

PRELIMINARY REPORT OF 050109

ATTENTION: This report is automatically generated no comments are provided on data analysis

last update on Sun Jan 9 11:01:35 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. [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 2005-01-08 00:00:00 to 2005-01-09 11:01:35

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	32	44	4	2	0
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	32	44	4	2	0
ASA_CON_AXVIEC20041215_175442_20030601_000000_20051231_000000	32	44	4	2	0
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	32	44	4	2	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	41	45	1	11	4
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	41	45	1	11	4
ASA_CON_AXVIEC20041215_175442_20030601_000000_20051231_000000	41	45	1	11	4
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	41	45	1	11	4

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

The MS mode provides an internal health check on an individual module basis. The purpose of this mode is to identify any malfunctioning modules and to identify modules for which calibration offsets are to be applied. No anomalies observed on available MS products:

Polarisation	Start Time
V	20050105 073837
H	20050108 060346

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	-3.446548	0.030082	0.115240
7	P1	-3.097784	0.024762	0.076859
11	P1	-4.656644	0.045971	0.066601
15	P1	-5.662339	0.039791	0.035554
19	P1	-3.659163	0.006021	0.005763
22	P1	-4.573363	0.017051	0.027544
26	P1	-4.941221	0.024929	0.046034
30	P1	-7.122334	0.013634	-0.016192
3	P1	-15.939701	0.108175	0.025291
7	P1	-15.503634	0.156208	-0.057932
11	P1	-20.758104	0.546641	-0.327716
15	P1	-11.611988	0.102598	-0.016883
19	P1	-14.170122	0.031585	-0.002197
22	P1	-16.047499	0.454762	0.190984
26	P1	-17.726717	0.250179	0.137291
30	P1	-17.871180	0.310283	0.078227

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.331572	0.087876	0.110781
7	P2	-22.536058	0.172493	0.120057
11	P2	-14.833436	0.185348	0.164549
15	P2	-7.153064	0.117270	0.088098
19	P2	-9.730230	0.212386	0.109097
22	P2	-17.143929	0.100399	0.124434
26	P2	-16.530191	0.116796	0.084561

30	P2	-18.954002	0.084051	0.056621
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P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.207246	0.007147	0.034906
7	P3	-8.207243	0.007148	0.034875
11	P3	-8.207257	0.007147	0.034965
15	P3	-8.207314	0.007149	0.035291
19	P3	-8.207313	0.007150	0.035296
22	P3	-8.207294	0.007147	0.035212
26	P3	-8.207262	0.007147	0.035023
30	P3	-8.206991	0.007141	0.036096

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1
<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	-2.850715	0.108529	0.165245
7	P1	-2.978335	0.063668	0.115148
11	P1	-3.955605	0.047907	0.060786
15	P1	-3.525899	0.077465	0.112677
19	P1	-3.610311	0.012936	-0.001332
22	P1	-5.632284	0.068508	-0.032515
26	P1	-6.526129	0.024387	-0.037377
30	P1	-6.300209	0.044529	0.031361
3	P1	-10.757237	0.055791	-0.137488
7	P1	-10.129034	0.158261	-0.109146
11	P1	-12.457121	0.197249	-0.251215

15	P1	-11.730217	0.095635	-0.108663
19	P1	-15.643293	0.047528	0.008861
22	P1	-24.109365	1.946764	0.081470
26	P1	-14.956809	0.374864	0.317691
30	P1	-20.097563	0.898570	0.138975

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-18.011192	0.037059	0.085834
7	P2	-22.580715	0.033993	0.124926
11	P2	-10.628173	0.037112	0.208963
15	P2	-5.052697	0.025513	0.043892
19	P2	-6.950485	0.036722	0.067396
22	P2	-7.282388	0.028840	0.094229
26	P2	-23.955435	0.019274	0.047928
30	P2	-22.001688	0.023818	0.072350

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.039936	0.002983	0.026306
7	P3	-8.039943	0.002984	0.026126
11	P3	-8.039890	0.002985	0.026132
15	P3	-8.040044	0.002985	0.025774
19	P3	-8.039906	0.002993	0.026322
22	P3	-8.039984	0.002987	0.026324
26	P3	-8.039968	0.002988	0.026493
30	P3	-8.039899	0.002977	0.026053

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	0.000460872
	stdev	2.26915e-07
MEAN Q	mean	0.000533472
	stdev	2.39363e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127747
	stdev	0.000970453
STDEV Q	mean	0.127980
	stdev	0.000980426





5.3 - Gain imbalance I/Q



6 - Doppler Analysis

Preliminary report. The data is not yet controlled

6.1 - Unbiased Doppler Error for WVS

Evolution of unbiased Doppler error (Real - Expected)

Acsending


Descending

6.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler

Ascending

Descending

6.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX

6.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)

Ascending

Descending

6.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler

Ascending

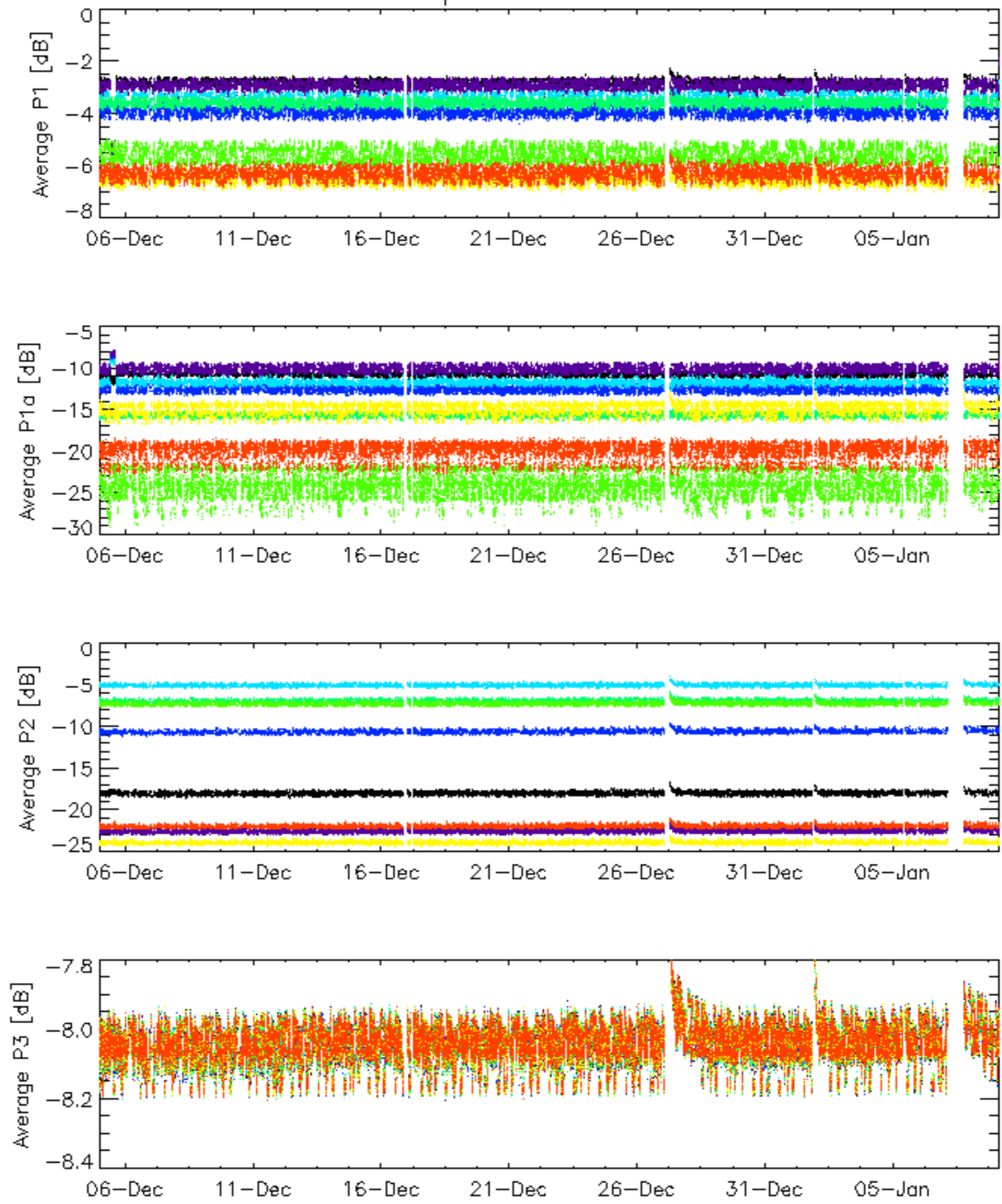
Descending

6.6 - Doppler evolution versus ANX for GM1

Evolution Doppler error versus ANX

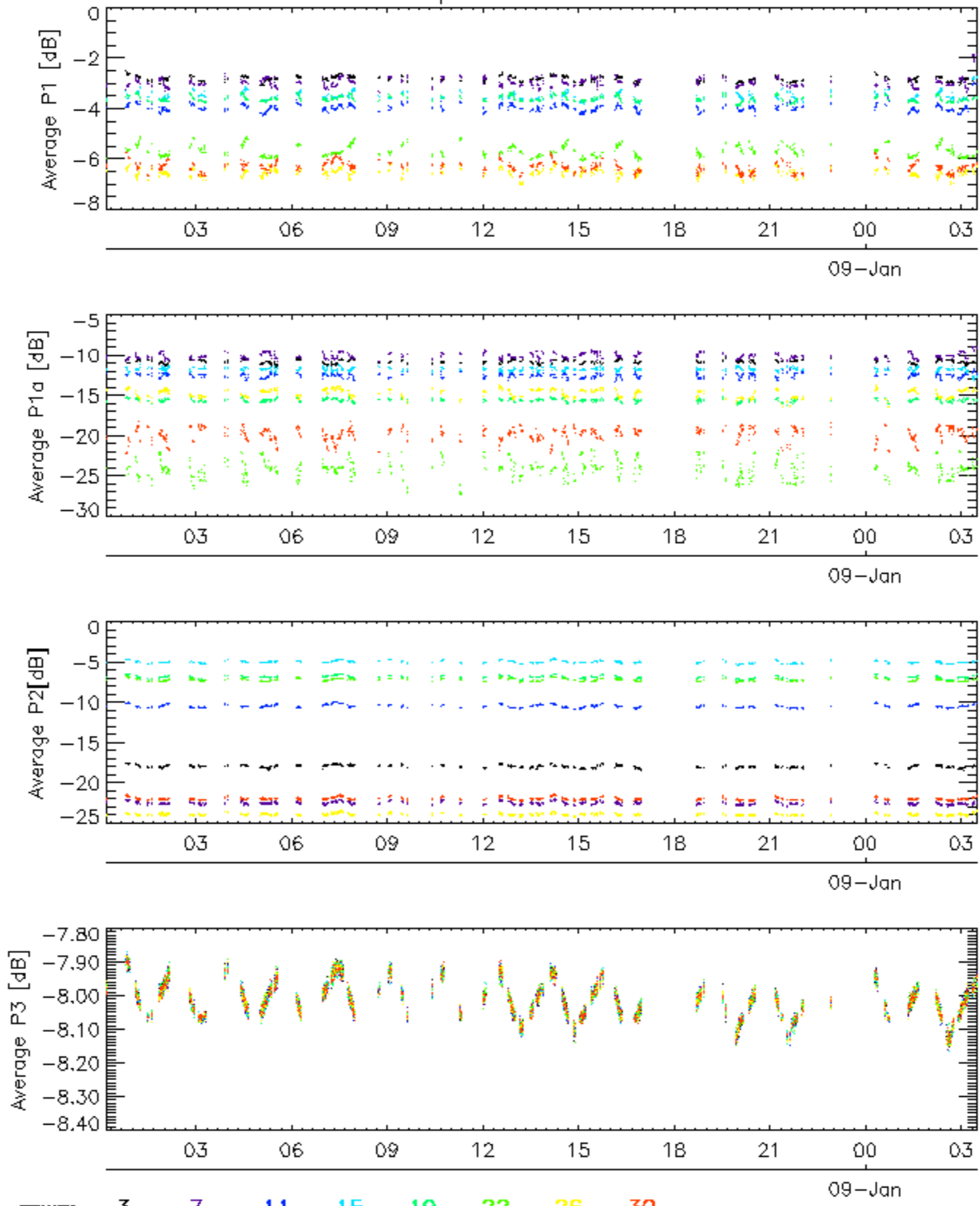


Cal pulses for GM1 SS3

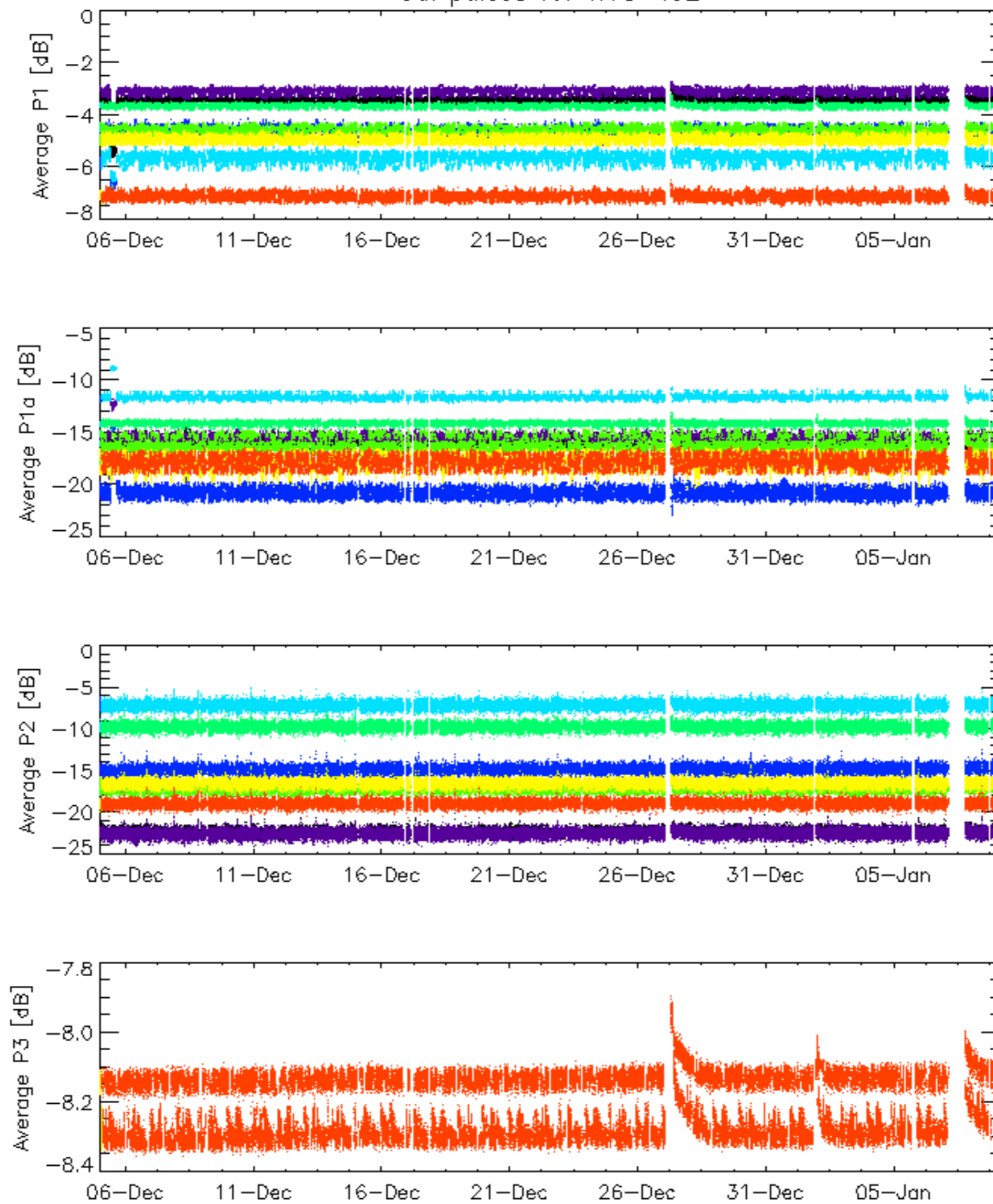


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

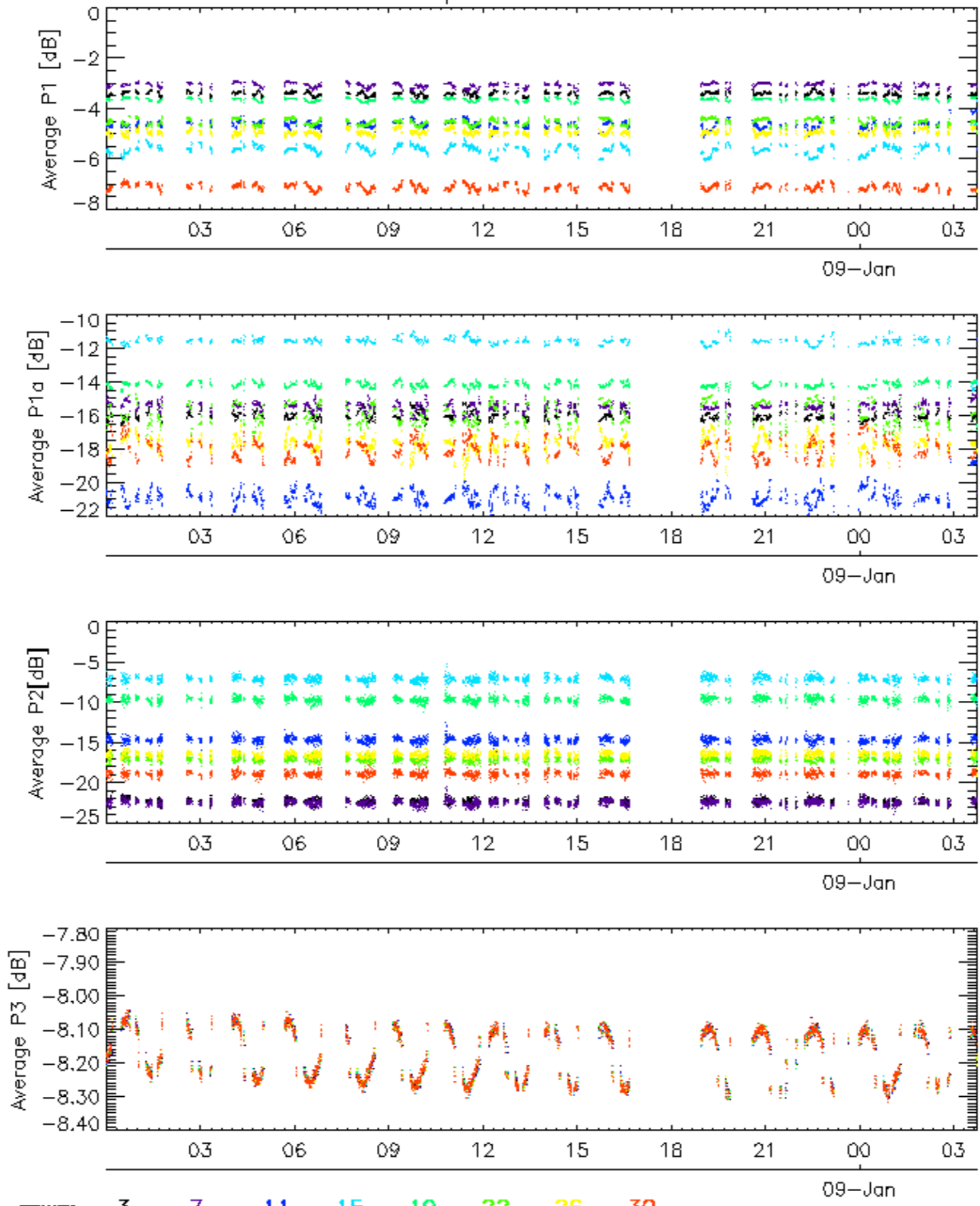


Cal pulses for WVS IS2

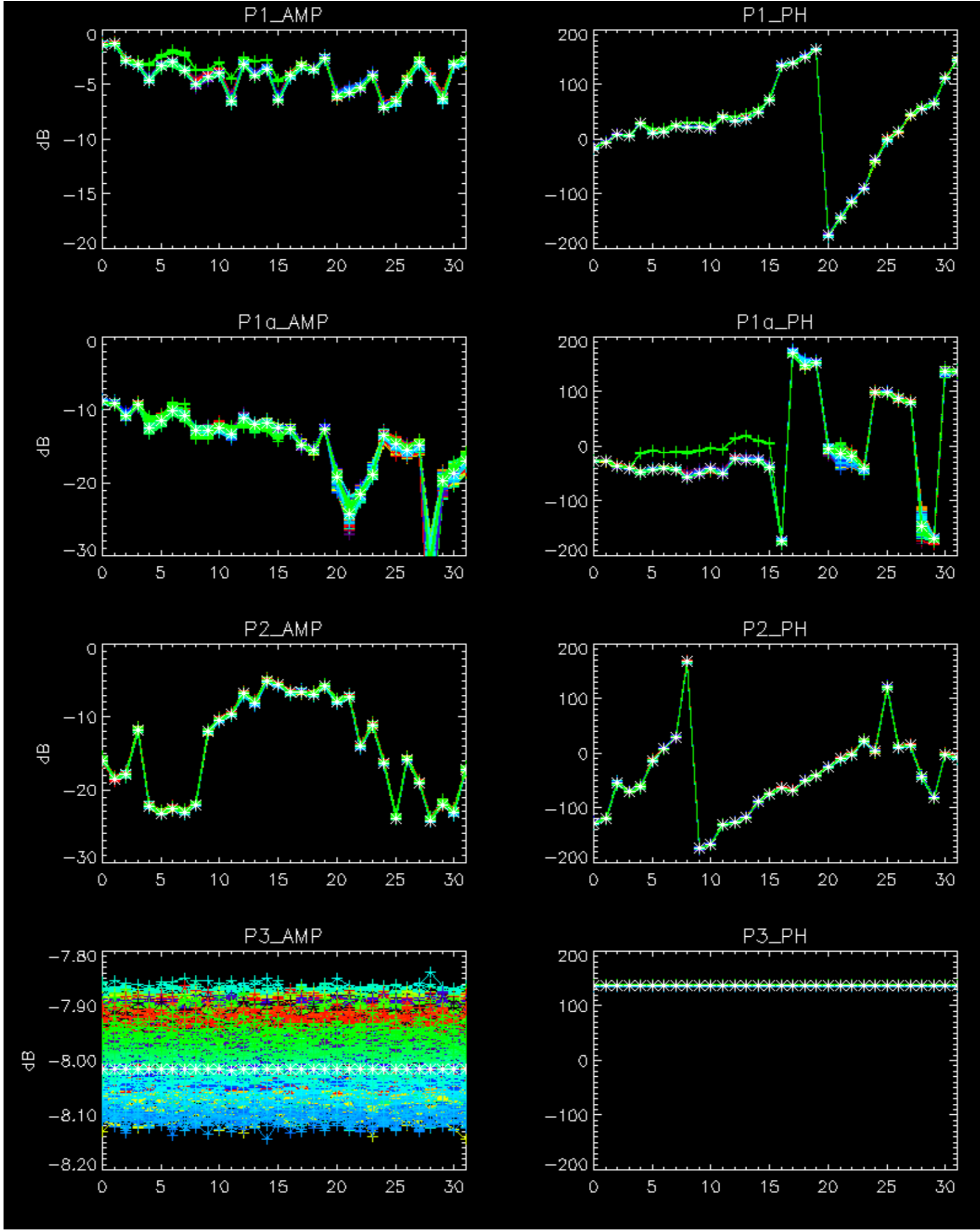


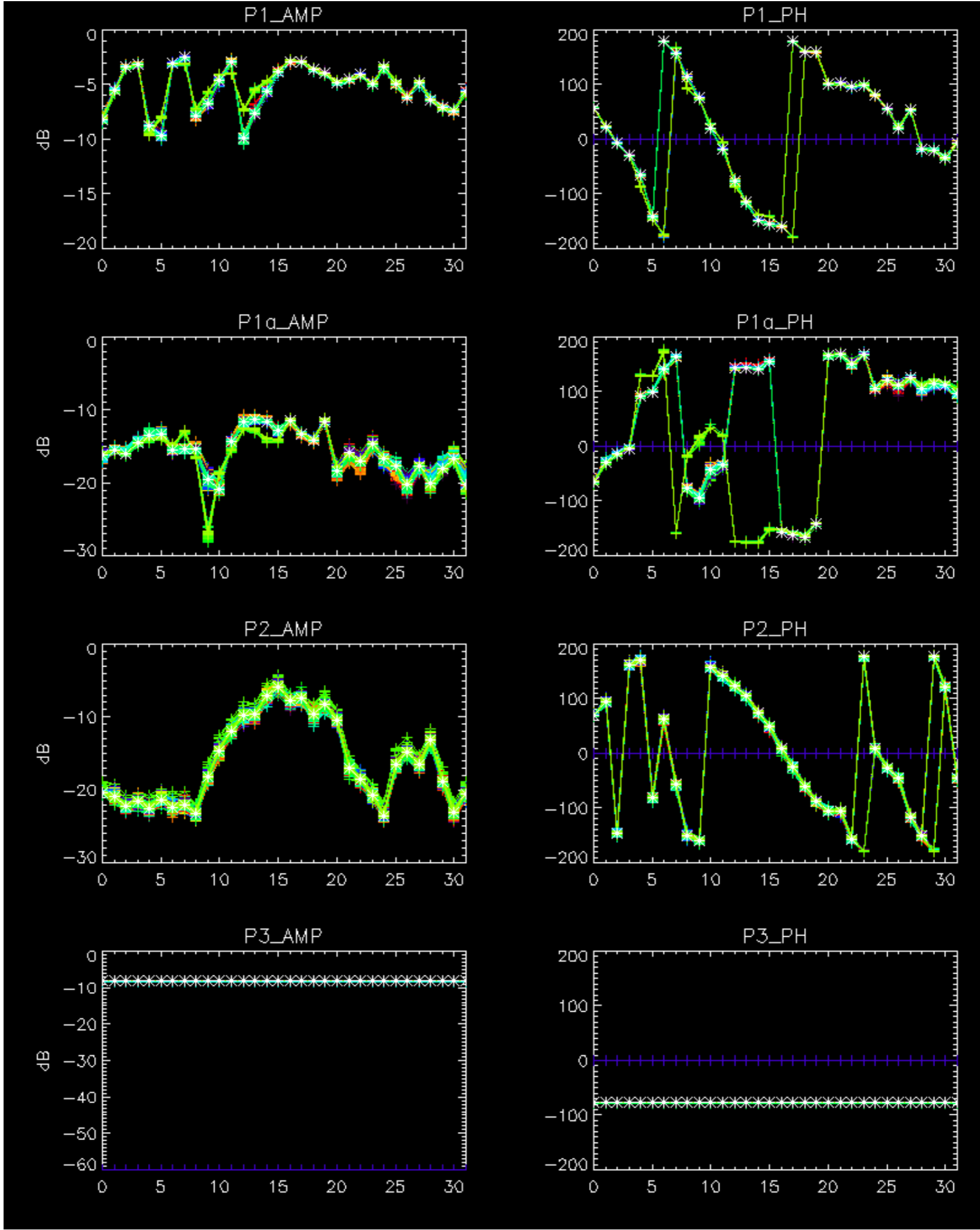
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



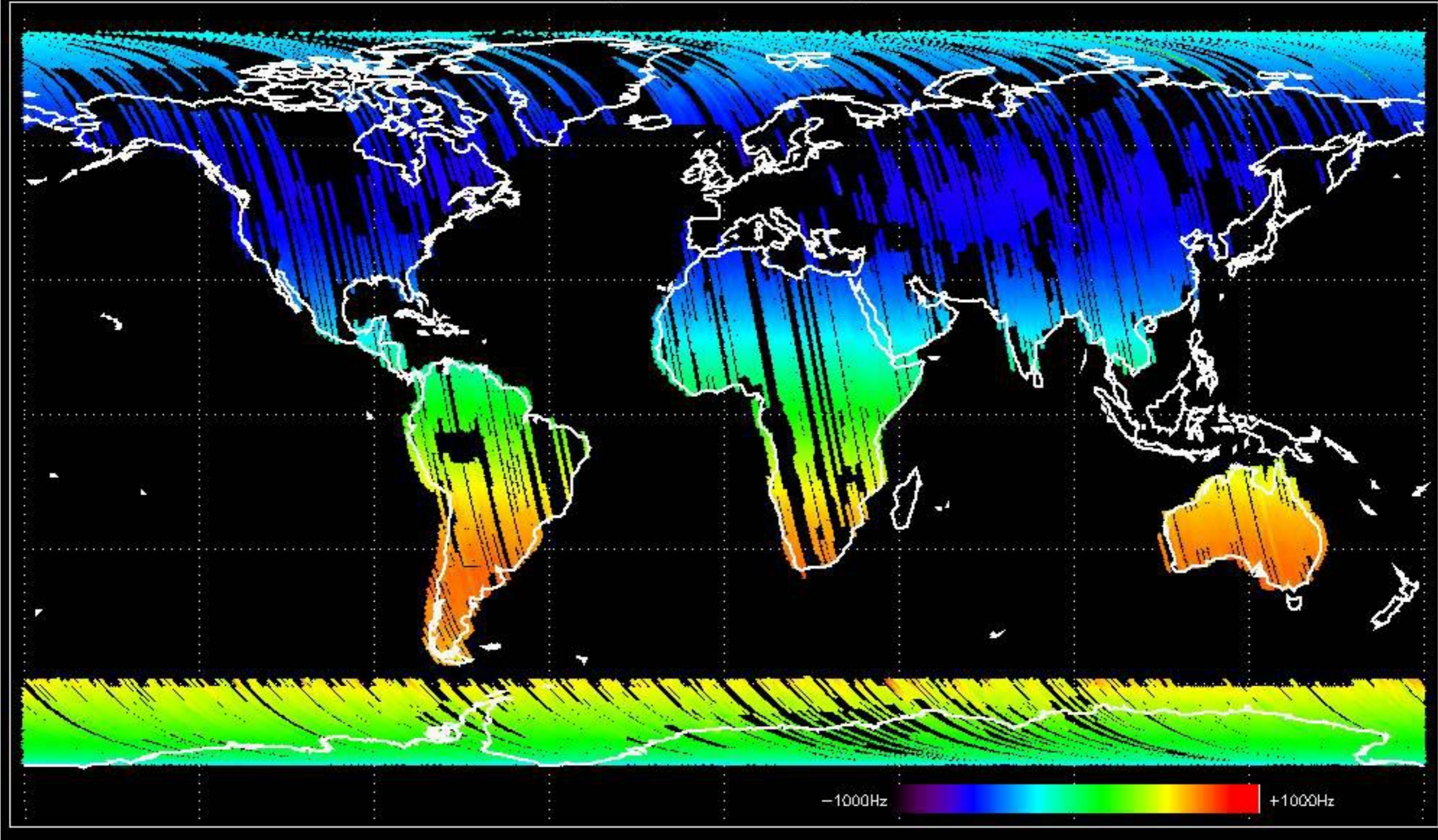
No anomalies observed.



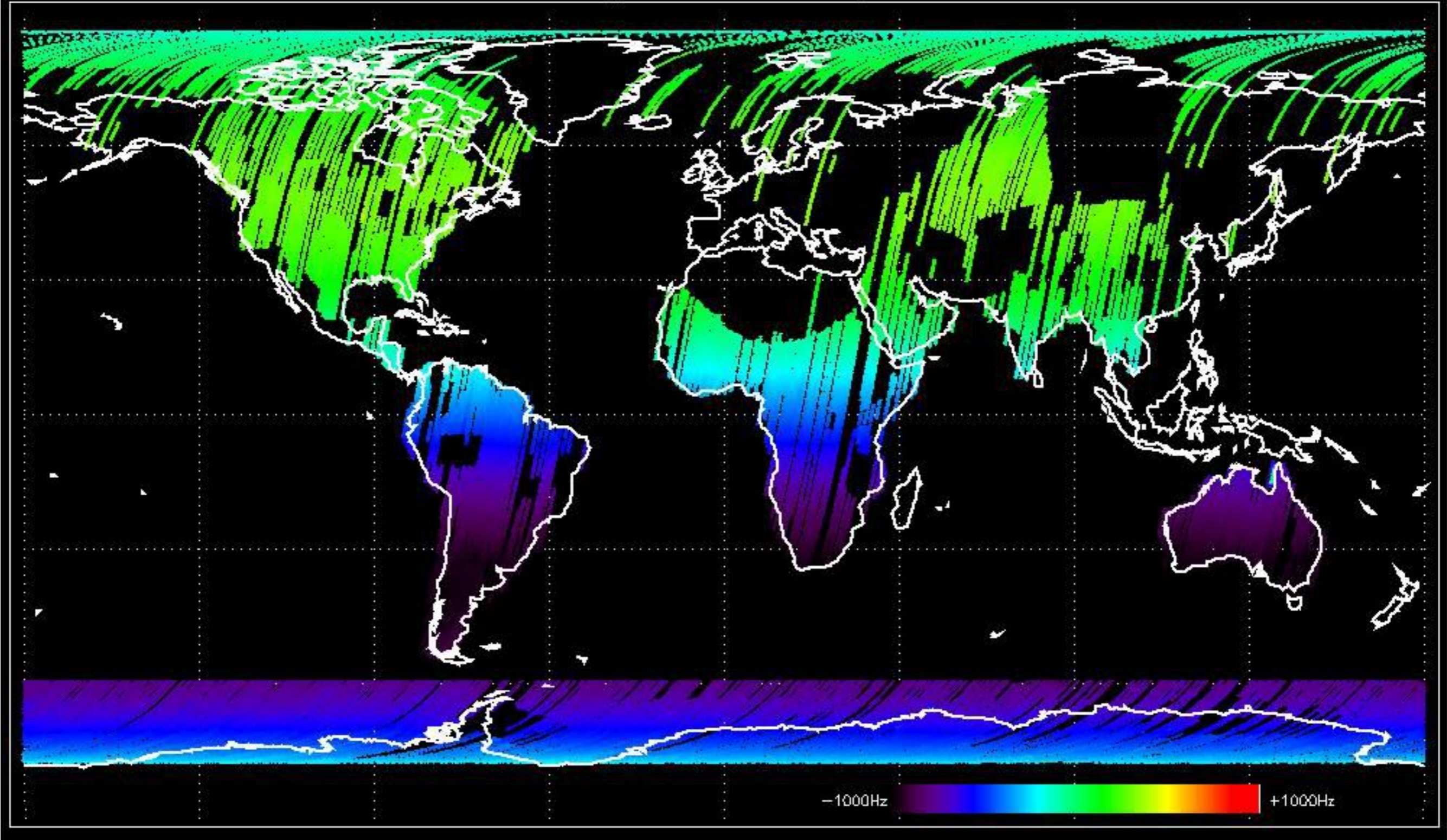


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

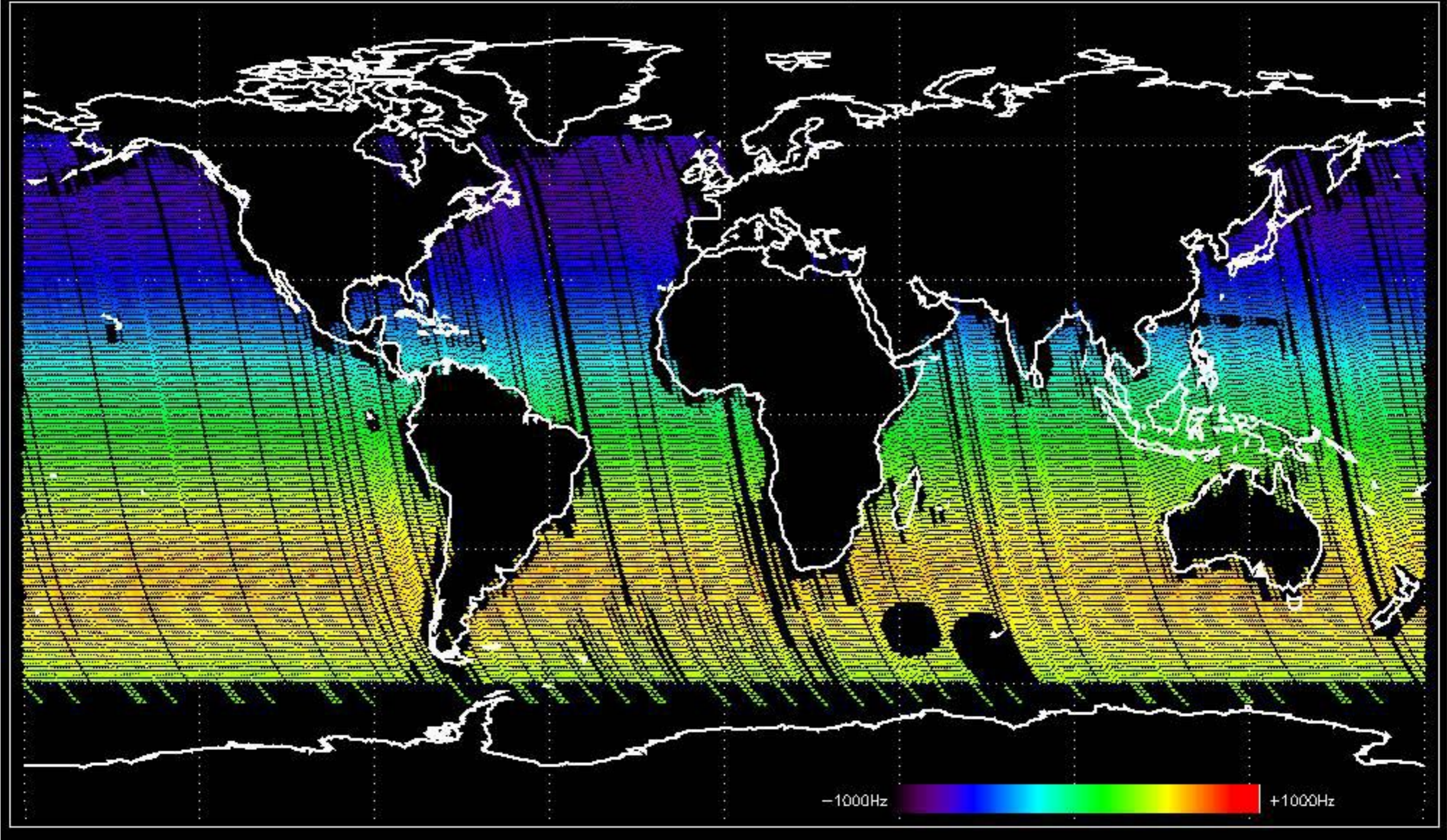
Doppler 'GM1' 'SS1' ascending



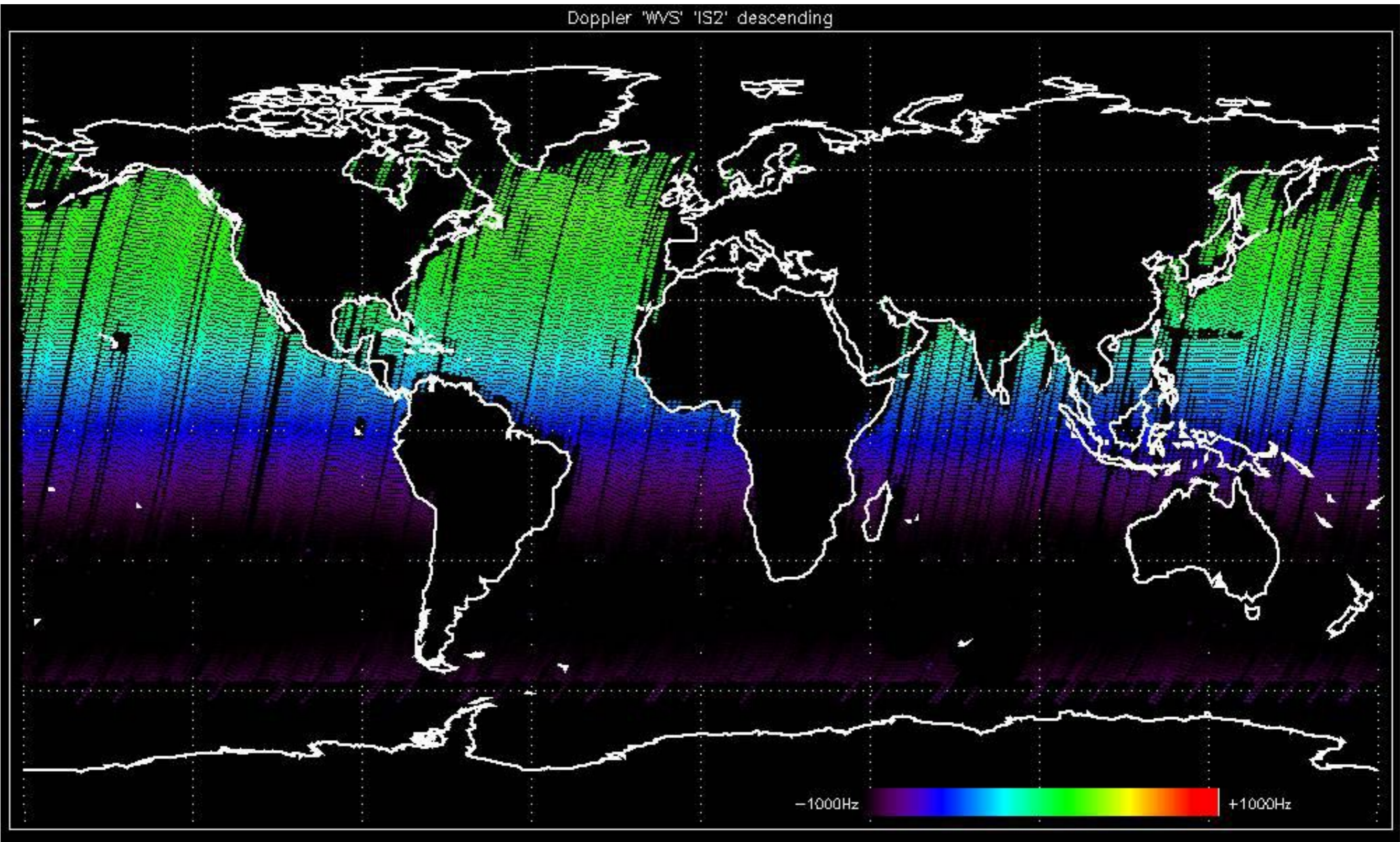
Doppler 'GM1' 'SS1' descending



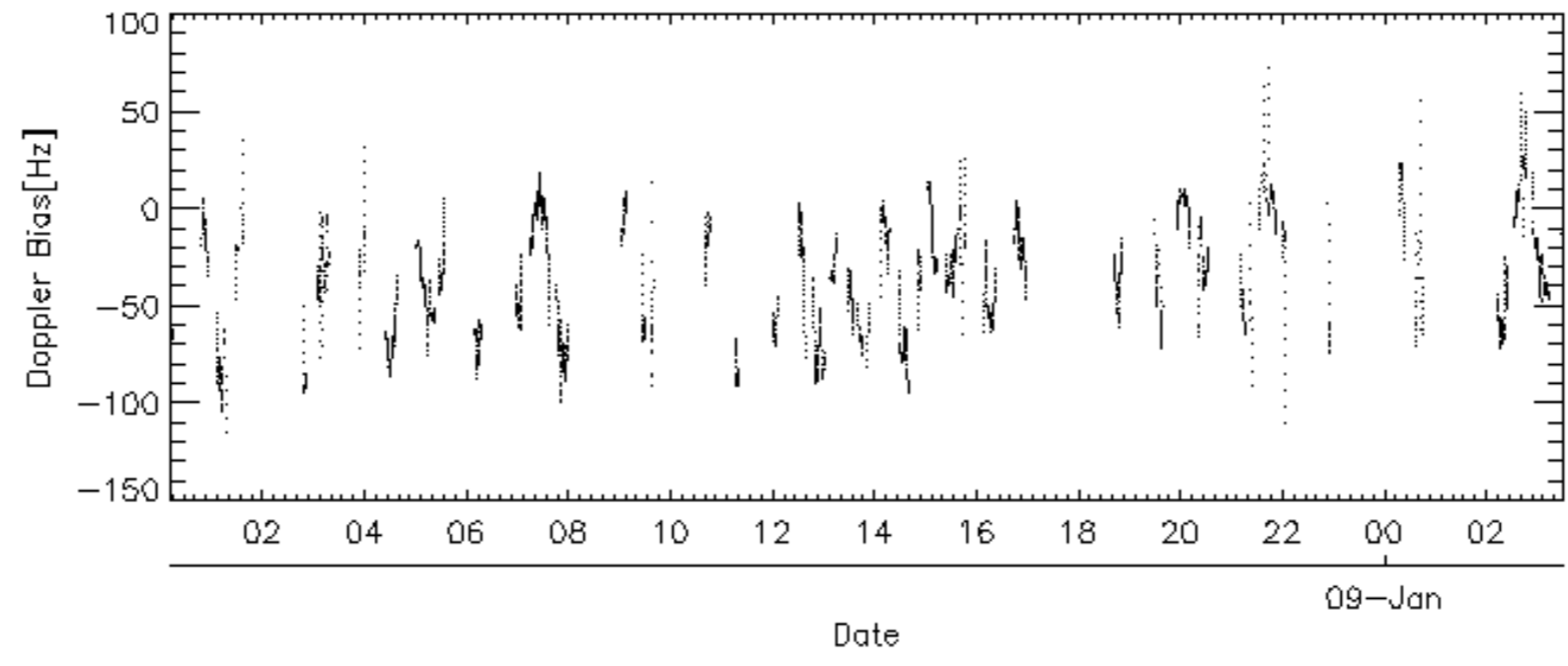
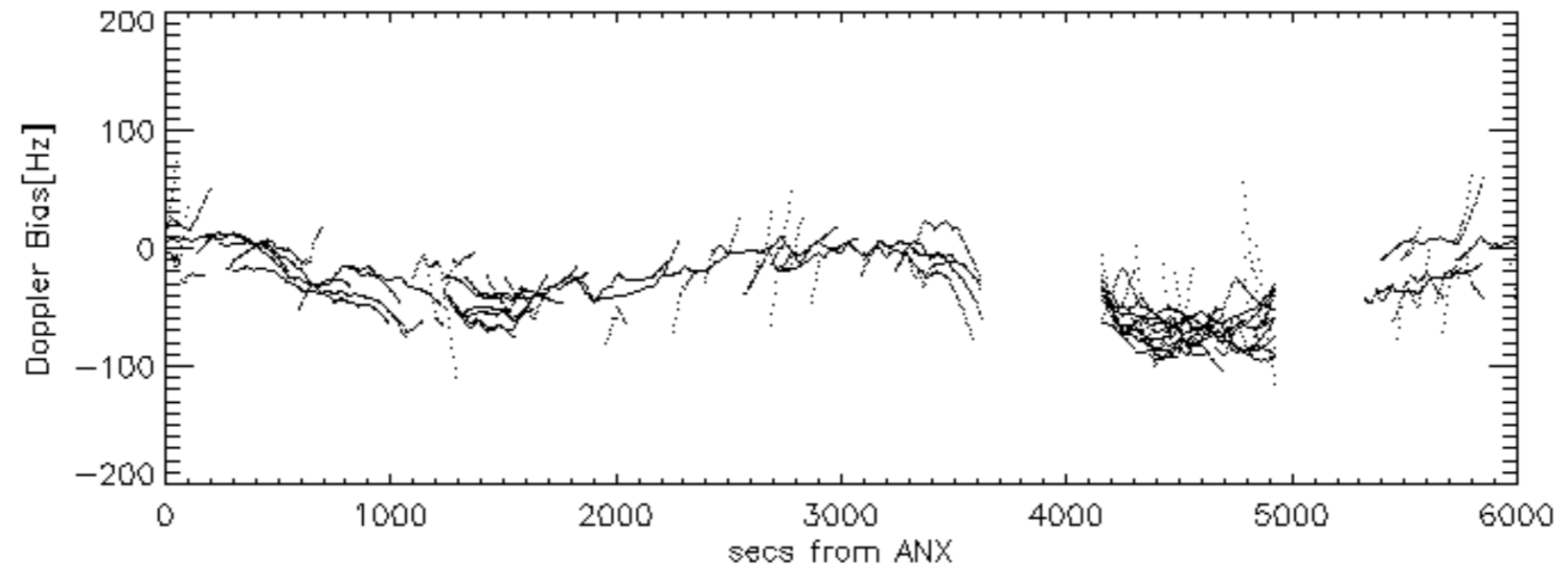
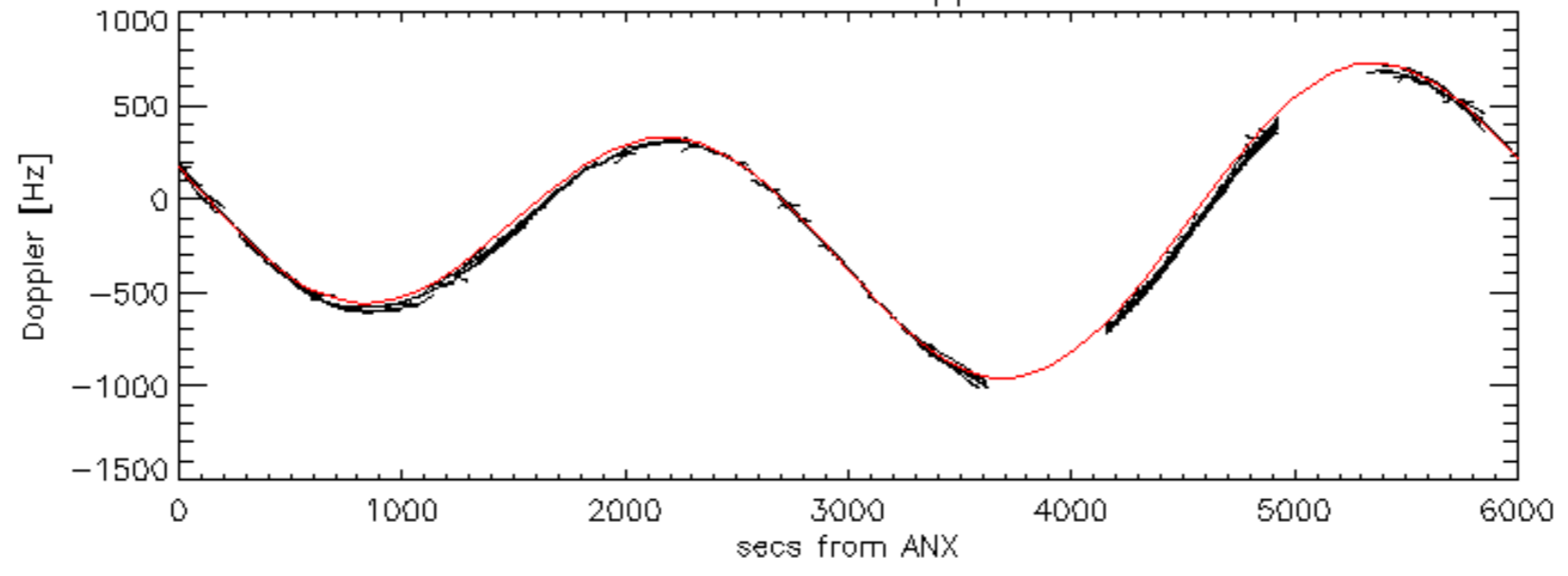
Doppler 'WVS' 'IS2' ascending

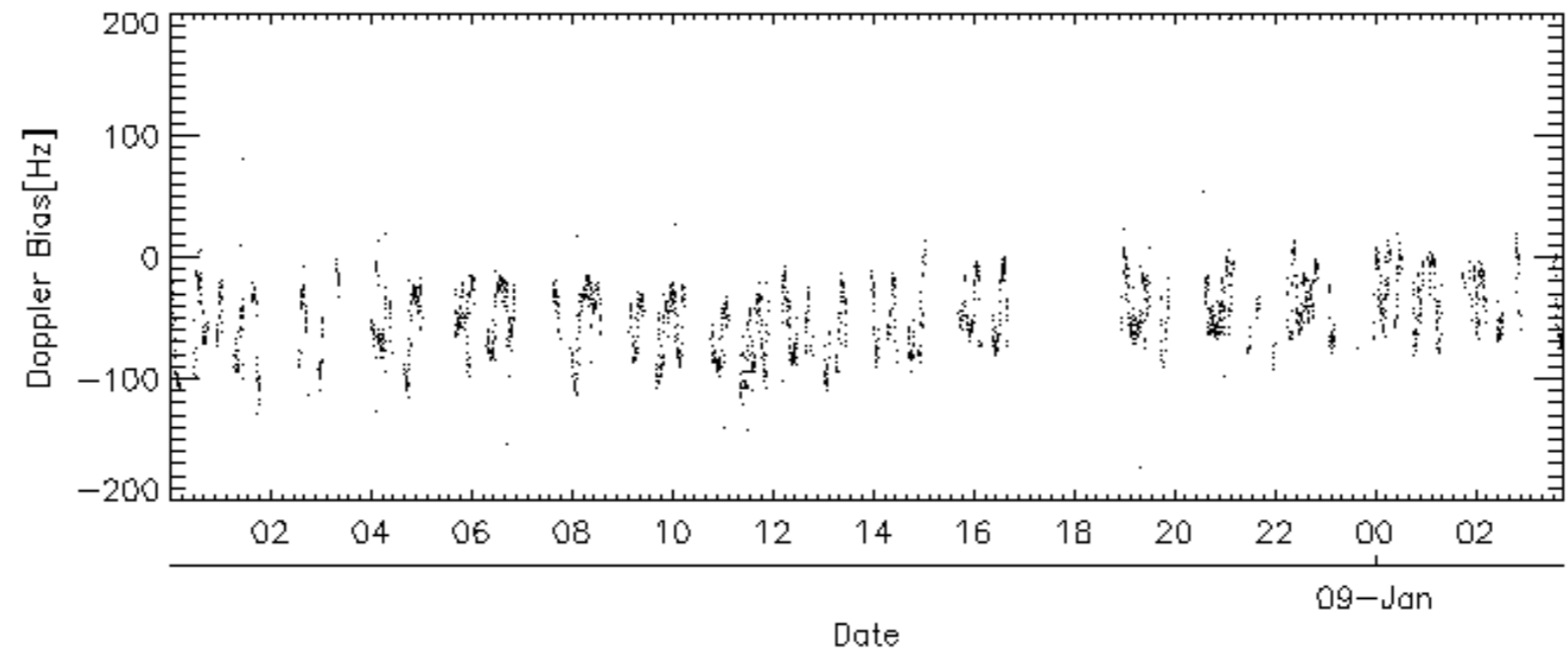
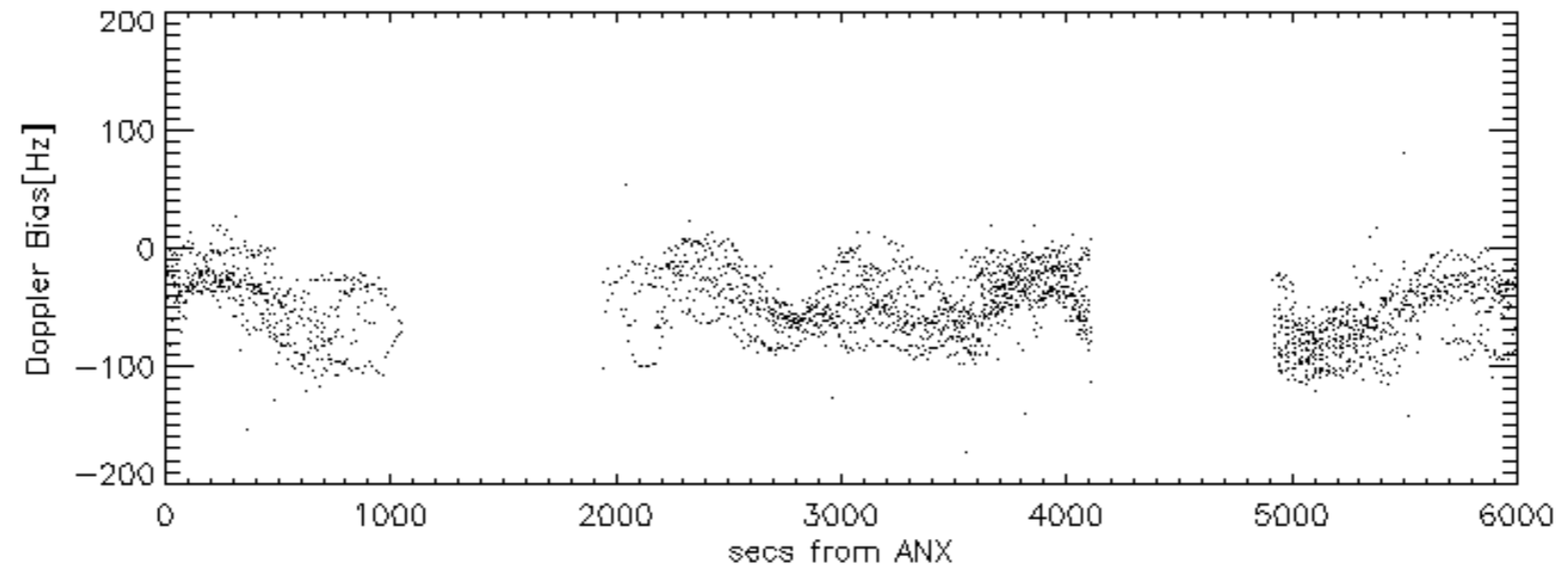
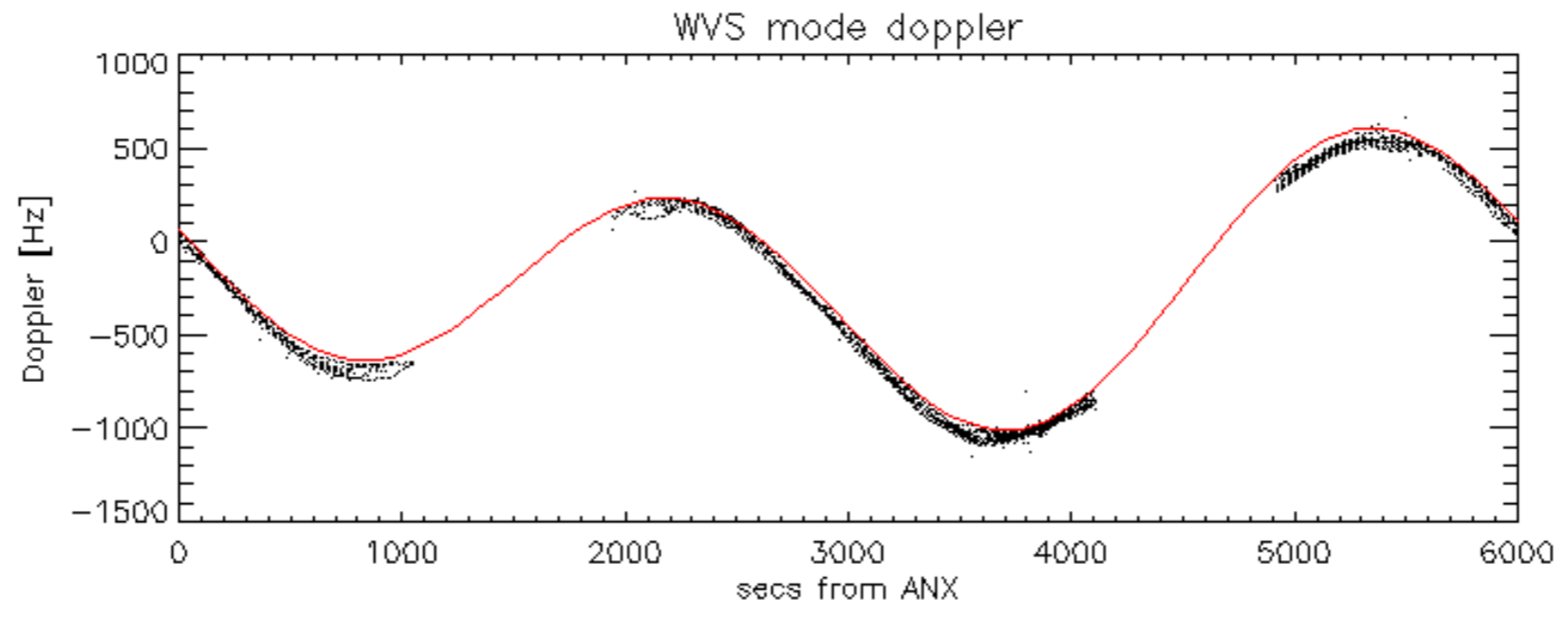


Doppler 'WVS' 'IS2' descending

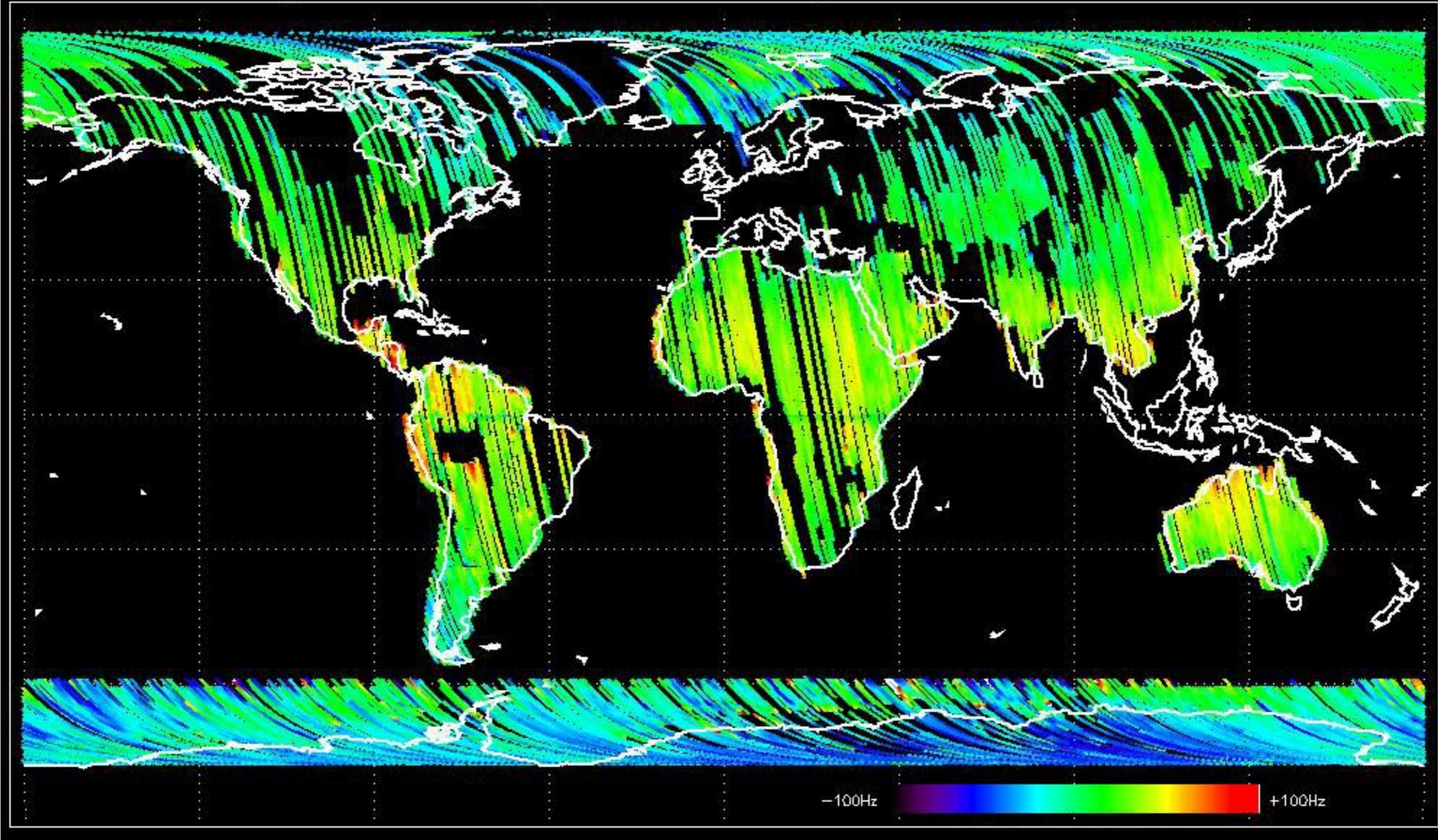


GM1 mode doppler

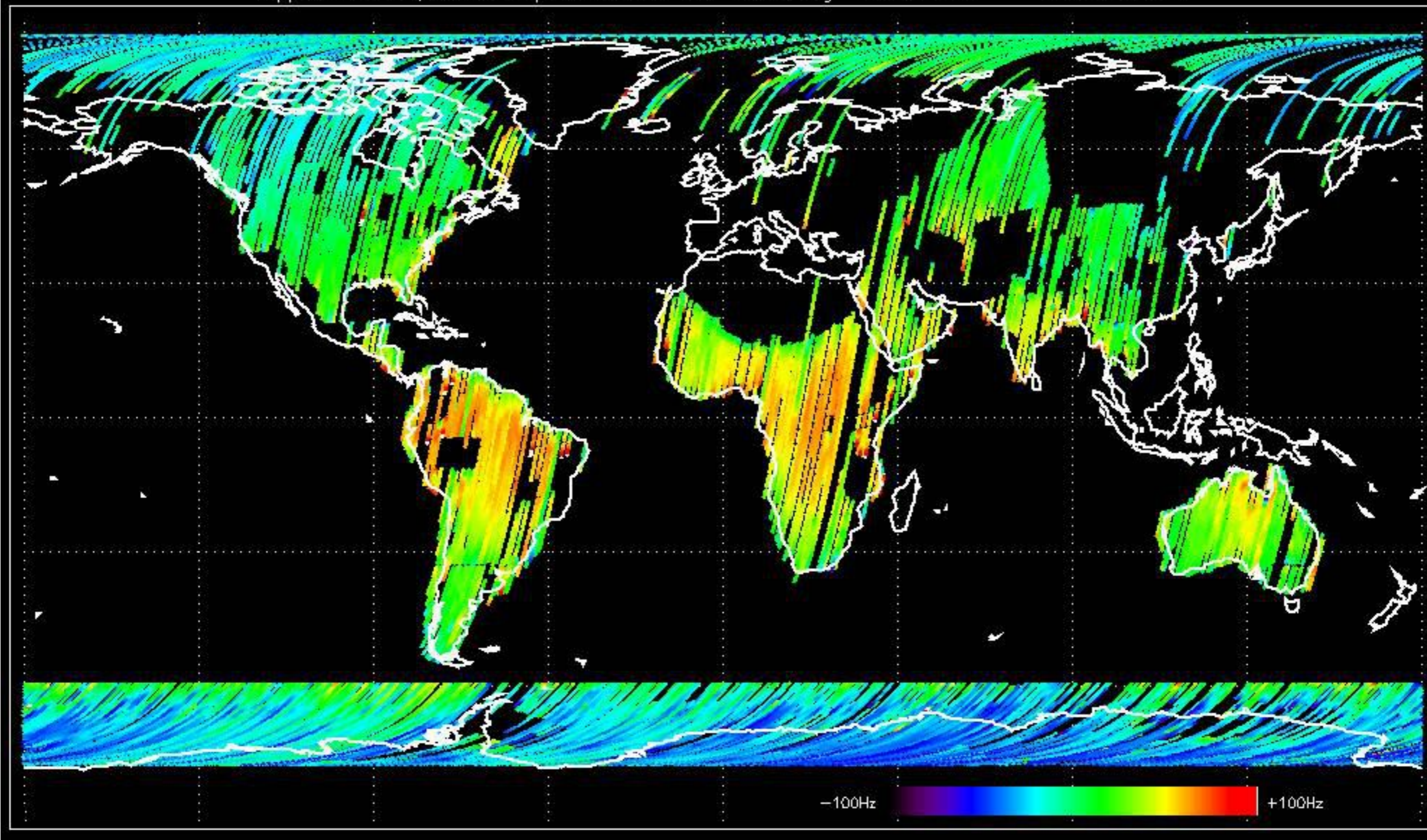




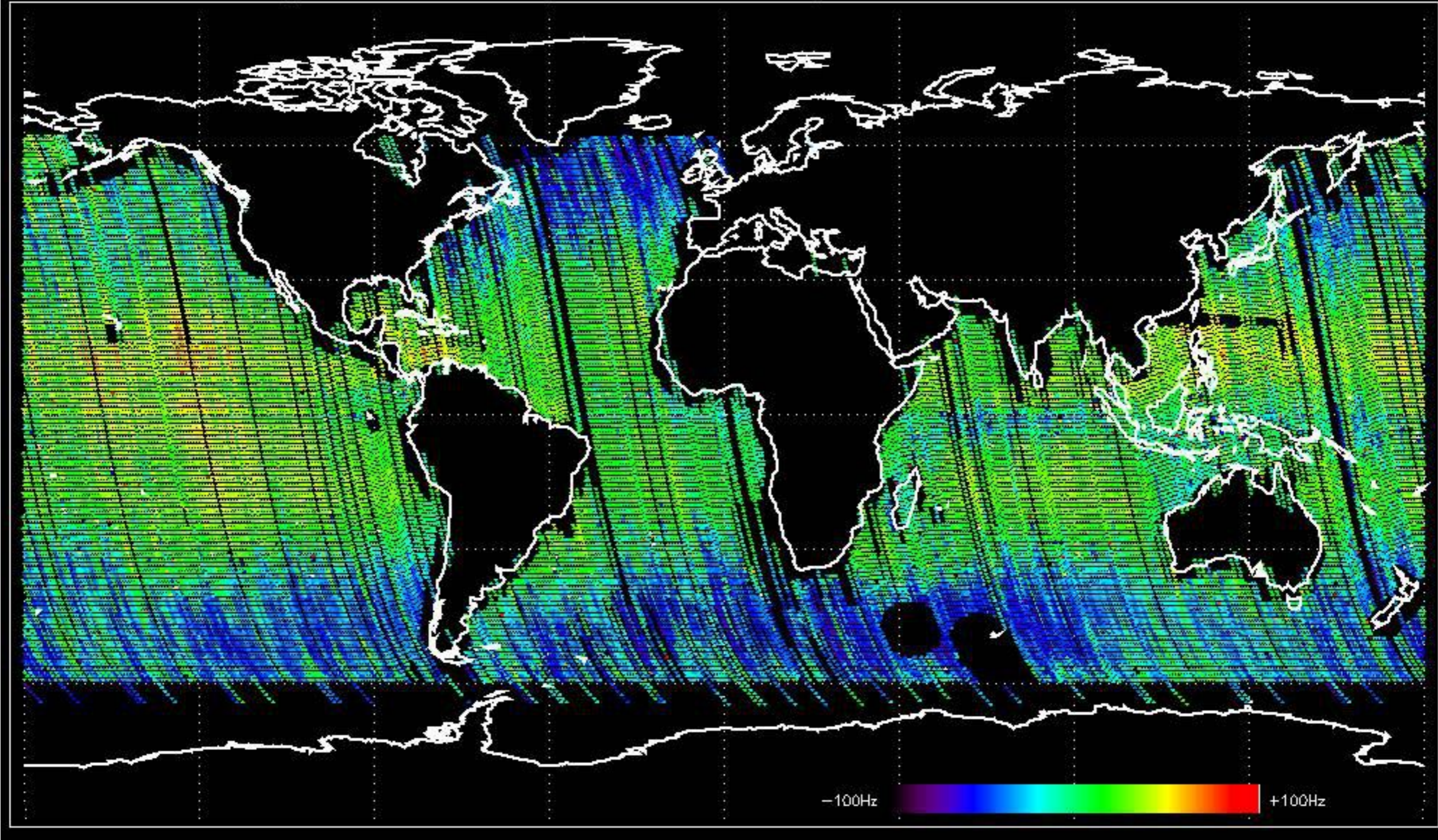
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -34.480032 Hz



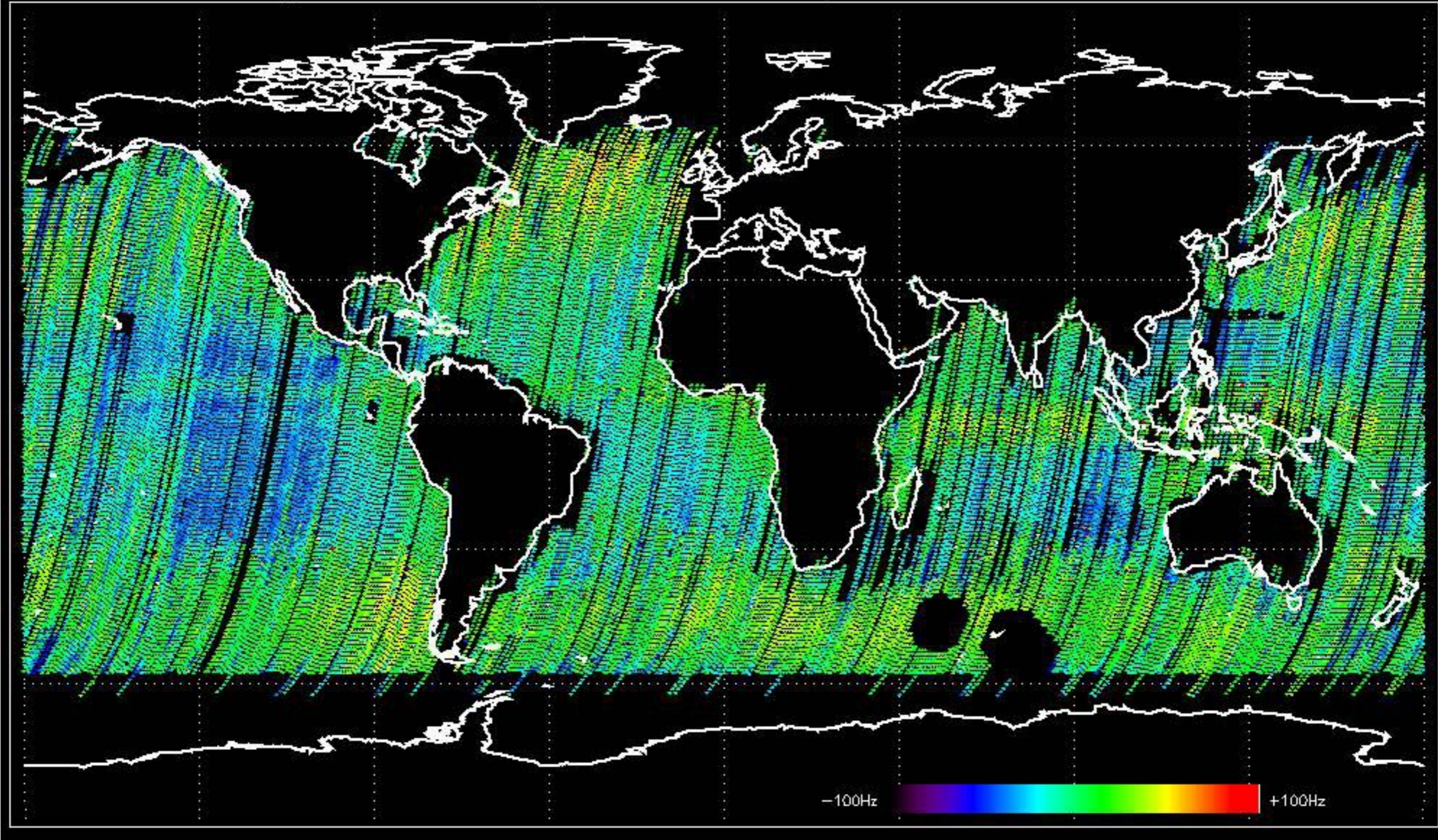
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -29.698316 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -34.705621 Hz

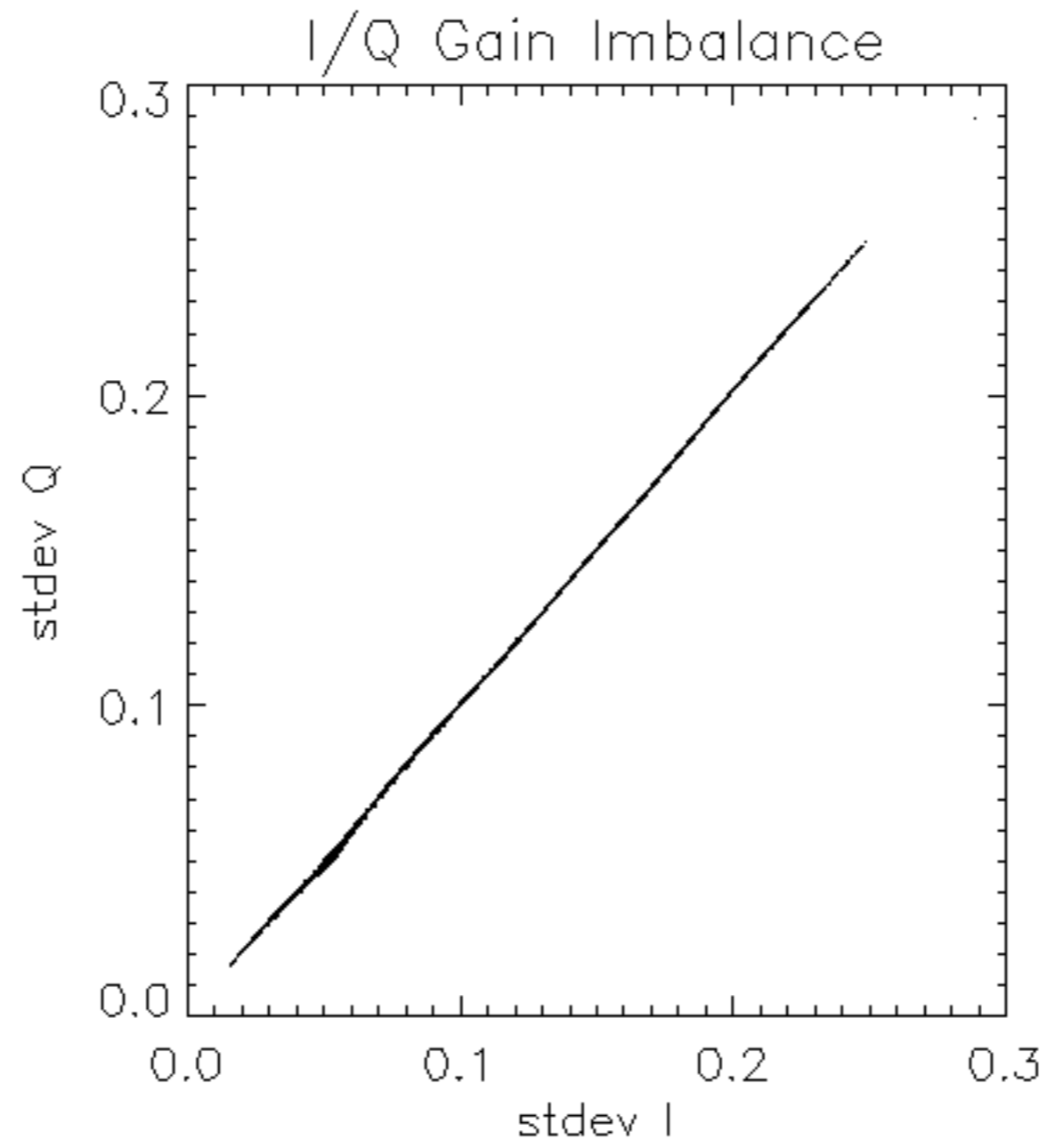


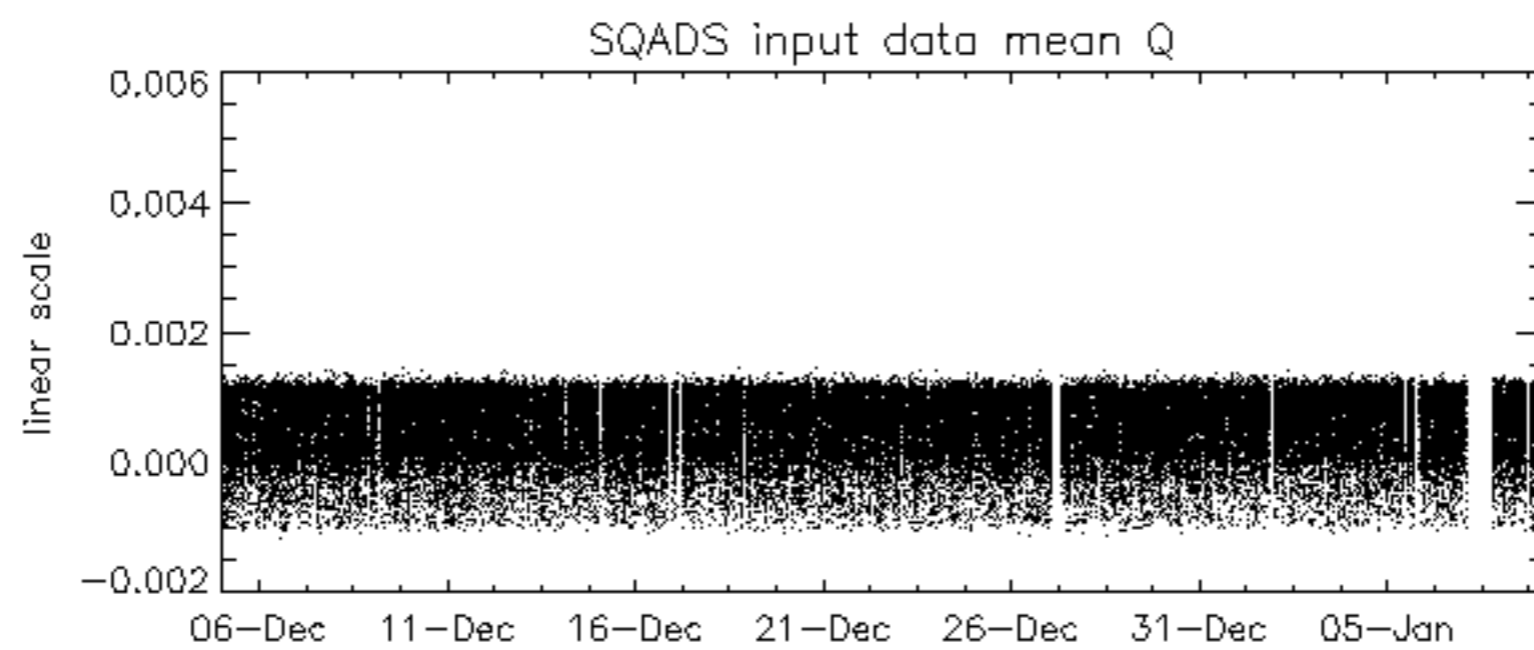
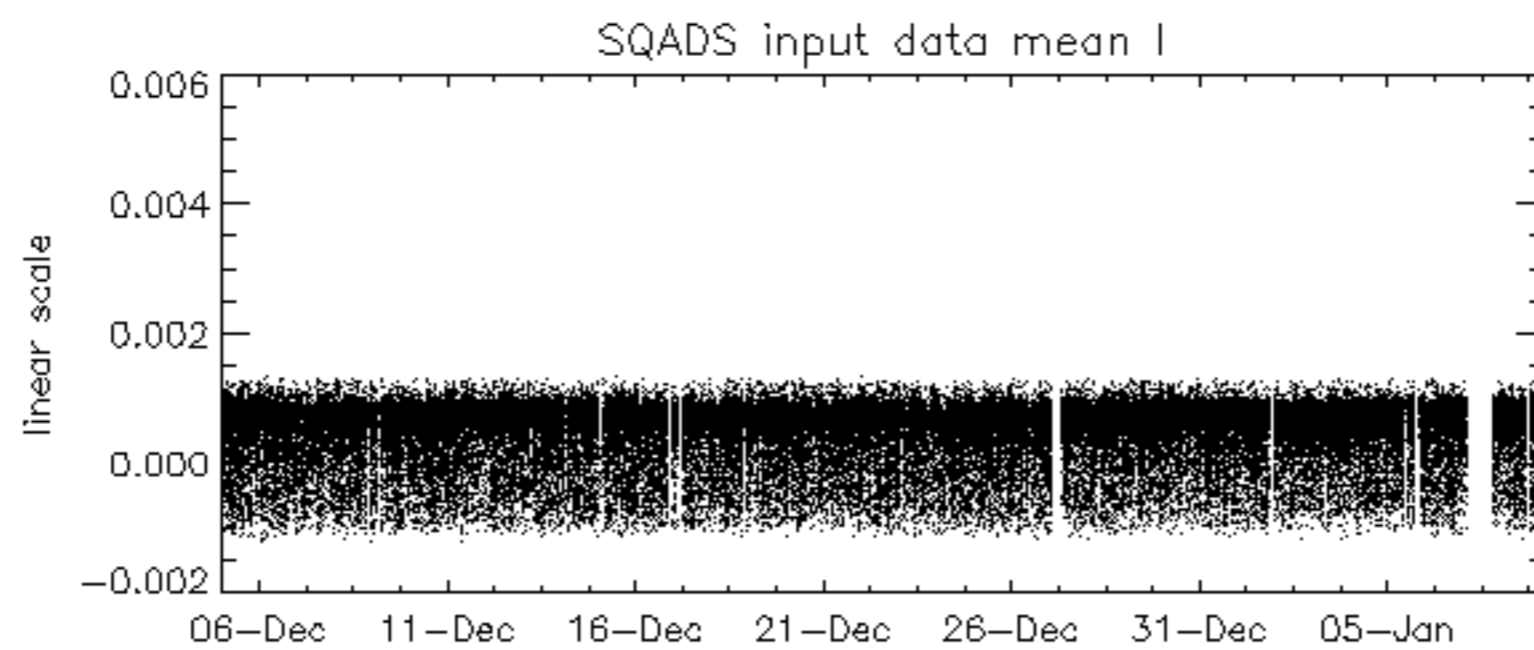
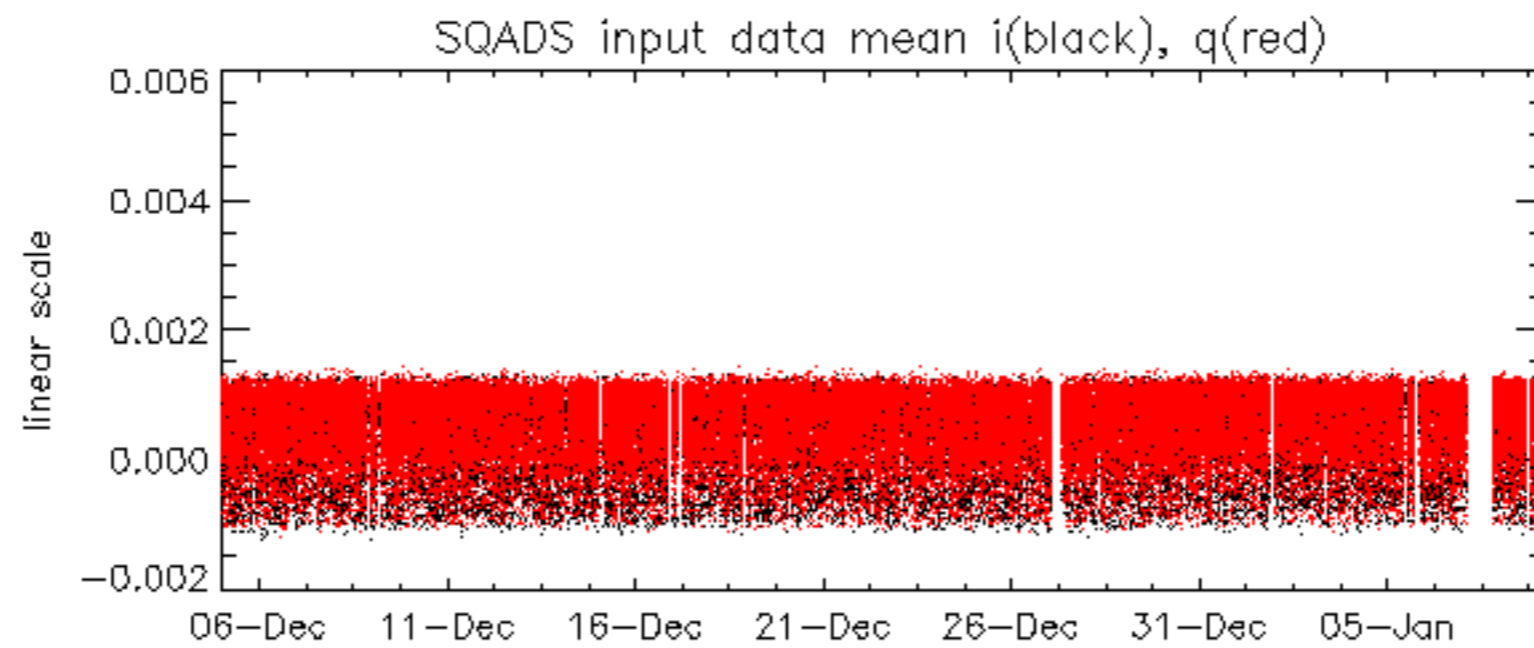
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -36.752511 Hz

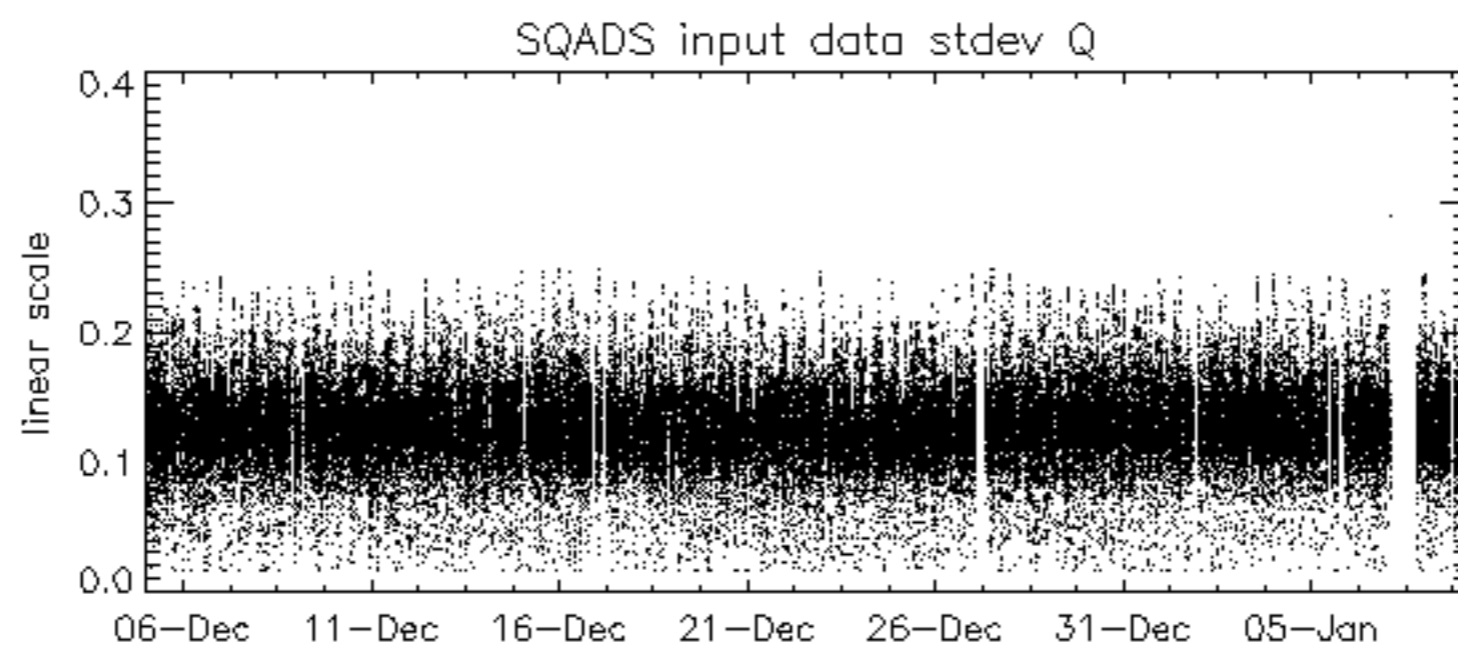
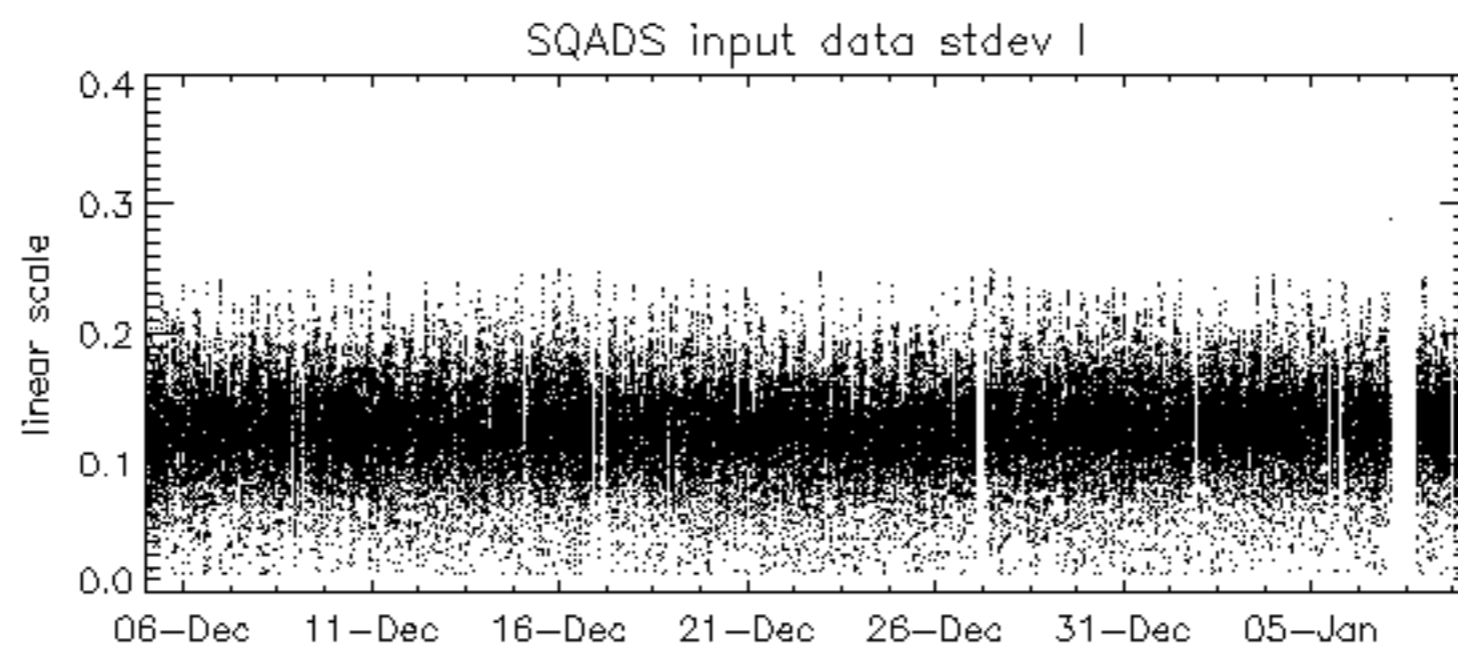
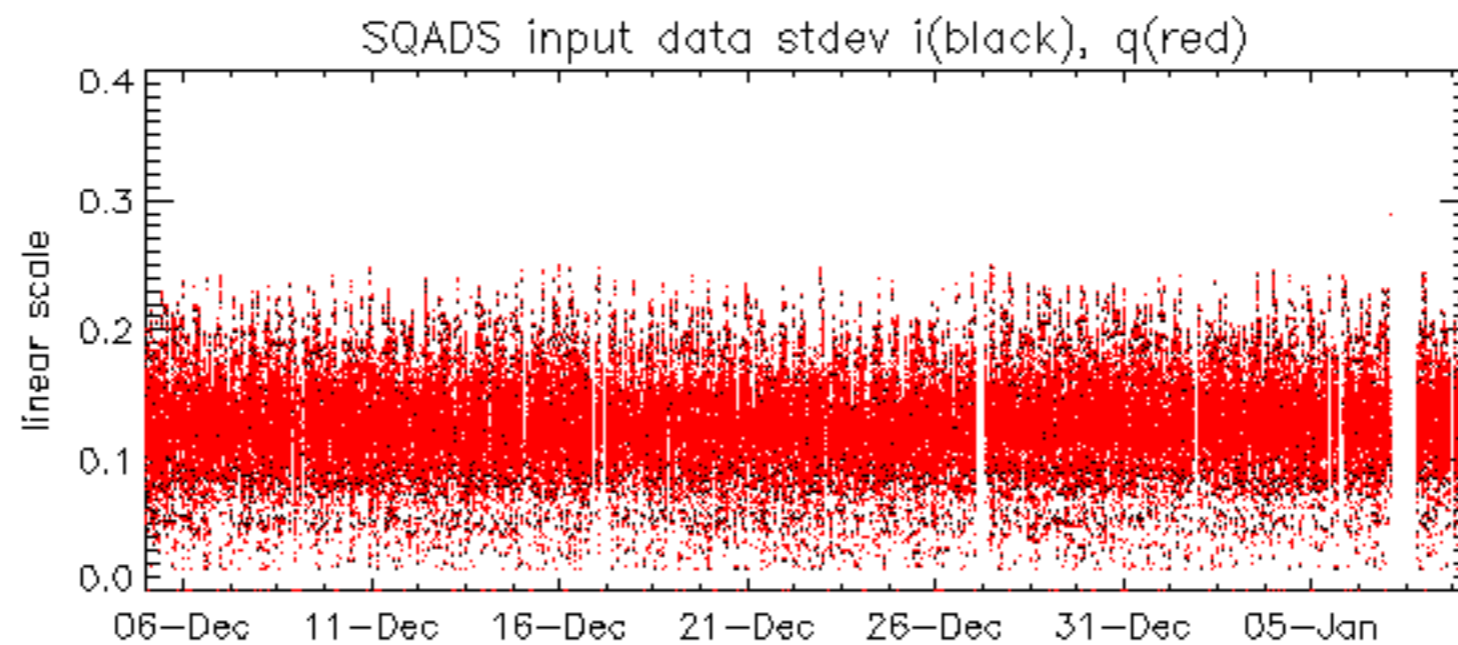


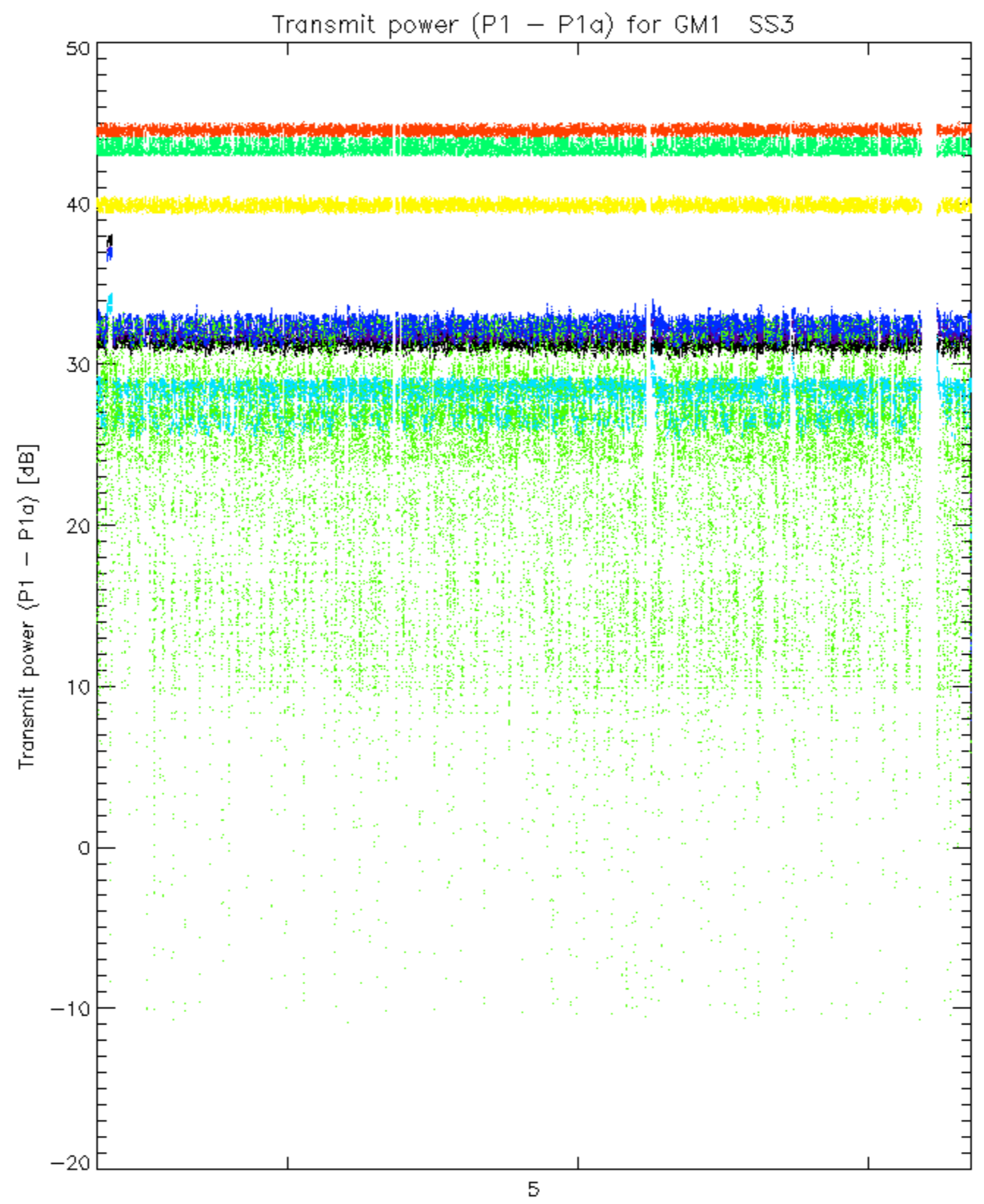
The MS mode provides an internal health check on an individual module basis.
The purpose of this mode is to identify to identify any malfunctioning modules and
to identify modules for which calibration offsets are to be applied.
No anomalies observed on available MS products:

No anomalies observed.

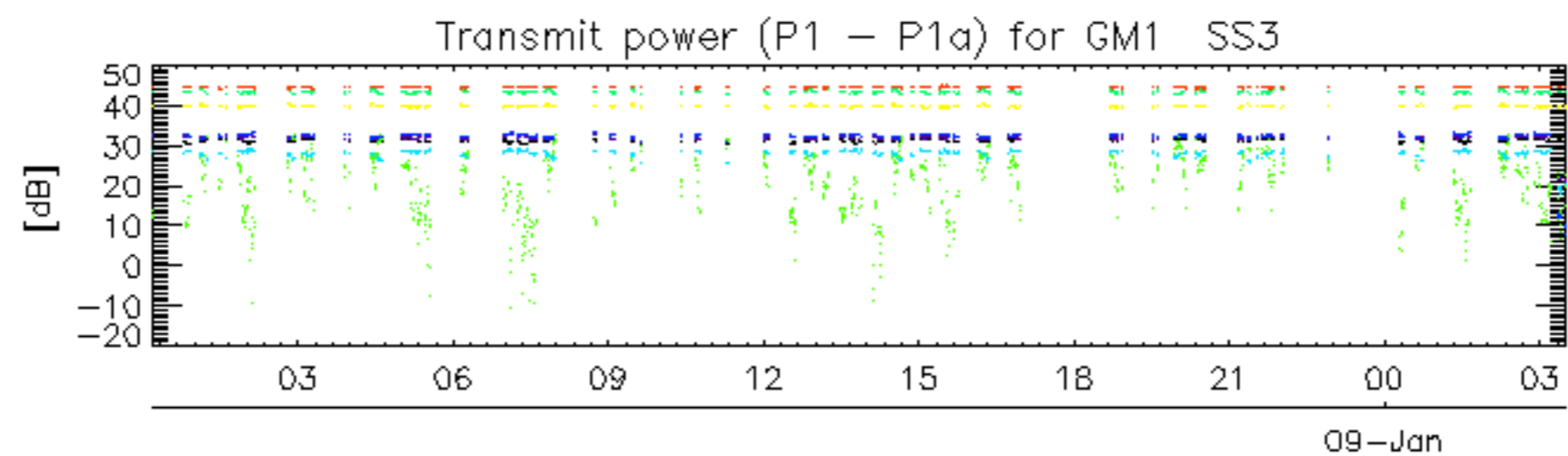




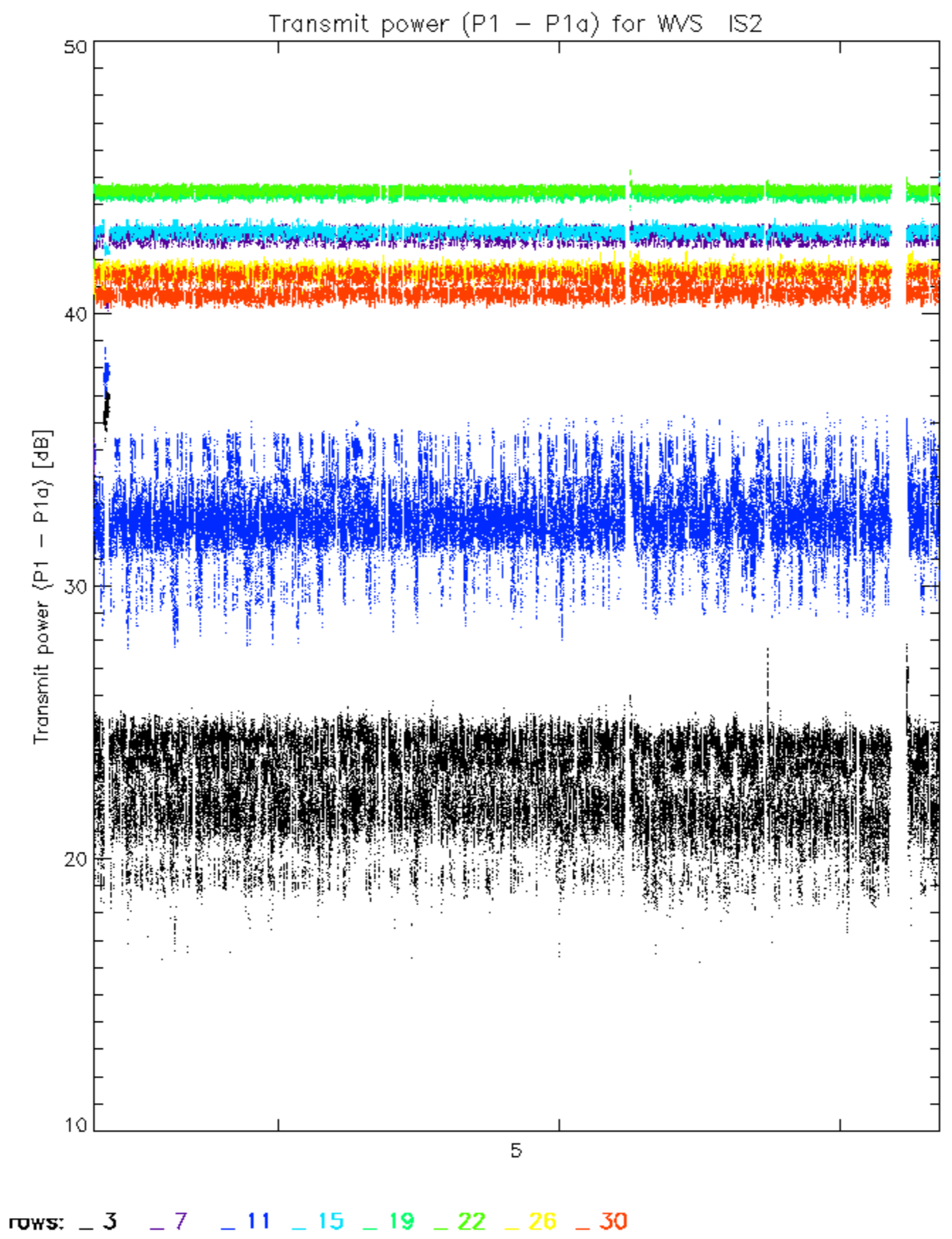


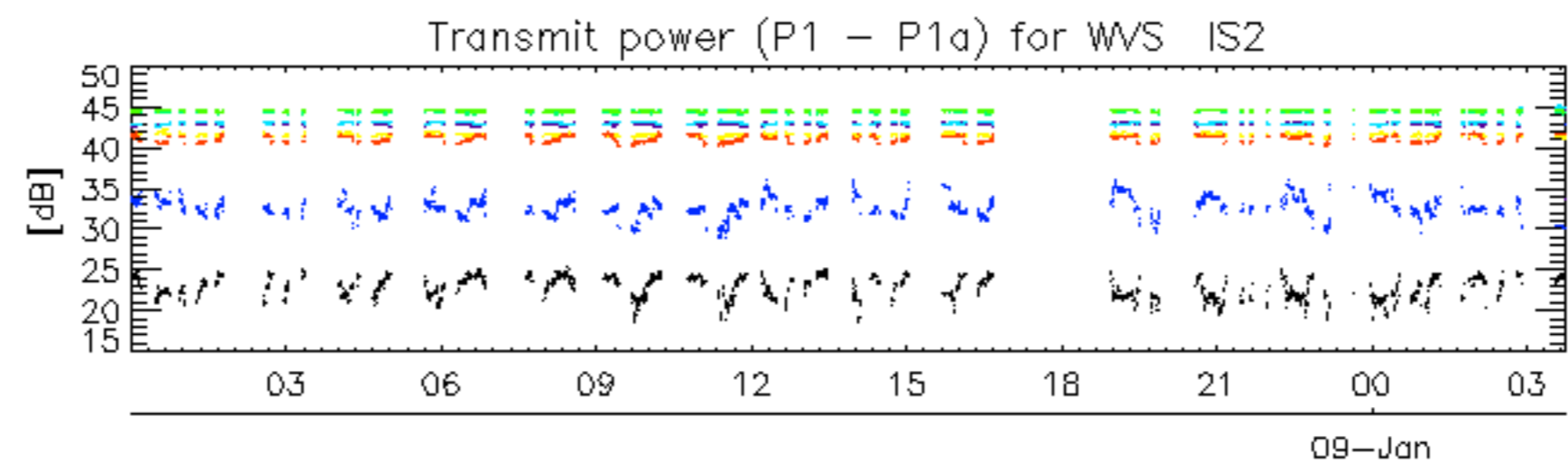


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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





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

No unavailabilities during the reported period.