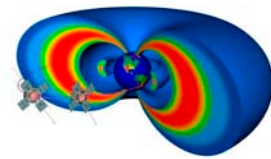


Report to the RBSP SWG on the 15 May RBSP Data Workshop

B. H. Mauk



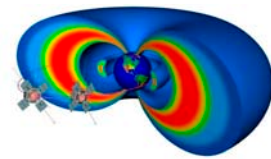
RBSP Data WS Agenda; 15 May 2012



- Introduction – (5 minutes)
- Brief Discussion of [Mission-level Data Products](#) captured to date (update at end of the workshop). Includes scope discussion (cross instrument?) – Appendix. (10 minutes).
- High-level discussion of [scenarios for data use](#) (Appendix) – (10 minutes)
- Brief presentation of [Baseline science operations](#) plan for each team. Including answer to Data Scenario #1: How do instrument team members access / analyze their own data – (5 minutes each, total of 30 minutes): EMFISIS, EFW, ECT, RPS, RBSPICE
- Very brief presentations on some possible [non-team resources](#): Gateway, SPDF, VIRBO. (2 slides, < 4 minutes each; total of no more than 15 minutes)
- The meat of the Workshop: Project Science team will lead an interactive session asking teams and non-team participants how they will respond to each scenario; seeking to [chart routes to data access and gaps in service](#). Teams can respond with impromptu slide & web presentations as we go through each Data Use scenario (Slide 4) one at a time. (2-3) hours). SWG members are encouraged to poll their team members for planned studies prior to the meeting, and describe these at the meeting.
- Broad discussions on: What is missing? What do we need to fix? How will we fix it? Who will fix it?
- Discussion / Real-time editing to updating the list of Data products that all users need (Discussion / clarification / expansion of the table on the next slide).



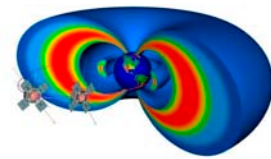
RBSP Data WS Findings / Actions (1)



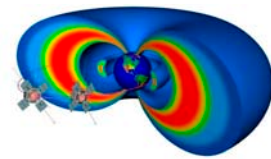
- A SOC telecom will be held on 22 May to discuss the possible generation by teams of instrument simulation data for testing our ability to share data and do multi-instrument plotting. Also, what simulated data products might APL generate (mag-spin, etc.)?
- Rob Barnes will continue to develop his data product spread sheet which cross-correlates user data needs with team data products. It will become an appendix or section of the SDMP.
- Should Data Quality Flags should be imbedded in the data? If so, we need to develop a consistent approach across teams.
- For the different teams, are error parameters attached to the measurement parameters? Do we need to talk about consistency of approach?
- For “fixed” survey plots, we need to develop some standards (24 hours, orbit-by-orbit, which spacecraft is the driver for orbit-by-orbit plots, etc.) at least in terms of a dictionary of terms. (orbit, leg, etc.).
- Who will generate Orbit files? Good to have just one set.



RBSP Data WS Findings / Actions (2)



- We need to benchmark download time delays. Do we need “data reducers.”
- It would be very good to coordinate the generation of merged data sets (e. g. Alfvén speed, Moments across instruments, spectra across instruments, etc.). Which teams have the most interest in specific merged data sets? How can we share the load? What “stitching” service can SPDF provide?
- A table will be needed of perigee times and an agreed-upon orbit numbering scheme. Likely an APL responsibility.
- We need to develop a plan and schedule for intercalibration of instruments in flight.
- We need to develop a schedule for validating the processing of the Space Weather Data?
- How are maneuver times documented. There is a suggestion that they should be imbedded each data set to avoid mistakes (quality flag?)



Miscellaneous discussion points (1)

- All team publish CDF's for sharing data. 2 teams perform detailed plots using Autoplot, 1 performs detailed plots using TDAS, 1 performs detailed plots with MIDL + TDAS.
- SPDF archives all data and provides some instrument and cross-instrument plotting capabilities.
- Discussion on whether Level-1 is publically available and archived. Level-2 is the standard published product.
- Proper hierarchy of data storage can make auto-searches for plotting work.
- EMFISIS wants Level-0 for ground tests. Apparently the Project has agreed.
- Discussion about how processing software (TDAS for example) is maintained over the long run.
- SPDF needs to talk more with all of the teams to provide what the community needs from them.