

K4LED

Georgia Amateur Radio Astronomy Observatory

Observation Date: 06-09-2018, 0:00:00 to 23:59:00 UTC

Location: Lat. 34.42322 N, Lon. -84.49413 W (Jasper, GA 30143)

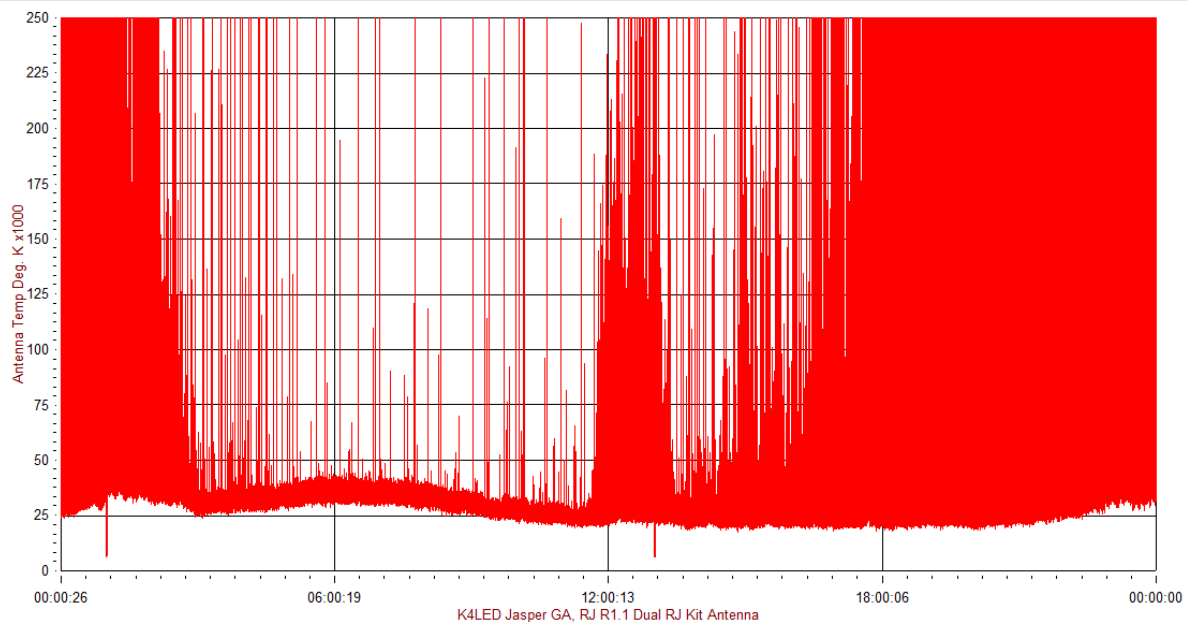
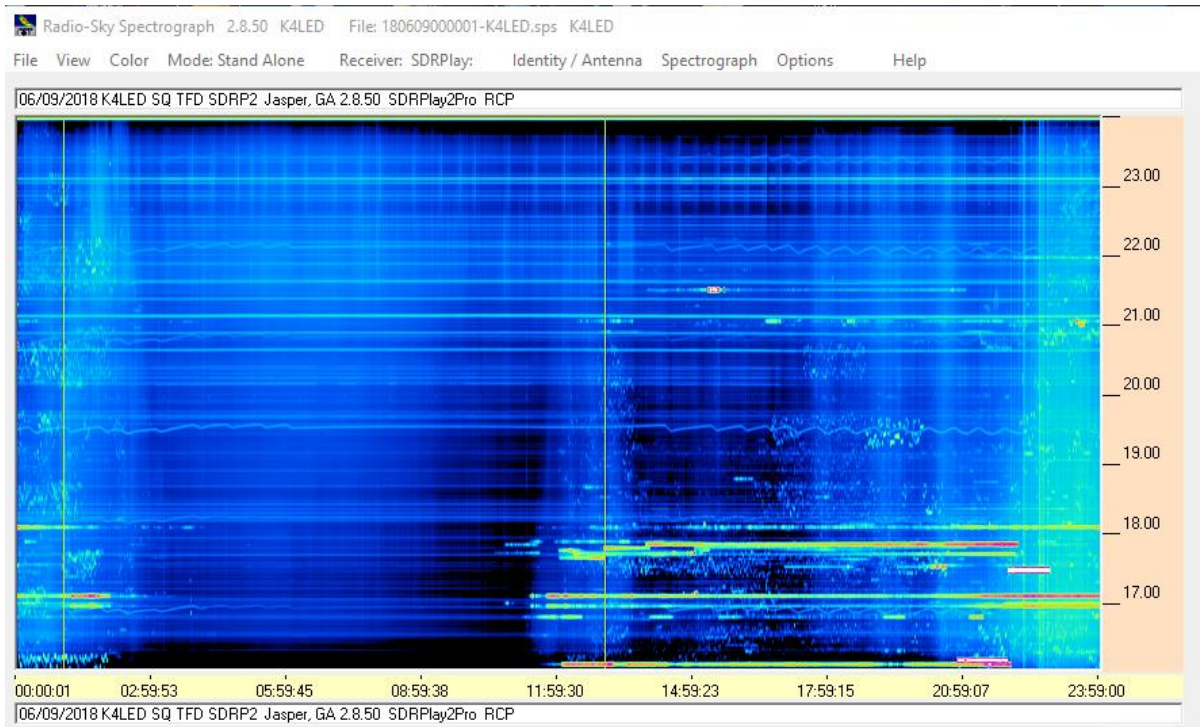
Object: TP, IO-A

Observer: Larry E. Dodd

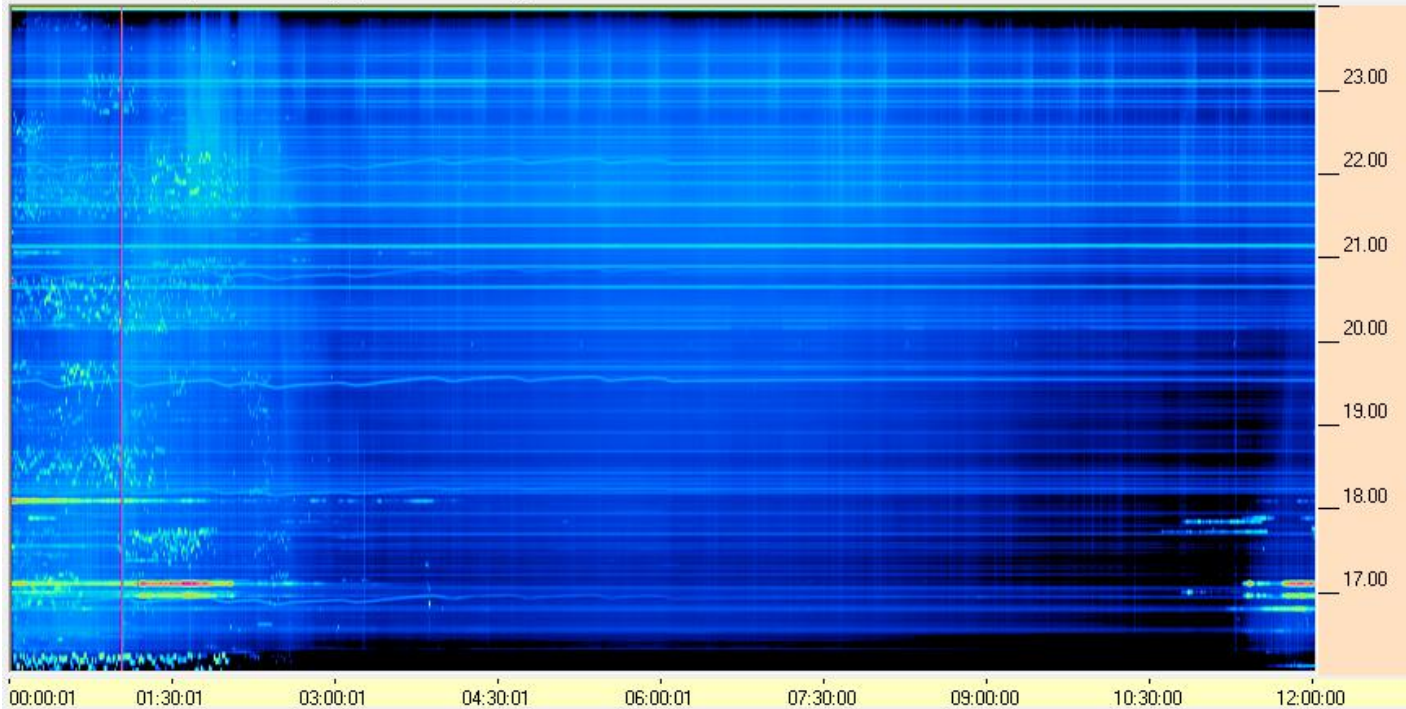
Receivers: FSX11, SDRPlay2PRO, RJ1.1

Software: SkypipeII 2.7.34, Spectrograph 2.8.50

Antennas: Radio Jove Dual Dipole Kit, Typinski Square TFD

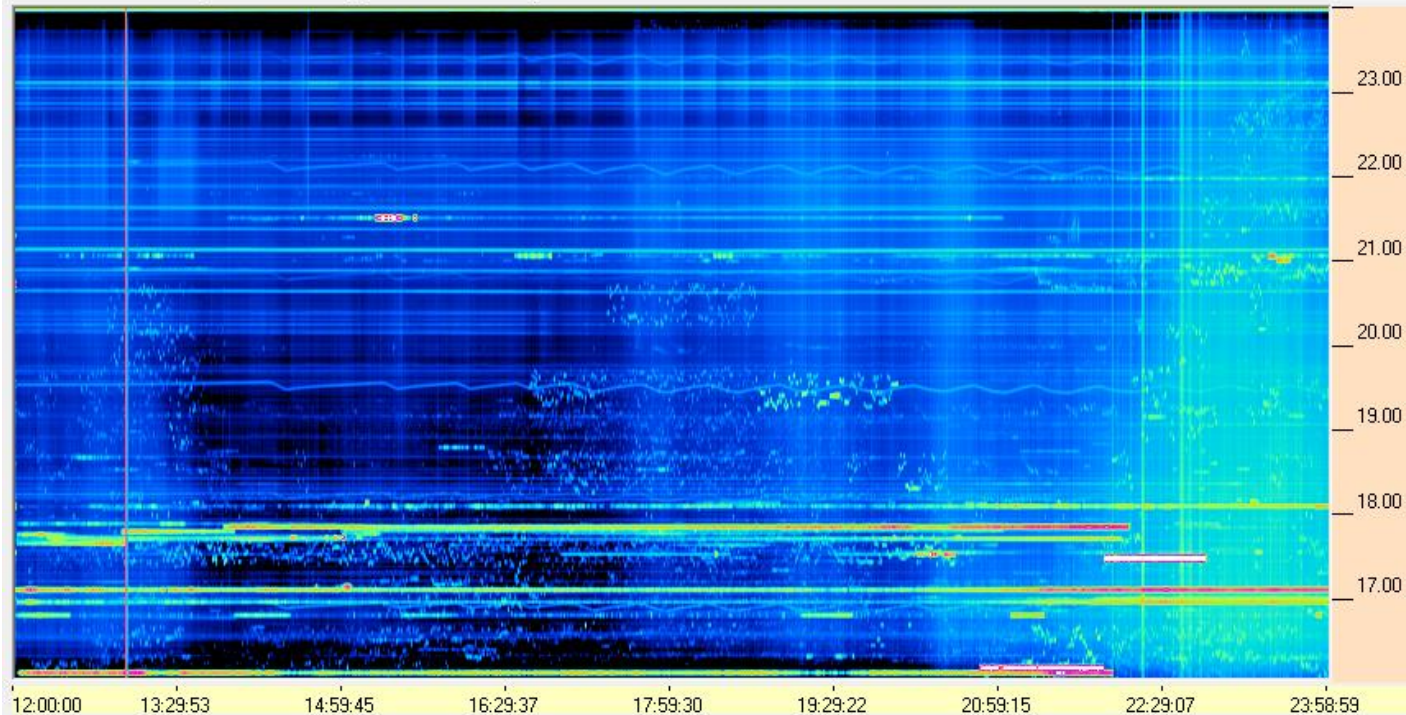


06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



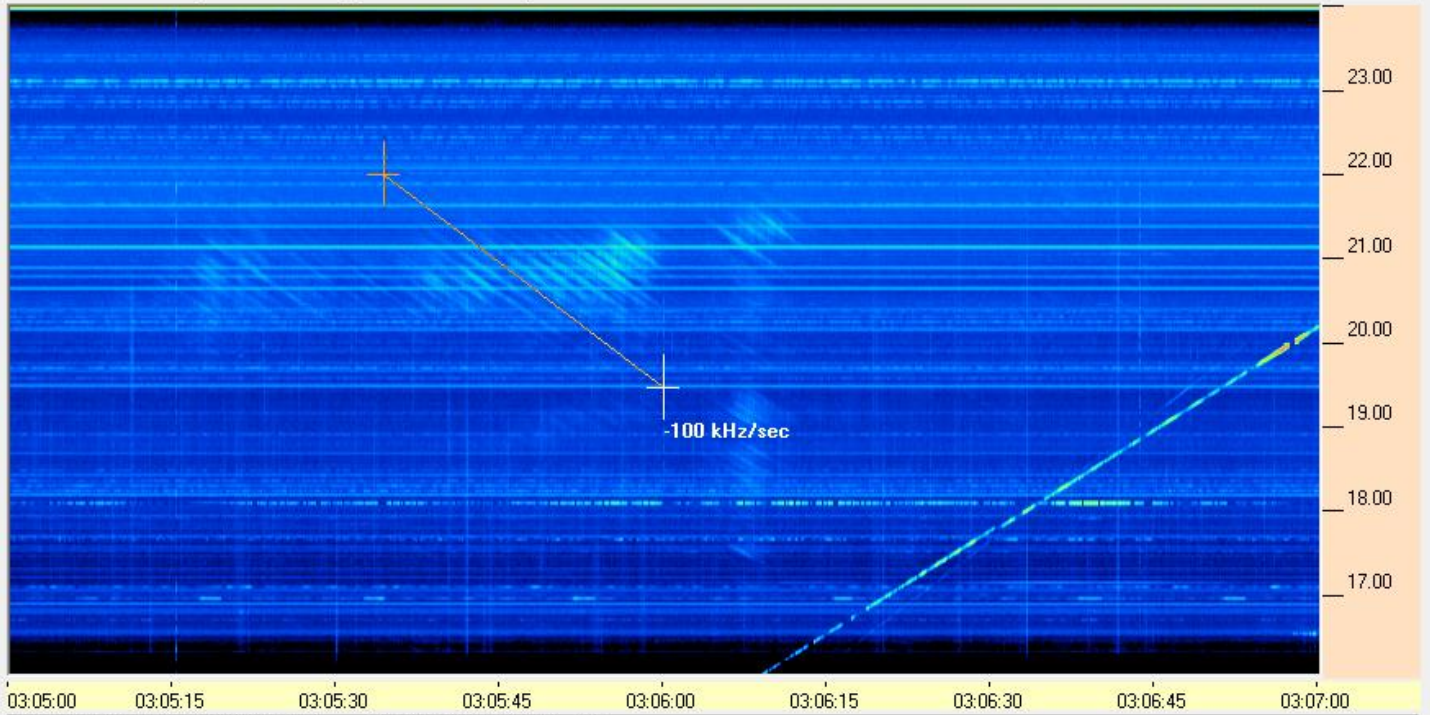
06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



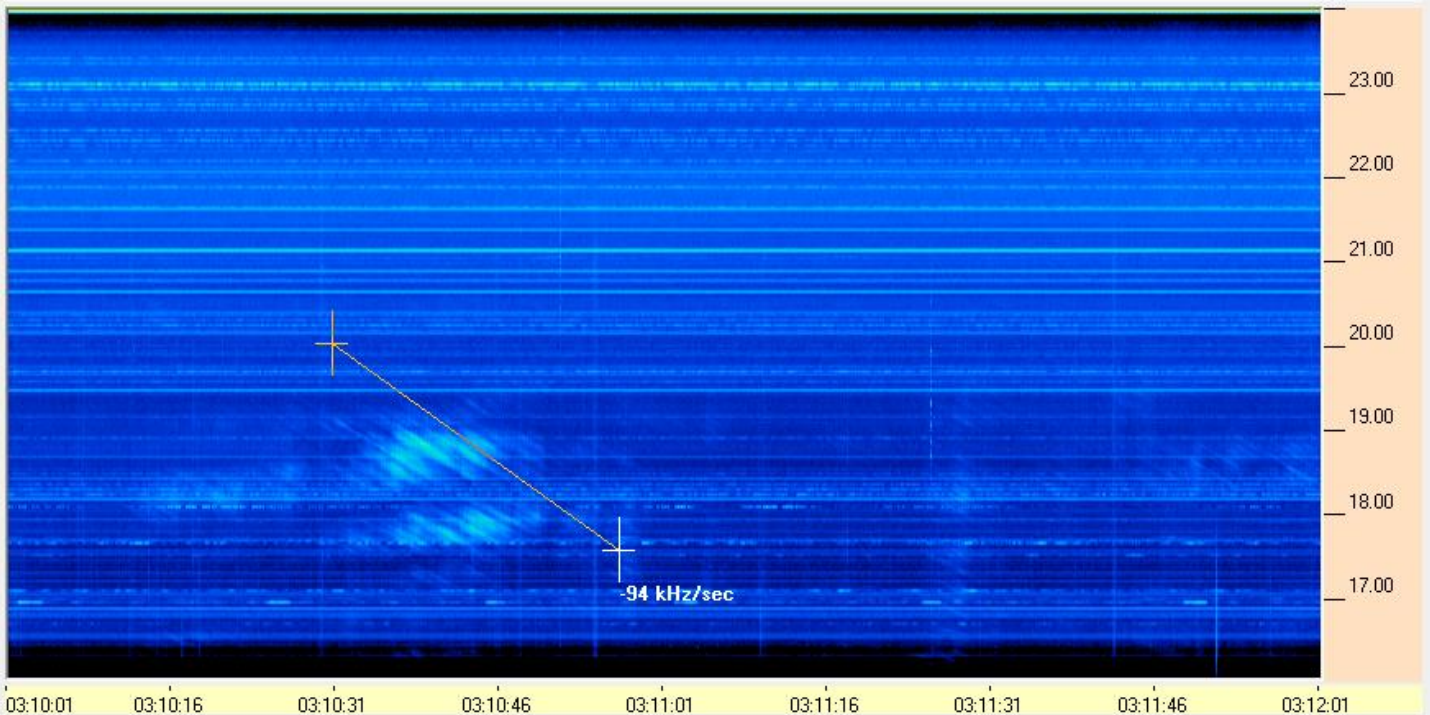
06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



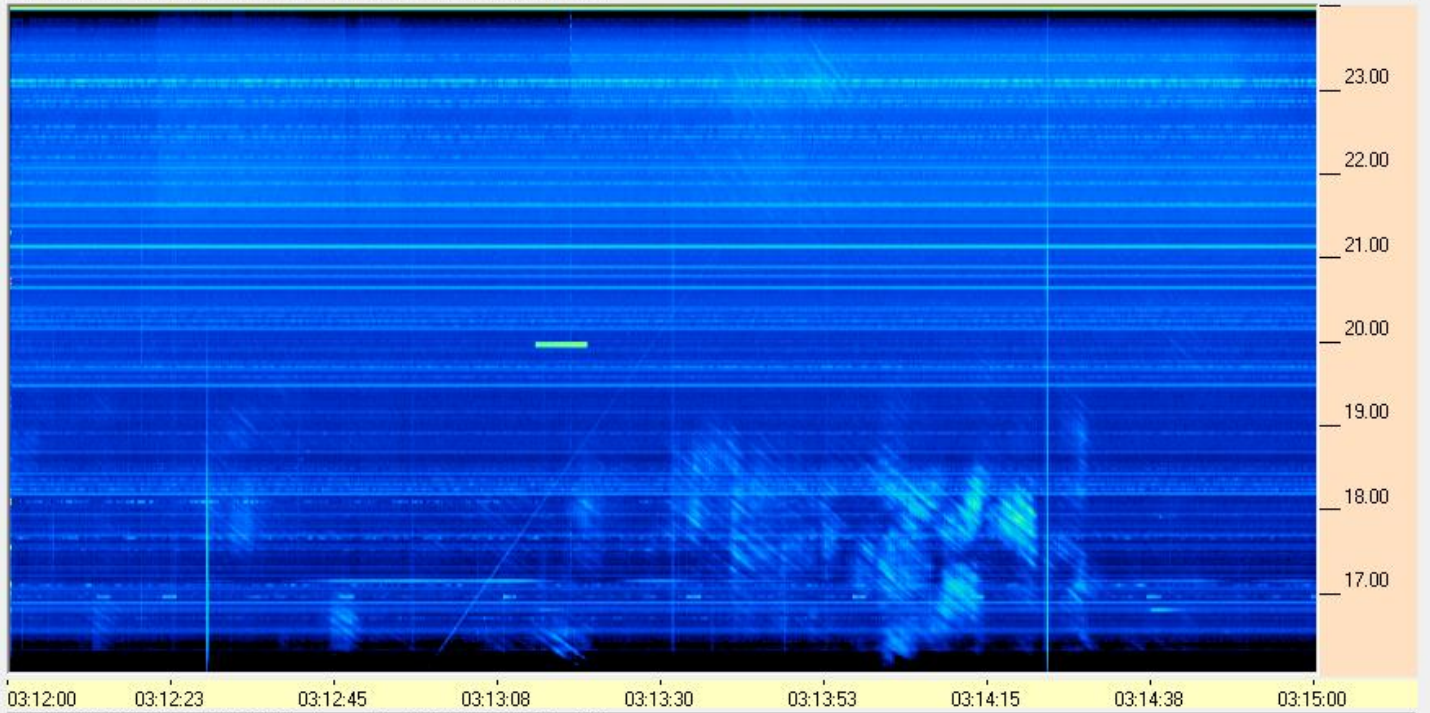
06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



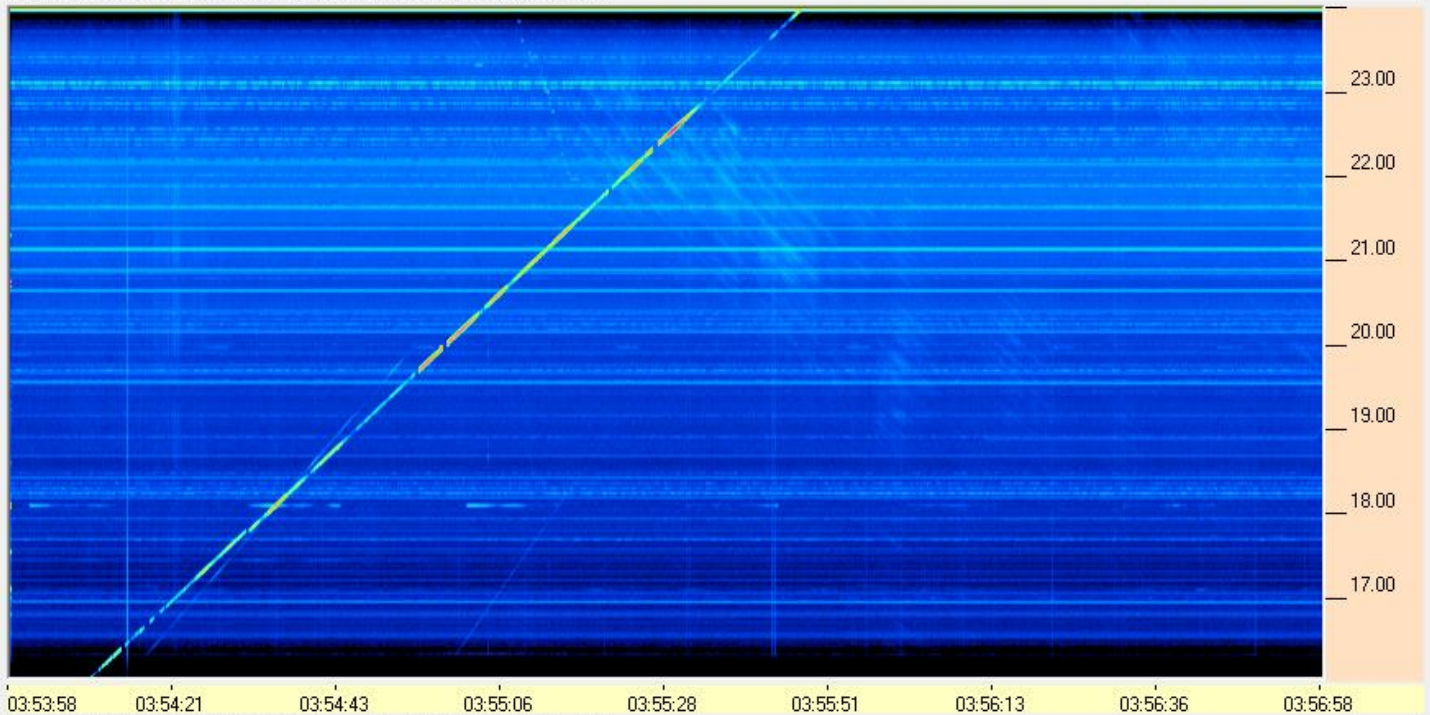
06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

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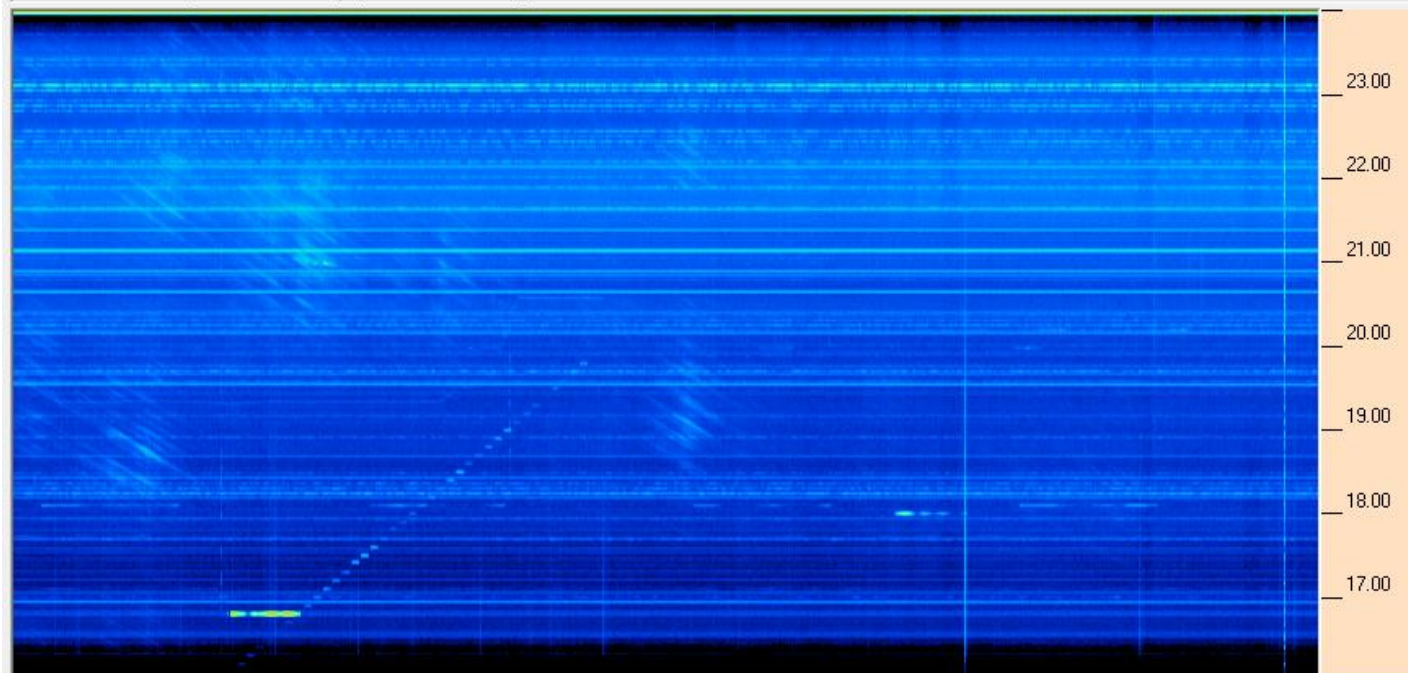
06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

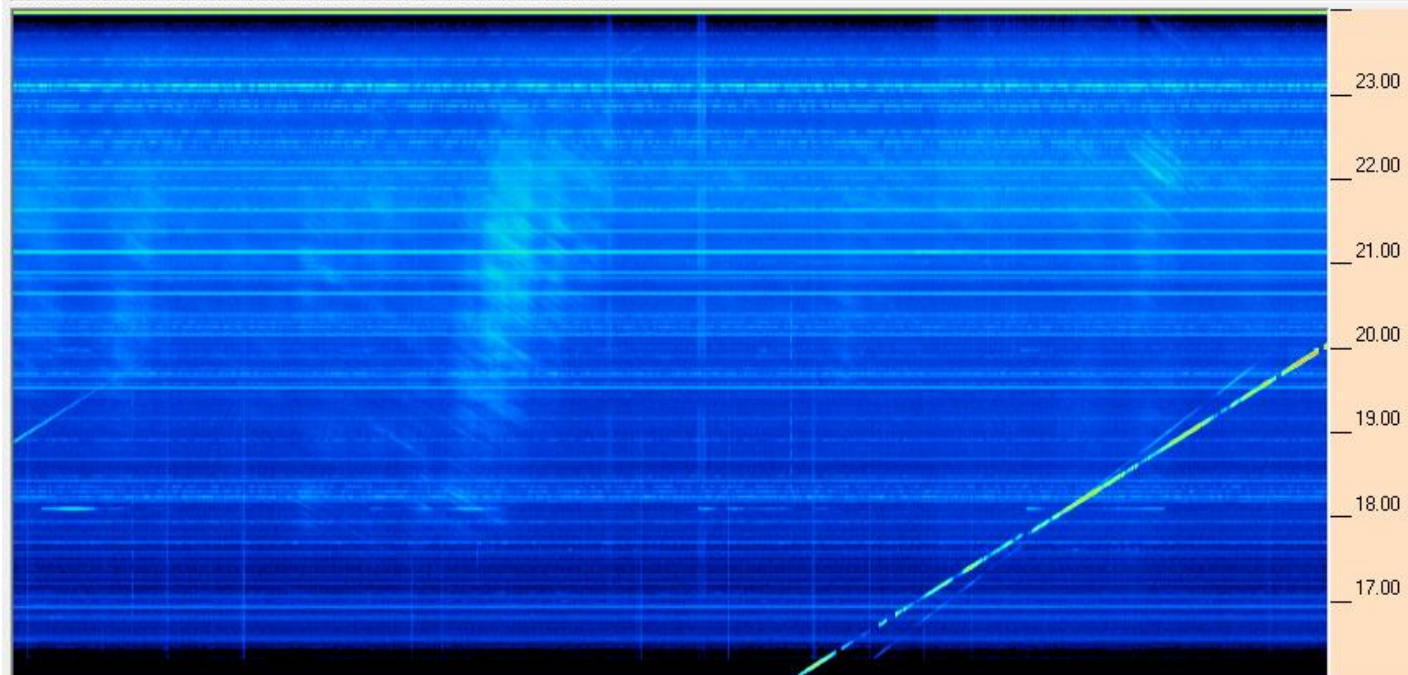
06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



03:56:58 03:57:13 03:57:28 03:57:43 03:57:58 03:58:13 03:58:28 03:58:43 03:58:58

06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



04:04:58 04:05:13 04:05:28 04:05:43 04:05:58 04:06:13 04:06:28 04:06:43 04:06:58

06/09/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

foF2 4.375
foF1 N/A
foF1p N/A
foE N/A
foEp 0.38
fxI 5.10
foEs N/A
fmin 2.70

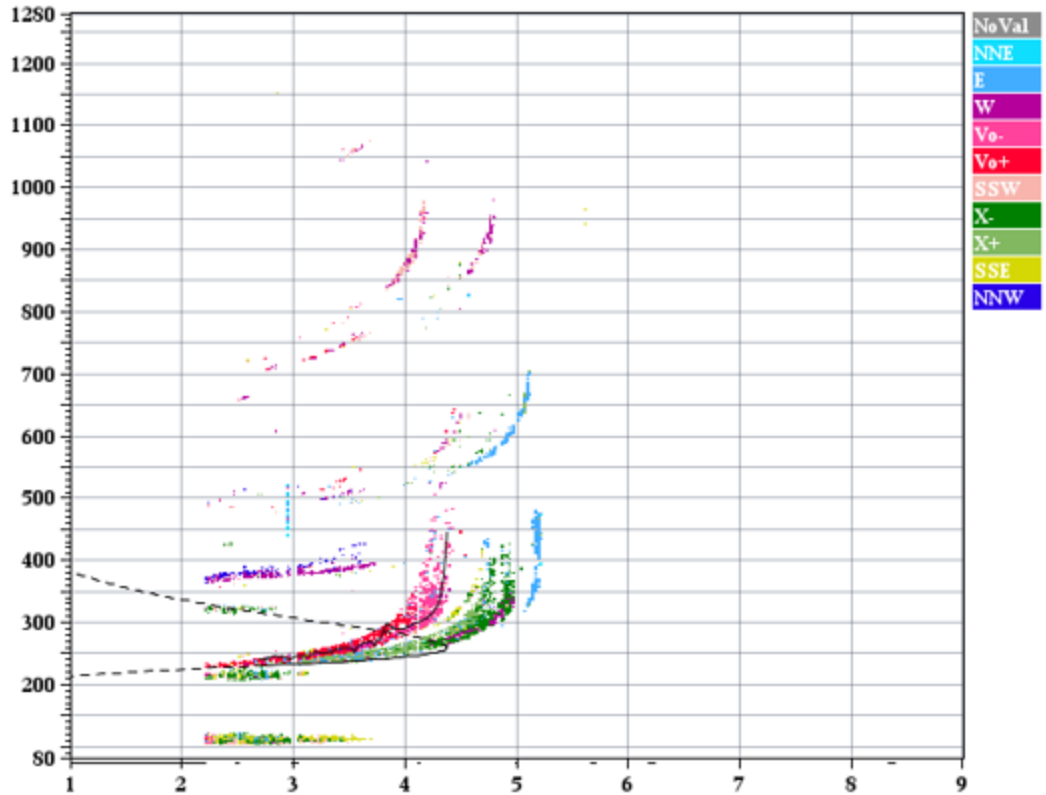
MUF(D) 15.25
M(D) 3.49
D N/A

h'F 237.5
h'F2 237.5
h'E N/A
h'Es N/A

hmF2 259.2
hmF1 N/A
hmE 110.0
yF2 36.5
yF1 N/A
yE 20.0
B0 33.0
B1 2.99

C-level 44

Auto:
Artist5
500200



D 100 200 400 600 800 1000 1500 3000 [km]
MUF 5.0 5.0 5.3 5.6 6.2 7.0 9.3 15.2 [MHz]
67670462.tmp / 320fx512h 25 kHz 2.5 km / DPS-4D EG931 084 / 30.5 N 273.5 E

ShowIonogram v 1.0

References for Interpreting the Ionogram:

http://www.sws.bom.gov.au/IPSHosted/INAG/uag_23a/UAG_23A_indexed.pdf

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.404.5517&rep=rep1&type=pdf>

<https://www.hfunderground.com/wiki/index.php/Ionosonde>

IonoProbe 1.41

File Download Help

WWW STORM ALERTS Issued 2 hours ago

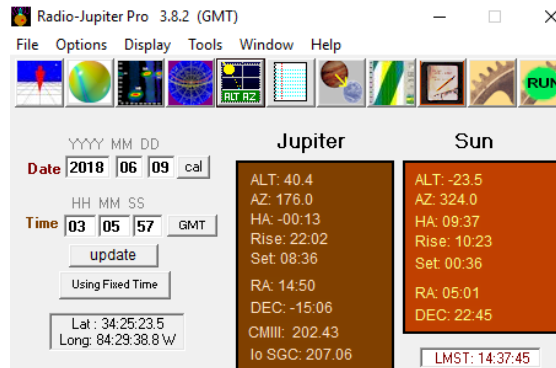
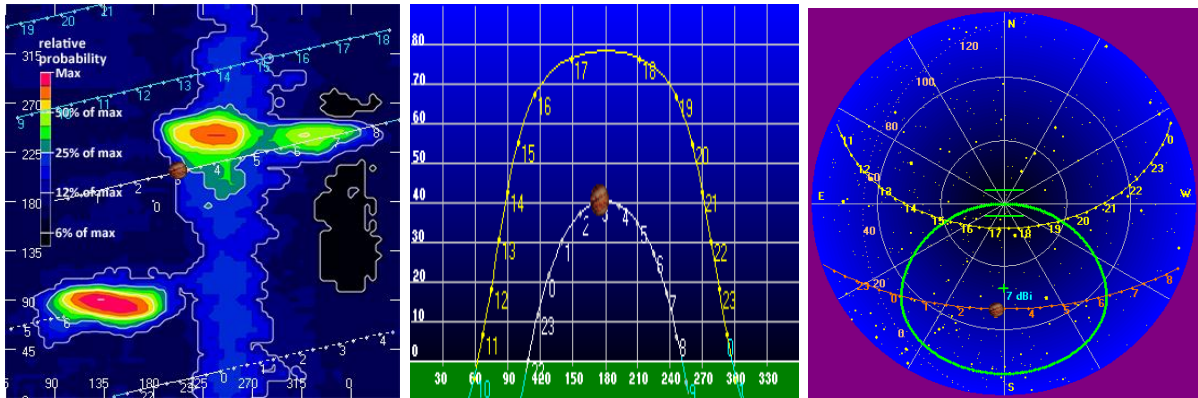
G0 S0 R0 Last 24 h No activity

G0 S0 R0 Next 24 h No activity

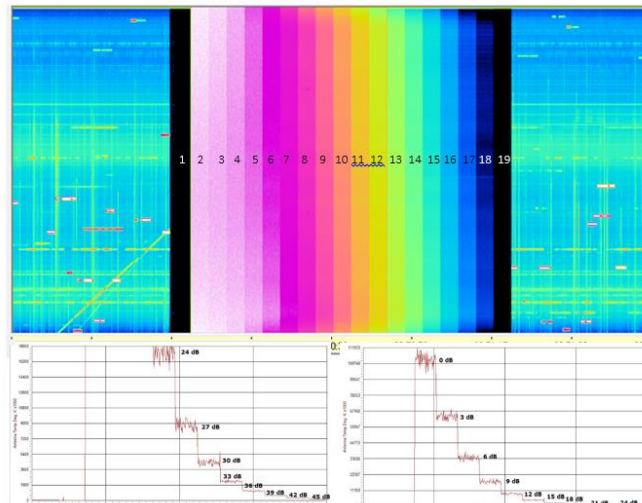
Current SSN 0 Ap 4
90-day SSN 11 Kp 1
Effective SSN -10 Aurora 4
Current SFI 67 Protons 1.5E-1
90-day SFI 71 X-rays 0

SGAS.txt

A. Energetic Events
Begin Max End Rgn Loc Xray Op 245MHz 10cm Sweep
None
B. Proton Events: None.
C. Geomagnetic Activity Summary: The geomagnetic field was quiet to unsettled.
D. Stratwarm: Not Available
E. Daily Indices: (real-time preliminary/estimated values)
10 cm 068 SSN 000 Atr/Ap 005/005 X-ray Background <A1.0
Daily Proton Fluence (flux accumulation over 24 hrs)
GT 1 MeV 7.5e+05 GT 10 MeV 1.9e+04 p/(cm2-ster-day)
(GOES-15 satellite synchronous orbit W135 degrees)
Daily Electron Fluence
GT 2 MeV 7.30e+07 e/(cm2-ster-day)
(GOES-15 satellite synchronous orbit W135 degrees)
3 Hour K-indices:
Boulder 1 3 1 2 3 2 1 2 Planetary 1 3 1 2 2 1 0 1
F. Comments: None.



AUTOMATED COLOR BAR TEST PATTERN AND DATA ACTUAL MEASURED DATA



STEP	TEMPERATURE	ATTENUATION
1	>1 kK	101 dB
2	104.0 MK	0 dB
3	66.9 MK	3 dB
4	36.3 MK	6 dB
5	19.1 MK	9 dB
6	9.6 MK	12 dB
7	4.5 MK	15 dB
8	2.3 MK	18 dB
9	1.2 MK	21 dB
10	602.0 kK	24 dB
11	296.6 kK	27 dB
12	133.0 kK	30 dB
13	92.2 kK	33 dB
14	51.6 kK	36 dB
15	32.0 kK	39 dB
16	22.6 kK	42 dB
17	17.9 kK	45 dB
18	12.0 kK	48 dB
19	>1 kK	101 dB