Session 4 – CMEs SIRs and space weather forecasting

Thursday 07 May 2009 11:30h-12:45h

Notes due to be taken by Leonid Benkevitch, but sketch notes provided by Divya Oberoi and Mario Bisi instead – Session Chaired by Andy Breen

- The April/May 2007 periods were discussed and compared using EISCAT and STEREO data by Gareth.

- John gave an excellent account of how comet tail "wiggles" can be used for solar wind radial velocity measurements both with the Solar Mass Ejection Imager (SMEI) and with STEREO HIs. UCSD are intending to write a paper on the HI aspect of the measurements and it will likely be an Ap. J. Lett. or and AGU GRL with a follow-up paper in the workshop proceedings combining SMEI, STEREO|HI and SOHO|LASCO comet-tail observations, or something along those lines. Authors likely to be Clover/Bisi *et al*. in both cases…

- Some good solar wind forecast capabilities using STELab IPS observations and comparisons with the ACE spacecraft were shown by Mario on behalf of Fujiki san.

- It was commented that for the Whole Heliosphere Interval (WHI) period, the IPS reconstructions based on only either STELab or SMEI data produce good reconstructions. However, including Ooty data, which has a much better sampling of the sky as compared to the STELab data, leads to a worse reconstruction. Manoharan mentioned that has re-analysed this data and will make it available for another attempt at reconstruction. Mario looks forward to receiving these data shortly after the Workshop.

- There are 'stuff' seen in STEREO images which do not correspond to anything else observed either on the Sun (or possibly in IPS?)…

- It was pointed out that STEREO images average over length and time scale much longer than IPS or ACE data and this should be accounted for when cross-comparing data sets.

- There was also a mention of the role of frequency of observation (with IPS) being important in observations. The exact context cannot be recalled at present, but suspicions are that it might have to do with the Fresnel scale which can differ by a factor of few due to differences in observing frequencies.