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Poster
The Office of Space Weather Observations (SWO) performed an Analysis of Alternatives (AoA) to define the scope of the Space Weather (SW) Next Geostationary (GEO) project. The SW GEO AoA assessed the cost, risk, and benefits of acquiring space weather observations from geostationary orbit. Expert teams conducted market research and trade studies, developing architecture and instrument catalogs to estimate the total cost for various mission alternatives and identify high-risk issues and technologies that may drive the schedule. The AoA considered the following observations or datasets: photospheric magnetograph, extreme ultraviolet (EUV) imagery, energetic particle flux, X-ray irradiance, EUV irradiance, magnetic field, and thermospheric far ultraviolet (FUV) measurements. A variety of mission concept alternatives were analyzed, including one concept with all observations and various missions with fewer observations. For each concept the ground system, communications, spacecraft requirements and launch vehicle requirements were updated and costs estimated. This allowed the team to identify key drivers of risk and cost. A final benefit/cost analysis demonstrated substantial benefits across all alternatives studied. Analyses of the initial AoA findings are ongoing.
Poster session day
Wednesday, April 29, 2026
Poster location
26
Meeting homepage
2026 Space Weather Workshop
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