

PRELIMINARY REPORT OF 050916

last update on Fri Sep 16 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 2005-09-15 00:00:00 to 2005-09-16 10:50:01

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	24	47	17	4	25
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	24	47	17	4	25
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	24	47	17	4	25
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	24	47	17	4	25

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	37	56	22	13	45
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	37	56	22	13	45
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	37	56	22	13	45
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	37	56	22	13	45

2.3 - Browse Visual Inspection

Preliminary report. Browse are not yet controled

2.4 - Data Analysis

Preliminary report. The data is not yet controled

3 - Module Stepping Mode

No anomalies observed on available MS products:

Polarisation	Start Time
V	20050915 100810
H	20050914 222358

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	-3.344874	0.066425	-0.331954
7	P1	-3.189486	0.011892	-0.080223
11	P1	-4.751527	0.034635	-0.118662
15	P1	-5.654125	0.052879	-0.154952
19	P1	-3.726815	0.149912	0.503576
22	P1	-4.625578	0.013496	-0.047710
26	P1	-4.846031	0.028742	-0.116323
30	P1	-7.155158	0.236104	0.593260
3	P1	-15.833136	1.450887	-1.580833
7	P1	-16.110416	4.338163	-2.868620
11	P1	-22.185266	2.474068	-2.038584
15	P1	-12.083743	9.157744	-4.122315
19	P1	-14.436249	0.178222	0.488333
22	P1	-16.568874	19.862684	-5.892315
26	P1	-18.212767	16.479034	-5.435071
30	P1	-18.486423	5.960665	-3.415094

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.716955	0.091331	0.014532
7	P2	-21.916460	0.185588	-0.356809
11	P2	-13.630910	1.005028	-1.181206
15	P2	-7.070735	0.116380	-0.206869
19	P2	-9.492607	0.203233	0.446116
22	P2	-16.810278	0.107010	-0.076628
26	P2	-16.499735	0.104340	-0.014386
30	P2	-18.870569	0.163923	-0.384453

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
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3	P3	-8.156132	0.004167	-0.015867
7	P3	-8.156132	0.004167	-0.015867
11	P3	-8.156132	0.004167	-0.015867
15	P3	-8.156132	0.004167	-0.015867
19	P3	-8.156132	0.004167	-0.015867
22	P3	-8.156132	0.004167	-0.015867
26	P3	-8.156137	0.004167	-0.015852
30	P3	-8.156137	0.004167	-0.015852

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	-2.729718	0.043093	0.247430
7	P1	-3.005052	0.071183	-0.265975
11	P1	-4.035695	0.029453	0.026540
15	P1	-3.637052	0.025331	-0.033909
19	P1	-3.570423	0.070327	0.346780
22	P1	-5.614377	0.187650	0.568297
26	P1	-7.158445	0.590483	1.110743
30	P1	-6.133928	0.392830	0.847713
3	P1	-11.132559	0.455669	-0.995816
7	P1	-11.548604	15.963998	-5.753558
11	P1	-14.020895	26.270620	-7.460171
15	P1	-12.991098	25.731133	-7.287965
19	P1	-15.359571	0.183138	0.544572
22	P1	-25.226984	2.172588	0.729328
26	P1	-15.738152	5.325607	-3.174660
30	P1	-20.247665	1.803844	-0.910955

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.414623	0.049690	0.046338
7	P2	-22.045944	0.131480	-0.405306
11	P2	-9.585907	0.352245	-0.657153
15	P2	-5.070934	0.036465	0.001604
19	P2	-6.767373	0.115442	0.376438
22	P2	-7.027398	0.045336	-0.060561
26	P2	-23.952520	0.035609	-0.036799
30	P2	-21.967743	0.071362	-0.253182

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.000625	0.004117	-0.011014
7	P3	-8.000642	0.004129	-0.010978
11	P3	-8.000550	0.004112	-0.010849
15	P3	-8.000525	0.004127	-0.010882
19	P3	-8.000667	0.004112	-0.011213
22	P3	-8.000499	0.004117	-0.010948
26	P3	-8.000523	0.004127	-0.011571
30	P3	-8.000475	0.004126	-0.011353

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	0.000457685
	stdev	2.17351e-07
MEAN Q	mean	0.000490307
	stdev	2.28633e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.128246
	stdev	0.000968519
STDEV Q	mean	0.128495
	stdev	0.000978366



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2005091[456]

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_1PNPDE20050916_004346_000001222040_00446_18536_5720.N1	1	0
ASA_IMM_1PNPDK20050915_092744_000000132040_00437_18527_4038.N1	0	96
ASA_IMM_1PNPDK20050915_092757_000000222040_00437_18527_4093.N1	0	162
ASA_IMM_1PNPDK20050915_092929_000000192040_00437_18527_4037.N1	0	112
ASA_IMM_1PNPDK20050915_093616_000000622040_00437_18527_4035.N1	0	17
ASA_GM1_1PNPDK20050915_074128_000005072040_00436_18526_5453.N1	0	14
ASA_GM1_1PNPDK20050915_080751_000005732040_00436_18526_5450.N1	0	197
ASA_GM1_1PNPDK20050915_081727_000001142040_00436_18526_5525.N1	0	41
ASA_GM1_1PNPDK20050915_082612_000011352040_00436_18526_5449.N1	0	286

ASA_GM1_1PNPDK20050915_091833_000005192040_00437_18527_5451.N1	0	120
ASA_GM1_1PNPDK20050915_150835_000011362040_00440_18530_5490.N1	0	7
ASA_WSM_1PNPDE20050914_225857_000003002040_00431_18521_8744.N1	0	65
ASA_WSM_1PNPDE20050915_012427_000004282040_00432_18522_8770.N1	0	16
ASA_WSM_1PNPDE20050916_005515_000002792040_00446_18536_8936.N1	0	46
ASA_WSM_1PNPDK20050915_122838_000003972040_00439_18529_4159.N1	0	21



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

7.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler	
<input type="checkbox"/>	Ascending
<input type="checkbox"/>	Descending

7.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX**7.4 - Unbiased Doppler Error for GM1****Evolution of unbiased Doppler error (Real - Expected)**

Acsending

Descending

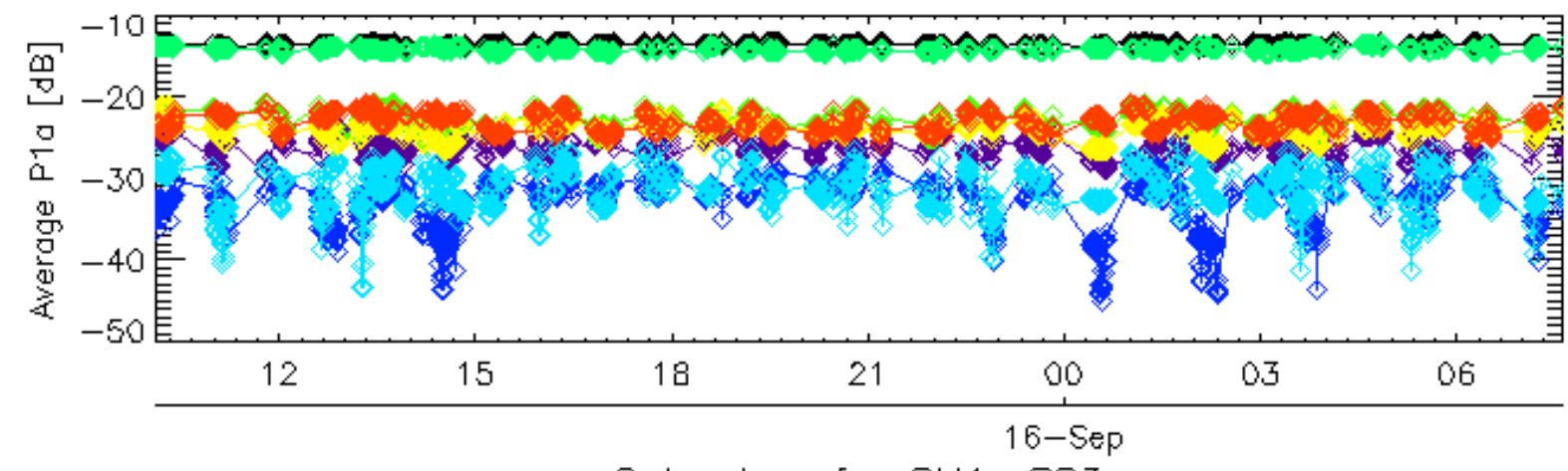
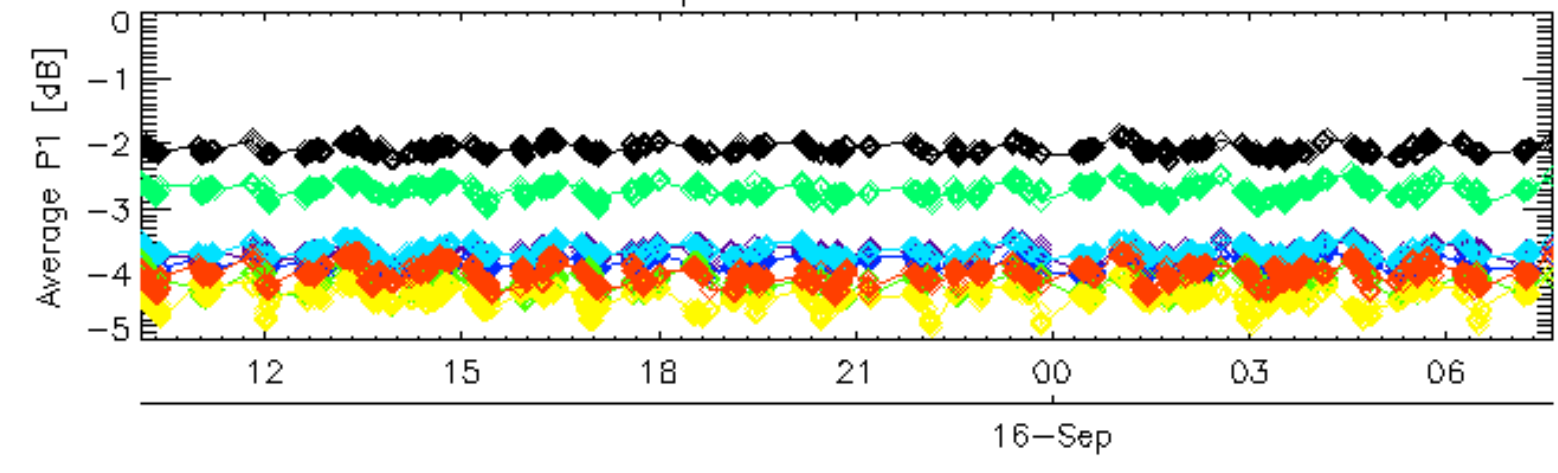
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

Acsending

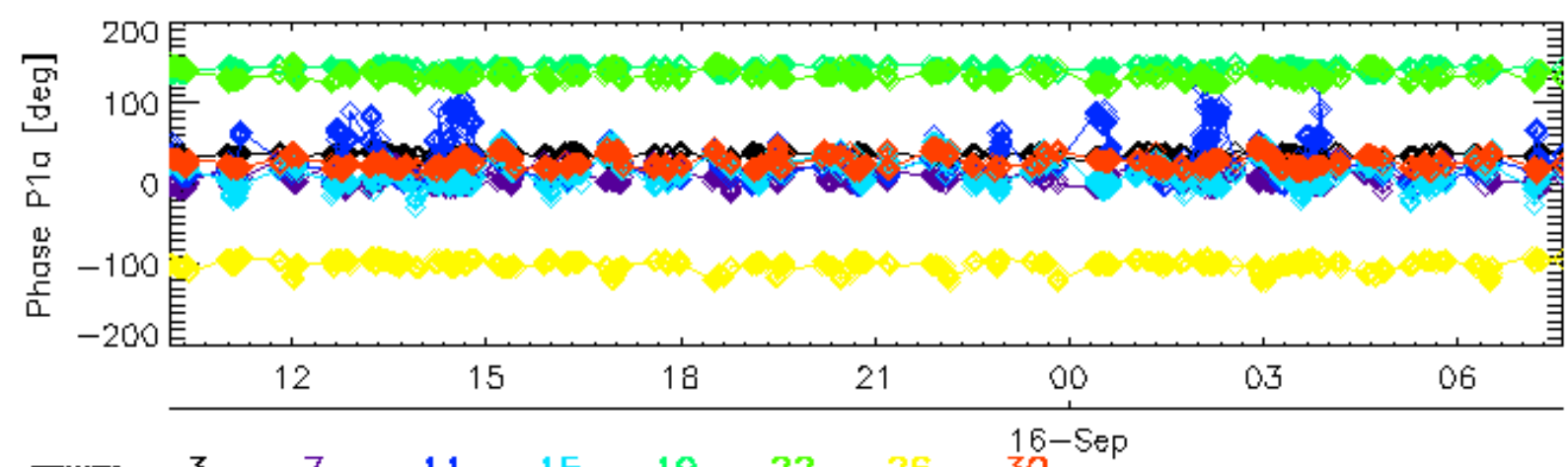
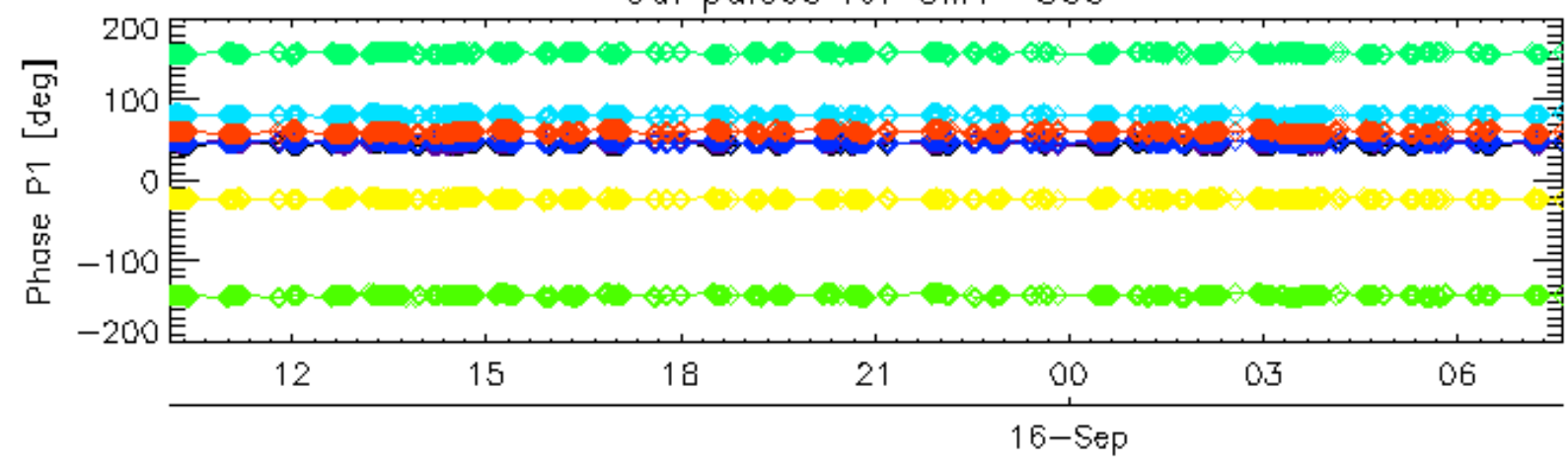
Descending

7.6 - Doppler evolution versus ANX for GM1**Evolution Doppler error versus ANX**

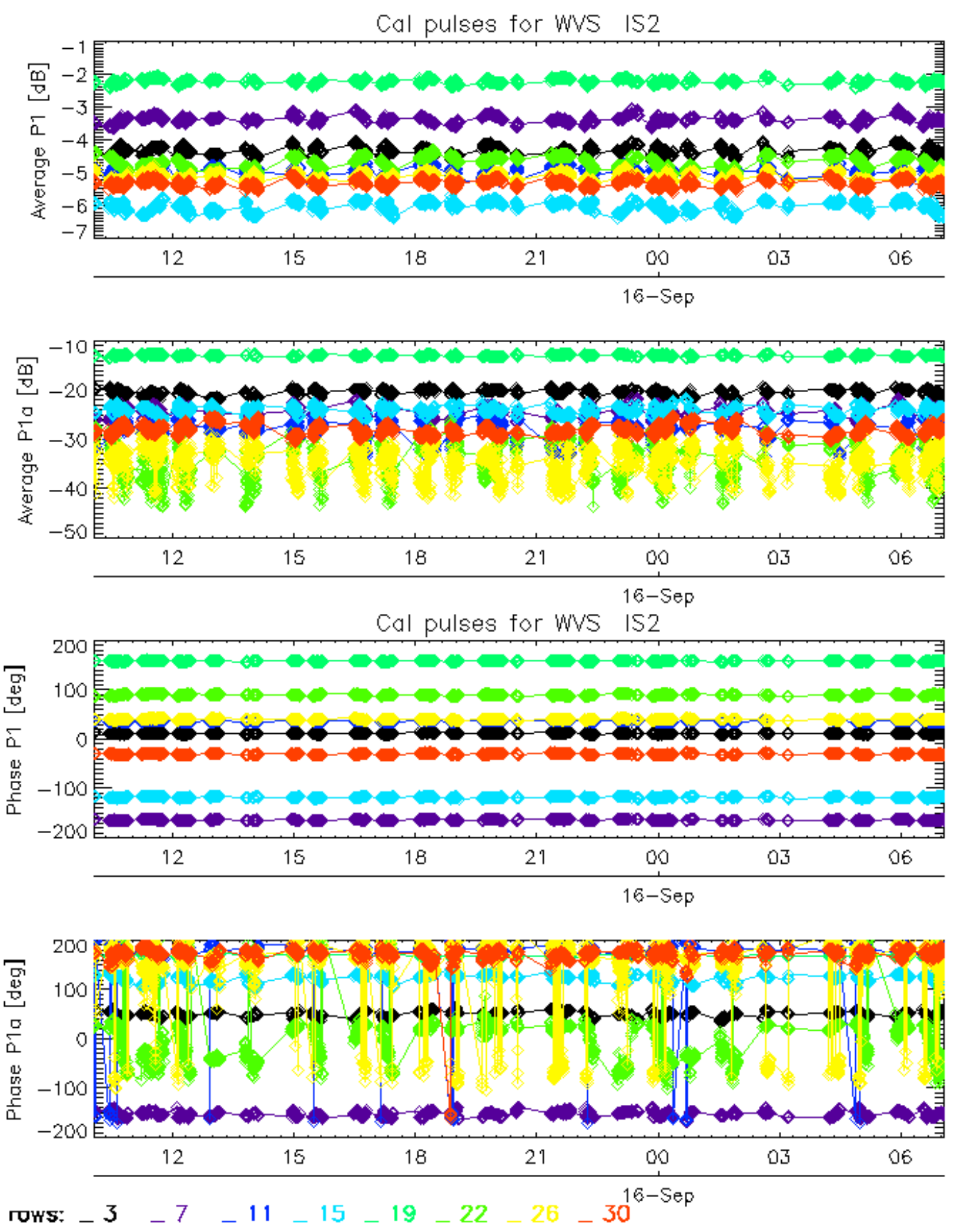
Cal pulses for GM1 SS3



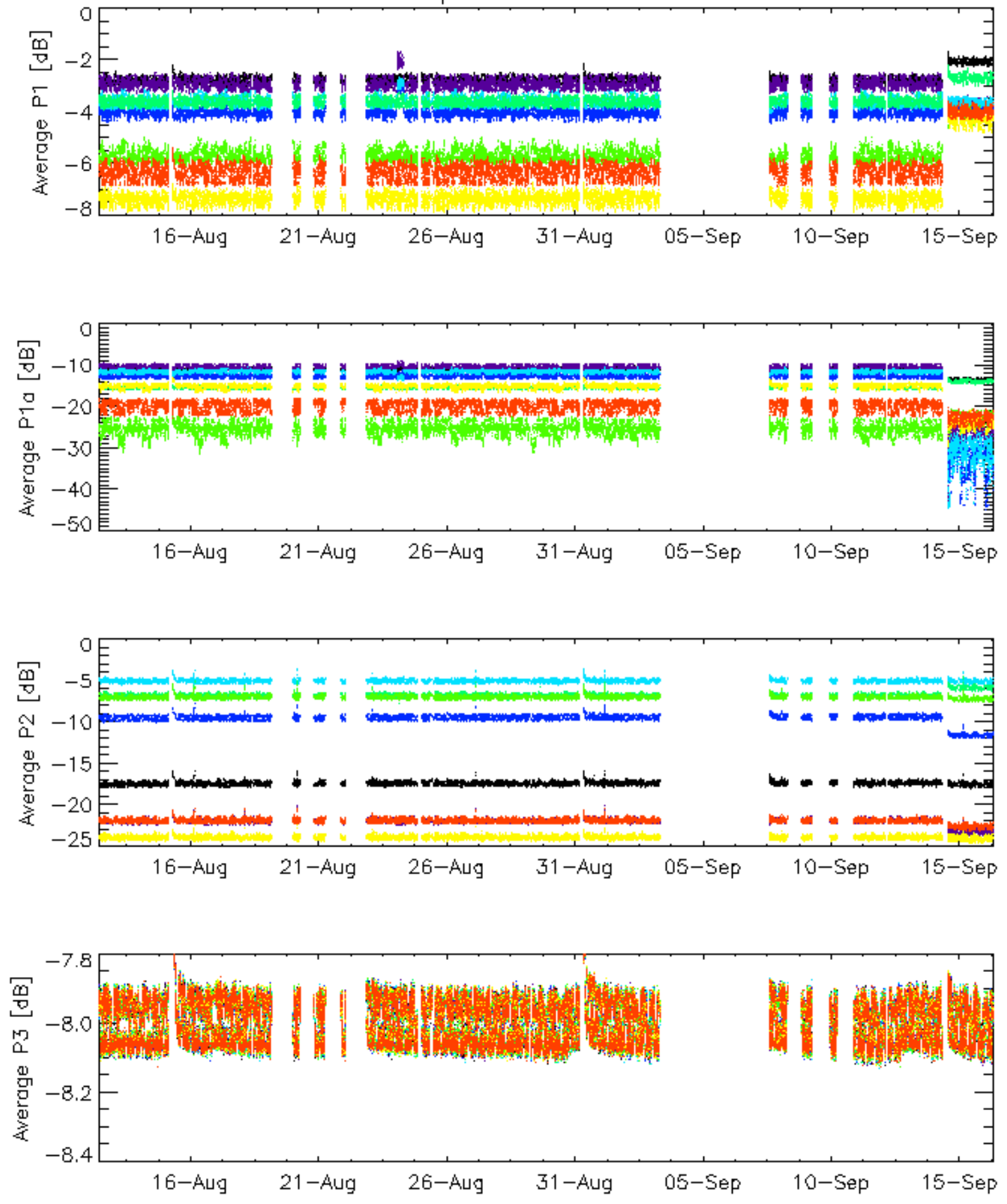
Cal pulses for GM1 SS3



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

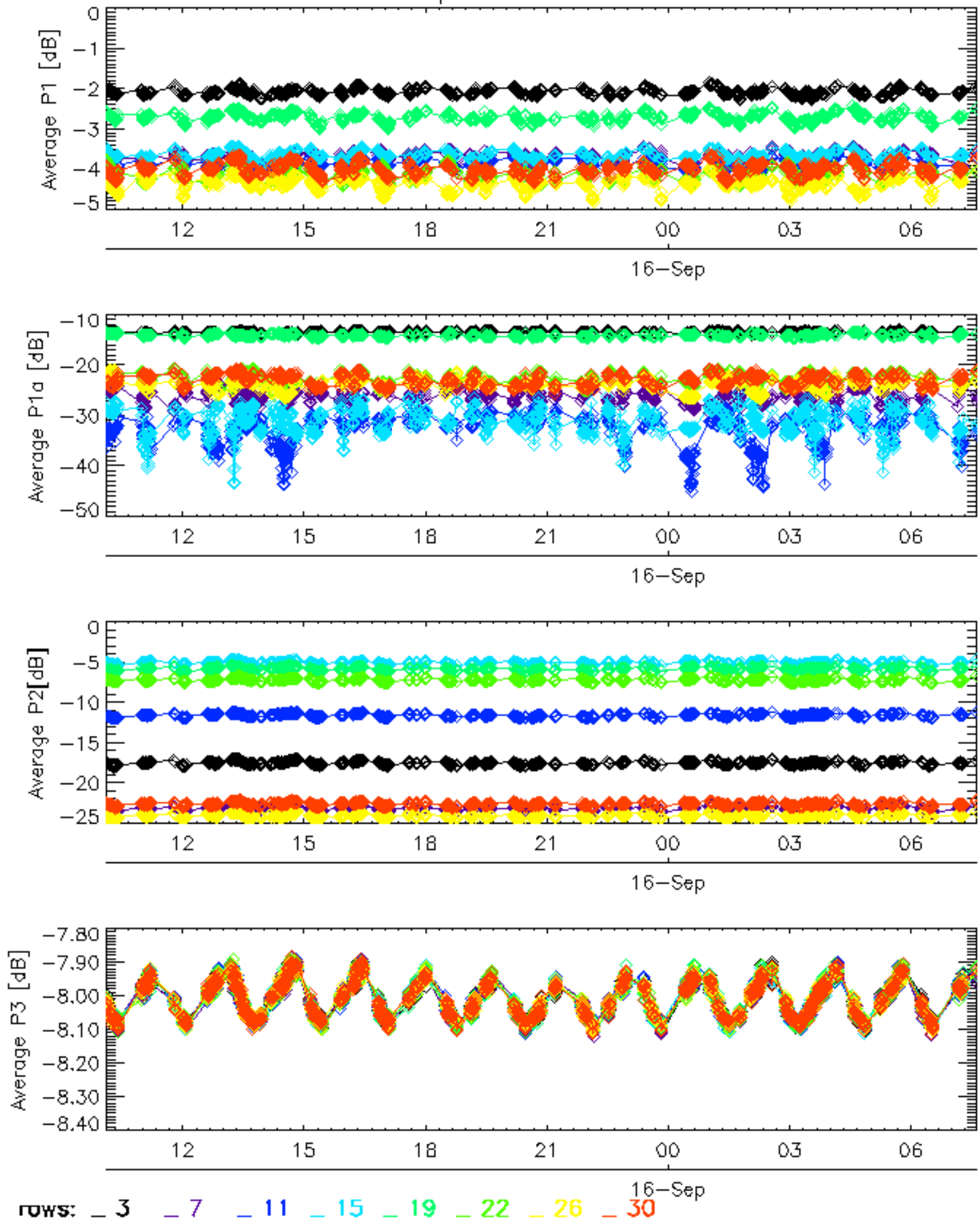


Cal pulses for GM1 SS3

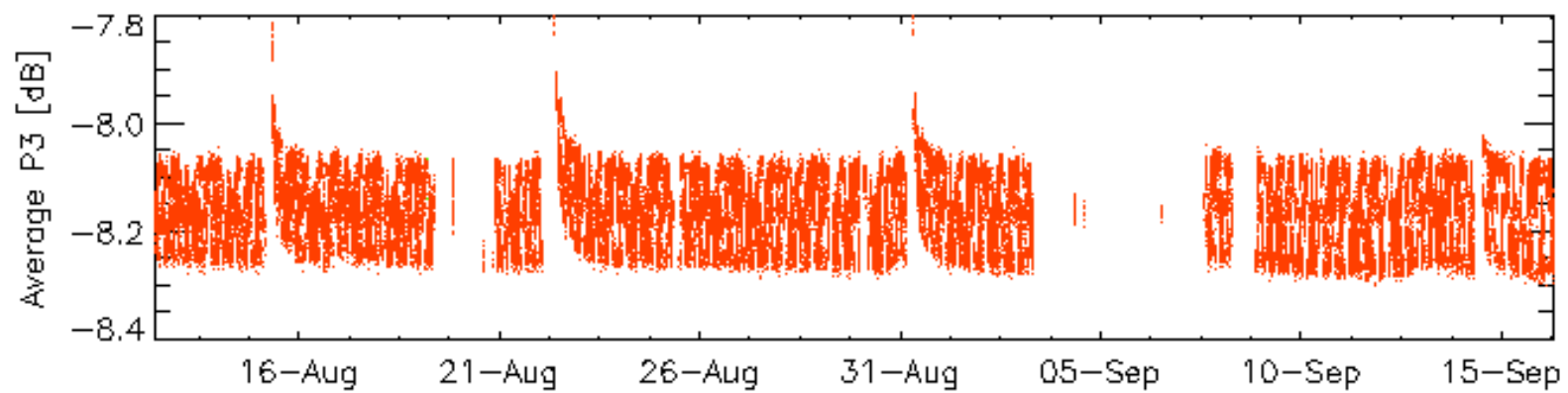
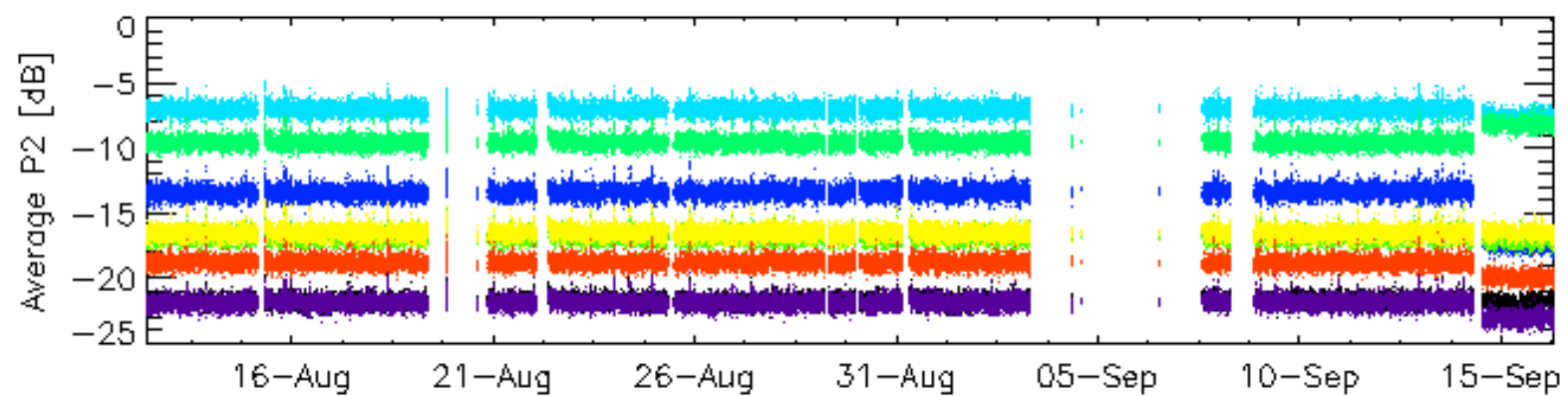
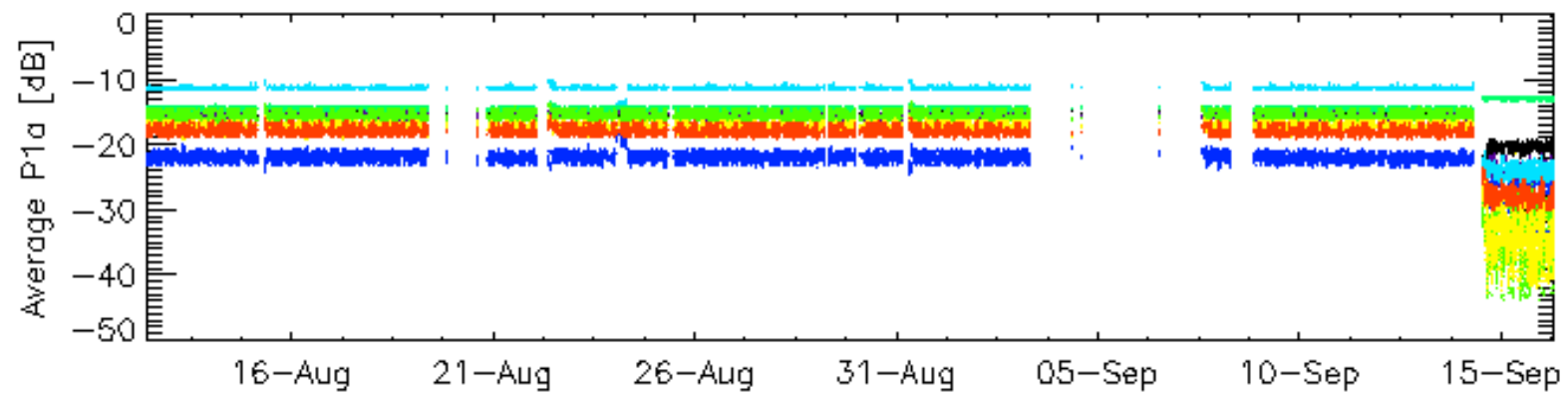
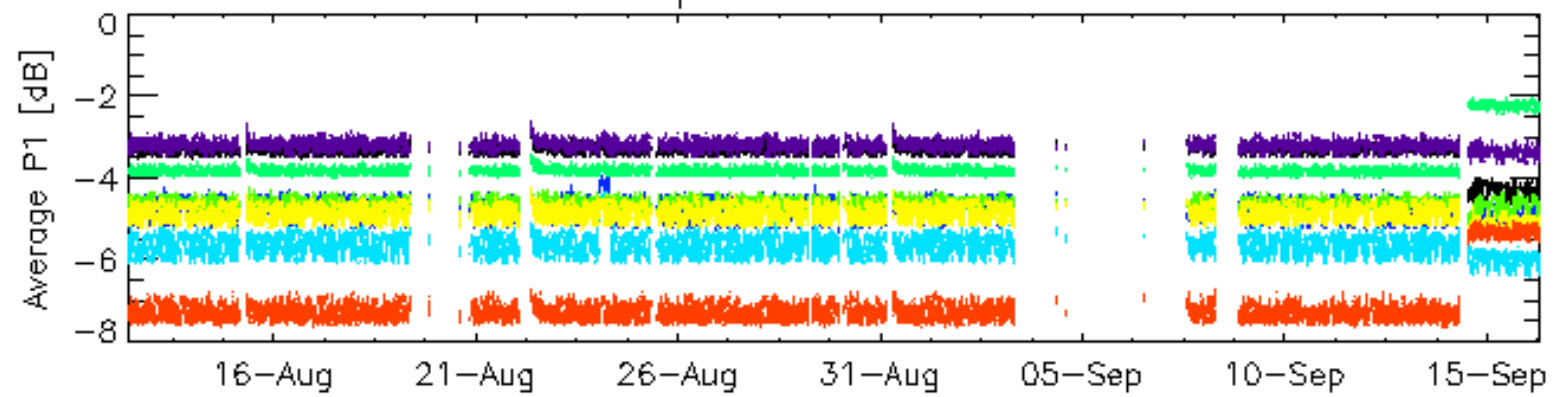


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

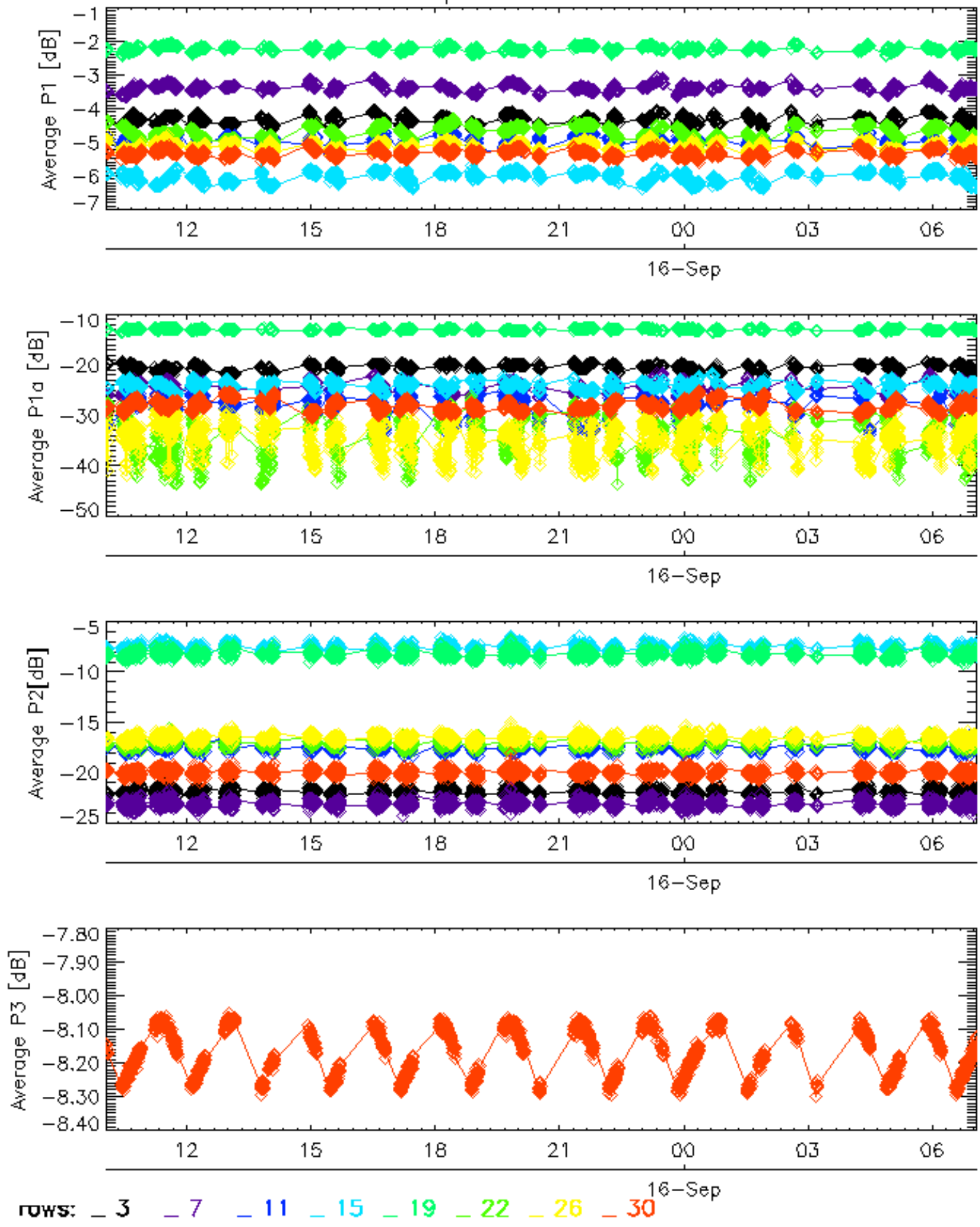


Cal pulses for WVS IS2

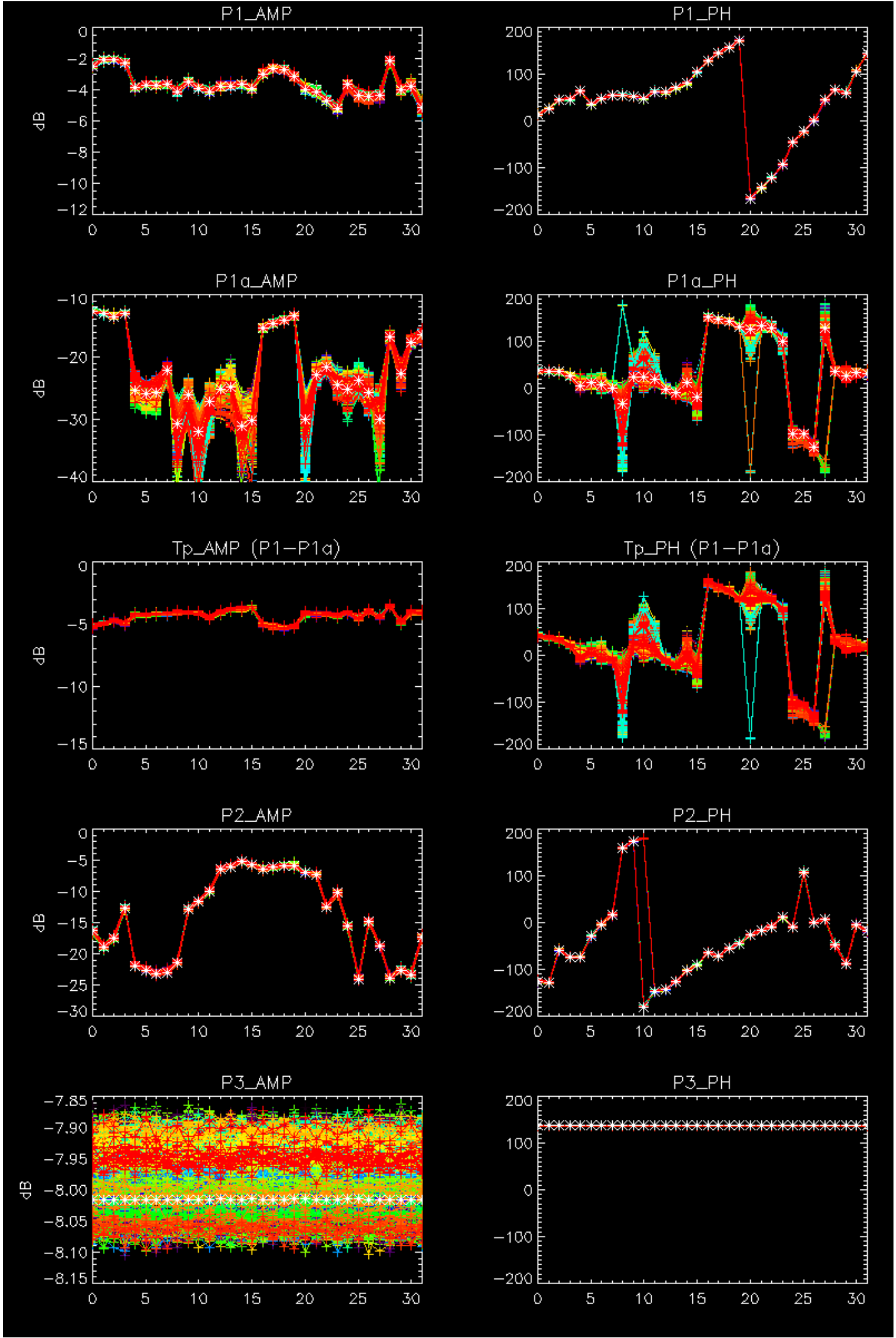


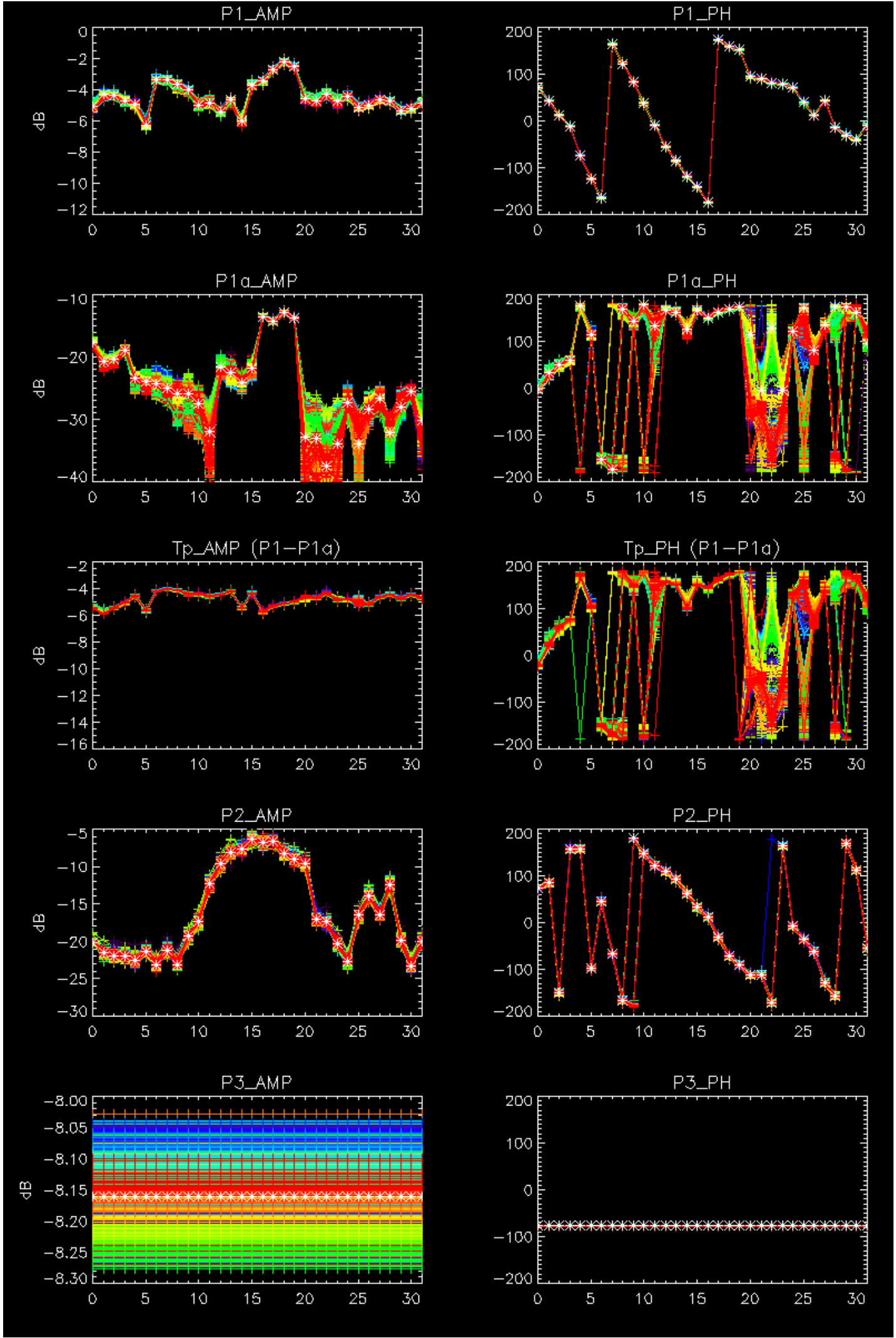
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

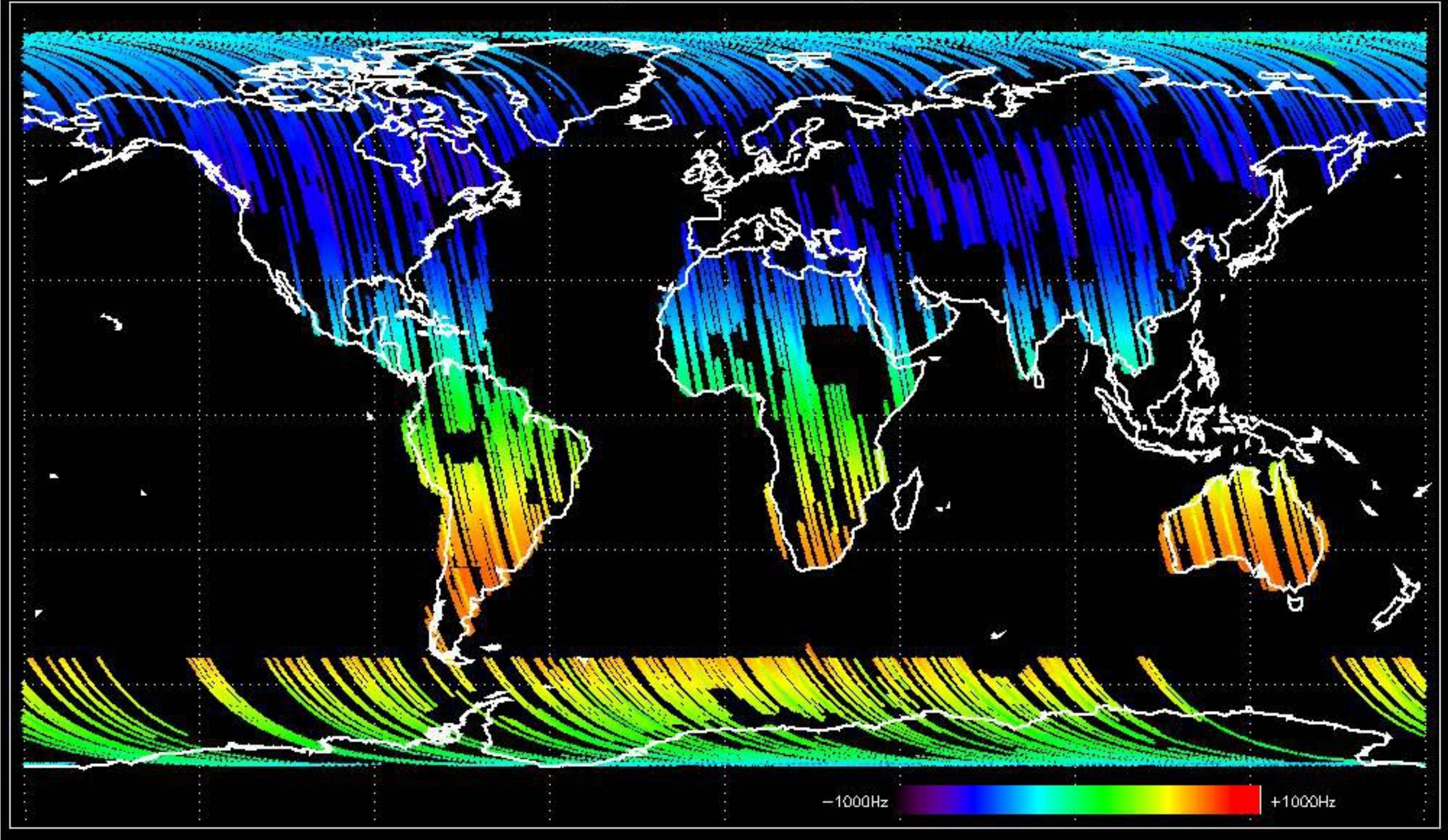


No anomalies observed.

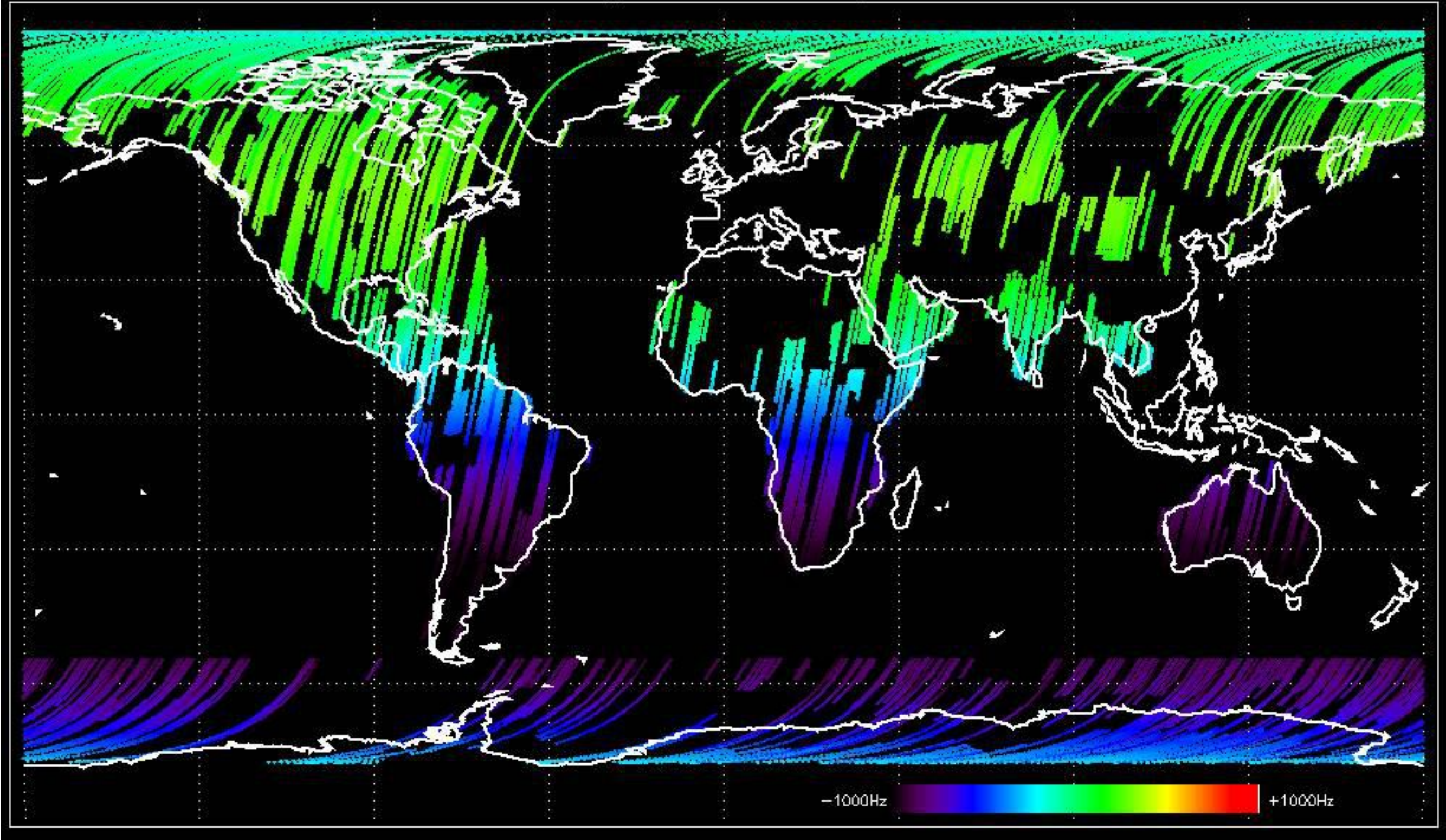




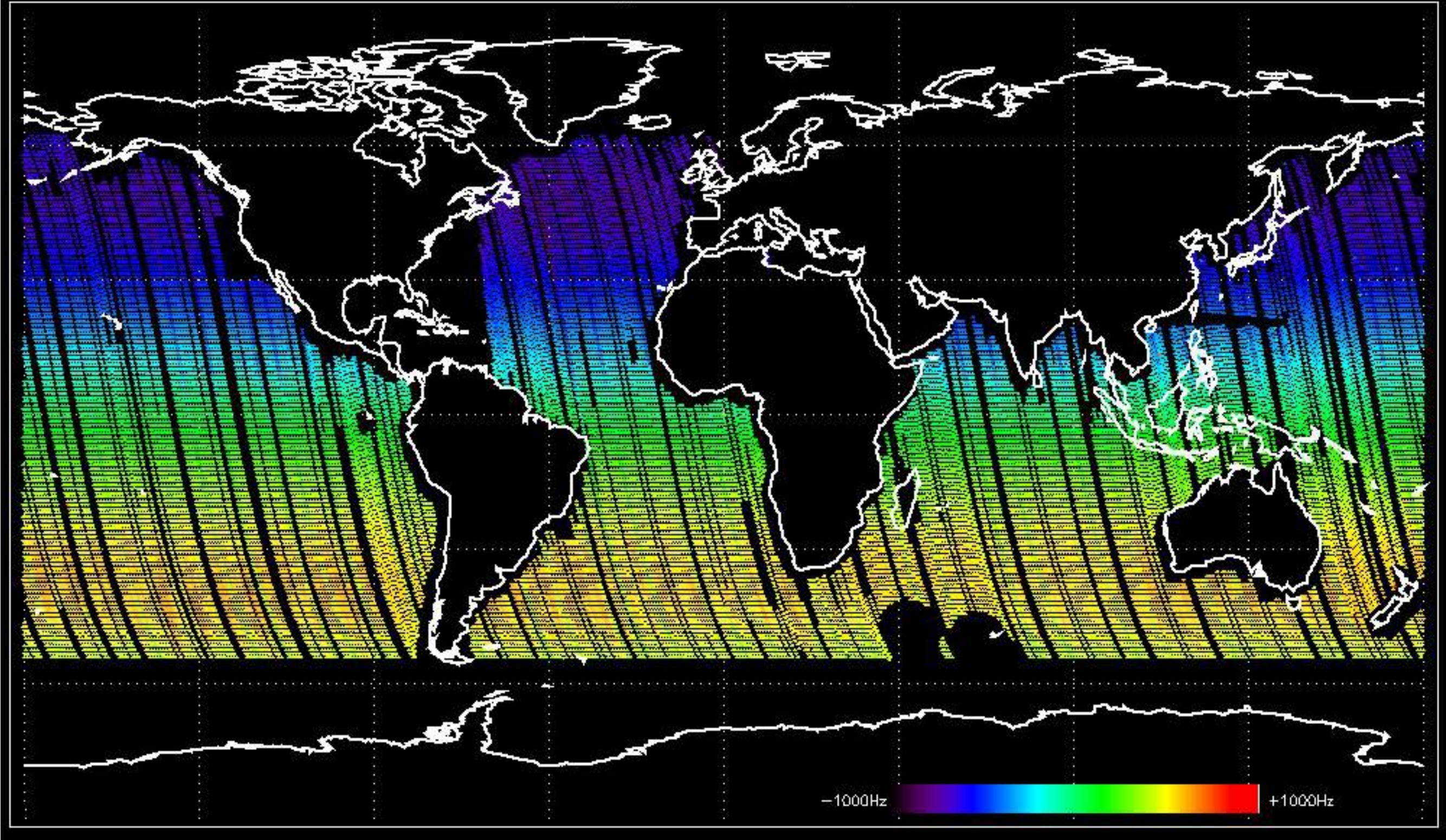
Doppler 'GM1' 'SS1' ascending



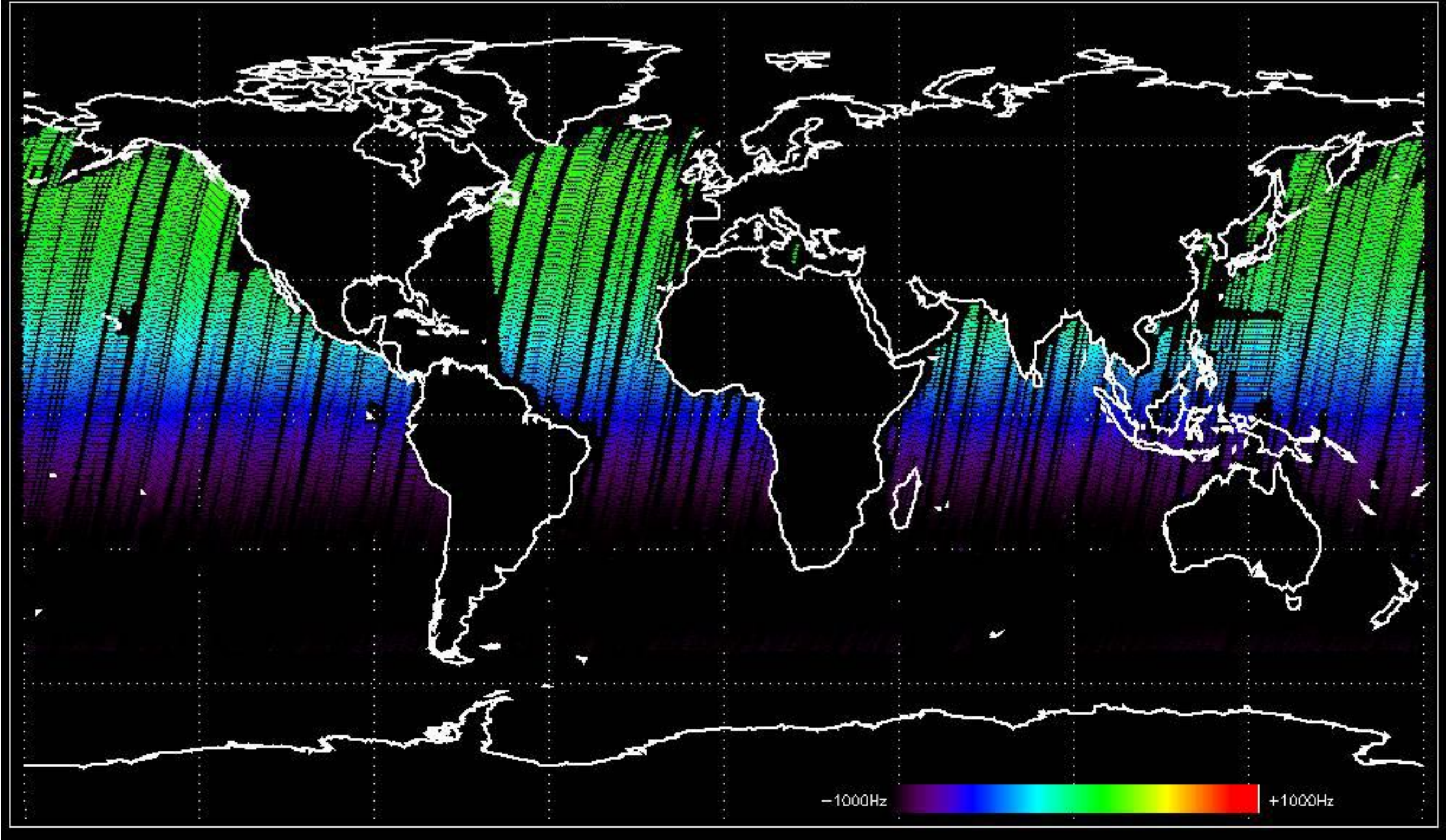
Doppler 'GM1' 'SS1' descending

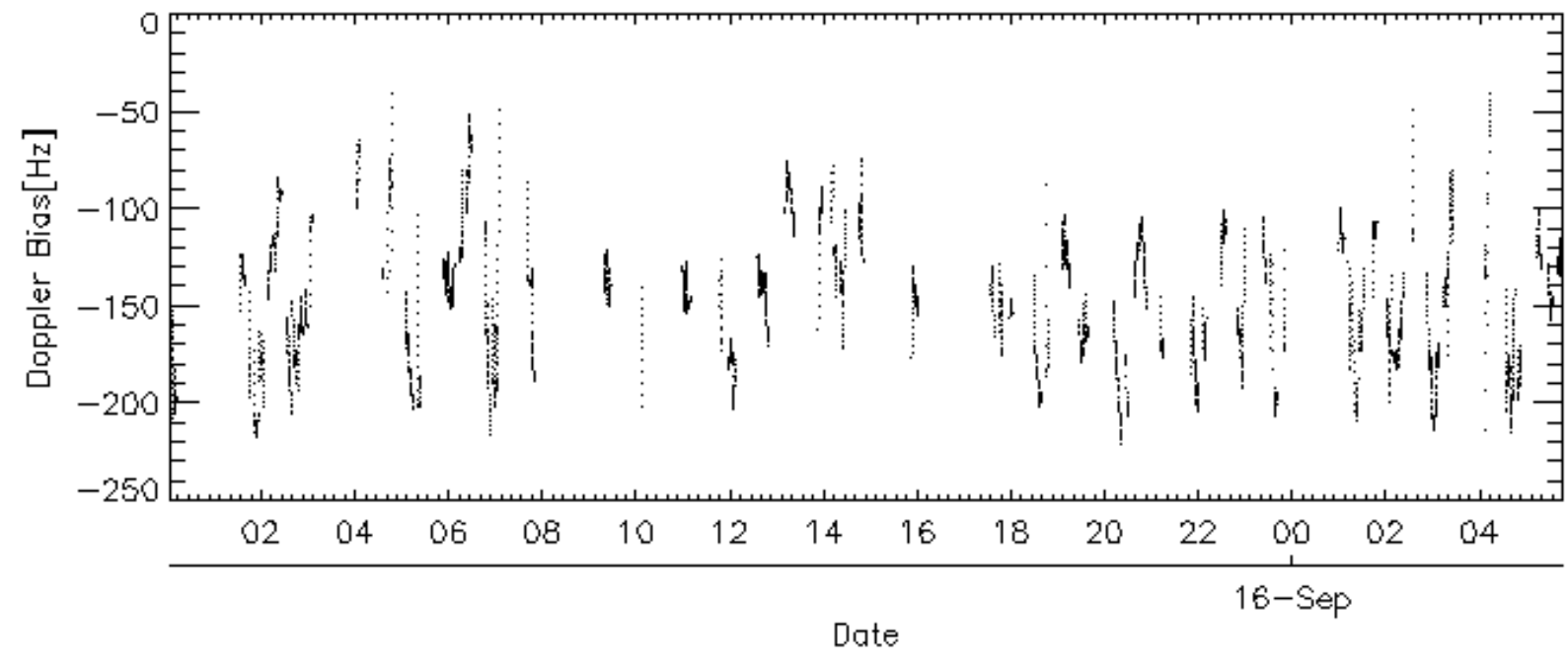
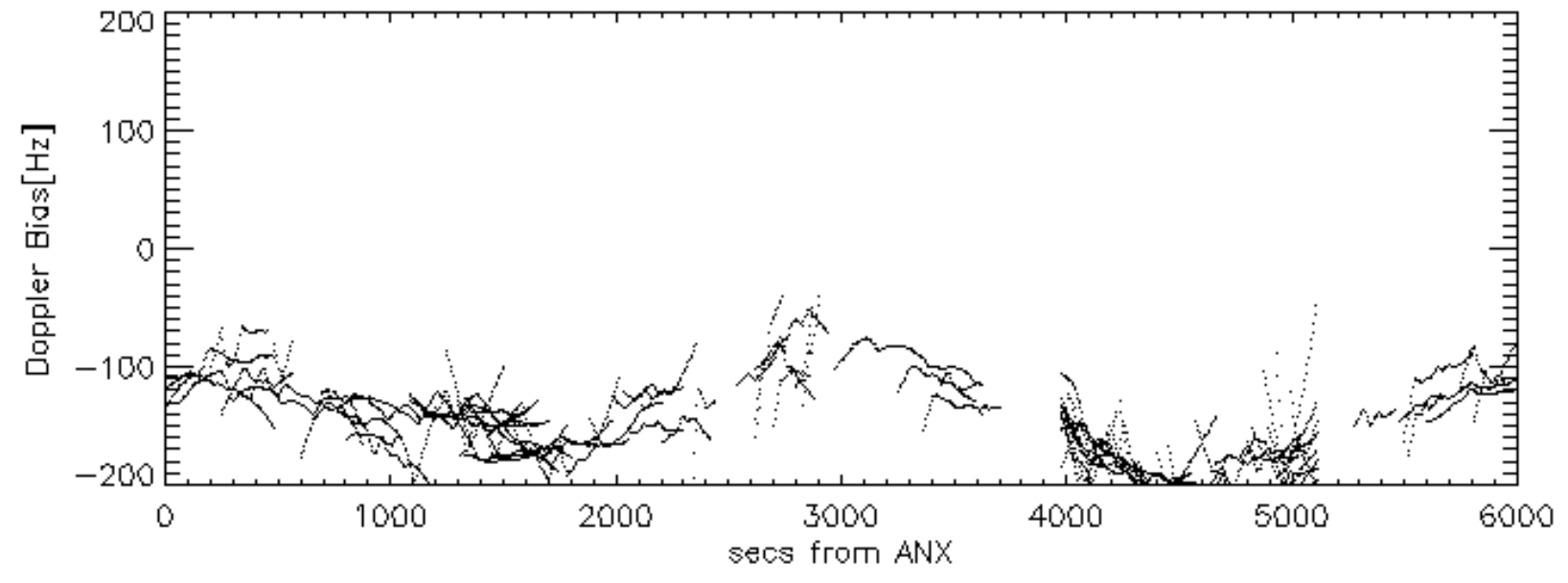
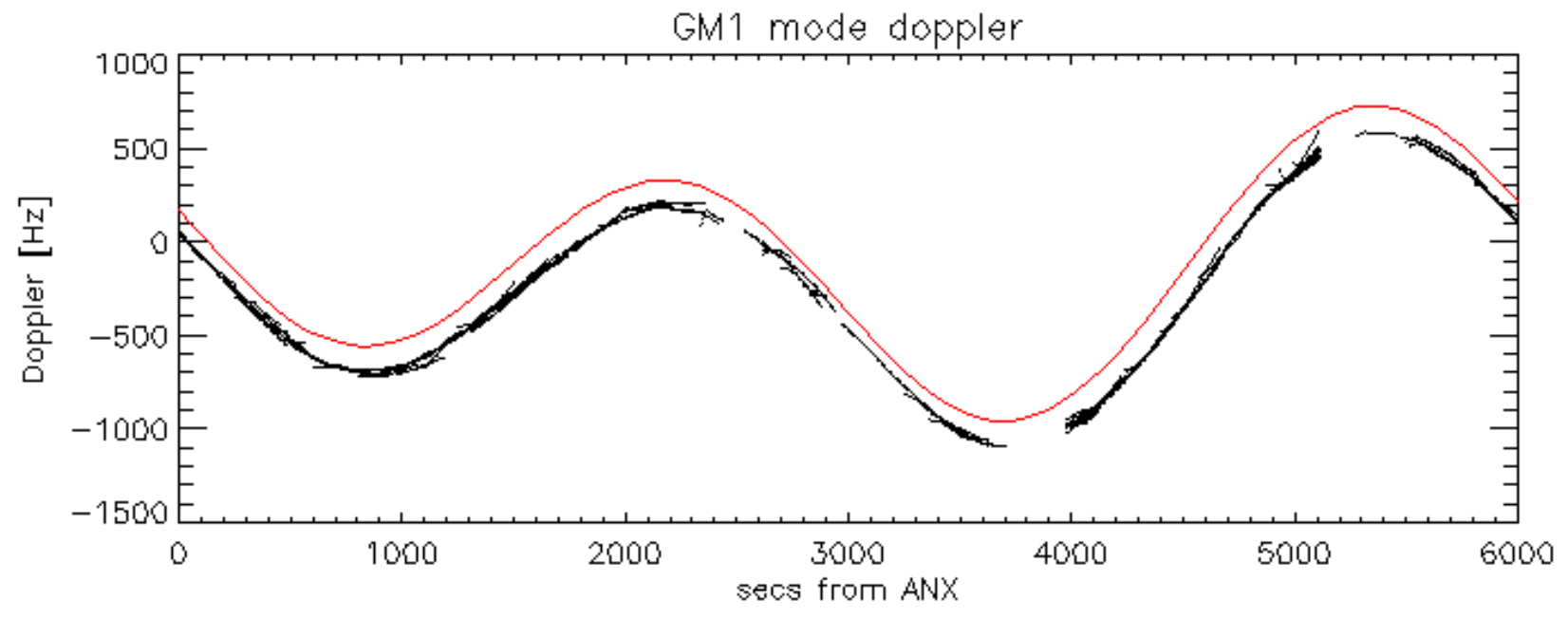


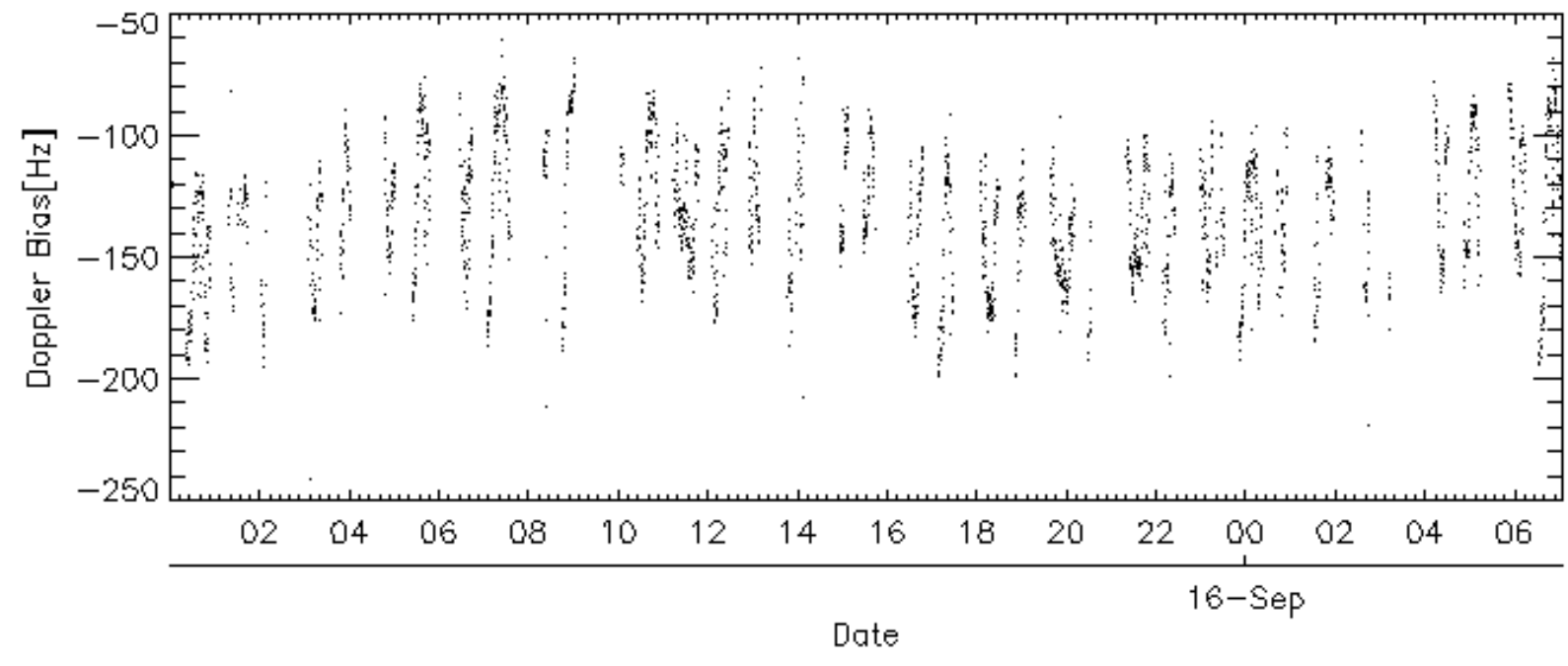
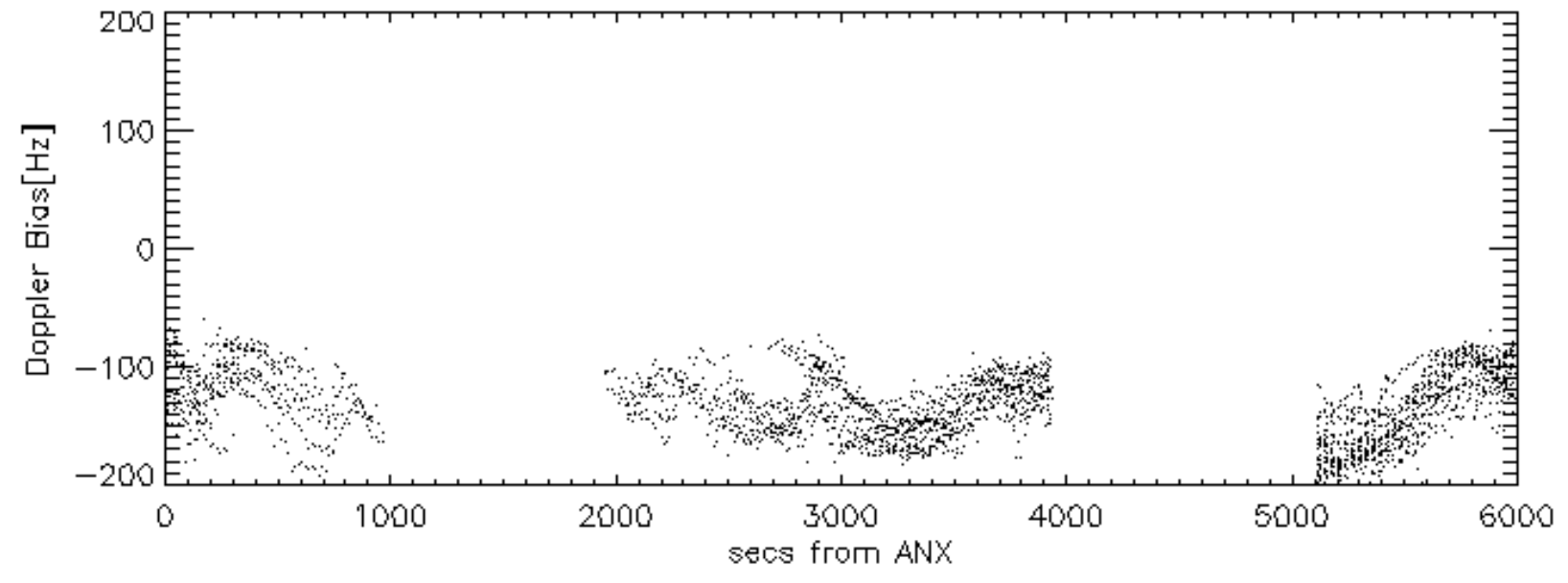
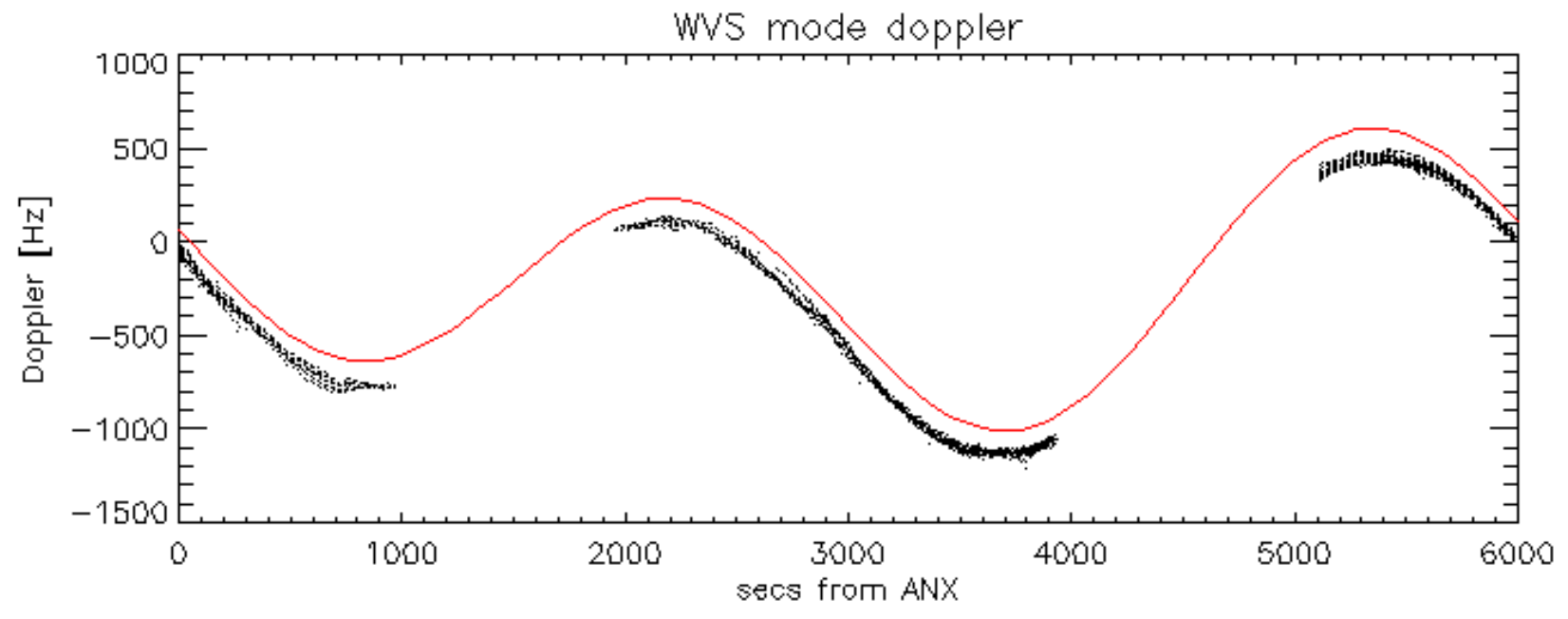
Doppler 'WVS' 'IS2' ascending



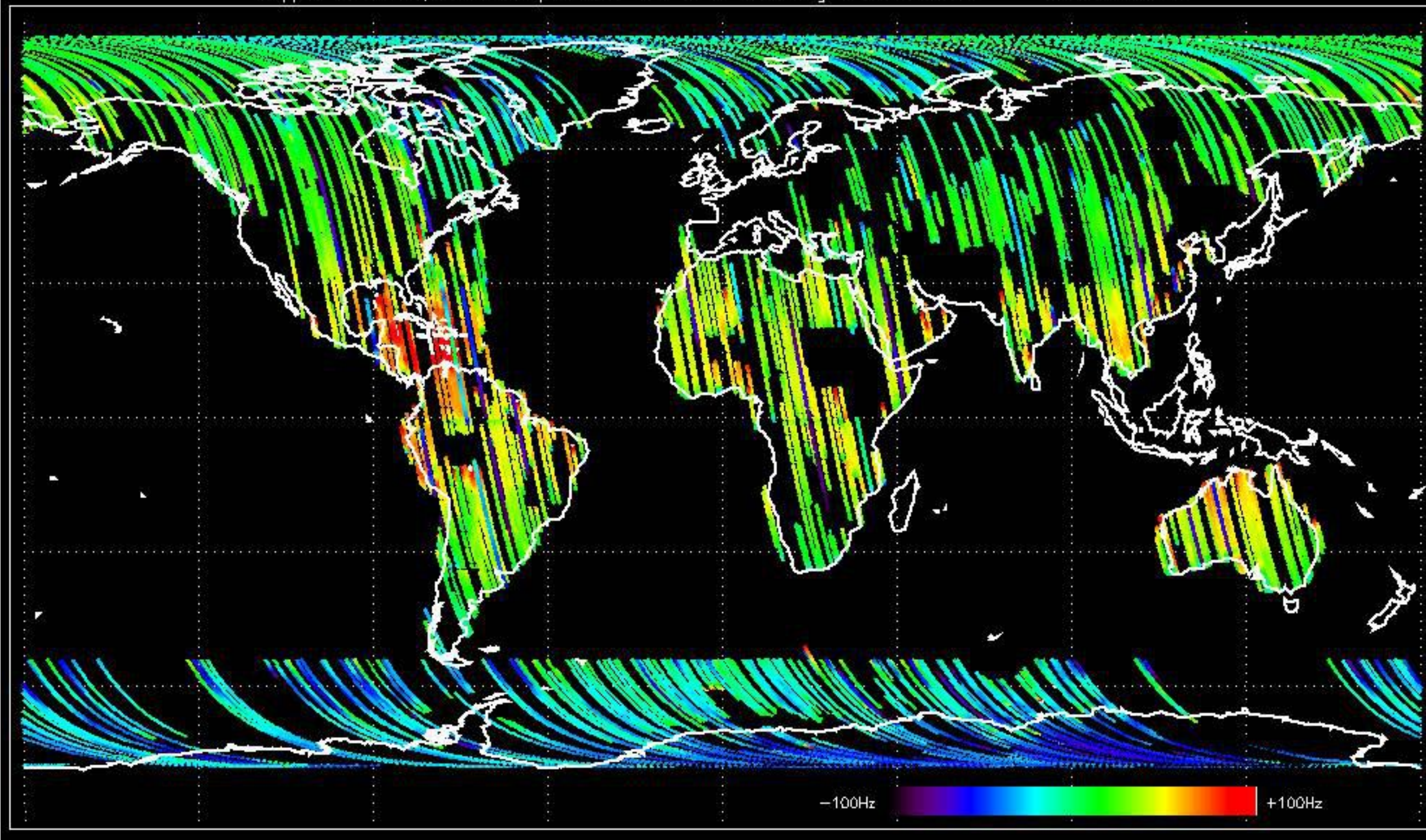
Doppler 'WVS' 'IS2' descending



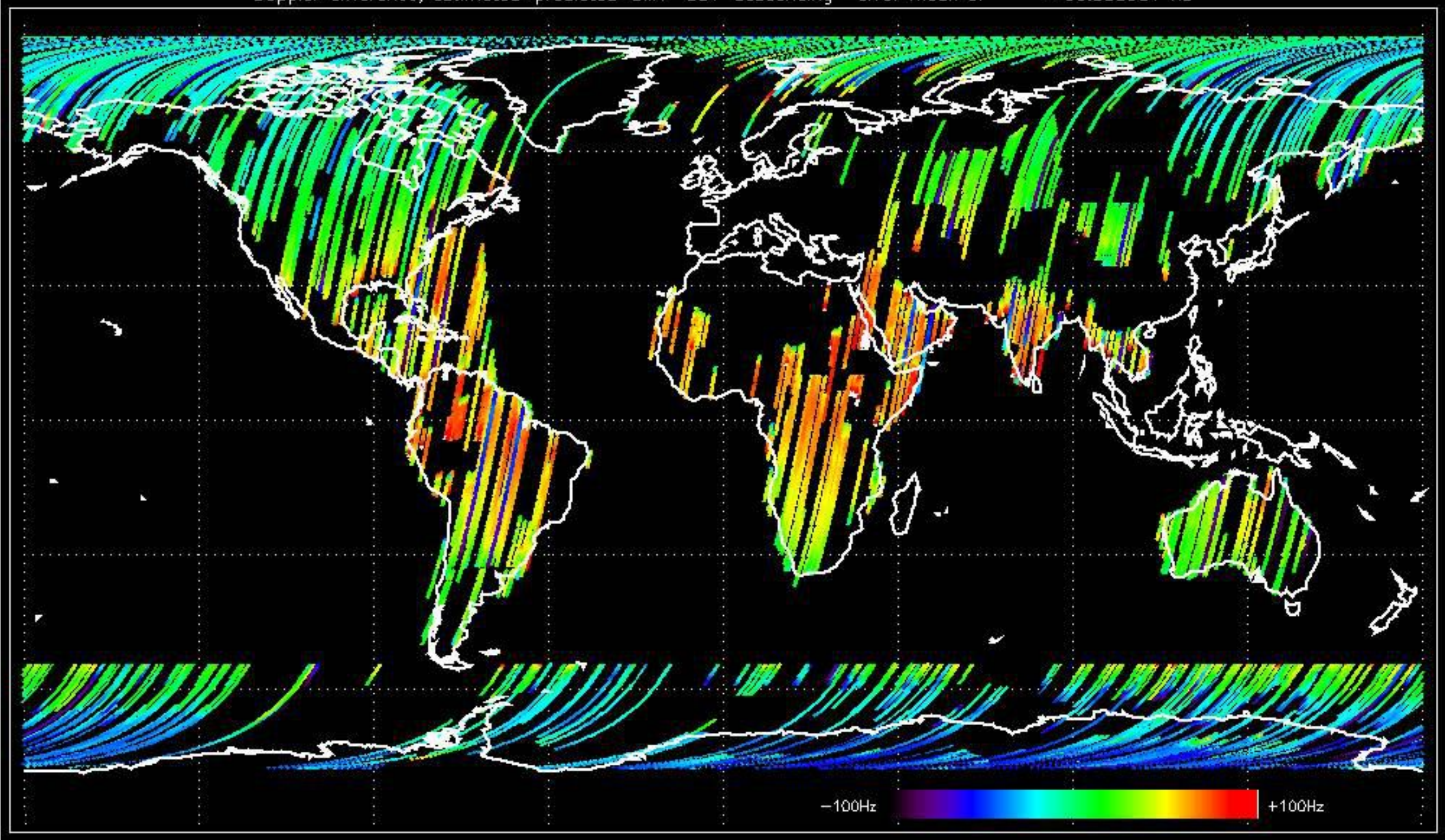




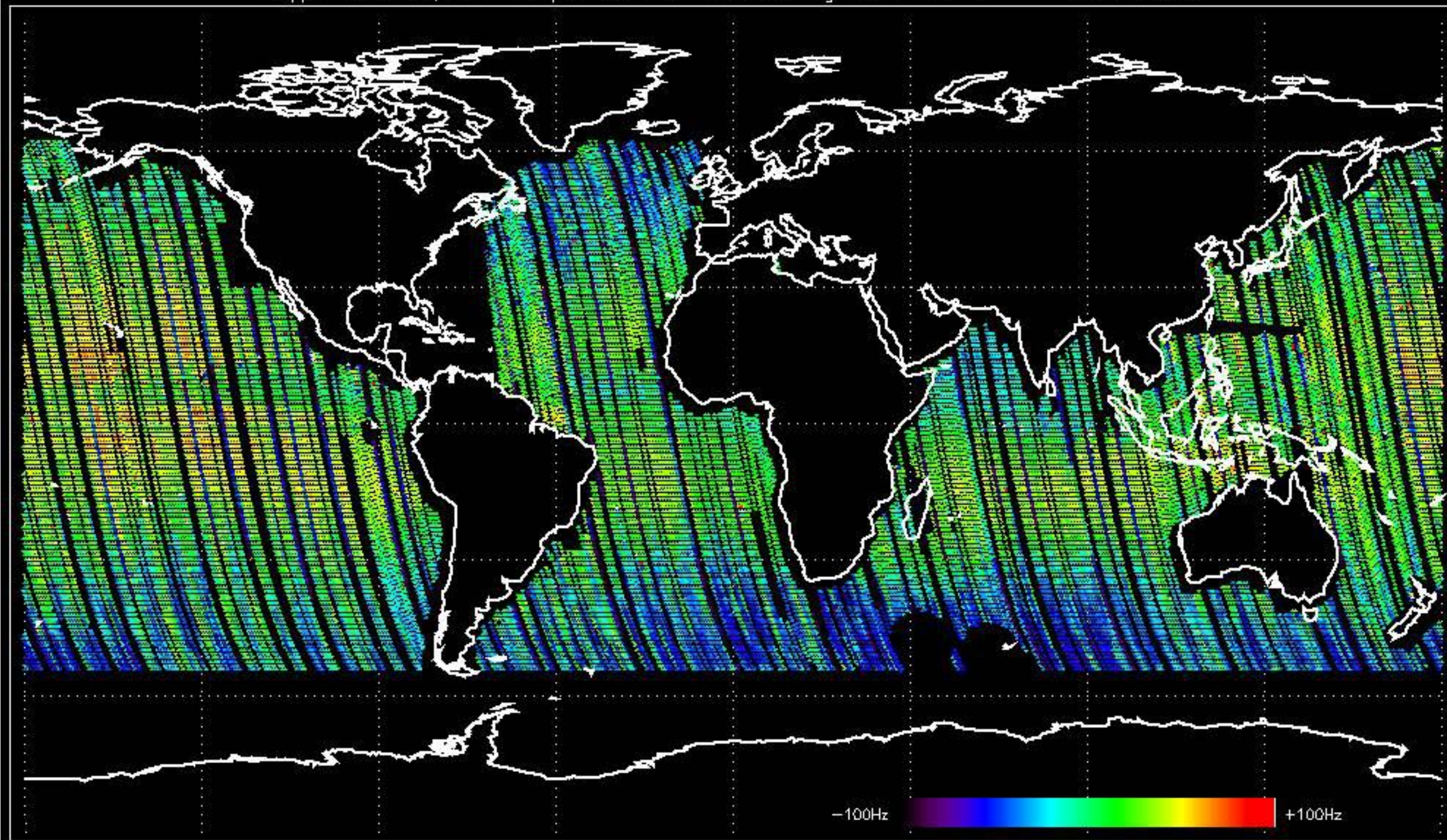
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -40.805539 Hz



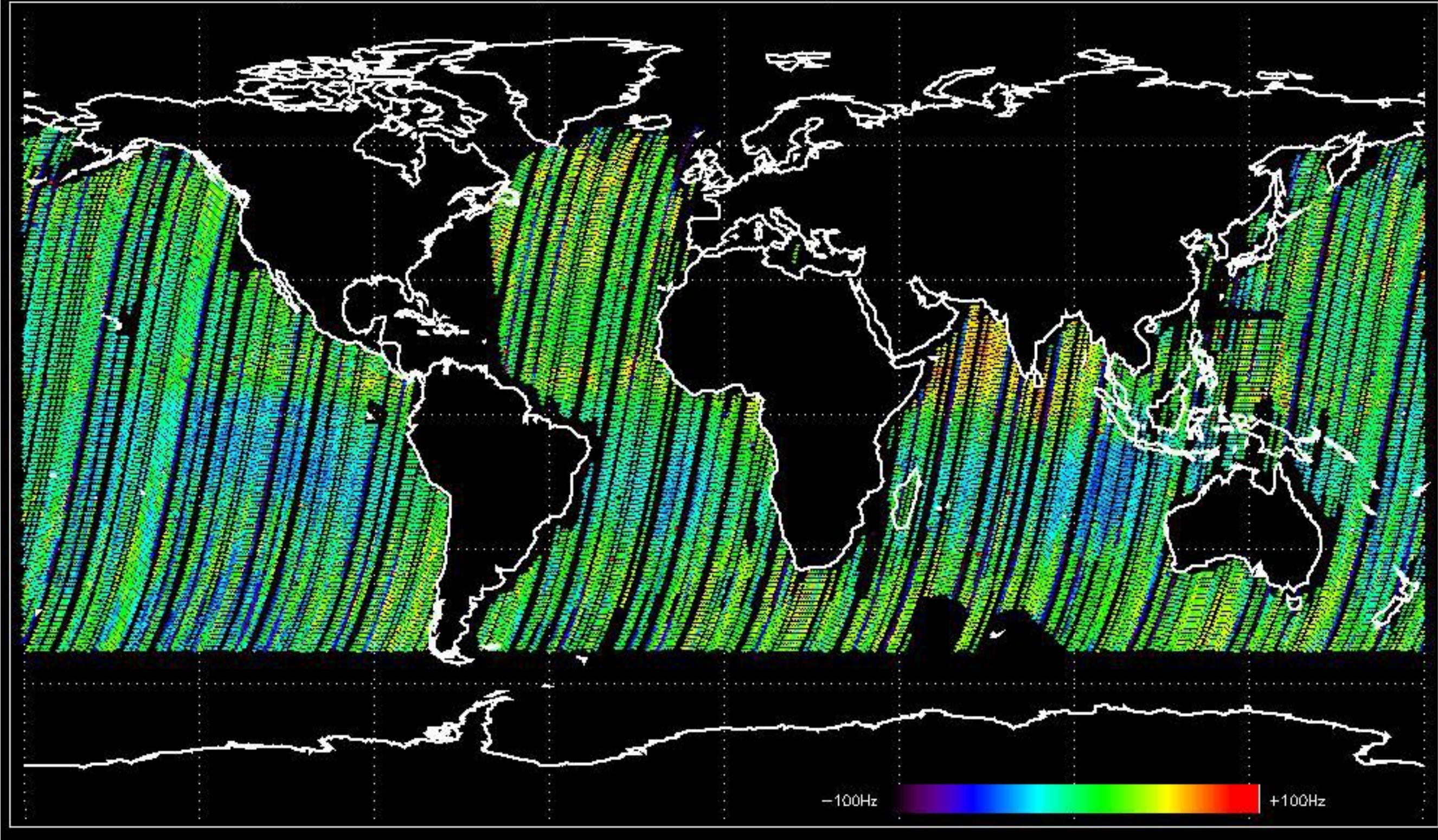
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -33.833951 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -41.808338 Hz

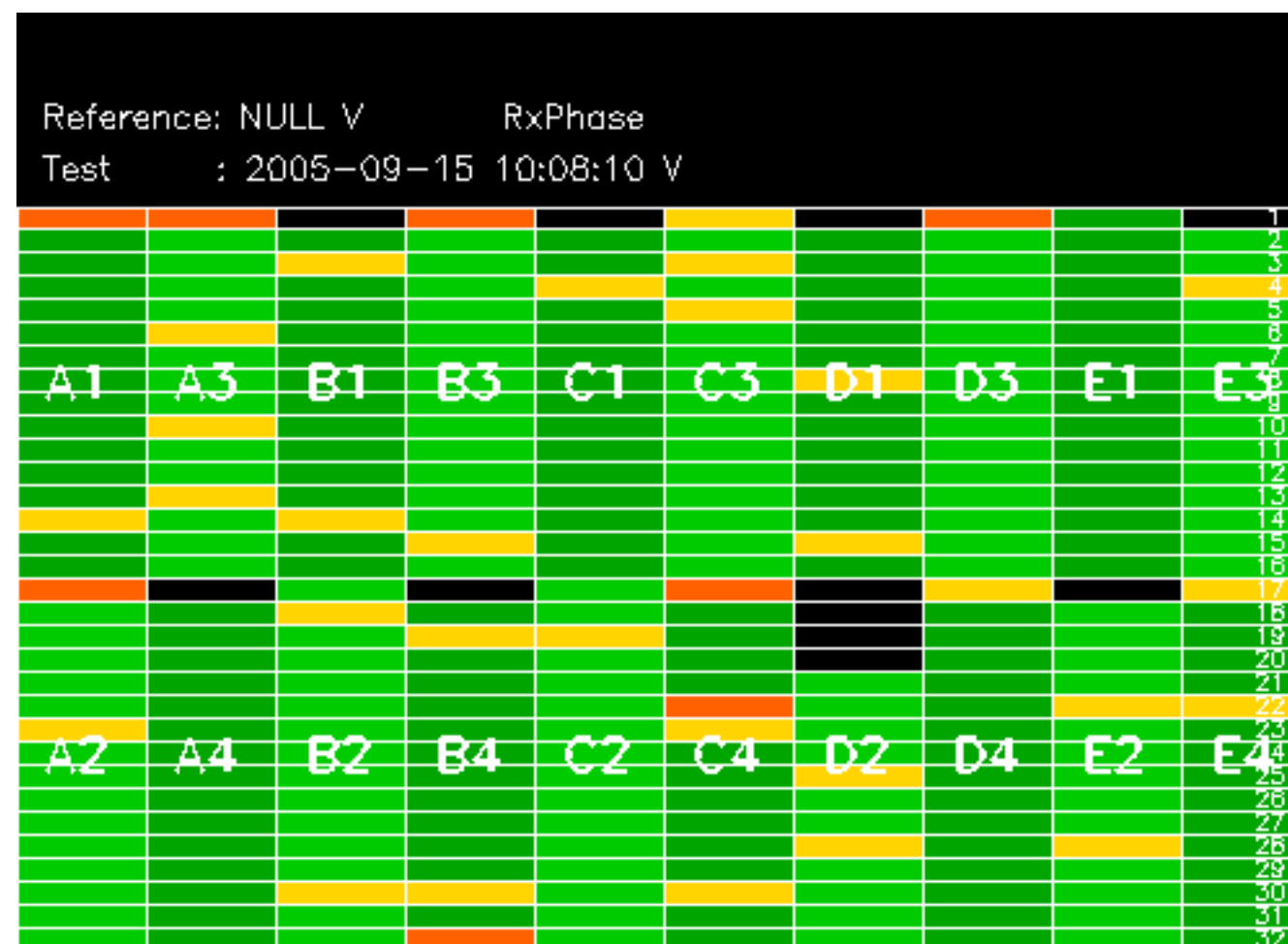


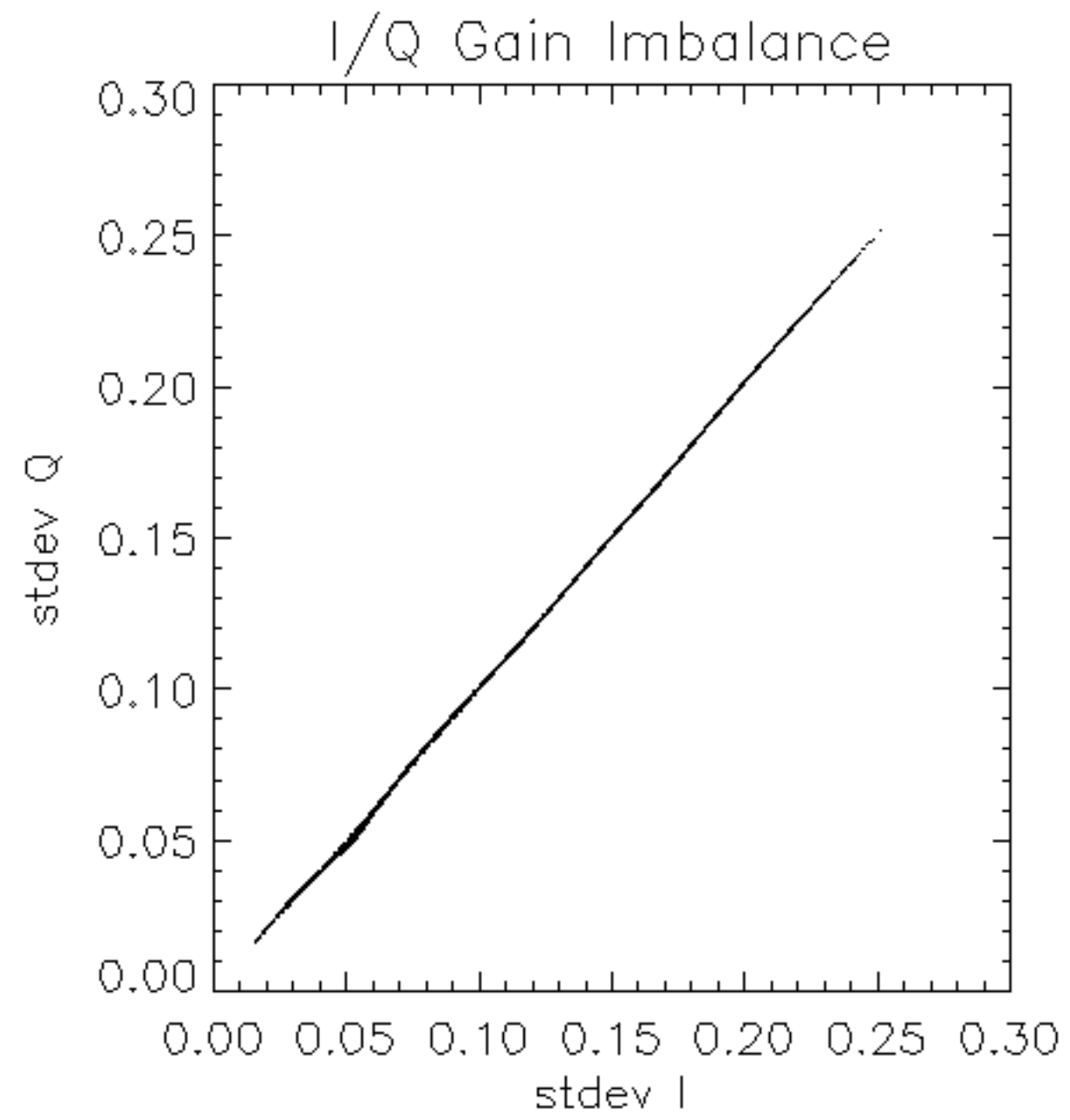
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -46.472177 Hz

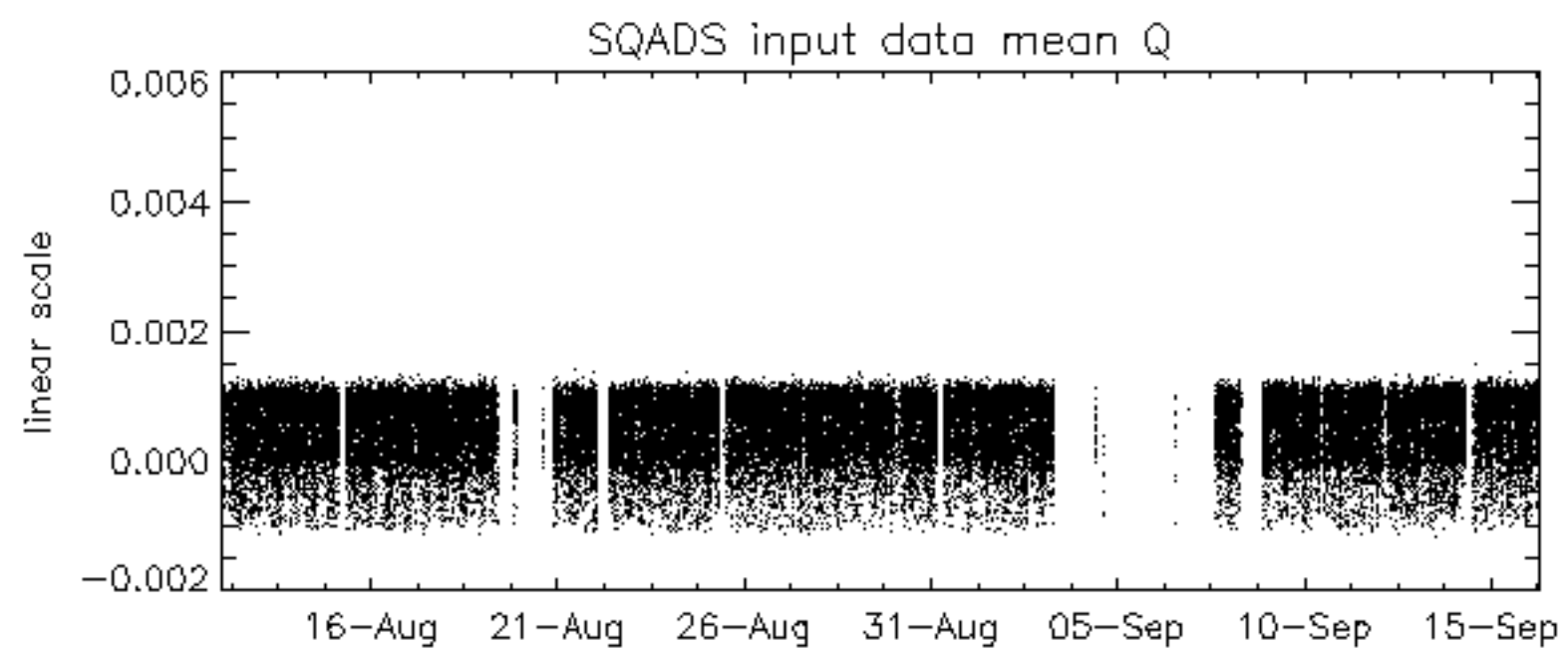
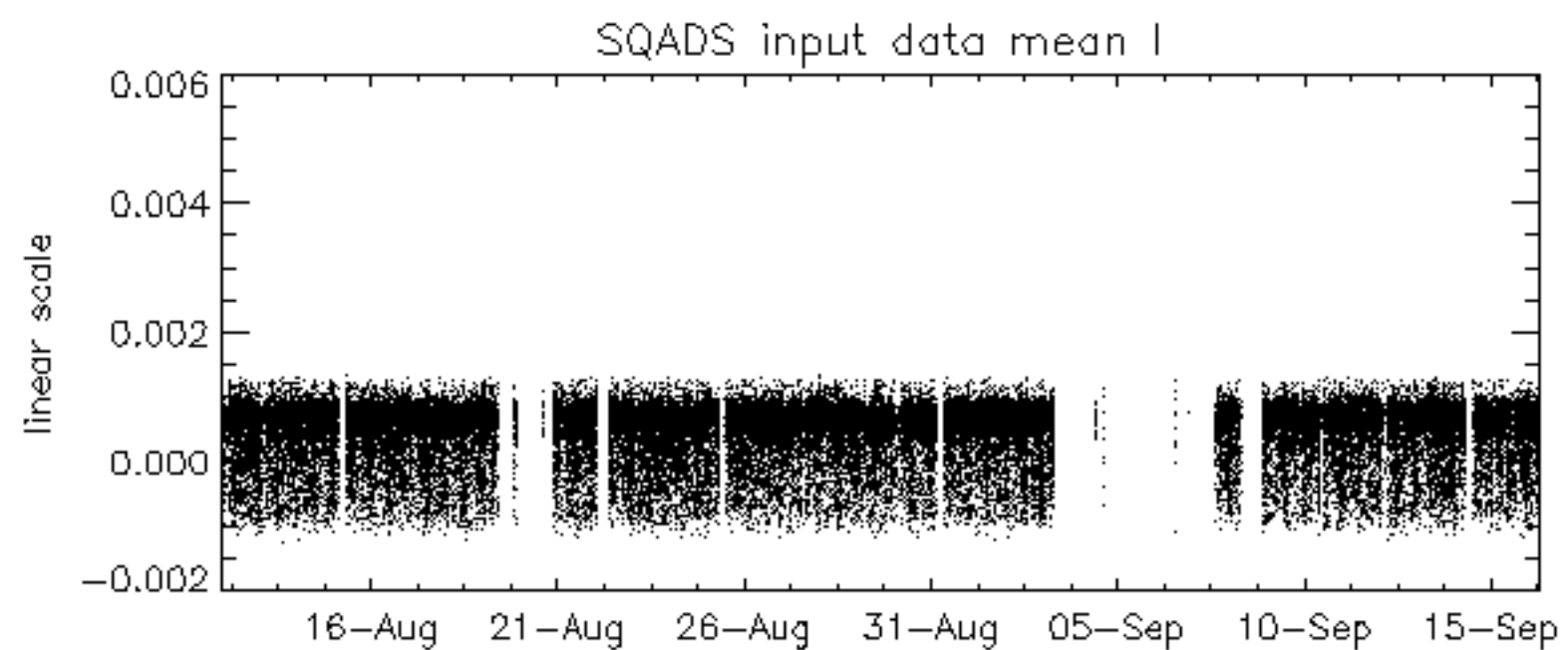
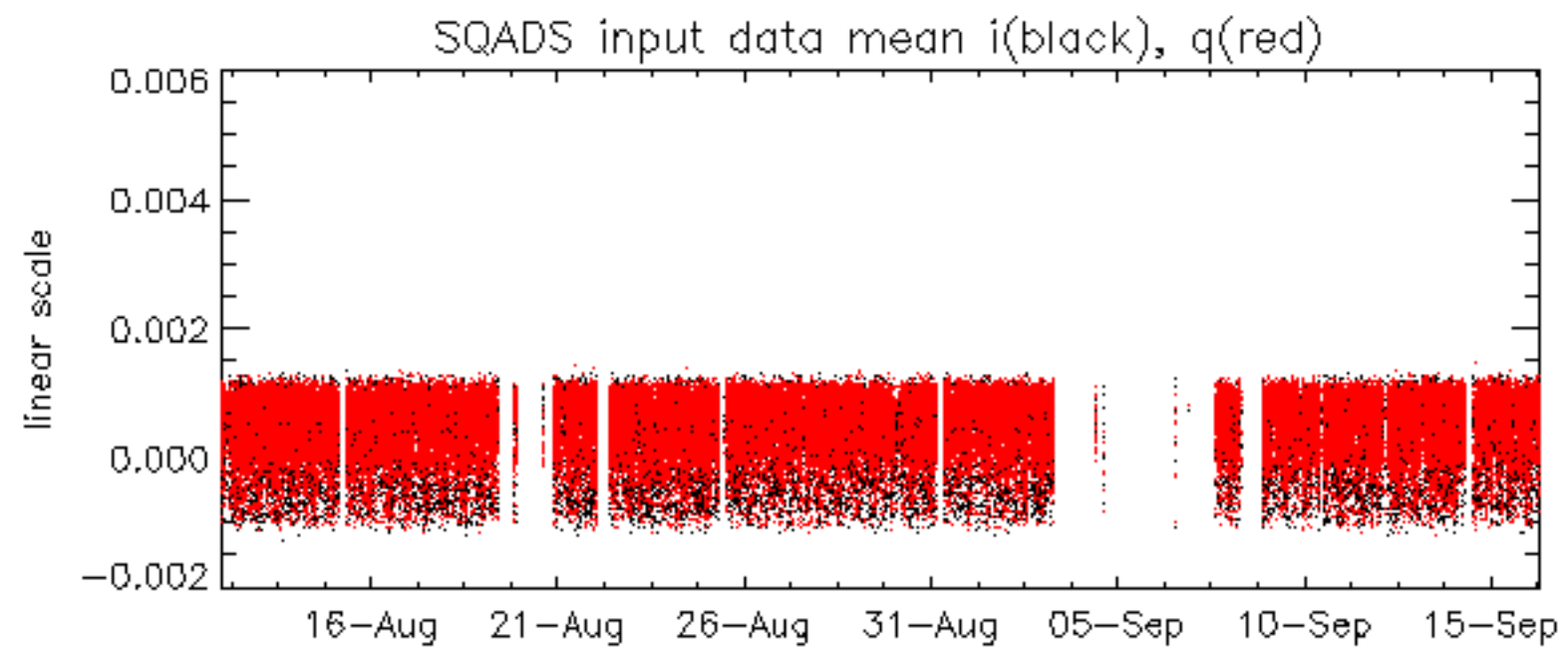


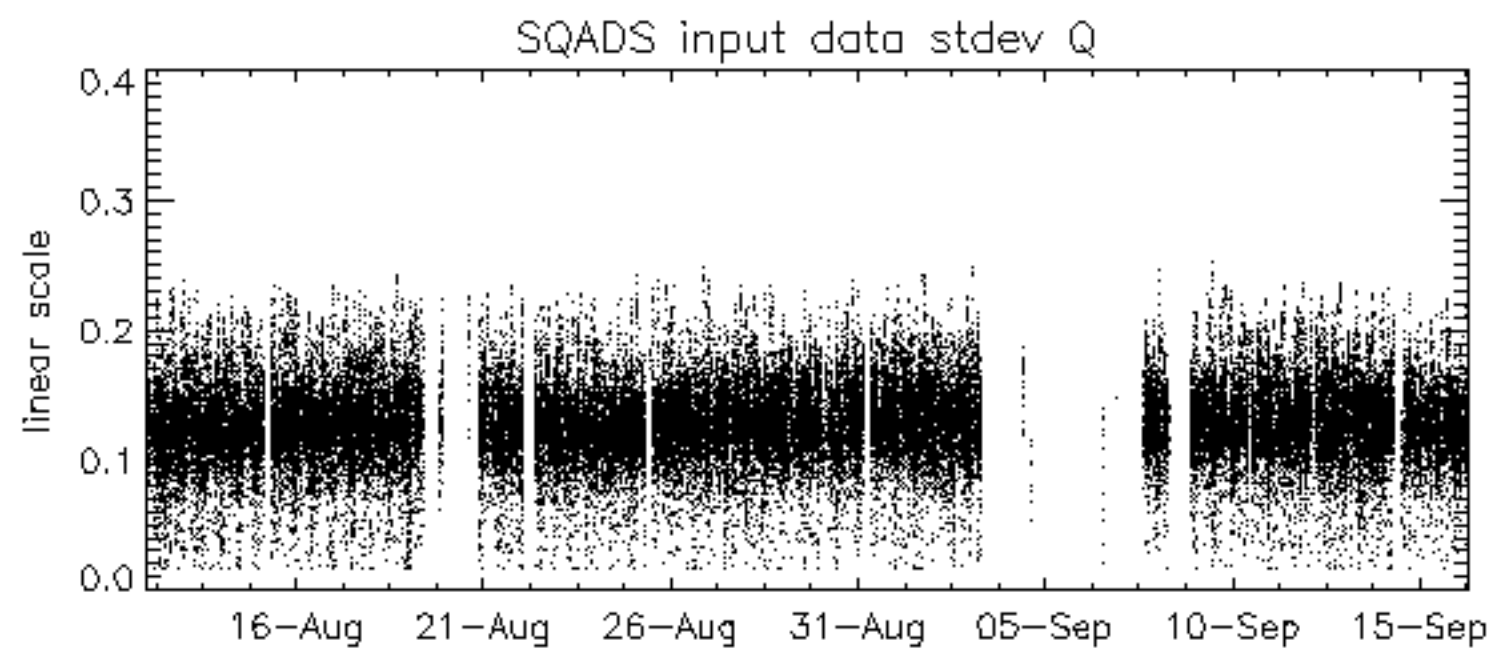
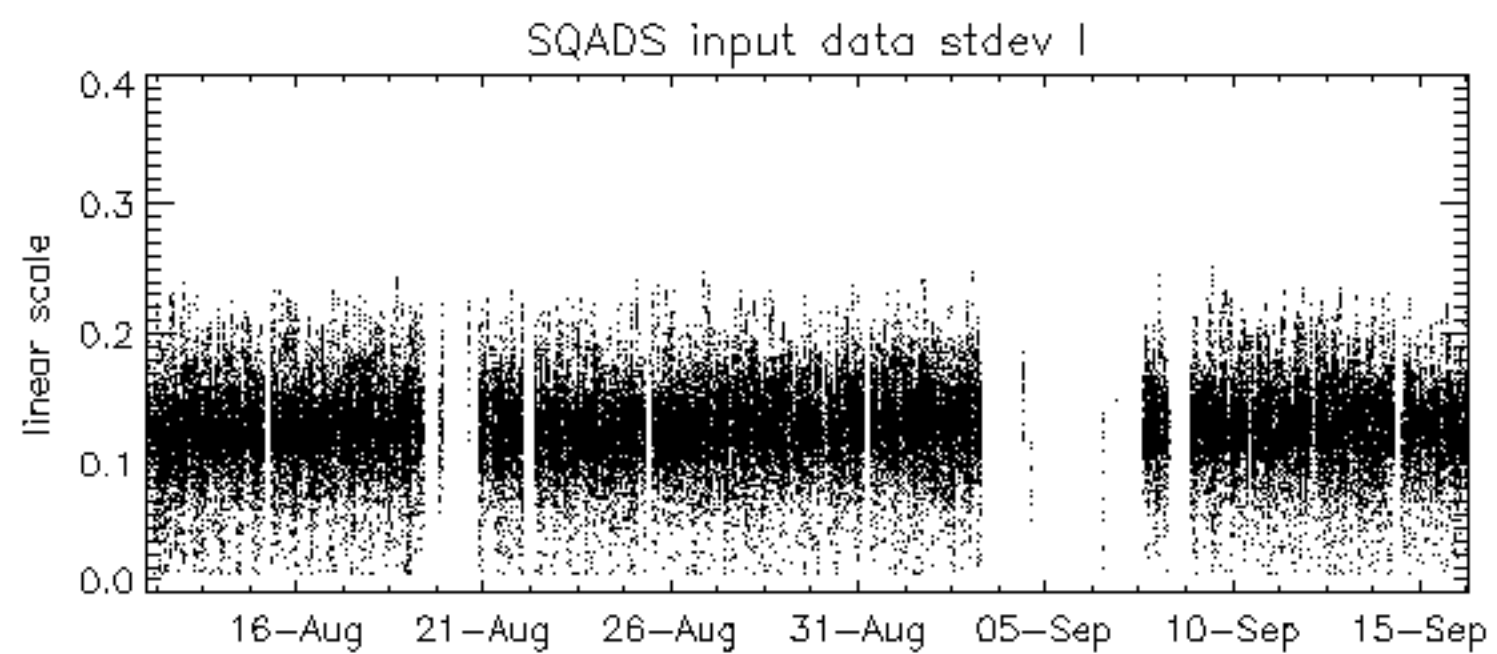
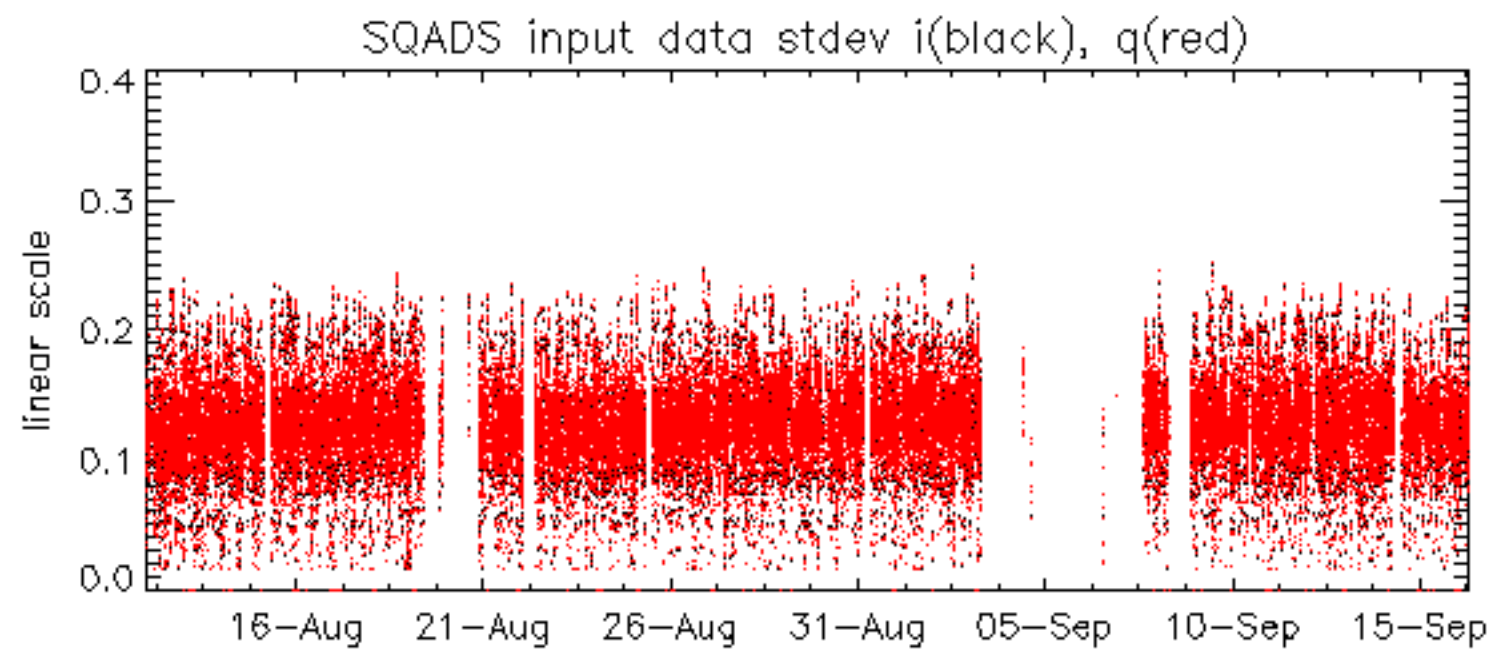
No anomalies observed on available MS products:

No anomalies observed.







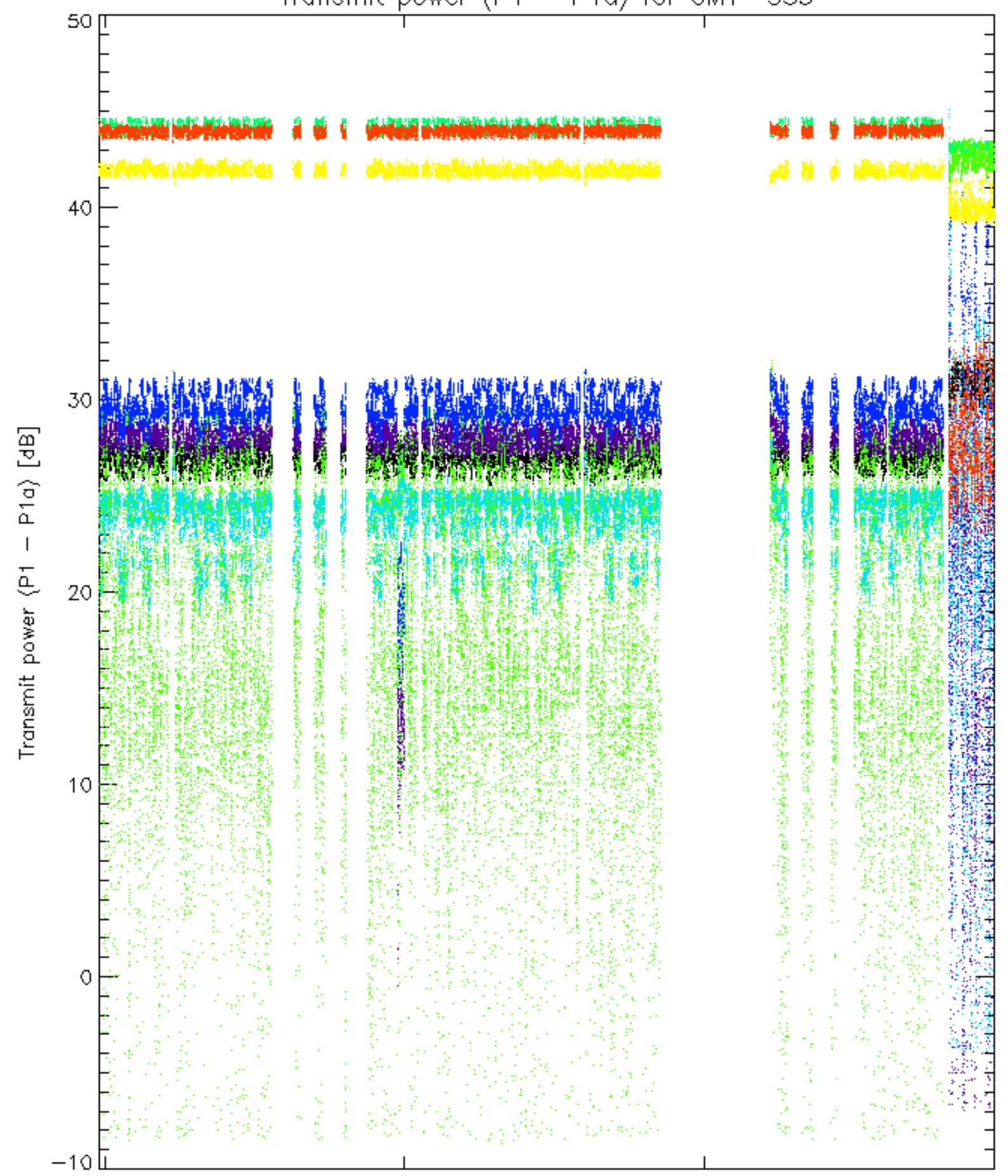


Summary of analysis for the last 3 days 2005091[456]

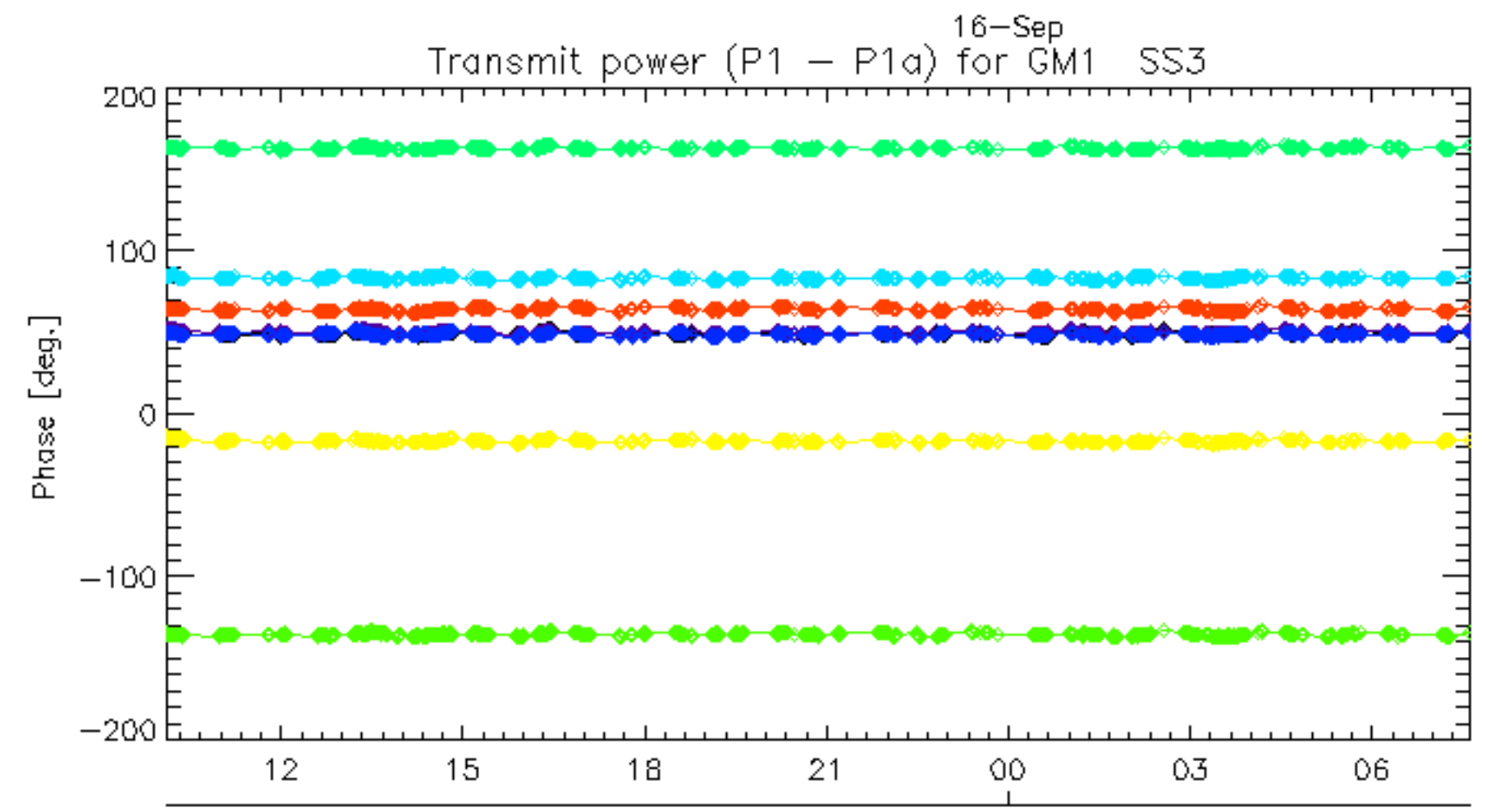
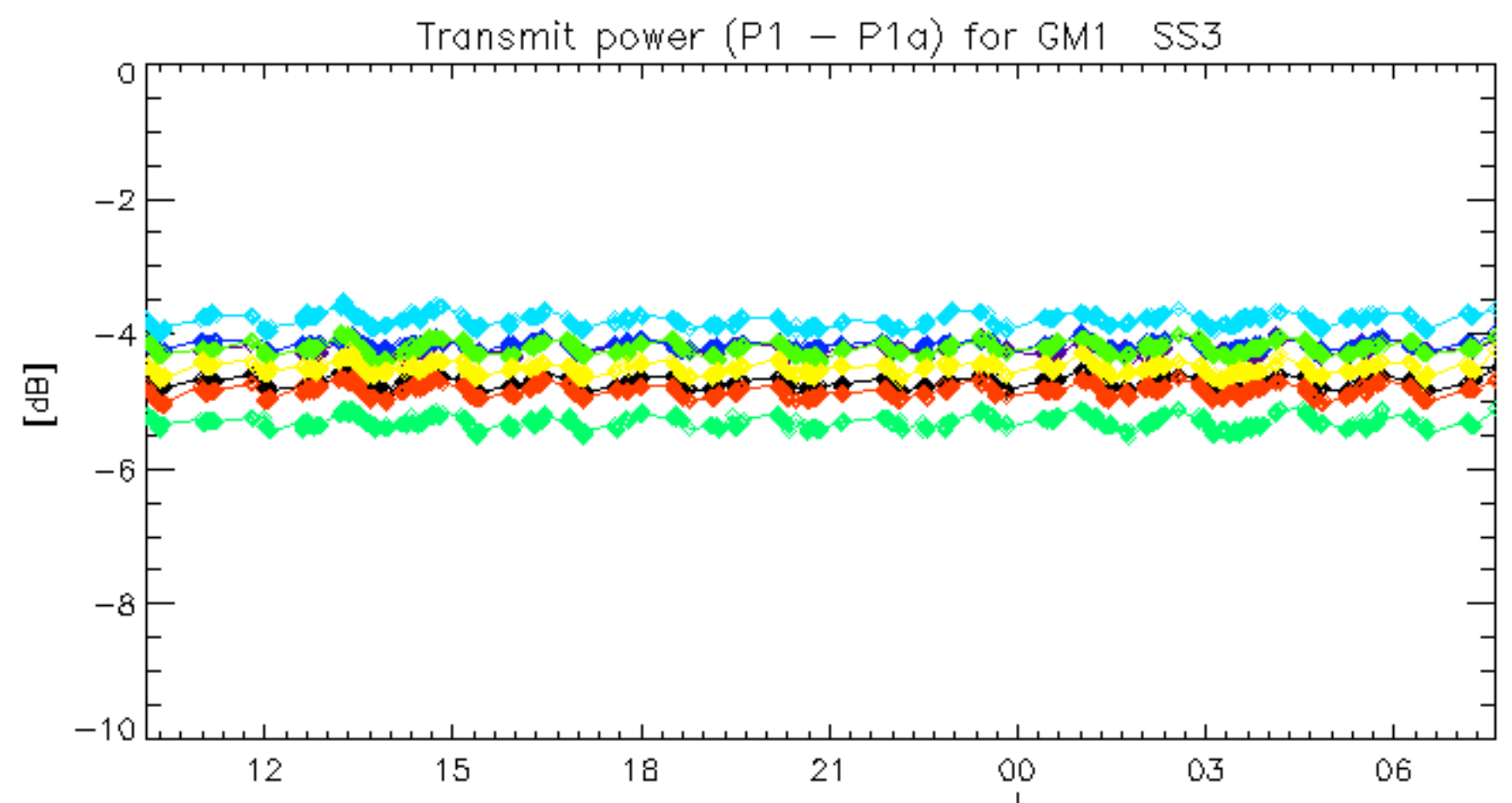
The assumption is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20050916_004346_000001222040_00446_18536_5720.N1	1	0
ASA_IMM_1PNPDK20050915_092744_000000132040_00437_18527_4038.N1	0	96
ASA_IMM_1PNPDK20050915_092757_000000222040_00437_18527_4093.N1	0	162
ASA_IMM_1PNPDK20050915_092929_000000192040_00437_18527_4037.N1	0	112
ASA_IMM_1PNPDK20050915_093616_000000622040_00437_18527_4035.N1	0	17
ASA_GM1_1PNPDK20050915_074128_000005072040_00436_18526_5453.N1	0	14
ASA_GM1_1PNPDK20050915_080751_000005732040_00436_18526_5450.N1	0	197
ASA_GM1_1PNPDK20050915_081727_000001142040_00436_18526_5525.N1	0	41
ASA_GM1_1PNPDK20050915_082612_000011352040_00436_18526_5449.N1	0	286
ASA_GM1_1PNPDK20050915_091833_000005192040_00437_18527_5451.N1	0	120
ASA_GM1_1PNPDK20050915_150835_000011362040_00440_18530_5490.N1	0	7
ASA_WSM_1PNPDE20050914_225857_000003002040_00431_18521_8744.N1	0	65
ASA_WSM_1PNPDE20050915_012427_000004282040_00432_18522_8770.N1	0	16
ASA_WSM_1PNPDE20050916_005515_000002792040_00446_18536_8936.N1	0	46
ASA_WSM_1PNPDK20050915_122838_000003972040_00439_18529_4159.N1	0	21

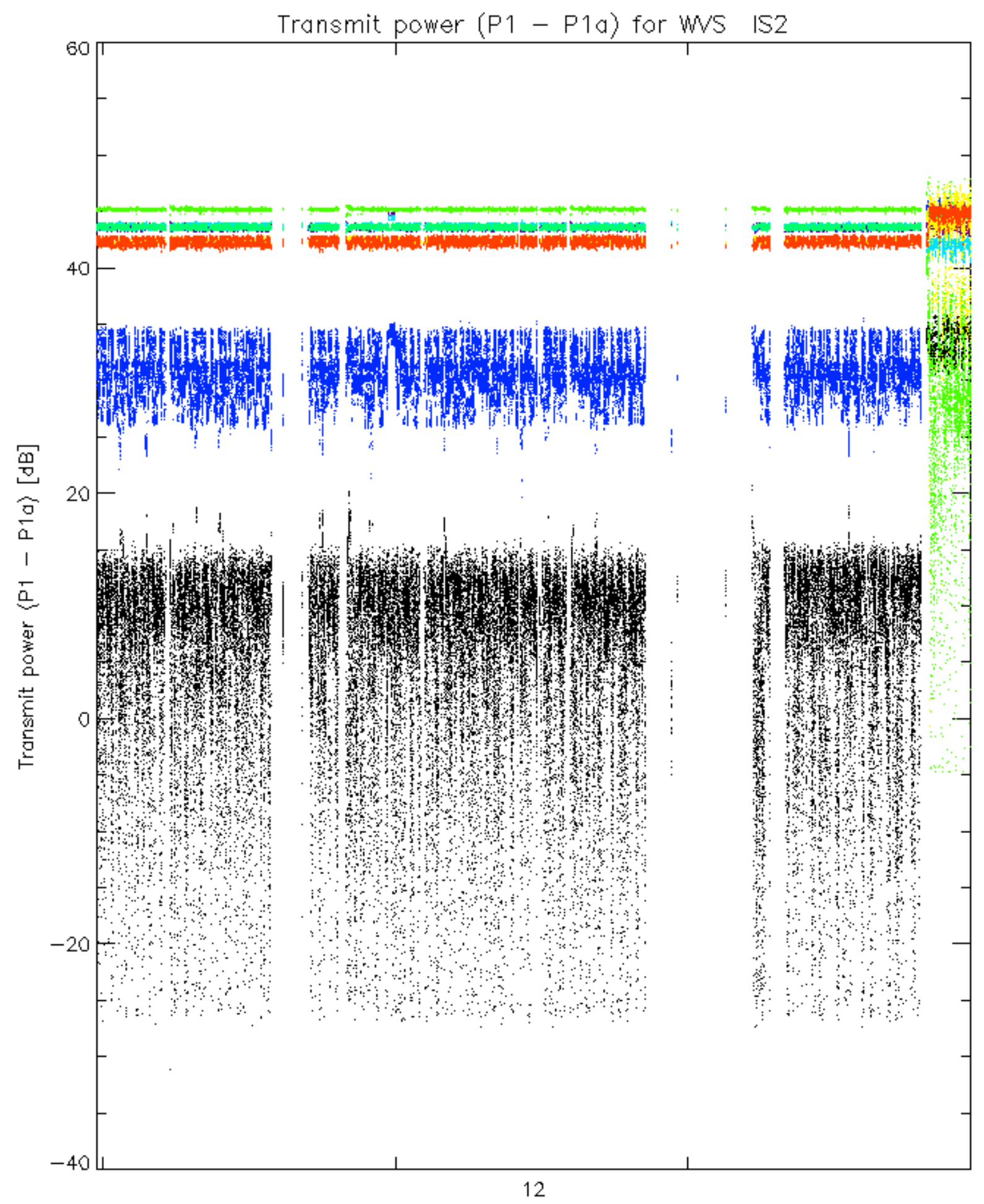
Transmit power (P1 - P1a) for GM1 SS3



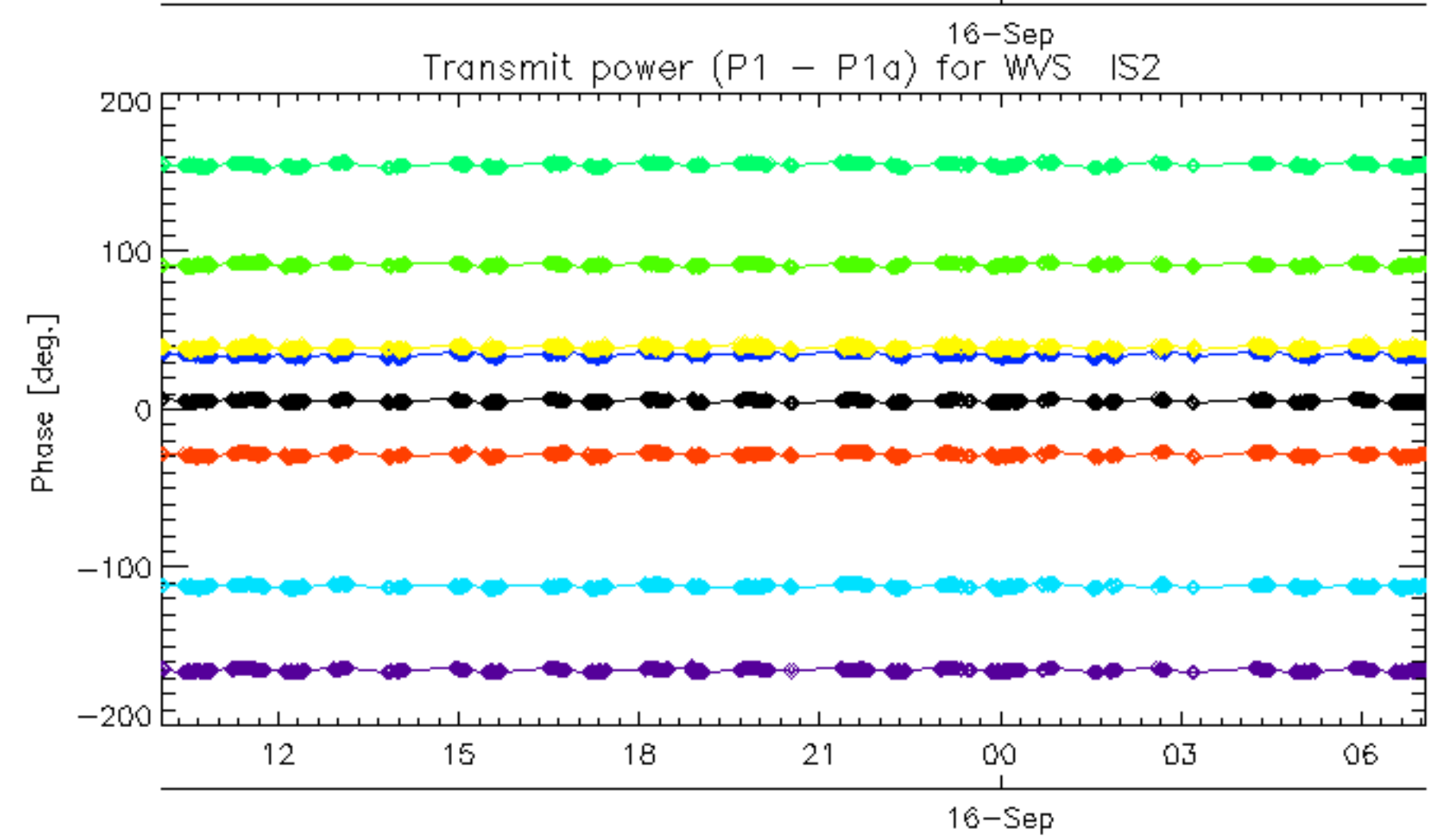
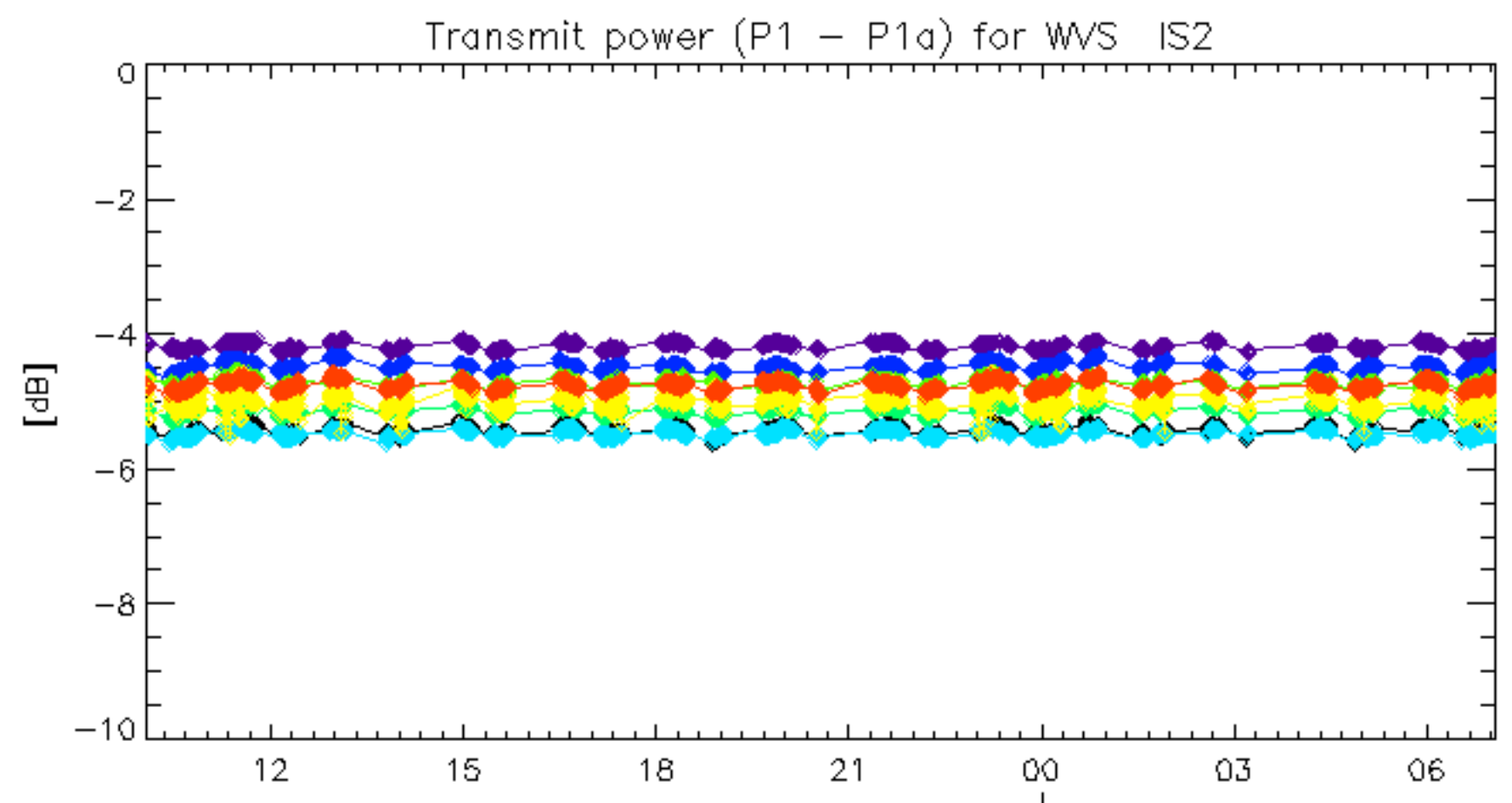
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



16-Sep
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.