

GAMBLE – A Thematic Network to Consider Future Developments in Satellite Altimetry

Workshop for Themes 1 and 3:

Sea surface height error budget and feature detectability
Orbit determination and satellite tracking

Day 1: Thursday, November 7

09:30 Opening

- Welcome and opening: K. Wakker
- Introduction and local arrangements: E. Doornbos
- Purpose of the meeting: Y. Menard / D. Cotton

10:00 Overview of new altimeter projects

- Jason-2: Y. Menard
- WSOA: E. Thouvenot
- Cryosat: P. Vincent
- AltiKa: P. Vincent
- Gander: D. Cotton or T. Allan
- Bistatic Delay Doppler Altimeter: K. Raney and C. Shum

11:15 Coffee break

11:30 Results from simulations on the contribution of present/future altimeter missions

- LEGI: J.M. Brankart
- LEGOS: B. Mourre
- SOC: P. Challenor
- Discussion

12:30 Lunch

14:00 Refined requirements for sea level measurements (mainly sampling issues)

- Climate/mesoscale and operational oceanography applications: P.Y. Le Traon
- Coastal/tidal applications: C. Le Provost
- Discussion

15:00 Coffee Break

15:30 Requirements for SSH measurement errors

- General requirements (noise, orbit): P.Y. Le Traon
- Specific discussion on the choice of orbit (heliosynchronous or not): C. Le Provost
- Gander specific issues : dual-frequency, no radiometer, non-repeat orbit: D. Cotton, P. Challenor

16:20 Summary, conclusions and recommendations of day 1

- GAMBLE recommendations for future altimeter missions

17:00 Close

19:00 Group dinner in Delft

Day 2: Friday, November 8

09:00 Summary of future requirements affecting orbit choice and orbit determination for Themes 1 and 2

- Theme 1: P.Y. Le Traon
- Theme 2: D. Cotton

09:30 Presentations on future developments in high precision satellite tracking for low-Earth satellites:

- SLR: R. Noomen
- DORIS: P. Vincent
- GPS: D. Svehla
- GPS receiver for GANDER: M. Meerman

10:30 Coffee Break

11:00 Opportunity for presentations on future developments in orbit determination and related issues, for example:

- Aspects of Precise Orbit Determination for Geodetic and Altimetric Missions: Current Issues and Future Trends: P. Moore
- Orbit choices and OD using kinematic approach: C. Shum and D. Chambers
- Gravity models: P. Visser
- Non-gravitational force models: E. Doornbos

12:30 Lunch

14:00 Guided discussion on orbit determination and tracking, providing preliminary recommendations on:

- Tracking systems
- Orbit choice and orbit determination strategy for future missions

15:30 Coffee break

15:45 Discussion on summary, conclusions and recommendations of the workshop, and to establish:

- Contributions to GAMBLE reports on theme 1 and 3.
- What work should be carried out in second phase of both work packages.

16:30 Close