

K4LED

Georgia Amateur Radio Astronomy Observatory

Observation Date: 06-14-2018, 0:00:00 to 23:59:00 UTC

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

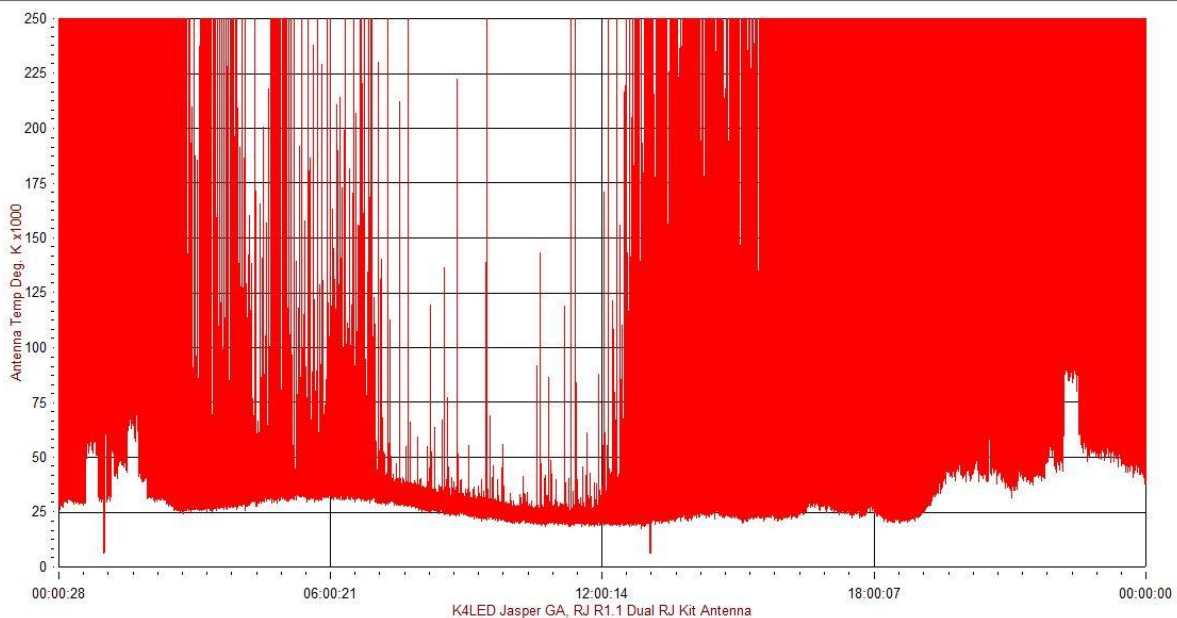
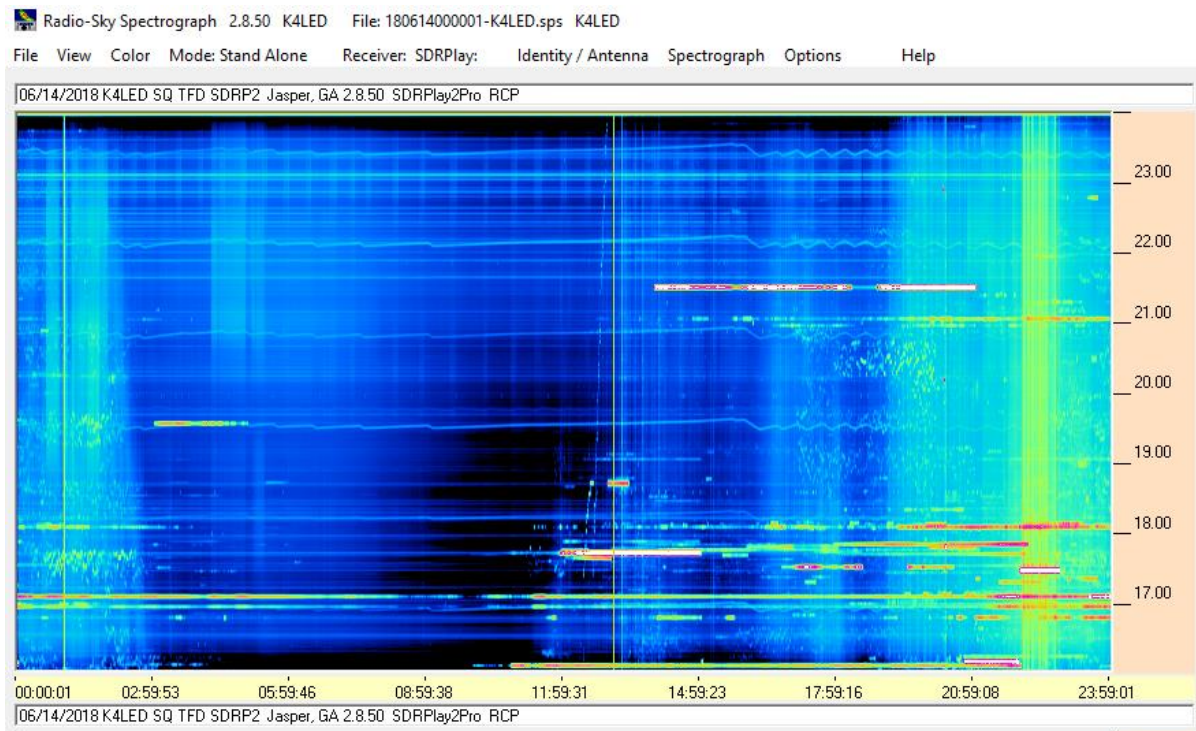
Object: TP, GB

Observer: Larry E. Dodd

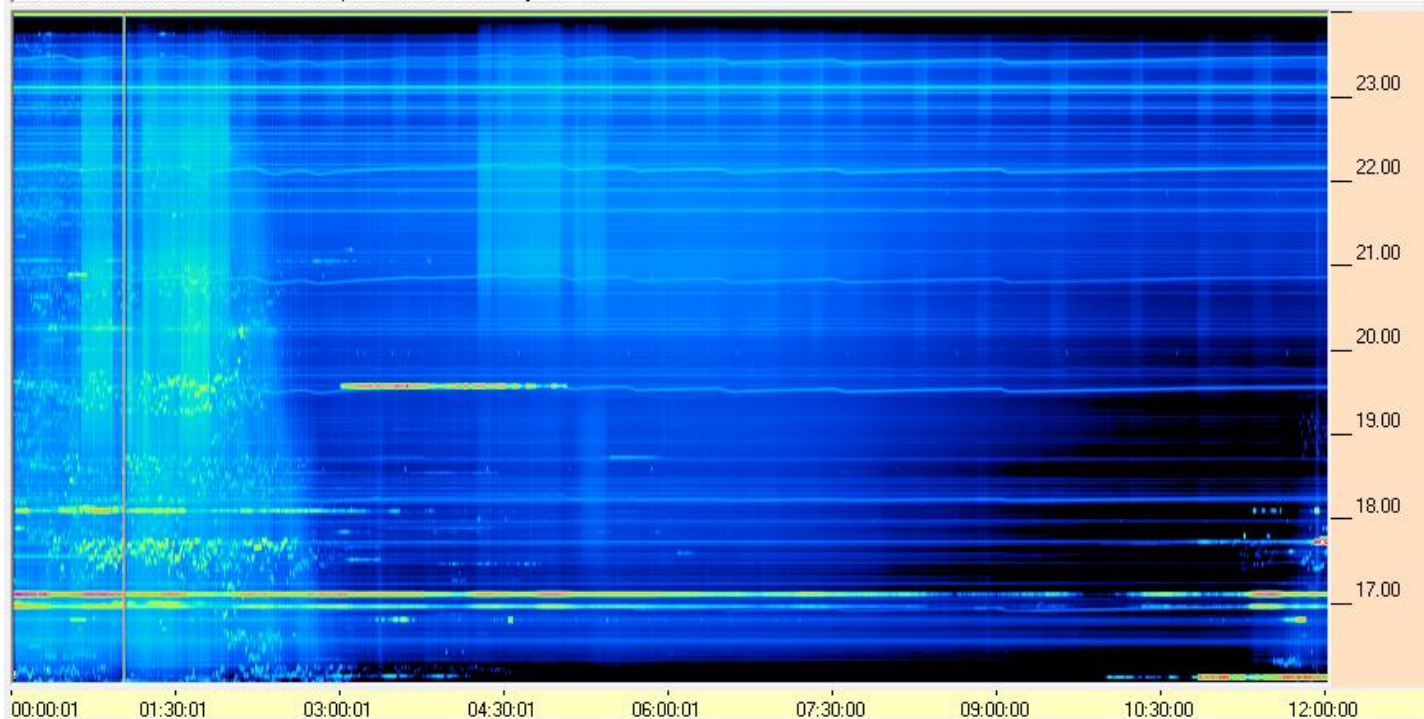
Receivers: FSX11, SDRPlay2PRO, RJ1.1

Software: SkypipeII 2.7.34, Spectrograph 2.8.50

Antennas: Radio Jove Dual Dipole Kit, Typinski Square TFD

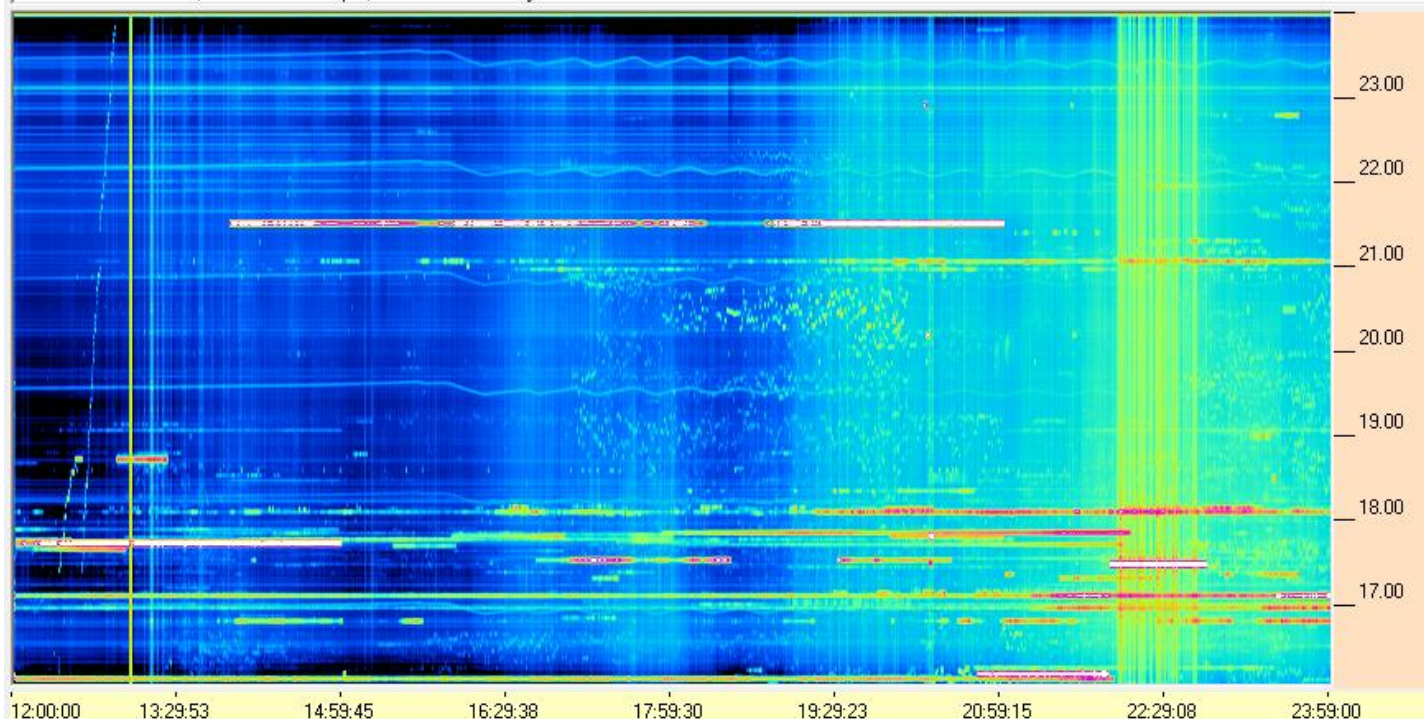


06/14/2018 K4LED SQ TFD SDRP2 Jasper, GA 2.8.50 SDRPlay2Pro RCP



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Station YYYY DAY DDD HHMMSS P1 FFS S AXN PPS IGA PS
Eglin AFB 2018 Jun15 166 014500 RSF 1 713 100 03+ 79

foF2 8.050
foF1 N/A
foF1p N/A
foE N/A
foEp 0.50
fxI 8.75
foEs 3.85
fmin 2.33

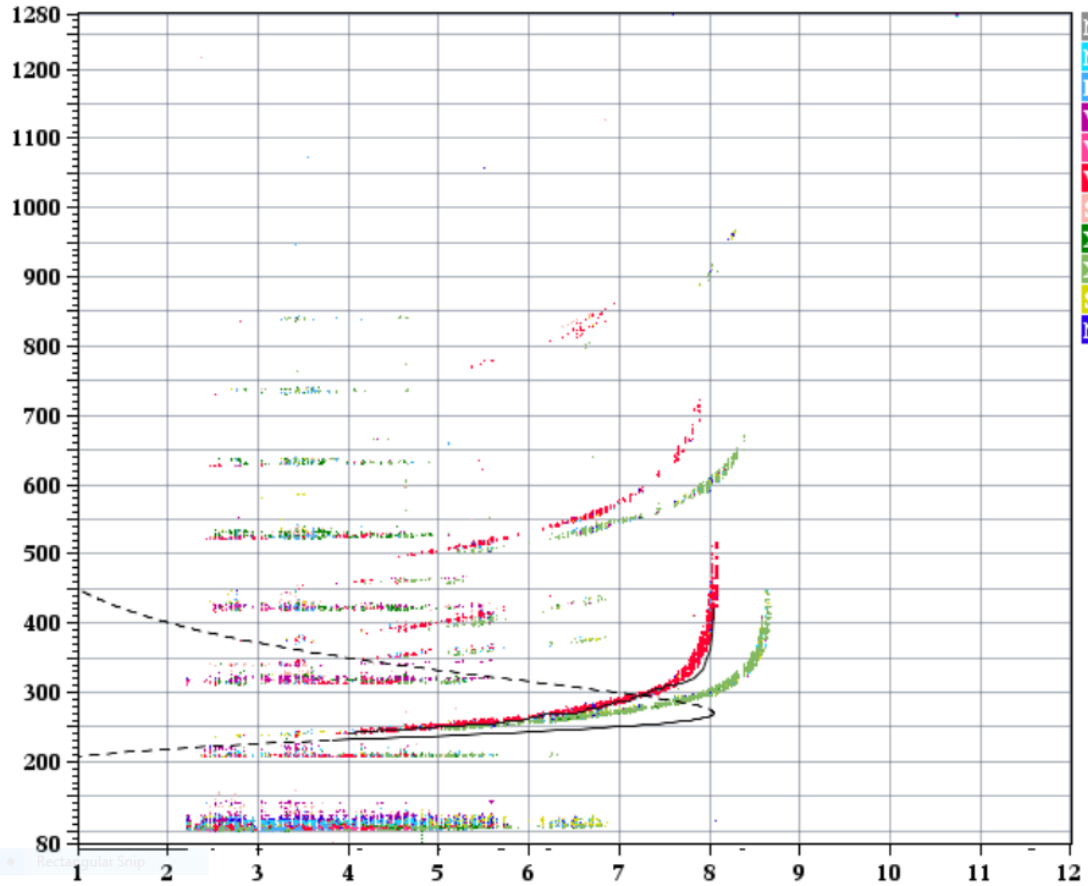
MUF(D) 27.51
M(D) 3.42
D N/A

h'F 240.0
h'F2 240.0
h'E N/A
h'Es 100.0

hmF2 269.8
hmF1 N/A
hmE 110.0
yF2 41.0
yF1 N/A
yE 20.0
B0 38.2
B1 2.68

C-level 11

Auto:
Artist5
500200



D 100 200 400 600 800 1000 1500 3000 [km]
MUF 8.7 8.8 9.2 9.9 10.9 12.4 16.6 27.5 [MHz]
71447081.tmp / 440fx512h 25 kHz 2.5 km / DPS-4D EG931 084 / 30.5 N 273.5 E

ShowIonogram v 1.0

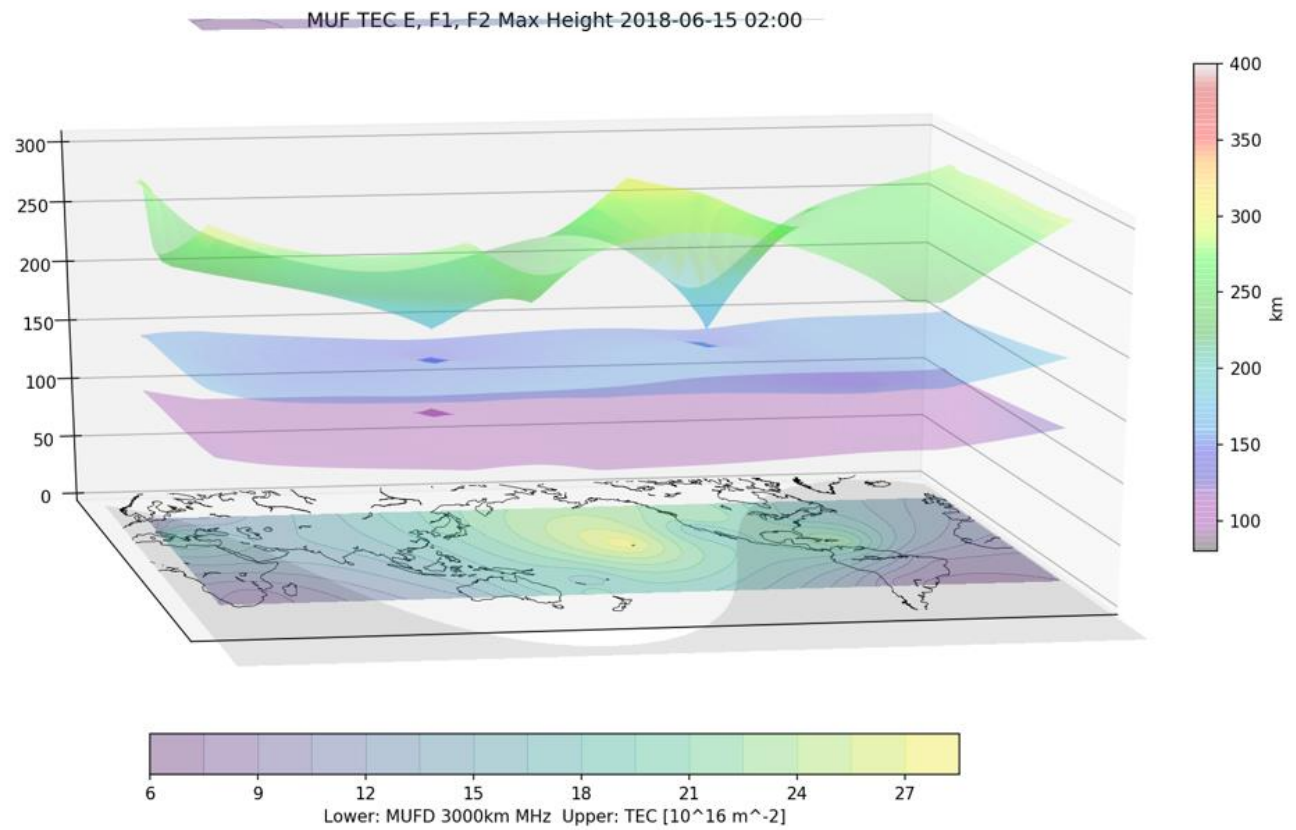
References for Interpreting the Ionogram:

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>

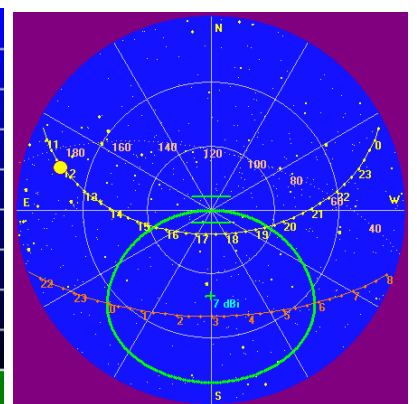
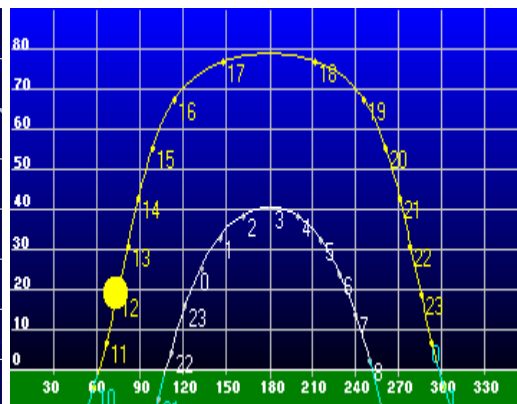
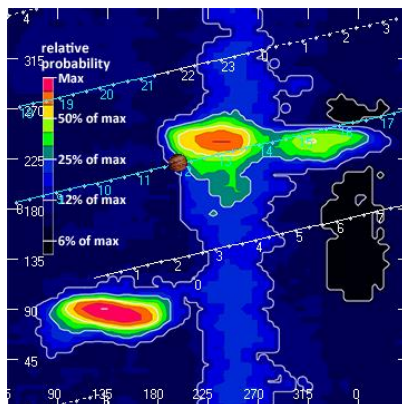
Ionosphere Layers, MUF, Total Electron Content

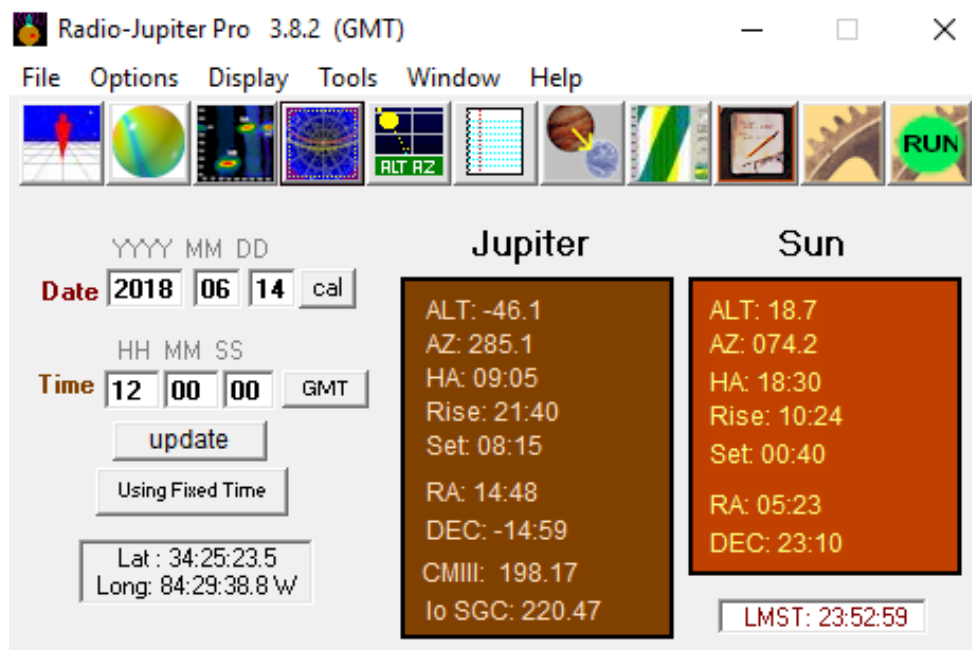


Data Global Ionospheric Radio Observatory (GIRO) Principal Investigator Prof. B. W. Reinisch UMass Lowell

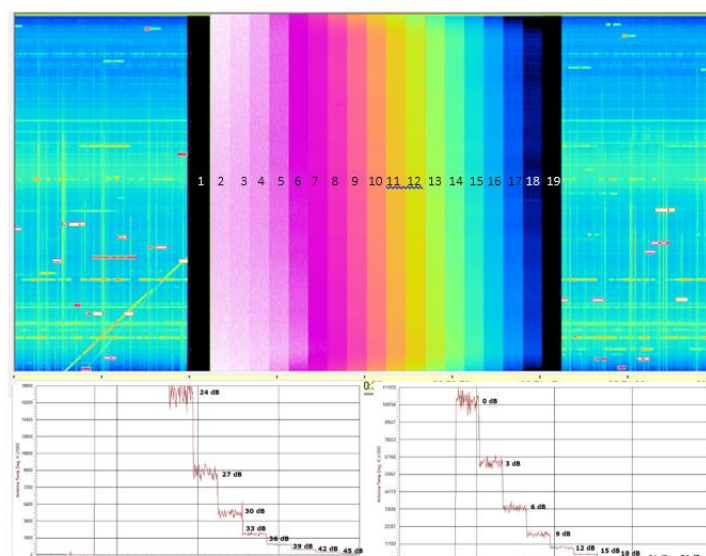
Rectangular Snip

Maximum Usable Frequency Last 24hrs





**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