

PRELIMINARY REPORT OF 060528

last update on Sun May 28 16:41:49 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 2006-05-27 00:00:00 to 2006-05-28 16:41:49

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	38	65	9	0	23
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	38	65	9	0	23
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	38	65	9	0	23
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	38	65	9	0	23

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	43	65	26	19	89
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	43	65	26	19	89
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	43	65	26	19	89
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	43	65	26	19	89

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	20060528 095343
H	20060527 084444

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	-3.962101	0.017485	0.028513
7	P1	-3.098931	0.017228	-0.089846
11	P1	-4.107405	0.018458	-0.024119
15	P1	-6.130267	0.020182	-0.016703
19	P1	-3.317769	0.008397	-0.031836
22	P1	-4.521376	0.011114	0.028782
26	P1	-3.994349	0.019177	0.057555
30	P1	-5.742525	0.019423	-0.039080
3	P1	-16.586582	0.293379	0.186538
7	P1	-17.102221	0.188684	-0.276297
11	P1	-16.898838	0.327387	-0.178795
15	P1	-13.210226	0.209278	-0.143154
19	P1	-14.247431	0.047420	-0.130871
22	P1	-16.152206	0.389304	-0.091337
26	P1	-15.290670	0.251900	0.114247
30	P1	-16.992790	0.357824	-0.299858

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.227650	0.082373	0.136732
7	P2	-22.113878	0.099875	0.171024
11	P2	-15.955569	0.111772	0.145127
15	P2	-7.166609	0.093259	0.012987
19	P2	-9.164797	0.085804	-0.015275
22	P2	-18.113277	0.083637	-0.089567
26	P2	-16.360329	0.088535	-0.080870
30	P2	-19.589256	0.085597	0.069508

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.189900	0.003810	0.014753
7	P3	-8.189900	0.003810	0.014753
11	P3	-8.189900	0.003810	0.014753
15	P3	-8.189900	0.003810	0.014753
19	P3	-8.189900	0.003810	0.014753
22	P3	-8.189900	0.003810	0.014753
26	P3	-8.189900	0.003810	0.014753
30	P3	-8.189900	0.003810	0.014753

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	-3.768685	0.074554	-0.125860
7	P1	-2.609589	0.038796	0.033739
11	P1	-2.862697	0.028544	-0.028737
15	P1	-3.495900	0.049585	0.006649
19	P1	-3.395010	0.013618	-0.026727
22	P1	-5.090177	0.020166	0.042281
26	P1	-5.838479	0.015039	-0.029390
30	P1	-5.183681	0.037350	-0.050795
3	P1	-11.604051	0.122704	-0.100765
7	P1	-9.953854	0.068662	0.002959
11	P1	-10.188826	0.097480	-0.004460
15	P1	-10.620058	0.145818	0.032463
19	P1	-15.503695	0.073788	-0.093861
22	P1	-20.876461	1.234995	-0.180262
26	P1	-16.482967	0.355475	-0.095511
30	P1	-18.034248	0.456744	0.216990

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.910589	0.060645	0.089945
7	P2	-22.527773	0.118884	0.036869
11	P2	-11.189782	0.040708	0.034092
15	P2	-4.902832	0.042472	-0.045038
19	P2	-6.877743	0.040000	-0.015501
22	P2	-8.191480	0.038214	-0.048909
26	P2	-24.099430	0.060386	-0.053445
30	P2	-22.064655	0.048486	-0.017540

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.022424	0.004093	0.014163
7	P3	-8.022453	0.004097	0.014163
11	P3	-8.022458	0.004078	0.014103
15	P3	-8.022279	0.004087	0.014103
19	P3	-8.022511	0.004090	0.014215
22	P3	-8.022488	0.004074	0.014005
26	P3	-8.022398	0.004076	0.013565
30	P3	-8.022429	0.004089	0.013789

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	0.000531507
	stdev	1.89101e-07
MEAN Q	mean	0.000514082
	stdev	2.27647e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.134607
	stdev	0.00116315
STDEV Q	mean	0.134948
	stdev	0.00118004



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006052[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_1PNPDE20060526_054354_000000352048_00048_22146_6225.N1	1	0
ASA_IMM_1PNPDE20060527_005025_000001722048_00059_22157_6265.N1	1	0
ASA_WSM_1PNPDE20060526_021326_000000852048_00046_22144_0919.N1	0	28
ASA_WSM_1PNPDE20060526_203642_000000922048_00057_22155_1065.N1	0	47
ASA_WSM_1PNPDE20060527_000327_000003292048_00059_22157_1091.N1	0	34
ASA_WSM_1PNPDE20060527_160556_000001402048_00069_22167_1206.N1	0	34
ASA_WSM_1PNPDE20060527_233149_000000672048_00073_22171_1272.N1	0	34
ASA_WSM_1PNPDK20060526_151921_000000552048_00054_22152_6150.N1	0	42



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

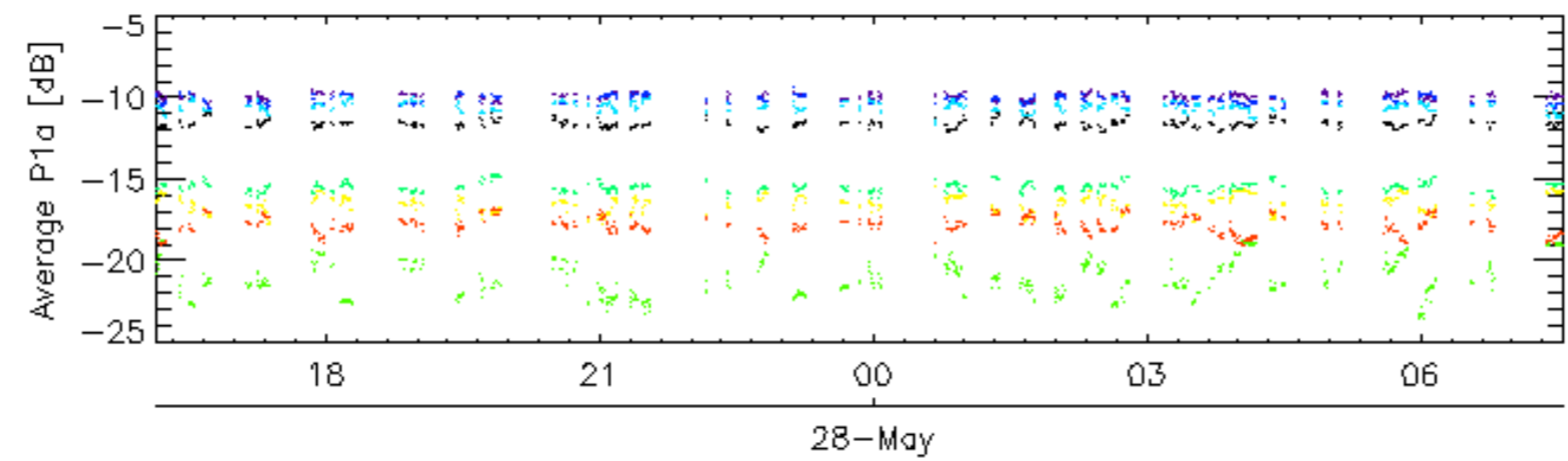
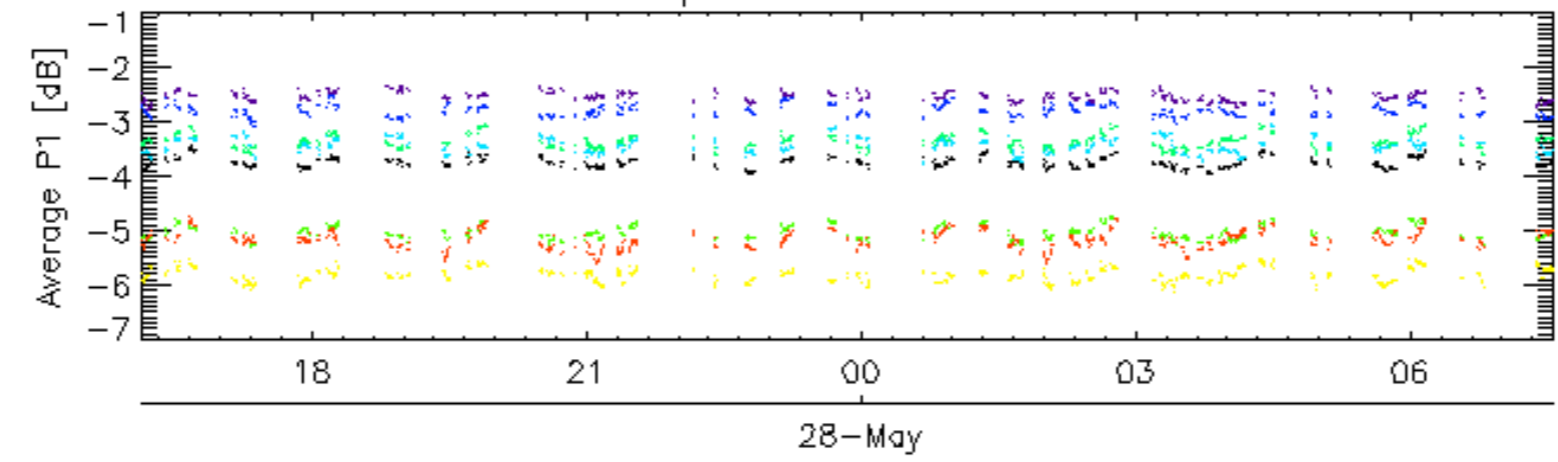
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

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

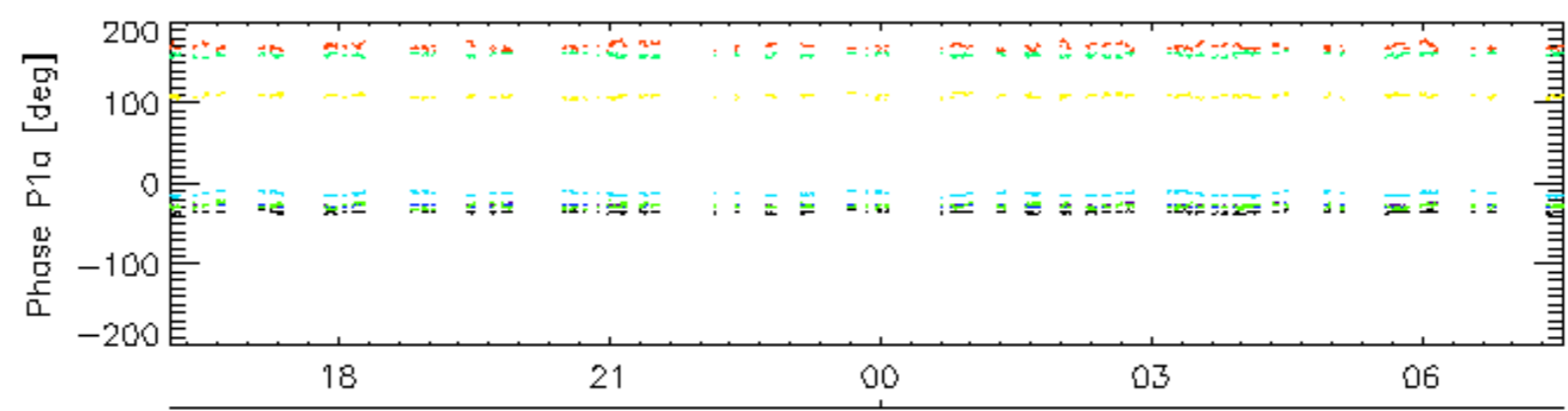
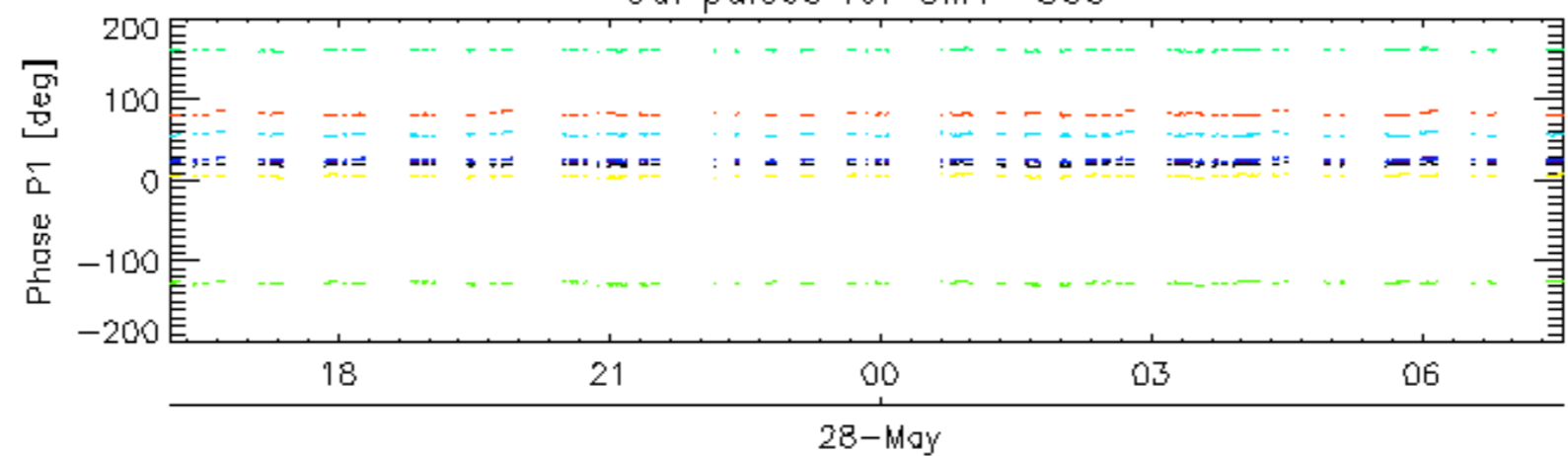
7.6 - Doppler evolution versus ANX for GM1**Evolution Doppler error versus ANX**

<input type="checkbox"/>

Cal pulses for GM1 SS3

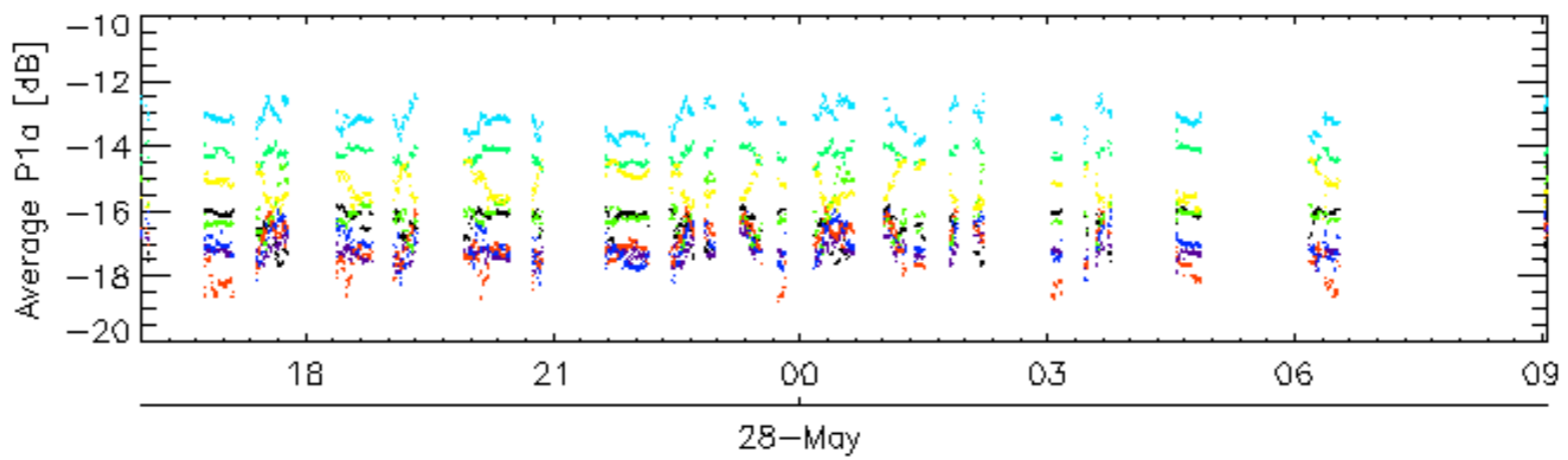
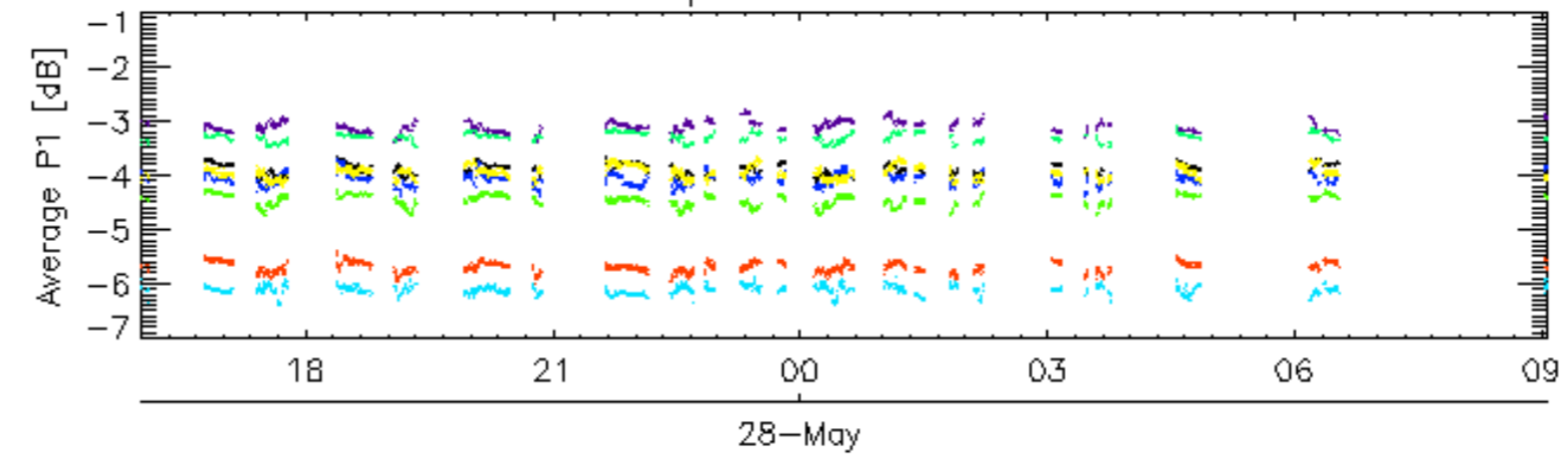


Cal pulses for GM1 SS3

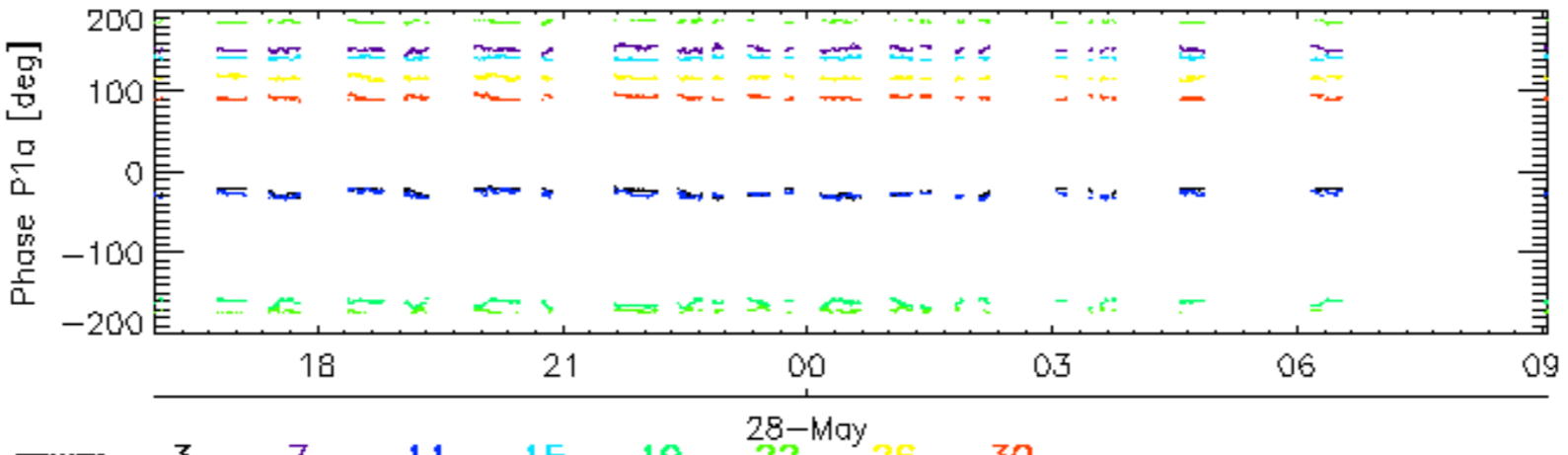
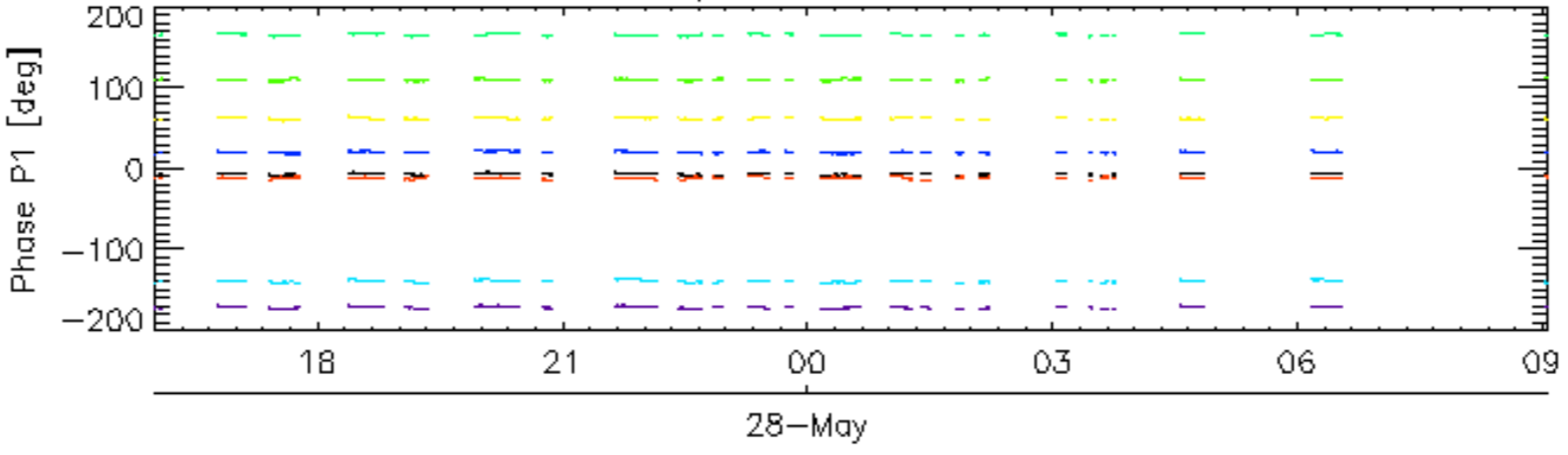


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30 28-May

Cal pulses for WVS IS2

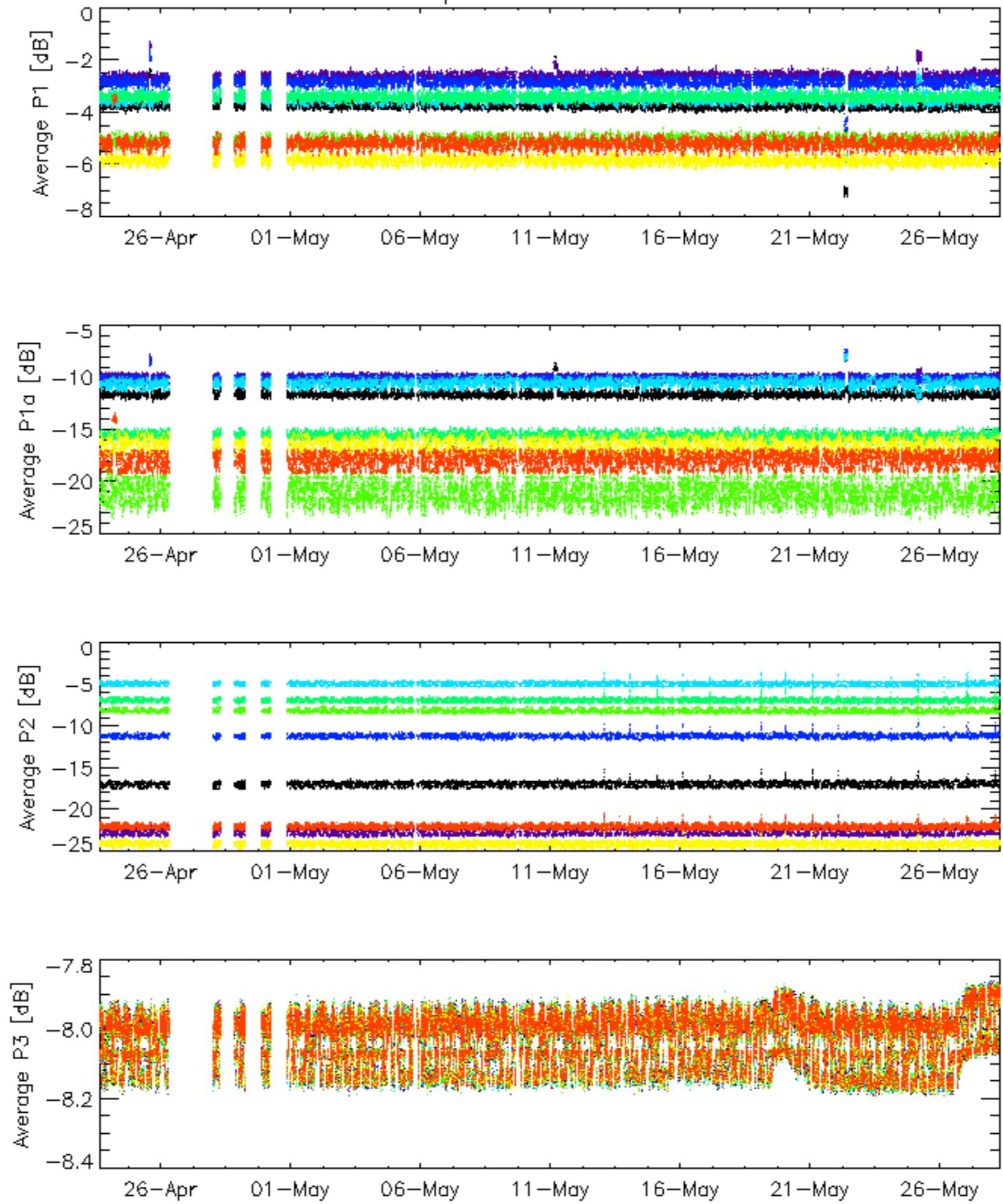


Cal pulses for WVS IS2



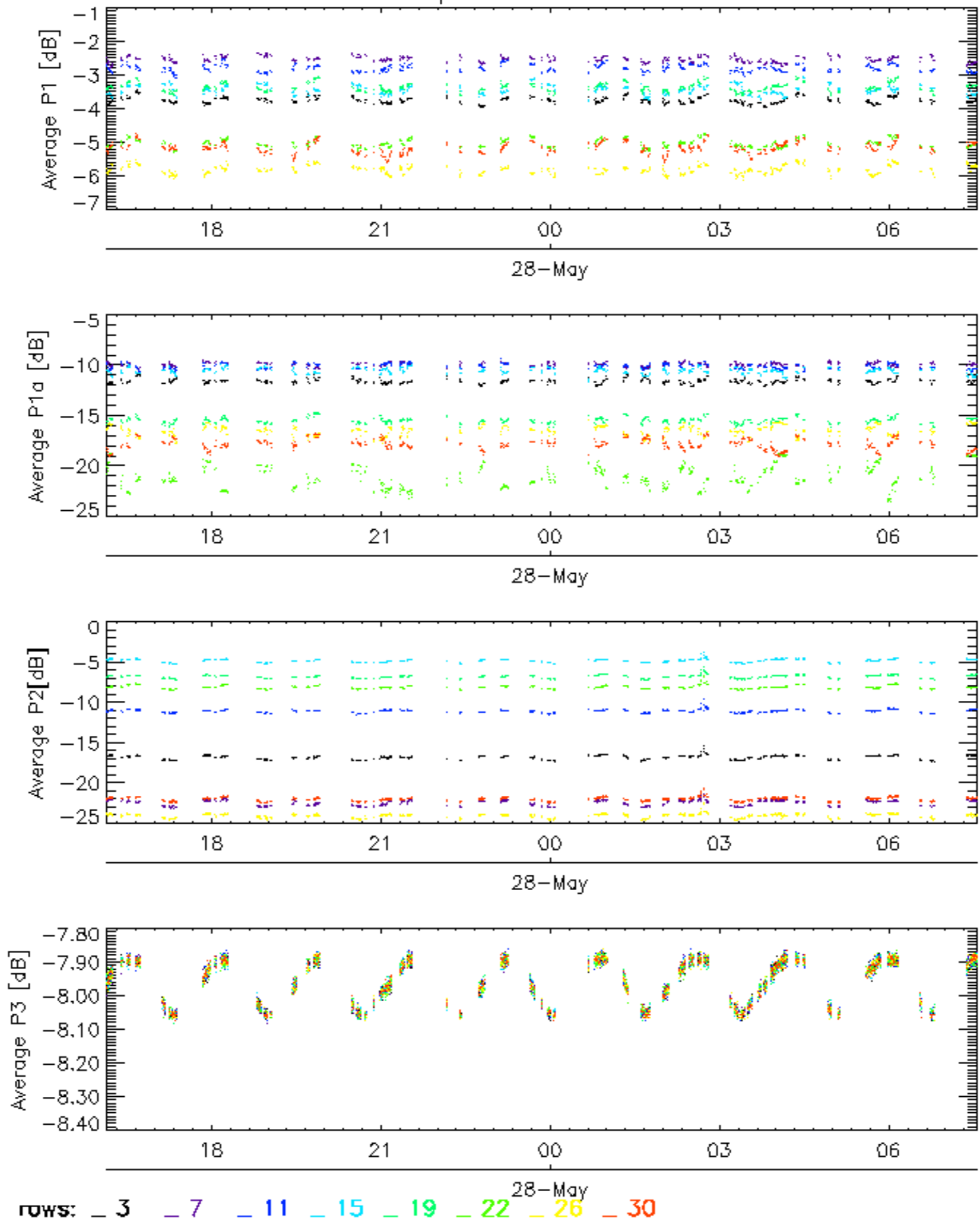
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

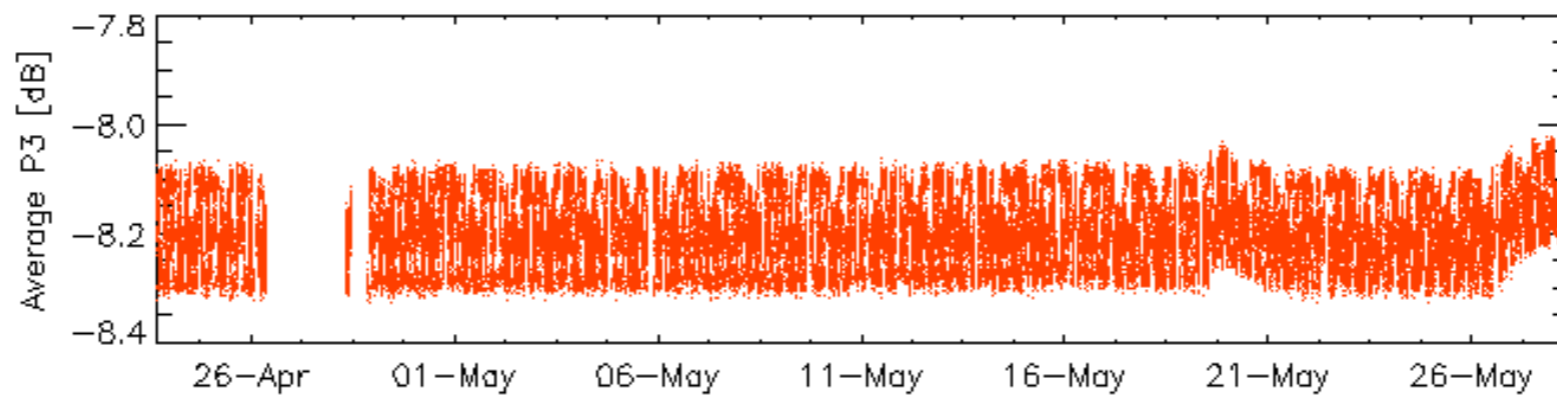
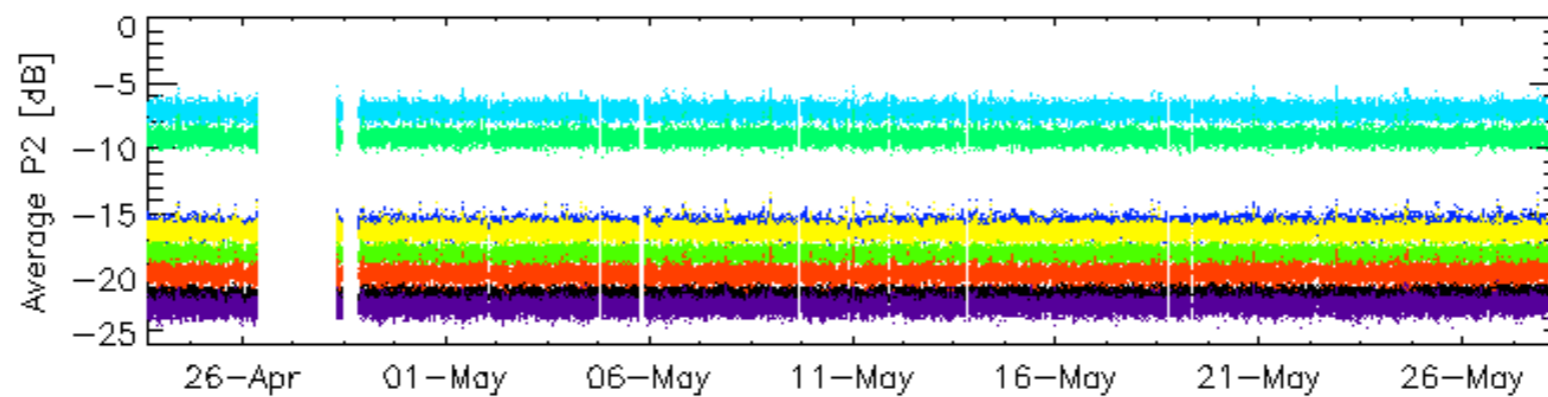
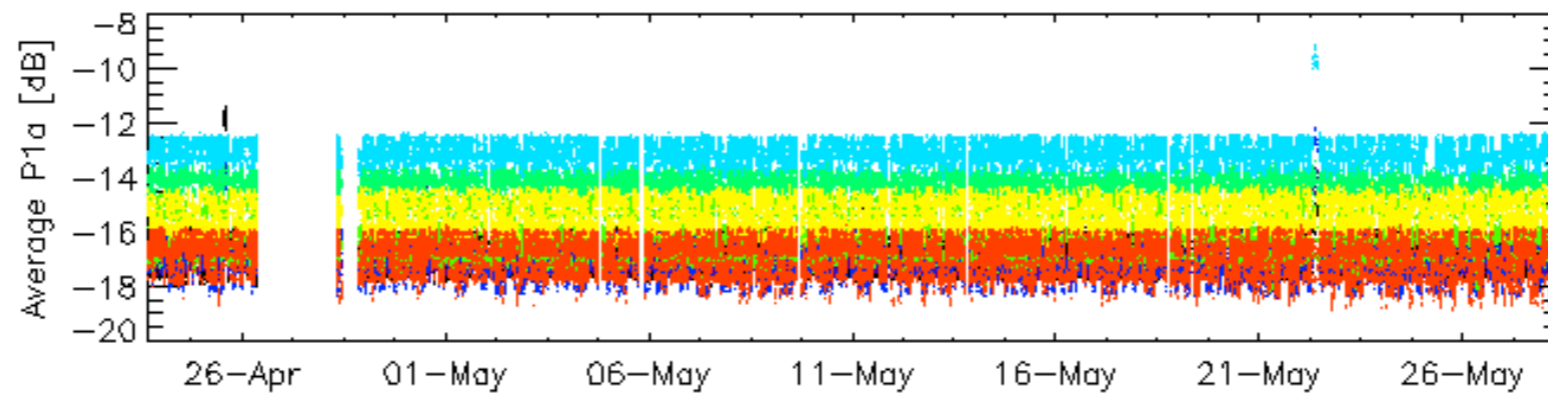
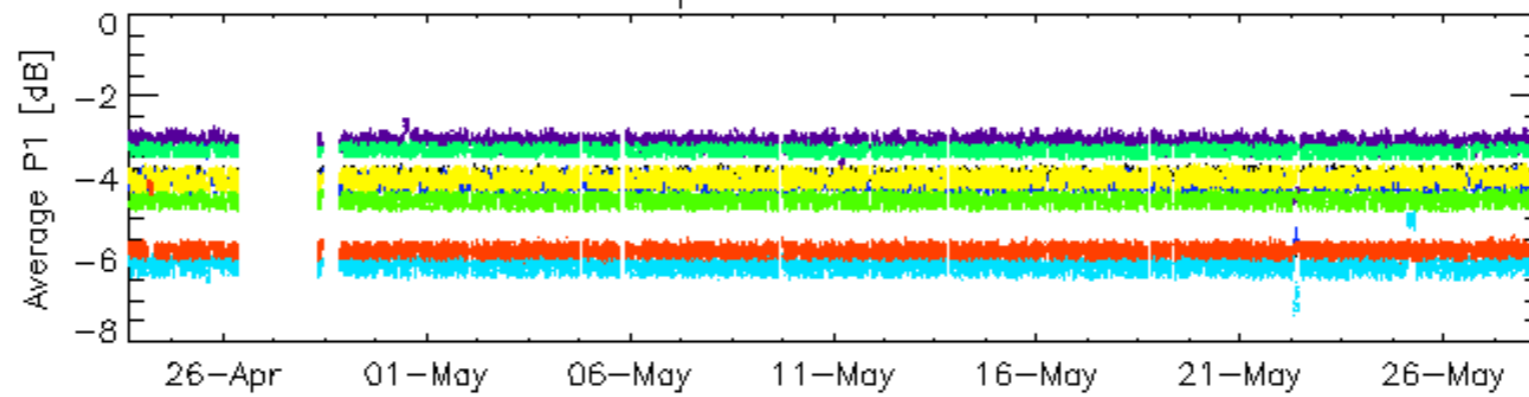


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

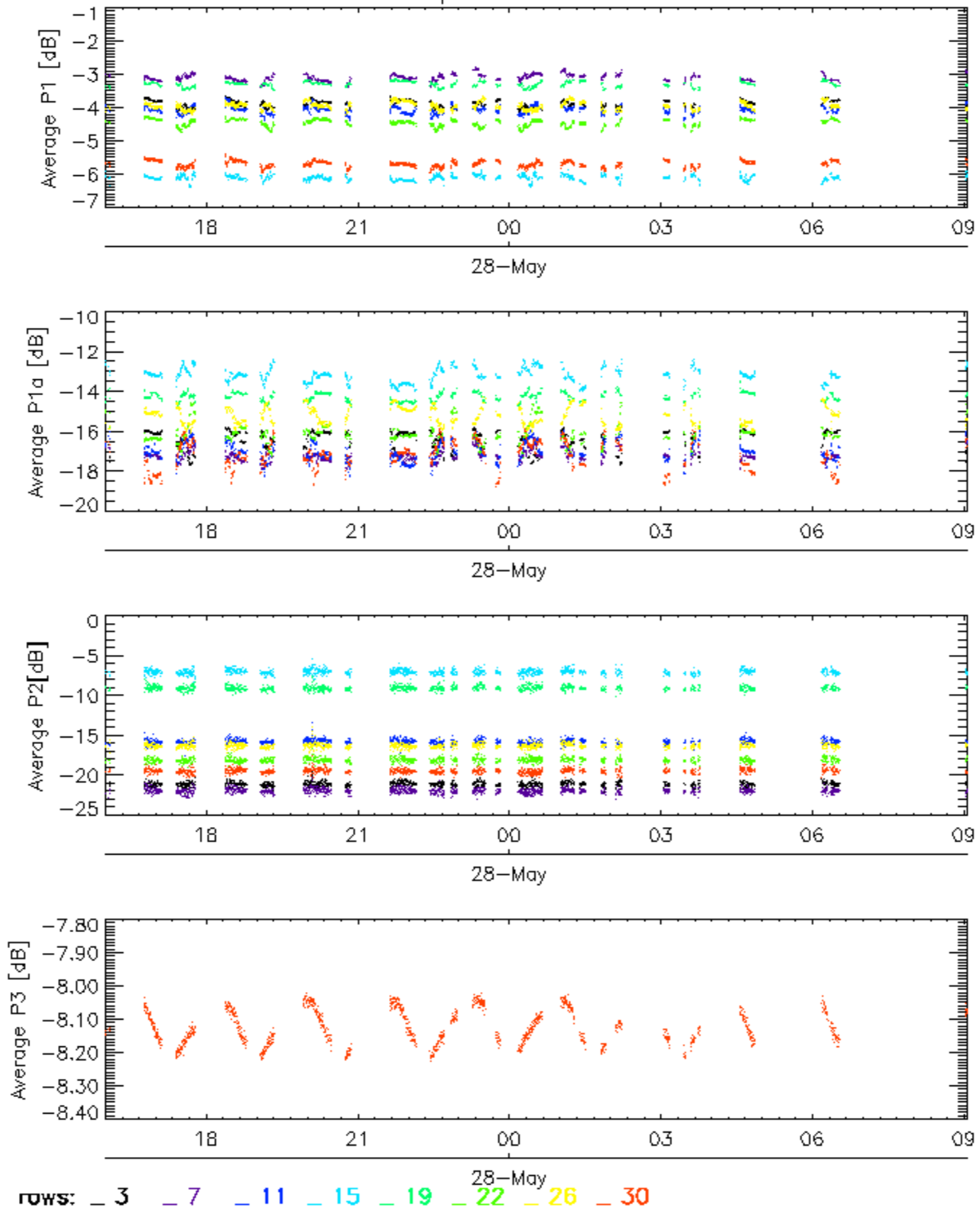


Cal pulses for WVS IS2

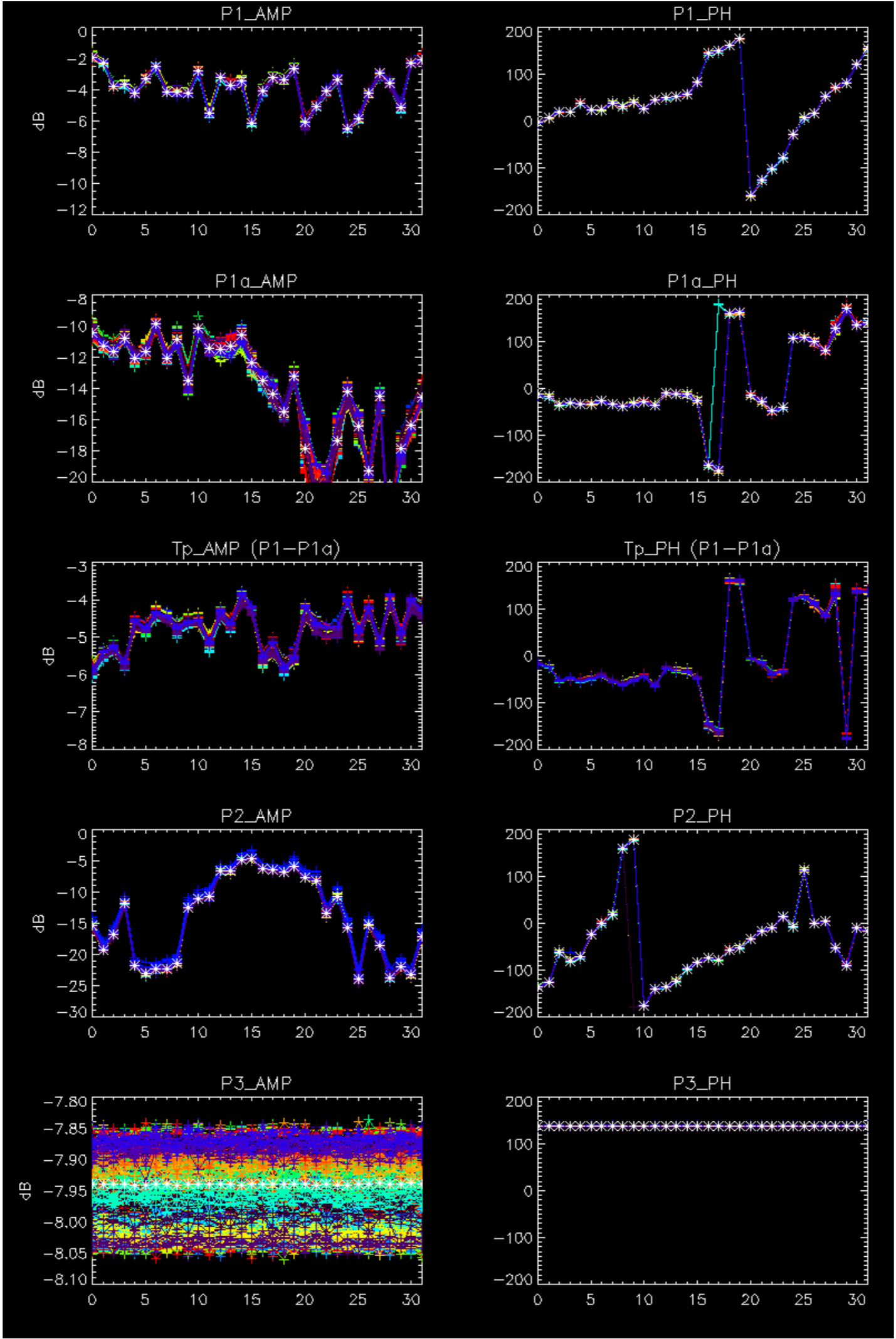


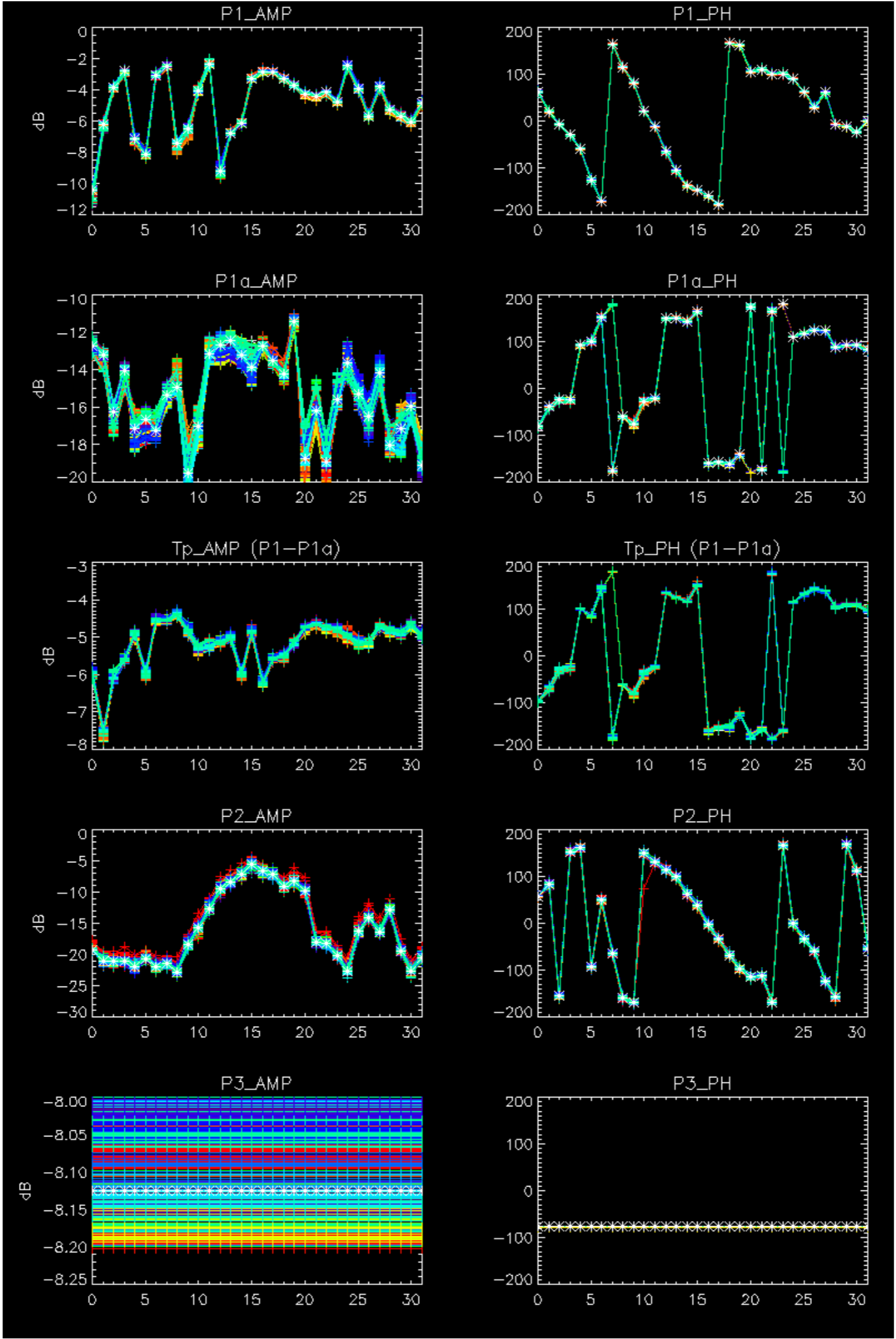
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



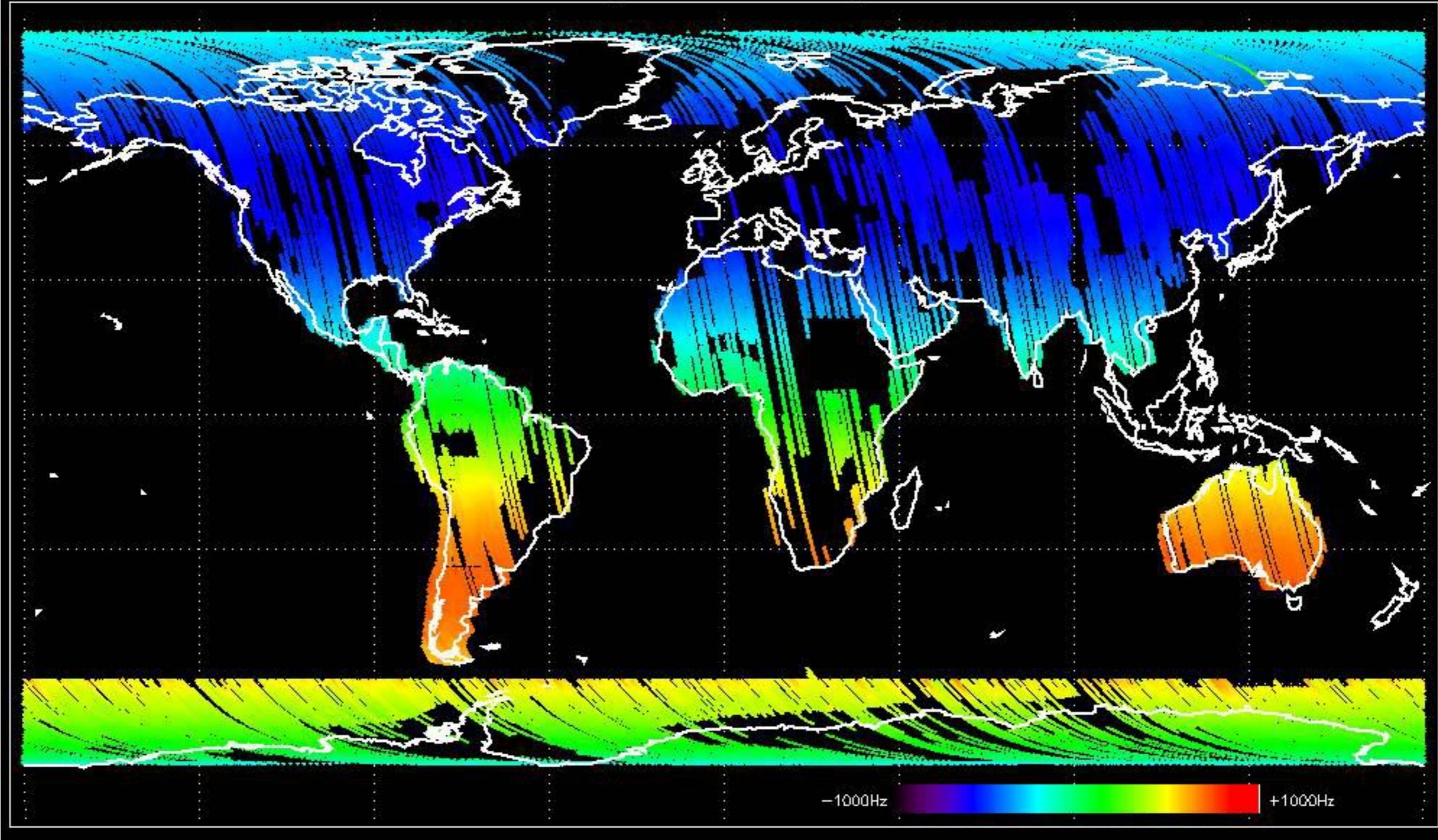
No anomalies observed.



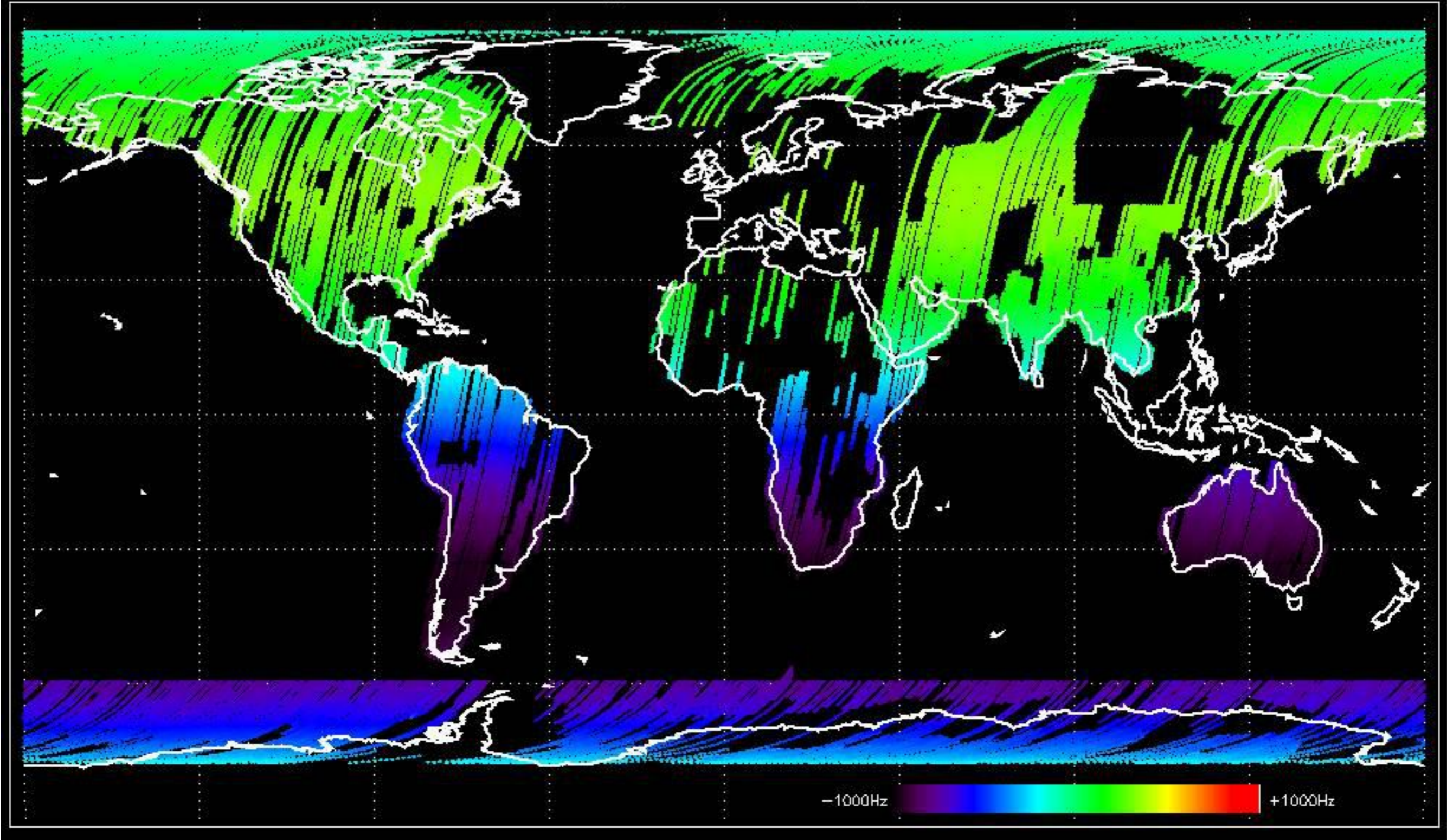


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

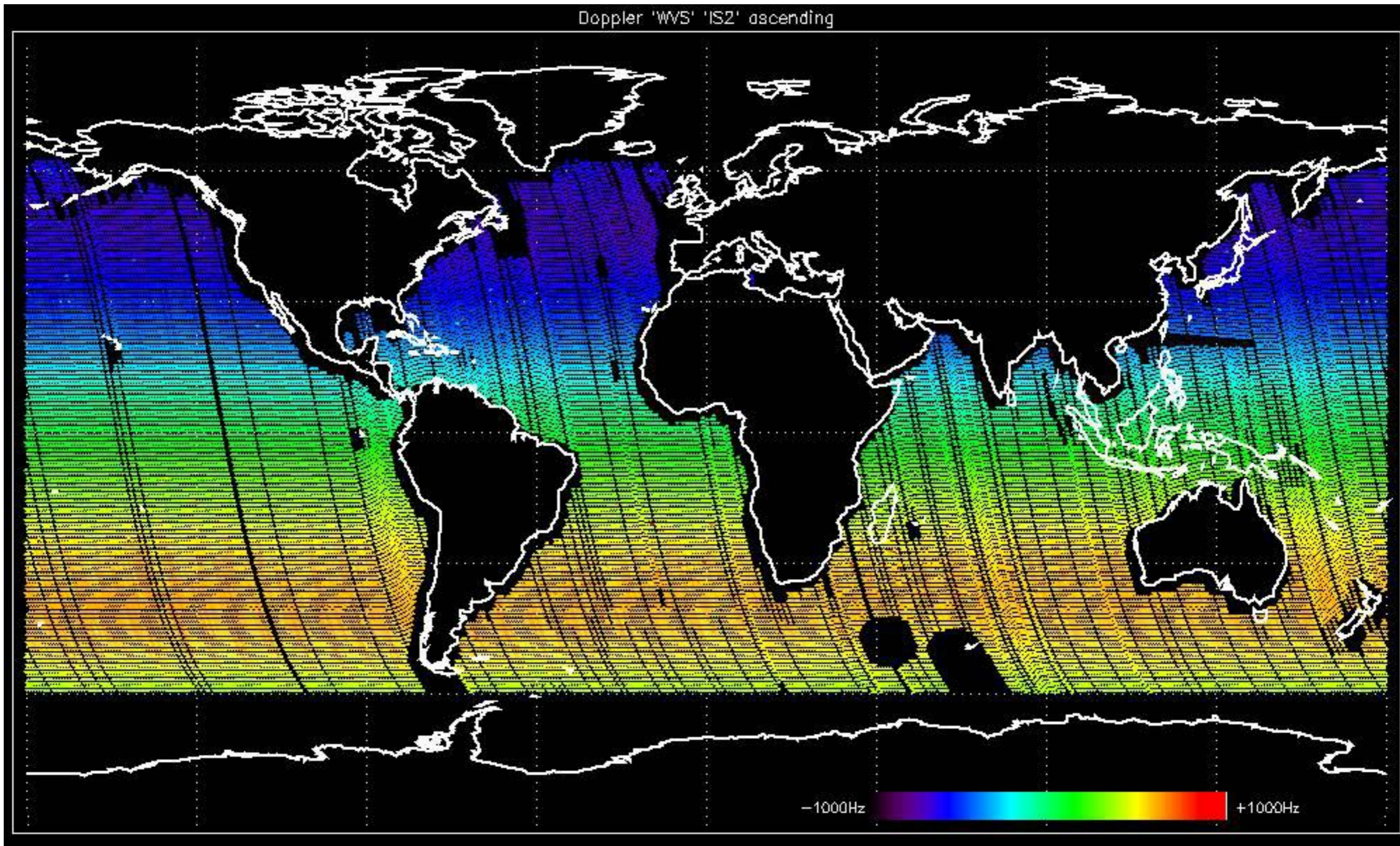
Doppler 'GM1' 'SS1' ascending



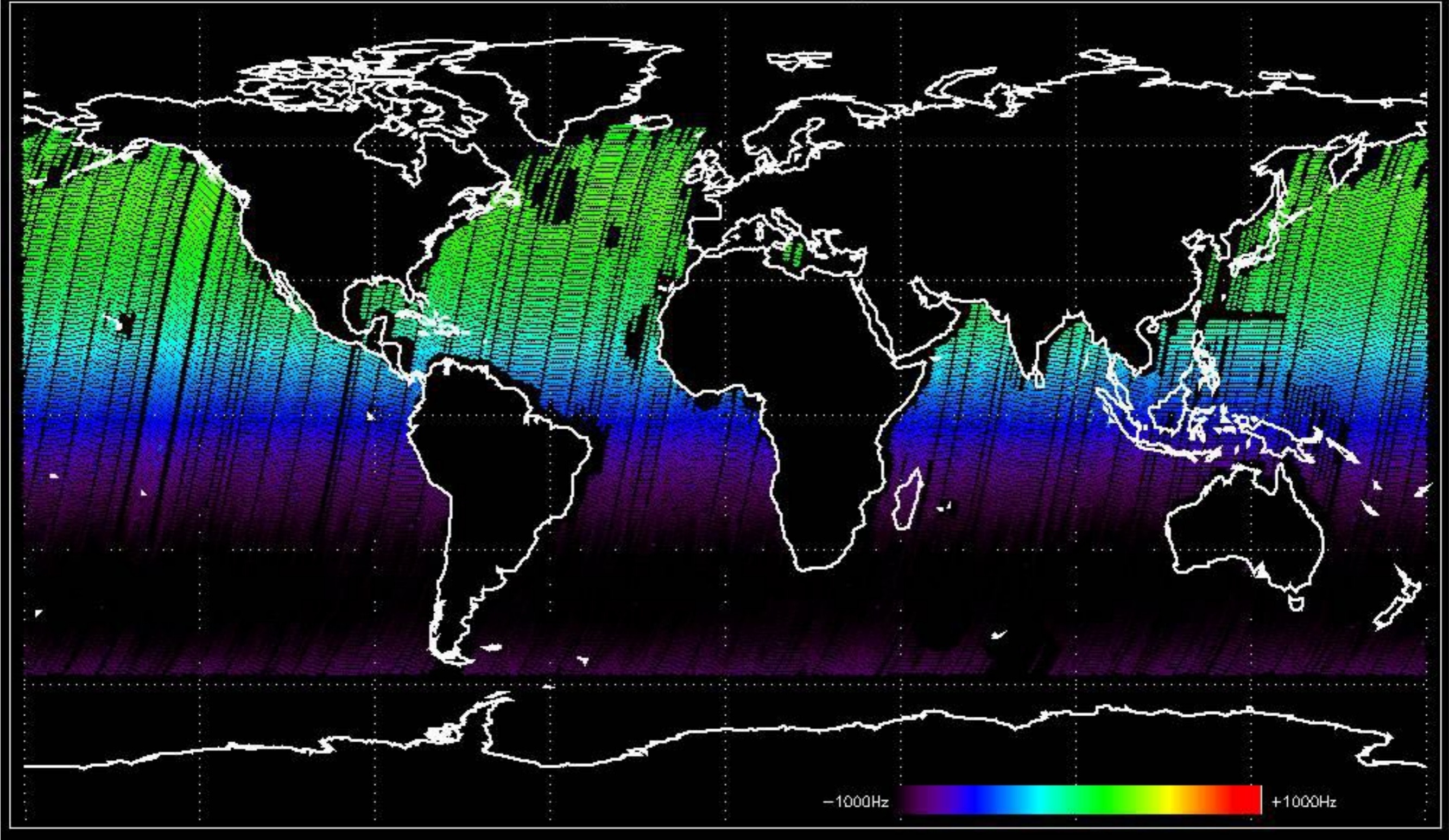
Doppler 'GM1' 'SS1' descending



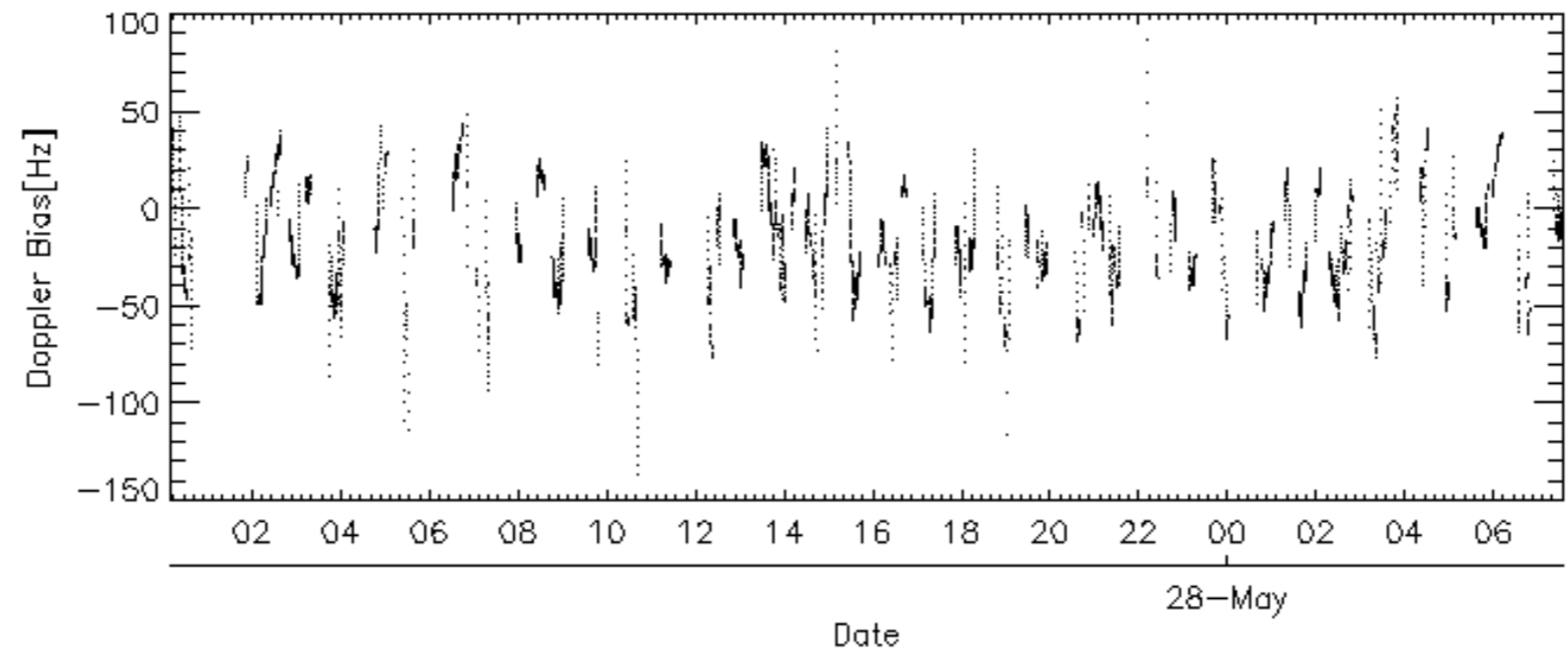
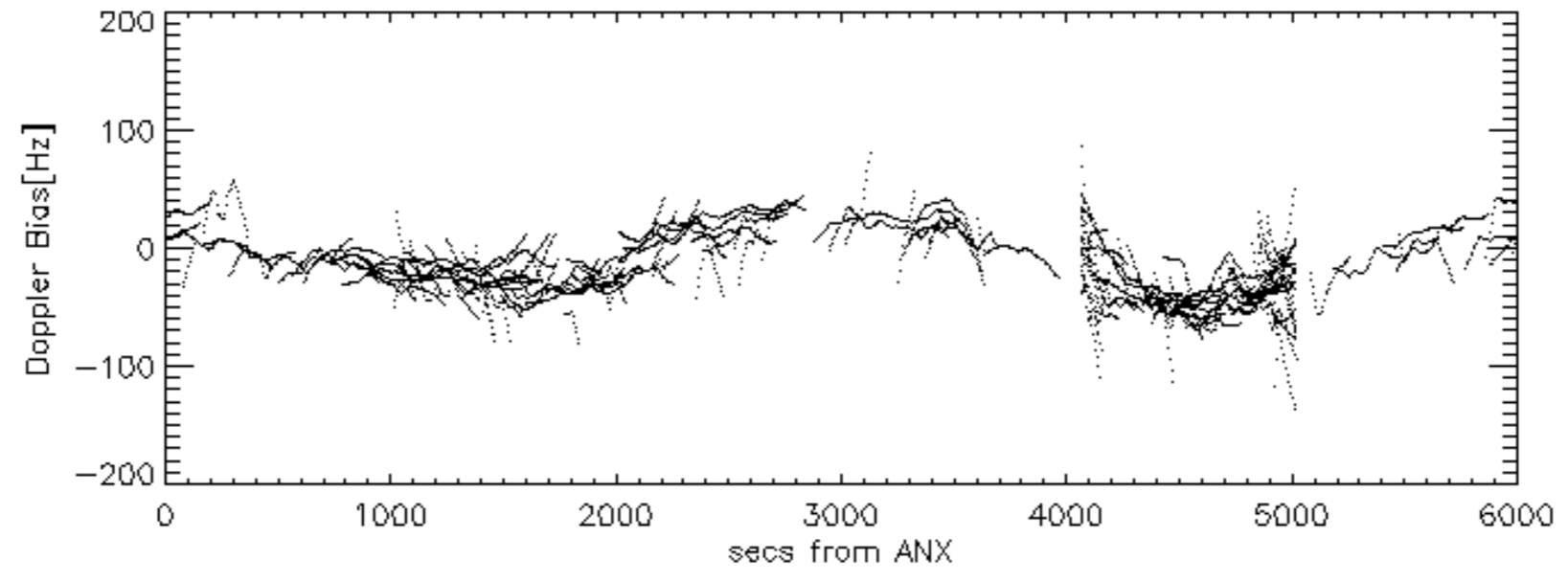
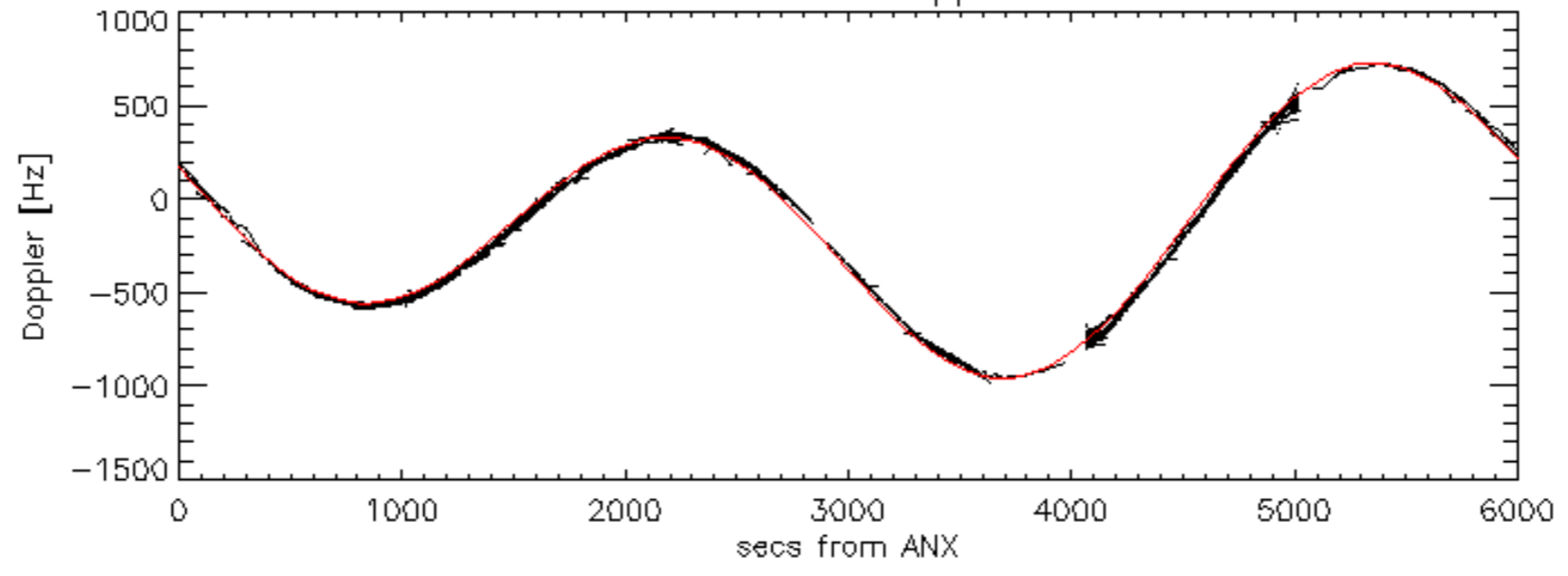
Doppler 'WVS' 'IS2' ascending

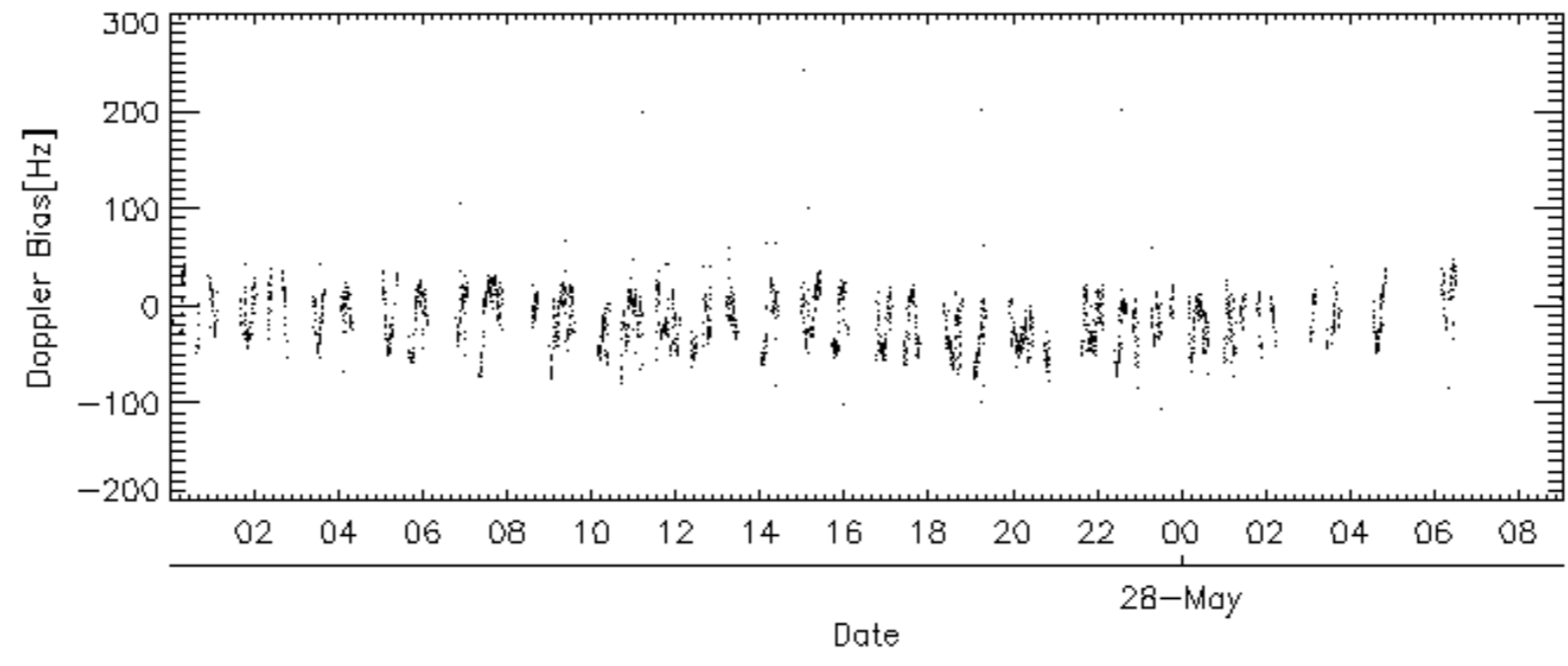
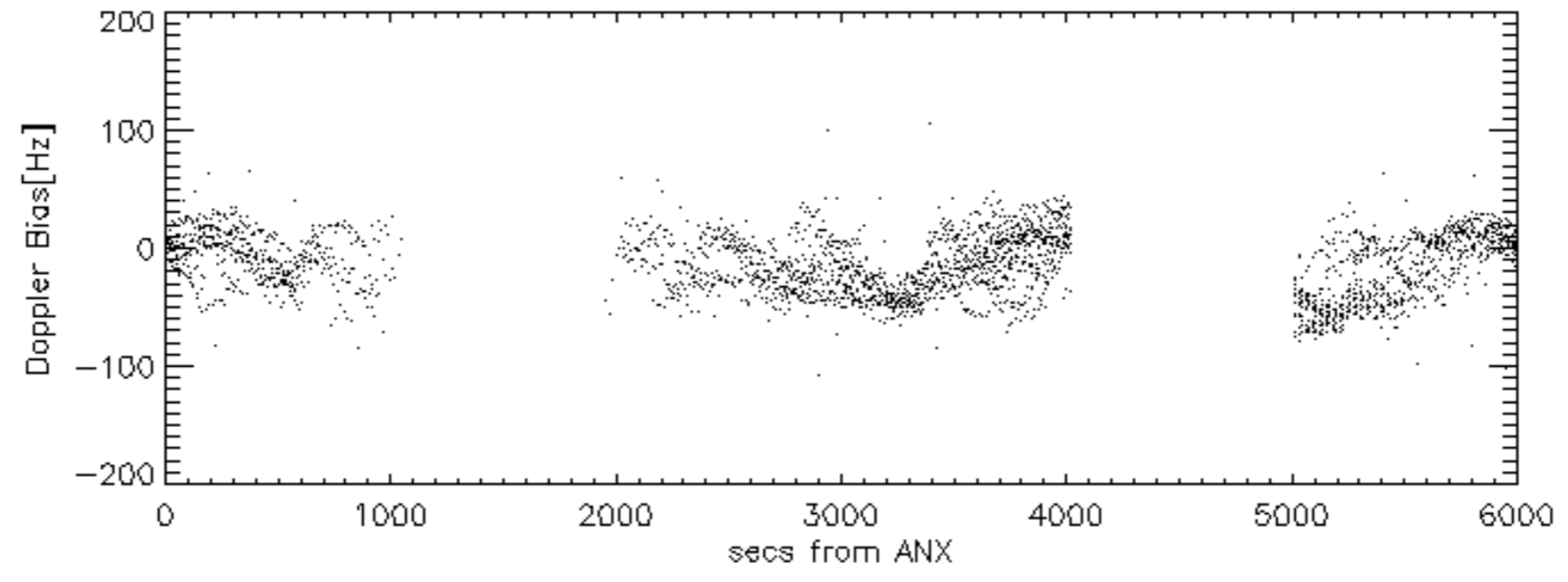
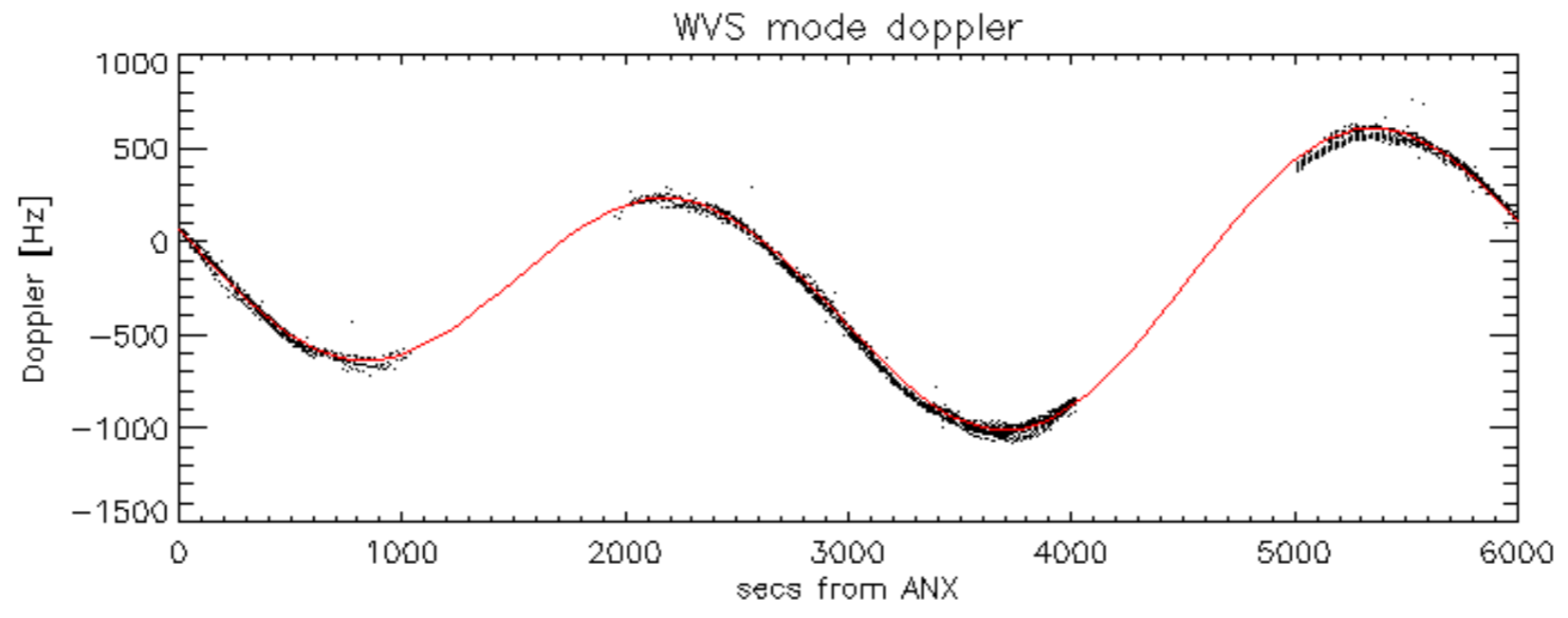


Doppler 'WVS' 'IS2' descending

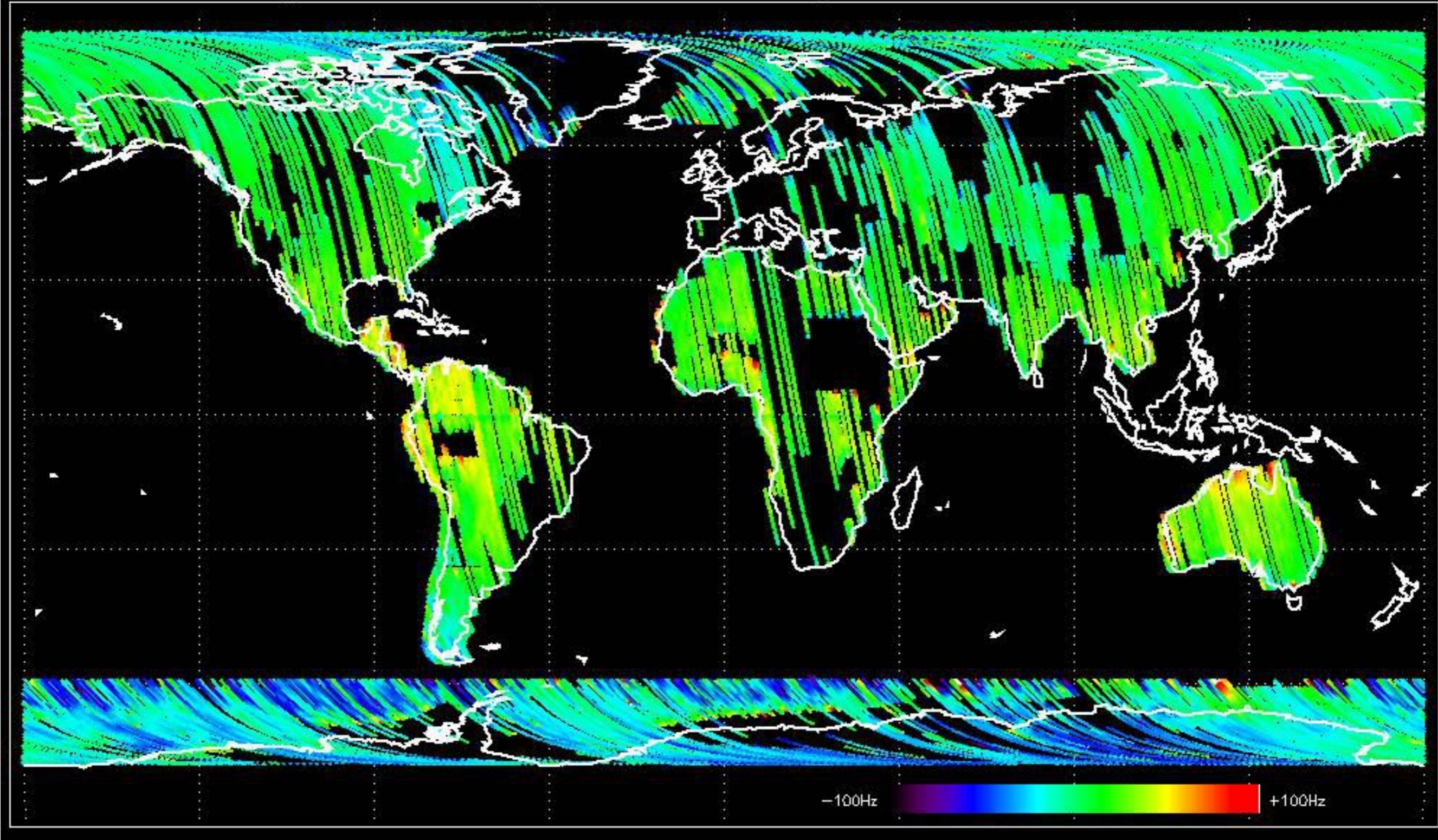


GM1 mode doppler

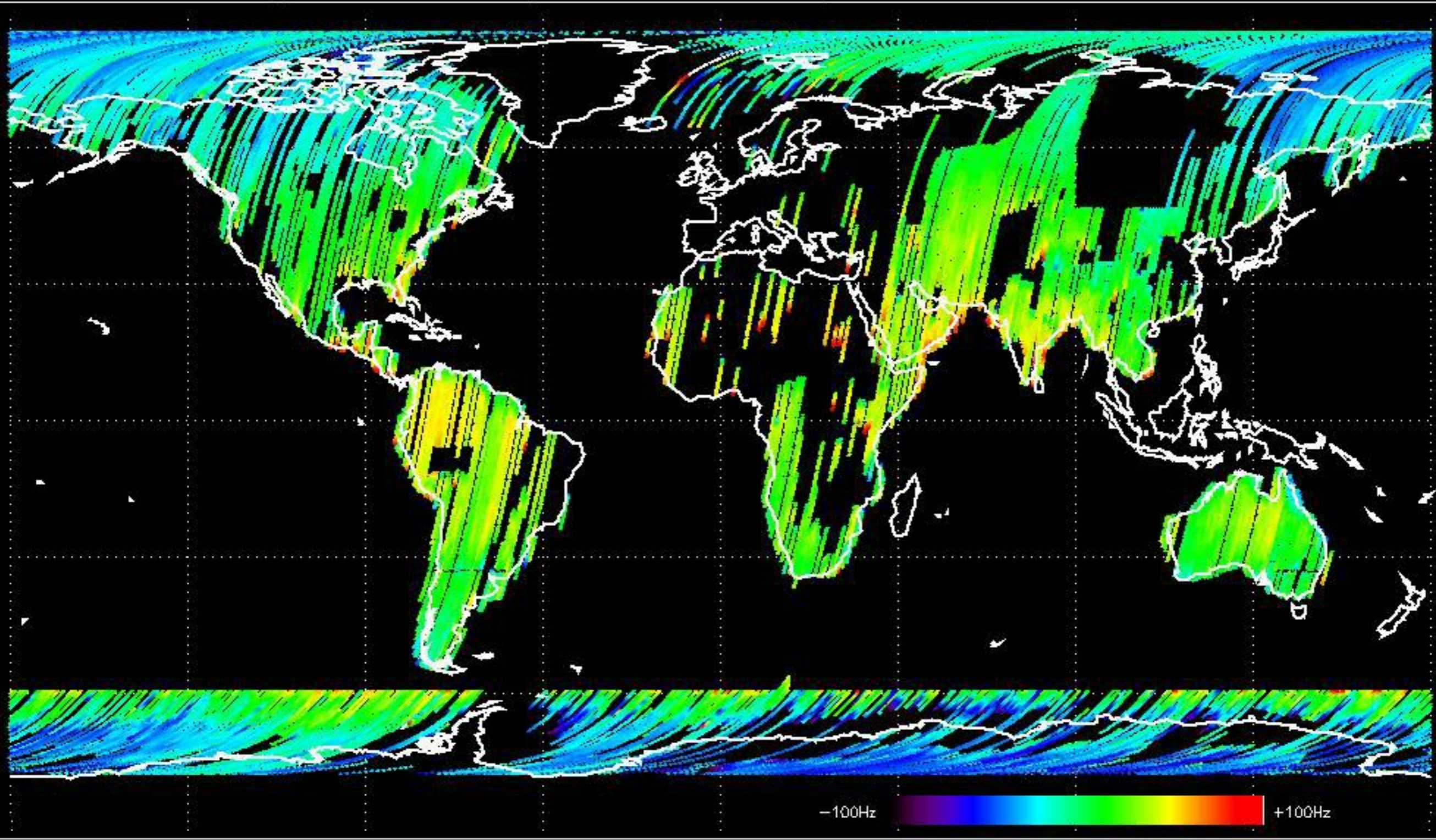




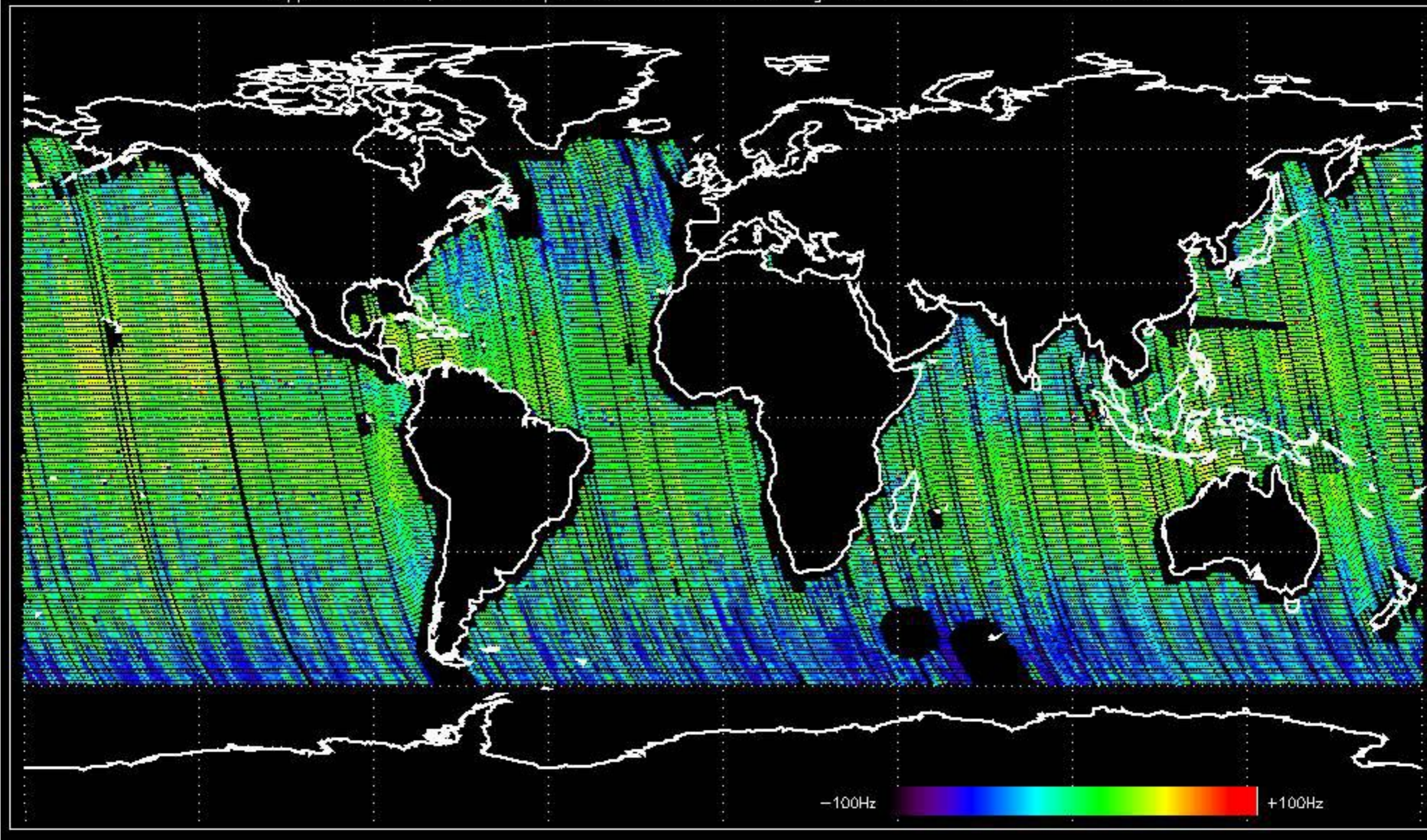
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -15.430800 Hz



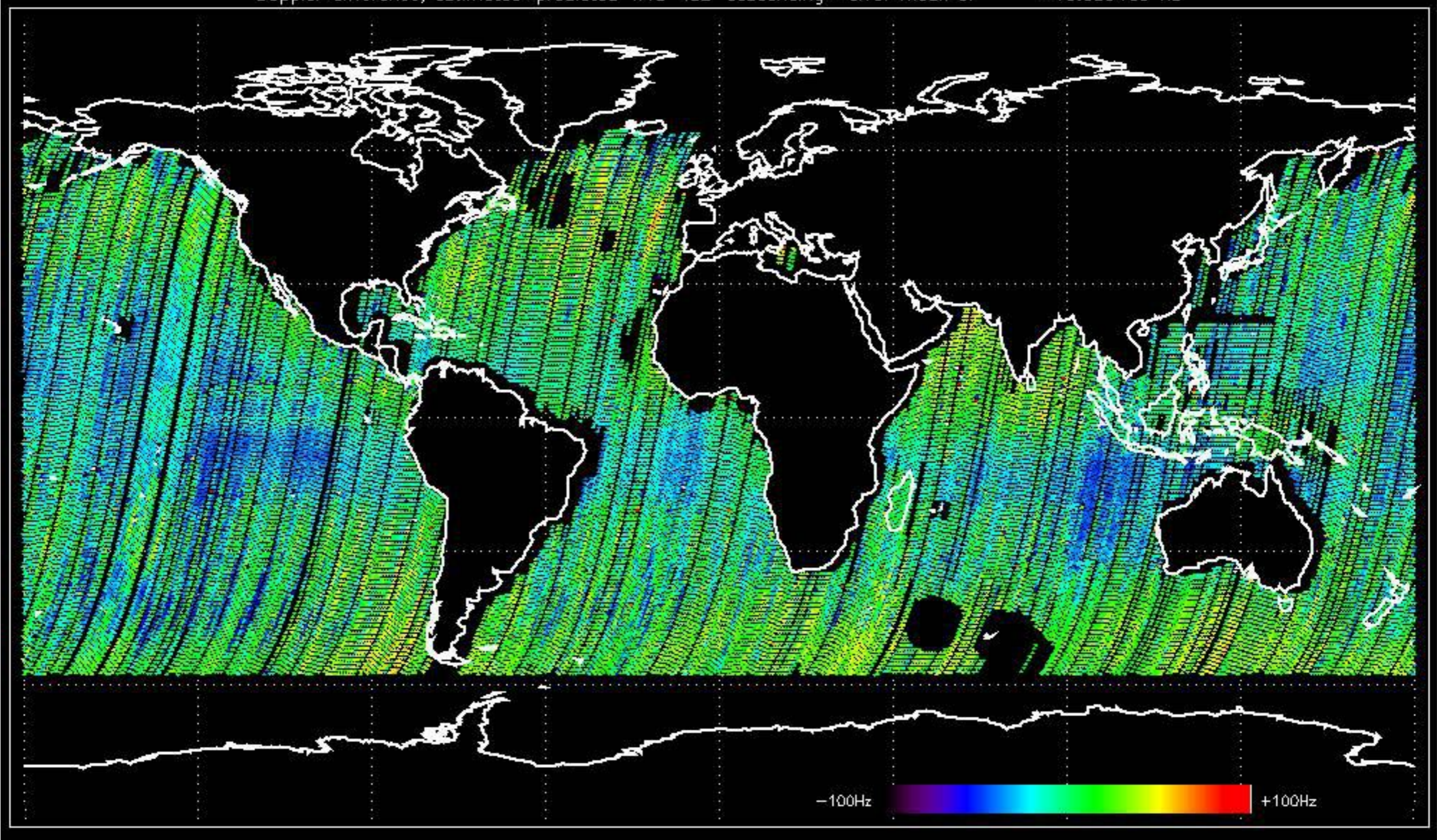
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -4.1685212 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -7.6771891 Hz

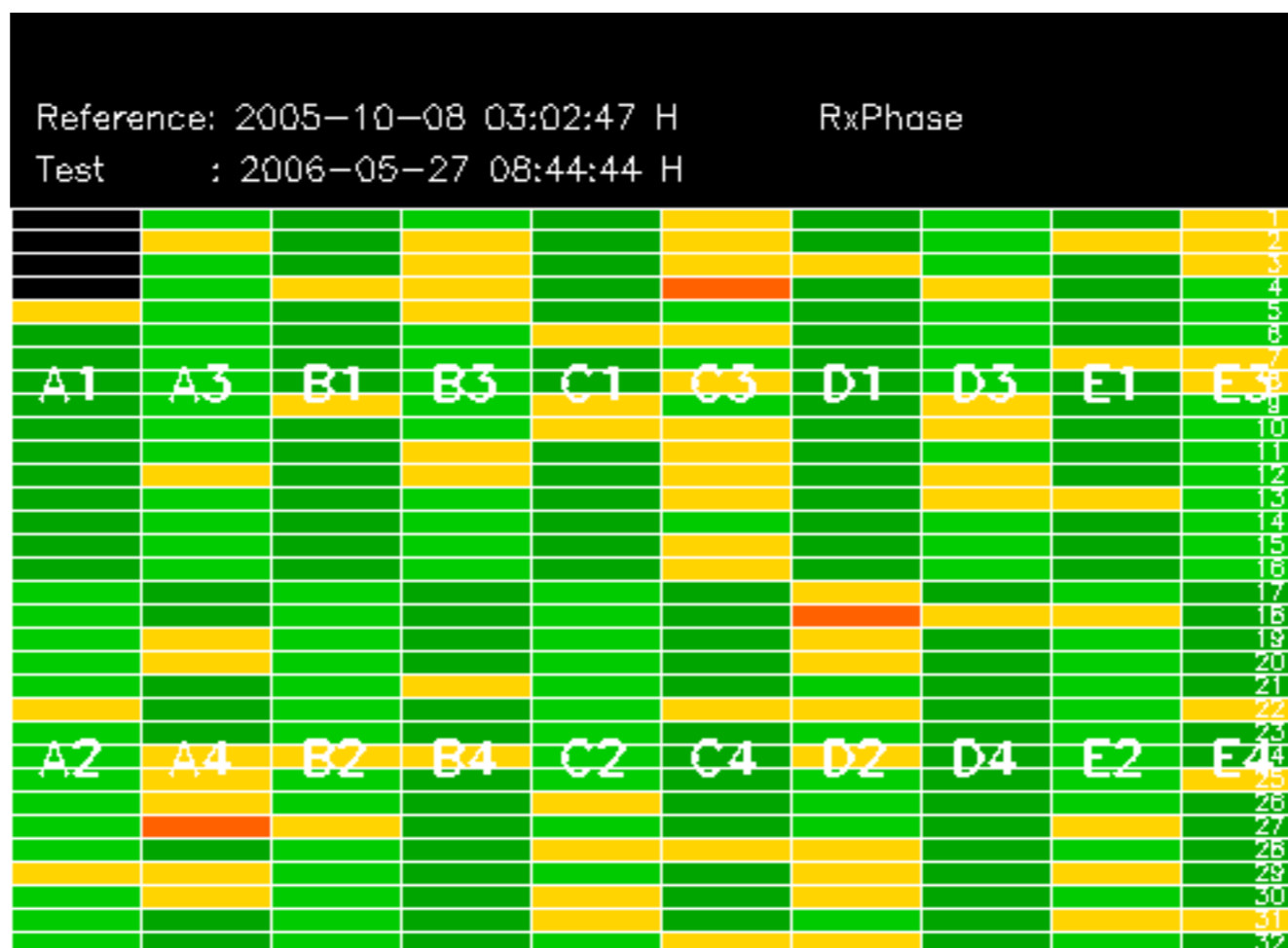


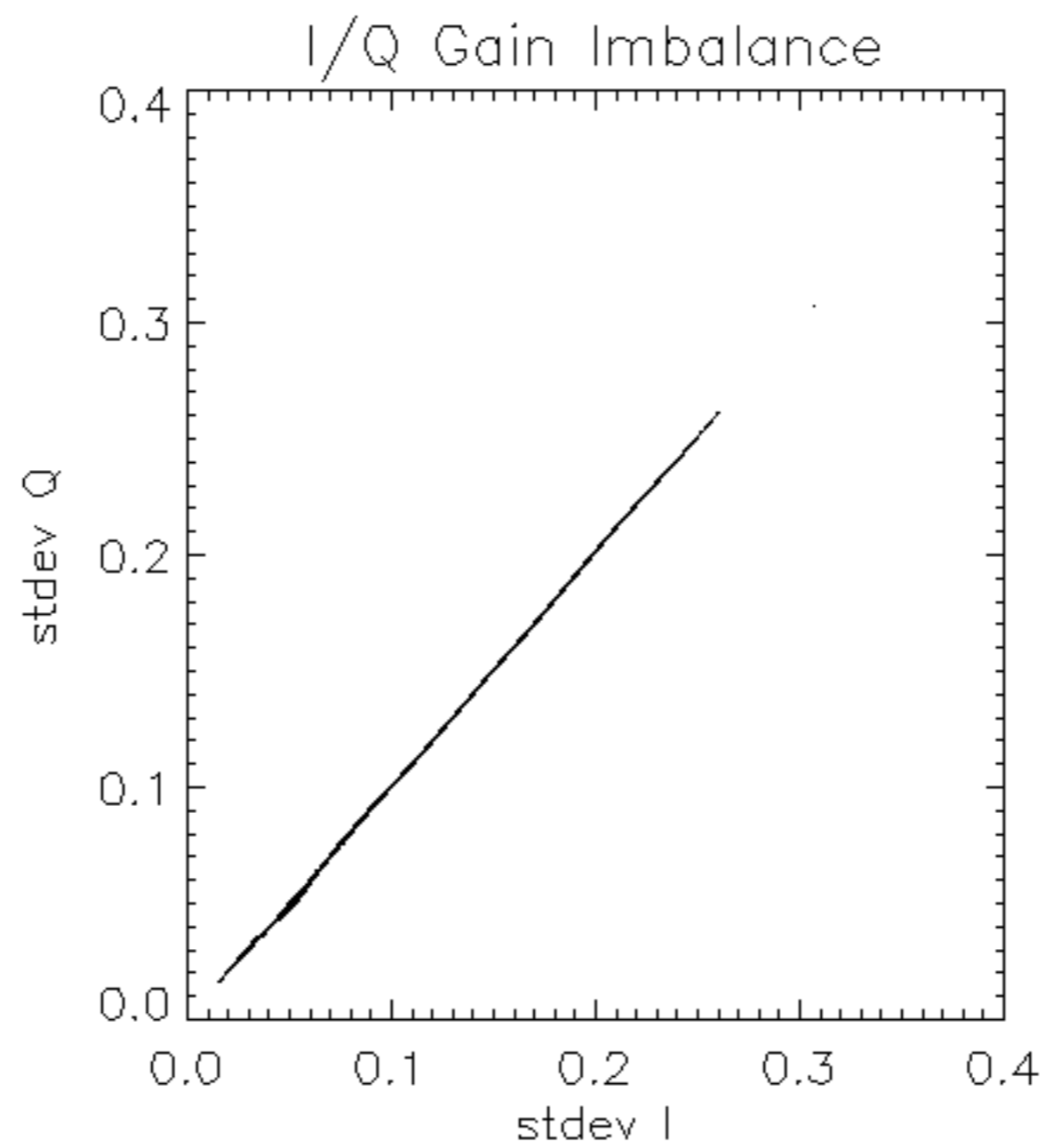
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -10.689469 Hz

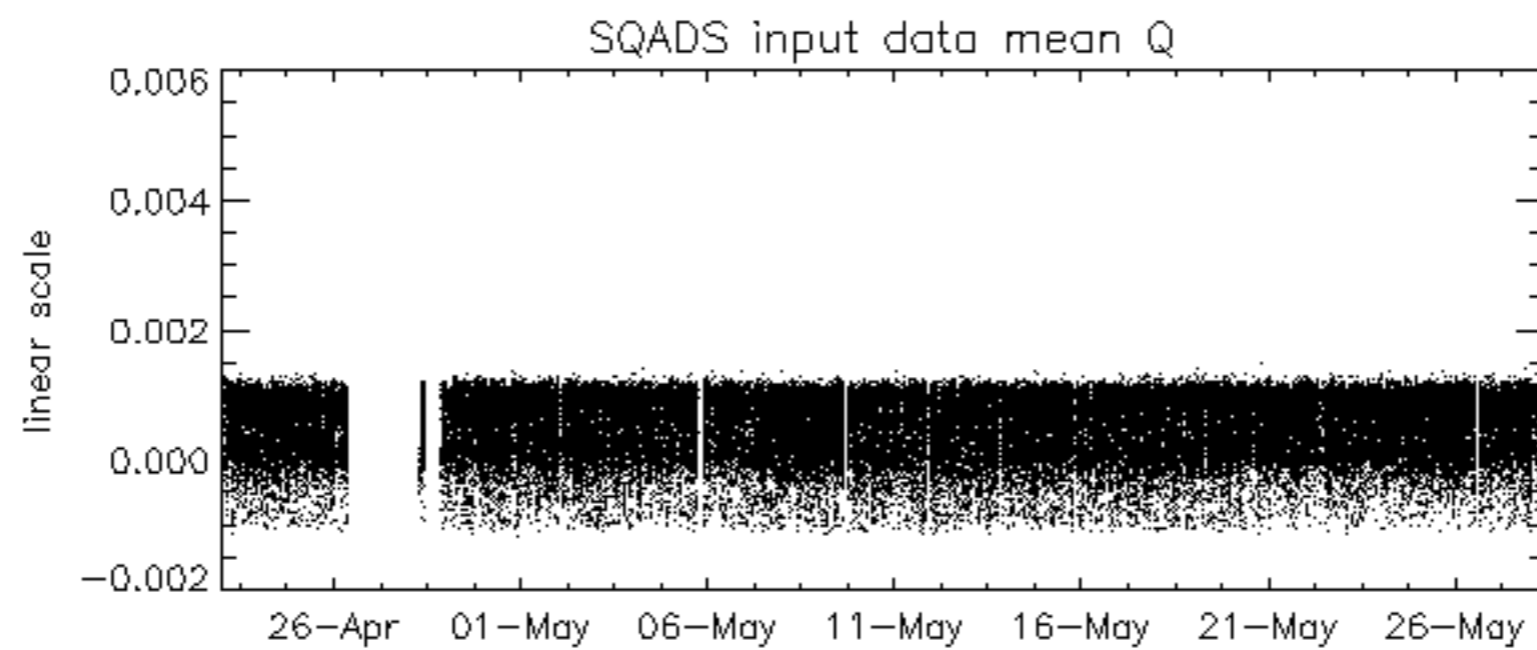
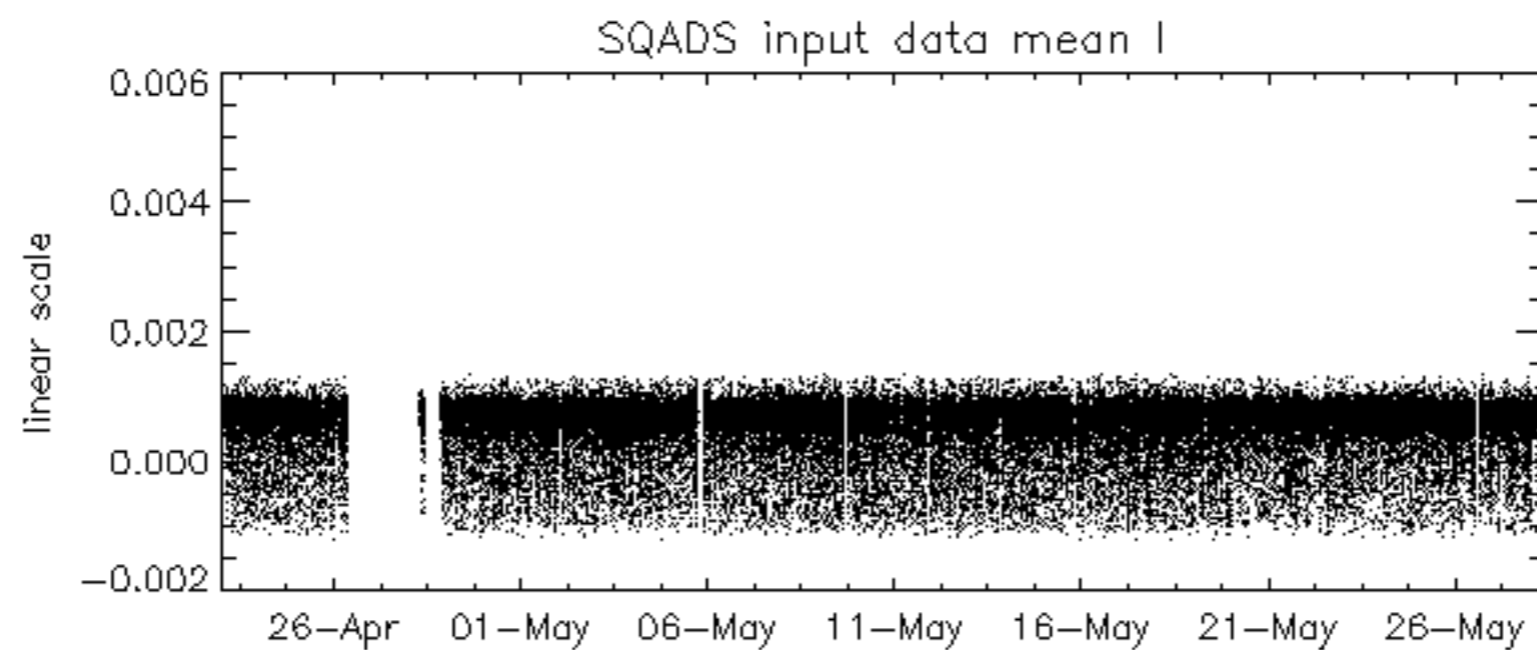
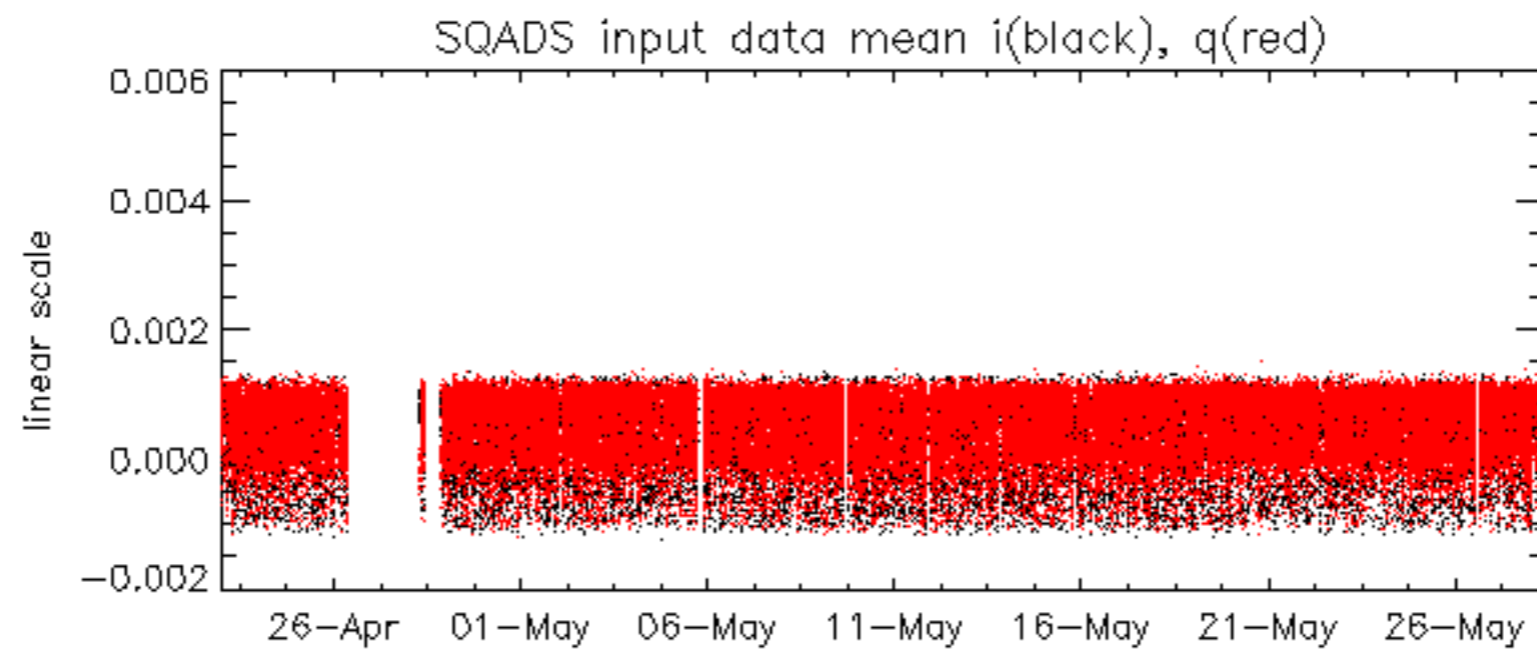


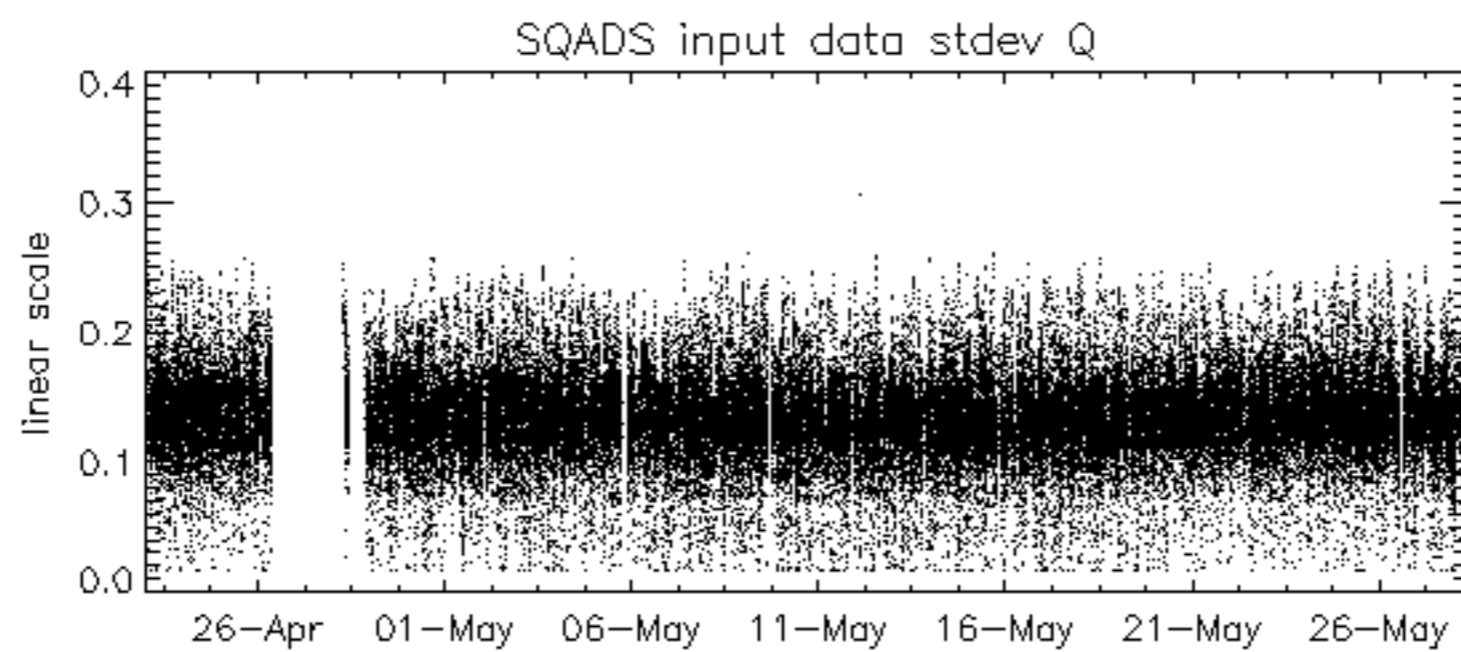
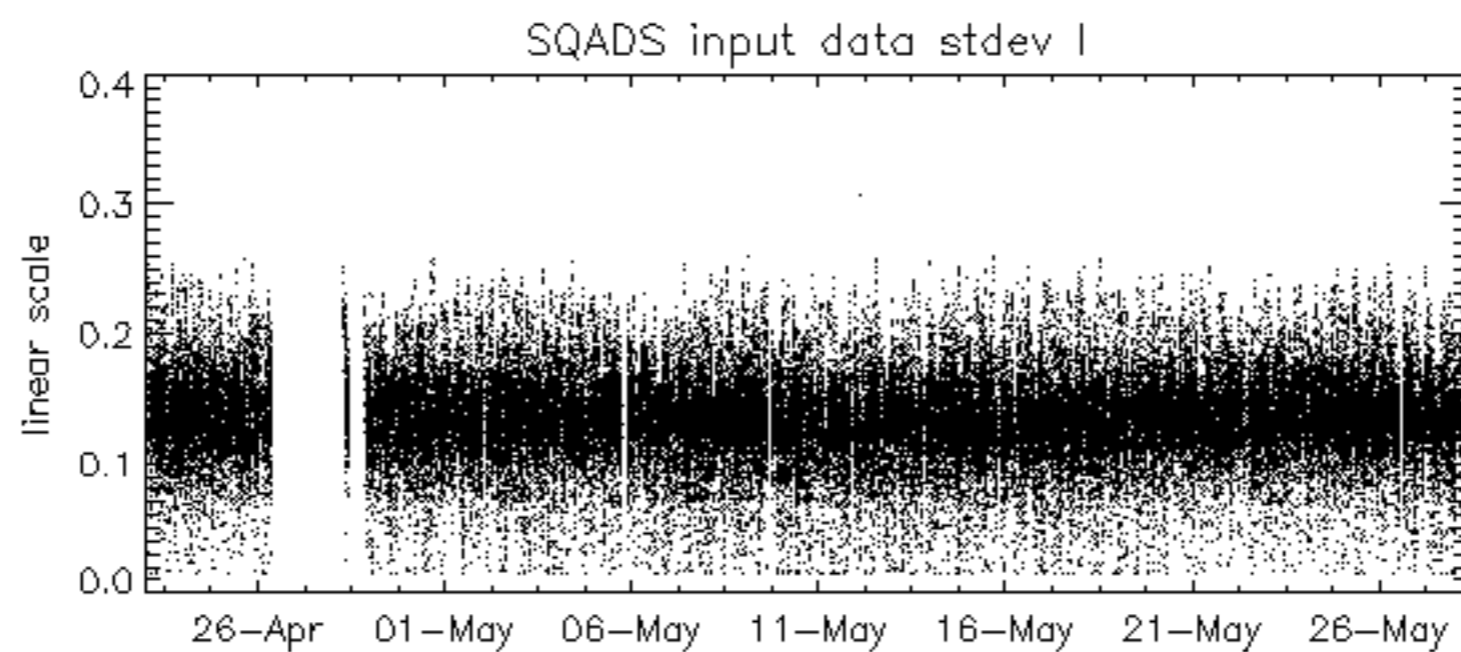
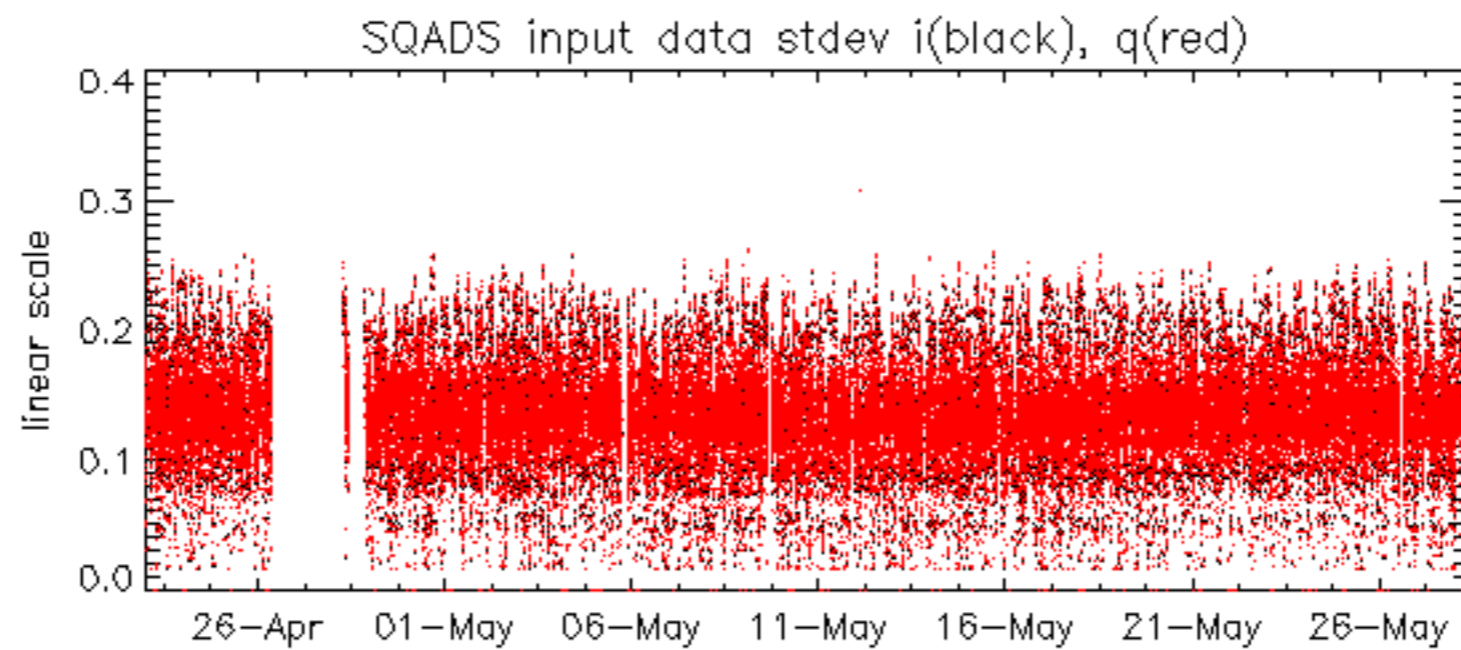
No anomalies observed on available MS products:

No anomalies observed.





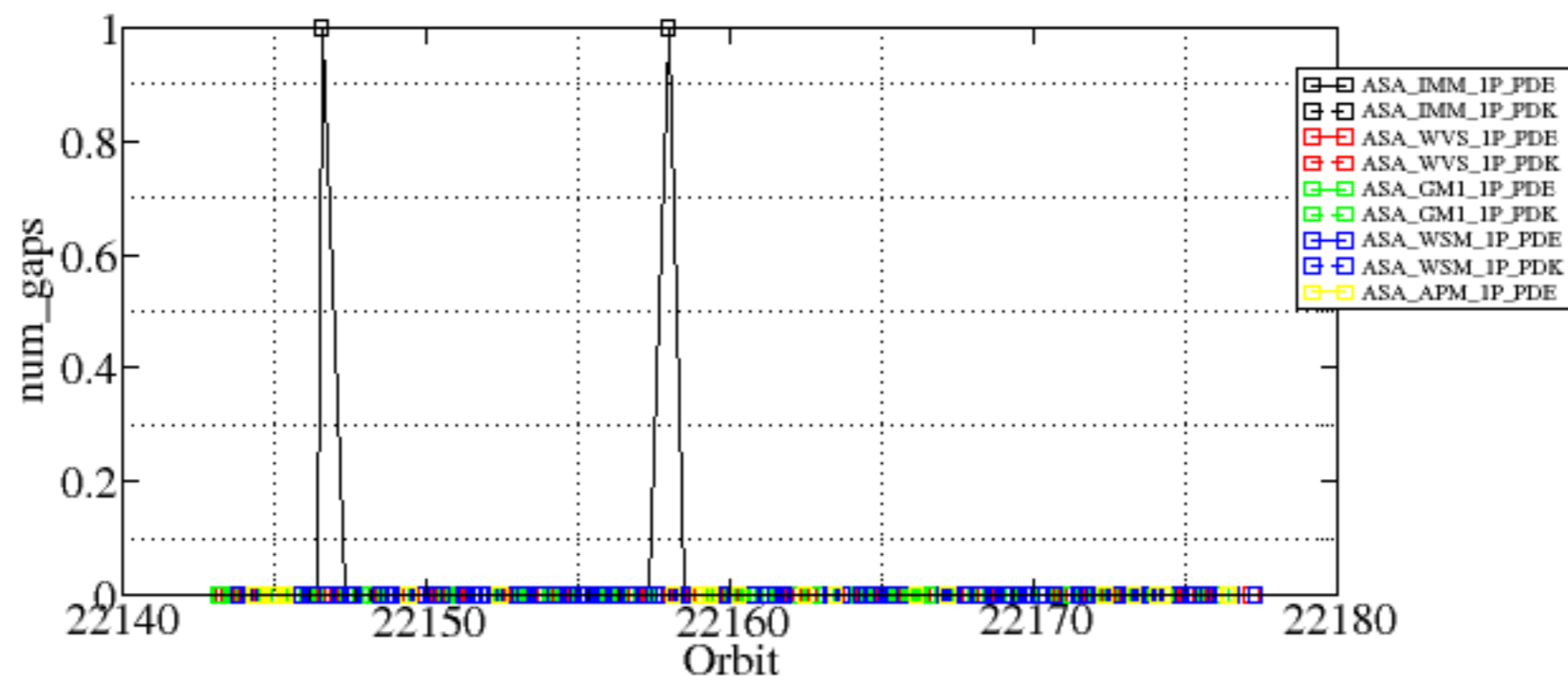




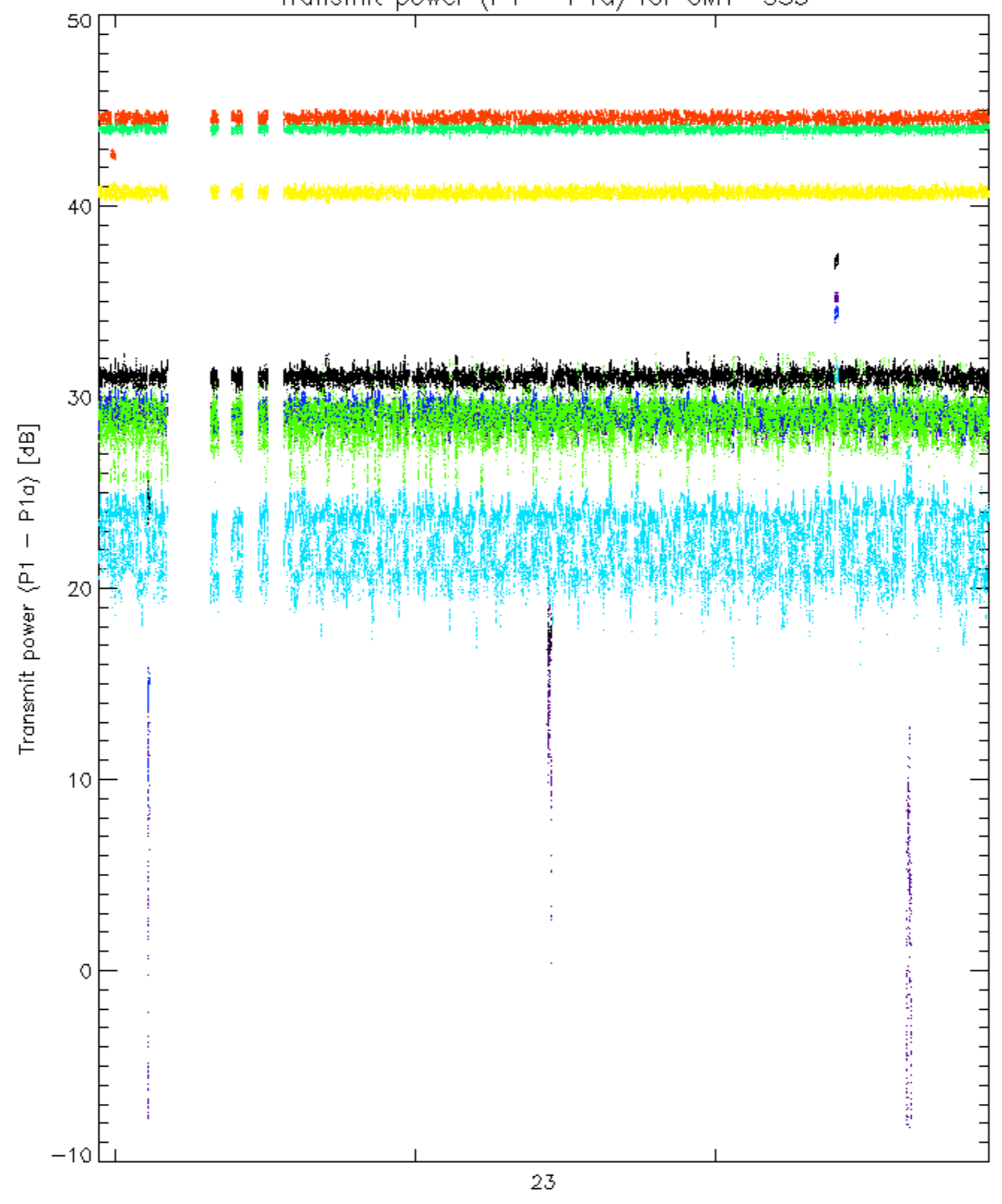
Summary of analysis for the last 3 days 2006052[678]

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

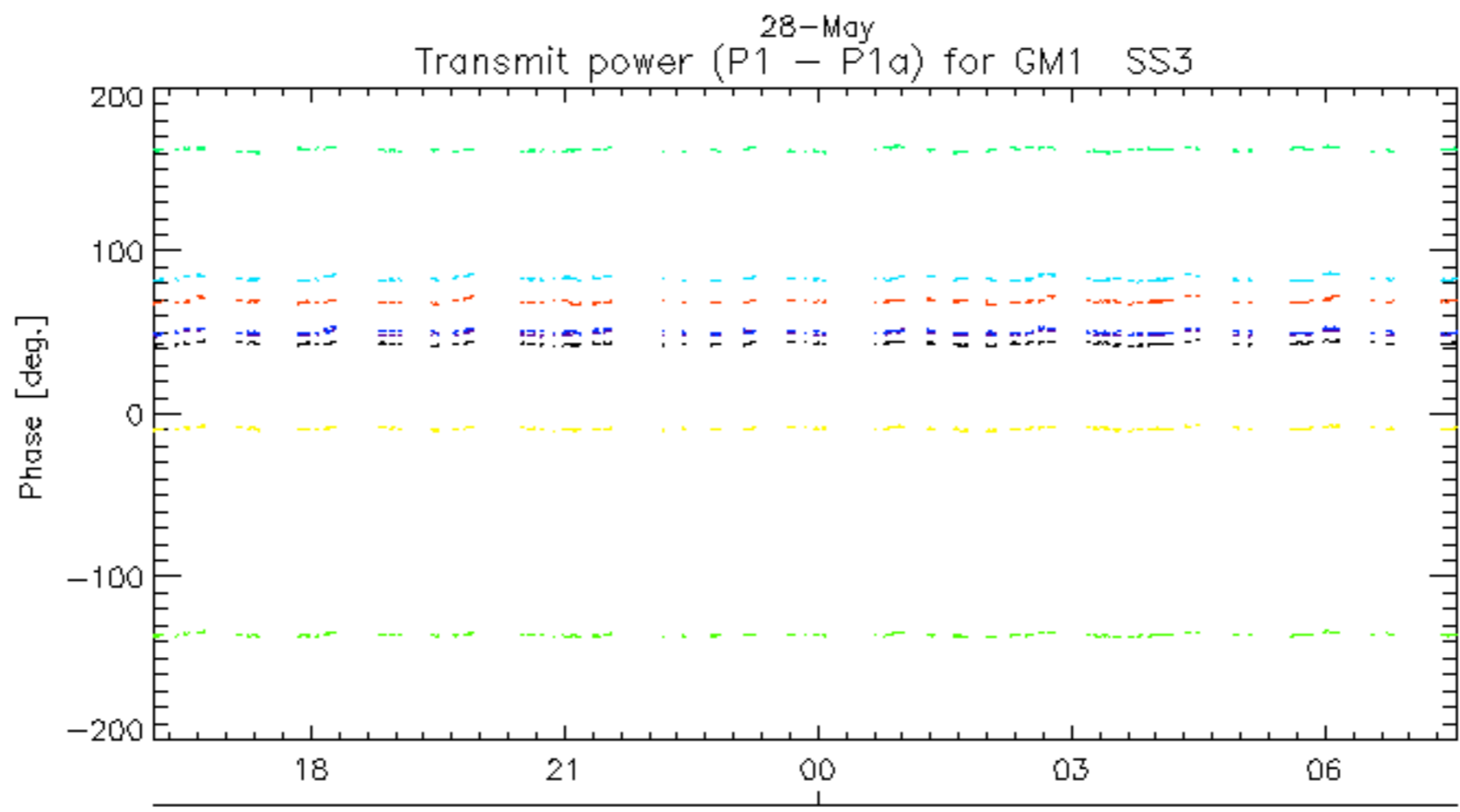
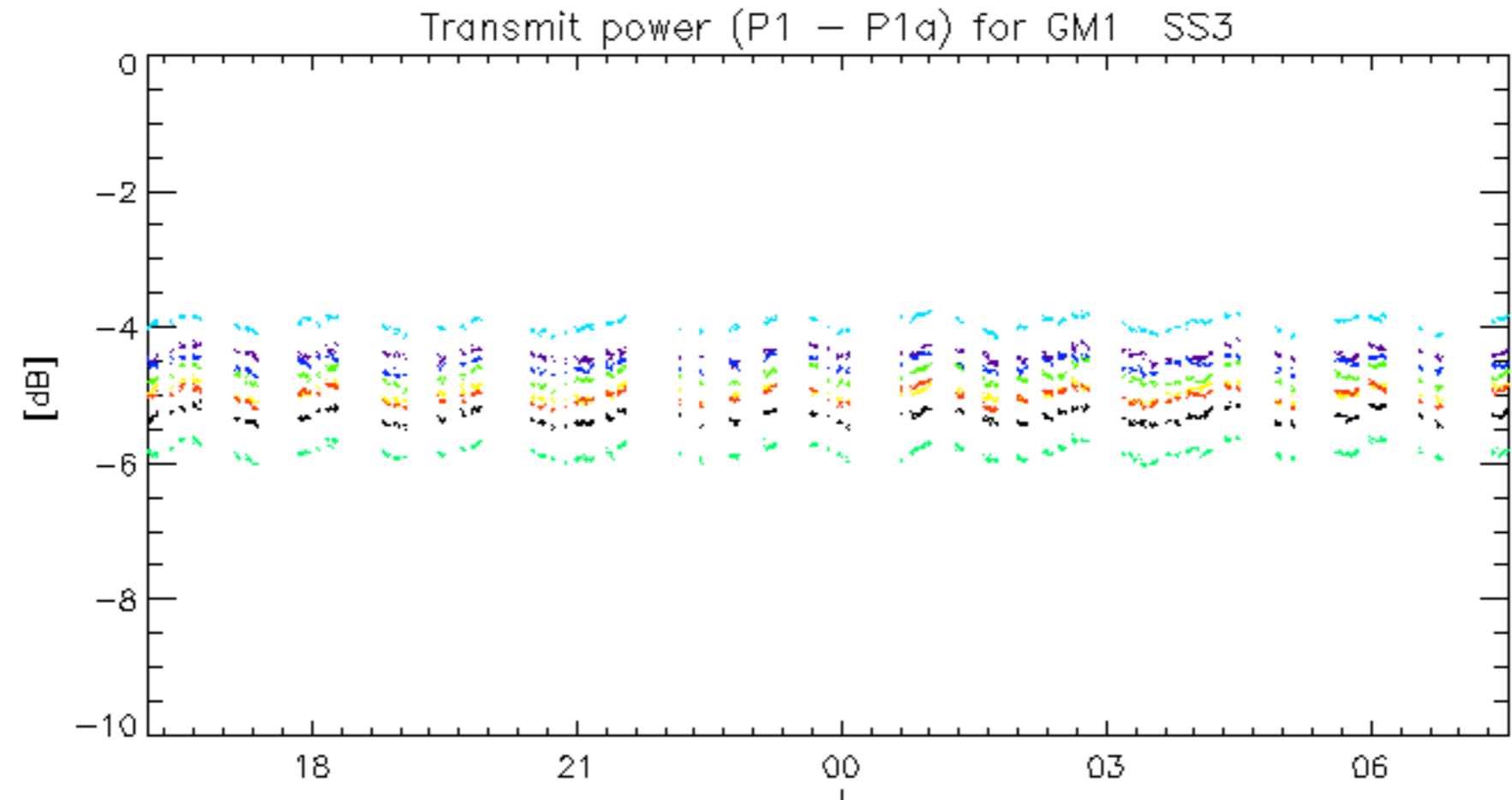
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060526_054354_00000352048_00048_22146_6225.N1	1	0
ASA_IMM_1PNPDE20060527_005025_000001722048_00059_22157_6265.N1	1	0
ASA_WSM_1PNPDE20060526_021326_000000852048_00046_22144_0919.N1	0	28
ASA_WSM_1PNPDE20060526_203642_000000922048_00057_22155_1065.N1	0	47
ASA_WSM_1PNPDE20060527_000327_000003292048_00059_22157_1091.N1	0	34
ASA_WSM_1PNPDE20060527_160556_000001402048_00069_22167_1206.N1	0	34
ASA_WSM_1PNPDE20060527_233149_000000672048_00073_22171_1272.N1	0	34
ASA_WSM_1PNPDK20060526_151921_000000552048_00054_22152_6150.N1	0	42



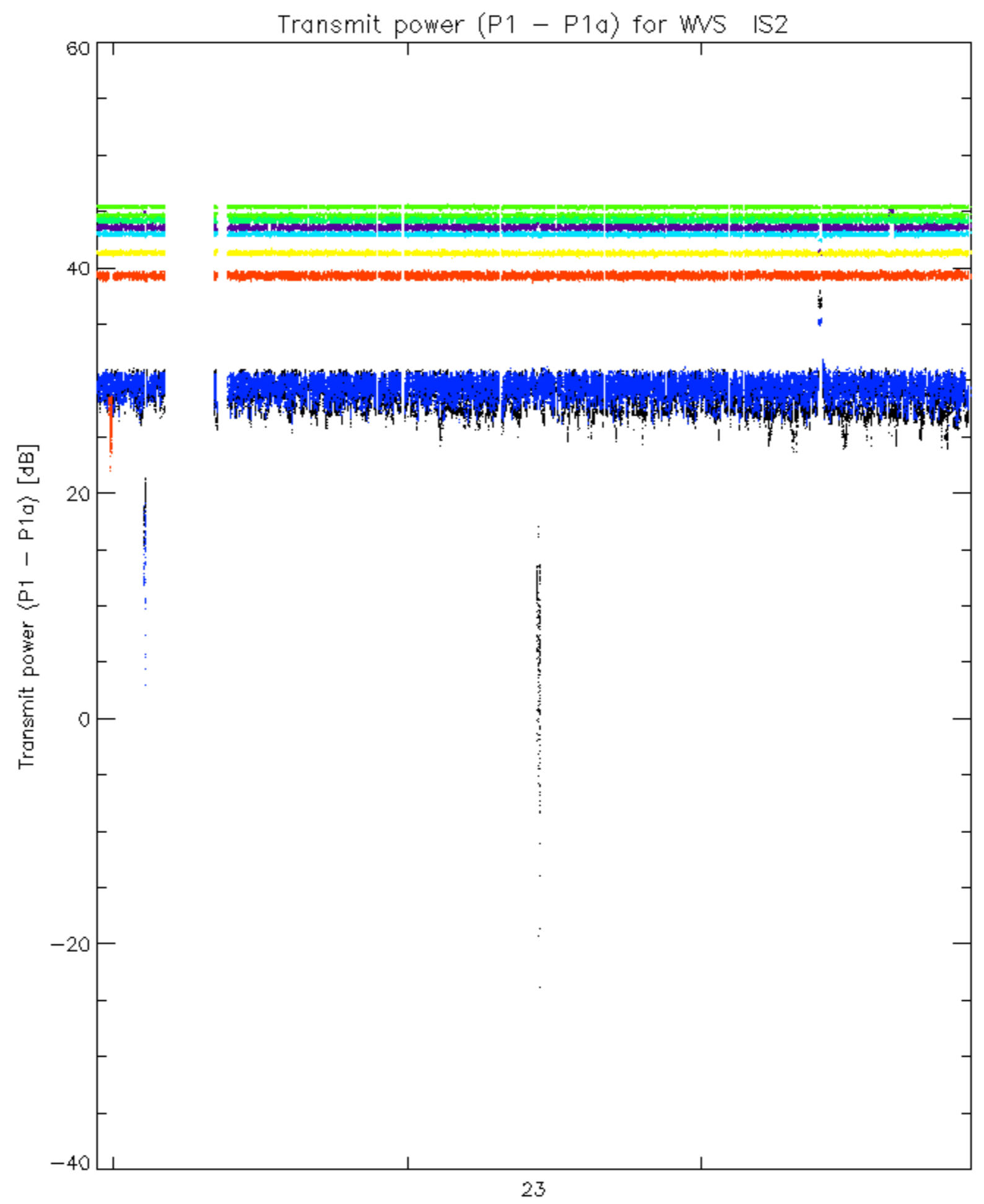
Transmit power (P1 - P1a) for GM1 SS3



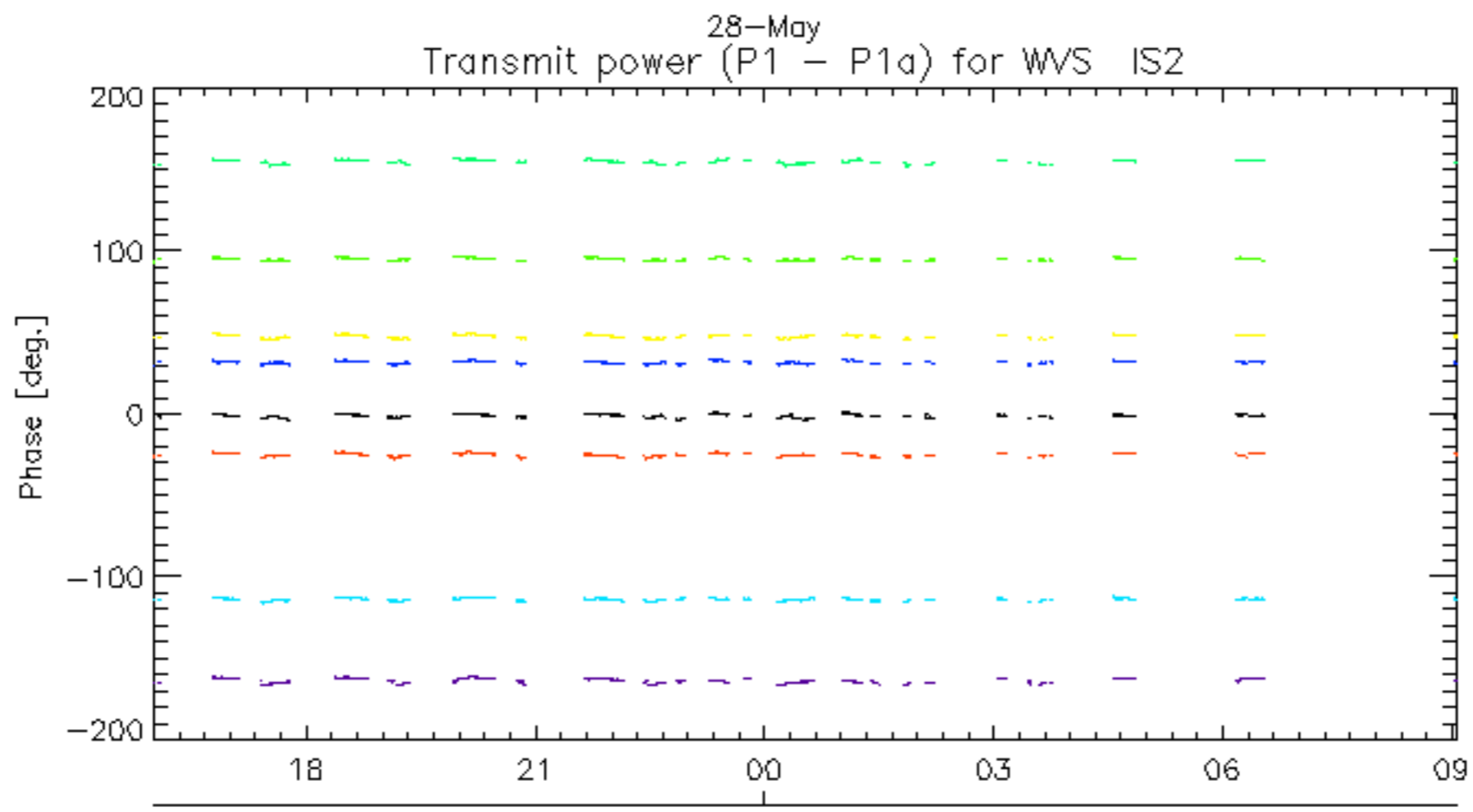
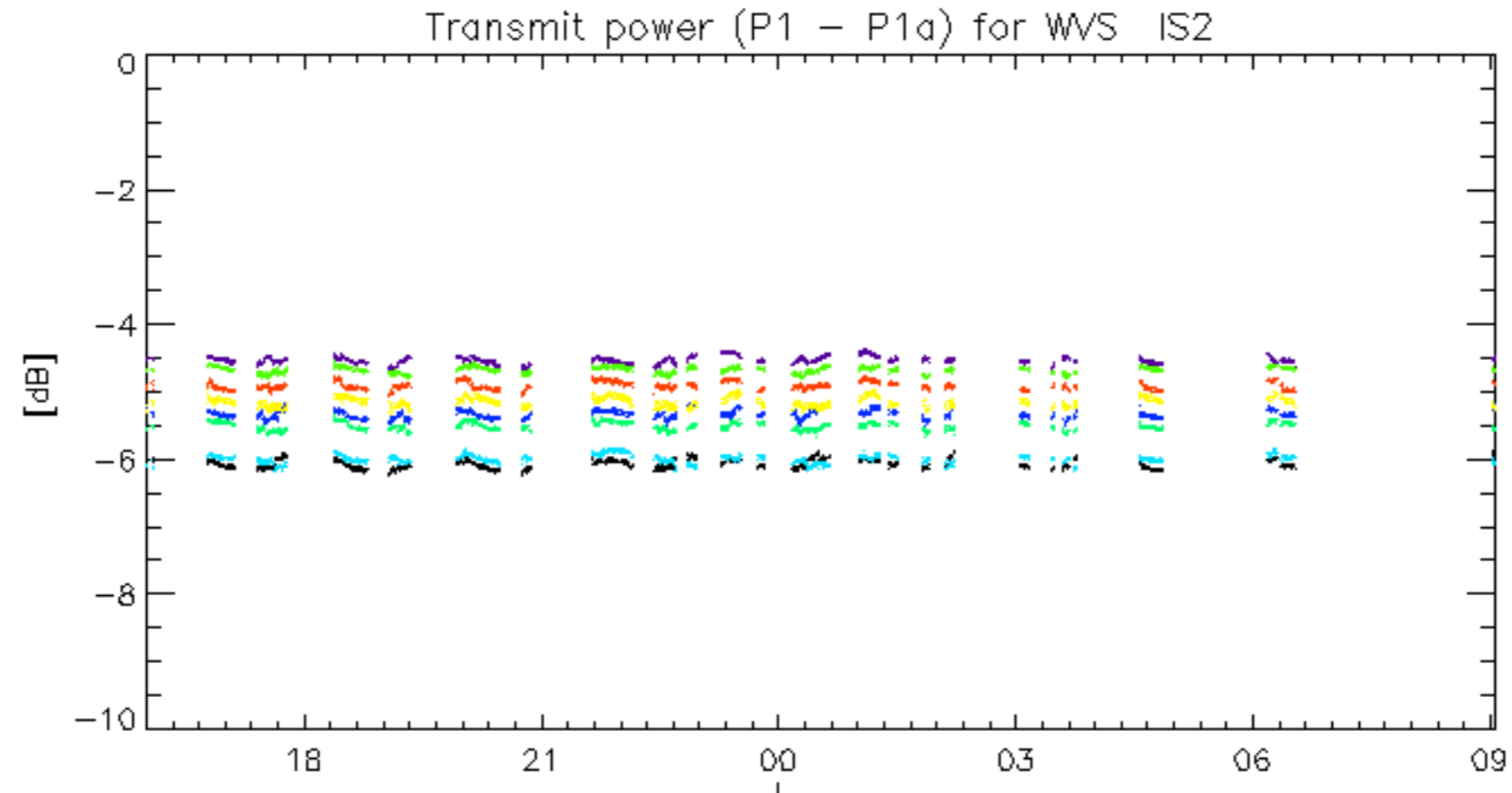
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



rows: 3 7 11 15 19 22 26 30



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



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

No unavailabilities during the reported period.