### WG-GGI Newsletter No. 3

## September 2001

Dear GGI & GIANT Listserver members

Welcome to the third WG-GGI Newsletter as part of the GGI's Outreach Program. In this newsletter we hear from our colleagues in Italy, the USA, and Germany. A big thank you to all of those who have contributed information to this edition.

# **Changes in GGI membership**

There have been a number of changes to member country representatives since our last newsletter. Welcome to:

- Rear Admiral Neil Guy representing the International Hydrographic Organisation
- Prof. Dr. Reinhard Dietrich, the new representative for Germany. Prof Dietrich also retains his role as the International Association for Geodesy representative.
- Ms Marie-Nöelle Bouin, the new representative for France
- Ms Tania Brito, the interim representative for Brazil. A new and permanent representative will be appointed before the end of the year.
- Prof Fraser Taylor, the new representative for Canada.

Contact details for each of these members is available at <a href="www.scar-ggi.org.au/scarmemb.htm">www.scar-ggi.org.au/scarmemb.htm</a>

It is with regret that we announce the death of our Chilean member - Prof Victor Villanueva-Lopez - who passed away after a short illness on September 15. Victor made a significant contribution to the WG during the 17 years he was a member and he will be greatly missed.

### **Composite Gazetteer Update**

In the next version of the CGA (1.7.2001) there will be:

149 new features (1 of Canada, 1 of Germany, 2 of UK and 139 of USA), 139 new names (of USA) for features already named by different countries. Electronic copies of the complete database are now available from the web site <a href="www.pnra.it/SCAR\_GAZE">www.pnra.it/SCAR\_GAZE</a> You will need to register (which is free of charge) and then you can gain access to the .zip file.

Perhaps the only other news is that a new Country (Canada) is contributing to the CGA even if with only one name. Thank you Canada for your contribution!

There has been a small article on the CGA published in the March 2001 edition (Volume 20 Number 3) of "Aurora" (the ANARE Club journal). If you would like a copy of the article please contact the Executive Officer, Glenn Johnstone.

### USA / NZ Successful Antarctica Science Program - Field Season 2000-2001

A team composed of experts in geodetic surveys and spaceborne imagery from the USGS and Land Information New Zealand (LINZ) successfully completed objectives in the work plan for the NSF funded science program for the 2000-2001 field season in Antarctica. Members of the team from the USGS included Larry Hothem (Team Leader), Brad Johnson, physical scientist, and Mike Willis, (student from Byrd Polar Research Center, Ohio State University on one-year temporary assignment), and from LINZ, Tony Bevin, NZ Surveyor General, and John Ritchie, geodesist. Program activities carried out by the USGS/LINZ Team included:

- (1) establishing positions on photo-identifiable points for georeferencing satellite imagery at sites in the Prince Albert and Eisenhower Mountains, and in vicinity of Terra Nova Bay (Italian base station);
- (2) use of high accuracy GPS survey methods to conduct mm-level calibration of the Cape Roberts tide gauge observatory (critical site for monitoring changes in sea level affected by possible climate changes);
- (3) installation near the tide gauge at Cape Roberts, a newly designed continuous operating low power GPS/GLONASS observatory system where the data collected contributes to the continent-wide international network of permanent co-located geodetic and geophysical observatories, and
- (4) coordination with the Italian Geodetic Team who occupied simultaneously stations of the Victoria Lands North Transantarctic Mountains Network (VLNDEF), continued for the 5<sup>th</sup> season the GPS observing campaign on stations of the Transantarctic Mountains Deformation Monitoring Network (TAMDEF).

### **Map Distributors**

A list of Antarctic map distributors for each of the SCAR member nations is now available from the WG-GGI web site. If the details are incorrect or other sources are known could you please contact the Executive Officer with the information. See <a href="https://www.scar-ggi.org.au/mapdistrib.htm">www.scar-ggi.org.au/mapdistrib.htm</a>

## Siena meetings

There were a two WG-GGI meetings held in Siena, Italy between 12-14 July this year one was a Geographic Information Workshop and the other was the intersessional WG Coordinators meeting. Notes from both meetings (as well as some of the papers presented) are available from: www.scar-ggi.org.au/siena/docs.htm

There was also a week long ANTEC Workshop held at the same venue. Abstracts and the Programme are available - if you are interested in a copy please contact the Chief Officer of ANTEC, Dr Terry Wilson. Her email address is: <wilson.43@osu.edu>

### Cybercartographic Atlas project endorsed

At the WG Coordinators meeting in Siena it was decided to formally integrate the Canadian based Cybercartographic Atlas project into the Geographic Information Work Programme.

There is also a workshop being planned on the project - to be held in Puerto Madryn, Argentina - between November 29 and December 1 2001.

Any questions about the project and/or workshop can be directed to the Project Leader – Prof Fraser Taylor, at Carleton University in Ottawa.

### **AGS'01 Summary**

This SCAR Antarctic Geodesy Symposium (AGS'01) was the third inter-period symposium arranged by the WG-GGI as a contribution to the GIANT program. It was hosted by Aerogeodezia, at the Arctic and Antarctic Research Institute, St Petersburg. Fourteen people participated in the symposium which included representatives from seven SCAR countries (see list of attendees)

The program contained presentations on recent history of Russian geodetic activities in Antarctica and reports on active research in Antarctica. A particularly notable presentation was made by Professor Reinhard Dietrich on the inclusion of results from the SCAR GPS surveys in the International Terrestrial Reference Frame (ITRF 2000) of the International Earth Rotation Service. A new area of research was the research project headed by Dr Cisak, on the influence of the atmosphere on precise GPS observations related to Antarctica. Australia presented details of an impressive on-line GPS processing service as a new tool for application in Antarctica. Extended discussion on methods for calibration of tide gauges followed the presentation by Dr Kazou Shibuya on Antarctic tide gauges

Current field activities in Antarctica were highlighted were by Australia, Italy, Japan, Germany and USA. Feedback on the ANTEC, and the WG-GGI Geographic Information meetings, was given by several participants, who had attended these meetings held in the previous week in Siena.

A joint reception was hosted by AARI for the symposium attendees together with representatives from the separately held ATCM meeting. This reception was followed by a technical tour of the facilities at AARI including the Otto Schmidt Research Centre in the Institute. Presentations on the second day were followed up by technical tours to the Arctic and Antarctic Museum and inspection of the impressive facilities of the Aerogeodezia business enterprise.

The excellent symposium was by hosted by Dr Alexander Yuskevitch of Aerogeodezia utilising AARI facilities and continued the successful series of inter-period technical geodesy symposia. Most participants provided final versions or summaries of their presentations and these will be published in a SCAR Report as well as being available from the WG-GGI web site

### **Web Site**

There has been a steady updating of the WG-GGI web site over the past 2 months - more can be found at: www.scar-ggi.org.au/wotsnew.htm

Statistics on the for the financial year 1 July 2000 to 30 June 2001 reveal that more than 7 700 individuals visited the site and after the home page the most popular page was on the location of Antarctic base stations. More detailed information can be found at: <a href="https://www.scar-ggi.org.au/webstats/year0001.htm">www.scar-ggi.org.au/webstats/year0001.htm</a>

### **SCAR Review / Transition Group meeting**

The SCAR Transition Group held a meeting in Amsterdam between 19-21 August 2001 to discuss the progress / status of the restructuring of SCAR.

Unofficial reports from those at the meeting say it appears likely that the new SCAR structure will contain 3 programs, Life Sciences, Physical Sciences and Geosciences + an Outreach program. It is also likely there will be up to 5 major coordination projects. At this stage it appears that elements of WG-GGI appear to be in the "Geosciences" program, whilst JCADM is in the Outreach program.

So far there has been no formal or official response from the SCAR Executive on the outcomes of both the Transition Group meeting and the SCAR Executive meeting that followed.

We will keep you posted with any information, as it arrives.

John Manning Chief Officer, WG-GGI

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Glenn Johnstone Executive Officer, WG-GGI