

PRELIMINARY REPORT OF 060326

last update on Sun Mar 26 17:41:18 GMT 2006

1. [Introduction](#)
2. [Summary](#)
 - [Instrument Unavailability](#)
 - [Auxiliary files used](#)
 - [Browse Visual Inspection](#)
 - [Module Stepping Results](#)
 - [Data Analysis](#)
3. [Module Stepping](#)
4. [Internal Calibration pulses](#)
 - [Daily statistics](#)
 - [Cyclic statistics](#)
 - [cal pulses monitoring \(all rows\)](#)
5. [Raw Data Statistics](#)
 - [raw data mean I and Q](#)
 - [raw data stdev I and Q](#)
 - [raw gain imbalance](#)
6. [TLM analysis](#)
7. [Wave Doppler analysis](#)
 - [Unbiased Doppler Error for WVS](#)
 - [Absolute Doppler for WVS](#)
 - [Doppler evolution versus ANX for WVS](#)
 - [Unbiased Doppler Error for GM1](#)
 - [Absolute Doppler for GM1](#)
 - [Doppler evolution versus ANX for GM1](#)

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 2006-03-25 00:00:00 to 2006-03-26 17:41:18

PDHS-K

AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
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PDHS-E

AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
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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	20060325 064353
H	20060326 061216

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

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⊗

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

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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	-4.002132	0.009151	0.008168
7	P1	-3.012342	0.008439	-0.018829
11	P1	-4.059892	0.018436	-0.010202
15	P1	-6.094897	0.020426	-0.054353
19	P1	-3.301193	0.006550	-0.045811
22	P1	-4.462544	0.014301	-0.027708
26	P1	-4.175967	0.113761	0.248378
30	P1	-5.785745	0.172337	0.163841
3	P1	-16.970234	0.255471	0.078285
7	P1	-16.744913	0.102017	-0.100203
11	P1	-16.477524	0.309810	0.030388
15	P1	-13.054888	0.092690	-0.017824
19	P1	-13.957118	0.050937	-0.101575
22	P1	-15.587560	0.459600	-0.107034
26	P1	-15.748514	0.362274	0.012685
30	P1	-16.509047	0.318200	-0.143568

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.379950	0.086600	0.069982
7	P2	-22.349096	0.096132	0.131924
11	P2	-16.218584	0.100609	0.034373
15	P2	-7.166227	0.097870	-0.008665
19	P2	-9.135048	0.089899	-0.022583
22	P2	-17.954460	0.087880	-0.069743
26	P2	-16.221706	0.094000	-0.065774
30	P2	-19.652288	0.084209	-0.015632

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.195813	0.005581	-0.001266
7	P3	-8.195813	0.005581	-0.001266
11	P3	-8.195813	0.005581	-0.001266
15	P3	-8.195813	0.005581	-0.001266
19	P3	-8.195813	0.005581	-0.001266
22	P3	-8.195813	0.005581	-0.001266

26	P3	-8.195813	0.005581	-0.001266
30	P3	-8.195814	0.005581	-0.001264

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	-3.827877	2.506844	0.366812
7	P1	-2.807257	2.632514	0.428856
11	P1	-3.007041	2.650980	0.419128
15	P1	-3.651621	2.628187	0.450210
19	P1	-3.450534	2.545410	0.382687
22	P1	-5.251135	2.341047	0.348040
26	P1	-5.903816	2.510685	0.710169
30	P1	-5.252744	2.379039	0.472534
3	P1	-11.637588	1.652731	0.266103
7	P1	-10.032232	1.831106	0.295478
11	P1	-10.335398	1.825472	0.297535
15	P1	-10.884705	1.842815	0.288245
19	P1	-15.447695	1.360927	0.258620
22	P1	-20.329176	2.031347	0.090287
26	P1	-16.274839	1.851618	0.128847
30	P1	-18.305872	1.581665	0.331851

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.073315	1.738236	0.097333
7	P2	-22.524517	2.043248	-0.048423

11	P2	-11.256115	1.886238	0.199165
15	P2	-4.897499	2.449921	0.364673
19	P2	-6.905996	2.204659	0.334522
22	P2	-8.197817	2.067463	0.287018
26	P2	-23.918018	2.083776	-0.309126
30	P2	-22.043173	1.964433	-0.179987

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.022776	0.002300	0.007628
7	P3	-8.022717	0.002299	0.007837
11	P3	-8.022696	0.002315	0.007953
15	P3	-8.022792	0.002303	0.008197
19	P3	-8.022735	0.002309	0.007855
22	P3	-8.022840	0.002300	0.007999
26	P3	-8.022833	0.002302	0.007992
30	P3	-8.022654	0.002311	0.007893

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	0.000564527
	stdev	1.70749e-07
MEAN Q	mean	0.000523600

stdev 2.18208e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.138772
	stdev	0.00116766
STDEV Q	mean	0.139140
	stdev	0.00118597



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006032[456]

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_1PNPDE20060324_042639_000000522046_00147_21243_1443.N1	1	0
ASA_IMM_1PNPDE20060325_022726_000000692046_00161_21257_1486.N1	1	0
ASA_GM1_1PNPDK20060325_105812_000005072046_00166_21262_0859.N1	0	17
ASA_GM1_1PNPDK20060325_134937_000003502046_00167_21263_0870.N1	0	6
ASA_WSM_1PNPDE20060324_001349_000002262046_00145_21241_2219.N1	0	34
ASA_WSM_1PNPDE20060324_133838_000000852046_00153_21249_2321.N1	0	27
ASA_WSM_1PNPDE20060324_161721_000002202046_00155_21251_2319.N1	0	18
ASA_WSM_1PNPDE20060324_201713_000000862046_00157_21253_2363.N1	0	43
ASA_WSM_1PNPDE20060324_234146_000003062046_00159_21255_2398.N1	0	13
ASA_WSM_1PNPDE20060325_012047_000001282046_00160_21256_2418.N1	0	39







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)


Acsending

Descending

7.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler


Acsending

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)


Acsending

<input type="checkbox"/>
Descending

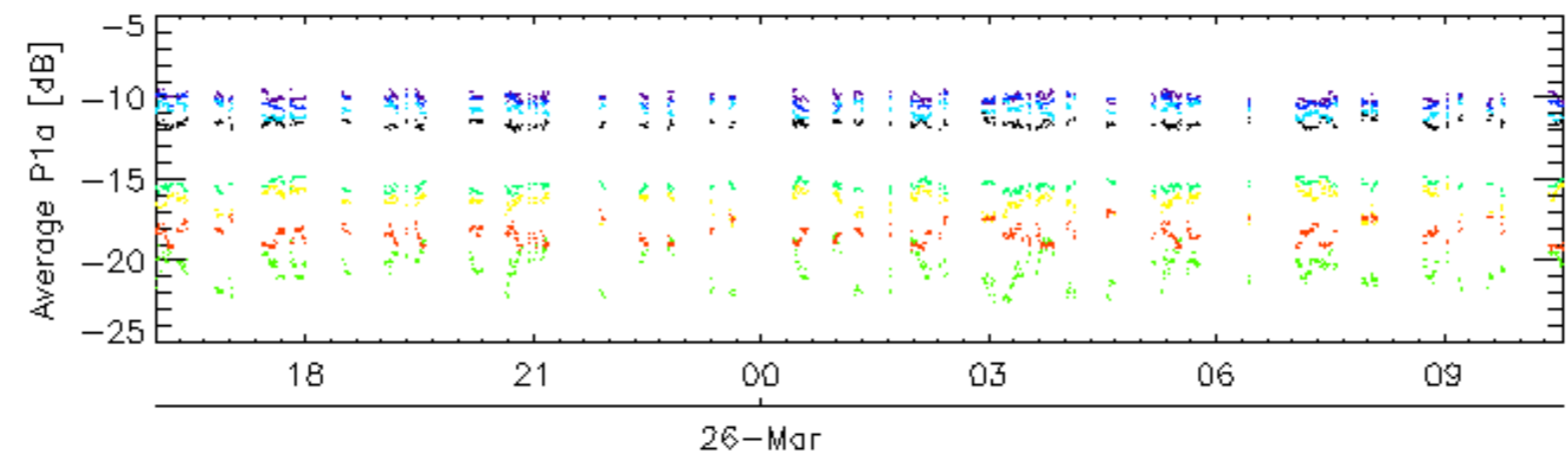
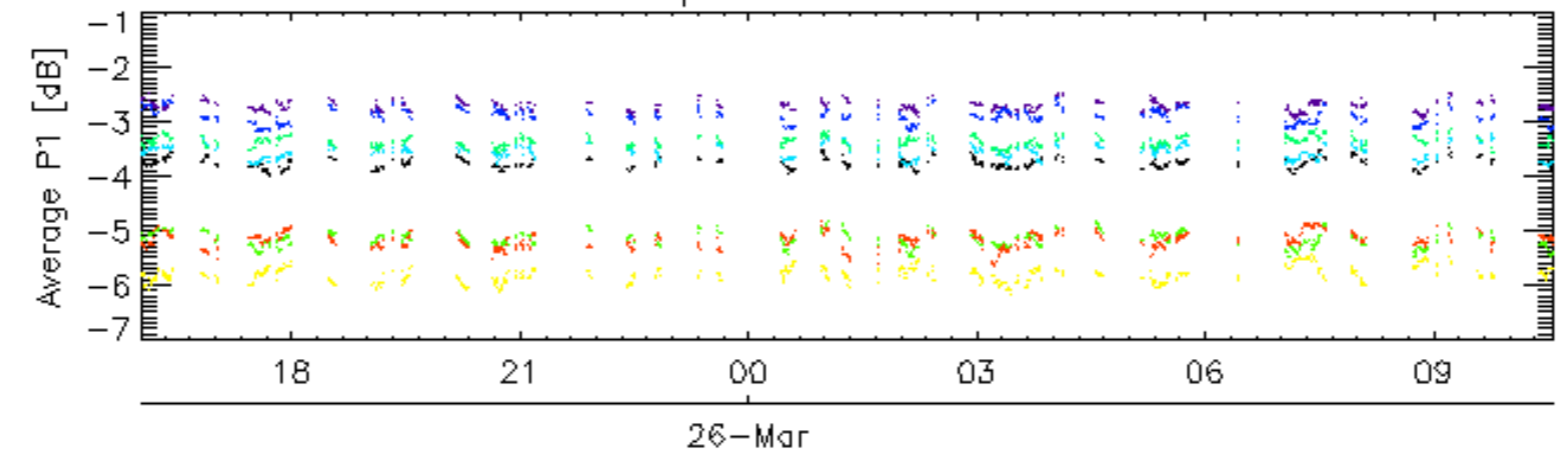
7.5 - Absolute Doppler for GM1

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

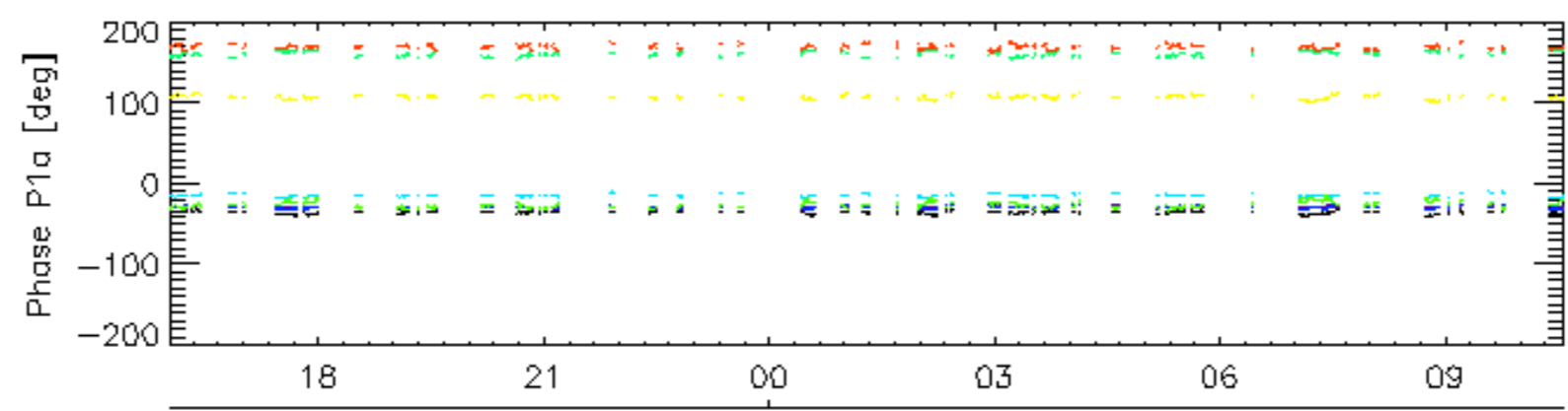
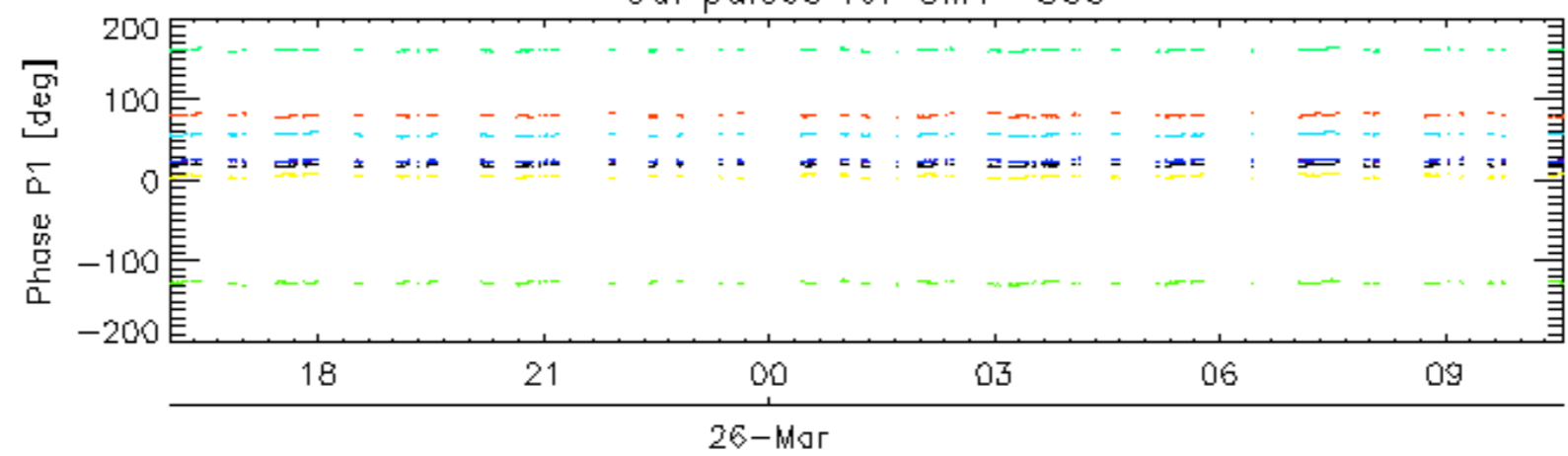
7.6 - Doppler evolution versus ANX for GM1

Evolution Doppler error versus ANX
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Cal pulses for GM1 SS3

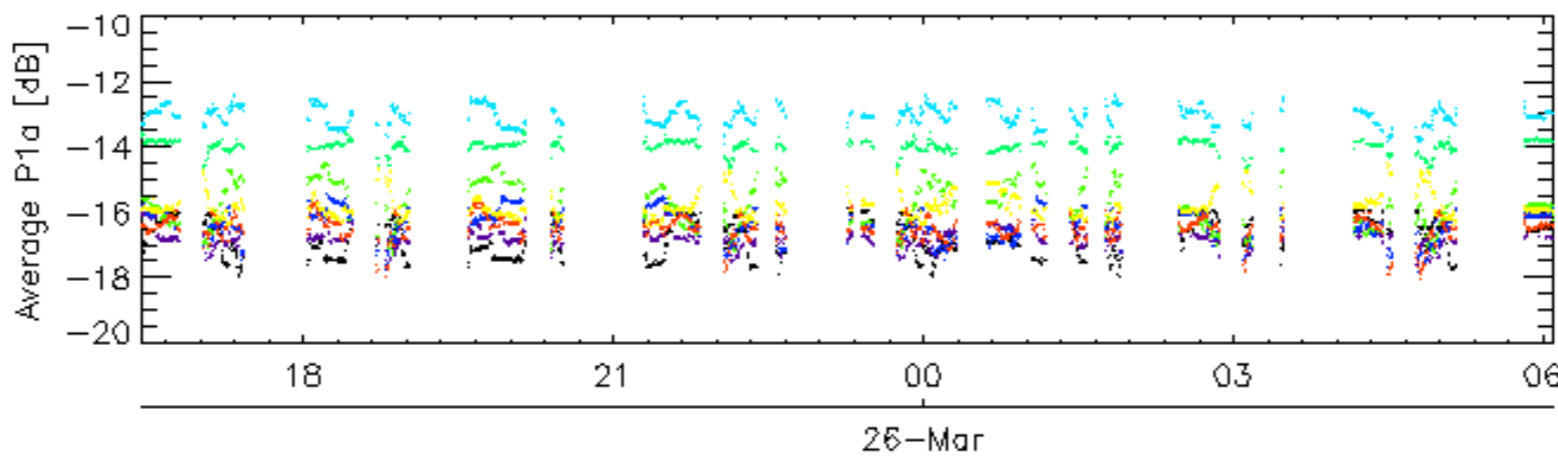
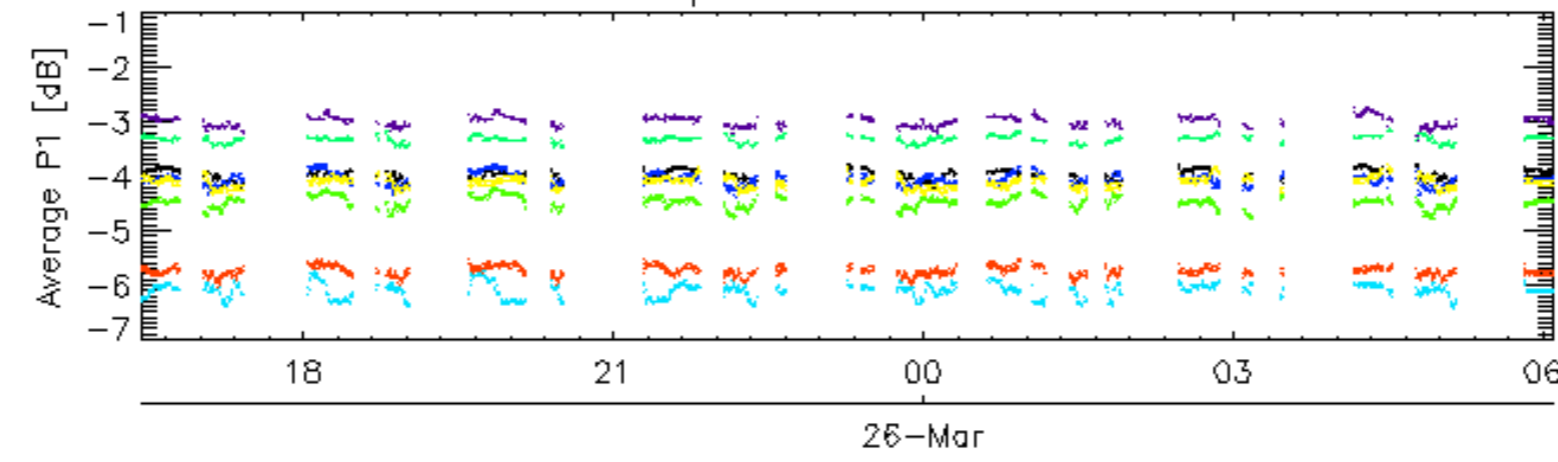


Cal pulses for GM1 SS3

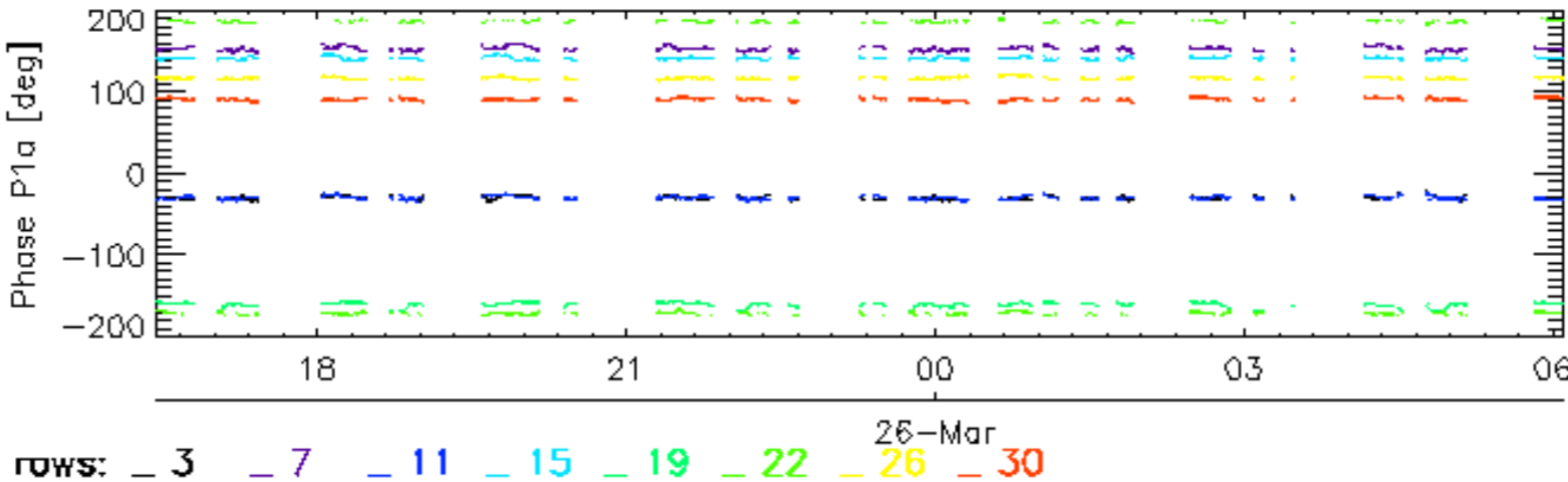
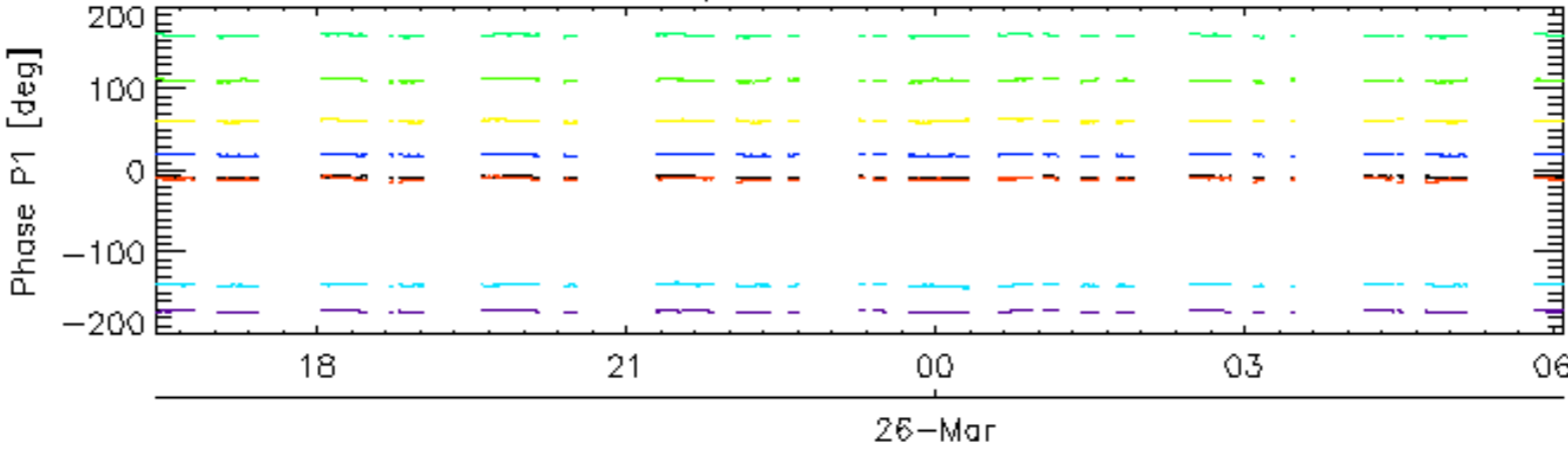


rows: **3** **7** **11** **15** **19** **22** **26** **30**

Cal pulses for WVS IS2

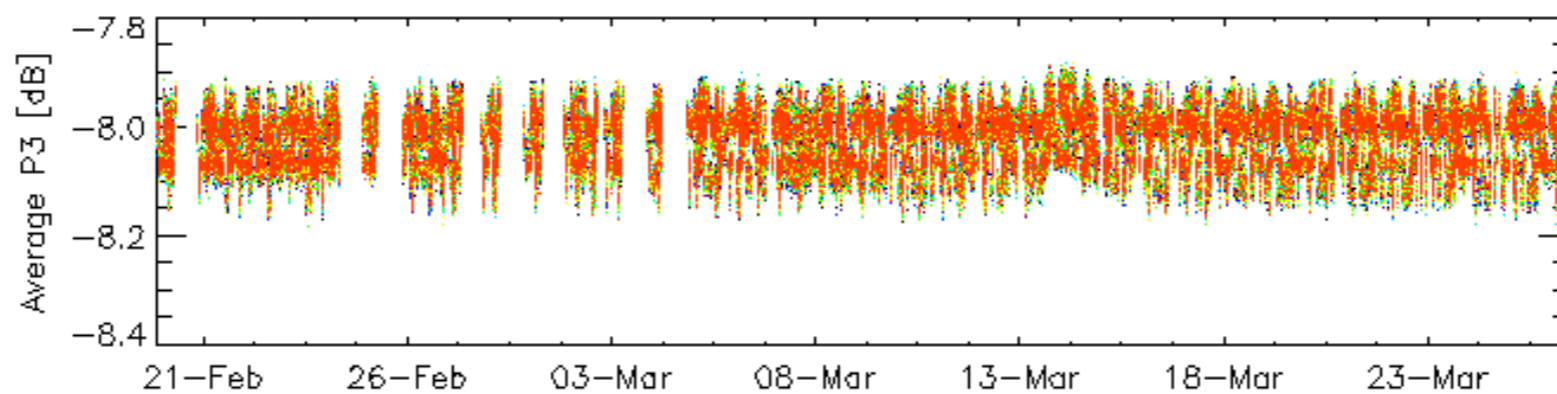
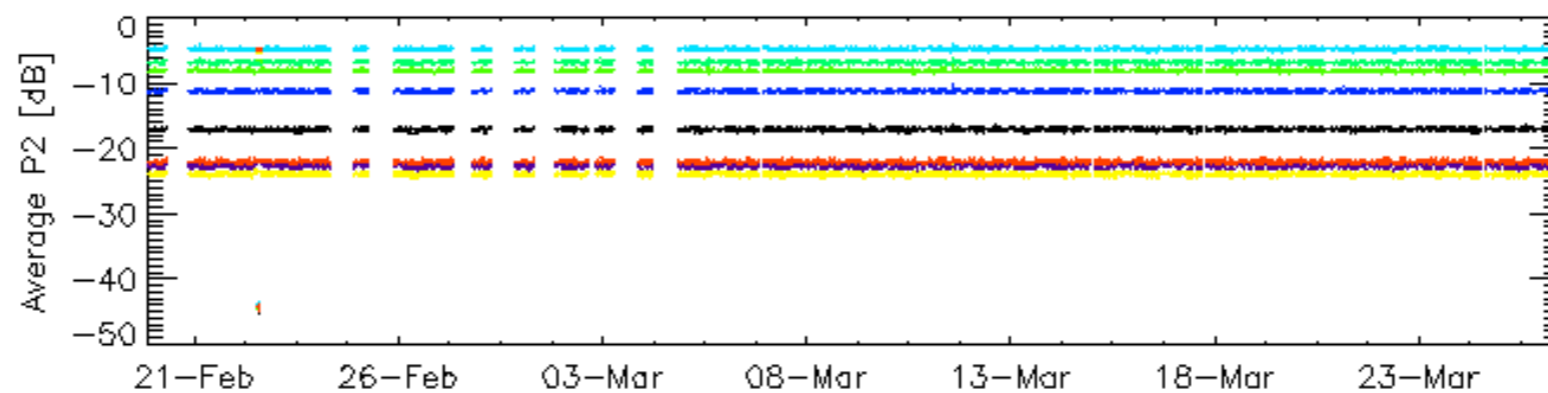
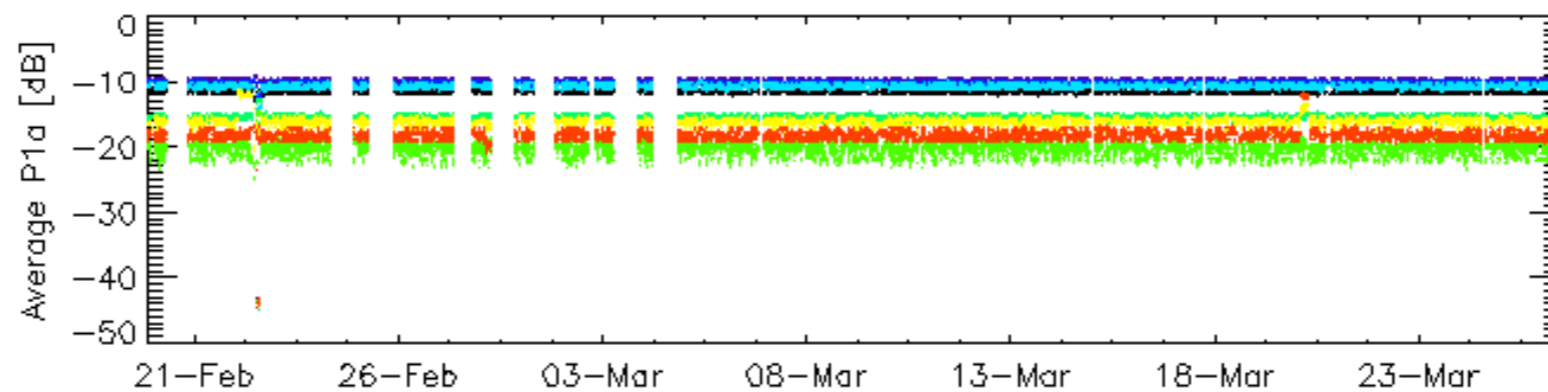
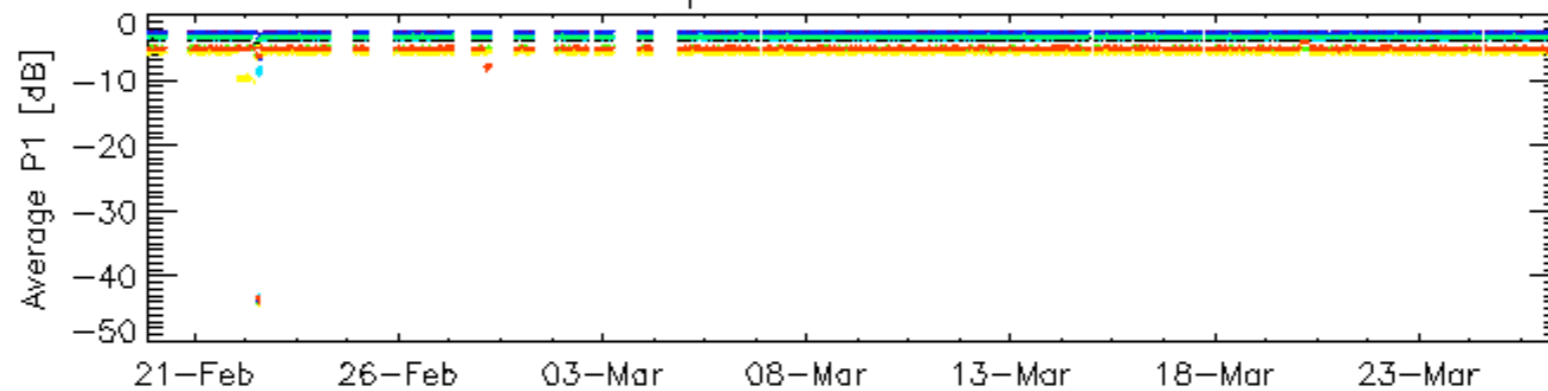


Cal pulses for WVS IS2



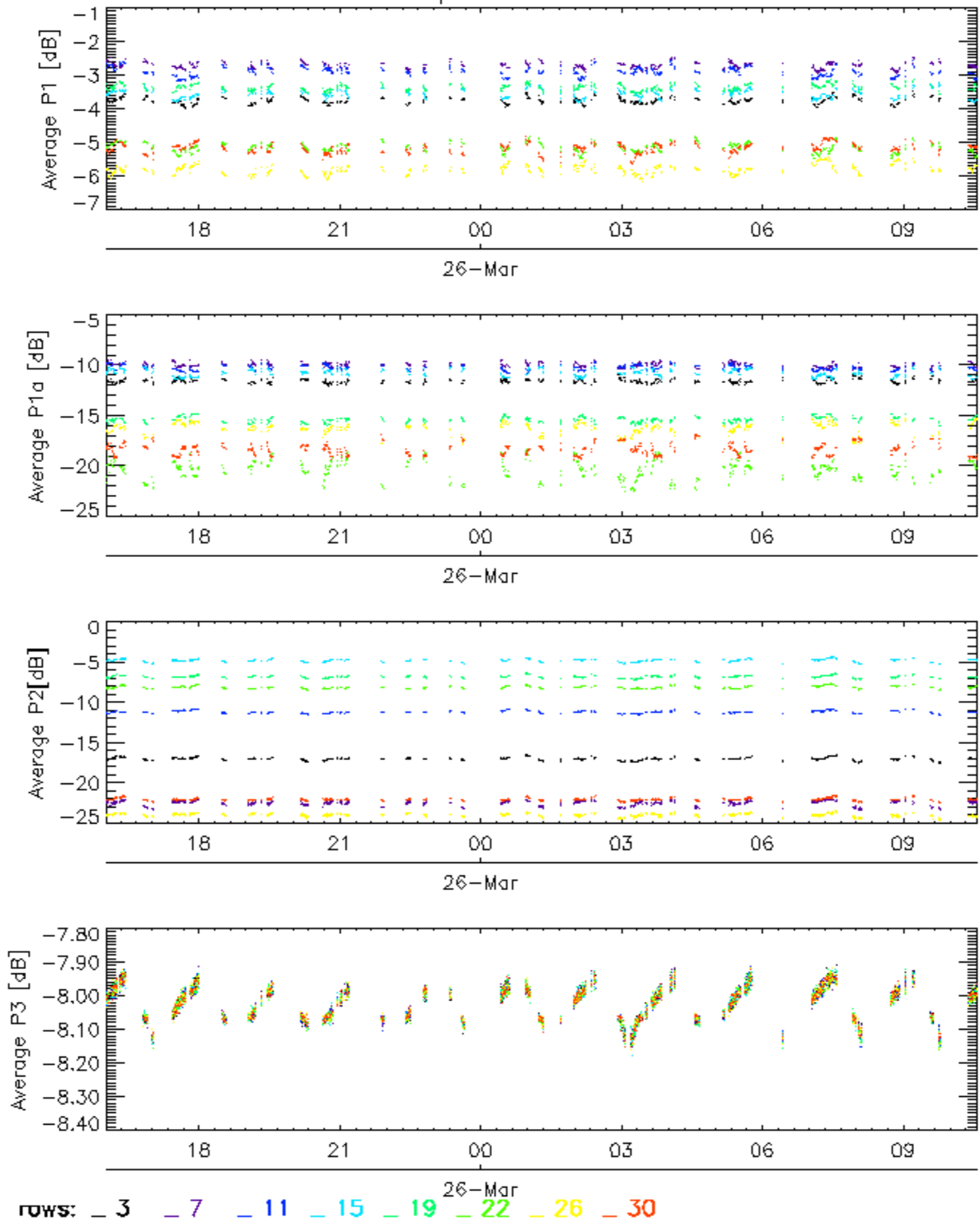
rows: 3 7 11 15 19 22 26 30

Cal pulses for GM1 SS3

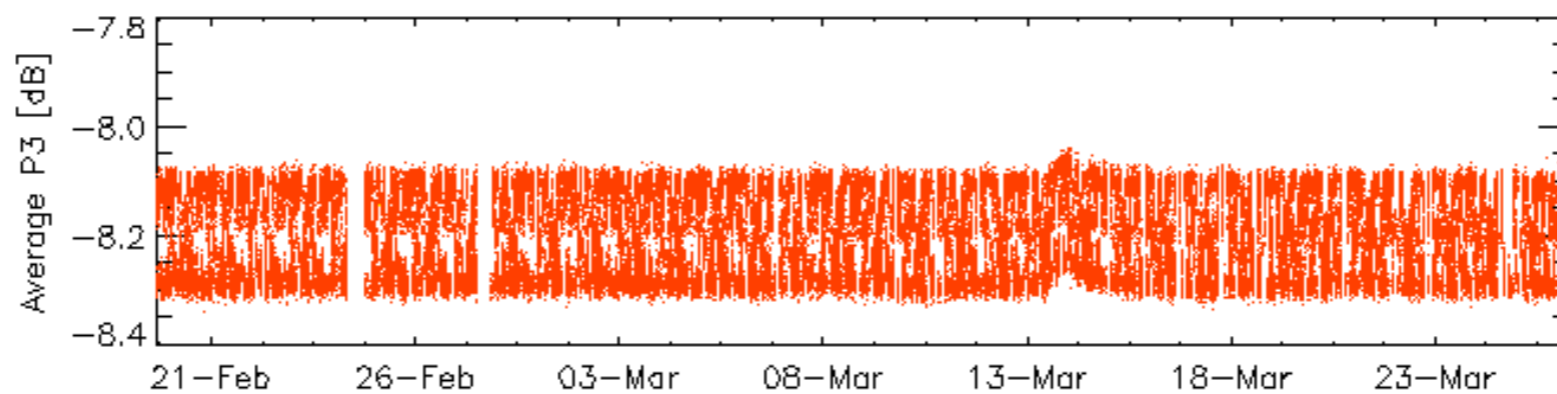
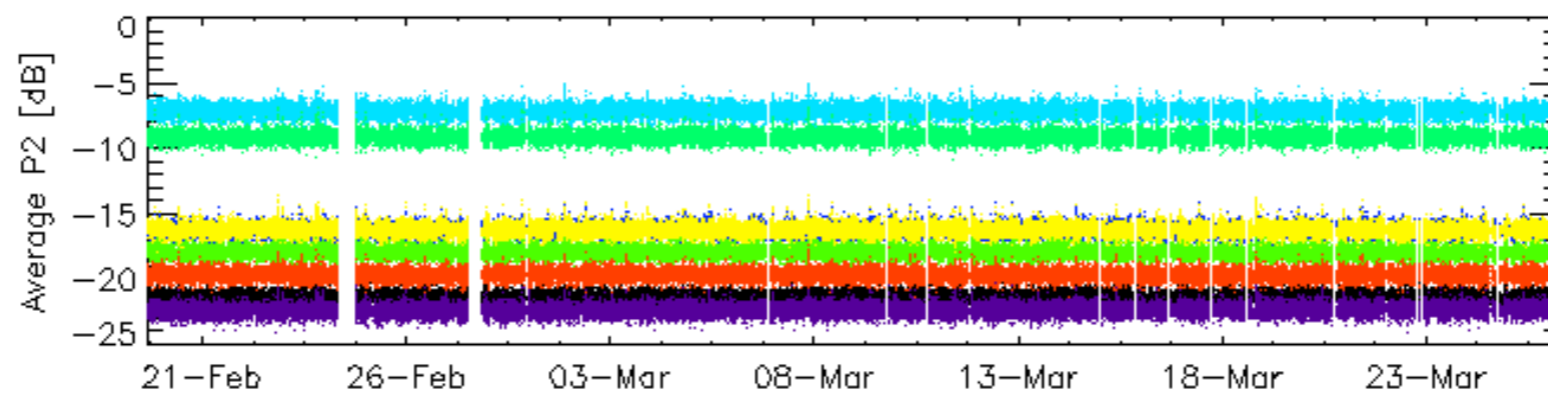
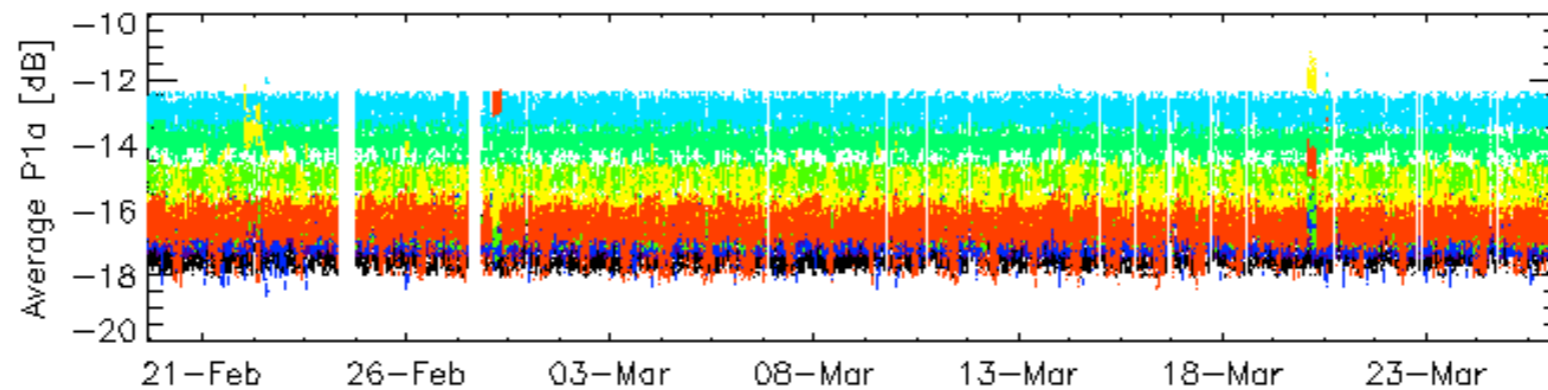
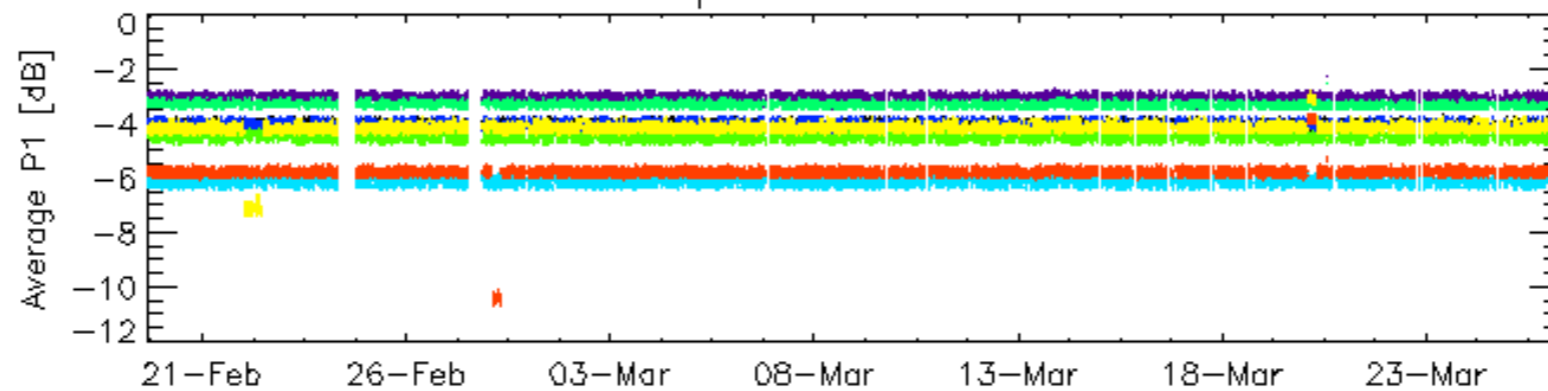


rows: [_ 3](#) [_ 7](#) [_ 11](#) [_ 15](#) [_ 19](#) [_ 22](#) [_ 26](#) [_ 30](#)

Cal pulses for GM1 SS3

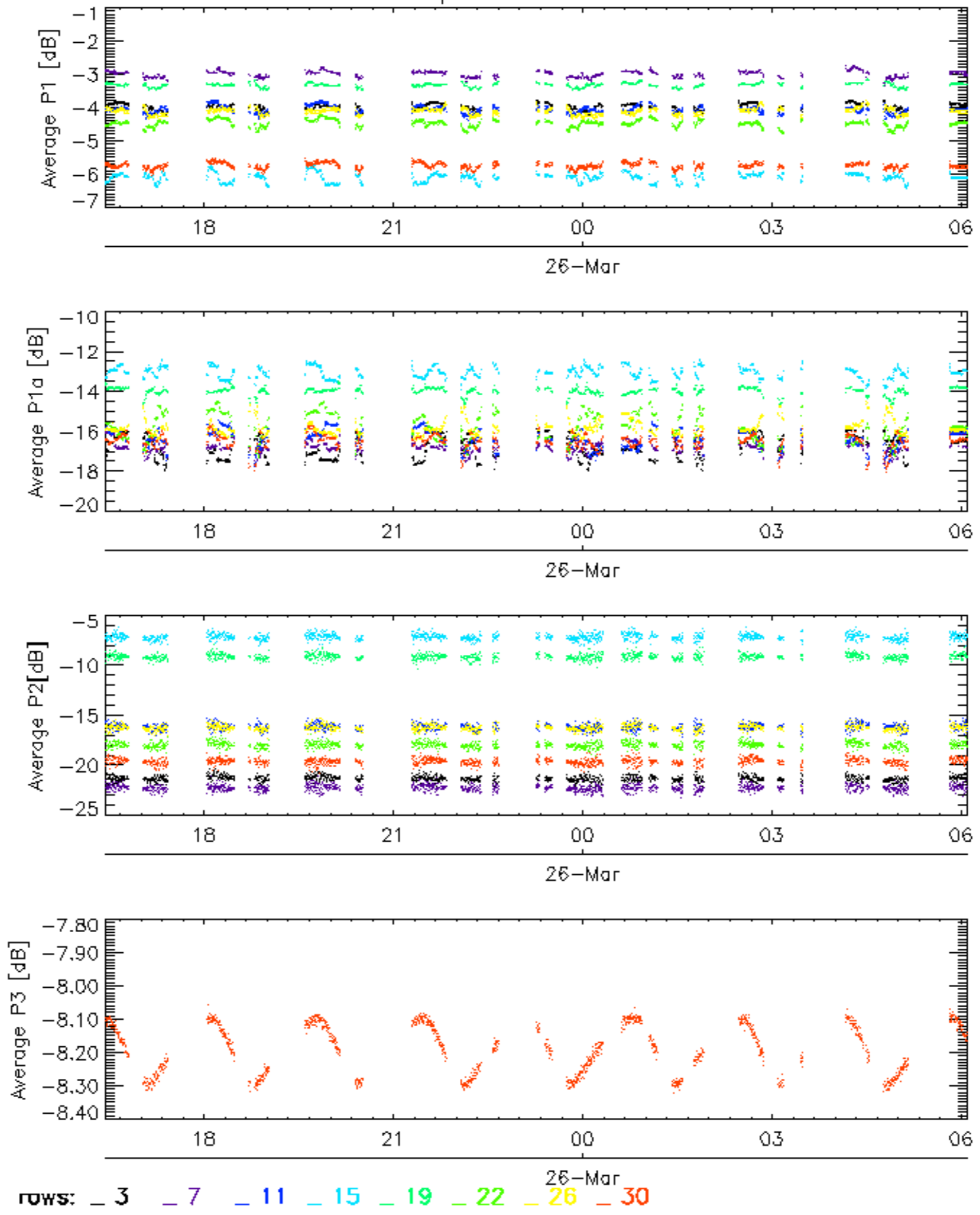


Cal pulses for WVS IS2

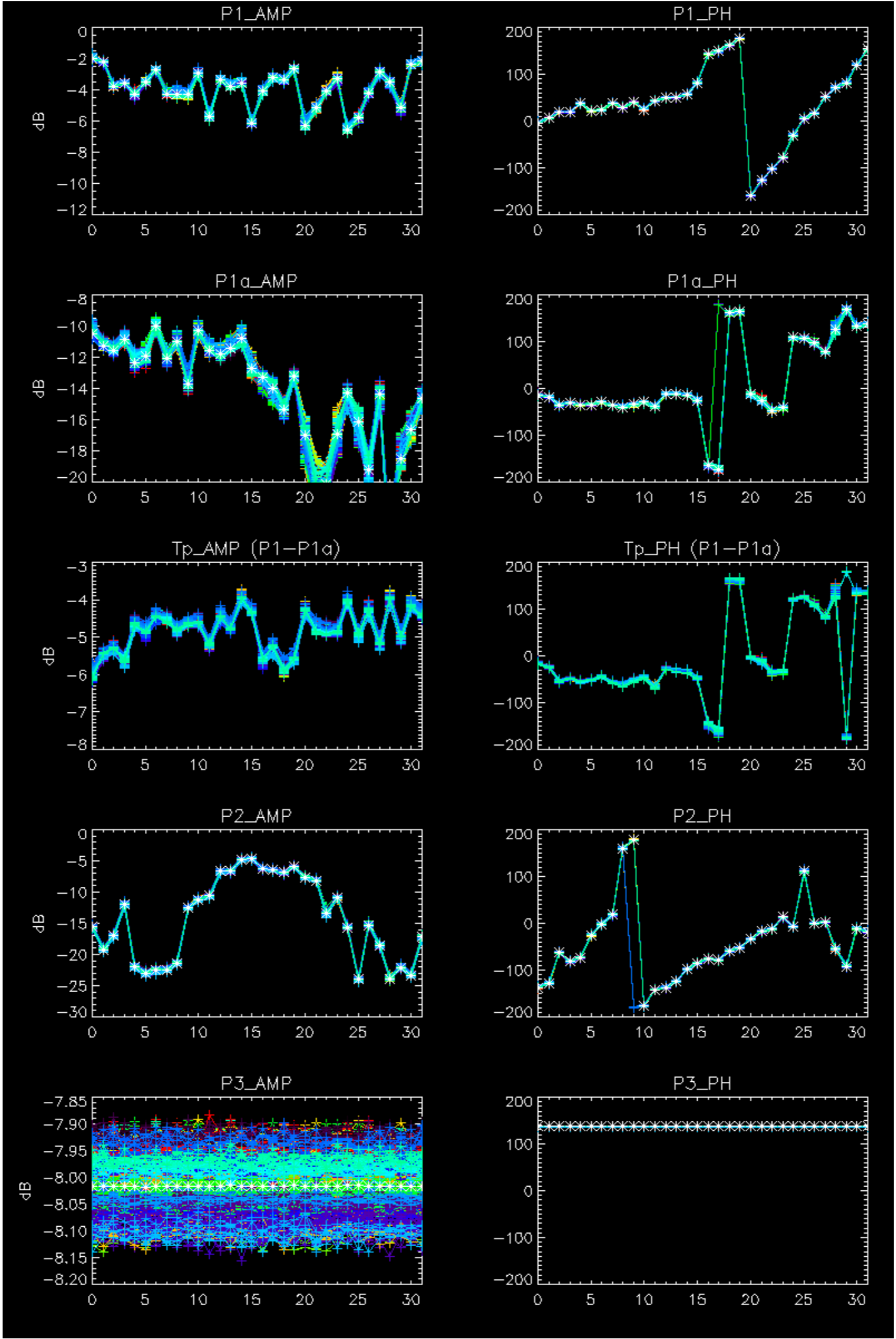


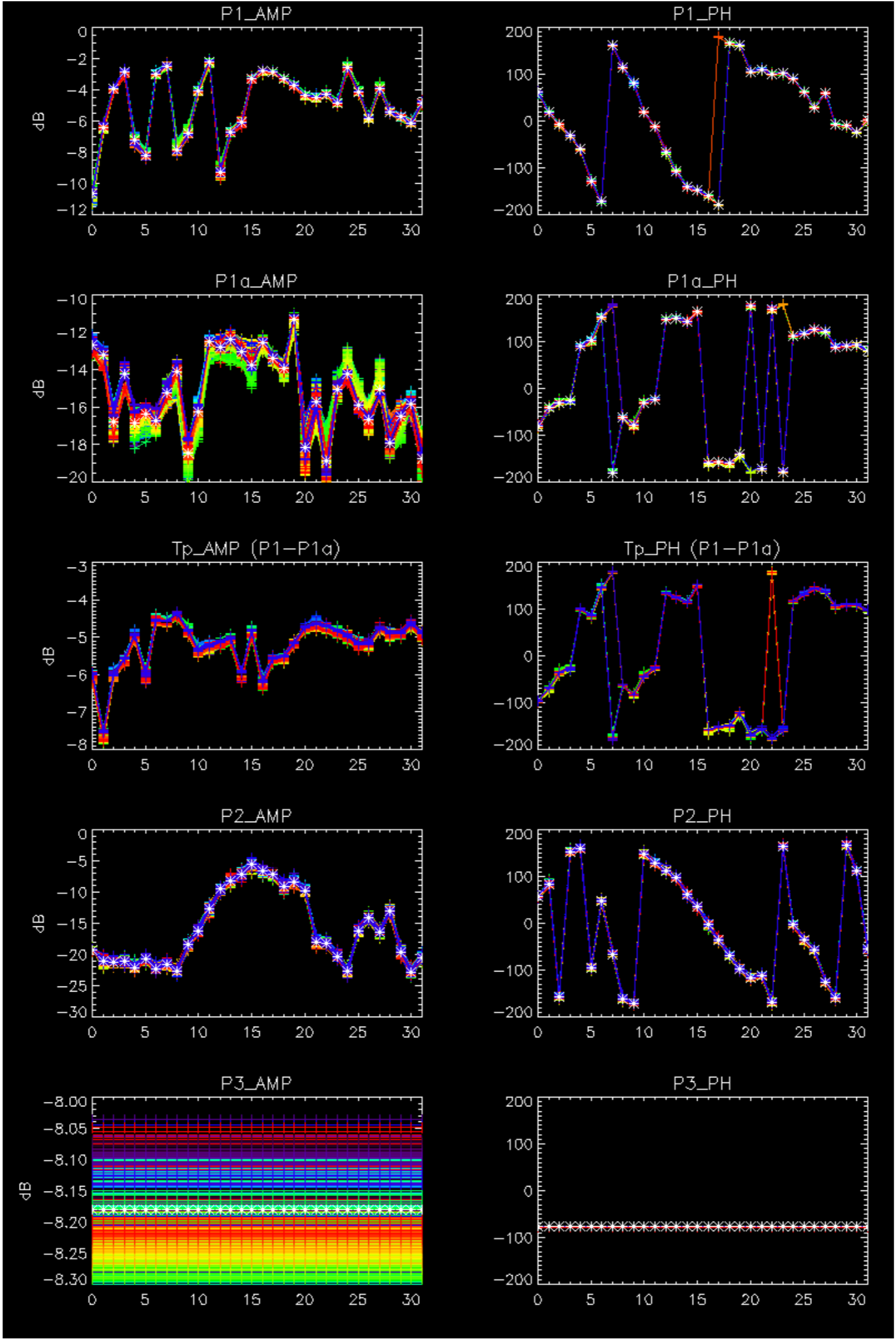
rows: [_ 3](#) [_ 7](#) [_ 11](#) [_ 15](#) [_ 19](#) [_ 22](#) [_ 26](#) [_ 30](#)

Cal pulses for WVS IS2



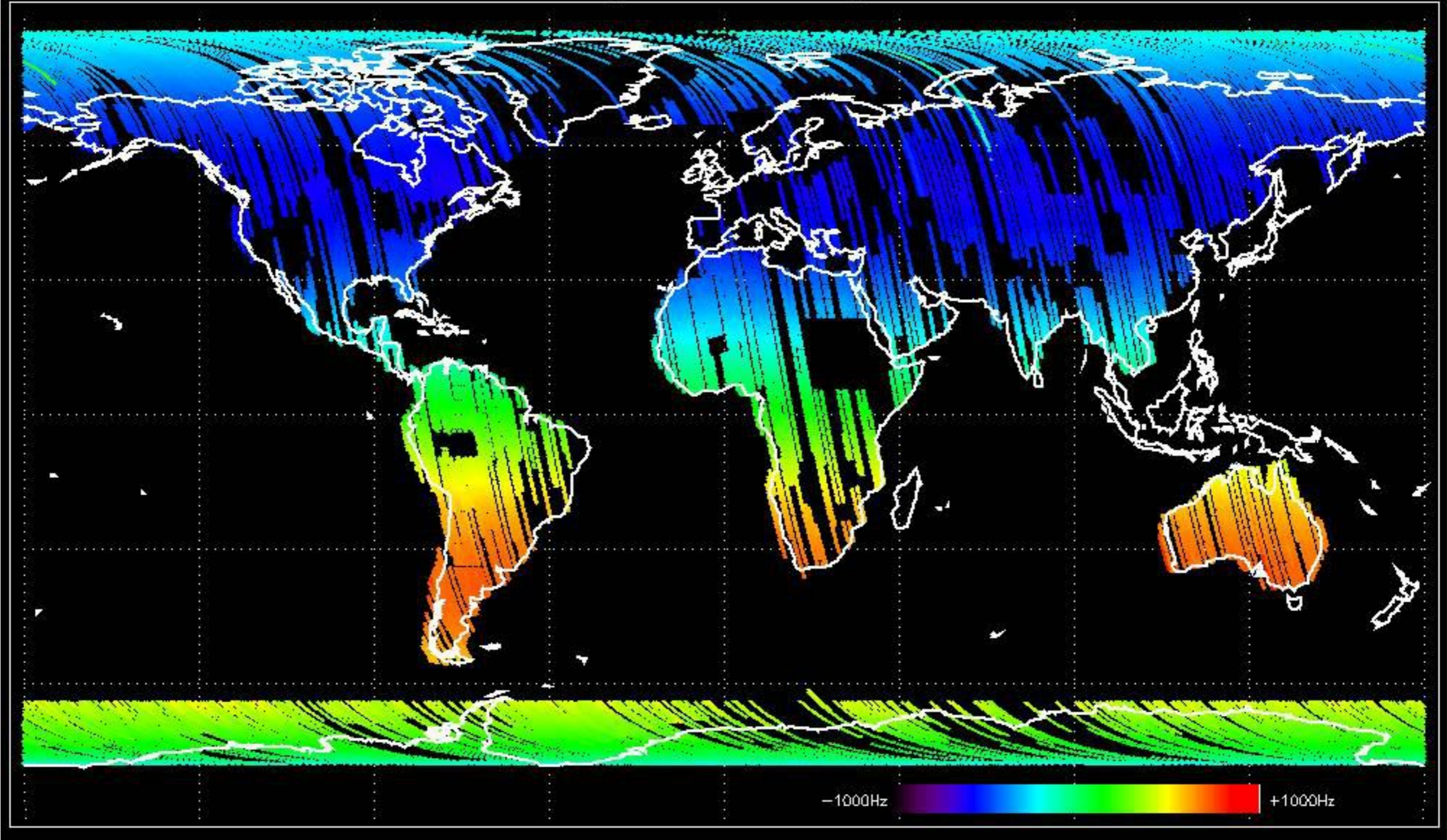
No anomalies observed.



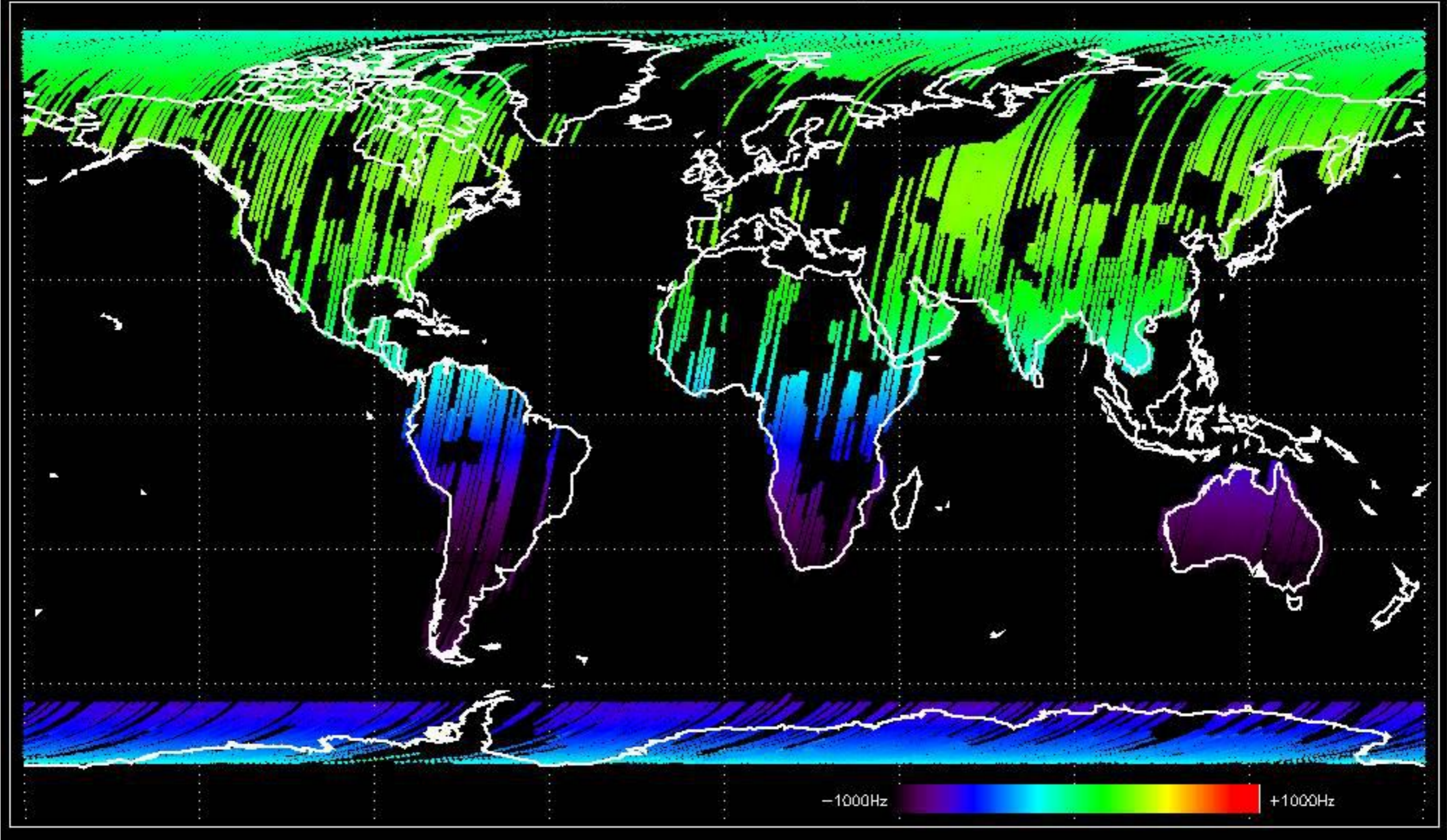


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

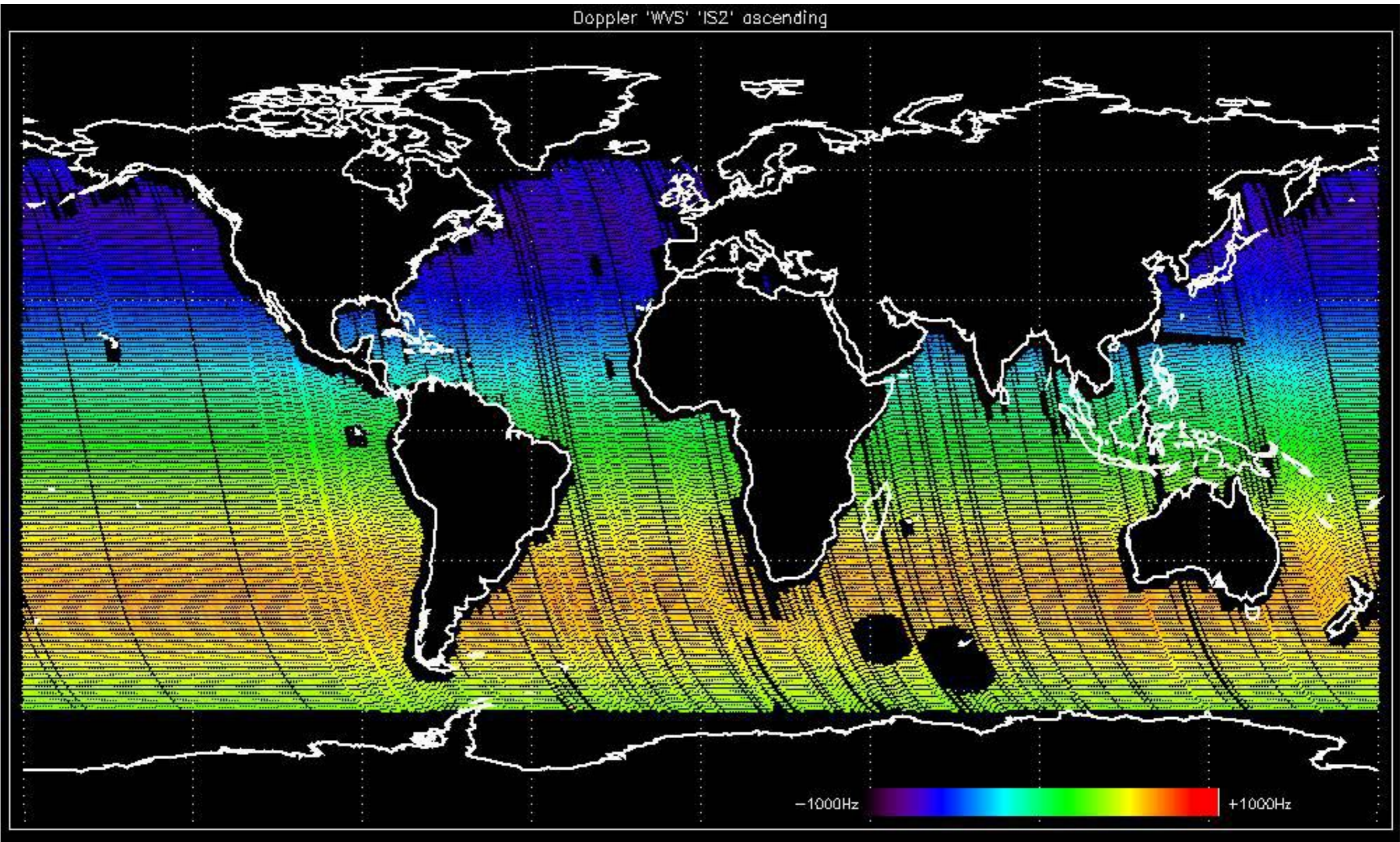
Doppler 'GM1' 'SS1' ascending



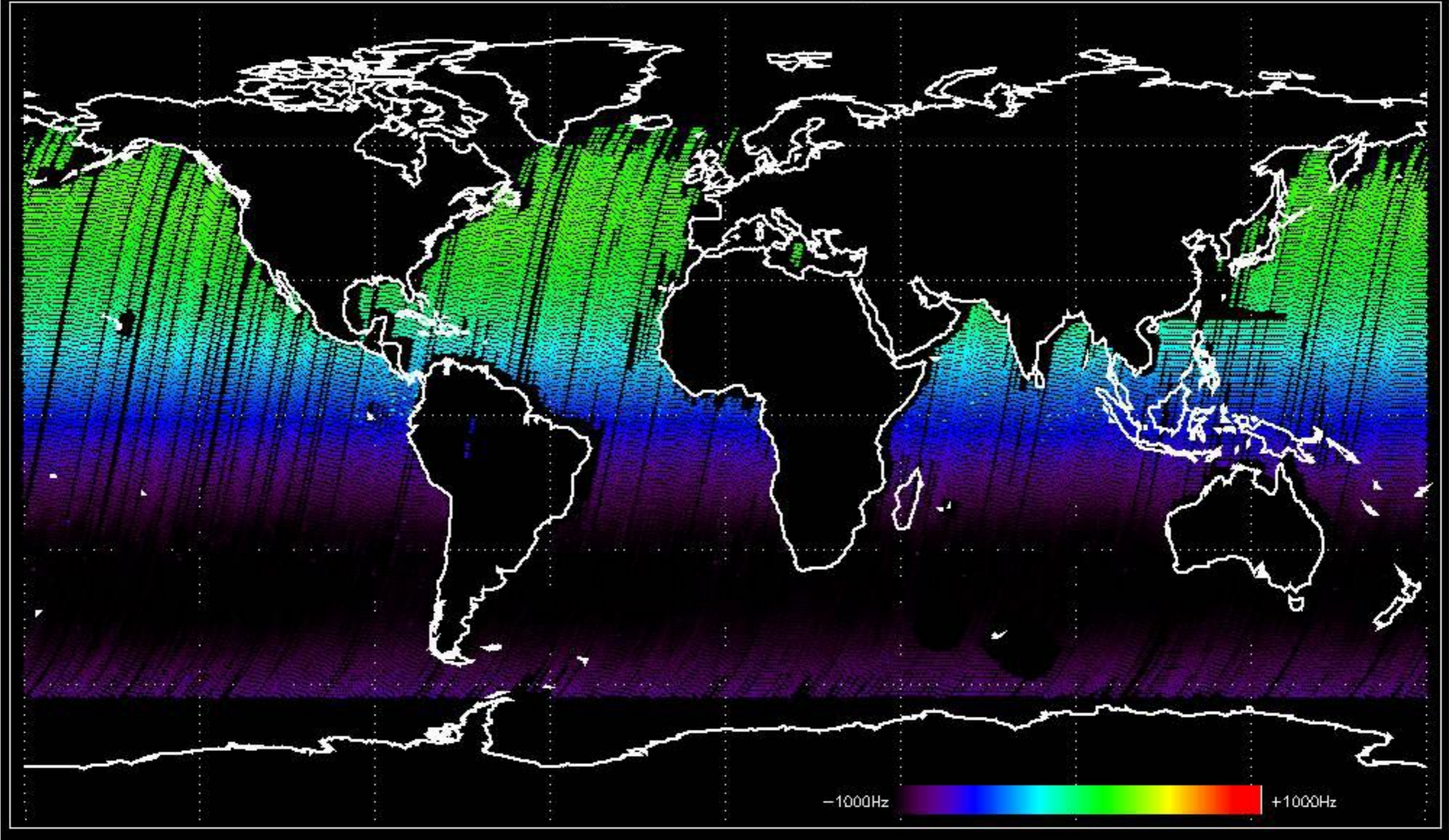
Doppler 'GM1' 'SS1' descending



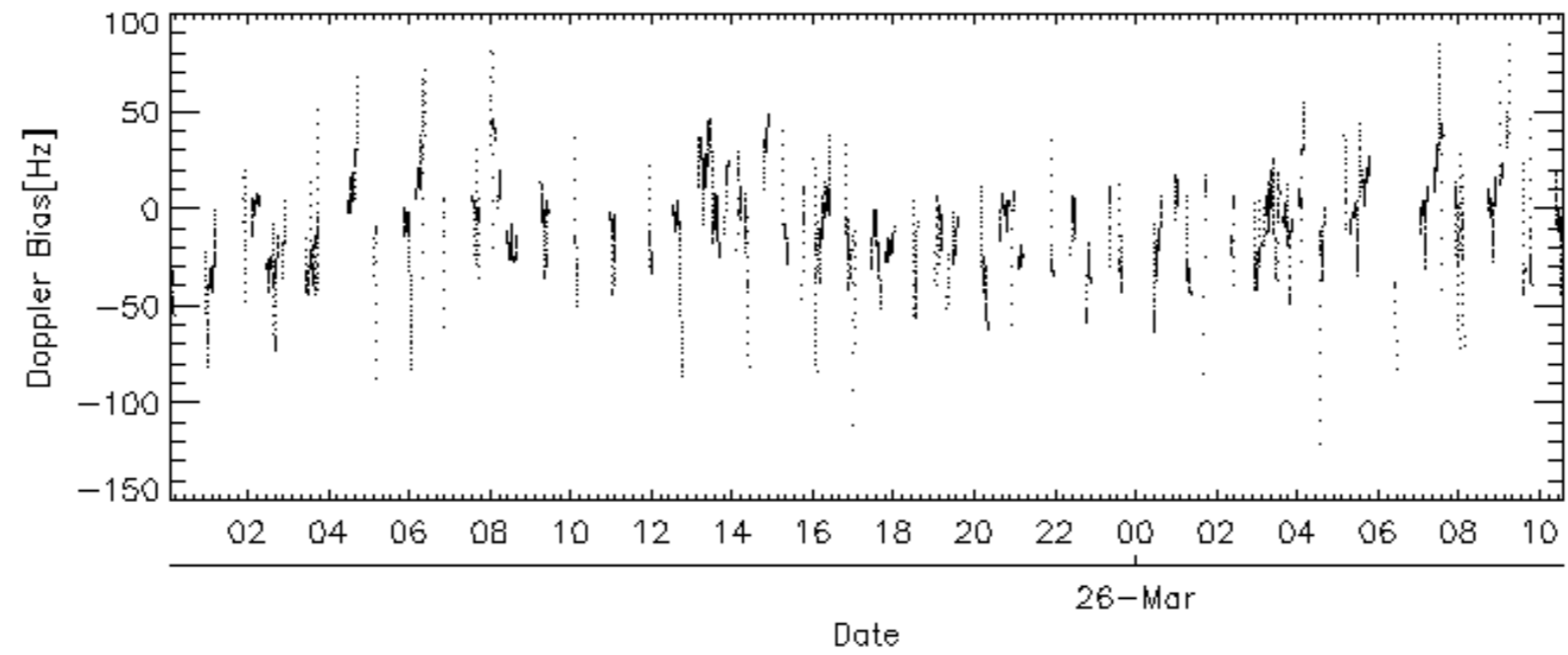
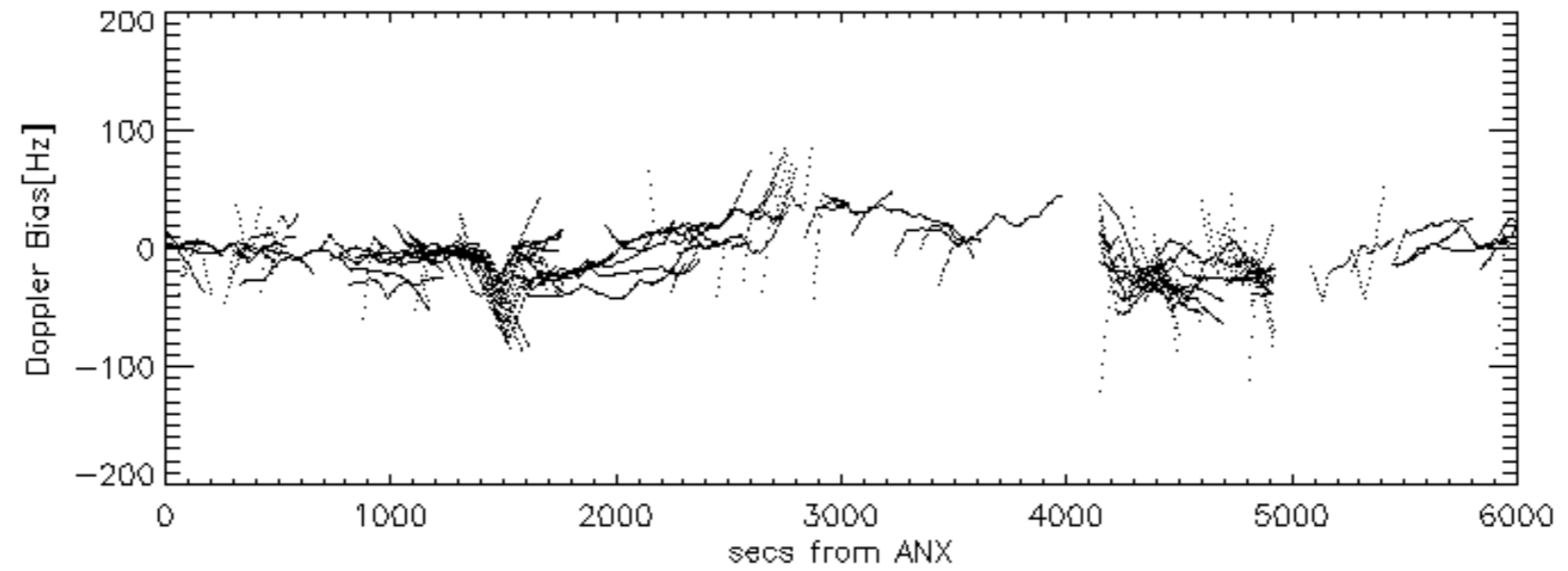
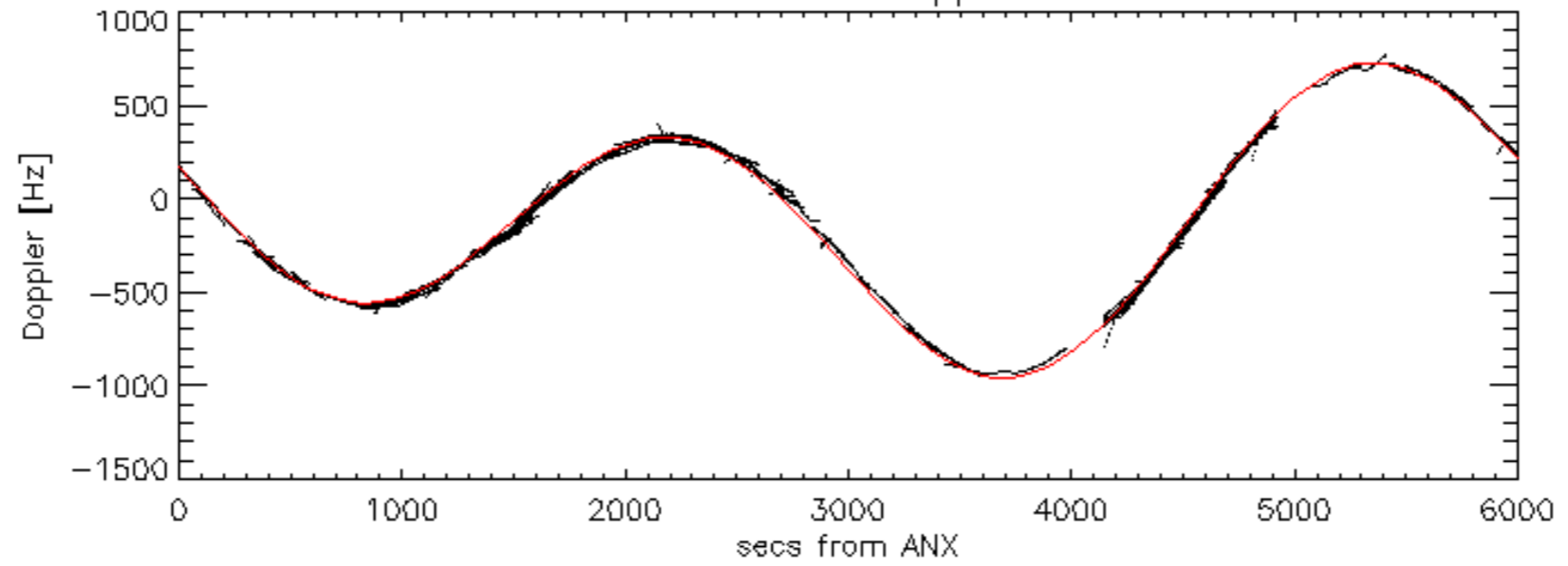
Doppler 'WVS' 'IS2' ascending

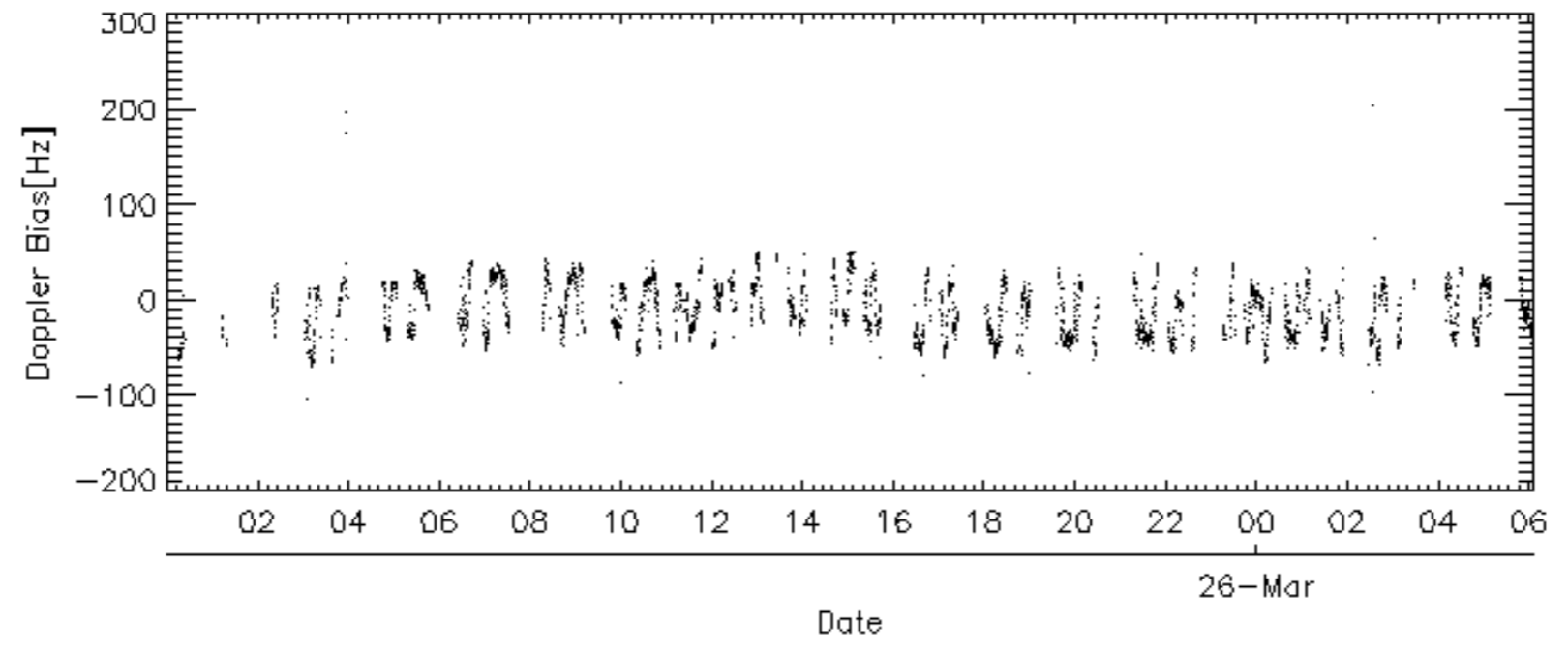
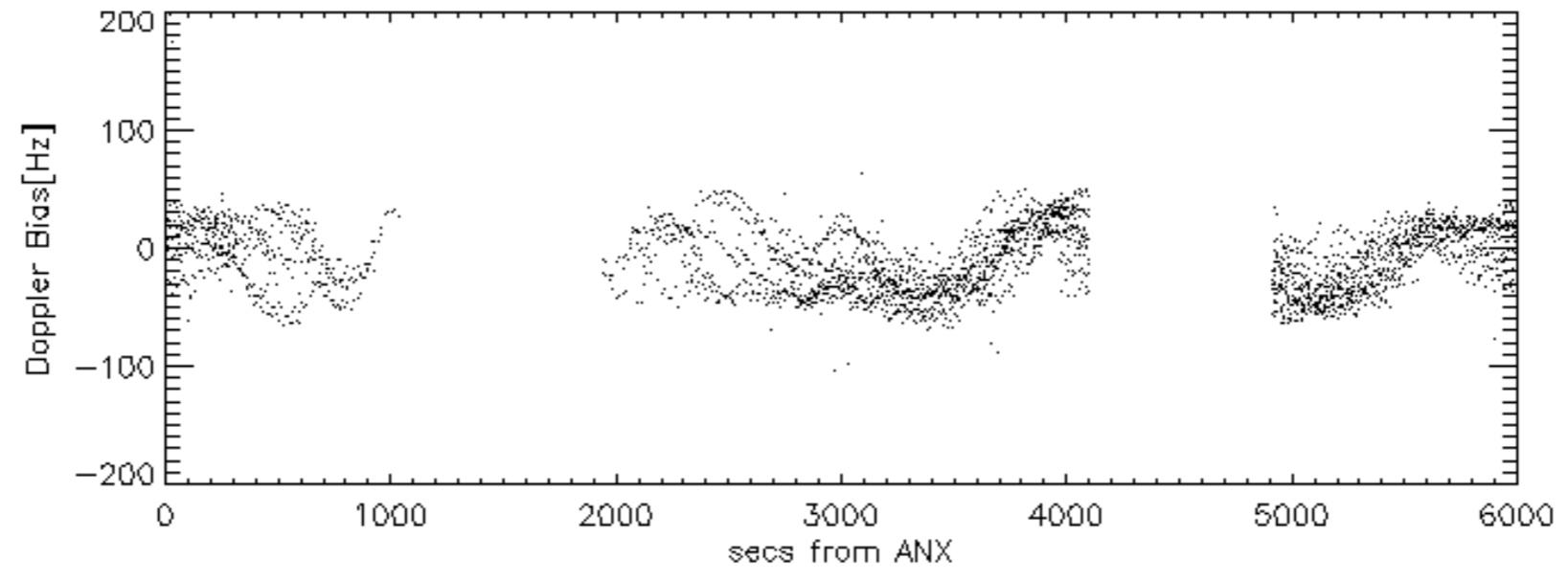
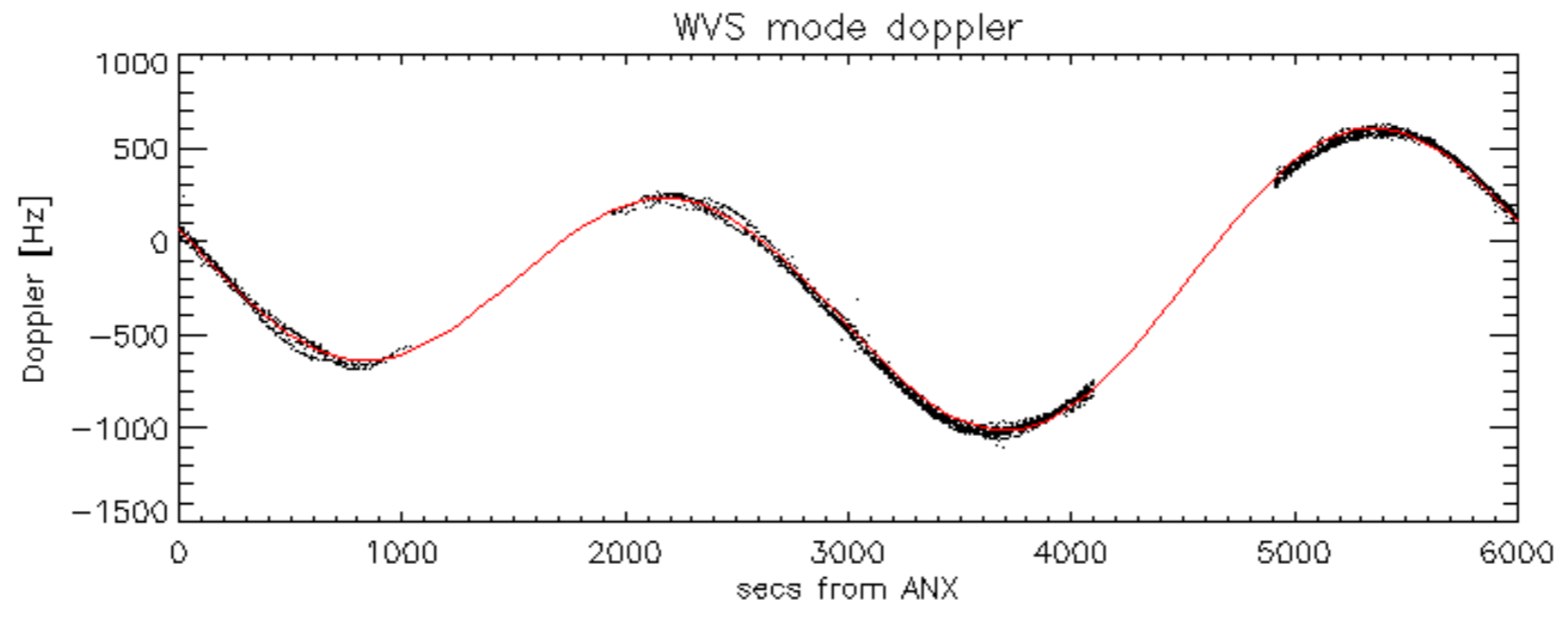


Doppler 'WVS' 'IS2' descending

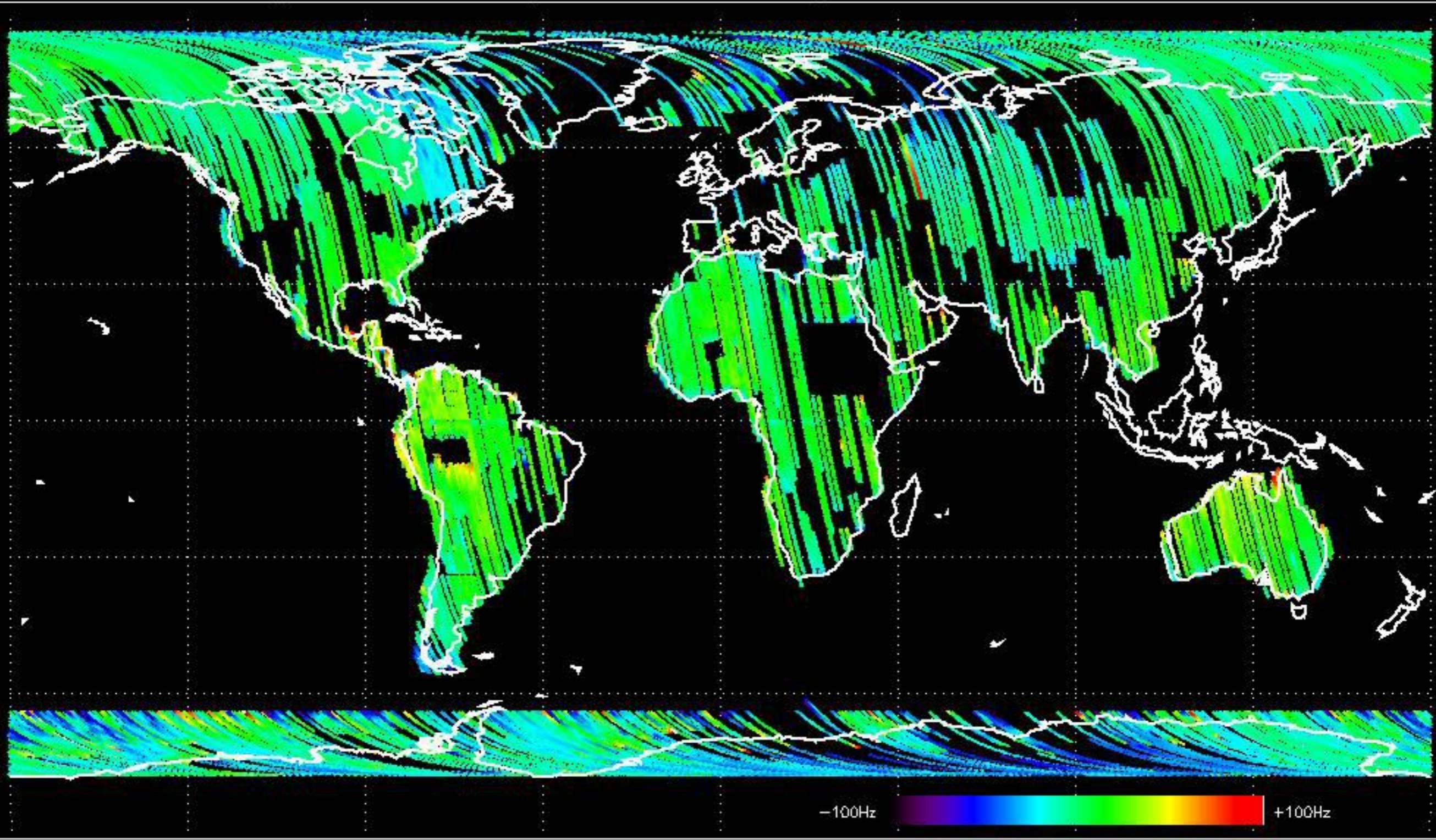


GM1 mode doppler

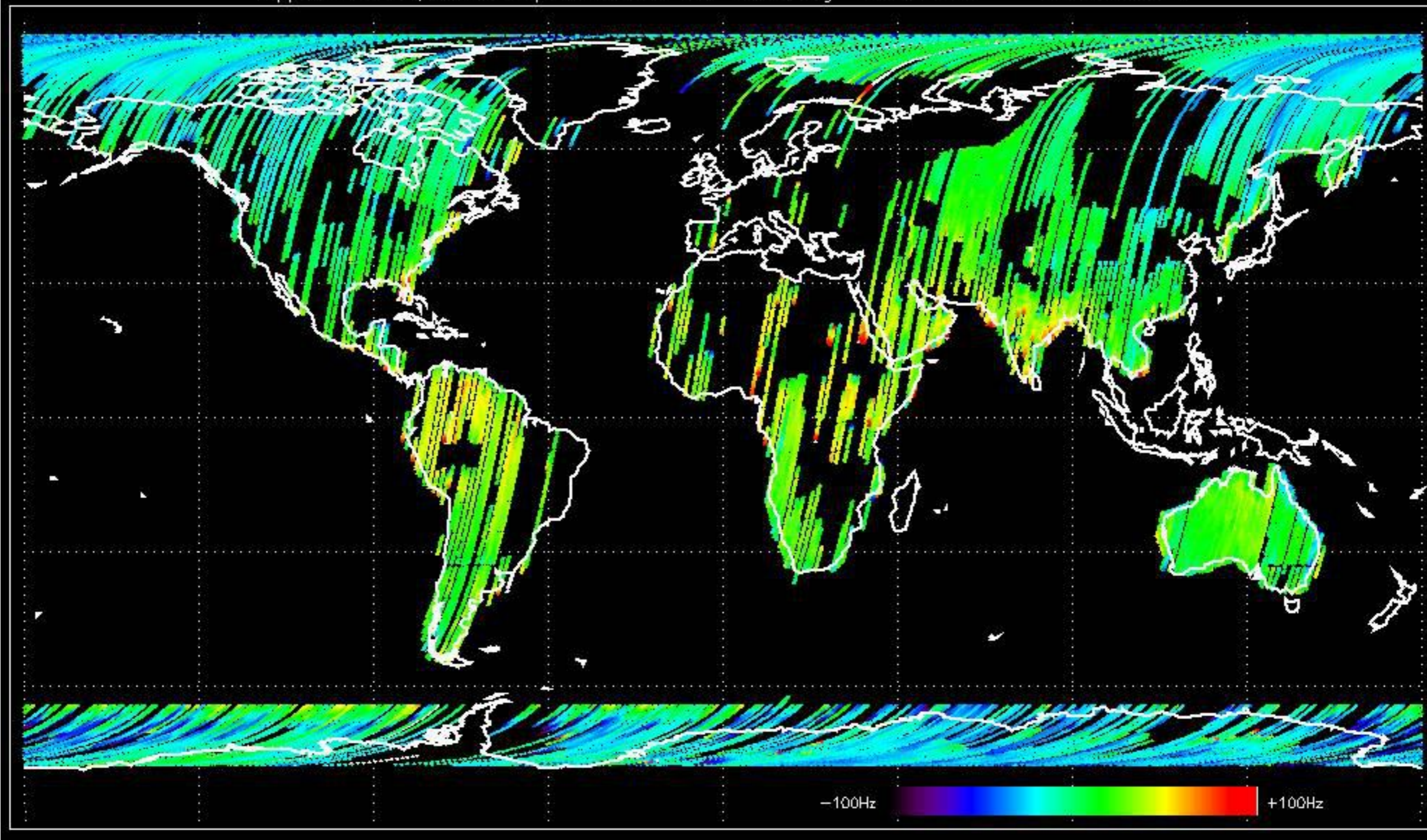




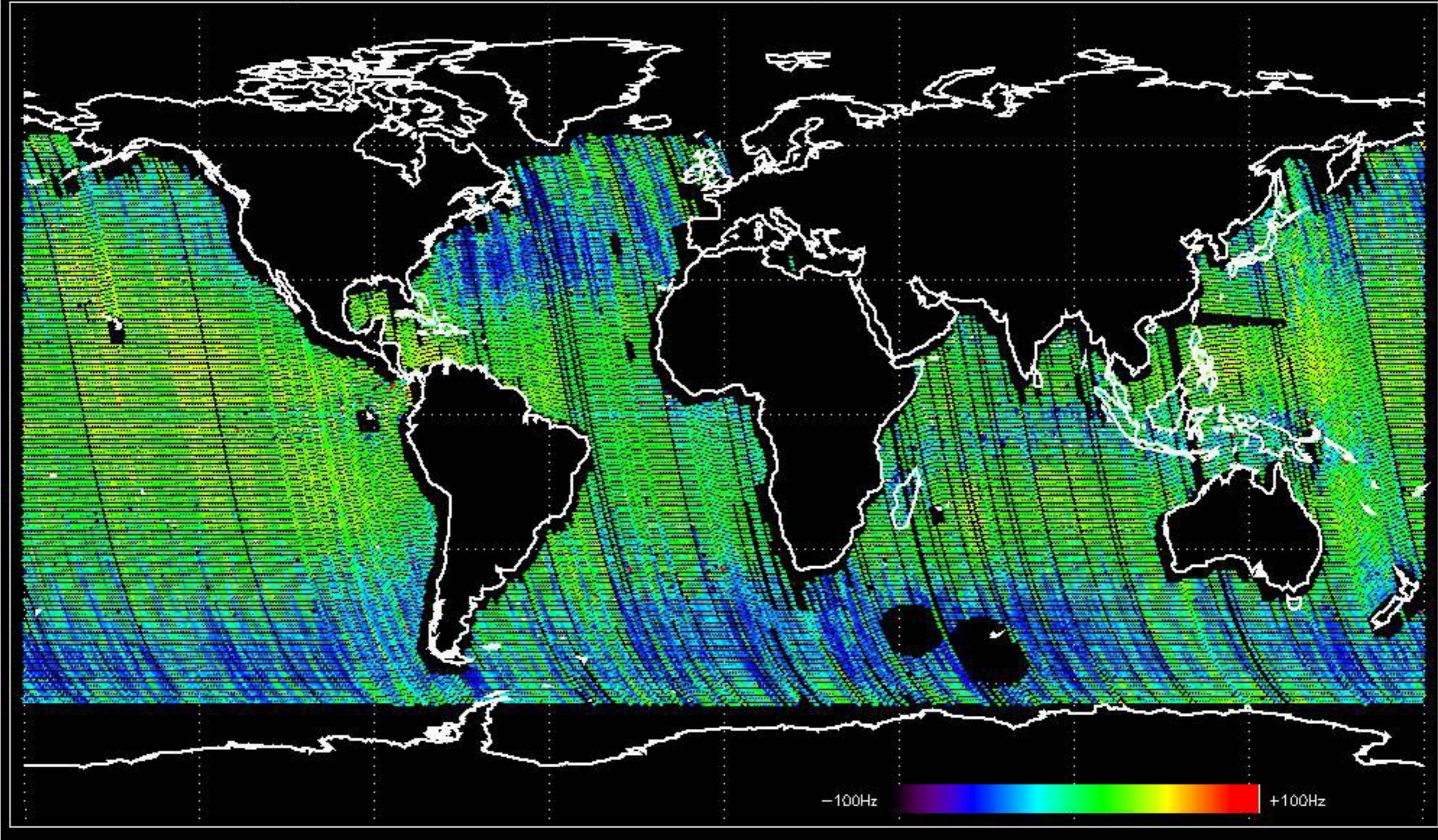
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -8.1332841 Hz



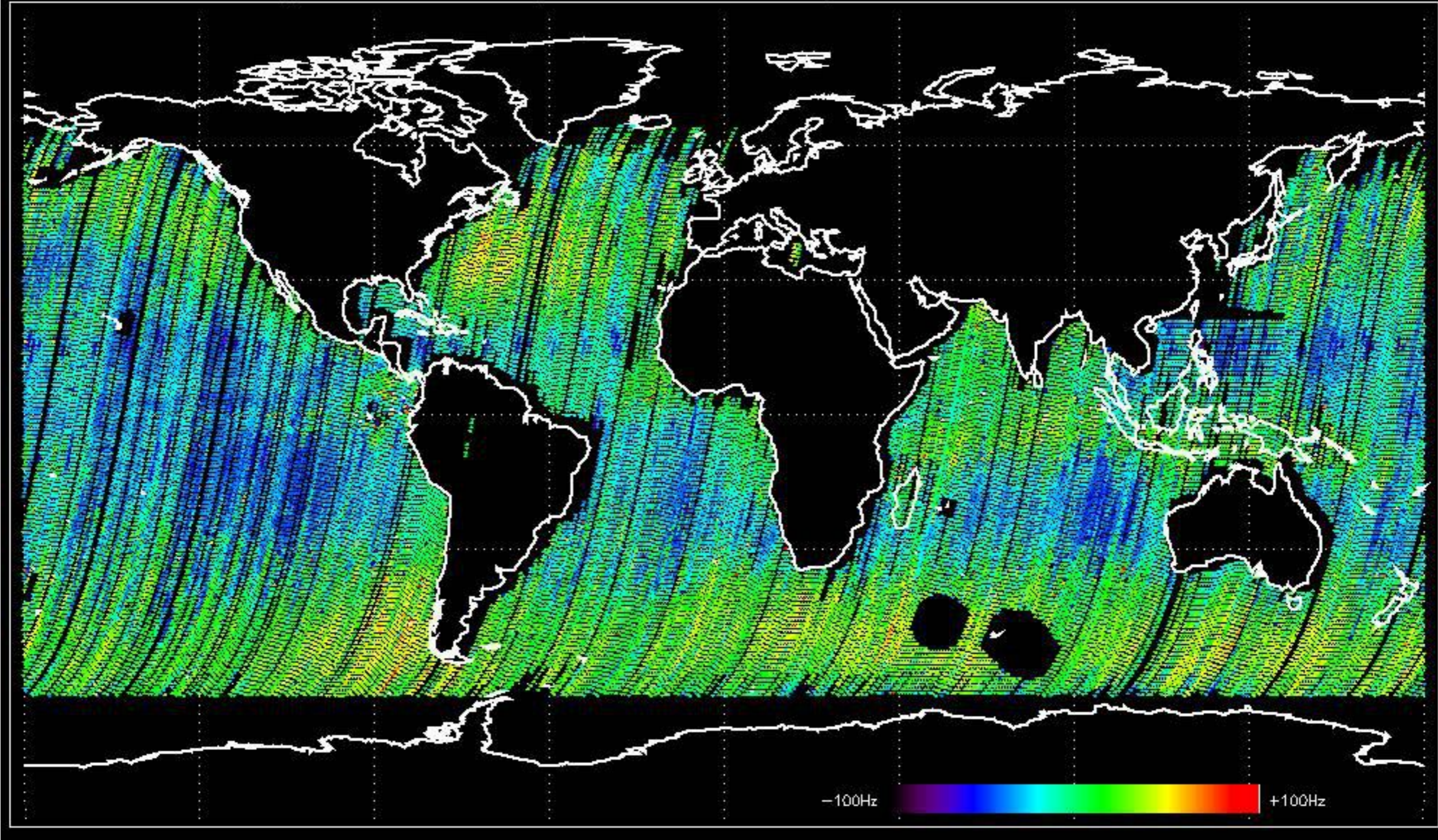
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -6.5974852 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -6.9208822 Hz

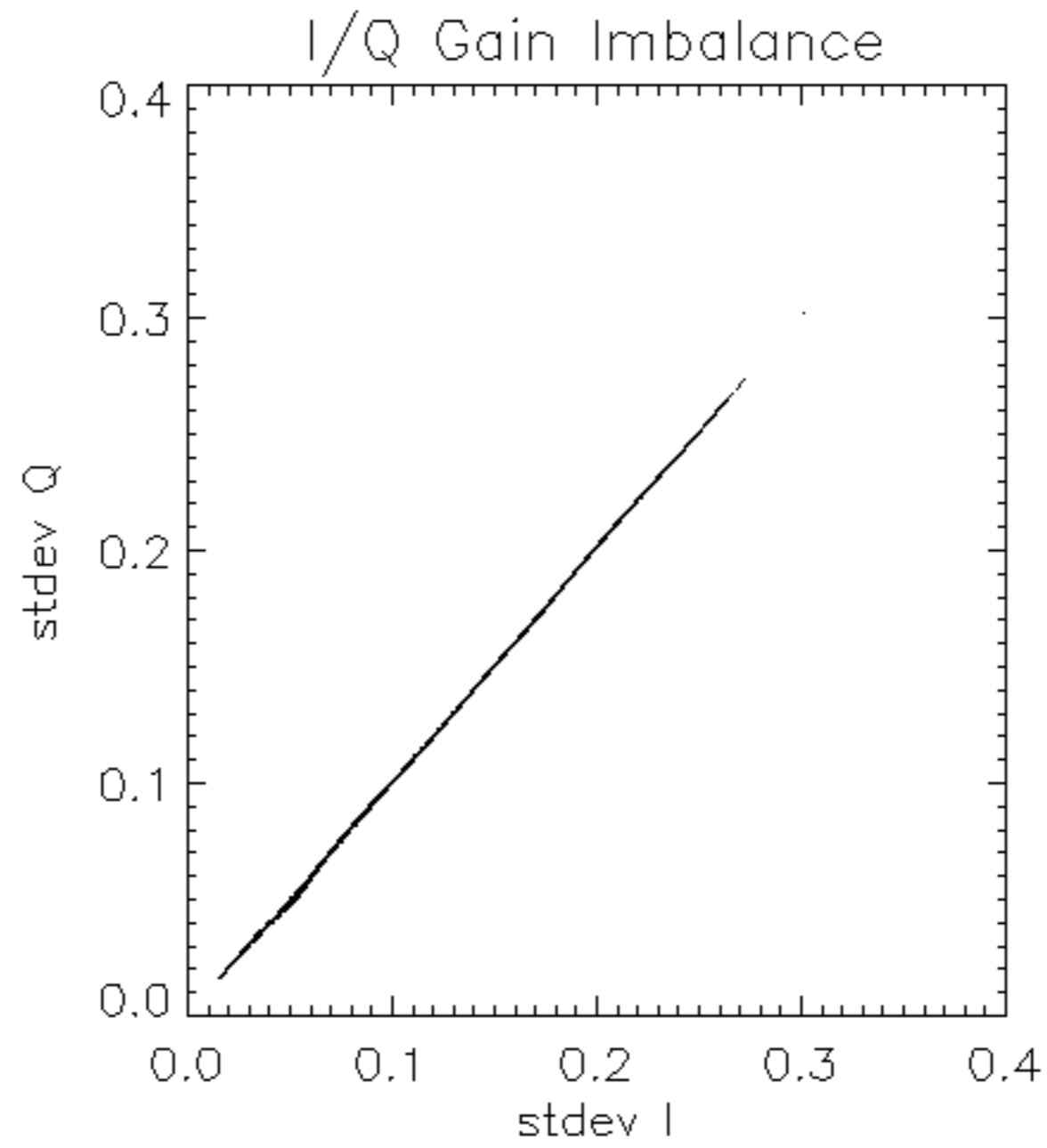


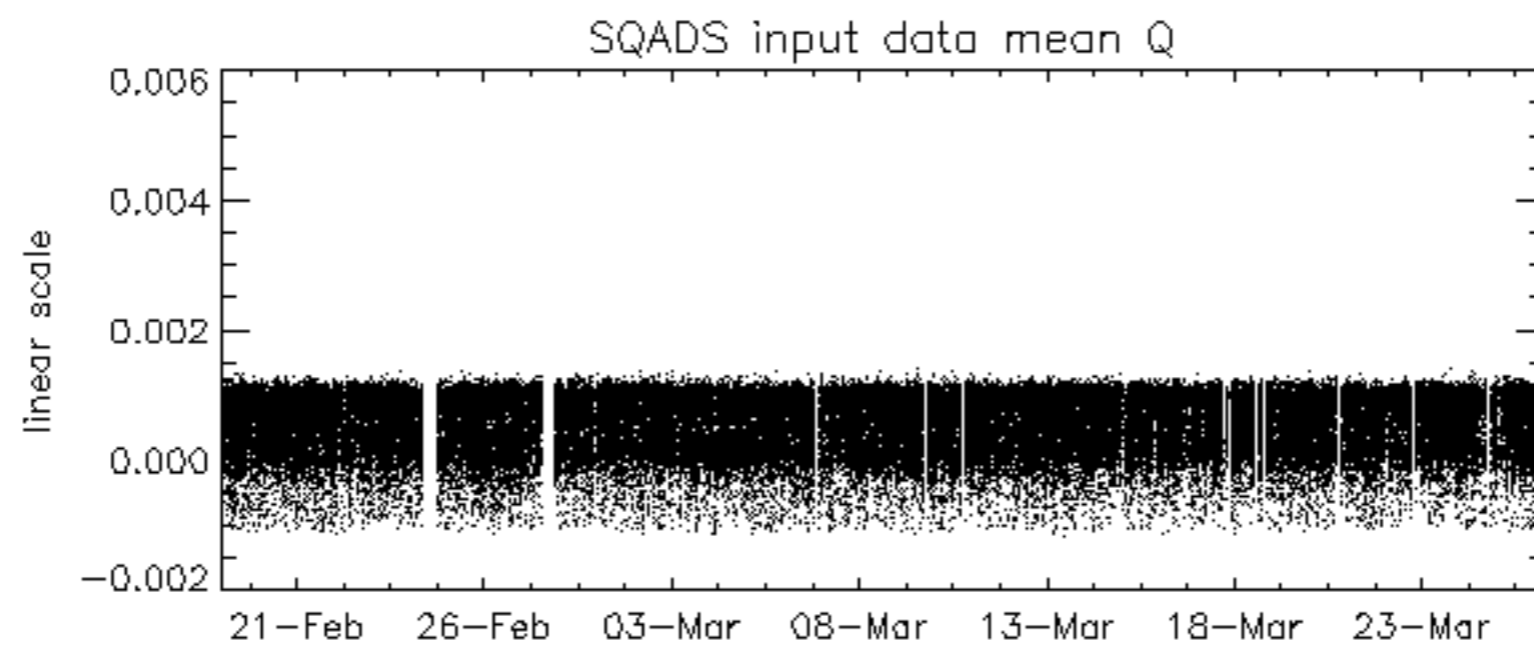
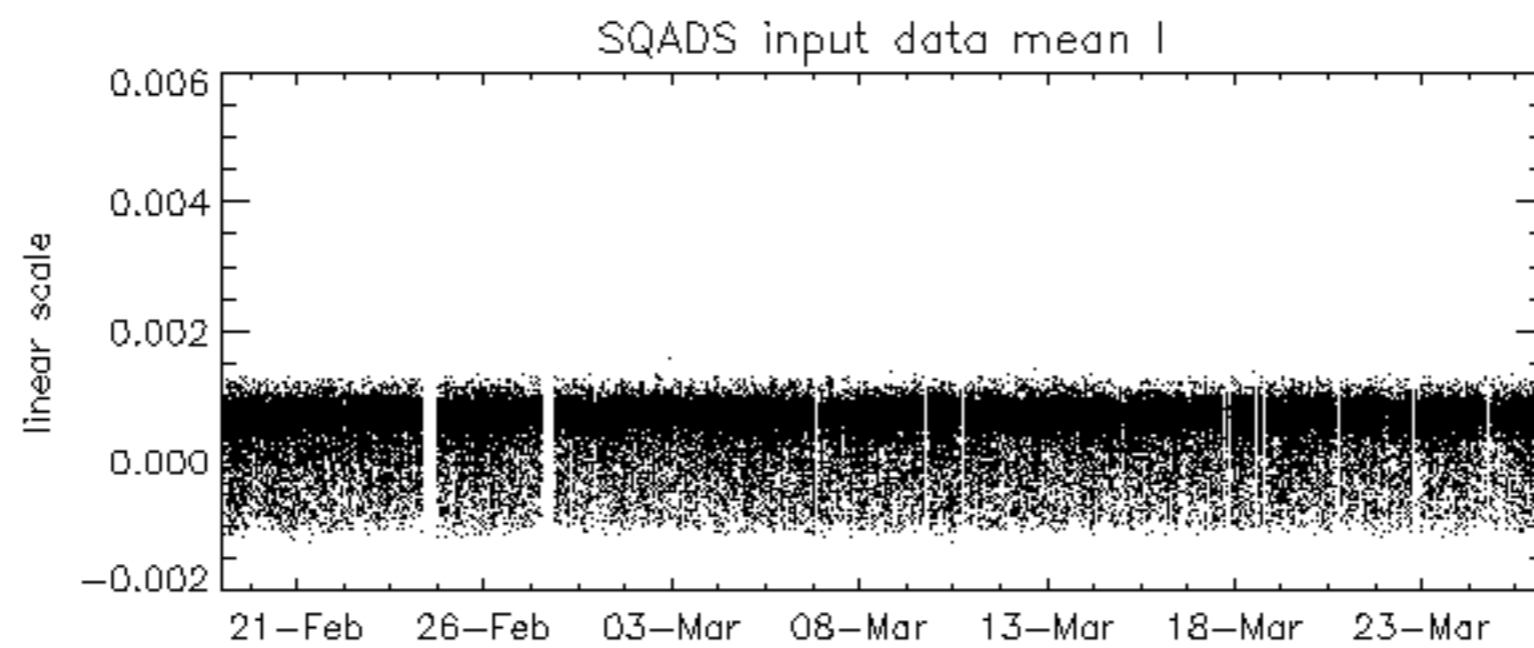
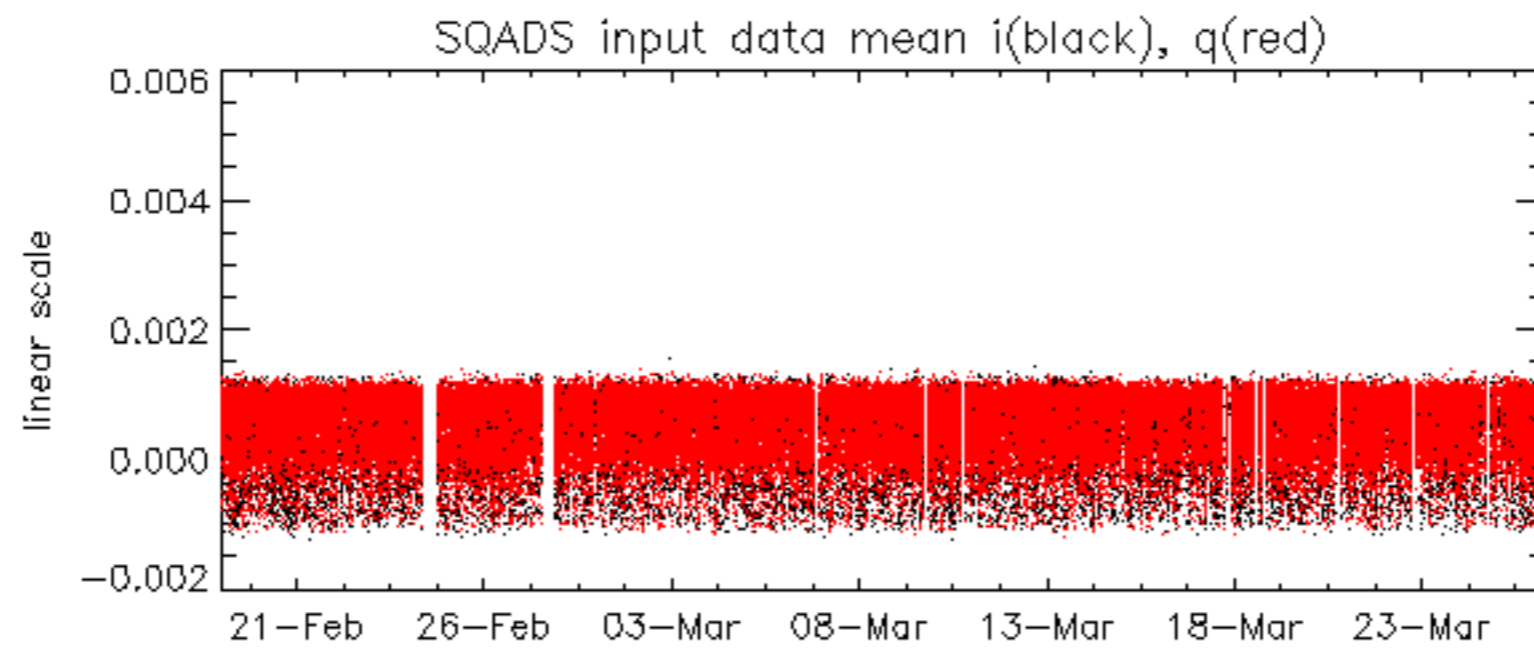
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -8.6853913 Hz

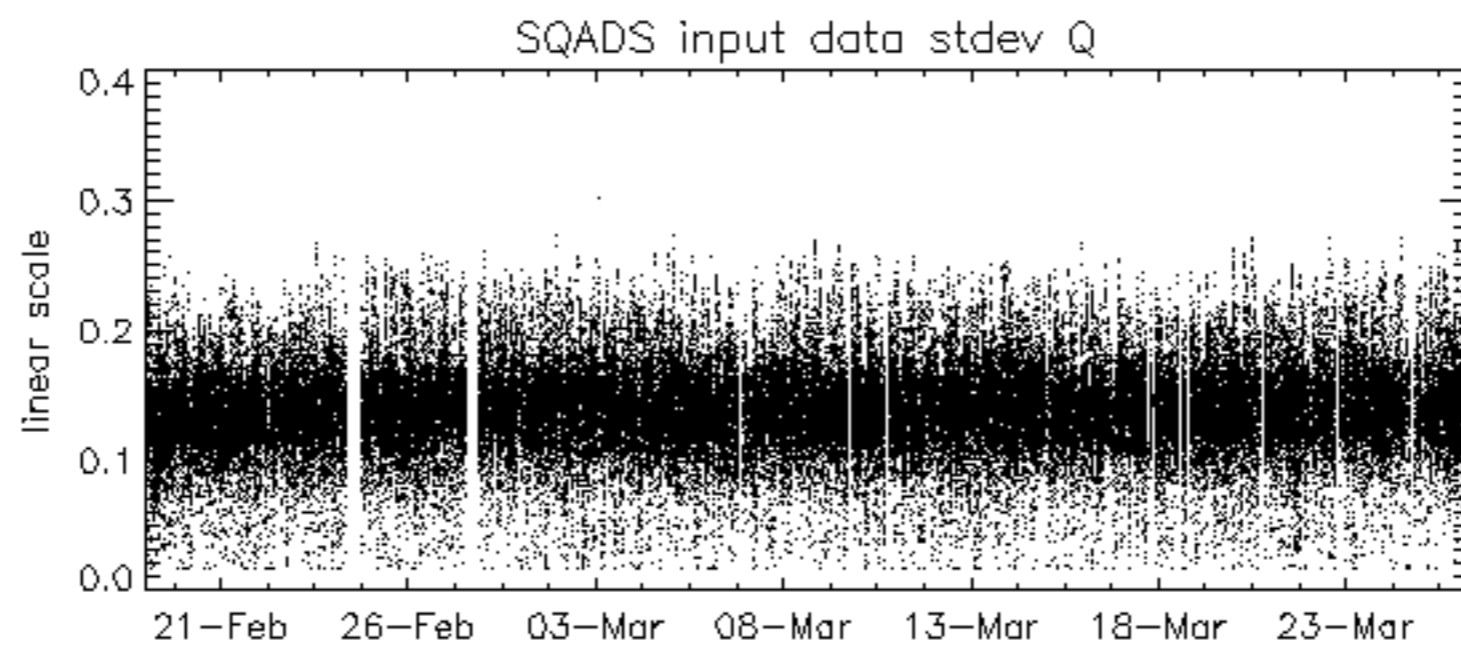
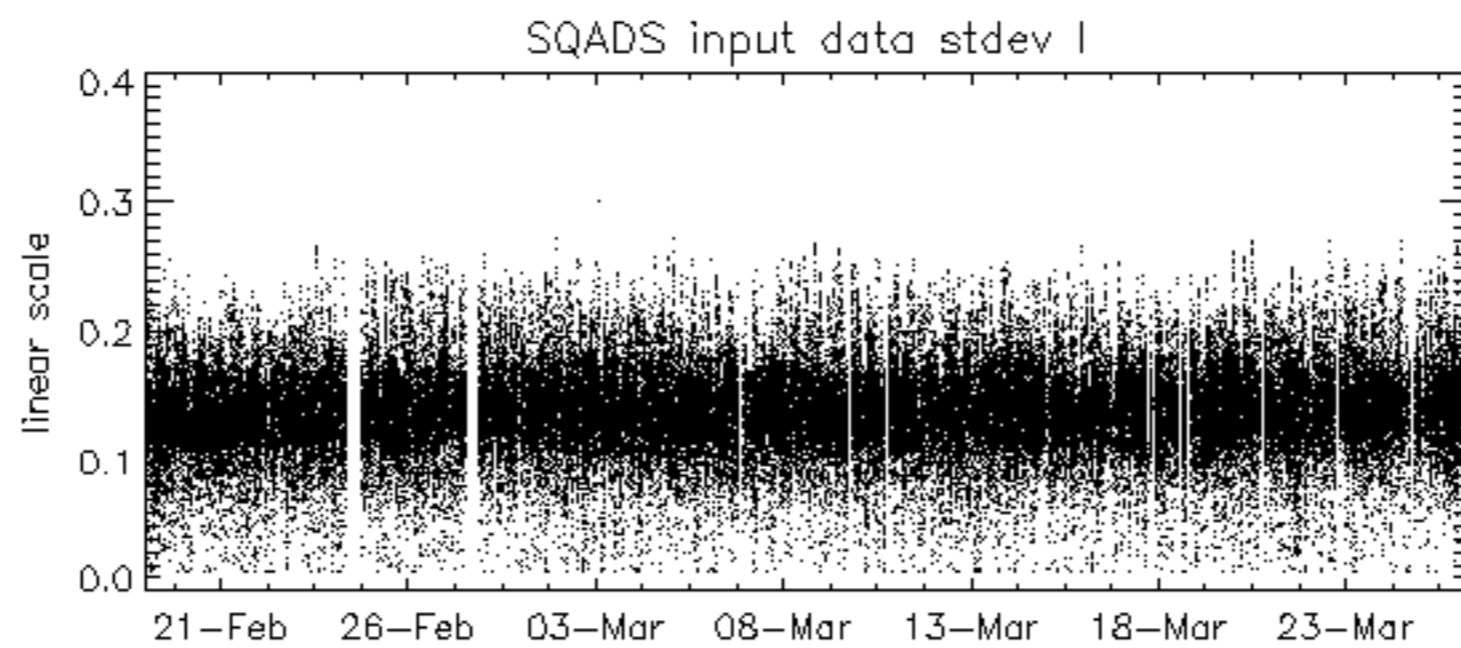
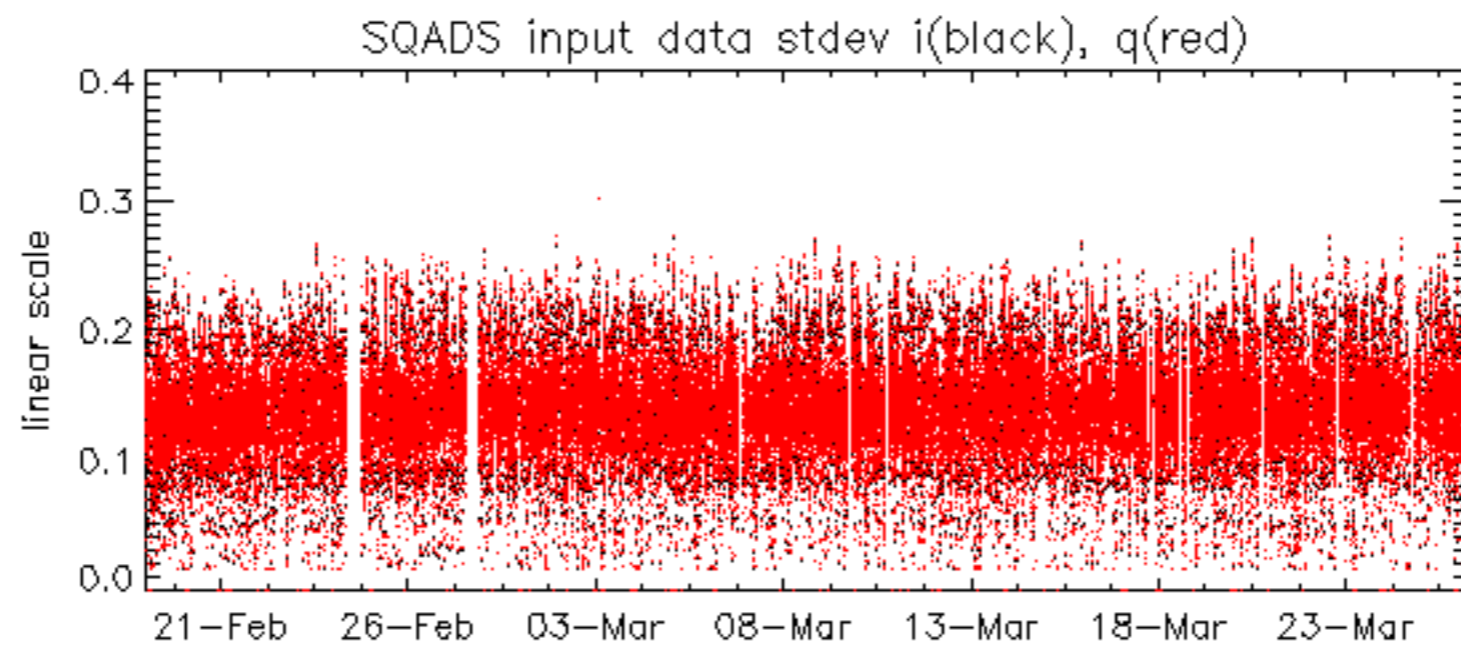


No anomalies observed on available MS products:

No anomalies observed.



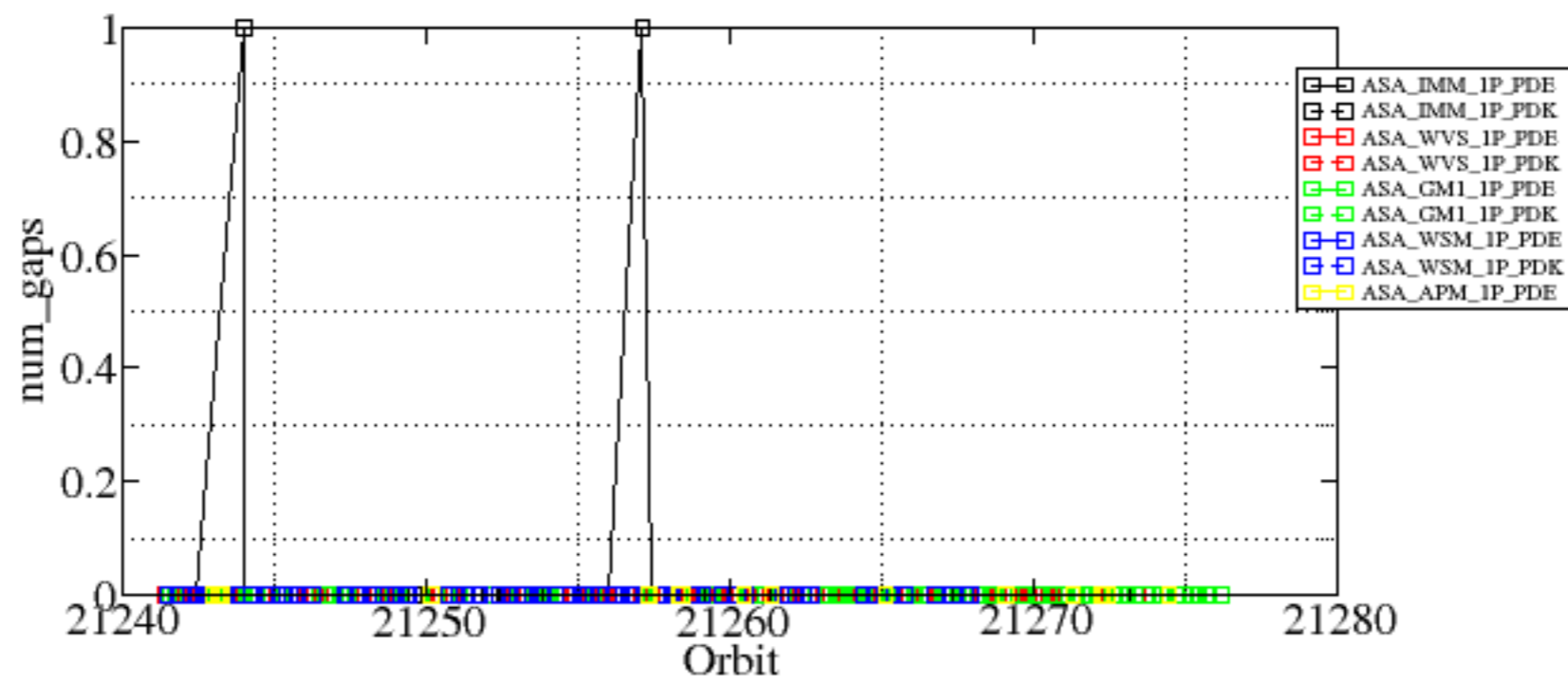


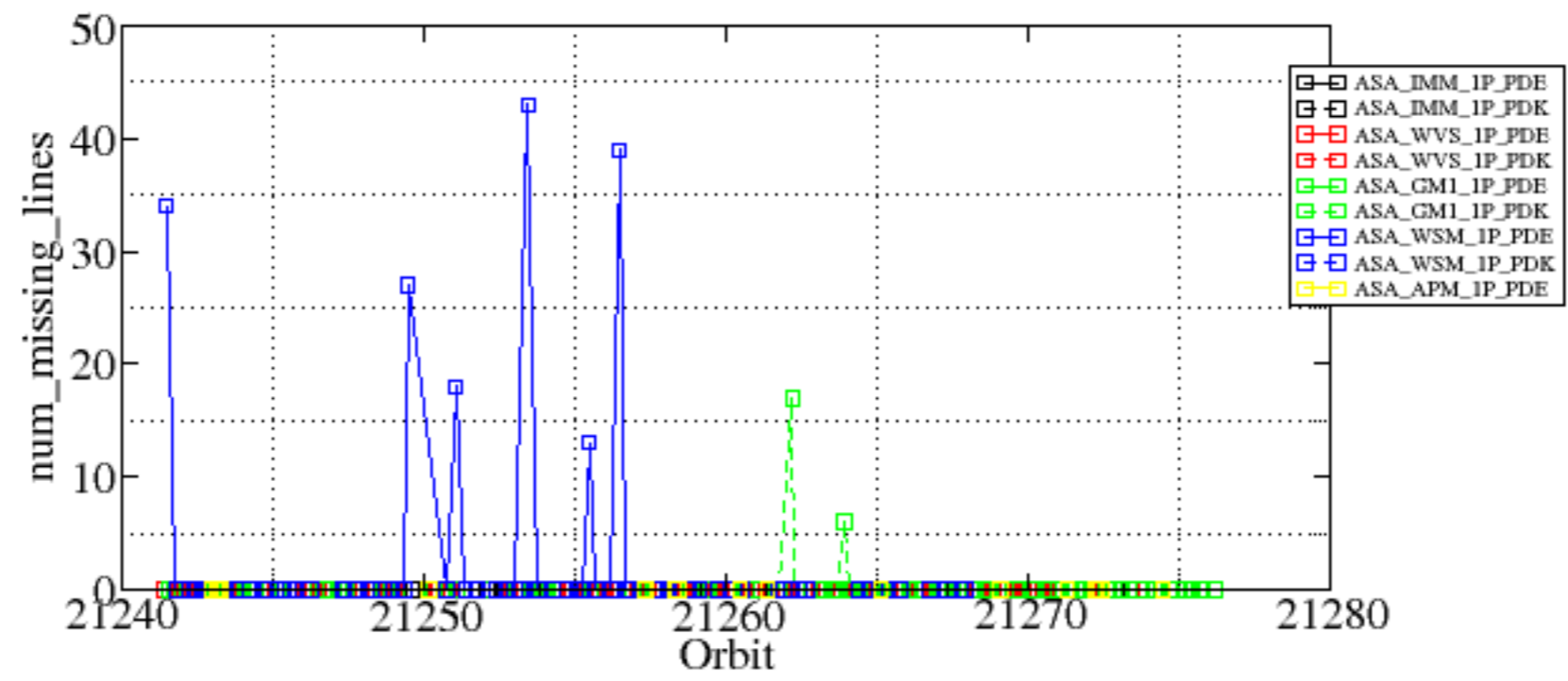


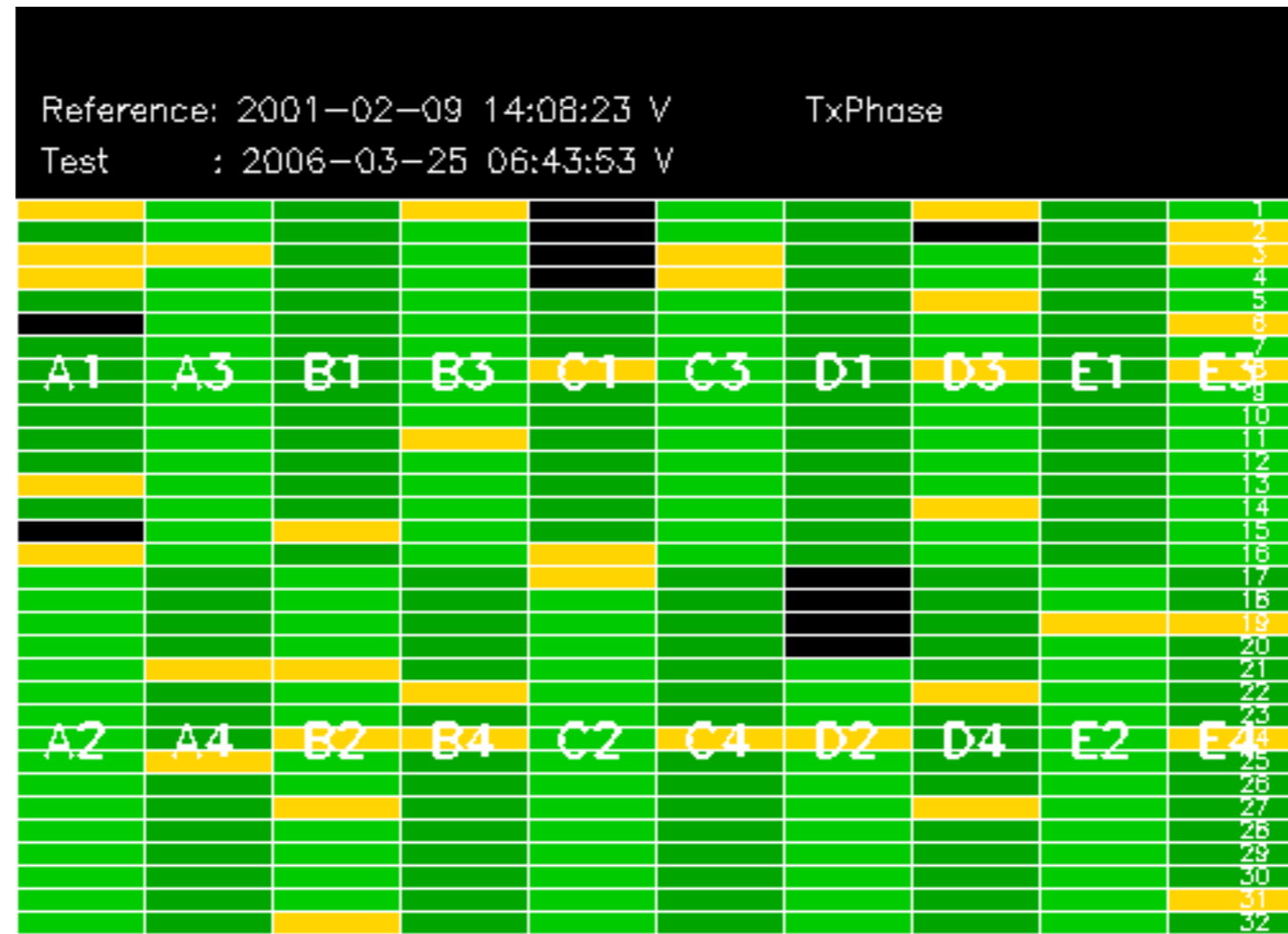
Summary of analysis for the last 3 days 2006032[456]

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

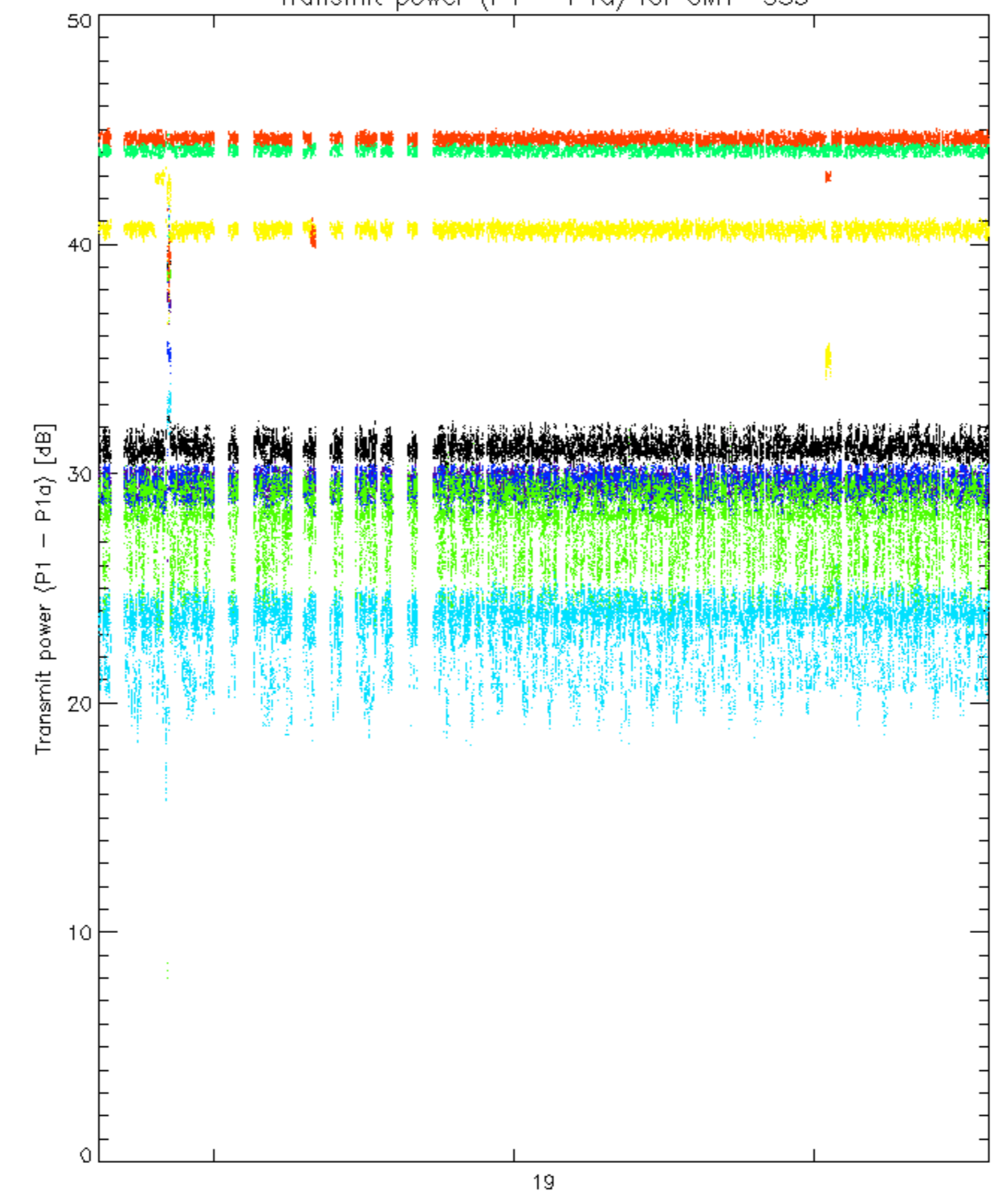
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060324_042639_00000522046_00147_21243_1443.N1	1	0
ASA_IMM_1PNPDE20060325_022726_00000692046_00161_21257_1486.N1	1	0
ASA_GM1_1PNPDK20060325_105812_000005072046_00166_21262_0859.N1	0	17
ASA_GM1_1PNPDK20060325_134937_000003502046_00167_21263_0870.N1	0	6
ASA_WSM_1PNPDE20060324_001349_000002262046_00145_21241_2219.N1	0	34
ASA_WSM_1PNPDE20060324_133838_00000852046_00153_21249_2321.N1	0	27
ASA_WSM_1PNPDE20060324_161721_000002202046_00155_21251_2319.N1	0	18
ASA_WSM_1PNPDE20060324_201713_00000862046_00157_21253_2363.N1	0	43
ASA_WSM_1PNPDE20060324_234146_000003062046_00159_21255_2398.N1	0	13
ASA_WSM_1PNPDE20060325_012047_000001282046_00160_21256_2418.N1	0	39



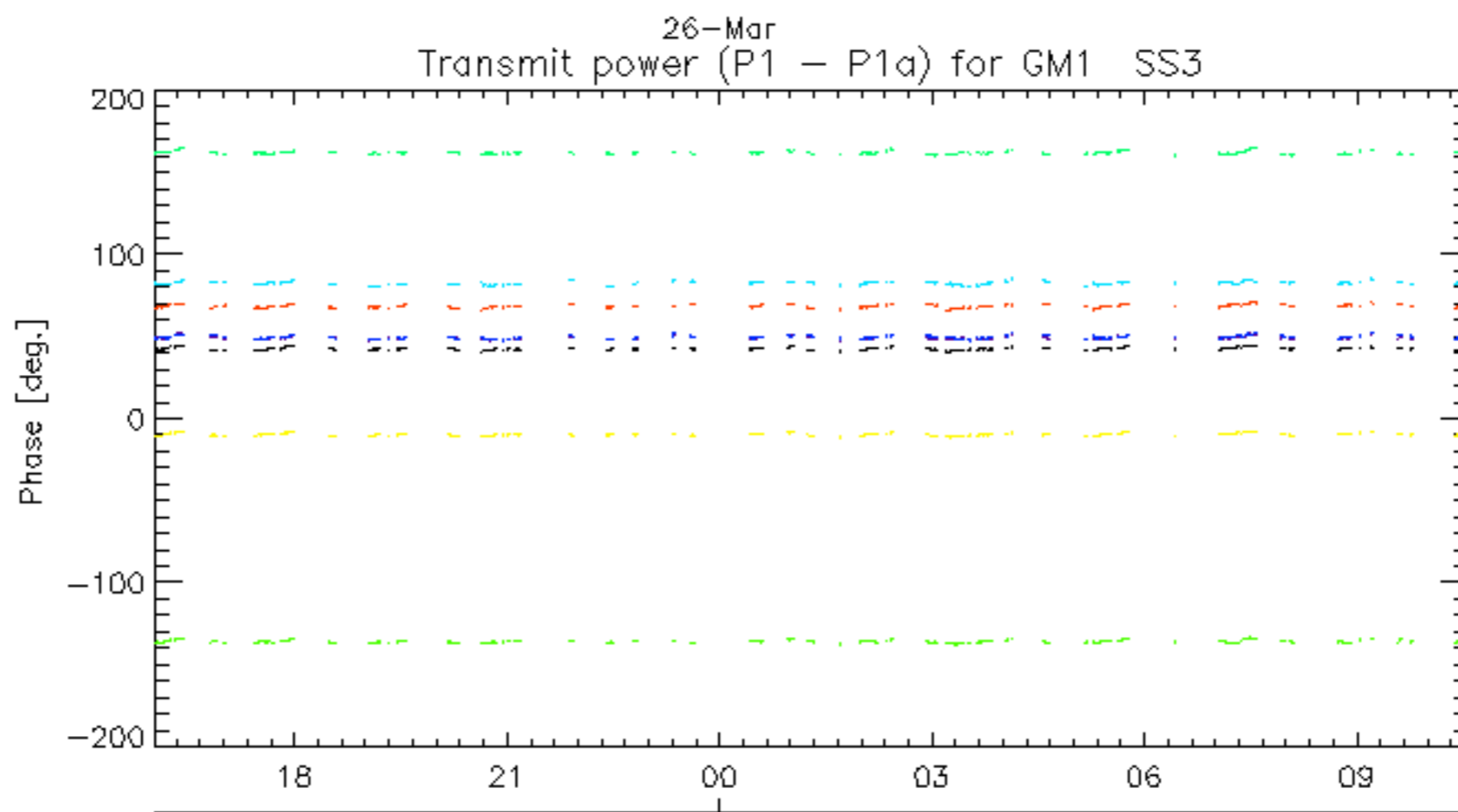
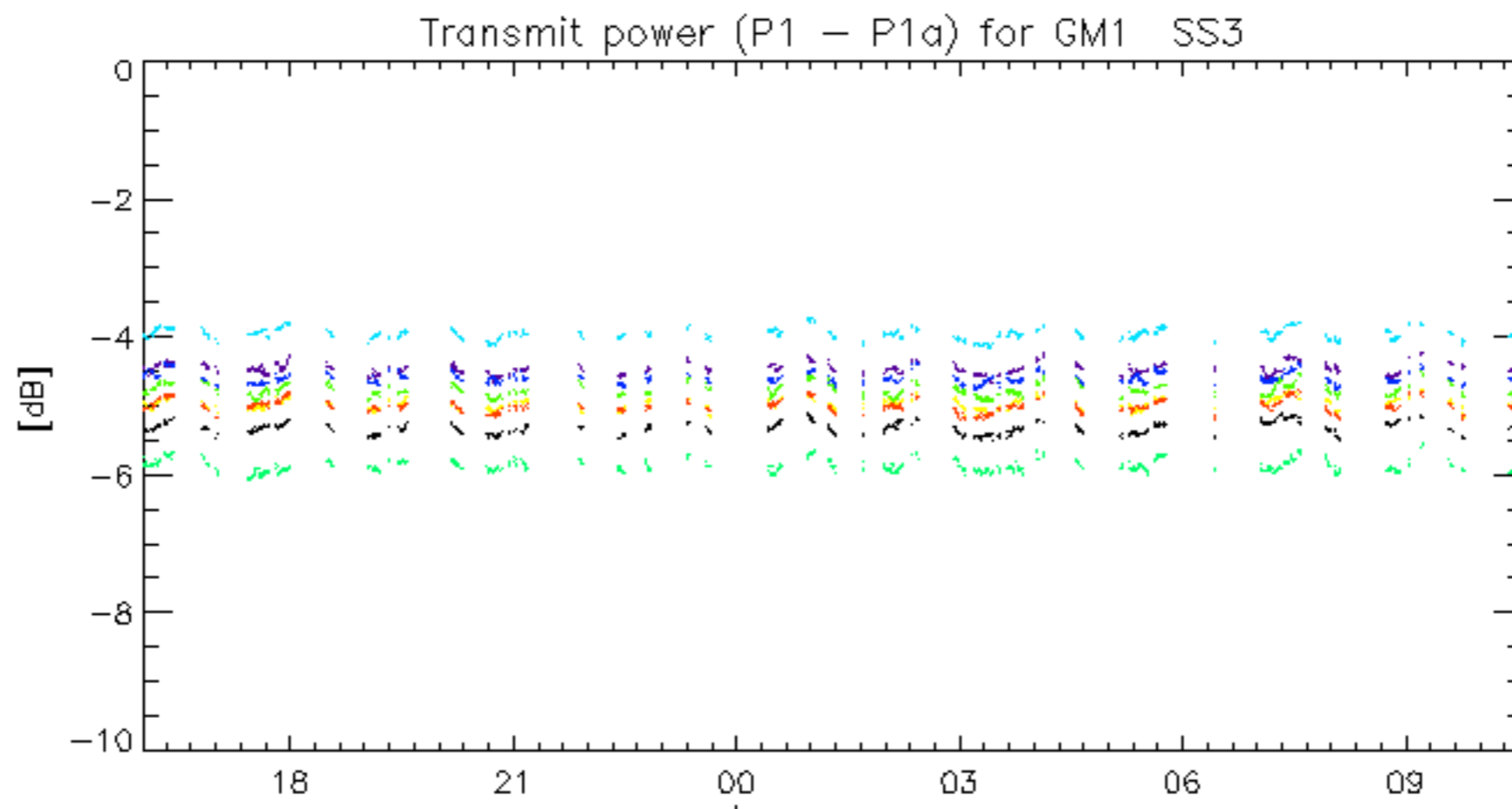




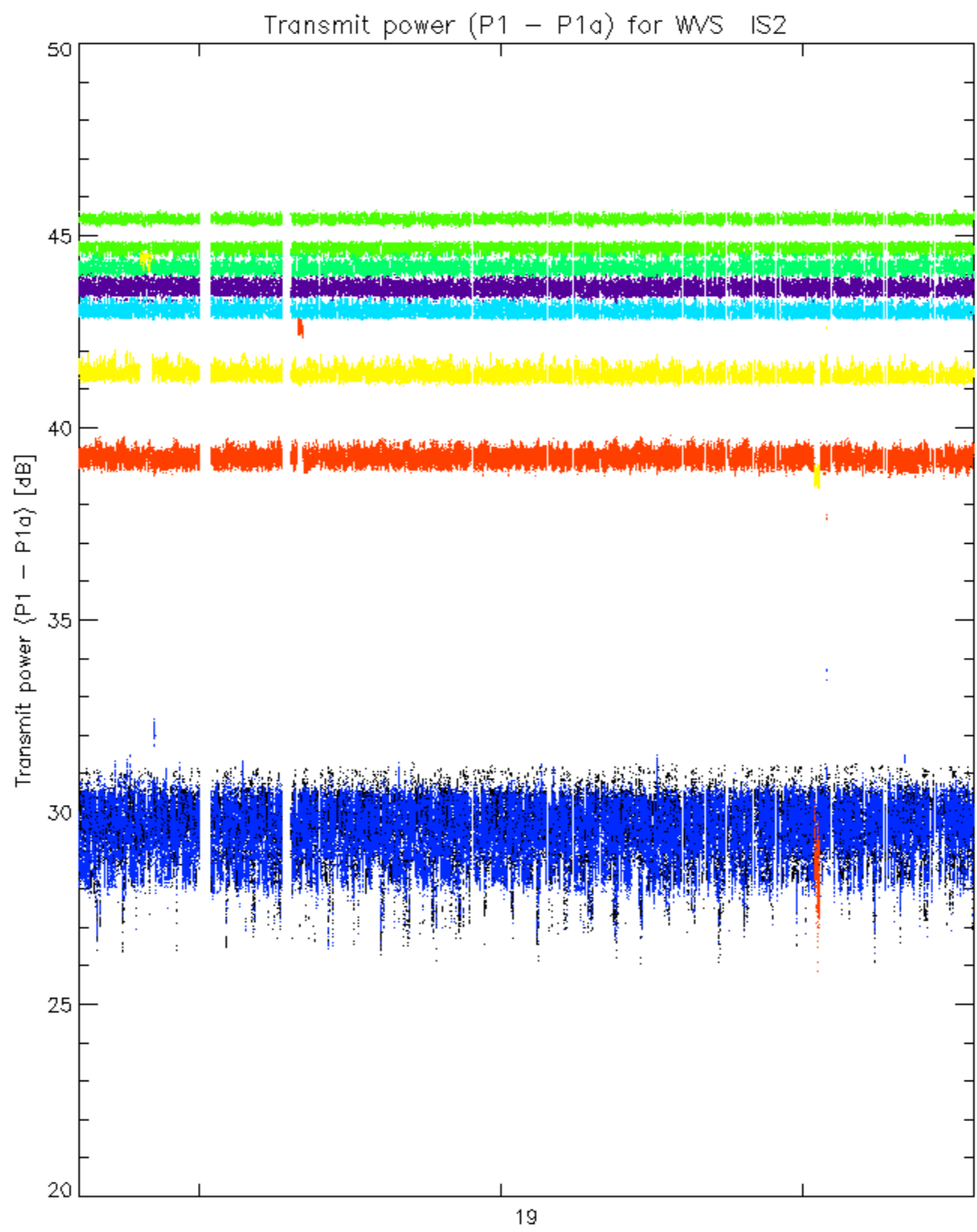
Transmit power (P1 - P1a) for GM1 SS3



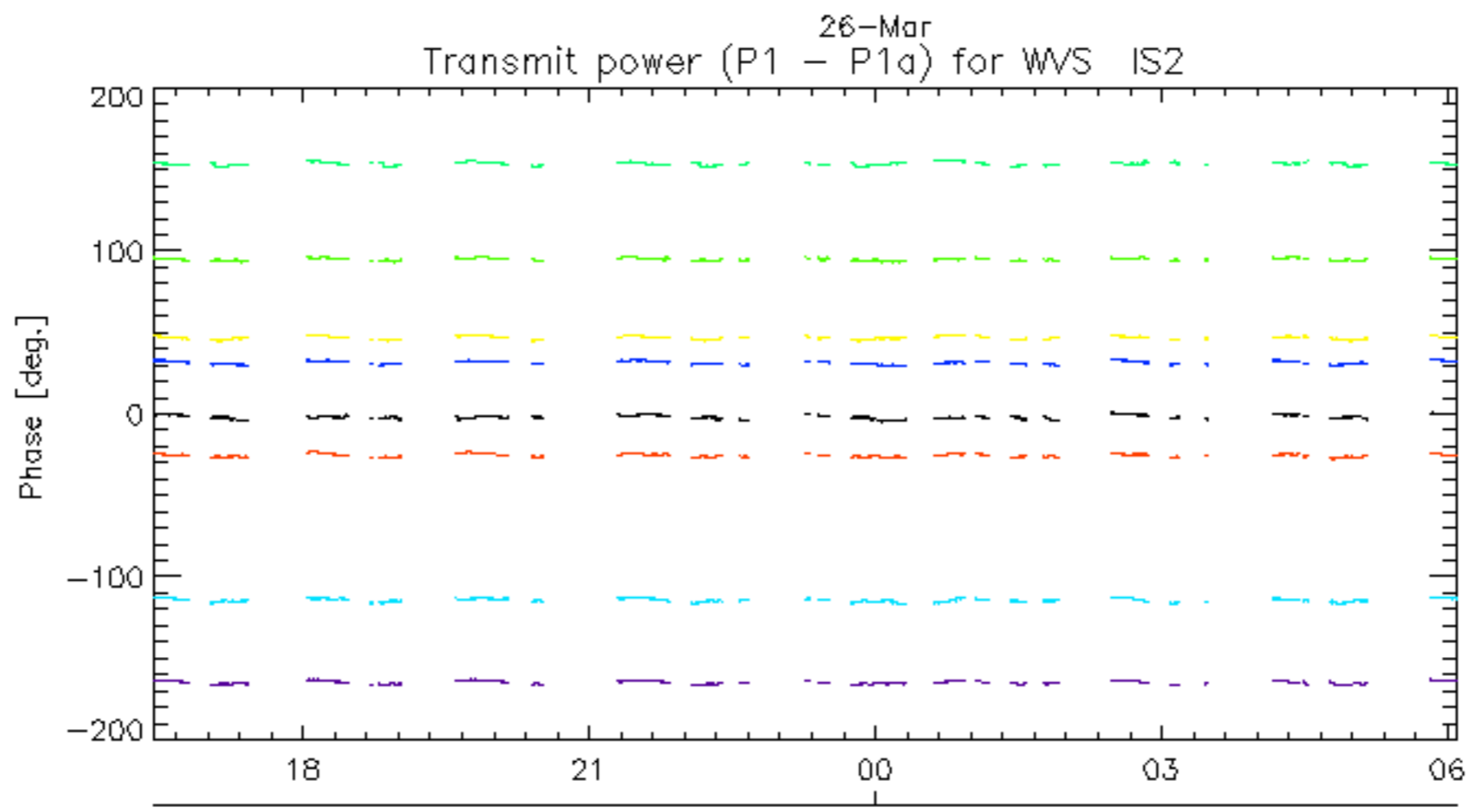
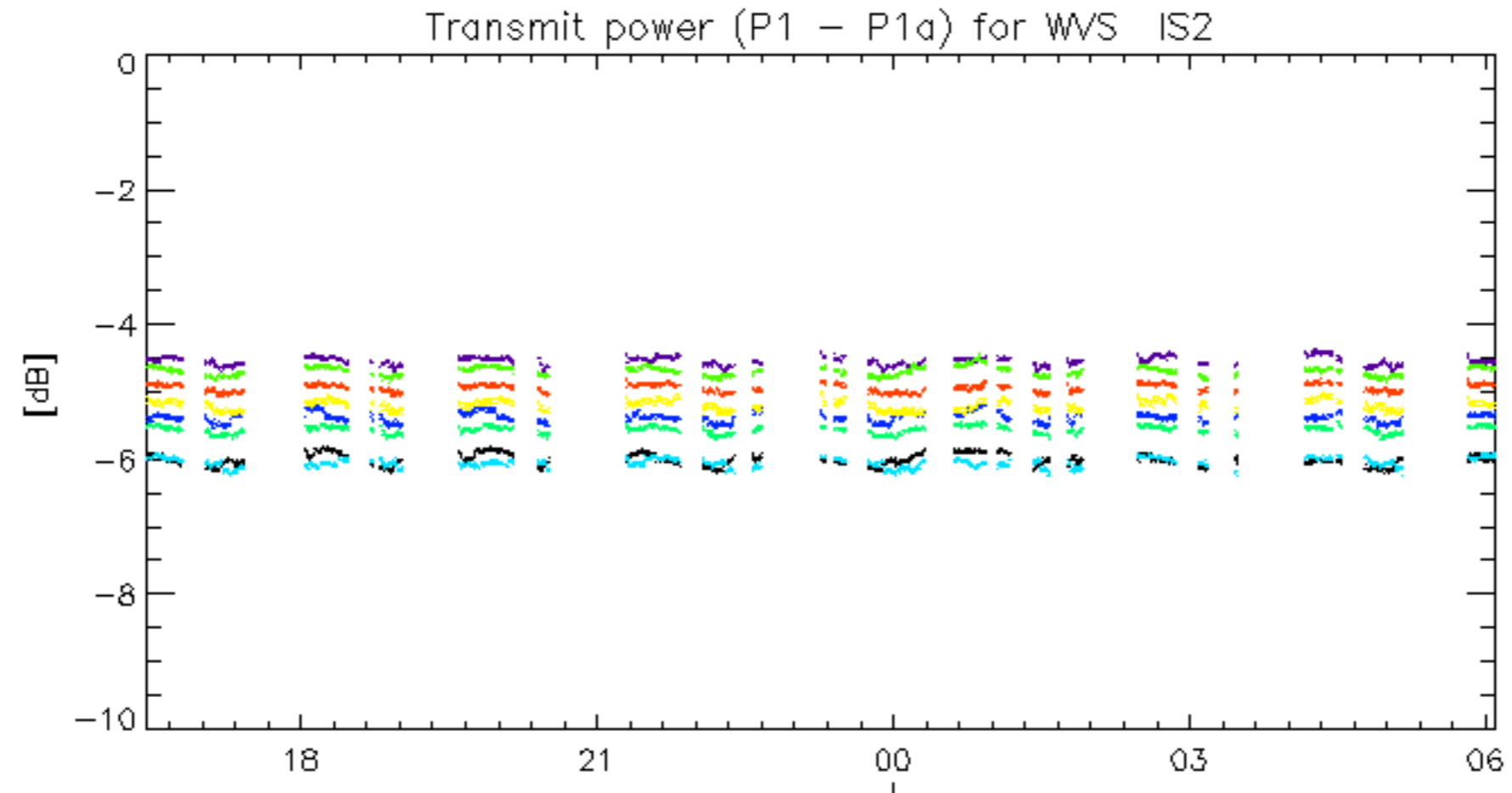
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



26-Mar
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.