

Subject: [radiojove-data] 12 Dec 2014 Io-D
From: Dave Typinski <davetyp@typnet.net>
Date: 12/13/2014 15:35
To: RadioJove-Data <radiojove-data@lists.nasa.gov>

In addition to Io-B, there was some Io-D Friday morning.

LCP dominant L bursting from 16 to 24 MHz. No modulation lanes visible.

For a brief period from 0950 to 1010 UTC, the Io-D (LCP) emission in the TFD array was in the 500 kK range, with a brief burst above 1 MK. Later, though, it was much weaker. Nevertheless, Io-D produced a really nicely formed vertex early arc, the upper portion of which is visible between 16 and 24 MHz.

The Io-D (LCP) emission began during the Io-B (RCP) emission, overlapping from 0940 to 1020 UTC

It is the difference in circular polarization sense that allows us to distinguish these two emission sources -- that is, the A-B source from the C-D source -- and thus Io-D from Io-B.

In general, for the Io-controlled regions of the phase plane, the A-B emission source, located in Jupiter's northern hemisphere, is thought to produce RCP emissions, while the C-D emission source, located in Jupiter's southern hemisphere, is thought to produce LCP emissions. The non-Io-controlled regions of the phase plane have greater flexibility in polarization sense, although RCP non-Io emission seems to occur more frequently than LCP non-Io emission by perhaps a factor of ten.

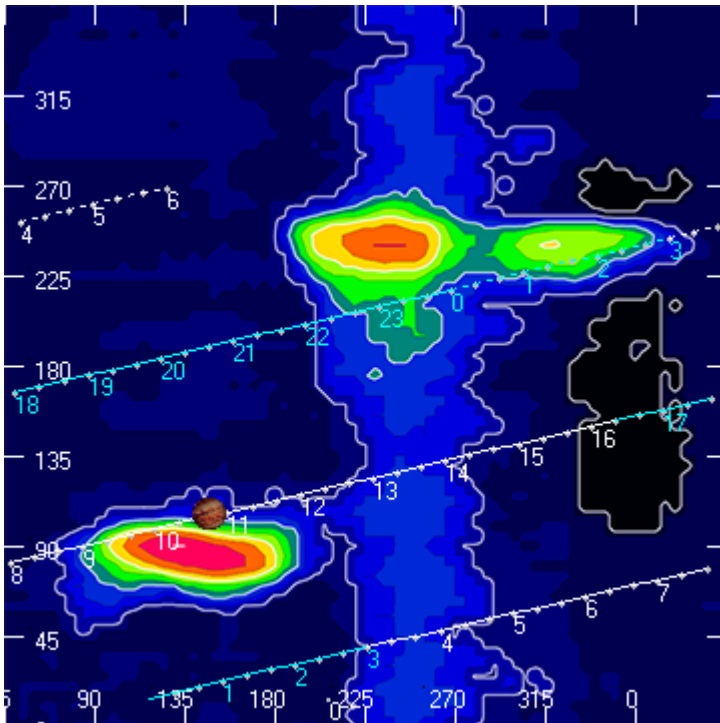
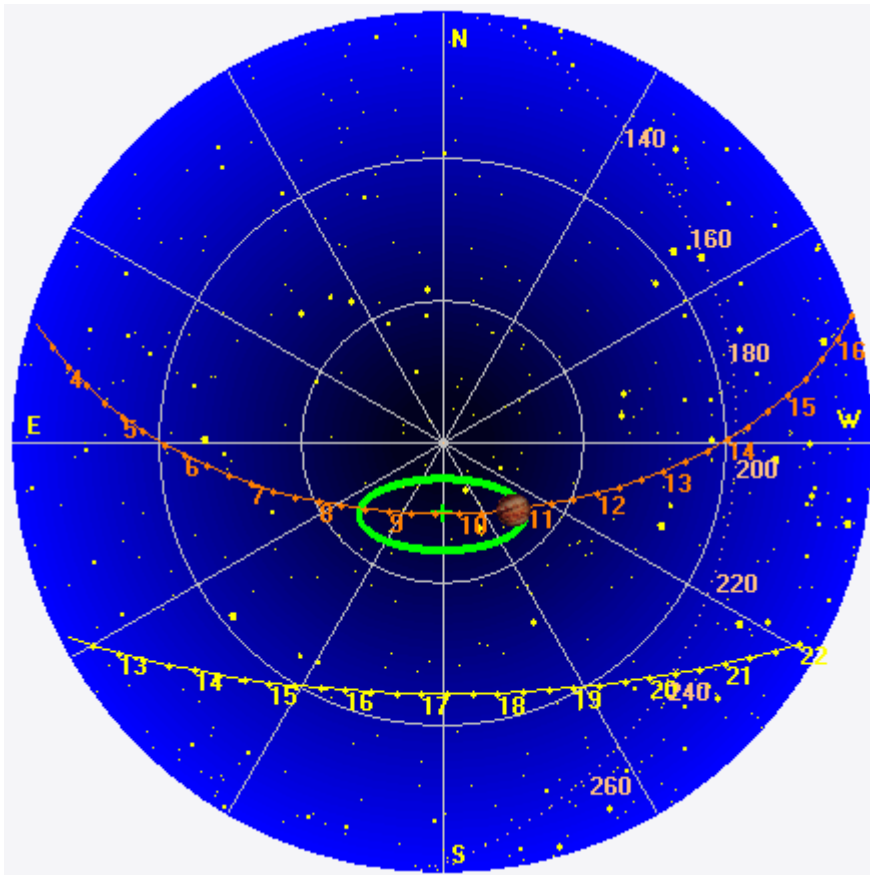
Jupiter was -2° to $+30^\circ$ off axis.

Jupiter was leading the Sun by 118° .

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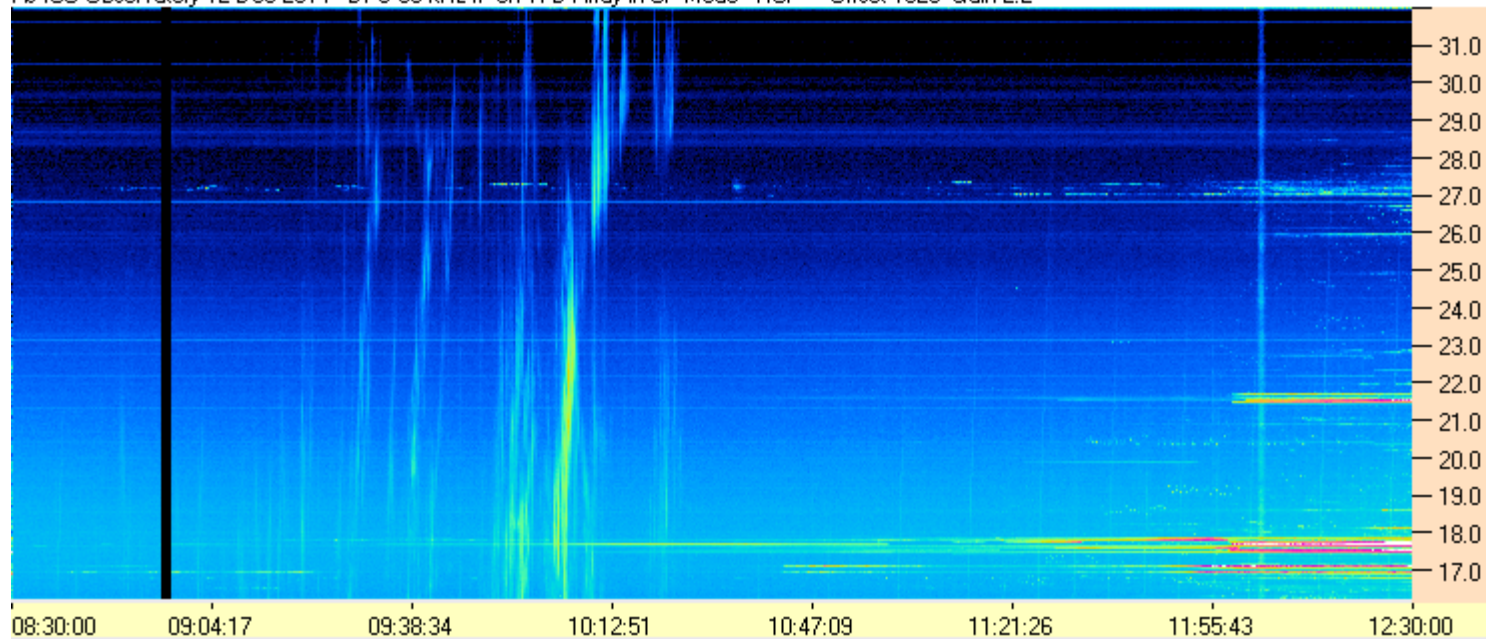
Dave

AJ4CO Observatory 12 Dec 2014, log entry 229

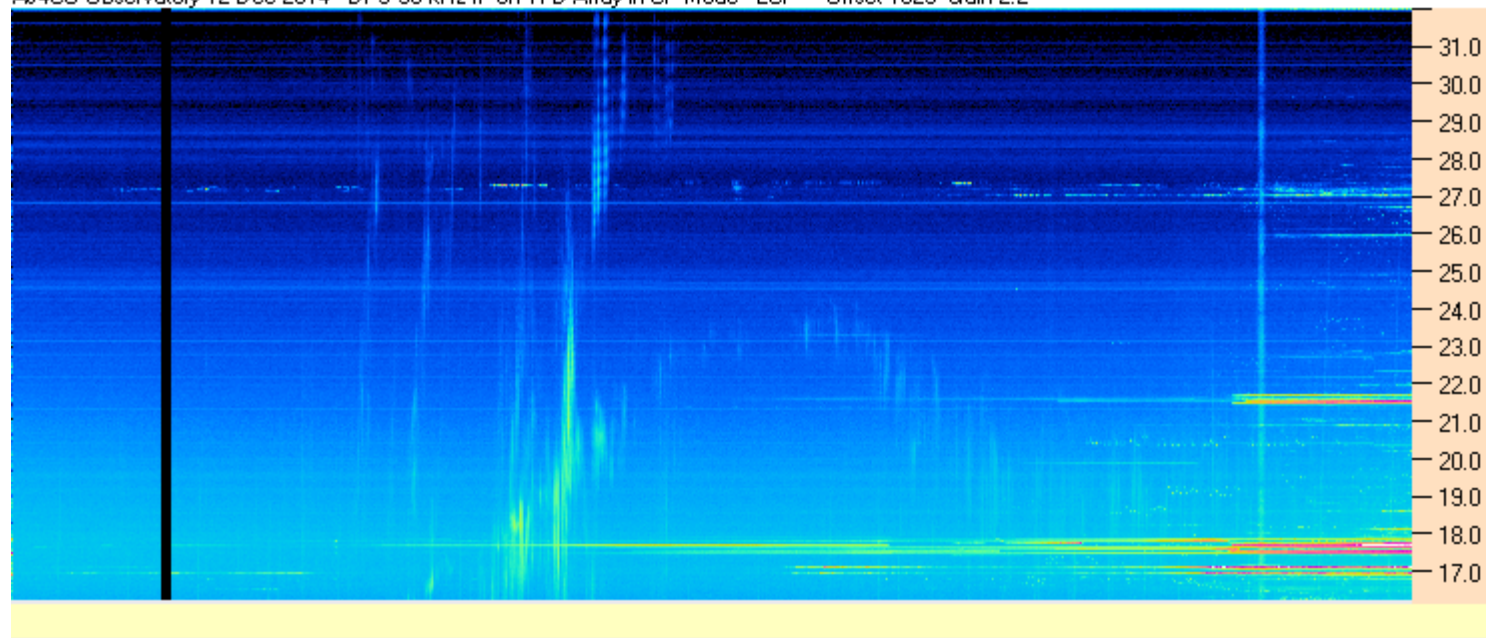


Io-B (RCP) followed by Io-D (LCP), overlap from 0940 to 1020 UTC

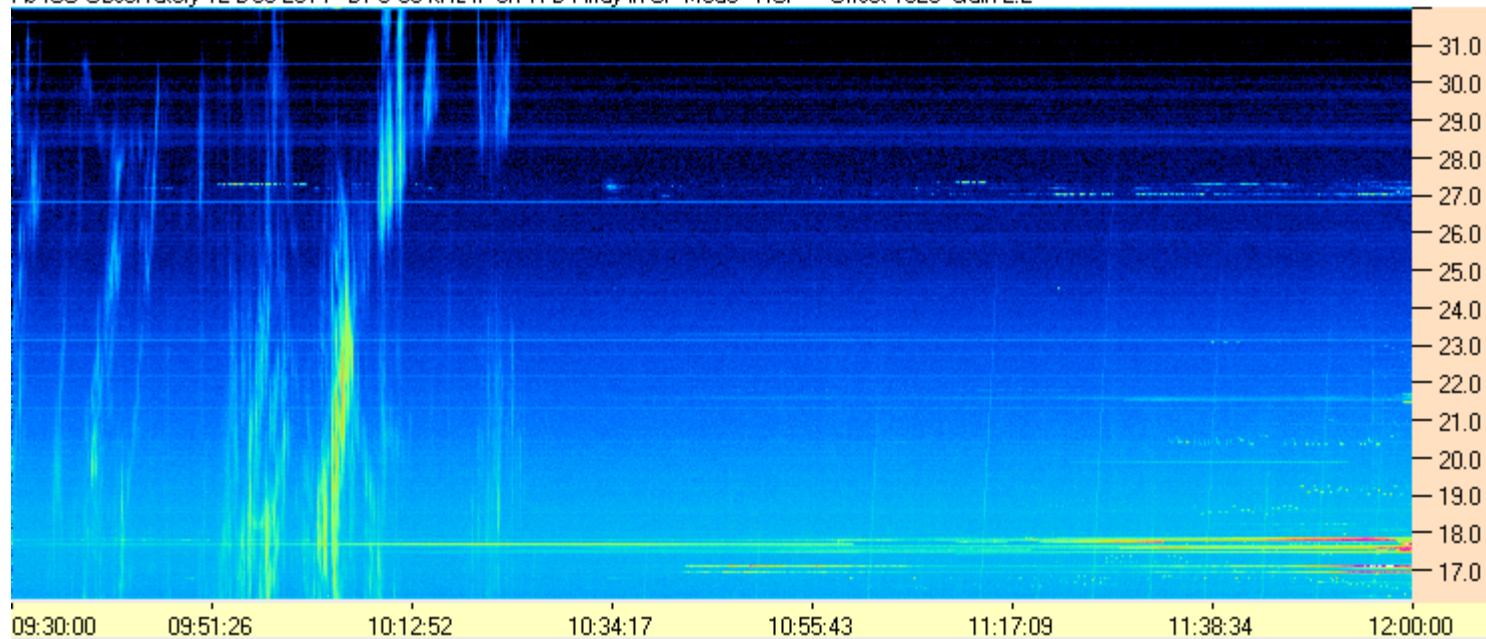
AJ4CO Observatory 12 Dec 2014 - DPS 30 kHz IF on TFD Array in CP Mode - RCP Offset 1825 Gain 2.2



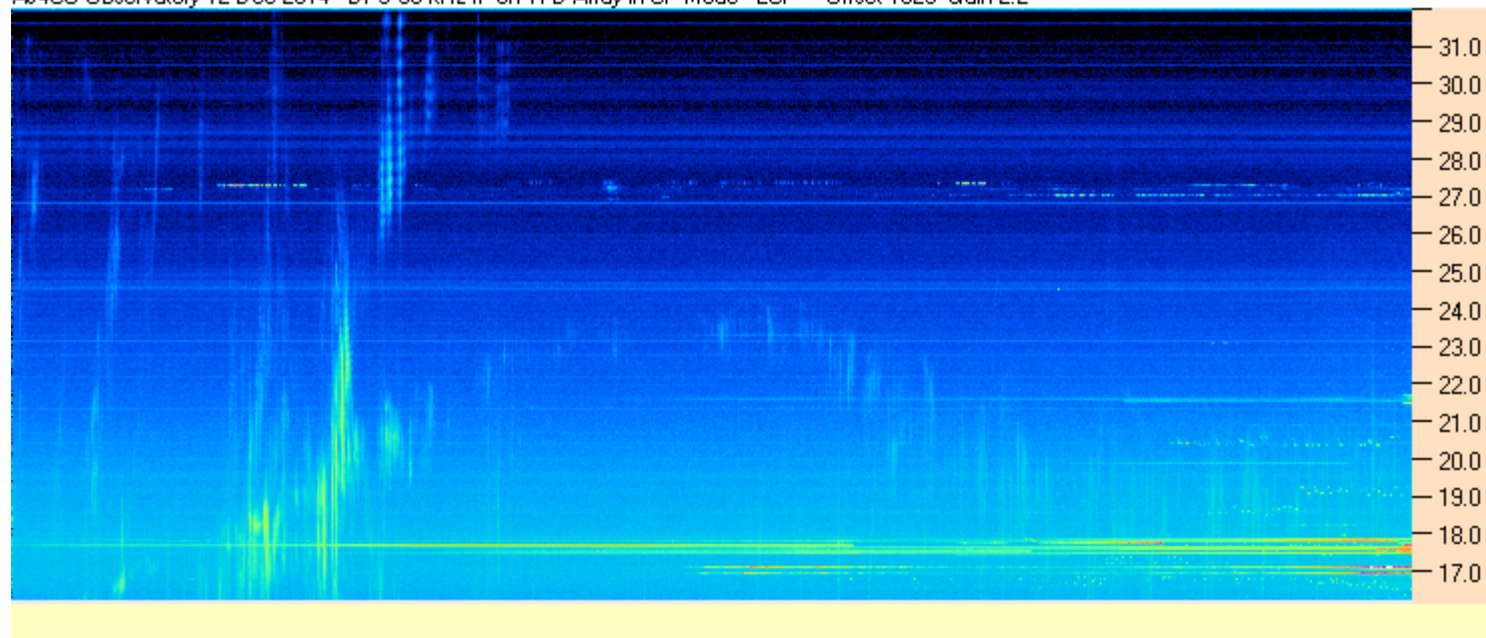
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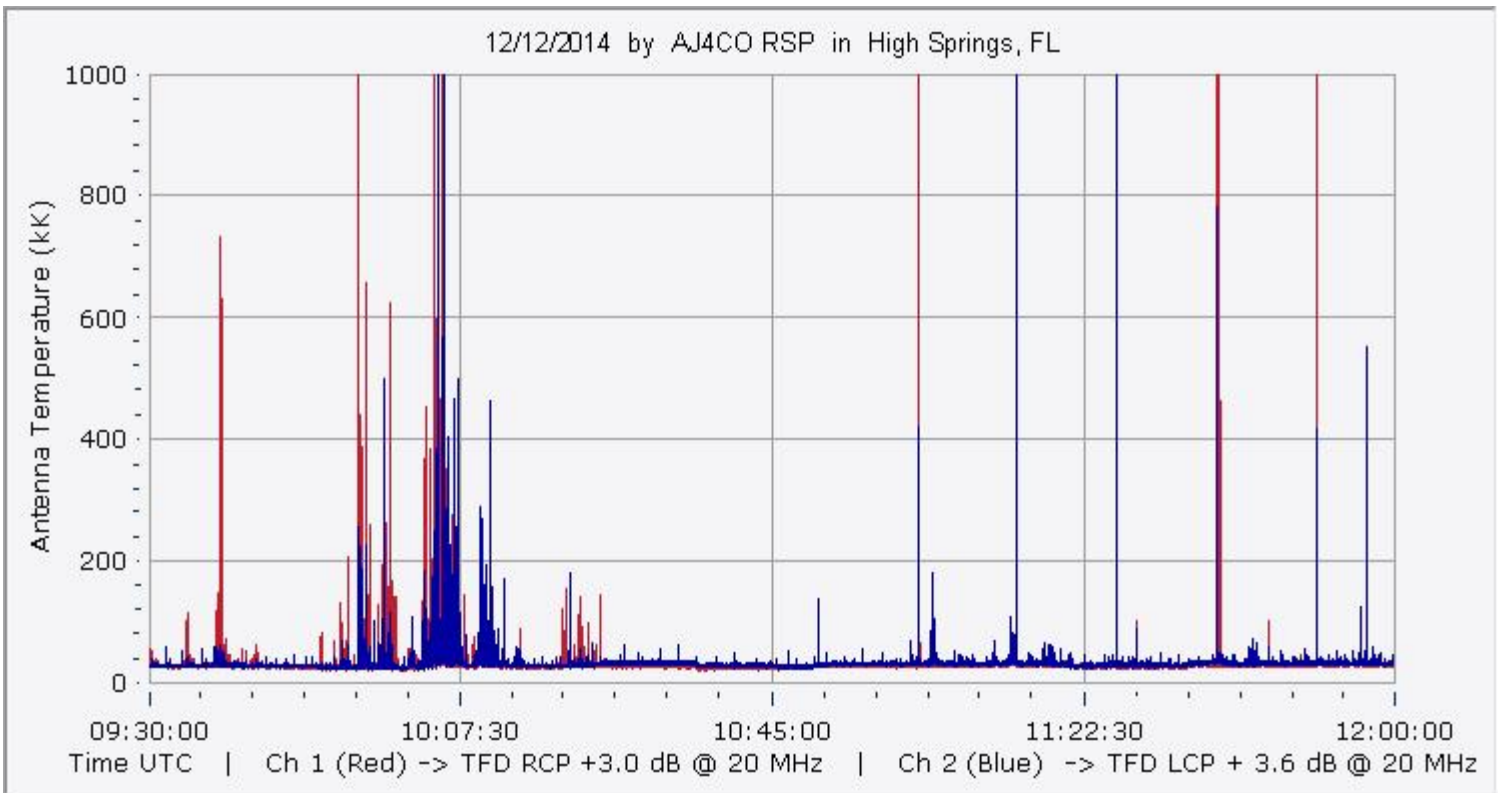


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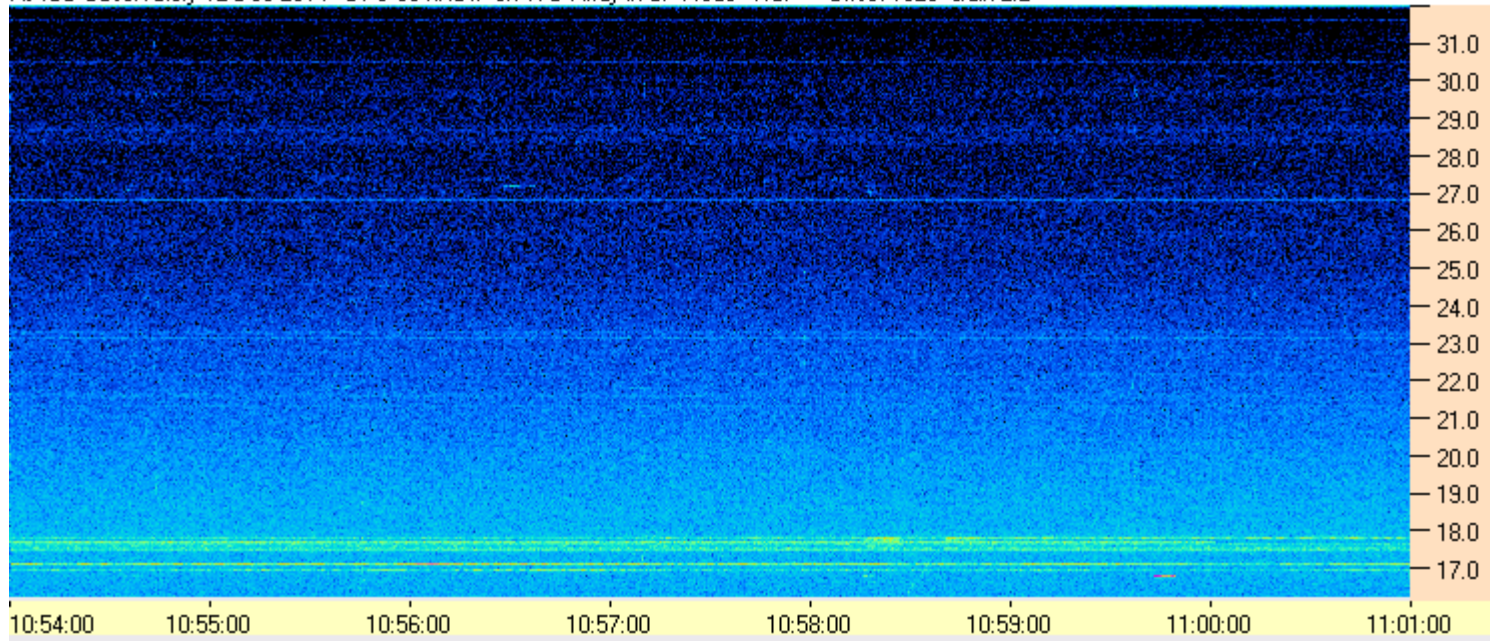


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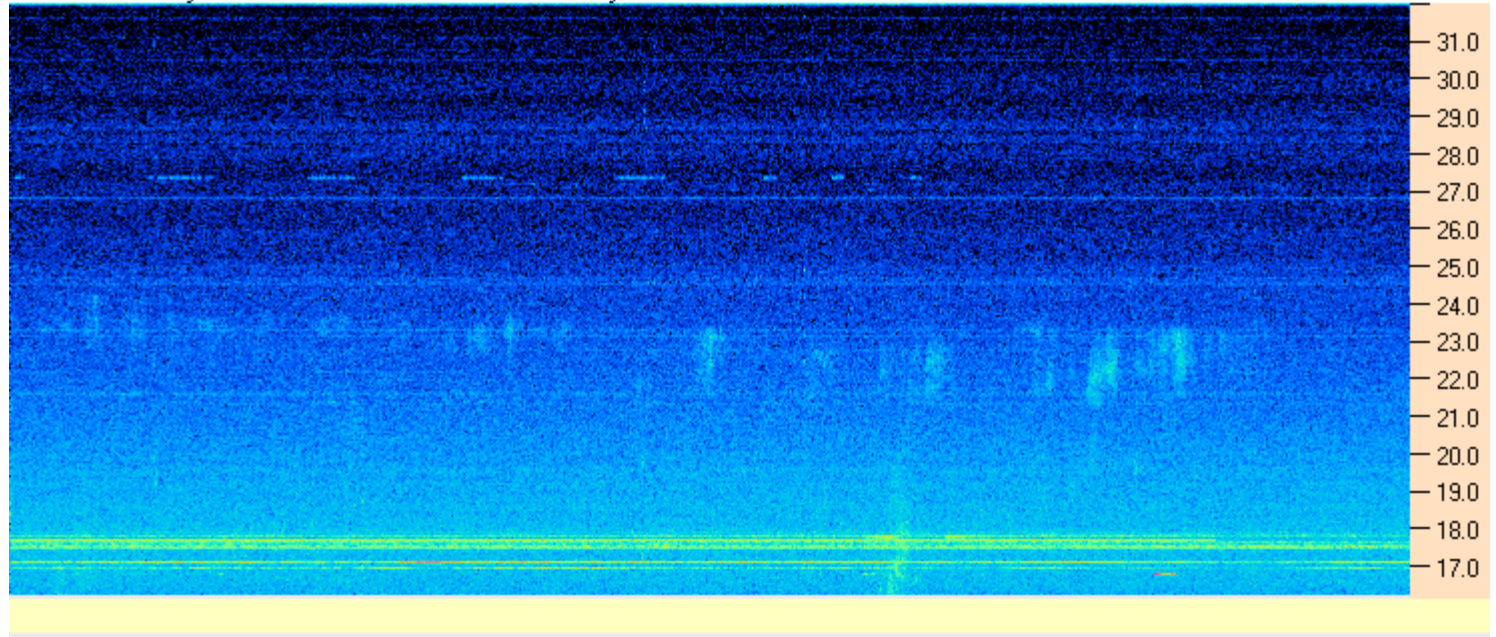




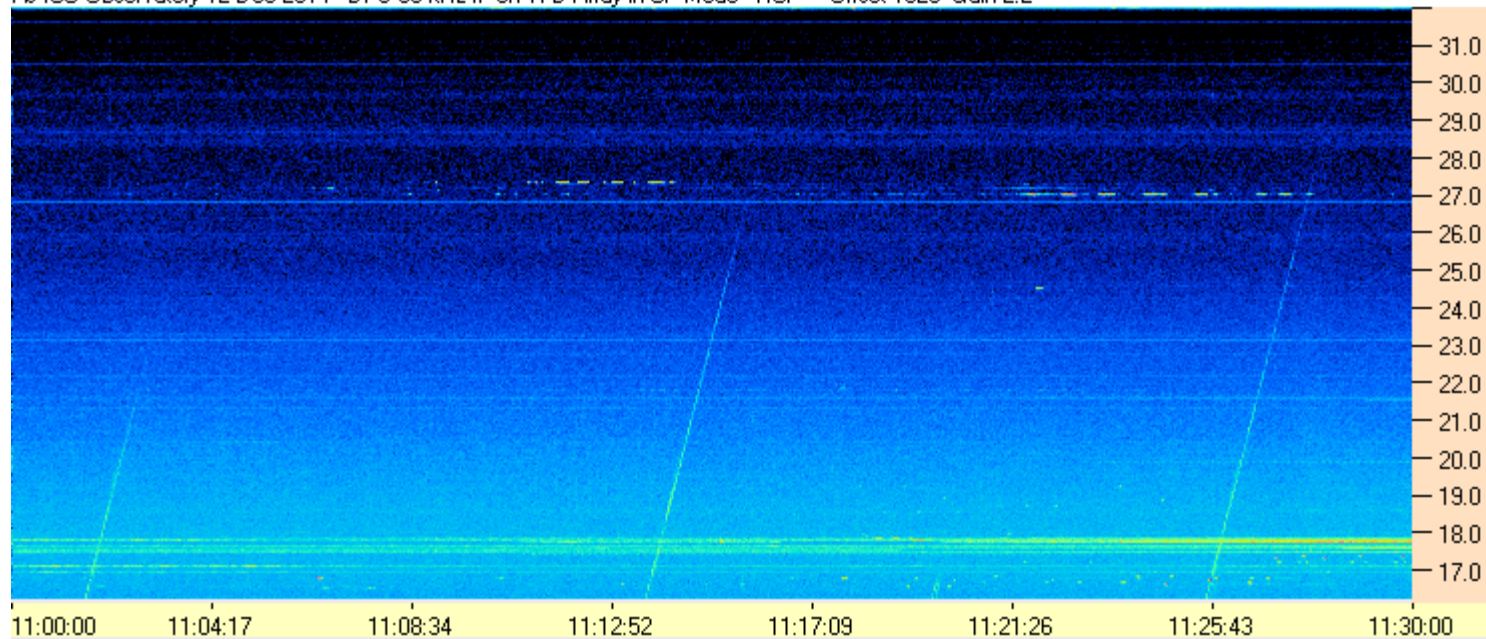
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