

HNRAO Observing Log
40.673181 N – 80.437885 W
EN90sq



Date: 26 February 2017

Object: Jupiter – Io-B

Observer: JB/RF

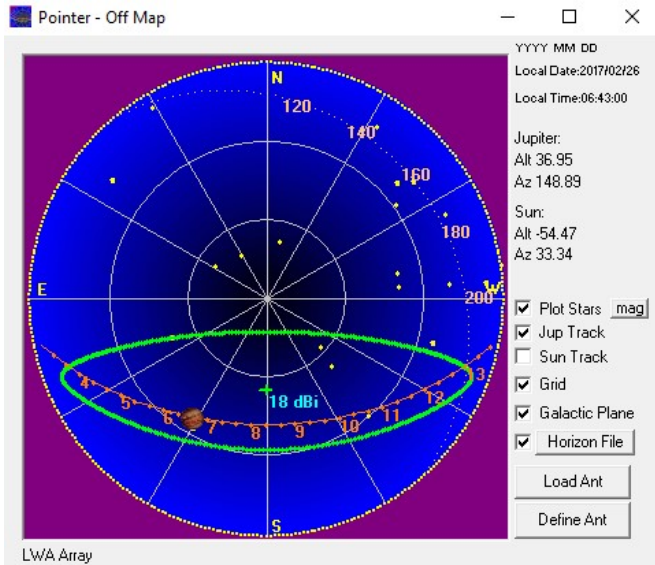
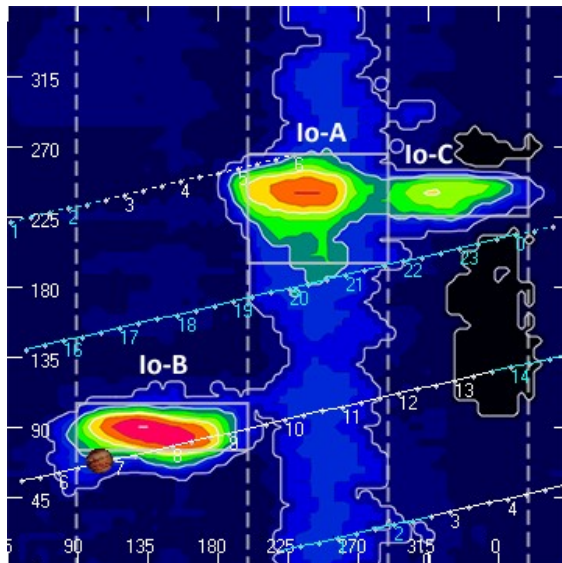
Start of pass:	0643 UT	Planetary K-index:	2 > 1
Jupiter Altitude:	37.0 degrees	Jupiter Azimuth:	148.9 degrees
Jupiter CML:	104.18	Jupiter Io Phase:	067.29
Jupiter RA:	13:25	Jupiter Dec:	-07:18
Hour Angle:	-01:38	Polarization	RCP
Sun Altitude:	-54.5 Degrees	Sun Azimuth:	033.3 degrees
Sun RA:	22:31	Sun Dec:	-09:20

End of pass:	0854 UT		
Jupiter Altitude:	41.4 degrees	Jupiter Azimuth:	190.9 degrees
Jupiter CML:	183.39	Jupiter Io Phase	085.66
Hour Angle:	00:33		
Sun Altitude:	-34.7 degrees	Sun Azimuth:	070.3 degrees

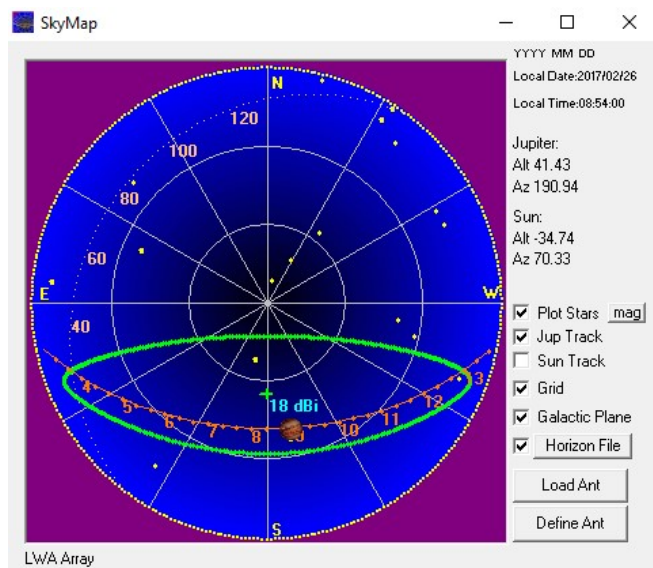
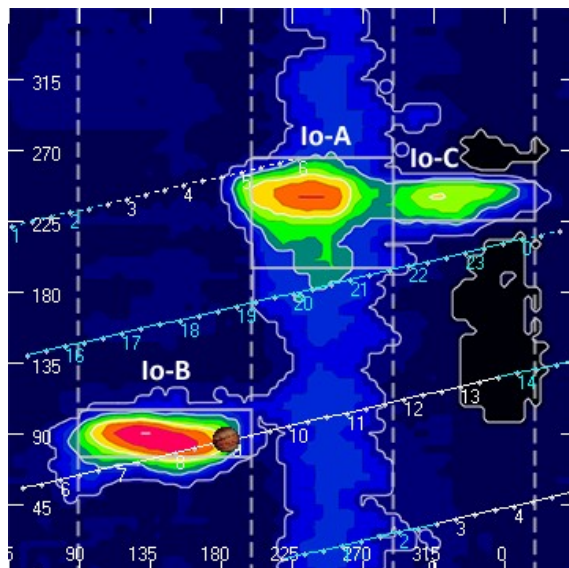
Observations made using:

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'
 - a. 12' phase cable - phased for 2016-17 season
 - b. Calibrated 4 February 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 4 February 2017
5. SDR
 - a. SDRPlay, RSP1 & RSP2

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Beginning of Pass

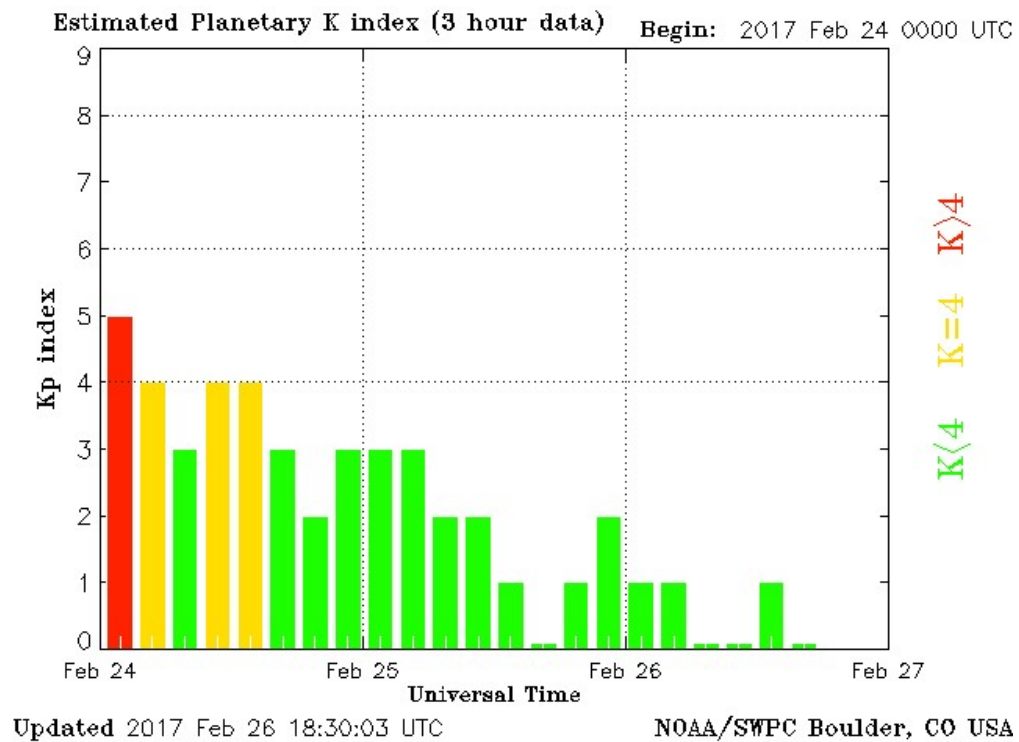


End of Pass

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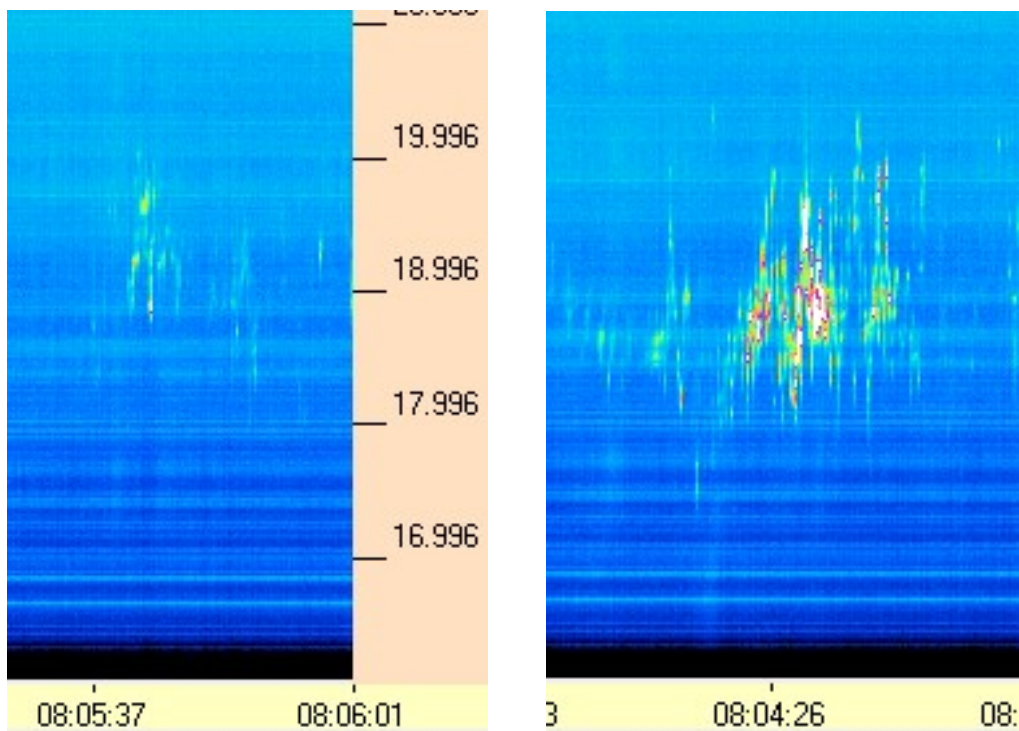
X-ray Solar Flares
 6-hr max: A8 1324 UT Feb26
 24-hr: B1 0636 UT Feb26



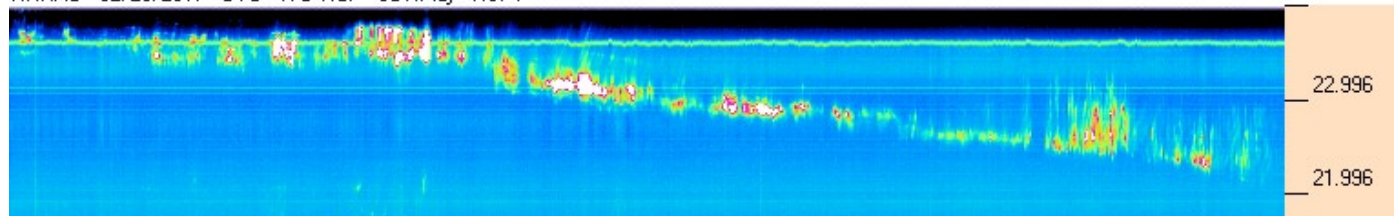
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A low Io-B pass lasting 3.5 hours. S-bursts, L-bursts and N-events throughout the entire pass. There were both negative drift and positive drift N-events. There were both positive and negative drift modulation lanes.



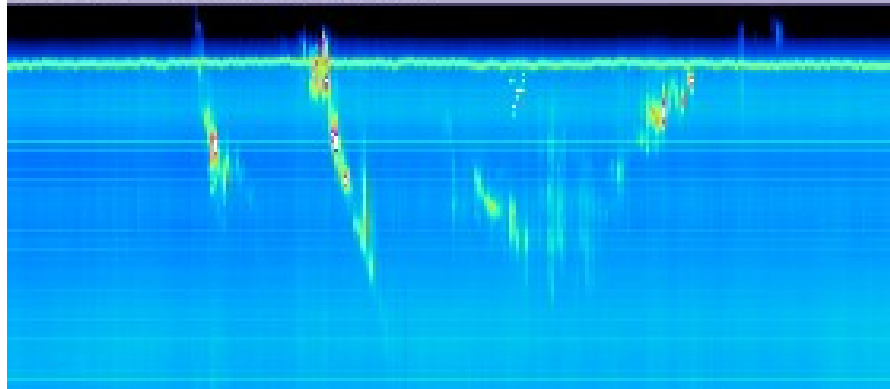
HNRAO - 02/26/2017 - UTC - TFD RCP - SDRPlay - RSP1



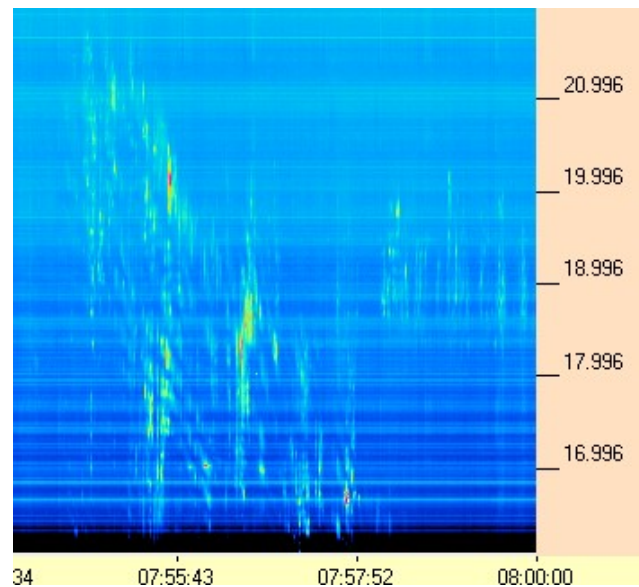
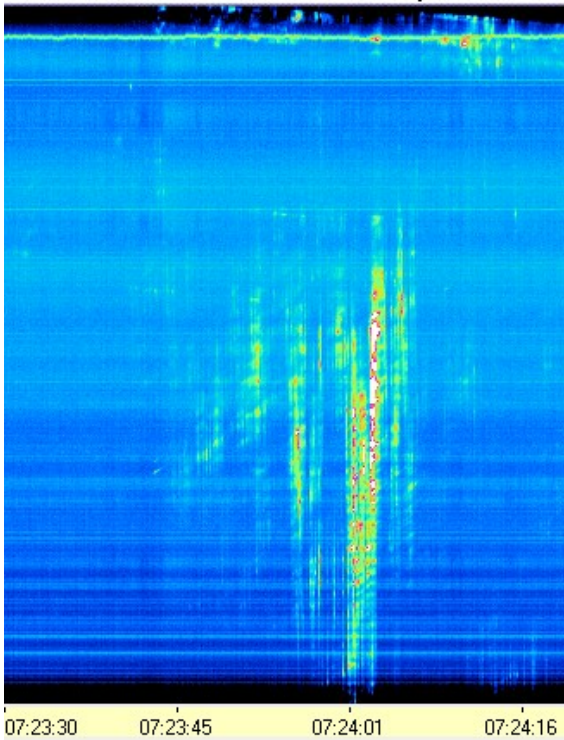
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TFD RCP - SDRPlay - RSP1



HNRAO - 02/26/2017 - UTC - TFD RCP - SDRPlay - RSP1

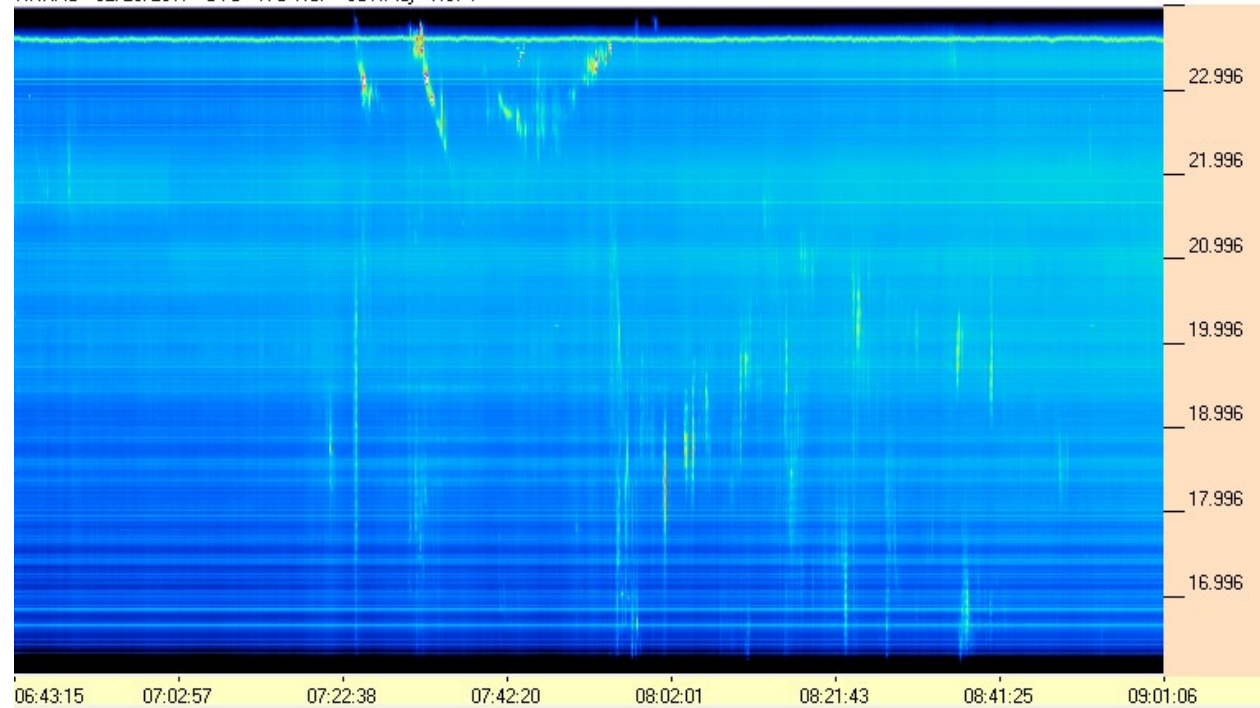


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SDR RSP1/TFD RCP Pair

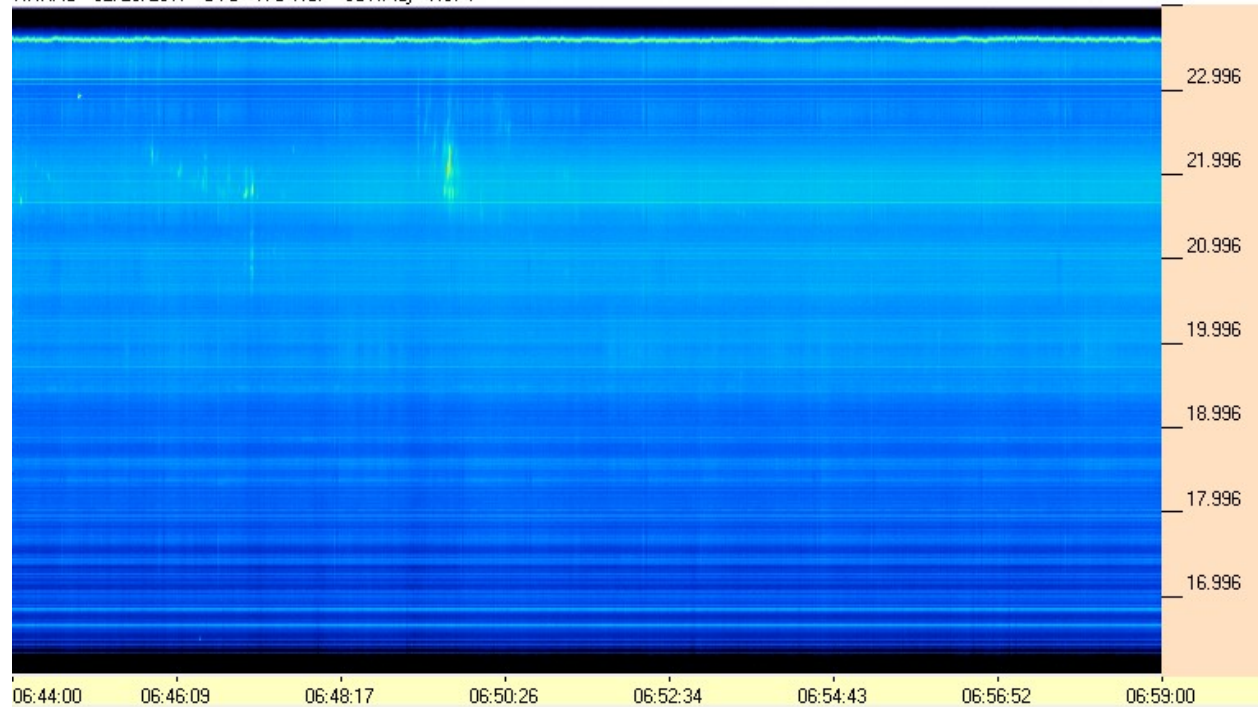
HNRAO - 02/26/2017 - UTC - TFD RCP - SDRPlay - RSP1



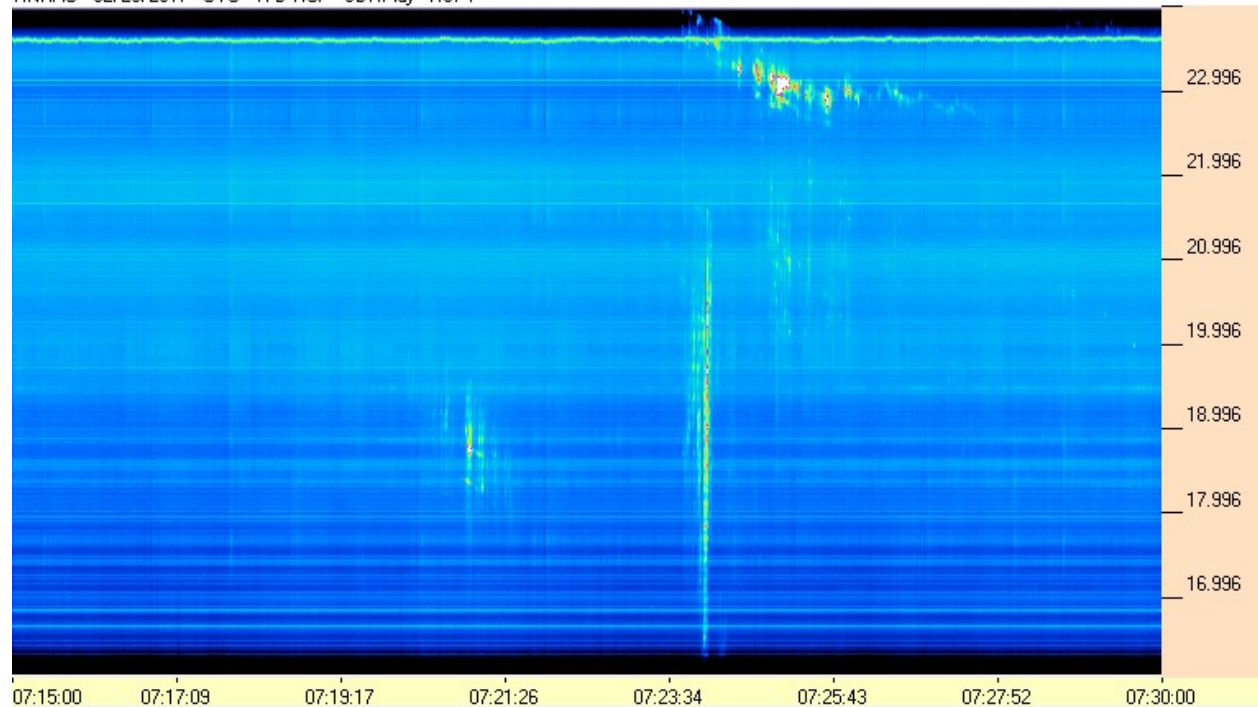
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HNRAO - 02/26/2017 - UTC - TFD RCP - SDRPlay - RSP1



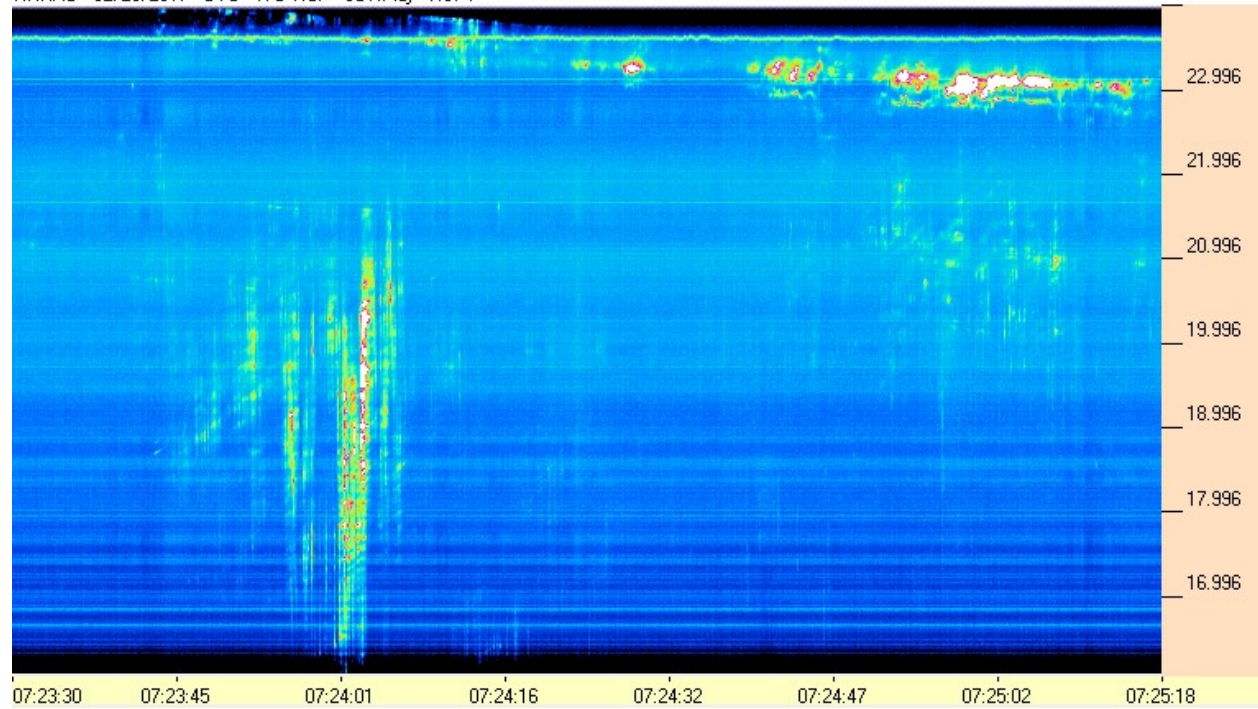
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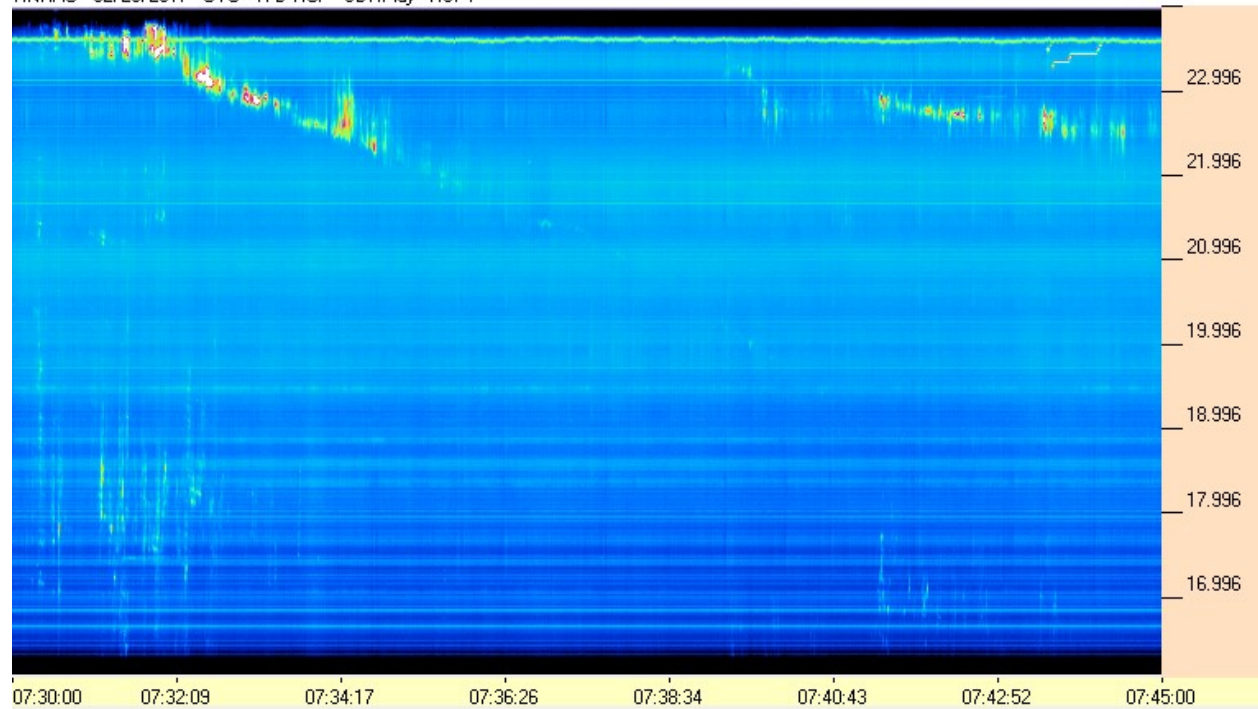
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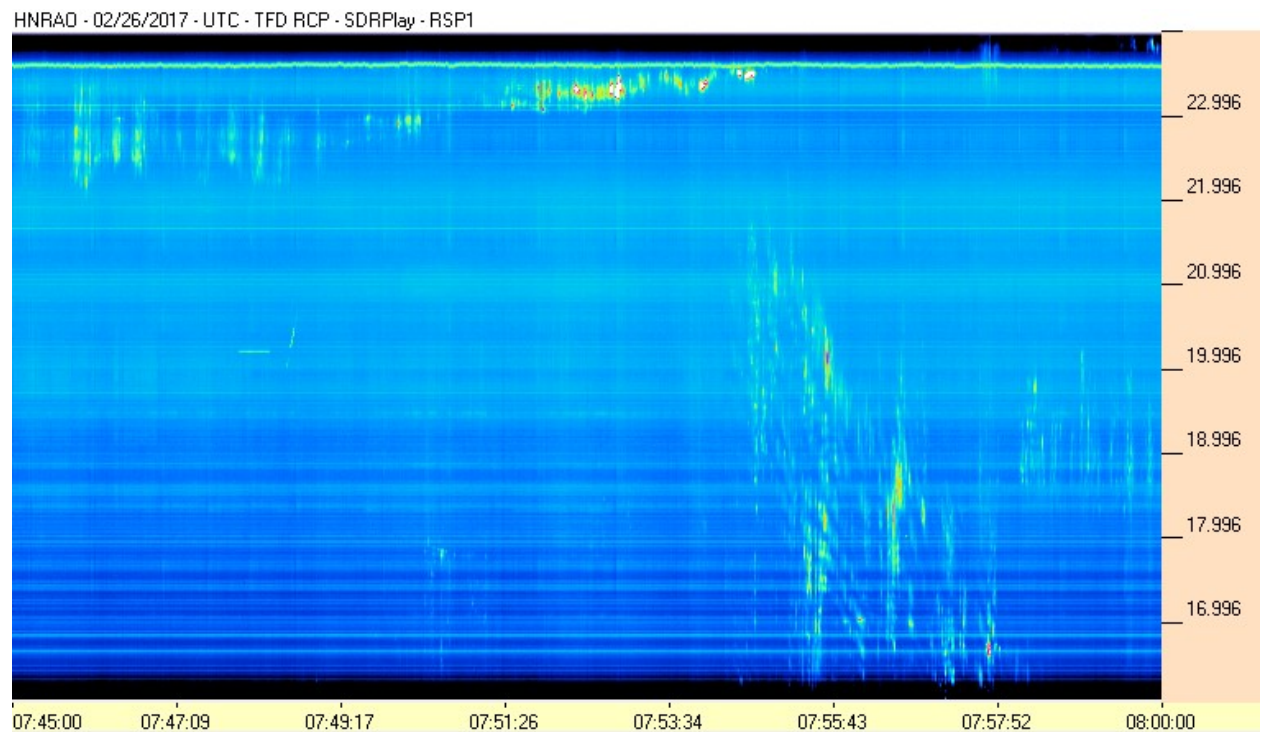
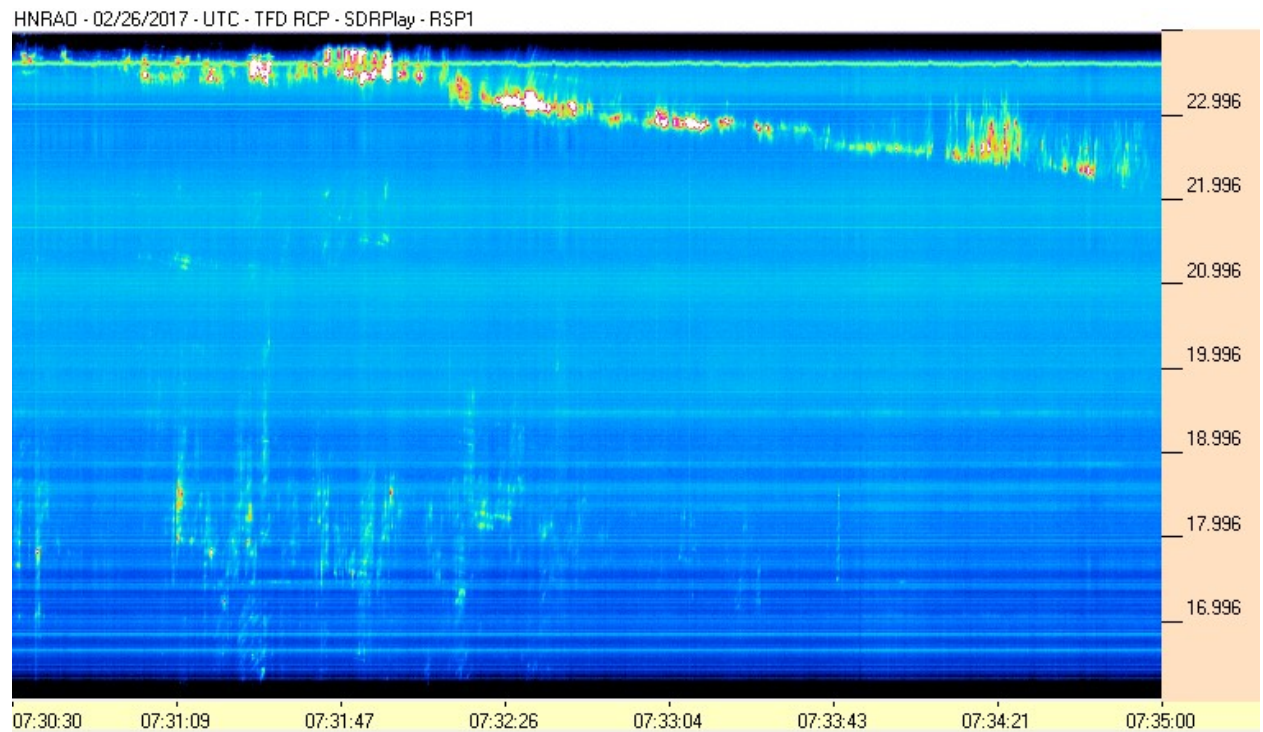
HNRAO - 02/26/2017 - UTC - TFD RCP - SDRPlay - RSP1



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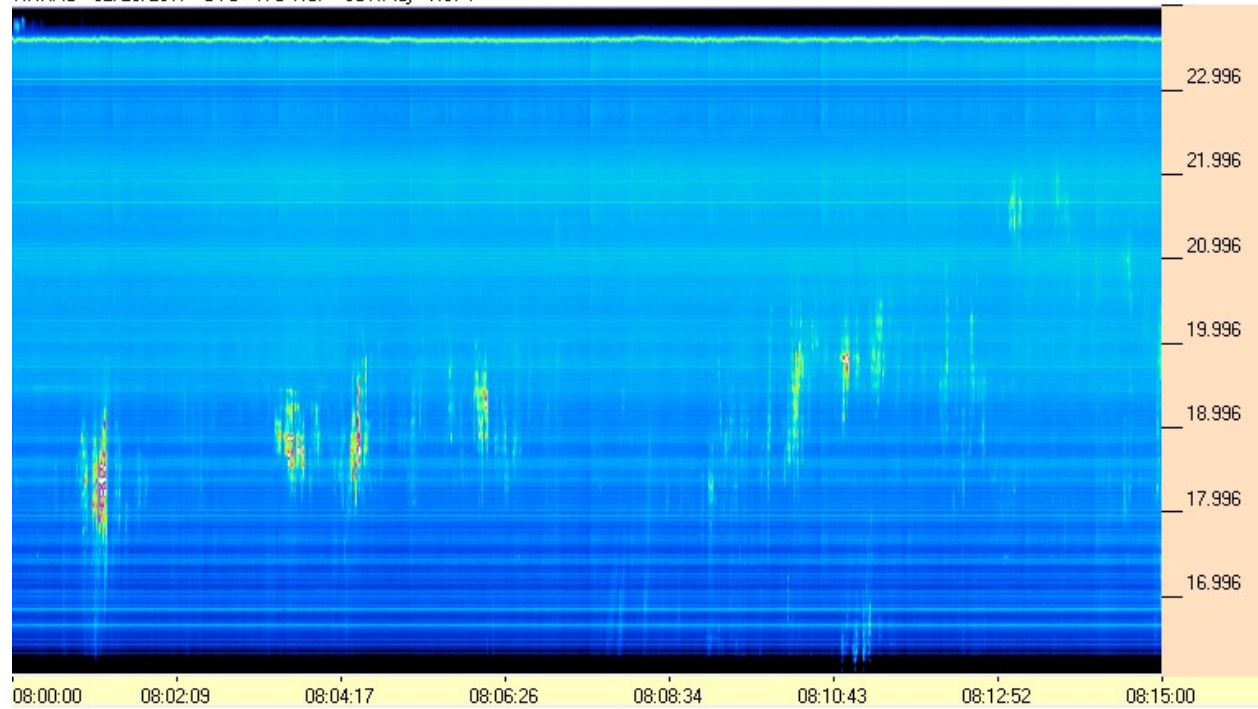
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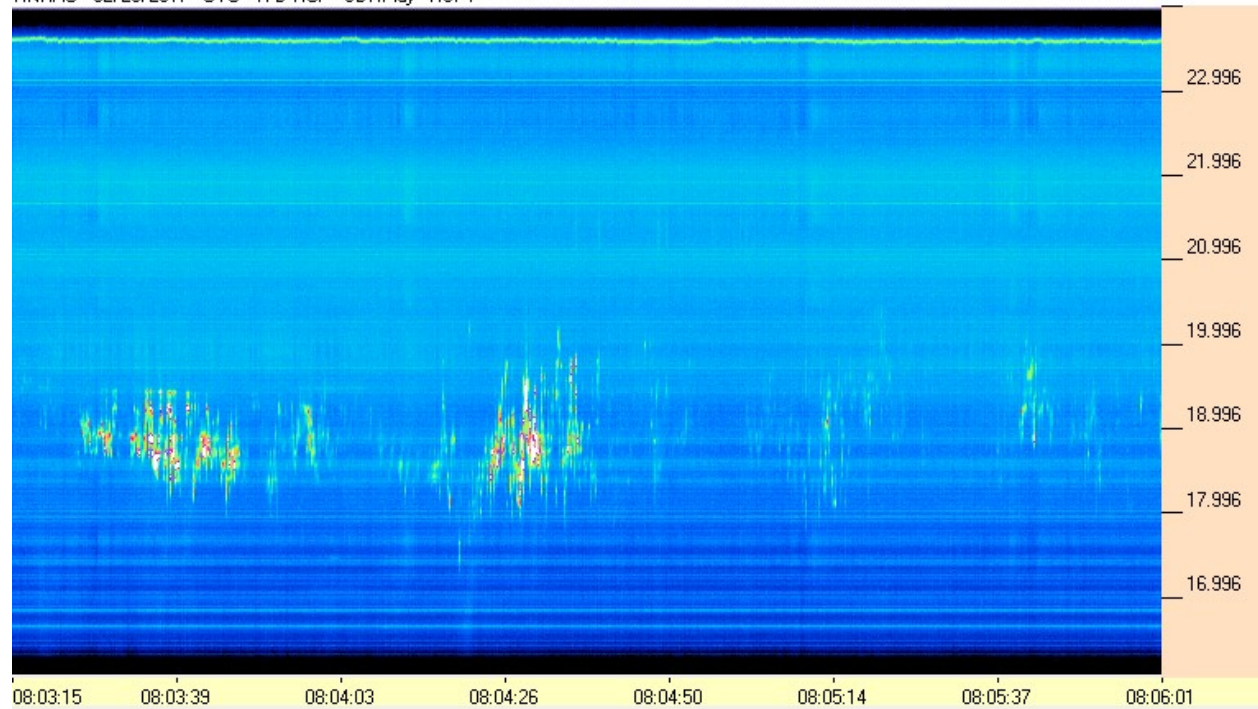
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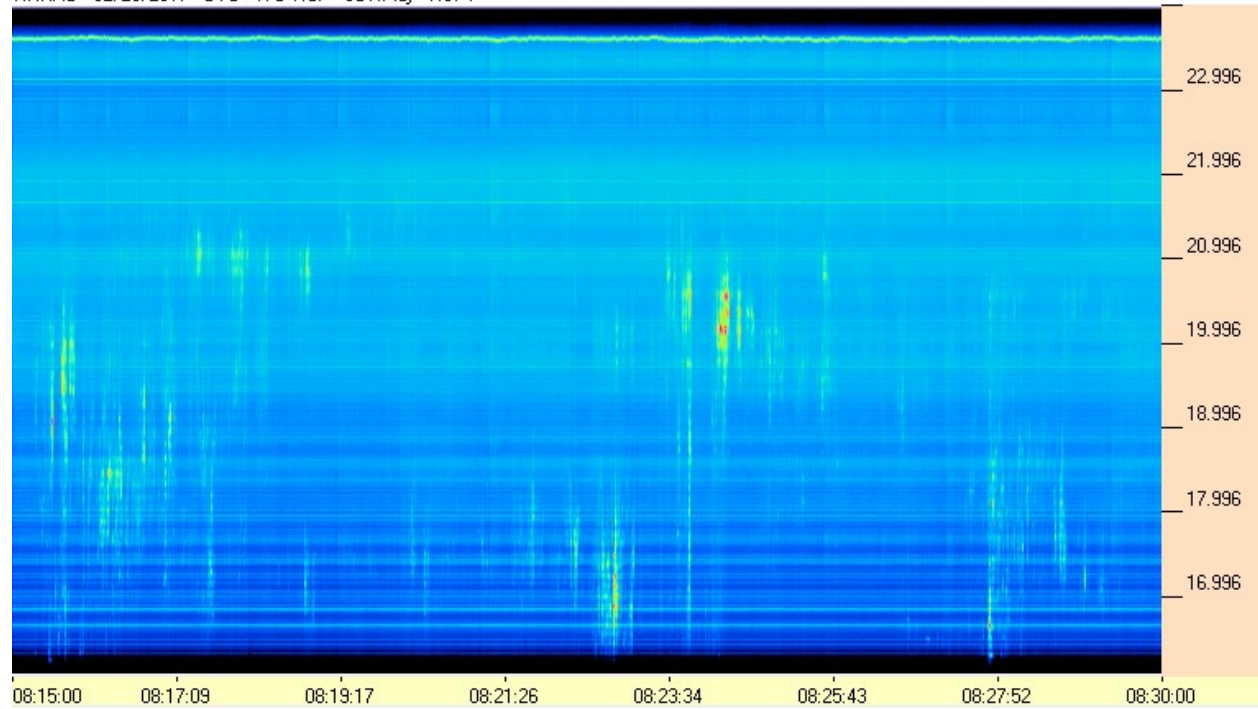
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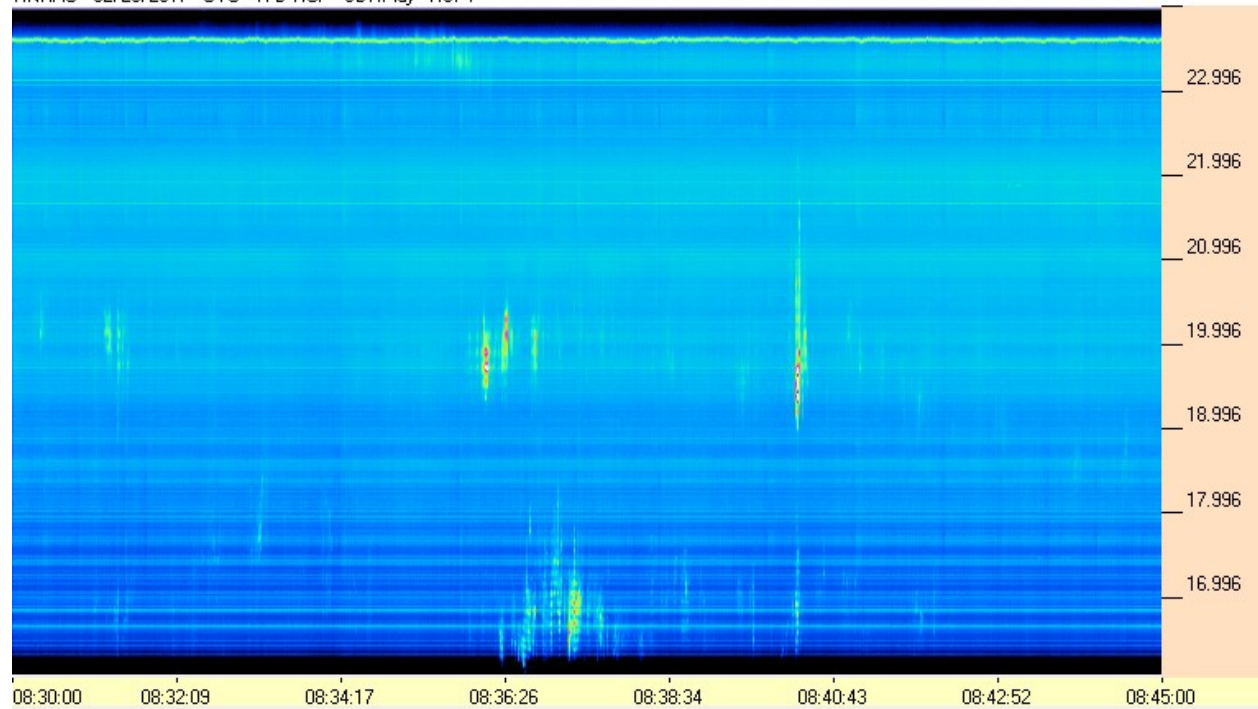
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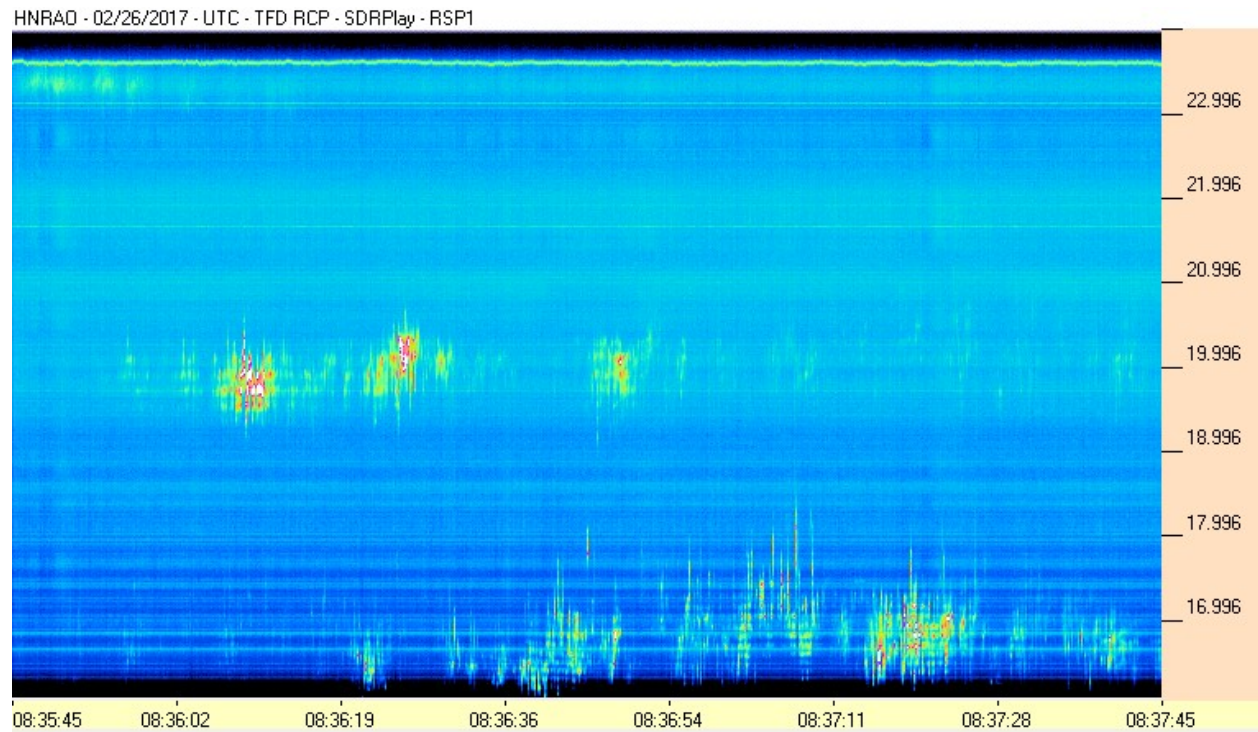
HNRAO - 02/26/2017 - UTC - TFD RCP - SDRPlay - RSP1



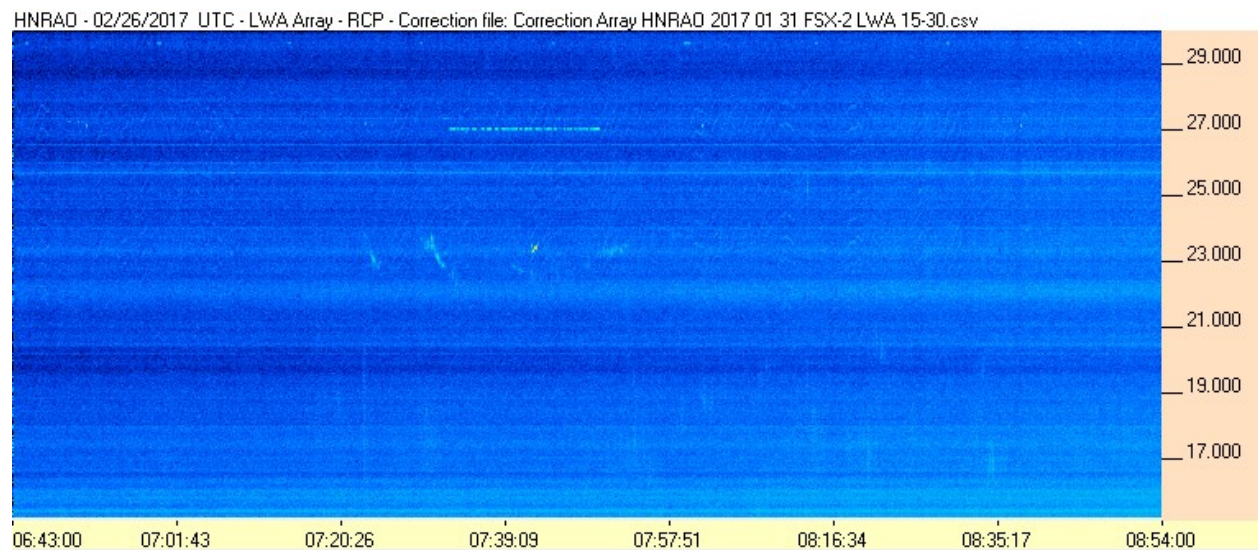
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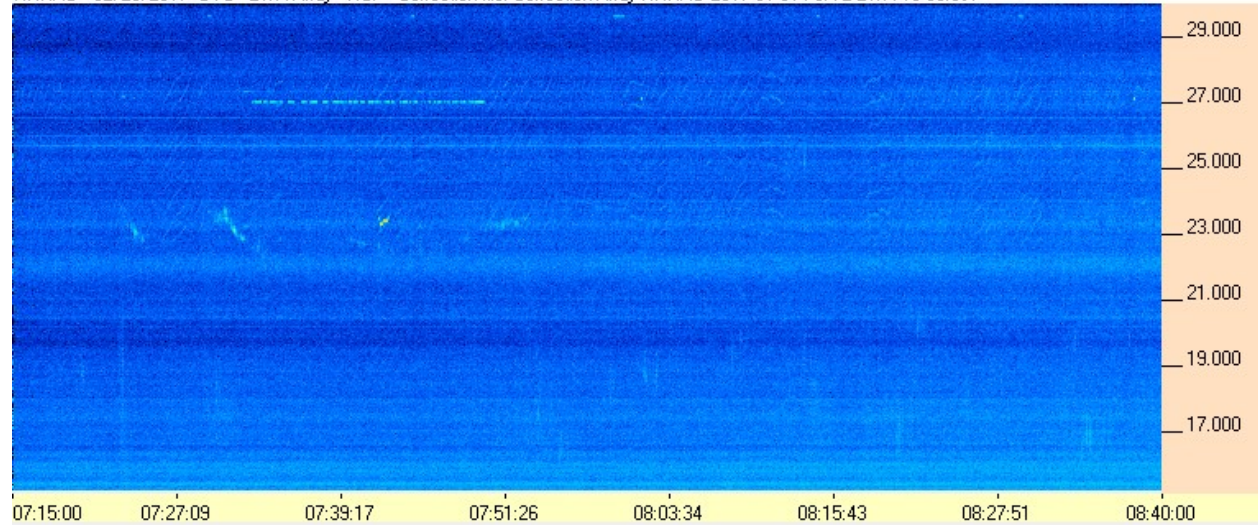
FSX-2/LWA Pair



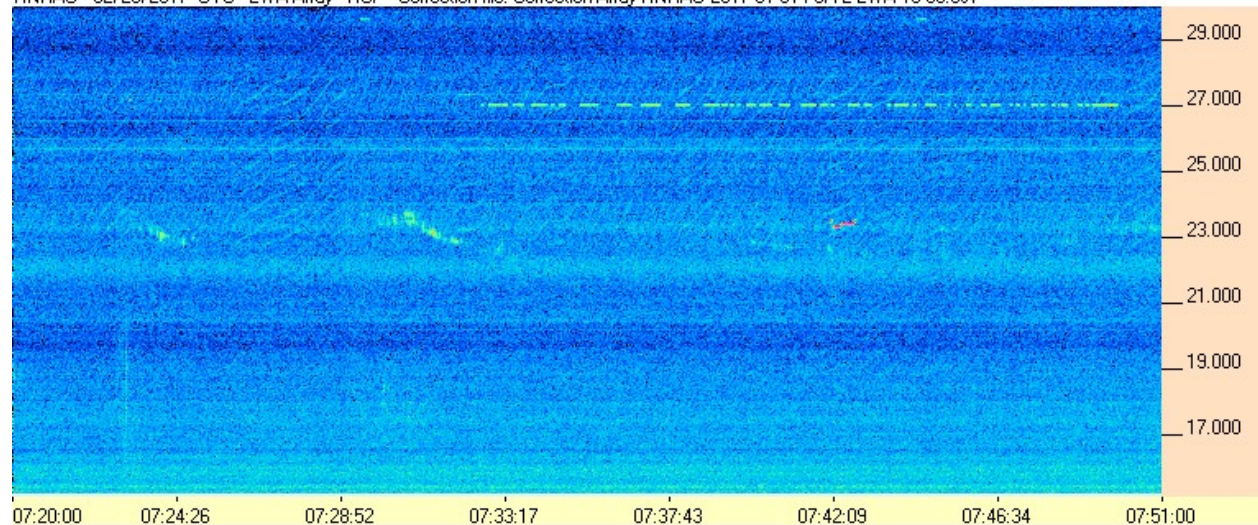
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HNRAO - 02/26/2017 UTC - LWA Array - RCP - Correction file: Correction Array HNRAO 2017 01 31 FSX-2 LWA 15-30.csv



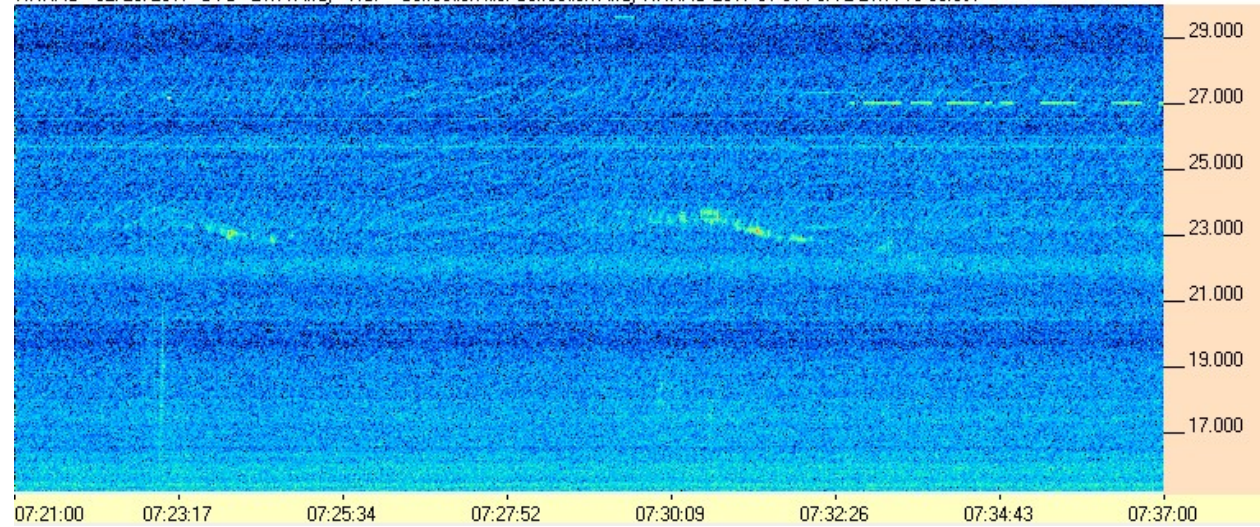
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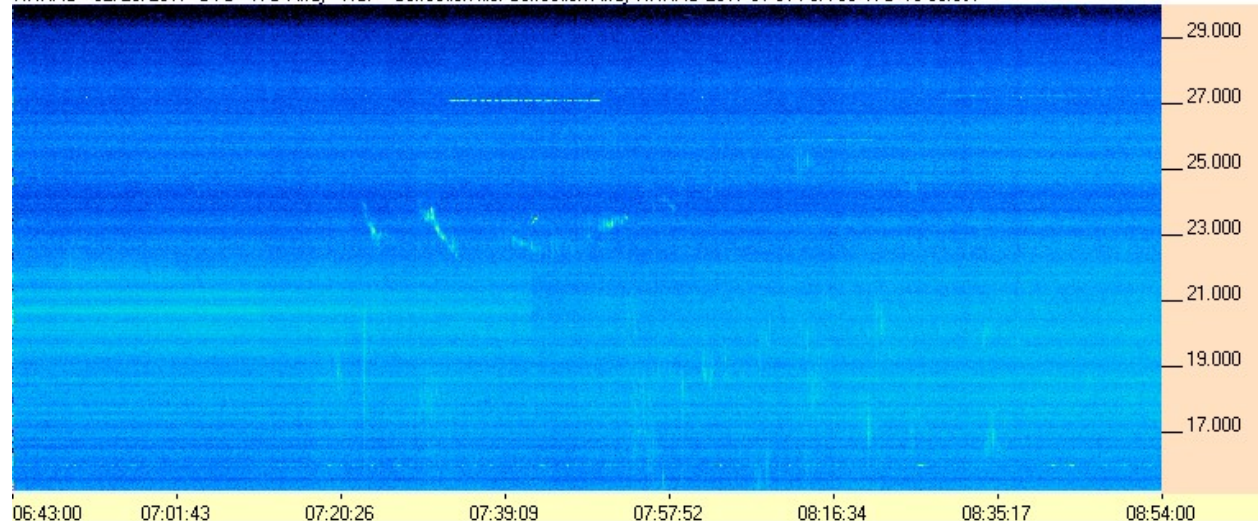


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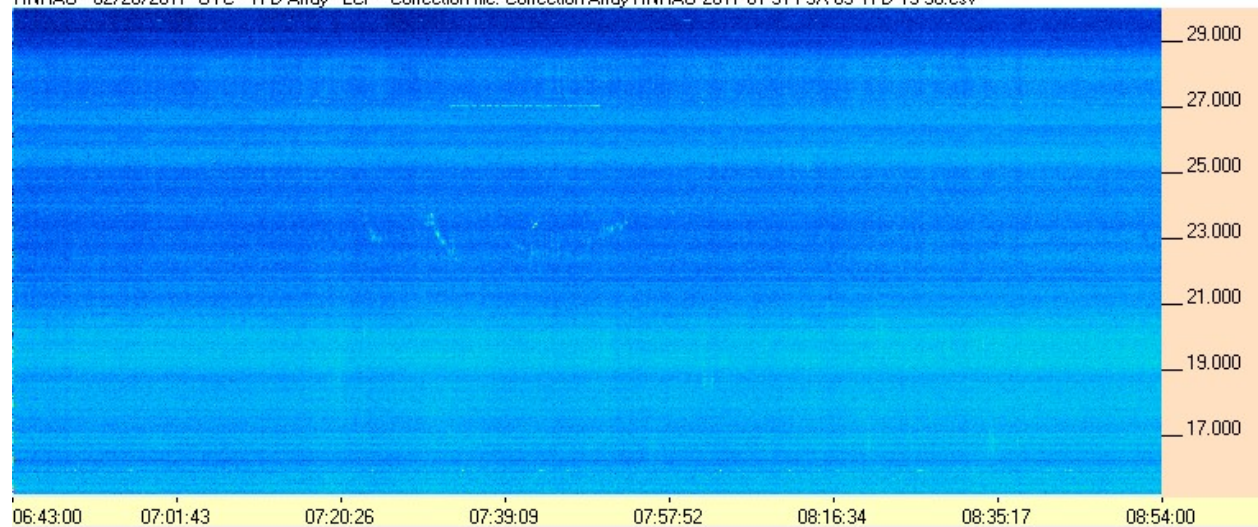


FSX-8S/TFD

HNRAO - 02/26/2017 UTC - TFD Array - RCP - Correction file: Correction Array HNRAO 2017 01 31 FSX-8S TFD 15-30.csv



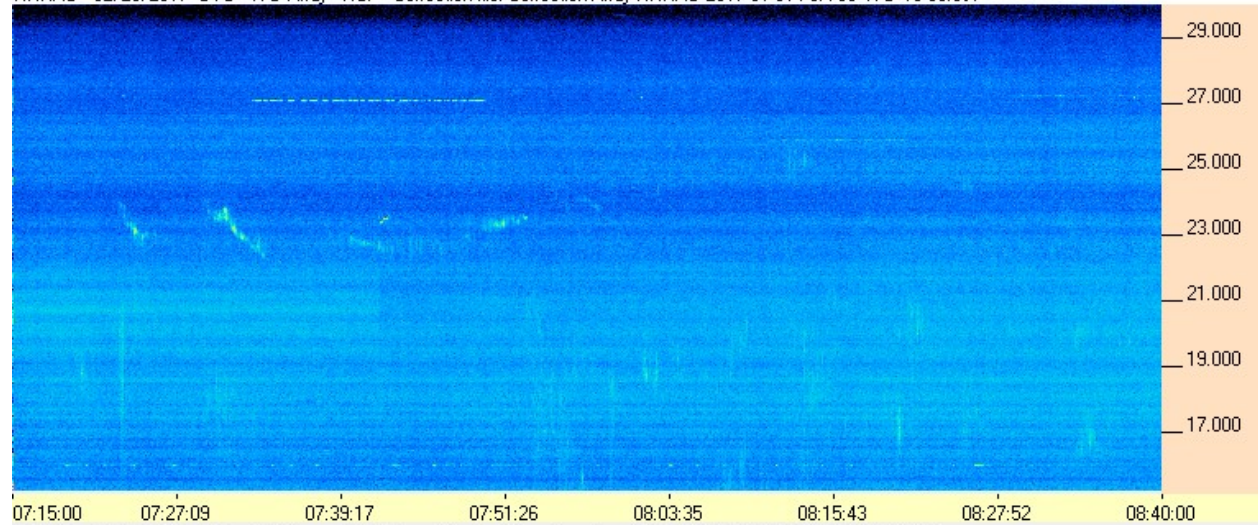
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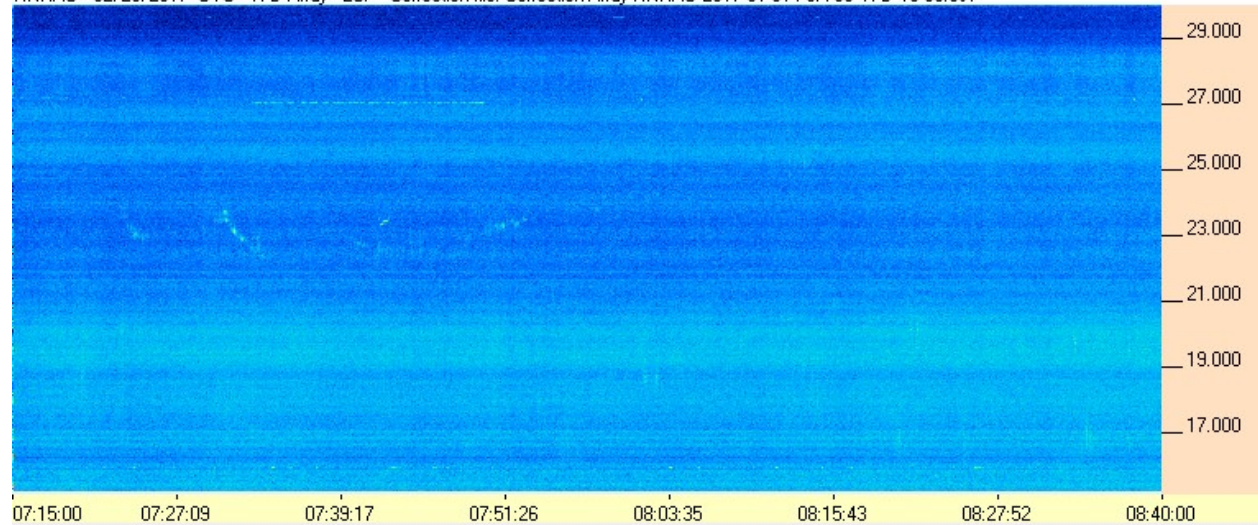
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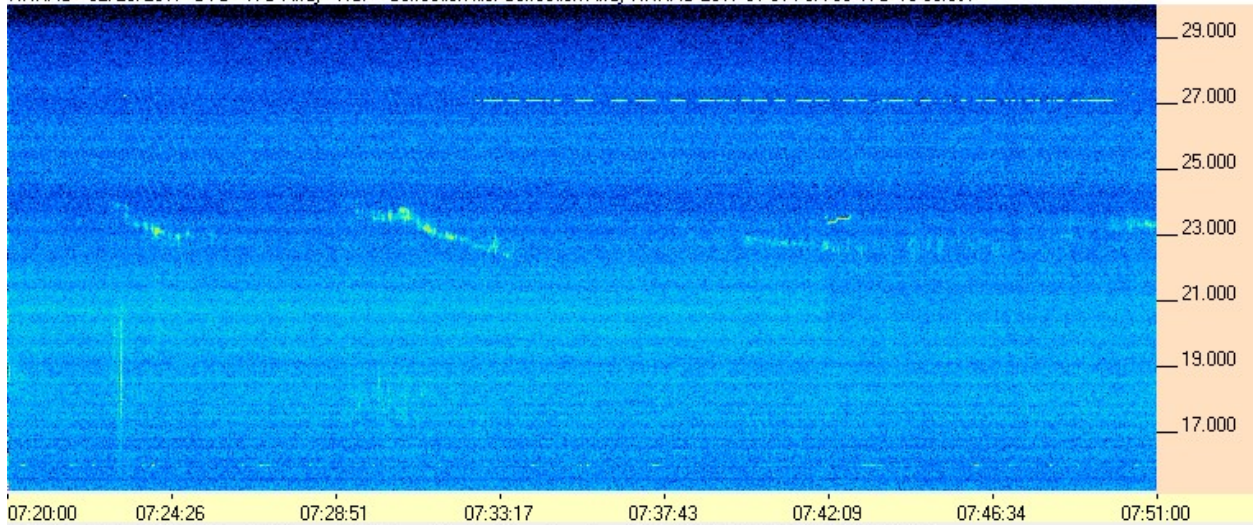
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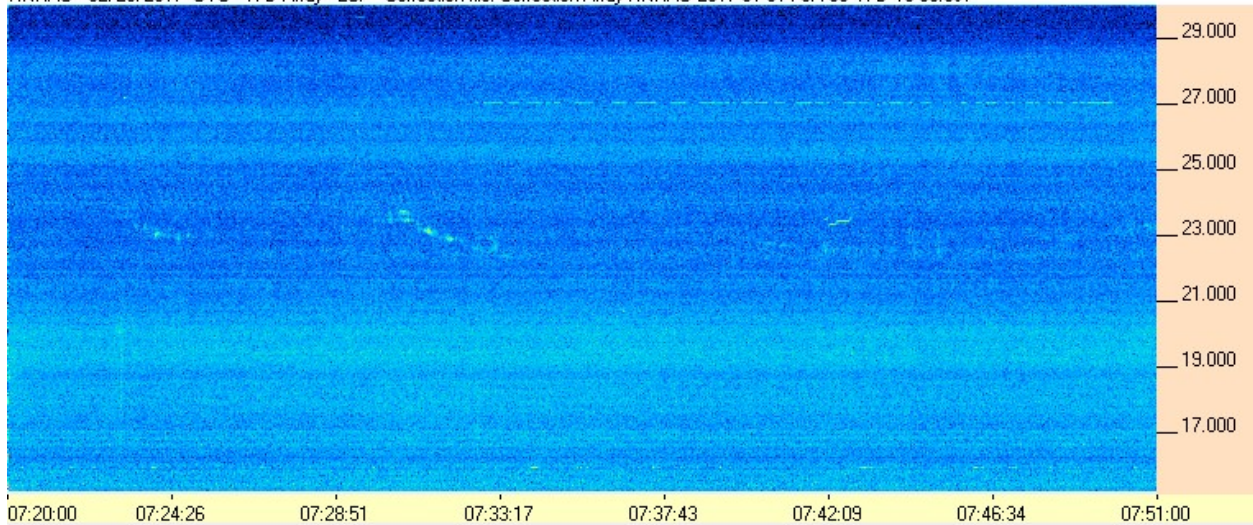
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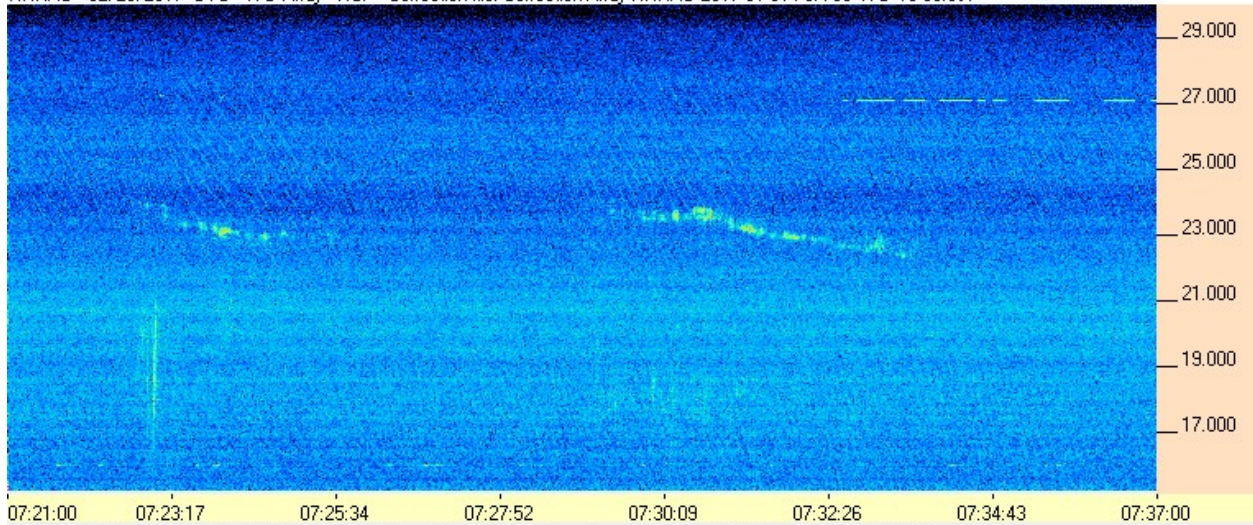
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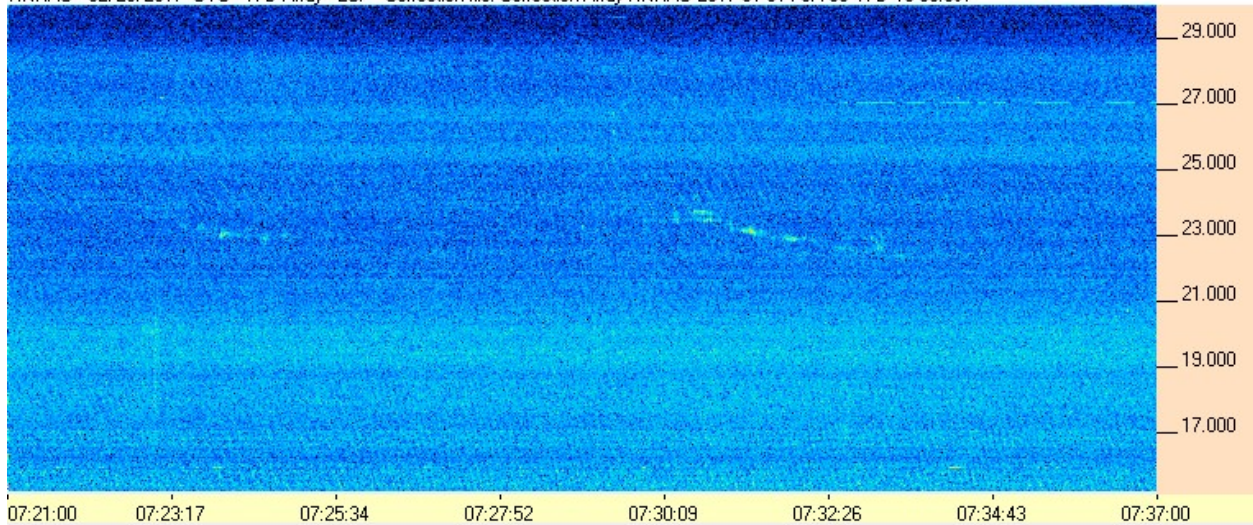
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