

SUG Telecon, 18 Jul 2017

Present: Dick, Larry, Jim T, Francisco, Chuck, Jim S, Wes, Andy, Jim B, Shing, Dave

Dick – New computer present at WCCRO, but not yet configured.

Jim B – Jove array now steered to zenith.

Andy – Getting ready for eclipse; will steer Jove array to zenith.

Chuck – Will install a Jove array steered to zenith for the eclipse.

Larry – Spectro stopping randomly on the WIn7 box; will add some Jove dipole arrays to the antenna farm.

Wes – Nothing new.

Francisco – All four TFD elements now up at RHO steered to zenith. A few hours of observation look very clean, no line noise.

Dave – New auto-calibrator installed and working fine.

HEC

Shing asked where we are on the SDR evaluation for year 1 of the HEC grant. Lots of subsequent discussion about the differences between swept freq spectros and FFT-based spectros.

Jim Sky pointed out that the SDRPlay2 experiences bleed-through when switching between the two antenna inputs and that he's in touch with one of the SDRPlay engineers about this.

Dick pointed out that we are in a transition period between the FSX and SDRPlay2 spectrographs and that the HNRAO station gained experience operating both the FSX and SDR spectrographs, suggesting that the SDRPlay2 appears to be a suitable replacement instrument. A more rigorous performance study needs to be performed. Given the numerous software settings of the SDRPlay2, we need to do a careful analysis of the SDRPlay2 performance versus various settings. We also need to determine what computer specifications (speed, memory, etc) are necessary in order to use both the single and dual channel capabilities of the SDRPlay2. The result of this study should be a recommendation as to the configuration of the following years' HEC grant spectrograph stations, including identification of software upgrades desired, hardware, and cost information.

Dick and Wes mentioned the need to peak the Jove receivers properly if two receivers are to be used together as a polarimeter.

Jim S said that RSP might be able to handle switching between two inputs and will consider what might need to be done to make that happen.

Jim S said that RSP may be updated to re-include a sound card offset during the calibration wizard routine. Jim S also sent around a link to some Chinese sound cards in wee blue metal boxes that seem to work rather well in his experience.

Chuck reported that his student is working on the HNRAO data to calculate the QDC, but that the solar burst comparison has taken a back seat for now. Shing pointed out that bin size may affect the results of the analysis.

Chuck passed around a map of the eclipse participants to the group via email.

Jim T noted that Chuck, Jim S, and himself were on the last eclipse telecom with 7 observers, who asked several questions that were duly addressed.

Propagation TPs

Shing pointed out that there has been some high geomagnetic activity in the past several days and asked if anyone was seeing propagation TPs. Dave said he did not see any and thought that this was odd. Shing pointed out that the distant lightning and reflection spot have to be in the right position to see the TP, so a geomagnetic upset in and of itself isn't necessarily enough to produce a TP.

Discussion about solar bursts Chuck sent around as to what was the cause of differences in appearance of solar bursts at different stations.

Archiving

AJ4CO data being processed in Paris; next group of data for processing will probably be LGM.

Jim B asked if the new version of RSS, which now stores data in differently named directories, will affect the operation of the PDS hard drive transfer script. Jim S will think about this and see if the script must be modified.

**Next SUG Telecon Tuesday, 01 Aug 2017 at 5:00pm EDT (2100 UTC)
(844) 467-6272, 352297#**