

PRELIMINARY REPORT OF 040922

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

last update on Wed Sep 22 12:40:18 GMT 2004

1. [Introduction](#)
2. [Summary](#)
 - [Instrument Unavailability](#)
 - [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 - Browse Visual Inspection

2.3 - 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	20040920 084154
H	20040918 030245

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

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	-3.468311	0.022652	-0.045217
7	P1	-3.338725	0.022734	-0.029092
11	P1	-4.645768	0.041031	-0.046096
15	P1	-5.762072	0.088507	-0.086675
19	P1	-3.510636	0.079982	-0.091150
22	P1	-4.558761	0.108937	-0.064789
24	P1	-5.000291	0.127258	-0.072267
30	P1	-7.026288	0.150847	-0.179541

3	P1	-16.232069	0.399899	-0.089757
7	P1	-14.010748	0.072911	-0.012344
11	P1	-20.236231	0.271866	-0.133395
15	P1	-11.776249	0.042206	0.010183
19	P1	-14.027603	1.114730	-0.300015
22	P1	-16.065584	0.351861	0.203352
24	P1	-14.480536	0.319651	0.130611
30	P1	-17.927929	0.633494	-0.142765

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.308603	0.085272	-0.017733
7	P2	-22.606632	0.127875	-0.005643
11	P2	-15.231023	0.157532	0.108521
15	P2	-7.062257	0.098275	-0.002665
19	P2	-9.569784	0.168262	0.029240
22	P2	-17.321211	0.114719	0.059612
24	P2	-20.756548	0.092180	-0.044544
30	P2	-19.187798	0.083247	0.109200

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.152317	0.002859	-0.025177
7	P3	-8.152306	0.002860	-0.025238
11	P3	-8.152299	0.002860	-0.025257
15	P3	-8.152299	0.002860	-0.025247
19	P3	-8.152307	0.002859	-0.025215
22	P3	-8.152320	0.002858	-0.025126
24	P3	-8.152335	0.002859	-0.025049
30	P3	-8.152200	0.002860	-0.023996

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1	
<input type="checkbox"/>	
<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	-2.828345	0.048672	-0.114202
7	P1	-3.028927	0.083499	-0.070143
11	P1	-3.889132	0.064885	-0.077981
15	P1	-3.538325	0.081105	-0.079271
19	P1	-3.519332	0.100932	-0.110821
22	P1	-5.729880	0.125300	-0.086216
24	P1	-3.953146	0.055153	-0.094109
30	P1	-6.214957	0.099023	-0.080165
3	P1	-10.789310	0.167124	-0.450915
7	P1	-10.109965	0.142499	-0.013470
11	P1	-12.164794	0.109504	-0.018336
15	P1	-11.678308	0.073628	-0.085462
19	P1	-15.749722	2.121607	-0.391347
22	P1	-23.333885	1.583807	0.295030
24	P1	-17.939453	0.353603	-0.005277
30	P1	-20.395527	1.266263	0.182003

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.991619	0.049143	0.019783
7	P2	-22.744484	0.039195	0.029742
11	P2	-10.939285	0.060463	0.109985
15	P2	-4.962017	0.030291	-0.007155
19	P2	-6.774625	0.045432	-0.017184
22	P2	-7.429936	0.037760	0.048646
24	P2	-11.061352	0.043533	-0.015644
30	P2	-22.156704	0.028997	0.092823

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
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3	P3	-8.004101	0.003046	-0.022407
7	P3	-8.004165	0.003042	-0.022461
11	P3	-8.004168	0.003046	-0.022398
15	P3	-8.004161	0.003034	-0.022477
19	P3	-8.004125	0.003050	-0.022405
22	P3	-8.004137	0.003045	-0.022503
24	P3	-8.004218	0.003063	-0.022583
30	P3	-8.004149	0.003048	-0.022362

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	0.000469347
	stdev	2.18055e-07
MEAN Q	mean	0.000537955
	stdev	2.35707e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127452
	stdev	0.000959134

STDEV Q	mean	0.127674
	stdev	0.000968718





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

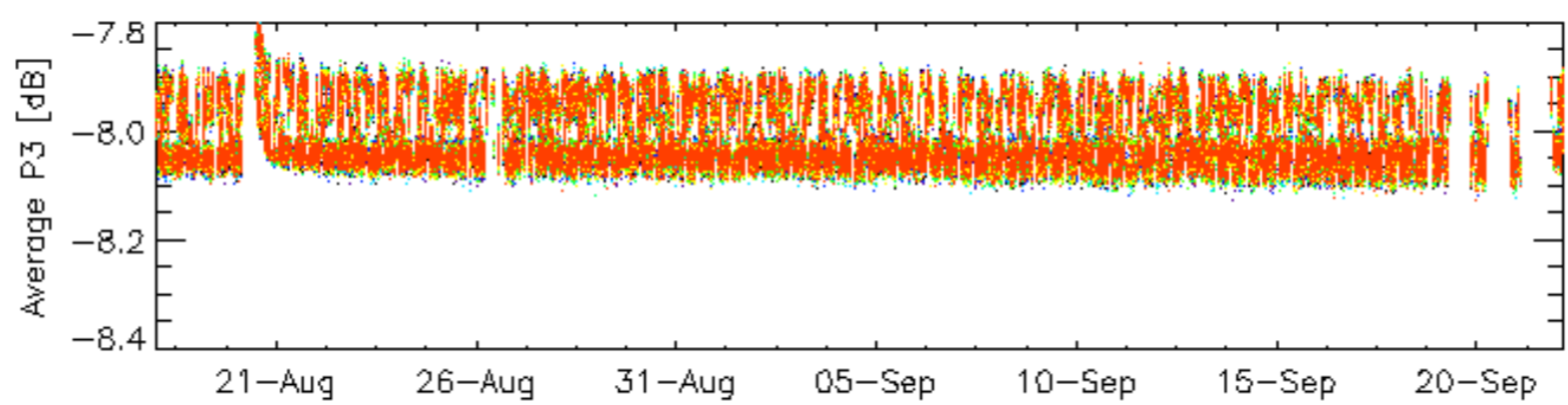
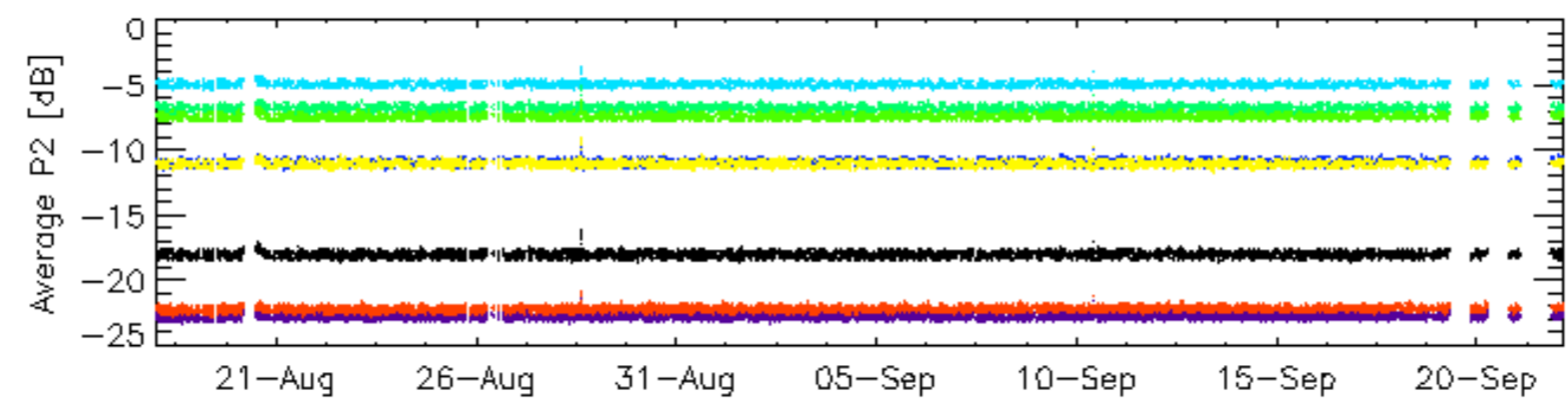
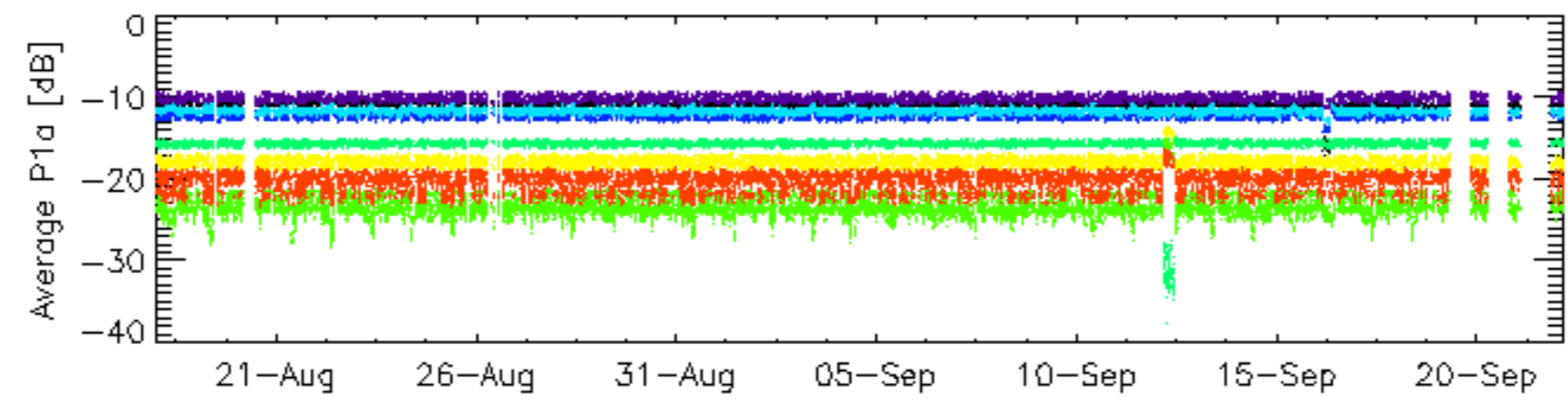
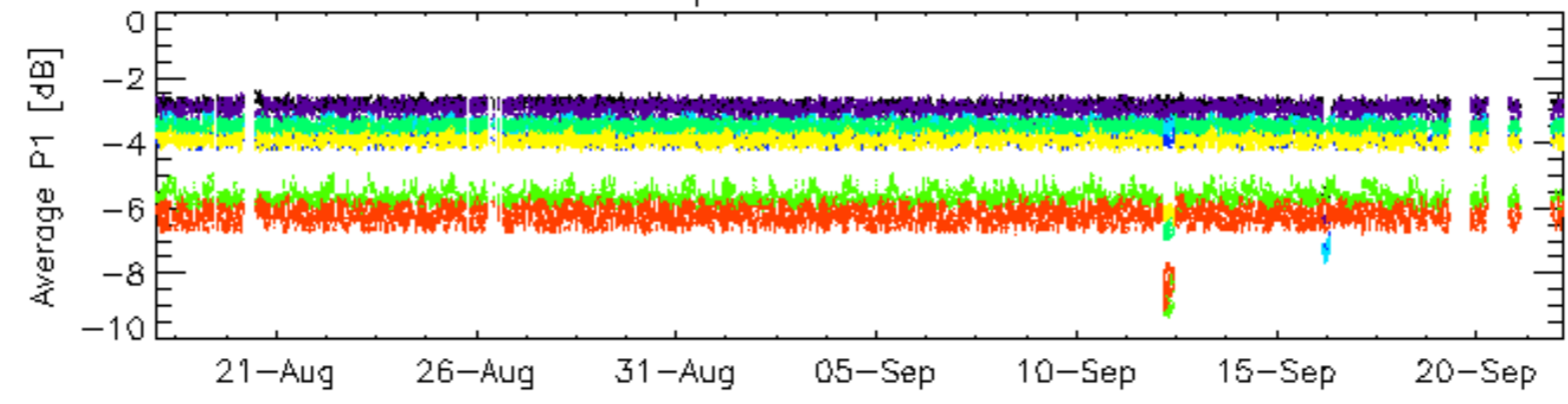
6.5 - Absolute Doppler for GM1

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

6.6 - Doppler evolution versus ANX for GM1

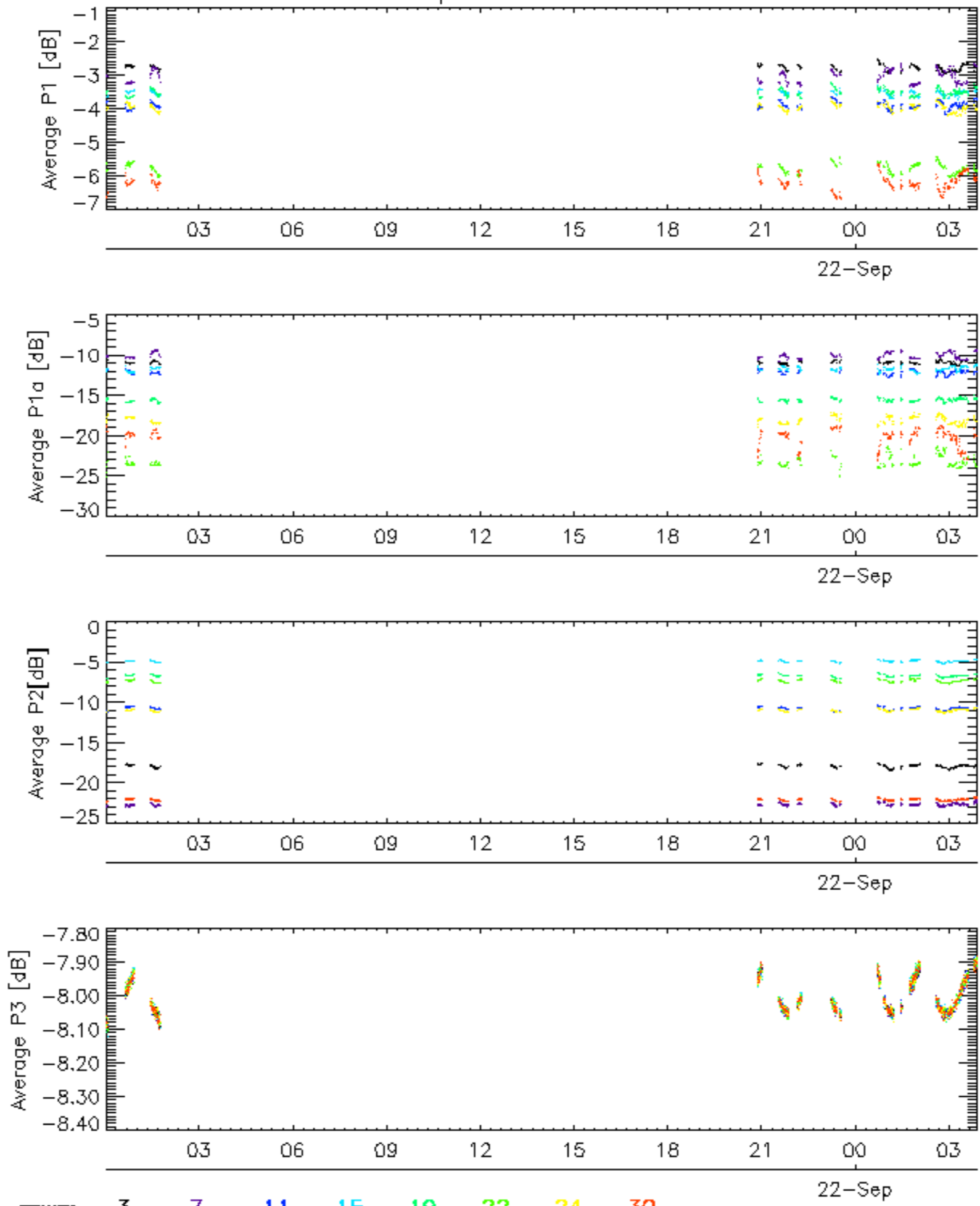
Evolution Doppler error versus ANX	
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Cal pulses for GM1 SS3

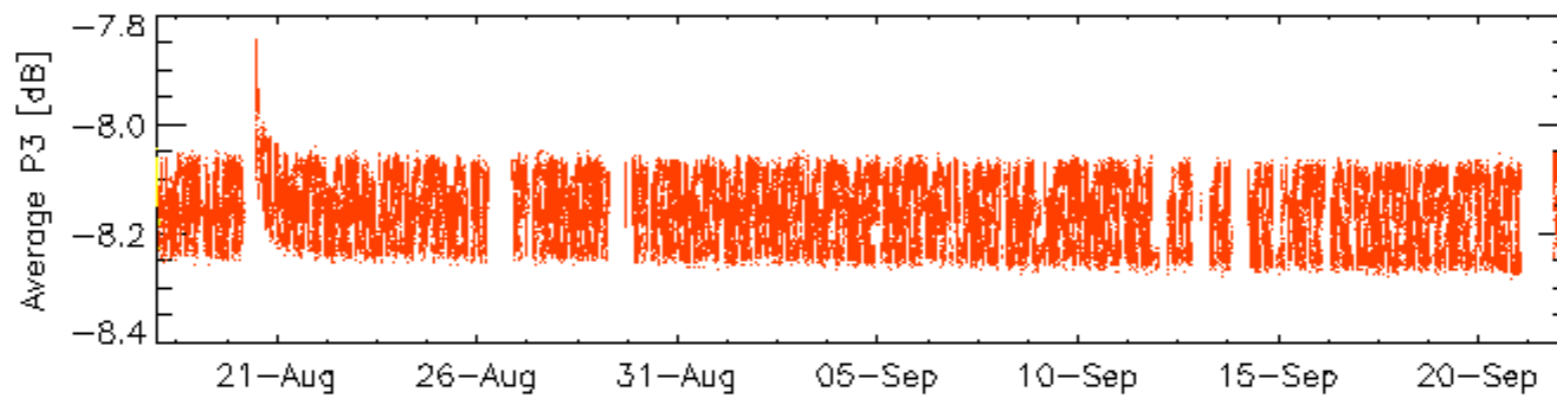
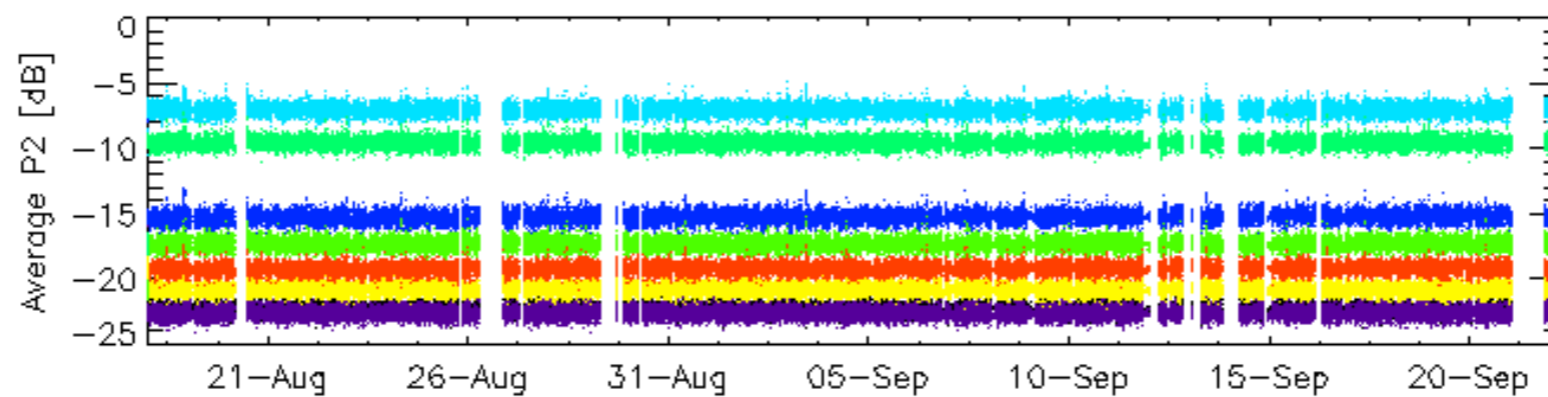
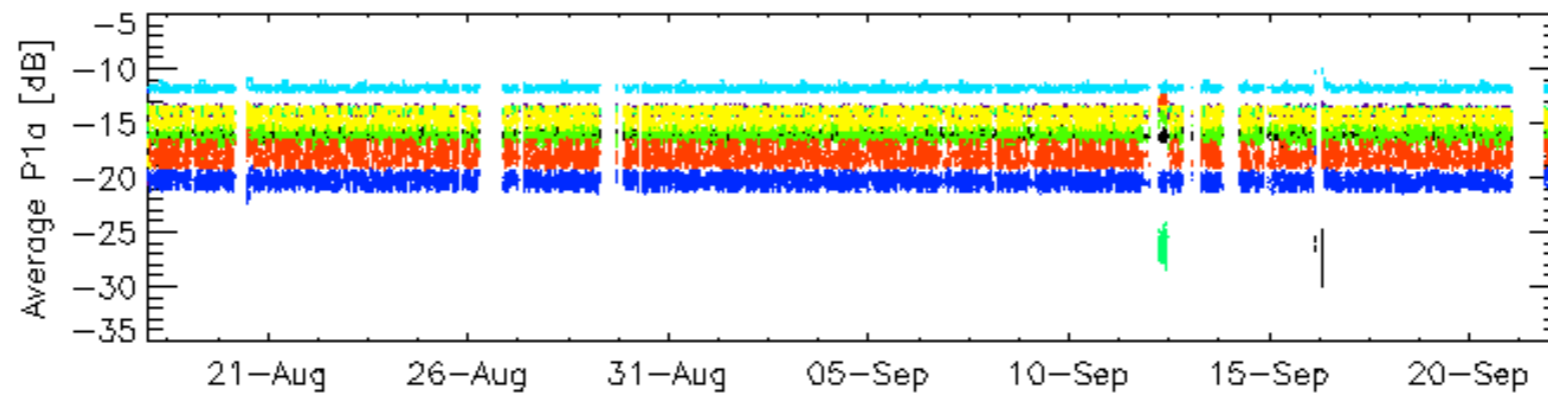
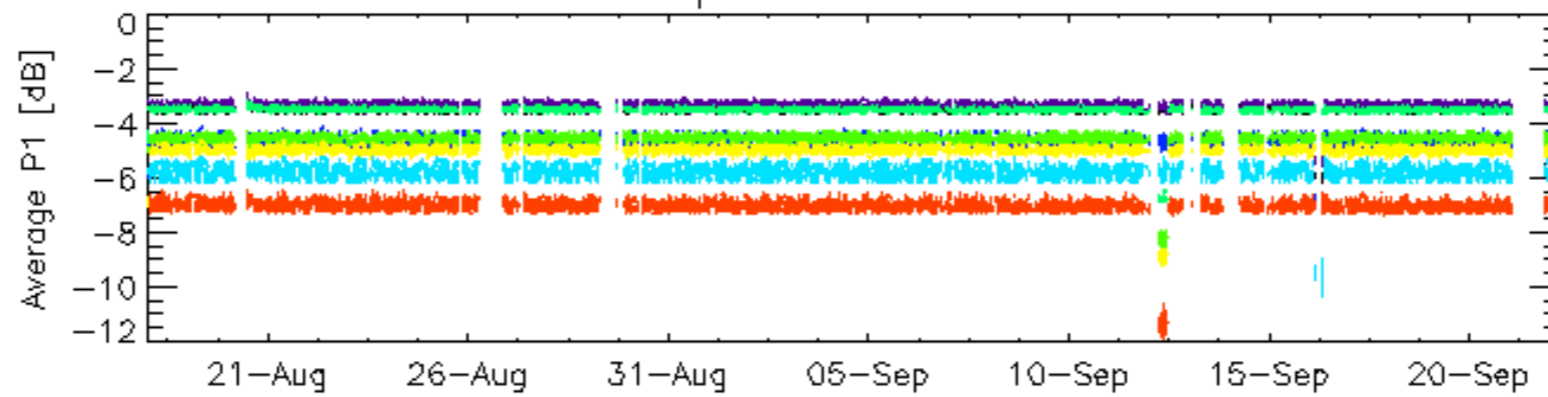


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

Cal pulses for GM1 SS3

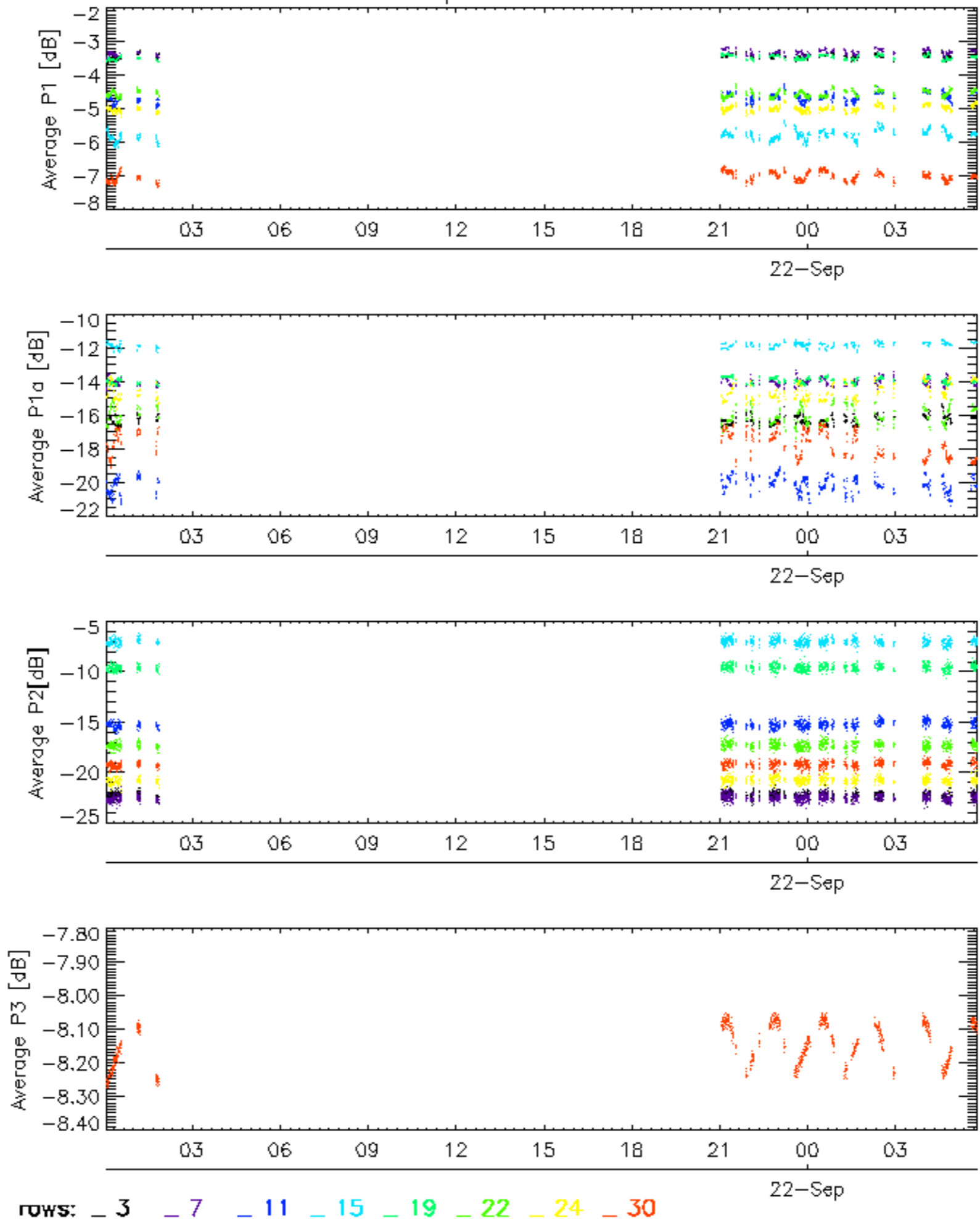


Cal pulses for WVS IS2



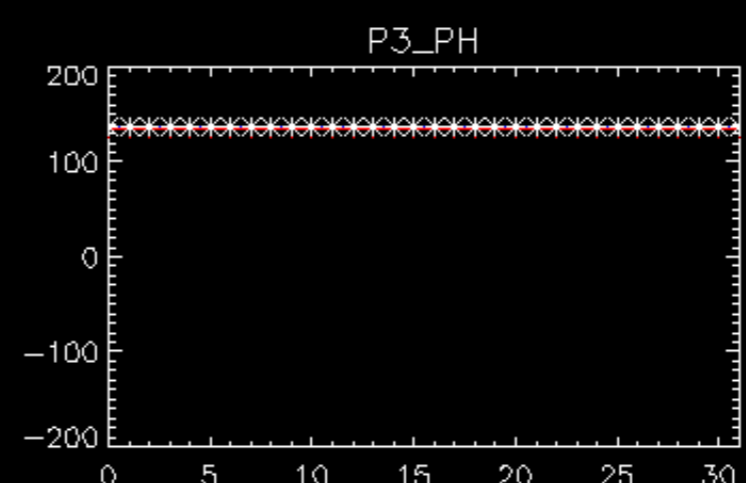
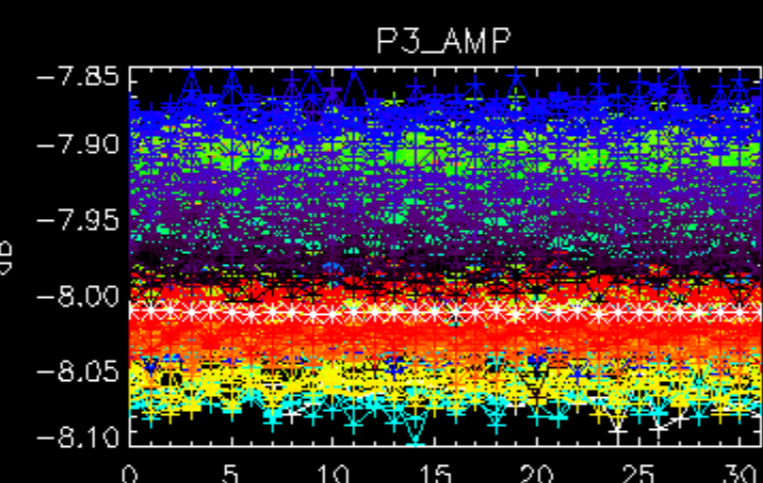
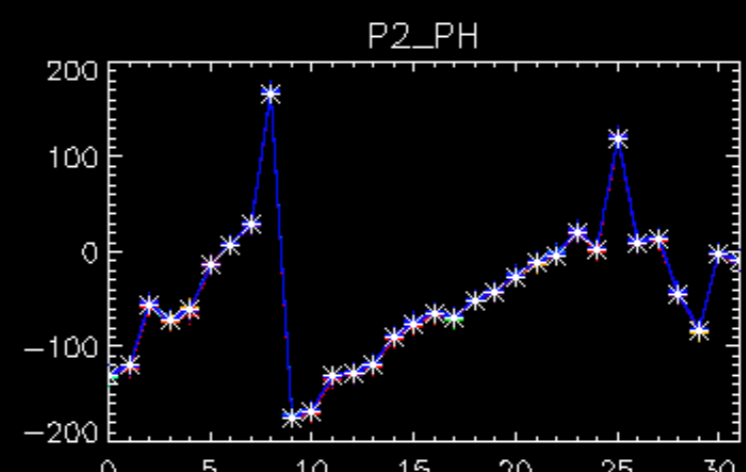
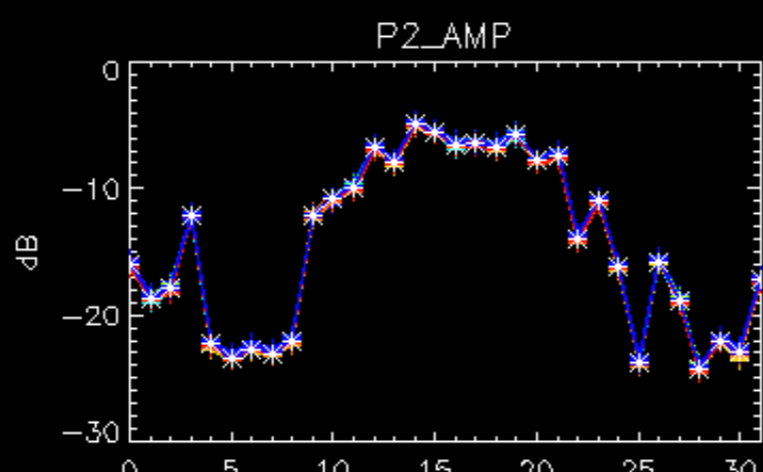
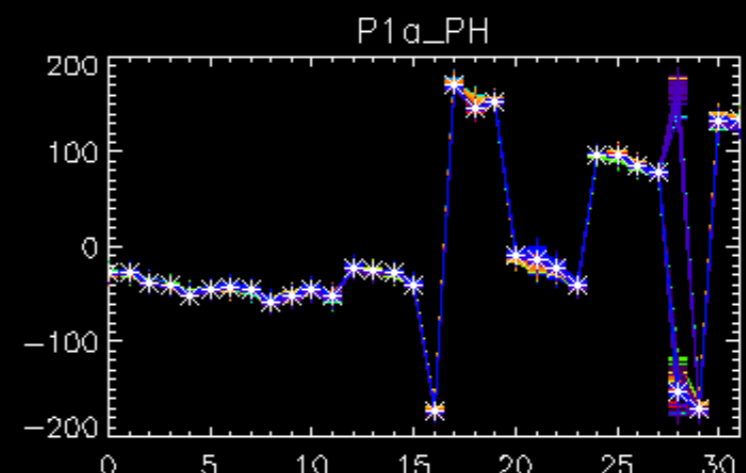
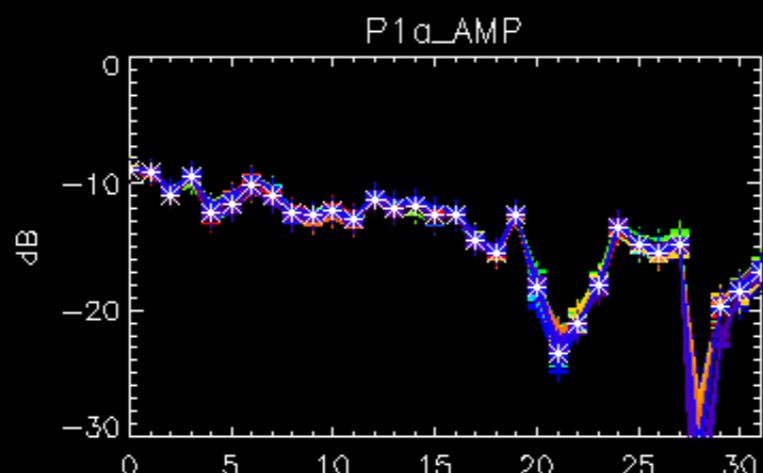
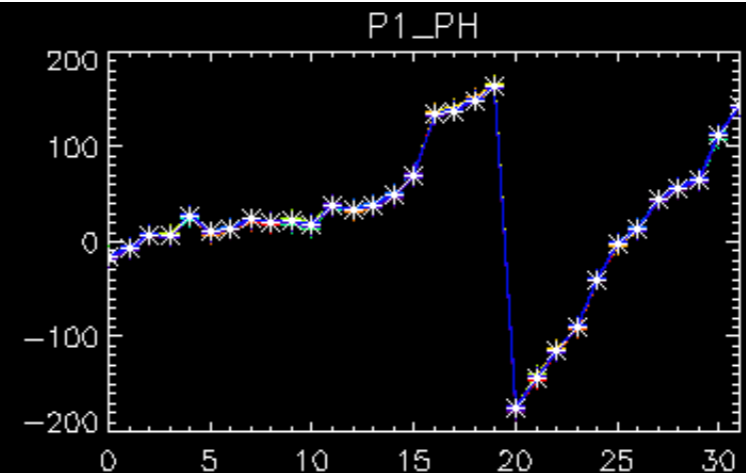
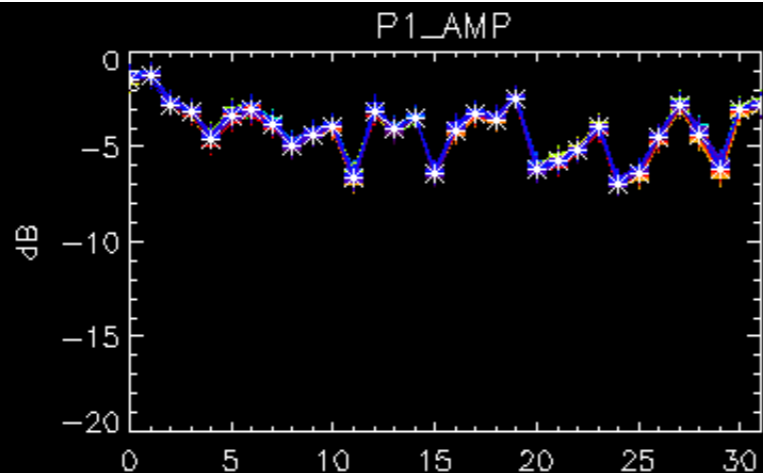
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

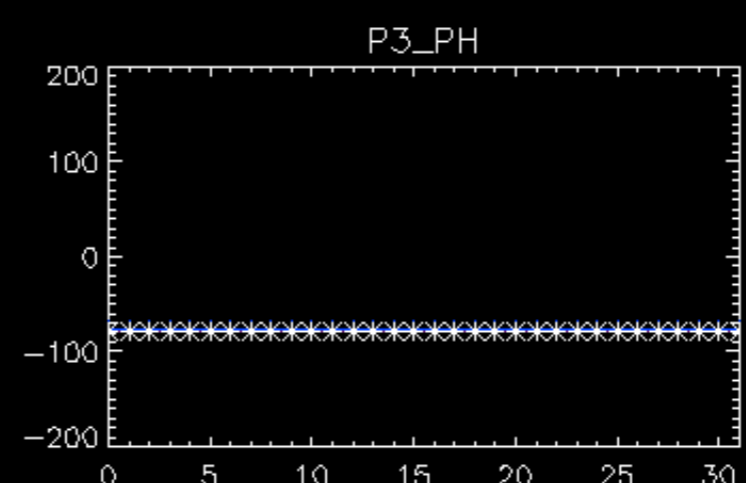
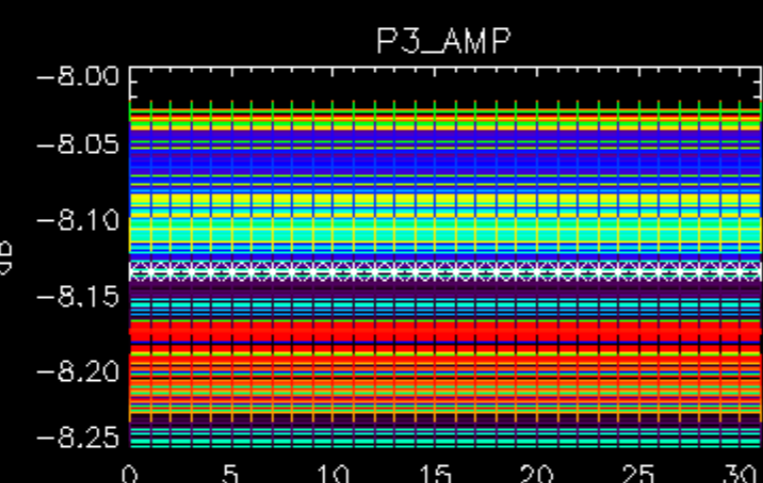
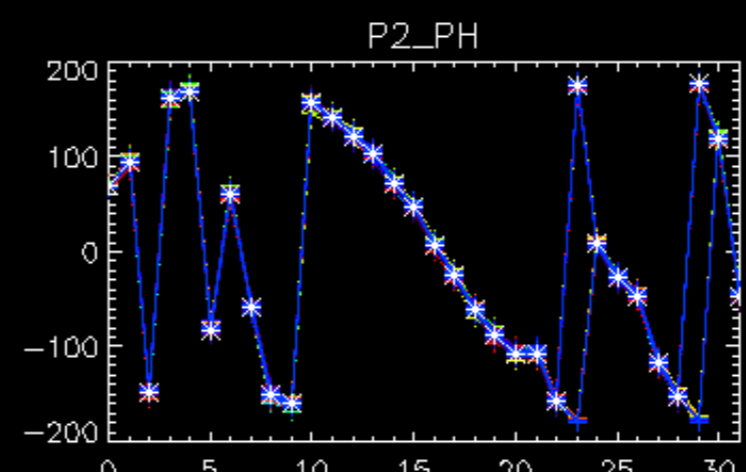
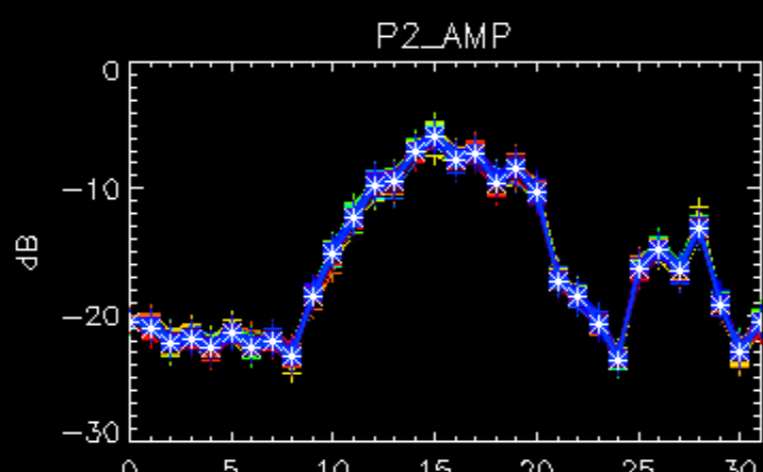
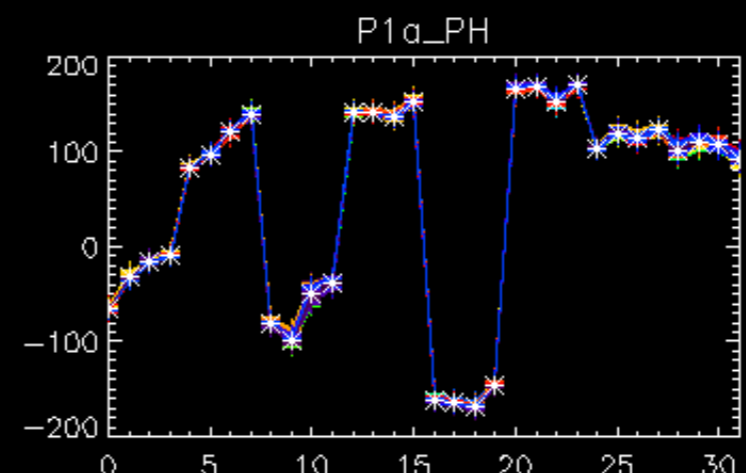
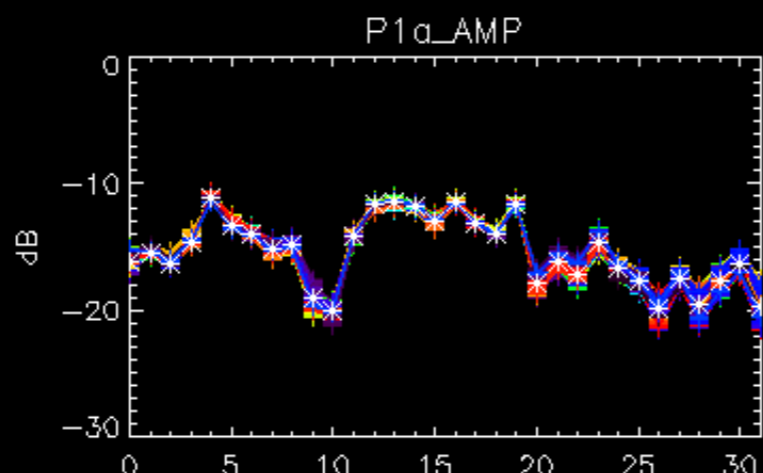
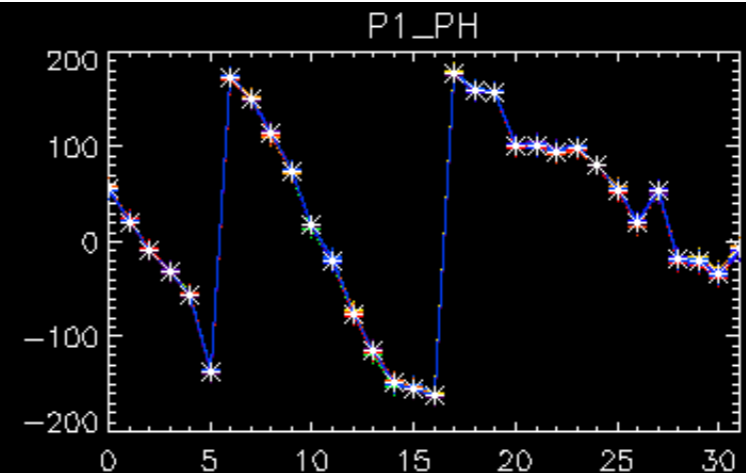
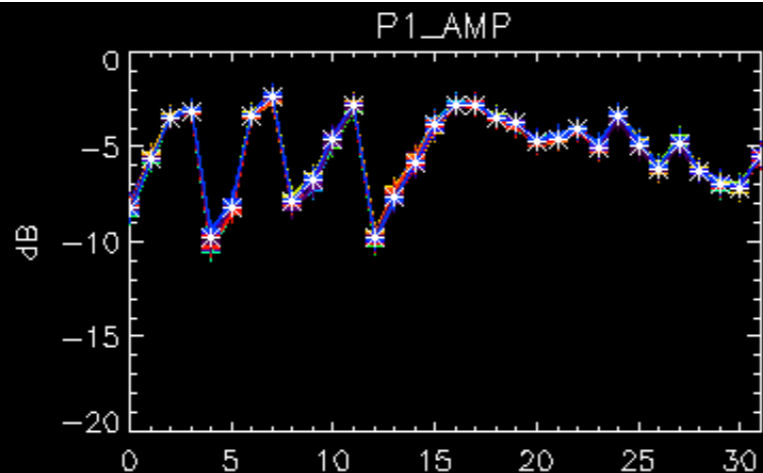
Cal pulses for WVS IS2



rows: 3 7 11 15 19 22 24 30

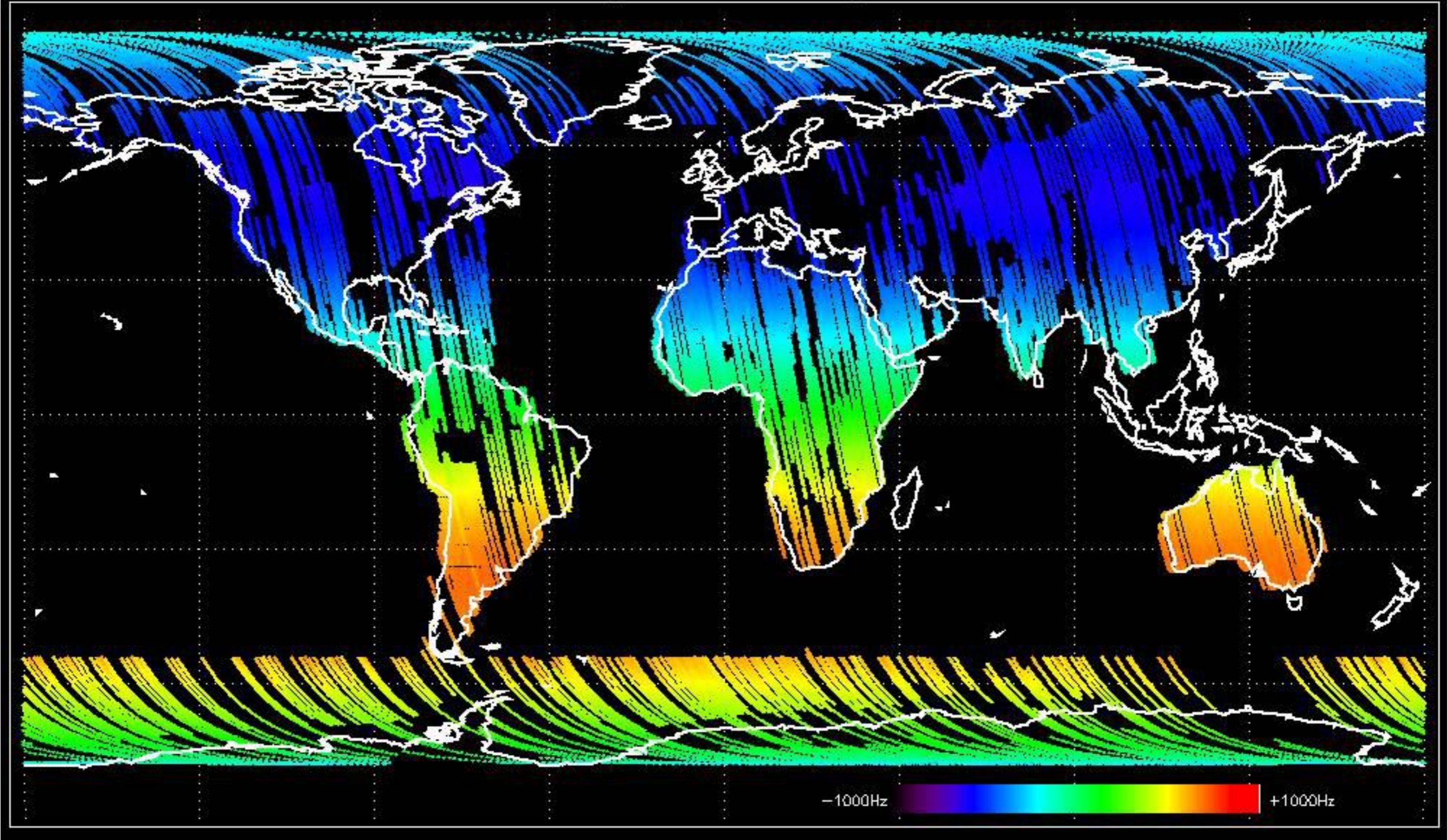
No anomalies observed.



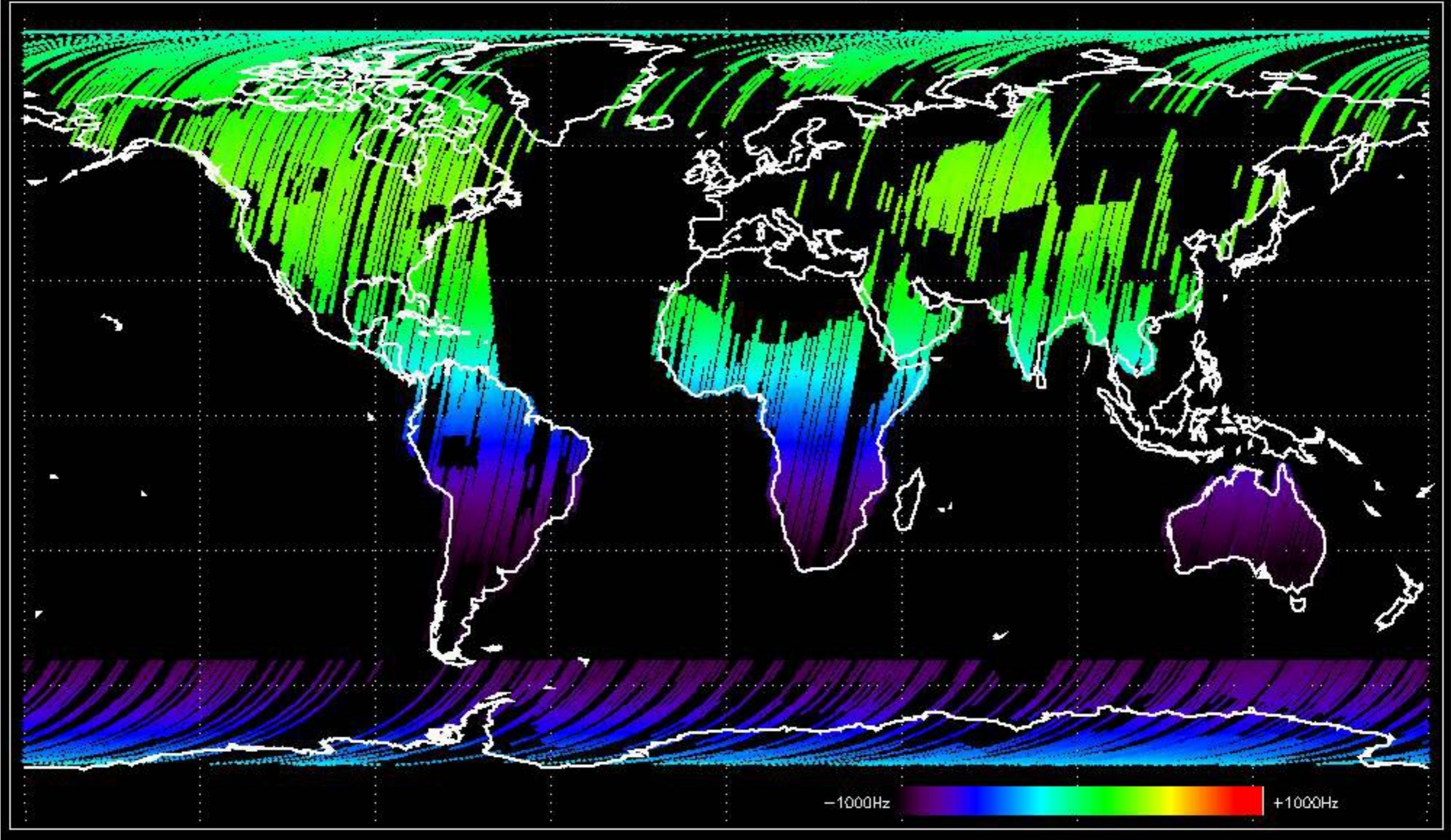


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

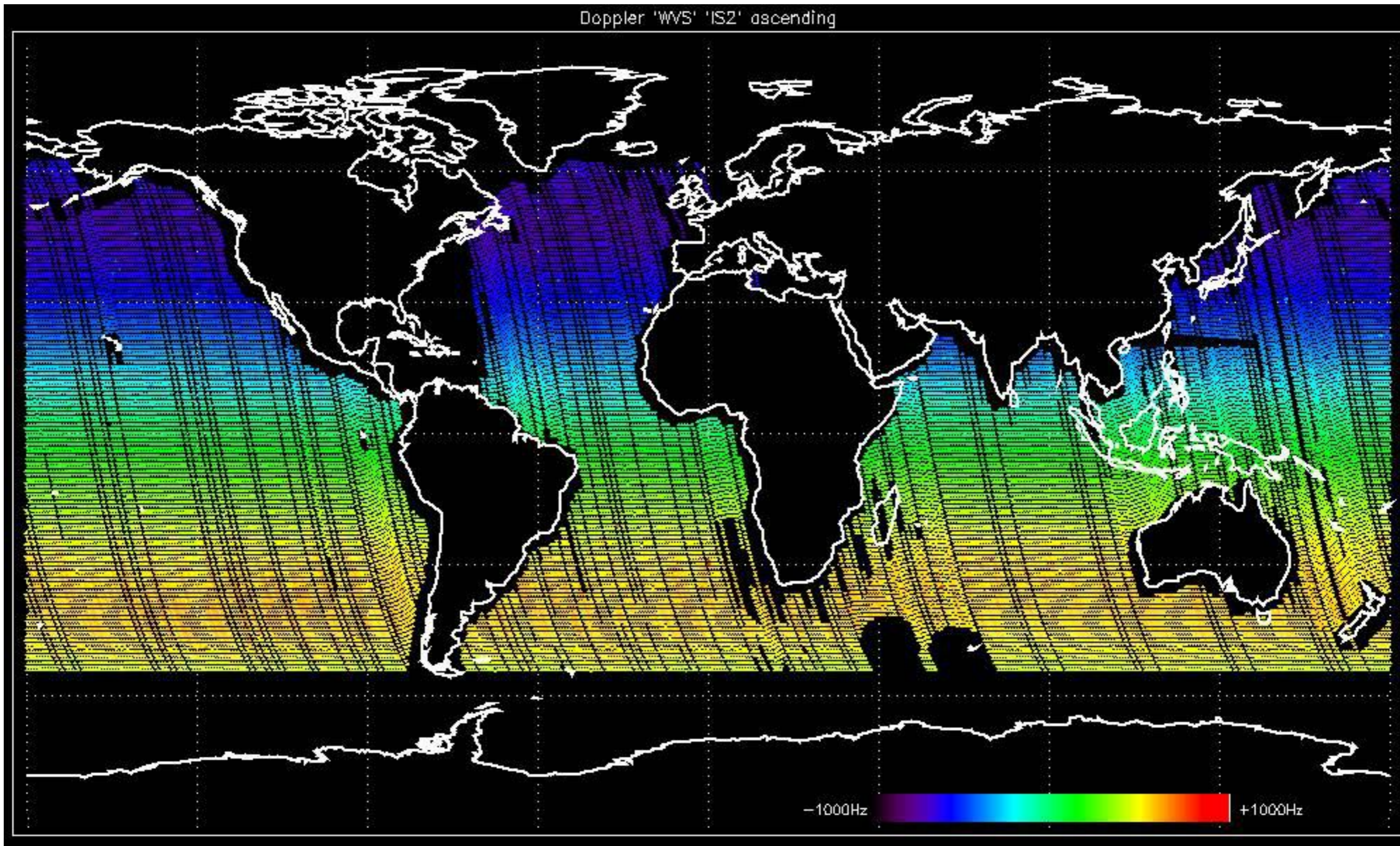
Doppler 'GM1' 'SS1' ascending



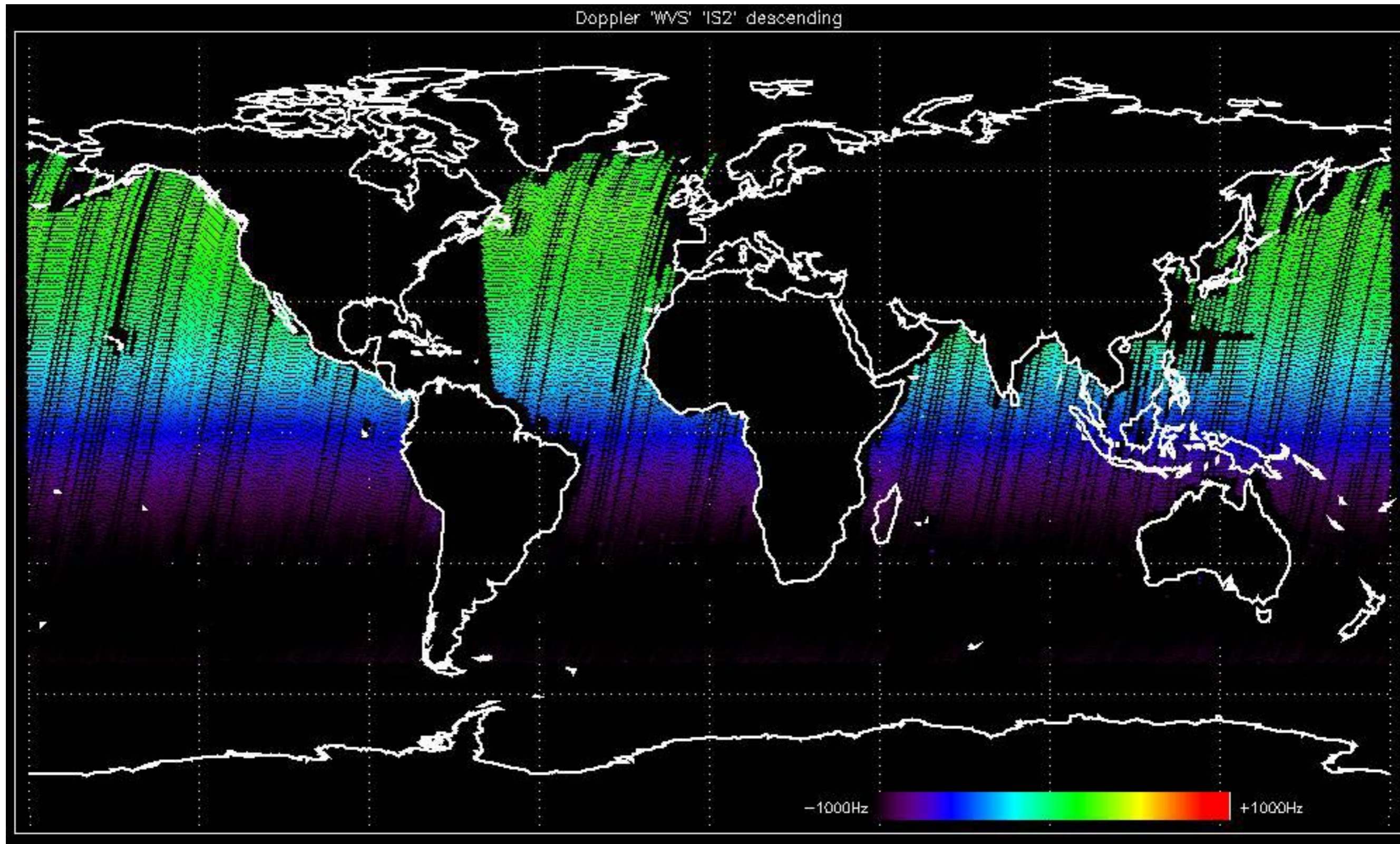
Doppler 'GM1' 'SS1' descending

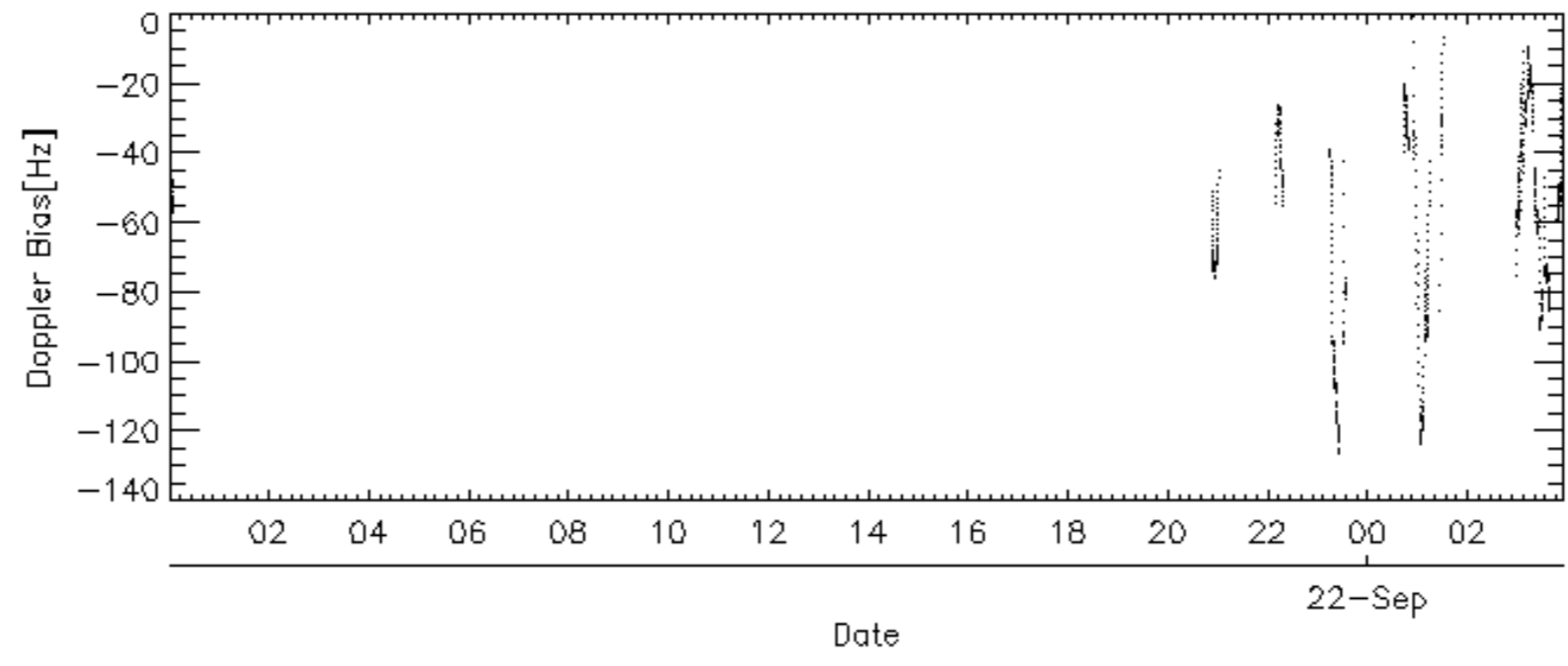
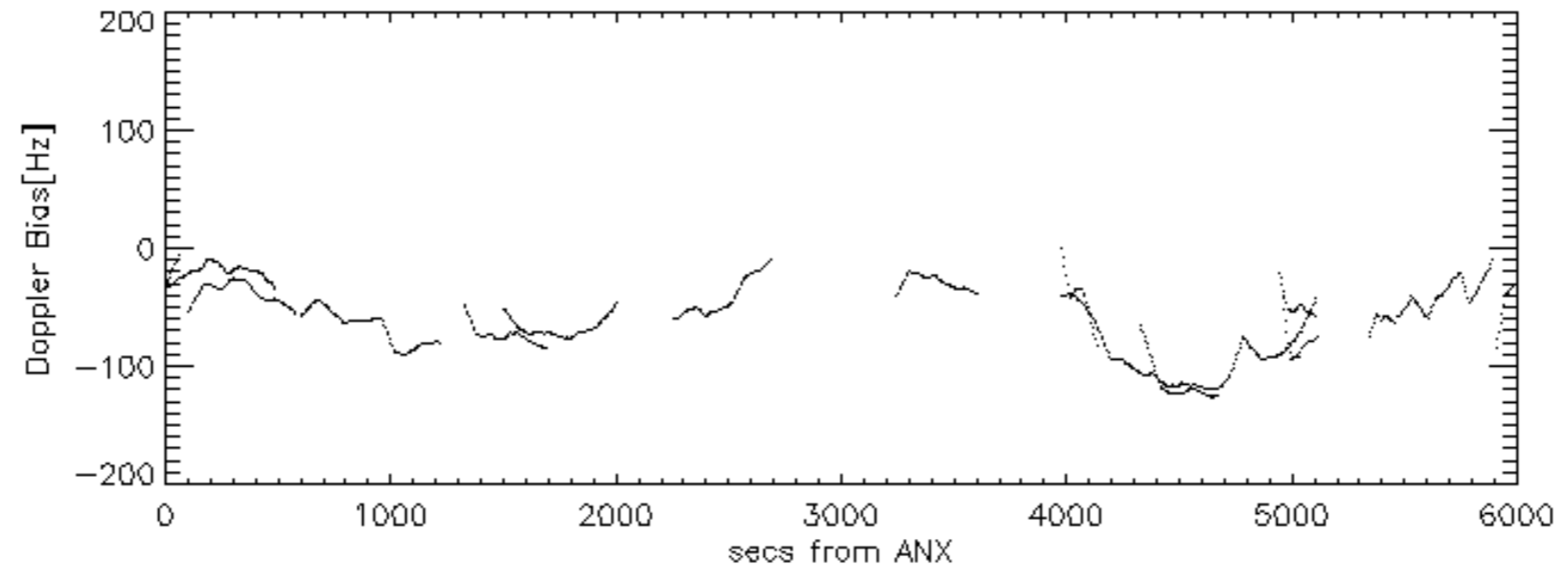
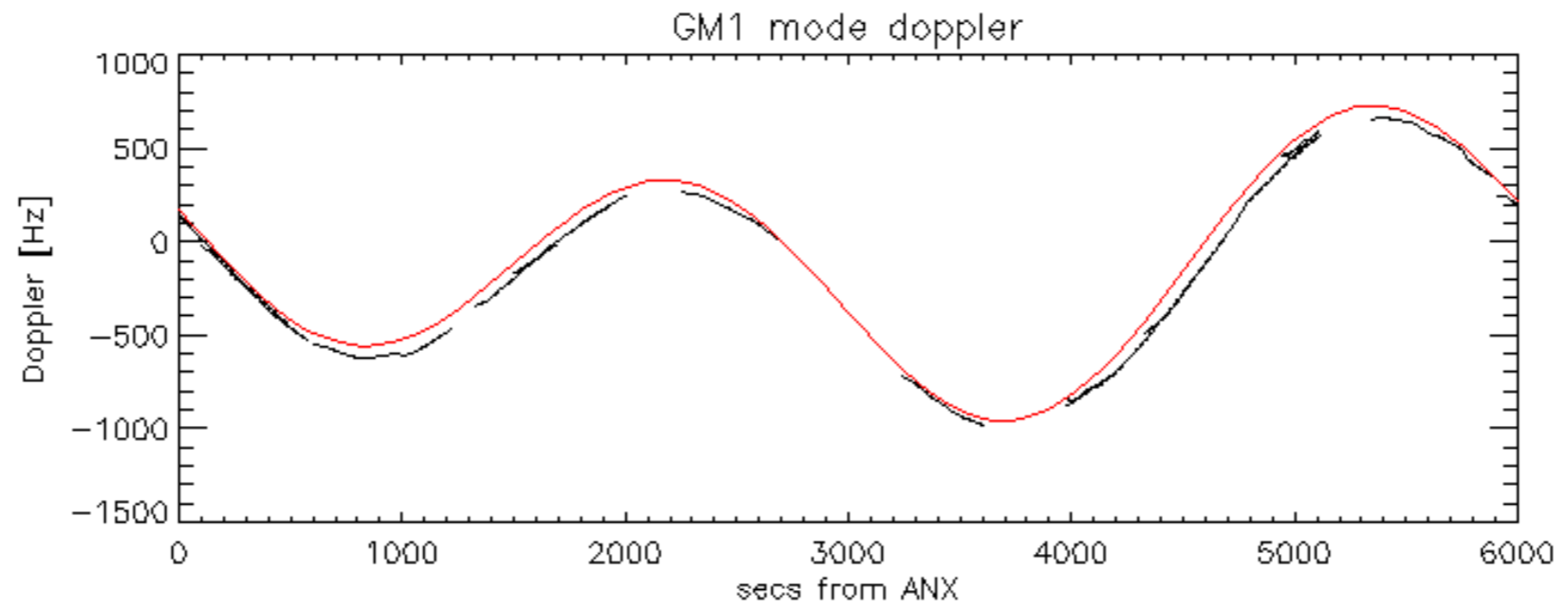


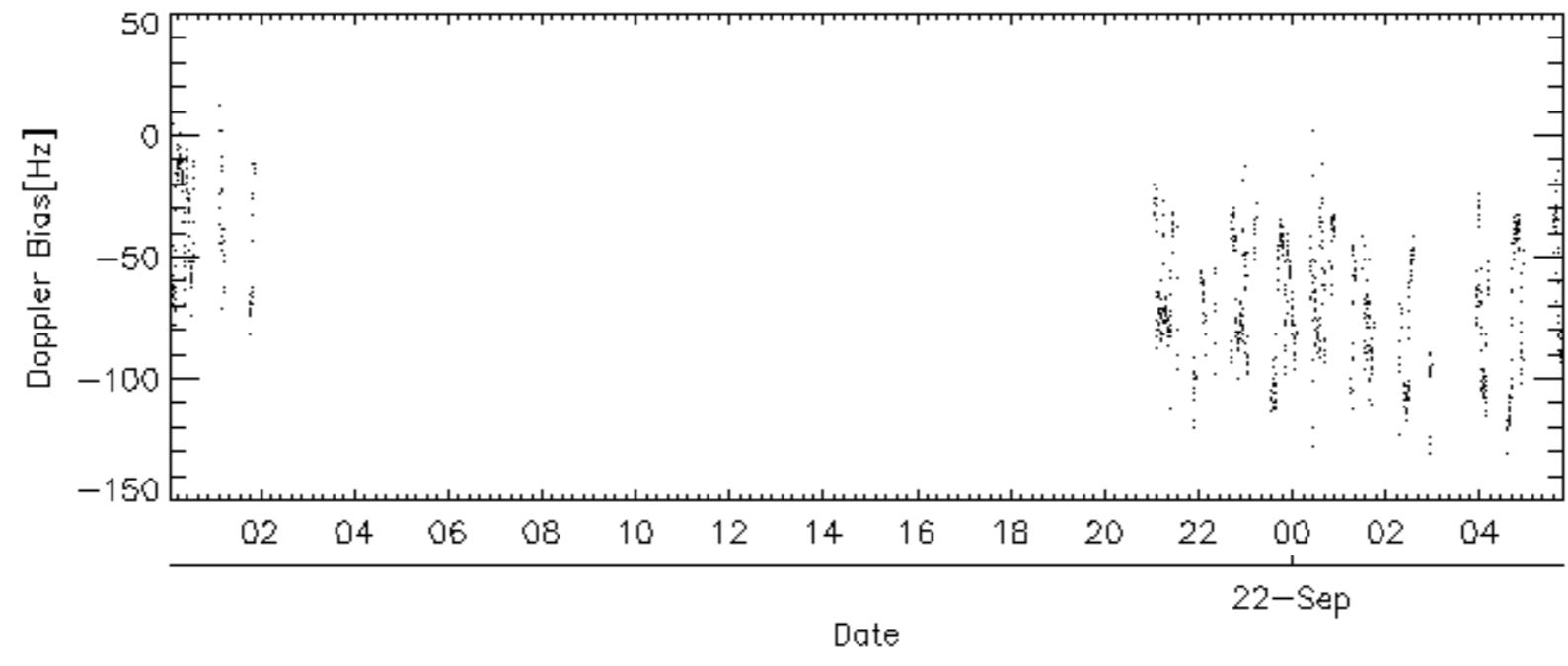
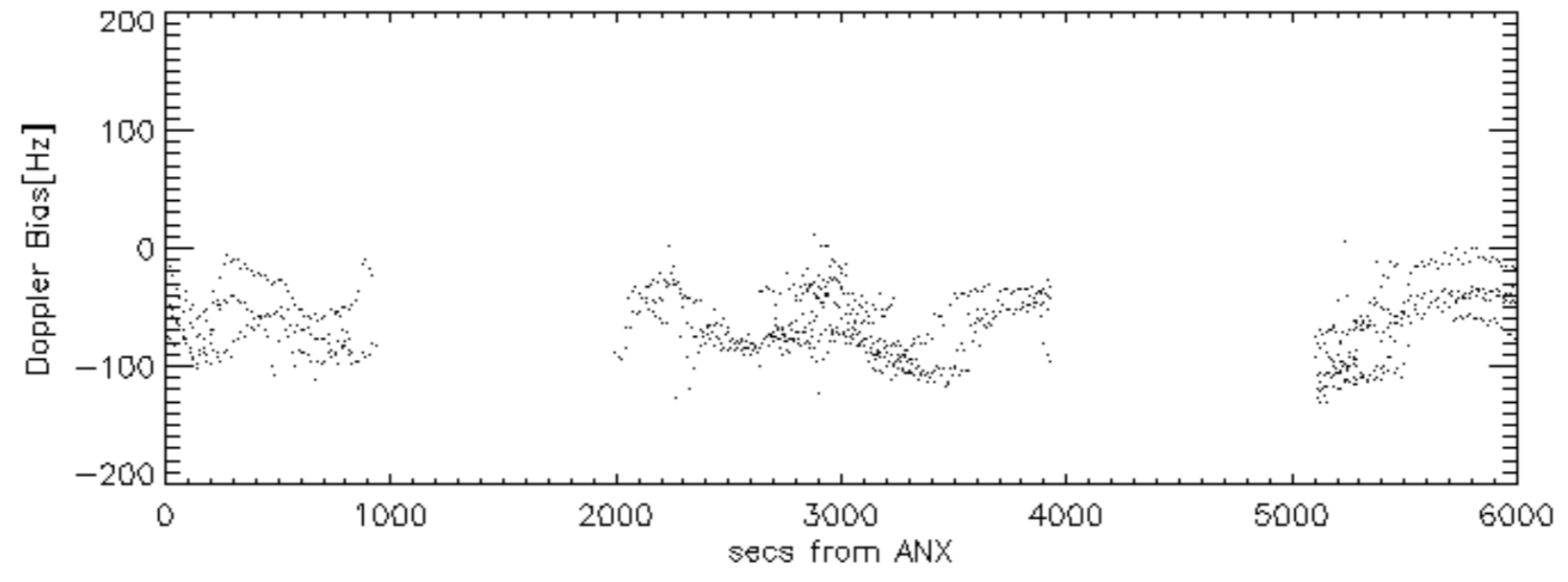
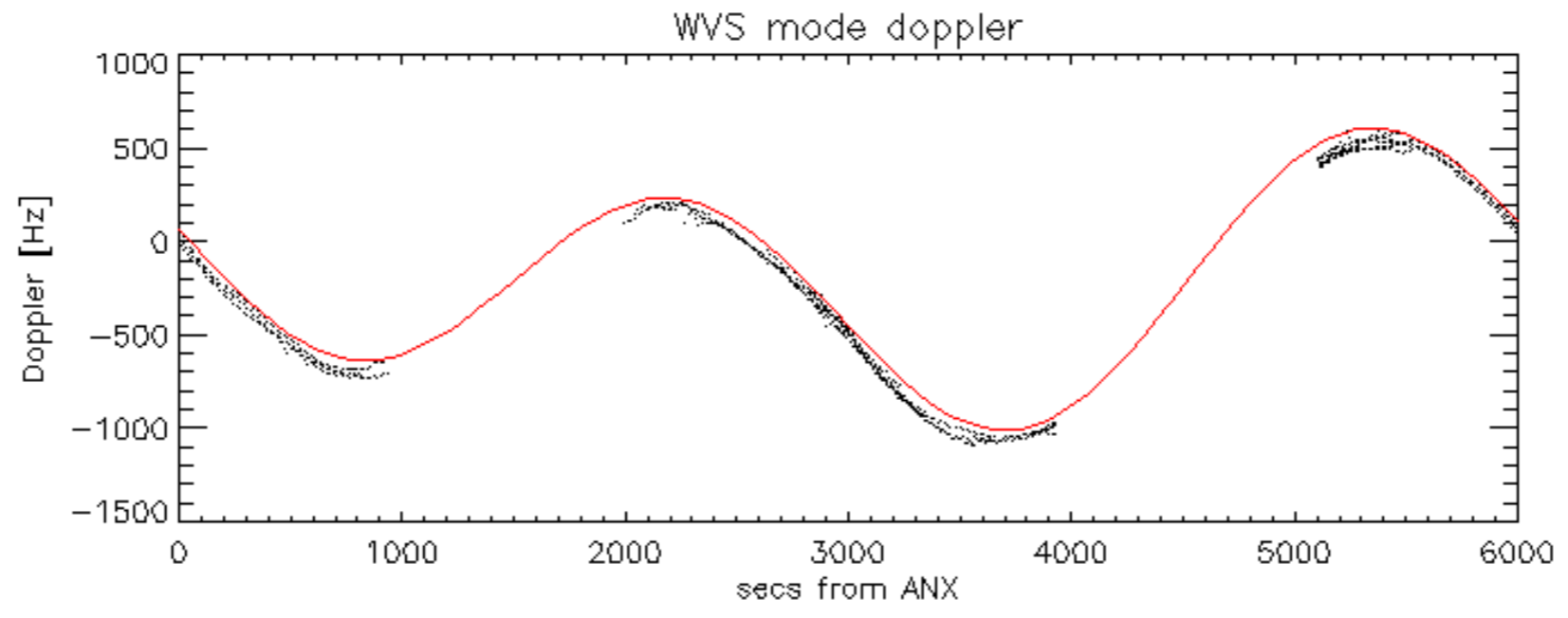
Doppler 'WVS' 'IS2' ascending



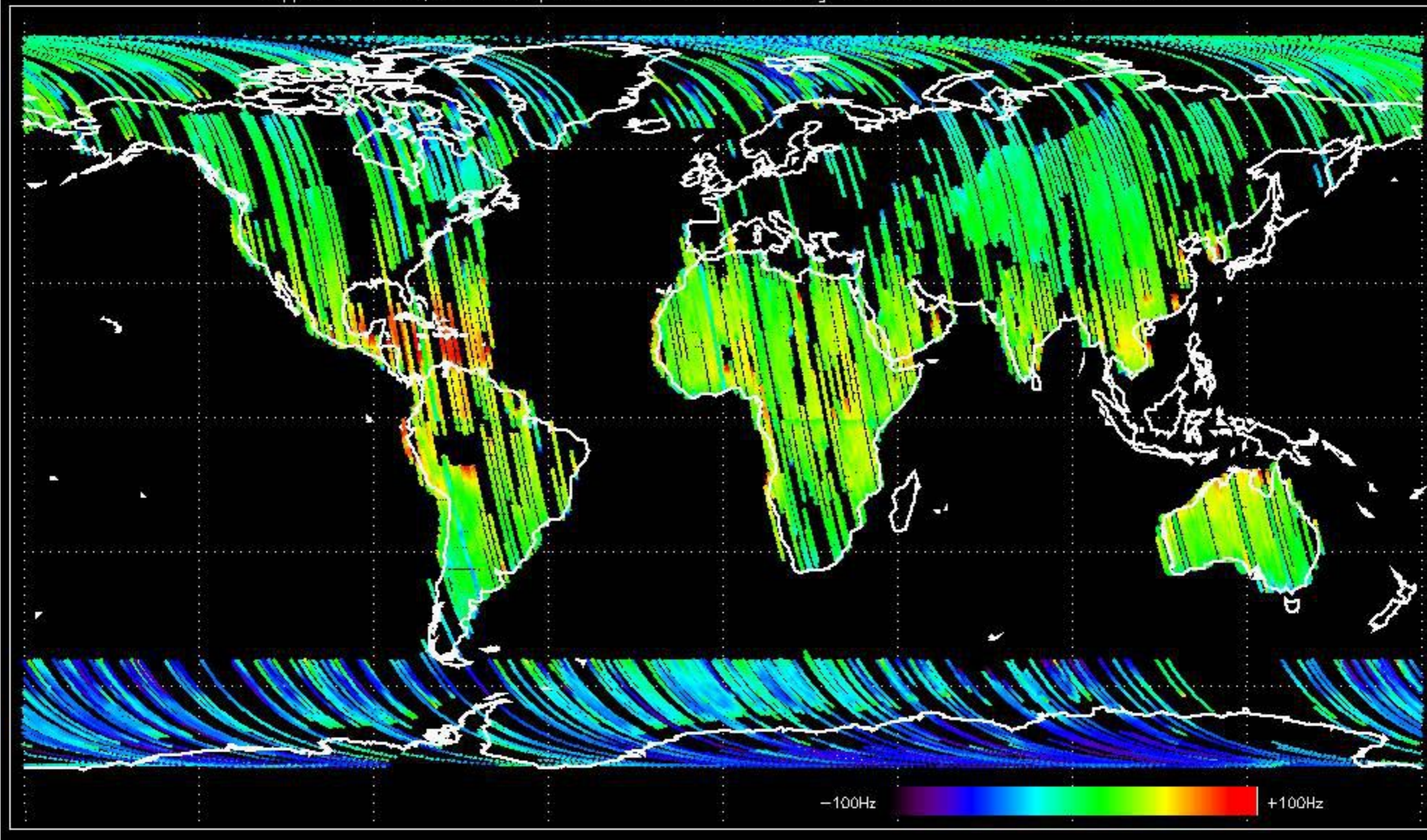
Doppler 'WVS' 'IS2' descending



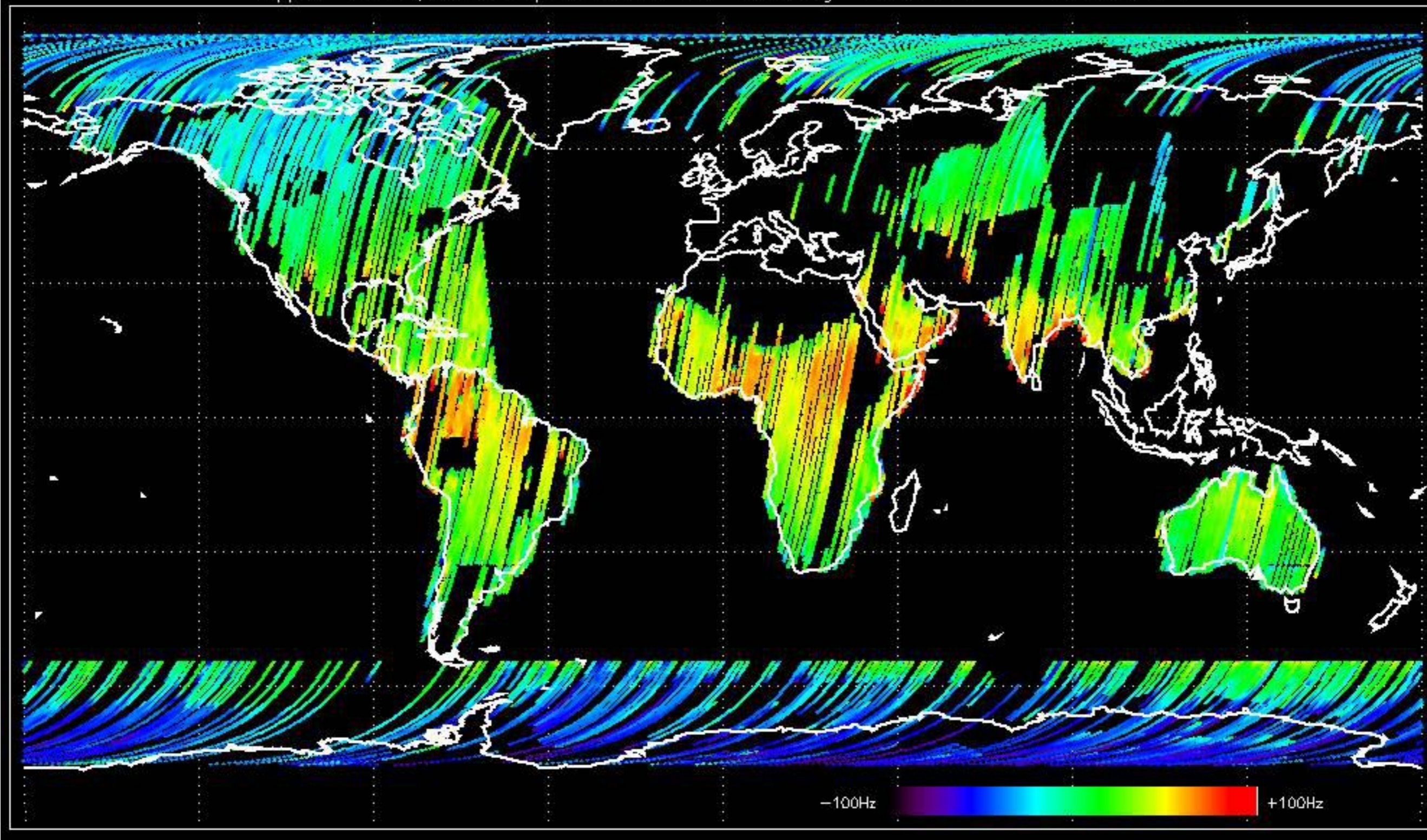




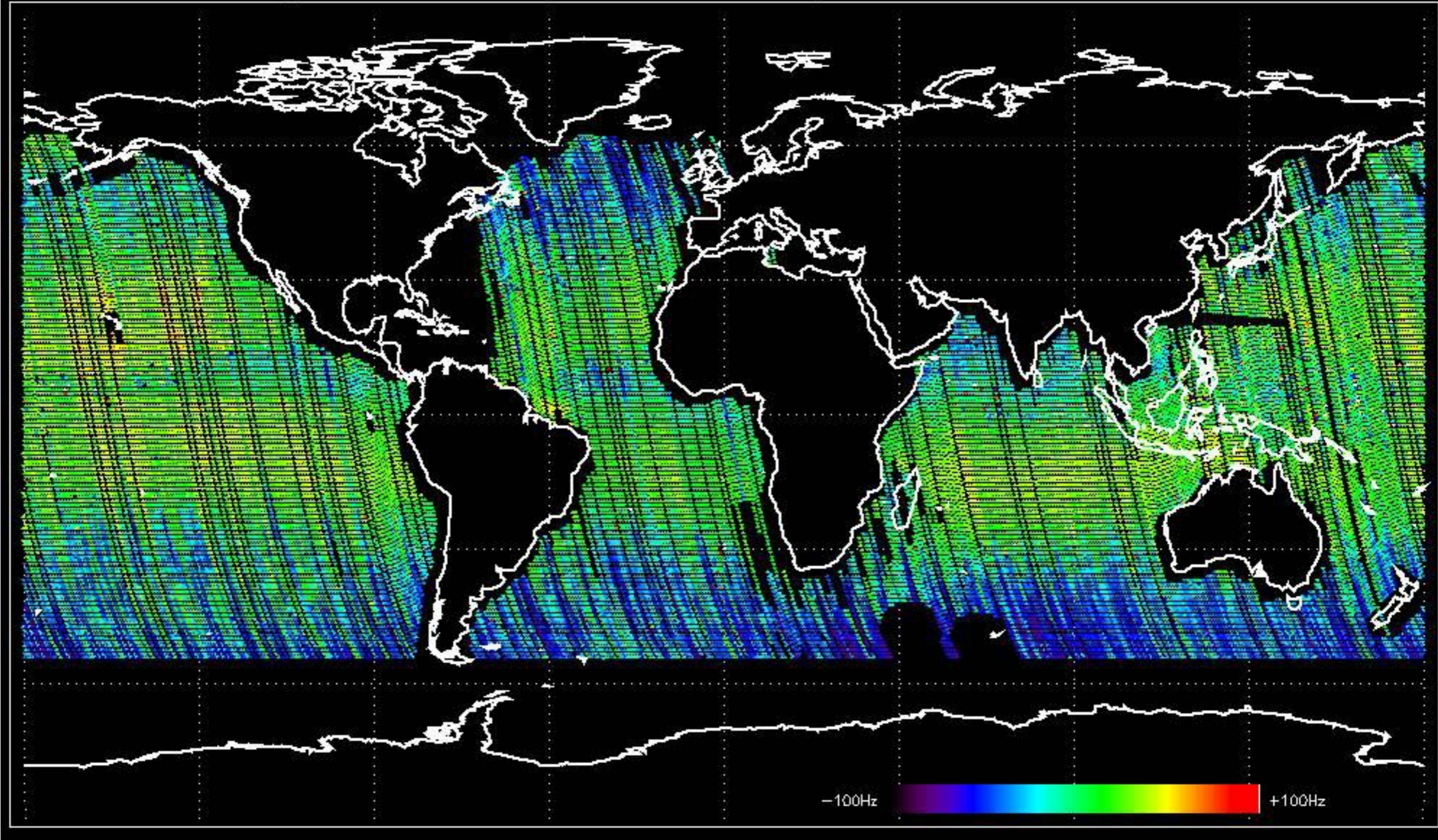
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -29.706704 Hz



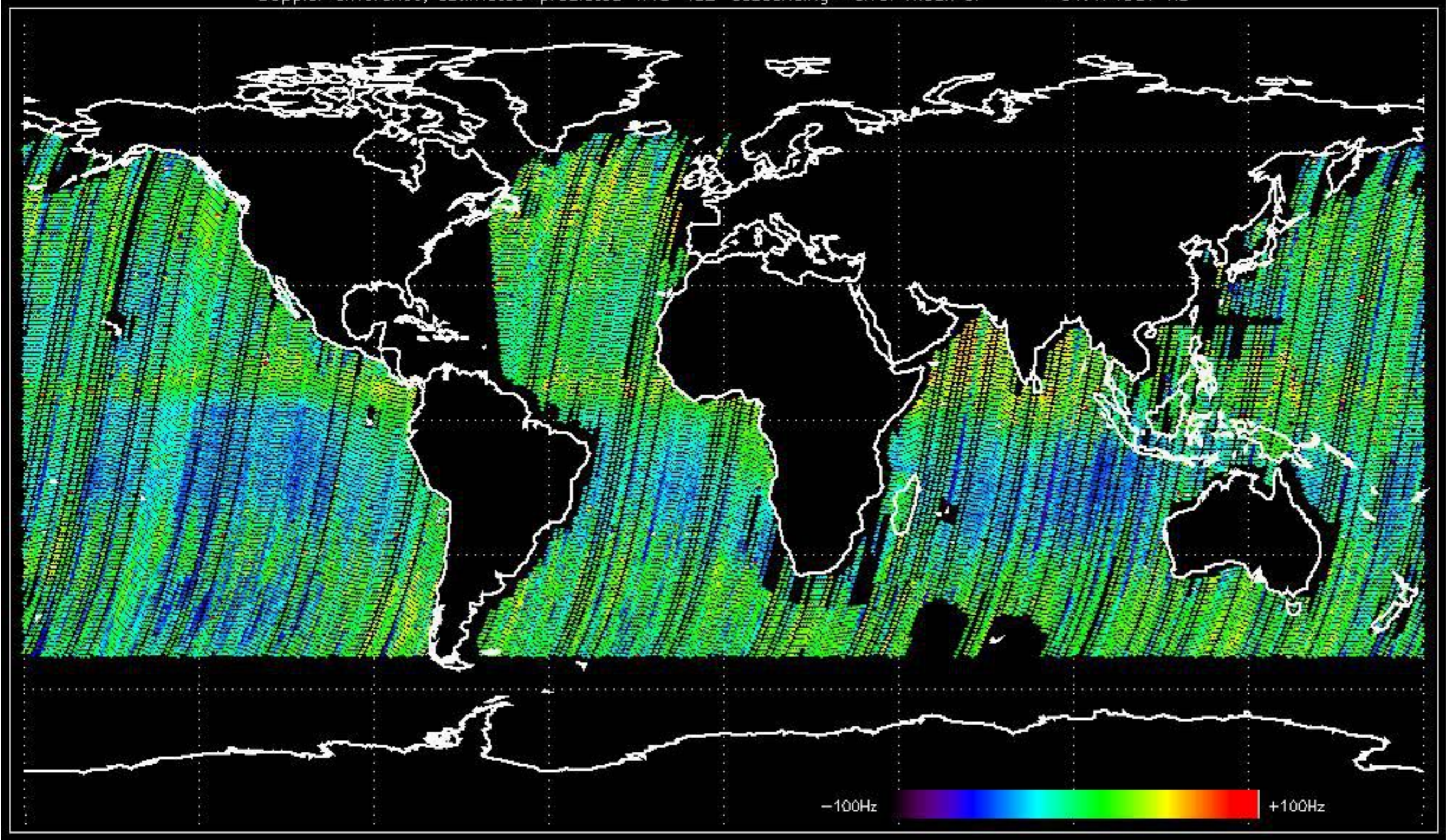
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -18.338223 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -30.326412 Hz

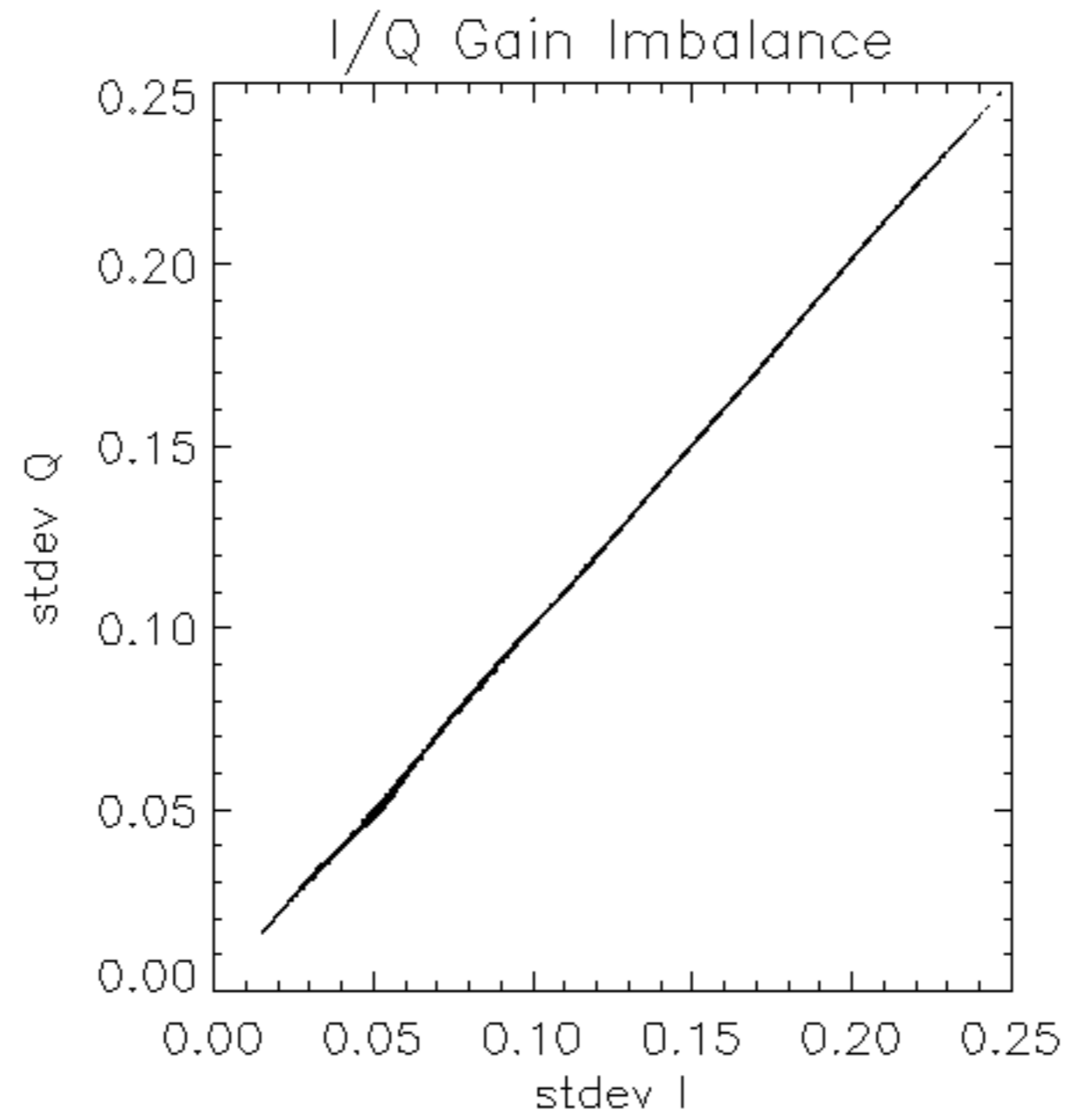


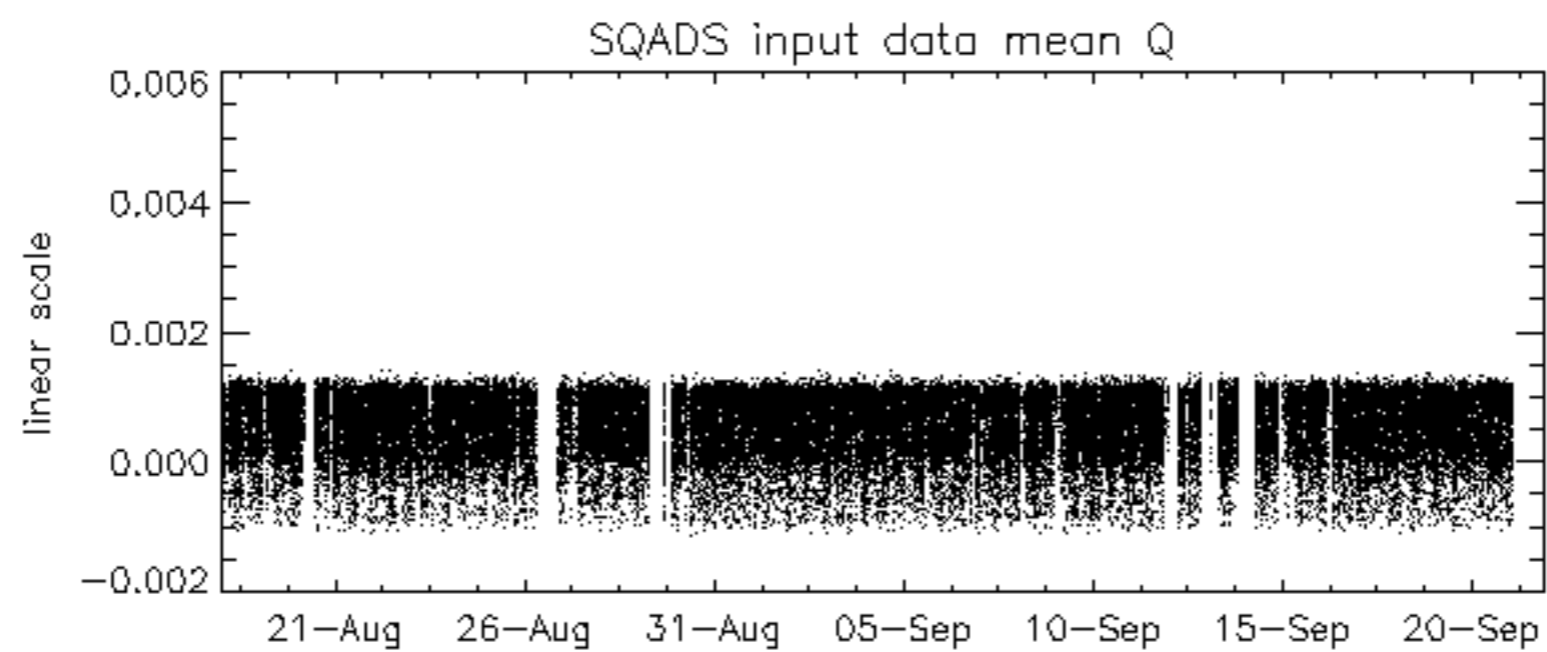
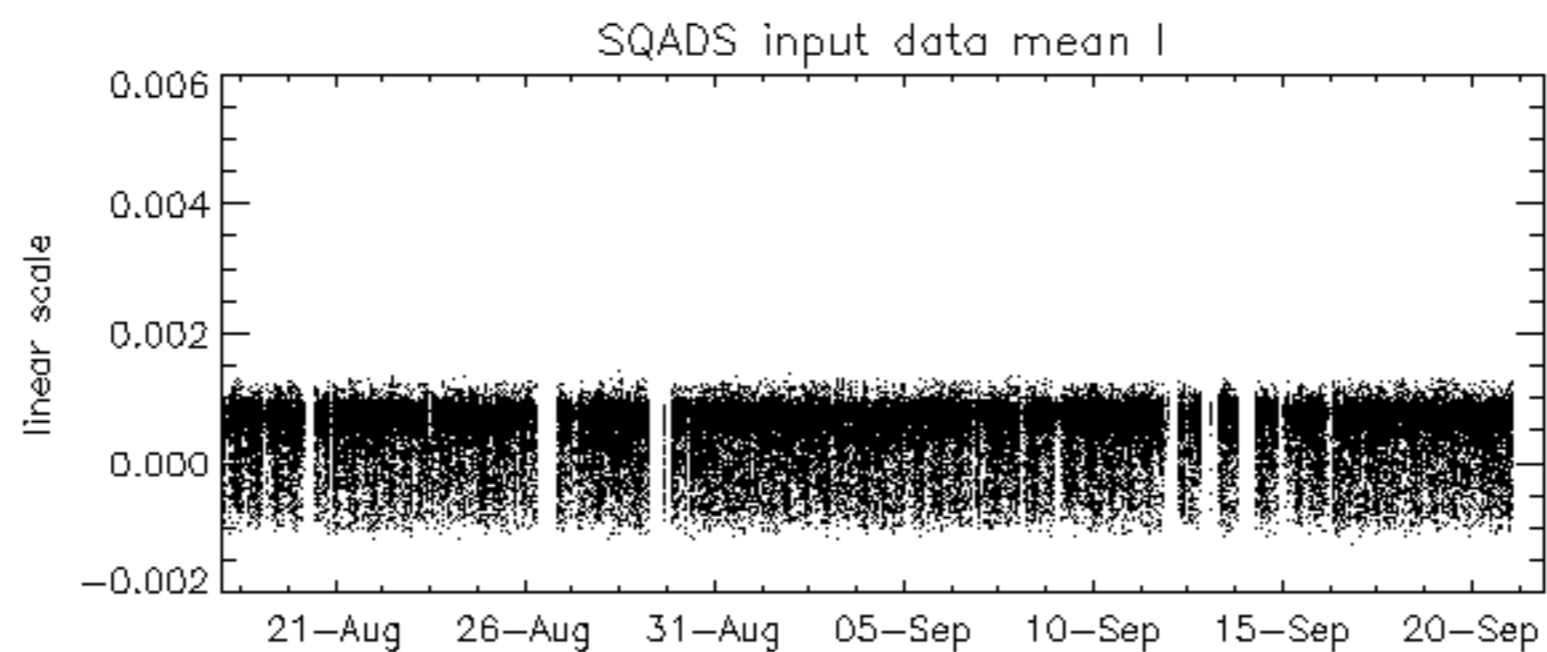
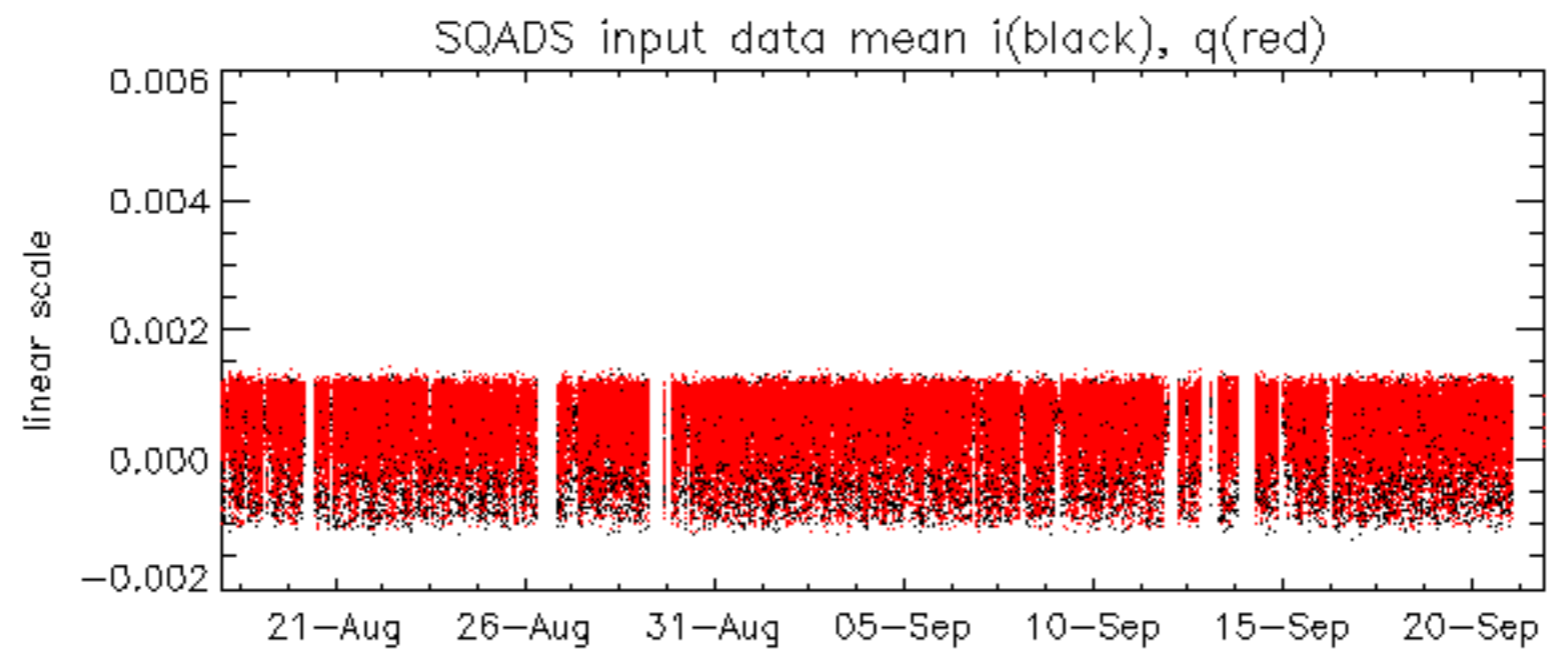
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -31.474987 Hz

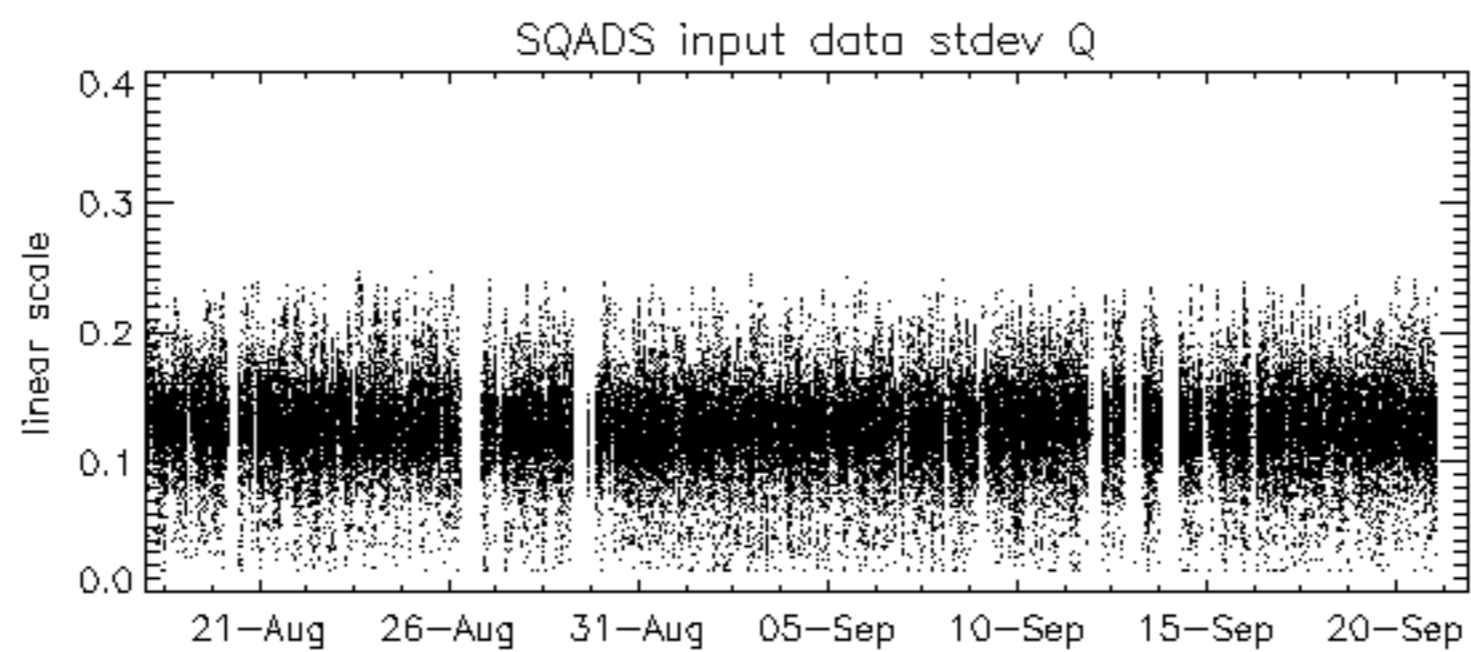
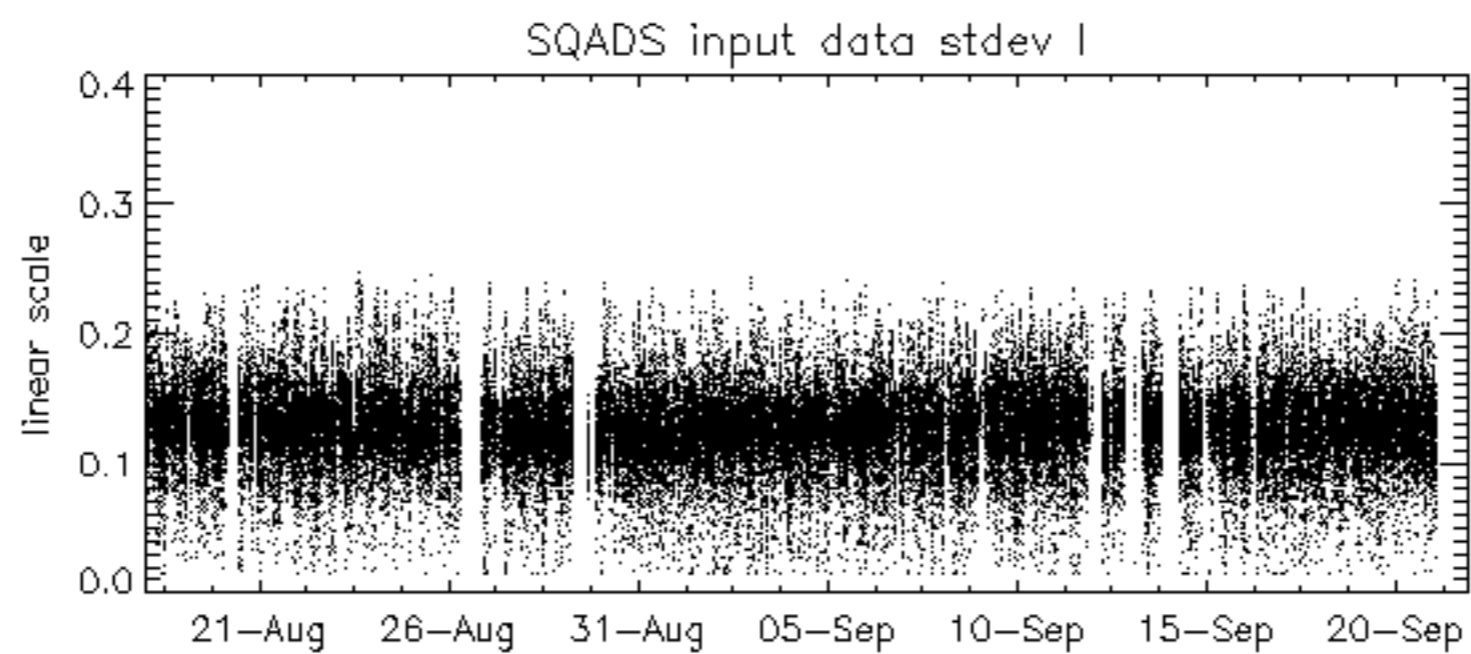
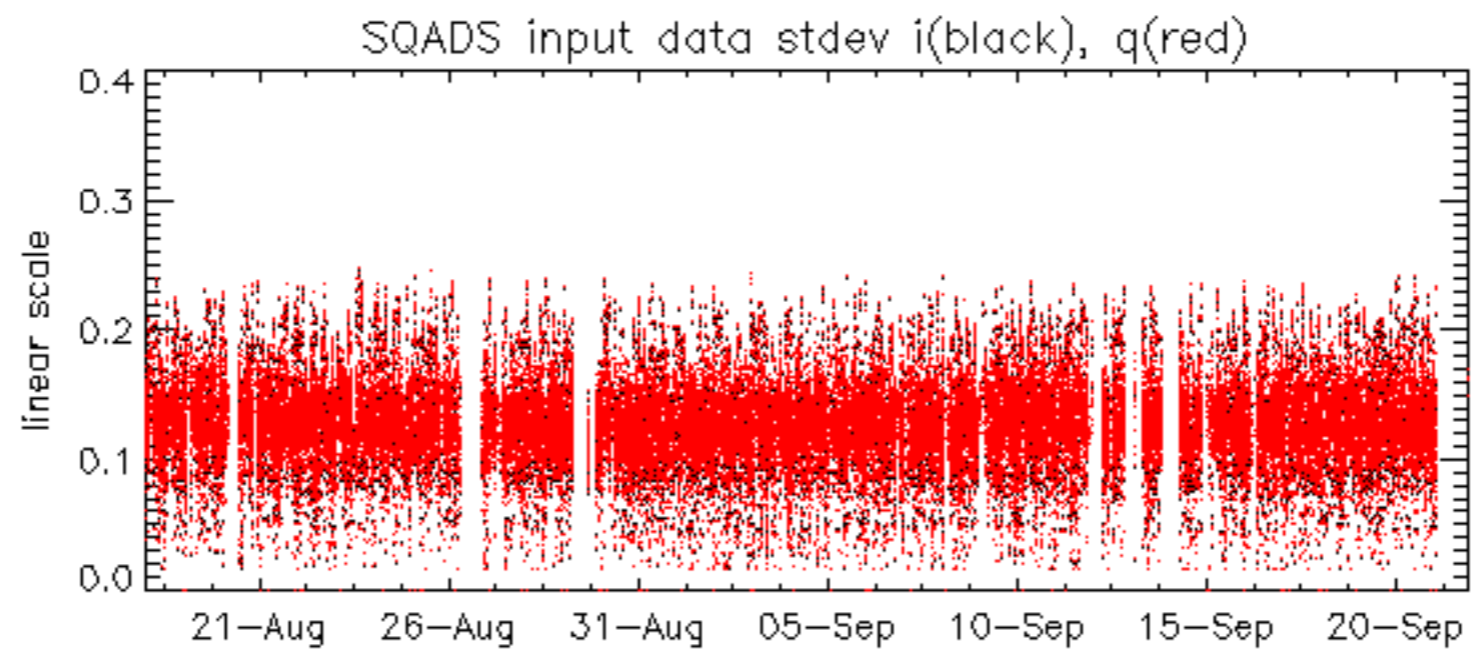


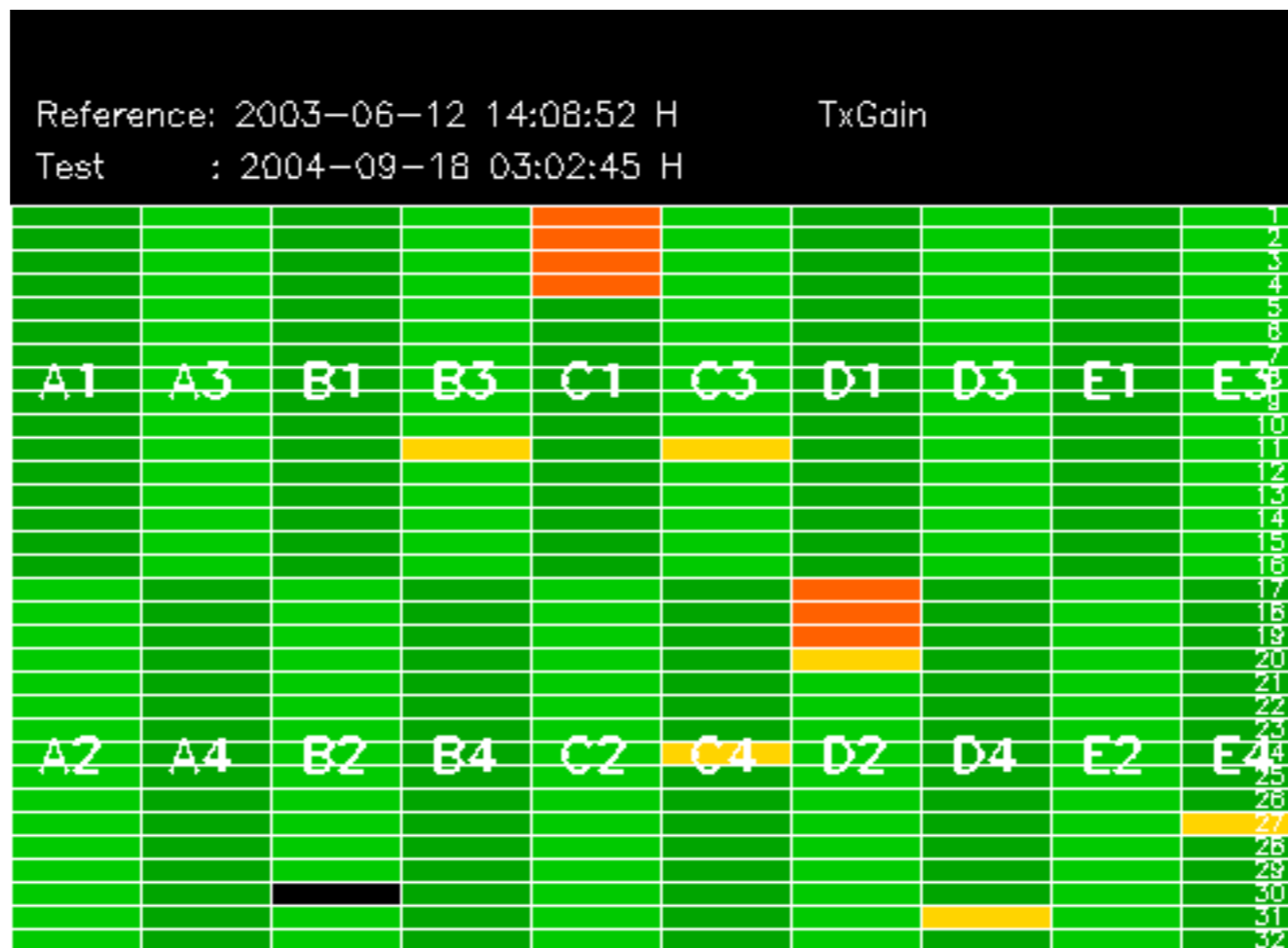
The MS mode provides an internal health check on an individual module basis.
The purpose of this mode is to identify to identify any malfunctioning modules and
to identify modules for which calibration offsets are to be applied.
No anomalies observed on available MS products:

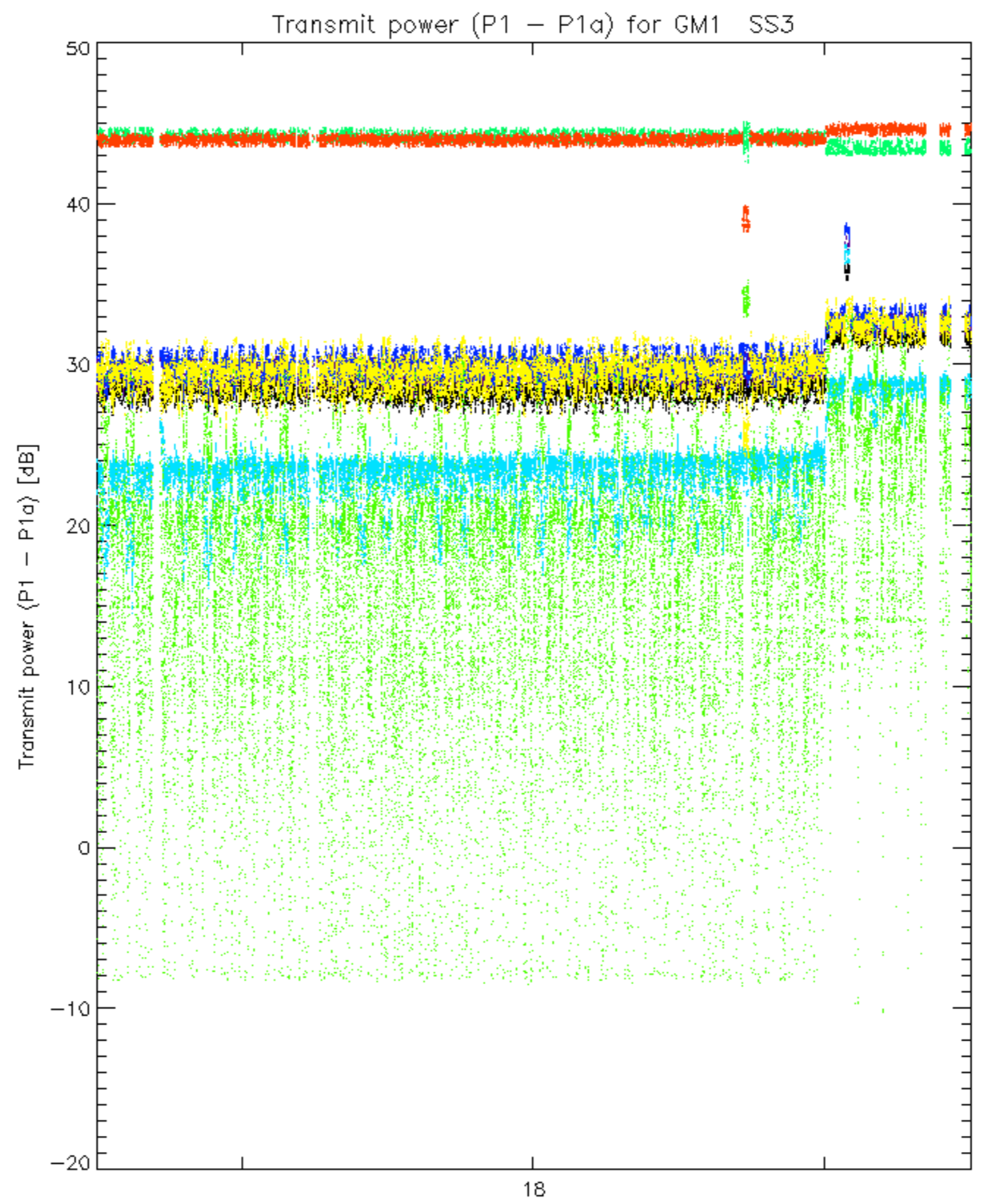
No anomalies observed.



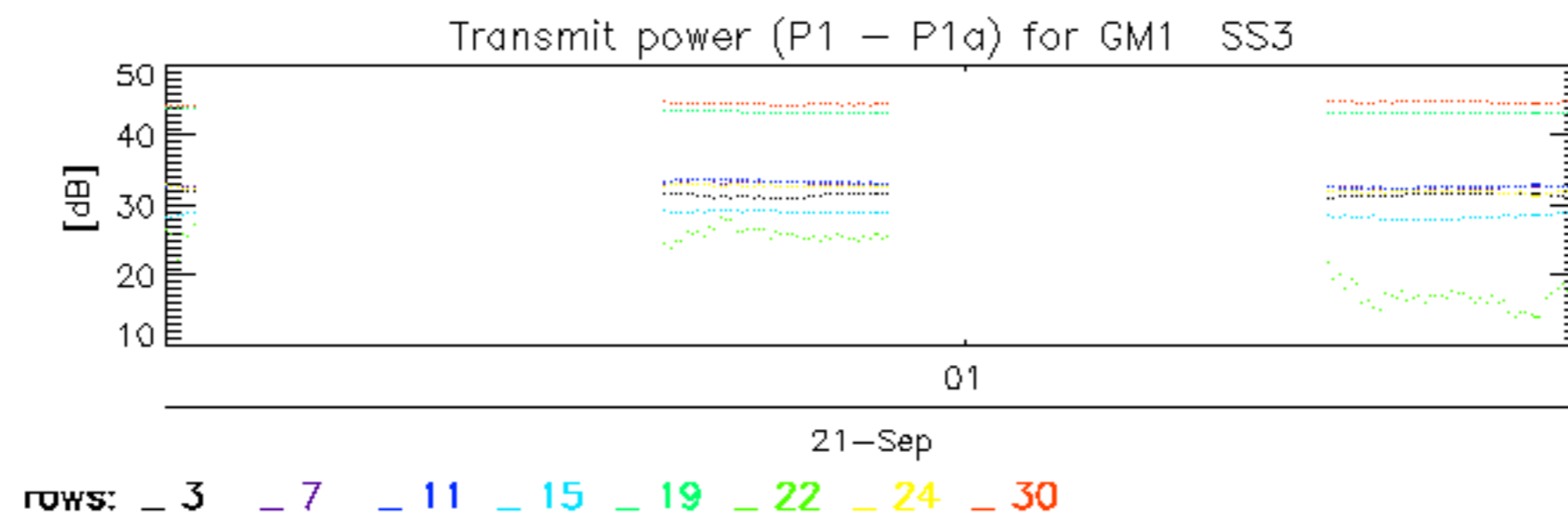


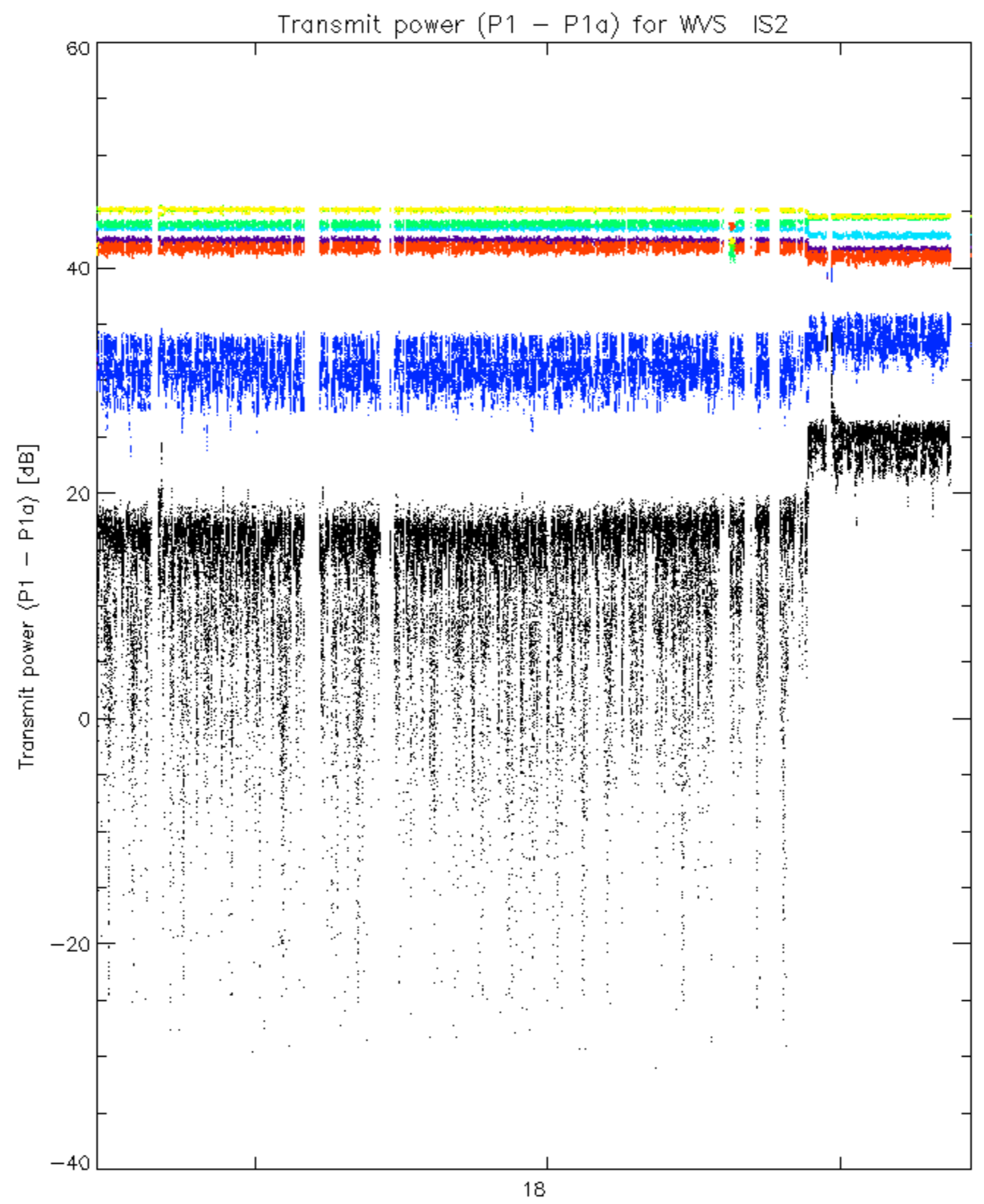


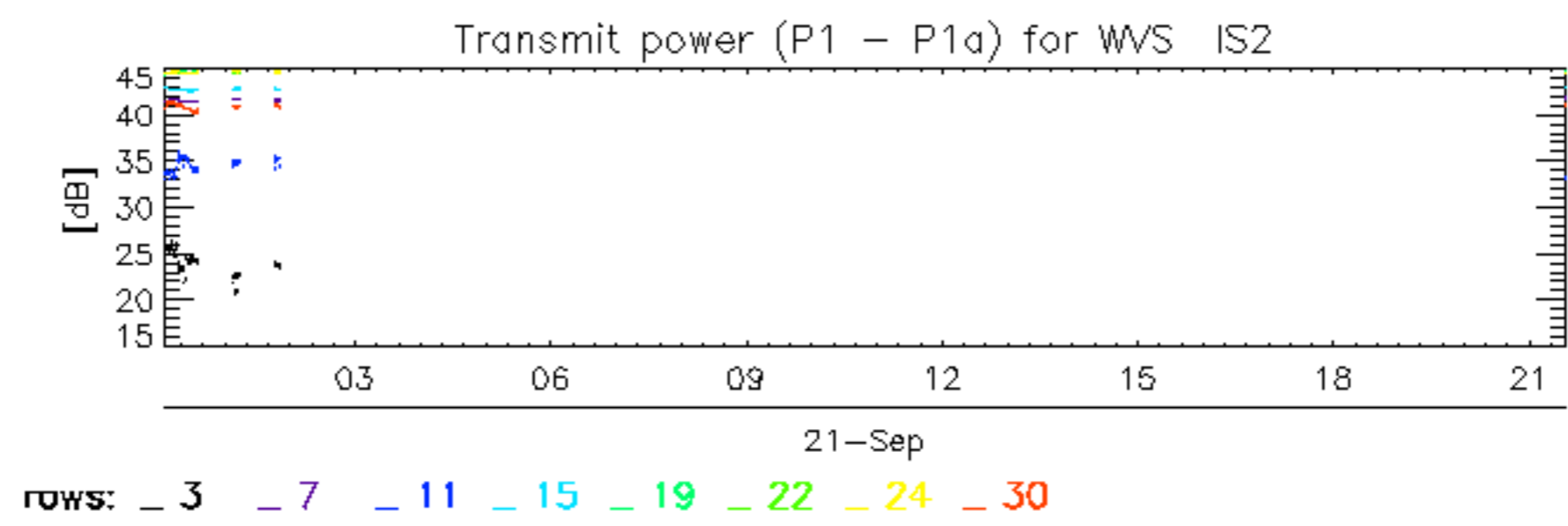




rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30







No unavailabilities during the reported period.