Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee 60th Session February 6-17, 2023



Japan Item 8- "Space-system-based Disaster Management Support"

Mr. Chair, Distinguished Delegates,

On behalf of the Japanese delegation, I am pleased to present some of Japan's recent initiatives and international cooperation activities related to this agenda item.

Mr. Chair,

Recognizing the importance of space technology and international cooperation in disaster management, Japan has been leading a regional disaster management project called "Sentinel Asia". The Asian region is often affected by a range of natural disasters, such as floods, volcanic eruptions, earthquakes and typhoons. Sentinel Asia contributes to preventing, mitigating, and reducing damage from these kinds of disasters by co-sharing satellite data in the region. Over 100 organizations in the Asia-Pacific region participate in this framework and more than 350 emergency observations have been conducted in total since its launch in 2006.

One of Sentinel Asia's remarkable characteristics is that it is composed of space agencies, disaster management organizations and international organizations. Recently Sentinel Asia has been working to build a stronger link with the disaster management community based on the Sendai Framework for Disaster Risk Reduction.

Sentinel Asia is committed to making its best effort to offer disaster assessment and response planning support, and to activate supporting agencies as required. Sentinel Asia will continue to commit to implementing the Sendai Framework through cooperation among Sentinel Asia member organizations.

Also, JAXA has been a member of the International Charter "Space and Major Disasters" since 2005 and has been actively supporting its activities in cooperation with 16 other Charter members.

Mr. Chair

Precipitation data is important for weather forecasts as well as for water related

disaster management, such as floods, typhoons, and landslides. Due to observational difficulties from utilizing rain gauges and weather radars on the ground, satellite observation plays a vital role in monitoring precipitation distribution both locally and globally.

To address water related disasters utilizing satellite data, JAXA has developed a precipitation data system known as GSMaP. GSMaP offers a multi-satellite global precipitation map under the Global Precipitation Measurement (GPM) Mission, by using Dual-frequency Precipitation Radar (DPR) onboard GPM core satellites, other GPM constellation satellites, and geostationary satellites. This system provides hourly global precipitation information to support a wide range of disaster management. It also enhances flood forecasting and management capacity of the Typhoon Committee, an intergovernmental organization established under the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the World Meteorological Organization.

JAXA is cooperating with international partners to improve the accuracy in GSMaP data. For example, JAXA and the Indian Space Research Organization (ISRO) are cooperating to jointly validate, improve, and apply rainfall products from both agencies by using both satellite and ground data. JAXA and ISRO also aim to contribute to the improvement of satellite data applications especially in the Asia-Pacific region, where there is heavy annual rainfall.

Mr. Chair,

Before concluding, I would like to reiterate that space technology plays a great role in managing natural disasters. Japan will continue to strengthen its international cooperation in this field.

Thank you for your attention.

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