

PRELIMINARY REPORT OF 060709

last update on Sun Jul 9 16:52:13 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 2006-07-08 00:00:00 to 2006-07-09 16:52:13

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	43	72	8	8	0
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	43	72	8	8	0
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	43	72	8	8	0
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	43	72	8	8	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	27	57	23	21	78
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	27	57	23	21	78
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	27	57	23	21	78
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	27	57	23	21	78

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	20060708 064407
H	20060709 061230

MSM in V/V 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"/>

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	-3.939408	0.046245	-0.008002
7	P1	-3.128096	0.012126	0.065558
11	P1	-4.098663	0.015684	0.032536
15	P1	-6.167048	0.011550	-0.024491
19	P1	-3.375578	0.008864	-0.036552
22	P1	-4.533073	0.010898	-0.032118
26	P1	-3.953526	0.018415	0.053997
30	P1	-5.760639	0.008361	-0.012429
3	P1	-16.537743	0.625371	-0.016711
7	P1	-17.230110	0.108585	0.106155
11	P1	-16.984667	0.279270	-0.009742
15	P1	-13.162308	0.159464	0.075607
19	P1	-14.396924	0.049016	-0.095319
22	P1	-16.105291	0.393161	0.218914
26	P1	-15.165793	0.231455	0.074880
30	P1	-17.132280	0.384862	0.118147

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.066538	0.086738	0.170014
7	P2	-21.971642	0.103018	0.114527
11	P2	-15.824862	0.116965	0.066433
15	P2	-7.150661	0.099364	0.041000
19	P2	-9.158218	0.090493	0.063082
22	P2	-18.167149	0.085752	0.033609
26	P2	-16.410767	0.091923	0.030708
30	P2	-19.547827	0.091465	0.037057

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.184328	0.003433	0.020606
7	P3	-8.184328	0.003433	0.020606
11	P3	-8.184328	0.003433	0.020606
15	P3	-8.184328	0.003433	0.020606
19	P3	-8.184328	0.003433	0.020606
22	P3	-8.184328	0.003433	0.020606
26	P3	-8.184328	0.003433	0.020606
30	P3	-8.184328	0.003433	0.020606

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	-3.809581	0.063887	0.008905
7	P1	-2.572617	0.008323	0.031352
11	P1	-2.858691	0.013786	-0.002761
15	P1	-3.540675	0.028197	-0.069842
19	P1	-3.416060	0.014014	0.002450
22	P1	-5.088033	0.020074	-0.018741
26	P1	-5.861197	0.016074	0.006045
30	P1	-5.194390	0.025941	0.006560
3	P1	-11.618903	0.171157	0.068233
7	P1	-9.981814	0.033132	0.021499
11	P1	-10.241947	0.058873	-0.000261
15	P1	-10.716583	0.135591	-0.126592
19	P1	-15.537567	0.075916	0.040422
22	P1	-20.948214	1.180438	0.065240
26	P1	-16.408915	0.353066	0.179602
30	P1	-17.873190	0.386324	-0.008197

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.727571	0.074743	0.202056
7	P2	-22.450005	0.132145	0.082141
11	P2	-11.099165	0.046785	0.105466
15	P2	-4.923675	0.048438	0.014075
19	P2	-6.882907	0.050660	0.011471
22	P2	-8.206882	0.041783	0.022010
26	P2	-24.176640	0.068068	-0.040347
30	P2	-22.041862	0.054765	0.064117

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.021017	0.004190	0.015155
7	P3	-8.021132	0.004182	0.015344
11	P3	-8.021081	0.004203	0.015410
15	P3	-8.020967	0.004196	0.015389
19	P3	-8.020992	0.004199	0.015127
22	P3	-8.021122	0.004183	0.015542
26	P3	-8.021194	0.004191	0.015401
30	P3	-8.021063	0.004168	0.015614

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	0.000571709
	stdev	1.63797e-07
MEAN Q	mean	0.000537294
	stdev	2.13979e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.138420
	stdev	0.00112335
STDEV Q	mean	0.138785
	stdev	0.00114145



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006070[789]

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_1PNPDE20060707_201746_000000372049_00157_22756_0467.N1	1	0
ASA_IMM_1PNPDE20060709_004101_000000622049_00174_22773_0517.N1	1	0
ASA_WVS_1PNPDK20060707_070752_000000002049_00149_22748_0265.N1	1	0
ASA_WVS_1PNPDK20060707_070752_000000002049_00149_22748_0293.N1	1	0
ASA_WSM_1PNPDE20060707_161735_000002192049_00155_22754_1810.N1	0	17
ASA_WSM_1PNPDE20060708_112314_000001522049_00166_22765_1970.N1	0	76
ASA_APM_1PNPDE20060707_143629_000000852049_00154_22753_0347.N1	0	10





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	
	
	Ascending
	
	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)

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

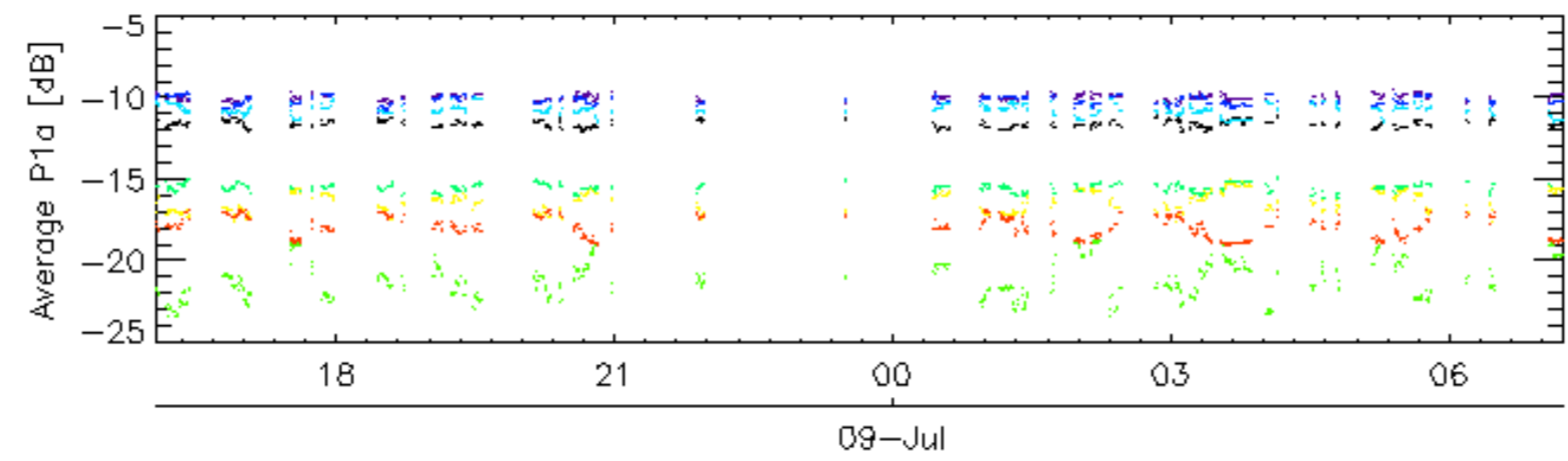
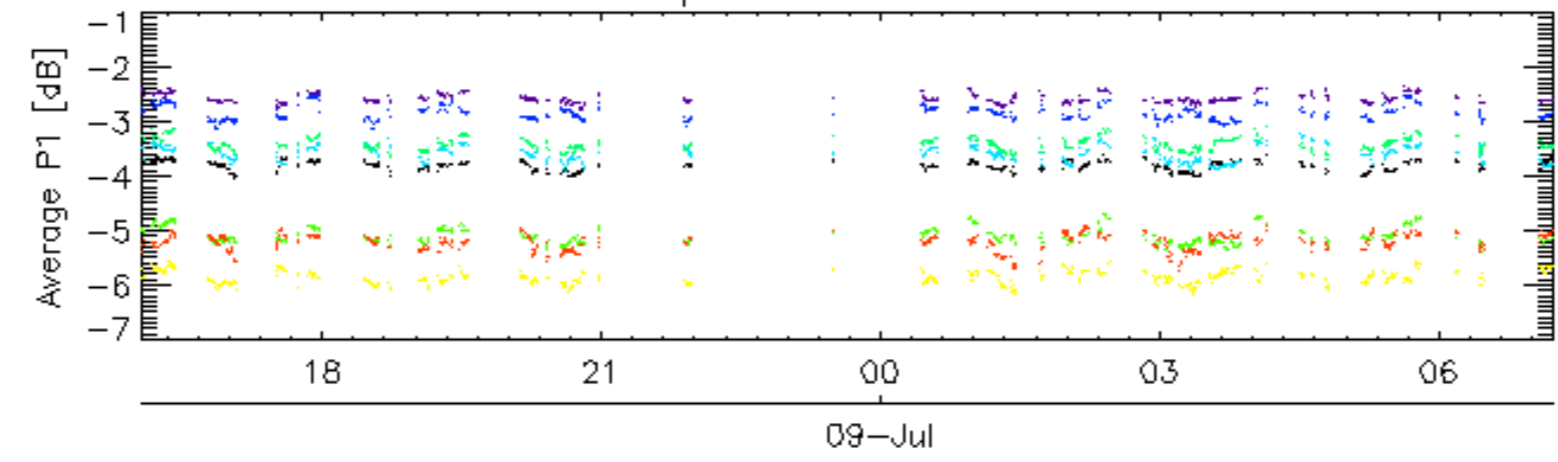
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

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

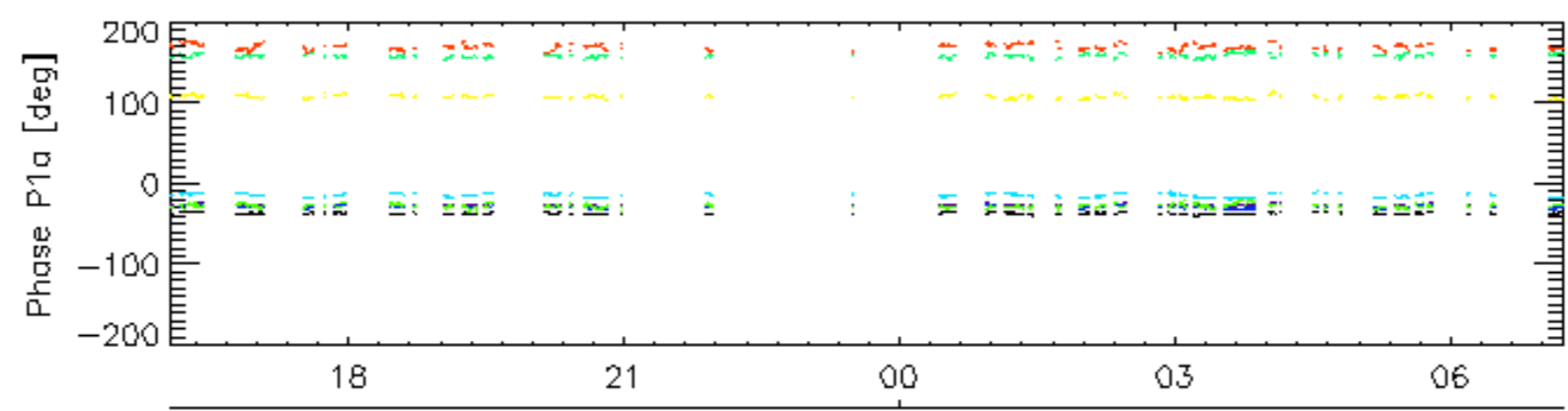
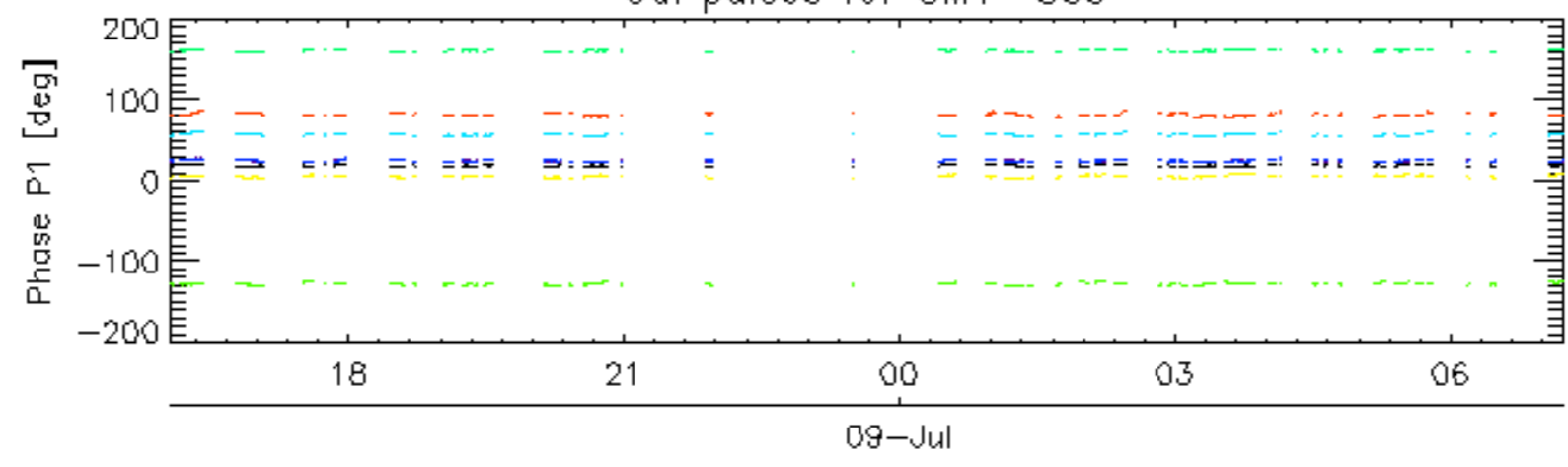
7.6 - Doppler evolution versus ANX for GM1**Evolution Doppler error versus ANX**

<input type="checkbox"/>

Cal pulses for GM1 SS3

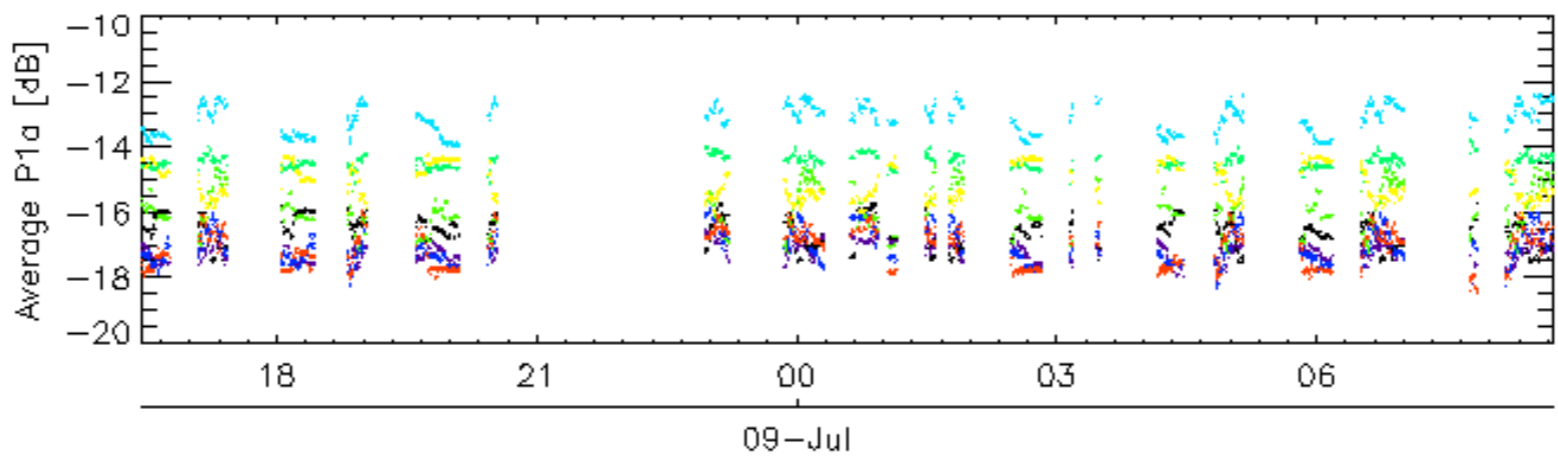
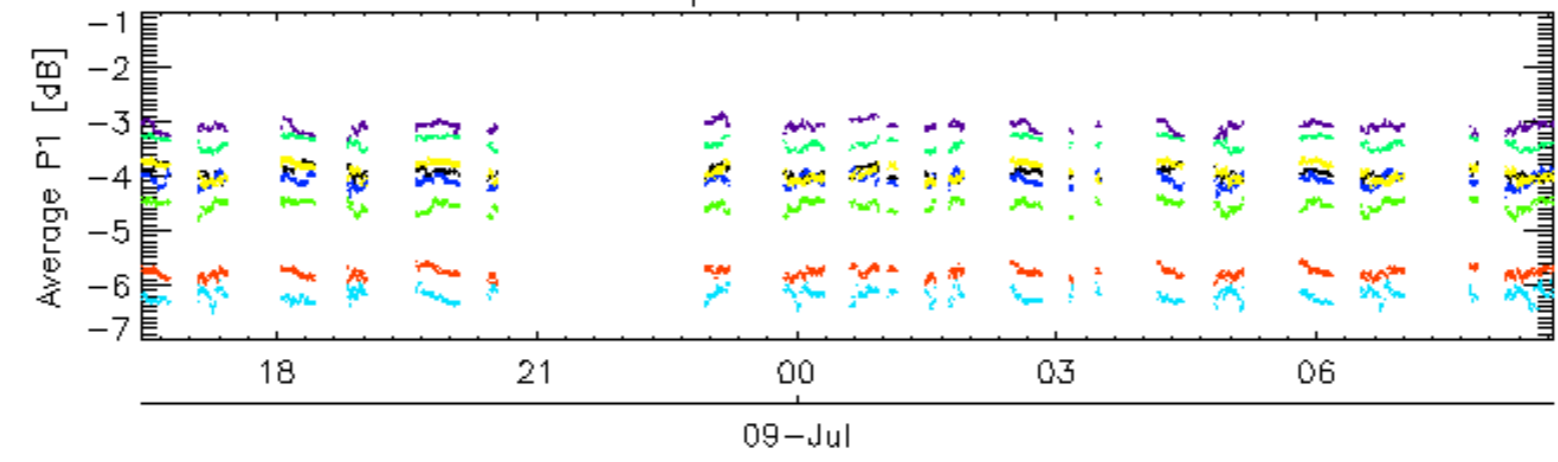


Cal pulses for GM1 SS3

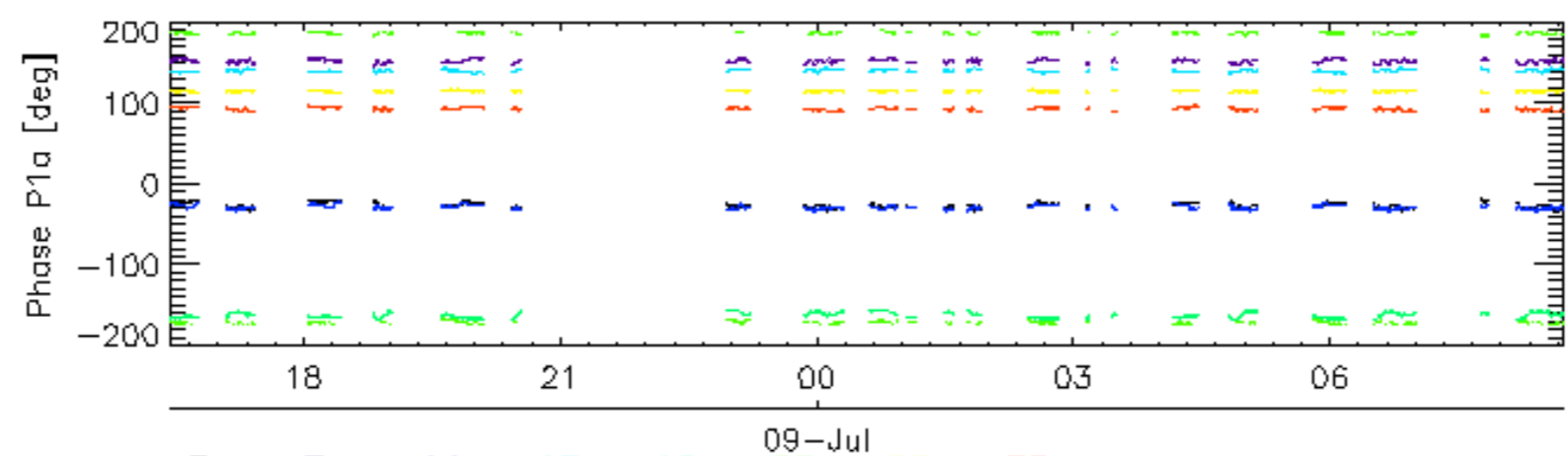
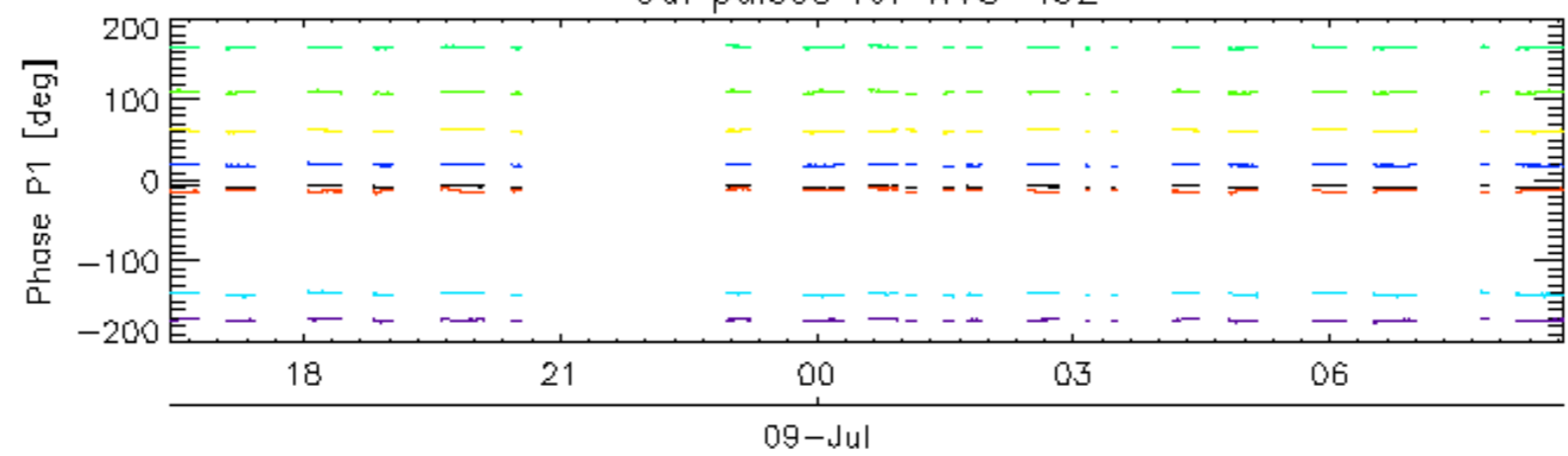


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30 09-Jul

Cal pulses for WVS IS2

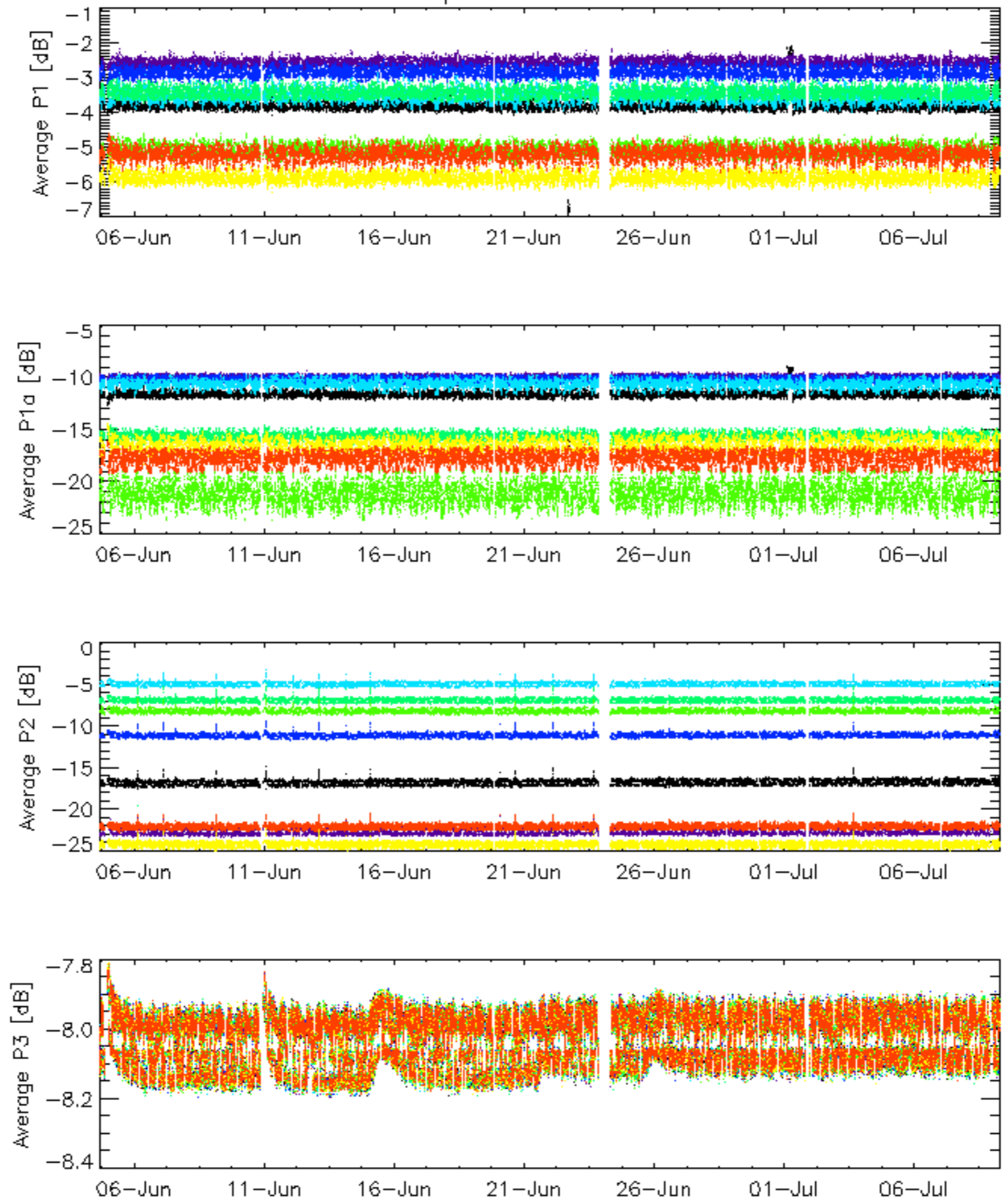


Cal pulses for WVS IS2



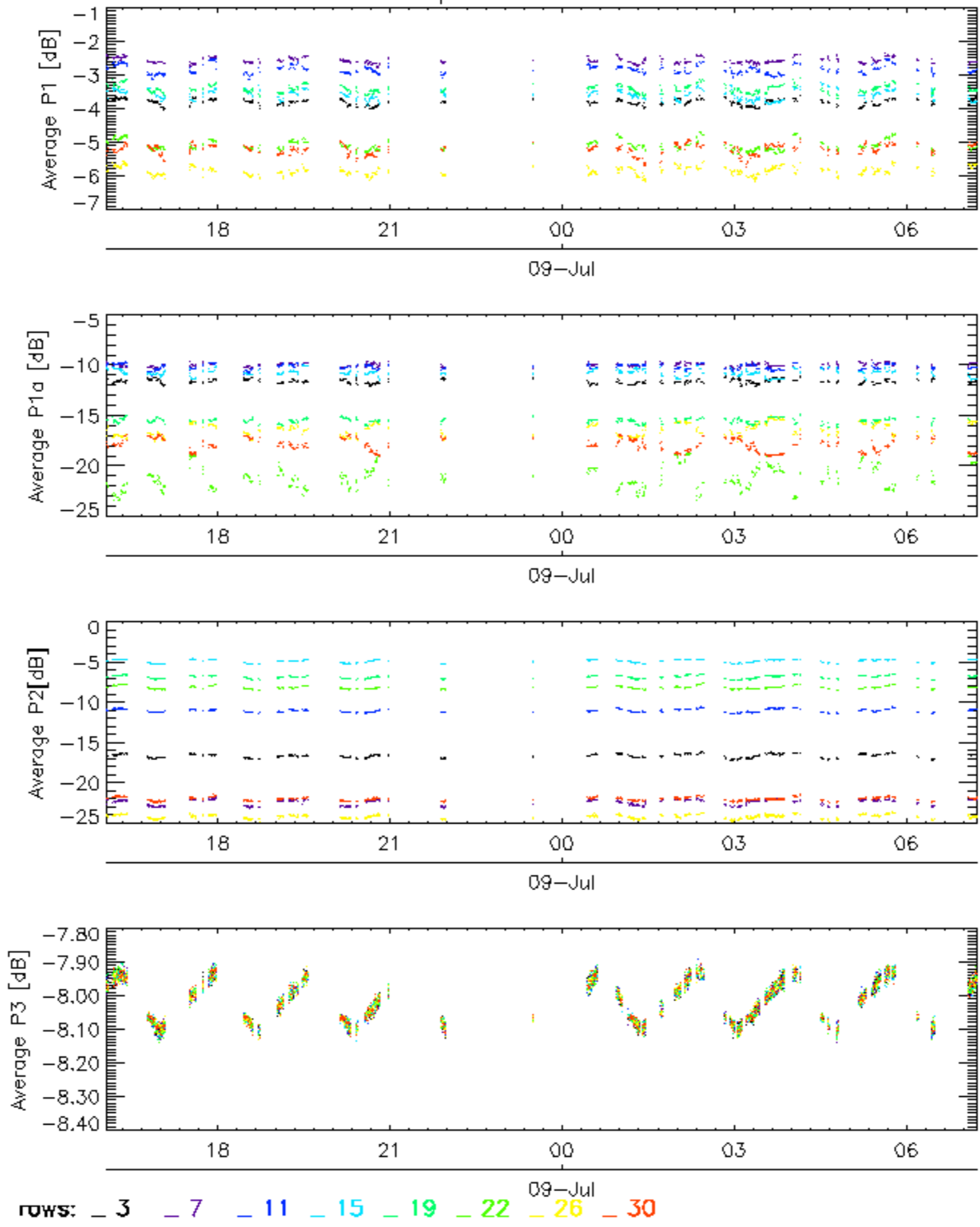
rows: **3** **7** **11** **15** **19** **22** **26** **30**

Cal pulses for GM1 SS3

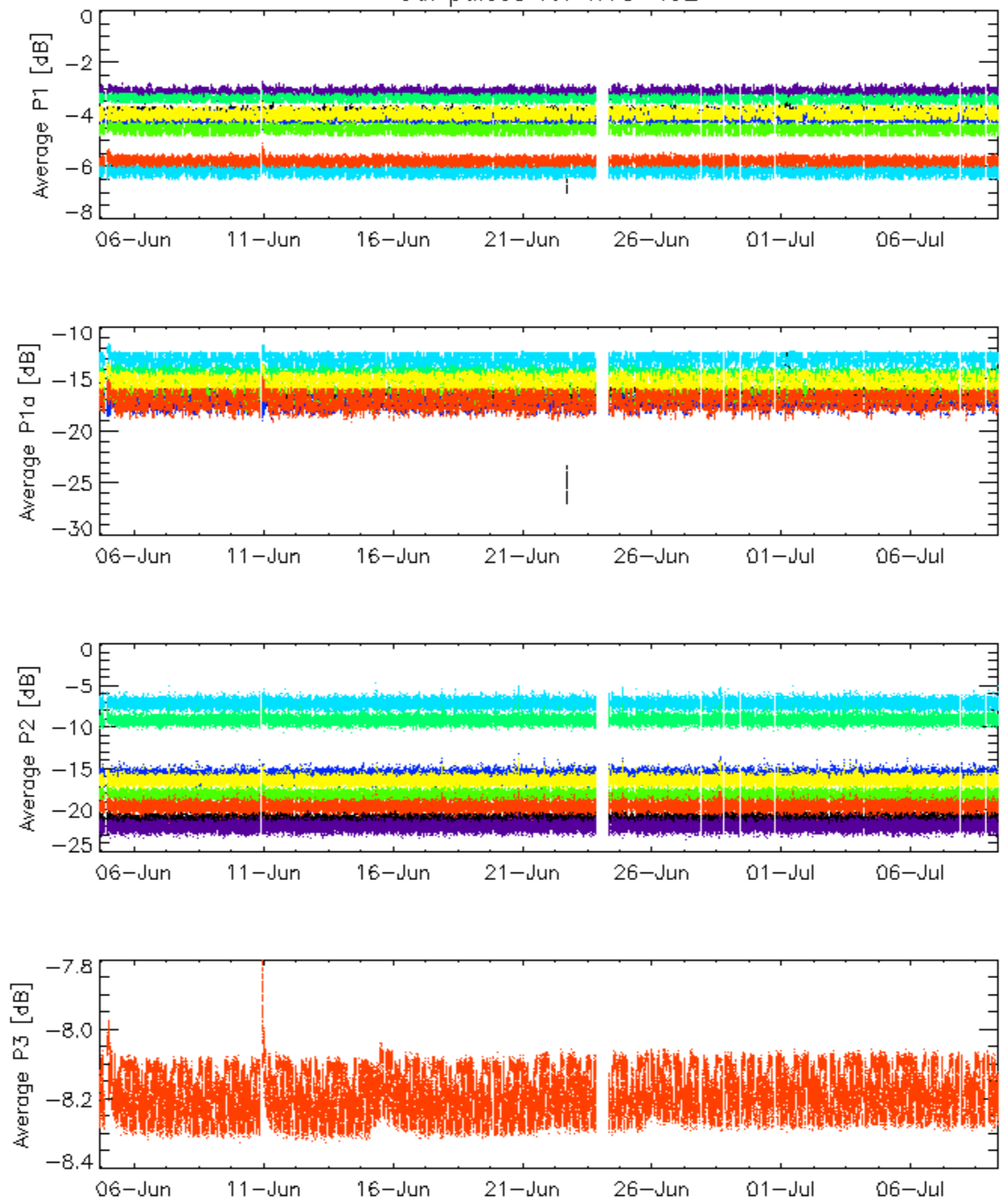


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

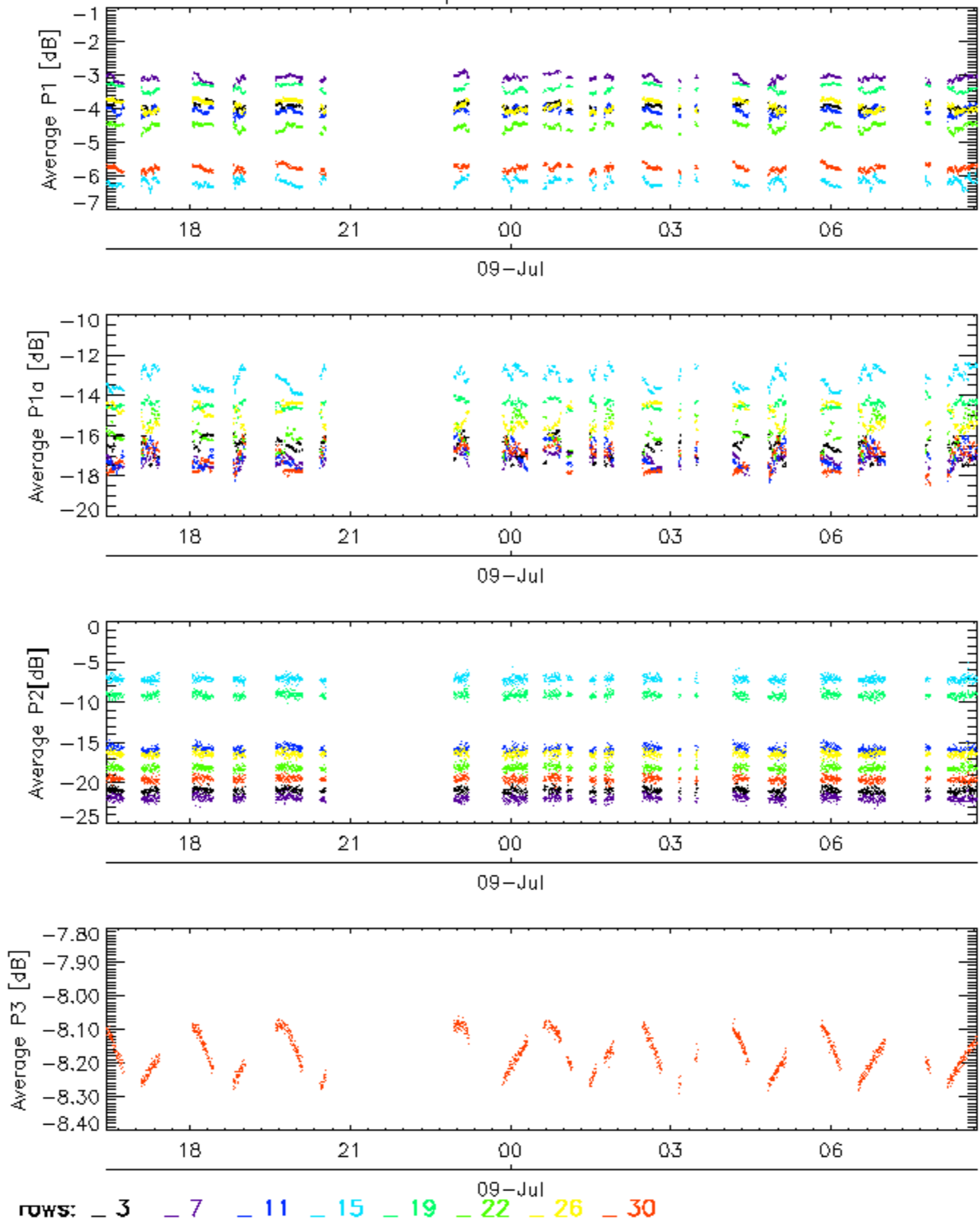


Cal pulses for WVS IS2

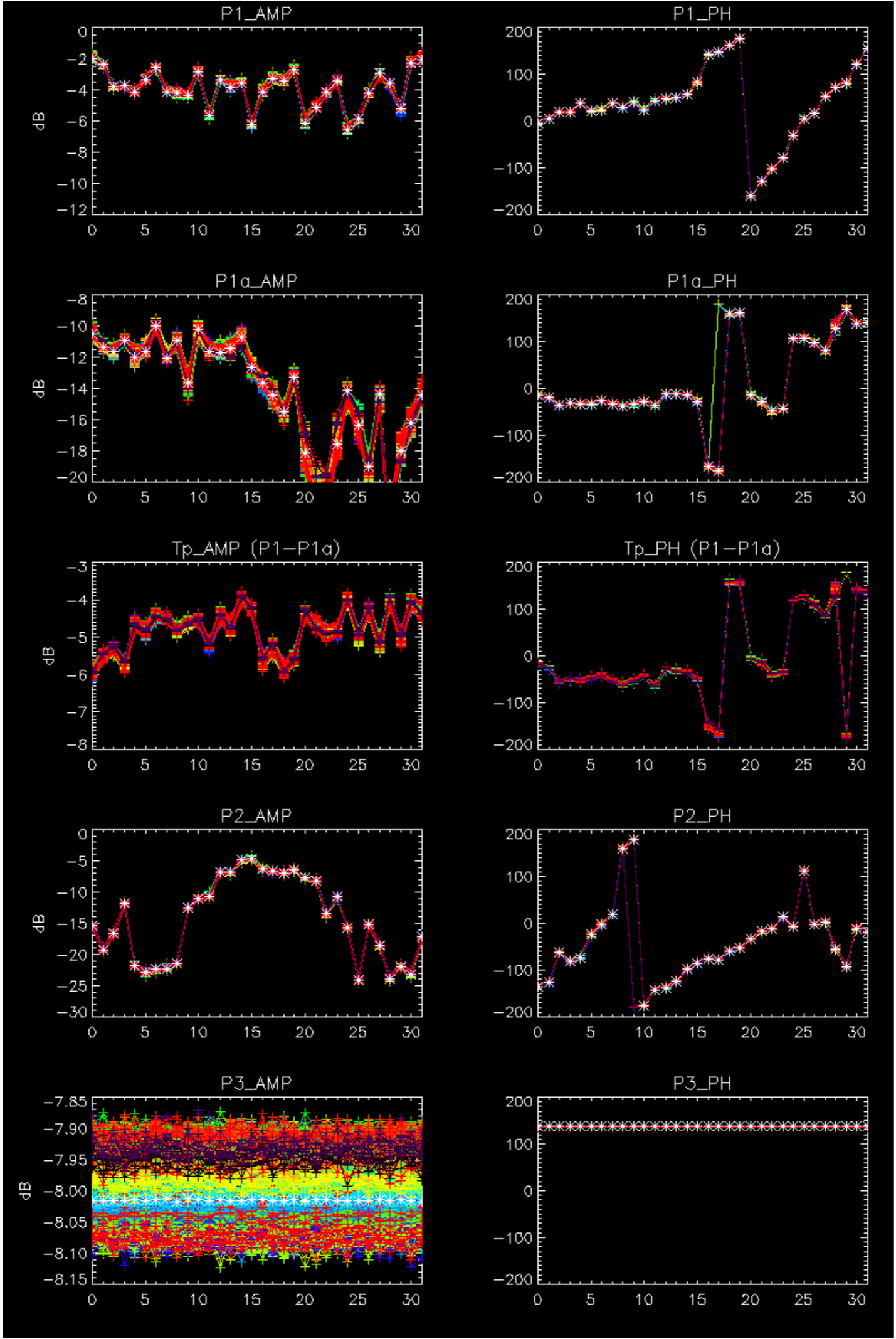


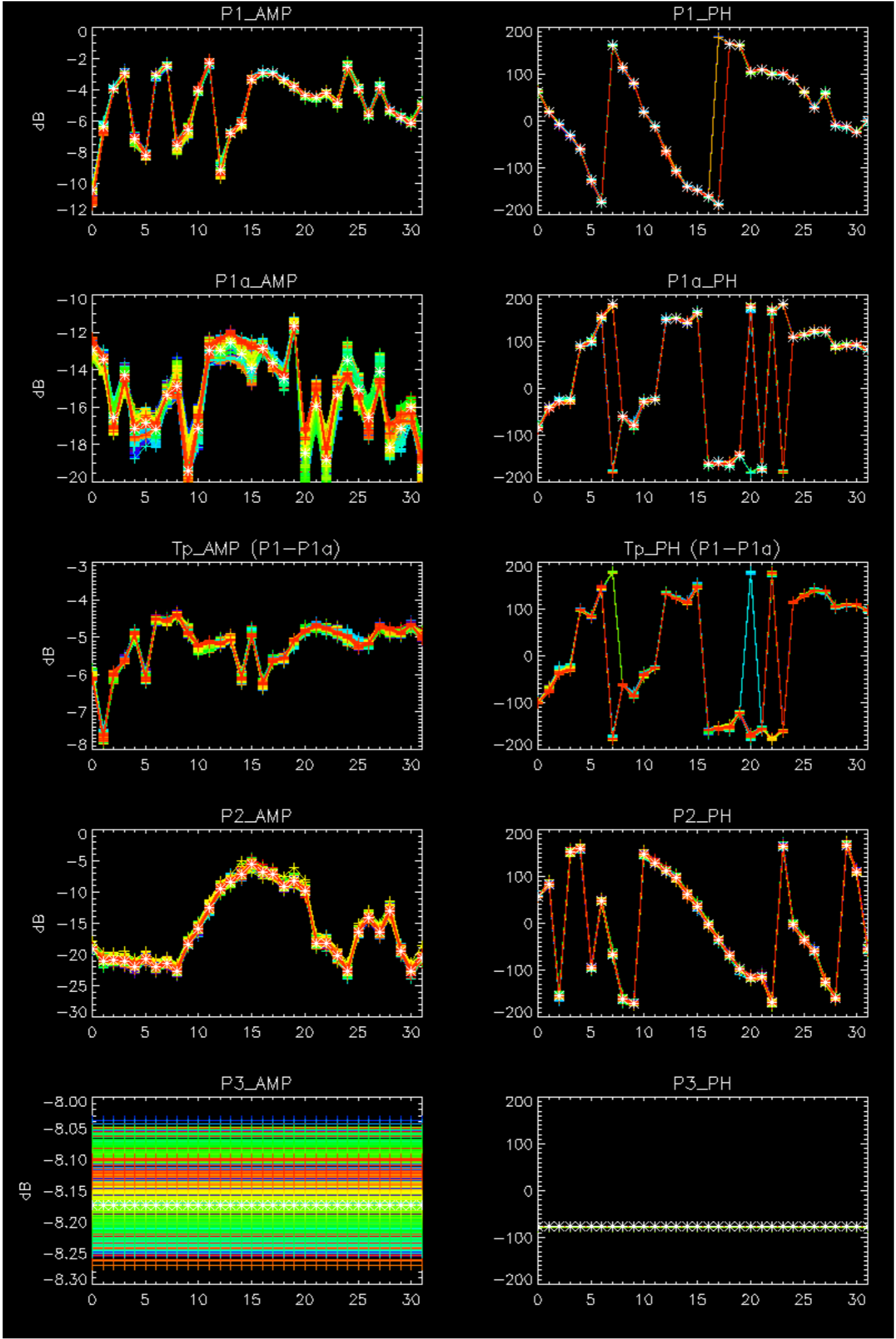
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



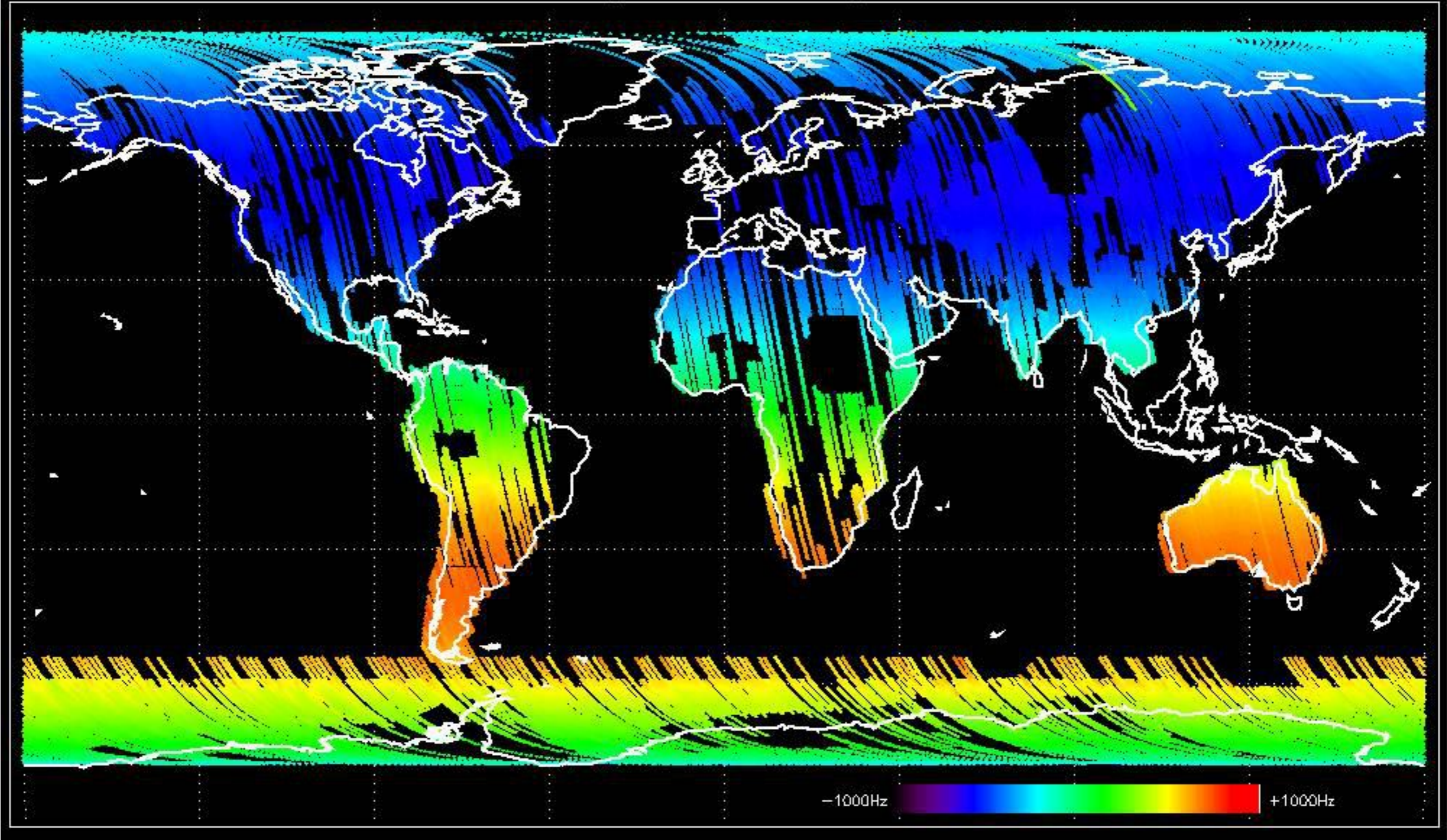
No anomalies observed.



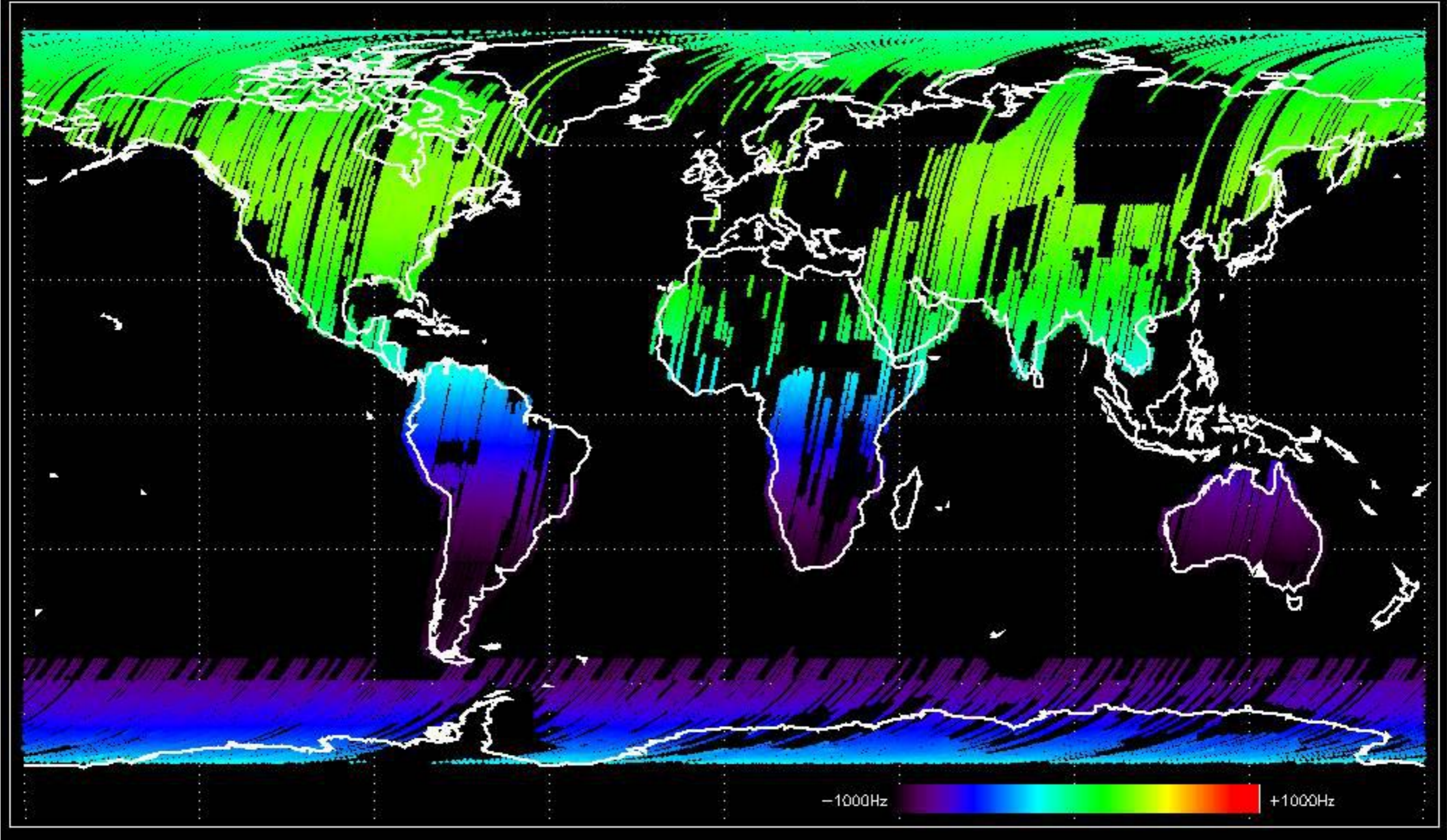


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

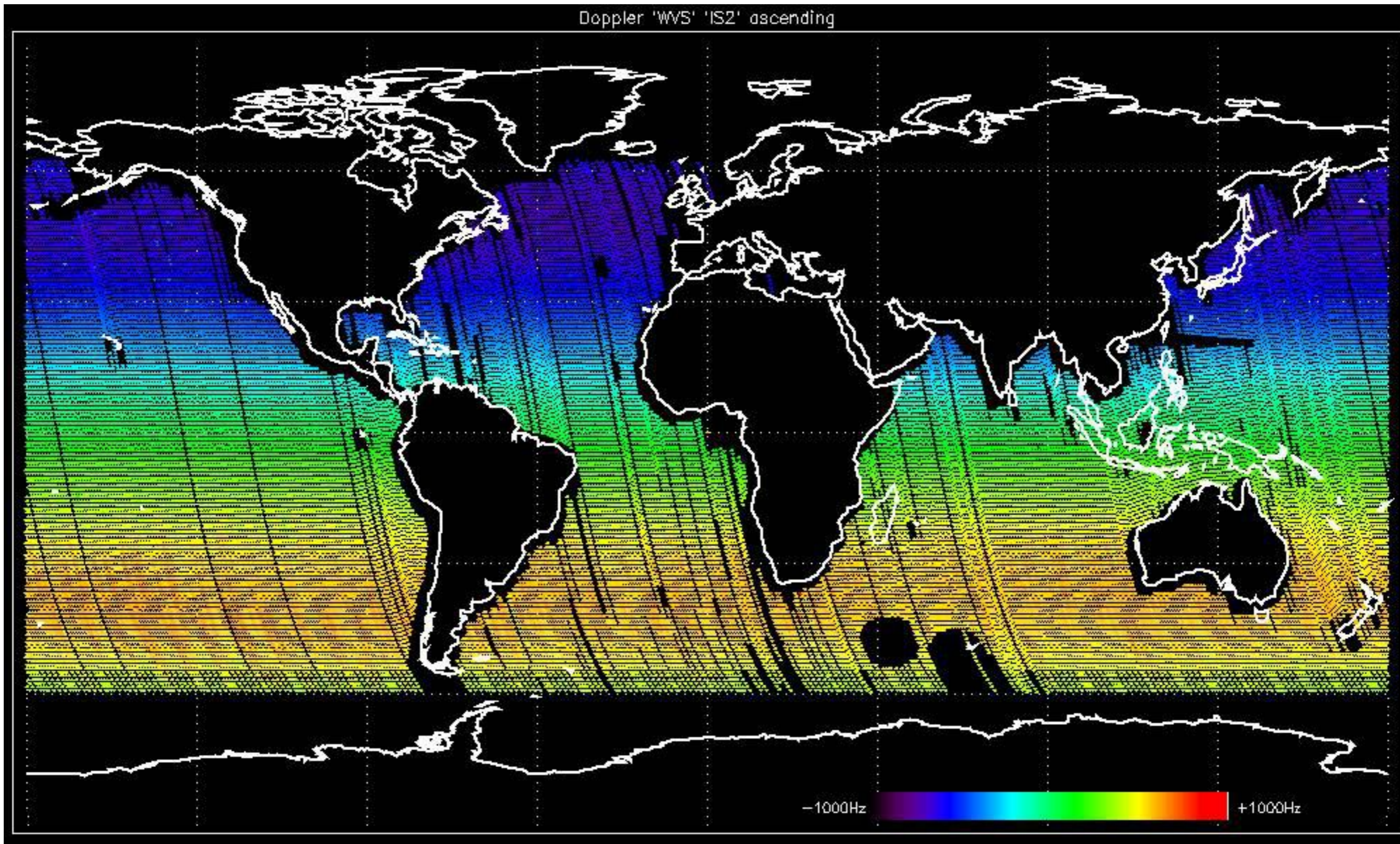
Doppler 'GM1' 'SS1' ascending



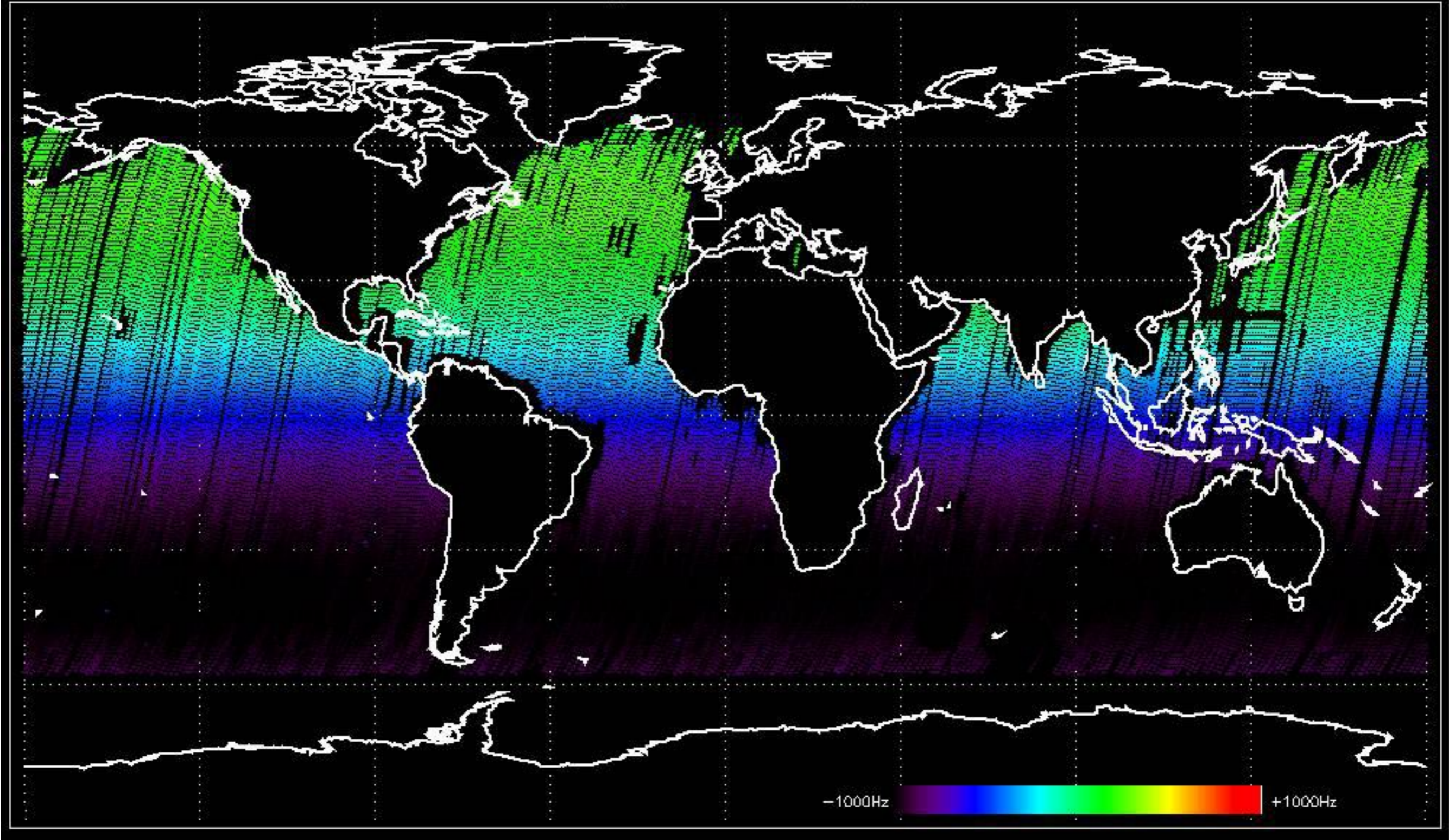
Doppler 'GM1' 'SS1' descending

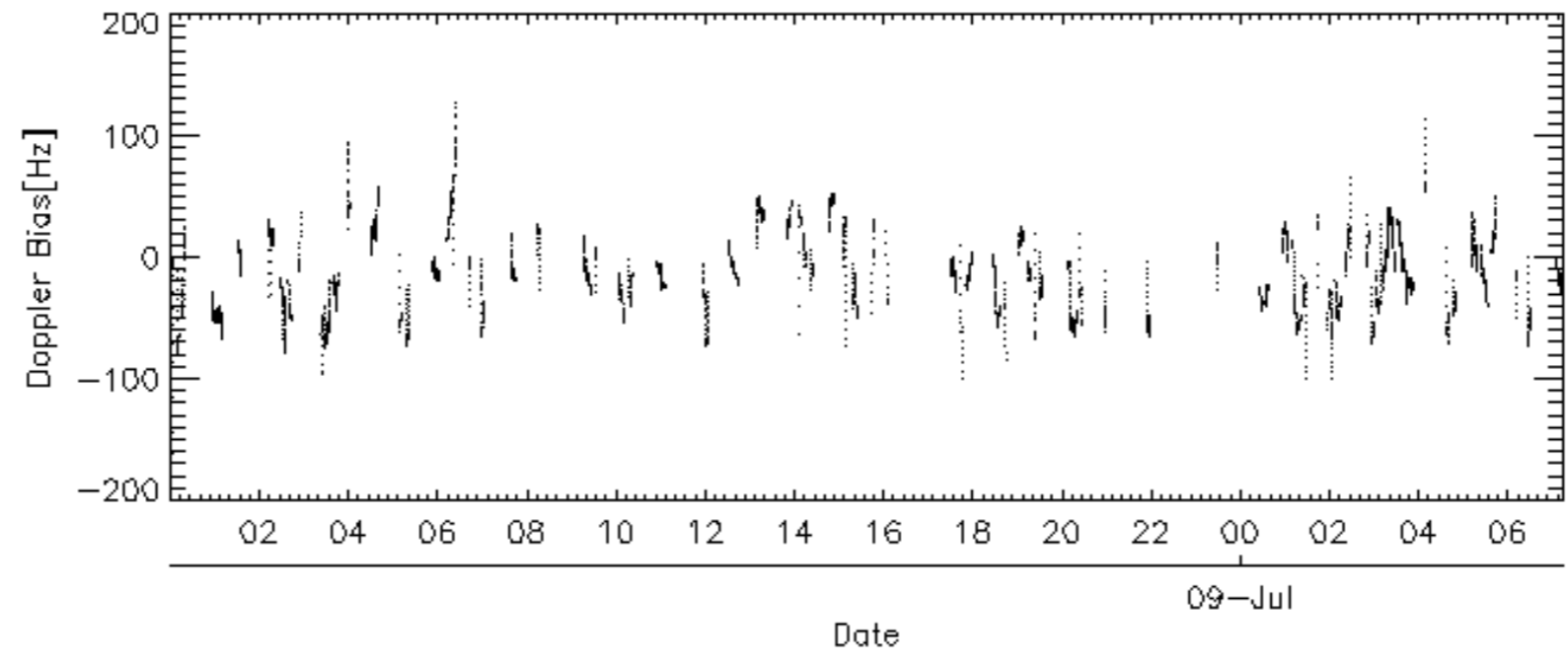
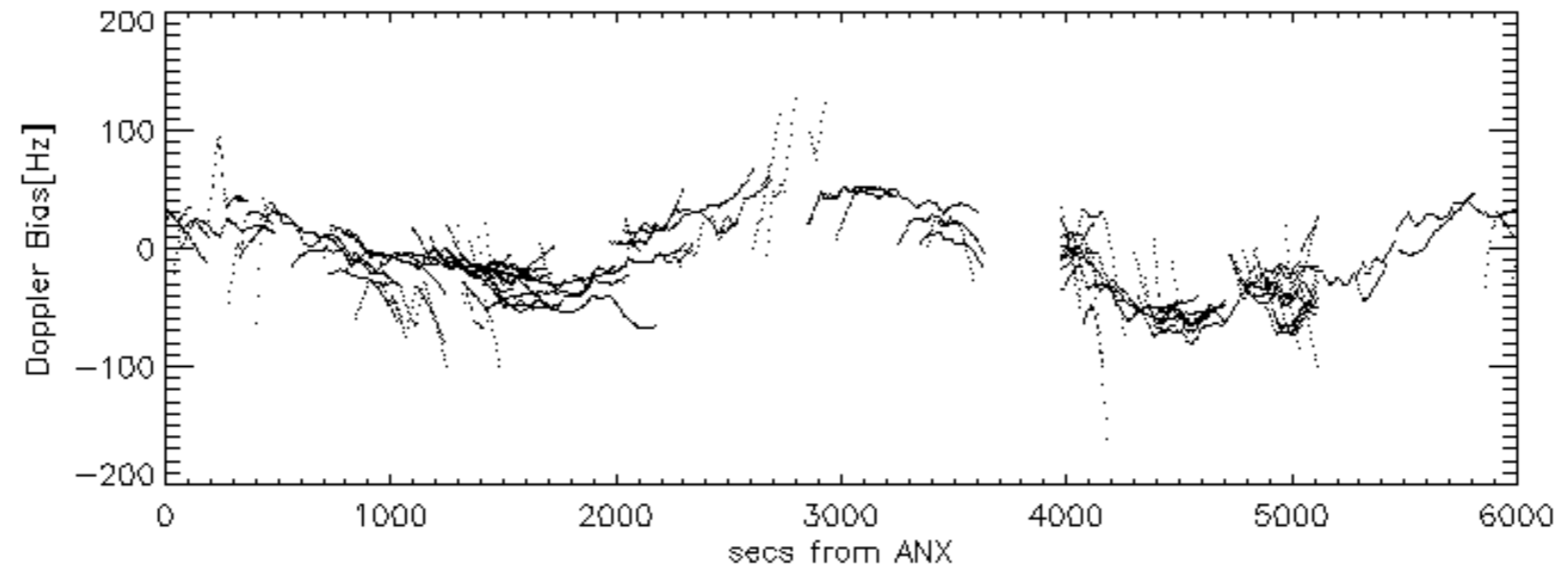
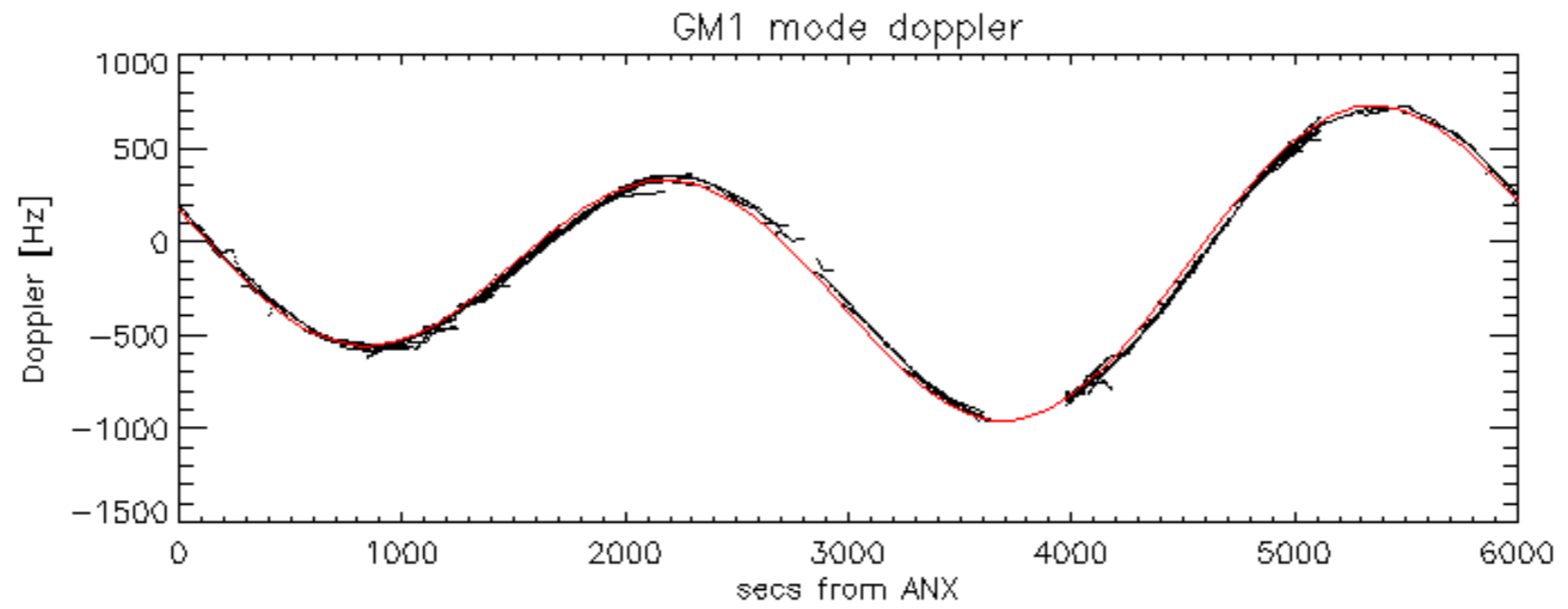


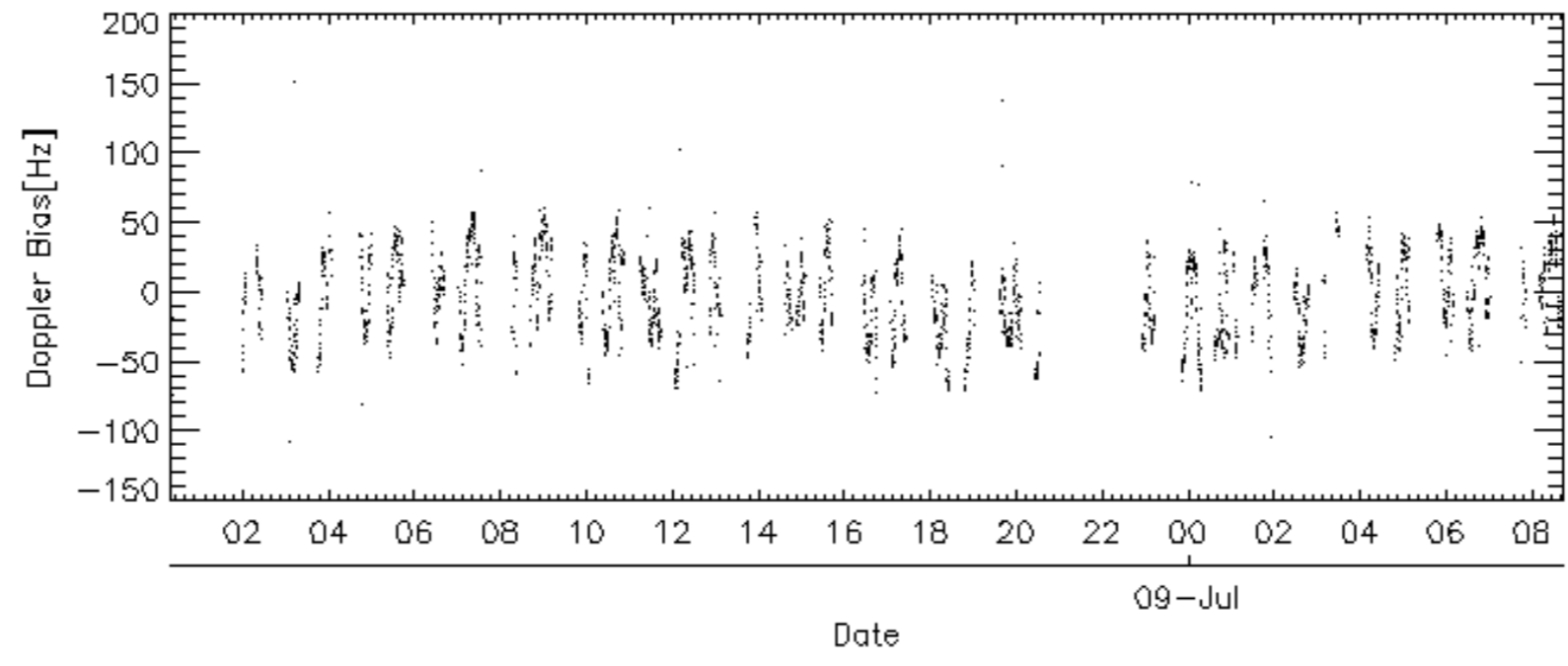
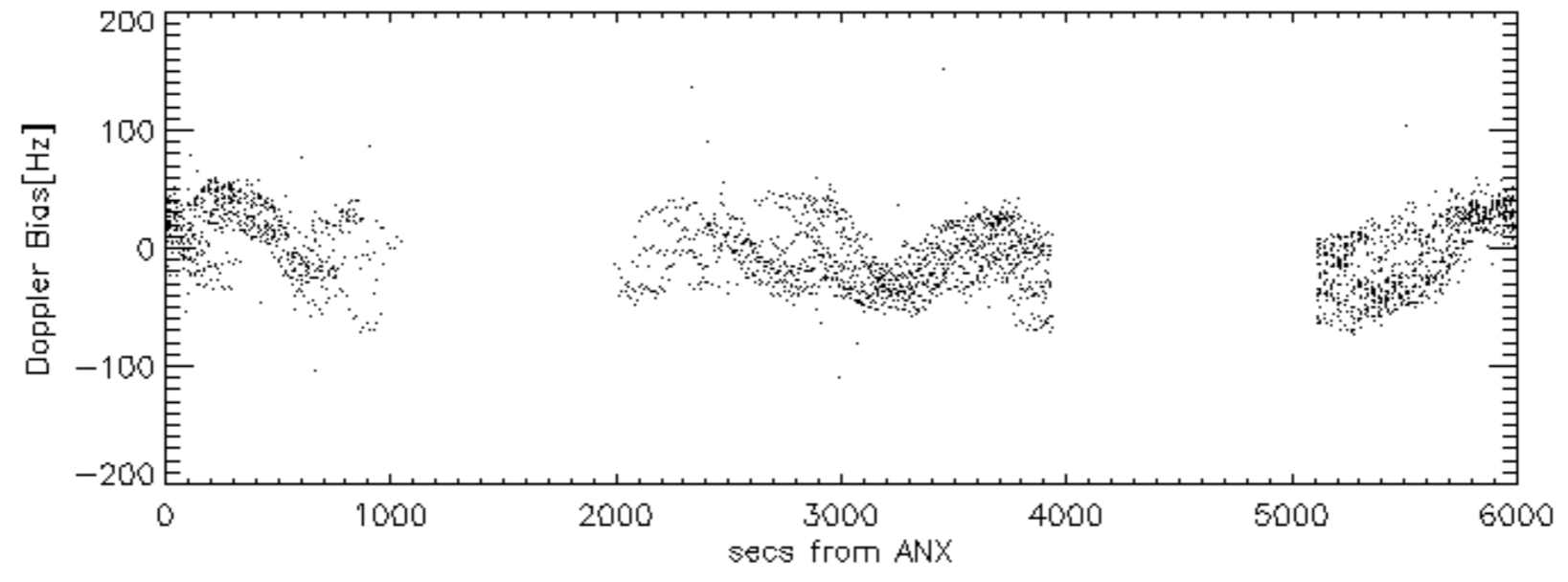
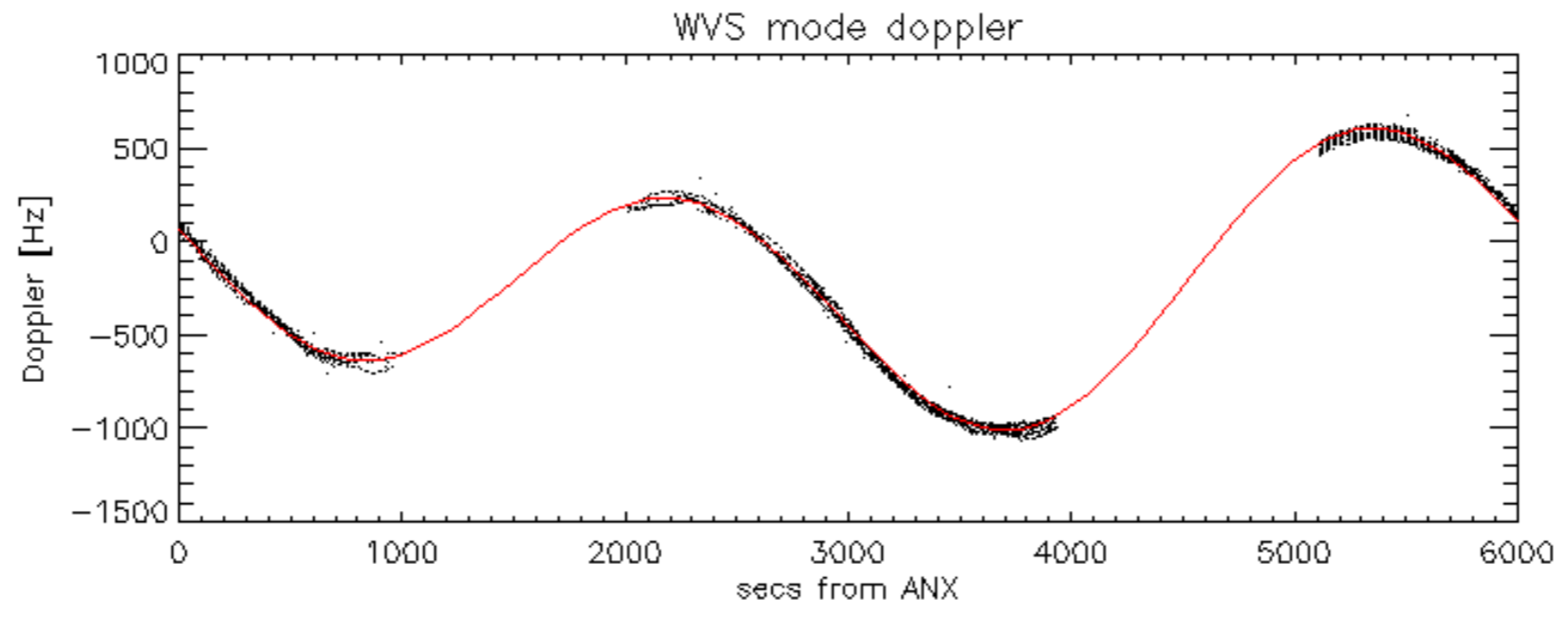
Doppler 'WVS' 'IS2' ascending



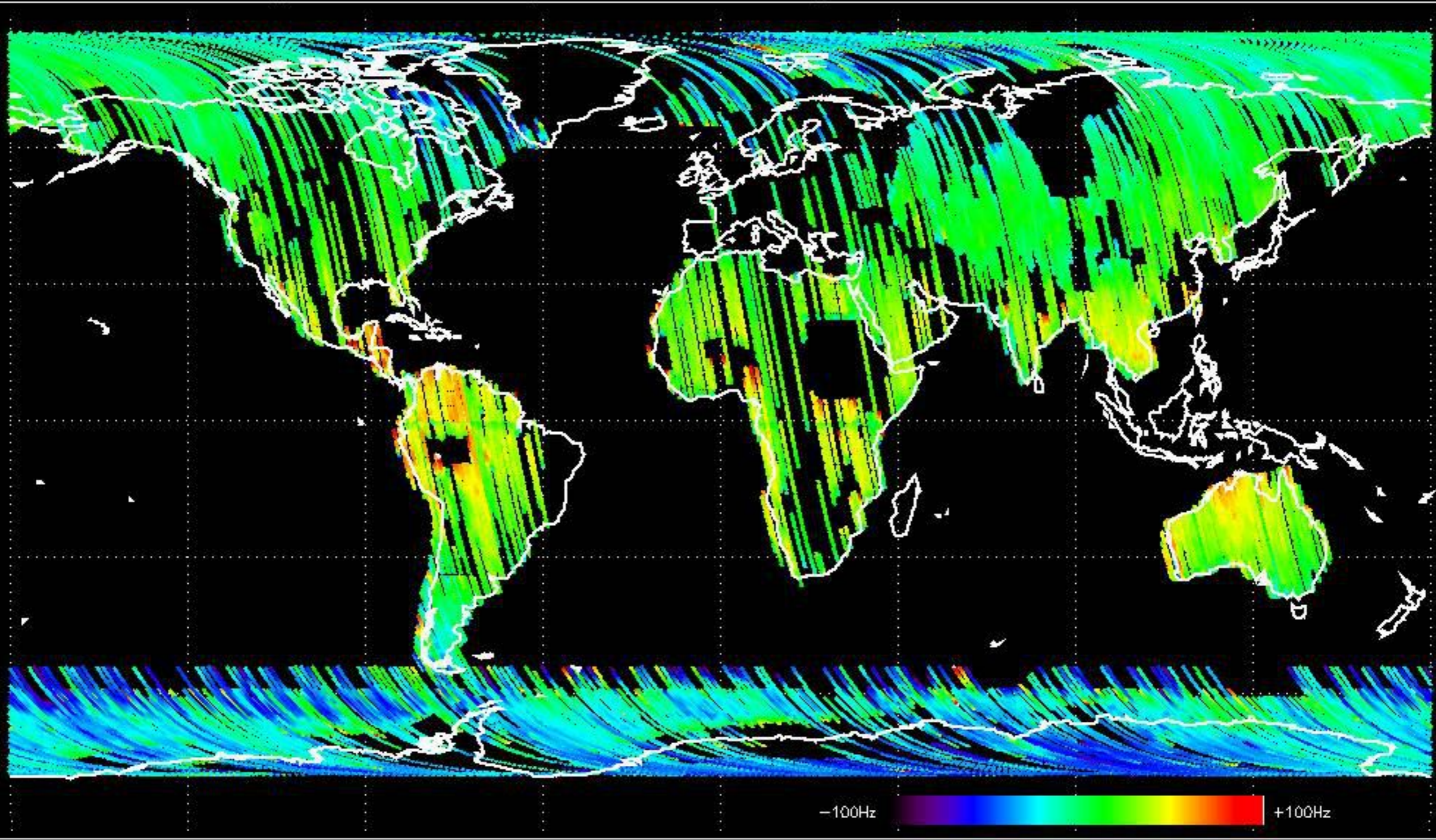
Doppler 'WVS' 'IS2' descending



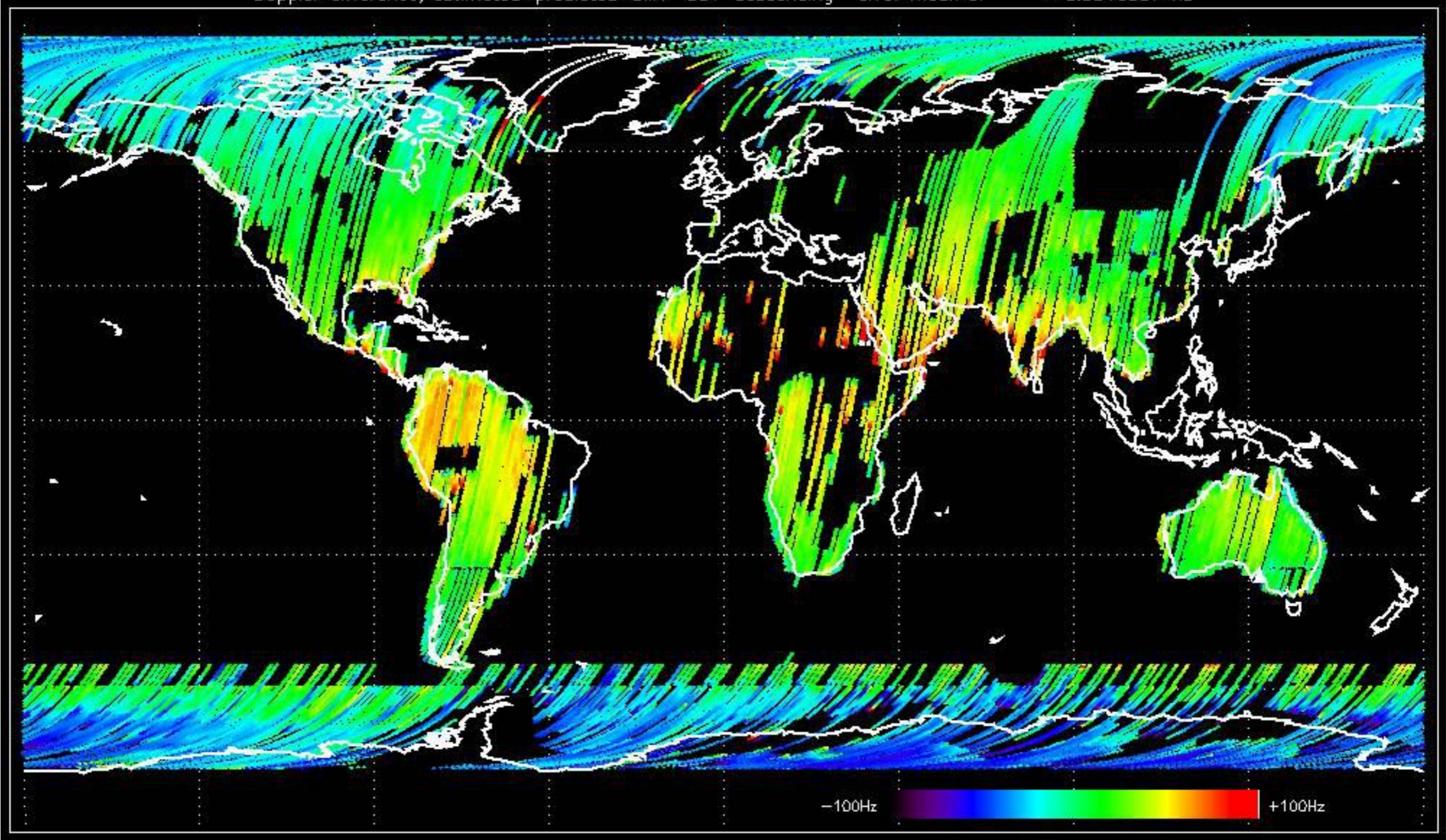




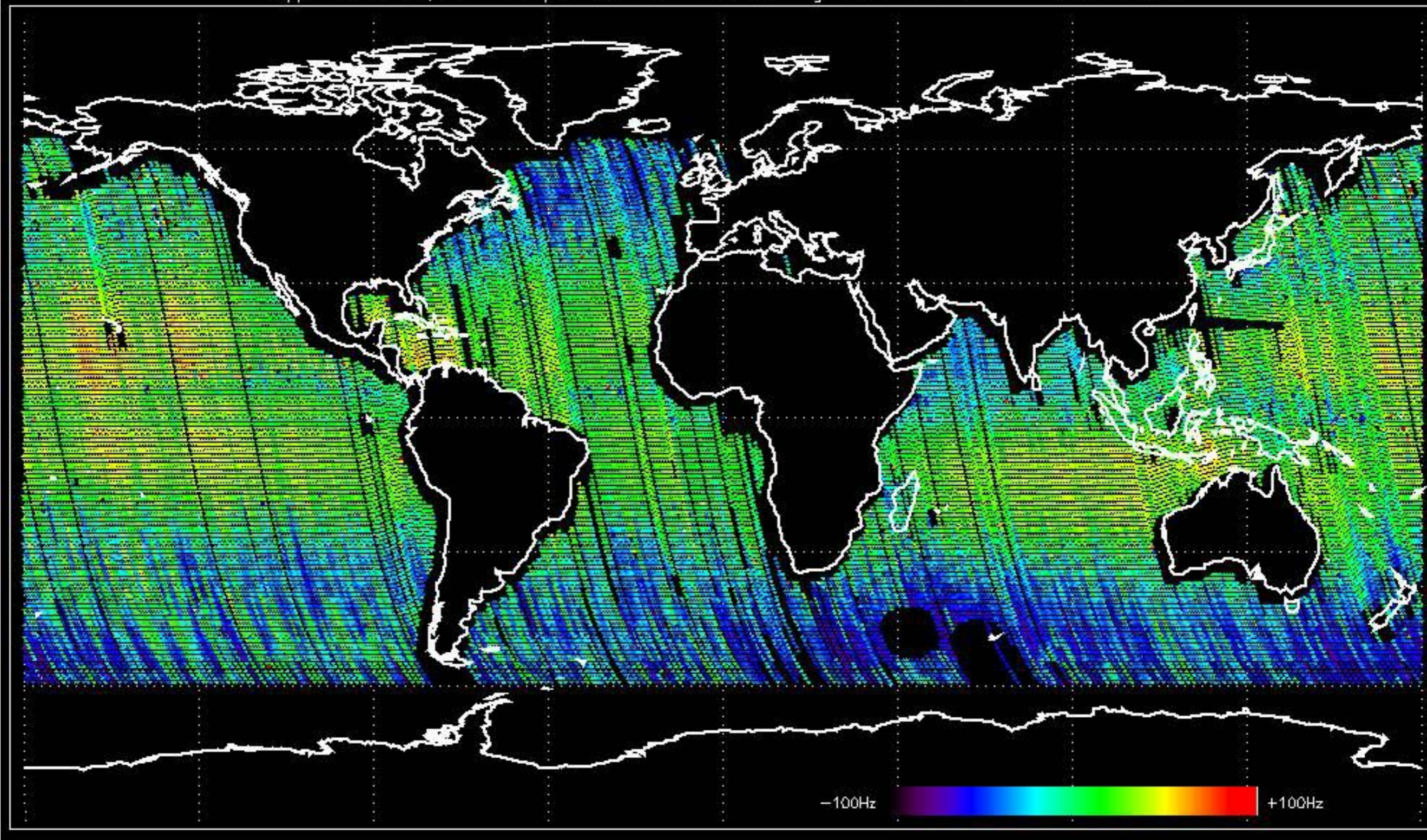
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -18.336335 Hz



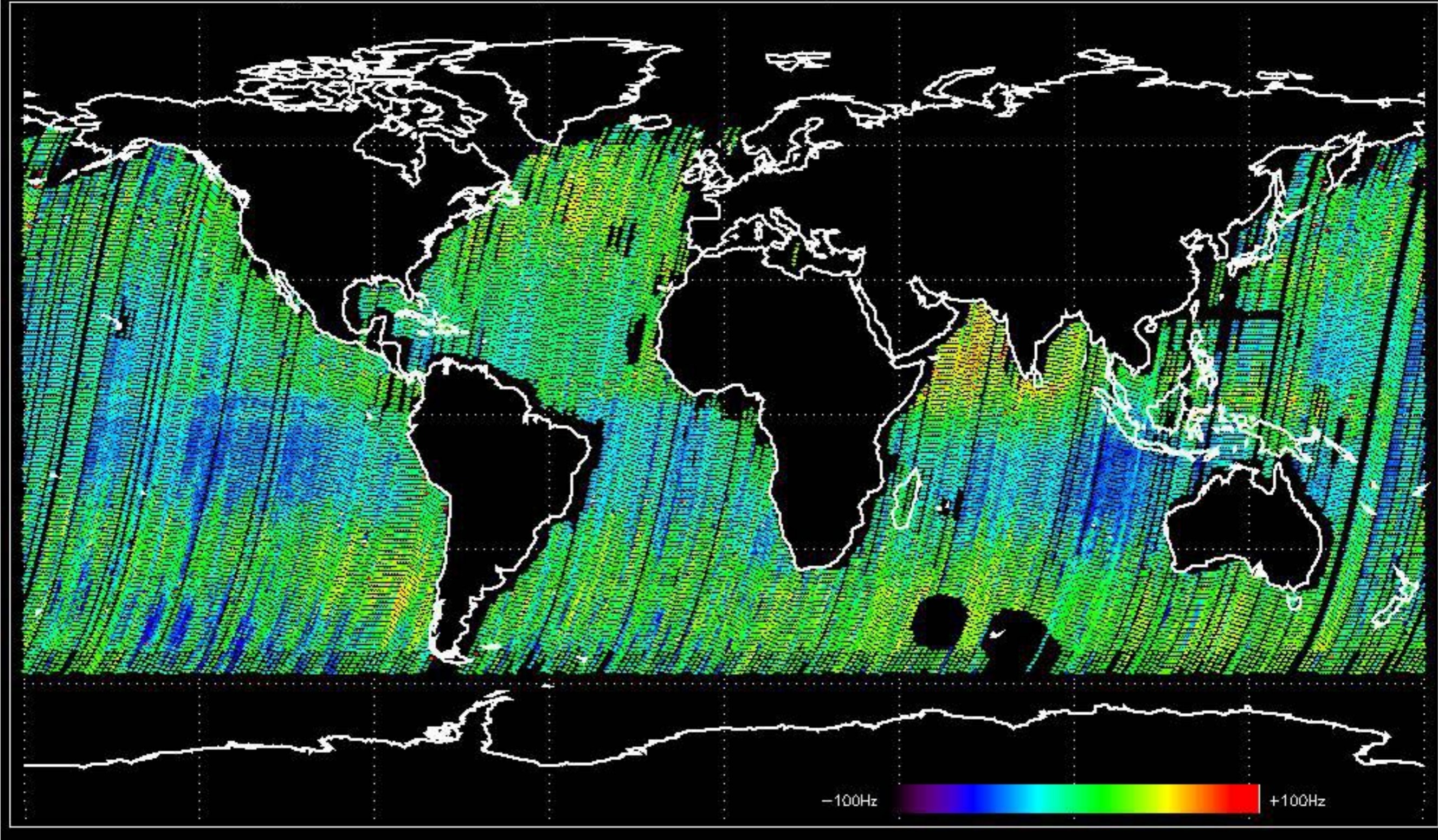
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -8.5510857 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -5.3593948 Hz

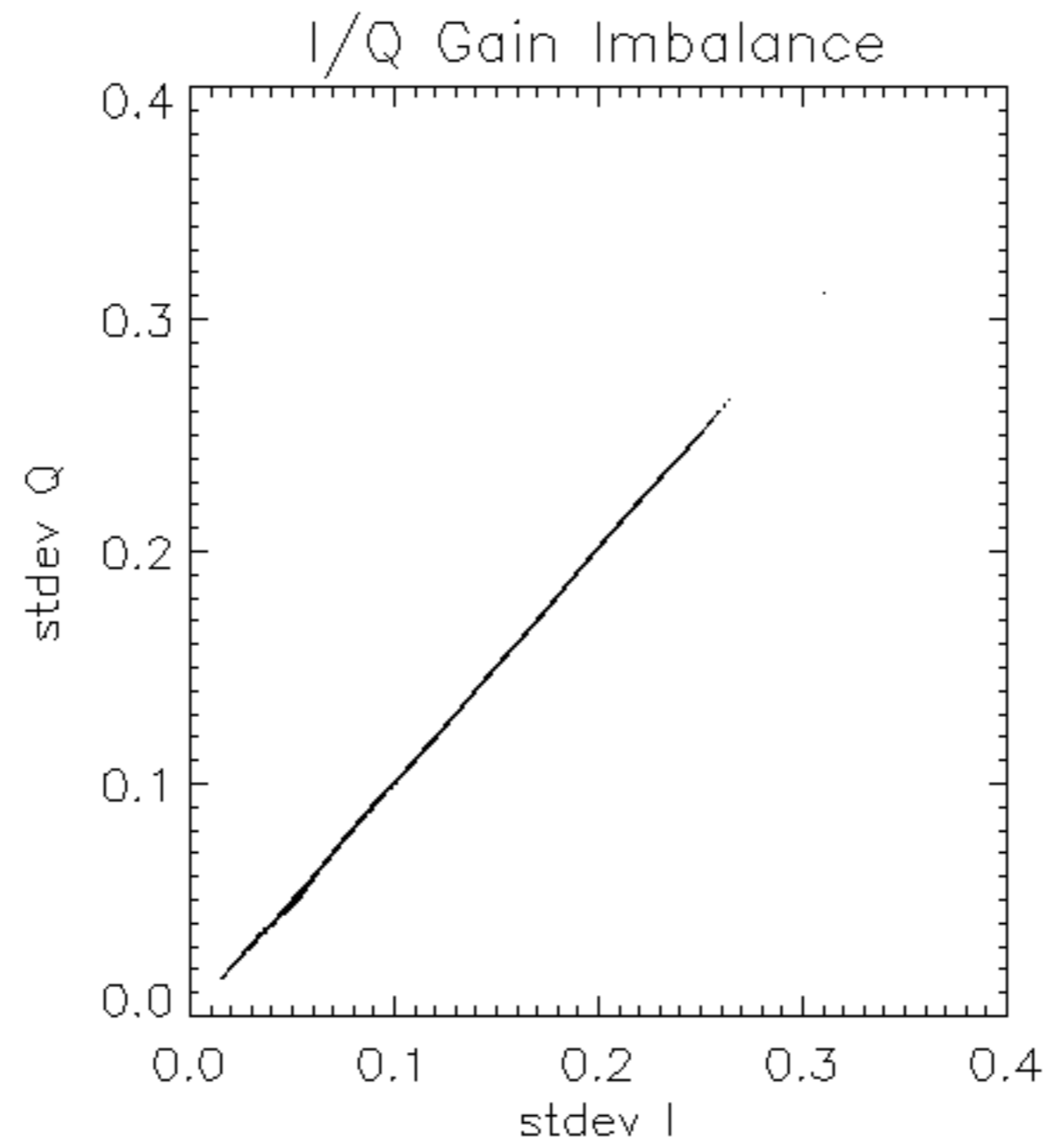


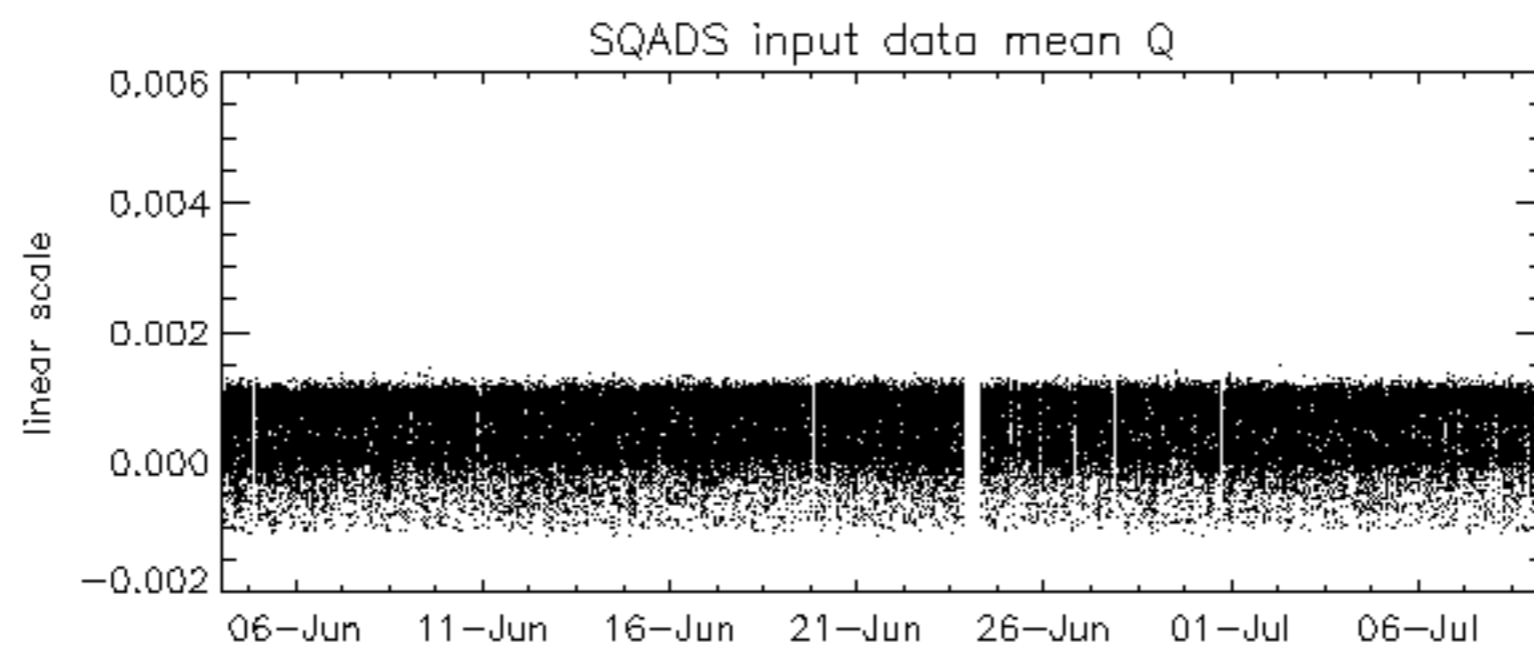
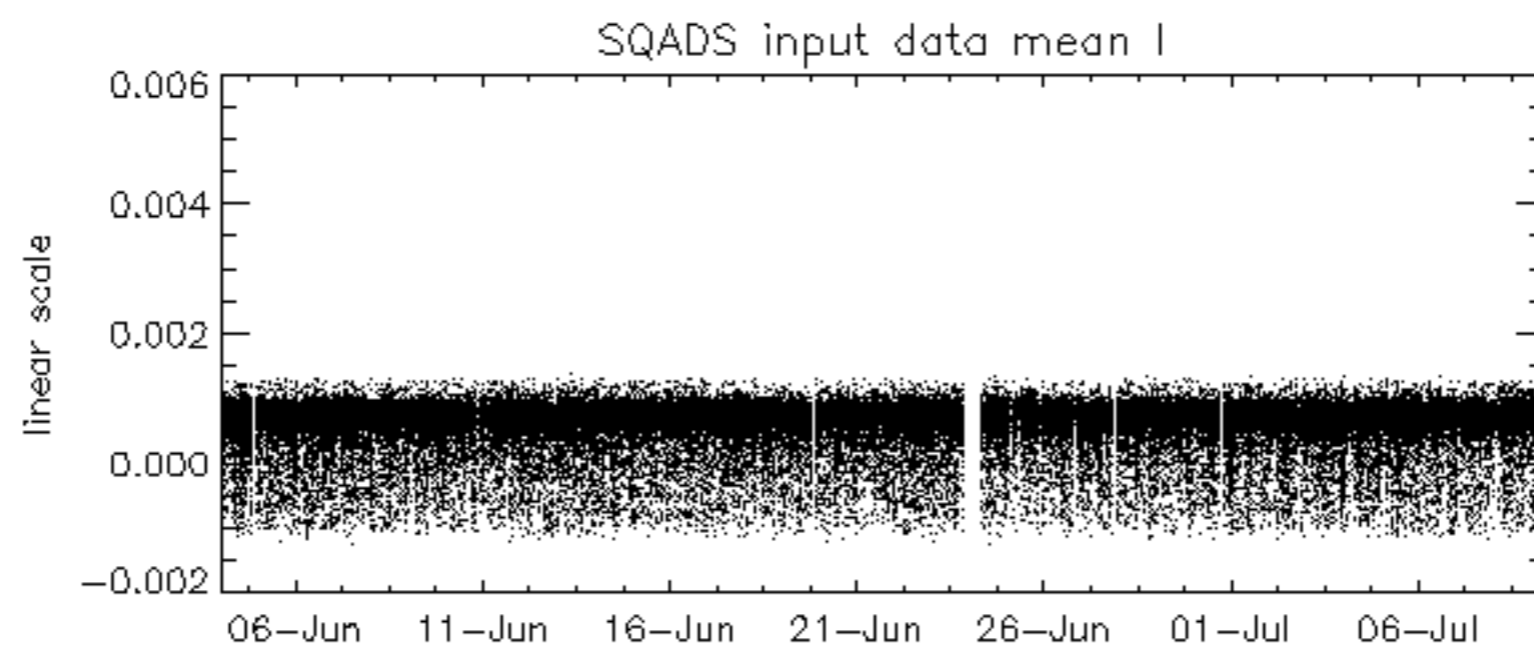
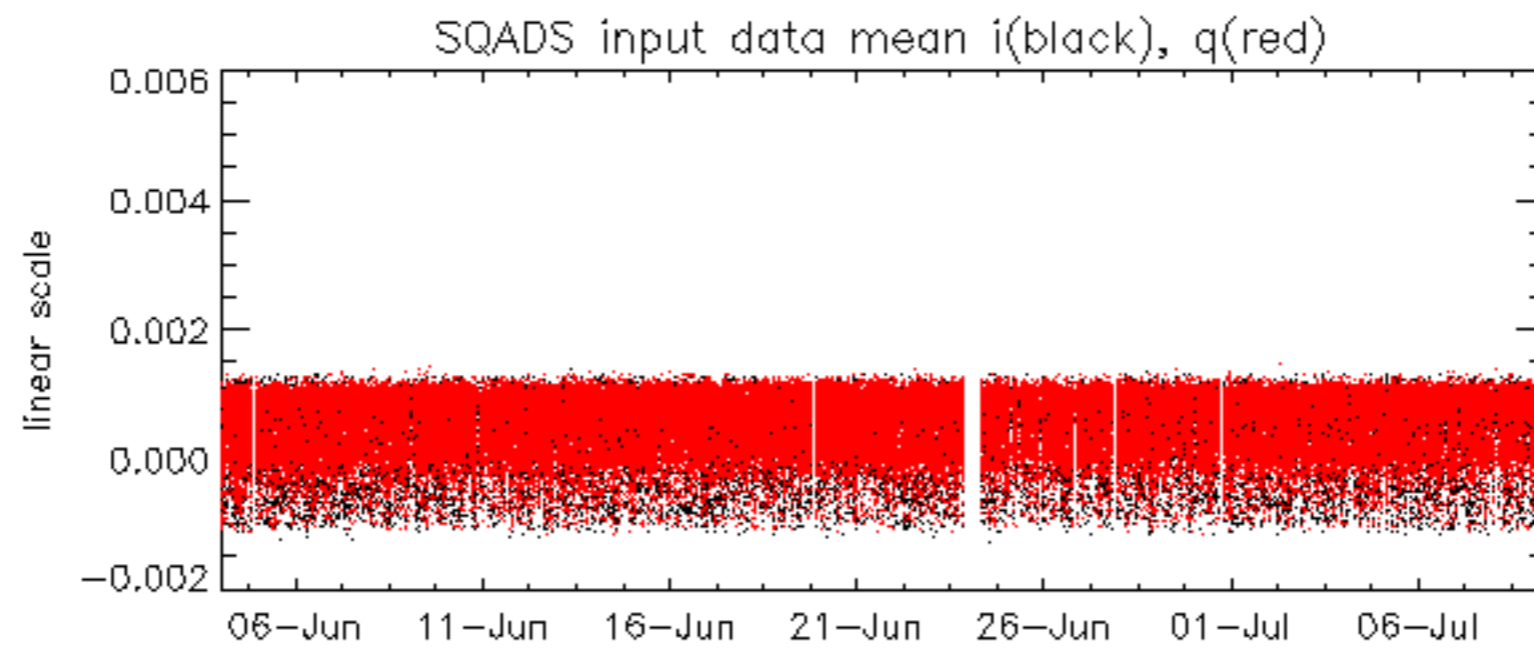
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -11.326809 Hz

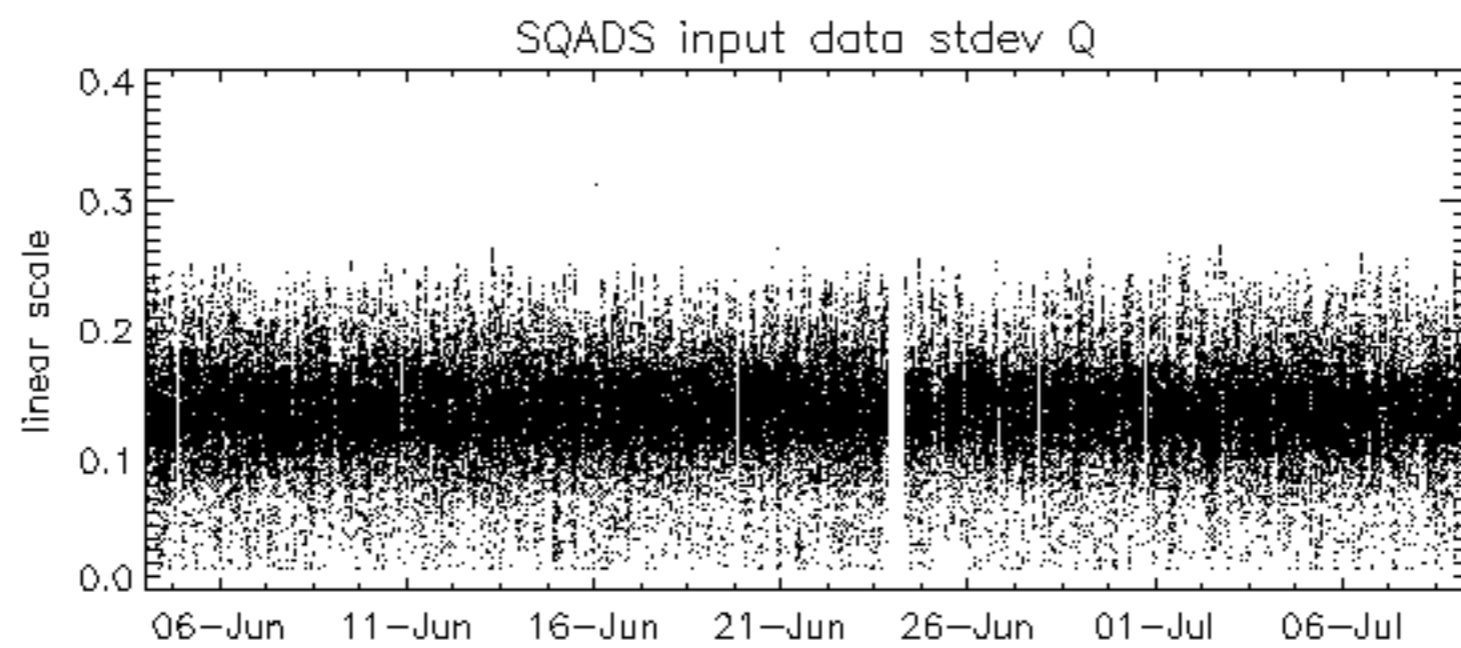
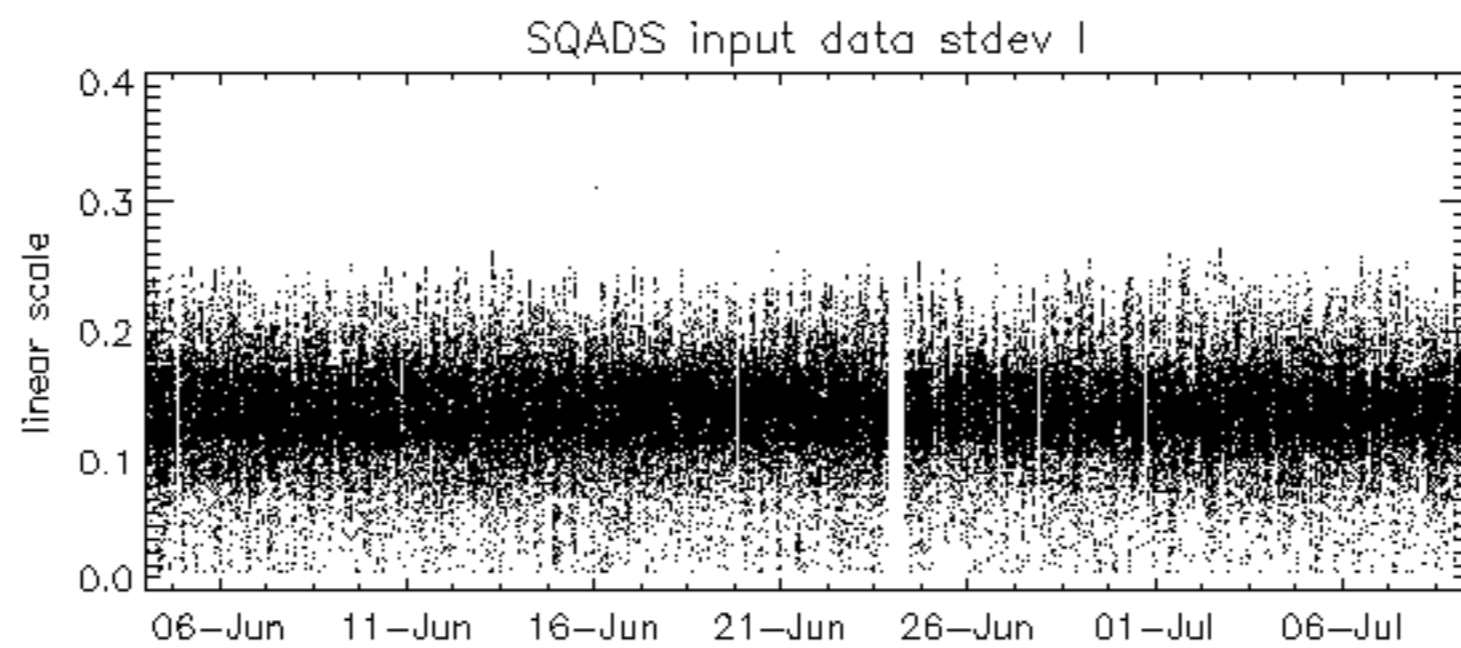
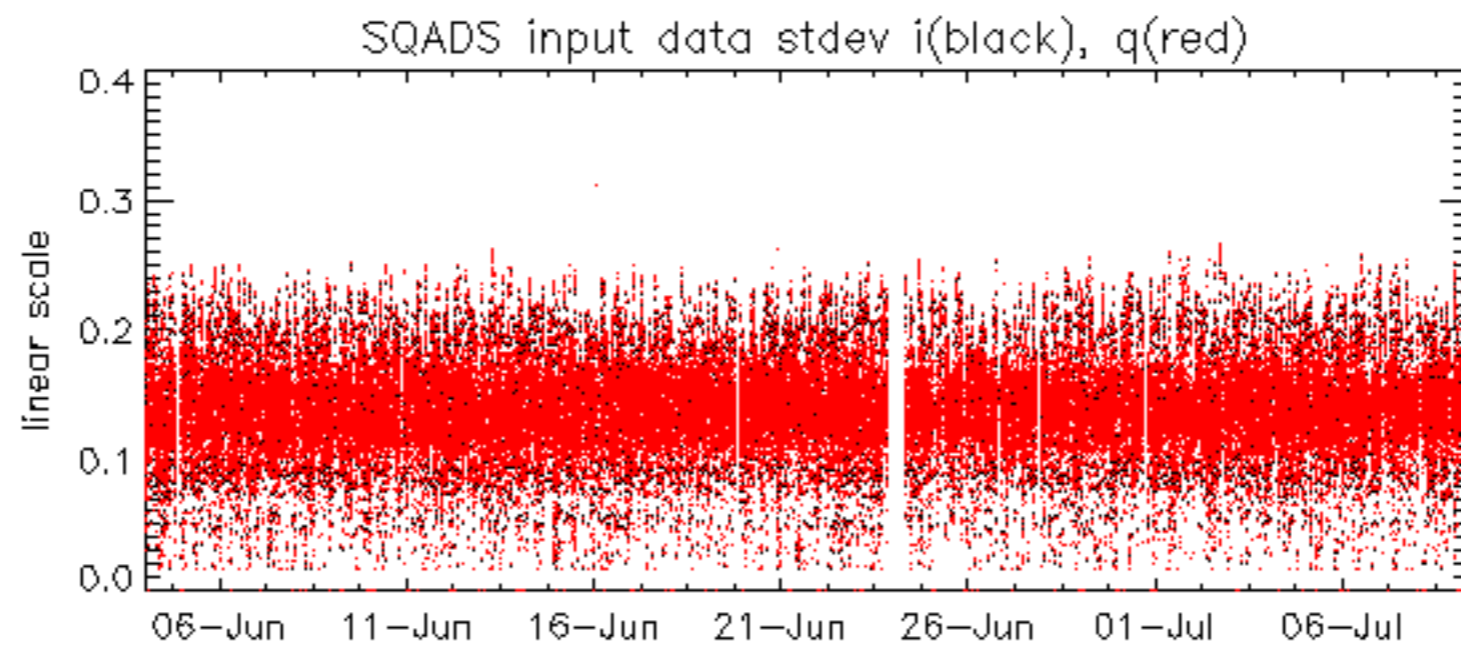


No anomalies observed on available MS products:

No anomalies observed.



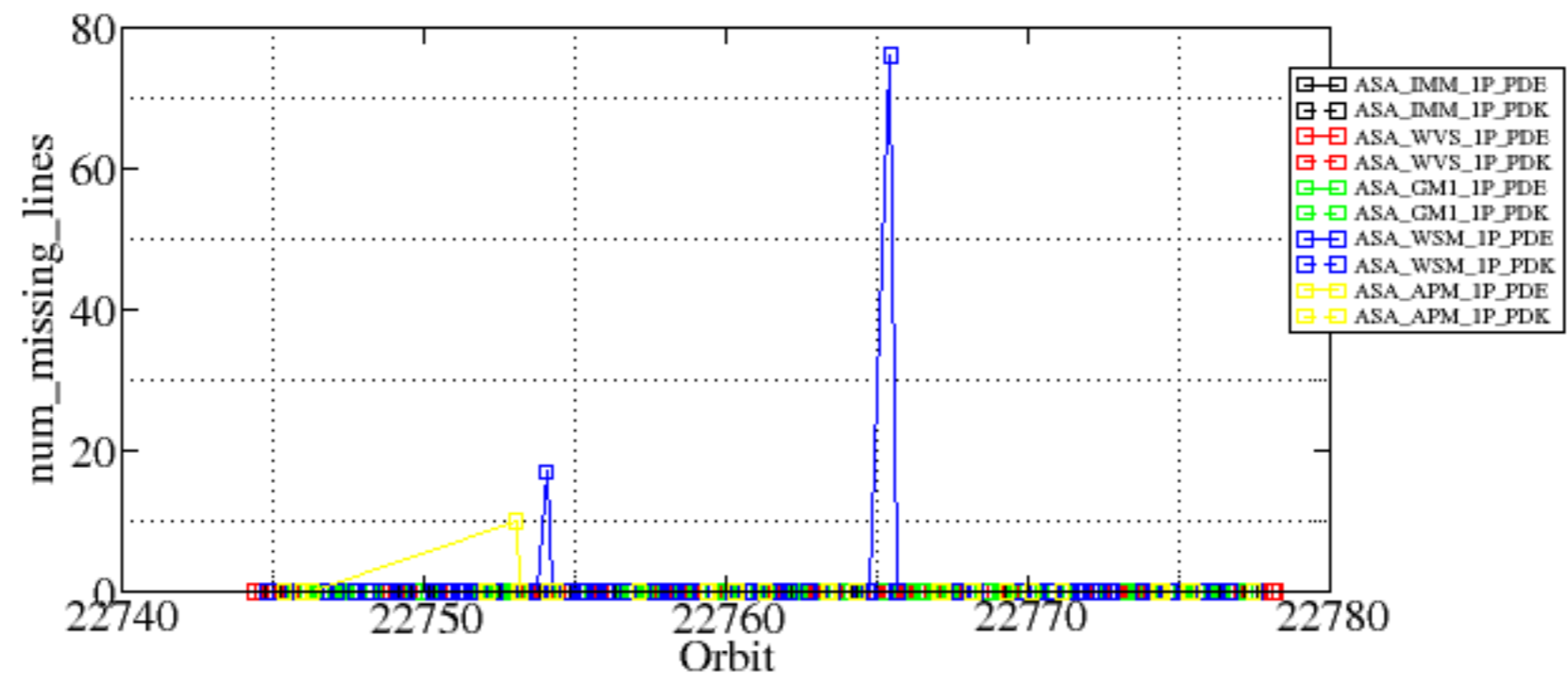


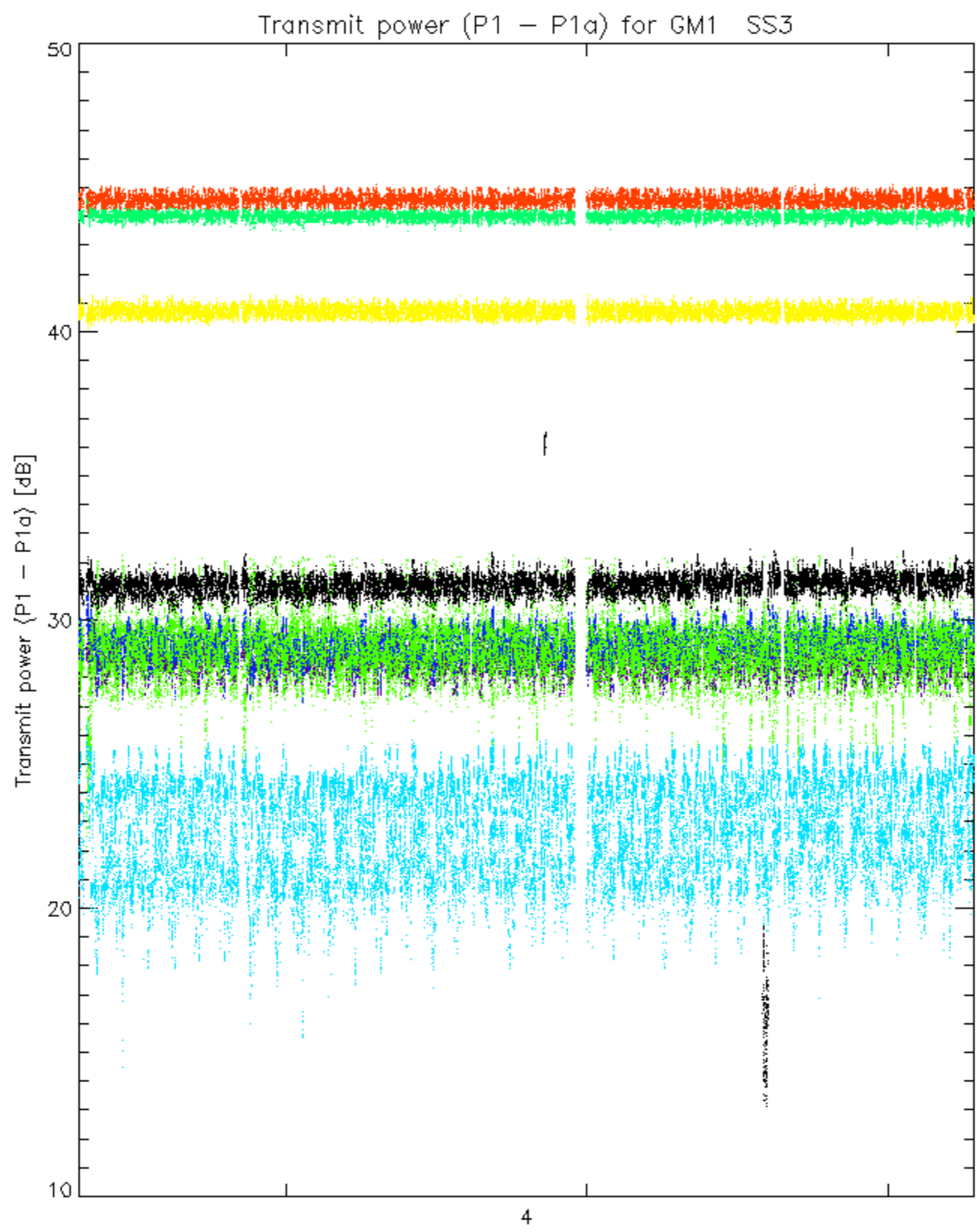


Summary of analysis for the last 3 days 2006070[789]

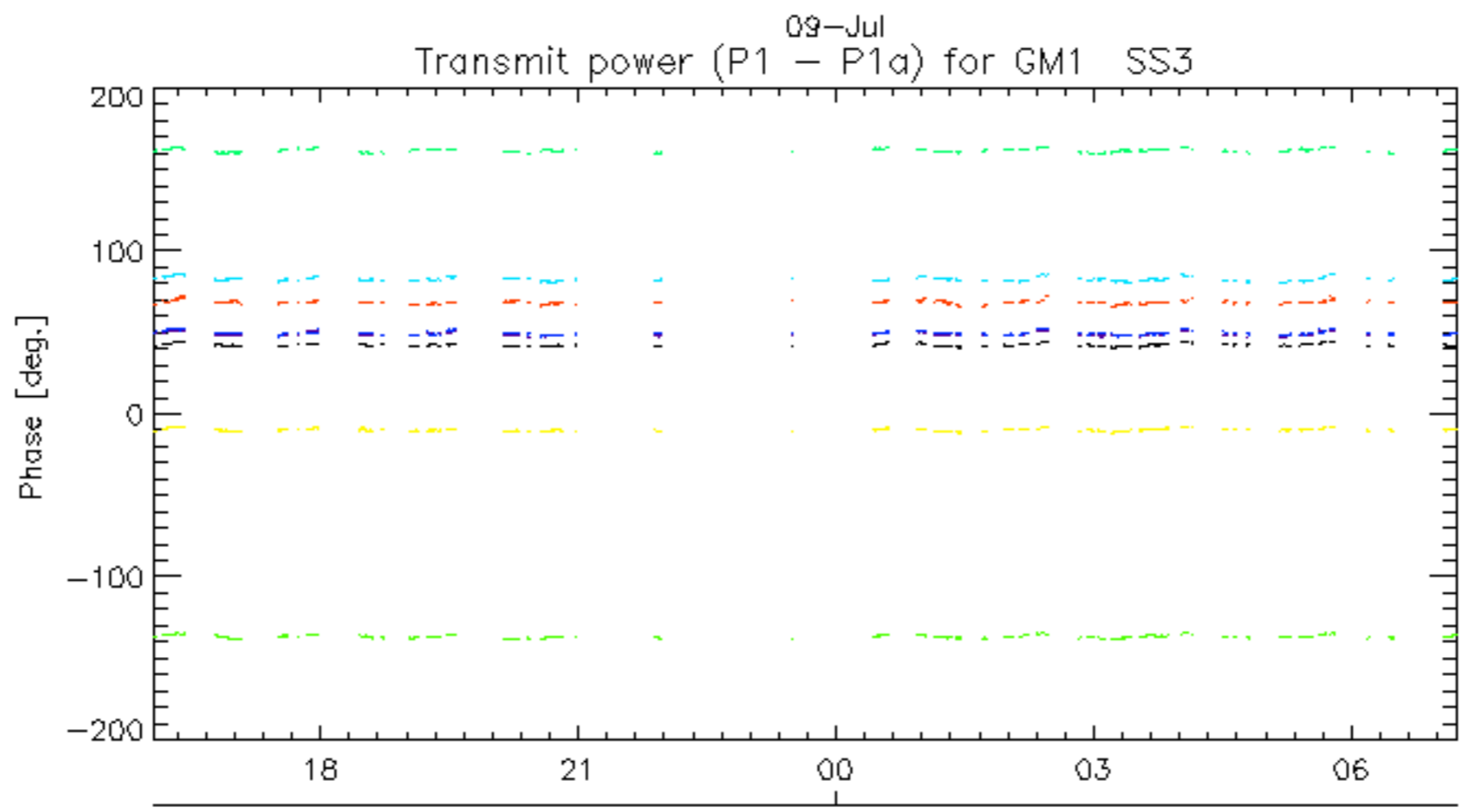
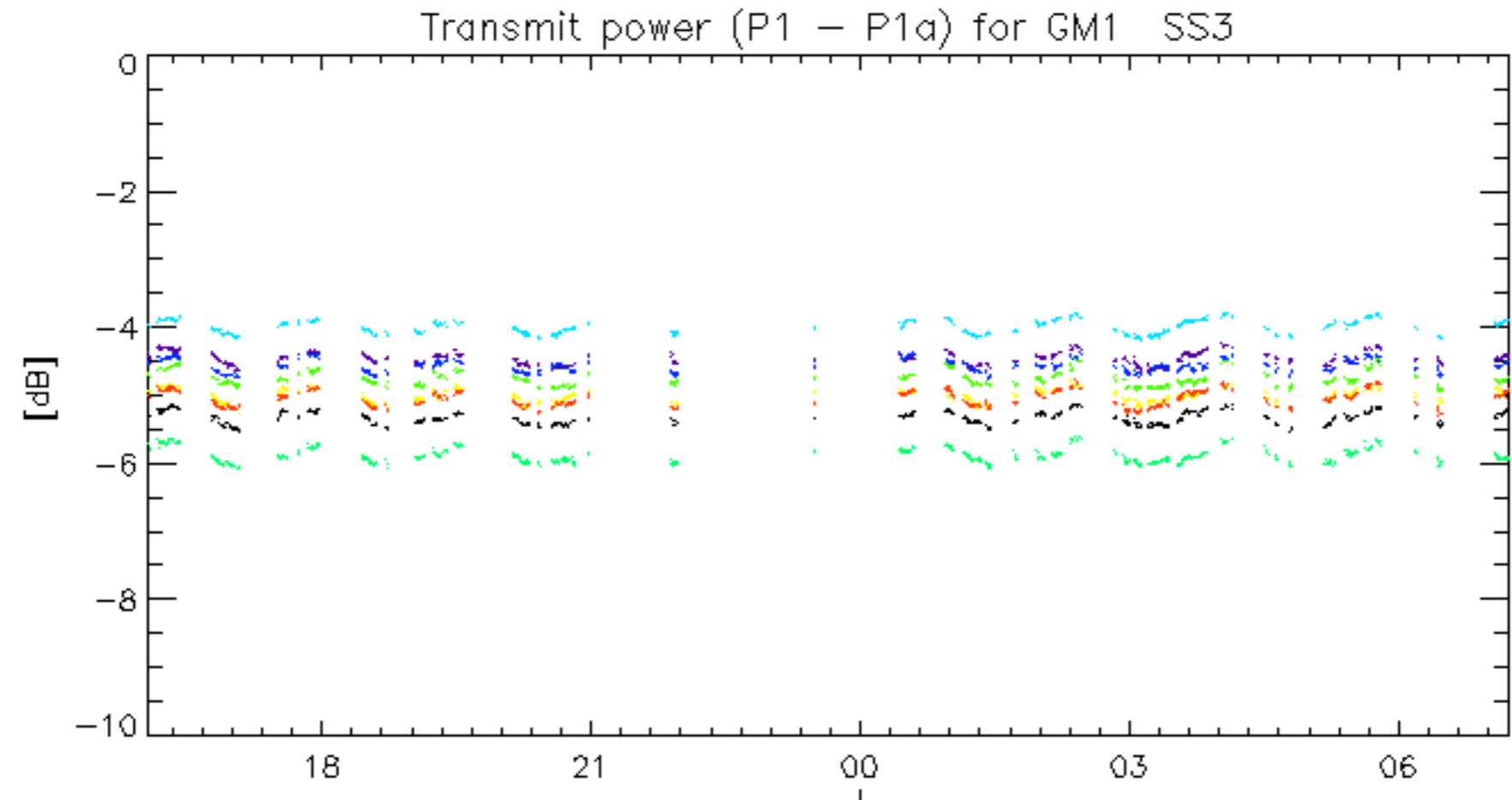
The assumption is taken that the SQUADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060707_201746_000000372049_00157_22756_0467.N1	1	0
ASA_IMM_1PNPDE20060709_004101_000000622049_00174_22773_0517.N1	1	0
ASA_WVS_1PNPDK20060707_070752_000000002049_00149_22748_0265.N1	1	0
ASA_WVS_1PNPDK20060707_070752_000000002049_00149_22748_0293.N1	1	0
ASA_WSM_1PNPDE20060707_161735_000002192049_00155_22754_1810.N1	0	17
ASA_WSM_1PNPDE20060708_112314_000001522049_00166_22765_1970.N1	0	76
ASA_APM_1PNPDE20060707_143629_000000852049_00154_22753_0347.N1	0	10

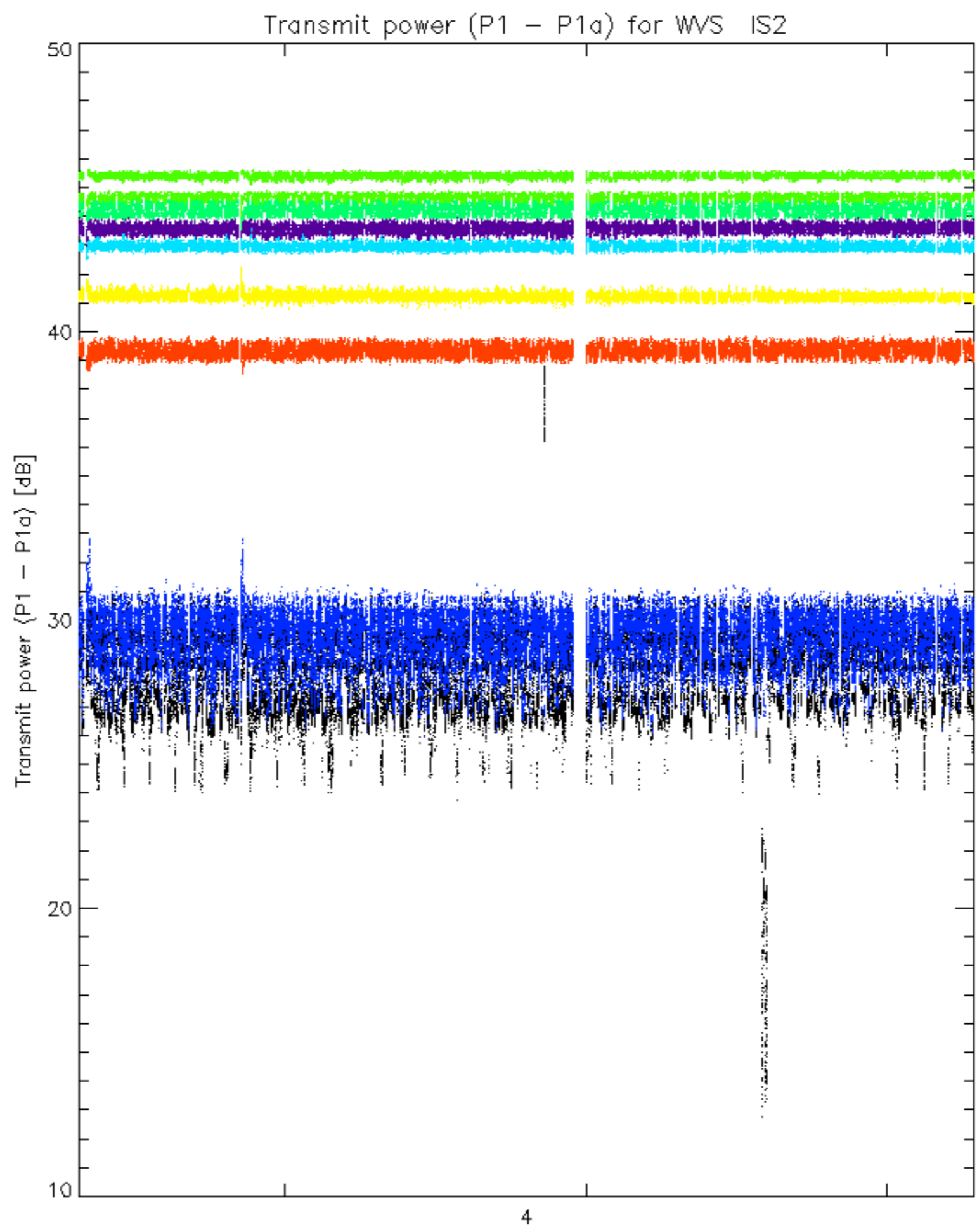




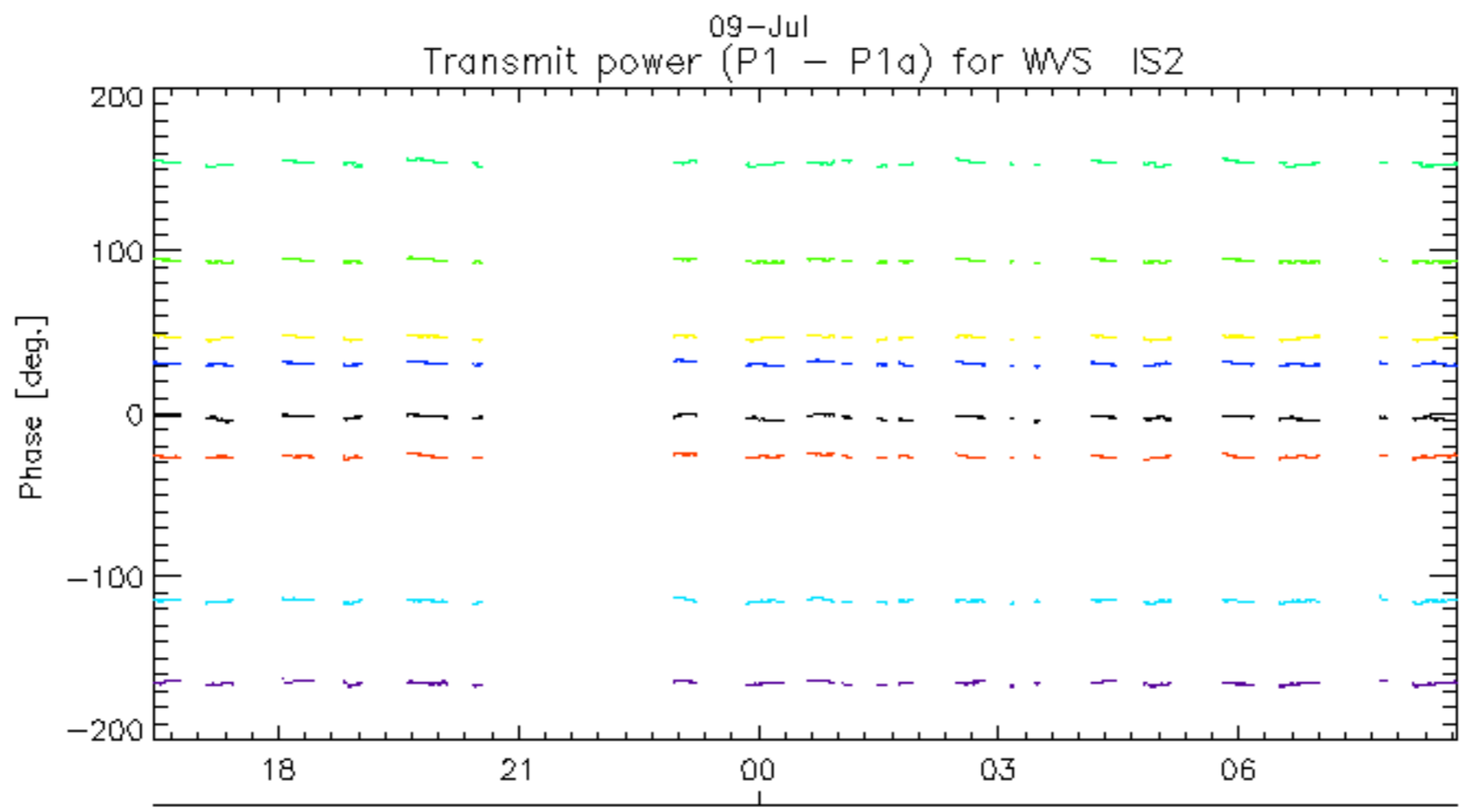
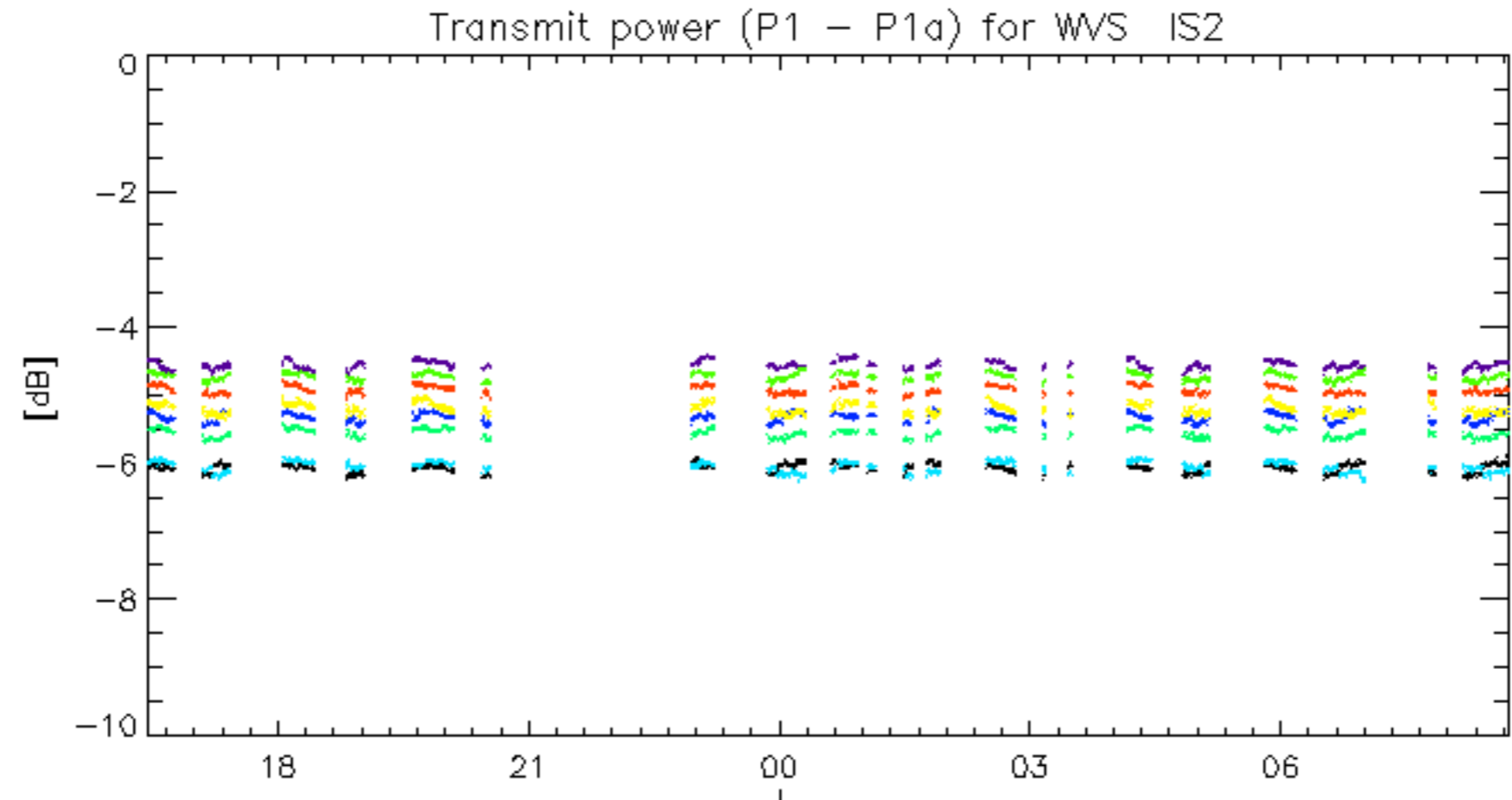
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



09-Jul
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.