

全球統合測地観測システム (GGOS)

The Global Geodetic Observing System

*宮原 伐折羅¹

*Basara Miyahara¹

1. 国土交通省国土地理院

1. GSI of Japan

The Global Geodetic Observing System (GGOS) of the International Association of Geodesy (IAG) provides the basis on which future advances in geosciences can be built. By considering the Earth system as a whole (including the geosphere, hydrosphere, cryosphere, atmosphere and biosphere), monitoring Earth system components and their interactions by geodetic techniques and studying them from the geodetic point of view, the geodetic community provides the global geosciences community with a powerful tool consisting mainly of high-quality services, standards and references, and theoretical and observational innovations. The mission of GGOS is: (a) to provide the observations needed to monitor, map and understand changes in the Earth's shape, rotation and mass distribution; (b) to provide the global frame of reference that is the fundamental backbone for measuring and consistently interpreting key global change processes and for many other scientific and societal applications; and (c) to benefit science and society by providing the foundation upon which advances in Earth and planetary system science and applications are built. The goals of GGOS are: (1) to be the primary source for all global geodetic information and expertise serving society and Earth system science; (2) to actively promote, sustain, improve, and evolve the integrated global geodetic infrastructure needed to meet Earth science and societal requirements; (3) to coordinate with the international geodetic services that are the main source of key parameters and products needed to realize a stable global frame of reference and to observe and study changes in the dynamic Earth system; (4) to communicate and advocate the benefits of GGOS to user communities, policy makers, funding organizations, and society. In order to accomplish its mission and goals, GGOS depends on the IAG Services, Commissions, and Inter-Commission Committees. The Services provide the infrastructure and products on which all contributions of GGOS are based. The IAG Commissions and Inter-Commission Committees provide expertise and support for the scientific development within GGOS. In summary, GGOS is IAG's central interface to the scientific community and to society in general. The whole figure of GGOS and its recent focus will be presented in the presentation.

キーワード：測地基準座標系、国際測地学協会、地球重力場、地球回転

Keywords: geodetic reference frame, International Association of Geodesy, earth's gravity field, earth rotation

