

NOAA's Space-based Remote Sensing Activities

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NOAA is a science-based services agency engaged with the entire Earth system science enterprise. The mission of NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) is to provide secure and timely access to global environmental data and information from satellites and other sources. In the recent years, there have been major technological advances in improving and expanding NOAA's space-based observational capabilities. The new generation operational Geostationary Operational Environmental Satellites – R series (GOES-R) now includes GOES-16 (East) and GOES-17 (West) in orbit, with two more satellites planned. Building on experience from the Suomi National Polar-orbiting Partnership (NPP), the new generation Joint Polar Satellite System (JPSS) now provides NOAA-20 as the primary operational NOAA polar mission, with three more satellites of the series to follow on the 1:30 orbit. NOAA's other operational capabilities are the Deep Space Climate Observatory (DISCOVR) positioned at the Lagrange 1 Point, and the Jason-2 and -3 radar altimetry missions. In addition, NOAA is engaged in partnerships to secure radio occultation measurements and is committed to ensure continuity of space weather data. NOAA's observing capabilities contribute the global constellation of Earth Observing satellites, while data from non-NOAA systems are crucial for ensuring data continuity for NOAA's mission. To this aim, NOAA is engaged in a number of international partnerships, including those with agencies in the Asia - Oceania region.