

PRELIMINARY REPORT OF 050927

last update on Tue Sep 27 10:50:01 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 2005-09-26 00:00:00 to 2005-09-27 10:50:01

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	28	54	17	0	0
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	28	54	17	0	0
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	28	54	17	0	0
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	28	54	17	0	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	25	53	26	12	55
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	25	53	26	12	55
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	25	53	26	12	55
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	25	53	26	12	55

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	20050925 095348
H	20050924 084449

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
☒	☒
☒	☒
☒	☒
☒	☒

4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

4.1.1 - Evolution for WVS

Evolution of cal pulses for WVS
☒
☒

4.1.2 - Evolution for GM1

Evolution of cal pulses for GM1
☒
☒

4.2 - Cyclic statistics

4.2.1 - Evolution for WVS

Evolution of cal pulses for WVS
☒

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	-3.451557	0.085409	-0.459590
7	P1	-3.090178	0.036826	0.351571
11	P1	-4.519384	0.150187	0.814254
15	P1	-5.788009	0.069876	-0.539528
19	P1	-3.468760	0.240221	1.054596
22	P1	-4.562548	0.023229	0.227942
26	P1	-4.669673	0.103294	0.618839
30	P1	-6.588386	0.698857	2.216195
3	P1	-15.893900	1.869204	-0.581303
7	P1	-16.478220	5.378996	-1.965297
11	P1	-20.346052	12.254608	6.099914
15	P1	-13.007170	11.293991	-4.077007
19	P1	-14.084303	0.350394	1.406993
22	P1	-17.091303	25.176973	-3.145065
26	P1	-18.190609	22.037579	-1.112657
30	P1	-18.161448	8.851129	0.558484

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.769558	0.100472	-0.226434
7	P2	-22.233093	0.330690	-1.251099
11	P2	-14.847031	3.192631	-4.735198
15	P2	-7.139406	0.123596	-0.270232
19	P2	-9.328118	0.235081	0.701779
22	P2	-17.113571	0.266558	-1.114878
26	P2	-16.352621	0.142265	0.540716
30	P2	-19.169851	0.281398	-1.150518

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.164950	0.004270	-0.022455
7	P3	-8.164950	0.004270	-0.022455
11	P3	-8.164950	0.004270	-0.022455
15	P3	-8.164950	0.004270	-0.022455
19	P3	-8.164950	0.004270	-0.022455
22	P3	-8.164950	0.004270	-0.022455
26	P3	-8.164950	0.004270	-0.022455
30	P3	-8.164950	0.004270	-0.022455

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	-2.985964	0.244759	-0.905828
7	P1	-2.981777	0.081787	-0.046678
11	P1	-3.660553	0.324538	1.400749
15	P1	-3.560003	0.037948	0.269605
19	P1	-3.460057	0.087104	0.499852
22	P1	-5.405853	0.247205	0.948007
26	P1	-6.592790	1.038620	2.405334
30	P1	-5.747940	0.586301	1.667759
3	P1	-11.330023	0.549556	-0.954665
7	P1	-11.700641	20.930628	-2.103894
11	P1	-13.643911	38.280346	-0.420299
15	P1	-13.113894	34.940018	-2.207100
19	P1	-15.325956	0.221667	0.231953
22	P1	-23.637693	6.625321	6.069001
26	P1	-16.511921	6.675377	-3.835660
30	P1	-19.960615	2.053131	0.773657

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.506336	0.067026	-0.382624
7	P2	-22.403559	0.363406	-1.487817
11	P2	-10.339121	1.335987	-3.106565
15	P2	-5.009316	0.050647	0.226218
19	P2	-6.758343	0.123380	0.111019
22	P2	-7.363888	0.272911	-1.298478
26	P2	-23.916840	0.040946	0.112560
30	P2	-22.023685	0.074192	-0.270095

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.007770	0.003505	-0.019972
7	P3	-8.007670	0.003510	-0.019626
11	P3	-8.007617	0.003504	-0.019248
15	P3	-8.007588	0.003513	-0.019815
19	P3	-8.007791	0.003498	-0.019900
22	P3	-8.007564	0.003501	-0.019641
26	P3	-8.007684	0.003510	-0.020041
30	P3	-8.007546	0.003522	-0.020101

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	0.000496741
	stdev	2.00631e-07
MEAN Q	mean	0.000512728
	stdev	2.22262e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.131910
	stdev	0.00100682
STDEV Q	mean	0.132191
	stdev	0.00101895



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2005092[567]

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_1PNPDE20050926_182349_000000352041_00099_18690_6722.N1	0	8
ASA_IMM_1PNPDK20050926_070621_000000622041_00092_18683_4751.N1	0	185
ASA_IMM_1PNPDK20050926_070822_000000602041_00092_18683_4752.N1	0	49
ASA_IMM_1PNPDK20050926_081954_000000152041_00093_18684_4754.N1	0	63
ASA_IMM_1PNPDK20050926_120645_000000622041_00095_18686_4758.N1	0	100
ASA_IMM_1PNPDK20050926_120846_000000272041_00095_18686_4759.N1	0	66
ASA_IMM_1PNPDK20050926_152355_000000622041_00097_18688_4763.N1	0	113
ASA_IMM_1PNPDK20050926_152556_000000502041_00097_18688_4764.N1	0	118
ASA_WVS_1PNPDK20050926_055320_000003302041_00091_18682_1605.N1	0	16

ASA_GM1_1PNPDK20050926_055937_000005982041_00091_18682_6530.N1	0	88
ASA_GM1_1PNPDK20050926_061117_000001932041_00091_18682_6533.N1	0	13
ASA_GM1_1PNPDK20050926_065026_000005372041_00092_18683_6534.N1	0	48
ASA_GM1_1PNPDK20050926_071049_000007732041_00092_18683_6540.N1	0	71
ASA_GM1_1PNPDK20050926_072553_000001502041_00092_18683_6542.N1	0	7
ASA_GM1_1PNPDK20050926_073927_000002292041_00092_18683_6545.N1	0	29
ASA_GM1_1PNPDK20050926_074503_000008452041_00092_18683_6538.N1	0	106
ASA_GM1_1PNPDK20050926_083112_000007792041_00093_18684_6539.N1	0	167
ASA_GM1_1PNPDK20050926_092334_000004282041_00093_18684_6551.N1	0	37
ASA_GM1_1PNPDK20050926_093227_000004342041_00093_18684_6550.N1	0	29
ASA_GM1_1PNPDK20050926_102220_000001812041_00094_18685_6564.N1	0	7
ASA_GM1_1PNPDK20050926_110125_000006042041_00094_18685_6560.N1	0	28
ASA_GM1_1PNPDK20050926_111314_000004282041_00094_18685_6562.N1	0	65
ASA_GM1_1PNPDK20050926_115256_000004952041_00095_18686_6561.N1	0	155
ASA_GM1_1PNPDK20050926_124201_000004952041_00095_18686_6567.N1	0	51
ASA_GM1_1PNPDK20050926_130524_000004652041_00095_18686_6570.N1	0	46
ASA_GM1_1PNPDK20050926_132615_000000662041_00096_18687_6572.N1	0	15
ASA_GM1_1PNPDK20050926_133447_000003922041_00096_18687_6569.N1	0	50
ASA_GM1_1PNPDK20050926_133511_000009182041_00096_18687_6579.N1	0	95
ASA_GM1_1PNPDK20050926_140511_000002052041_00096_18687_6589.N1	0	26
ASA_GM1_1PNPDK20050926_141024_000000782041_00096_18687_6630.N1	0	30
ASA_GM1_1PNPDK20050926_141026_000000782041_00096_18687_6590.N1	0	30
ASA_GM1_1PNPDK20050926_142236_000005922041_00096_18687_6582.N1	0	75
ASA_GM1_1PNPDK20050926_143412_000004412041_00096_18687_6586.N1	0	44
ASA_GM1_1PNPDK20050926_144716_000002232041_00096_18687_6578.N1	0	17
ASA_GM1_1PNPDK20050926_145950_000009242041_00097_18688_6580.N1	0	105
ASA_WSM_1PNPDE20050925_171036_000002382041_00084_18675_0541.N1	0	12
ASA_WSM_1PNPDE20050926_012729_000001832041_00088_18679_0630.N1	0	1

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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)

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

7.2 - Absolute Doppler for WVS**Evolution of Absolute Doppler**

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

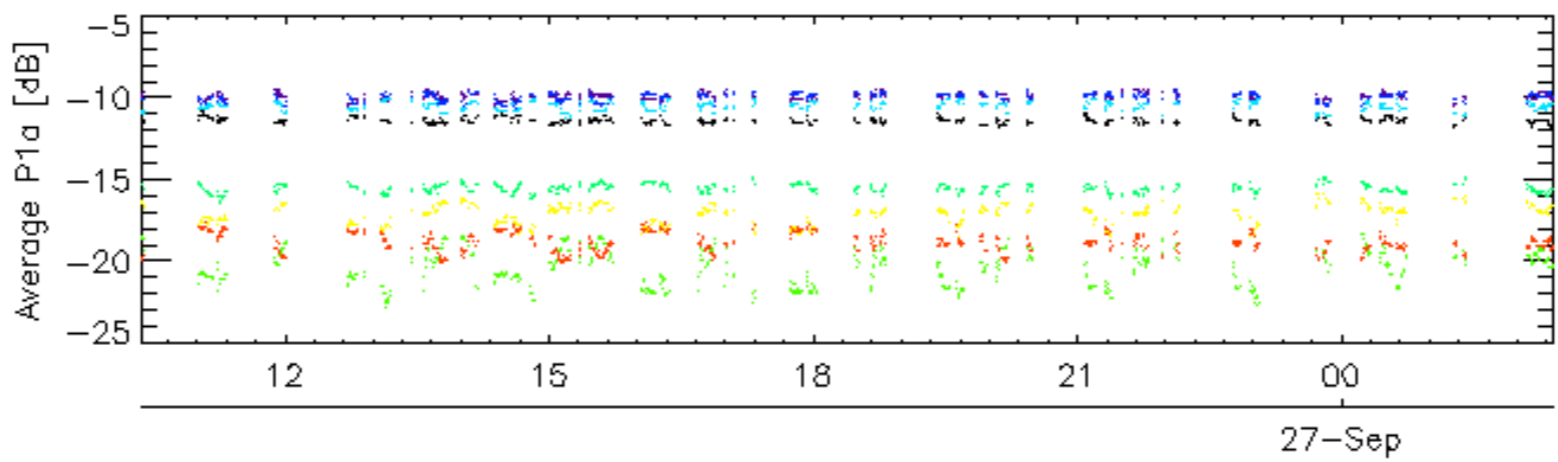
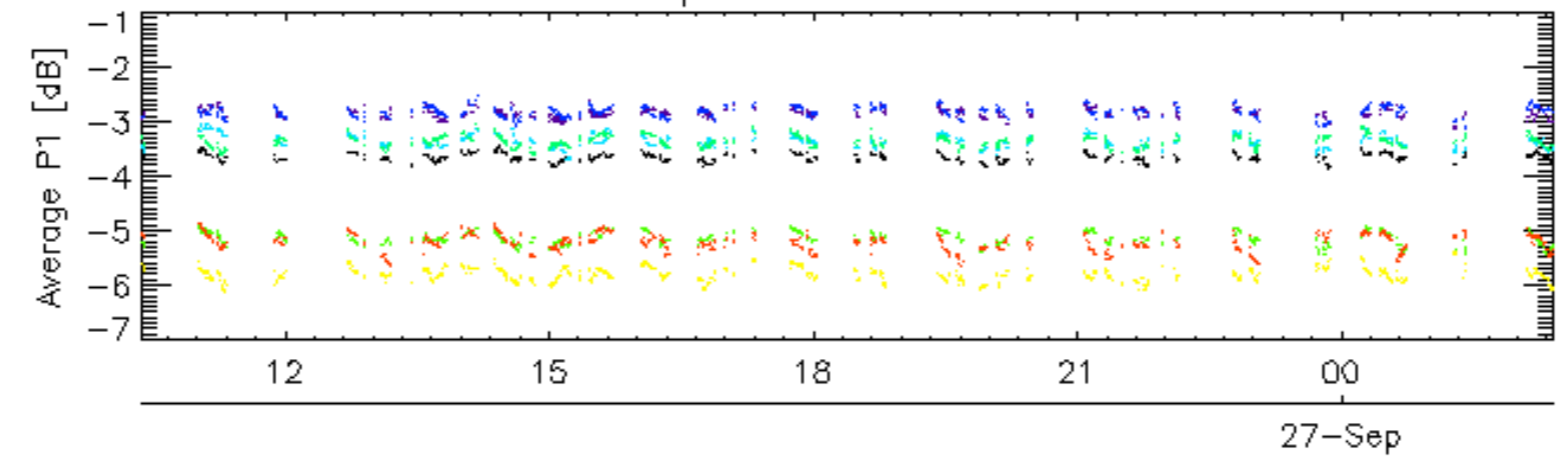
Ascending
<input type="checkbox"/>
Descending

7.6 - Doppler evolution versus ANX for GM1

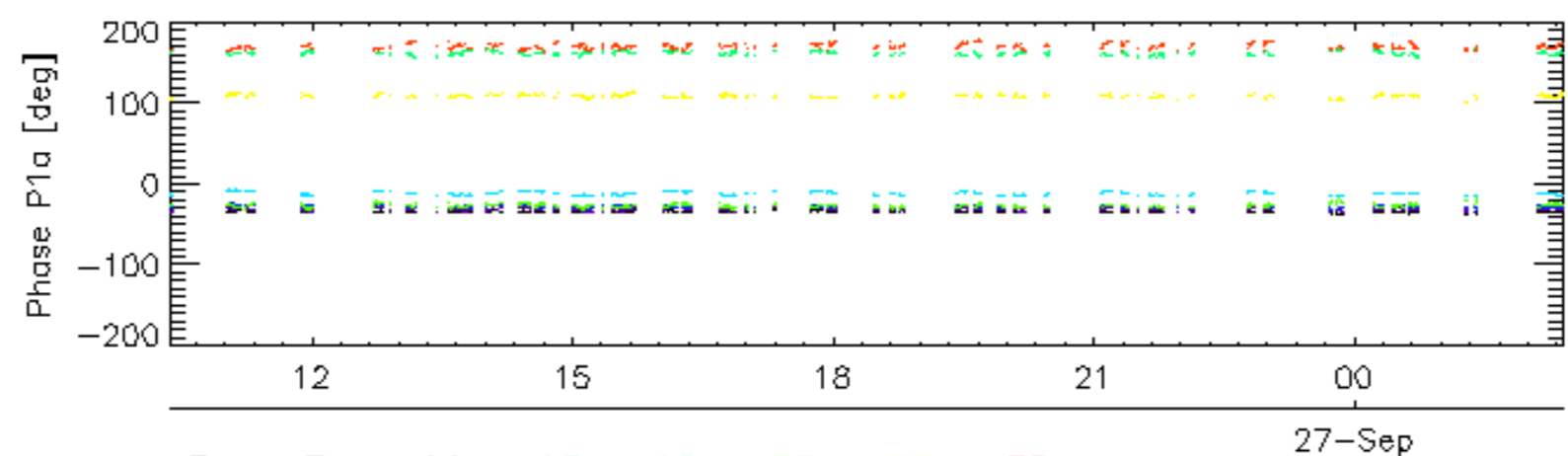
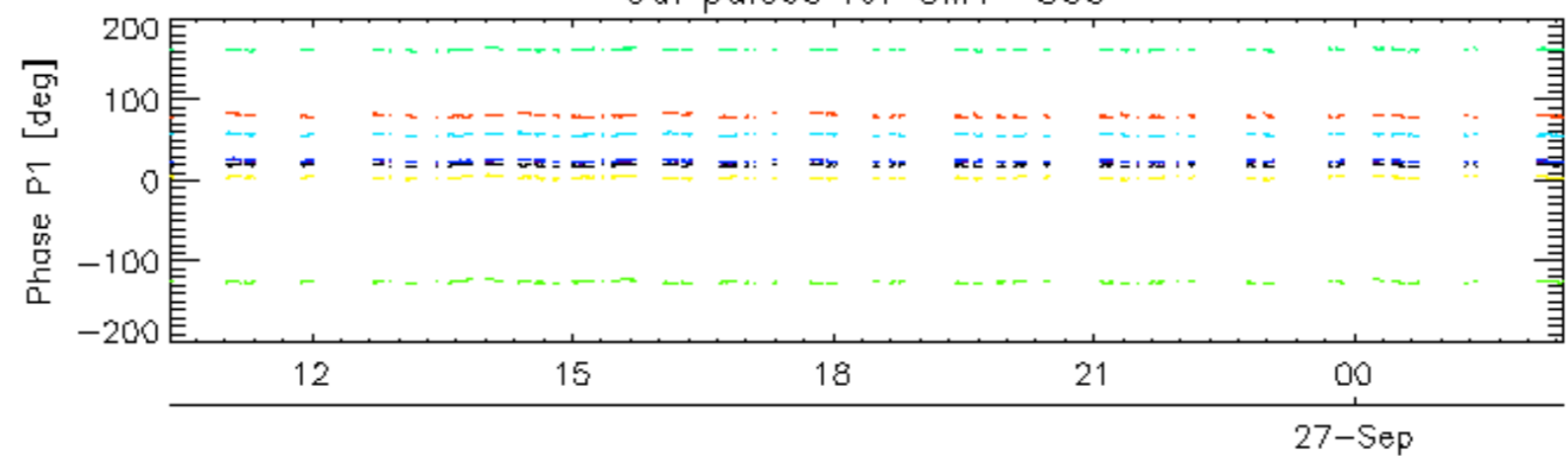
Evolution Doppler error versus ANX

<input type="checkbox"/>

Cal pulses for GM1 SS3

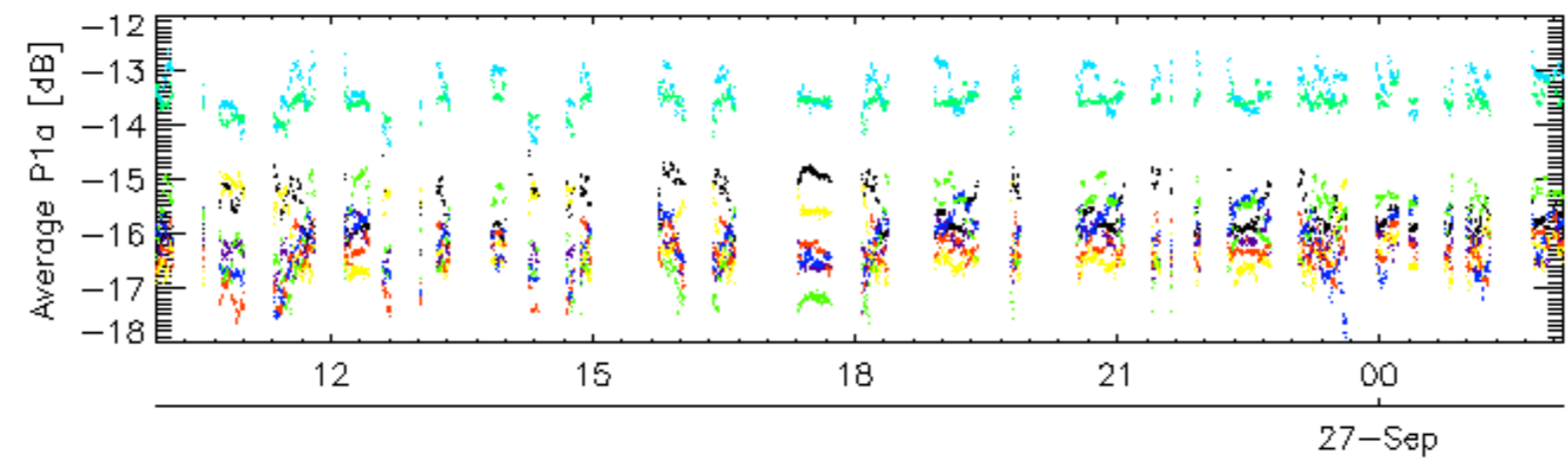
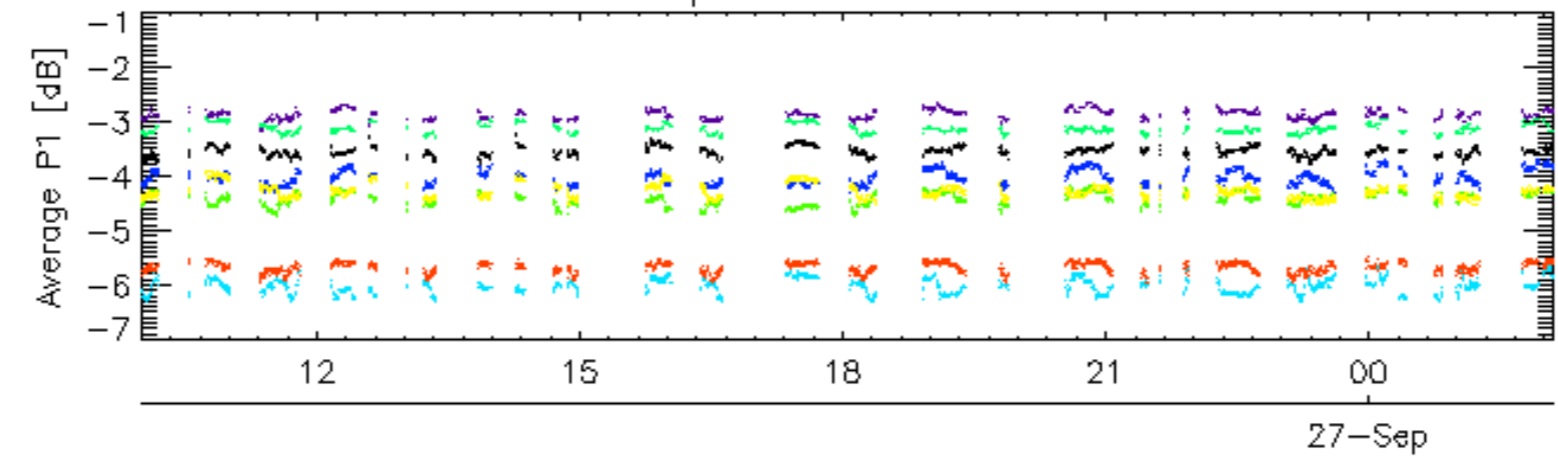


Cal pulses for GM1 SS3

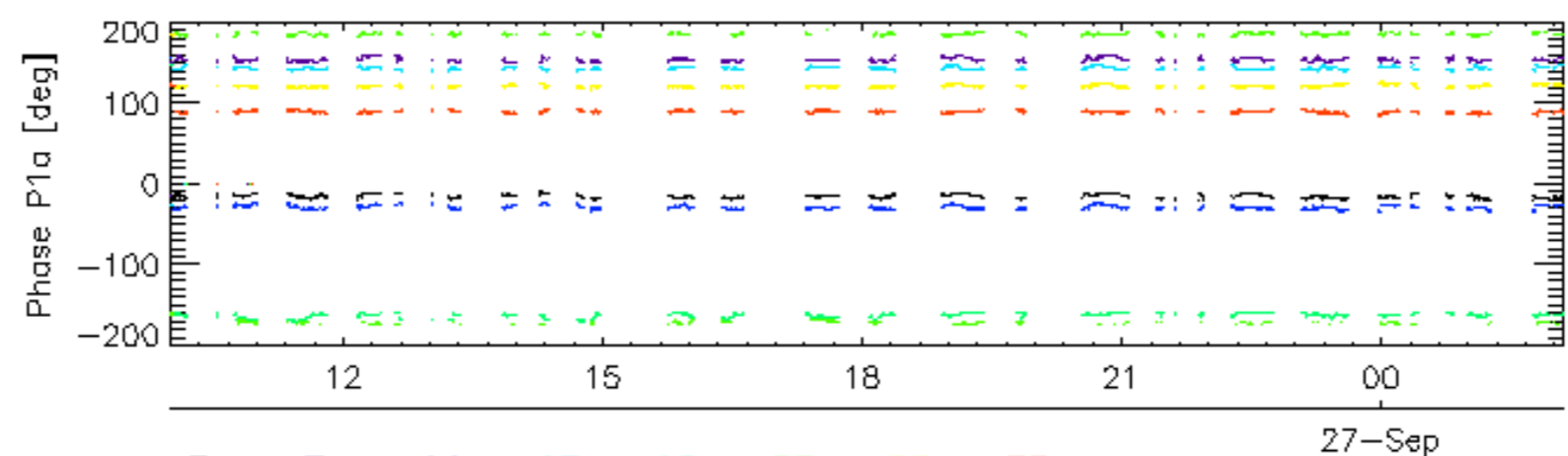
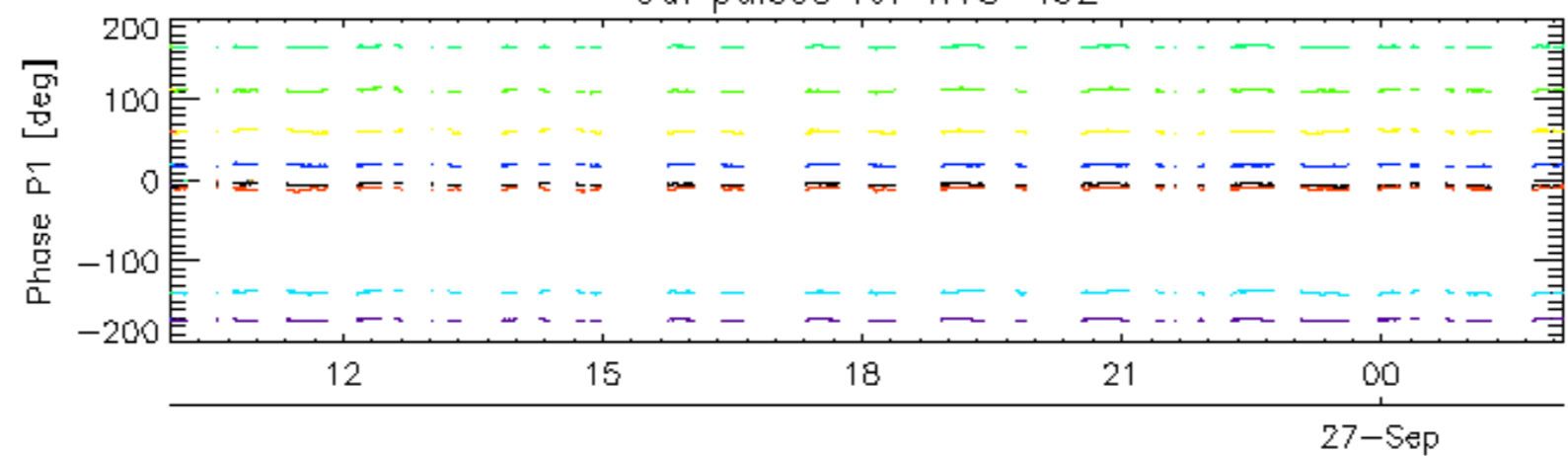


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

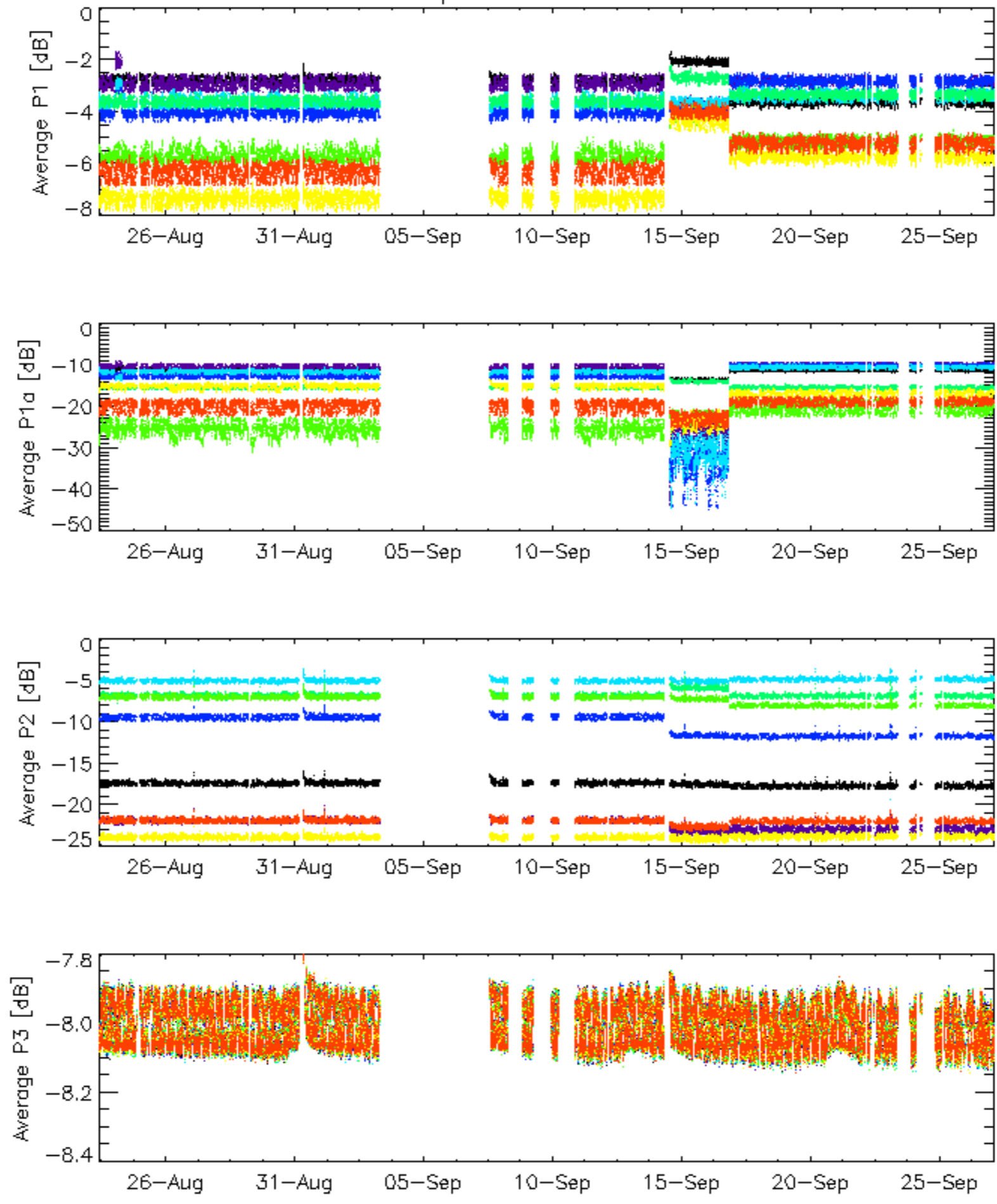


Cal pulses for WVS IS2



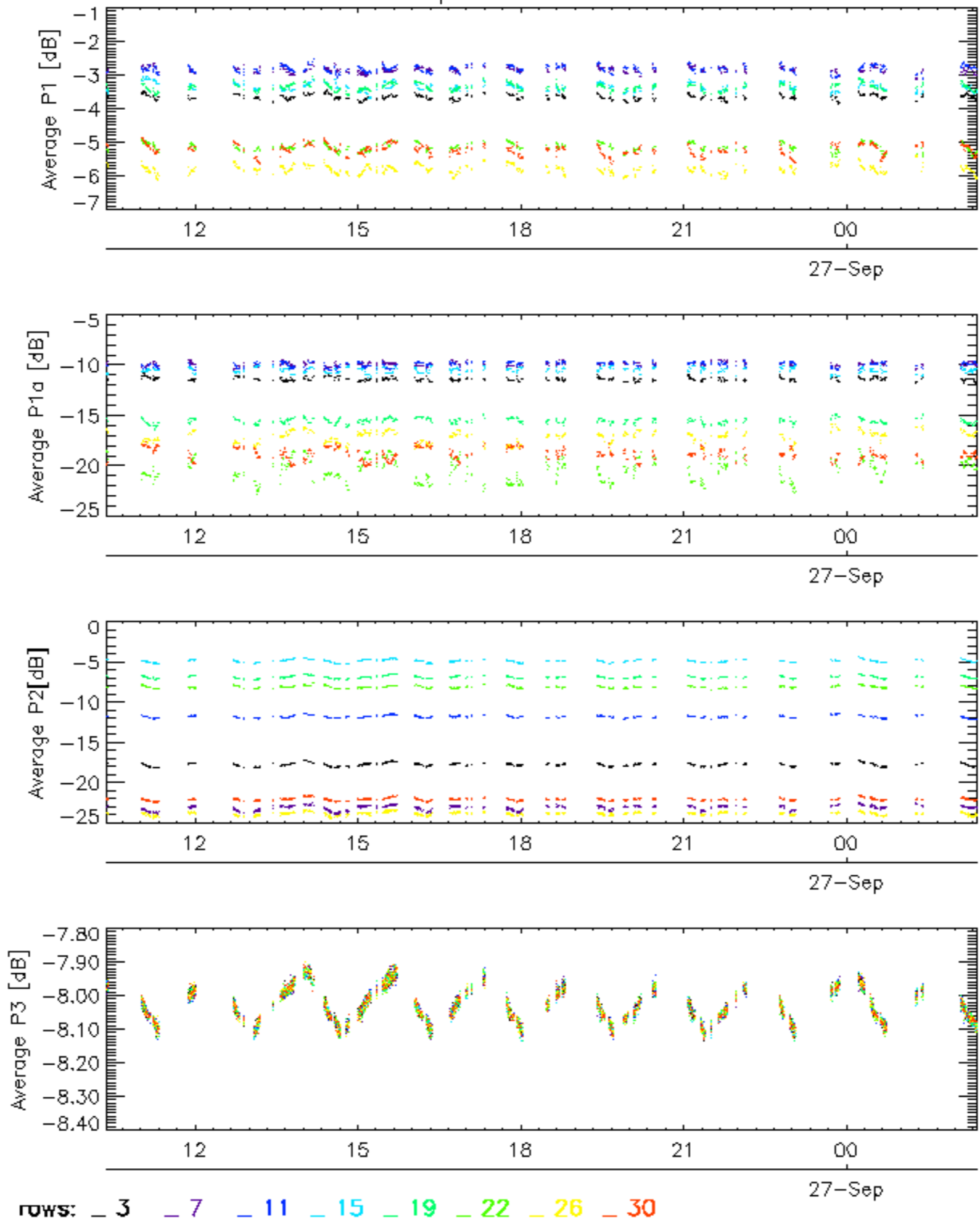
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

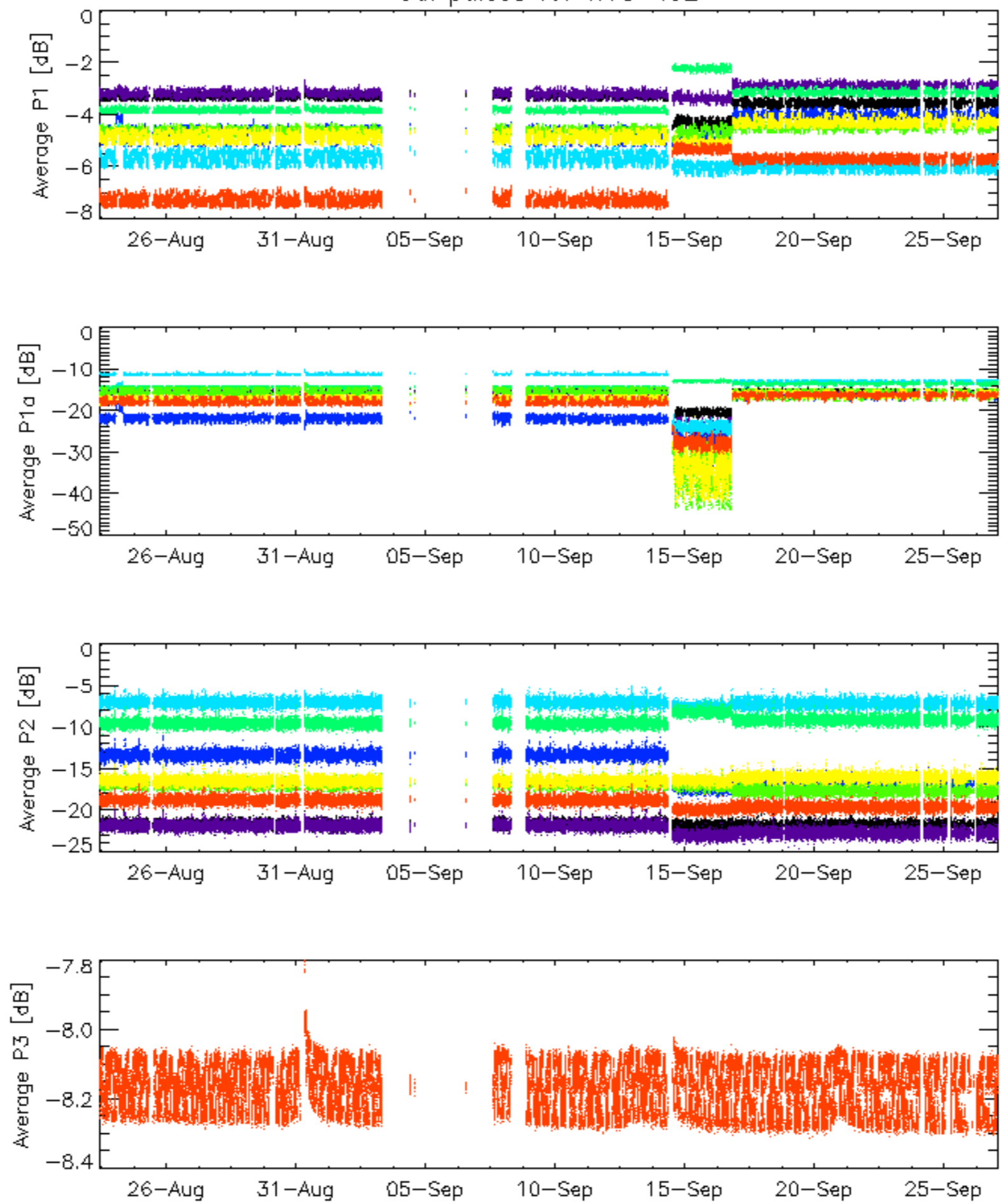


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

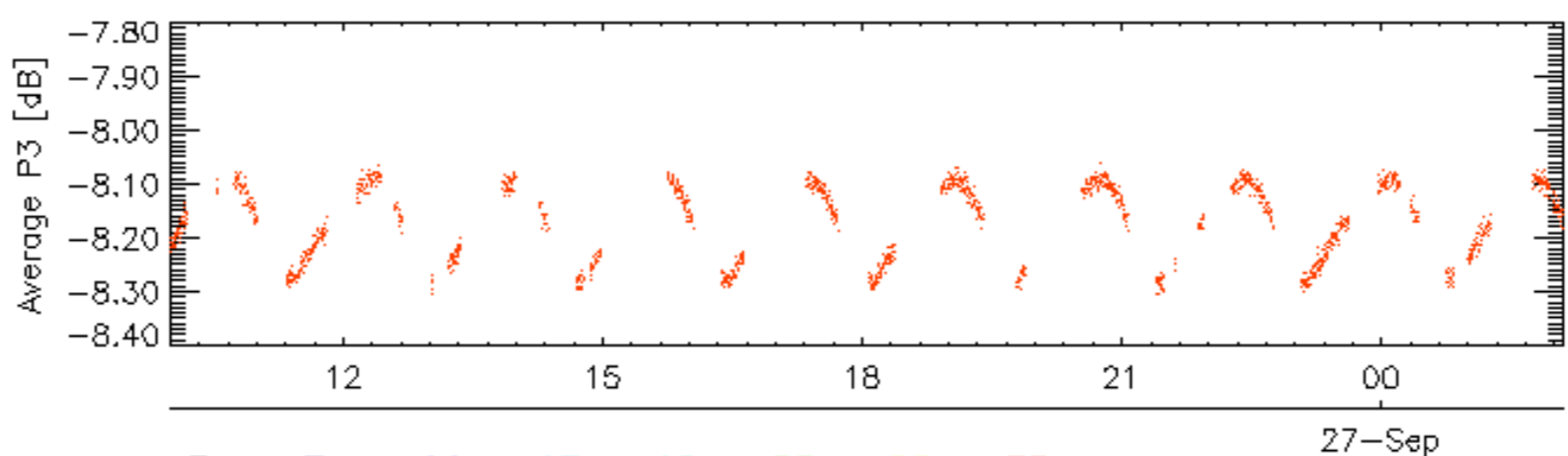
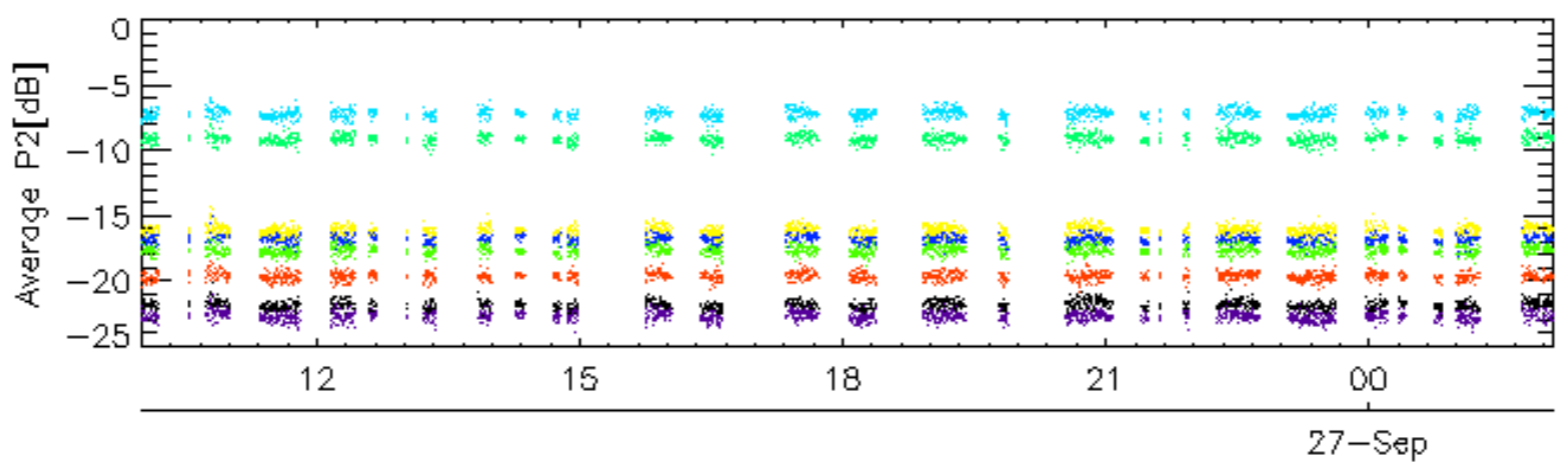
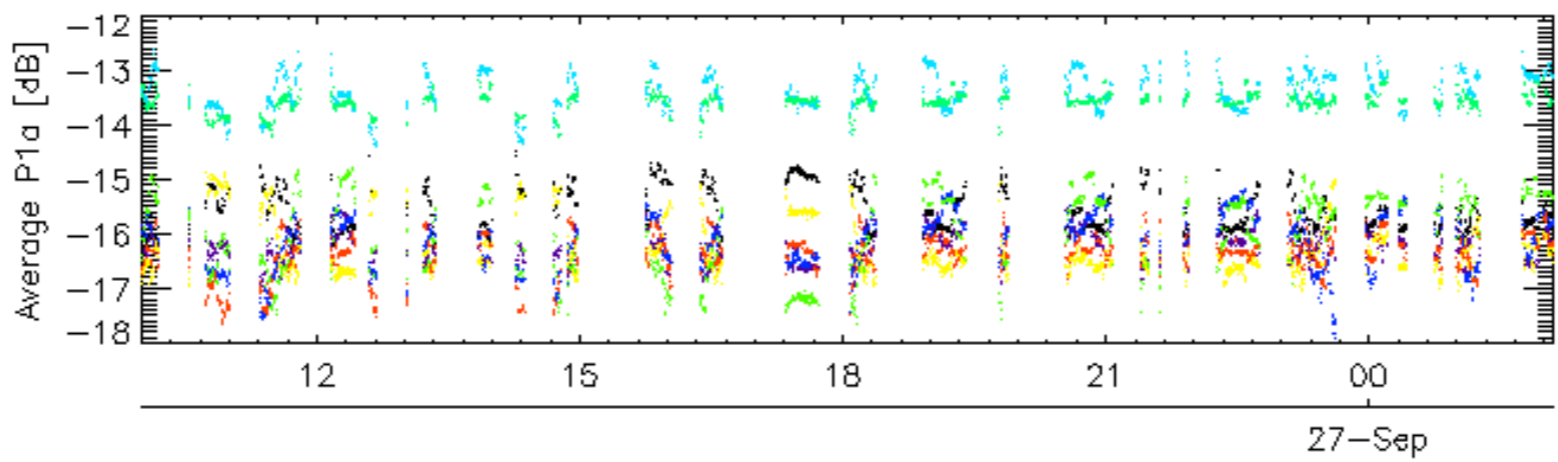
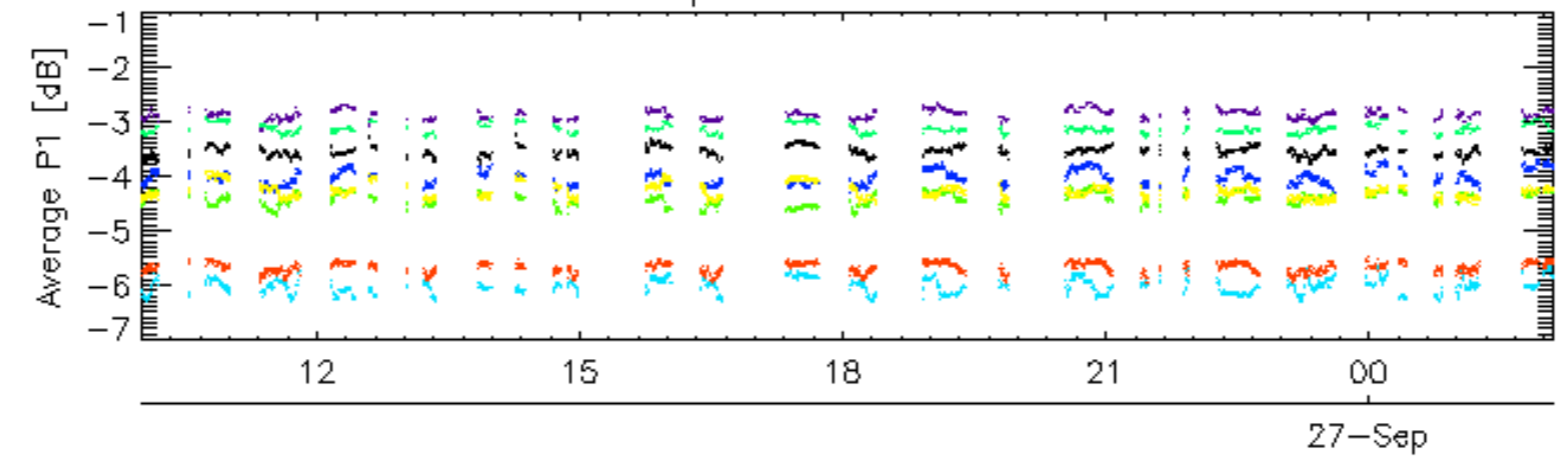


Cal pulses for WVS IS2



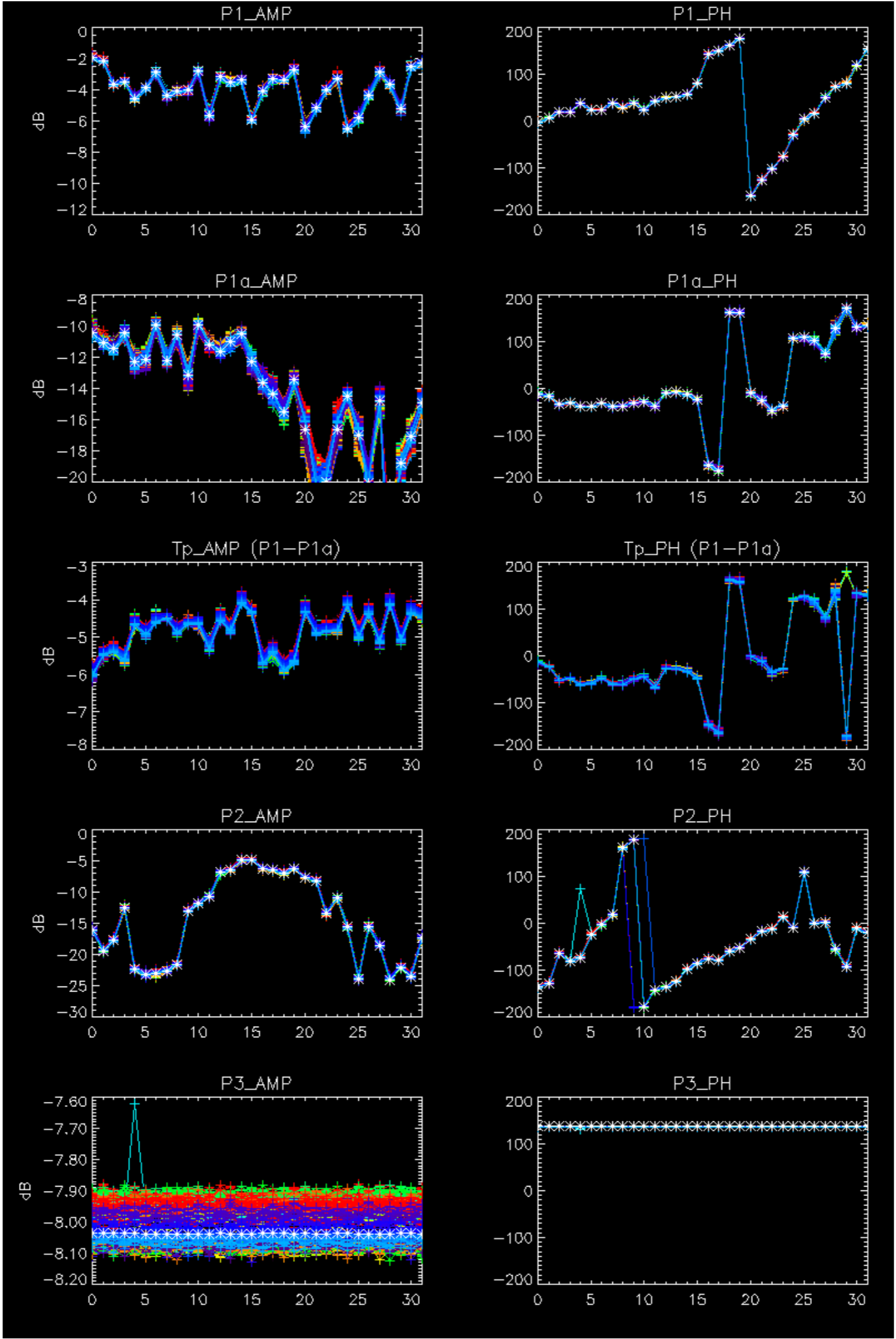
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

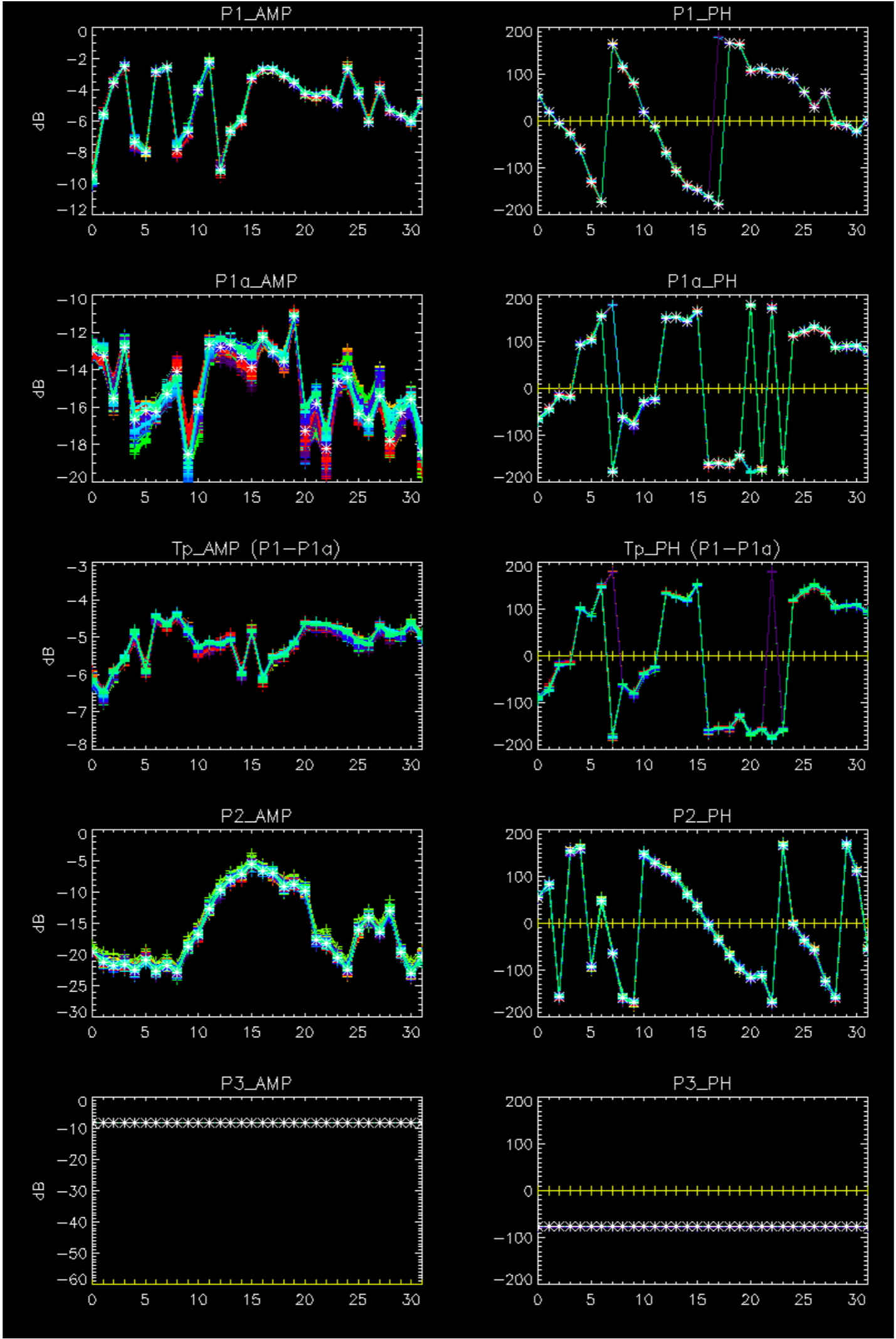
Cal pulses for WVS IS2



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

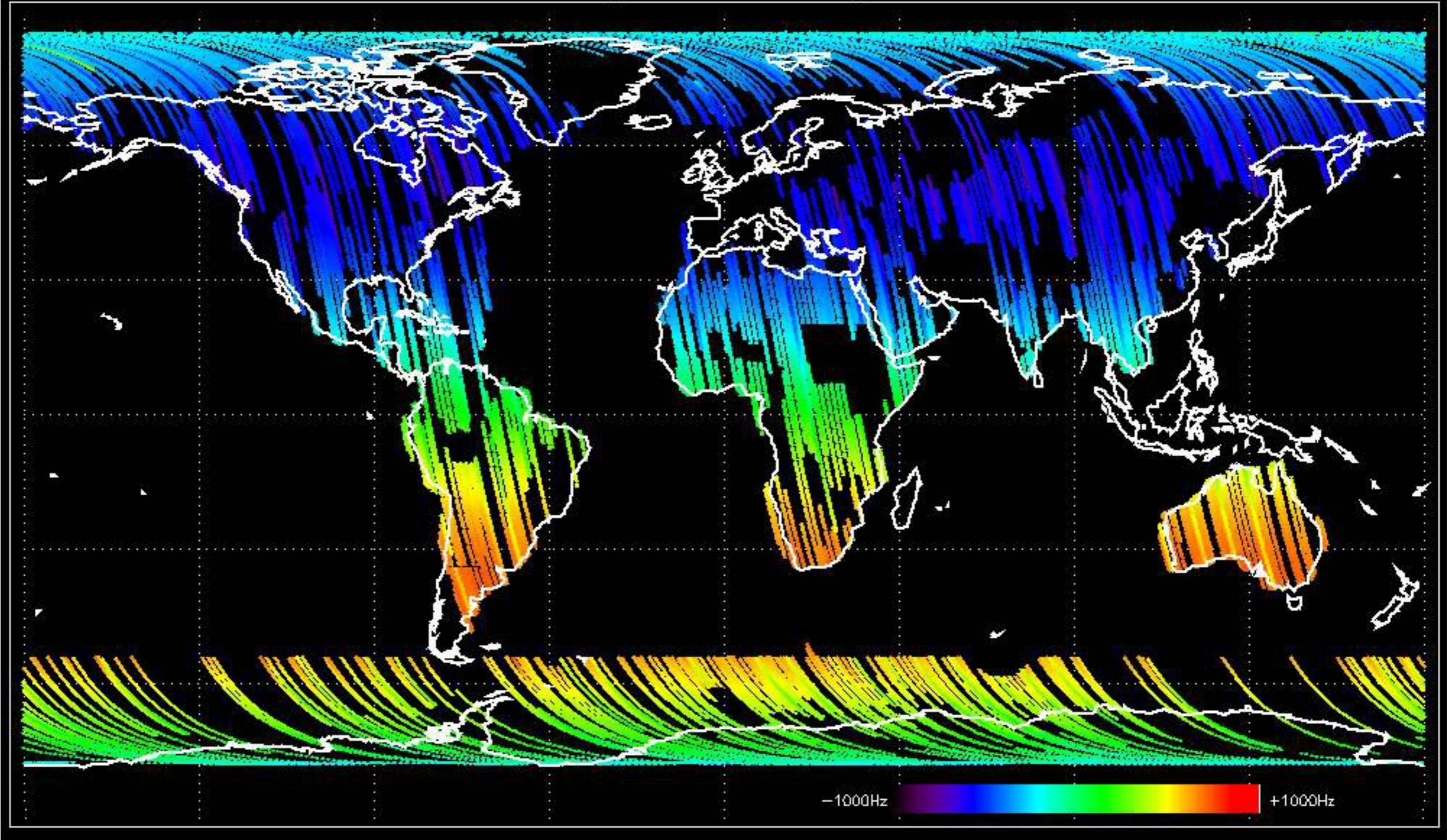
No anomalies observed.



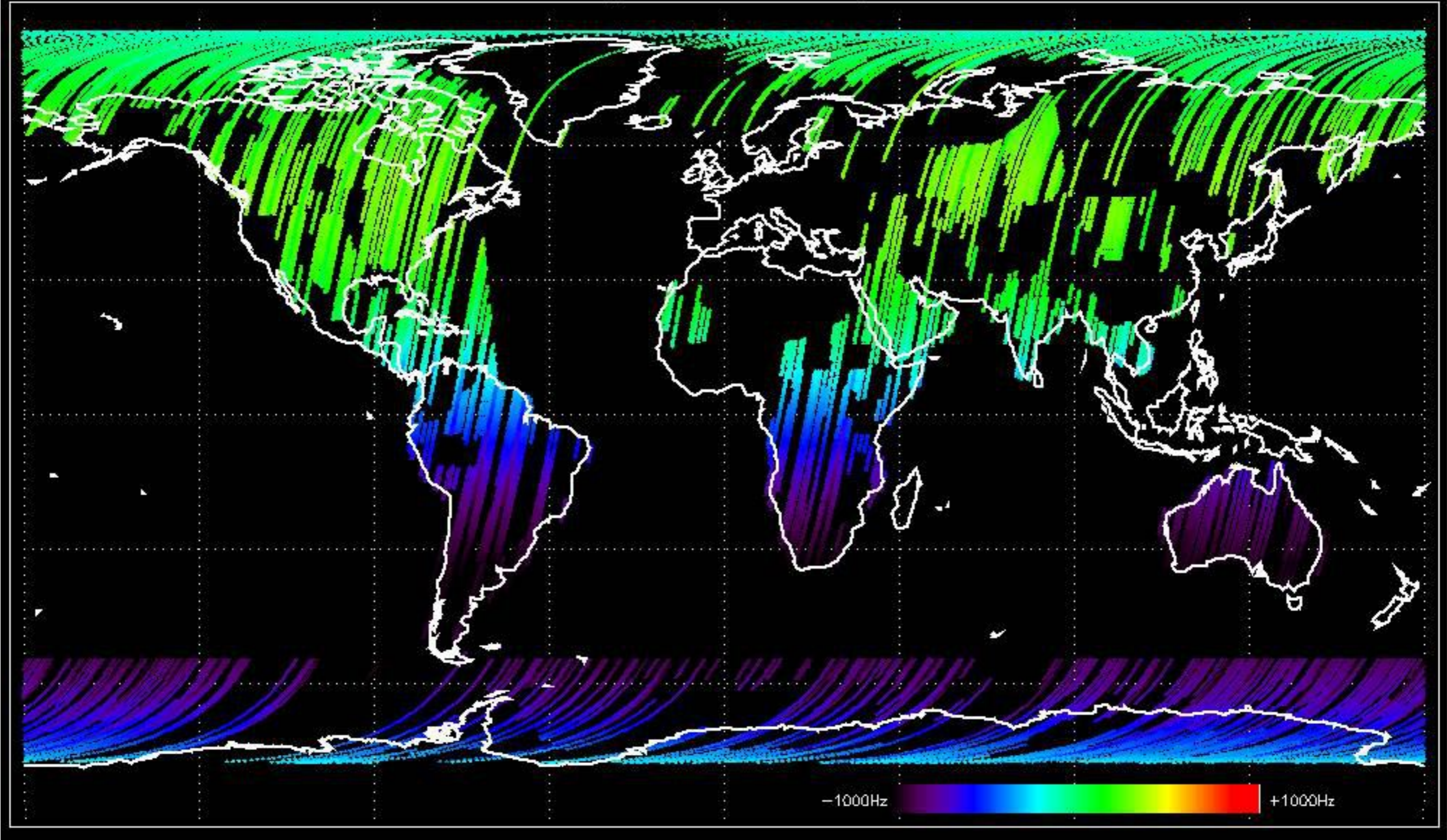


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

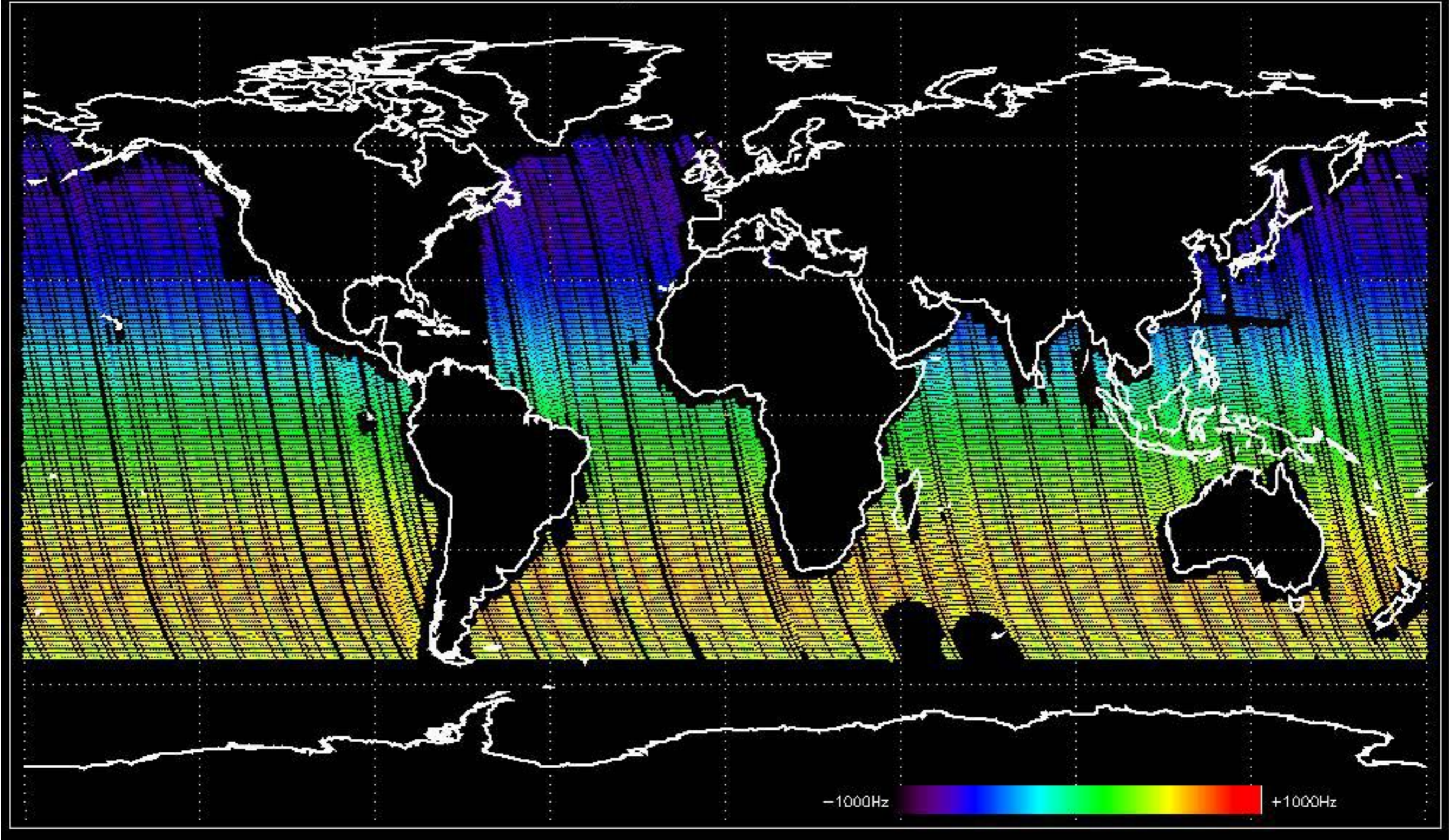
Doppler 'GM1' 'SS1' ascending



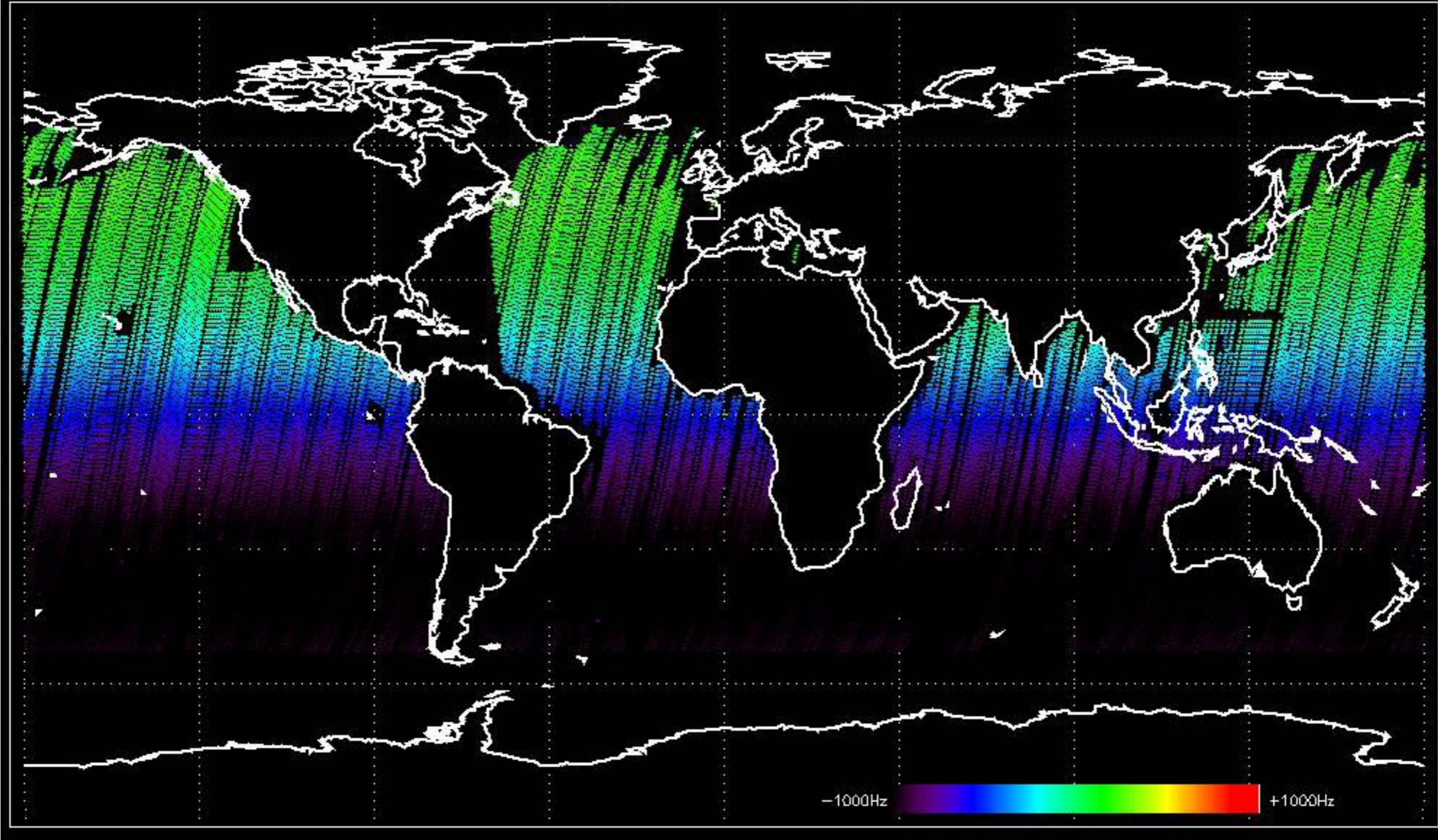
Doppler 'GM1' 'SS1' descending



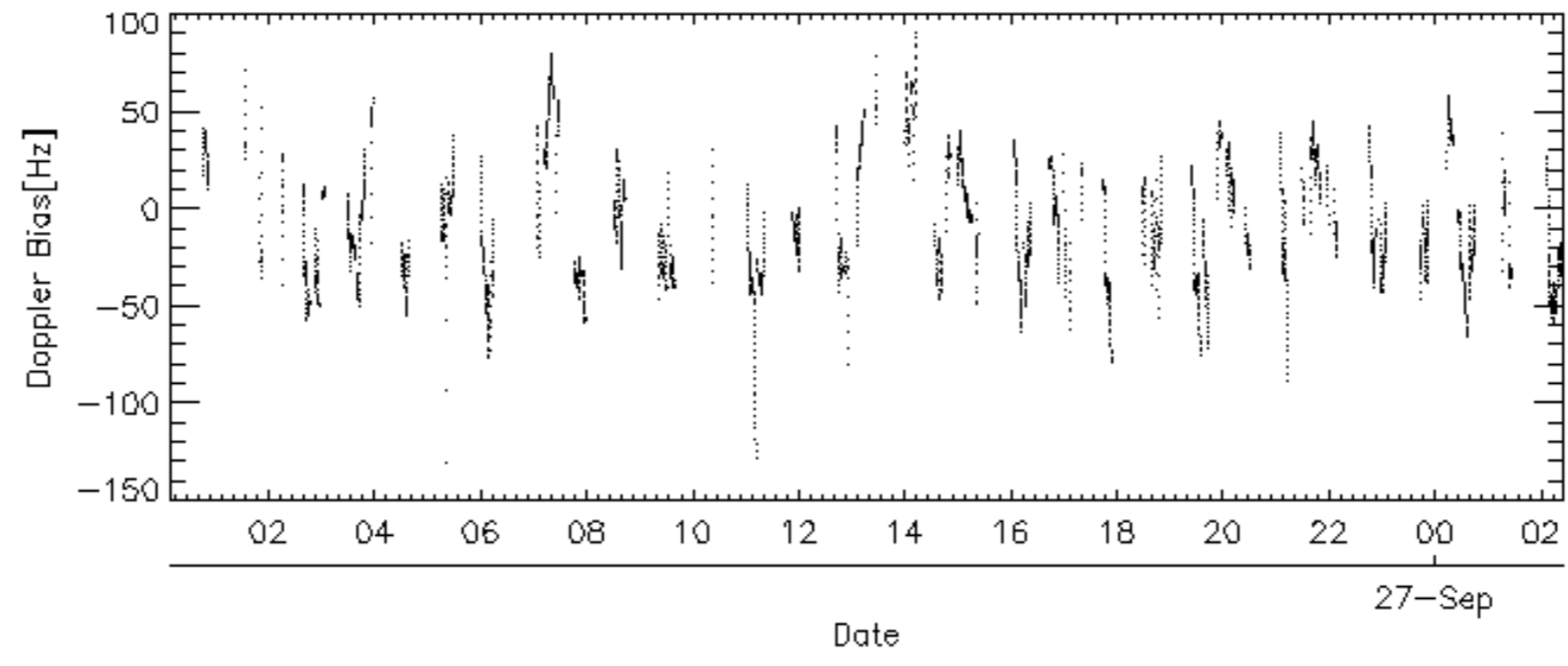
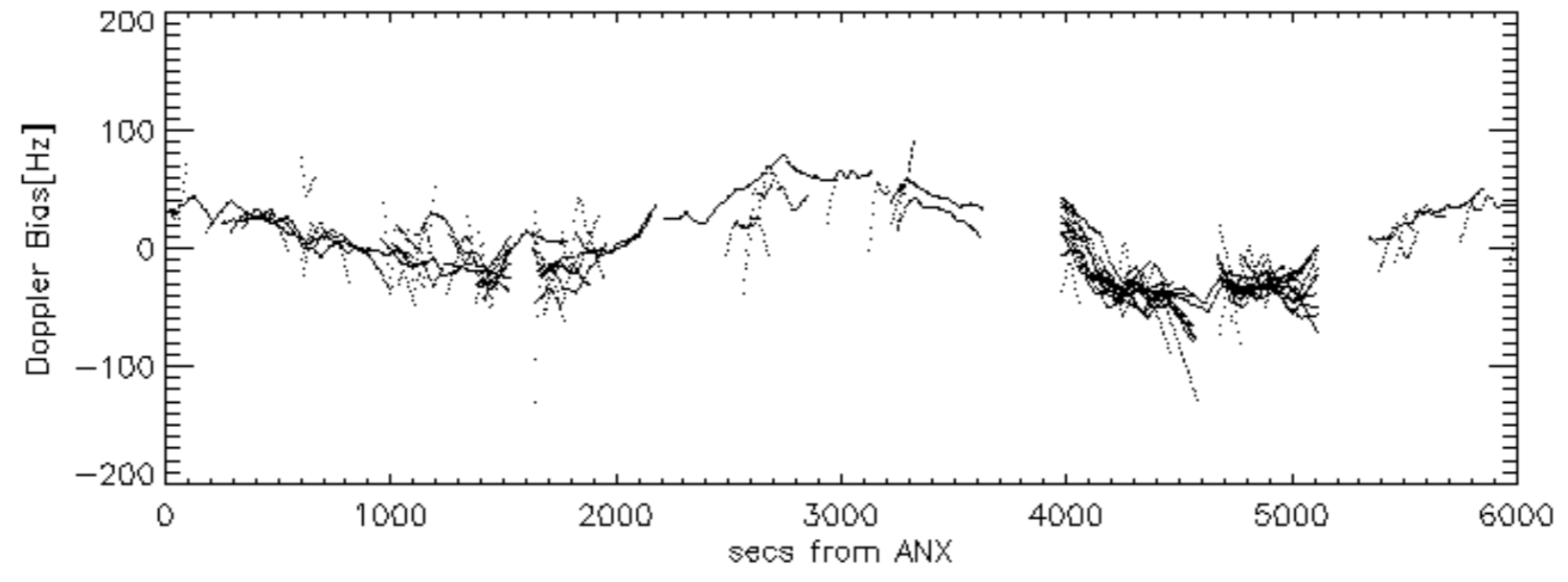
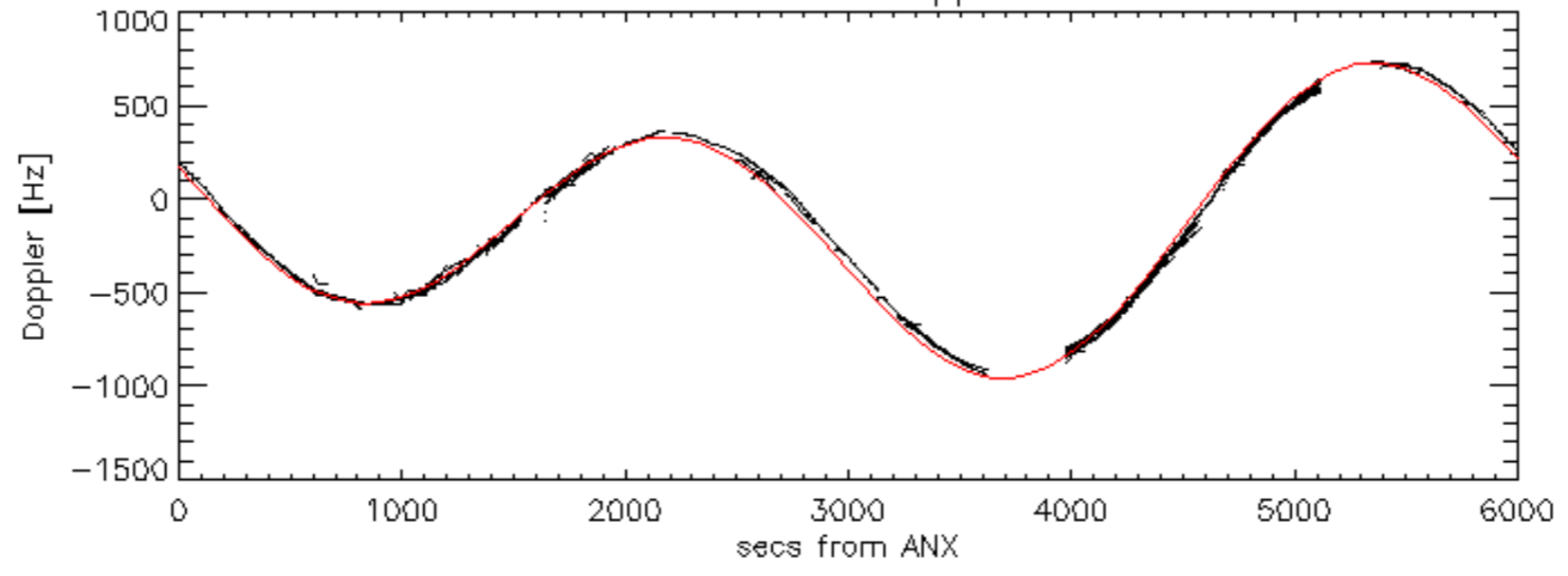
Doppler 'WVS' 'IS2' ascending

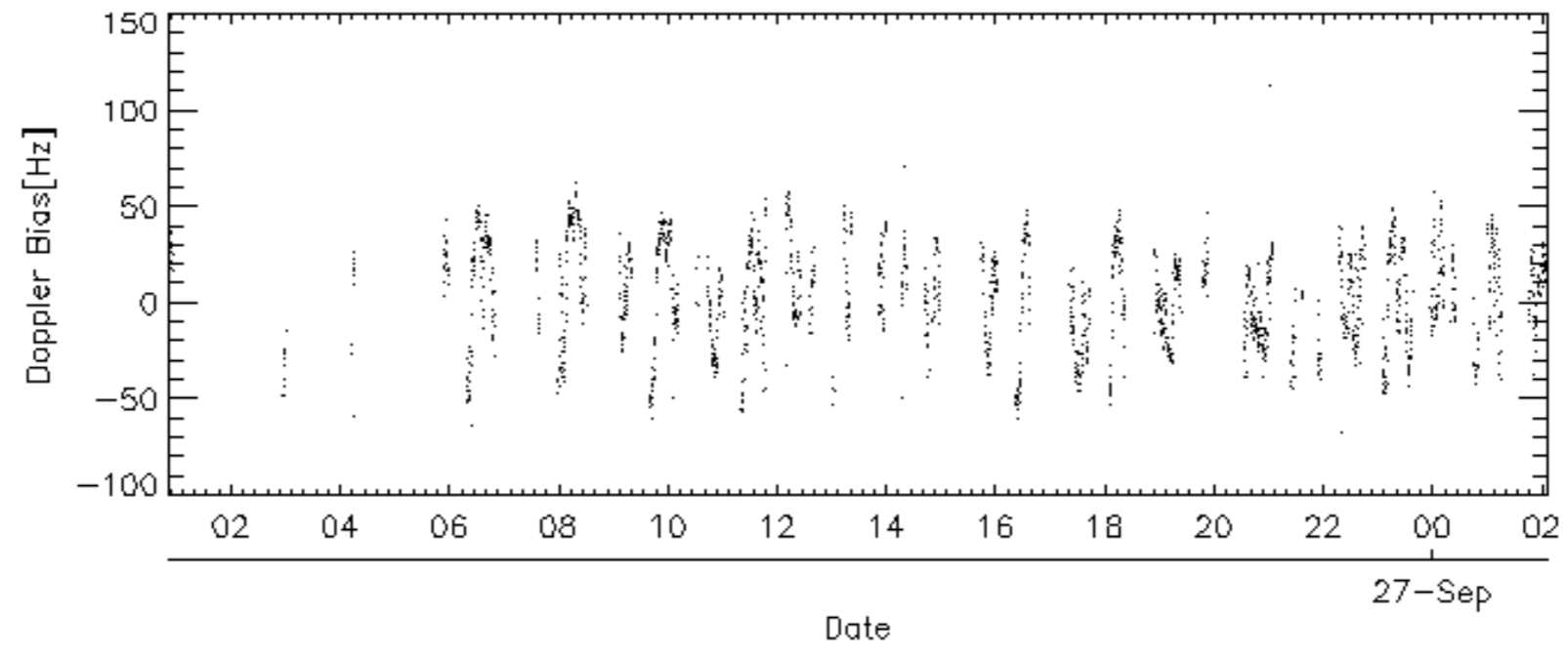
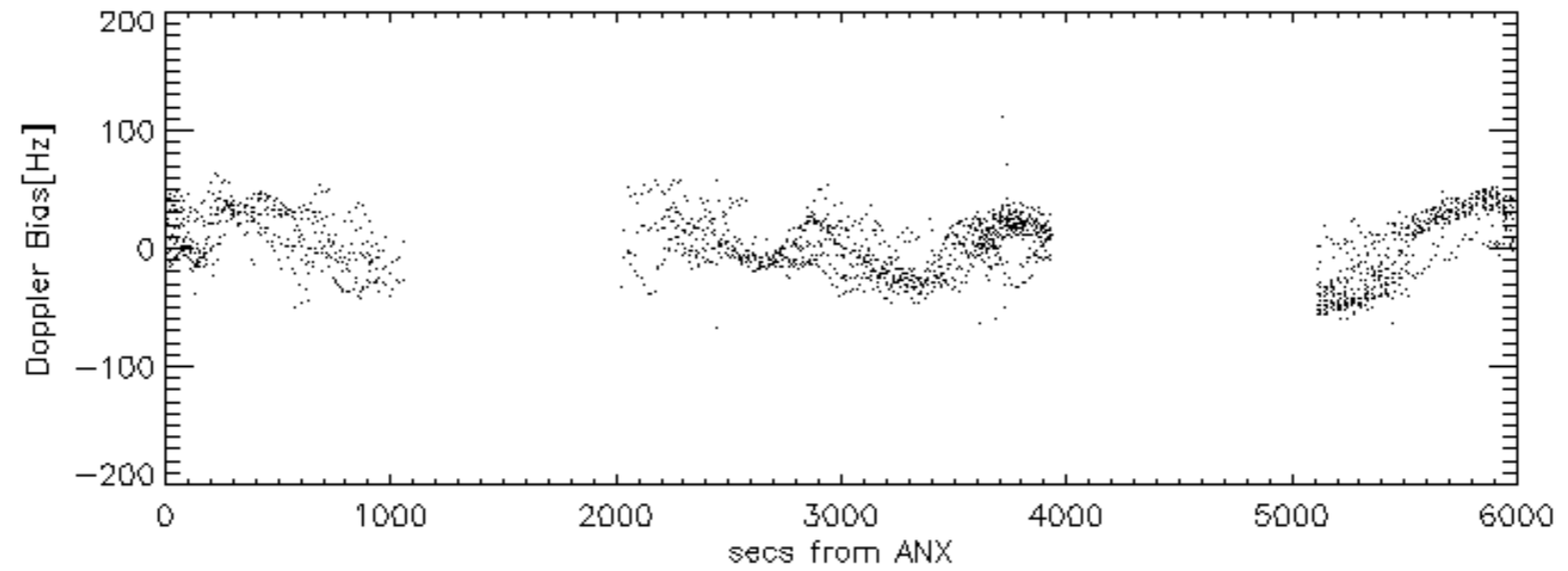
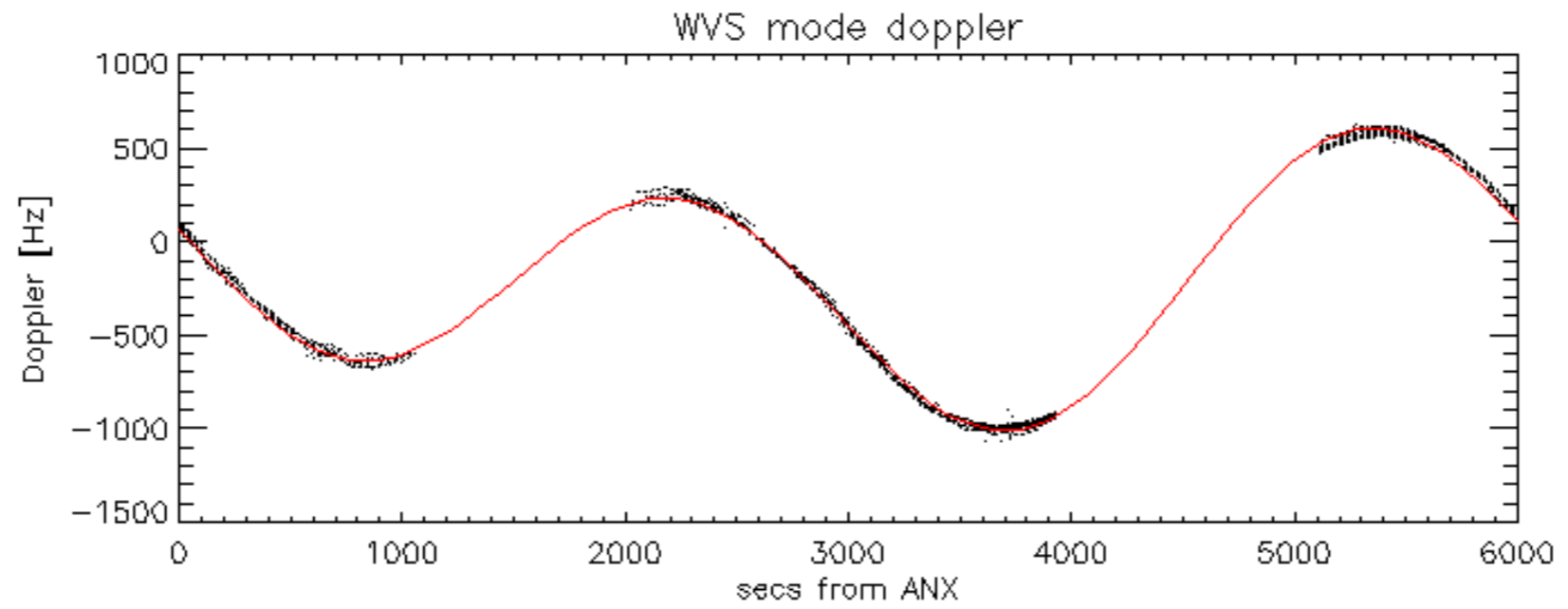


Doppler 'WVS' 'IS2' descending

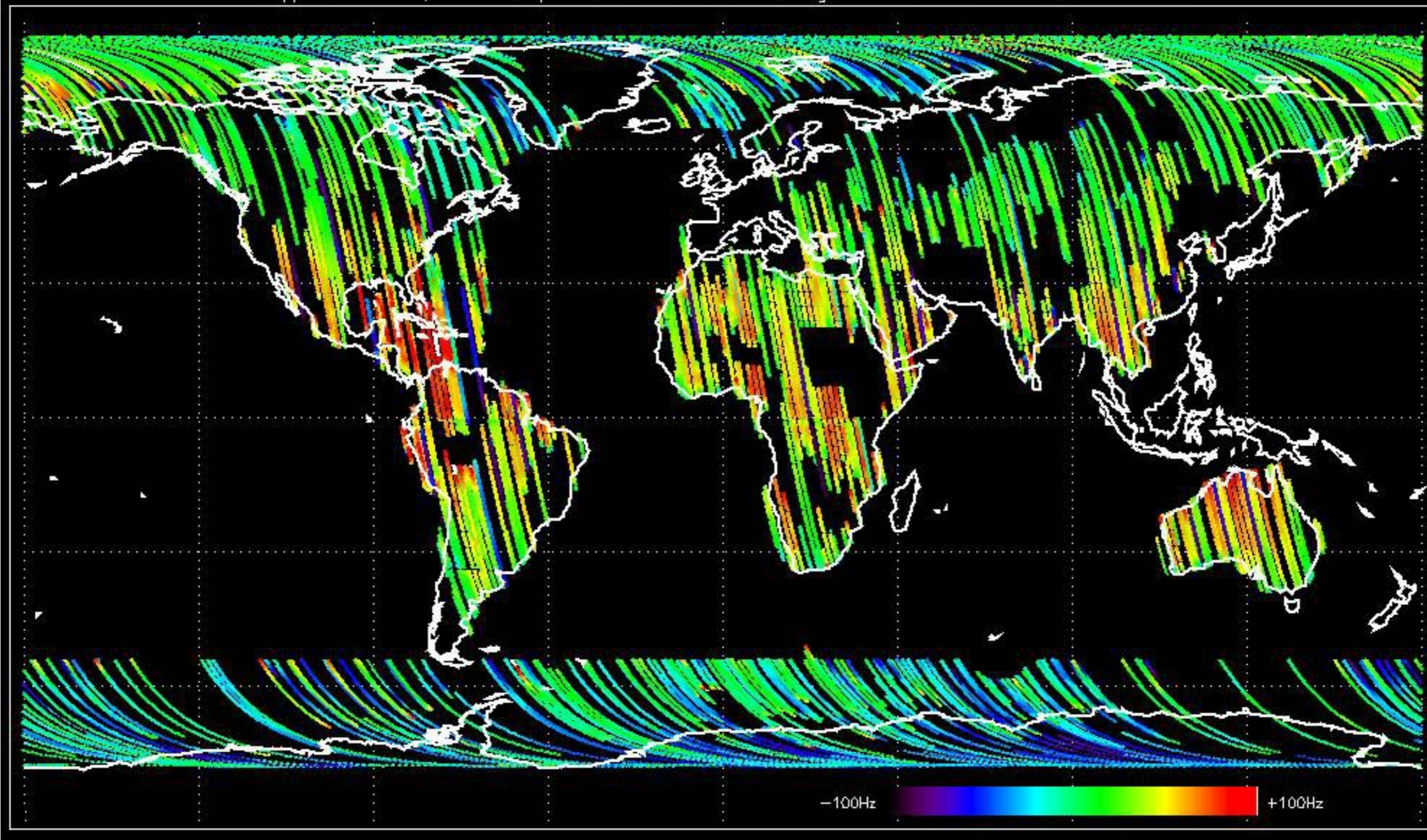


GM1 mode doppler

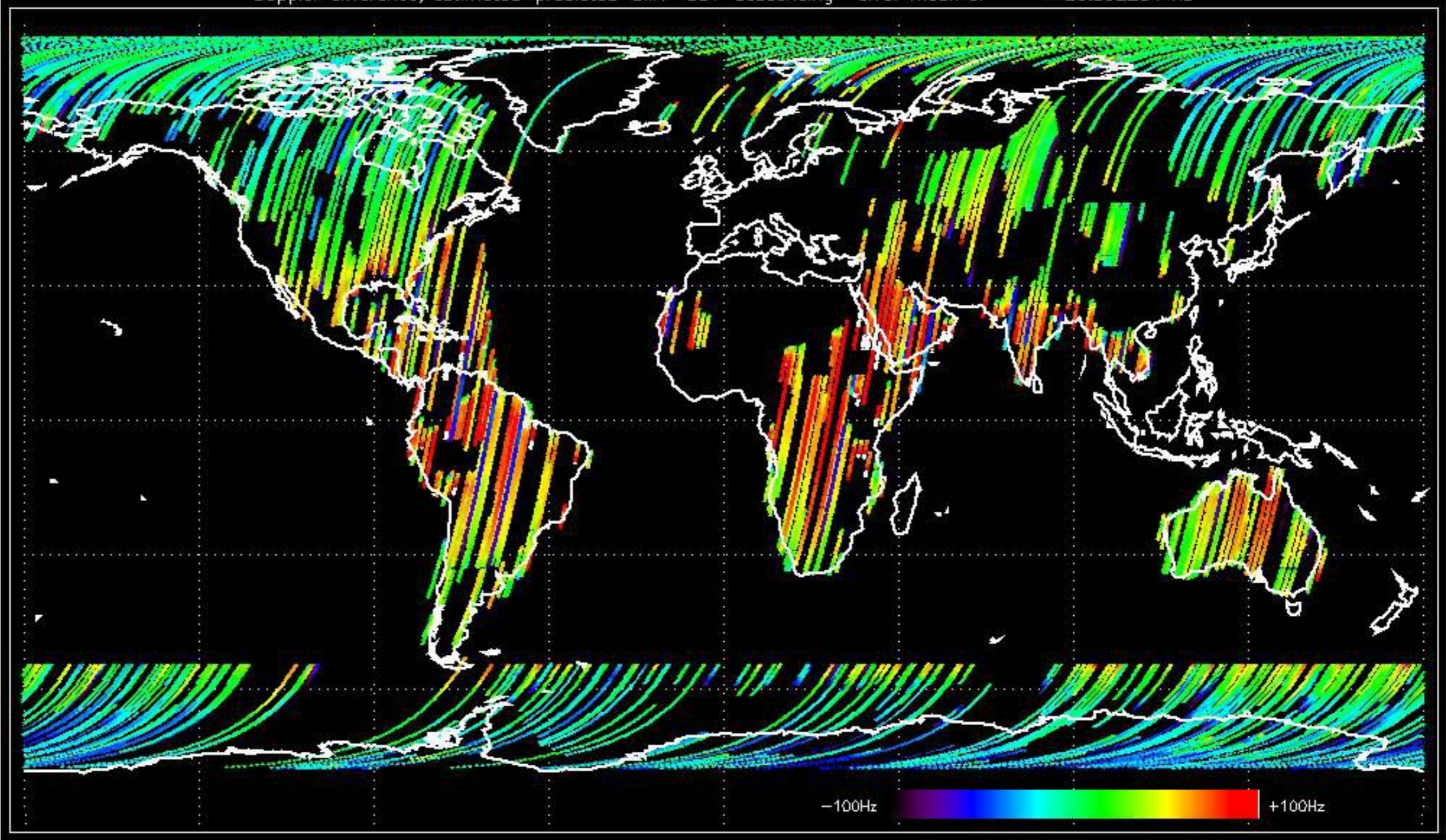




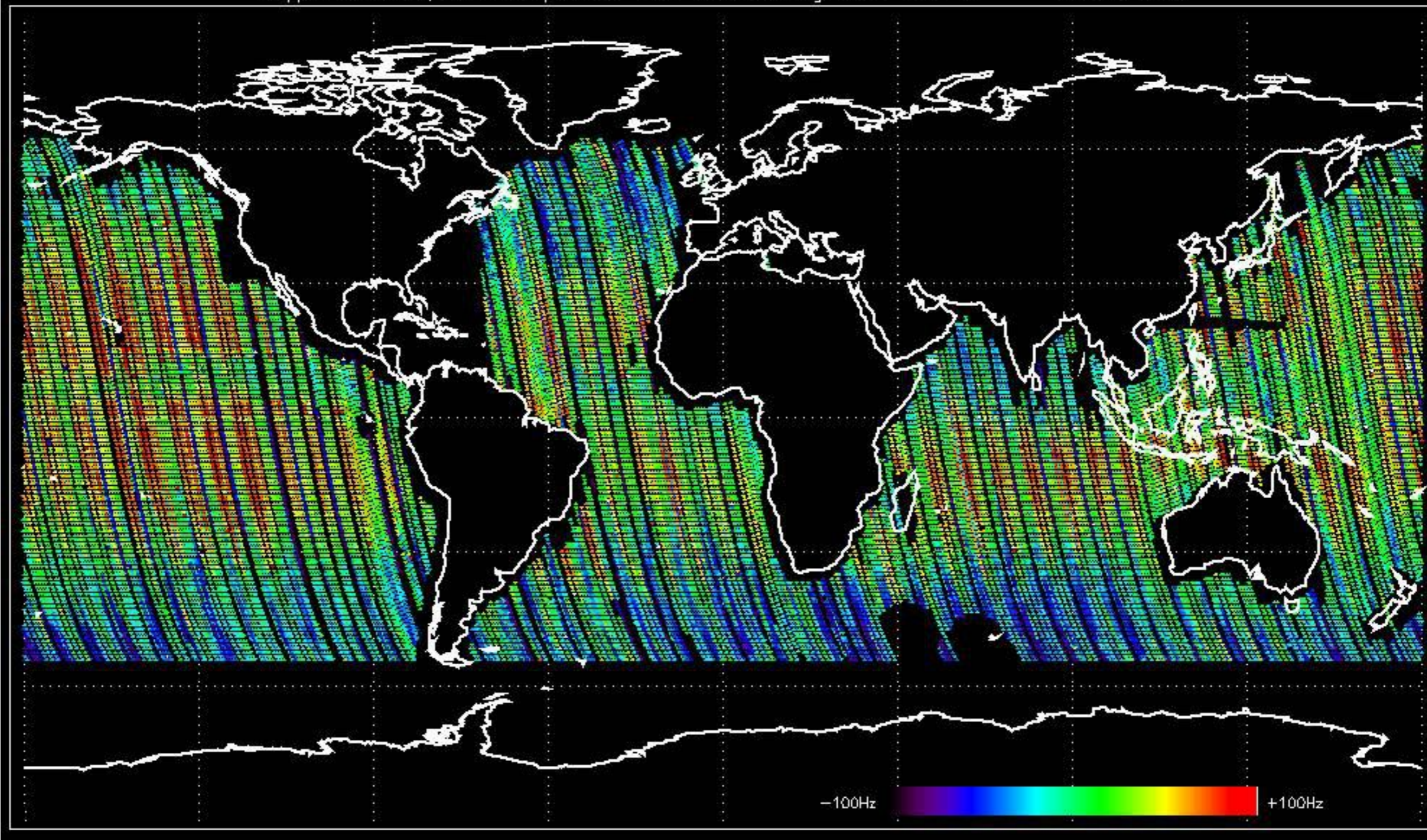
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -33.944100 Hz



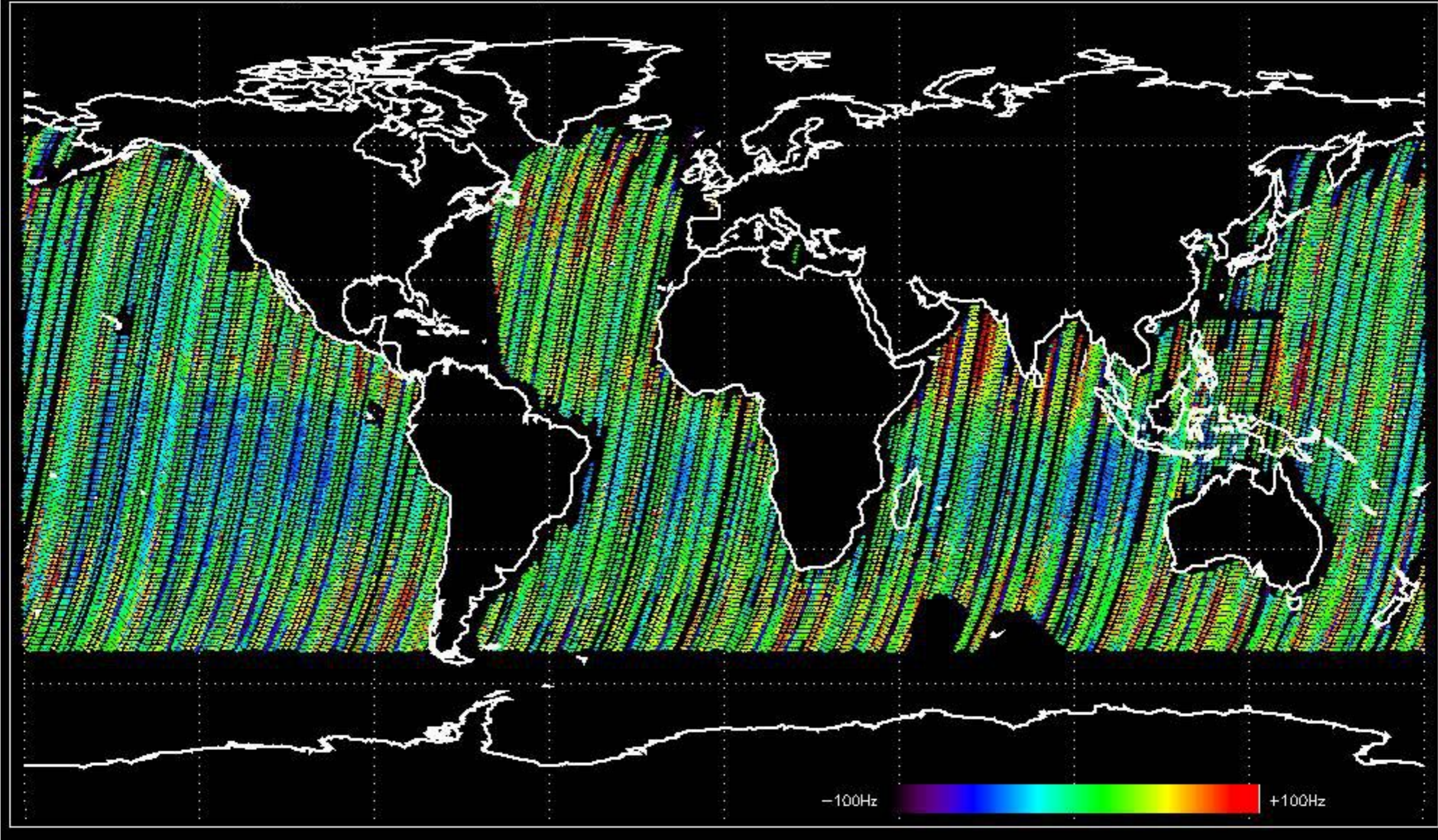
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -29.892204 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -31.335552 Hz

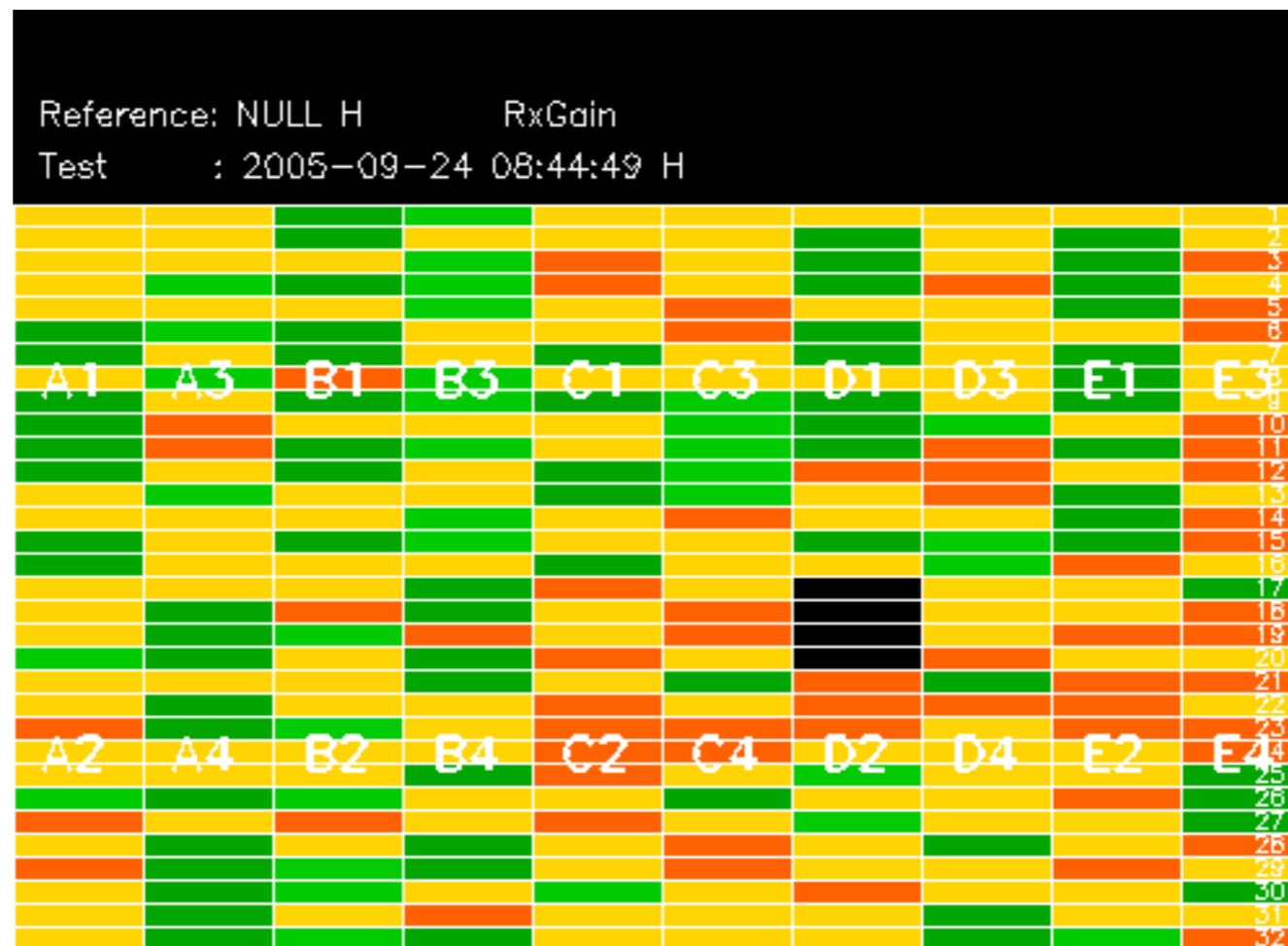


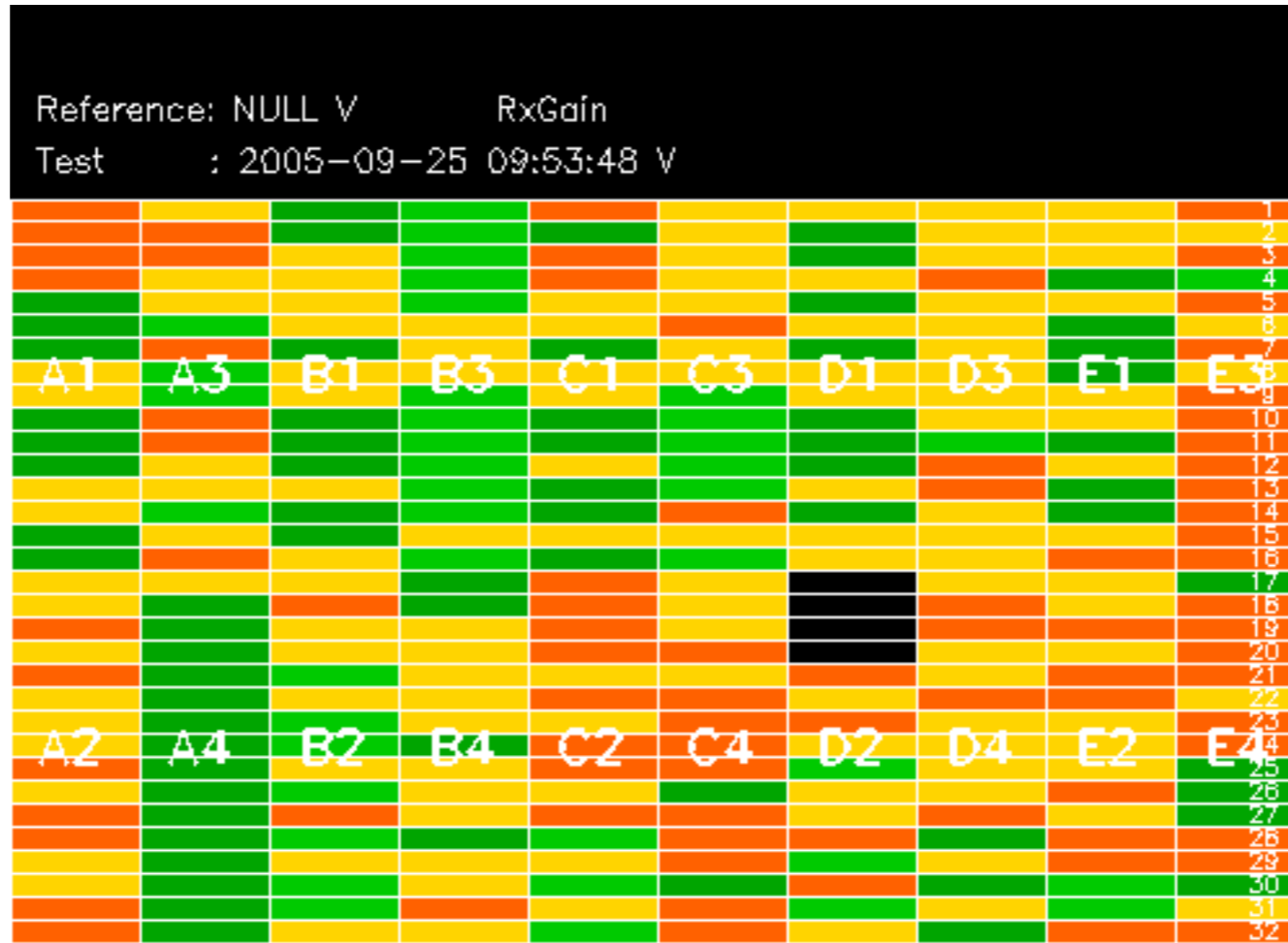
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -36.378126 Hz

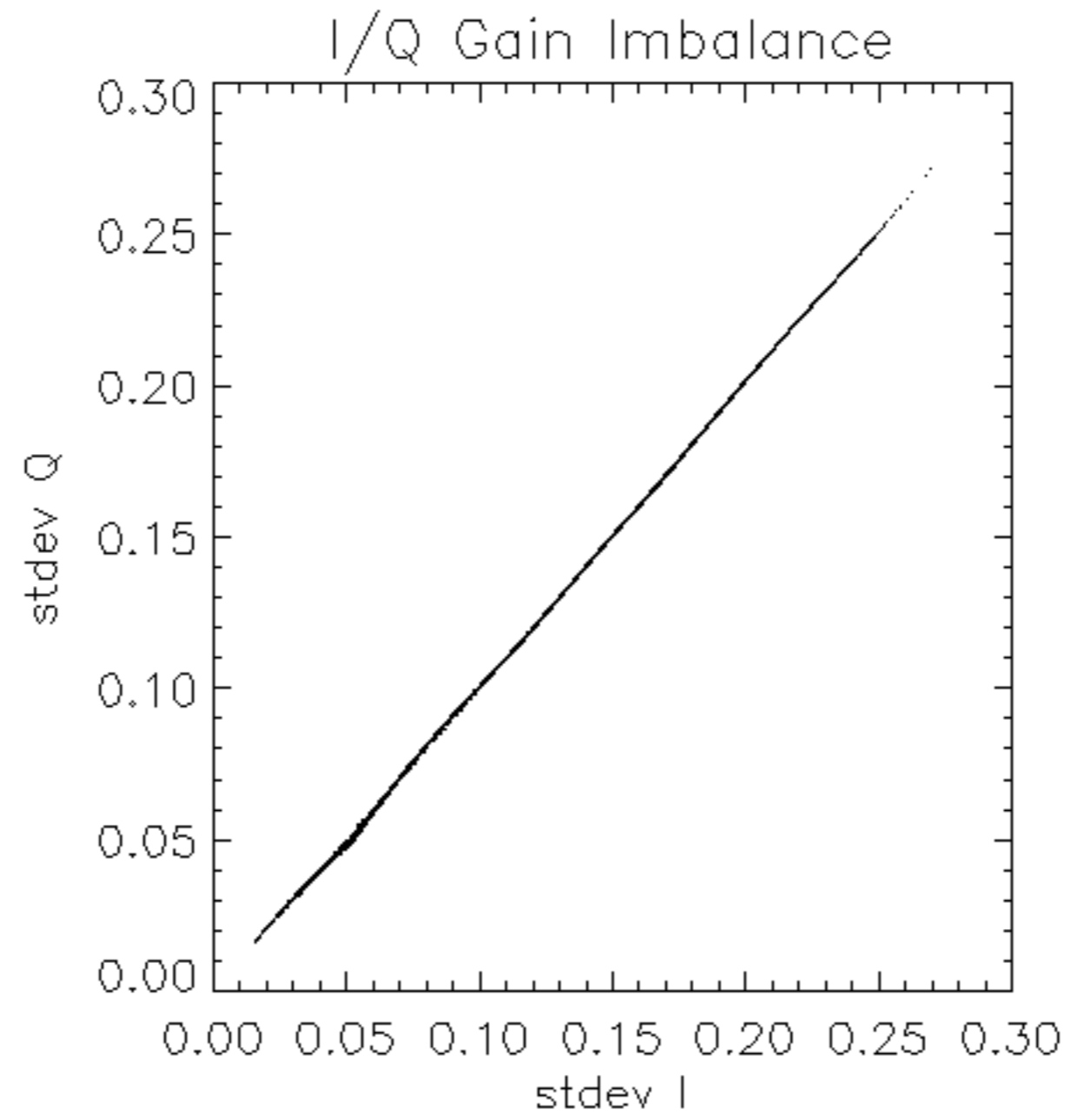


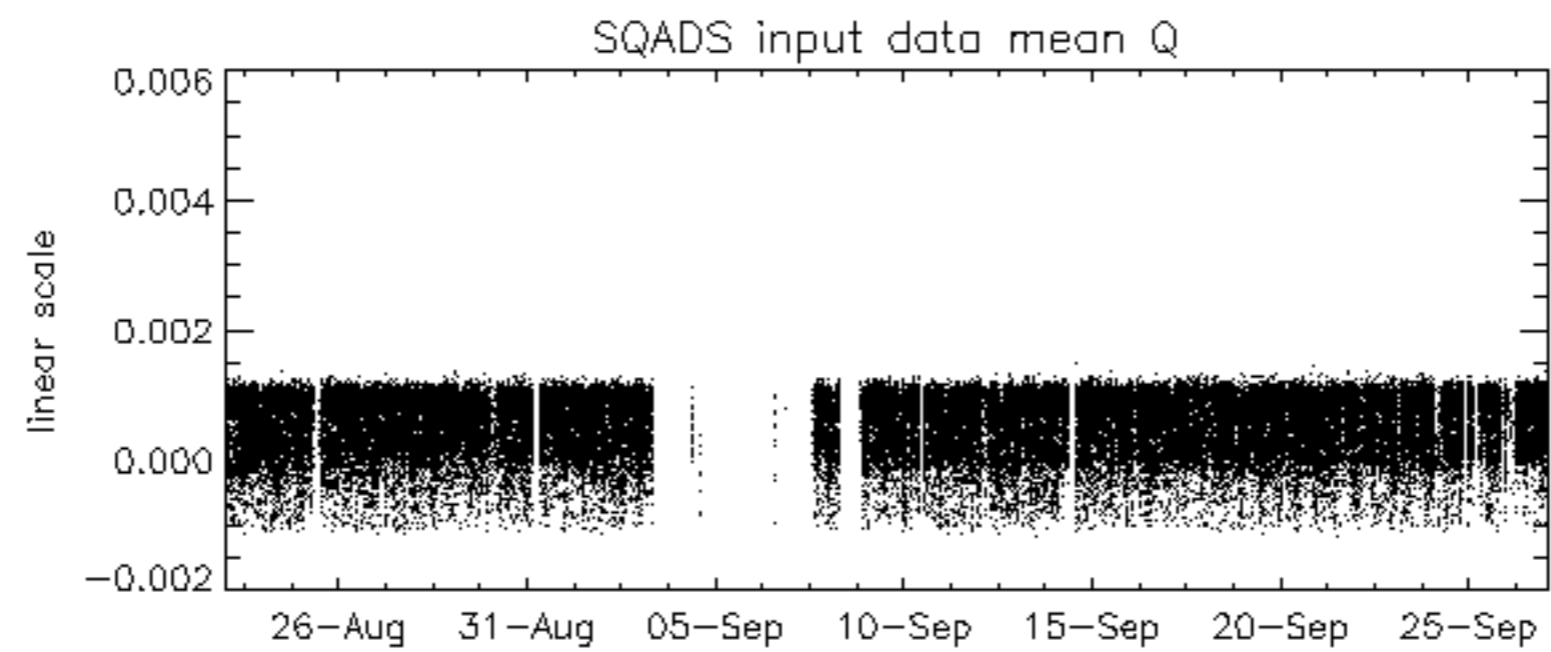
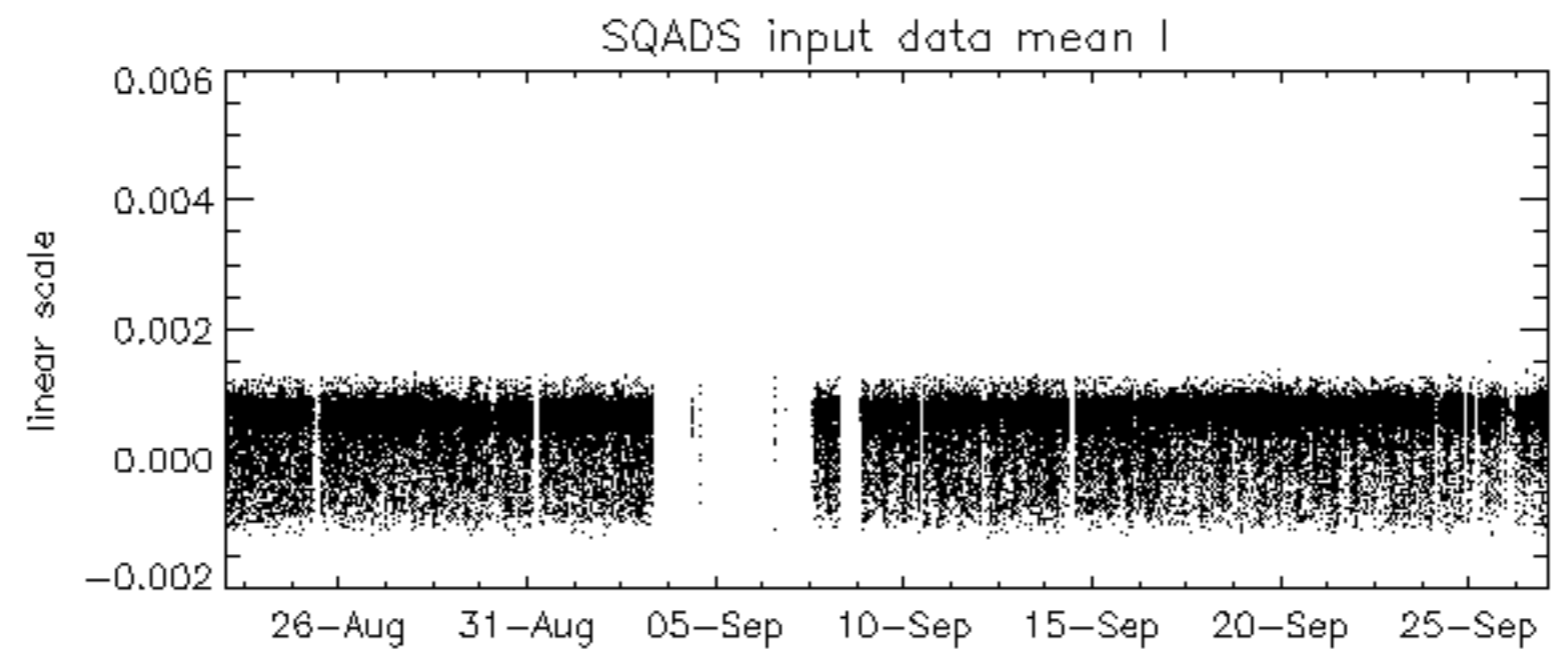
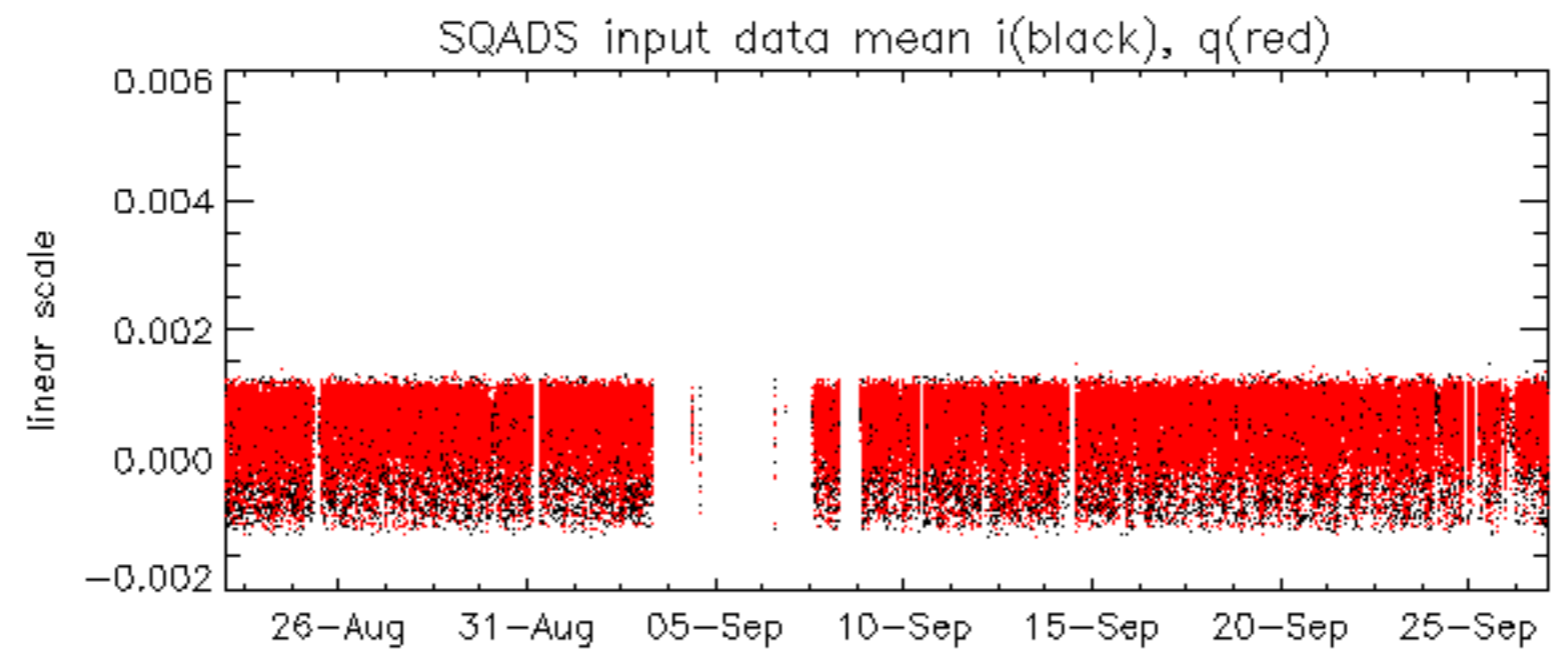
No anomalies observed on available MS products:

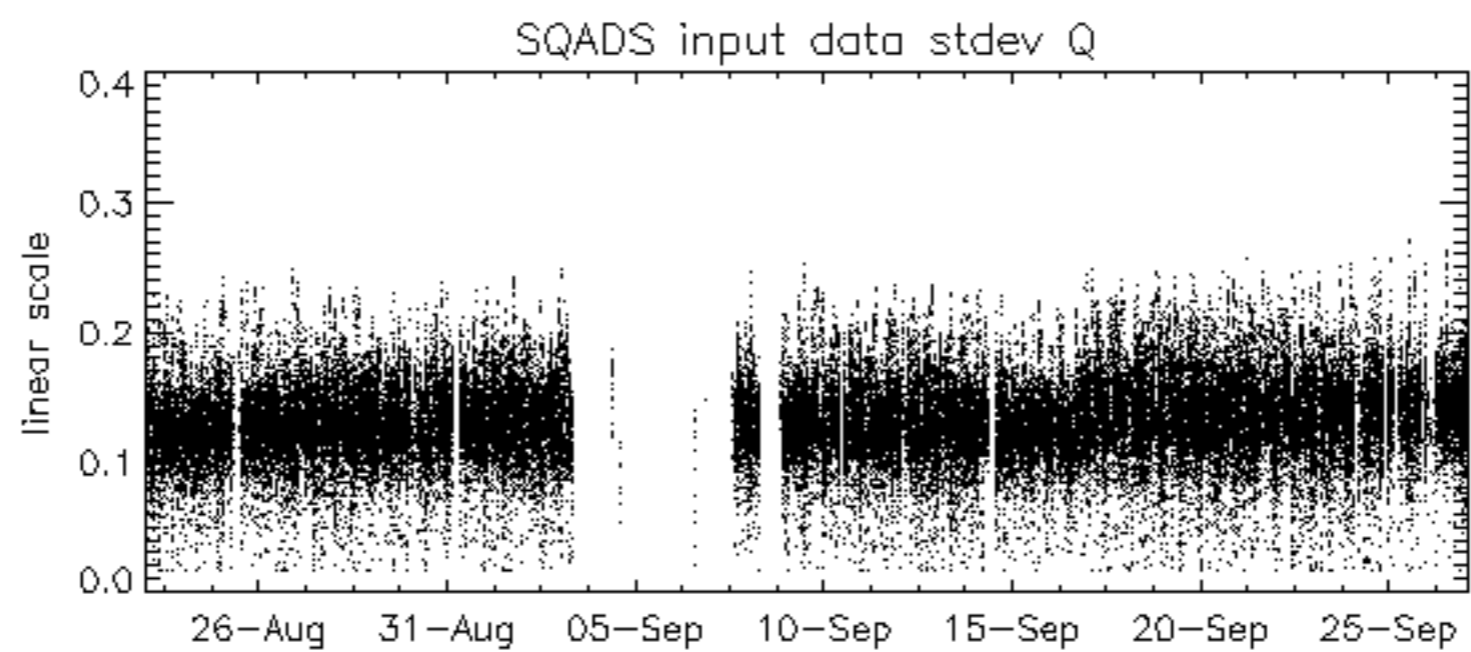
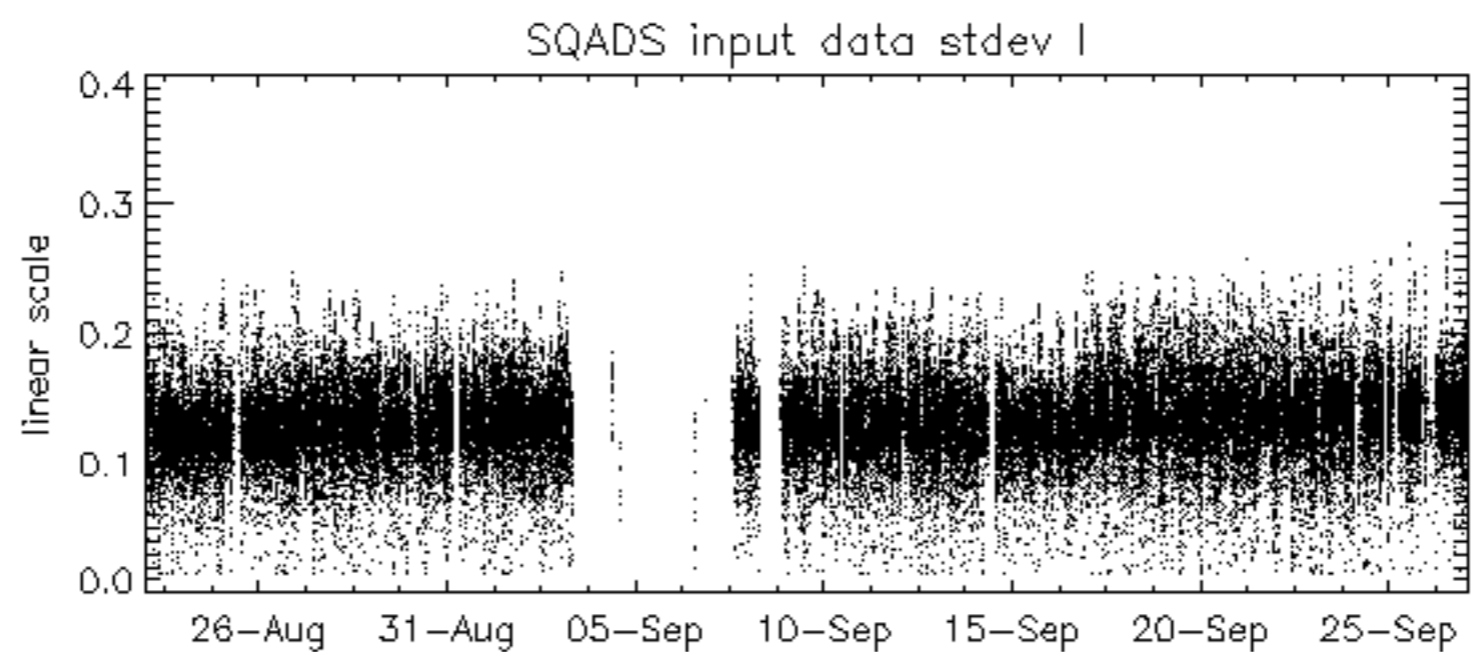
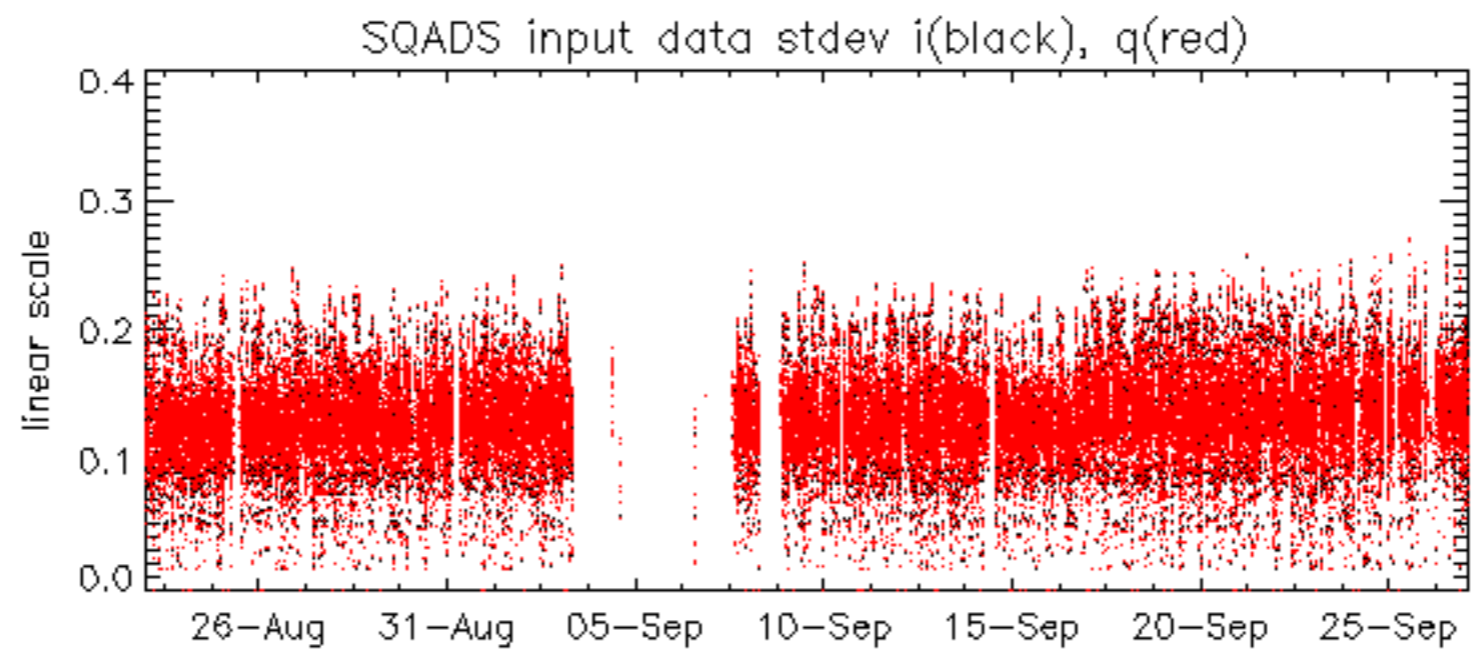
No anomalies observed.







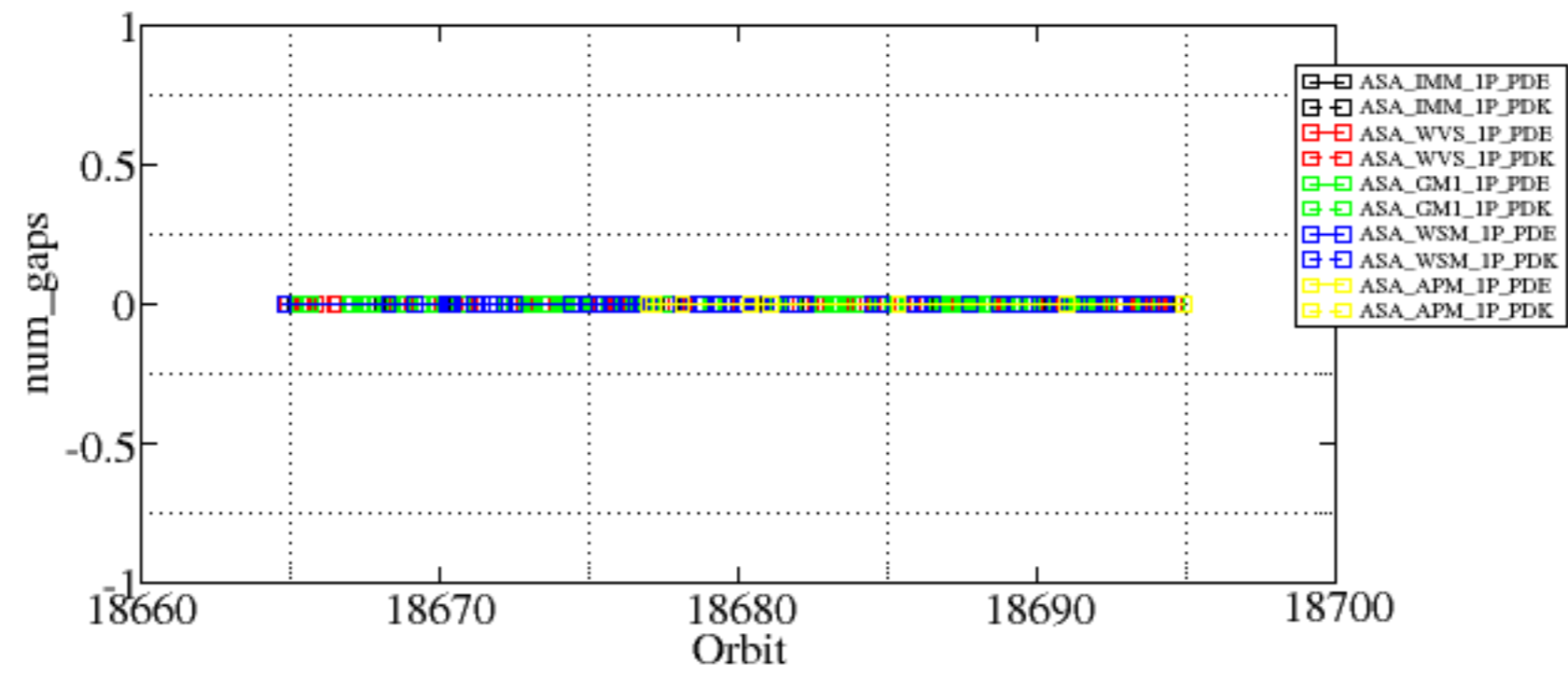


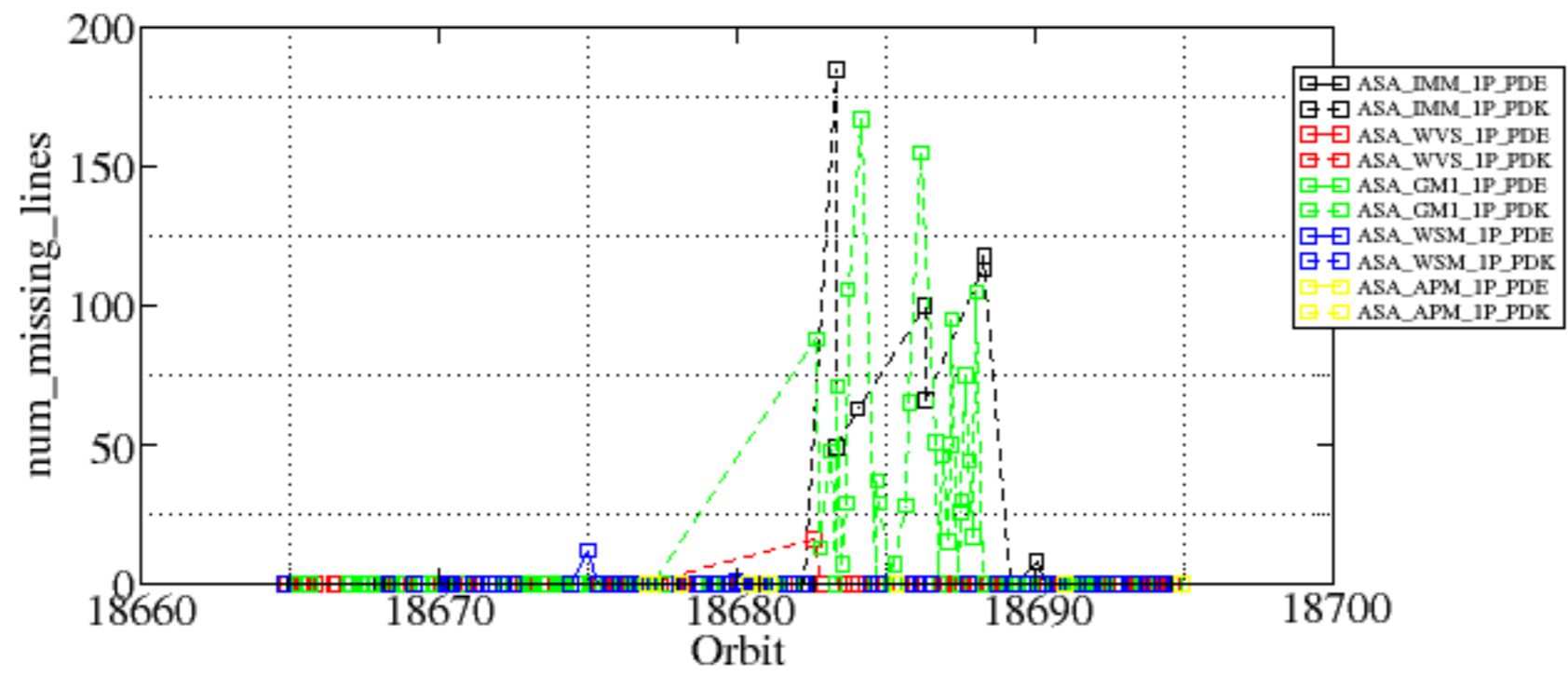


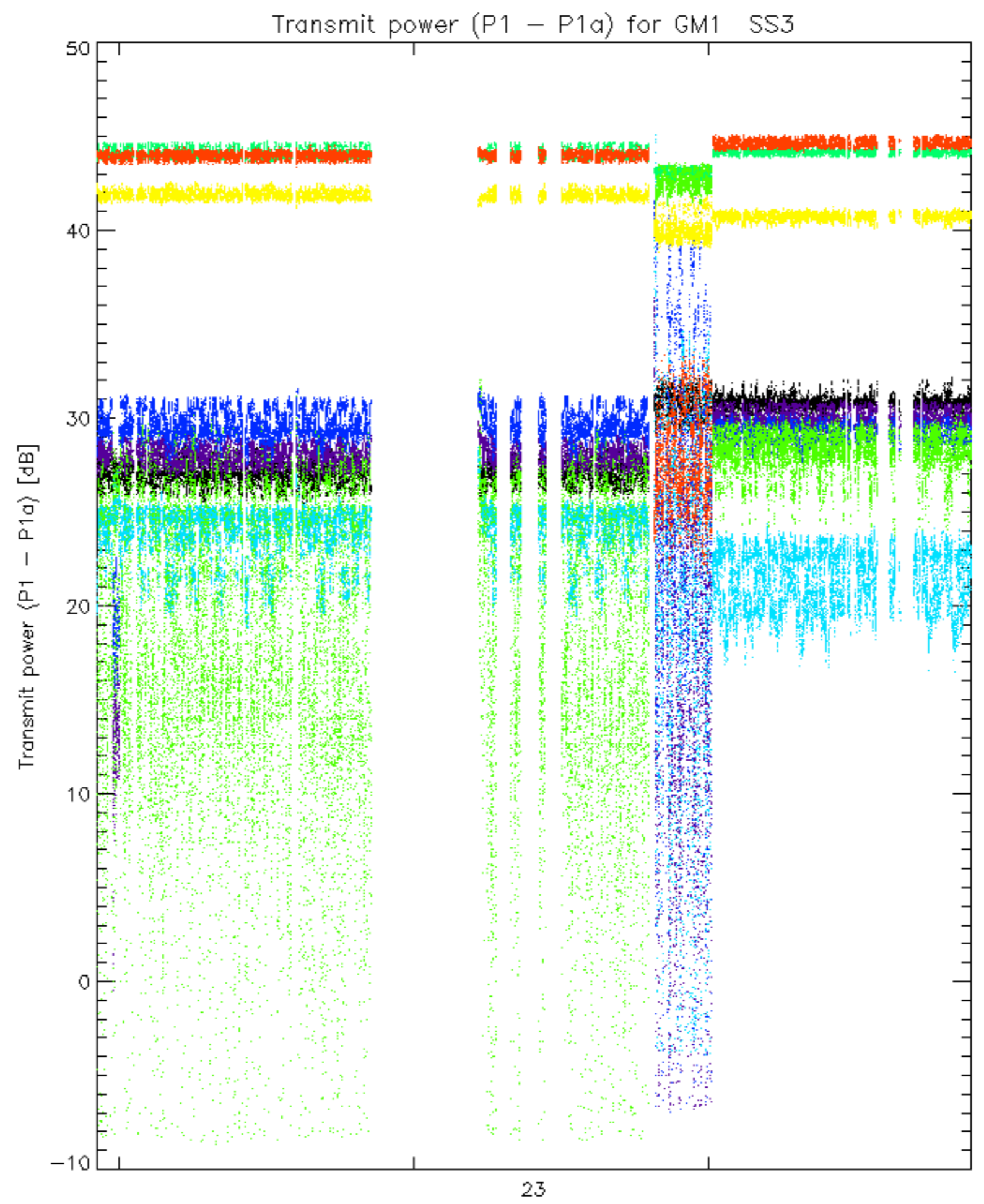
Summary of analysis for the last 3 days 2005092[567]

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

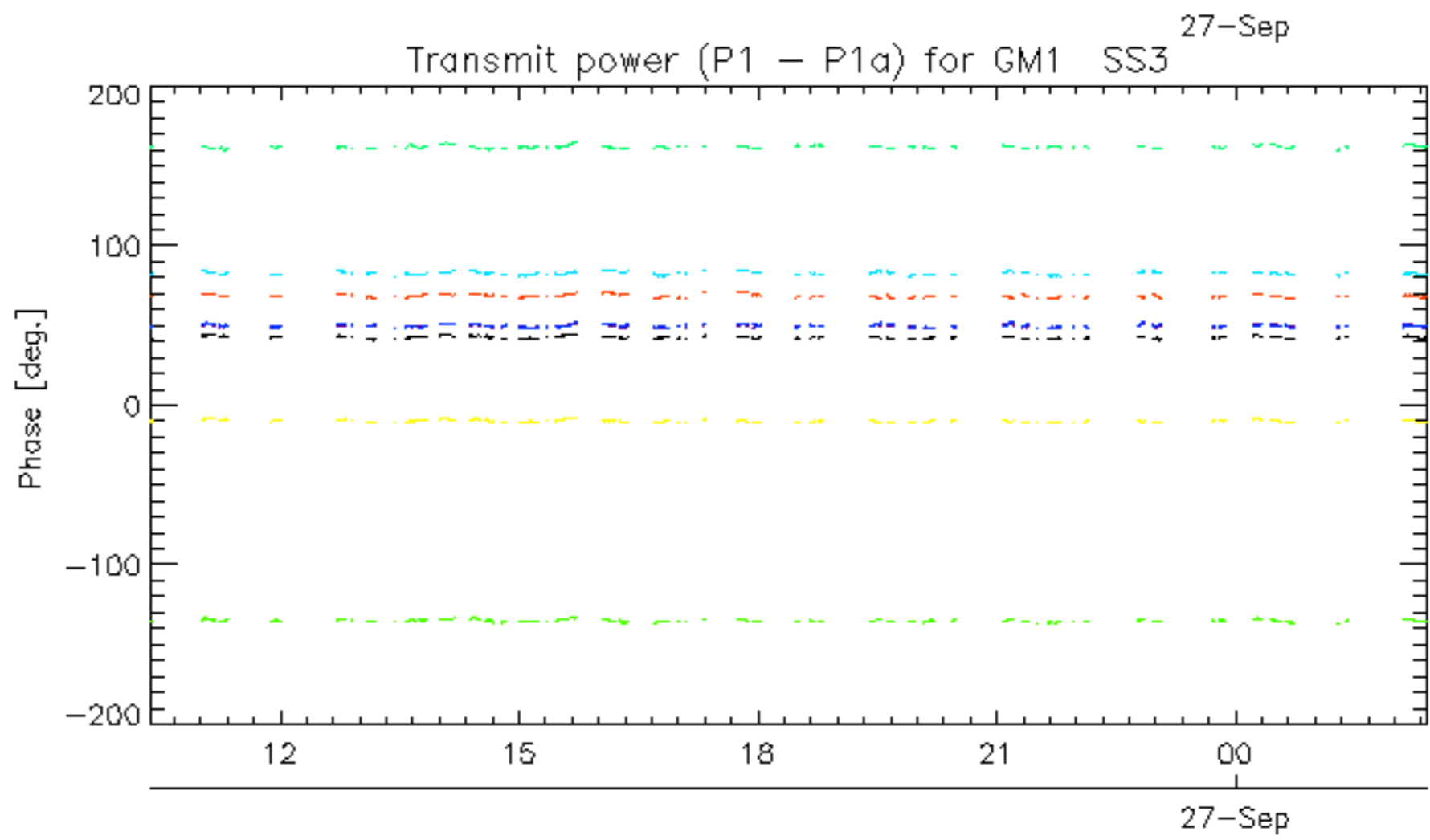
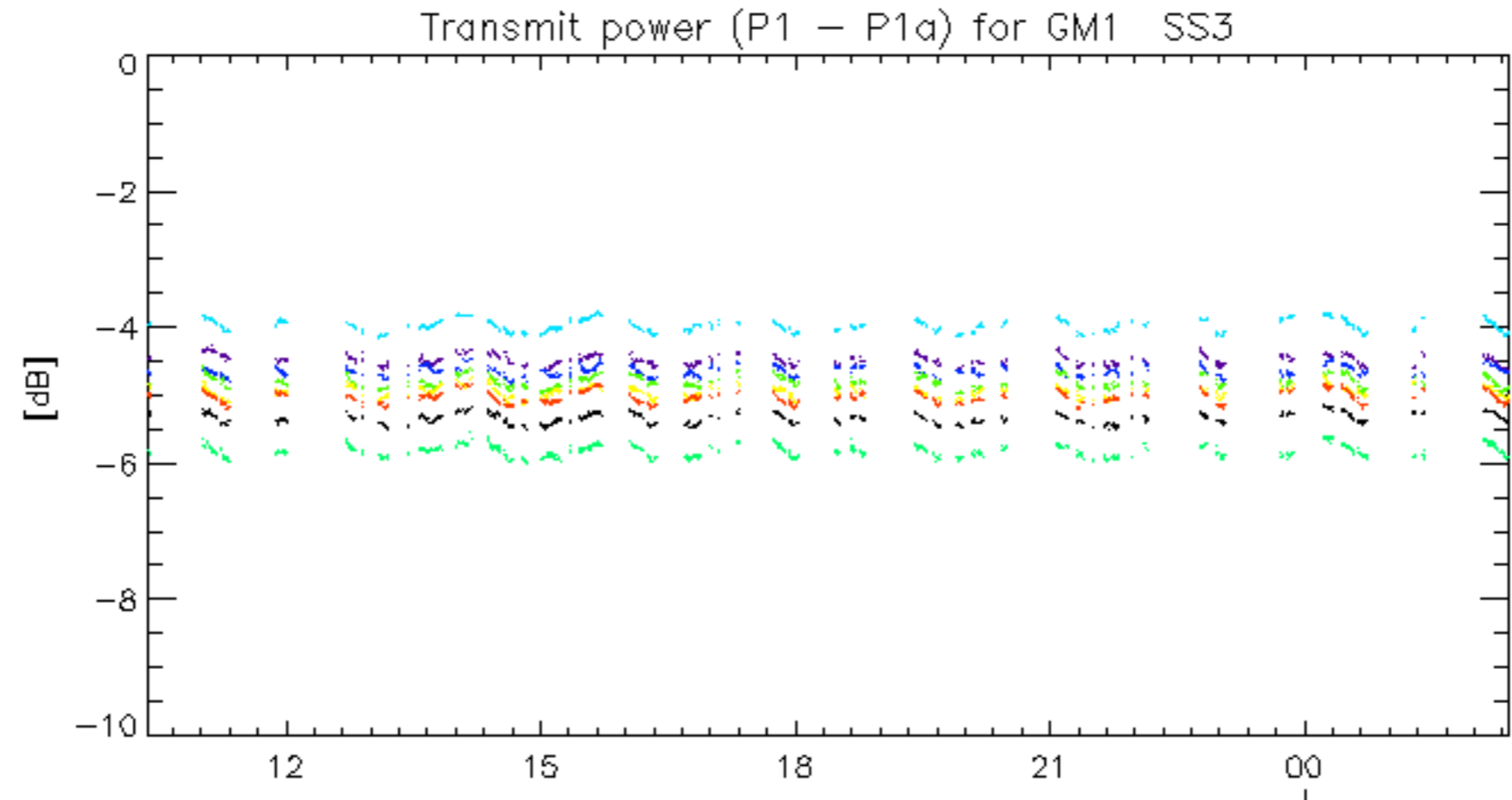
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20050926_182349_00000352041_00099_18690_6722.N1	0	8
ASA_IMM_1PNPDK20050926_070621_00000622041_00092_18683_4751.N1	0	185
ASA_IMM_1PNPDK20050926_070822_00000602041_00092_18683_4752.N1	0	49
ASA_IMM_1PNPDK20050926_081954_00000152041_00093_18684_4754.N1	0	63
ASA_IMM_1PNPDK20050926_120645_00000622041_00095_18686_4758.N1	0	100
ASA_IMM_1PNPDK20050926_120846_00000272041_00095_18686_4759.N1	0	66
ASA_IMM_1PNPDK20050926_152355_00000622041_00097_18688_4763.N1	0	113
ASA_IMM_1PNPDK20050926_152556_00000502041_00097_18688_4764.N1	0	118
ASA_WVS_1PNPDK20050926_055320_000003302041_00091_18682_1605.N1	0	16
ASA_GM1_1PNPDK20050926_055937_000005982041_00091_18682_6530.N1	0	88
ASA_GM1_1PNPDK20050926_061117_000001932041_00091_18682_6533.N1	0	13
ASA_GM1_1PNPDK20050926_065026_000005372041_00092_18683_6534.N1	0	48
ASA_GM1_1PNPDK20050926_071049_000007732041_00092_18683_6540.N1	0	71
ASA_GM1_1PNPDK20050926_072553_000001502041_00092_18683_6542.N1	0	7
ASA_GM1_1PNPDK20050926_073927_000002292041_00092_18683_6545.N1	0	29
ASA_GM1_1PNPDK20050926_074503_000008452041_00092_18683_6538.N1	0	106
ASA_GM1_1PNPDK20050926_083112_000007792041_00093_18684_6539.N1	0	167
ASA_GM1_1PNPDK20050926_092334_000004282041_00093_18684_6551.N1	0	37
ASA_GM1_1PNPDK20050926_093227_000004342041_00093_18684_6550.N1	0	29
ASA_GM1_1PNPDK20050926_102220_000001812041_00094_18685_6564.N1	0	7
ASA_GM1_1PNPDK20050926_110125_000006042041_00094_18685_6560.N1	0	28
ASA_GM1_1PNPDK20050926_111314_000004282041_00094_18685_6562.N1	0	65
ASA_GM1_1PNPDK20050926_115256_000004952041_00095_18686_6561.N1	0	155
ASA_GM1_1PNPDK20050926_124201_000004952041_00095_18686_6567.N1	0	51
ASA_GM1_1PNPDK20050926_130524_000004652041_00095_18686_6570.N1	0	46
ASA_GM1_1PNPDK20050926_132615_00000662041_00096_18687_6572.N1	0	15
ASA_GM1_1PNPDK20050926_133447_000003922041_00096_18687_6569.N1	0	50
ASA_GM1_1PNPDK20050926_133511_000009182041_00096_18687_6579.N1	0	95
ASA_GM1_1PNPDK20050926_140511_000002052041_00096_18687_6589.N1	0	26
ASA_GM1_1PNPDK20050926_141024_00000782041_00096_18687_6630.N1	0	30
ASA_GM1_1PNPDK20050926_141026_00000782041_00096_18687_6590.N1	0	30
ASA_GM1_1PNPDK20050926_142236_000005922041_00096_18687_6582.N1	0	75
ASA_GM1_1PNPDK20050926_143412_000004412041_00096_18687_6586.N1	0	44
ASA_GM1_1PNPDK20050926_144716_000002232041_00096_18687_6578.N1	0	17
ASA_GM1_1PNPDK20050926_145950_000009242041_00097_18688_6580.N1	0	105
ASA_WSM_1PNPDE20050925_171036_000002382041_00084_18675_0541.N1	0	12
ASA_WSM_1PNPDE20050926_012729_000001832041_00088_18679_0630.N1	0	1



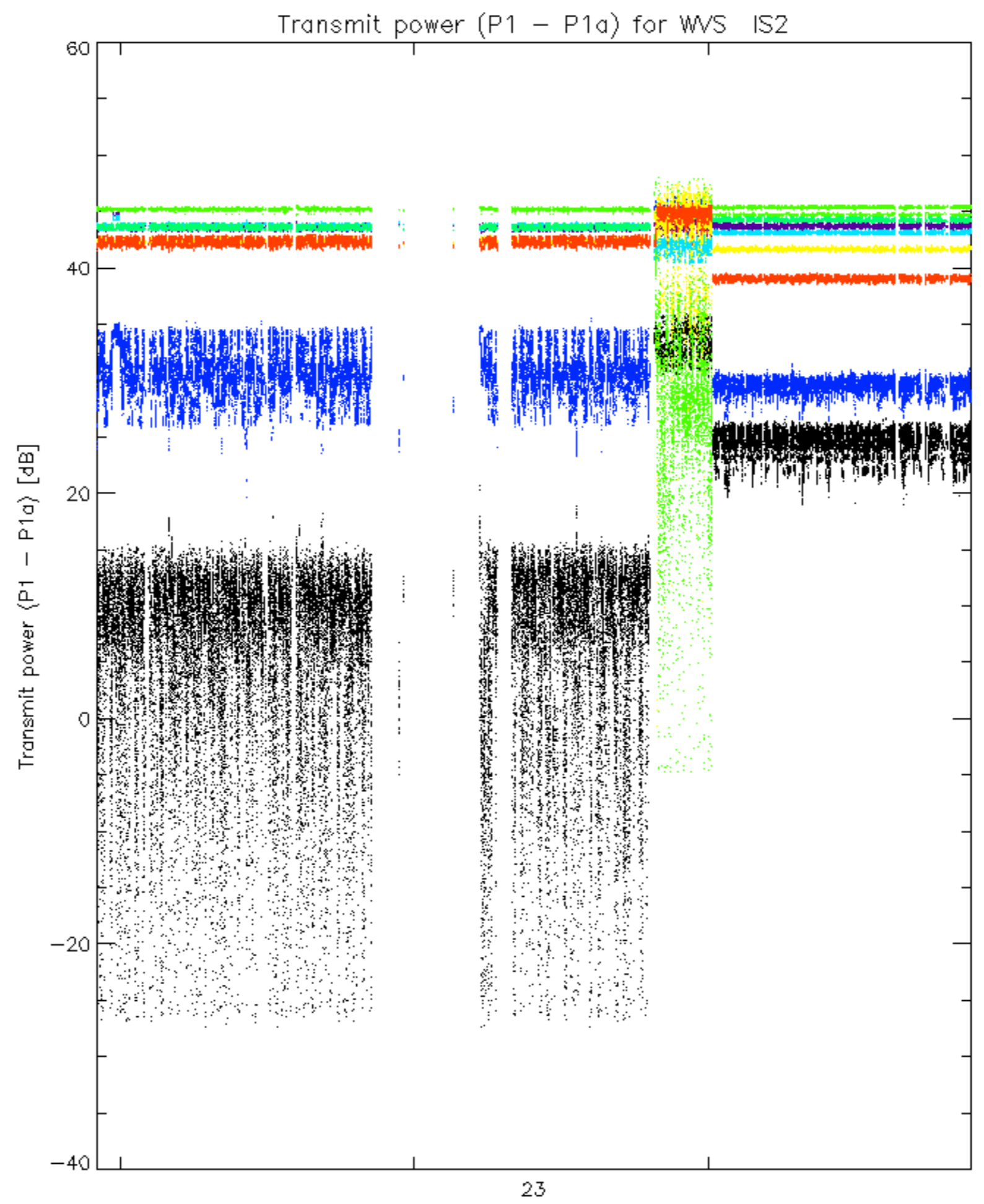


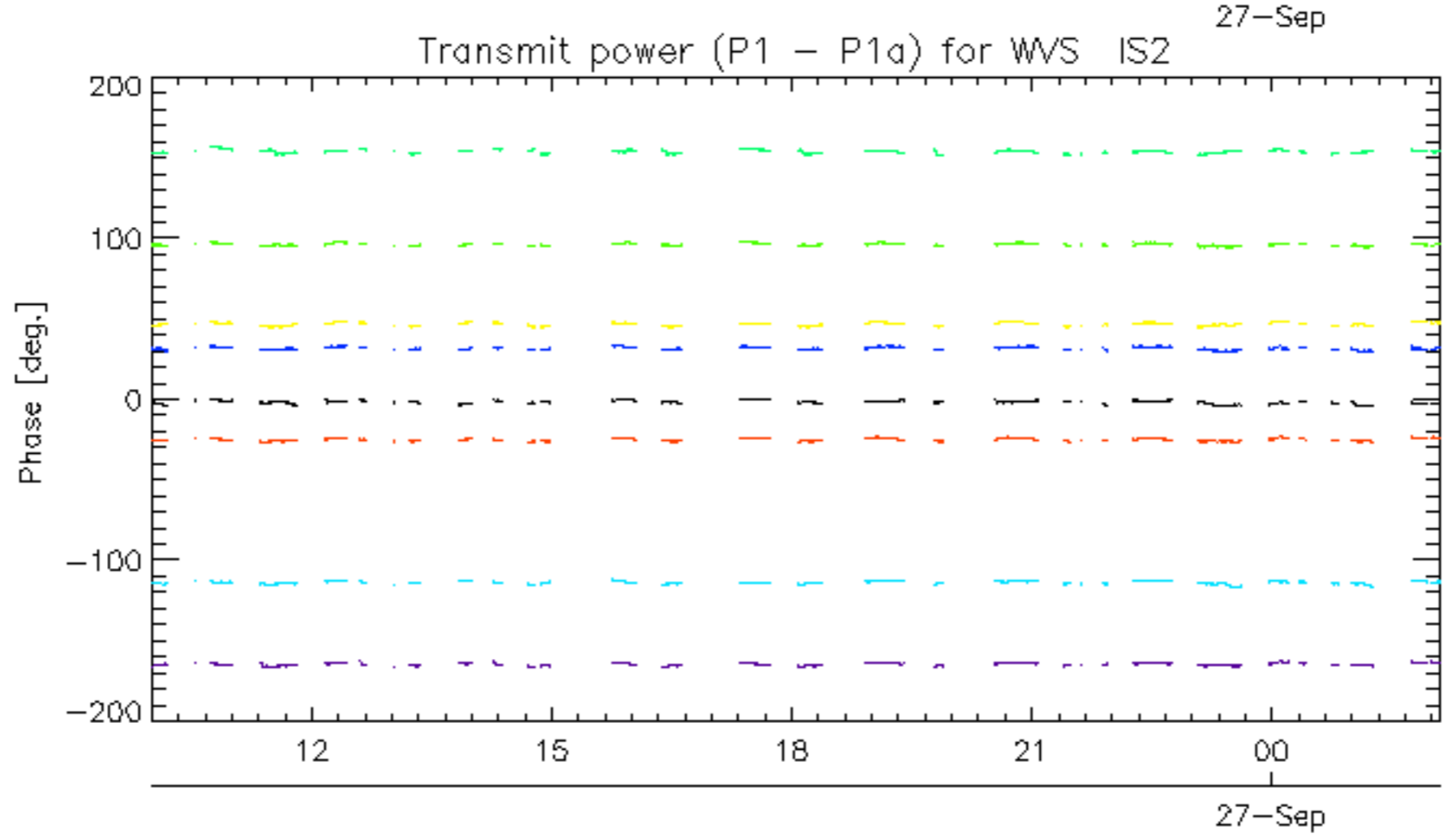
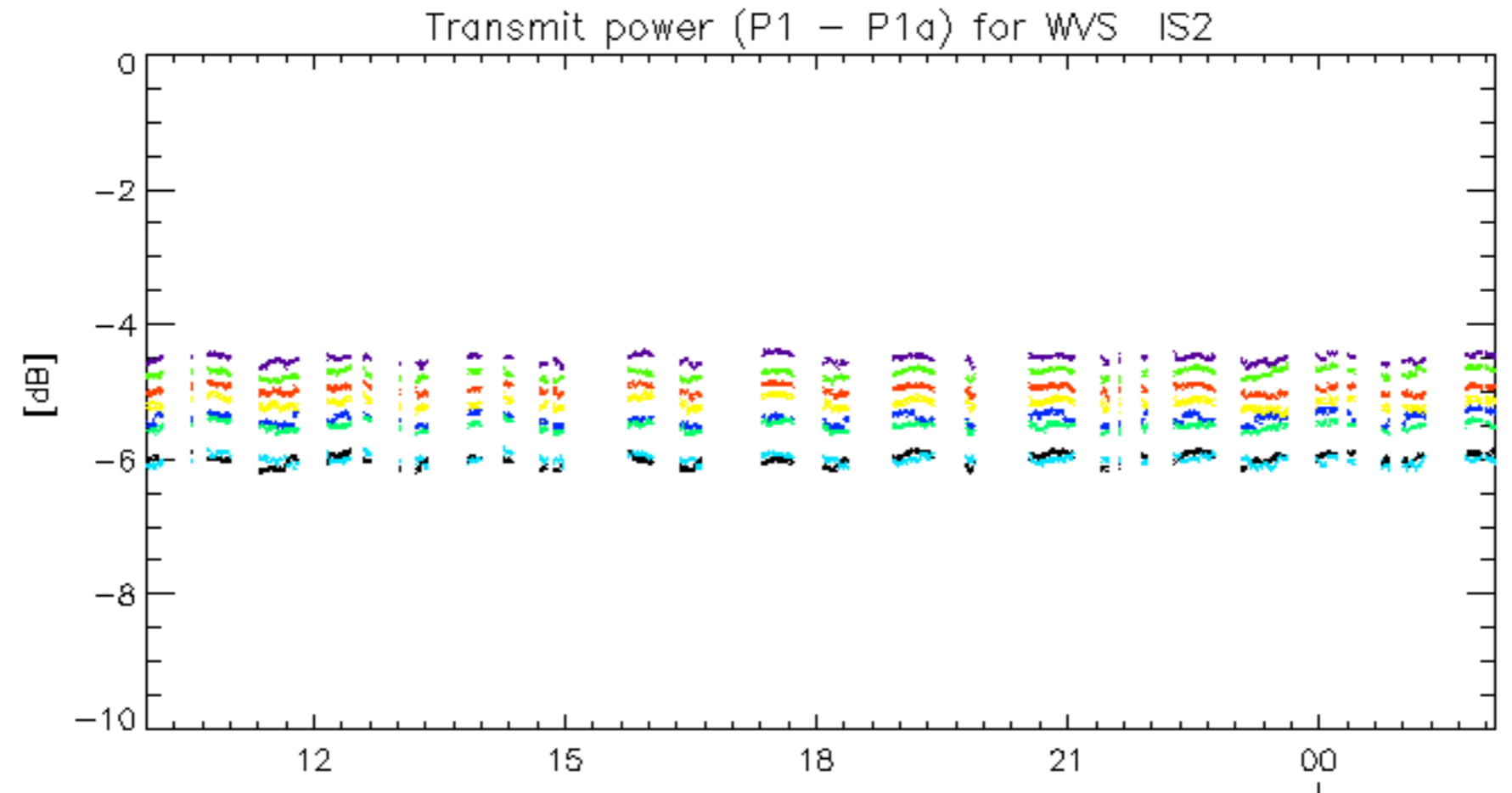


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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





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

No unavailabilities during the reported period.