

3D noise simulation

Final report

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Synthesis project 2020

Master Geomatics, Faculty of Architecture and the build environment



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by

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Project duration:	April 20, 2020 – June 26, 2020	
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Preface

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The Project Initiation Document (PID) is a document clarifying our approach and first steps in the 3D noise simulation project. The PID is written for our clients Renez Nota, the representative of Directorate-General for Public Works and Water Management (RWS), and Arnoud Kok, the representative of the National Institute for Public Health and the Environment (RIVM). Besides, it is written for our supervisors from the TU Delft, Balász Dukai and Jantien Stoter.

In 2017, RWS and RIVM approached the TU Delft for a more efficient, cheaper, and standardised way to simulate noise. After 3 years of developing several approaches based on height lines, it was concluded that another approach could be more efficient, namely an approach based on TINs directly. In this project, we will do that in the time frame from the 20th of April 2020 until the 26th Of June 2020.

In March 2020, several projects were offered to the students in the MSc Geomatics at TU Delft to work on in the last period of the academic year. All the group members in this project had the preference to participate in the 3D noise simulation project. As a group, we have various backgrounds ranging from computer science to architecture. Since we are working in a group, we divided the writing parts of the PID. The introduction chapter is written by Denis Giannelli and Maarit Prusti. The project methodology is written by Laurens van Rijssel and the planning chapter is written by Nadine Hobeika. Finally, the project organisation chapter is written by Constantijn Dinklo.

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Bibliography

- [1] 3D geo-information. 3d input data for noise studies version (0.3 february 2020). <https://3d.bk.tudelft.nl/opendata/noise3d/en.html>, 2020. Accessed: 2020-04-27.