

PRELIMINARY REPORT OF 060818

last update on Fri Aug 18 16:33:47 GMT 2006

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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 2006-08-17 00:00:00 to 2006-08-18 16:33:47

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	37	66	7	9	0
ASA_XCA_AXVIEC20060717_154125_20050916_195733_20061231_000000	37	66	7	9	0
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	37	66	7	9	0
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	37	66	7	9	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	27	50	26	27	67
ASA_XCA_AXVIEC20060717_154125_20050916_195733_20061231_000000	27	50	26	27	67
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	27	50	26	27	67
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	27	50	26	27	67

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**

MSM in V/V polarisation

MSM in H/H polarisation

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	-3.942439	0.010023	-0.004106

7	P1	-3.101096	0.049630	0.019333
11	P1	-4.096573	0.062209	-0.025229
15	P1	-6.197620	0.092905	-0.070498
19	P1	-3.437413	0.009986	-0.070690
22	P1	-4.565563	0.010024	-0.024077
26	P1	-3.920208	0.020207	0.002335
30	P1	-5.763525	0.009903	-0.007018
3	P1	-16.530268	0.253407	0.000527
7	P1	-17.105415	0.260848	0.453558
11	P1	-16.913296	0.281839	0.179361
15	P1	-13.026518	0.166268	0.174652
19	P1	-14.500366	0.053939	-0.059905
22	P1	-15.961921	0.455739	0.174823
26	P1	-15.123296	0.224940	-0.059139
30	P1	-17.072592	0.329363	0.111815

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-20.906490	0.084921	0.101008
7	P2	-21.871162	0.102137	0.064652
11	P2	-15.763912	0.118263	0.046340
15	P2	-7.113432	0.097792	0.027980
19	P2	-9.120661	0.091335	0.024589
22	P2	-18.143789	0.086048	0.015056
26	P2	-16.399466	0.091920	0.006215
30	P2	-19.494730	0.091817	0.052284

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.172493	0.003323	0.003040
7	P3	-8.172493	0.003323	0.003040
11	P3	-8.172493	0.003323	0.003040
15	P3	-8.172493	0.003323	0.003040
19	P3	-8.172493	0.003323	0.003040
22	P3	-8.172493	0.003323	0.003040
26	P3	-8.172550	0.003321	0.002819
30	P3	-8.172550	0.003321	0.002819

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	-3.829685	0.021780	-0.014889
7	P1	-2.572587	0.234771	0.022811
11	P1	-2.893382	0.137431	-0.126804
15	P1	-3.629793	0.149798	-0.158224
19	P1	-3.427586	0.025778	-0.002326
22	P1	-5.084841	0.020523	-0.010065
26	P1	-5.866597	0.023072	-0.013938
30	P1	-5.194546	0.040265	0.007413
3	P1	-11.623590	0.066950	-0.014965
7	P1	-9.964714	0.159978	0.012648
11	P1	-10.275564	0.081554	-0.100743
15	P1	-10.781482	0.173874	-0.132063
19	P1	-15.553380	0.527806	0.071247
22	P1	-20.929718	1.332433	-0.171678
26	P1	-16.181005	0.400702	0.175004
30	P1	-17.984495	0.430039	-0.070825

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.514065	0.086191	0.155659
7	P2	-22.307743	0.210836	0.166326
11	P2	-10.990542	0.055517	0.134866
15	P2	-4.891807	0.044115	0.021453
19	P2	-6.861215	0.040729	0.006527
22	P2	-8.189774	0.062808	0.001548

26	P2	-24.168219	0.129776	0.021090
30	P2	-21.983253	0.079534	0.050147

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.011656	0.003715	-0.007192
7	P3	-8.011563	0.003713	-0.007034
11	P3	-8.011612	0.003718	-0.007000
15	P3	-8.011689	0.003718	-0.007009
19	P3	-8.011572	0.003727	-0.007191
22	P3	-8.011763	0.003704	-0.007123
26	P3	-8.011615	0.003704	-0.006397
30	P3	-8.011607	0.003712	-0.006550

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	0.000560913
	stdev	1.72023e-07
MEAN Q	mean	0.000535005
	stdev	2.13925e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.137378
	stdev	0.00107790
STDEV Q	mean	0.137733
	stdev	0.00109479



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006081[678]

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_1PNPDE20060818_004240_000001742050_00245_23345_3639.N1	1	0
ASA_IMM_1PNPDE20060818_005912_000000432050_00246_23346_3640.N1	1	0
ASA_GM1_1PNPDK20060817_181455_000003862050_00242_23342_3005.N1	0	9
ASA_GM1_1PNPDK20060817_195553_000003382050_00243_23343_3010.N1	0	9
ASA_WSM_1PNPDE20060816_005609_000000852050_00217_23317_8045.N1	0	36
ASA_WSM_1PNPDE20060817_020406_000002322050_00232_23332_8255.N1	0	40
ASA_WSM_1PNPDE20060817_235454_000003302050_00245_23345_8396.N1	0	35



7 - Doppler Analysis

Preliminary report.The data is not yet controled

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	
<input type="checkbox"/>	

7.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)	
<input type="checkbox"/>	
	Ascending
<input type="checkbox"/>	
	Descending

7.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler

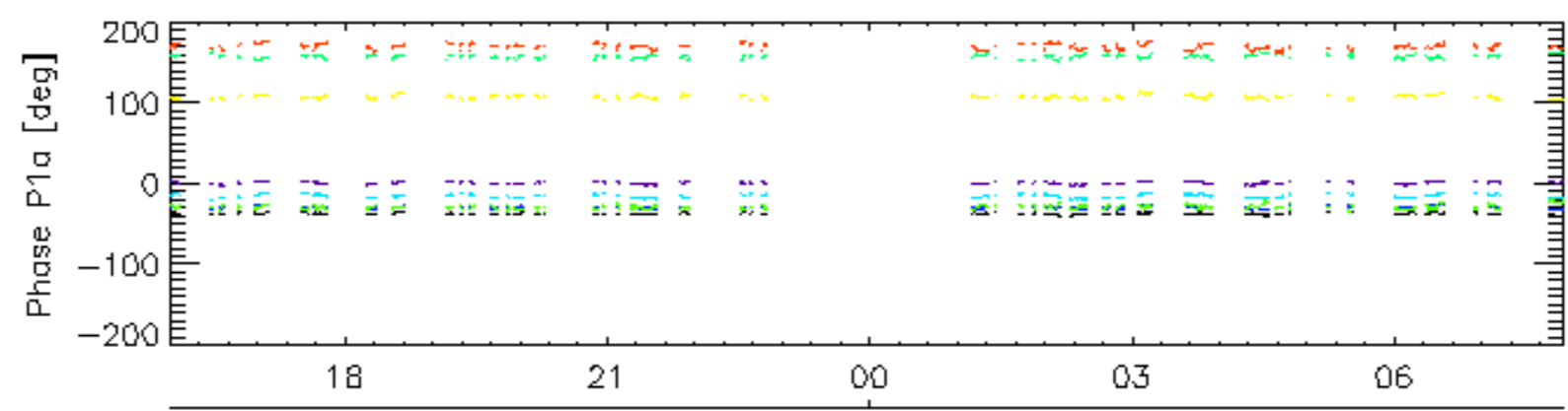
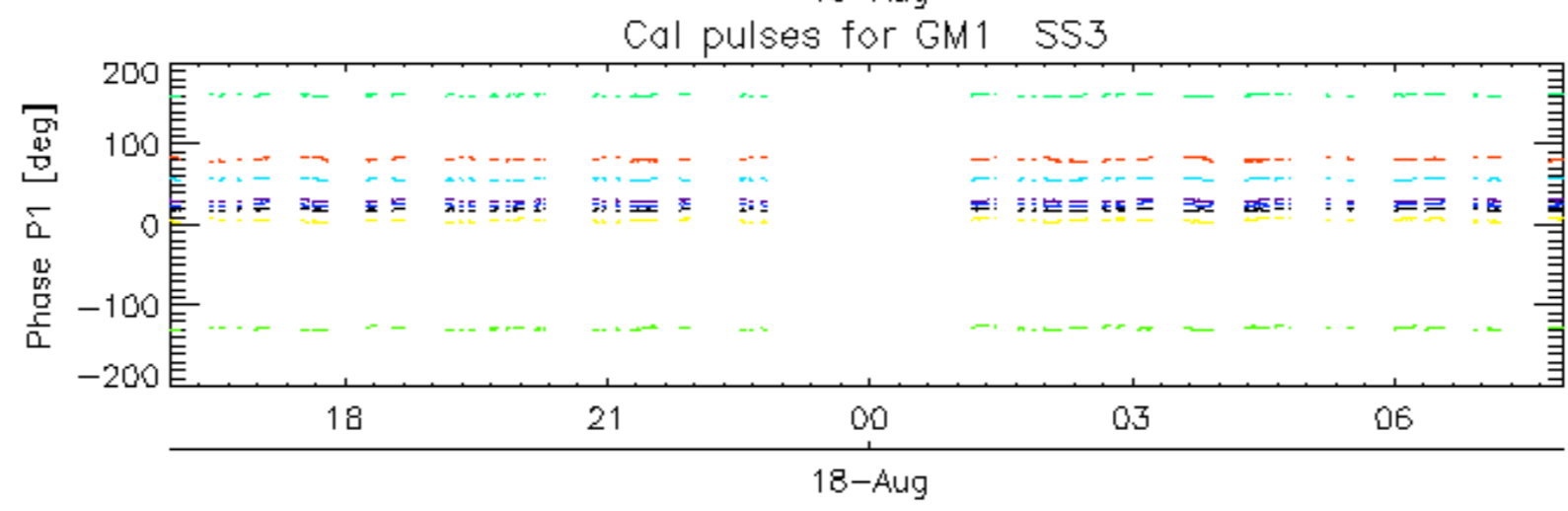
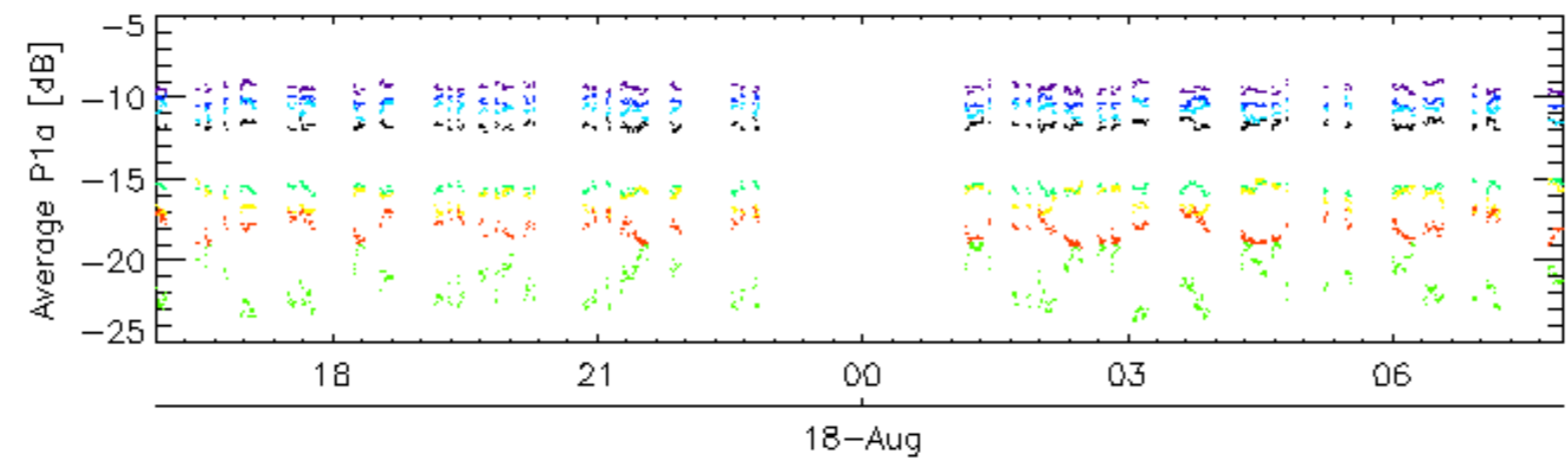
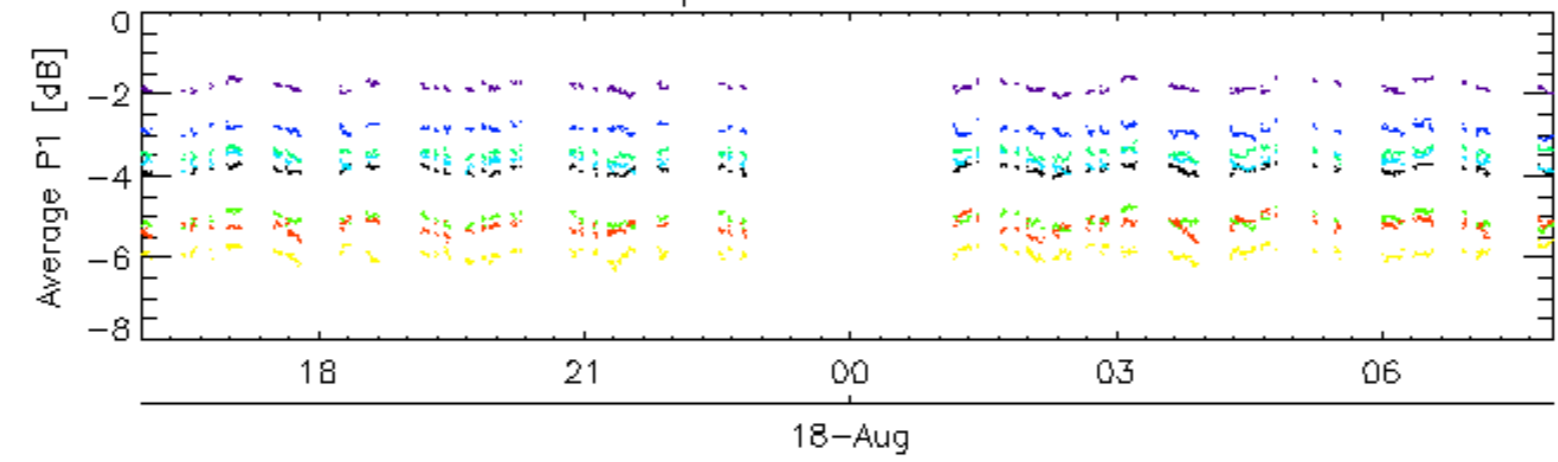
Ascending

Descending

7.6 - Doppler evolution versus ANX for GM1

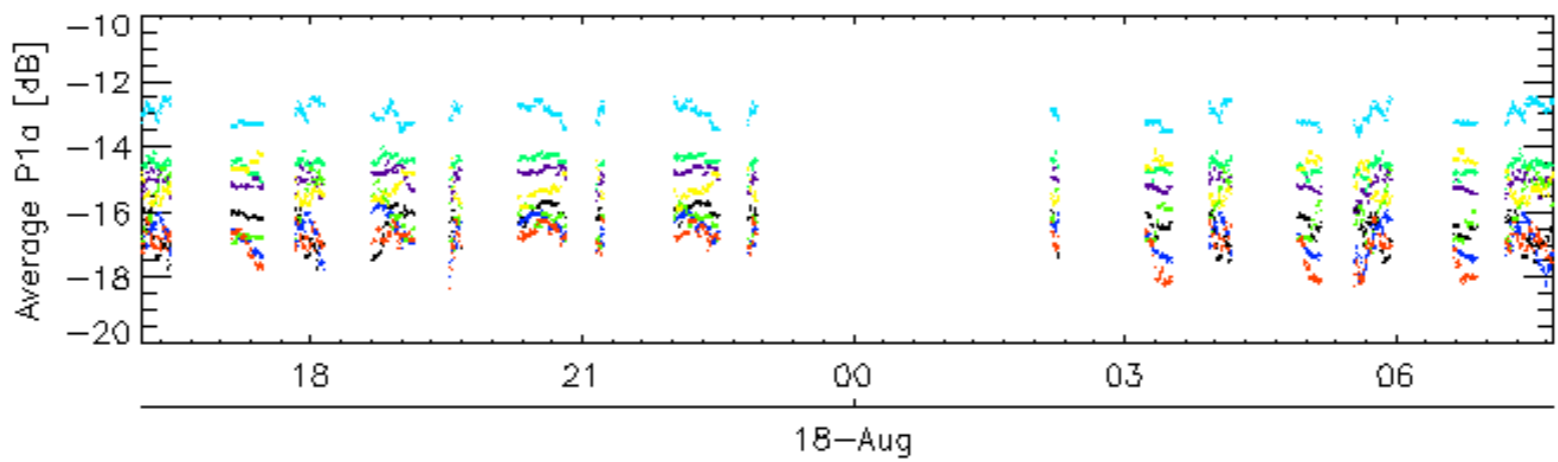
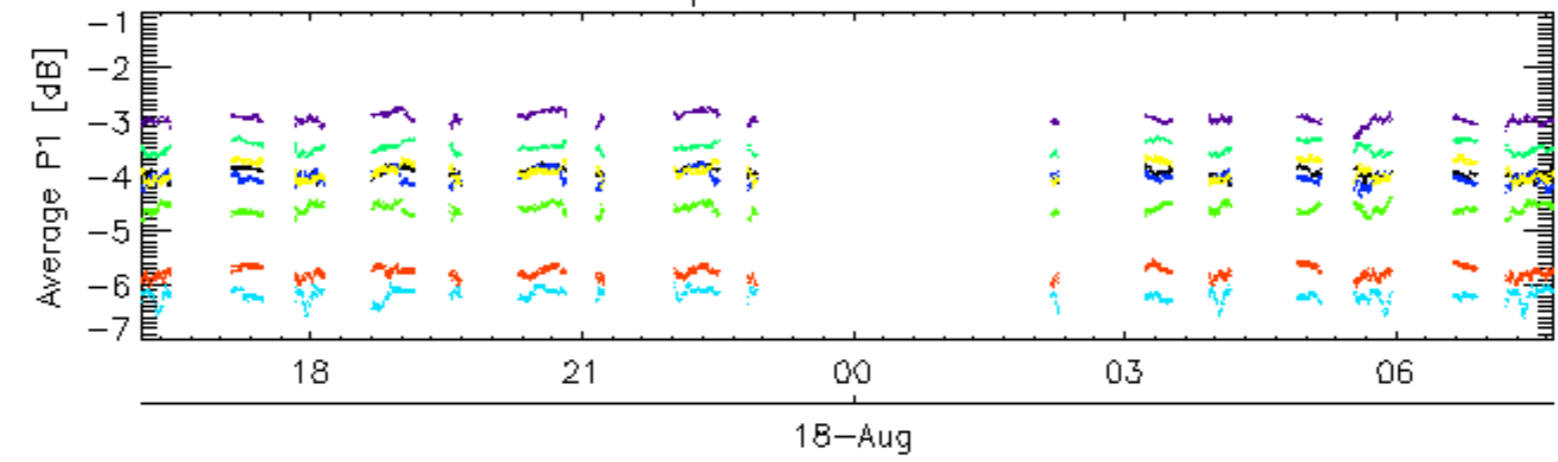
Evolution Doppler error versus ANX

Cal pulses for GM1 SS3

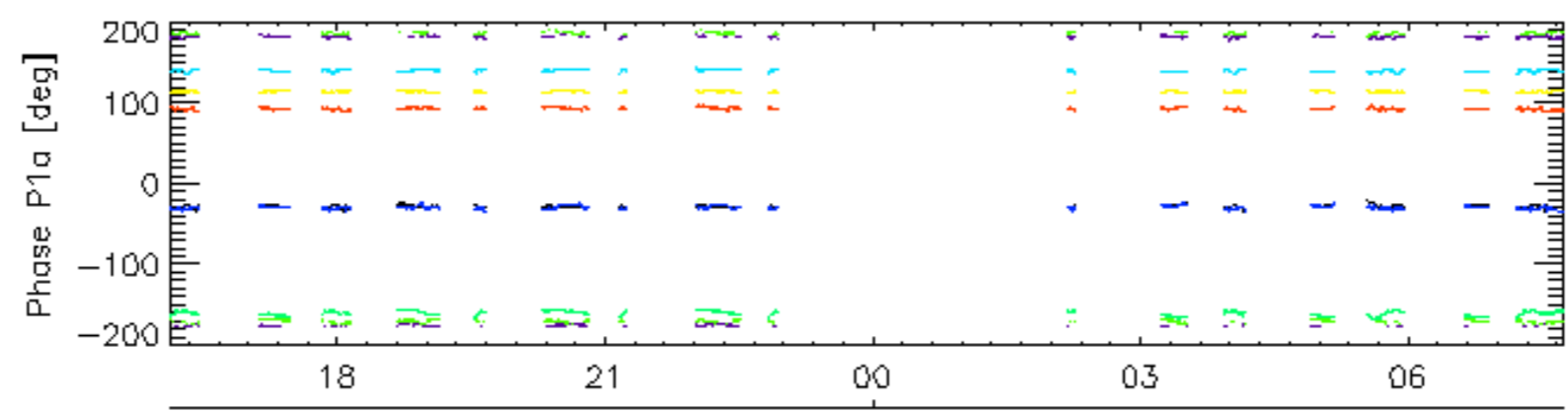
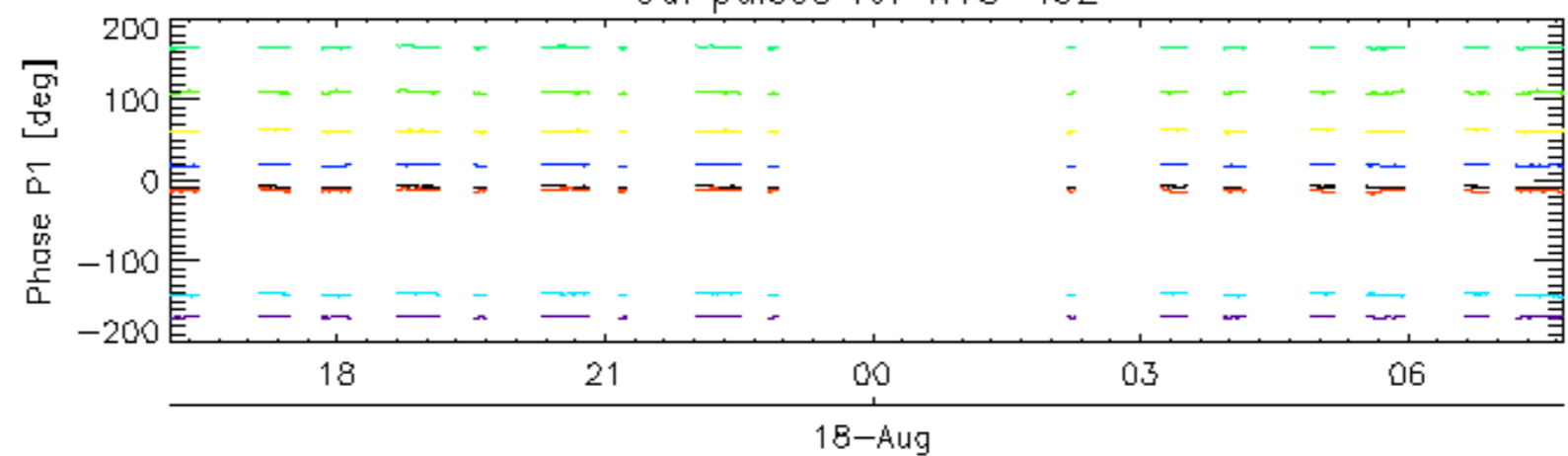


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 ^{18-Aug} _ 26 _ 30

Cal pulses for WVS IS2

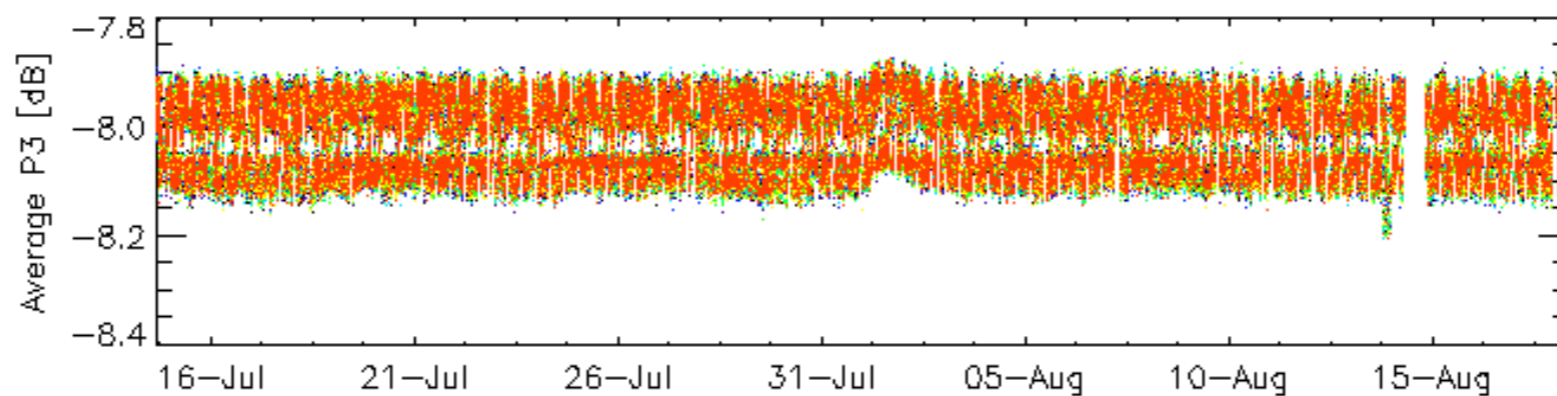
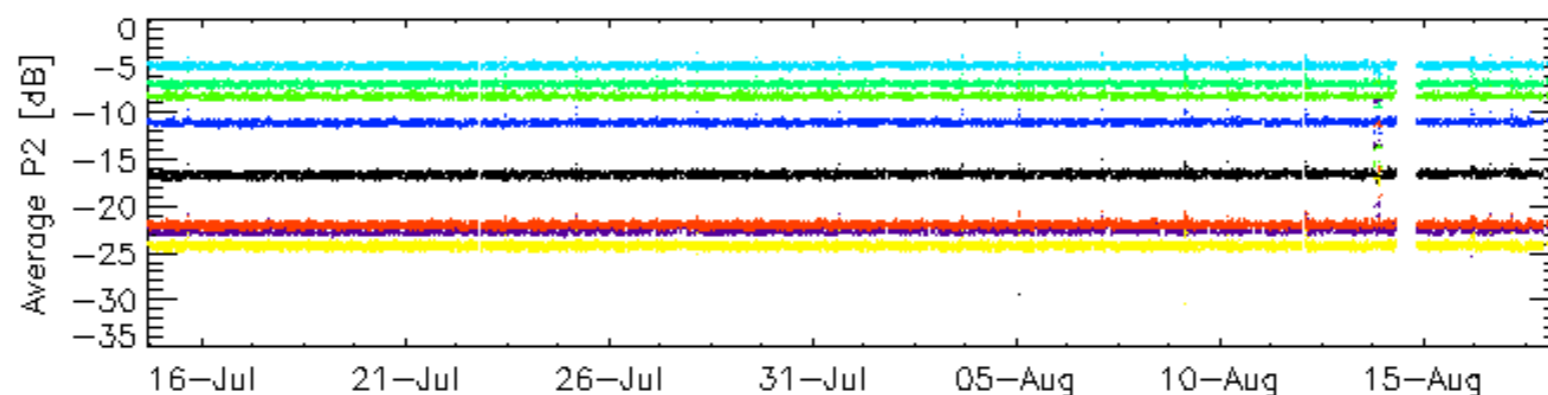
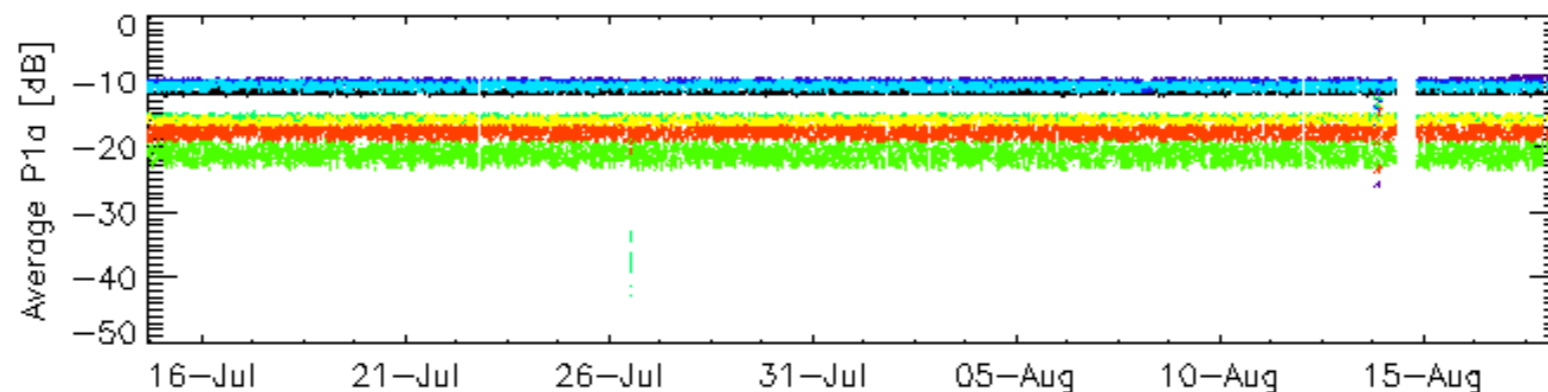
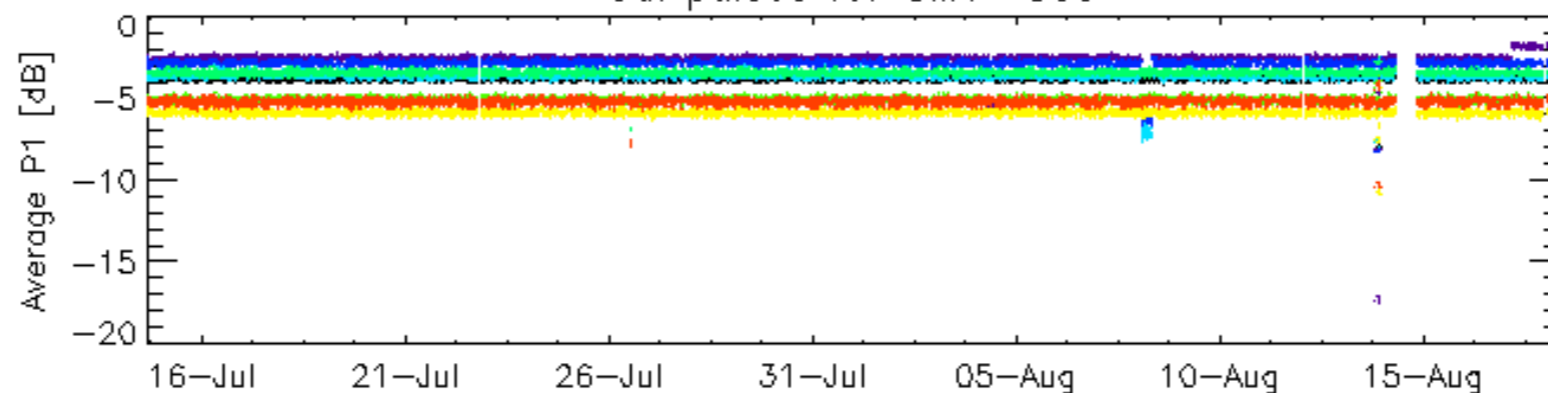


Cal pulses for WVS IS2



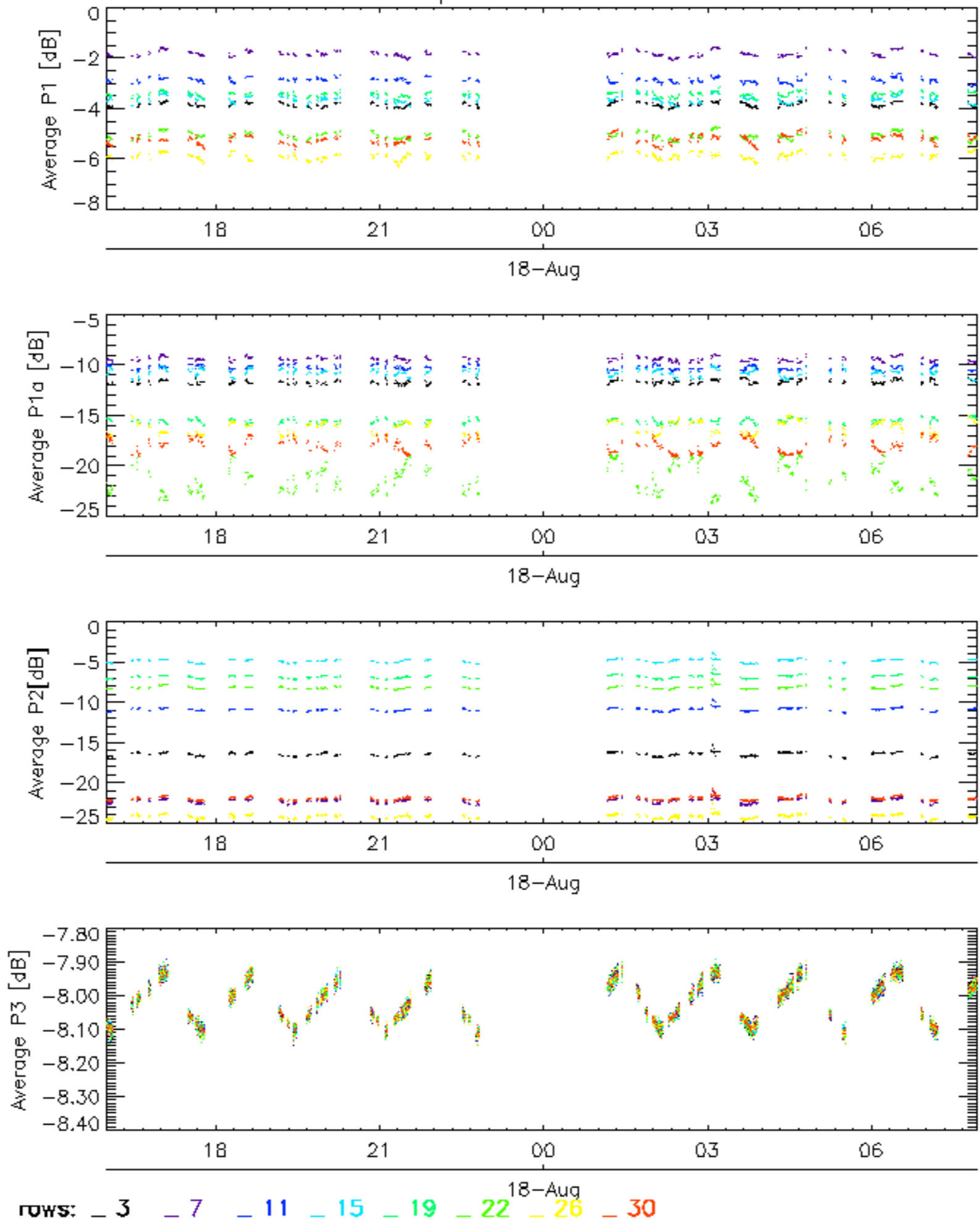
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

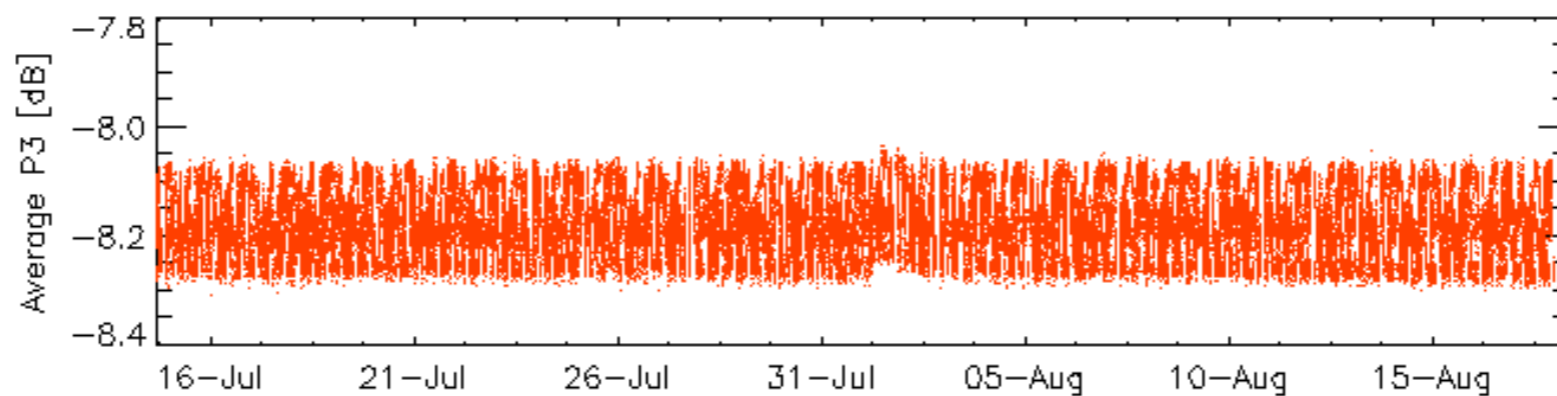
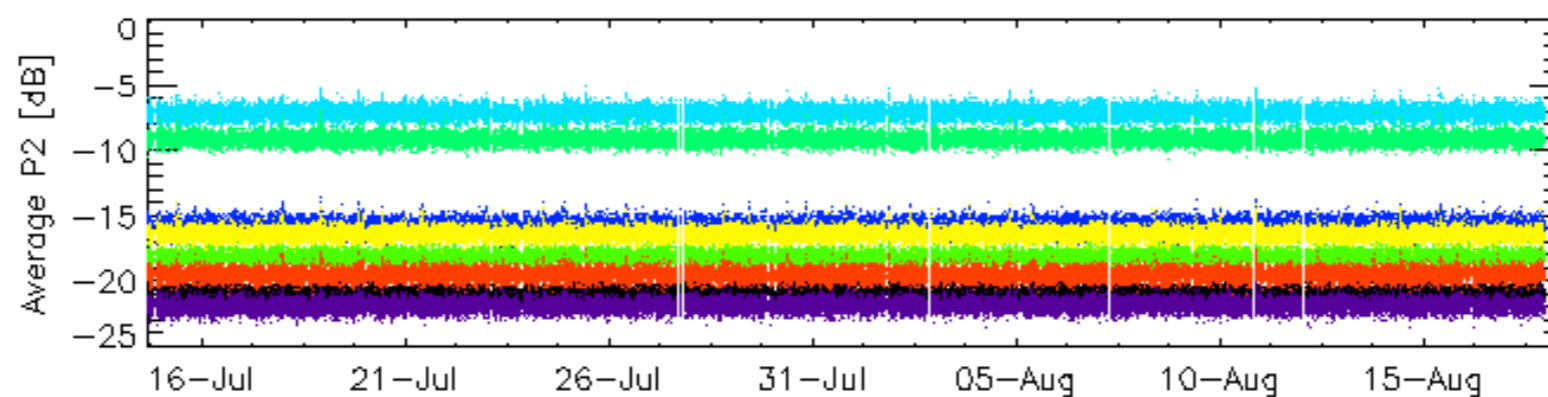
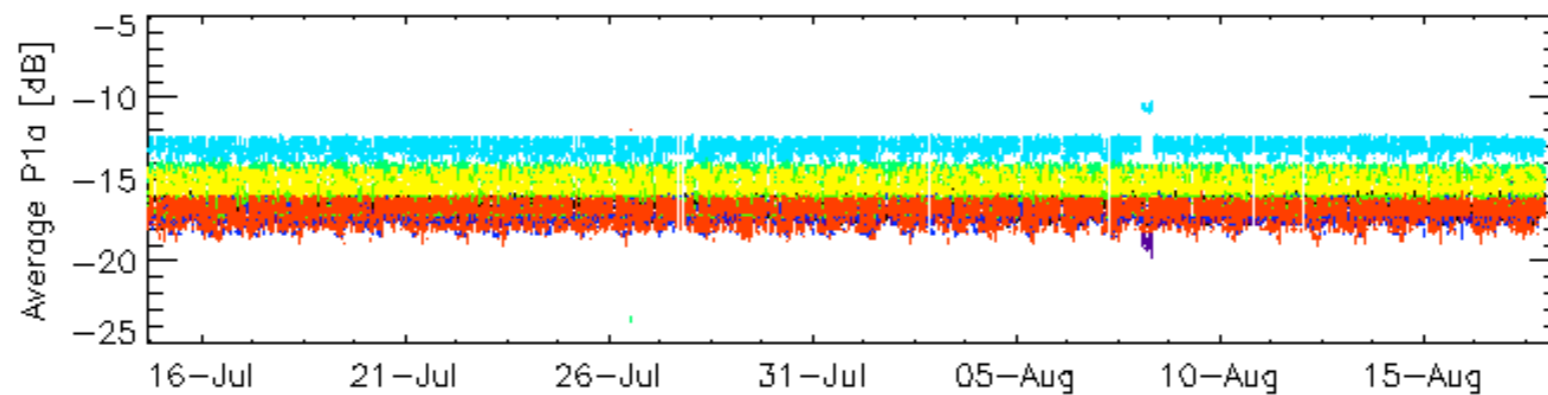
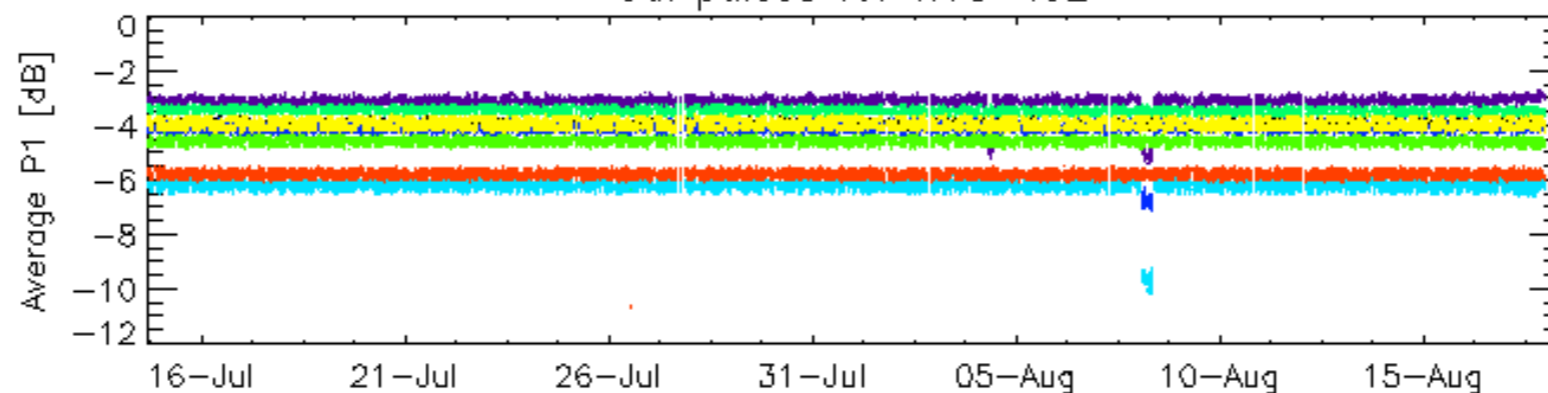


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

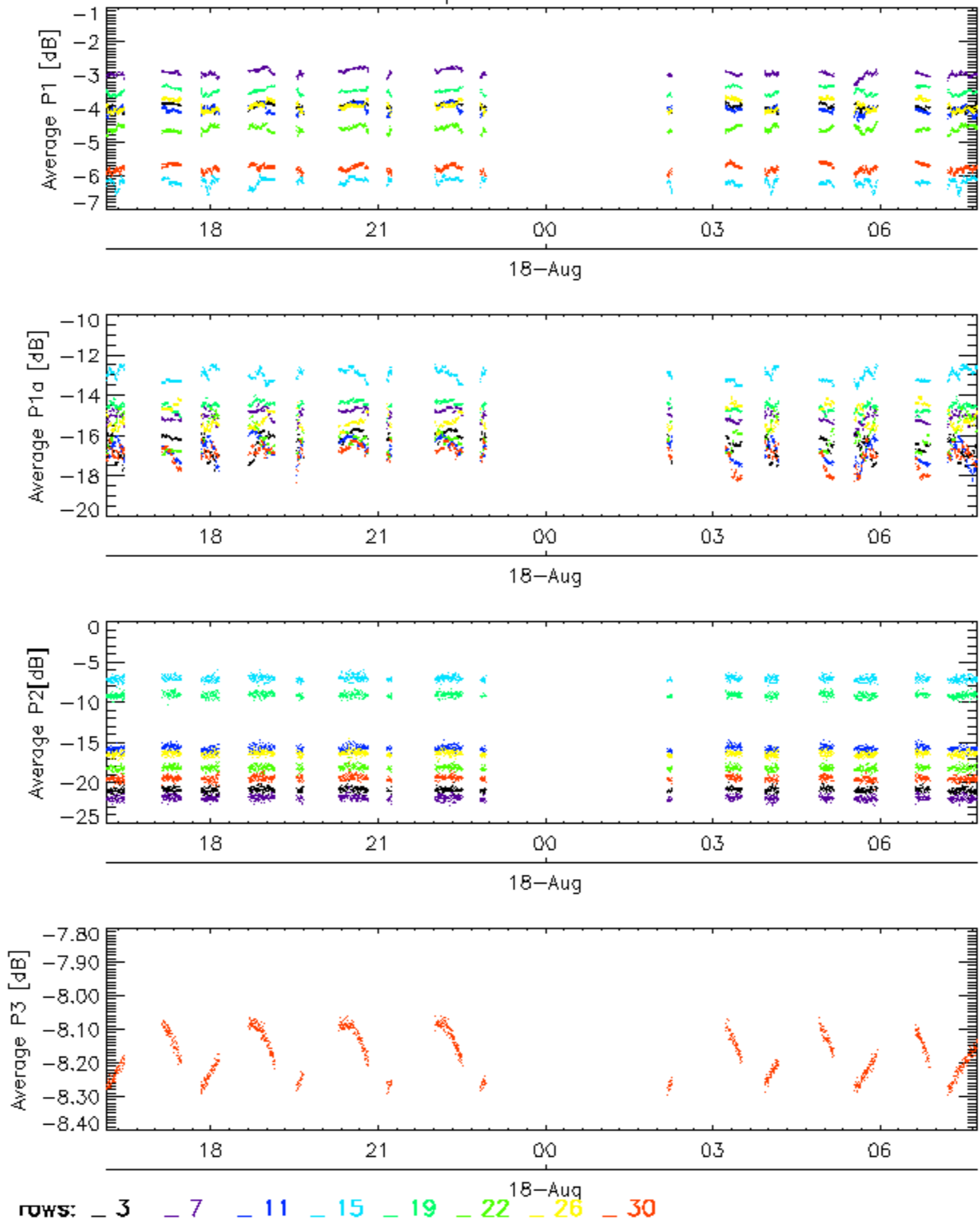


Cal pulses for WVS IS2

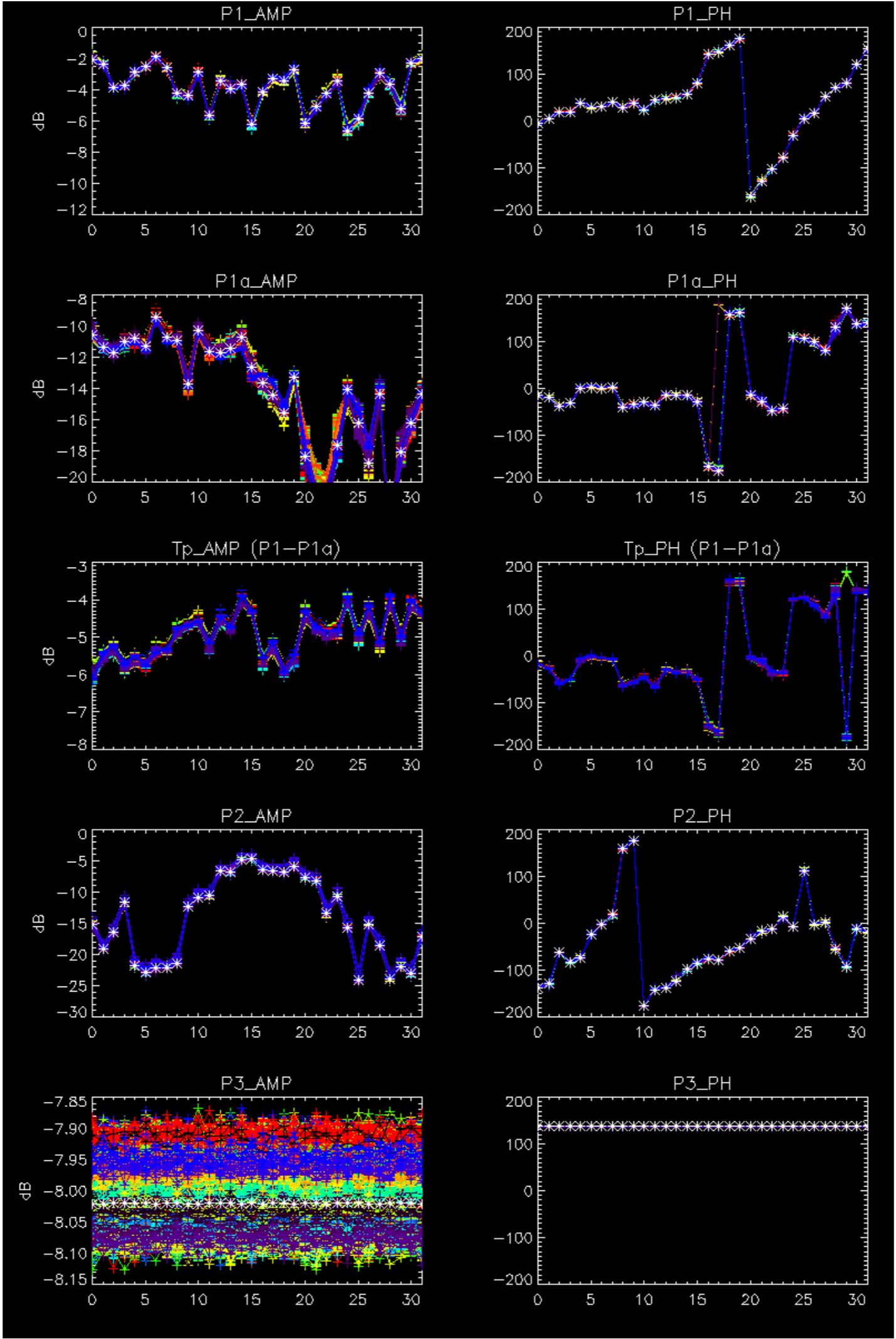


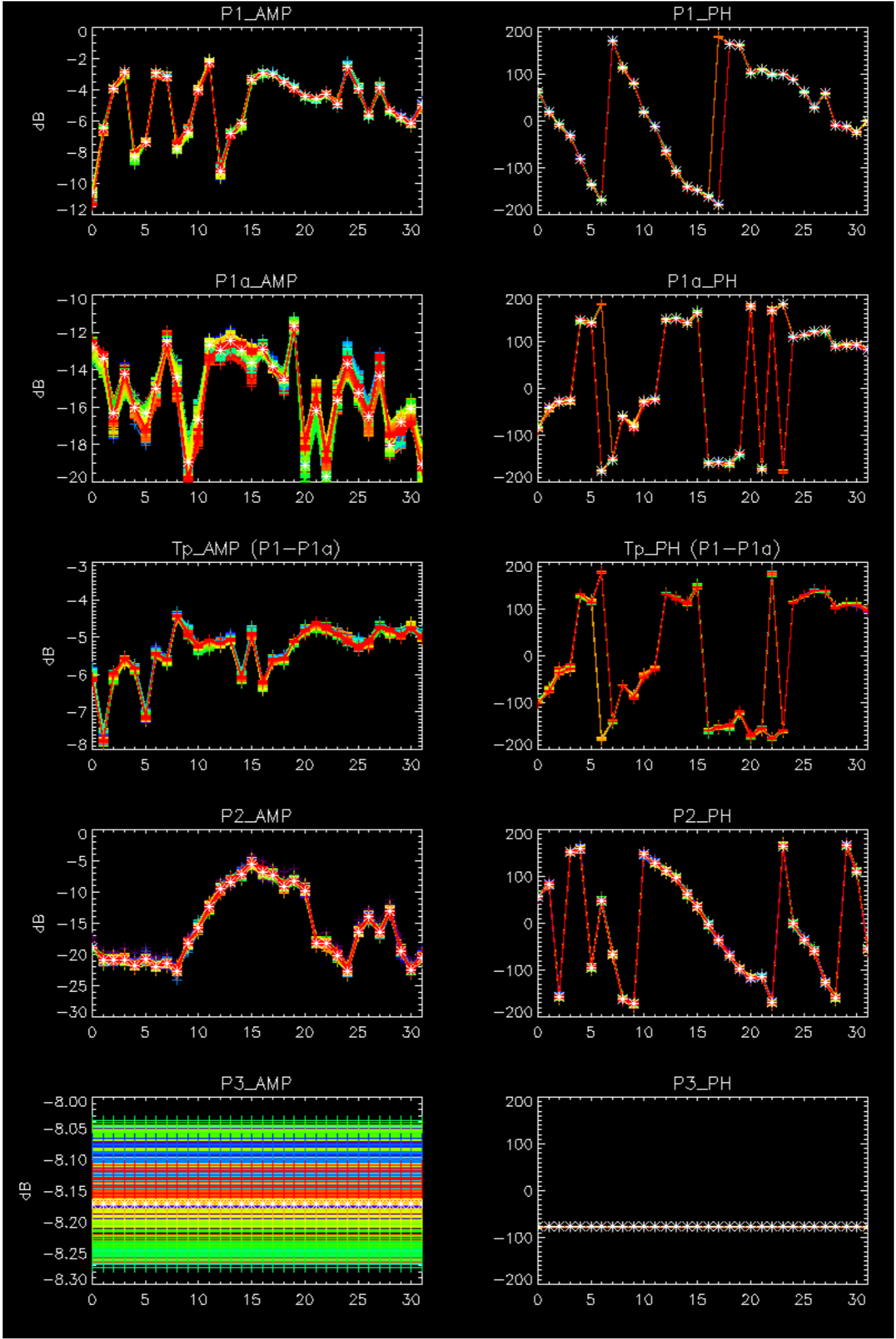
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



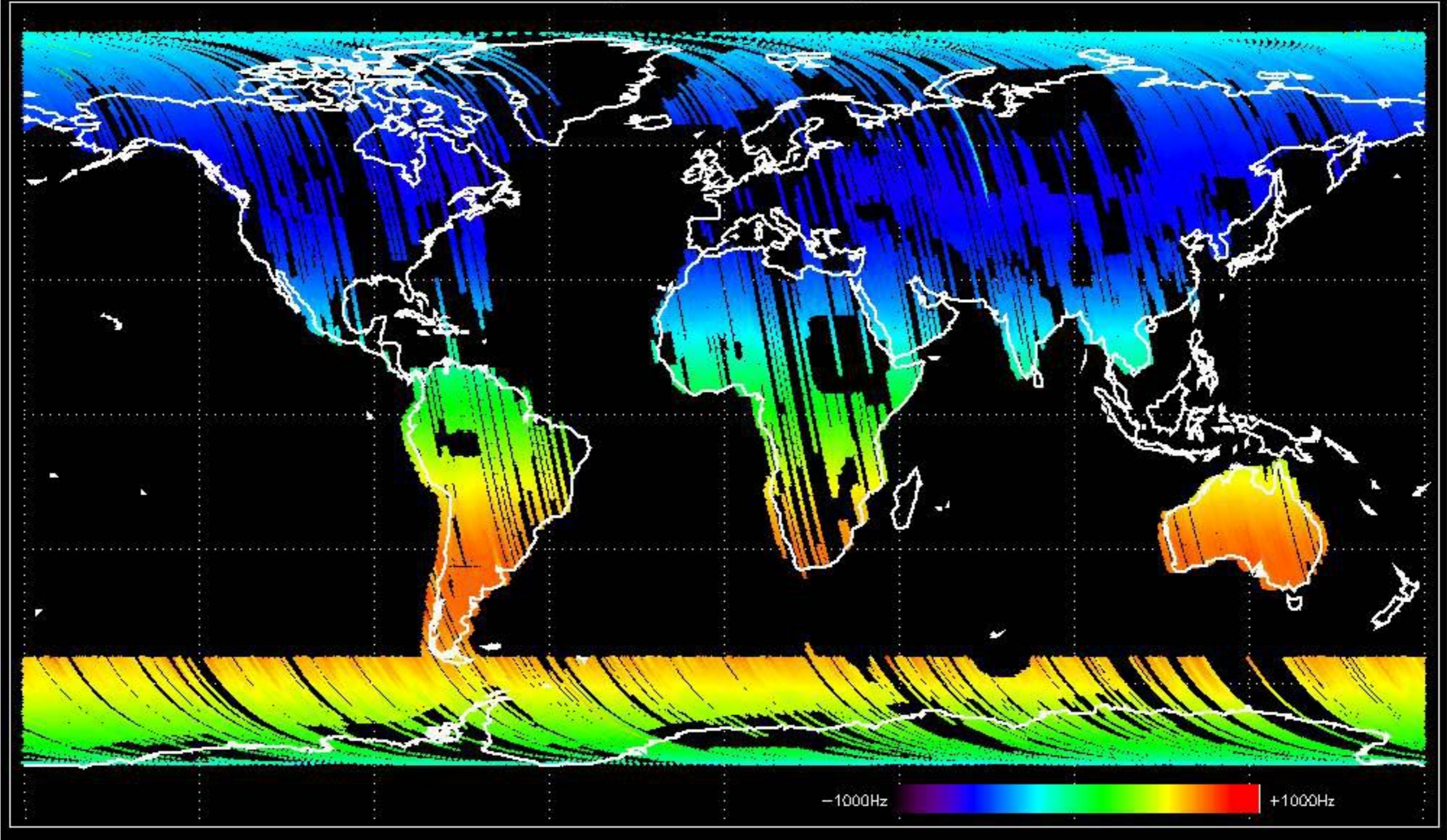
No anomalies observed.



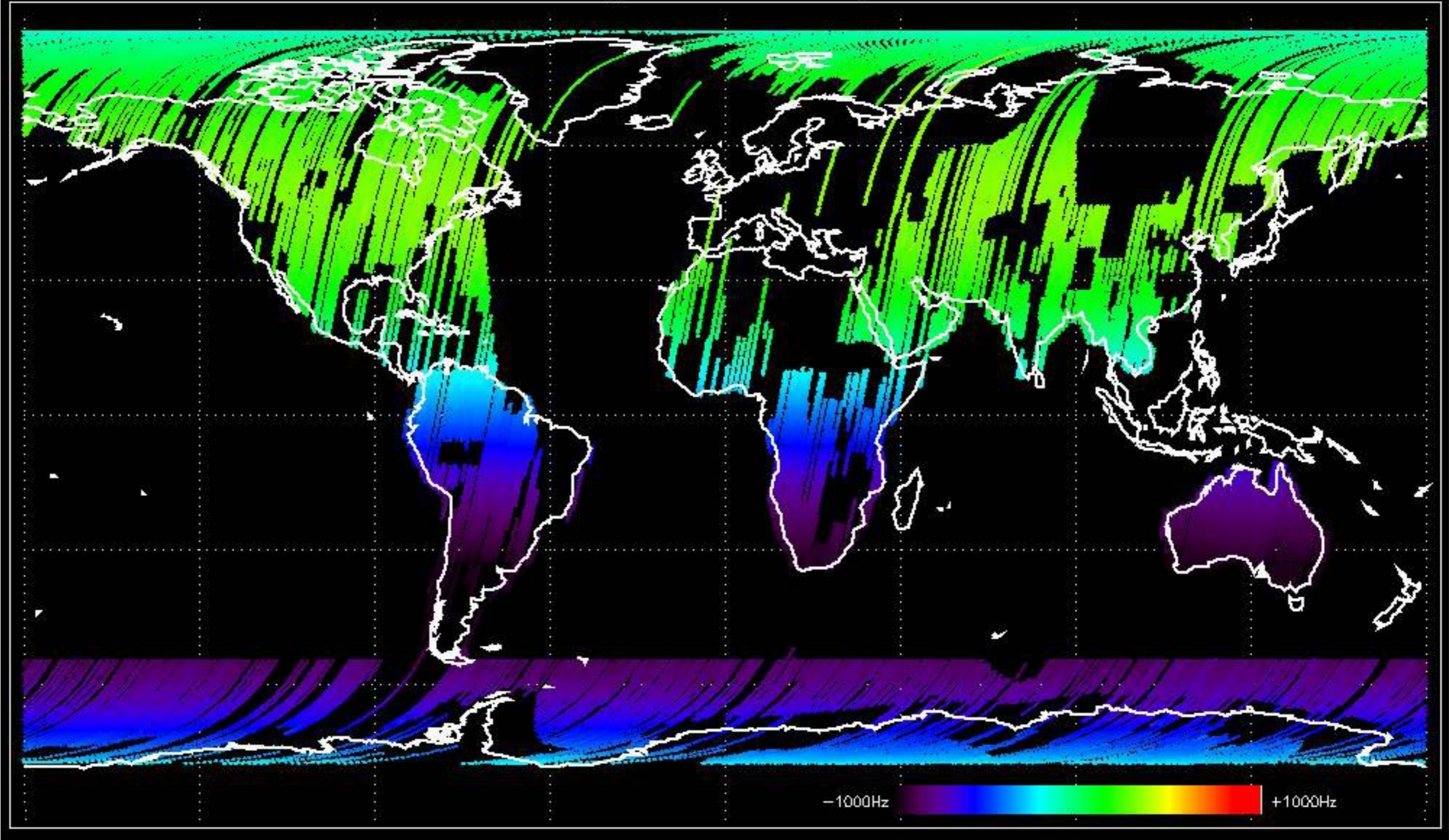


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

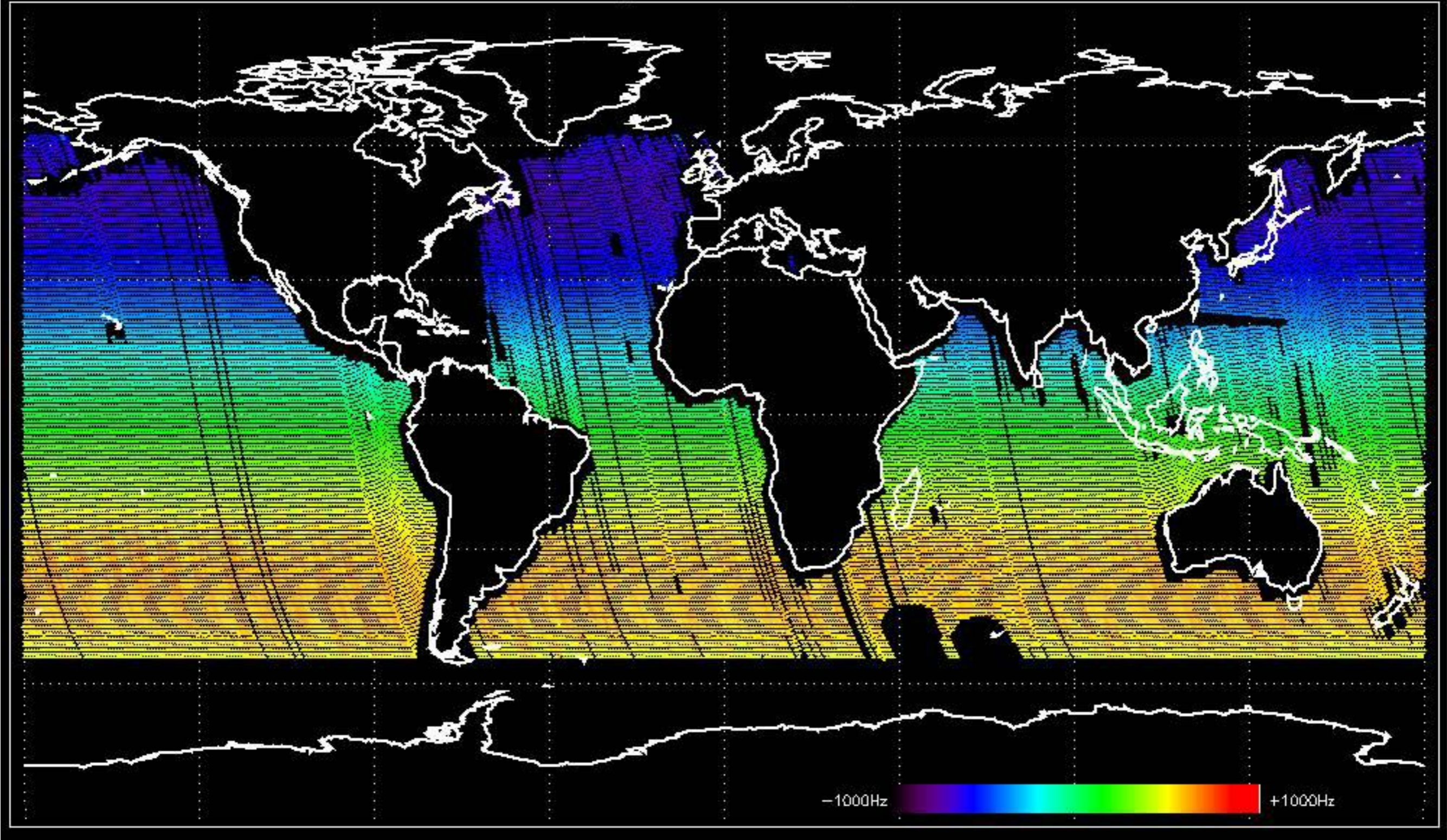
Doppler 'GM1' 'SS1' ascending



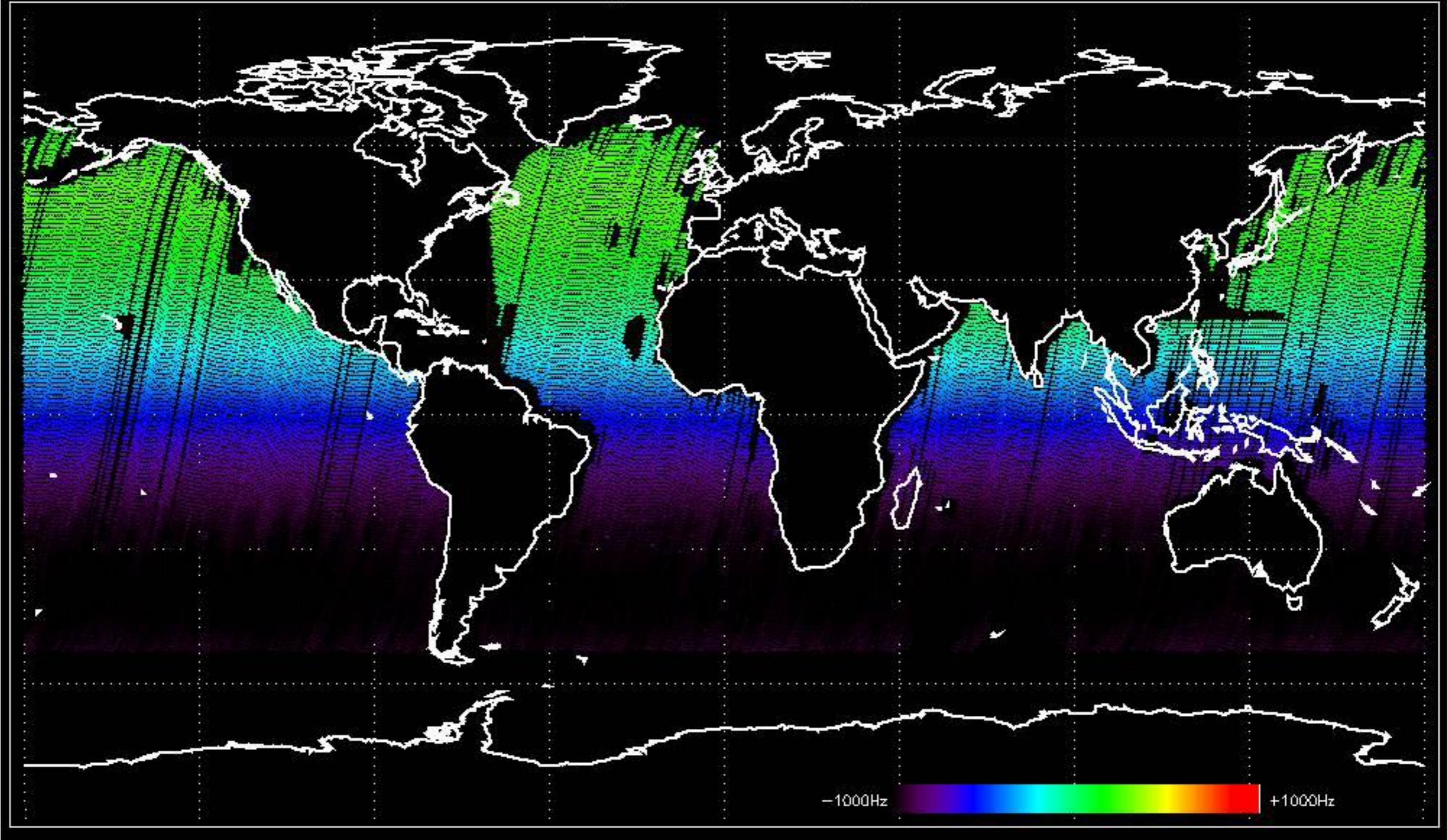
Doppler 'GM1' 'SS1' descending



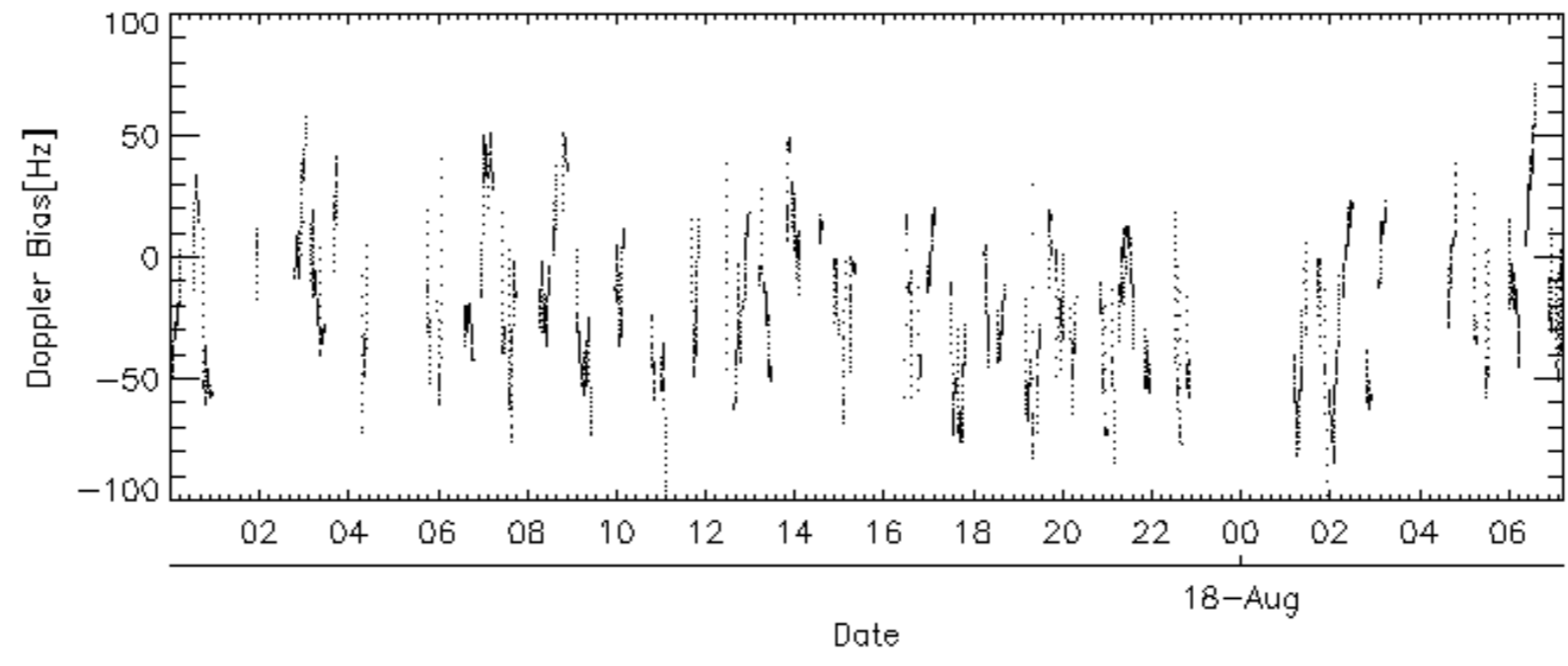
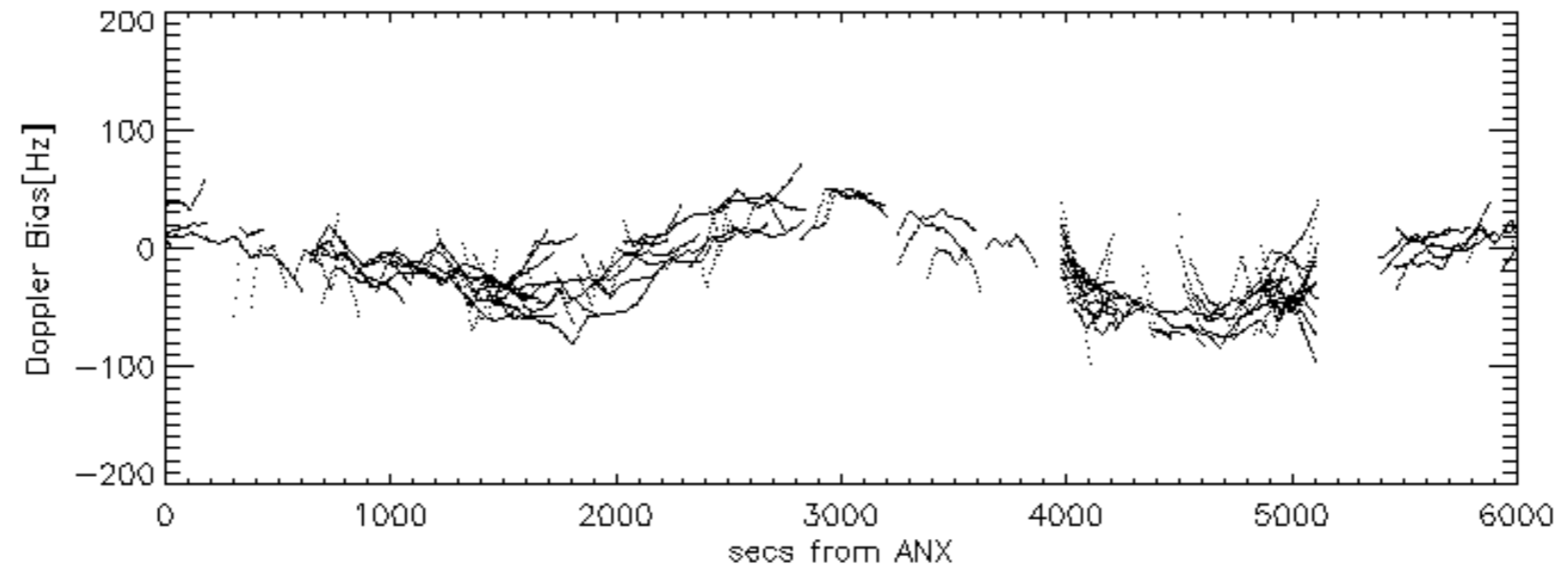
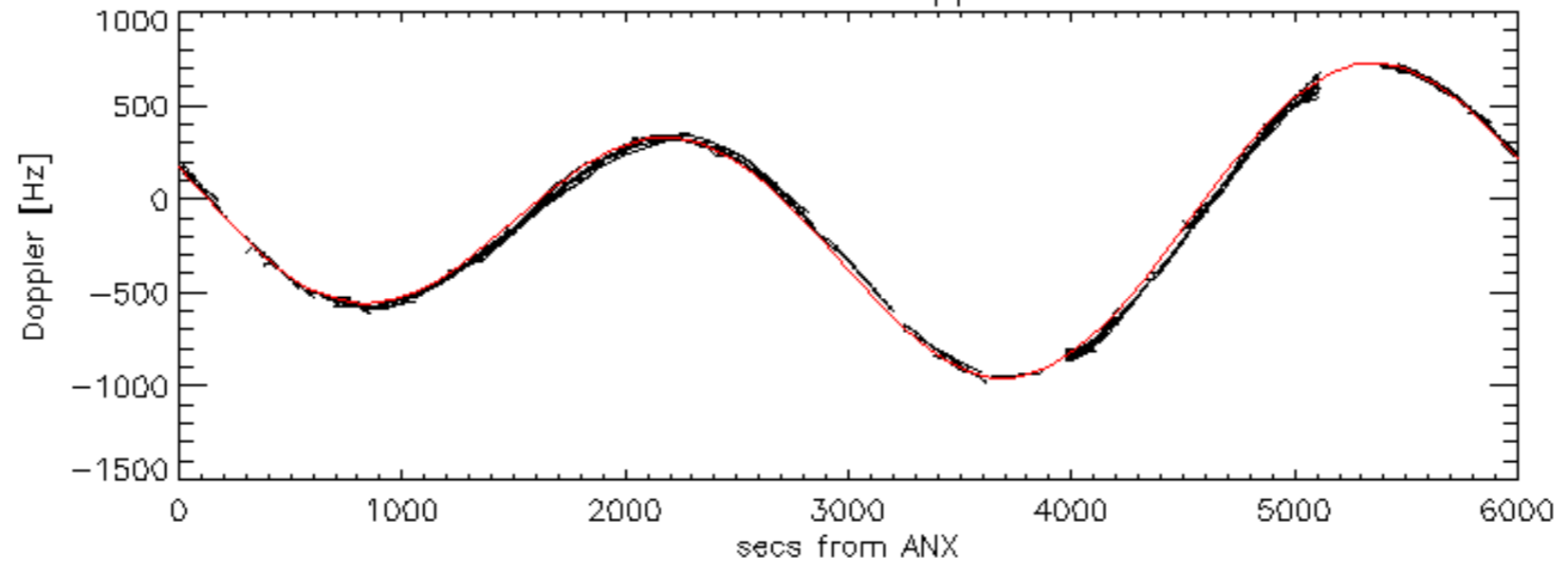
Doppler 'WVS' 'IS2' ascending

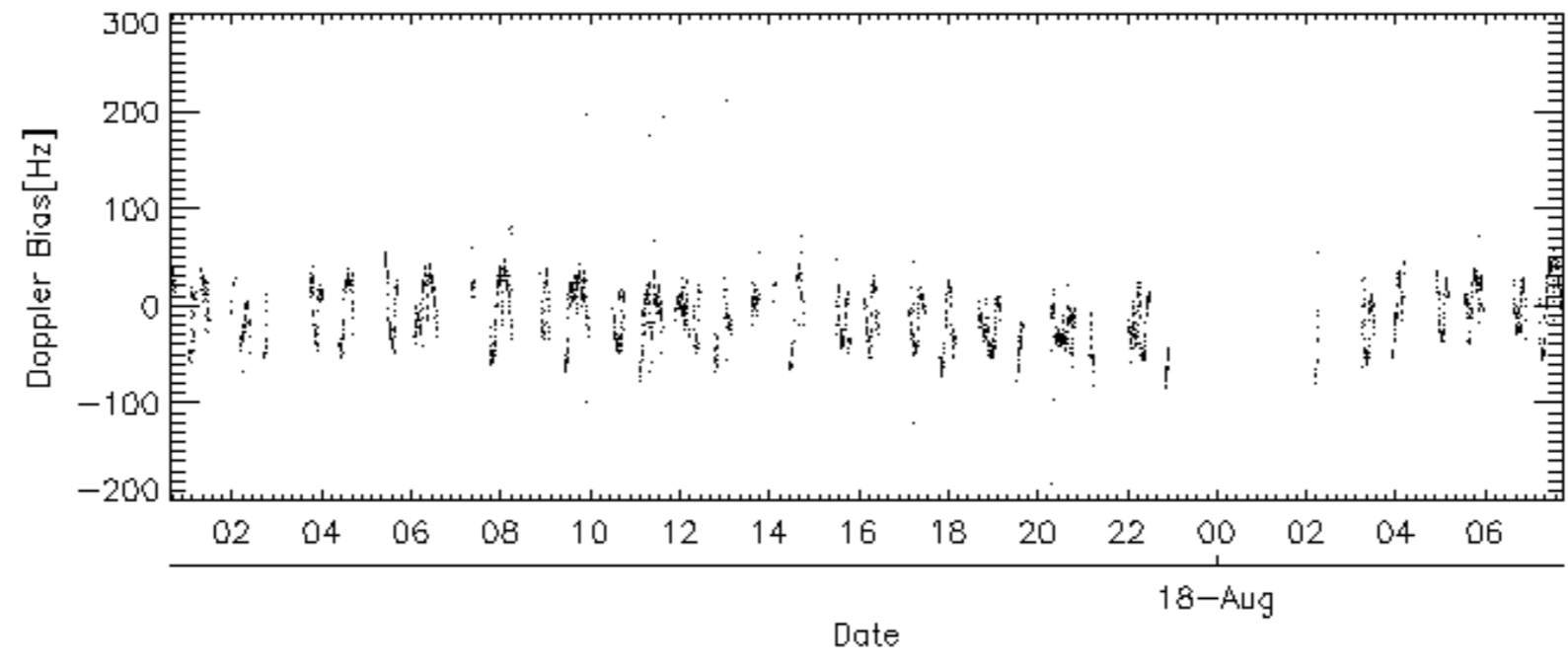
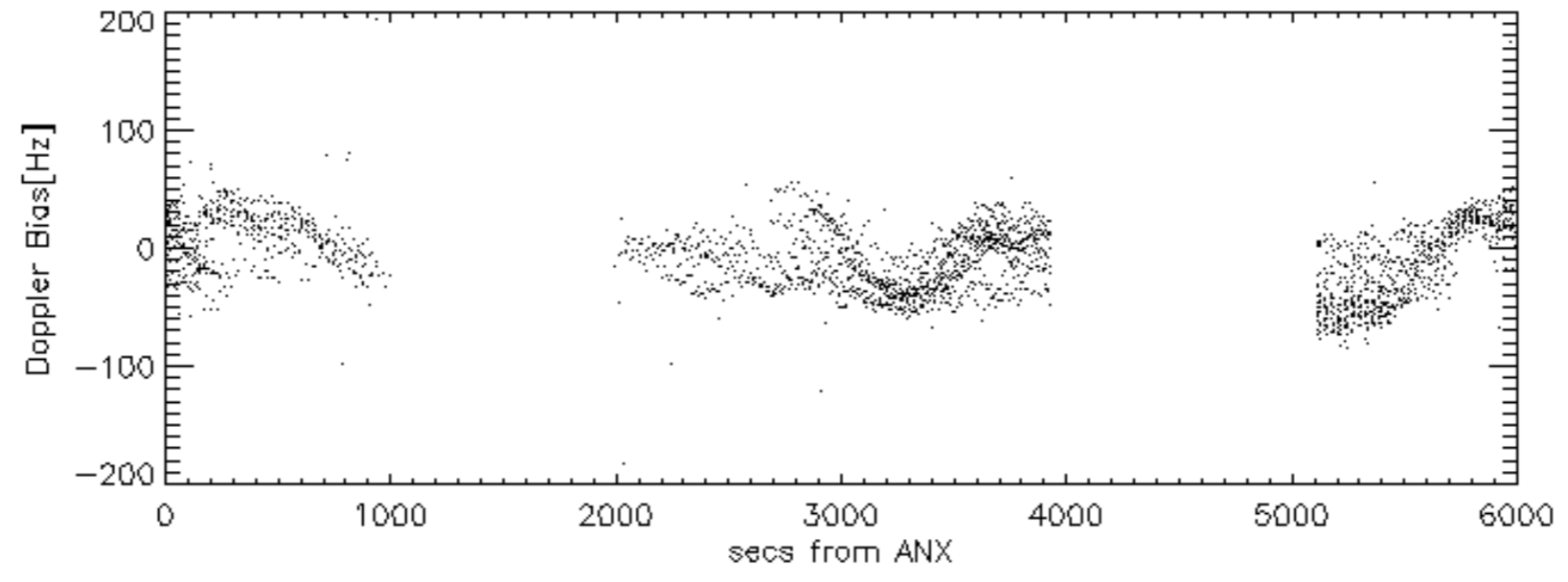
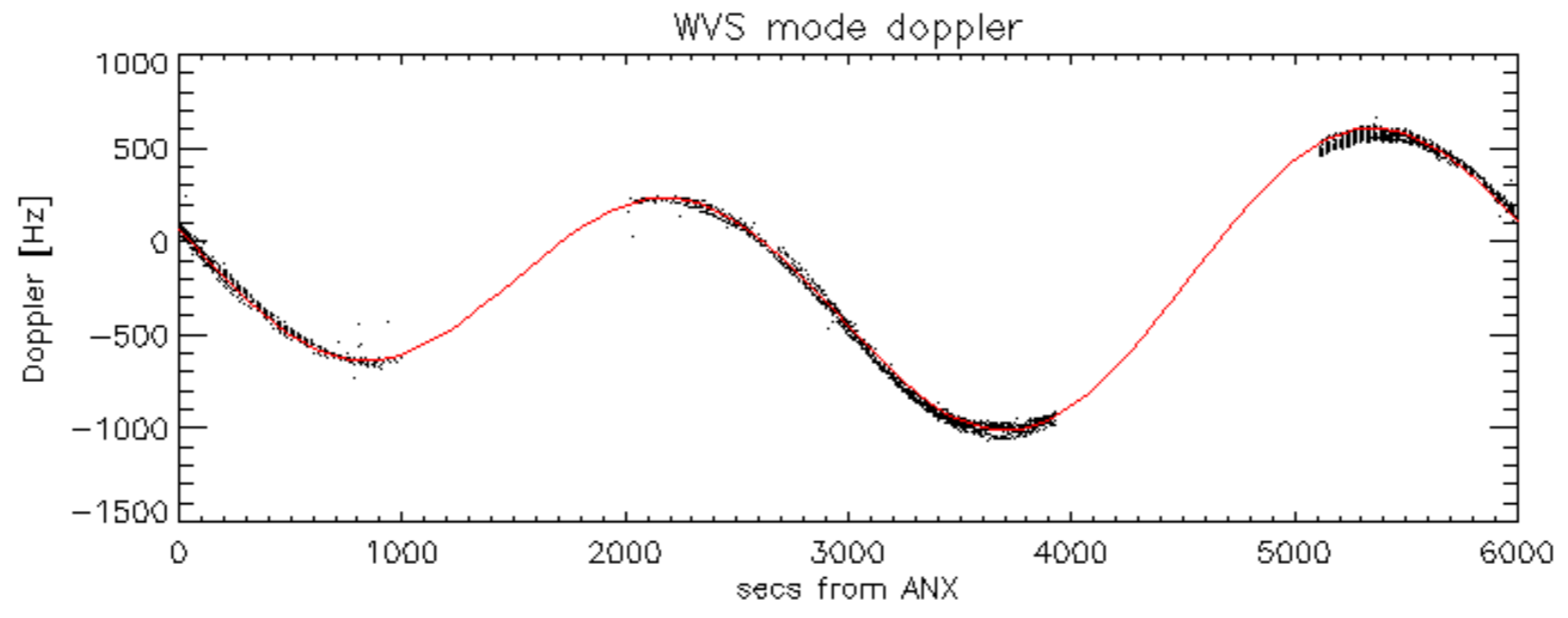


Doppler 'WVS' 'IS2' descending

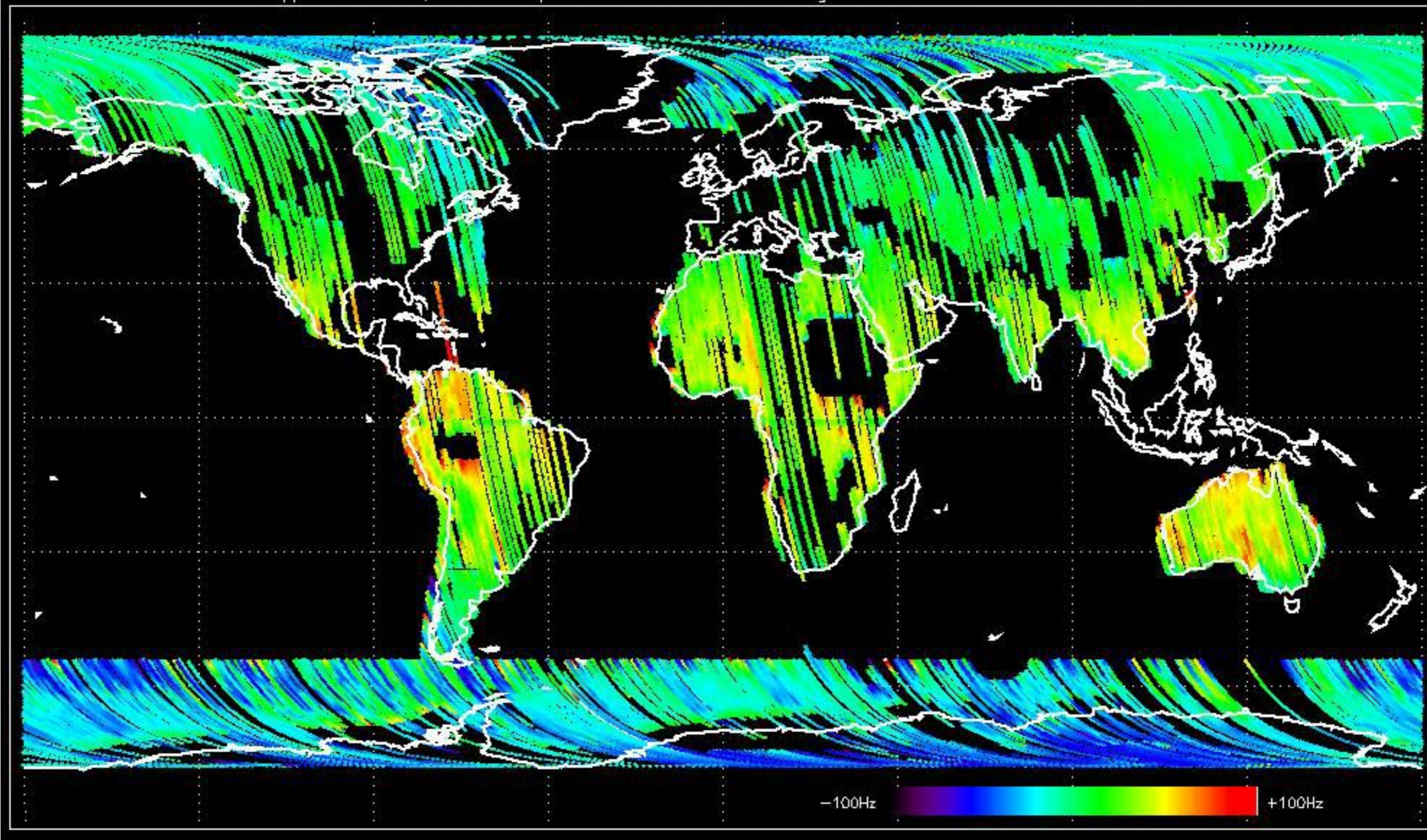


GM1 mode doppler

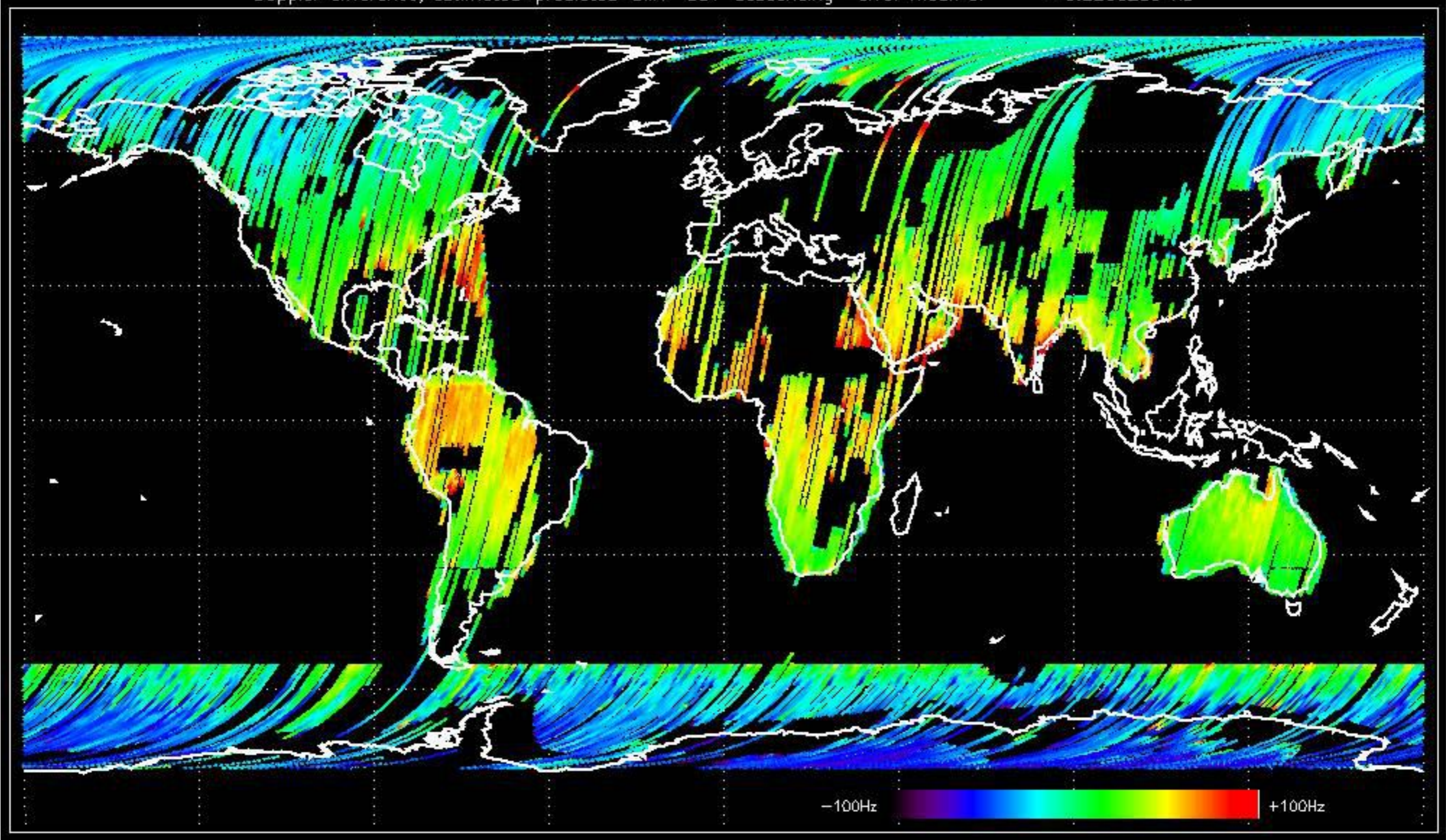




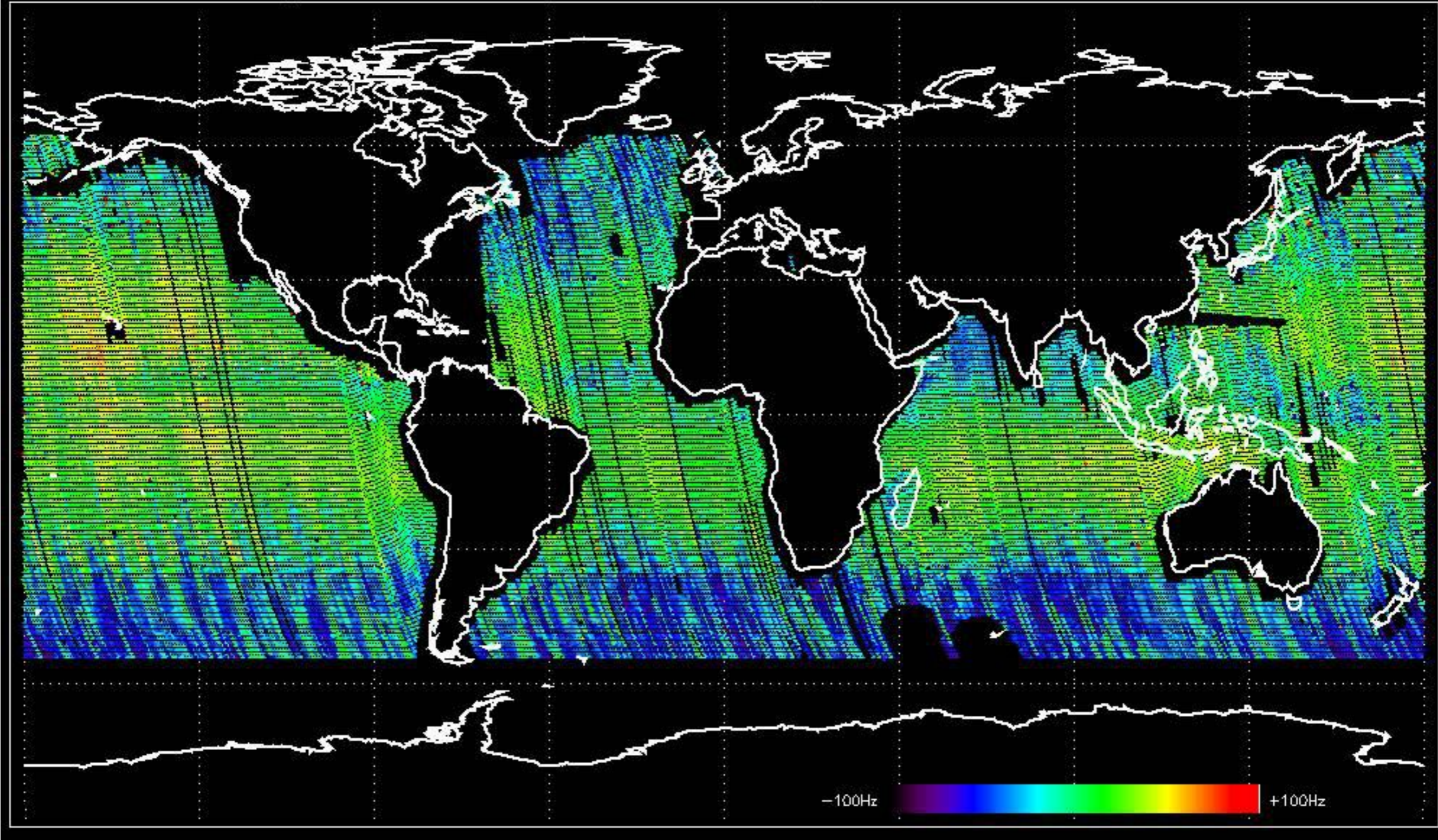
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -18.984994 Hz



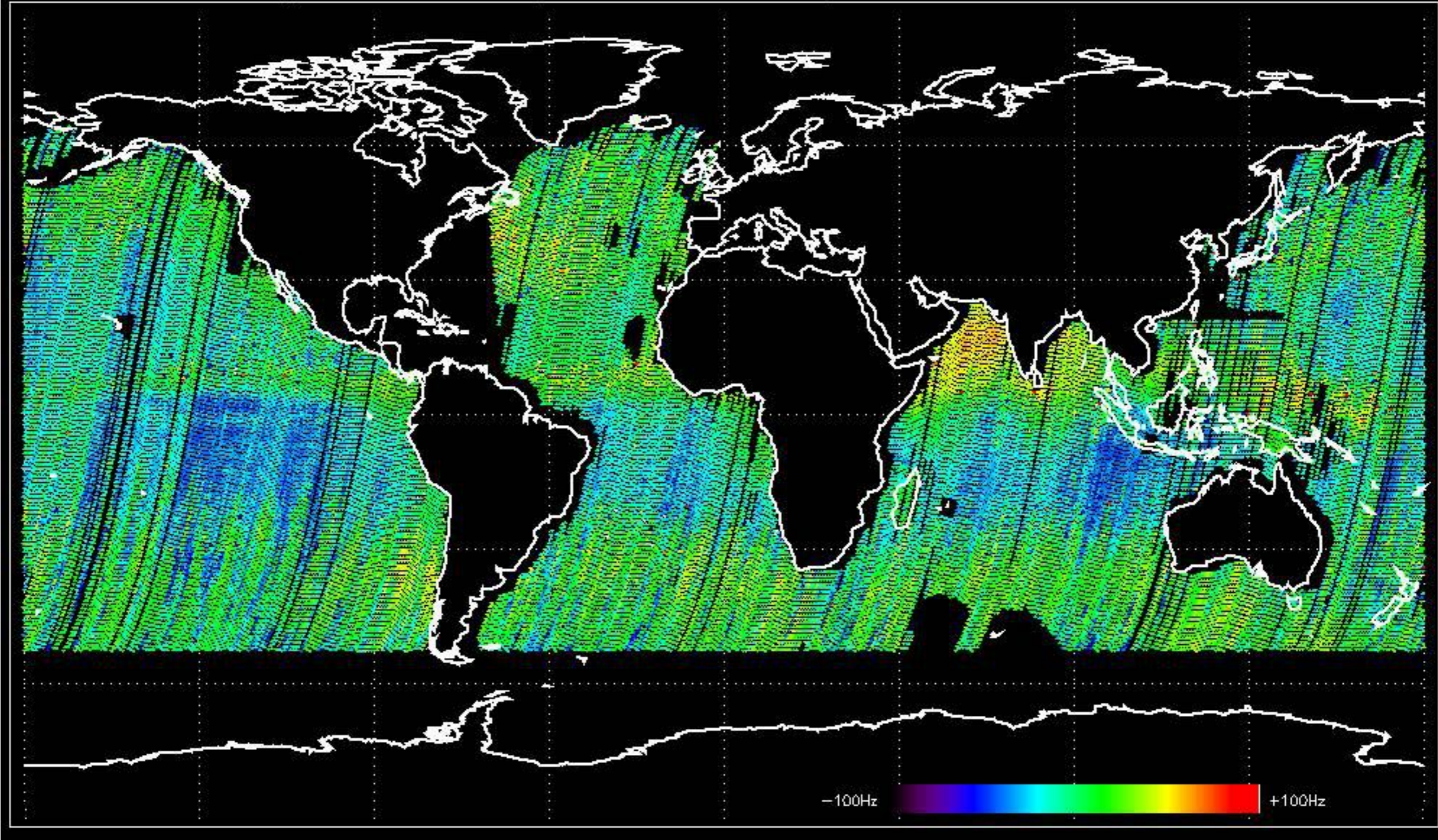
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -9.2260203 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -2.6089425 Hz

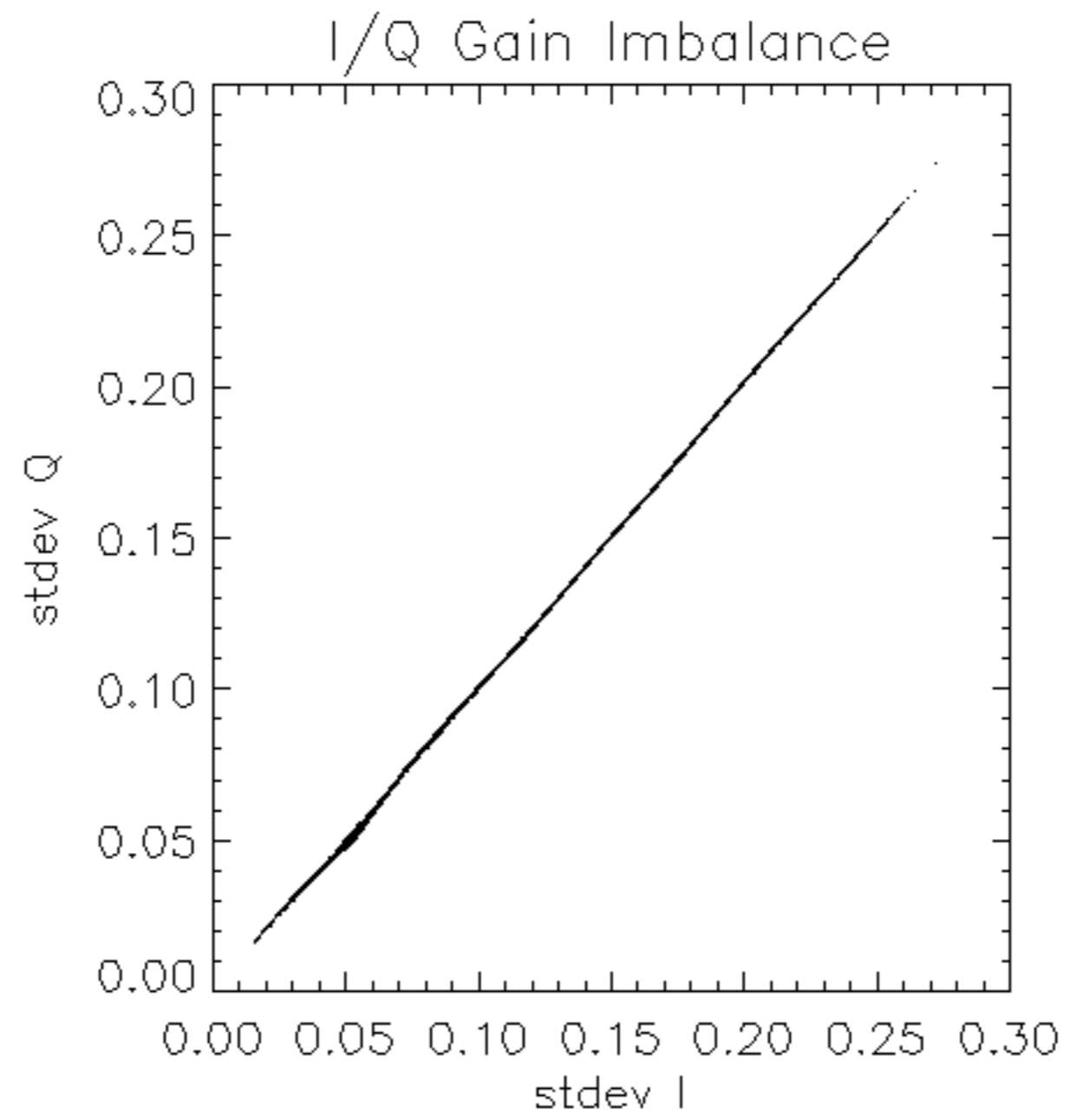


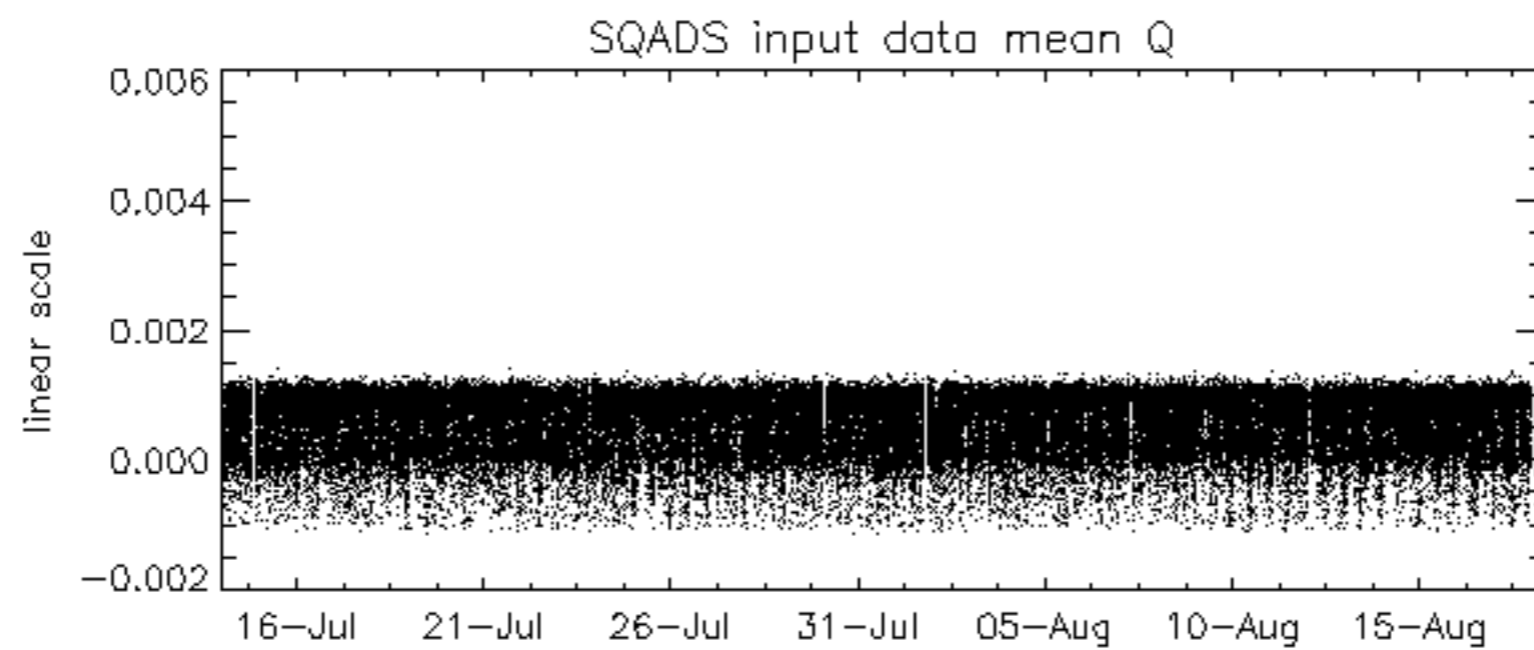
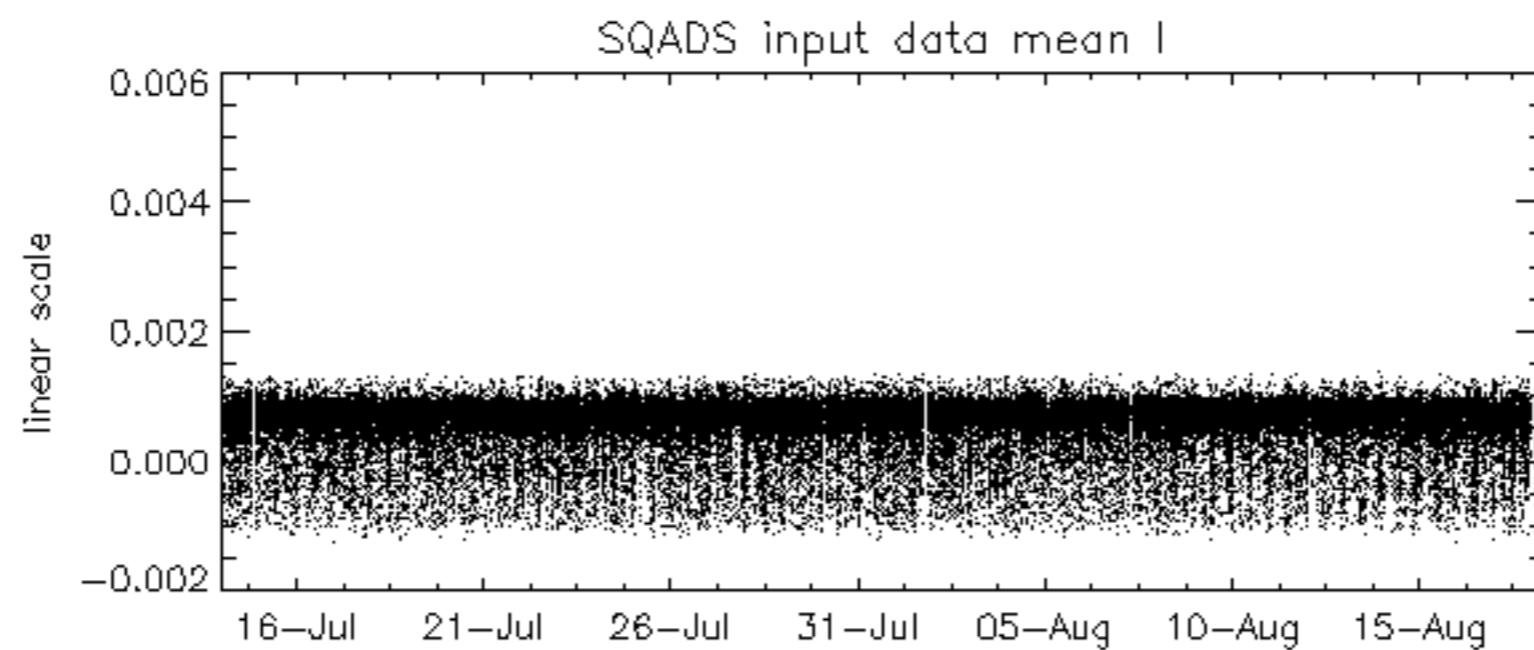
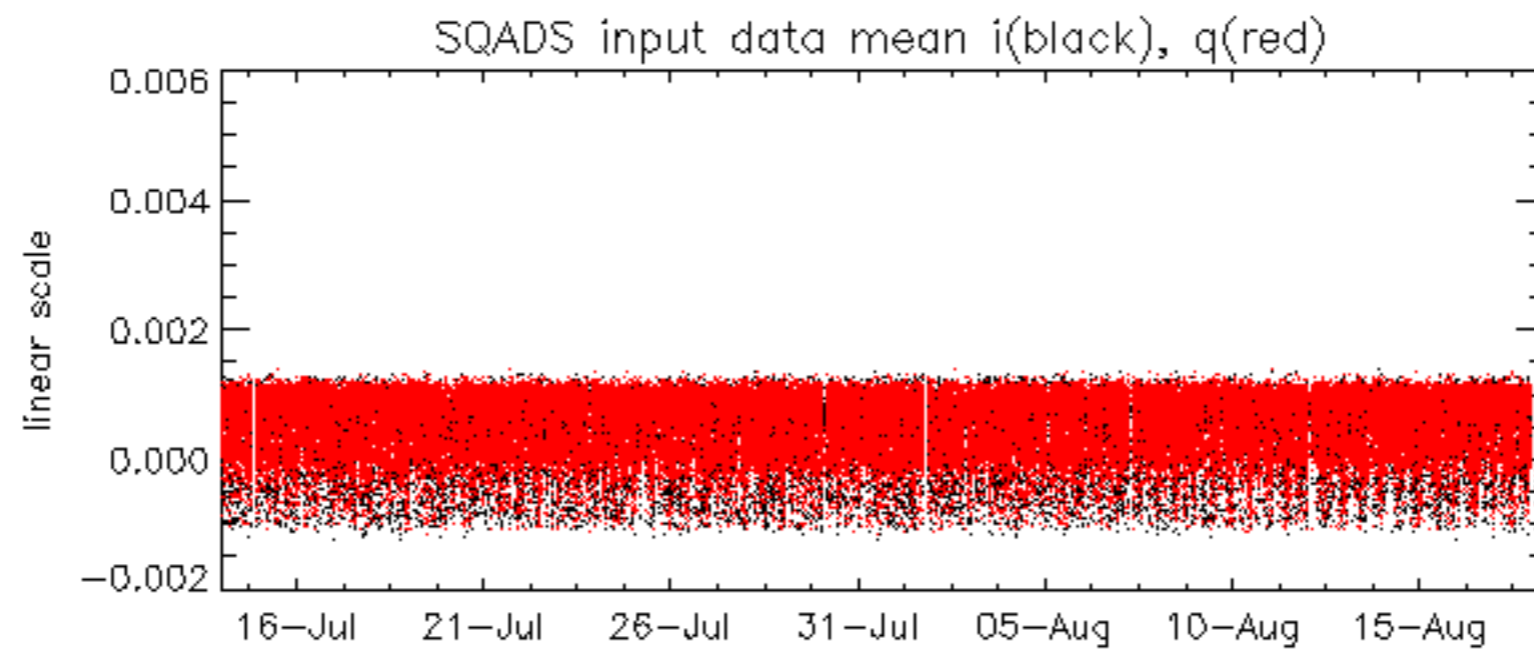
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -8.5557704 Hz

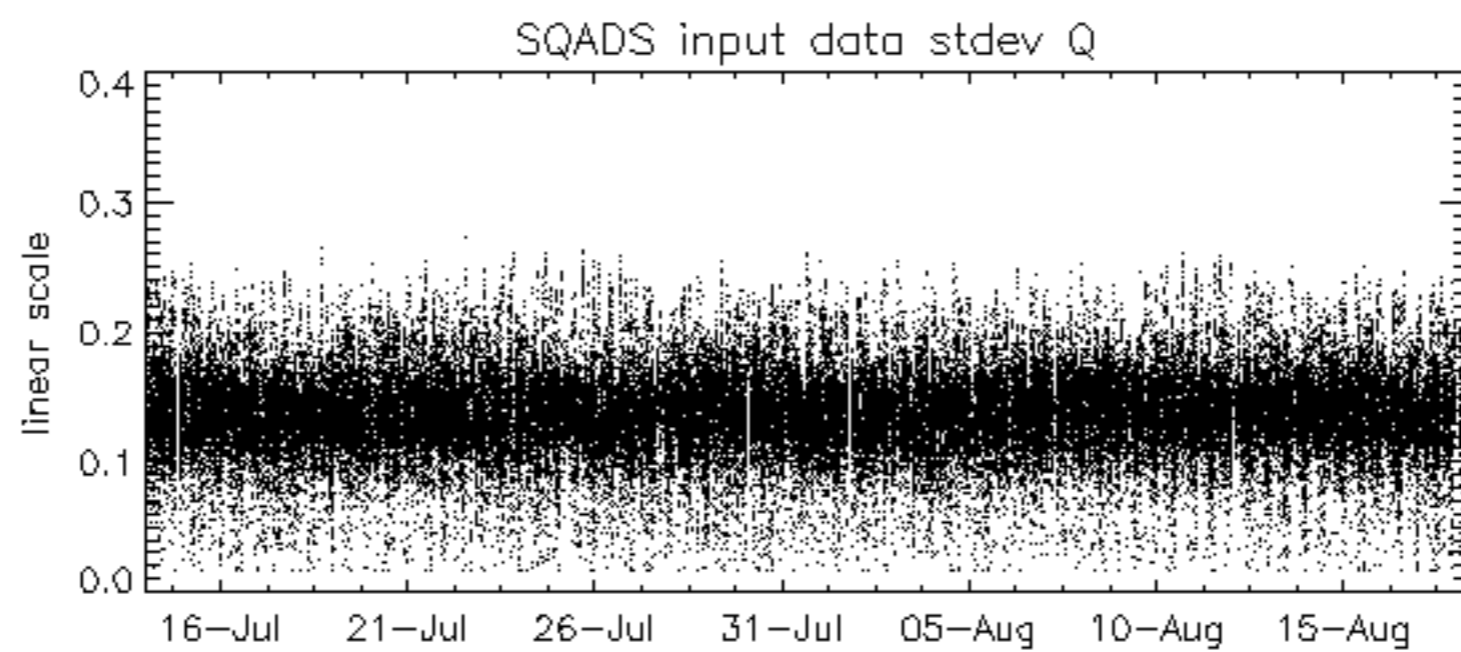
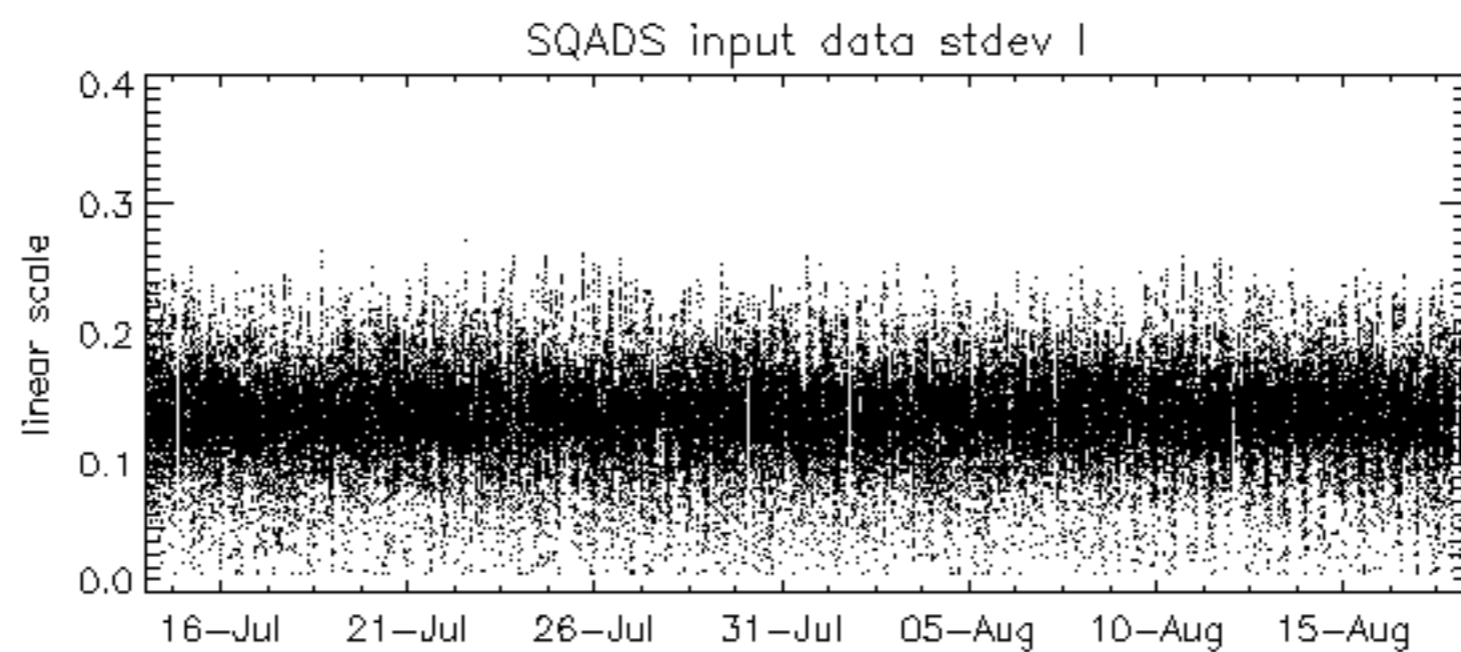
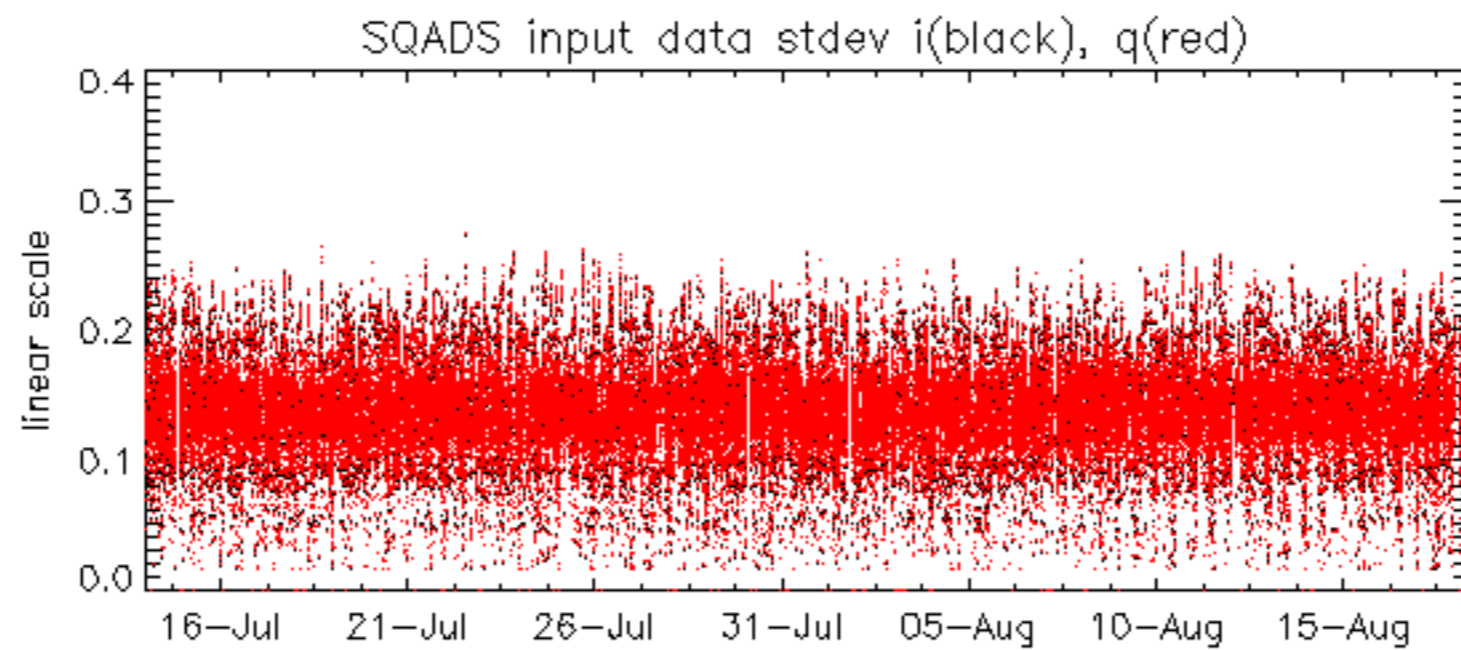


No anomalies observed on available MS products:

No anomalies observed.



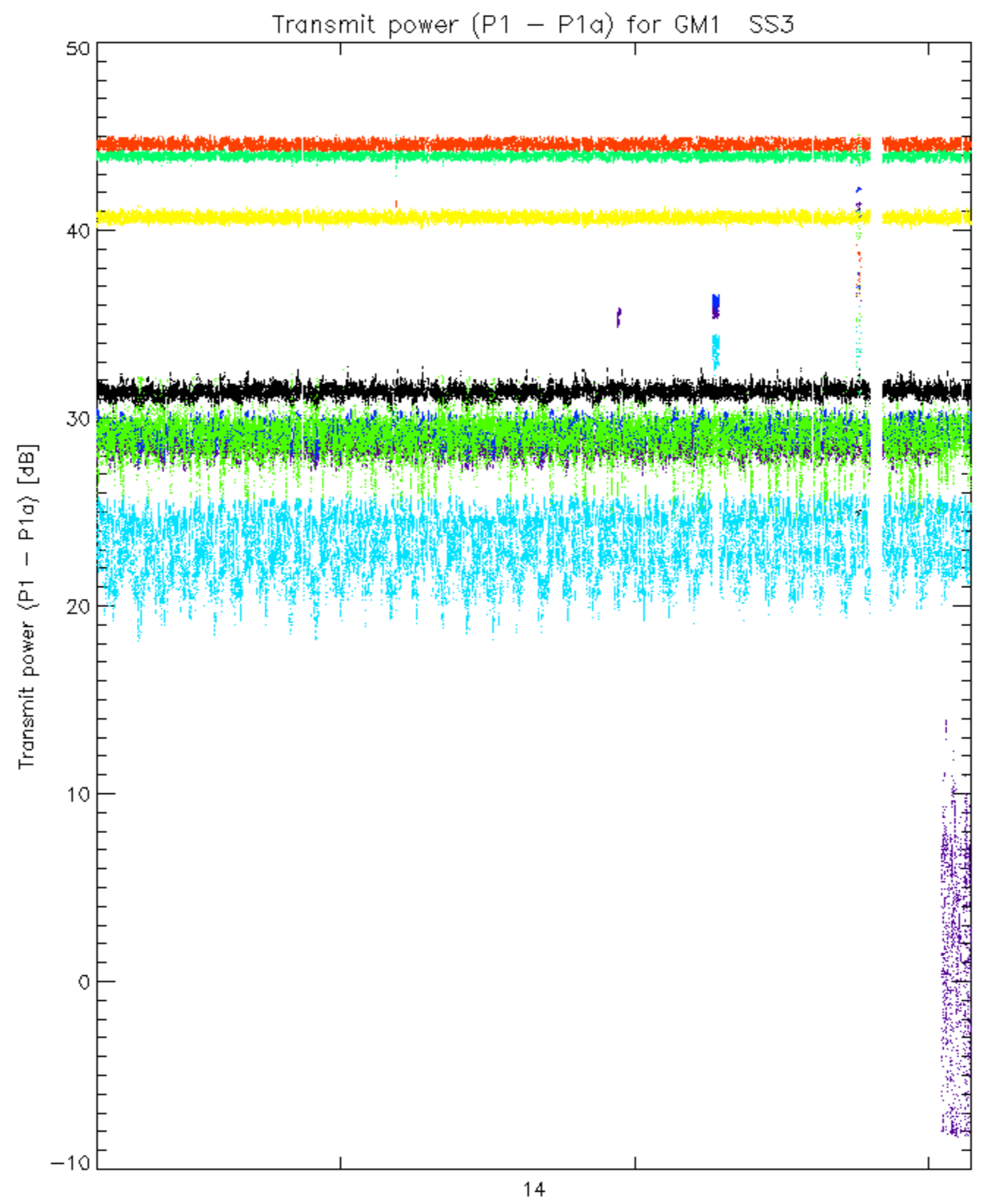




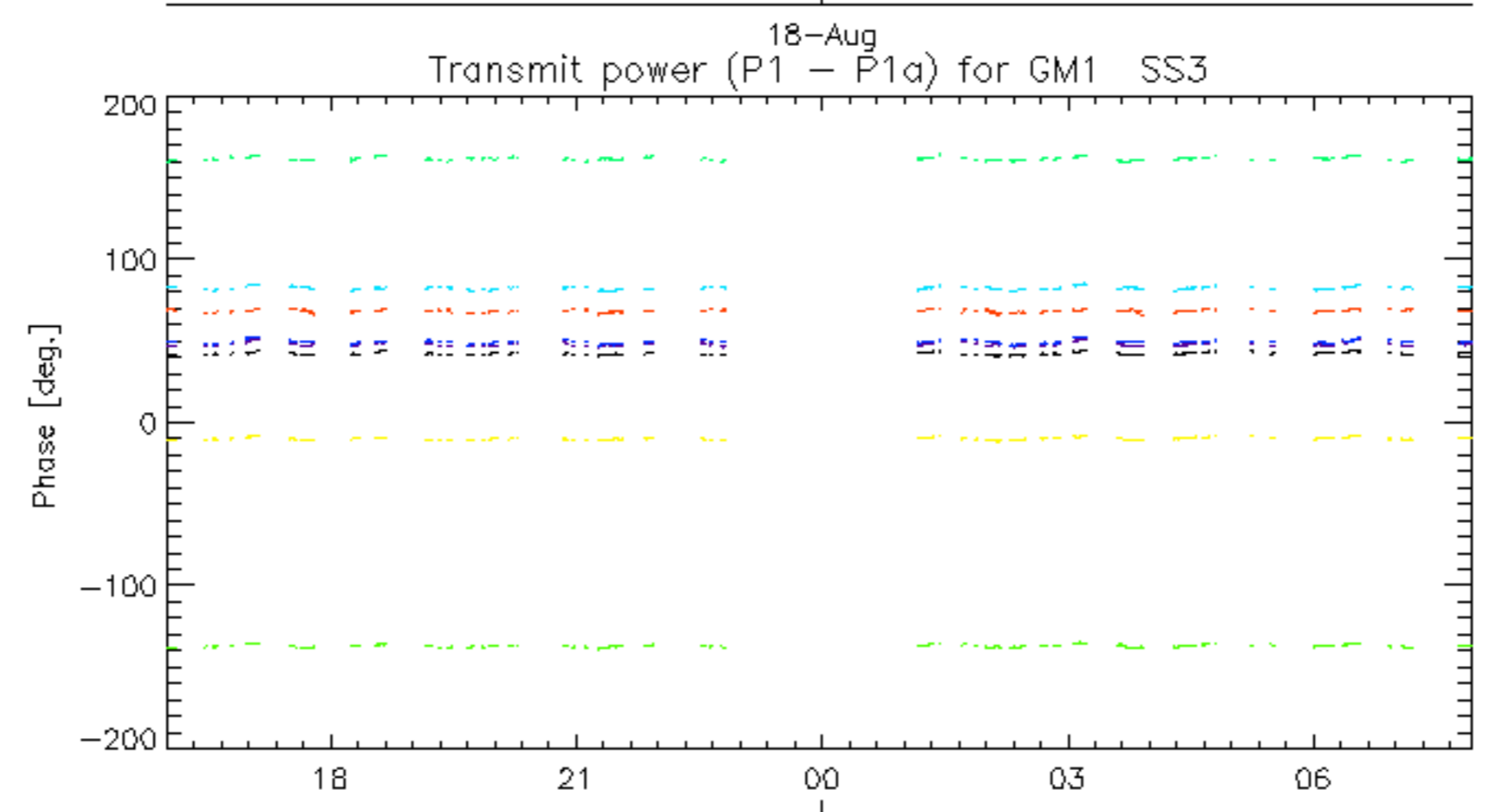
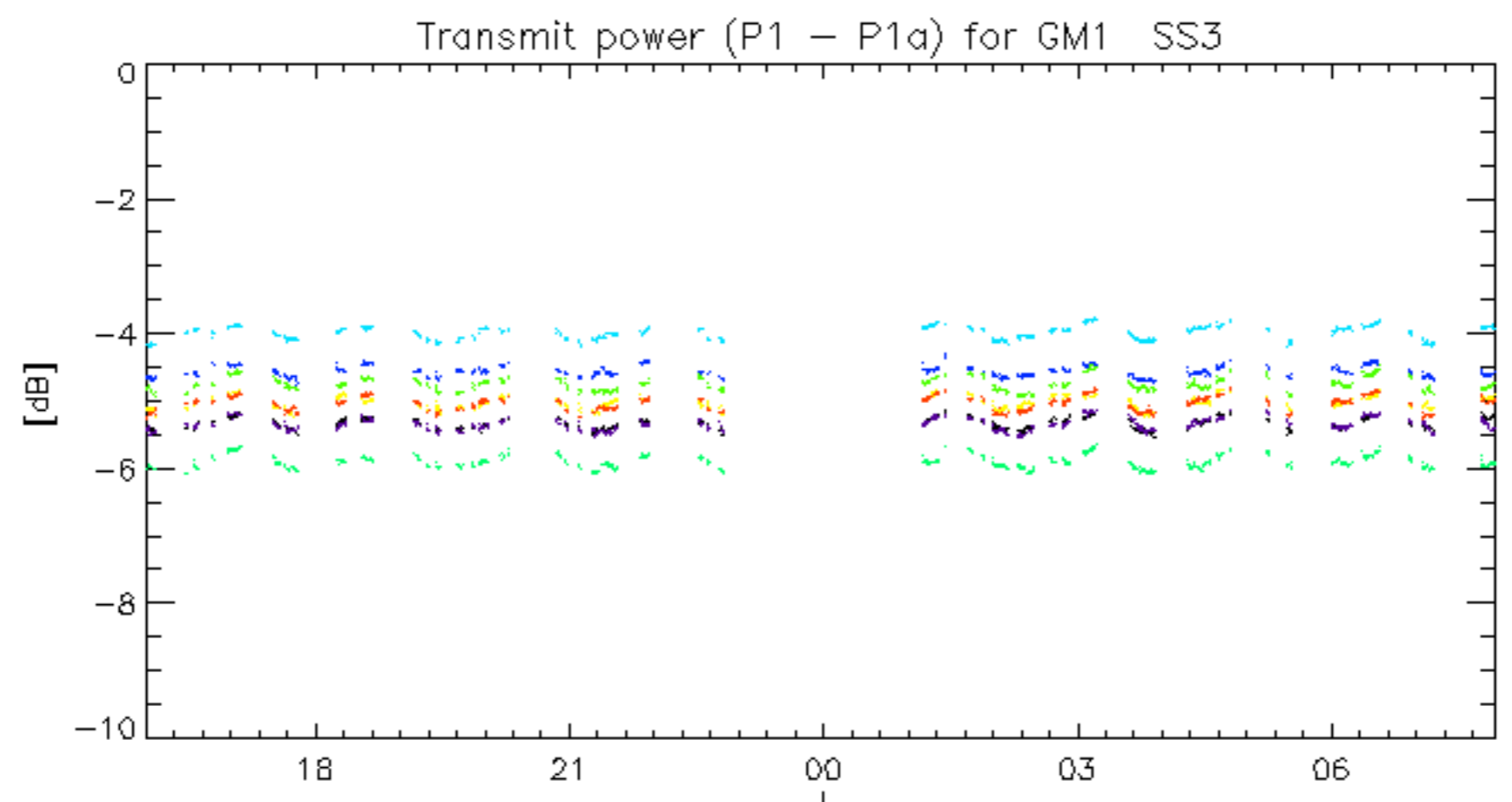
Summary of analysis for the last 3 days 2006081[678]

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

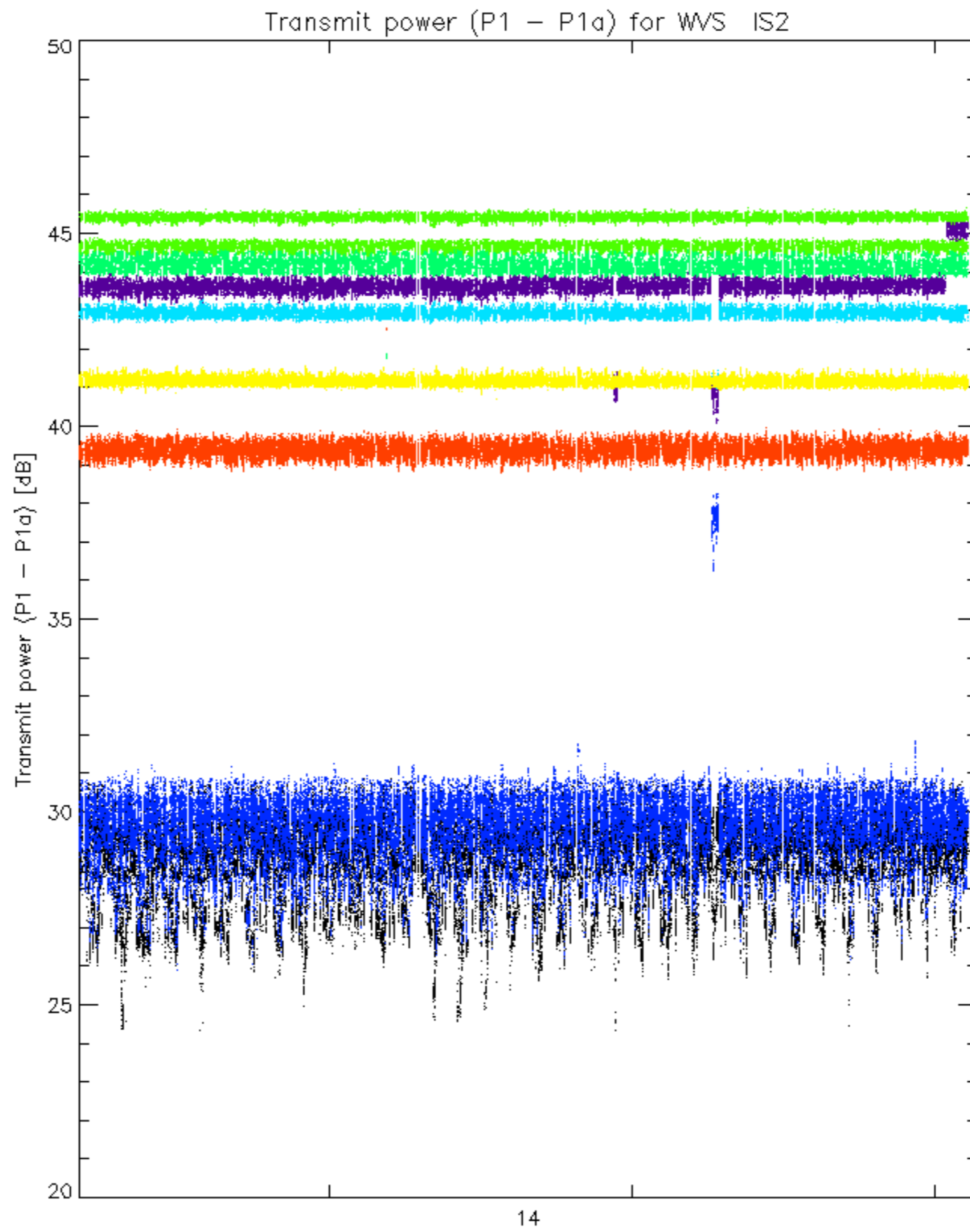
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060818_004240_000001742050_00245_23345_3639.N1	1	0
ASA_IMM_1PNPDE20060818_005912_000000432050_00246_23346_3640.N1	1	0
ASA_GM1_1PNPDK20060817_181455_000003862050_00242_23342_3005.N1	0	9
ASA_GM1_1PNPDK20060817_195553_000003382050_00243_23343_3010.N1	0	9
ASA_WSM_1PNPDE20060816_005609_000000852050_00217_23317_8045.N1	0	36
ASA_WSM_1PNPDE20060817_020406_000002322050_00232_23332_8255.N1	0	40
ASA_WSM_1PNPDE20060817_235454_000003302050_00245_23345_8396.N1	0	35



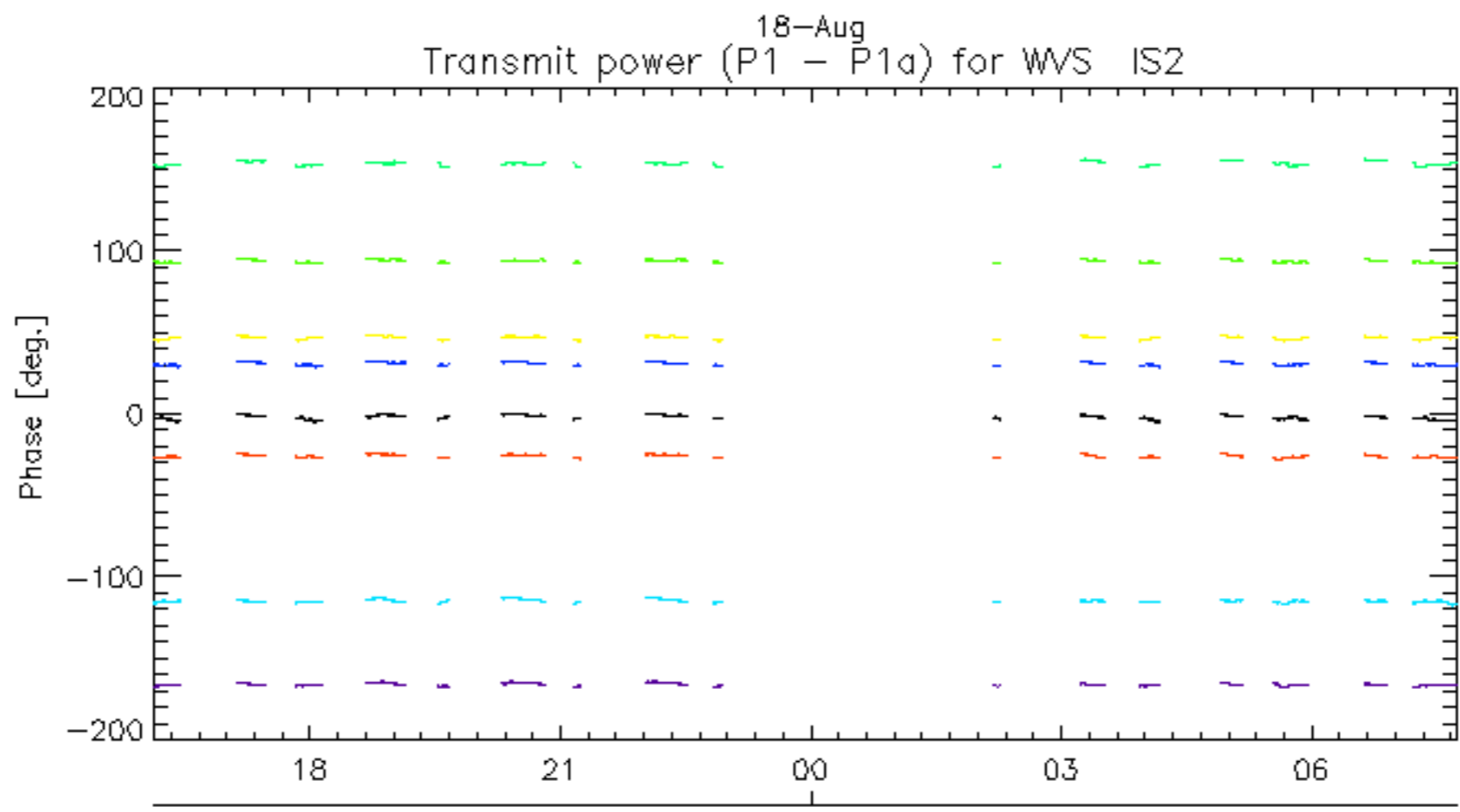
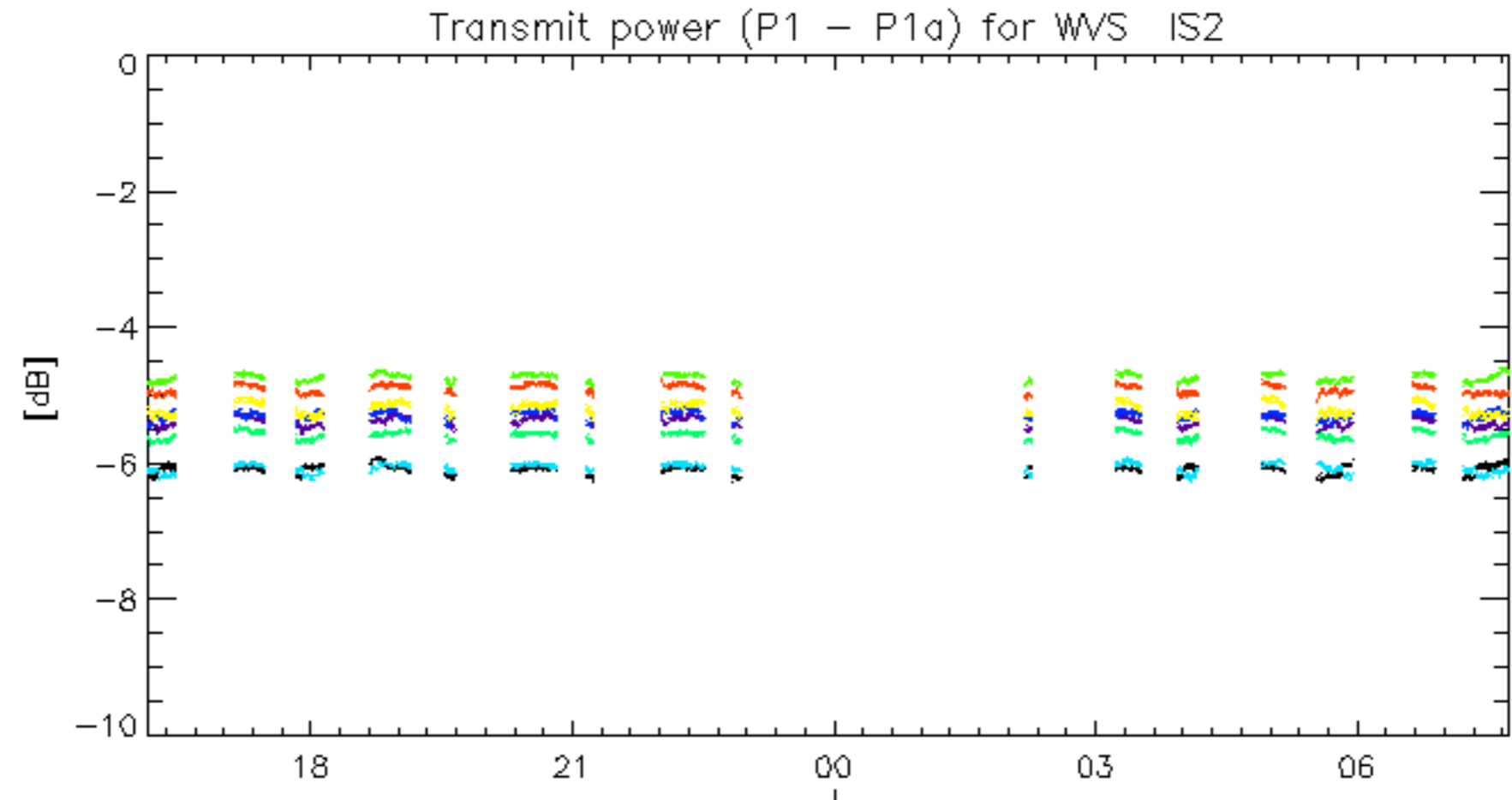
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



18-Aug
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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



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No unavailabilities during the reported period.