EIS Core Team Studies

Week beginning 11th January 2008

As of 9th January 08:11 UT (EIT 195), activity is just below GOES A-level. AR10980 though extended, is decaying. It is followed by a smaller AR to the East. There is also the small North-located AR 10981. STEREO-B shows a Southern on-disc CH and continuation of the N- and S-polar CHs.

0_a. Continue with SYNOP001 at Sun-centre during each XRT SYNOP.
0_b. SYNOP002 to be run Mondays on Sun-centre QS; once per week but avoid conflict with HOP 58
0_c. EIS participation in mission co-alignment studies as required
0_d. Note: XRT will be testing its flare trigger. EIS is not yet prepared to accept this signal but COs should consider an appropriate study for periods of XRT trigger setting. XRT mode on trigger will be Thin or Medium Be with 384" x 384" FOV. XRT will also build a program that uses 5 filters (Be_thin as the thinnest) in a flare response. The single filter will be used first. If the AR has flaring potential when near the limb a large FOV CME-watch program will be used, flare flag to be ignored for this program.

Core team month (04/01/08 – 31/01/08)

Week 2: 11/01/08 – 17/01/08

Core Team Observing Month agreed at 20/12/07 monthly meeting
- see core team plan for schedule and HOP table for SOT/XRT requests
- see HOP list for desired SOT and XRT observation modes

1. HOP 58: Young et al – Measuring Coronal Outflows in ARs
   - six days continuous observation scheduled;
   - TOO; if adequate activity, run when un-named mid lat AR - E of 10980, is within ± 3 days of CM passage
   - EIS assigned 32% TLM; two daily XRT synoptics agreed for six day interval
   - run PRY_footpoints_HI in two 12 hour blocks each day
   - block begins with context study **PRY_slot_context;** duration 3 minutes
   - repeat **PRY_footpoints_HI** to fill block
   - following blocks to start from same mirror position (MIP) as the previous block
   - check with David Williams or David Brooks if in doubt

2. HOP 60: Mariska, Warren – Quiet Sun Dynamics
   - higher cadence to complement longer term HOP 59
   - one day continuous observation with no synoptics
   - either fixed pointing or tracking acceptable
   - run IUU_SLOT_148x400; data rate ~90 kps so slight increase in EIS data rate

3. HOP 61: Savcheva et al - XRT Long Duration Equatorial CH observation
   - supported by Van Driel-Gesztelyi et al – On–disc Coronal Hole Jet Velocity Measurements
   - 2 arc sec slit raster; details to be discussed with XRT team

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Week beginning 18th January and beyond

See Core Team Monthly Plan for schedule; observations involving EIS include:

4. HOP 53 Shimizu et al - SOT continuous magnetic field observations for investigating mechanisms responsible for XBPs and QS dynamics
   - EIS program as run on Oct 10-11; ID #164, cam_qs_2as_context

5. HOP 59: Young – Quiet Sun Evolution: a Hinode Heritage Study
   - three day continuous observation of QS patch within ± 1.5 days of CM passage
   - EIS assigned 23% TLM; two/three daily XRT synoptics; discuss scheduling with XRT COs
   - run QS_diagnostics_HI (includes two rasters) in four 6 hour blocks each day
   - block begins with **slot_context_raster** then single entry of **QS_diagnostics_HI**
   - number of raster repeats to be adjusted to fill six hour time block
   - relative number of repeats of the rasters adjusted to optimise the EIS data rate
   - check with David Williams or David Brooks if in doubt

6. HOP 60: Mariska, Warren – Quiet Sun Dynamics
   - higher cadence to complement longer term HOP 59
   - one day continuous observation with no synoptics
   - either fixed pointing or tracking acceptable
   - run IUU_SLOT_148x400; data rate ~90 kps so slight increase in EIS data rate

7. HOP 61: Savcheva et al - XRT Long Duration Equatorial CH observation
   - supported by Van Driel-Gesztelyi et al – On–disc Coronal Hole Jet Velocity Measurements
   - 2 arc sec slit raster; details to be discussed with XRT team

8. Bewsher – CME Watch
   - run while P. Young is CO
   - if suitable AR available, run cmeo_slit_study and cmeo_slot_study