S1-06

NOAA : Current and Future Satellite Systems

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High-quality, timely, and global observations from Earth observing satellites are needed to forecast weather, track climate trends and provide climate products and services, understand changing ecosystems, monitor land and sea surface changes as well as environmental hazards, and observe space weather.

To meet these challenges NOAA is evolving to stay current with the expanding complexity of Earth observing contributors including our partners among the meteorological satellite agencies of Asia. NOAA owns and operates 11 environmental satellites. These include five geostationary satellites (GOES-14, -15, -16, -17, -18), five polar-orbiting satellites (NOAA-15, -18, -19, -20, and -21) and one deep space mission (DSCOVR). NOAA operates but does not own an additional six satellites. NOAA plans to launch one additional GOES series and two additional JPSS series satellites between 2024 and 2031. NOAA is also purchasing commercial radio occultation data and exploring options for disaggregated small sats in LEO to enhance our future architecture. These missions, along with other NOAA collaborations (COSMIC, JASON, etc.) are key contributions to the space-based portion of the WMO Integrated Global Observing System.

In addition, NOAA continues to approach our common ground systems, satellite architecture, data stewardship, data distribution, and user preparedness in a manner

that ensures we are a more mission-effective, integrated, adaptable organization that anticipates and responds efficiently to changing technology, emerging partnerships and evolving observation requirements. We are focused on maximizing our resources and effectiveness through partnerships for observations and blended products.

No one country alone can afford to effectively monitor the entire Earth. NOAA continues to forge partnerships around the globe to share the Earth observation on a full and open basis and to ensure users have the information they need to address pressing policy concerns. We collectively improve our forecasting strength by sharing data with countries around the world.

In this presentation, we will provide an overview of NOAA's current satellites and plans for future satellites and a review of access to all of NOAA's data, which is provided on a fully free and open basis. Further, we will provide an overview of NOAA's important partnerships and examples of NOAA's products and applications of potential interest to users in Asia and Oceania.

This presentation will provide information to address four of the six goals for the AOMSUC conferences, including: Goal 1: Promoting the importance of satellite observations and highlighting their utility; Goal 3: Providing a means for satellite operators to interact directly with the user community with respect to current and future satellite related activities and plans and respond to the requirements of those users; Goal 4: Harmonizing unified and optimal usage of all types of satellite and other meteorological and environmental data and information; and Goal 5: Innovating new technology and science to invest in and develop future weather satellite sensing capabilities.