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Poster

The WSA-ENLIL-Cone model has been routinely used at NASA and NOAA to predict the arrival time of transient disturbances. Validation studies have found that arrivals of the coronal mass ejections (CMEs) can be predicted with an uncertainty of about 6-9 hours. We propose improving through ensemble modeling and assimilating heliospheric imagery. The former can include uncertainties in the model initialization, and the latter can be used to suggest which particular simulation is more realistic and will provide a more accurate prediction. This approach will also avoid incorrect predictions from incorrect model initialization. In this presentation, we show the first results in simulation of the October 2021 single-CME and May 2021 multi-CME events.

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