

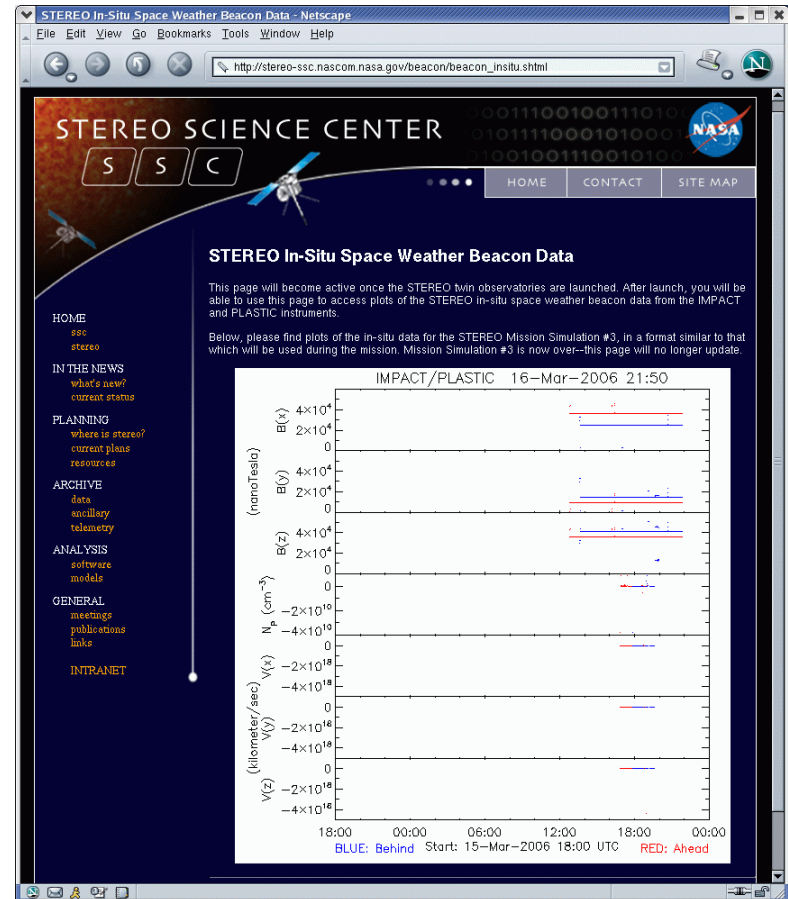
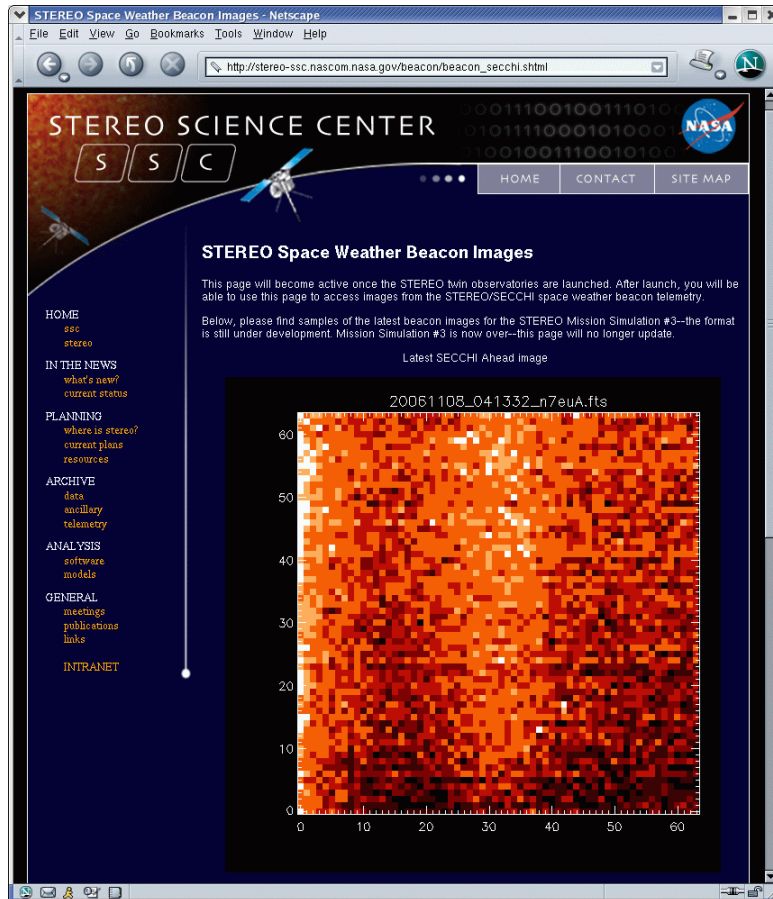
# SSC Support for Sim #3

- Archived MOC Data Products, and distributed via web.
  - Level-0 telemetry files organized by year and month
  - SPICE orbit and attitude files processed, organized, and put into SolarSoft
- Archived processed instrument data
  - Served on web as organized by instrument teams
- Processed beacon data and served on web
  - Produced plots and images on web in real-time
- Practiced science planning process
  - Served current plans, DSN schedule summary, and minutes from planning telecons

# SSC Beacon Processing

- Beacon telemetry ingested from MOC
  - Setting filter parameters to “ALL” led to duplicated packets during DSN passes—affected SECCHI beacon processing
  - Have updated software to overcome this problem
- Beacon processing software delivered by instrument teams
  - Single IDL program processes IMPACT, PLASTIC, and SWAVES telemetry from both Ahead and Behind observatories
  - Separate multistep process for SECCHI images
    - ITOS (C) program collects together packets forming an image
    - IDL procedure with C subroutines decompresses telemetry and generates FITS files
    - Separate processing strings for Ahead and Behind
- Web displays of data are generated by IDL programs in real time from processed data files
- Recordings of beacon telemetry during the simulation will be used to develop and test antenna partner software

# SSC Beacon During Sim #3



Realtime beacon images and in-situ plots processed and on the web within seconds of telemetry receipt.

# SSC Sim #3 Science Planning

STEREO Coordinated Observations Calendar - 2006

This page will become active once the STEREO twin observatories are launched. After launch, you will be able to use this page to access information about the current STEREO science plans.

Below, please find the plans for the STEREO Mission Simulation #3, in a format similar to that which will be used during the mission. This page will be kept up-to-date as the simulation progresses. More information about Sim #3 can be found on our [Planning Resources](#) page.

This page is also available as [plain text](#).

M Mar 06 (W10) Ahead: DFD testing (simulated DOY 303)  
T Mar 07 Start of Mission Sim #3 (304)  
W Mar 08 Ahead: Beacon test, Turbo 1/6 (305)  
T Mar 09 Ahead: SECCHI Calibration roll, 05:54-13:30 UT (305)  
Behind: SECCHI Calibration roll, 11:54-17:30 UT  
Ahead: Beacon test, Conv 1/2  
Behind: Momentum Dump (306)  
F Mar 10 Both: IMPACT stimulus test, 00:00 UT  
Ahead: Beacon test, Conv 1/6  
S Mar 11 Ahead: IMPACT/PLASTIC software & table loads (307)  
Behind: SECCHI software load  
S Mar 12 Ahead: SECCHI software load (308)

Notes:  
\* Momentum dump duration, for impact on the instruments, is about 5 minutes.  
On the Weekly Schedule and Track Plan, it will show up as an hour due to catalyst bed heating. The actual thrusting will occur at the end of the hour.  
\* SECCHI software loads take ~1 hour  
\* IMPACT/PLASTIC software and table loads take ~1 hour total

Other activities for Week 10:  
+

Planners for Week 10:  
IMPACT -- TBD PLASTIC -- Mark Popecki  
SECCHI -- Simon Plunkett SWAVES -- Keith Goetz  
LASO -- Ops Team EIT -- Jack Ireland  
TRACE -- Jonathan Cirrain

M Mar 13 (W11) Ahead: Test of lost track (309)  
Both: IMPACT stimulus test, 00:00 UT  
Behind: SWAVES software load  
T Mar 14 Ahead: Momentum Dump (310)  
Both: PLASTIC HV adjustments as needed  
Both: PLASTIC upload an SSD Load ASIC sequence  
W Mar 15 Ahead: SECCHI filtered GT data test, 13:00-13:30 UT (311)  
Ahead: SWAVES software load  
Behind: SECCHI filtered GT data test, 17:00-17:30 UT  
Behind: IMPACT/PLASTIC software & table loads

- Practice of science planning process during Sim #3.
- Maintained online page of current science plans based on input from advanced planning, and weekly planning telecons.
- Generated minutes of weekly telecons, distributed, and put on web.
- Included replanning to meet changing instrument needs.

# SSC Sim #3 Sample Science Plan

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M Mar 06 (W10) Ahead: DFD testing  
T Mar 07 Start of Mission Sim #3 (simulated DOY 303)  
W Mar 08 Ahead: Beacon test, Turbo 1/6 (304)  
T Mar 09 Ahead: SECCHI Calibration roll, 05:54-13:30 UT (305)  
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## Notes:

- \* Momentum dump duration, for impact on the instruments, is about 5 minutes. On the Weekly Schedule and Track Plan, it will show up as an hour due to catalyst bed heating. The actual thrusting will occur at the end of the hour.
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- \* IMPACT/PLASTIC software and table loads take ~1 hour total

Other activities for Week 10:

\*

Planners for Week 10:

IMPACT	--	TED	PLASTIC	--	Mark Popecki
SECCHI	--	Simon Plunkett	SWAVES	--	Keith Goetz
LASCO	--	Ops Team	EIT	--	Jack Ireland
TRACE	--	Jonathan Cirtain			

# Telemetry and Attitude History Files

- Attitude history files produced for Sim #3 had gaps in them, with durations of several hours.
- Upon investigation, it turned out that S/C C&DH Level-0 telemetry files had the same gaps in them, at least for most APIDs.
- *Have the instrument teams noticed any missing telemetry in the Level-0 files from Sim #3?*
  - No several-hour gaps evident from looking at APIDs.

# Sim #3 Discussion Items

- Realtime telemetry
- Level-0 telemetry files
- MOC data products
  - Mirroring by instrument teams
- SSC planning pages
- Fresh start of databases for launch