

Space Weather Nowcast and Forecast at NOAA SWPC

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Oral

(Invited Speaker)

The Space Weather Forecast Office (SWFO) at NOAA Space Weather Prediction Center (SWPC) monitors the space weather conditions 24/7 and issues space weather alerts and warnings. To make the space weather forecasts possible, it is necessary to combine various observations from satellites and ground-based instruments to obtain specification and nowcast. To provide forecasts of space environments near the Earth, typically these measurements need to be applied in the state-of-the-art models to provide simulation outputs for consideration. The increasing capability of small satellite community and industry has largely enhanced the possibility of utilizing the smaller spacecraft in space weather monitoring. In this talk, I will walk through SWPC's operations and models, discuss the measurements used in our operational products, and share the ongoing NOAA projects that aim to utilize small satellites to improve space weather monitoring and forecasting.

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