Resolution 1: Gravity field satellite missions

The International Association of Geodesy,

Considering,

The interest of the scientific community in knowing with the highest accuracy and resolution the Earth gravity field and its time evolution as one of the fundamental components of the Earth system, also to understanding the climate evolution of the Earth;

Acknowledging,

The large experience acquired within the IAG in the last 10 years in analyzing data from dedicated satellite missions like CHAMP, GRACE and GOCE for the purpose of estimating the gravity field and its time variation;

Noting,

The need for a long-term monitoring of the gravity field for Earth System science beyond the mission lifetime of GRACE and GOCE;

Urge,

International and national institutions, agencies and governmental bodies in charge of supporting Earth science research to make all efforts in implementing new gravity field satellite missions that would respond to the aforementioned need for continued observation.

Resolution 2: Second Realization of the International Celestial Reference Frame

The International Association of Geodesy,

Considering,

1. That the International Union of Geodesy and Geophysics adopted at the 23rd General Assembly in Sapporo 2003 Resolution 4 on the first realization of the International Celestial Reference Frame;
2. That the International Astronomical Union (IAU) adopted Resolution B3 at its XXVII General Assembly (2009) (www.iau.org/static/resolutions/IAU2009_English.pdf) that resolves to consider the “Second Realization of the International Celestial Reference Frame (ICRF2)” as the fundamental realization of the International Celestial Reference System (ICRS) (see note 1);
3. That the celestial reference system and the nutation-precession model have a large influence on geodetic and geodynamic observations, analyses and interpretations;
4. That the ICRF2 was constructed by the International Earth Rotation and Reference Systems Service (IERS) and the International VLBI Service for Geodesy and Astrometry (IVS);

Recommend

1. That the ICRF2 should be used as a standard for all future applications in geodesy and astrometry;
2. That the organizations responsible for geodetic VLBI observing programs take appropriate measures to continue existing and develop improved VLBI observing and analysis programs to both maintain and improve ICRF2;

3. That highest consistency between the ICRF, the International Terrestrial Reference Frame (ITRF), and the Earth Orientation Parameters (EOP) as observed and realized by the IAG and its components such as the IERS should be a primary goal in all future realizations of the ICRS.