HNRAO Observing Log
40.673181 N – 80.437885 W
EN90sq

Date: 09 February 2017

Object: Jupiter – Non-Io-B

Observer: Unattended

Start of pass:	**0911 UT**		
Jupiter Altitude:	**41.6 degrees**	**Jupiter Azimuth:**	**173.7 degrees**
Jupiter CML:	**152.82**	**Jupiter Io Phase:**	**227.72**
Jupiter RA:	**13:27**	**Jupiter Dec:**	**-07:33**
Hour Angle:	**-00:19**	**Polarization**	**RHC**
Sun Altitude:	**-35.7 degrees**	**Sun Azimuth:**	**078.9 degrees**
Sun RA:	**21:25**	**Sun Dec:**	**-15:10**

End of pass:	**0935 UT**		
Jupiter Altitude:	**41.8 degrees**	**Jupiter Azimuth:**	**181.7 degrees**
Jupiter CML:	**167.33**	**Jupiter Io Phase**	**231.13**
Hour Angle:	**00:05**		
Sun Altitude:	**-31.2 degrees**	**Sun Azimuth:**	**-083.3 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 @ 10’ – phased for 2016-17 season
    a. Calibrated 4 February 2017
    b. 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 4 February 2017

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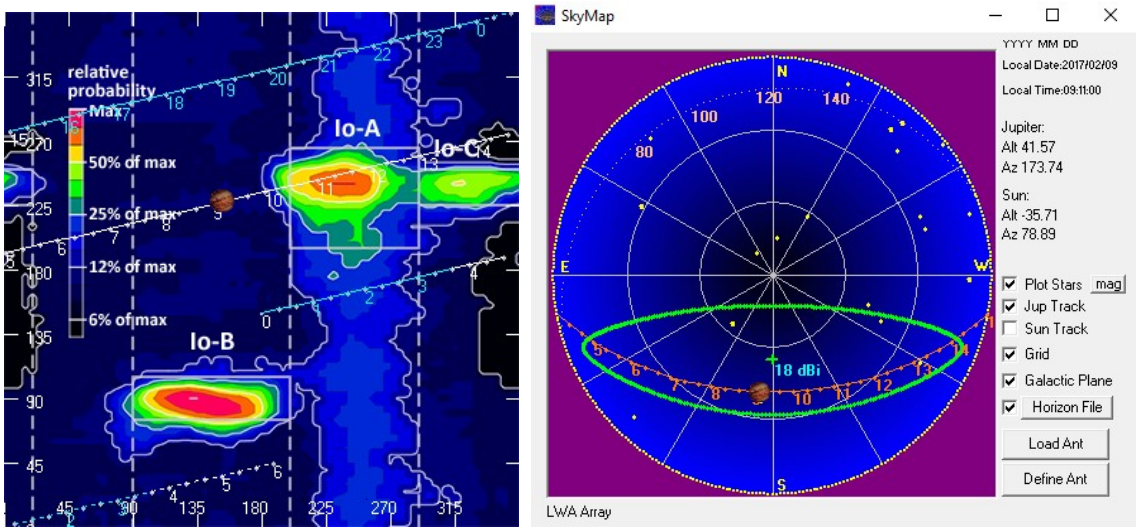
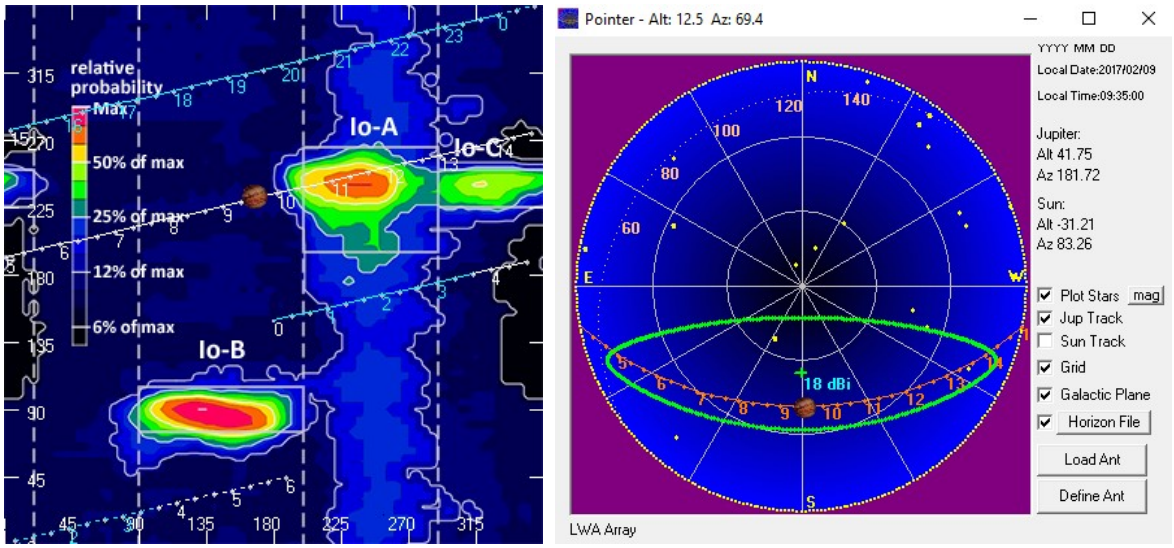


Beginning of Pass



End of Pass

A Non-Io-B event observed at this observatory that was so weak as to be nearly overlooked. Positive confirmation from another observer, in this case AJ4CO observatory, was needed to be sure this was, in fact, Jupiter emission.

RHC L-bursts in an arc starting about 0911 UT at 15 MHz and reaching frequency of 19 MHz about 0922 UT, then decreasing in frequency until the end of visible emissions at about 0935 UT.

End of Report

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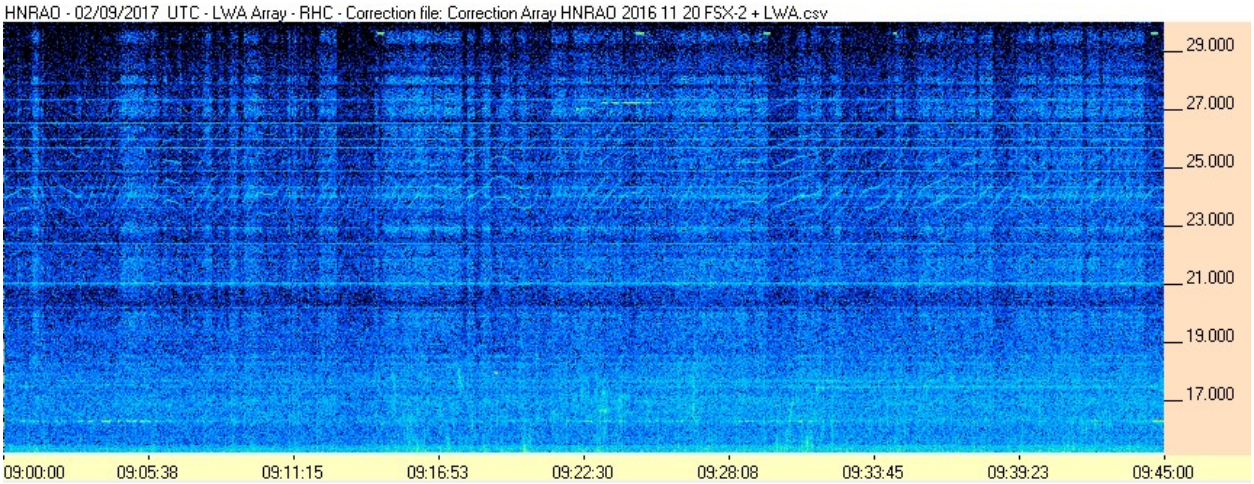
FSX-2/LWA pair



FSX-8S/TFD pair