

HNRAO Observing Log
40.673181 N – 80.437885 W
EN90sq



Date: 22 April 2017

Object: Jupiter – Io-C

Observer: Unattended

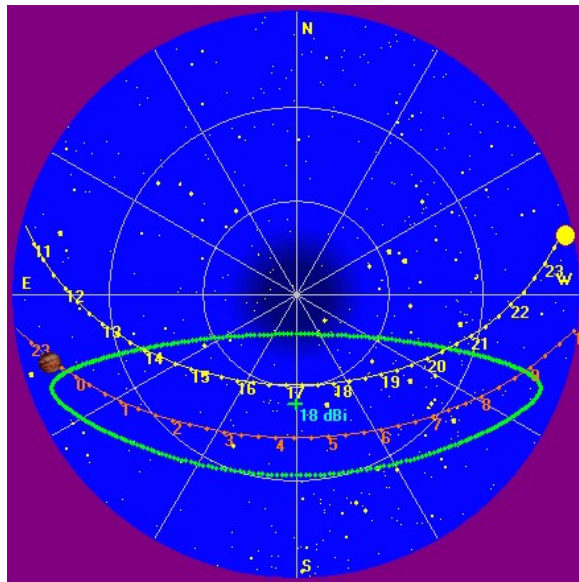
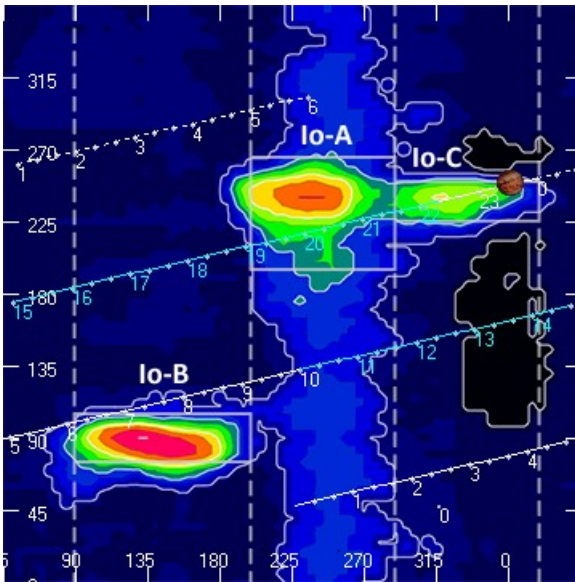
Start of pass:	2333 UT	Planetary K-index:	
Jupiter Altitude:	10.5 degrees	Jupiter Azimuth:	106.0 degrees
Jupiter CML:	1.52	Jupiter Io Phase:	248.54
Jupiter RA:	13:02	Jupiter Dec:	-04:57
Hour Angle:	-04:46	Polarization	RCP ?
Sun Altitude:	04.0 degrees	Sun Azimuth:	282.3 degrees
Sun RA:	01:56	Sun Dec:	11:52

End of pass:	2344 UT		
Jupiter Altitude:	12.5 degrees	Jupiter Azimuth:	107.9 degrees
Jupiter CML:	8.17	Jupiter Io Phase	250.11
Hour Angle:	-04:35		
Sun Altitude:	01.9 degrees	Sun Azimuth:	284.0 degrees

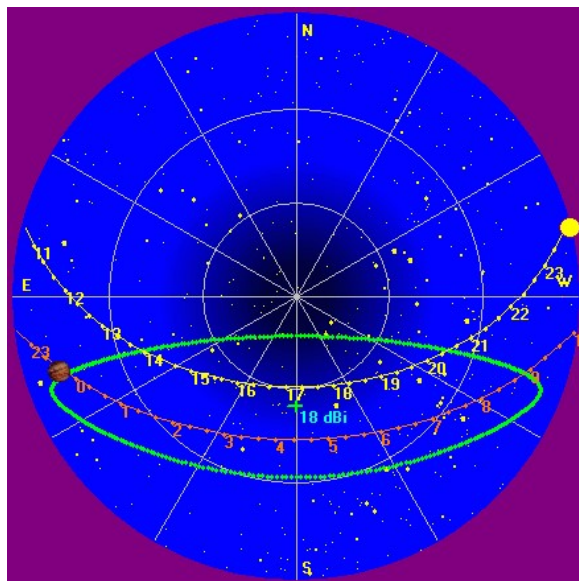
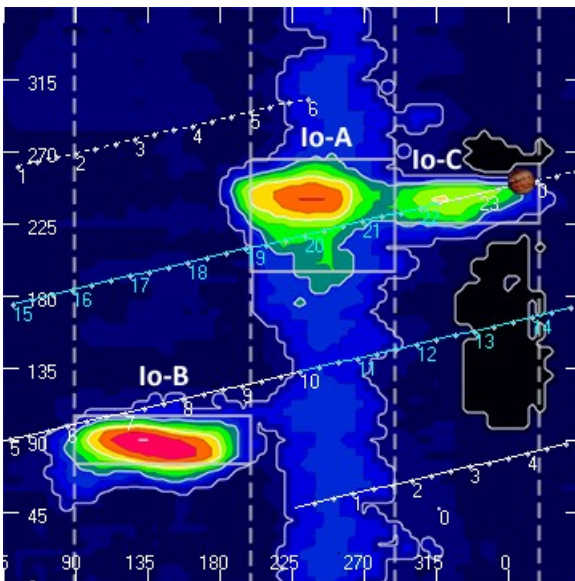
Observations made using:

1. FSX-8S fed by the TFD array
 - a. 7.7 dB loss between TFD and Multicouplers.
 - b. Connect to array through HNRAO Multicoupler #1 and #2, port 2
 - i. HNRAO Multicoupler #1 – TFD/LCP
 - ii. HNRAO Multicoupler #2 – TFD/RCP
 1. Port 1 having 10 dB of gain, all other ports have 3 dB gain.
2. FSX-2 fed by the LWA array directly
 - a. LWA element configuration – 90 degrees
3. JOVE 2 receiver fed by phased JOVE dipoles @ 13'
 - a. 12' 6" phase cable - phased for 2016-17 season
 - b. Calibrated 19 April 2017
 - c. Connected to dipoles through HNRAO Multicoupler #3, port 1.
 - i. 3.165 dB loss between Multicoupler and dipoles.
4. Icom R75 receiver fed by experimental DDRR antenna directly.
 - a. Calibrated 19 April 2017
5. SDRPlay
 - a. RSP1 (2) and RSP2 (1)

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Beginning of Pass



End of Pass

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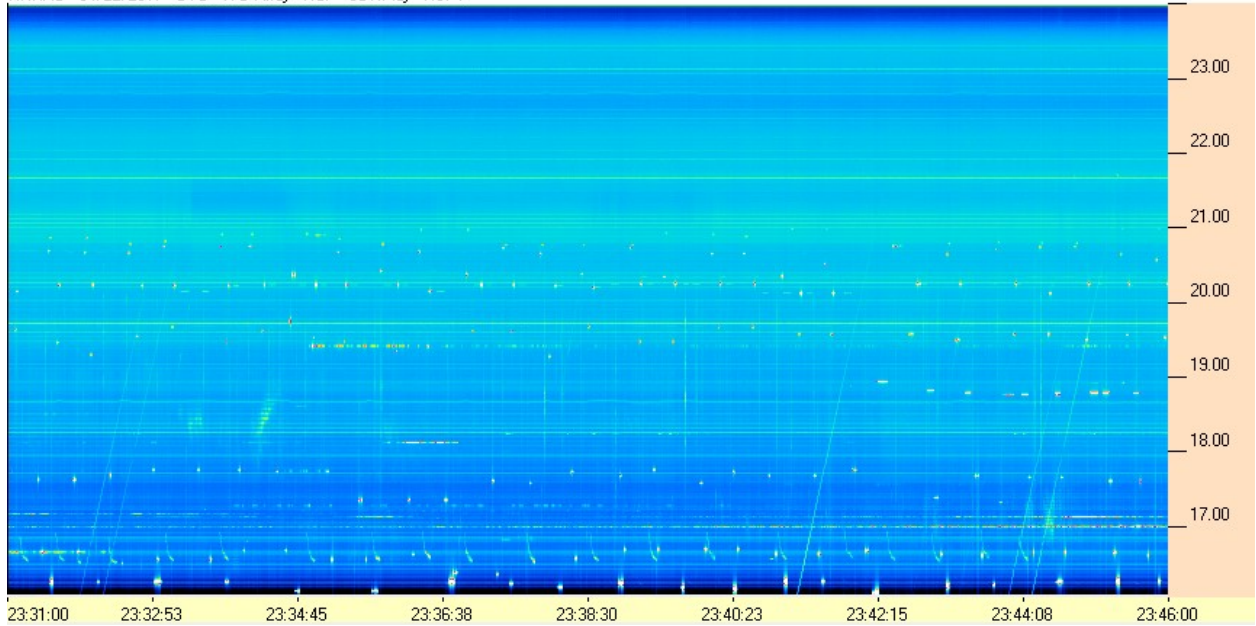
Very brief L-burst emission in the Io-C CML. No LCP emissions observed at this time and only registered on the RCP spectrograph. Due to the degree of off axis, polarity would be uncertain, but probably RCP.

18-19 MHz. No detectable modulation lanes.

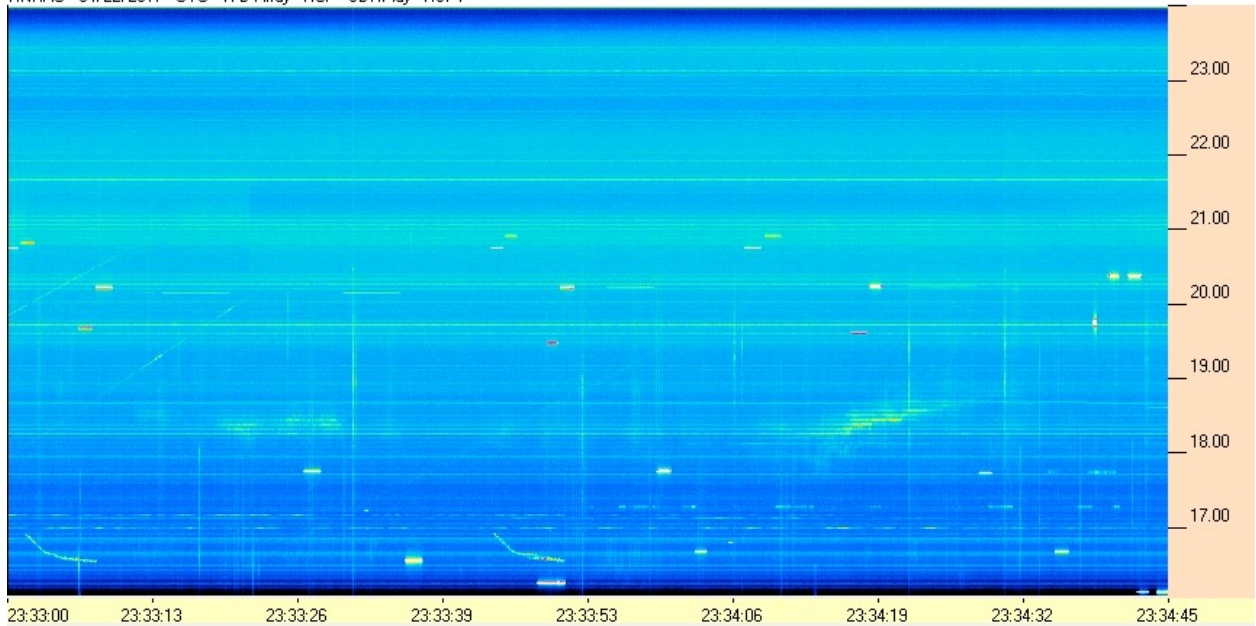
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HNRAO - 04/22/2017 - UTC - TFD Array - RCP - SDRPlay - RSP1



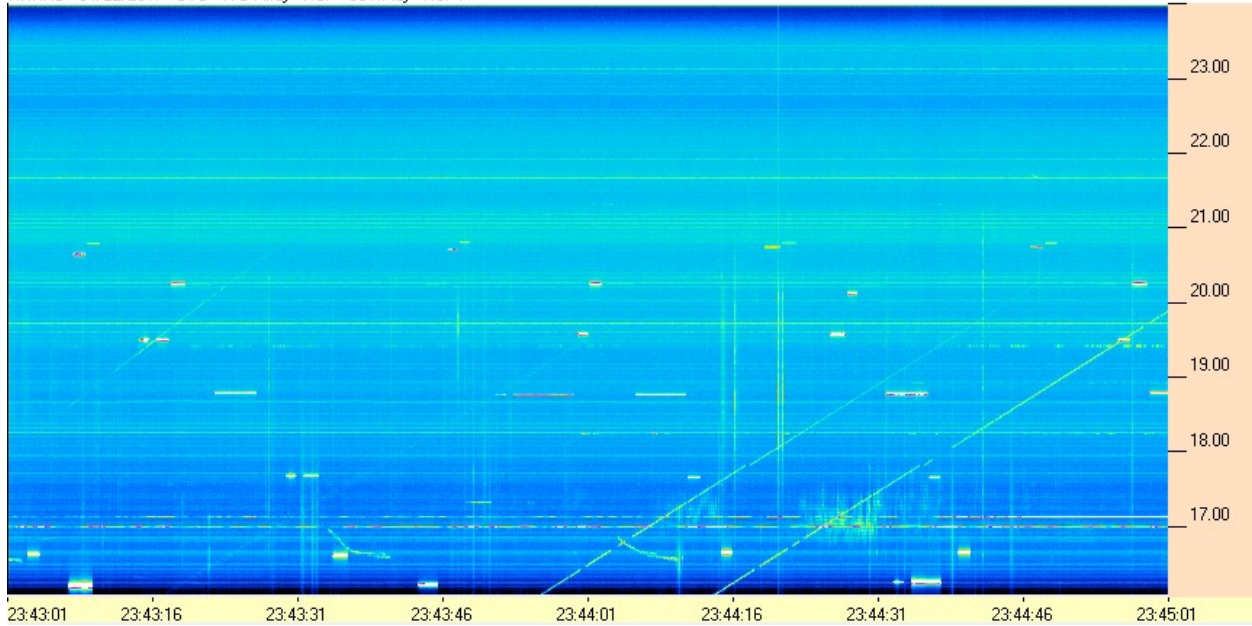
HNRAO - 04/22/2017 - UTC - TFD Array - RCP - SDRPlay - RSP1



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HNRAO - 04/22/2017 - UTC - TFD Array - RCP - SDRPlay - RSP1



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