David
Fritz
NESDIS/SWO - MITRE Corporation
Christian Naylor (Groundswell), Scott Schnee (Aerospace), Michael Laufer (MITRE), Richard Ullman (NOAA SWO), Daikou Shiota (NICT), Yuki Kubo (NICT)
Poster
The National Oceanic and Atmospheric Administration (NOAA) continuously monitors solar activity from the Sun–Earth Lagrange Point 1 (L1) vantage point. A global network of ground stations ensures the high availability of L1 observations collected for space weather forecasters. In support of the Space Weather Follow On (SWFO) mission, NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) developed the SWFO Antenna Network (SAN), a global ground station network which captures real-time observations from the Space weather Observations at L1 to Advance Readiness (SOLAR-1) observatory. SAN enables the integration of ground stations from international partners, continuing the Real-Time Solar Wind Network used for Deep Space Climate Observatory (DSCOVR). The Japan National Institute of Information and Communications Technology (NICT) provided the first international partner ground station to be integrated with SAN. The South Korea AeroSpace Administration (KASA) is preparing to provide the second partner ground station. Japan, South Korea and future partners will significantly increase the availability of observational data over the life of the SOLAR-1 mission. In preparation for future observatories, NESDIS will enhance the SAN to become a multi-mission Space Weather Antenna Network (SWAN) supporting the concurrent operation of multiple NOAA observatories at L1. NOAA is continuing to engage with international partners regarding the significant role they can play in supporting SOLAR-1 and future L1 missions. This poster outlines the SAN architecture, the role of international partners, the roadmap to the future SWAN, and the increasing need for high-availability collection of all L1 observations for space weather forecasting.
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