

## CP2.4 Antarctic Geoid

Chair: **Mirko Scheinert** (Germany)

### Terms of reference and Objectives

The main goal of AntGP is to work towards a continent-wide determination of the Antarctic geoid on basis of a completed Antarctic terrestrial gravity dataset. However, Antarctica remains the continent with the largest gaps in terrestrial gravity data coverage. A complete gravity dataset of the Antarctic will be needed in order to facilitate the regional geoid determination, to contribute to the determination of the global gravity field in combination with data of the new gravity satellite missions GRACE and GOCE, but also to densify the satellite data. Therefore, the compilation of existing gravity data should be pursued and new observation campaigns should be promoted. The Antarctic Geoid Project (AntGP) should be a focus group for geodesists and geophysicists interested in gravity and geoid in Antarctica.

### Activities

- Initiating and facilitating the exchange of Antarctic gravity field data
- Collecting and evaluating existing gravity data (surface, airborne and satellite) and GNSS data at tide gauges to compute best possible gravity anomaly and geoid grids for Antarctica
- Promoting new terrestrial and airborne gravity survey activities
- Promoting new precise gravity ties to older and new traverses and airborne surveys
- Promoting the measurement of reference gravity stations, especially using absolute gravity meters
- Liaising with similar data initiatives in solid-earth geophysics, especially the Scientific Committee on Antarctic Research (SCAR), and the International Polar Year 2007/2008 (IPY)

### Membership

Mirko Scheinert (chair), TU Dresden, Germany  
Martine Amalvict, Université Strasbourg, France  
Alessandro Capra, Università di Modena a Reggio Emilia, Italy  
Detlef Damaske, BGR Hannover, Germany  
Reinhard Dietrich, TU Dresden, Germany  
Fausto Ferraccioli, British Antarctic Survey  
Rene Forsberg, Danish National Space Center  
Larry Hothem, USGS, USA  
Cheinway Hwang, National Chiao Tung University, Taiwan  
Wilfried Jokat, AWI Bremerhaven, Germany  
Gary Johnston, Geoscience Australia

A.H. William Kearsley, University of New South Wales, Australia  
Steve Kenyon, NIMA, USA  
German L. Leitchenkov, VNIIOkeangeologia, Russia  
Jaakko Maekinen, FGI, Finland  
Kazuo Shibuya, NIPR, Japan  
C.K. Shum, OSU Columbus, USA  
Dag Solheim, Statens Kartverk, Norway  
Michael Studinger, Lamont-Doherty Earth Observatory, USA

### Corresponding members

Graeme Blick, LINZ, New Zealand  
Dave McAdoo, National Oceanic and Atmospheric Administration, USA