JOVIAN DAM OBSERVATION REPORT

Log Entry 865–866

10 Feb 2017 nA/nC

Some non-Io-A followed by a brief, lone emission in non-Io-C.

We see these brief (several tens of seconds or less), lone (no evident Jovian emission nearby in time or frequency) events maybe once a year or less. Francisco remarked several years ago during a SUG telecon that he saw a few such brief, lone events at the observatory in Chile (Juanta or Maipu? MHz?) and that they are very rare. This one looks narrow-band, like an N event. Other previously observed X events look like very brief L bursts. Regardless of bandwidth, the term "X event" has been used in the AJ4CO observing log for lack of anything better to call them.

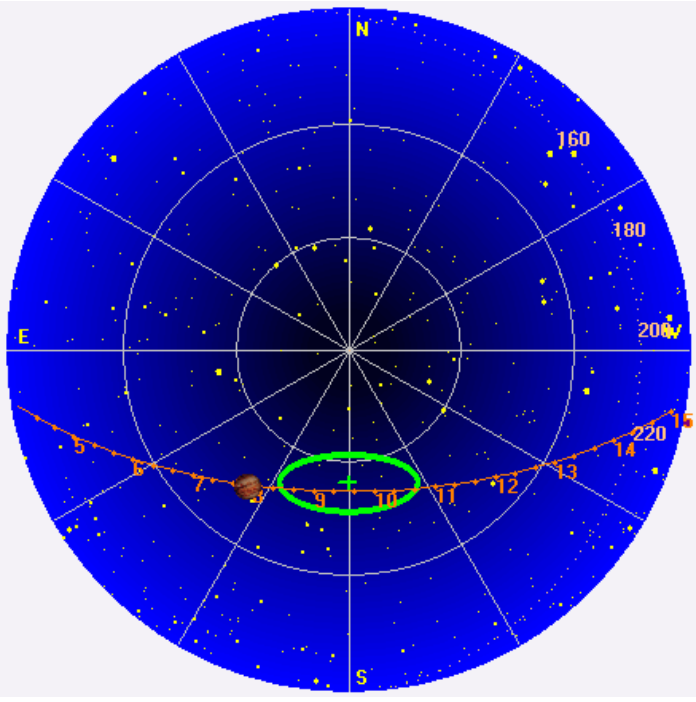
RCP dominant L bursting 0730–0750 UTC from 16 to 21 MHz, negative frequency drift emission envelope. (non-Io-A)

LCP dominant X event 0827 UTC at 17.2 MHz. (non-Io-C)

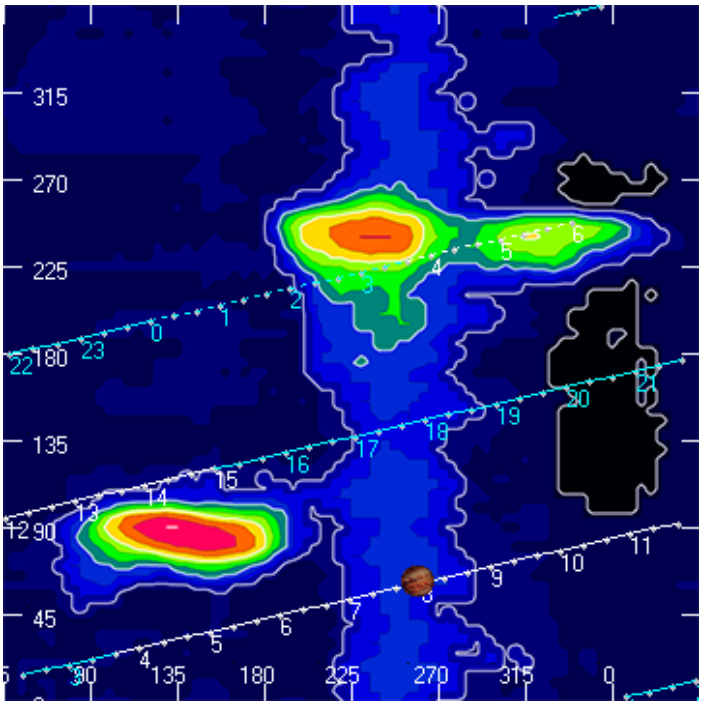
Jupiter was -31° to -18° off axis.

Jupiter was leading the Sun by 119°.

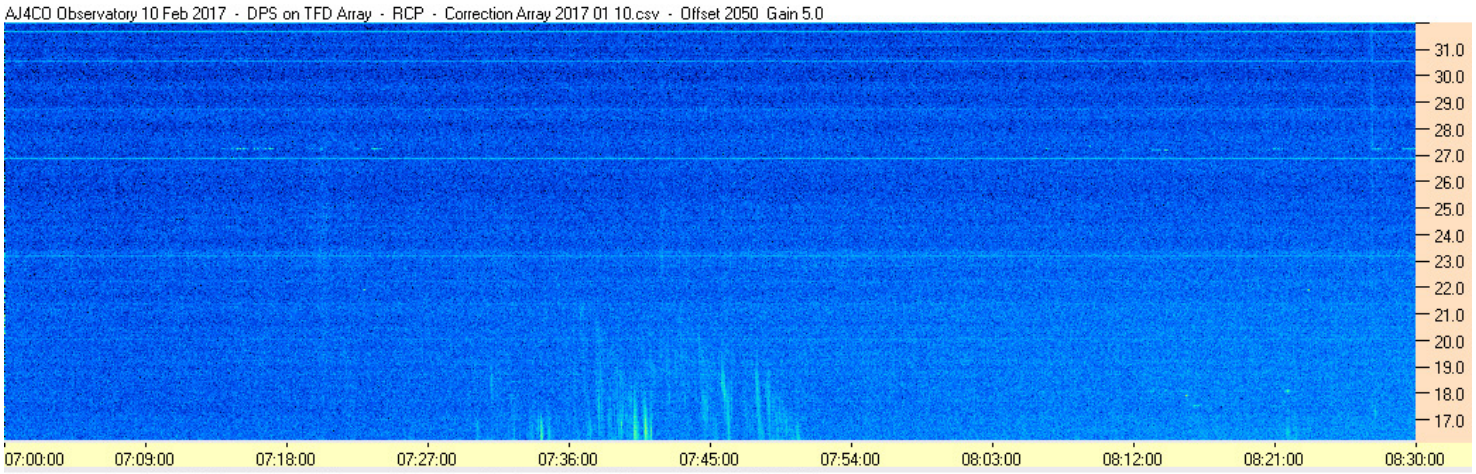
Jupiter's location at midpoint of observed emission (0758 UTC)



Sky map with array HPBW in green.



CML–Io phase plane.


AJ4CO Observatory 10 Feb 2017 - DPS on TFD Array - RCP - Correction Array 2017 01 10.csv - Offset 2050 Gain 5.0
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07:36:00
07:45:00
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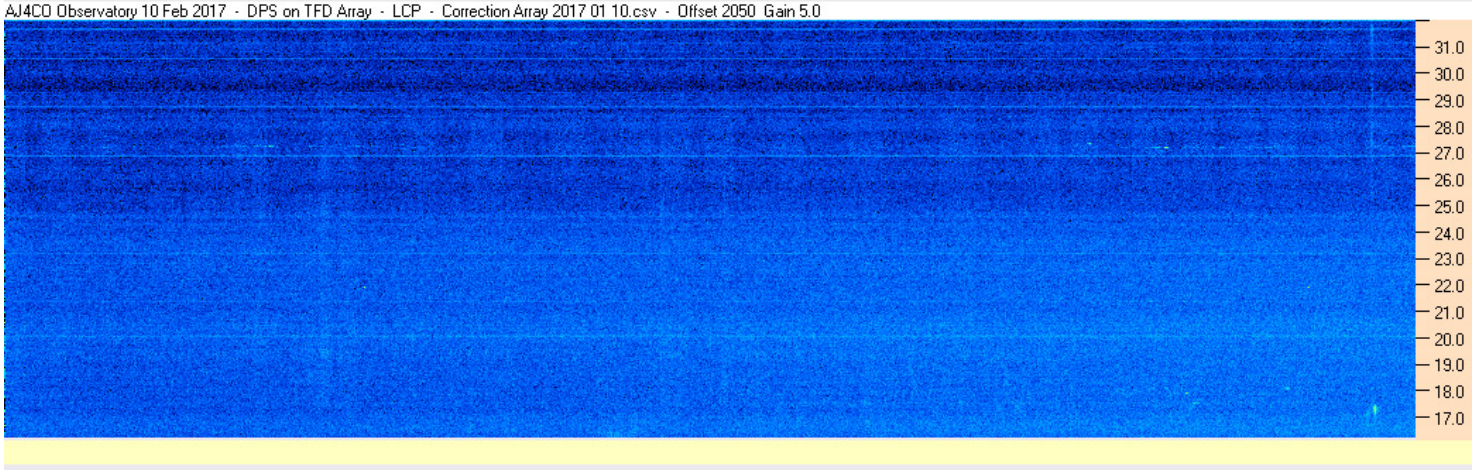
08:12:00
08:21:00
08:30:00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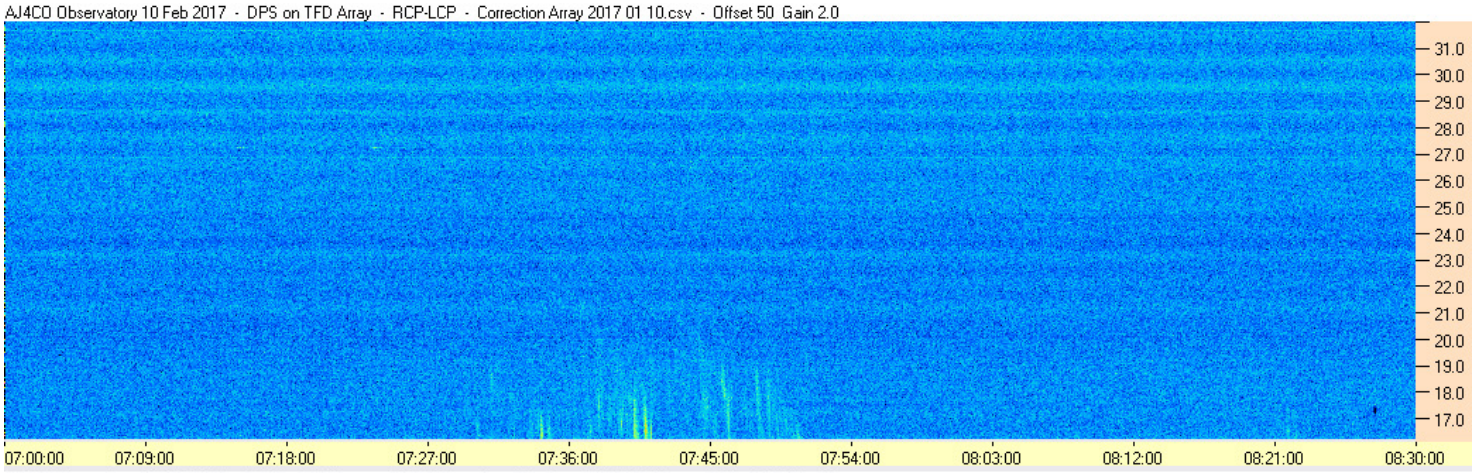
AJ4CO Observatory 10 Feb 2017 - DPS on TFD Array - RCP-LCP - Correction Array 2017 01 10.csv - Offset 50 Gain 2.0
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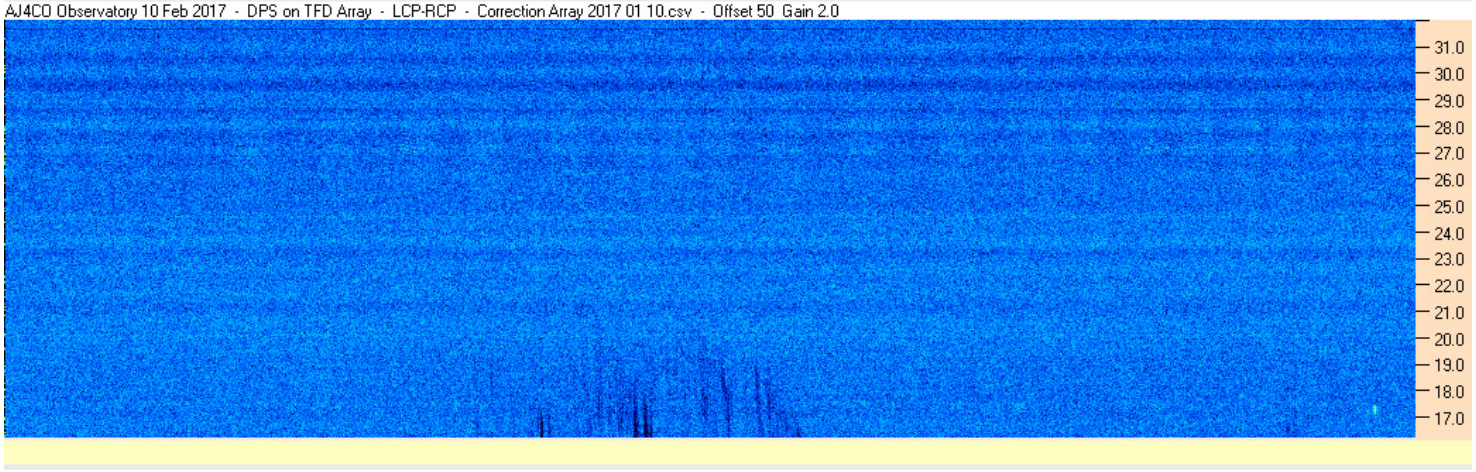
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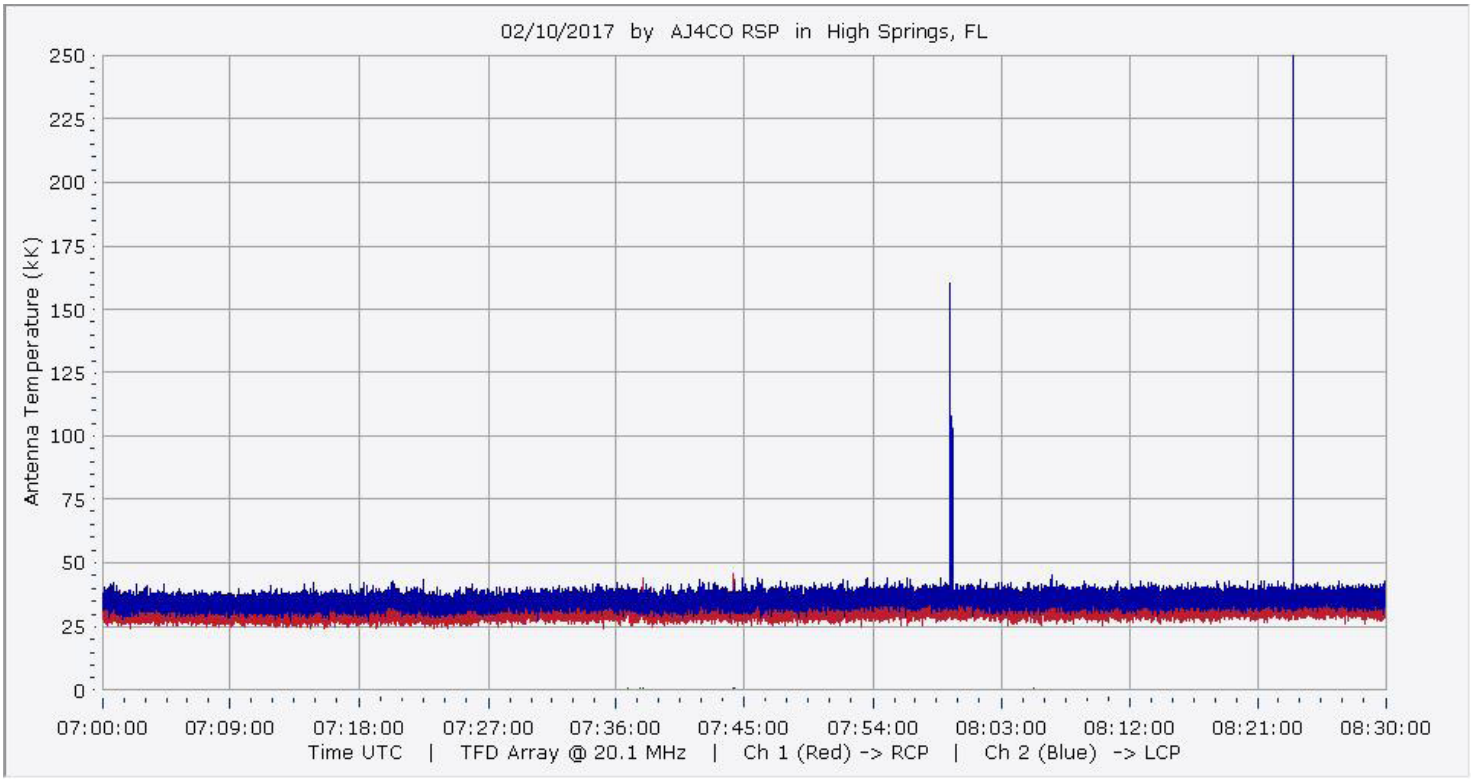
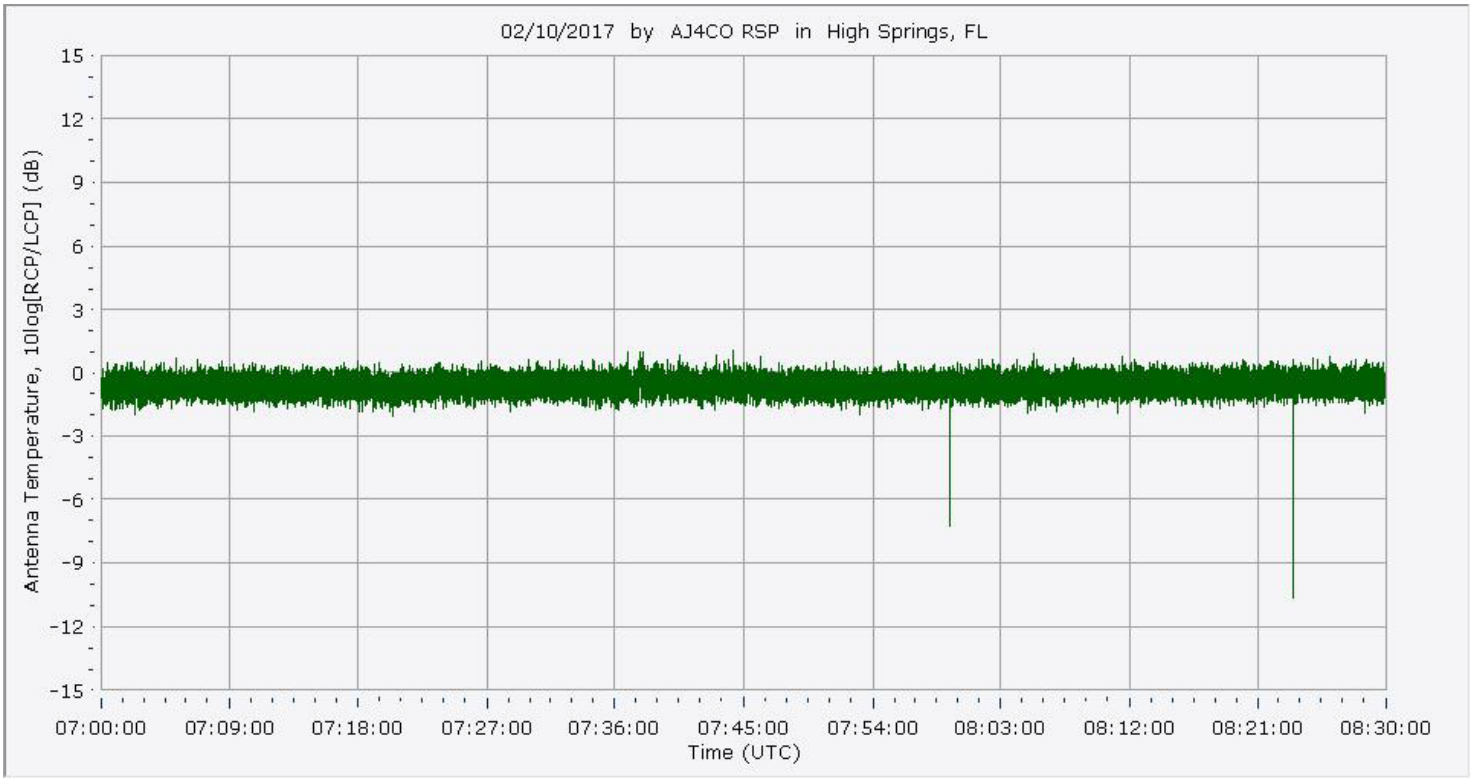

02/10/2017 by AJ4CO RSP in High Springs, FL
Antenna Temperature (kK)
250
225
200
175
150
125
100
75
50
25
0
07:00:00
07:09:00
07:18:00
07:27:00
07:36:00
07:45:00
07:54:00
08:03:00
08:12:00
08:21:00
08:30:00
Time UTC | TFD Array @ 20.1 MHz | Ch 1 (Red) -> RCP | Ch 2 (Blue) -> LCP


02/10/2017 by AJ4CO RSP in High Springs, FL
Antenna Temperature, 10log[RCP/LCP] (dB)
15
12
9
6
3
0
-3
-6
-9
-12
-15
07:00:00
07:09:00
07:18:00
07:27:00
07:36:00
07:45:00
07:54:00
08:03:00
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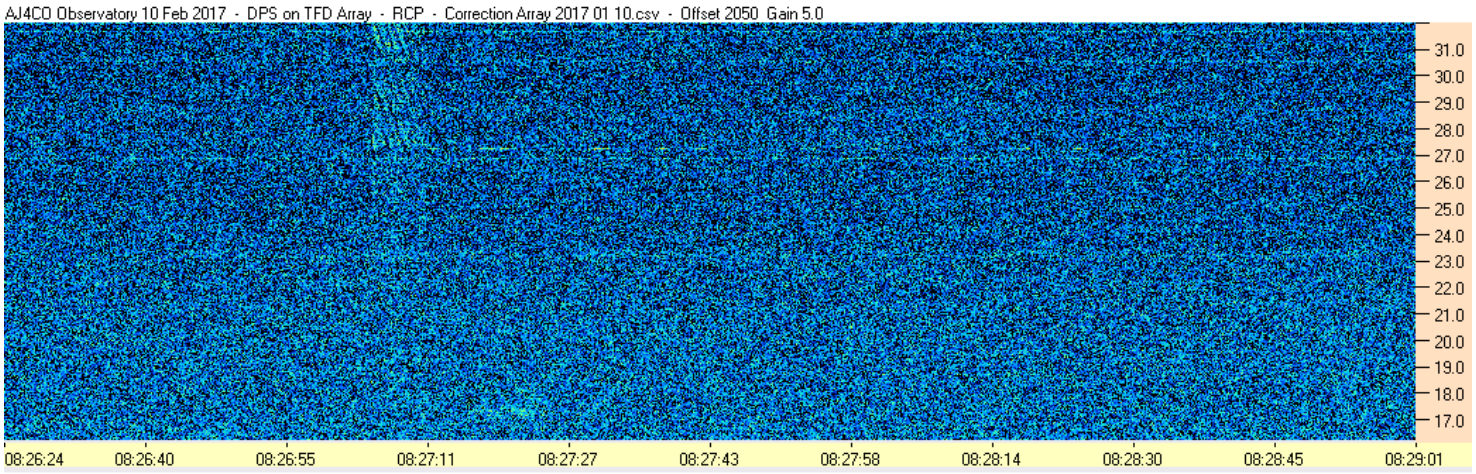
08:21:00
08:30:00
Time (UTC)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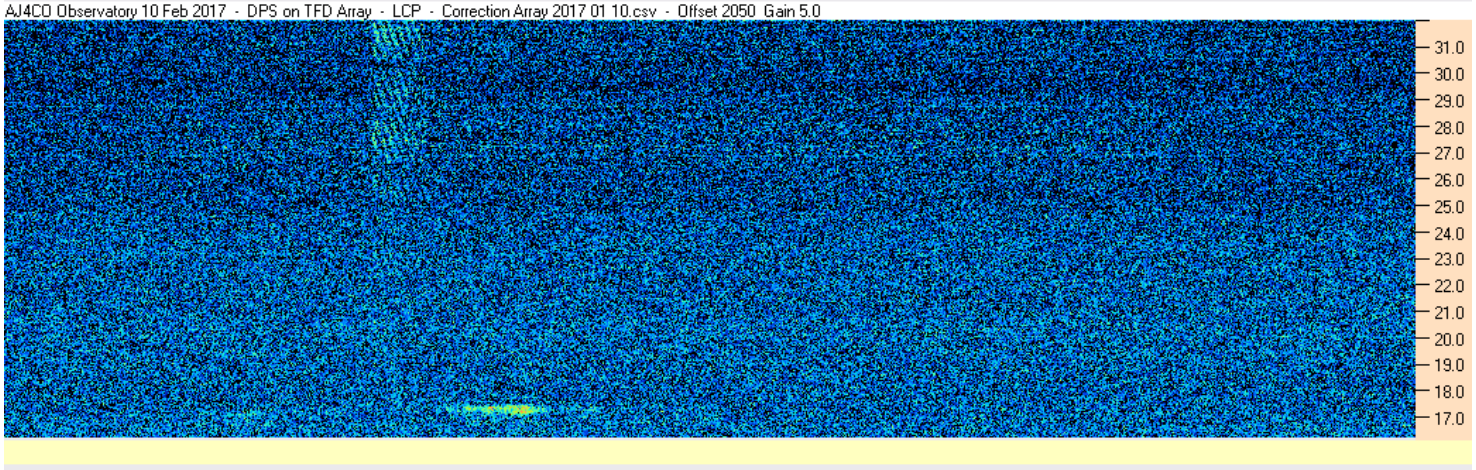
08:26:55
08:27:11
08:27:27
08:27:43
08:27:58
08:28:14
08:28:30
08:28:45
08:29:01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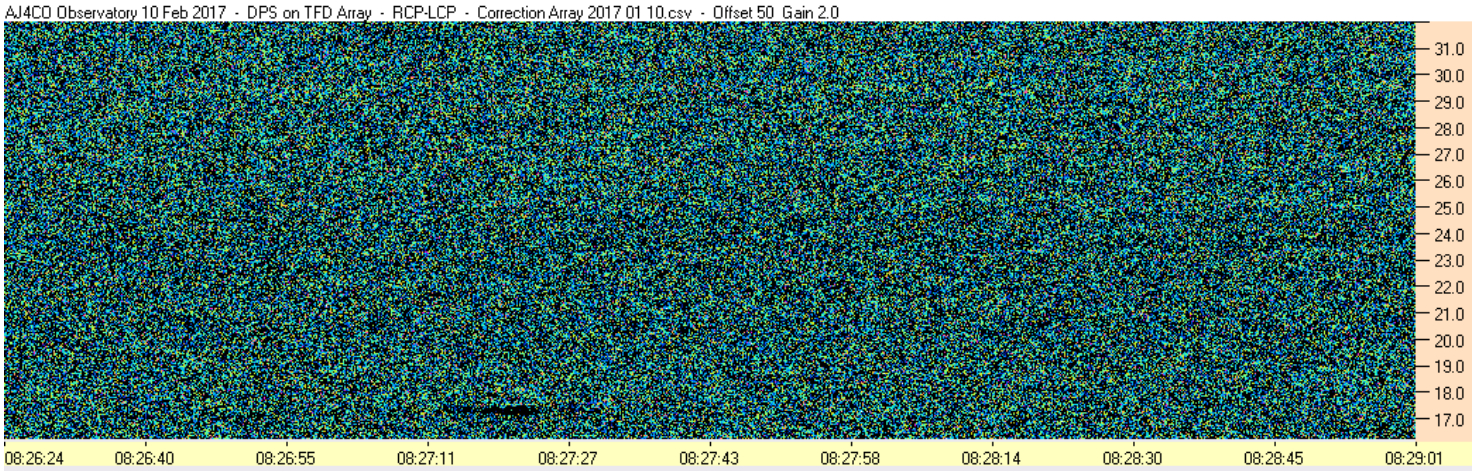
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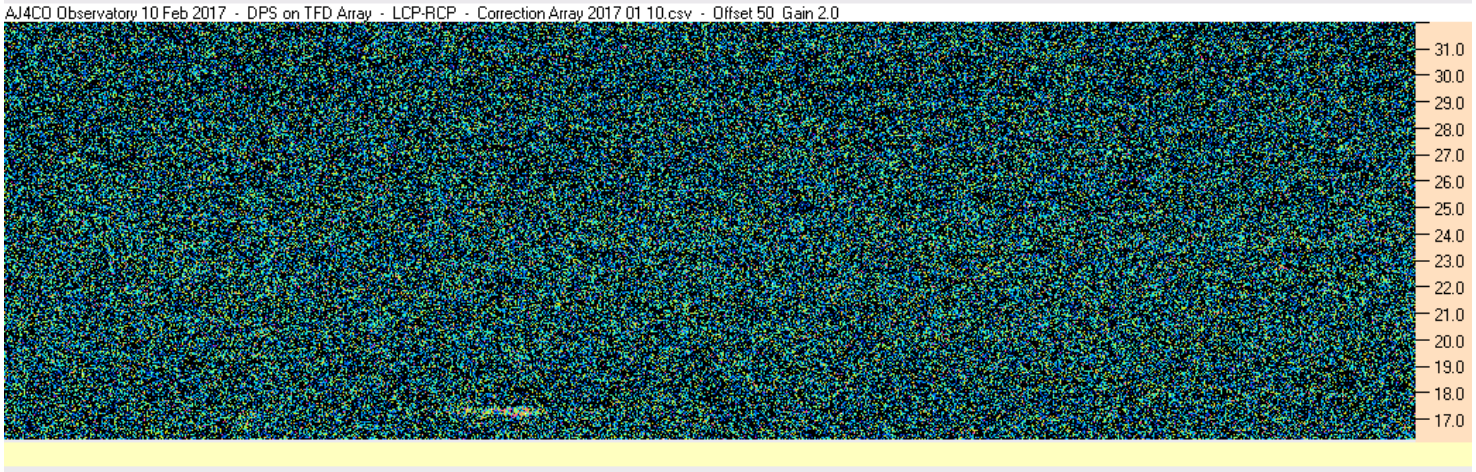
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