

Agenda Item 7 – “Remote Sensing”

The importance of Earth monitoring by satellite cannot be overstated. It has proved useful and essential for improving our daily lives and in tackling global issues. I am pleased to present Japan’s recent activities with respect to remote sensing technologies.

To begin, I would like to highlight Japan’s remote sensing activities to monitor climate change. In 2009, Japan launched the Greenhouse Gases Observing Satellite (GOSAT) series—GOSAT and followed it up in 2017 with GOSAT-2. These satellites observe the global concentration of greenhouse gases, and are referred to in the Intergovernmental Panel on Climate Change, or IPCC global guidelines.

Last year, during the 49th session of IPCC held in Kyoto, Japan, the intergovernmental panel refined the guidelines used by governments to estimate their national greenhouse gases emissions and removals, which governments are required to report to the United Nations Framework Convention on Climate Change (UNFCCC). The refinement of the guidelines is based on the latest science, some of which derives from the use of satellite data, including Japan’s satellites: GOSAT, GOSAT-2 and ALOS-2.

I would also like to highlight an innovative remote sensing satellite called “Super Low Altitude Test Satellite” or “SLATS.” For some time now the observation of the low altitudes atmosphere using satellites has been considered unsuitable for remote sensing, since it requires precise positioning, orbit control, and long term satellite operations. However during its two year mission from 2017 to 2019, SLATS maintained seven different orbital attitudes, with 167.4km being the lowest, and was able to capture high-resolution satellite images. SLATS also succeeded in demonstrating its ion engine system and gas-jet thrusters.

SLATS has even set a Guinness World Record and was registered as having achieved the “lowest altitude by an Earth observation satellite in orbit.” The experience and knowledge acquired through the development and operation of SLATS will be utilized for future satellite missions.

Japan believes that remote sensing technologies can continue making positive contributions to our lives and will continue to further develop these technologies.

Thank you for your attention.