L_FULL_HRES_HCAD_Eruption-Watch

Proposed SOOP Coordinators

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Description

Full-Disk, high resolution SOOP designed to catch eruptive events.

Default SOOP duration: 1 day

Pointing requirements: disk centre

Triggers: enabled for both IS and RS

Instrument	Mode	Comment
EUI	Global Eruptive Event Mode: FSI Global eruptive event mode (G)	Triggered: EUI will be in global mode all the time (i.e. full SOOP length) but it will only prioritize the data of 1-2 events. Global mode generates **4,42 Gbit/hr.** Let's say for now that we flush 2 hrs of data = ~8Gbits.
Metis	METIS standard modes: GLOBAL + CMEOBS on trigger *(modelled as 2 CME events of 1 hr in the 1-day-SOOP)*	CME Trigger on
PHI	FDT, 2-5 minute cadence, highest spatial resolution (PHI_nominal_FDT/HRT_0 with FDT and 5 mins cadence)	Selection of data so will check LLD
SoloHI	Combination of shock and synoptics at perihelion	Combine HI_SHOCK_PER + HI_SYN_PER (each 50% of time)
SPICE	SPICE Composition Mapping (or alternatively SPICE Dynamics at start, then SPICE Waves mode (sit-and-stare)	Off-pointing would be interesting for SPICE, but even if disk-centre pointed *Composition mapping* or *Dynamics* (both with the maximum SPICE FOV) should be ran before running Waves sit-and-stare. *SPICE_WAVES has been used for modelling SAP v.0*
STIX	Standard Operations: STIX Normal Mode	
MAG	Normal Mode	
EPD	Normal Mode	
RPW	Detection Mode	Detection algorithms active
SWA	Normal Mode	

SAP objective	Target	Duration	Opportunity (*e.g.*, orbital requirements, solar cycle phase, quadrature ...)	Operational constraints	Additional comments

2.1.1.1 CME initiation	Full Disk	1 Day (limited by EUI/PHI internal memory)	Perihelion preferred. Quadrature with Earth preferred. Interesting throughout the solar cycle.	No offpointing beyond Metis limit.	EUI/PHI at highest cadence appropriate to spatial resolution (could be slower if further away). SPICE Sit & Stare in waves mode to try and catch EUV waves. Metis Modes: • GLOBAL (before the event, if possible), min. obs time 2 hr, data volume 300 Mb. • CMEOBS, starts after CME flag rise, min. obs time 1 hr (high cadence, 1 min), data volume ~ 2.137 Gb. • GLOBAL (after the event), min. obs time 2 hr, data volume 300 Mb.