EIS Core Team Studies

Week beginning 11th April 2008

This summary resumes the weekly statement of desired EIS core team studies. It will hopefully become more applicable as our available S-band coverage increases and we become more accustomed to restricted use of the on-board mass memory.

As of 9th February 13:24 UT (EIT 195), there is essentially no activity on the disc apart from AR 10989 which has just crossed the West limb. Overall activity is at or below GOES-A. There is a well developed S-polar CH visible in STEREO B and a small on-disc CH in the S-W quadrant.

0_a. Run SYNOP005_A at Sun-centre during each XRT SYNOP
0_b. Run SYNOP006 weekly if possible but still useful at longer intervals
0_c. Continue support for WHI observations where possible.

1. Polar Coronal Hole Observation – Harra
   - EIS should be pointed to include the boundary of the coronal hole and the limb
   - Obtain velocity maps of million degree plasma
   - request Ca II from SOT and the normal polar dynamics study from XRT.
   - 1" slit scan, FOV 140"x256", 45sec exp time; DPCM for line profile precision
   - run JS_CH_140x256p; data volume: 77295 kBits, run time: 1h55m13s
   - Note 1: run regcal 071 and regcal 072 before running this study
   - Note 2: ideally this study should run e.g. 2 or 3 times consecutively

2. Coronal Hole Density Measurement – Young
   - polar or equatorial CH
   - select pointing based on EIT 195 images; choose darkest part of CH
   - accurate warm pixel removal essential for CH data
   - run REGCAL071 and REGCAL072 on the same day; also context study
   - study sequence is: REGCAL071
     REGCAL072
     PRY_slot_context_v2
     PRY_CH_density
- Note 1: repeat PRY_slot_context_v2 to fill the available time slot; vol: 20 Mbit; data rate: 5.2 kbps
- Note 2: for large dark CH areas, stitch two or more repeats of PRY_CH_density

3. Data Compression Test Studies – Warren
   - run series of HPW004_Q*, preferably on the same day and at the same location
   - significant quantity of data missing from previous attempts
   - run HPW004_Q95 – data volume: 120 Mbits
     HPW004_Q92 – data volume: 99 "
     HPW004_Q90 – data volume: 90 "
     HPW004_Q85 – data volume: 72 "
   - in addition a run of the DPCM version is desirable if possible

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Week beginning 18th February and beyond

Continue above programme if possible; other studies are TBD