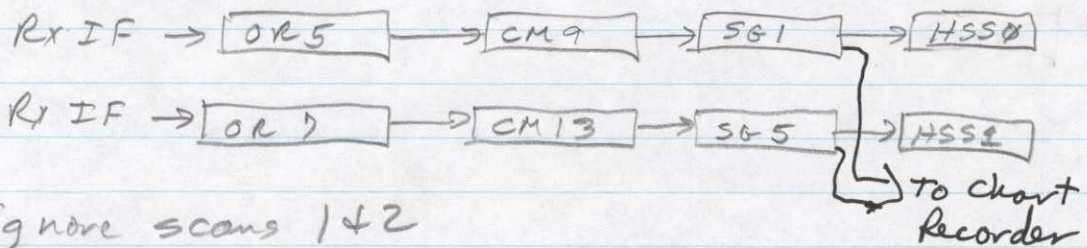


11/8/02

ID: TRDN11-08-02

Setting up w/ K band in Equipment Room. Have chart recorder running on AF Rack TP monitors in parallel.



Ignore scans 1 & 2

Using $\tau = 20s$, $T = 300s$, Sw Period 5s.

Chs R4, L4 @ 22GHz

Scan 3 st @ 12:54:23

12 fi @ 13:45:10

Chs R3, L3

Scan 13 st @ 13:49:28

20 fi @ 14:30:04

Chs R1, L1 @ 20GHz

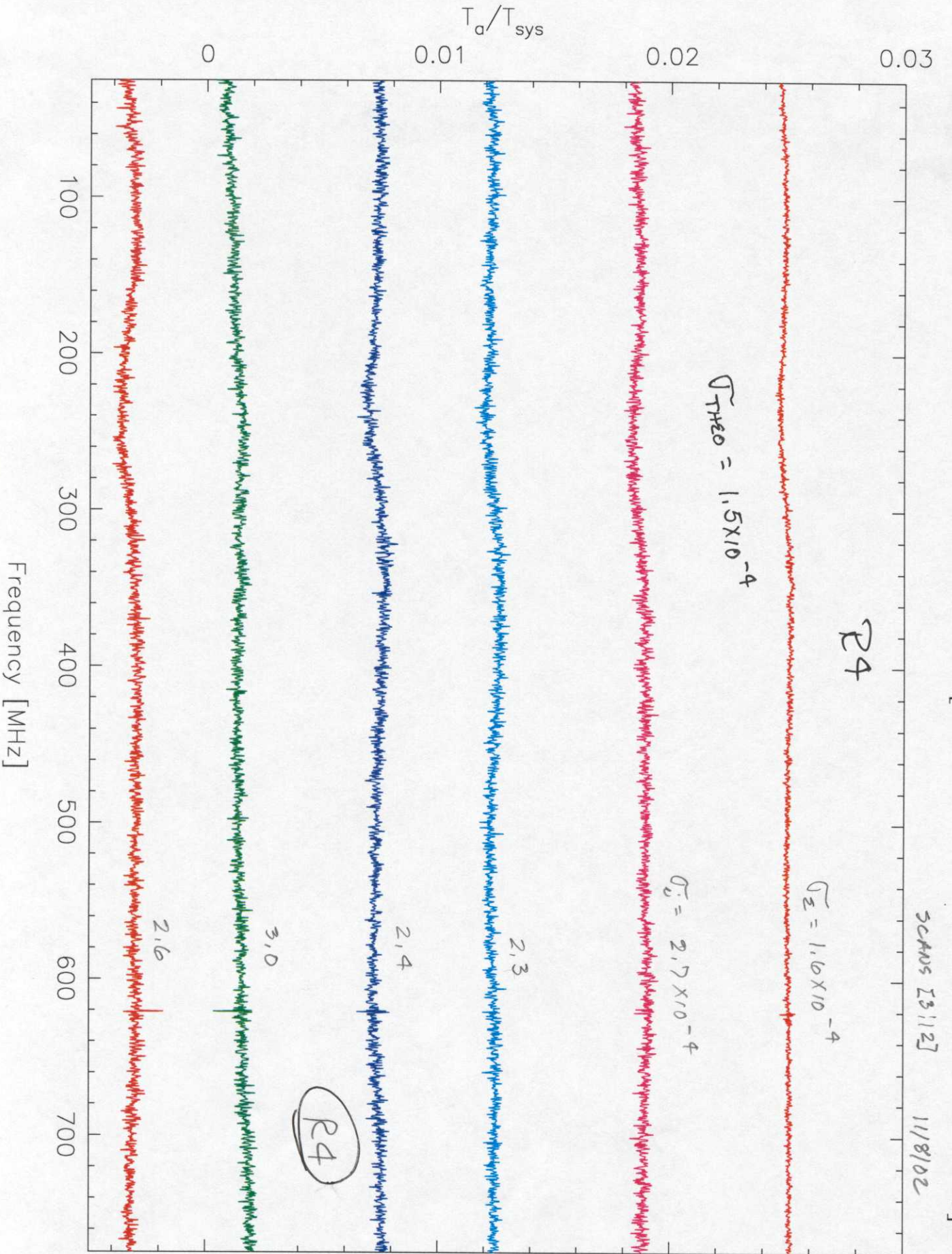
Scan 21 st @ 14:34:47

28 fi @ 15:15:23

Chs R2, L2

Scan 29 st @ 15:20:11

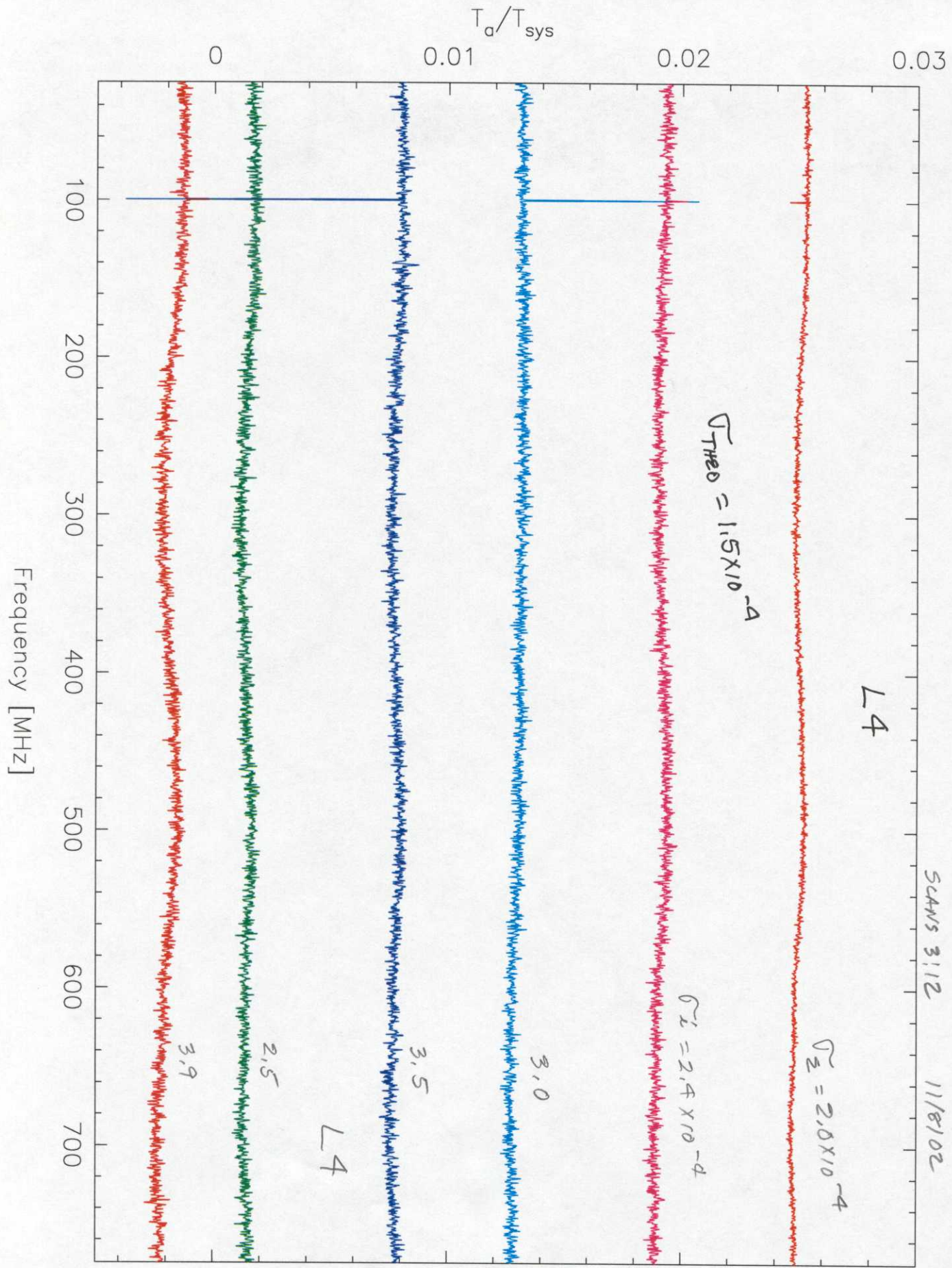
Analysis of data follows. TP fluctuations ~~and~~ meas w/ spectrometer and with chart recorder agree as best as can be determined. However, appears noticeably worse than 11/07/02 tests just at Rx IF output ports. Points to stability problems in Converter and/or AF Racks.



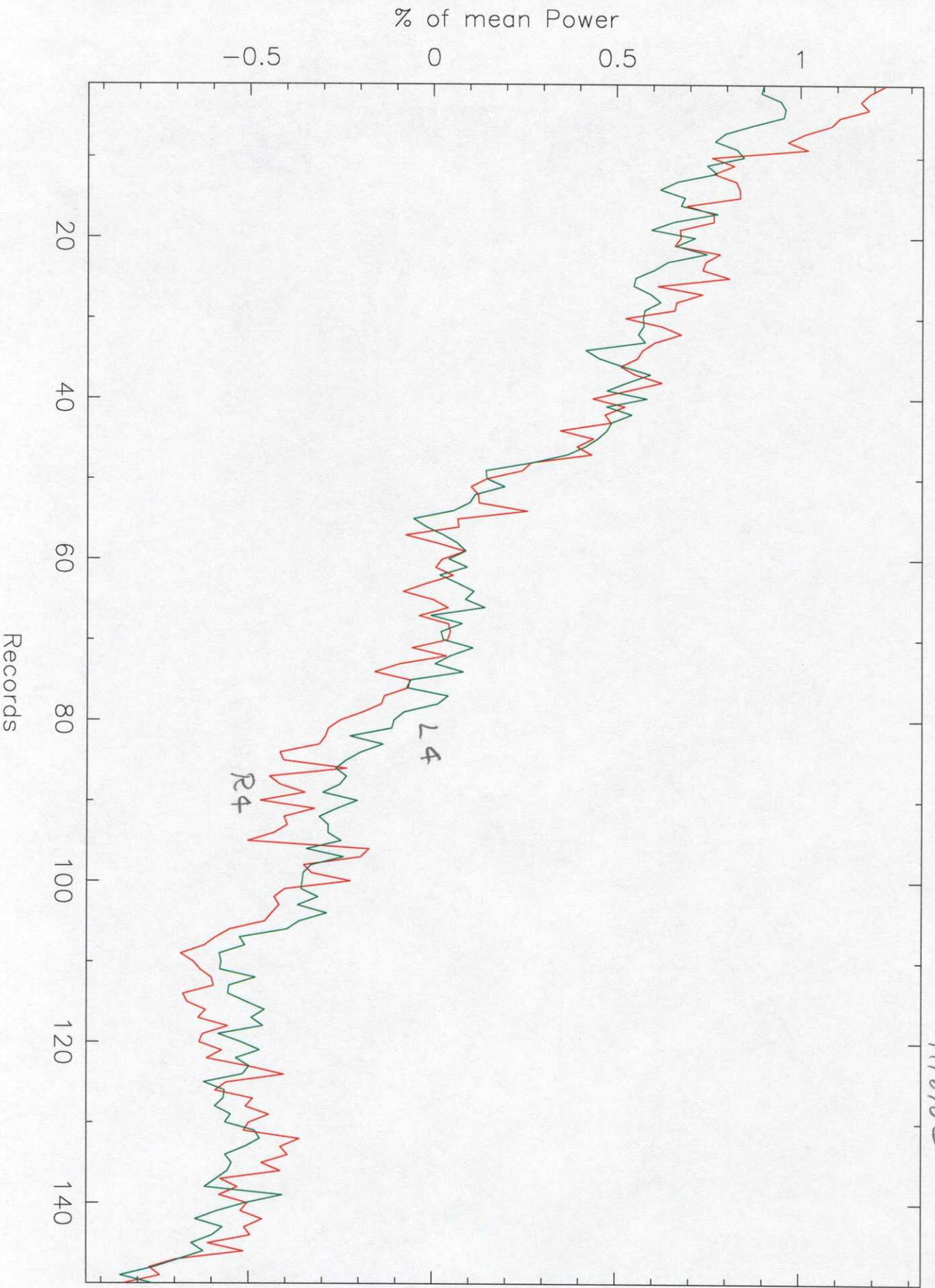
SCANS 312

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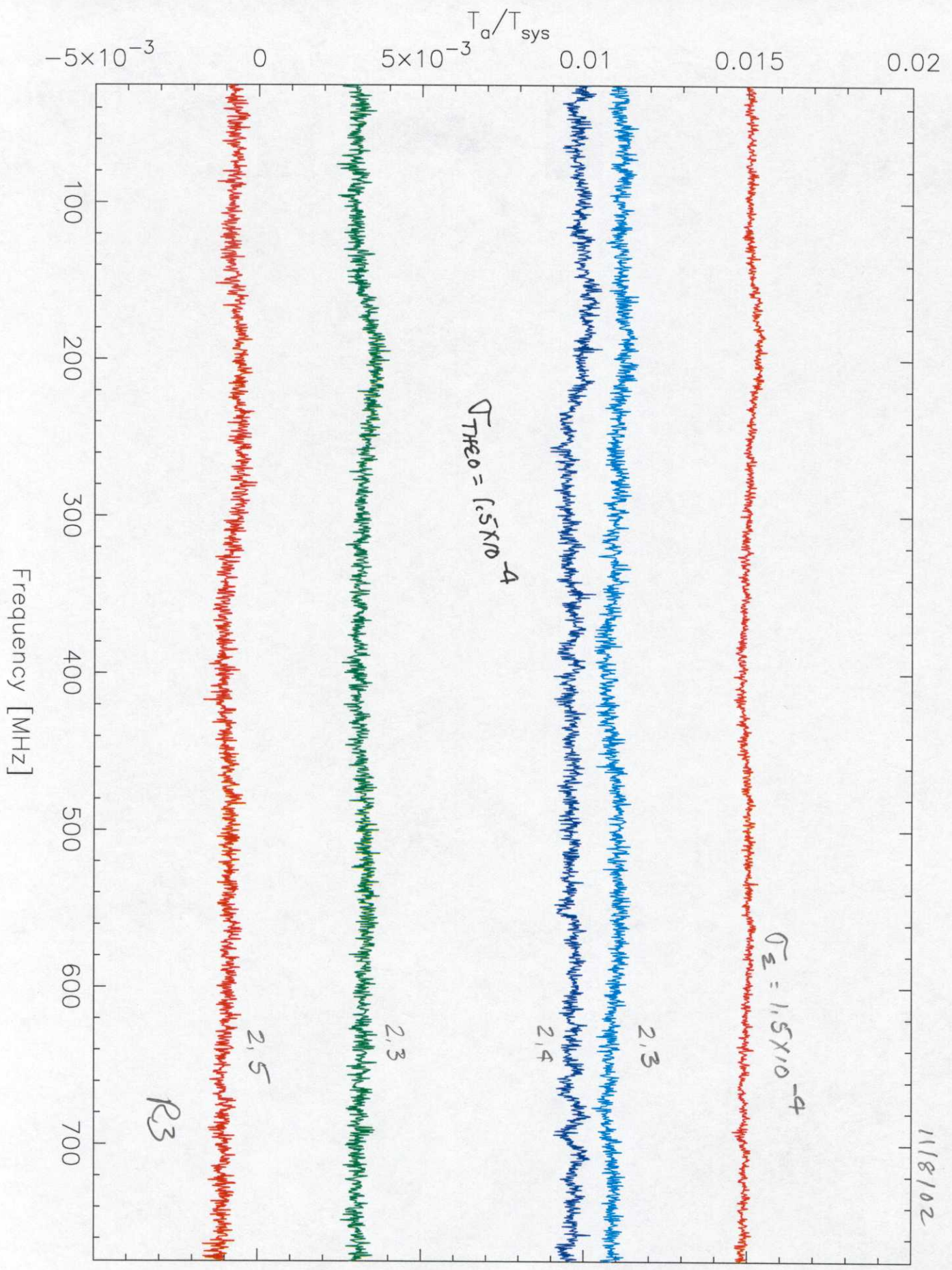
L4



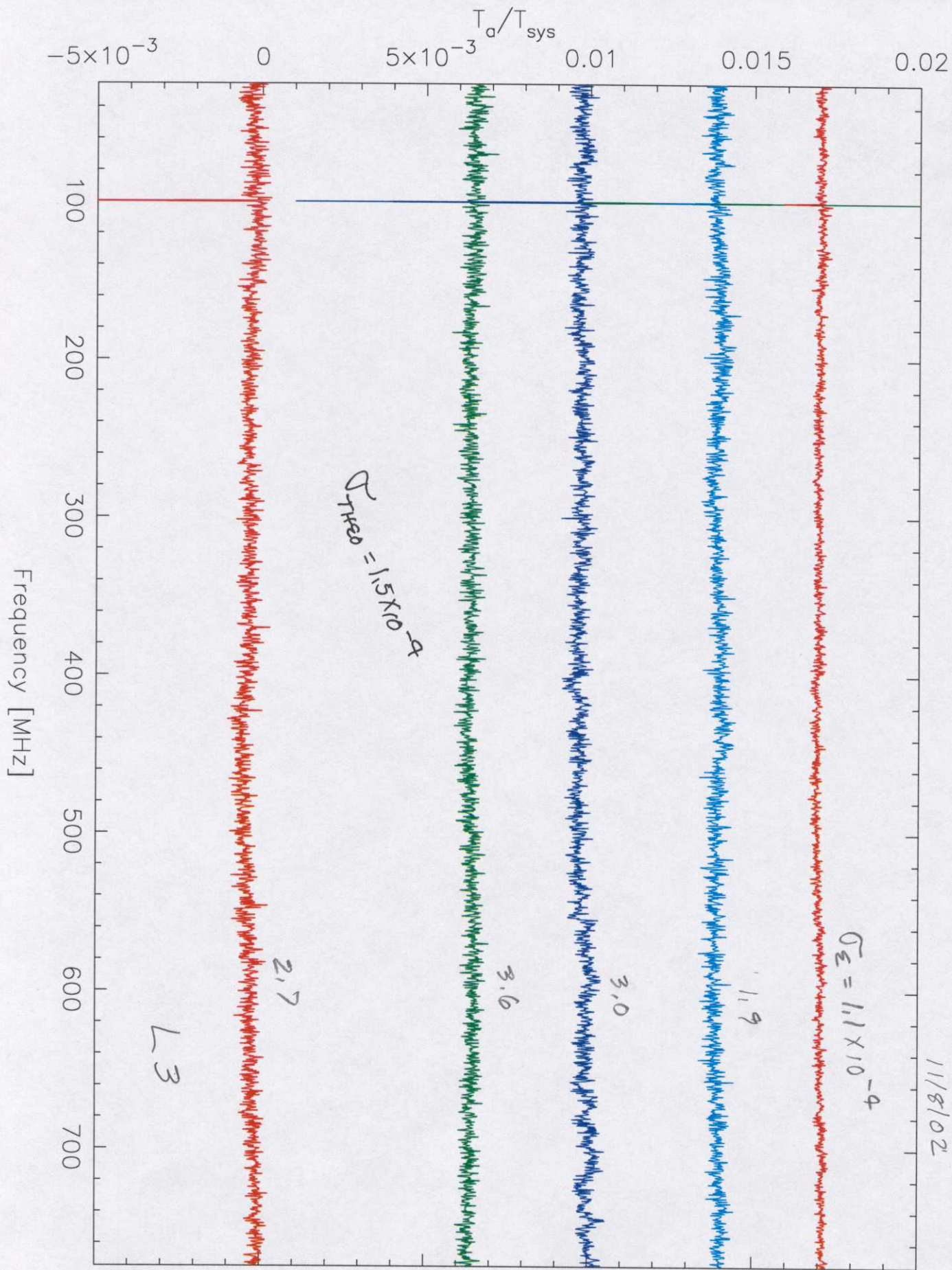
11/8/02

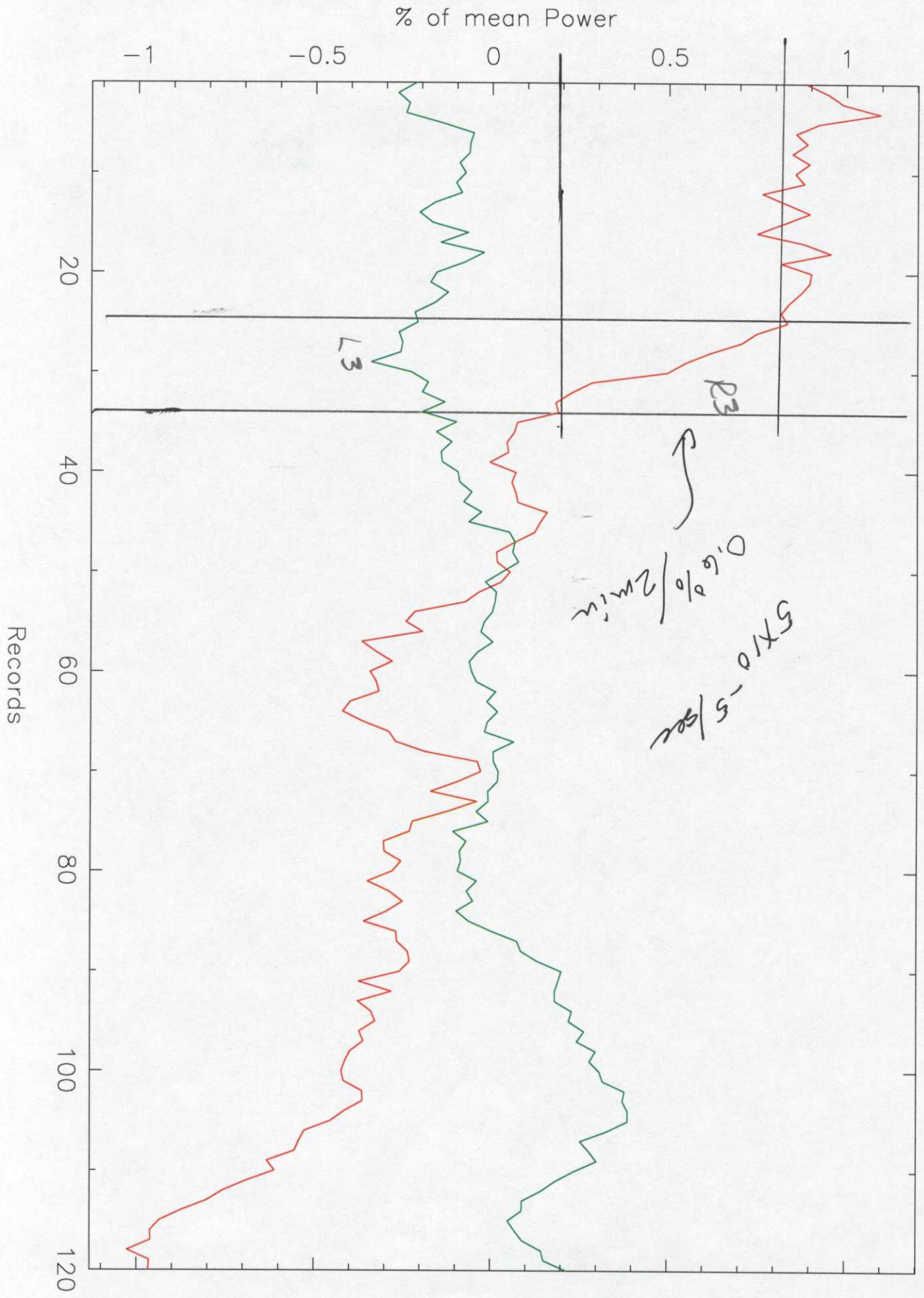


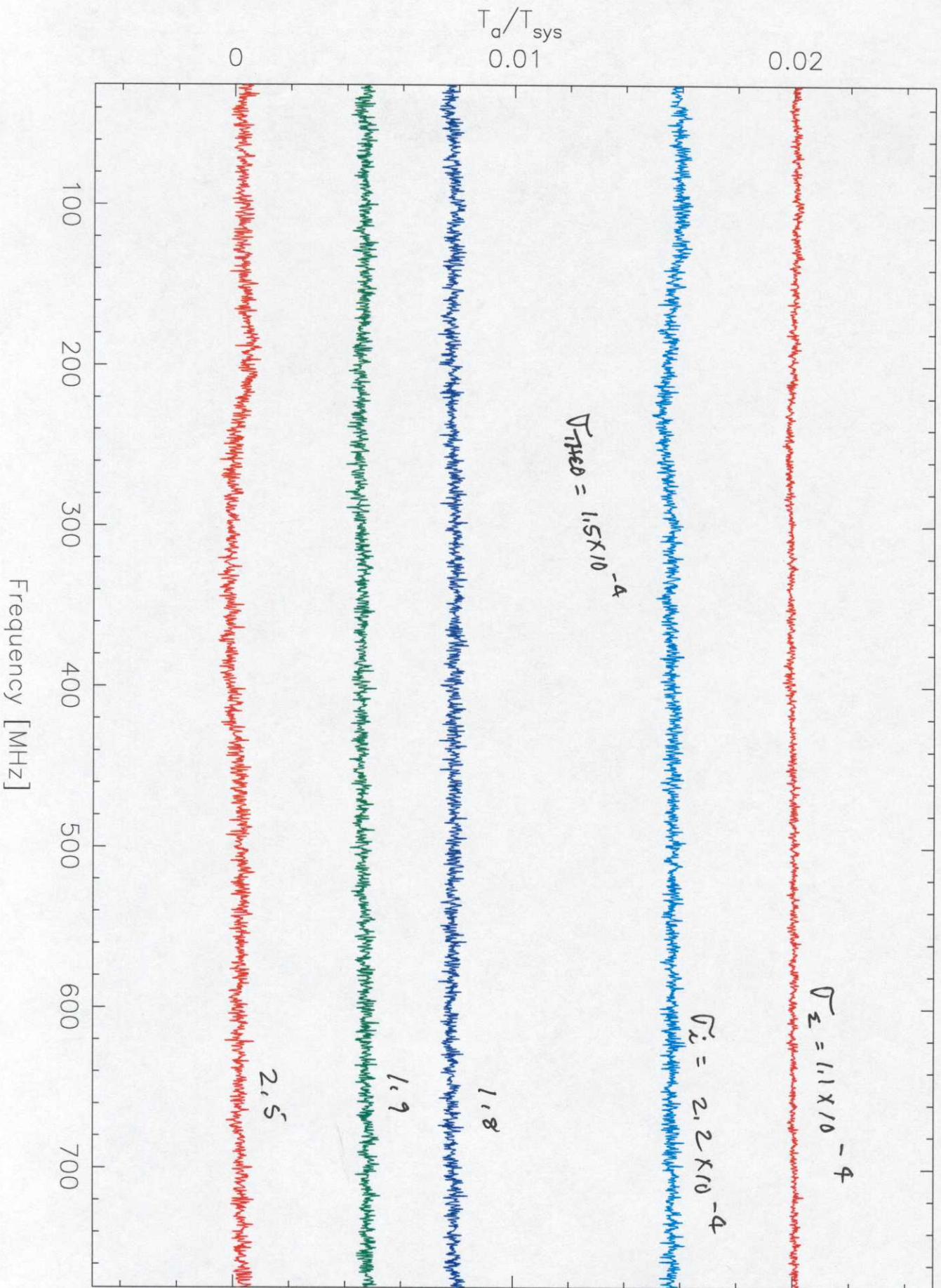
11/8/02



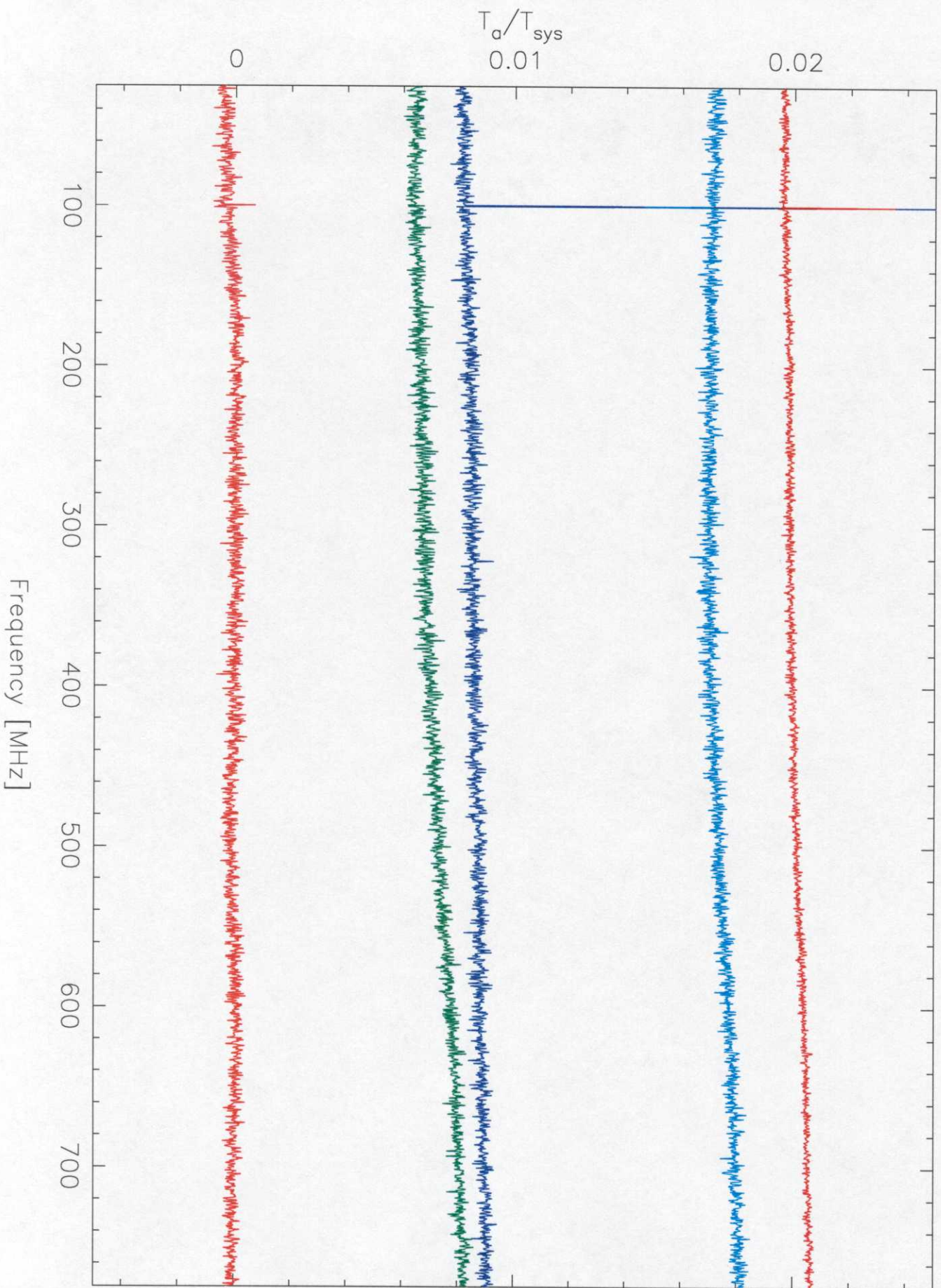
11/8/02

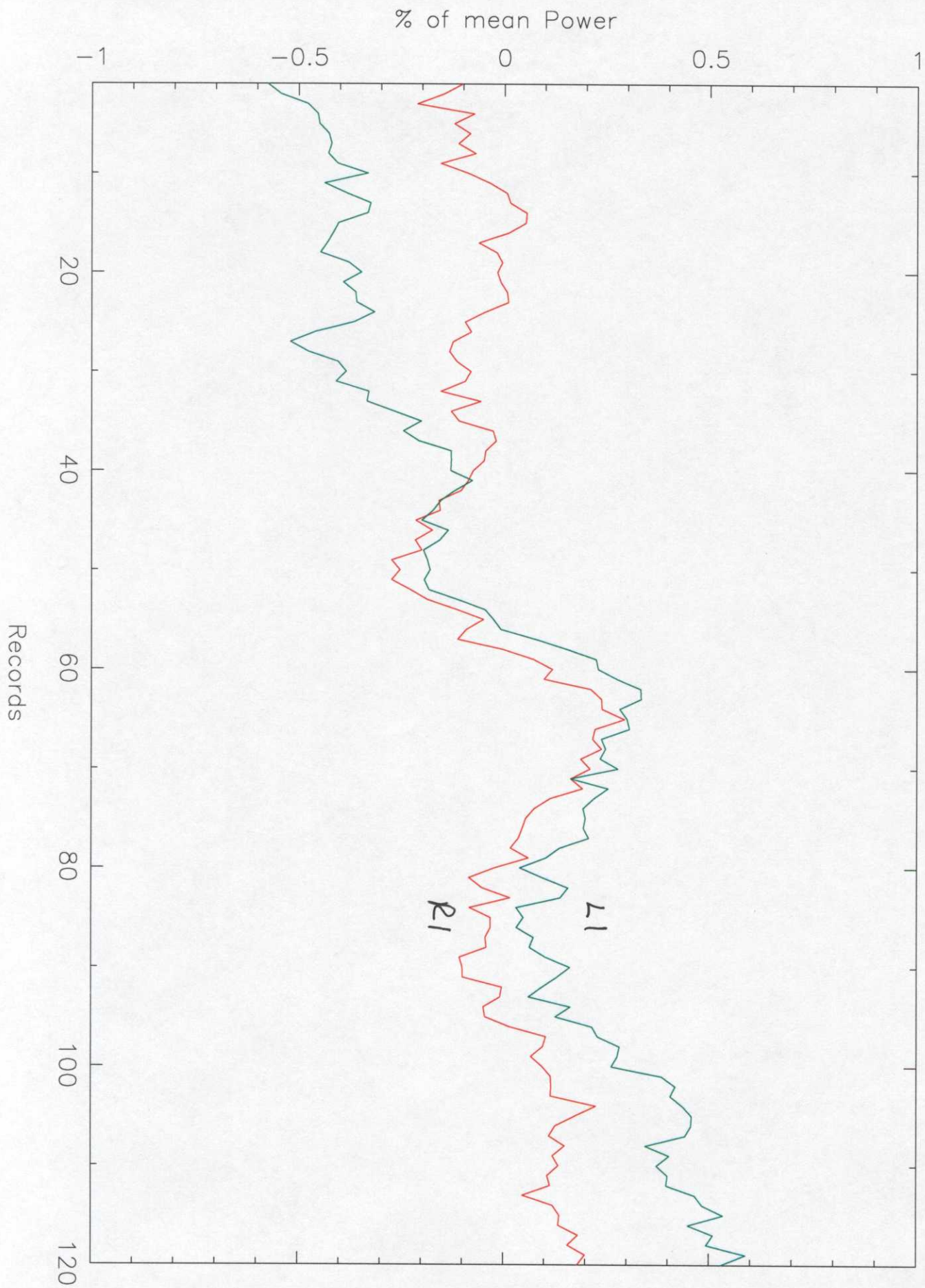




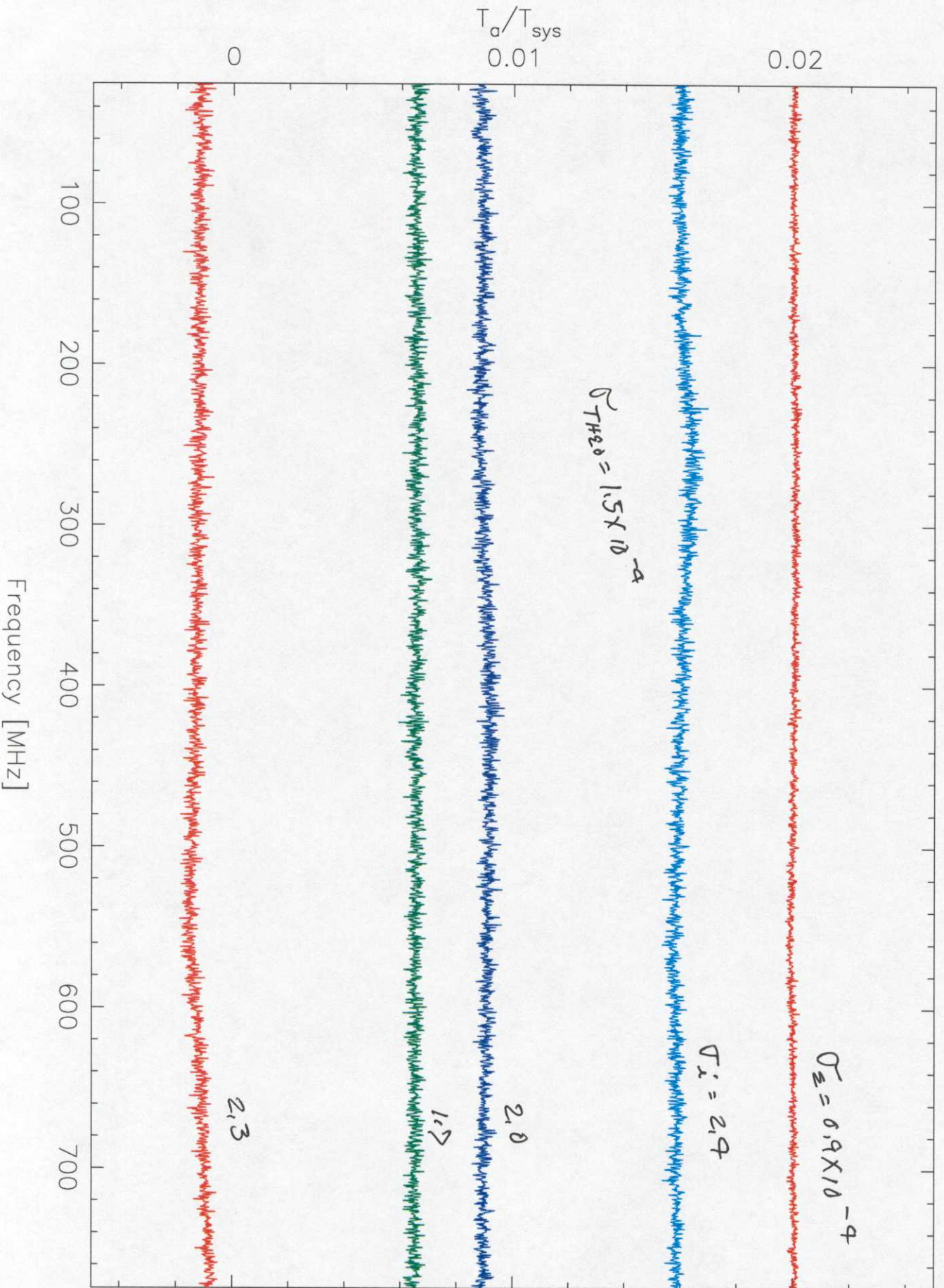


Kband L1, 11/8/02

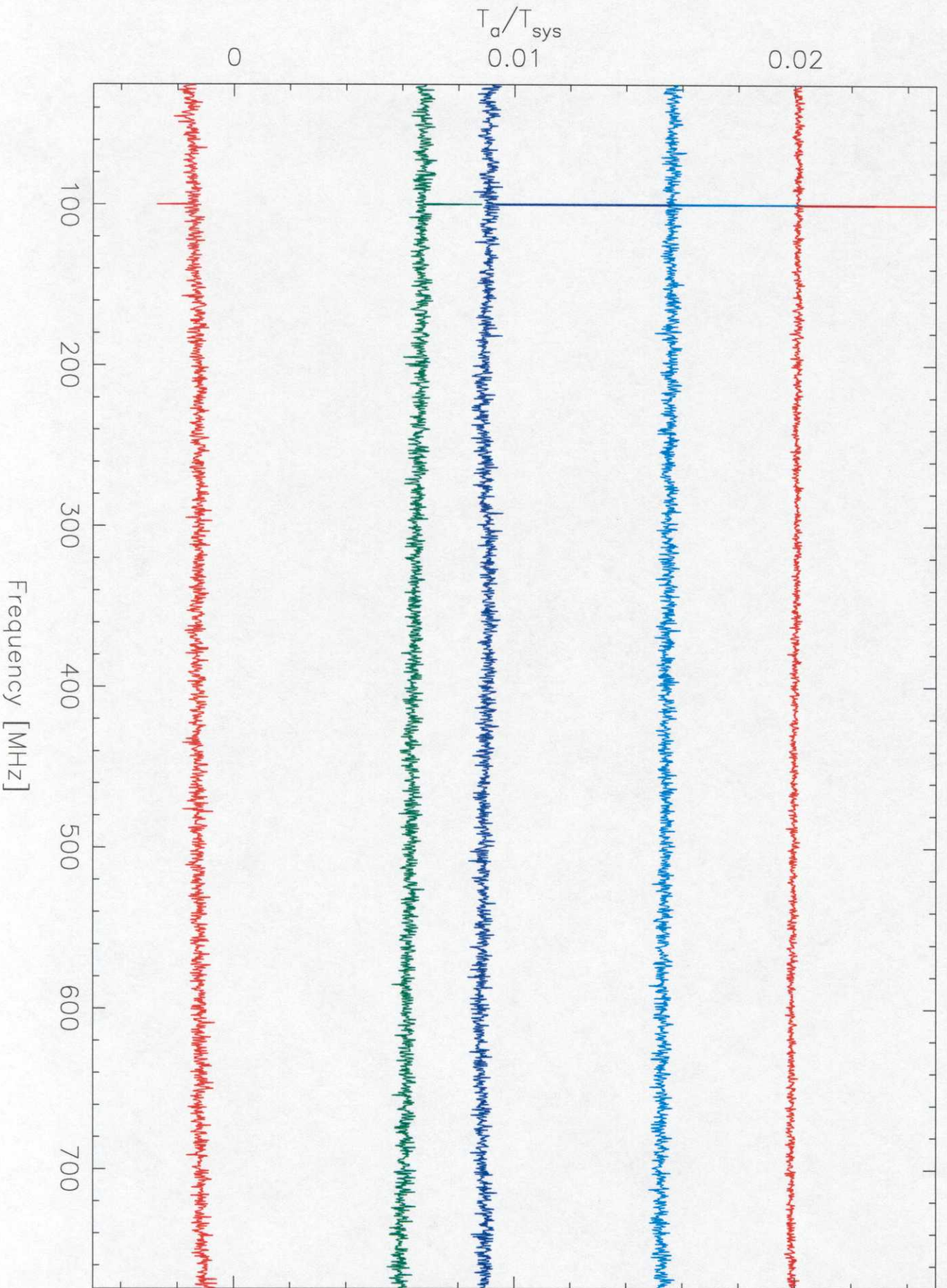


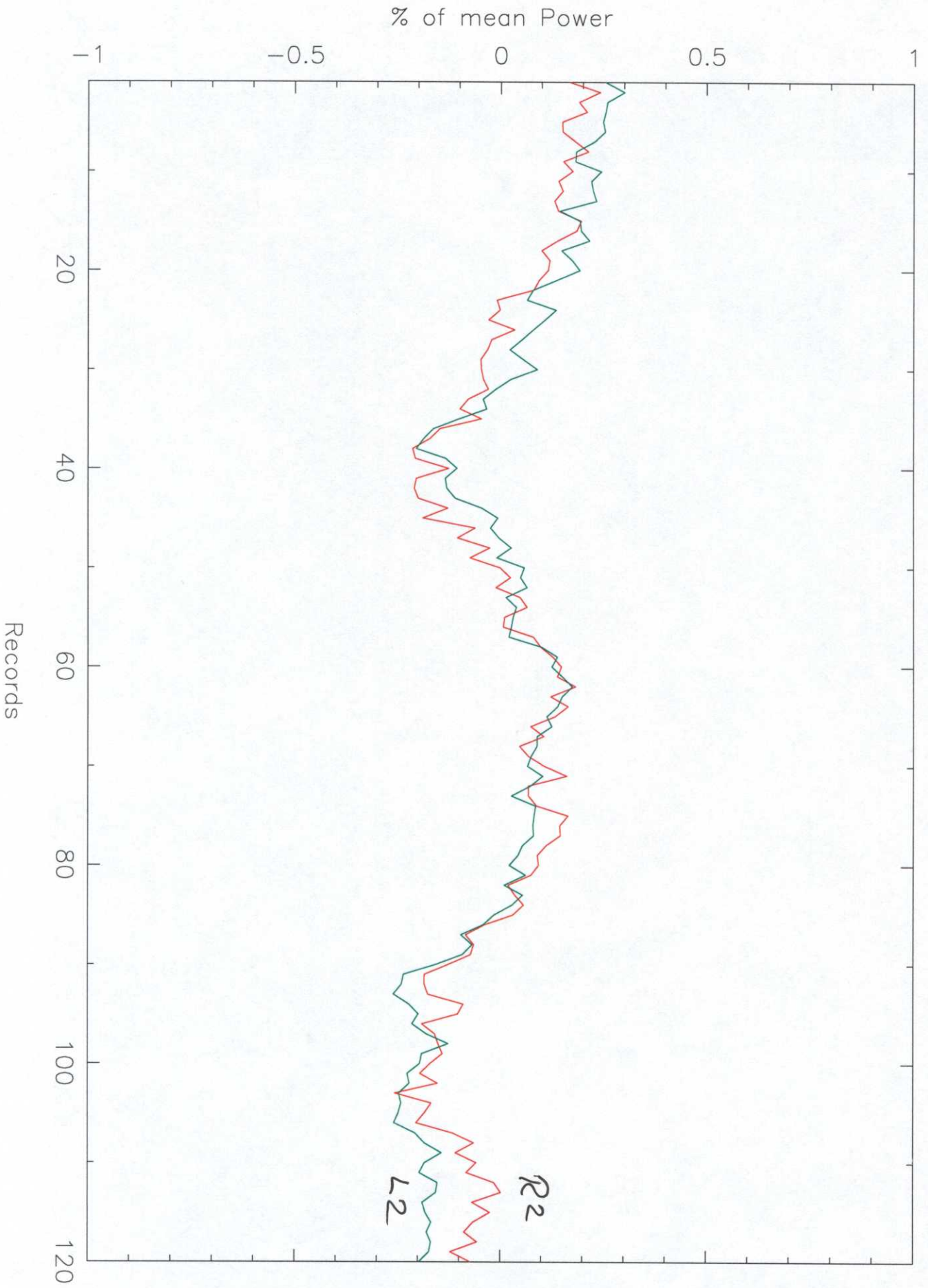


Kband R2, 11/8/02



Kband L2, 11/8/02





11/7/02

K-Band TP and 15K Temperature Monitoring

We're looking for a rapid 1% change in total power from the K-band receiver, and trying to correlate it with a change in 15K temperature.

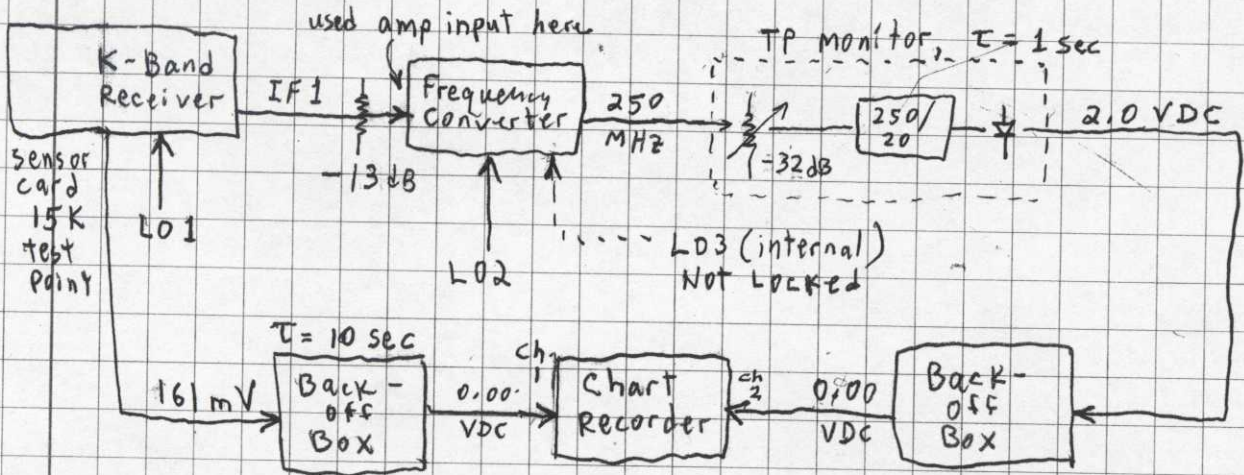


Chart Recorder settings:

	Channel	mV/cm	Chart speed cm/min
15K monitor	1	0.1	1
TP monitor	2	0.5	1

A 1% change in TP would correspond to $2.00 \times 0.01 = 20 \text{ mV}$.

A 1% change in 15K temperature is $161 \times 0.01 = 1.61 \text{ mV}$.

We will easily be able to see changes of this magnitude on the chart recorder; 1% change in TP is 40 cm, and 1% in T_{15} is 16.1 cm

Data Log:

Receiver Channel	Start Time	Stop Time
L4	1:23 PM	2:40 PM
R4	2:40 PM	3:50
R2	3:50	4:20

Mean of Spectrum, Scans 3:8

