

PRELIMINARY REPORT OF 040925

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

last update on Sat Sep 25 10:50:01 GMT 2004

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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 - 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	20040924 063526
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	-3.467994	0.022465	-0.024952
7	P1	-3.338528	0.022314	-0.011898
11	P1	-4.646315	0.039691	-0.028994
15	P1	-5.760703	0.085982	-0.051987
19	P1	-3.511766	0.079007	-0.045599
22	P1	-4.558266	0.107751	-0.031568
24	P1	-5.000643	0.124152	-0.047137
30	P1	-7.032156	0.147876	-0.126120

3	P1	-16.227179	0.393864	-0.041937
7	P1	-14.011926	0.073131	-0.016480
11	P1	-20.245565	0.255335	-0.124155
15	P1	-11.773822	0.040231	0.044832
19	P1	-14.030963	1.098940	-0.172834
22	P1	-16.051718	0.348111	0.247403
24	P1	-14.472428	0.298662	0.134922
30	P1	-17.942013	0.625762	-0.136156

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.307606	0.085333	0.007813
7	P2	-22.602169	0.123100	0.031117
11	P2	-15.218670	0.147352	0.127570
15	P2	-7.062006	0.097446	0.020450
19	P2	-9.568565	0.155464	0.045207
22	P2	-17.315636	0.111704	0.082279
24	P2	-20.759668	0.090129	-0.033034
30	P2	-19.177700	0.082339	0.110772

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.153003	0.003018	-0.009123
7	P3	-8.152999	0.003018	-0.009131
11	P3	-8.152997	0.003018	-0.009147
15	P3	-8.152991	0.003020	-0.009192
19	P3	-8.152991	0.003020	-0.009200
22	P3	-8.152991	0.003020	-0.009204
24	P3	-8.152993	0.003020	-0.009201
30	P3	-8.153052	0.003011	-0.008344

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	-2.829968	0.047237	-0.074016
7	P1	-3.028345	0.082291	-0.044104
11	P1	-3.889353	0.063123	-0.050074
15	P1	-3.535838	0.079334	-0.036560
19	P1	-3.520331	0.098098	-0.073227
22	P1	-5.729378	0.124174	-0.037090
24	P1	-3.957380	0.054599	-0.070016
30	P1	-6.212858	0.097508	-0.032025
3	P1	-10.811620	0.163959	-0.374872
7	P1	-10.111772	0.144588	-0.006418
11	P1	-12.168363	0.107814	0.002281
15	P1	-11.681734	0.074359	-0.069499
19	P1	-15.738906	2.066656	-0.183745
22	P1	-23.344175	1.536788	0.139431
24	P1	-17.961071	0.352906	-0.117225
30	P1	-20.402641	1.261650	0.168513

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.988665	0.047512	0.045267
7	P2	-22.738884	0.038741	0.050515
11	P2	-10.925835	0.059594	0.139618
15	P2	-4.961716	0.029754	0.005591
19	P2	-6.774214	0.044554	0.004998
22	P2	-7.424078	0.036799	0.073800
24	P2	-11.060983	0.042309	-0.001274
30	P2	-22.149633	0.027737	0.085233

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
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3	P3	-8.004720	0.003088	-0.009007
7	P3	-8.004766	0.003087	-0.009123
11	P3	-8.004789	0.003084	-0.009306
15	P3	-8.004806	0.003079	-0.009224
19	P3	-8.004783	0.003090	-0.009135
22	P3	-8.004856	0.003084	-0.009146
24	P3	-8.004815	0.003114	-0.009288
30	P3	-8.004699	0.003088	-0.009340

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	0.000470168
	stdev	2.17908e-07
MEAN Q	mean	0.000538432
	stdev	2.35137e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127469
	stdev	0.000955323

STDEV Q	mean	0.127691
	stdev	0.000964766



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

	
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6.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)	
<input type="checkbox"/>	
	Ascending
<input type="checkbox"/>	
	Descending

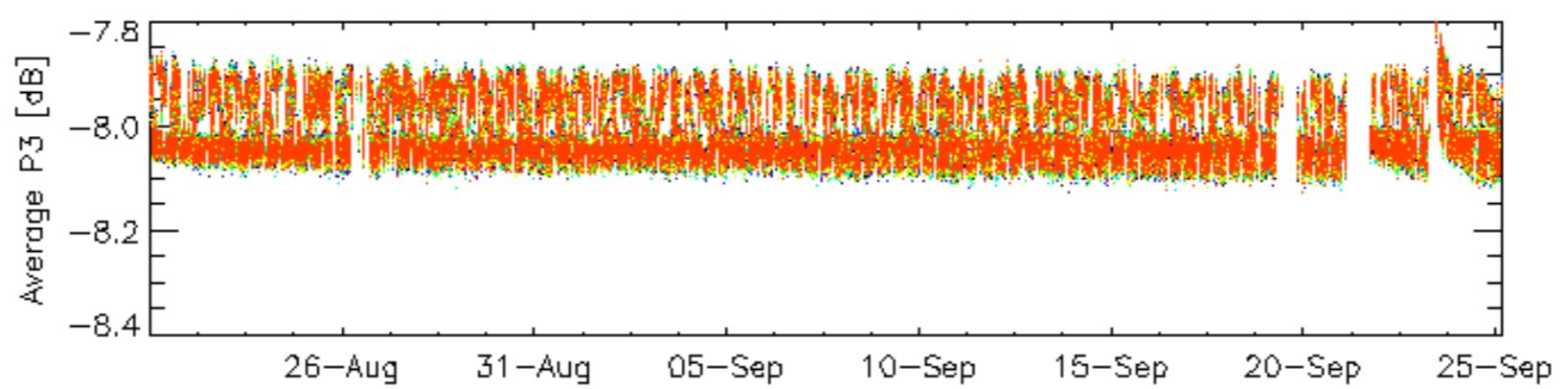
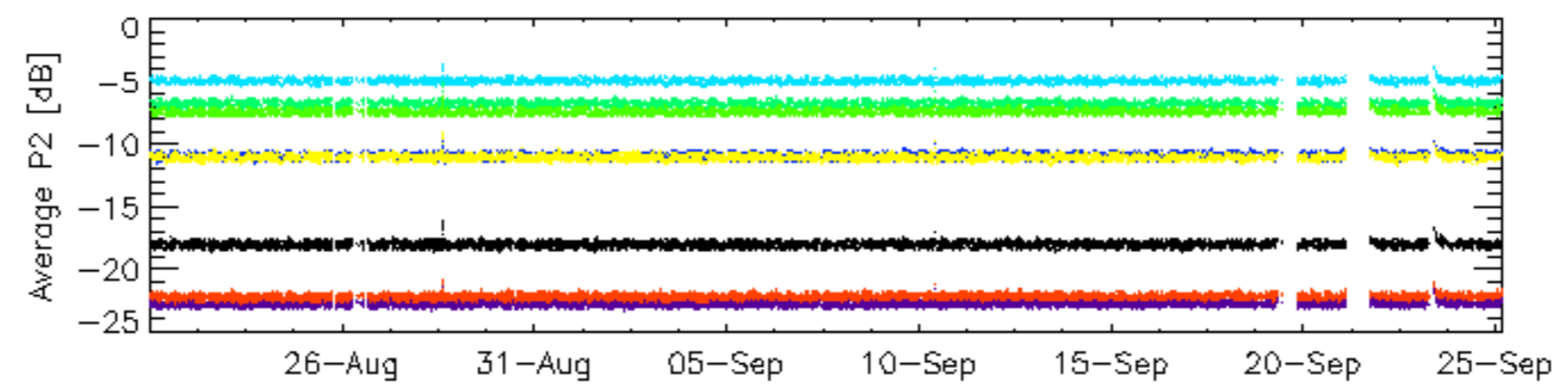
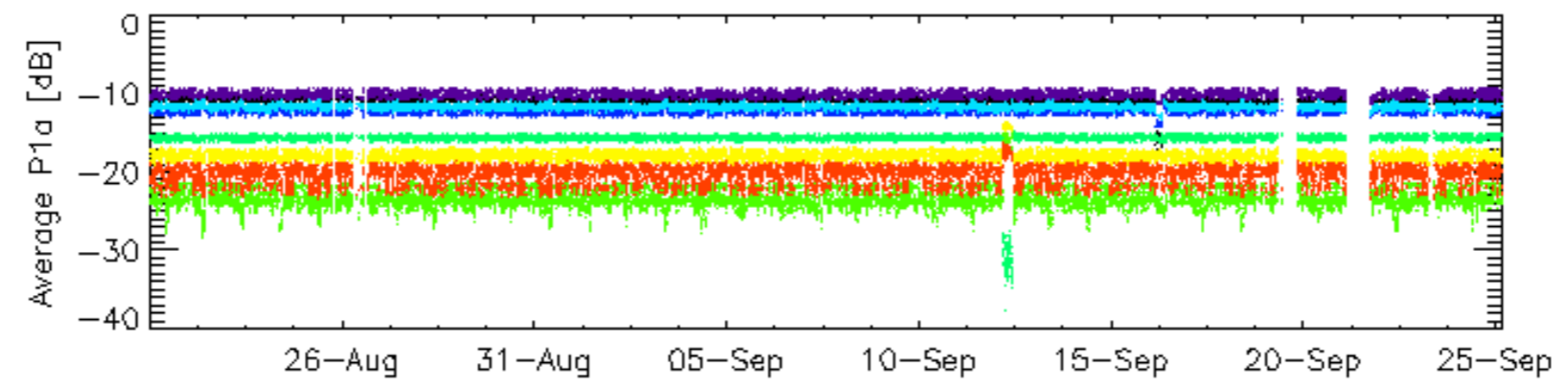
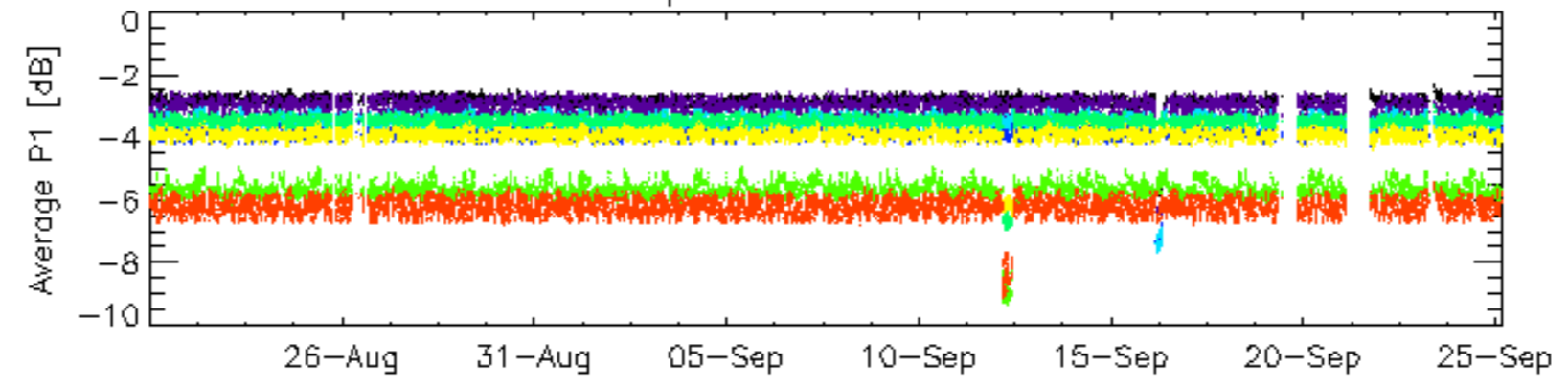
6.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler	
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	Ascending
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	Descending

6.6 - Doppler evolution versus ANX for GM1

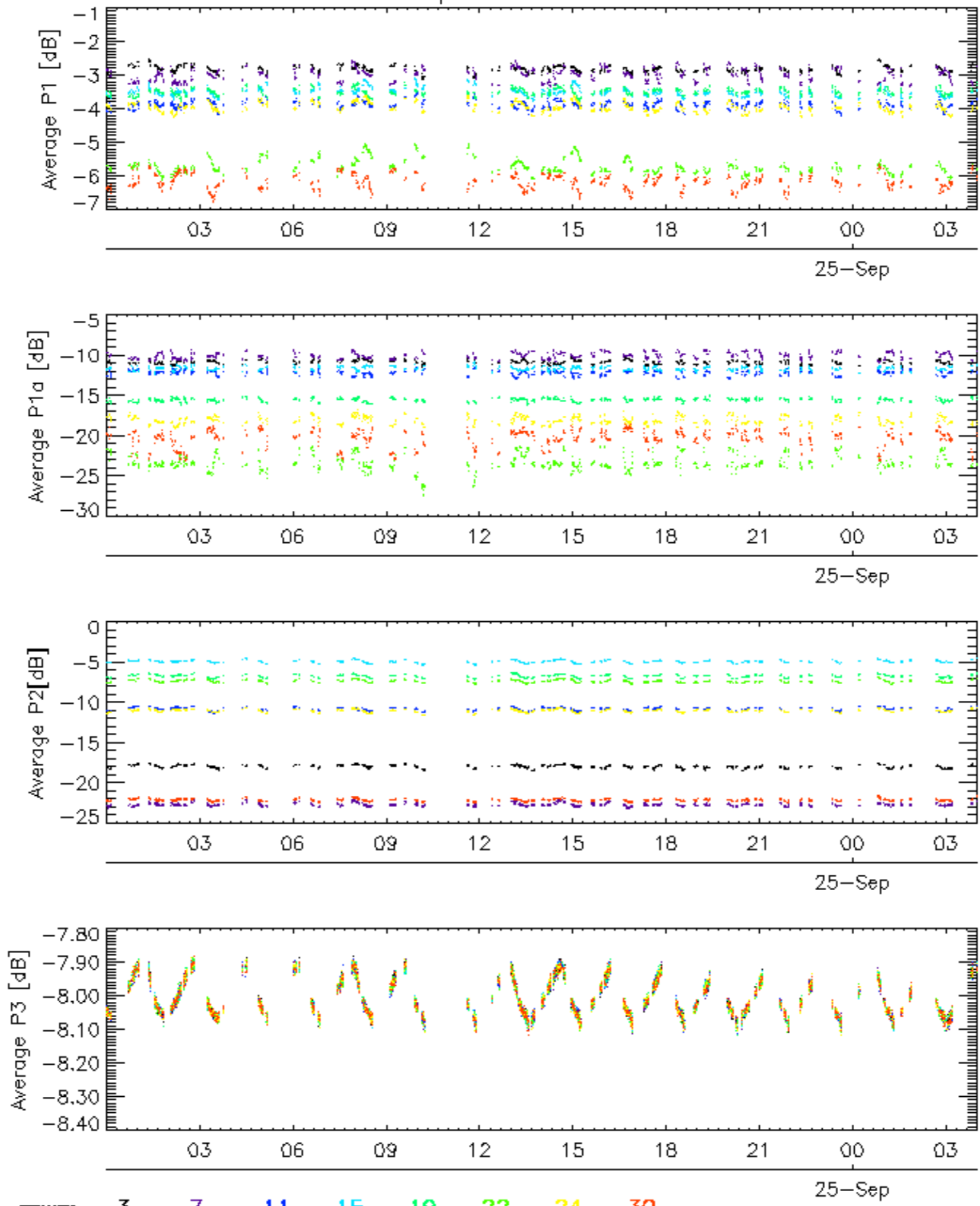
Evolution Doppler error versus ANX	
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Cal pulses for GM1 SS3



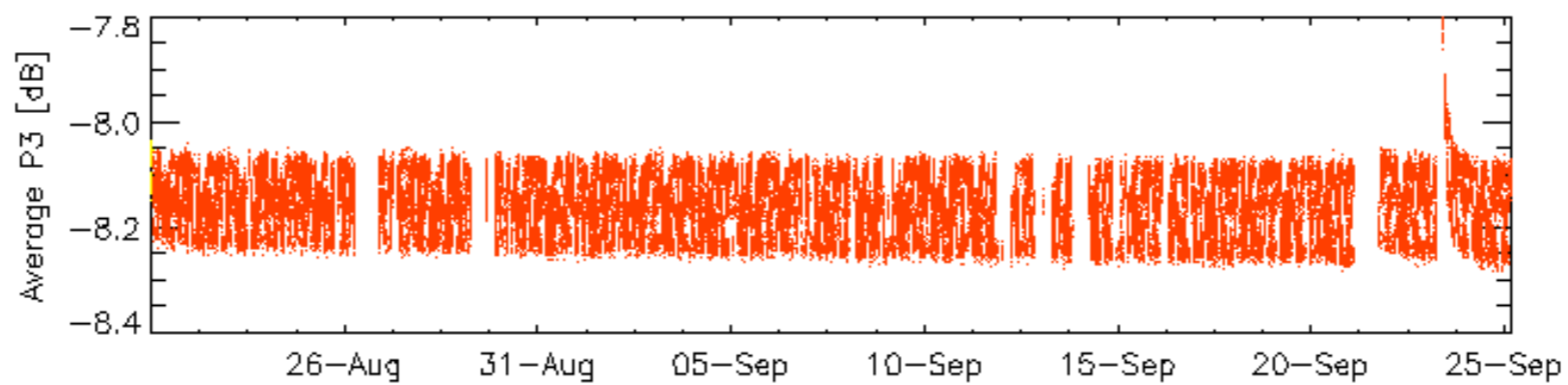
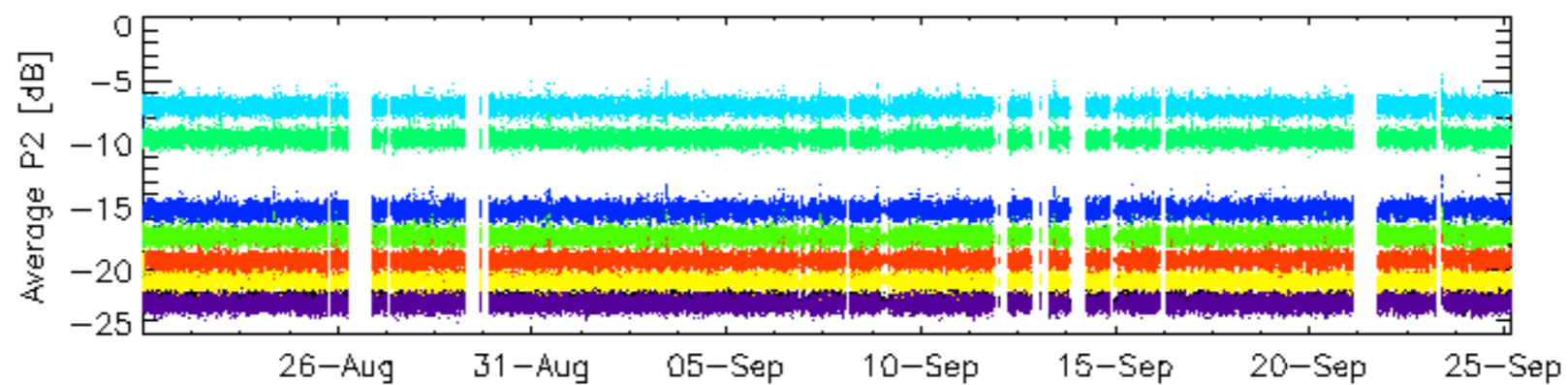
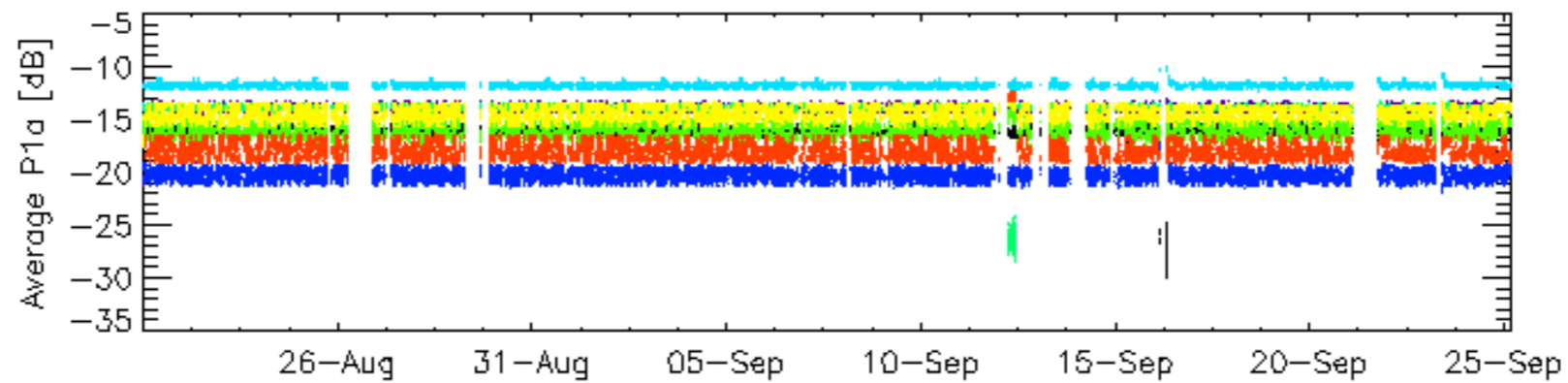
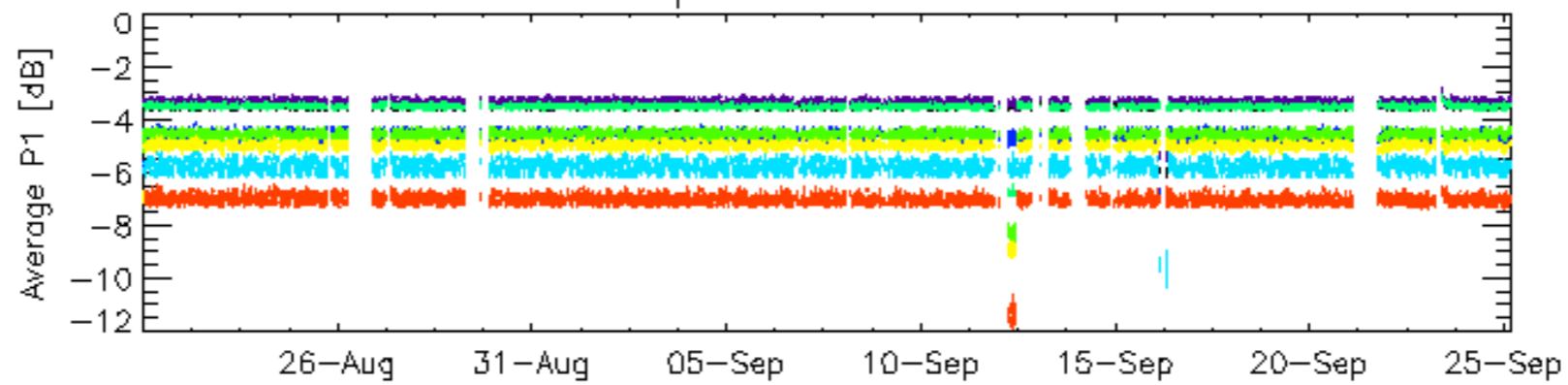
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

Cal pulses for GM1 SS3



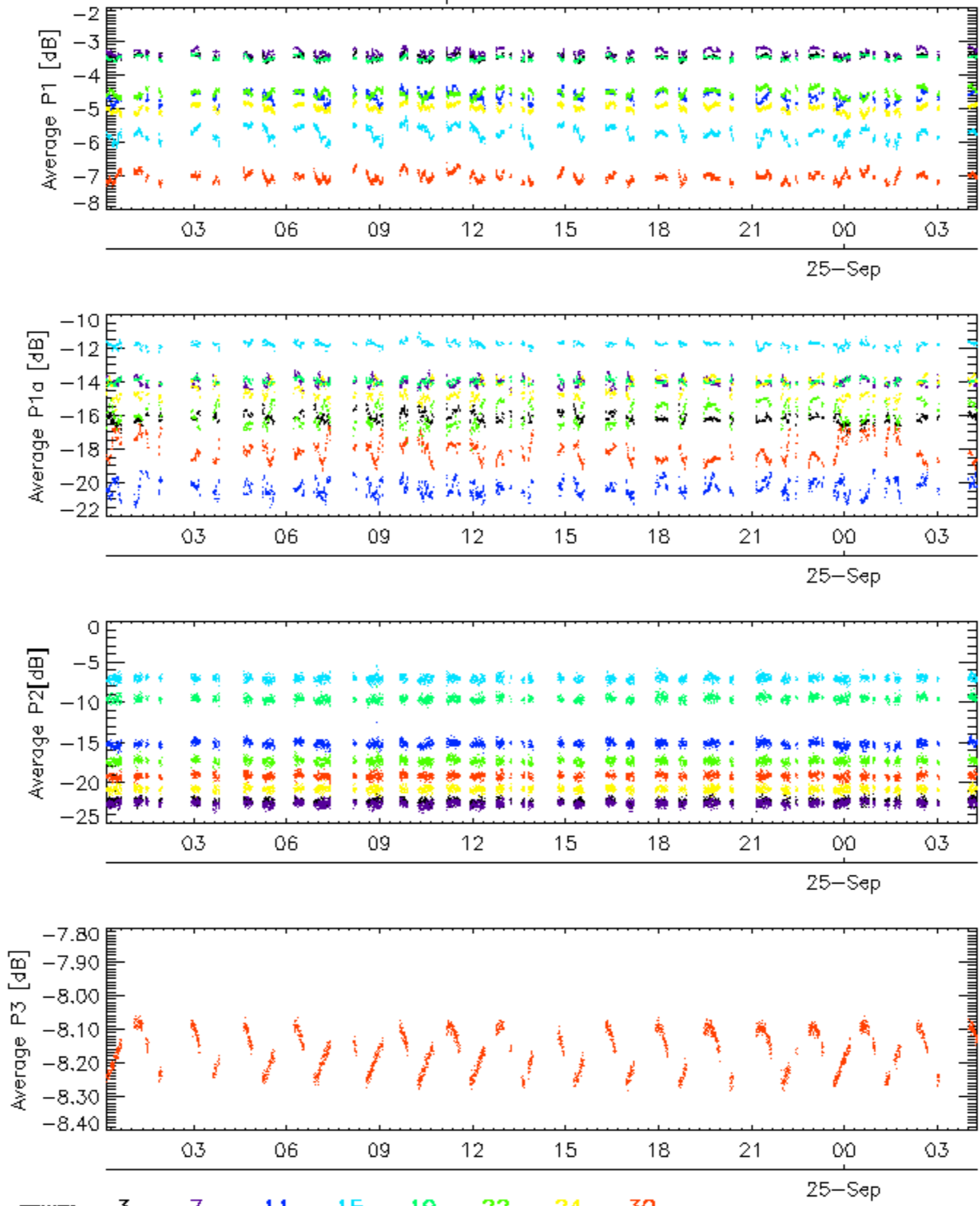
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Cal pulses for WVS IS2



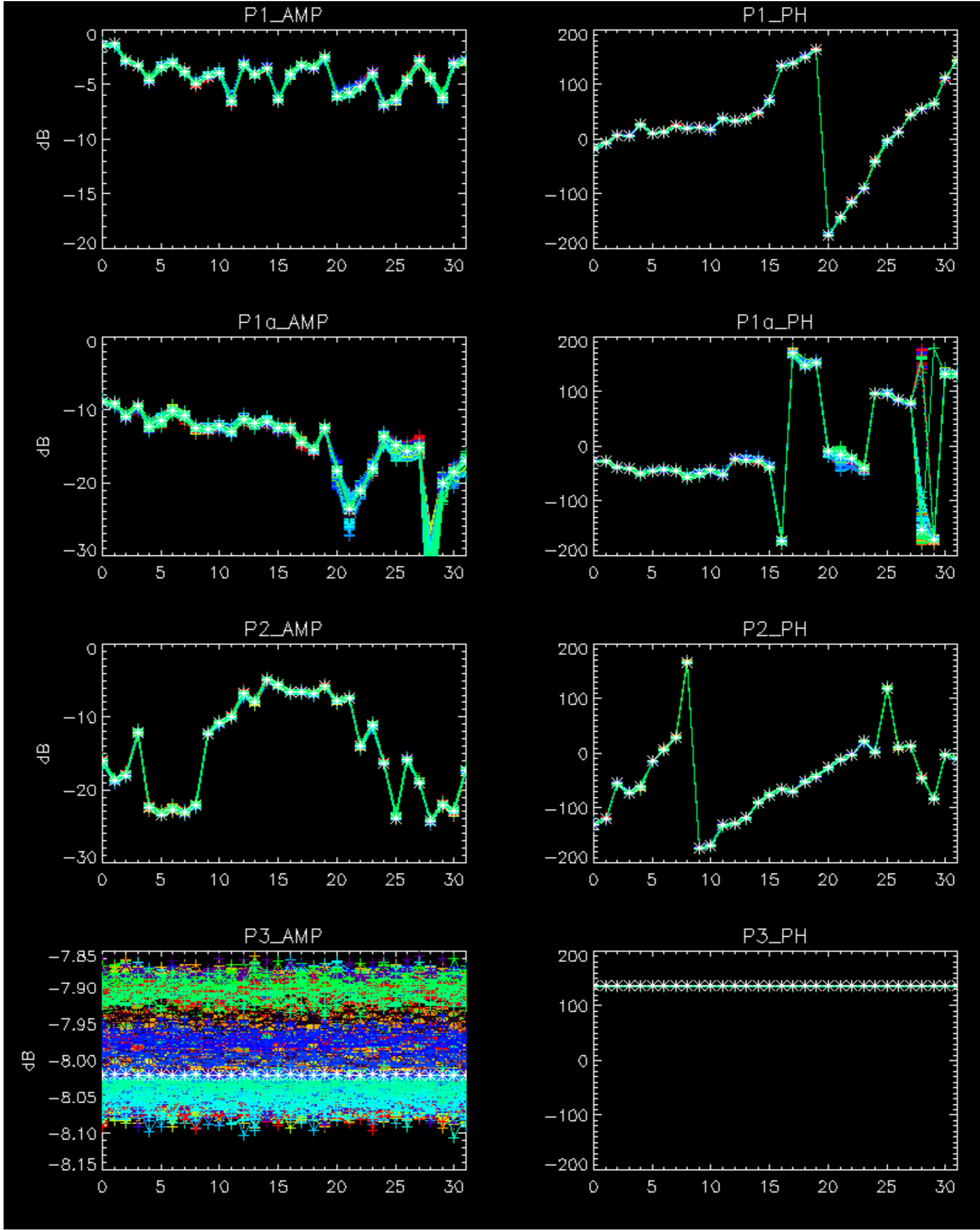
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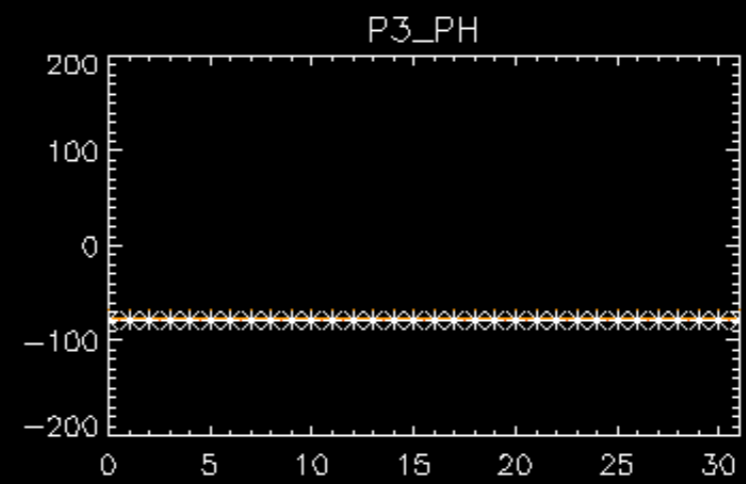
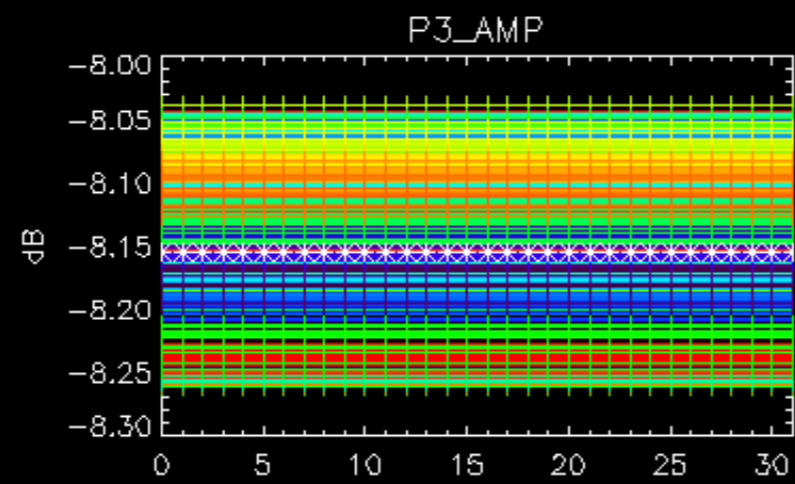
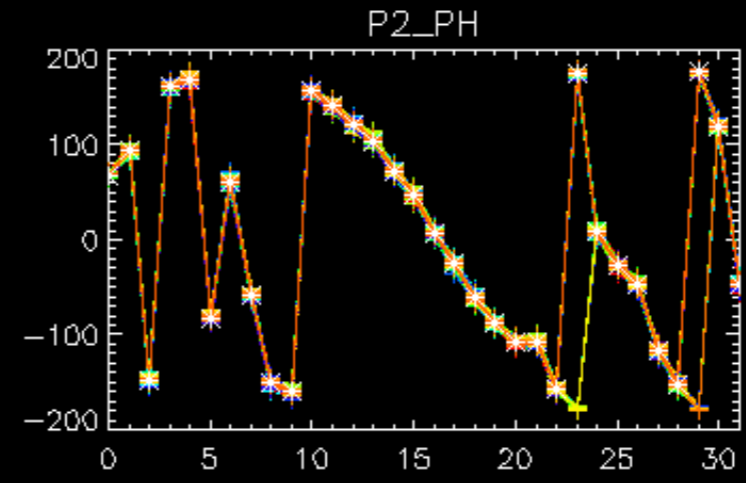
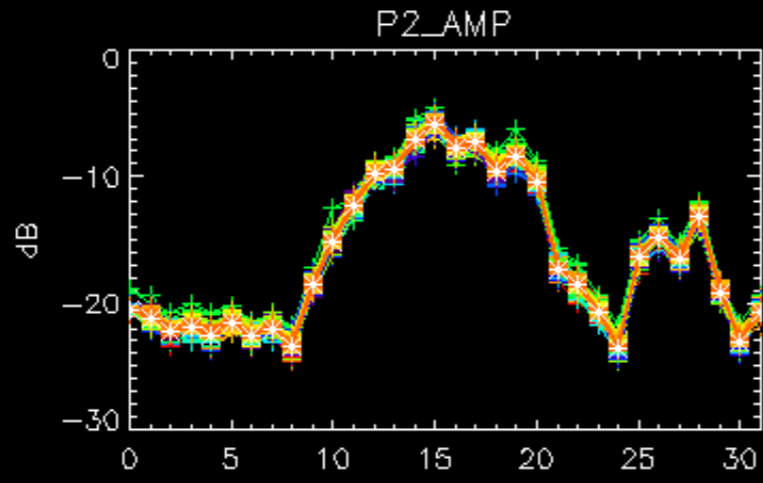
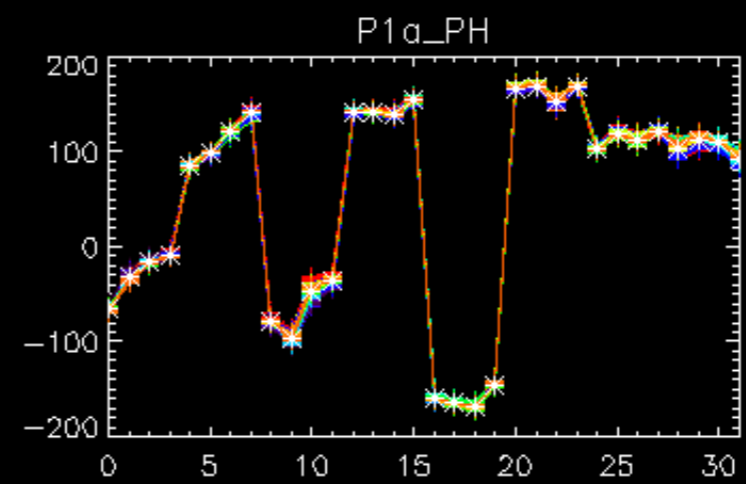
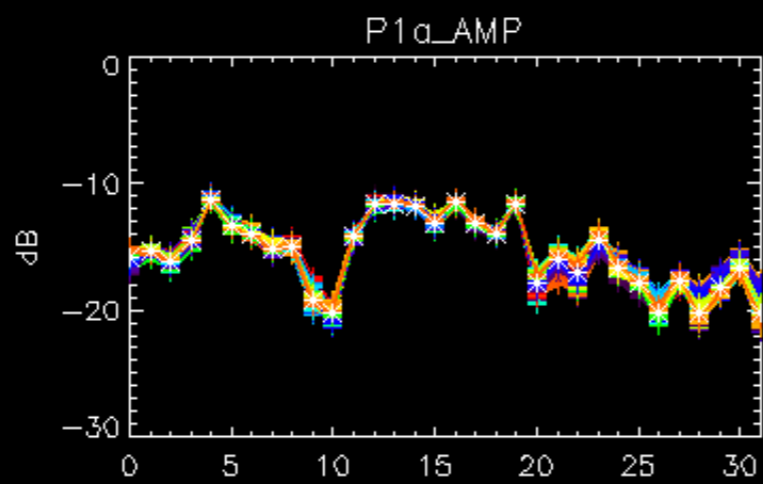
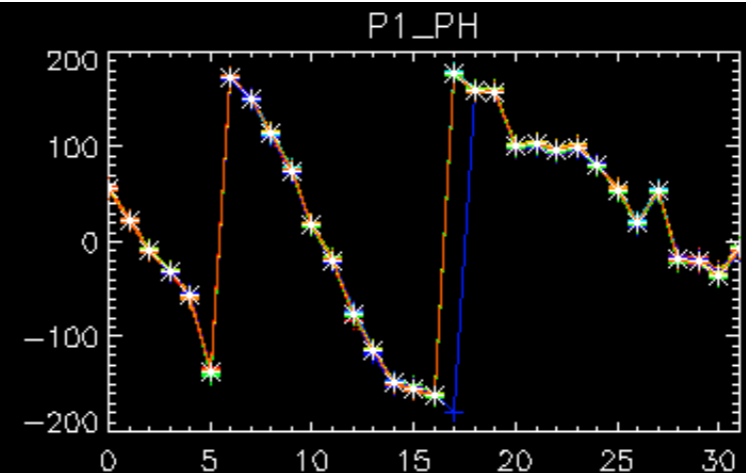
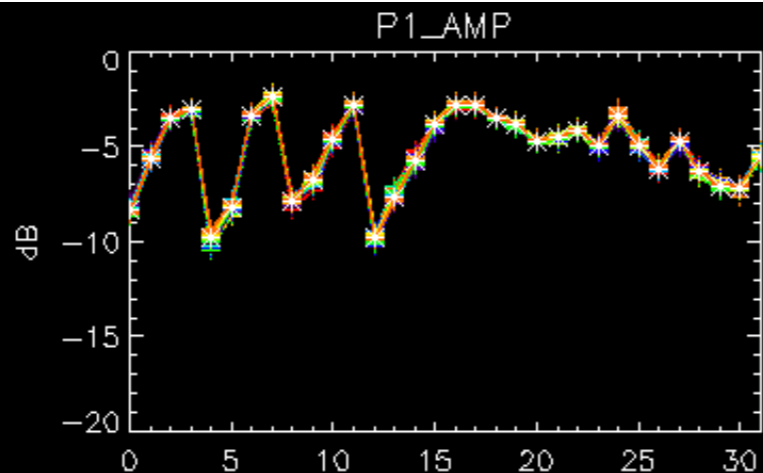
Cal pulses for WVS IS2



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

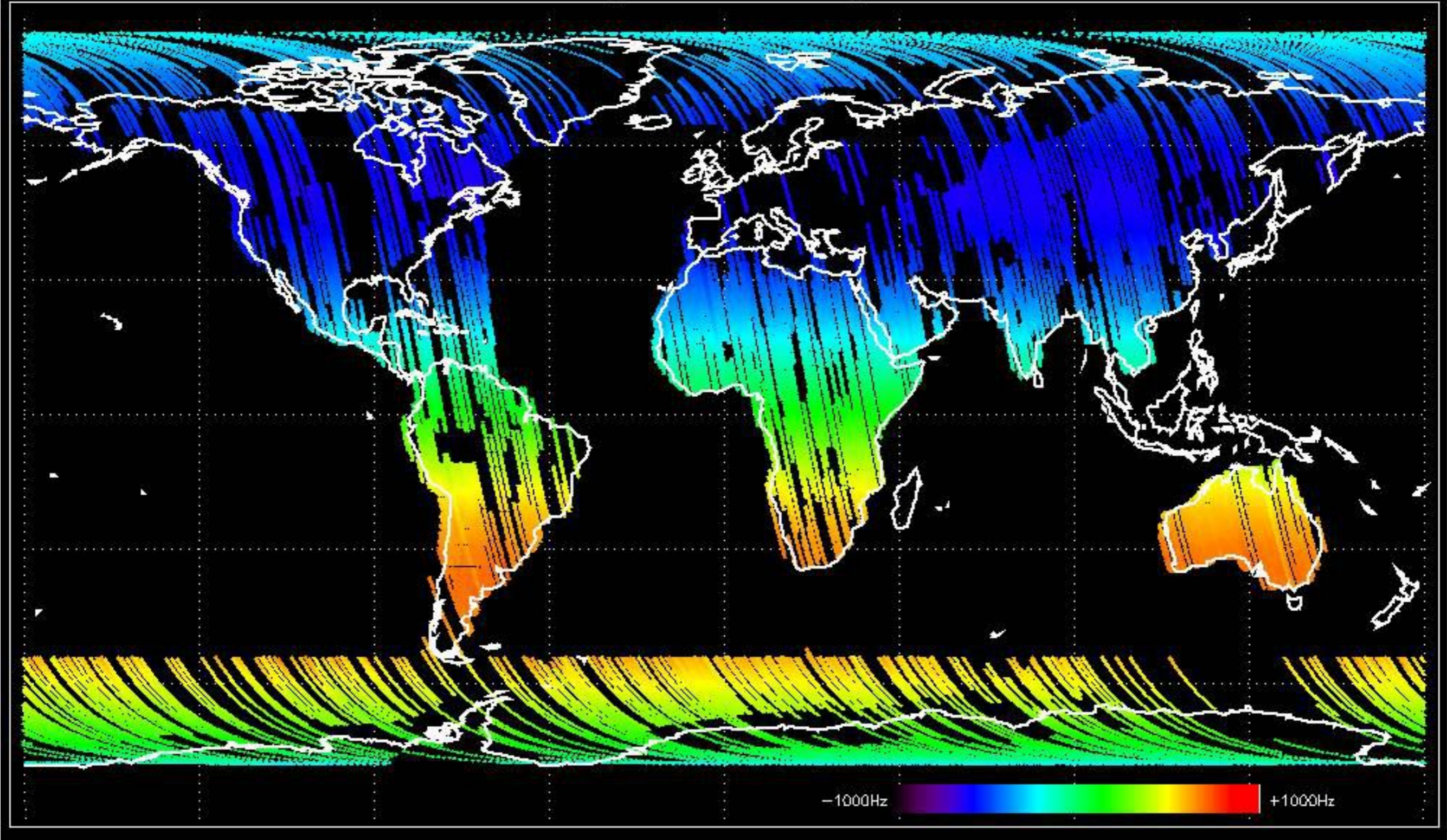
No anomalies observed.



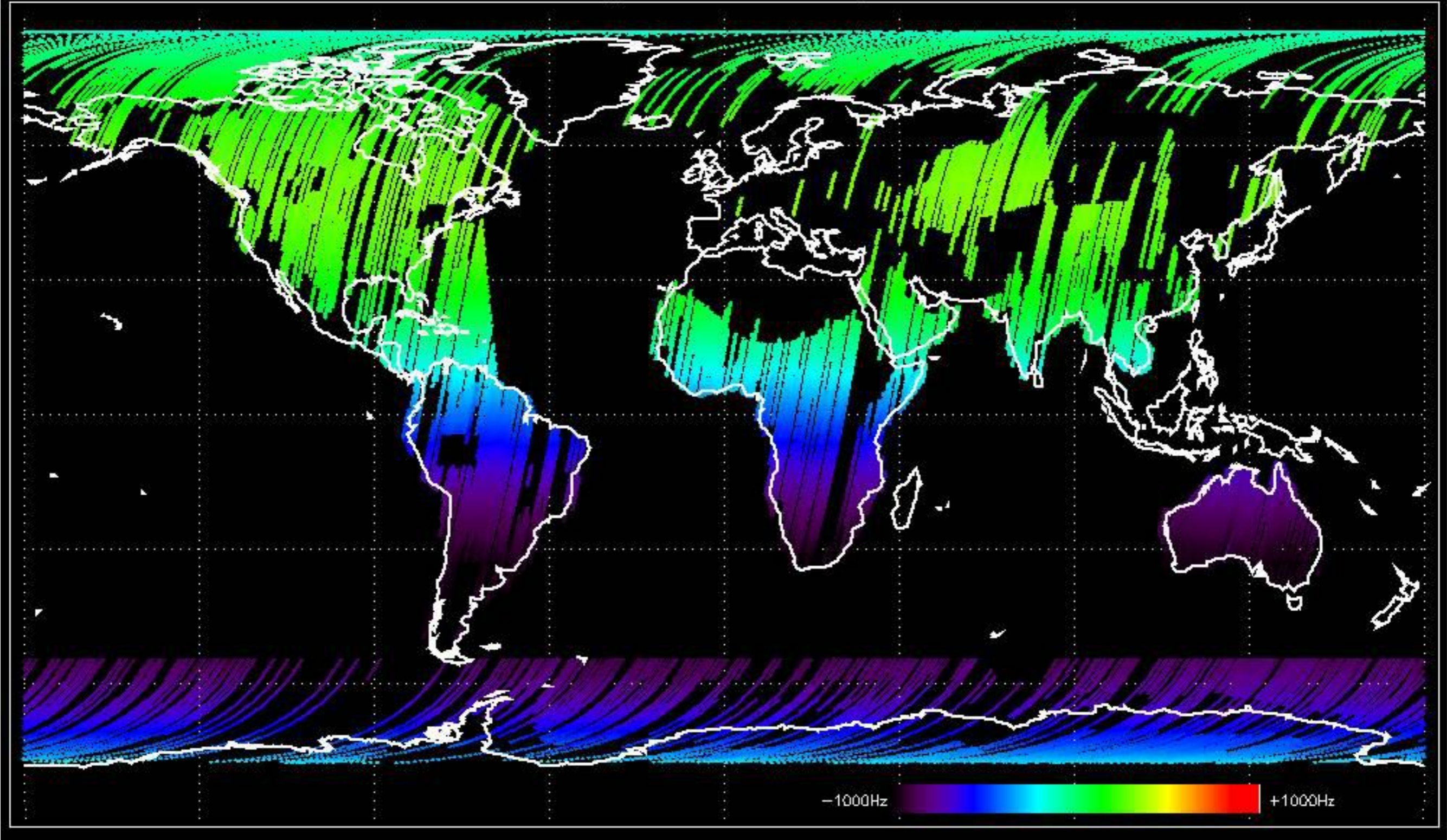


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

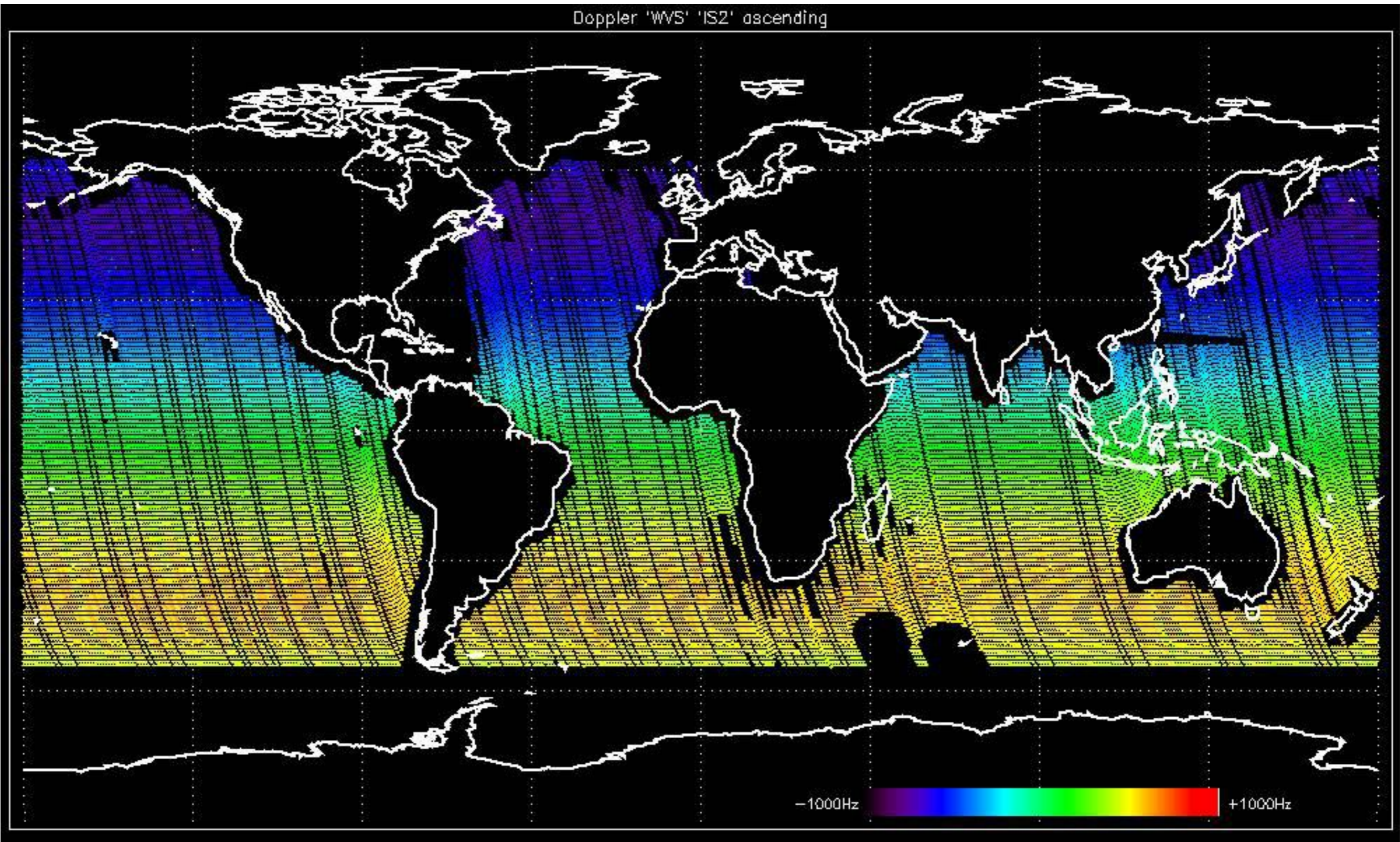
Doppler 'GM1' 'SS1' ascending



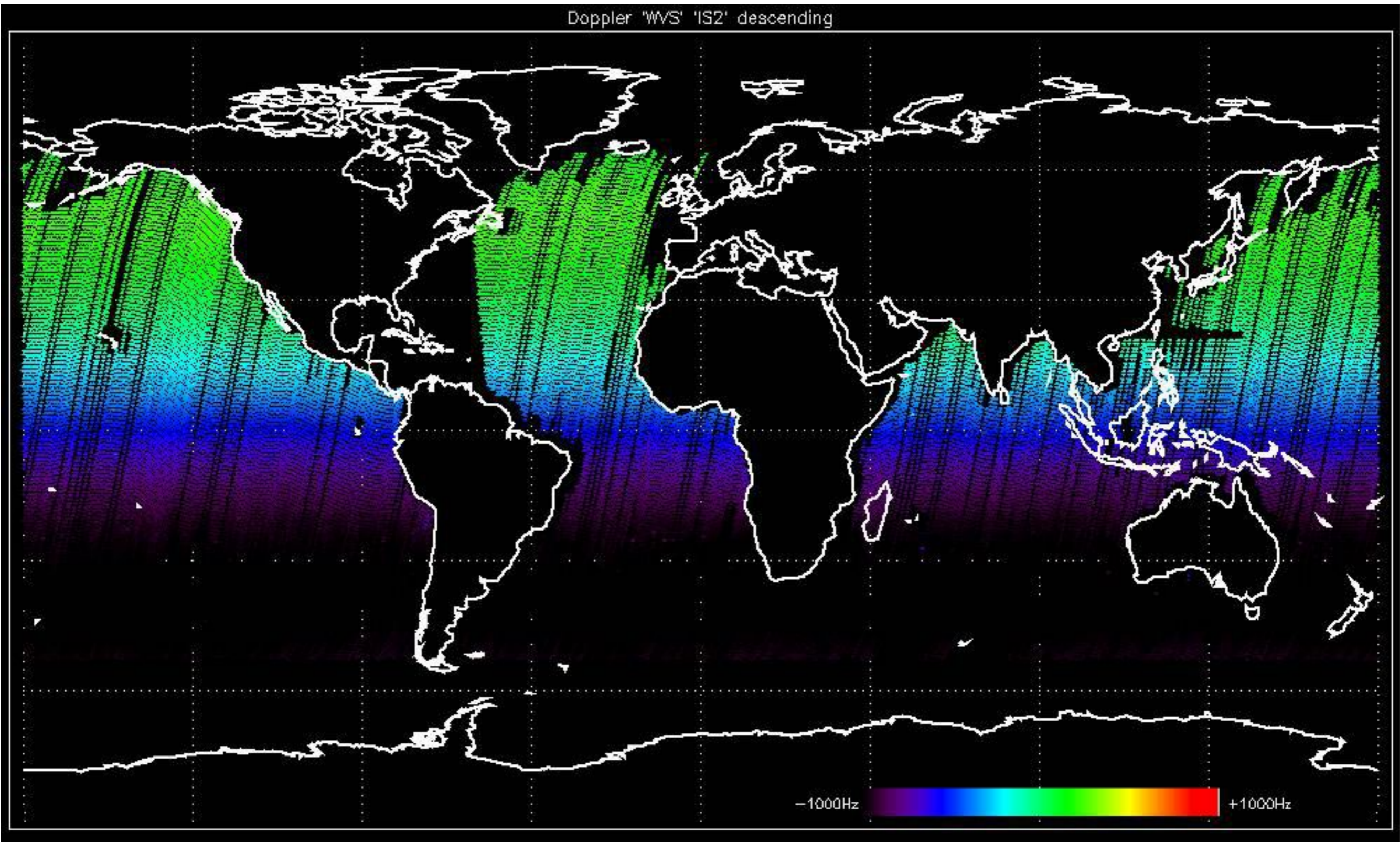
Doppler 'GM1' 'SS1' descending

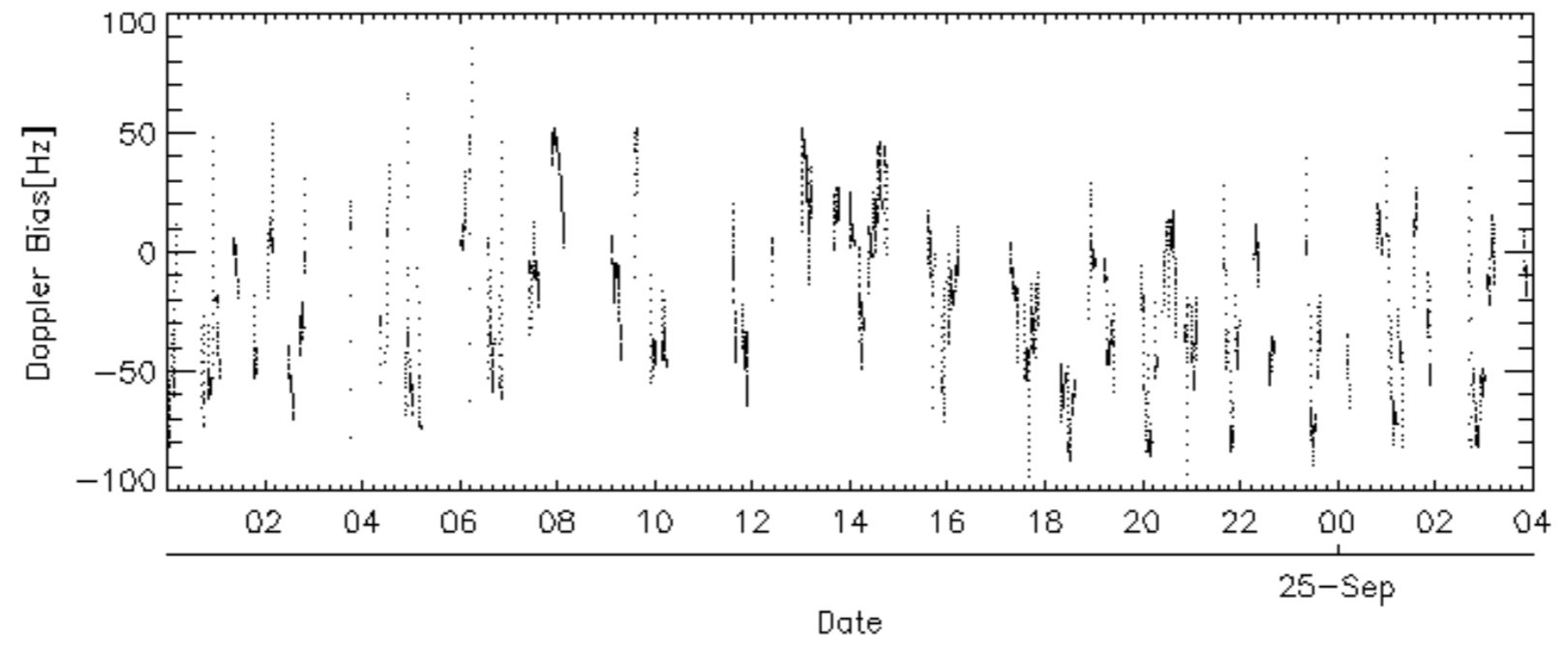
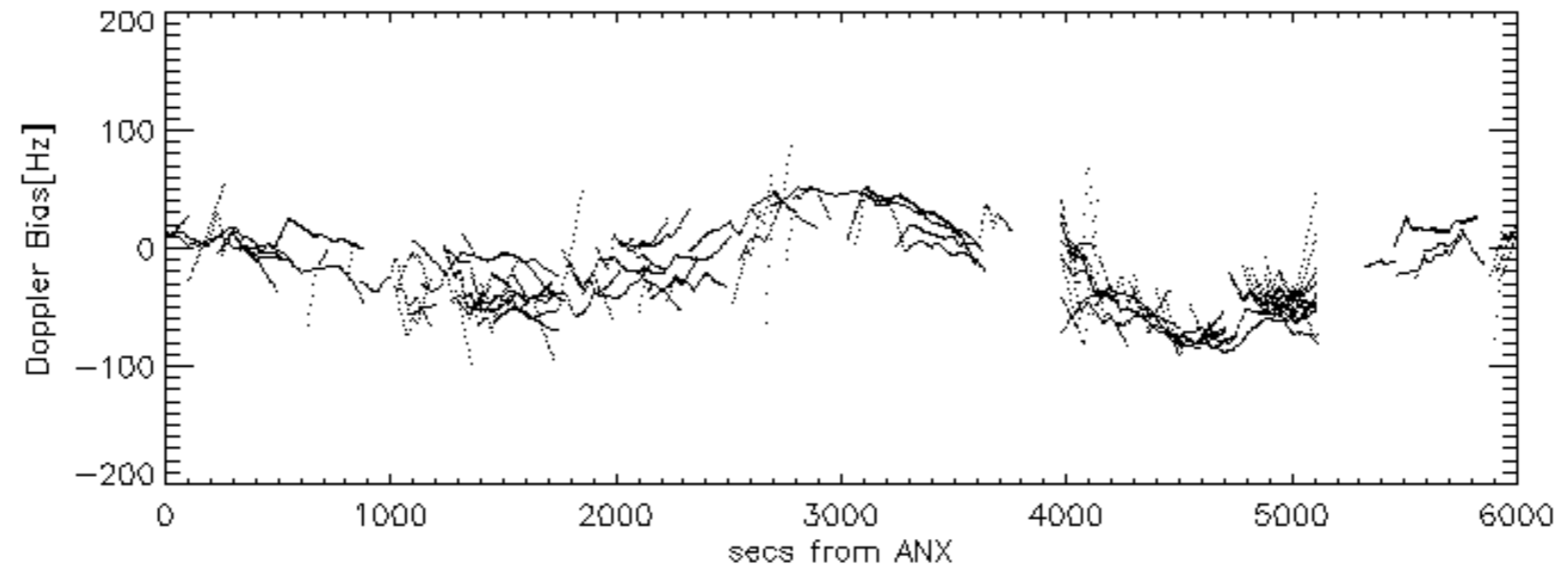
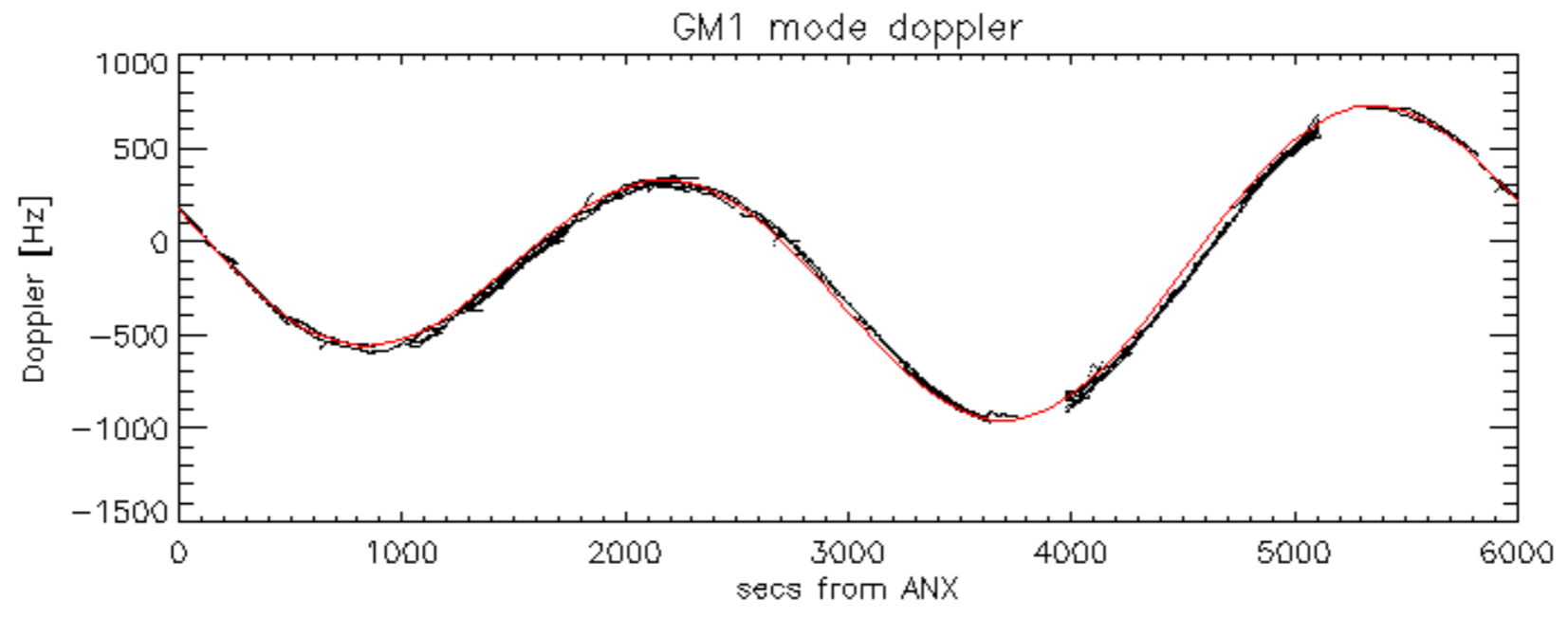


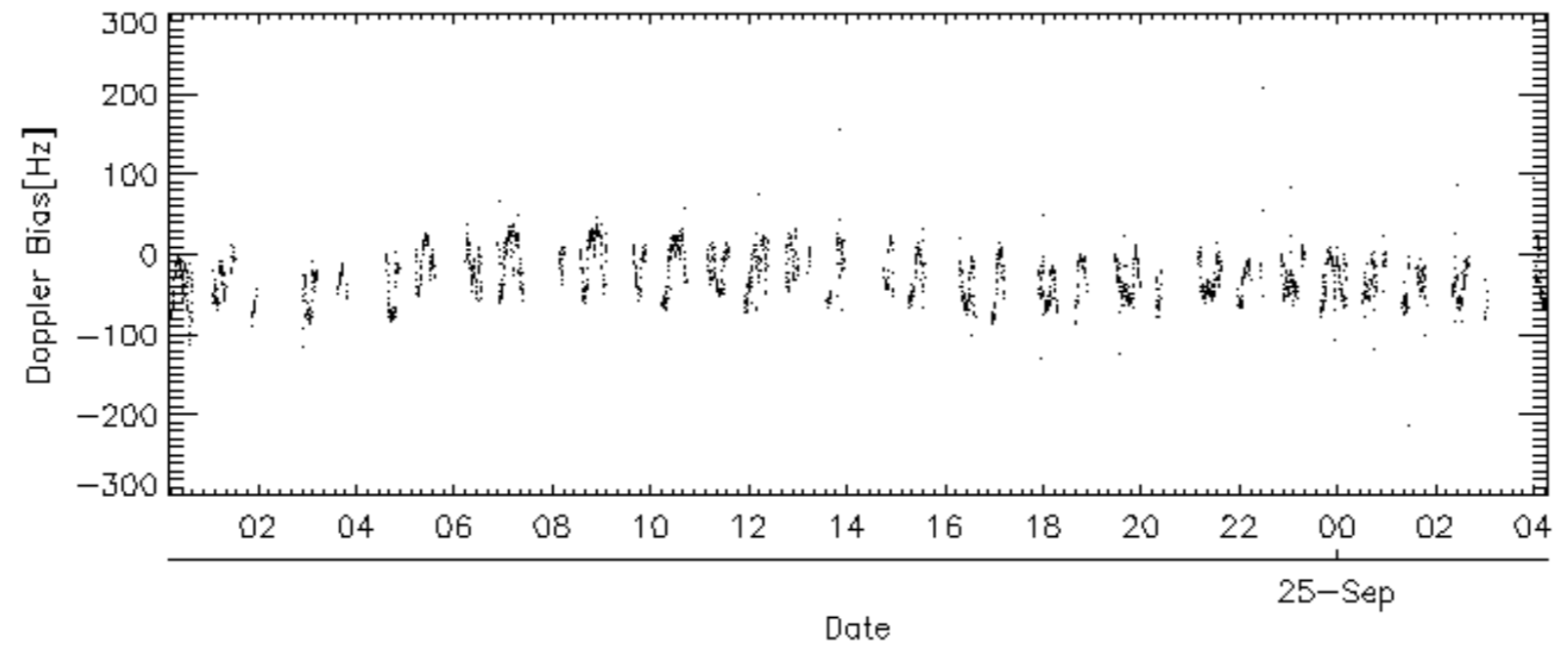
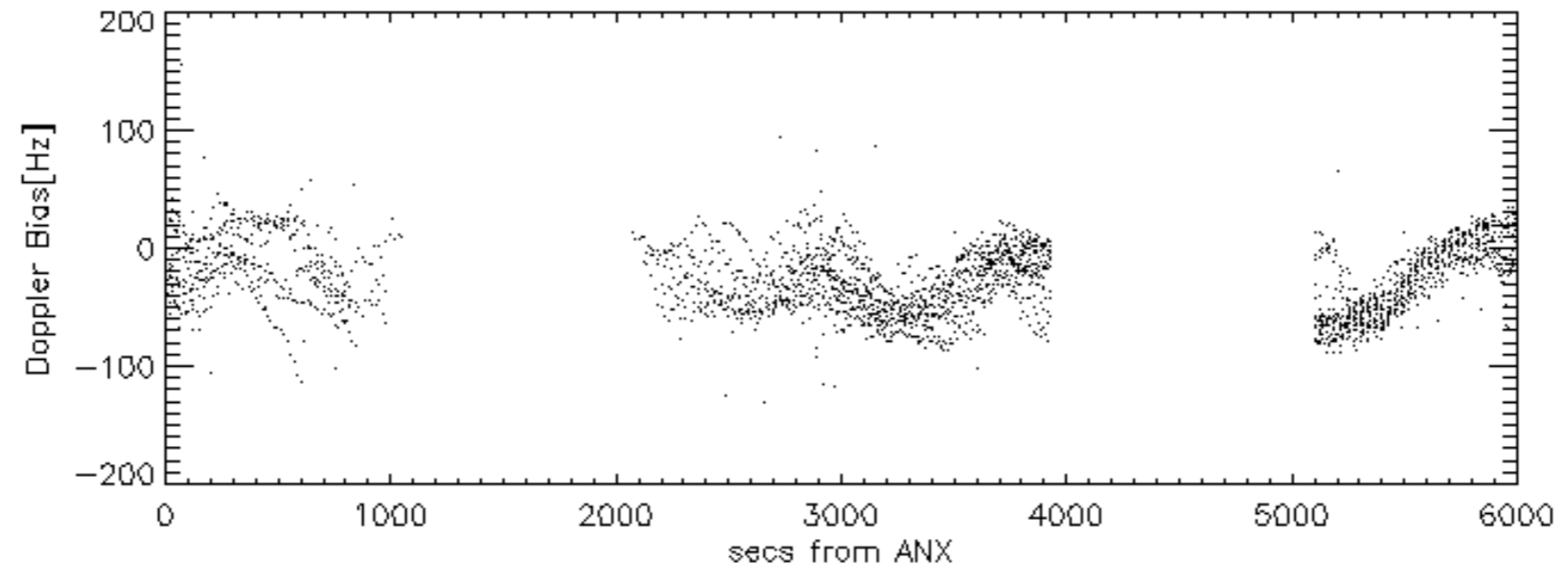
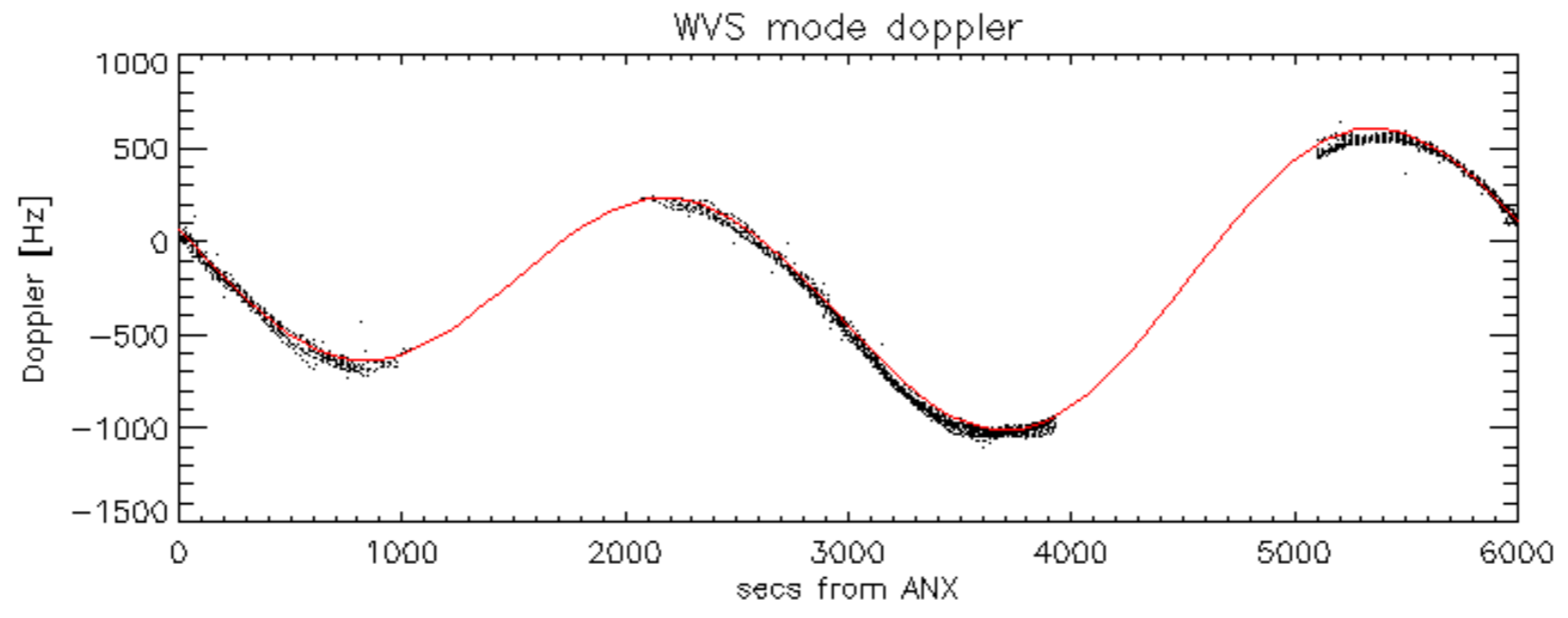
Doppler 'WVS' 'IS2' ascending



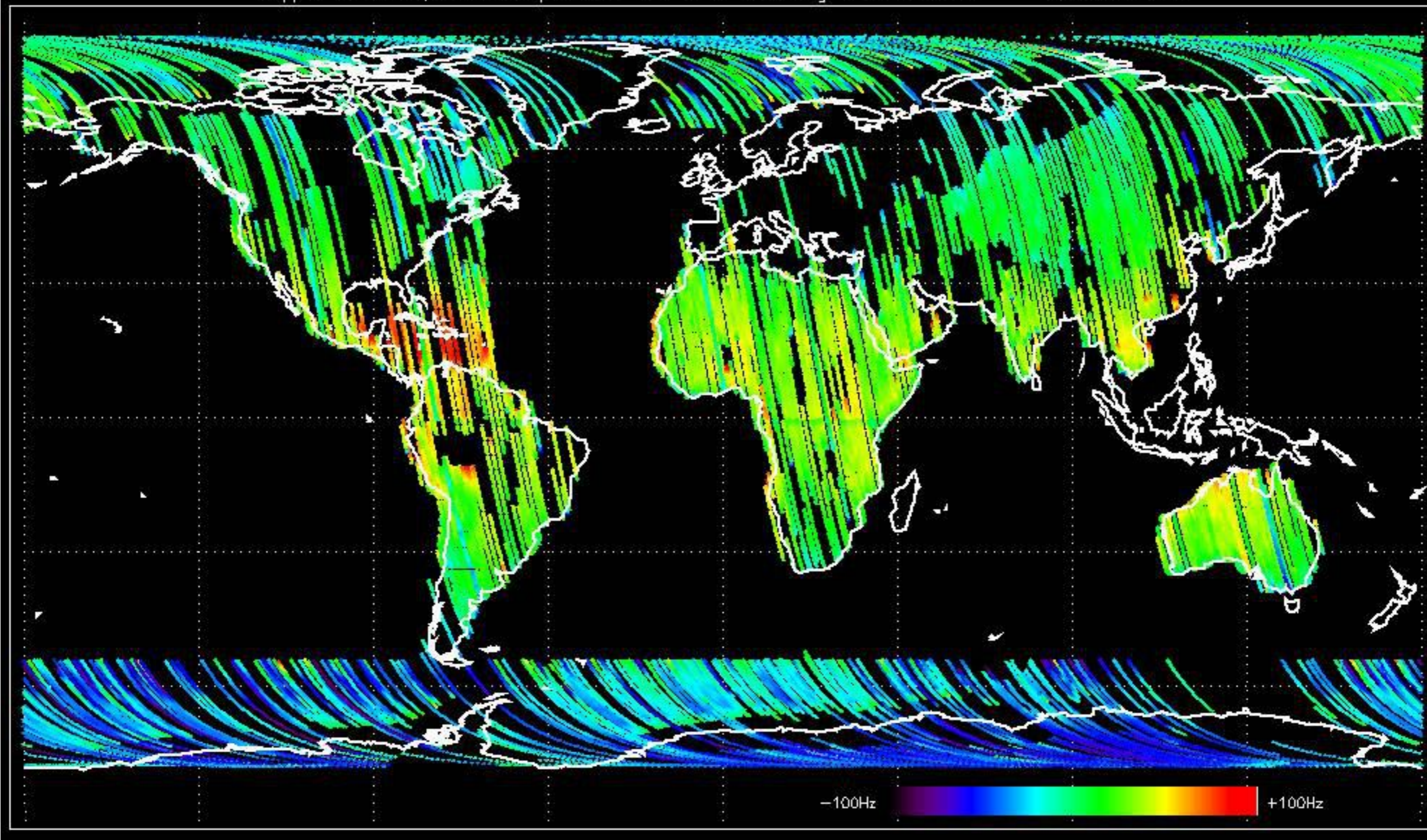
Doppler 'WVS' 'IS2' descending



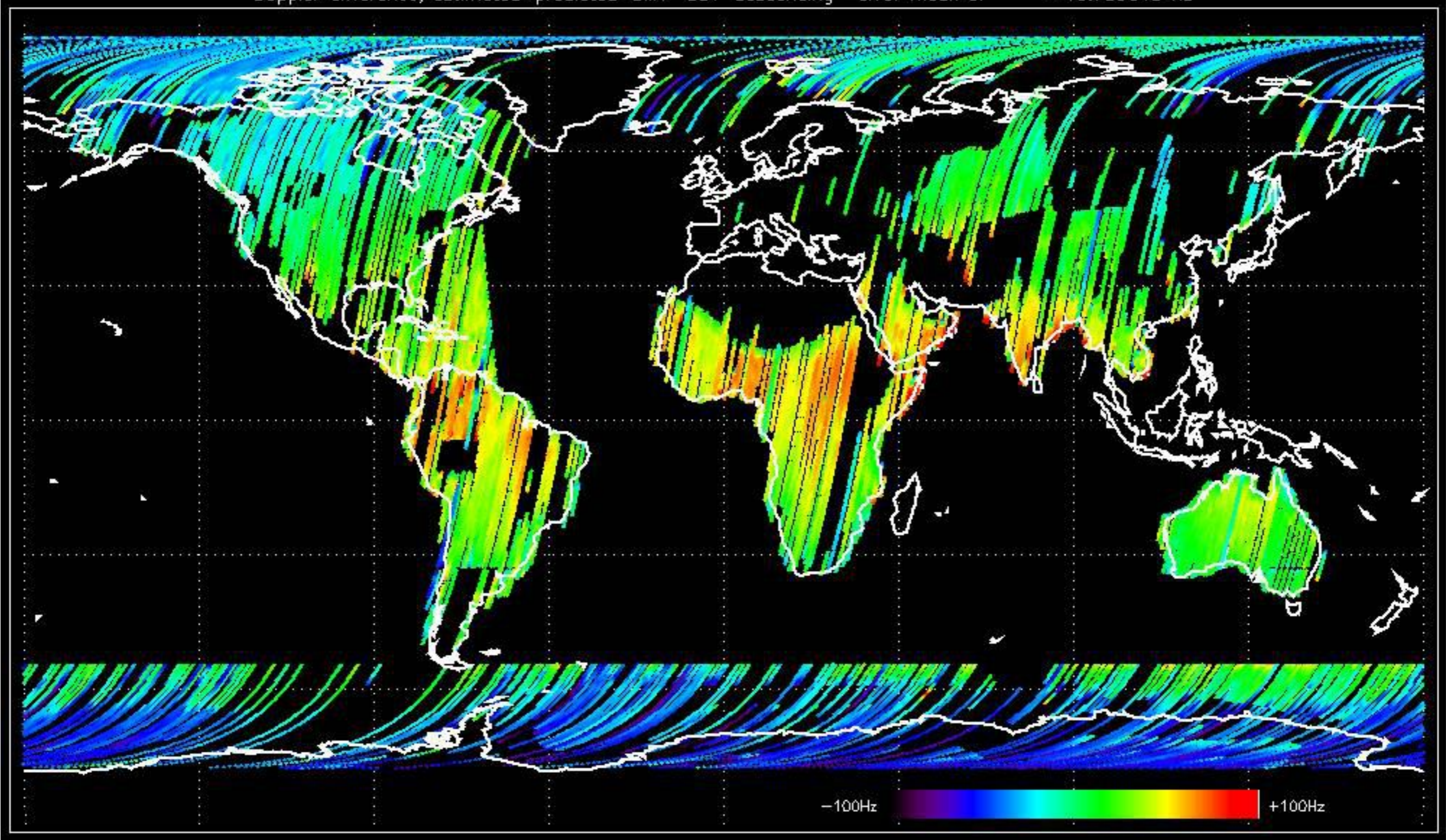




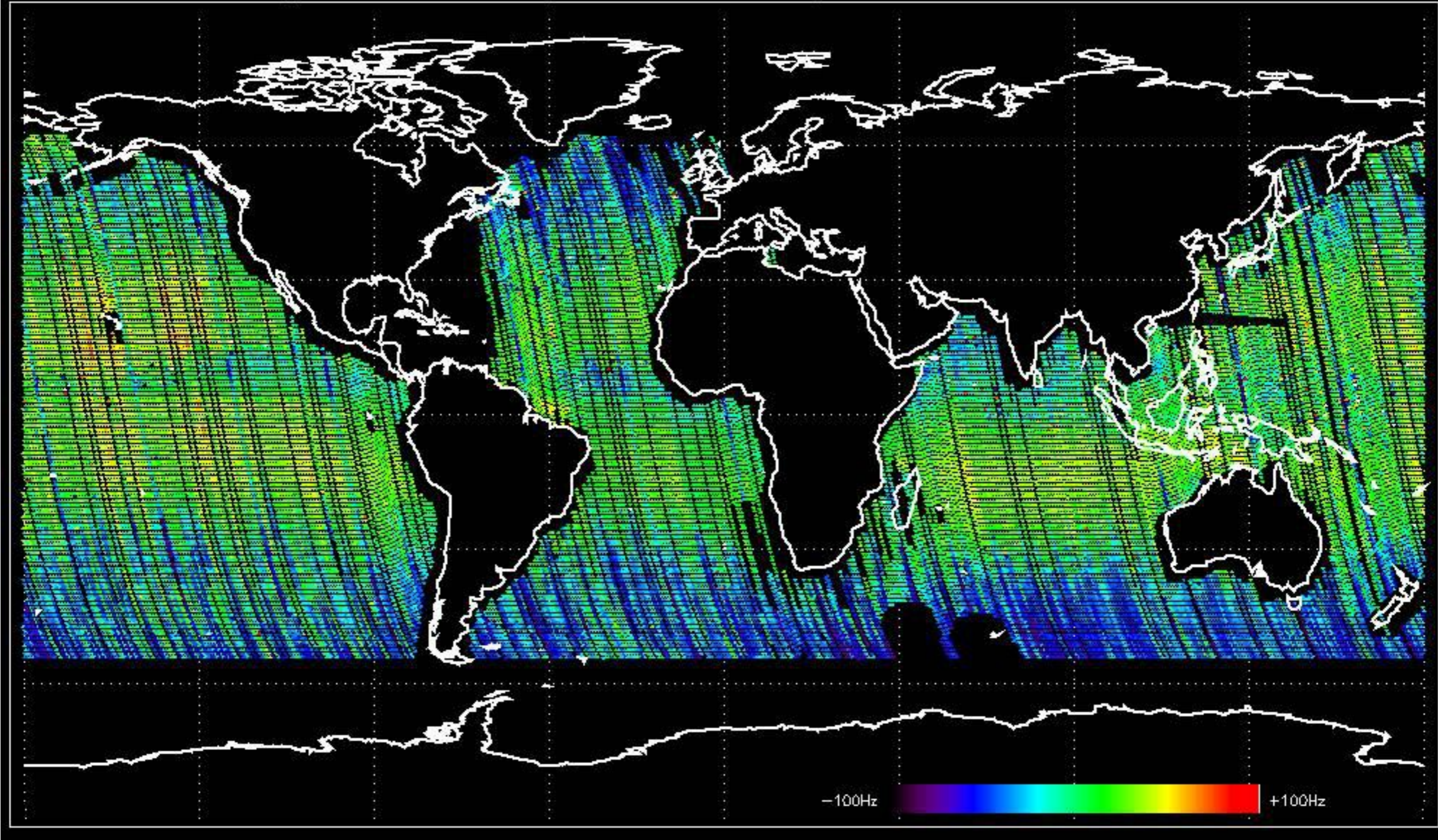
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -30.734685 Hz



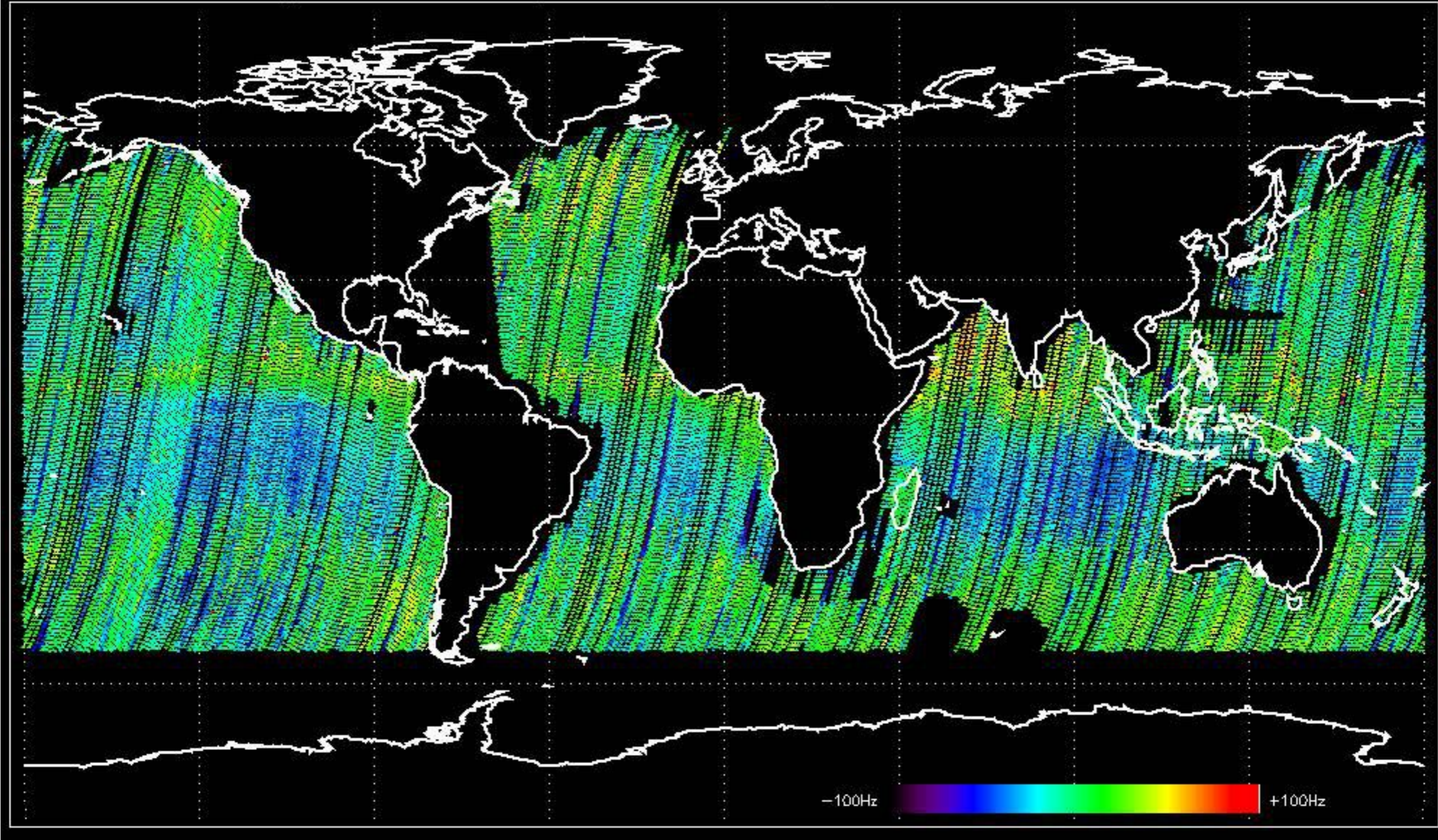
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -19.739648 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -30.817569 Hz

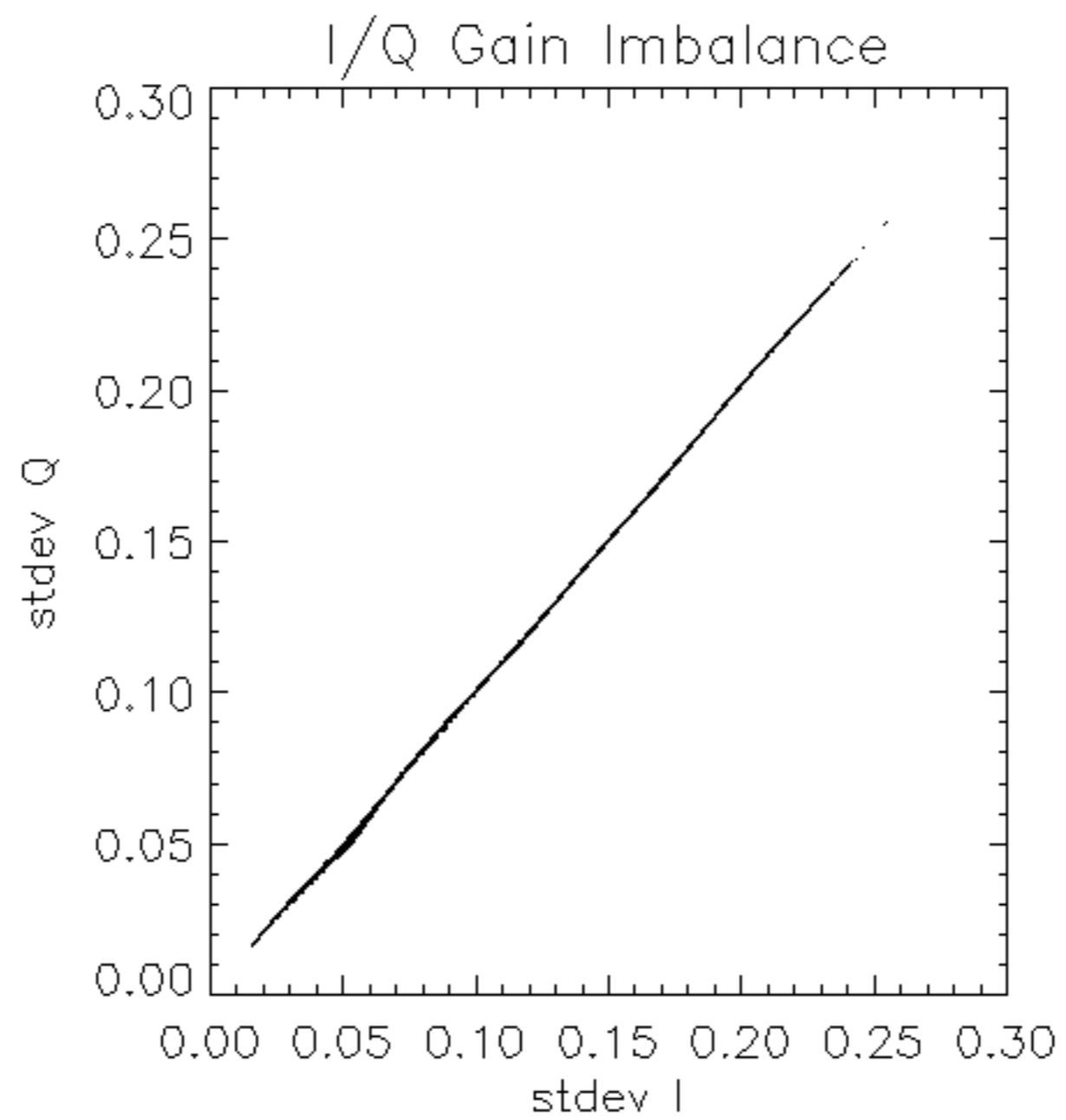


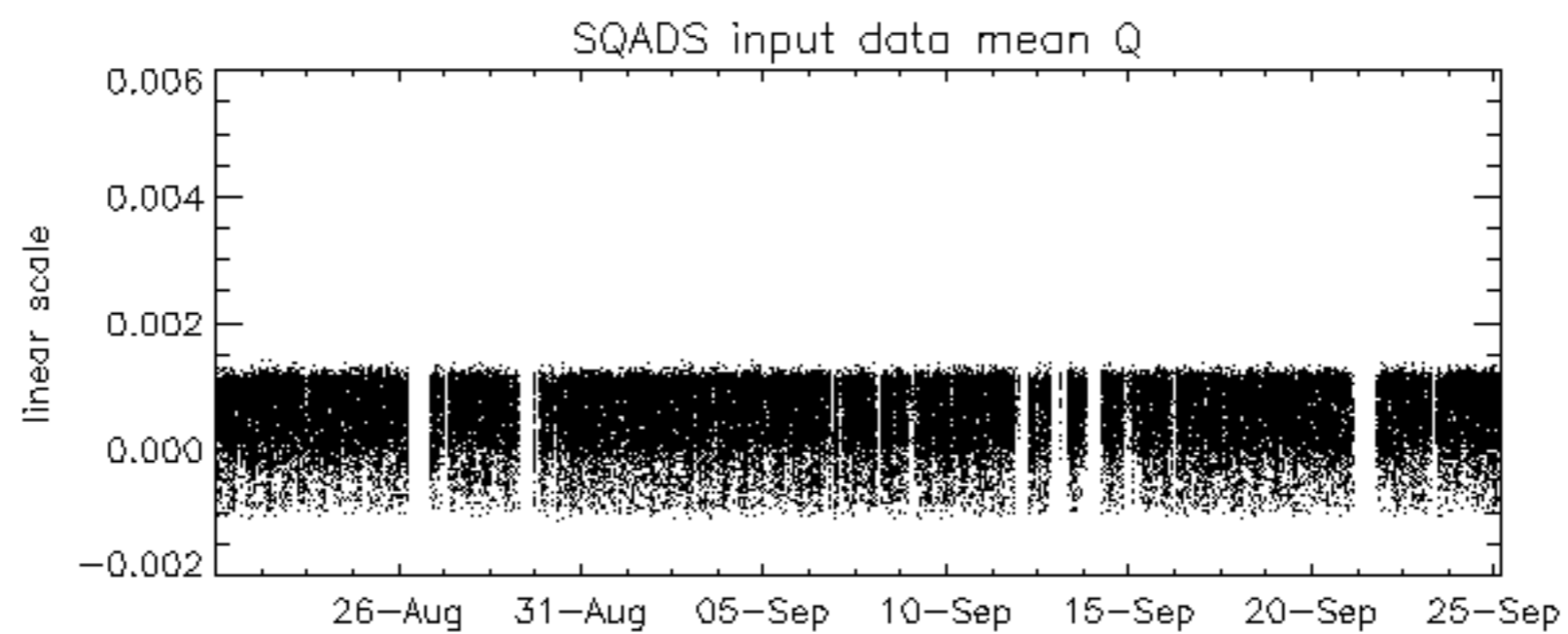
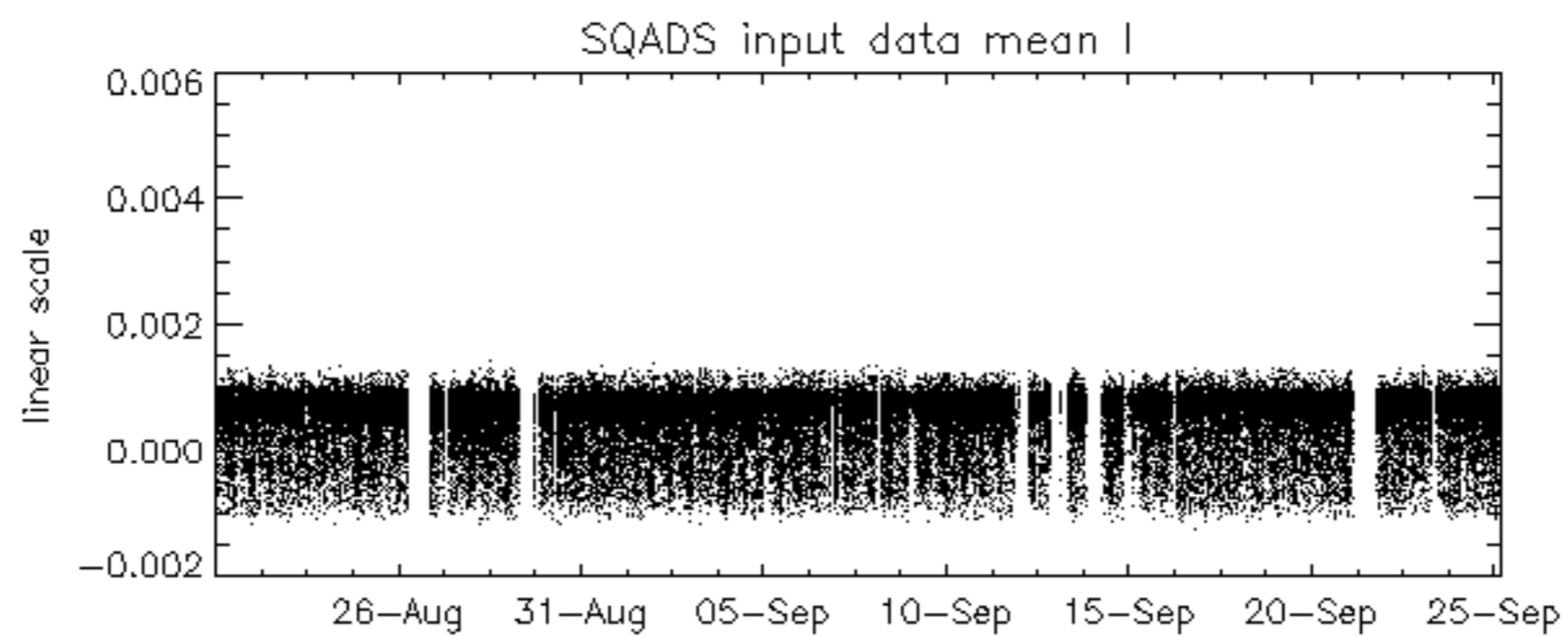
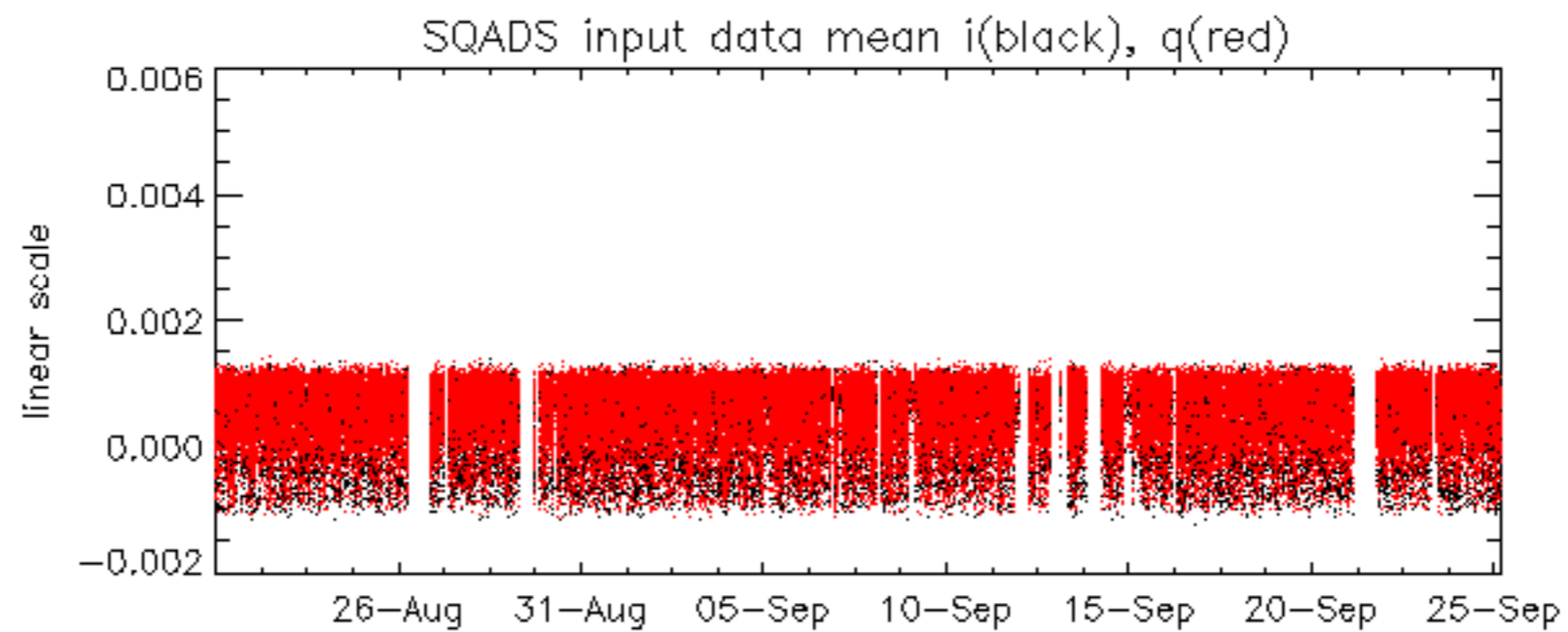
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -32.573311 Hz

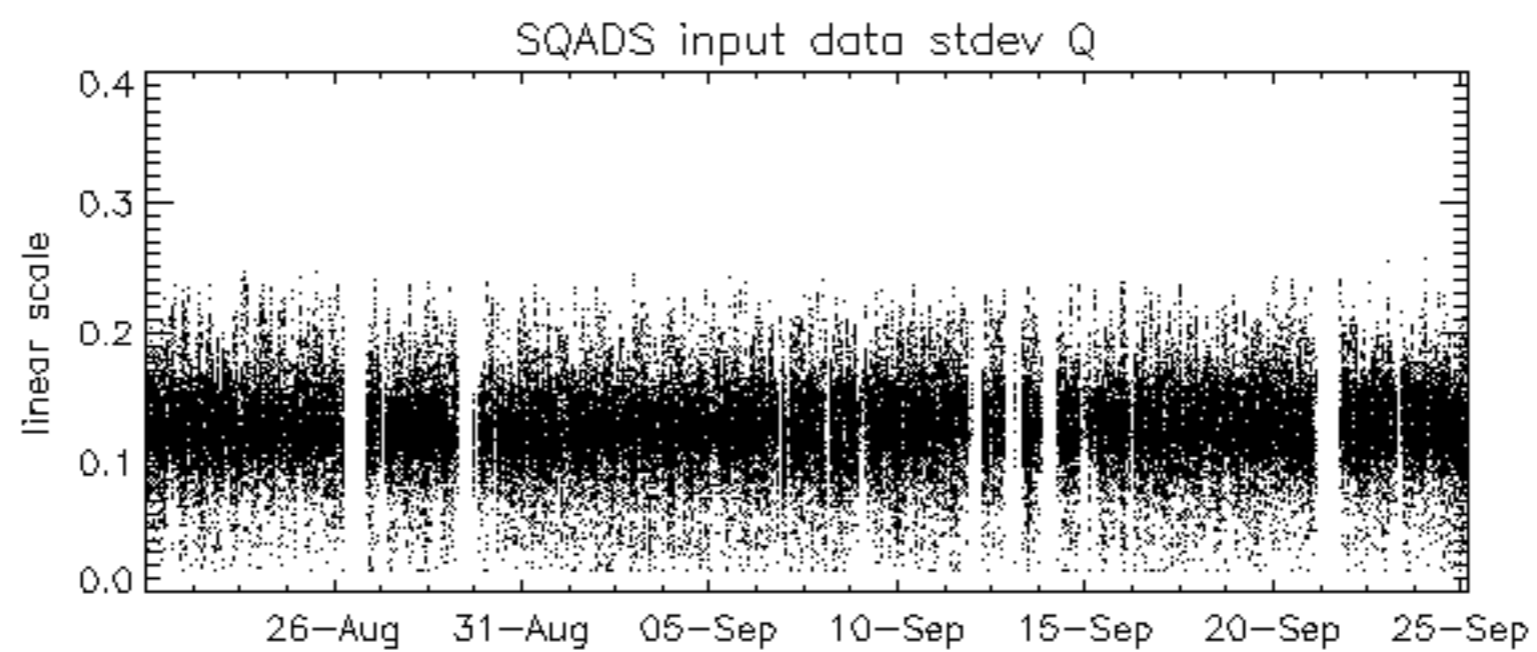
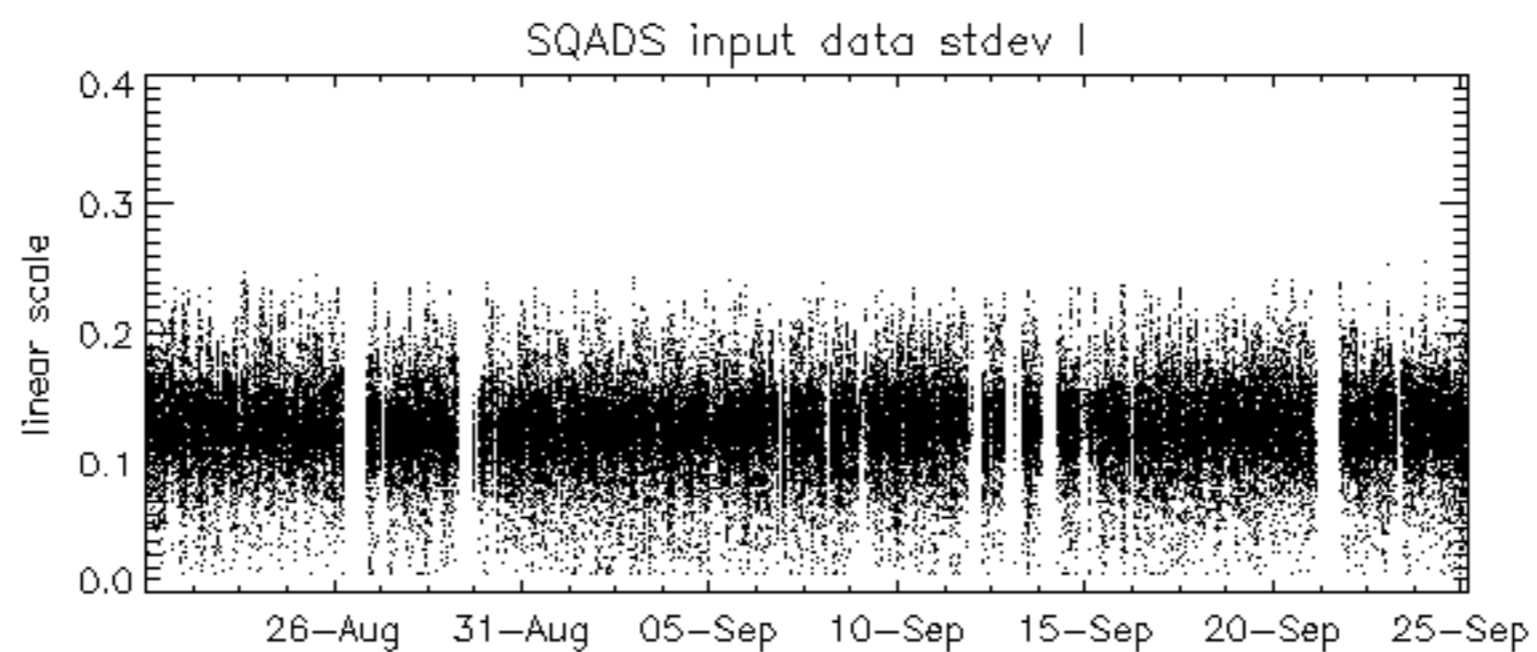
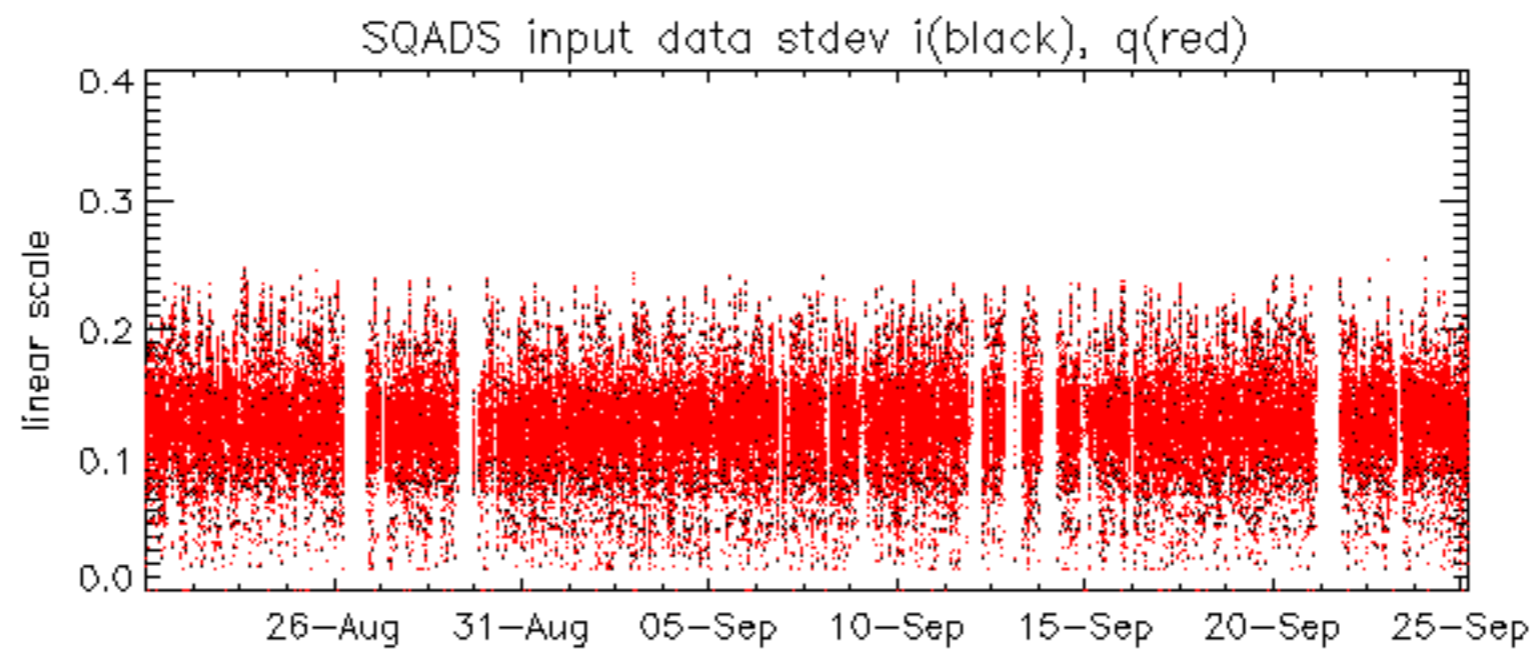


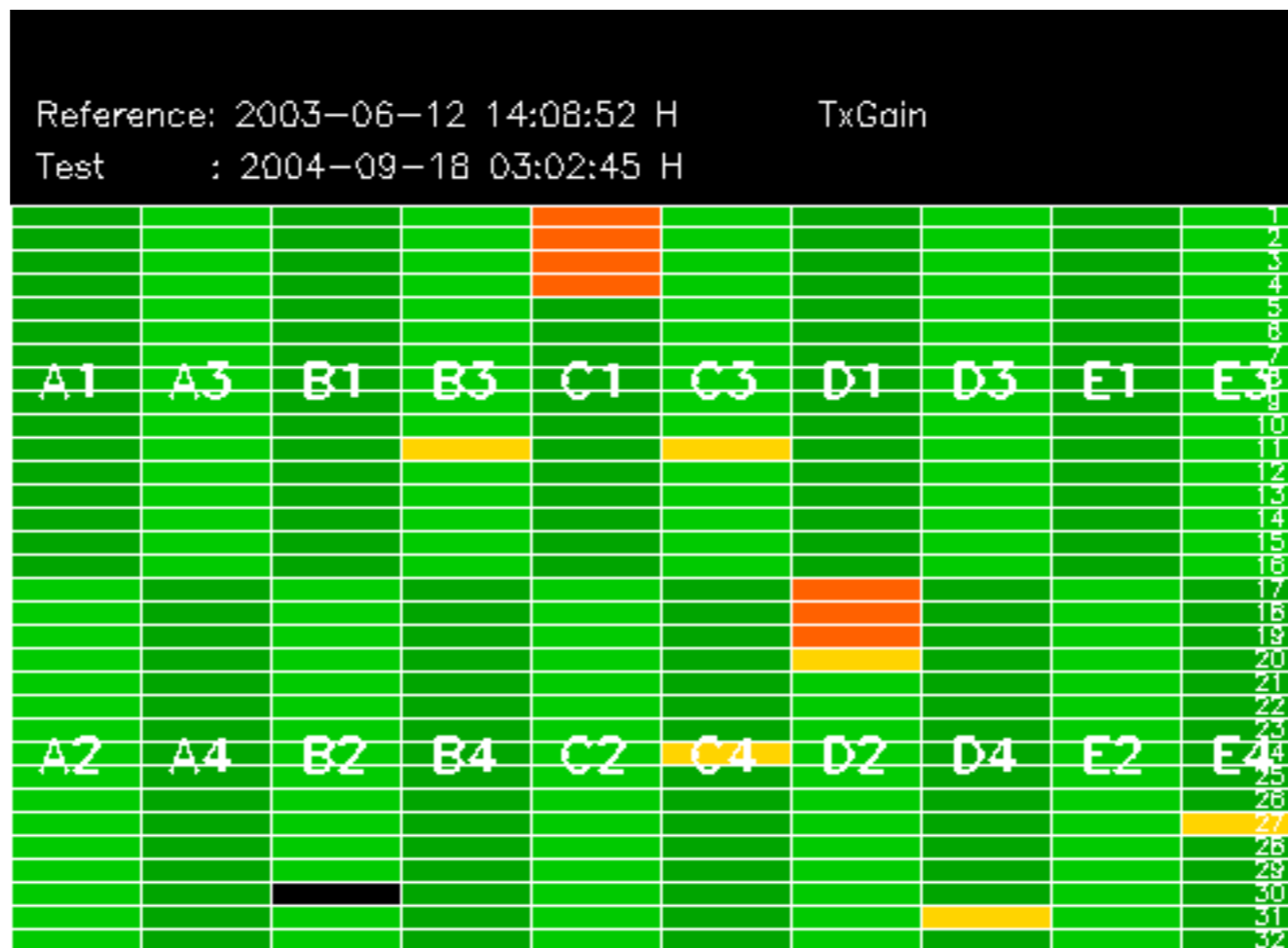
The MS mode provides an internal health check on an individual module basis.
The purpose of this mode is to identify to identify any malfunctioning modules and
to identify modules for which calibration offsets are to be applied.
No anomalies observed on available MS products:

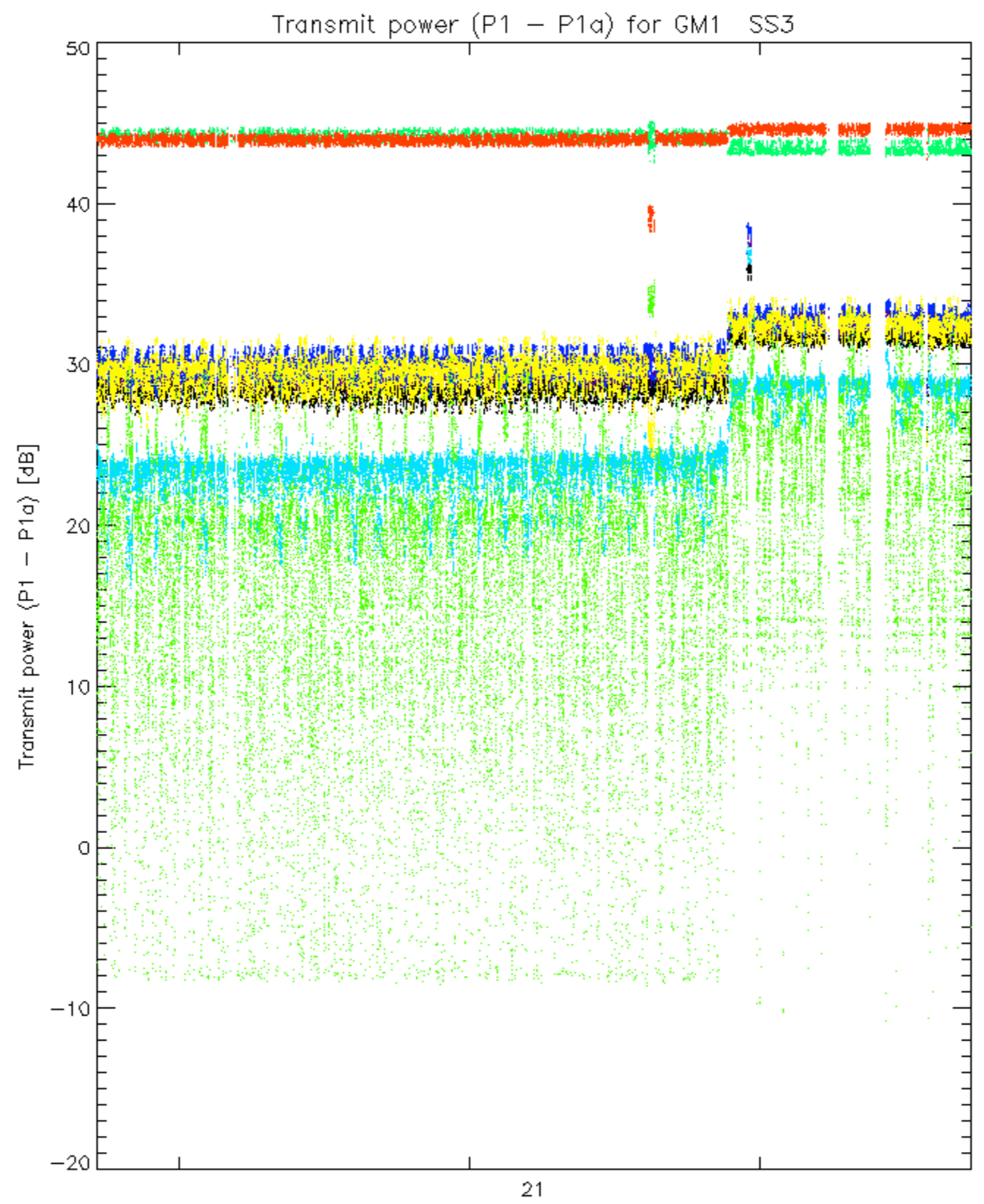
No anomalies observed.



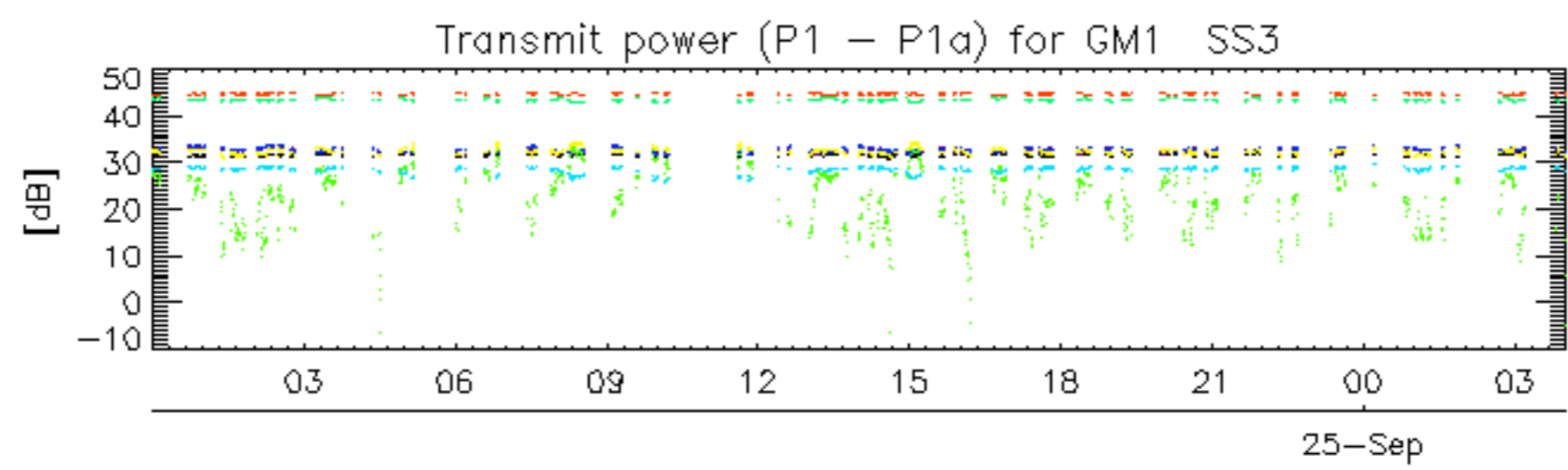




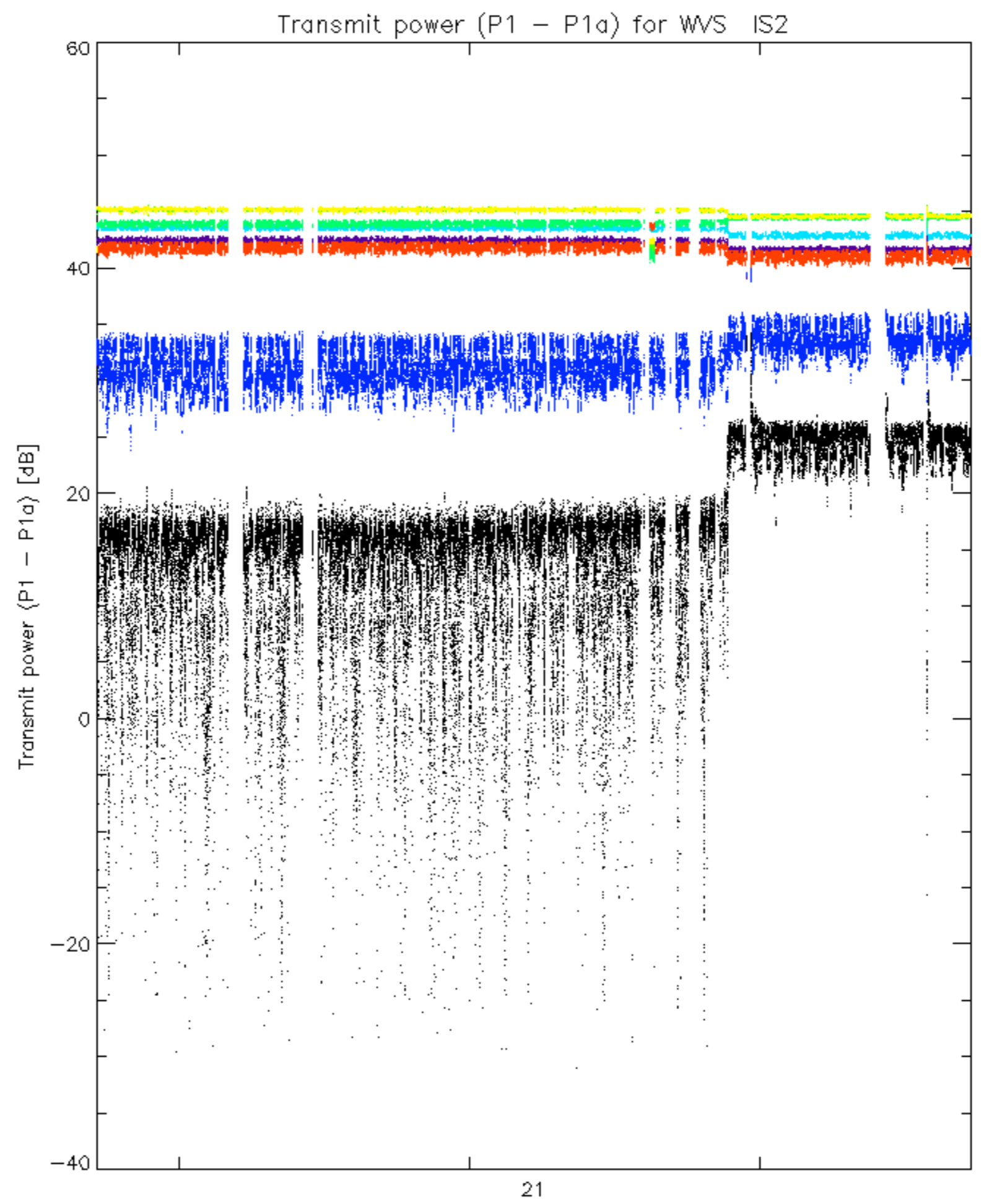




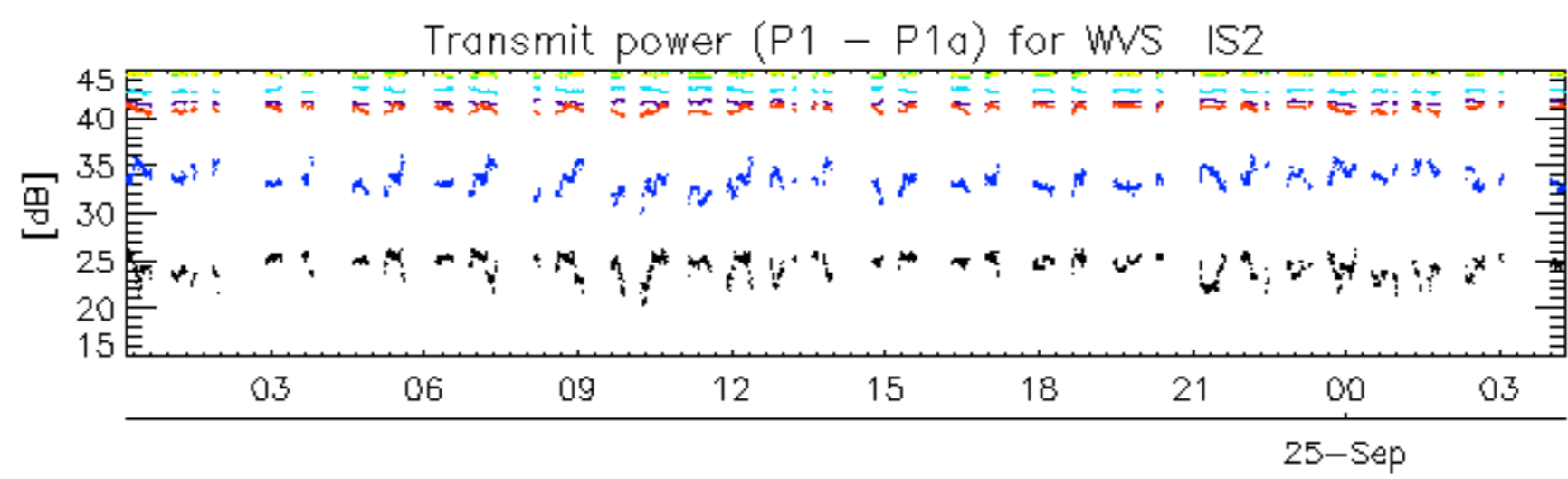
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30



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



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



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

No unavailabilities during the reported period.