

K4LED

Georgia Amateur Radio Astronomy Observatory

Observation Date: 06-16-2018, 0:00:00 to 23:59:00 UTC

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

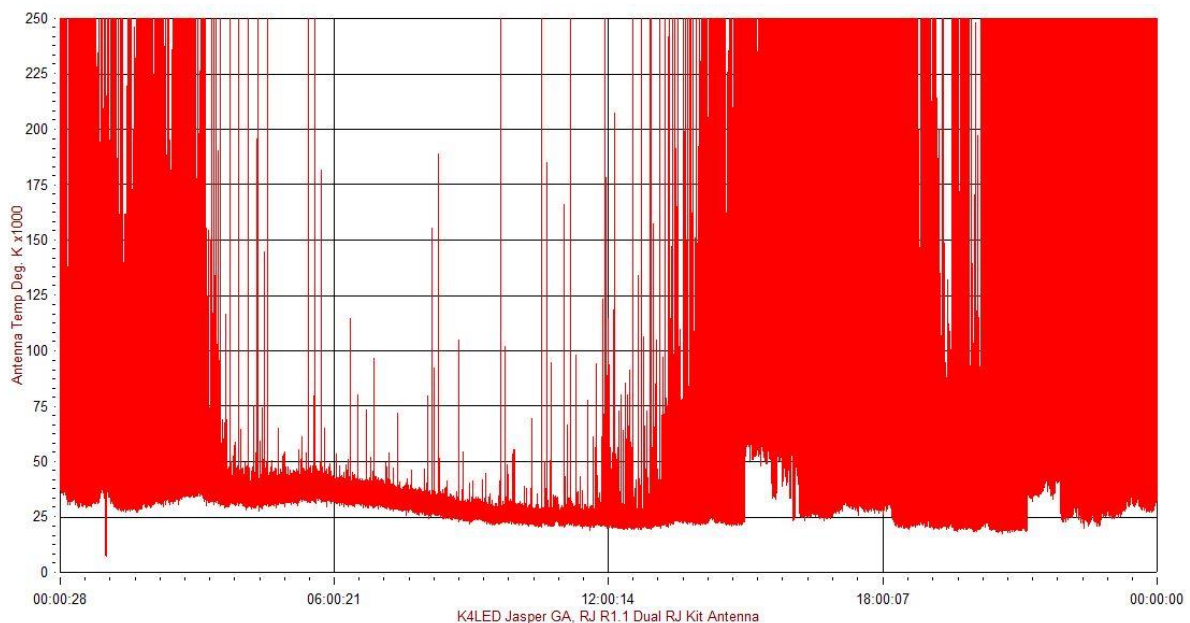
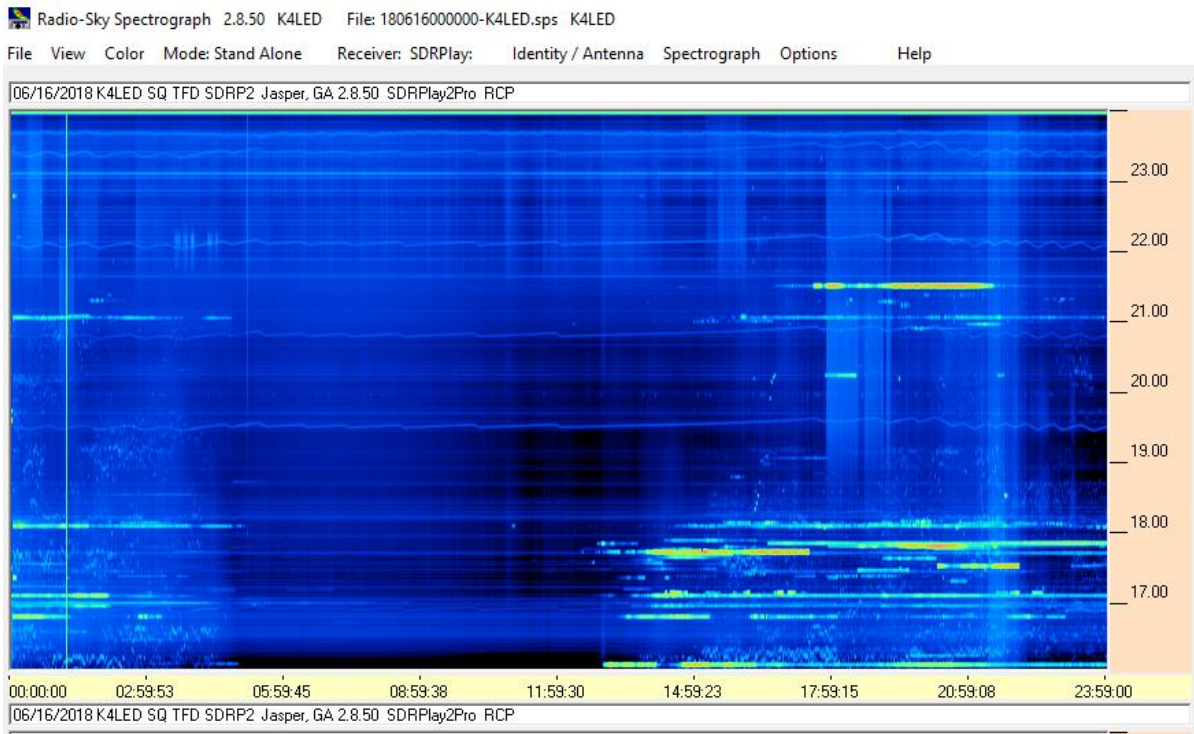
Object: TP, GB, Non-IO-A

Observer: Larry E. Dodd

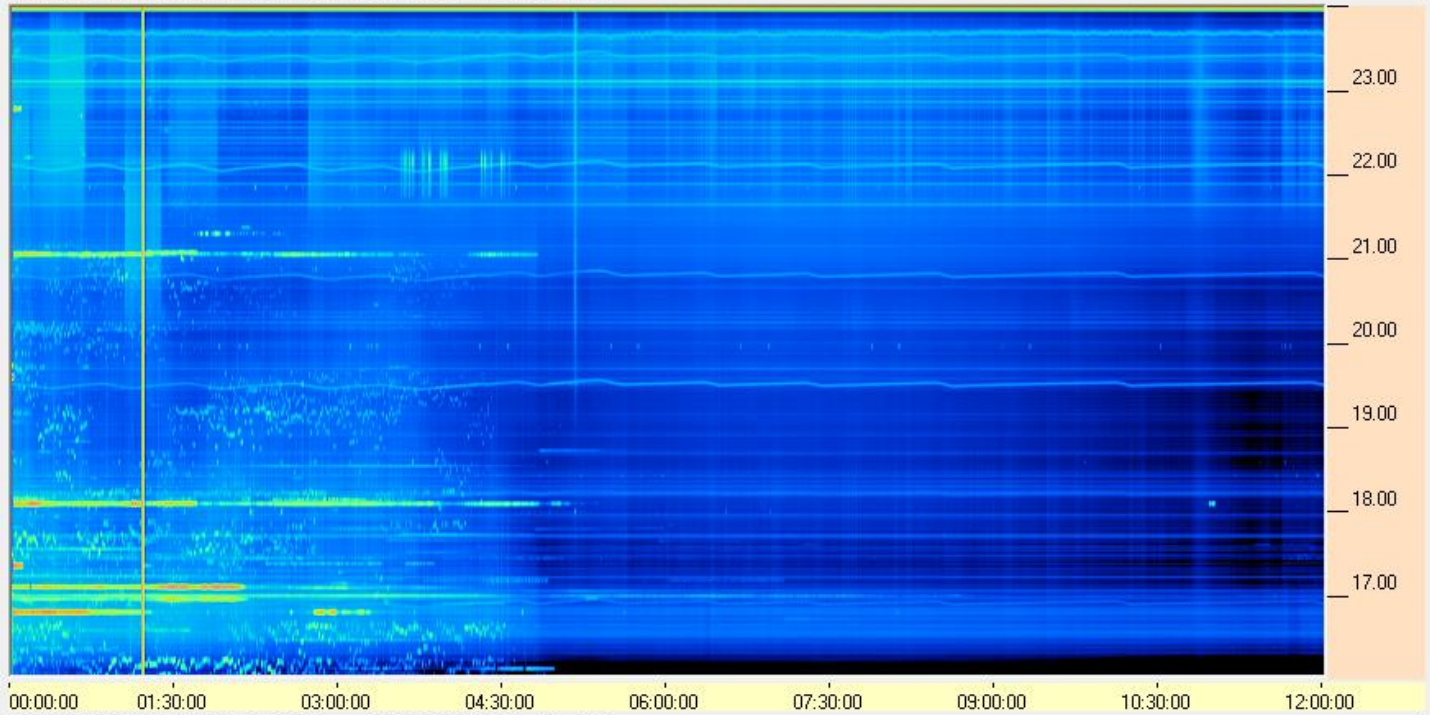
Receivers: FSX11, SDRPlay2PRO, RJ1.1

Software: SkypipeII 2.7.34, Spectrograph 2.8.50

Antennas: Radio Jove Dual Dipole Kit, Typinski Square TFD

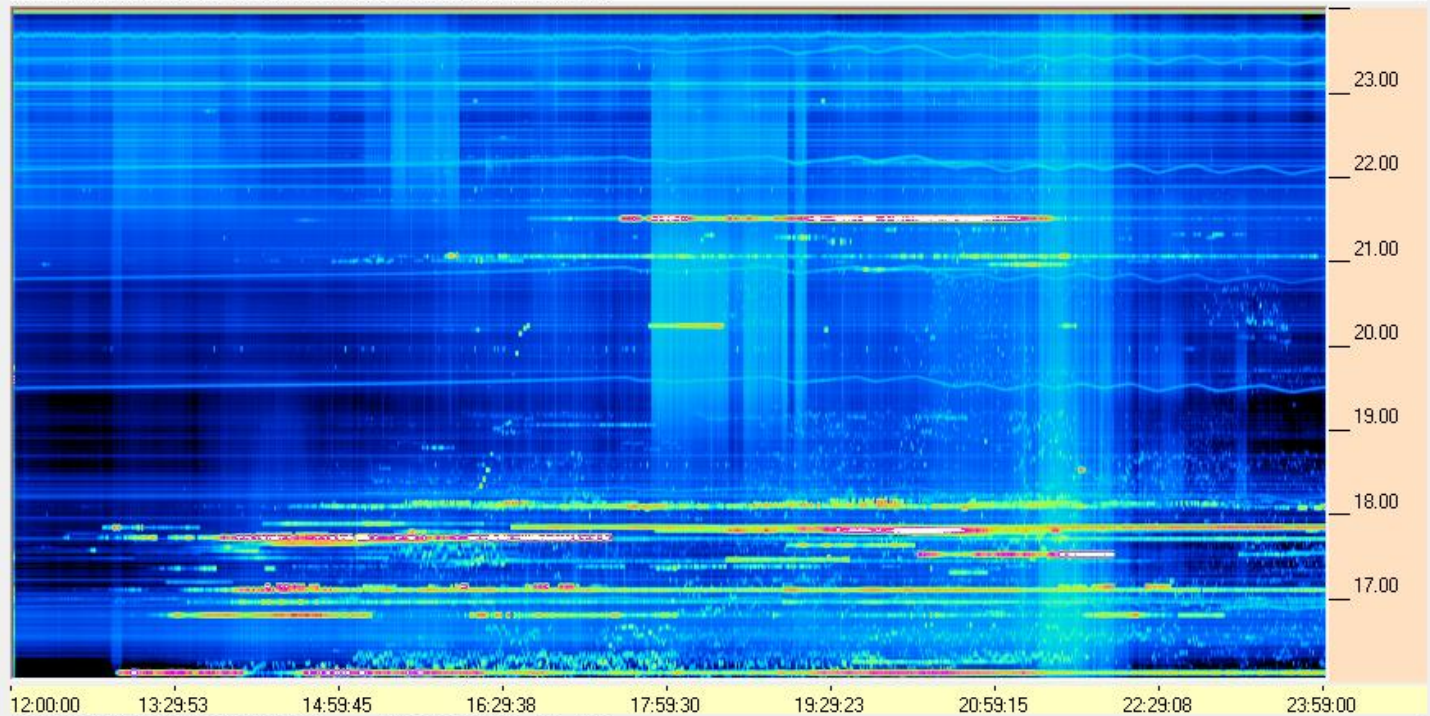


06/16/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



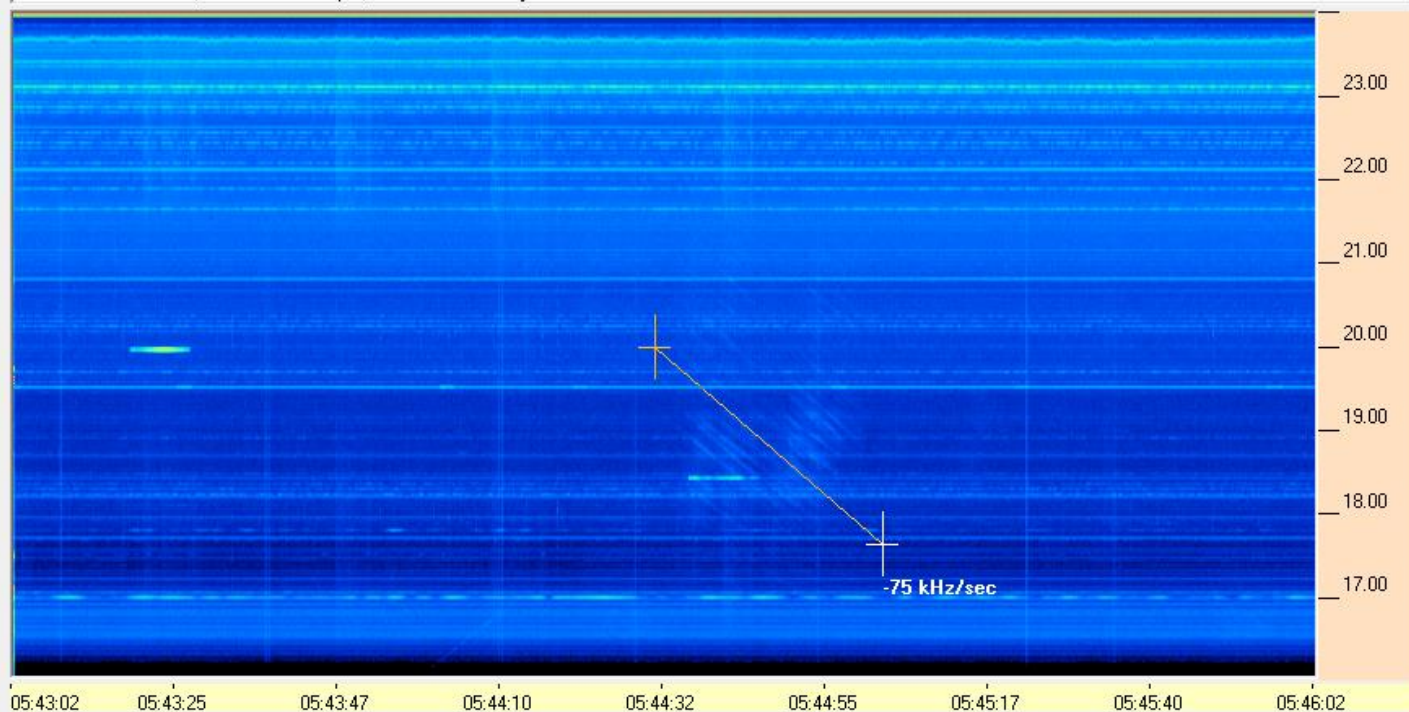
06/16/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP

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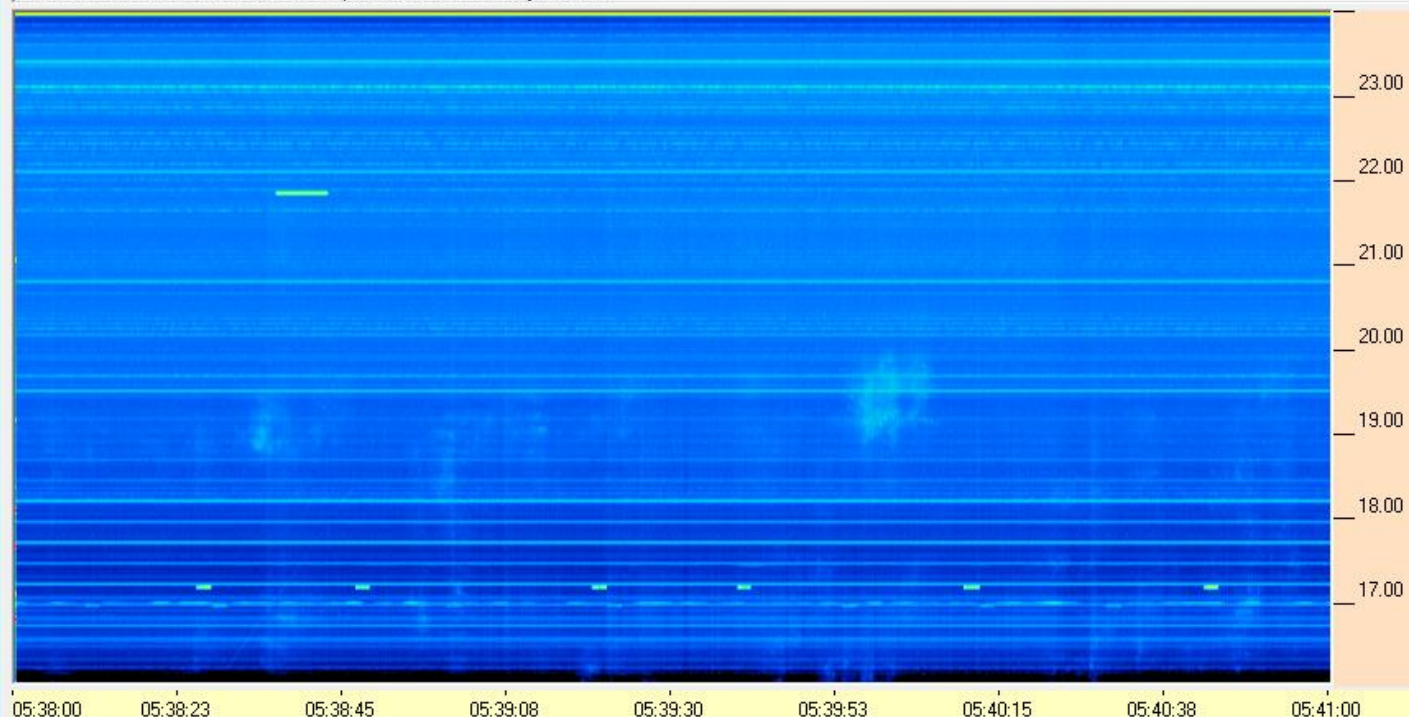
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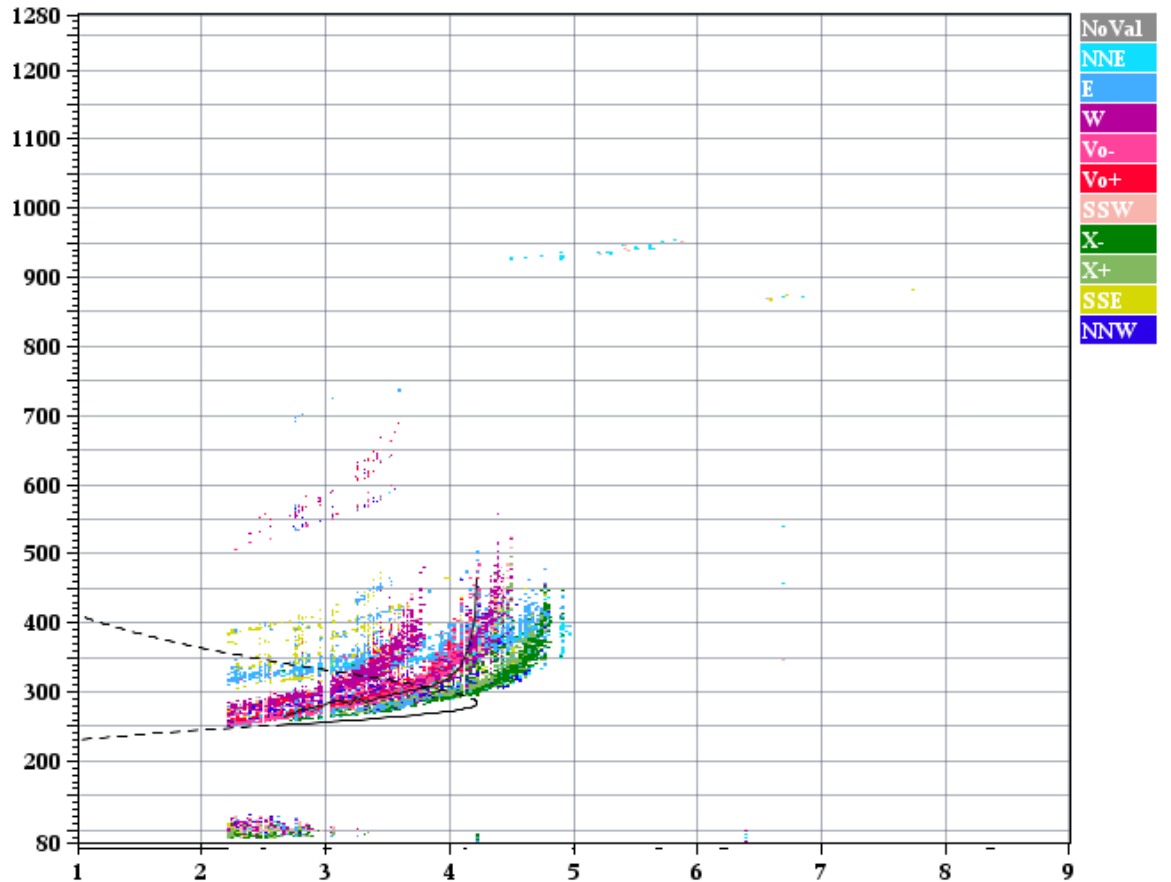


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Station YYYY DAY DDD HHMMSS P1 FFS S AXN PPS IGA PS
Eglin AFB 2018 Jun16 167 054500 RSF 005 2 714 100 03+ 8A

foF2 4.225
foF1 N/A
foF1p N/A
foE N/A
foEp 0.38
fxI 4.95
foEs N/A
fmin 2.68
MUF(D) 14.13
M(D) 3.34
D N/A
h`F 265.0
h`F2 265.0
h`E N/A
h`Es N/A
hmF2 283.7
hmF1 N/A
hmE 110.0
yF2 39.3
yF1 N/A
yE 20.0
B0 38.1
B1 2.33
C-level 44
Auto:
Artist5
500200



D 100 200 400 600 800 1000 1500 3000 [km]
MUF 4.8 4.9 5.1 5.4 5.9 6.7 8.7 14.1 [MHz]
56051110.tmp / 320fx512h 25 kHz 2.5 km / DPS-4D EG931 084 / 30.5 N 273.5 E

ShowIonogram v 1.0

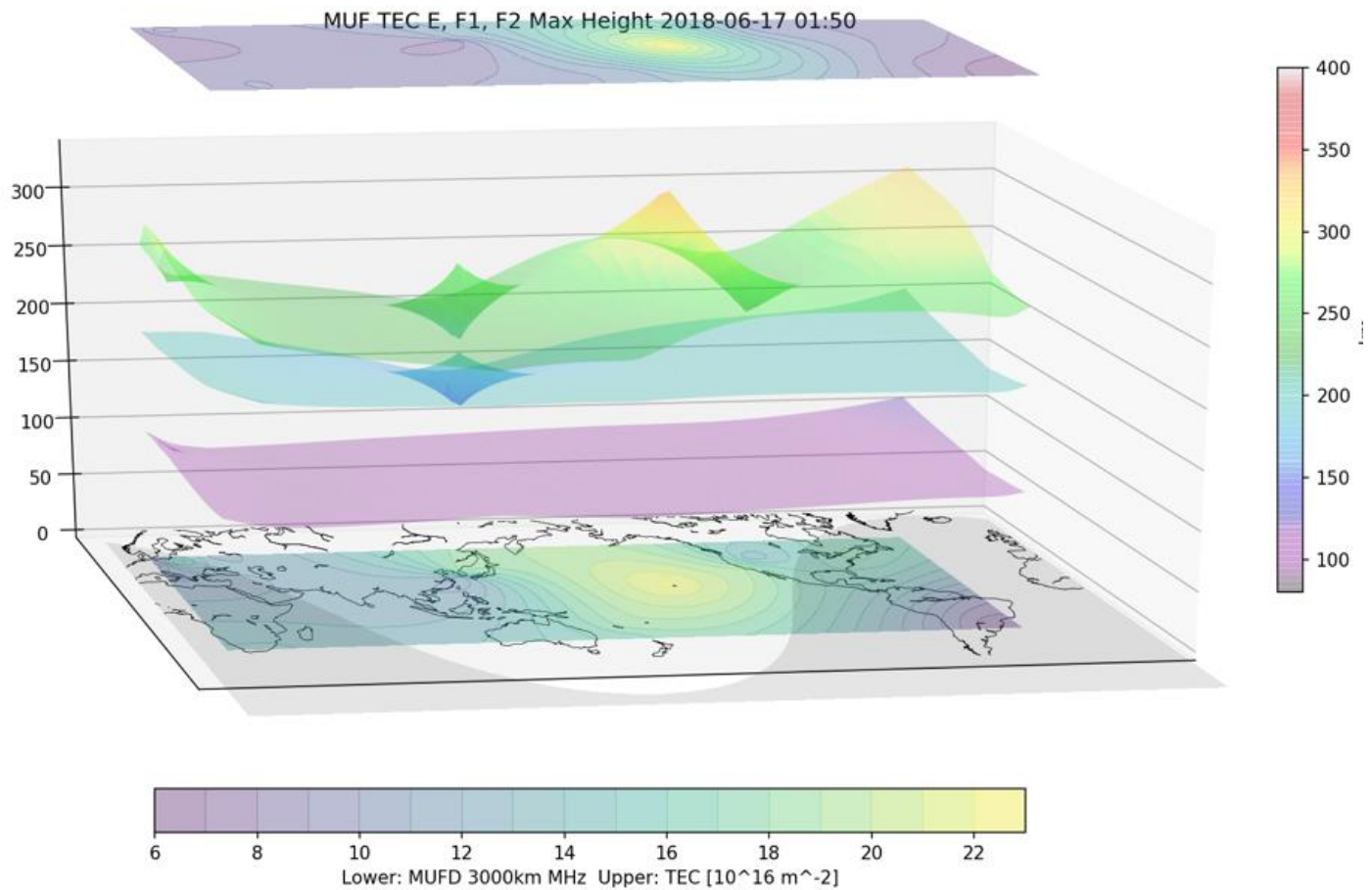
References for Interpreting the Ionogram:

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

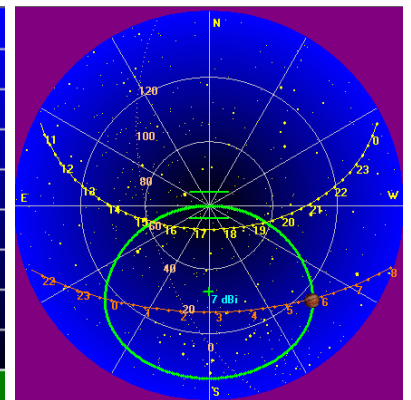
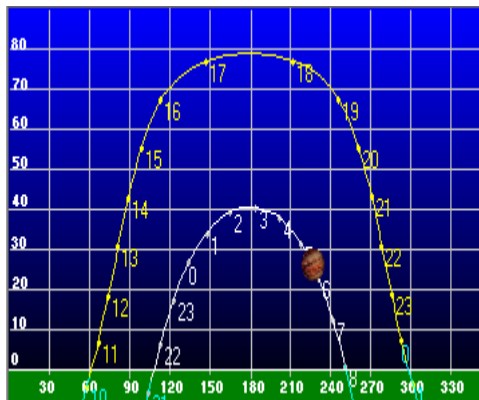
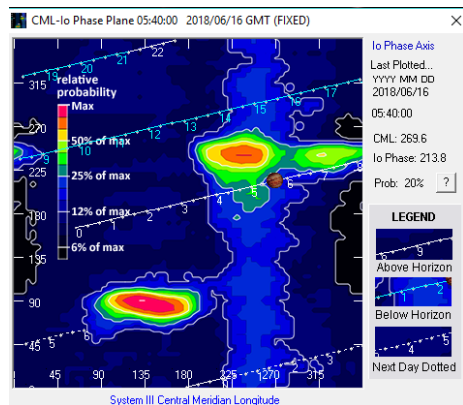
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.404.5517&rep=rep1&type=pdf>

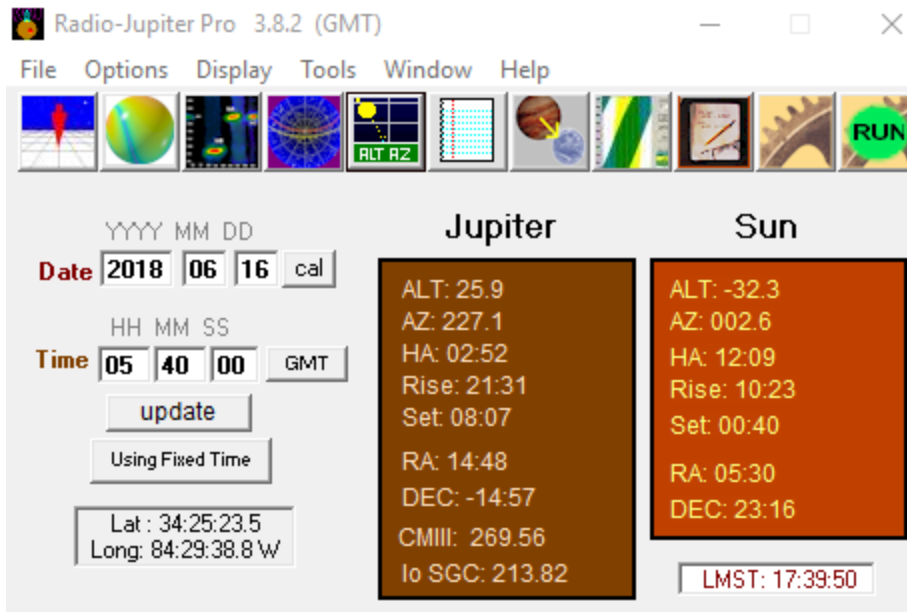
<https://www.hfunderground.com/wiki/index.php/Ionosonde>

Ionosphere Layers, MUF, Total Electron Content

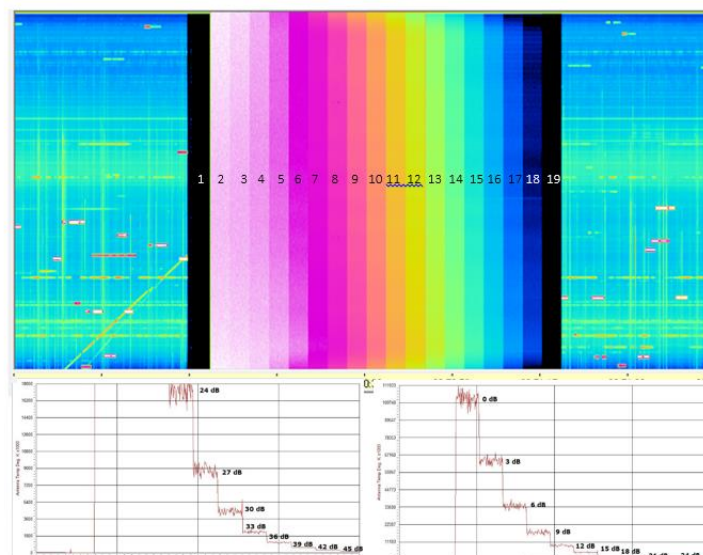


Data Global Ionospheric Radio Observatory (GIRO) Principal Investigator Prof. B. W. Reinisch UMass Lowell





AUTOMATED CALIBRATION 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