

IAG resolution for the International Terrestrial Gravity Reference System (ITGRS)

The International Association of Geodesy,

Noting,

- The importance of an International Terrestrial Gravity Reference System (ITGRS) for geodesy and geosciences,
- That with state-of-the-art absolute gravimeters a relative accuracy of 10^{-8} and better is achievable;

Acknowledging,

- The IAG resolution No. 9.2 and 16.3 adopted at the 18th IUGG General Assembly in Hamburg in August 1983, recommending the use of a common standard atmosphere and the zero-tide concept;
- The IAG Resolution No. 2 for the establishment of a global absolute gravity reference system adopted at the 26th IUGG General Assembly in Prague in July 2015,
- The IAG Resolution No. 4 on the establishment of the Infrastructure for the International Terrestrial Gravity Reference Frame, adopted at the 27th IUGG General Assembly in Montreal in July 2019,

Resolves,

- That the definition of the ITGRS be based on the instantaneous acceleration of free-fall expressed in SI and related to the zero-tide concept, a standard atmosphere, and Earth orientation in the ITRS (International Terrestrial Reference System),

Recommends,

- That the ITGRS be adopted as the reference system for gravity acceleration in geosciences and metrology,

Requests,

- That Commission 2 (Gravity Field) together with IGFS (International Gravity Field Service), BGI (International Gravimetric Bureau) and IGETS (International Geodynamics and Earth Tide Service) prepare and disseminate guidelines and conventions for the establishment of the International Terrestrial Gravity Reference Frame (ITGRF) as the realization of the ITGRS.