Agenda Item 12: Space and Climate Change Republic of Korea National Statement Sixty-Seventh Session of the Committee on the Peaceful Uses of Outer Space June 19, 2024

Thank you Chair,

Given that climate change is an imminent issue that affects us all, monitoring and analyzing data from meteorological satellites is one of the most effective ways to address this issue. Moreover, sharing data from various satellites across different countries would enhance our collective capabilities and efforts to respond to the issue.

In this context, the Republic of Korea has been at the forefront of utilizing space-based technologies to monitor and mitigate the impacts of climate change. Since the launch of our first geostationary satellite, Cheollian-1 (COMS-1), we have been sharing weather patterns in the Asia-Pacific region. Our commitment also extends to supporting capacity building of developing countries to receive and utilize our satellite data.

Recently, the Republic of Korea has installed infrastructure in Cambodia for receiving and analyzing data from our satellite, Cheollian-2A (GK-2A). We are also participating in National Oceanic and Atmospheric Administration (NOAA)'s public data distribution project, called "NOAA Open Data Dissemination (NODD)", sharing weather information observed by GK-2A for the Asia-Pacific region.

Furthermore, using the Geostationary Environmental Monitoring Spectrometer (GEMS) on the world's first geostationary environmental satellite, Cheollian-2B (GK-2B), we are conducting research to improve air quality across Asia in conjunction with the "Pandora Asia Network". We also plan to form a geostationary air quality monitoring network with the United States' TEMPO and Europe's future Sentinel-4, representing a significant stride in international cooperation.

To address the climate change, the Republic of Korea will utilize not only the aforementioned geostationary satellites but also low Earth orbit satellites. We successfully launched the first of eleven high-resolution microsatellites, called NEONSAT, this year. Through NEONSAT, we aim to perform rapid monitoring of disasters affected by climate change and contribute to the international community's response to natural disaster.

In addition to these efforts, we are enhancing our analytical capabilities related to meteorological satellite images by attempting technological innovation such as AI.

Korean company "SIA (SatRec-i Analytics)" won the "AI and Machine Learning Solutions Challenge for Climate Change" at COP28 last year by using AI-based cloud movement path estimation (GeoCloud) and precipitation prediction technology (GeoRain). Furthermore, another company, TelePIX, plans to launch a microsatellite (BlueBON) which can monitor blue carbon and to provide a satellite-based service for analyzing the carbon dioxide absorption of seaweed.

Once again, the Republic of Korea would like to highlight that international cooperation and data sharing are pivotal to making important strides in our efforts against climate change. We stand ready to work with other countries to leverage our space-based technologies.

Thank you.