

NOAA Space Weather Update



**NRC Committee on Solar and Space Physics Meeting
March 3, 2014**

NOAA Observations

Continue and Expand Coverage of Critical Observations

GOES-R

- EXIS – X-ray sensor, expanded dynamic range and flare location
- SEISS – significant increase in range of energetic particle measurements
- SUVI – new UV solar imager
- Launch ~2016



DSCOVR

- Will ensure continuity of critical L1 measurements
- Collaborating with NASA and Air Force for early 2015 launch



DSCOV^R



- DSCOVR has completed integration and is half way through thermal vacuum testing
- Key Decision Points D (KDP-D) is scheduled for March 6, 2014
- Launch Readiness Date (LRD) is January 13, 2015
- Magnetometer boom has been lengthened and the Magnetometer repositioned to the end of the boom
 - Meets absolute accuracy of 1nT
- Electron Spectrometer is retained as a space physics sensor and repositioned on the spacecraft body
- No major problems have occurred in testing
- Project funding has been stable
- Launch services Mission Design Review 2 (MDR-2) will be in May 2014

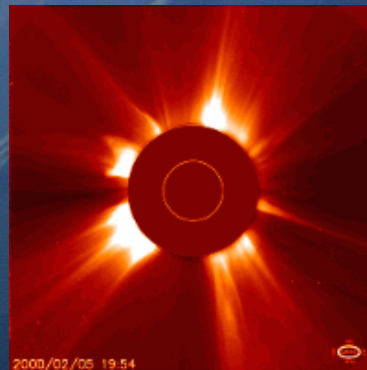
DSCOVER F/O Planning Activities

- Commercial data buy
 - RFI results due March 28, 2014 for updated prices for a solar wind data buy and CCOR hosted payload
 - May provide costs for services for Heliophysics and U.S. National Science Foundation (NSF) as well
- Sunjammer commercial solar sail flight demonstration
 - Recently demanifested from DSCOVER launch due to late schedule
 - New launch selected in March – will determine launch date and final orbit
 - NOAA will receive Sunjammer flight data, fund analysis of solar wind data, and receive and monitor commercial earnings
- Government satellite studies (backup option)
 - John Hopkins University Applied Physics Lab (APL) design and cost study for a L1/solar orbiting pair of satellites in progress
 - Goddard Space Flight Center (GSFC) design and cost study to be started in FY 2014

New Satellite Observations

Compact Coronagraph (CCOR)

- NOAA plans to fly Compact Coronagraph (CCOR) as part of the DSCOVR Follow On (F/O) mission at L1
- Leading option would be as a hosted payload on a commercial satellite as reflected in recently released Request for Information (RFI)
- NOAA has entered a new Memorandum of Understanding (MOU) with U.S. Naval Research Laboratory (NRL) and are conducting studies on areas of schedule risk – electronics design and detector



New Satellite Observations

Sunjammer (Solar Sail Technology)

- NASA mission to prove the viability and value of solar sail technology (launch ~2015)
- Solar wind instruments provided by University College London and Imperial College London
- NOAA to partner with L'Garde to provide data reception, analysis, and archival

