



Participation to the Sentinel-3 Calibration and Validation Planning Meeting

Nine members of the MCGS consortium, from ACRI-ST and CLS, were present at the joint ESA-EUMETSAT meeting which was held 20-22nd March 2012 in ESA/ESRIN facilities. This meeting was aimed at seeking lessons learned feedback from the scientific community, based on previous R&D studies and spatial missions. The 142 participants got an overview and the status of Sentinel-3 Calibration / Validation work packages, and a review of the Plans & Schedules. They provided the organizers with prioritized recommendations to ensure an effective and successful mission cal/val outcome.

The presentations of the attendees are available on the website <http://congrexprojects.com/12m19/12m17>. The content of the MCGS project was published on a poster.

We were glad that the ESA-EUMETSAT Sentinel-3 mission managers referred to MCGS as the first case of *Collaborative Ground Segments* of the GMES Core Ground Segments. They suggested that such a collaboration scheme should be used as a mechanism to formalise the membership of the Sentinel-3 Cal /Val team.

MCGS first steering committee meeting

Members of the MCGS Steering Committee, which held its first meeting on April 5 at the CLS Headquarters in Toulouse, are Vincent Kerbaol (CLS Brest), who had been elected chairman of the Committee, Marcel Babin (GIS COOC), Odile Hembise Fanton d'Andon (ACRI-ST), Patrick Farcy (IFREMER), René Garello (GIS BreTel), Baptiste Ibert-Jorgi (AS+), Bruno Le Squère (SHOM), Yves Morel (LEGOS), Estelle Obligis (CLS Toulouse), and Constant Mazeran (ACRI-ST), who, as MCGS project coordination manager, was designated secretary of the Committee. Vincent Toumazou, who is in charge of the interface with ESA and EUMETSAT for all *Collaborative Ground Segments* within the French Space Agency (CNES), will be a permanent guest, as will be representative of the FUI (Fond Unique Interministériel, or French R&D Fund for Competitiveness Clusters), to be designated.

The function of the steering committee is threefold: - to lead the R&D activity which is funded by the FUI and qualify the results obtained, - to specify the promotion of MCGS products and services, and - to prepare the consortium to the next stage of MCGS beyond the FUI funding phase (i.e. deployment).

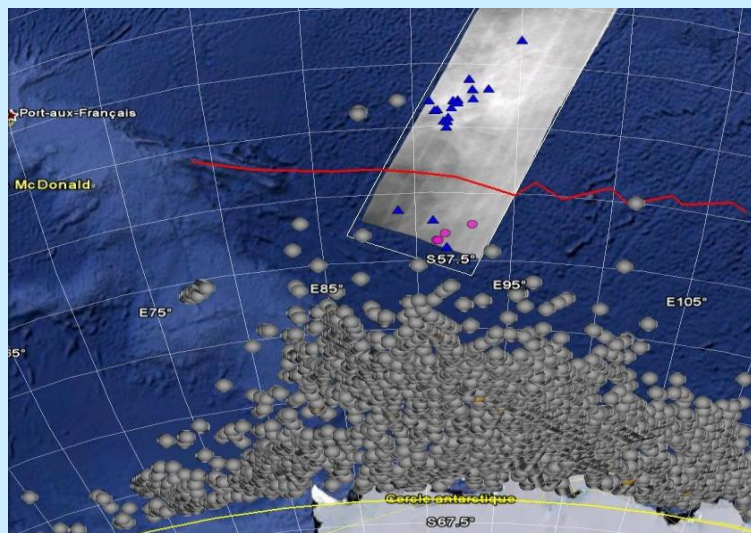
During the first meeting it decided that all future MCGS service will be available through a unique portal associated to a unique catalogue.



Dr Vincent Kerbaol
(CLS Brest),

Detecting icebergs for safer navigation

Icebergs are at the origin of hazards to shipping and off-shore exploitation. Onboard radars are used to mitigate the risk in real-time; but it might be better if the ships stay away from areas with icebergs or if ships and platforms were noticed of the existence of icebergs. CLS provides the service today using a combination of space techniques for the detection of these obstacles. In a first step, satellite altimeters spot the big icebergs (few meters height, and of size > 300 m x 300 m). Synthetic Aperture Radars (SAR) take the baton, being programmed to take a picture of the area in order to pinpoint the iceberg locations and detect smaller icebergs. Drift forecasts are then computed, so that the position of the iceberg(s) on a given day can be estimated, and an alert service bulletin issued. The satellites of the Sentinel type will carry new generation of instruments with enhanced capabilities, whether a new altimeter (on Sentinel-3) or a new SAR (on Sentinel-1). CLS, in the context of MCGS, will improve its service owing to the Sentinel missions.



Example of icebergs detection. Thomas Coville on the trimaran Sodebo attempted the record around the world alone beginning of 2011. He decided, after massive iceberg detections around Antarctica from altimetry (grey dots, representing 3 weeks of altimetry analyzed) and the localization of one big and several smaller icebergs on a SAR image (blue triangles on the grey-toned swath rectangle), and bad weather Northward, to sail in between the two iceberg-ridden areas (red line). He noticed no icebergs on this route.

Interruption of Envisat services

After 10 years in service, twice of its planned life, Envisat has stopped sending data to Earth on 8th April. The next days ESA and its subcontractors have tried to re-establish communications, unsuccessfully. Faced with this tragedy, Volker Liebig, ESA's Director of Earth Observation Programs, said, "The launch of the GMES Sentinel satellites, which are planned to replace Envisat, becomes urgent."

Meanwhile, pictures of the satellite have been taken to analyse the attitude profile and scenarios are being elaborated to understand the cause of the anomaly.

For the record, Envisat has orbited Earth more than 50000 times since its launch, delivering thousands of images and data. If the problem persists, a contingency agreement with the Canadian Space Agency on Radarsat will be activated in order to continue to serve some users.