

PRELIMINARY REPORT OF 060623

last update on Fri Jun 23 16:47:59 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 2006-06-22 00:00:00 to 2006-06-23 16:47:59

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	48	84	15	1	25
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	48	84	15	1	25
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	48	84	15	1	25
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	48	84	15	1	25

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	35	47	44	20	43
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	35	47	44	20	43
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	35	47	44	20	43
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	35	47	44	20	43

2.3 - Browse Visual Inspection

No anomalies observed on available browse products

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	20060622 100809
H	20060621 071834

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

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	-3.945045	0.050563	-0.037235
7	P1	-3.137883	0.015429	-0.018091
11	P1	-4.106331	0.019567	0.016095
15	P1	-6.150687	0.020175	-0.052722
19	P1	-3.352869	0.008717	-0.067475
22	P1	-4.518259	0.011654	-0.033632
26	P1	-3.968051	0.017035	0.016213
30	P1	-5.752144	0.008948	-0.025646
3	P1	-16.541437	0.561298	-0.181181
7	P1	-17.228754	0.148456	-0.089121
11	P1	-16.963182	0.307587	-0.059870
15	P1	-13.203082	0.215850	0.080476
19	P1	-14.342380	0.052127	-0.155217
22	P1	-16.165148	0.369816	0.057482
26	P1	-15.207913	0.227254	0.107195
30	P1	-17.141407	0.409219	-0.098186

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.131060	0.081231	0.128178
7	P2	-22.017851	0.097708	0.099055
11	P2	-15.860147	0.111275	0.102098
15	P2	-7.157906	0.094594	-0.004974
19	P2	-9.171351	0.085988	-0.003160
22	P2	-18.165331	0.083398	-0.051720
26	P2	-16.404472	0.087924	-0.058191
30	P2	-19.557684	0.087272	-0.000540

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.185411	0.003980	-0.015573
7	P3	-8.185411	0.003980	-0.015573
11	P3	-8.185411	0.003980	-0.015573
15	P3	-8.185411	0.003980	-0.015573
19	P3	-8.185411	0.003980	-0.015573
22	P3	-8.185411	0.003980	-0.015573
26	P3	-8.185411	0.003980	-0.015573
30	P3	-8.185411	0.003980	-0.015573

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	-3.819315	0.092062	-0.058622
7	P1	-2.586776	0.030126	0.046882
11	P1	-2.862148	0.022748	0.028456
15	P1	-3.518037	0.051606	-0.037400
19	P1	-3.410856	0.014441	-0.022710
22	P1	-5.082607	0.019692	-0.006437
26	P1	-5.854791	0.015958	-0.025891
30	P1	-5.190935	0.026642	-0.017559
3	P1	-11.640671	0.140466	-0.125767
7	P1	-9.969994	0.048564	-0.064091
11	P1	-10.220588	0.086102	-0.069827
15	P1	-10.673263	0.160822	-0.111152
19	P1	-15.539992	0.077172	-0.028660
22	P1	-20.939568	1.166512	-0.070722

26	P1	-16.463938	0.331137	0.091436
30	P1	-17.895475	0.373797	0.121774

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.814905	0.074744	0.191350
7	P2	-22.484196	0.131338	0.091934
11	P2	-11.141358	0.049406	0.097058
15	P2	-4.919735	0.049623	-0.014705
19	P2	-6.882313	0.054200	-0.000979
22	P2	-8.208567	0.043627	-0.004106
26	P2	-24.147264	0.069875	-0.081263
30	P2	-22.060049	0.056900	0.036372

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.019618	0.004922	-0.014317
7	P3	-8.019704	0.004899	-0.014494
11	P3	-8.019736	0.004904	-0.014468
15	P3	-8.019690	0.004906	-0.014152
19	P3	-8.019649	0.004904	-0.014179
22	P3	-8.019848	0.004896	-0.014503
26	P3	-8.019869	0.004909	-0.014222
30	P3	-8.019802	0.004896	-0.014174

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	0.000557797
	stdev	1.72483e-07
MEAN Q	mean	0.000526114
	stdev	2.19884e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.136890
	stdev	0.00115305
STDEV Q	mean	0.137246
	stdev	0.00117059



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006062[123]

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_1PNPDE20060622_003435_000001162048_00431_22529_8242.N1	1	0
ASA_IMM_1PNPDE20060622_144838_000000792048_00440_22538_8275.N1	0	17
ASA_WSM_1PNPDE20060621_015620_000000972048_00418_22516_4911.N1	0	2
ASA_WSM_1PNPDE20060621_043526_000001832048_00420_22518_4929.N1	0	32
ASA_WSM_1PNPDE20060621_202015_000000852048_00429_22527_5013.N1	0	54

ASA_WSM_1PNPDE20060621_234617_000003302048_00431_22529_5042.N1	0	27
ASA_WSM_1PNPDE20060622_040158_000001462048_00434_22532_5069.N1	0	63
ASA_WSM_1PNPDE20060622_112554_000001702048_00438_22536_5109.N1	0	51
ASA_WSM_1PNPDK20060622_140712_000000922048_00440_22538_8138.N1	0	16



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

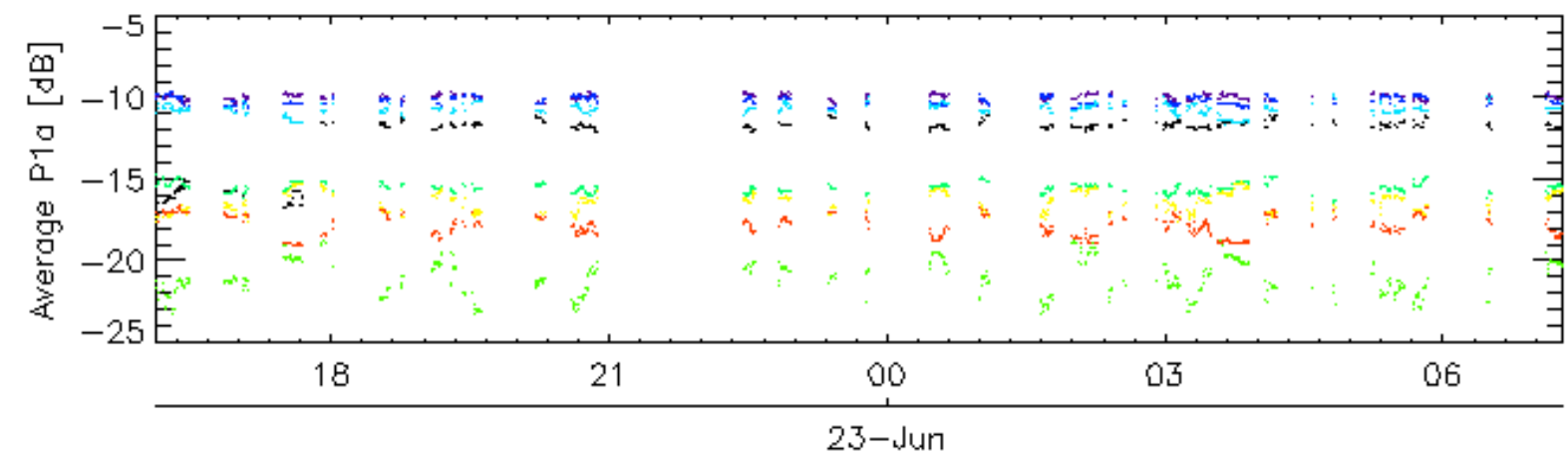
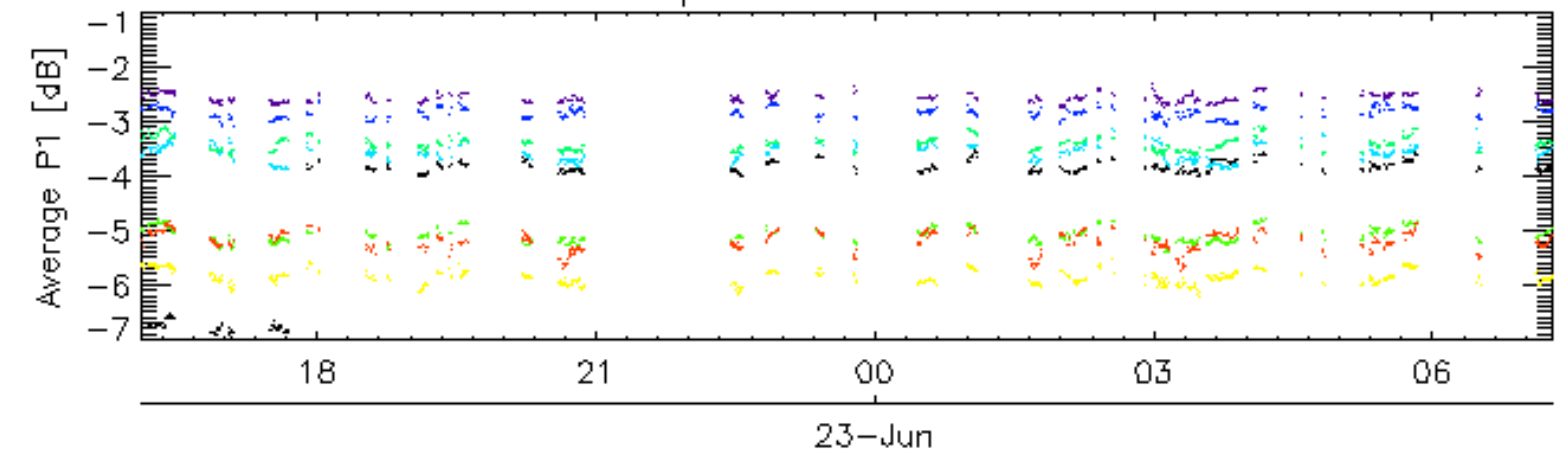
7.5 - Absolute Doppler for GM1

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

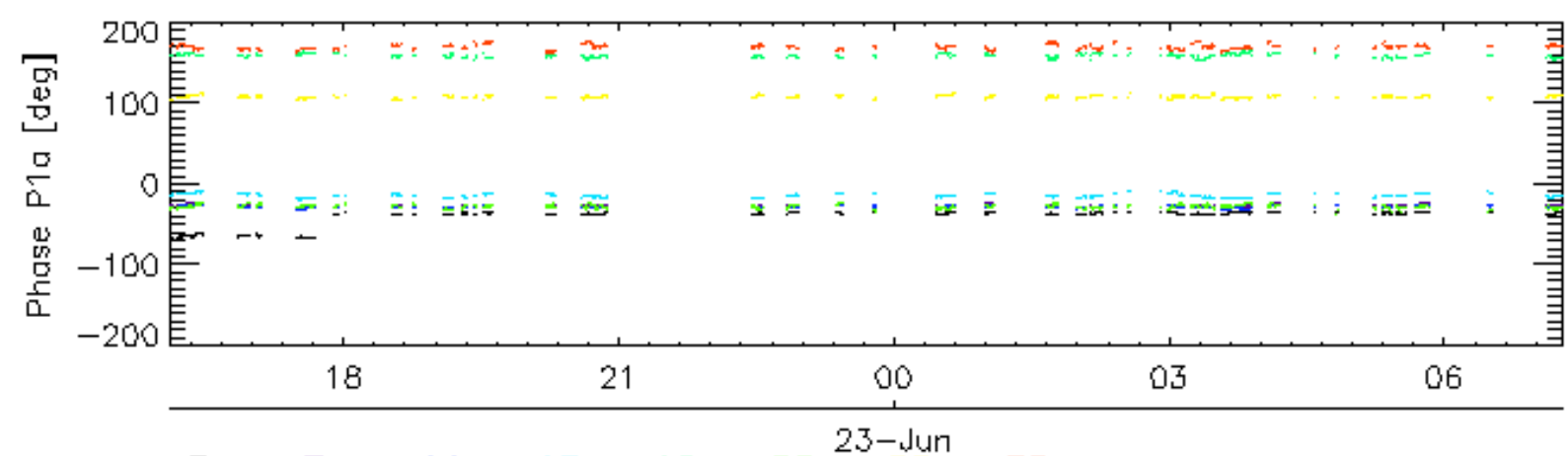
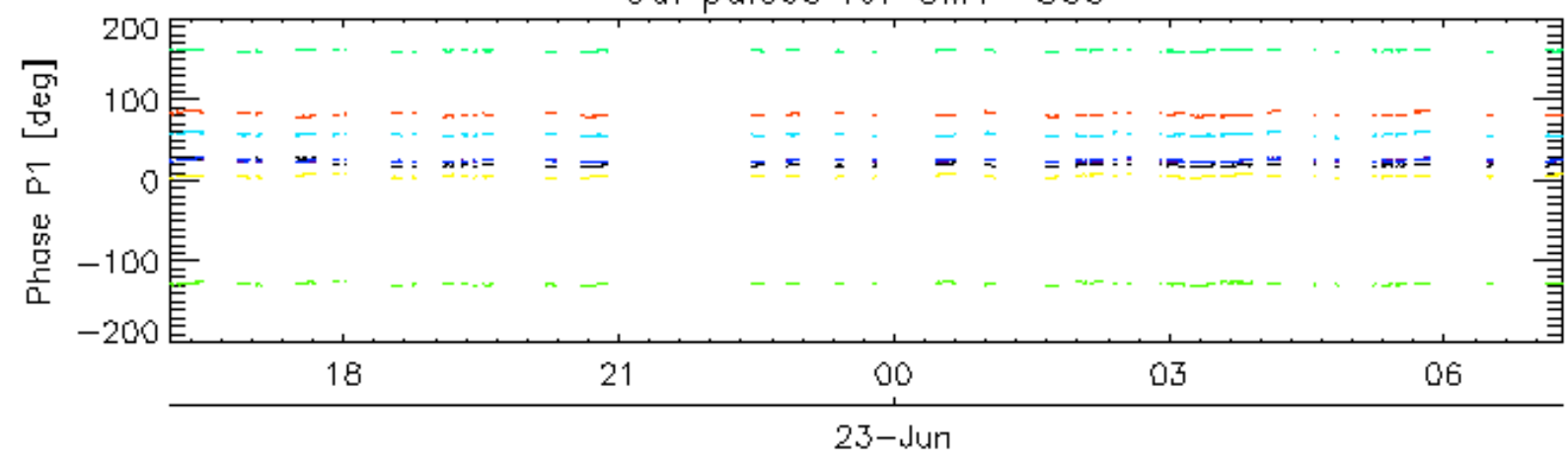
7.6 - Doppler evolution versus ANX for GM1

Evolution Doppler error versus ANX
<input type="checkbox"/>

Cal pulses for GM1 SS3

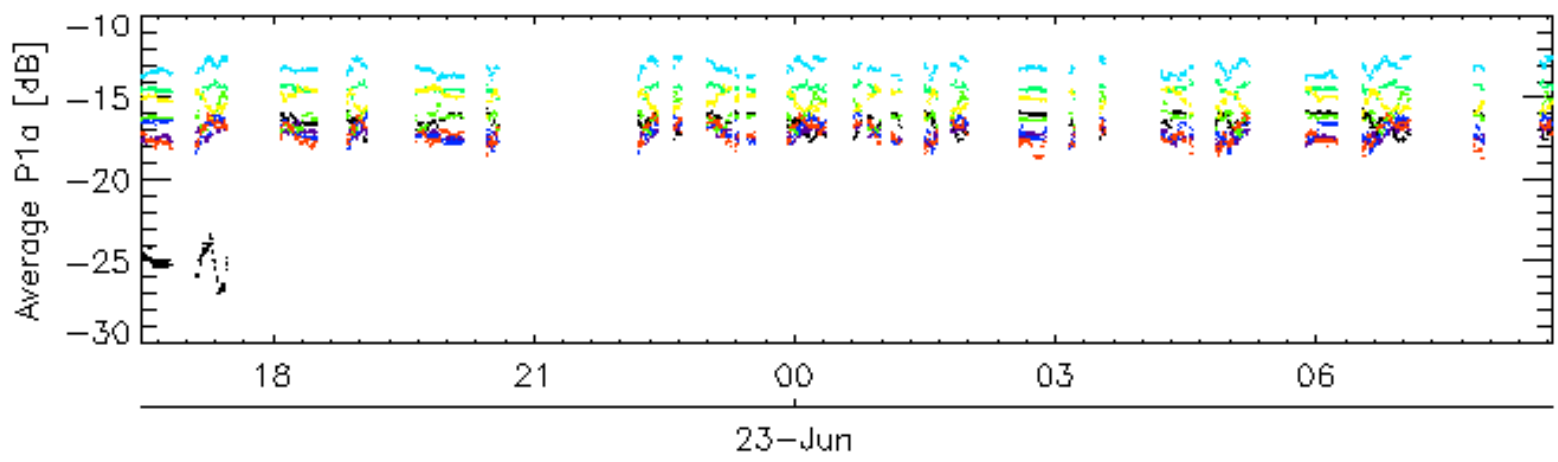
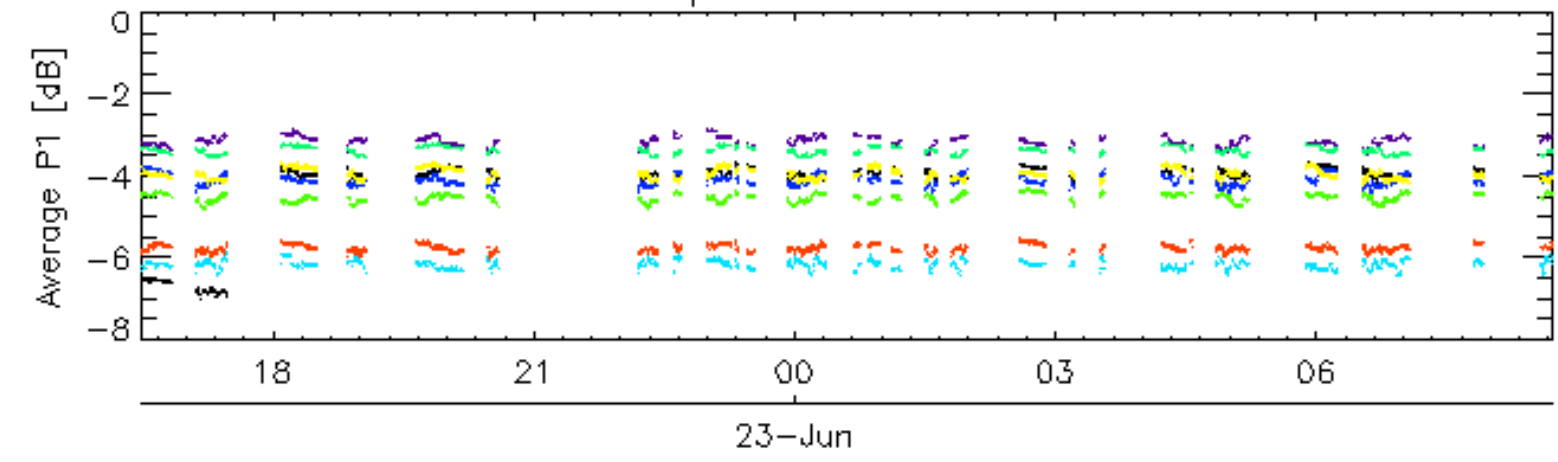


Cal pulses for GM1 SS3

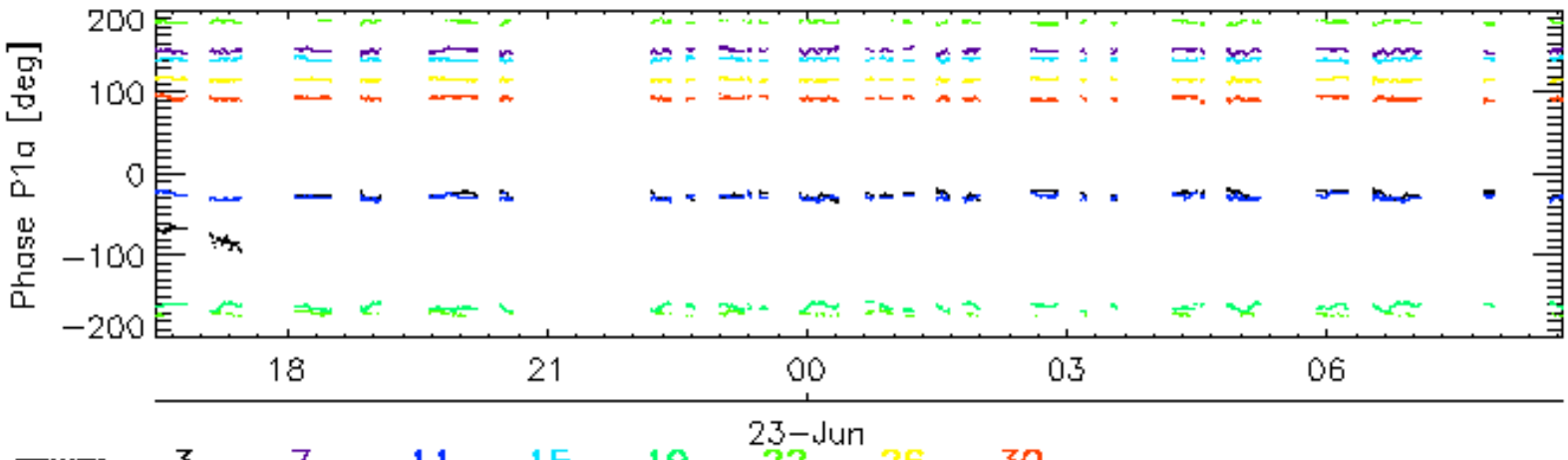
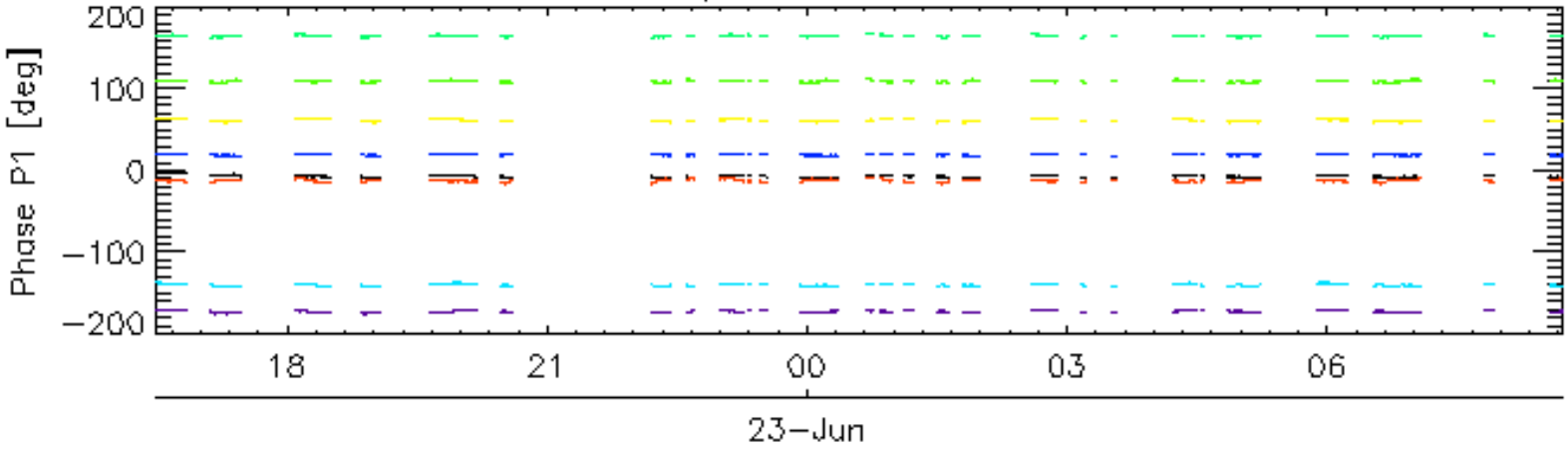


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

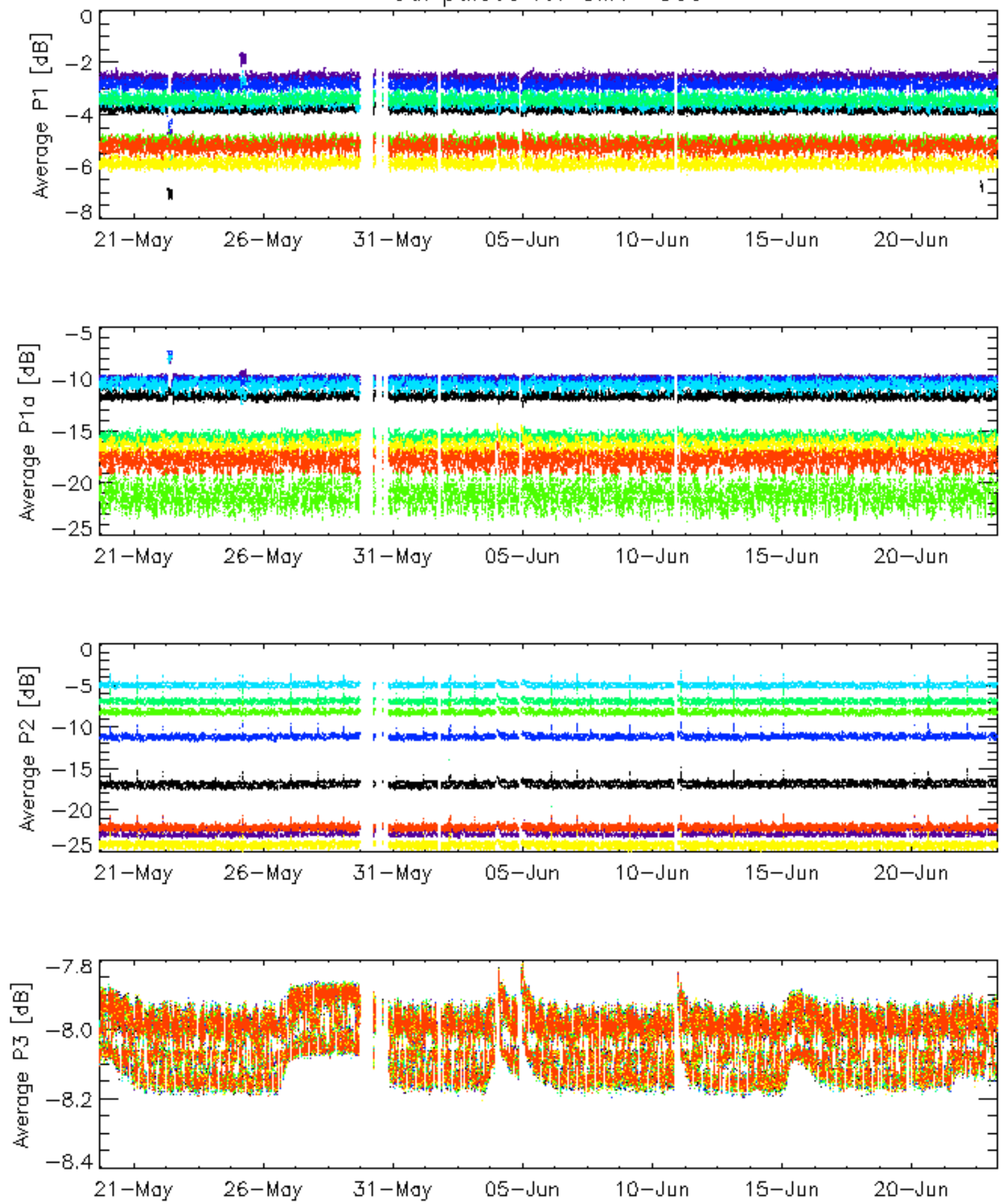


Cal pulses for WVS IS2



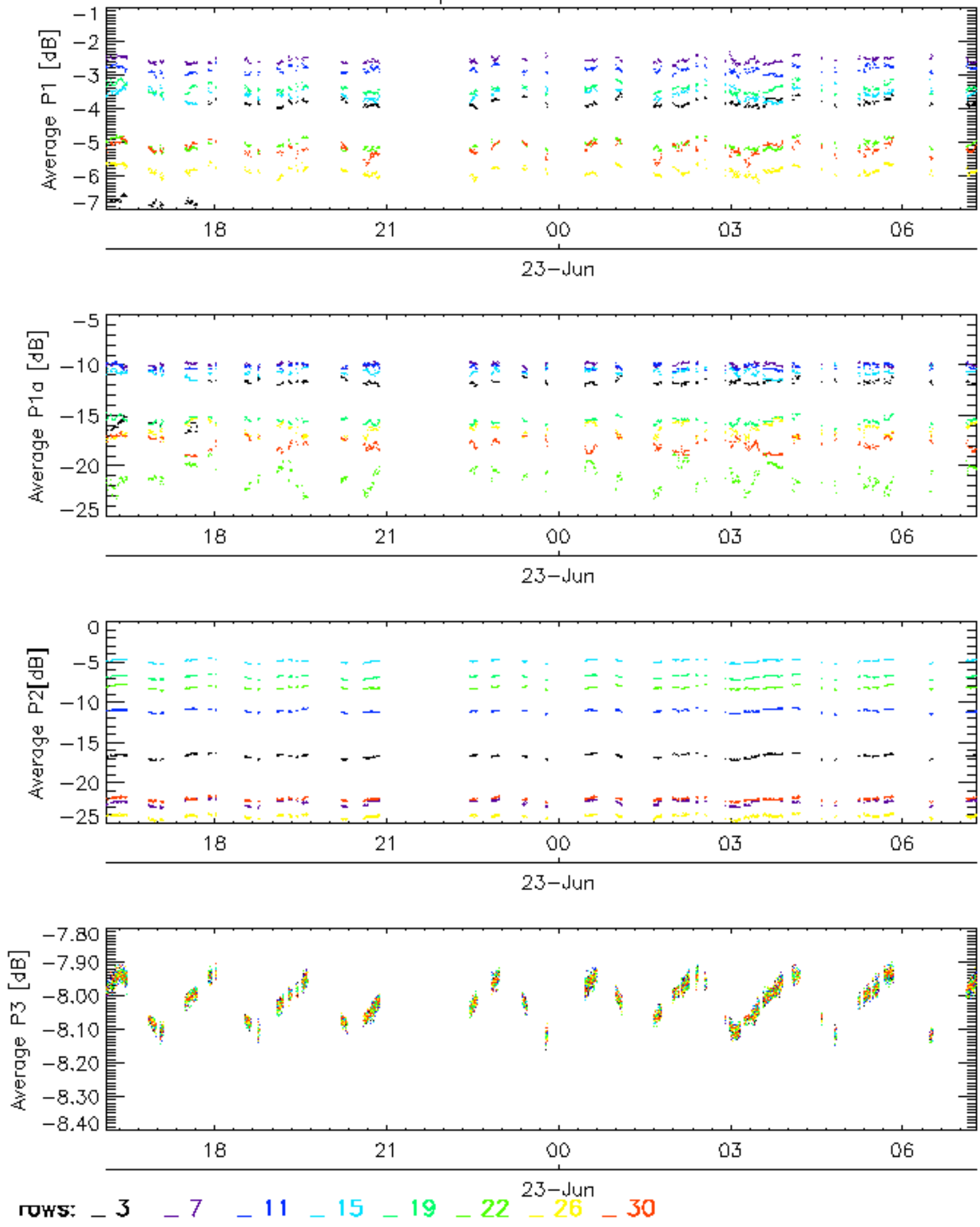
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

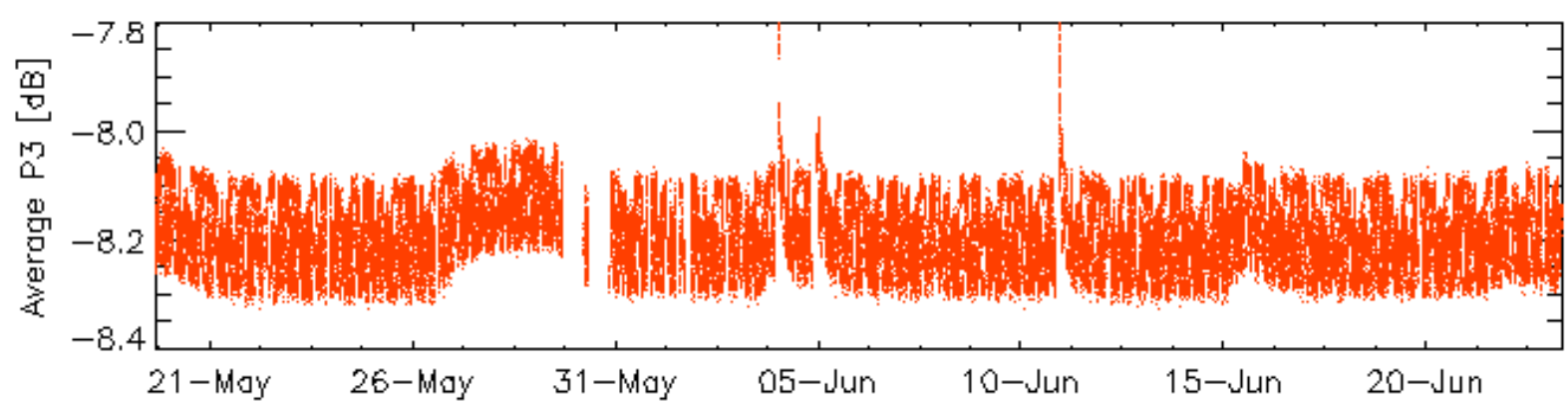
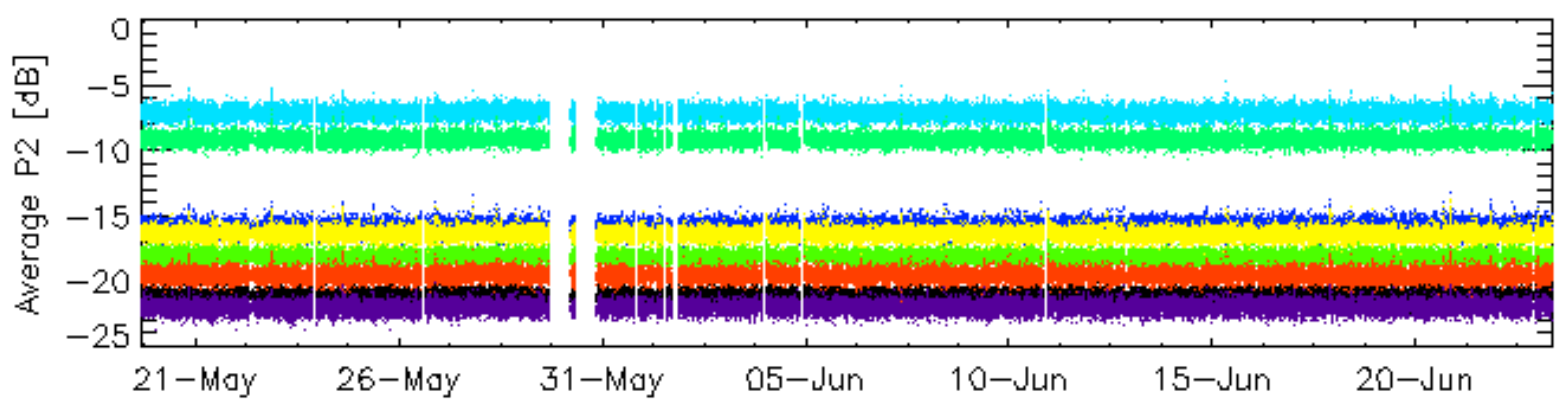
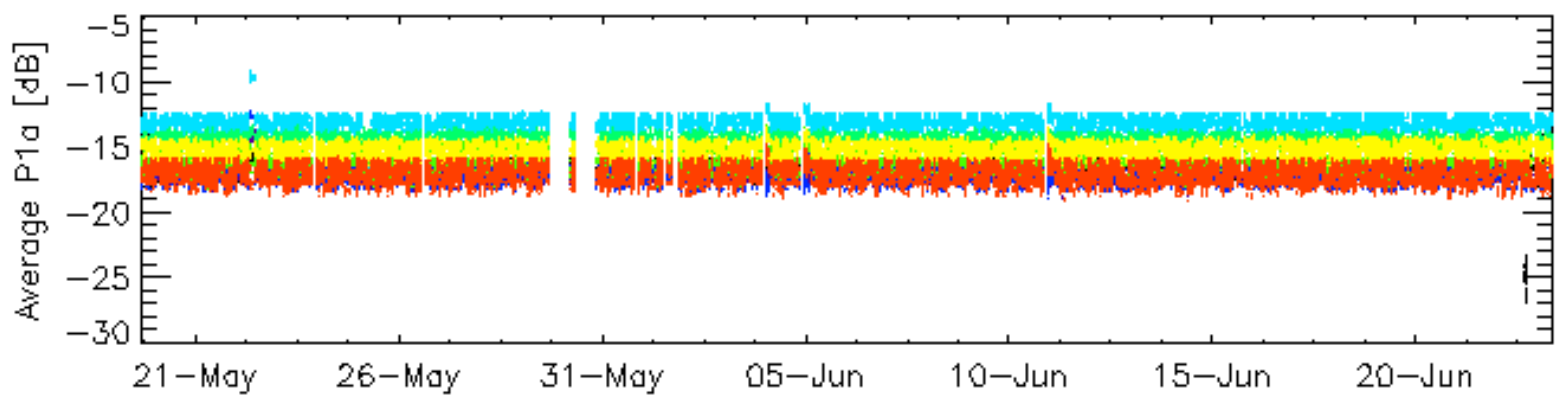
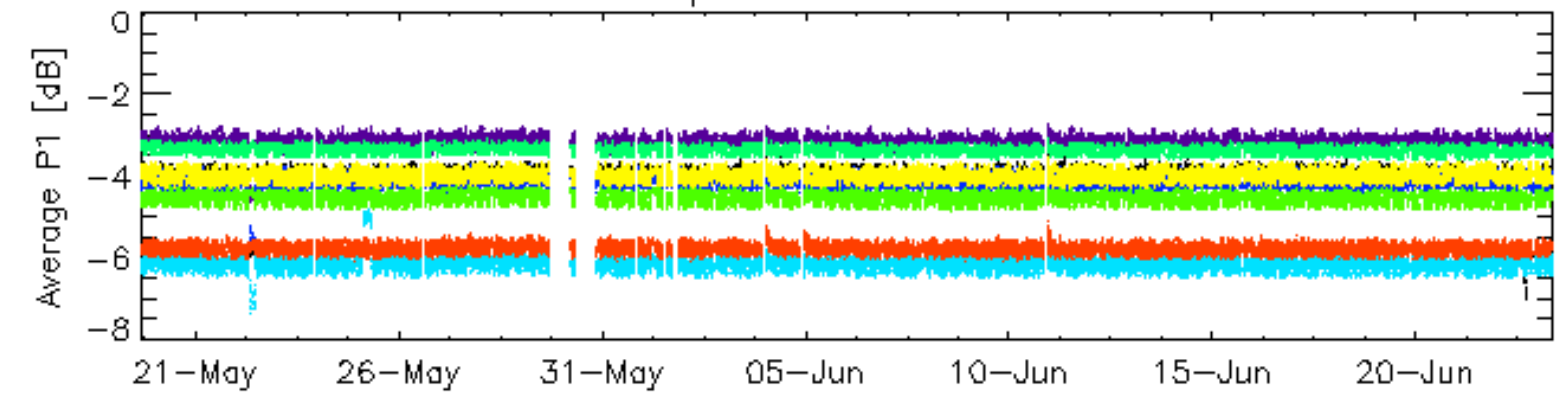


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

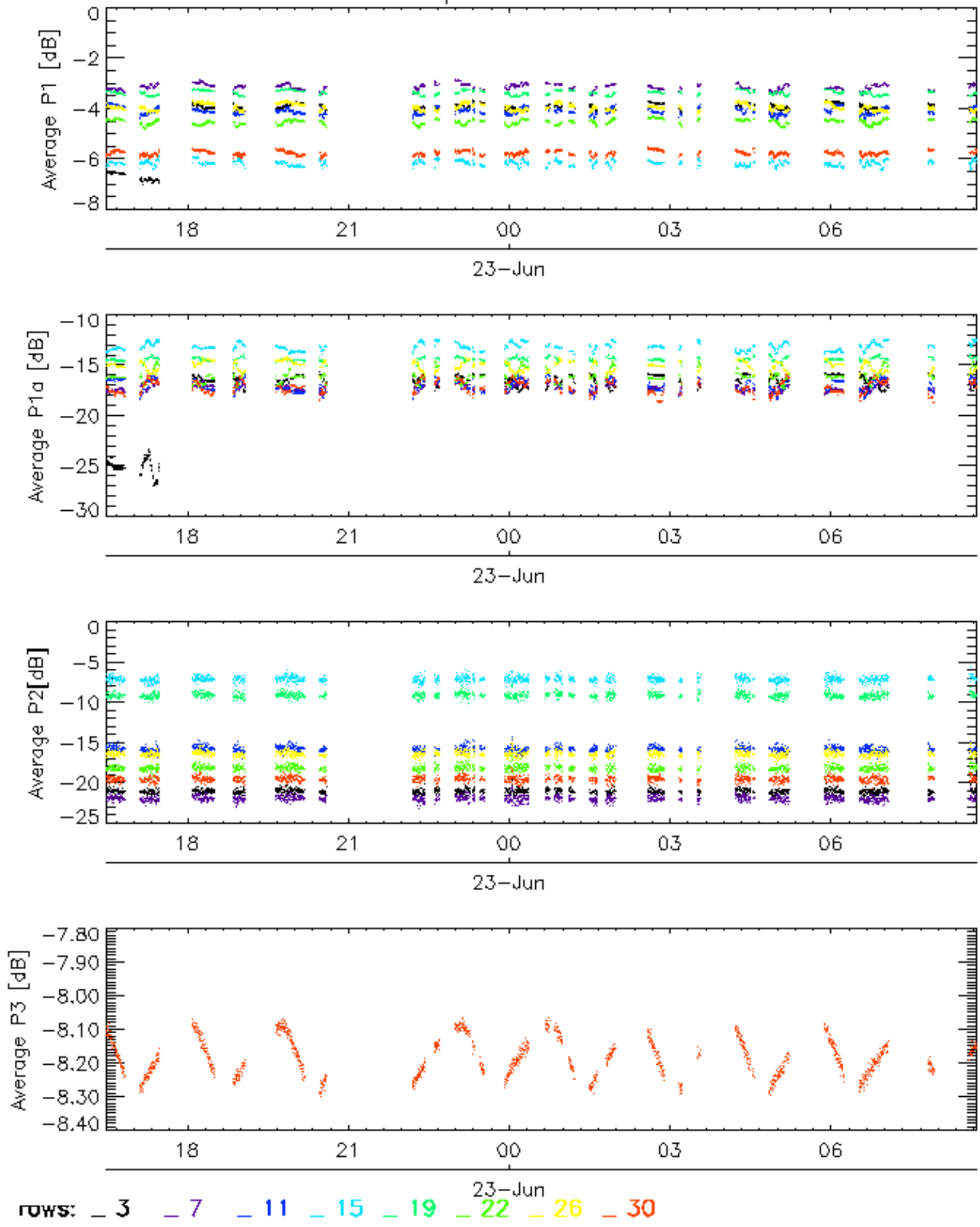


Cal pulses for WVS IS2



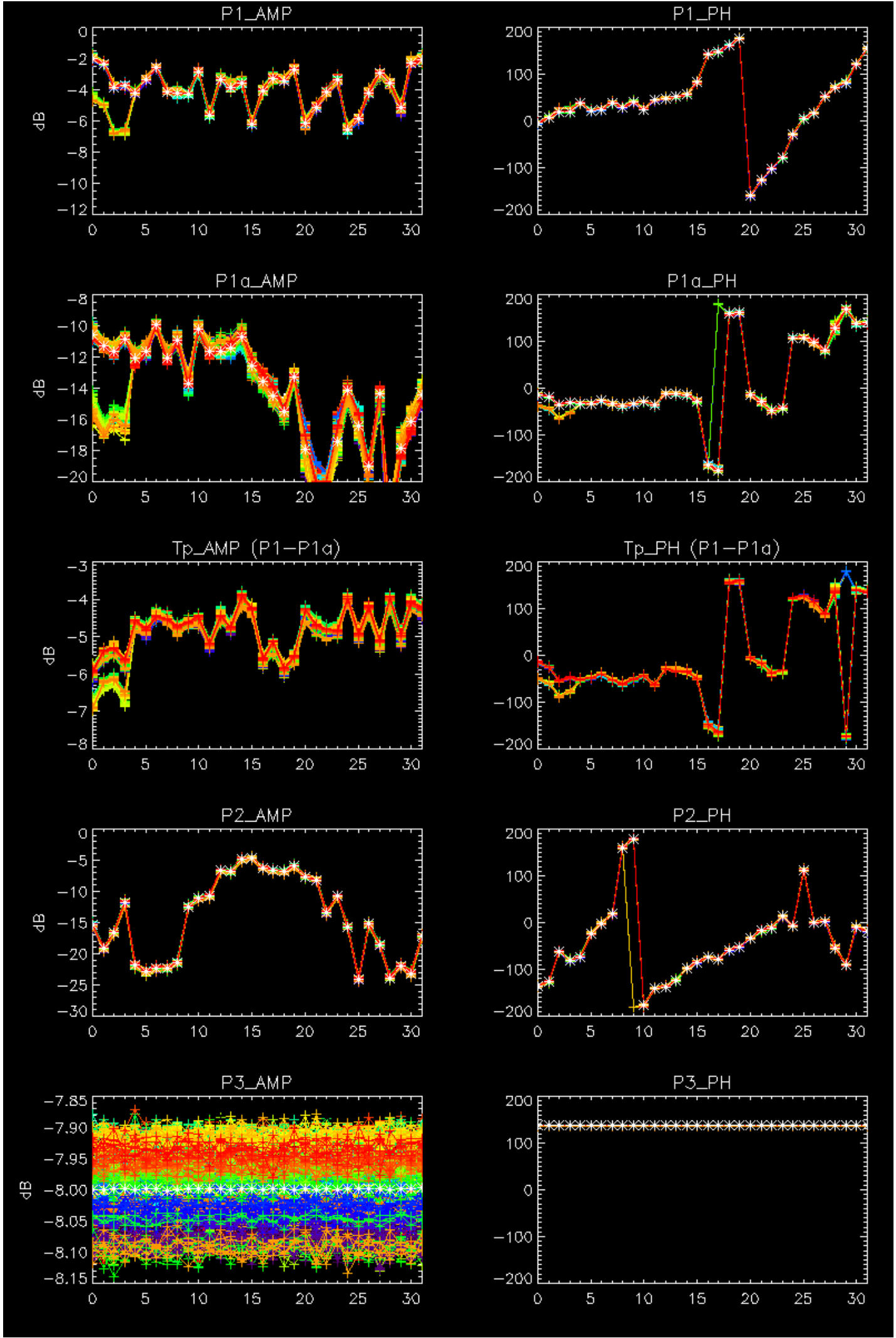
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

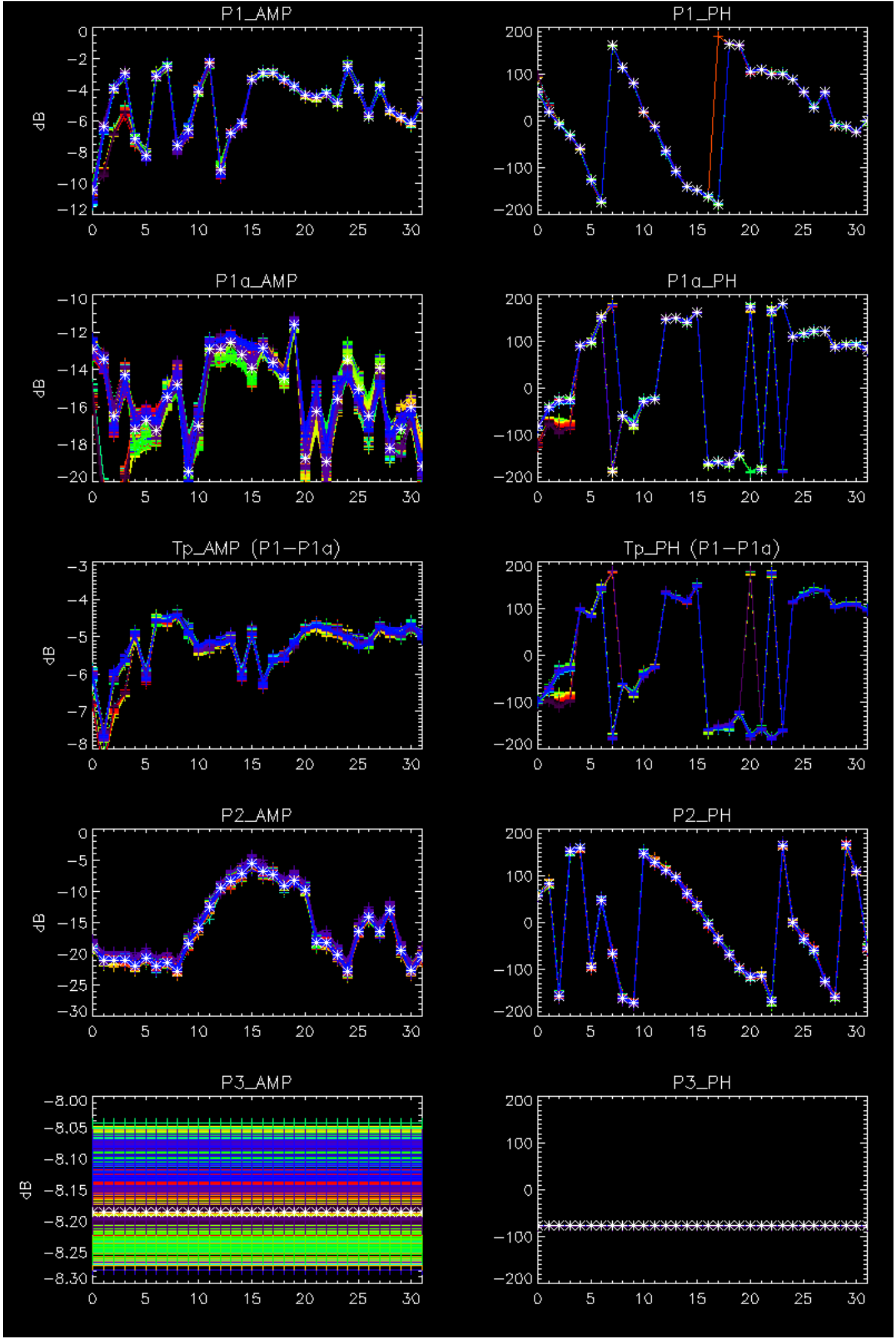
Cal pulses for WVS IS2



No anomalies observed on available browse products

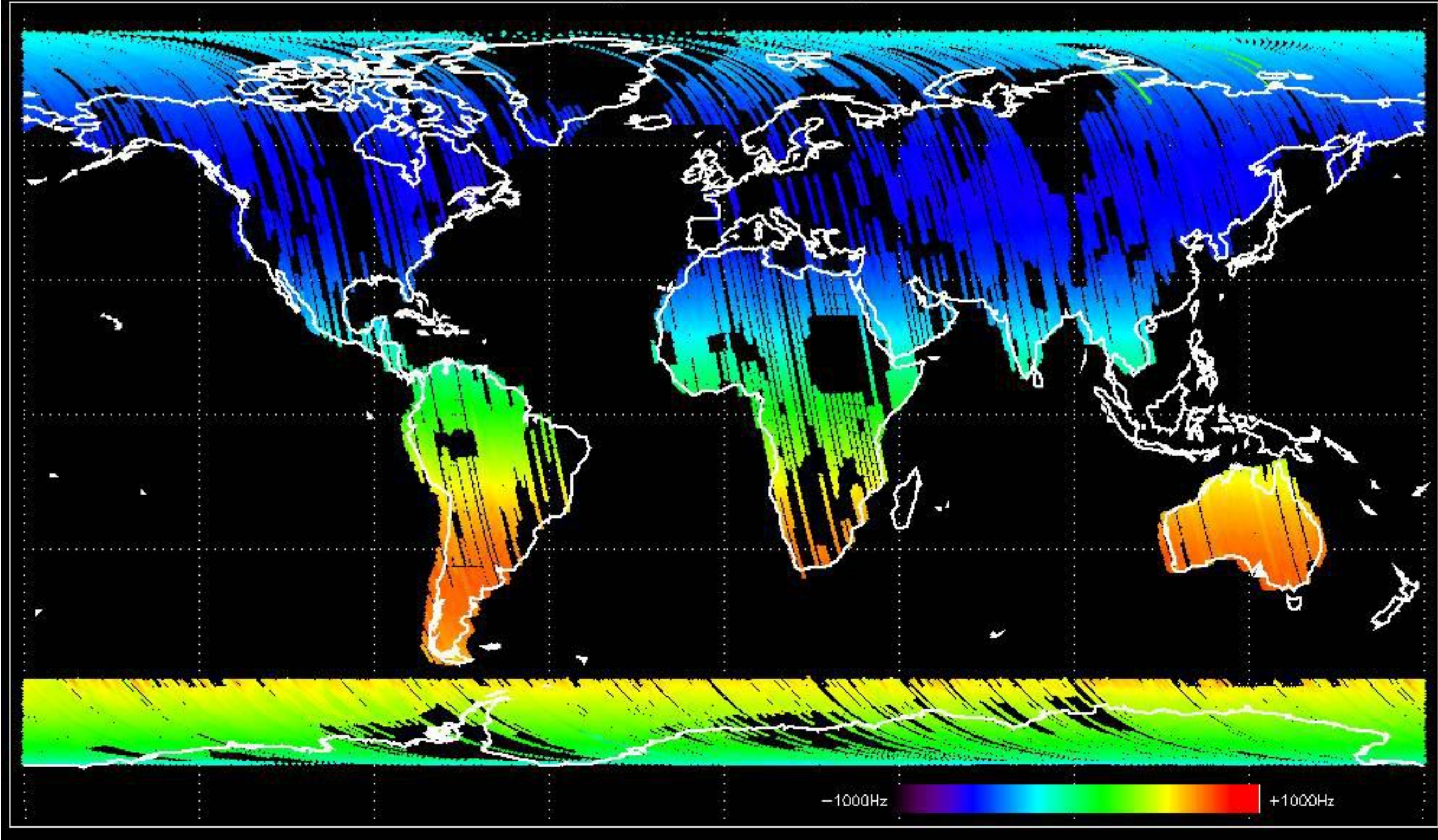
No anomalies observed.



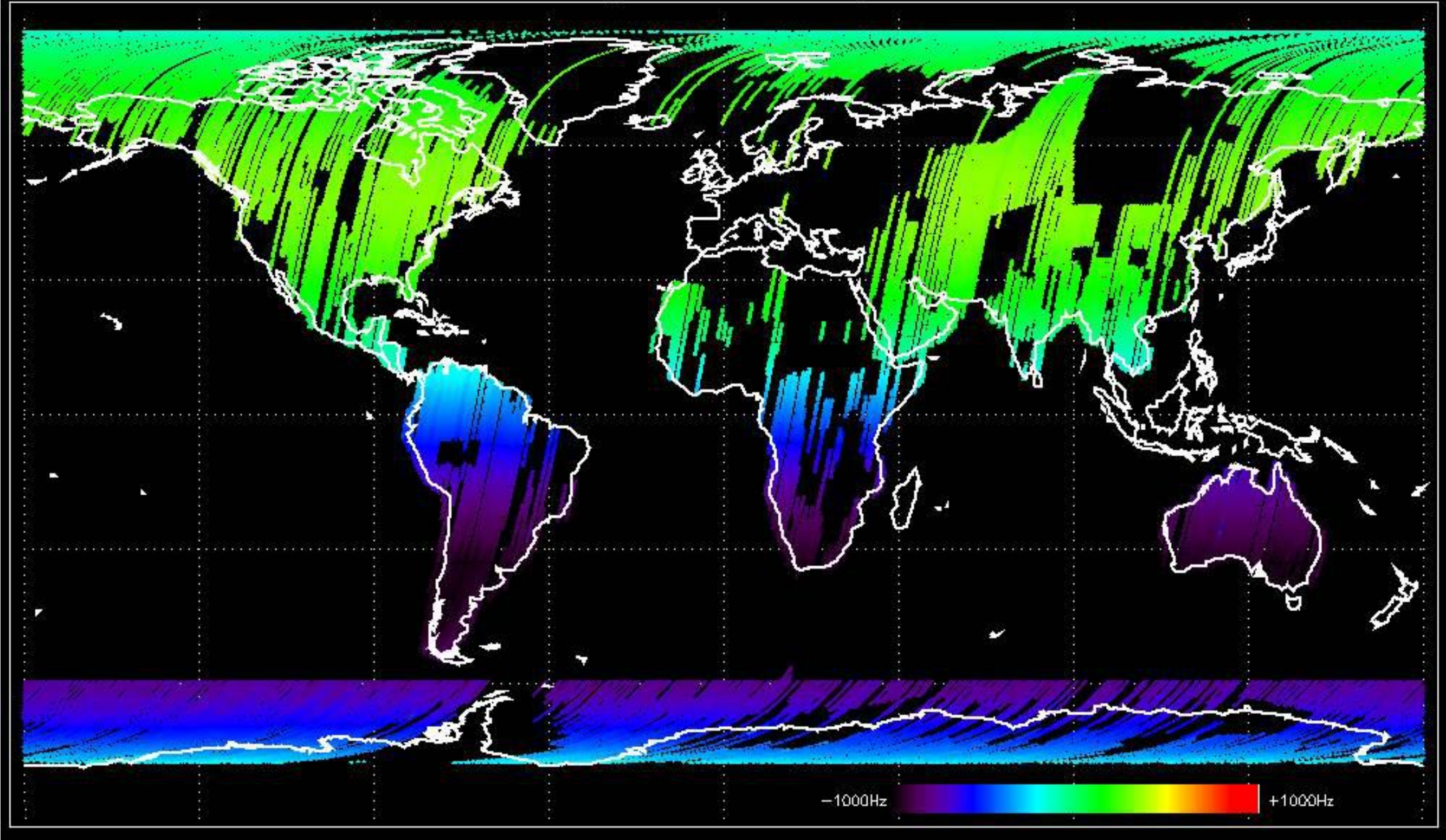


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

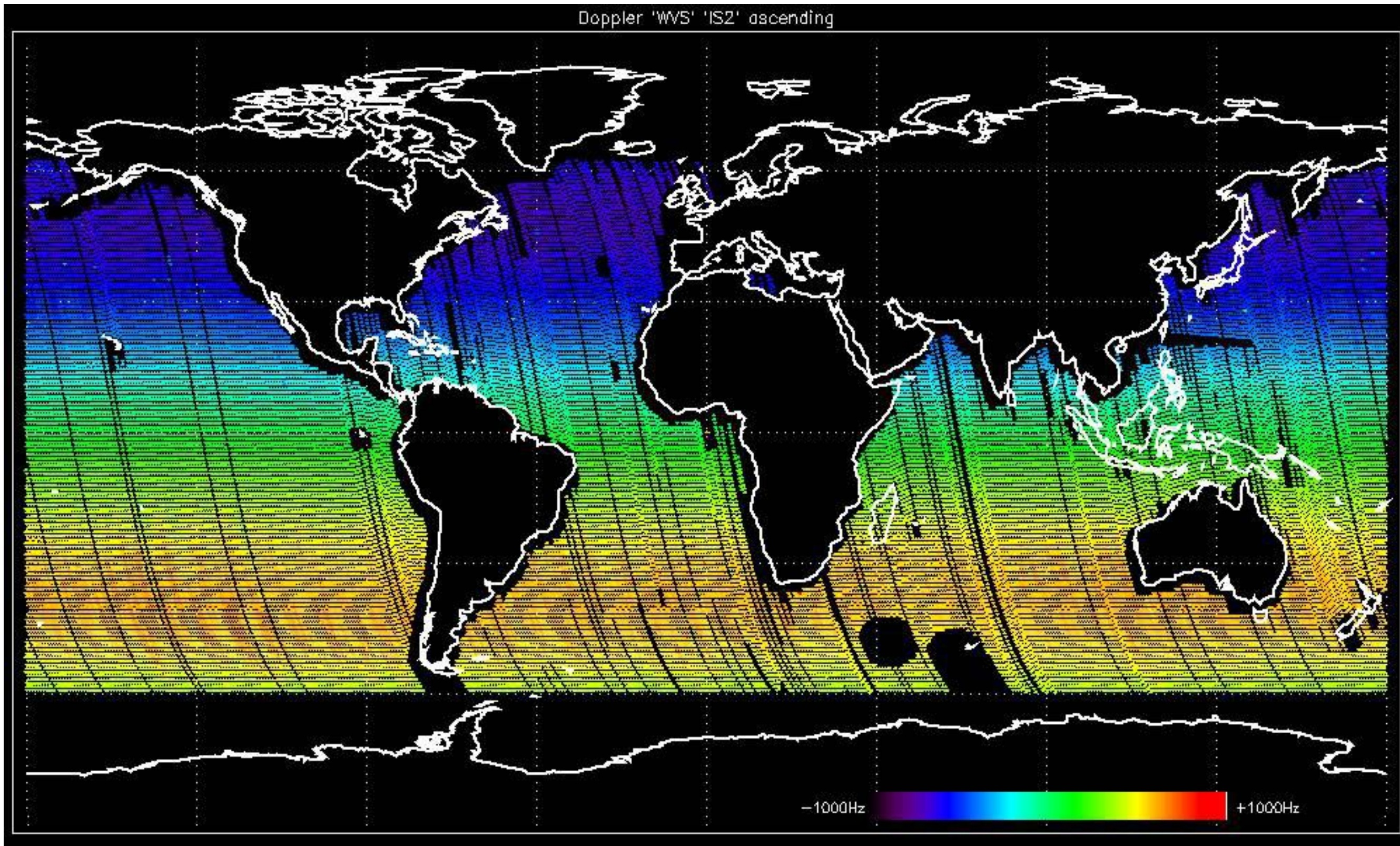
Doppler 'GM1' 'SS1' ascending



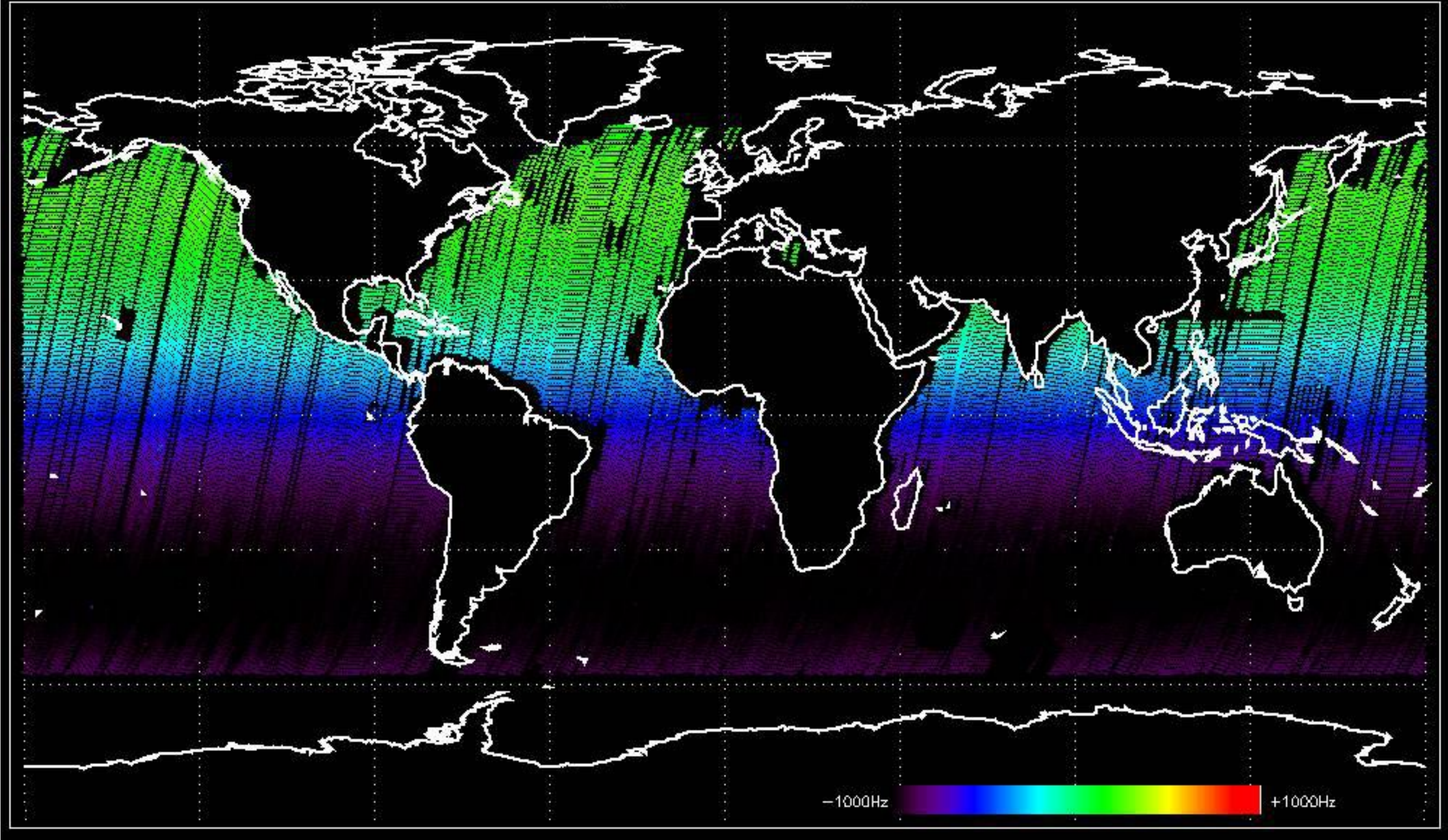
Doppler 'GM1' 'SS1' descending



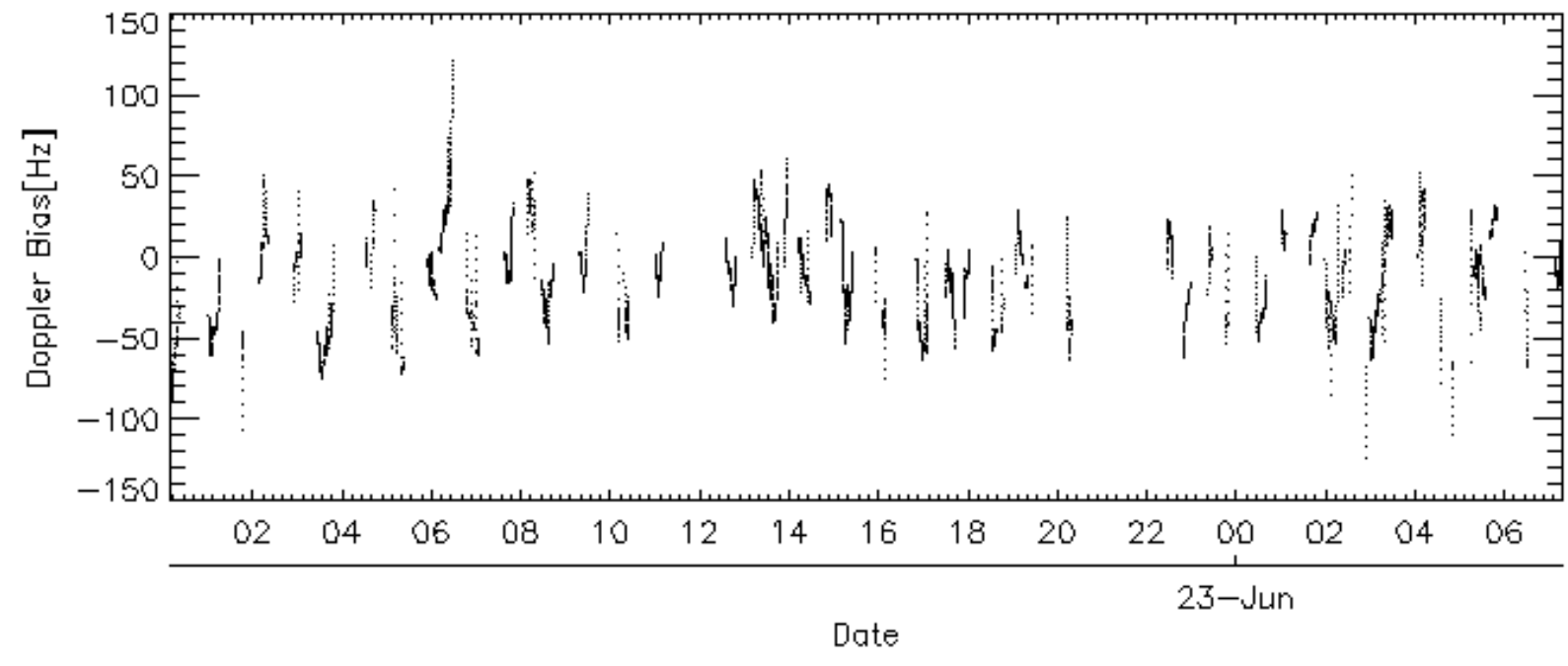
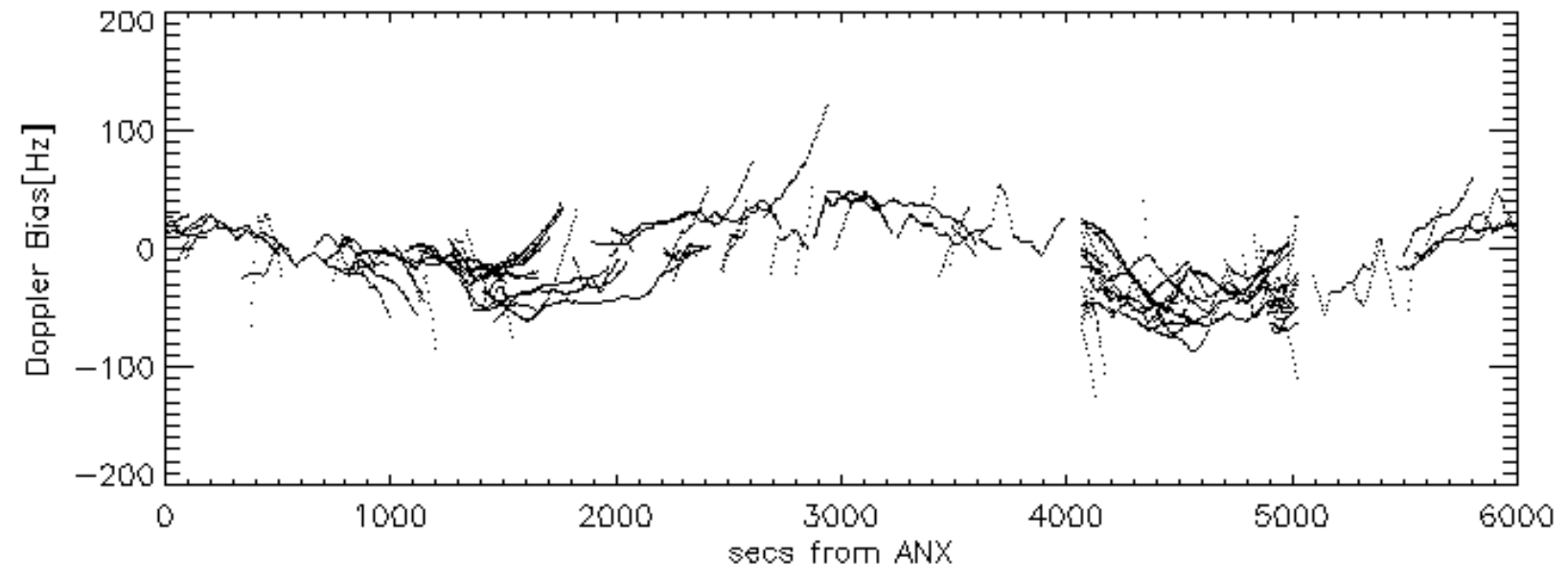
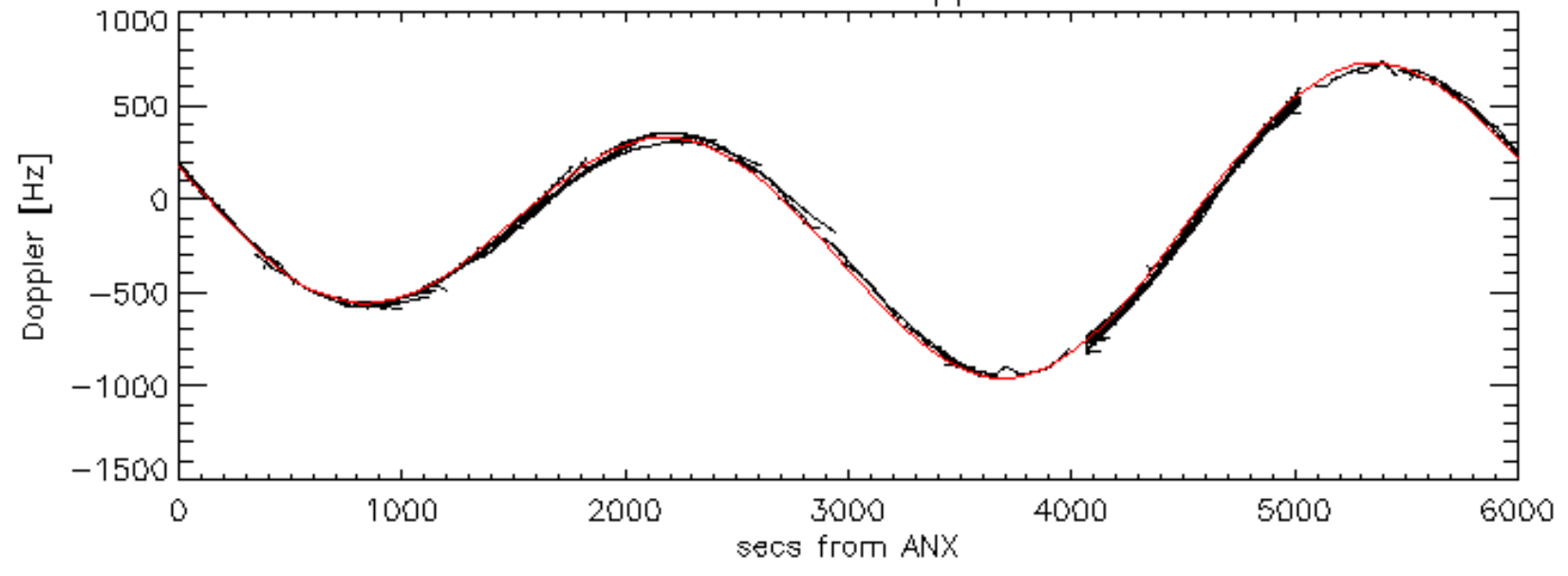
Doppler 'WVS' 'IS2' ascending

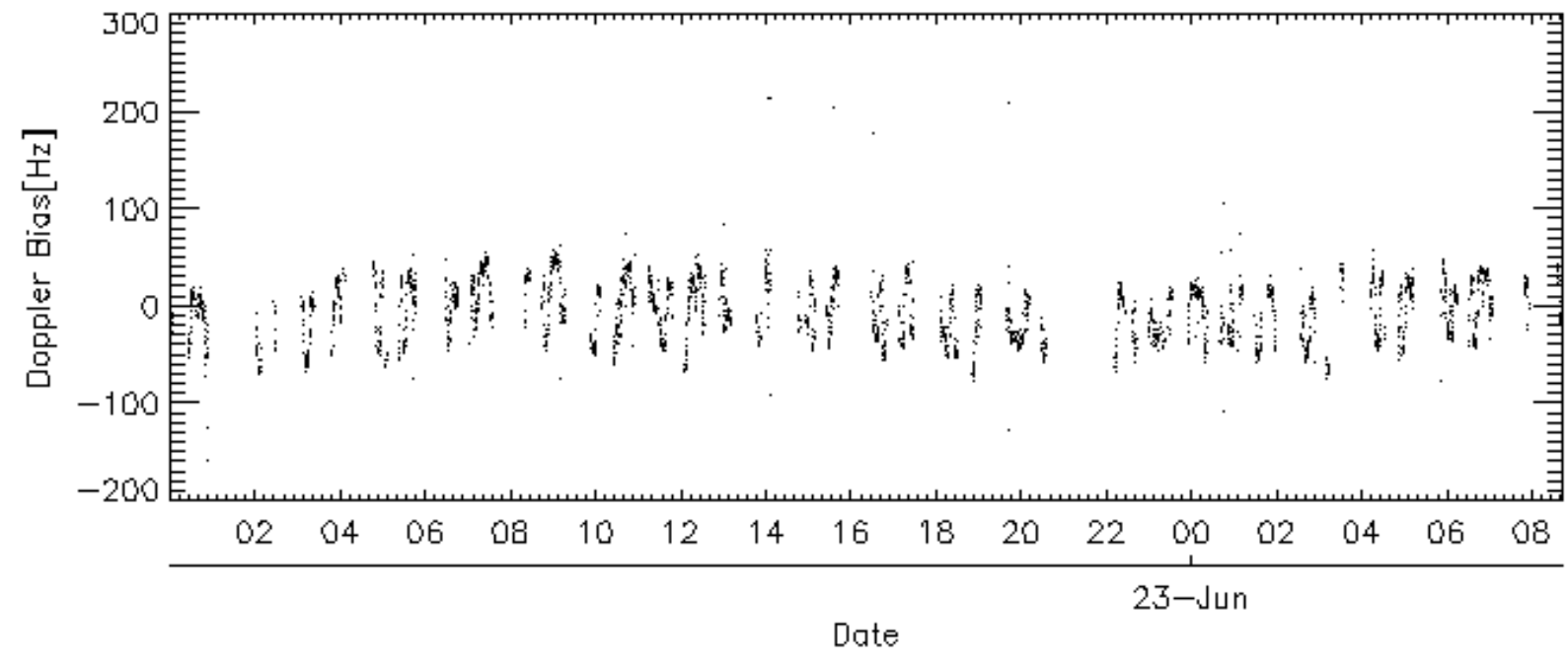
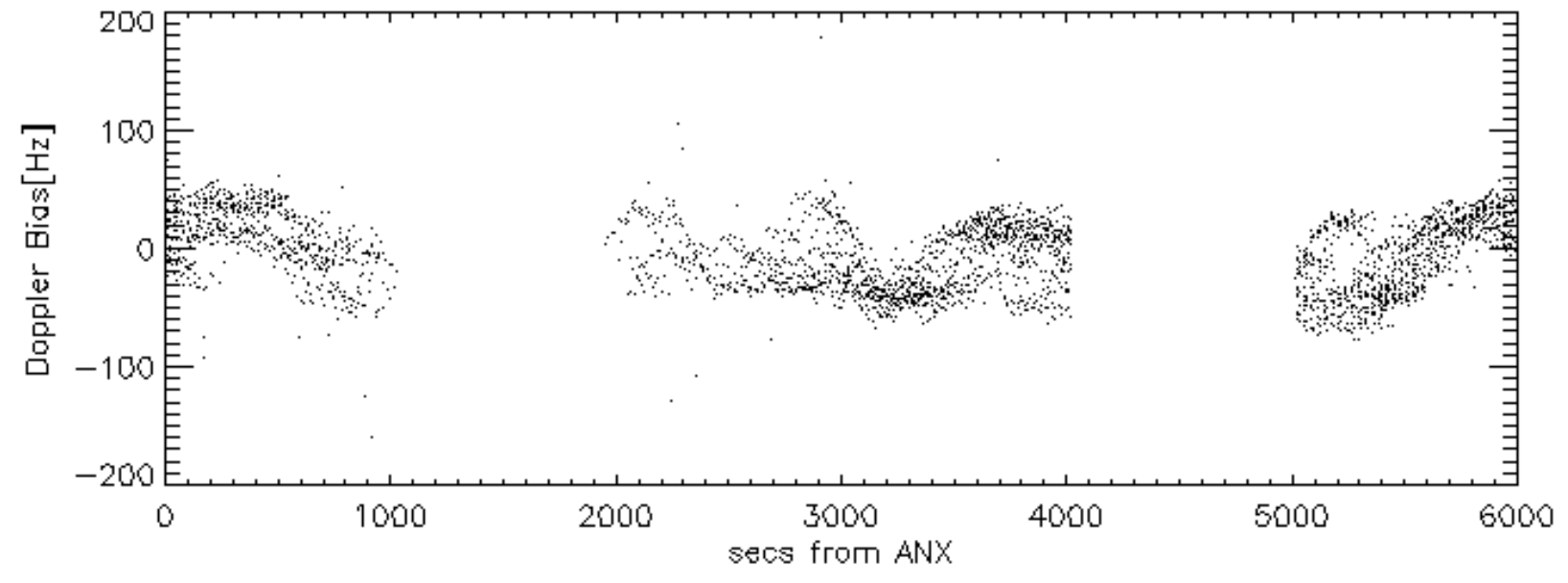
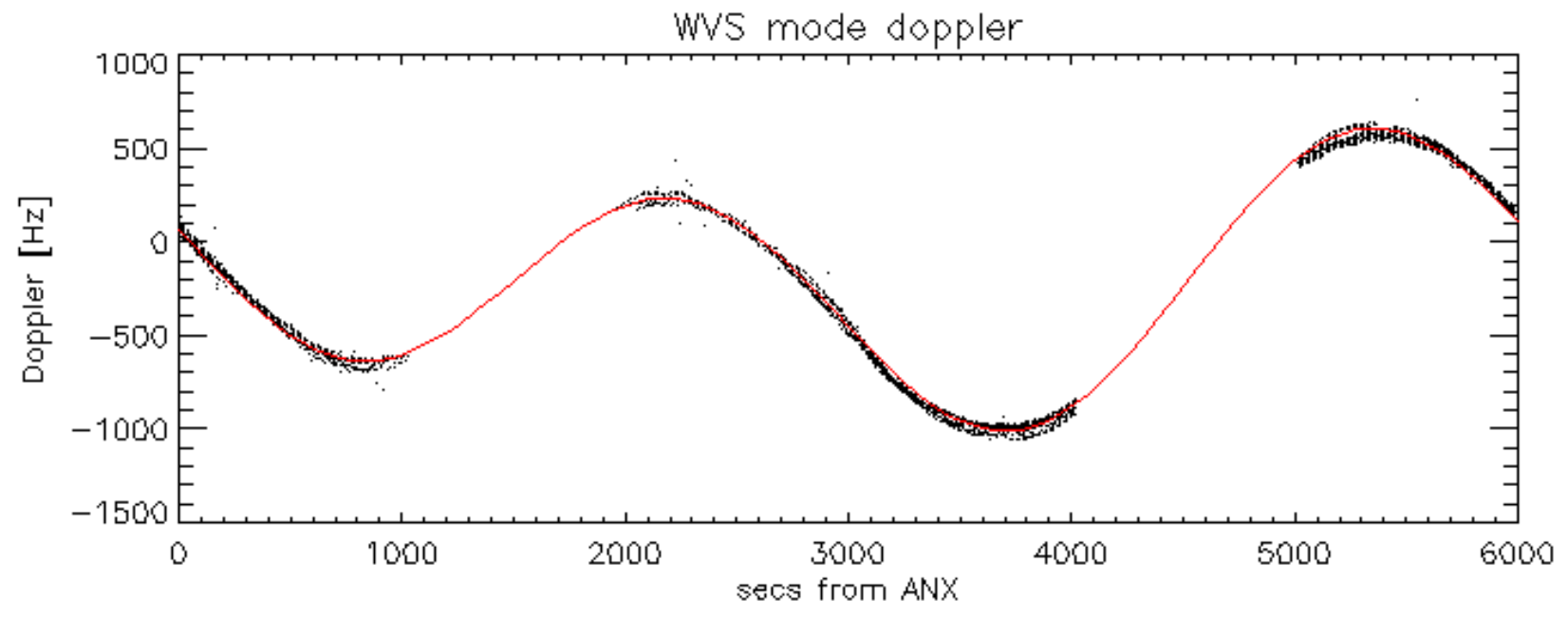


Doppler 'WVS' 'IS2' descending

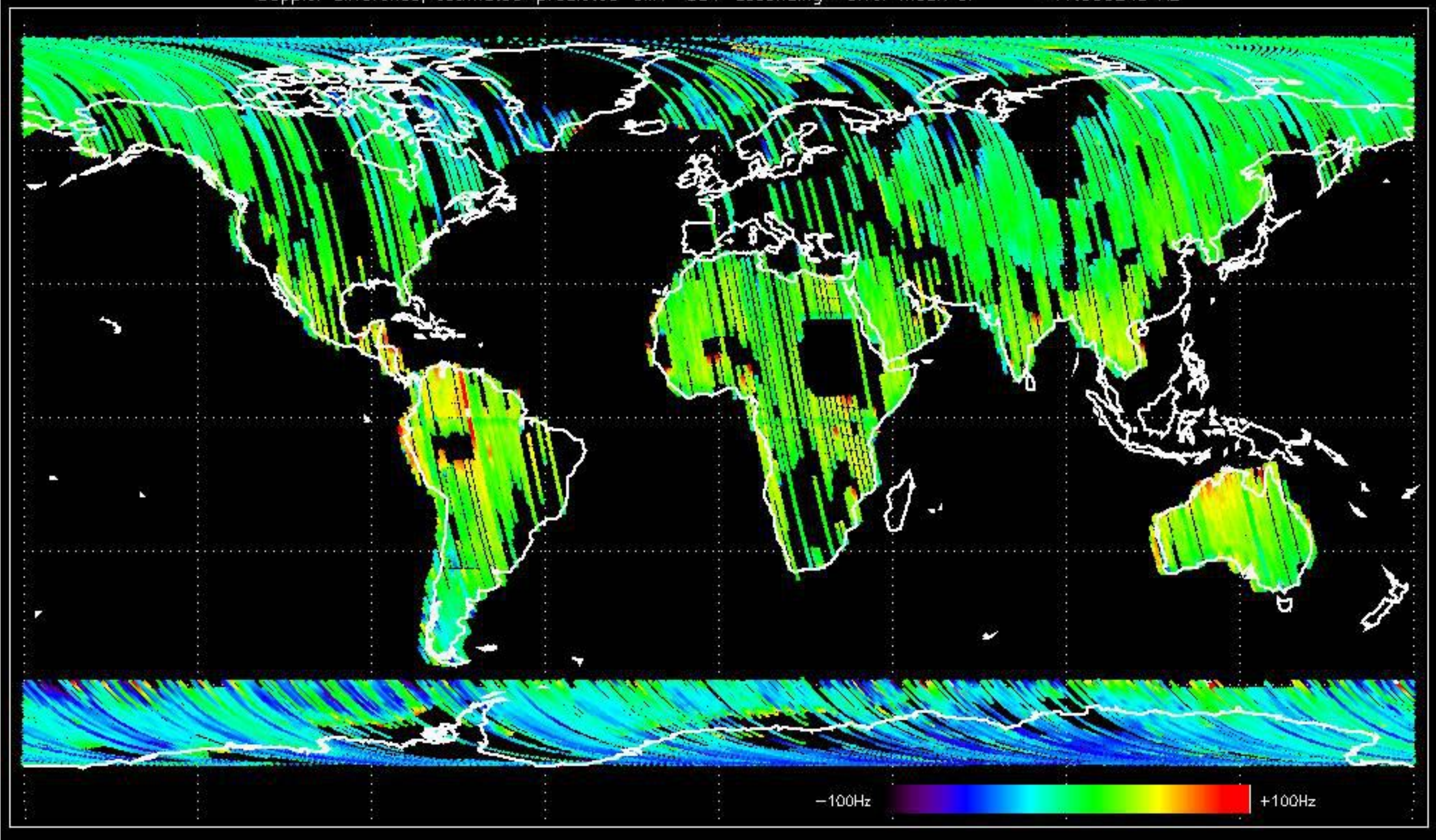


GM1 mode doppler

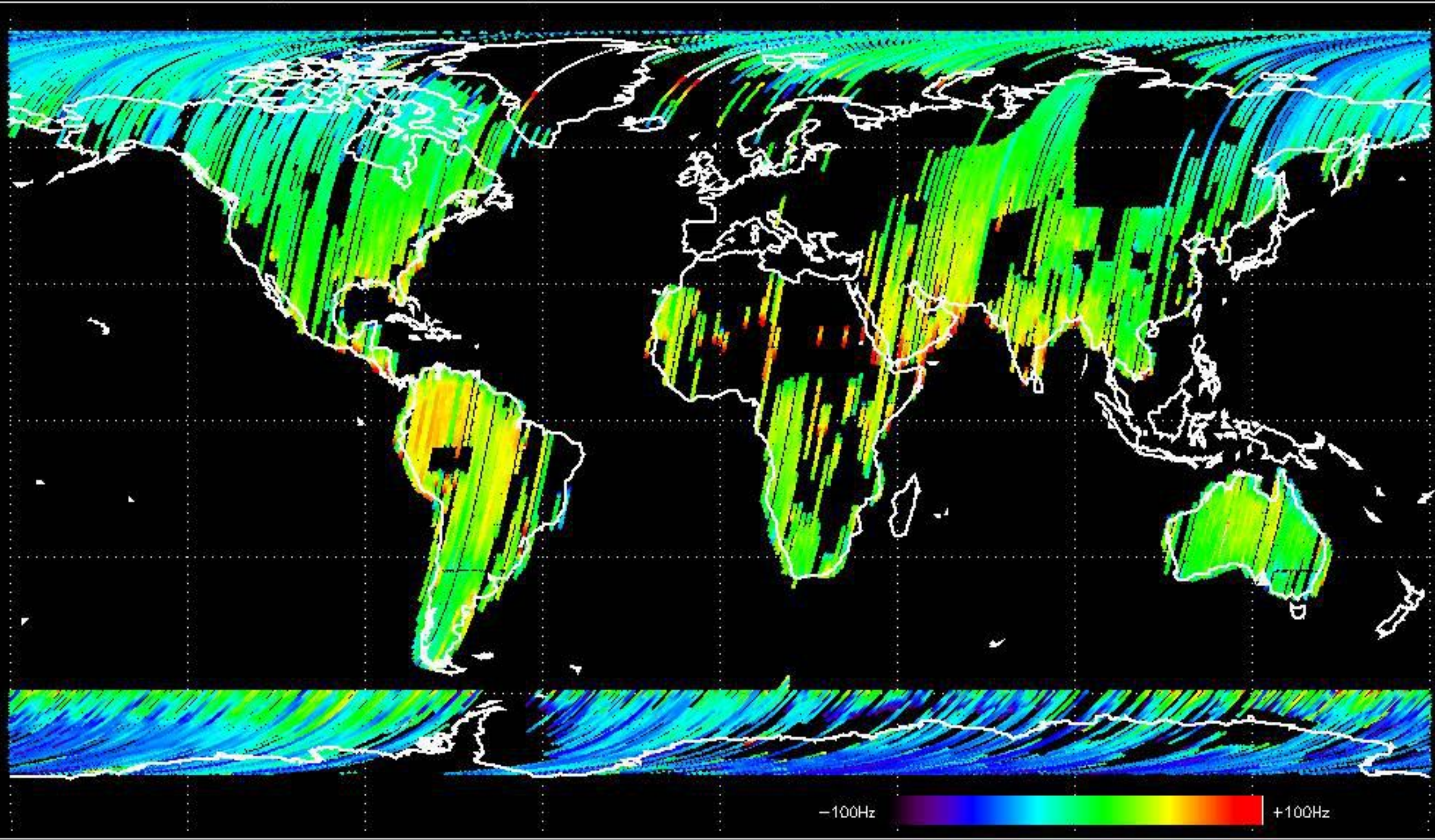




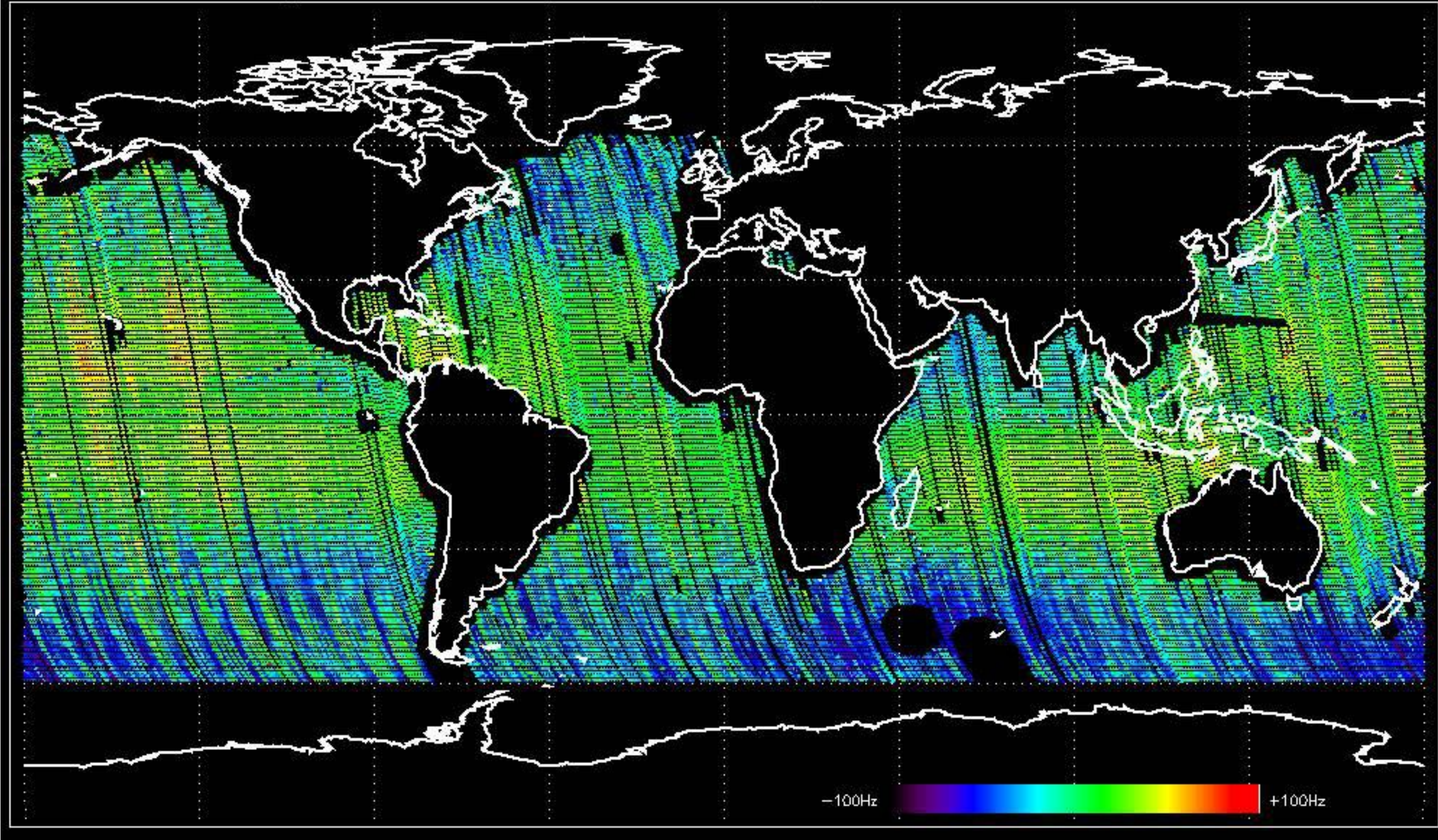
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -17.996245 Hz



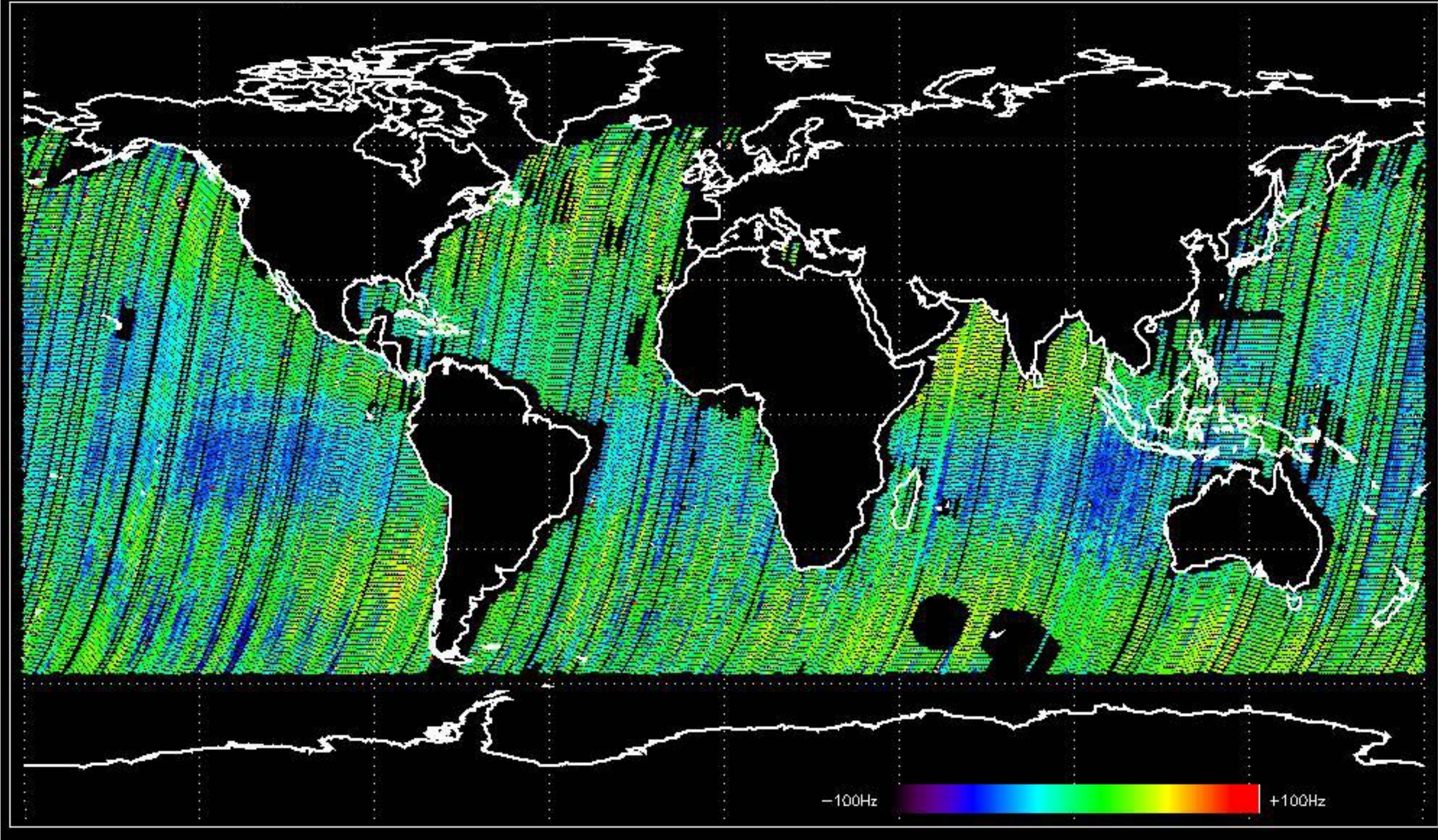
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -8.3671642 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -8.2345431 Hz

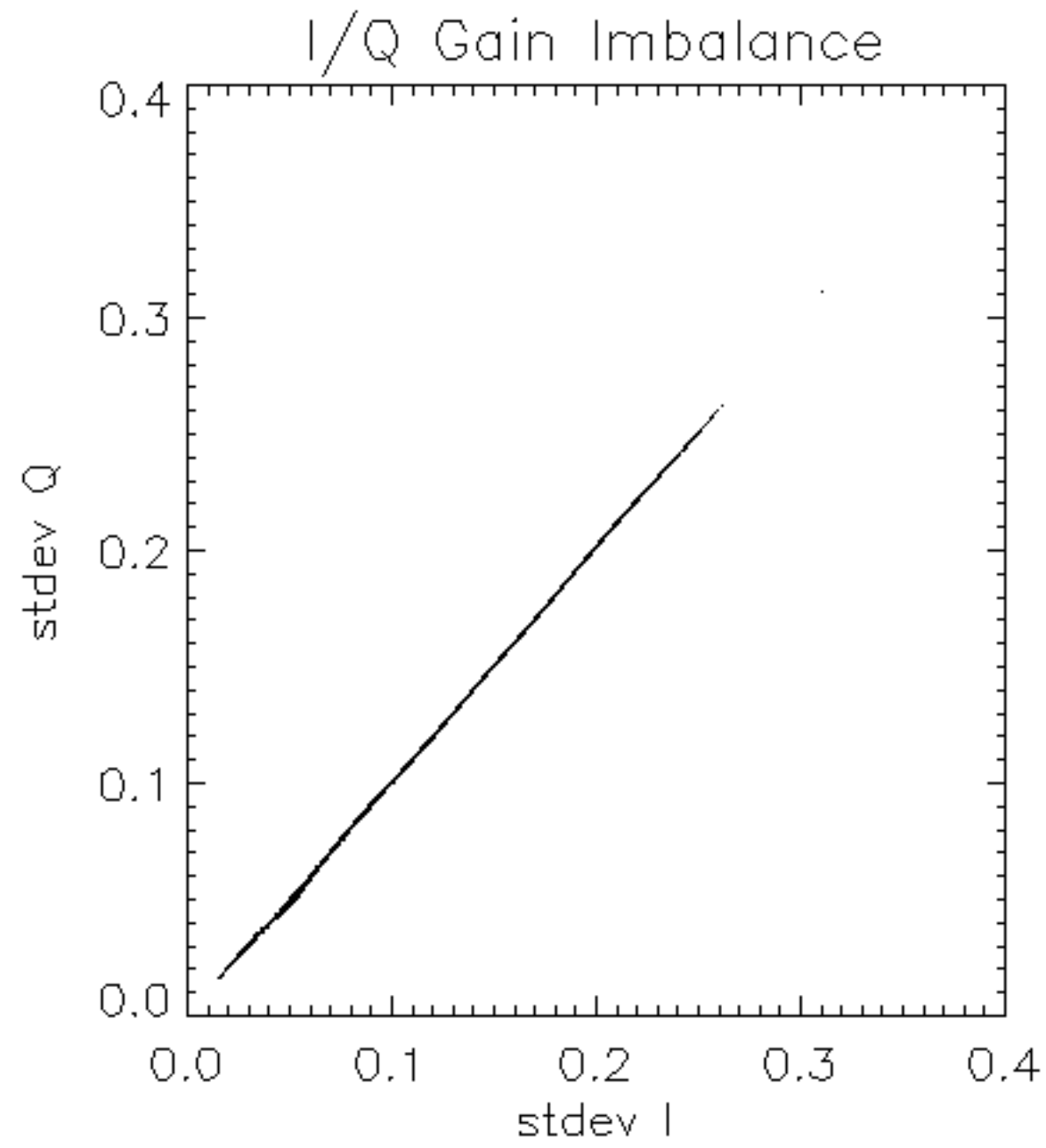


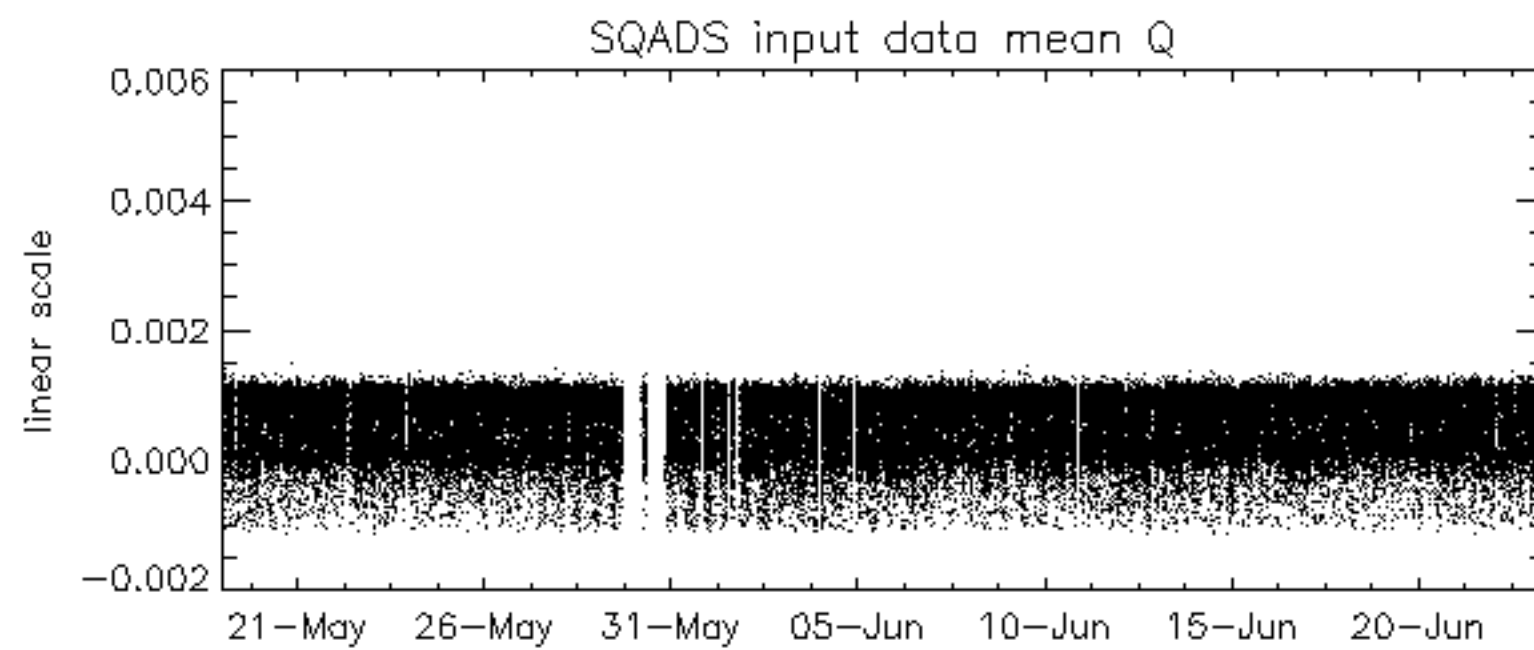
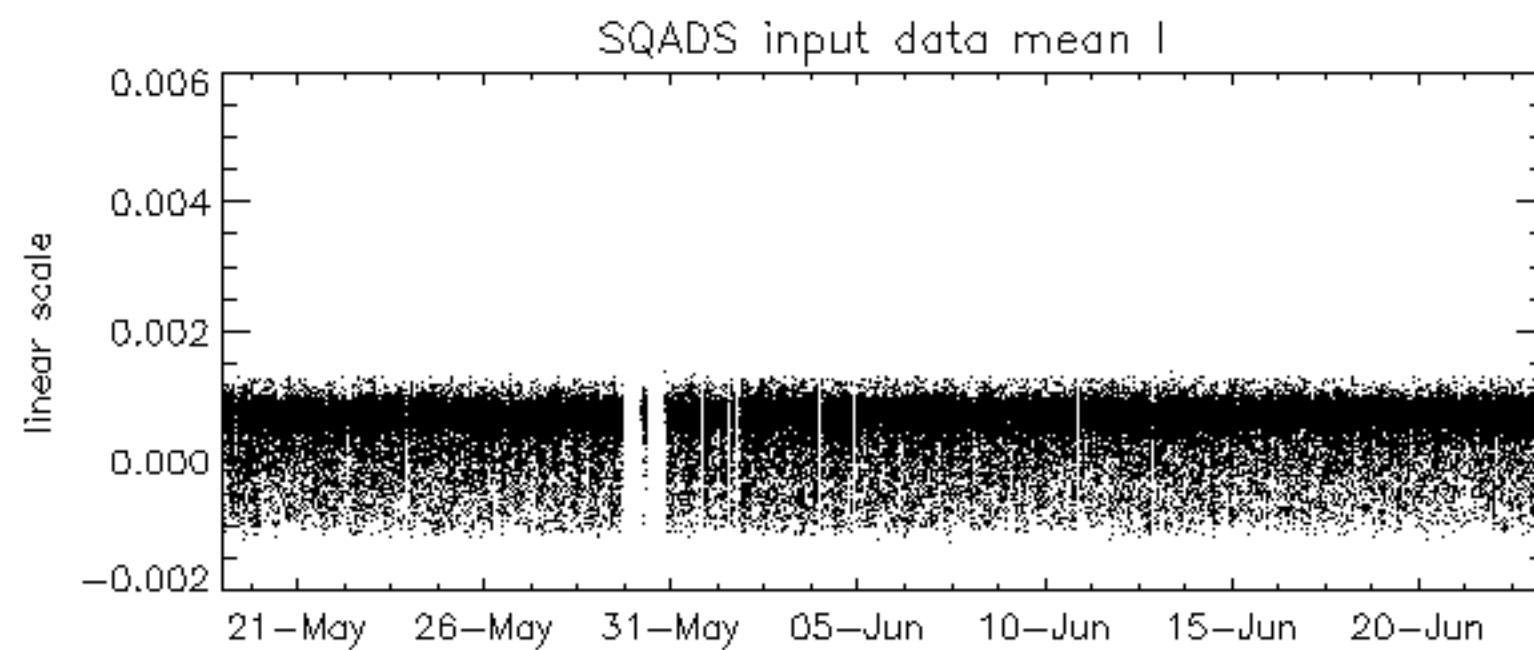
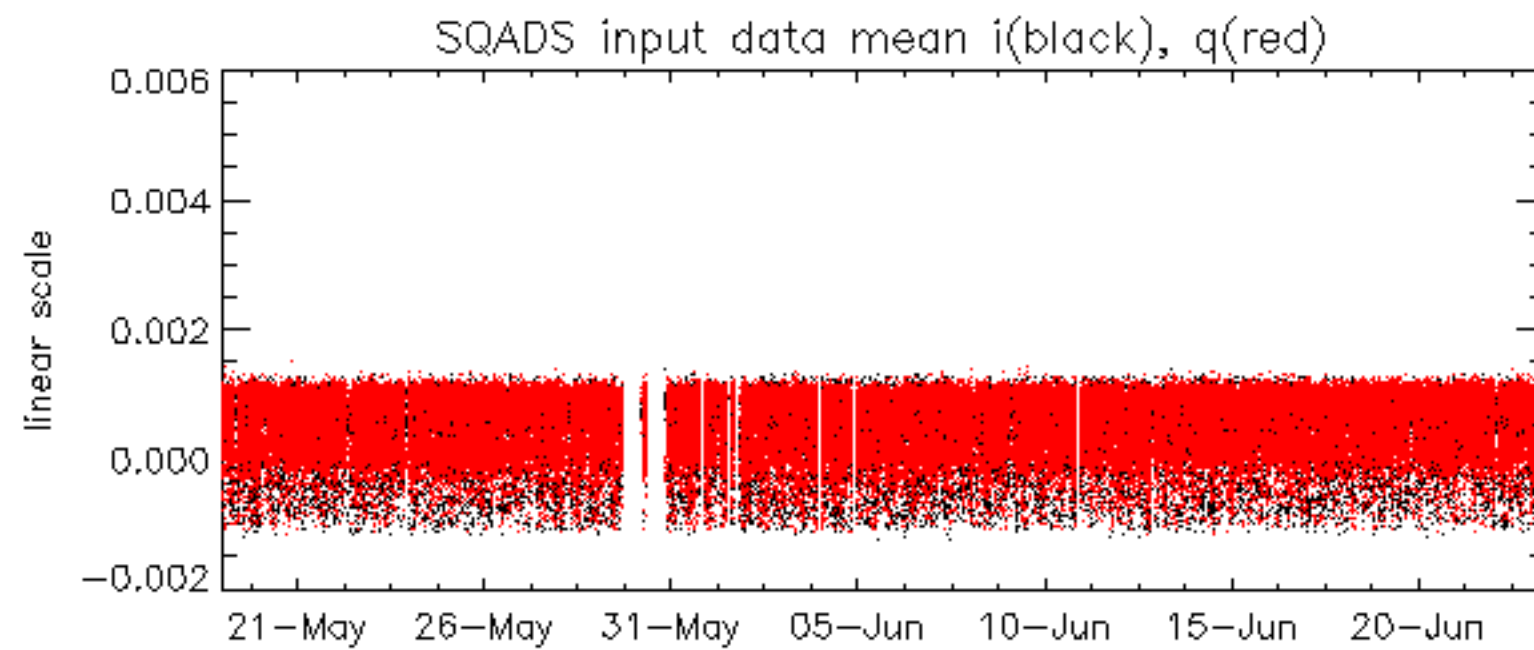
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -11.686519 Hz

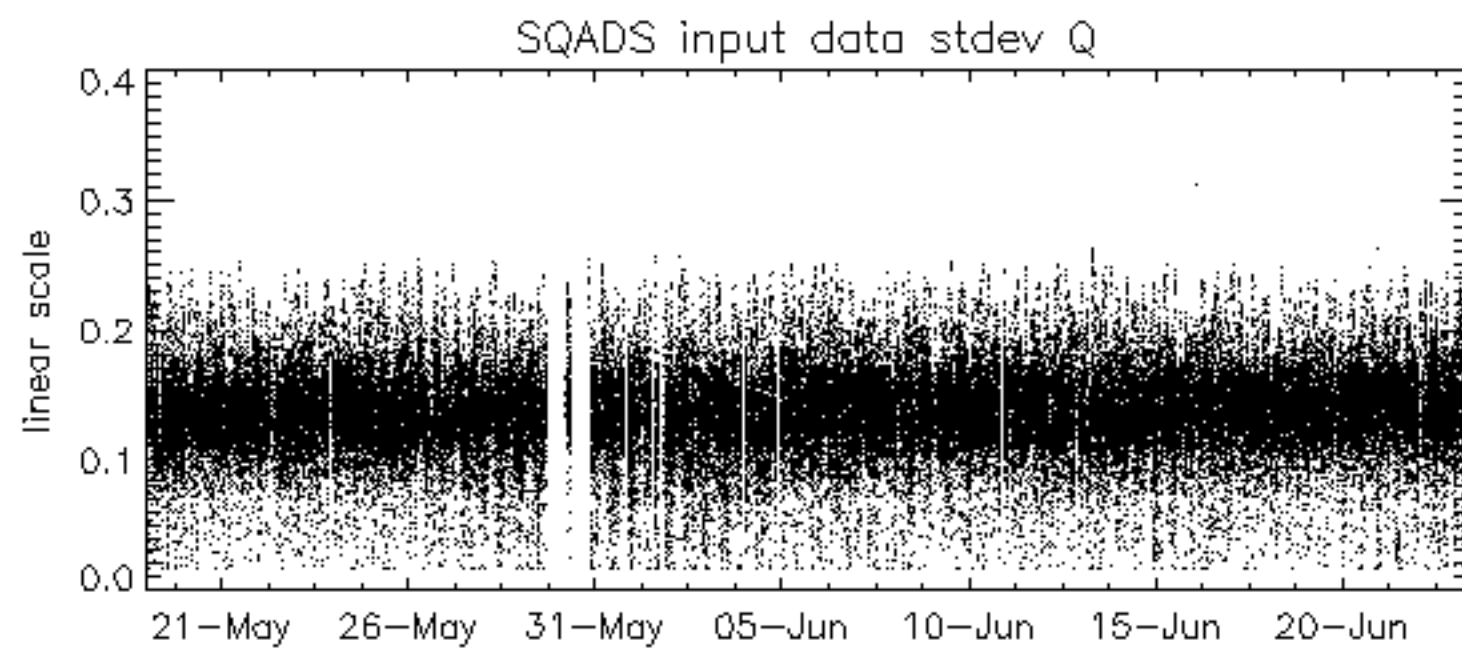
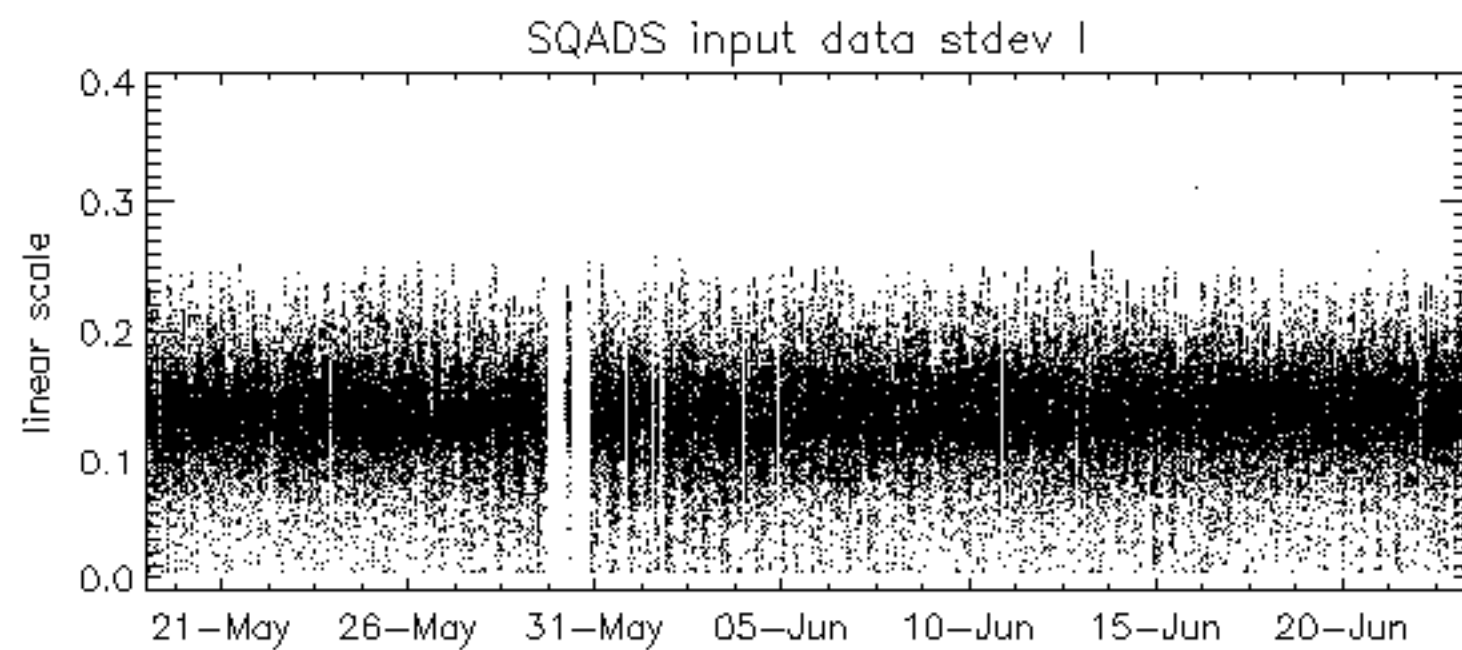
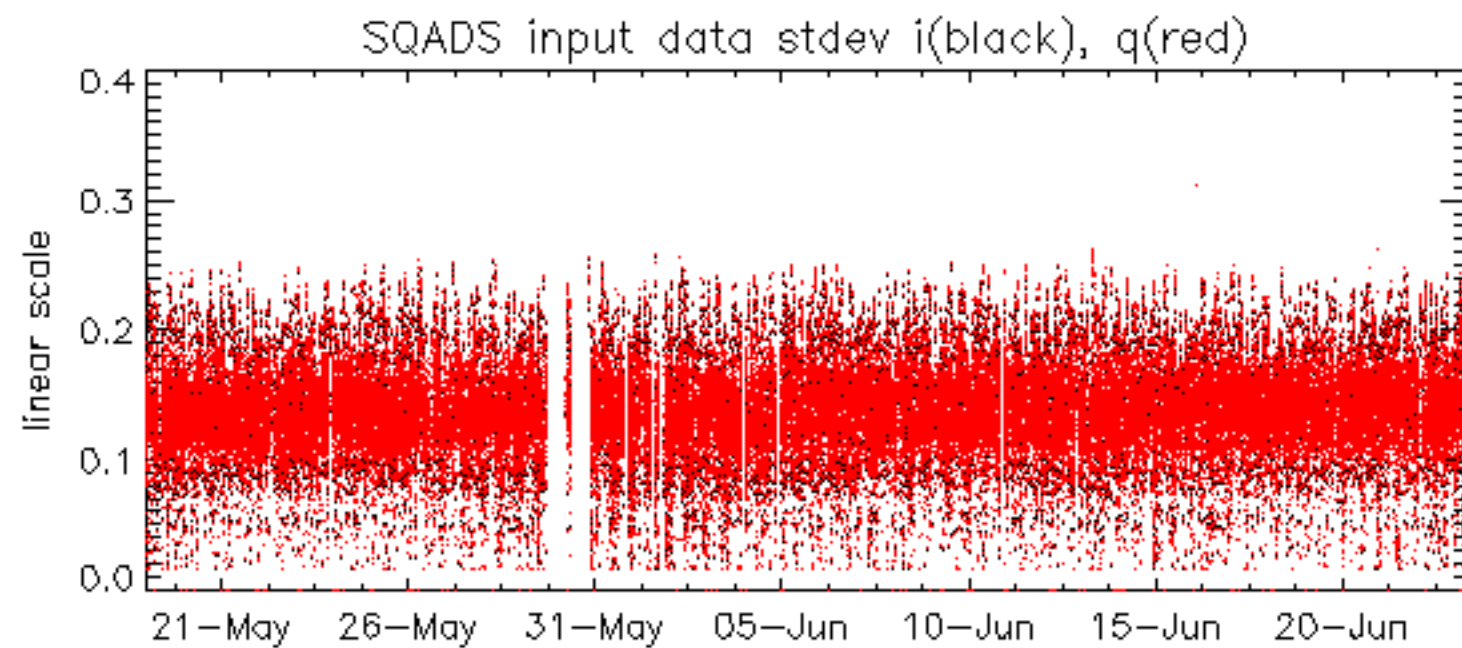


No anomalies observed on available MS products:

No anomalies observed.



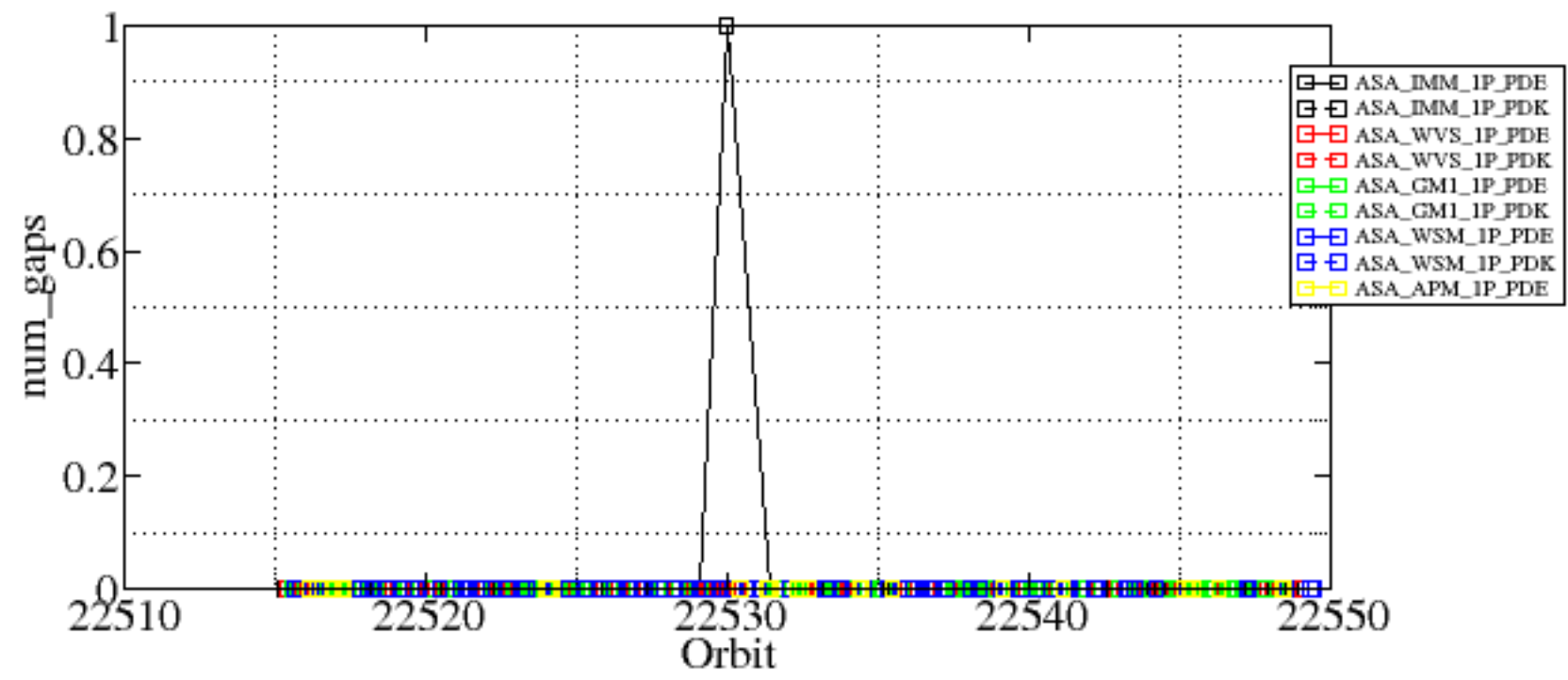


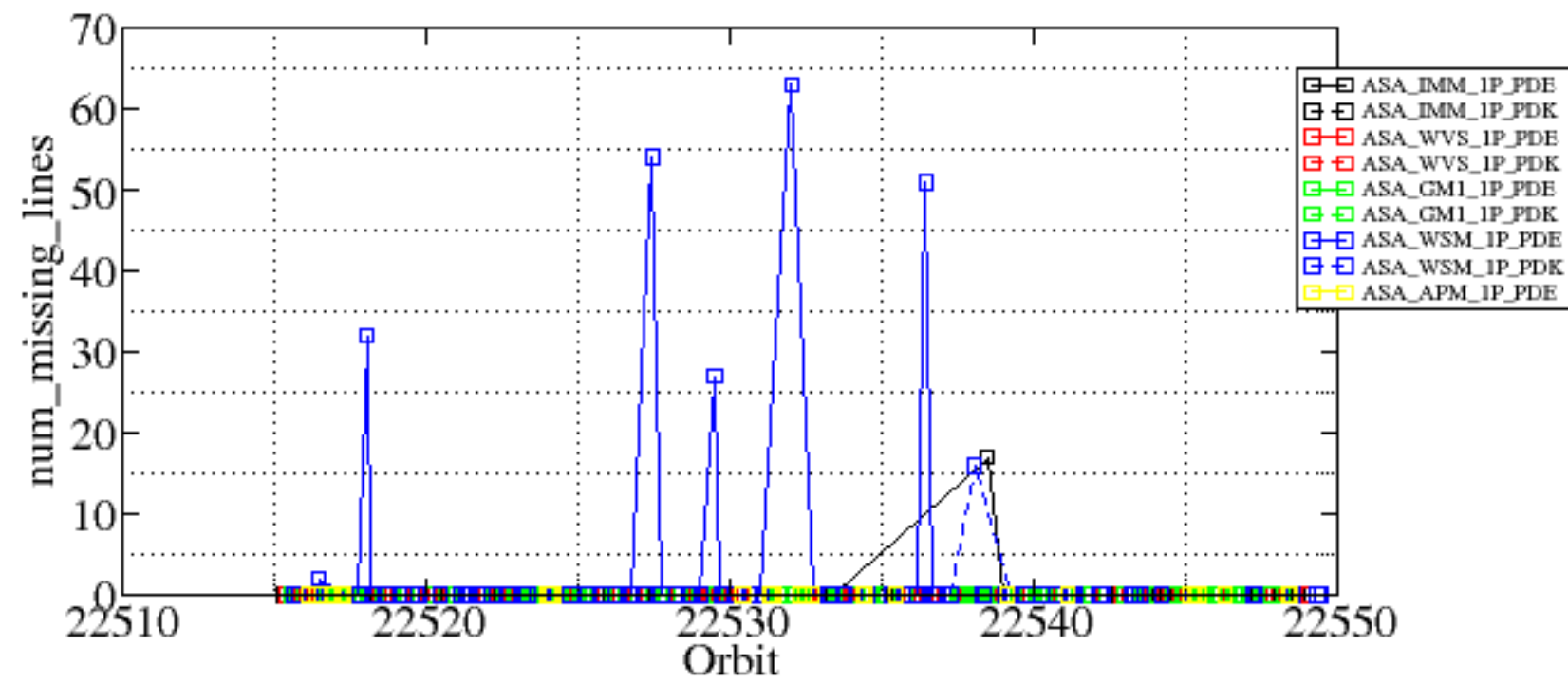


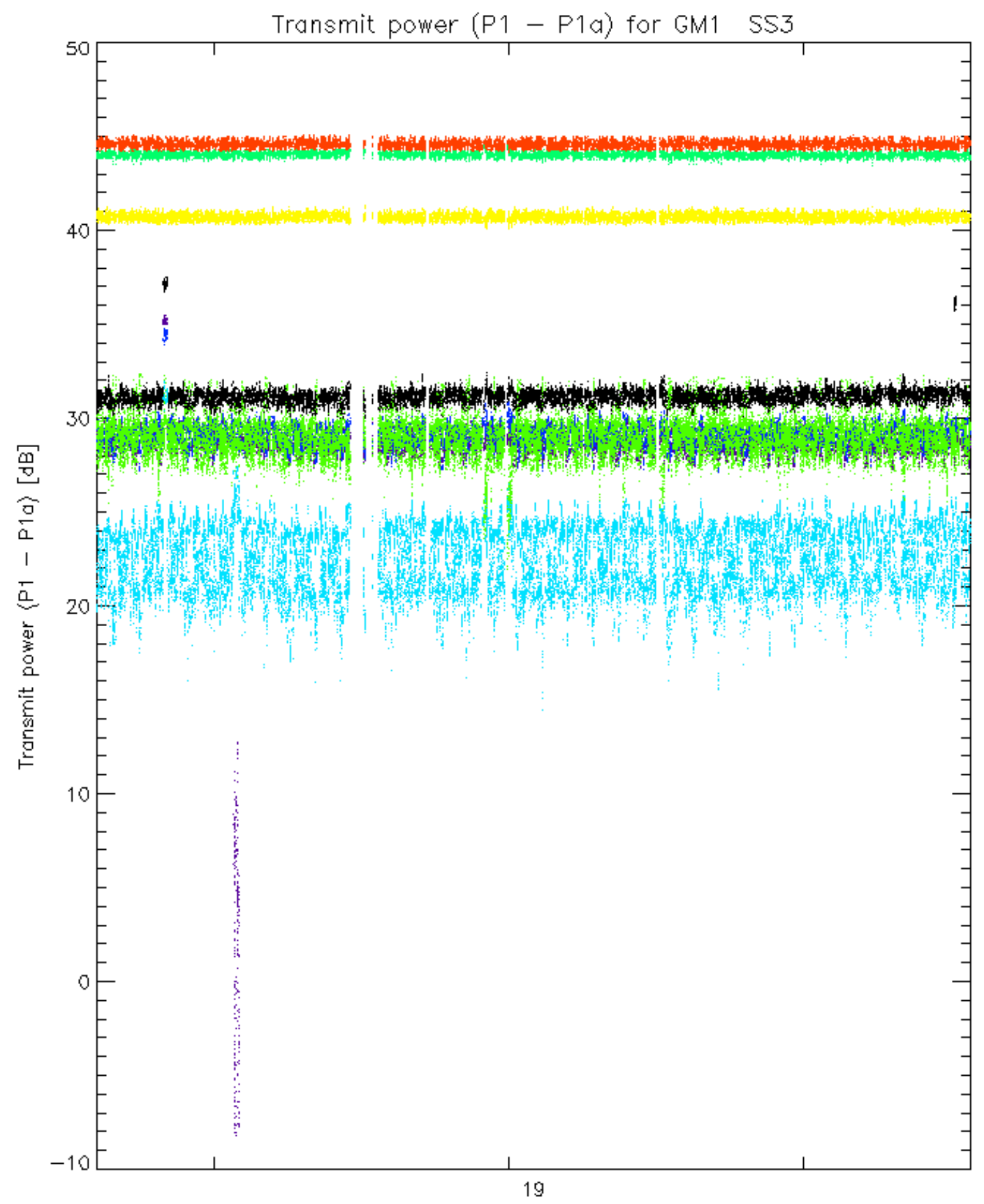
Summary of analysis for the last 3 days 2006062[123]

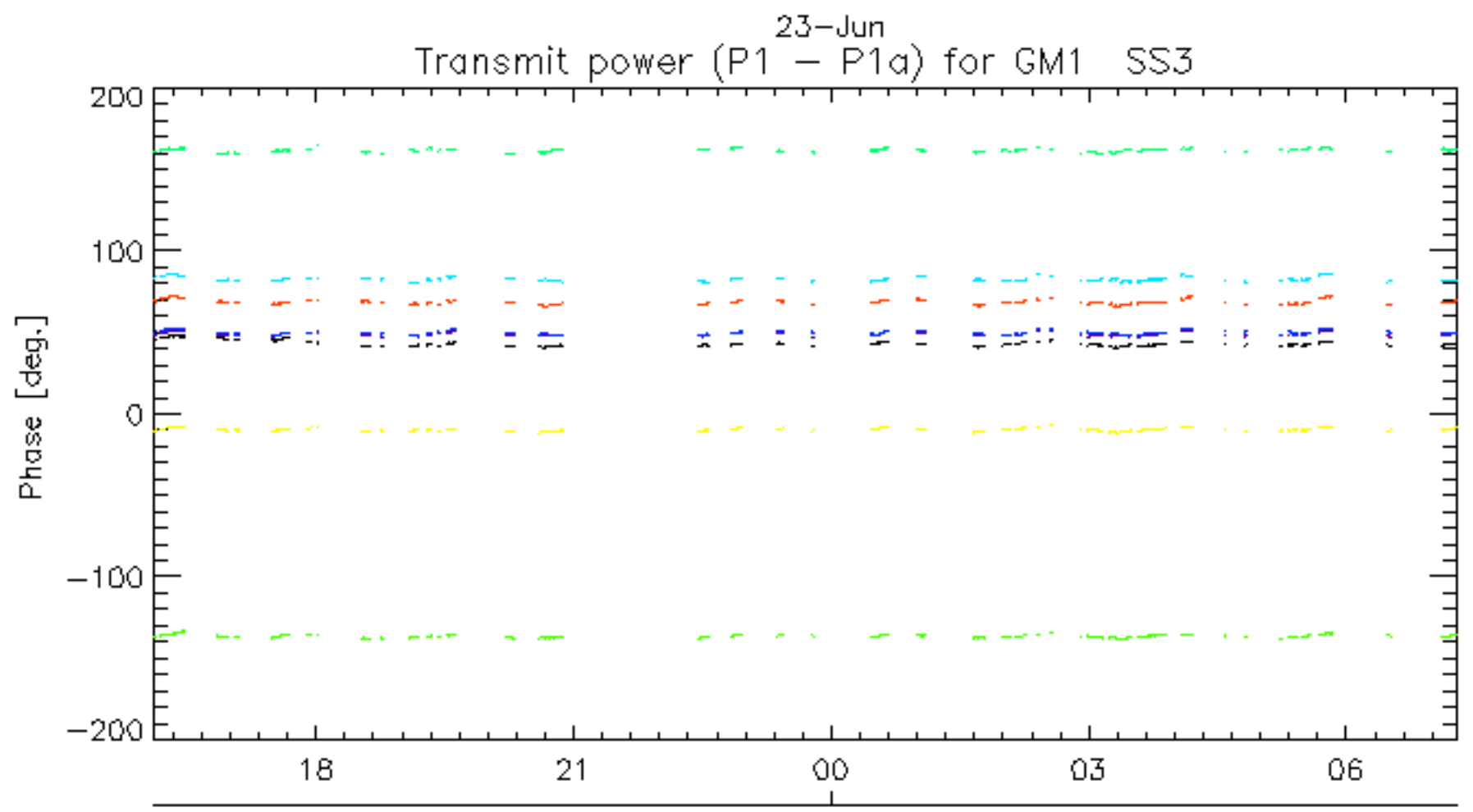
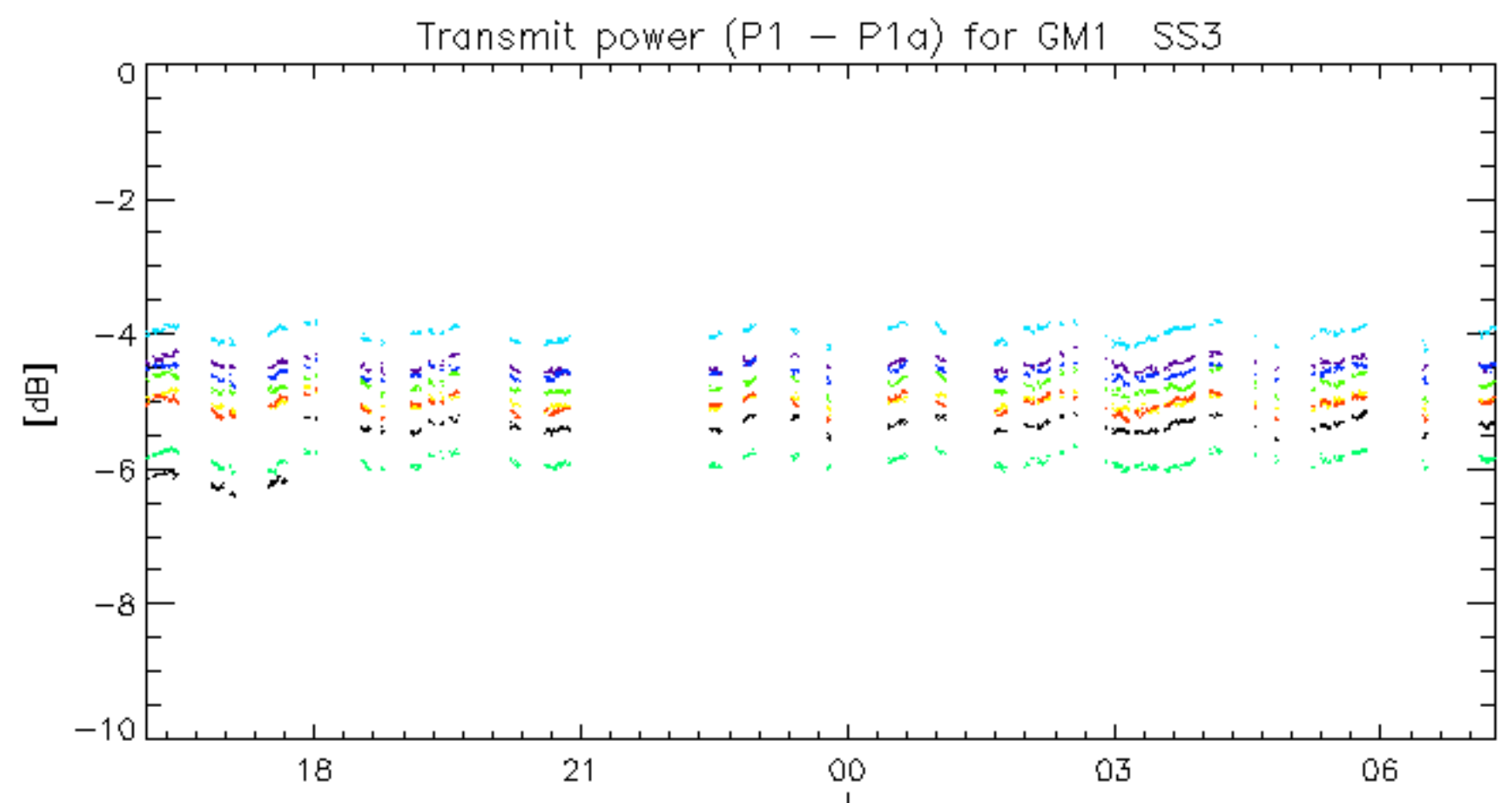
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060622_003435_000001162048_00431_22529_8242.N1	1	0
ASA_IMM_1PNPDE20060622_144838_000000792048_00440_22538_8275.N1	0	17
ASA_WSM_1PNPDE20060621_015620_000000972048_00418_22516_4911.N1	0	2
ASA_WSM_1PNPDE20060621_043526_000001832048_00420_22518_4929.N1	0	32
ASA_WSM_1PNPDE20060621_202015_000000852048_00429_22527_5013.N1	0	54
ASA_WSM_1PNPDE20060621_234617_000003302048_00431_22529_5042.N1	0	27
ASA_WSM_1PNPDE20060622_040158_000001462048_00434_22532_5069.N1	0	63
ASA_WSM_1PNPDE20060622_112554_000001702048_00438_22536_5109.N1	0	51
ASA_WSM_1PNPDK20060622_140712_000000922048_00440_22538_8138.N1	0	16

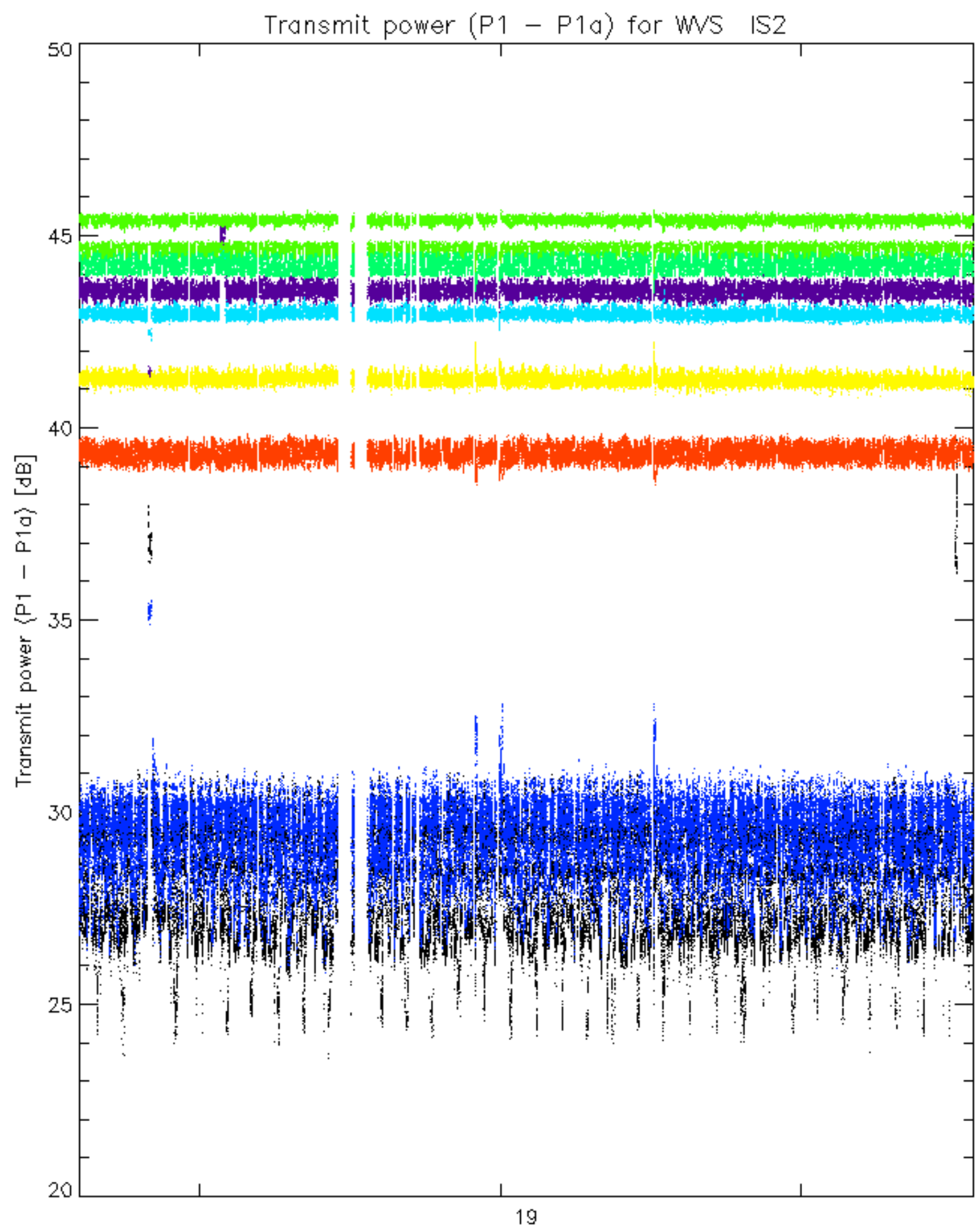




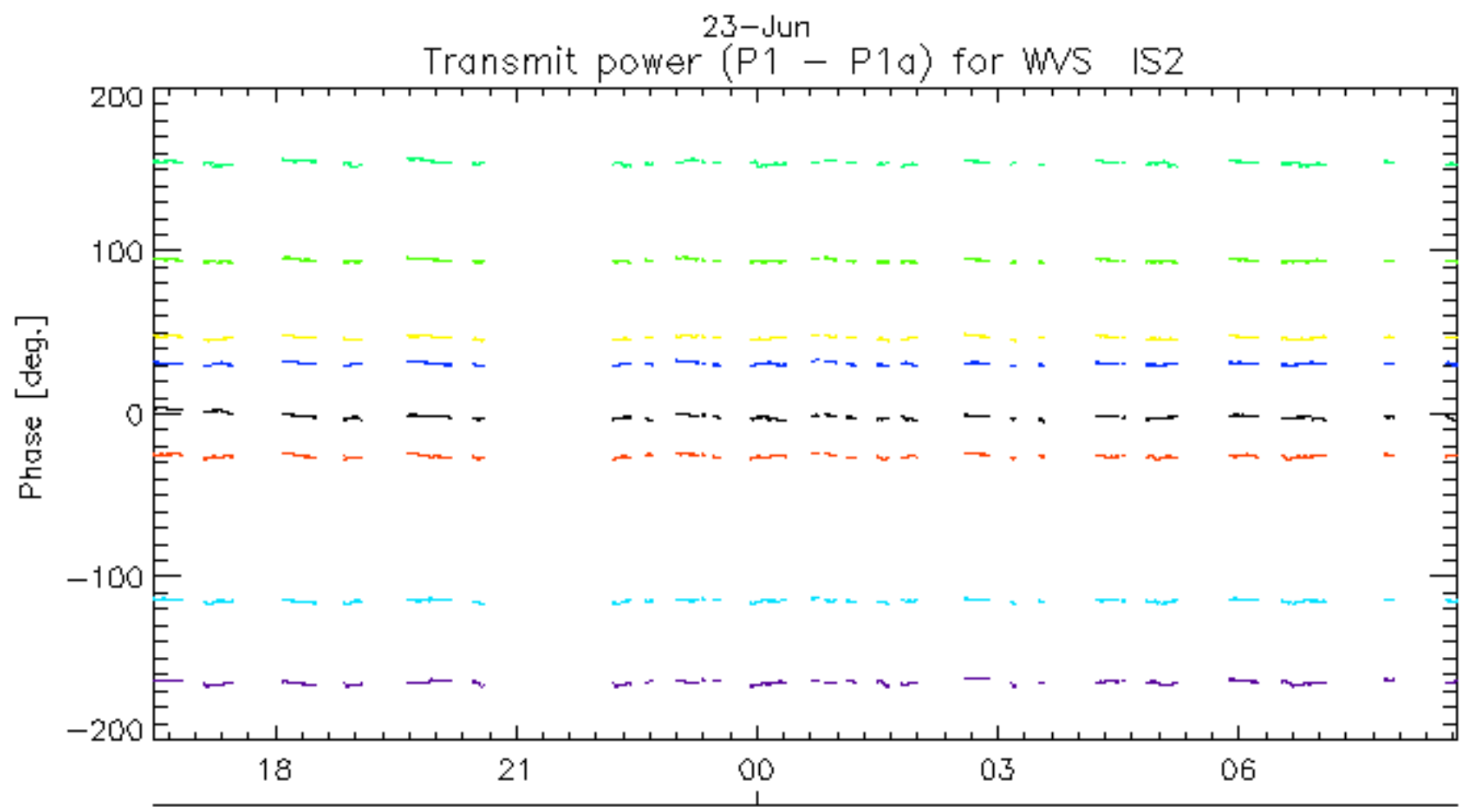
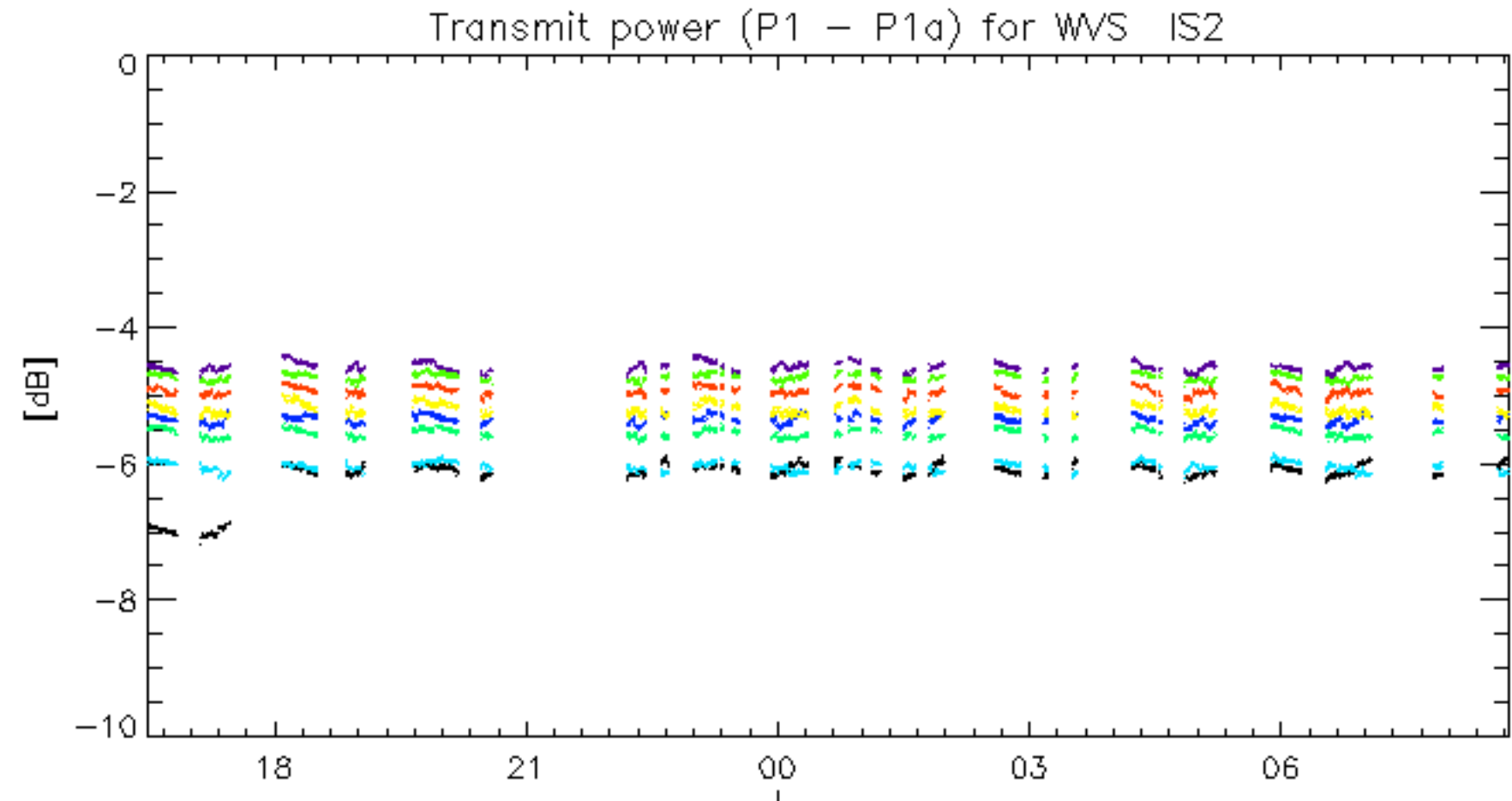




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No unavailabilities during the reported period.