

PRELIMINARY REPORT OF 040913

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

last update on Mon Sep 13 13:18:31 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	20040911 064406
H	20040912 061229

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	-3.445152	0.006370	-0.056057
7	P1	-3.297140	0.026462	-0.120611
11	P1	-4.637061	0.030787	-0.010303
15	P1	-5.741912	0.046688	-0.069528
19	P1	-3.499636	0.078837	-0.173021
22	P1	-4.556579	0.106567	-0.142718
24	P1	-4.994675	0.125438	-0.154574
30	P1	-7.005084	0.149502	-0.270366

3	P1	-15.843819	1.241945	-1.378857
7	P1	-14.053760	0.163062	0.204579
11	P1	-20.239780	0.318481	-0.056017
15	P1	-11.801248	0.143157	0.099852
19	P1	-14.005980	1.091294	-0.568909
22	P1	-16.101236	0.348408	0.215941
24	P1	-14.482988	0.325342	0.166781
30	P1	-17.882521	0.635523	-0.069689

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.303118	0.084383	-0.031295
7	P2	-22.600996	0.128562	-0.052512
11	P2	-15.264624	0.160463	0.095743
15	P2	-7.056464	0.097438	-0.007112
19	P2	-9.560816	0.170430	0.019581
22	P2	-17.330212	0.114264	0.054542
24	P2	-20.747929	0.090251	-0.050642
30	P2	-19.208721	0.082742	0.110510

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.144851	0.003050	-0.035782
7	P3	-8.144851	0.003050	-0.035784
11	P3	-8.144852	0.003050	-0.035769
15	P3	-8.144866	0.003049	-0.035707
19	P3	-8.144889	0.003049	-0.035615
22	P3	-8.144902	0.003050	-0.035557
24	P3	-8.144894	0.003050	-0.035587
30	P3	-8.145127	0.003055	-0.036526

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	-2.685878	0.142233	-0.543925
7	P1	-2.927142	0.098181	-0.333466
11	P1	-3.863813	0.025645	-0.054750
15	P1	-3.515080	0.024071	-0.042260
19	P1	-3.503374	0.079827	-0.141962
22	P1	-5.722232	0.102826	-0.128007
24	P1	-3.939351	0.045563	-0.117620
30	P1	-6.199081	0.092112	-0.144374
3	P1	-10.433886	0.752784	-1.418406
7	P1	-10.065615	0.165603	-0.160532
11	P1	-12.162527	0.109112	-0.008289
15	P1	-11.675953	0.097312	0.017629
19	P1	-15.716407	1.571589	-0.584815
22	P1	-23.356951	1.474572	0.324935
24	P1	-17.926071	0.320177	0.085881
30	P1	-20.425655	1.263300	0.211370

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.982157	0.053669	-0.043429
7	P2	-22.742399	0.043068	-0.011367
11	P2	-10.957186	0.062318	0.064913
15	P2	-4.954906	0.032849	-0.032315
19	P2	-6.764596	0.048629	-0.045237
22	P2	-7.435262	0.041039	0.008965
24	P2	-11.050052	0.046767	-0.050187
30	P2	-22.169962	0.031438	0.075405

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
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3	P3	-7.996593	0.003633	-0.036554
7	P3	-7.996497	0.003635	-0.036608
11	P3	-7.996586	0.003625	-0.036345
15	P3	-7.996572	0.003623	-0.036774
19	P3	-7.996548	0.003639	-0.036717
22	P3	-7.996479	0.003633	-0.036898
24	P3	-7.996533	0.003655	-0.036878
30	P3	-7.996508	0.003631	-0.036535

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	0.000469391
	stdev	2.20058e-07
MEAN Q	mean	0.000537527
	stdev	2.36642e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127418
	stdev	0.000963890

STDEV Q	mean	0.127636
	stdev	0.000973760



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

6.2 - Absolute Doppler for WVS

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

6.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX	
<input type="checkbox"/>	

6.4 - Unbiased Doppler Error for GM1

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

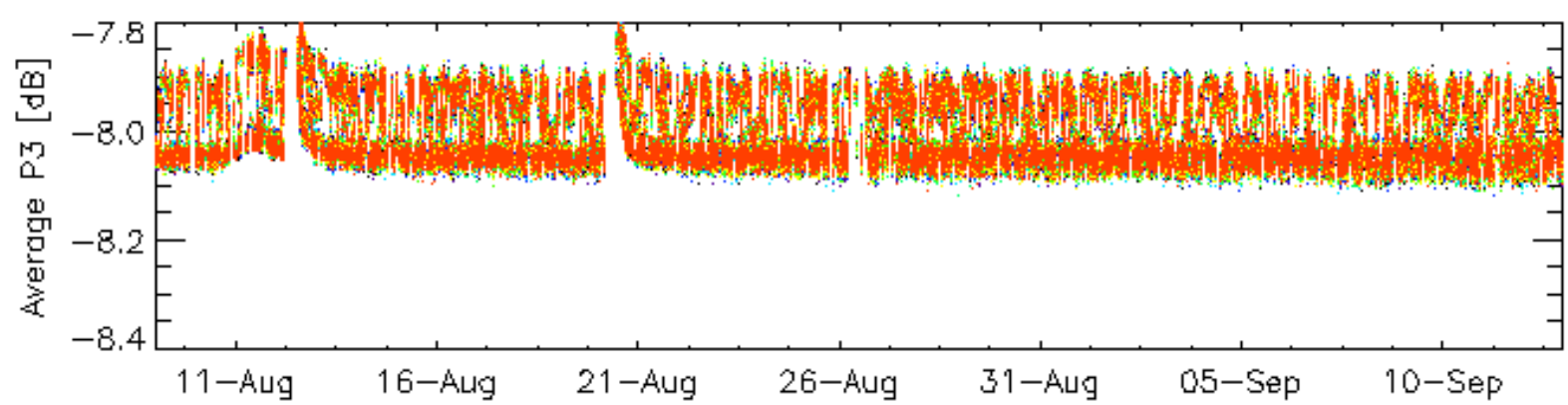
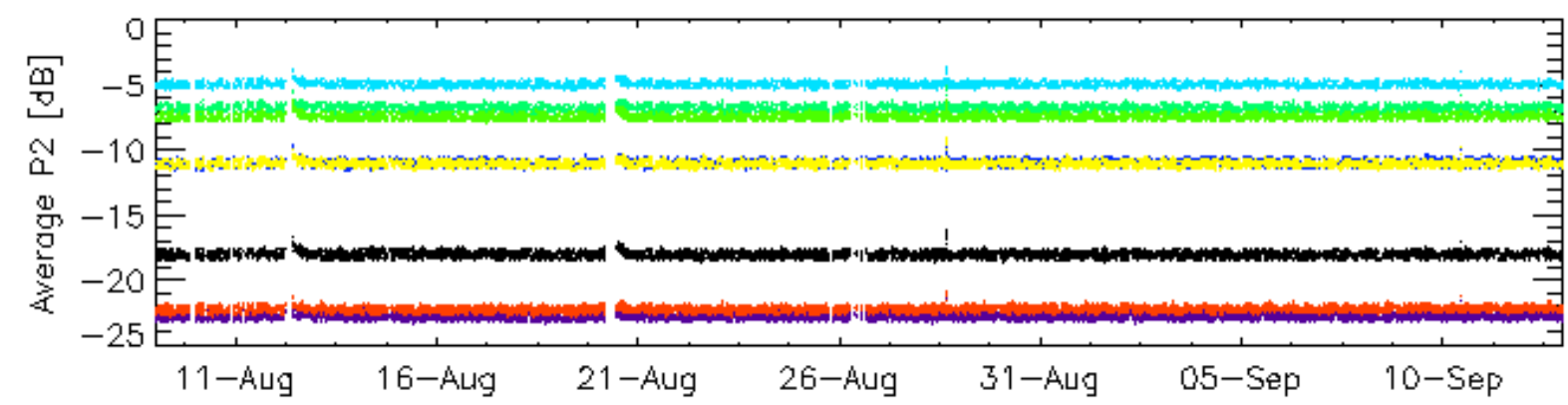
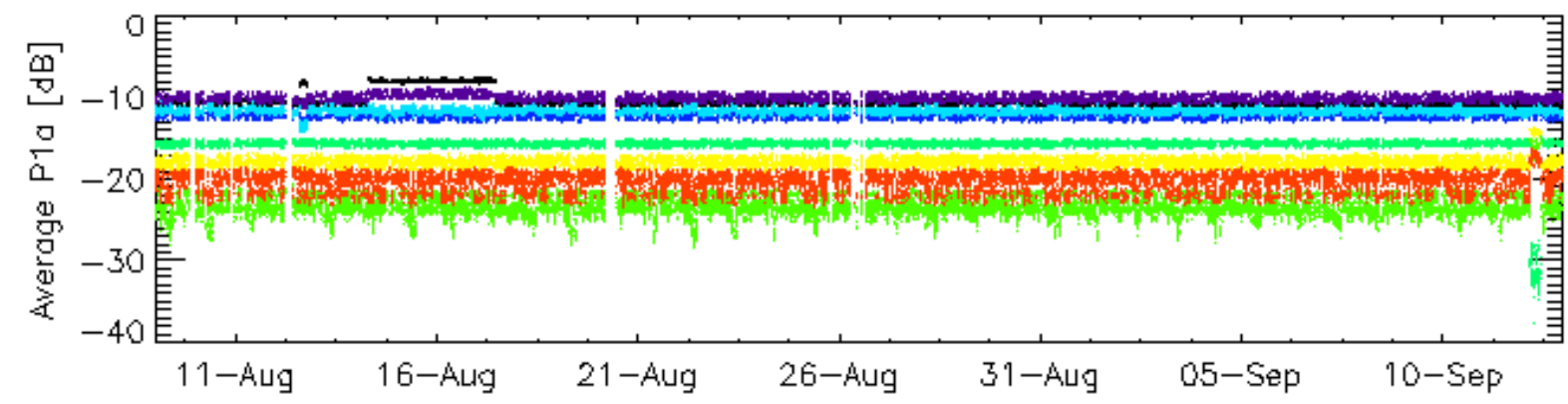
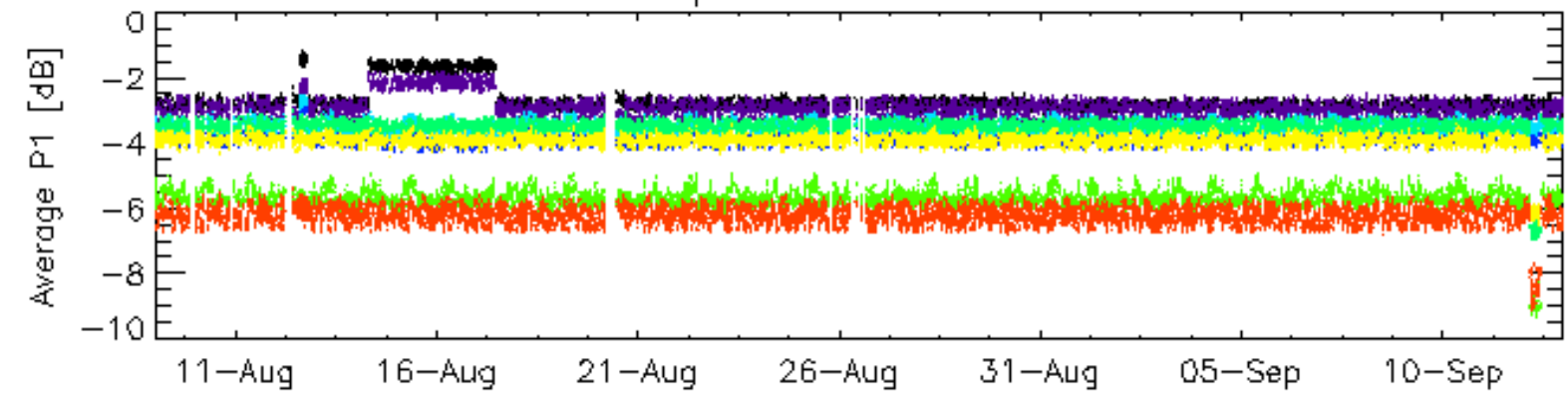
6.5 - Absolute Doppler for GM1

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

6.6 - Doppler evolution versus ANX for GM1

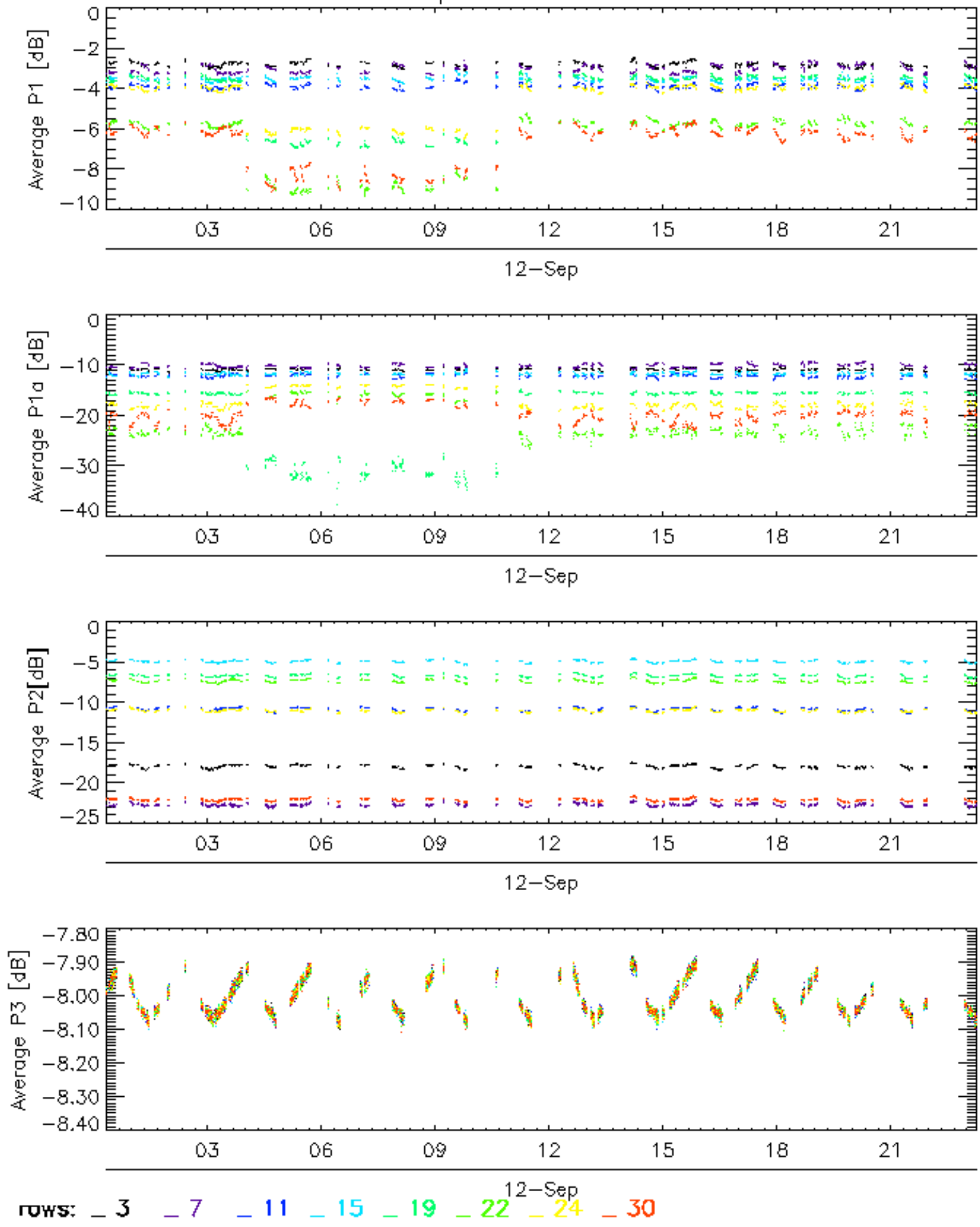
Evolution Doppler error versus ANX	
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Cal pulses for GM1 SS3

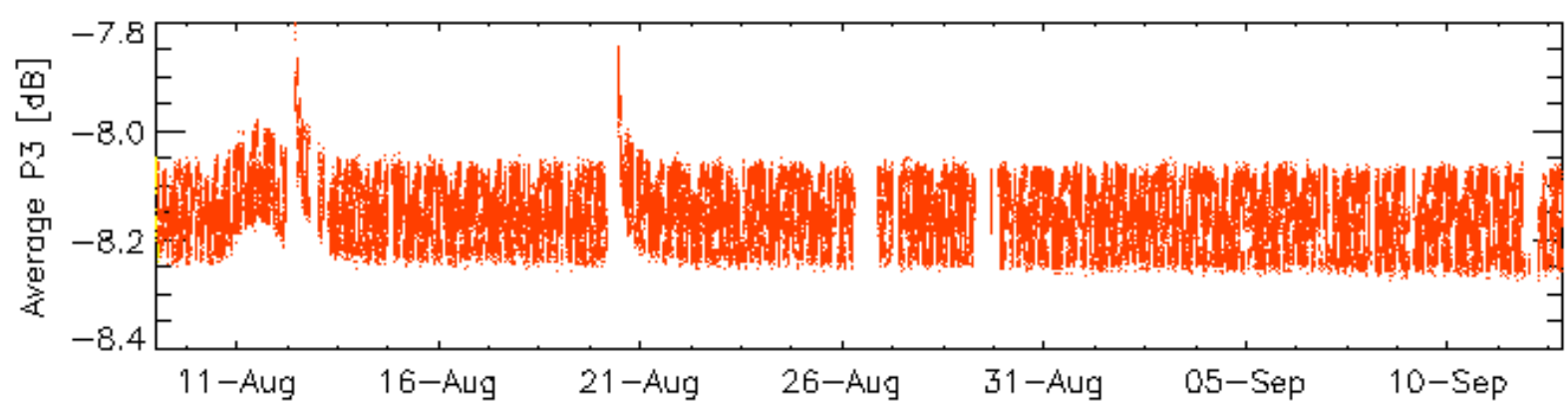
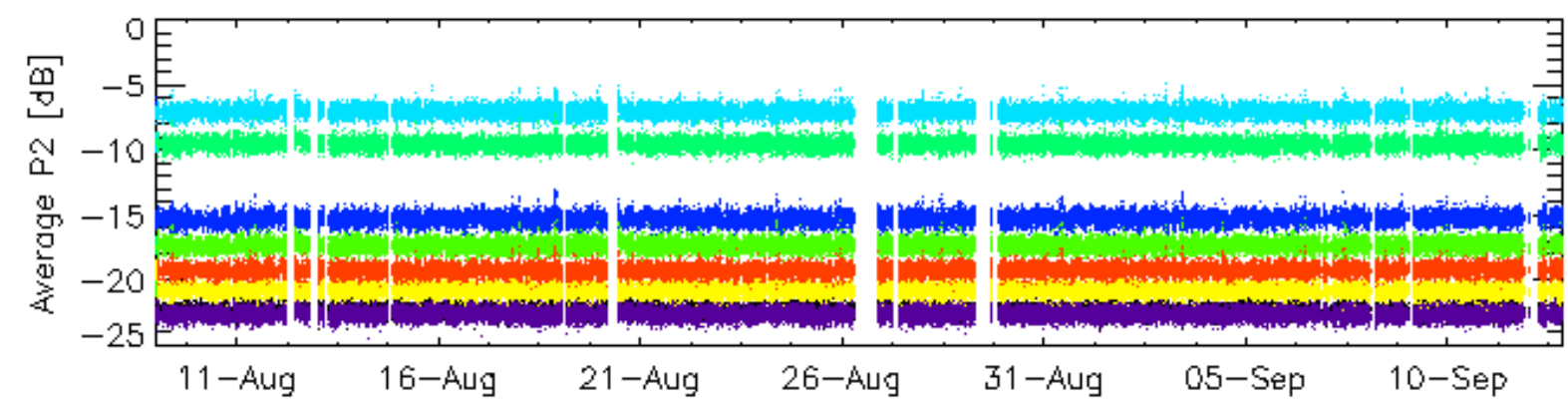
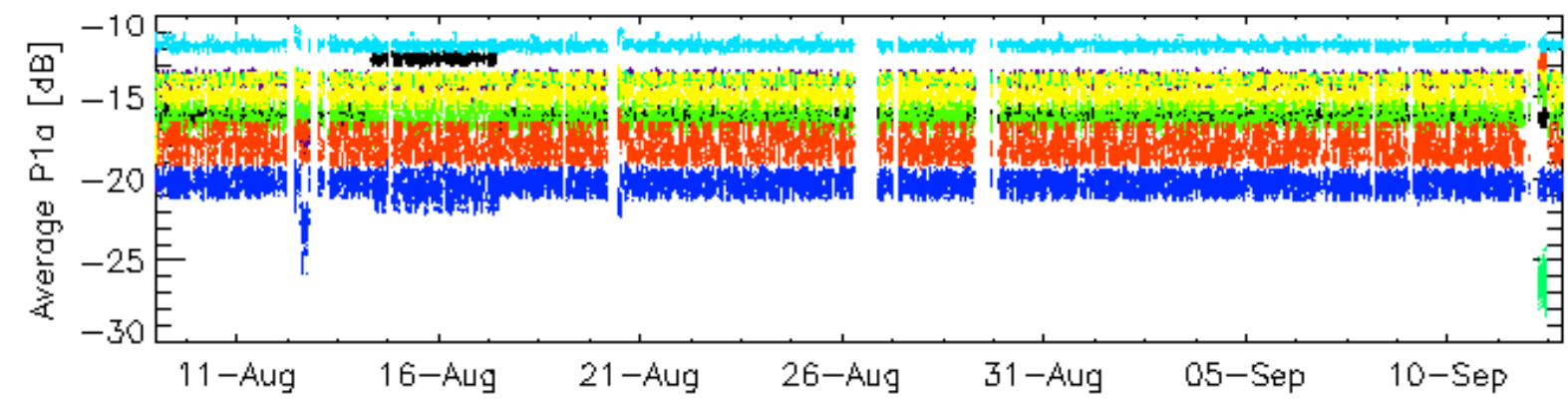
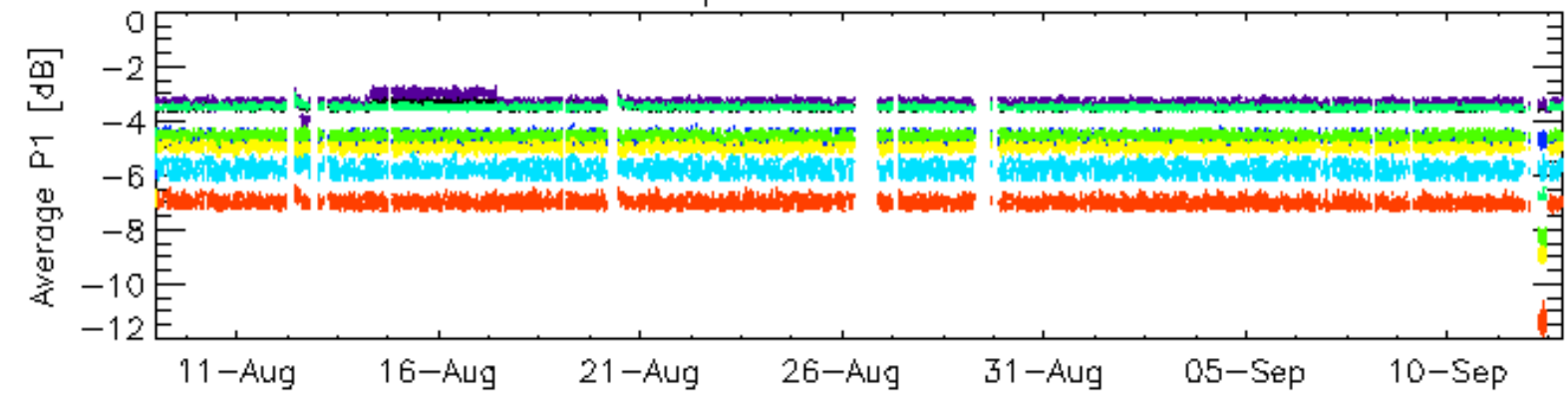


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

Cal pulses for GM1 SS3

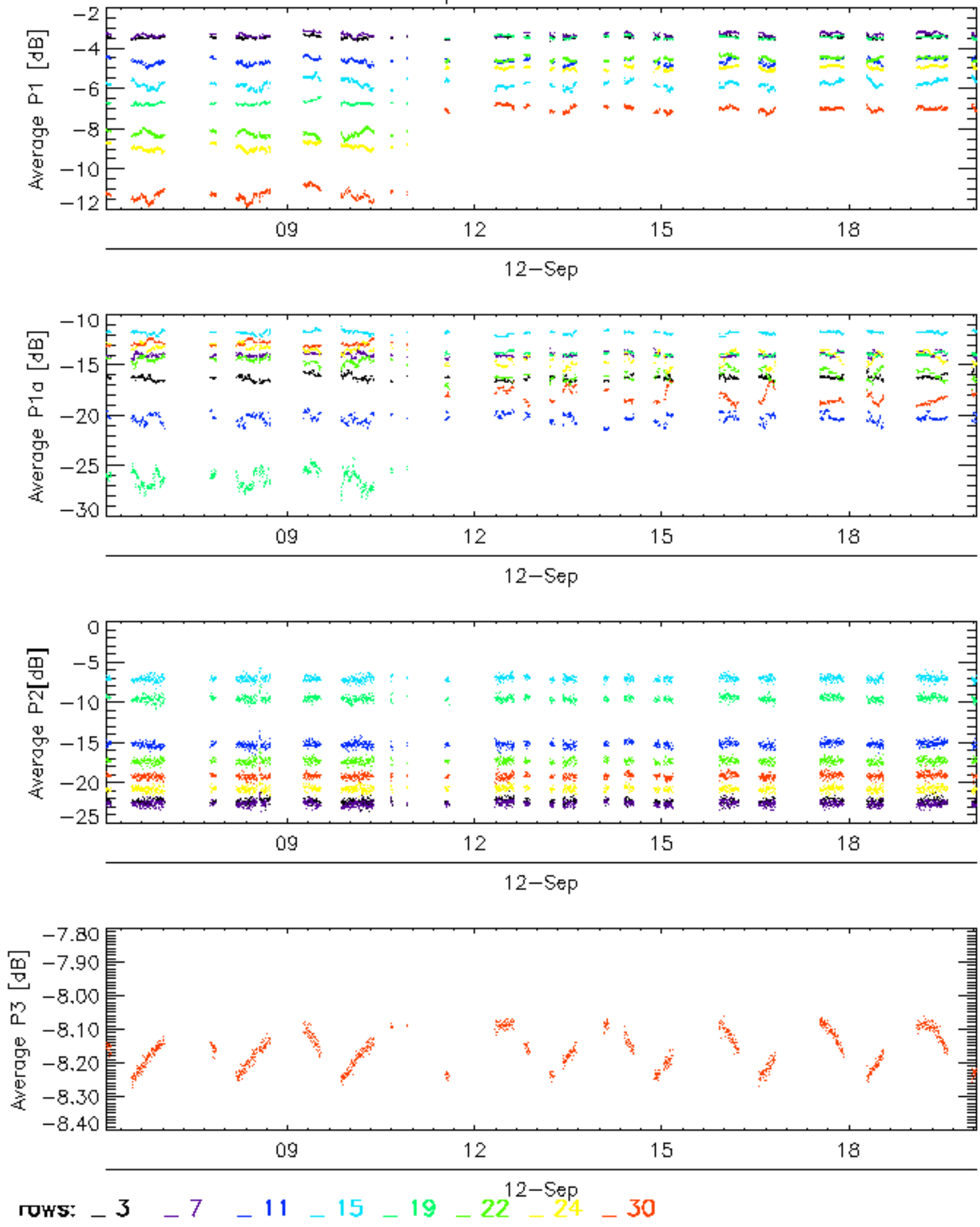


Cal pulses for WVS IS2

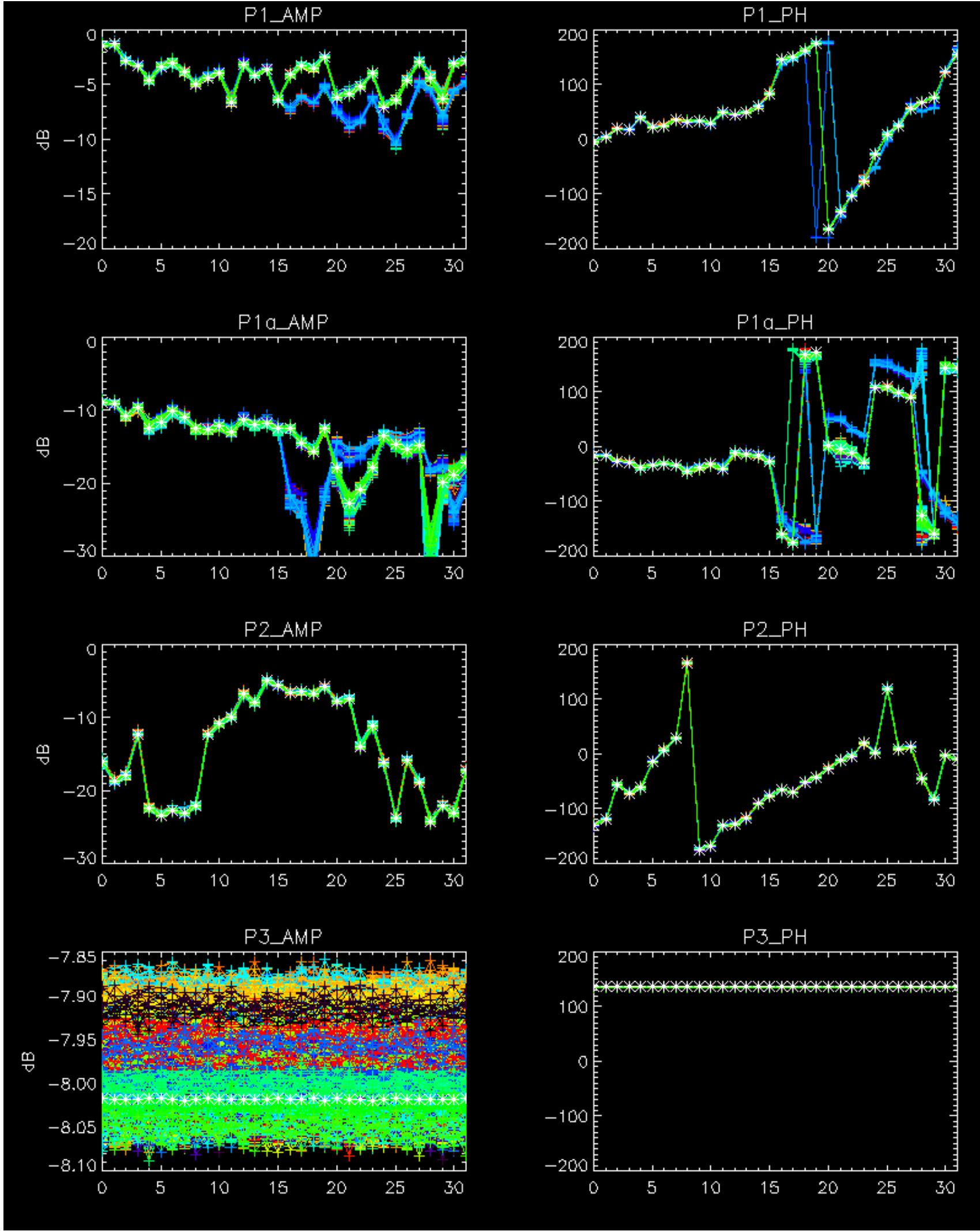


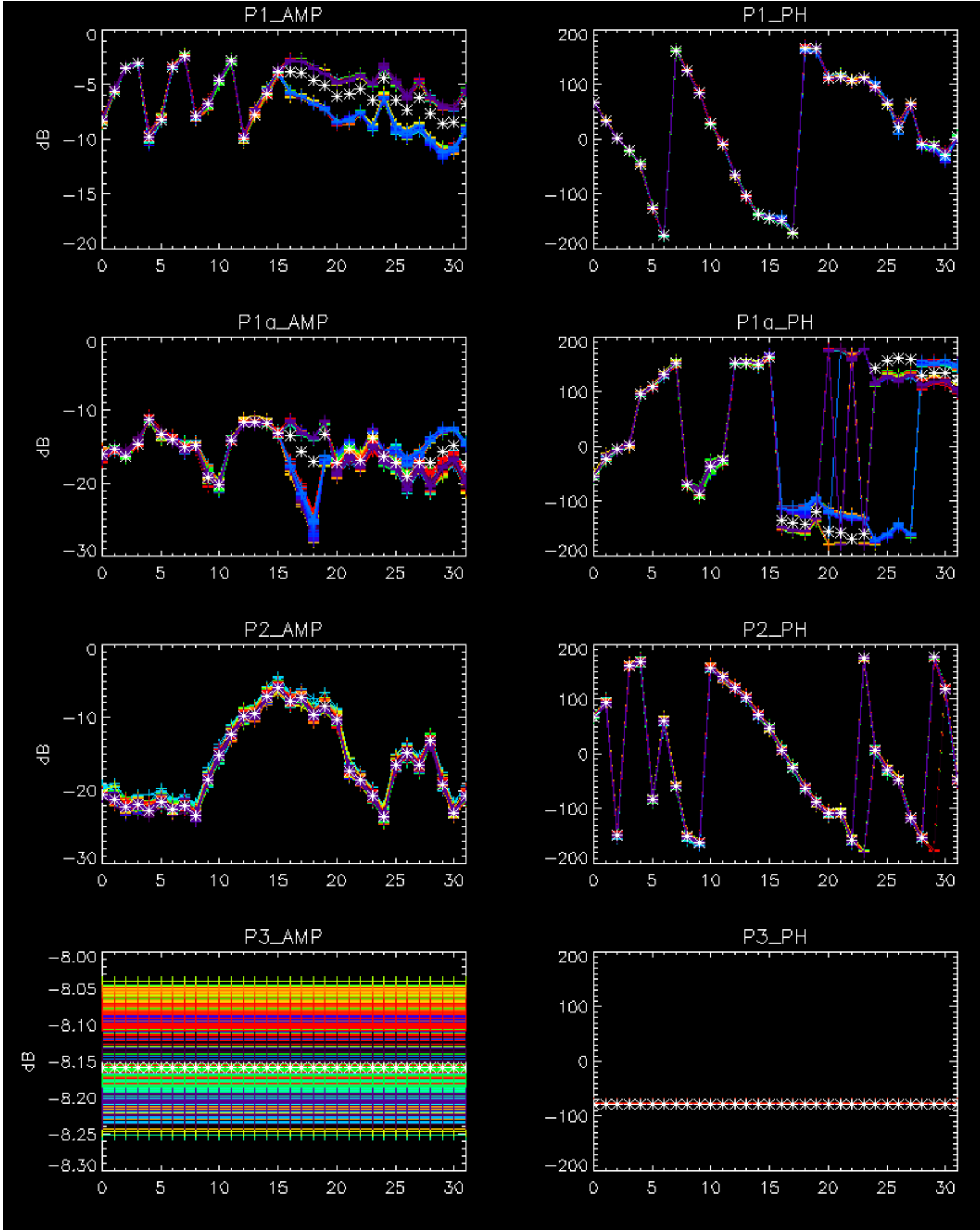
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

Cal pulses for WVS IS2



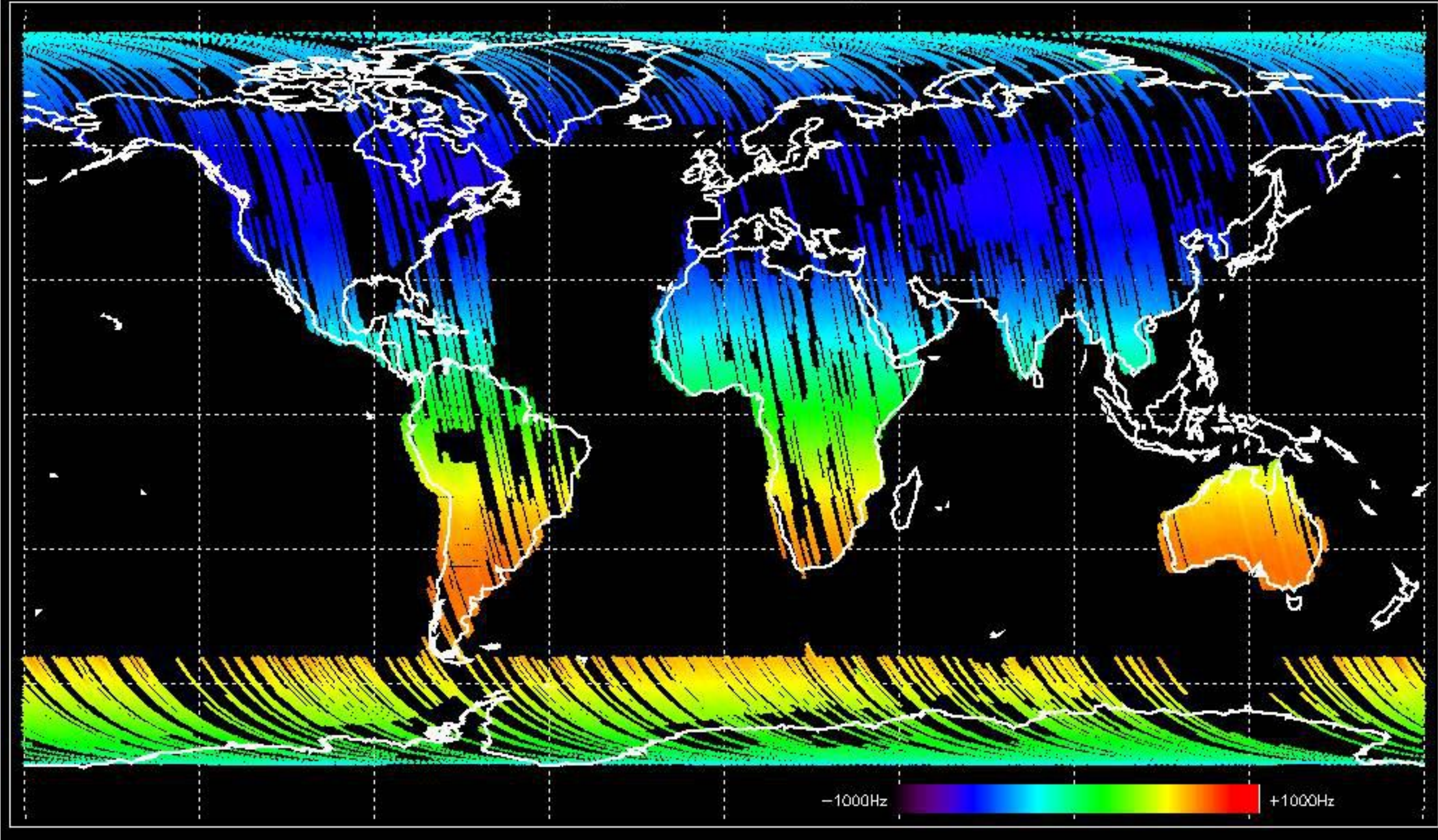
No anomalies observed.



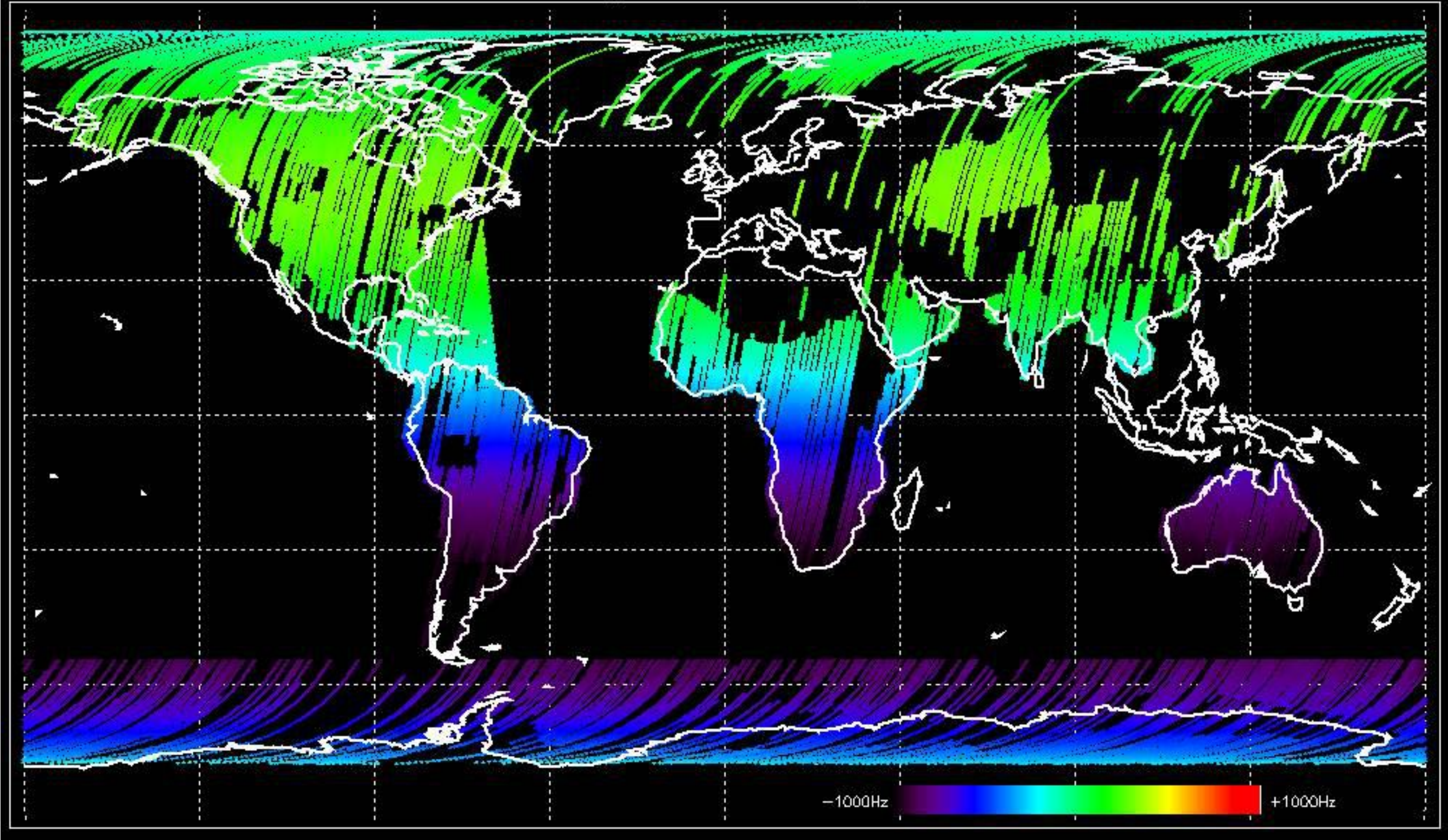


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

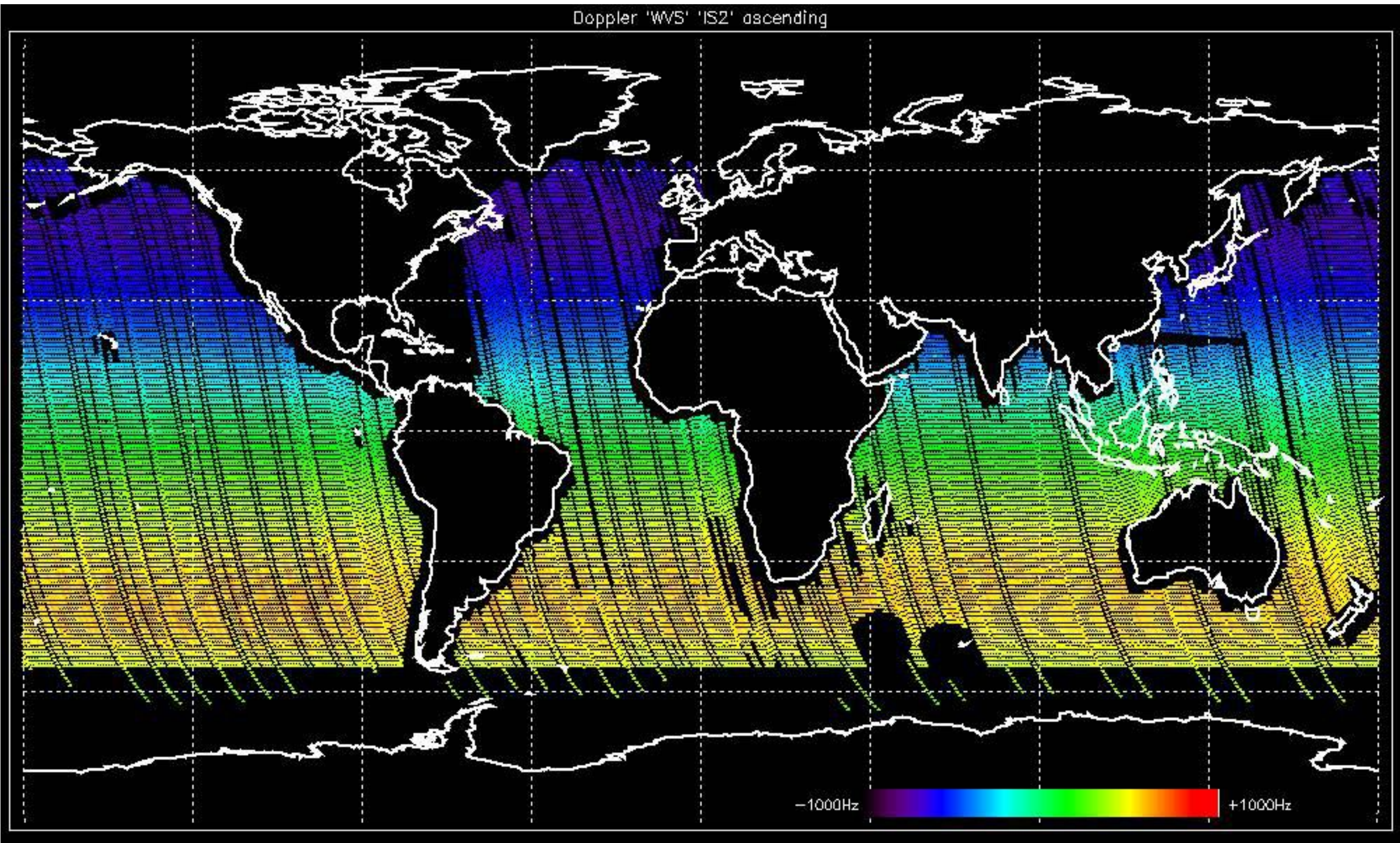
Doppler 'GM1' 'SS1' ascending



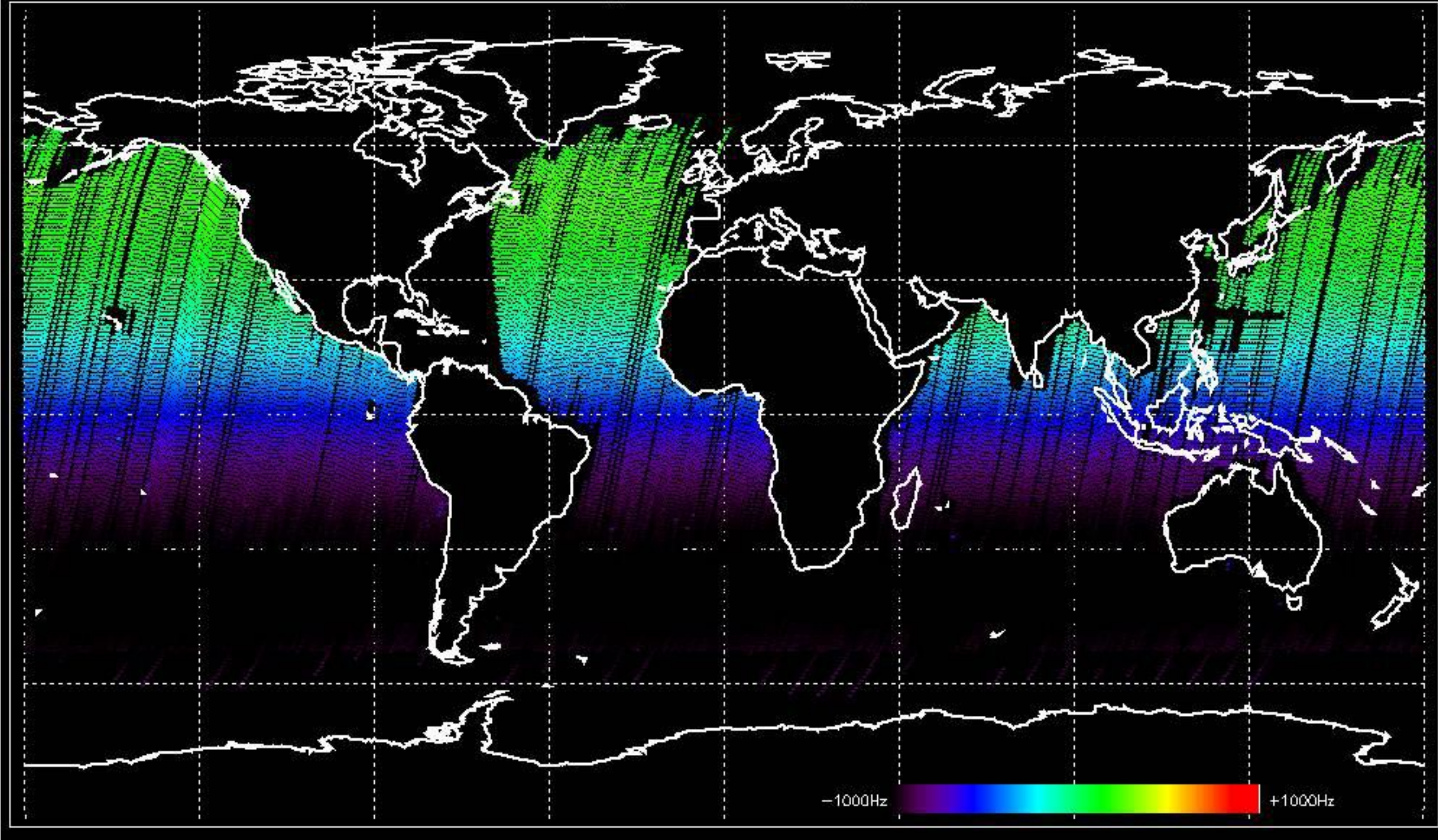
Doppler 'GM1' 'SS1' descending



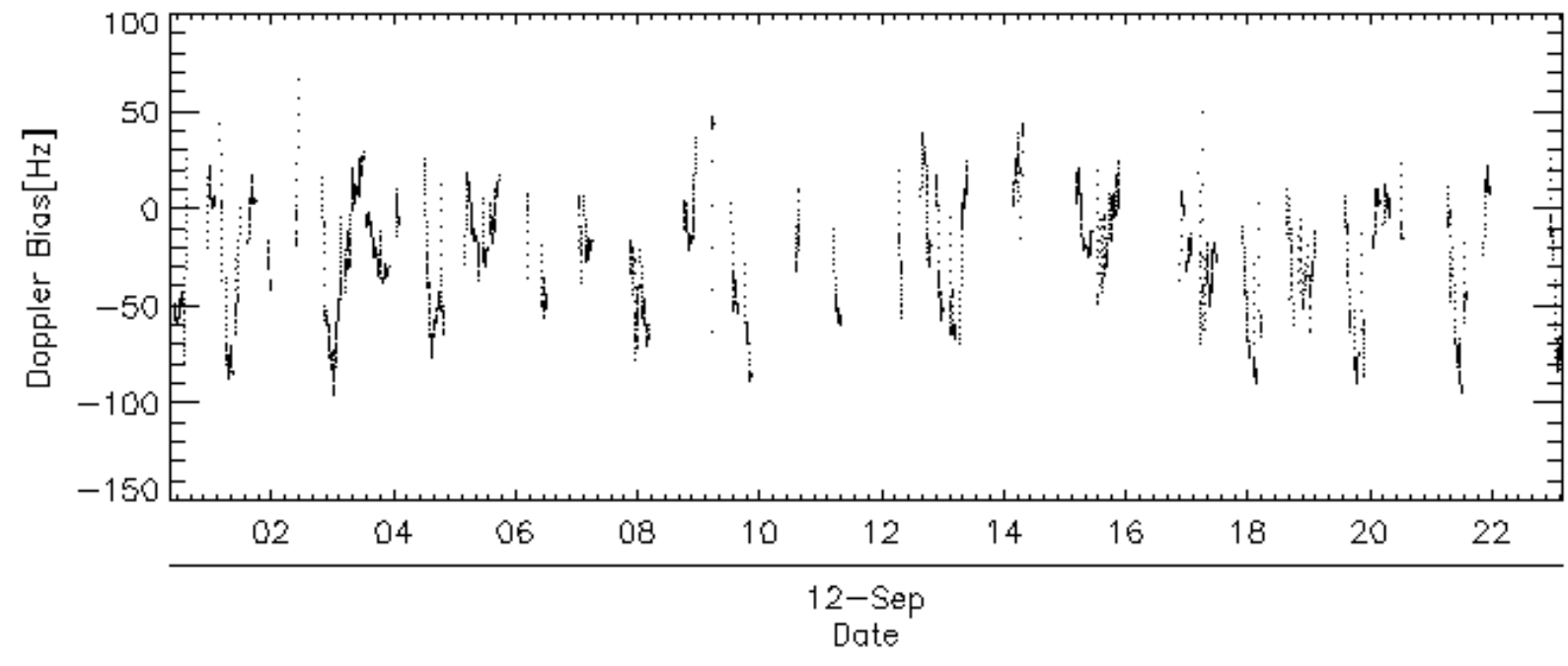
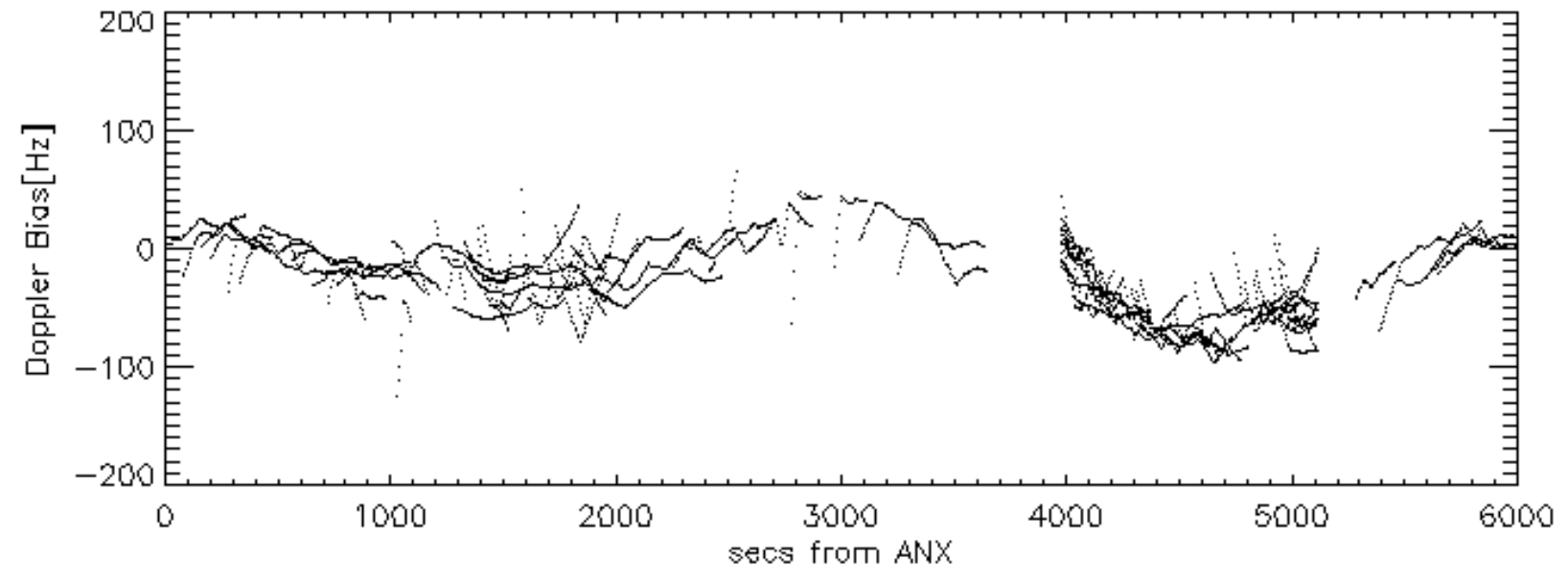
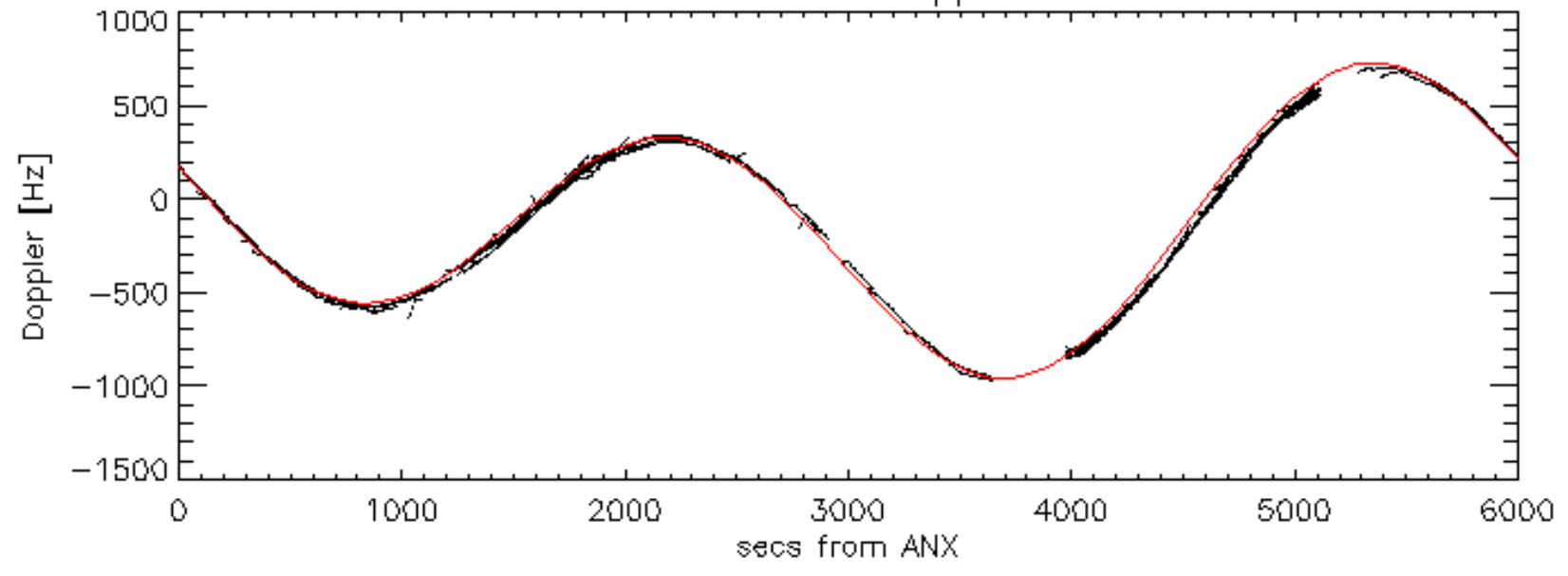
Doppler 'WVS' 'IS2' ascending

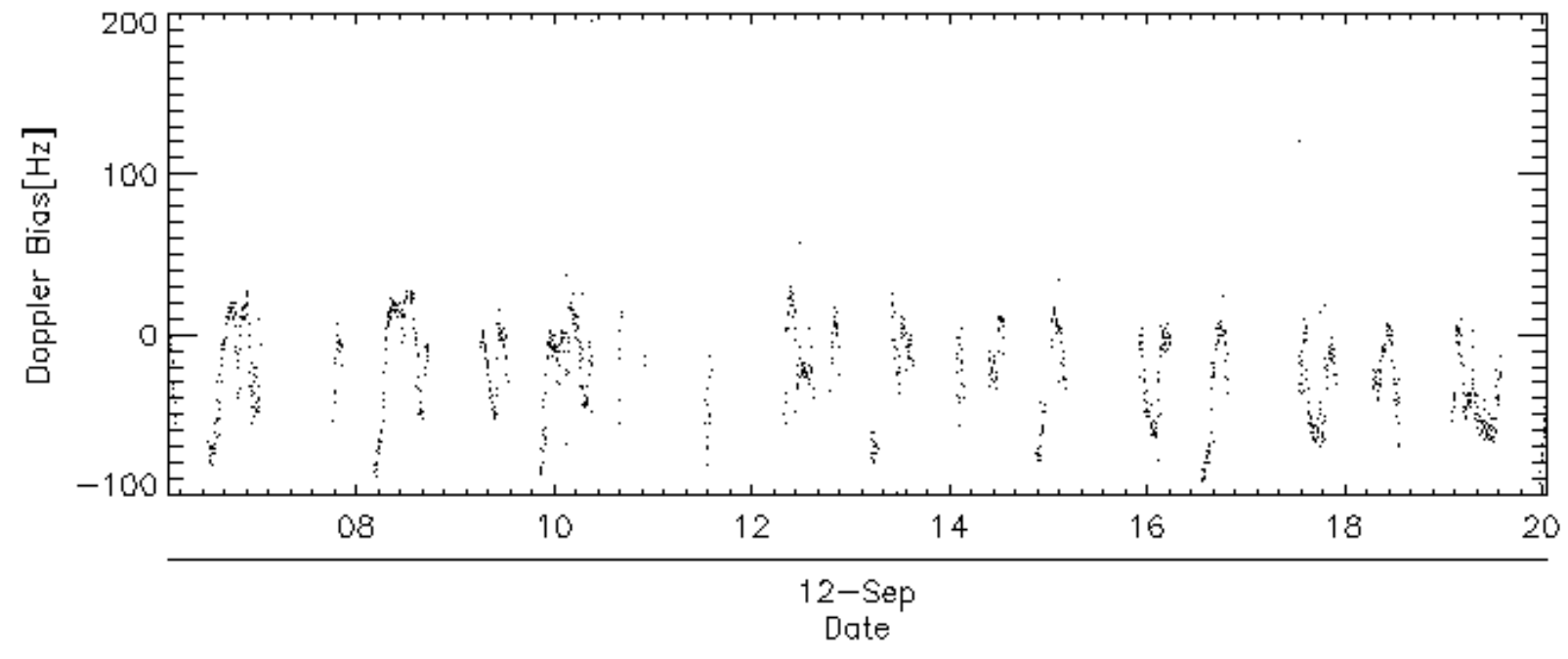
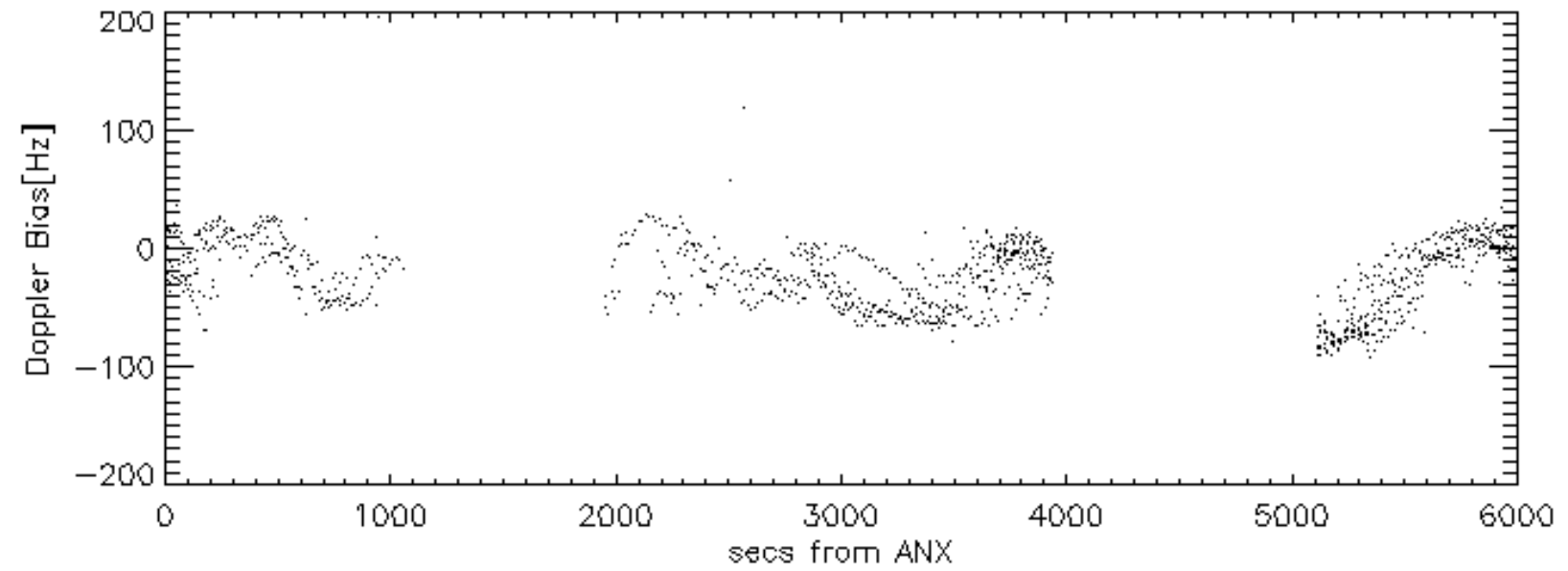
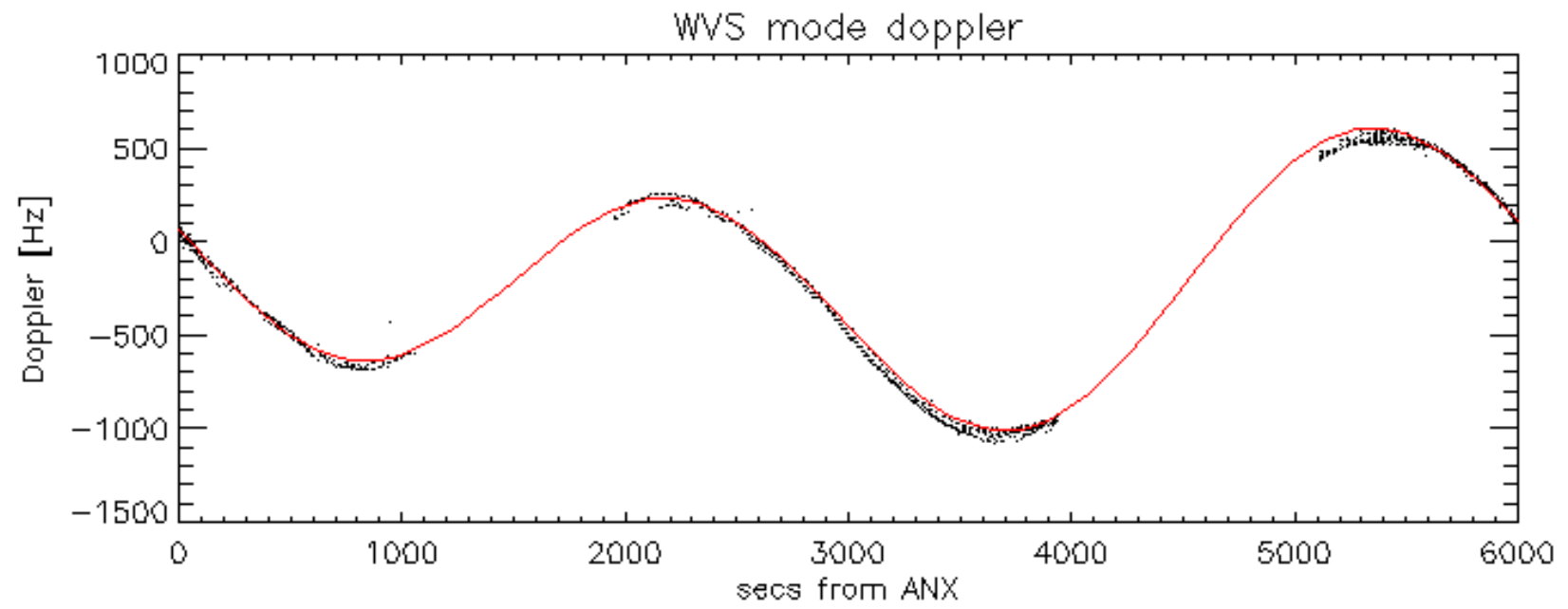


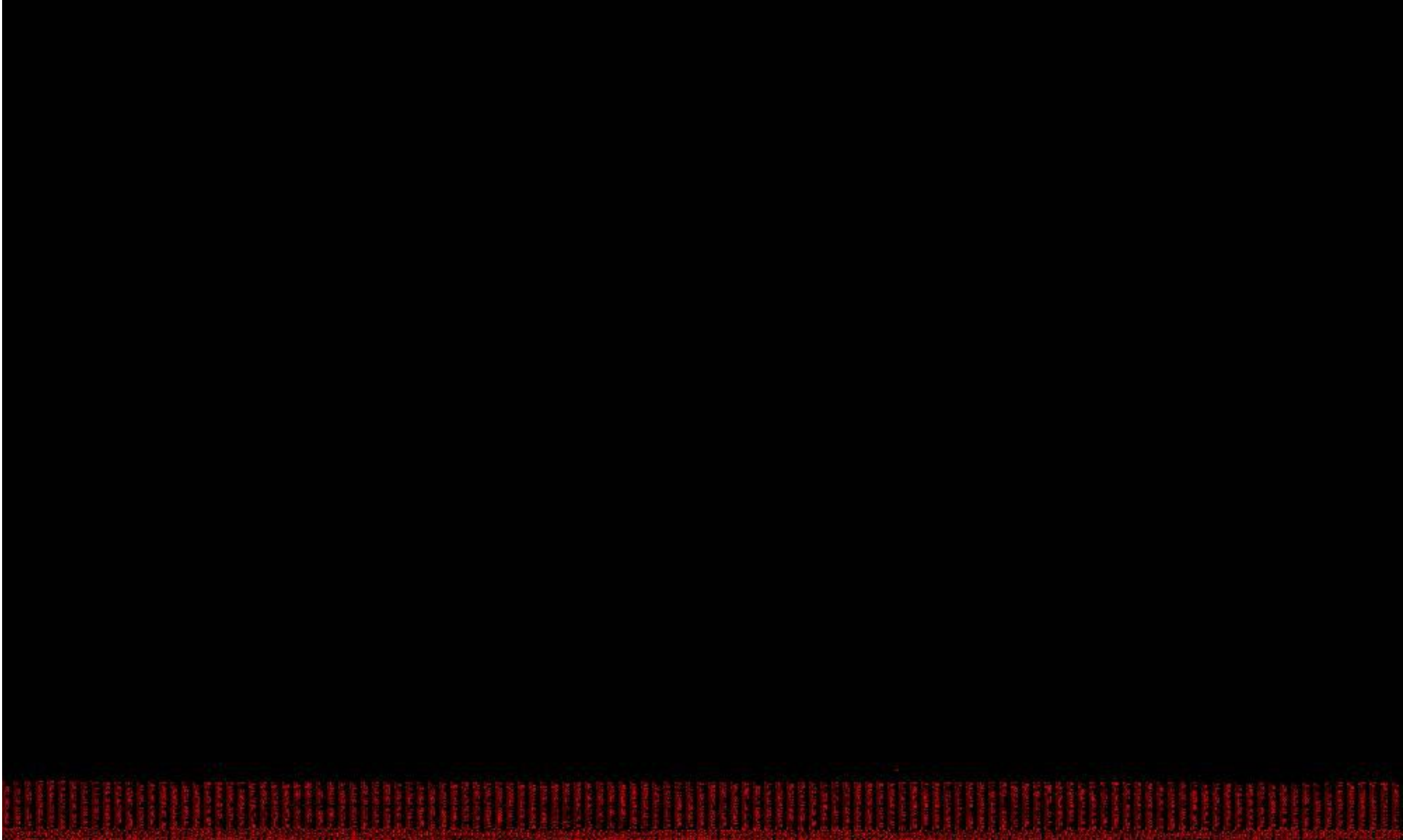
Doppler 'WVS' 'IS2' descending



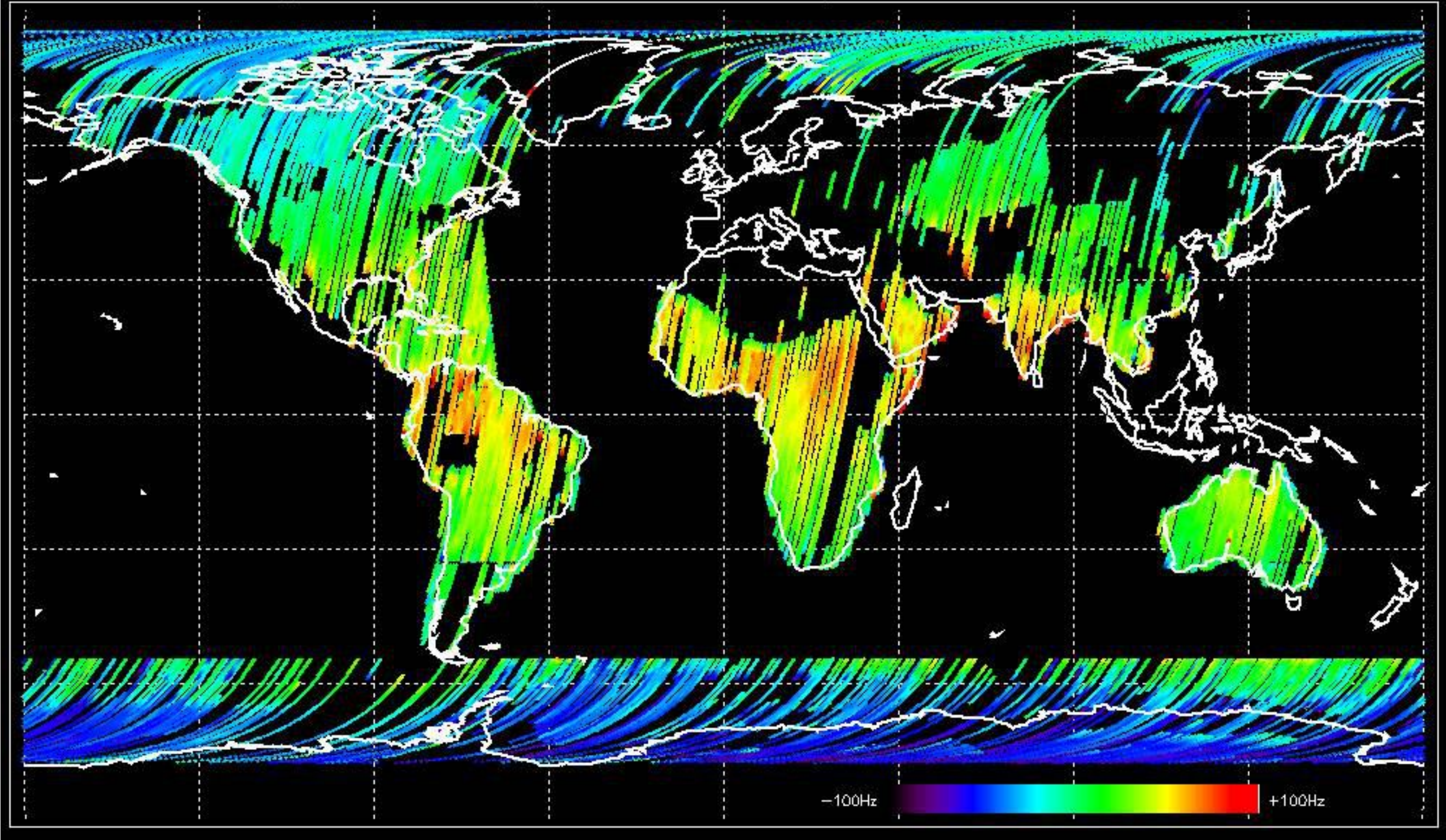
GM1 mode doppler



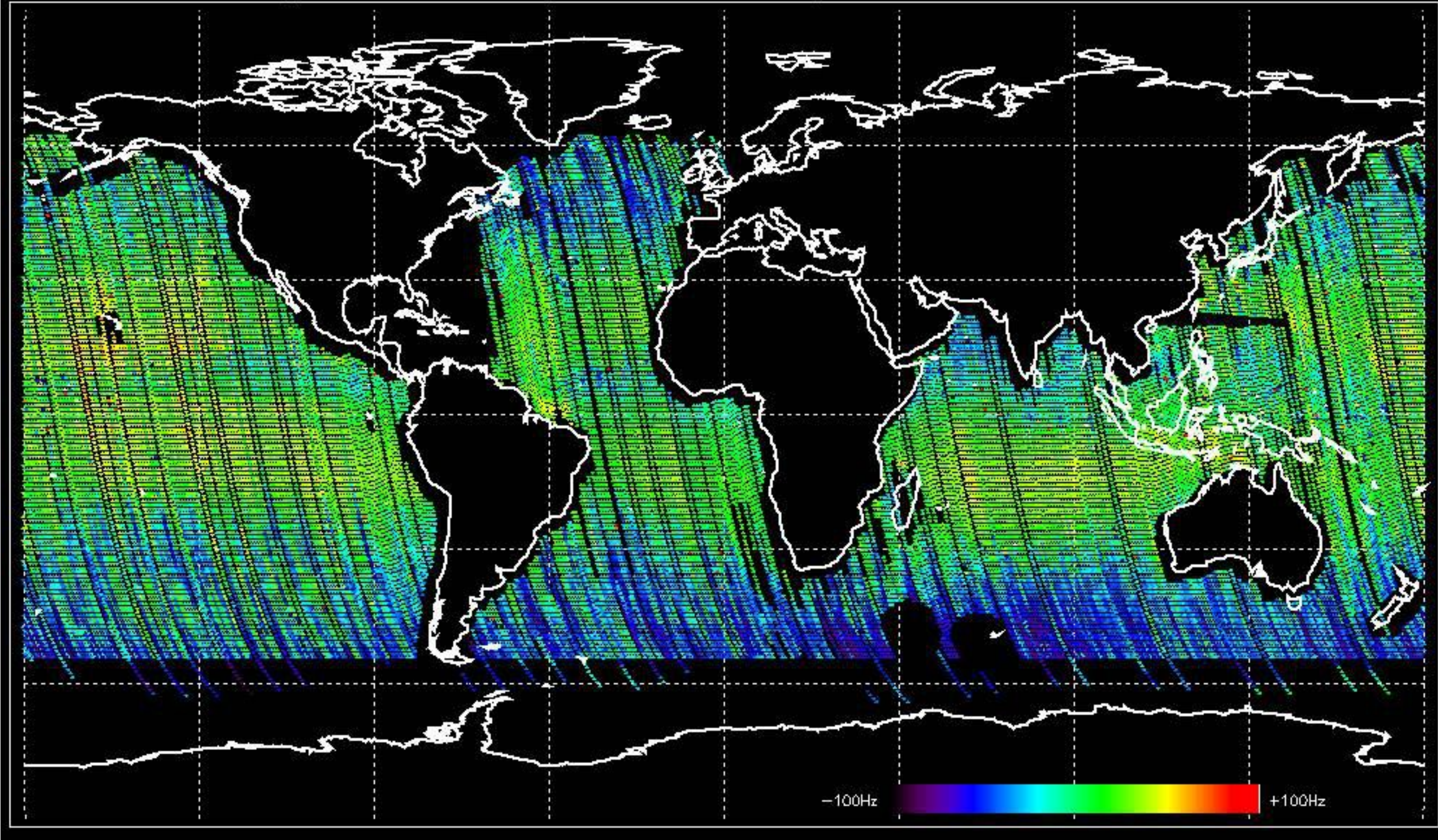




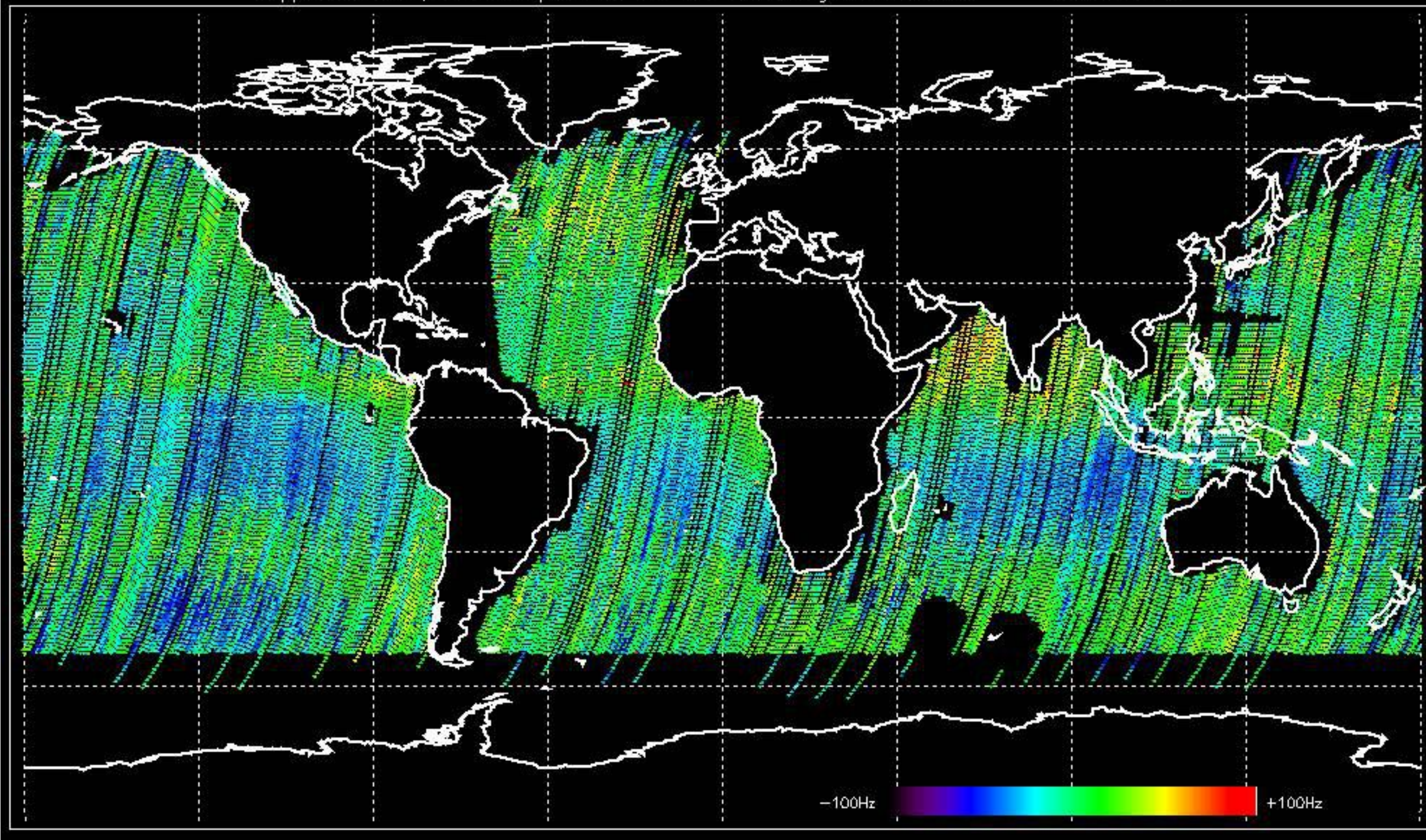
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -19.764061 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -29.404995 Hz

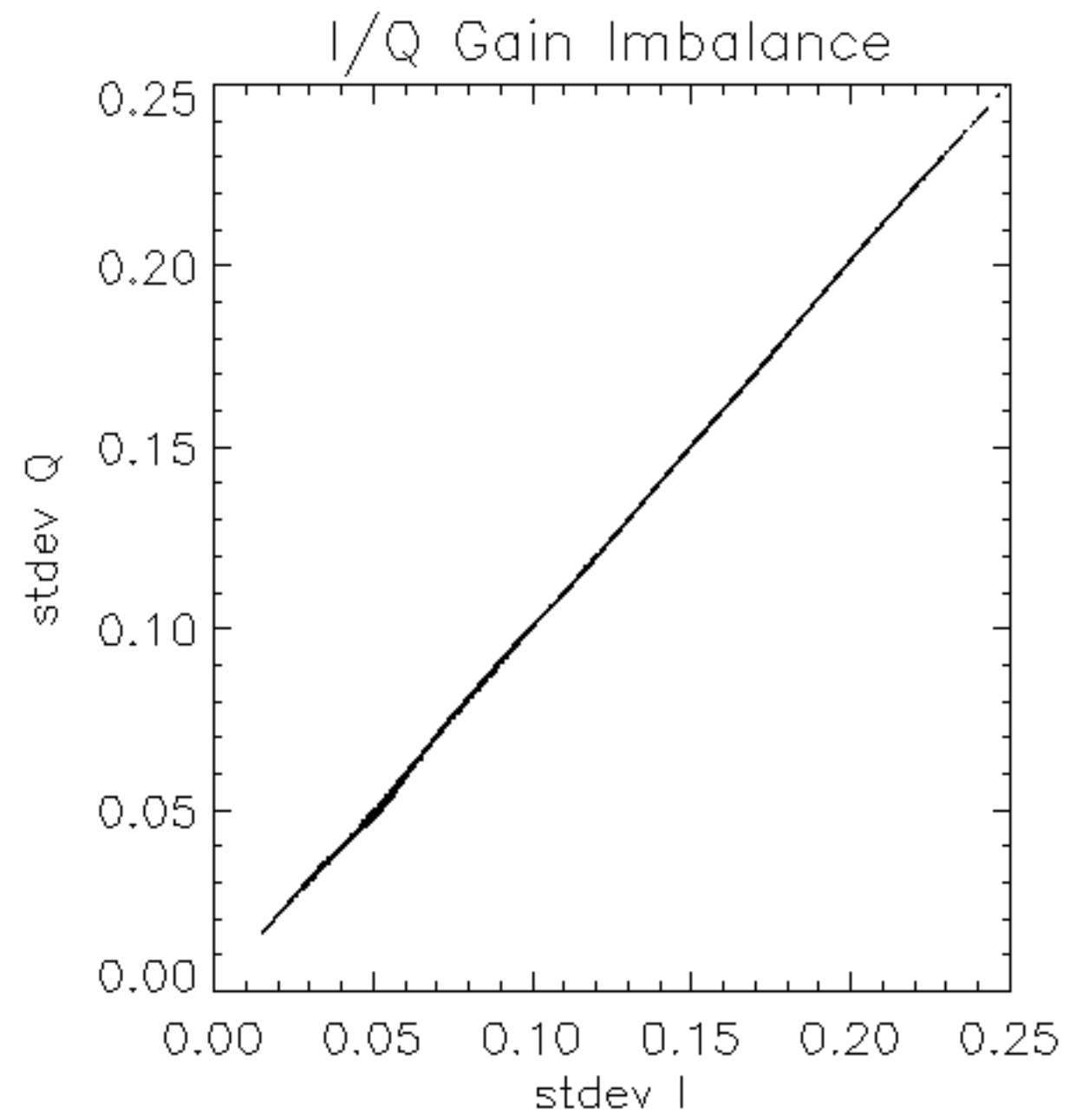


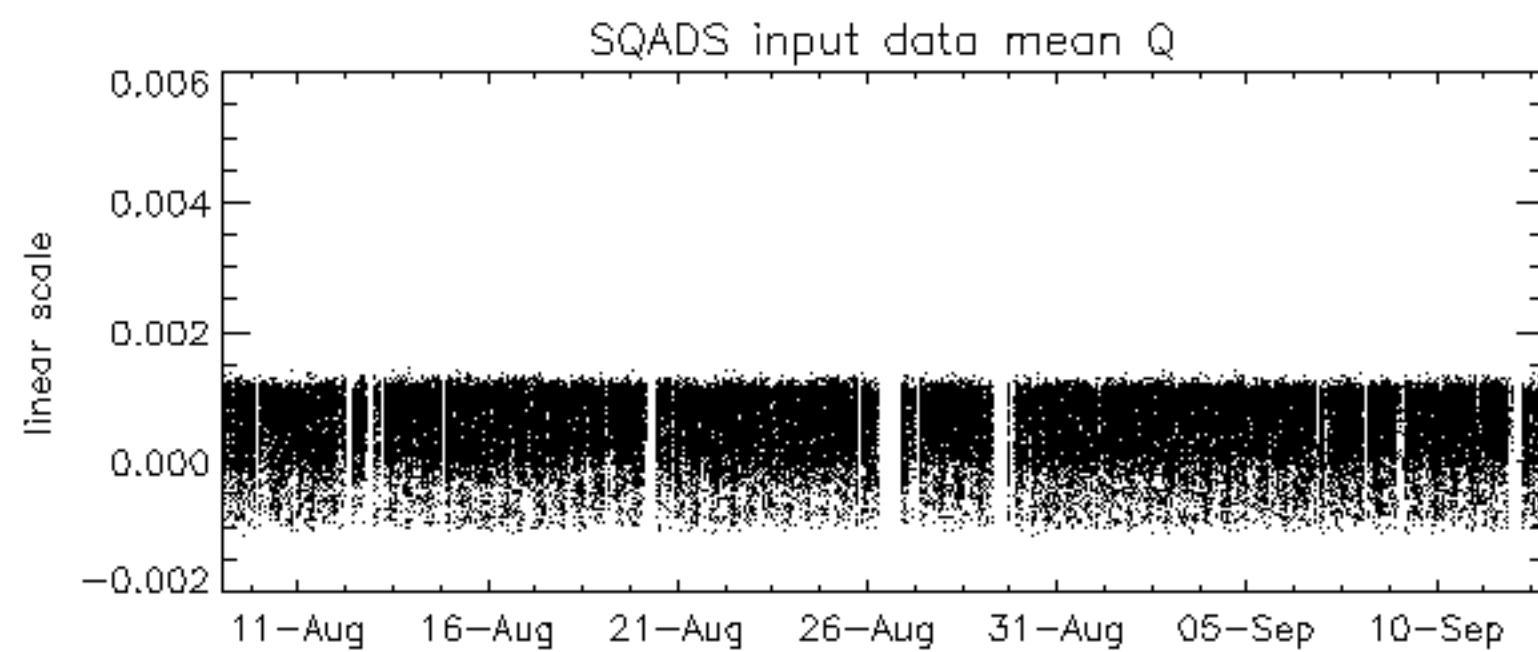
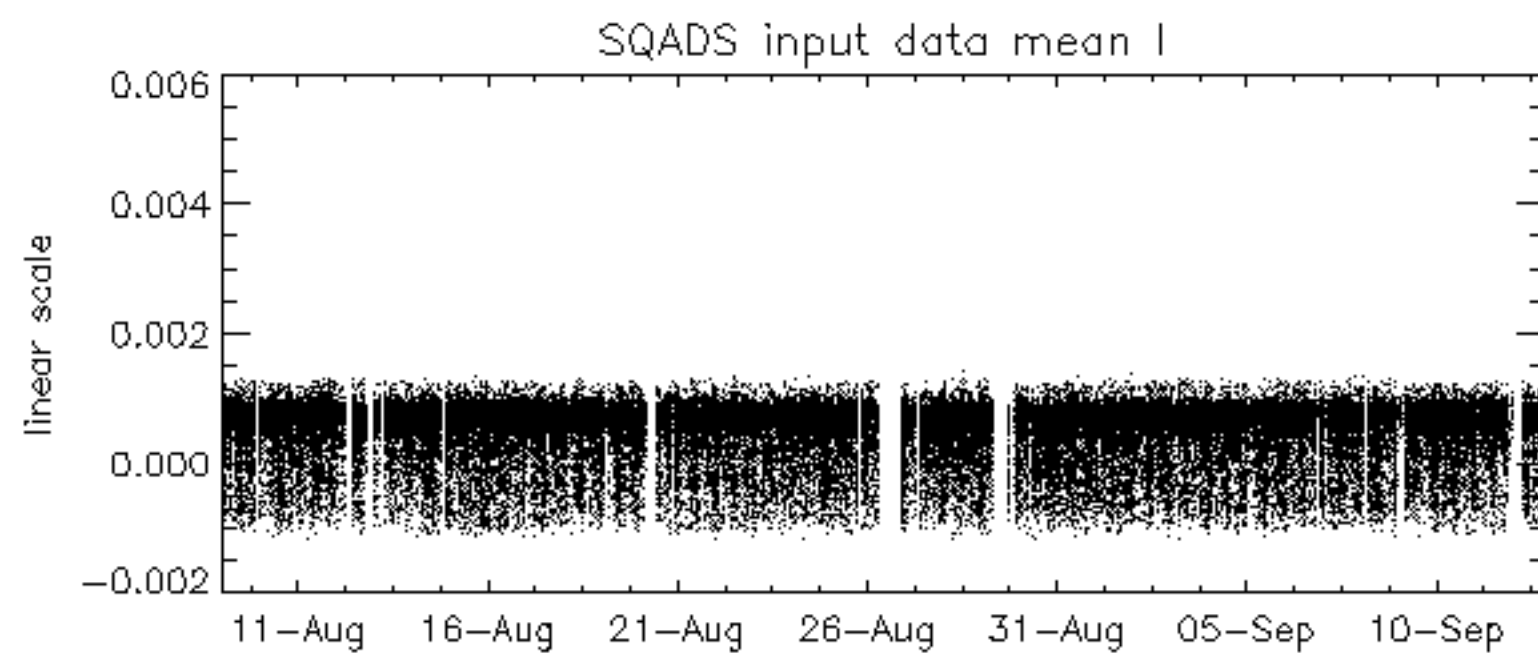
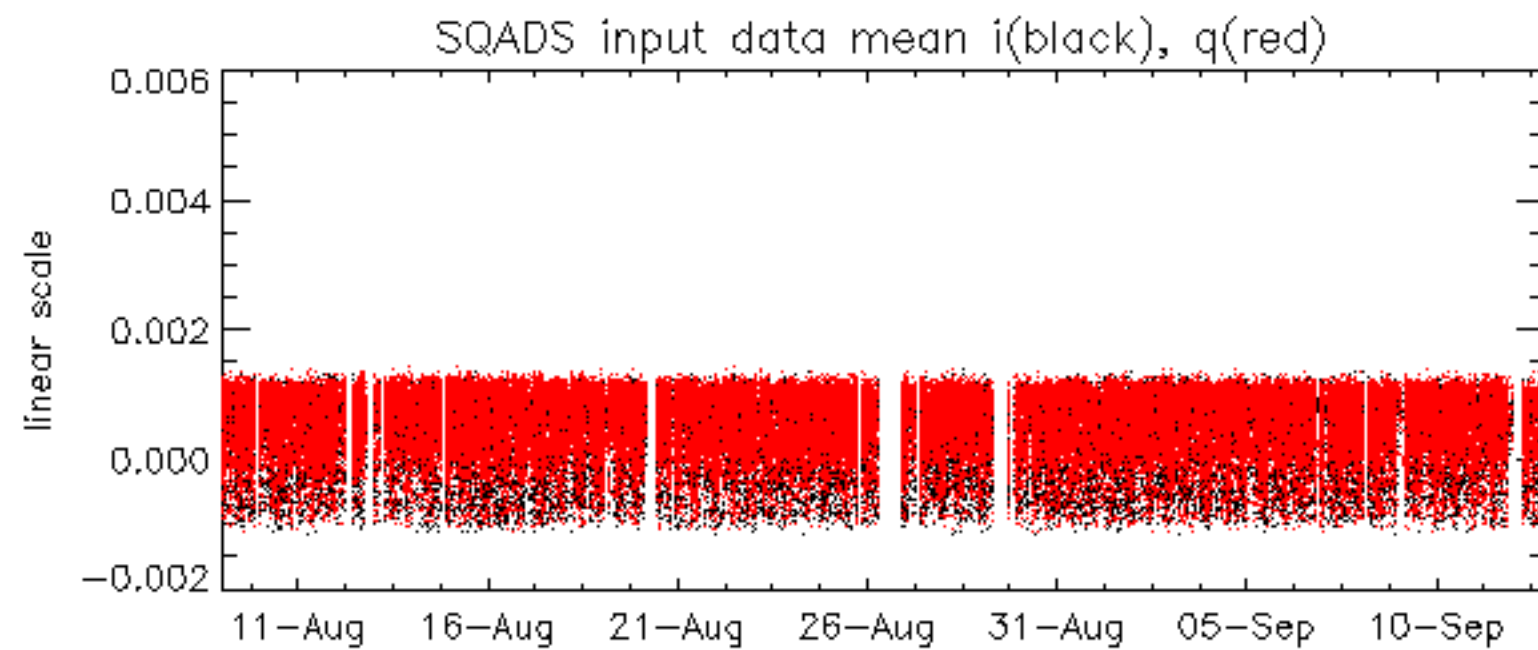
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -29.899096 Hz

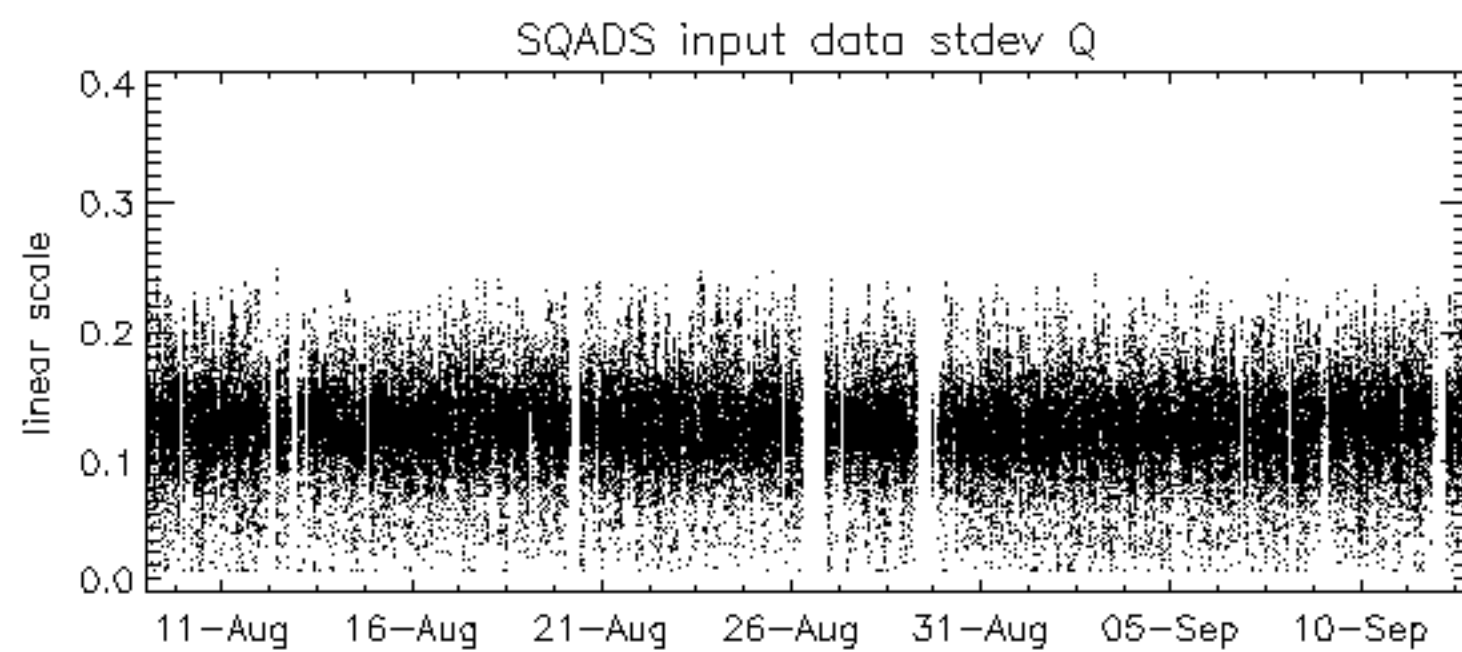
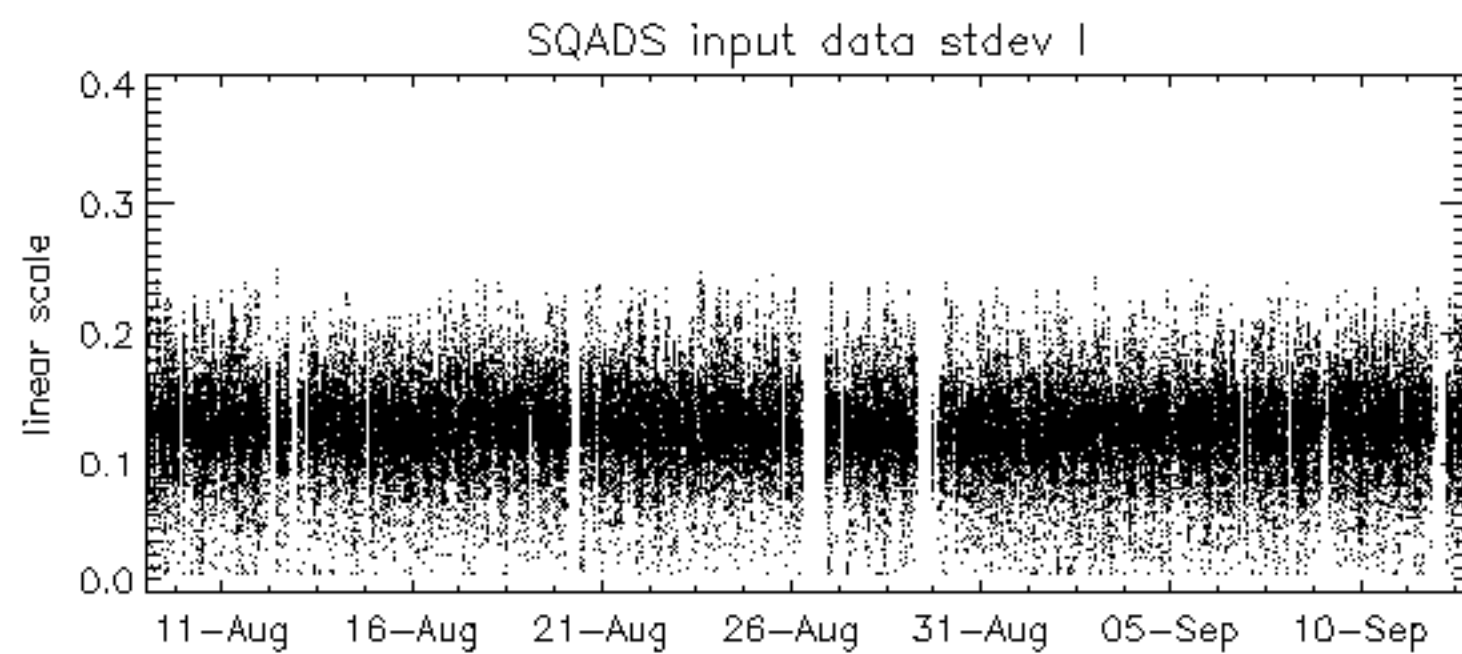
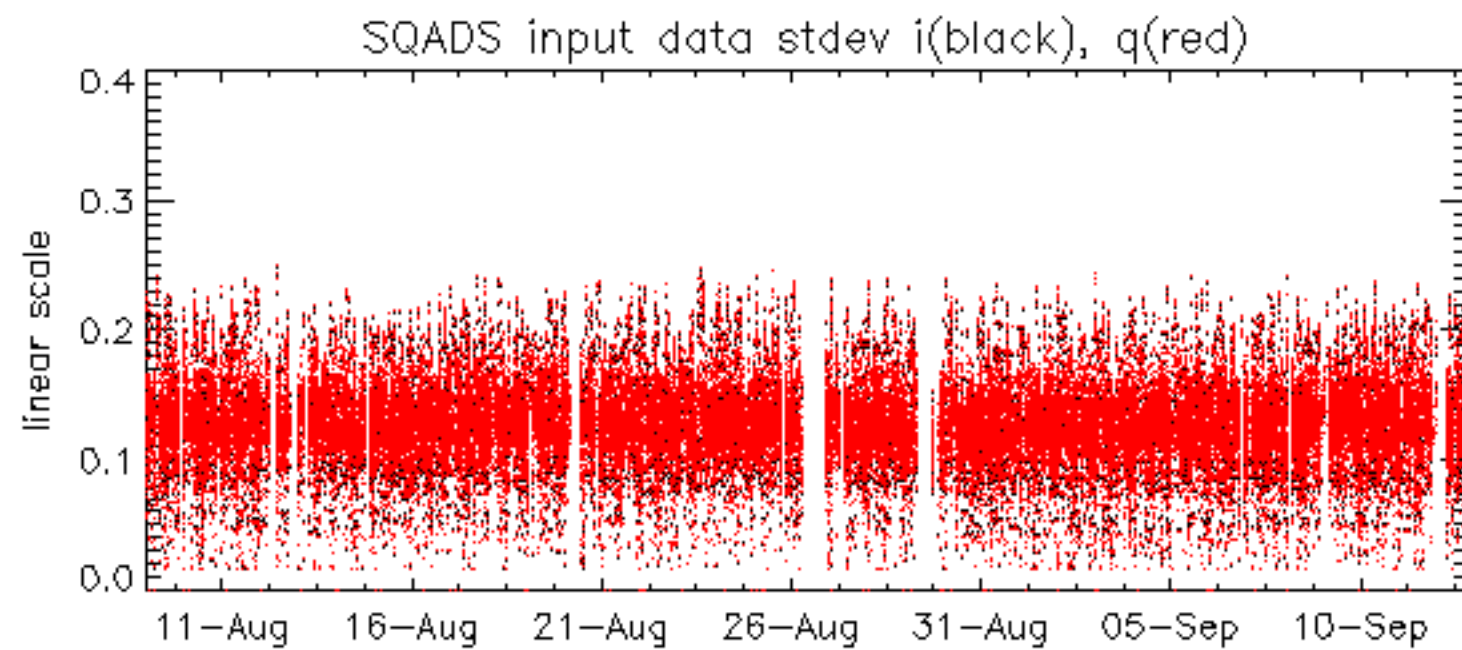


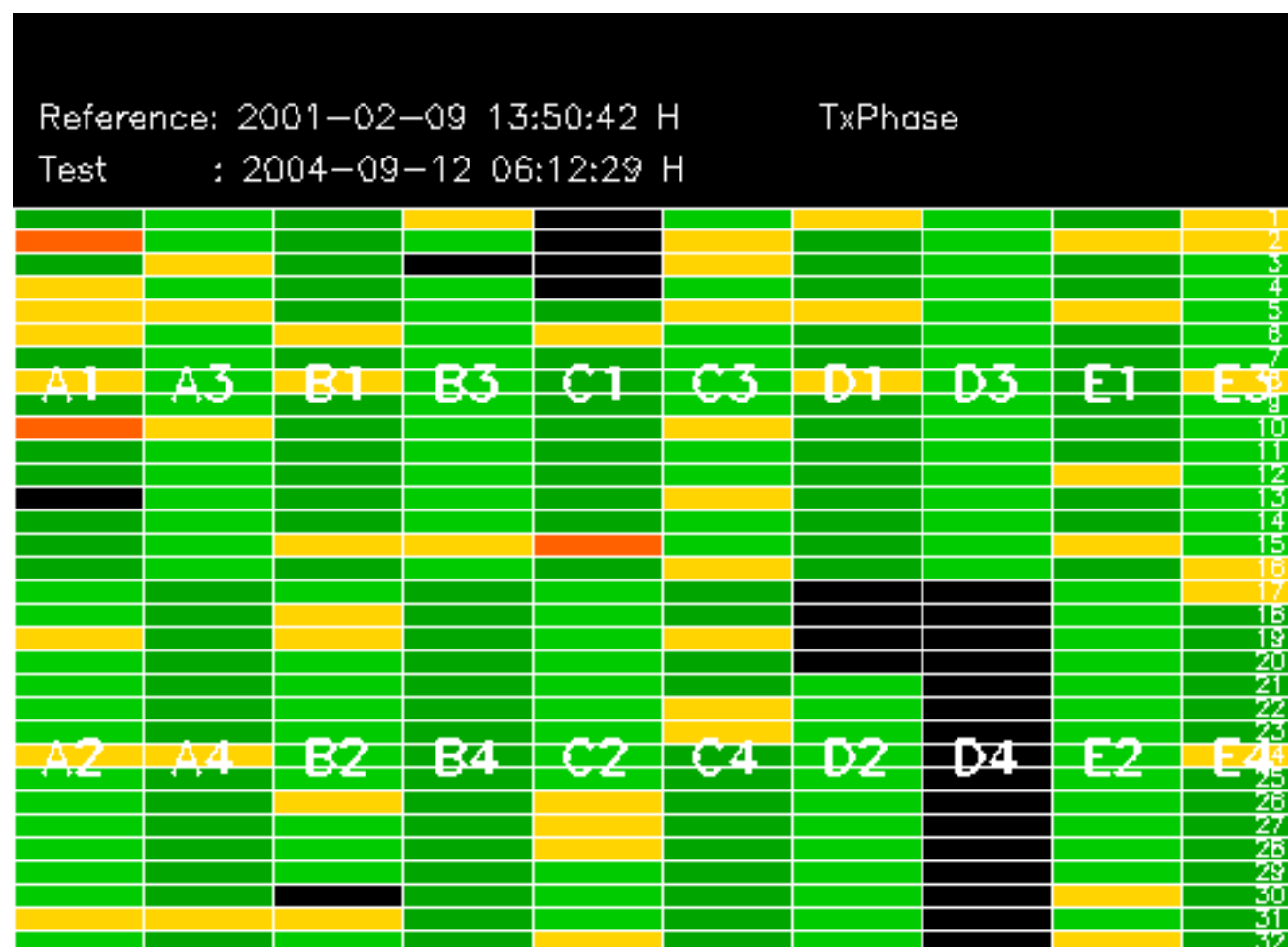
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No anomalies observed on available MS products:

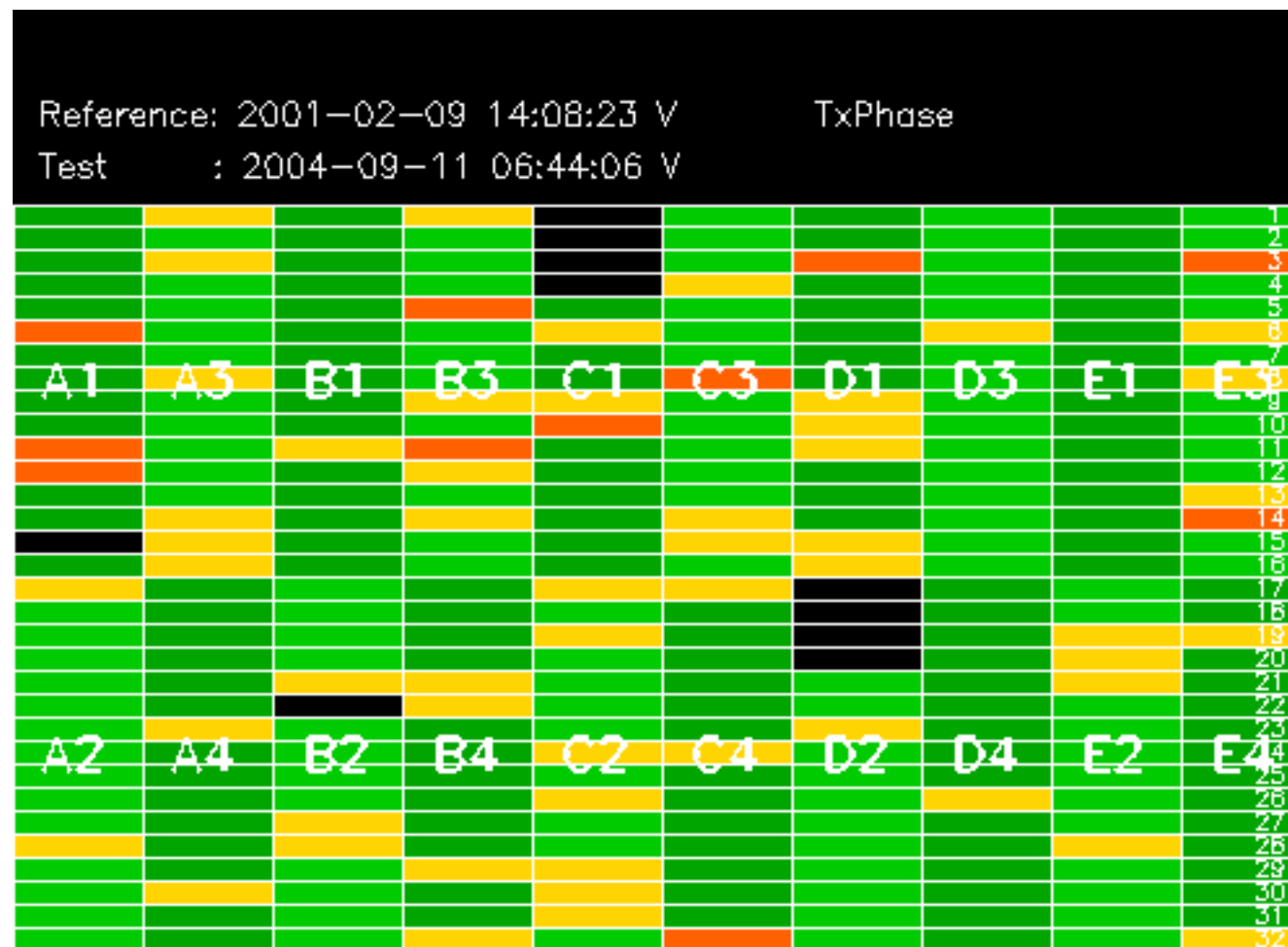
No anomalies observed.

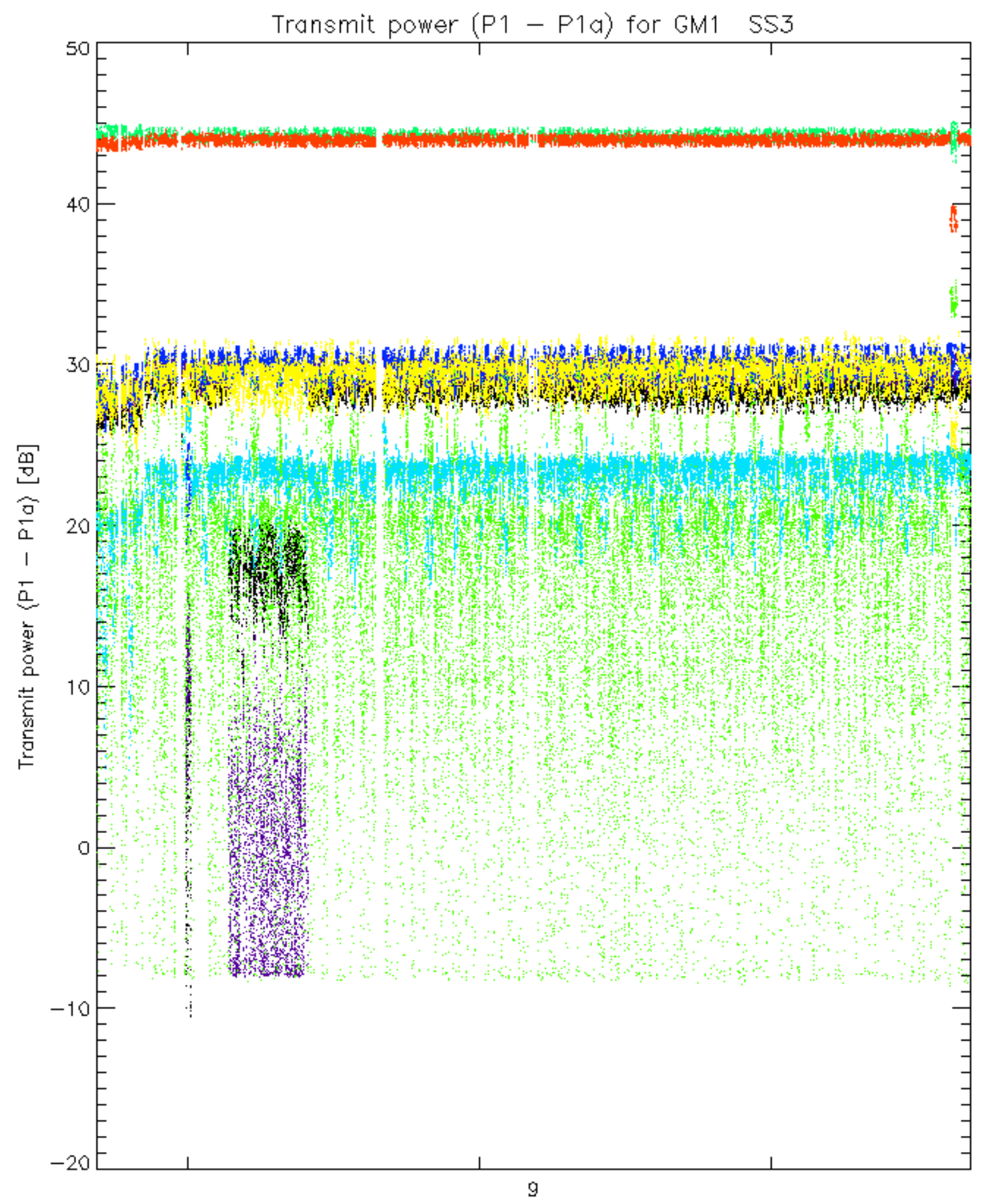




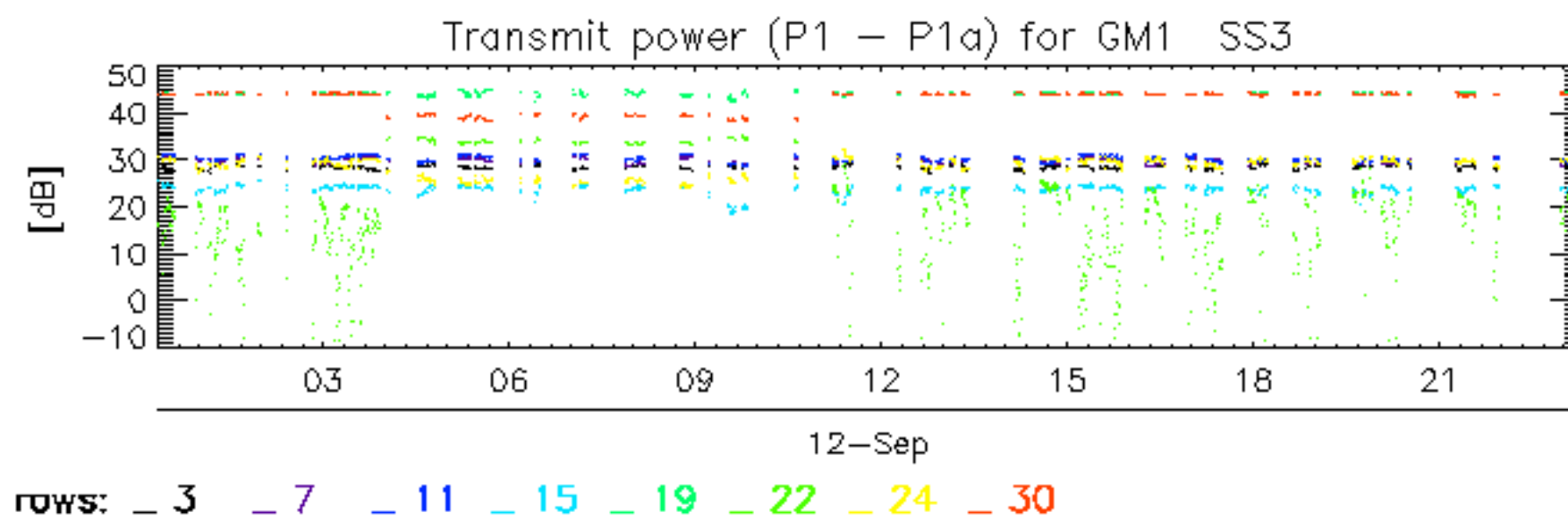


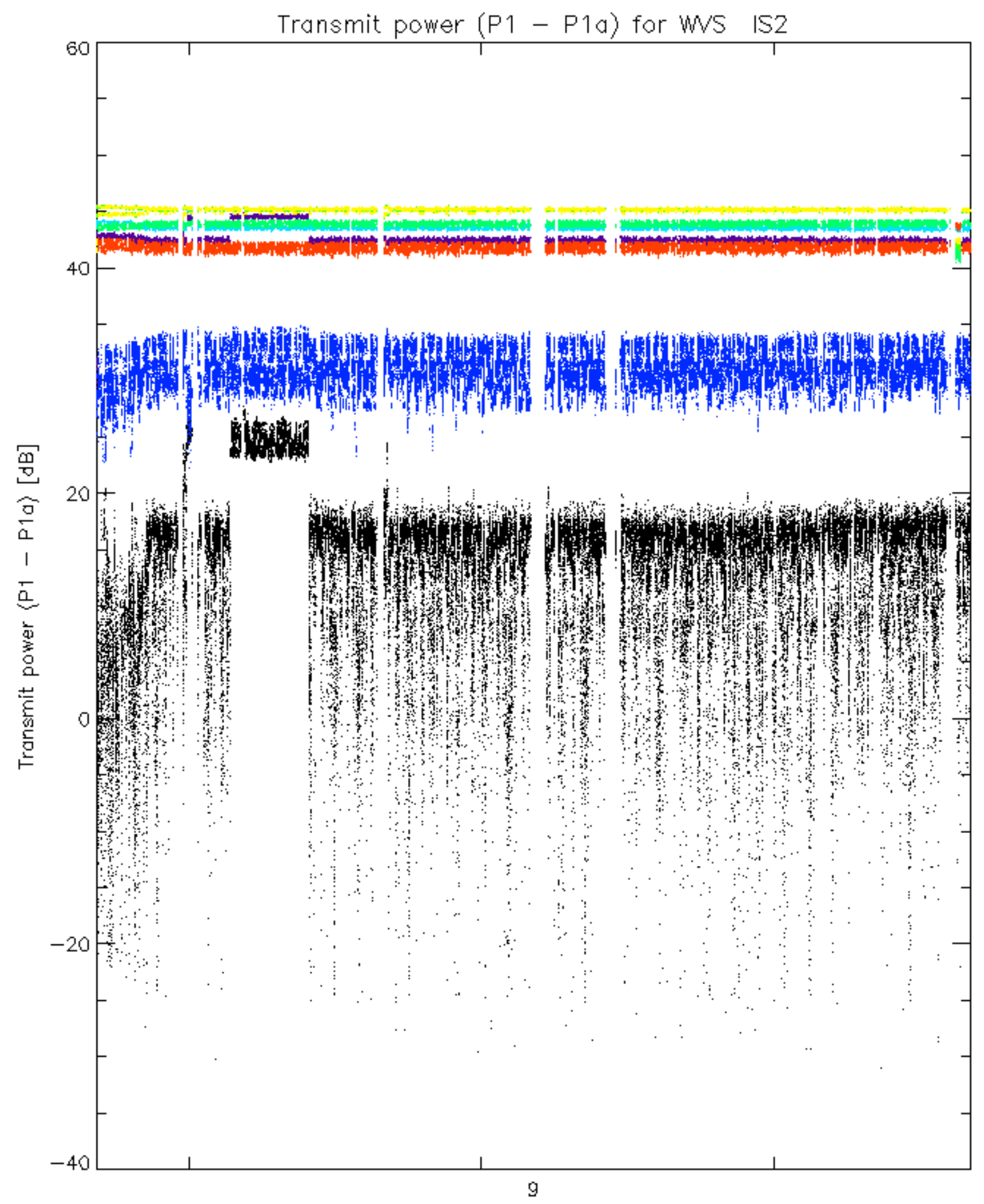


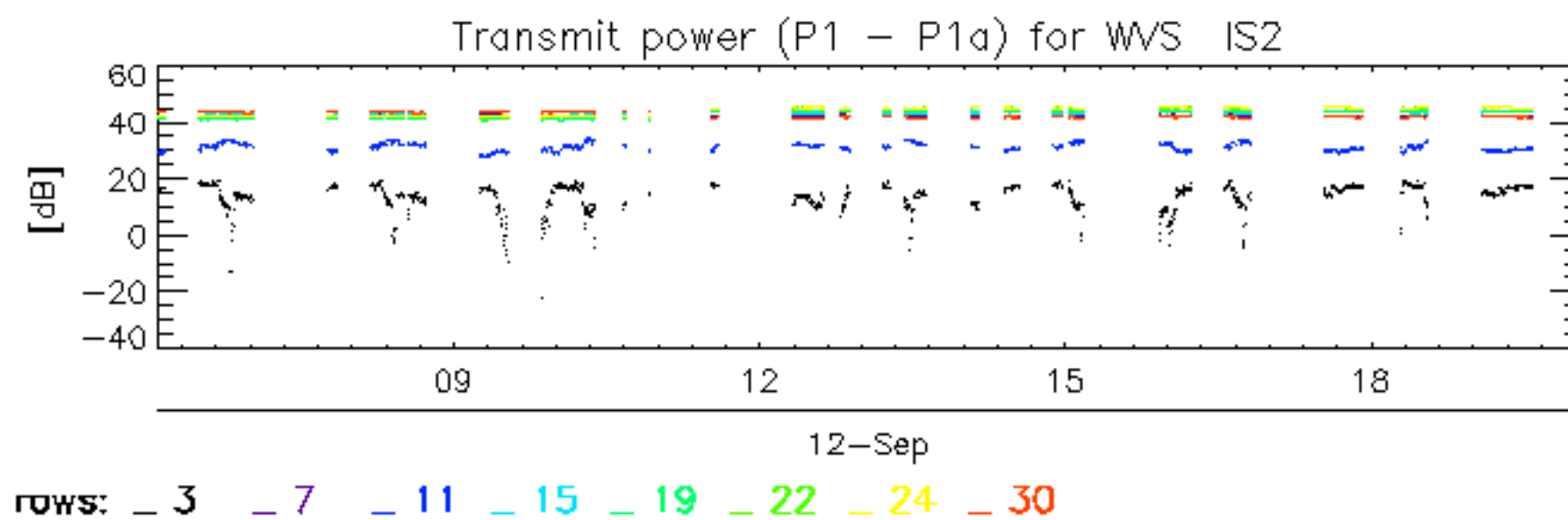




rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30







No unavailabilities during the reported period.