

SOWG 13 Cruise Phase MLP: Questions to be answered

SOC list of possible questions to be answered during the mini-SWT Cruise Phase MLP review:

Question	Scenario for consideration	Possible actions / mitigations	Pro(s)	Con(s)	Comments
1. Do we keep the locations of the RS Checkout windows?	1a. The plan currently does not take account of PSP geometric events (At the time of the MLP CP activity in Jan 2018, the launch date of PSP was not known, so such events <i>could</i> not be taken into account.)	Do we want to change some window locations to respond to certain PSP events?	PSP orbit is now known, so PSP-only events can be determined with sufficient accuracy.	Given the width of the Solar Orbiter launch window, it may be difficult to discuss PSP-Solar Orbiter geometries. To that end (and others'), we've asked José Manuel for some indication on how much the trajectory varies in position as a function of launch date.	1) We have some small flexibility on the location of the RS Checkout windows by a few days, with the possibility to change it later (after June 2019 which is the deadline for requesting the passes). 2) It is urgent to freeze the location of the first RS Checkout window (within the margin explained in the previous comment). The other checkout windows can still be changed before December 2019.
	1b. There are about 3 weeks between the nominal end of NECP (mid-May) and the beginning of RSCW#1. If NECP should take longer than anticipated, RSCW#1 may need to be rescheduled.	We could move it by up to a week (later), <i>i.e.</i> , just after the first perihelion.	This case would allow very similar thermal conditions (important, since we want to have two "hot" cases)	It would be at a time of noticeably worse downlink. We would need to double the passes to support RSCW1 in this case, <i>i.e.</i> approx. 6 extra passes for RS downlink (on top of the baseline 3 per week) instead of 3. We may need to discuss with MOC whether we can take the risk of keeping the RS checkout in its original position (saving passes) or whether it's safer/better to already move the window request to just after perihelion. (Note that the extra passes needed could be reallocated from the time of very good downlink at the end of Cruise). It also impacts the Metis visible-light radiometric calibration, currently scheduled for <i>Leo</i> and <i>Leo</i> (16–17 and 18–19 June). <u>However</u> , if this calibration could be included in RSCW1 activities, then this issue goes away.	Unless there are no other reasons not to, it seems worthwhile to spend the extra passes in order to move this window until just after the 1st perihelion. This would give the teams some additional "breathing room" after Commissioning. This also respects the agreement of having the first perihelion EMC quiet for in situ science.
		We could try to schedule the window much later in Cruise Phase.	Gives some more margin in case NECP finishes later. Allows more time to digest results of commissioning.	It may be quite difficult to find a time to have a second hot-case window to characterise the RS instruments.	
2. Are the IS instruments happy with where the telemetry is focussed across the Cruise Phase?					
3. Has anything changed in the Calibration Plans (particularly for RS instruments) that would mean the current plan for the Cruise Phase is not feasible?					