

Summary of Workshop Discussion Items

Specific Issues Raised or Questions Posed:

- What is the GOCE Data Policy? ESA Data Policy will govern access to data
 - Are exclusive rights granted to the European GOCE Gravity Consortium (EGG-C) as sole participant in Level 2 data product generation? Answer: No
 - A Current Study is underway by the EGG-C to identify a potential Level 2 data processing architecture. This study will identify:
 - Required Steps
 - Interfaces definition
 - Definition of mature, optional methodologies
 - Priorities for development phases
- 3 potential mechanisms are identified for receiving ESA "blessing" for data use:
 - o limited Invitation to Tender (ITT) for contracted data processing (with Agency support)
 - direct negotiated participation in Level 1a/b product development (Agency support)
 - Announcement of Opportunity (AO) for data only (no ESA support)
- Potentially, an AO could be issued for purpose of identifying:
 - potential participants in Cal/Val campaign activities;
 - potential participants in Cal/Val of data products;
 - 'quick-look' teams for rapid evaluation of payload data stream anomalies
 - participants in Level 2 data processing;
 - \circ 3rd party evaluation of competing EGG-C Level 2 data products;
 - o generation of Validation/supporting data sets;
 - Generation of unique, non-standard (tailored) Level 2 products
 - Scientific applications using standard Level 2 data products
 - Level 3 data product generation
- Promoting the Mission (Explorer Web resources; EGG-C)
- Defining New/Essential Scientific Studies
 - Coordinating scientific activities in long preparation period up to launch
 - optimising momentum
 - timing/tailoring workshops to GOCE Project input requirements
- Important to establish early on the interface between the Ocean Community & GOCE L2 Gravity Products
 - How are corrections implemented for atmospheric/oceanic mass distribution and loading?
- E. Schrama pointed out the advantages of a frozen orbit scenario for performing external geophysical calibration using collinear ground tracks.
 - What are pro's/con's of existing orbit scenario, both in scientific and technical sense, compared to a frozen orbit scenario (under the current design restrictions).
 - How can collinear ground tracks be exploited for external geophysical calibration?
 - How do non exact-repeating ground tracks affect calibration noise?



Ideas for Future Focus Workshops:

- Simulated Data Sets** (how to generate data sets for purpose of community spin up prior to data release?)
 - Use of E2E simulator? (Open-loop data simulations.)
 - Test data set specifications.
 - Gradiometer noise characteristics
 - Complete platform/system error characteristics

** This item noted as one of highest priorities after GOCE workshop and Post W/S MAG meeting

- Cal/Val Strategy
 - Calibration (is there frequency-dependency control on cal. parameters?)
 - Appropriate region selection for Calibration
 - Product Validation planning (regional test areas)
 - What is the appropriate region size for comparisons with a regional solution?
 - What ancillary data necessary (e.g. DTM data; GPS levelling)?
 - Where do high quality screened regional data exist?

• Level 1a/b-Level 2 interface standards

• Data Standards (for Level 2 Products)

Before Product definitions frozen:

- What form of Level 2 products required (specifications)?
- What is the best product for oceanographers (geoid/MSS)?
- We cannot satisfy tailored requests but would nevertheless like to optimise with from community input.
- Are software solutions required, e.g. for converting level 2 products into specialised gridded products?

• ESA Level 2 Product Definitions

Metrics for determining "best" choice solution amongst varying gravity recovery methods

- What criteria should be applied (choice/selection/regional data comparison)?
- How can simulated/standardised datasets be used to judge amongst methods?

Thematic workshops

- Specifically tailored to GOCE Project input milestones:
 - Pascal LeGrand suggested a Workshop on "Oceanography requirements at Level 2" e.g. How will the oceans community use the data?
 - How do users apply the GOCE data in high res. geoid determination; direct use of data or spherical harmonics?