

PRELIMINARY REPORT OF 050714

last update on Thu Jul 14 10:57:28 GMT 2005

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1 - Introduction

This report is based on the analysis of wave mode level-1 cross spectra (ASA_WVS_1P), global monitoring products (ASA_GM1_1P), which are the available few hours after the acquisition, on the browse (BP) products and on the Module Stepping (MS) product.

2 - Summary

2.1 - Instrument Unavailability

No unavailabilities during the reported period.

2.2 - Auxiliary files

Summary of the auxiliary files used from 2005-07-13 00:00:00 to 2005-07-14 10:57:28

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	29	41	12	4	10
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	29	41	12	4	10
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	29	41	12	4	10
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	29	41	12	4	10

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	44	59	30	8	44
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	44	59	30	8	44
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	44	59	30	8	44
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	44	59	30	8	44

2.3 - Browse Visual Inspection

2.4 - Data Analysis

- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

3 - Module Stepping Mode

No anomalies observed on available MS products:

Polarisation	Start Time
V	20050713 170209
H	20050714 062657

MSM in V/V polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
☒	☒
☒	☒
☒	☒
☒	☒

MSM in H/H polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

4.1.1 - Evolution for WVS

Evolution of cal pulses for WVS

<input type="checkbox"/>
<input type="checkbox"/>

4.1.2 - Evolution for GM1

Evolution of cal pulses for GM1

<input type="checkbox"/>
<input type="checkbox"/>

4.2 - Cyclic statistics

4.2.1 - Evolution for WVS

Evolution of cal pulses for WVS

<input type="checkbox"/>

P1a Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
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P1 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-3.324900	0.007043	0.019926
7	P1	-3.139533	0.015269	0.012094
11	P1	-4.661680	0.033547	-0.071086
15	P1	-5.529431	0.045794	-0.076167
19	P1	-3.779879	0.045160	-0.072407
22	P1	-4.607891	0.066357	-0.050875
26	P1	-4.853392	0.069452	-0.021093
30	P1	-7.194650	0.157547	-0.130714
3	P1	-15.565494	0.092105	-0.022684
7	P1	-15.555635	0.113559	0.102440
11	P1	-21.533384	0.276615	-0.239367
15	P1	-11.286572	0.046961	-0.010893
19	P1	-14.483698	0.254207	-0.130653
22	P1	-15.832880	0.353044	0.224196
26	P1	-17.567343	0.276395	0.310387
30	P1	-17.763710	0.352014	0.109982

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.910109	0.083094	0.137272
7	P2	-22.094187	0.105792	0.199309
11	P2	-13.779078	0.102480	0.259227
15	P2	-7.113966	0.093195	0.076822
19	P2	-9.602037	0.093084	0.027329
22	P2	-16.865887	0.093488	0.031428
26	P2	-16.507524	0.094893	0.020018
30	P2	-18.789772	0.081666	-0.008785

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.160099	0.002862	0.007157
7	P3	-8.160099	0.002862	0.007157
11	P3	-8.160099	0.002862	0.007157
15	P3	-8.160099	0.002862	0.007157
19	P3	-8.160099	0.002862	0.007157
22	P3	-8.160099	0.002862	0.007157
26	P3	-8.160099	0.002862	0.007157
30	P3	-8.160099	0.002862	0.007157

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1

P1a Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
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P1 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-2.790158	0.014873	0.015626
7	P1	-2.950513	0.032835	0.000170
11	P1	-3.985373	0.017859	-0.042259
15	P1	-3.551090	0.024367	-0.059041
19	P1	-3.672938	0.120178	-0.078805
22	P1	-5.668592	0.114881	-0.101028
26	P1	-7.371826	0.202159	-0.145506
30	P1	-6.313961	0.115395	-0.084178
3	P1	-10.829138	0.047666	0.006750
7	P1	-10.429626	0.163755	-0.033581
11	P1	-12.589577	0.115738	-0.057825
15	P1	-11.619216	0.081821	-0.015307
19	P1	-15.695974	1.395220	-0.186122
22	P1	-25.918205	3.752626	0.514367
26	P1	-15.481756	0.442101	0.260108
30	P1	-20.182739	1.286450	0.192782

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.657803	0.050567	0.144190
7	P2	-22.076843	0.051824	0.071601
11	P2	-9.768100	0.062169	0.170538
15	P2	-5.130834	0.046994	-0.001705
19	P2	-6.910222	0.062294	0.010805
22	P2	-7.093268	0.046877	0.019135
26	P2	-23.966278	0.052793	-0.028810
30	P2	-21.958809	0.042163	0.005231

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-7.997504	0.004192	-0.008699
7	P3	-7.997602	0.004180	-0.008790
11	P3	-7.997661	0.004170	-0.008425
15	P3	-7.997611	0.004182	-0.008820
19	P3	-7.997633	0.004189	-0.008887
22	P3	-7.997641	0.004172	-0.009010
26	P3	-7.997742	0.004176	-0.008630
30	P3	-7.997662	0.004177	-0.008799

4.3 - cal pulses monitoring (all rows)

4.3.1 - Evolution for WVS



4.3.2 - Evolution for GM1



5 - RAW data statistics

No anomalies observed.

5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000463346
	stdev	2.15863e-07
MEAN Q	mean	0.000500222
	stdev	2.30803e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127730
	stdev	0.000973633
STDEV Q	mean	0.127964
	stdev	0.000984146



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2005071[234]

The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20050713_155418_000001552039_00025_17614_1802.N1	1	0
ASA_IMM_1PNPDK20050712_065358_000000592039_00006_17595_1425.N1	0	1
ASA_IMM_1PNPDK20050712_065657_000000602039_00006_17595_1429.N1	0	5
ASA_IMM_1PNPDK20050712_065658_000001052039_00006_17595_1511.N1	0	5
ASA_IMM_1PNPDK20050712_083354_000001742039_00007_17596_1442.N1	0	1
ASA_IMM_1PNPDK20050712_083948_000000922039_00007_17596_1443.N1	0	2
ASA_IMM_1PNPDK20050712_131837_000000992039_00010_17599_1514.N1	0	2
ASA_IMM_1PNPDK20050712_182402_000001582039_00013_17602_1463.N1	0	3
ASA_IMM_1PNPDK20050712_214251_000001512039_00015_17604_1478.N1	0	1

ASA_IMM_1PNPDK20050713_074723_000000692039_00021_17610_1507.N1	0	2
ASA_IMM_1PNPDK20050713_094344_000001452039_00022_17611_1518.N1	0	1
ASA_IMM_1PNPDK20050713_192842_000003862039_00028_17617_1531.N1	0	1
ASA_IMM_1PNPDK20050713_211809_000001662039_00029_17618_1535.N1	0	1
ASA_WSM_1PNPDE20050712_162924_000001232039_00012_17601_3817.N1	0	57
ASA_WSM_1PNPDE20050712_231136_000000672039_00016_17605_3864.N1	0	42
ASA_WSM_1PNPDE20050712_231138_000001282039_00016_17605_3954.N1	0	42
ASA_WSM_1PNPDE20050713_041522_000002322039_00019_17608_3899.N1	0	48
ASA_WSM_1PNPDK20050712_082903_000001462039_00007_17596_3639.N1	0	2
ASA_WSM_1PNPDK20050712_100910_000001462039_00008_17597_3652.N1	0	1
ASA_WSM_1PNPDK20050712_101518_000002932039_00008_17597_3651.N1	0	1
ASA_WSM_1PNPDK20050712_115133_000000852039_00009_17598_3655.N1	0	1
ASA_WSM_1PNPDK20050712_132528_000000612039_00010_17599_3661.N1	0	2
ASA_WSM_1PNPDK20050712_132540_000000552039_00010_17599_3691.N1	0	2
ASA_APM_1PNPDK20050713_081747_000000602039_00021_17610_0297.N1	0	3

⊗

⊗

7 - Doppler Analysis

Preliminary report. The data is not yet controlled

7.1 - Unbiased Doppler Error for WVS

Evolution of unbiased Doppler error (Real - Expected)

⊗
Ascending
⊗
Descending

7.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler

⊗

Acsending
<input type="checkbox"/>
Descending

7.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX

<input type="checkbox"/>

7.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)

<input type="checkbox"/>
Acsending
<input type="checkbox"/>
Descending

7.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler

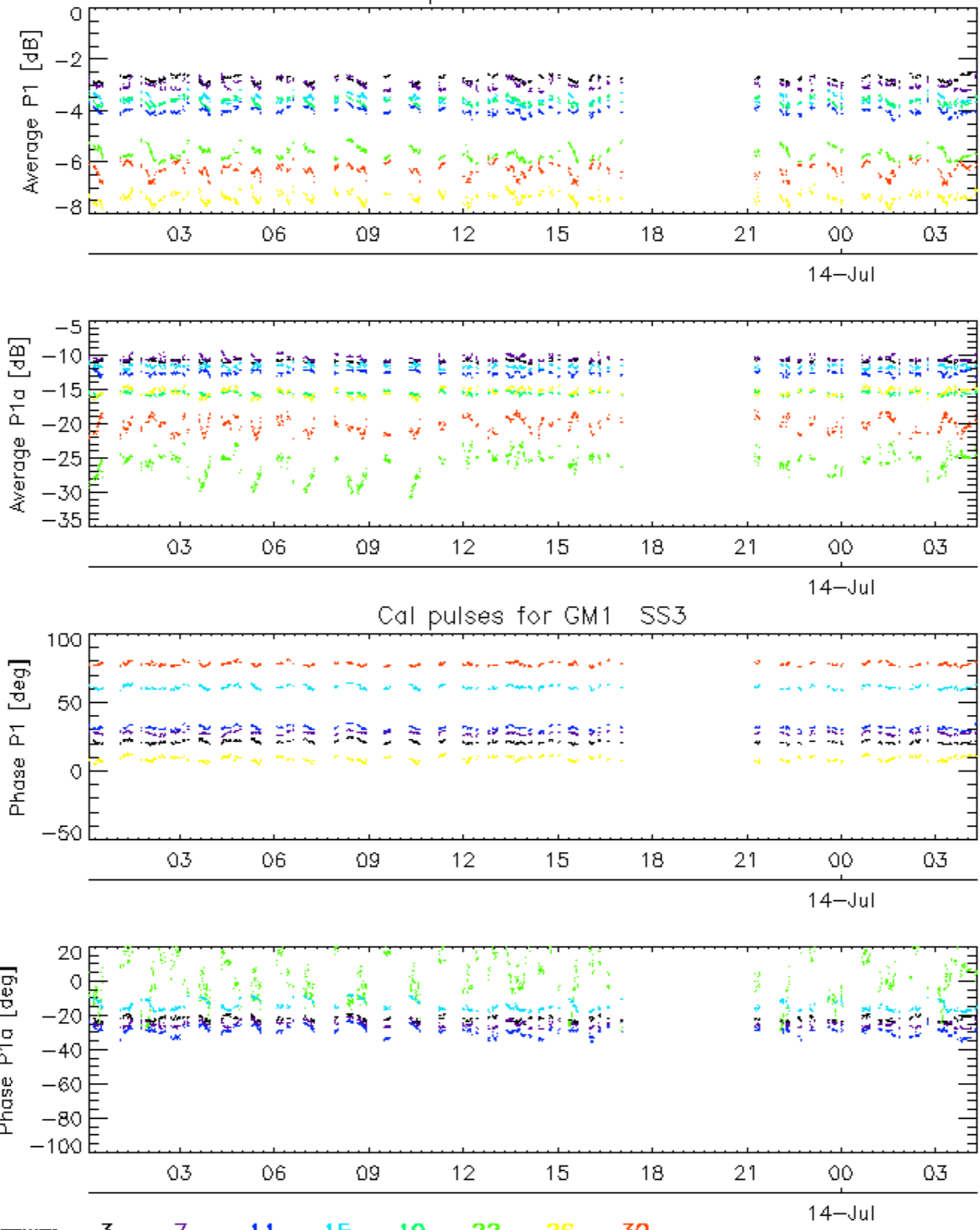
<input type="checkbox"/>
Acsending
<input type="checkbox"/>
Descending

7.6 - Doppler evolution versus ANX for GM1

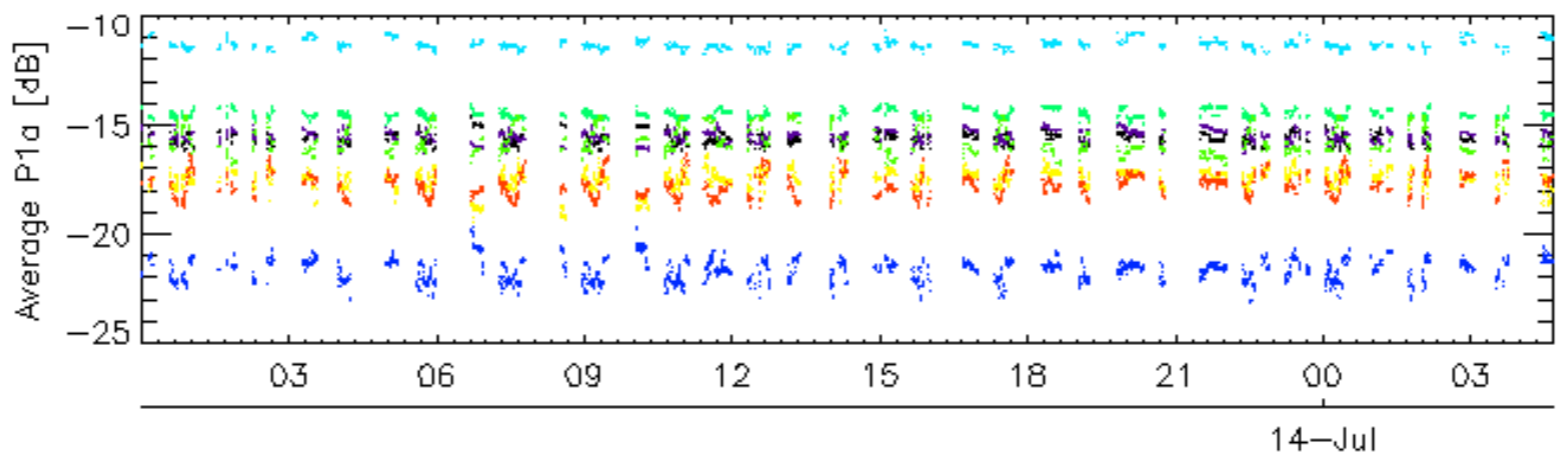
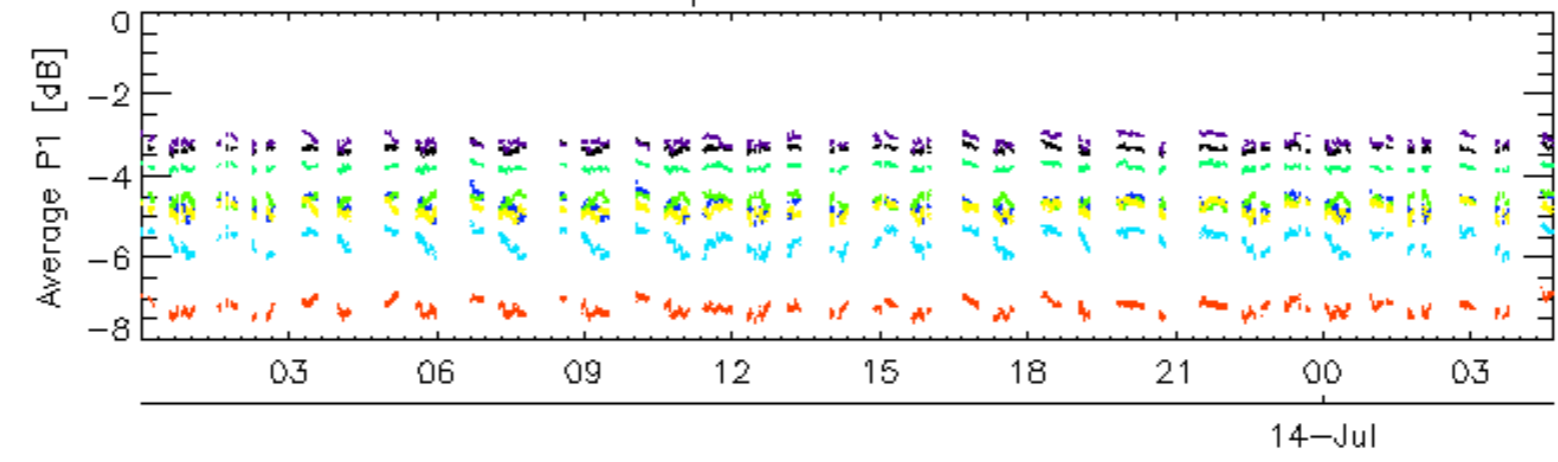
Evolution Doppler error versus ANX

<input type="checkbox"/>

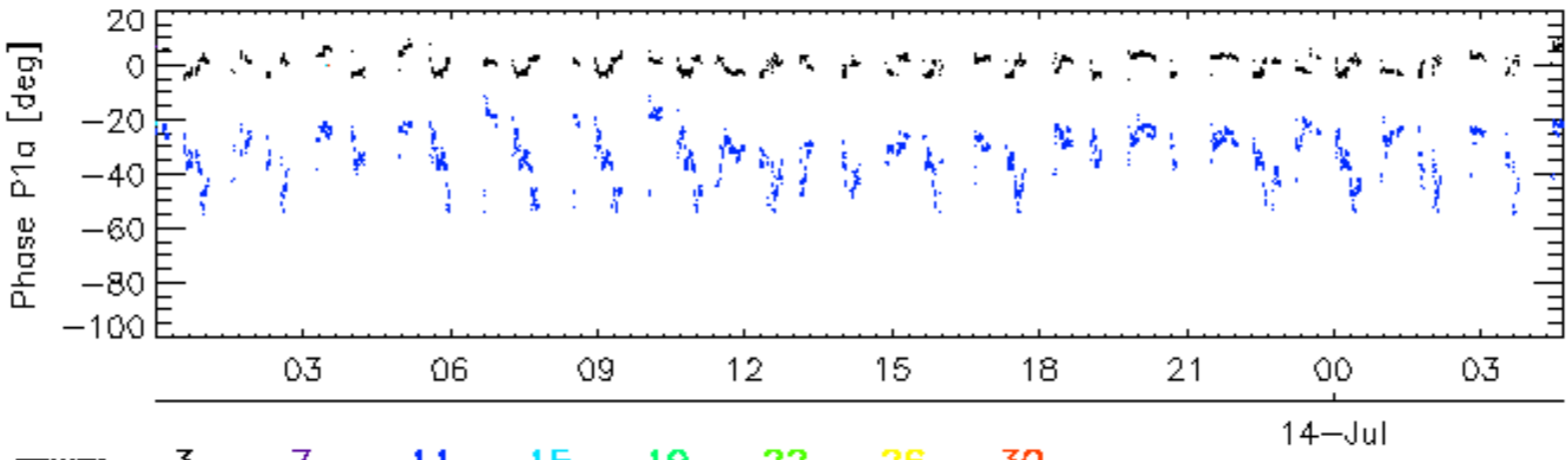
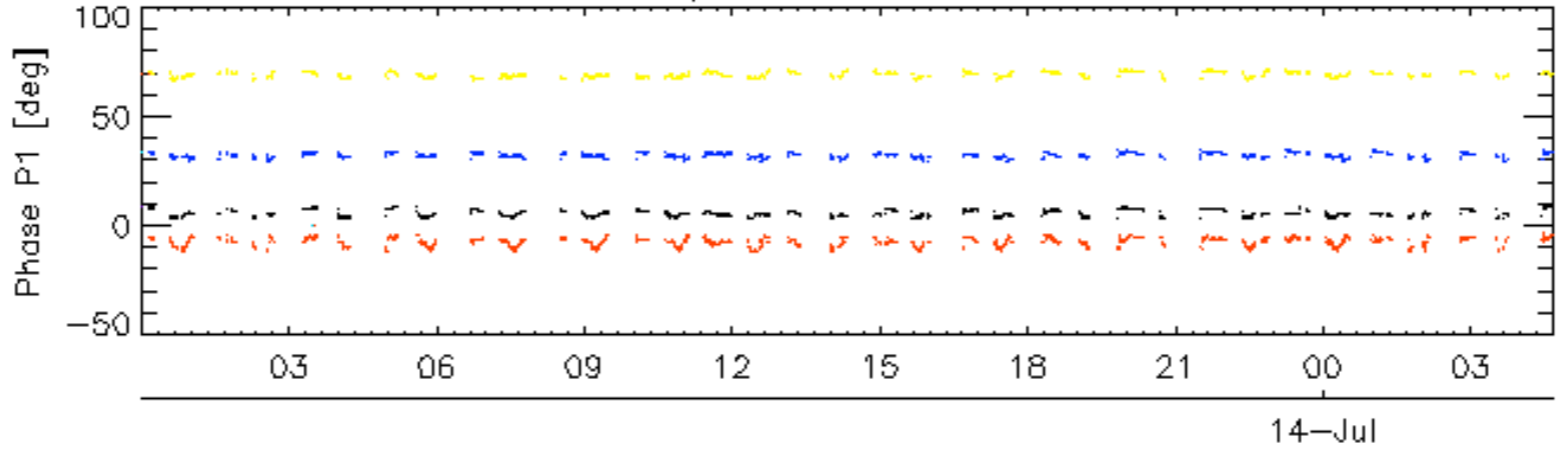
Cal pulses for GM1 SS3



Cal pulses for WVS IS2

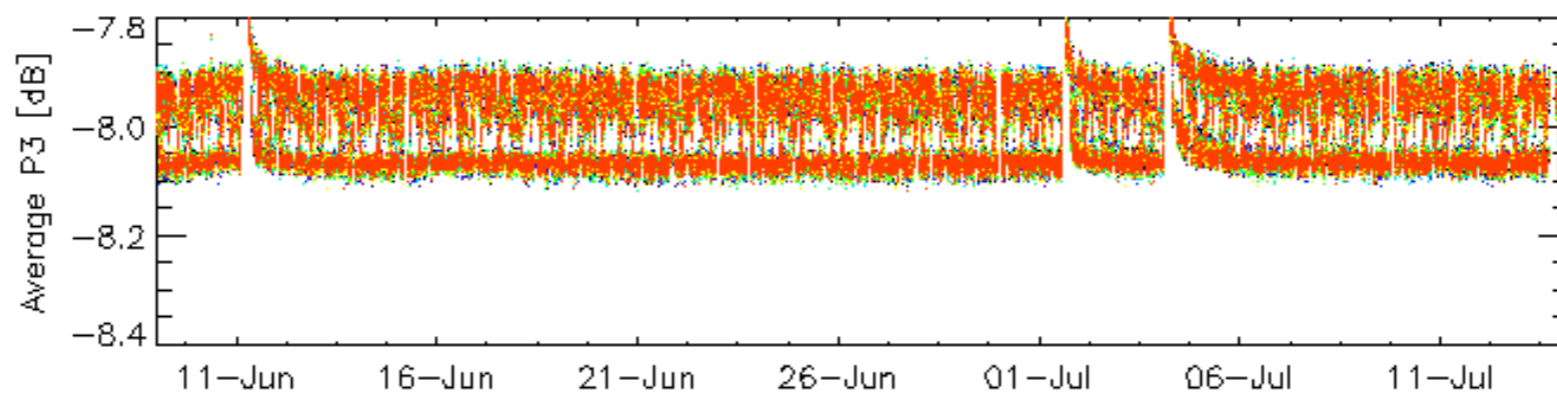
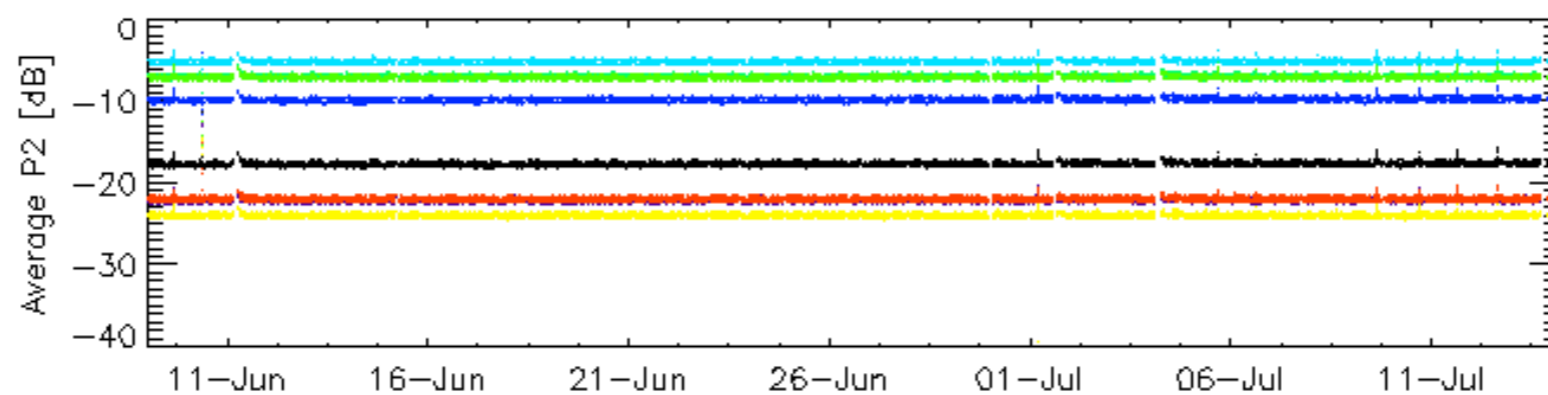
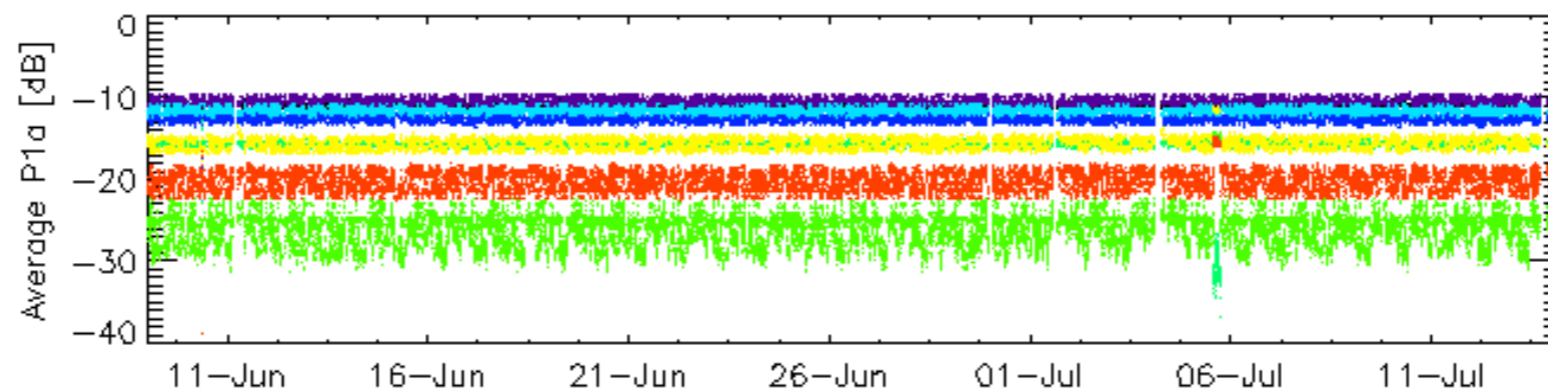
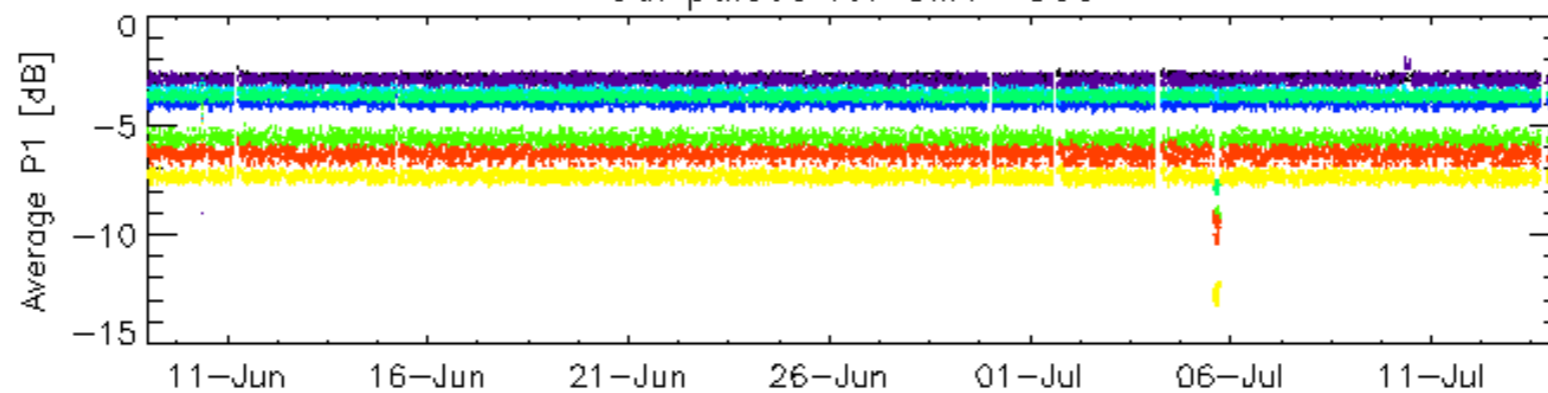


Cal pulses for WVS IS2



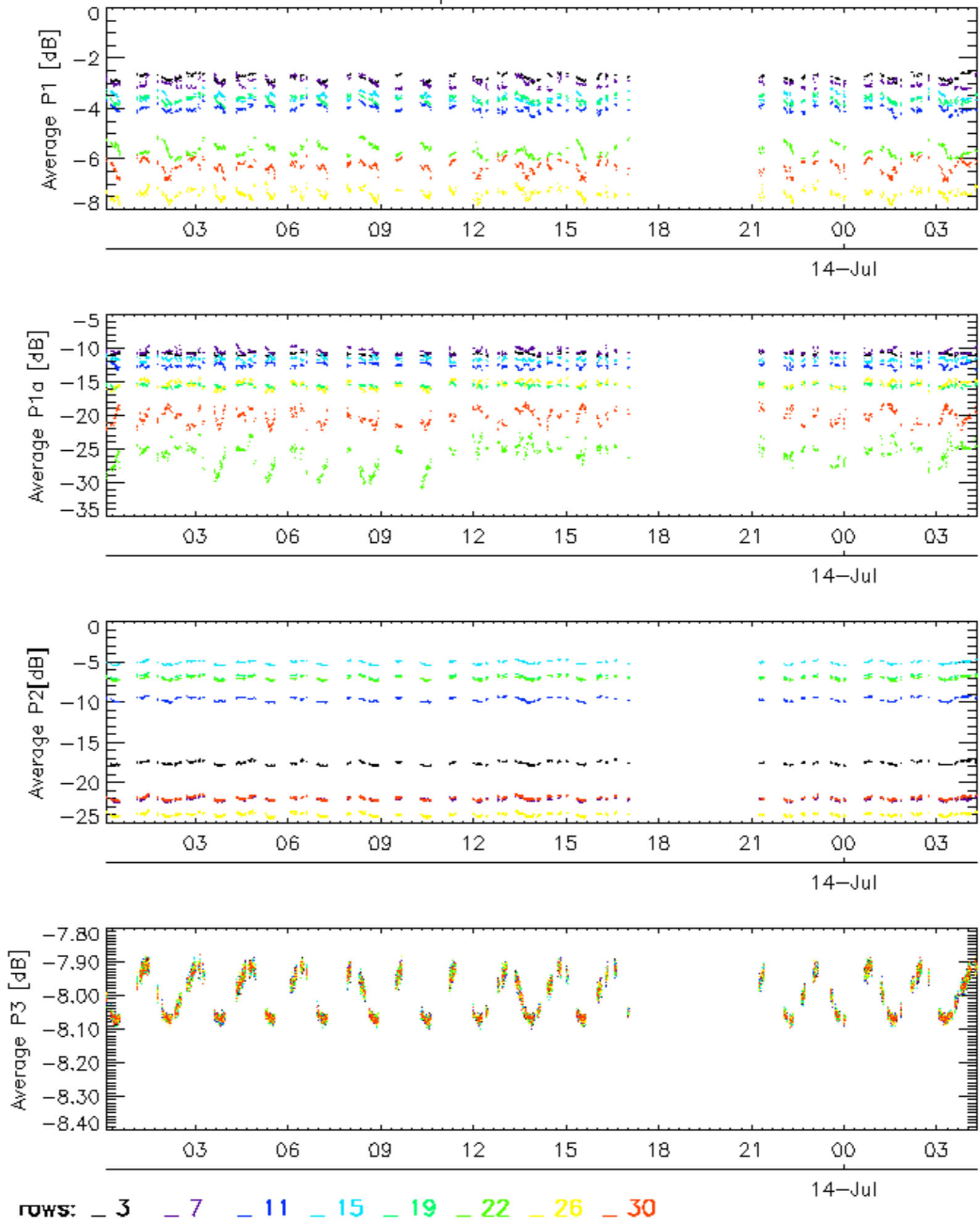
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

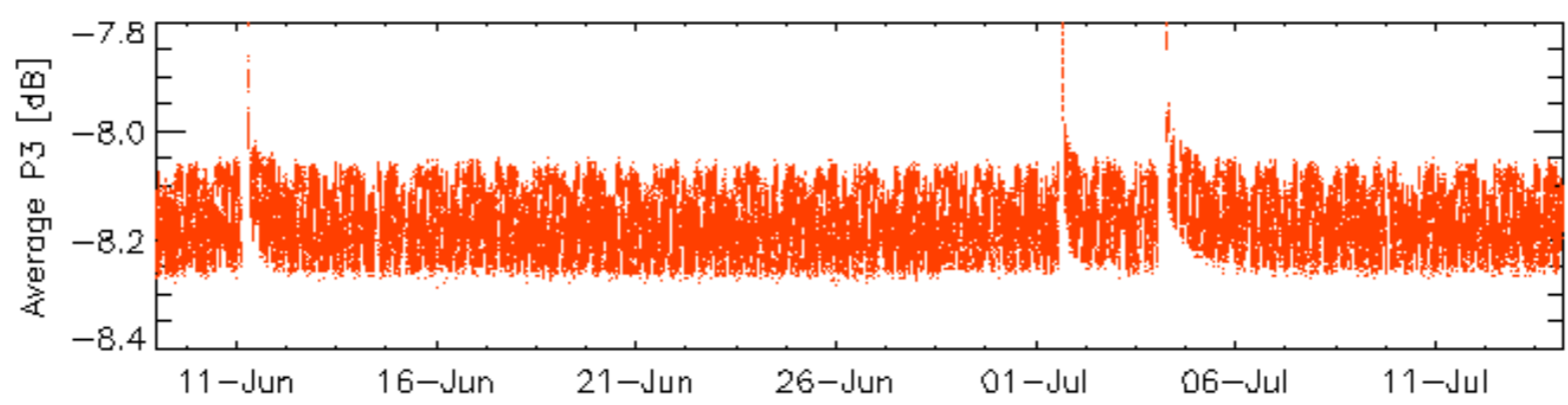
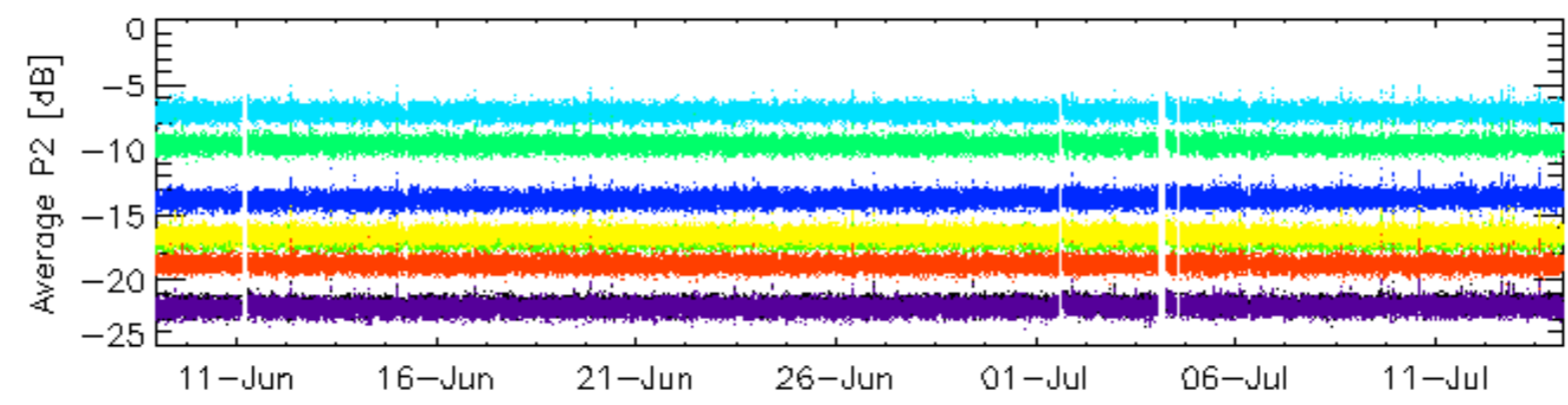
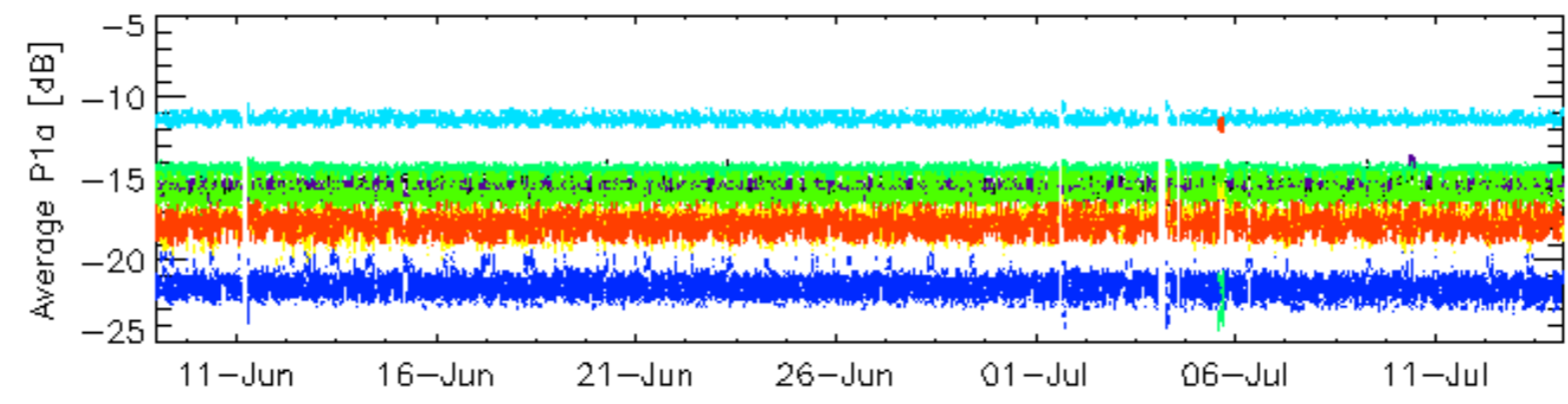
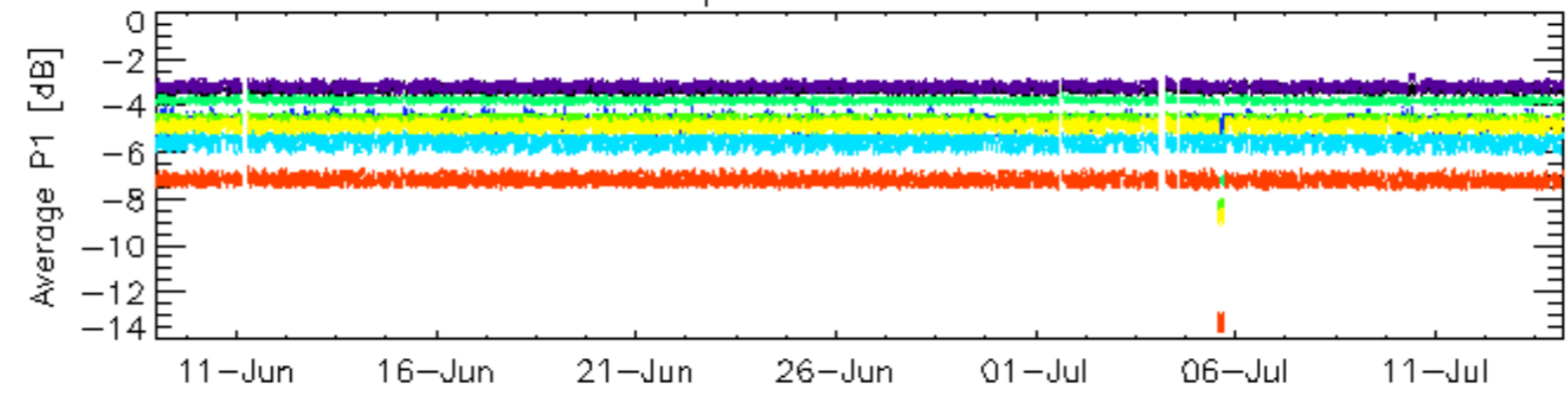


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

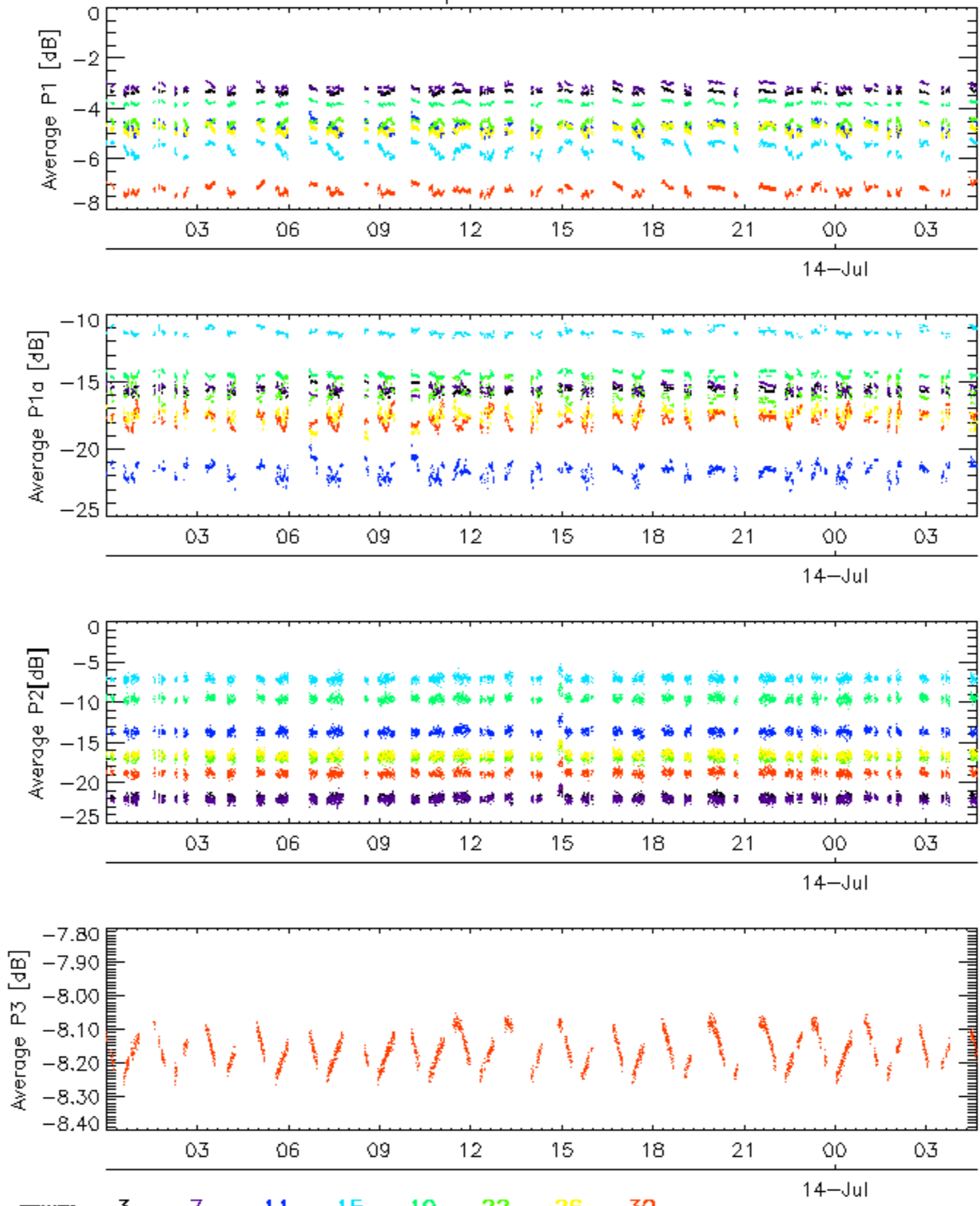


Cal pulses for WVS IS2



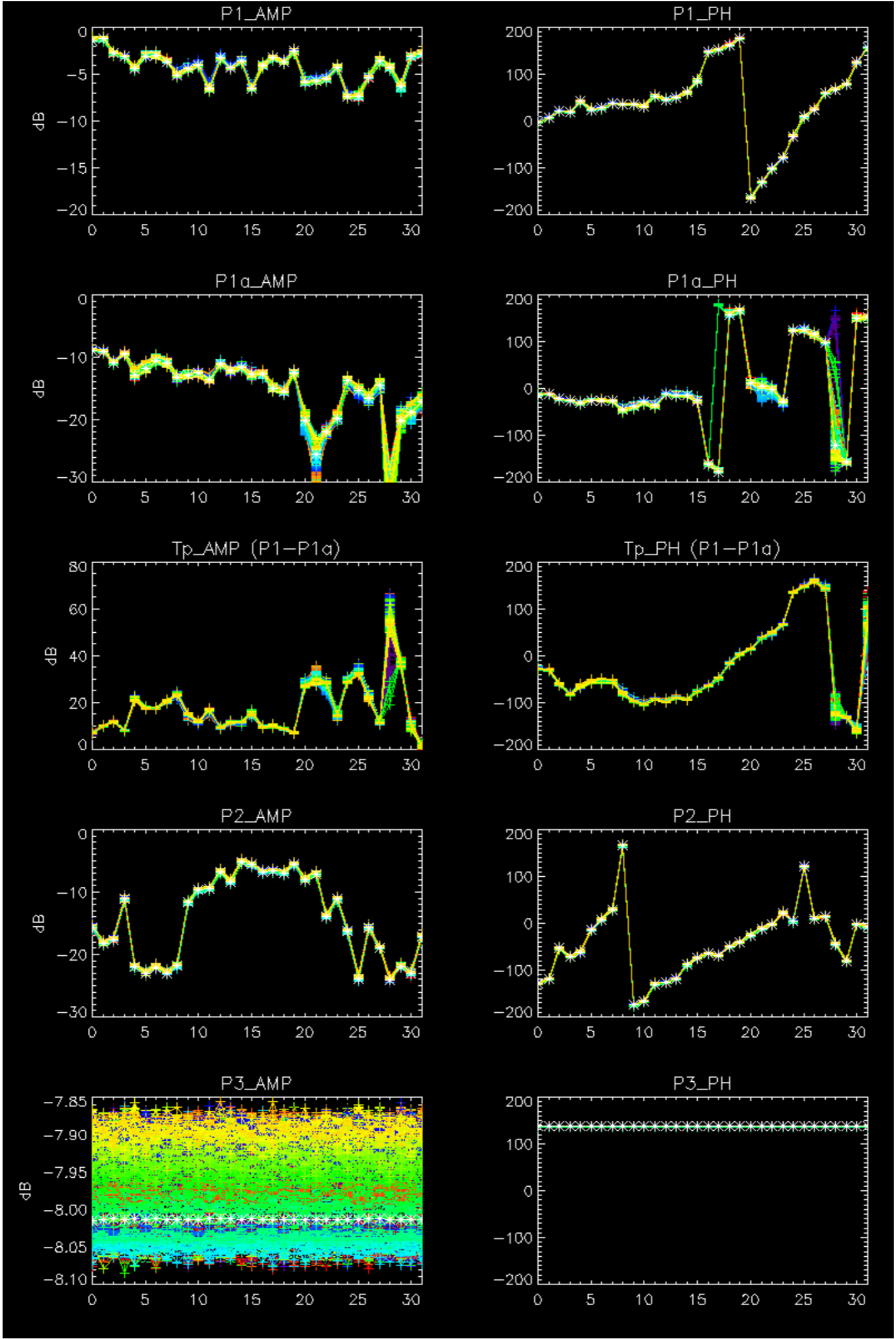
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

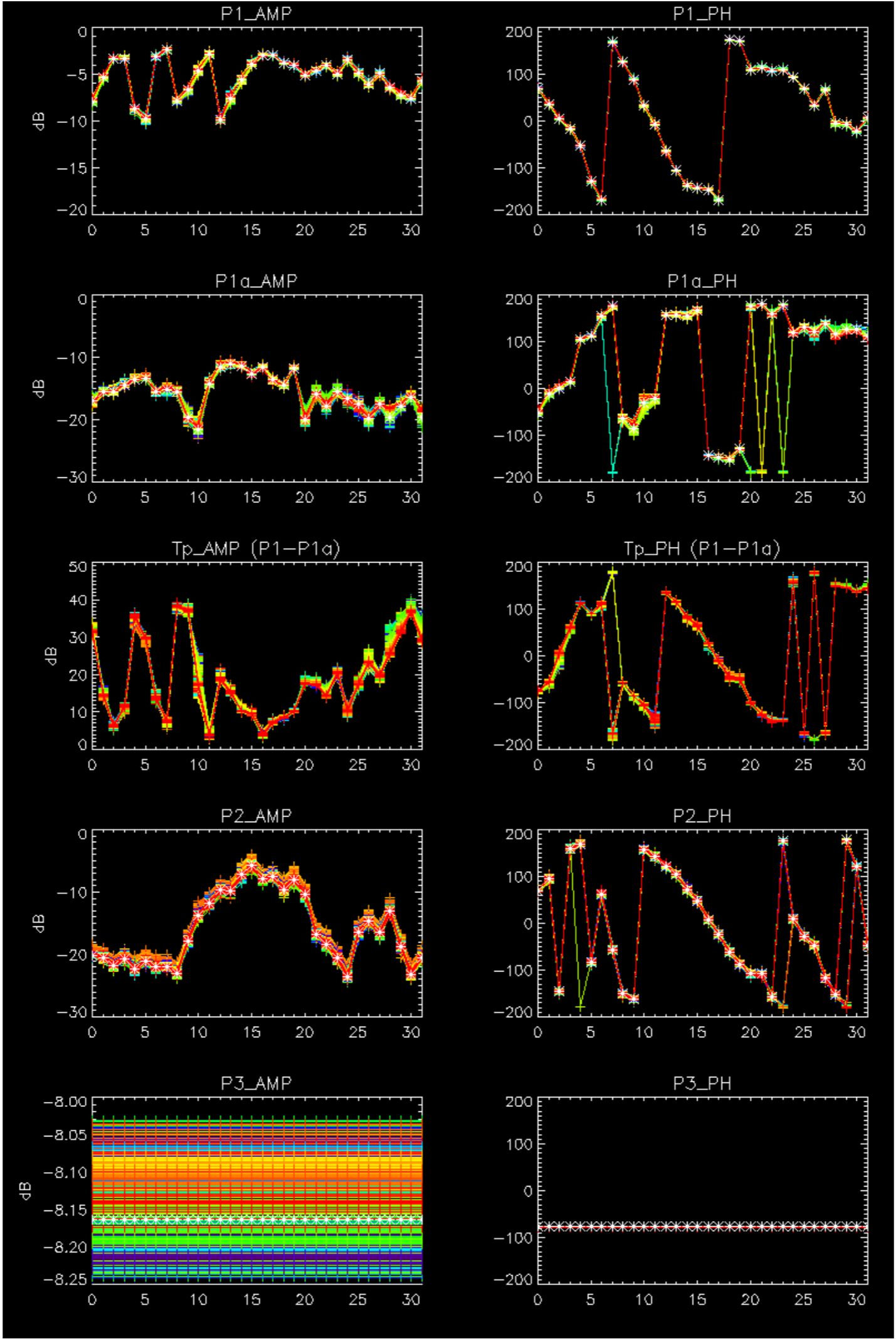
Cal pulses for WVS IS2



rows: 3 7 11 15 19 22 26 30

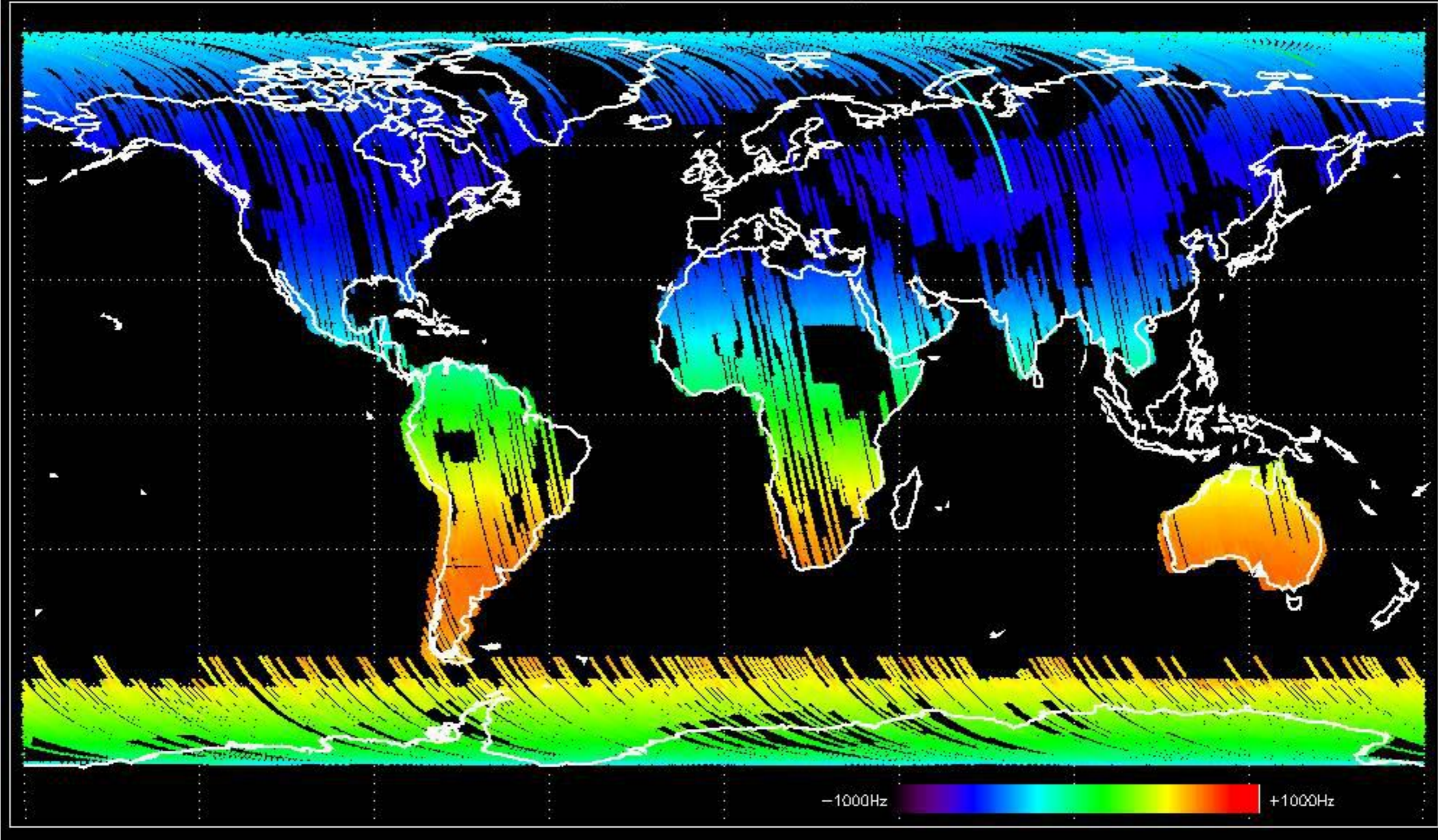
No anomalies observed.



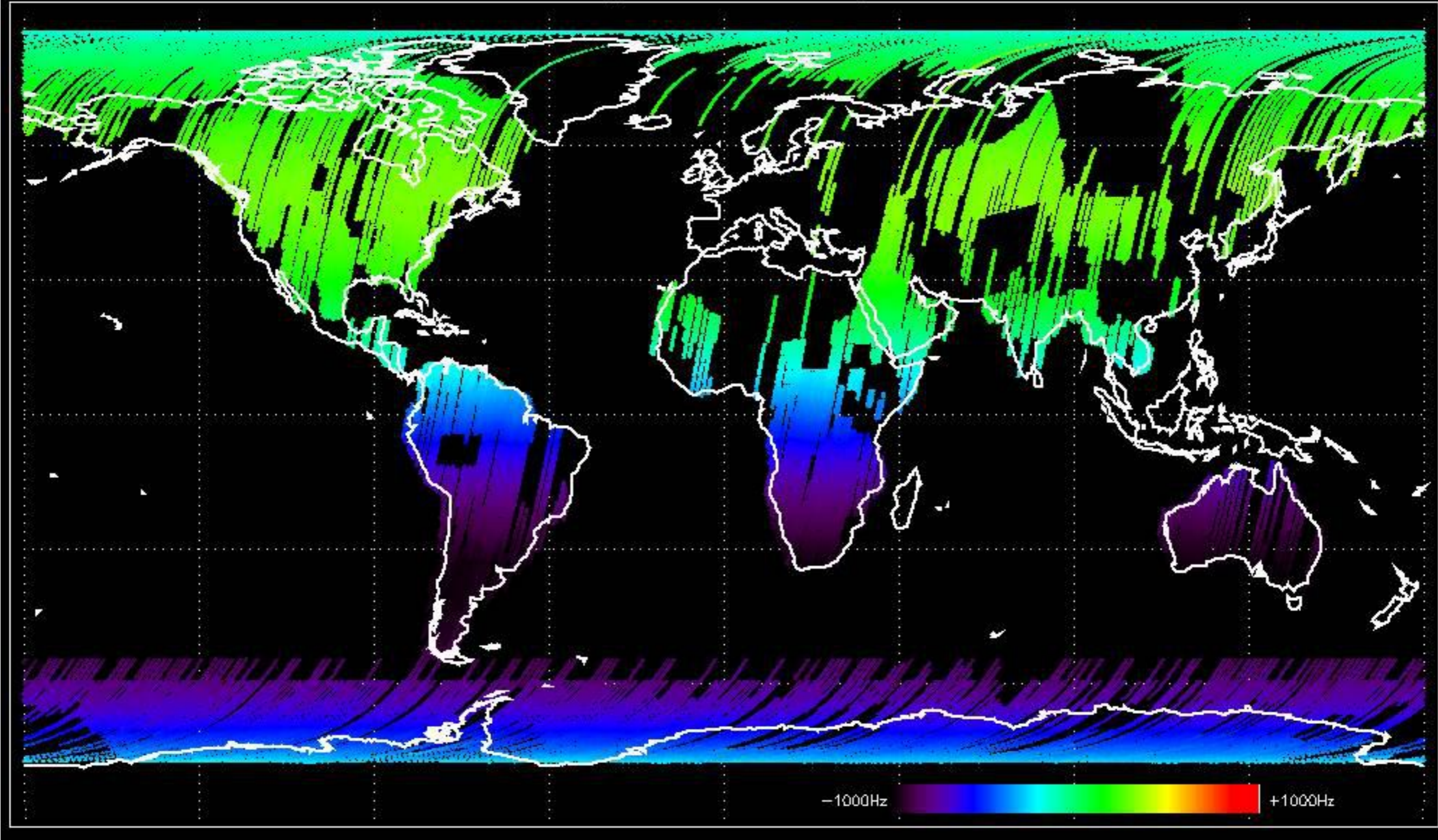


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

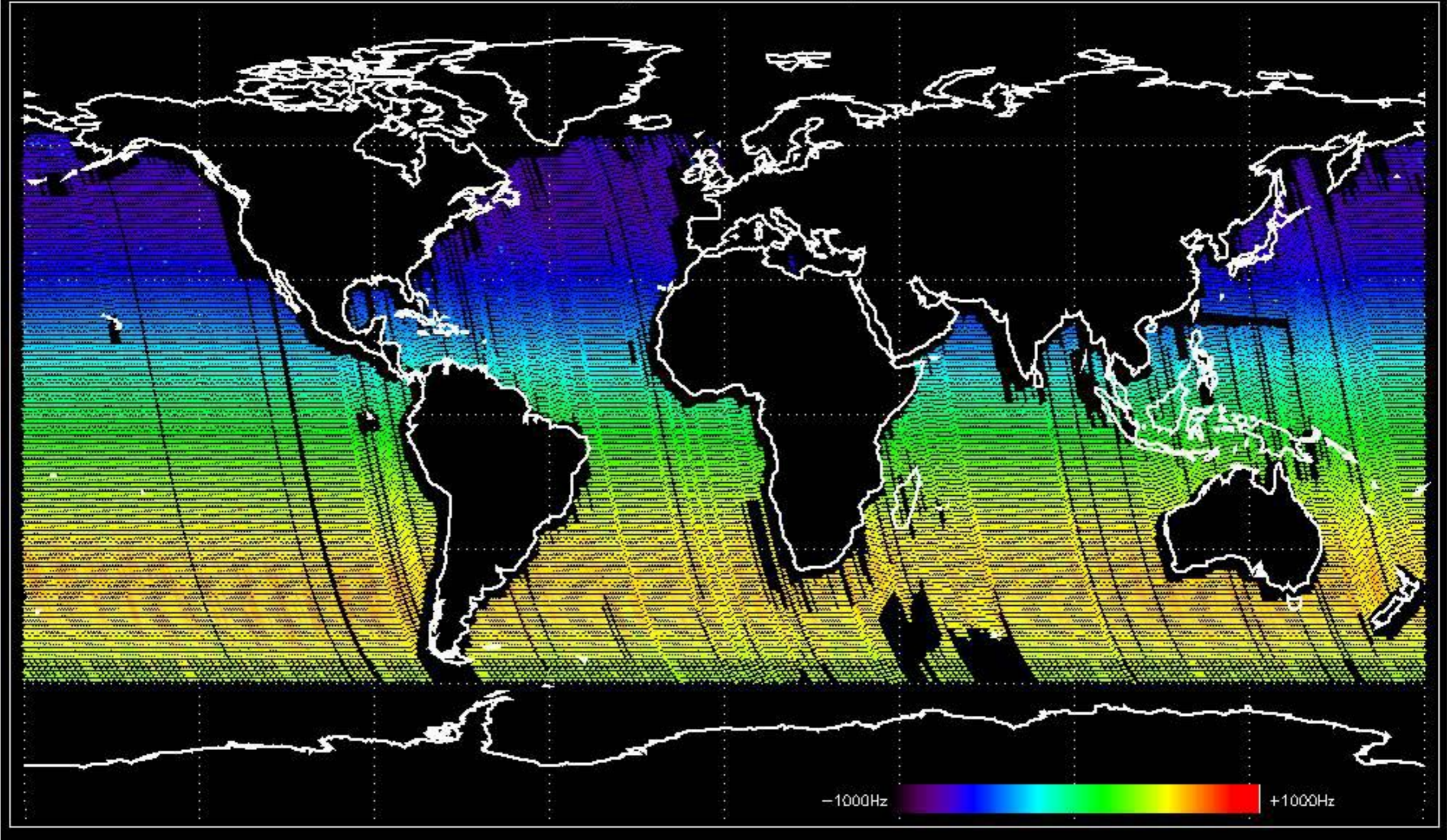
Doppler 'GM1' 'SS1' ascending



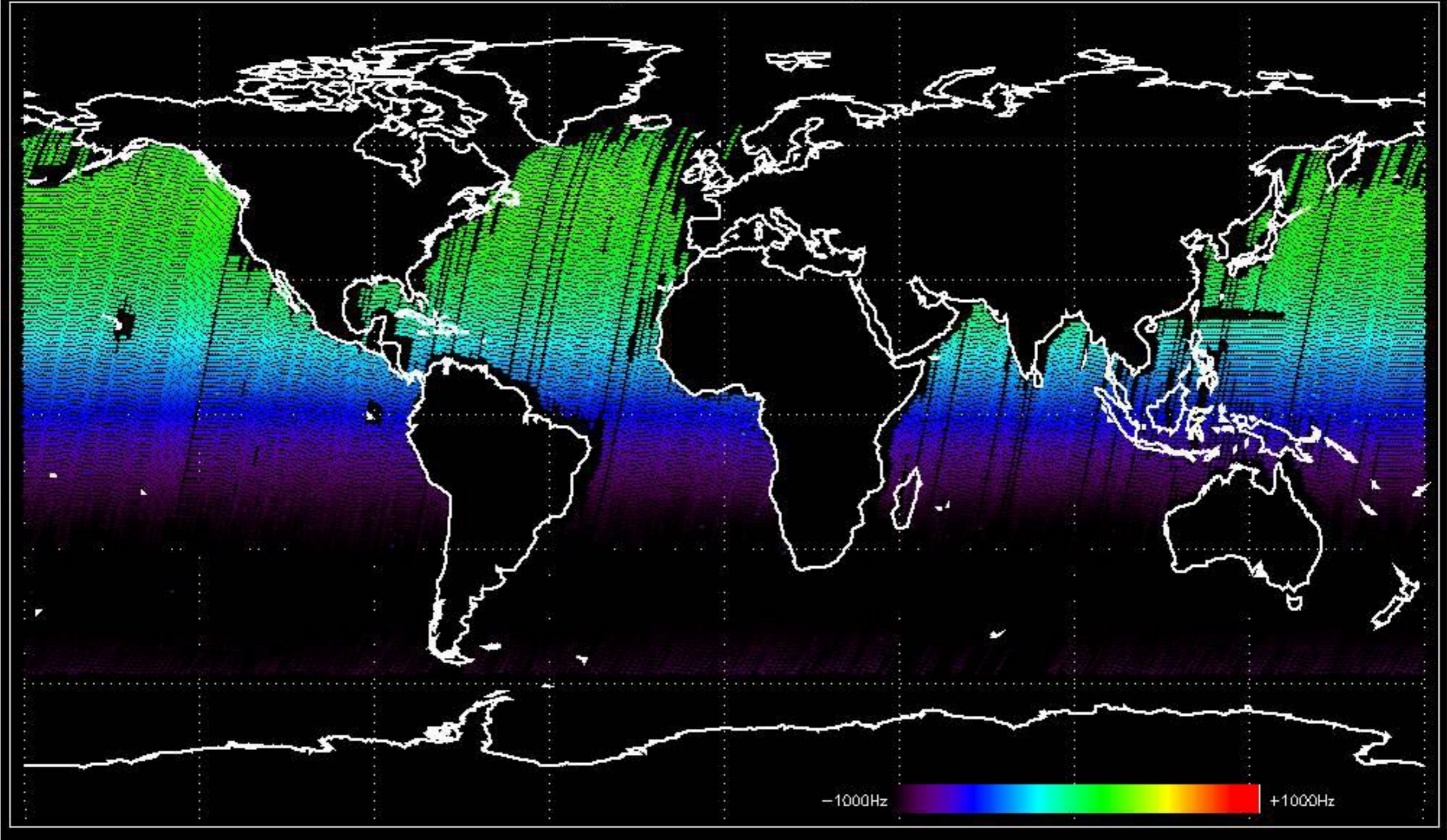
Doppler 'GM1' 'SS1' descending



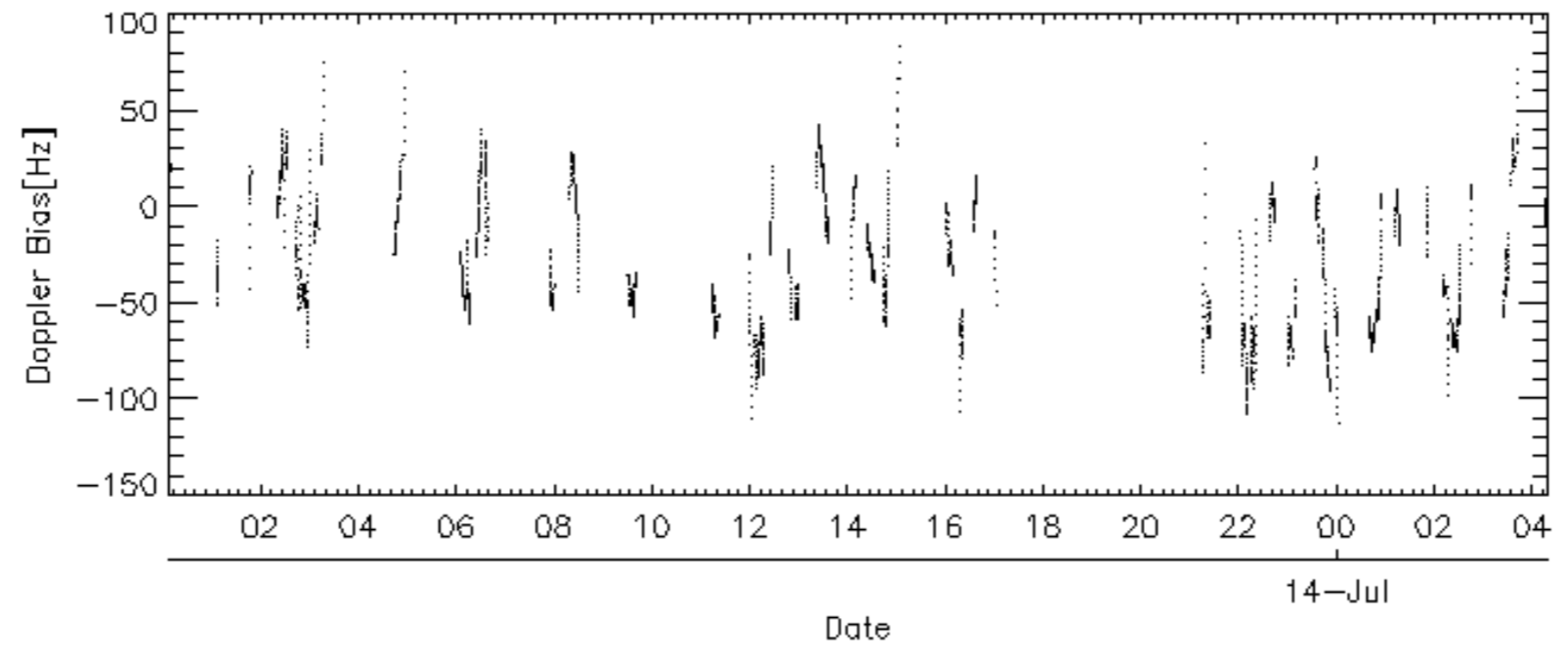
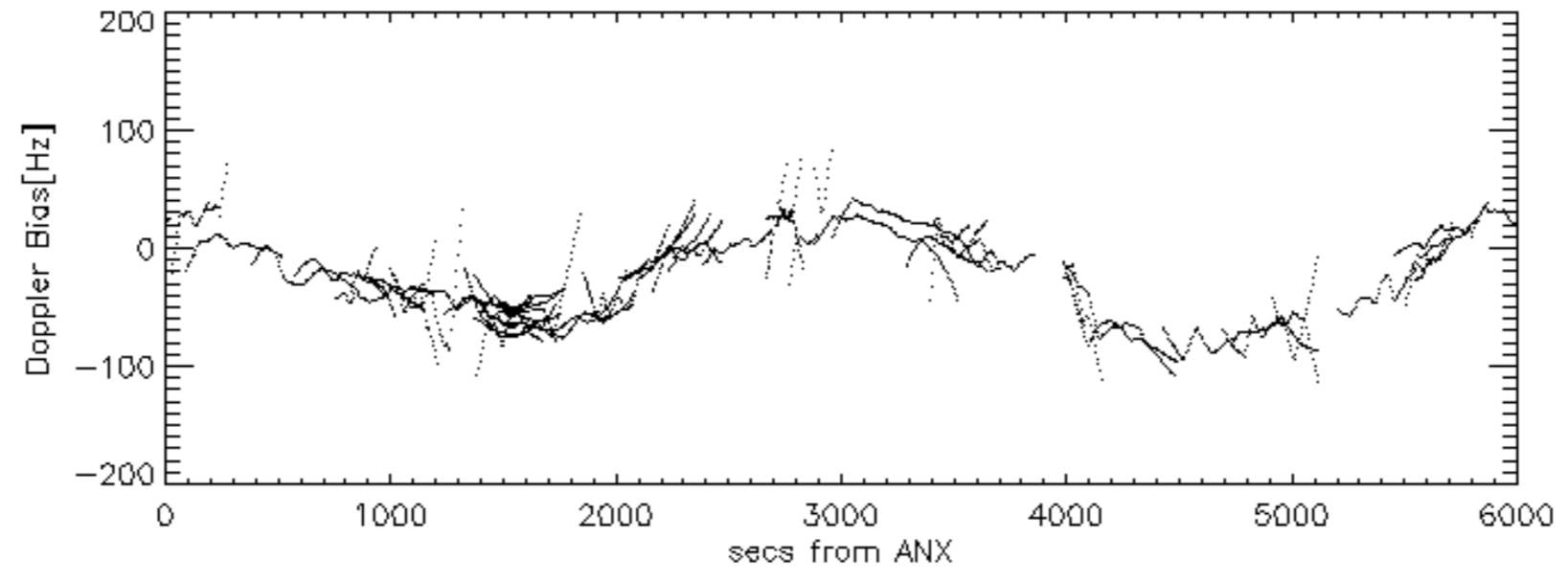
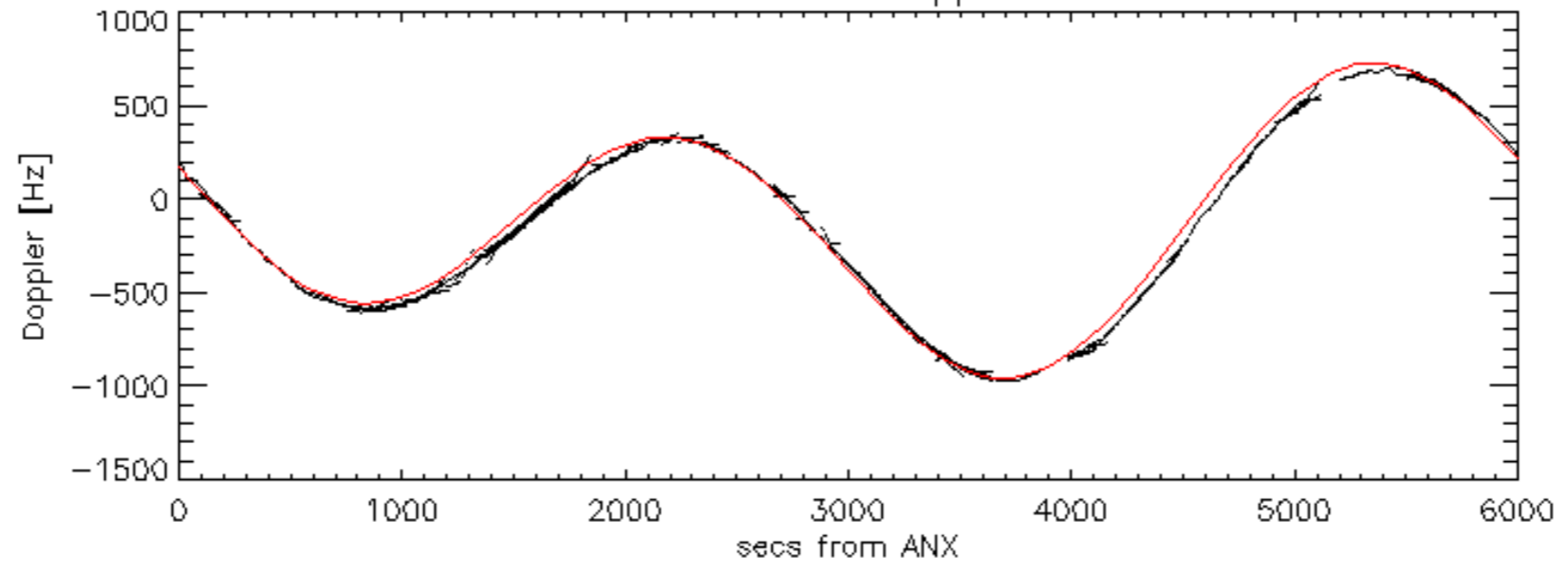
Doppler 'WVS' 'IS2' ascending

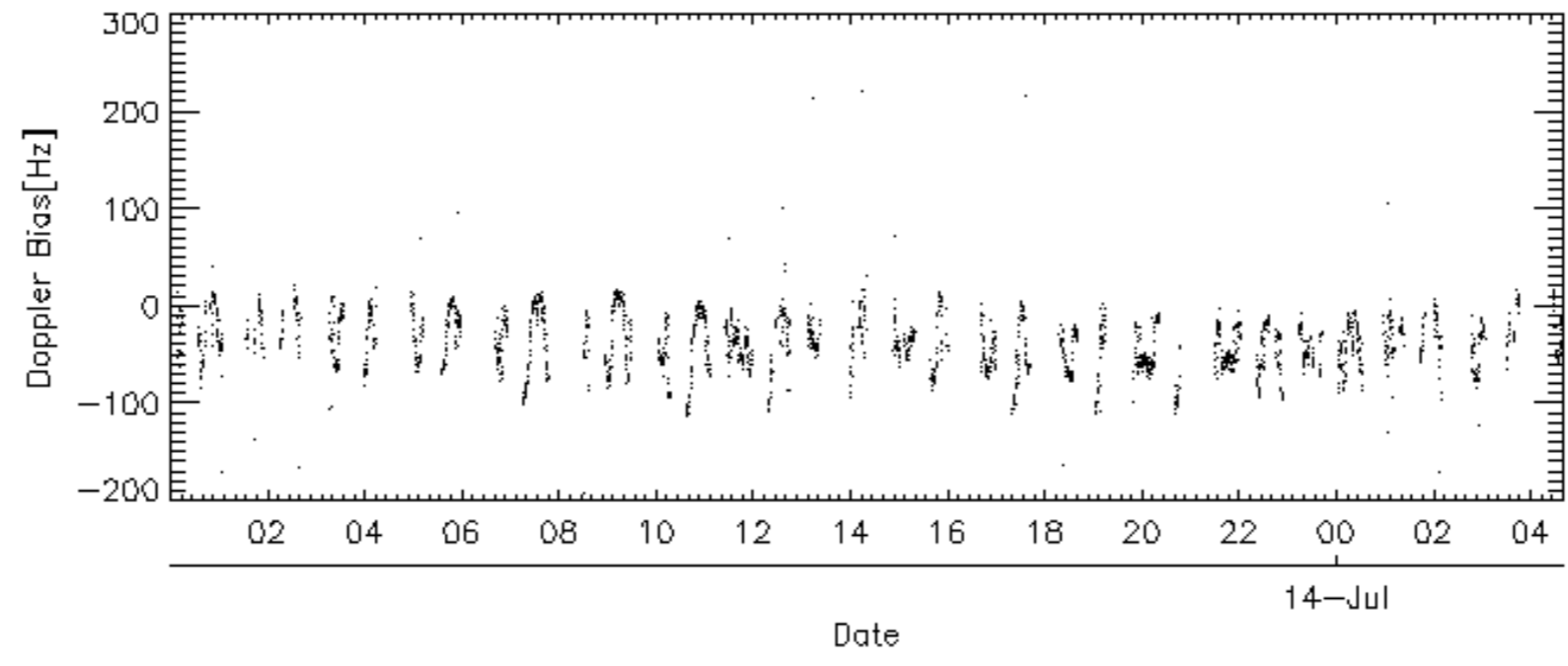
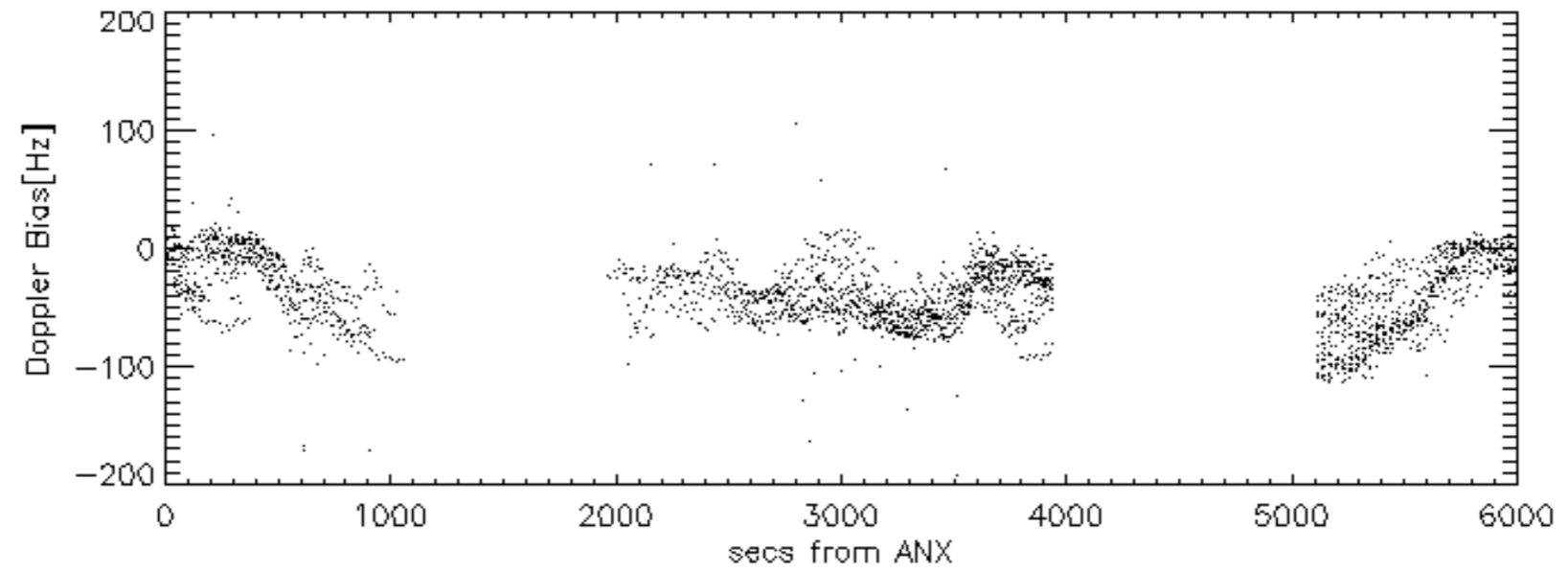
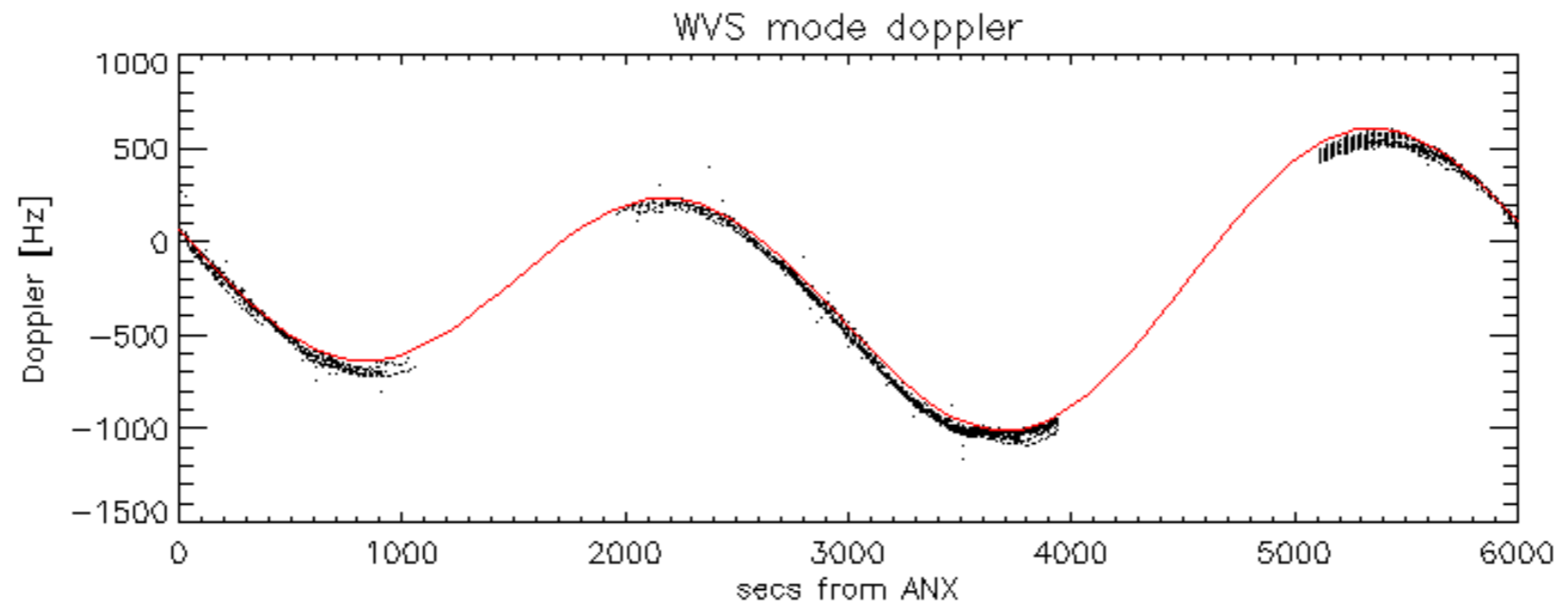


Doppler 'WVS' 'IS2' descending

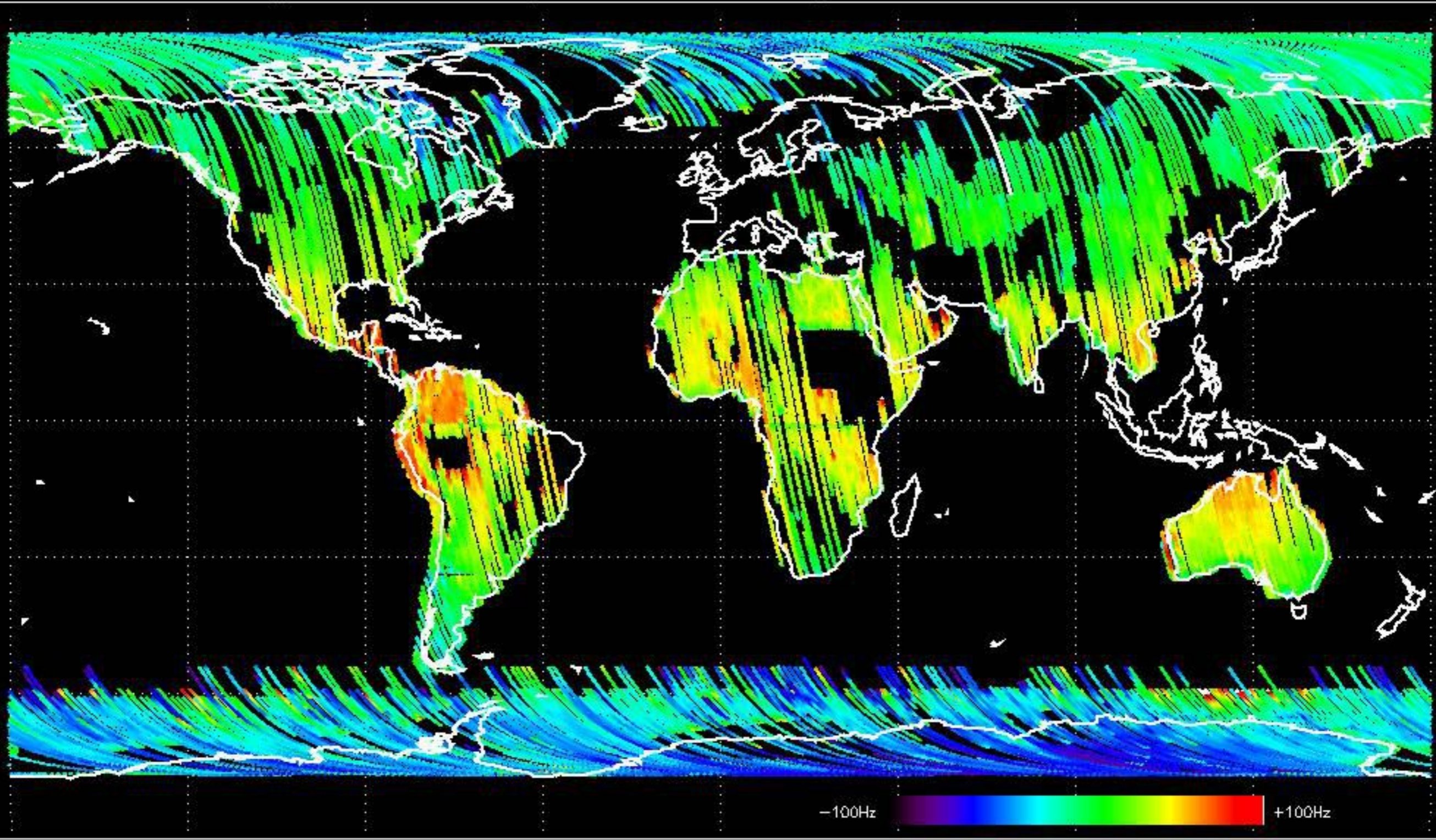


GM1 mode doppler



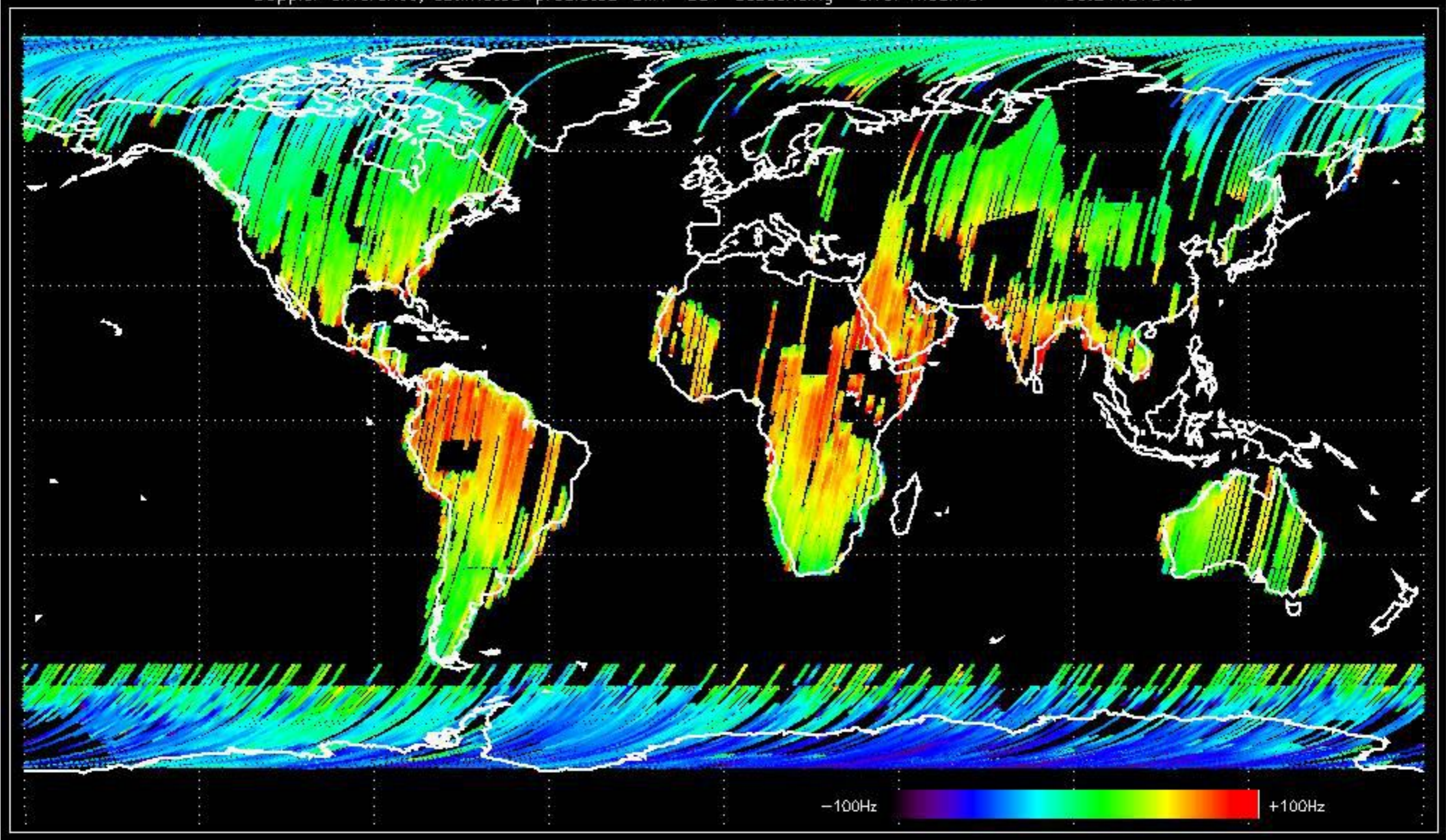


Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -39.103299 Hz

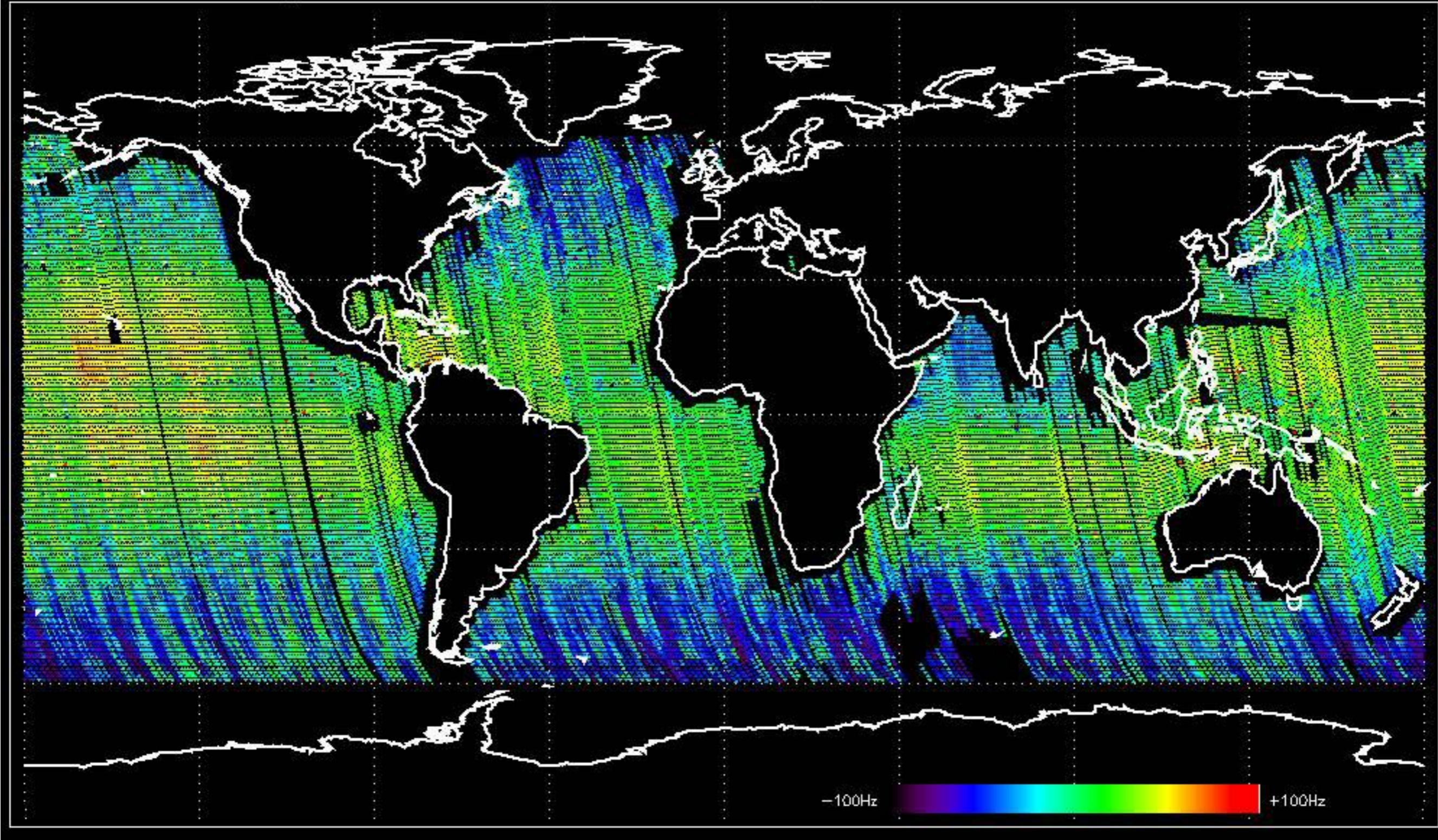


-100Hz +100Hz

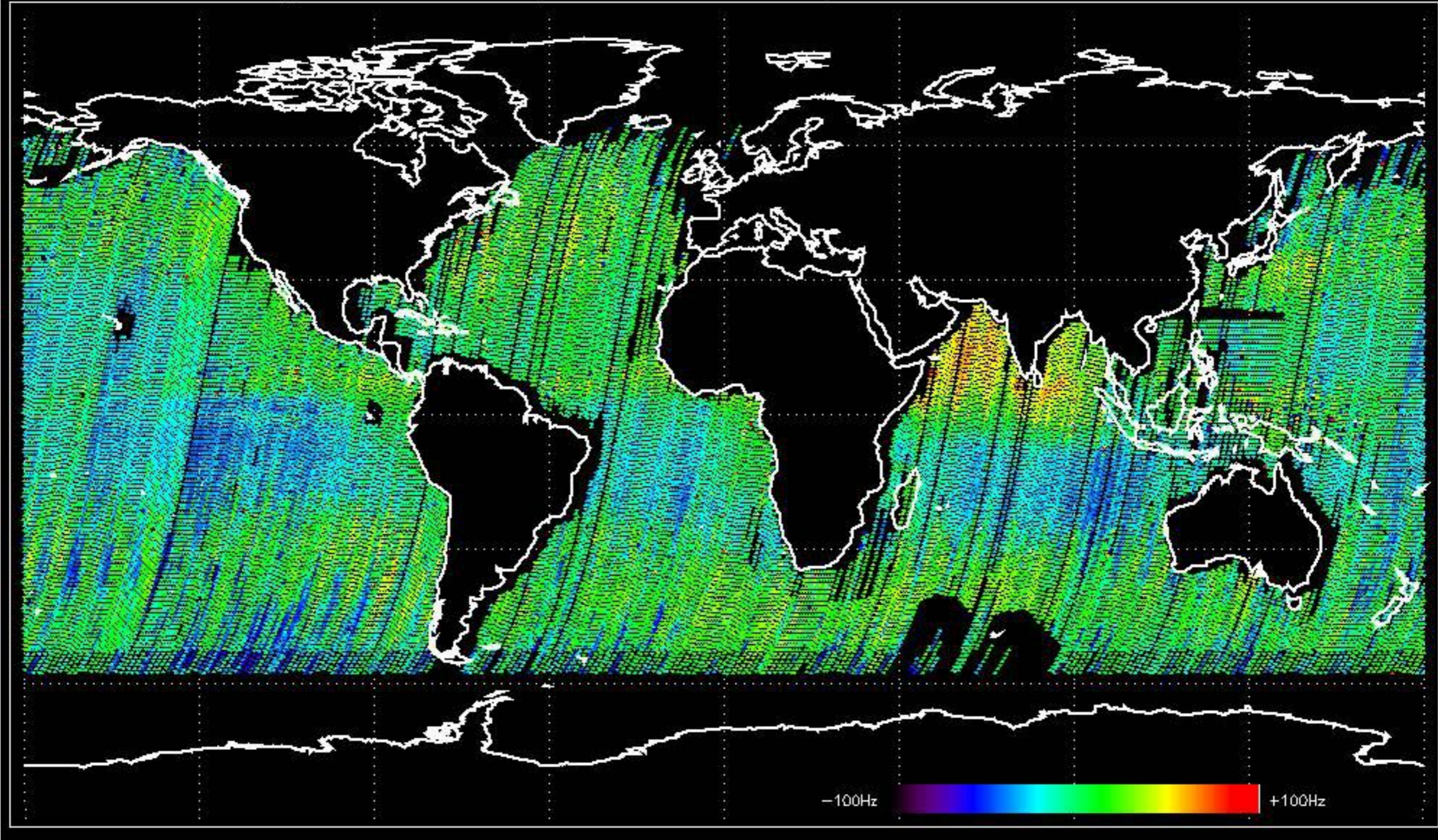
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -33.214078 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -32.368637 Hz

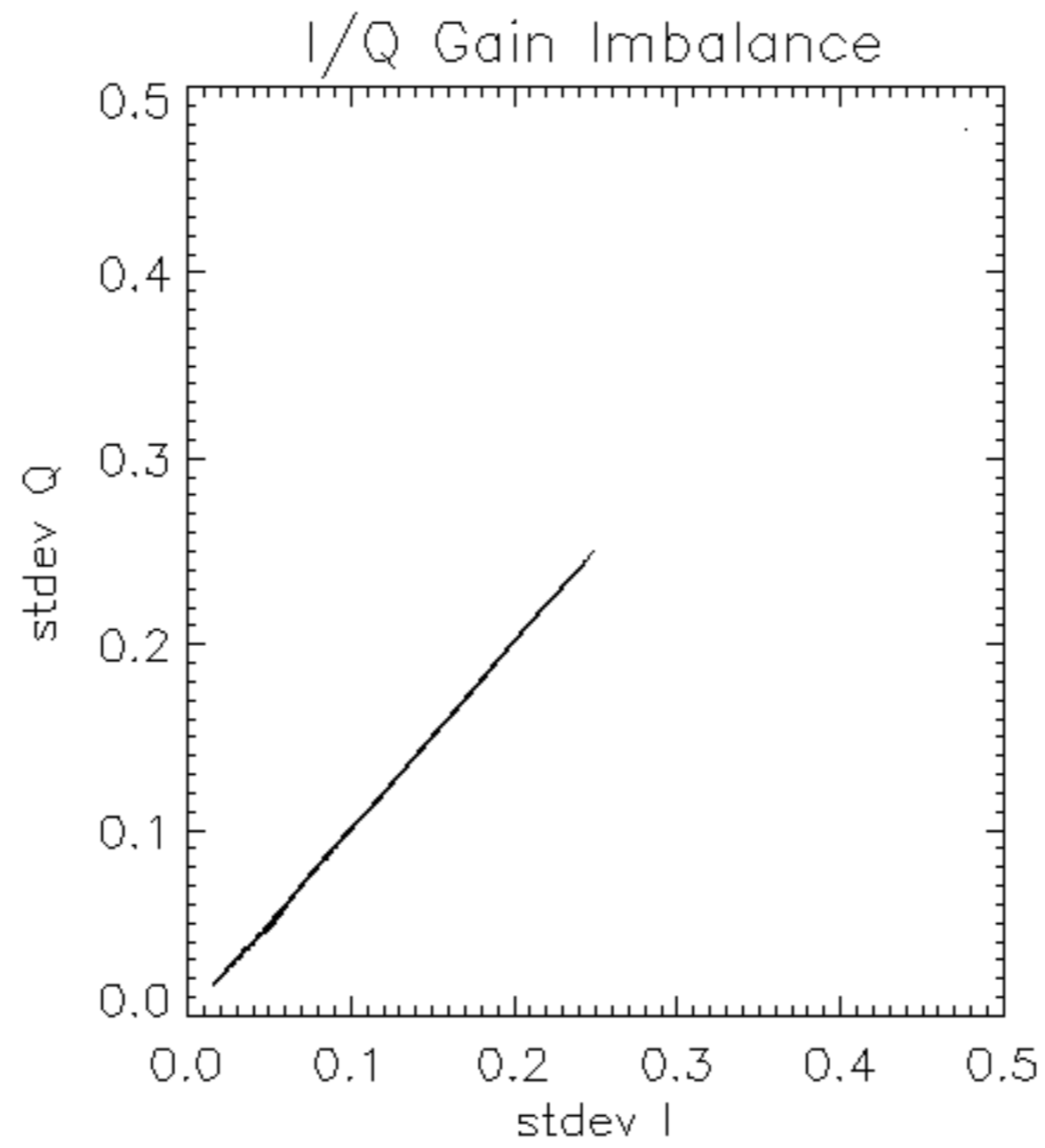


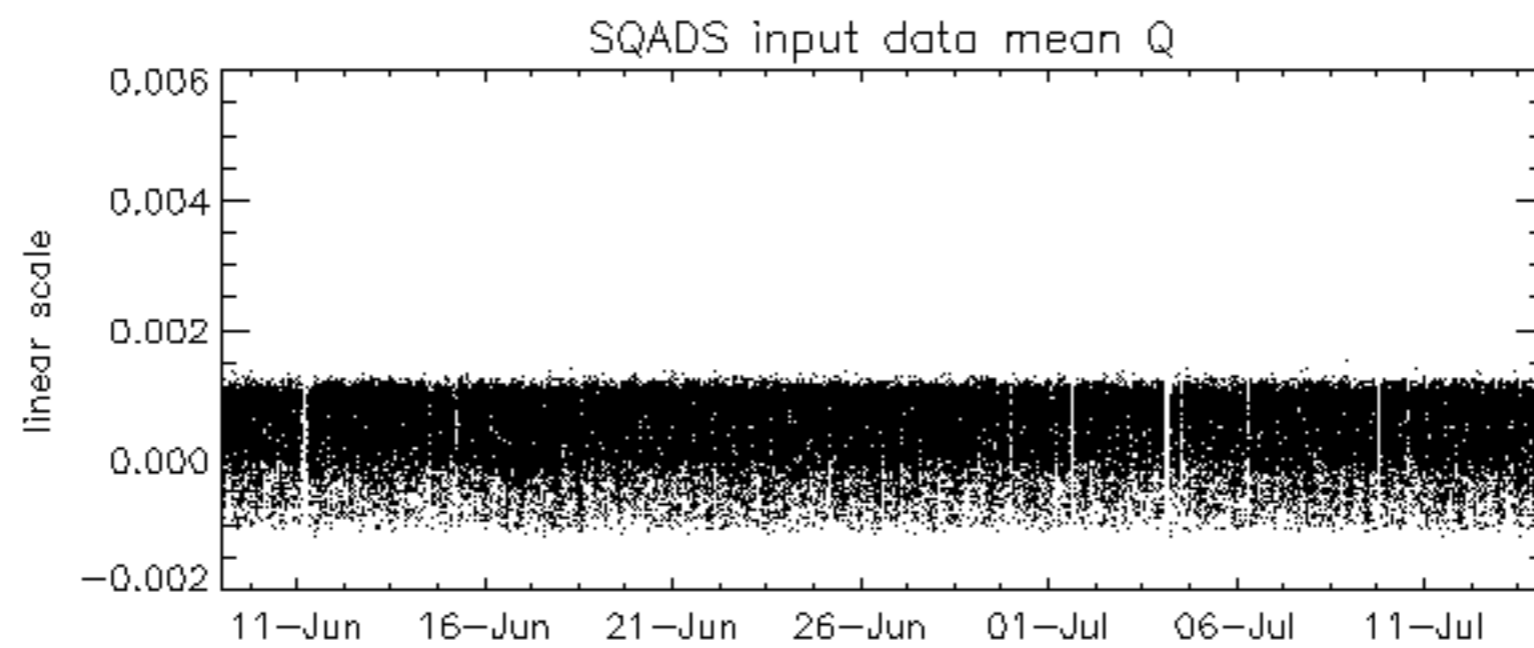
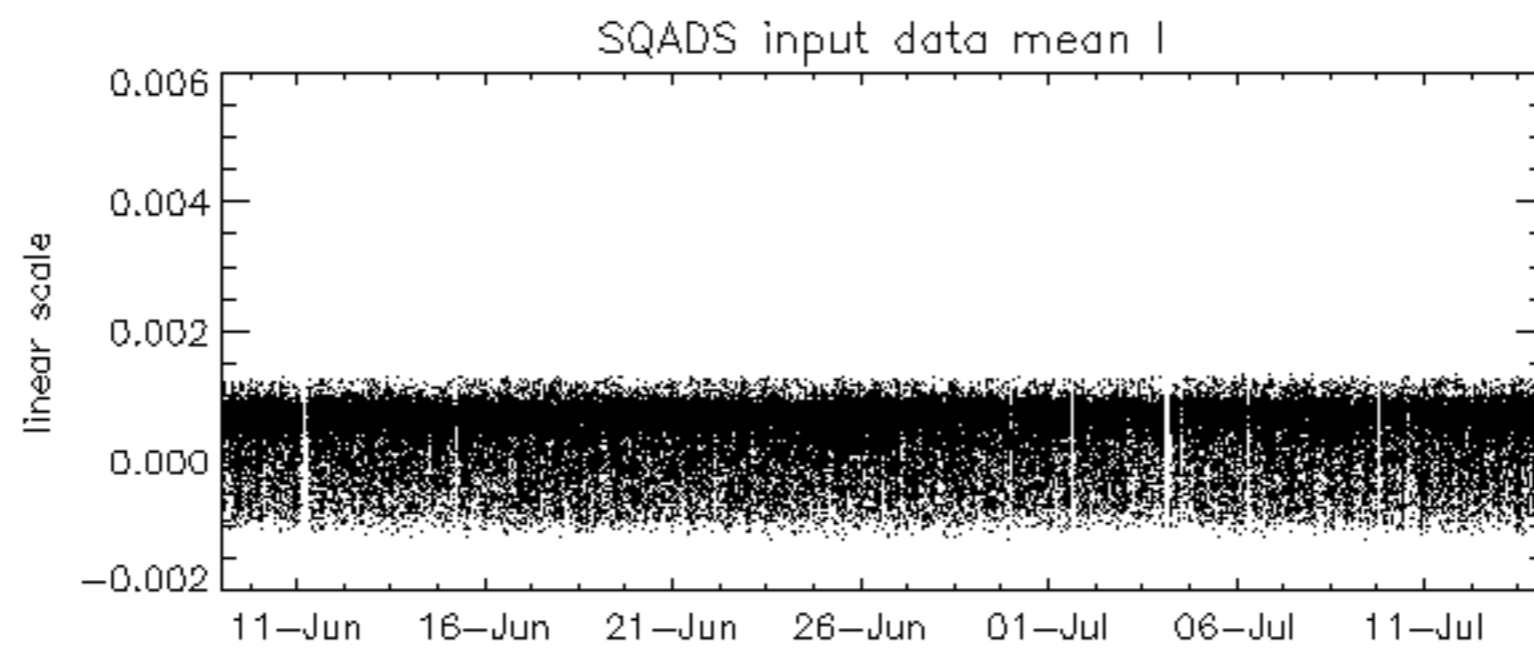
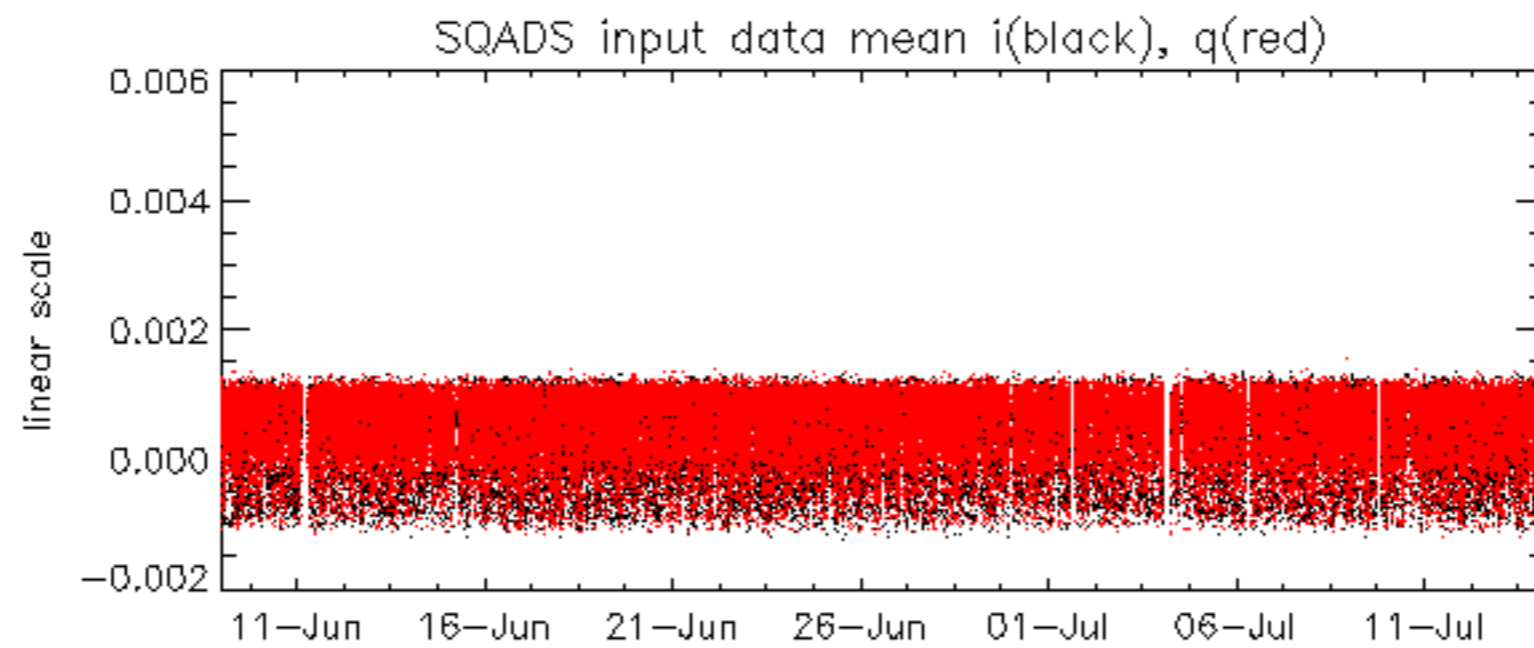
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -36.938598 Hz

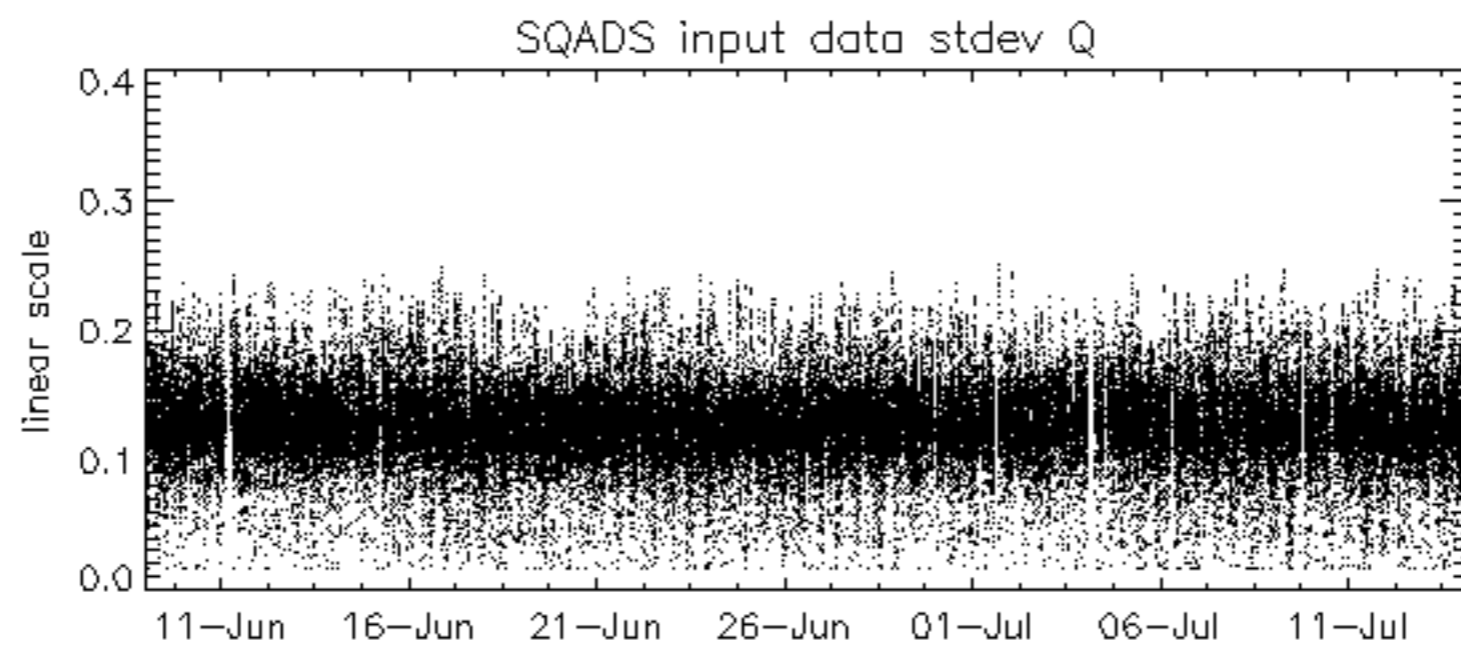
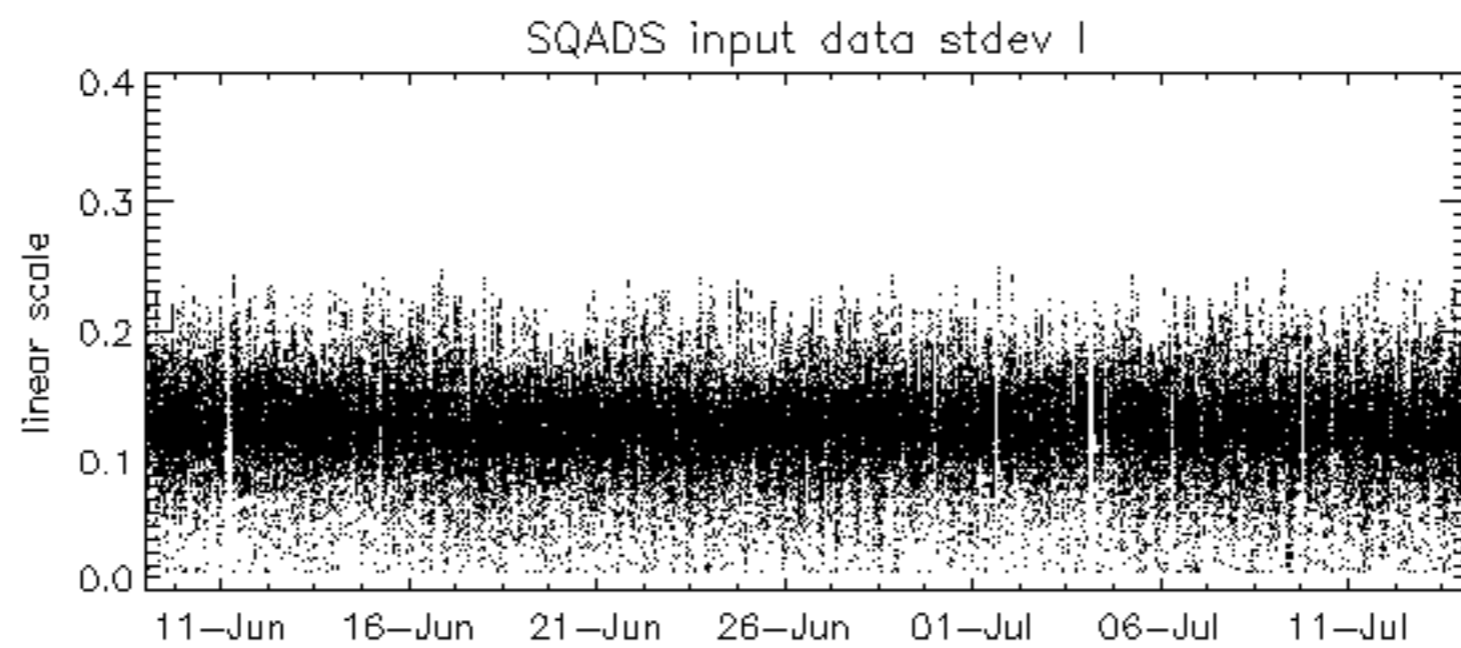
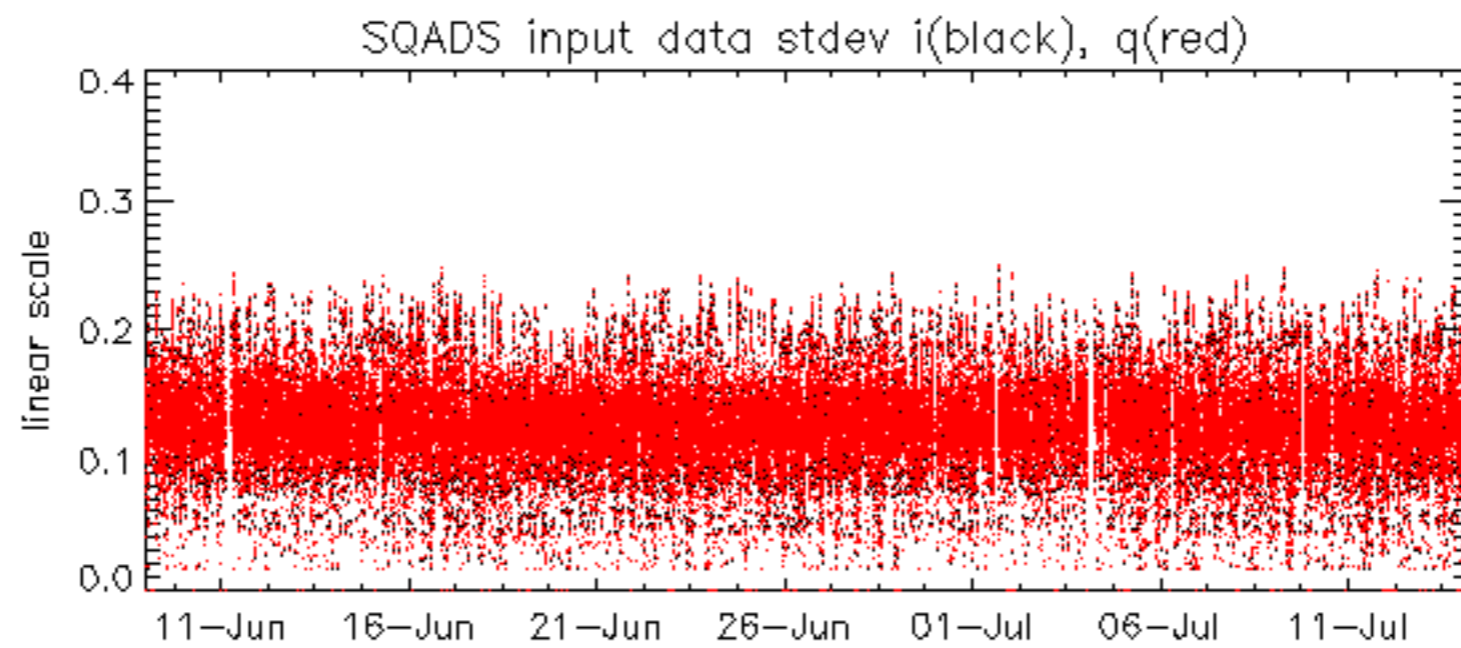


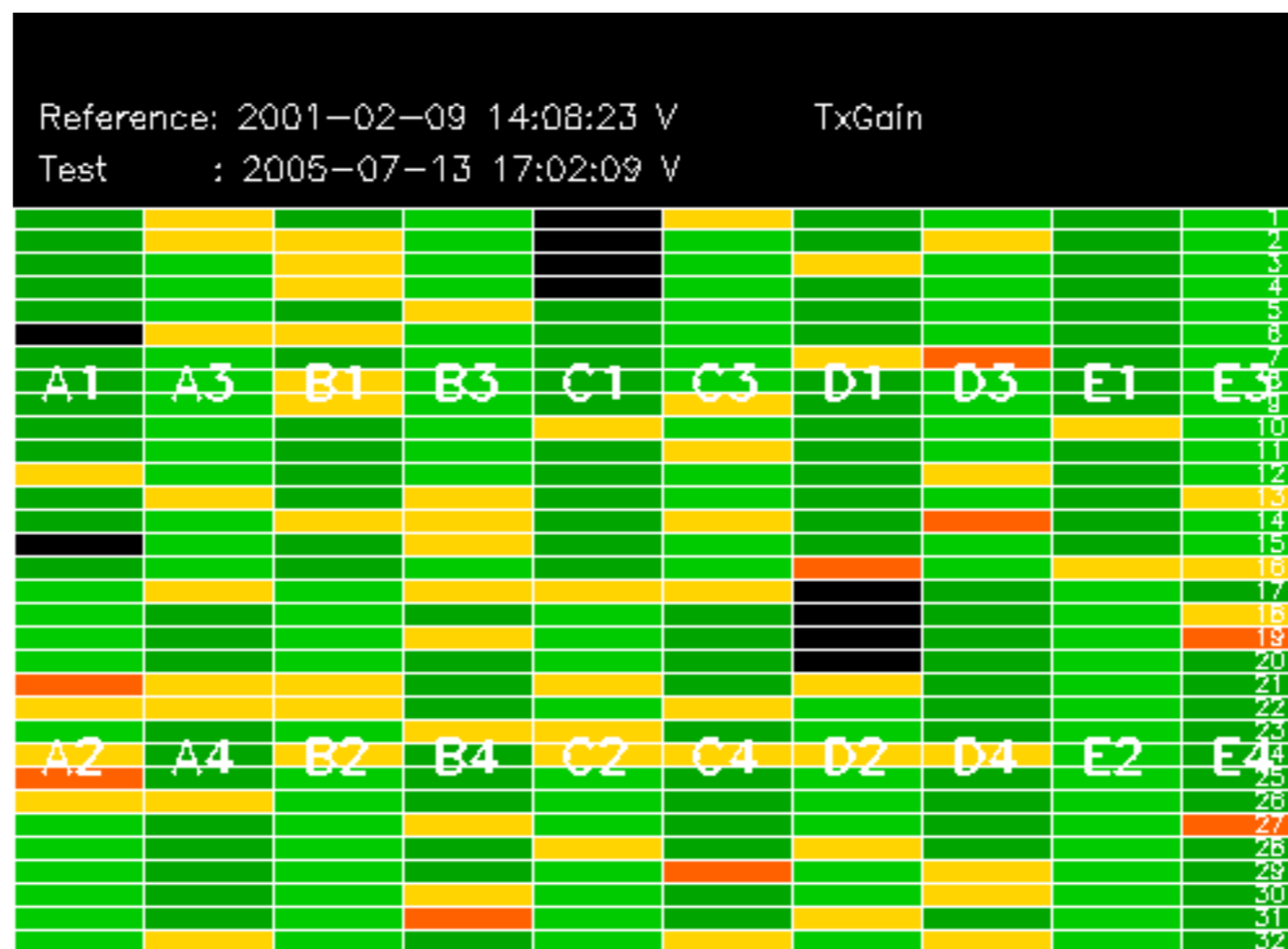
No anomalies observed on available MS products:

No anomalies observed.





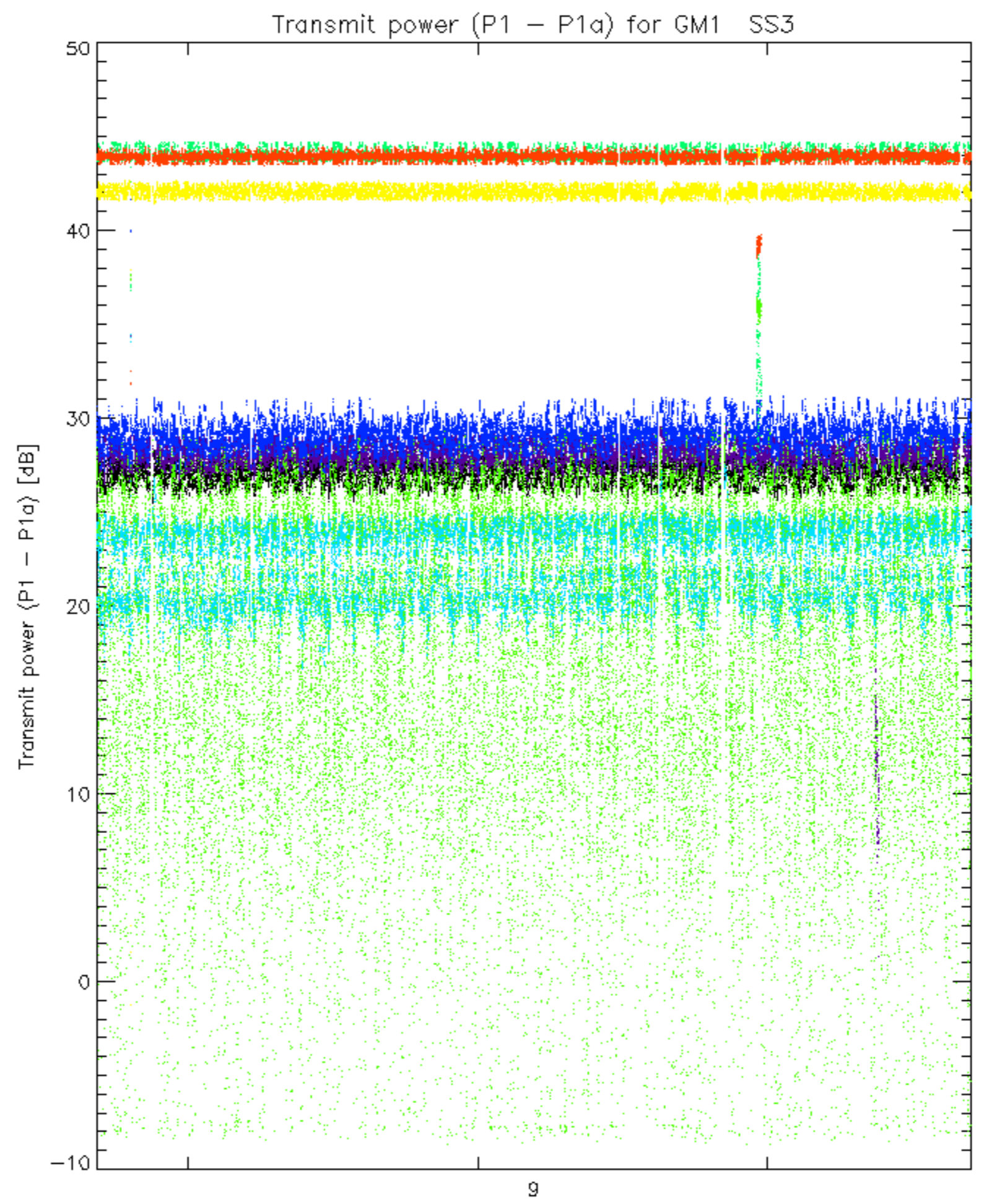




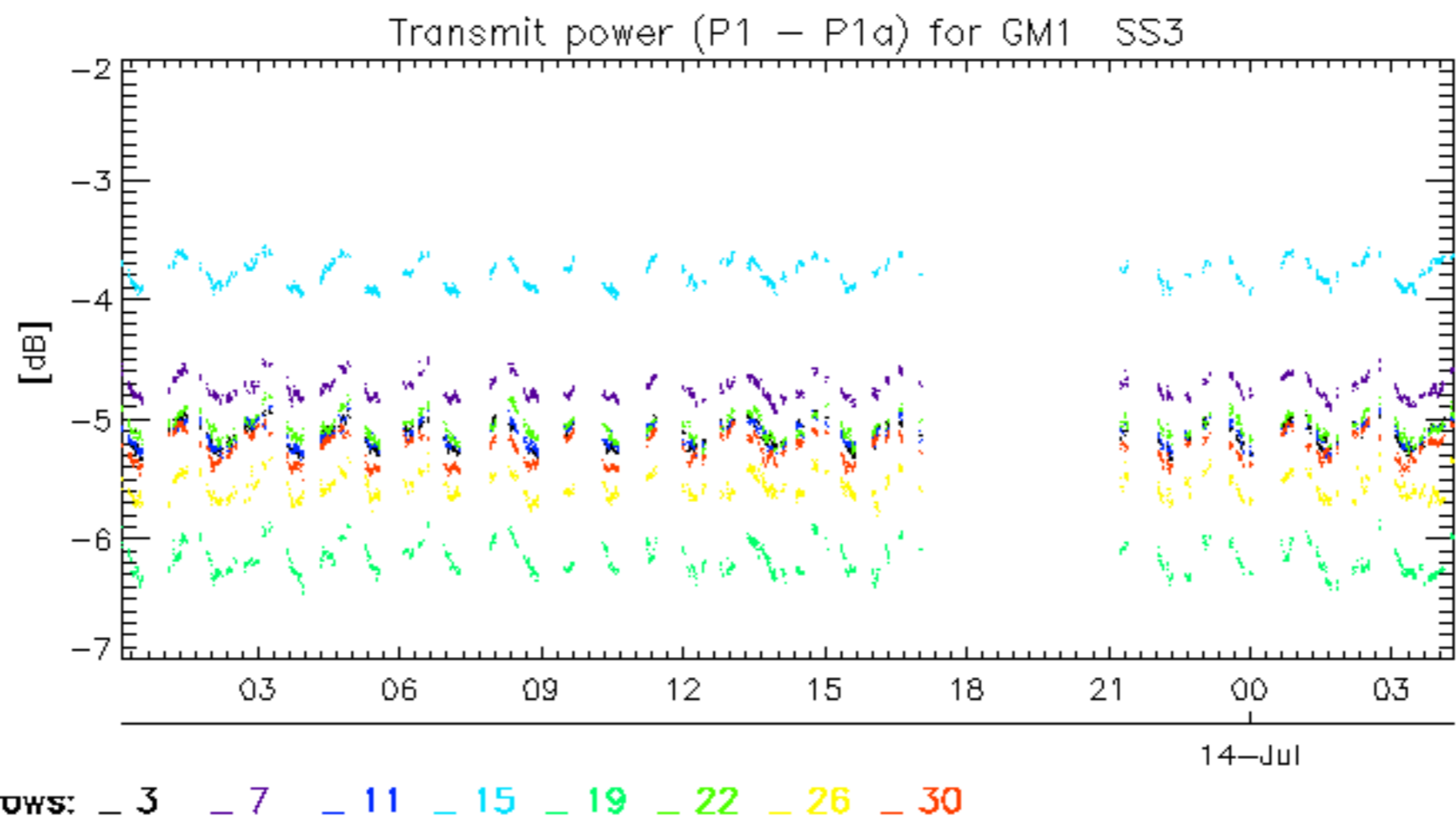
Summary of analysis for the last 3 days 2005071[234]

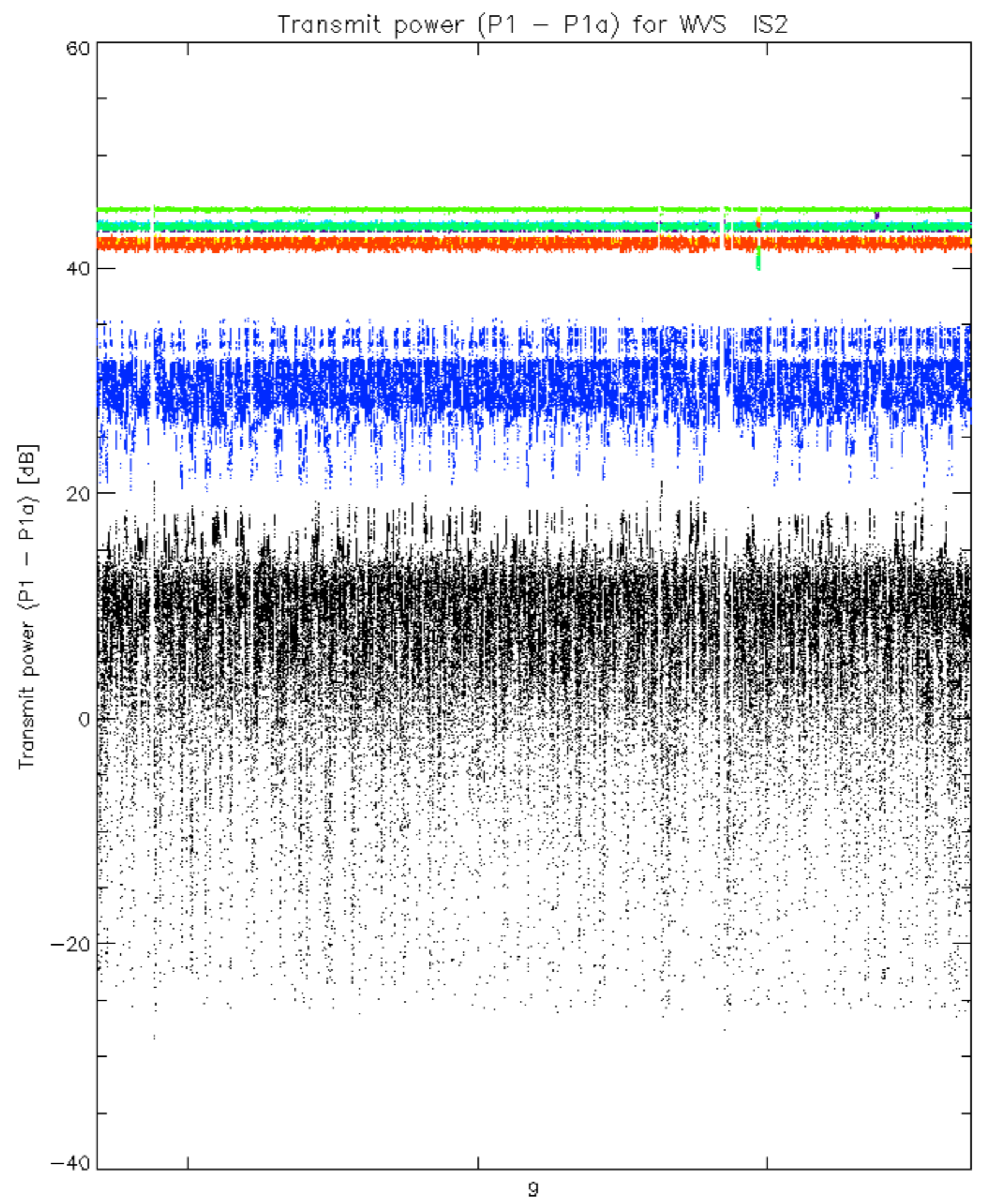
The assumption is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

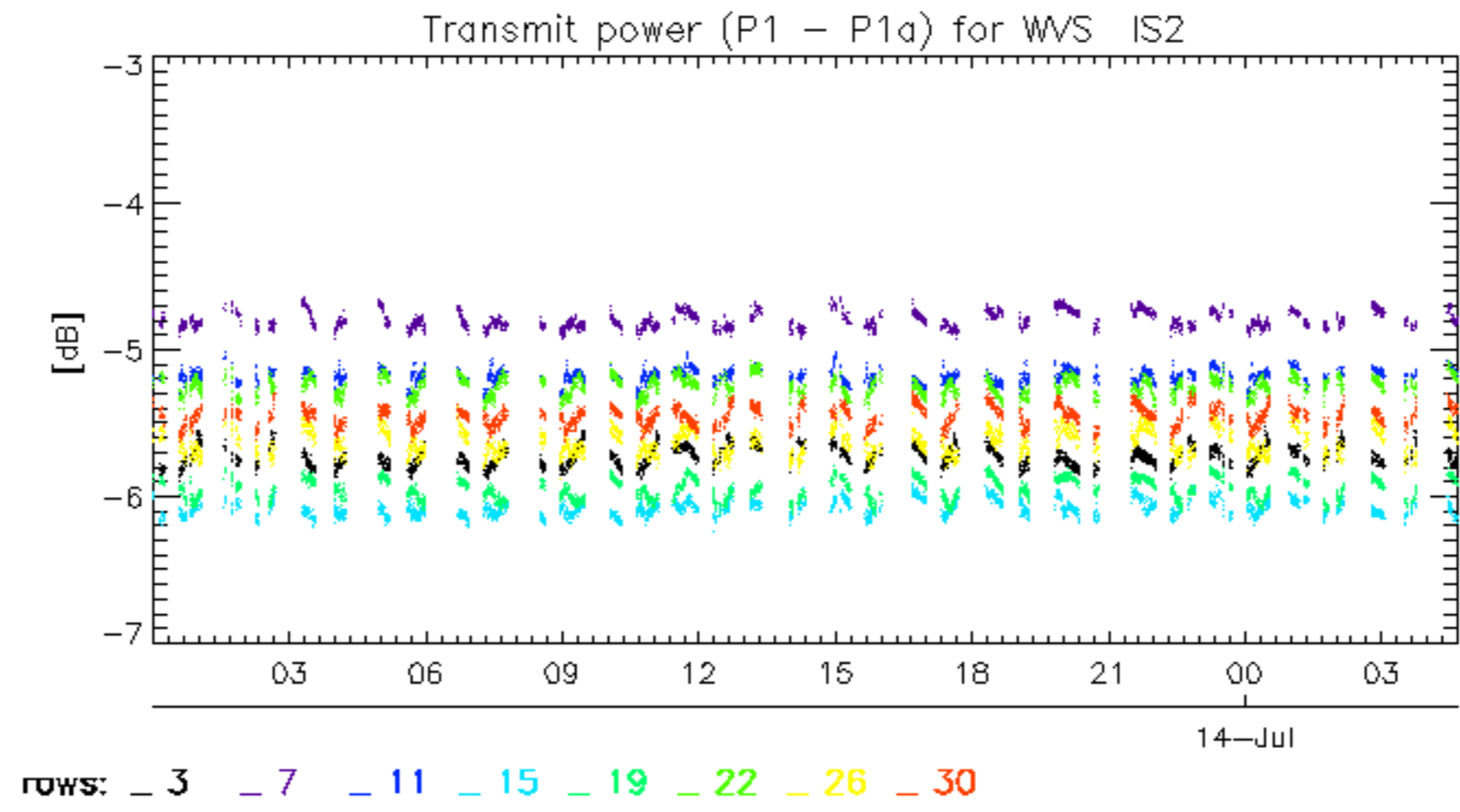
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20050713_155418_000001552039_00025_17614_1802.N1	1	0
ASA_IMM_1PNPDK20050712_065358_000000592039_00006_17595_1425.N1	0	1
ASA_IMM_1PNPDK20050712_065657_000000602039_00006_17595_1429.N1	0	5
ASA_IMM_1PNPDK20050712_065658_000001052039_00006_17595_1511.N1	0	5
ASA_IMM_1PNPDK20050712_083354_000001742039_00007_17596_1442.N1	0	1
ASA_IMM_1PNPDK20050712_083948_000000922039_00007_17596_1443.N1	0	2
ASA_IMM_1PNPDK20050712_131837_000000992039_00010_17599_1514.N1	0	2
ASA_IMM_1PNPDK20050712_182402_000001582039_00013_17602_1463.N1	0	3
ASA_IMM_1PNPDK20050712_214251_000001512039_00015_17604_1478.N1	0	1
ASA_IMM_1PNPDK20050713_074723_000000692039_00021_17610_1507.N1	0	2
ASA_IMM_1PNPDK20050713_094344_000001452039_00022_17611_1518.N1	0	1
ASA_IMM_1PNPDK20050713_192842_000003862039_00028_17617_1531.N1	0	1
ASA_IMM_1PNPDK20050713_211809_000001662039_00029_17618_1535.N1	0	1
ASA_WSM_1PNPDE20050712_162924_000001232039_00012_17601_3817.N1	0	57
ASA_WSM_1PNPDE20050712_231136_000000672039_00016_17605_3864.N1	0	42
ASA_WSM_1PNPDE20050712_231138_000001282039_00016_17605_3954.N1	0	42
ASA_WSM_1PNPDE20050713_041522_000002322039_00019_17608_3899.N1	0	48
ASA_WSM_1PNPDK20050712_082903_000001462039_00007_17596_3639.N1	0	2
ASA_WSM_1PNPDK20050712_100910_000001462039_00008_17597_3652.N1	0	1
ASA_WSM_1PNPDK20050712_101518_000002932039_00008_17597_3651.N1	0	1
ASA_WSM_1PNPDK20050712_115133_000000852039_00009_17598_3655.N1	0	1
ASA_WSM_1PNPDK20050712_132528_000000612039_00010_17599_3661.N1	0	2
ASA_WSM_1PNPDK20050712_132540_000000552039_00010_17599_3691.N1	0	2
ASA_APM_1PNPDK20050713_081747_000000602039_00021_17610_0297.N1	0	3



rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30







No unavailabilities during the reported period.