

NOAA's Space Weather Observations to Provide Continuous Operational Capability

International Space Weather Initiative

National Environmental Satellite,
Data, and Information Service

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NOAA's Space Weather Role

NOAA's responsibilities include:

- provide operational space weather monitoring, forecasting, and long-term data archiving and access for civil applications,
- maintain ground-based and space-based assets to provide observations needed for space weather forecasting, prediction, and warnings,
- provide research to support operational responsibilities, and
- develop requirements for space weather forecasting technologies and science.

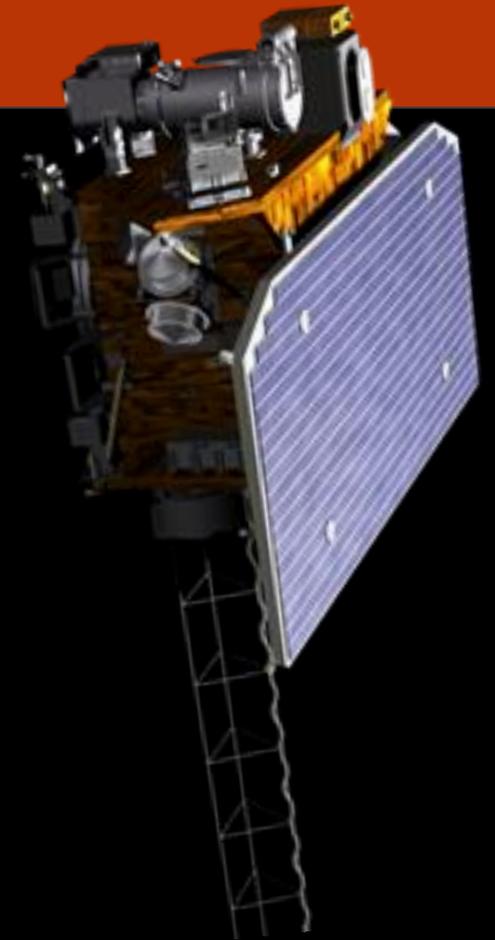


Space Weather Follow On (SWFO)



SWFO sustains NOAA's foundational set of space-based space weather observations and measurements to ensure continuity of critical data.

- Development underway for:
 - SWFO-L1 Observatory at Lagrange 1
 - Instruments (two CCORs; MAG, SWiPS, STIS)
 - Ground Segment (SWFO Antenna Network, Command & Control, and Product Generation and Distribution)
- Status
 - Established agreements with NASA, NRL, and European Space Agency (L1 & L5 cooperation)
 - CCOR-1 integrated onto GOES-U; on track for **2024 Launch**
 - SWFO-L1 mission on track for **2025 rideshare** with NASA IMAP Launch

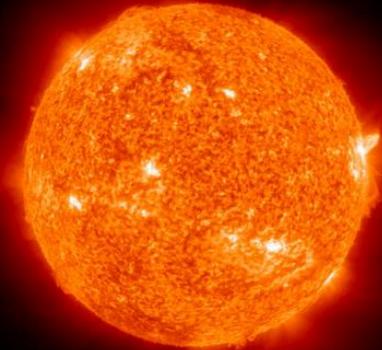


SWFO-L1 Observatory

Space Weather Next (SW Next)

SW Next will **maintain and extend** space weather observations from a range of different observing points, selected to most efficiently provide the comprehensive knowledge of the Sun and the near-Earth space environment.

- Planning for **continuity of observations** from:
 - L1 and L5 Orbits
 - Geostationary Orbit
 - Low Earth Orbit
 - Space Weather Ground Support Networks
- Program and L1 Series Project are in formulation phase.
- Engaging stakeholders through:
 - **User outreach** targeting aviation, electric grid, and satellite operator communities
 - **Partnerships** for observational support and exchange of space weather observational data
 - **RFIs and RFPs** for L1 Series Project instruments and observatory



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