



GROUP ON
EARTH OBSERVATIONS



A joint GGOS/IGCP565 – IAG – GEO Workshop

Towards a Roadmap for Future Satellite Gravity Missions

September 30 – October 2, 2009, Graz University of Technology, Austria

First Circular

Rationale:

Satellite gravity missions, such as CHAMP, GRACE and GOCE, are continuously pushing our knowledge of the static and temporally changing gravity field. The integration of these satellite missions with complementary information has created new opportunities for the study of mass transport in the Earth system in a globally consistent way. The monitoring of changes in Earth's gravity field provides insight in land water storage changes at sub-continental scales, ice sheets and oceans. Despite the importance of the gravity missions as part of the global geodetic observing system and, in particular, the global water cycle observing system, we are facing a serious challenge in maintaining the observations at current level or increasing spatial and temporal resolution to a level required by many geoscientific applications. It is therefore of paramount importance to come to a global agreement on how sufficient semi-operational satellite gravity missions can be ensured and necessary developments towards increasing accuracy, spatial and temporal resolution, and lower latency of products can be facilitated. In parallel, also a medium to long-term perspective has to be developed to ensure a continuous and sustainable monitoring of mass transport in the Earth system by means of future satellite gravity missions.

Objectives of the workshop:

The workshop aims at bringing together stakeholders in satellite gravity missions in order to establish a roadmap for future satellite gravity missions that would outline the sensor developments, mission concept developments, and mission implementation, and that would be consistent with anticipations of the major space agencies, CEOS, and GEO, and with the needs of key user groups (such as IGWCO, the GEO Water Tasks, GOOS and GCOS, Earth scientists, and GGOS itself).

Anticipated output:

The key output of the workshop shall be a roadmap document that could be submitted to the GEO Plenary in November 2009 in Washington, D.C., for endorsement and also to the CEOS Plenary and SIT for further discussions.

Program Committee:

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For further information concerning programme, registration, venue, hotel reservation please refer to the web-page:

www.iag-ggos.org/workshops/Graz

