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NOAA NESDIS Office of Space Weather Observations

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1. NOAA NESDIS Office of Space Weather Observations

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Poster

The National Oceanic and Atmospheric Administration (NOAA) National Environmental Satellite, Data, and Information Service (NESDIS) Office of Space Weather Observations (SWO) is actively involved in fostering partnerships and technology investments to advance NOAA's space weather observational and data system capabilities. This allows NOAA to leverage external expertise and investments, enhancing its ability to meet mission goals and provide valuable space weather products and services to the users and the public. These technology maturation projects aim to advance new and innovative instrument and data technologies developed by other agencies, industry, and academia. Once proven, these technologies then may be integrated into NOAA's space weather operational environment to enhance space weather monitoring and forecasting capabilities. Through the lifecycle of the projects, SWO actively brings outside researchers and NOAA's Space Weather Prediction Center (SWPC) scientists together through regular cadenced meetings to align project goals and scopes with specific requirements for operational use. These include Research-to-Operations (R2O), sharing updates, and seeking feedback from operation to research to enhance quality and usability of space weather data and services, i.e., Operations-to-Research (O2R). However, transitioning research findings and prototypes into operational use is not without challenges. This presentation will highlight NOAA's contributions to space weather Research-to-Operations and Operations-to-Research (R2O2R) enterprise, give a status of on-going activities, share lessons learned, and offer thoughts on path forward.

Poster session day

Tuesday, April 28, 2026

Poster location

36

Meeting homepage

[2026 Space Weather Workshop](#)

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