

# Master Thesis - Statistical evaluation of errors in Maxar's 3D products

# **About Maxar**

Maxar Sweden serves the global professional geospatial market with world-leading 3D geodata, 3D visualization solutions, and 3D image processing solutions. We're on a mission to build the Globe in 3D—a revolution in GEOINT tradecraft—that offers decision makers and analysts the entire world in highly accurate, immersive 3D. Maxar's customers are varied and come from the telecommunications, emergency response, defense, and intelligence communities.

We are searching for the best and brightest to join a culture that is open and flexible, inclusive and positive. We offer opportunities for growth and the ability to work with talented people who make a real difference for our clients. Most of our research and development work is done in our Linköping office in Sweden, which employs about 80 engineers who work on cutting-edge technology to produce unparalleled, global, precise 3D geospatial data and software.

# The Thesis

Maxar's 3D geodata and sensor models are accompanied with estimates of the error uncertainties in them. This information is important to many users of the data. It is equally important that this information is reliable and well founded.

This thesis will seek and apply methods from literature to improve and assess the error estimation that accompanies the Maxar 3D geodata and Maxar sensor models. Error estimate modelling and evaluation will - among other things - be a part of the thesis. A special case could be to model and compute the error estimation in a sparser mesh which originates from a dense mesh. Or in a 2,5D-raster that has been converted from a mesh. The scope of the thesis can be broadened depending on the master student's interests.

## Qualifications

Master of Science student with knowledge and interest in statistical methods and mathematics.

### Contact

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