



# Solar-B Science Operations



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# The Solar-B Team

- The Solar-B Team consists of the:
  - The JAXA and NASA Program Managers
  - The three instrument teams and their collaborators
  - The four Project Scientists (Two from Japan (Shibata and Sakurai), and one each from the US (Davis) and the UK (Hara)).
- The Solar-B Team:
  - Coordinates the observing plans of the three instruments and establishes the target (pointing coordinates) and the data recorder allocations.
- To maximize the scientific return, the Solar-B team shall cooperate with other space and ground based observatories.

# Observation Planning

- Science operations planning follows the Yohkoh model and will be guided through a series of meetings occurring on a monthly, weekly and daily schedule.
- The monthly meeting (or teleconference) is a top level planning meeting that will:
  - review the mission status and discuss the observing plans for the following three months
  - review and accept/reject external proposals
  - prioritize the observations for the next month

# The Science Schedule Coordinator (SSC)

- The SSCs are senior scientists, two from each instrument team, one of whom will be Japanese and one from either the US or Europe.
- The SSCs will coordinate the long-term (monthly) observation schedule.
- They will be the contact person for external proposals and they will either act as a proposal consultant or will assign a member from their instrument team to act as a proposal consultant.
- SSCs will present external proposals at the monthly meeting and will notify external proposers if and when their observations will be made and how to contact the Chief Observer who will be responsible for implementing their observation.

# The Weekly Meeting

- The weekly meeting is held Fridays at ISAS after the daily meeting. It is attended, at a minimum, by the Chief Planner, the three Chief Observers, a Science Scheduling Coordinator and the Ground Based Contacts Coordinator. It's members will:
  - review the ground contact schedule for the next week
  - make a preliminary plan for target selection and pointing maneuvers for the next week, including the plans for coordinated observations with other space or ground based observatories.
  - make preliminary allocations of the data recorder for the three instruments

# The Daily Meeting

- The daily meeting is held at ISAS, every morning, Monday through Saturday. It is attended by the Chief Planner, the Chief Observers, and the Ground Based Contacts Coordinator.
- The function of the meeting is to:
  - Confirm the target regions
  - Confirm the allocation of the data recorder and/or reallocate it, if there are changes in the schedule of ground based contacts.
  - Confirm the schedule of pointing maneuvers
  - Confirm the operation plans for the next day real-time operations.

# Coordinating Observations

- Observations sequences are sent to the spacecraft during the evening passes in Japan and cover a 24 hour interval.
- Detailed planning for each days observations starts approximately 36 hours before the observations sequences are sent to the spacecraft.
- In extreme cases it is possible to make minor adjustments to the target position or sequences as little as 8 hours before the observations sequences are sent to the spacecraft.

# SIMPLIFIED TIMELINE

TIME		EVENTS		
<u>Day</u>	<u>Hour</u>	<u>Chief Observers (CO)</u>	<u>Chief Planner (CP)</u>	<u>Real Time Tohban</u>
1	0500	Continue preparing instrument Commands & Tables for Day 2		Review Down Link Data from Day 1
	1000		<u>Daily Meeting</u>	
		Provide CP with Instrument Commands for Day 2	Establishes Target List for Day 2	
		Preliminary Target List for Day 3 is accepted		
	1030-1500	Prepare Instrument Commands and Observing Tables for Day 3	Generates: -Pointing Commands -Instrument Commands and Observing Tables for Day 2	
	1500			Review Command Sequences for Day 2
	17XX	↓		Uplink Commands and Observing Tables for Day 2
	18XX		<u>Start Day 2 Observations</u>	
2	0500			Review Down Link Data from Day 2

**OK, Everyone back to the beach!**

