

The WSA Dashboard: Current and Future Capabilities

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Sources of solar wind, WSA coronal hole solutions, and photospheric map

Choice of in situ satellite/planet for comparison to solar wind data

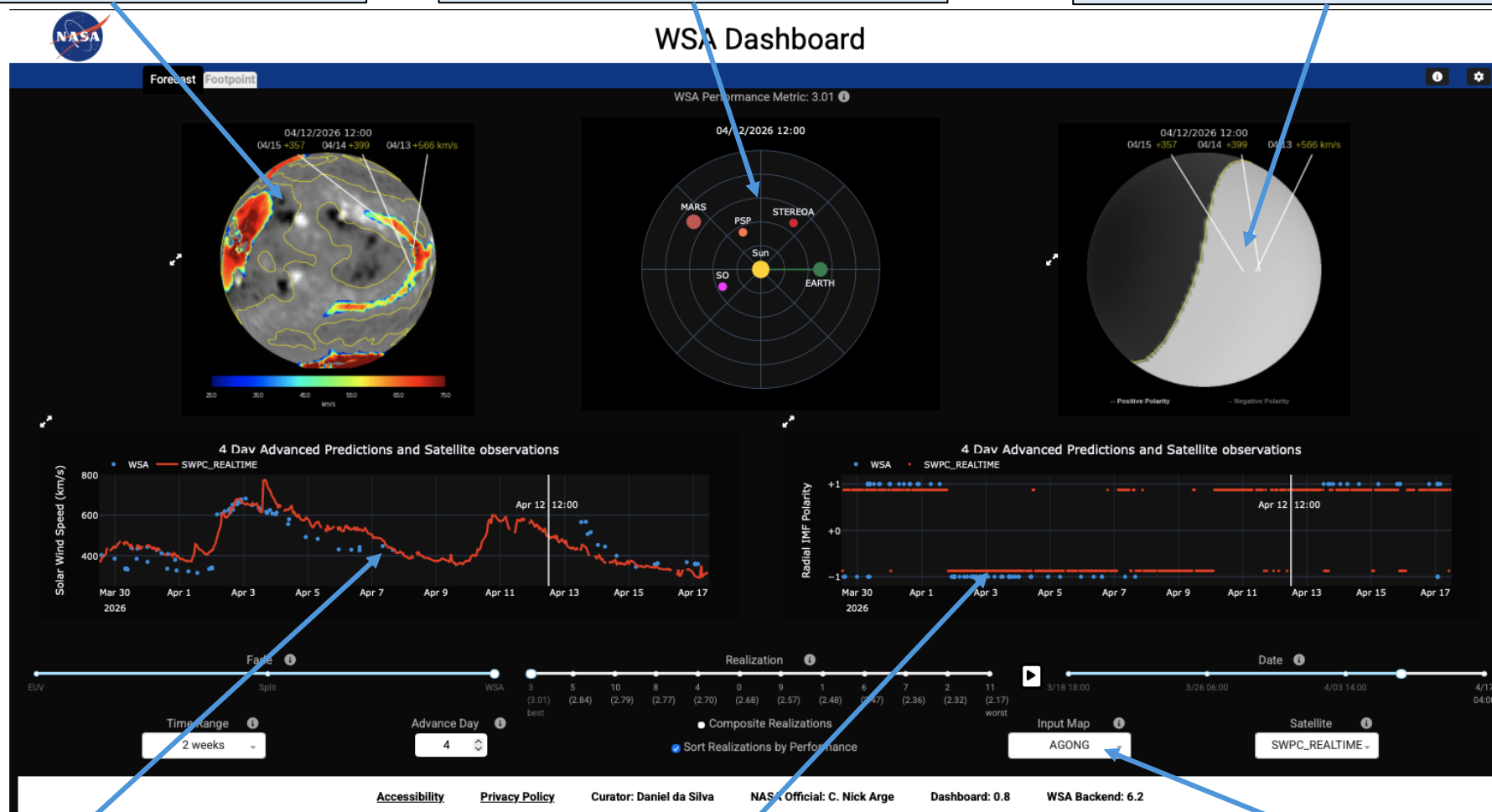
Predicted magnetic connectivity relative to heliospheric current sheet at 5R_{Sun}



CCMC Version
ccmc.gsfc.nasa.gov/wsa-dashboard/



Development beta version
wsa-dashboard.helioanalytics.io



WSA-predicted solar wind speed compared to spacecraft data

WSA-predicted solar wind interplanetary magnetic field (IMF) polarity compared to spacecraft data

Choice of input map data source

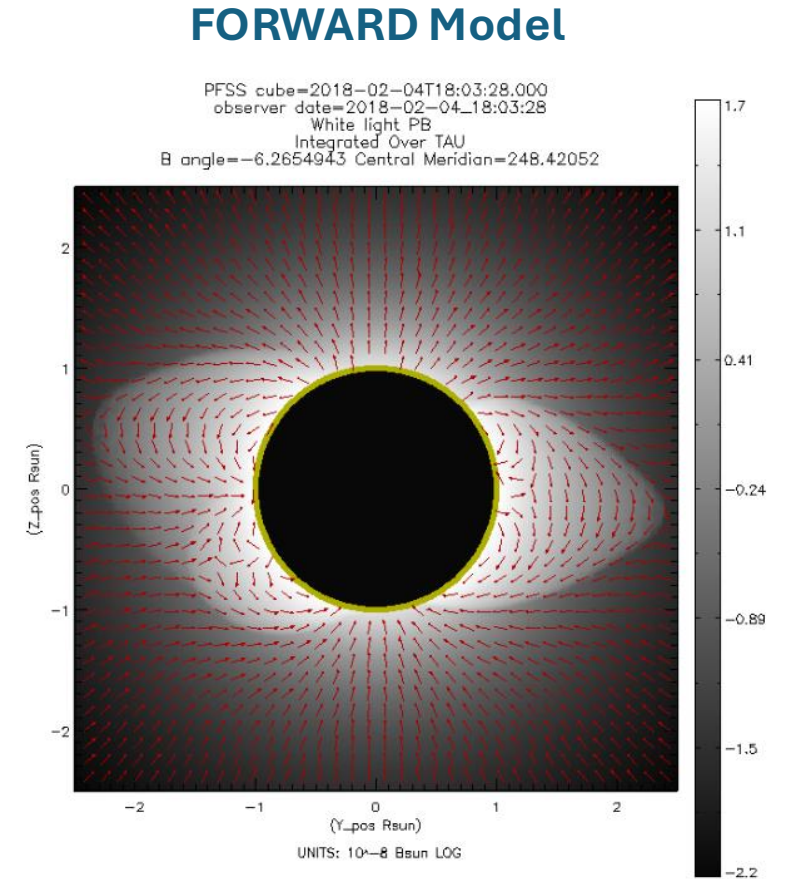
Enhancing WSA's Scientific and Space Weather Forecasting Capabilities

Adding an empirical electron density specification capability to the model

- Approach: Integrating WSA with the HAO FORWARD model
- FORWARD generates white light images of the Sun based on the magnetic field configuration generated by a coronal model and empirical density functions
- WSA will make use of these empirical density functions to generate 3D coronal density data cubes

WSA-FORWARD will generate:

- White light (plane of the sky) images of the Sun
- 3D coronal e- density cubes
- These model products will be made available to public!



Courtesy Sarah Gibson, HAO