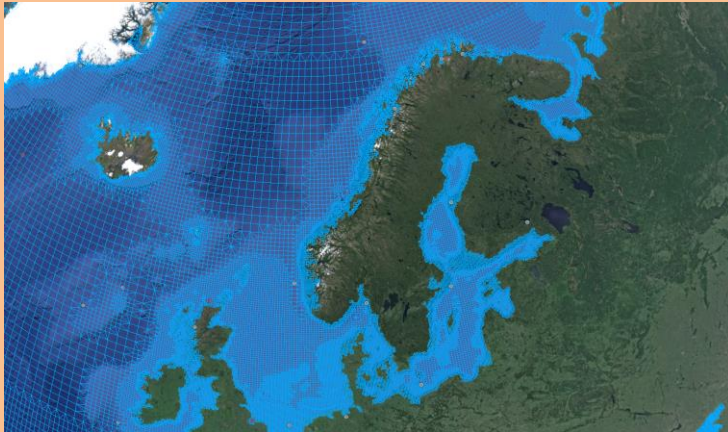


Open Seminar Series

Geoscience & Remote Sensing

Modeling sea-level - Hydrodynamics, vertical referencing and gravity

Prof. dr. Martin Verlaan
Deltares & TU Delft
December 20, 2016
12:40-13:30
CiTG room E



Tides and storm-surges are important for many human activities in the coastal zone from navigation to flood protection. Modeling these sea-levels with hydrodynamic models is often used with success to help find solutions for many relevant issues. During the cooperation between TU Delft and Deltares over the past years, first with the PhD of Cornelis Slobbe and later in the NEVREF project, we discovered more and more links between the research of both groups. In this presentation, I will show two of the available numerical models for computing sea-level and discuss a number of topics, such as: vertical reference of the numerical model, computation of lowest astronomical tide, self-attraction and loading, effects of water density differences and tidal reduction of bathymetrical survey data. And in my view, this is just a start there are many more interesting links to be explored.