

SUG Minutes – 06 Dec 2016

In attendance

Jim B, Tom, Dick, Wes, Jim S, Jim T, Shing, Dave

Station Reports – New Info in RED

Tom – Building the new 4-element TFD array; holes dug for masts, planting posts tomorrow. Should be online with the new FSX-10S in two weeks making polarization observation reports.

Dick – WCCRO computer rebooted; RSS chat disabled; someone was trying to hack into the machine over that port.

Whit –

Jim B – Seeing diagonal RFI lines in the FSX-8S when using 300 channels. Faint at 250 channels, and not there at all when using 200 channels. Investigation continues. DDDR experiment still going, but all indications are that it is deaf as a post. LWA array currently at a 67.5° dangle angle.

Wes – Line noise still low for now. Heat pump RFI still a concern with the colder weather. LMR-400 now buried; spectrograms look better than when using the RG-8. Wes will send reminders for Io-A/C on Dec 9th and Io-B on the 10th.

Chuck –

Francisco –

Andy –

Dave – Nothing new.

Discussion – New Info in RED

HEC grant

Hardware delivery is progressing well, first phase nearly complete.

Archiving

Dave asked if others' data (other than AJ4CO) will be published soon. Mark replied (via email) that this will happen soon.

<http://ppi.pds.nasa.gov/radiojove/>

Anyone who has not submitted data on a PDS hard drive is asked do so and to contact Jim Sky for any needed help.

Jim S is working on modifications to the data copying program to make it able to handle SPD files as well as SPS files. This will facilitate data transfer of SPD files to the PDS.

Dick asked why Dave's files on the PDS have no useful metadata. Dave explained that the software versions weren't updated until 4 or 6 months ago. Dave will make sure that the current data-taking machines have all the appropriate metadata entered.

Shing suggested standardizing the metadata.

Jim S noted that RSS and RSP metadata is diverging and is working to bring the two groups of metadata back to uniformity.

Jim S will publish a set of instructions on how to enter metadata in RSS and RSP.

Dave asked if that document could include a list of required and optional metadata fields.

Jim S will send around the documents concerning metadata that he and Baptiste have been using.

Shing asked if there was a software change log explaining which versions of RSS and RSP can collect what pieces of metadata. Jim said, yes, go to Help -> Check for Updates.

Shing suggested contacting Len Garcia about what metadata is useful for Waves data.

Software

Latest version of RSS is 2.8.27

http://radiosky.com/spec/Spectrograph_Update_2_8_27.exe

Latest version of RSP is 2.7.15

http://radiosky.com/skypipe/RSPUpdate_2_7_15.exe

Phase Plane

Dave asked if there existed a good diagram of the nested Jovian DAM emission cones. Per Hess, et al., the cones are widest at 10 to 15 MHz, narrowing above and below that freq range. The diagram in Imai, et al., indicates the cones get progressively wider with frequency from 10 to 18 MHz, at odds with Hess. Dave felt that Hess explains the formation of the arc vertices in the dynamic spectra. Jim T mentioned that the arc vertices might also be explained by the fact that the emission sources are spread out along the IFT (higher freq sources being closer to Jupiter) and/or among various flux tubes near the IFT. Since the IFT is a curve, the emission cones' axes of symmetry are not parallel for cones of different frequency. Since other flux tubes do not have the same Jovian longitude, emission cones located along them also point in different directions. All of this leads to some very complex dynamic geometry between the emission sources, cone opening angles, cone directions, and Earth, all varying with frequency and time. Dave thought this was an important point.

JUNO

Dick asked if there was anything specific SUG observers needed to do for the Juno ground-based observing campaign. Chuck indicated that it is business as usual for SUG; that is, making observation and recording data much as we always do.

2017 Solar Eclipse

There will be a solar observing practice session Sunday Dec 18 at 2:00pm EST (1900 UTC). All are encouraged to submit their data to the Jove Archive.

Jim T informed us that the new proposal has passed Phase 1 and now Shing will proceed to the much more involved Phase 2. Shing has sent around an email to those who must supply him with more information (applies to Co-I's and Consultants). **Shing has now submitted Phase 2.**

**Next SUG Telecon Tuesday, 27 Dec 2016 at 5:00 pm EST (2200 UTC)
(844) 467-6272, 352297#**