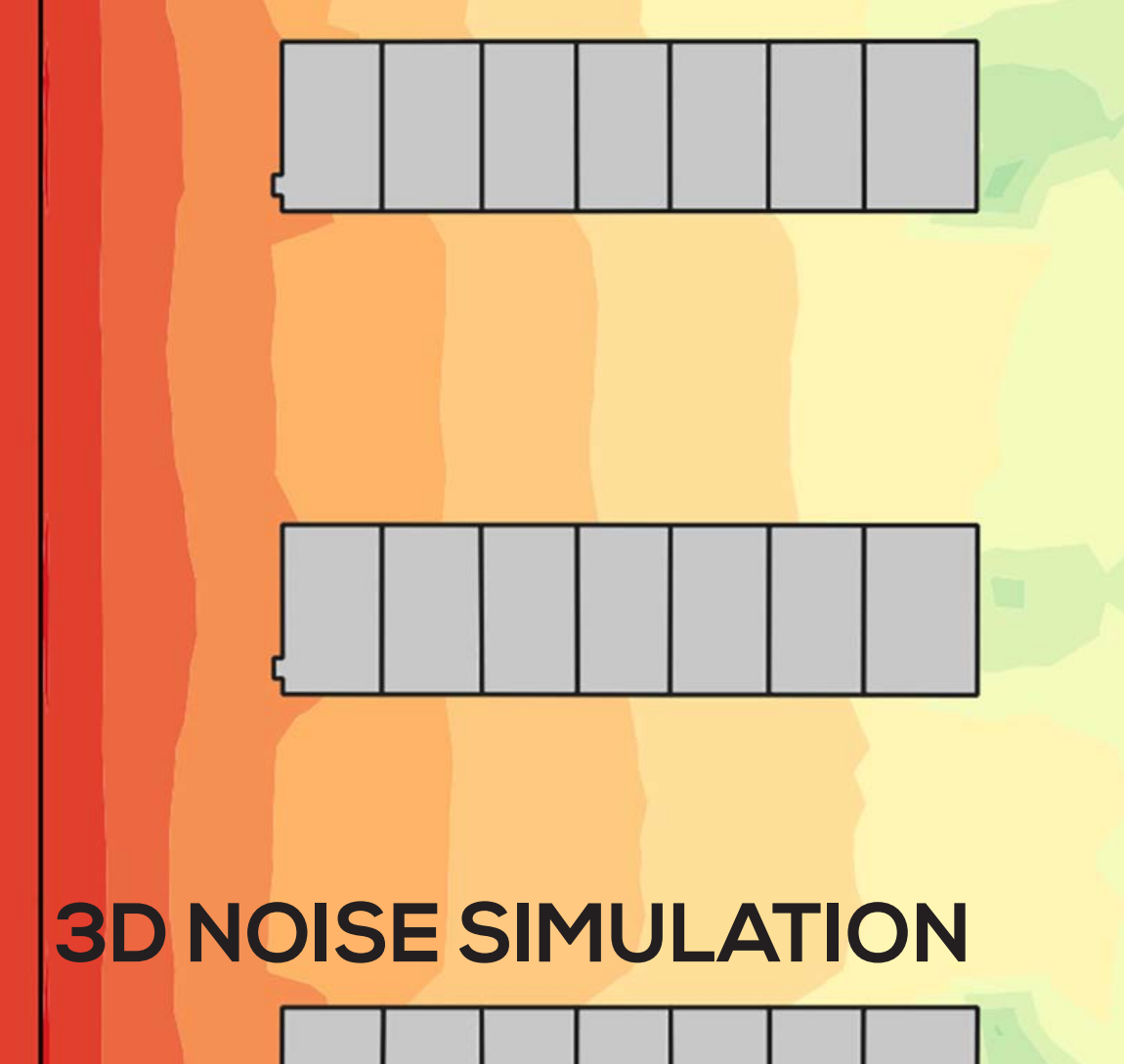
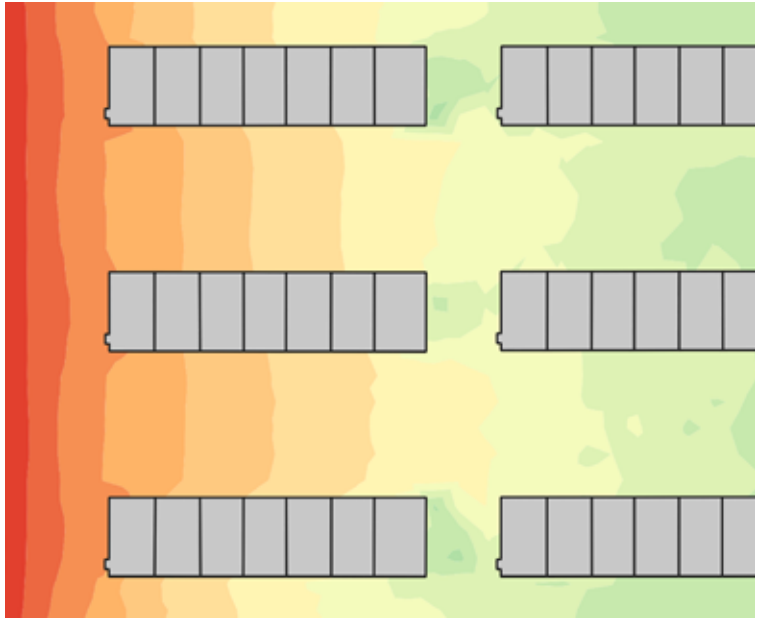


3D NOISE SIMULATION

NADINE HOBEIKA
CONSTANTIJN DINKLO
DENIS GIANNELLI
LAURENS VAN RIJSSEL
MAARIT PRUSTI

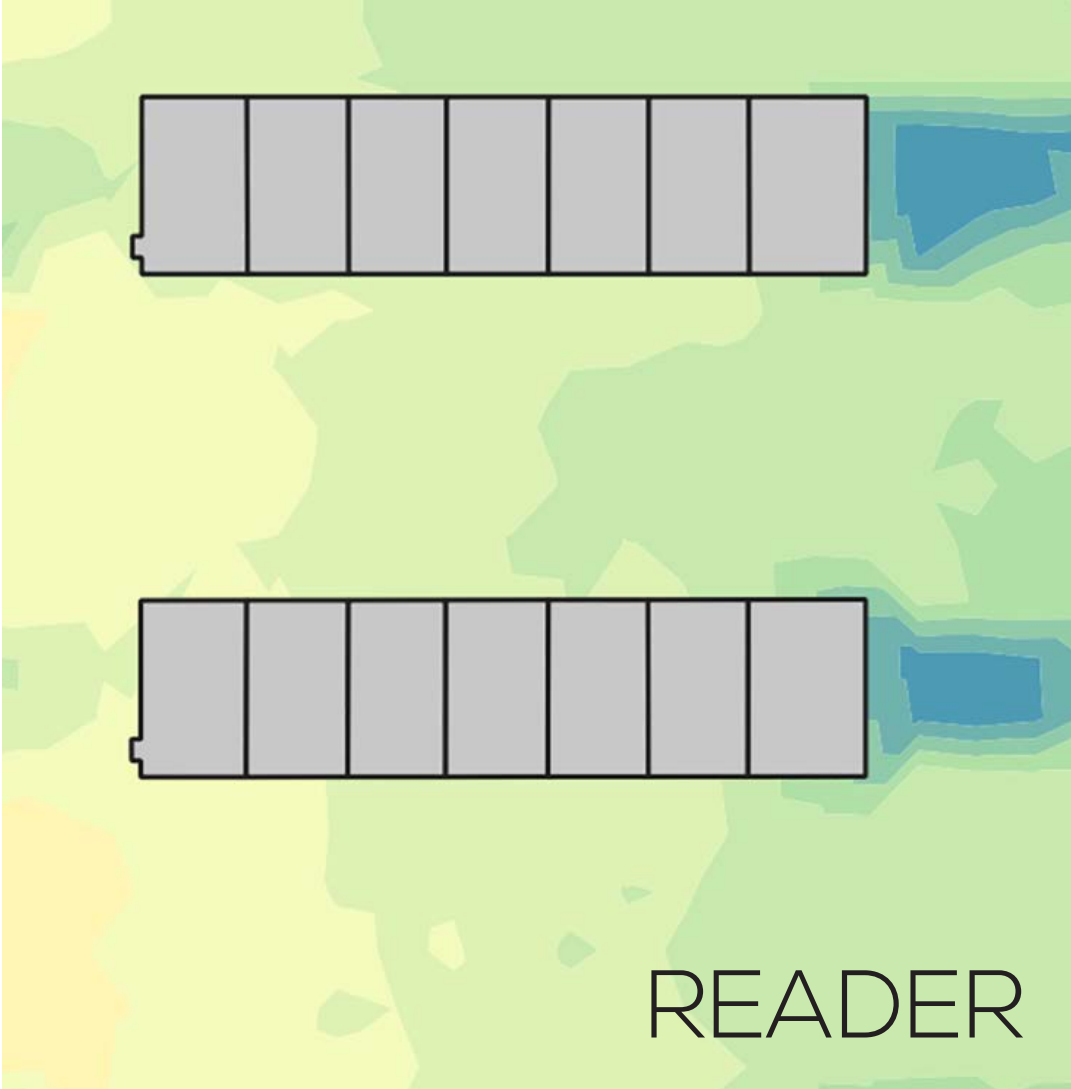
JANTIEN STOTER
BALÁZS DUKAI

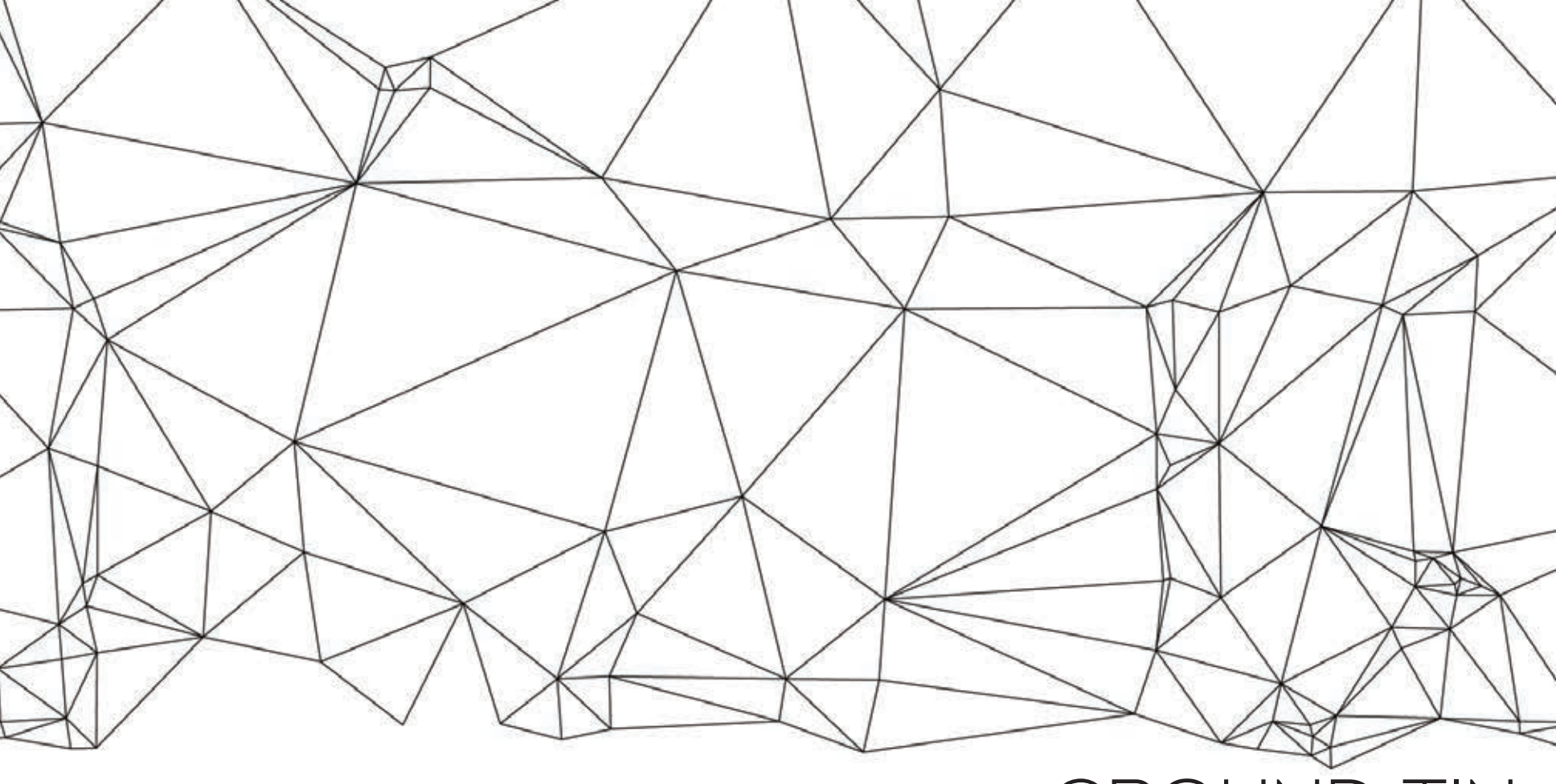
ARNAUD KOK
RENEZ NOTA
ROB VAN LOON



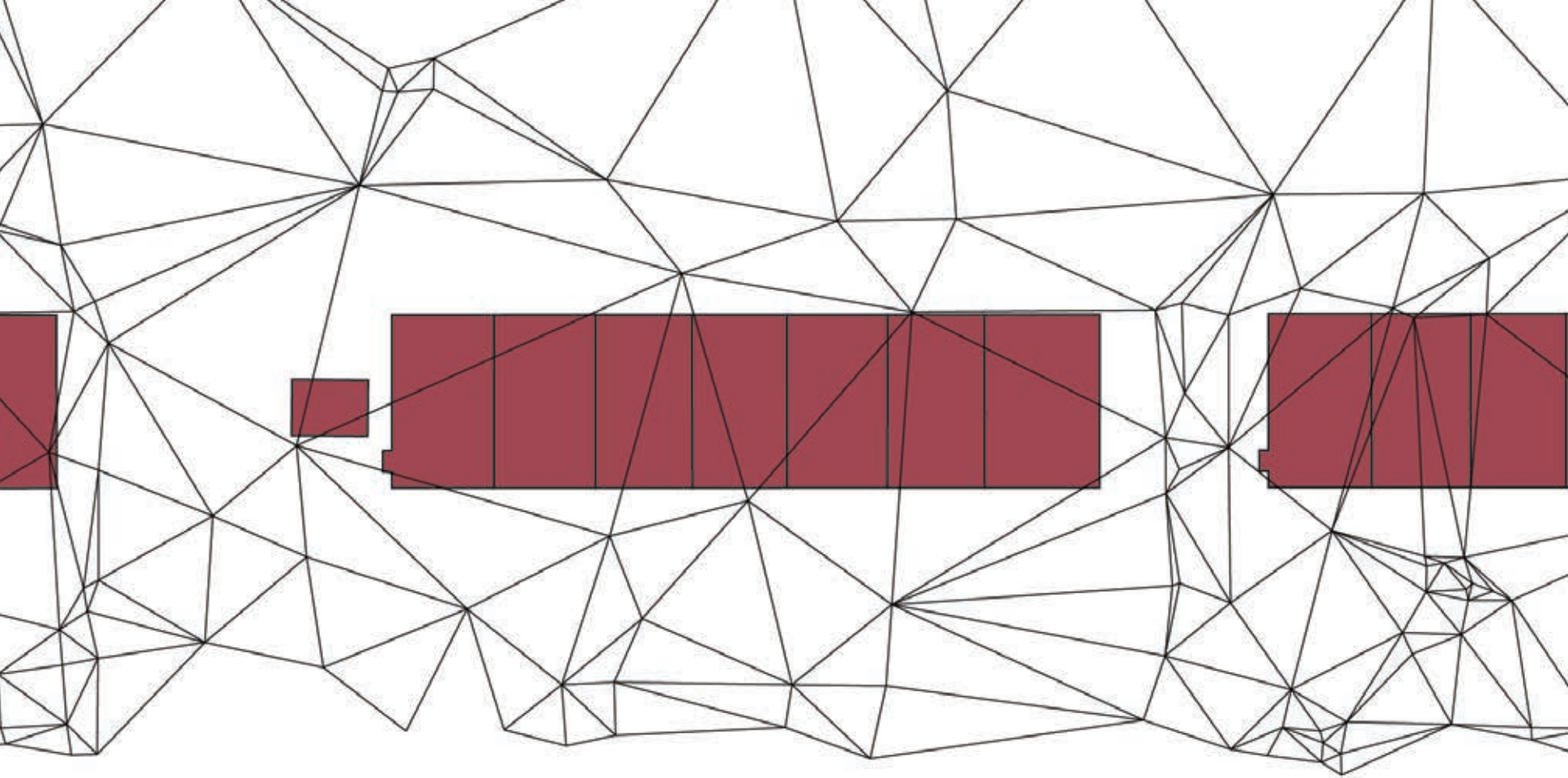
OBJECTIVE

- ALGORITHM
- RESULTS
- QUALITY
- LIMITATIONS
- CONCLUSION

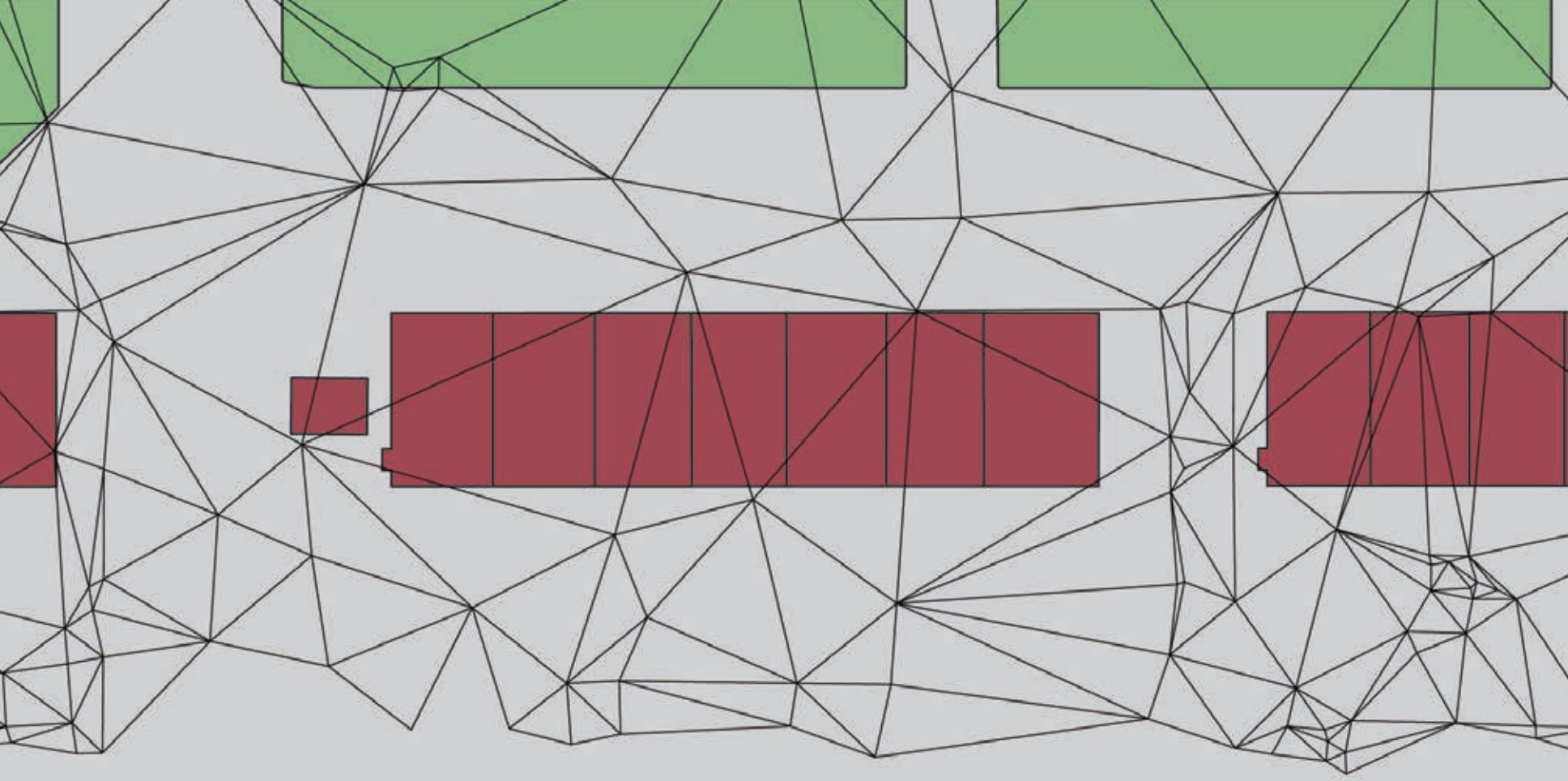




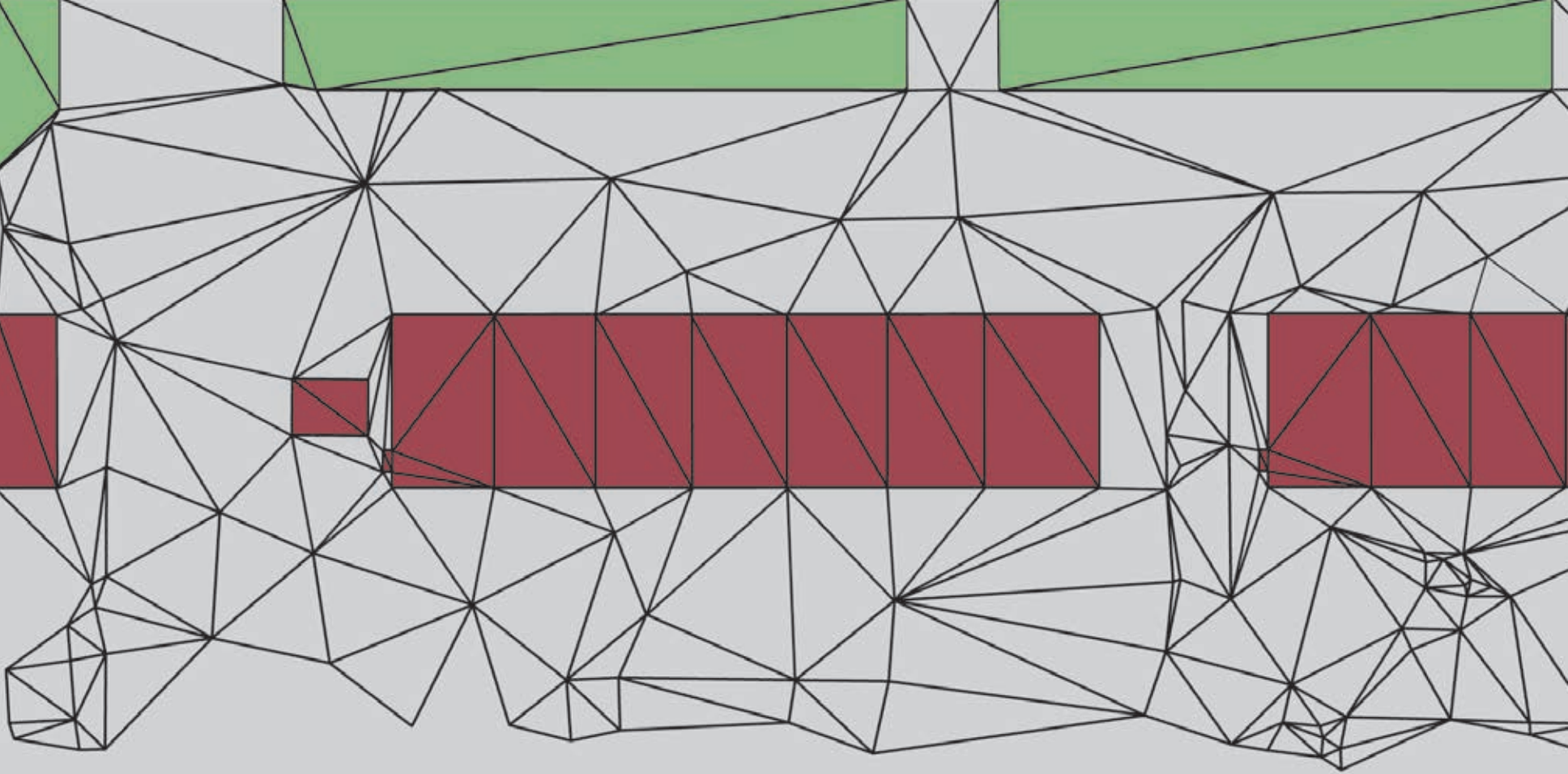
GROUND TIN



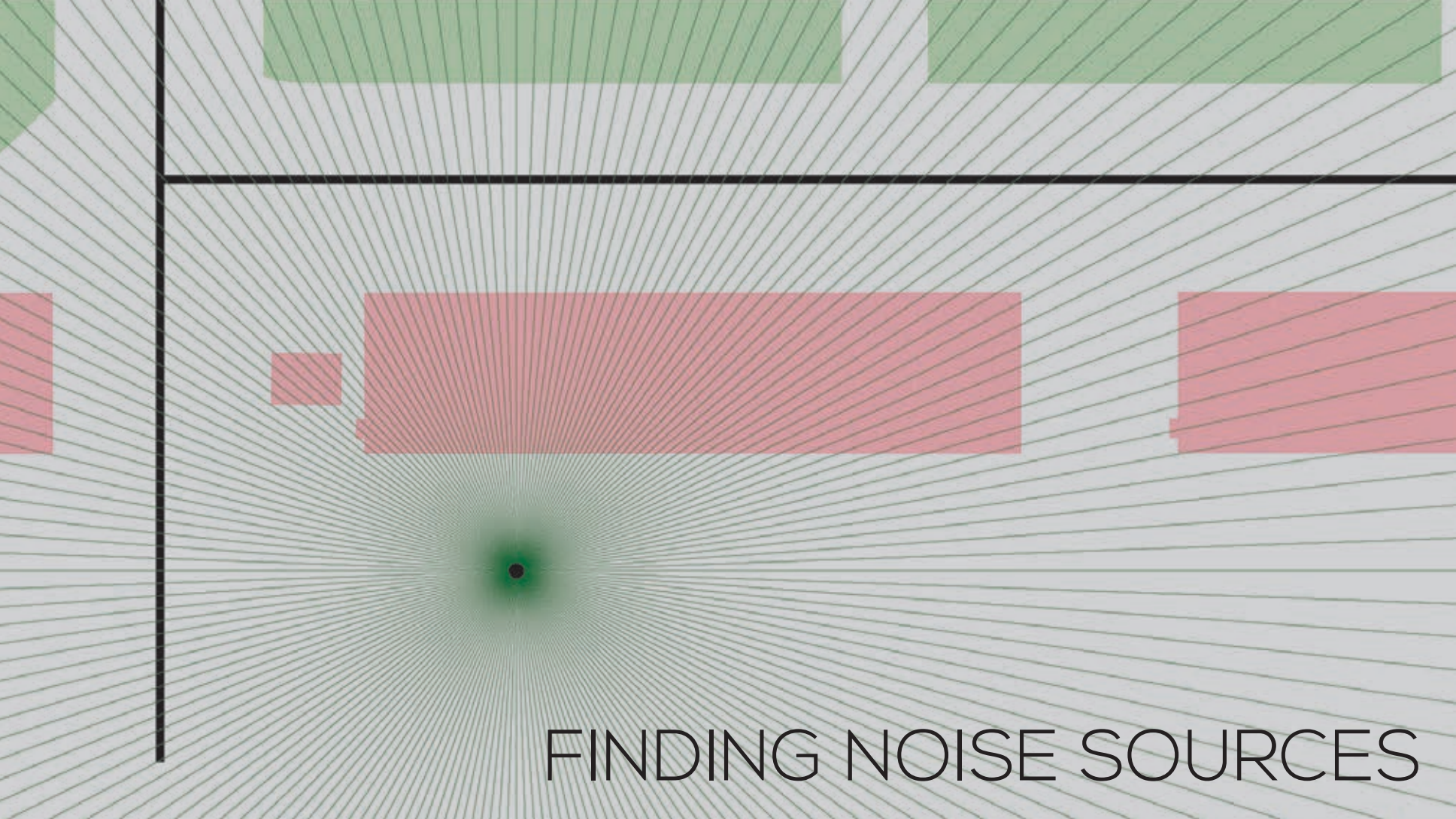
BUILDINGS



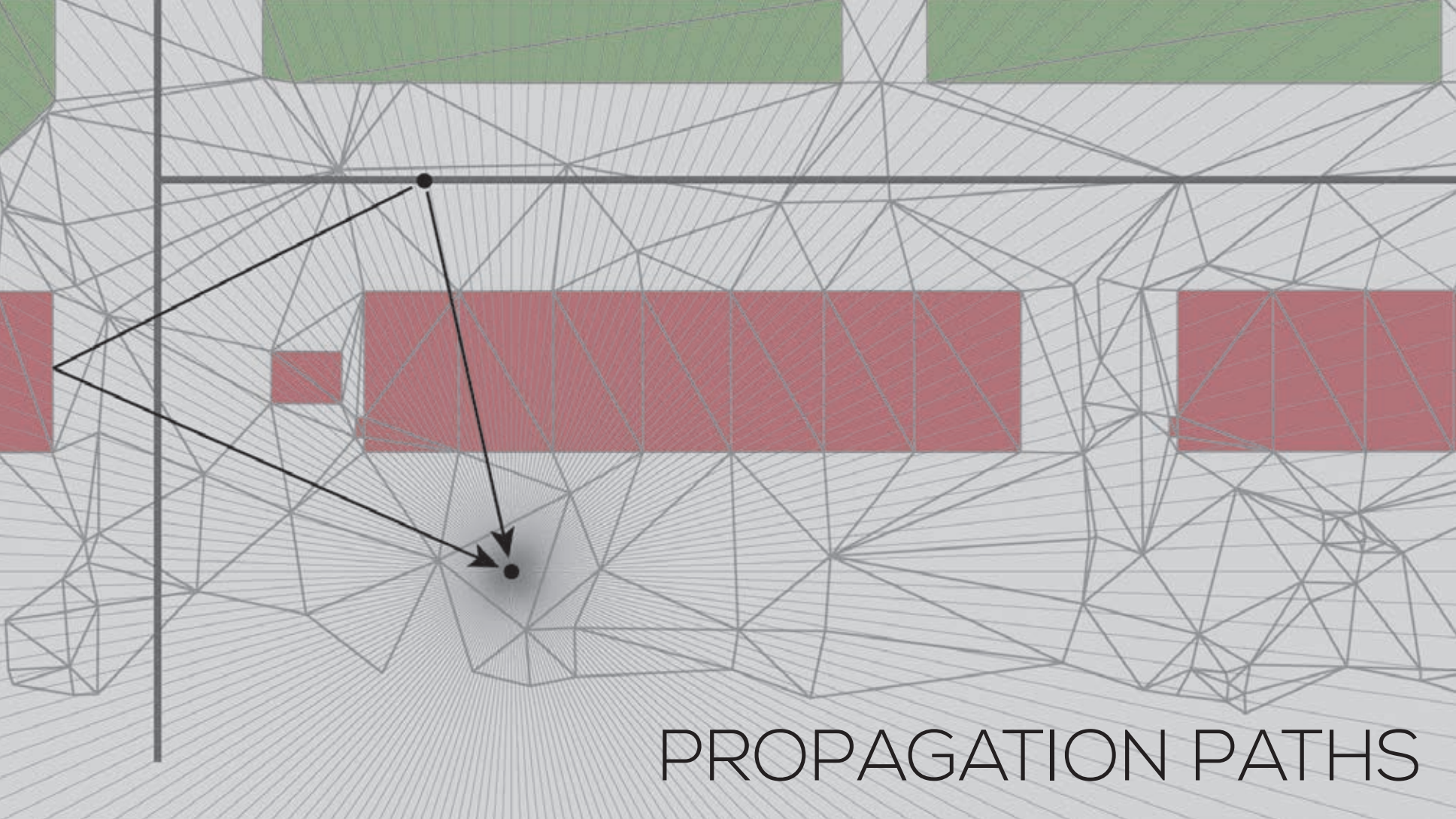
GROUND TYPES

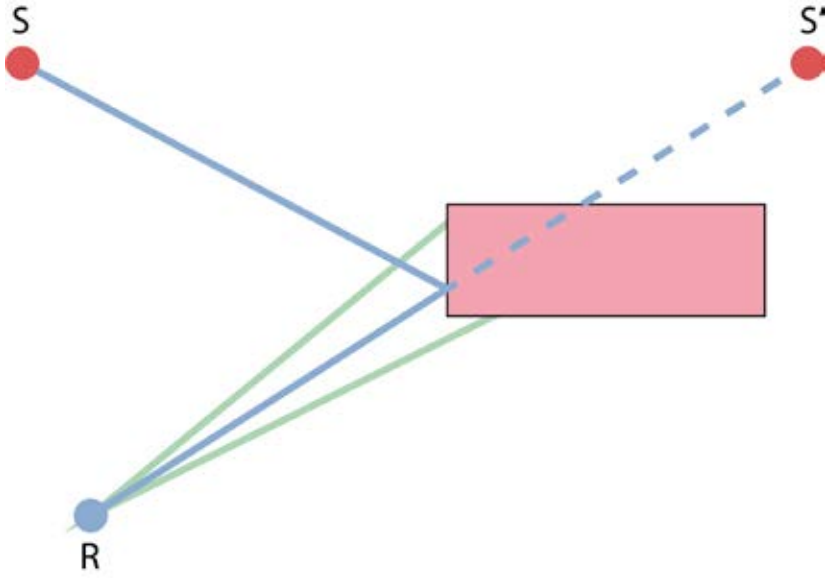


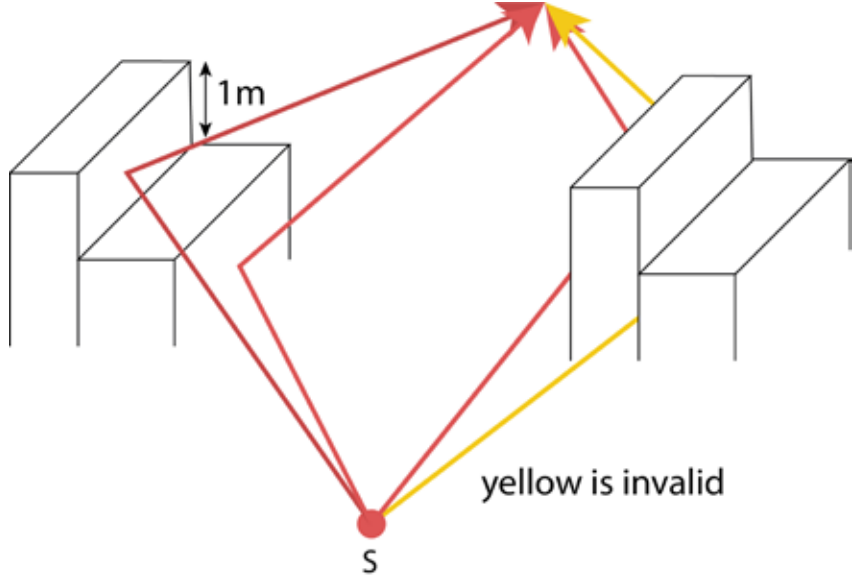
CONSTRAINED TIN



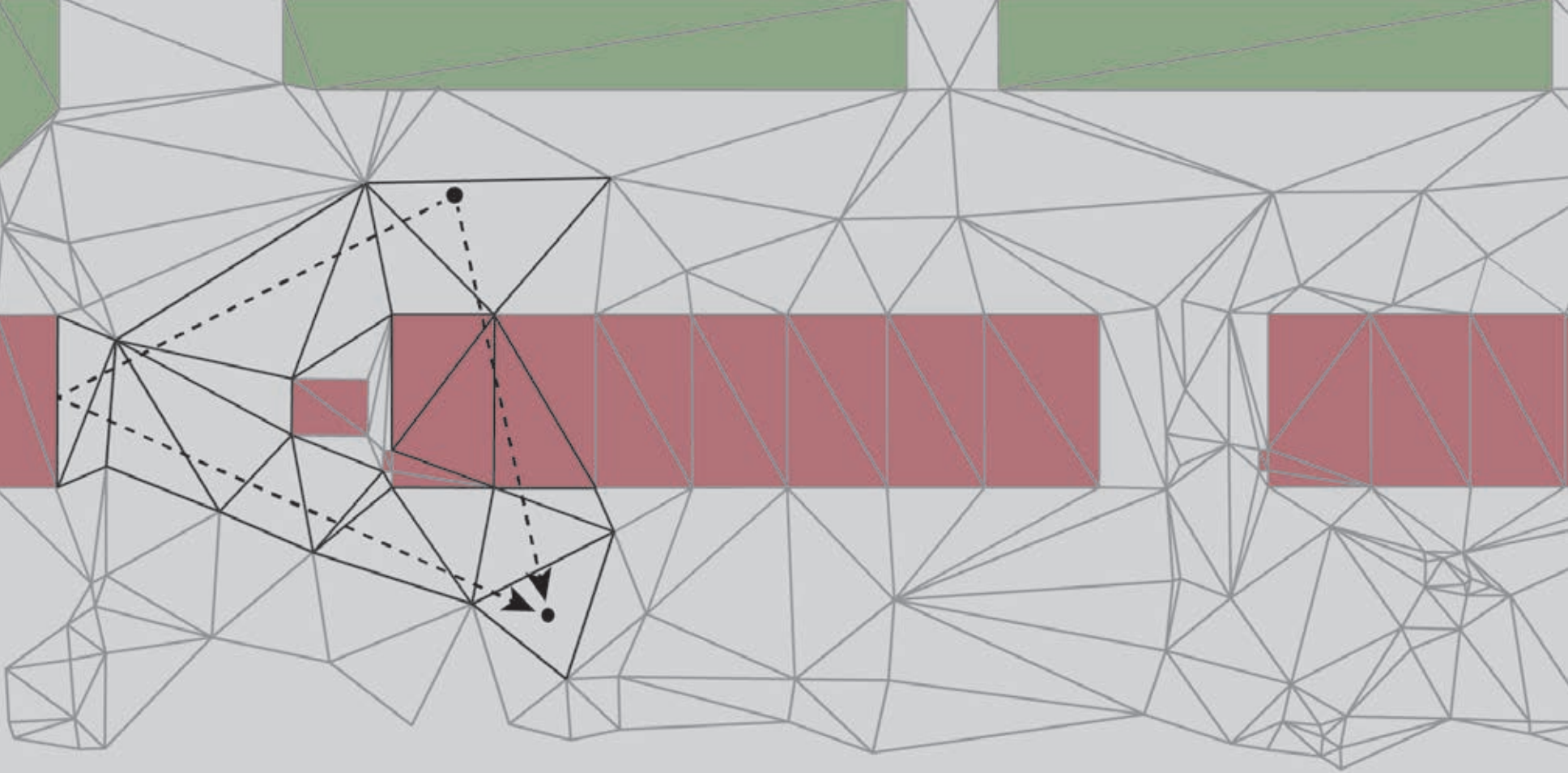
FINDING NOISE SOURCES


PROPAGATION PATHS

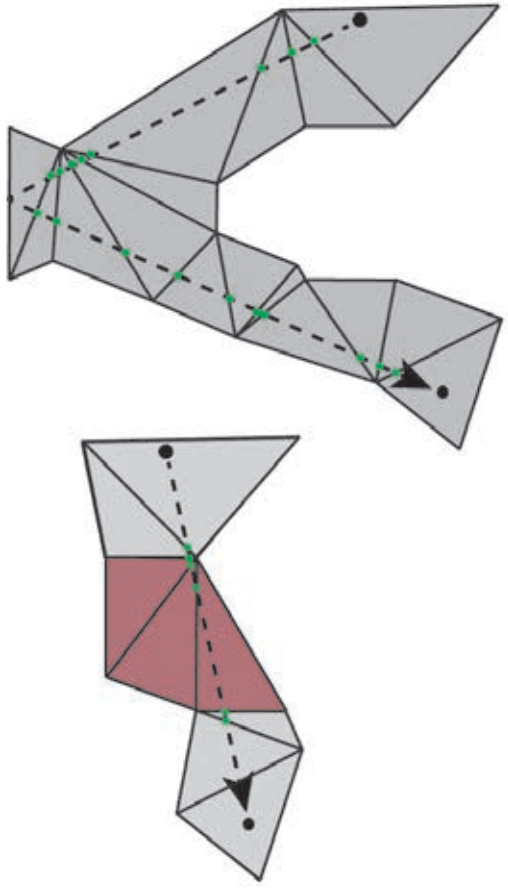


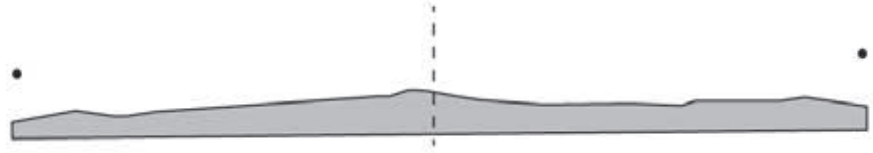


TESTS FOR REFLECTED PATHS



WALKING ALGORTIHM

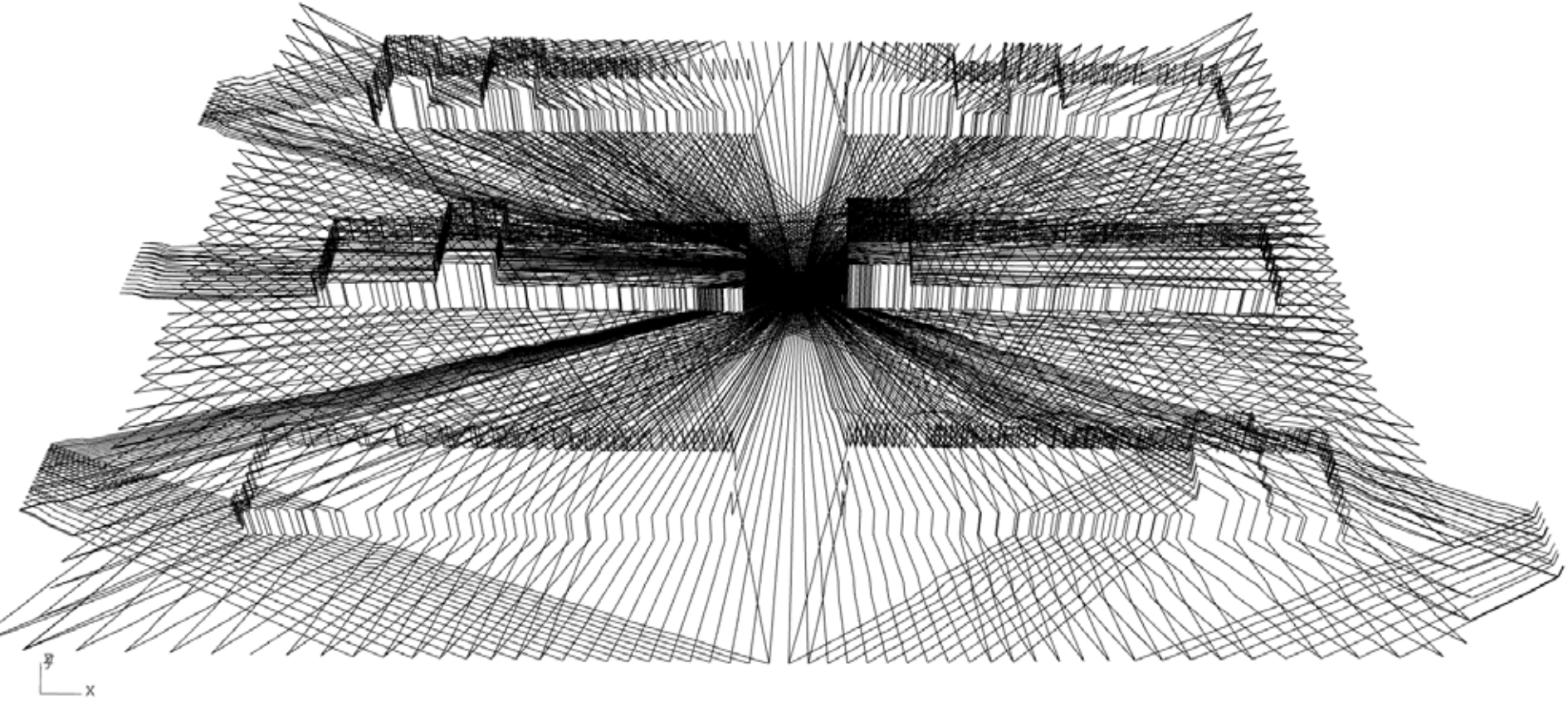




REFLECTED PATH

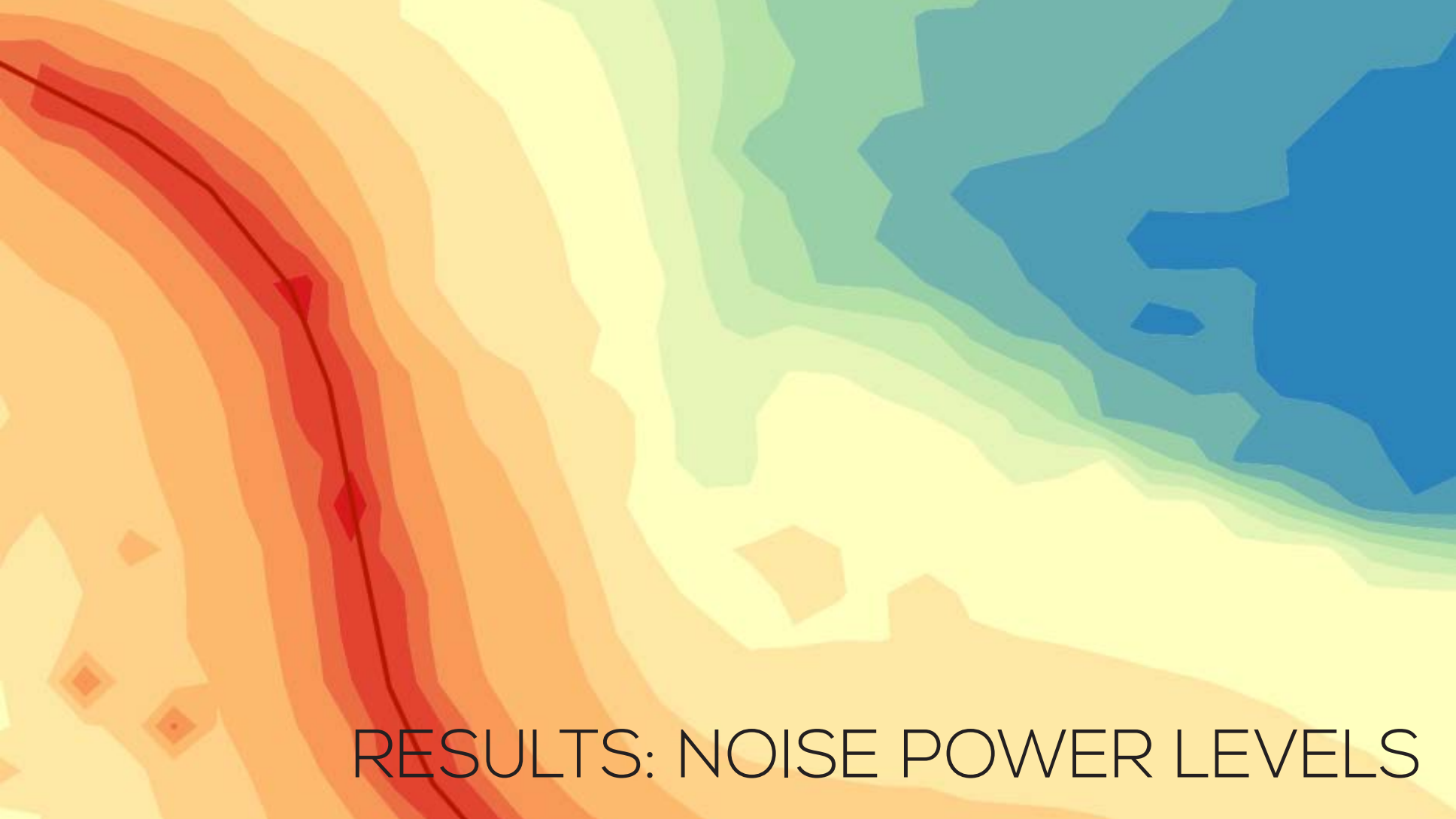
DIRECT PATH

CROSS-SECTIONS FROM WALKING

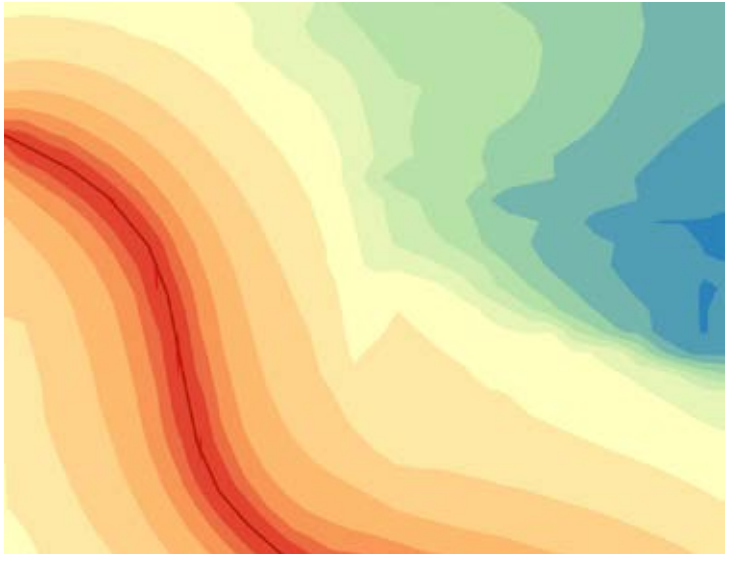


RESULTS: CROSS-SECTIONS

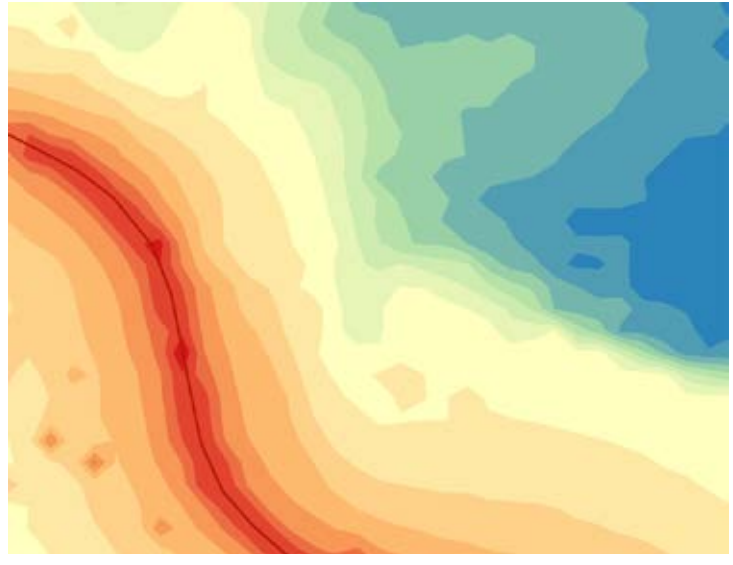
RESULTS: CROSS-SECTIONS



RESULTS: NOISE POWER LEVELS

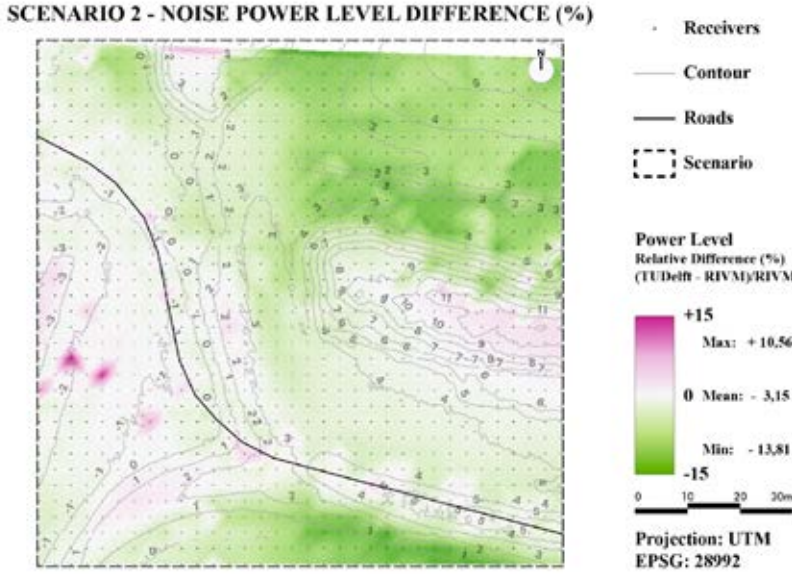


NOISE RESULTS BY RIVM

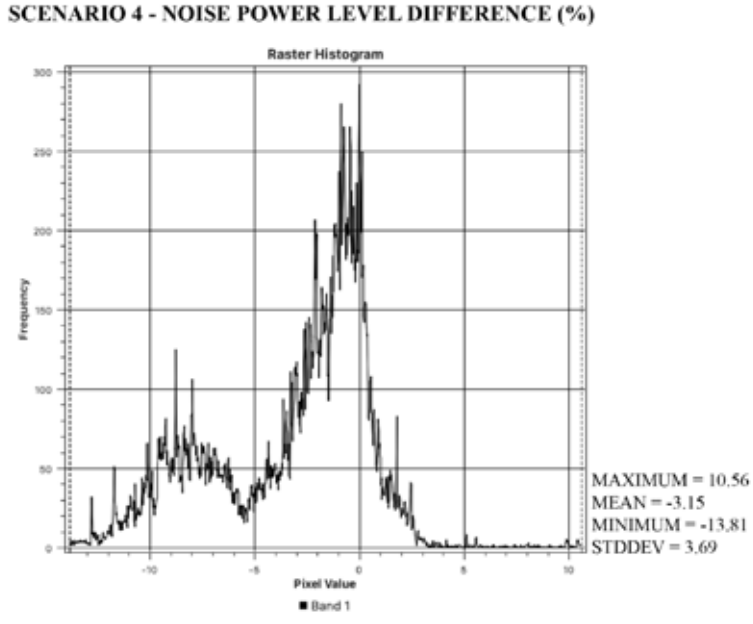


NOISE RESULTS BY US

QUALITY: SCENARIO WITHOUT REFLECTIONS

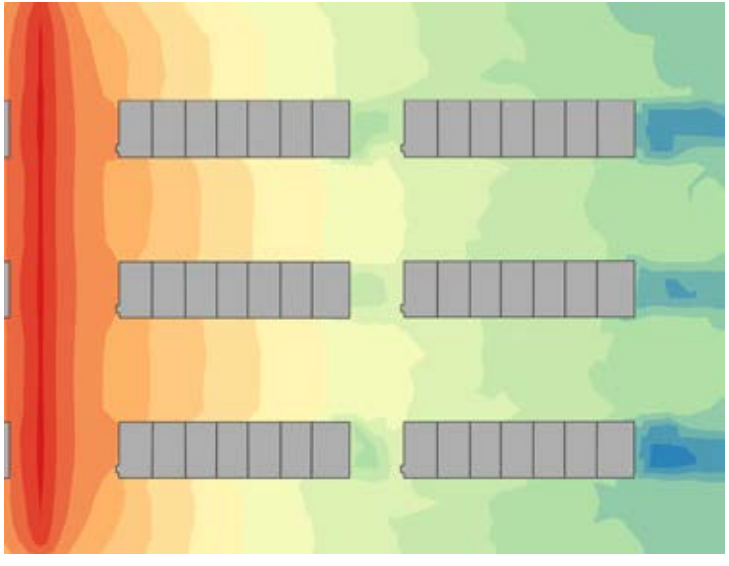


NOISE RESULTS BY RIVM

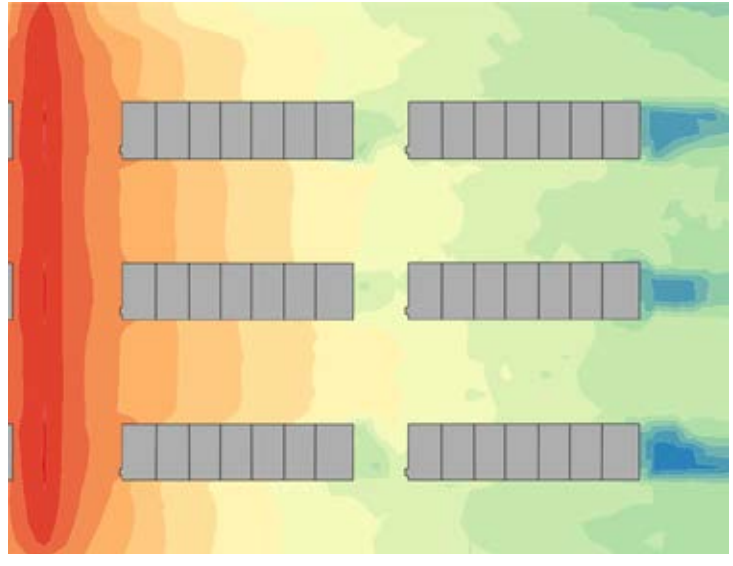


NOISE RESULTS BY US

QUALITY: SCENARIO WITHOUT REFLECTIONS

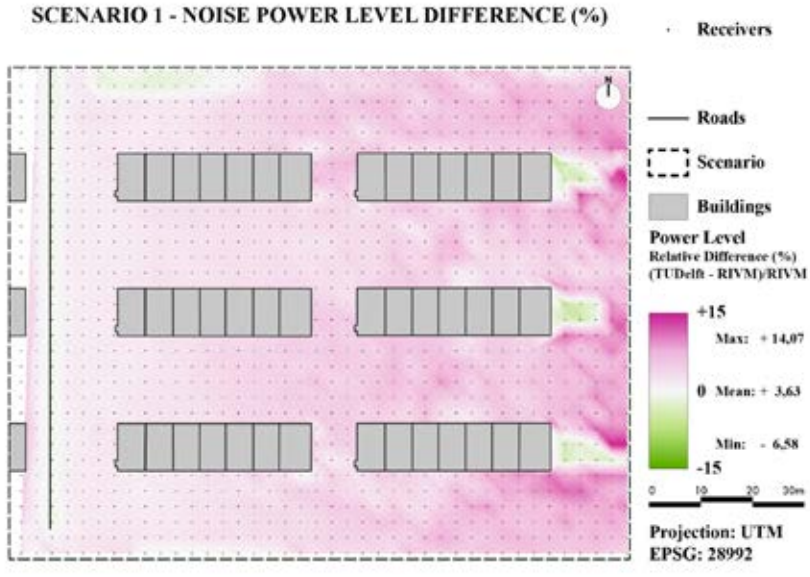


NOISE RESULTS BY RIVM

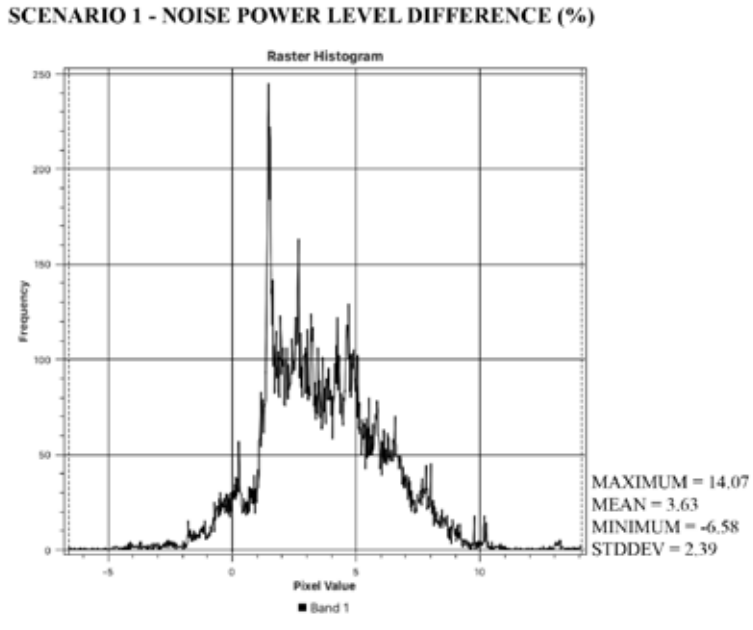


NOISE RESULTS BY US

QUALITY: SCENARIO WITH REFLECTIONS

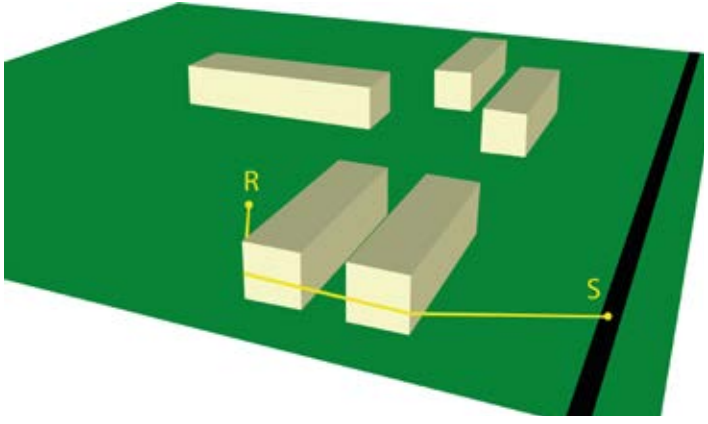


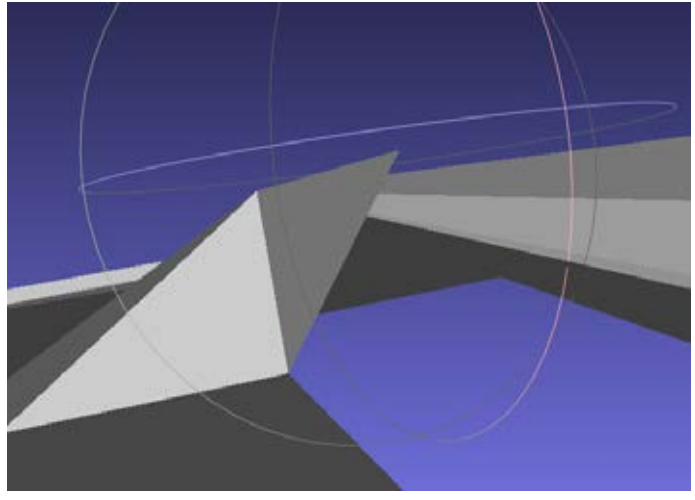
NOISE RESULTS BY RIVM

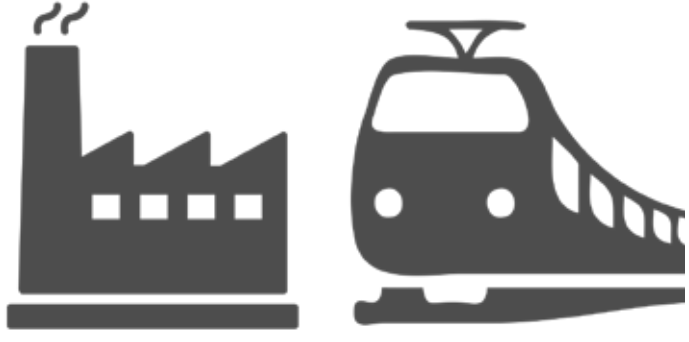


NOISE RESULTS BY US

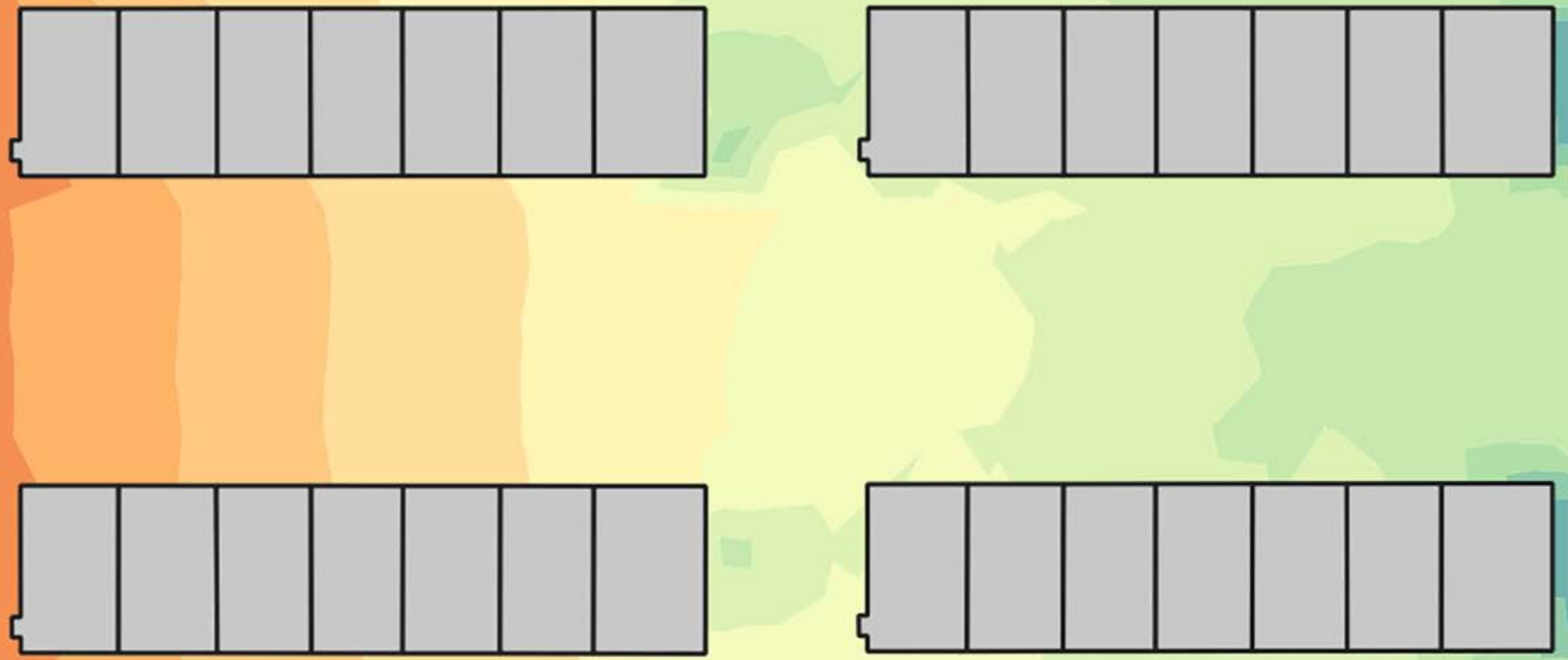
QUALITY: SCENARIO WITH REFLECTIONS







LIMITATIONS



CONCLUSION AND FURTHER RESEARCH