

IAF EARTH OBSERVATION SYMPOSIUM (B1)  
International Cooperation in Earth Observation Missions (1)

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INCORPORATING INTERNATIONAL PARTNERSHIPS IN THE FUTURE NOAA SATELLITE  
OBSERVING SYSTEM ARCHITECTURE

**Abstract**

The National Oceanic and Atmospheric Administration (NOAA) provides critical environmental information to the weather, climate, scientific, and general public communities. International partners provide a significant portion of the data used by NOAA for weather forecasting and other environmental analyses. Although NOAA has begun launching its next generation of weather satellites, both in polar and geostationary orbit, it is planning for their replacements. NOAA conducted a study, titled the NOAA Satellite Observing System Architecture (NSOSA) study, to plan for the next generation of weather satellites. This study provided an opportunity to design a modern architecture with no pre-conceived notions regarding instruments, platforms, orbits, etc., but driven by user needs. As part of the study, NOAA assumed that international partners would continue to provide data as they do today using existing and planned satellite platforms. The study formally concluded in the fall of 2017 and NOAA has begun to initiate projects to develop the new constellation. This paper will show the role that international partners played in the analysis and will show how future collaborations can be used to enhance any future US satellite system. The result of these partnerships is to collect more, better, and scientifically relevant environmental data for use by all partners and the meteorological and climatological community.