



Simultaneous white-light and interplanetary scintillation measurements of the fast solar wind near the Sun

R.A. Jones (1), **A.R. Breen** (1), S.J. Tappin (2), P. Thomasson (3), R.A. Fallows (1), S.R. Habbal (4), M.M. Bisi (1)

(1) University of Wales, Aberystwyth; (2) University of Birmingham; (3) Jodrell Bank Observatory, University of Manchester; (4) University of Hawaii

2-site measurements of Interplanetary Scintillation (IPS) provide measurements of the motion of small (~ 100 km) scale irregularities in the solar wind across regions of space which are otherwise inaccessible. It is usually assumed in analysing IPS data that the small-scale turbulence producing the scintillation pattern is drifting with the background solar wind, but there is an increasing amount of evidence that close to the Sun in the fast solar wind this is not the case and that the small irregularities are being boosted to speeds higher than the solar wind speed by wave action. In this paper we present results of a series of co-ordinated observing programmes combining IPS measurements from MERLIN and EISCAT (together covering heliocentric distances from 7 to 80 solar radii) with white-light measurements of the drift velocities of larger features from LASCO(2- ~ 10 solar radii) and ultra-violet results from UVCS (inside 5 solar radii) to consider the acceleration of the fast solar wind near the Sun. We review the results obtained to date and describe an expanded programme of measurements which are to be run in May 2005.