SHINE Campaign Events Session

Progress and Challenges Towards Driving Solar Models With Observations From the SHINE Campaign Event Periods

(Chairs: Arge and Abbett)

Wednesday, July 13, 9:45am – 12:30pm

Session Summary: One of the main objectives of the SHINE campaign event (effort is to drive solar and heliospheric models with observations in order to accurately reproduce the structure of the corona and heliosphere. This is an extremely challenging task, as key inputs are often missing for an given event or not even available (e.g., 3D coronal temperatures) for ingest into the models, and the models themselves are frequently still too idealized to deal with the actual observations without first having to significantly "massage" them (e.g., smoothing) to assure model stability. The goal of this session is to have an open discussion of the successes and difficulties we are having driving models with observations, as well as possible new approaches for making further progress. Part of the discussion will naturally involve the observations themselves (e.g., coverage, quality, availability etc.). We also will have one talk on a potentially promising new technique for obtaining 3D coronal quantities not currently available to modelers.

Invited Speakers:
Roussev, Ilia: Progress and Challenges Towards Data-Driven Numerical Models of Solar Eruptions
Mikic, Zoran: Progress and challenges in modeling the May 12, 1997 CME
Frazin, Richard: Driving models with 3D tomographic reconstructions from white-light, EUV and magnetogram data
Odstrcil, Dusan: Heliospheric Simulations of SHINE Events Using CME Cone Models
Krall, Jonathan: Modeling the 2003 October 28-30 CME/ICME Event: Can We Predict These Things?