STEREO Science Center

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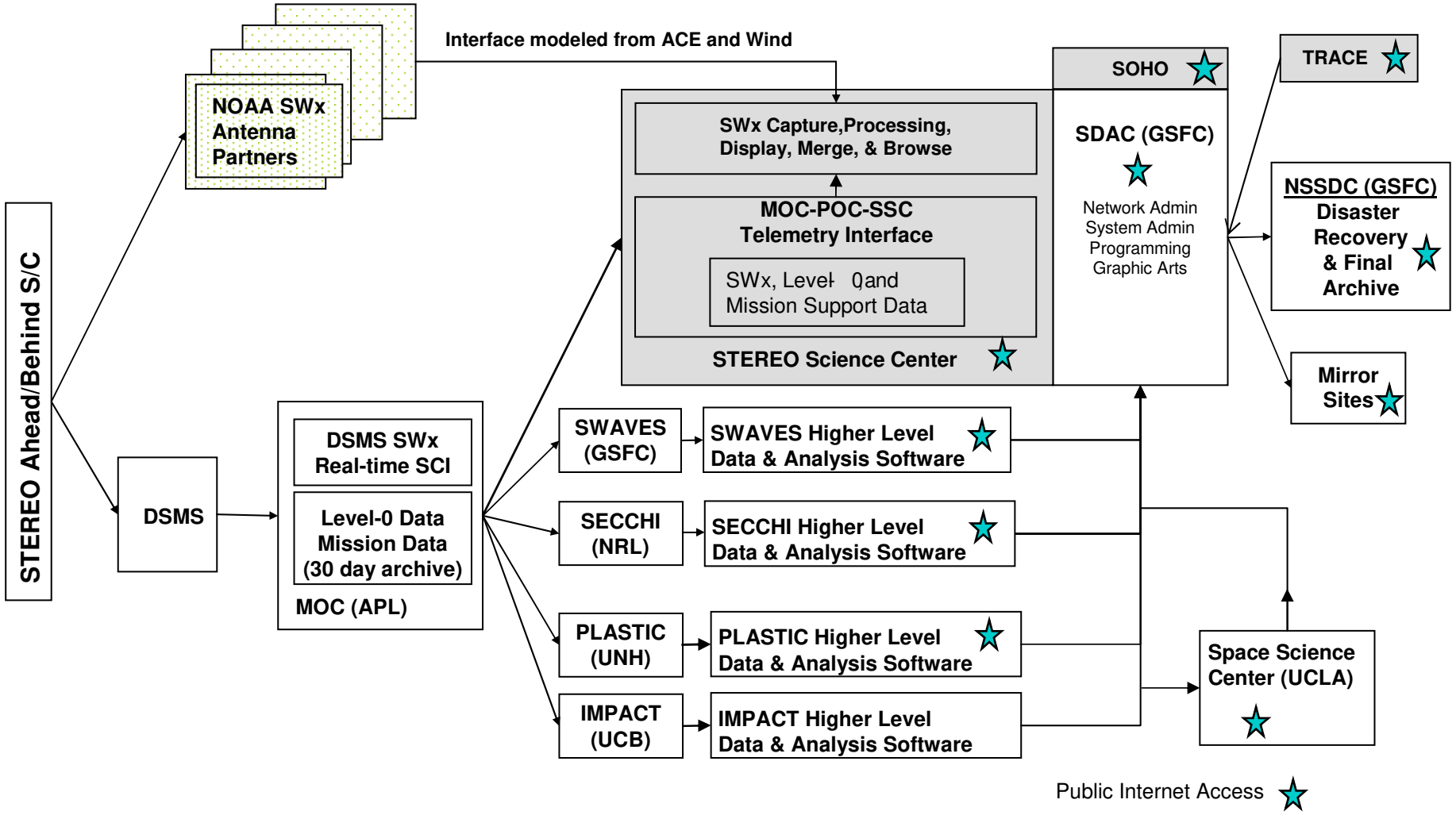
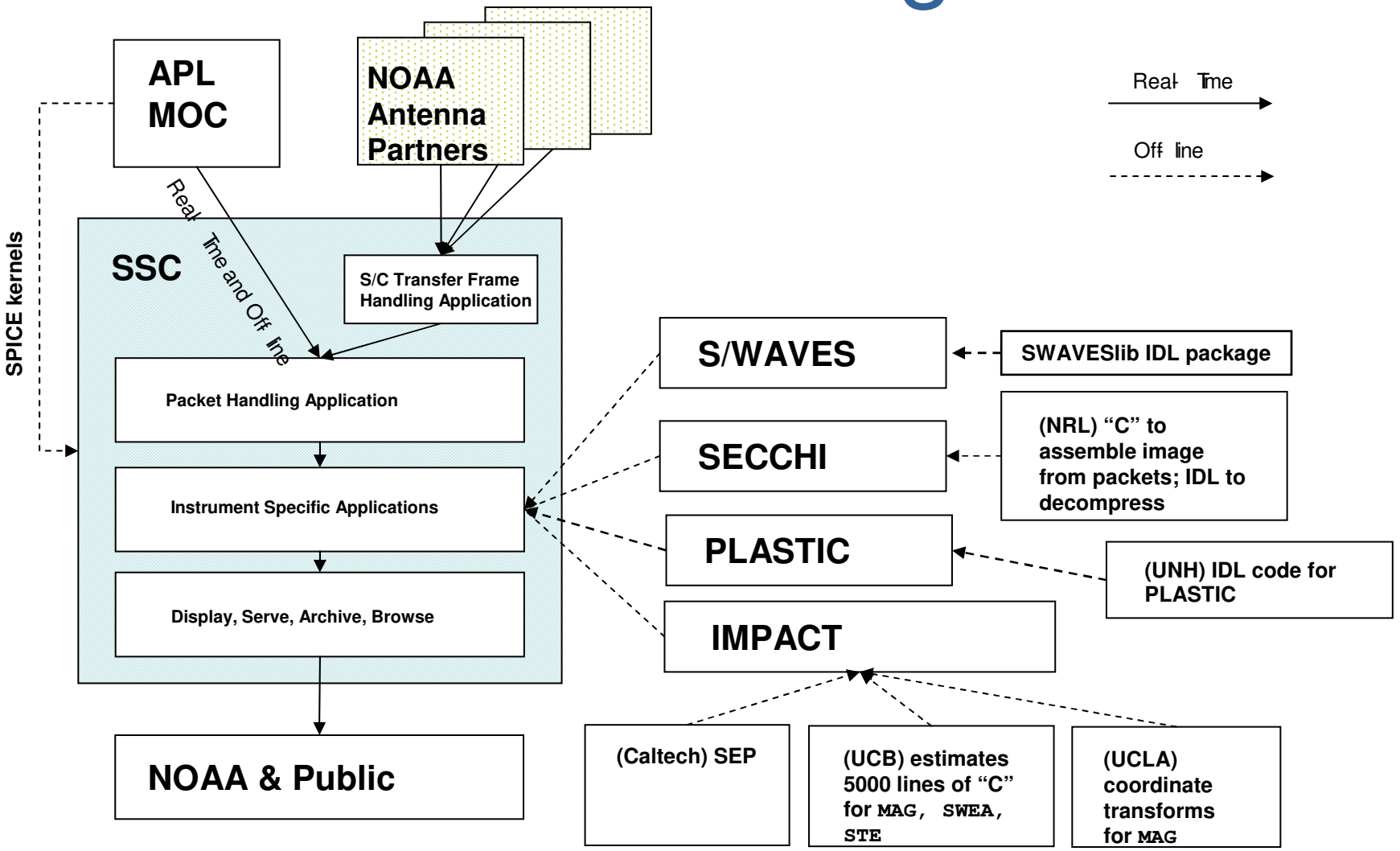
What is the SSC?

- The SSC performs the following functions
    1. Collects telemetry and processed data, archives it, and serves it on the web.
    2. Receives beacon data from the DSN and NOAA antenna partners, processes it, and makes space weather products available in near real-time.
    3. Focal point for science coordination
    4. Focal point for education and public outreach.
- In addition, through interaction with the SOLAR Software Library, the SSC can act as a focal point for software coordination.

Data Flow/SSC Block Diagram



Space Weather Beacon Processing



SSC Current Status

- Amy Skowronek and Marc Despres from the SOHO project are working on programming.
  - *We are currently preparing for a R/T telemetry throughput test with the MOC in January 2004.*
- Emilie Drobnes is working on website design.
  - *Draft text for the website is currently available. We appreciate any comments from the community.*
- A draft MOU with NOAA is being prepared.
- Current funding looks good for archive and science coordination activities. E/PO and Beacon budget to come from other sources.

SSC website

External website *(under development)*

http://stereo.nascom.nasa.gov/

Internal website

http://stereo.nascom.nasa.gov/intranet

Account: **SSC**

Password: **StereoSC**

Software tasks

1. R/T telemetry ingest from MOC
   - Also ingest via FTP transfer
2. Antenna partner ingest
3. Telemetry processing
4. Data ingest from instrument teams
5. Data management
6. Web services

What does the SSC need from the instrument teams?

- What formats will the data be in?
  - SECCHI: FITS
  - IMPACT: CDF, ASCII, binary flatfile
- Are any example data files available (e.g. from earlier missions)? Example telemetry files?
- What software will be used to process beacon telemetry?
  - S/WAVES: IDL
  - SECCHI: IDL, C
  - PLASTIC: IDL
  - IMPACT: C
- What software will be used to analyze the data?

What does the SSC need from the instrument teams?

- What should appear in the catalog?
  - What kind of queries should the catalog support?
- When will first generation software for processing beacon data be delivered to the SSC?
- Each instrument should designate a contact person to discuss software and data flow issues.

What do the instrument teams need from the SSC?

- Software coordination, distribution
  - Instrument team supplied software
  - Contributed software
- Coordinate transformations? SPICE?
- Data cataloging, VSO
  - Search criteria?
  - Data visualizations?
- Science coordination

Operations Working Group Meeting

- APL would like to hold a meeting on STEREO operations, to follow up on the meeting last March.
- Meeting is a response to questions that APL has been getting recently.
- Focus would be on the allocation of resources.
- What items should be on the agenda?