
Towards an International Altimeter Service (IAS) – a mandatory component of GGOS

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Role of IAS within GGOS

- Satellite Altimetry provides
 - Mean sea level (2/3 of the Earth's figure)
 - High resolution gravity data
 - Empirical estimates of ocean tides
 - Data to estimate ocean mass redistribution
 - ... (a wealth of further applications, loading, OAM, ...)
- Thus, **IAS is a mandatory component of GGOS**
- However, ...

Outside relations of IAS

- Satellite Altimetry serves other geosciences as well !

IAS will be an interdisciplinary service

- providing also essential input to GOOS (the Global Ocean Observing System)
- e.g. for programs like MERCATOR, GODAE, etc.
- IAS can not be a pure geodetic service!

IAS and GGOS – Expectations and value-adding

- According to its impact IAS should be properly represented within GGOS

IAS will provide to GGOS

- Geodetic relevant, consolidated and quality controlled products, following international standards and conventions
- Interfaces to related services (PSMSL, IERS, GFC, IGS, ...)

IAS origin and legitimation

International Altimeter Service Planning Group (IAS-PG)

- Initiated in 2003 by a Call of C.K. Shum, Ph. Woodworth, G. Mitchum, and W.Bosch
- hosted by **IAG, Commission1** „Reference Systems“ == COSPAR Subcommittee „Coordination of Space Techniques“
- **Official endorsements** by
 - Global Sea Level Observing System **GLOSS**(IOC)
 - International Association of Geodesy, **IAG**
 - International Association of the Physical Sciences of the Oceans, **IAPSO**

Activities of IAS-PG

- Business Meetings in Paris (Oct 2003), Nice (Apr 2004), Vienna (Apr 2005), Cairns (Aug 2005), and Venice (2006); Web page at <http://www.dgfi.badw.de/wiki>
- Drafting ToR with structure and organisation similar to other services (<http://www.dgfi.badw.de/wiki/Documents/IAS-TOR-06-02-14.doc>)
- Venice 2006: No consensus on ToR ; organizational overhead not accepted by groups already serving altimeter users
- Review of strategy: focus on pilot projects initiated by an “Integrating Office”

Call for an IAS- Integrating Office (IAS-IO)

- Submitted on **January, 15, 2007**
- seeking proposals for the establishment of an **Integrating Office** with the general objectives **IAS-**
 - to provide a **single point of contact** for information on satellite altimetry and its applications;
 - to **communicate** with, and **interface** to, altimeter mission data providers, centres which process, archive, and analyse altimeter data, and other related services and organizations;
 - to **promote** satellite altimetry as a core element of Global Earth Observing Systems
 - to **help compile and analyse data**, and
 - **respond to altimeter user requirements.**



IAS-IO will accomplish its mission by

- Collaborating as appropriate with space agencies, processing centres, research institutes, altimeter experts
- Establishing a collaborative Web site (Wiki or Content Management System)
- Directing user requests to the appropriate organizations
- Establishing pilot projects to enhance and expand ist activities (may evolve to permanent components of IAS)
- Reporting to IAG, IAPSO, GLOSS, GEOSS, G4OS and other bodies

The roadmap for IAS-IO

- Proposals are due to **March 1, 2007**
- will be reviewed and selected by the Nomination Committee (representatives of IAG, IAPSO, GLOSS, related services)
- By **March 31, 2007** one of the applicants is recommended for approval by the Executive Committees of IAG and IAPSO (at IUGG in Perugia)
- The Nomination Committee may compile a list of initial tasks and value-added activities to be realized by the applicant.

IAS in the context of GGOS 2020

- As a technique specific service IAS will fill gaps in the GGOS infrastructure (as indicated in section 10 of the GGOS2020 reference document)
- Differences to other services should be accounted for:
 - IAS depends on data providers (Space agencies, but also MET-Offices) partly without a complete open **data policy**
 - IAS is not a pure geodetic service
 - IAS shall **coordinate**, leaving processing and data storage at different institutions/centres

IAS in the context of CAGS and ICSU

- Role of Services within CAGS (formerly FAGS) unclear, to be reorganized by the International Council of Scientific Unions, ICSU)
- ICSU Priority Area Assessment (PAA) focuses on Scientific Data and Information (SciDIF). Integration of IGS, ILRS, IVS, IAS, ... ?