

Japan Item 10 – “Space and water”

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Chair, Distinguished delegates,

The demand for water has been a major concern of humankind since ancient times. We have always strived to secure water for drinking, for everyday use, and to mitigate the damage to societies caused by water-related natural disasters, such as floods. The shortage of clean water caused by rapid urbanization and population growth in developing countries has become a serious problem directly affecting the health and lives of local people. In addition, climate change, an emerging global concern, has become a serious threat to stable water management, causing severe droughts and water related disasters around the world. Without a doubt, water has become one of the most important issues in discussions on sustainable development discussions.

With this in mind, Japan is committed to helping address water-related issues through a variety of initiatives including space applications. One such example is the Global Change Observation Mission-Water, GCOM-W, which was launched in 2012. Data from this satellite are used worldwide for weather forecasting, sea ice monitoring, and climate and water cycle studies. The Global Observing SATellite for Greenhouse gases and Water cycle, GOSAT-GW, is currently under development to continue GCOM-W’s water observations and improve observation accuracy and capability. Observing and understanding the mechanisms of global water cycles help to manage water resource and predict water related disasters. Such water cycle observations need to be conducted globally and frequently, and the use of satellites is, to this day, the most effective means of doing so.

Chair,

Precipitation data are important for weather forecasts as well as water related disaster management, such as floods, typhoons, and landslides. Due to observational difficulties in using 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 using satellite data, JAXA has developed a precipitation data system known as GSMaP. This system provides hourly global precipitation information contributing to a wide range of disaster management. It also enhances the flood forecasting and management capacity of the Typhoon Committee Region, an intergovernmental organization established under the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the World Meteorological Organization.

Chair,

In March 2023, JAXA and the Japan Meteorological Agency (JMA) co-hosted an online workshop as one of the practical activities under the Quad Space Working Group to provide technical support to countries in the region, with the aim of enhancing space capabilities to respond to extreme precipitation events. The workshop was attended by meteorological and hydrological agencies in and around countries of the Indo-Pacific region, various agencies providing expertise and funding in the region and experts from the Quad countries, bringing the total number of participants to over 200 from 17 countries.

Chair,

Japan will continue to contribute to solving water-related issues through the application of space-based technology, and that concludes my statement.

Thank you for your attention.