-0.002	0.412	0.0	0.0
	-0.002	0.446	-0.002	0.409	0.0	0.0
	-0.002	0.449	-0.002	0.439	0.0	0.0
	-0.002	0.435	-0.002	0.441	0.0	0.0
	-0.002	0.435	-0.002	0.447	0.0	0.0
	-0.002	0.444	-0.002	0.435	0.0	0.0
	-0.002	0.443	-0.002	0.422	0.0	0.0
	-0.002	0.458	-0.002	0.442	0.0	0.0
	-0.003	0.531	-0.002	0.432	0.0	0.0
	-0.002	0.427	-0.002	0.47	0.0	0.0
Wachter	-0.002	0.459	-0.002	0.413	0.0	0.0
	-0.002	0.471	-0.002	0.467	0.0	0.0
	-0.002	0.466	-0.002	0.444	0.0	0.0
	-0.002	0.451	-0.002	0.426	0.0	0.0
	-0.002	0.496	-0.002	0.51	0.01	0.0
	-0.002	0.478	-0.002	0.437	0.0	0.0
	-0.002	0.425	-0.002	0.443	0.0	0.0
	-0.002	0.466	-0.002	0.422	0.0	0.0
	-0.002	0.463	-0.002	0.44	0.0	0.0
	-0.002	0.481	-0.002	0.44	0.0	0.0
Generic	-0.003	0.494	-0.002	0.426	0.01	0.0
	-0.002	0.486	-0.002	0.45	0.0	0.0
	-0.002	0.427	-0.002	0.419	0.0	0.0
	-0.002	0.476	-0.002	0.415	0.0	0.0
	-0.003	0.511	-0.002	0.441	0.0	0.0
	-0.002	0.466	-0.002	0.455	0.0	0.0
	-0.003	0.492	-0.002	0.399	0.0	0.0
	-0.002	0.475	-0.002	0.427	0.0	0.0
	-0.002	0.431	-0.002	0.428	0.0	0.0
	-0.002	0.474	-0.002	0.428	0.01	0.0
DiCE	-0.002	0.471	-0.002	0.417	0.0	0.0
	-0.002	0.502	-0.002	0.445	0.01	0.0
	-0.002	0.498	-0.002	0.426	0.0	0.0
	-0.003	0.529	-0.002	0.49	0.02	0.0
	-0.002	0.494	-0.002	0.423	0.01	0.0
	-0.002	0.463	-0.002	0.434	0.0	0.0
	-0.002	0.461	-0.002	0.437	0.0	0.0
	-0.002	0.452	-0.002	0.408	0.0	0.0
	-0.002	0.432	-0.002	0.425	0.0	0.0
	-0.002	0.479	-0.002	0.51	0.01	0.01
ClaPROAR	-0.002	0.503	-0.002	0.426	0.0	0.0
	-0.002	0.438	-0.002	0.424	0.0	0.0
	-0.002	0.448	-0.002	0.41	0.0	0.0
	-0.002	0.45	-0.002	0.471	0.0	0.0
	-0.002	0.444	-0.002	0.421	0.0	0.0
	-0.002	0.47	-0.002	0.438	0.01	0.0
	-0.002	0.443	-0.002	0.428	0.0	0.0
	-0.002	0.432	-0.002	0.448	0.0	0.0
	-0.002	0.451	-0.002	0.438	0.0	0.0
	-0.002	0.446	-0.002	0.449	0.0	0.0

Tab. 200: Domain shifts for the overlapping data experiment 4 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.001	0.308	0.001	0.296	0.01	0.01
	-0.0	0.329	0.001	0.288	0.01	0.02
	-0.0	0.34	0.001	0.303	0.02	0.02
	-0.0	0.338	0.001	0.279	0.0	0.01
	0.001	0.255	-0.0	0.304	0.01	0.0
	-0.001	0.339	0.001	0.274	0.0	0.0
	0.0	0.306	-0.0	0.346	0.0	0.0
	-0.001	0.407	0.001	0.269	0.0	0.0
	-0.0	0.314	0.0	0.329	0.01	0.01
	-0.001	0.385	-0.001	0.339	0.01	0.0
ECCo	-0.001	0.342	0.001	0.291	0.0	0.0
	0.001	0.26	0.0	0.344	0.01	0.01
	0.0	0.31	0.001	0.248	0.02	0.01
	0.0	0.329	0.001	0.27	0.0	0.0
	-0.0	0.309	0.001	0.254	0.01	0.0
	0.0	0.326	-0.0	0.335	0.01	0.0
	-0.001	0.367	0.001	0.294	0.0	0.0
	-0.0	0.331	0.001	0.265	0.01	0.01
	-0.0	0.315	0.0	0.298	0.0	0.0
	-0.001	0.384	-0.0	0.319	0.0	0.0
Wachter	0.0	0.327	0.001	0.27	0.01	0.01
	0.0	0.303	0.0	0.326	0.0	0.0
	0.001	0.294	0.001	0.268	0.02	0.01
	-0.001	0.339	-0.0	0.33	0.01	0.0
	-0.001	0.42	-0.0	0.333	0.01	0.0
	0.0	0.314	0.001	0.27	0.01	0.01
	0.001	0.317	0.001	0.259	0.01	0.01
	-0.001	0.371	-0.001	0.353	0.03	0.01
	-0.001	0.372	-0.0	0.308	0.0	0.0
	0.0	0.319	0.001	0.254	0.02	0.01
Generic	-0.001	0.36	-0.001	0.347	0.0	0.0
	-0.0	0.332	0.0	0.294	0.01	0.01
	-0.001	0.374	-0.0	0.355	0.0	0.0
	-0.0	0.351	0.001	0.259	0.01	0.01
	0.001	0.266	0.001	0.278	0.01	0.01
	-0.001	0.375	0.001	0.288	0.0	0.0
	-0.0	0.352	-0.0	0.303	0.0	0.0
	0.0	0.298	0.001	0.274	0.01	0.01
	-0.001	0.364	-0.001	0.355	0.0	0.0
	0.0	0.326	-0.0	0.344	0.0	0.01
DiCE	-0.001	0.366	0.001	0.281	0.0	0.0
	-0.0	0.328	-0.001	0.35	0.0	0.0
	-0.0	0.341	-0.001	0.38	0.0	0.0
	-0.001	0.343	0.0	0.307	0.0	0.0
	-0.001	0.373	-0.0	0.328	0.0	0.0
	-0.001	0.323	-0.001	0.375	0.0	0.0
	-0.001	0.395	0.0	0.301	0.0	0.0
	-0.0	0.305	-0.001	0.353	0.0	0.01
	-0.001	0.342	-0.0	0.365	0.0	0.0
	-0.001	0.432	0.0	0.333	0.0	0.0
ClaPROAR	0.0	0.318	0.0	0.288	0.03	0.01
	0.0	0.308	0.001	0.277	0.01	0.01
	-0.0	0.319	0.0	0.309	0.01	0.01
	-0.0	0.333	-0.0	0.338	0.0	0.0

	-0.001	0.341	-0.0	0.315	0.0	0.0
	-0.001	0.35	0.0	0.323	0.0	0.0
	0.001	0.253	0.001	0.249	0.01	0.01
	0.0	0.326	0.0	0.308	0.01	0.01
	0.0	0.276	0.001	0.283	0.01	0.01
	-0.0	0.333	0.0	0.298	0.01	0.01

Tab. 201: Domain shifts for the overlapping data experiment 5 using a deep ensemble

F.3.4. Blobs dataset using MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.923	-0.005	0.913	0.0	0.0
	-0.005	0.915	-0.005	0.932	0.0	0.0
	-0.005	0.927	-0.005	0.96	0.0	0.01
	-0.005	0.93	-0.005	0.941	0.0	0.0
	-0.005	0.921	-0.005	0.936	0.0	0.0
	-0.005	0.912	-0.005	0.918	0.0	0.0
	-0.005	0.932	-0.005	0.925	0.0	0.0
	-0.005	0.926	-0.005	0.97	0.0	0.0
	-0.005	0.924	-0.005	0.935	0.0	0.0
	-0.005	0.921	-0.005	0.937	0.0	0.0
ECCo	-0.005	0.921	-0.005	0.919	0.0	0.0
	-0.005	0.946	-0.005	0.914	0.0	0.0
	-0.005	0.912	-0.005	0.927	0.0	0.0
	-0.005	0.939	-0.005	0.934	0.0	0.0
	-0.005	0.923	-0.005	0.903	0.0	0.0
	-0.005	0.922	-0.005	0.928	0.0	0.0
	-0.005	0.918	-0.005	0.921	0.0	0.0
	-0.005	0.94	-0.005	0.918	0.0	0.0
	-0.005	0.939	-0.005	0.921	0.0	0.0
	-0.005	0.917	-0.005	0.929	0.0	0.0
Wachter	-0.005	0.933	-0.005	0.934	0.0	0.0
	-0.005	0.943	-0.005	0.95	0.0	0.0
	-0.005	0.945	-0.005	0.903	0.0	0.0
	-0.005	0.917	-0.005	0.941	0.0	0.0
	-0.005	0.937	-0.005	0.927	0.0	0.0
	-0.005	0.93	-0.005	0.92	0.0	0.0
	-0.005	0.927	-0.005	0.933	0.0	0.0
	-0.005	0.916	-0.005	0.933	0.0	0.0
	-0.005	0.922	-0.005	0.937	0.0	0.0
	-0.005	0.921	-0.005	0.953	0.0	0.0
Generic	-0.005	0.924	-0.005	0.93	0.0	0.0
	-0.005	0.924	-0.005	0.986	0.0	0.0
	-0.005	0.91	-0.005	0.944	0.0	0.0
	-0.005	0.927	-0.005	0.945	0.0	0.0
	-0.005	0.903	-0.005	0.949	0.0	0.0
	-0.005	0.919	-0.005	0.939	0.0	0.0
	-0.005	0.93	-0.005	0.932	0.0	0.0
	-0.005	0.926	-0.005	0.925	0.0	0.0
	-0.005	0.923	-0.005	0.933	0.0	0.0
	-0.005	0.936	-0.005	0.929	0.0	0.0
DiCE	-0.005	0.943	-0.005	0.935	0.0	0.0
	-0.005	0.927	-0.005	0.986	0.0	0.0
	-0.005	0.937	-0.005	0.935	0.0	0.0
	-0.005	0.919	-0.005	0.97	0.0	0.0

	-0.005	0.92	-0.005	0.921	0.0	0.0
	-0.005	0.931	-0.005	0.932	0.0	0.0
	-0.005	0.918	-0.005	0.924	0.0	0.0
	-0.005	0.922	-0.005	0.988	0.0	0.0
	-0.005	0.937	-0.005	0.929	0.0	0.0
	-0.005	0.925	-0.005	0.92	0.0	0.0
ClaPROAR	-0.005	0.943	-0.005	0.92	0.0	0.0
	-0.005	0.933	-0.005	0.932	0.0	0.0
	-0.005	0.936	-0.005	0.947	0.0	0.0
	-0.005	0.908	-0.005	0.935	0.0	0.0
	-0.005	0.927	-0.005	0.933	0.0	0.0
	-0.005	0.934	-0.005	0.925	0.0	0.0
	-0.005	0.921	-0.005	0.936	0.0	0.0
	-0.005	0.917	-0.005	0.933	0.0	0.0
	-0.005	0.903	-0.005	0.946	0.0	0.0
	-0.005	0.943	-0.005	0.938	0.0	0.0

Tab. 202: Domain shifts for the blobs data experiment 1 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.95	-0.005	0.932	0.0	0.0
	-0.005	0.962	-0.005	0.913	0.0	0.0
	-0.005	0.948	-0.005	0.924	0.0	0.0
	-0.005	0.964	-0.005	0.916	0.0	0.0
	-0.005	0.956	-0.005	0.919	0.0	0.0
	-0.005	0.957	-0.005	0.929	0.0	0.0
	-0.005	0.942	-0.005	0.923	0.0	0.0
	-0.005	0.961	-0.005	0.924	0.0	0.0
	-0.005	0.939	-0.005	0.918	0.0	0.0
	-0.005	0.963	-0.005	0.917	0.0	0.0
ECCo	-0.005	0.955	-0.005	0.912	0.0	0.0
	-0.005	0.941	-0.005	0.919	0.0	0.0
	-0.005	0.938	-0.005	0.921	0.0	0.0
	-0.005	0.948	-0.005	0.936	0.0	0.0
	-0.005	0.959	-0.005	0.918	0.0	0.0
	-0.005	0.964	-0.005	0.927	0.0	0.0
	-0.005	0.96	-0.005	0.915	0.0	0.0
	-0.005	0.959	-0.005	0.912	0.0	0.0
	-0.005	0.957	-0.005	0.924	0.0	0.0
	-0.005	0.954	-0.005	0.92	0.0	0.0
Wachter	-0.005	0.941	-0.005	0.916	0.0	0.0
	-0.005	0.951	-0.005	0.909	0.0	0.0
	-0.005	0.962	-0.005	0.928	0.0	0.0
	-0.005	0.966	-0.005	0.931	0.0	0.0
	-0.005	0.95	-0.005	0.926	0.0	0.0
	-0.005	0.954	-0.005	0.913	0.0	0.0
	-0.005	0.95	-0.005	1.0	0.0	0.0
	-0.005	0.959	-0.005	0.907	0.0	0.0
	-0.005	0.971	-0.005	0.909	0.0	0.0
	-0.005	0.949	-0.005	0.925	0.0	0.0
Generic	-0.005	0.97	-0.005	0.918	0.0	0.0
	-0.005	0.966	-0.005	0.934	0.0	0.0
	-0.005	0.958	-0.005	0.922	0.0	0.0
	-0.005	0.951	-0.005	0.925	0.0	0.0
	-0.005	0.953	-0.005	0.899	0.0	0.0

	-0.005	0.921	-0.005	0.928	0.0	0.0
	-0.005	0.944	-0.005	0.927	0.0	0.0
	-0.005	0.926	-0.005	0.919	0.0	0.0
	-0.005	0.934	-0.005	0.913	0.0	0.0
	-0.005	0.963	-0.005	0.899	0.0	0.0
DiCE	-0.005	0.955	-0.005	0.935	0.0	0.0
	-0.005	0.94	-0.005	0.913	0.0	0.0
	-0.005	0.952	-0.005	0.934	0.0	0.0
	-0.005	0.946	-0.005	0.926	0.0	0.0
	-0.005	0.96	-0.005	0.908	0.0	0.0
	-0.005	0.961	-0.005	0.924	0.0	0.0
	-0.005	0.965	-0.005	0.903	0.0	0.0
	-0.005	0.963	-0.005	0.913	0.0	0.0
	-0.005	0.946	-0.005	0.922	0.0	0.0
	-0.005	0.946	-0.005	0.938	0.0	0.0
ClaPROAR	-0.005	0.959	-0.005	0.921	0.0	0.0
	-0.005	0.95	-0.005	0.908	0.0	0.0
	-0.005	0.954	-0.005	0.937	0.0	0.0
	-0.005	0.964	-0.005	0.962	0.0	0.0
	-0.005	0.953	-0.005	0.9	0.0	0.0
	-0.005	0.945	-0.005	0.913	0.0	0.0
	-0.005	0.962	-0.005	0.928	0.0	0.0
	-0.005	0.927	-0.005	0.911	0.0	0.0
	-0.005	0.946	-0.005	0.911	0.0	0.0
	-0.005	0.935	-0.005	0.922	0.0	0.0

Tab. 203: Domain shifts for the blobs data experiment 2 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.958	-0.005	0.973	0.0	0.0
	-0.005	0.941	-0.005	0.973	0.0	0.0
	-0.005	0.943	-0.005	0.962	0.0	0.0
	-0.005	0.879	-0.005	0.96	0.01	0.0
	-0.005	0.962	-0.005	0.986	0.0	0.0
	-0.005	0.952	-0.005	0.958	0.0	0.0
	-0.005	0.952	-0.005	0.984	0.0	0.0
	-0.005	0.957	-0.005	0.954	0.02	0.0
	-0.005	0.955	-0.005	0.956	0.0	0.0
	-0.005	0.952	-0.005	0.952	0.0	0.0
ECCo	-0.005	0.964	-0.005	0.933	0.0	0.0
	-0.005	0.96	-0.005	0.944	0.0	0.0
	-0.005	0.959	-0.005	0.934	0.0	0.0
	-0.005	0.962	-0.005	0.946	0.0	0.0
	-0.005	0.954	-0.005	0.927	0.0	0.0
	-0.005	0.963	-0.005	0.944	0.0	0.0
	-0.005	0.954	-0.005	0.935	0.0	0.0
	-0.005	0.965	-0.005	0.927	0.0	0.0
	-0.005	0.952	-0.005	0.937	0.0	0.0
	-0.005	0.958	-0.005	0.938	0.0	0.0
Wachter	-0.005	0.966	-0.005	0.953	0.0	0.0
	-0.005	0.964	-0.005	0.944	0.0	0.0
	-0.005	0.956	-0.005	0.95	0.0	0.0
	-0.005	0.97	-0.005	0.955	0.0	0.0
	-0.005	0.953	-0.005	0.962	0.0	0.0
	-0.005	0.961	-0.005	0.957	0.0	0.0

	-0.005	0.978	-0.005	0.911	0.01	0.02
	-0.005	0.951	-0.005	0.955	0.0	0.0
	-0.005	0.959	-0.005	0.955	0.0	0.0
	-0.005	0.935	-0.005	0.951	0.0	0.0
Generic	-0.005	0.958	-0.005	0.982	0.0	0.0
	-0.005	0.96	-0.005	0.951	0.0	0.0
	-0.005	0.956	-0.005	0.946	0.0	0.0
	-0.005	0.95	-0.005	0.954	0.0	0.0
	-0.005	0.951	-0.005	0.957	0.0	0.0
	-0.005	0.943	-0.005	0.962	0.0	0.0
	-0.005	0.963	-0.005	0.958	0.0	0.0
	-0.005	0.953	-0.005	0.937	0.0	0.0
	-0.005	0.951	-0.005	0.94	0.0	0.0
	-0.005	0.946	-0.005	0.98	0.02	0.02
DiCE	-0.005	0.96	-0.005	0.956	0.0	0.0
	-0.004	0.78	-0.005	0.944	0.02	0.0
	-0.005	0.953	-0.005	0.975	0.0	0.0
	-0.005	0.977	-0.005	0.911	0.01	0.02
	-0.005	0.946	-0.005	0.977	0.0	0.0
	-0.005	0.973	-0.005	0.953	0.0	0.0
	-0.005	0.945	-0.005	0.955	0.0	0.0
	-0.005	0.955	-0.005	0.968	0.0	0.0
	-0.005	0.959	-0.005	0.939	0.0	0.0
	-0.005	0.962	-0.005	0.96	0.0	0.0
ClaPROAR	-0.005	0.948	-0.005	0.953	0.0	0.0
	-0.005	0.956	-0.005	0.942	0.0	0.0
	-0.005	0.938	-0.005	0.955	0.0	0.0
	-0.005	0.953	-0.005	0.95	0.0	0.0
	-0.005	0.961	-0.005	0.955	0.0	0.0
	-0.005	0.948	-0.005	0.963	0.0	0.0
	-0.005	0.95	-0.005	0.975	0.0	0.0
	-0.005	0.951	-0.005	0.96	0.0	0.0
	-0.005	0.965	-0.005	0.955	0.0	0.0
	-0.005	0.952	-0.005	0.962	0.0	0.0

Tab. 204: Domain shifts for the blobs data experiment 3 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.961	-0.005	0.944	0.0	0.0
	-0.005	0.953	-0.005	0.922	0.0	0.0
	-0.005	0.975	-0.005	0.935	0.0	0.0
	-0.005	0.936	-0.005	0.928	0.0	0.0
	-0.005	0.908	-0.005	0.95	0.01	0.0
	-0.005	0.958	-0.005	0.921	0.0	0.0
	-0.005	0.956	-0.005	0.941	0.0	0.0
	-0.005	0.97	-0.005	0.935	0.0	0.0
	-0.004	0.746	-0.005	0.928	0.02	0.0
	-0.005	0.981	-0.005	0.933	0.0	0.0
ECCo	-0.005	0.945	-0.005	0.929	0.0	0.0
	-0.005	0.92	-0.005	0.925	0.0	0.0
	-0.005	0.937	-0.005	0.922	0.0	0.0
	-0.005	0.977	-0.005	0.917	0.0	0.0
	-0.005	0.95	-0.005	0.924	0.0	0.0
	-0.005	0.937	-0.005	0.904	0.0	0.0
	-0.005	0.878	-0.005	0.872	0.01	0.01

	-0.005	0.939	-0.005	0.921	0.0	0.0
	-0.005	0.971	-0.005	0.942	0.0	0.0
	-0.005	0.956	-0.005	0.937	0.0	0.0
Wachter	-0.005	0.948	-0.005	0.926	0.0	0.0
	-0.005	0.94	-0.005	0.921	0.0	0.0
	-0.005	0.959	-0.005	0.918	0.0	0.0
	-0.005	0.889	-0.005	0.915	0.01	0.0
	-0.005	0.976	-0.005	0.931	0.0	0.0
	-0.005	0.97	-0.005	0.953	0.0	0.0
	-0.005	0.932	-0.005	0.94	0.0	0.0
	-0.005	0.944	-0.005	0.94	0.0	0.0
	-0.005	0.938	-0.005	0.924	0.0	0.0
	-0.005	0.945	-0.005	0.927	0.0	0.0
Generic	-0.005	0.97	-0.005	0.927	0.0	0.0
	-0.005	0.956	-0.005	0.923	0.0	0.0
	-0.005	0.911	-0.005	0.923	0.01	0.0
	-0.005	0.954	-0.005	0.93	0.0	0.0
	-0.005	0.937	-0.005	0.916	0.0	0.0
	-0.005	0.939	-0.005	0.931	0.0	0.0
	-0.005	0.897	-0.005	0.903	0.01	0.0
	-0.005	0.926	-0.005	0.918	0.0	0.0
	-0.005	0.885	-0.005	0.915	0.01	0.0
	-0.005	0.974	-0.005	0.926	0.0	0.0
DiCE	-0.005	0.975	-0.005	0.921	0.0	0.0
	-0.005	0.954	-0.005	0.931	0.0	0.0
	-0.005	0.949	-0.005	0.94	0.0	0.0
	-0.005	0.942	-0.005	0.933	0.0	0.0
	-0.005	0.97	-0.005	0.926	0.0	0.0
	-0.005	0.99	-0.005	0.942	0.0	0.0
	-0.005	0.949	-0.005	0.918	0.0	0.0
	-0.005	0.889	-0.005	0.931	0.01	0.0
	-0.005	0.931	-0.005	0.901	0.0	0.0
	-0.005	0.909	-0.005	0.938	0.01	0.0
ClaPROAR	-0.005	0.946	-0.005	0.928	0.0	0.0
	-0.005	0.903	-0.005	0.929	0.01	0.0
	-0.005	0.964	-0.005	0.936	0.0	0.0
	-0.005	0.952	-0.005	0.936	0.0	0.0
	-0.005	0.969	-0.005	0.919	0.0	0.0
	-0.005	0.941	-0.005	0.933	0.0	0.0
	-0.005	0.895	-0.005	0.924	0.01	0.0
	-0.005	0.958	-0.005	0.939	0.0	0.0
	-0.005	0.968	-0.005	0.919	0.0	0.0
	-0.005	0.94	-0.005	0.914	0.0	0.0

Tab. 205: Domain shifts for the blobs data experiment 4 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.952	-0.005	0.944	0.0	0.0
	-0.005	0.959	-0.005	0.929	0.0	0.0
	-0.005	0.954	-0.005	0.933	0.0	0.0
	-0.005	0.972	-0.005	0.917	0.0	0.0
	-0.005	0.973	-0.005	0.925	0.0	0.0
	-0.005	0.958	-0.005	0.905	0.0	0.0
	-0.005	0.957	-0.005	0.921	0.0	0.0
	-0.005	0.969	-0.005	0.933	0.0	0.0

	-0.005	0.944	-0.005	0.915	0.0	0.0
	-0.005	0.96	-0.005	0.927	0.0	0.0
ECCo	-0.005	0.952	-0.005	0.923	0.0	0.0
	-0.005	0.982	-0.005	0.944	0.0	0.0
	-0.005	0.96	-0.005	0.898	0.0	0.0
	-0.005	0.983	-0.005	0.938	0.0	0.0
	-0.005	0.981	-0.005	0.93	0.0	0.0
	-0.005	0.98	-0.005	0.922	0.0	0.0
	-0.005	0.956	-0.005	0.906	0.0	0.0
	-0.005	0.952	-0.005	0.912	0.0	0.0
	-0.005	0.957	-0.005	0.926	0.0	0.0
	-0.005	0.938	-0.005	0.91	0.0	0.0
Wachter	-0.005	0.965	-0.005	0.926	0.0	0.0
	-0.005	0.955	-0.005	0.908	0.0	0.0
	-0.005	0.97	-0.005	0.923	0.0	0.0
	-0.005	0.946	-0.005	0.916	0.0	0.0
	-0.005	0.966	-0.005	0.913	0.0	0.0
	-0.005	0.983	-0.005	0.92	0.0	0.0
	-0.005	0.946	-0.005	0.91	0.0	0.0
	-0.005	0.947	-0.005	0.91	0.0	0.0
	-0.005	0.973	-0.005	0.926	0.0	0.0
	-0.005	0.968	-0.005	0.928	0.0	0.0
Generic	-0.005	0.953	-0.005	0.924	0.0	0.0
	-0.005	0.972	-0.005	0.924	0.0	0.0
	-0.005	0.955	-0.005	0.923	0.0	0.0
	-0.005	0.952	-0.005	0.915	0.0	0.0
	-0.005	0.944	-0.005	0.943	0.0	0.0
	-0.005	0.952	-0.005	0.911	0.0	0.0
	-0.005	0.962	-0.005	0.922	0.0	0.0
	-0.005	0.938	-0.005	0.951	0.0	0.0
	-0.005	0.988	-0.005	0.94	0.0	0.0
	-0.005	0.979	-0.005	0.924	0.0	0.0
DiCE	-0.005	0.949	-0.005	0.928	0.0	0.0
	-0.005	0.944	-0.005	0.905	0.0	0.0
	-0.005	0.979	-0.005	0.9	0.0	0.0
	-0.005	0.95	-0.005	0.937	0.0	0.0
	-0.005	0.966	-0.005	0.923	0.0	0.0
	-0.005	0.981	-0.005	0.917	0.0	0.0
	-0.005	0.978	-0.005	0.958	0.0	0.0
	-0.005	0.95	-0.005	0.918	0.0	0.0
	-0.005	0.967	-0.005	0.911	0.0	0.0
	-0.005	0.981	-0.005	0.923	0.0	0.0
ClaPROAR	-0.005	0.964	-0.005	0.918	0.0	0.0
	-0.005	0.962	-0.005	0.918	0.0	0.0
	-0.005	0.957	-0.005	0.914	0.0	0.0
	-0.005	0.963	-0.005	0.931	0.0	0.0
	-0.005	0.948	-0.005	0.938	0.0	0.0
	-0.005	0.955	-0.005	0.962	0.0	0.0
	-0.005	0.958	-0.005	0.924	0.0	0.0
	-0.005	0.936	-0.005	0.94	0.0	0.0
	-0.005	0.979	-0.005	0.921	0.0	0.0
	-0.005	0.986	-0.005	0.955	0.0	0.0

Tab. 206: Domain shifts for the blobs data experiment 4 using a MLP

F.3.5. Blobs dataset using Deep ensemble using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.929	-0.005	0.913	0.0	0.0
	-0.005	0.911	-0.005	0.916	0.0	0.0
	-0.005	0.919	-0.005	0.93	0.0	0.0
	-0.005	0.929	-0.005	0.917	0.0	0.0
	-0.005	0.921	-0.005	0.935	0.0	0.0
	-0.005	0.907	-0.005	0.919	0.0	0.0
	-0.005	0.922	-0.005	0.923	0.0	0.0
	-0.005	0.917	-0.005	0.929	0.0	0.0
	-0.005	0.924	-0.005	0.927	0.0	0.0
	-0.005	0.91	-0.005	0.92	0.0	0.0
ECCo	-0.005	0.904	-0.005	0.923	0.0	0.0
	-0.005	0.937	-0.005	0.915	0.0	0.0
	-0.005	0.911	-0.005	0.929	0.0	0.0
	-0.005	0.915	-0.005	0.932	0.0	0.0
	-0.005	0.92	-0.005	0.905	0.0	0.0
	-0.005	0.907	-0.005	0.929	0.0	0.0
	-0.005	0.918	-0.005	0.922	0.0	0.0
	-0.005	0.921	-0.005	0.919	0.0	0.0
	-0.005	0.924	-0.005	0.921	0.0	0.0
	-0.005	0.911	-0.005	0.931	0.0	0.0
Wachter	-0.005	0.926	-0.005	0.928	0.0	0.0
	-0.005	0.932	-0.005	0.93	0.0	0.0
	-0.005	0.926	-0.005	0.895	0.0	0.0
	-0.005	0.919	-0.005	0.929	0.0	0.0
	-0.005	0.926	-0.005	0.924	0.0	0.0
	-0.005	0.929	-0.005	0.922	0.0	0.0
	-0.005	0.92	-0.005	0.924	0.0	0.0
	-0.005	0.914	-0.005	0.921	0.0	0.0
	-0.005	0.908	-0.005	0.936	0.0	0.0
	-0.005	0.915	-0.005	0.936	0.0	0.0
Generic	-0.005	0.926	-0.005	0.927	0.0	0.0
	-0.005	0.932	-0.005	0.916	0.0	0.0
	-0.005	0.921	-0.005	0.926	0.0	0.0
	-0.005	0.916	-0.005	0.917	0.0	0.0
	-0.005	0.905	-0.005	0.92	0.0	0.0
	-0.005	0.912	-0.005	0.913	0.0	0.0
	-0.005	0.921	-0.005	0.924	0.0	0.0
	-0.005	0.911	-0.005	0.92	0.0	0.0
	-0.005	0.922	-0.005	0.92	0.0	0.0
	-0.005	0.923	-0.005	0.929	0.0	0.0
DiCE	-0.005	0.92	-0.005	0.935	0.0	0.0
	-0.005	0.909	-0.005	0.943	0.0	0.0
	-0.005	0.913	-0.005	0.915	0.0	0.0
	-0.005	0.922	-0.005	0.941	0.0	0.0
	-0.005	0.916	-0.005	0.912	0.0	0.0
	-0.005	0.922	-0.005	0.915	0.0	0.0
	-0.005	0.914	-0.005	0.911	0.0	0.0
	-0.005	0.915	-0.005	0.936	0.0	0.0
	-0.005	0.928	-0.005	0.924	0.0	0.0
	-0.005	0.918	-0.005	0.919	0.0	0.0
ClaPROAR	-0.005	0.924	-0.005	0.923	0.0	0.0
	-0.005	0.922	-0.005	0.923	0.0	0.0
	-0.005	0.931	-0.005	0.932	0.0	0.0
	-0.005	0.902	-0.005	0.931	0.0	0.0

	-0.005	0.922	-0.005	0.917	0.0	0.0
	-0.005	0.926	-0.005	0.908	0.0	0.0
	-0.005	0.918	-0.005	0.922	0.0	0.0
	-0.005	0.916	-0.005	0.923	0.0	0.0
	-0.005	0.902	-0.005	0.925	0.0	0.0
	-0.005	0.923	-0.005	0.926	0.0	0.0

Tab. 207: Domain shifts for the blobs data experiment 1 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.911	-0.005	0.912	0.0	0.0
	-0.005	0.914	-0.005	0.911	0.0	0.0
	-0.005	0.928	-0.005	0.928	0.0	0.0
	-0.005	0.923	-0.005	0.915	0.0	0.0
	-0.005	0.912	-0.005	0.918	0.0	0.0
	-0.005	0.922	-0.005	0.91	0.0	0.0
	-0.005	0.913	-0.005	0.922	0.0	0.0
	-0.005	0.927	-0.005	0.922	0.0	0.0
	-0.005	0.922	-0.005	0.921	0.0	0.0
	-0.005	0.906	-0.005	0.92	0.0	0.0
ECCo	-0.005	0.927	-0.005	0.908	0.0	0.0
	-0.005	0.913	-0.005	0.919	0.0	0.0
	-0.005	0.913	-0.005	0.925	0.0	0.0
	-0.005	0.926	-0.005	0.931	0.0	0.0
	-0.005	0.922	-0.005	0.913	0.0	0.0
	-0.005	0.923	-0.005	0.925	0.0	0.0
	-0.005	0.922	-0.005	0.92	0.0	0.0
	-0.005	0.917	-0.005	0.911	0.0	0.0
	-0.005	0.913	-0.005	0.923	0.0	0.0
	-0.005	0.918	-0.005	0.918	0.0	0.0
Wachter	-0.005	0.906	-0.005	0.911	0.0	0.0
	-0.005	0.918	-0.005	0.913	0.0	0.0
	-0.005	0.917	-0.005	0.931	0.0	0.0
	-0.005	0.906	-0.005	0.928	0.0	0.0
	-0.005	0.916	-0.005	0.927	0.0	0.0
	-0.005	0.912	-0.005	0.913	0.0	0.0
	-0.005	0.916	-0.005	0.919	0.0	0.0
	-0.005	0.909	-0.005	0.909	0.0	0.0
	-0.005	0.926	-0.005	0.904	0.0	0.0
	-0.005	0.919	-0.005	0.927	0.0	0.0
Generic	-0.005	0.939	-0.005	0.915	0.0	0.0
	-0.005	0.928	-0.005	0.918	0.0	0.0
	-0.005	0.918	-0.005	0.929	0.0	0.0
	-0.005	0.92	-0.005	0.919	0.0	0.0
	-0.005	0.918	-0.005	0.892	0.0	0.0
	-0.005	0.911	-0.005	0.93	0.0	0.0
	-0.005	0.913	-0.005	0.93	0.0	0.0
	-0.005	0.93	-0.005	0.922	0.0	0.0
	-0.005	0.921	-0.005	0.911	0.0	0.0
	-0.005	0.924	-0.005	0.909	0.0	0.0
DiCE	-0.005	0.925	-0.005	0.924	0.0	0.0
	-0.005	0.892	-0.005	0.903	0.0	0.0
	-0.005	0.912	-0.005	0.925	0.0	0.0
	-0.005	0.913	-0.005	0.926	0.0	0.0
	-0.005	0.93	-0.005	0.907	0.0	0.0

	-0.005	0.909	-0.005	0.927	0.0	0.0
	-0.005	0.917	-0.005	0.901	0.0	0.0
	-0.005	0.923	-0.005	0.907	0.0	0.0
	-0.005	0.915	-0.005	0.922	0.0	0.0
	-0.005	0.907	-0.005	0.934	0.0	0.0
ClaPROAR	-0.005	0.925	-0.005	0.924	0.0	0.0
	-0.005	0.917	-0.005	0.905	0.0	0.0
	-0.005	0.919	-0.005	0.932	0.0	0.0
	-0.005	0.924	-0.005	0.916	0.0	0.0
	-0.005	0.913	-0.005	0.898	0.0	0.0
	-0.005	0.896	-0.005	0.919	0.0	0.0
	-0.005	0.935	-0.005	0.929	0.0	0.0
	-0.005	0.915	-0.005	0.907	0.0	0.0
	-0.005	0.933	-0.005	0.91	0.0	0.0
	-0.005	0.9	-0.005	0.929	0.0	0.0

Tab. 208: Domain shifts for the blobs data experiment 2 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.955	-0.005	0.942	0.0	0.0
	-0.005	0.921	-0.005	0.953	0.0	0.0
	-0.005	0.867	-0.005	0.929	0.01	0.0
	-0.005	0.939	-0.005	0.947	0.0	0.0
	-0.005	0.934	-0.005	0.935	0.0	0.0
	-0.005	0.932	-0.005	0.93	0.0	0.0
	-0.005	0.936	-0.005	0.939	0.0	0.0
	-0.005	0.944	-0.005	0.93	0.0	0.0
	-0.005	0.938	-0.005	0.923	0.0	0.0
	-0.005	0.935	-0.005	0.916	0.0	0.0
ECCo	-0.005	0.942	-0.005	0.91	0.0	0.0
	-0.005	0.929	-0.005	0.918	0.0	0.0
	-0.005	0.949	-0.005	0.946	0.0	0.0
	-0.005	0.924	-0.005	0.925	0.0	0.0
	-0.005	0.934	-0.005	0.933	0.0	0.0
	-0.005	0.947	-0.005	0.903	0.0	0.0
	-0.005	0.936	-0.005	0.93	0.0	0.0
	-0.005	0.924	-0.005	0.923	0.0	0.0
	-0.005	0.944	-0.005	0.902	0.0	0.0
	-0.005	0.915	-0.005	0.926	0.0	0.0
Wachter	-0.005	0.954	-0.005	0.921	0.0	0.0
	-0.005	0.94	-0.005	0.937	0.0	0.0
	-0.005	0.955	-0.005	0.925	0.0	0.0
	-0.005	0.94	-0.005	0.954	0.0	0.0
	-0.005	0.943	-0.005	0.956	0.0	0.0
	-0.005	0.929	-0.005	0.937	0.0	0.0
	-0.005	0.929	-0.005	0.931	0.0	0.0
	-0.005	0.925	-0.005	0.908	0.0	0.0
	-0.005	0.928	-0.005	0.944	0.0	0.0
	-0.005	0.926	-0.005	0.912	0.0	0.0
Generic	-0.005	0.951	-0.005	0.933	0.0	0.0
	-0.005	0.928	-0.005	0.933	0.0	0.0
	-0.005	0.938	-0.005	0.941	0.0	0.0
	-0.005	0.927	-0.005	0.947	0.0	0.0
	-0.005	0.915	-0.005	0.944	0.0	0.0
	-0.005	0.942	-0.005	0.926	0.0	0.0

	-0.005	0.939	-0.005	0.93	0.0	0.0
	-0.005	0.931	-0.005	0.917	0.0	0.0
	-0.005	0.926	-0.005	0.909	0.0	0.0
	-0.005	0.936	-0.005	0.926	0.0	0.0
DiCE	-0.005	0.949	-0.005	0.921	0.0	0.0
	-0.005	0.953	-0.005	0.943	0.0	0.0
	-0.005	0.938	-0.005	0.938	0.0	0.0
	-0.005	0.928	-0.005	0.938	0.0	0.0
	-0.005	0.924	-0.005	0.914	0.0	0.0
	-0.005	0.916	-0.005	0.943	0.0	0.0
	-0.005	0.938	-0.005	0.911	0.0	0.0
	-0.005	0.923	-0.005	0.915	0.0	0.0
	-0.005	0.932	-0.005	0.915	0.0	0.0
	-0.005	0.936	-0.005	0.938	0.0	0.0
ClaPROAR	-0.005	0.942	-0.005	0.927	0.0	0.0
	-0.005	0.917	-0.005	0.927	0.0	0.0
	-0.005	0.908	-0.005	0.932	0.0	0.0
	-0.005	0.935	-0.005	0.947	0.0	0.0
	-0.005	0.933	-0.005	0.953	0.0	0.0
	-0.005	0.934	-0.005	0.931	0.0	0.0
	-0.005	0.923	-0.005	0.942	0.0	0.0
	-0.005	0.994	-0.005	0.925	0.01	0.0
	-0.005	0.892	-0.005	0.922	0.01	0.0
	-0.005	0.949	-0.005	0.925	0.0	0.0

Tab. 209: Domain shifts for the blobs data experiment 3 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.912	-0.005	0.929	0.0	0.0
	-0.005	0.86	-0.005	0.925	0.01	0.0
	-0.005	0.926	-0.005	0.932	0.0	0.0
	-0.005	0.93	-0.005	0.931	0.0	0.0
	-0.005	0.953	-0.005	0.925	0.0	0.0
	-0.005	0.935	-0.005	0.922	0.0	0.0
	-0.005	0.94	-0.005	0.921	0.0	0.0
	-0.005	0.942	-0.005	0.928	0.0	0.0
	-0.005	0.929	-0.005	0.928	0.0	0.0
	-0.004	0.75	-0.005	0.922	0.02	0.0
ECCo	-0.005	0.928	-0.005	0.927	0.0	0.0
	-0.005	0.914	-0.005	0.906	0.0	0.0
	-0.005	0.917	-0.005	0.919	0.0	0.0
	-0.005	0.937	-0.005	0.917	0.0	0.0
	-0.005	0.921	-0.005	0.918	0.0	0.0
	-0.005	0.942	-0.005	0.941	0.0	0.0
	-0.005	0.917	-0.005	0.908	0.0	0.0
	-0.005	0.92	-0.005	0.913	0.0	0.0
	-0.005	0.939	-0.005	0.924	0.0	0.0
	-0.005	0.941	-0.005	0.933	0.0	0.0
Wachter	-0.005	0.94	-0.005	0.929	0.0	0.0
	-0.005	0.932	-0.005	0.912	0.0	0.0
	-0.005	0.938	-0.005	0.911	0.0	0.0
	-0.005	0.927	-0.005	0.914	0.0	0.0
	-0.005	0.946	-0.005	0.923	0.0	0.0
	-0.005	0.95	-0.005	0.934	0.0	0.0
	-0.005	0.941	-0.005	0.923	0.0	0.0

	-0.005	0.943	-0.005	0.935	0.0	0.0
	-0.005	0.921	-0.005	0.933	0.0	0.0
	-0.005	0.925	-0.005	0.937	0.0	0.0
Generic	-0.005	0.933	-0.005	0.924	0.0	0.0
	-0.005	0.929	-0.005	0.921	0.0	0.0
	-0.005	0.947	-0.005	0.918	0.0	0.0
	-0.005	0.945	-0.005	0.919	0.0	0.0
	-0.005	0.9	-0.005	0.907	0.01	0.0
	-0.005	0.942	-0.005	0.924	0.0	0.0
	-0.005	0.917	-0.005	0.9	0.0	0.0
	-0.005	0.926	-0.005	0.911	0.0	0.0
	-0.005	0.917	-0.005	0.908	0.0	0.0
	-0.005	0.927	-0.005	0.923	0.0	0.0
DiCE	-0.005	0.946	-0.005	0.92	0.0	0.0
	-0.005	0.935	-0.005	0.937	0.0	0.0
	-0.005	0.922	-0.005	0.924	0.0	0.0
	-0.005	0.925	-0.005	0.936	0.0	0.0
	-0.005	0.941	-0.005	0.925	0.0	0.0
	-0.005	0.927	-0.005	0.932	0.0	0.0
	-0.005	0.917	-0.005	0.922	0.0	0.0
	-0.005	0.915	-0.005	0.915	0.0	0.0
	-0.005	0.918	-0.005	0.906	0.0	0.0
	-0.005	0.933	-0.005	0.92	0.0	0.0
ClaPROAR	-0.005	0.925	-0.005	0.941	0.0	0.0
	-0.005	0.872	-0.005	0.929	0.01	0.0
	-0.005	0.937	-0.005	0.917	0.0	0.0
	-0.005	0.928	-0.005	0.939	0.0	0.0
	-0.005	0.888	-0.005	0.911	0.01	0.0
	-0.005	0.922	-0.005	0.921	0.0	0.0
	-0.005	0.88	-0.005	0.915	0.01	0.0
	-0.005	0.935	-0.005	0.924	0.0	0.0
	-0.005	0.93	-0.005	0.924	0.0	0.0
	-0.005	0.868	-0.005	0.912	0.01	0.0

Tab. 210: Domain shifts for the blobs data experiment 4 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.923	-0.005	0.92	0.0	0.0
	-0.005	0.969	-0.005	0.916	0.0	0.0
	-0.005	0.92	-0.005	0.932	0.0	0.0
	-0.005	0.927	-0.005	0.912	0.0	0.0
	-0.005	0.916	-0.005	0.928	0.0	0.0
	-0.005	0.907	-0.005	0.911	0.0	0.0
	-0.005	0.923	-0.005	0.918	0.0	0.0
	-0.005	0.92	-0.005	0.921	0.0	0.0
	-0.005	0.963	-0.005	0.911	0.0	0.0
	-0.005	0.932	-0.005	0.913	0.0	0.0
ECCo	-0.005	0.912	-0.005	0.911	0.0	0.0
	-0.005	0.921	-0.005	0.903	0.0	0.0
	-0.005	0.909	-0.005	0.906	0.0	0.0
	-0.005	0.93	-0.005	0.931	0.0	0.0
	-0.005	0.918	-0.005	0.926	0.0	0.0
	-0.005	0.934	-0.005	0.912	0.0	0.0
	-0.005	0.917	-0.005	0.911	0.0	0.0
	-0.005	0.959	-0.005	0.92	0.0	0.0

	-0.005	0.962	-0.005	0.933	0.0	0.0
	-0.005	0.966	-0.005	0.91	0.0	0.0
Wachter	-0.005	0.964	-0.005	0.928	0.0	0.0
	-0.005	0.915	-0.005	0.916	0.0	0.0
	-0.005	0.959	-0.005	0.918	0.0	0.0
	-0.005	0.917	-0.005	0.91	0.0	0.0
	-0.005	0.966	-0.005	0.904	0.0	0.0
	-0.005	0.95	-0.005	0.913	0.0	0.0
	-0.005	0.956	-0.005	0.91	0.0	0.0
	-0.005	0.902	-0.005	0.925	0.0	0.0
	-0.005	0.91	-0.005	0.923	0.0	0.0
	-0.005	0.917	-0.005	0.924	0.0	0.0
Generic	-0.005	0.934	-0.005	0.924	0.0	0.0
	-0.005	0.921	-0.005	0.919	0.0	0.0
	-0.005	0.962	-0.005	0.918	0.0	0.0
	-0.005	0.96	-0.005	0.917	0.0	0.0
	-0.005	0.915	-0.005	0.924	0.0	0.0
	-0.005	0.92	-0.005	0.91	0.0	0.0
	-0.005	0.929	-0.005	0.917	0.0	0.0
	-0.005	0.911	-0.005	0.92	0.0	0.0
	-0.005	0.922	-0.005	0.928	0.0	0.0
	-0.005	0.917	-0.005	0.919	0.0	0.0
DiCE	-0.005	0.925	-0.005	0.909	0.0	0.0
	-0.005	0.912	-0.005	0.905	0.0	0.0
	-0.005	0.903	-0.005	0.897	0.0	0.0
	-0.005	0.914	-0.005	0.921	0.0	0.0
	-0.005	0.912	-0.005	0.93	0.0	0.0
	-0.005	0.932	-0.005	0.905	0.0	0.0
	-0.005	0.933	-0.005	0.912	0.0	0.0
	-0.005	0.904	-0.005	0.932	0.0	0.0
	-0.005	0.927	-0.005	0.915	0.0	0.0
	-0.005	0.921	-0.005	0.921	0.0	0.0
ClaPROAR	-0.005	0.934	-0.005	0.926	0.0	0.0
	-0.005	0.926	-0.005	0.92	0.0	0.0
	-0.005	0.912	-0.005	0.92	0.0	0.0
	-0.005	0.918	-0.005	0.932	0.0	0.0
	-0.005	0.963	-0.005	0.911	0.0	0.0
	-0.005	0.92	-0.005	0.925	0.0	0.0
	-0.005	0.918	-0.005	0.925	0.0	0.0
	-0.005	0.93	-0.005	0.924	0.0	0.0
	-0.005	0.921	-0.005	0.906	0.0	0.0
	-0.005	0.918	-0.005	0.929	0.0	0.0

Tab. 211: Domain shifts for the blobs data experiment 5 using a MLP and a deep ensemble

F.3.6. Blobs dataset using Deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.909	-0.005	0.92	0.0	0.0
	-0.005	0.911	-0.005	1.0	0.0	0.0
	-0.005	0.919	-0.005	0.93	0.0	0.0
	-0.005	0.929	-0.005	0.934	0.0	0.0
	-0.005	0.921	-0.005	0.937	0.0	0.0
	-0.005	0.907	-0.005	0.919	0.0	0.0
	-0.005	0.922	-0.005	0.923	0.0	0.0
	-0.005	0.917	-0.005	0.929	0.0	0.0

	-0.005	0.922	-0.005	0.927	0.0	0.0
	-0.005	0.91	-0.005	0.92	0.0	0.0
ECCo	-0.005	0.904	-0.005	0.923	0.0	0.0
	-0.005	0.937	-0.005	0.915	0.0	0.0
	-0.005	0.911	-0.005	0.929	0.0	0.0
	-0.005	0.915	-0.005	0.932	0.0	0.0
	-0.005	0.92	-0.005	0.905	0.0	0.0
	-0.005	0.907	-0.005	0.929	0.0	0.0
	-0.005	0.918	-0.005	0.922	0.0	0.0
	-0.005	0.921	-0.005	0.919	0.0	0.0
	-0.005	0.924	-0.005	0.921	0.0	0.0
	-0.005	0.911	-0.005	0.931	0.0	0.0
Wachter	-0.005	0.926	-0.005	0.928	0.0	0.0
	-0.005	0.932	-0.005	0.931	0.0	0.0
	-0.005	0.926	-0.005	0.895	0.0	0.0
	-0.005	0.919	-0.005	0.929	0.0	0.0
	-0.005	0.926	-0.005	0.924	0.0	0.0
	-0.005	0.929	-0.005	0.922	0.0	0.0
	-0.005	0.92	-0.005	0.929	0.0	0.0
	-0.005	0.914	-0.005	0.925	0.0	0.0
	-0.005	0.908	-0.005	0.936	0.0	0.0
	-0.005	0.915	-0.005	0.939	0.0	0.0
Generic	-0.005	0.926	-0.005	0.928	0.0	0.0
	-0.005	0.932	-0.005	0.916	0.0	0.0
	-0.005	0.921	-0.005	0.964	0.0	0.0
	-0.005	0.916	-0.005	0.917	0.0	0.0
	-0.005	0.905	-0.005	0.946	0.0	0.0
	-0.005	0.912	-0.005	0.913	0.0	0.0
	-0.005	0.921	-0.005	0.925	0.0	0.0
	-0.005	0.911	-0.005	0.92	0.0	0.0
	-0.005	0.922	-0.005	0.92	0.0	0.0
	-0.005	0.923	-0.005	0.929	0.0	0.0
DiCE	-0.005	0.92	-0.005	0.935	0.0	0.0
	-0.005	0.909	-0.005	0.943	0.0	0.0
	-0.005	0.913	-0.005	0.918	0.0	0.0
	-0.005	0.922	-0.005	0.941	0.0	0.0
	-0.005	0.916	-0.005	0.912	0.0	0.0
	-0.005	0.922	-0.005	0.915	0.0	0.0
	-0.005	0.914	-0.005	0.911	0.0	0.0
	-0.005	0.915	-0.005	0.939	0.0	0.0
	-0.005	0.928	-0.005	0.924	0.0	0.0
	-0.005	0.918	-0.005	0.942	0.0	0.0
ClaPROAR	-0.005	0.924	-0.005	0.923	0.0	0.0
	-0.005	0.922	-0.005	0.966	0.0	0.0
	-0.005	0.931	-0.005	0.932	0.0	0.0
	-0.005	0.902	-0.005	0.931	0.0	0.0
	-0.005	0.922	-0.005	0.925	0.0	0.0
	-0.005	0.926	-0.005	0.908	0.0	0.0
	-0.005	0.918	-0.005	0.952	0.0	0.0
	-0.005	0.916	-0.005	0.923	0.0	0.0
	-0.005	0.902	-0.005	0.925	0.0	0.0
	-0.005	0.923	-0.005	0.926	0.0	0.0

Tab. 212: Domain shifts for the blobs data experiment 1 using a deeo ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.908	-0.005	0.912	0.0	0.0
	-0.005	0.914	-0.005	0.911	0.0	0.0
	-0.005	0.929	-0.005	0.928	0.0	0.0
	-0.005	0.922	-0.005	0.915	0.0	0.0
	-0.005	0.911	-0.005	0.918	0.0	0.0
	-0.005	0.922	-0.005	0.91	0.0	0.0
	-0.005	0.913	-0.005	0.922	0.0	0.0
	-0.005	0.926	-0.005	0.922	0.0	0.0
	-0.005	0.922	-0.005	0.921	0.0	0.0
	-0.005	0.901	-0.005	0.92	0.0	0.0
ECCo	-0.005	0.926	-0.005	0.908	0.0	0.0
	-0.005	0.913	-0.005	0.919	0.0	0.0
	-0.005	0.913	-0.005	0.925	0.0	0.0
	-0.005	0.926	-0.005	0.931	0.0	0.0
	-0.005	0.923	-0.005	0.912	0.0	0.0
	-0.005	0.923	-0.005	0.925	0.0	0.0
	-0.005	0.919	-0.005	0.92	0.0	0.0
	-0.005	0.917	-0.005	0.911	0.0	0.0
	-0.005	0.913	-0.005	0.922	0.0	0.0
	-0.005	0.919	-0.005	0.918	0.0	0.0
Wachter	-0.005	0.913	-0.005	0.911	0.0	0.0
	-0.005	0.917	-0.005	0.914	0.0	0.0
	-0.005	0.917	-0.005	0.93	0.0	0.0
	-0.005	0.905	-0.005	0.928	0.0	0.0
	-0.005	0.919	-0.005	0.927	0.0	0.0
	-0.005	0.912	-0.005	0.912	0.0	0.0
	-0.005	0.916	-0.005	0.919	0.0	0.0
	-0.005	0.909	-0.005	0.909	0.0	0.0
	-0.005	0.925	-0.005	0.905	0.0	0.0
	-0.005	0.92	-0.005	0.927	0.0	0.0
Generic	-0.005	0.935	-0.005	0.915	0.0	0.0
	-0.005	0.928	-0.005	0.919	0.0	0.0
	-0.005	0.918	-0.005	0.929	0.0	0.0
	-0.005	0.922	-0.005	0.919	0.0	0.0
	-0.005	0.919	-0.005	0.892	0.0	0.0
	-0.005	0.911	-0.005	0.93	0.0	0.0
	-0.005	0.916	-0.005	0.93	0.0	0.0
	-0.005	0.922	-0.005	0.922	0.0	0.0
	-0.005	0.921	-0.005	0.911	0.0	0.0
	-0.005	0.923	-0.005	0.909	0.0	0.0
DiCE	-0.005	0.925	-0.005	0.924	0.0	0.0
	-0.005	0.892	-0.005	0.903	0.0	0.0
	-0.005	0.944	-0.005	0.925	0.0	0.0
	-0.005	0.913	-0.005	0.926	0.0	0.0
	-0.005	0.932	-0.005	0.907	0.0	0.0
	-0.005	0.909	-0.005	0.927	0.0	0.0
	-0.005	0.917	-0.005	0.901	0.0	0.0
	-0.005	0.923	-0.005	0.907	0.0	0.0
	-0.005	0.914	-0.005	0.922	0.0	0.0
	-0.005	0.907	-0.005	0.934	0.0	0.0
ClaPROAR	-0.005	0.924	-0.005	0.924	0.0	0.0
	-0.005	0.917	-0.005	0.905	0.0	0.0
	-0.005	0.92	-0.005	0.932	0.0	0.0
	-0.005	0.923	-0.005	0.917	0.0	0.0

	-0.005	0.913	-0.005	0.898	0.0	0.0
	-0.005	0.895	-0.005	0.919	0.0	0.0
	-0.005	0.935	-0.005	0.928	0.0	0.0
	-0.005	0.914	-0.005	0.906	0.0	0.0
	-0.005	0.934	-0.005	0.911	0.0	0.0
	-0.005	0.899	-0.005	0.928	0.0	0.0

Tab. 213: Domain shifts for the blobs data experiment 1 using a deeo ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.934	-0.005	0.938	0.01	0.0
	-0.005	0.942	-0.005	0.941	0.0	0.0
	-0.005	0.921	-0.005	0.951	0.0	0.0
	-0.005	0.941	-0.005	0.935	0.0	0.0
	-0.005	0.945	-0.005	0.95	0.0	0.0
	-0.005	0.995	-0.005	0.954	0.0	0.0
	-0.005	0.941	-0.005	0.941	0.0	0.0
	-0.005	0.939	-0.005	0.95	0.0	0.0
	-0.005	0.933	-0.005	0.929	0.0	0.0
	-0.005	0.955	-0.005	0.932	0.0	0.0
ECCo	-0.005	0.942	-0.005	0.912	0.0	0.0
	-0.005	0.935	-0.005	0.92	0.0	0.0
	-0.005	0.997	-0.005	0.999	0.01	0.01
	-0.005	0.951	-0.005	0.925	0.0	0.0
	-0.005	0.931	-0.005	0.913	0.0	0.0
	-0.005	0.964	-0.005	0.926	0.0	0.0
	-0.005	0.96	-0.005	0.967	0.0	0.0
	-0.005	0.934	-0.005	0.923	0.0	0.0
	-0.005	0.951	-0.005	0.907	0.0	0.0
	-0.005	0.92	-0.005	0.926	0.0	0.0
Wachter	-0.005	0.957	-0.005	0.926	0.0	0.0
	-0.005	0.939	-0.005	0.939	0.0	0.0
	-0.005	0.958	-0.005	0.936	0.0	0.0
	-0.005	0.933	-0.005	0.951	0.0	0.0
	-0.005	0.939	-0.005	0.959	0.0	0.0
	-0.005	0.929	-0.005	0.947	0.0	0.0
	-0.005	0.928	-0.005	0.944	0.0	0.0
	-0.005	0.955	-0.005	0.936	0.0	0.0
	-0.005	0.938	-0.005	0.951	0.0	0.0
	-0.005	0.934	-0.005	0.925	0.0	0.0
Generic	-0.005	0.942	-0.005	0.946	0.0	0.0
	-0.005	0.945	-0.005	0.94	0.0	0.0
	-0.005	0.937	-0.005	0.93	0.0	0.0
	-0.005	0.932	-0.005	0.949	0.0	0.0
	-0.005	0.923	-0.005	0.936	0.0	0.0
	-0.005	0.929	-0.005	0.943	0.0	0.0
	-0.005	0.944	-0.005	0.941	0.0	0.0
	-0.005	0.957	-0.005	0.924	0.0	0.0
	-0.005	0.935	-0.005	0.925	0.0	0.0
	-0.005	0.94	-0.005	0.929	0.0	0.0
DiCE	-0.005	0.943	-0.005	0.925	0.0	0.0
	-0.005	0.966	-0.005	0.945	0.0	0.0
	-0.005	0.945	-0.005	0.948	0.0	0.0
	-0.005	0.957	-0.005	0.961	0.0	0.0
	-0.005	0.932	-0.005	0.927	0.0	0.0

	-0.005	0.936	-0.005	0.953	0.0	0.0
	-0.005	0.949	-0.005	0.925	0.0	0.0
	-0.005	0.94	-0.005	0.918	0.0	0.0
	-0.005	0.952	-0.005	0.927	0.0	0.0
	-0.005	1.0	-0.005	0.944	0.0	0.0
ClaPROAR	-0.005	0.94	-0.005	0.947	0.0	0.0
	-0.005	0.923	-0.005	0.921	0.0	0.0
	-0.005	0.921	-0.005	0.955	0.0	0.0
	-0.005	0.944	-0.005	0.933	0.0	0.0
	-0.005	0.929	-0.005	0.948	0.0	0.0
	-0.005	0.944	-0.005	0.929	0.0	0.0
	-0.005	0.93	-0.005	0.935	0.0	0.0
	-0.005	0.932	-0.005	0.93	0.0	0.0
	-0.005	0.945	-0.005	0.935	0.0	0.0
	-0.005	0.942	-0.005	0.932	0.0	0.0

Tab. 214: Domain shifts for the blobs data experiment 1 using a deeo ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.969	-0.005	0.946	0.0	0.0
	-0.005	0.98	-0.005	0.93	0.0	0.0
	-0.005	0.968	-0.005	0.948	0.0	0.0
	-0.005	0.966	-0.005	0.966	0.0	0.0
	-0.005	0.975	-0.005	0.953	0.01	0.0
	-0.005	0.969	-0.005	0.962	0.0	0.0
	-0.005	0.987	-0.005	0.931	0.0	0.0
	-0.005	0.971	-0.005	0.958	0.0	0.0
	-0.005	0.965	-0.005	0.933	0.0	0.0
	-0.005	0.965	-0.005	0.928	0.0	0.0
ECCo	-0.005	0.915	-0.005	0.973	0.01	0.0
	-0.005	0.962	-0.005	0.916	0.0	0.0
	-0.005	0.956	-0.005	0.968	0.0	0.0
	-0.005	0.932	-0.005	0.879	0.01	0.01
	-0.005	0.9	-0.005	0.931	0.01	0.0
	-0.005	0.898	-0.005	0.878	0.01	0.01
	-0.005	0.97	-0.005	0.932	0.0	0.0
	-0.005	0.975	-0.005	0.935	0.0	0.0
	-0.005	0.975	-0.005	0.954	0.0	0.0
	-0.005	0.916	-0.005	0.943	0.01	0.0
Wachter	-0.005	0.957	-0.005	0.927	0.0	0.0
	-0.005	0.97	-0.005	0.945	0.0	0.0
	-0.005	0.983	-0.005	0.959	0.0	0.0
	-0.005	0.964	-0.005	0.935	0.0	0.0
	-0.005	0.975	-0.005	0.932	0.0	0.0
	-0.005	0.806	-0.005	0.948	0.02	0.0
	-0.005	0.979	-0.005	0.937	0.0	0.0
	-0.005	0.976	-0.005	0.948	0.0	0.0
	-0.005	0.954	-0.005	0.939	0.0	0.0
	-0.005	0.964	-0.005	0.943	0.0	0.0
Generic	-0.005	0.967	-0.005	0.932	0.01	0.0
	-0.005	0.979	-0.005	0.934	0.0	0.0
	-0.005	0.984	-0.005	0.935	0.0	0.0
	-0.005	0.973	-0.005	0.931	0.0	0.0
	-0.005	0.965	-0.005	0.928	0.01	0.0
	-0.005	0.974	-0.005	0.928	0.0	0.0

	-0.005	0.964	-0.005	0.907	0.0	0.0
	-0.005	0.975	-0.005	0.925	0.0	0.0
	-0.005	0.963	-0.005	0.933	0.0	0.0
	-0.005	0.974	-0.005	0.945	0.0	0.0
DiCE	-0.005	0.979	-0.005	0.926	0.0	0.0
	-0.005	0.929	-0.005	0.951	0.01	0.0
	-0.005	0.958	-0.005	0.942	0.01	0.0
	-0.005	0.8	-0.005	0.948	0.02	0.0
	-0.005	0.972	-0.005	0.932	0.0	0.0
	-0.005	0.975	-0.005	0.947	0.0	0.0
	-0.005	0.974	-0.005	0.935	0.0	0.0
	-0.005	0.966	-0.005	0.923	0.0	0.0
	-0.005	0.969	-0.005	0.911	0.0	0.0
	-0.005	0.923	-0.005	0.935	0.01	0.0
ClaPROAR	-0.005	0.974	-0.005	0.952	0.0	0.0
	-0.005	0.973	-0.005	0.945	0.0	0.0
	-0.005	0.983	-0.005	0.929	0.0	0.0
	-0.005	0.968	-0.005	0.948	0.0	0.0
	-0.005	0.973	-0.005	0.919	0.0	0.0
	-0.005	0.926	-0.005	0.945	0.01	0.0
	-0.005	0.976	-0.005	0.932	0.0	0.0
	-0.005	0.968	-0.005	0.933	0.0	0.0
	-0.005	0.911	-0.005	0.946	0.01	0.0
	-0.005	0.968	-0.005	0.947	0.0	0.0

Tab. 215: Domain shifts for the blobs data experiment 4 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.926	-0.005	0.919	0.0	0.0
	-0.005	0.928	-0.005	0.916	0.0	0.0
	-0.005	0.92	-0.005	0.932	0.0	0.0
	-0.005	0.927	-0.005	0.912	0.0	0.0
	-0.005	1.0	-0.005	0.928	0.0	0.0
	-0.005	0.918	-0.005	0.912	0.0	0.0
	-0.005	0.925	-0.005	0.919	0.0	0.0
	-0.005	0.921	-0.005	0.921	0.0	0.0
	-0.005	0.919	-0.005	0.911	0.0	0.0
	-0.005	0.935	-0.005	0.913	0.0	0.0
ECCo	-0.005	0.911	-0.005	0.91	0.0	0.0
	-0.005	0.927	-0.005	0.904	0.0	0.0
	-0.005	0.915	-0.005	0.906	0.0	0.0
	-0.005	0.928	-0.005	0.933	0.0	0.0
	-0.005	0.922	-0.005	0.926	0.0	0.0
	-0.005	0.934	-0.005	0.912	0.0	0.0
	-0.005	0.92	-0.005	0.91	0.0	0.0
	-0.005	1.0	-0.005	0.96	0.0	0.0
	-0.005	0.925	-0.005	0.927	0.0	0.0
	-0.005	0.931	-0.005	0.9	0.0	0.0
Wachter	-0.005	0.931	-0.005	0.928	0.0	0.0
	-0.005	0.914	-0.005	0.916	0.0	0.0
	-0.005	0.937	-0.005	0.917	0.0	0.0
	-0.005	0.919	-0.005	0.91	0.0	0.0
	-0.005	0.923	-0.005	0.905	0.0	0.0
	-0.005	1.0	-0.005	0.913	0.0	0.0
	-0.005	1.0	-0.005	0.911	0.0	0.0

	-0.005	0.909	-0.005	0.925	0.0	0.0
	-0.005	0.914	-0.005	0.923	0.0	0.0
	-0.005	0.916	-0.005	0.924	0.0	0.0
Generic	-0.005	0.92	-0.005	0.924	0.0	0.0
	-0.005	0.923	-0.005	0.919	0.0	0.0
	-0.005	0.919	-0.005	0.918	0.0	0.0
	-0.005	0.929	-0.005	0.917	0.0	0.0
	-0.005	0.916	-0.005	0.924	0.0	0.0
	-0.005	0.921	-0.005	0.999	0.0	0.0
	-0.005	0.964	-0.005	0.916	0.0	0.0
	-0.005	0.91	-0.005	0.92	0.0	0.0
	-0.005	0.925	-0.005	0.928	0.0	0.0
	-0.005	0.921	-0.005	0.919	0.0	0.0
DiCE	-0.005	0.927	-0.005	0.909	0.0	0.0
	-0.005	1.0	-0.005	0.905	0.0	0.0
	-0.005	0.905	-0.005	0.896	0.0	0.0
	-0.005	0.917	-0.005	0.921	0.0	0.0
	-0.005	0.915	-0.005	0.93	0.0	0.0
	-0.005	1.0	-0.005	0.904	0.0	0.0
	-0.005	0.934	-0.005	0.911	0.0	0.0
	-0.005	0.909	-0.005	0.932	0.0	0.0
	-0.005	0.908	-0.005	0.915	0.0	0.0
	-0.005	1.0	-0.005	0.921	0.0	0.0
ClaPROAR	-0.005	0.933	-0.005	0.926	0.0	0.0
	-0.005	0.926	-0.005	0.921	0.0	0.0
	-0.005	0.912	-0.005	0.92	0.0	0.0
	-0.005	0.968	-0.005	0.933	0.0	0.0
	-0.005	0.919	-0.005	0.911	0.0	0.0
	-0.005	0.92	-0.005	0.926	0.0	0.0
	-0.005	0.973	-0.005	0.924	0.0	0.0
	-0.005	0.922	-0.005	0.924	0.0	0.0
	-0.005	1.0	-0.005	0.907	0.0	0.0
	-0.005	0.918	-0.005	0.928	0.0	0.0

Tab. 216: Domain shifts for the blobs data experiment 5 using a deep ensemble

F.3.7. GMCS dataset using MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.21	0.0	0.197	0.0	0.054	0.054
	0.194	0.0	0.192	0.0	0.064	0.058
	0.213	0.0	0.201	0.0	0.056	0.056
	0.203	0.0	0.184	0.0	0.062	0.082
	0.209	0.0	0.197	0.0	0.056	0.07
	0.195	0.0	0.182	0.0	0.06	0.082
	0.21	0.0	0.203	0.0	0.064	0.068
	0.211	0.0	0.198	0.0	0.05	0.092
	0.2	0.0	0.198	0.0	0.06	0.058
	0.202	0.0	0.185	0.0	0.058	0.058
ECCo	0.209	0.0	0.2	0.0	0.056	0.086
	0.2	0.0	0.187	0.0	0.058	0.078
	0.206	0.0	0.198	0.0	0.048	0.078
	0.203	0.0	0.195	0.0	0.044	0.07
	0.201	0.0	0.197	0.0	0.048	0.082
	0.199	0.0	0.171	0.0	0.044	0.082
	0.204	0.0	0.197	0.0	0.072	0.072

	0.192	0.0	0.184	0.0	0.054	0.068
	0.207	0.0	0.185	0.0	0.032	0.082
	0.201	0.0	0.193	0.0	0.06	0.066
Wachter	0.207	0.0	0.193	0.0	0.062	0.07
	0.204	0.0	0.193	0.0	0.058	0.06
	0.202	0.0	0.195	0.0	0.064	0.07
	0.207	0.0	0.202	0.0	0.054	0.06
	0.21	0.0	0.177	0.0	0.05	0.076
	0.196	0.0	0.191	0.0	0.048	0.062
	0.211	0.0	0.186	0.0	0.06	0.066
	0.203	0.0	0.189	0.0	0.05	0.072
	0.196	0.0	0.194	0.0	0.062	0.054
	0.209	0.0	0.199	0.0	0.034	0.072
Generic	0.204	0.0	0.19	0.0	0.07	0.064
	0.207	0.0	0.19	0.0	0.068	0.062
	0.205	0.0	0.186	0.0	0.062	0.064
	0.201	0.0	0.193	0.0	0.048	0.06
	0.203	0.0	0.182	0.0	0.048	0.07
	0.199	0.0	0.192	0.0	0.058	0.07
	0.207	0.0	0.167	0.0	0.064	0.086
	0.206	0.0	0.196	0.0	0.044	0.072
	0.197	0.0	0.174	0.0	0.052	0.076
	0.201	0.0	0.184	0.0	0.038	0.07
DiCE	0.205	0.0	0.195	0.0	0.048	0.07
	0.205	0.0	0.184	0.0	0.042	0.066
	0.207	0.0	0.188	0.0	0.066	0.078
	0.209	0.0	0.205	0.0	0.07	0.074
	0.207	0.0	0.19	0.0	0.034	0.052
	0.196	0.0	0.183	0.0	0.066	0.074
	0.194	0.0	0.185	0.0	0.042	0.06
	0.198	0.0	0.186	0.0	0.05	0.054
	0.201	0.0	0.186	0.0	0.048	0.06
	0.202	0.0	0.187	0.0	0.044	0.064
ClaPROAR	0.2	0.0	0.183	0.0	0.058	0.062
	0.205	0.0	0.182	0.0	0.04	0.058
	0.204	0.0	0.161	0.0	0.062	0.086
	0.208	0.0	0.191	0.0	0.036	0.042
	0.204	0.0	0.191	0.0	0.05	0.076
	0.201	0.0	0.179	0.0	0.046	0.06
	0.205	0.0	0.192	0.0	0.062	0.062
	0.194	0.0	0.184	0.0	0.048	0.066
	0.215	0.0	0.18	0.0	0.044	0.076
	0.211	0.0	0.195	0.0	0.064	0.074

Tab. 217: Domain shifts for the GMCS data experiment 1 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.175	0.0	0.188	0.0	0.05	0.04
	0.179	0.0	0.192	0.0	0.054	0.05
	0.184	0.0	0.205	0.0	0.048	0.058
	0.182	0.0	0.2	0.0	0.058	0.05
	0.191	0.0	0.201	0.0	0.042	0.044
	0.17	0.0	0.197	0.0	0.06	0.052
	0.185	0.0	0.202	0.0	0.062	0.046
	0.19	0.0	0.196	0.0	0.044	0.066

	0.198	0.0	0.219	0.0	0.062	0.042
	0.183	0.0	0.201	0.0	0.058	0.046
ECCo	0.181	0.0	0.209	0.0	0.042	0.05
	0.187	0.0	0.198	0.0	0.048	0.056
	0.198	0.0	0.213	0.0	0.04	0.048
	0.193	0.0	0.204	0.0	0.06	0.04
	0.182	0.0	0.21	0.0	0.072	0.042
	0.177	0.0	0.211	0.0	0.058	0.036
	0.181	0.0	0.198	0.0	0.05	0.044
	0.18	0.0	0.203	0.0	0.04	0.054
	0.187	0.0	0.211	0.0	0.046	0.04
	0.184	0.0	0.205	0.0	0.05	0.04
Wachter	0.186	0.0	0.181	0.0	0.048	0.054
	0.193	0.0	0.209	0.0	0.06	0.064
	0.16	0.0	0.186	0.0	0.072	0.056
	0.186	0.0	0.204	0.0	0.048	0.046
	0.198	0.0	0.21	0.0	0.054	0.042
	0.197	0.0	0.217	0.0	0.042	0.06
	0.173	0.0	0.194	0.0	0.062	0.056
	0.185	0.0	0.181	0.0	0.046	0.042
	0.184	0.0	0.201	0.0	0.044	0.036
	0.191	0.0	0.216	0.0	0.05	0.048
Generic	0.171	0.0	0.192	0.0	0.046	0.052
	0.188	0.0	0.202	0.0	0.058	0.044
	0.182	0.0	0.207	0.0	0.032	0.05
	0.19	0.0	0.209	0.0	0.052	0.05
	0.187	0.0	0.199	0.0	0.036	0.032
	0.185	0.0	0.219	0.0	0.064	0.048
	0.182	0.0	0.201	0.0	0.05	0.044
	0.185	0.0	0.215	0.0	0.044	0.034
	0.175	0.0	0.214	0.0	0.056	0.042
	0.176	0.0	0.187	0.0	0.056	0.052
DiCE	0.176	0.0	0.183	0.0	0.068	0.086
	0.188	0.0	0.215	0.0	0.052	0.05
	0.19	0.0	0.204	0.0	0.048	0.052
	0.179	0.0	0.2	0.0	0.058	0.058
	0.192	0.0	0.188	0.0	0.034	0.046
	0.18	0.0	0.191	0.0	0.052	0.046
	0.187	0.0	0.205	0.0	0.048	0.04
	0.181	0.0	0.19	0.0	0.036	0.054
	0.173	0.0	0.21	0.0	0.06	0.038
	0.177	0.0	0.188	0.0	0.052	0.04
ClaPROAR	0.177	0.0	0.21	0.0	0.066	0.04
	0.192	0.0	0.218	0.0	0.074	0.046
	0.187	0.0	0.209	0.0	0.056	0.058
	0.187	0.0	0.208	0.0	0.052	0.032
	0.182	0.0	0.194	0.0	0.06	0.058
	0.175	0.0	0.187	0.0	0.038	0.05
	0.192	0.0	0.208	0.0	0.056	0.05
	0.182	0.0	0.211	0.0	0.052	0.048
	0.177	0.0	0.207	0.0	0.062	0.054
	0.194	0.0	0.199	0.0	0.044	0.048

Tab. 218: Domain shifts for the GMCS data experiment 2 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.196	0.0	0.19	0.0	0.044	0.058
	0.207	0.0	0.197	0.0	0.048	0.058
	0.203	0.0	0.192	0.0	0.03	0.054
	0.201	0.0	0.174	0.0	0.034	0.048
	0.202	0.0	0.188	0.0	0.038	0.054
	0.208	0.0	0.2	0.0	0.036	0.05
	0.203	0.0	0.187	0.0	0.028	0.052
	0.21	0.0	0.18	0.0	0.026	0.054
	0.208	0.0	0.208	0.0	0.032	0.04
	0.212	0.0	0.201	0.0	0.04	0.054
ECCo	0.199	0.0	0.178	0.0	0.036	0.05
	0.205	0.0	0.189	0.0	0.028	0.048
	0.208	0.0	0.199	0.0	0.032	0.046
	0.204	0.0	0.209	0.0	0.048	0.046
	0.2	0.0	0.203	0.0	0.05	0.056
	0.204	0.0	0.187	0.0	0.042	0.072
	0.201	0.0	0.165	0.0	0.04	0.048
	0.208	0.0	0.198	0.0	0.042	0.05
	0.202	0.0	0.2	0.0	0.036	0.034
	0.211	0.0	0.191	0.0	0.03	0.056
Wachter	0.212	0.0	0.192	0.0	0.044	0.074
	0.209	0.0	0.202	0.0	0.038	0.036
	0.215	0.0	0.2	0.0	0.024	0.048
	0.208	0.0	0.192	0.0	0.032	0.048
	0.206	0.0	0.191	0.0	0.024	0.056
	0.194	0.0	0.188	0.0	0.054	0.046
	0.209	0.0	0.195	0.0	0.032	0.05
	0.207	0.0	0.199	0.0	0.04	0.038
	0.204	0.0	0.189	0.0	0.04	0.046
	0.212	0.0	0.198	0.0	0.02	0.056
Generic	0.21	0.0	0.191	0.0	0.046	0.046
	0.21	0.0	0.184	0.0	0.036	0.062
	0.21	0.0	0.179	0.0	0.044	0.052
	0.195	0.0	0.186	0.0	0.03	0.058
	0.207	0.0	0.177	0.0	0.026	0.044
	0.206	0.0	0.179	0.0	0.036	0.042
	0.202	0.0	0.193	0.0	0.048	0.05
	0.216	0.0	0.196	0.0	0.034	0.044
	0.209	0.0	0.203	0.0	0.034	0.048
	0.19	0.0	0.201	0.0	0.074	0.056
DiCE	0.199	0.0	0.2	0.0	0.036	0.044
	0.203	0.0	0.185	0.0	0.032	0.07
	0.208	0.0	0.182	0.0	0.042	0.058
	0.202	0.0	0.184	0.0	0.04	0.034
	0.215	0.0	0.198	0.0	0.042	0.04
	0.211	0.0	0.2	0.0	0.028	0.054
	0.209	0.0	0.19	0.0	0.044	0.05
	0.197	0.0	0.187	0.0	0.026	0.05
	0.201	0.0	0.186	0.0	0.04	0.054
	0.206	0.0	0.194	0.0	0.032	0.068
ClaPROAR	0.208	0.0	0.194	0.0	0.04	0.07
	0.196	0.0	0.182	0.0	0.038	0.048
	0.207	0.0	0.193	0.0	0.028	0.046
	0.209	0.0	0.192	0.0	0.04	0.036

	0.219	0.0	0.21	0.0	0.032	0.044
	0.207	0.0	0.203	0.0	0.04	0.048
	0.207	0.0	0.178	0.0	0.046	0.074
	0.207	0.0	0.198	0.0	0.036	0.046
	0.204	0.0	0.145	0.0	0.052	0.074
	0.201	0.0	0.205	0.0	0.04	0.056

Tab. 219: Domain shifts for the GMCS data experiment 3 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.2	0.0	0.197	0.0	0.06	0.056
	0.202	0.0	0.18	0.0	0.062	0.068
	0.191	0.0	0.192	0.0	0.052	0.064
	0.192	0.0	0.193	0.0	0.042	0.068
	0.205	0.0	0.2	0.0	0.052	0.06
	0.185	0.0	0.157	0.0	0.064	0.07
	0.199	0.0	0.185	0.0	0.054	0.046
	0.192	0.0	0.194	0.0	0.068	0.064
	0.203	0.0	0.186	0.0	0.066	0.076
	0.19	0.0	0.198	0.0	0.04	0.06
ECCo	0.204	0.0	0.191	0.0	0.058	0.076
	0.2	0.0	0.202	0.0	0.048	0.042
	0.197	0.0	0.181	0.0	0.07	0.066
	0.202	0.0	0.189	0.0	0.052	0.064
	0.197	0.0	0.188	0.0	0.06	0.06
	0.205	0.0	0.206	0.0	0.056	0.054
	0.191	0.0	0.184	0.0	0.05	0.064
	0.203	0.0	0.197	0.0	0.056	0.076
	0.189	0.0	0.194	0.0	0.066	0.058
	0.203	0.0	0.19	0.0	0.044	0.068
Wachter	0.202	0.0	0.193	0.0	0.044	0.056
	0.194	0.0	0.194	0.0	0.064	0.066
	0.197	0.0	0.187	0.0	0.052	0.066
	0.203	0.0	0.199	0.0	0.044	0.06
	0.196	0.0	0.196	0.0	0.054	0.062
	0.184	0.0	0.176	0.0	0.064	0.066
	0.2	0.0	0.195	0.0	0.05	0.064
	0.194	0.0	0.173	0.0	0.032	0.052
	0.182	0.0	0.177	0.0	0.056	0.048
	0.19	0.0	0.194	0.0	0.068	0.056
Generic	0.196	0.0	0.192	0.0	0.048	0.044
	0.203	0.0	0.201	0.0	0.058	0.048
	0.195	0.0	0.195	0.0	0.076	0.062
	0.181	0.0	0.186	0.0	0.072	0.06
	0.2	0.0	0.194	0.0	0.058	0.036
	0.185	0.0	0.191	0.0	0.068	0.06
	0.197	0.0	0.191	0.0	0.044	0.056
	0.193	0.0	0.181	0.0	0.062	0.066
	0.202	0.0	0.202	0.0	0.048	0.042
	0.206	0.0	0.197	0.0	0.052	0.056
DiCE	0.2	0.0	0.193	0.0	0.056	0.06
	0.196	0.0	0.191	0.0	0.056	0.06
	0.205	0.0	0.192	0.0	0.056	0.068
	0.189	0.0	0.194	0.0	0.06	0.066
	0.197	0.0	0.191	0.0	0.048	0.044

	0.2	0.0	0.193	0.0	0.054	0.064
	0.195	0.0	0.19	0.0	0.048	0.068
	0.2	0.0	0.197	0.0	0.066	0.06
	0.192	0.0	0.188	0.0	0.062	0.064
	0.195	0.0	0.175	0.0	0.056	0.056
ClaPROAR	0.2	0.0	0.196	0.0	0.08	0.072
	0.194	0.0	0.191	0.0	0.06	0.07
	0.205	0.0	0.197	0.0	0.046	0.05
	0.199	0.0	0.172	0.0	0.056	0.068
	0.197	0.0	0.196	0.0	0.058	0.062
	0.194	0.0	0.185	0.0	0.046	0.068
	0.201	0.0	0.202	0.0	0.036	0.05
	0.195	0.0	0.191	0.0	0.048	0.068
	0.207	0.0	0.199	0.0	0.062	0.07
	0.197	0.0	0.195	0.0	0.056	0.048

Tab. 220: Domain shifts for the GMCS data experiment 4 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.191	0.0	0.207	0.0	0.04	0.034
	0.2	0.0	0.21	0.0	0.048	0.04
	0.188	0.0	0.207	0.0	0.038	0.076
	0.192	0.0	0.207	0.0	0.036	0.056
	0.188	0.0	0.204	0.0	0.056	0.048
	0.188	0.0	0.198	0.0	0.036	0.054
	0.195	0.0	0.206	0.0	0.044	0.04
	0.196	0.0	0.203	0.0	0.03	0.038
	0.191	0.0	0.195	0.0	0.032	0.07
	0.182	0.0	0.209	0.0	0.056	0.036
ECCo	0.195	0.0	0.202	0.0	0.044	0.062
	0.192	0.0	0.203	0.0	0.036	0.054
	0.19	0.0	0.208	0.0	0.04	0.032
	0.191	0.0	0.207	0.0	0.056	0.044
	0.193	0.0	0.207	0.0	0.034	0.03
	0.197	0.0	0.202	0.0	0.036	0.034
	0.199	0.0	0.203	0.0	0.036	0.046
	0.184	0.0	0.211	0.0	0.05	0.052
	0.185	0.0	0.207	0.0	0.058	0.044
	0.19	0.0	0.199	0.0	0.052	0.062
Wachter	0.198	0.0	0.204	0.0	0.044	0.05
	0.198	0.0	0.219	0.0	0.058	0.032
	0.204	0.0	0.208	0.0	0.052	0.054
	0.191	0.0	0.208	0.0	0.04	0.052
	0.195	0.0	0.217	0.0	0.032	0.028
	0.192	0.0	0.21	0.0	0.03	0.026
	0.197	0.0	0.21	0.0	0.042	0.052
	0.198	0.0	0.215	0.0	0.042	0.032
	0.192	0.0	0.201	0.0	0.052	0.04
	0.196	0.0	0.198	0.0	0.042	0.048
Generic	0.19	0.0	0.212	0.0	0.046	0.04
	0.194	0.0	0.208	0.0	0.048	0.06
	0.196	0.0	0.213	0.0	0.034	0.044
	0.185	0.0	0.202	0.0	0.04	0.068
	0.193	0.0	0.201	0.0	0.038	0.052
	0.192	0.0	0.204	0.0	0.046	0.06

	0.184	0.0	0.208	0.0	0.038	0.03
	0.19	0.0	0.208	0.0	0.038	0.036
	0.189	0.0	0.205	0.0	0.038	0.052
	0.184	0.0	0.204	0.0	0.054	0.064
DiCE	0.192	0.0	0.214	0.0	0.05	0.046
	0.202	0.0	0.208	0.0	0.04	0.036
	0.199	0.0	0.214	0.0	0.04	0.036
	0.188	0.0	0.207	0.0	0.06	0.052
	0.188	0.0	0.202	0.0	0.066	0.066
	0.186	0.0	0.211	0.0	0.062	0.044
	0.203	0.0	0.218	0.0	0.054	0.054
	0.193	0.0	0.206	0.0	0.052	0.032
	0.191	0.0	0.21	0.0	0.034	0.036
	0.189	0.0	0.21	0.0	0.034	0.048
ClaPROAR	0.182	0.0	0.209	0.0	0.074	0.066
	0.182	0.0	0.202	0.0	0.042	0.064
	0.191	0.0	0.198	0.0	0.046	0.034
	0.197	0.0	0.213	0.0	0.054	0.048
	0.19	0.0	0.207	0.0	0.062	0.026
	0.193	0.0	0.195	0.0	0.04	0.054
	0.2	0.0	0.214	0.0	0.044	0.062
	0.183	0.0	0.206	0.0	0.044	0.054
	0.186	0.0	0.208	0.0	0.052	0.054
	0.194	0.0	0.2	0.0	0.036	0.058

Tab. 221: Domain shifts for the GMCS data experiment 5 using a MLP

F.3.8. GMCS dataset using Deep ensemble using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.234	0.0	0.242	0.0	0.056	0.054
	0.234	0.0	0.233	0.0	0.06	0.064
	0.236	0.0	0.233	0.0	0.052	0.066
	0.231	0.0	0.224	0.0	0.042	0.062
	0.232	0.0	0.23	0.0	0.046	0.064
	0.238	0.0	0.23	0.0	0.054	0.072
	0.24	0.0	0.235	0.0	0.066	0.066
	0.233	0.0	0.232	0.0	0.056	0.068
	0.239	0.0	0.237	0.0	0.068	0.062
	0.243	0.0	0.238	0.0	0.046	0.058
ECCo	0.238	0.0	0.235	0.0	0.064	0.072
	0.232	0.0	0.235	0.0	0.054	0.064
	0.235	0.0	0.23	0.0	0.064	0.076
	0.237	0.0	0.237	0.0	0.054	0.064
	0.234	0.0	0.223	0.0	0.056	0.068
	0.236	0.0	0.231	0.0	0.056	0.062
	0.234	0.0	0.229	0.0	0.066	0.076
	0.234	0.0	0.23	0.0	0.056	0.078
	0.231	0.0	0.237	0.0	0.05	0.052
	0.237	0.0	0.236	0.0	0.058	0.068
Wachter	0.238	0.0	0.241	0.0	0.048	0.066
	0.244	0.0	0.243	0.0	0.066	0.064
	0.238	0.0	0.228	0.0	0.07	0.076
	0.233	0.0	0.237	0.0	0.064	0.068
	0.238	0.0	0.239	0.0	0.07	0.09
	0.237	0.0	0.235	0.0	0.054	0.074

	0.235	0.0	0.229	0.0	0.048	0.06
	0.24	0.0	0.239	0.0	0.066	0.076
	0.239	0.0	0.237	0.0	0.054	0.054
	0.232	0.0	0.227	0.0	0.06	0.07
Generic	0.234	0.0	0.234	0.0	0.064	0.072
	0.232	0.0	0.234	0.0	0.066	0.066
	0.236	0.0	0.231	0.0	0.052	0.072
	0.242	0.0	0.232	0.0	0.052	0.082
	0.236	0.0	0.234	0.0	0.048	0.066
	0.243	0.0	0.235	0.0	0.04	0.058
	0.24	0.0	0.233	0.0	0.046	0.058
	0.232	0.0	0.228	0.0	0.064	0.052
	0.232	0.0	0.23	0.0	0.046	0.066
	0.24	0.0	0.243	0.0	0.066	0.068
DiCE	0.237	0.0	0.23	0.0	0.06	0.08
	0.242	0.0	0.232	0.0	0.052	0.056
	0.237	0.0	0.234	0.0	0.06	0.072
	0.232	0.0	0.23	0.0	0.058	0.07
	0.234	0.0	0.227	0.0	0.056	0.056
	0.236	0.0	0.226	0.0	0.054	0.06
	0.242	0.0	0.237	0.0	0.052	0.058
	0.231	0.0	0.224	0.0	0.06	0.066
	0.236	0.0	0.237	0.0	0.06	0.074
	0.238	0.0	0.234	0.0	0.054	0.064
ClaPROAR	0.237	0.0	0.233	0.0	0.062	0.066
	0.24	0.0	0.238	0.0	0.054	0.074
	0.235	0.0	0.231	0.0	0.044	0.068
	0.236	0.0	0.233	0.0	0.05	0.062
	0.237	0.0	0.234	0.0	0.046	0.054
	0.24	0.0	0.232	0.0	0.052	0.066
	0.232	0.0	0.228	0.0	0.062	0.068
	0.237	0.0	0.228	0.0	0.046	0.074
	0.238	0.0	0.235	0.0	0.058	0.062
	0.233	0.0	0.226	0.0	0.056	0.068

Tab. 222: Domain shifts for the GMCS data experiment 1 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.209	0.0	0.205	0.0	0.058	0.062
	0.211	0.0	0.203	0.0	0.05	0.052
	0.204	0.0	0.199	0.0	0.044	0.058
	0.209	0.0	0.205	0.0	0.056	0.072
	0.204	0.0	0.205	0.0	0.05	0.058
	0.21	0.0	0.203	0.0	0.05	0.058
	0.209	0.0	0.211	0.0	0.064	0.072
	0.21	0.0	0.203	0.0	0.05	0.072
	0.207	0.0	0.204	0.0	0.052	0.064
	0.21	0.0	0.205	0.0	0.06	0.08
ECCo	0.208	0.0	0.199	0.0	0.046	0.054
	0.206	0.0	0.204	0.0	0.048	0.064
	0.203	0.0	0.13	0.0	0.06	0.078
	0.212	0.0	0.203	0.0	0.052	0.06
	0.204	0.0	0.192	0.0	0.044	0.074
	0.207	0.0	0.206	0.0	0.054	0.064
	0.208	0.0	0.196	0.0	0.044	0.054

	0.203	0.0	0.199	0.0	0.046	0.06
	0.208	0.0	0.204	0.0	0.05	0.066
	0.213	0.0	0.208	0.0	0.04	0.052
Wachter	0.203	0.0	0.197	0.0	0.046	0.06
	0.208	0.0	0.206	0.0	0.06	0.072
	0.205	0.0	0.2	0.0	0.052	0.072
	0.207	0.0	0.201	0.0	0.048	0.052
	0.205	0.0	0.199	0.0	0.046	0.072
	0.211	0.0	0.201	0.0	0.044	0.068
	0.206	0.0	0.202	0.0	0.048	0.042
	0.208	0.0	0.206	0.0	0.066	0.072
	0.21	0.0	0.198	0.0	0.054	0.056
	0.208	0.0	0.204	0.0	0.054	0.066
Generic	0.205	0.0	0.201	0.0	0.058	0.06
	0.208	0.0	0.205	0.0	0.052	0.062
	0.203	0.0	0.197	0.0	0.048	0.05
	0.207	0.0	0.194	0.0	0.058	0.07
	0.203	0.0	0.198	0.0	0.048	0.064
	0.21	0.0	0.202	0.0	0.046	0.064
	0.211	0.0	0.202	0.0	0.05	0.072
	0.209	0.0	0.202	0.0	0.046	0.06
	0.206	0.0	0.2	0.0	0.052	0.06
	0.209	0.0	0.204	0.0	0.05	0.06
DiCE	0.208	0.0	0.202	0.0	0.048	0.064
	0.209	0.0	0.205	0.0	0.06	0.058
	0.208	0.0	0.209	0.0	0.062	0.066
	0.208	0.0	0.201	0.0	0.052	0.066
	0.208	0.0	0.204	0.0	0.058	0.066
	0.199	0.0	0.197	0.0	0.058	0.074
	0.204	0.0	0.2	0.0	0.04	0.054
	0.205	0.0	0.203	0.0	0.05	0.062
	0.207	0.0	0.203	0.0	0.064	0.068
	0.206	0.0	0.133	0.0	0.046	0.06
ClaPROAR	0.206	0.0	0.197	0.0	0.044	0.064
	0.212	0.0	0.202	0.0	0.046	0.06
	0.208	0.0	0.2	0.0	0.052	0.066
	0.208	0.0	0.203	0.0	0.05	0.062
	0.215	0.0	0.203	0.0	0.05	0.06
	0.203	0.0	0.202	0.0	0.056	0.062
	0.205	0.0	0.203	0.0	0.048	0.05
	0.211	0.0	0.209	0.0	0.038	0.068
	0.21	0.0	0.197	0.0	0.05	0.06
	0.205	0.0	0.205	0.0	0.064	0.074

Tab. 223: Domain shifts for the GMCS data experiment 2 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.23	0.0	0.233	0.0	0.034	0.032
	0.223	0.0	0.227	0.0	0.038	0.034
	0.218	0.0	0.227	0.0	0.034	0.032
	0.227	0.0	0.227	0.0	0.034	0.026
	0.225	0.0	0.232	0.0	0.036	0.04
	0.22	0.0	0.231	0.0	0.034	0.032
	0.217	0.0	0.231	0.0	0.034	0.036
	0.219	0.0	0.229	0.0	0.028	0.048

	0.215	0.0	0.22	0.0	0.032	0.026
	0.224	0.0	0.231	0.0	0.032	0.03
ECCo	0.218	0.0	0.224	0.0	0.036	0.036
	0.225	0.0	0.228	0.0	0.044	0.038
	0.223	0.0	0.23	0.0	0.03	0.03
	0.226	0.0	0.222	0.0	0.036	0.03
	0.22	0.0	0.225	0.0	0.034	0.036
	0.224	0.0	0.222	0.0	0.032	0.038
	0.224	0.0	0.222	0.0	0.03	0.034
	0.217	0.0	0.227	0.0	0.04	0.026
	0.218	0.0	0.224	0.0	0.03	0.038
	0.223	0.0	0.231	0.0	0.03	0.03
Wachter	0.226	0.0	0.234	0.0	0.04	0.034
	0.218	0.0	0.229	0.0	0.034	0.022
	0.214	0.0	0.228	0.0	0.036	0.038
	0.218	0.0	0.228	0.0	0.032	0.022
	0.225	0.0	0.221	0.0	0.04	0.042
	0.216	0.0	0.227	0.0	0.046	0.03
	0.221	0.0	0.229	0.0	0.054	0.046
	0.214	0.0	0.225	0.0	0.04	0.04
	0.215	0.0	0.222	0.0	0.034	0.03
	0.231	0.0	0.231	0.0	0.04	0.048
Generic	0.224	0.0	0.23	0.0	0.03	0.026
	0.217	0.0	0.229	0.0	0.044	0.04
	0.225	0.0	0.226	0.0	0.04	0.034
	0.22	0.0	0.231	0.0	0.038	0.034
	0.221	0.0	0.227	0.0	0.032	0.036
	0.22	0.0	0.228	0.0	0.032	0.03
	0.219	0.0	0.225	0.0	0.032	0.04
	0.227	0.0	0.233	0.0	0.036	0.038
	0.226	0.0	0.227	0.0	0.028	0.032
	0.221	0.0	0.232	0.0	0.034	0.034
DiCE	0.212	0.0	0.226	0.0	0.04	0.026
	0.215	0.0	0.226	0.0	0.03	0.03
	0.224	0.0	0.224	0.0	0.036	0.038
	0.221	0.0	0.234	0.0	0.04	0.034
	0.218	0.0	0.227	0.0	0.034	0.034
	0.223	0.0	0.23	0.0	0.032	0.04
	0.224	0.0	0.228	0.0	0.03	0.034
	0.22	0.0	0.226	0.0	0.036	0.032
	0.222	0.0	0.227	0.0	0.026	0.028
	0.226	0.0	0.23	0.0	0.042	0.04
ClaPROAR	0.214	0.0	0.224	0.0	0.046	0.034
	0.219	0.0	0.229	0.0	0.04	0.026
	0.22	0.0	0.225	0.0	0.032	0.034
	0.22	0.0	0.229	0.0	0.04	0.036
	0.225	0.0	0.237	0.0	0.034	0.034
	0.227	0.0	0.229	0.0	0.032	0.028
	0.222	0.0	0.22	0.0	0.038	0.042
	0.223	0.0	0.229	0.0	0.04	0.036
	0.219	0.0	0.226	0.0	0.026	0.03
	0.216	0.0	0.221	0.0	0.036	0.036

Tab. 224: Domain shifts for the GMCS data experiment 3 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.228	0.0	0.217	0.0	0.036	0.062
	0.233	0.0	0.218	0.0	0.044	0.072
	0.23	0.0	0.213	0.0	0.046	0.064
	0.232	0.0	0.221	0.0	0.048	0.05
	0.229	0.0	0.219	0.0	0.038	0.048
	0.222	0.0	0.218	0.0	0.048	0.066
	0.219	0.0	0.215	0.0	0.042	0.052
	0.221	0.0	0.21	0.0	0.054	0.068
	0.229	0.0	0.222	0.0	0.048	0.054
	0.229	0.0	0.221	0.0	0.044	0.052
ECCo	0.224	0.0	0.22	0.0	0.044	0.056
	0.226	0.0	0.217	0.0	0.052	0.052
	0.228	0.0	0.22	0.0	0.036	0.044
	0.228	0.0	0.213	0.0	0.046	0.064
	0.226	0.0	0.219	0.0	0.046	0.07
	0.224	0.0	0.212	0.0	0.044	0.052
	0.224	0.0	0.214	0.0	0.056	0.06
	0.227	0.0	0.211	0.0	0.046	0.068
	0.229	0.0	0.153	0.0	0.048	0.078
	0.229	0.0	0.214	0.0	0.042	0.058
Wachter	0.227	0.0	0.219	0.0	0.04	0.062
	0.225	0.0	0.212	0.0	0.056	0.064
	0.226	0.0	0.218	0.0	0.054	0.048
	0.224	0.0	0.217	0.0	0.052	0.068
	0.232	0.0	0.22	0.0	0.042	0.052
	0.222	0.0	0.211	0.0	0.042	0.064
	0.231	0.0	0.214	0.0	0.06	0.066
	0.223	0.0	0.203	0.0	0.036	0.082
	0.227	0.0	0.215	0.0	0.046	0.066
	0.226	0.0	0.213	0.0	0.044	0.052
Generic	0.219	0.0	0.217	0.0	0.046	0.05
	0.228	0.0	0.225	0.0	0.046	0.048
	0.225	0.0	0.206	0.0	0.044	0.06
	0.227	0.0	0.215	0.0	0.042	0.062
	0.223	0.0	0.211	0.0	0.048	0.054
	0.219	0.0	0.213	0.0	0.044	0.06
	0.231	0.0	0.216	0.0	0.05	0.052
	0.223	0.0	0.211	0.0	0.048	0.06
	0.235	0.0	0.22	0.0	0.038	0.052
	0.228	0.0	0.225	0.0	0.05	0.054
DiCE	0.232	0.0	0.226	0.0	0.04	0.05
	0.224	0.0	0.214	0.0	0.046	0.07
	0.226	0.0	0.21	0.0	0.046	0.07
	0.231	0.0	0.228	0.0	0.046	0.05
	0.233	0.0	0.223	0.0	0.046	0.052
	0.232	0.0	0.227	0.0	0.04	0.056
	0.223	0.0	0.218	0.0	0.038	0.048
	0.227	0.0	0.219	0.0	0.052	0.06
	0.226	0.0	0.222	0.0	0.046	0.058
	0.225	0.0	0.214	0.0	0.044	0.056
ClaPROAR	0.221	0.0	0.212	0.0	0.052	0.068
	0.228	0.0	0.214	0.0	0.038	0.072
	0.221	0.0	0.211	0.0	0.044	0.058
	0.225	0.0	0.215	0.0	0.042	0.05

	0.218	0.0	0.218	0.0	0.05	0.068
	0.23	0.0	0.217	0.0	0.044	0.06
	0.226	0.0	0.217	0.0	0.05	0.064
	0.229	0.0	0.222	0.0	0.046	0.062
	0.232	0.0	0.224	0.0	0.04	0.052
	0.228	0.0	0.222	0.0	0.048	0.052

Tab. 225: Domain shifts for the GMCS data experiment 4 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.233	0.0	0.238	0.0	0.054	0.044
	0.233	0.0	0.233	0.0	0.066	0.06
	0.231	0.0	0.236	0.0	0.042	0.044
	0.23	0.0	0.231	0.0	0.056	0.036
	0.231	0.0	0.238	0.0	0.05	0.036
	0.234	0.0	0.238	0.0	0.04	0.046
	0.235	0.0	0.24	0.0	0.05	0.038
	0.227	0.0	0.233	0.0	0.048	0.042
	0.232	0.0	0.231	0.0	0.054	0.052
	0.236	0.0	0.238	0.0	0.058	0.068
ECCo	0.233	0.0	0.244	0.0	0.054	0.04
	0.233	0.0	0.234	0.0	0.05	0.048
	0.236	0.0	0.237	0.0	0.054	0.05
	0.235	0.0	0.238	0.0	0.052	0.042
	0.234	0.0	0.229	0.0	0.054	0.056
	0.227	0.0	0.225	0.0	0.042	0.04
	0.236	0.0	0.236	0.0	0.054	0.052
	0.237	0.0	0.238	0.0	0.044	0.042
	0.229	0.0	0.231	0.0	0.048	0.052
	0.232	0.0	0.231	0.0	0.042	0.036
Wachter	0.235	0.0	0.225	0.0	0.044	0.058
	0.232	0.0	0.234	0.0	0.052	0.056
	0.236	0.0	0.23	0.0	0.048	0.052
	0.234	0.0	0.233	0.0	0.068	0.066
	0.24	0.0	0.238	0.0	0.056	0.056
	0.232	0.0	0.237	0.0	0.048	0.044
	0.23	0.0	0.234	0.0	0.044	0.044
	0.234	0.0	0.236	0.0	0.048	0.05
	0.235	0.0	0.234	0.0	0.052	0.04
	0.232	0.0	0.236	0.0	0.048	0.044
Generic	0.236	0.0	0.242	0.0	0.044	0.04
	0.239	0.0	0.231	0.0	0.038	0.05
	0.227	0.0	0.226	0.0	0.05	0.042
	0.226	0.0	0.23	0.0	0.052	0.032
	0.234	0.0	0.239	0.0	0.05	0.066
	0.238	0.0	0.245	0.0	0.046	0.038
	0.234	0.0	0.237	0.0	0.056	0.05
	0.232	0.0	0.241	0.0	0.052	0.056
	0.228	0.0	0.241	0.0	0.052	0.052
	0.235	0.0	0.233	0.0	0.054	0.042
DiCE	0.228	0.0	0.229	0.0	0.048	0.054
	0.24	0.0	0.237	0.0	0.048	0.046
	0.23	0.0	0.236	0.0	0.054	0.052
	0.236	0.0	0.241	0.0	0.056	0.042
	0.232	0.0	0.237	0.0	0.054	0.05

	0.233	0.0	0.235	0.0	0.046	0.04
	0.235	0.0	0.236	0.0	0.044	0.038
	0.233	0.0	0.239	0.0	0.062	0.044
	0.237	0.0	0.235	0.0	0.05	0.046
	0.236	0.0	0.234	0.0	0.052	0.056
ClaPROAR	0.232	0.0	0.232	0.0	0.054	0.036
	0.237	0.0	0.239	0.0	0.04	0.042
	0.236	0.0	0.241	0.0	0.05	0.038
	0.234	0.0	0.235	0.0	0.05	0.064
	0.235	0.0	0.239	0.0	0.054	0.046
	0.234	0.0	0.237	0.0	0.056	0.052
	0.235	0.0	0.234	0.0	0.056	0.052
	0.23	0.0	0.229	0.0	0.056	0.038
	0.232	0.0	0.239	0.0	0.044	0.038
	0.23	0.0	0.233	0.0	0.058	0.052

Tab. 226: Domain shifts for the GMCS data experiment 5 using a MLP and a deep ensemble

F.3.9. GMCS dataset using Deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.075	0.0	0.076	0.0	0.024	0.018
	0.076	0.0	0.072	0.0	0.026	0.032
	0.075	0.0	0.074	0.0	0.02	0.028
	0.073	0.0	0.072	0.0	0.028	0.03
	0.074	0.0	0.07	0.0	0.028	0.028
	0.073	0.0	0.072	0.0	0.026	0.036
	0.071	0.0	0.072	0.0	0.038	0.042
	0.074	0.0	0.074	0.0	0.026	0.024
	0.074	0.0	0.074	0.0	0.02	0.026
	0.076	0.0	0.074	0.0	0.024	0.042
ECCo	0.074	0.0	0.073	0.0	0.026	0.024
	0.072	0.0	0.072	0.0	0.024	0.022
	0.072	0.0	0.07	0.0	0.02	0.036
	0.072	0.0	0.074	0.0	0.026	0.026
	0.072	0.0	0.074	0.0	0.032	0.028
	0.071	0.0	0.074	0.0	0.036	0.038
	0.073	0.0	0.073	0.0	0.022	0.024
	0.076	0.0	0.075	0.0	0.028	0.032
	0.076	0.0	0.074	0.0	0.026	0.032
	0.073	0.0	0.072	0.0	0.036	0.034
Wachter	0.075	0.0	0.075	0.0	0.026	0.026
	0.074	0.0	0.075	0.0	0.03	0.034
	0.074	0.0	0.073	0.0	0.02	0.026
	0.074	0.0	0.072	0.0	0.026	0.034
	0.071	0.0	0.074	0.0	0.02	0.02
	0.074	0.0	0.071	0.0	0.032	0.034
	0.072	0.0	0.073	0.0	0.024	0.03
	0.074	0.0	0.069	0.0	0.024	0.02
	0.069	0.0	0.07	0.0	0.028	0.028
	0.075	0.0	0.074	0.0	0.032	0.026
Generic	0.073	0.0	0.075	0.0	0.036	0.032
	0.072	0.0	0.071	0.0	0.03	0.028
	0.073	0.0	0.072	0.0	0.02	0.024
	0.072	0.0	0.072	0.0	0.028	0.026
	0.073	0.0	0.072	0.0	0.04	0.038

	0.072	0.0	0.071	0.0	0.028	0.038
	0.072	0.0	0.07	0.0	0.022	0.03
	0.075	0.0	0.073	0.0	0.022	0.024
	0.072	0.0	0.072	0.0	0.036	0.036
	0.071	0.0	0.073	0.0	0.034	0.026
DiCE	0.074	0.0	0.071	0.0	0.032	0.032
	0.074	0.0	0.073	0.0	0.024	0.024
	0.074	0.0	0.074	0.0	0.024	0.032
	0.073	0.0	0.069	0.0	0.024	0.03
	0.07	0.0	0.067	0.0	0.024	0.032
	0.075	0.0	0.074	0.0	0.03	0.028
	0.076	0.0	0.076	0.0	0.022	0.03
	0.074	0.0	0.075	0.0	0.026	0.032
	0.07	0.0	0.073	0.0	0.03	0.02
	0.075	0.0	0.073	0.0	0.024	0.036
ClaPROAR	0.073	0.0	0.074	0.0	0.028	0.03
	0.073	0.0	0.072	0.0	0.032	0.03
	0.075	0.0	0.071	0.0	0.03	0.038
	0.07	0.0	0.073	0.0	0.026	0.02
	0.075	0.0	0.075	0.0	0.028	0.024
	0.072	0.0	0.074	0.0	0.024	0.032
	0.074	0.0	0.075	0.0	0.03	0.028
	0.074	0.0	0.073	0.0	0.032	0.042
	0.07	0.0	0.072	0.0	0.03	0.03
	0.07	0.0	0.072	0.0	0.034	0.026

Tab. 227: Domain shifts for the GMCS data experiment 1 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.077	0.0	0.08	0.0	0.014	0.008
	0.076	0.0	0.067	0.0	0.026	0.036
	0.077	0.0	0.064	0.0	0.026	0.034
	0.077	0.0	0.069	0.0	0.02	0.028
	0.078	0.0	0.068	0.0	0.024	0.04
	0.077	0.0	0.063	0.0	0.022	0.038
	0.078	0.0	0.067	0.0	0.016	0.032
	0.079	0.0	0.067	0.0	0.022	0.026
	0.076	0.0	0.072	0.0	0.022	0.024
	0.078	0.0	0.068	0.0	0.018	0.024
ECCo	0.078	0.0	0.077	0.0	0.024	0.02
	0.078	0.0	0.076	0.0	0.018	0.016
	0.074	0.0	0.075	0.0	0.02	0.026
	0.076	0.0	0.073	0.0	0.022	0.032
	0.078	0.0	0.073	0.0	0.018	0.026
	0.078	0.0	0.077	0.0	0.026	0.018
	0.077	0.0	0.076	0.0	0.024	0.022
	0.08	0.0	0.08	0.0	0.018	0.016
	0.076	0.0	0.077	0.0	0.024	0.026
	0.079	0.0	0.074	0.0	0.022	0.026
Wachter	0.078	0.0	0.069	0.0	0.024	0.02
	0.077	0.0	0.065	0.0	0.02	0.034
	0.079	0.0	0.076	0.0	0.02	0.022
	0.077	0.0	0.069	0.0	0.026	0.036
	0.077	0.0	0.071	0.0	0.02	0.024
	0.076	0.0	0.062	0.0	0.026	0.038

	0.074	0.0	0.071	0.0	0.024	0.028
	0.078	0.0	0.069	0.0	0.022	0.024
	0.078	0.0	0.07	0.0	0.02	0.026
	0.077	0.0	0.073	0.0	0.03	0.036
Generic	0.078	0.0	0.065	0.0	0.018	0.034
	0.078	0.0	0.072	0.0	0.016	0.026
	0.076	0.0	0.068	0.0	0.022	0.026
	0.076	0.0	0.067	0.0	0.016	0.03
	0.077	0.0	0.071	0.0	0.026	0.04
	0.08	0.0	0.068	0.0	0.014	0.028
	0.074	0.0	0.07	0.0	0.024	0.03
	0.076	0.0	0.071	0.0	0.026	0.042
	0.075	0.0	0.069	0.0	0.022	0.036
	0.076	0.0	0.067	0.0	0.018	0.036
DiCE	0.078	0.0	0.07	0.0	0.018	0.03
	0.078	0.0	0.065	0.0	0.022	0.03
	0.077	0.0	0.07	0.0	0.02	0.036
	0.076	0.0	0.071	0.0	0.02	0.036
	0.078	0.0	0.074	0.0	0.02	0.026
	0.077	0.0	0.072	0.0	0.02	0.026
	0.078	0.0	0.076	0.0	0.028	0.026
	0.076	0.0	0.071	0.0	0.03	0.032
	0.078	0.0	0.07	0.0	0.022	0.024
	0.076	0.0	0.065	0.0	0.016	0.042
ClaPROAR	0.078	0.0	0.067	0.0	0.022	0.03
	0.077	0.0	0.07	0.0	0.018	0.032
	0.076	0.0	0.07	0.0	0.022	0.036
	0.077	0.0	0.07	0.0	0.014	0.03
	0.079	0.0	0.074	0.0	0.02	0.02
	0.077	0.0	0.069	0.0	0.02	0.038
	0.077	0.0	0.074	0.0	0.026	0.024
	0.077	0.0	0.065	0.0	0.016	0.042
	0.077	0.0	0.066	0.0	0.018	0.042
	0.077	0.0	0.064	0.0	0.022	0.042

Tab. 228: Domain shifts for the GMCS data experiment 1 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.068	0.0	0.067	0.0	0.03	0.02
	0.068	0.0	0.068	0.0	0.03	0.038
	0.067	0.0	0.069	0.0	0.022	0.036
	0.069	0.0	0.067	0.0	0.028	0.03
	0.067	0.0	0.068	0.0	0.028	0.03
	0.068	0.0	0.067	0.0	0.04	0.03
	0.069	0.0	0.066	0.0	0.038	0.042
	0.069	0.0	0.066	0.0	0.034	0.036
	0.066	0.0	0.065	0.0	0.034	0.034
	0.068	0.0	0.068	0.0	0.032	0.044
ECCo	0.068	0.0	0.07	0.0	0.038	0.038
	0.068	0.0	0.069	0.0	0.026	0.038
	0.068	0.0	0.065	0.0	0.03	0.042
	0.069	0.0	0.067	0.0	0.034	0.04
	0.068	0.0	0.067	0.0	0.032	0.034
	0.068	0.0	0.066	0.0	0.034	0.034
	0.07	0.0	0.068	0.0	0.026	0.04

	0.069	0.0	0.065	0.0	0.032	0.032
	0.066	0.0	0.064	0.0	0.026	0.034
	0.066	0.0	0.066	0.0	0.022	0.03
Wachter	0.067	0.0	0.068	0.0	0.03	0.042
	0.067	0.0	0.067	0.0	0.036	0.028
	0.067	0.0	0.068	0.0	0.03	0.03
	0.069	0.0	0.067	0.0	0.028	0.036
	0.068	0.0	0.068	0.0	0.026	0.036
	0.068	0.0	0.064	0.0	0.024	0.028
	0.067	0.0	0.067	0.0	0.03	0.034
	0.068	0.0	0.065	0.0	0.034	0.034
	0.07	0.0	0.066	0.0	0.034	0.03
	0.066	0.0	0.069	0.0	0.032	0.03
Generic	0.068	0.0	0.069	0.0	0.032	0.036
	0.066	0.0	0.063	0.0	0.03	0.03
	0.068	0.0	0.068	0.0	0.032	0.032
	0.069	0.0	0.068	0.0	0.032	0.046
	0.069	0.0	0.068	0.0	0.036	0.038
	0.068	0.0	0.064	0.0	0.022	0.034
	0.069	0.0	0.067	0.0	0.026	0.034
	0.068	0.0	0.063	0.0	0.022	0.042
	0.065	0.0	0.067	0.0	0.038	0.046
	0.067	0.0	0.064	0.0	0.036	0.038
DiCE	0.07	0.0	0.065	0.0	0.038	0.038
	0.067	0.0	0.066	0.0	0.026	0.03
	0.068	0.0	0.069	0.0	0.022	0.032
	0.068	0.0	0.067	0.0	0.026	0.028
	0.068	0.0	0.066	0.0	0.03	0.032
	0.069	0.0	0.064	0.0	0.026	0.028
	0.067	0.0	0.064	0.0	0.032	0.034
	0.068	0.0	0.065	0.0	0.032	0.038
	0.066	0.0	0.066	0.0	0.026	0.03
	0.067	0.0	0.064	0.0	0.034	0.032
ClaPROAR	0.069	0.0	0.068	0.0	0.04	0.036
	0.067	0.0	0.064	0.0	0.036	0.032
	0.068	0.0	0.069	0.0	0.03	0.038
	0.068	0.0	0.068	0.0	0.032	0.034
	0.068	0.0	0.067	0.0	0.024	0.024
	0.069	0.0	0.068	0.0	0.022	0.03
	0.069	0.0	0.068	0.0	0.03	0.034
	0.069	0.0	0.064	0.0	0.036	0.04
	0.066	0.0	0.068	0.0	0.034	0.032
	0.067	0.0	0.064	0.0	0.038	0.038

Tab. 229: Domain shifts for the GMCS data experiment 2 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.08	0.0	0.074	0.0	0.018	0.04
	0.074	0.0	0.076	0.0	0.02	0.02
	0.077	0.0	0.075	0.0	0.018	0.024
	0.079	0.0	0.075	0.0	0.022	0.03
	0.074	0.0	0.078	0.0	0.03	0.022
	0.076	0.0	0.073	0.0	0.03	0.03
	0.079	0.0	0.074	0.0	0.024	0.034
	0.075	0.0	0.074	0.0	0.016	0.024

	0.076	0.0	0.077	0.0	0.014	0.018
	0.077	0.0	0.078	0.0	0.022	0.022
ECCo	0.076	0.0	0.077	0.0	0.018	0.016
	0.079	0.0	0.078	0.0	0.018	0.018
	0.076	0.0	0.076	0.0	0.024	0.034
	0.075	0.0	0.083	0.0	0.034	0.024
	0.077	0.0	0.08	0.0	0.02	0.016
	0.077	0.0	0.078	0.0	0.018	0.02
	0.078	0.0	0.081	0.0	0.026	0.024
	0.08	0.0	0.079	0.0	0.024	0.022
	0.075	0.0	0.074	0.0	0.022	0.01
	0.076	0.0	0.079	0.0	0.018	0.02
Wachter	0.077	0.0	0.075	0.0	0.018	0.018
	0.077	0.0	0.079	0.0	0.016	0.016
	0.075	0.0	0.078	0.0	0.024	0.018
	0.075	0.0	0.075	0.0	0.022	0.032
	0.076	0.0	0.077	0.0	0.024	0.022
	0.075	0.0	0.075	0.0	0.02	0.032
	0.077	0.0	0.075	0.0	0.034	0.042
	0.08	0.0	0.077	0.0	0.022	0.04
	0.078	0.0	0.077	0.0	0.024	0.034
	0.077	0.0	0.076	0.0	0.02	0.026
Generic	0.077	0.0	0.077	0.0	0.022	0.016
	0.074	0.0	0.078	0.0	0.018	0.026
	0.076	0.0	0.078	0.0	0.02	0.028
	0.075	0.0	0.077	0.0	0.026	0.03
	0.075	0.0	0.074	0.0	0.024	0.018
	0.078	0.0	0.074	0.0	0.01	0.022
	0.079	0.0	0.075	0.0	0.03	0.022
	0.075	0.0	0.076	0.0	0.03	0.022
	0.078	0.0	0.08	0.0	0.022	0.02
	0.075	0.0	0.075	0.0	0.026	0.018
DiCE	0.075	0.0	0.072	0.0	0.022	0.022
	0.075	0.0	0.076	0.0	0.024	0.02
	0.075	0.0	0.073	0.0	0.022	0.038
	0.082	0.0	0.076	0.0	0.03	0.034
	0.077	0.0	0.08	0.0	0.02	0.016
	0.075	0.0	0.075	0.0	0.032	0.032
	0.077	0.0	0.078	0.0	0.02	0.016
	0.073	0.0	0.07	0.0	0.024	0.02
	0.081	0.0	0.076	0.0	0.014	0.018
	0.076	0.0	0.076	0.0	0.026	0.034
ClaPROAR	0.075	0.0	0.078	0.0	0.02	0.02
	0.077	0.0	0.08	0.0	0.02	0.022
	0.077	0.0	0.078	0.0	0.018	0.022
	0.076	0.0	0.075	0.0	0.02	0.02
	0.079	0.0	0.077	0.0	0.018	0.022
	0.075	0.0	0.075	0.0	0.038	0.024
	0.081	0.0	0.079	0.0	0.022	0.018
	0.077	0.0	0.072	0.0	0.024	0.026
	0.079	0.0	0.076	0.0	0.018	0.022
	0.078	0.0	0.08	0.0	0.022	0.016

Tab. 230: Domain shifts for the GMCS data experiment 4 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.09	0.0	0.079	0.0	0.054	0.06
	0.086	0.0	0.082	0.0	0.062	0.064
	0.089	0.0	0.083	0.0	0.05	0.068
	0.084	0.0	0.079	0.0	0.058	0.066
	0.088	0.0	0.079	0.0	0.052	0.064
	0.086	0.0	0.082	0.0	0.048	0.044
	0.088	0.0	0.082	0.0	0.05	0.054
	0.085	0.0	0.082	0.0	0.052	0.066
	0.093	0.0	0.086	0.0	0.056	0.064
	0.088	0.0	0.087	0.0	0.054	0.064
ECCo	0.085	0.0	0.081	0.0	0.052	0.06
	0.084	0.0	0.085	0.0	0.054	0.056
	0.088	0.0	0.083	0.0	0.056	0.07
	0.088	0.0	0.081	0.0	0.058	0.064
	0.085	0.0	0.081	0.0	0.05	0.058
	0.089	0.0	0.085	0.0	0.062	0.058
	0.086	0.0	0.085	0.0	0.04	0.056
	0.084	0.0	0.085	0.0	0.038	0.052
	0.087	0.0	0.079	0.0	0.044	0.066
	0.086	0.0	0.084	0.0	0.052	0.074
Wachter	0.087	0.0	0.082	0.0	0.046	0.07
	0.087	0.0	0.082	0.0	0.048	0.042
	0.089	0.0	0.084	0.0	0.054	0.064
	0.085	0.0	0.08	0.0	0.048	0.076
	0.092	0.0	0.085	0.0	0.052	0.062
	0.087	0.0	0.082	0.0	0.048	0.064
	0.087	0.0	0.083	0.0	0.064	0.058
	0.092	0.0	0.084	0.0	0.056	0.066
	0.091	0.0	0.086	0.0	0.046	0.066
	0.089	0.0	0.086	0.0	0.05	0.064
Generic	0.083	0.0	0.081	0.0	0.052	0.056
	0.088	0.0	0.085	0.0	0.048	0.062
	0.091	0.0	0.089	0.0	0.06	0.066
	0.089	0.0	0.087	0.0	0.056	0.062
	0.086	0.0	0.081	0.0	0.046	0.052
	0.086	0.0	0.078	0.0	0.044	0.062
	0.086	0.0	0.079	0.0	0.05	0.07
	0.087	0.0	0.083	0.0	0.058	0.058
	0.085	0.0	0.082	0.0	0.048	0.052
	0.088	0.0	0.083	0.0	0.048	0.058
DiCE	0.084	0.0	0.078	0.0	0.058	0.064
	0.09	0.0	0.084	0.0	0.05	0.074
	0.085	0.0	0.084	0.0	0.05	0.06
	0.09	0.0	0.083	0.0	0.058	0.06
	0.085	0.0	0.08	0.0	0.046	0.066
	0.085	0.0	0.08	0.0	0.054	0.076
	0.09	0.0	0.087	0.0	0.052	0.07
	0.086	0.0	0.086	0.0	0.052	0.062
	0.086	0.0	0.079	0.0	0.05	0.064
	0.085	0.0	0.083	0.0	0.052	0.056
ClaPROAR	0.083	0.0	0.081	0.0	0.044	0.054
	0.087	0.0	0.085	0.0	0.042	0.052
	0.085	0.0	0.081	0.0	0.052	0.054
	0.086	0.0	0.081	0.0	0.054	0.058

	0.088	0.0	0.084	0.0	0.06	0.058
	0.091	0.0	0.087	0.0	0.062	0.07
	0.085	0.0	0.082	0.0	0.052	0.056
	0.09	0.0	0.084	0.0	0.048	0.064
	0.084	0.0	0.081	0.0	0.034	0.05
	0.084	0.0	0.08	0.0	0.05	0.062

Tab. 231: Domain shifts for the GMCS data experiment 5 using a deep ensemble

F.3.10. Iris dataset using MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.072	0.064	0.079	0.048	0.067	0.0
	0.14	0.003	0.157	0.002	0.2	0.267
	0.067	0.065	0.213	0.002	0.067	0.167
	0.066	0.068	0.296	0.0	0.0	0.2
	0.026	0.188	0.244	0.0	0.067	0.467
	0.189	0.002	0.133	0.007	0.233	0.2
	0.103	0.022	0.105	0.024	0.133	0.067
	0.137	0.011	0.121	0.011	0.333	0.067
	0.018	0.259	0.105	0.026	0.067	0.133
	0.074	0.057	0.117	0.024	0.133	0.467
REVISE	0.16	0.006	0.091	0.037	0.467	0.0
	0.03	0.174	0.208	0.0	0.0	0.467
	0.186	0.005	0.12	0.019	0.467	0.0
	0.054	0.093	0.219	0.0	0.067	0.433
	-0.019	0.604	0.105	0.033	0.0	0.0
	-0.014	0.563	0.154	0.005	0.0	0.133
	0.078	0.051	0.095	0.023	0.067	0.1
	0.064	0.059	0.246	0.001	0.067	0.267
	0.093	0.027	0.105	0.034	0.067	0.067
	-0.005	0.396	0.154	0.006	0.067	0.067
ECCo	-0.016	0.569	0.147	0.006	0.0	0.4
	0.156	0.005	0.186	0.001	0.1	0.5
	0.034	0.143	0.218	0.001	0.0	0.367
	0.102	0.017	0.164	0.002	0.067	0.067
	0.118	0.022	0.254	0.0	0.4	0.6
	0.152	0.008	0.139	0.013	0.267	0.033
	0.027	0.179	0.108	0.016	0.0	0.067
	0.187	0.001	0.29	0.0	0.467	0.067
	0.15	0.008	0.148	0.01	0.267	0.467
	0.058	0.096	0.118	0.026	0.133	0.267
Wachter	0.065	0.06	0.259	0.0	0.067	0.433
	-0.009	0.475	0.072	0.07	0.067	0.0
	0.072	0.065	0.263	0.001	0.133	0.467
	0.182	0.001	0.438	0.0	0.267	0.1
	0.103	0.026	0.198	0.001	0.133	0.1
	0.294	0.0	0.154	0.005	0.4	0.467
	0.104	0.02	0.096	0.03	0.2	0.033
	0.013	0.266	0.131	0.01	0.133	0.467
	0.163	0.005	0.137	0.011	0.467	0.467
	0.217	0.0	0.125	0.016	0.467	0.467
Generic	0.164	0.005	0.23	0.0	0.267	0.367
	0.123	0.021	0.025	0.201	0.133	0.0
	0.063	0.079	0.135	0.01	0.067	0.467
	0.226	0.002	0.459	0.0	0.467	1.067

	0.076	0.053	0.13	0.01	0.067	0.0
	-0.016	0.592	0.266	0.0	0.0	0.467
	-0.002	0.374	0.322	0.0	0.0	0.533
	0.062	0.087	0.208	0.003	0.067	0.333
	0.101	0.027	0.25	0.0	0.133	0.5
	0.089	0.032	0.07	0.055	0.067	0.067
DiCE	0.128	0.011	0.166	0.002	0.267	0.033
	-0.016	0.6	0.171	0.003	0.0	0.467
	0.141	0.004	0.196	0.001	0.2	0.067
	-0.019	0.598	0.167	0.009	0.067	0.467
	0.045	0.118	0.07	0.049	0.0	0.0
	0.033	0.127	0.146	0.007	0.0	0.167
	0.082	0.033	0.097	0.034	0.067	0.233
	-0.002	0.387	0.036	0.146	0.0	0.067
	0.073	0.061	0.238	0.001	0.0	0.3
	0.019	0.232	0.129	0.014	0.0	0.067
ClaPROAR	0.035	0.119	0.13	0.009	0.133	0.467
	0.056	0.078	0.209	0.002	0.067	0.467
	0.035	0.137	0.326	0.0	0.067	0.467
	0.291	0.0	0.19	0.004	0.2	0.067
	0.074	0.048	0.154	0.01	0.133	0.333
	-0.028	0.689	0.356	0.0	0.0	0.467
	0.174	0.005	0.064	0.073	0.433	0.0
	0.069	0.066	0.092	0.032	0.0	0.067
	0.021	0.223	0.14	0.005	0.133	0.167
	0.016	0.251	0.114	0.022	0.0	0.467

Tab. 232: Domain shifts for the Iris data experiment 1 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.055	0.083	0.182	0.005	0.067	0.433
	0.052	0.092	0.005	0.327	0.133	0.067
	0.025	0.196	0.102	0.023	0.0	0.6
	0.084	0.032	0.292	0.0	0.067	0.567
	0.158	0.004	0.146	0.009	0.433	0.633
	0.068	0.058	0.163	0.004	0.233	0.433
	0.102	0.023	0.139	0.008	0.133	0.067
	0.251	0.0	0.054	0.066	0.333	0.2
	0.034	0.151	0.171	0.001	0.133	0.4
	0.124	0.011	0.038	0.141	0.233	0.133
REVISE	0.12	0.01	0.124	0.015	0.233	0.567
	0.06	0.084	0.079	0.037	0.133	0.4
	0.019	0.245	0.133	0.009	0.067	0.5
	0.198	0.001	0.091	0.018	0.467	0.133
	0.152	0.006	0.144	0.007	0.367	0.4
	0.04	0.121	0.379	0.0	0.067	0.433
	0.072	0.049	0.114	0.014	0.2	0.4
	0.029	0.169	0.115	0.011	0.067	0.367
	0.127	0.011	0.129	0.008	0.2	0.367
	0.033	0.157	0.323	0.0	0.133	0.8
ECCo	0.164	0.005	0.347	0.0	0.467	0.867
	0.121	0.02	0.317	0.0	0.233	0.833
	0.15	0.006	0.16	0.005	0.267	0.467
	0.026	0.166	0.176	0.003	0.133	0.3
	0.134	0.008	0.21	0.002	0.1	0.433

	0.123	0.015	0.392	0.0	0.4	0.533
	0.082	0.031	0.067	0.06	0.133	0.133
	0.041	0.14	0.19	0.001	0.067	0.233
	0.07	0.056	0.529	0.0	0.133	0.5
	0.176	0.002	0.146	0.007	0.3	0.6
Wachter	0.095	0.035	0.321	0.0	0.3	0.533
	0.068	0.067	0.115	0.012	0.067	0.2
	0.064	0.064	0.1	0.022	0.133	0.267
	0.045	0.097	0.258	0.002	0.067	0.933
	0.011	0.258	0.128	0.01	0.133	0.533
	0.14	0.004	0.146	0.003	0.3	0.233
	0.058	0.087	0.11	0.013	0.067	0.467
	0.153	0.008	0.417	0.0	0.4	0.7
	0.057	0.073	0.241	0.0	0.133	0.567
	-0.018	0.622	0.512	0.0	0.067	0.7
Generic	0.067	0.068	0.233	0.001	0.133	0.3
	0.0	0.376	0.082	0.039	0.0	0.5
	0.122	0.007	0.145	0.007	0.233	0.067
	0.215	0.001	0.109	0.019	0.533	0.167
	0.154	0.006	0.357	0.0	0.367	1.0
	0.042	0.107	0.285	0.0	0.133	0.4
	0.075	0.037	0.183	0.0	0.133	0.267
	0.1	0.027	0.181	0.006	0.167	0.5
	0.133	0.008	0.144	0.007	0.233	0.1
	0.274	0.0	0.102	0.025	0.6	0.3
DiCE	0.032	0.145	0.074	0.039	0.033	0.433
	0.049	0.106	0.173	0.003	0.0	0.2
	0.014	0.27	0.042	0.112	0.133	0.267
	0.166	0.003	0.134	0.006	0.533	0.333
	0.035	0.131	0.111	0.023	0.133	0.6
	0.115	0.014	0.187	0.0	0.133	0.4
	0.169	0.003	0.104	0.019	0.533	0.567
	0.013	0.286	0.309	0.0	0.133	0.8
	0.28	0.001	0.169	0.004	0.4	0.433
	0.041	0.118	0.101	0.018	0.133	0.6
ClaPROAR	0.175	0.004	0.478	0.0	0.433	1.2
	0.038	0.116	0.182	0.002	0.067	0.3
	0.108	0.02	0.092	0.03	0.167	0.433
	0.18	0.0	0.269	0.0	0.4	0.367
	0.067	0.066	0.448	0.0	0.067	0.967
	0.082	0.025	0.11	0.016	0.067	0.467
	0.033	0.123	0.194	0.004	0.133	0.6
	0.035	0.115	0.076	0.053	0.2	0.3
	0.122	0.012	0.179	0.004	0.467	0.4
	0.065	0.06	0.371	0.0	0.133	0.567

Tab. 233: Domain shifts for the Iris data experiment 1 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.022	0.213	0.12	0.016	0.3	0.167
	0.033	0.13	0.002	0.311	0.4	0.067
	0.032	0.13	0.049	0.081	0.4	0.4
	0.044	0.1	0.02	0.215	0.4	0.3
	-0.003	0.372	0.059	0.081	0.2	0.4
	0.047	0.083	0.031	0.141	0.4	0.4

	0.012	0.24	0.112	0.013	0.267	0.333
	0.052	0.084	0.043	0.091	0.4	0.4
	0.02	0.195	0.035	0.115	0.233	0.333
	0.049	0.093	0.064	0.069	0.4	0.367
REVISE	0.077	0.041	0.092	0.027	0.333	0.4
	0.041	0.132	0.063	0.057	0.4	0.4
	0.031	0.151	0.205	0.001	0.4	0.4
	0.01	0.24	0.259	0.0	0.233	0.7
	0.021	0.212	0.173	0.005	0.367	0.233
	0.025	0.188	0.026	0.163	0.4	0.4
	0.024	0.187	0.037	0.118	0.4	0.267
	0.025	0.193	0.654	0.0	0.4	0.933
	0.03	0.15	0.145	0.006	0.4	0.233
	0.132	0.002	0.075	0.038	0.4	0.4
ECCo	0.019	0.219	0.044	0.089	0.333	0.333
	-0.004	0.376	0.188	0.0	0.133	1.0
	0.048	0.102	0.047	0.09	0.4	0.4
	0.001	0.345	0.064	0.054	0.167	0.4
	0.174	0.0	0.057	0.076	0.433	0.4
	0.029	0.15	0.05	0.103	0.4	0.4
	0.012	0.251	0.051	0.074	0.333	0.4
	0.03	0.157	0.068	0.067	0.4	0.4
	0.033	0.151	0.011	0.262	0.4	0.233
	0.031	0.144	0.044	0.103	0.4	0.333
Wachter	0.024	0.198	0.088	0.035	0.4	0.4
	0.053	0.095	0.093	0.021	0.4	0.333
	0.057	0.068	0.049	0.097	0.4	0.367
	0.046	0.093	0.085	0.028	0.4	0.4
	0.038	0.111	0.147	0.003	0.367	0.367
	0.016	0.208	0.05	0.078	0.333	0.4
	0.116	0.014	0.131	0.011	0.367	0.367
	0.01	0.263	0.045	0.08	0.333	0.4
	0.013	0.261	0.156	0.001	0.367	0.4
	0.01	0.251	0.088	0.026	0.267	0.4
Generic	0.039	0.11	0.028	0.161	0.4	0.067
	0.023	0.191	0.015	0.234	0.4	0.333
	0.029	0.169	0.039	0.117	0.4	0.4
	0.024	0.198	0.095	0.019	0.333	0.4
	0.035	0.129	0.033	0.134	0.4	0.4
	0.034	0.124	0.037	0.113	0.333	0.4
	0.039	0.105	0.057	0.066	0.4	0.4
	0.018	0.221	0.018	0.223	0.333	0.3
	0.043	0.109	0.189	0.001	0.4	0.7
	0.033	0.141	0.094	0.019	0.4	0.233
DiCE	0.064	0.063	0.192	0.0	0.4	0.7
	-0.006	0.447	0.031	0.15	0.2	0.4
	-0.009	0.473	0.114	0.019	0.067	0.3
	-0.0	0.344	0.246	0.0	0.2	0.233
	0.021	0.227	0.042	0.102	0.333	0.367
	0.009	0.242	0.189	0.0	0.267	0.833
	0.023	0.203	0.067	0.068	0.367	0.4
	0.032	0.156	0.02	0.232	0.333	0.267
	0.01	0.279	0.025	0.189	0.3	0.233
	0.008	0.278	0.064	0.073	0.267	0.233
ClaPROAR	0.017	0.233	0.042	0.103	0.333	0.4
	0.039	0.112	0.039	0.12	0.4	0.4

	0.043	0.108	0.043	0.088	0.4	0.367
	0.009	0.274	0.106	0.021	0.3	0.4
	0.004	0.307	0.049	0.102	0.267	0.067
	0.021	0.211	0.077	0.041	0.4	0.067
	0.076	0.045	0.056	0.069	0.4	0.4
	0.012	0.245	0.077	0.038	0.267	0.4
	0.019	0.24	0.046	0.099	0.367	0.4
	0.007	0.301	0.004	0.297	0.167	0.267

Tab. 234: Domain shifts for the Iris data experiment 3 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.141	0.004	0.102	0.02	0.3	0.133
	0.044	0.096	0.11	0.03	0.0	0.4
	0.074	0.066	0.156	0.003	0.067	0.467
	0.117	0.028	0.073	0.056	0.267	0.067
	0.038	0.124	0.075	0.051	0.067	0.1
	0.115	0.019	0.118	0.02	0.467	0.5
	0.167	0.003	0.117	0.026	0.333	0.467
	0.1	0.041	0.069	0.058	0.067	0.1
	0.068	0.073	0.086	0.042	0.0	0.467
	0.119	0.024	0.111	0.025	0.433	0.133
REVISE	0.083	0.034	0.084	0.047	0.1	0.467
	0.096	0.028	0.076	0.038	0.067	0.2
	0.09	0.038	0.1	0.028	0.133	0.467
	0.058	0.084	0.07	0.068	0.033	0.4
	0.08	0.039	0.082	0.045	0.067	0.333
	0.056	0.099	0.145	0.01	0.067	0.267
	0.058	0.097	0.147	0.006	0.033	0.533
	0.078	0.035	0.089	0.048	0.1	0.0
	0.088	0.031	0.109	0.024	0.067	0.467
	0.243	0.0	0.087	0.036	0.4	0.467
ECCo	0.079	0.048	0.04	0.11	0.067	0.0
	0.046	0.108	0.103	0.019	0.133	0.467
	0.077	0.045	0.078	0.049	0.067	0.133
	0.167	0.005	0.19	0.004	0.567	0.167
	0.076	0.06	0.047	0.108	0.2	0.067
	0.091	0.027	0.091	0.031	0.067	0.2
	0.058	0.074	0.077	0.045	0.0	0.467
	-0.001	0.361	0.092	0.03	0.0	0.2
	0.086	0.032	0.088	0.033	0.133	0.4
	0.059	0.078	0.106	0.019	0.2	0.467
Wachter	0.102	0.025	0.093	0.042	0.2	0.4
	0.129	0.017	0.111	0.027	0.467	0.4
	0.121	0.028	0.014	0.279	0.467	0.267
	0.09	0.029	0.047	0.1	0.2	0.133
	0.371	0.0	0.466	0.0	0.533	0.7
	0.081	0.049	0.199	0.0	0.067	0.2
	0.098	0.029	0.066	0.065	0.067	0.4
	0.05	0.096	0.119	0.018	0.0	0.067
	0.112	0.023	0.107	0.024	0.4	0.133
	0.121	0.021	0.149	0.011	0.4	0.2
Generic	0.044	0.096	0.098	0.019	0.0	0.5
	0.084	0.042	0.077	0.055	0.167	0.167
	0.423	0.0	0.109	0.033	0.567	0.467

	0.098	0.033	0.129	0.015	0.4	0.667
	0.09	0.039	0.147	0.006	0.067	0.567
	0.095	0.035	0.099	0.021	0.067	0.167
	0.084	0.05	0.088	0.041	0.133	0.333
	0.042	0.107	0.085	0.041	0.0	0.333
	0.268	0.0	0.15	0.01	0.467	0.067
	0.055	0.099	0.108	0.016	0.0	0.0
DiCE	0.114	0.017	0.14	0.008	0.1	0.467
	0.079	0.038	0.071	0.061	0.133	0.133
	0.119	0.023	0.068	0.056	0.4	0.133
	0.653	0.0	0.094	0.024	1.0	0.467
	-0.005	0.404	0.102	0.025	0.0	0.567
	0.003	0.304	0.15	0.004	0.0	0.467
	0.038	0.127	0.107	0.025	0.067	0.467
	0.128	0.013	0.101	0.033	0.467	0.067
	0.175	0.004	0.083	0.041	0.567	0.133
	0.084	0.032	0.455	0.0	0.1	0.567
ClaPROAR	0.116	0.02	0.165	0.005	0.467	0.467
	0.075	0.056	0.089	0.029	0.067	0.067
	0.101	0.026	0.107	0.019	0.067	0.2
	0.021	0.22	0.163	0.006	0.0	0.233
	0.108	0.027	0.098	0.025	0.067	0.2
	0.168	0.003	0.152	0.002	0.133	0.0
	0.077	0.038	0.108	0.028	0.133	0.067
	0.097	0.026	0.022	0.21	0.133	0.033
	0.105	0.025	0.096	0.036	0.067	0.267
	0.076	0.056	0.039	0.112	0.033	0.133

Tab. 235: Domain shifts for the Iris data experiment 4 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.156	0.004	0.289	0.0	0.233	0.2
	0.083	0.039	0.423	0.0	0.067	1.033
	0.663	0.0	0.262	0.0	1.0	0.233
	0.2	0.003	0.134	0.011	0.267	0.367
	0.192	0.003	0.255	0.001	0.033	0.3
	0.098	0.023	0.335	0.0	0.0	0.0
	0.199	0.004	0.359	0.0	0.4	0.367
	0.045	0.105	0.097	0.026	0.133	0.067
	0.003	0.33	0.105	0.04	0.067	0.533
	0.041	0.124	0.089	0.032	0.067	0.167
REVISE	0.07	0.063	0.139	0.005	0.067	0.533
	0.219	0.001	0.262	0.0	0.467	0.867
	0.099	0.018	0.144	0.007	0.133	0.533
	0.098	0.02	0.139	0.007	0.267	0.2
	0.079	0.039	0.26	0.0	0.067	0.233
	0.103	0.018	0.108	0.025	0.2	0.533
	0.237	0.0	0.205	0.0	0.533	0.233
	0.222	0.0	0.021	0.211	0.533	0.067
	0.135	0.008	0.148	0.006	0.333	0.067
	0.068	0.062	0.198	0.002	0.133	0.133
ECCo	0.224	0.001	0.252	0.0	0.533	0.867
	0.188	0.004	0.165	0.002	0.4	0.333
	0.106	0.029	0.08	0.044	0.133	0.133
	0.139	0.007	0.129	0.012	0.067	0.533

	0.096	0.016	0.165	0.006	0.133	0.167
	0.222	0.003	0.138	0.011	0.533	0.3
	0.254	0.001	0.074	0.043	0.533	0.333
	0.227	0.001	0.134	0.006	0.4	0.533
	0.044	0.1	0.216	0.003	0.067	0.433
	0.27	0.0	0.12	0.012	0.533	0.2
Wachter	0.25	0.0	0.297	0.0	0.533	0.3
	0.115	0.02	0.163	0.002	0.067	0.067
	0.131	0.012	0.152	0.005	0.2	0.267
	0.146	0.004	0.131	0.008	0.167	0.333
	0.088	0.026	0.074	0.062	0.067	0.2
	0.191	0.004	0.068	0.062	0.267	0.067
	0.199	0.003	0.097	0.03	0.333	0.067
	0.195	0.002	0.274	0.0	0.467	0.333
	0.139	0.008	0.181	0.002	0.2	0.533
	0.057	0.088	0.061	0.077	0.133	0.067
Generic	0.21	0.002	0.194	0.001	0.533	0.067
	0.221	0.0	0.121	0.012	0.4	0.167
	0.114	0.015	0.334	0.0	0.2	0.467
	0.004	0.328	0.182	0.001	0.067	0.333
	0.053	0.086	0.204	0.001	0.067	0.067
	0.17	0.006	0.083	0.043	0.467	0.2
	0.194	0.005	0.178	0.002	0.333	0.533
	0.238	0.0	0.213	0.001	0.5	0.533
	0.156	0.002	0.277	0.0	0.267	0.467
	0.09	0.027	0.069	0.063	0.2	0.067
DiCE	0.121	0.016	0.174	0.003	0.333	0.533
	0.193	0.003	0.087	0.039	0.333	0.233
	0.21	0.002	0.171	0.004	0.467	0.467
	0.122	0.012	0.474	0.0	0.067	0.833
	0.146	0.008	0.287	0.0	0.333	0.667
	0.192	0.002	0.168	0.006	0.333	0.267
	0.132	0.007	0.112	0.016	0.2	0.067
	0.155	0.004	0.047	0.098	0.267	0.0
	0.069	0.057	0.346	0.0	0.133	0.167
	0.18	0.005	0.097	0.029	0.267	0.433
ClaPROAR	0.096	0.021	0.295	0.001	0.133	0.467
	0.218	0.0	0.088	0.031	0.533	0.0
	0.16	0.004	0.105	0.03	0.267	0.533
	0.188	0.001	0.134	0.01	0.267	0.367
	0.088	0.028	0.079	0.041	0.067	0.2
	0.103	0.024	0.191	0.0	0.133	0.533
	0.211	0.002	0.272	0.0	0.367	0.833
	0.003	0.345	0.227	0.002	0.0	0.367
	0.207	0.001	0.138	0.008	0.4	0.167
	0.155	0.005	0.282	0.0	0.4	0.533

Tab. 236: Domain shifts for the Iris data experiment 5 using a MLP

F.3.11. Iris dataset using Deep ensemble using a MLP

Gravitational	0.047	0.083	0.052	0.082	0.433	0.333
	0.048	0.092	0.076	0.04	0.433	0.233
	0.046	0.097	0.062	0.077	0.4	0.433
	0.042	0.124	0.166	0.003	0.433	0.567
	0.038	0.117	0.057	0.083	0.367	0.433

	0.039	0.113	0.073	0.045	0.4	0.267
	0.057	0.087	0.025	0.2	0.4	0.067
	0.027	0.178	0.179	0.003	0.367	0.267
	0.042	0.114	0.07	0.062	0.4	0.333
	0.045	0.102	0.149	0.008	0.4	0.2
REVISE	0.046	0.101	0.076	0.062	0.367	0.467
	0.027	0.183	0.046	0.122	0.367	0.433
	0.044	0.119	0.036	0.134	0.433	0.0
	0.05	0.111	0.066	0.085	0.333	0.133
	0.038	0.152	0.031	0.161	0.4	0.433
	0.035	0.14	0.016	0.287	0.4	0.067
	0.032	0.166	0.0	0.347	0.333	0.0
	0.045	0.103	0.039	0.122	0.4	0.167
	0.023	0.236	0.02	0.238	0.3	0.3
	0.045	0.11	0.052	0.102	0.333	0.167
ECCo	0.05	0.09	0.034	0.179	0.333	0.333
	0.054	0.1	0.017	0.239	0.367	0.233
	0.047	0.092	0.082	0.049	0.433	0.167
	0.047	0.105	0.013	0.26	0.4	0.233
	0.034	0.125	0.023	0.2	0.4	0.2
	0.044	0.128	0.05	0.091	0.333	0.133
	0.042	0.119	0.025	0.167	0.4	0.2
	0.085	0.038	0.245	0.0	0.433	0.3
	0.015	0.237	0.128	0.018	0.267	0.6
	0.054	0.101	0.105	0.018	0.433	0.533
Wachter	0.074	0.049	0.06	0.082	0.333	0.467
	0.025	0.186	0.007	0.282	0.367	0.0
	0.057	0.096	0.069	0.072	0.433	0.467
	0.05	0.1	0.058	0.079	0.4	0.433
	0.055	0.095	0.061	0.08	0.4	0.433
	0.024	0.2	0.066	0.076	0.367	0.133
	0.033	0.15	0.087	0.036	0.4	0.3
	0.074	0.055	0.024	0.201	0.333	0.033
	0.032	0.148	0.049	0.12	0.4	0.433
	0.022	0.181	0.076	0.04	0.367	0.333
Generic	0.042	0.112	0.032	0.133	0.433	0.4
	0.032	0.151	0.05	0.102	0.3	0.4
	0.033	0.145	0.049	0.111	0.4	0.433
	0.058	0.078	0.044	0.1	0.433	0.0
	0.039	0.126	0.01	0.281	0.4	0.233
	0.039	0.129	0.042	0.122	0.367	0.367
	0.029	0.141	0.091	0.031	0.333	0.167
	0.027	0.17	0.079	0.041	0.333	0.033
	0.032	0.155	0.107	0.03	0.367	0.6
	0.056	0.089	-0.003	0.366	0.433	0.2
DiCE	0.023	0.218	0.067	0.079	0.333	0.4
	0.051	0.096	0.097	0.028	0.4	0.567
	0.023	0.181	0.071	0.064	0.3	0.533
	0.043	0.109	-0.009	0.461	0.4	0.0
	0.005	0.31	0.013	0.294	0.233	0.233
	0.045	0.122	0.074	0.059	0.433	0.333
	0.064	0.07	0.055	0.1	0.4	0.0
	0.032	0.139	0.048	0.105	0.4	0.2
	0.072	0.054	0.044	0.106	0.3	0.133
	0.066	0.076	0.093	0.021	0.3	0.533
ClaPROAR	0.028	0.166	0.01	0.259	0.333	0.233

	0.035	0.128	0.058	0.101	0.4	0.467
	0.043	0.099	0.002	0.302	0.4	0.2
	0.061	0.079	0.118	0.023	0.4	0.6
	0.082	0.046	0.046	0.119	0.4	0.0
	0.022	0.21	0.024	0.181	0.3	0.3
	0.026	0.159	0.122	0.01	0.367	0.433
	0.045	0.119	0.018	0.235	0.4	0.033
	0.032	0.162	-0.012	0.472	0.4	0.133
	0.027	0.163	0.03	0.156	0.367	0.2

Tab. 237: Domain shifts for the Iris data experiment 1 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.103	0.009	0.205	0.0	0.533	0.7
	0.119	0.009	0.215	0.0	0.133	0.767
	0.124	0.008	0.152	0.005	0.6	0.633
	0.108	0.009	0.191	0.0	0.367	0.633
	0.159	0.003	0.192	0.001	0.467	0.7
	0.129	0.014	0.202	0.0	0.367	0.267
	0.127	0.008	0.218	0.0	0.5	0.733
	0.125	0.011	0.194	0.0	0.467	0.733
	0.124	0.007	0.183	0.0	0.5	0.7
	0.15	0.007	0.26	0.0	0.567	0.4
REVISE	0.121	0.009	0.377	0.0	0.467	1.233
	0.103	0.008	0.189	0.001	0.167	0.6
	0.104	0.012	0.294	0.0	0.533	0.833
	0.162	0.001	0.255	0.0	0.667	0.767
	0.15	0.002	0.194	0.0	0.567	0.733
	0.126	0.01	0.293	0.0	0.533	0.867
	0.096	0.015	0.18	0.001	0.4	1.0
	0.155	0.0	0.204	0.0	0.4	0.133
	0.125	0.004	0.225	0.0	0.167	0.933
	0.148	0.005	0.381	0.0	0.2	0.633
ECCo	0.147	0.002	0.178	0.002	0.5	0.6
	0.125	0.008	0.25	0.0	0.5	0.8
	0.14	0.002	0.233	0.001	0.433	0.867
	0.145	0.004	0.22	0.0	0.367	0.2
	0.156	0.003	0.289	0.0	0.6	0.633
	0.102	0.012	0.208	0.0	0.333	0.633
	0.128	0.004	0.246	0.0	0.567	0.2
	0.14	0.004	0.277	0.0	0.1	0.867
	0.112	0.011	0.249	0.0	0.467	0.633
	0.154	0.0	0.205	0.0	0.567	0.133
Wachter	0.08	0.03	0.214	0.0	0.267	0.667
	0.143	0.007	0.232	0.0	0.533	0.2
	0.246	0.0	0.179	0.003	0.667	0.733
	0.132	0.006	0.289	0.0	0.567	0.367
	0.165	0.003	0.195	0.0	0.133	0.733
	0.135	0.003	0.296	0.0	0.4	0.933
	0.139	0.004	0.2	0.001	0.467	0.733
	0.124	0.009	0.202	0.001	0.5	0.467
	0.101	0.016	0.143	0.004	0.267	0.333
	0.146	0.003	0.193	0.0	0.667	0.733
Generic	0.072	0.034	0.313	0.0	0.267	0.867
	0.172	0.0	0.199	0.0	0.133	0.7

	0.147	0.002	0.264	0.0	0.533	0.667
	0.157	0.002	0.18	0.002	0.367	0.8
	0.135	0.005	0.359	0.0	0.567	0.667
	0.143	0.005	0.17	0.002	0.567	0.733
	0.094	0.014	0.305	0.0	0.2	0.867
	0.144	0.003	0.323	0.0	0.133	1.033
	0.177	0.0	0.242	0.0	0.667	0.867
	0.126	0.01	0.278	0.0	0.567	0.933
DiCE	0.18	0.001	0.233	0.0	0.633	0.767
	0.165	0.001	0.247	0.0	0.233	0.867
	0.1	0.016	0.221	0.0	0.5	0.933
	0.136	0.007	0.099	0.009	0.167	0.067
	0.164	0.002	0.187	0.0	0.6	0.767
	0.179	0.0	0.169	0.001	0.2	0.867
	0.143	0.004	0.436	0.0	0.567	1.267
	0.158	0.001	0.368	0.0	0.5	0.933
	0.172	0.005	0.232	0.001	0.567	0.733
	0.124	0.01	0.212	0.0	0.5	0.6
ClaPROAR	0.1	0.016	0.232	0.001	0.367	0.467
	0.108	0.011	0.399	0.0	0.367	1.1
	0.104	0.011	0.199	0.0	0.467	0.2
	0.13	0.003	0.249	0.0	0.6	0.233
	0.176	0.0	0.154	0.0	0.567	0.2
	0.152	0.002	0.375	0.0	0.667	0.867
	0.158	0.001	0.232	0.001	0.6	0.5
	0.138	0.009	0.169	0.0	0.667	0.3
	0.156	0.003	0.356	0.0	0.4	0.3
	0.154	0.003	0.322	0.0	0.667	0.2

Tab. 238: Domain shifts for the Iris data experiment 2 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.09	0.023	0.202	0.0	0.167	0.733
	0.122	0.011	0.254	0.001	0.133	0.467
	0.092	0.023	0.131	0.009	0.033	0.133
	0.129	0.012	0.321	0.0	0.1	0.667
	0.094	0.023	0.261	0.0	0.067	0.733
	0.108	0.023	0.266	0.0	0.133	0.1
	0.094	0.026	0.17	0.003	0.133	0.733
	0.041	0.111	0.182	0.003	0.067	0.667
	0.069	0.055	0.258	0.0	0.1	0.5
	0.1	0.019	0.381	0.0	0.167	0.767
REVISE	0.081	0.04	0.137	0.007	0.133	0.267
	0.113	0.022	0.11	0.011	0.133	0.2
	0.105	0.026	0.174	0.005	0.1	0.733
	0.086	0.035	0.158	0.003	0.067	0.7
	0.13	0.011	0.173	0.001	0.133	0.367
	0.11	0.014	0.199	0.001	0.133	0.733
	0.145	0.005	0.272	0.0	0.2	0.733
	0.129	0.014	0.13	0.011	0.167	0.233
	0.061	0.074	0.084	0.032	0.1	0.2
	0.116	0.018	0.168	0.005	0.167	0.733
ECCo	0.135	0.005	0.123	0.01	0.067	0.367
	0.089	0.023	0.102	0.026	0.067	0.233
	0.09	0.02	0.12	0.019	0.133	0.533

	0.144	0.005	0.061	0.074	0.1	0.067
	0.178	0.002	0.067	0.053	0.167	0.167
	0.086	0.034	0.081	0.038	0.167	0.333
	0.175	0.002	0.093	0.02	0.167	0.133
	0.094	0.022	0.226	0.0	0.1	0.433
	0.118	0.017	0.18	0.002	0.167	0.467
	0.094	0.021	0.144	0.011	0.067	0.6
Wachter	0.089	0.023	0.268	0.0	0.133	0.933
	0.096	0.024	0.202	0.0	0.067	0.733
	0.129	0.017	0.111	0.017	0.1	0.033
	0.173	0.007	0.177	0.0	0.133	0.733
	0.109	0.017	0.266	0.0	0.133	0.767
	0.04	0.122	0.089	0.032	0.067	0.333
	0.12	0.011	0.15	0.002	0.167	0.7
	0.075	0.047	0.19	0.0	0.133	0.233
	0.119	0.013	0.16	0.003	0.1	0.6
	0.093	0.027	0.223	0.0	0.2	0.533
Generic	0.097	0.02	0.059	0.045	0.1	0.133
	0.078	0.03	0.191	0.001	0.133	0.733
	0.064	0.065	0.181	0.0	0.067	0.633
	0.092	0.024	0.146	0.005	0.167	0.6
	0.079	0.042	0.126	0.014	0.167	0.667
	0.075	0.044	0.032	0.161	0.067	0.133
	0.191	0.002	0.129	0.012	0.3	0.567
	0.069	0.062	0.239	0.0	0.133	0.733
	0.111	0.012	0.177	0.005	0.133	0.733
	0.088	0.037	0.185	0.002	0.167	0.7
DiCE	0.112	0.021	0.168	0.005	0.133	0.667
	0.111	0.016	0.159	0.003	0.133	0.733
	0.075	0.033	0.03	0.166	0.133	0.133
	0.044	0.1	0.176	0.001	0.033	0.733
	0.173	0.0	0.137	0.002	0.1	0.067
	0.122	0.017	0.142	0.005	0.1	0.667
	0.109	0.018	0.081	0.029	0.167	0.133
	0.138	0.011	0.106	0.016	0.2	0.267
	0.087	0.033	0.16	0.001	0.1	0.567
	0.119	0.013	0.121	0.007	0.067	0.133
ClaPROAR	0.099	0.013	0.145	0.004	0.133	0.7
	0.104	0.013	0.078	0.043	0.133	0.367
	0.07	0.059	0.085	0.034	0.133	0.4
	0.094	0.027	0.343	0.0	0.167	0.967
	0.143	0.004	0.484	0.0	0.133	1.267
	0.101	0.013	0.093	0.023	0.2	0.467
	0.113	0.024	0.041	0.1	0.133	0.133
	0.13	0.006	0.105	0.023	0.133	0.267
	0.106	0.012	0.141	0.007	0.1	0.7
	0.088	0.025	0.134	0.009	0.133	0.367

Tab. 239: Domain shifts for the Iris data experiment 3 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.047	0.097	0.148	0.006	0.033	0.367
	0.045	0.102	0.151	0.012	0.1	0.6
	0.076	0.06	0.268	0.0	0.067	0.533
	0.046	0.101	0.074	0.054	0.0	0.067

	0.083	0.045	0.105	0.023	0.2	0.533
	0.035	0.134	0.167	0.003	0.0	0.3
	0.047	0.106	0.099	0.042	0.0	0.433
	0.051	0.112	0.097	0.029	0.0	0.267
	0.079	0.058	0.272	0.0	0.067	0.2
	0.13	0.012	0.142	0.009	0.233	0.567
REVISE	0.094	0.022	0.152	0.01	0.167	0.6
	0.076	0.055	0.044	0.103	0.1	0.067
	0.054	0.1	0.071	0.047	0.033	0.267
	0.08	0.047	0.043	0.11	0.2	0.0
	0.085	0.04	0.079	0.049	0.1	0.333
	0.033	0.148	0.053	0.082	0.033	0.1
	0.063	0.075	0.116	0.03	0.033	0.6
	0.098	0.032	0.067	0.088	0.233	0.2
	0.047	0.115	0.063	0.092	0.0	0.167
	0.048	0.117	0.138	0.015	0.0	0.6
ECCo	0.062	0.082	0.059	0.087	0.033	0.533
	0.087	0.033	0.105	0.029	0.033	0.6
	0.057	0.071	0.108	0.031	0.0	0.6
	0.069	0.064	0.062	0.091	0.0	0.067
	0.06	0.078	0.033	0.138	0.033	0.067
	0.045	0.115	0.091	0.035	0.0	0.567
	0.038	0.13	0.061	0.086	0.0	0.533
	0.042	0.113	0.095	0.033	0.0	0.433
	0.045	0.121	0.072	0.058	0.0	0.533
	0.044	0.105	0.063	0.087	0.067	0.533
Wachter	0.052	0.087	0.06	0.112	0.0	0.533
	0.059	0.075	0.052	0.092	0.0	0.4
	0.053	0.098	0.08	0.043	0.033	0.167
	0.05	0.081	0.051	0.078	0.0	0.3
	0.061	0.088	0.053	0.095	0.033	0.467
	0.044	0.101	0.057	0.089	0.0	0.067
	0.068	0.063	0.064	0.086	0.0	0.333
	0.048	0.095	0.066	0.082	0.0	0.533
	0.068	0.072	0.085	0.038	0.033	0.3
	0.066	0.062	0.067	0.073	0.067	0.0
Generic	0.067	0.069	0.282	0.0	0.0	0.633
	0.074	0.058	0.127	0.024	0.133	0.6
	0.061	0.083	0.147	0.012	0.0	0.6
	0.03	0.155	0.068	0.077	0.0	0.533
	0.038	0.141	0.034	0.158	0.067	0.133
	0.049	0.108	0.046	0.094	0.0	0.167
	0.07	0.062	0.09	0.036	0.1	0.567
	0.058	0.082	0.114	0.028	0.0	0.6
	0.083	0.053	0.094	0.043	0.167	0.6
	0.069	0.053	0.119	0.018	0.033	0.1
DiCE	0.052	0.086	0.071	0.046	0.0	0.433
	0.041	0.117	0.136	0.012	0.0	0.6
	0.071	0.072	0.085	0.043	0.0	0.533
	0.046	0.12	0.099	0.035	0.0	0.533
	0.073	0.07	0.058	0.084	0.0	0.533
	0.091	0.035	0.101	0.023	0.0	0.6
	0.046	0.112	0.051	0.084	0.0	0.2
	0.045	0.115	0.106	0.031	0.0	0.6
	0.055	0.095	0.081	0.043	0.0	0.333
	0.104	0.025	0.088	0.029	0.4	0.4

ClaPROAR	0.063	0.077	0.096	0.028	0.0	0.567
	0.07	0.07	0.059	0.085	0.0	0.1
	0.076	0.06	0.043	0.121	0.033	0.533
	0.06	0.075	0.082	0.043	0.067	0.433
	0.046	0.11	0.114	0.02	0.0	0.5
	0.069	0.069	0.129	0.024	0.0	0.6
	0.087	0.031	0.139	0.007	0.233	0.6
	0.068	0.081	0.116	0.029	0.0	0.567
	0.078	0.047	0.106	0.023	0.0	0.6
	0.047	0.087	0.06	0.071	0.0	0.533

Tab. 240: Domain shifts for the Iris data experiment 4 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.033	0.159	0.265	0.0	0.0	0.0
	0.039	0.118	0.195	0.001	0.0	0.667
	0.127	0.009	0.2	0.001	0.0	0.367
	0.073	0.036	0.193	0.0	0.0	0.7
	0.06	0.064	0.265	0.0	0.0	0.433
	0.041	0.146	0.25	0.0	0.0	0.0
	-0.013	0.546	0.136	0.007	0.0	0.0
	0.053	0.09	0.294	0.0	0.0	0.9
	0.012	0.304	0.152	0.003	0.0	0.0
	0.133	0.01	0.285	0.0	0.067	0.733
REVISE	0.016	0.259	0.062	0.075	0.0	0.0
	0.132	0.009	0.234	0.0	0.0	1.133
	0.073	0.06	0.066	0.075	0.0	0.033
	0.094	0.028	0.127	0.01	0.0	0.267
	0.059	0.076	0.051	0.106	0.0	0.0
	0.08	0.036	0.095	0.025	0.0	0.0
	0.081	0.037	0.196	0.0	0.0	0.0
	0.069	0.067	0.341	0.0	0.0	0.567
	0.102	0.027	0.083	0.046	0.0	0.233
	0.068	0.045	0.221	0.0	0.0	0.733
ECCo	0.111	0.022	0.237	0.0	0.0	0.733
	0.073	0.065	0.174	0.003	0.0	0.667
	0.105	0.019	0.204	0.005	0.0	0.733
	0.108	0.015	0.188	0.001	0.0	0.0
	0.009	0.302	0.144	0.005	0.0	0.033
	0.115	0.019	0.143	0.004	0.0	0.667
	0.081	0.048	0.162	0.002	0.0	0.0
	0.034	0.135	0.13	0.02	0.0	0.533
	0.033	0.151	0.175	0.002	0.0	0.033
	0.008	0.325	0.14	0.006	0.0	0.233
Wachter	0.075	0.051	0.073	0.065	0.0	0.0
	0.211	0.0	0.07	0.06	0.167	0.0
	0.094	0.023	0.131	0.016	0.0	0.6
	0.173	0.004	0.202	0.0	0.033	0.6
	0.014	0.279	0.182	0.002	0.0	0.7
	0.065	0.067	0.133	0.008	0.0	0.067
	0.177	0.002	0.052	0.109	0.033	0.0
	0.096	0.024	0.111	0.011	0.0	0.333
	0.111	0.021	0.212	0.0	0.0	0.2
	0.121	0.015	0.302	0.0	0.0	0.733

Generic	0.11	0.026	0.224	0.0	0.0	1.067
	0.127	0.011	0.187	0.001	0.0	0.533
	0.056	0.08	0.216	0.0	0.0	0.733
	0.19	0.002	0.2	0.003	0.067	0.733
	0.076	0.041	0.21	0.0	0.0	0.433
	0.019	0.234	0.089	0.028	0.0	0.067
	-0.005	0.4	0.13	0.009	0.0	0.533
	0.066	0.06	0.136	0.009	0.033	0.2
	0.104	0.018	0.146	0.006	0.0	0.067
	0.08	0.035	0.225	0.0	0.0	0.067
DiCE	0.043	0.136	0.01	0.323	0.0	0.0
	0.083	0.041	0.06	0.086	0.0	0.0
	0.246	0.0	0.195	0.002	0.0	0.6
	0.079	0.055	0.181	0.002	0.0	0.133
	0.092	0.026	0.11	0.025	0.0	0.167
	0.141	0.012	0.136	0.009	0.0	0.567
	0.116	0.016	0.189	0.001	0.0	0.0
	0.049	0.125	0.115	0.028	0.0	0.533
	0.13	0.007	0.086	0.034	0.0	0.033
	0.108	0.015	0.149	0.005	0.0	0.6
ClaPROAR	0.136	0.007	0.083	0.038	0.0	0.233
	0.012	0.283	0.065	0.067	0.0	0.0
	0.123	0.019	0.19	0.0	0.0	0.033
	0.073	0.042	0.205	0.0	0.0	0.0
	0.062	0.077	0.191	0.0	0.0	0.6
	0.043	0.116	0.075	0.053	0.0	0.067
	0.085	0.031	0.098	0.023	0.0	0.2
	0.109	0.02	0.151	0.011	0.0	0.033
	0.043	0.106	0.102	0.023	0.0	0.367
	-0.001	0.362	0.1	0.025	0.0	0.0

Tab. 241: Domain shifts for the Iris data experiment 5 using a MLP and a deep ensemble

F.3.12. Iris dataset using Deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.024	0.204	0.029	0.17	0.267	0.267
	0.027	0.169	0.011	0.258	0.267	0.267
	0.016	0.233	-0.002	0.307	0.267	0.267
	0.018	0.234	0.005	0.291	0.267	0.267
	0.024	0.211	0.008	0.285	0.267	0.267
	0.022	0.215	-0.001	0.31	0.267	0.233
	0.025	0.171	-0.001	0.309	0.267	0.267
	0.019	0.24	-0.001	0.327	0.267	0.267
	0.025	0.176	0.024	0.211	0.267	0.267
	0.019	0.23	0.023	0.211	0.267	0.267
ECCo	0.026	0.185	0.018	0.232	0.267	0.267
	0.025	0.175	0.019	0.23	0.267	0.267
	0.021	0.213	0.011	0.26	0.267	0.267
	0.024	0.206	0.019	0.217	0.267	0.267
	0.027	0.179	0.013	0.276	0.267	0.267
	0.024	0.193	0.011	0.26	0.267	0.267
	0.026	0.158	0.002	0.285	0.267	0.267
	0.025	0.175	0.01	0.283	0.267	0.267
	0.027	0.169	0.006	0.31	0.267	0.267

	0.029	0.134	0.018	0.25	0.267	0.267
Wachter	0.037	0.12	0.019	0.235	0.267	0.267
	0.027	0.172	0.02	0.209	0.267	0.267
	0.025	0.173	0.014	0.253	0.267	0.267
	0.026	0.17	0.014	0.26	0.267	0.267
	0.027	0.186	-0.012	0.516	0.267	0.2
	0.026	0.202	0.009	0.296	0.267	0.267
	0.024	0.163	0.02	0.228	0.267	0.267
	0.073	0.063	0.001	0.311	0.267	0.267
	0.027	0.159	0.013	0.251	0.267	0.267
	0.026	0.187	-0.002	0.297	0.267	0.267
Generic	0.023	0.21	0.004	0.301	0.267	0.267
	0.025	0.185	0.02	0.232	0.267	0.267
	0.024	0.219	0.005	0.253	0.267	0.267
	0.021	0.211	0.015	0.246	0.267	0.267
	0.025	0.183	0.009	0.261	0.267	0.267
	0.042	0.111	0.01	0.272	0.267	0.267
	0.018	0.228	-0.002	0.328	0.267	0.267
	0.02	0.206	0.006	0.261	0.267	0.267
	0.019	0.231	0.002	0.29	0.267	0.267
	0.022	0.192	0.018	0.236	0.267	0.267
DiCE	0.028	0.177	-0.001	0.347	0.267	0.267
	0.027	0.185	0.014	0.248	0.267	0.267
	0.034	0.172	0.01	0.273	0.267	0.267
	0.031	0.166	0.02	0.217	0.267	0.267
	0.027	0.164	-0.006	0.424	0.267	0.2
	0.024	0.178	-0.006	0.395	0.267	0.2
	0.026	0.181	-0.004	0.358	0.267	0.233
	0.027	0.183	0.025	0.184	0.267	0.267
	0.024	0.197	0.018	0.252	0.267	0.267
	0.021	0.203	0.019	0.235	0.267	0.267
ClaPROAR	0.025	0.198	0.02	0.22	0.267	0.267
	0.022	0.216	0.022	0.212	0.267	0.267
	0.026	0.198	0.013	0.243	0.267	0.267
	0.023	0.225	0.004	0.303	0.267	0.267
	0.027	0.155	0.008	0.248	0.267	0.267
	0.023	0.196	-0.002	0.346	0.267	0.267
	0.02	0.214	0.008	0.237	0.267	0.267
	0.022	0.208	0.015	0.252	0.267	0.267
	0.018	0.223	0.019	0.211	0.267	0.267
	0.03	0.149	0.012	0.26	0.267	0.267

Tab. 242: Domain shifts for the Iris data experiment 1 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.092	0.029	0.178	0.003	0.067	0.067
	0.13	0.009	-0.028	0.736	0.133	0.067
	0.183	0.002	0.055	0.081	0.4	0.267
	0.226	0.0	-0.018	0.588	0.1	0.133
	0.168	0.001	0.017	0.242	0.267	0.067
	0.103	0.022	-0.018	0.611	0.067	0.067
	0.065	0.063	-0.023	0.688	0.067	0.133
	0.088	0.033	-0.033	0.848	0.133	0.067
	0.164	0.001	-0.005	0.411	0.167	0.133
	0.118	0.011	-0.018	0.608	0.2	0.133

ECCo	0.158	0.003	0.022	0.205	0.133	0.267
	0.085	0.03	-0.009	0.459	0.067	0.133
	0.197	0.003	-0.023	0.676	0.067	0.133
	0.106	0.018	0.022	0.212	0.067	0.067
	0.196	0.001	0.023	0.195	0.233	0.133
	0.139	0.009	-0.017	0.633	0.2	0.067
	0.198	0.001	0.04	0.126	0.4	0.267
	0.198	0.001	0.086	0.039	0.333	0.333
	0.228	0.0	0.001	0.364	0.6	0.067
	0.163	0.009	0.058	0.075	0.333	0.267
Wachter	0.15	0.007	-0.008	0.468	0.0	0.067
	0.266	0.0	-0.011	0.468	0.7	0.133
	0.077	0.027	-0.019	0.626	0.067	0.133
	0.18	0.003	0.0	0.374	0.3	0.067
	0.125	0.015	0.038	0.114	0.133	0.067
	0.146	0.002	0.007	0.288	0.133	0.067
	0.152	0.005	-0.006	0.431	0.2	0.133
	0.211	0.0	0.02	0.238	0.5	0.067
	0.105	0.014	0.008	0.311	0.133	0.2
	0.191	0.001	-0.004	0.411	0.4	0.2
Generic	0.146	0.006	-0.026	0.704	0.133	0.067
	0.142	0.007	-0.007	0.451	0.133	0.067
	0.129	0.009	0.034	0.157	0.067	0.133
	0.172	0.003	-0.023	0.687	0.267	0.067
	0.106	0.015	-0.005	0.416	0.067	0.067
	0.228	0.002	0.046	0.11	0.167	0.133
	0.091	0.038	-0.011	0.529	0.067	0.067
	0.216	0.0	-0.003	0.356	0.1	0.067
	0.194	0.001	0.006	0.306	0.067	0.133
	0.201	0.001	-0.012	0.53	0.4	0.067
DiCE	0.209	0.001	0.004	0.338	0.467	0.133
	0.177	0.001	-0.017	0.614	0.233	0.133
	0.157	0.001	-0.009	0.467	0.067	0.067
	0.165	0.005	0.005	0.351	0.067	0.067
	0.135	0.01	-0.019	0.635	0.3	0.067
	0.118	0.006	0.017	0.277	0.067	0.133
	0.174	0.0	-0.028	0.752	0.233	0.133
	0.133	0.008	-0.031	0.789	0.2	0.067
	0.208	0.001	0.002	0.369	0.167	0.067
	0.217	0.0	-0.024	0.692	0.367	0.133
ClaPROAR	0.167	0.002	-0.013	0.549	0.233	0.067
	0.178	0.002	0.021	0.219	0.133	0.133
	0.098	0.031	0.029	0.178	0.133	0.133
	0.165	0.004	0.001	0.365	0.133	0.067
	0.118	0.016	-0.012	0.488	0.133	0.067
	0.123	0.007	-0.01	0.481	0.1	0.133
	0.17	0.001	-0.012	0.552	0.333	0.067
	0.17	0.001	0.014	0.286	0.133	0.067
	0.161	0.004	0.05	0.094	0.2	0.267
	0.141	0.01	0.045	0.114	0.133	0.267

Tab. 243: Domain shifts for the Iris data experiment 1 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e

REVISE	0.162	0.004	-0.02	0.616	0.3	0.067
	0.12	0.02	-0.012	0.504	0.467	0.067
	0.169	0.004	-0.033	0.808	0.267	0.0
	0.115	0.019	-0.011	0.479	0.4	0.0
	0.177	0.002	-0.024	0.649	0.467	0.067
	0.077	0.048	-0.026	0.675	0.133	0.133
	0.144	0.013	-0.033	0.805	0.4	0.0
	0.155	0.005	-0.039	0.947	0.333	0.0
	0.141	0.013	0.003	0.322	0.333	0.0
	0.108	0.024	-0.017	0.6	0.467	0.067
ECCo	0.104	0.025	-0.02	0.631	0.2	0.0
	0.15	0.007	-0.023	0.653	0.1	0.0
	0.14	0.005	-0.026	0.706	0.233	0.0
	0.079	0.051	-0.014	0.557	0.4	0.133
	0.098	0.034	-0.022	0.658	0.467	0.067
	0.083	0.038	-0.006	0.434	0.4	0.067
	0.099	0.025	-0.019	0.622	0.4	0.133
	0.103	0.031	-0.02	0.614	0.467	0.0
	0.082	0.04	-0.007	0.432	0.4	0.2
	0.112	0.028	0.011	0.29	0.467	0.033
Wachter	0.187	0.004	-0.023	0.663	0.2	0.0
	0.095	0.04	-0.004	0.38	0.467	0.2
	0.126	0.007	0.016	0.269	0.467	0.133
	0.11	0.029	-0.035	0.866	0.4	0.0
	0.169	0.002	-0.023	0.658	0.333	0.067
	0.093	0.03	-0.021	0.619	0.2	0.067
	0.152	0.009	-0.023	0.661	0.333	0.0
	0.098	0.026	-0.014	0.545	0.133	0.0
	0.124	0.016	-0.009	0.508	0.3	0.067
	0.095	0.026	-0.02	0.575	0.4	0.067
Generic	0.111	0.016	-0.019	0.59	0.4	0.067
	0.101	0.029	-0.018	0.591	0.4	0.067
	0.124	0.011	0.016	0.269	0.133	0.0
	0.134	0.011	-0.025	0.681	0.267	0.133
	0.088	0.035	-0.025	0.687	0.4	0.0
	0.063	0.074	-0.007	0.421	0.4	0.133
	0.095	0.033	-0.022	0.627	0.4	0.067
	0.082	0.044	-0.025	0.69	0.0	0.0
	0.157	0.003	-0.033	0.82	0.333	0.067
	0.107	0.014	-0.018	0.585	0.067	0.133
DiCE	0.106	0.015	-0.03	0.769	0.2	0.0
	0.127	0.014	-0.02	0.636	0.467	0.067
	0.075	0.061	-0.025	0.695	0.067	0.067
	0.109	0.017	-0.005	0.387	0.467	0.133
	0.13	0.021	-0.015	0.588	0.467	0.133
	0.07	0.069	-0.021	0.628	0.067	0.067
	0.164	0.007	-0.027	0.71	0.467	0.067
	0.077	0.043	-0.011	0.471	0.367	0.067
	0.12	0.03	-0.015	0.565	0.467	0.067
	0.119	0.016	-0.034	0.827	0.167	0.067
ClaPROAR	0.199	0.002	-0.01	0.478	0.233	0.067
	0.063	0.075	-0.034	0.847	0.067	0.0
	0.075	0.057	-0.013	0.473	0.333	0.067
	0.083	0.046	-0.029	0.726	0.067	0.0
	0.103	0.023	-0.023	0.642	0.4	0.0

	0.145	0.005	-0.023	0.651	0.4	0.067
	0.156	0.007	-0.032	0.817	0.333	0.067
	0.113	0.021	-0.022	0.63	0.4	0.067
	0.128	0.011	-0.035	0.877	0.333	0.0
	0.068	0.075	-0.015	0.547	0.333	0.2

Tab. 244: Domain shifts for the Iris data experiment 3 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.125	0.015	0.008	0.323	0.267	0.067
	0.107	0.016	-0.025	0.686	0.067	0.067
	0.087	0.028	0.09	0.038	0.067	0.267
	0.14	0.011	-0.025	0.655	0.2	0.133
	0.067	0.059	0.051	0.098	0.067	0.133
	0.096	0.027	-0.021	0.631	0.067	0.067
	0.148	0.005	-0.019	0.616	0.067	0.133
	0.126	0.008	-0.003	0.404	0.2	0.067
	0.141	0.009	-0.015	0.561	0.267	0.067
	0.106	0.013	-0.015	0.572	0.2	0.067
ECCo	0.102	0.018	-0.02	0.654	0.2	0.133
	0.126	0.011	0.049	0.084	0.267	0.067
	0.072	0.063	0.032	0.161	0.133	0.067
	0.171	0.002	-0.019	0.627	0.333	0.133
	0.12	0.012	0.01	0.288	0.2	0.067
	0.148	0.005	-0.033	0.826	0.133	0.067
	0.111	0.019	0.032	0.139	0.2	0.067
	0.138	0.007	-0.014	0.57	0.133	0.067
	0.125	0.011	0.002	0.373	0.2	0.067
	0.115	0.011	-0.015	0.525	0.267	0.067
Wachter	0.123	0.006	-0.022	0.664	0.067	0.133
	0.118	0.016	0.001	0.36	0.233	0.133
	0.151	0.006	-0.028	0.735	0.2	0.067
	0.125	0.006	-0.015	0.568	0.2	0.133
	0.101	0.026	-0.022	0.665	0.067	0.067
	0.14	0.006	-0.008	0.448	0.267	0.067
	0.054	0.089	-0.026	0.704	0.2	0.067
	0.165	0.003	-0.009	0.475	0.2	0.067
	0.119	0.015	0.034	0.135	0.2	0.133
	0.11	0.017	-0.027	0.716	0.2	0.067
Generic	0.025	0.186	0.035	0.124	0.167	0.067
	0.168	0.002	0.037	0.123	0.267	0.133
	0.117	0.019	-0.019	0.623	0.1	0.133
	0.134	0.013	-0.022	0.664	0.133	0.067
	0.09	0.023	0.005	0.334	0.2	0.067
	0.149	0.003	-0.019	0.636	0.2	0.067
	0.12	0.014	-0.018	0.623	0.2	0.133
	0.139	0.01	0.019	0.234	0.2	0.067
	0.103	0.014	-0.02	0.625	0.1	0.133
	0.146	0.003	-0.007	0.447	0.267	0.067
DiCE	0.142	0.006	-0.03	0.788	0.1	0.067
	0.08	0.035	-0.024	0.704	0.067	0.067
	0.15	0.005	0.009	0.285	0.4	0.067
	0.073	0.05	-0.033	0.842	0.2	0.133
	0.137	0.008	-0.016	0.573	0.233	0.067
	0.089	0.026	-0.012	0.526	0.133	0.067

	0.132	0.009	0.026	0.183	0.1	0.067
	0.074	0.037	-0.026	0.692	0.167	0.067
	0.164	0.002	0.013	0.237	0.233	0.2
	0.117	0.018	-0.008	0.454	0.267	0.067
ClaPROAR	0.163	0.011	0.01	0.287	0.6	0.067
	0.11	0.015	-0.01	0.48	0.2	0.067
	0.132	0.014	-0.015	0.589	0.2	0.067
	0.149	0.007	-0.014	0.563	0.4	0.067
	0.146	0.003	-0.008	0.477	0.167	0.067
	0.093	0.028	-0.035	0.88	0.2	0.067
	0.138	0.006	-0.004	0.4	0.2	0.067
	0.095	0.023	0.035	0.141	0.2	0.067
	0.084	0.031	0.015	0.24	0.2	0.133
	0.136	0.01	-0.002	0.401	0.267	0.133

Tab. 245: Domain shifts for the Iris data experiment 4 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.068	0.06	0.085	0.033	0.067	0.067
	0.106	0.027	0.041	0.137	0.133	0.067
	0.178	0.002	-0.006	0.41	0.1	0.0
	0.146	0.008	0.08	0.046	0.133	0.067
	0.13	0.009	0.02	0.24	0.133	0.133
	0.078	0.041	0.042	0.107	0.067	0.067
	0.137	0.008	0.011	0.294	0.067	0.067
	0.133	0.011	0.019	0.238	0.133	0.0
	0.123	0.015	0.008	0.332	0.533	0.067
	0.164	0.004	-0.01	0.475	0.433	0.067
ECCo	0.114	0.02	0.004	0.327	0.533	0.0
	0.088	0.037	-0.021	0.642	0.2	0.0
	0.133	0.011	0.011	0.307	0.133	0.067
	0.08	0.051	-0.002	0.381	0.067	0.0
	0.101	0.029	0.021	0.236	0.1	0.067
	0.114	0.012	0.038	0.115	0.067	0.0
	0.135	0.016	0.038	0.138	0.133	0.0
	0.094	0.028	0.009	0.305	0.067	0.067
	0.124	0.012	-0.025	0.672	0.067	0.0
	0.088	0.035	-0.032	0.792	0.133	0.0
Wachter	0.167	0.008	0.06	0.071	0.1	0.0
	0.146	0.008	0.086	0.027	0.533	0.0
	0.12	0.027	0.015	0.261	0.067	0.133
	0.108	0.025	0.015	0.251	0.533	0.0
	0.089	0.046	-0.005	0.398	0.067	0.0
	0.169	0.003	0.035	0.142	0.1	0.133
	0.165	0.003	0.004	0.299	0.067	0.067
	0.178	0.003	0.0	0.338	0.4	0.0
	0.14	0.011	0.023	0.198	0.067	0.0
	0.112	0.02	-0.018	0.583	0.067	0.0
Generic	0.121	0.014	0.015	0.242	0.067	0.0
	0.098	0.031	0.042	0.11	0.333	0.067
	0.123	0.021	-0.014	0.512	0.067	0.133
	0.127	0.018	-0.027	0.707	0.067	0.0
	0.194	0.004	0.054	0.093	0.533	0.0
	0.158	0.008	-0.017	0.608	0.1	0.0
	0.068	0.071	0.039	0.117	0.067	0.0

	0.118	0.026	-0.009	0.431	0.067	0.067
	0.127	0.014	0.08	0.044	0.067	0.0
	0.097	0.02	0.056	0.093	0.067	0.133
DiCE	0.121	0.024	0.037	0.131	0.067	0.067
	0.135	0.011	-0.023	0.642	0.067	0.0
	0.133	0.011	0.017	0.265	0.167	0.0
	0.091	0.016	0.01	0.309	0.0	0.0
	0.103	0.017	0.064	0.074	0.067	0.067
	0.15	0.012	0.03	0.165	0.067	0.0
	0.141	0.006	0.041	0.13	0.1	0.0
	0.117	0.013	0.013	0.294	0.133	0.0
	0.143	0.007	0.009	0.316	0.1	0.0
	0.087	0.042	0.016	0.253	0.0	0.0
ClaPROAR	0.15	0.006	0.023	0.214	0.133	0.0
	0.123	0.018	0.03	0.158	0.133	0.133
	0.159	0.007	0.139	0.012	0.133	0.0
	0.09	0.03	0.026	0.178	0.067	0.133
	0.195	0.005	0.079	0.057	0.533	0.067
	0.161	0.007	-0.022	0.633	0.533	0.0
	0.122	0.022	-0.02	0.642	0.067	0.0
	0.165	0.004	0.058	0.09	0.067	0.133
	0.083	0.044	-0.002	0.402	0.267	0.0
	0.095	0.033	0.028	0.185	0.067	0.0

Tab. 246: Domain shifts for the Iris data experiment 5 using a deep ensemble

F.3.13. Moons dataset using MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	-0.0	0.342	-0.001	0.369	0.05	0.08
	0.003	0.24	0.008	0.108	0.1	0.11
	0.001	0.291	0.018	0.024	0.07	0.06
	-0.003	0.504	0.004	0.175	0.01	0.04
	0.001	0.26	0.017	0.03	0.04	0.14
	-0.002	0.456	-0.001	0.405	0.04	0.07
	-0.003	0.538	0.022	0.028	0.01	0.08
	0.003	0.184	0.0	0.297	0.13	0.12
	0.003	0.207	0.008	0.117	0.11	0.1
	0.003	0.175	0.017	0.028	0.07	0.05
REVISE	0.003	0.204	0.033	0.007	0.06	0.09
	-0.002	0.488	0.021	0.014	0.02	0.05
	0.002	0.222	-0.003	0.496	0.06	0.0
	0.004	0.162	0.101	0.0	0.05	0.14
	0.003	0.197	0.003	0.212	0.06	0.08
	0.005	0.137	-0.005	0.758	0.07	0.0
	-0.001	0.362	0.021	0.023	0.05	0.08
	-0.003	0.523	0.01	0.077	0.05	0.14
	-0.002	0.5	-0.004	0.647	0.01	0.0
	0.001	0.255	-0.003	0.581	0.12	0.0
ECCo	0.006	0.135	0.023	0.012	0.07	0.17
	-0.001	0.386	-0.004	0.617	0.02	0.0
	0.001	0.296	-0.004	0.647	0.04	0.0
	-0.002	0.47	-0.003	0.574	0.06	0.0
	0.001	0.267	0.012	0.044	0.05	0.14
	0.003	0.191	-0.004	0.683	0.06	0.01
	-0.004	0.729	-0.004	0.682	0.0	0.0

	-0.001	0.406	0.052	0.0	0.02	0.25
	-0.001	0.321	-0.003	0.51	0.06	0.01
	-0.002	0.408	0.009	0.073	0.04	0.11
Wachter	-0.002	0.443	-0.0	0.338	0.02	0.0
	0.007	0.1	0.022	0.014	0.1	0.15
	0.0	0.301	0.007	0.122	0.08	0.02
	0.0	0.294	0.0	0.301	0.05	0.07
	0.001	0.28	0.036	0.007	0.06	0.18
	0.001	0.292	-0.004	0.683	0.04	0.01
	0.005	0.162	0.008	0.095	0.09	0.09
	0.001	0.275	-0.001	0.379	0.03	0.07
	-0.002	0.421	0.008	0.091	0.02	0.01
	-0.002	0.407	-0.004	0.691	0.01	0.0
Generic	-0.001	0.32	-0.004	0.703	0.06	0.0
	-0.002	0.441	-0.004	0.606	0.07	0.0
	-0.001	0.389	0.032	0.004	0.01	0.14
	0.003	0.195	-0.003	0.541	0.09	0.01
	0.001	0.277	-0.0	0.306	0.08	0.05
	0.001	0.253	0.011	0.068	0.04	0.07
	0.002	0.264	0.013	0.051	0.06	0.04
	0.005	0.156	0.002	0.233	0.09	0.06
	0.003	0.206	-0.0	0.339	0.07	0.01
	0.001	0.271	-0.003	0.562	0.07	0.0
DiCE	0.0	0.304	-0.003	0.619	0.05	0.0
	-0.0	0.323	-0.001	0.381	0.02	0.0
	-0.003	0.51	-0.004	0.761	0.01	0.0
	0.003	0.209	-0.004	0.584	0.11	0.01
	0.001	0.291	-0.002	0.435	0.07	0.01
	0.004	0.184	-0.0	0.348	0.07	0.02
	0.001	0.262	0.004	0.179	0.09	0.01
	-0.0	0.34	-0.004	0.717	0.06	0.0
	0.002	0.224	-0.005	0.904	0.09	0.0
	-0.001	0.379	-0.005	0.791	0.06	0.0
ClaPROAR	0.0	0.304	0.036	0.0	0.01	0.28
	0.006	0.116	-0.004	0.625	0.11	0.0
	0.005	0.162	0.012	0.062	0.11	0.15
	0.002	0.217	-0.004	0.74	0.06	0.0
	-0.003	0.575	0.021	0.011	0.0	0.07
	-0.001	0.322	-0.002	0.475	0.06	0.0
	-0.001	0.397	0.001	0.259	0.04	0.01
	-0.003	0.536	-0.004	0.614	0.07	0.03
	0.004	0.175	-0.003	0.594	0.11	0.0
	0.003	0.19	-0.004	0.771	0.12	0.0

Tab. 247: Domain shifts for the moons data experiment 1 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.001	0.278	0.01	0.099	0.08	0.09
	0.008	0.095	0.011	0.093	0.1	0.11
	0.001	0.27	0.005	0.143	0.04	0.11
	-0.0	0.352	0.004	0.171	0.02	0.08
	0.001	0.263	0.031	0.004	0.03	0.11
	-0.0	0.302	0.009	0.078	0.03	0.08
	0.002	0.24	0.013	0.041	0.08	0.16
	-0.001	0.402	0.012	0.058	0.03	0.1

	0.004	0.162	0.02	0.02	0.07	0.11
	0.001	0.28	0.009	0.089	0.04	0.06
REVISE	-0.001	0.404	-0.001	0.372	0.03	0.06
	0.008	0.111	-0.005	0.839	0.09	0.0
	-0.002	0.426	-0.004	0.657	0.01	0.0
	-0.002	0.408	0.007	0.097	0.03	0.01
	0.002	0.265	0.001	0.297	0.04	0.03
	0.002	0.223	-0.004	0.763	0.08	0.0
	0.003	0.195	0.045	0.0	0.03	0.13
	-0.0	0.334	0.004	0.182	0.04	0.03
	0.003	0.218	0.004	0.183	0.05	0.0
	-0.0	0.339	0.219	0.0	0.04	0.18
ECCo	-0.002	0.421	-0.002	0.422	0.03	0.01
	-0.0	0.364	0.002	0.223	0.04	0.07
	0.002	0.242	-0.004	0.768	0.04	0.0
	-0.004	0.694	0.029	0.006	0.01	0.24
	-0.002	0.444	-0.002	0.474	0.05	0.01
	-0.0	0.336	0.003	0.225	0.04	0.02
	0.004	0.164	-0.003	0.479	0.08	0.0
	0.001	0.252	-0.001	0.363	0.06	0.01
	-0.004	0.668	0.019	0.027	0.02	0.09
	-0.0	0.318	0.006	0.133	0.03	0.01
Wachter	-0.001	0.342	-0.004	0.6	0.01	0.0
	0.011	0.048	0.057	0.0	0.09	0.05
	-0.001	0.406	0.027	0.008	0.01	0.28
	0.001	0.261	0.002	0.24	0.06	0.0
	0.002	0.244	0.003	0.187	0.07	0.06
	-0.002	0.455	0.016	0.044	0.02	0.01
	0.009	0.097	0.056	0.0	0.14	0.11
	0.0	0.304	-0.005	0.797	0.04	0.0
	0.002	0.25	-0.004	0.667	0.06	0.0
	0.002	0.208	-0.003	0.526	0.08	0.0
Generic	0.002	0.211	-0.002	0.386	0.05	0.0
	0.003	0.232	-0.004	0.747	0.08	0.0
	0.004	0.179	-0.0	0.325	0.08	0.0
	-0.0	0.315	0.012	0.058	0.04	0.17
	-0.001	0.344	0.004	0.175	0.04	0.1
	0.002	0.226	0.01	0.062	0.03	0.15
	0.001	0.266	0.015	0.041	0.04	0.11
	-0.003	0.59	0.015	0.044	0.02	0.04
	0.001	0.266	0.032	0.006	0.05	0.11
	0.003	0.194	0.003	0.219	0.04	0.0
DiCE	0.002	0.22	-0.003	0.481	0.07	0.0
	0.007	0.118	-0.004	0.626	0.13	0.0
	-0.001	0.356	-0.005	0.759	0.02	0.0
	0.002	0.223	0.098	0.0	0.08	0.26
	-0.0	0.342	0.001	0.276	0.03	0.0
	-0.002	0.457	0.016	0.026	0.02	0.15
	-0.002	0.457	-0.002	0.459	0.01	0.0
	-0.002	0.416	0.002	0.25	0.01	0.06
	0.002	0.204	-0.0	0.337	0.04	0.01
	-0.002	0.469	0.012	0.069	0.01	0.0
ClaPROAR	0.002	0.228	-0.003	0.61	0.03	0.0
	-0.002	0.44	0.018	0.042	0.03	0.15
	0.005	0.136	0.004	0.169	0.08	0.0
	0.001	0.264	-0.004	0.613	0.04	0.0

	-0.001	0.379	-0.005	0.762	0.02	0.0
	0.001	0.27	-0.0	0.316	0.04	0.0
	0.003	0.192	0.035	0.005	0.07	0.3
	0.003	0.213	0.0	0.307	0.05	0.01
	0.001	0.282	0.004	0.181	0.07	0.0
	-0.002	0.467	0.008	0.104	0.02	0.0

Tab. 248: Domain shifts for the moons data experiment 2 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.005	0.165	0.009	0.097	0.1	0.19
	0.006	0.123	0.005	0.147	0.1	0.1
	0.001	0.239	0.004	0.2	0.05	0.04
	-0.004	0.627	0.015	0.038	0.01	0.12
	0.006	0.108	0.011	0.055	0.11	0.13
	-0.0	0.309	0.021	0.023	0.04	0.09
	0.005	0.143	0.025	0.015	0.1	0.18
	0.003	0.226	0.013	0.053	0.11	0.13
	0.004	0.17	0.045	0.001	0.04	0.16
	0.004	0.183	0.006	0.113	0.1	0.11
REVISE	0.005	0.155	-0.002	0.434	0.11	0.0
	-0.001	0.33	0.001	0.267	0.01	0.0
	0.005	0.156	0.05	0.001	0.1	0.04
	0.008	0.092	-0.005	0.916	0.11	0.0
	0.007	0.102	0.018	0.028	0.11	0.06
	0.0	0.294	0.017	0.03	0.04	0.0
	0.007	0.097	0.025	0.01	0.09	0.09
	0.002	0.215	0.023	0.015	0.03	0.04
	-0.002	0.457	0.008	0.096	0.01	0.0
	0.003	0.207	0.015	0.049	0.09	0.0
ECCo	0.001	0.282	-0.004	0.75	0.03	0.0
	0.006	0.121	0.111	0.0	0.11	0.14
	0.009	0.08	-0.004	0.779	0.11	0.0
	-0.004	0.649	0.068	0.0	0.01	0.16
	0.009	0.092	-0.004	0.776	0.1	0.0
	0.001	0.287	0.039	0.0	0.01	0.05
	0.001	0.282	-0.002	0.415	0.05	0.0
	-0.0	0.334	0.052	0.001	0.06	0.07
	-0.004	0.762	-0.001	0.356	0.0	0.01
	-0.001	0.384	0.025	0.009	0.01	0.0
Wachter	0.004	0.185	0.006	0.155	0.1	0.0
	0.003	0.187	0.007	0.129	0.06	0.01
	0.004	0.172	-0.001	0.363	0.09	0.0
	0.002	0.213	0.026	0.008	0.04	0.09
	0.007	0.119	0.042	0.002	0.07	0.07
	0.003	0.18	0.061	0.0	0.04	0.11
	0.004	0.174	0.02	0.014	0.1	0.0
	0.008	0.095	0.002	0.264	0.11	0.0
	0.003	0.203	-0.005	0.917	0.11	0.0
	0.006	0.128	0.002	0.25	0.1	0.01
Generic	0.006	0.135	0.097	0.0	0.11	0.21
	0.004	0.187	0.039	0.004	0.1	0.09
	0.003	0.178	0.044	0.001	0.03	0.09
	0.004	0.164	0.026	0.006	0.1	0.0
	0.004	0.159	-0.003	0.6	0.11	0.0

	0.006	0.108	0.003	0.195	0.11	0.0
	0.006	0.11	-0.002	0.439	0.1	0.01
	0.004	0.157	0.006	0.13	0.1	0.0
	0.007	0.127	0.01	0.086	0.1	0.09
	-0.003	0.541	0.03	0.007	0.01	0.01
DiCE	-0.004	0.62	0.033	0.003	0.0	0.0
	-0.004	0.638	0.007	0.113	0.01	0.01
	0.003	0.179	0.056	0.0	0.1	0.1
	0.008	0.117	-0.003	0.615	0.11	0.0
	0.007	0.134	0.057	0.0	0.11	0.23
	0.009	0.089	0.024	0.014	0.11	0.01
	0.002	0.217	-0.004	0.618	0.03	0.0
	0.004	0.162	-0.003	0.566	0.11	0.01
	0.002	0.217	0.011	0.071	0.11	0.0
	-0.003	0.504	-0.001	0.375	0.01	0.0
ClaPROAR	0.002	0.232	0.009	0.086	0.05	0.0
	0.008	0.089	-0.0	0.371	0.12	0.0
	0.003	0.204	0.022	0.024	0.11	0.01
	0.003	0.215	0.018	0.025	0.03	0.0
	0.002	0.258	-0.002	0.434	0.1	0.0
	-0.003	0.562	0.035	0.003	0.02	0.03
	-0.001	0.356	0.071	0.0	0.05	0.07
	-0.0	0.339	0.025	0.018	0.01	0.03
	0.008	0.126	0.003	0.214	0.1	0.02
	0.001	0.259	0.005	0.152	0.02	0.0

Tab. 249: Domain shifts for the moons data experiment 2 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.016	0.036	0.02	0.019	0.15	0.12
	0.014	0.036	0.011	0.075	0.06	0.06
	-0.004	0.63	0.016	0.028	0.0	0.16
	0.021	0.009	0.01	0.074	0.2	0.1
	0.006	0.117	0.021	0.023	0.04	0.16
	0.01	0.077	0.029	0.009	0.04	0.17
	-0.005	0.925	0.042	0.0	0.0	0.2
	0.018	0.023	0.034	0.001	0.15	0.24
	0.02	0.021	0.013	0.048	0.2	0.2
	0.009	0.086	0.023	0.014	0.03	0.22
REVISE	-0.004	0.657	0.024	0.009	0.0	0.13
	0.005	0.153	-0.004	0.628	0.09	0.0
	0.023	0.016	0.004	0.165	0.16	0.11
	0.022	0.012	0.004	0.176	0.2	0.0
	0.006	0.133	0.016	0.04	0.03	0.04
	-0.0	0.339	0.06	0.0	0.03	0.21
	0.017	0.03	-0.002	0.463	0.14	0.02
	0.004	0.201	0.001	0.272	0.05	0.01
	-0.001	0.422	-0.004	0.628	0.0	0.0
	0.018	0.033	-0.004	0.636	0.17	0.0
ECCo	0.003	0.186	-0.001	0.348	0.01	0.0
	0.004	0.163	0.044	0.002	0.02	0.38
	-0.0	0.322	-0.005	0.749	0.0	0.0
	0.01	0.09	-0.002	0.467	0.03	0.02
	-0.001	0.338	-0.004	0.615	0.02	0.0
	-0.002	0.44	0.004	0.167	0.0	0.0

	-0.003	0.524	-0.004	0.793	0.0	0.0
	0.022	0.013	0.0	0.299	0.2	0.01
	-0.002	0.462	0.005	0.14	0.0	0.07
	0.022	0.019	-0.003	0.547	0.21	0.02
Wachter	-0.003	0.587	-0.001	0.387	0.0	0.0
	0.009	0.094	-0.004	0.65	0.06	0.0
	0.002	0.249	-0.003	0.632	0.03	0.02
	0.012	0.059	-0.004	0.752	0.06	0.0
	-0.004	0.762	0.035	0.003	0.0	0.01
	-0.005	0.878	0.002	0.265	0.0	0.0
	0.022	0.014	-0.001	0.36	0.21	0.0
	-0.002	0.477	-0.002	0.456	0.0	0.0
	-0.004	0.756	0.036	0.0	0.0	0.22
	0.023	0.012	-0.001	0.385	0.22	0.0
Generic	-0.004	0.61	-0.004	0.755	0.0	0.0
	0.008	0.094	0.009	0.094	0.06	0.03
	0.021	0.023	-0.003	0.571	0.22	0.05
	0.01	0.079	0.029	0.003	0.06	0.02
	0.011	0.07	0.014	0.041	0.06	0.04
	-0.001	0.382	-0.004	0.674	0.0	0.02
	0.016	0.041	0.031	0.006	0.14	0.0
	-0.004	0.611	0.06	0.0	0.0	0.37
	-0.003	0.536	-0.004	0.726	0.0	0.0
	-0.003	0.525	0.008	0.108	0.0	0.07
DiCE	-0.005	0.774	0.042	0.001	0.0	0.03
	-0.004	0.695	-0.003	0.627	0.0	0.0
	0.006	0.129	-0.001	0.344	0.05	0.01
	-0.002	0.5	-0.002	0.383	0.0	0.0
	-0.004	0.627	-0.004	0.665	0.0	0.0
	0.021	0.021	0.006	0.132	0.17	0.04
	-0.005	0.772	-0.004	0.653	0.0	0.0
	-0.002	0.468	0.004	0.173	0.0	0.0
	-0.005	0.918	0.007	0.11	0.0	0.03
	0.0	0.318	-0.0	0.339	0.03	0.0
ClaPROAR	-0.003	0.527	0.009	0.093	0.0	0.05
	0.007	0.119	-0.003	0.463	0.02	0.02
	-0.005	0.751	0.006	0.165	0.0	0.0
	0.015	0.044	-0.003	0.563	0.19	0.02
	0.02	0.016	0.09	0.0	0.15	0.43
	0.001	0.296	0.038	0.001	0.02	0.38
	0.006	0.141	0.002	0.228	0.05	0.04
	0.018	0.021	0.02	0.022	0.2	0.21
	0.0	0.265	-0.002	0.508	0.01	0.0
	0.021	0.02	-0.001	0.361	0.17	0.03

Tab. 250: Domain shifts for the moons data experiment 4 using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
Gravitational	0.003	0.199	0.03	0.004	0.08	0.16
	0.011	0.064	0.03	0.001	0.14	0.19
	0.017	0.031	0.025	0.017	0.12	0.17
	0.007	0.141	0.02	0.023	0.06	0.07
	0.017	0.03	0.021	0.021	0.14	0.17
	0.007	0.131	0.025	0.013	0.04	0.1
	-0.002	0.493	0.041	0.001	0.0	0.09

	0.001	0.275	0.008	0.081	0.03	0.03
	0.007	0.114	0.057	0.0	0.07	0.16
	0.004	0.197	0.03	0.004	0.06	0.07
REVISE	0.012	0.065	-0.004	0.686	0.13	0.0
	0.02	0.014	-0.002	0.487	0.13	0.0
	0.01	0.082	0.0	0.298	0.12	0.01
	0.012	0.06	-0.003	0.568	0.14	0.0
	-0.003	0.515	-0.003	0.587	0.0	0.01
	0.001	0.257	0.002	0.206	0.02	0.04
	0.003	0.232	0.099	0.0	0.02	0.28
	0.003	0.226	-0.001	0.376	0.02	0.01
	0.006	0.127	-0.003	0.549	0.12	0.06
	0.013	0.051	-0.003	0.596	0.13	0.01
ECCo	0.006	0.126	0.002	0.211	0.03	0.01
	0.011	0.066	-0.003	0.6	0.13	0.01
	0.013	0.048	-0.003	0.543	0.13	0.02
	0.004	0.152	-0.003	0.612	0.03	0.0
	0.01	0.085	-0.0	0.343	0.11	0.01
	0.007	0.128	-0.003	0.543	0.09	0.05
	0.008	0.089	0.008	0.095	0.12	0.02
	-0.001	0.373	0.011	0.058	0.03	0.14
	-0.004	0.665	-0.004	0.583	0.01	0.01
	-0.003	0.576	0.012	0.055	0.01	0.0
Wachter	0.015	0.03	-0.004	0.622	0.13	0.01
	0.008	0.098	-0.002	0.406	0.09	0.01
	0.009	0.096	-0.001	0.347	0.13	0.02
	0.009	0.098	-0.003	0.534	0.13	0.01
	0.003	0.195	-0.004	0.614	0.02	0.0
	0.013	0.044	0.003	0.191	0.15	0.09
	-0.003	0.494	-0.001	0.36	0.0	0.0
	-0.001	0.356	0.005	0.177	0.05	0.03
	0.002	0.243	0.04	0.001	0.02	0.06
	0.008	0.101	-0.001	0.399	0.08	0.01
Generic	0.01	0.093	0.002	0.236	0.09	0.05
	0.008	0.099	0.096	0.0	0.04	0.27
	0.004	0.165	0.002	0.227	0.02	0.02
	-0.003	0.547	-0.001	0.347	0.0	0.02
	0.006	0.127	0.002	0.256	0.06	0.01
	0.006	0.139	0.006	0.122	0.07	0.03
	0.003	0.197	0.001	0.292	0.14	0.01
	0.011	0.06	0.006	0.108	0.13	0.04
	-0.005	0.739	-0.004	0.626	0.0	0.0
	0.011	0.076	-0.004	0.625	0.15	0.0
DiCE	0.006	0.13	0.005	0.161	0.09	0.1
	0.007	0.13	0.022	0.016	0.12	0.11
	0.006	0.148	-0.002	0.422	0.1	0.03
	-0.001	0.389	-0.003	0.521	0.01	0.0
	0.011	0.066	-0.004	0.688	0.09	0.01
	-0.002	0.428	0.003	0.186	0.01	0.0
	0.011	0.041	-0.002	0.445	0.11	0.01
	0.006	0.131	0.003	0.188	0.03	0.03
	0.01	0.085	-0.004	0.716	0.14	0.01
	0.007	0.121	-0.004	0.621	0.04	0.01
ClaPROAR	0.007	0.097	0.019	0.03	0.04	0.0
	0.01	0.091	0.0	0.3	0.15	0.01
	0.011	0.055	0.001	0.289	0.14	0.02

	0.009	0.102	-0.002	0.45	0.07	0.01
	0.004	0.171	-0.004	0.738	0.06	0.0
	0.001	0.306	0.073	0.0	0.02	0.21
	0.014	0.041	0.004	0.188	0.14	0.05
	0.006	0.137	0.001	0.295	0.04	0.02
	0.016	0.04	0.003	0.195	0.14	0.04
	0.003	0.175	-0.003	0.527	0.05	0.01

Tab. 251: Domain shifts for the moons data experiment 5 using a MLP

F.3.14. Moons dataset using Deep ensemble using a MLP

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.004	0.637	-0.003	0.515	0.06	0.02
	-0.003	0.572	0.001	0.285	0.08	0.02
	-0.002	0.476	0.0	0.328	0.07	0.03
	-0.003	0.546	-0.005	0.851	0.09	0.01
	-0.003	0.536	-0.003	0.535	0.07	0.02
	-0.003	0.569	-0.003	0.541	0.1	0.03
	-0.003	0.528	-0.005	0.826	0.06	0.02
	-0.004	0.633	-0.001	0.373	0.06	0.03
	-0.003	0.499	0.001	0.3	0.07	0.04
	-0.003	0.533	-0.002	0.46	0.07	0.02
ECCo	-0.003	0.603	-0.004	0.794	0.09	0.0
	-0.002	0.451	-0.002	0.478	0.09	0.03
	-0.003	0.517	-0.002	0.441	0.11	0.03
	-0.003	0.456	-0.004	0.567	0.07	0.01
	-0.002	0.476	-0.005	0.785	0.07	0.02
	-0.003	0.491	-0.002	0.394	0.1	0.03
	-0.003	0.531	-0.003	0.513	0.06	0.03
	-0.003	0.566	-0.005	0.852	0.11	0.01
	-0.002	0.493	-0.003	0.548	0.11	0.03
	-0.004	0.581	-0.0	0.347	0.11	0.04
Wachter	-0.003	0.529	-0.003	0.561	0.07	0.03
	-0.003	0.501	-0.003	0.508	0.07	0.02
	-0.003	0.516	-0.003	0.513	0.13	0.02
	-0.003	0.608	-0.0	0.332	0.1	0.01
	-0.004	0.627	-0.004	0.732	0.06	0.01
	-0.003	0.571	-0.002	0.482	0.11	0.03
	-0.003	0.584	-0.003	0.521	0.08	0.02
	-0.003	0.534	-0.005	0.793	0.08	0.01
	-0.003	0.532	0.001	0.281	0.11	0.02
	-0.002	0.466	-0.003	0.546	0.11	0.02
Generic	-0.004	0.582	-0.004	0.742	0.11	0.01
	-0.003	0.495	-0.003	0.531	0.1	0.02
	-0.003	0.529	-0.003	0.493	0.1	0.02
	-0.002	0.419	-0.002	0.447	0.11	0.02
	-0.003	0.526	-0.005	0.827	0.09	0.01
	-0.003	0.521	-0.003	0.525	0.11	0.03
	-0.003	0.581	-0.002	0.463	0.06	0.03
	-0.004	0.615	-0.003	0.576	0.06	0.01
	-0.003	0.521	-0.002	0.476	0.07	0.03
	-0.003	0.518	0.0	0.28	0.07	0.02
DiCE	-0.003	0.482	-0.004	0.583	0.07	0.01
	-0.003	0.61	-0.005	0.784	0.08	0.01
	-0.003	0.541	0.002	0.202	0.07	0.05

	-0.002	0.473	-0.002	0.476	0.08	0.02
	-0.003	0.498	-0.004	0.703	0.11	0.02
	-0.003	0.485	-0.003	0.569	0.08	0.01
	-0.003	0.499	-0.003	0.576	0.09	0.02
	-0.004	0.615	-0.004	0.61	0.1	0.01
	-0.003	0.542	-0.003	0.552	0.09	0.02
	-0.003	0.58	-0.003	0.555	0.06	0.02
ClaPROAR	-0.003	0.596	-0.005	0.853	0.07	0.01
	-0.002	0.448	-0.005	0.918	0.07	0.02
	-0.003	0.522	-0.001	0.366	0.11	0.02
	-0.003	0.564	-0.005	0.789	0.07	0.0
	-0.003	0.571	-0.003	0.531	0.07	0.02
	-0.003	0.55	-0.003	0.627	0.07	0.02
	-0.004	0.642	-0.001	0.388	0.07	0.04
	-0.004	0.589	-0.003	0.499	0.11	0.02
	-0.003	0.529	0.0	0.321	0.07	0.04
	-0.003	0.569	-0.005	0.913	0.07	0.02

Tab. 252: Domain shifts for the moons data experiment 1 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.001	0.382	-0.002	0.421	0.09	0.0
	-0.003	0.457	-0.005	0.807	0.07	0.0
	-0.002	0.433	-0.005	0.91	0.08	0.0
	-0.001	0.382	-0.005	0.931	0.08	0.0
	-0.002	0.441	-0.004	0.754	0.09	0.0
	-0.0	0.306	-0.005	0.929	0.1	0.0
	-0.001	0.337	-0.005	0.917	0.09	0.0
	-0.002	0.434	-0.005	0.789	0.07	0.0
	-0.002	0.458	-0.005	0.781	0.08	0.0
	-0.002	0.479	-0.003	0.519	0.1	0.0
ECCo	-0.003	0.525	-0.003	0.504	0.09	0.0
	-0.003	0.493	-0.005	0.923	0.08	0.0
	-0.003	0.557	-0.004	0.787	0.08	0.0
	-0.002	0.473	-0.005	0.78	0.1	0.0
	-0.002	0.472	-0.003	0.599	0.09	0.0
	-0.002	0.382	-0.005	0.912	0.08	0.0
	-0.002	0.459	-0.005	0.924	0.07	0.0
	-0.002	0.422	-0.005	0.915	0.08	0.0
	-0.001	0.397	-0.005	0.922	0.1	0.0
	-0.002	0.418	-0.005	0.917	0.09	0.0
Wachter	-0.002	0.47	-0.004	0.768	0.08	0.0
	-0.002	0.429	-0.004	0.669	0.05	0.0
	-0.003	0.529	-0.005	0.912	0.07	0.0
	-0.002	0.446	-0.004	0.686	0.08	0.0
	-0.002	0.496	-0.005	0.915	0.08	0.0
	0.0	0.286	-0.003	0.526	0.08	0.0
	-0.002	0.47	-0.005	0.921	0.08	0.0
	-0.003	0.519	-0.005	0.92	0.08	0.0
	-0.002	0.443	-0.003	0.454	0.07	0.0
	-0.001	0.379	-0.005	0.934	0.08	0.0
Generic	-0.003	0.535	-0.005	0.917	0.08	0.0
	-0.001	0.415	-0.003	0.611	0.12	0.0
	-0.002	0.45	-0.001	0.38	0.06	0.0
	-0.001	0.387	-0.005	0.929	0.09	0.0

	-0.002	0.431	-0.004	0.633	0.08	0.0
	-0.002	0.484	-0.0	0.334	0.08	0.0
	-0.002	0.459	-0.005	0.91	0.08	0.0
	-0.003	0.488	-0.005	0.918	0.08	0.0
	-0.002	0.437	-0.004	0.756	0.08	0.0
	-0.002	0.447	-0.004	0.765	0.08	0.0
DiCE	-0.002	0.468	-0.002	0.401	0.08	0.0
	-0.0	0.346	-0.005	0.929	0.07	0.0
	-0.002	0.45	-0.002	0.421	0.08	0.0
	-0.002	0.414	-0.005	0.91	0.08	0.0
	-0.002	0.431	-0.005	0.883	0.11	0.0
	-0.002	0.406	-0.005	0.918	0.1	0.0
	-0.002	0.447	-0.005	0.752	0.08	0.0
	-0.001	0.389	-0.003	0.505	0.09	0.0
	-0.003	0.494	-0.005	0.778	0.08	0.0
	-0.001	0.371	-0.005	0.754	0.09	0.0
ClaPROAR	-0.002	0.453	-0.001	0.372	0.08	0.0
	-0.002	0.443	-0.005	0.919	0.08	0.0
	-0.002	0.386	-0.005	0.928	0.07	0.0
	-0.001	0.36	-0.005	0.926	0.09	0.0
	-0.002	0.41	-0.005	0.932	0.09	0.0
	-0.001	0.331	-0.005	0.912	0.1	0.0
	-0.002	0.395	-0.005	0.912	0.05	0.0
	-0.003	0.557	-0.005	0.936	0.05	0.0
	-0.003	0.506	-0.002	0.49	0.11	0.0
	-0.002	0.399	-0.004	0.775	0.1	0.0

Tab. 253: Domain shifts for the moons data experiment 2 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.002	0.453	-0.005	0.924	0.09	0.0
	-0.002	0.412	-0.005	0.922	0.1	0.0
	-0.001	0.382	-0.005	0.921	0.08	0.0
	-0.002	0.433	-0.005	0.912	0.06	0.0
	-0.001	0.4	-0.005	0.931	0.11	0.0
	-0.002	0.418	-0.005	0.91	0.07	0.0
	-0.001	0.398	-0.002	0.437	0.06	0.01
	-0.002	0.434	-0.005	0.912	0.09	0.0
	-0.001	0.363	-0.003	0.609	0.08	0.0
	-0.002	0.385	-0.005	0.937	0.09	0.0
ECCo	-0.001	0.399	-0.005	0.863	0.08	0.0
	-0.0	0.349	-0.005	0.761	0.05	0.0
	-0.0	0.37	-0.005	0.776	0.1	0.0
	-0.002	0.453	-0.005	0.916	0.08	0.0
	-0.001	0.388	-0.005	0.928	0.08	0.0
	-0.002	0.471	-0.005	0.92	0.1	0.0
	-0.002	0.409	-0.004	0.611	0.09	0.0
	-0.002	0.424	-0.005	0.933	0.1	0.0
	-0.002	0.429	-0.005	0.922	0.1	0.0
	-0.001	0.414	-0.005	0.925	0.09	0.0
Wachter	-0.0	0.348	-0.005	0.904	0.08	0.0
	-0.002	0.413	-0.004	0.746	0.08	0.0
	-0.001	0.373	-0.005	0.929	0.08	0.0
	-0.002	0.488	-0.005	0.788	0.1	0.0
	-0.001	0.395	-0.005	0.924	0.1	0.0

	-0.002	0.477	-0.005	0.926	0.09	0.0
	-0.002	0.428	-0.005	0.93	0.09	0.0
	-0.002	0.45	-0.005	0.93	0.08	0.0
	-0.001	0.38	-0.005	0.919	0.09	0.0
	-0.002	0.422	-0.005	0.934	0.07	0.0
Generic	-0.001	0.398	-0.005	0.907	0.1	0.0
	0.001	0.287	-0.005	0.923	0.1	0.0
	0.0	0.334	-0.004	0.778	0.08	0.01
	-0.002	0.442	-0.005	0.911	0.1	0.0
	-0.001	0.39	-0.005	0.916	0.1	0.0
	-0.002	0.454	-0.004	0.626	0.1	0.0
	-0.002	0.437	-0.005	0.924	0.08	0.0
	-0.002	0.45	-0.005	0.912	0.08	0.0
	-0.002	0.471	-0.005	0.902	0.09	0.0
	-0.001	0.377	-0.001	0.345	0.1	0.0
DiCE	-0.001	0.352	-0.005	0.913	0.07	0.0
	-0.0	0.35	-0.004	0.616	0.06	0.0
	-0.002	0.444	0.001	0.28	0.06	0.0
	-0.001	0.351	-0.005	0.93	0.1	0.0
	-0.001	0.406	-0.001	0.387	0.09	0.0
	-0.002	0.444	-0.005	0.923	0.06	0.0
	-0.001	0.382	-0.005	0.901	0.09	0.0
	-0.003	0.519	-0.001	0.364	0.09	0.0
	-0.002	0.423	-0.005	0.922	0.09	0.0
	-0.002	0.42	-0.005	0.918	0.09	0.0
ClaPROAR	-0.001	0.396	-0.005	0.76	0.08	0.0
	-0.001	0.396	-0.005	0.917	0.09	0.0
	-0.001	0.402	-0.004	0.631	0.07	0.0
	-0.001	0.386	-0.005	0.905	0.09	0.0
	-0.001	0.354	-0.005	0.916	0.08	0.01
	-0.002	0.464	-0.005	0.913	0.1	0.0
	-0.002	0.441	-0.005	0.906	0.1	0.0
	-0.001	0.425	-0.005	0.918	0.06	0.0
	-0.002	0.428	-0.005	0.912	0.08	0.0
	-0.002	0.415	-0.005	0.907	0.1	0.0

Tab. 254: Domain shifts for the moons data experiment 3 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.004	0.178	-0.005	0.742	0.13	0.0
	0.007	0.107	-0.004	0.776	0.14	0.0
	0.005	0.148	-0.003	0.601	0.11	0.0
	0.003	0.195	-0.005	0.907	0.14	0.0
	0.003	0.201	-0.005	0.925	0.15	0.0
	0.002	0.248	-0.005	0.935	0.08	0.0
	0.005	0.143	-0.005	0.931	0.14	0.0
	0.003	0.225	-0.005	0.923	0.1	0.0
	0.003	0.19	-0.005	0.928	0.13	0.0
	0.001	0.271	0.003	0.231	0.05	0.0
ECCo	0.005	0.151	-0.005	0.919	0.16	0.0
	0.004	0.186	-0.005	0.904	0.1	0.0
	0.003	0.194	-0.005	0.931	0.15	0.0
	0.0	0.325	-0.005	0.928	0.03	0.0
	0.002	0.271	-0.003	0.572	0.05	0.0
	0.006	0.14	-0.005	0.778	0.13	0.0

	0.005	0.147	-0.005	0.917	0.17	0.0
	0.001	0.283	-0.005	0.93	0.04	0.0
	0.005	0.133	-0.005	0.931	0.17	0.0
	0.002	0.236	-0.004	0.602	0.08	0.0
Wachter	0.003	0.19	0.001	0.275	0.13	0.0
	0.004	0.175	-0.002	0.447	0.14	0.0
	0.003	0.2	-0.005	0.901	0.13	0.0
	0.001	0.247	-0.005	0.924	0.05	0.0
	0.005	0.153	-0.001	0.365	0.15	0.0
	0.002	0.216	-0.0	0.355	0.16	0.0
	0.004	0.168	-0.005	0.914	0.14	0.0
	0.005	0.152	-0.005	0.93	0.16	0.0
	0.005	0.159	-0.005	0.922	0.12	0.0
	0.005	0.168	-0.004	0.632	0.11	0.0
Generic	0.004	0.155	-0.005	0.927	0.12	0.0
	0.005	0.135	-0.005	0.922	0.13	0.0
	0.003	0.238	0.001	0.269	0.14	0.0
	0.006	0.144	-0.003	0.54	0.14	0.0
	0.005	0.165	-0.005	0.931	0.15	0.0
	0.002	0.23	-0.005	0.903	0.12	0.0
	0.004	0.162	-0.005	0.93	0.11	0.0
	0.003	0.222	-0.005	0.927	0.12	0.0
	0.008	0.09	0.002	0.219	0.16	0.0
	0.002	0.24	-0.005	0.91	0.04	0.0
DiCE	0.002	0.244	-0.005	0.913	0.1	0.0
	0.003	0.183	-0.005	0.922	0.06	0.0
	0.001	0.271	-0.005	0.875	0.17	0.0
	0.002	0.218	-0.001	0.411	0.1	0.0
	0.003	0.204	0.004	0.205	0.14	0.0
	0.005	0.141	0.038	0.001	0.1	0.03
	0.002	0.267	-0.001	0.358	0.17	0.02
	0.004	0.169	-0.003	0.612	0.14	0.0
	0.004	0.199	-0.005	0.916	0.11	0.0
	0.0	0.315	-0.005	0.915	0.08	0.0
ClaPROAR	0.004	0.146	-0.003	0.594	0.13	0.0
	0.003	0.211	-0.005	0.94	0.12	0.0
	0.004	0.181	-0.005	0.92	0.17	0.0
	0.004	0.189	-0.005	0.922	0.13	0.0
	0.002	0.225	-0.005	0.913	0.09	0.0
	0.003	0.199	0.004	0.163	0.05	0.0
	0.005	0.153	0.003	0.195	0.14	0.0
	0.005	0.163	-0.004	0.638	0.11	0.0
	0.0	0.307	0.002	0.235	0.08	0.0
	0.005	0.172	-0.004	0.615	0.14	0.0

Tab. 255: Domain shifts for the moons data experiment 4 using a MLP and a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.001	0.391	0.004	0.177	0.11	0.09
	0.0	0.334	-0.005	0.779	0.13	0.0
	0.0	0.312	-0.003	0.523	0.11	0.01
	0.002	0.237	-0.005	0.883	0.11	0.0
	-0.0	0.326	-0.002	0.431	0.11	0.0
	0.002	0.24	-0.004	0.721	0.13	0.01
	0.003	0.205	-0.004	0.687	0.15	0.0

	0.0	0.335	0.001	0.265	0.12	0.02
	0.001	0.286	-0.004	0.695	0.1	0.0
	-0.0	0.327	-0.004	0.653	0.08	0.01
ECCo	0.001	0.298	-0.002	0.446	0.12	0.02
	-0.0	0.354	-0.004	0.773	0.11	0.02
	0.001	0.298	0.001	0.253	0.11	0.01
	0.0	0.286	-0.004	0.776	0.14	0.01
	-0.0	0.323	-0.001	0.384	0.11	0.0
	0.0	0.326	-0.004	0.71	0.12	0.01
	-0.002	0.421	-0.0	0.326	0.12	0.02
	0.002	0.218	-0.005	0.847	0.1	0.01
	0.0	0.31	-0.001	0.363	0.12	0.02
	-0.001	0.373	0.003	0.236	0.12	0.03
Wachter	0.0	0.298	-0.005	0.881	0.12	0.0
	0.001	0.308	-0.005	0.875	0.09	0.0
	0.003	0.202	-0.004	0.756	0.13	0.01
	0.001	0.304	-0.001	0.334	0.12	0.0
	-0.0	0.333	-0.005	0.933	0.11	0.0
	0.001	0.272	-0.001	0.335	0.13	0.01
	0.001	0.263	-0.001	0.348	0.09	0.0
	0.001	0.282	-0.005	0.82	0.1	0.0
	-0.002	0.388	-0.005	0.915	0.09	0.0
	0.002	0.228	-0.004	0.636	0.13	0.02
Generic	-0.0	0.298	-0.005	0.84	0.1	0.0
	-0.0	0.309	-0.005	0.916	0.13	0.0
	-0.001	0.408	-0.005	0.917	0.11	0.0
	-0.001	0.384	-0.005	0.926	0.13	0.0
	-0.0	0.337	-0.005	0.779	0.11	0.0
	0.0	0.288	-0.001	0.369	0.11	0.0
	-0.001	0.395	-0.002	0.397	0.11	0.0
	0.001	0.294	-0.002	0.418	0.11	0.0
	-0.001	0.382	-0.005	0.859	0.09	0.0
	0.001	0.271	-0.005	0.933	0.11	0.0
DiCE	0.0	0.331	-0.004	0.774	0.1	0.0
	0.0	0.32	-0.005	0.924	0.09	0.0
	0.0	0.308	-0.004	0.775	0.12	0.01
	0.001	0.28	-0.005	0.792	0.11	0.0
	0.002	0.253	-0.004	0.743	0.13	0.01
	0.002	0.236	-0.005	0.795	0.08	0.0
	-0.0	0.317	0.0	0.307	0.1	0.0
	0.0	0.289	-0.005	0.929	0.11	0.0
	0.001	0.254	-0.0	0.334	0.11	0.0
	-0.0	0.319	-0.005	0.816	0.13	0.02
ClaPROAR	0.001	0.305	-0.005	0.852	0.12	0.01
	-0.0	0.329	-0.001	0.397	0.1	0.0
	-0.0	0.357	-0.005	0.883	0.09	0.0
	-0.001	0.397	-0.004	0.732	0.1	0.01
	-0.001	0.379	-0.005	0.837	0.1	0.0
	0.001	0.287	-0.004	0.749	0.14	0.0
	0.001	0.267	-0.003	0.615	0.11	0.0
	0.002	0.245	-0.005	0.915	0.11	0.0
	0.001	0.287	-0.005	0.875	0.13	0.0
	-0.001	0.397	-0.005	0.828	0.1	0.01

Tab. 256: Domain shifts for the moons data experiment 5 using a MLP and a deep ensemble

F.3.15. Moons dataset using Deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.005	0.853	-0.005	0.797	0.06	0.0
	-0.005	0.839	-0.005	0.797	0.08	0.0
	-0.004	0.748	-0.005	0.848	0.07	0.0
	-0.004	0.814	-0.004	0.757	0.09	0.0
	-0.005	0.851	-0.005	0.756	0.07	0.0
	-0.005	0.851	-0.005	0.81	0.1	0.0
	-0.005	0.822	-0.005	0.852	0.06	0.01
	-0.005	0.951	-0.004	0.777	0.06	0.0
	-0.004	0.76	-0.005	0.87	0.07	0.01
	-0.005	0.835	-0.005	0.887	0.07	0.0
ECCo	-0.005	0.898	-0.004	0.777	0.09	0.0
	-0.004	0.73	-0.004	0.758	0.09	0.0
	-0.004	0.74	-0.005	0.844	0.11	0.0
	-0.004	0.749	-0.004	0.764	0.07	0.0
	-0.004	0.74	-0.004	0.761	0.07	0.0
	-0.004	0.773	-0.004	0.763	0.1	0.0
	-0.004	0.813	-0.004	0.769	0.06	0.0
	-0.004	0.787	-0.004	0.764	0.11	0.0
	-0.004	0.722	-0.005	0.928	0.11	0.01
	-0.005	0.857	-0.005	0.817	0.11	0.0
Wachter	-0.005	0.861	-0.005	0.977	0.07	0.01
	-0.004	0.78	-0.004	0.746	0.07	0.0
	-0.004	0.652	-0.005	0.958	0.13	0.0
	-0.005	0.878	-0.005	0.962	0.1	0.0
	-0.005	0.905	-0.005	0.866	0.06	0.0
	-0.004	0.742	-0.005	0.899	0.11	0.0
	-0.005	0.88	-0.005	0.785	0.08	0.0
	-0.005	0.84	-0.004	0.732	0.08	0.0
	-0.005	0.803	-0.004	0.711	0.11	0.0
	-0.004	0.721	-0.005	0.906	0.11	0.02
Generic	-0.005	0.894	-0.004	0.738	0.11	0.0
	-0.004	0.778	-0.005	0.837	0.1	0.0
	-0.004	0.803	-0.004	0.769	0.1	0.0
	-0.004	0.645	-0.005	0.794	0.11	0.0
	-0.004	0.828	-0.004	0.744	0.09	0.0
	-0.004	0.792	-0.005	0.922	0.11	0.0
	-0.005	0.853	-0.005	0.95	0.06	0.0
	-0.005	0.902	-0.005	0.972	0.06	0.0
	-0.005	0.838	-0.005	0.93	0.07	0.0
	-0.005	0.836	-0.005	0.952	0.07	0.0
DiCE	-0.005	0.826	-0.004	0.761	0.07	0.0
	-0.005	0.873	-0.004	0.679	0.08	0.0
	-0.005	0.837	-0.005	0.861	0.07	0.01
	-0.004	0.734	-0.004	0.734	0.08	0.01
	-0.004	0.745	-0.004	0.758	0.11	0.01
	-0.004	0.776	-0.005	0.93	0.08	0.0
	-0.004	0.774	-0.004	0.763	0.09	0.0
	-0.005	0.893	-0.004	0.64	0.1	0.0
	-0.005	0.844	-0.005	0.788	0.09	0.0
	-0.005	0.871	-0.005	0.834	0.06	0.01
ClaPROAR	-0.005	0.91	-0.004	0.785	0.07	0.0
	-0.004	0.713	-0.005	0.83	0.07	0.0
	-0.004	0.751	-0.005	0.781	0.11	0.0

	-0.005	0.887	-0.005	0.764	0.07	0.0
	-0.005	0.886	-0.005	0.755	0.07	0.0
	-0.005	0.863	-0.005	0.866	0.07	0.01
	-0.005	0.941	-0.005	0.904	0.07	0.0
	-0.004	0.779	-0.003	0.502	0.11	0.0
	-0.005	0.854	-0.005	0.938	0.07	0.0
	-0.005	0.839	-0.005	0.798	0.07	0.01

Tab. 257: Domain shifts for the moons data experiment 1 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.001	0.39	-0.002	0.36	0.08	0.0
	-0.0	0.303	-0.004	0.764	0.09	0.01
	-0.002	0.492	-0.005	0.909	0.07	0.0
	-0.002	0.457	-0.005	0.932	0.07	0.0
	-0.003	0.499	-0.005	0.78	0.05	0.0
	-0.001	0.349	-0.002	0.396	0.07	0.0
	-0.003	0.529	-0.005	0.917	0.09	0.0
	-0.002	0.44	-0.005	0.915	0.07	0.0
	-0.001	0.372	-0.005	0.93	0.07	0.0
	-0.001	0.391	-0.005	0.922	0.08	0.0
ECCo	-0.001	0.384	-0.005	0.912	0.12	0.0
	-0.002	0.414	-0.005	0.771	0.07	0.0
	-0.002	0.474	-0.005	0.788	0.07	0.0
	-0.002	0.468	-0.004	0.62	0.07	0.0
	-0.002	0.41	-0.005	0.773	0.08	0.0
	-0.002	0.383	-0.005	0.912	0.09	0.0
	-0.003	0.547	-0.005	0.924	0.09	0.0
	-0.001	0.353	-0.005	0.915	0.08	0.0
	-0.0	0.352	0.002	0.26	0.08	0.0
	-0.0	0.342	-0.005	0.917	0.11	0.0
Wachter	-0.001	0.409	-0.004	0.769	0.08	0.0
	-0.001	0.349	-0.004	0.618	0.09	0.0
	-0.001	0.426	-0.005	0.912	0.07	0.0
	-0.003	0.553	-0.002	0.491	0.07	0.0
	-0.0	0.344	-0.005	0.915	0.09	0.0
	-0.001	0.343	-0.003	0.634	0.07	0.0
	-0.002	0.443	-0.005	0.921	0.07	0.0
	-0.002	0.478	-0.004	0.605	0.07	0.0
	-0.002	0.437	-0.005	0.925	0.09	0.0
	-0.002	0.432	-0.005	0.764	0.04	0.0
Generic	-0.002	0.452	-0.001	0.366	0.08	0.0
	-0.001	0.422	-0.005	0.929	0.07	0.0
	-0.002	0.412	-0.004	0.712	0.09	0.0
	-0.002	0.45	-0.004	0.782	0.07	0.0
	-0.0	0.318	-0.004	0.635	0.11	0.0
	-0.001	0.415	-0.005	0.915	0.07	0.0
	-0.002	0.451	-0.001	0.361	0.07	0.0
	-0.002	0.434	-0.002	0.484	0.08	0.0
	0.0	0.303	-0.005	0.913	0.1	0.0
	-0.003	0.504	-0.005	0.92	0.08	0.0
DiCE	-0.003	0.552	-0.005	0.92	0.05	0.0
	-0.002	0.428	-0.005	0.929	0.07	0.0
	-0.002	0.48	-0.001	0.384	0.07	0.0
	-0.002	0.445	-0.005	0.91	0.11	0.0

	-0.001	0.418	-0.005	0.767	0.08	0.0
	-0.002	0.486	-0.005	0.918	0.09	0.0
	-0.003	0.527	-0.0	0.358	0.05	0.0
	-0.001	0.391	-0.005	0.909	0.1	0.0
	0.0	0.34	-0.005	0.908	0.09	0.0
	-0.001	0.364	-0.005	0.911	0.08	0.0
ClaPROAR	-0.003	0.492	-0.005	0.916	0.05	0.0
	-0.001	0.437	-0.005	0.919	0.08	0.0
	-0.004	0.588	-0.005	0.928	0.04	0.0
	-0.001	0.38	-0.005	0.926	0.09	0.0
	-0.002	0.405	-0.002	0.489	0.08	0.0
	-0.001	0.377	-0.002	0.471	0.08	0.0
	-0.002	0.419	0.0	0.281	0.09	0.0
	-0.003	0.485	-0.001	0.364	0.08	0.0
	-0.002	0.4	-0.001	0.366	0.08	0.0
	-0.002	0.396	-0.005	0.936	0.09	0.0

Tab. 258: Domain shifts for the moons data experiment 2 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.002	0.424	-0.005	0.924	0.1	0.0
	-0.001	0.399	-0.0	0.352	0.06	0.0
	-0.001	0.398	-0.005	0.844	0.08	0.0
	-0.001	0.382	-0.005	0.754	0.09	0.0
	-0.0	0.353	-0.005	0.931	0.08	0.0
	-0.001	0.365	-0.005	0.911	0.09	0.0
	-0.002	0.431	-0.005	0.942	0.1	0.0
	-0.001	0.366	-0.005	0.913	0.08	0.0
	-0.002	0.416	-0.003	0.61	0.06	0.0
	-0.001	0.352	-0.005	0.937	0.08	0.0
ECCo	-0.002	0.415	-0.001	0.361	0.1	0.0
	-0.002	0.441	-0.005	0.894	0.1	0.0
	-0.001	0.423	-0.005	0.904	0.09	0.0
	-0.001	0.387	-0.005	0.917	0.09	0.0
	-0.002	0.437	-0.001	0.391	0.1	0.0
	-0.001	0.41	-0.005	0.921	0.09	0.0
	-0.001	0.396	-0.005	0.908	0.1	0.0
	-0.001	0.358	-0.001	0.375	0.08	0.0
	-0.002	0.445	-0.005	0.923	0.09	0.0
	-0.001	0.389	-0.005	0.925	0.09	0.0
Wachter	-0.002	0.459	-0.005	0.904	0.09	0.0
	-0.001	0.405	-0.004	0.604	0.08	0.0
	-0.002	0.433	-0.004	0.768	0.08	0.0
	-0.001	0.437	-0.005	0.909	0.09	0.0
	-0.002	0.418	-0.005	0.925	0.08	0.0
	-0.002	0.413	-0.005	0.926	0.07	0.0
	-0.002	0.454	-0.005	0.93	0.12	0.0
	-0.001	0.394	-0.004	0.77	0.09	0.0
	-0.001	0.38	-0.005	0.919	0.07	0.0
	-0.001	0.392	-0.003	0.582	0.08	0.0
Generic	-0.002	0.436	0.001	0.288	0.11	0.0
	-0.002	0.41	-0.003	0.551	0.06	0.0
	0.0	0.337	-0.005	0.904	0.12	0.0
	-0.002	0.497	-0.005	0.911	0.1	0.0
	-0.002	0.411	-0.005	0.916	0.09	0.0

	-0.001	0.399	-0.004	0.76	0.08	0.0
	-0.002	0.426	-0.001	0.375	0.1	0.0
	-0.002	0.427	-0.004	0.637	0.07	0.0
	-0.0	0.35	-0.005	0.902	0.08	0.0
	-0.001	0.329	-0.004	0.769	0.09	0.0
DiCE	-0.001	0.38	-0.002	0.46	0.08	0.0
	0.0	0.316	-0.003	0.466	0.08	0.0
	-0.002	0.478	-0.004	0.772	0.1	0.0
	-0.002	0.476	-0.005	0.93	0.07	0.0
	-0.002	0.459	-0.005	0.933	0.09	0.0
	-0.003	0.526	-0.005	0.923	0.12	0.0
	-0.002	0.447	-0.003	0.556	0.06	0.0
	-0.0	0.317	-0.005	0.933	0.09	0.0
	-0.001	0.383	-0.004	0.607	0.08	0.0
	-0.002	0.411	-0.002	0.467	0.1	0.0
ClaPROAR	-0.002	0.422	-0.005	0.925	0.07	0.0
	-0.001	0.382	-0.005	0.919	0.09	0.0
	-0.001	0.362	-0.005	0.901	0.1	0.0
	-0.001	0.403	-0.005	0.905	0.06	0.0
	-0.001	0.41	-0.005	0.915	0.09	0.0
	-0.001	0.392	-0.005	0.914	0.09	0.0
	0.001	0.291	-0.005	0.906	0.08	0.0
	-0.003	0.555	-0.003	0.598	0.07	0.0
	-0.001	0.421	-0.005	0.912	0.07	0.0
	-0.002	0.434	-0.005	0.908	0.07	0.0

Tab. 259: Domain shifts for the moons data experiment 3 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	0.0	0.309	-0.003	0.567	0.13	0.0
	-0.003	0.569	-0.004	0.632	0.05	0.0
	-0.0	0.319	-0.004	0.78	0.17	0.0
	-0.004	0.625	-0.003	0.565	0.12	0.0
	-0.001	0.357	-0.005	0.817	0.15	0.0
	0.0	0.295	-0.003	0.579	0.11	0.0
	-0.003	0.551	-0.004	0.796	0.08	0.0
	-0.003	0.569	-0.003	0.573	0.13	0.0
	-0.002	0.467	-0.005	0.864	0.15	0.0
	-0.002	0.459	-0.002	0.514	0.14	0.0
ECCo	-0.004	0.686	-0.004	0.657	0.13	0.02
	-0.004	0.628	-0.004	0.608	0.07	0.0
	-0.002	0.418	-0.004	0.692	0.08	0.0
	-0.001	0.369	-0.003	0.523	0.13	0.0
	-0.001	0.409	-0.003	0.615	0.17	0.0
	-0.003	0.604	-0.005	0.93	0.03	0.0
	-0.001	0.385	-0.003	0.557	0.15	0.0
	-0.002	0.465	-0.005	0.951	0.12	0.0
	-0.002	0.417	-0.005	0.931	0.13	0.0
	-0.003	0.52	-0.004	0.6	0.08	0.0
Wachter	-0.003	0.591	-0.004	0.628	0.05	0.0
	-0.003	0.586	-0.003	0.582	0.03	0.0
	-0.001	0.385	-0.004	0.62	0.13	0.0
	-0.001	0.367	-0.004	0.659	0.11	0.0
	-0.002	0.421	-0.003	0.636	0.14	0.0
	-0.001	0.382	-0.004	0.734	0.13	0.0

	-0.002	0.453	-0.004	0.641	0.15	0.0
	-0.003	0.517	-0.003	0.572	0.15	0.0
	-0.003	0.525	-0.001	0.408	0.15	0.02
	-0.003	0.557	-0.003	0.574	0.16	0.0
Generic	-0.002	0.472	-0.003	0.594	0.09	0.0
	-0.003	0.583	0.009	0.093	0.1	0.0
	0.0	0.344	-0.004	0.618	0.12	0.0
	-0.002	0.498	-0.004	0.722	0.14	0.0
	-0.002	0.496	-0.005	0.824	0.1	0.0
	-0.003	0.511	-0.003	0.551	0.05	0.0
	-0.002	0.494	-0.004	0.656	0.1	0.0
	-0.004	0.633	-0.004	0.638	0.05	0.0
	-0.001	0.385	-0.004	0.78	0.11	0.0
	0.0	0.319	0.001	0.312	0.14	0.0
DiCE	-0.002	0.447	-0.004	0.625	0.14	0.0
	-0.002	0.463	-0.001	0.357	0.11	0.02
	-0.002	0.456	-0.004	0.628	0.06	0.0
	-0.001	0.401	-0.005	0.943	0.08	0.0
	-0.003	0.545	-0.005	0.956	0.09	0.0
	-0.004	0.71	-0.005	0.946	0.05	0.0
	-0.003	0.58	-0.005	0.975	0.13	0.0
	0.0	0.322	-0.005	0.969	0.12	0.0
	-0.003	0.56	-0.003	0.505	0.14	0.0
	-0.003	0.549	-0.003	0.617	0.14	0.0
ClaPROAR	-0.002	0.439	-0.003	0.508	0.15	0.0
	-0.002	0.503	-0.004	0.666	0.17	0.0
	-0.003	0.555	-0.004	0.613	0.15	0.0
	-0.002	0.491	-0.004	0.622	0.12	0.0
	-0.001	0.394	-0.004	0.738	0.13	0.0
	-0.002	0.498	-0.005	0.871	0.14	0.0
	-0.003	0.562	-0.003	0.637	0.14	0.0
	-0.004	0.662	-0.005	0.988	0.03	0.0
	-0.001	0.401	-0.004	0.702	0.1	0.0
	-0.001	0.371	-0.004	0.623	0.11	0.0

Tab. 260: Domain shifts for the moons data experiment 4 using a deep ensemble

Generator	ppmmd d	p d e	ppmmd e	p e	dis cov d	dis cov e
REVISE	-0.004	0.647	-0.003	0.578	0.11	0.09
	-0.003	0.538	-0.004	0.6	0.13	0.0
	-0.005	0.846	-0.004	0.648	0.12	0.0
	-0.003	0.541	-0.004	0.677	0.12	0.0
	-0.002	0.441	-0.004	0.664	0.12	0.0
	-0.003	0.585	-0.004	0.626	0.12	0.0
	-0.004	0.827	-0.004	0.646	0.13	0.0
	-0.004	0.707	-0.004	0.611	0.14	0.0
	-0.004	0.71	-0.004	0.663	0.1	0.0
	-0.003	0.578	-0.004	0.616	0.1	0.0
ECCo	-0.004	0.698	-0.004	0.634	0.07	0.0
	-0.003	0.574	-0.004	0.632	0.13	0.0
	-0.003	0.581	-0.004	0.627	0.12	0.0
	-0.003	0.6	-0.004	0.615	0.11	0.0
	-0.003	0.542	-0.004	0.609	0.14	0.0
	-0.002	0.458	-0.003	0.628	0.12	0.0
	-0.003	0.554	-0.003	0.623	0.11	0.0

	-0.004	0.622	-0.003	0.606	0.1	0.0
	-0.004	0.629	-0.004	0.642	0.09	0.0
	-0.003	0.548	-0.004	0.598	0.14	0.0
Wachter	-0.002	0.455	-0.004	0.609	0.12	0.0
	-0.005	0.838	-0.004	0.619	0.13	0.0
	-0.004	0.73	-0.004	0.603	0.09	0.0
	-0.003	0.539	-0.004	0.7	0.14	0.0
	-0.004	0.652	-0.004	0.639	0.12	0.0
	-0.004	0.664	-0.004	0.7	0.1	0.0
	-0.005	0.906	-0.004	0.685	0.11	0.0
	-0.004	0.634	-0.004	0.649	0.11	0.0
	-0.003	0.575	-0.004	0.619	0.12	0.0
	-0.004	0.79	-0.004	0.703	0.14	0.01
Generic	-0.004	0.663	-0.004	0.701	0.12	0.0
	-0.003	0.583	0.005	0.14	0.12	0.02
	-0.002	0.491	-0.003	0.62	0.11	0.0
	-0.003	0.553	-0.004	0.631	0.14	0.0
	-0.004	0.65	-0.003	0.624	0.1	0.0
	-0.004	0.65	-0.004	0.633	0.11	0.0
	-0.004	0.83	-0.003	0.628	0.12	0.0
	-0.003	0.57	-0.004	0.617	0.12	0.0
	-0.003	0.525	-0.003	0.559	0.12	0.03
	-0.004	0.658	-0.004	0.626	0.11	0.0
DiCE	-0.004	0.642	-0.004	0.643	0.13	0.0
	-0.004	0.614	-0.004	0.651	0.11	0.0
	-0.004	0.659	-0.004	0.624	0.1	0.0
	-0.004	0.638	-0.003	0.616	0.1	0.0
	-0.002	0.504	-0.004	0.62	0.08	0.0
	-0.003	0.583	-0.004	0.611	0.11	0.0
	-0.003	0.566	-0.004	0.611	0.09	0.0
	-0.003	0.572	-0.004	0.688	0.14	0.01
	-0.003	0.533	-0.004	0.618	0.13	0.0
	-0.003	0.547	-0.004	0.631	0.13	0.0
ClaPROAR	-0.004	0.634	-0.004	0.629	0.11	0.0
	-0.003	0.57	-0.004	0.635	0.08	0.0
	-0.004	0.651	-0.004	0.618	0.14	0.0
	-0.004	0.693	-0.004	0.603	0.09	0.0
	-0.003	0.571	-0.004	0.641	0.15	0.0
	-0.003	0.538	-0.003	0.644	0.13	0.0
	-0.004	0.731	0.006	0.139	0.1	0.05
	-0.003	0.56	-0.004	0.696	0.12	0.0
	-0.003	0.559	-0.004	0.645	0.1	0.0
	-0.003	0.547	-0.004	0.614	0.11	0.0

Tab. 261: Domain shifts for the moons data experiment 5 using a deep ensemble

F.4. faithfulness experiments

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.975	0.975	0.975	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0

	1.0	1.0	0.95	0.0± 0.0
	0.975	1.0	0.85	0.0± 0.0
	1.0	1.0	0.9	0.0 ± 0.0
REVISE	1.0	1.0	1.0	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.975	0.925	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0 ± 0.0
ECCo	1.0	0.975	0.925	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0 ± 0.0
Wachter	1.0	1.0	0.95	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	0.975	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0
Generic	1.0	1.0	1.0	0.0 ±0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.85	0.0 ± 0.0
DiCE	1.0	1.0	0.975	0.0 ±0.0
	0.975	1.0	0.975	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	0.975	0.95	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.975	0.0 ±0.0
	0.975	0.975	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0

	1.0	1.0	0.95	0.0± 0.0
	0.975	0.975	0.9	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0 ± 0.0

Tab. 262: Faithfulness experiment overlapping data experiment 1 when using a MLP and deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	1.0	0.925	0.0 ±0.0
	0.975	1.0	0.825	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	0.95	0.85	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.85	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.85	0.0 ± 0.0
REVISE	0.975	1.0	0.95	0.0 ±0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	0.975	0.9	0.0± 0.0
	1.0	0.975	0.85	0.0± 0.0
	0.975	1.0	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
ECCo	1.0	1.0	0.95	0.0 ±0.0
	1.0	0.95	0.875	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.775	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.975	0.975	0.875	0.0± 0.0
	0.975	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.925	0.0 ± 0.0
Wachter	1.0	1.0	0.875	0.0 ±0.0
	1.0	0.975	0.875	0.0± 0.0
	0.95	0.95	0.925	0.0± 0.0
	0.975	0.95	0.9	0.0± 0.0
	0.925	0.95	0.925	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	0.975	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0 ± 0.0
Generic	0.975	0.975	1.0	0.0 ±0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0

	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.8	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.925	0.0 ± 0.0
DiCE	0.975	0.975	0.95	0.0 ±0.0
	0.975	1.0	0.925	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	0.95	0.95	0.925	0.0± 0.0
	0.975	0.95	0.9	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.975	1.0	0.975	0.0± 0.0
	0.975	0.975	0.95	0.0 ± 0.0
ClaPROAR	0.975	0.95	1.0	0.0 ±0.0
	0.975	0.95	0.875	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.975	0.95	0.85	0.0± 0.0
	1.0	0.975	0.775	0.0± 0.0
	0.975	0.975	0.9	0.0± 0.0
	0.975	0.975	0.875	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	0.975	0.95	0.95	0.0 ± 0.0

Tab. 263: Faithfulness experiment overlapping data experiment 2 when using a MLP and deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	1.0	0.775	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.925	0.0 ± 0.0
REVISE	0.975	0.95	1.0	0.0 ±0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	0.975	0.975	0.0± 0.0
	0.975	0.975	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0 ± 0.0
ECCo	0.975	1.0	0.95	0.0 ±0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.825	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0

	0.95	0.975	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0 ± 0.0
Wachter	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	0.975	0.975	0.9	0.0 ± 0.0
Generic	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.975	1.0	0.875	0.0± 0.0
	0.975	0.975	0.95	0.0± 0.0
	0.975	0.975	0.9	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	0.975	0.875	0.0 ± 0.0
DiCE	0.975	0.975	0.95	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.975	0.95	0.975	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.925	0.0 ±0.0
	0.975	0.975	0.95	0.0± 0.0
	0.975	1.0	0.925	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.95	0.0 ± 0.0

Tab. 264: Faithfulness experiment overlapping data experiment 3 when using a MLP and deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	0.975	0.9	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	0.975	0.975	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	0.975	1.0	0.975	0.0± 0.0

	0.975	0.975	0.95	0.0± 0.0
	1.0	0.95	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	0.975	0.95	0.0 ± 0.0
REVISE	1.0	0.975	0.925	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
ECCo	0.975	0.95	0.925	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	0.95	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	0.95	0.9	0.0± 0.0
	1.0	0.975	0.95	0.0 ± 0.0
Wachter	0.975	0.95	0.975	0.0 ±0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	0.95	0.925	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	1.0	0.95	0.0 ± 0.0
Generic	0.975	0.975	0.95	0.0 ±0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0 ± 0.0
DiCE	1.0	1.0	0.925	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.95	0.95	0.925	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.975	1.0	0.925	0.0± 0.0
	1.0	0.975	0.925	0.0 ± 0.0
ClaPROAR	0.975	0.975	0.925	0.0 ±0.0
	1.0	0.975	0.975	0.0± 0.0

	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	0.975	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0 ± 0.0

Tab. 265: Faithfulness experiment overlapping data experiment 4 when using a MLP and deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	1.0	0.9	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	1.0	0.825	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0 ± 0.0
REVISE	0.975	0.975	0.95	0.0 ±0.0
	0.975	0.975	0.925	0.0± 0.0
	0.975	0.9	0.925	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	0.975	0.825	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
ECCo	1.0	1.0	0.85	0.0 ±0.0
	0.975	0.975	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	0.975	0.875	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.925	0.0 ± 0.0
Wachter	0.975	0.975	0.95	0.0 ±0.0
	0.975	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	1.0	0.9	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	0.975	0.95	0.9	0.0 ± 0.0
Generic	1.0	1.0	0.875	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0

	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.925	0.925	0.9	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	0.975	0.9	0.0± 0.0
	1.0	1.0	0.825	0.0± 0.0
	1.0	0.975	0.85	0.0 ± 0.0
DiCE	1.0	1.0	0.875	0.0 ±0.0
	1.0	0.95	0.95	0.0± 0.0
	0.975	0.925	0.9	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	0.9	0.95	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.9	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.925	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.975	0.975	0.9	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	1.0	0.925	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0

Tab. 266: Faithfulness experiment overlapping data experiment 5 when using a MLP and deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	0.85	-22.014± 0.947
	1.0	1.0	0.925	-22.029± 0.894
	1.0	1.0	0.925	-22.0± 0.973
	1.0	1.0	0.925	-22.118± 0.912
	1.0	1.0	0.925	-22.025± 1.012
	1.0	1.0	1.0	-22.051± 0.989
	1.0	1.0	0.975	-22.049± 0.929
	1.0	1.0	0.975	-22.005± 0.947
	1.0	1.0	0.85	-22.049± 0.972
	1.0	1.0	0.95	-22.04± 1.003
ECCo	1.0	1.0	1.0	-21.552± 0.685
	1.0	1.0	0.95	-21.64± 0.699
	1.0	1.0	0.95	-21.542± 0.703
	1.0	1.0	0.925	-21.54± 0.689
	0.975	0.975	0.975	-21.612± 0.674
	0.975	0.975	1.0	-21.57± 0.697
	1.0	1.0	0.975	-21.515± 0.677
	0.975	0.975	0.925	-21.535± 0.691
	1.0	1.0	0.975	-21.535± 0.675
	0.975	0.975	0.925	-21.581± 0.641
Wachter	0.975	0.975	0.9	-22.094± 0.953
	0.975	0.975	0.975	-22.104± 0.889
	0.975	0.975	0.95	-22.133± 0.906
	0.975	0.975	0.925	-22.068± 0.932

	1.0	1.0	0.9	-22.049± 0.936
	1.0	1.0	0.925	-22.011± 1.016
	0.975	0.975	0.975	-22.071± 0.937
	0.975	0.975	0.95	-22.003± 0.98
	0.975	0.975	0.925	-21.984± 0.965
	1.0	1.0	0.975	-22.054± 0.93
Generic	1.0	1.0	0.95	-21.993± 0.985
	1.0	1.0	0.9	-21.989± 0.977
	0.975	0.975	0.975	-22.11± 0.986
	0.975	0.975	0.925	-22.101± 0.953
	1.0	1.0	0.925	-22.092± 0.963
	0.975	0.975	0.95	-22.091± 0.878
	1.0	1.0	0.9	-22.029± 0.966
	1.0	1.0	0.95	-21.967± 1.048
	1.0	1.0	0.975	-22.195± 0.895
	1.0	1.0	0.975	-22.073± 0.924
DiCE	1.0	1.0	1.0	-22.05± 0.957
	1.0	1.0	1.0	-22.0± 1.006
	1.0	1.0	0.95	-22.063± 0.961
	1.0	1.0	1.0	-22.181± 0.95
	1.0	1.0	0.95	-22.009± 0.945
	0.975	0.975	0.975	-22.12± 0.874
	0.975	0.975	0.975	-21.97± 0.969
	1.0	1.0	0.975	-21.97± 0.941
	1.0	1.0	1.0	-21.902± 0.991
	1.0	1.0	0.85	-22.075± 0.932
ClaPROAR	1.0	1.0	0.975	-22.084± 0.944
	0.975	0.975	0.975	-22.071± 0.881
	0.975	0.975	0.975	-22.043± 0.989
	0.975	0.975	0.975	-22.043± 0.949
	0.975	0.975	1.0	-22.057± 0.937
	0.95	0.95	0.95	-22.036± 1.003
	1.0	1.0	0.95	-22.095± 0.934
	0.975	0.975	0.9	-22.059± 0.988
	0.975	0.975	0.9	-21.878± 1.023
	0.975	0.975	0.975	-22.141± 0.925

Tab. 267: Faithfulness experiment overlapping data experiment 1 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.975	0.975	0.975	-23.494± 1.071
	0.975	0.975	0.9	-23.382± 1.125
	1.0	1.0	0.975	-23.454± 1.069
	0.95	0.95	0.9	-23.386± 1.179
	0.95	0.95	0.95	-23.336± 1.111
	0.95	0.95	0.975	-23.487± 1.103
	1.0	1.0	0.9	-23.484± 1.048
	0.975	0.975	0.95	-23.351± 1.088
	0.975	0.975	0.975	-23.333± 1.141
	1.0	1.0	0.95	-23.416± 1.12
ECCo	1.0	1.0	0.95	-23.259± 0.579
	1.0	1.0	0.975	-23.212± 0.659
	1.0	1.0	1.0	-23.278± 0.676
	1.0	1.0	0.95	-23.169± 0.698
	0.975	0.975	0.925	-23.208± 0.673

	0.975	0.975	0.925	-23.263± 0.679
	1.0	1.0	0.925	-23.21± 0.732
	1.0	1.0	0.9	-23.223± 0.68
	1.0	1.0	0.85	-23.252± 0.599
	0.95	0.95	0.975	-23.271± 0.676
Wachter	0.975	0.975	0.975	-23.483± 1.073
	0.975	0.975	0.95	-23.396± 1.146
	1.0	1.0	0.925	-23.425± 1.093
	1.0	1.0	0.95	-23.339± 1.119
	1.0	1.0	0.925	-23.319± 1.094
	1.0	1.0	0.925	-23.419± 1.089
	1.0	1.0	0.925	-23.395± 1.098
	0.975	0.975	0.9	-23.483± 1.076
	0.95	0.95	0.925	-23.418± 1.075
	1.0	1.0	0.95	-23.455± 1.097
Generic	1.0	1.0	0.875	-23.432± 1.09
	0.95	0.95	0.925	-23.479± 1.066
	0.975	0.975	0.975	-23.419± 1.068
	1.0	1.0	0.95	-23.393± 1.116
	0.975	0.975	0.875	-23.416± 1.122
	0.975	0.975	0.925	-23.375± 1.118
	1.0	1.0	0.975	-23.383± 1.082
	0.975	0.975	0.925	-23.4± 1.088
	0.975	0.975	0.975	-23.533± 1.07
	0.975	0.975	0.925	-23.41± 1.096
DiCE	1.0	1.0	1.0	-23.483± 1.111
	1.0	1.0	1.0	-23.4± 1.072
	0.925	0.925	0.925	-23.395± 1.116
	1.0	1.0	0.975	-23.363± 1.128
	1.0	1.0	0.875	-23.571± 1.071
	1.0	1.0	1.0	-23.427± 1.084
	0.975	0.975	0.85	-23.421± 1.111
	0.975	0.975	1.0	-23.459± 1.06
	0.975	0.975	0.925	-23.427± 1.158
	1.0	1.0	0.925	-23.504± 1.036
ClaPROAR	1.0	1.0	0.925	-23.366± 1.084
	1.0	0.975	0.9	-23.477± 1.07
	0.975	0.975	0.925	-23.455± 1.093
	0.975	0.975	0.9	-23.49± 1.027
	0.975	0.975	0.95	-23.502± 1.073
	0.975	0.975	0.975	-23.416± 1.125
	1.0	1.0	0.975	-23.415± 1.152
	0.975	0.975	0.925	-23.521± 1.075
	1.0	1.0	0.9	-23.52± 1.039
	1.0	1.0	1.0	-23.504± 1.092

Tab. 268: Faithfulness experiment overlapping data experiment 2 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	0.925	-25.203± 1.25
	1.0	1.0	0.95	-25.199± 1.153
	0.975	0.975	0.95	-25.361± 1.058
	1.0	1.0	0.975	-25.314± 1.108
	0.975	0.975	1.0	-25.24± 1.179
	0.975	0.975	0.9	-25.169± 1.116

	1.0	1.0	0.925	-25.184± 1.174
	1.0	1.0	1.0	-25.221± 1.119
	0.975	0.975	0.9	-25.286± 1.061
	1.0	1.0	0.95	-25.33± 1.082
ECCo	1.0	1.0	0.95	-24.475± 0.819
	1.0	1.0	0.925	-24.373± 0.804
	0.975	0.975	1.0	-24.372± 0.843
	1.0	1.0	0.875	-24.355± 0.835
	1.0	1.0	0.975	-24.523± 0.783
	0.975	0.975	0.975	-24.425± 0.857
	1.0	1.0	0.975	-24.492± 0.8
	0.975	0.975	0.95	-24.494± 0.855
	1.0	1.0	0.9	-24.445± 0.874
	1.0	1.0	0.925	-24.364± 0.88
Wachter	0.975	0.975	0.9	-25.316± 1.109
	1.0	1.0	0.95	-25.372± 1.047
	1.0	1.0	0.975	-25.209± 1.103
	1.0	1.0	0.875	-25.257± 1.061
	1.0	1.0	0.975	-25.258± 1.08
	1.0	1.0	0.975	-25.313± 1.048
	1.0	1.0	0.95	-25.24± 1.052
	1.0	1.0	0.975	-25.147± 1.183
	1.0	1.0	0.975	-25.279± 1.12
	1.0	1.0	0.95	-25.31± 1.113
Generic	0.975	0.975	1.0	-25.36± 1.066
	1.0	1.0	1.0	-25.336± 1.11
	1.0	1.0	0.975	-25.274± 1.074
	0.975	0.975	0.975	-25.261± 1.106
	0.975	0.975	0.95	-25.331± 1.081
	1.0	1.0	1.0	-25.266± 1.129
	1.0	1.0	0.975	-25.252± 1.072
	0.975	0.975	0.975	-25.258± 1.101
	1.0	1.0	0.95	-25.235± 1.158
	1.0	1.0	0.95	-25.202± 1.243
DiCE	0.975	0.975	0.95	-25.231± 1.087
	1.0	1.0	0.925	-25.195± 1.184
	1.0	1.0	0.85	-25.242± 1.091
	1.0	1.0	0.95	-25.282± 1.137
	0.975	0.975	0.95	-25.249± 1.129
	0.95	0.95	0.975	-25.248± 1.1
	1.0	1.0	0.95	-25.288± 1.099
	1.0	1.0	0.95	-25.248± 1.15
	1.0	1.0	0.975	-25.29± 1.088
	1.0	1.0	0.925	-25.227± 1.109
ClaPROAR	1.0	1.0	0.975	-25.229± 1.163
	1.0	1.0	0.95	-25.253± 1.141
	1.0	1.0	0.95	-25.234± 1.174
	1.0	1.0	1.0	-25.268± 1.128
	0.975	0.975	0.925	-25.269± 1.041
	0.975	0.975	0.975	-25.288± 1.097
	1.0	1.0	0.9	-25.263± 1.053
	0.975	1.0	0.925	-25.348± 1.05
	1.0	1.0	0.875	-25.123± 1.186
	0.975	0.975	0.925	-25.266± 1.099

Tab. 269: Faithfulness experiment overlapping data experiment 3 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	0.9	-23.591± 1.07
	0.975	0.975	0.95	-23.617± 1.057
	1.0	1.0	0.95	-23.605± 1.04
	1.0	1.0	0.95	-23.51± 1.172
	1.0	1.0	1.0	-23.538± 1.062
	1.0	1.0	0.925	-23.62± 1.092
	1.0	1.0	0.95	-23.56± 1.07
	1.0	1.0	1.0	-23.557± 1.101
	1.0	1.0	0.975	-23.569± 1.123
	1.0	1.0	0.925	-23.553± 1.119
ECCo	1.0	1.0	0.95	-22.853± 0.851
	1.0	1.0	1.0	-22.861± 0.872
	1.0	1.0	0.975	-22.909± 0.813
	1.0	1.0	0.95	-22.85± 0.85
	1.0	1.0	0.975	-22.947± 0.857
	1.0	1.0	1.0	-22.838± 0.849
	1.0	1.0	0.95	-22.835± 0.868
	1.0	1.0	0.975	-22.866± 0.827
	1.0	1.0	0.975	-22.879± 0.869
	1.0	1.0	0.925	-22.789± 0.878
Wachter	1.0	1.0	0.975	-23.519± 1.147
	1.0	1.0	0.975	-23.593± 1.12
	1.0	1.0	0.975	-23.501± 1.063
	1.0	1.0	0.95	-23.508± 1.1
	0.975	1.0	0.95	-23.531± 1.078
	1.0	1.0	0.975	-23.596± 1.074
	1.0	1.0	0.95	-23.552± 1.05
	1.0	1.0	0.925	-23.642± 1.036
	1.0	1.0	0.925	-23.579± 1.108
	1.0	1.0	0.925	-23.547± 1.047
Generic	0.975	1.0	0.95	-23.462± 1.104
	1.0	1.0	0.95	-23.549± 1.09
	1.0	1.0	0.95	-23.574± 1.087
	1.0	1.0	0.925	-23.595± 1.092
	1.0	1.0	0.95	-23.529± 1.152
	1.0	1.0	0.975	-23.659± 1.053
	1.0	1.0	0.95	-23.564± 1.109
	1.0	1.0	0.975	-23.641± 1.039
	1.0	1.0	0.95	-23.607± 1.069
	0.975	1.0	0.925	-23.563± 1.043
DiCE	1.0	1.0	0.975	-23.493± 1.122
	0.975	1.0	0.925	-23.675± 1.038
	1.0	1.0	0.975	-23.55± 1.088
	0.95	1.0	0.925	-23.545± 1.123
	0.975	1.0	0.975	-23.402± 1.164
	1.0	1.0	0.975	-23.654± 1.01
	1.0	1.0	0.925	-23.604± 1.026
	1.0	1.0	0.95	-23.553± 1.104
	1.0	1.0	0.95	-23.605± 1.068
	0.975	0.975	0.975	-23.563± 1.12
ClaPROAR	1.0	1.0	0.95	-23.614± 1.028
	1.0	1.0	0.925	-23.534± 1.025
	1.0	1.0	0.975	-23.587± 1.081
	1.0	1.0	0.925	-23.593± 1.017

	1.0	1.0	0.925	-23.484± 1.1
	0.975	1.0	0.95	-23.571± 1.096
	1.0	1.0	1.0	-23.556± 1.133
	1.0	1.0	0.925	-23.474± 1.142
	1.0	1.0	0.975	-23.56± 1.032
	1.0	1.0	0.95	-23.525± 1.167

Tab. 270: Faithfulness experiment overlapping data experiment 4 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.975	0.975	0.9	-19.853± 1.343
	0.975	0.95	0.95	-19.861± 1.312
	0.95	0.95	0.875	-19.841± 1.235
	1.0	0.975	0.95	-19.822± 1.329
	0.975	1.0	0.925	-19.846± 1.322
	1.0	1.0	0.95	-19.844± 1.249
	1.0	1.0	0.95	-19.77± 1.279
	1.0	1.0	0.925	-19.837± 1.333
	0.975	0.975	0.95	-19.875± 1.356
	1.0	1.0	0.95	-19.842± 1.283
ECCo	1.0	1.0	0.95	-19.326± 1.211
	0.975	0.975	0.95	-19.319± 1.189
	0.95	0.975	0.875	-19.385± 1.188
	1.0	1.0	0.975	-19.33± 1.226
	0.975	1.0	0.95	-19.336± 1.186
	0.975	1.0	0.9	-19.334± 1.254
	1.0	1.0	0.95	-19.373± 1.209
	0.975	0.975	0.95	-19.38± 1.235
	1.0	1.0	0.95	-19.35± 1.251
	1.0	1.0	0.95	-19.303± 1.252
Wachter	0.975	0.975	1.0	-19.843± 1.343
	1.0	1.0	0.95	-19.881± 1.319
	0.95	0.975	0.95	-19.88± 1.307
	0.975	1.0	1.0	-19.786± 1.305
	0.975	1.0	0.85	-19.738± 1.296
	0.975	0.975	0.95	-19.826± 1.324
	0.975	0.975	0.95	-19.813± 1.308
	0.95	0.975	0.875	-19.755± 1.268
	1.0	1.0	0.95	-19.809± 1.334
	0.95	0.975	0.95	-19.923± 1.303
Generic	1.0	1.0	0.95	-19.853± 1.285
	0.975	0.975	0.95	-19.789± 1.333
	1.0	1.0	0.975	-19.873± 1.301
	0.975	0.975	0.975	-19.852± 1.239
	0.975	0.975	0.975	-19.828± 1.304
	1.0	1.0	0.925	-19.874± 1.268
	1.0	1.0	0.875	-19.81± 1.306
	0.975	0.975	0.925	-19.821± 1.353
	1.0	1.0	1.0	-19.876± 1.301
	1.0	1.0	1.0	-19.807± 1.347
DiCE	1.0	1.0	0.9	-19.844± 1.327
	1.0	1.0	0.95	-19.865± 1.317
	1.0	1.0	0.975	-19.86± 1.348
	1.0	1.0	0.925	-19.871± 1.335
	1.0	1.0	0.95	-19.739± 1.339

	1.0	1.0	0.975	-19.839± 1.326
	1.0	1.0	0.925	-19.775± 1.325
	1.0	1.0	0.95	-19.802± 1.297
	1.0	1.0	0.95	-19.79± 1.258
	1.0	1.0	0.975	-19.802± 1.303
ClaPROAR	0.925	0.975	0.95	-19.812± 1.266
	0.975	0.975	0.925	-19.781± 1.318
	0.975	0.975	0.925	-19.839± 1.285
	1.0	1.0	0.95	-19.788± 1.337
	1.0	1.0	0.9	-19.857± 1.341
	1.0	1.0	0.925	-19.837± 1.355
	0.975	0.975	0.9	-19.828± 1.377
	0.975	0.975	0.875	-19.803± 1.408
	0.975	0.975	0.975	-19.839± 1.312
	0.975	0.975	1.0	-19.719± 1.357

Tab. 271: Faithfulness experiment overlapping data experiment 5 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.975	0.95	0.925	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.95	0.95	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	0.95	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.975	0.95	0.95	0.0 ± 0.0
REVISE	0.975	1.0	0.95	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	0.975	1.0	0.0 ± 0.0
ECCo	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0
Wachter	0.975	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0

	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
Generic	1.0	0.975	0.95	0.0 ±0.0
	1.0	0.975	1.0	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	0.95	0.975	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
DiCE	1.0	1.0	1.0	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	1.0	0.925	0.0± 0.0
	0.95	0.95	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0

Tab. 272: Faithfulness experiment overlapping data experiment 1 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.975	0.95	0.925	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.95	0.95	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	0.95	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.975	0.95	0.95	0.0 ± 0.0
REVISE	0.975	1.0	0.95	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0

	1.0	0.975	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	0.975	1.0	0.0 ± 0.0
ECCo	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0
Wachter	0.975	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
Generic	1.0	0.975	0.95	0.0 ±0.0
	1.0	0.975	1.0	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	0.95	0.975	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
DiCE	1.0	1.0	1.0	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	1.0	0.925	0.0± 0.0
	0.95	0.95	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0

Tab. 273: Faithfulness experiment overlapping data experiment 2 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.975	0.95	0.925	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.95	0.95	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	0.95	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.975	0.95	0.95	0.0 ± 0.0
REVISE	0.975	1.0	0.95	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	0.975	1.0	0.0 ± 0.0
ECCo	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0
Wachter	0.975	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
Generic	1.0	0.975	0.95	0.0 ±0.0
	1.0	0.975	1.0	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	0.95	0.975	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
DiCE	1.0	1.0	1.0	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0

	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	1.0	0.925	0.0± 0.0
	0.95	0.95	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0

Tab. 274: Faithfulness experiment overlapping data experiment 3 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.975	0.95	0.925	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.95	0.95	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	0.95	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.975	0.95	0.95	0.0 ± 0.0
REVISE	0.975	1.0	0.95	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	0.975	1.0	0.0 ± 0.0
ECCo	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0
Wachter	0.975	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0

	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
Generic	1.0	0.975	0.95	0.0 ±0.0
	1.0	0.975	1.0	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	0.95	0.975	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
DiCE	1.0	1.0	1.0	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	1.0	0.925	0.0± 0.0
	0.95	0.95	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0

Tab. 275: Faithfulness experiment overlapping data experiment 4 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.975	0.95	0.925	0.0 ±0.0
	1.0	1.0	0.925	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	0.95	0.95	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	0.975	0.95	0.9	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.975	0.95	0.95	0.0 ± 0.0
REVISE	0.975	1.0	0.95	0.0 ±0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0

	1.0	1.0	0.975	0.0± 0.0
	1.0	0.975	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	0.975	1.0	0.0 ± 0.0
ECCo	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.875	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.875	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0
Wachter	0.975	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
Generic	1.0	0.975	0.95	0.0 ±0.0
	1.0	0.975	1.0	0.0± 0.0
	0.95	0.95	0.975	0.0± 0.0
	0.95	0.975	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
DiCE	1.0	1.0	1.0	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.975	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.9	0.0± 0.0
	0.95	1.0	0.925	0.0± 0.0
	0.95	0.95	0.9	0.0± 0.0
	1.0	1.0	0.975	0.0 ± 0.0
ClaPROAR	1.0	1.0	0.975	0.0 ±0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.975	0.975	0.925	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.925	0.0± 0.0
	0.975	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	1.0	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0 ± 0.0

Tab. 276: Faithfulness experiment overlapping data experiment 5 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-60.649 ±24.172
	1.0	1.0	1.0	-60.684± 24.203
	1.0	1.0	1.0	-60.634± 24.199
	1.0	1.0	1.0	-60.687± 24.236
	1.0	1.0	1.0	-60.663± 24.187
	1.0	1.0	1.0	-60.733± 24.247
	1.0	1.0	1.0	-60.727± 24.217
	1.0	1.0	1.0	-60.719± 24.252
	1.0	1.0	1.0	-60.637± 24.167
	1.0	1.0	1.0	-60.696 ± 24.206
ECCo	1.0	1.0	1.0	-58.108 ±25.756
	1.0	1.0	1.0	-58.142± 25.768
	1.0	1.0	1.0	-58.098± 25.741
	1.0	1.0	1.0	-58.062± 25.756
	1.0	1.0	1.0	-58.085± 25.75
	1.0	1.0	1.0	-58.09± 25.726
	1.0	1.0	1.0	-58.12± 25.709
	1.0	1.0	1.0	-58.089± 25.781
	1.0	1.0	1.0	-58.108± 25.785
	1.0	1.0	1.0	-58.09 ± 25.751
Wachter	1.0	1.0	1.0	-60.64 ±24.209
	1.0	1.0	1.0	-60.615± 24.215
	1.0	1.0	1.0	-60.719± 24.212
	1.0	1.0	1.0	-60.686± 24.22
	1.0	1.0	1.0	-60.719± 24.253
	1.0	1.0	1.0	-60.727± 24.232
	1.0	1.0	1.0	-60.646± 24.242
	1.0	1.0	1.0	-60.71± 24.229
	1.0	1.0	1.0	-60.722± 24.258
	1.0	1.0	1.0	-60.697 ± 24.199
Generic	1.0	1.0	1.0	-60.692 ±24.194
	1.0	1.0	1.0	-60.71± 24.249
	1.0	1.0	1.0	-60.64± 24.183
	1.0	1.0	1.0	-60.644± 24.173
	1.0	1.0	1.0	-60.689± 24.222
	1.0	1.0	1.0	-60.685± 24.199
	1.0	1.0	1.0	-60.662± 24.214
	1.0	1.0	1.0	-60.691± 24.249
	1.0	1.0	1.0	-60.649± 24.23
	1.0	1.0	1.0	-60.623 ± 24.199
DiCE	1.0	1.0	1.0	-60.737 ±24.212
	1.0	1.0	1.0	-60.737± 24.224
	1.0	1.0	1.0	-60.684± 24.161
	1.0	1.0	1.0	-60.705± 24.251
	1.0	1.0	1.0	-60.731± 24.24
	1.0	1.0	1.0	-60.698± 24.183
	1.0	1.0	1.0	-60.643± 24.168
	1.0	1.0	1.0	-60.729± 24.211
	1.0	1.0	1.0	-60.648± 24.186
	1.0	1.0	1.0	-60.706 ± 24.205
ClaPROAR	1.0	1.0	1.0	-60.725 ±24.272
	1.0	1.0	1.0	-60.659± 24.184
	1.0	1.0	1.0	-60.705± 24.249
	1.0	1.0	1.0	-60.702± 24.242

	1.0	1.0	1.0	-60.605± 24.107
	1.0	1.0	1.0	-60.651± 24.159
	1.0	1.0	1.0	-60.719± 24.252
	1.0	1.0	1.0	-60.658± 24.177
	1.0	1.0	1.0	-60.693± 24.209
	1.0	1.0	1.0	-60.716 ± 24.212

Tab. 277: Faithfulness experiment blobs data experiment 1 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-42.027 ±15.5
	1.0	1.0	1.0	-42.324± 15.658
	1.0	1.0	1.0	-41.805± 15.642
	1.0	1.0	1.0	-42.227± 15.52
	1.0	1.0	1.0	-42.137± 15.745
	1.0	1.0	1.0	-41.993± 15.766
	1.0	1.0	1.0	-42.361± 15.512
	1.0	1.0	1.0	-42.381± 15.571
	1.0	1.0	1.0	-42.124± 15.535
	1.0	1.0	1.0	-42.275 ± 15.531
ECCo	1.0	1.0	1.0	-38.388 ±14.07
	1.0	1.0	1.0	-38.485± 14.113
	1.0	1.0	1.0	-38.411± 14.087
	1.0	1.0	1.0	-38.37± 14.088
	1.0	1.0	1.0	-38.489± 14.084
	1.0	1.0	1.0	-38.461± 14.057
	1.0	1.0	1.0	-38.438± 14.05
	1.0	1.0	1.0	-38.454± 14.114
	1.0	1.0	1.0	-38.408± 14.097
	1.0	1.0	1.0	-38.42 ± 14.07
Wachter	1.0	1.0	1.0	-42.002 ±15.773
	1.0	1.0	1.0	-42.384± 15.574
	1.0	1.0	1.0	-42.238± 15.555
	1.0	1.0	1.0	-42.242± 15.649
	1.0	1.0	1.0	-42.331± 15.526
	1.0	1.0	1.0	-42.313± 15.705
	1.0	1.0	1.0	-42.187± 15.746
	1.0	1.0	1.0	-42.162± 15.696
	1.0	1.0	1.0	-42.095± 15.263
	1.0	1.0	1.0	-42.188 ± 15.715
Generic	1.0	1.0	1.0	-42.106 ±15.669
	1.0	1.0	1.0	-42.251± 15.558
	1.0	1.0	1.0	-42.181± 15.4
	1.0	1.0	1.0	-42.182± 15.621
	1.0	1.0	1.0	-42.187± 15.437
	1.0	1.0	1.0	-42.16± 15.485
	1.0	1.0	1.0	-42.405± 15.493
	1.0	1.0	1.0	-42.266± 15.359
	1.0	1.0	1.0	-41.86± 15.725
	1.0	1.0	1.0	-42.31 ± 15.425
DiCE	1.0	1.0	1.0	-42.22 ±15.614
	1.0	1.0	1.0	-42.194± 15.508
	1.0	1.0	1.0	-42.179± 15.613
	1.0	1.0	1.0	-42.323± 15.526
	1.0	1.0	1.0	-42.236± 15.546

	1.0	1.0	1.0	-42.145± 15.396
	1.0	1.0	1.0	-42.031± 15.805
	1.0	1.0	1.0	-42.069± 15.528
	1.0	1.0	1.0	-42.087± 15.557
	1.0	1.0	1.0	-42.041 ± 15.671
ClaPROAR	1.0	1.0	1.0	-42.442 ±15.446
	1.0	1.0	1.0	-42.505± 15.351
	1.0	1.0	1.0	-42.081± 15.443
	1.0	1.0	1.0	-42.127± 15.35
	1.0	1.0	1.0	-42.271± 15.518
	1.0	1.0	1.0	-42.213± 15.638
	1.0	1.0	1.0	-42.087± 15.734
	1.0	1.0	1.0	-42.345± 15.659
	1.0	1.0	1.0	-42.342± 15.446
	1.0	1.0	1.0	-42.238 ± 15.57

Tab. 278: Faithfulness experiment blobs data experiment 2 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	0.975	-52.777 ±13.327
	1.0	1.0	1.0	-52.914± 13.294
	0.975	1.0	1.0	-52.612± 13.318
	1.0	1.0	0.975	-52.925± 13.135
	1.0	1.0	1.0	-52.77± 13.425
	1.0	1.0	1.0	-52.795± 13.463
	1.0	1.0	0.975	-52.945± 13.324
	1.0	1.0	1.0	-52.656± 13.303
	1.0	1.0	1.0	-52.82± 13.25
	1.0	1.0	0.975	-52.772 ± 13.535
ECCo	1.0	1.0	0.975	-48.073 ±12.32
	1.0	1.0	0.95	-48.078± 12.344
	1.0	1.0	0.975	-48.006± 12.363
	1.0	1.0	1.0	-48.093± 12.301
	1.0	1.0	1.0	-48.065± 12.349
	1.0	1.0	1.0	-48.062± 12.362
	1.0	1.0	1.0	-48.1± 12.347
	1.0	1.0	1.0	-48.069± 12.33
	1.0	1.0	0.975	-48.056± 12.329
	1.0	1.0	1.0	-48.115 ± 12.359
Wachter	1.0	1.0	0.975	-52.603 ±13.727
	1.0	1.0	0.975	-52.91± 13.348
	1.0	1.0	1.0	-52.956± 13.242
	1.0	1.0	1.0	-52.402± 13.472
	1.0	1.0	1.0	-52.692± 13.502
	1.0	1.0	0.975	-52.834± 13.434
	1.0	1.0	1.0	-52.713± 13.451
	1.0	1.0	0.925	-52.705± 13.152
	1.0	1.0	0.975	-52.633± 13.339
	1.0	1.0	0.975	-52.721 ± 13.395
Generic	1.0	1.0	1.0	-52.484 ±13.492
	1.0	1.0	1.0	-52.753± 13.517
	1.0	1.0	0.975	-52.866± 13.293
	1.0	1.0	0.975	-52.741± 13.353
	1.0	1.0	0.95	-52.614± 13.412
	1.0	1.0	1.0	-52.822± 13.317

	1.0	1.0	0.975	-52.774± 13.351
	1.0	1.0	1.0	-52.783± 13.123
	1.0	1.0	0.975	-52.711± 13.48
	1.0	1.0	0.975	-52.697 ± 13.1
DiCE	1.0	1.0	1.0	-52.82 ±13.097
	1.0	1.0	1.0	-52.767± 13.315
	1.0	1.0	0.95	-52.388± 13.638
	1.0	1.0	1.0	-52.616± 13.497
	1.0	1.0	1.0	-52.537± 13.626
	1.0	1.0	1.0	-52.561± 13.317
	1.0	1.0	1.0	-52.537± 13.585
	1.0	1.0	0.975	-52.699± 13.293
	1.0	1.0	1.0	-52.749± 13.398
	1.0	1.0	0.975	-52.805 ± 13.422
ClaPROAR	1.0	1.0	0.975	-52.586 ±13.414
	1.0	1.0	1.0	-52.742± 13.388
	1.0	1.0	1.0	-52.484± 13.503
	1.0	1.0	0.975	-52.779± 13.447
	1.0	1.0	1.0	-52.793± 13.545
	1.0	1.0	1.0	-52.955± 13.506
	1.0	1.0	1.0	-52.752± 13.366
	0.975	1.0	1.0	-52.924± 13.658
	0.975	1.0	1.0	-52.748± 13.484
	1.0	1.0	0.975	-52.536 ± 13.907

Tab. 279: Faithfulness experiment blobs data experiment 3 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-29.911 ±1.439
	0.975	1.0	1.0	-29.885± 1.444
	1.0	1.0	1.0	-29.836± 1.494
	1.0	1.0	1.0	-29.832± 1.5
	1.0	1.0	1.0	-29.806± 1.535
	1.0	1.0	1.0	-29.909± 1.399
	1.0	1.0	1.0	-29.948± 1.373
	1.0	1.0	1.0	-29.933± 1.386
	1.0	1.0	1.0	-29.842± 1.525
	0.95	1.0	1.0	-29.815 ± 1.521
ECCo	1.0	1.0	1.0	-25.866 ±0.7
	1.0	1.0	1.0	-25.828± 0.745
	1.0	1.0	0.975	-25.842± 0.742
	1.0	1.0	0.975	-25.855± 0.656
	1.0	1.0	0.975	-25.835± 0.735
	1.0	1.0	0.975	-25.783± 0.684
	1.0	1.0	1.0	-25.875± 0.693
	1.0	1.0	1.0	-25.891± 0.81
	1.0	1.0	1.0	-25.784± 0.779
	1.0	1.0	0.975	-25.845 ± 0.8
Wachter	1.0	1.0	1.0	-29.877 ±1.449
	1.0	1.0	1.0	-29.826± 1.561
	1.0	1.0	1.0	-29.881± 1.442
	1.0	1.0	1.0	-29.871± 1.452
	1.0	1.0	1.0	-29.8± 1.538
	1.0	1.0	1.0	-29.928± 1.426
	1.0	1.0	1.0	-29.839± 1.501

	1.0	1.0	1.0	-29.852± 1.469
	1.0	1.0	1.0	-29.837± 1.491
	1.0	1.0	0.975	-29.81 ± 1.536
Generic	1.0	1.0	1.0	-29.813 ±1.519
	1.0	1.0	1.0	-29.827± 1.527
	1.0	1.0	1.0	-29.878± 1.448
	1.0	1.0	1.0	-29.905± 1.486
	0.975	1.0	1.0	-29.867± 1.464
	1.0	1.0	1.0	-29.948± 1.363
	1.0	1.0	1.0	-29.818± 1.538
	1.0	1.0	1.0	-29.835± 1.495
	1.0	1.0	1.0	-29.874± 1.491
	1.0	1.0	1.0	-29.937 ± 1.363
DiCE	1.0	1.0	1.0	-29.786 ±1.551
	1.0	1.0	1.0	-29.878± 1.44
	1.0	1.0	1.0	-29.875± 1.453
	1.0	1.0	1.0	-29.922± 1.408
	1.0	1.0	0.975	-29.928± 1.37
	1.0	1.0	1.0	-29.936± 1.386
	1.0	1.0	1.0	-29.909± 1.408
	1.0	1.0	1.0	-29.85± 1.465
	1.0	1.0	0.975	-29.911± 1.418
	1.0	1.0	0.975	-29.835 ± 1.497
ClaPROAR	1.0	1.0	0.975	-29.898 ±1.422
	0.975	1.0	1.0	-29.863± 1.521
	1.0	1.0	1.0	-29.895± 1.461
	1.0	1.0	1.0	-29.914± 1.406
	0.975	1.0	0.975	-29.823± 1.544
	1.0	1.0	1.0	-29.88± 1.46
	0.975	1.0	1.0	-29.823± 1.542
	1.0	1.0	1.0	-29.896± 1.45
	1.0	1.0	1.0	-29.838± 1.497
	0.975	1.0	1.0	-29.942 ± 1.38

Tab. 280: Faithfulness experiment blobs data experiment 4 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-49.32 ±16.491
	1.0	1.0	1.0	-49.32± 16.493
	1.0	1.0	1.0	-49.31± 16.475
	1.0	1.0	1.0	-49.347± 16.461
	1.0	1.0	1.0	-49.345± 16.45
	1.0	1.0	1.0	-49.321± 16.487
	1.0	1.0	1.0	-49.244± 16.529
	1.0	1.0	1.0	-49.322± 16.484
	1.0	1.0	1.0	-49.351± 16.45
	1.0	1.0	1.0	-49.296 ± 16.514
ECCo	1.0	1.0	1.0	-44.935 ±15.2
	1.0	1.0	1.0	-44.924± 15.182
	1.0	1.0	1.0	-44.912± 15.255
	1.0	1.0	1.0	-44.976± 15.204
	1.0	1.0	1.0	-44.857± 15.281
	1.0	1.0	1.0	-44.877± 15.3
	1.0	1.0	1.0	-44.971± 15.223
	1.0	1.0	1.0	-44.927± 15.218

	1.0	1.0	1.0	-44.981± 15.203
	1.0	1.0	1.0	-44.9 ± 15.303
Wachter	1.0	1.0	1.0	-49.319 ±16.484
	1.0	1.0	1.0	-49.298± 16.432
	1.0	1.0	1.0	-49.342± 16.465
	1.0	1.0	1.0	-49.345± 16.463
	1.0	1.0	1.0	-49.298± 16.521
	1.0	1.0	1.0	-49.296± 16.462
	1.0	1.0	1.0	-49.341± 16.458
	1.0	1.0	1.0	-49.35± 16.461
	1.0	1.0	1.0	-49.208± 16.457
	1.0	1.0	1.0	-49.317 ± 16.428
Generic	1.0	1.0	1.0	-49.355 ±16.456
	1.0	1.0	1.0	-49.327± 16.489
	1.0	1.0	1.0	-49.298± 16.529
	1.0	1.0	1.0	-49.346± 16.45
	1.0	1.0	1.0	-49.3± 16.473
	1.0	1.0	1.0	-49.348± 16.451
	1.0	1.0	1.0	-49.349± 16.448
	1.0	1.0	1.0	-49.364± 16.455
	1.0	1.0	1.0	-49.335± 16.441
	1.0	1.0	1.0	-49.27 ± 16.501
DiCE	1.0	1.0	1.0	-49.27 ±16.546
	1.0	1.0	1.0	-49.317± 16.485
	1.0	1.0	1.0	-49.347± 16.455
	1.0	1.0	1.0	-49.349± 16.457
	1.0	1.0	1.0	-49.323± 16.487
	1.0	1.0	1.0	-49.349± 16.463
	1.0	1.0	1.0	-49.32± 16.49
	1.0	1.0	1.0	-49.265± 16.505
	1.0	1.0	1.0	-49.305± 16.518
	1.0	1.0	1.0	-49.29 ± 16.505
ClaPROAR	1.0	1.0	1.0	-49.326 ±16.48
	1.0	1.0	1.0	-49.318± 16.488
	1.0	1.0	1.0	-49.324± 16.495
	1.0	1.0	1.0	-49.279± 16.463
	1.0	1.0	1.0	-49.308± 16.522
	1.0	1.0	1.0	-49.344± 16.463
	1.0	1.0	1.0	-49.301± 16.523
	1.0	1.0	1.0	-49.238± 16.587
	1.0	1.0	1.0	-49.314± 16.483
	1.0	1.0	1.0	-49.353 ± 16.454

Tab. 281: Faithfulness experiment blobs data experiment 5 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-57.196 ±4.912
	1.0	1.0	1.0	-56.609± 5.144
	1.0	1.0	1.0	-57.186± 4.945
	1.0	1.0	1.0	-56.963± 4.837
	1.0	1.0	1.0	-57.369± 4.931
	1.0	1.0	1.0	-57.506± 4.47
	1.0	1.0	1.0	-56.928± 4.731
	1.0	1.0	1.0	-57.176± 4.783
	1.0	1.0	1.0	-57.259± 5.083

	1.0	1.0	1.0	-56.942 ± 5.035
ECCo	1.0	1.0	1.0	-53.406 ±3.389
	1.0	1.0	1.0	-53.496± 3.383
	1.0	1.0	1.0	-53.363± 3.516
	1.0	1.0	1.0	-53.377± 3.396
	1.0	1.0	1.0	-53.447± 3.409
	1.0	1.0	1.0	-53.442± 3.424
	1.0	1.0	1.0	-53.41± 3.401
	1.0	1.0	1.0	-53.571± 3.348
	1.0	1.0	1.0	-53.344± 3.42
	1.0	1.0	1.0	-53.467 ± 3.425
Wachter	1.0	1.0	1.0	-57.255 ±4.672
	1.0	1.0	1.0	-57.1± 5.038
	1.0	1.0	1.0	-57.06± 5.066
	1.0	1.0	1.0	-57.322± 4.857
	1.0	1.0	1.0	-57.068± 4.975
	1.0	1.0	1.0	-56.779± 5.174
	1.0	1.0	1.0	-57.046± 4.889
	1.0	1.0	1.0	-56.722± 5.249
	1.0	1.0	1.0	-56.683± 4.896
	1.0	1.0	1.0	-56.978 ± 4.954
Generic	1.0	1.0	1.0	-57.308 ±4.626
	1.0	1.0	1.0	-57.253± 4.884
	1.0	1.0	1.0	-57.092± 4.826
	1.0	1.0	1.0	-57.183± 4.697
	1.0	1.0	1.0	-57.021± 4.572
	1.0	1.0	1.0	-57.037± 5.075
	1.0	1.0	1.0	-56.719± 5.152
	1.0	1.0	1.0	-57.366± 4.896
	1.0	1.0	1.0	-56.996± 4.727
	1.0	1.0	1.0	-57.204 ± 4.862
DiCE	1.0	1.0	1.0	-57.281 ±4.937
	1.0	1.0	1.0	-57.061± 5.113
	1.0	1.0	1.0	-57.364± 4.782
	1.0	1.0	1.0	-57.348± 4.791
	1.0	1.0	1.0	-57.352± 4.826
	1.0	1.0	1.0	-57.255± 4.999
	1.0	1.0	1.0	-57.075± 4.975
	1.0	1.0	1.0	-57.293± 4.584
	1.0	1.0	1.0	-56.76± 5.054
	1.0	1.0	1.0	-57.341 ± 4.875
ClaPROAR	1.0	1.0	1.0	-57.061 ±5.188
	1.0	1.0	1.0	-57.082± 4.798
	1.0	1.0	1.0	-57.031± 4.93
	1.0	1.0	1.0	-57.044± 4.681
	1.0	1.0	1.0	-56.838± 5.18
	1.0	1.0	1.0	-57.306± 4.724
	1.0	1.0	1.0	-57.398± 4.805
	1.0	1.0	1.0	-56.851± 4.994
	1.0	1.0	1.0	-57.459± 4.64
	1.0	1.0	1.0	-57.26 ± 4.779

Tab. 282: Faithfulness experiment blobs data experiment 1 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco

REVISE	1.0	1.0	1.0	-65.741 ±5.086
	1.0	1.0	1.0	-65.705± 5.083
	1.0	1.0	1.0	-65.844± 4.936
	1.0	1.0	1.0	-65.724± 5.027
	1.0	1.0	1.0	-65.786± 4.989
	1.0	1.0	1.0	-65.847± 4.908
	1.0	1.0	1.0	-65.774± 4.98
	1.0	1.0	1.0	-65.767± 5.021
	1.0	1.0	1.0	-65.842± 4.892
	1.0	1.0	1.0	-65.881 ± 4.848
ECCo	1.0	1.0	1.0	-59.7 ±4.737
	1.0	1.0	1.0	-59.699± 4.714
	1.0	1.0	1.0	-59.618± 4.65
	1.0	1.0	1.0	-59.651± 4.647
	1.0	1.0	1.0	-59.707± 4.703
	1.0	1.0	1.0	-59.624± 4.648
	1.0	1.0	1.0	-59.722± 4.682
	1.0	1.0	1.0	-59.636± 4.666
	1.0	1.0	1.0	-59.622± 4.722
	1.0	1.0	1.0	-59.662 ± 4.653
Wachter	1.0	1.0	1.0	-65.806 ±4.982
	1.0	1.0	1.0	-65.811± 4.95
	1.0	1.0	1.0	-65.745± 4.964
	1.0	1.0	1.0	-65.778± 4.953
	1.0	1.0	1.0	-65.808± 4.944
	1.0	1.0	1.0	-65.902± 4.872
	1.0	1.0	1.0	-65.812± 4.886
	1.0	1.0	1.0	-65.812± 4.935
	1.0	1.0	1.0	-65.754± 5.07
	1.0	1.0	1.0	-65.87 ± 4.86
Generic	1.0	1.0	1.0	-65.831 ±4.929
	1.0	1.0	1.0	-65.744± 5.014
	1.0	1.0	1.0	-65.855± 4.935
	1.0	1.0	1.0	-65.835± 4.955
	1.0	1.0	1.0	-65.846± 4.82
	1.0	1.0	1.0	-65.825± 4.976
	1.0	1.0	1.0	-65.823± 4.895
	1.0	1.0	1.0	-65.8± 4.923
	1.0	1.0	1.0	-65.815± 4.915
	1.0	1.0	1.0	-65.747 ± 5.102
DiCE	1.0	1.0	1.0	-65.848 ±4.896
	1.0	1.0	1.0	-65.791± 4.971
	1.0	1.0	1.0	-65.75± 4.998
	1.0	1.0	1.0	-65.885± 4.854
	1.0	1.0	1.0	-65.711± 5.157
	1.0	1.0	1.0	-65.807± 4.965
	1.0	1.0	1.0	-65.764± 4.915
	1.0	1.0	1.0	-65.817± 4.951
	1.0	1.0	1.0	-65.818± 4.909
	1.0	1.0	1.0	-65.785 ± 5.009
ClaPROAR	1.0	1.0	1.0	-65.82 ±4.903
	1.0	1.0	1.0	-65.766± 5.06
	1.0	1.0	1.0	-65.873± 4.835
	1.0	1.0	1.0	-65.732± 4.922
	1.0	1.0	1.0	-65.812± 4.938

	1.0	1.0	1.0	-65.905± 4.839
	1.0	1.0	1.0	-65.746± 5.014
	1.0	1.0	1.0	-65.887± 4.878
	1.0	1.0	1.0	-65.673± 5.174
	1.0	1.0	1.0	-65.755 ± 5.044

Tab. 283: Faithfulness experiment blobs data experiment 1 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.975	1.0	1.0	-58.447 ±18.777
	1.0	1.0	0.975	-58.097± 18.697
	1.0	1.0	0.975	-58.292± 18.885
	1.0	1.0	0.95	-58.263± 18.841
	1.0	1.0	1.0	-58.322± 18.494
	1.0	1.0	0.975	-58.019± 19.115
	1.0	1.0	1.0	-58.06± 19.289
	1.0	1.0	1.0	-58.491± 19.138
	1.0	1.0	0.975	-58.505± 19.203
	1.0	1.0	1.0	-58.184 ± 18.885
ECCo	1.0	1.0	0.95	-55.482 ±17.034
	1.0	1.0	0.95	-55.475± 17.072
	0.975	0.975	0.95	-55.45± 16.996
	1.0	1.0	1.0	-55.454± 17.038
	1.0	1.0	1.0	-55.486± 17.039
	1.0	1.0	1.0	-55.481± 17.049
	1.0	1.0	0.975	-55.471± 17.035
	1.0	1.0	1.0	-55.517± 17.035
	1.0	1.0	1.0	-55.509± 17.081
	1.0	1.0	1.0	-55.501 ± 17.032
Wachter	1.0	1.0	1.0	-57.934 ±18.383
	1.0	1.0	0.975	-58.726± 18.839
	1.0	1.0	1.0	-58.073± 18.498
	1.0	1.0	1.0	-58.511± 18.914
	1.0	1.0	1.0	-58.31± 18.603
	1.0	1.0	1.0	-58.031± 18.807
	1.0	1.0	1.0	-58.485± 18.781
	1.0	1.0	0.975	-58.268± 18.892
	1.0	1.0	1.0	-58.166± 18.767
	1.0	1.0	0.975	-58.549 ± 18.687
Generic	1.0	1.0	1.0	-58.297 ±18.867
	1.0	1.0	0.975	-57.958± 18.664
	1.0	1.0	1.0	-58.26± 18.909
	1.0	1.0	1.0	-58.489± 19.076
	1.0	1.0	0.975	-58.211± 18.894
	1.0	1.0	0.975	-58.411± 19.104
	1.0	1.0	1.0	-58.307± 18.862
	1.0	1.0	1.0	-58.128± 18.896
	1.0	1.0	0.975	-58.291± 18.685
	1.0	1.0	1.0	-58.472 ± 18.495
DiCE	1.0	1.0	0.975	-58.317 ±18.549
	1.0	1.0	0.975	-58.154± 18.556
	1.0	1.0	1.0	-57.983± 18.934
	1.0	1.0	0.975	-57.905± 18.329
	1.0	1.0	0.975	-58.039± 18.919
	1.0	1.0	1.0	-58.46± 19.233

	1.0	1.0	0.975	-58.364± 18.859
	1.0	1.0	1.0	-58.622± 18.804
	1.0	1.0	0.975	-58.28± 18.564
	1.0	1.0	0.975	-58.472 ± 18.96
ClaPROAR	1.0	1.0	1.0	-58.068 ±18.754
	1.0	1.0	0.975	-58.252± 18.588
	1.0	1.0	0.975	-58.061± 18.839
	1.0	1.0	1.0	-58.344± 18.755
	1.0	1.0	0.975	-58.605± 19.337
	1.0	1.0	1.0	-57.97± 18.802
	1.0	1.0	0.975	-58.483± 19.144
	1.0	1.0	0.975	-57.996± 18.632
	1.0	1.0	1.0	-58.331± 18.873
	1.0	1.0	1.0	-58.274 ± 18.893

Tab. 284: Faithfulness experiment blobs data experiment 3 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-88.61 ±33.146
	1.0	1.0	0.975	-88.757± 33.262
	1.0	1.0	1.0	-88.494± 33.034
	1.0	1.0	0.975	-88.677± 33.264
	0.975	1.0	0.975	-88.619± 33.142
	1.0	1.0	0.975	-88.594± 33.129
	1.0	1.0	1.0	-88.568± 33.124
	1.0	1.0	1.0	-88.61± 33.088
	1.0	1.0	1.0	-88.595± 33.177
	1.0	1.0	1.0	-88.639 ± 33.183
ECCo	0.975	1.0	1.0	-84.969 ±34.962
	1.0	1.0	1.0	-84.947± 34.92
	1.0	1.0	1.0	-84.848± 34.964
	0.975	0.975	1.0	-84.847± 34.863
	0.975	1.0	1.0	-84.92± 34.882
	0.975	0.975	0.975	-84.836± 34.925
	1.0	1.0	0.975	-84.93± 34.916
	1.0	1.0	1.0	-84.99± 35.058
	1.0	1.0	1.0	-84.975± 34.979
	0.975	1.0	0.975	-85.025 ± 34.937
Wachter	1.0	1.0	1.0	-88.683 ±33.207
	1.0	1.0	0.975	-88.599± 33.136
	1.0	1.0	1.0	-88.489± 33.137
	1.0	1.0	1.0	-88.645± 33.377
	1.0	1.0	0.975	-88.419± 33.027
	0.95	1.0	1.0	-88.474± 33.038
	1.0	1.0	1.0	-88.709± 33.245
	1.0	1.0	1.0	-88.71± 33.211
	1.0	1.0	1.0	-88.484± 33.066
	1.0	1.0	1.0	-88.811 ± 33.315
Generic	0.975	1.0	1.0	-88.583 ±33.123
	1.0	1.0	1.0	-88.67± 33.183
	1.0	1.0	1.0	-88.762± 33.266
	1.0	1.0	1.0	-88.525± 33.119
	0.975	1.0	1.0	-88.661± 33.21
	1.0	1.0	1.0	-88.579± 33.141
	1.0	1.0	1.0	-88.493± 33.079

	1.0	1.0	0.975	-88.615± 33.109
	1.0	1.0	1.0	-88.519± 33.102
	1.0	1.0	1.0	-88.66 ± 33.266
DiCE	1.0	1.0	1.0	-88.417 ±32.982
	0.975	1.0	1.0	-88.59± 33.114
	0.975	1.0	1.0	-88.429± 33.039
	0.95	1.0	0.975	-88.683± 33.225
	1.0	1.0	1.0	-88.63± 33.166
	1.0	1.0	1.0	-88.638± 33.244
	1.0	1.0	1.0	-88.571± 33.165
	1.0	1.0	0.975	-88.524± 33.141
	1.0	1.0	0.975	-88.648± 33.265
	0.975	1.0	1.0	-88.505 ± 33.085
ClaPROAR	1.0	1.0	0.975	-88.841 ±33.329
	1.0	1.0	1.0	-88.691± 33.196
	1.0	1.0	1.0	-88.754± 33.262
	1.0	1.0	0.975	-88.537± 33.112
	1.0	1.0	0.975	-88.709± 33.239
	0.975	1.0	1.0	-88.788± 33.231
	1.0	1.0	1.0	-88.584± 33.171
	1.0	1.0	1.0	-88.595± 33.068
	0.975	1.0	0.975	-88.757± 33.267
	1.0	1.0	1.0	-88.665 ± 33.178

Tab. 285: Faithfulness experiment blobs data experiment 1 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-88.13 ±18.904
	1.0	1.0	1.0	-87.94± 19.063
	1.0	1.0	1.0	-87.913± 18.791
	1.0	1.0	1.0	-87.853± 19.152
	1.0	1.0	1.0	-88.052± 19.203
	1.0	1.0	1.0	-87.955± 18.931
	1.0	1.0	1.0	-88.21± 18.929
	1.0	1.0	1.0	-88.068± 18.844
	1.0	1.0	1.0	-87.972± 18.896
	1.0	1.0	1.0	-87.924 ± 19.067
ECCo	1.0	1.0	1.0	-82.892 ±18.702
	1.0	1.0	1.0	-82.764± 18.837
	1.0	1.0	1.0	-82.829± 18.768
	1.0	1.0	1.0	-82.825± 18.746
	1.0	1.0	1.0	-82.843± 18.791
	1.0	1.0	1.0	-82.936± 18.793
	1.0	1.0	1.0	-82.853± 18.835
	1.0	1.0	1.0	-82.832± 18.867
	1.0	1.0	1.0	-82.826± 18.792
	1.0	1.0	1.0	-82.906 ± 18.805
Wachter	1.0	1.0	1.0	-88.079 ±19.066
	1.0	1.0	1.0	-88.079± 18.905
	1.0	1.0	1.0	-87.95± 18.979
	1.0	1.0	1.0	-88.175± 18.949
	1.0	1.0	1.0	-88.089± 18.911
	1.0	1.0	1.0	-88.055± 18.957
	1.0	1.0	1.0	-87.955± 19.104
	1.0	1.0	1.0	-88.052± 18.849

	1.0	1.0	1.0	-88.032± 18.734
	1.0	1.0	1.0	-88.062 ± 18.659
Generic	1.0	1.0	1.0	-87.905 ±18.916
	1.0	1.0	1.0	-88.028± 19.018
	1.0	1.0	1.0	-87.909± 19.142
	1.0	1.0	1.0	-88.124± 18.983
	1.0	1.0	1.0	-87.965± 18.794
	1.0	1.0	1.0	-88.068± 18.84
	1.0	1.0	1.0	-88.066± 18.776
	1.0	1.0	1.0	-87.995± 18.923
	1.0	1.0	1.0	-88.058± 19.133
	1.0	1.0	1.0	-87.889 ± 19.032
DiCE	1.0	1.0	1.0	-88.099 ±18.671
	1.0	1.0	1.0	-87.783± 18.833
	1.0	1.0	1.0	-88.1± 18.679
	1.0	1.0	1.0	-88.112± 18.872
	1.0	1.0	1.0	-87.947± 18.905
	1.0	1.0	1.0	-87.762± 19.03
	1.0	1.0	1.0	-87.992± 18.931
	1.0	1.0	1.0	-88.047± 18.744
	1.0	1.0	1.0	-87.947± 19.062
	1.0	1.0	1.0	-88.094 ± 18.982
ClaPROAR	1.0	1.0	1.0	-88.028 ±19.089
	1.0	1.0	1.0	-88.009± 19.029
	1.0	1.0	1.0	-88.043± 18.773
	1.0	1.0	1.0	-87.916± 19.021
	1.0	1.0	1.0	-88.061± 18.775
	1.0	1.0	1.0	-87.837± 19.016
	1.0	1.0	1.0	-88.082± 18.875
	1.0	1.0	1.0	-88.042± 18.924
	1.0	1.0	1.0	-87.942± 18.925
	1.0	1.0	1.0	-87.897 ± 19.124

Tab. 286: Faithfulness experiment blobs data experiment 5 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-60.604 ±24.302
	1.0	1.0	1.0	-60.601± 24.273
	1.0	0.975	1.0	-60.593± 24.357
	1.0	1.0	1.0	-60.564± 24.226
	1.0	1.0	1.0	-60.317± 24.127
	1.0	1.0	1.0	-60.503± 24.319
	1.0	1.0	1.0	-60.295± 24.081
	1.0	1.0	1.0	-60.436± 24.178
	1.0	1.0	1.0	-60.635± 24.34
	1.0	1.0	1.0	-60.535 ± 24.288
ECCo	1.0	1.0	1.0	-58.278 ±25.716
	1.0	1.0	1.0	-58.183± 25.69
	1.0	1.0	1.0	-58.285± 25.703
	1.0	1.0	1.0	-58.288± 25.633
	1.0	1.0	1.0	-58.22± 25.698
	1.0	1.0	1.0	-58.217± 25.758
	1.0	1.0	1.0	-58.202± 25.677
	1.0	1.0	1.0	-58.308± 25.691
	1.0	1.0	1.0	-58.273± 25.689

	1.0	1.0	1.0	-58.278 ± 25.69
Wachter	1.0	1.0	1.0	-60.643 ±24.325
	1.0	1.0	1.0	-60.571± 24.262
	1.0	1.0	1.0	-60.598± 24.207
	1.0	1.0	1.0	-60.535± 24.207
	1.0	1.0	1.0	-60.49± 24.181
	1.0	1.0	1.0	-60.498± 24.181
	1.0	1.0	1.0	-60.528± 24.209
	1.0	1.0	1.0	-60.533± 24.192
	1.0	1.0	1.0	-60.539± 24.259
	1.0	1.0	1.0	-60.626 ± 24.287
Generic	1.0	1.0	1.0	-60.662 ±24.367
	1.0	1.0	1.0	-60.411± 24.349
	1.0	1.0	1.0	-60.564± 24.175
	1.0	1.0	1.0	-60.489± 24.361
	1.0	1.0	1.0	-60.771± 24.331
	1.0	1.0	1.0	-60.577± 24.34
	1.0	1.0	1.0	-60.533± 24.133
	1.0	1.0	1.0	-60.527± 24.27
	1.0	1.0	1.0	-60.547± 24.241
	1.0	1.0	1.0	-60.508 ± 24.159
DiCE	1.0	1.0	1.0	-60.482 ±24.298
	1.0	1.0	1.0	-60.289± 24.32
	1.0	1.0	1.0	-60.613± 24.357
	1.0	1.0	1.0	-60.476± 24.284
	1.0	1.0	1.0	-60.576± 24.229
	1.0	1.0	1.0	-60.72± 24.376
	1.0	1.0	1.0	-60.614± 24.225
	1.0	1.0	1.0	-60.574± 24.314
	1.0	1.0	1.0	-60.577± 24.156
	1.0	1.0	0.975	-60.502 ± 24.156
ClaPROAR	1.0	1.0	1.0	-60.622 ±24.363
	1.0	1.0	1.0	-60.494± 24.237
	1.0	1.0	1.0	-60.611± 24.212
	1.0	1.0	1.0	-60.629± 24.309
	1.0	1.0	1.0	-60.507± 24.365
	1.0	1.0	1.0	-60.522± 24.134
	1.0	1.0	1.0	-60.486± 24.383
	1.0	1.0	1.0	-60.358± 24.092
	1.0	1.0	1.0	-60.426± 24.201
	1.0	1.0	1.0	-60.442 ± 24.19

Tab. 287: Faithfulness experiment blobs data experiment 1 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-66.005 ±14.558
	1.0	1.0	1.0	-66.007± 14.552
	1.0	1.0	1.0	-66.004± 14.554
	1.0	1.0	1.0	-66.01± 14.559
	1.0	1.0	1.0	-66.007± 14.558
	1.0	1.0	1.0	-66.003± 14.555
	1.0	1.0	1.0	-66.007± 14.555
	1.0	1.0	1.0	-66.007± 14.554
	1.0	1.0	1.0	-66.006± 14.554
	1.0	1.0	1.0	-66.006 ± 14.554

ECCo	1.0	1.0	1.0	-60.032 ±14.323
	1.0	1.0	1.0	-59.994± 14.34
	1.0	1.0	1.0	-60.046± 14.329
	1.0	1.0	1.0	-60.098± 14.358
	1.0	1.0	1.0	-60.073± 14.363
	1.0	1.0	1.0	-60.1± 14.359
	1.0	1.0	1.0	-59.998± 14.387
	1.0	1.0	1.0	-60.038± 14.366
	1.0	1.0	1.0	-60.073± 14.343
	1.0	1.0	1.0	-60.027 ± 14.36
Wachter	1.0	1.0	1.0	-66.004 ±14.549
	1.0	1.0	1.0	-66.004± 14.556
	1.0	1.0	1.0	-66.007± 14.557
	1.0	1.0	1.0	-66.005± 14.557
	1.0	1.0	1.0	-66.003± 14.555
	1.0	1.0	1.0	-66.008± 14.559
	1.0	1.0	1.0	-66.0± 14.552
	1.0	1.0	1.0	-66.01± 14.561
	1.0	1.0	1.0	-66.008± 14.557
	1.0	1.0	1.0	-66.002 ± 14.552
Generic	1.0	1.0	1.0	-66.006 ±14.553
	1.0	1.0	1.0	-66.004± 14.555
	1.0	1.0	1.0	-66.008± 14.557
	1.0	1.0	1.0	-66.001± 14.553
	1.0	1.0	1.0	-66.0± 14.547
	1.0	1.0	1.0	-66.006± 14.549
	1.0	1.0	1.0	-66.003± 14.554
	1.0	1.0	1.0	-66.002± 14.551
	1.0	1.0	1.0	-66.008± 14.558
	1.0	1.0	1.0	-66.007 ± 14.549
DiCE	1.0	1.0	1.0	-66.008 ±14.55
	1.0	1.0	1.0	-65.999± 14.551
	1.0	1.0	1.0	-66.002± 14.558
	1.0	1.0	1.0	-66.008± 14.554
	1.0	1.0	1.0	-66.011± 14.556
	1.0	1.0	1.0	-66.01± 14.557
	1.0	1.0	1.0	-66.002± 14.554
	1.0	1.0	1.0	-66.001± 14.551
	1.0	1.0	1.0	-66.005± 14.557
	1.0	1.0	1.0	-66.007 ± 14.554
ClaPROAR	1.0	1.0	1.0	-66.006 ±14.556
	1.0	1.0	1.0	-66.01± 14.554
	1.0	1.0	1.0	-66.004± 14.551
	1.0	1.0	1.0	-65.998± 14.545
	1.0	1.0	1.0	-66.007± 14.554
	1.0	1.0	1.0	-66.005± 14.555
	1.0	1.0	1.0	-66.005± 14.555
	1.0	1.0	1.0	-66.008± 14.555
	1.0	1.0	1.0	-66.006± 14.55
	1.0	1.0	1.0	-66.008 ± 14.557

Tab. 288: Faithfulness experiment blobs data experiment 1 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco

REVISE	1.0	1.0	1.0	-50.631 ±14.837
	1.0	1.0	1.0	-50.739± 14.704
	1.0	1.0	1.0	-50.633± 14.844
	0.975	1.0	0.975	-50.684± 14.737
	1.0	1.0	1.0	-50.595± 14.887
	1.0	1.0	1.0	-50.592± 14.886
	1.0	1.0	1.0	-50.639± 14.805
	0.95	1.0	0.975	-50.653± 14.737
	1.0	1.0	1.0	-50.626± 14.846
	1.0	1.0	1.0	-50.564 ± 14.923
ECCo	1.0	1.0	1.0	-44.954 ±14.522
	1.0	1.0	0.975	-44.924± 14.487
	1.0	1.0	1.0	-44.984± 14.533
	1.0	1.0	1.0	-44.915± 14.559
	1.0	1.0	0.975	-44.932± 14.503
	1.0	1.0	1.0	-44.943± 14.507
	1.0	1.0	1.0	-44.934± 14.479
	1.0	1.0	1.0	-44.878± 14.492
	1.0	1.0	1.0	-44.935± 14.497
	1.0	1.0	0.975	-44.916 ± 14.404
Wachter	1.0	1.0	0.975	-50.556 ±14.857
	1.0	1.0	1.0	-50.569± 14.922
	1.0	1.0	1.0	-50.536± 14.961
	1.0	1.0	1.0	-50.562± 14.924
	1.0	1.0	0.975	-50.708± 14.746
	1.0	1.0	0.975	-50.711± 14.743
	0.975	0.95	0.975	-50.67± 14.793
	1.0	1.0	1.0	-50.599± 14.879
	1.0	1.0	1.0	-50.638± 14.695
	1.0	1.0	1.0	-50.627 ± 14.818
Generic	1.0	1.0	1.0	-50.562 ±14.928
	1.0	1.0	1.0	-50.667± 14.791
	1.0	1.0	1.0	-50.739± 14.703
	1.0	1.0	1.0	-50.708± 14.741
	1.0	1.0	1.0	-50.67± 14.795
	1.0	1.0	1.0	-50.575± 14.853
	1.0	1.0	1.0	-50.696± 14.75
	1.0	1.0	1.0	-50.574± 14.912
	1.0	1.0	0.975	-50.666± 14.79
	0.95	0.95	1.0	-50.743 ± 14.696
DiCE	1.0	1.0	0.975	-50.706 ±14.751
	0.95	1.0	1.0	-50.559± 14.852
	1.0	1.0	0.975	-50.636± 14.829
	0.975	0.95	1.0	-50.593± 14.889
	1.0	1.0	1.0	-50.638± 14.833
	1.0	1.0	1.0	-50.587± 14.892
	1.0	1.0	1.0	-50.675± 14.778
	1.0	1.0	1.0	-50.667± 14.796
	1.0	1.0	0.975	-50.609± 14.87
	1.0	1.0	1.0	-50.608 ± 14.874
ClaPROAR	1.0	1.0	1.0	-50.666 ±14.715
	1.0	1.0	0.975	-50.657± 14.773
	1.0	1.0	1.0	-50.598± 14.882
	1.0	1.0	0.975	-50.681± 14.732
	1.0	1.0	1.0	-50.7± 14.749

	1.0	1.0	1.0	-50.665± 14.796
	1.0	1.0	1.0	-50.563± 14.852
	1.0	1.0	0.975	-50.628± 14.765
	1.0	1.0	0.975	-50.567± 14.851
	1.0	1.0	1.0	-50.629 ± 14.823

Tab. 289: Faithfulness experiment blobs data experiment 3 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-58.927 ±35.839
	1.0	1.0	1.0	-59.02± 35.678
	1.0	1.0	1.0	-59.008± 35.659
	1.0	1.0	1.0	-58.917± 35.864
	0.975	1.0	1.0	-59.101± 35.808
	1.0	1.0	1.0	-58.899± 35.817
	1.0	1.0	0.975	-59.105± 35.684
	1.0	1.0	0.975	-58.836± 35.814
	0.95	1.0	1.0	-59.098± 35.859
	1.0	1.0	1.0	-58.856 ± 35.671
ECCo	1.0	1.0	0.975	-57.006 ±37.267
	1.0	1.0	0.975	-56.966± 37.218
	1.0	1.0	1.0	-56.971± 37.231
	1.0	1.0	1.0	-56.947± 37.226
	1.0	1.0	1.0	-56.956± 37.267
	1.0	1.0	1.0	-56.938± 37.276
	0.975	0.975	0.975	-56.94± 37.259
	1.0	1.0	1.0	-56.942± 37.246
	1.0	1.0	1.0	-56.922± 37.258
	1.0	1.0	0.975	-56.913 ± 37.24
Wachter	1.0	1.0	1.0	-59.116 ±35.918
	1.0	1.0	1.0	-59.072± 35.67
	1.0	1.0	1.0	-58.919± 35.716
	0.975	1.0	1.0	-59.04± 35.912
	1.0	1.0	0.975	-59.027± 35.797
	1.0	1.0	1.0	-59.066± 35.892
	1.0	1.0	1.0	-58.813± 35.569
	1.0	1.0	1.0	-58.893± 35.742
	1.0	1.0	1.0	-58.817± 35.637
	1.0	1.0	1.0	-59.177 ± 35.749
Generic	1.0	1.0	1.0	-58.774 ±35.502
	1.0	1.0	0.975	-58.726± 35.623
	0.975	1.0	1.0	-58.761± 35.581
	1.0	1.0	1.0	-58.964± 35.802
	1.0	1.0	1.0	-59.056± 35.868
	1.0	1.0	0.975	-58.898± 35.676
	0.975	1.0	1.0	-59.121± 35.808
	1.0	1.0	1.0	-58.81± 35.633
	0.975	1.0	1.0	-58.843± 35.658
	1.0	1.0	1.0	-58.936 ± 35.614
DiCE	1.0	1.0	1.0	-58.888 ±35.457
	1.0	1.0	0.975	-59.009± 35.884
	1.0	1.0	1.0	-59.002± 35.668
	1.0	1.0	1.0	-58.93± 35.822
	1.0	1.0	1.0	-58.824± 35.519
	1.0	1.0	1.0	-59.047± 35.718

	1.0	1.0	1.0	-59.011± 35.729
	0.975	1.0	1.0	-58.713± 35.606
	1.0	1.0	1.0	-59.031± 35.748
	0.975	1.0	1.0	-58.94 ± 35.675
ClaPROAR	1.0	1.0	1.0	-59.196 ±35.869
	0.975	1.0	1.0	-58.898± 35.719
	1.0	1.0	1.0	-58.767± 35.592
	1.0	1.0	1.0	-58.908± 35.666
	1.0	1.0	1.0	-59.029± 35.744
	1.0	1.0	1.0	-59.101± 35.744
	0.975	1.0	1.0	-58.786± 35.667
	1.0	1.0	0.975	-58.906± 35.603
	1.0	1.0	1.0	-59.081± 35.772
	1.0	1.0	0.975	-58.985 ± 35.809

Tab. 290: Faithfulness experiment blobs data experiment 4 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-80.156 ±25.146
	1.0	1.0	1.0	-80.085± 24.929
	1.0	1.0	1.0	-80.303± 25.036
	1.0	1.0	1.0	-80.28± 25.002
	1.0	1.0	1.0	-80.145± 24.871
	1.0	1.0	1.0	-80.313± 24.966
	1.0	1.0	1.0	-80.161± 25.084
	1.0	1.0	1.0	-80.252± 25.087
	1.0	1.0	1.0	-80.194± 25.093
	1.0	1.0	1.0	-80.137 ± 25.0
ECCo	1.0	1.0	1.0	-77.046 ±26.839
	1.0	1.0	1.0	-76.994± 26.863
	1.0	1.0	1.0	-77.012± 26.844
	1.0	1.0	1.0	-77.028± 26.84
	1.0	1.0	1.0	-77.061± 26.863
	1.0	1.0	1.0	-77.066± 26.844
	1.0	1.0	1.0	-77.084± 26.863
	1.0	1.0	1.0	-77.023± 26.873
	1.0	1.0	1.0	-77.042± 26.887
	1.0	1.0	1.0	-77.016 ± 26.925
Wachter	1.0	1.0	1.0	-80.234 ±24.933
	1.0	1.0	1.0	-80.334± 24.907
	1.0	1.0	1.0	-80.305± 24.906
	1.0	1.0	1.0	-80.183± 24.935
	1.0	1.0	1.0	-80.161± 25.212
	1.0	1.0	1.0	-80.199± 25.094
	1.0	1.0	1.0	-80.335± 24.79
	1.0	1.0	1.0	-80.136± 25.177
	1.0	1.0	1.0	-80.078± 25.107
	1.0	1.0	1.0	-80.251 ± 25.054
Generic	1.0	1.0	1.0	-80.264 ±24.954
	1.0	1.0	1.0	-80.186± 24.994
	1.0	1.0	1.0	-80.147± 25.217
	1.0	1.0	1.0	-80.186± 25.105
	1.0	1.0	1.0	-80.077± 25.069
	1.0	1.0	1.0	-80.137± 24.992
	1.0	1.0	1.0	-80.333± 24.855

	1.0	1.0	1.0	-80.253± 25.021
	1.0	1.0	1.0	-80.211± 24.966
	1.0	1.0	1.0	-80.331 ± 24.907
DiCE	1.0	1.0	1.0	-80.29 ±25.031
	1.0	1.0	1.0	-80.193± 25.148
	1.0	1.0	1.0	-80.16± 24.994
	1.0	1.0	1.0	-80.272± 24.947
	1.0	1.0	1.0	-80.132± 24.933
	1.0	1.0	1.0	-80.214± 25.068
	1.0	1.0	1.0	-80.166± 24.99
	1.0	1.0	1.0	-80.217± 24.85
	1.0	1.0	1.0	-80.172± 25.044
	1.0	1.0	1.0	-80.274 ± 25.131
ClaPROAR	1.0	1.0	1.0	-80.138 ±25.099
	1.0	1.0	1.0	-80.19± 25.044
	1.0	1.0	1.0	-80.329± 24.946
	1.0	1.0	1.0	-80.205± 25.062
	1.0	1.0	1.0	-80.296± 25.033
	1.0	1.0	1.0	-80.229± 25.062
	1.0	1.0	1.0	-80.255± 24.902
	1.0	1.0	1.0	-80.18± 25.072
	1.0	1.0	1.0	-80.131± 24.923
	1.0	1.0	1.0	-80.222 ± 24.995

Tab. 291: Faithfulness experiment blobs data experiment 5 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.945	0.95	0.645	-64.173 ±27.274
	0.95	0.95	0.54	-64.432± 27.492
	0.955	0.945	0.625	-64.05± 27.241
	0.975	0.975	0.57	-64.771± 27.722
	0.965	0.965	0.6	-64.39± 27.373
	0.955	0.925	0.63	-64.442± 27.707
	0.93	0.94	0.575	-64.648± 27.814
	0.96	0.95	0.585	-64.583± 27.804
	0.92	0.935	0.655	-64.74± 28.13
	0.955	0.95	0.61	-64.068 ± 27.254
ECCo	0.92	0.92	0.64	-64.137 ±26.904
	0.945	0.935	0.595	-63.498± 26.506
	0.965	0.95	0.63	-63.932± 27.163
	0.965	0.965	0.64	-64.717± 27.621
	0.965	0.965	0.58	-63.899± 26.812
	0.95	0.965	0.605	-63.842± 26.905
	0.965	0.96	0.56	-64.415± 27.384
	0.97	0.95	0.605	-63.854± 26.803
	0.955	0.95	0.615	-63.773± 26.688
	0.94	0.935	0.62	-63.417 ± 26.323
Wachter	0.955	0.935	0.595	-64.168 ±27.398
	0.91	0.915	0.595	-64.936± 28.145
	0.93	0.95	0.56	-64.272± 27.461
	0.96	0.955	0.585	-64.536± 27.871
	0.94	0.92	0.65	-64.377± 27.236
	0.96	0.96	0.62	-64.643± 27.721
	0.955	0.96	0.68	-64.614± 27.773
	0.92	0.92	0.565	-64.215± 27.373

	0.96	0.965	0.56	-64.026± 27.069
	0.945	0.945	0.645	-64.904 ± 27.873
Generic	0.945	0.95	0.61	-64.906 ±28.259
	0.935	0.93	0.61	-64.909± 27.958
	0.94	0.925	0.645	-64.652± 27.778
	0.945	0.925	0.61	-64.478± 27.832
	0.945	0.945	0.64	-63.988± 27.089
	0.97	0.965	0.655	-64.53± 27.581
	0.96	0.955	0.61	-64.599± 27.892
	0.95	0.96	0.58	-64.278± 27.514
	0.965	0.97	0.52	-64.496± 27.562
	0.935	0.94	0.635	-64.52 ± 27.404
DiCE	0.955	0.965	0.605	-64.307 ±27.652
	0.94	0.95	0.655	-64.413± 27.462
	0.965	0.96	0.59	-64.371± 27.563
	0.945	0.945	0.59	-64.236± 27.381
	0.945	0.955	0.54	-64.534± 27.651
	0.955	0.96	0.595	-64.35± 27.263
	0.95	0.955	0.605	-64.398± 27.76
	0.94	0.96	0.6	-65.012± 28.181
	0.95	0.945	0.58	-63.984± 27.357
	0.945	0.925	0.63	-64.007 ± 27.372
ClaPROAR	0.955	0.97	0.625	-64.88 ±27.928
	0.935	0.925	0.69	-64.229± 27.411
	0.965	0.955	0.66	-64.557± 27.707
	0.965	0.96	0.615	-64.081± 27.168
	0.965	0.955	0.65	-64.455± 27.673
	0.94	0.935	0.65	-64.482± 27.638
	0.95	0.955	0.64	-64.165± 27.376
	0.965	0.955	0.61	-64.058± 27.342
	0.955	0.955	0.635	-64.675± 27.987
	0.96	0.98	0.615	-64.009 ± 27.027

Tab. 292: Faithfulness experiment GMCS data experiment 1 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.965	0.96	0.62	-81.322 ±29.494
	0.955	0.945	0.575	-81.216± 29.493
	0.975	0.975	0.67	-81.043± 29.2
	0.93	0.92	0.68	-80.924± 29.043
	0.95	0.95	0.63	-80.693± 28.882
	0.96	0.965	0.64	-82.357± 30.771
	0.92	0.925	0.63	-80.921± 29.25
	0.965	0.965	0.565	-80.988± 29.191
	0.955	0.96	0.655	-81.042± 29.183
	0.96	0.935	0.64	-81.227 ± 29.558
ECCo	0.955	0.94	0.675	-77.42 ±25.246
	0.97	0.96	0.59	-77.533± 25.423
	0.94	0.945	0.58	-78.097± 26.589
	0.96	0.96	0.72	-77.039± 24.849
	0.975	0.965	0.635	-77.666± 25.802
	0.95	0.95	0.52	-77.098± 24.852
	0.97	0.96	0.555	-77.267± 25.263
	0.955	0.94	0.69	-77.237± 25.144
	0.935	0.935	0.66	-77.374± 25.084

	0.96	0.95	0.61	-77.087 ± 24.725
Wachter	0.96	0.96	0.625	-81.375 ±29.471
	0.93	0.935	0.615	-80.836± 28.987
	0.935	0.93	0.59	-81.093± 29.296
	0.955	0.96	0.645	-80.907± 29.057
	0.965	0.965	0.68	-81.236± 29.515
	0.955	0.94	0.635	-80.827± 28.923
	0.98	0.98	0.67	-81.358± 29.627
	0.925	0.925	0.605	-81.361± 29.491
	0.975	0.975	0.54	-80.593± 28.777
	0.96	0.955	0.58	-81.024 ± 29.183
Generic	0.965	0.975	0.6	-80.752 ±28.83
	0.955	0.95	0.65	-81.2± 29.406
	0.98	0.975	0.595	-81.347± 29.581
	0.95	0.955	0.635	-81.224± 29.605
	0.965	0.96	0.645	-81.433± 29.718
	0.965	0.95	0.57	-81.021± 29.2
	0.975	0.96	0.6	-80.863± 29.005
	0.95	0.95	0.6	-80.907± 28.935
	0.95	0.95	0.685	-81.292± 29.637
	0.965	0.96	0.655	-81.017 ± 29.0
DiCE	0.96	0.94	0.605	-80.911 ±28.884
	0.96	0.965	0.625	-81.618± 30.17
	0.925	0.925	0.66	-81.352± 29.578
	0.975	0.985	0.62	-81.348± 29.75
	0.945	0.94	0.61	-81.38± 29.643
	0.98	0.975	0.605	-80.945± 29.252
	0.97	0.97	0.66	-81.166± 29.262
	0.96	0.965	0.565	-81.735± 30.079
	0.93	0.925	0.575	-81.675± 29.849
	0.97	0.965	0.6	-81.545 ± 29.809
ClaPROAR	0.965	0.965	0.635	-81.202 ±29.426
	0.955	0.955	0.66	-81.234± 29.391
	0.97	0.97	0.635	-81.633± 30.058
	0.96	0.96	0.605	-81.536± 29.729
	0.935	0.945	0.6	-81.119± 29.312
	0.95	0.955	0.625	-80.657± 28.835
	0.965	0.955	0.63	-80.929± 29.127
	0.955	0.94	0.605	-81.176± 29.291
	0.945	0.945	0.61	-81.074± 29.083
	0.915	0.91	0.65	-81.518 ± 29.641

Tab. 293: Faithfulness experiment GMCS data experiment 2 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.97	0.965	0.58	-61.624 ±33.468
	0.96	0.975	0.65	-61.622± 33.464
	0.965	0.98	0.615	-61.624± 33.475
	0.96	0.975	0.635	-61.625± 33.47
	0.96	0.96	0.64	-61.625± 33.466
	0.965	0.97	0.665	-61.614± 33.464
	0.965	0.96	0.6	-61.62± 33.465
	0.965	0.96	0.615	-61.618± 33.468
	0.965	0.98	0.64	-61.623± 33.468
	0.95	0.97	0.66	-61.62 ± 33.467

ECCo	0.97	0.975	0.605	-61.53 ±33.388
	0.955	0.965	0.655	-61.535± 33.398
	0.965	0.97	0.595	-61.537± 33.395
	0.98	0.98	0.61	-61.534± 33.389
	0.97	0.965	0.605	-61.536± 33.39
	0.965	0.965	0.585	-61.538± 33.393
	0.975	0.98	0.635	-61.536± 33.388
	0.96	0.98	0.585	-61.54± 33.399
	0.98	0.985	0.595	-61.535± 33.389
	0.97	0.97	0.625	-61.542 ± 33.4
Wachter	0.955	0.96	0.535	-61.619 ±33.46
	0.975	0.99	0.555	-61.621± 33.466
	0.97	0.965	0.625	-61.617± 33.461
	0.98	0.985	0.64	-61.616± 33.463
	0.975	0.97	0.625	-61.616± 33.462
	0.97	0.975	0.665	-61.619± 33.467
	0.92	0.925	0.63	-61.617± 33.461
	0.97	0.97	0.65	-61.621± 33.469
	0.985	0.99	0.585	-61.616± 33.465
	0.935	0.925	0.585	-61.612 ± 33.466
Generic	0.965	0.97	0.605	-61.624 ±33.472
	0.94	0.95	0.59	-61.618± 33.461
	0.94	0.95	0.585	-61.616± 33.457
	0.965	0.965	0.655	-61.622± 33.461
	0.96	0.97	0.64	-61.623± 33.461
	0.975	0.975	0.62	-61.617± 33.462
	0.975	0.985	0.685	-61.623± 33.463
	0.97	0.96	0.645	-61.623± 33.463
	0.98	0.98	0.605	-61.622± 33.467
	0.975	0.97	0.66	-61.62 ± 33.469
DiCE	0.955	0.975	0.63	-61.617 ±33.464
	0.98	0.98	0.625	-61.619± 33.466
	0.96	0.945	0.65	-61.618± 33.46
	0.96	0.96	0.64	-61.623± 33.471
	0.97	0.97	0.595	-61.62± 33.466
	0.965	0.97	0.61	-61.617± 33.464
	0.97	0.97	0.61	-61.618± 33.459
	0.96	0.975	0.565	-61.618± 33.46
	0.985	0.99	0.64	-61.617± 33.466
	0.945	0.955	0.625	-61.618 ± 33.467
ClaPROAR	0.955	0.965	0.605	-61.62 ±33.463
	0.95	0.975	0.63	-61.622± 33.47
	0.98	0.975	0.67	-61.626± 33.468
	0.955	0.97	0.575	-61.621± 33.468
	0.96	0.955	0.635	-61.623± 33.473
	0.98	0.975	0.565	-61.623± 33.463
	0.965	0.965	0.605	-61.617± 33.461
	0.95	0.96	0.68	-61.615± 33.458
	0.985	0.98	0.63	-61.622± 33.466
	0.975	0.965	0.605	-61.62 ± 33.469

Tab. 294: Faithfulness experiment GMCS data experiment 3 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco

REVISE	0.98	0.945	0.615	-110.632 ±25.632
	0.955	0.935	0.6	-110.688± 25.713
	0.955	0.94	0.615	-110.544± 25.395
	0.965	0.97	0.595	-110.476± 25.382
	0.975	0.975	0.595	-110.763± 25.751
	0.96	0.95	0.565	-110.717± 25.8
	0.97	0.97	0.65	-110.44± 25.41
	0.945	0.94	0.625	-110.511± 25.435
	0.94	0.94	0.58	-110.524± 25.499
	0.955	0.965	0.58	-110.527 ± 25.532
ECCo	0.97	0.965	0.605	-109.49 ±24.455
	0.96	0.97	0.55	-109.409± 24.441
	0.985	0.98	0.635	-109.523± 24.316
	0.955	0.955	0.595	-109.32± 24.169
	0.965	0.945	0.6	-109.219± 24.073
	0.98	0.985	0.63	-109.277± 24.068
	0.955	0.945	0.57	-109.44± 24.327
	0.965	0.95	0.545	-109.039± 23.8
	0.96	0.95	0.685	-109.441± 24.342
	0.965	0.95	0.625	-109.514 ± 24.369
Wachter	0.99	0.98	0.55	-110.428 ±25.421
	0.94	0.935	0.65	-110.537± 25.566
	0.965	0.965	0.615	-111.046± 26.13
	0.965	0.95	0.58	-110.516± 25.571
	0.95	0.95	0.675	-110.28± 25.312
	0.975	0.965	0.635	-110.536± 25.55
	0.925	0.935	0.63	-110.463± 25.553
	0.985	0.975	0.6	-110.48± 25.462
	0.955	0.945	0.57	-110.592± 25.703
	0.955	0.955	0.615	-110.39 ± 25.406
Generic	0.955	0.955	0.59	-110.488 ±25.584
	0.98	0.965	0.63	-110.465± 25.482
	0.99	0.985	0.605	-110.361± 25.404
	0.975	0.965	0.585	-110.401± 25.466
	0.965	0.96	0.625	-110.382± 25.403
	0.985	0.97	0.63	-110.61± 25.515
	0.97	0.97	0.63	-110.617± 25.638
	0.98	0.96	0.625	-110.712± 25.702
	0.95	0.95	0.55	-110.453± 25.369
	0.965	0.95	0.645	-110.51 ± 25.535
DiCE	0.97	0.955	0.64	-110.559 ±25.53
	0.95	0.935	0.565	-110.498± 25.474
	0.955	0.94	0.64	-110.807± 25.807
	0.955	0.965	0.665	-110.737± 25.713
	0.955	0.95	0.575	-110.432± 25.387
	0.945	0.935	0.655	-110.546± 25.463
	0.985	0.975	0.57	-110.719± 25.868
	0.94	0.94	0.61	-110.449± 25.458
	0.965	0.965	0.615	-110.758± 25.732
	0.96	0.965	0.54	-111.035 ± 26.054
ClaPROAR	0.955	0.96	0.645	-110.483 ±25.419
	0.955	0.945	0.565	-110.453± 25.444
	0.965	0.96	0.575	-110.574± 25.576
	0.98	0.97	0.58	-110.513± 25.687
	0.945	0.945	0.64	-110.521± 25.43

	0.965	0.95	0.63	-110.798± 25.78
	0.955	0.95	0.58	-110.689± 25.698
	0.955	0.95	0.59	-110.676± 25.787
	0.955	0.955	0.57	-110.535± 25.483
	0.955	0.95	0.62	-110.319 ± 25.266

Tab. 295: Faithfulness experiment GMCS data experiment 4 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.955	0.955	0.66	-75.68 ±39.95
	0.94	0.94	0.63	-75.676± 39.953
	0.965	0.965	0.64	-75.675± 39.958
	0.955	0.97	0.655	-75.687± 39.961
	0.945	0.965	0.595	-75.687± 39.958
	0.97	0.965	0.675	-75.683± 39.955
	0.955	0.97	0.61	-75.687± 39.956
	0.95	0.965	0.61	-75.679± 39.955
	0.95	0.955	0.62	-75.684± 39.96
	0.945	0.95	0.57	-75.68 ± 39.956
ECCo	0.955	0.955	0.625	-75.521 ±39.839
	0.955	0.965	0.615	-75.526± 39.847
	0.98	0.98	0.67	-75.516± 39.836
	0.94	0.955	0.675	-75.521± 39.834
	0.94	0.935	0.66	-75.526± 39.844
	0.98	0.98	0.625	-75.522± 39.835
	0.965	0.955	0.64	-75.523± 39.834
	0.975	0.97	0.585	-75.527± 39.841
	0.975	0.97	0.62	-75.52± 39.839
	0.97	0.97	0.615	-75.529 ± 39.835
Wachter	0.96	0.96	0.63	-75.687 ±39.961
	0.96	0.965	0.615	-75.684± 39.959
	0.96	0.965	0.61	-75.68± 39.96
	0.935	0.945	0.605	-75.678± 39.956
	0.95	0.945	0.65	-75.682± 39.962
	0.92	0.95	0.61	-75.674± 39.956
	0.96	0.965	0.61	-75.683± 39.957
	0.94	0.93	0.585	-75.678± 39.957
	0.96	0.96	0.63	-75.679± 39.96
	0.945	0.955	0.675	-75.68 ± 39.957
Generic	0.96	0.95	0.62	-75.676 ±39.954
	0.965	0.96	0.6	-75.681± 39.956
	0.975	0.96	0.62	-75.675± 39.952
	0.965	0.97	0.65	-75.685± 39.956
	0.975	0.955	0.61	-75.681± 39.958
	0.965	0.97	0.655	-75.681± 39.954
	0.96	0.965	0.61	-75.684± 39.959
	0.96	0.95	0.685	-75.684± 39.956
	0.95	0.95	0.635	-75.678± 39.955
	0.96	0.955	0.66	-75.687 ± 39.964
DiCE	0.965	0.965	0.615	-75.683 ±39.957
	0.95	0.945	0.66	-75.686± 39.957
	0.965	0.965	0.62	-75.677± 39.954
	0.945	0.95	0.645	-75.68± 39.963
	0.94	0.94	0.61	-75.686± 39.968
	0.96	0.965	0.585	-75.679± 39.958

	0.96	0.97	0.65	-75.682± 39.956
	0.965	0.97	0.675	-75.687± 39.959
	0.96	0.965	0.67	-75.686± 39.956
	0.945	0.955	0.615	-75.684 ± 39.959
ClaPROAR	0.945	0.975	0.685	-75.672 ±39.957
	0.985	0.96	0.62	-75.681± 39.958
	0.97	0.965	0.68	-75.686± 39.961
	0.945	0.915	0.625	-75.678± 39.951
	0.96	0.965	0.6	-75.678± 39.952
	0.93	0.945	0.63	-75.685± 39.955
	0.94	0.945	0.65	-75.676± 39.958
	0.96	0.98	0.59	-75.679± 39.962
	0.975	0.975	0.615	-75.684± 39.957
	0.94	0.955	0.61	-75.69 ± 39.965

Tab. 296: Faithfulness experiment GMCS data experiment 5 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.985	0.985	0.58	-150.205 ±86.266
	0.965	0.97	0.645	-150.358± 86.424
	0.99	0.985	0.6	-150.469± 86.522
	0.965	0.975	0.57	-150.068± 86.137
	0.975	0.975	0.57	-150.026± 86.084
	0.975	0.975	0.62	-150.428± 86.526
	0.945	0.945	0.66	-150.36± 86.466
	0.97	0.965	0.61	-150.362± 86.46
	0.99	0.985	0.585	-150.371± 86.46
	0.965	0.96	0.575	-150.243 ± 86.307
ECCo	0.97	0.97	0.605	-148.282 ±84.613
	0.965	0.975	0.575	-147.807± 84.129
	0.975	0.97	0.585	-147.405± 83.669
	0.965	0.975	0.55	-147.732± 84.034
	0.965	0.965	0.605	-147.828± 84.106
	0.96	0.97	0.585	-147.893± 84.207
	0.985	0.985	0.625	-147.509± 83.794
	0.965	0.96	0.565	-147.858± 84.161
	0.97	0.97	0.6	-147.583± 83.866
	0.955	0.955	0.56	-147.86 ± 84.162
Wachter	0.98	0.975	0.6	-150.35 ±86.422
	0.97	0.97	0.605	-150.328± 86.365
	0.99	0.99	0.61	-150.458± 86.505
	0.955	0.955	0.56	-149.987± 86.044
	0.99	0.995	0.605	-150.388± 86.474
	0.97	0.97	0.56	-150.398± 86.47
	0.96	0.97	0.58	-150.326± 86.385
	0.975	0.985	0.555	-150.375± 86.465
	0.965	0.96	0.55	-150.61± 86.705
	0.95	0.965	0.525	-150.384 ± 86.463
Generic	0.955	0.965	0.61	-150.305 ±86.358
	0.97	0.975	0.595	-150.413± 86.49
	0.985	1.0	0.585	-150.577± 86.633
	0.975	0.985	0.54	-150.404± 86.48
	0.945	0.95	0.595	-150.36± 86.444
	0.97	0.965	0.54	-150.299± 86.367
	0.965	0.965	0.55	-150.302± 86.382

	0.98	0.98	0.64	-150.347± 86.434
	0.97	0.97	0.585	-150.169± 86.2
	0.965	0.97	0.6	-150.144 ± 86.197
DiCE	0.95	0.96	0.61	-150.611 ±86.656
	0.99	0.985	0.605	-150.495± 86.575
	0.97	0.98	0.575	-150.288± 86.384
	0.98	0.975	0.665	-150.032± 86.094
	0.985	0.975	0.58	-150.598± 86.718
	0.965	0.97	0.665	-150.135± 86.217
	0.965	0.965	0.605	-150.25± 86.297
	0.965	0.965	0.55	-150.31± 86.408
	0.975	0.98	0.62	-150.104± 86.144
	0.965	0.965	0.605	-150.607 ± 86.71
ClaPROAR	0.975	0.975	0.625	-150.361 ±86.427
	0.96	0.965	0.6	-150.056± 86.141
	0.97	0.97	0.565	-150.282± 86.381
	0.975	0.975	0.625	-150.463± 86.512
	0.98	0.98	0.52	-150.224± 86.259
	0.97	0.965	0.565	-150.386± 86.445
	0.955	0.955	0.575	-150.408± 86.504
	0.945	0.945	0.56	-150.318± 86.408
	0.98	0.98	0.565	-150.588± 86.679
	0.965	0.97	0.59	-150.218 ± 86.285

Tab. 297: Faithfulness experiment GMCS data experiment 1 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.98	0.99	0.58	-87.167 ±43.57
	0.965	0.96	0.705	-87.248± 43.42
	0.97	0.975	0.645	-87.152± 43.589
	0.98	0.965	0.585	-87.199± 43.566
	0.97	0.965	0.67	-87.215± 43.478
	0.98	0.97	0.62	-87.26± 43.512
	0.99	0.975	0.635	-87.263± 43.474
	0.975	0.97	0.615	-87.243± 43.466
	0.975	0.975	0.61	-87.249± 43.49
	0.975	0.965	0.63	-87.175 ± 43.55
ECCo	0.975	0.975	0.585	-85.2 ±44.913
	0.975	0.985	0.66	-85.23± 44.909
	0.975	0.975	0.62	-85.2± 44.977
	0.985	0.975	0.7	-85.175± 44.931
	0.975	0.975	0.645	-85.08± 45.028
	0.965	0.97	0.6	-85.195± 44.979
	0.975	0.985	0.67	-85.291± 44.829
	0.98	0.975	0.58	-85.182± 44.918
	0.97	0.965	0.565	-85.222± 44.854
	0.975	0.975	0.65	-85.192 ± 44.856
Wachter	0.975	0.98	0.645	-87.213 ±43.508
	0.975	0.975	0.63	-87.178± 43.538
	0.965	0.97	0.615	-87.16± 43.504
	0.96	0.955	0.705	-87.171± 43.526
	0.975	0.975	0.635	-87.285± 43.431
	0.975	0.965	0.62	-87.158± 43.568
	0.975	0.955	0.665	-87.18± 43.522
	0.985	0.985	0.655	-87.205± 43.455

	0.985	0.985	0.665	-87.198± 43.555
	0.95	0.945	0.595	-87.252 ± 43.424
Generic	0.985	0.98	0.63	-87.242 ±43.452
	0.985	0.975	0.65	-87.193± 43.559
	0.99	0.995	0.655	-87.201± 43.535
	0.985	0.98	0.63	-87.21± 43.469
	0.97	0.96	0.61	-87.314± 43.432
	0.985	0.975	0.64	-87.257± 43.531
	0.98	0.98	0.64	-87.247± 43.46
	0.98	0.95	0.61	-87.299± 43.453
	0.975	0.955	0.655	-87.234± 43.519
	0.99	0.975	0.635	-87.151 ± 43.579
DiCE	0.975	0.965	0.615	-87.133 ±43.536
	0.985	0.985	0.61	-87.236± 43.435
	0.98	0.985	0.64	-87.22± 43.511
	0.985	0.975	0.64	-87.277± 43.471
	0.97	0.965	0.72	-87.224± 43.496
	0.98	0.975	0.63	-87.204± 43.483
	0.965	0.97	0.61	-87.226± 43.565
	0.96	0.96	0.7	-87.23± 43.462
	0.97	0.96	0.645	-87.171± 43.531
	0.985	0.975	0.68	-87.24 ± 43.458
ClaPROAR	0.96	0.96	0.69	-87.151 ±43.567
	0.98	0.965	0.67	-87.196± 43.513
	0.975	0.965	0.605	-87.293± 43.462
	0.99	0.975	0.56	-87.231± 43.515
	0.97	0.98	0.575	-87.282± 43.47
	0.98	0.975	0.665	-87.194± 43.521
	0.97	0.975	0.62	-87.208± 43.513
	0.985	0.965	0.59	-87.271± 43.509
	0.99	0.98	0.62	-87.173± 43.543
	0.975	0.965	0.645	-87.155 ± 43.498

Tab. 298: Faithfulness experiment GMCS data experiment 2 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.98	0.98	0.64	-99.309 ±60.885
	0.96	0.96	0.64	-98.383± 59.934
	0.98	0.97	0.6	-98.568± 60.035
	0.975	0.97	0.645	-99.365± 60.987
	0.995	1.0	0.61	-99.12± 60.655
	0.965	0.96	0.66	-98.838± 60.345
	0.96	0.975	0.63	-99.069± 60.634
	0.97	0.97	0.645	-99.219± 60.747
	0.98	0.985	0.605	-98.877± 60.344
	0.965	0.945	0.655	-99.189 ± 60.761
ECCo	0.955	0.955	0.61	-96.733 ±58.092
	0.97	0.97	0.645	-96.665± 58.147
	0.98	0.975	0.585	-96.93± 58.404
	0.965	0.97	0.69	-96.73± 58.155
	0.965	0.96	0.61	-97.502± 59.005
	0.955	0.96	0.66	-97.306± 58.798
	0.975	0.96	0.645	-97.234± 58.825
	0.965	0.97	0.595	-96.787± 58.151
	0.98	0.985	0.59	-97.768± 59.343

	0.975	0.97	0.595	-97.059 ± 58.551
Wachter	0.945	0.935	0.63	-99.376 ±60.962
	0.945	0.97	0.62	-98.845± 60.319
	0.965	0.97	0.585	-98.854± 60.355
	0.96	0.965	0.615	-98.879± 60.486
	0.965	0.96	0.625	-99.066± 60.644
	0.975	0.98	0.64	-98.563± 59.976
	0.975	0.975	0.61	-99.048± 60.676
	0.975	0.97	0.62	-99.429± 60.956
	0.965	0.975	0.595	-98.743± 60.227
	0.98	0.975	0.575	-99.243 ± 60.815
Generic	0.97	0.975	0.615	-98.756 ±60.324
	0.985	0.99	0.61	-98.941± 60.51
	0.98	0.98	0.59	-99.571± 61.025
	0.965	0.96	0.65	-98.875± 60.443
	0.96	0.96	0.605	-99.542± 61.181
	0.97	0.96	0.595	-98.695± 60.097
	0.97	0.97	0.64	-98.976± 60.471
	0.985	0.975	0.62	-98.695± 60.226
	0.97	0.955	0.65	-98.851± 60.386
	0.97	0.975	0.605	-99.544 ± 61.055
DiCE	0.96	0.965	0.65	-98.509 ±59.989
	0.98	0.98	0.55	-98.932± 60.481
	0.98	0.98	0.6	-98.754± 60.276
	0.975	0.97	0.55	-99.131± 60.578
	0.955	0.97	0.615	-98.799± 60.373
	0.985	0.98	0.685	-98.888± 60.393
	0.98	0.98	0.605	-99.357± 60.851
	0.975	0.975	0.625	-99.022± 60.558
	0.975	0.98	0.6	-98.818± 60.363
	0.965	0.97	0.6	-98.701 ± 60.226
ClaPROAR	0.965	0.96	0.625	-98.839 ±60.282
	0.975	0.975	0.6	-99.371± 60.903
	0.97	0.965	0.64	-98.638± 60.161
	0.945	0.965	0.61	-98.687± 60.074
	0.975	0.98	0.595	-98.846± 60.377
	0.98	0.98	0.625	-99.473± 61.005
	0.975	0.97	0.645	-98.969± 60.597
	0.94	0.94	0.605	-98.783± 60.333
	0.98	0.975	0.605	-99.248± 60.732
	0.98	0.97	0.64	-98.847 ± 60.319

Tab. 299: Faithfulness experiment GMCS data experiment 3 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.965	0.95	0.525	-127.837 ±77.882
	0.975	0.97	0.625	-127.873± 77.885
	0.985	0.99	0.585	-127.85± 77.885
	0.955	0.95	0.61	-127.874± 77.944
	0.965	0.965	0.62	-127.857± 77.922
	0.97	0.975	0.57	-127.928± 77.973
	0.96	0.955	0.57	-127.862± 77.895
	0.98	0.98	0.61	-127.834± 77.87
	0.985	0.985	0.625	-127.865± 77.898
	0.98	0.975	0.575	-127.86 ± 77.915

ECCo	0.99	0.985	0.625	-127.46 ±77.743
	0.98	0.985	0.62	-127.461± 77.741
	0.97	0.965	0.58	-127.458± 77.719
	0.96	0.965	0.62	-127.457± 77.724
	0.985	0.98	0.6	-127.504± 77.739
	0.975	0.97	0.575	-127.477± 77.725
	0.975	0.975	0.6	-127.475± 77.72
	0.965	0.96	0.575	-127.455± 77.708
	0.98	0.99	0.605	-127.457± 77.717
	0.98	0.99	0.615	-127.497 ± 77.773
Wachter	0.97	0.97	0.565	-127.836 ±77.885
	0.97	0.97	0.57	-127.857± 77.887
	0.98	0.98	0.67	-127.859± 77.899
	0.97	0.97	0.625	-127.886± 77.919
	0.965	0.965	0.555	-127.863± 77.896
	0.965	0.955	0.575	-127.84± 77.9
	0.955	0.95	0.55	-127.843± 77.885
	0.965	0.95	0.6	-127.846± 77.913
	0.965	0.96	0.58	-127.825± 77.878
	0.975	0.975	0.555	-127.85 ± 77.907
Generic	0.98	0.99	0.58	-127.855 ±77.902
	0.98	0.97	0.625	-127.843± 77.913
	0.98	0.975	0.6	-127.812± 77.846
	0.96	0.96	0.585	-127.844± 77.904
	0.97	0.975	0.595	-127.844± 77.903
	0.99	0.99	0.565	-127.836± 77.901
	0.96	0.975	0.62	-127.868± 77.917
	0.96	0.97	0.57	-127.825± 77.887
	0.975	0.975	0.605	-127.84± 77.869
	0.97	0.985	0.61	-127.855 ± 77.908
DiCE	0.975	0.97	0.63	-127.862 ±77.912
	0.99	0.985	0.61	-127.83± 77.914
	0.985	0.97	0.595	-127.846± 77.901
	0.955	0.955	0.625	-127.854± 77.913
	0.97	0.965	0.56	-127.849± 77.892
	0.98	0.98	0.58	-127.895± 77.953
	0.97	0.97	0.63	-127.841± 77.874
	0.96	0.97	0.61	-127.847± 77.906
	0.975	0.975	0.575	-127.859± 77.915
	0.97	0.955	0.6	-127.842 ± 77.88
ClaPROAR	0.97	0.965	0.565	-127.864 ±77.906
	0.985	0.985	0.595	-127.868± 77.909
	0.98	0.97	0.575	-127.876± 77.907
	0.98	0.98	0.6	-127.817± 77.866
	0.975	0.97	0.61	-127.858± 77.923
	0.975	0.985	0.6	-127.863± 77.895
	0.965	0.97	0.53	-127.823± 77.864
	0.985	0.98	0.575	-127.831± 77.859
	0.965	0.965	0.55	-127.868± 77.912
	0.985	0.985	0.5	-127.861 ± 77.922

Tab. 300: Faithfulness experiment GMCS data experiment 4 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco

REVISE	0.95	0.95	0.61	-79.78 ±44.432
	0.945	0.95	0.695	-79.756± 44.413
	0.945	0.94	0.6	-80.548± 45.179
	0.98	0.97	0.605	-79.741± 44.33
	0.96	0.955	0.59	-79.852± 44.475
	0.98	0.985	0.66	-79.357± 43.857
	0.95	0.96	0.6	-79.612± 44.182
	0.975	0.975	0.61	-79.765± 44.344
	0.935	0.94	0.6	-80.715± 45.559
	0.965	0.955	0.625	-79.98 ± 44.728
ECCo	0.955	0.96	0.615	-78.687 ±43.325
	0.95	0.955	0.615	-78.867± 43.48
	0.945	0.95	0.64	-78.468± 42.981
	0.97	0.965	0.67	-77.969± 42.355
	0.96	0.955	0.635	-78.518± 43.061
	0.945	0.95	0.585	-78.053± 42.528
	0.965	0.965	0.625	-78.239± 42.721
	0.965	0.955	0.6	-78.533± 43.313
	0.955	0.93	0.63	-78.639± 43.333
	0.96	0.95	0.615	-78.93 ± 43.625
Wachter	0.975	0.965	0.59	-79.37 ±43.946
	0.975	0.98	0.635	-80.444± 45.207
	0.97	0.965	0.635	-79.546± 44.069
	0.94	0.92	0.645	-79.528± 43.942
	0.935	0.93	0.63	-79.633± 44.165
	0.975	0.965	0.59	-79.88± 44.352
	0.96	0.965	0.615	-80.096± 44.656
	0.945	0.95	0.605	-80.086± 44.796
	0.96	0.955	0.62	-79.449± 43.972
	0.955	0.95	0.6	-79.767 ± 44.363
Generic	0.97	0.97	0.6	-79.782 ±44.241
	0.965	0.96	0.65	-80.105± 44.679
	0.93	0.925	0.665	-79.645± 44.235
	0.945	0.94	0.62	-79.702± 44.258
	0.97	0.975	0.61	-79.849± 44.281
	0.98	0.98	0.55	-79.449± 44.02
	0.97	0.955	0.61	-79.212± 43.815
	0.965	0.965	0.59	-80.118± 44.778
	0.97	0.97	0.61	-80.305± 44.948
	0.97	0.975	0.66	-80.302 ± 45.022
DiCE	0.955	0.965	0.68	-79.919 ±44.447
	0.965	0.95	0.655	-80.164± 44.84
	0.955	0.95	0.65	-79.819± 44.449
	0.94	0.94	0.69	-79.559± 44.117
	0.955	0.94	0.595	-80.291± 45.072
	0.965	0.965	0.62	-79.747± 44.378
	0.955	0.935	0.615	-79.597± 44.005
	0.99	0.98	0.625	-80.017± 44.571
	0.955	0.945	0.58	-79.148± 43.598
	0.96	0.96	0.6	-79.87 ± 44.514
ClaPROAR	0.97	0.975	0.565	-79.803 ±44.345
	0.98	0.975	0.61	-79.967± 44.475
	0.965	0.965	0.615	-80.122± 44.783
	0.97	0.965	0.595	-79.678± 44.36
	0.94	0.95	0.6	-80.173± 44.809

	0.93	0.935	0.58	-79.762± 44.274
	0.98	0.98	0.635	-80.237± 44.841
	0.95	0.955	0.585	-80.106± 44.703
	0.985	0.98	0.63	-79.796± 44.368
	0.965	0.945	0.61	-79.616 ± 44.135

Tab. 301: Faithfulness experiment GMCS data experiment 5 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.96	0.95	0.615	-73.36± 37.064
	0.965	0.965	0.6	-73.365± 37.069
	0.96	0.955	0.66	-73.356± 37.058
	0.955	0.94	0.665	-73.364± 37.067
	0.935	0.92	0.58	-73.364± 37.064
	0.94	0.91	0.59	-73.36± 37.06
	0.935	0.93	0.645	-73.373± 37.064
	0.95	0.935	0.64	-73.364± 37.062
	0.965	0.965	0.59	-73.365± 37.062
	0.965	0.96	0.605	-73.363± 37.067
ECCo	0.96	0.955	0.63	-73.373± 37.064
	0.955	0.945	0.635	-73.363± 37.057
	0.96	0.94	0.68	-73.366± 37.06
	0.975	0.955	0.675	-73.363± 37.057
	0.98	0.96	0.645	-73.37± 37.06
	0.97	0.955	0.585	-73.37± 37.068
	0.93	0.935	0.615	-73.373± 37.063
	0.95	0.94	0.56	-73.368± 37.063
	0.97	0.935	0.63	-73.369± 37.066
	0.95	0.95	0.61	-73.375± 37.067
Wachter	0.96	0.95	0.625	-73.367± 37.066
	0.97	0.965	0.61	-73.367± 37.068
	0.95	0.94	0.625	-73.367± 37.065
	0.94	0.93	0.54	-73.365± 37.066
	0.955	0.94	0.59	-73.361± 37.061
	0.97	0.97	0.65	-73.365± 37.061
	0.945	0.945	0.675	-73.36± 37.065
	0.955	0.94	0.625	-73.363± 37.064
	0.97	0.97	0.58	-73.362± 37.07
	0.96	0.935	0.67	-73.364± 37.067
Generic	0.945	0.94	0.635	-73.364± 37.068
	0.94	0.97	0.605	-73.357± 37.061
	0.955	0.935	0.635	-73.36± 37.064
	0.97	0.955	0.61	-73.362± 37.063
	0.96	0.965	0.64	-73.374± 37.066
	0.965	0.98	0.57	-73.363± 37.064
	0.945	0.94	0.61	-73.362± 37.063
	0.95	0.95	0.63	-73.367± 37.068
	0.98	0.97	0.61	-73.365± 37.063
	0.955	0.94	0.645	-73.362± 37.061
DiCE	0.96	0.965	0.65	-73.368± 37.062
	0.965	0.96	0.645	-73.362± 37.065
	0.94	0.95	0.615	-73.362± 37.061
	0.94	0.925	0.58	-73.363± 37.061
	0.965	0.96	0.63	-73.366± 37.069
	0.965	0.96	0.62	-73.363± 37.063

	0.96	0.94	0.635	-73.362± 37.067
	0.96	0.955	0.63	-73.364± 37.065
	0.975	0.965	0.6	-73.36± 37.066
	0.975	0.97	0.595	-73.369± 37.066
ClaPROAR	0.965	0.97	0.66	-73.365± 37.063
	0.95	0.945	0.58	-73.364± 37.061
	0.955	0.95	0.575	-73.366± 37.067
	0.965	0.98	0.615	-73.365± 37.067
	0.955	0.95	0.615	-73.366± 37.065
	0.97	0.96	0.595	-73.36± 37.062
	0.955	0.955	0.62	-73.361± 37.067
	0.97	0.955	0.645	-73.372± 37.068
	0.945	0.925	0.655	-73.364± 37.063
	0.965	0.945	0.6	-73.37± 37.071

Tab. 302: Faithfulness experiment GMCS data experiment 1 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.98	0.965	0.61	-60.809± 28.003
	0.94	0.96	0.615	-60.818± 27.999
	0.96	0.95	0.65	-60.805± 28.005
	0.93	0.95	0.655	-60.812± 28.003
	0.95	0.955	0.605	-60.808± 28.0
	0.945	0.96	0.66	-60.811± 28.002
	0.95	0.965	0.635	-60.811± 28.0
	0.95	0.95	0.64	-60.808± 27.991
	0.905	0.93	0.735	-60.803± 28.006
	0.955	0.95	0.635	-60.795± 28.003
ECCo	0.97	0.95	0.665	-60.783± 27.949
	0.965	0.955	0.625	-60.789± 27.949
	0.955	0.945	0.69	-60.786± 27.941
	0.945	0.945	0.595	-60.788± 27.958
	0.945	0.96	0.64	-60.778± 27.954
	0.945	0.965	0.68	-60.78± 27.941
	0.97	0.97	0.62	-60.771± 27.953
	0.97	0.945	0.72	-60.789± 27.955
	0.96	0.97	0.695	-60.788± 27.949
	0.94	0.97	0.7	-60.774± 27.961
Wachter	0.955	0.95	0.65	-60.802± 28.01
	0.93	0.925	0.59	-60.811± 27.996
	0.97	0.965	0.63	-60.811± 28.003
	0.97	0.96	0.655	-60.815± 27.996
	0.95	0.96	0.595	-60.802± 28.011
	0.935	0.925	0.635	-60.805± 28.005
	0.97	0.975	0.675	-60.809± 28.002
	0.95	0.945	0.65	-60.809± 27.998
	0.975	0.99	0.57	-60.806± 28.008
	0.955	0.955	0.625	-60.811± 28.001
Generic	0.97	0.985	0.63	-60.815± 27.994
	0.945	0.955	0.72	-60.812± 28.005
	0.98	0.945	0.69	-60.803± 27.995
	0.935	0.935	0.6	-60.814± 28.001
	0.98	0.98	0.67	-60.809± 28.0
	0.94	0.93	0.58	-60.814± 28.005
	0.94	0.945	0.635	-60.807± 27.997

	0.95	0.965	0.645	-60.806± 28.005
	0.98	0.985	0.625	-60.813± 28.006
	0.965	0.965	0.655	-60.814± 27.996
DiCE	0.95	0.945	0.645	-60.81± 28.007
	0.94	0.935	0.605	-60.809± 28.002
	0.975	0.97	0.615	-60.812± 28.0
	0.965	0.95	0.625	-60.8± 28.002
	0.98	0.97	0.66	-60.808± 27.999
	0.96	0.965	0.695	-60.809± 28.005
	0.955	0.955	0.585	-60.811± 28.002
	0.975	0.97	0.625	-60.811± 28.006
	0.94	0.97	0.6	-60.81± 28.006
	0.955	0.975	0.64	-60.812± 27.999
ClaPROAR	0.96	0.96	0.64	-60.806± 28.011
	0.95	0.96	0.615	-60.81± 28.001
	0.94	0.94	0.605	-60.808± 28.004
	0.95	0.97	0.63	-60.808± 27.998
	0.955	0.945	0.655	-60.806± 28.007
	0.98	0.975	0.615	-60.811± 28.004
	0.94	0.945	0.63	-60.819± 27.999
	0.935	0.95	0.67	-60.811± 28.002
	0.97	0.955	0.63	-60.81± 27.999
	0.95	0.955	0.64	-60.802± 28.008

Tab. 303: Faithfulness experiment GMCS data experiment 2 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.94	0.94	0.62	-123.617± 56.136
	0.945	0.945	0.6	-124.136± 56.396
	0.975	0.965	0.65	-123.9± 56.191
	0.97	0.975	0.645	-123.831± 55.671
	0.96	0.935	0.59	-123.691± 56.128
	0.955	0.945	0.605	-123.265± 55.385
	0.98	0.975	0.6	-123.679± 55.929
	0.97	0.965	0.55	-124.071± 55.815
	0.955	0.95	0.575	-123.353± 55.517
	0.95	0.93	0.595	-123.127± 55.443
ECCo	0.955	0.95	0.64	-124.168± 55.147
	0.96	0.96	0.645	-124.232± 55.216
	0.955	0.96	0.6	-124.097± 55.015
	0.95	0.95	0.555	-123.52± 54.657
	0.96	0.94	0.54	-123.963± 54.676
	0.96	0.945	0.6	-124.801± 55.538
	0.95	0.955	0.57	-123.805± 54.787
	0.96	0.955	0.63	-124.244± 54.999
	0.97	0.975	0.66	-124.554± 55.525
	0.985	0.965	0.62	-124.087± 55.201
Wachter	0.955	0.92	0.585	-123.698± 55.782
	0.965	0.975	0.58	-123.537± 55.69
	0.98	0.965	0.655	-123.877± 56.282
	0.98	0.97	0.66	-123.917± 55.893
	0.965	0.95	0.65	-123.405± 55.311
	0.945	0.955	0.59	-123.271± 55.412
	0.975	0.965	0.61	-123.077± 55.758
	0.985	0.965	0.625	-124.09± 56.097

	0.955	0.95	0.62	-124.115± 56.111
	0.975	0.945	0.65	-123.966± 56.075
Generic	0.95	0.95	0.62	-123.816± 55.947
	0.975	0.965	0.585	-124.177± 56.43
	0.965	0.965	0.64	-123.606± 56.025
	0.98	0.95	0.57	-124.081± 55.972
	0.98	0.97	0.605	-123.468± 55.628
	0.965	0.96	0.59	-124.011± 56.239
	0.96	0.96	0.615	-123.701± 56.011
	0.955	0.95	0.61	-123.95± 55.884
	0.955	0.96	0.585	-123.448± 55.418
	0.945	0.945	0.59	-123.973± 56.102
DiCE	0.965	0.96	0.655	-123.65± 55.851
	0.975	0.97	0.575	-124.006± 55.989
	0.95	0.935	0.655	-124.013± 56.47
	0.955	0.97	0.63	-124.289± 56.452
	0.955	0.965	0.6	-123.922± 56.325
	0.965	0.945	0.58	-123.367± 55.265
	0.97	0.98	0.6	-124.379± 56.703
	0.975	0.955	0.585	-123.777± 56.251
	0.97	0.95	0.645	-124.244± 56.298
	0.97	0.94	0.62	-124.209± 56.285
ClaPROAR	0.94	0.935	0.58	-124.241± 56.317
	0.98	0.965	0.615	-123.889± 56.188
	0.98	0.965	0.605	-123.757± 55.913
	0.965	0.97	0.61	-123.566± 55.804
	0.955	0.94	0.605	-123.667± 55.695
	0.95	0.935	0.6	-124.025± 56.378
	0.95	0.925	0.61	-124.04± 56.425
	0.95	0.945	0.62	-123.896± 55.954
	0.925	0.94	0.65	-122.992± 55.233
	0.945	0.945	0.66	-123.732± 56.255

Tab. 304: Faithfulness experiment GMCS data experiment 3 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.935	0.945	0.645	-97.232± 49.492
	0.935	0.95	0.685	-97.39± 49.752
	0.97	0.96	0.62	-97.743± 50.034
	0.975	0.97	0.63	-97.232± 49.488
	0.935	0.94	0.59	-97.396± 49.725
	0.97	0.965	0.65	-97.722± 49.963
	0.96	0.96	0.635	-97.647± 49.81
	0.93	0.95	0.625	-97.55± 49.904
	0.95	0.94	0.58	-97.985± 50.358
	0.965	0.955	0.595	-96.954± 49.297
ECCo	0.915	0.92	0.63	-94.117± 46.384
	0.945	0.95	0.59	-94.283± 46.414
	0.945	0.945	0.595	-93.808± 46.077
	0.945	0.96	0.66	-93.836± 46.083
	0.945	0.94	0.6	-94.559± 46.926
	0.94	0.94	0.595	-94.389± 46.558
	0.97	0.975	0.605	-93.971± 46.245
	0.965	0.945	0.615	-94.414± 46.781
	0.965	0.97	0.6	-93.583± 45.812

	0.95	0.93	0.615	-94.048± 46.409
Wachter	0.97	0.955	0.585	-97.668± 49.916
	0.96	0.965	0.59	-97.901± 50.115
	0.965	0.965	0.625	-98.168± 50.552
	0.96	0.955	0.63	-97.582± 49.933
	0.96	0.96	0.605	-97.948± 50.257
	0.955	0.96	0.66	-97.538± 49.865
	0.955	0.96	0.57	-97.705± 49.841
	0.99	0.975	0.57	-97.625± 49.884
	0.98	0.975	0.595	-96.933± 49.255
	0.935	0.945	0.635	-97.914± 50.22
Generic	0.97	0.965	0.63	-97.454± 49.84
	0.955	0.965	0.59	-97.925± 50.168
	0.95	0.945	0.63	-97.651± 49.931
	0.96	0.965	0.615	-97.944± 50.27
	0.955	0.975	0.61	-97.274± 49.501
	0.925	0.94	0.605	-97.824± 50.124
	0.96	0.96	0.595	-97.167± 49.446
	0.96	0.955	0.595	-97.887± 50.108
	0.95	0.955	0.62	-97.225± 49.538
	0.94	0.96	0.615	-98.308± 50.647
DiCE	0.945	0.965	0.645	-97.718± 49.928
	0.95	0.955	0.655	-97.708± 49.956
	0.95	0.94	0.685	-97.649± 49.897
	0.97	0.955	0.595	-97.578± 49.754
	0.97	0.97	0.615	-97.482± 49.761
	0.955	0.95	0.64	-97.206± 49.449
	0.975	0.95	0.63	-98.047± 50.288
	0.93	0.94	0.61	-97.662± 49.899
	0.965	0.95	0.6	-97.95± 50.173
	0.96	0.965	0.6	-97.715± 49.904
ClaPROAR	0.91	0.94	0.635	-97.969± 50.188
	0.94	0.915	0.59	-97.431± 49.673
	0.96	0.955	0.63	-97.626± 49.912
	0.955	0.945	0.64	-97.834± 50.137
	0.95	0.945	0.595	-97.257± 49.565
	0.96	0.94	0.575	-97.965± 50.323
	0.955	0.945	0.625	-97.302± 49.667
	0.95	0.93	0.59	-97.765± 49.959
	0.93	0.935	0.55	-97.45± 49.694
	0.95	0.96	0.645	-97.292± 49.696

Tab. 305: Faithfulness experiment GMCS data experiment 4 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.975	0.97	0.555	-61.411± 30.804
	0.92	0.93	0.585	-61.403± 30.808
	0.96	0.95	0.595	-61.404± 30.806
	0.985	0.975	0.625	-61.407± 30.804
	0.945	0.97	0.58	-61.405± 30.809
	0.96	0.945	0.6	-61.411± 30.803
	0.955	0.98	0.61	-61.41± 30.8
	0.955	0.96	0.62	-61.404± 30.804
	0.98	0.97	0.515	-61.405± 30.806
	0.94	0.955	0.62	-61.408± 30.804

ECCo	0.955	0.945	0.58	-61.415± 30.809
	0.97	0.96	0.585	-61.415± 30.81
	0.96	0.97	0.545	-61.413± 30.81
	0.96	0.975	0.575	-61.417± 30.805
	0.96	0.965	0.6	-61.416± 30.806
	0.975	0.975	0.625	-61.414± 30.809
	0.95	0.955	0.615	-61.409± 30.814
	0.96	0.945	0.665	-61.414± 30.808
	0.955	0.945	0.585	-61.41± 30.814
	0.96	0.95	0.585	-61.415± 30.808
Wachter	0.935	0.93	0.6	-61.404± 30.809
	0.935	0.95	0.595	-61.406± 30.806
	0.95	0.945	0.6	-61.401± 30.81
	0.95	0.955	0.605	-61.41± 30.805
	0.97	0.965	0.59	-61.413± 30.802
	0.98	0.98	0.565	-61.415± 30.803
	0.955	0.955	0.59	-61.408± 30.804
	0.95	0.95	0.58	-61.41± 30.807
	0.945	0.955	0.59	-61.407± 30.811
	0.965	0.945	0.55	-61.414± 30.799
Generic	0.955	0.955	0.575	-61.408± 30.806
	0.945	0.94	0.605	-61.408± 30.807
	0.96	0.935	0.615	-61.406± 30.809
	0.96	0.95	0.57	-61.407± 30.806
	0.97	0.965	0.585	-61.41± 30.807
	0.975	0.955	0.51	-61.406± 30.805
	0.98	0.985	0.61	-61.404± 30.808
	0.97	0.955	0.55	-61.413± 30.802
	0.965	0.96	0.59	-61.405± 30.808
	0.965	0.965	0.58	-61.401± 30.809
DiCE	0.94	0.935	0.63	-61.407± 30.804
	0.96	0.975	0.66	-61.409± 30.806
	0.96	0.95	0.525	-61.407± 30.809
	0.965	0.965	0.575	-61.408± 30.806
	0.965	0.965	0.56	-61.406± 30.806
	0.95	0.94	0.635	-61.406± 30.808
	0.915	0.92	0.635	-61.409± 30.803
	0.955	0.97	0.585	-61.407± 30.808
	0.97	0.97	0.645	-61.41± 30.802
	0.955	0.94	0.545	-61.412± 30.803
ClaPROAR	0.945	0.95	0.63	-61.413± 30.801
	0.975	0.96	0.55	-61.405± 30.81
	0.965	0.985	0.655	-61.408± 30.808
	0.94	0.95	0.6	-61.41± 30.806
	0.965	0.99	0.57	-61.407± 30.802
	0.96	0.96	0.58	-61.407± 30.809
	0.95	0.955	0.62	-61.41± 30.801
	0.965	0.935	0.555	-61.405± 30.806
	0.965	0.96	0.63	-61.41± 30.804
	0.96	0.94	0.585	-61.404± 30.806

Tab. 306: Faithfulness experiment GMCS data experiment 5 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco

Gravitational	0.667	0.667	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.002
	1.0	0.667	1.0	0.002± 0.002
	0.667	0.5	1.0	0.002± 0.002
	0.833	0.667	1.0	0.002± 0.002
	0.667	0.667	1.0	0.002± 0.002
	0.667	1.0	1.0	0.002± 0.002
	0.833	0.833	1.0	0.002± 0.002
	0.667	0.667	1.0	0.002± 0.002
	0.833	1.0	1.0	0.002± 0.002
REVISE	0.833	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.667	1.0	0.833	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
ECCo	0.833	0.667	1.0	0.001± 0.001
	0.833	0.833	0.833	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.833	0.833	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
Wachter	0.667	0.667	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.667	0.667	0.833	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	0.833	0.001± 0.001
Generic	0.667	0.667	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
DiCE	0.667	0.667	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001

	0.667	0.667	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
ClaPROAR	0.833	0.833	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001

Tab. 307: Faithfulness experiment Iris data experiment 1 when using a MLP and a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.5	0.5	1.0	0.004± 0.005
	1.0	0.833	1.0	0.003± 0.004
	0.5	0.5	1.0	0.003± 0.004
	1.0	0.667	1.0	0.002± 0.003
	0.667	0.667	1.0	0.002± 0.003
	1.0	0.833	1.0	0.004± 0.005
	0.667	0.667	0.833	0.002± 0.003
	1.0	0.667	1.0	0.002± 0.003
	0.667	0.667	1.0	0.002± 0.003
	0.667	0.833	1.0	0.002± 0.004
REVISE	1.0	0.333	1.0	0.003± 0.006
	1.0	0.833	1.0	0.005± 0.006
	0.667	0.667	1.0	0.005± 0.006
	0.667	0.667	1.0	0.008± 0.007
	1.0	0.667	0.833	0.005± 0.007
	0.833	0.5	1.0	0.007± 0.007
	0.667	0.333	1.0	0.004± 0.006
	0.667	1.0	1.0	0.005± 0.006
	1.0	0.5	1.0	0.005± 0.006
	1.0	0.333	1.0	0.006± 0.007
ECCo	0.833	0.833	1.0	0.005± 0.006
	0.833	0.667	1.0	0.004± 0.006
	0.667	0.667	1.0	0.006± 0.007
	1.0	1.0	1.0	0.005± 0.006
	0.667	0.667	1.0	0.005± 0.006
	1.0	0.667	1.0	0.005± 0.006
	0.667	0.833	1.0	0.003± 0.006
	1.0	0.5	1.0	0.007± 0.007
	0.833	0.667	0.833	0.004± 0.006
	0.833	1.0	1.0	0.005± 0.007
Wachter	0.833	0.667	0.833	0.004± 0.006
	0.833	1.0	1.0	0.005± 0.006
	0.667	0.667	0.833	0.006± 0.007
	0.667	0.667	1.0	0.007± 0.007
	1.0	0.833	1.0	0.006± 0.007
	0.833	0.5	1.0	0.005± 0.007

	0.833	0.667	1.0	0.005± 0.006
	0.667	0.667	1.0	0.005± 0.006
	0.833	0.833	1.0	0.004± 0.006
	0.5	0.5	1.0	0.005± 0.007
Generic	0.833	0.667	1.0	0.005± 0.007
	1.0	0.833	1.0	0.005± 0.007
	0.667	0.833	1.0	0.004± 0.006
	0.833	0.5	1.0	0.006± 0.007
	0.667	0.5	0.833	0.005± 0.006
	0.667	0.667	1.0	0.004± 0.006
	1.0	0.667	1.0	0.005± 0.006
	1.0	0.5	0.833	0.005± 0.007
	0.833	0.667	1.0	0.005± 0.006
	1.0	0.5	0.833	0.005± 0.006
DiCE	0.833	0.667	1.0	0.005± 0.007
	1.0	0.5	1.0	0.004± 0.006
	0.667	0.167	1.0	0.005± 0.007
	0.833	1.0	0.833	0.005± 0.007
	0.667	0.667	1.0	0.005± 0.007
	1.0	0.5	1.0	0.005± 0.006
	0.667	0.333	0.833	0.005± 0.006
	0.833	0.667	1.0	0.005± 0.007
	0.667	0.667	1.0	0.003± 0.006
	0.667	0.333	0.833	0.008± 0.007
ClaPROAR	0.833	0.667	0.833	0.006± 0.007
	1.0	0.333	1.0	0.005± 0.007
	0.667	0.833	1.0	0.004± 0.006
	0.5	0.667	1.0	0.007± 0.007
	0.833	1.0	1.0	0.004± 0.006
	0.5	0.5	1.0	0.007± 0.007
	0.833	0.833	0.833	0.006± 0.007
	0.5	0.5	1.0	0.005± 0.007
	0.667	1.0	0.833	0.006± 0.007
	0.5	0.833	0.833	0.004± 0.006

Tab. 308: Faithfulness experiment Iris data experiment 2 when using a MLP and a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.833	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	0.833	0.667	0.833	0.001± 0.001
	0.833	0.667	0.667	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.833	0.5	0.667	0.001± 0.001
REVISE	0.833	0.833	0.833	0.001± 0.001
	1.0	1.0	1.0	0.0± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001

	1.0	0.833	1.0	0.001± 0.001
	0.833	0.833	1.0	0.0± 0.001
	1.0	0.667	1.0	0.0± 0.001
ECCo	1.0	0.833	0.833	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	1.0	0.833	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	0.667	0.667	0.833	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
Wachter	1.0	0.5	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	0.833	0.001± 0.001
	0.833	0.667	0.833	0.001± 0.001
	0.833	0.333	0.833	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	0.833	0.001± 0.001
	1.0	0.667	0.833	0.0± 0.001
	1.0	0.667	0.833	0.001± 0.001
Generic	1.0	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	0.833	0.001± 0.001
	0.833	0.667	0.833	0.001± 0.001
	1.0	0.667	0.833	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	0.667	0.833	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
DiCE	0.833	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	0.833	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.667	0.833	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
ClaPROAR	1.0	0.667	1.0	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
	0.833	0.667	0.667	0.001± 0.001
	0.833	0.5	0.833	0.001± 0.001
	1.0	0.333	0.833	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	1.0	1.0	0.833	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001

Tab. 309: Faithfulness experiment Iris data experiment 3 when using a MLP and a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.002
	0.833	0.667	1.0	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.833	0.833	0.002± 0.002
	1.0	0.667	1.0	0.001± 0.002
	1.0	0.667	1.0	0.002± 0.002
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
REVISE	1.0	0.667	1.0	0.001± 0.0
	1.0	1.0	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	0.667	1.0	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.0
	0.833	0.833	0.833	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.0± 0.0
	1.0	0.667	1.0	0.001± 0.0
ECCo	1.0	0.667	1.0	0.0± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.833	1.0	0.0± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.0± 0.0
	1.0	0.833	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
Wachter	1.0	0.667	1.0	0.001± 0.0
	1.0	0.833	1.0	0.001± 0.0
	0.833	0.833	1.0	0.0± 0.0
	1.0	0.833	0.833	0.001± 0.0
	1.0	0.667	0.833	0.001± 0.0
	1.0	1.0	0.833	0.001± 0.0
	1.0	0.833	1.0	0.0± 0.0
	1.0	0.667	0.833	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	1.0	1.0	0.001± 0.0
Generic	1.0	0.667	0.833	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	1.0	1.0	0.001± 0.0
	0.833	0.667	1.0	0.001± 0.0
	1.0	0.667	0.833	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	1.0	1.0	0.001± 0.0
DiCE	1.0	0.833	1.0	0.001± 0.0
	1.0	0.667	1.0	0.0± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0

	1.0	0.667	0.833	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.833	1.0	0.001± 0.0
	1.0	0.667	0.833	0.001± 0.0
	1.0	0.833	1.0	0.001± 0.0
	0.667	0.667	1.0	0.001± 0.0
ClaPROAR	1.0	0.667	1.0	0.001± 0.0
	1.0	1.0	1.0	0.001± 0.0
	1.0	0.667	0.833	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	0.833	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0
	1.0	0.667	1.0	0.001± 0.0

Tab. 310: Faithfulness experiment Iris data experiment 4 when using a MLP and a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	1.0	1.0	0.002± 0.001
	1.0	0.667	1.0	0.002± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.002± 0.002
	1.0	0.833	1.0	0.002± 0.001
	1.0	1.0	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.5	1.0	0.002± 0.001
	1.0	1.0	1.0	0.002± 0.002
	1.0	0.667	1.0	0.002± 0.002
REVISE	1.0	1.0	1.0	0.002± 0.002
	1.0	0.333	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.002
	1.0	0.667	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.002
	1.0	1.0	1.0	0.002± 0.002
	1.0	0.667	1.0	0.001± 0.002
	1.0	0.833	1.0	0.001± 0.002
	1.0	0.667	1.0	0.002± 0.002
ECCo	1.0	0.667	1.0	0.002± 0.002
	1.0	0.833	1.0	0.001± 0.002
	1.0	0.667	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.002
	1.0	0.833	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.002
Wachter	1.0	1.0	1.0	0.001± 0.002
	1.0	1.0	1.0	0.002± 0.002
	1.0	0.833	1.0	0.001± 0.002
	1.0	0.833	1.0	0.001± 0.002
	1.0	0.667	1.0	0.002± 0.002

	1.0	1.0	0.833	0.001± 0.002
	1.0	1.0	1.0	0.002± 0.002
	1.0	0.833	1.0	0.002± 0.002
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.002
Generic	1.0	0.333	1.0	0.001± 0.002
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.002
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.002± 0.002
	1.0	0.833	0.833	0.001± 0.001
	1.0	0.833	0.833	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.002
DiCE	1.0	1.0	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.5	1.0	0.001± 0.002
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.002
	1.0	0.667	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.002
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.002
ClaPROAR	1.0	1.0	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.002
	1.0	0.833	1.0	0.002± 0.002
	1.0	1.0	1.0	0.001± 0.001

Tab. 311: Faithfulness experiment Iris data experiment 5 when using a MLP and a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.667	0.667	1.0	-37.286± 11.967
	0.667	0.667	0.833	-43.885± 12.595
	0.667	0.667	1.0	-41.602± 12.33
	0.667	0.667	0.833	-42.225± 13.352
	0.667	0.667	0.833	-42.174± 12.607
	0.667	0.667	1.0	-44.364± 11.922
	0.667	0.667	1.0	-41.045± 12.763
	0.667	0.667	1.0	-46.06± 10.724
	0.667	0.667	0.833	-42.132± 12.604
	0.667	0.667	1.0	-44.937± 12.087
ECCo	0.667	0.667	1.0	-43.958± 13.272
	0.667	0.667	0.833	-41.186± 14.125
	0.667	0.667	0.833	-41.091± 13.389
	0.667	0.667	0.833	-41.753± 13.822
	0.667	0.667	0.833	-44.884± 11.26
	0.667	0.667	1.0	-43.215± 11.579

	0.667	0.667	1.0	-43.268± 12.285
	0.667	0.667	0.833	-38.815± 12.743
	0.667	0.667	1.0	-42.637± 12.011
	0.667	0.667	0.833	-45.51± 12.196
Wachter	0.667	0.667	1.0	-41.093± 12.8
	0.667	0.667	0.833	-41.723± 13.823
	0.667	0.667	1.0	-43.829± 12.523
	0.667	0.667	0.833	-40.578± 13.908
	0.667	0.833	1.0	-43.94± 13.24
	0.667	0.667	0.833	-44.413± 12.699
	0.667	0.667	0.833	-43.342± 13.114
	0.667	0.667	1.0	-41.677± 13.759
	0.667	0.667	1.0	-40.451± 13.113
	0.667	0.667	0.833	-43.168± 12.268
Generic	0.667	0.667	1.0	-47.26± 10.865
	0.667	0.667	0.833	-43.916± 12.578
	0.667	0.667	1.0	-40.047± 14.241
	0.667	0.667	1.0	-44.331± 11.958
	0.667	0.667	1.0	-42.353± 14.679
	0.667	0.667	1.0	-43.896± 13.244
	0.667	0.667	1.0	-41.015± 12.748
	0.667	0.667	0.833	-46.104± 11.539
	0.667	0.667	1.0	-40.614± 14.482
	0.667	0.667	0.833	-41.604± 13.056
DiCE	0.667	0.667	1.0	-44.465± 12.694
	0.667	0.667	0.833	-45.007± 12.142
	0.667	0.667	0.833	-40.554± 13.252
	0.667	0.667	0.833	-41.615± 13.098
	0.667	0.667	0.833	-38.333± 13.787
	0.667	0.667	1.0	-44.363± 11.975
	0.667	0.667	0.833	-40.993± 12.768
	0.667	0.667	0.833	-37.88± 14.18
	0.667	0.667	0.833	-41.522± 12.307
	0.667	0.667	1.0	-42.247± 13.382
ClaPROAR	0.667	0.667	0.833	-37.711± 12.697
	0.667	0.667	0.833	-43.344± 13.119
	0.667	0.667	0.833	-42.621± 12.098
	0.667	0.667	0.833	-42.626± 12.064
	0.667	0.667	0.833	-42.133± 12.623
	0.667	0.667	1.0	-40.944± 12.764
	0.667	0.667	0.833	-41.108± 13.537
	0.667	0.667	0.833	-42.692± 12.814
	0.667	0.667	1.0	-42.693± 12.867
	0.667	0.667	1.0	-41.627± 13.079

Tab. 312: Faithfulness experiment Iris data experiment 1 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.833	1.0	0.833	-34.266± 12.108
	0.833	0.833	0.667	-37.398± 10.537
	0.667	0.833	0.833	-32.407± 12.271
	1.0	1.0	0.833	-33.976± 11.894
	1.0	1.0	0.833	-33.844± 12.647
	0.833	0.833	0.833	-36.038± 11.614
	0.833	0.833	1.0	-34.117± 11.995

	0.833	0.833	1.0	-32.314± 12.186
	0.667	0.833	1.0	-35.183± 11.933
	0.833	1.0	0.833	-38.395± 10.117
ECCo	1.0	1.0	1.0	-33.38± 12.258
	1.0	0.833	0.833	-35.732± 11.415
	0.833	0.833	0.833	-35.778± 11.453
	1.0	0.833	0.833	-35.935± 11.557
	1.0	1.0	1.0	-32.587± 12.405
	0.833	1.0	0.833	-35.938± 11.57
	0.833	0.833	1.0	-35.029± 11.822
	0.833	0.667	1.0	-34.293± 12.134
	0.667	1.0	0.833	-32.619± 12.467
	0.667	0.833	0.833	-35.067± 11.86
Wachter	1.0	0.833	1.0	-34.951± 11.772
	0.667	0.667	1.0	-35.126± 11.89
	0.833	0.667	0.833	-32.326± 12.189
	0.833	1.0	0.833	-35.148± 11.917
	0.833	1.0	1.0	-33.283± 12.18
	0.833	1.0	0.833	-33.733± 12.531
	0.833	0.833	1.0	-34.046± 11.935
	0.667	0.833	0.833	-36.655± 11.103
	0.833	0.667	1.0	-34.347± 12.175
	0.667	0.667	0.833	-35.053± 11.846
Generic	0.833	0.833	0.833	-33.03± 11.962
	0.833	1.0	1.0	-31.926± 12.665
	1.0	0.833	0.833	-36.811± 11.201
	0.833	0.833	1.0	-32.581± 12.426
	0.833	0.833	1.0	-33.594± 12.43
	0.833	0.833	1.0	-33.202± 12.105
	0.833	1.0	1.0	-35.199± 11.913
	0.833	0.833	0.833	-34.832± 11.679
	1.0	1.0	1.0	-32.635± 12.443
	0.833	1.0	0.833	-33.289± 12.156
DiCE	0.833	0.833	1.0	-34.279± 12.135
	0.833	1.0	1.0	-35.246± 11.972
	0.833	0.833	1.0	-33.368± 12.251
	1.0	1.0	1.0	-35.05± 11.85
	0.667	1.0	0.833	-35.652± 11.353
	0.833	1.0	0.833	-38.505± 10.168
	0.833	0.833	1.0	-33.517± 12.371
	0.833	1.0	1.0	-35.682± 11.372
	1.0	1.0	0.833	-38.603± 10.196
	1.0	1.0	1.0	-35.677± 11.394
ClaPROAR	1.0	1.0	0.833	-32.518± 12.365
	1.0	1.0	0.833	-35.084± 11.852
	0.833	1.0	1.0	-36.063± 11.643
	0.833	1.0	1.0	-31.065± 12.645
	0.833	1.0	1.0	-33.106± 12.008
	1.0	1.0	1.0	-35.262± 11.995
	0.667	1.0	0.833	-38.439± 10.11
	1.0	1.0	1.0	-37.543± 10.642
	1.0	1.0	0.833	-32.325± 12.189
	1.0	0.833	1.0	-35.042± 11.84

Tab. 313: Faithfulness experiment Iris data experiment 2 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-41.558± 13.521
	0.667	1.0	0.833	-33.677± 14.273
	1.0	1.0	1.0	-39.383± 15.613
	0.667	1.0	1.0	-40.038± 12.661
	0.667	1.0	1.0	-34.234± 14.853
	0.667	0.667	1.0	-39.028± 14.676
	1.0	1.0	1.0	-40.549± 15.501
	0.833	1.0	0.667	-38.431± 15.044
	0.833	1.0	1.0	-43.039± 14.173
	0.667	0.833	1.0	-37.716± 15.353
ECCo	1.0	1.0	1.0	-40.484± 14.588
	1.0	1.0	1.0	-40.39± 15.348
	1.0	1.0	1.0	-39.164± 15.389
	0.667	0.833	0.833	-41.1± 14.116
	0.667	1.0	1.0	-39.391± 14.786
	0.667	1.0	0.833	-35.239± 14.862
	0.667	0.667	0.833	-41.485± 15.123
	0.667	1.0	1.0	-37.049± 14.75
	0.667	0.667	1.0	-43.704± 15.032
	0.667	1.0	0.833	-38.16± 14.782
Wachter	0.833	1.0	1.0	-36.25± 14.182
	0.667	0.833	0.833	-39.878± 15.929
	0.667	1.0	1.0	-36.205± 14.162
	0.667	1.0	1.0	-40.841± 14.047
	0.833	0.833	1.0	-40.742± 14.794
	1.0	1.0	0.833	-38.899± 15.366
	0.833	1.0	0.667	-39.55± 15.0
	1.0	1.0	0.833	-40.401± 13.783
	0.833	1.0	0.833	-38.127± 16.368
	0.667	1.0	1.0	-38.582± 14.338
Generic	0.667	1.0	0.833	-38.886± 15.386
	0.667	1.0	1.0	-40.111± 15.267
	1.0	1.0	1.0	-37.555± 13.579
	0.833	0.833	1.0	-38.403± 15.031
	0.667	1.0	1.0	-40.543± 12.984
	0.667	0.833	0.833	-38.941± 15.363
	0.667	0.833	1.0	-36.245± 14.194
	1.0	1.0	1.0	-36.705± 14.613
	0.833	0.833	1.0	-38.044± 13.903
	0.833	0.833	0.833	-36.233± 14.202
DiCE	1.0	1.0	1.0	-35.393± 15.089
	0.667	1.0	1.0	-41.868± 14.58
	1.0	1.0	1.0	-37.87± 14.659
	0.667	1.0	1.0	-40.047± 15.262
	0.667	1.0	0.833	-38.267± 15.687
	1.0	1.0	1.0	-41.245± 15.095
	0.833	1.0	0.667	-40.797± 14.771
	0.833	1.0	1.0	-36.727± 14.657
	0.667	1.0	1.0	-38.065± 13.939
	1.0	0.833	0.833	-37.58± 16.011
ClaPROAR	0.833	1.0	1.0	-36.834± 13.833
	1.0	1.0	1.0	-34.551± 13.448
	0.833	0.833	0.833	-37.23± 14.994
	1.0	1.0	1.0	-39.311± 14.087

	0.833	1.0	0.833	-39.836± 14.391
	0.667	1.0	1.0	-40.726± 14.813
	0.833	0.833	0.833	-39.062± 14.574
	0.667	1.0	0.833	-39.754± 14.242
	0.833	1.0	1.0	-36.042± 14.905
	0.667	0.833	0.833	-35.991± 14.798

Tab. 314: Faithfulness experiment Iris data experiment 3 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.833	1.0	0.833	-37.875± 10.046
	1.0	1.0	1.0	-31.591± 12.668
	0.833	0.667	1.0	-32.187± 12.385
	1.0	1.0	0.833	-36.066± 10.96
	1.0	0.833	1.0	-33.772± 12.024
	0.833	0.833	1.0	-32.505± 12.658
	1.0	1.0	1.0	-36.339± 11.142
	0.833	0.833	1.0	-36.363± 11.142
	0.667	0.833	1.0	-31.876± 12.92
	1.0	0.833	1.0	-33.665± 11.939
ECCo	0.833	0.833	0.833	-37.153± 10.643
	1.0	1.0	1.0	-36.796± 11.364
	1.0	1.0	1.0	-36.466± 11.178
	0.833	0.833	0.833	-33.072± 12.275
	1.0	1.0	1.0	-35.419± 11.432
	1.0	1.0	1.0	-34.169± 12.279
	1.0	1.0	1.0	-34.072± 12.224
	1.0	1.0	1.0	-32.454± 12.58
	0.833	1.0	0.667	-33.803± 12.016
	0.833	0.833	0.833	-33.627± 11.879
Wachter	1.0	1.0	1.0	-35.799± 11.701
	1.0	1.0	1.0	-37.926± 10.066
	0.833	1.0	1.0	-35.941± 11.791
	0.833	0.667	0.833	-33.696± 11.961
	1.0	1.0	0.833	-32.242± 12.421
	1.0	1.0	0.833	-33.898± 12.116
	0.667	0.833	1.0	-35.793± 11.692
	0.833	1.0	1.0	-36.816± 10.46
	1.0	1.0	1.0	-35.423± 11.465
	0.833	1.0	1.0	-33.952± 12.159
Generic	0.833	1.0	0.833	-33.054± 12.265
	1.0	1.0	0.833	-32.606± 12.719
	1.0	0.833	1.0	-35.511± 11.516
	0.833	0.833	0.833	-34.538± 11.712
	0.833	1.0	1.0	-34.713± 11.861
	0.667	0.833	1.0	-37.506± 10.831
	0.833	1.0	1.0	-34.004± 12.189
	0.833	1.0	1.0	-34.747± 11.882
	1.0	1.0	1.0	-31.9± 12.106
	0.833	1.0	1.0	-33.214± 12.416
DiCE	1.0	0.833	0.833	-36.138± 11.006
	1.0	1.0	0.833	-33.28± 12.467
	0.833	1.0	1.0	-35.139± 12.14
	0.667	0.833	1.0	-37.072± 11.539
	0.833	1.0	1.0	-34.966± 12.02

	0.833	0.833	1.0	-35.08± 12.092
	1.0	1.0	1.0	-34.707± 11.839
	0.833	0.833	1.0	-32.494± 12.65
	0.833	0.833	1.0	-35.708± 11.648
	0.833	1.0	0.833	-34.498± 11.701
ClaPROAR	0.667	1.0	1.0	-33.927± 12.14
	0.833	1.0	0.833	-34.708± 11.856
	0.833	0.833	0.833	-33.092± 12.298
	0.833	1.0	0.833	-36.345± 11.131
	0.833	0.833	1.0	-33.076± 12.302
	0.667	0.833	1.0	-35.047± 12.069
	1.0	1.0	0.833	-32.636± 12.763
	1.0	1.0	0.833	-35.919± 11.756
	1.0	1.0	0.833	-34.843± 11.961
	1.0	1.0	1.0	-37.419± 10.79

Tab. 315: Faithfulness experiment Iris data experiment 4 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.833	0.833	1.0	-35.275± 11.77
	0.833	1.0	1.0	-35.159± 12.435
	1.0	1.0	1.0	-32.224± 12.304
	0.833	0.833	1.0	-36.288± 11.049
	1.0	1.0	1.0	-34.635± 12.745
	0.833	0.833	0.667	-37.573± 12.296
	1.0	1.0	1.0	-33.573± 13.284
	0.833	1.0	1.0	-34.624± 12.747
	0.5	0.833	1.0	-34.711± 12.164
	0.833	1.0	0.833	-31.716± 12.461
ECCo	0.5	1.0	0.833	-34.567± 12.685
	0.667	1.0	0.667	-35.554± 12.644
	1.0	1.0	1.0	-35.379± 13.742
	0.833	1.0	1.0	-36.069± 12.266
	0.833	0.833	0.833	-35.62± 12.022
	1.0	1.0	0.833	-38.092± 11.117
	1.0	1.0	1.0	-38.186± 10.434
	1.0	1.0	0.833	-33.08± 12.914
	0.833	1.0	1.0	-37.574± 11.629
	0.833	1.0	0.833	-35.514± 12.625
Wachter	0.833	1.0	0.833	-35.156± 12.416
	0.5	1.0	1.0	-34.183± 12.461
	1.0	0.833	0.833	-32.941± 14.056
	0.5	1.0	1.0	-34.019± 13.588
	1.0	1.0	1.0	-33.89± 10.903
	1.0	0.833	1.0	-35.173± 12.422
	1.0	1.0	0.833	-35.966± 13.474
	0.833	1.0	1.0	-36.048± 12.927
	1.0	1.0	0.667	-33.569± 13.292
	1.0	1.0	0.833	-33.125± 12.974
Generic	1.0	1.0	1.0	-36.576± 12.523
	0.667	0.833	1.0	-34.176± 12.465
	1.0	0.833	1.0	-33.64± 12.748
	0.833	1.0	0.833	-32.202± 12.292
	0.5	1.0	1.0	-36.048± 12.916
	1.0	1.0	1.0	-30.275± 11.775

	1.0	1.0	1.0	-38.09± 11.865
	0.833	0.833	1.0	-35.154± 12.413
	1.0	1.0	1.0	-33.118± 12.986
	0.833	0.833	1.0	-35.076± 13.01
DiCE	1.0	1.0	0.833	-33.053± 13.507
	1.0	1.0	0.833	-35.506± 13.259
	1.0	1.0	1.0	-32.671± 12.656
	1.0	1.0	0.833	-35.973± 13.461
	1.0	1.0	0.833	-37.119± 12.127
	1.0	1.0	1.0	-33.643± 12.751
	1.0	1.0	0.833	-32.684± 12.641
	1.0	1.0	1.0	-35.152± 12.431
	1.0	1.0	1.0	-37.107± 12.129
	1.0	1.0	0.833	-32.23± 12.291
ClaPROAR	1.0	1.0	1.0	-34.18± 12.448
	1.0	1.0	1.0	-33.654± 12.743
	1.0	1.0	1.0	-32.216± 12.288
	1.0	1.0	0.833	-32.677± 12.642
	0.667	1.0	0.833	-34.651± 12.737
	0.5	1.0	1.0	-36.742± 11.286
	1.0	1.0	0.833	-36.57± 12.537
	1.0	1.0	1.0	-37.024± 12.722
	0.667	1.0	0.833	-36.047± 12.92
	1.0	1.0	0.833	-35.155± 12.423

Tab. 316: Faithfulness experiment Iris data experiment 5 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	1.0	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.002
	1.0	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.002
	0.833	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
REVISE	0.667	1.0	1.0	0.0± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
ECCo	1.0	0.667	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001

	0.667	1.0	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
Wachter	1.0	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.0± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
Generic	0.833	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.667	0.333	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
DiCE	0.833	1.0	1.0	0.0± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.0± 0.0
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
ClaPROAR	0.833	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001

Tab. 317: Faithfulness experiment Iris data experiment 1 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	1.0	0.667	0.833	0.003± 0.003
	1.0	1.0	0.833	0.003± 0.002
	1.0	0.667	1.0	0.003± 0.002
	1.0	0.667	1.0	0.004± 0.002
	0.833	0.667	1.0	0.003± 0.003
	0.667	0.667	0.833	0.002± 0.002
	1.0	1.0	0.833	0.004± 0.002
	1.0	1.0	1.0	0.003± 0.003

	0.833	0.833	1.0	0.003± 0.002
	1.0	0.833	1.0	0.003± 0.003
REVISE	0.833	0.667	0.667	0.002± 0.002
	0.833	0.833	0.667	0.003± 0.002
	1.0	0.667	0.833	0.003± 0.002
	0.833	1.0	1.0	0.002± 0.002
	0.833	0.667	0.833	0.003± 0.002
	1.0	1.0	1.0	0.003± 0.002
	0.833	0.667	1.0	0.003± 0.002
	0.833	0.833	0.667	0.003± 0.002
	1.0	0.833	0.833	0.002± 0.002
	0.833	0.667	0.833	0.003± 0.002
ECCo	0.833	0.5	0.833	0.003± 0.002
	0.833	0.667	0.833	0.002± 0.002
	1.0	0.667	0.833	0.002± 0.002
	1.0	0.833	0.833	0.002± 0.002
	1.0	0.667	0.833	0.002± 0.002
	0.5	0.5	0.833	0.002± 0.002
	1.0	1.0	0.833	0.002± 0.002
	1.0	0.833	0.667	0.003± 0.002
	1.0	0.667	1.0	0.003± 0.002
	0.5	0.5	0.667	0.003± 0.002
Wachter	0.667	0.5	0.667	0.003± 0.002
	1.0	1.0	0.833	0.002± 0.002
	1.0	0.833	0.667	0.003± 0.002
	1.0	0.5	1.0	0.002± 0.002
	0.833	0.5	0.667	0.002± 0.002
	0.833	1.0	0.833	0.003± 0.002
	1.0	0.833	1.0	0.003± 0.002
	0.833	0.667	0.833	0.002± 0.002
	1.0	1.0	0.833	0.002± 0.002
	0.833	0.667	0.833	0.003± 0.002
Generic	1.0	1.0	1.0	0.002± 0.002
	1.0	0.667	0.833	0.003± 0.002
	0.833	0.833	0.833	0.002± 0.002
	0.667	0.833	0.667	0.002± 0.002
	0.667	0.667	1.0	0.003± 0.002
	0.833	0.667	0.833	0.003± 0.002
	1.0	1.0	1.0	0.002± 0.002
	1.0	1.0	0.833	0.003± 0.002
	0.833	0.833	0.833	0.002± 0.002
	0.667	1.0	1.0	0.002± 0.002
DiCE	1.0	0.833	1.0	0.003± 0.002
	1.0	1.0	0.833	0.003± 0.002
	0.667	0.5	0.667	0.003± 0.002
	0.667	0.667	1.0	0.002± 0.002
	0.667	0.5	0.833	0.003± 0.002
	1.0	1.0	1.0	0.002± 0.002
	0.667	0.667	0.833	0.003± 0.002
	1.0	0.667	0.667	0.002± 0.002
	0.667	0.667	1.0	0.003± 0.002
	1.0	0.667	1.0	0.002± 0.002
ClaPROAR	0.833	0.333	0.667	0.002± 0.002
	1.0	0.833	0.833	0.003± 0.002
	1.0	0.667	0.667	0.003± 0.002
	0.667	1.0	1.0	0.002± 0.002

	1.0	0.667	0.833	0.003± 0.002
	1.0	0.667	0.833	0.003± 0.002
	0.833	0.667	0.667	0.002± 0.002
	0.667	0.667	1.0	0.003± 0.002
	0.5	1.0	1.0	0.003± 0.002
	0.833	0.667	0.833	0.003± 0.002

Tab. 318: Faithfulness experiment Iris data experiment 2 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.667	1.0	0.833	0.001± 0.001
	0.667	1.0	0.833	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.833	0.833	0.001± 0.002
	0.833	0.667	0.667	0.002± 0.002
	0.667	0.667	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.002
	0.667	0.667	0.833	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.667	0.833	0.667	0.002± 0.002
REVISE	0.667	0.667	0.833	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.002
	0.833	0.5	1.0	0.001± 0.001
	0.667	1.0	0.833	0.001± 0.002
	0.5	0.5	0.833	0.002± 0.002
	0.667	0.833	1.0	0.001± 0.001
	0.667	0.667	0.833	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.002
	0.667	0.667	0.833	0.002± 0.002
ECCo	0.667	0.667	1.0	0.001± 0.002
	1.0	0.333	0.833	0.001± 0.002
	0.5	0.5	1.0	0.001± 0.002
	0.833	0.667	1.0	0.001± 0.001
	0.667	0.667	0.833	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	0.833	0.001± 0.001
Wachter	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	0.667	0.0± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	0.833	0.001± 0.001
Generic	0.667	1.0	0.833	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.5	0.5	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001

	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	0.833	0.001± 0.002
	0.667	0.833	0.833	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.833	0.833	0.001± 0.001
DiCE	0.667	0.667	1.0	0.001± 0.002
	0.833	0.667	0.833	0.001± 0.002
	1.0	0.667	0.667	0.001± 0.001
	0.833	0.667	0.833	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.833	0.5	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.002
	0.833	0.667	1.0	0.001± 0.001
	0.833	0.667	0.833	0.001± 0.002
ClaPROAR	0.833	0.667	1.0	0.002± 0.002
	0.5	0.5	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.5	1.0	0.001± 0.002
	0.667	1.0	1.0	0.001± 0.002
	0.667	1.0	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	0.667	0.001± 0.002
	0.833	0.667	0.833	0.001± 0.001

Tab. 319: Faithfulness experiment Iris data experiment 3 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.833	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.833	0.833	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	0.833	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
REVISE	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
ECCo	0.833	1.0	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001

	1.0	0.667	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
Wachter	0.833	0.833	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.833	0.333	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
Generic	1.0	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
DiCE	1.0	0.667	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.5	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	1.0	0.667	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.667	0.833	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
ClaPROAR	0.667	0.667	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001
	1.0	1.0	1.0	0.001± 0.001
	0.833	0.667	1.0	0.001± 0.001
	0.667	1.0	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.833	1.0	1.0	0.001± 0.001
	0.833	0.667	0.833	0.001± 0.001
	1.0	0.833	1.0	0.001± 0.001

Tab. 320: Faithfulness experiment Iris data experiment 4 when using a MLP

	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.833	0.667	1.0	0.001± 0.002
	1.0	0.5	1.0	0.002± 0.003
	0.333	1.0	1.0	0.002± 0.003
	1.0	0.833	0.833	0.001± 0.002
	1.0	0.833	1.0	0.002± 0.003
	1.0	1.0	1.0	0.002± 0.003
	0.833	0.833	1.0	0.002± 0.003

	1.0	1.0	1.0	0.002± 0.002
	0.833	0.667	1.0	0.002± 0.003
	0.833	0.833	1.0	0.002± 0.003
REVISE	0.833	0.667	1.0	0.001± 0.001
	0.667	0.667	1.0	0.002± 0.002
	0.833	0.667	1.0	0.002± 0.002
	0.833	0.833	1.0	0.001± 0.002
	1.0	0.833	0.833	0.002± 0.002
	0.833	0.667	1.0	0.002± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.667	1.0	0.833	0.001± 0.002
	0.667	0.833	1.0	0.002± 0.002
	0.833	1.0	1.0	0.001± 0.002
ECCo	0.667	0.667	1.0	0.001± 0.002
	0.833	0.833	1.0	0.002± 0.002
	0.667	0.667	0.833	0.002± 0.002
	1.0	0.667	0.833	0.001± 0.002
	1.0	0.833	1.0	0.001± 0.002
	0.667	1.0	1.0	0.002± 0.002
	0.5	0.5	1.0	0.002± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.833	0.833	1.0	0.002± 0.002
	0.667	0.833	0.833	0.001± 0.002
Wachter	0.667	0.833	0.833	0.001± 0.002
	1.0	1.0	1.0	0.001± 0.002
	0.833	0.833	0.833	0.002± 0.002
	0.833	0.833	0.833	0.001± 0.002
	1.0	0.833	1.0	0.001± 0.002
	0.667	1.0	1.0	0.002± 0.002
	0.667	1.0	1.0	0.002± 0.002
	0.667	0.833	1.0	0.002± 0.002
	0.833	0.667	1.0	0.002± 0.002
	1.0	1.0	0.833	0.002± 0.002
Generic	0.667	1.0	0.833	0.001± 0.002
	0.667	0.833	1.0	0.001± 0.002
	0.667	0.833	1.0	0.001± 0.002
	1.0	0.833	0.833	0.001± 0.002
	1.0	0.833	0.833	0.002± 0.002
	0.667	0.833	0.833	0.001± 0.002
	0.833	0.667	1.0	0.002± 0.002
	0.833	0.667	1.0	0.001± 0.002
	0.833	0.833	1.0	0.001± 0.002
	0.833	0.833	0.833	0.001± 0.002
DiCE	0.5	0.5	0.833	0.002± 0.002
	0.833	1.0	1.0	0.001± 0.002
	0.667	0.667	1.0	0.001± 0.002
	0.833	0.667	1.0	0.002± 0.002
	0.667	0.5	1.0	0.002± 0.002
	0.833	0.667	1.0	0.001± 0.002
	0.833	1.0	0.833	0.002± 0.002
	0.833	1.0	1.0	0.002± 0.002
	0.833	1.0	1.0	0.001± 0.002
	0.833	0.667	1.0	0.001± 0.002
ClaPROAR	1.0	0.833	0.667	0.001± 0.002
	0.667	1.0	1.0	0.001± 0.002
	1.0	0.667	1.0	0.001± 0.002

	0.833	0.667	1.0	0.001± 0.002
	1.0	1.0	0.833	0.002± 0.002
	1.0	0.5	1.0	0.001± 0.002
	0.667	0.667	1.0	0.002± 0.002
	1.0	0.667	1.0	0.002± 0.002
	0.667	1.0	1.0	0.001± 0.002
	0.667	0.5	1.0	0.001± 0.002

Tab. 321: Faithfulness experiment Iris data experiment 5 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.925	0.975	1.0	-97.859 ±41.331
	0.95	0.975	1.0	-97.876± 41.323
	1.0	1.0	1.0	-97.869± 41.334
	0.975	1.0	1.0	-97.879± 41.322
	0.975	1.0	1.0	-97.877± 41.314
	0.925	1.0	1.0	-97.862± 41.331
	0.95	0.975	1.0	-97.883± 41.304
	0.975	0.975	1.0	-97.868± 41.332
	0.975	0.975	1.0	-97.871± 41.326
	1.0	1.0	1.0	-97.87 ± 41.33
ECCo	0.975	1.0	1.0	-97.986 ±41.295
	1.0	1.0	1.0	-98.011± 41.275
	0.925	1.0	1.0	-97.998± 41.285
	0.975	1.0	1.0	-97.998± 41.29
	0.975	0.975	1.0	-97.997± 41.288
	0.975	1.0	1.0	-98.002± 41.286
	0.975	1.0	1.0	-97.994± 41.292
	0.9	1.0	1.0	-97.996± 41.285
	0.95	0.975	1.0	-98.004± 41.285
	0.9	0.975	1.0	-98.011 ± 41.275
Wachter	0.925	0.975	1.0	-97.868 ±41.323
	1.0	1.0	1.0	-97.875± 41.326
	0.875	1.0	1.0	-97.882± 41.306
	0.925	1.0	1.0	-97.871± 41.327
	0.95	0.975	1.0	-97.873± 41.325
	0.925	1.0	1.0	-97.879± 41.319
	0.95	1.0	1.0	-97.868± 41.326
	0.925	1.0	1.0	-97.881± 41.305
	0.925	1.0	1.0	-97.883± 41.316
	0.975	1.0	1.0	-97.884 ± 41.31
Generic	0.9	1.0	1.0	-97.88 ±41.311
	0.95	1.0	1.0	-97.868± 41.321
	0.975	1.0	1.0	-97.866± 41.322
	0.975	1.0	1.0	-97.867± 41.331
	0.925	0.975	1.0	-97.873± 41.321
	0.975	1.0	1.0	-97.874± 41.324
	0.95	0.975	1.0	-97.877± 41.324
	0.975	0.975	1.0	-97.874± 41.316
	0.975	1.0	1.0	-97.876± 41.31
	0.95	1.0	1.0	-97.878 ± 41.329
DiCE	1.0	1.0	1.0	-97.862 ±41.325
	0.95	0.975	1.0	-97.871± 41.317
	0.975	0.975	1.0	-97.871± 41.325
	0.95	0.975	1.0	-97.871± 41.318

	0.925	0.975	1.0	-97.874± 41.331
	0.95	0.975	1.0	-97.868± 41.323
	0.975	1.0	1.0	-97.876± 41.323
	0.875	1.0	1.0	-97.877± 41.318
	0.975	1.0	1.0	-97.853± 41.33
	0.95	0.975	1.0	-97.866 ± 41.317
ClaPROAR	0.95	1.0	1.0	-97.861 ±41.333
	0.975	0.975	1.0	-97.878± 41.323
	0.95	1.0	1.0	-97.869± 41.316
	0.95	1.0	1.0	-97.871± 41.32
	0.975	1.0	1.0	-97.866± 41.324
	0.925	0.975	1.0	-97.875± 41.331
	0.925	0.95	1.0	-97.881± 41.321
	0.875	1.0	1.0	-97.867± 41.328
	0.95	0.975	1.0	-97.862± 41.329
	0.925	0.975	1.0	-97.864 ± 41.334

Tab. 322: Faithfulness experiment moons data experiment 1 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.95	1.0	1.0	-102.982 ±39.575
	0.975	1.0	1.0	-103.034± 39.578
	0.925	1.0	1.0	-103.03± 39.6
	0.95	1.0	1.0	-103.0± 39.577
	0.95	1.0	1.0	-103.025± 39.558
	0.95	1.0	1.0	-103.029± 39.583
	0.95	1.0	1.0	-102.999± 39.571
	1.0	1.0	1.0	-103.025± 39.571
	0.95	1.0	1.0	-103.015± 39.576
	0.925	1.0	1.0	-103.044 ± 39.569
ECCo	0.9	1.0	1.0	-103.161 ±39.666
	0.95	1.0	1.0	-103.17± 39.659
	0.95	1.0	1.0	-103.157± 39.673
	0.9	1.0	1.0	-103.151± 39.674
	0.9	1.0	1.0	-103.159± 39.66
	0.925	1.0	1.0	-103.167± 39.662
	1.0	1.0	1.0	-103.154± 39.674
	0.95	1.0	1.0	-103.158± 39.672
	0.9	1.0	1.0	-103.167± 39.663
	0.975	1.0	1.0	-103.155 ± 39.68
Wachter	0.95	1.0	1.0	-103.034 ±39.582
	0.95	1.0	1.0	-103.03± 39.577
	0.975	1.0	1.0	-103.022± 39.594
	0.95	1.0	1.0	-103.048± 39.576
	0.975	1.0	1.0	-103.036± 39.565
	0.975	1.0	1.0	-103.038± 39.605
	0.975	1.0	1.0	-102.998± 39.566
	0.975	1.0	1.0	-103.018± 39.584
	0.975	1.0	1.0	-103.056± 39.592
	0.975	1.0	1.0	-103.022 ± 39.591
Generic	0.925	1.0	1.0	-103.018 ±39.57
	0.9	1.0	1.0	-103.027± 39.569
	0.975	1.0	1.0	-103.038± 39.586
	0.975	1.0	1.0	-103.008± 39.593
	0.975	1.0	1.0	-103.017± 39.581

	0.95	1.0	1.0	-103.031± 39.578
	0.95	1.0	1.0	-103.04± 39.586
	0.95	1.0	1.0	-103.006± 39.579
	0.975	1.0	1.0	-103.014± 39.59
	0.95	1.0	1.0	-103.02 ± 39.603
DiCE	0.925	1.0	1.0	-103.007 ±39.586
	0.975	1.0	1.0	-103.004± 39.574
	0.975	1.0	1.0	-103.011± 39.555
	0.95	1.0	1.0	-103.026± 39.563
	0.875	1.0	1.0	-103.016± 39.575
	0.925	1.0	1.0	-102.998± 39.564
	0.925	1.0	1.0	-103.038± 39.573
	0.95	1.0	1.0	-103.018± 39.586
	0.925	1.0	1.0	-103.016± 39.584
	0.925	1.0	1.0	-103.024 ± 39.567
ClaPROAR	0.95	1.0	1.0	-103.025 ±39.558
	0.925	1.0	1.0	-103.022± 39.573
	0.975	1.0	1.0	-103.019± 39.592
	0.95	1.0	1.0	-103.024± 39.596
	0.975	1.0	1.0	-103.007± 39.542
	0.925	1.0	1.0	-103.019± 39.574
	0.975	1.0	1.0	-103.014± 39.568
	0.925	1.0	1.0	-103.028± 39.557
	0.85	1.0	1.0	-103.038± 39.565
	0.875	1.0	1.0	-103.012 ± 39.538

Tab. 323: Faithfulness experiment moons data experiment 2 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.9	1.0	1.0	-140.541 ±30.736
	0.925	1.0	1.0	-140.58± 30.735
	0.95	1.0	1.0	-140.596± 30.709
	0.95	1.0	1.0	-140.6± 30.71
	0.975	1.0	1.0	-140.613± 30.723
	0.975	1.0	1.0	-140.597± 30.703
	0.95	0.975	1.0	-140.603± 30.695
	0.9	1.0	1.0	-140.628± 30.704
	0.975	1.0	1.0	-140.585± 30.715
	0.95	1.0	1.0	-140.605 ± 30.705
ECCo	0.95	1.0	1.0	-140.725 ±30.712
	0.975	1.0	1.0	-140.744± 30.693
	0.95	1.0	1.0	-140.741± 30.7
	0.95	1.0	1.0	-140.737± 30.698
	1.0	1.0	1.0	-140.71± 30.731
	0.9	1.0	1.0	-140.723± 30.717
	0.95	1.0	1.0	-140.738± 30.696
	0.9	1.0	1.0	-140.725± 30.718
	0.925	1.0	1.0	-140.734± 30.705
	0.925	1.0	1.0	-140.736 ± 30.707
Wachter	0.95	1.0	1.0	-140.596 ±30.712
	0.95	1.0	1.0	-140.613± 30.72
	1.0	1.0	1.0	-140.602± 30.709
	0.9	1.0	1.0	-140.596± 30.727
	0.95	1.0	1.0	-140.608± 30.706
	0.925	1.0	1.0	-140.591± 30.72

	0.95	1.0	1.0	-140.602± 30.715
	0.9	1.0	1.0	-140.593± 30.715
	0.95	1.0	1.0	-140.597± 30.729
	0.925	1.0	1.0	-140.594 ± 30.704
Generic	0.975	1.0	1.0	-140.605 ±30.717
	1.0	1.0	1.0	-140.593± 30.735
	0.975	0.975	1.0	-140.611± 30.735
	0.925	1.0	1.0	-140.61± 30.697
	0.975	1.0	1.0	-140.597± 30.72
	0.9	1.0	1.0	-140.594± 30.691
	0.95	1.0	1.0	-140.594± 30.729
	0.95	1.0	1.0	-140.609± 30.714
	0.925	1.0	1.0	-140.592± 30.724
	0.975	1.0	1.0	-140.602 ± 30.724
DiCE	0.975	1.0	0.975	-140.61 ±30.748
	0.975	1.0	1.0	-140.571± 30.705
	0.975	1.0	1.0	-140.606± 30.713
	1.0	1.0	1.0	-140.608± 30.735
	0.95	1.0	1.0	-140.594± 30.691
	0.95	1.0	1.0	-140.604± 30.731
	1.0	1.0	1.0	-140.631± 30.711
	0.875	1.0	1.0	-140.613± 30.751
	0.9	1.0	1.0	-140.581± 30.75
	0.975	1.0	1.0	-140.579 ± 30.711
ClaPROAR	0.975	1.0	1.0	-140.591 ±30.717
	0.975	1.0	1.0	-140.583± 30.727
	0.975	1.0	1.0	-140.588± 30.751
	0.95	1.0	1.0	-140.604± 30.701
	0.975	0.975	1.0	-140.6± 30.707
	0.95	1.0	1.0	-140.583± 30.708
	0.9	1.0	1.0	-140.628± 30.74
	0.975	1.0	1.0	-140.596± 30.729
	0.975	1.0	1.0	-140.602± 30.732
	0.925	1.0	1.0	-140.624 ± 30.744

Tab. 324: Faithfulness experiment moons data experiment 3 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.925	1.0	1.0	-71.633 ±3.656
	0.95	1.0	1.0	-71.66± 3.604
	0.95	1.0	1.0	-71.707± 3.576
	0.9	1.0	1.0	-71.767± 3.467
	0.9	1.0	1.0	-71.577± 3.556
	0.925	1.0	1.0	-71.694± 3.442
	0.925	1.0	1.0	-71.688± 3.552
	0.975	1.0	1.0	-71.709± 3.499
	0.925	1.0	1.0	-71.636± 3.614
	1.0	1.0	1.0	-71.737 ± 3.502
ECCo	0.9	1.0	1.0	-71.911 ±3.334
	0.95	1.0	1.0	-72.001± 3.308
	0.925	1.0	1.0	-71.974± 3.31
	0.975	1.0	1.0	-71.981± 3.348
	0.975	1.0	1.0	-71.97± 3.302
	0.9	1.0	1.0	-71.979± 3.292
	0.85	1.0	1.0	-71.951± 3.302

	0.95	1.0	1.0	-71.954± 3.335
	0.95	1.0	1.0	-72.015± 3.316
	0.95	1.0	1.0	-72.001 ± 3.315
Wachter	0.9	1.0	1.0	-71.736 ±3.499
	0.9	1.0	1.0	-71.676± 3.604
	0.9	1.0	1.0	-71.698± 3.53
	0.975	1.0	1.0	-71.687± 3.581
	0.9	1.0	1.0	-71.661± 3.513
	0.875	1.0	1.0	-71.621± 3.585
	0.925	1.0	1.0	-71.709± 3.552
	0.95	1.0	1.0	-71.646± 3.563
	0.95	1.0	1.0	-71.719± 3.511
	0.975	1.0	1.0	-71.675 ± 3.542
Generic	0.95	1.0	1.0	-71.659 ±3.592
	0.95	1.0	1.0	-71.679± 3.56
	0.925	1.0	1.0	-71.681± 3.511
	0.975	1.0	1.0	-71.766± 3.535
	0.875	1.0	1.0	-71.697± 3.498
	0.925	1.0	1.0	-71.68± 3.5
	0.975	1.0	1.0	-71.72± 3.466
	0.875	1.0	1.0	-71.671± 3.538
	0.925	1.0	1.0	-71.73± 3.514
	0.975	1.0	1.0	-71.663 ± 3.554
DiCE	0.95	1.0	1.0	-71.793 ±3.549
	1.0	1.0	1.0	-71.698± 3.58
	0.875	1.0	1.0	-71.663± 3.559
	0.925	1.0	1.0	-71.714± 3.615
	0.875	1.0	1.0	-71.674± 3.569
	0.95	0.975	1.0	-71.705± 3.561
	0.9	0.95	1.0	-71.677± 3.587
	0.875	1.0	1.0	-71.778± 3.528
	0.9	1.0	1.0	-71.718± 3.629
	0.925	1.0	1.0	-71.742 ± 3.543
ClaPROAR	0.95	1.0	1.0	-71.649 ±3.545
	0.925	1.0	1.0	-71.65± 3.535
	0.9	1.0	1.0	-71.794± 3.551
	0.925	1.0	1.0	-71.781± 3.482
	0.925	1.0	1.0	-71.7± 3.549
	1.0	1.0	1.0	-71.7± 3.527
	0.925	1.0	1.0	-71.621± 3.579
	0.9	1.0	1.0	-71.585± 3.617
	0.95	1.0	1.0	-71.708± 3.461
	0.95	1.0	1.0	-71.747 ± 3.496

Tab. 325: Faithfulness experiment moons data experiment 4 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.925	0.925	1.0	-88.25 ±37.487
	0.9	1.0	1.0	-88.245± 37.482
	0.925	0.975	1.0	-88.243± 37.47
	0.975	1.0	1.0	-88.249± 37.484
	0.975	1.0	1.0	-88.252± 37.488
	0.95	1.0	1.0	-88.239± 37.492
	0.85	1.0	1.0	-88.233± 37.482
	0.925	0.975	1.0	-88.252± 37.494

	0.95	1.0	1.0	-88.249± 37.483
	0.975	1.0	1.0	-88.246 ± 37.478
ECCo	0.95	1.0	1.0	-88.372 ±37.493
	0.95	0.975	1.0	-88.374± 37.484
	0.975	1.0	1.0	-88.377± 37.49
	0.925	0.975	1.0	-88.371± 37.498
	1.0	1.0	1.0	-88.374± 37.501
	0.925	0.975	1.0	-88.376± 37.497
	0.875	0.95	1.0	-88.364± 37.49
	0.975	1.0	1.0	-88.363± 37.503
	0.925	0.975	1.0	-88.379± 37.497
	0.9	1.0	1.0	-88.372 ± 37.494
Wachter	0.925	1.0	1.0	-88.228 ±37.486
	1.0	1.0	1.0	-88.227± 37.488
	0.95	1.0	1.0	-88.232± 37.466
	0.925	1.0	1.0	-88.238± 37.478
	0.95	1.0	1.0	-88.246± 37.493
	0.95	1.0	1.0	-88.25± 37.469
	1.0	1.0	1.0	-88.239± 37.473
	0.975	1.0	1.0	-88.234± 37.484
	0.95	1.0	1.0	-88.228± 37.484
	0.9	1.0	1.0	-88.245 ± 37.47
Generic	0.9	1.0	1.0	-88.252 ±37.472
	0.925	1.0	1.0	-88.236± 37.473
	0.9	1.0	1.0	-88.248± 37.47
	0.875	1.0	1.0	-88.228± 37.457
	0.95	1.0	1.0	-88.242± 37.478
	0.95	1.0	1.0	-88.244± 37.492
	0.95	1.0	1.0	-88.262± 37.481
	0.95	1.0	1.0	-88.228± 37.485
	0.95	1.0	1.0	-88.236± 37.48
	0.95	1.0	1.0	-88.252 ± 37.48
DiCE	0.975	1.0	1.0	-88.251 ±37.479
	0.95	1.0	1.0	-88.215± 37.463
	0.925	0.975	1.0	-88.237± 37.49
	0.975	1.0	1.0	-88.22± 37.474
	0.975	1.0	1.0	-88.238± 37.476
	1.0	1.0	1.0	-88.236± 37.48
	0.95	1.0	1.0	-88.246± 37.47
	0.875	1.0	1.0	-88.235± 37.484
	0.975	1.0	1.0	-88.245± 37.488
	0.95	0.975	1.0	-88.256 ± 37.485
ClaPROAR	0.925	1.0	1.0	-88.251 ±37.48
	0.975	1.0	1.0	-88.238± 37.456
	0.975	1.0	1.0	-88.245± 37.496
	0.95	0.975	1.0	-88.236± 37.472
	0.9	1.0	1.0	-88.223± 37.467
	0.9	1.0	1.0	-88.233± 37.46
	0.95	1.0	1.0	-88.252± 37.48
	0.925	1.0	1.0	-88.237± 37.49
	0.9	1.0	1.0	-88.249± 37.475
	0.925	0.975	1.0	-88.235 ± 37.458

Tab. 326: Faithfulness experiment moons data experiment 5 when using a MLP and a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.925	1.0	1.0	-95.453 ±50.564
	0.95	1.0	1.0	-95.285± 50.523
	1.0	1.0	1.0	-95.478± 50.461
	0.975	1.0	1.0	-95.306± 50.472
	0.975	1.0	1.0	-95.486± 50.336
	0.925	1.0	1.0	-95.405± 50.592
	0.95	0.975	1.0	-95.458± 50.579
	0.975	1.0	1.0	-95.377± 50.559
	0.975	0.975	1.0	-95.57± 50.515
	1.0	1.0	1.0	-95.299 ± 50.376
ECCo	0.975	1.0	1.0	-96.18 ±50.815
	1.0	1.0	1.0	-96.371± 50.664
	0.925	1.0	1.0	-96.282± 50.738
	0.975	1.0	1.0	-96.257± 50.773
	0.975	1.0	1.0	-96.195± 50.823
	0.975	1.0	1.0	-96.339± 50.682
	0.975	1.0	1.0	-96.273± 50.758
	0.9	1.0	1.0	-96.251± 50.773
	0.95	0.975	1.0	-96.309± 50.725
	0.9	1.0	1.0	-96.305 ± 50.73
Wachter	0.925	0.975	1.0	-95.511 ±50.552
	1.0	1.0	1.0	-95.364± 50.479
	0.875	1.0	1.0	-95.445± 50.592
	0.925	1.0	1.0	-95.533± 50.611
	0.95	1.0	1.0	-95.41± 50.665
	0.925	1.0	1.0	-95.368± 50.589
	0.95	1.0	1.0	-95.484± 50.453
	0.925	1.0	1.0	-95.453± 50.54
	0.925	1.0	1.0	-95.447± 50.62
	0.975	1.0	1.0	-95.432 ± 50.387
Generic	0.9	1.0	1.0	-95.381 ±50.545
	0.95	1.0	1.0	-95.504± 50.552
	0.975	1.0	1.0	-95.439± 50.698
	0.975	1.0	1.0	-95.435± 50.473
	0.925	1.0	1.0	-95.462± 50.562
	0.975	1.0	1.0	-95.347± 50.473
	0.95	1.0	1.0	-95.463± 50.507
	0.975	1.0	1.0	-95.429± 50.561
	0.975	1.0	1.0	-95.462± 50.375
	0.95	1.0	1.0	-95.439 ± 50.508
DiCE	1.0	1.0	1.0	-95.397 ±50.507
	0.95	1.0	1.0	-95.374± 50.518
	0.975	1.0	1.0	-95.42± 50.727
	0.95	0.975	1.0	-95.47± 50.515
	0.925	0.975	1.0	-95.395± 50.568
	0.95	1.0	1.0	-95.379± 50.487
	0.975	1.0	1.0	-95.465± 50.539
	0.875	1.0	1.0	-95.482± 50.551
	0.975	1.0	1.0	-95.549± 50.449
	0.95	0.975	1.0	-95.438 ± 50.478
ClaPROAR	0.95	1.0	1.0	-95.48 ±50.415
	0.975	1.0	1.0	-95.497± 50.45
	0.95	1.0	1.0	-95.461± 50.524
	0.95	1.0	1.0	-95.307± 50.495

	0.975	1.0	1.0	-95.424± 50.514
	0.925	0.975	1.0	-95.622± 50.472
	0.925	1.0	1.0	-95.372± 50.599
	0.875	1.0	1.0	-95.642± 50.467
	0.95	1.0	1.0	-95.49± 50.444
	0.925	0.975	1.0	-95.439 ± 50.523

Tab. 327: Faithfulness experiment moons data experiment 1 when using a deep ensemble

	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.975	1.0	1.0	-151.018 ±41.441
	0.95	0.975	1.0	-151.083± 41.369
	1.0	1.0	1.0	-151.03± 41.439
	0.975	1.0	1.0	-151.045± 41.359
	0.975	1.0	1.0	-151.043± 41.392
	1.0	1.0	1.0	-151.035± 41.451
	0.875	1.0	1.0	-151.046± 41.4
	0.975	1.0	1.0	-151.07± 41.487
	0.925	1.0	1.0	-151.032± 41.442
	0.95	1.0	0.975	-151.105 ± 41.438
ECCo	0.95	1.0	1.0	-151.283 ±41.421
	0.975	1.0	1.0	-151.269± 41.435
	0.975	1.0	1.0	-151.284± 41.422
	0.975	1.0	1.0	-151.264± 41.442
	0.95	1.0	1.0	-151.261± 41.442
	0.9	1.0	1.0	-151.27± 41.435
	0.875	1.0	1.0	-151.283± 41.421
	1.0	1.0	1.0	-151.273± 41.433
	0.925	1.0	1.0	-151.271± 41.434
	0.925	1.0	1.0	-151.258 ± 41.445
Wachter	0.975	1.0	1.0	-151.038 ±41.372
	0.975	1.0	1.0	-151.055± 41.452
	1.0	1.0	1.0	-151.098± 41.413
	0.925	1.0	1.0	-151.098± 41.39
	0.975	1.0	1.0	-151.03± 41.413
	1.0	1.0	1.0	-151.043± 41.475
	0.925	1.0	1.0	-151.06± 41.416
	0.95	1.0	1.0	-151.051± 41.363
	0.925	1.0	1.0	-151.073± 41.448
	1.0	1.0	1.0	-151.095 ± 41.411
Generic	0.925	1.0	1.0	-150.99 ±41.425
	0.975	1.0	1.0	-151.042± 41.427
	0.925	1.0	1.0	-151.063± 41.334
	0.975	1.0	1.0	-151.034± 41.378
	0.95	1.0	1.0	-151.025± 41.455
	0.975	1.0	1.0	-151.011± 41.424
	0.975	1.0	1.0	-151.076± 41.409
	0.95	1.0	1.0	-151.036± 41.426
	0.925	1.0	1.0	-151.028± 41.45
	0.95	1.0	1.0	-151.022 ± 41.451
DiCE	0.975	1.0	1.0	-150.998 ±41.436
	1.0	1.0	1.0	-151.059± 41.433
	0.975	1.0	1.0	-151.058± 41.398
	0.9	1.0	1.0	-151.026± 41.437
	0.925	1.0	1.0	-151.08± 41.39

	0.875	1.0	1.0	-151.104± 41.408
	0.975	1.0	1.0	-151.092± 41.403
	0.875	1.0	1.0	-151.037± 41.488
	0.975	1.0	1.0	-151.09± 41.449
	0.95	1.0	1.0	-151.097 ± 41.378
ClaPROAR	0.95	1.0	1.0	-151.063 ±41.445
	0.95	1.0	1.0	-150.992± 41.406
	0.95	1.0	1.0	-151.037± 41.436
	0.975	1.0	1.0	-151.034± 41.425
	0.95	1.0	1.0	-151.073± 41.396
	0.975	1.0	1.0	-151.038± 41.397
	0.95	1.0	1.0	-151.052± 41.389
	0.925	1.0	1.0	-151.059± 41.424
	0.95	1.0	1.0	-151.082± 41.436
	0.925	1.0	1.0	-151.041 ± 41.399

Tab. 328: Faithfulness experiment moons data experiment 2 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.925	1.0	1.0	-143.8 ±34.319
	0.975	1.0	1.0	-143.972± 34.166
	0.925	1.0	1.0	-143.898± 34.156
	0.95	1.0	1.0	-144.084± 34.259
	0.9	1.0	1.0	-144.018± 34.313
	0.9	1.0	1.0	-143.83± 34.191
	0.9	1.0	1.0	-143.908± 34.306
	0.975	1.0	1.0	-143.816± 34.214
	1.0	1.0	1.0	-143.936± 34.093
	0.95	1.0	1.0	-143.986 ± 34.258
ECCo	0.9	1.0	1.0	-144.978 ±34.278
	0.95	1.0	1.0	-144.978± 34.275
	0.95	1.0	1.0	-144.966± 34.295
	0.975	1.0	1.0	-144.976± 34.274
	0.95	1.0	1.0	-144.989± 34.258
	0.95	1.0	1.0	-144.983± 34.256
	0.95	1.0	1.0	-144.954± 34.294
	1.0	1.0	1.0	-144.981± 34.251
	0.925	1.0	1.0	-144.997± 34.266
	0.9	1.0	1.0	-144.984 ± 34.256
Wachter	0.95	1.0	1.0	-143.761 ±34.127
	0.975	1.0	1.0	-143.715± 34.231
	0.95	1.0	1.0	-143.8± 34.269
	0.975	1.0	1.0	-143.866± 34.202
	0.975	1.0	1.0	-143.767± 34.147
	0.925	1.0	1.0	-143.932± 34.187
	0.875	1.0	1.0	-143.815± 34.189
	0.975	1.0	1.0	-143.782± 34.123
	0.975	1.0	1.0	-143.841± 34.128
	0.975	1.0	1.0	-143.818 ± 34.241
Generic	0.9	1.0	1.0	-143.865 ±34.318
	1.0	1.0	1.0	-143.923± 34.232
	0.925	1.0	1.0	-143.896± 34.16
	0.875	1.0	1.0	-143.941± 34.165
	0.95	1.0	1.0	-143.735± 34.115
	0.925	1.0	1.0	-143.881± 34.131

	0.9	1.0	1.0	-143.828± 34.173
	0.95	1.0	1.0	-143.861± 34.147
	0.95	1.0	1.0	-143.918± 34.216
	0.975	1.0	1.0	-143.852 ± 34.271
DiCE	0.975	1.0	1.0	-143.806 ±34.127
	0.975	1.0	1.0	-143.78± 34.268
	0.95	1.0	1.0	-143.896± 34.212
	0.975	1.0	1.0	-143.814± 34.211
	0.9	1.0	1.0	-143.89± 34.227
	0.825	1.0	1.0	-143.873± 34.219
	0.975	1.0	1.0	-143.833± 34.219
	0.95	1.0	1.0	-143.869± 34.182
	0.975	1.0	1.0	-143.947± 34.25
	0.925	1.0	1.0	-144.026 ± 34.081
ClaPROAR	0.925	1.0	1.0	-143.97 ±34.211
	0.975	1.0	1.0	-143.853± 34.105
	0.925	1.0	1.0	-143.906± 34.278
	1.0	1.0	1.0	-143.956± 34.244
	0.925	1.0	1.0	-143.871± 34.211
	0.95	1.0	1.0	-143.936± 34.332
	0.975	1.0	1.0	-143.851± 34.131
	0.925	1.0	1.0	-143.917± 34.143
	1.0	1.0	1.0	-143.847± 34.143
	0.925	1.0	1.0	-143.95 ± 34.149

Tab. 329: Faithfulness experiment moons data experiment 3 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	1.0	1.0	1.0	-106.193 ±41.687
	1.0	1.0	1.0	-106.234± 41.688
	0.9	1.0	1.0	-106.241± 41.711
	0.925	1.0	1.0	-106.209± 41.685
	0.95	1.0	1.0	-106.218± 41.719
	0.95	1.0	1.0	-106.257± 41.712
	0.925	1.0	1.0	-106.185± 41.658
	0.875	1.0	1.0	-106.209± 41.69
	0.925	1.0	1.0	-106.189± 41.719
	0.925	1.0	1.0	-106.197 ± 41.699
ECCo	0.85	0.95	1.0	-106.4 ±41.68
	0.925	1.0	1.0	-106.396± 41.678
	0.975	1.0	1.0	-106.401± 41.676
	0.975	1.0	1.0	-106.408± 41.676
	0.9	1.0	1.0	-106.407± 41.676
	0.975	1.0	1.0	-106.404± 41.676
	0.925	1.0	1.0	-106.402± 41.674
	0.975	1.0	1.0	-106.414± 41.67
	0.9	1.0	1.0	-106.403± 41.675
	0.975	1.0	1.0	-106.402 ± 41.672
Wachter	0.95	1.0	1.0	-106.193 ±41.699
	0.975	1.0	1.0	-106.214± 41.692
	0.975	1.0	1.0	-106.246± 41.722
	0.975	1.0	1.0	-106.208± 41.703
	0.925	1.0	1.0	-106.153± 41.662
	0.925	1.0	1.0	-106.204± 41.696
	0.925	1.0	1.0	-106.209± 41.699

	0.925	1.0	1.0	-106.235± 41.697
	0.85	0.975	1.0	-106.212± 41.717
	0.875	1.0	1.0	-106.211 ± 41.695
Generic	0.95	1.0	1.0	-106.213 ±41.701
	0.9	1.0	1.0	-106.214± 41.691
	1.0	1.0	1.0	-106.209± 41.713
	0.925	1.0	1.0	-106.195± 41.704
	0.95	1.0	1.0	-106.224± 41.724
	0.925	1.0	1.0	-106.178± 41.678
	0.975	1.0	1.0	-106.201± 41.719
	1.0	1.0	1.0	-106.206± 41.695
	0.95	1.0	1.0	-106.2± 41.663
	1.0	1.0	1.0	-106.219 ± 41.695
DiCE	0.925	1.0	1.0	-106.221 ±41.708
	0.925	0.975	1.0	-106.22± 41.706
	0.95	1.0	1.0	-106.224± 41.709
	0.975	1.0	1.0	-106.2± 41.72
	0.9	1.0	1.0	-106.188± 41.693
	0.975	1.0	1.0	-106.21± 41.674
	0.875	1.0	1.0	-106.191± 41.696
	1.0	1.0	1.0	-106.251± 41.721
	0.9	1.0	1.0	-106.227± 41.735
	0.85	1.0	1.0	-106.246 ± 41.726
ClaPROAR	0.95	1.0	1.0	-106.229 ±41.704
	0.9	1.0	1.0	-106.215± 41.741
	0.925	1.0	1.0	-106.202± 41.702
	0.9	1.0	1.0	-106.211± 41.71
	0.925	1.0	1.0	-106.198± 41.677
	0.85	1.0	1.0	-106.234± 41.708
	0.9	1.0	1.0	-106.172± 41.682
	1.0	1.0	1.0	-106.204± 41.724
	0.95	1.0	1.0	-106.185± 41.717
	0.975	1.0	1.0	-106.213 ± 41.689

Tab. 330: Faithfulness experiment moons data experiment 4 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
REVISE	0.95	0.975	1.0	-119.732 ±62.913
	0.975	1.0	1.0	-119.728± 62.988
	0.875	1.0	1.0	-119.726± 63.052
	0.925	1.0	1.0	-119.646± 63.037
	0.975	1.0	1.0	-119.782± 63.069
	1.0	1.0	1.0	-119.761± 63.152
	0.825	1.0	1.0	-119.798± 63.06
	0.9	1.0	1.0	-119.75± 63.0
	0.9	1.0	1.0	-119.8± 63.007
	0.925	1.0	1.0	-119.805 ± 63.065
ECCo	0.95	1.0	1.0	-119.689 ±63.407
	0.95	1.0	1.0	-119.656± 63.434
	1.0	1.0	1.0	-119.681± 63.412
	0.95	1.0	1.0	-119.659± 63.431
	0.9	1.0	1.0	-119.657± 63.435
	0.95	1.0	1.0	-119.616± 63.469
	0.95	1.0	1.0	-119.631± 63.461
	0.95	1.0	1.0	-119.649± 63.447

	0.95	1.0	1.0	-119.587± 63.5
	0.85	1.0	1.0	-119.571 ± 63.517
Wachter	0.975	1.0	1.0	-119.794 ±63.001
	0.875	1.0	1.0	-119.788± 63.035
	0.95	1.0	1.0	-119.757± 63.05
	0.9	1.0	1.0	-119.787± 63.1
	0.975	1.0	1.0	-119.747± 63.025
	0.925	1.0	1.0	-119.649± 63.054
	0.825	1.0	1.0	-119.768± 62.98
	0.925	1.0	1.0	-119.709± 63.099
	0.95	1.0	1.0	-119.736± 62.998
	0.85	0.975	1.0	-119.727 ± 63.11
Generic	0.95	1.0	1.0	-119.848 ±63.062
	0.925	0.95	1.0	-119.784± 62.993
	0.9	1.0	1.0	-119.788± 63.018
	0.9	1.0	1.0	-119.718± 62.952
	0.95	1.0	1.0	-119.771± 63.008
	0.9	1.0	1.0	-119.762± 63.095
	0.825	1.0	1.0	-119.723± 62.948
	0.9	1.0	1.0	-119.837± 63.034
	0.925	0.95	1.0	-119.83± 63.033
	0.9	1.0	1.0	-119.75 ± 62.986
DiCE	0.95	1.0	1.0	-119.796 ±63.028
	0.95	1.0	1.0	-119.744± 63.042
	0.9	1.0	1.0	-119.738± 62.985
	0.975	1.0	1.0	-119.808± 63.08
	0.975	1.0	1.0	-119.787± 63.043
	0.925	1.0	1.0	-119.735± 63.013
	0.925	1.0	1.0	-119.774± 63.077
	0.875	0.975	1.0	-119.667± 63.072
	0.975	1.0	1.0	-119.751± 63.029
	0.975	1.0	1.0	-119.773 ± 63.062
ClaPROAR	0.875	1.0	1.0	-119.802 ±63.014
	0.95	1.0	1.0	-119.738± 63.02
	0.925	1.0	1.0	-119.724± 62.985
	0.925	1.0	1.0	-119.771± 62.994
	0.925	1.0	1.0	-119.732± 63.032
	0.95	1.0	1.0	-119.759± 63.051
	0.875	0.925	1.0	-119.785± 63.048
	0.975	1.0	1.0	-119.787± 63.026
	0.95	1.0	1.0	-119.789± 63.018
	0.9	1.0	1.0	-119.786 ± 63.038

Tab. 331: Faithfulness experiment moons data experiment 5 when using a deep ensemble

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.925	0.925	1.0	0.0 ±0.0
	0.925	0.925	1.0	0.0± 0.0
	0.925	0.95	0.95	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.95	0.875	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.85	0.85	1.0	0.0± 0.0
	0.9	0.9	1.0	0.0± 0.0

	0.975	1.0	1.0	0.0 ± 0.0
REVISE	0.975	0.95	1.0	0.0 ±0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	0.9	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0 ± 0.0
ECCo	1.0	0.925	1.0	0.0 ±0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	0.85	1.0	0.0± 0.0
	0.95	0.975	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0 ± 0.0
Wachter	0.975	1.0	1.0	0.0 ±0.0
	1.0	0.95	1.0	0.0± 0.0
	0.925	0.95	1.0	0.0± 0.0
	0.975	0.925	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.95	0.875	1.0	0.0± 0.0
	0.975	0.9	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
Generic	0.9	1.0	1.0	0.0 ±0.0
	0.875	1.0	1.0	0.0± 0.0
	1.0	0.925	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	0.975	0.95	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0 ± 0.0
DiCE	0.975	1.0	1.0	0.0 ±0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0 ± 0.0
ClaPROAR	1.0	0.875	1.0	0.0 ±0.0
	0.95	1.0	1.0	0.0± 0.0
	0.925	0.9	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0

	0.95	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0 ± 0.0

Tab. 332: Faithfulness experiment moons data experiment 1 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.925	0.9	0.975	0.001 ±0.002
	0.975	0.975	1.0	0.0± 0.001
	1.0	0.95	1.0	0.0± 0.002
	1.0	0.95	1.0	0.0± 0.002
	1.0	0.975	1.0	0.001± 0.002
	1.0	0.95	1.0	0.001± 0.002
	0.95	0.85	1.0	0.001± 0.002
	0.975	0.925	1.0	0.0± 0.001
	0.95	0.925	1.0	0.001± 0.003
	1.0	0.975	1.0	0.0 ± 0.002
REVISE	0.975	0.95	1.0	0.0 ±0.0
	0.9	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.95	0.975	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	1.0	0.9	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	0.9	1.0	0.0 ± 0.0
ECCo	0.975	1.0	1.0	0.0 ±0.0
	0.975	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	0.775	1.0	0.0± 0.0
	0.9	0.975	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.95	0.925	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
Wachter	1.0	1.0	1.0	0.0 ±0.0
	0.925	0.975	1.0	0.0± 0.0
	1.0	0.825	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.925	0.875	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.925	0.925	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0 ± 0.0
Generic	0.95	1.0	1.0	0.0 ±0.0
	0.925	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.975	0.9	1.0	0.0± 0.0
	0.95	0.9	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0

	0.975	0.95	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	0.95	0.925	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0 ± 0.0
DiCE	0.95	1.0	1.0	0.0 ±0.0
	0.95	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.95	0.85	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0 ± 0.0
ClaPROAR	1.0	1.0	1.0	0.0 ±0.0
	0.975	0.9	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	0.95	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0 ± 0.0

Tab. 333: Faithfulness experiment moons data experiment 2 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.95	0.9	1.0	0.0 ±0.0
	0.925	0.95	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	0.975	0.925	1.0	0.0± 0.0
	0.95	0.9	1.0	0.0± 0.0
	0.975	0.95	0.975	0.0± 0.0
	0.925	0.85	1.0	0.0± 0.0
	0.875	0.9	1.0	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.9	0.875	1.0	0.0 ± 0.0
REVISE	0.9	1.0	1.0	0.0 ±0.0
	1.0	1.0	1.0	0.0± 0.0
	0.9	0.975	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	0.975	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0 ± 0.0
ECCo	1.0	1.0	1.0	0.0 ±0.0
	0.975	0.925	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	1.0	0.875	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0

	0.925	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
Wachter	0.925	1.0	1.0	0.0 ±0.0
	0.975	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.975	0.95	1.0	0.0± 0.0
	1.0	0.925	1.0	0.0± 0.0
	0.975	0.95	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.9	0.975	1.0	0.0 ± 0.0
Generic	0.95	0.95	1.0	0.0 ±0.0
	0.925	0.9	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
DiCE	1.0	1.0	1.0	0.0 ±0.0
	0.975	1.0	1.0	0.0± 0.0
	0.925	0.925	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.925	0.925	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
ClaPROAR	0.95	1.0	1.0	0.0 ±0.0
	0.95	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.85	1.0	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	0.925	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0

Tab. 334: Faithfulness experiment moons data experiment 3 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.925	0.925	1.0	0.0 ±0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	0.775	0.925	1.0	0.0± 0.0
	1.0	0.925	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	1.0	0.875	1.0	0.0± 0.0
	0.9	0.85	1.0	0.0± 0.0

	0.875	0.875	1.0	0.0± 0.0
	1.0	0.925	1.0	0.0 ± 0.0
REVISE	1.0	0.925	1.0	0.0 ±0.0
	0.9	1.0	1.0	0.0± 0.0
	0.9	0.9	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	0.85	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0 ± 0.0
ECCo	0.975	1.0	1.0	0.0 ±0.0
	0.975	0.875	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.85	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.9	0.975	1.0	0.0 ± 0.0
Wachter	1.0	1.0	1.0	0.0 ±0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	0.95	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.9	1.0	0.0± 0.0
	0.85	1.0	1.0	0.0 ± 0.0
Generic	1.0	1.0	1.0	0.0 ±0.0
	0.95	1.0	1.0	0.0± 0.0
	0.875	0.975	1.0	0.0± 0.0
	0.95	0.975	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	1.0	0.775	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.925	1.0	0.0 ± 0.0
DiCE	1.0	0.975	1.0	0.0 ±0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
ClaPROAR	1.0	0.95	1.0	0.0 ±0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.875	0.95	1.0	0.0± 0.0

	0.9	0.775	1.0	0.0± 0.0
	0.95	0.825	1.0	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.875	0.85	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.925	0.95	1.0	0.0 ± 0.0

Tab. 335: Faithfulness experiment moons data experiment 4 when using a MLP

Generator	sim acc d	sim acc e	sim acc knn	ecco
Gravitational	0.925	0.9	0.95	0.0 ±0.0
	0.95	0.925	0.975	0.0± 0.0
	0.95	0.975	0.975	0.0± 0.0
	0.975	0.925	0.975	0.0± 0.0
	0.925	0.925	0.95	0.0± 0.0
	1.0	0.975	0.975	0.0± 0.0
	1.0	0.95	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	0.9	1.0	0.0± 0.0
	0.95	0.925	0.975	0.0 ± 0.0
REVISE	0.925	1.0	1.0	0.0 ±0.0
	0.975	1.0	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0± 0.0
	0.85	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	1.0	0.925	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.825	0.95	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0 ± 0.0
ECCo	0.975	1.0	1.0	0.0 ±0.0
	0.95	0.975	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.95	0.975	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.95	0.875	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0 ± 0.0
Wachter	0.95	1.0	1.0	0.0 ±0.0
	0.925	1.0	1.0	0.0± 0.0
	0.9	0.975	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.95	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.9	1.0	1.0	0.0± 0.0
	1.0	0.975	1.0	0.0± 0.0
	0.925	1.0	1.0	0.0 ± 0.0
Generic	0.95	0.925	1.0	0.0 ±0.0
	0.975	0.925	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0

	0.95	0.95	1.0	0.0± 0.0
	0.8	0.975	1.0	0.0± 0.0
	0.925	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0 ± 0.0
DiCE	0.925	0.925	1.0	0.0 ±0.0
	0.875	0.95	1.0	0.0± 0.0
	0.9	0.95	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	1.0	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.875	1.0	1.0	0.0± 0.0
	0.95	0.975	1.0	0.0 ± 0.0
ClaPROAR	0.975	1.0	1.0	0.0 ±0.0
	0.85	1.0	1.0	0.0± 0.0
	0.925	0.975	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.975	0.9	1.0	0.0± 0.0
	0.95	1.0	1.0	0.0± 0.0
	0.975	1.0	1.0	0.0± 0.0
	0.9	0.975	1.0	0.0± 0.0
	0.975	0.975	1.0	0.0 ± 0.0

Tab. 336: Faithfulness experiment moons data experiment 5 when using a MLP

F.5. Evaluation framework experiments

All data gathered during the experiments on the evaluation framework can be requested by the author.