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Poster

Abstract: As our society becomes increasingly reliant on satellite technology, GPS, and power grids, observing and forecasting space weather becomes even more critical for national security and economic stability. The National Oceanic and Atmospheric Administration (NOAA) National Environmental Satellite, Data, and Information Service (NESDIS) Office of Space Weather Observations (SWO) develops, deploys, and sustains NOAA operational satellite systems that monitor space weather and safeguard society. Essential to this mission is the cultivation of new talent through summer internships, where students work directly with SWO scientists.

Recent student contributions have spanned the breadth of the field, including the analysis of ionospheric anomalies using Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC) and COSMIC-2 data, visualization of space weather data from instruments aboard the Geostationary Operational Environmental Satellite (GOES) satellites, and the quantification of Earth-produced eclipses on coronagraph imagery. Looking forward, SWO is expanding its internship projects to include analysis of Space weather Observations at L1 to Advance Readiness – 1 (SOLAR-1) data and the application of machine learning and neural networks to explore forecasting techniques/capabilities. Despite the critical nature of this work, many students in the space weather community remain unaware of funding pathways available for summer internships. Currently, SWO actively recruits or plans to recruit summer interns through two primary programs.

-The Ernest F. Hollings Scholarship: A competitive program for undergraduate sophomores providing two years of academic funding and a 10-week paid summer internship at a NOAA facility.

-The William M. Lapenta Internship Program: A 10-week paid summer program targeted at both undergraduate (sophomore/junior) and graduate students, offering robust operational and research experience.

Poster session day

Thursday, April 30, 2026

Poster location

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Meeting homepage

[2026 Space Weather Workshop](#)

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