

PRELIMINARY REPORT OF 060514

last update on Sun May 14 16:38:29 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 2006-05-13 00:00:00 to 2006-05-14 16:38:29

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	41	61	18	0	23
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	41	61	18	0	23
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	41	61	18	0	23
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	41	61	18	0	23

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	36	53	63	17	29
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	36	53	63	17	29
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	36	53	63	17	29
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	36	53	63	17	29

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	20060512 063524
H	20060513 060347

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	-3.970910	0.011792	0.004716
7	P1	-3.064865	0.013434	-0.094748
11	P1	-4.093958	0.015729	-0.049605
15	P1	-6.107543	0.012335	-0.094029
19	P1	-3.309570	0.007837	-0.013500
22	P1	-4.520994	0.011103	-0.021628
26	P1	-4.029122	0.020300	0.098841
30	P1	-5.738584	0.020411	-0.035621
3	P1	-16.660807	0.311712	0.141770
7	P1	-17.002153	0.148847	-0.288179
11	P1	-16.782032	0.322855	-0.425241
15	P1	-13.122110	0.141664	-0.272157
19	P1	-14.168444	0.049178	-0.246743
22	P1	-16.075455	0.457979	-0.242034
26	P1	-15.405436	0.270638	0.398466
30	P1	-16.826496	0.328290	-0.510836

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.277895	0.085187	0.108396
7	P2	-22.174726	0.100502	0.132285
11	P2	-16.017384	0.111787	0.149382
15	P2	-7.164225	0.096006	-0.028213
19	P2	-9.154450	0.088871	-0.035702
22	P2	-18.067495	0.087707	-0.136598
26	P2	-16.320862	0.093132	-0.117762
30	P2	-19.602068	0.087114	-0.004199

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.189743	0.004312	-0.016491
7	P3	-8.189743	0.004312	-0.016491
11	P3	-8.189743	0.004312	-0.016491
15	P3	-8.189743	0.004312	-0.016491
19	P3	-8.189743	0.004312	-0.016491
22	P3	-8.189743	0.004312	-0.016491
26	P3	-8.189761	0.004313	-0.016467
30	P3	-8.189761	0.004313	-0.016467

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	-3.744000	0.038844	0.025231
7	P1	-2.651213	0.104196	0.120411
11	P1	-2.878457	0.031792	0.056835
15	P1	-3.508367	0.029941	0.055355
19	P1	-3.384686	0.013881	-0.018497
22	P1	-5.112708	0.022478	0.064060
26	P1	-5.819247	0.023018	-0.050303
30	P1	-5.181697	0.045542	-0.009954
3	P1	-11.591717	0.136733	0.018314
7	P1	-9.980081	0.160290	0.013877
11	P1	-10.222680	0.084357	0.074778
15	P1	-10.668414	0.130387	0.164337
19	P1	-15.461385	0.088867	-0.089859
22	P1	-20.725197	1.293968	-0.472776
26	P1	-16.410658	0.408181	-0.240902
30	P1	-18.208050	0.489377	0.421218

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.944363	0.070243	0.080789
7	P2	-22.510086	0.179994	-0.074972
11	P2	-11.191429	0.050566	-0.007069
15	P2	-4.874942	0.043061	-0.076099
19	P2	-6.861793	0.042089	-0.043556
22	P2	-8.161144	0.054779	-0.081694
26	P2	-24.058615	0.127273	-0.106225
30	P2	-22.051395	0.087561	-0.023031

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.023879	0.003803	-0.005482
7	P3	-8.023908	0.003819	-0.006108
11	P3	-8.024056	0.003797	-0.005555
15	P3	-8.023730	0.003819	-0.005228
19	P3	-8.023999	0.003816	-0.005684
22	P3	-8.023922	0.003813	-0.005617
26	P3	-8.023753	0.003803	-0.005273
30	P3	-8.023843	0.003807	-0.005283

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	0.000541934
	stdev	1.87308e-07
MEAN Q	mean	0.000514117
	stdev	2.27261e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.135499
	stdev	0.00118716
STDEV Q	mean	0.135851
	stdev	0.00120419



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006051[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_1PNPDE20060512_010614_000000832047_00346_21943_4800.N1	1	0
ASA_IMM_1PNPDE20060513_182646_000000352047_00371_21968_4970.N1	0	15
ASA_GM1_1PNPDK20060512_174532_000002112047_00356_21953_3153.N1	0	919
ASA_GM1_1PNPDK20060512_181941_000001262047_00356_21953_3154.N1	0	339
ASA_GM1_1PNPDK20060512_202829_000003742047_00357_21954_3164.N1	0	15
ASA_WSM_1PNPDE20060514_014737_000000862047_00375_21972_9156.N1	0	45
ASA_WSM_1PNPDK20060512_191044_000000672047_00357_21954_4898.N1	0	184
ASA_WSM_1PNPDK20060513_052729_000000122047_00363_21960_4998.N1	0	472
ASA_WSM_1PNPDK20060513_103058_000001292047_00366_21963_4958.N1	0	15



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"/>

Ascending

<input type="checkbox"/>

Descending

7.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler

<input type="checkbox"/>

Ascending

<input type="checkbox"/>

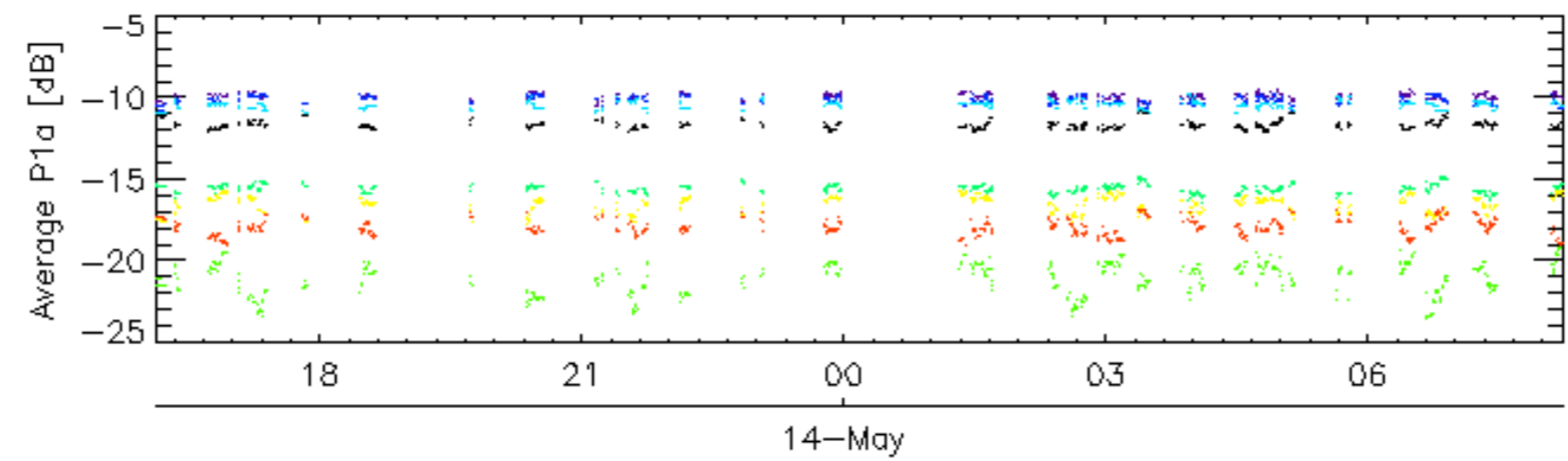
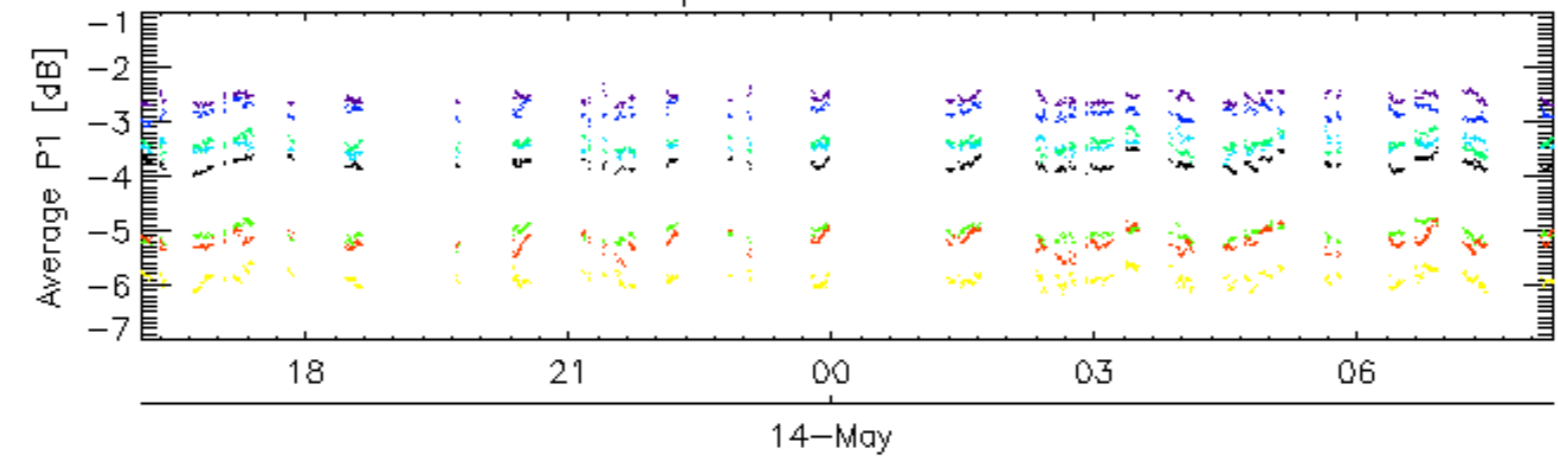
Descending

7.6 - Doppler evolution versus ANX for GM1

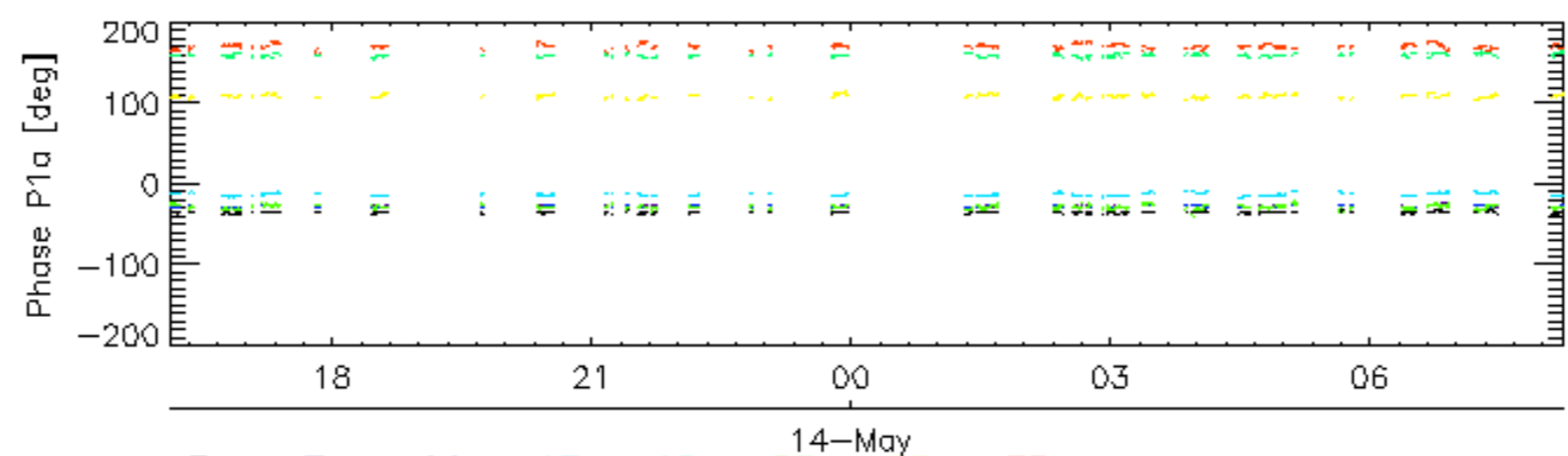
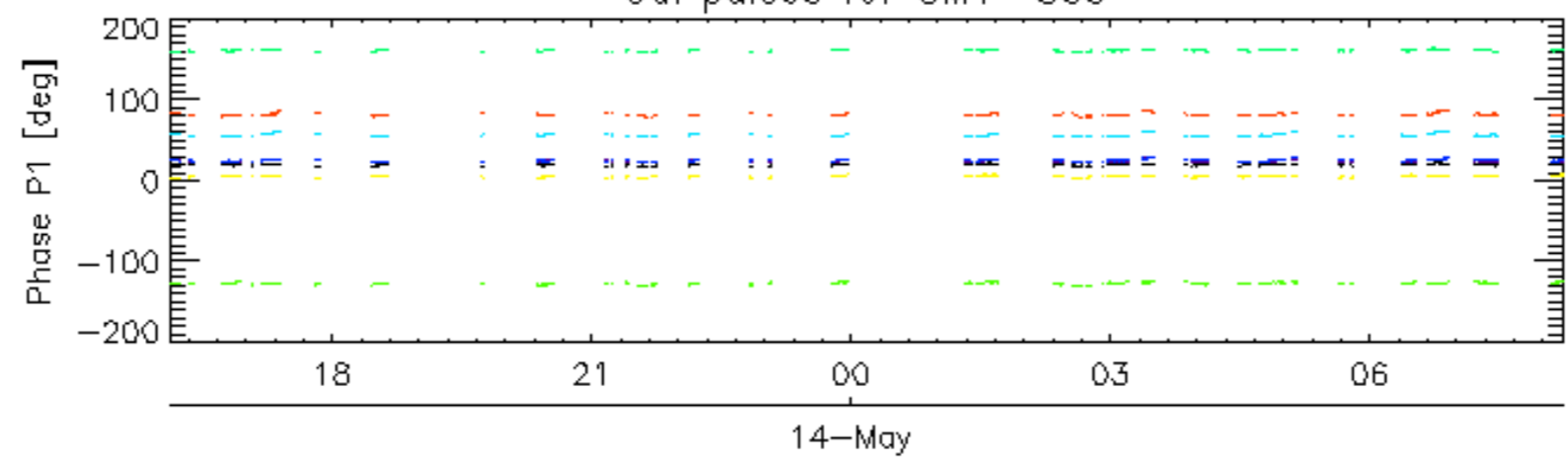
Evolution Doppler error versus ANX

<input type="checkbox"/>

Cal pulses for GM1 SS3

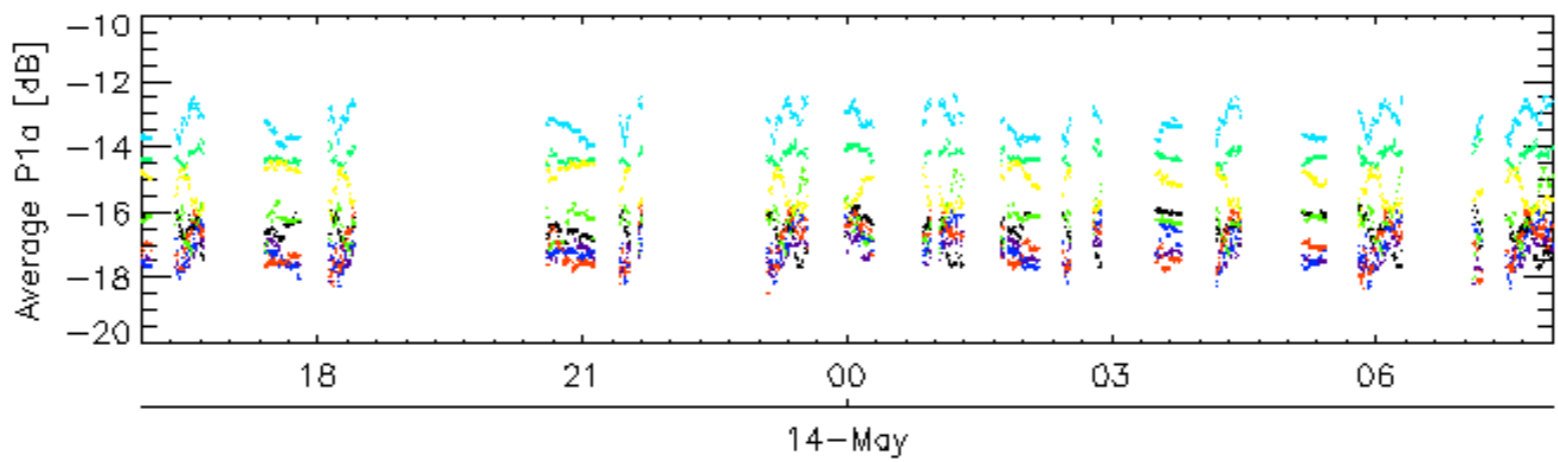
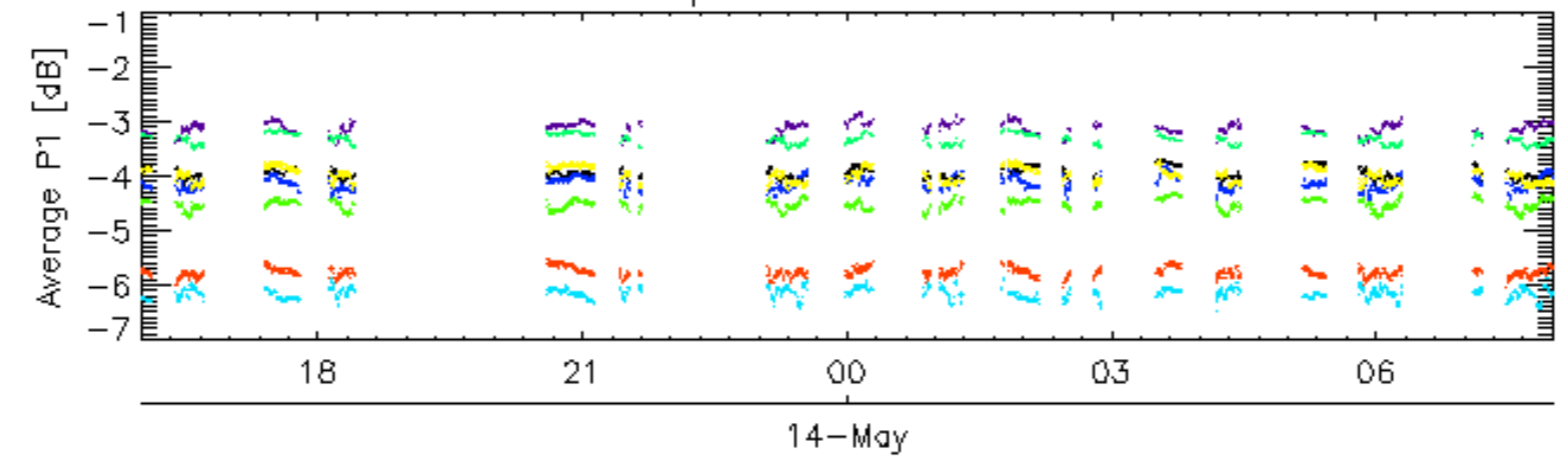


Cal pulses for GM1 SS3

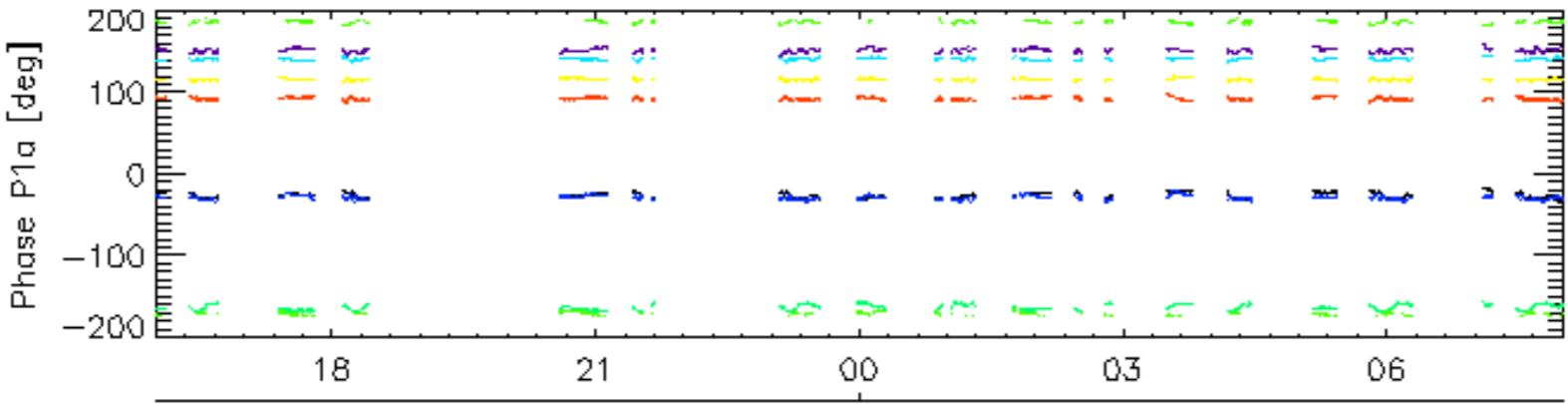
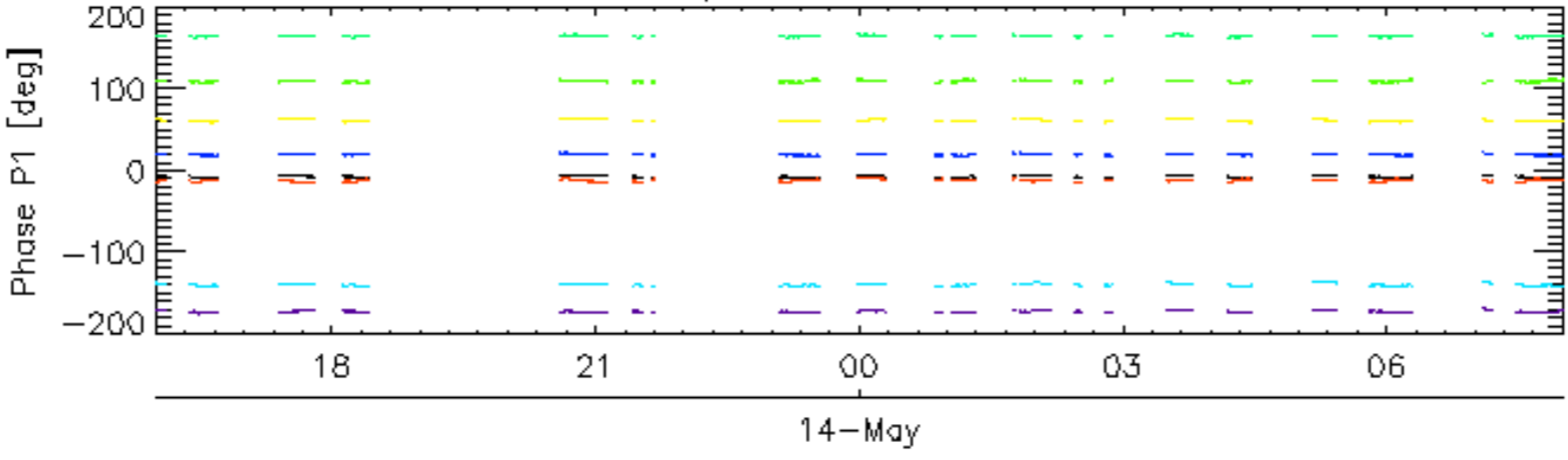


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

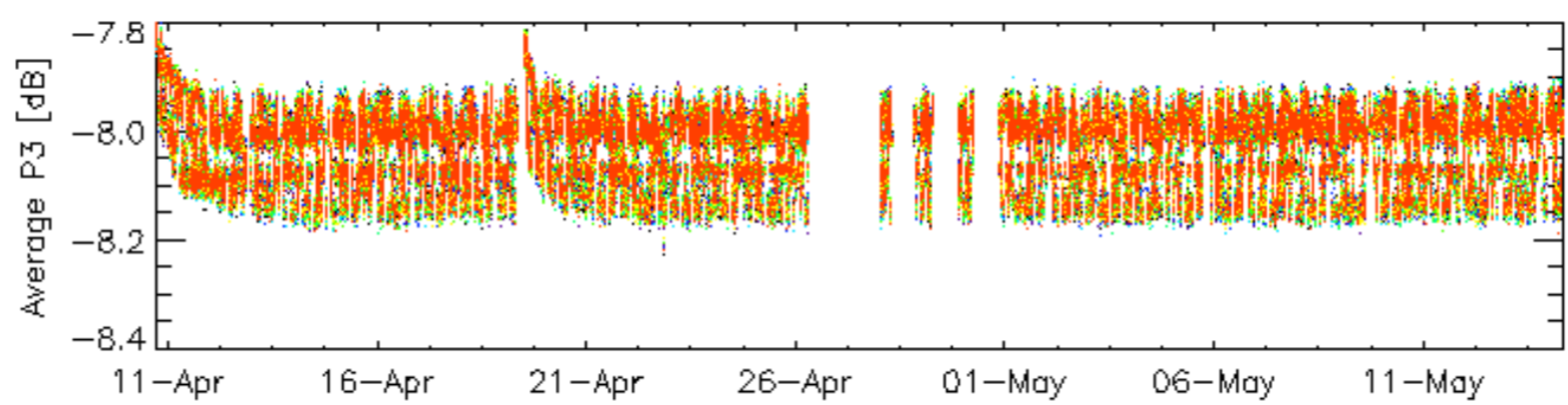
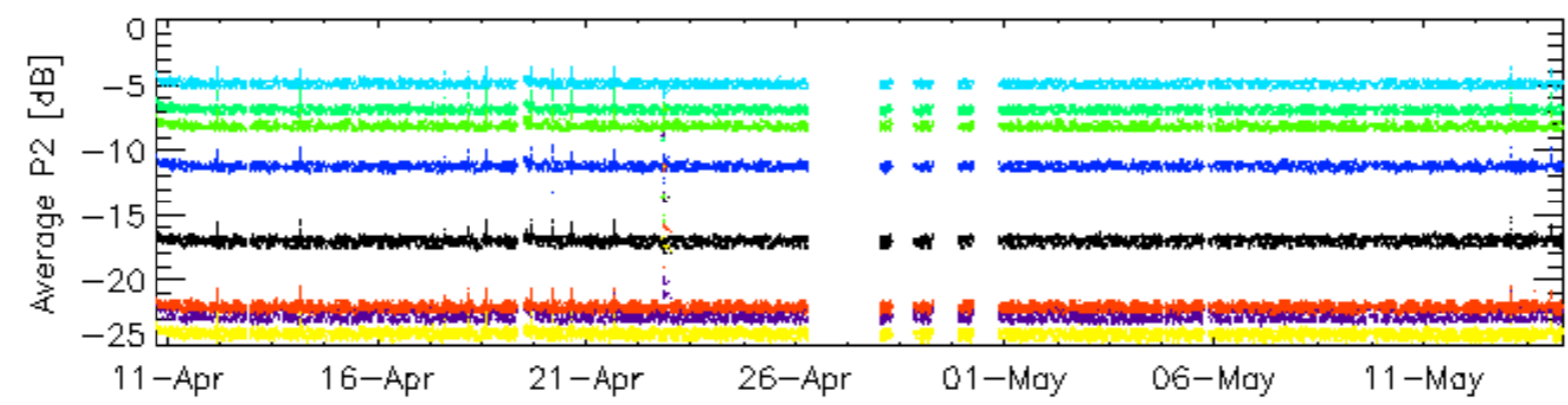
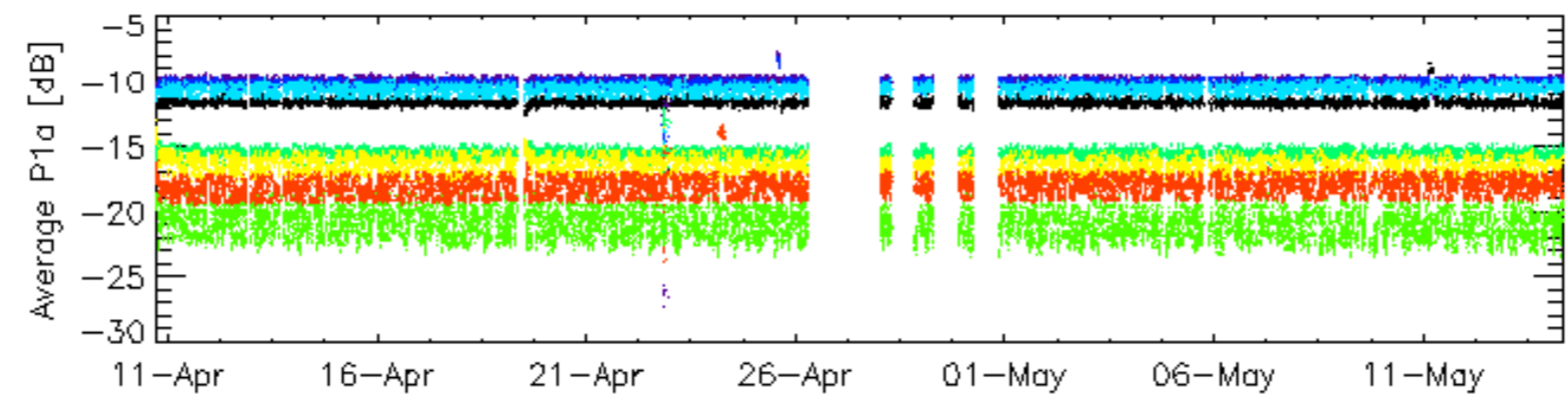
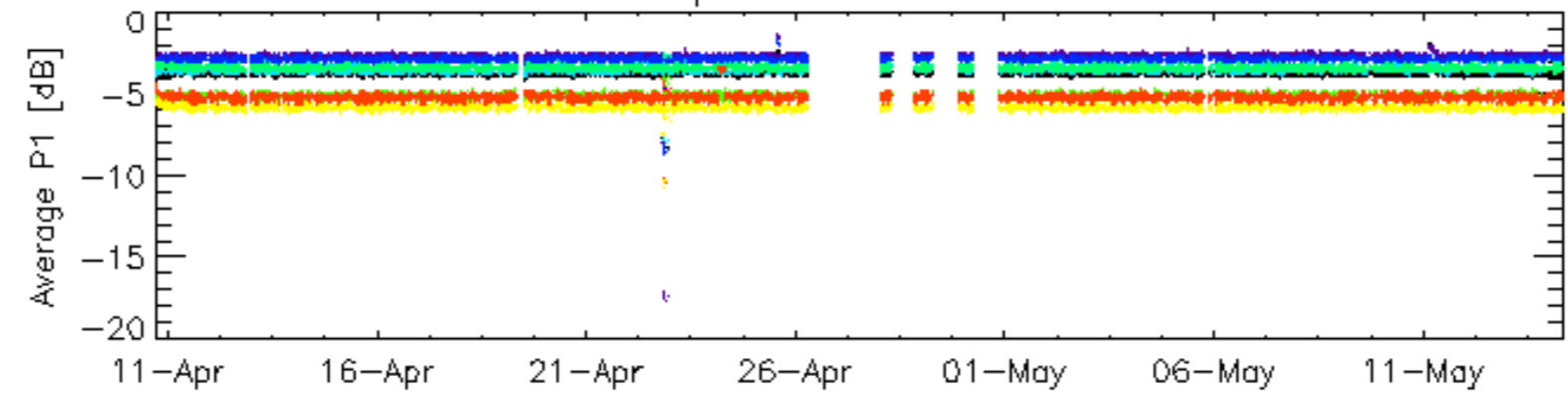


Cal pulses for WVS IS2



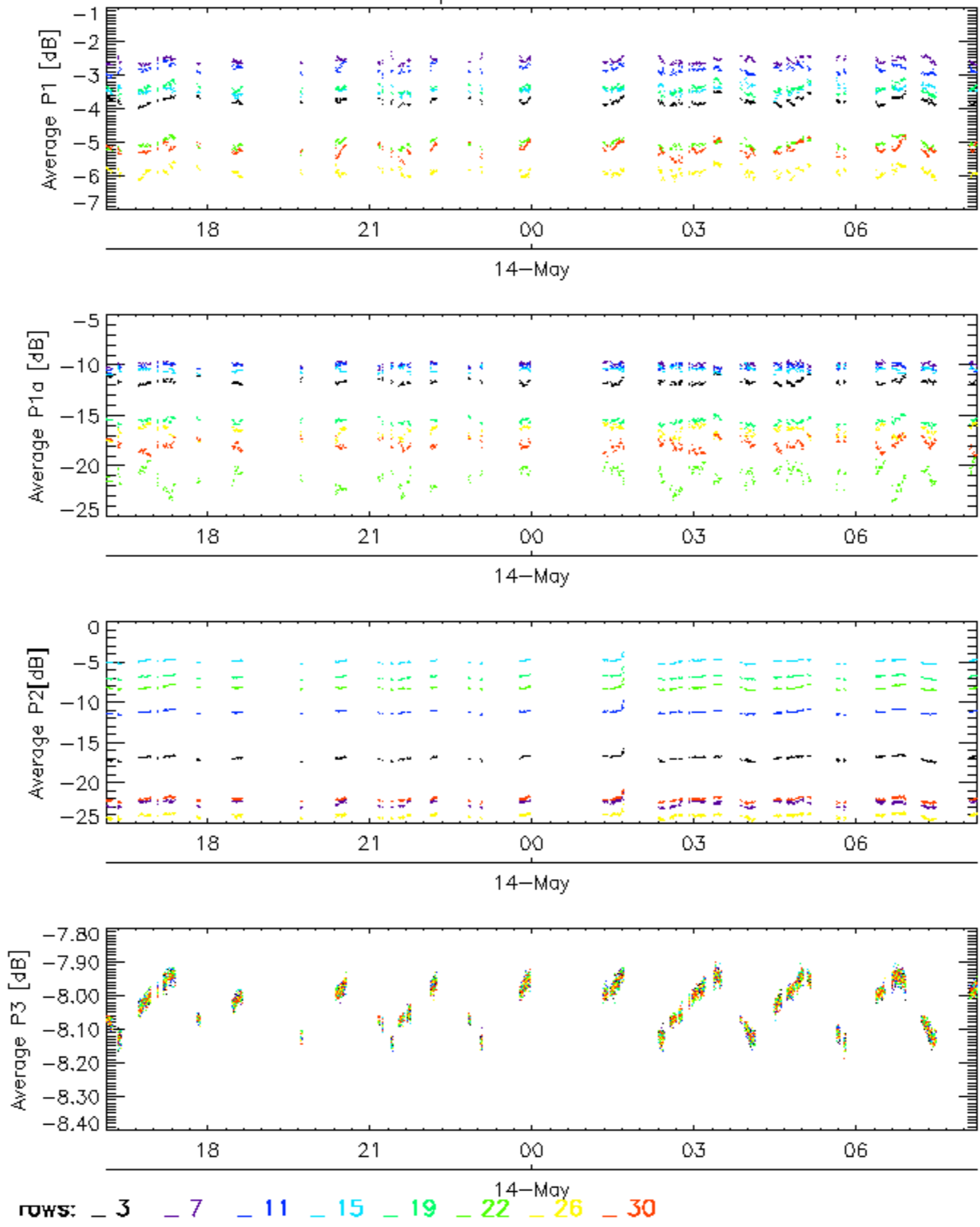
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

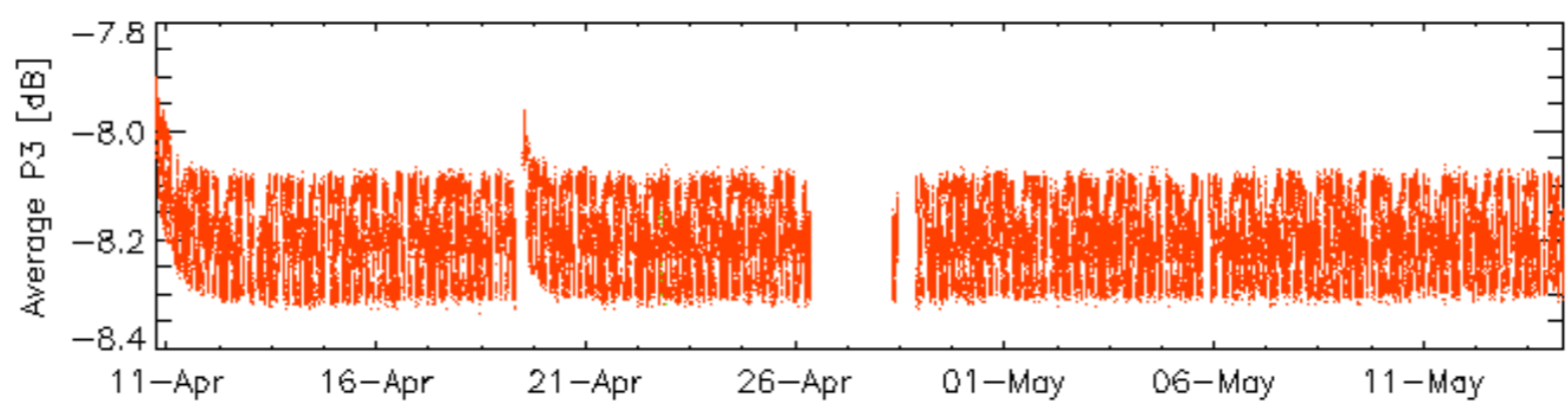
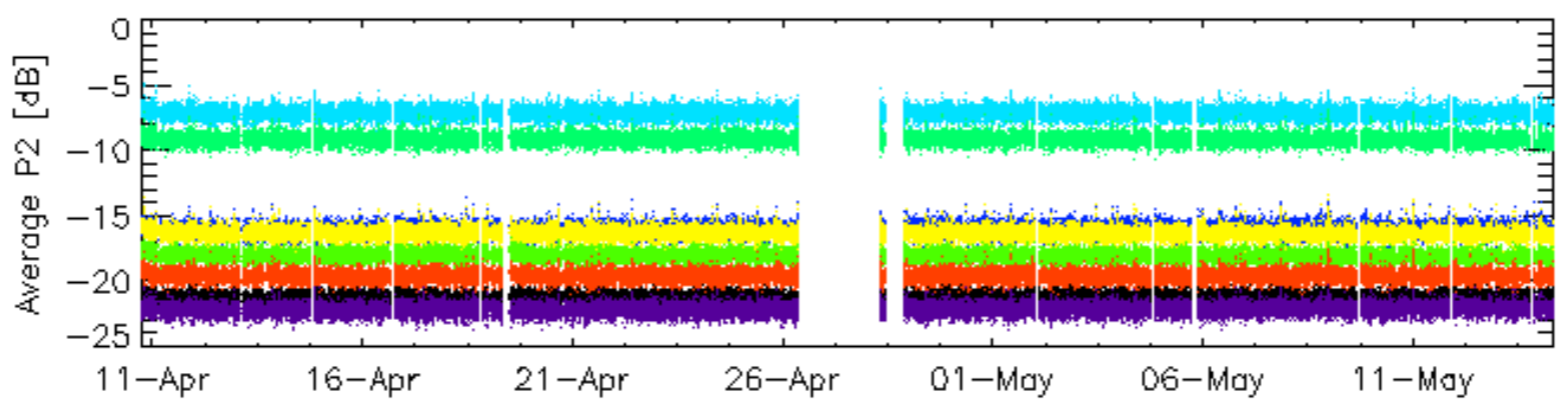
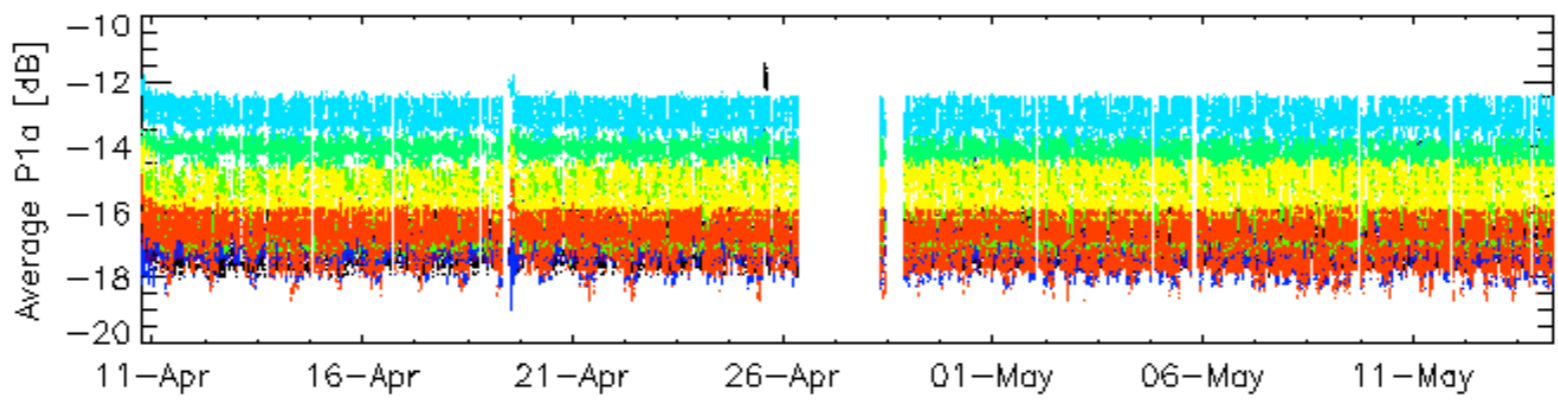
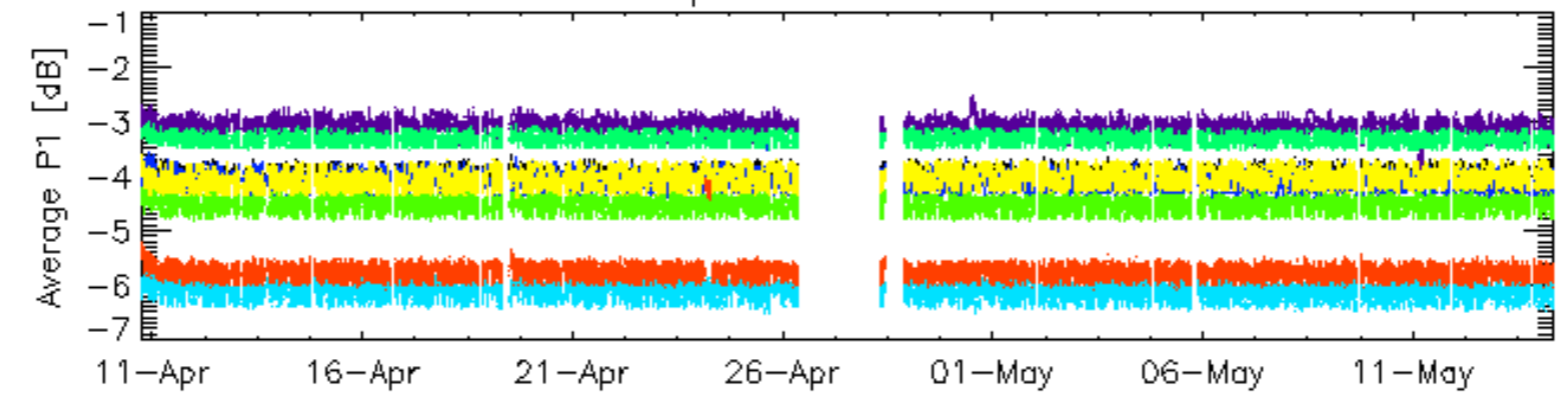


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

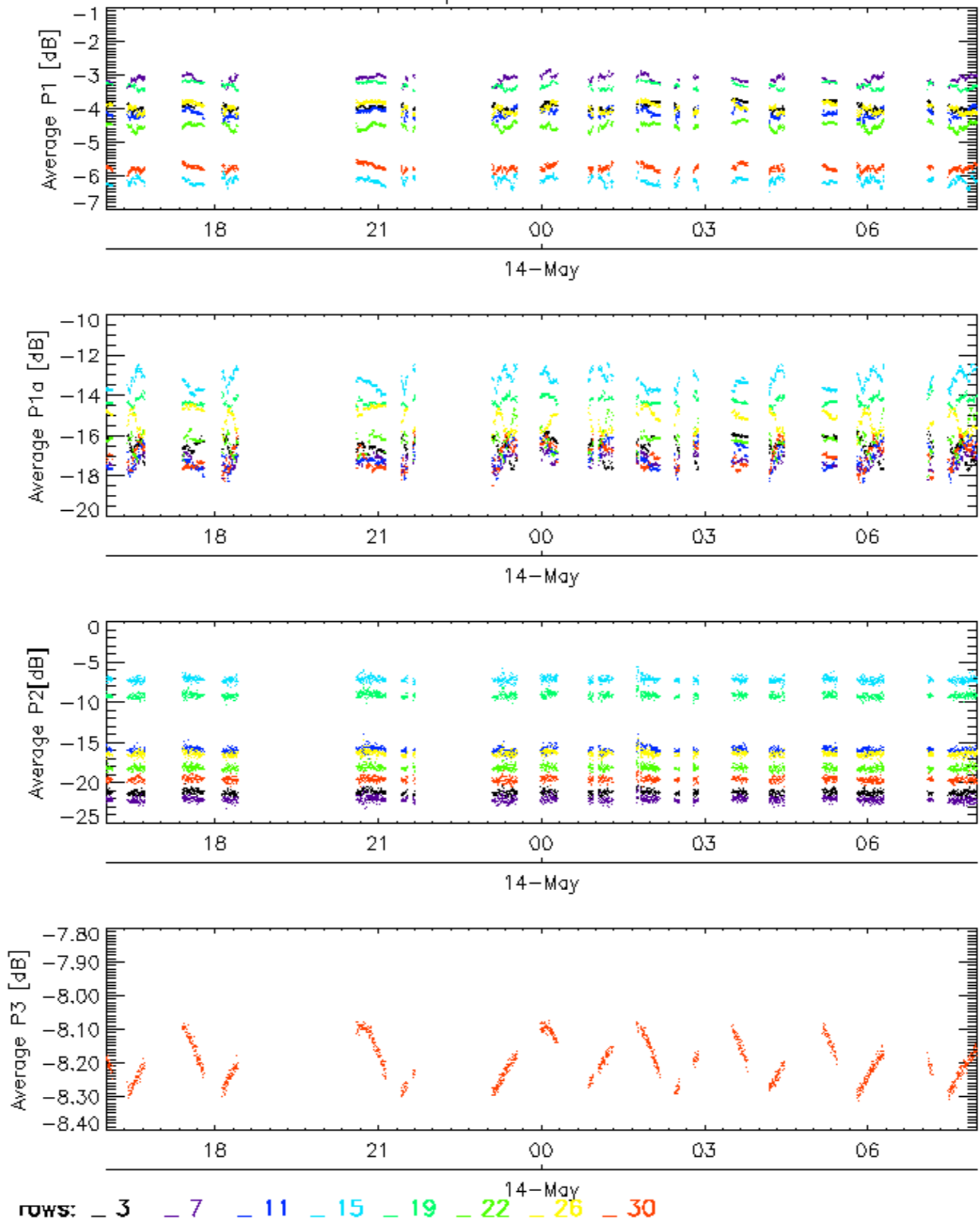


Cal pulses for WVS IS2

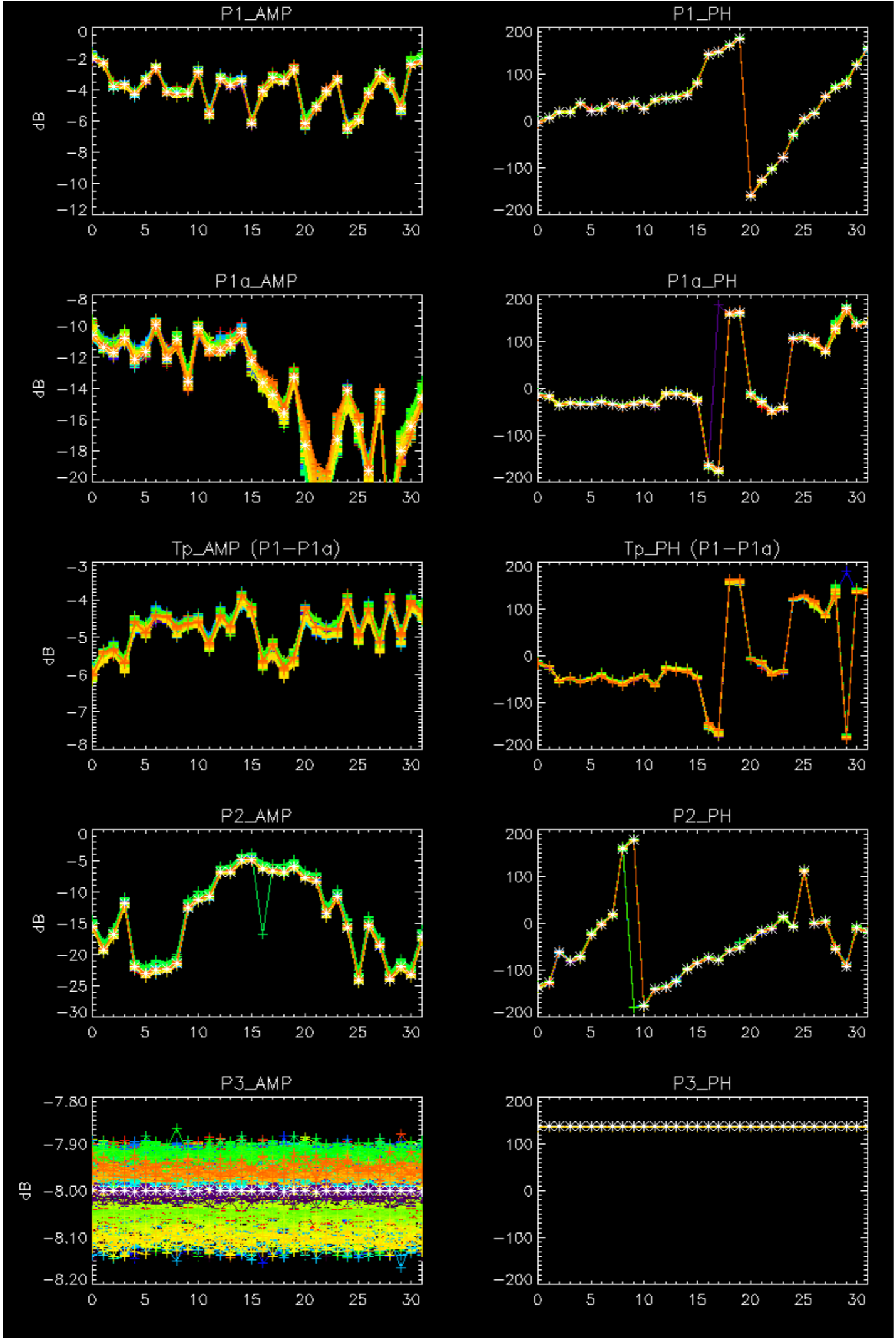


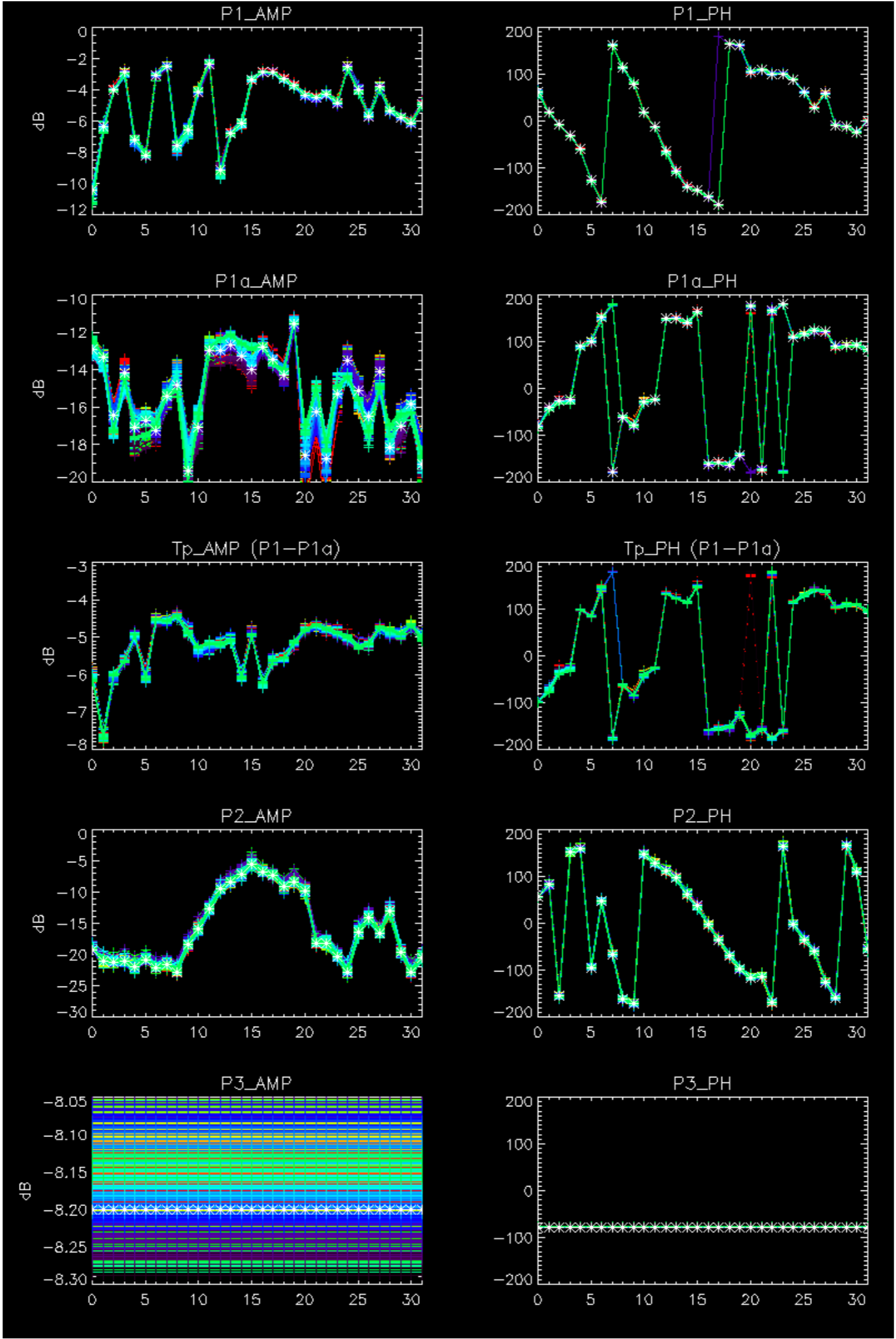
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



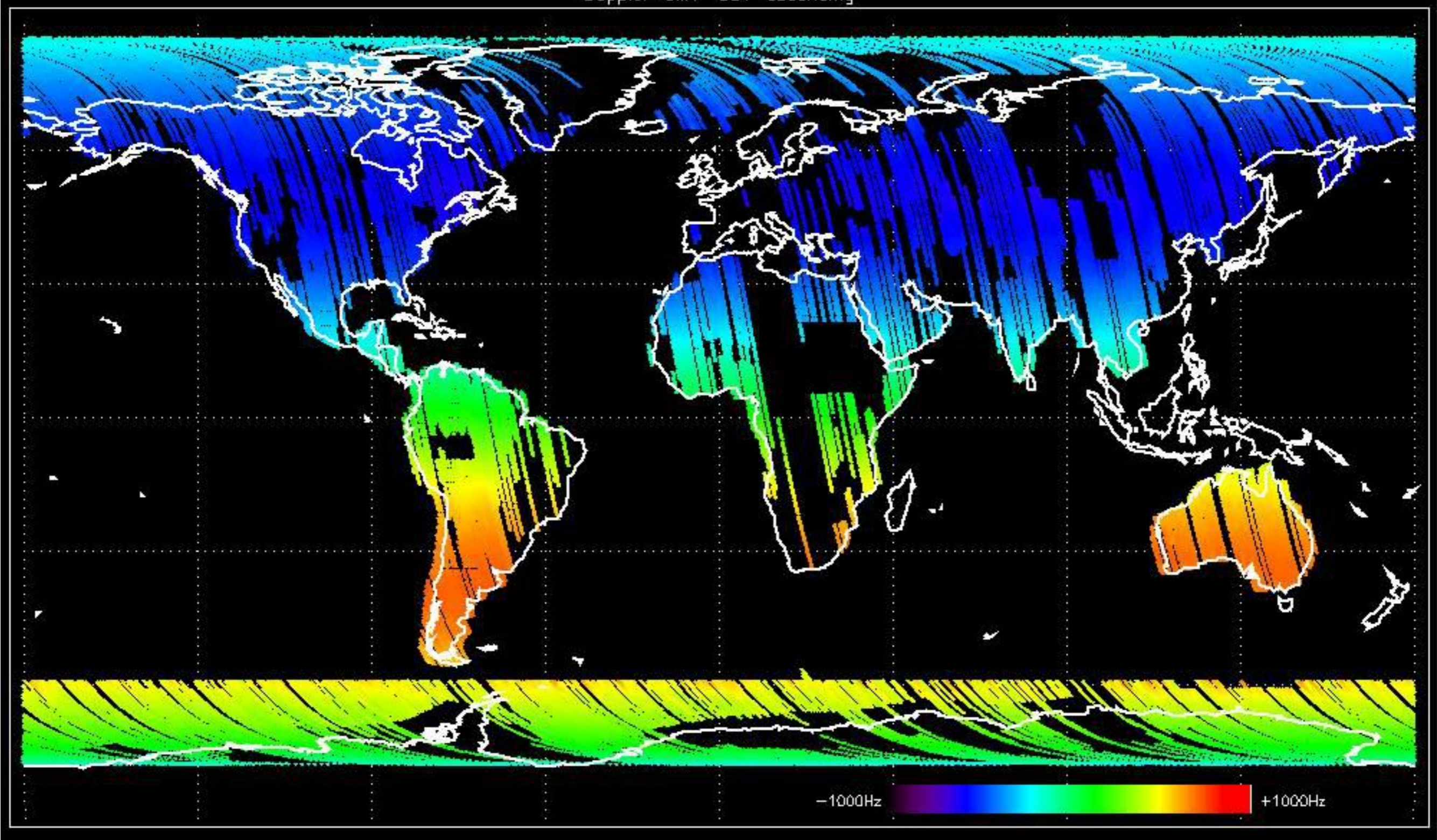
No anomalies observed.



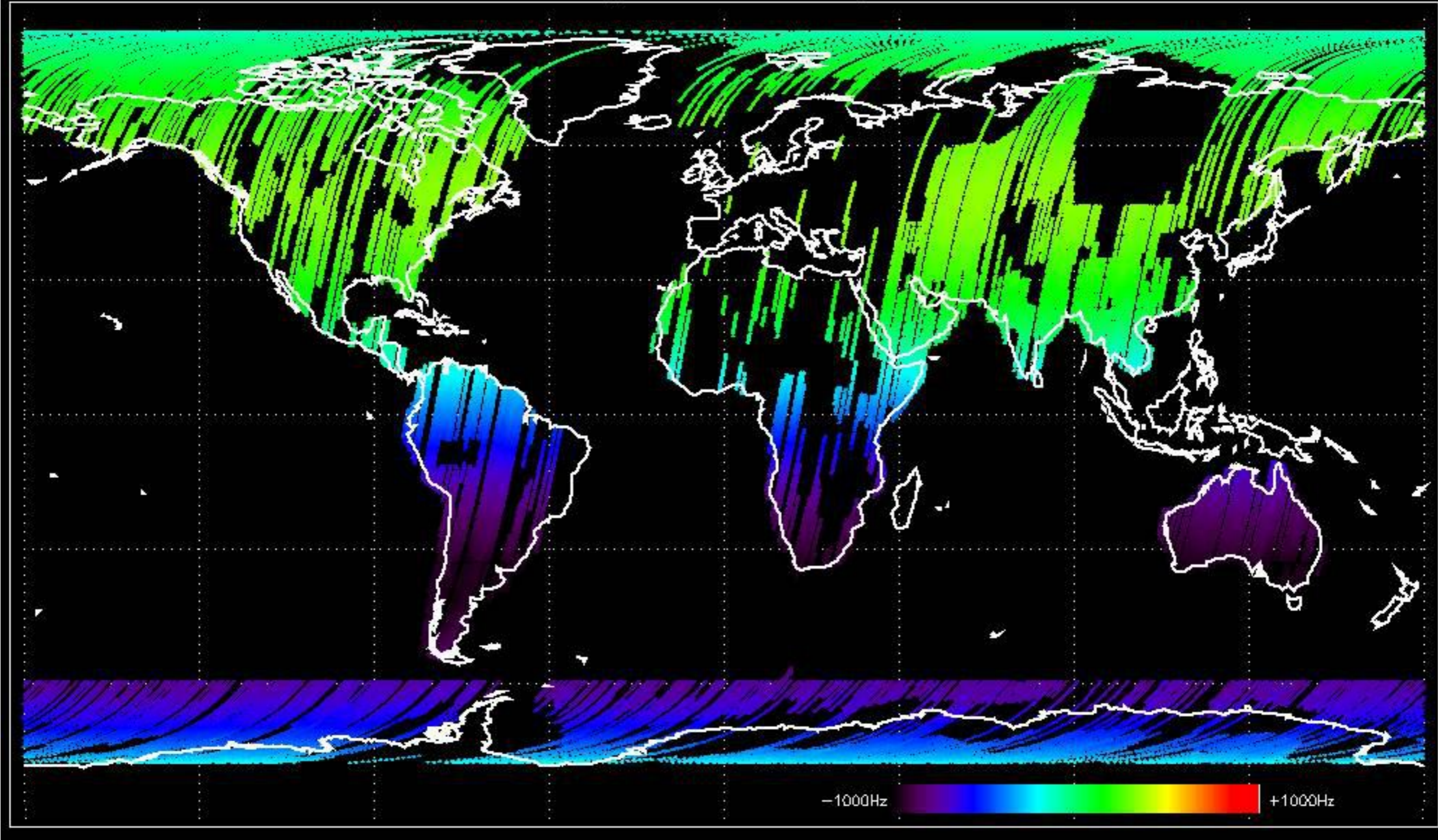


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

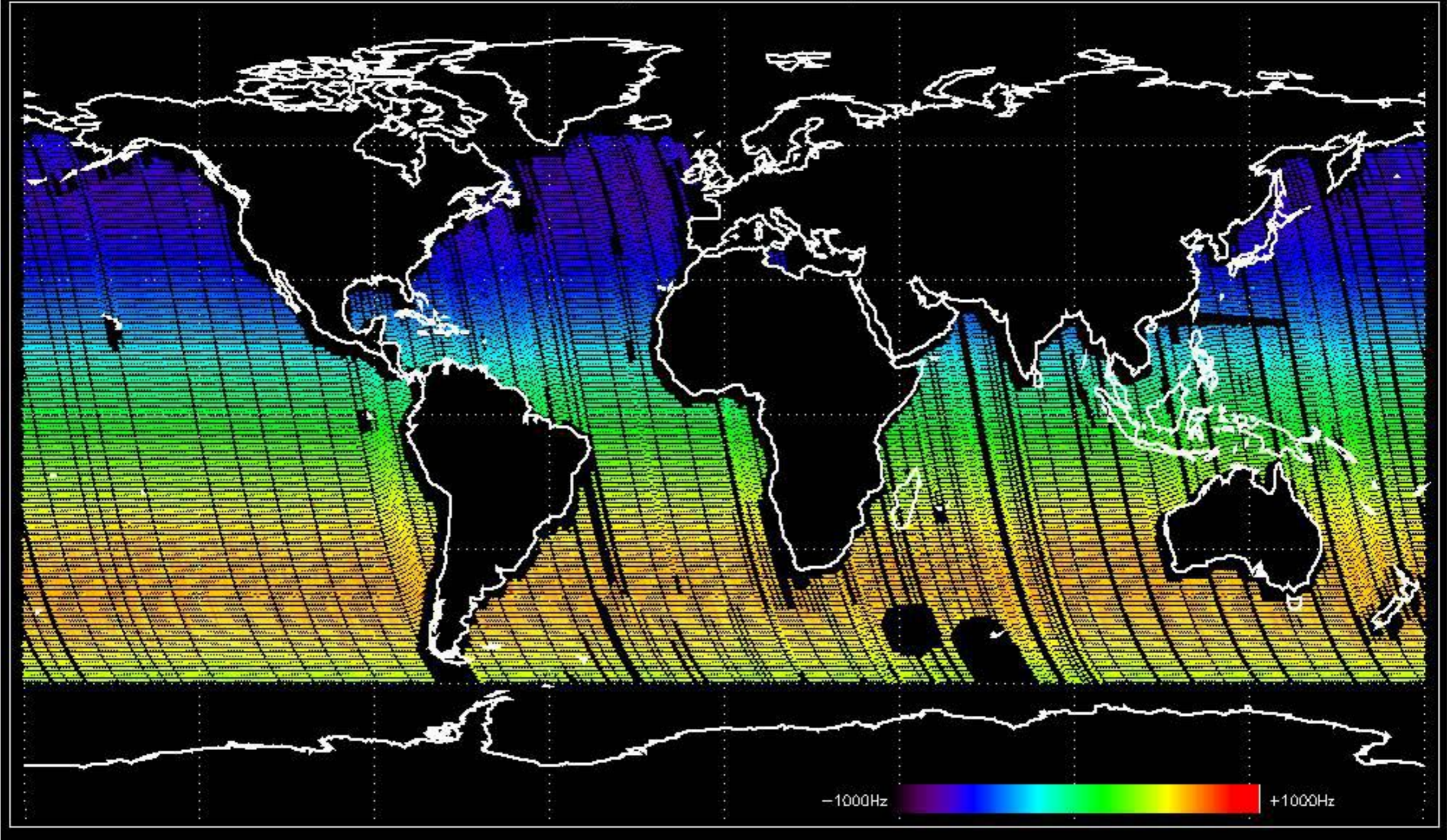
Doppler 'GM1' 'SS1' ascending



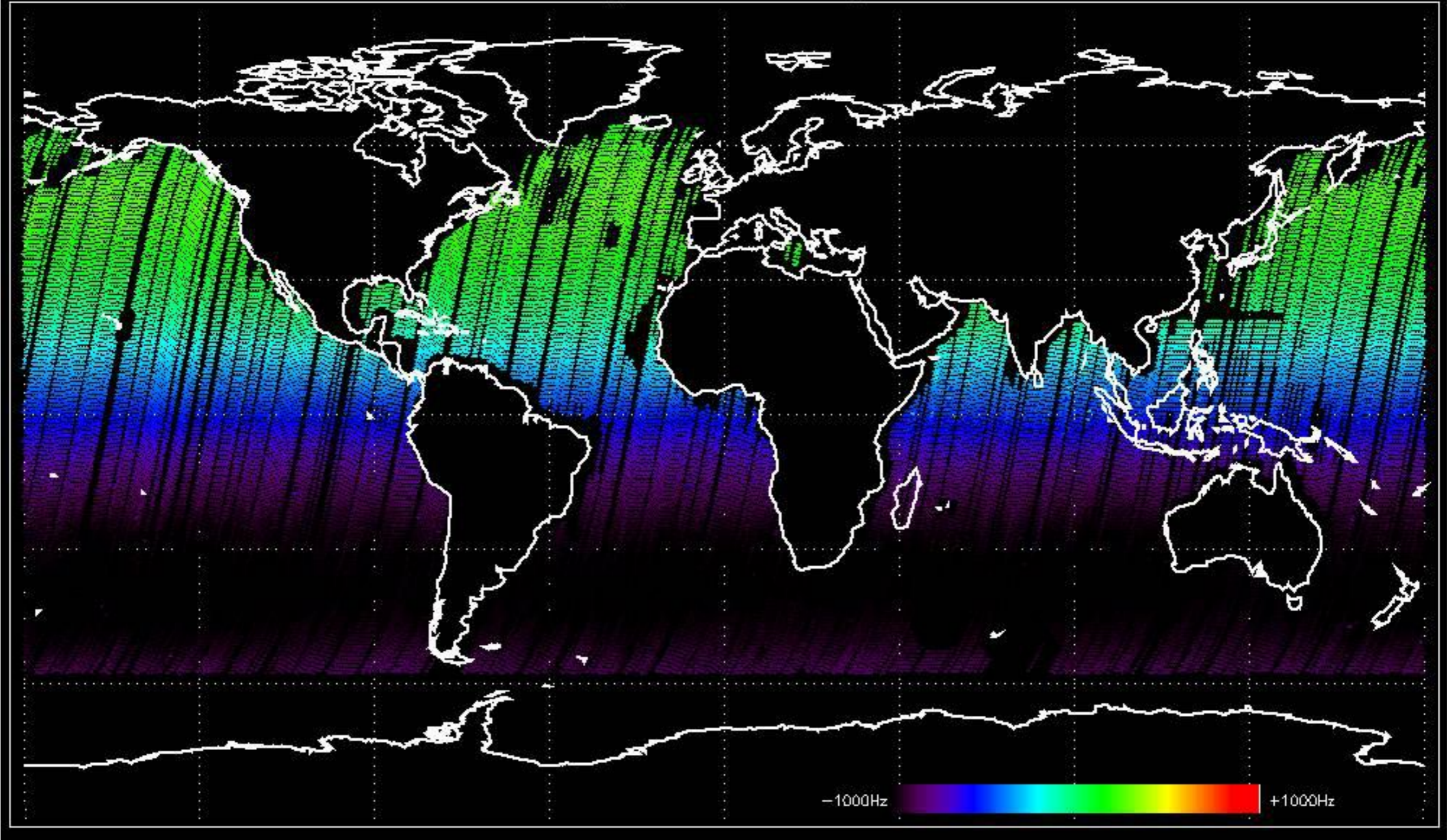
Doppler 'GM1' 'SS1' descending



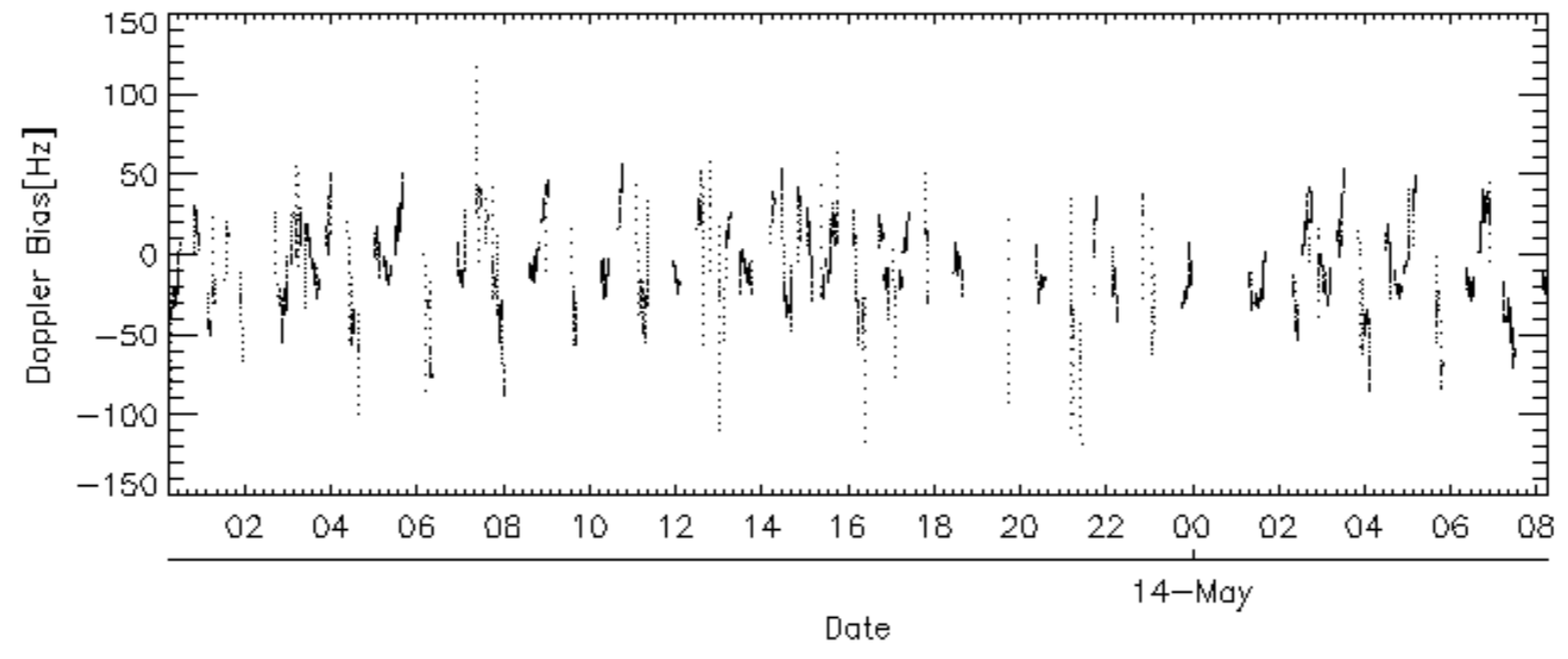
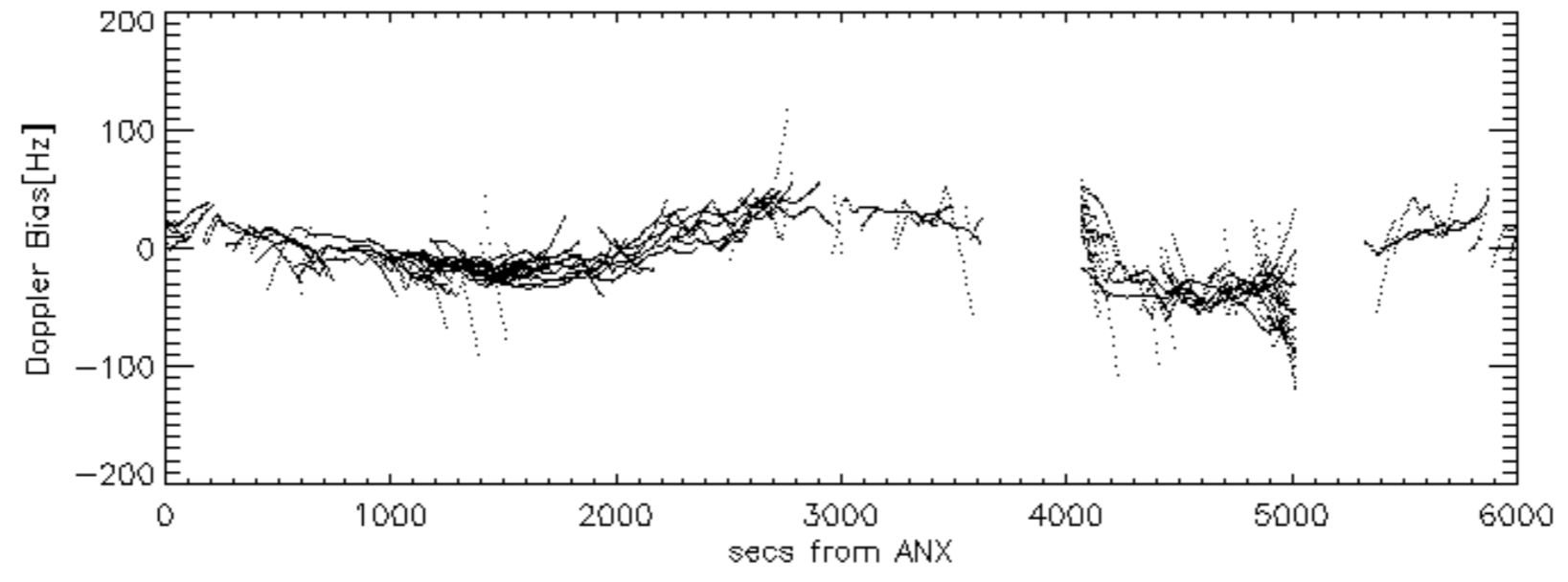
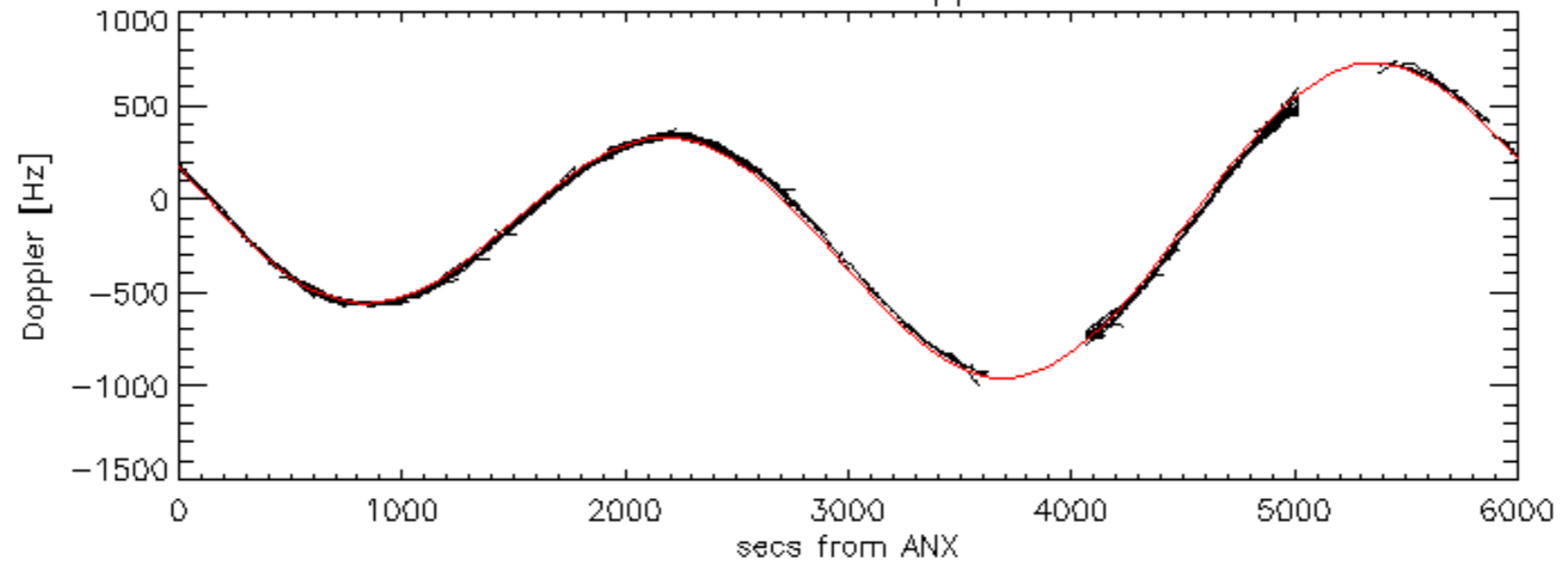
Doppler 'WVS' 'IS2' ascending

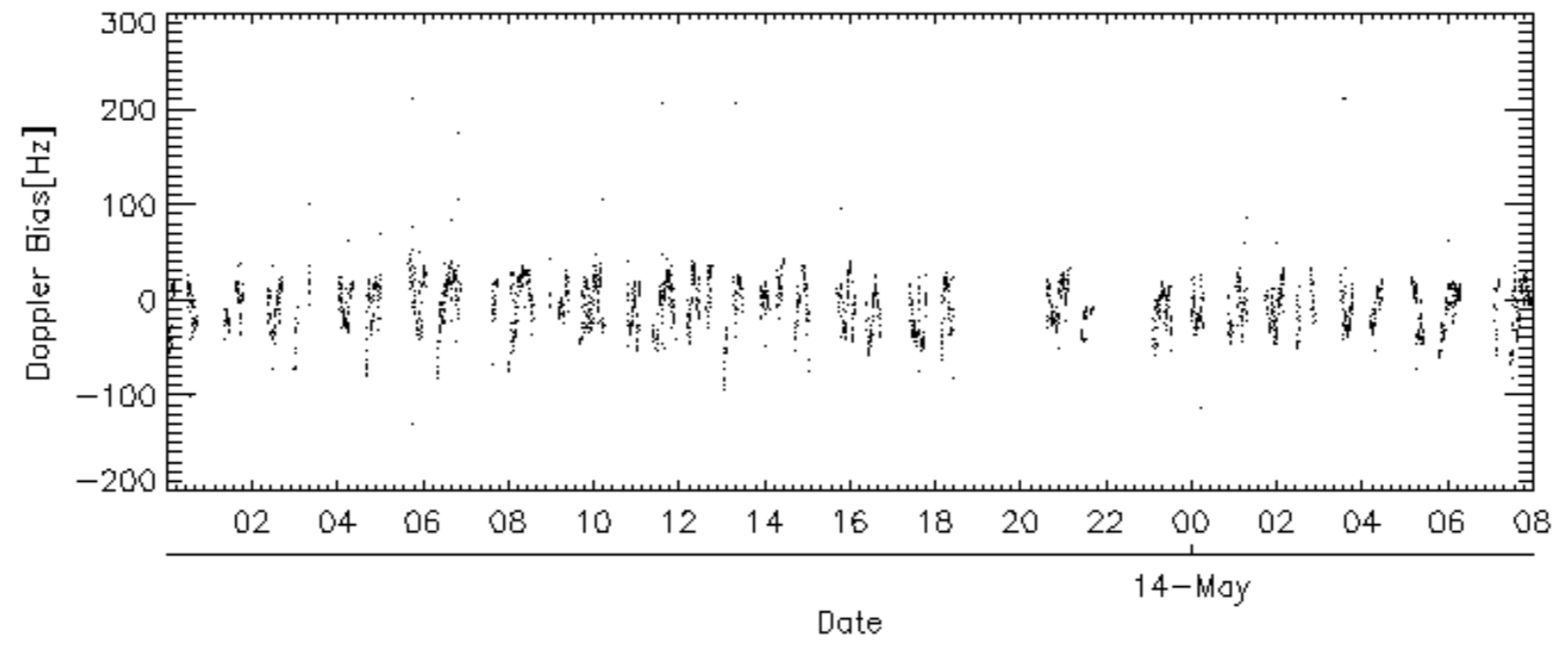
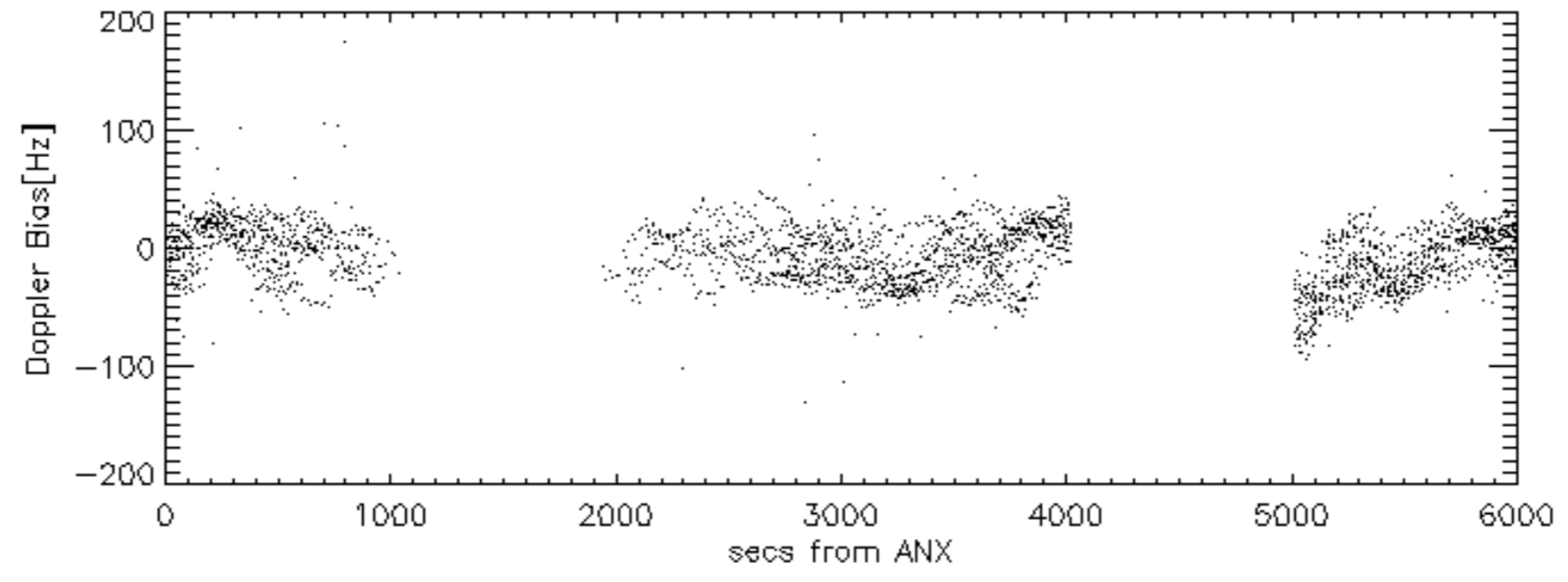
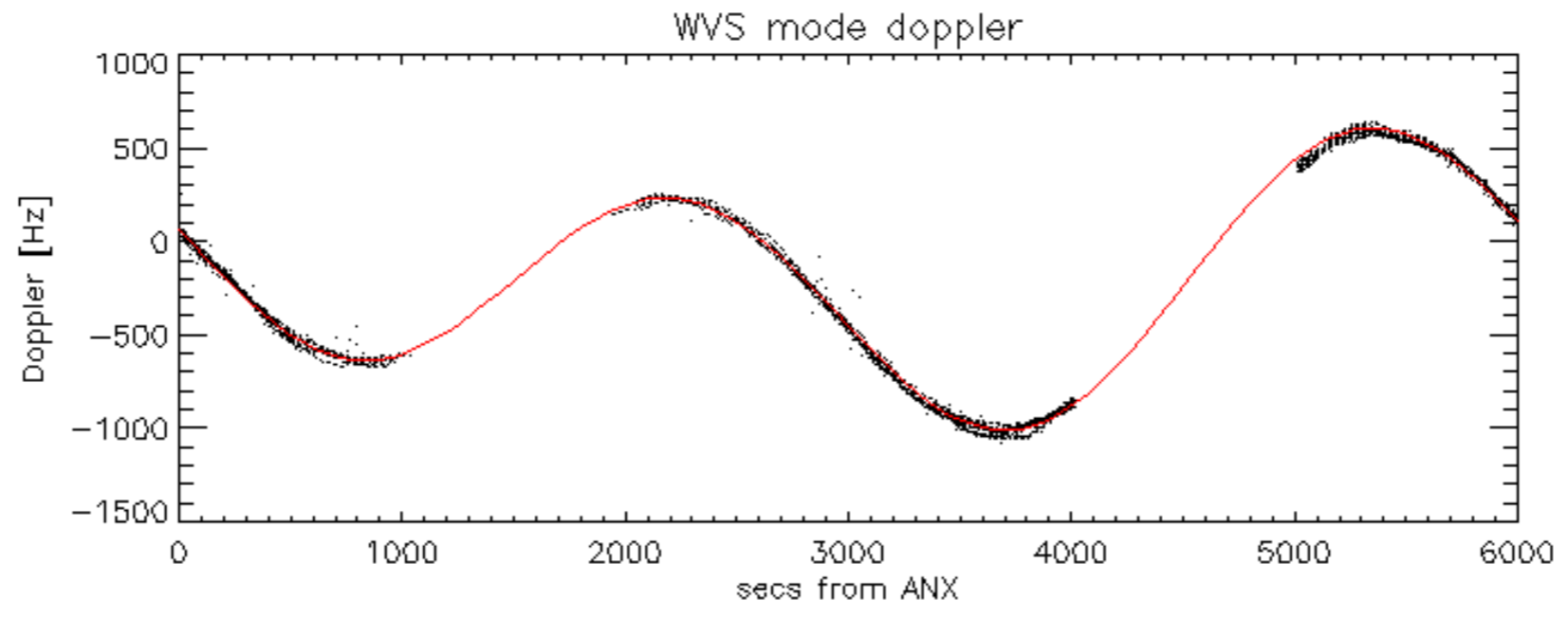


Doppler 'WVS' 'IS2' descending

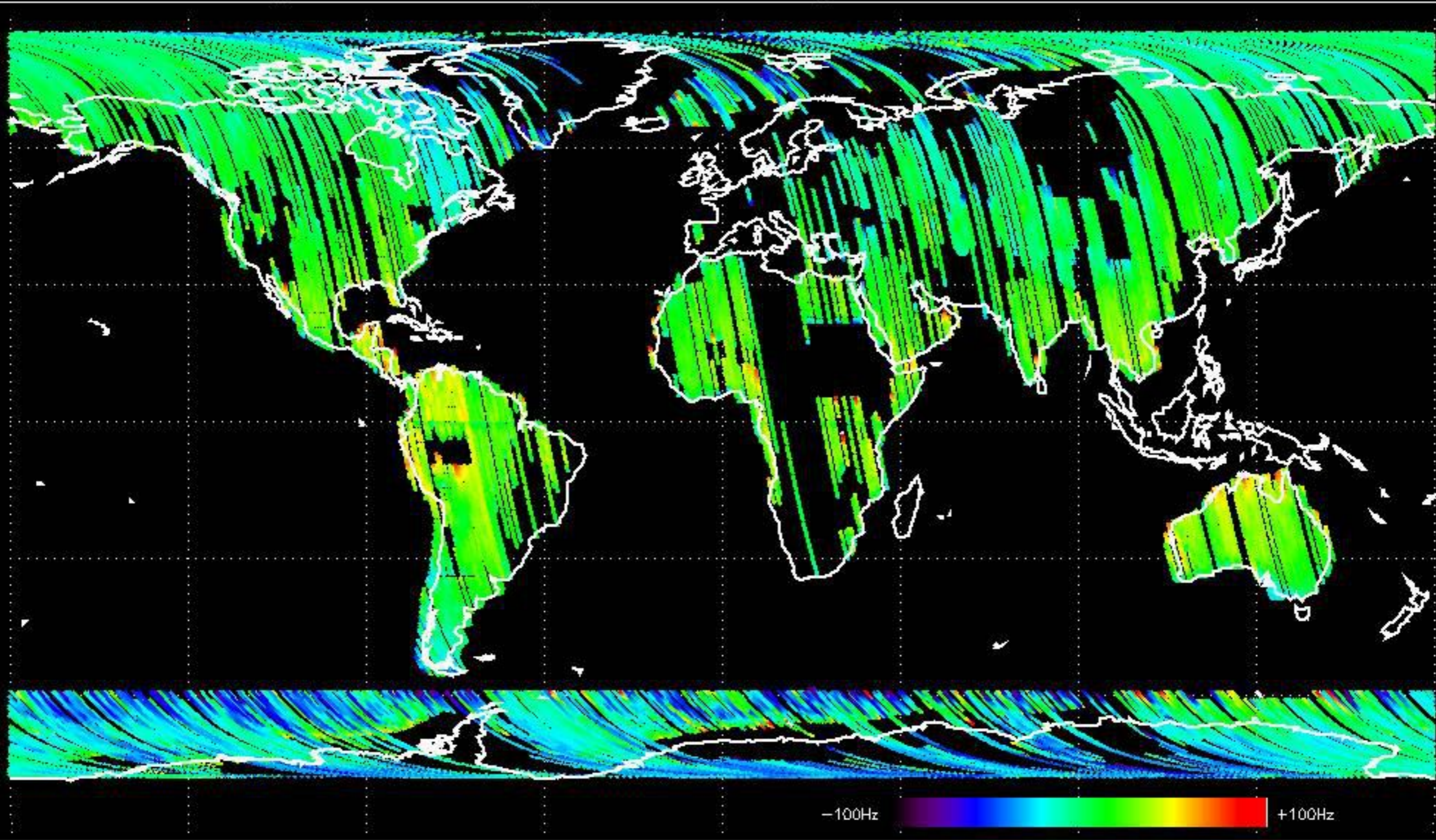


GM1 mode doppler

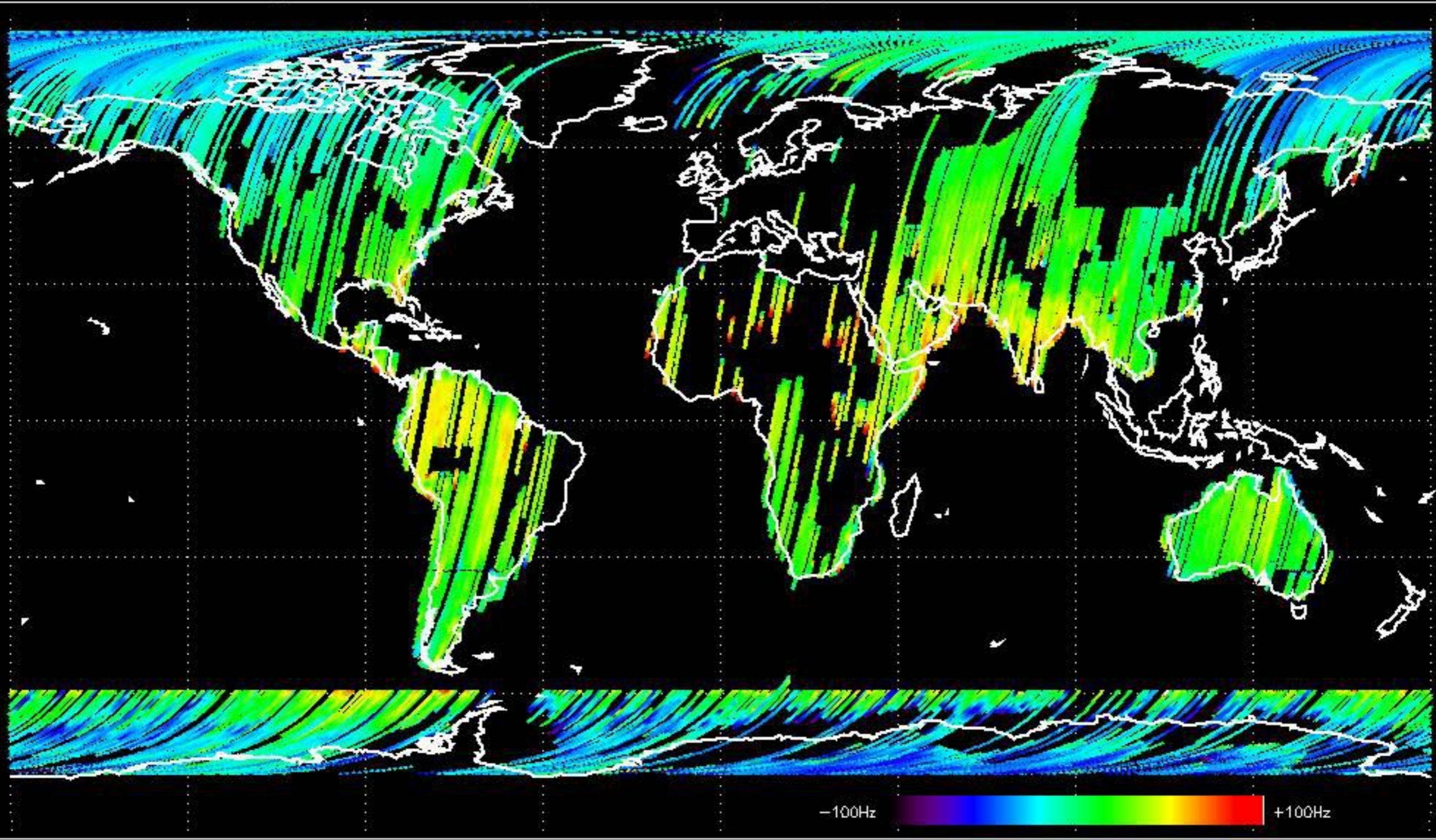




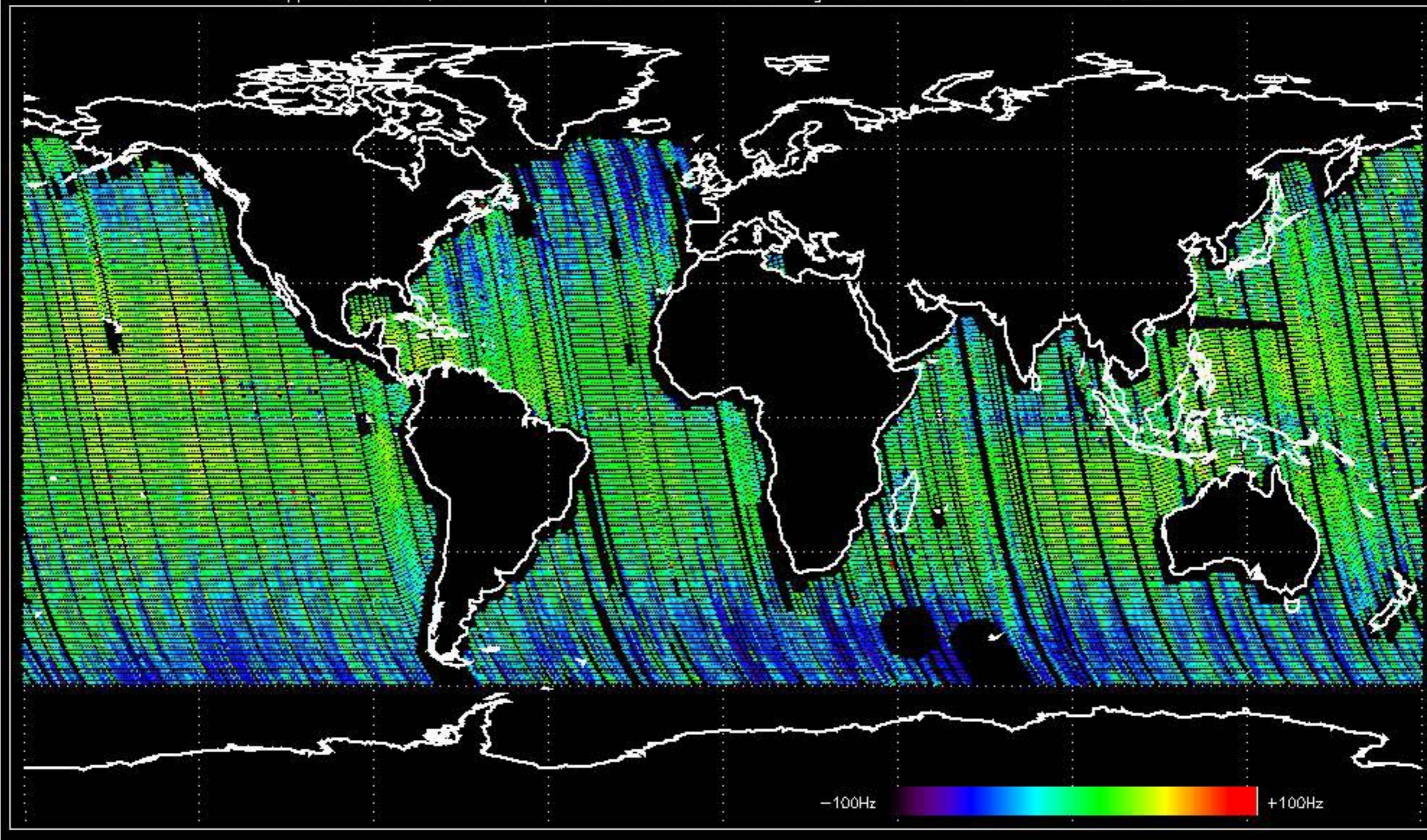
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -13.915340 Hz



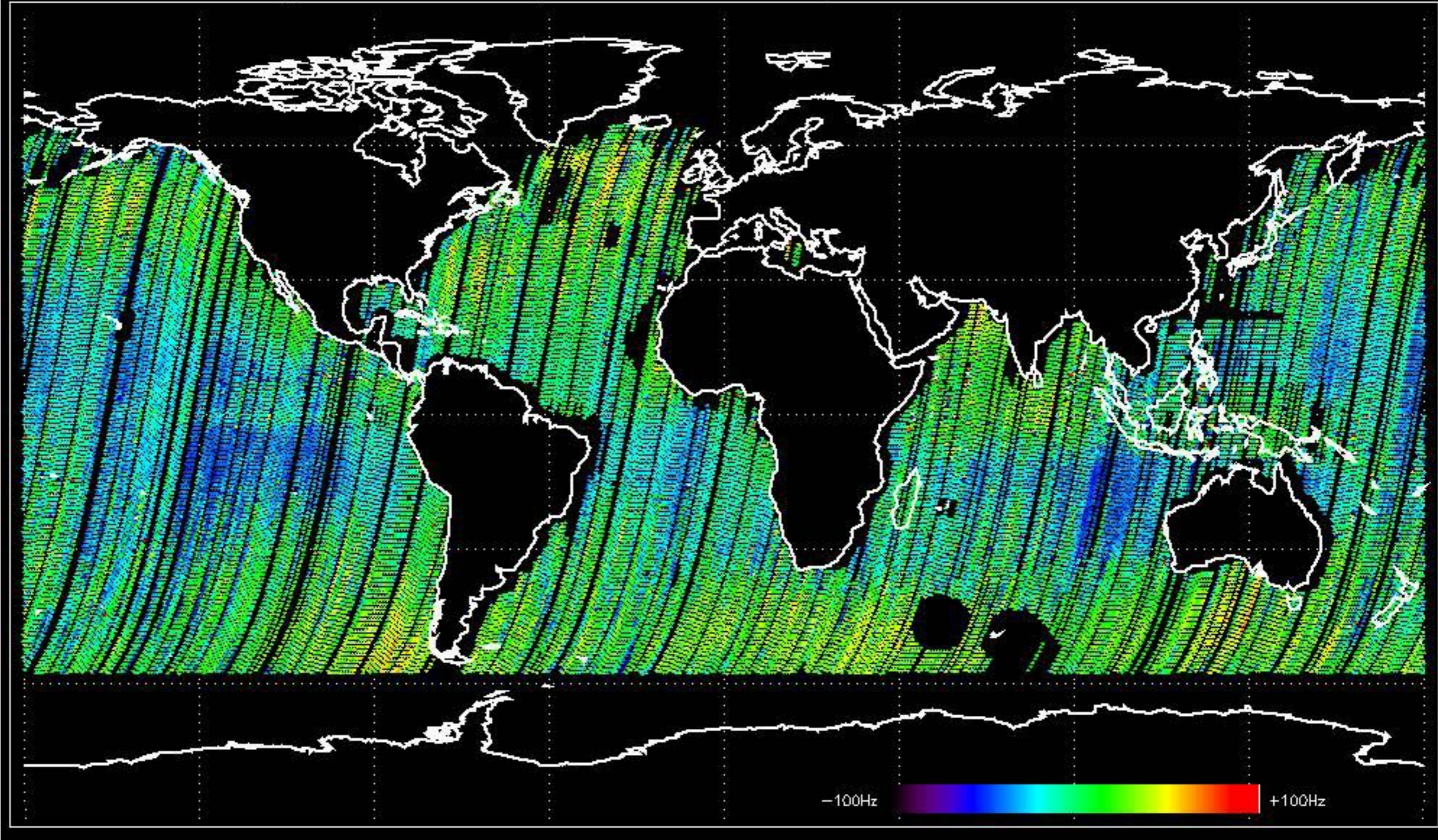
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -3.9707510 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -6.2703508 Hz

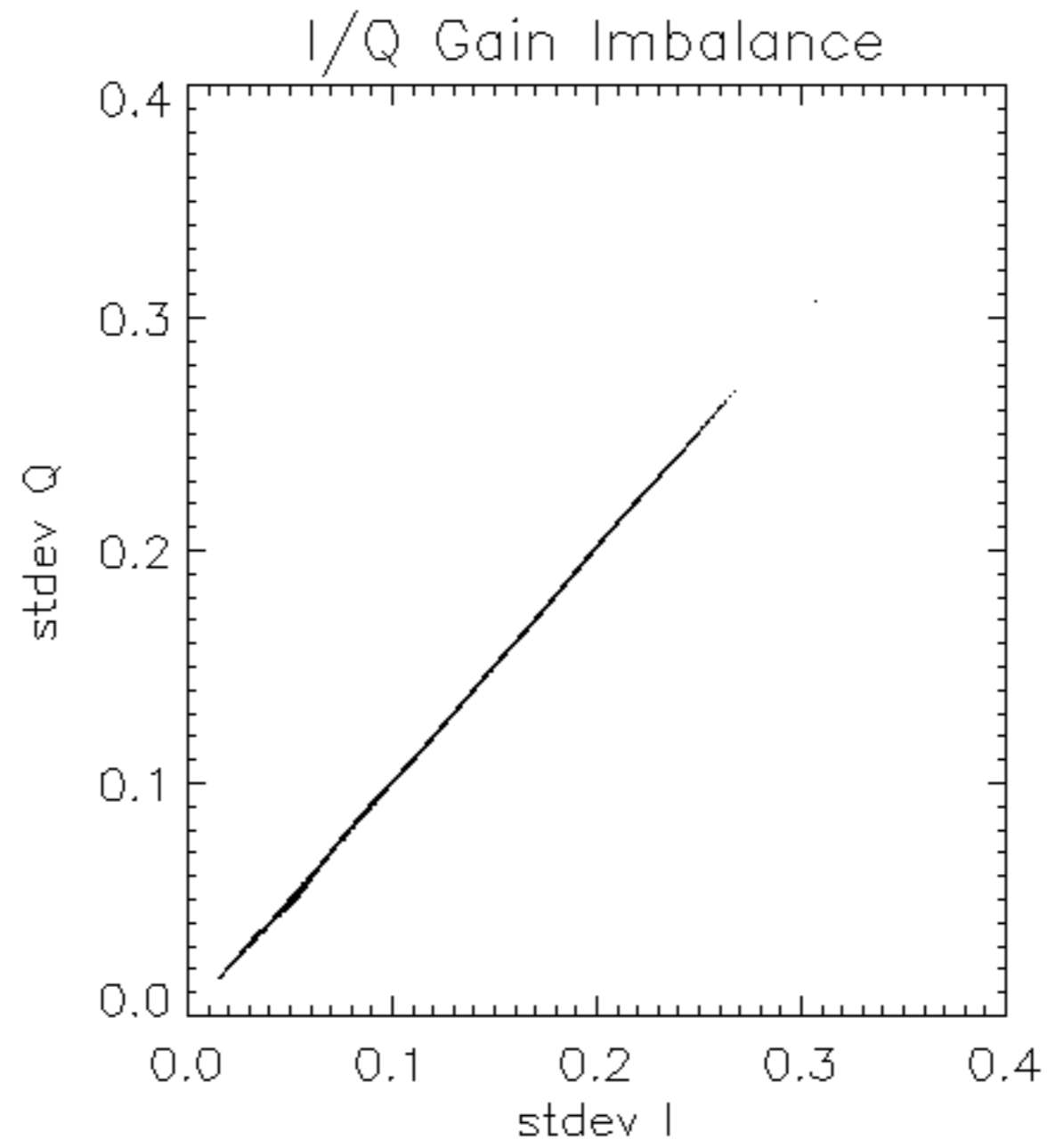


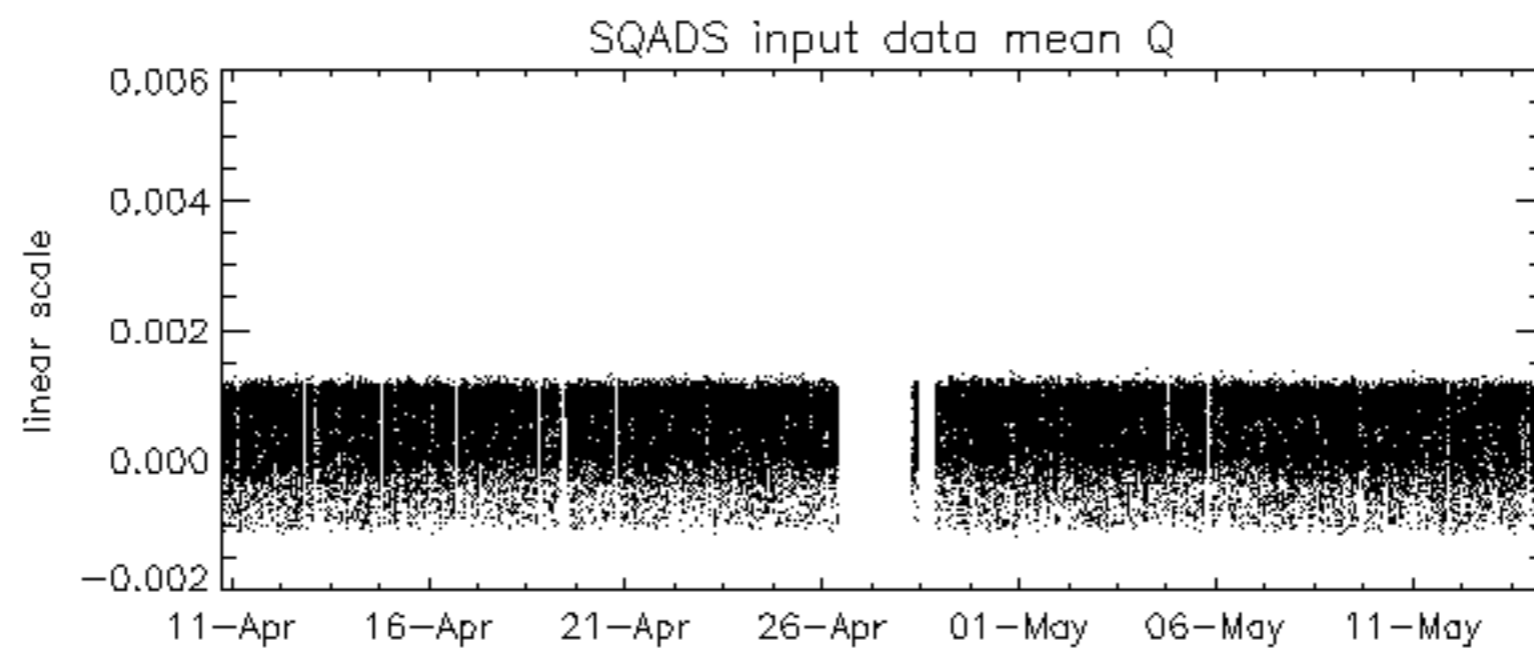
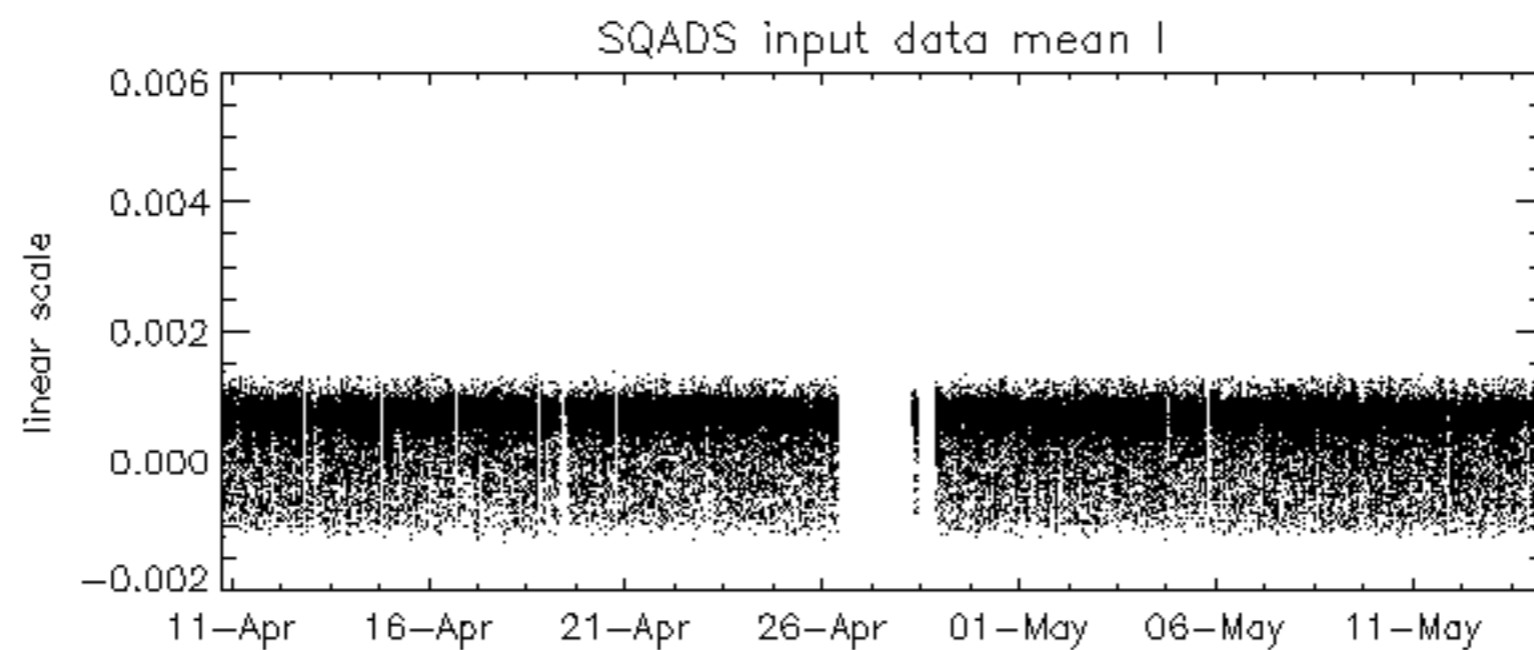
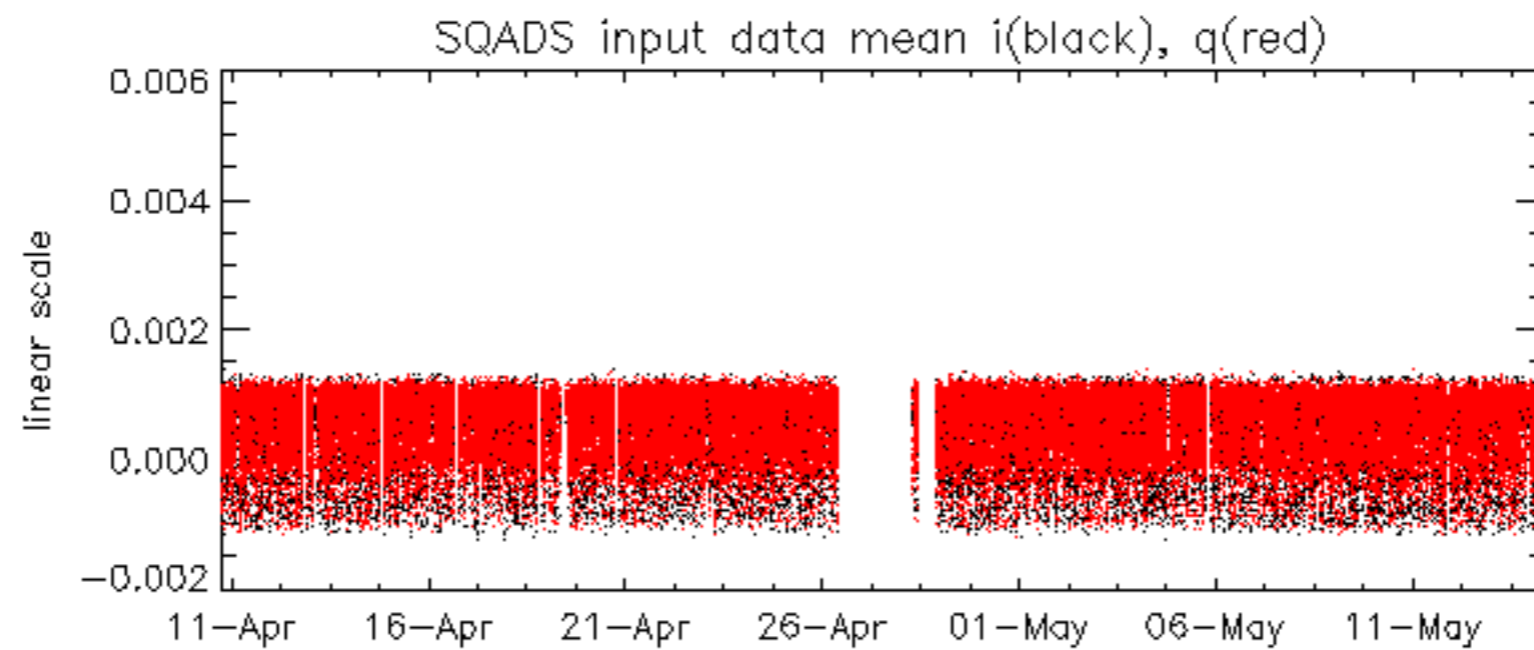
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -11.351798 Hz

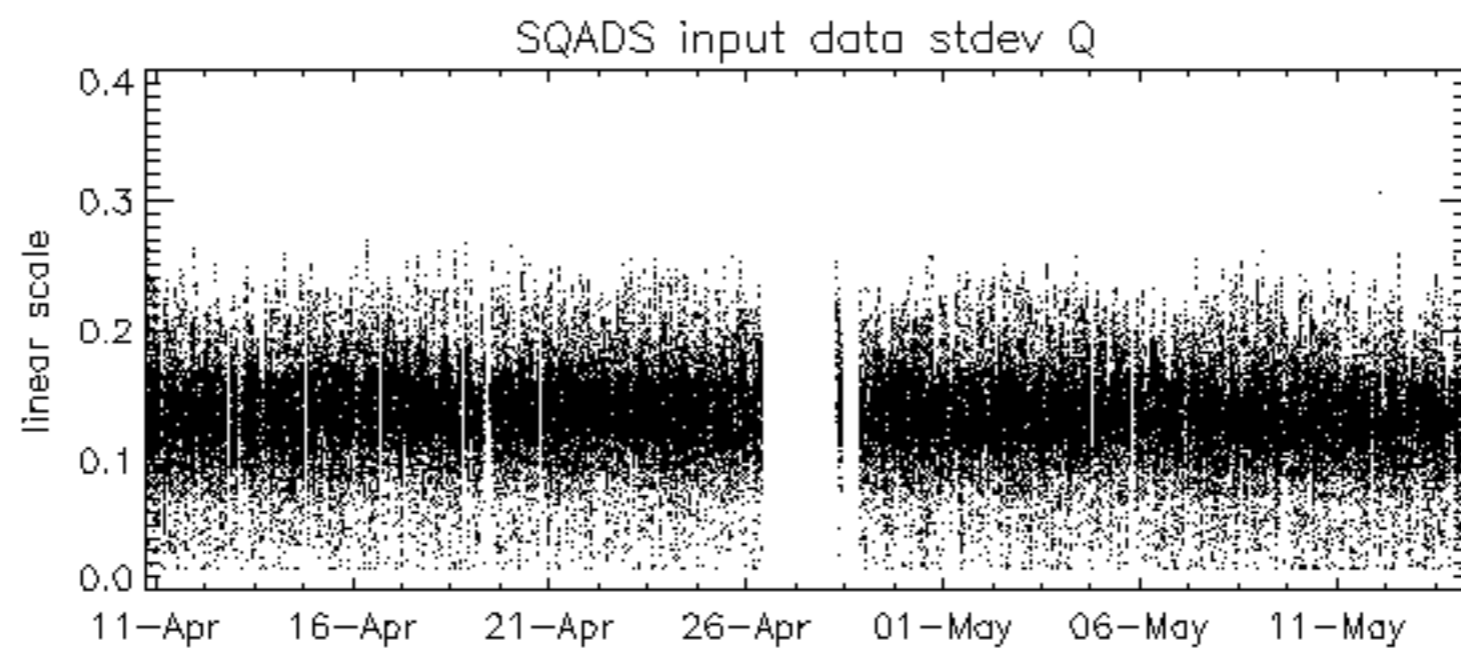
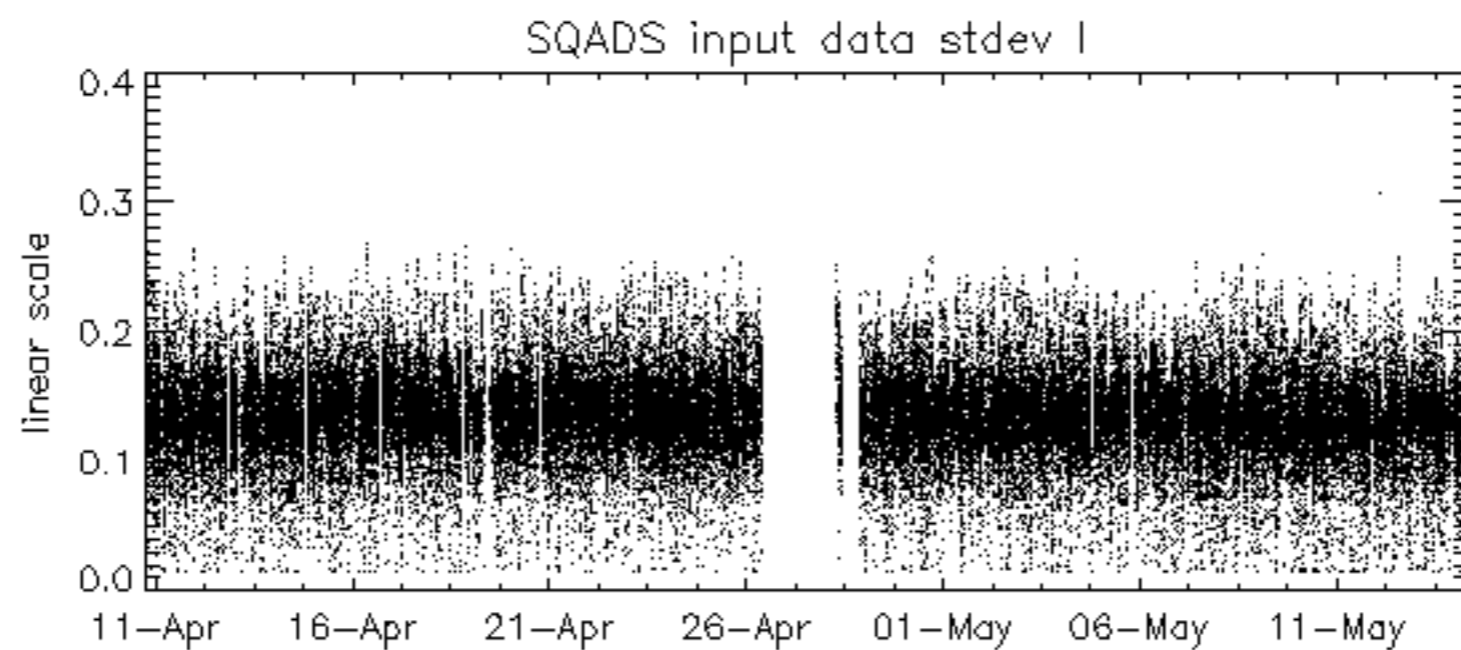
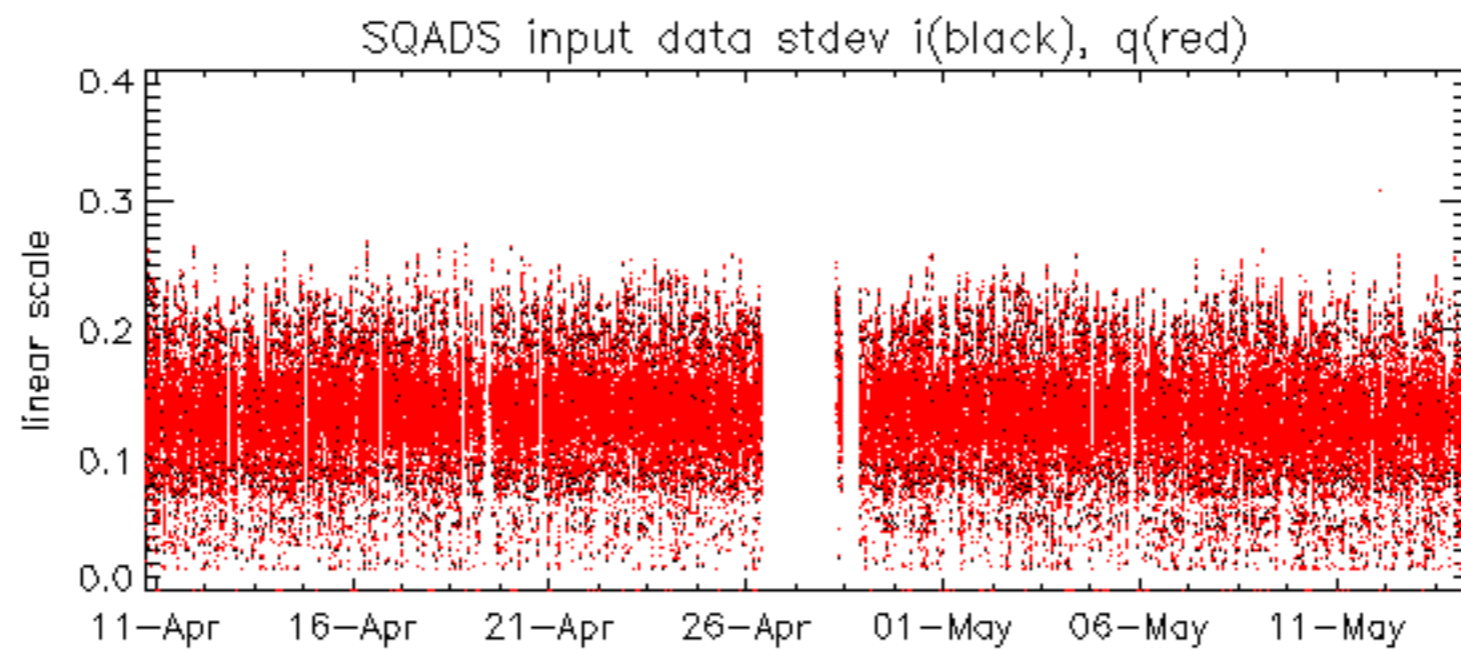


No anomalies observed on available MS products:

No anomalies observed.



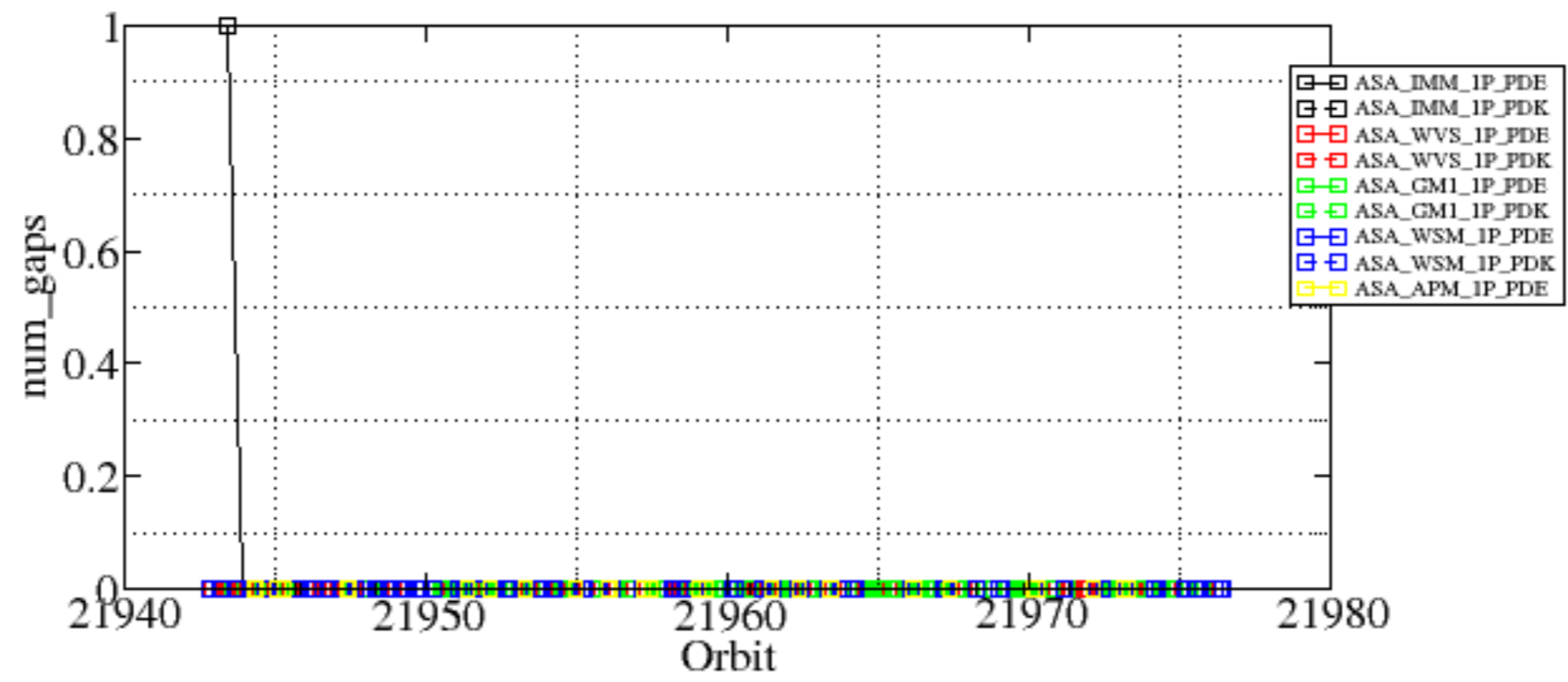


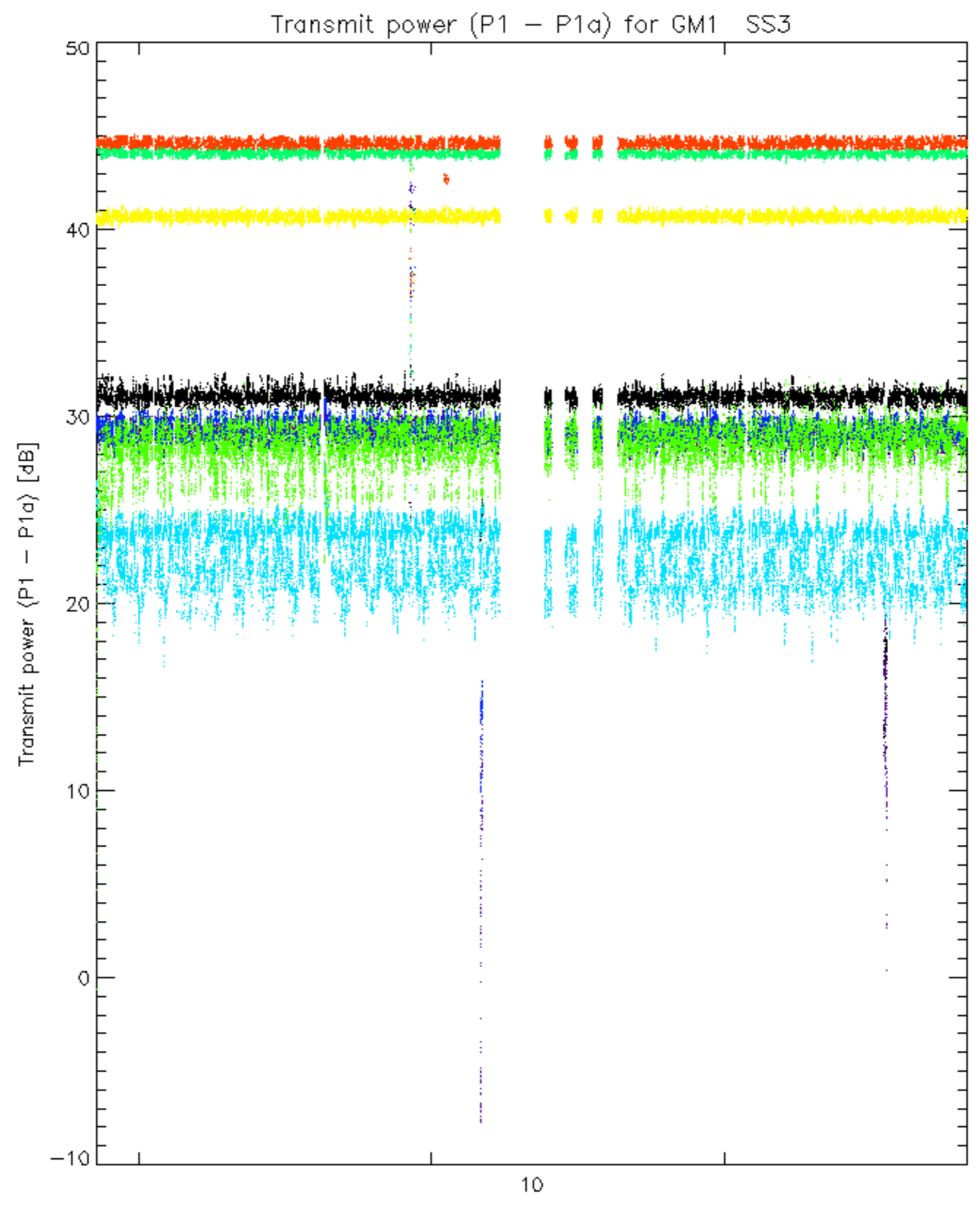


Summary of analysis for the last 3 days 2006051[234]

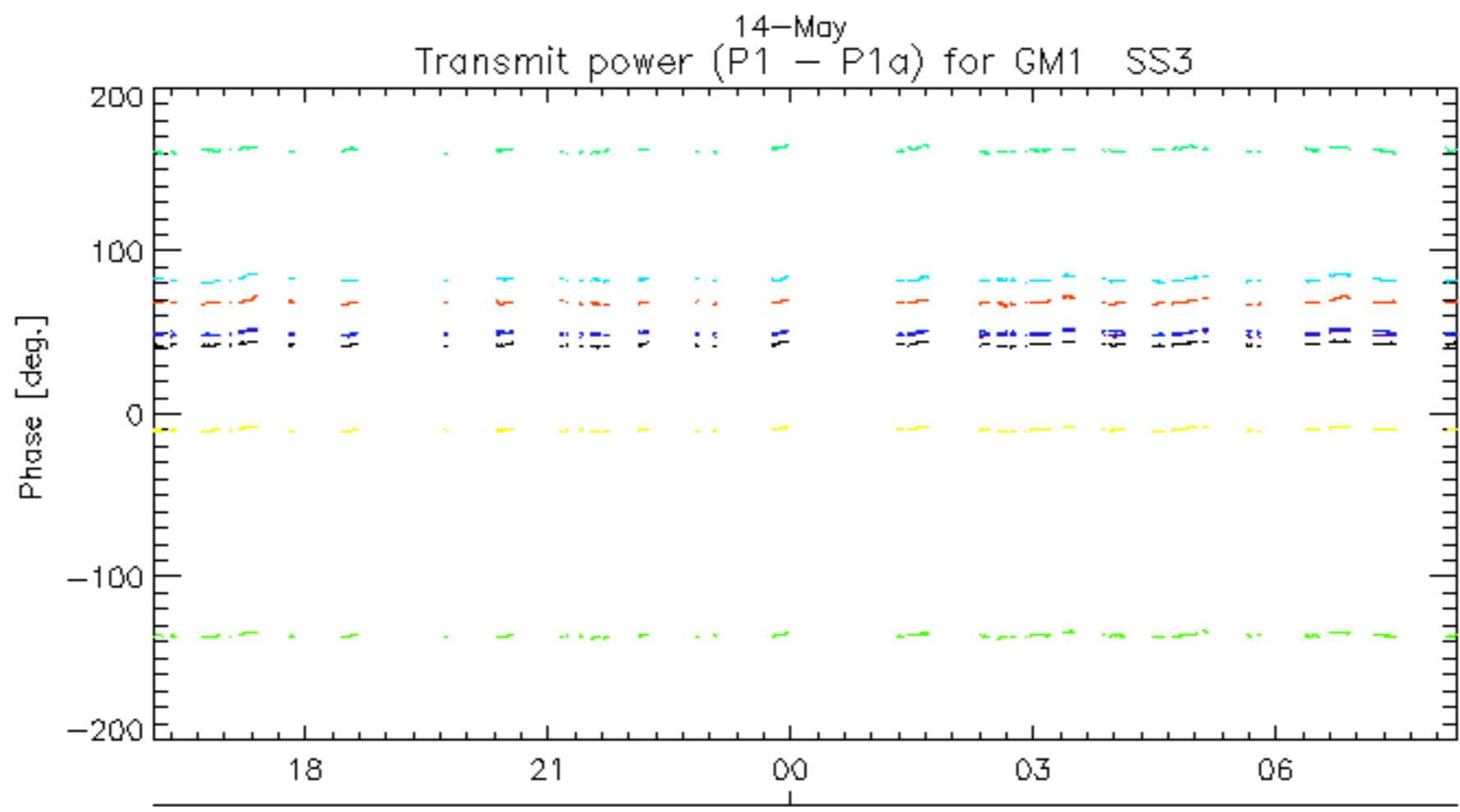
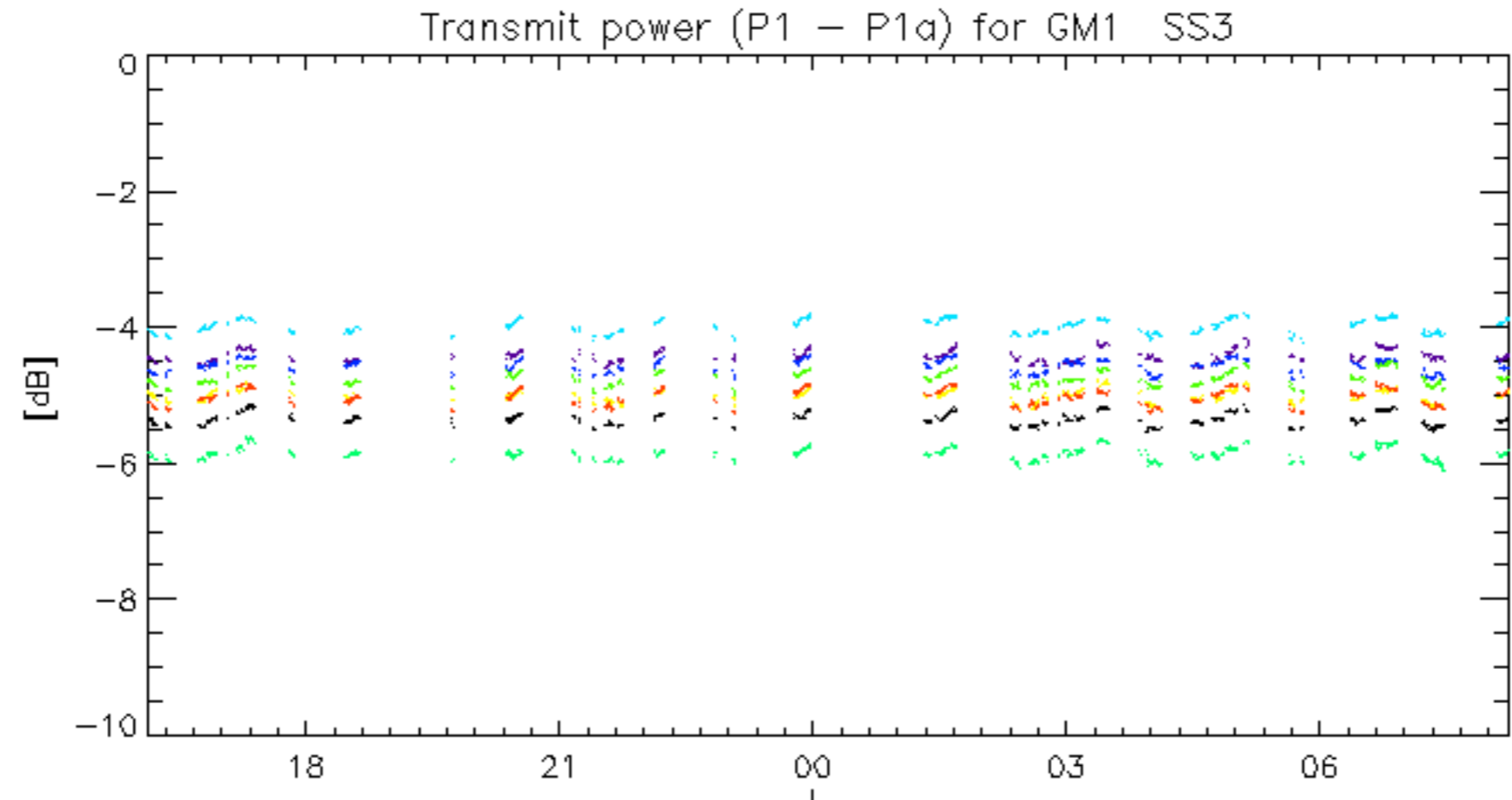
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060512_010614_000000832047_00346_21943_4800.N1	1	0
ASA_IMM_1PNPDE20060513_182646_000000352047_00371_21968_4970.N1	0	15
ASA_GM1_1PNPDK20060512_174532_000002112047_00356_21953_3153.N1	0	919
ASA_GM1_1PNPDK20060512_181941_000001262047_00356_21953_3154.N1	0	339
ASA_GM1_1PNPDK20060512_202829_000003742047_00357_21954_3164.N1	0	15
ASA_WSM_1PNPDE20060514_014737_000000862047_00375_21972_9156.N1	0	45
ASA_WSM_1PNPDK20060512_191044_000000672047_00357_21954_4898.N1	0	184
ASA_WSM_1PNPDK20060513_052729_000000122047_00363_21960_4998.N1	0	472
ASA_WSM_1PNPDK20060513_103058_000001292047_00366_21963_4958.N1	0	15
ASA_APM_1PNPDE20060513_004223_000000562047_00360_21957_2192.N1	0	19

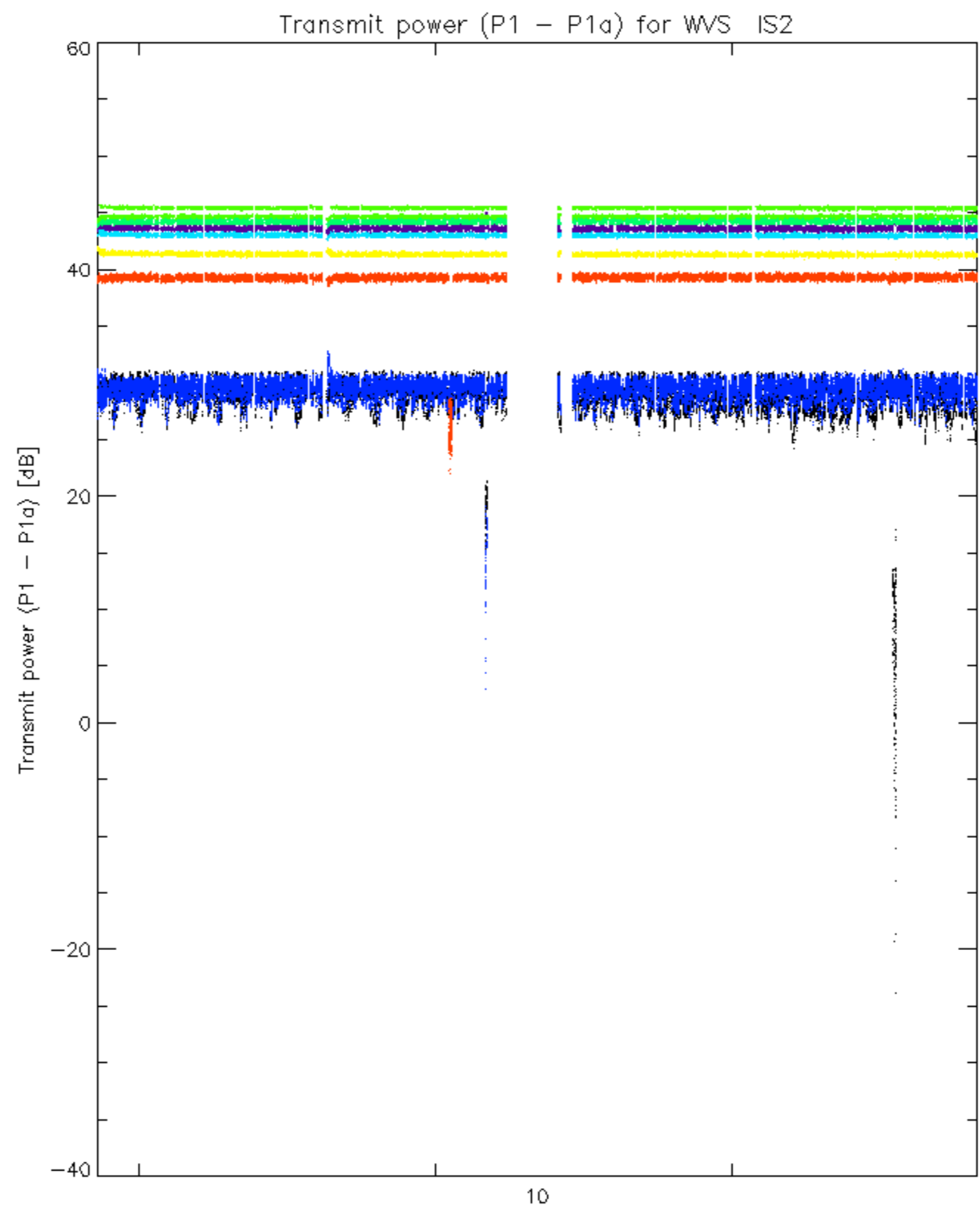




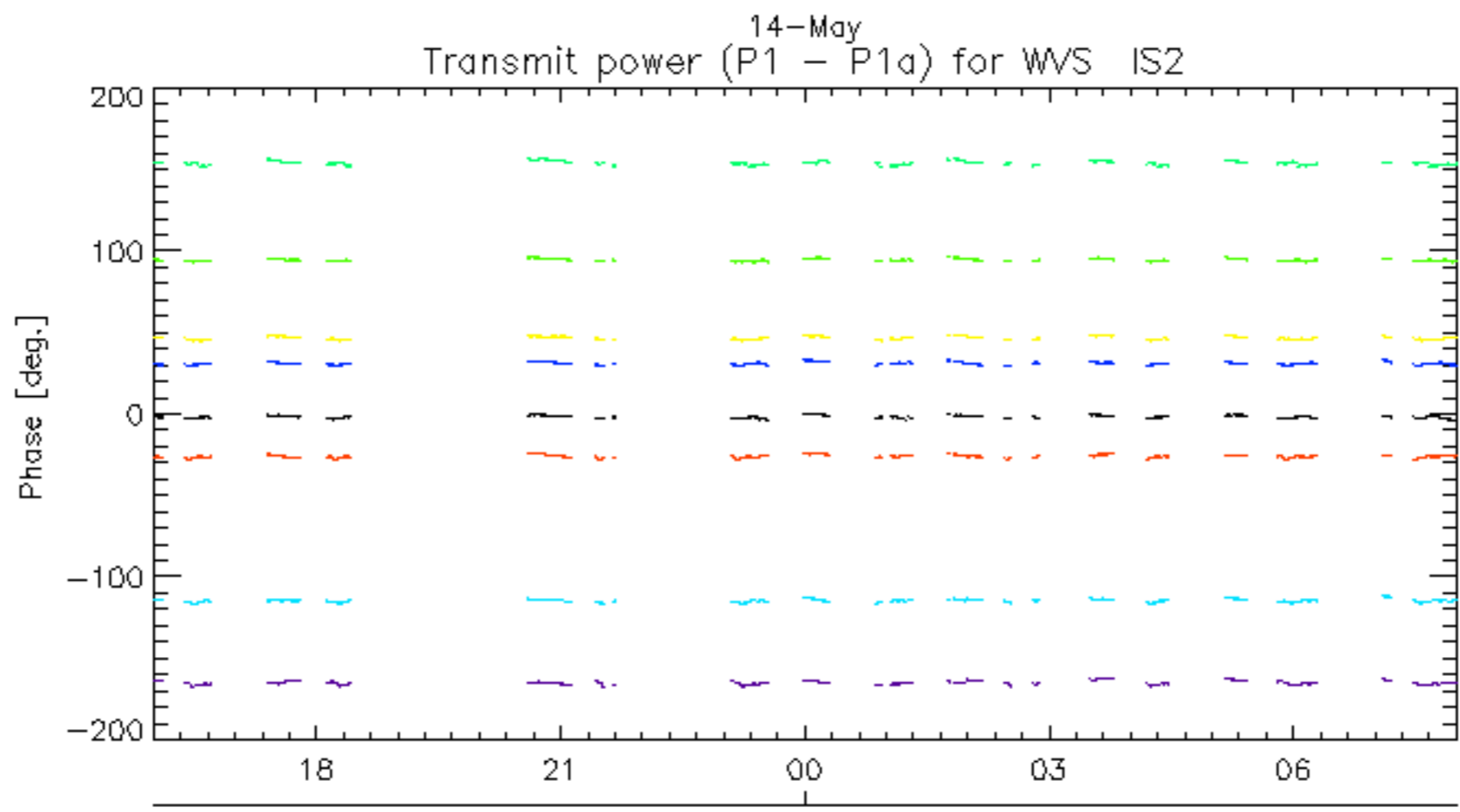
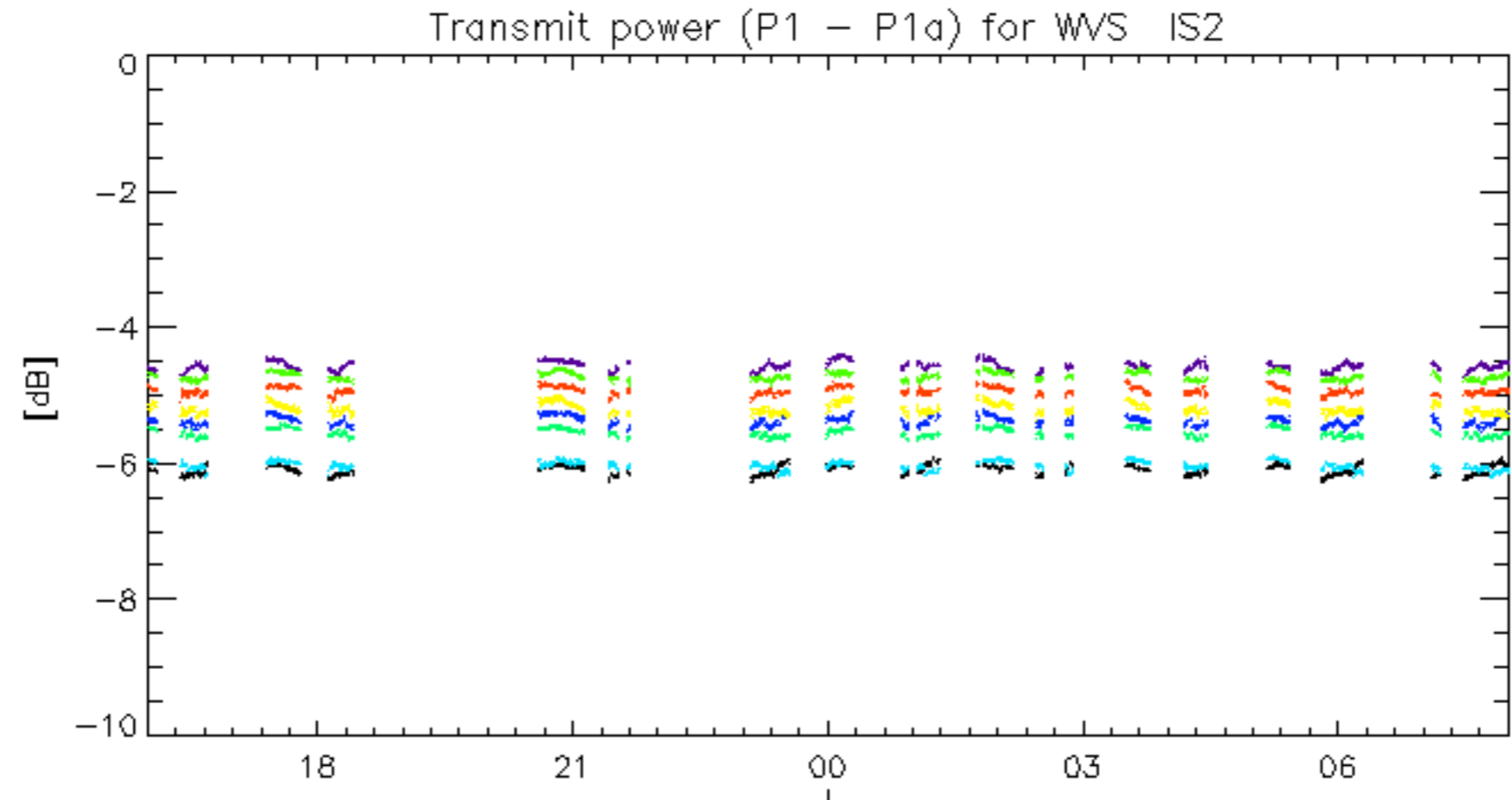
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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



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



14-May
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

No unavailabilities during the reported period.