

PRELIMINARY REPORT OF 051008

last update on Sat Oct 8 16:28:37 GMT 2005

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 2005-10-07 00:00:00 to 2005-10-08 16:28:37

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	46	63	14	1	20
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	46	63	14	1	20
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	46	63	14	1	20
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	46	63	14	1	20

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	42	56	35	15	43
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	42	56	35	15	43
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	42	56	35	15	43
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	42	56	35	15	43

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	20051007 033424
H	20051004 050915

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	-3.544042	0.070567	-0.091301
7	P1	-2.984858	0.037614	0.467323
11	P1	-4.275022	0.144734	1.052651
15	P1	-5.933966	0.043113	-0.456006
19	P1	-3.223035	0.172404	0.554933
22	P1	-4.497573	0.023663	0.282884
26	P1	-4.470573	0.107760	0.890192
30	P1	-6.012793	0.477914	1.762318
3	P1	-15.852693	1.962830	1.450231
7	P1	-16.732897	5.084381	1.310494
11	P1	-18.313559	13.673267	9.702097
15	P1	-13.730238	9.890952	0.385905
19	P1	-13.742794	0.248179	0.924631
22	P1	-17.332003	24.813765	3.795976
26	P1	-17.834080	23.232489	5.827432
30	P1	-17.615772	9.692334	4.806228

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.827715	0.103444	-0.214358
7	P2	-22.550762	0.257955	-0.932914
11	P2	-16.081202	2.234248	-3.837340
15	P2	-7.204099	0.119080	-0.106568
19	P2	-9.177366	0.197351	0.224625
22	P2	-17.446428	0.246224	-1.257443
26	P2	-16.199720	0.133833	0.603098
30	P2	-19.466665	0.218318	-0.863724

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.174842	0.004816	-0.033546
7	P3	-8.174842	0.004816	-0.033546
11	P3	-8.174842	0.004816	-0.033546
15	P3	-8.174842	0.004816	-0.033546
19	P3	-8.174842	0.004816	-0.033546
22	P3	-8.174842	0.004816	-0.033546
26	P3	-8.174842	0.004816	-0.033546
30	P3	-8.174842	0.004816	-0.033546

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	-3.337582	0.283303	-1.447416
7	P1	-2.945219	0.071239	0.402497
11	P1	-3.189137	0.294020	1.637443
15	P1	-3.466367	0.032986	0.370056
19	P1	-3.343089	0.066559	0.111491
22	P1	-5.177189	0.175703	0.308223
26	P1	-5.955932	0.674026	1.264088
30	P1	-5.312408	0.388360	0.786224
3	P1	-11.505615	0.468347	0.228466
7	P1	-11.507568	21.763153	5.687645
11	P1	-12.607935	42.573612	10.039456
15	P1	-12.708691	36.939320	7.753577
19	P1	-15.316203	0.229685	-0.428563
22	P1	-21.679564	5.585686	6.273365
26	P1	-17.294649	5.571926	0.011818
30	P1	-19.483326	1.950868	2.629647

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.627182	0.061665	-0.436033
7	P2	-22.836544	0.283132	-1.141455
11	P2	-11.264796	0.929354	-2.599654
15	P2	-4.933493	0.047899	0.261940
19	P2	-6.783881	0.118107	-0.410982
22	P2	-7.794423	0.242409	-1.450997
26	P2	-23.879194	0.043420	0.163397
30	P2	-22.076908	0.061460	0.035650

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.017733	0.002920	-0.036749
7	P3	-8.017773	0.002920	-0.037241
11	P3	-8.017558	0.002926	-0.037302
15	P3	-8.017646	0.002927	-0.037298
19	P3	-8.017855	0.002922	-0.036939
22	P3	-8.017586	0.002928	-0.037143
26	P3	-8.017864	0.002924	-0.037309
30	P3	-8.017694	0.002937	-0.037009

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	0.000530711
	stdev	1.84869e-07
MEAN Q	mean	0.000523094
	stdev	2.18370e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.135262
	stdev	0.00110677
STDEV Q	mean	0.135582
	stdev	0.00112221



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2005100[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_1PNPDE20051007_155150_00000772041_00255_18846_7711.N1	1	0
ASA_IMM_1PNPDK20051007_124322_00000532041_00253_18844_5323.N1	1	0
ASA_WSM_1PNPDE20051006_044316_000003062041_00234_18825_2610.N1	0	53
ASA_WSM_1PNPDE20051006_162645_000001762041_00241_18832_2652.N1	0	44
ASA_WSM_1PNPDE20051006_180926_000001832041_00242_18833_2673.N1	0	19
ASA_WSM_1PNPDE20051006_184205_000000852041_00242_18833_2698.N1	0	1
ASA_WSM_1PNPDE20051007_013227_000002392041_00246_18837_2779.N1	0	55
ASA_APM_1PNPDE20051007_141715_000000822041_00254_18845_1696.N1	0	21



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

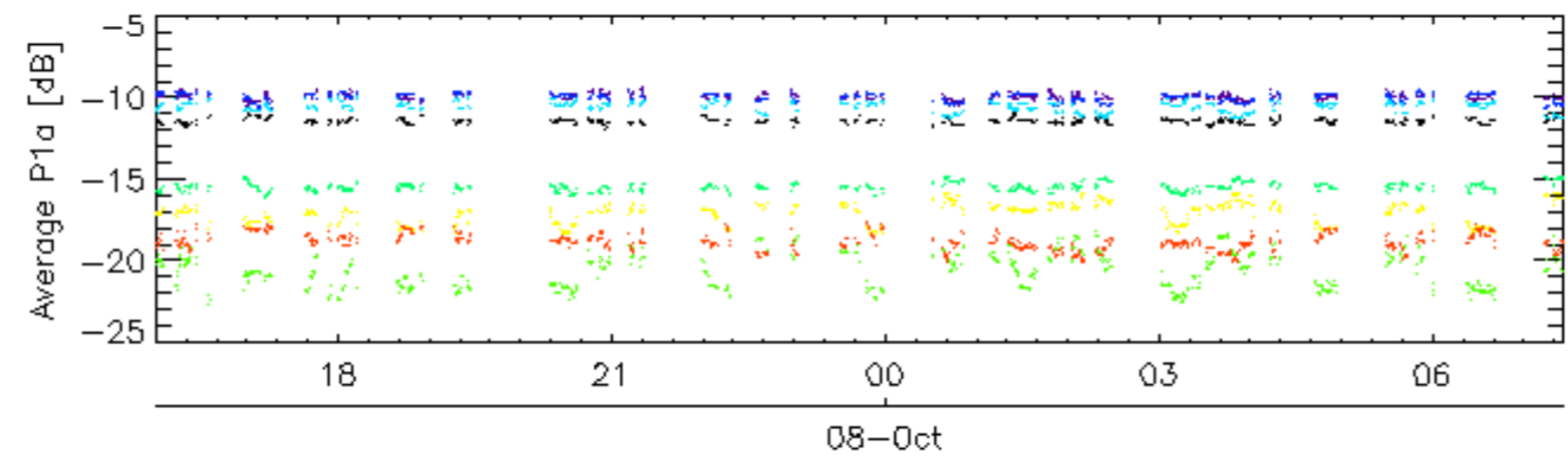
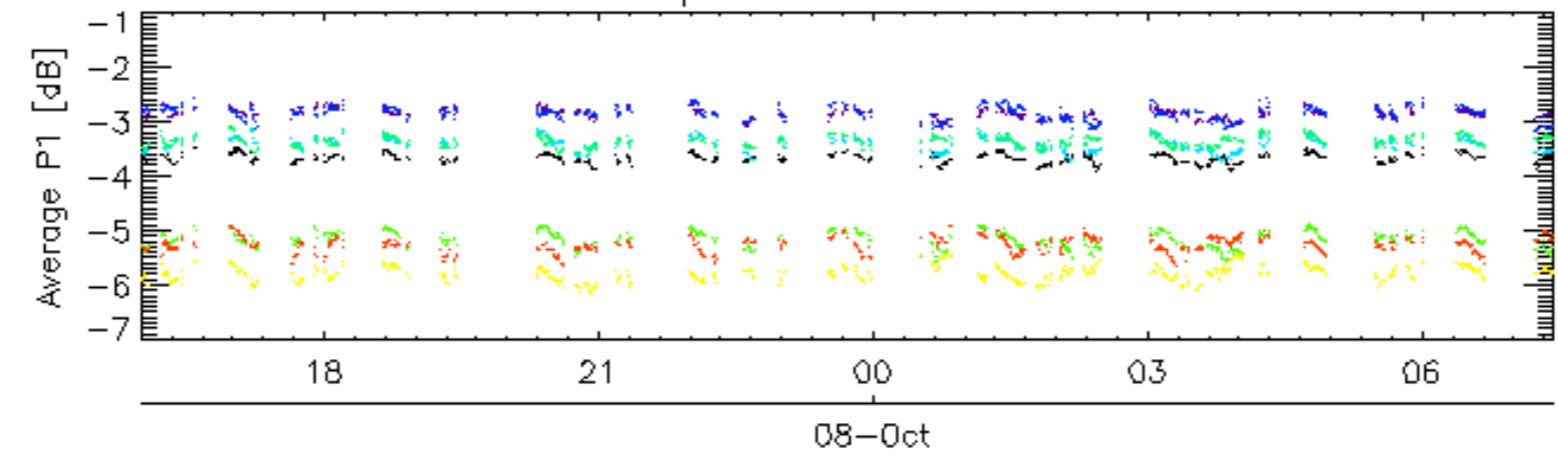
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

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

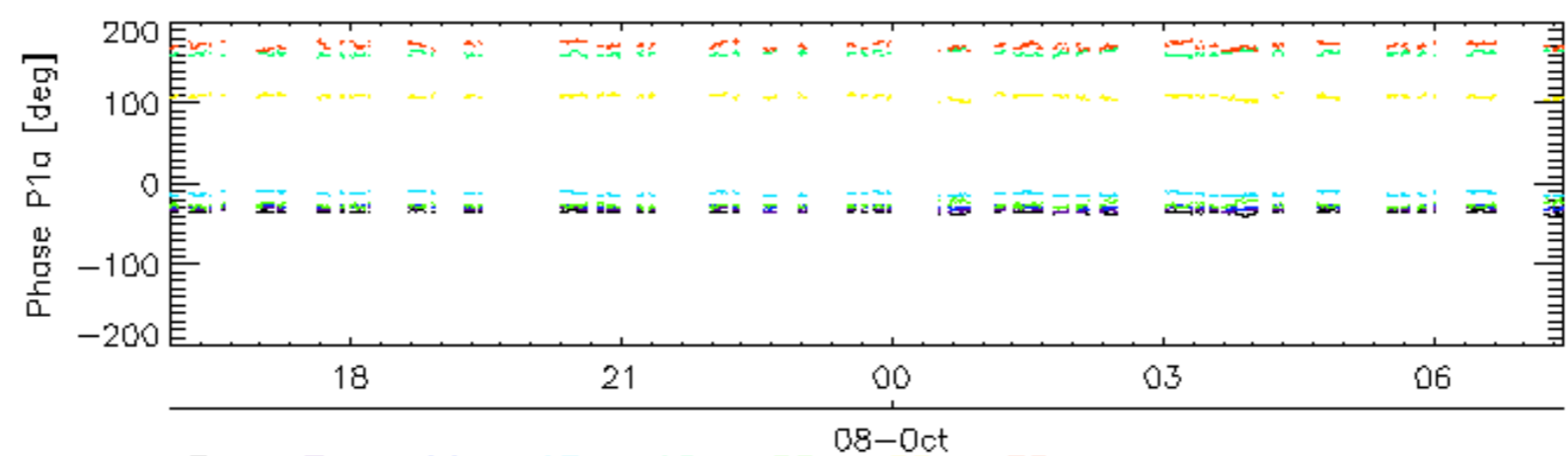
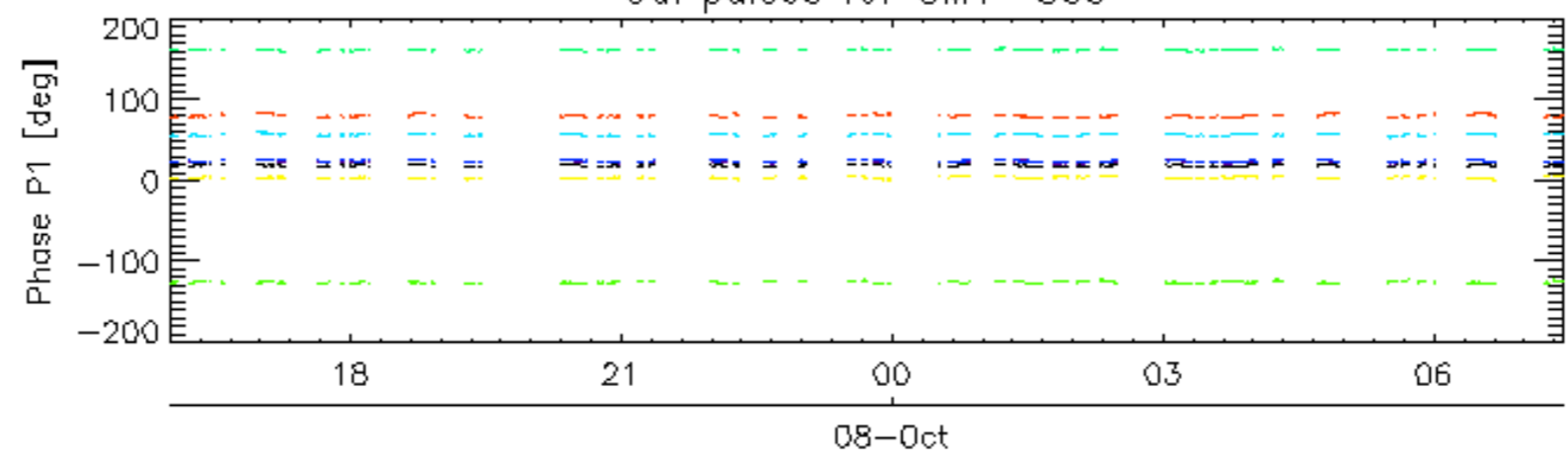
7.6 - Doppler evolution versus ANX for GM1**Evolution Doppler error versus ANX**

<input type="checkbox"/>

Cal pulses for GM1 SS3

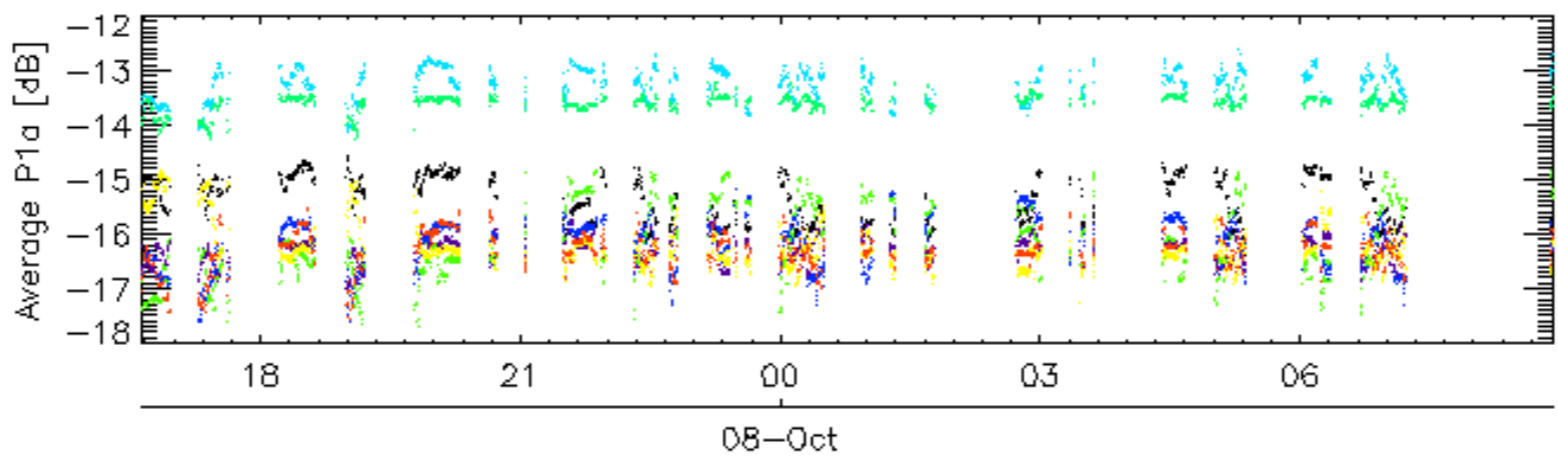
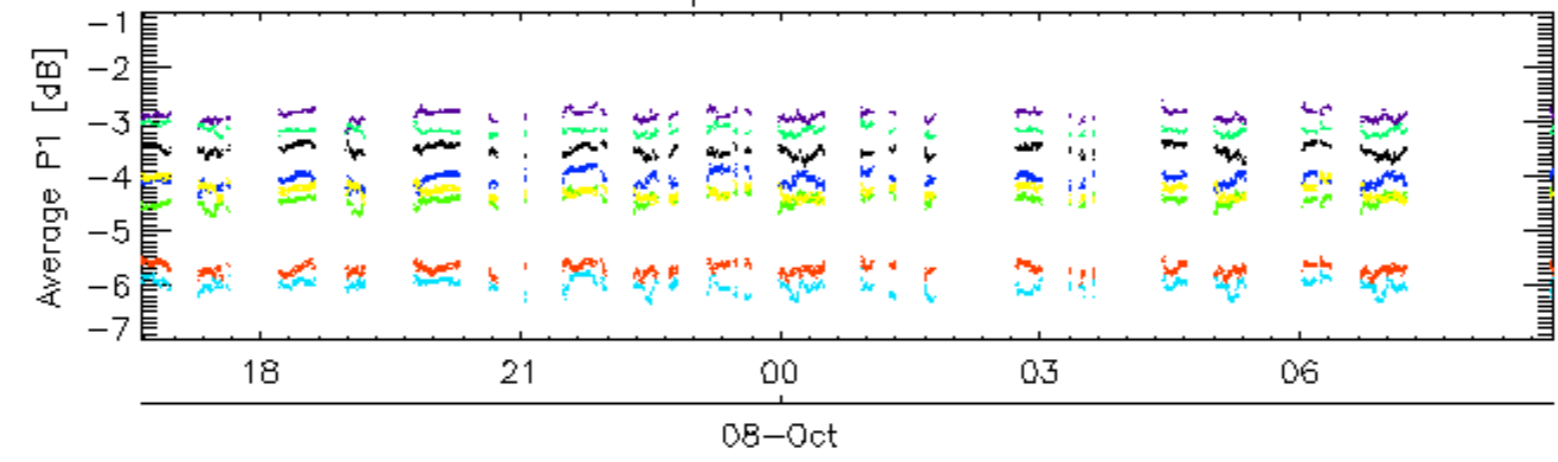


Cal pulses for GM1 SS3

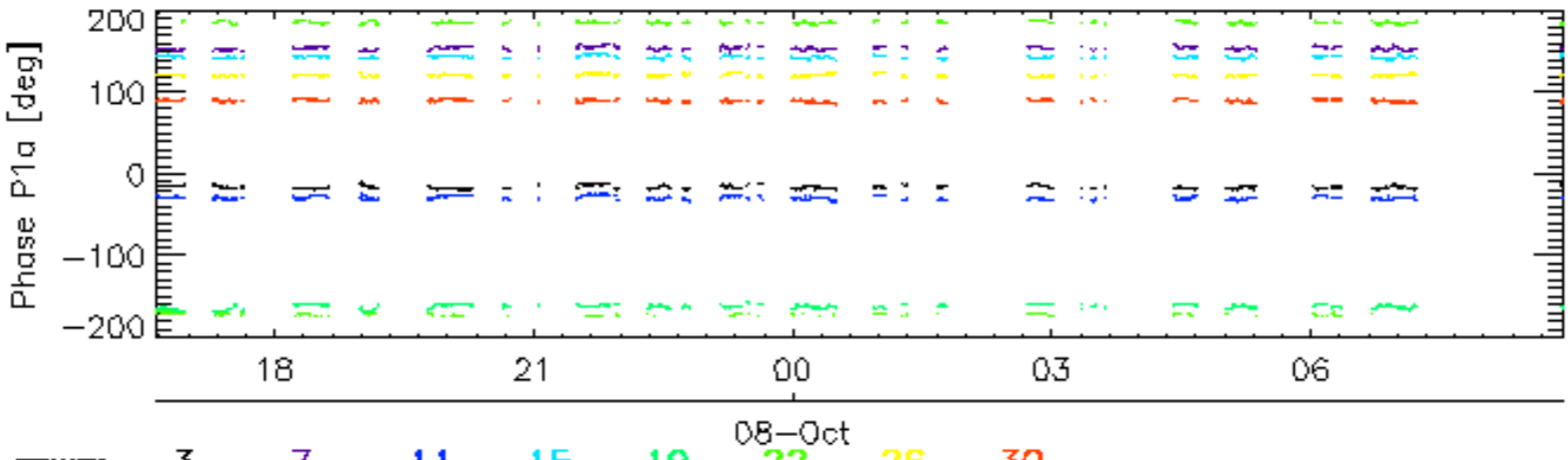
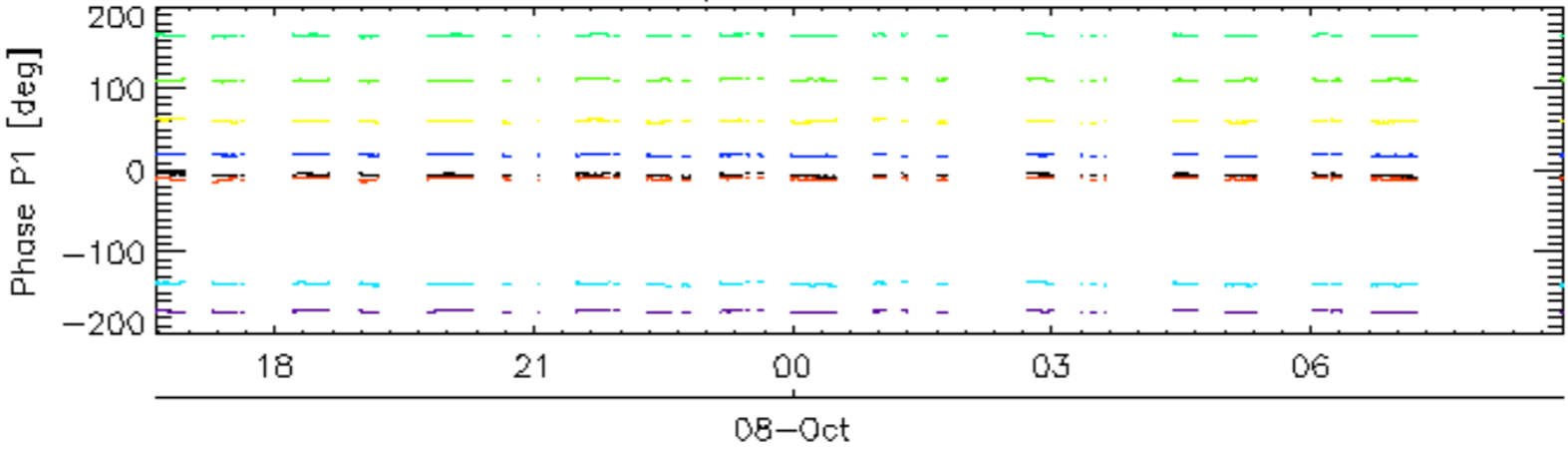


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

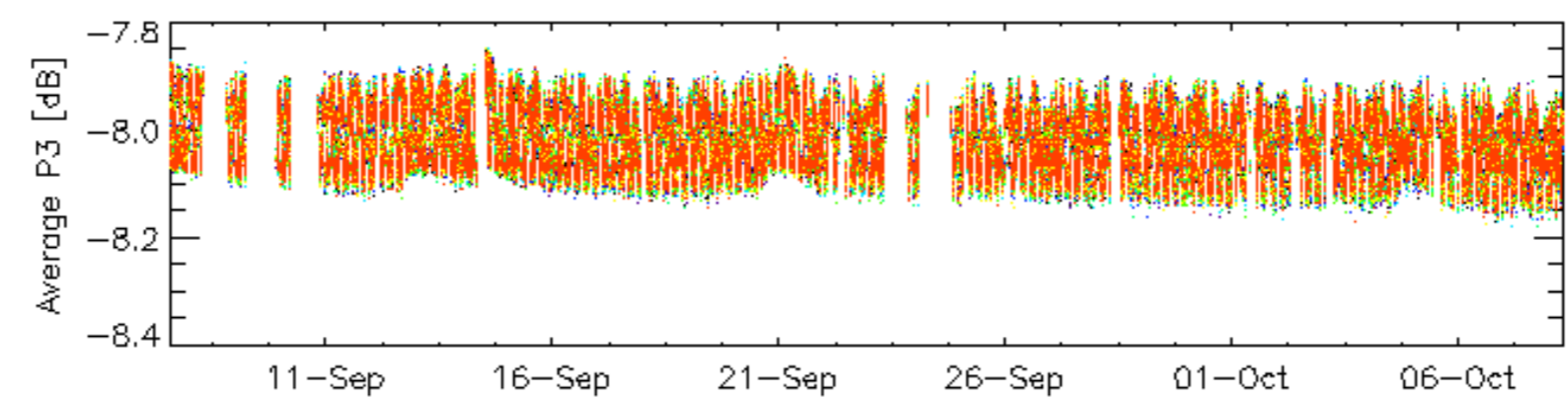
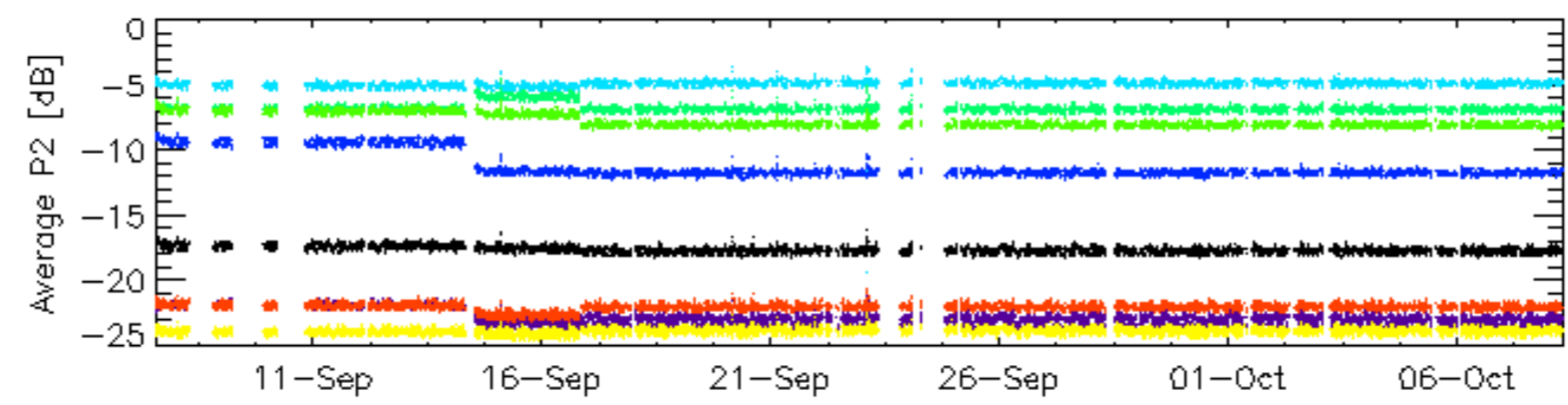
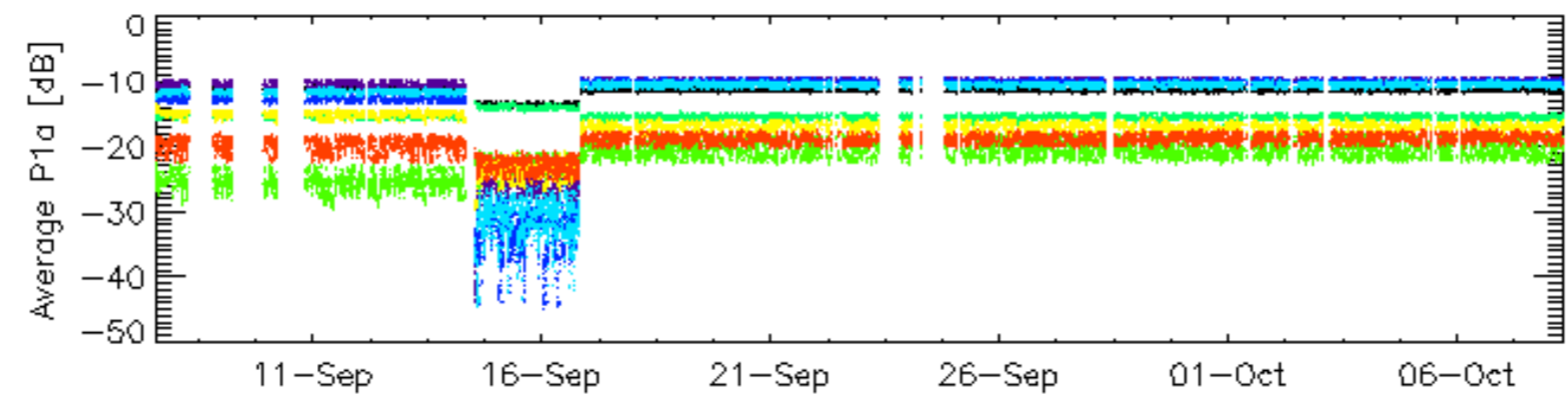
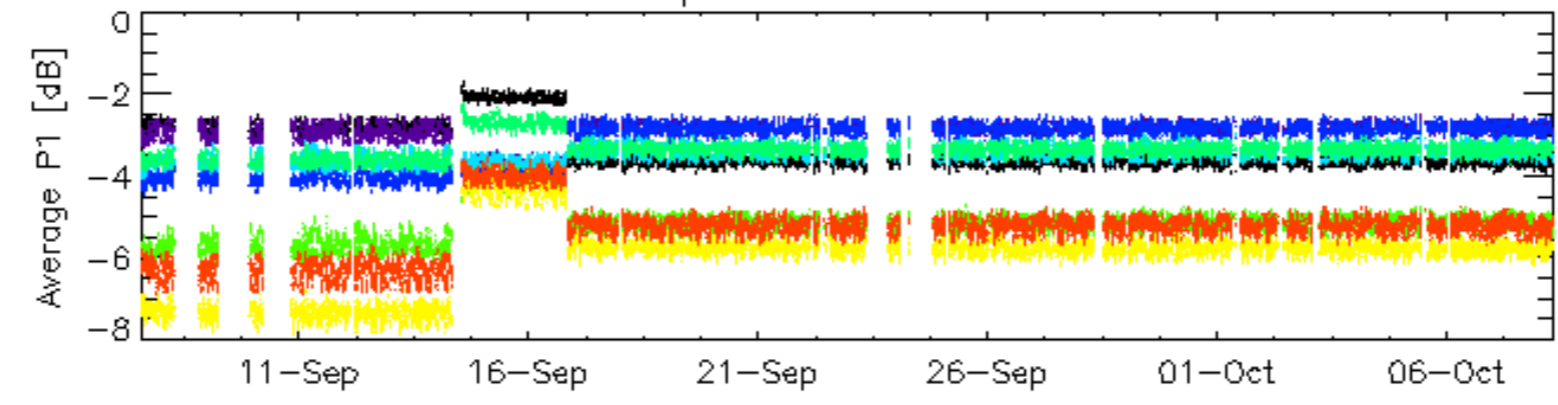


Cal pulses for WVS IS2



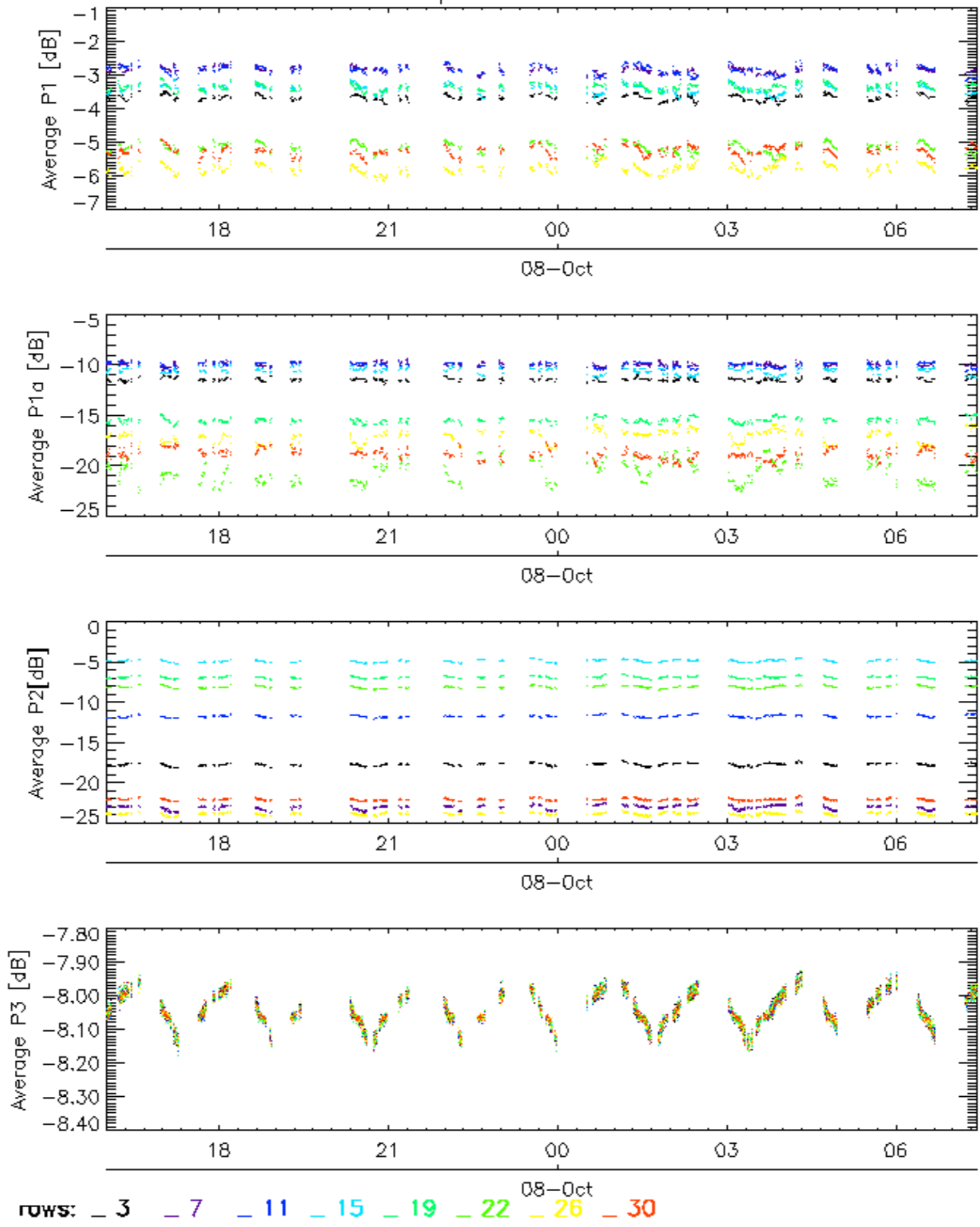
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

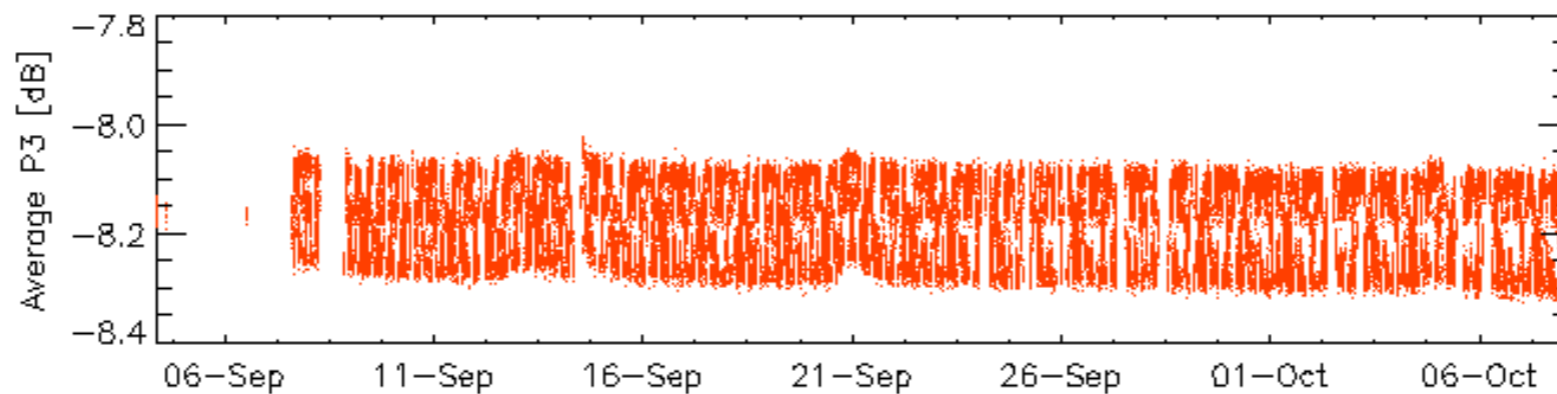
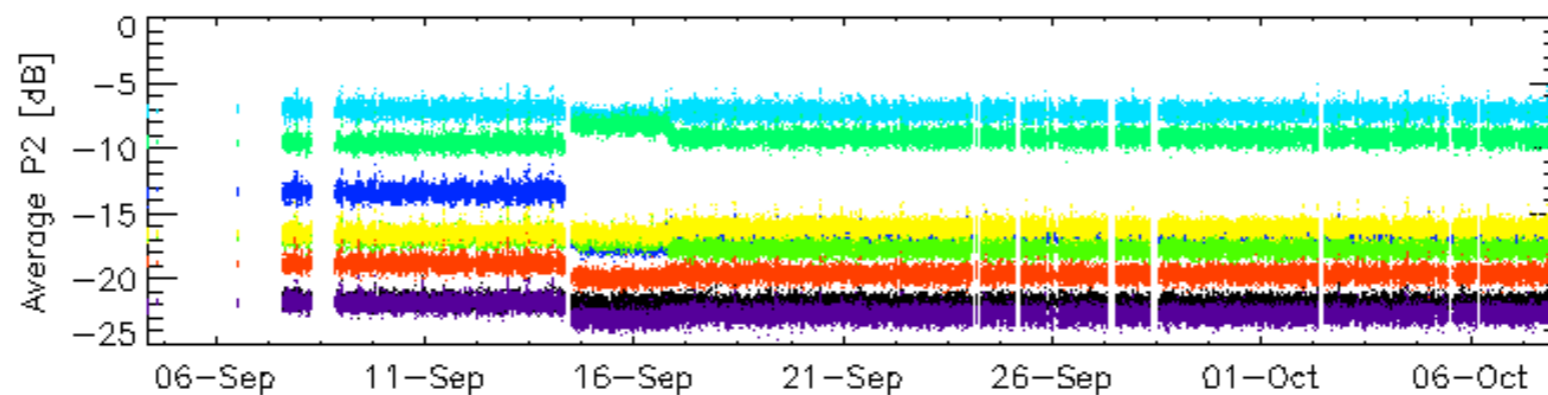
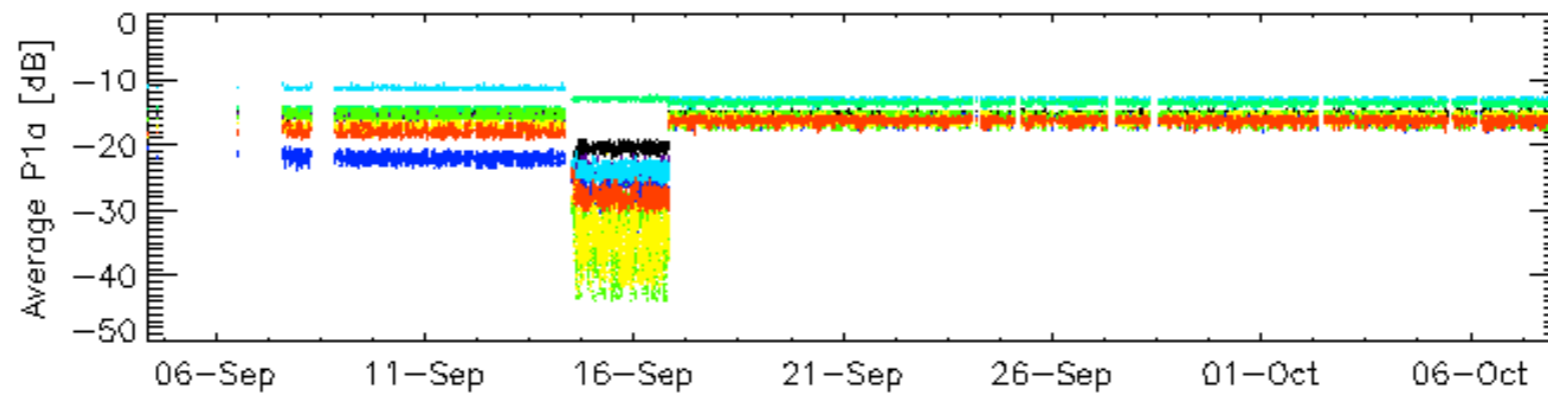
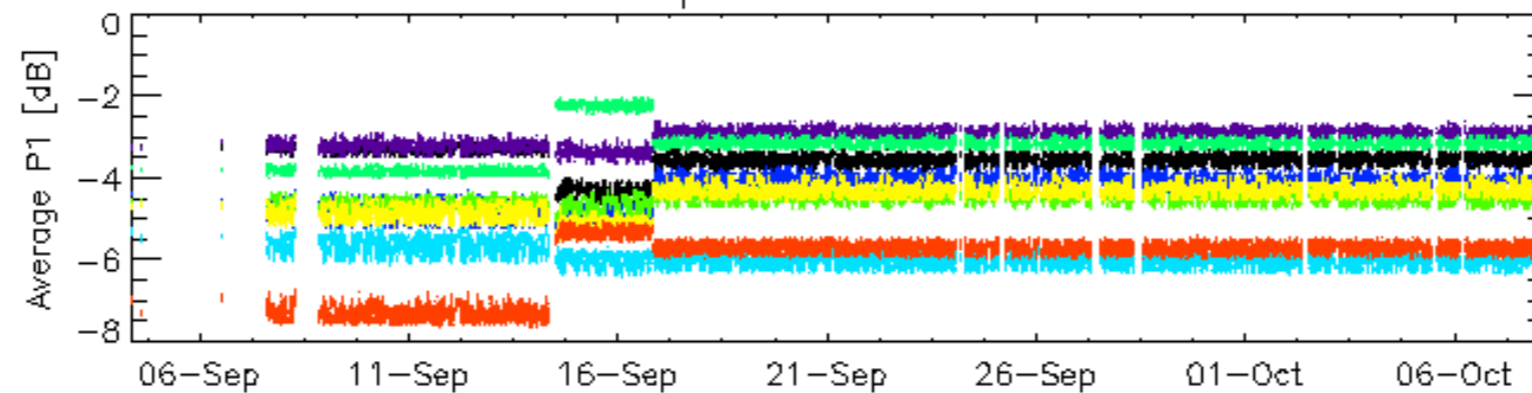


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

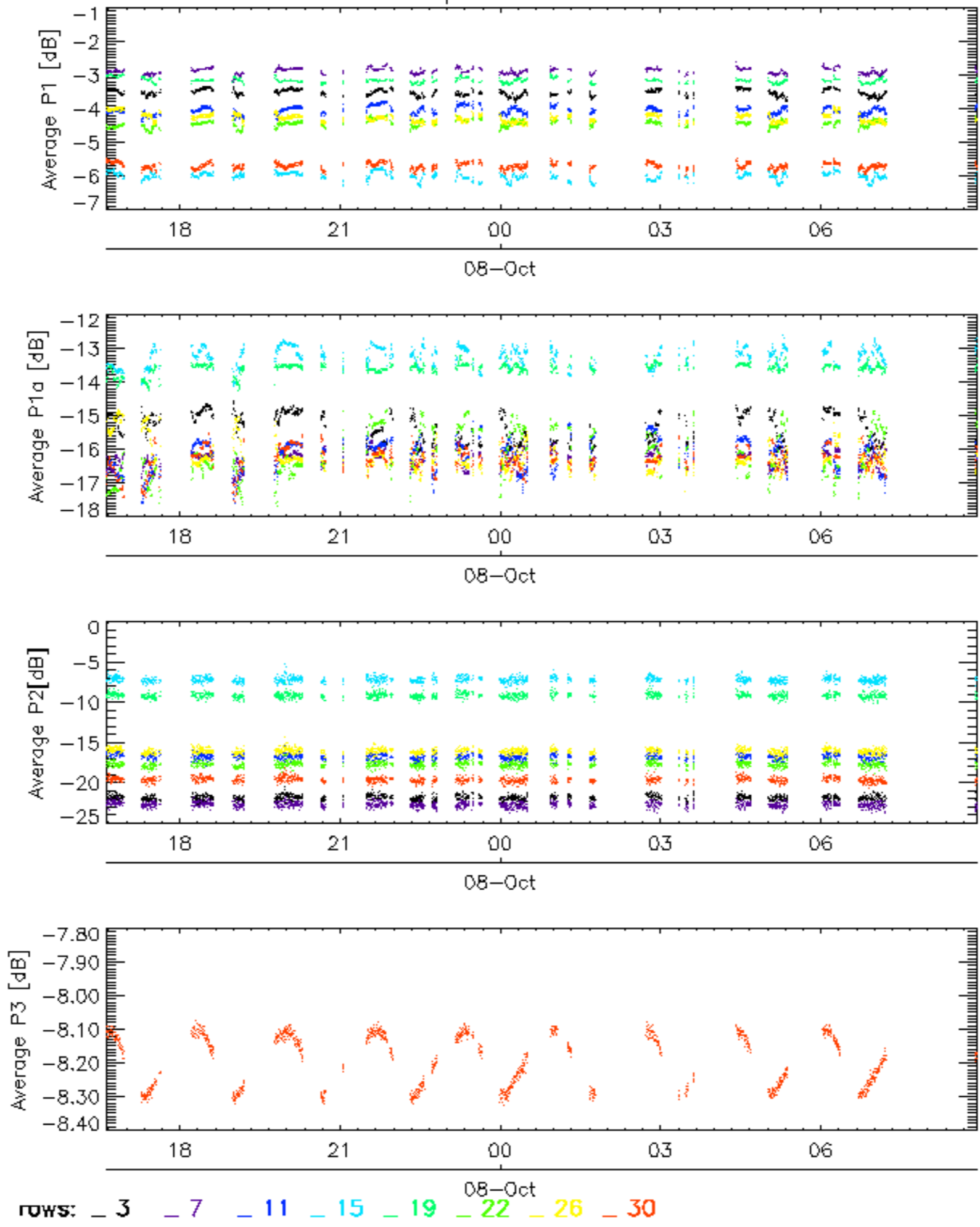


Cal pulses for WVS IS2

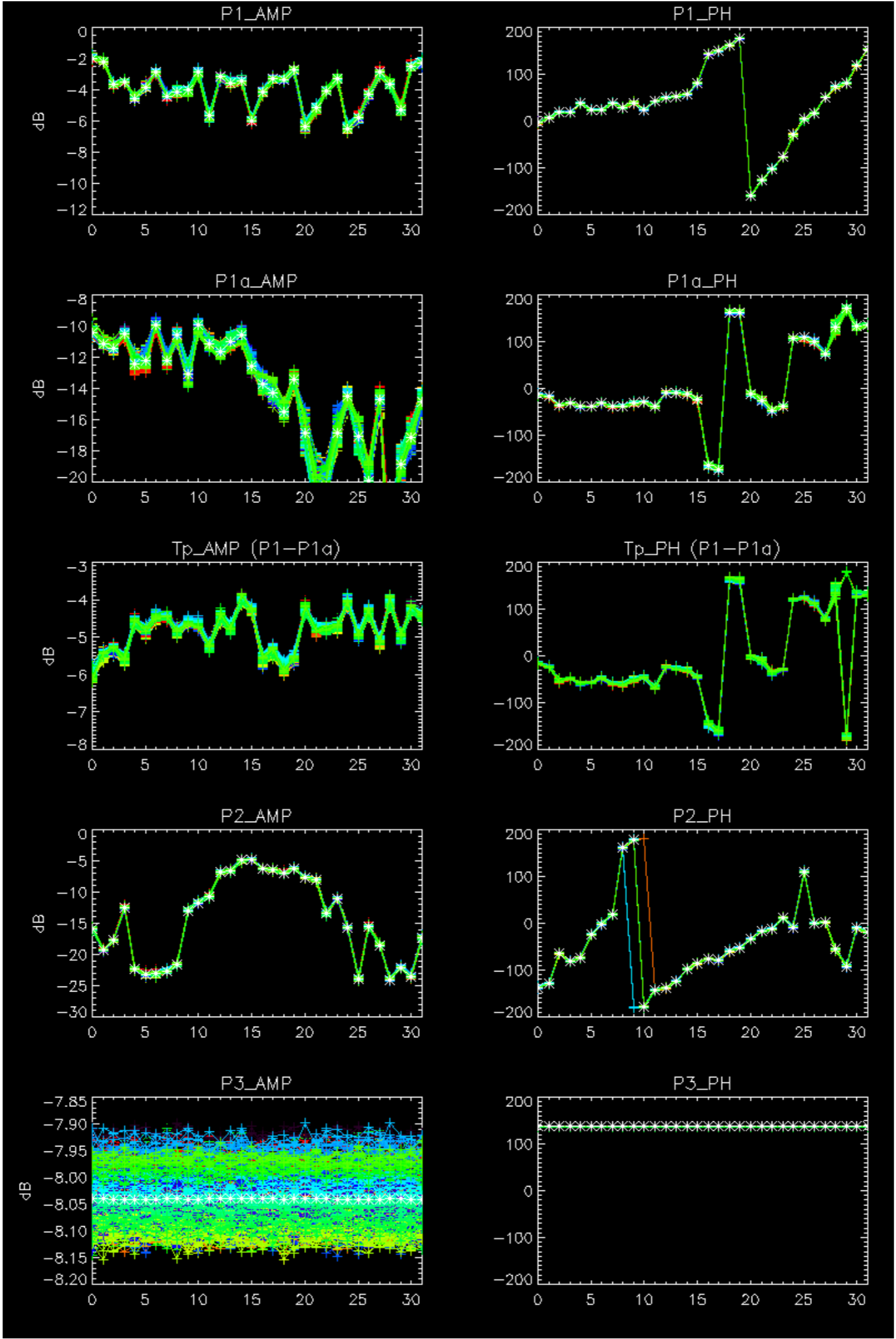


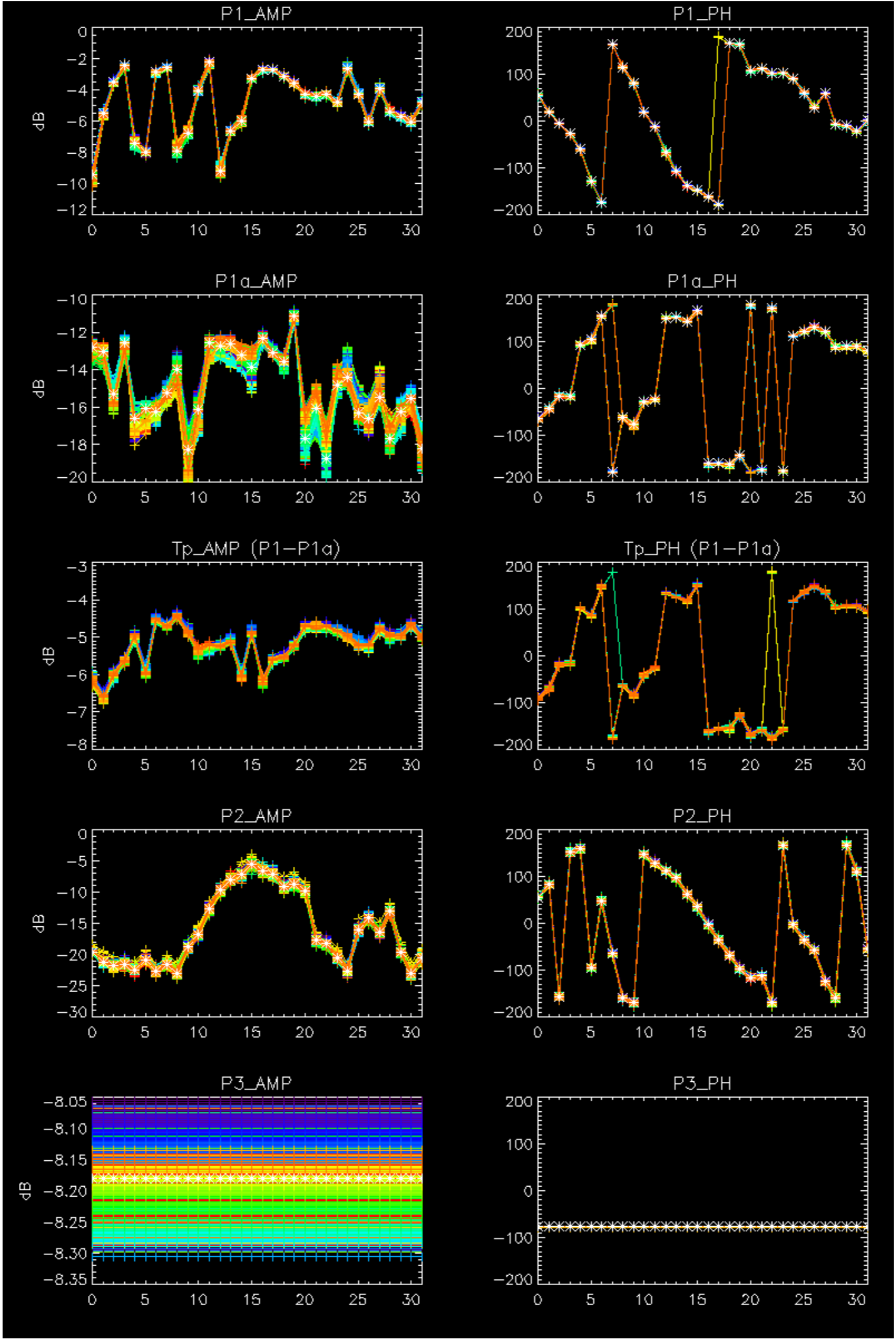
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



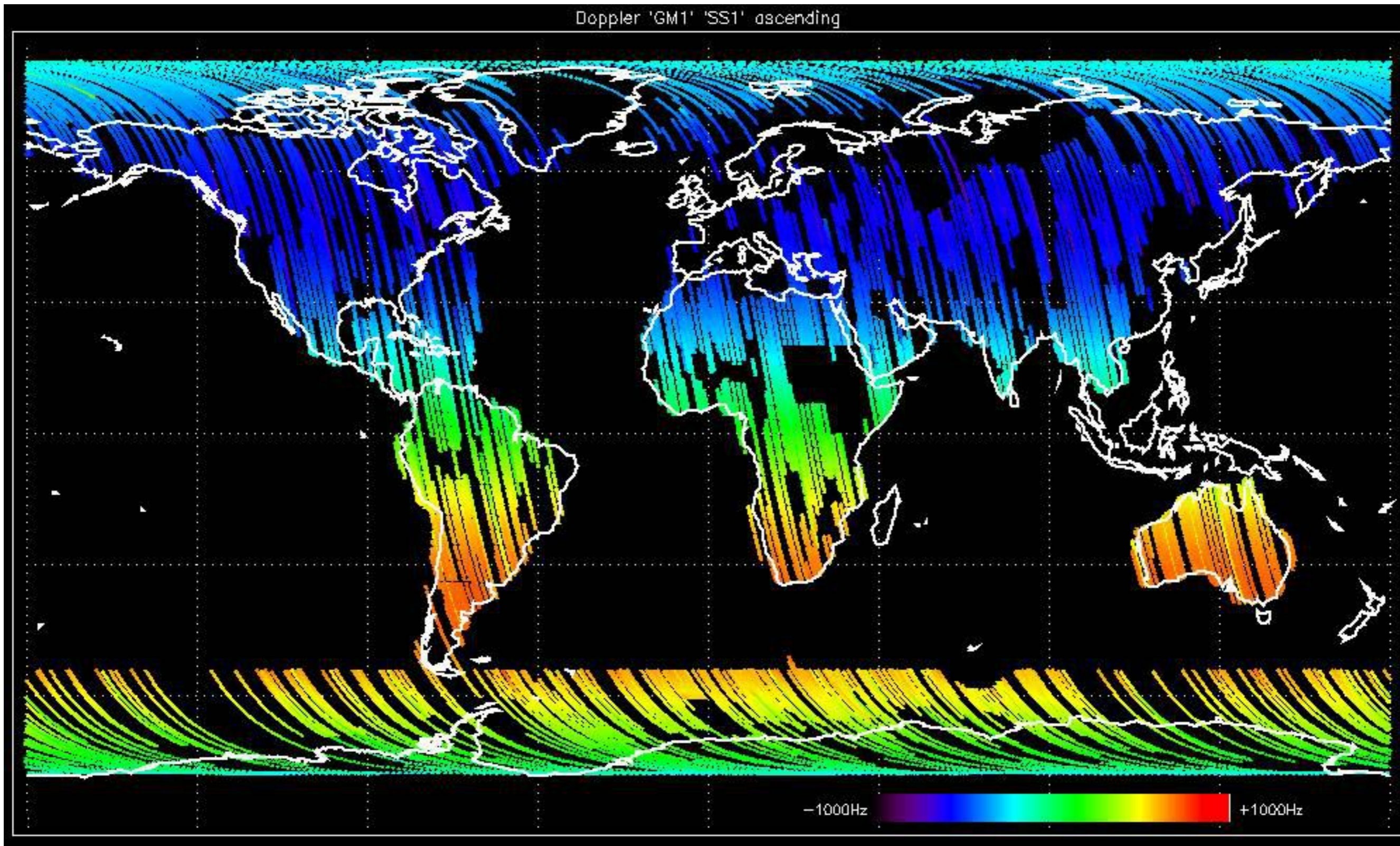
No anomalies observed.



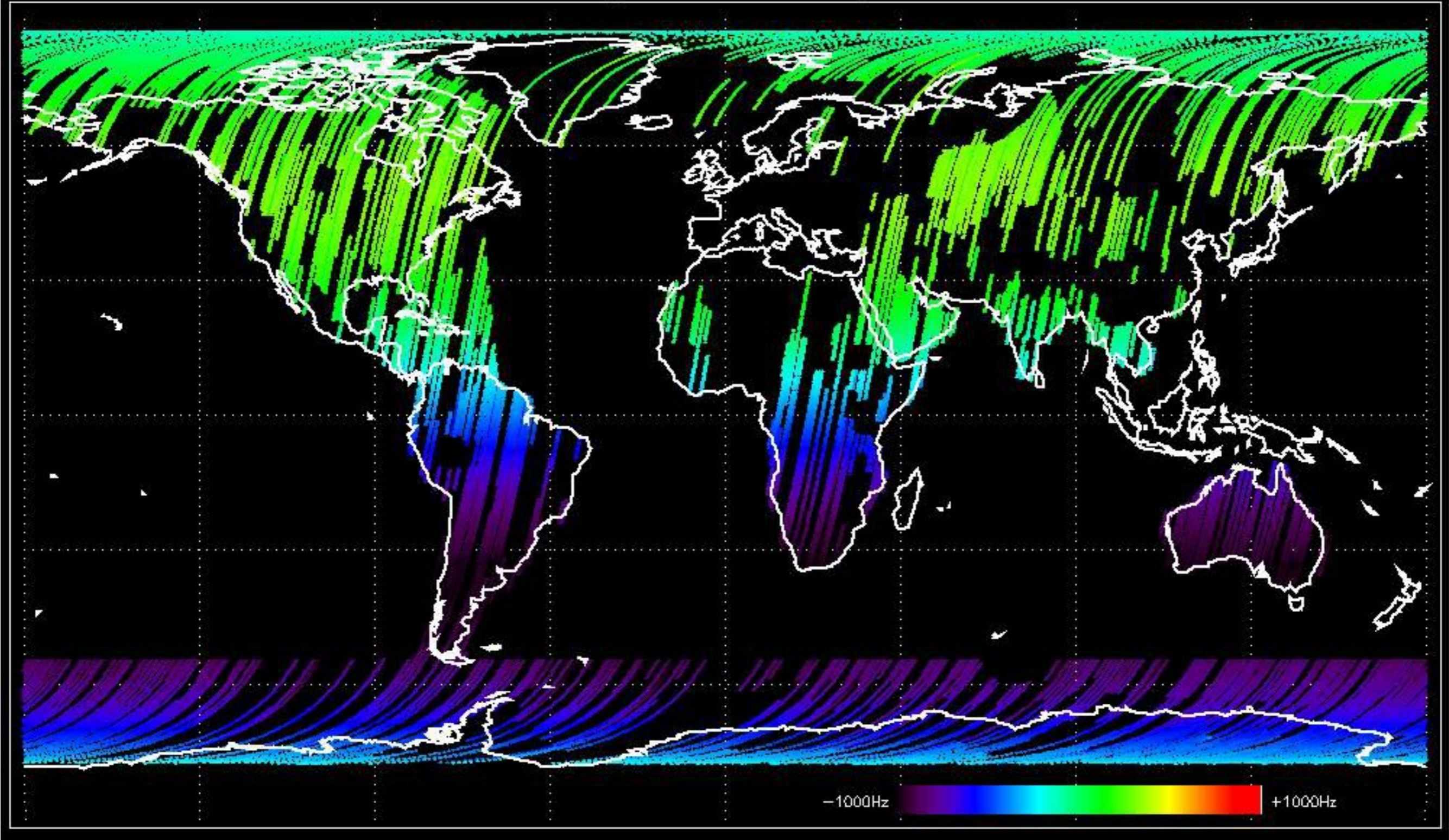


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

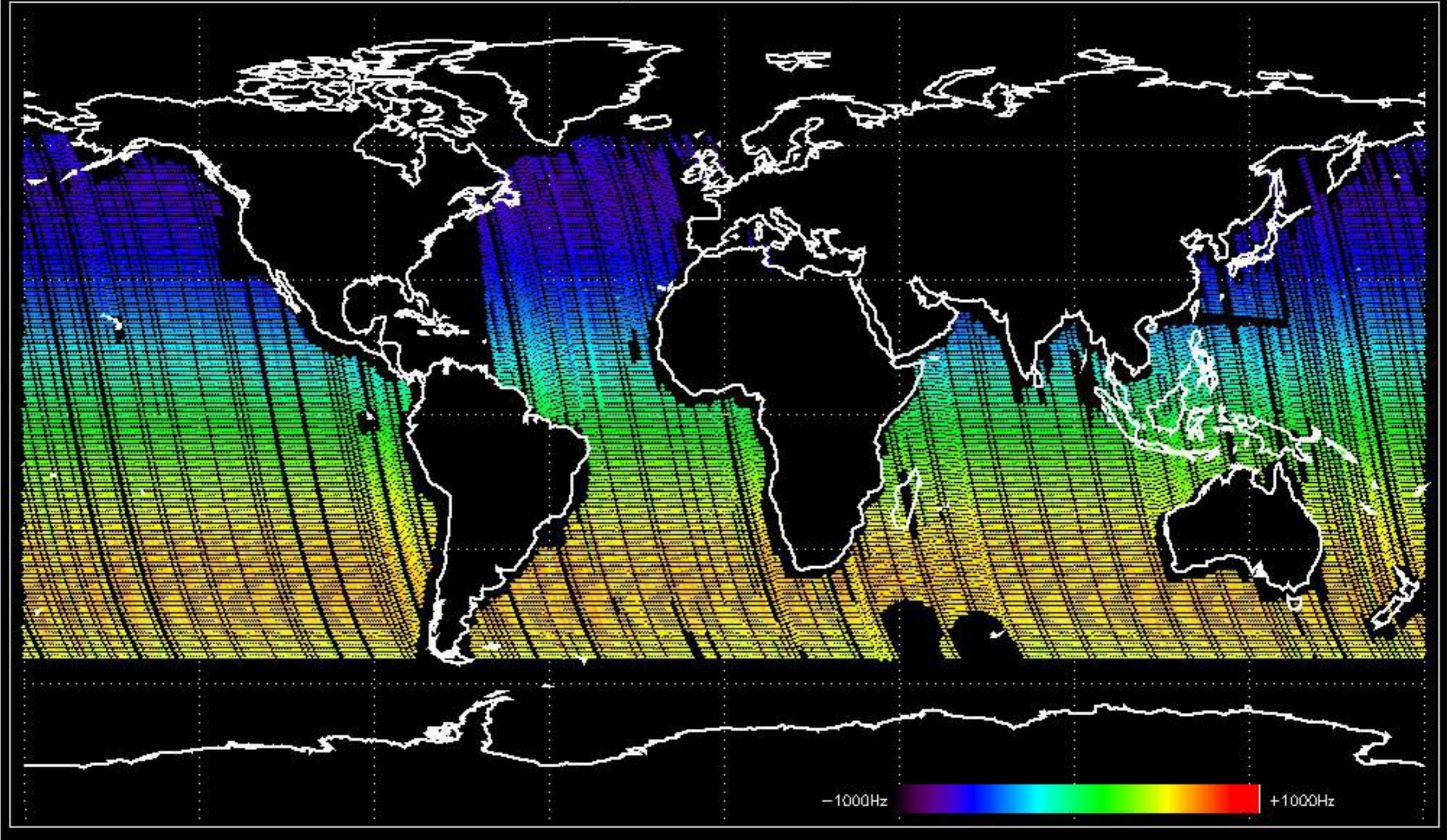
Doppler 'GM1' 'SS1' ascending



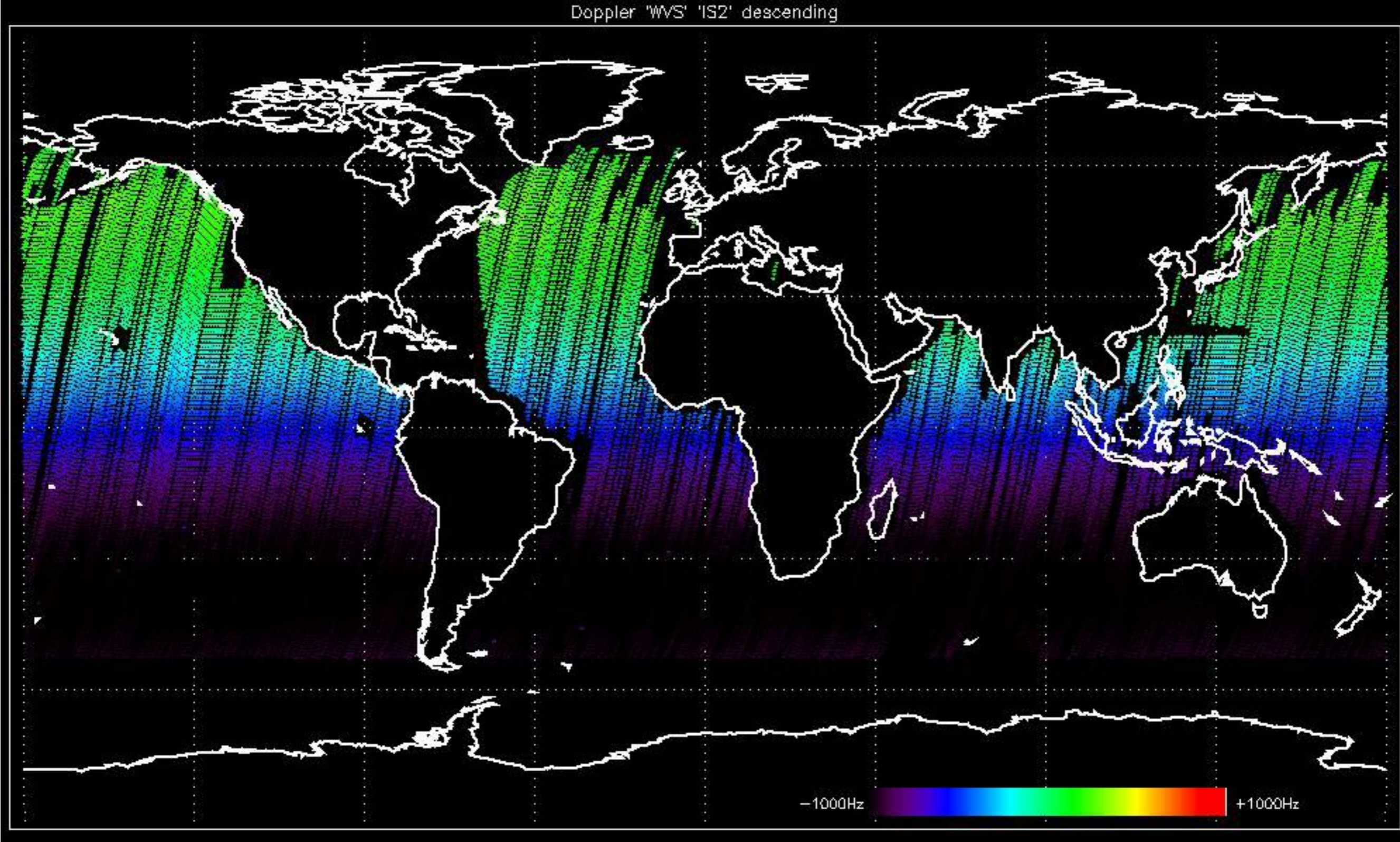
Doppler 'GM1' 'SS1' descending



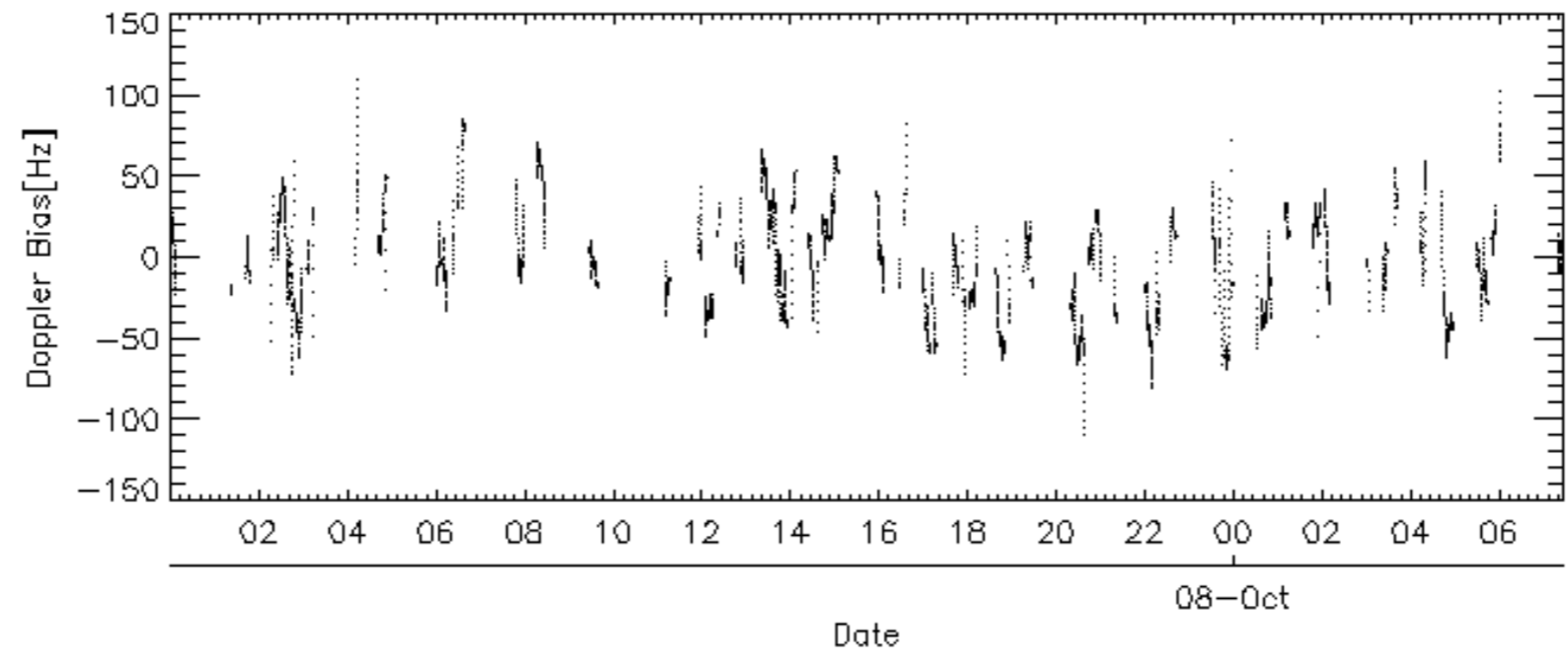
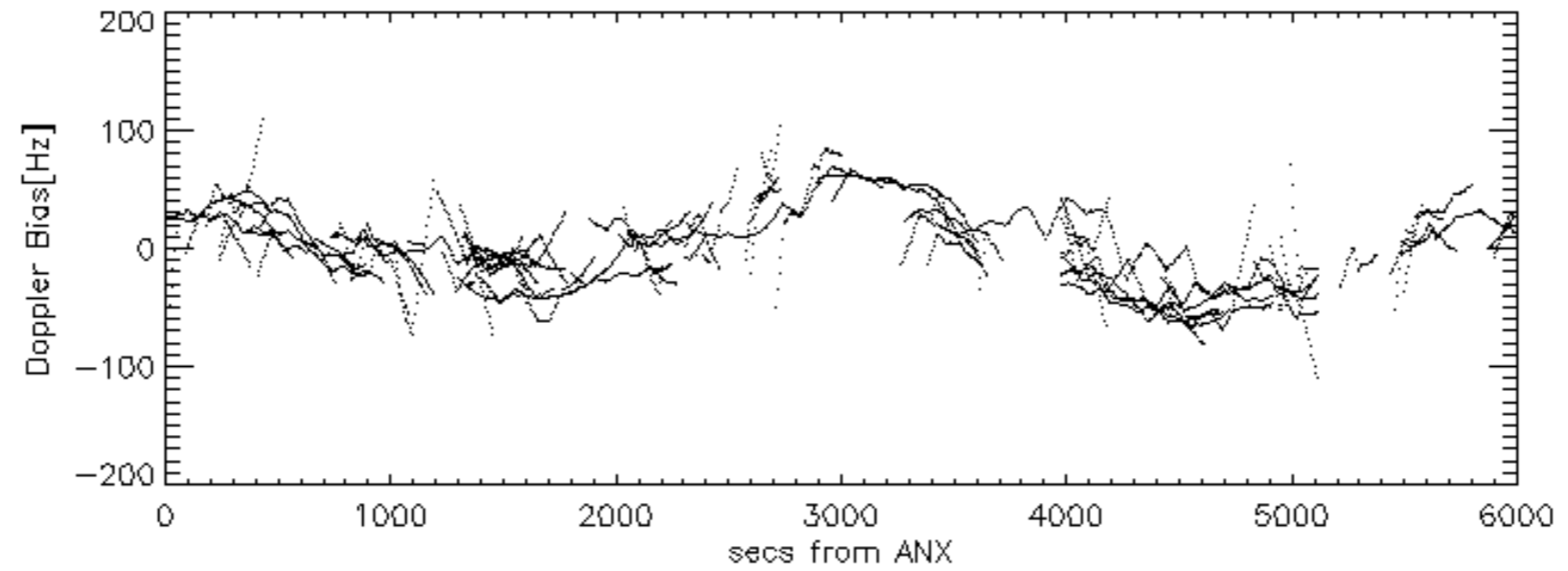
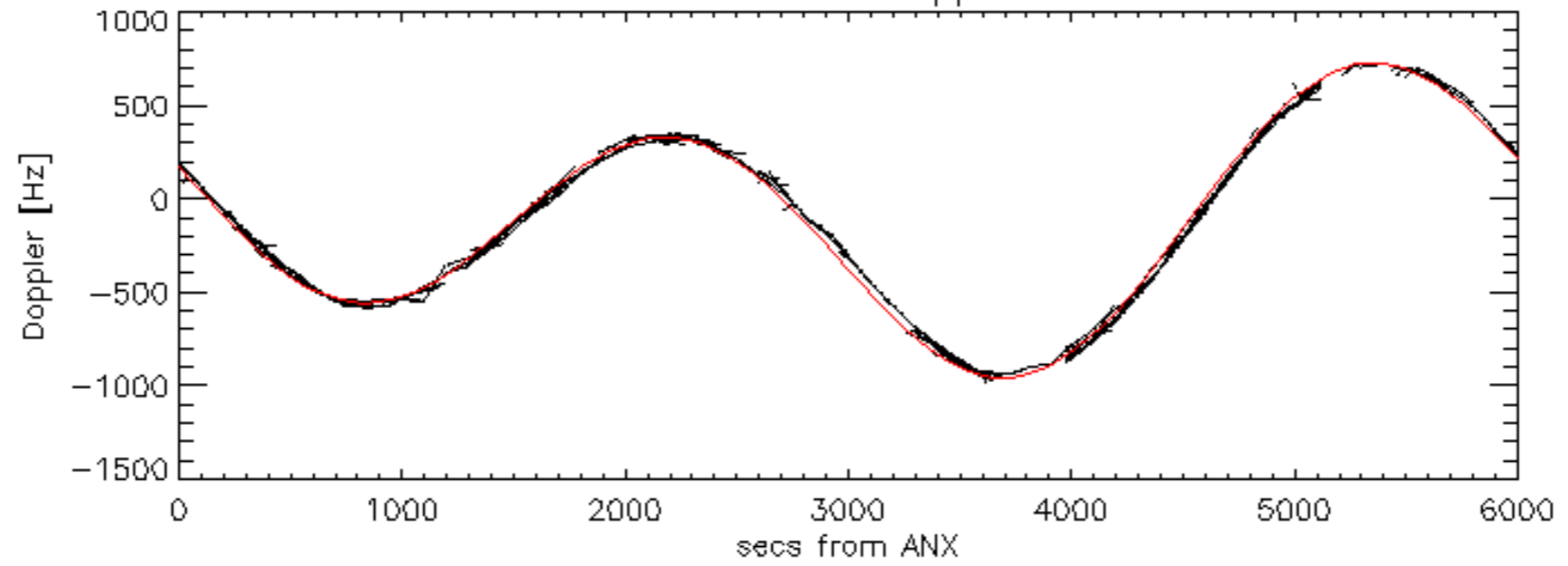
Doppler 'WVS' 'IS2' ascending

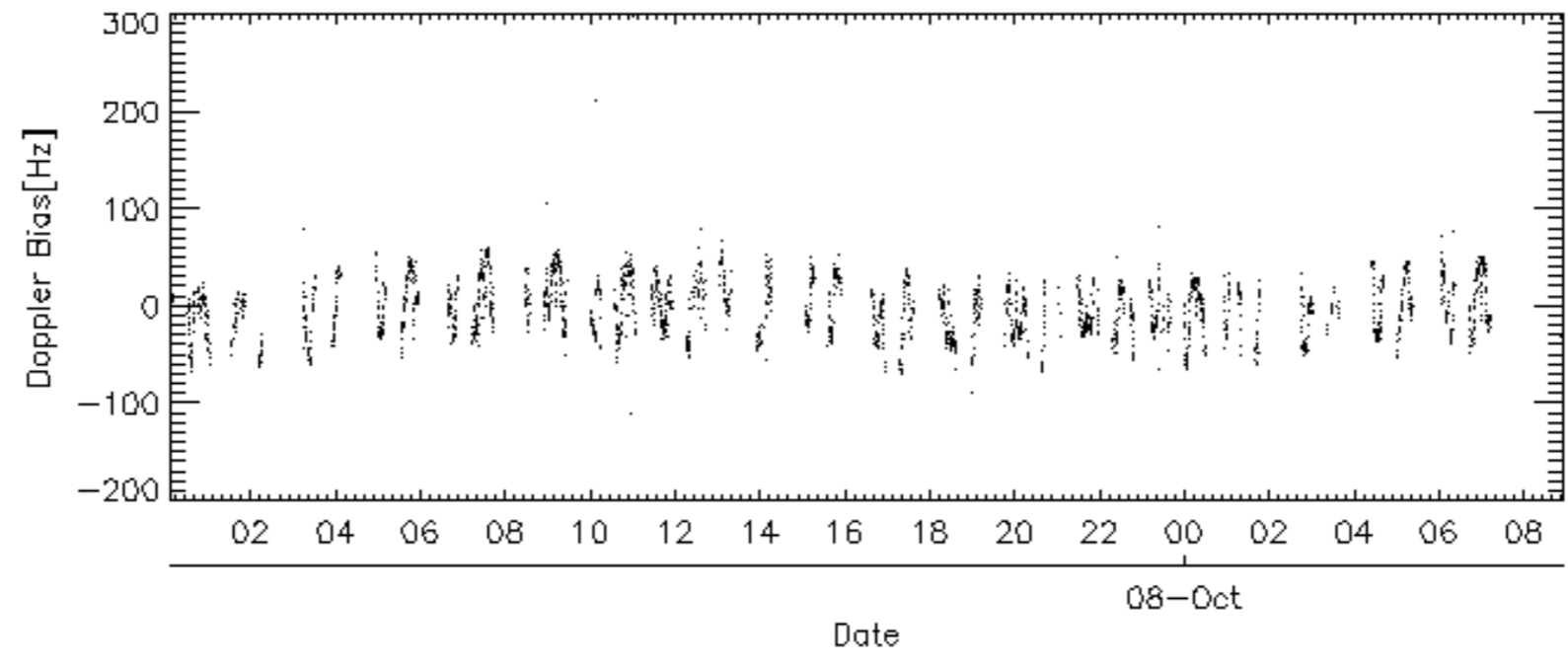
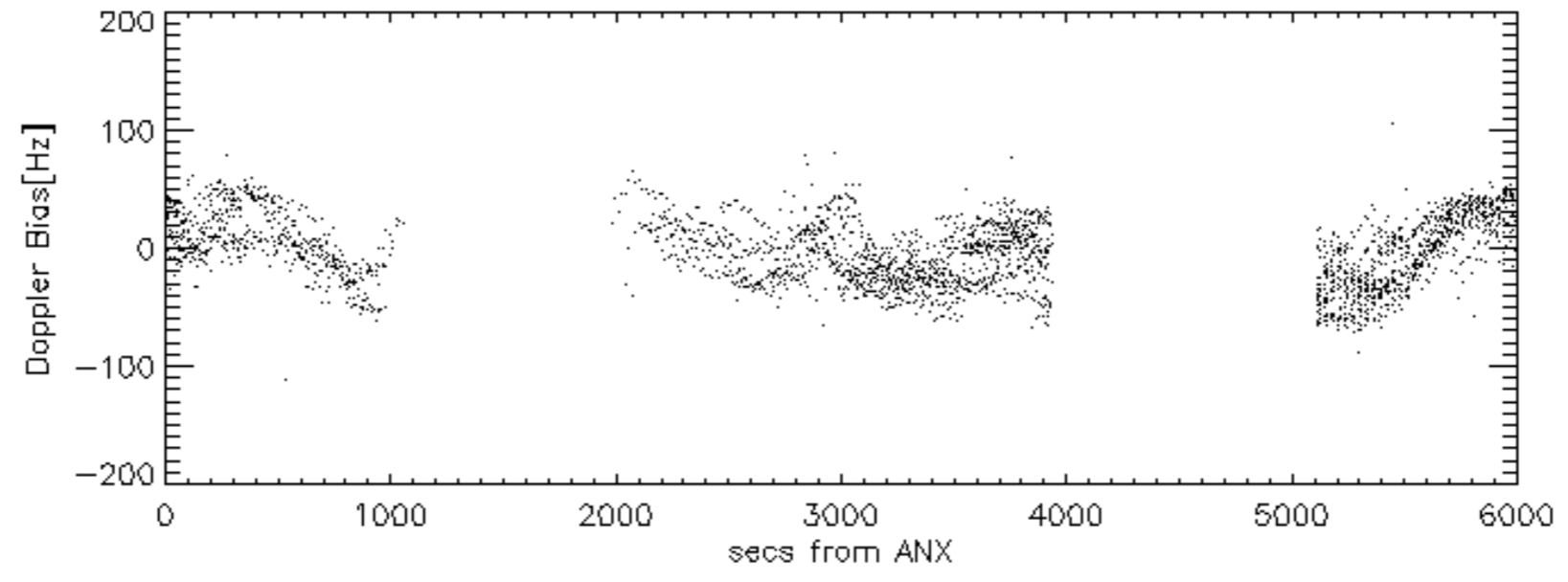
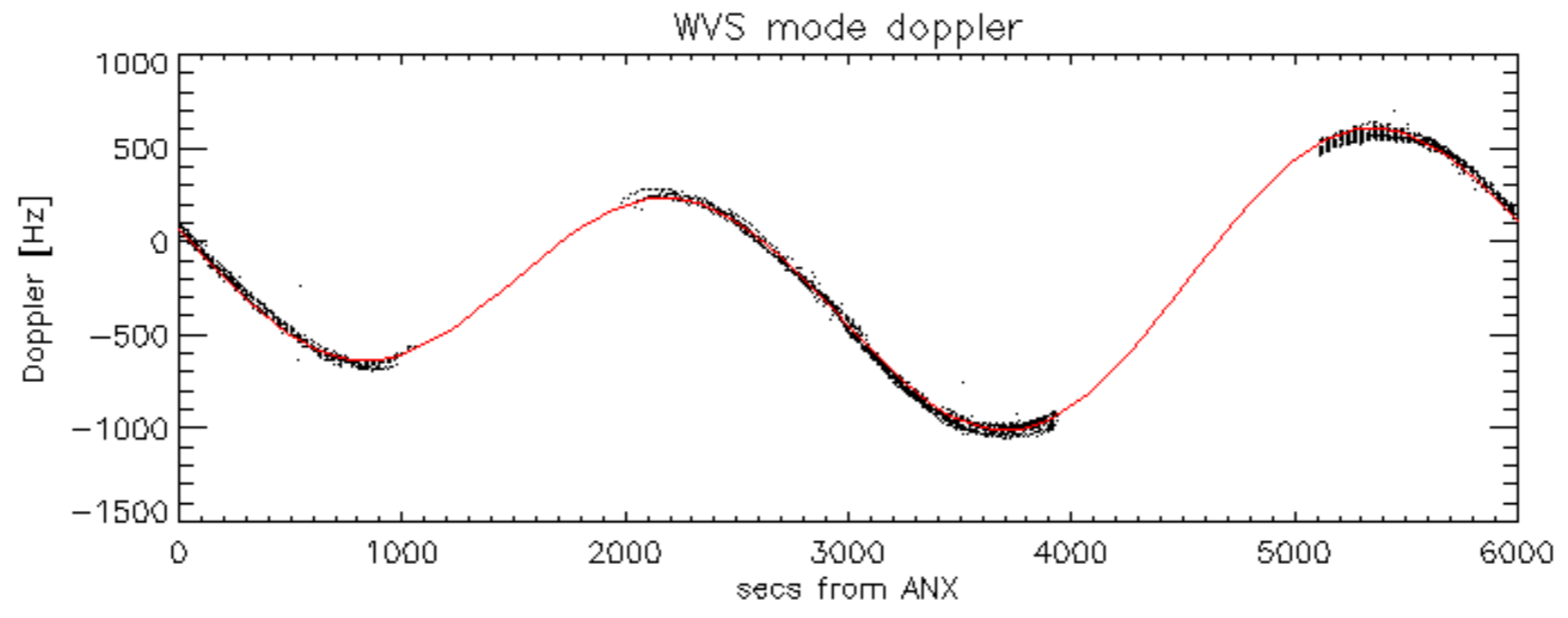


Doppler 'WVS' 'IS2' descending

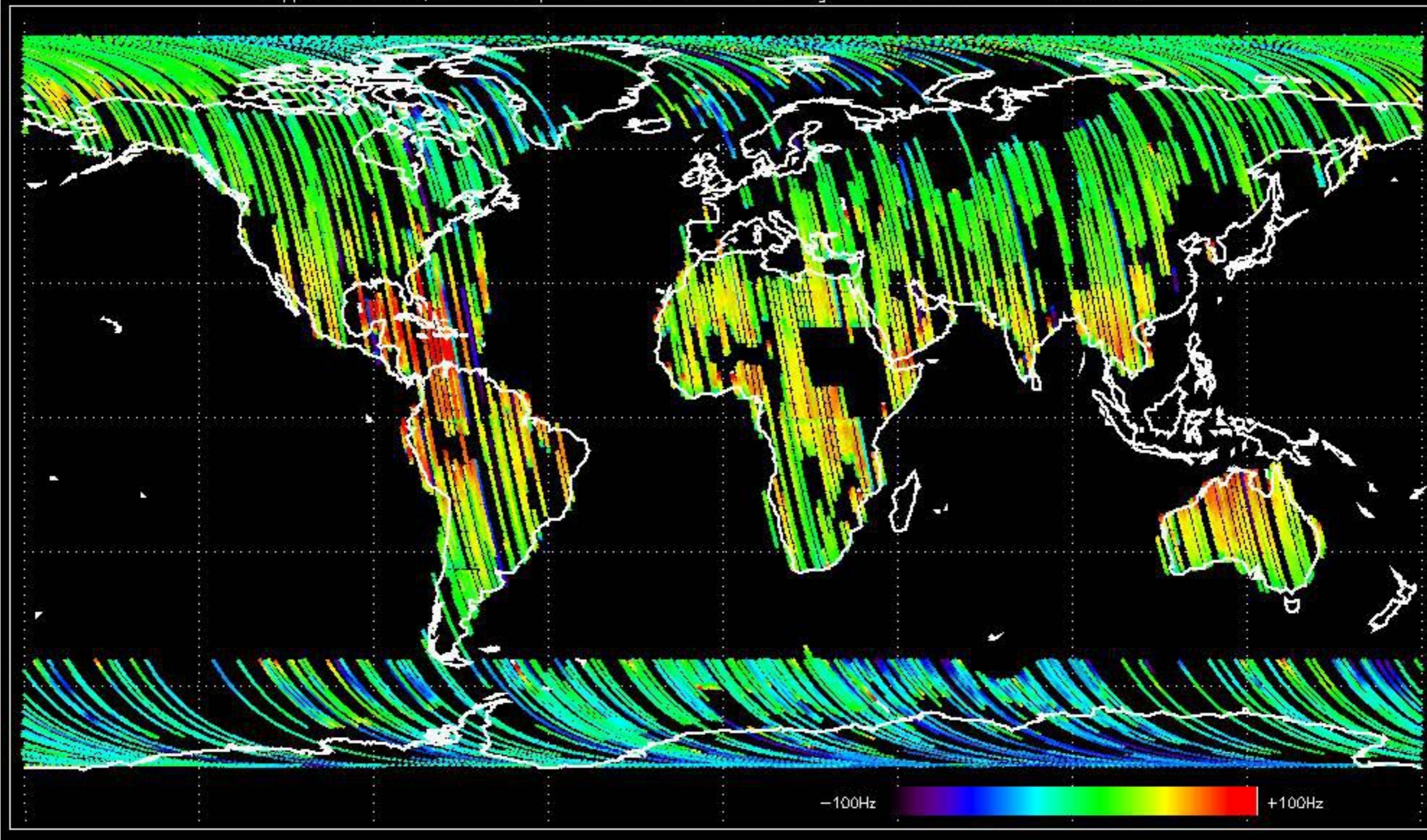


GM1 mode doppler

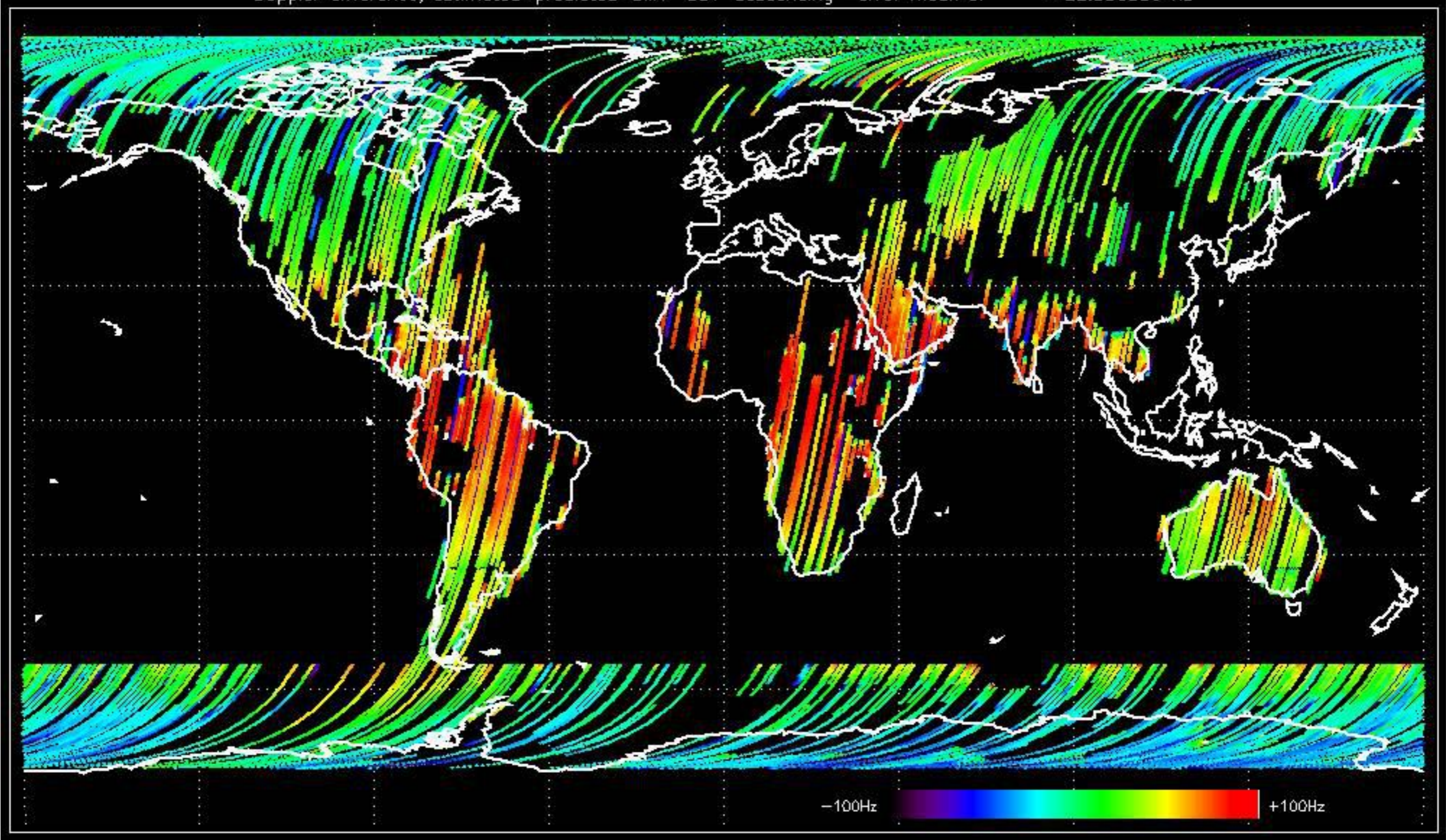




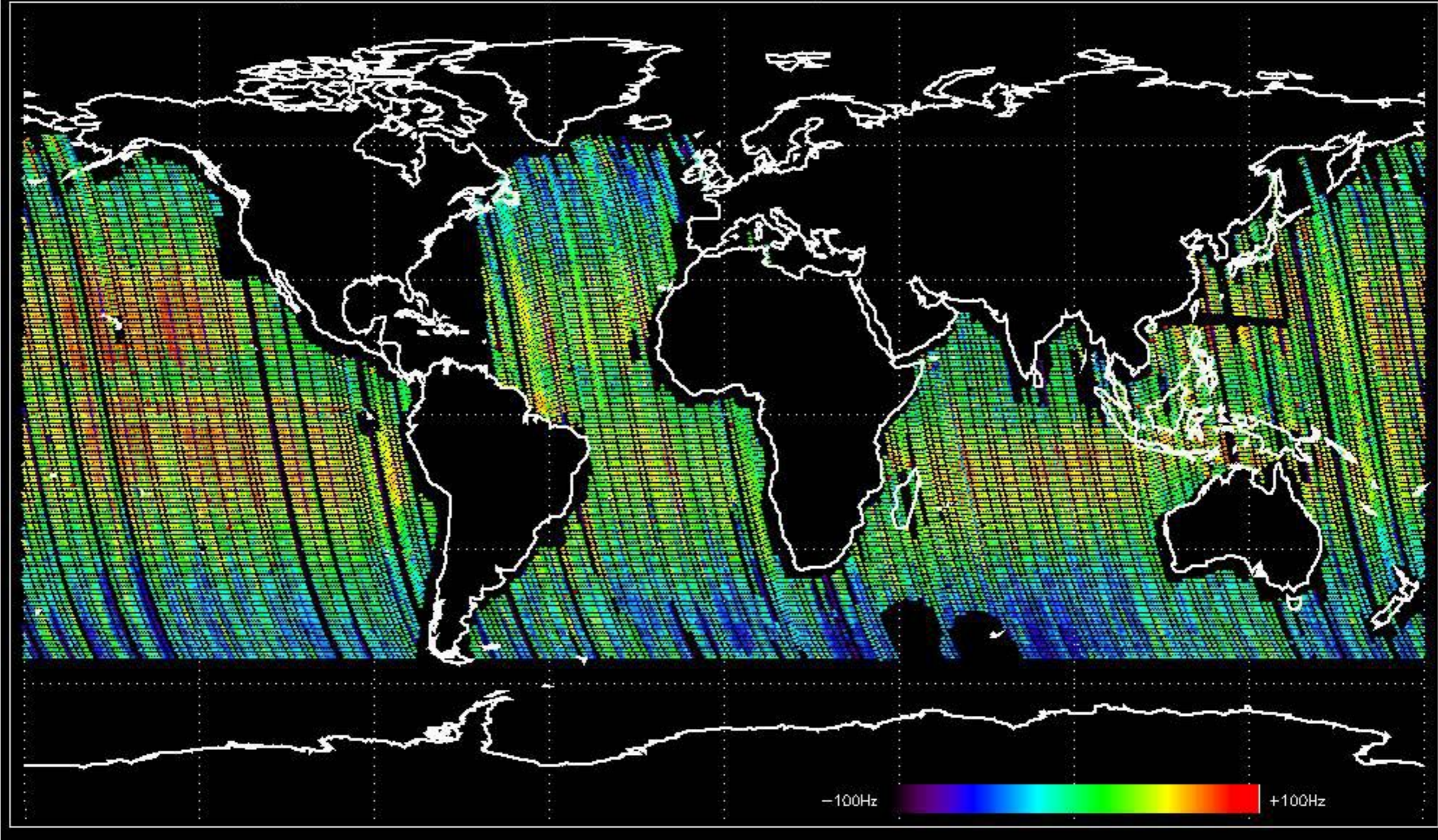
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -24.151690 Hz



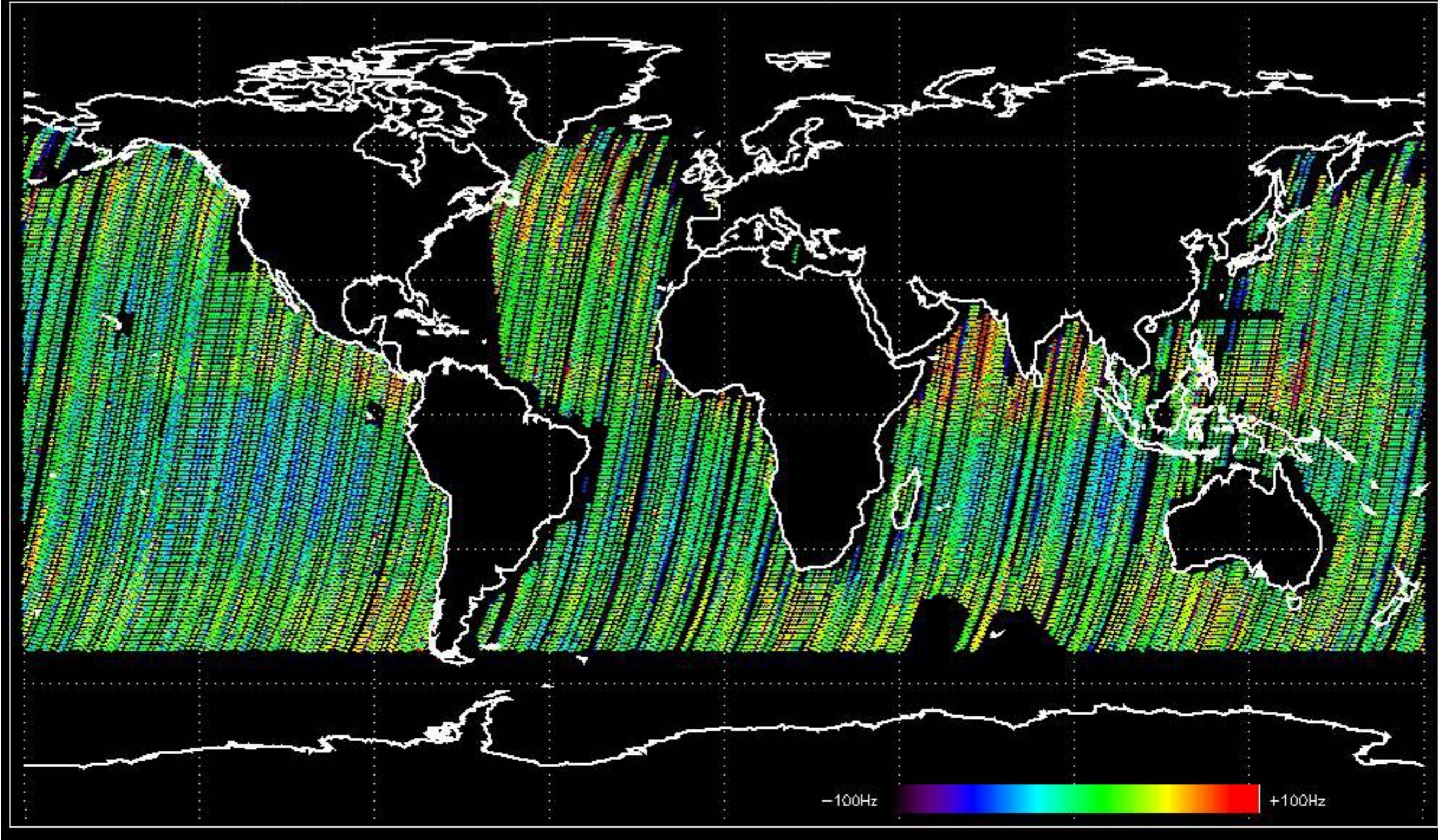
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -22.336836 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -19.154014 Hz



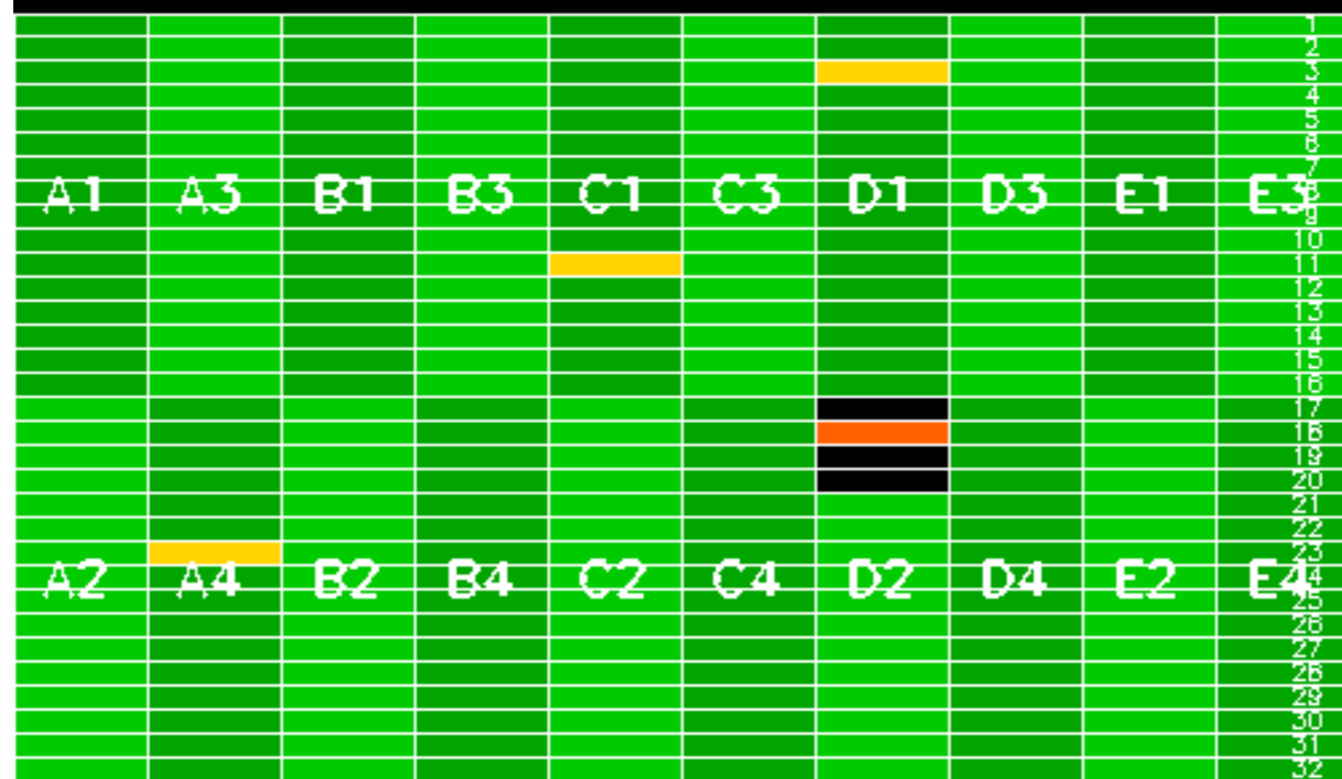
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -23.603150 Hz

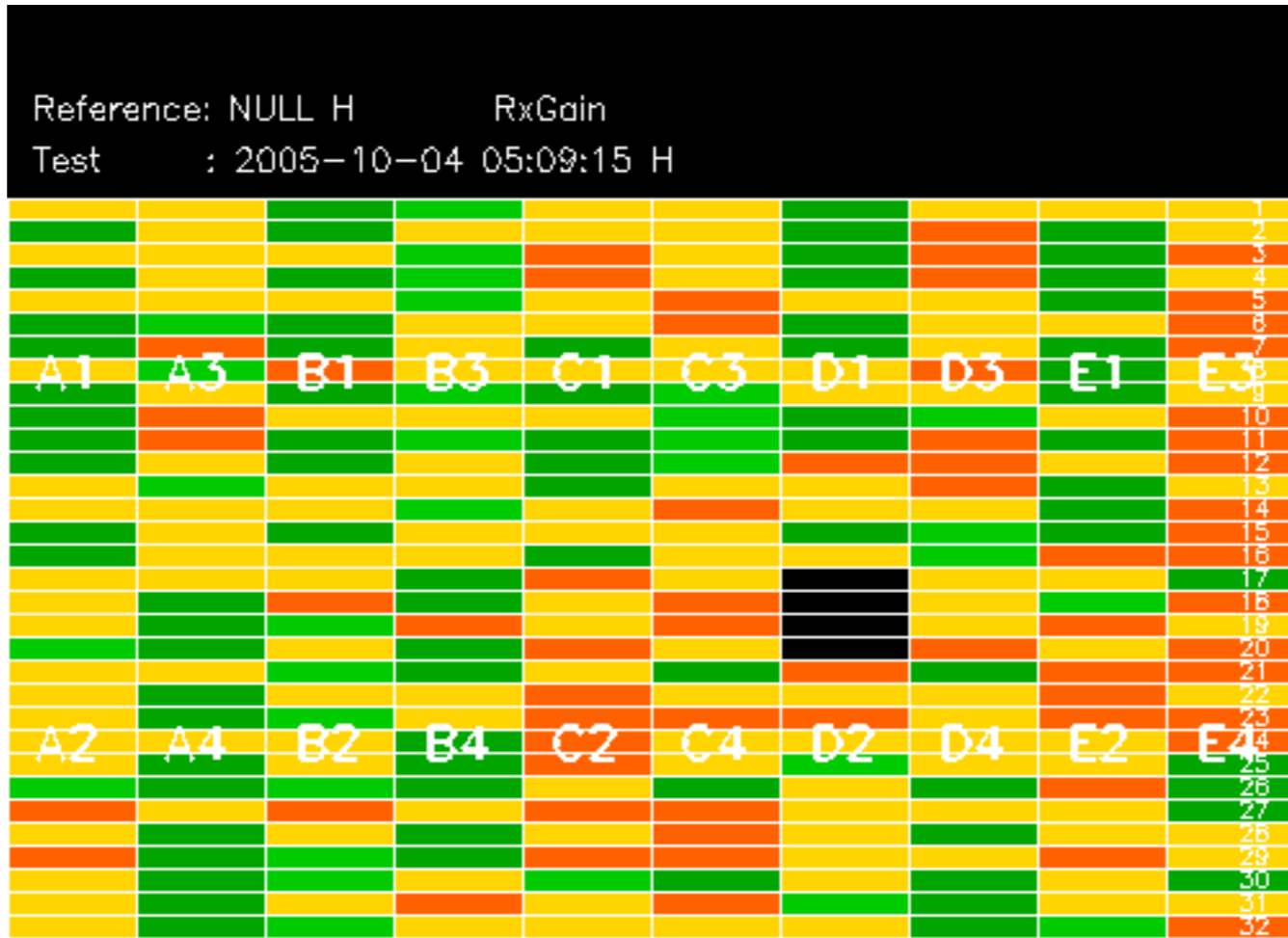


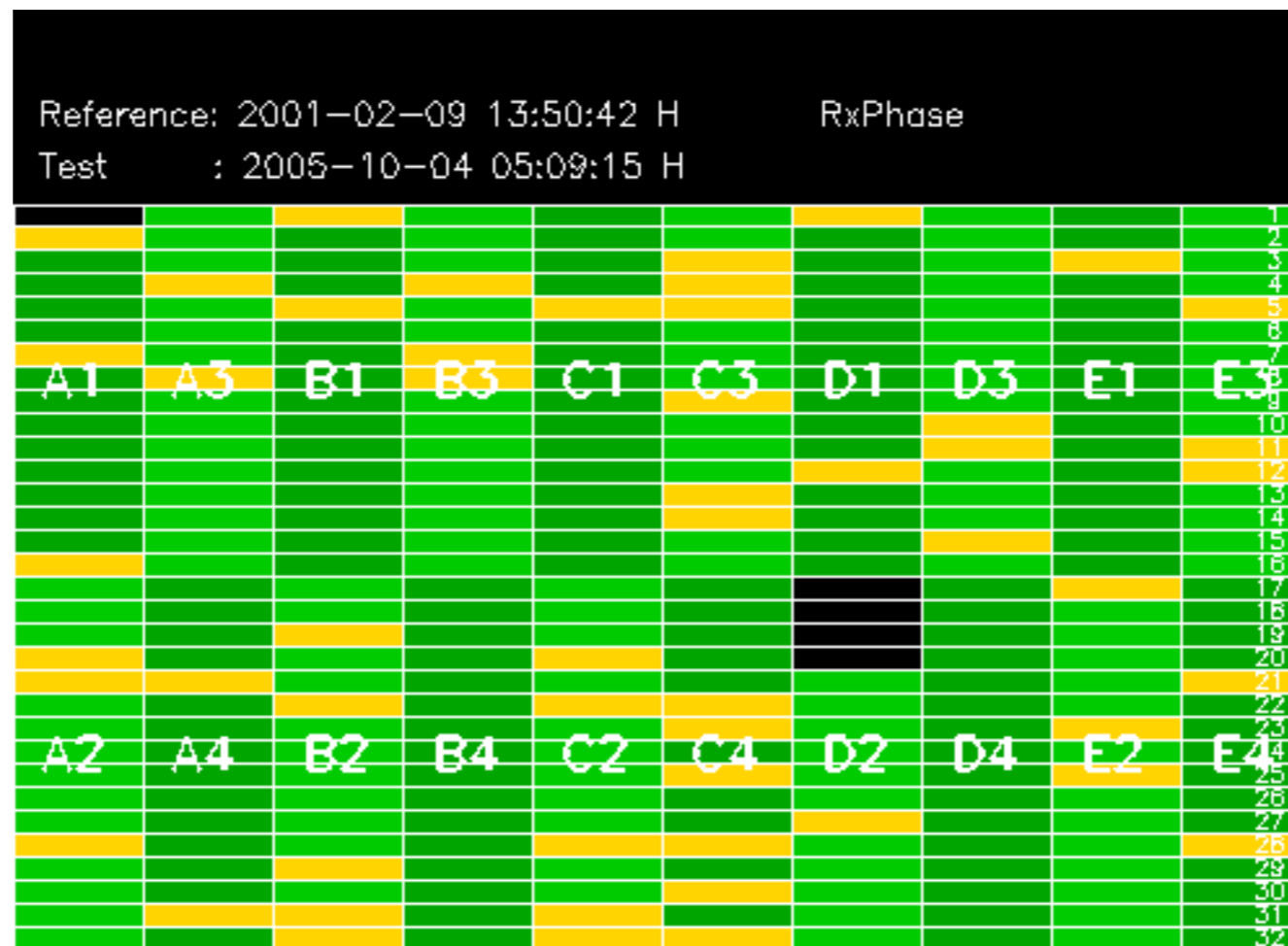
No anomalies observed on available MS products:

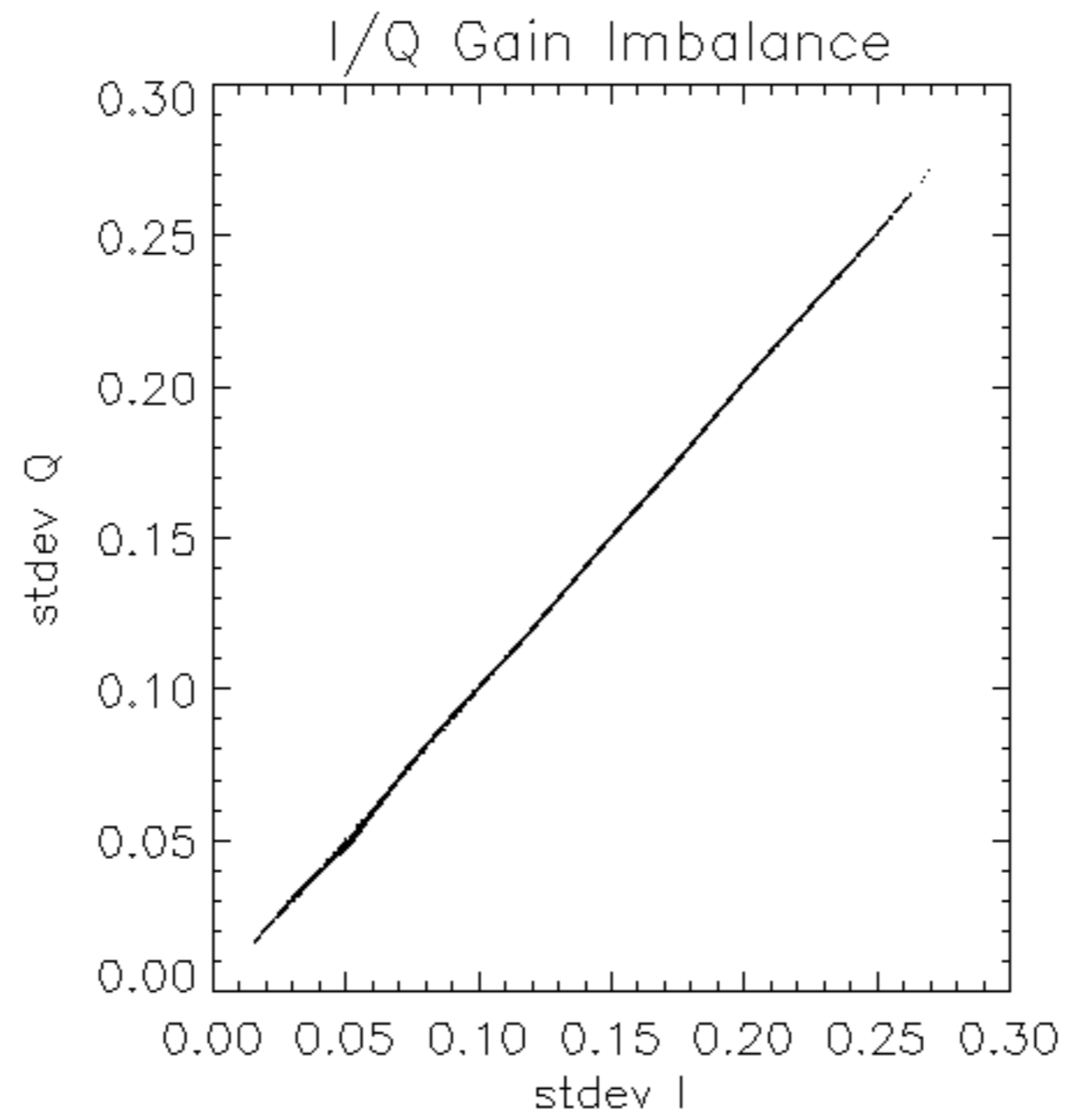
No anomalies observed.

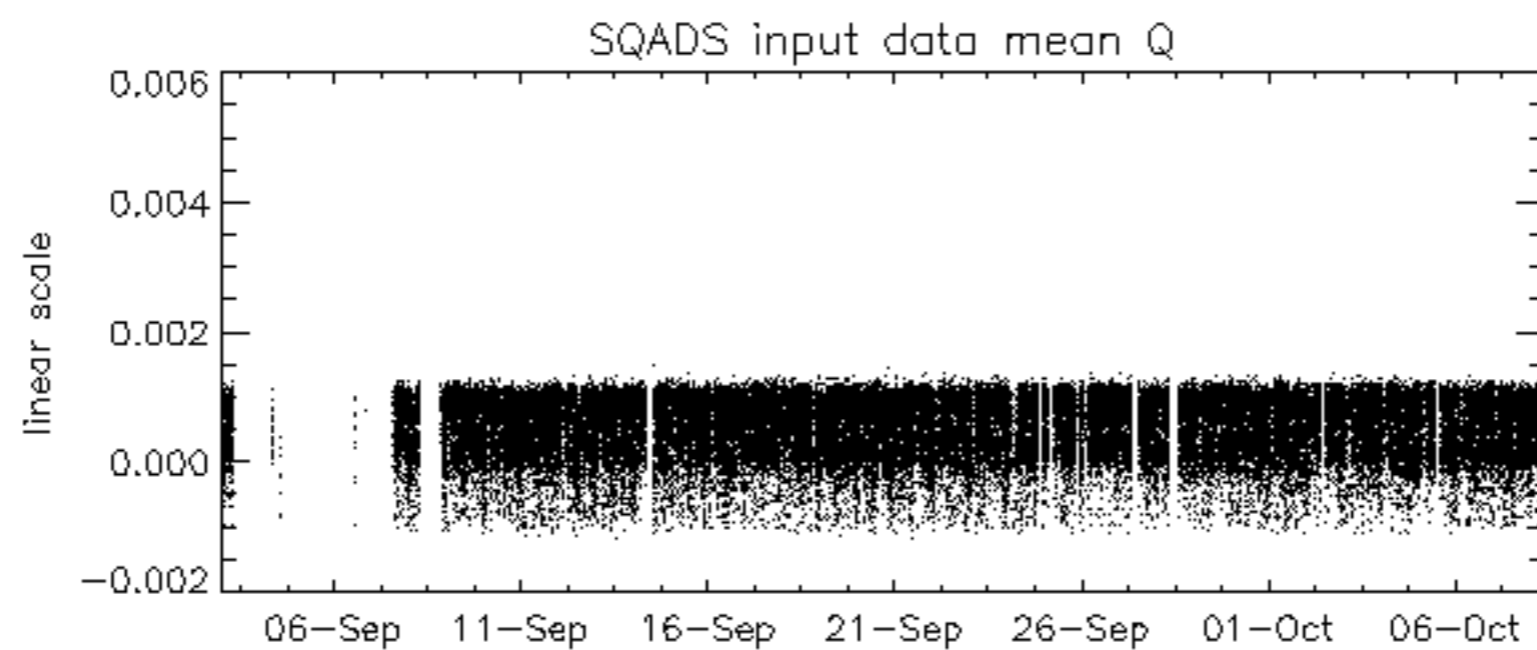
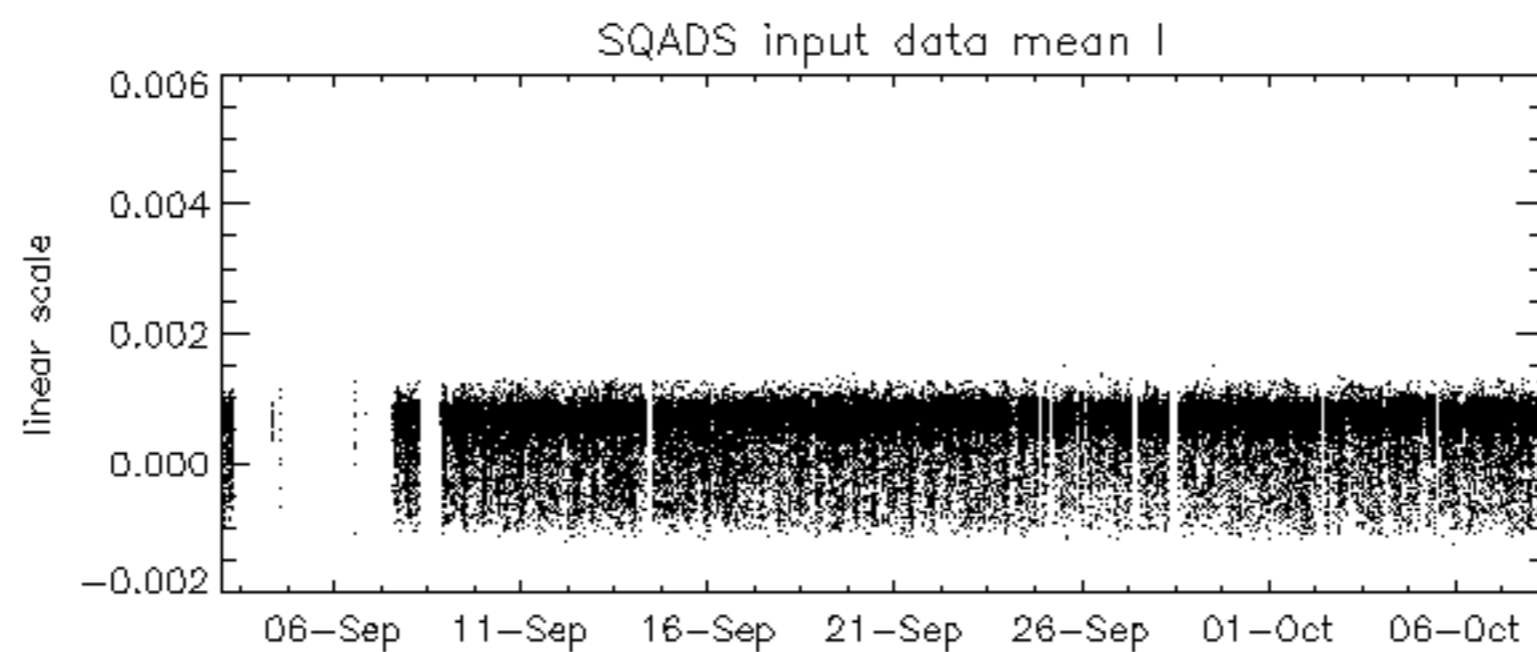
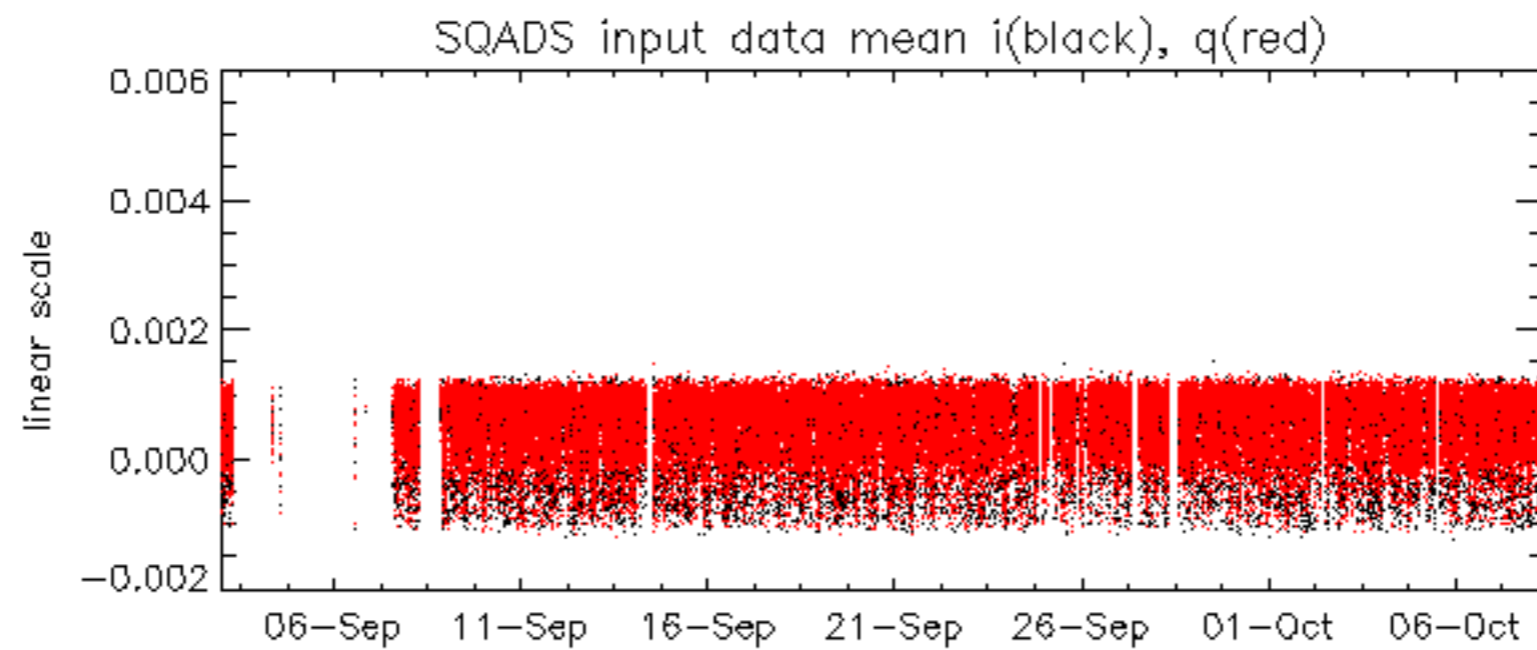
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 Test : 2005-10-04 05:09:15 H

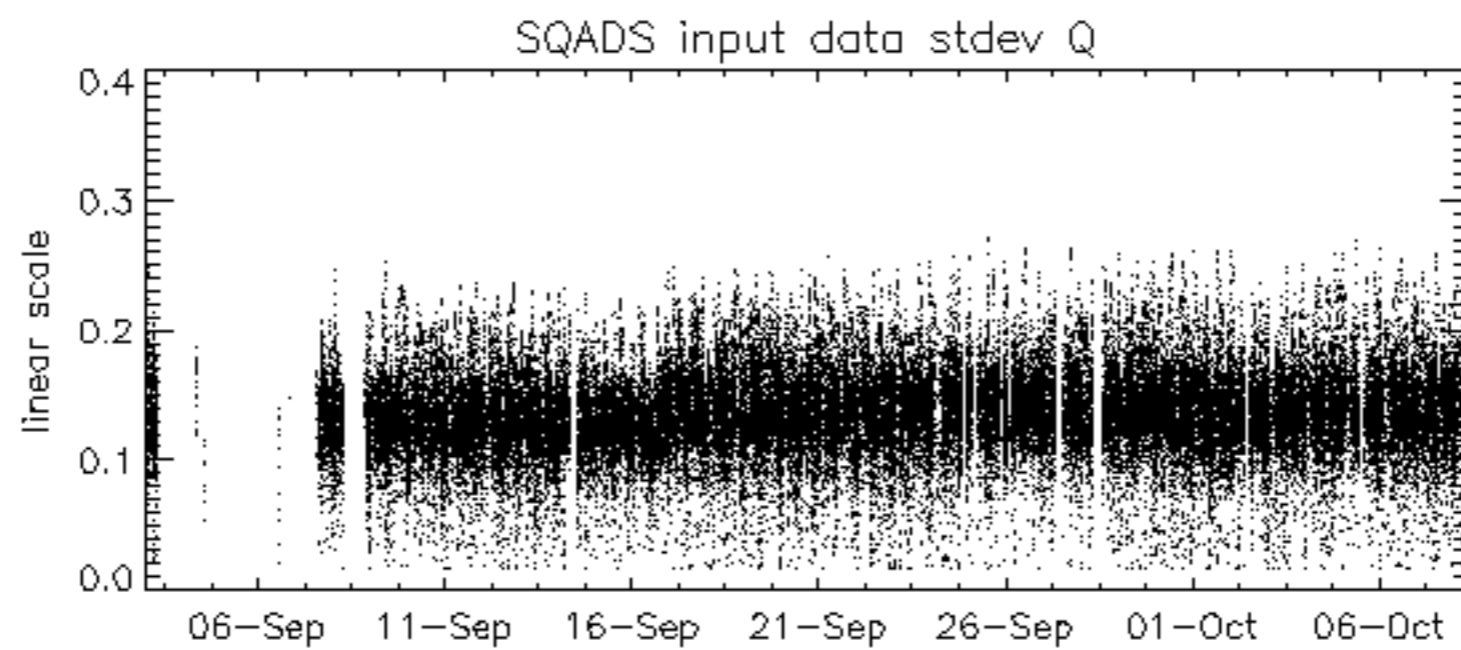
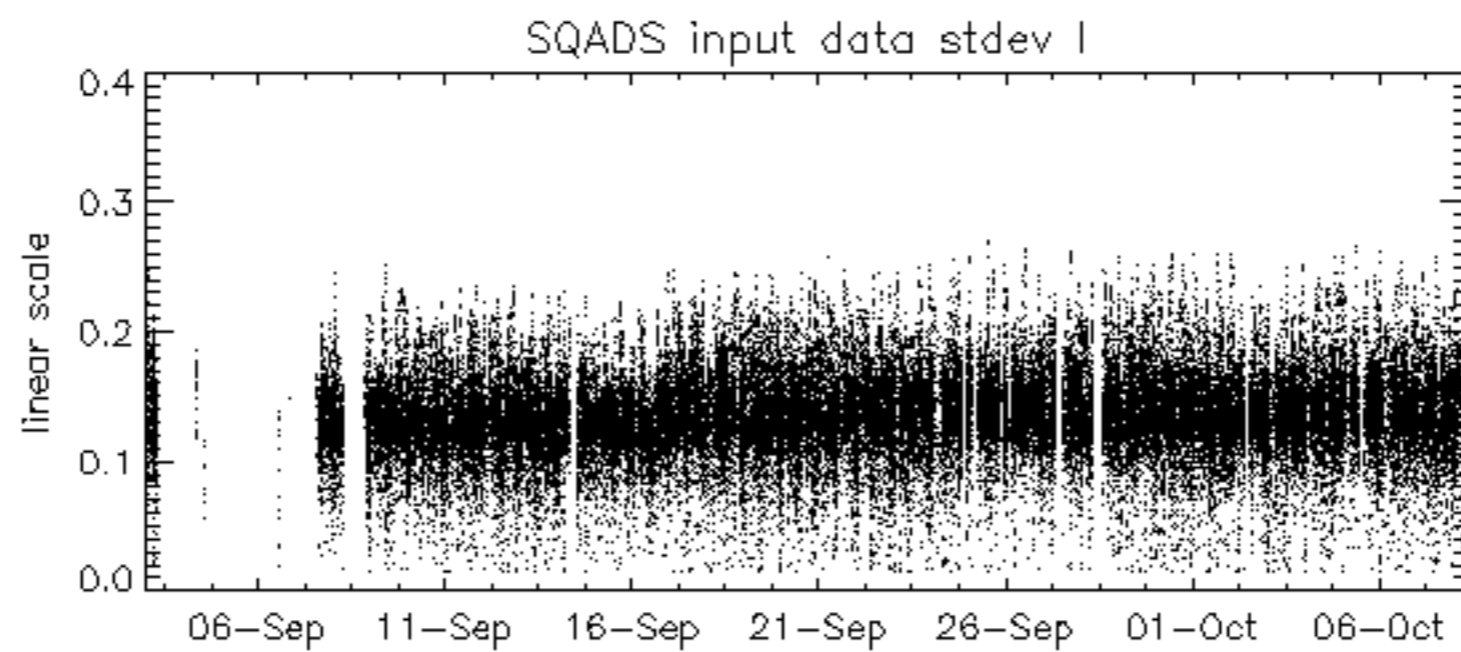
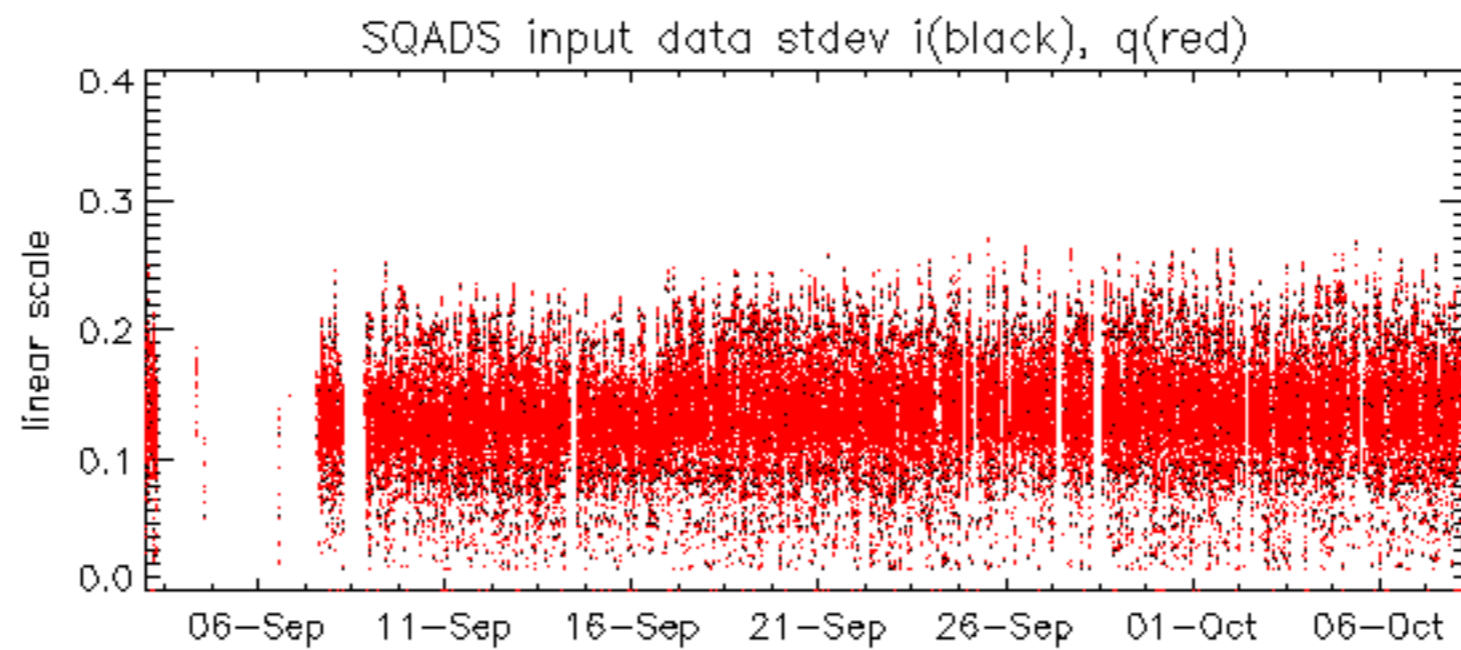








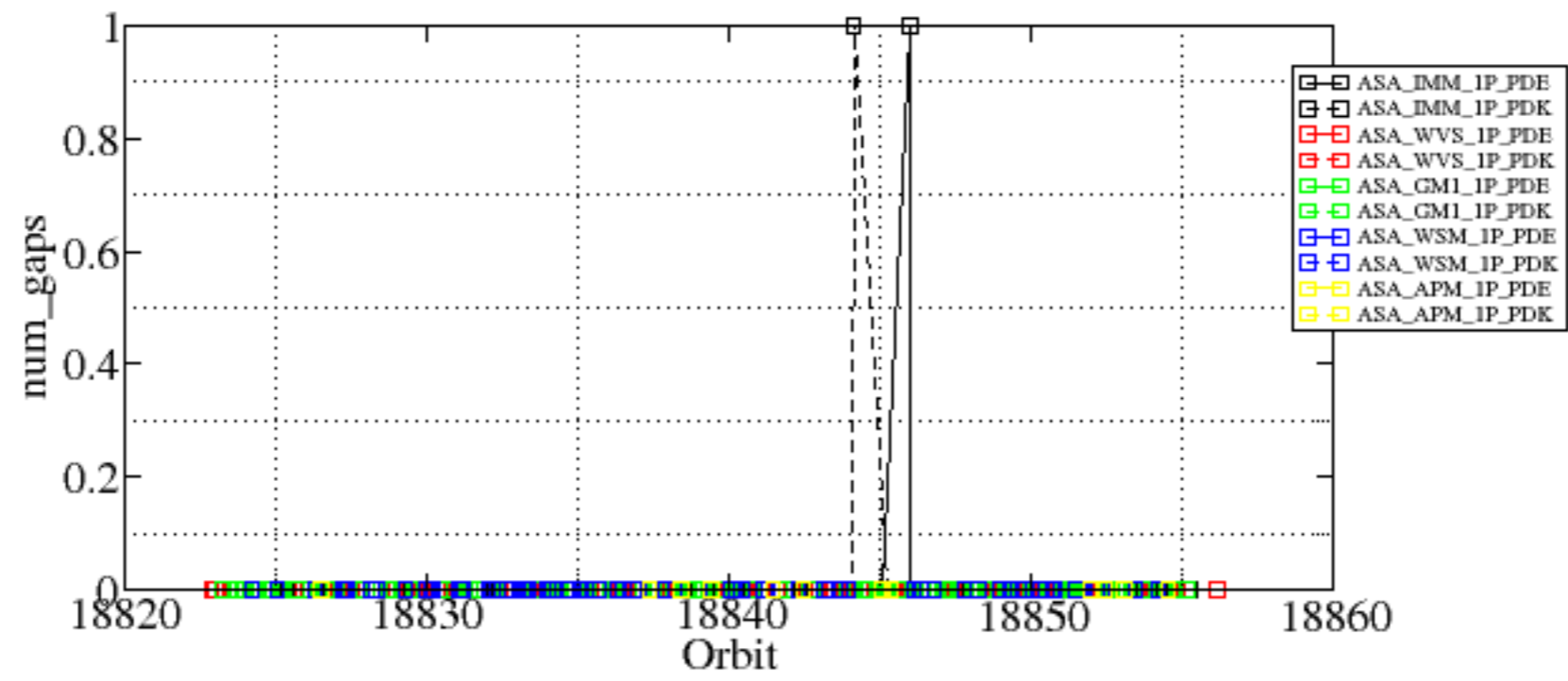


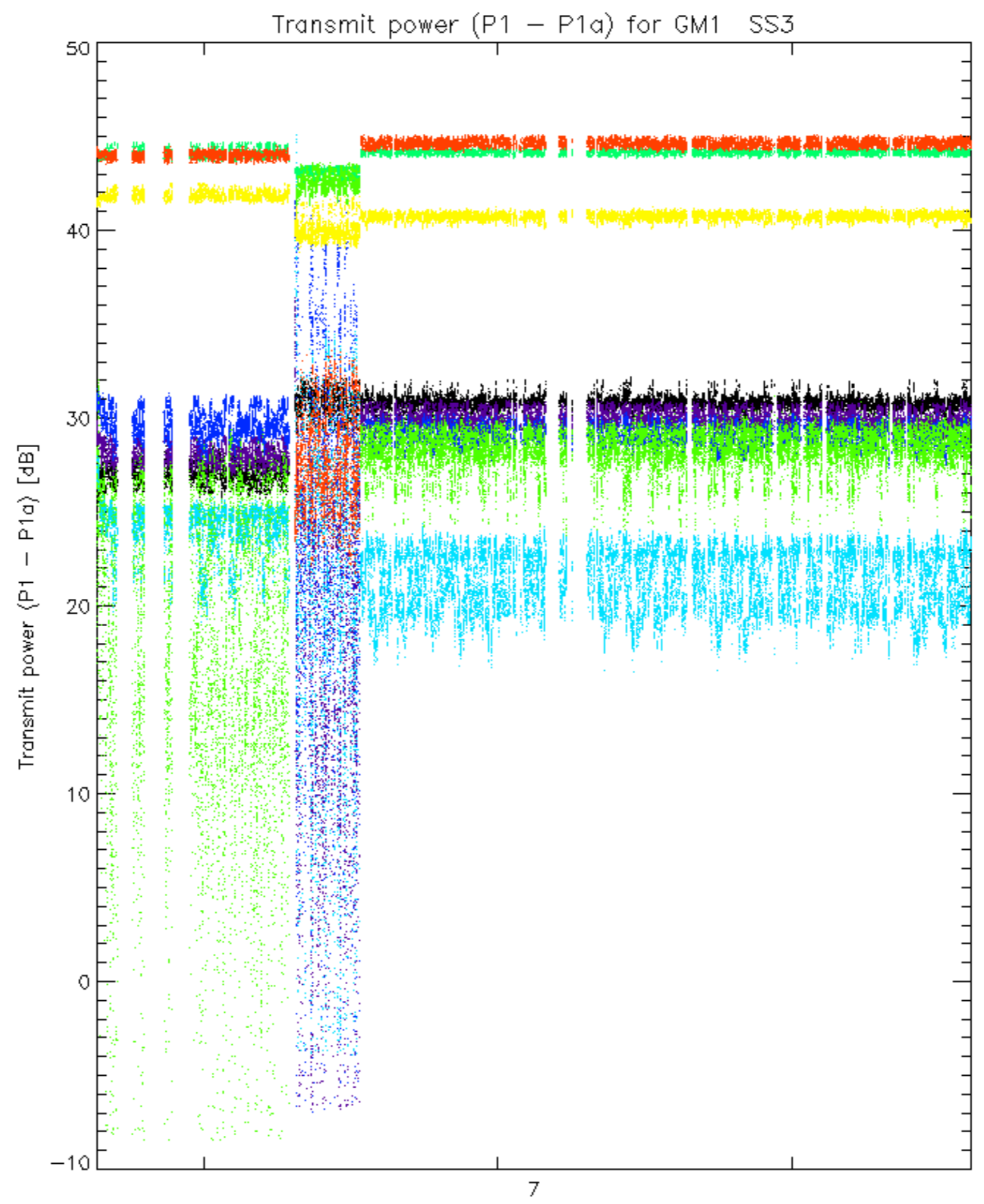


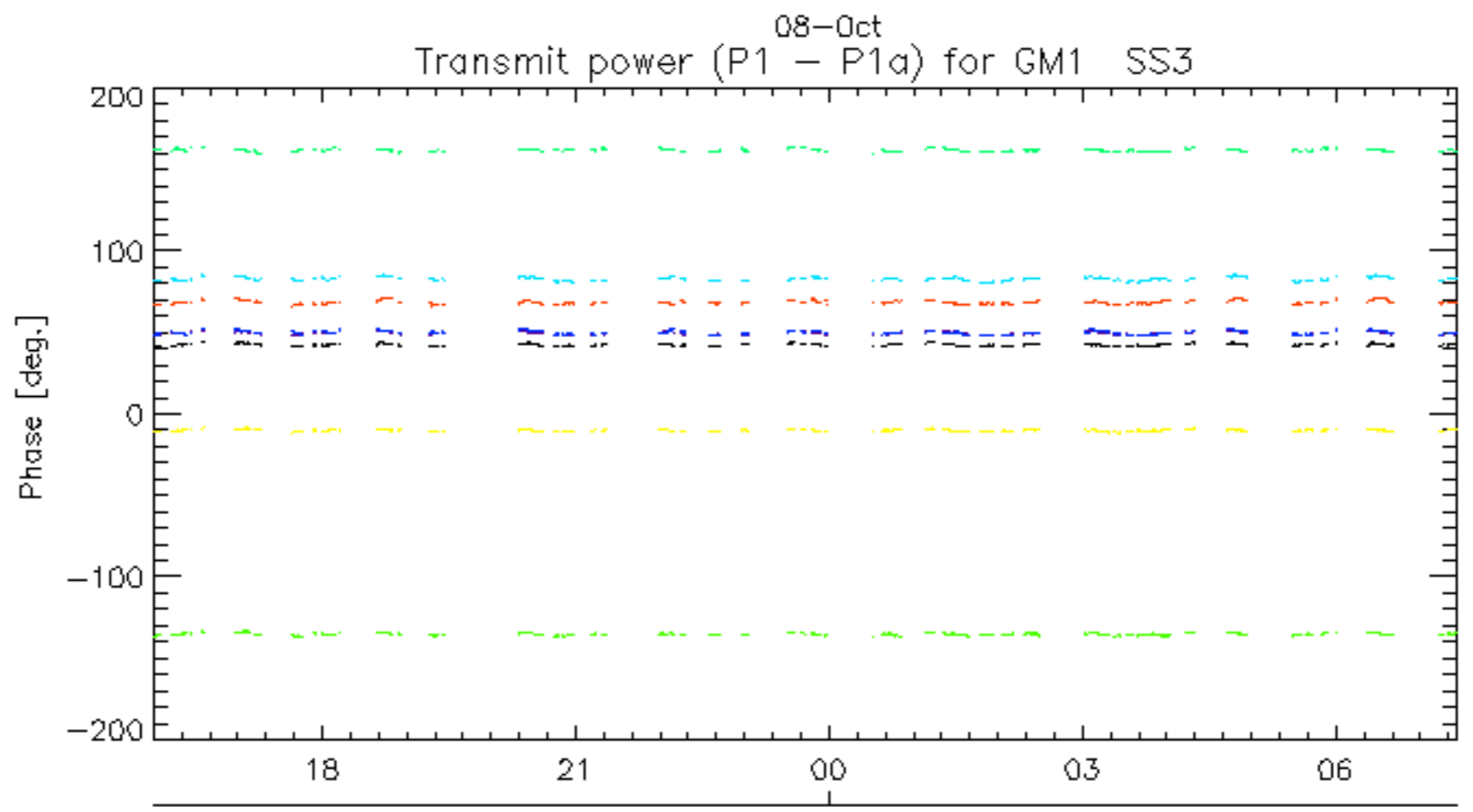
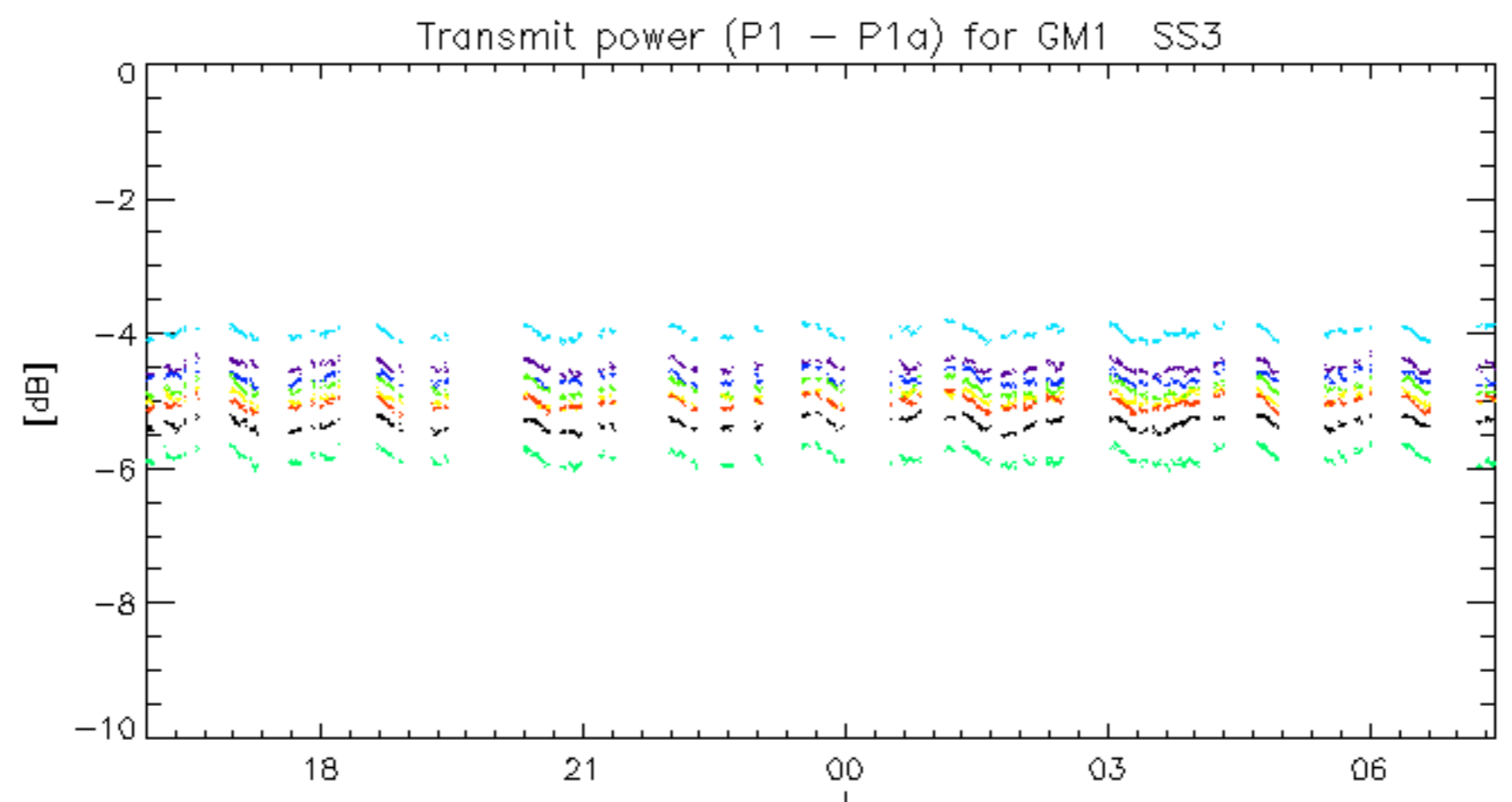
Summary of analysis for the last 3 days 2005100[678]

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

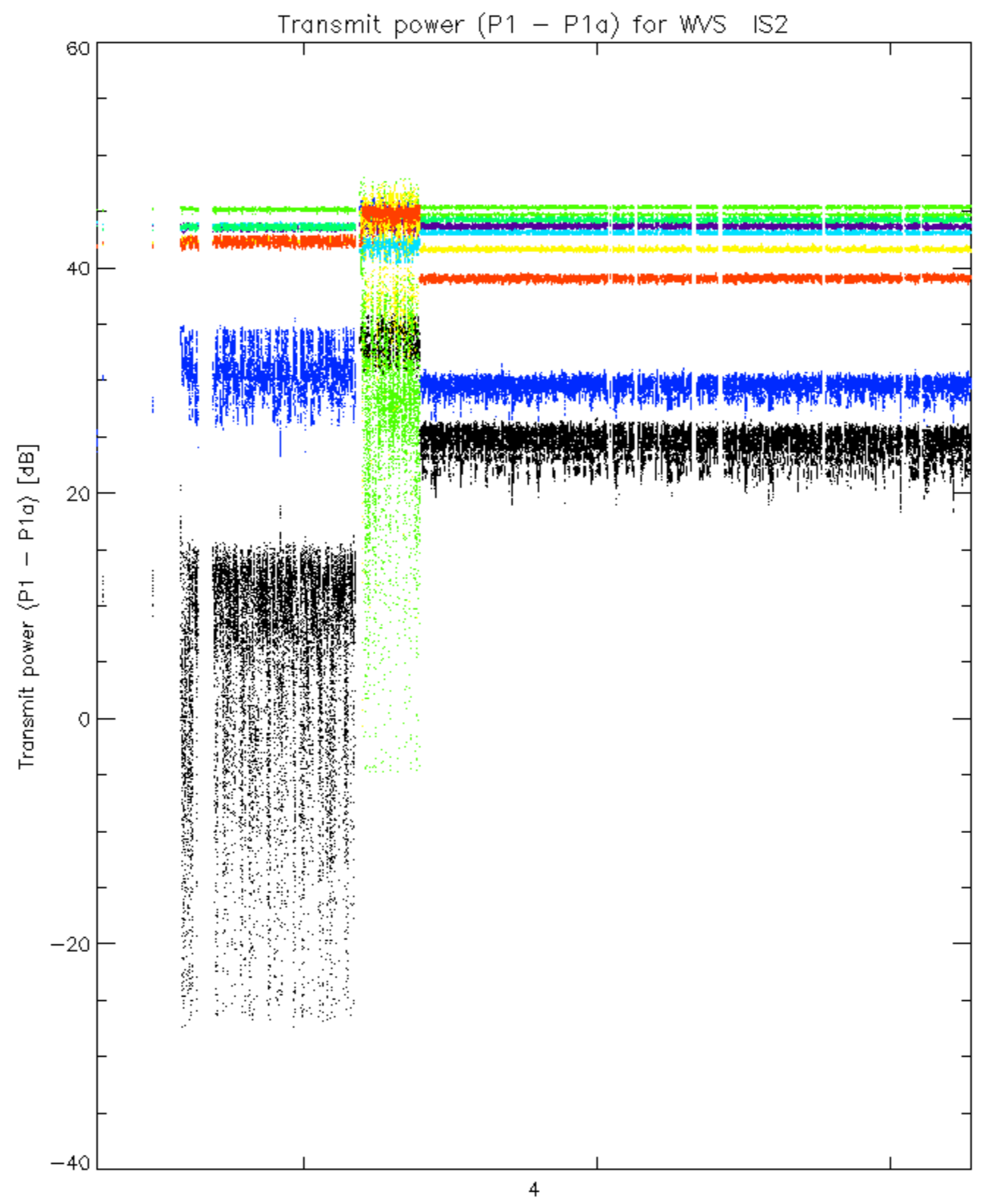
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20051007_155150_00000772041_00255_18846_7711.N1	1	0
ASA_IMM_1PNPDK20051007_124322_00000532041_00253_18844_5323.N1	1	0
ASA_WSM_1PNPDE20051006_044316_000003062041_00234_18825_2610.N1	0	53
ASA_WSM_1PNPDE20051006_162645_000001762041_00241_18832_2652.N1	0	44
ASA_WSM_1PNPDE20051006_180926_000001832041_00242_18833_2673.N1	0	19
ASA_WSM_1PNPDE20051006_184205_00000852041_00242_18833_2698.N1	0	1
ASA_WSM_1PNPDE20051007_013227_000002392041_00246_18837_2779.N1	0	55
ASA_APM_1PNPDE20051007_141715_00000822041_00254_18845_1696.N1	0	21



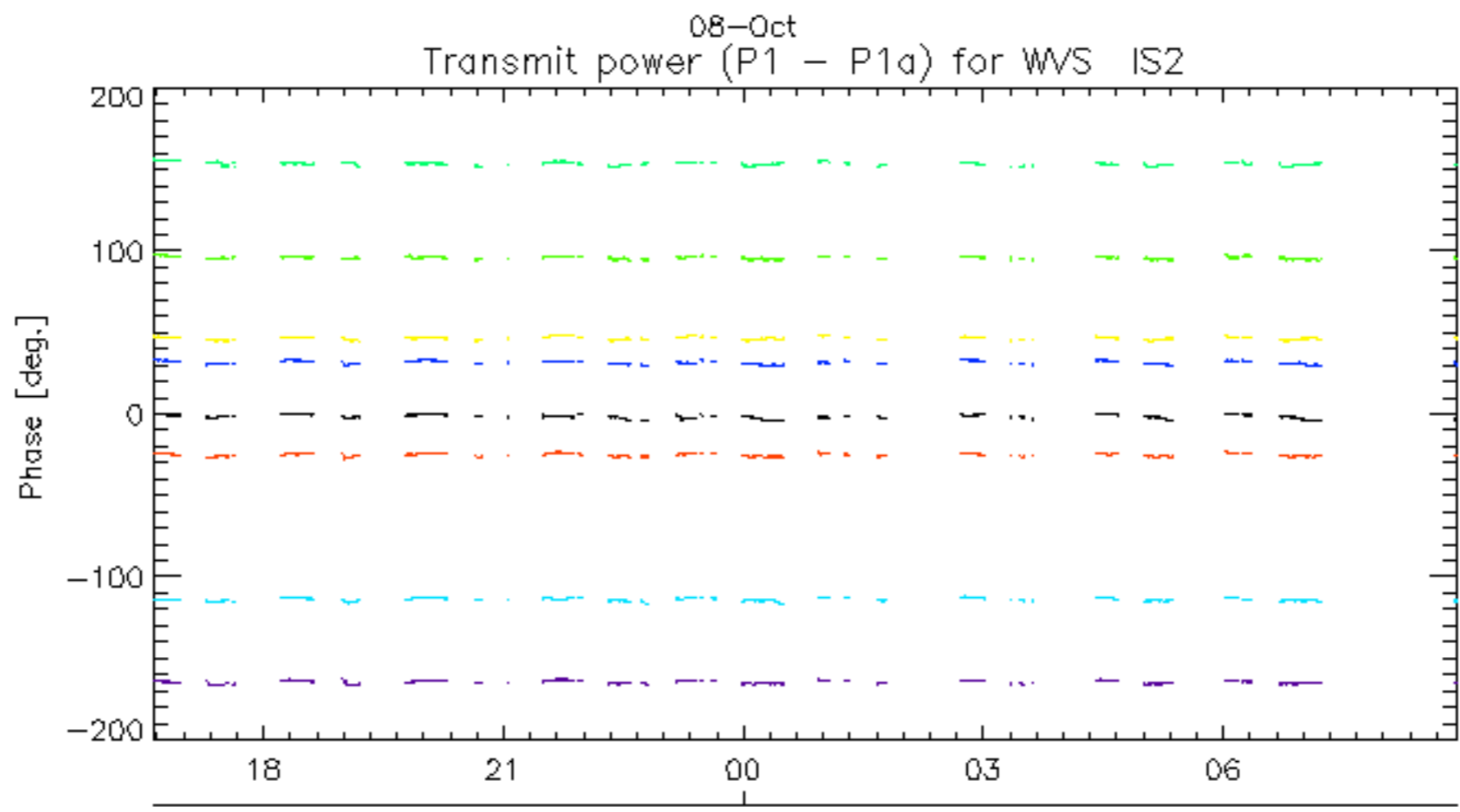
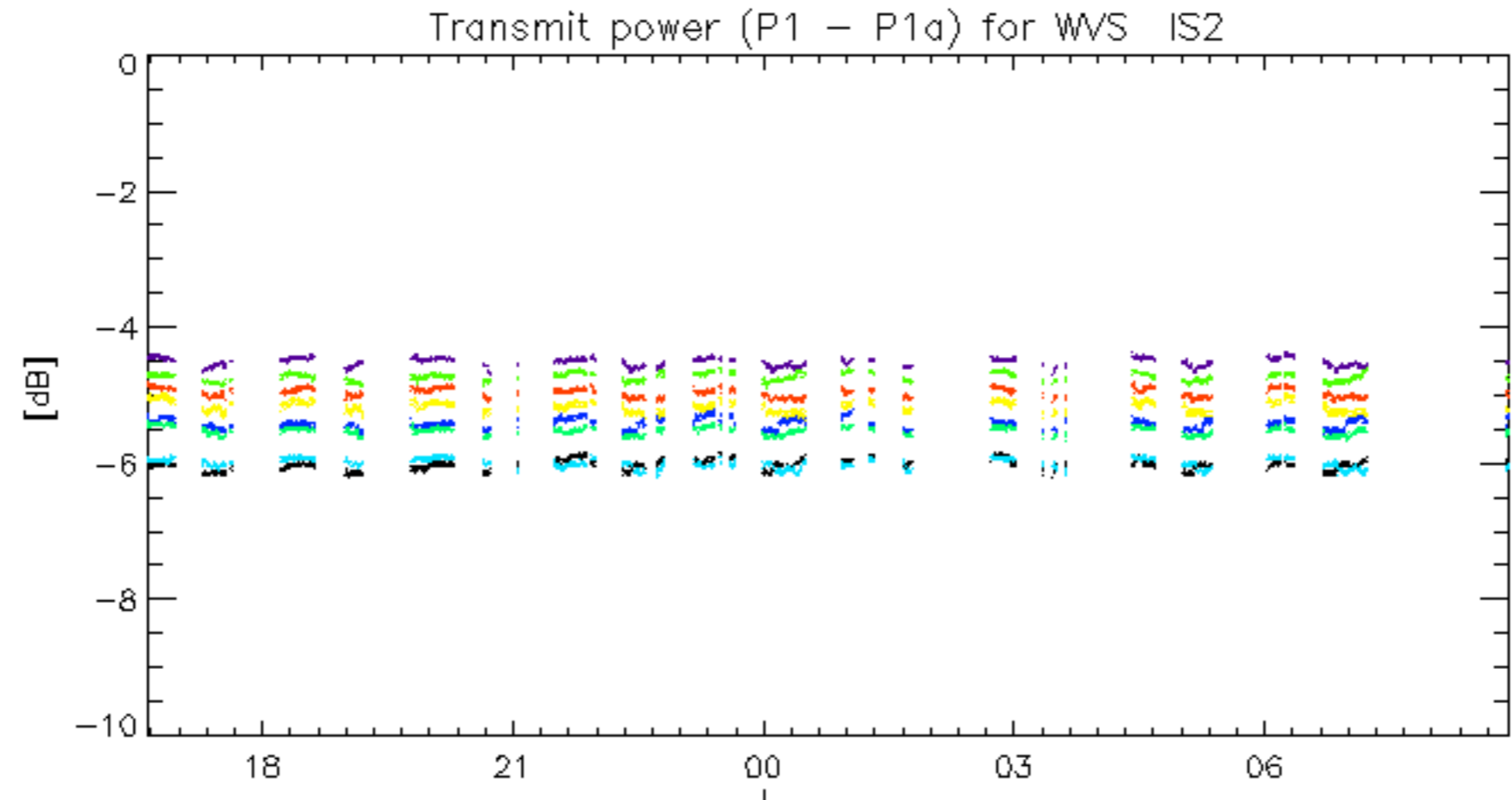




rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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



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

No unavailabilities during the reported period.