

CONSOLIDATION OF ANTARCTIC TIDE GAUGE INFORMATION

Background

At the SCAR WG-GGI Coordinators meeting, held in Heppenheim, Germany in July this year one item raised for discussion was the possibility of getting a project on Tide Gauges underway as information on the history and access to data from Antarctic Tide Gauges is difficult to locate.

There are a number of WG-GGI projects currently relying on tide gauge information but there is no coordinated approach within the Working Group to monitor activity and make available these data or results of sea level changes on an Antarctic-wide scale

The Geodesy Program Coordinator agreed to put together a project proposal to focus on coordination of tide gauge informations and sea level changes for consideration at XXVI SCAR meeting in Toyko, July 2000.

Project Scope

It is proposed that a Tide Gauge project be established within the GIANT program framework.

This will have a number of elements and will involve cooperation and liaison with a number of SCAR related groups and non-SCAR organisations. The principal components in this project are:

1. Research and develop a history of early tide gauge sites including location, physical benchmark and storage or records before IGY
2. Research and list permanent type gauges established for science during and after IGY
3. Identify significant temporary tide gauges and reference marks established for Hydrographic surveys or for specific scientific studies
4. Prepare a list of known values and accuracy estimates for all significant gauges identified
5. Prepare a tide gauge meta data page on the WG-GGI web site
6. Prepare guidelines for establishing and calibrating bottom mounted gauges and acoustic type gauges
7. Establish a register of GPS/TG connections on WG-GGI web page
8. Facilitate the collection and storage of data at Global data centres such as the IOC Southern Ocean Sea Level Centre
9. Identify project leadership and project team members

Liaison will be required with a number of bodies outside the SCAR environment including:

- PSMSL
- IHO Antarctic Group
- Southern Ocean Sea Level Centre
- GLOCHANT
- Other SCAR Working Groups such as Glaciology
- IAG Special Commission 8
- University of Texas

Suggested Milestones

History of early tide gauges	December 2000
Post IGY tide gauge details	April 2001
Summarise MSL values from each historical station	July 2001
Place meta data on web site	December 2001