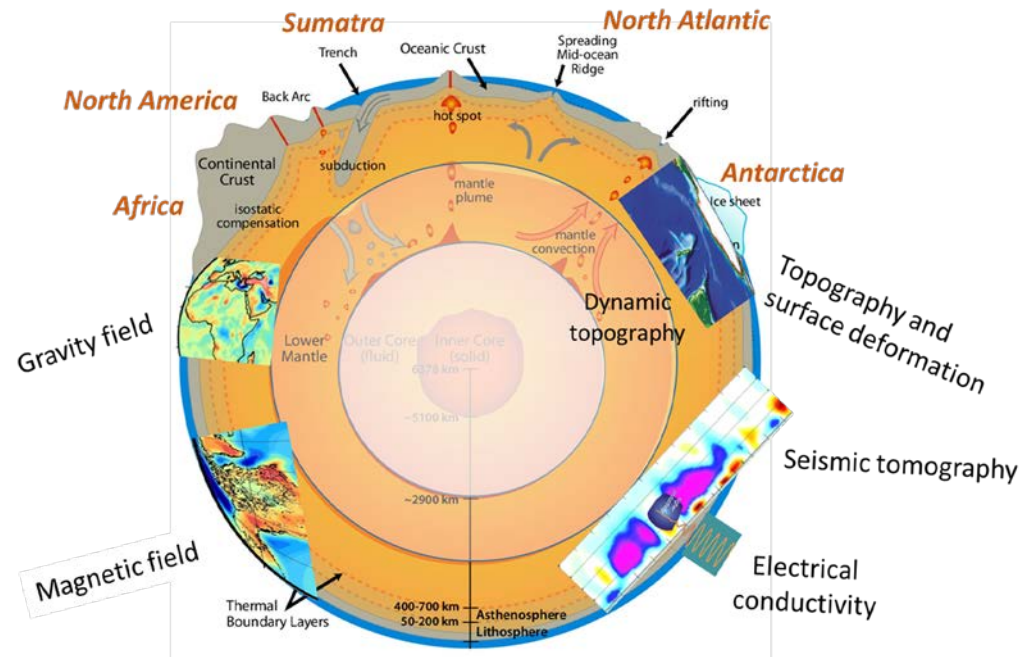


Highlights of Session

Upper Mantle and Lithosphere

Jörg Ebbing et al (keynote + posters)

With GOCE and Swarm Towards the 3D Lithosphere



(Last news from ESA funded 3-D Earth project)

- Swarm magnetic data are useful to establish reference models as input for aeromagnetic modelling
- Gravity gradients are useful to estimate the structure of the lithosphere in combination with seismological data
- Lower altitude would benefit the modeller

Nils Olsen et al

A new lithospheric field model
(LCS-1) based on CHAMP and
Swarm magnetic data

- Hi-res map (up to degree 185) of lithospheric field was determined from Swarm (450 km) and CHAMP (350 km data) **gradient** data
- Unique **Swarm east-west gradient** data was crucial for improvement of CHAMP-only model
- L1 model regularization does better job (compared to conventional L2 norm)