

📍 International Activities



Signing ceremony for cooperative activities with National Geographical Institute of Spain



Practical training in JICA Knowledge Co-Creation Program
"Management and Utilization of National Control Points for Efficiency of Survey"



Exchange of views on technical cooperation for developing countries



Technology transfer of UN vector tile toolkits

Contributing to international society with surveying technology

Through popularizing the Global Geodetic Reference Frame (GGRF) which was adopted by the UN General Assembly to show the precise shape and associated changes of the Earth, and promoting the utilization of geospatial information through international partnerships, GSI has contributed to support UN activities such as achieving Sustainable Development Goals (SDGs).

Utilizing our experience and cultivated techniques, we are engaged in a variety of activities on the international stage, such as providing technical cooperation to developing countries and contributing to Antarctic Research Project.



Presentation as the chair of UN-GGIM-AP working group on Geodetic Reference Frame

📍 Contributions in the UN and related frameworks

GSI participates in the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) of the United Nations Economic and Social Council, contributing to discussions on geospatial information.

GSI plays leading roles in UN-GGIM as Co-Chair of the Working Group on Geospatial Information and Services for Disasters, as a member of the Subcommittee on Geodesy, and as Vice-President of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP).



Statement as Japanese delegation at the UN-GGIM meeting held at the United Nations Headquarters

📍 Technical cooperation for developing countries

In cooperation with JICA, GSI provides technical cooperation to improve surveying and mapping technology in developing countries, including technical support for the development and advanced operation of GNSS CORS Network.

Since 1959, more than 1,000 participants have received training at the GSI over the past 60 years, and a total of over 850 GSI personnel have been dispatched as experts to geospatial information authorities overseas.



On-site survey for technical cooperation for developing countries

📍 Antarctic research expedition

In the Antarctic Research Project, which is carried out in cooperation with related ministries and agencies, GSI has dispatched personnel to every Japanese expedition since its commencement in 1956.

The geodetic and topographic information, which has been developed so far, has been used as the basis for the expedition members' safe field operations and research activities.

As part of the International GNSS Service (IGS), continuous GNSS observations are being conducted on East Ongul Island, where the Syowa Station is located.



GNSS survey on outcrop (Photographed in the 64th Expedition)

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The first IGS Analysis Center in Japan

GNSS is a system that determines ground positions based on satellite orbit information (ephemeris). A highly accurate ephemeris (precise ephemeris) is essential for high precision positioning. The precise ephemeris currently considered the most accurate is calculated by the International GNSS Service (IGS) through integration of precise ephemerides submitted by individual IGS Analysis Centers.

The IGS Analysis Center is accredited by IGS and is comprised of surveying or space-related organizations around the world. GSI, in collaboration with JAXA, established a unique method for calculating precise ephemerides, and was certified as the first IGS Analysis Center in Japan in December 2023.

In this way, we are making international contributions through IGS and contributing to the development of foundation for high-precision positioning.

