

Subject: [radiojove-data] 25 Dec 2014 Io-A/C
From: Dave Typinski <davetyp@typnet.net>
Date: 12/26/2014 19:40
To: RadioJove-Data <radiojove-data@lists.nasa.gov>

As Tom and Wes and Jim noted, this was almost a non-event, a very weak Io-A/C storm on Thursday morning.

RCP dominant L bursting between 16 and 28 MHz for Io-A from 0744 to 0918 UTC. No modulation lanes.

LCP dominant N event consisting of narrow banded S burst trains between 16 and 20 MHz for Io-C from 0943 to 1109 UTC.

The surprise was more RCP dominant L bursting between 16 and 25 MHz for a very late Io-A arc from 1056 to 1130 UTC. No modulation lanes.

There is also some distant, weak, line noise in the data. Shows up as vertical bands with a horizontal pitch of 8.3 milliseconds (120 Hz), about 41 pixels in the high speed spectrograms. Nobody likes RFI; however, in this instance, it is instructive. It provides an easy-to-grasp reference point for the speed with which Jovian S burst phenomena take place. In a single 60 Hz cycle of the AC mains, there were on the order of 8 S bursts in the narrow band trains -- meaning the burst rate is on the order of 500 Hz. Our Christmas miracle must be the fact that the line noise was just barely strong enough to be seen, but not strong enough to wipe out the observations.

The S burst trains at 17 MHz had a drift rate of -17 MHz/sec.

Unfortunately, the storm was so weak that the emission at 20 MHz did not often go above the slight variations of line noise in the strip charts.

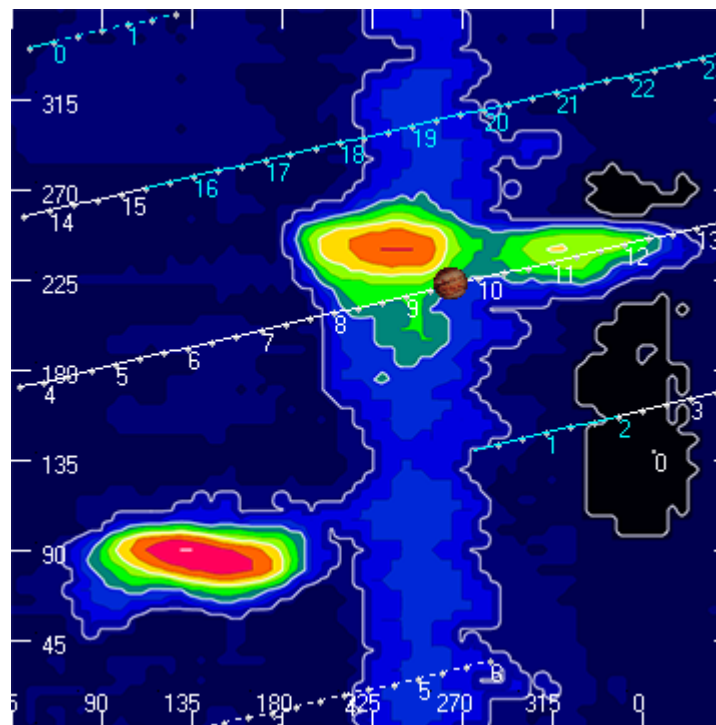
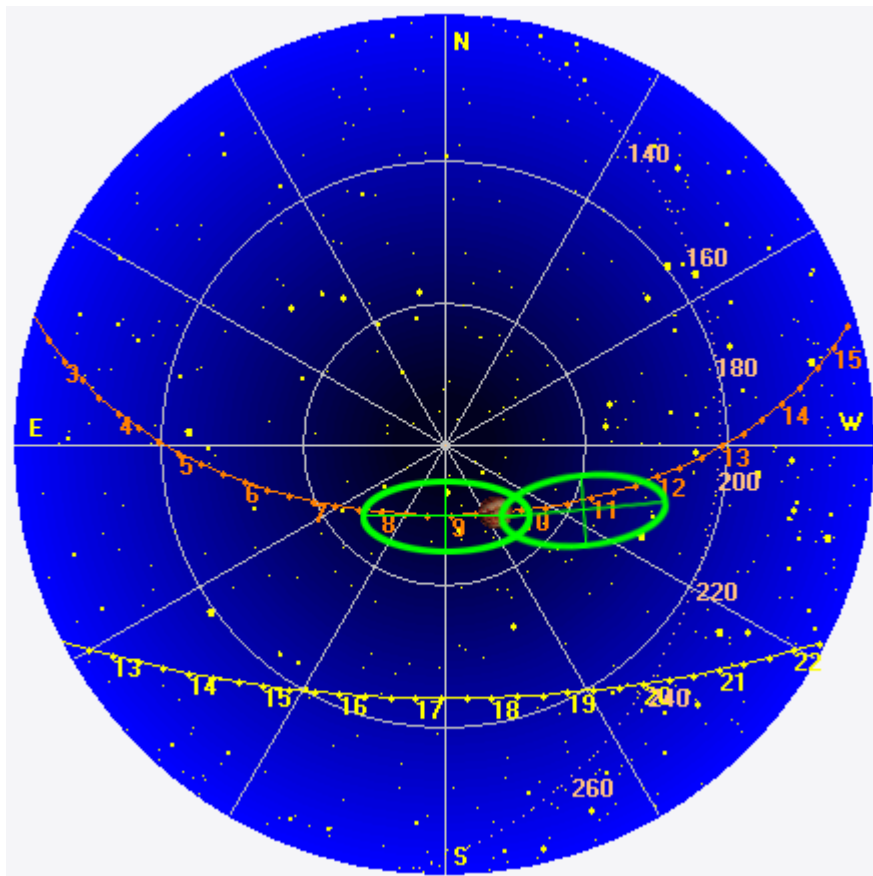
Beam steering was changed from 15S 0EW to 15S 30W at 1042 UTC. Jupiter was between -17° and +9° off axis for all these events.

Jupiter was leading the Sun by 131°.

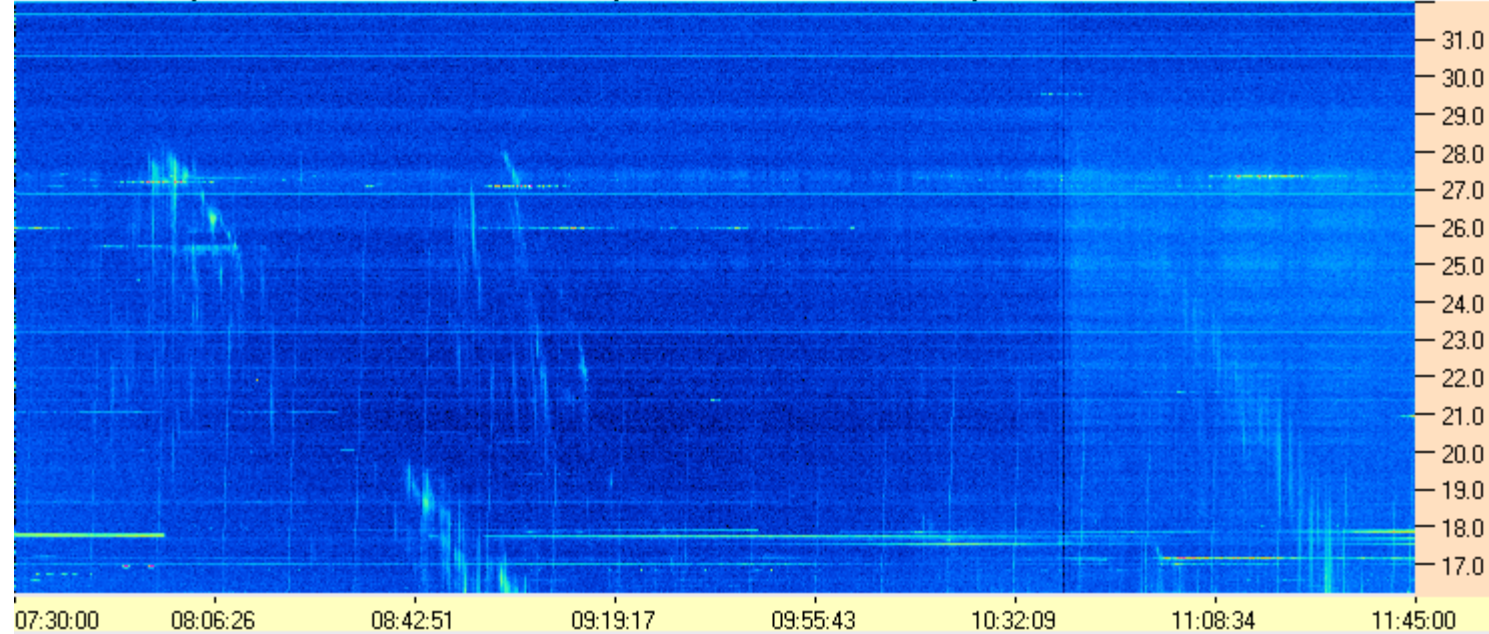
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Dave

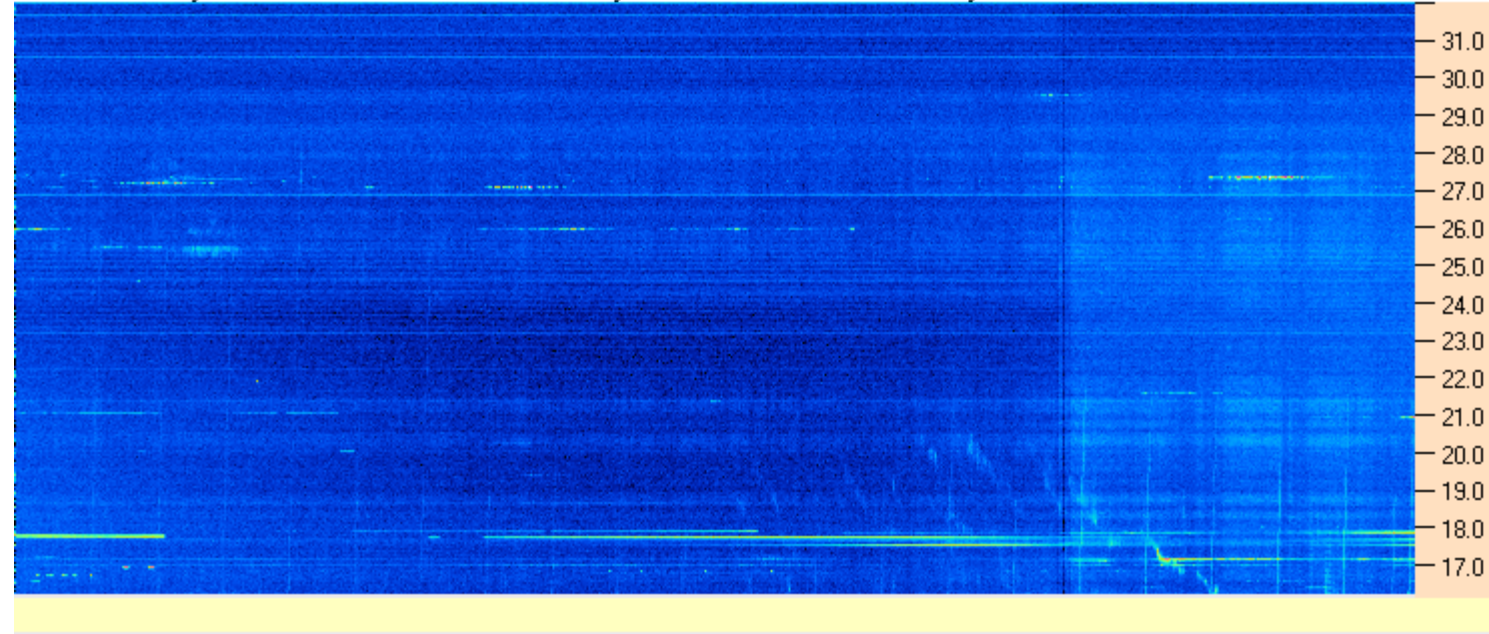
AJ4CO Observatory 25 Dec 2014, log entry 244(RCP), 245(LCP), 246(RCP)

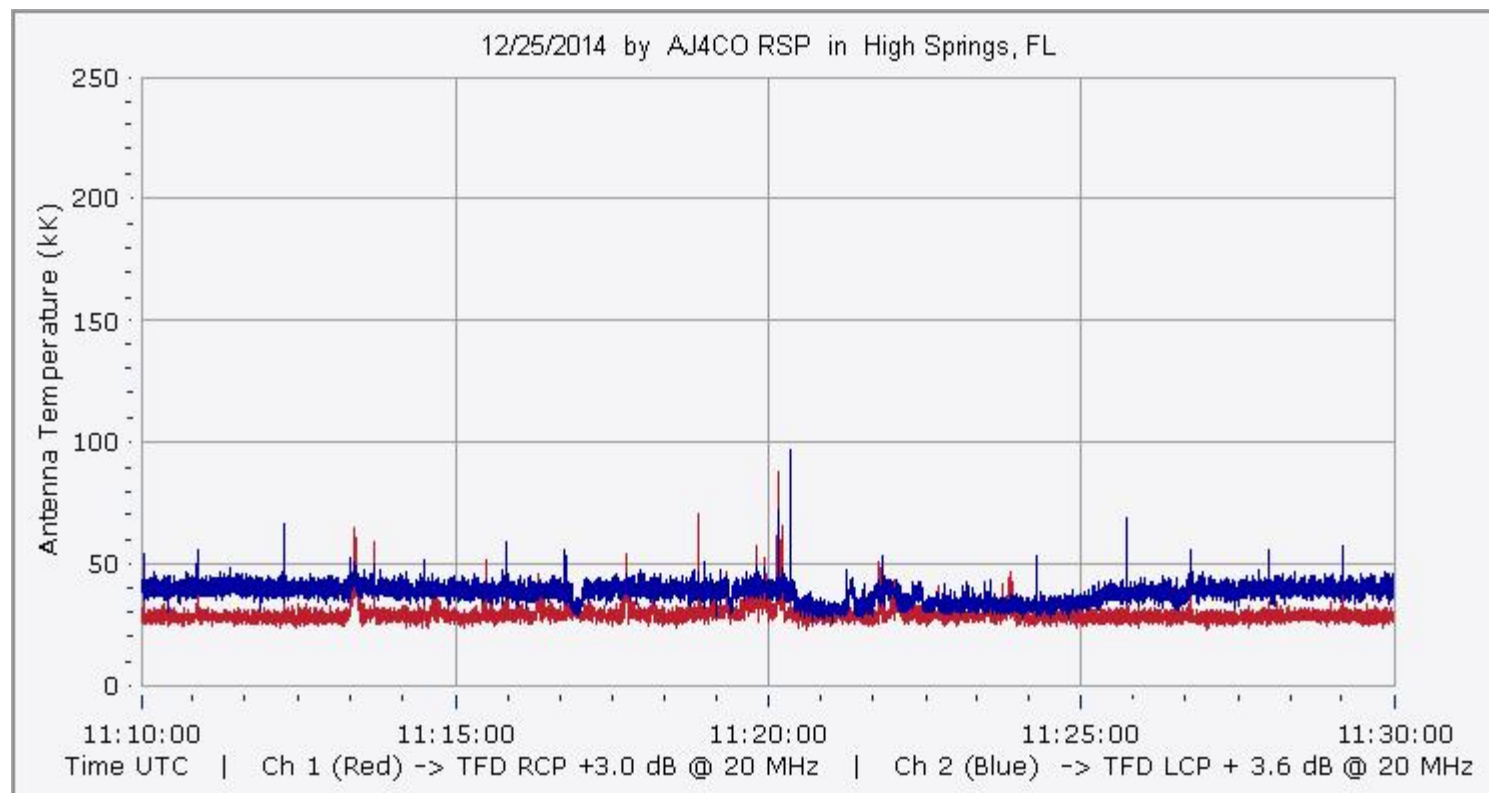


AJ4CO Observatory 25 Dec 2014 - DPS 30 kHz IF on TFD Array in CP Mode - RCP Correction Array 2014 12 18 B.csv Offset 2050 Gain 3.0

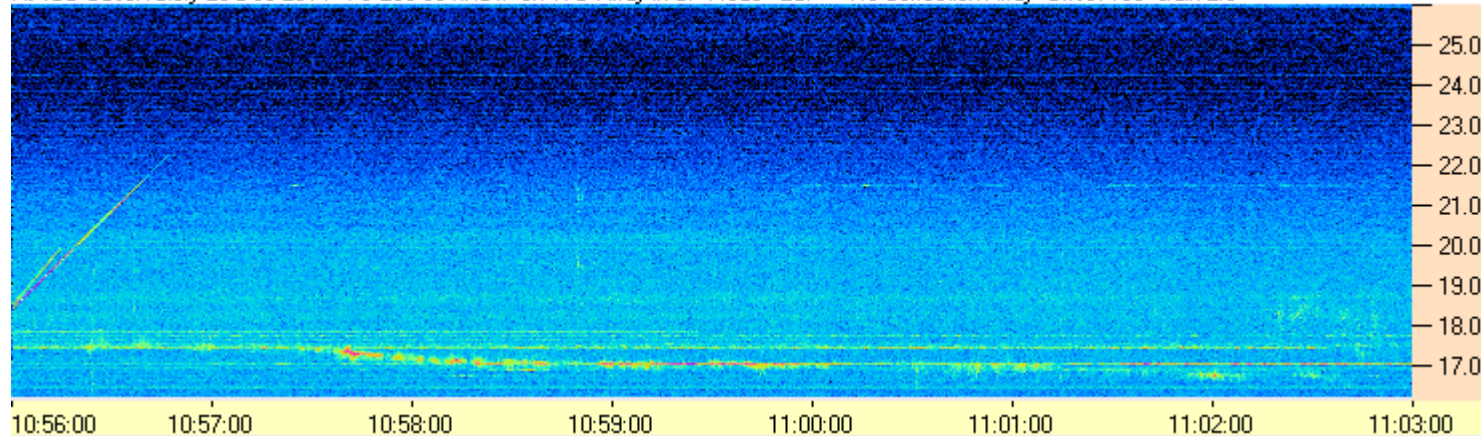


AJ4CO Observatory 25 Dec 2014 - DPS 30 kHz IF on TFD Array in CP Mode - LCP Correction Array 2014 12 18 B.csv Offset 2050 Gain 3.0

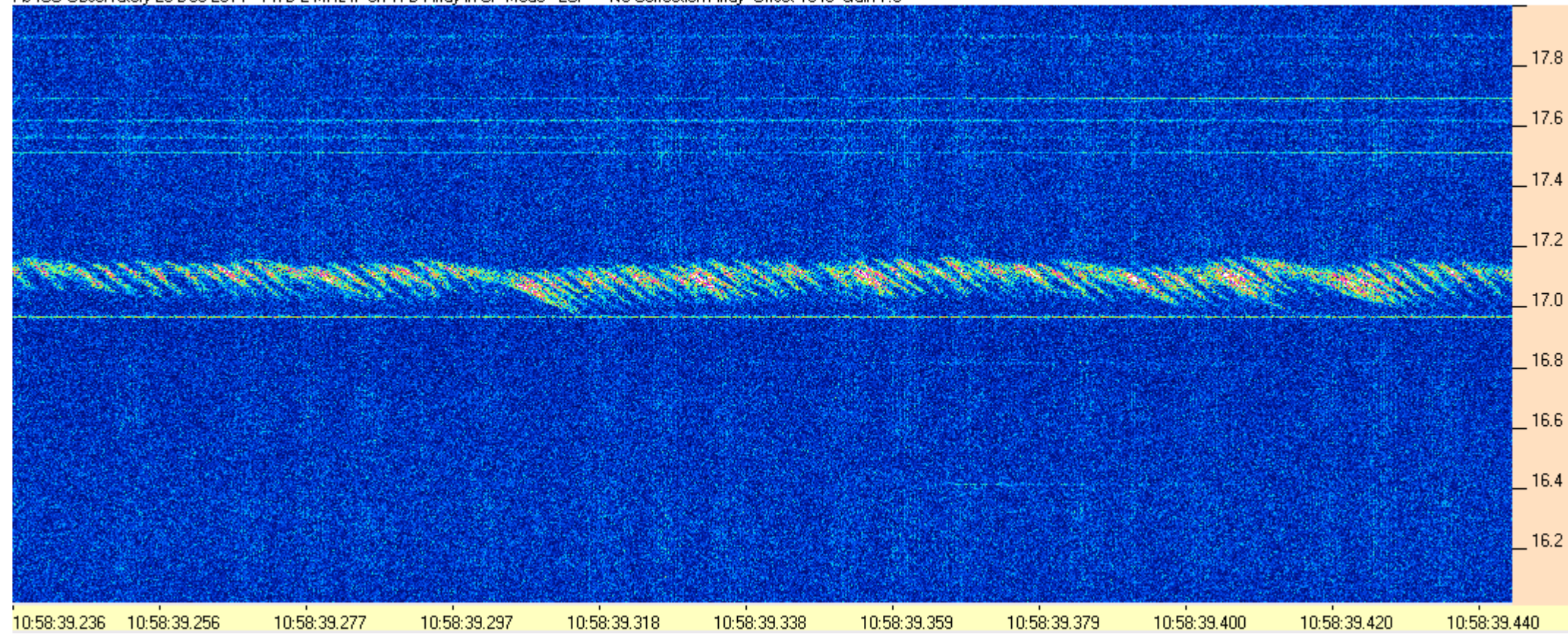




AJ4CO Observatory 25 Dec 2014 - FS-200 30 kHz IF on TFD Array in CP Mode - LCP No Correction Array Offset 180 Gain 2.0



AJ400 Observatory 25 Dec 2014 - TWB 2 MHz IF on TFD Array in CP Mode - LCP No Correction Array Offset 1045 Gain 7.0



AJ4CO Observatory 25 Dec 2014 - TWB 2 MHz IF on TFD Array in CP Mode - LCP No Correction Array Offset 1045 Gain 7.0

