

STEREO Science Center Status Report

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STEREO SWG
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Pasadena, California

Upcoming Events

- Momentum dumps occurring about once every 6 weeks for Ahead and 9 weeks for Behind. Next expected dumps are:
 - Ahead: Dec 19
 - Behind: Nov 28
- High gain antenna calibrations on both spacecraft January 9.
 - Spacecraft are rolled by $\pm 2^\circ$ to find best signal.
 - Occurs about once every 3 months.
- SECCHI campaign, January 7-20
 - Extra downlink pass to bring down SECCHI data

Joint Observing Programs

- The SSC website currently lists twelve STEREO-related JOPs.
 - Four STEREO-related IHY Coordinated Investigation Programs (CIPs) are also listed, which were run earlier as a campaign.
- Currently concluding the SUMER campaign, which includes seven STEREO-related JOPs.

Possible science collaborations

- Ulysses quadrature, Dec 2007-May 2008
- SECCHI campaign, Jan 7-20
- Messenger – Mercury flybys
 - Jan 14, 2008
 - Oct 6, 2008
 - Sep 29, 2009
- Whole Heliosphere Interval, Mar 20 – Apr 16
- SUMER campaign, Apr 21 – May 16

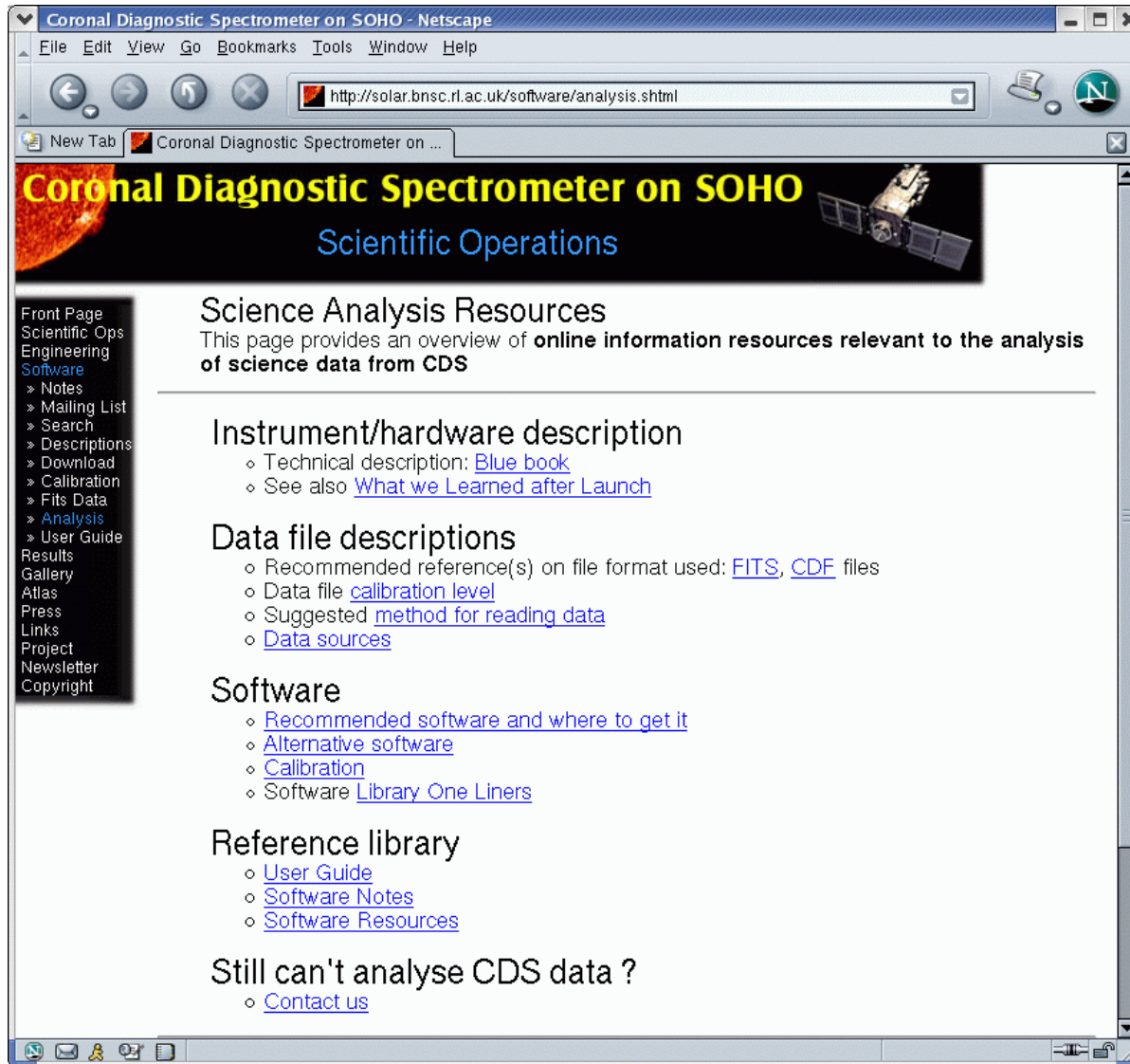
Archive Status

- Archive currently contains just under 11 TB of data
 - Processed instrument data 7166 GB
 - IMPACT 36
 - PLASTIC 185
 - SECCHI 6937
 - SWAVES 9
 - Level-0 telemetry 2629
 - Spacecraft 410
 - IMPACT 101
 - PLASTIC 106
 - SECCHI 1943
 - SWAVES 69
 - Ancillary data (ephemerides, etc.) 156
 - Beacon 55
 - Preflight 384
 - Website 349
- New hardware has been installed to store data at both primary and backup sites

Data Availability

- Data available through web from SSC website
 - Instrument data, telemetry, ancillary, beacon
 - Archiving all data available from instrument sites.
 - SECCHI, SWAVES within a few days
 - Only IMPACT, PLASTIC level-1
 - IMPACT LET, SEPT, SWEA through Aug 31, MAG through Sep 30, no HET, SIT, STE
- Also serves as Virtual Solar Observatory data provider for processed instrument data
 - Working on customized search pages
- Links to instrument-specific websites
- Links to supporting auxiliary data
 - GONG, L'Observatoire de Paris radio, SOHO, ACE, WIND
- Documentation still needs to be provided
 - Alex Young working on Instrument Resource pages
 - PLASTIC resources page available
 - Need input from other instrument teams

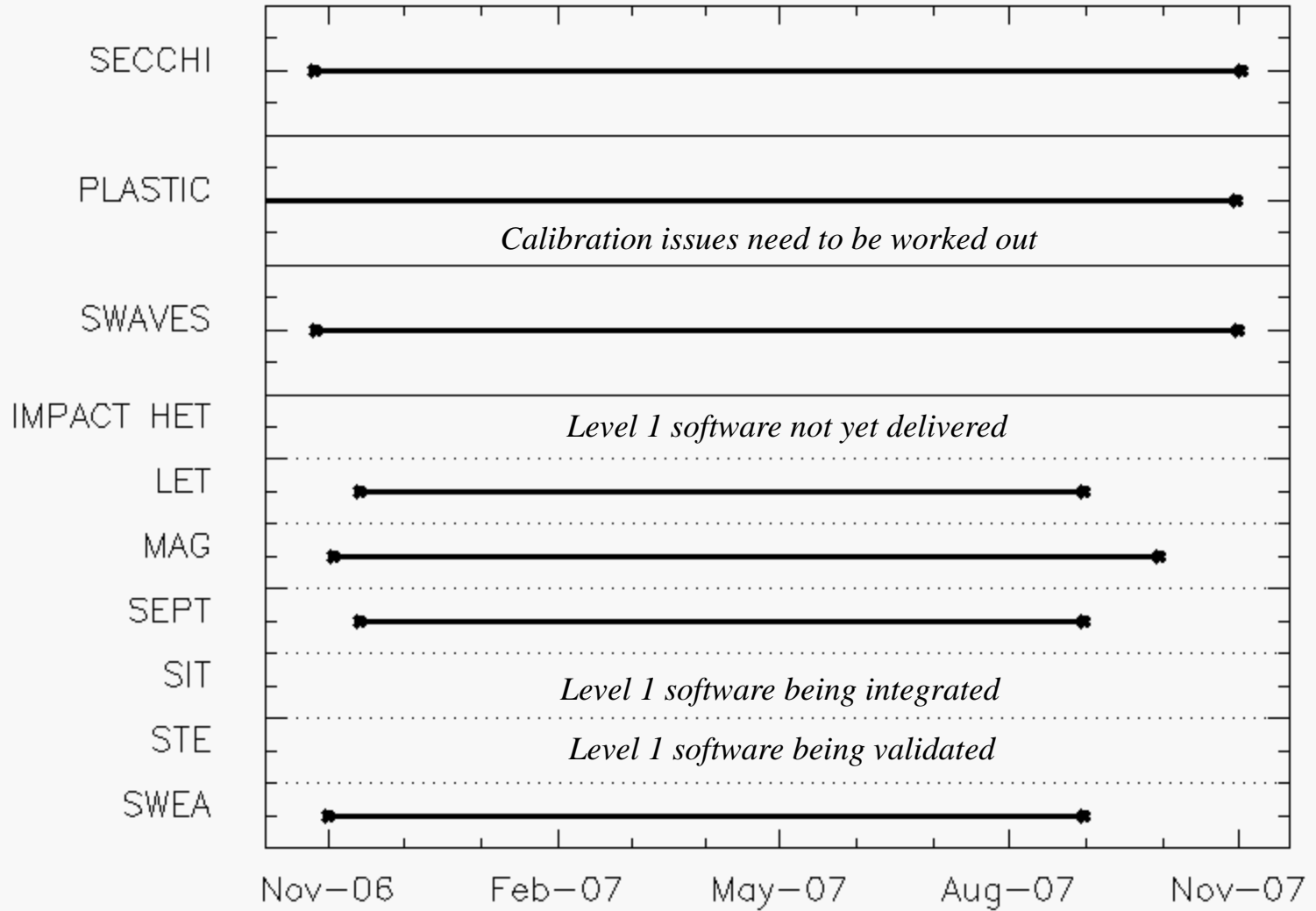
Instrument Resources Pages



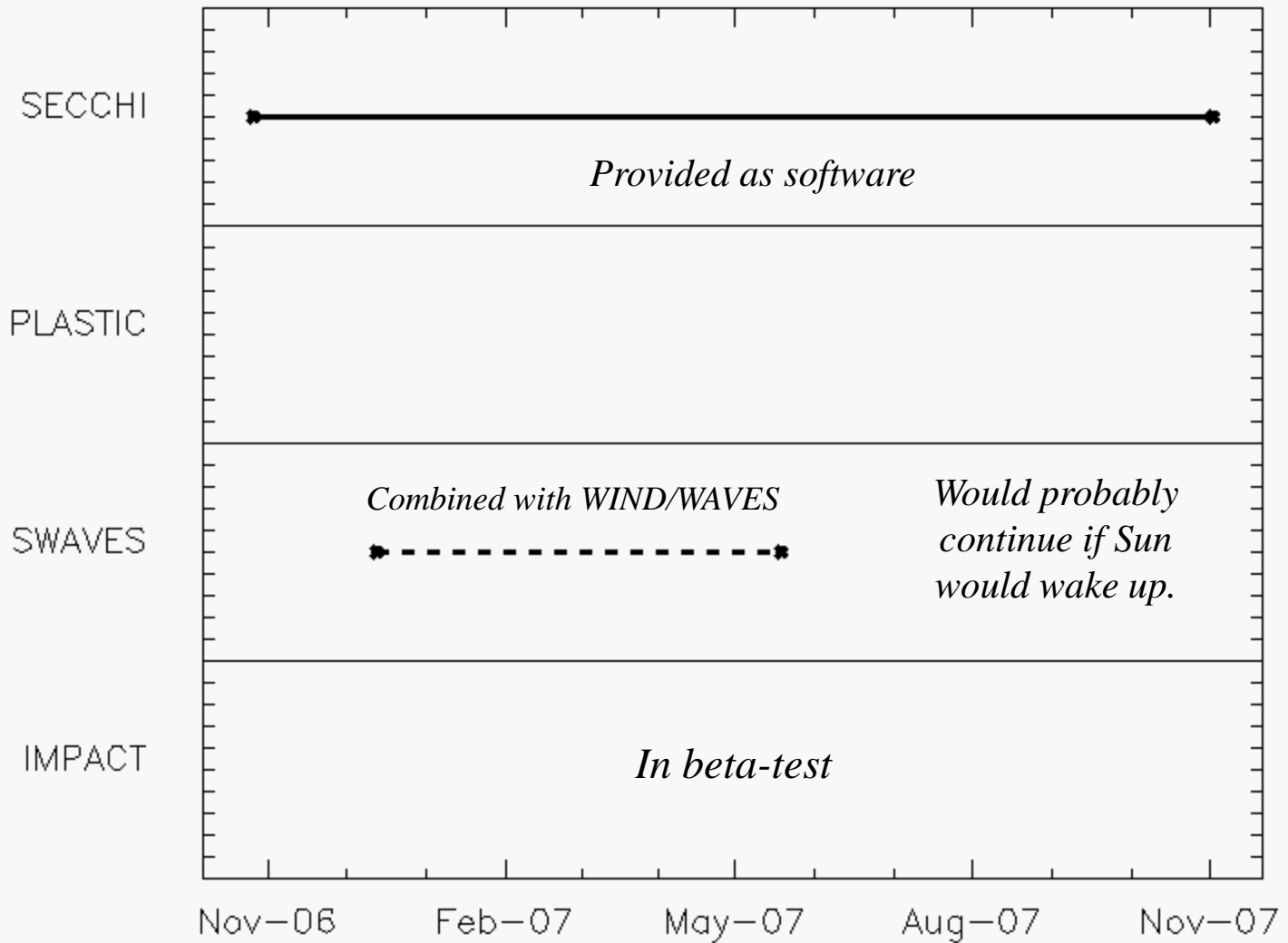
- A useful concept is to have resource pages for each instrument.
- Similar format for each instrument.
- Provides information about file formats, calibration, analysis software, and contact information.
- We ask that each team provide and maintain such a page.
- See the SOHO pages at the URL below for examples.

<http://soho.nascom.nasa.gov/mission/instruments.html>

Level-1 Data Availability



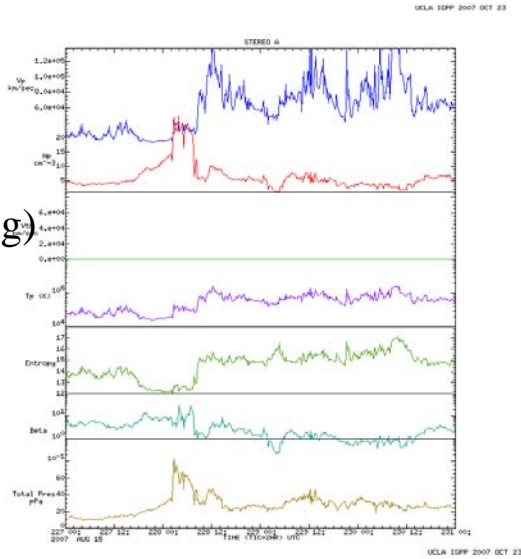
Level-2 Data Availability



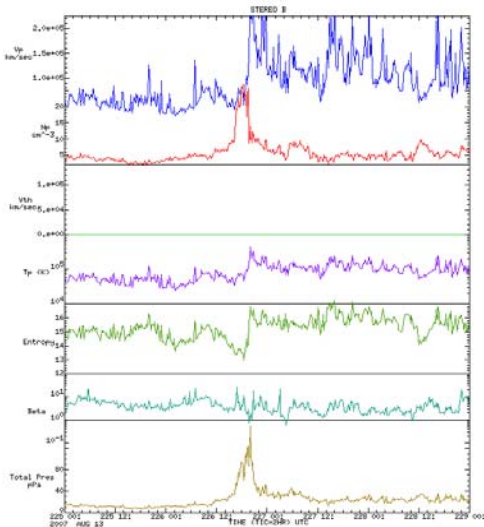
Samples of Merged 10-min PLASTIC Plasma and IMPACT MAG data and derived quantities from the beta test Level-2 Key Parameter Server Website

PLASTIC

- V
- N
- vth (coming)
- Tp
- Entropy
- w/MAG:
- Beta
- Total Pressure

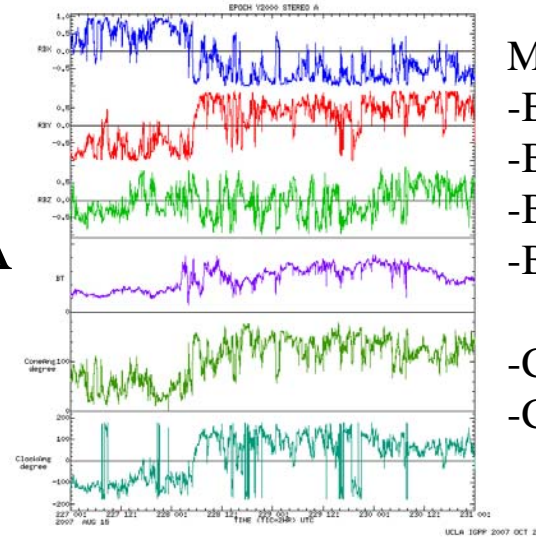


STEREO-A



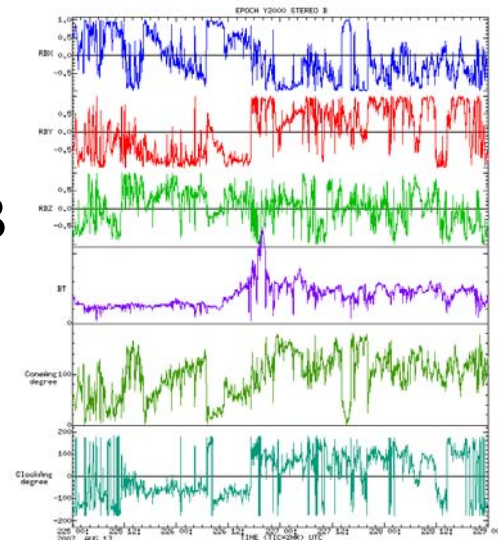
STEREO-B

UCLA ISPP 2007 OCT 22

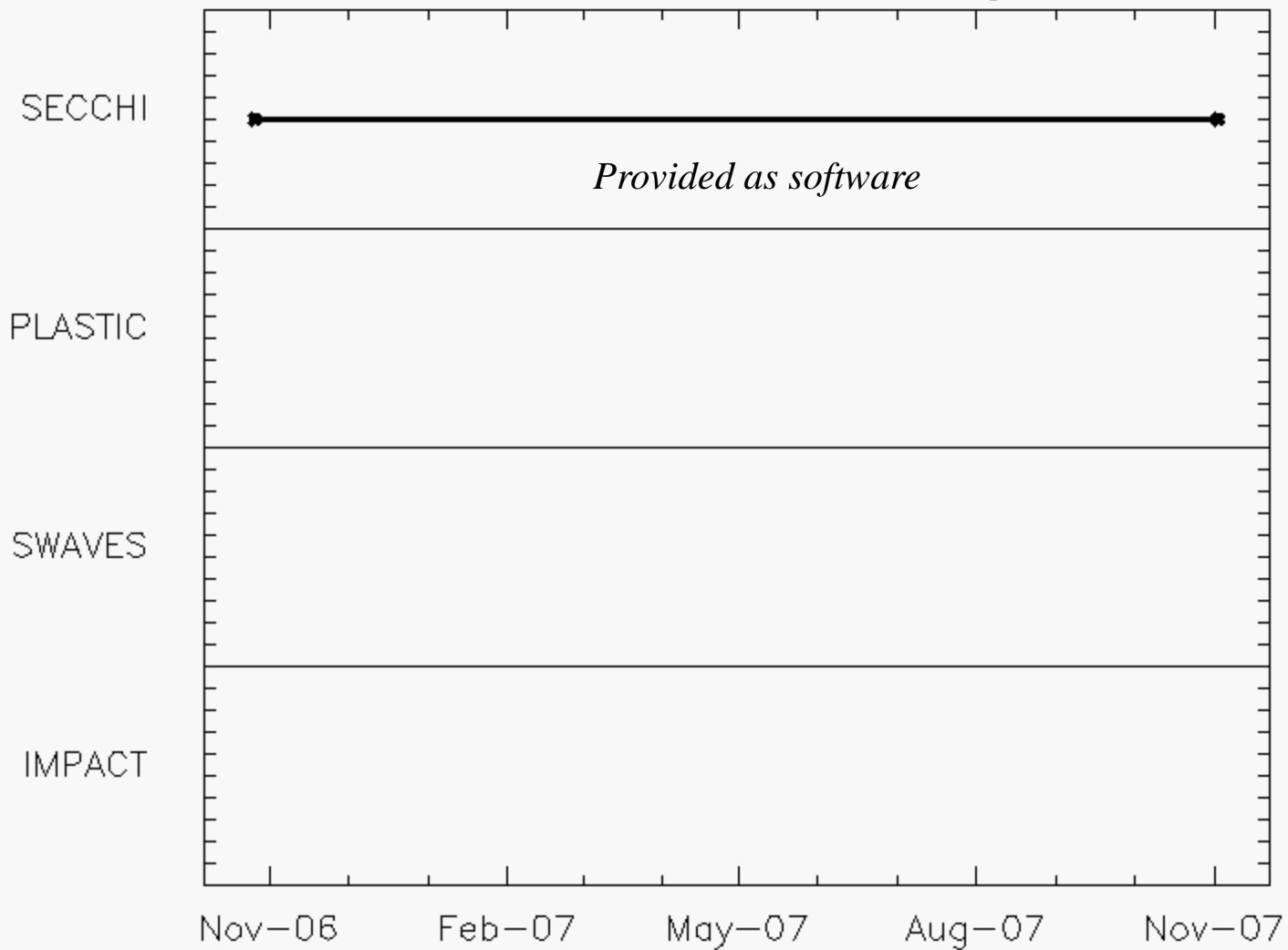


MAG

- Br
- Bt
- Bn
- Btot
- Cone Ang.
- Clock Ang.



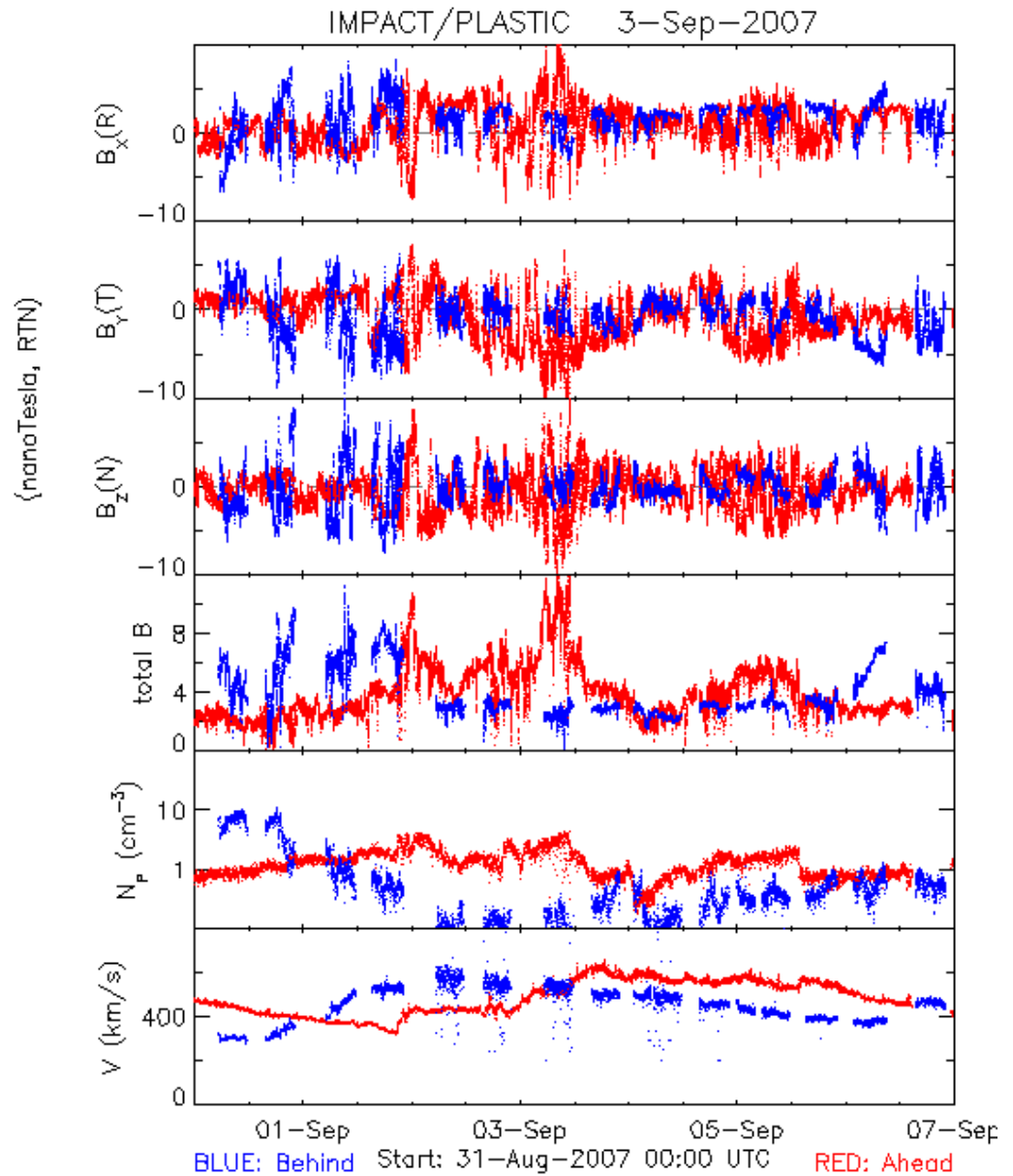
Level-3 Data Availability



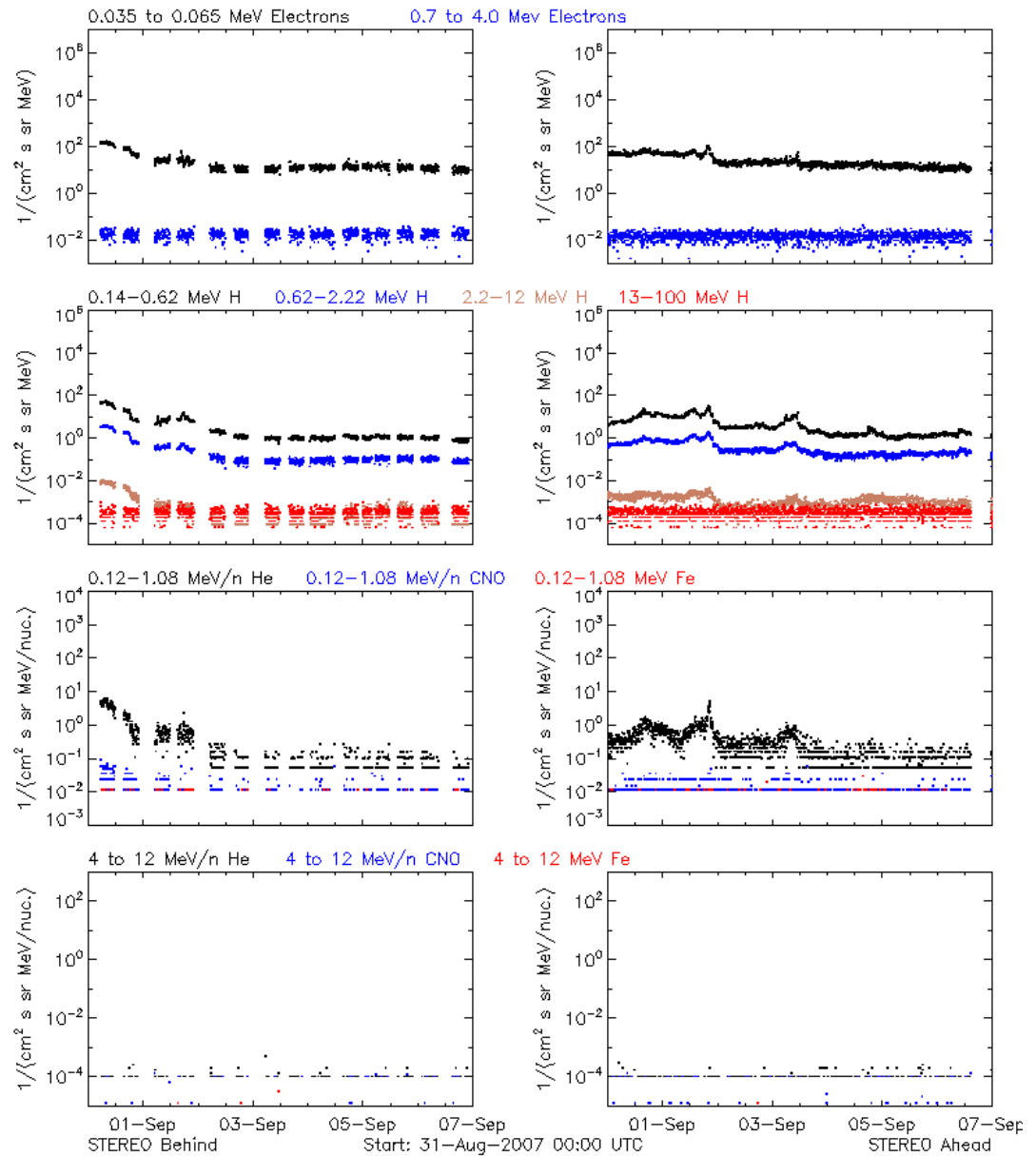
Beacon Status

- Receive beacon telemetry from England and Japan on a regular basis.
 - CNES station in France expected to start testing in November
 - Wallops tracking is top priority—paperwork is main delay
- SECCHI images and IMPACT/PLASTIC data put on web within 5 minutes.
 - Working with SECCHI team to include HI-2 for daily browse pages, but not beacon page
 - Many improvements made to IMPACT/PLASTIC plots
 - SWAVES now producing beacon data—software has been delivered
 - Presentation given at NOAA SEL on PLASTIC beacon data products
 - New PLASTIC calibration table for beacon density calculations uploaded 10/23/07

Sample beacon
plot of MAG and
PLASTIC data



Sample beacon plot of SEP data



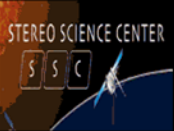
Science Publication Database (imminent)

STEREO Publication Database -- Query Results

http://sirius.nascom.nasa.gov/~cay/Develop/stereo-lit/search.php?sqlQuery=SELECT%: RSS

Address Book Bonjour AstroStatistics Jason -todo astrostats-local OCW CHASC07 Today Solar Work Computing (132) Vids+ Misc Games Science Books

STEREO Publication Databa...



STEREO Publication Database

[Home](#) | [Show All](#) | [Simple Search](#) | [Advanced Search](#) | [Add Record](#) | [Import](#)

1-4 of 4 records found matching **your query** ([save](#) | [RSS](#)):

Welcome
C. Alex Young!
You're logged in as
Admin (alex.young@gsfc.nasa.gov)

[Add User](#) | [Manage Users](#) | [Logout](#)

Show My Group:

Search within Results:

author

Exclude matches


Display Options:









author

records per page

[Select All](#) [Deselect All](#)


<< 1 >>



Author	Title	Year	Publication	Volume	Pages	Links
<input type="checkbox"/> Davis, C.J.; Harrison,R.A.	STEREO/HI: from near-Earth objects to 3D comets	2005	Advances in Space Research	36	1524-1529	 
<input type="checkbox"/> Harrison, R. A.; Davis, C.J.; Eyles, C.J.	The STEREO Heliospheric Imager: How to Detect CMEs in the Heliosphere	2005	Advances in Space Research	36	1512-1523	 
<input type="checkbox"/> Kaiser, M. L.	The STEREO Mission: an Overview	2005	Advances in Space Research	36	1483-1488	 
<input type="checkbox"/> Rucker, H.O.; et al.	Analysis of spacecraft antenna systems: Implications for STEREO/WAVES	2005	Advances in Space Research	36	1530-1533	 

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<< 1 >>



Selected Records: full entries records per page

using style: sort by: return as:

group:

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Tue, 19 Jun 2007

[Help](#)

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20:39:21 - 0400

Future Work

- Beacon processing:
 - Incorporate SWAVES
 - Real-time ASCII files. (*Need software from IMPACT team.*)
- Daily summary images/plots:
 - Add SECCHI HI-2
 - Reach into instrument browse pages
- Customized search pages for VSO database
 - Search on individual instruments within suites