Geodesy Section News

Marking the first anniversary of the Geodesy Section of the Canadian Geophysical Union, a series of events took place last May. Most of them, during the CGU Annual Scientific Meeting, in Banff, May 10-14, 2003: Meeting of the Executive, Annual General Meeting, Student Paper Competition and the First Sea Surface Topography (SST) Workshop.

There were five ***student papers*** competing for the $500 prize awarded by the Geodesy Section sponsored by the Geodetic Survey Division of NRCan. The winner was Ms. Georgia Fotopoulos, a PhD student from the Department of Geomatics Engineering, University of Calgary. The competing papers were:

- "On the estimation of variance components using GPS, Geoid and levelling data", by G. Fotopoulos.
- "The new IAU recommended transformation between the Celestial and Terrestrial Reference Frame and its implementation in Matlab", by M. Weigelt
- "Mean geoid-generated gravity disturbance along plumb line", By B-A. Martin.
- "The development of a high-degree spherical harmonic model based on satellite, airborne and terrestrial gravity data", by M. Kern
- "Orbit design for future gravity field satellite missions", by C. Xu.

The ***First SST Workshop*** took place on the 14th of May. It was an excellent opportunity for a meeting involving members of the geodetic and oceanographic communities dealing with a subject of interest to both: Sea Surface Topography. Various presentations set the stage for establishing a "common language" and identifying common areas of interest for possible collaboration. As a start, the participants representing the Universities of New Brunswick, Calgary, York and Dalhousie and the Federal Agencies of Geodetic Survey Division (NRCan) and the Institute of Ocean Sciences (DFO) agreed to prepare a research proposal for phase III of the GEOIDE/NCE. The Workshop participants are shown in the picture below.

The ***Seventh Geoid Workshop*** was an activity that took place after the CGU Meeting. It was held on 15-16 May 2003, at the University of Calgary. Besides the traditional open discussions on geoid modelling, the workshop was a venue for networking and discussions on two GEOIDE/NCE projects, namely "Seamless Vertical Reference System for Geomatics Applications," and "Precise Geoid Determination." It was very encouraging to see many geodesy students from all over Canada participate, give presentations and contribute to the discussions. Various topics in the field of geodesy and geophysics were discussed, including absolute gravity measurements and temporal variations of gravity, glacial isostasy and time-dependent geoid height over the North American continent, vertical datum transformation issues, assessment of CHAMP models and downward continuation methods for gravimetric geoid modeling. Future collaboration was also on the agenda: The team is now preparing for Phase III GEOIDE/NCE funding aiming at international collaborations and contributions. Those who have not yet been caught by the …Canadian Geodetic Web are particularly welcome to join in! (http://gge.unb.ca/CGU/GEODESY_SECTION.htm).

Future Meetings related to Geodesy:
Besides the Joint CGU/AGU Meeting, to take place in Montreal 2004, the following meetings will be held in Canada:

- The *3rd International VLBI Service General Meeting*, Ottawa, 9-11 February, 2004 (http://ivscc.gsfc.nasa.gov/meetings/gm2004), and the
- *XV International Symposium on Earth Tides*, Ottawa, 2-6 August 2004 (http://www.eas.yorku.ca/ETS-2004/ets.html).