Status of the ESOC IDS Analysis Centre

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Software and Modeling updates

- NAPEOS version 4.1
- Modeling according to latest standards (IERS2010)
- A-priori coordinates ITRF-2014 (DPOD14 v2 IDS SINEX file)
- Gravityfield
  - GRGS EIGEN.GRFS.RL03.v2 (120x120) + linear drift, annual and semi annual variation up to degree and order 80)
  - C21 and S21 taken from gravityfield and no longer from mean-pole
  - no update (?)
- Variable gravity
  - GFZ AOD1B rl06 (3 hourly, using 80x80)
- Surface force modelling
  - box re-radiation taking into account

DORIS RINEX processing

- First version of DORIS RINEX converter implemented in NAPEOS
- Testing so far performed with Jason-2 (comparison against old DORIS files and GPS only orbits)
- Still differences at the centimetre level between orbits generated with the old format files and the NAPEOS converted RINEX files.
- Main difference in cross-track direction

- Next test will be to generate single satellite IDS solution with DORIS RINEX files (using Cryosat-2 and Jason-2)

Summary

- NAPEOS up to date with the latest standards no major issues foreseen with model implementation for next ITRF iteration.

- First version of DORIS RINEX converted implemented in NAPEOS
- Initial results look good (based on comparison against Jason-2) but some question remain about the correct clock modeling.

- First IDS results within the next month (single satellite solution using Cryosat-2).
- Before IDS symposium in September ESOC IDS solution will be routinely available again. Partial reprocessing foreseen (covering the DORIS RINEX period)

Thank you

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