SUG Minutes –12 Apr 2016

In attendance

Jim T, Jim B, Whit, Chuck, Shing, Tom, Nathan, Francisco, Wes, Dick

Station Reports – New Info in RED

Tom – cleaned up wiring in his shack – found all-sky camera was the source of much RFI.

Dick – WCCRO back on line after being off for a couple of days – RFI issues.

Whit – 200kK RFI at his home – will be working to get new obs online by end of the summer.

Nathan – running using both linear and CP antenna modes – some RFI issues

Jim B – After outfitting his car with a Jove receiver and a 15 meter ham band whip and driving around Jim may have located several sources of RFI. Currently working with local power company and cable provider.

Wes – Has reported RFI to power company – waiting for visit.

Chuck – Didn't get money for additional antenna and move to dairy location. Tested at dairy location using 135 MHz MFJ – looks clean.

Francisco – Testing of polarimeter using Jove receiver – spectro probably on line soon.

All observers are urged to keep an engineering log and update their system drawings for the SUG site.

The following numbers correspond to agenda items.

- 3. Nathan planned experimental SDR setup. Plans to try out RASDR
- 4. Baptiste PADC Radio Jove archive news (if any) no news
- 5. Baptiste & Chuck News (if any) about the Juno Ground Radio group. No news
- 6. Jim S Update on software latest version of RSS is 2.8.14 (?). no Jim S but he and Jim B are working on 2.8.15 banner issues
- 7. Dick & Dave & Jim S Update on the progress of the correction array instruction manual. Correction array waiting completion on some issues such as applying correction array to old uncorrected data.

- 8. Interesting dissertation containing info about the UTR-2, exoplanet searches, SDR RFI reduction techniques, and pulsar searches (link courtesy of Philippe on the Jove Data mailing list).https://tel.archives-ouvertes.fr/tel-01246634/document
- 9. RFI examples for the SUG web site. Tom mentioned rope light, all-sky camera. Chuck circulated info on Linksys Ethernet switch.
- 10. Shing & Chuck News (if any) related to the HEC grant. Maybe news in next week.
- 11. Update on literature search progress. No progress
- 12. Additional discussion new topics, etc. No new topics

Alphabet Soup

(also available on the SUG web page http://www.radiojove.org/SUG/)

- **CA Correction array**; a matrix of correction values that can be applied to spectral data to flatten a displayed spectrogram in terms of frequency response.
- **CDF Common Data Format** is a library and toolkit that was developed by the National Space Science Data Center (NSSDC) at NASA starting in 1985. The software is an interface for the storage and manipulation of multi-dimensional data sets
- **CSV Comma Separated Values** is a common data exchange format that is widely supported by consumer, business, and scientific applications. Used in Excel.
- **FITS Flexible Image Transport System** (FITS) is an open standard defining a digital file format useful for storage, transmission and processing of scientific and other images. FITS is most commonly used in astronomy
- **HEC Heliophysics Educational Consortium**
- PADC Paris Astronomical Data Center
- PDS Planetary Data System
- **PPI Planetary Plasma Interactions**; this is a node within the PDS that pertains to what we do in the SUG. This node is hosted at UCLA.
- **RHO Rosemary Hill Observatory**, south of Gainesville, Florida; operated by UF.

RSP – **Radio SkyPipe** – the program we use to digitize audio from the Jove receiver, display and save data and serve these data as well as view it in client mode. Radio Sky Pipe (RSP) produces **data files with a ".spd" extension**.

RSS – **Radio Sky Spectrograph** – the program we use to run the spectrographs, display and save data and serve these data as well as view it in client mode. Radio Sky Spectrograph (RSS) produces **data files with a ".sps" extension**.

SPASE – **Space Physics Archive Search and Extract**, a project containing, among other things, a metadata model described here: http://www.spase-group.org/data/

UF - University of Florida

UFRO – **University of Florida Radio Observatory**, located at various places over the years: on campus, at Bivens Arm, and from 1970 at a 55-acre site in Dixie County, south of Old Town.

VO Paris – **Virtual Observatory Paris** (deprecated, see PADC).

Next SUG Telecon Tues, 26 April 2016 at 5:00 pm EDT (844) 467-6272, 352297#