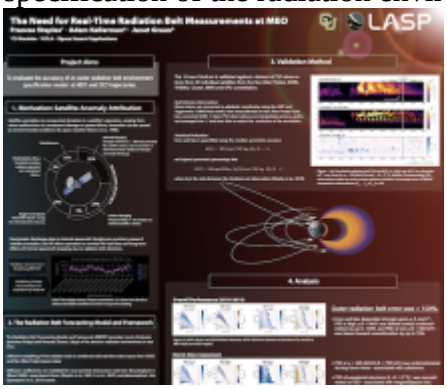
Frances
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Poster
The Radiation Belt Forecasting Model and Framework (RBFMF) provides real-time forecasts and hindcasts of the radiation environment, which are used as inputs for the Satellite Charging Assessment Tool (Sat-CAT). Sat-Cat is used by satellite operators to model both long term and real-time effects of internal charging on satellite components.

We will present the validation results of the RBFMF, and will show how combining real-time electron flux observations with physics based modelling improves hindcasting capabilities at MEO and GEO of either method used alone. We will also highlight how new missions must consider data provision for real-time operational applications, and discuss the observational requirements and model development necessary for improved specification of the radiation environment through hindcasts and forecasts.



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Poster session day
Wednesday, April 29, 2026
Poster location
36
Meeting homepage
2026 Space Weather Workshop
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