NEWS...

Advances of the Global Geodetic Observing System

– Dirk Behrend, NVI Inc./GSFC

(top) Participants at the GGOS Retreat in Oxnard, CA, USA in February 2007.

The Global Geodetic Observing System (GGOS) project of the International Association of Geodesy (IAG) made further steps in becoming an operational system. A group of about 30 people came together in Oxnard, CA, USA to participate in the GGOS Retreat 2007. The main focus areas of this three-day event (February 19–21) were threefold: (1) reports from the GGOS working groups and GEO (Group on Earth Observations) representatives about their on-going work, (2) discussion of the GGOS2020 process with a presentation of preliminary results and consequences for implementation, and (3) building GGOS on the existing services and commissions of the IAG including a discussion on potential contributions and challenges of integration.

(top) Tom Herring during his talk on the future geodetic reference frames.; (below) The GGOS Chairs (from left): Hans-Peter Plag (Vice-Chair), Markus Rothacher (Chair), and Ruth Neilan (Vice-Chair).

The IVS was represented by Dirk Behrend, the nominal IVS delegate to GGOS, but also by Chopo Ma (IERS Delegate and Member of the GGOS Executive Committee) and Harald Schuh (invited participant). IVS will strongly contribute to GGOS by providing uniquely the CRF (Celestial Reference Frame) and the full set of EOP (Earth Orientation Parameters) including nutation and UT1-UTC. Further, it will contribute to the TRF (Terrestrial Reference Frame), in particular the scale. In order to reach the goal of 1 mm accuracy for GGOS, the IVS has started investigations into the next generation VLBI system and work is under way to realize the VLBI2010 vision.

GGOS is working on its vision for the future geodetic observing system—dubbed GGOS2020. VLBI will be an integral part of this system. The GGOS2020 Reference Document (about 140 pages) is being drafted and is planned to be finalized by the IUGG General Assembly in Perugia, Italy in July 2007. This document is intended to provide background material and details for a global geodetic observing system in terms of concepts, conventions, infrastructure, and services. The main target group is the geodetic community proper. In addition to this document, a second document—the GGOS2020 Strategy—shall provide the main vision and an overview of the key issues. The scope of this strategy document will be about 30–40 pages with the target group being the decision makers, whose financial support will be required for realizing GGOS.

A sensitive issue with considerable discussion was whether the documents should list the planned number of stations for each technique. The consensus was that numbers should be included; however, this should be accompanied by a discussion of necessary redundancies and required minimum numbers.

The GGOS Steering Committee will meet during the EGU in Vienna, Austria in April 2007 and again in Perugia, Italy in July 2007. Furthermore, a combined workshop of GGOS and IGOS-P (Integrated Global Observing Strategy Partnership) will take place in Frascati, Italy on November 5–6, 2007. More information on the latter event can be found at http://geodesy.unr.edu/ggos/ggosws_2007/index.html.

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