Geophysical Research Abstracts Vol. 19, EGU2017-16920, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



The gravity field observations and products at IGFS

Riccardo Barzaghi (1), George Vergos (2), Sylvain Bonvalot (3), Franz Barthelmes (4), Mirko Reguzzoni (1), Hartmut Wziontek (5), and Kevin Kelly (6)

(1) Politecnico di Milano, DICA, Milano, Italy (riccardo.barzaghi@polimi.it), (2) GravLab, Department of Geodesy and Surveying, Aristotle University of Thessaloniki, Greece, (3) Observatoire Midi-Pyrénées, Toulouse, France, (4) GFZ, Potsdam, Germany , (5) BKG, Leipzig, Germany, (6) ESRI, Redlands CA, USA

The International Gravity Field Service (IGFS) is a service of the International Association of Geodesy (IAG) that was established in 2003 at the IAG/IUGG General Assembly in Sapporo (Japan). This service aims at coordinating the actions of the IAG services related to the Earth gravity field, i.e. the Bureau Gravimétrique International (BGI), the International Service for the Geoid (ISG), the International Geodynamics and Earth Tides Service (IGETS), the International Center for Global Earth Models (ICGEM) and the International Digital Elevation Model Service (IDEMS).

Also, via its Central Bureau hosted at the Aristotle University of Thessaloniki (Greece), IGFS provides a link to the Global Geodetic Observing System (GGOS) bureaus in order to communicate their requirements and recommendations to the IGFS-Centers.

In this work, a presentation is given on the recent activities of the service, namely those related to the contributions to the implementation of: the International Height Reference System/Frame; the Global Geodetic Reference System/Frame; the new Global Absolute Gravity Reference System/Frame.

Particularly, the impact that these activities have in improving the estimation of the Earth's gravity field, either at global and local scale, is highlighted also in the framework of GGOS.