

# Commissioning and Science Operations

## **OUTLINE**

- Overview of first month
- Early orbit summary
- Looking ahead to upcoming science events
- Calibration rolls and off-points
- Status of operational requests

# Early Operations – 1<sup>st</sup> week

Scheduled activities for Week 43:

M Oct 23

T Oct 24

W Oct 25

T Oct 26 Launch (00:38 UT; 8:38 EDT 25 Oct)

F Oct 27 Power on SECCHI, move doors from  
superclosed to closed

Power on SWAVES, deploy antennas

S Oct 28 1st Engineering Burn

Power on IMPACT IDPU, SWEA,  
Deploy SWEA cover

Power on PLASTIC

S Oct 29 Power on IMPACT/SWEA HVPS

# Early Operations – 2<sup>nd</sup> week

Scheduled activities for Week 44:

M	Oct	30	A1 Prime Delta V Maneuver
T	Oct	31	A1 Apogee
			A1 Backup #1 Delta V Maneuver
W	Nov	01	A1 Backup #2 Delta V Maneuver
			Deploy IMPACT boom
T	Nov	02	2nd Engineering Burn
F	Nov	03	
S	Nov	04	
S	Nov	05	

# Early Operations – 3<sup>rd</sup> week

Scheduled activities for Week 45:

M Nov 06	P1 Perigee & Delta V Maneuver
	Ahead: EA mode test
T Nov 07	
W Nov 08	
T Nov 09	
F Nov 10	Behind: A2 Prime Delta V Maneuver
S Nov 11	Ahead: A2 Prime Delta V Maneuver
	Ahead: 1st enabling of GT use
	Behind: A2 Apogee
S Nov 12	Ahead: A2 Apogee
	Behind: A2 Backup Delta V Maneuver

# Early Operations – 4<sup>th</sup> week

Scheduled activities for Week 46:

M Nov 13	Ahead: A2 Backup Delta V Maneuver Behind: 1st enabling of GT use Power up IMPACT SEP and STE
T Nov 14	
W Nov 15	
T Nov 16	
F Nov 17	P2 Perigee & Delta V Maneuver
S Nov 18	
S Nov 19	

# Early Operations – 5<sup>th</sup> week

Scheduled activities for Week 46:

M Nov 20

T Nov 21

W Nov 22    A3 Prime Delta V Maneuver  
                  IMPACT MAG rolls,  
                                  HGA end-to-end slew

T Nov 23    A3 Apogee

F Nov 24    A3 Backup Delta V Maneuver

S Nov 25

S Nov 26

# Early Orbit Summary

## STEREO A

## STEREO B

Launch	26-Oct-2006		26-Oct-2006	
A1 Apogee	31-Oct-2006	17:17	31-Oct-2006	16:16
P1 Perigee	6-Nov-2006	10:36	6-Nov-2006	08:33
A2 Apogee	12-Nov-2006	01:38	11-Nov-2006	22:43
P2 Perigee	17-Nov-2006	16:34	17-Nov-2006	12:45
A3 Apogee	23-Nov-2006	16:39	23-Nov-2006	14:13
P3 Perigee	29-Nov-2006	17:38	29-Nov-2006	16:37
A4 Apogee	5-Dec-2006	20:50	5-Dec-2006	21:19
P4 Perigee	12-Dec-2006	00:20	12-Dec-2006	02:21
S1 Swingby	15-Dec-2006	13:53	15-Dec-2006	13:47
A5 Apogee			2-Jan-2007	03:09
S2 Swingby			21-Jan-2007	15:52

# Looking Ahead

- IMPACT/MAG roll in magnetosphere
  - Possibly post-P3, November 29
- S1 Lunar swingby, December 15
  - May pass through Moon's wake
- Ulysses quadrature, Dec 2006–May 2007
- SUMER/Hinode (Solar-B) campaign
  - March 13 to April 30
- SECCHI campaign, May 1-15, 2007
- Messenger flyby of Venus, June 5
- Ulysses ecliptic plane passage, August 19

# Calibration Activities

- Rolls:
  - IMPACT calibration roll
  - COR1/COR2 stepped calibration roll
  - SWAVES calibration roll
  - HI cross-calibration roll maneuver
  - HI flat-field roll maneuver
- Off-points:
  - SECCHI/G&C calibration
  - COR1/COR2 pointing calibration off-point
  - EUVI calibration off-point
  - HI stray-light off-point

# Status of Operational Requests

- |   |                      |
|---|----------------------|
| • SECCHI EUVI off-point                     | Tests in progress    |
| • SECCHI HI cross calibration roll maneuver | Submitted            |
| • SECCHI HI stray-light off-point           | Submitted            |
| • SECCHI HI flat-field roll maneuver        | Submitted            |
| • SECCHI GT/G&C commissioning               | Implemented          |
| • SECCHI Survival Power Usage               | Implemented          |
| • SECCHI SSR2 playback problem              | Patch going up day 4 |
| • SECCHI campaign DSN pass duration         | Implemented          |
| • IMPACT/MAG calibration roll changes       | Tested               |
| • Beacon convolutional 1/6 encoding         | Implemented          |
| • SWAVES calibration roll                   | Tested               |
| • SECCHI COR calibration roll               | Tested               |
| • SECCHI campaign dates                     | Implemented          |
| • IMPACT 45 degrees off-point               | REJECTED             |
| • Mercury transit                           | No longer feasible   |