

# STEREO Science Center

SWG – Dec 2004

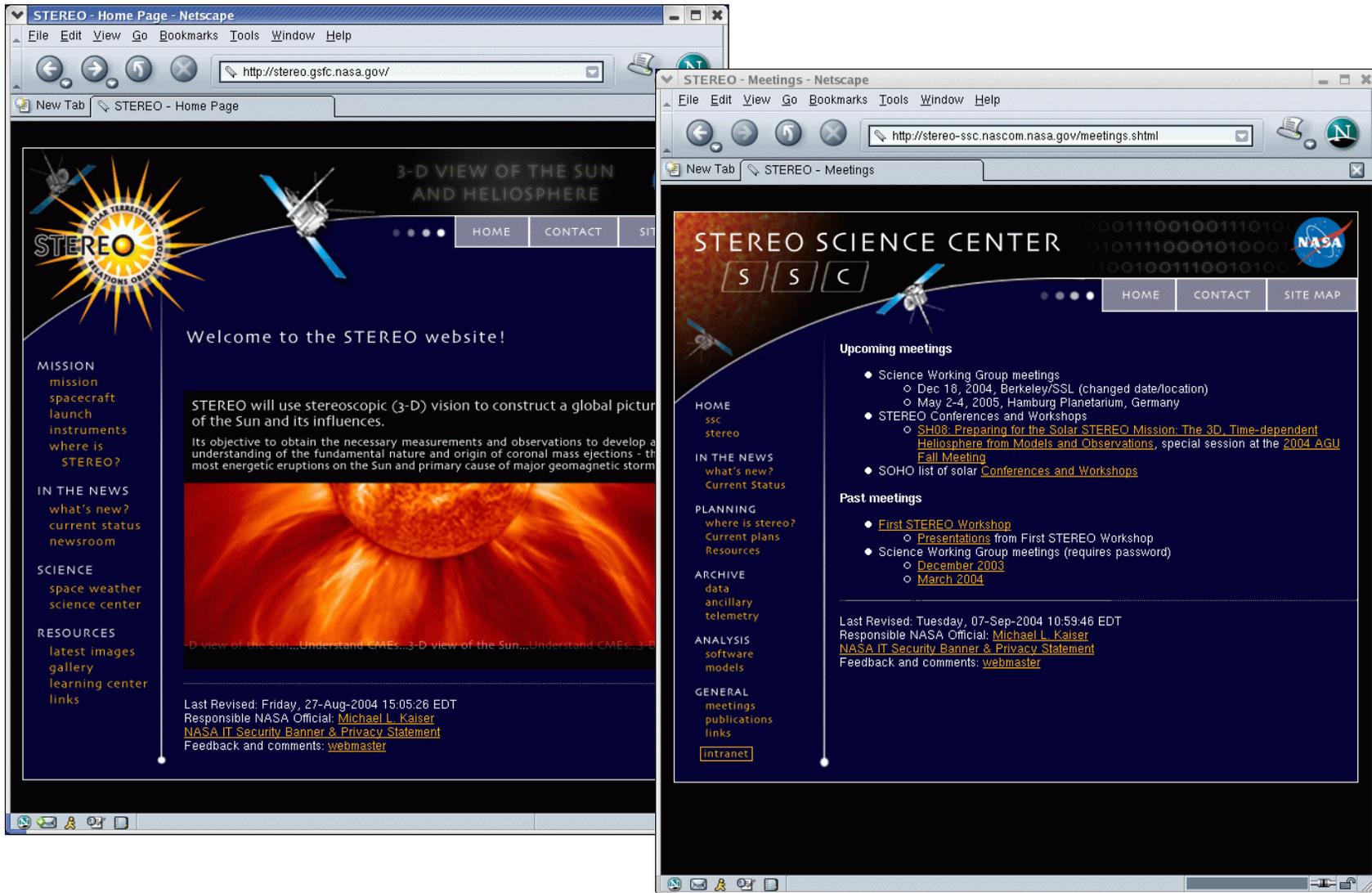
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# Both the STEREO and SSC websites are up and running



# Current status of STEREO website

- Site Map
- Home page
- Contact
  - Team member list
- Mission descriptions
  - Mission
    - Concept
    - Design
    - Why STEREO?
  - Spacecraft
  - Launch
  - Instruments
    - IMPACT institutions
    - PLASTIC institutions
    - SECCHI institutions
    - SWAVES institutions
  - Where is STEREO?
    - STEREO orbit simulations

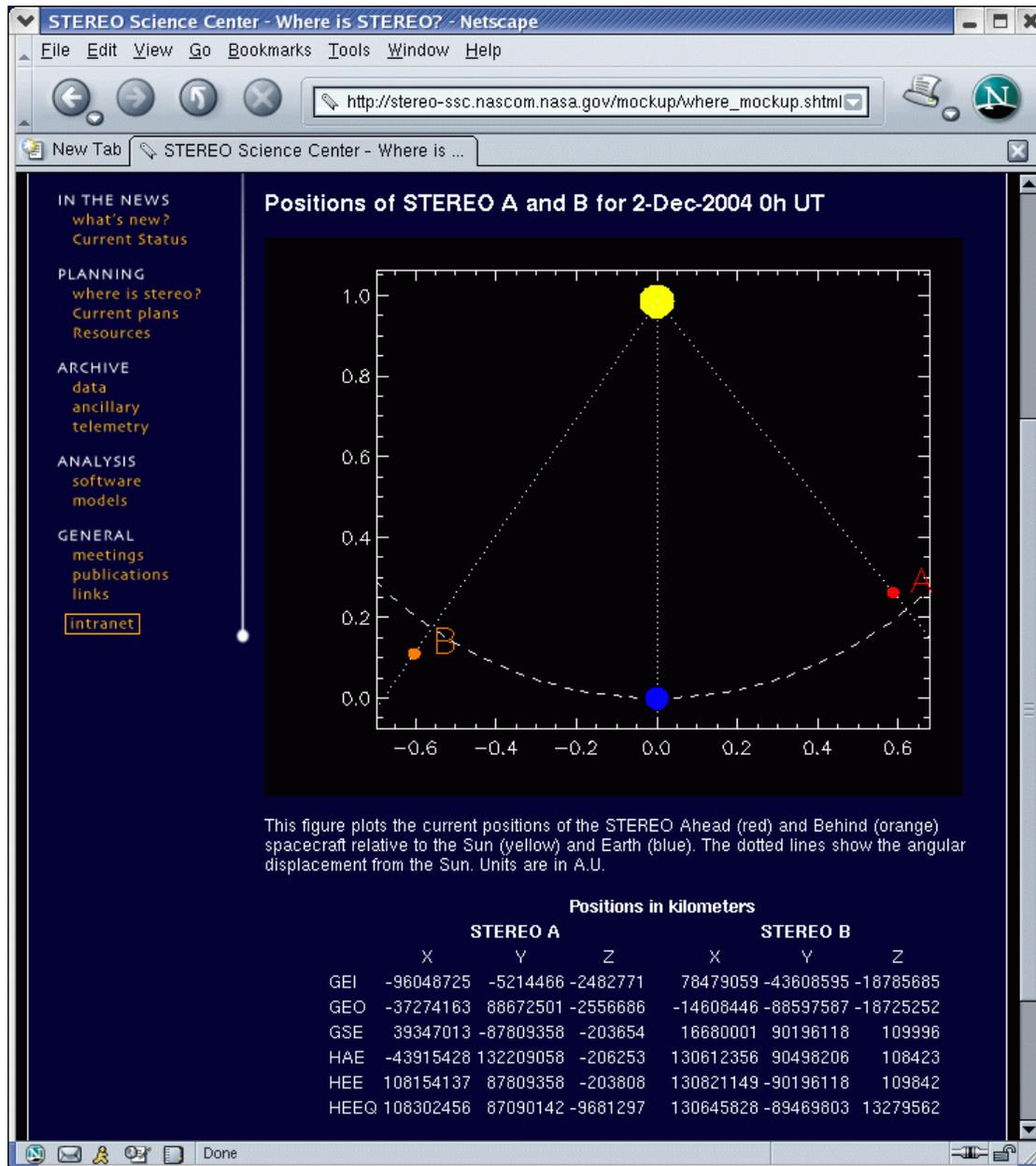
- In the News
  - What's New?
  - Current status
  - Newsroom
- Science
  - Space weather
- Resources
  - Latest images
  - Gallery
    - Image gallery
  - Learning center
    - Frequently asked questions
    - Products
  - Links
- Privacy statement
- Link to STEREO Science Center

*Done*  
*In between*  
*Not done*

# Current status of SSC website

- Site Map
- Home page
- Contact
  - Team member list
- In the News
  - What's New?
  - Current Status
- Planning
  - Where is STEREO?
    - STEREO orbit simulations
  - Current plans
  - Resources
- Archive
  - Data
  - Ancillary
  - Telemetry
- Analysis
  - Software
  - Models
- General
  - Meetings
    - STEREO Workshop #1
  - Publications
  - Links
- Mockups of realtime STEREO pages
  - Beacon mockup #1
  - Beacon mockup #2
  - Latest images mockup
  - Where is STEREO? mockup
  - Heliocentric orbit movie
  - Phasing orbit movie
- Privacy statement
- Link to main STEREO website
- Intranet
  - December 2003 SWG
  - March 2004 SWG

*Web site has been moved from Linux development site to Mac OS-X production platform.*

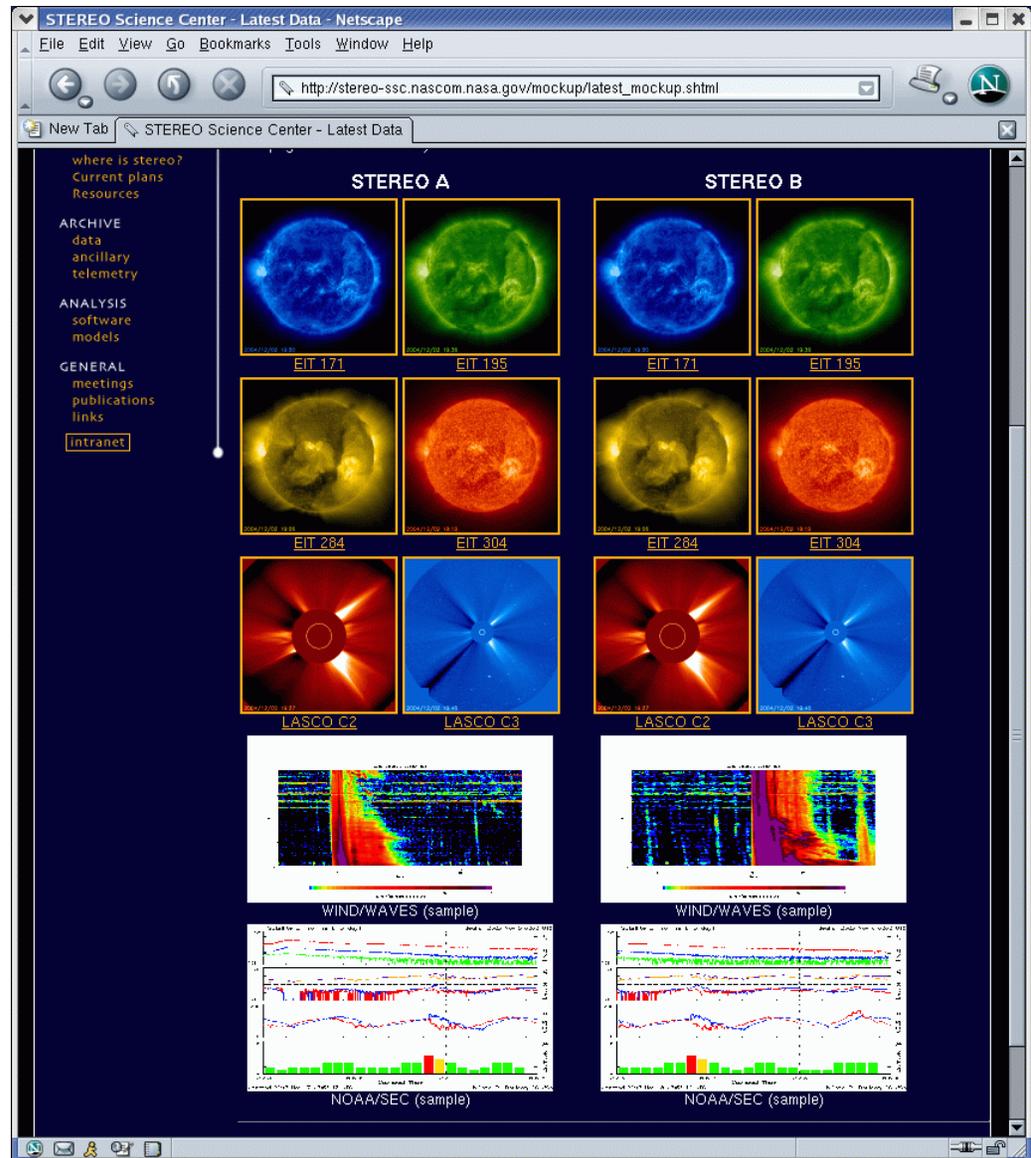


## Where is STEREO? Mockup

- Automatically generated using SPICE software.
- Data calculated for today's date in 2007—will reset on January 1<sup>st</sup>
- Updated daily via cron job
- Graphical display of STEREO A, B, Sun, and Earth on ecliptic plane
- Table shows x,y,z positions of STEREO A and B in several standard coordinate systems.
- *What other information should appear on this page?*

# Latest Images Mockup

- Platform for testing ideas for how to display the latest STEREO images
- Automatically generated every hour
- Currently, the only images which are updated are EIT and LASCO images from SOHO
- Uses same images which are served from the SOHO home page
- Same images used for STEREO A and B



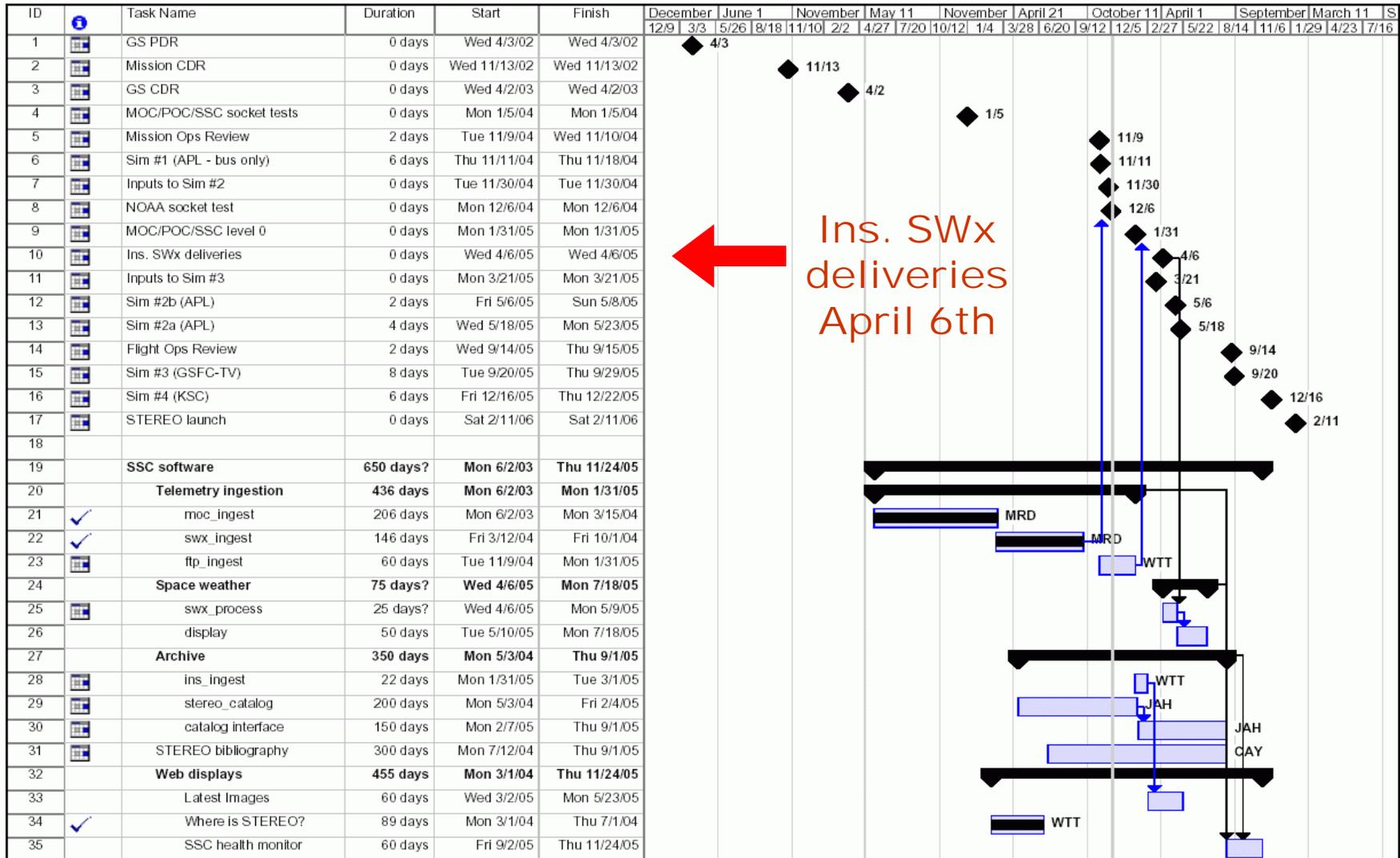
# Software tasks

- **moc\_ingest**: Ingest telemetry from MOC
  - Partially completed, successful test
- **swx\_ingest**: Ingest SWx telemetry from antenna partners
  - Draft ICD with NOAA
  - Software partially completed—requires test
- **ftp\_ingest**: Copy files from MOC
  - Using rsync
- **swx\_process**: Process space weather data
  - Requires software from instrument teams
- **ins\_ingest**: Copy files from instrument teams
  - Prefer to use rsync (push or pull?)

## Software tasks (cont.)

- **Stereo\_catalog**: Baseline is MySQL
  - Need to define what the catalog will contain
- **stereo\_bibliography**: To be defined
- **Web displays**
  - Space Weather Beacon
  - Latest Images and Plots
  - Where is STEREO? (working prototype)
  - Catalog interface
  - Planning timeline
  - SSC health monitor

# SSC Development Schedule



← Ins. SWx deliveries April 6th

Project: SSC Date: Tue 12/7/04	Task		Milestone		External Tasks	
	Split		Summary		External Milestone	
	Progress		Project Summary		Deadline	

# Solarsoft STEREO

```
$SSW/stereo---gen---idl
|-impact
|-plastic
|-secchi---data
|   \-idl---cor1
|       |-cor2
|       |-euvi
|       |-gen
|       |-hi
|       |-pipeline
|       \-util
|-ssc---data---spice_demo
|   |-idl---spice
|   |   \-telemetry
|   \-setup
\--swaves
```

- Some software has been uploaded to the SECCHI and SSC software trees.
- These software and supporting data files are available through the website, or via the SolarSoft installation script.
- The SSC tree includes demo routines for SPICE and telemetry processing.
- *Do any of the other teams have software ready to be uploaded to SolarSoft?*

# Beacon Processing

- Considering two possible ingest schemes for beacon data:
  - Custom socket software
    - Software development essentially finished—needs to be tested.
    - CNES cannot use socket connection. SSC will pull telemetry files from CNES via ftp.
  - File copy through ssh
    - Antenna partners (except CNES) push telemetry files to SSC.
    - Best match to CNES situation
    - Slower than socket connection
- Selection between the two will be based on security, reliability, and efficiency considerations
  - Currently leaning toward socket connection

# *Where do we go from here?*

- We need to start holding monthly telecons with the instrument software leads. Issues to be resolved include:
  - What software packages are needed for processing beacon data?
    - How will the beacon data be organized?
  - How will the data supplied by the instrument teams be organized?
    - What levels will each team supply?
    - Will the file transfers be a push or pull?
  - How will the data catalog be organized?
  - Coordinate systems
- More tests are needed between the SSC and the MOC
  - Also need to start testing with antenna partners.
- Need to start working on the data browser/catalog interface
  - Depends in part on the catalog definition
  - What software will the instrument teams provide for producing daily browse plots?
- How does STEREO fit into the VSO, VHO, VSPO?