



## ***Swarm* Data Processing and First Scientific Results**

Nils Olsen and the Swarm SCARF Team

DTU Space, Technical University of Denmark (nio@space.dtu.dk)

*Swarm*, a three-satellite constellation to study the dynamics of the Earth's magnetic field and its interactions with the Earth system, has been launched in November 2013. The objective of the *Swarm* mission is to provide the best ever survey of the geomagnetic field and its temporal evolution, which will bring new insights into the Earth system by improving our understanding of the Earth's interior and environment.

Each of the three *Swarm* satellites provides high-precision and high-resolution measurements of the strength, direction and variation of the magnetic field, complemented by precise navigation, accelerometer, plasma and electric field measurements. These observations will be distributed by ESA as Level-1b data, which are the calibrated and formatted time series of e.g. the magnetic field measurements taken by each of the three *Swarm* satellites.

The talks presents a first scientific validation of *Swarm* Level-1b data products.