



Report of activities of the IAU/IAG Joint Working Group on Theory of Earth rotation

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Earth rotation has been considered as one of the three pillars of geodesy. In April 2013 the International Association of Geodesy (IAG) and the International Astronomical Union (IAU) set up a Joint WG on Theory of the Earth Rotation to promote the development of improved theories of Earth rotation meeting the needs of accuracy of the near future as recommended by, e.g. GGOS, the Global Geodetic Observing System of the IAG. That JWG is chaired by the first two authors. Its structure comprises three Sub-WGs addressing Precession/Nutation, Polar Motion and UT1 and Numerical Solutions and Validation, which are chaired by the last three authors, respectively. Those SWG should work in parallel, for the sake of efficiency, but keeping consistency as an overall issue. This presentation intends to report about the initial activities carried out by the JWG and the work under development. A main task is to catalogue and to go in depth into the potential sources of inconsistency, at the level of precision given by the measurements of the space geodetic techniques.