Review of the International DORIS Service Workshop 2014

The International DORIS Service (IDS) is a service of the International Association of Geodesy (IAG) that supports geodetic and geophysical research activities through data and derived products of the DORIS (Doppler Orbitography and Radiopositioning Integrated by Satellite) system for satellite orbit determination and precise ground positioning. The Service organizes every two years a workshop to provide a forum to review the progress in the DORIS technique, present recent scientific developments and achievements, and prepare the future activities.

The 2014 IDS Workshop was successfully held in Konstanz, Germany, 27-28 October 2014, in conjunction with the Ocean Surface Topography Science Team (OSTST) meeting and a SARAL/Altika workshop (http://www.ostst-altimetry-2014.com/). The list of participants included representatives of the six IDS Analysis Centers and of the IDS Combination Center, people involved in the DORIS system management, and scientific groups interested in the DORIS data/products. We were pleased to welcome some new users and potential partners with promising results and perspectives.

A session was devoted to the data analysis performed for the IDS contribution to the next realization of the International Terrestrial Reference Frame (ITRF). It highlighted the very good dynamic within the IDS group, since in autumn, all the Analysis Centers had analyzed the whole period of data 1993-2013, and the Combination Center had submitted the DORIS contribution to the International Earth and Reference Systems Service (IERS). It was shown that the new instruments DGXX (on Jason-2, Cryosat-2, HY-2A, Saral) as well as the improvements brought to the data analysis and the modeling led to a significant gain with respect to the DORIS solution used for ITRF2008.

Among the topics addressed in the other sessions, we may report:
- two satellites equipped with a DORIS receiver will be launched in 2015: Jason-3 and Sentinel-3a;
- the first ground antennas benefiting of a consolidated manufacturing to ensure the radio frequency characterization are being deployed;
- radio-frequency compatibility tests DORIS-VLBI were performed at GGAO.
- the future version of the DORIS navigator (DIODE) on-board Jason-3 and the next missions will be able to provide pole coordinates estimations within 2 hours; it could be potentially interesting for IERS Bulletin A;
- including DORIS data in GNSS derived VTEC models has a positive impact; it offers some new promising applications.

PDF versions of both presentations and posters are available for download from the IDS website at:
http://ids-doris.org/report/meeting-presentations/ids-workshop-2014.html

In addition, following the workshop, the Governing Board held a meeting. It was the opportunity to confirm the results of the IDS autumn 2014 elections. The seat of Frank Lemoine (NASA/GSFC) who served as Analysis Coordinator since 2005 will be occupied for 2015-2018 by the tandem Hugues Capdeville (CLS) and Jean-Michel Lemoine (CNES). They will share together the responsibility and the work of this position. Marek Ziebart (UCL) was also elected by the IDS Associates. He will succeed to John Ries (UTexas/CSR) as a member at large for the next 4-year term, starting on January 1, 2015. Welcome to the new members and many thanks to Frank and John for their valuable contribution to the IDS.