

# 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: <a href="#">FSI Global eruptive event mode (G)</a>	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 <b>4,42 Gbit/hr</b> . Let's say for now that we flush 2 hrs of data = ~8Gbits.
Metis	<a href="#">METIS standard modes</a> : GLOBAL + CMEOBS on trigger  <i>(modelled as 2 CME events of 1 hr in the 1-day-SOOP)</i>	CME Trigger on
PHI	FDT, 2-5 minute cadence, highest spatial resolution <a href="#">(PHI_nominal_FDT/HRT_0</a> 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	<a href="#">SPICE Composition Mapping</a> (or alternatively <a href="#">SPICE Dynamics</a> at start,  then <a href="#">SPICE Waves mode</a> (sit-and-stare)	Off-pointing would be interesting for SPICE, but even if disk-centre pointed <i>Composition mapping</i> or <i>Dynamics</i> (both with the maximum SPICE FOV) should be ran before running Waves sit-and-stare.  <i>SPICE_WAVES has been used for modelling SAP v.0</i>
STIX	Standard Operations: <a href="#">STIX Normal Mode</a>	
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

<p>2.1.1.1 CME initiation</p>	<p>Full Disk</p>	<p>1 Day (limited by EUI/PHI internal memory)</p>	<p>Perihelion preferred. Quadrature with Earth preferred. Interesting throughout the solar cycle.</p>	<p>No offpointing beyond Metis limit.</p>	<p>EUI/PHI at highest cadence appropriate to spatial resolution (could be slower if further away). SPICE Sit &amp; Stare in waves mode to try and catch EUV waves.</p> <p>Metis Modes:</p> <ul style="list-style-type: none"> <li>• GLOBAL (before the event, if possible), min. obs time 2 hr, data volume 300 Mb.</li> <li>• CMEOBS, starts after CME flag rise, min. obs time 1 hr (high cadence, 1 min), data volume ~ 2.137 Gb.</li> <li>• GLOBAL (after the event), min. obs time 2 hr, data volume 300 Mb.</li> </ul>