Statement by Valda Vikmanis Keller, U.S. Head of Delegation to the 66th Session of UN Committee on the Peaceful Uses of Outer Space, on Agenda Agenda Item 11
"Space and Climate Change"
June 6, 2023

Thank you, Chair and distinguished delegates. For decades, NASA, National Oceanic and Atmospheric Administration, and the United States Geological Survey have developed space-based Earth observations, scientific research, and data modeling to better understand the planet's changing climate, and the impact of those changes on humanity. Together, NASA and NOAA data show that global emissions continue to move in the wrong direction at a rapid pace. The evidence is consistent, alarming, and undeniable.

Rising temperatures and sea levels, together with changing weather patterns, impact nearly all areas of our lives. The World Economic Forum identifies climate change as among the greatest risks to global well-being. In the United States, like communities around the globe, climate change is causing record-breaking economic damage and taking lives, in the form of severe dust storms, droughts, floods, wildfires, and hurricanes. Demand is increasing for data, scientific analysis, and tools to inform decisions that will help us build climate resilient communities.

Our trusted science agencies deliver that actionable science. It begins with using the unique vantage point of space to collect sustained observations of Earth's system of systems – the land, oceans, atmosphere and ice – and see how changes in one drive changes in others. Those observations are the basis for our scientific research and better understanding. From this increased awareness, we can develop models – and from those models, produce actionable data to inform decisionmakers, support operational climate services, and deliver science applications.

Today, NASA is flying 26 Earth observing missions in space, including seven on the International Space Station, and several in partnership with other space agencies. Last December, NASA partnered with France to launch the Surface Water and Ocean Topography (SWOT) mission, with contributions from Canada and the United Kingdom. SWOT will provide the first global survey of Earth's surface water

and measure how water bodies are changing over time. Early adopters of SWOT's data include freshwater reservoir managers in Texas and dam operators in Egypt, among others.

Another upcoming collaboration is a mission between NASA and the India Space Research Organisation (ISRO) called NISAR, for NASA ISRO Synthetic Aperture Radar. NISAR will help us study hazards such as earthquakes, tsunamis, and volcanoes, as well as measuring global environmental changes.

Now in its fifth decade, the NASA and USGS partnership for Landsat continues to provide researchers with global measurements to better quantify the impacts of surface warming, wildfires, droughts and floods at scales where many are managing their land resources – critical information to assess our global food supply.

Following it's launch last November, NOAA-21 - the second satellite of NOAA's Joint Polar Satellite System (JPSS) - joined the NOAA fleet. NOAA-21 will provide a continuous stream of data contributing to NOAA's long-term archive of temperature measurements that show us how our planet's atmosphere has changed over time, and support NOAA's environmental products and services for Arctic, ocean and fire weather observations.

As the United States works toward greater collaboration with its international partners, we are committed to increasing accessibility, transparency and inclusivity of its understanding of the Earth System, climate change, and the application of that knowledge. The agency is pioneering an open science policy that promotes open sharing of data, research, and scientific discovery. We encourage others to join this open science initiative, making the data they collect and analyze available to others, to help accelerate scientific discovery for the benefit of all.

At the end of this decade, another billion people will live on our planet, placing even greater pressures on our Earth's systems. Climate change demands a scientific response equal to the challenge it presents. NASA, NOAA, and USGS are moving with urgency and focus, and in concert with our partners, to meet that challenge. The United States is committed to providing the world the science and

space-based data needed to understand, mitigate, and adapt to our changing planet.

Thank you, Chair.