



Simultaneous Interplanetary Scintillation and STEREO Heliospheric Imager observations of coronal mass ejections

G.D. Dorrian (1), A.R. Breen (1), R.A. Fallows (1), J.A. Davies (2), and A.P. Rouillard (3)

(1) Aberystwyth, Solar System Physics, Aberystwyth, United Kingdom, (2) Rutherford-Appleton Laboratory, (3) Southampton University

We present results from simultaneous Interplanetary Scintillation (IPS) and STEREO Heliospheric Imager (HI) observations of coronal mass ejections in the inner heliosphere. The combination of IPS and HI is an extremely powerful one, with HI providing the global context for interpreting the high-resolution observations from IPS. This makes it possible - for the first time - to relate the small-scale structures revealed by IPS with the larger-scale structure of the CME seen by HI.

We discuss the methodology of combining IPS and HI measurements and go on to present results from two co-ordinated studies carried out in the spring of 2007, the first of which examines the interaction between two CME fronts, while the second investigates structure in the solar wind behind the front of the CME during the Comet Encke tail disconnect episode.