

PRELIMINARY REPORT OF 060612

last update on Mon Jun 12 16:46:01 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 2006-06-11 00:00:00 to 2006-06-12 16:46:01

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	38	62	14	0	6
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	38	62	14	0	6
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	38	62	14	0	6
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	38	62	14	0	6

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	38	47	52	15	28
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	38	47	52	15	28
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	38	47	52	15	28
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	38	47	52	15	28

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	20060612 084154
H	20060610 030243

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
☒	☒
☒	☒
☒	☒
☒	☒

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	-3.944063	0.018171	0.052313
7	P1	-3.123355	0.016951	-0.047023
11	P1	-4.108627	0.018832	0.006595
15	P1	-6.139935	0.020107	-0.015207
19	P1	-3.336087	0.008379	-0.056616
22	P1	-4.514010	0.011548	0.008205
26	P1	-3.978383	0.017390	0.020528
30	P1	-5.747398	0.008920	0.000031
3	P1	-16.531811	0.263909	0.070229
7	P1	-17.192787	0.150175	-0.145848
11	P1	-16.939688	0.311375	-0.049349
15	P1	-13.203850	0.218173	0.066289
19	P1	-14.295899	0.049851	-0.121446
22	P1	-16.163172	0.378683	0.006868
26	P1	-15.246614	0.237332	0.094078
30	P1	-17.072395	0.399798	-0.205633

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.173496	0.079868	0.123817
7	P2	-22.054512	0.096079	0.109336
11	P2	-15.905296	0.109567	0.122710
15	P2	-7.160275	0.092129	0.013788
19	P2	-9.167506	0.084562	-0.013680
22	P2	-18.142097	0.082726	-0.070687
26	P2	-16.385239	0.087087	-0.053352
30	P2	-19.565722	0.085765	0.044036

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.184709	0.004112	0.007988
7	P3	-8.184709	0.004112	0.007988
11	P3	-8.184709	0.004112	0.007988
15	P3	-8.184709	0.004112	0.007988
19	P3	-8.184709	0.004112	0.007988
22	P3	-8.184709	0.004112	0.007988
26	P3	-8.184709	0.004112	0.007988
30	P3	-8.184709	0.004112	0.007988

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1

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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	-3.786686	0.064354	-0.058108
7	P1	-2.596281	0.031565	0.020597
11	P1	-2.863736	0.023522	-0.001004
15	P1	-3.502455	0.049890	-0.040290
19	P1	-3.402603	0.014445	-0.024245
22	P1	-5.082562	0.019829	-0.003410
26	P1	-5.846000	0.015709	-0.022058
30	P1	-5.190041	0.027064	0.007508
3	P1	-11.612486	0.081833	-0.026341
7	P1	-9.967889	0.053199	-0.019950
11	P1	-10.210354	0.087110	-0.085431
15	P1	-10.637039	0.152059	-0.158608
19	P1	-15.524446	0.076485	-0.046298
22	P1	-20.916225	1.206325	-0.076221

26	P1	-16.482912	0.340759	0.070370
30	P1	-17.958624	0.380434	0.189258

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.863907	0.069900	0.123285
7	P2	-22.501076	0.127913	0.045560
11	P2	-11.167407	0.047481	0.069645
15	P2	-4.912126	0.047760	-0.023031
19	P2	-6.879117	0.052545	-0.015504
22	P2	-8.201736	0.042793	-0.027724
26	P2	-24.120016	0.067139	-0.084905
30	P2	-22.064865	0.054862	-0.006312

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.018644	0.004775	0.000623
7	P3	-8.018848	0.004767	0.000703
11	P3	-8.018748	0.004753	0.000951
15	P3	-8.018641	0.004767	0.000444
19	P3	-8.018762	0.004769	0.000496
22	P3	-8.018888	0.004758	0.000447
26	P3	-8.018779	0.004759	0.000435
30	P3	-8.018742	0.004759	0.000430

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	0.000532489
	stdev	1.89488e-07
MEAN Q	mean	0.000508421
	stdev	2.28878e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.134343
	stdev	0.00119555
STDEV Q	mean	0.134683
	stdev	0.00121251



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006061[012]

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_1PNPDE20060610_110007_000000342048_00266_22364_6947.N1	0	18
ASA_IMM_1PNPDE20060612_064716_000000372048_00292_22390_7200.N1	1	0
ASA_WSM_1PNPDE20060610_015903_000001462048_00261_22359_3573.N1	0	75
ASA_WSM_1PNPDE20060610_033801_000000852048_00262_22360_3591.N1	0	39
ASA_WSM_1PNPDE20060610_184505_000001842048_00271_22369_3667.N1	0	58

ASA_WSM_1PNPDE20060611_021040_000000862048_00275_22373_3687.N1	0	2
ASA_WSM_1PNPDE20060611_231431_000000972048_00288_22386_3740.N1	0	62
ASA_WSM_1PNPDE20060612_041708_000002082048_00291_22389_3765.N1	0	39
ASA_WSM_1PNPDK20060610_134308_000002082048_00268_22366_7314.N1	0	30



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

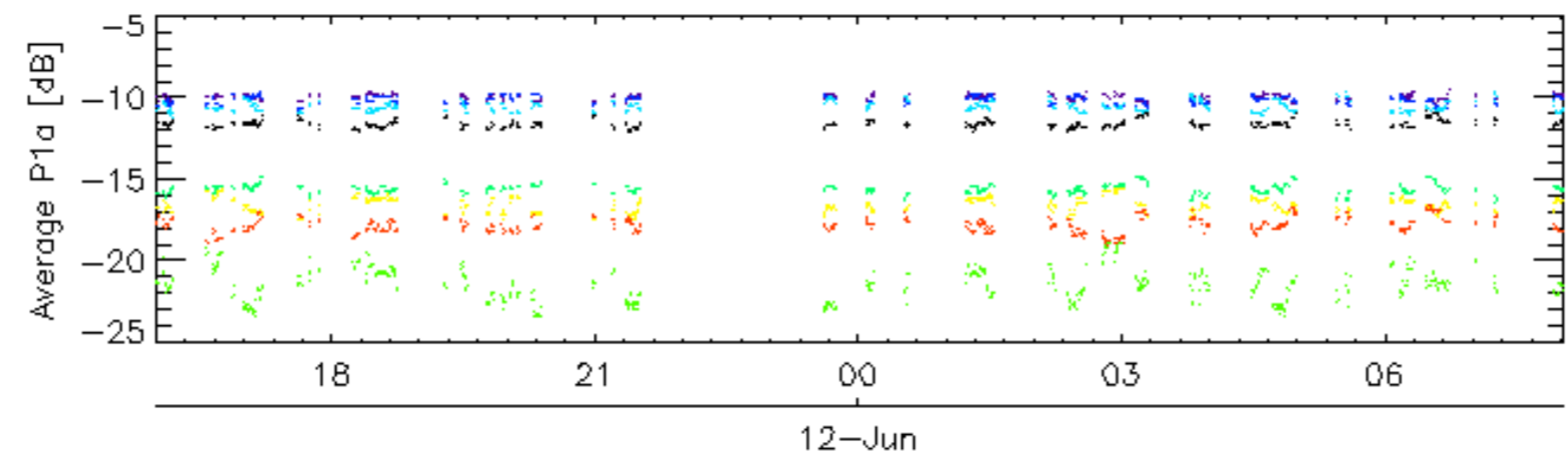
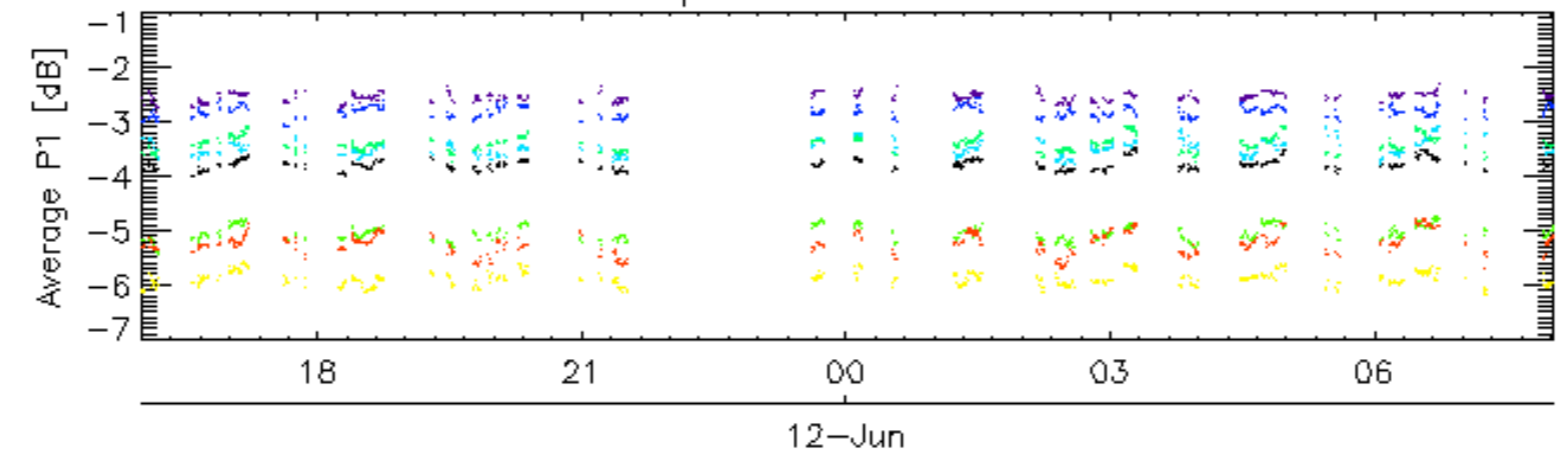
7.5 - Absolute Doppler for GM1

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

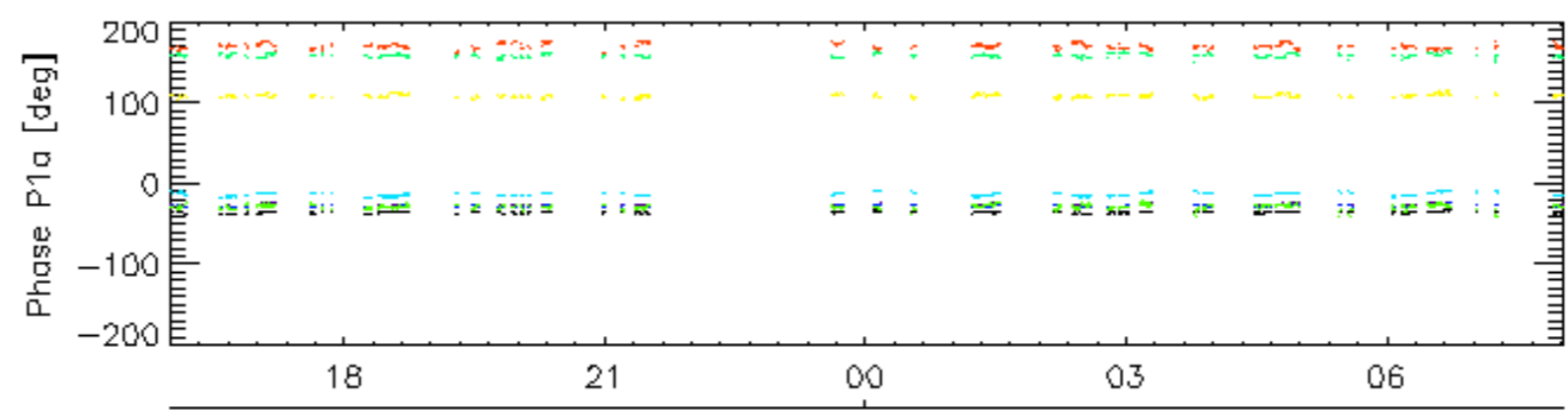
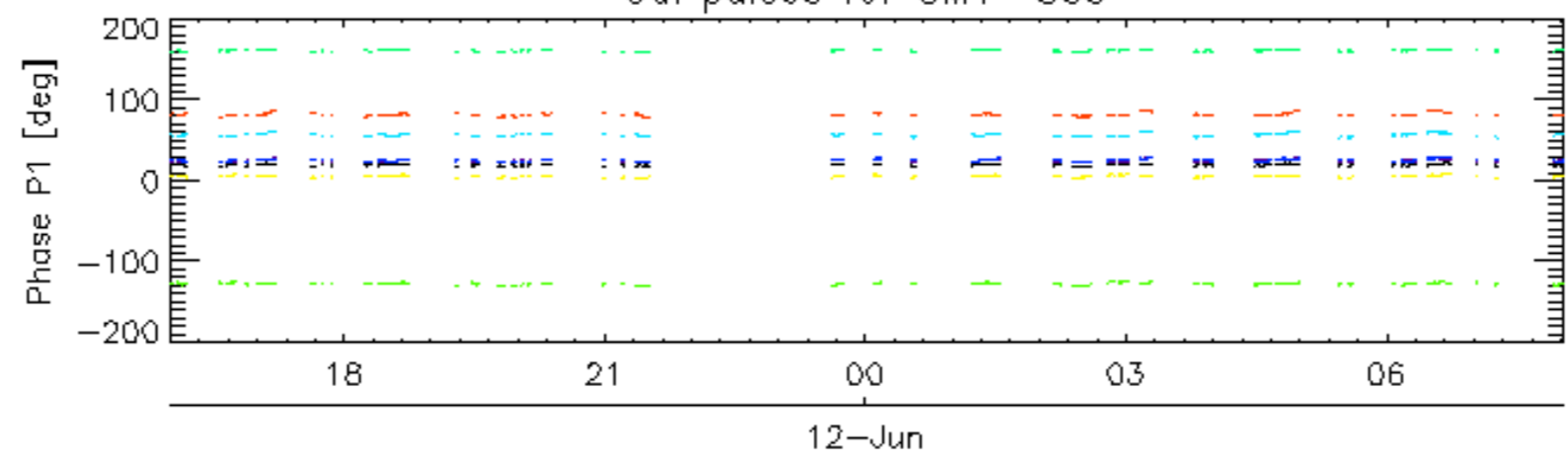
7.6 - Doppler evolution versus ANX for GM1

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

Cal pulses for GM1 SS3

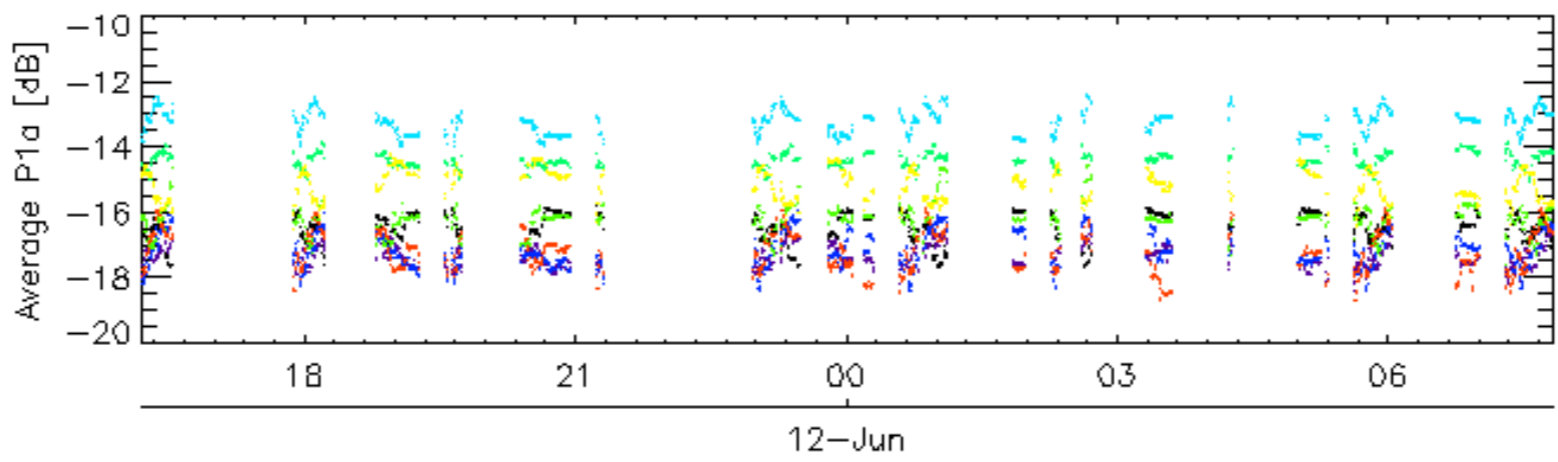
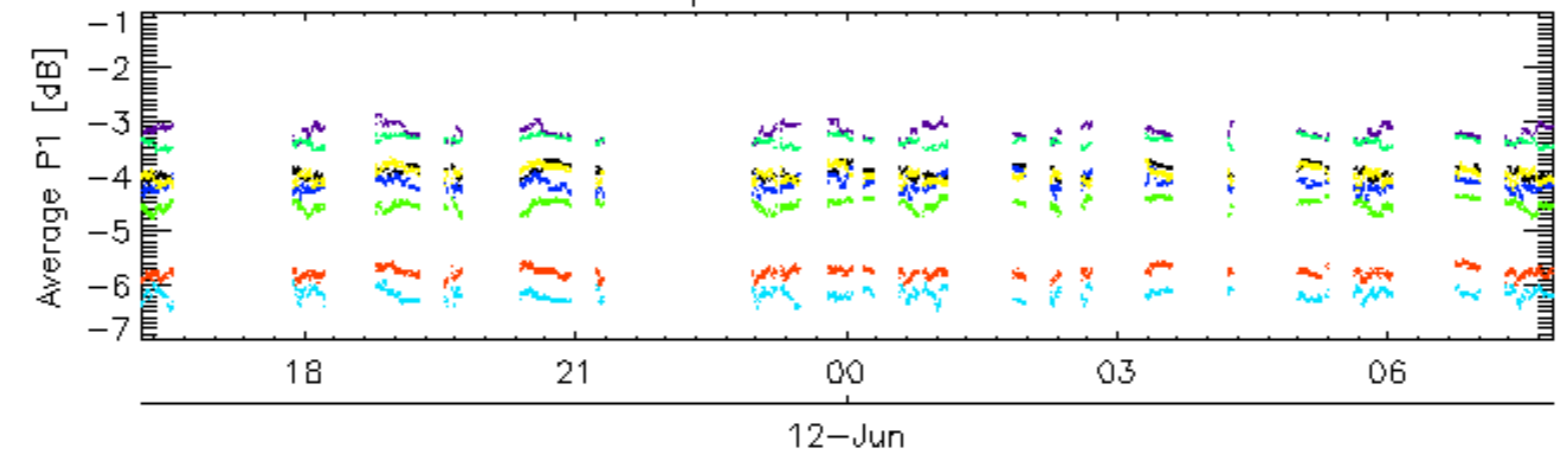


Cal pulses for GM1 SS3

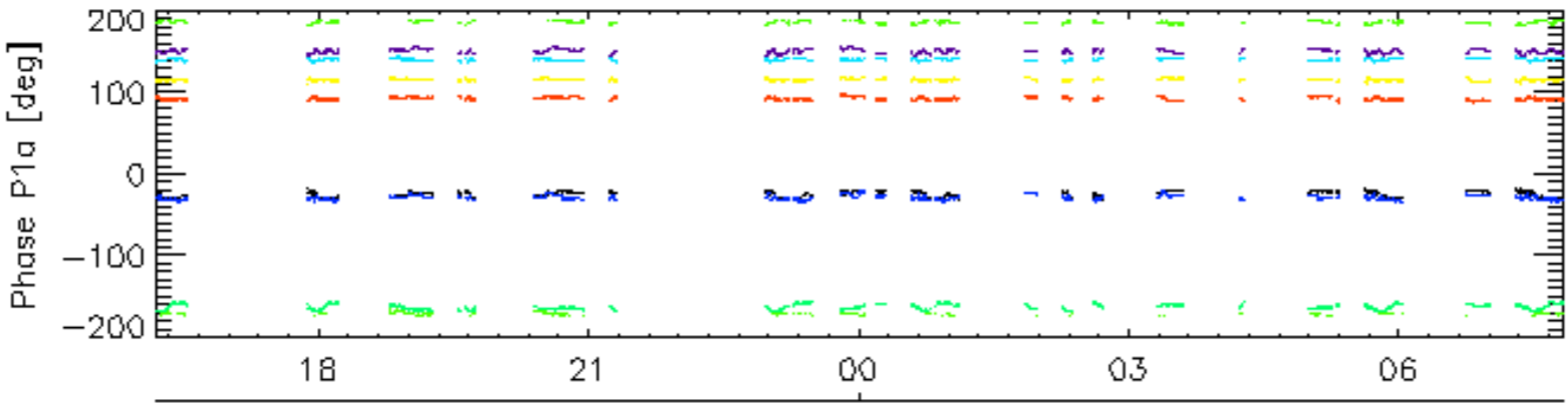
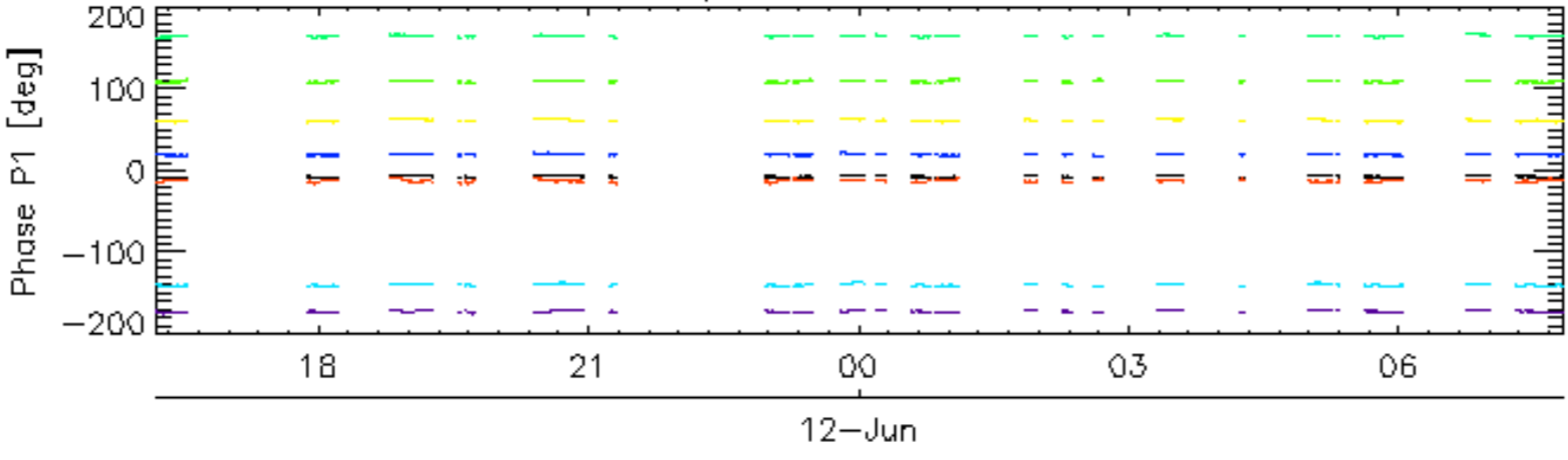


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

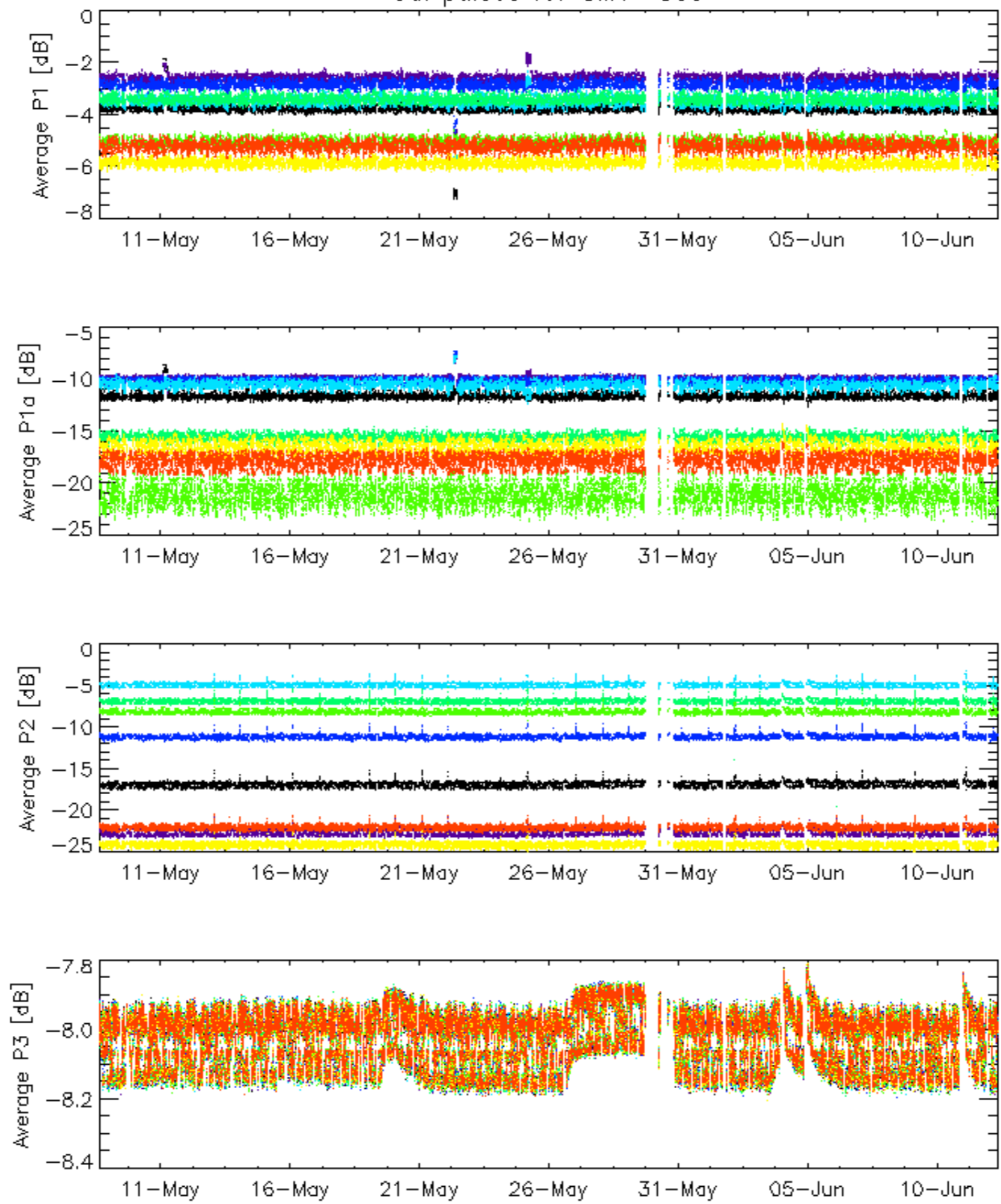


Cal pulses for WVS IS2



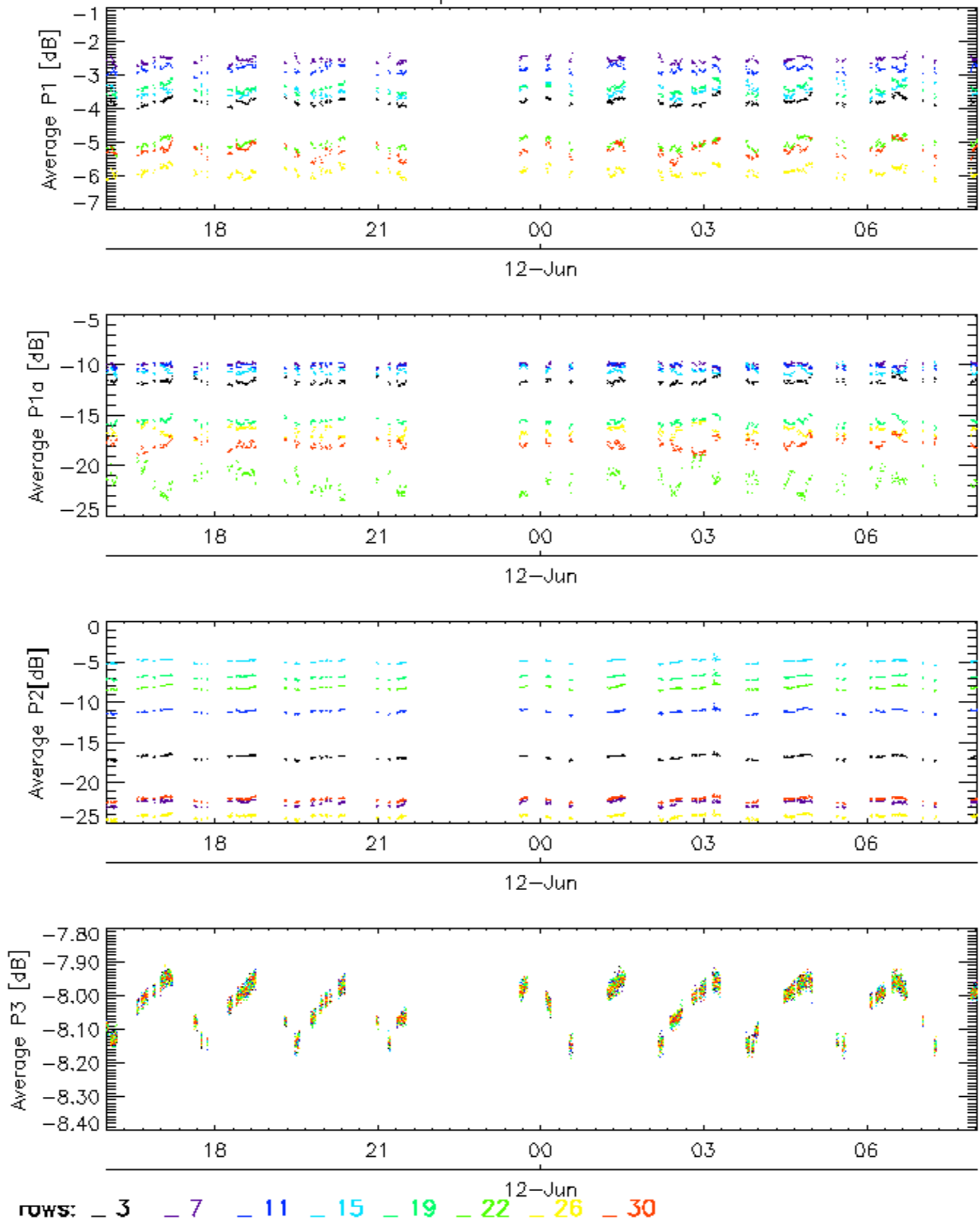
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

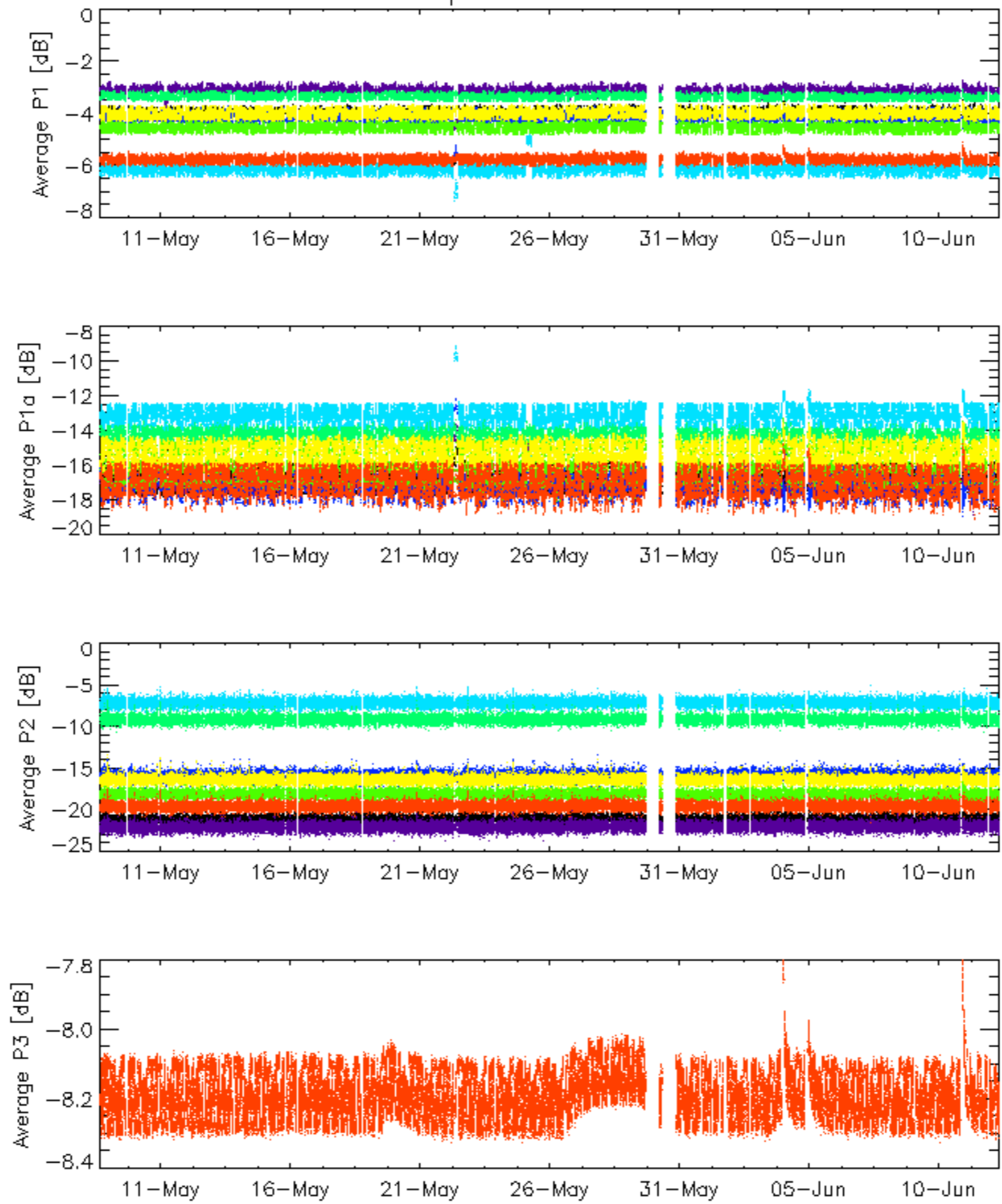


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

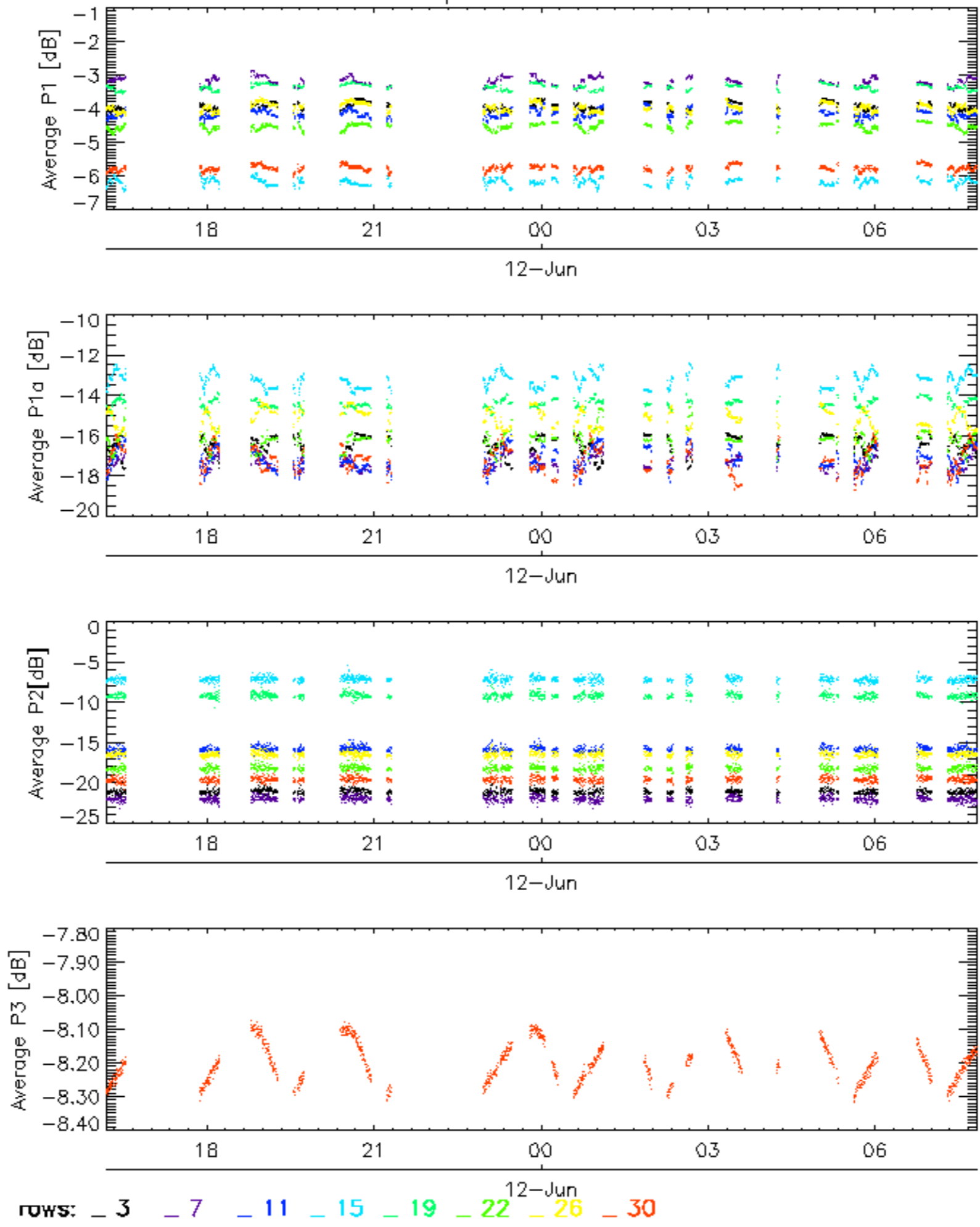


Cal pulses for WVS IS2



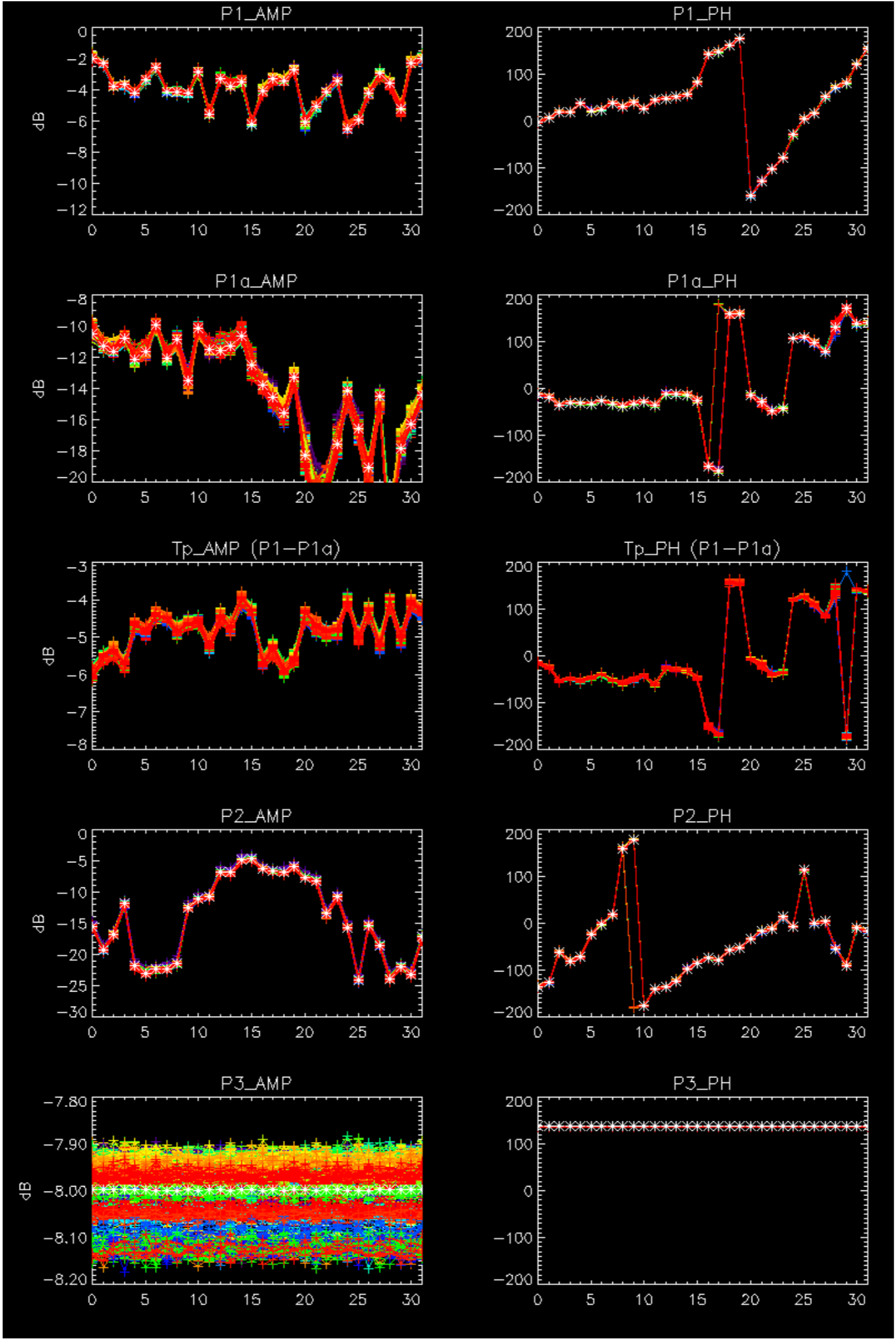
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

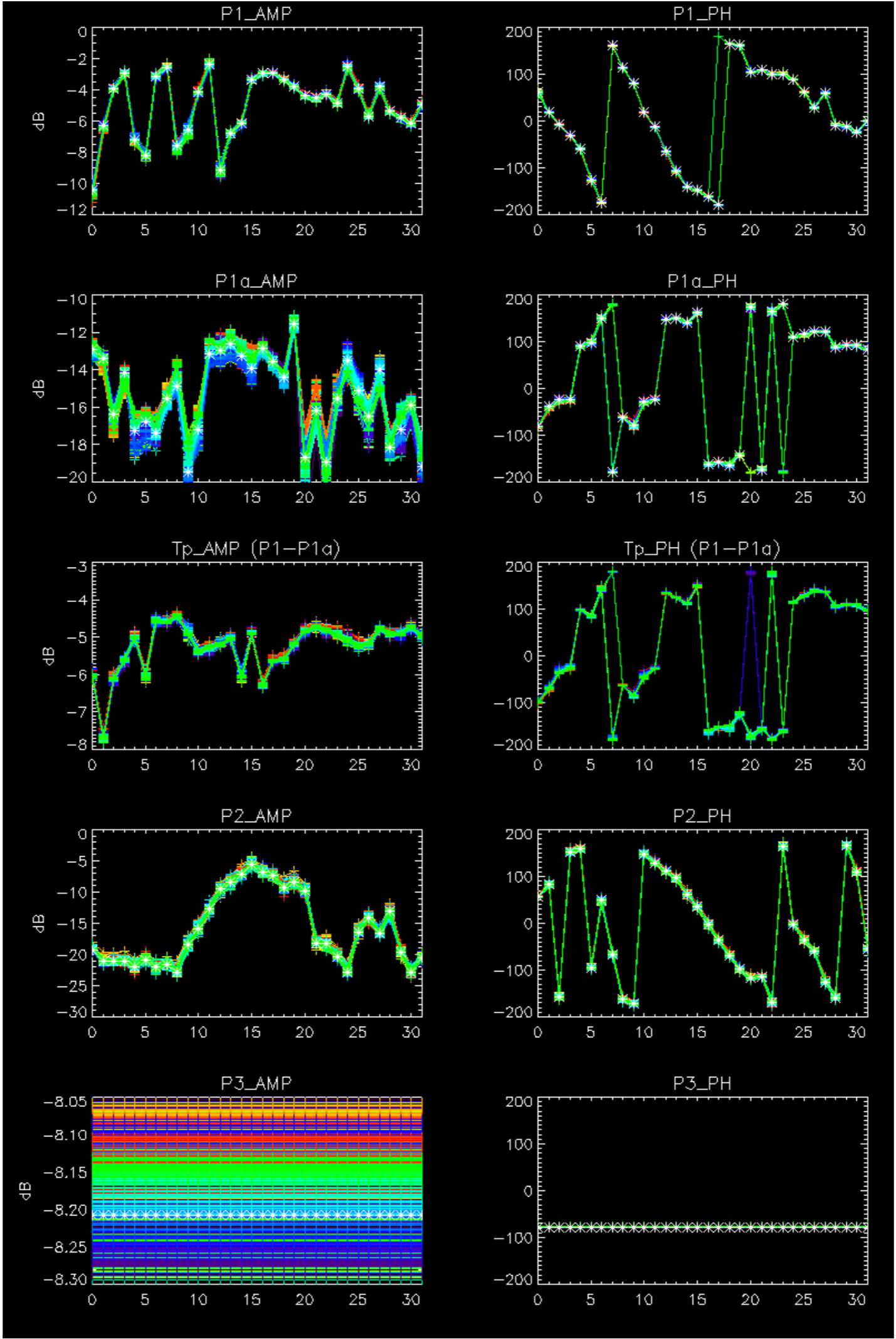
Cal pulses for WVS IS2



No anomalies observed on available browse products

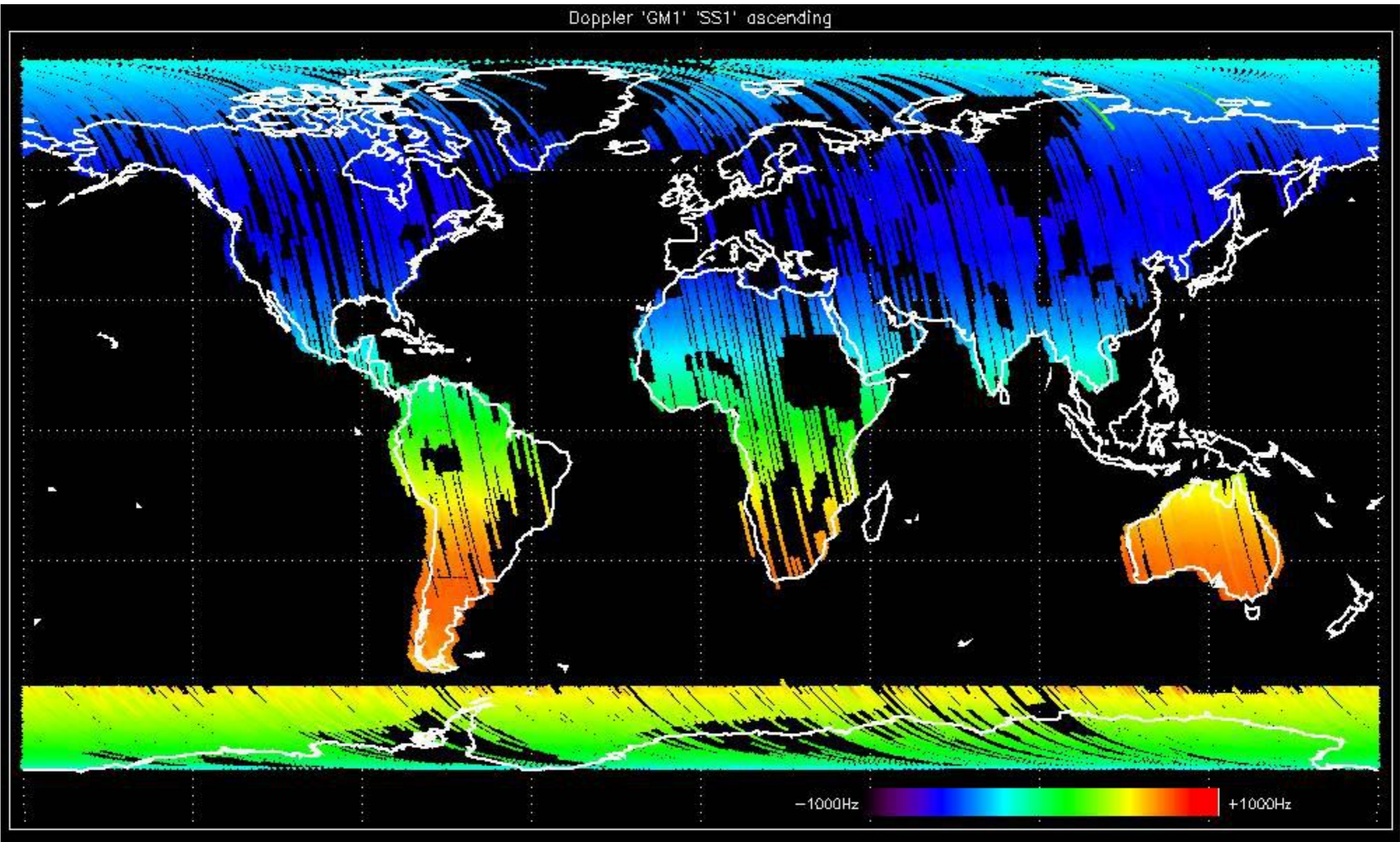
No anomalies observed.



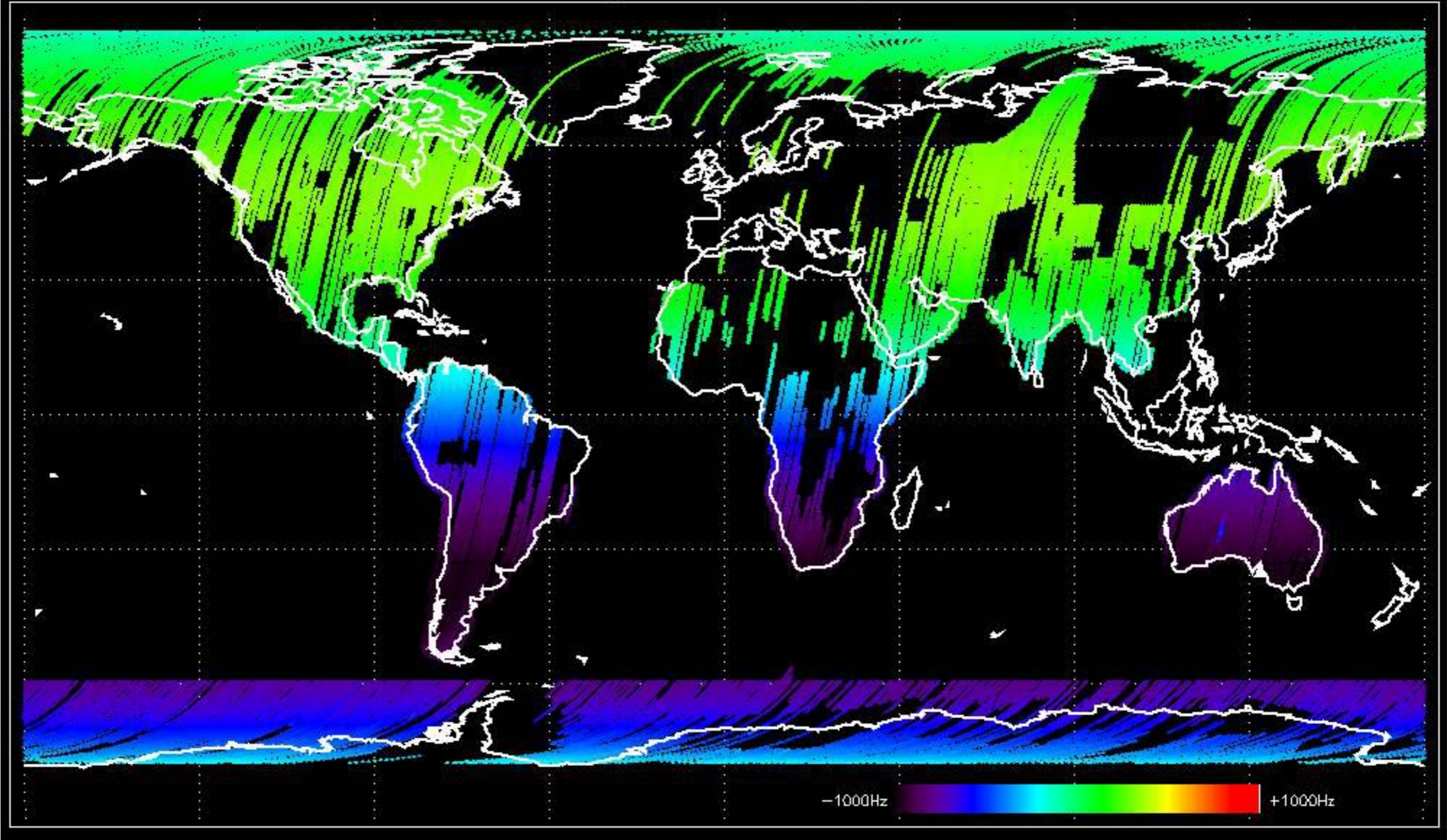


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

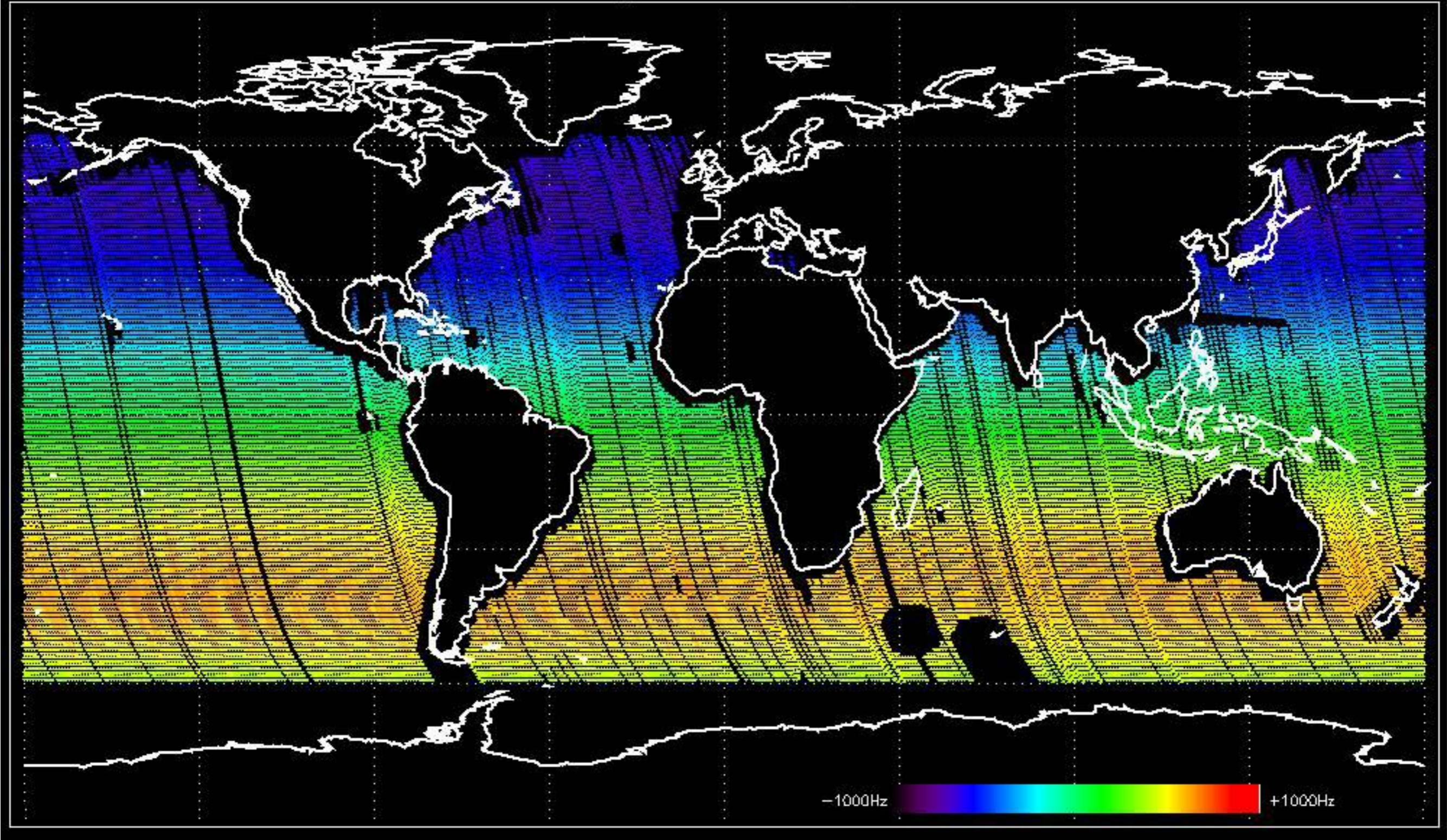
Doppler 'GM1' 'SS1' ascending



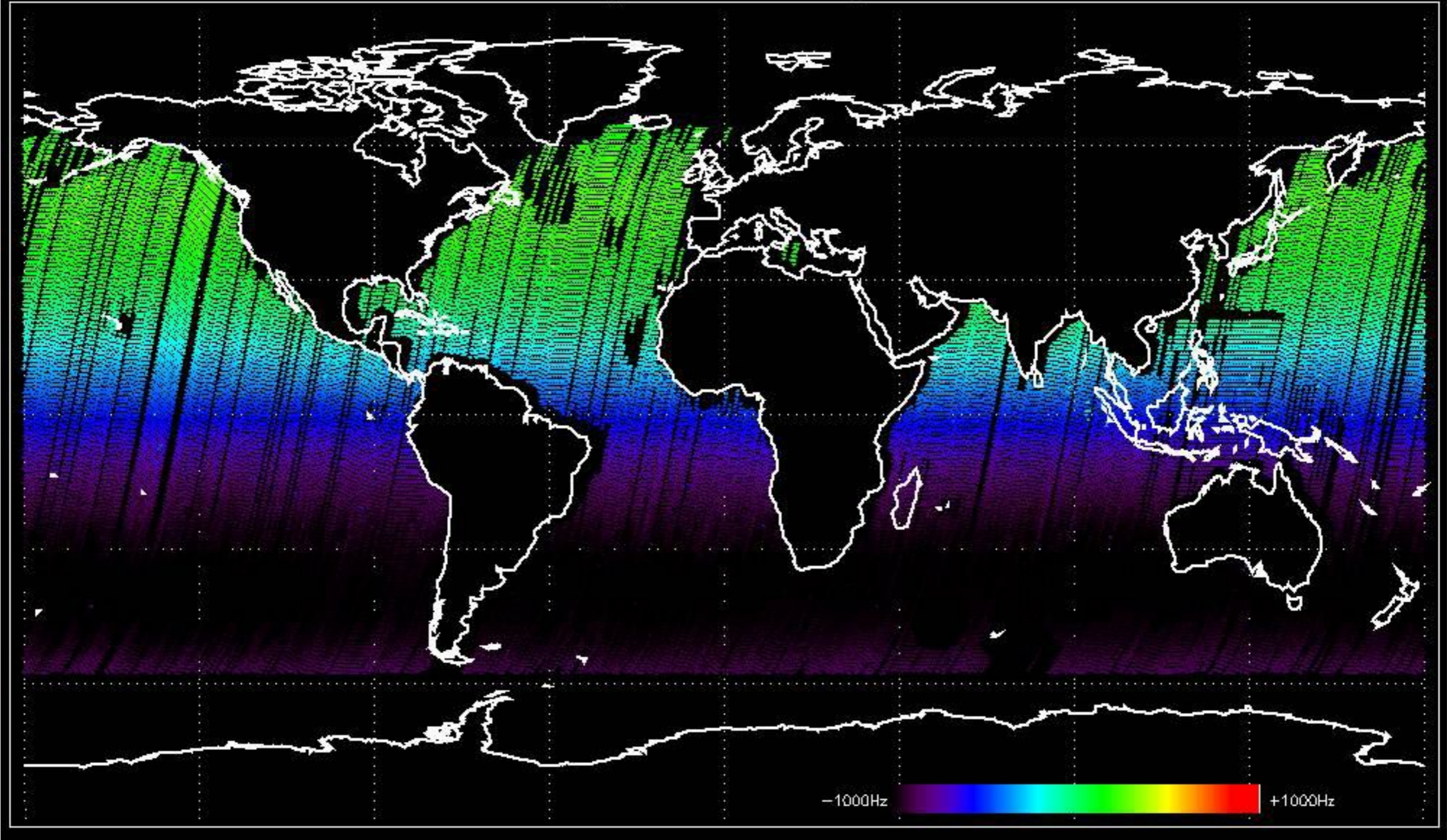
Doppler 'GM1' 'SS1' descending



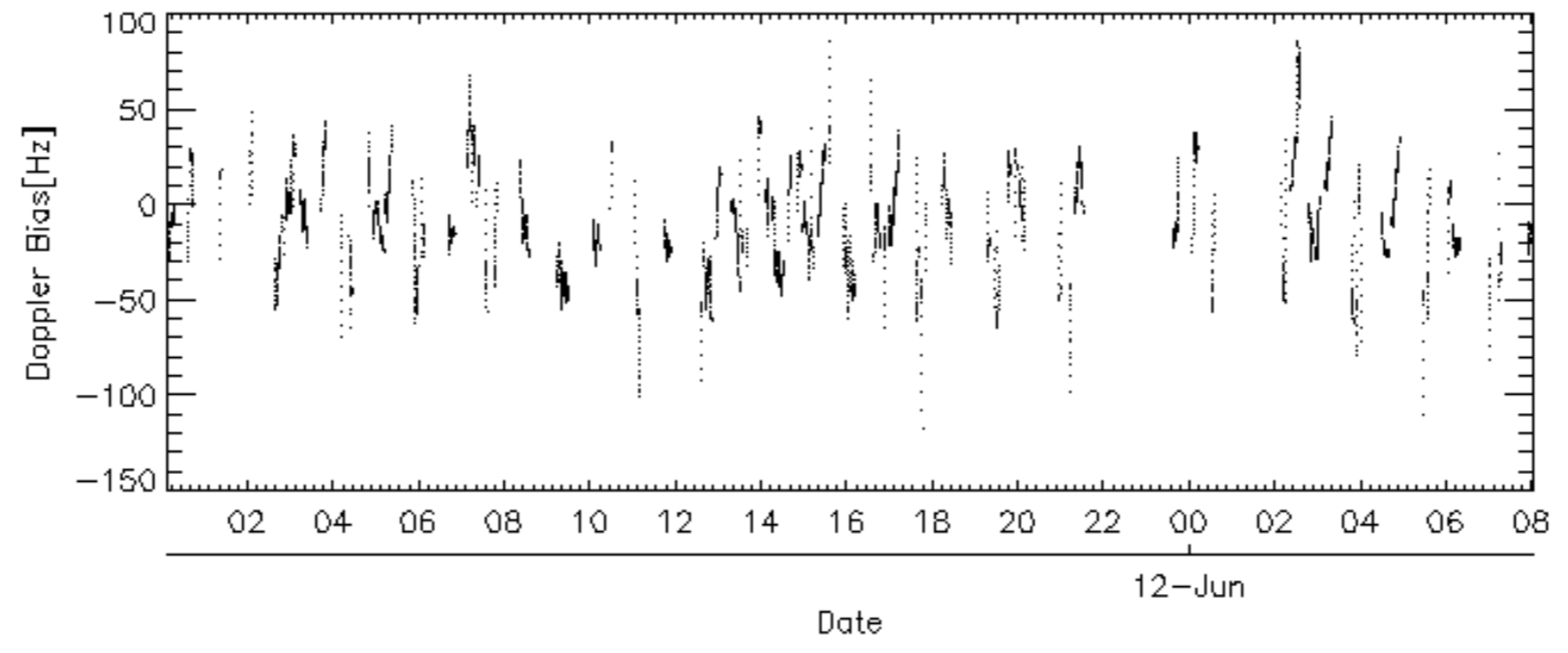
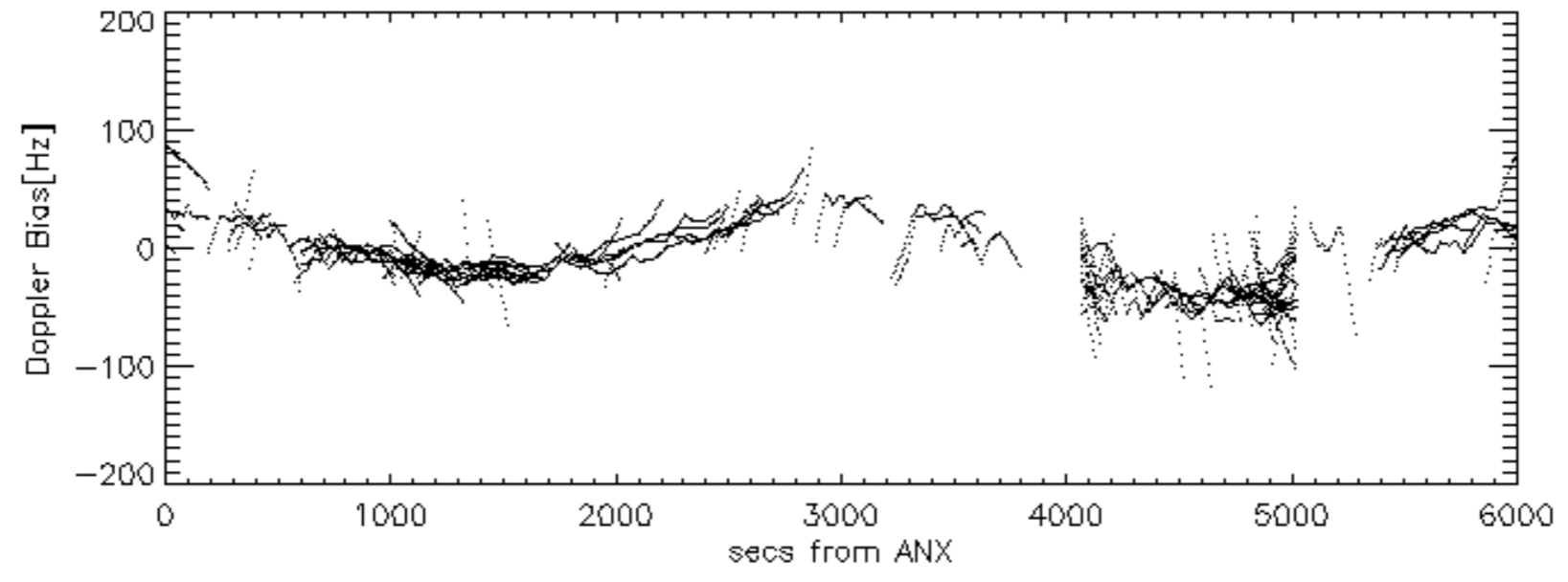
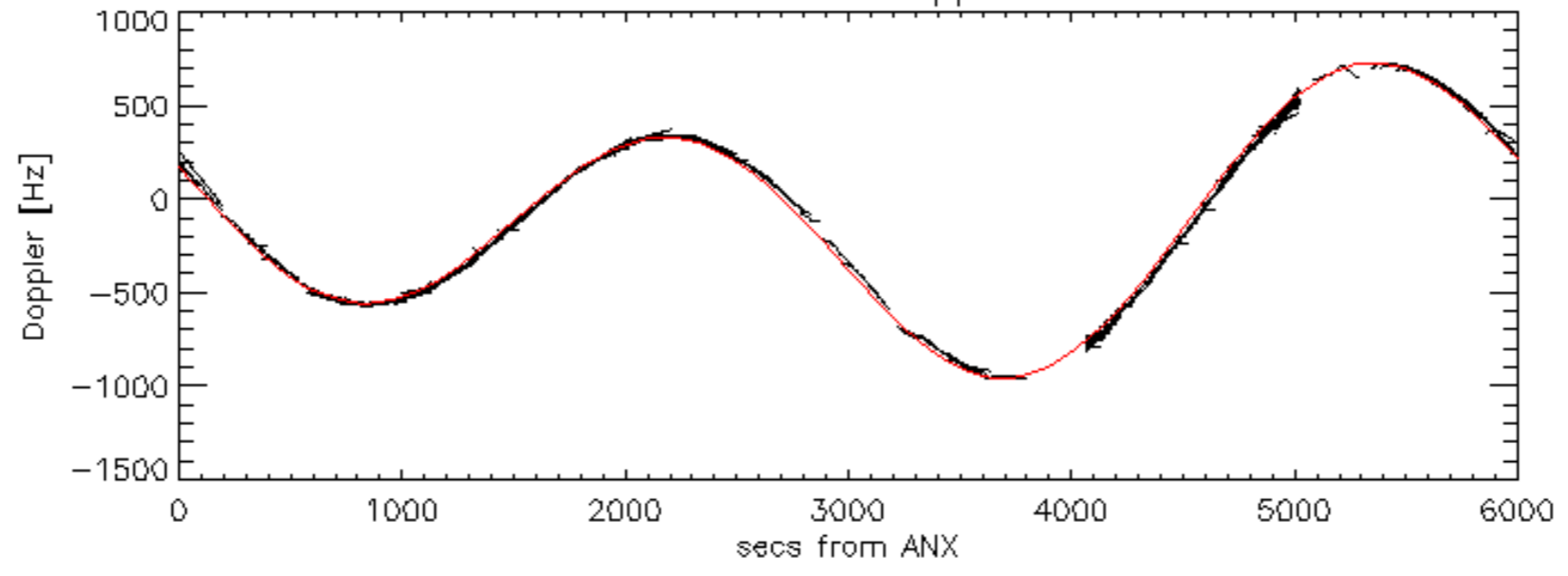
Doppler 'WVS' 'IS2' ascending

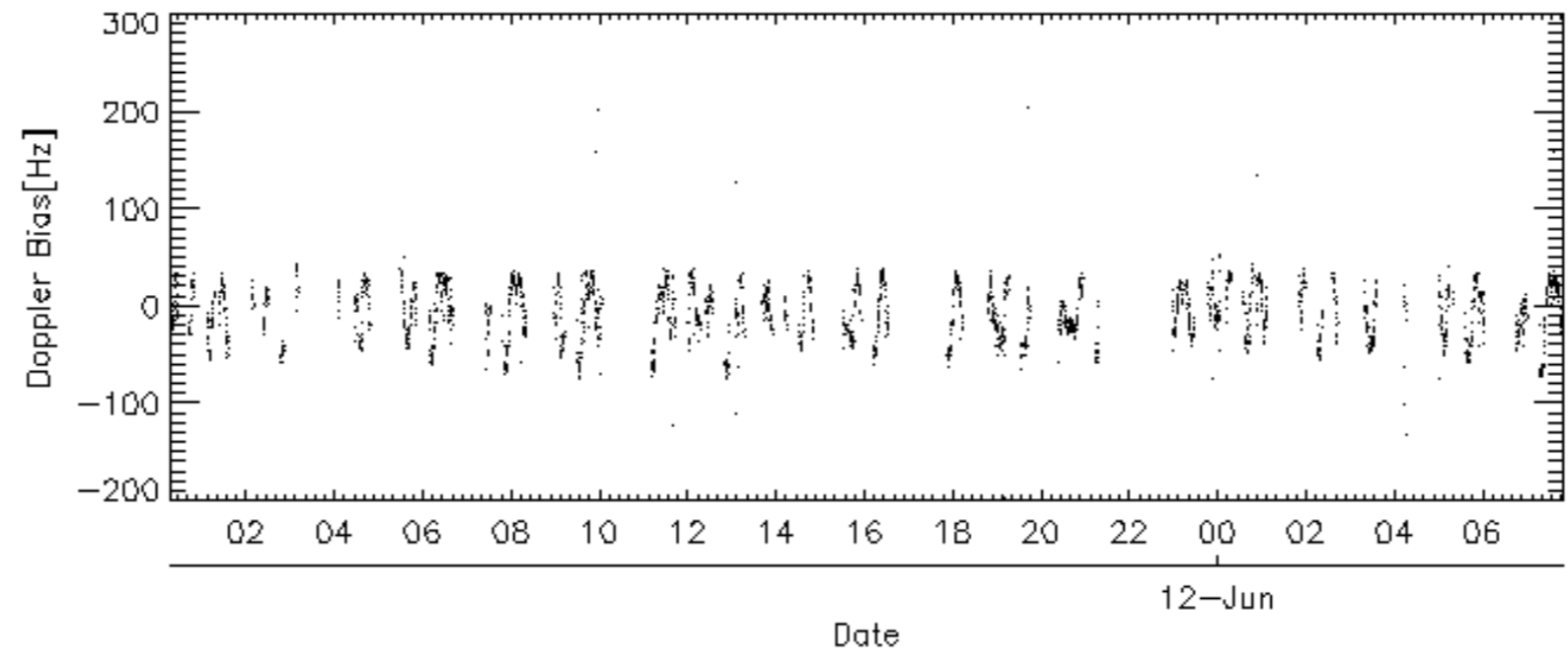
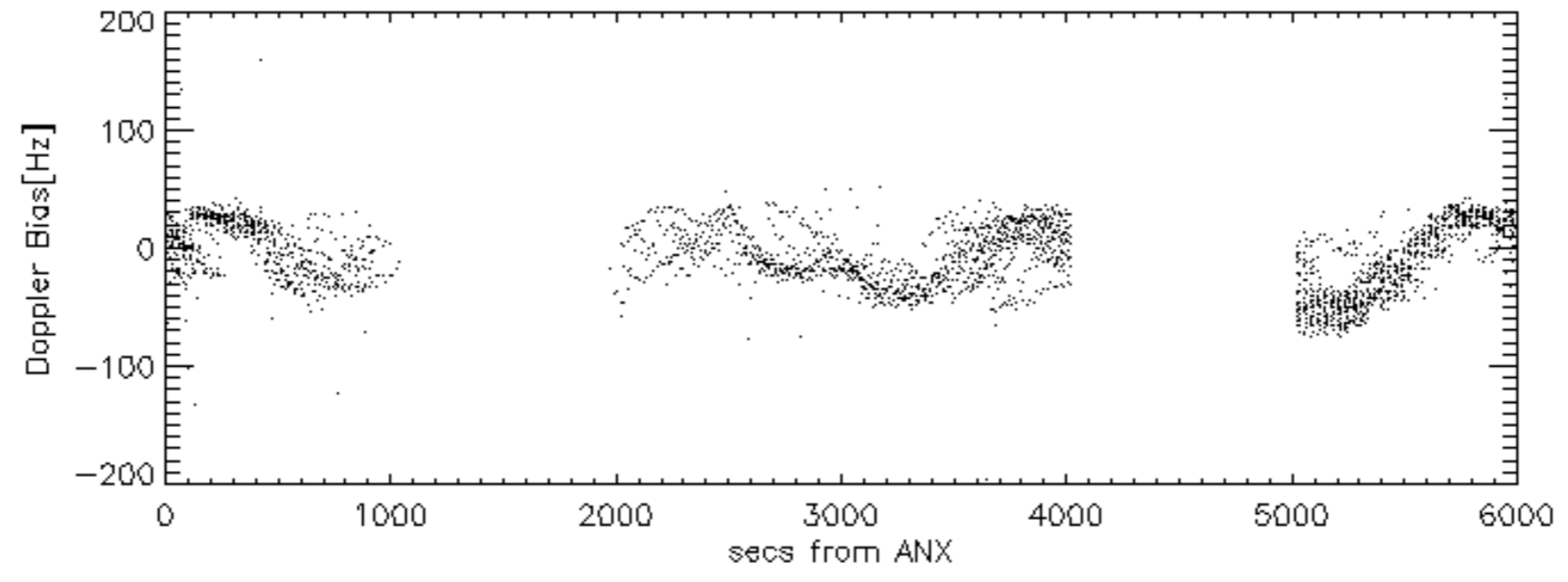
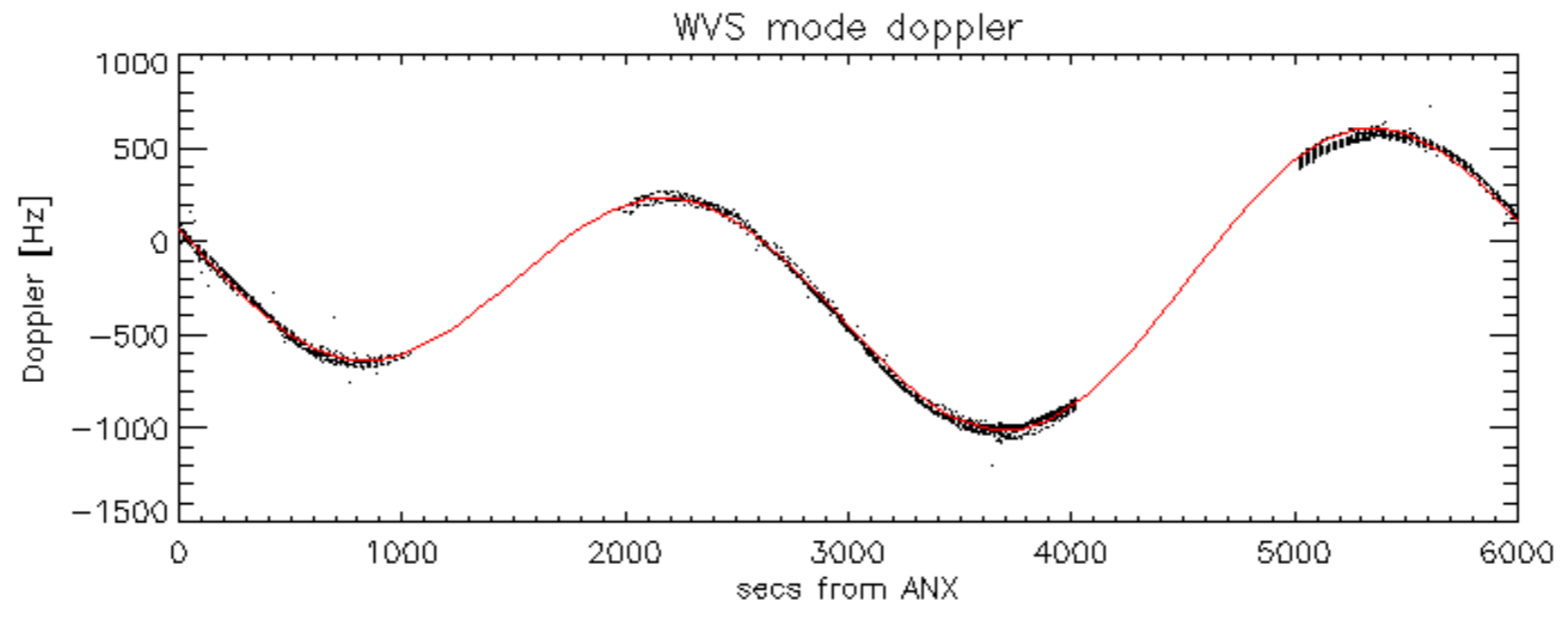


Doppler 'WVS' 'IS2' descending

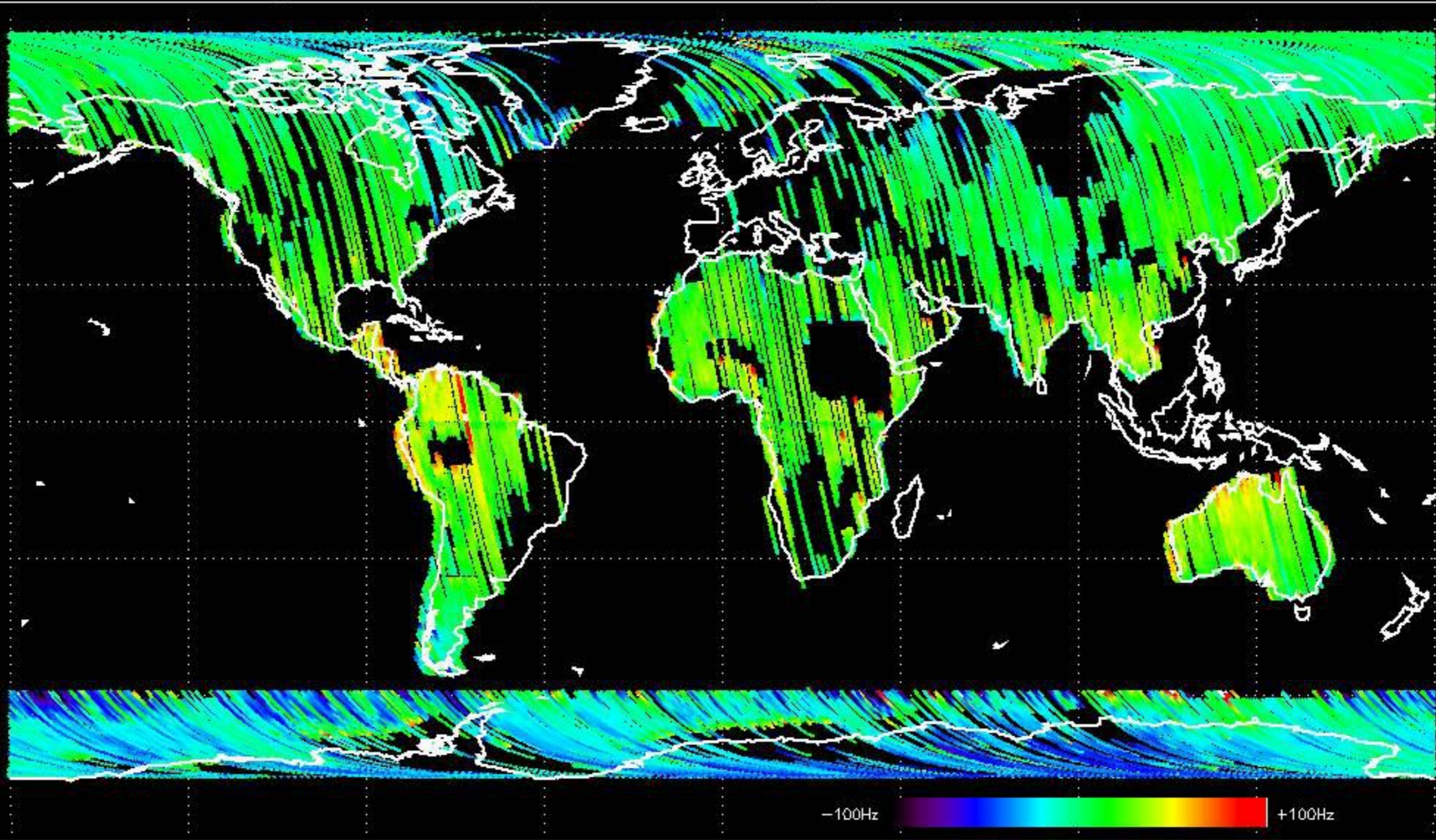


GM1 mode doppler

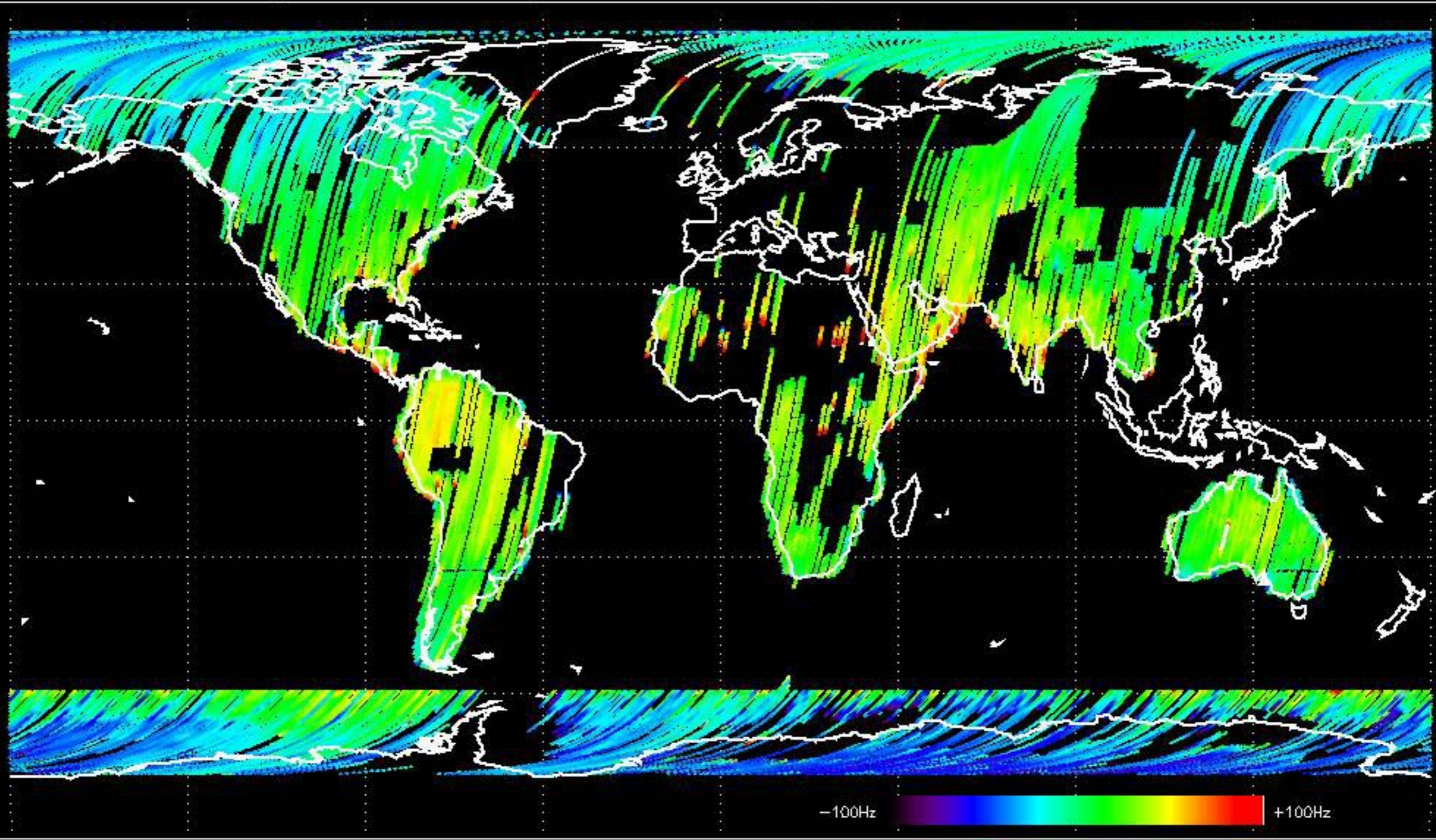




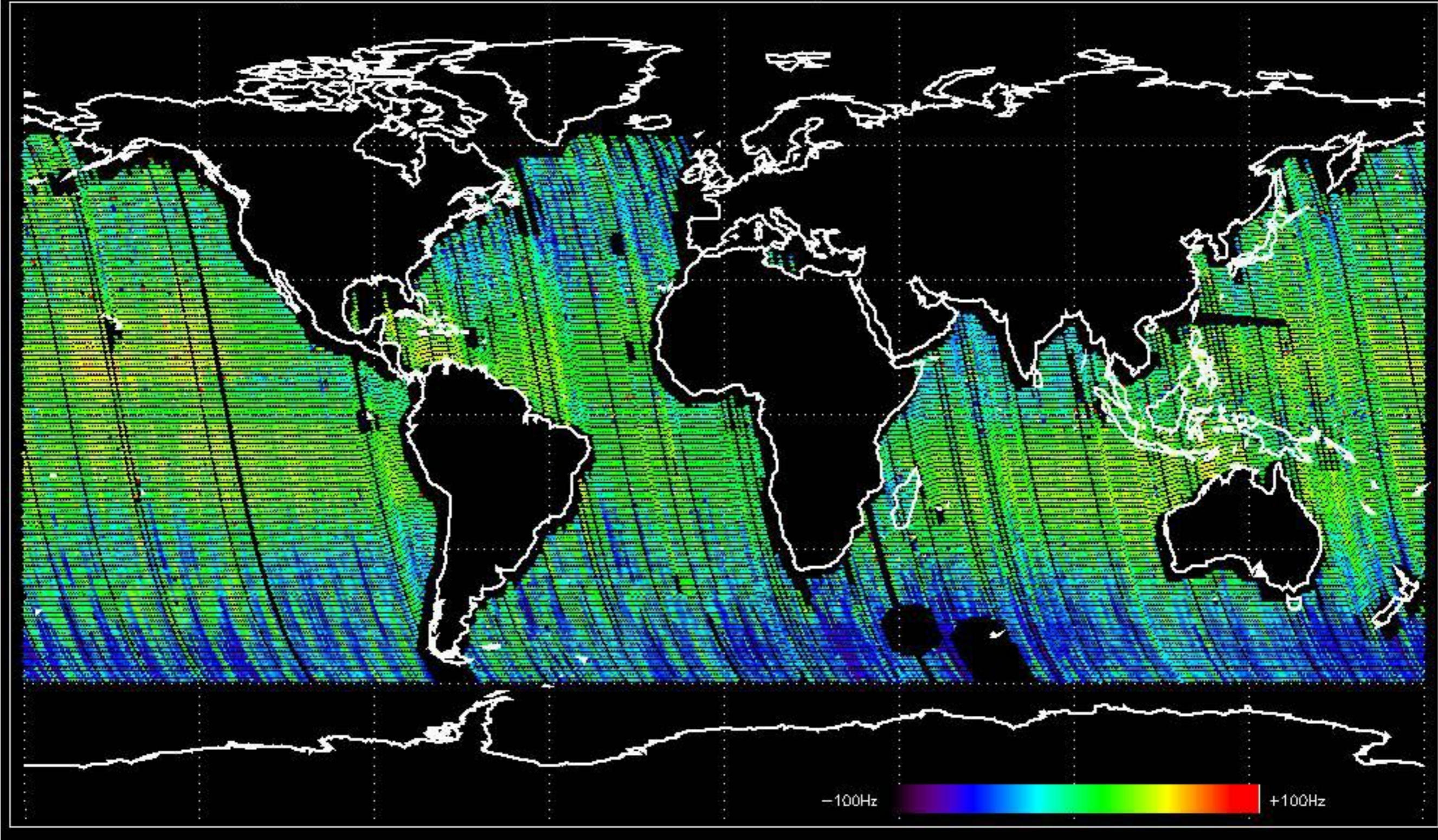
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -16.987262 Hz



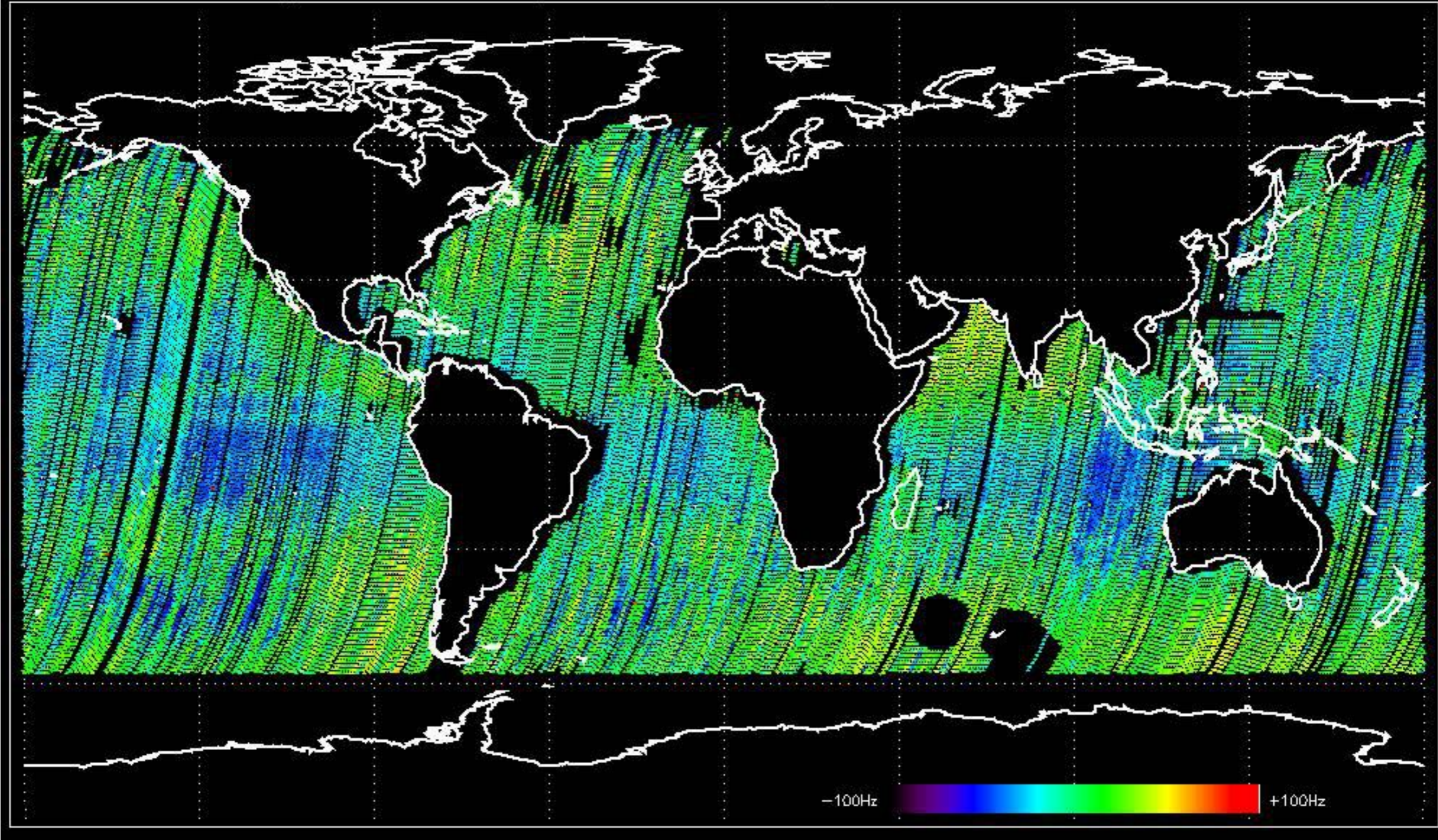
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -5.7226794 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -8.4868597 Hz

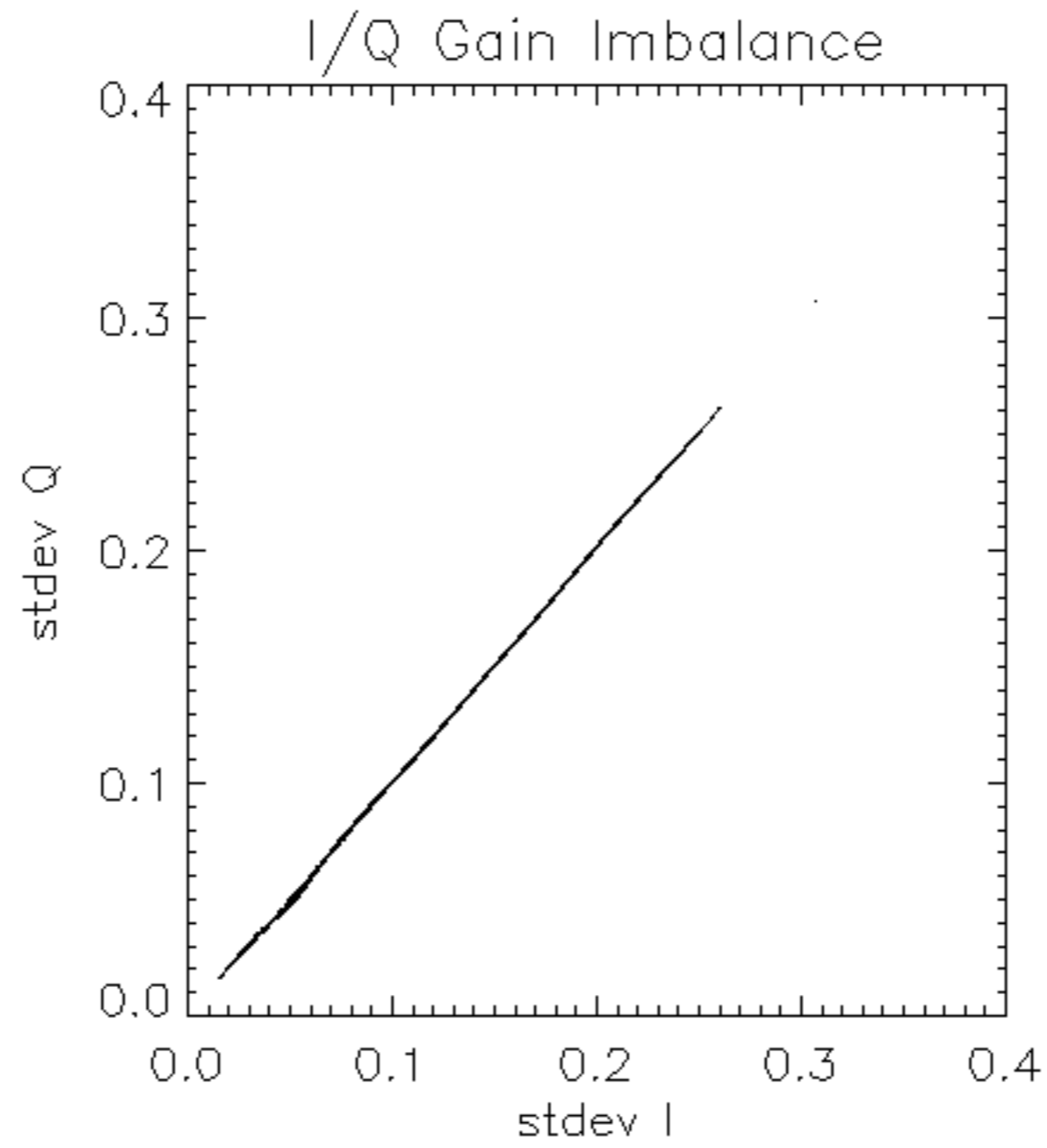


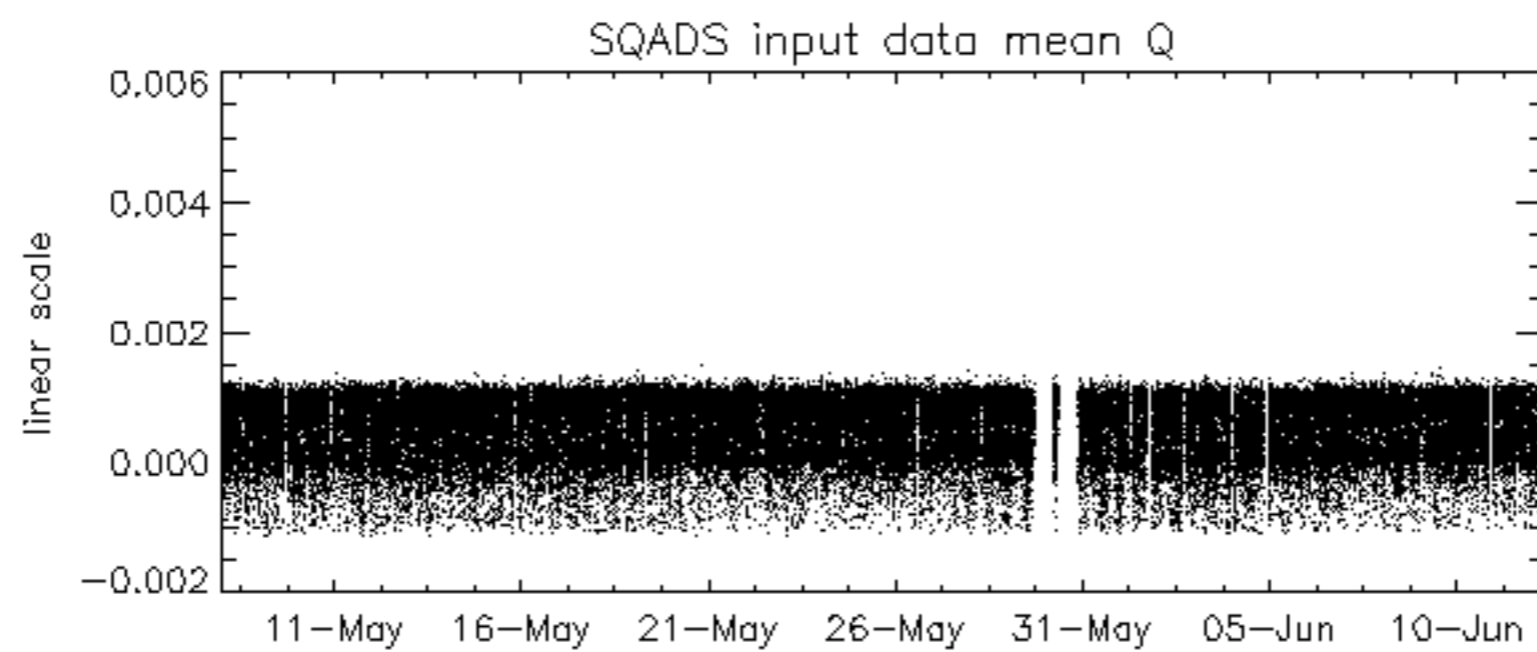
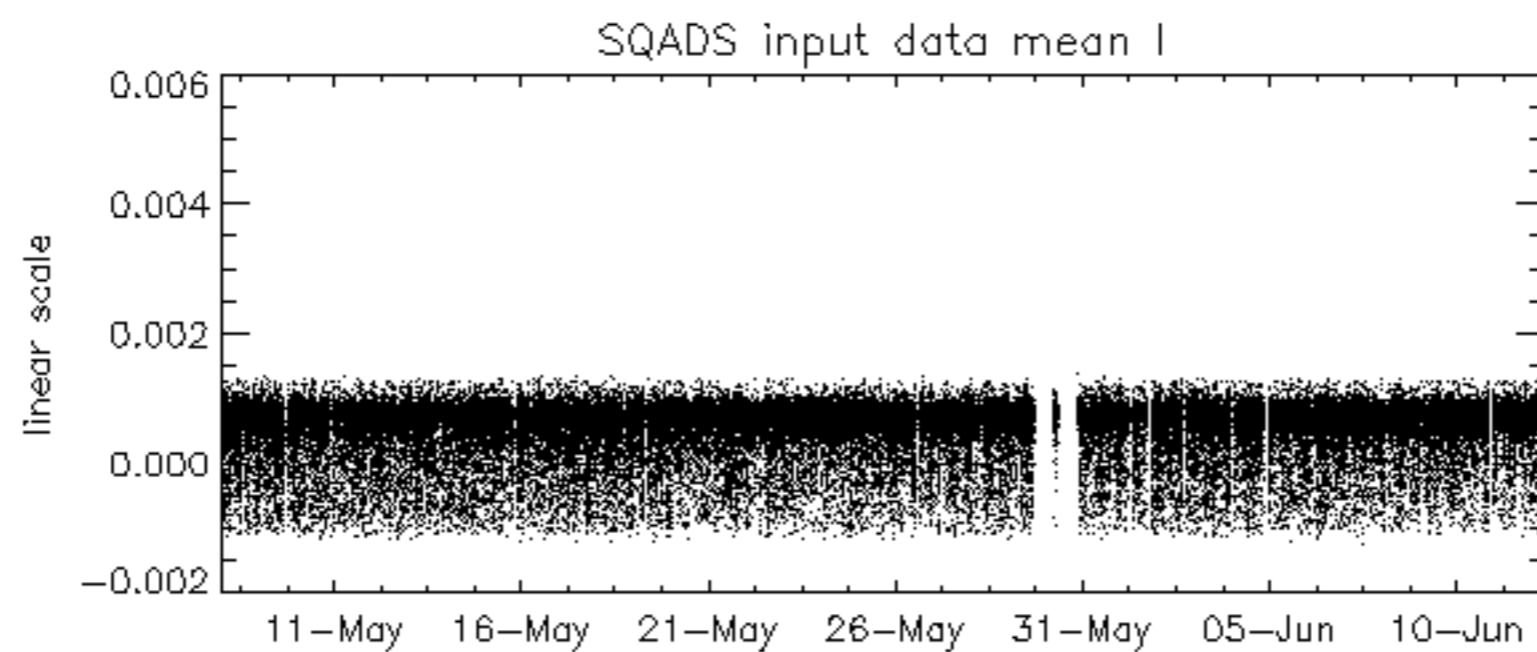
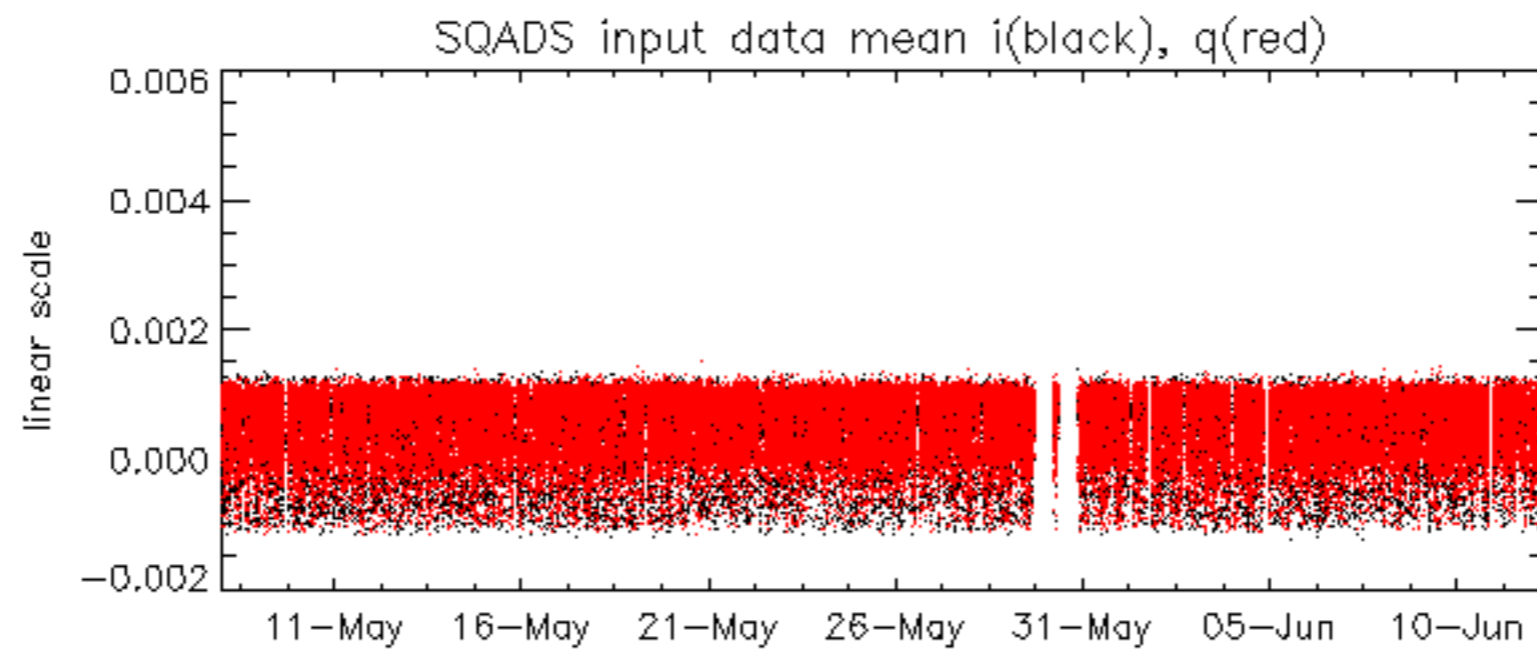
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -10.945852 Hz

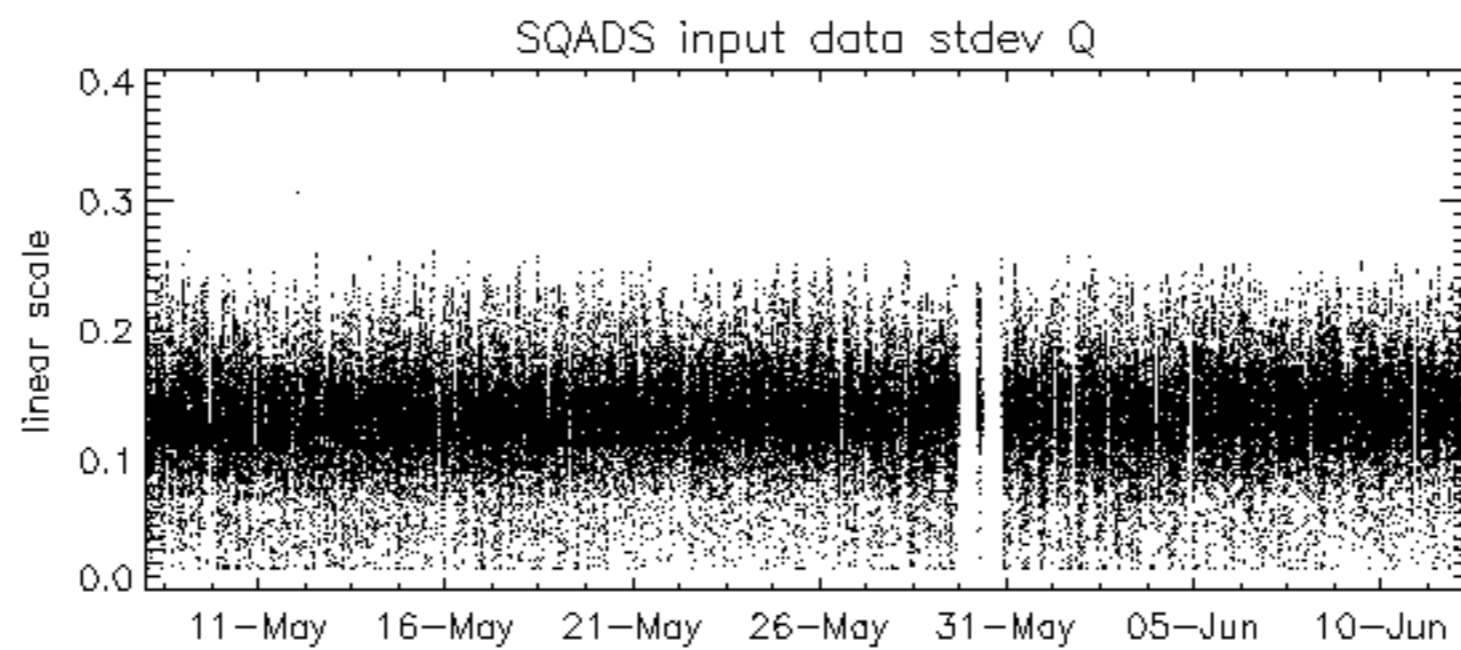
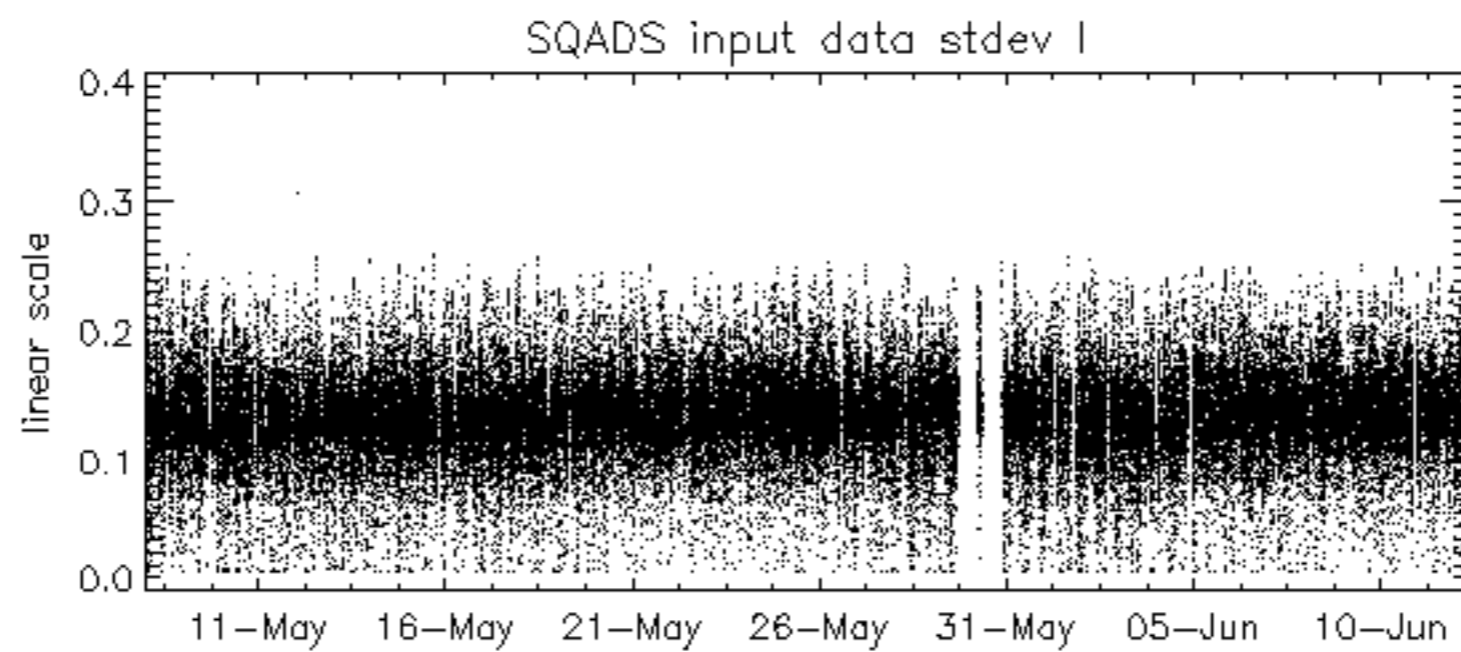
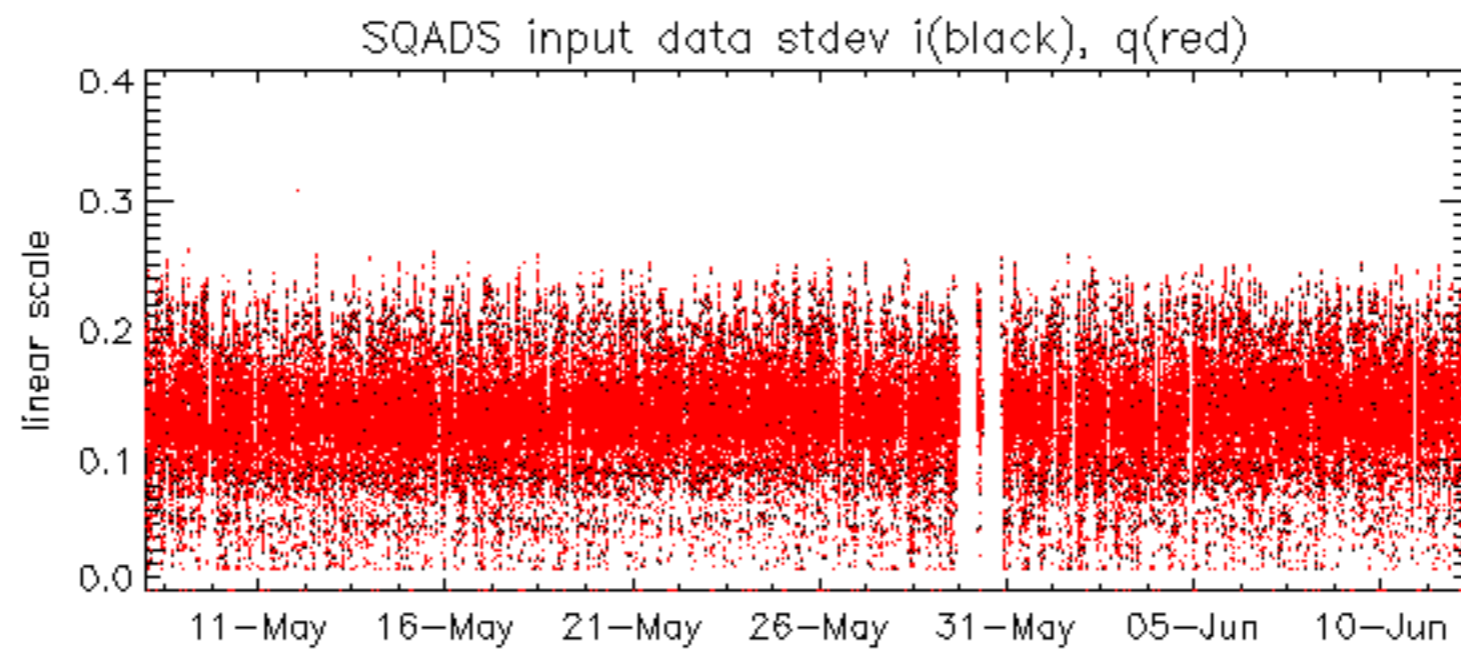


No anomalies observed on available MS products:

No anomalies observed.



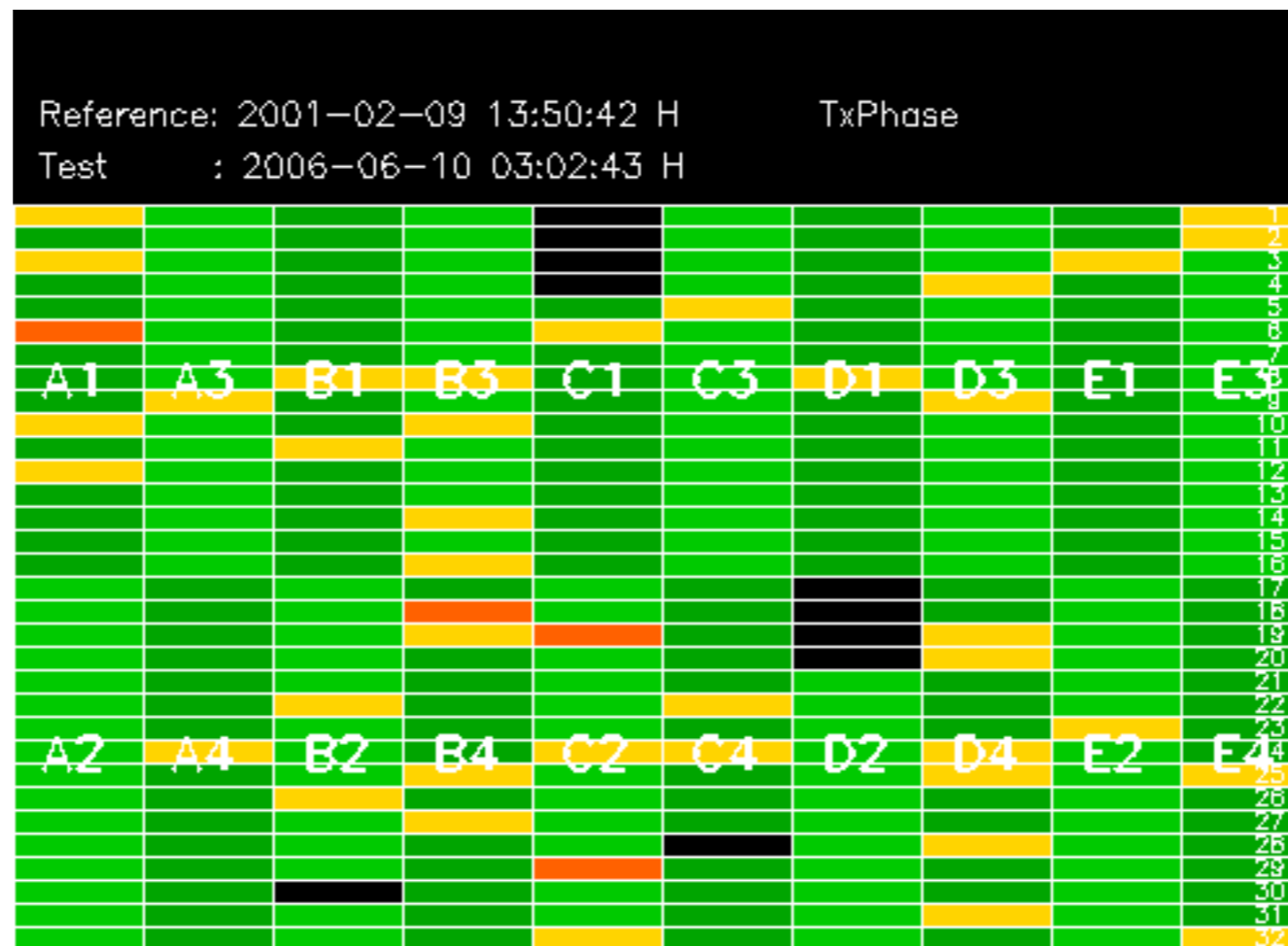


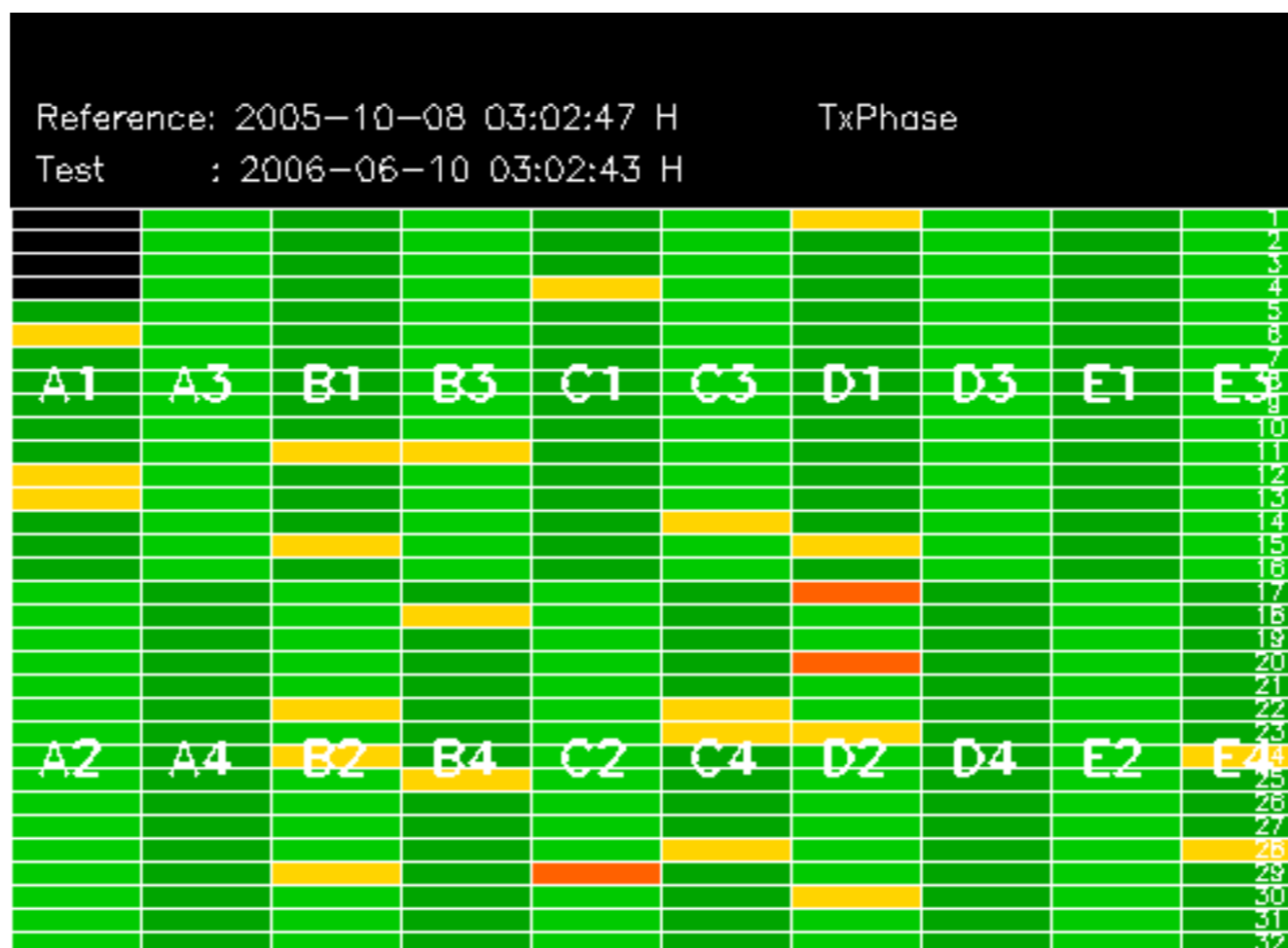


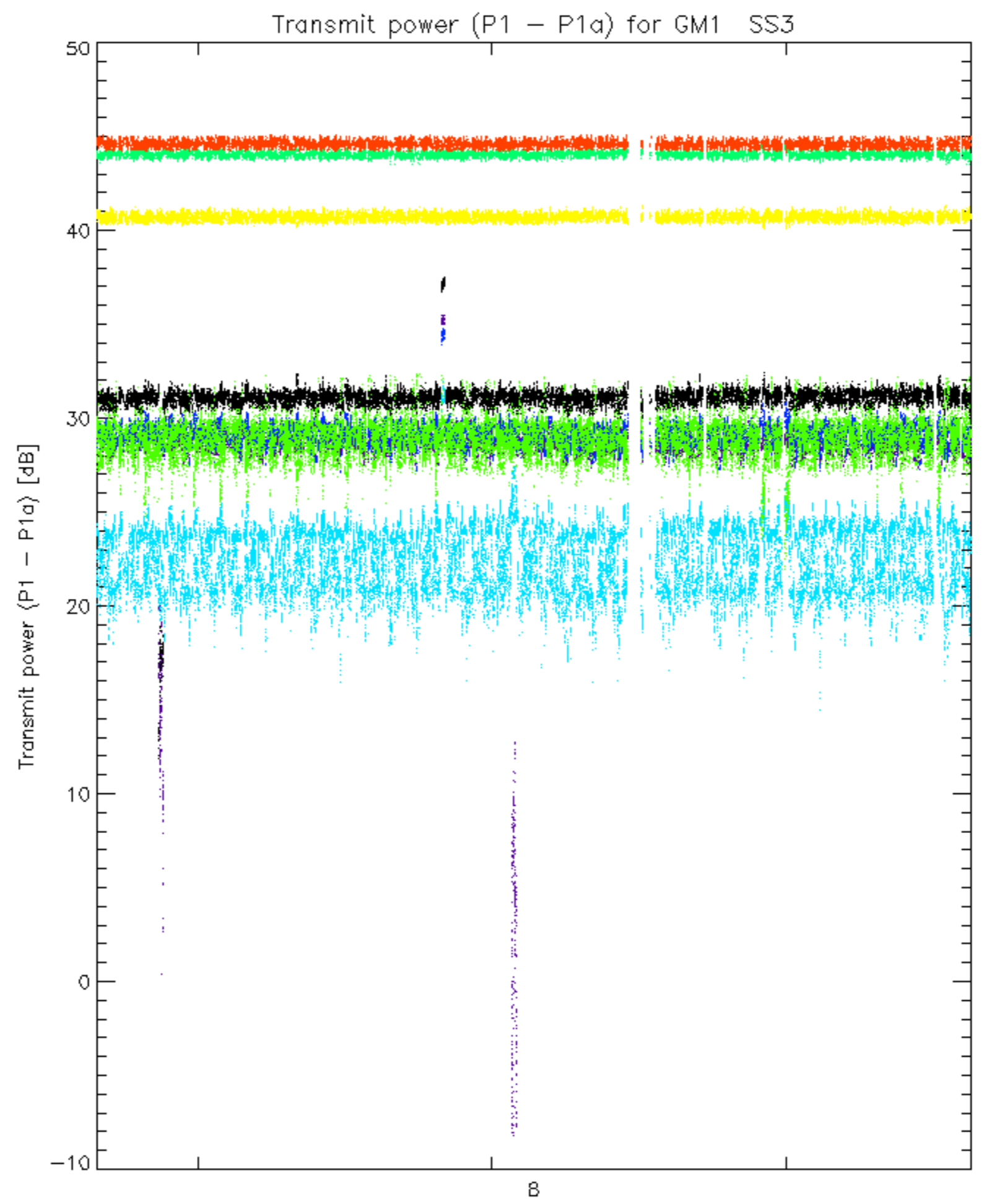
Summary of analysis for the last 3 days 2006061[012]

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

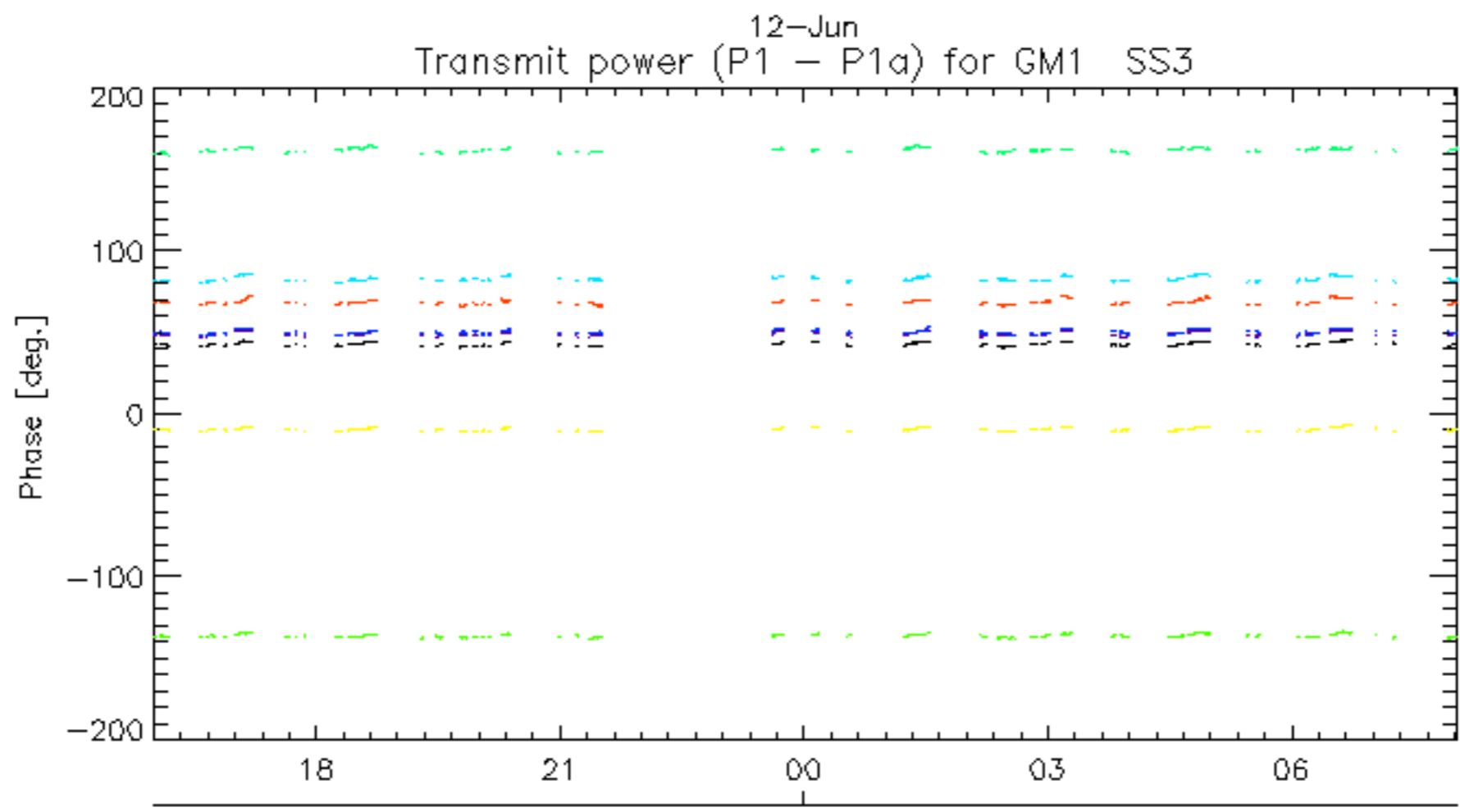
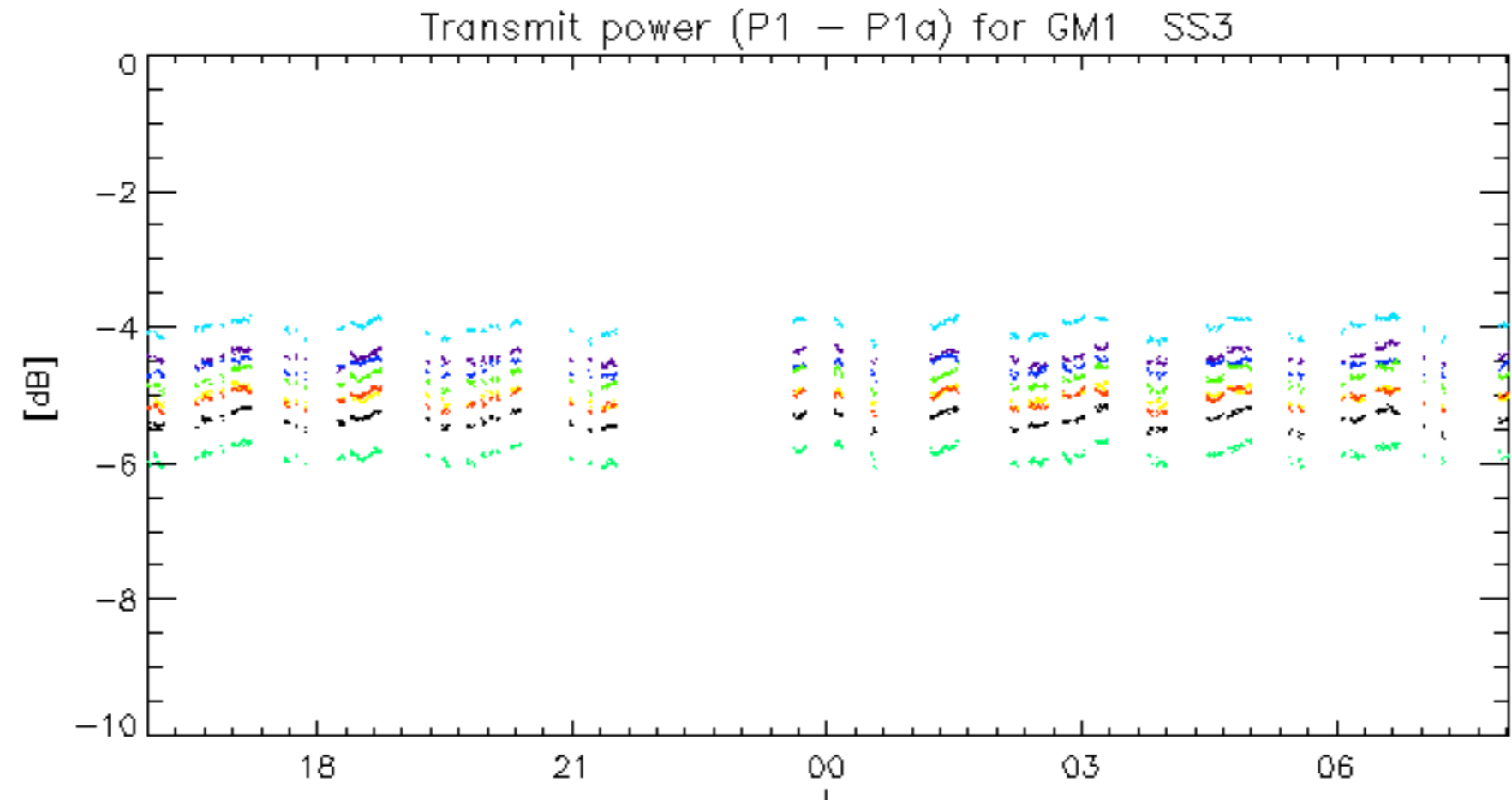
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060610_110007_000000342048_00266_22364_6947.N1	0	18
ASA_IMM_1PNPDE20060612_064716_000000372048_00292_22390_7200.N1	1	0
ASA_WSM_1PNPDE20060610_015903_000001462048_00261_22359_3573.N1	0	75
ASA_WSM_1PNPDE20060610_033801_000000852048_00262_22360_3591.N1	0	39
ASA_WSM_1PNPDE20060610_184505_000001842048_00271_22369_3667.N1	0	58
ASA_WSM_1PNPDE20060611_021040_000000862048_00275_22373_3687.N1	0	2
ASA_WSM_1PNPDE20060611_231431_000000972048_00288_22386_3740.N1	0	62
ASA_WSM_1PNPDE20060612_041708_000002082048_00291_22389_3765.N1	0	39
ASA_WSM_1PNPDK20060610_134308_000002082048_00268_22366_7314.N1	0	30



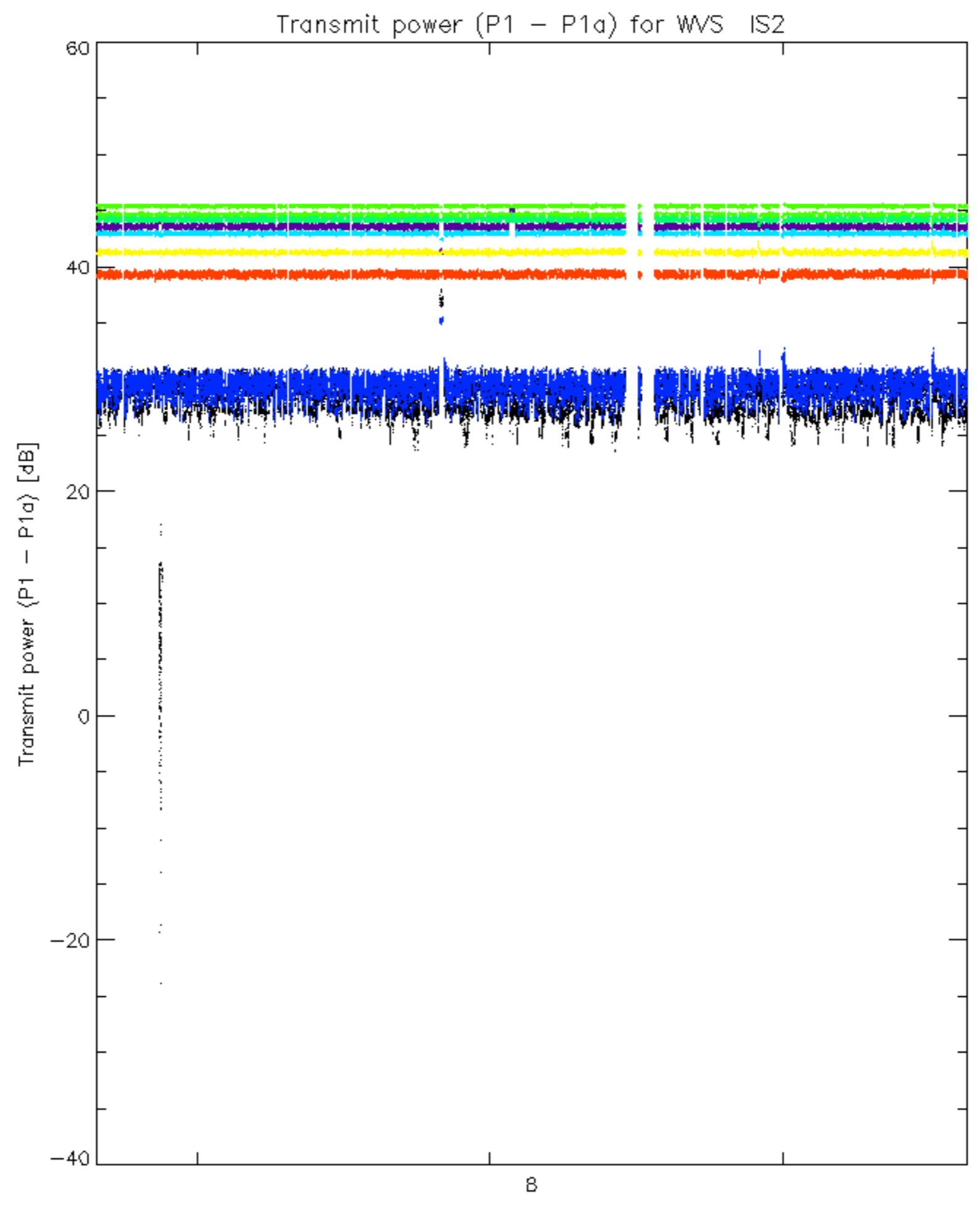


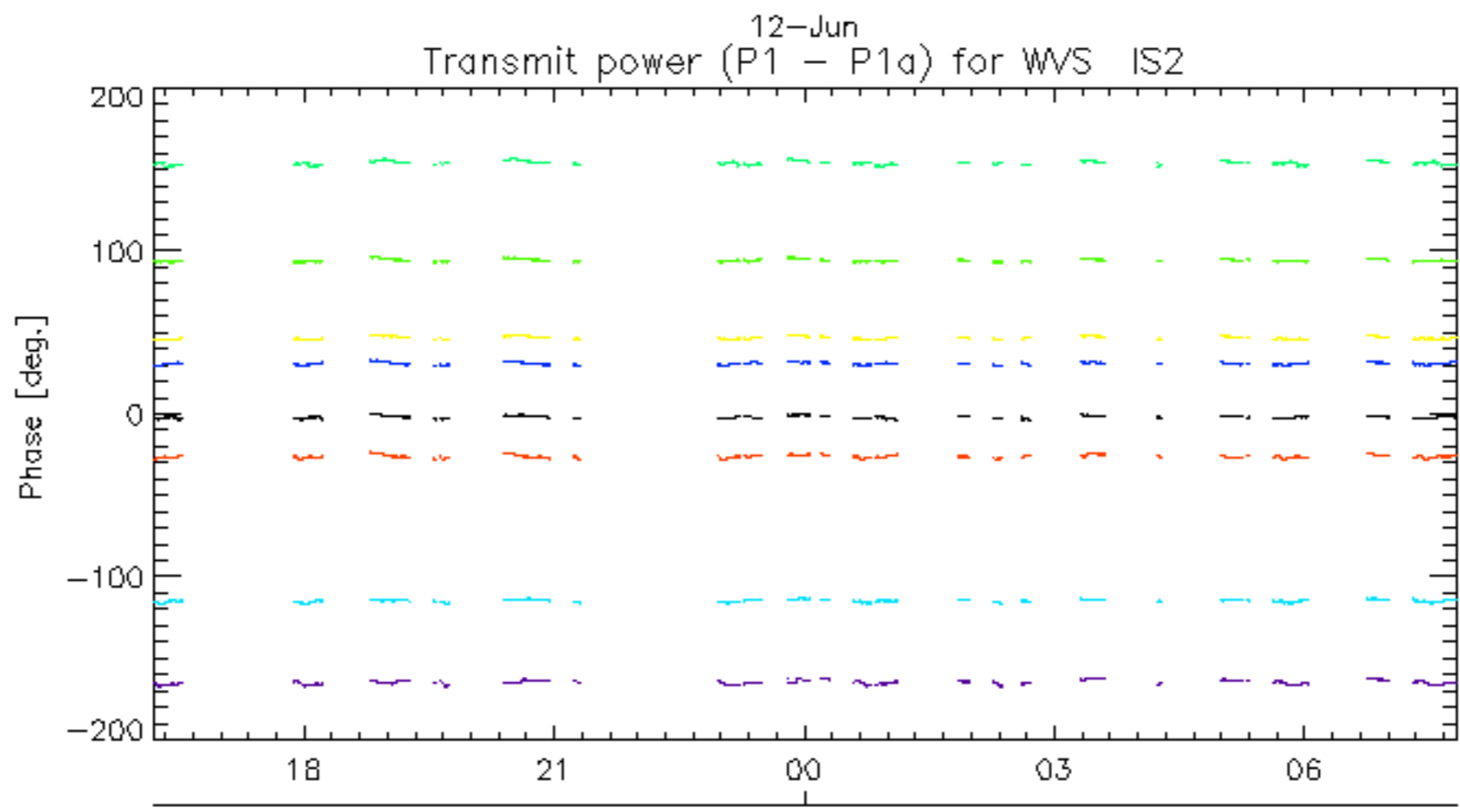
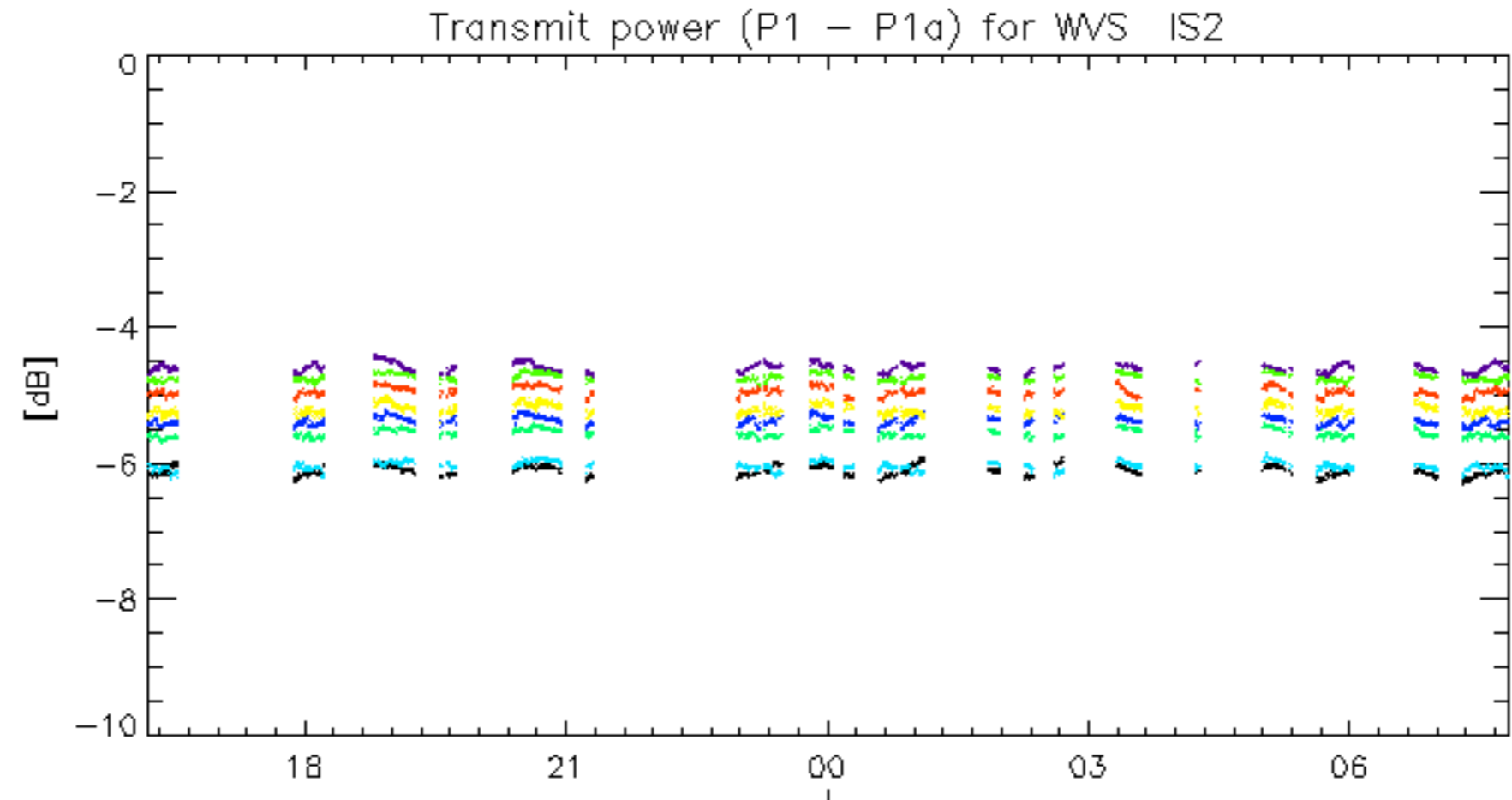


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12-Jun
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30





12-Jun
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No unavailabilities during the reported period.