

PRELIMINARY REPORT OF 060309

last update on Thu Mar 9 16:27:22 GMT 2006

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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 - Auxiliary files

Summary of the auxiliary files used from 2006-03-08 00:00:00 to 2006-03-09 16:27:22

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	41	65	15	1	0
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	41	65	15	1	0
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	41	65	15	1	0
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	41	65	15	1	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	46	45	36	16	46
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	46	45	36	16	46
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	46	45	36	16	46
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	46	45	36	16	46

2.3 - Browse Visual Inspection

No anomalies observed on available browse products

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	20060309 100800
H	20060308 071825

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

4.1.2 - Evolution for GM1

Evolution of cal pulses for GM1
<input type="checkbox"/>
<input type="checkbox"/>

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	-4.002881	0.009691	-0.014589
7	P1	-3.002445	0.008760	-0.030847
11	P1	-4.069504	0.021013	0.057198
15	P1	-6.074316	0.022042	-0.044993
19	P1	-3.284102	0.006764	-0.040710
22	P1	-4.458986	0.015045	0.007630
26	P1	-4.207536	0.115893	0.038724
30	P1	-5.807058	0.164988	-0.088150
3	P1	-16.977627	0.250076	-0.073940
7	P1	-16.698130	0.102668	-0.118018
11	P1	-16.508379	0.328871	0.148199
15	P1	-13.057214	0.095167	0.037681
19	P1	-13.918287	0.056136	-0.080916
22	P1	-15.593167	0.478002	0.116025
26	P1	-15.765019	0.323317	-0.090793
30	P1	-16.479826	0.325007	0.021575

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.422346	0.087291	0.125844
7	P2	-22.392418	0.093636	0.056124
11	P2	-16.233170	0.100029	0.037960
15	P2	-7.167737	0.098573	0.008172
19	P2	-9.134929	0.090737	0.010011
22	P2	-17.933863	0.090502	-0.031841
26	P2	-16.207443	0.093952	-0.014333
30	P2	-19.641972	0.084117	-0.040636

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.193842	0.006295	-0.008288
7	P3	-8.193842	0.006295	-0.008288
11	P3	-8.193842	0.006295	-0.008288
15	P3	-8.193842	0.006295	-0.008288
19	P3	-8.193842	0.006295	-0.008288
22	P3	-8.193842	0.006295	-0.008288
26	P3	-8.193842	0.006295	-0.008288
30	P3	-8.193842	0.006295	-0.008289

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	-3.865914	4.124176	0.084348
7	P1	-2.865068	4.327530	0.139092
11	P1	-3.049543	4.355182	0.098414
15	P1	-3.694411	4.316518	0.101459
19	P1	-3.492621	4.187204	0.064057
22	P1	-5.282534	3.843540	0.067810
26	P1	-5.998686	4.079023	0.186217
30	P1	-5.325565	3.885879	0.063378
3	P1	-11.662784	2.700793	0.099059
7	P1	-10.056844	2.989717	0.075290
11	P1	-10.347676	2.977643	-0.005943
15	P1	-10.889830	2.973092	0.021285
19	P1	-15.485641	2.187688	-0.007680
22	P1	-20.324522	2.734253	0.057390

26	P1	-16.345802	2.779255	0.130867
30	P1	-18.369341	1.975750	-0.009046

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.123768	2.841616	0.133424
7	P2	-22.553381	3.311861	-0.006354
11	P2	-11.296484	3.089615	0.113997
15	P2	-4.941751	4.015600	0.081645
19	P2	-6.947802	3.614653	0.082772
22	P2	-8.232864	3.391728	0.041319
26	P2	-23.866405	3.405321	-0.108676
30	P2	-22.022602	3.219807	-0.064630

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.024422	0.002643	-0.004828
7	P3	-8.024369	0.002643	-0.004682
11	P3	-8.024453	0.002653	-0.004858
15	P3	-8.024538	0.002647	-0.005195
19	P3	-8.024428	0.002662	-0.004391
22	P3	-8.024548	0.002641	-0.004963
26	P3	-8.024517	0.002648	-0.004543
30	P3	-8.024391	0.002644	-0.004607

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	0.000553527
	stdev	1.76721e-07
MEAN Q	mean	0.000512953
	stdev	2.21711e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.138020
	stdev	0.00119126
STDEV Q	mean	0.138381
	stdev	0.00120915



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006030[789]

The assumptions 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_1PNPDE20060307_003803_000000502045_00403_20998_5624.N1	1	0
ASA_IMM_1PNPDE20060307_115630_000002682045_00410_21005_5678.N1	1	0
ASA_IMM_1PNPDE20060309_003426_000001152045_00431_21026_0116.N1	1	0
ASA_IMM_1PNPDE20060309_023016_000000742045_00433_21028_0141.N1	1	0
ASA_WSM_1PNPDE20060307_164740_000001842045_00413_21008_0007.N1	0	8



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

7.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler

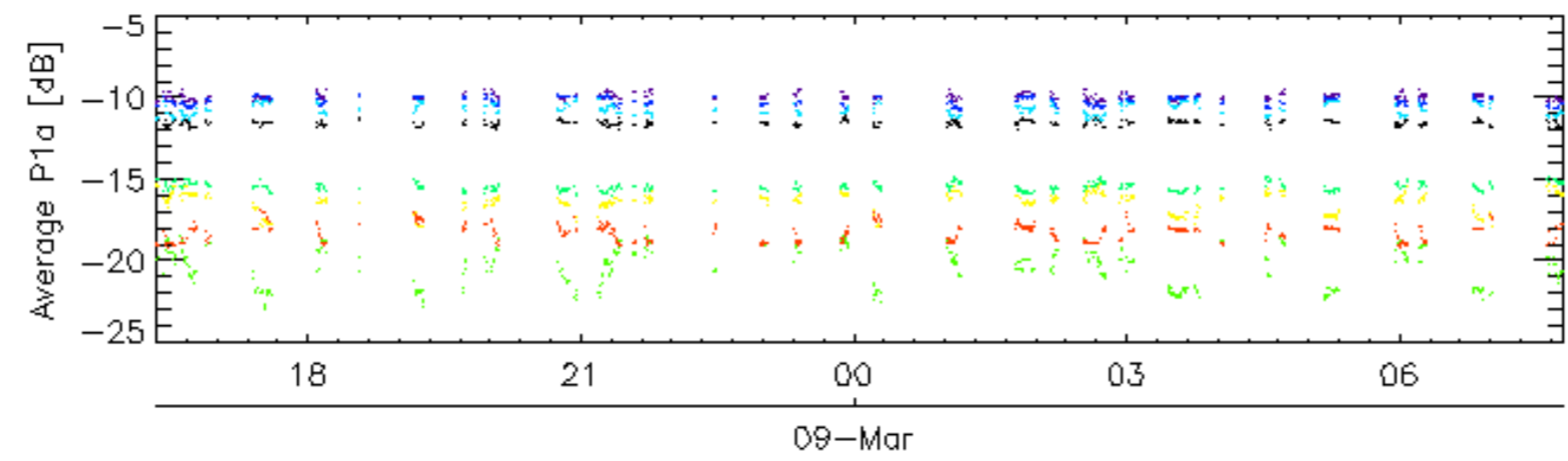
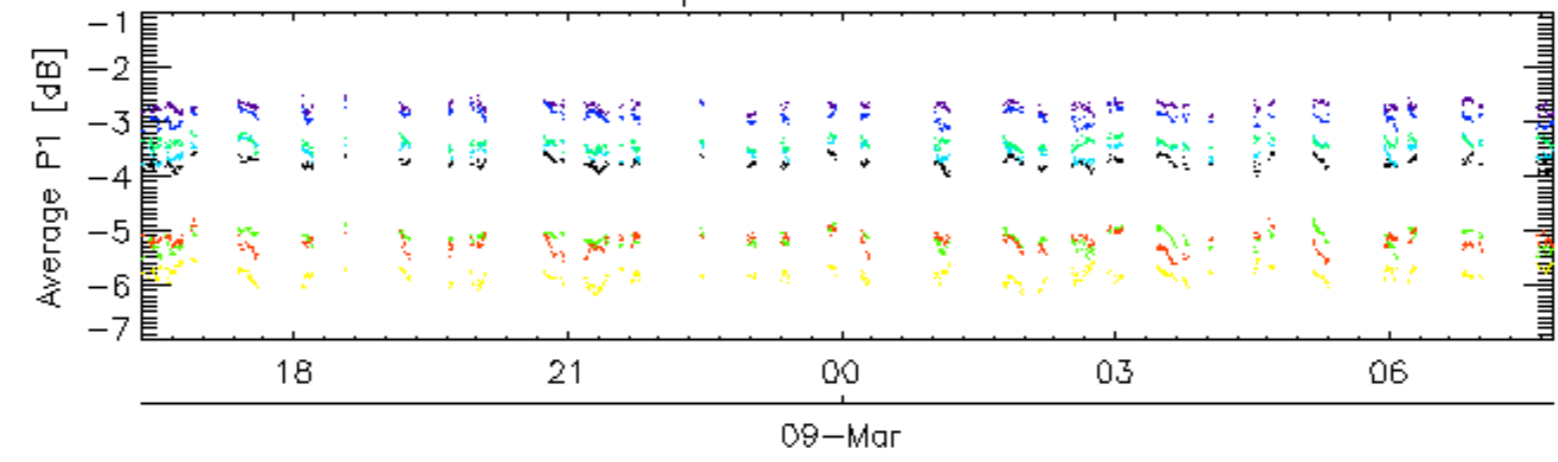
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	Ascending
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	Descending

7.6 - Doppler evolution versus ANX for GM1

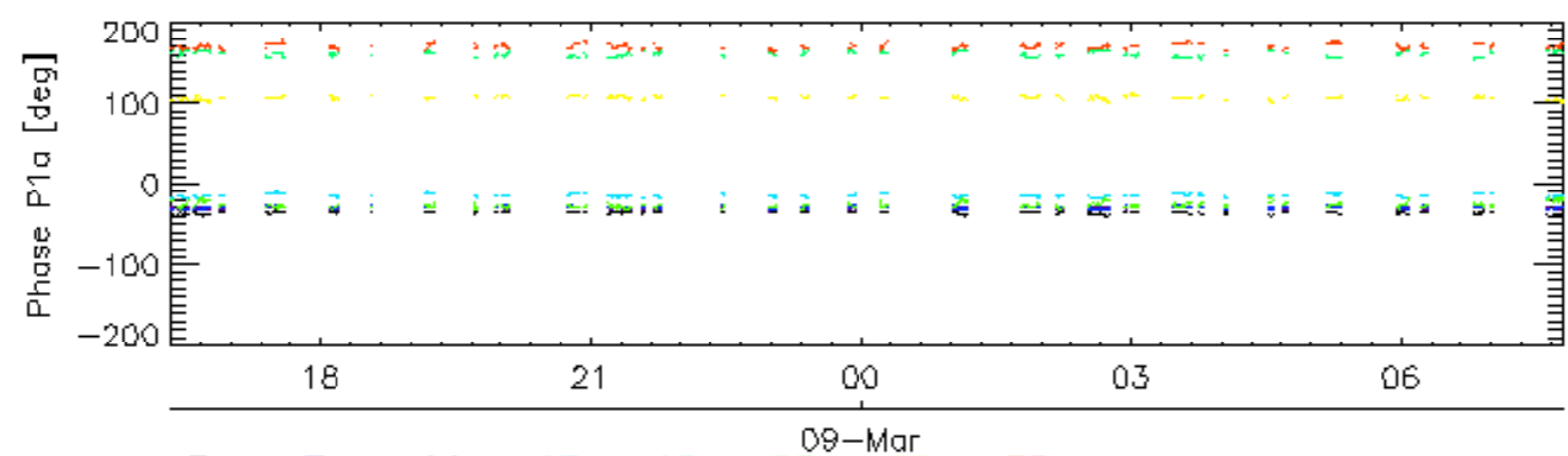
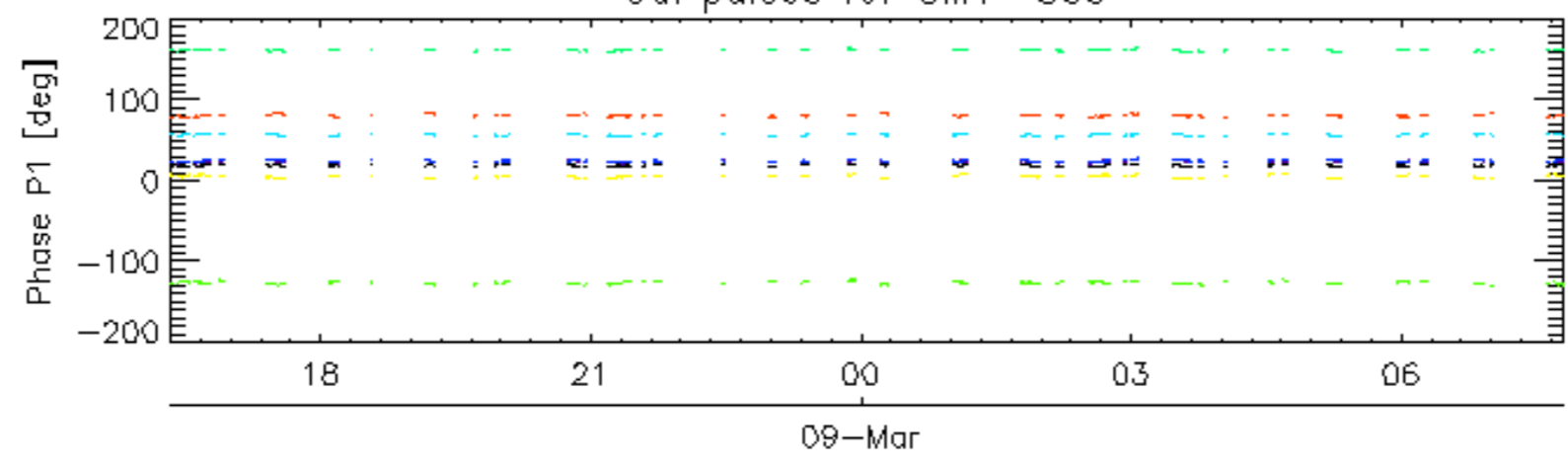
Evolution Doppler error versus ANX

<input type="checkbox"/>	
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Cal pulses for GM1 SS3

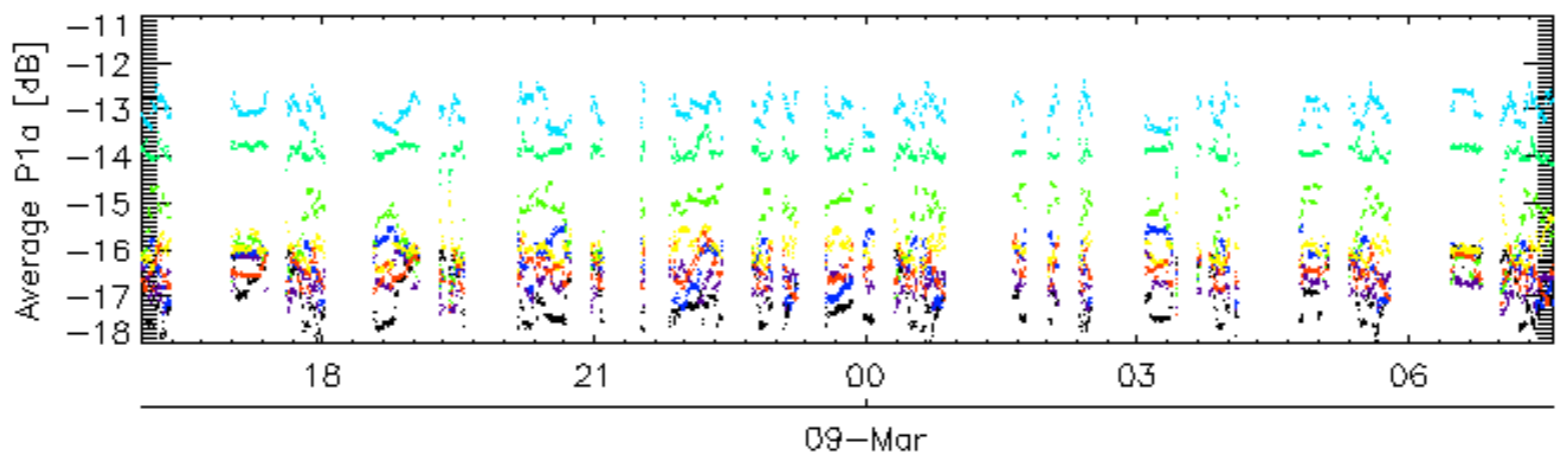
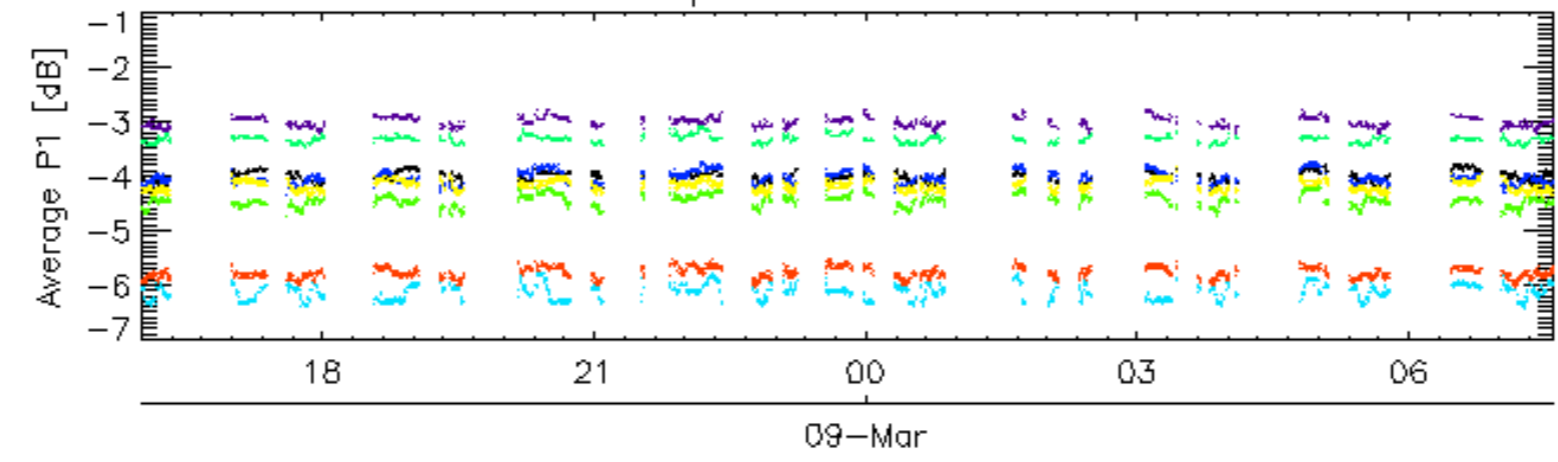


Cal pulses for GM1 SS3

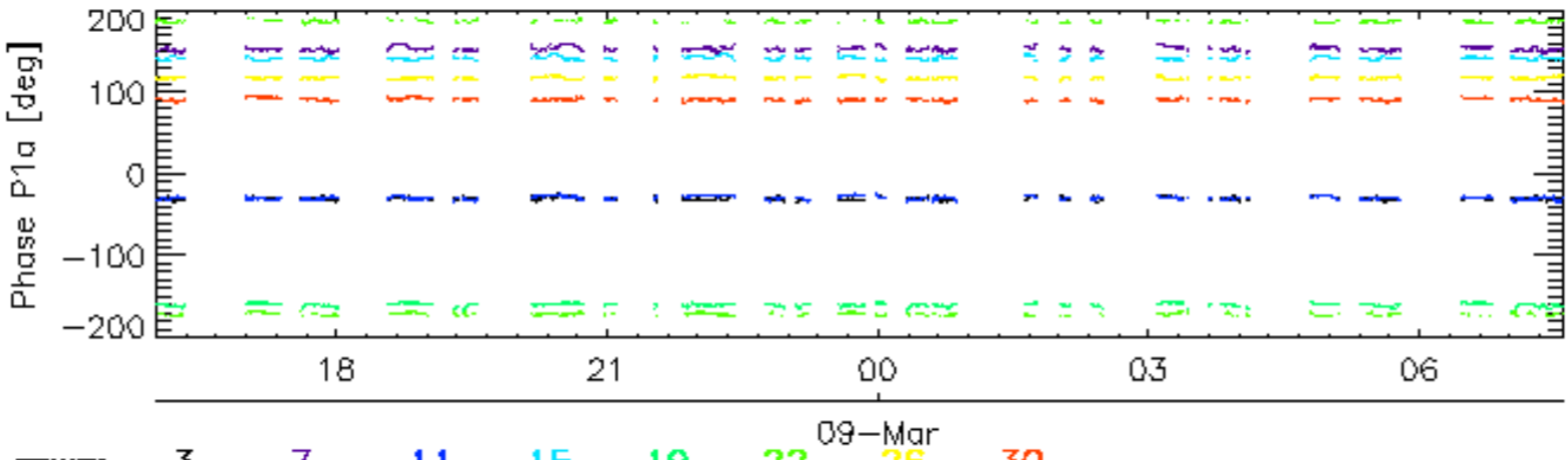
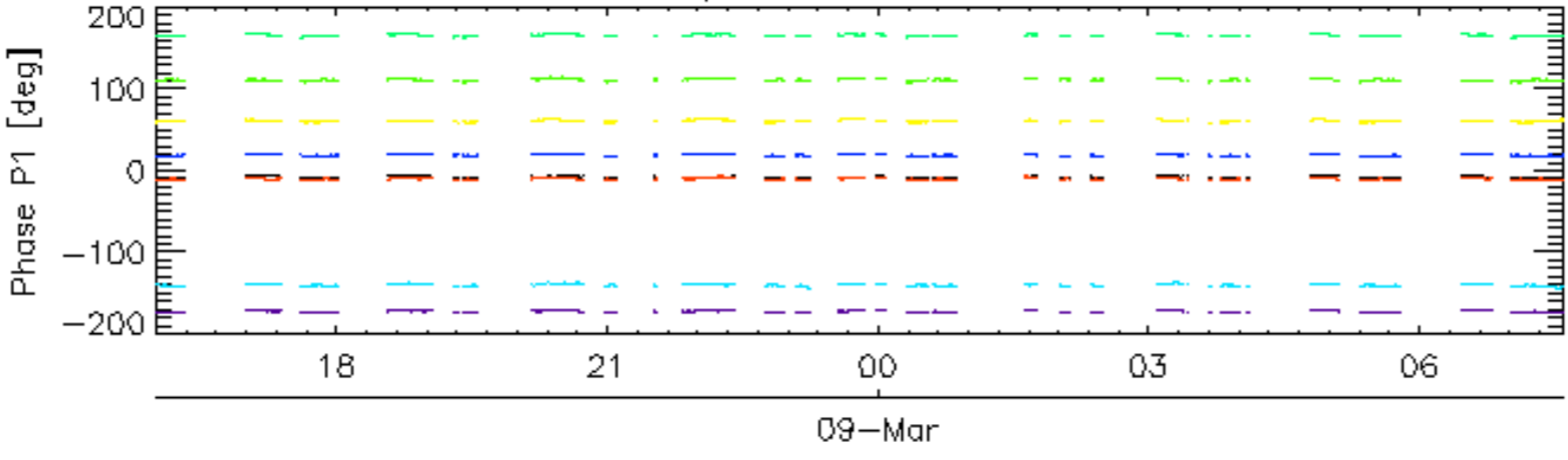


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

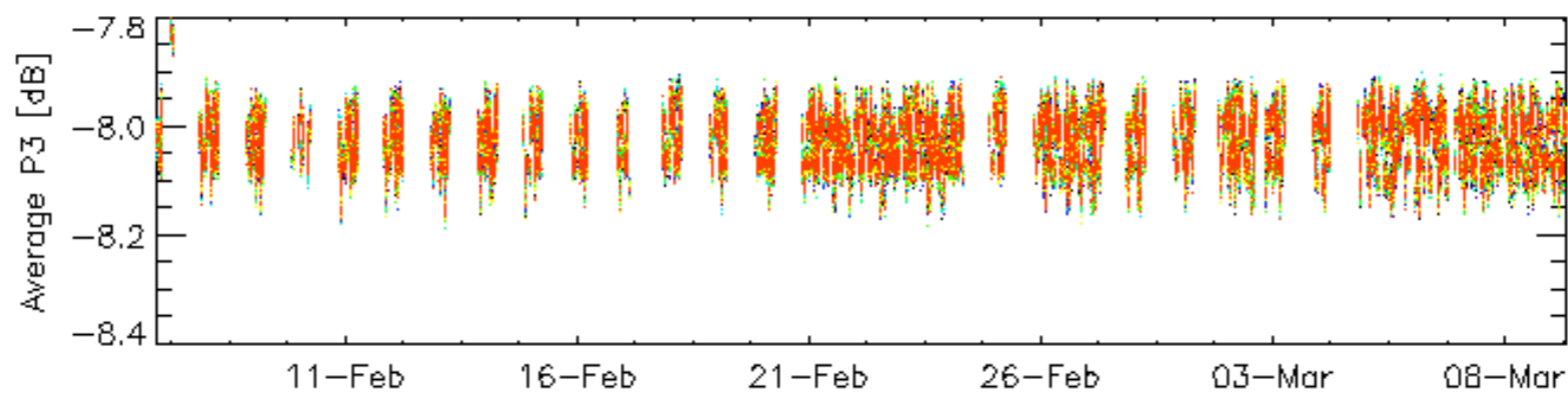
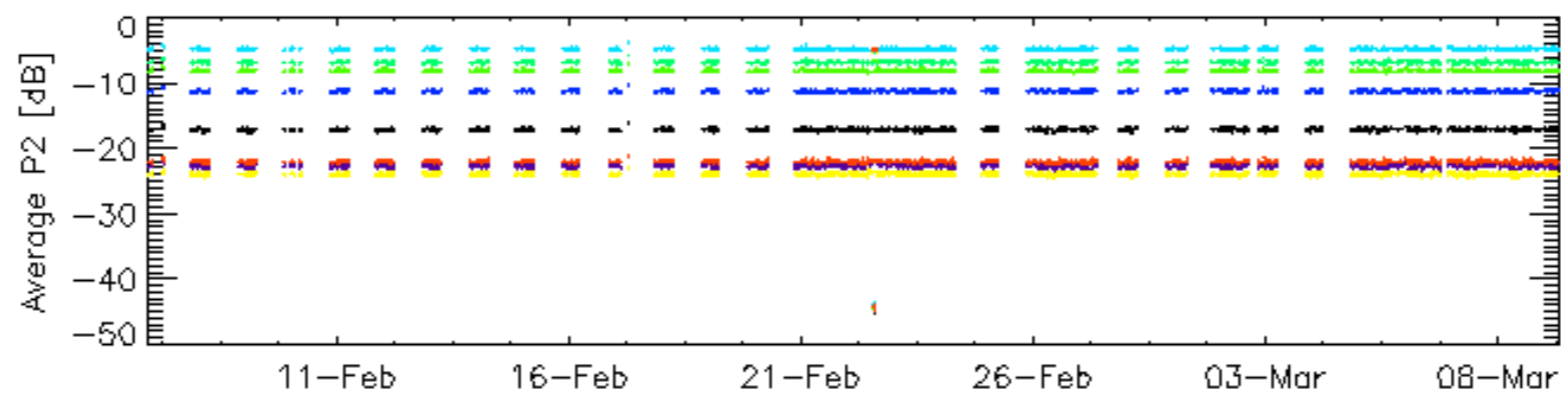
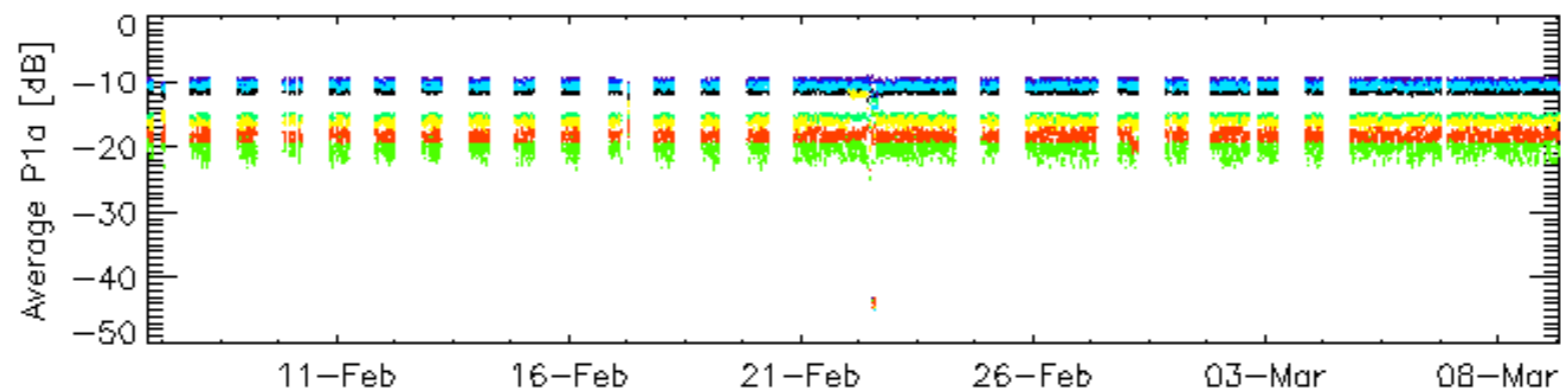
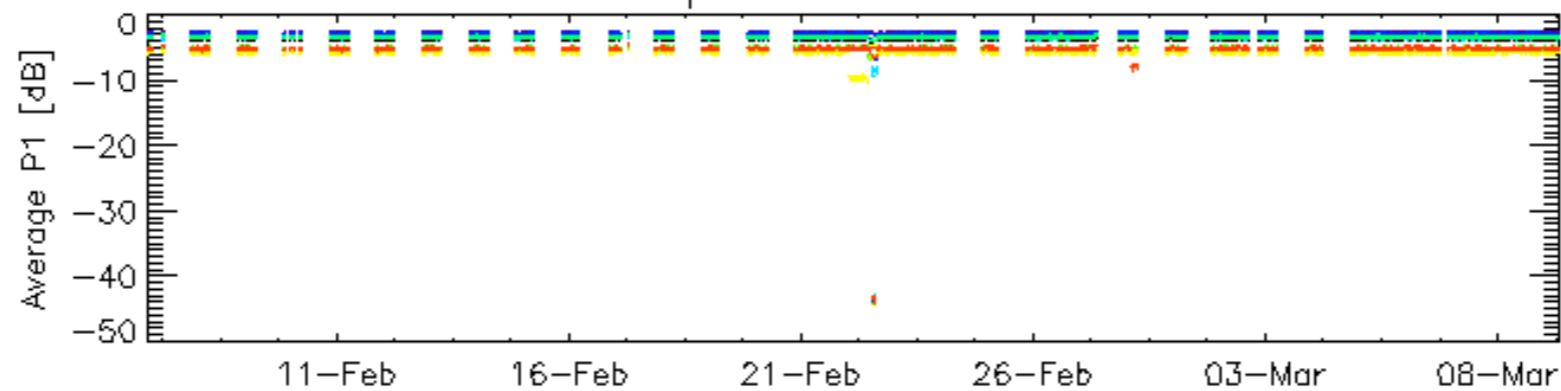


Cal pulses for WVS IS2



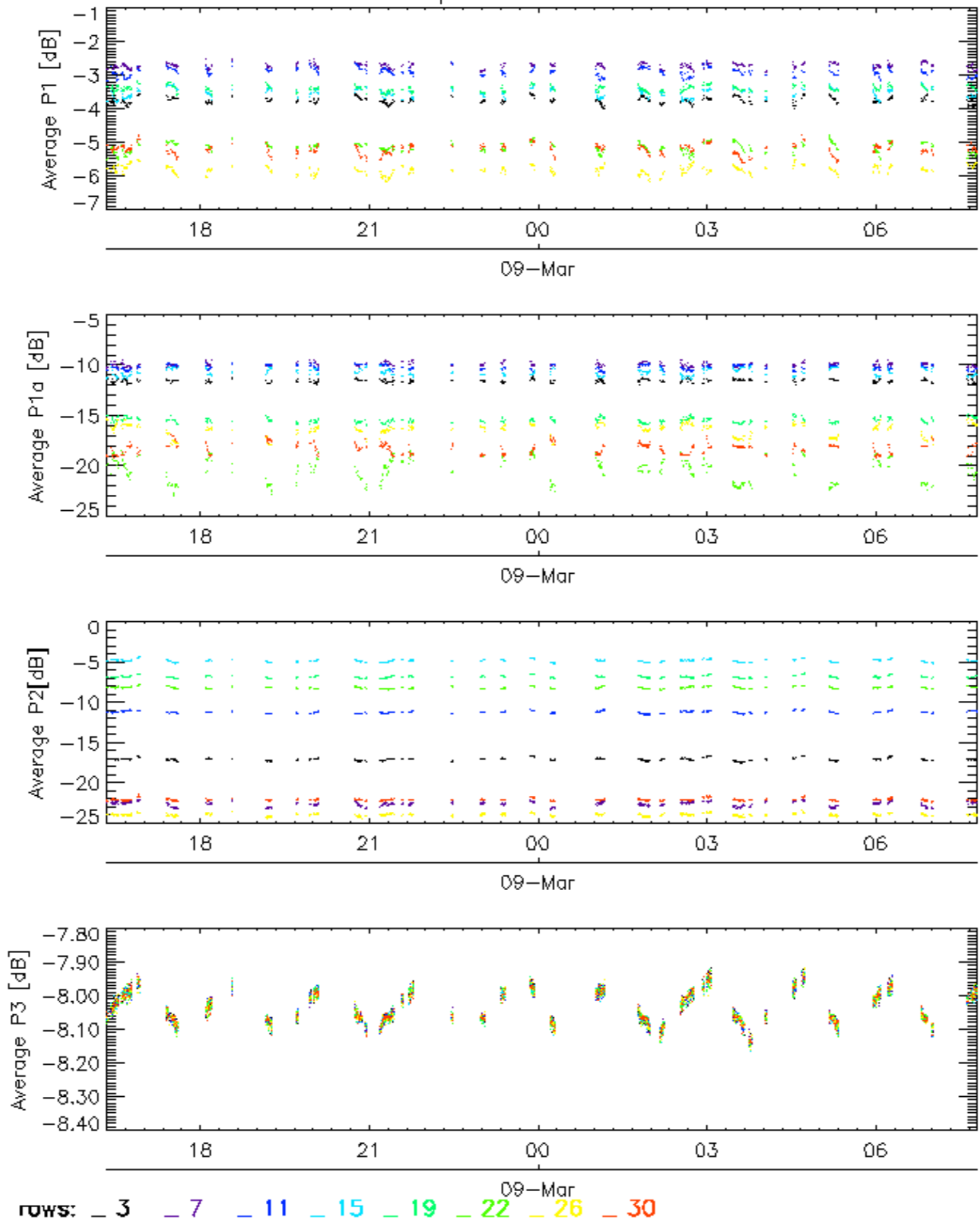
rows: - 3 - 7 - 11 - 15 - 19 - 22 - 26 - 30

Cal pulses for GM1 SS3

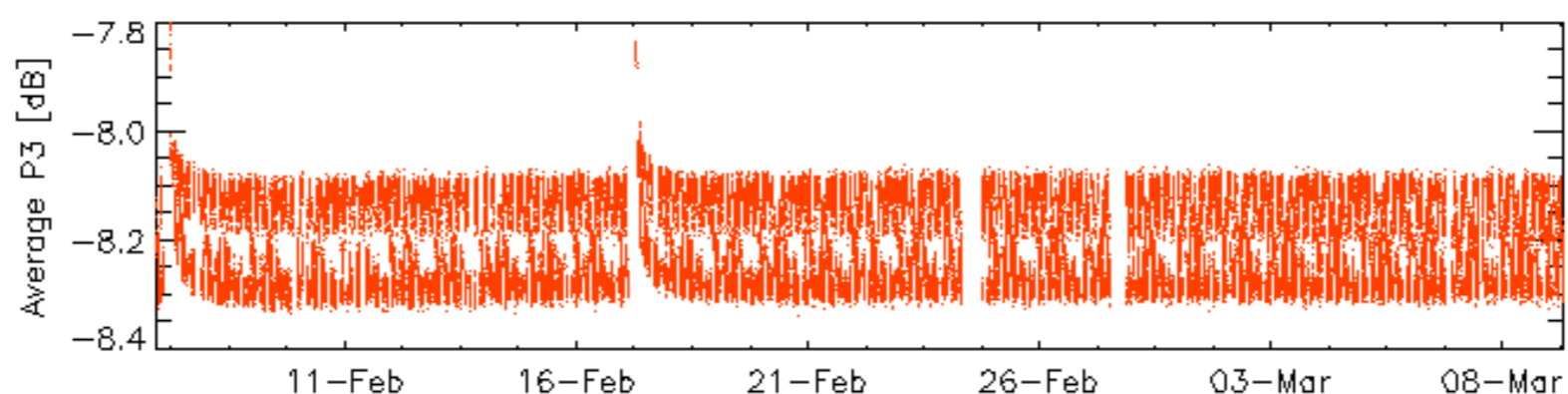
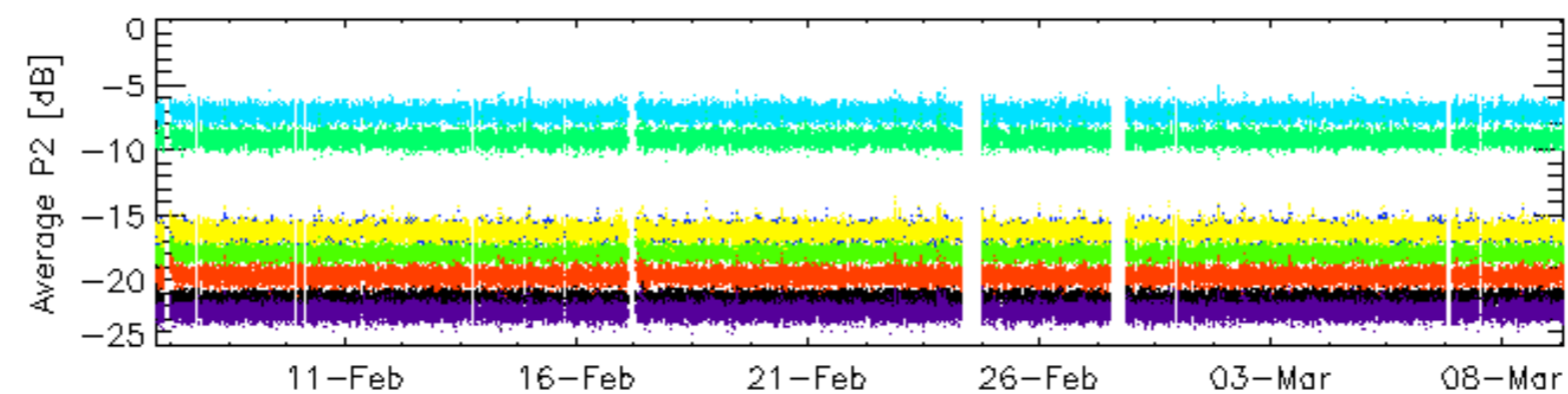
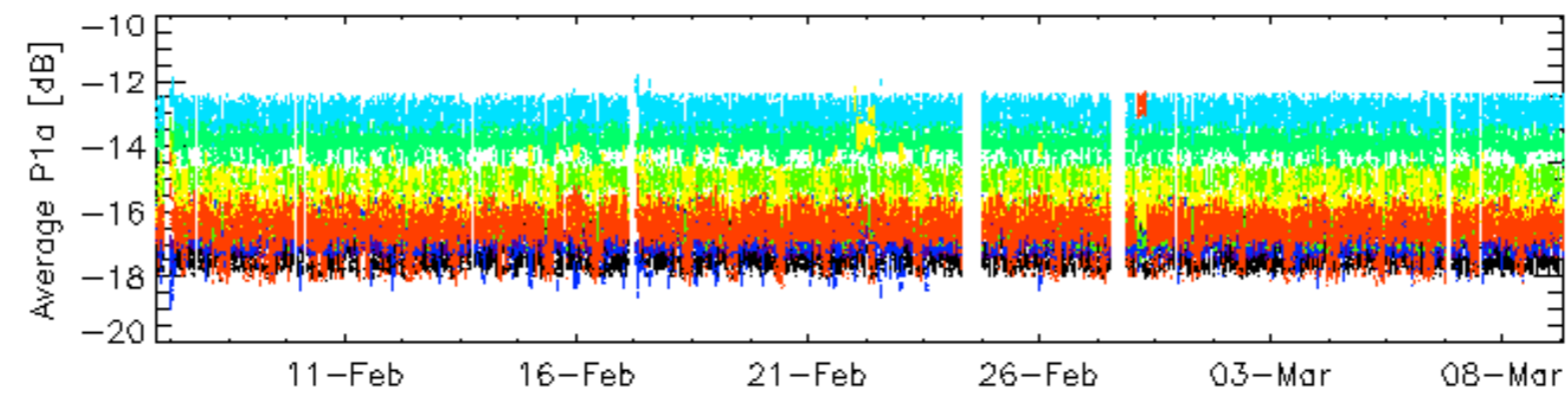
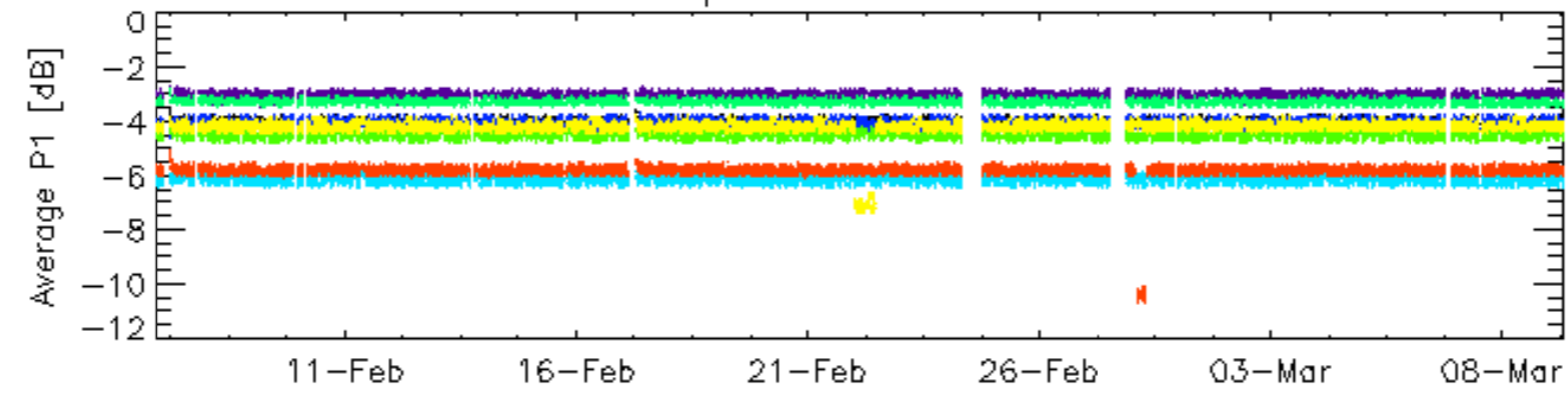


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

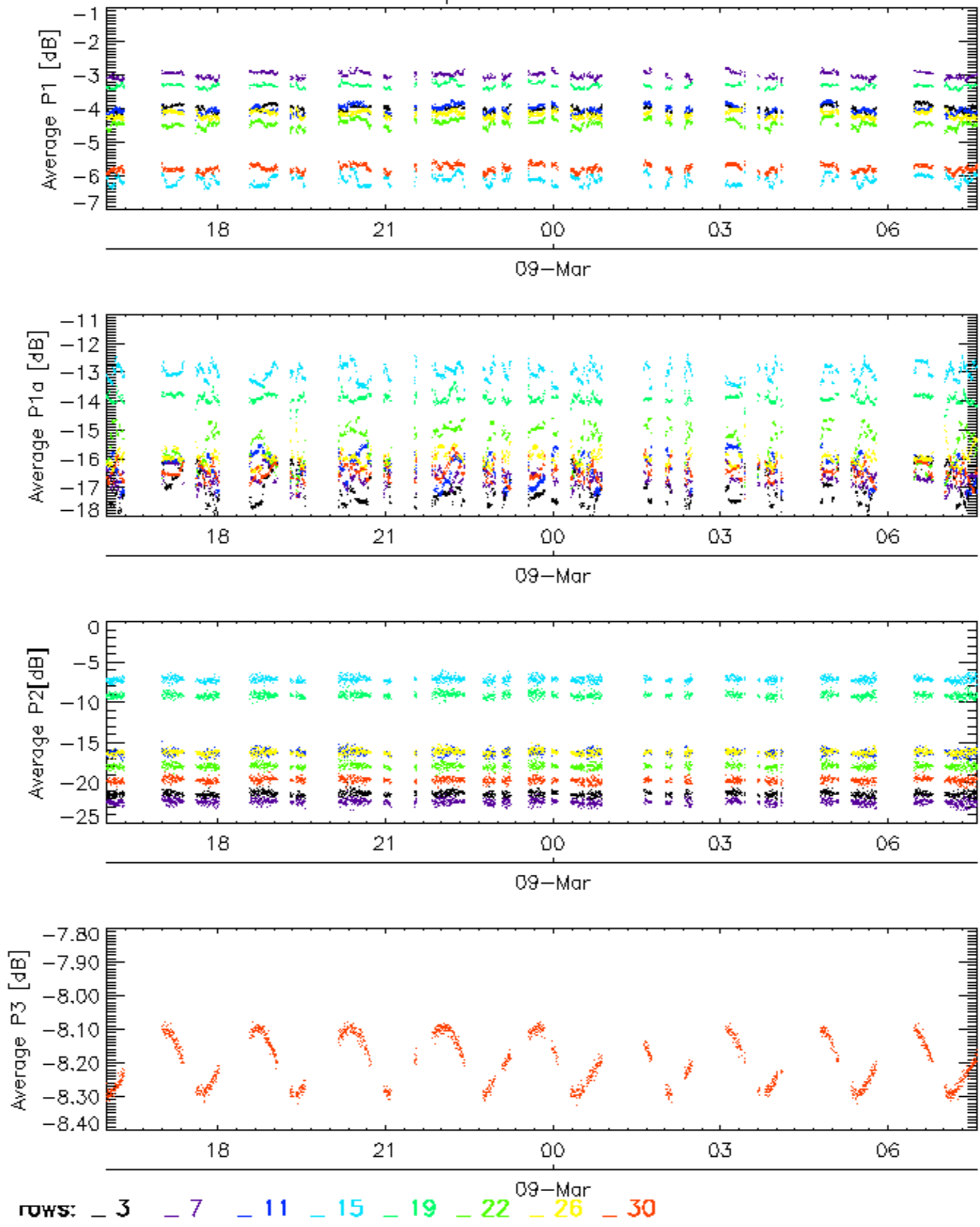


Cal pulses for WVS IS2



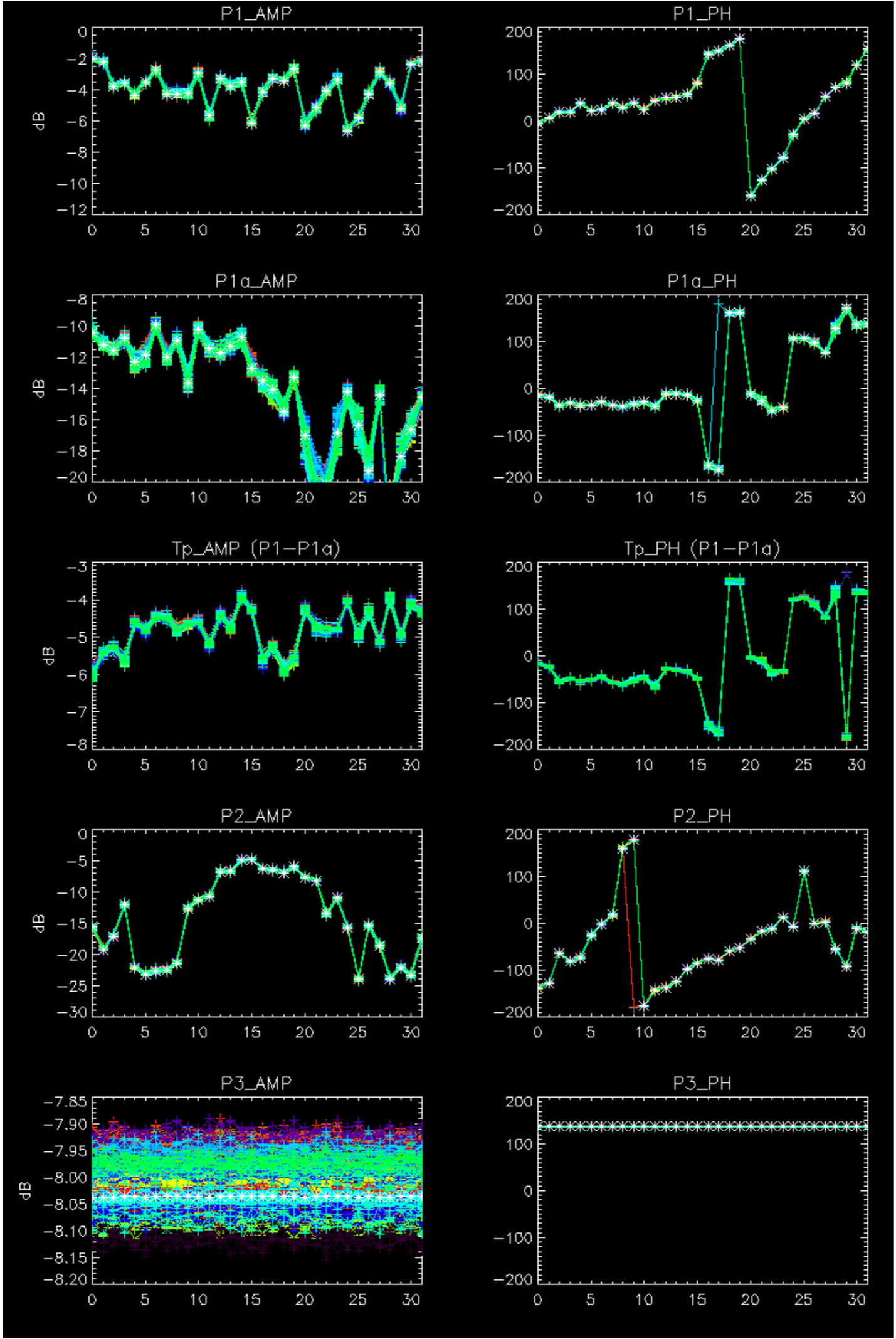
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

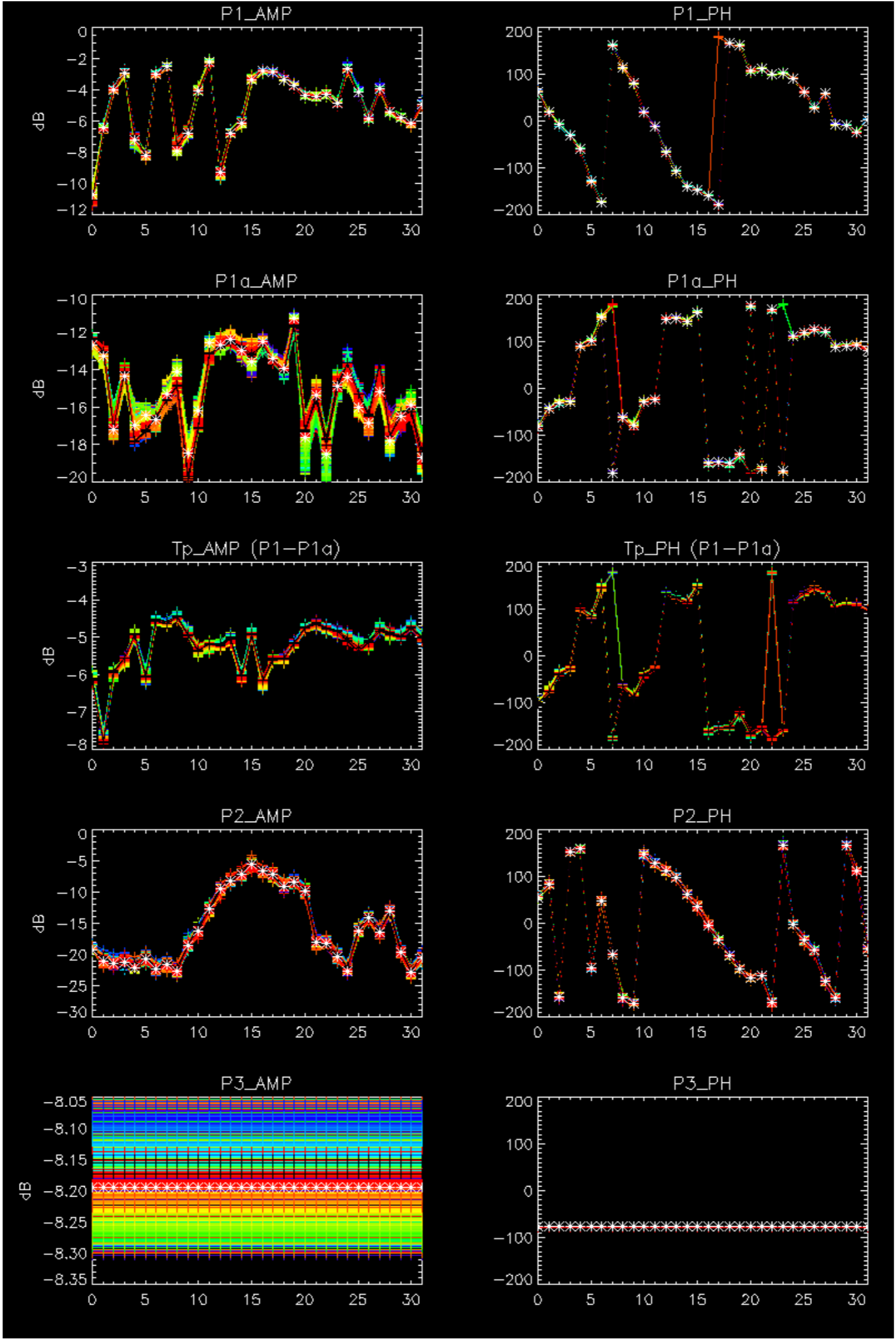
Cal pulses for WVS IS2



No anomalies observed on available browse products

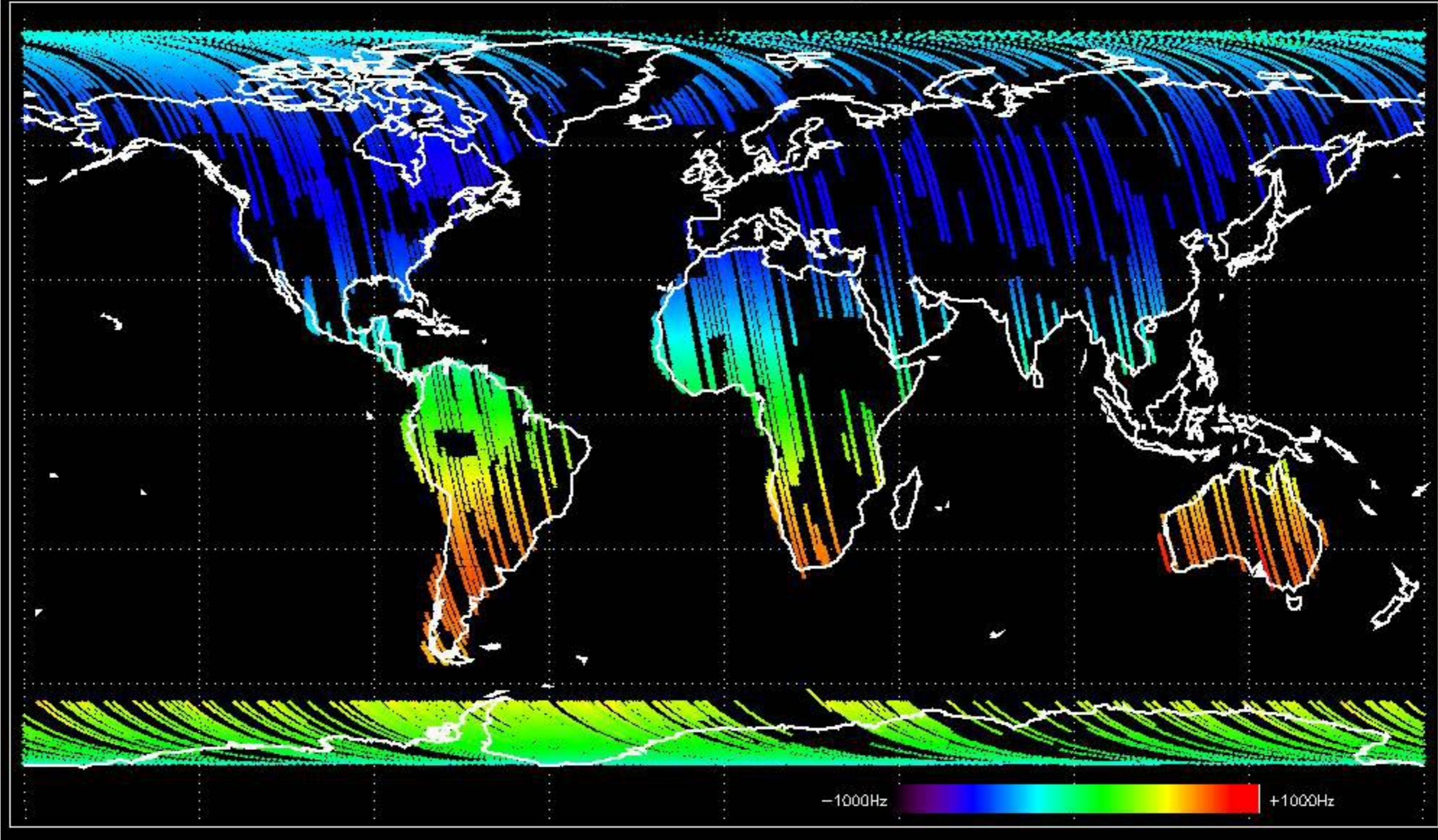
No anomalies observed.



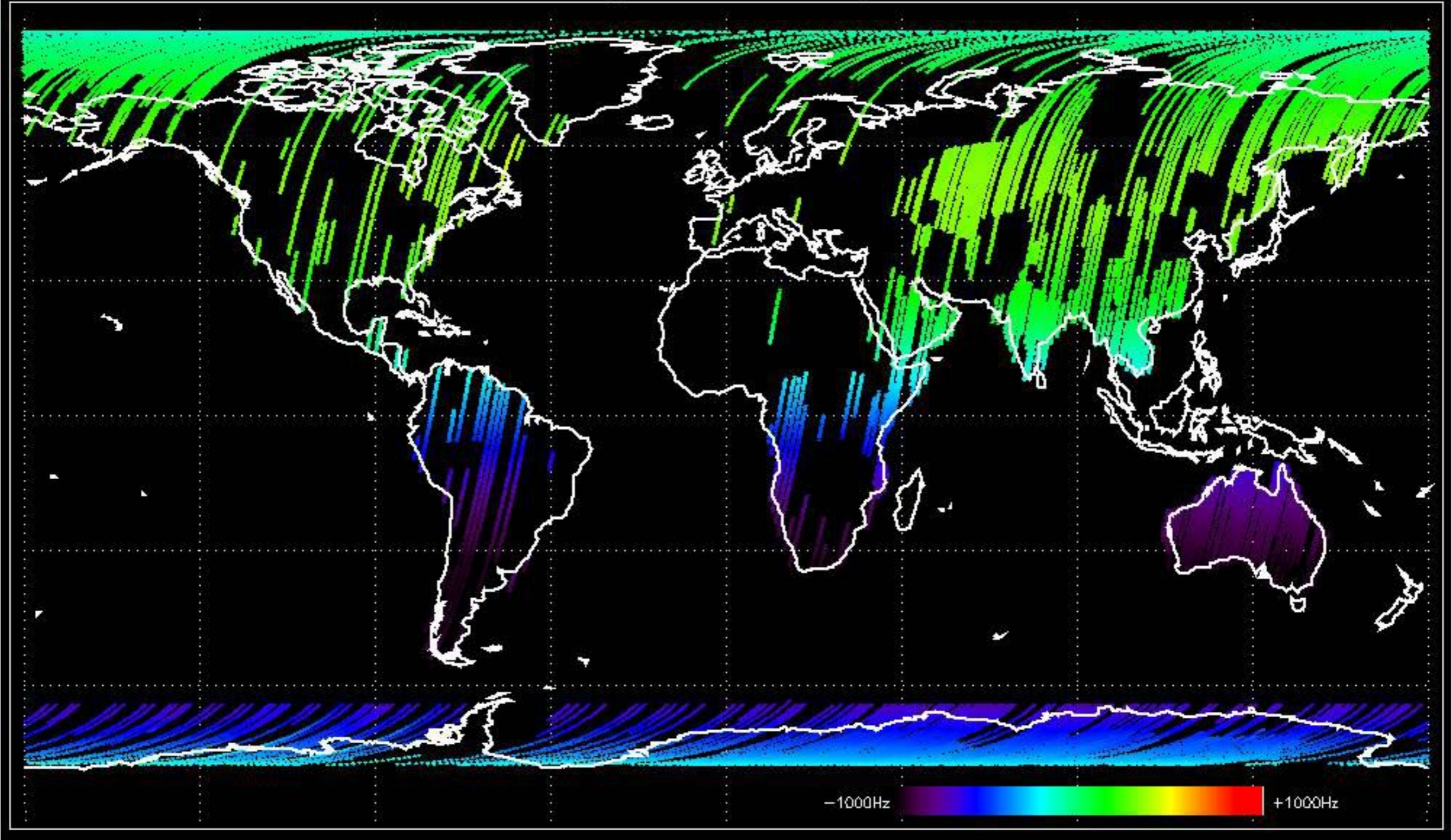


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

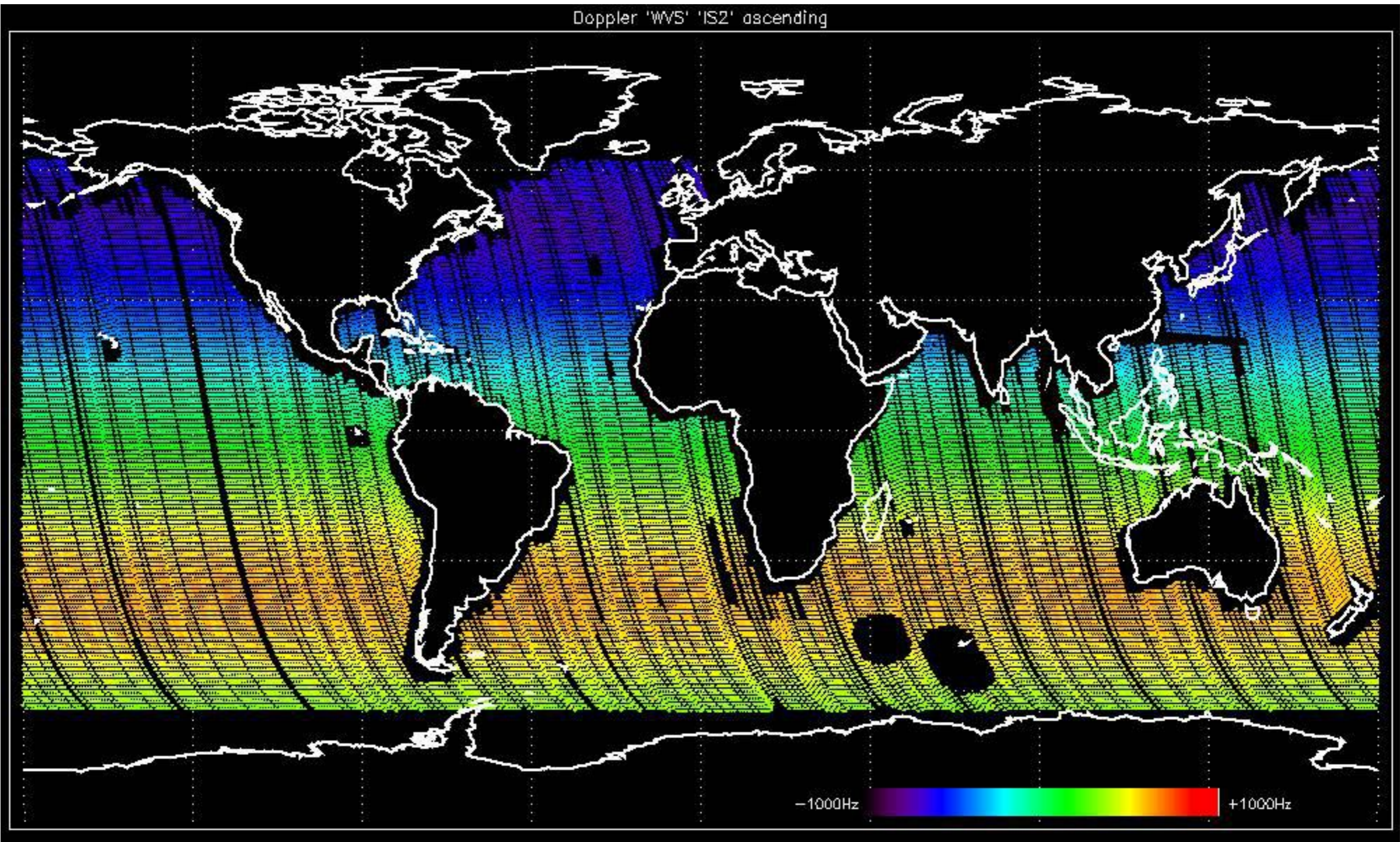
Doppler 'GM1' 'SS1' ascending



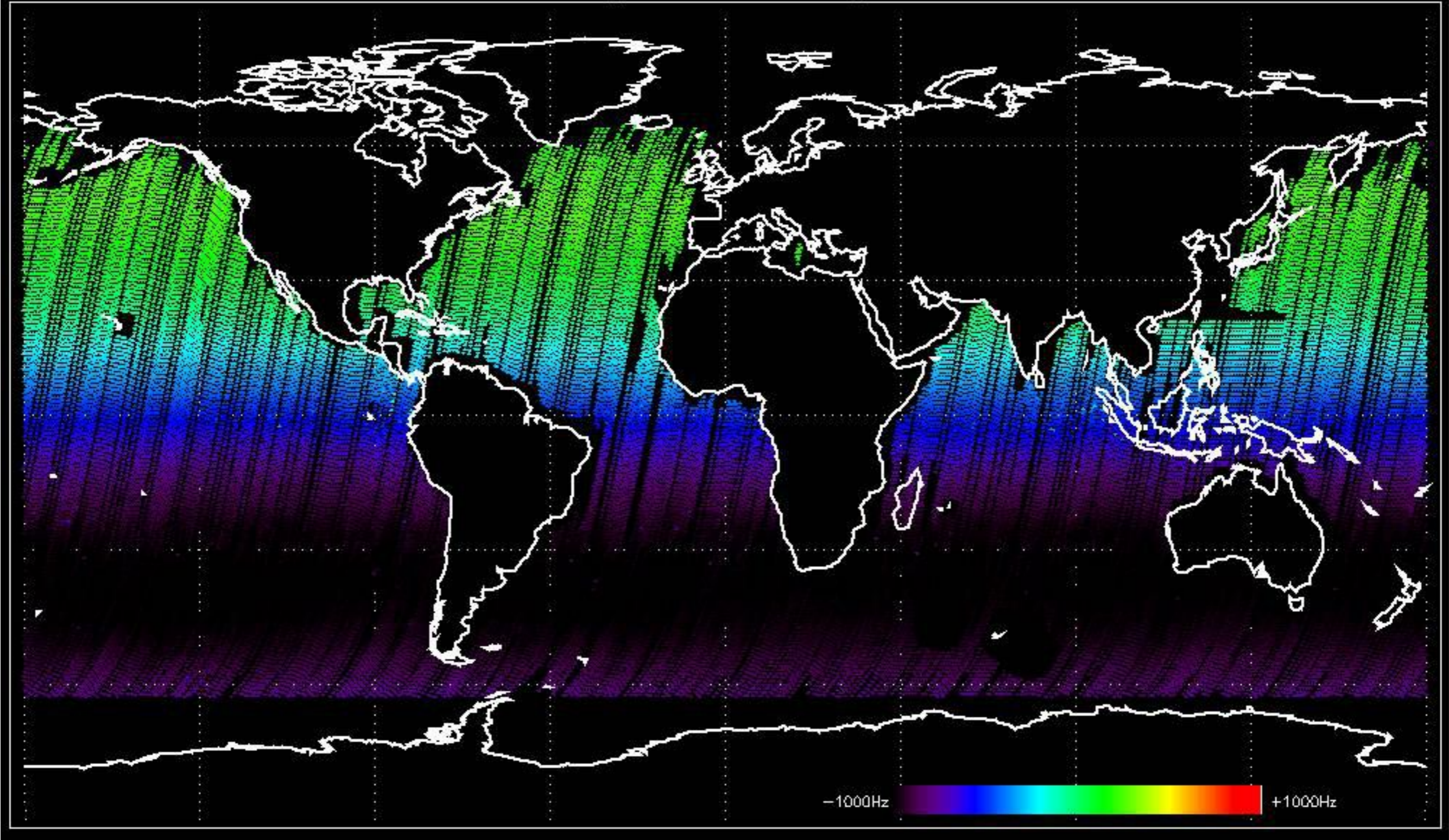
Doppler 'GM1' 'SS1' descending

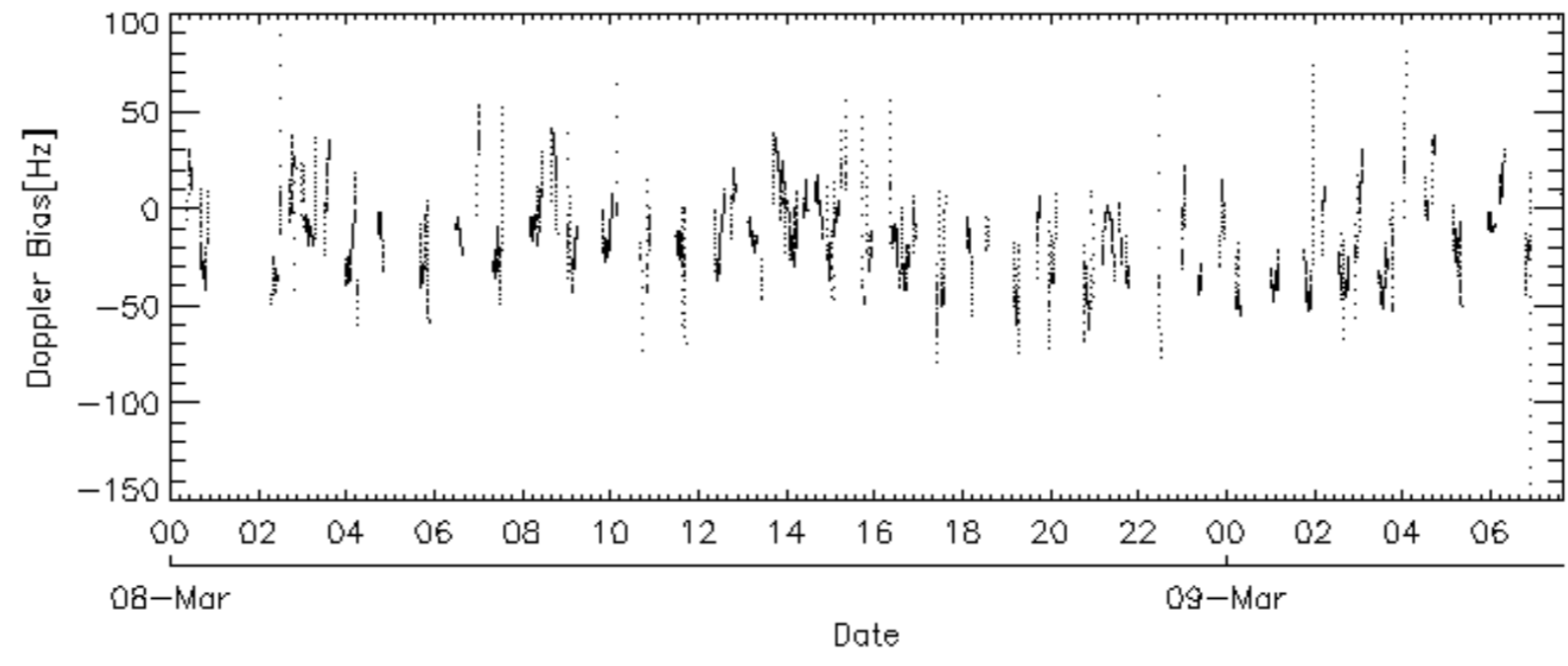
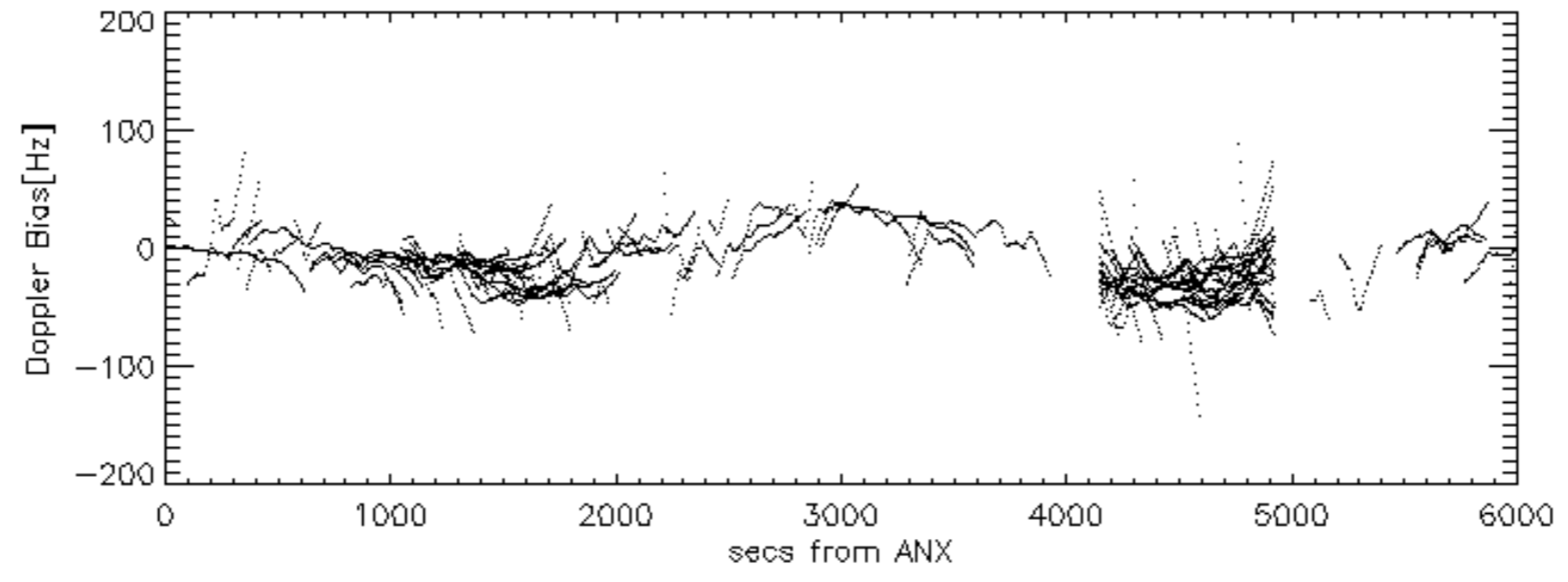
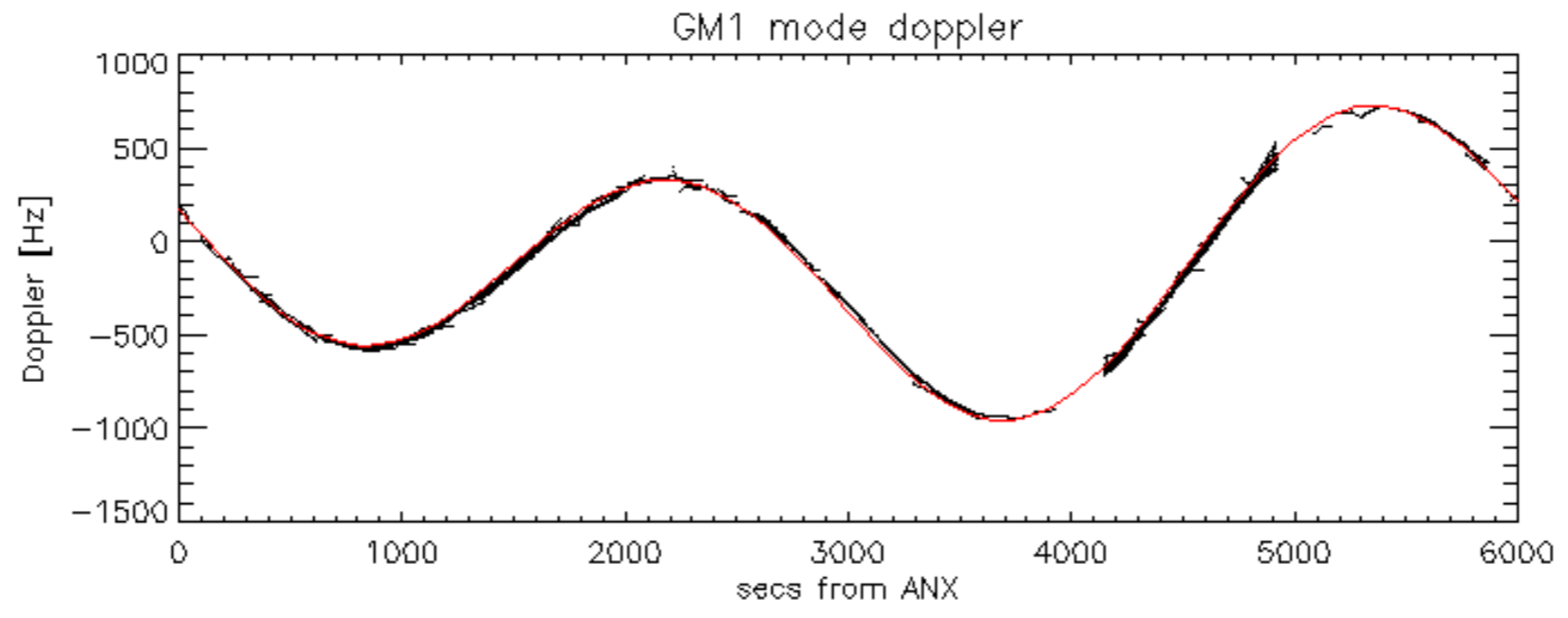


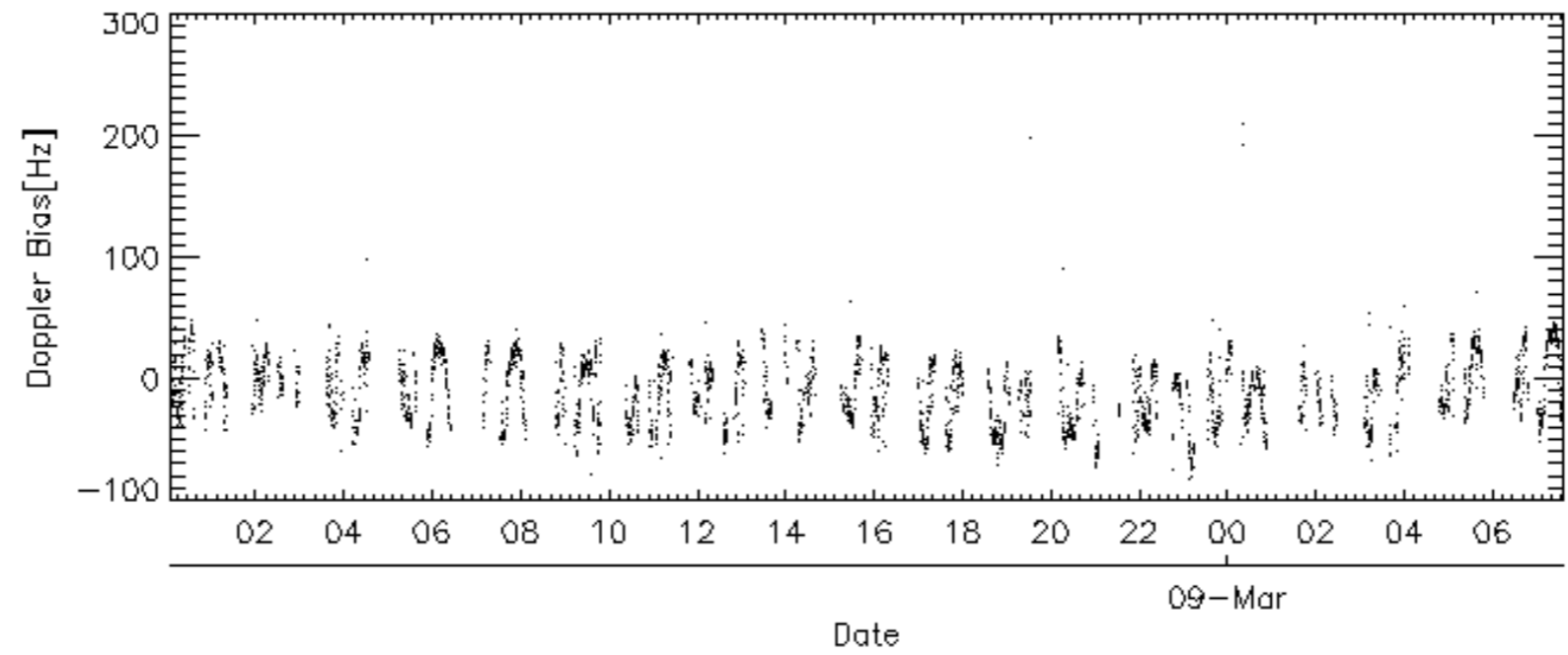
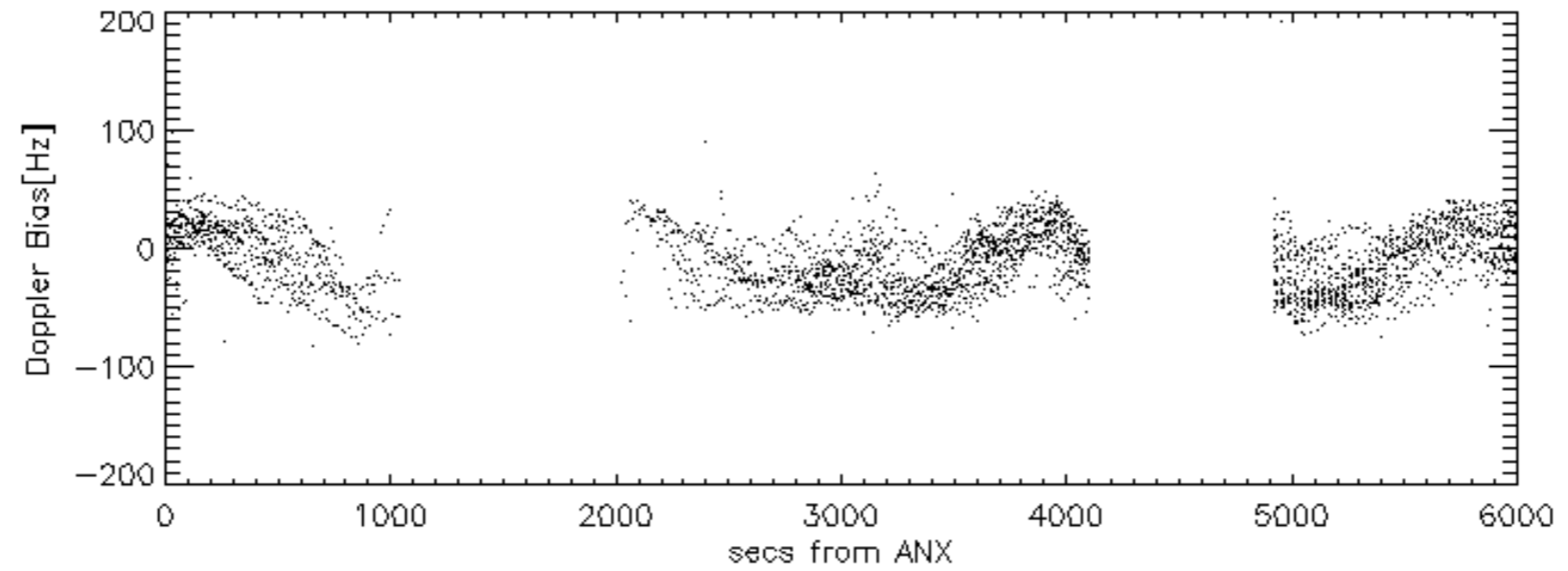
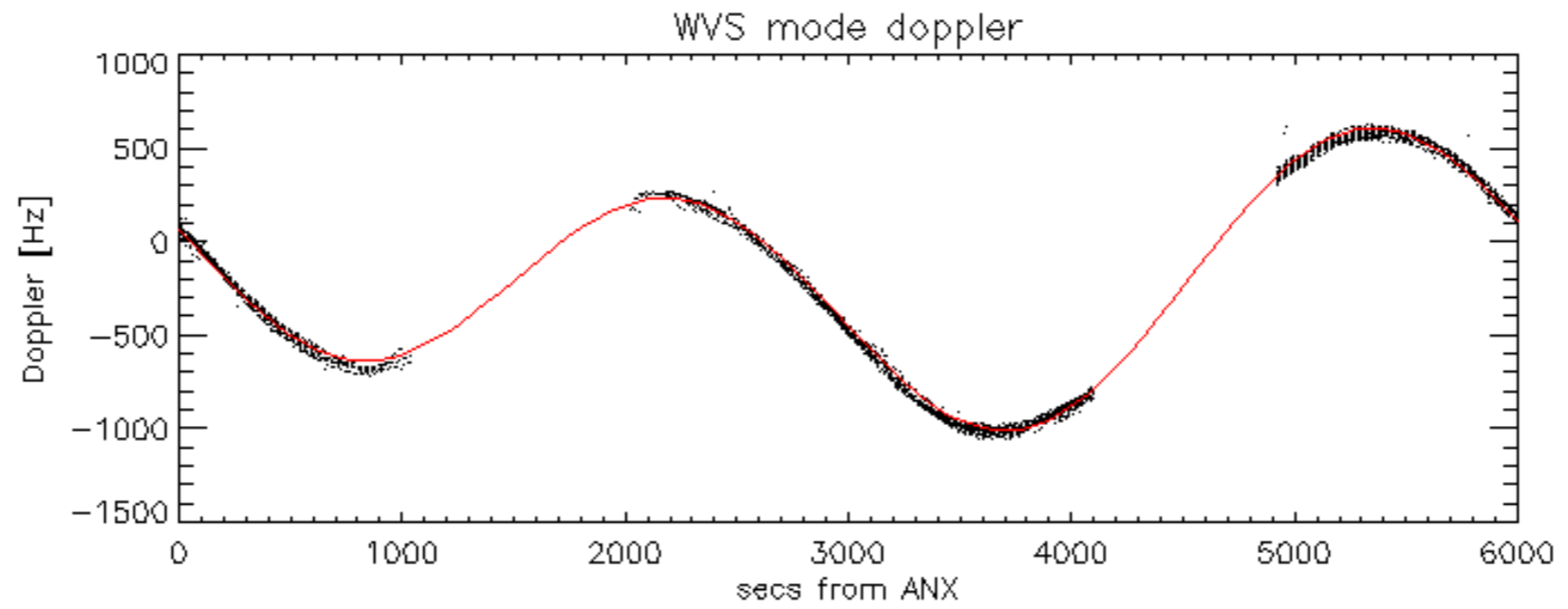
Doppler 'WVS' 'IS2' ascending



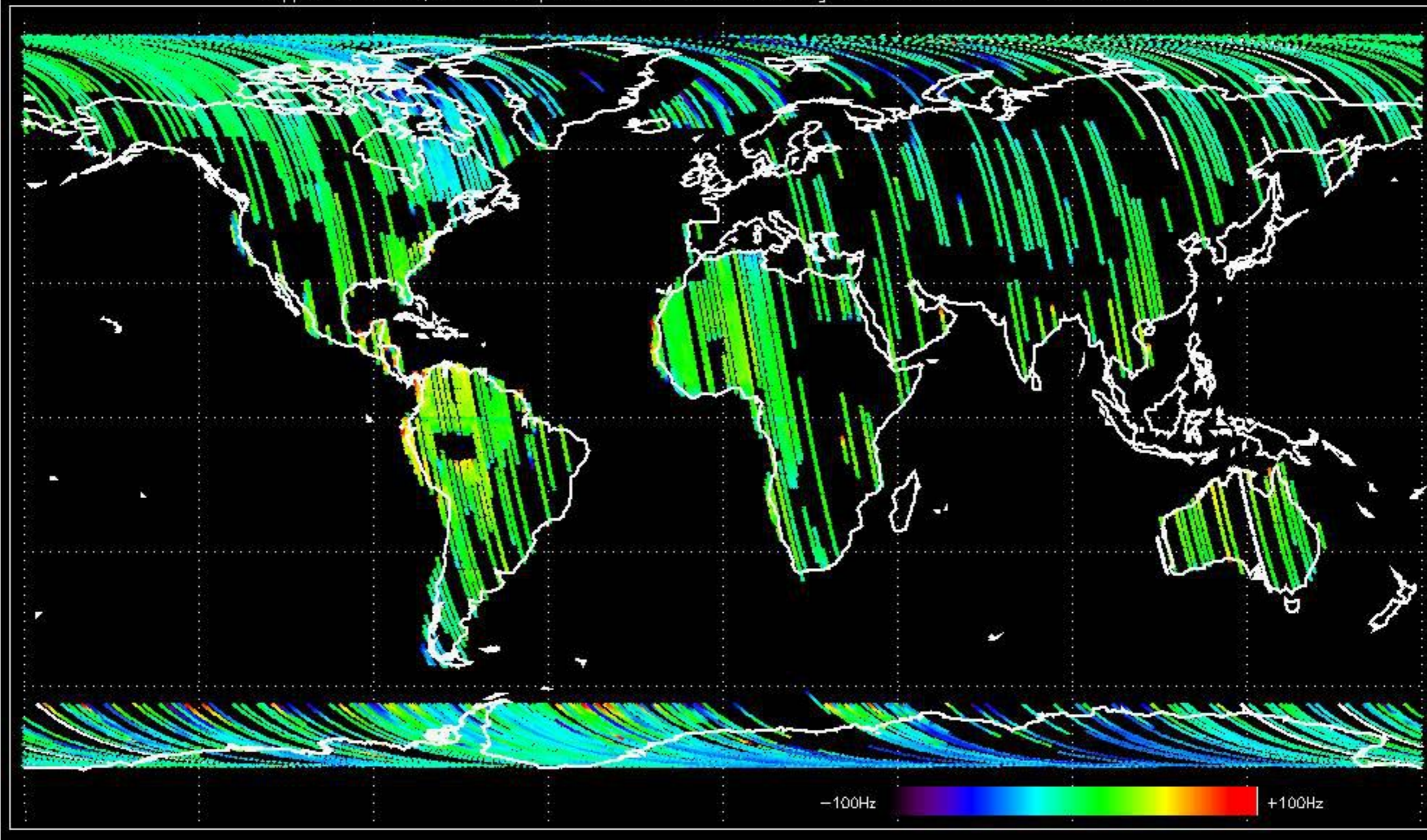
Doppler 'WVS' 'IS2' descending



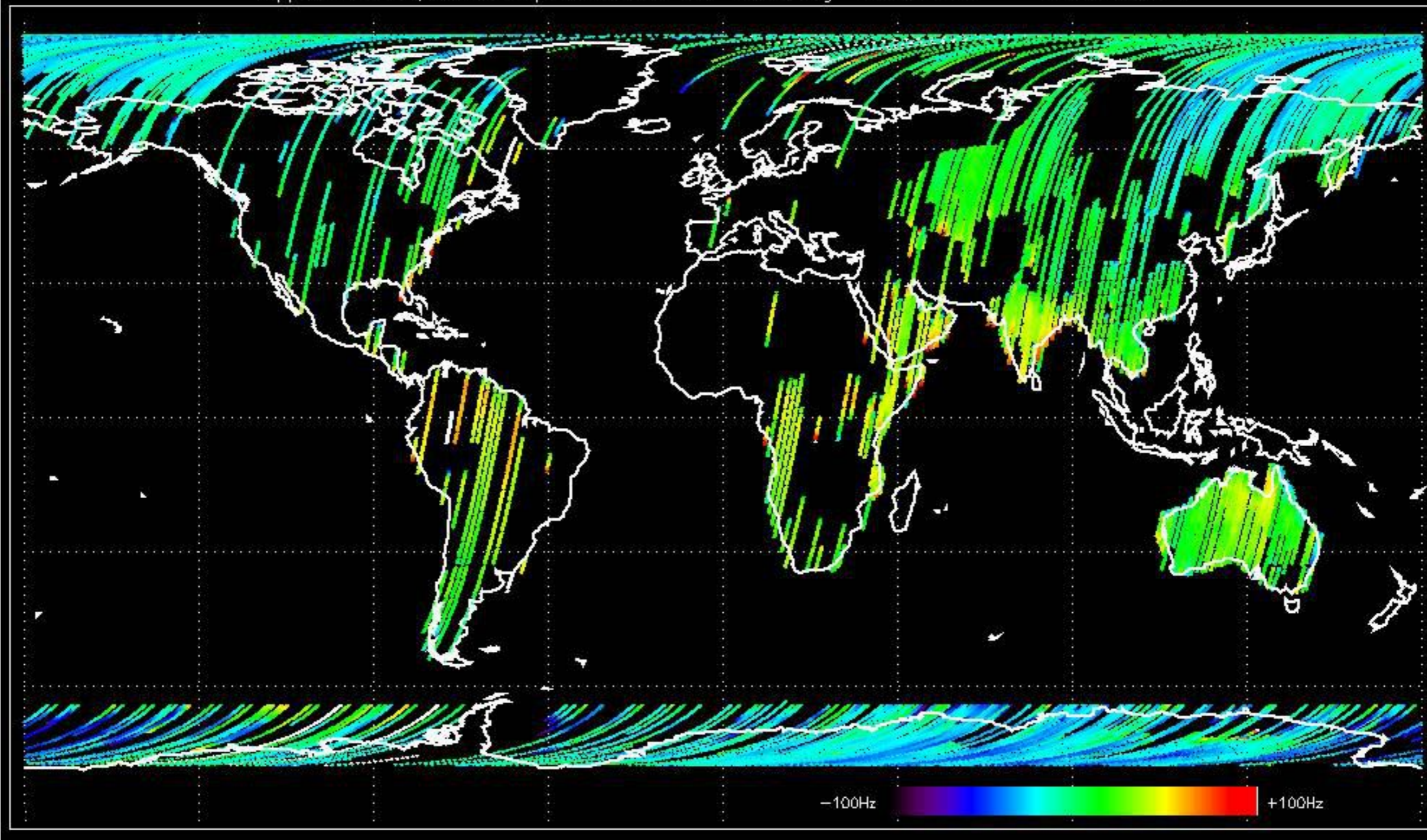




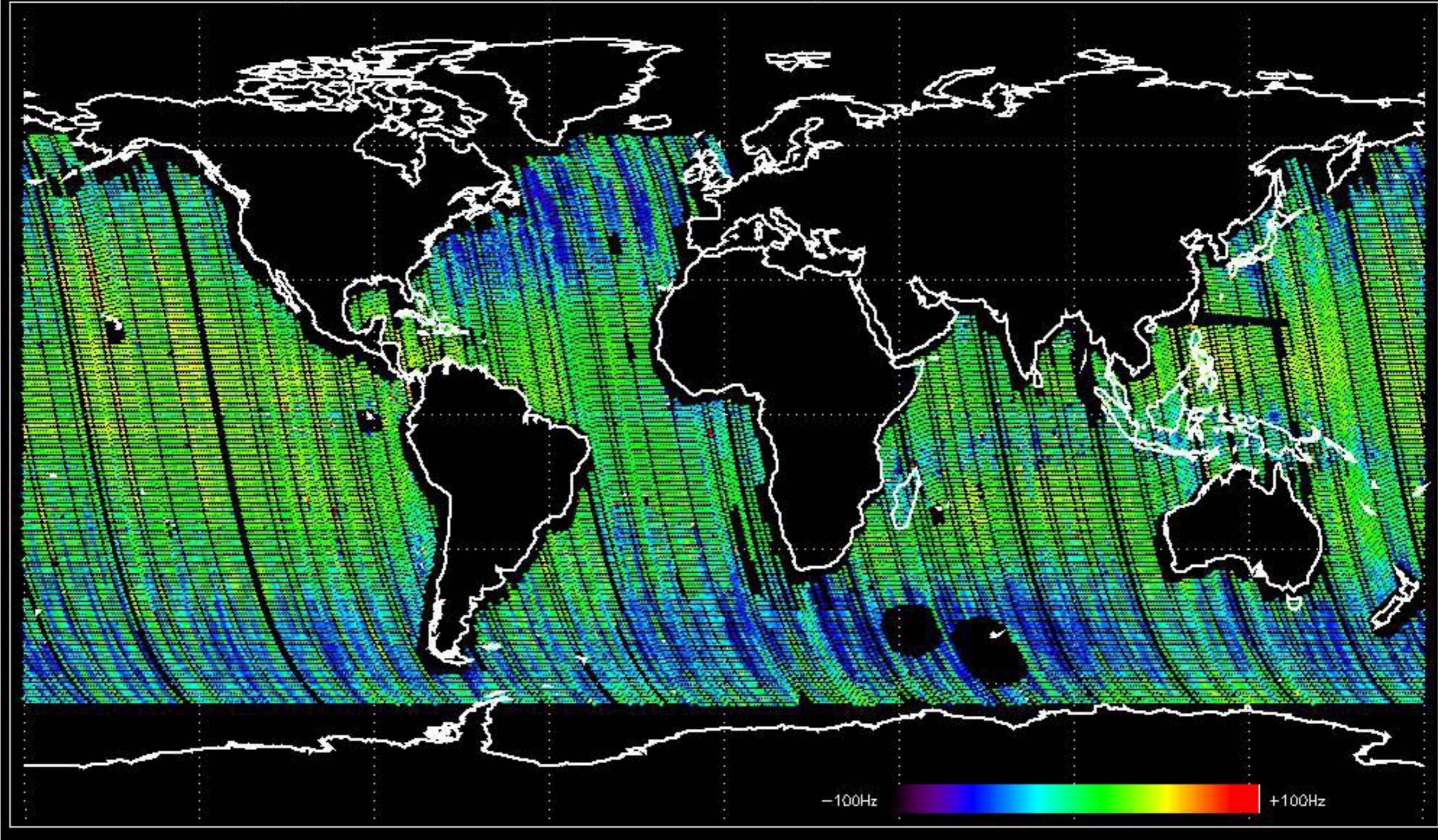
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -9.5310171 Hz



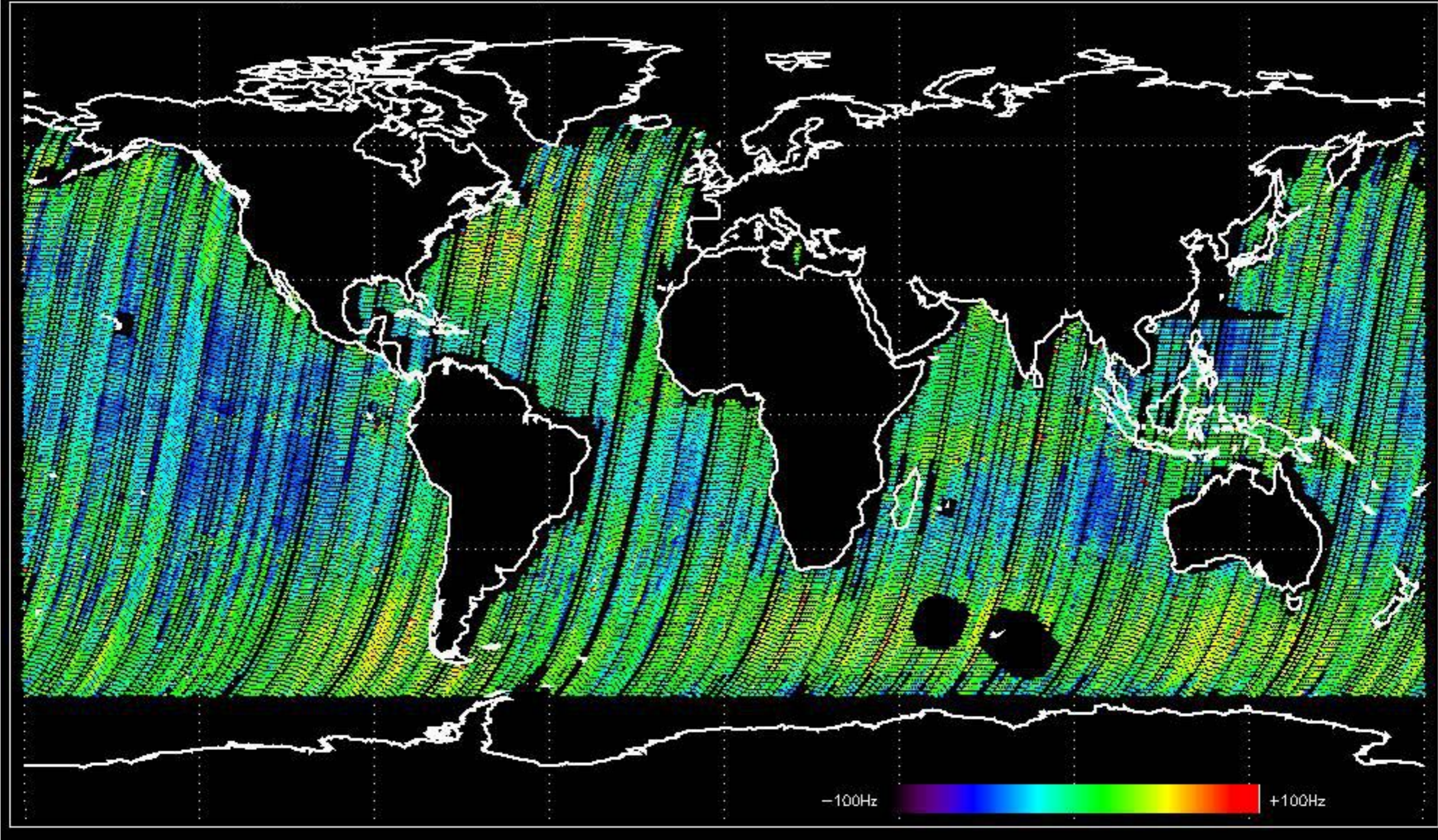
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -9.0046886 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -5.9112432 Hz

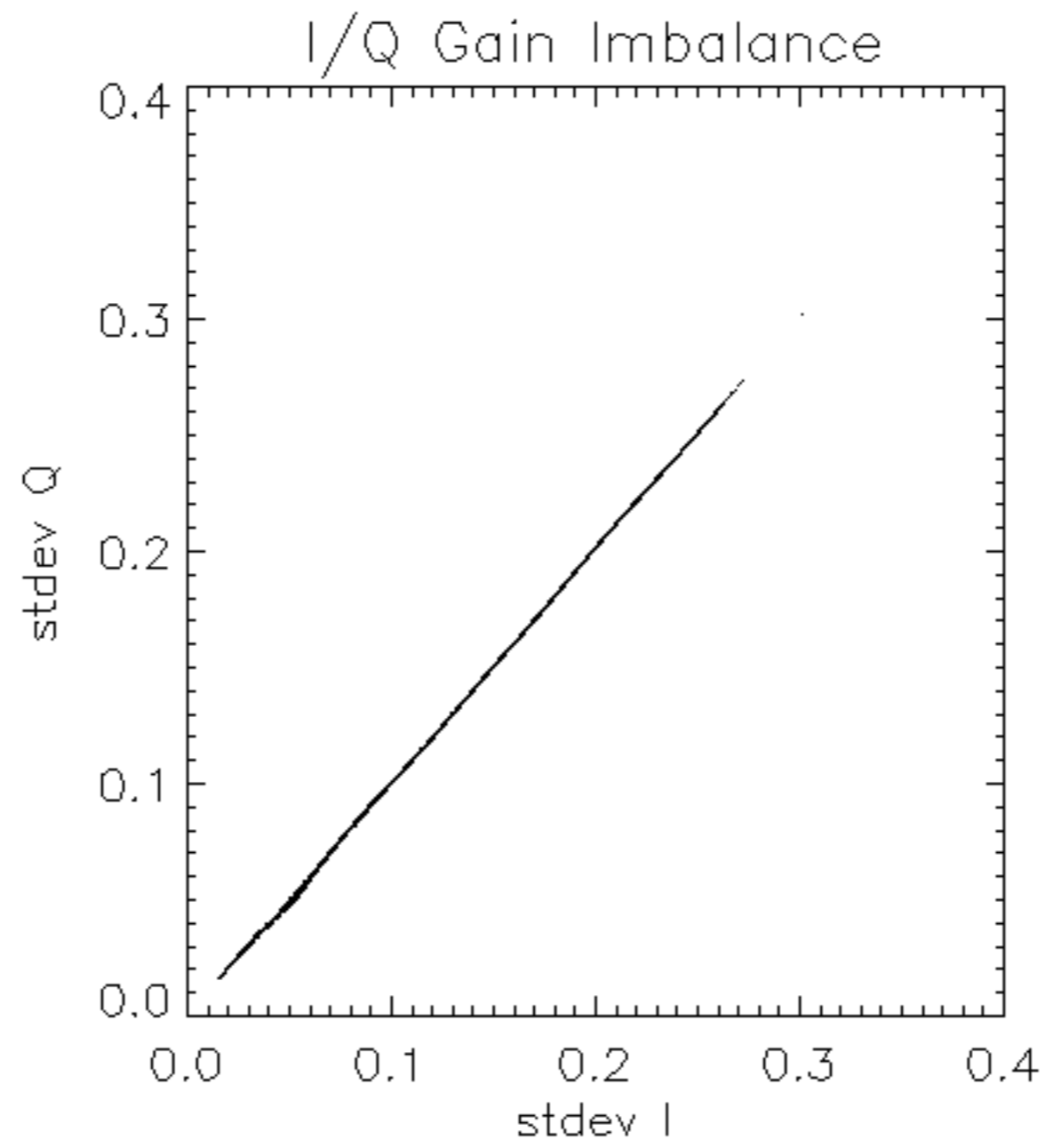


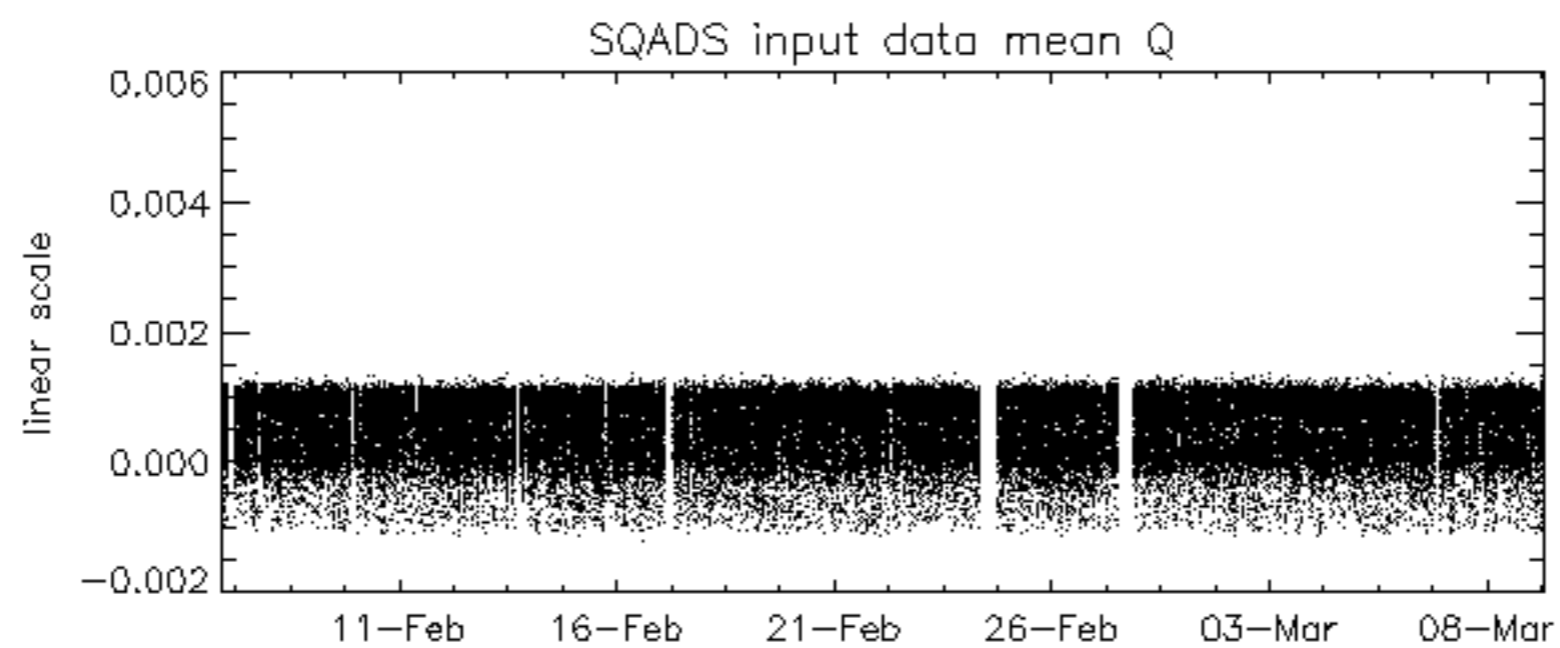
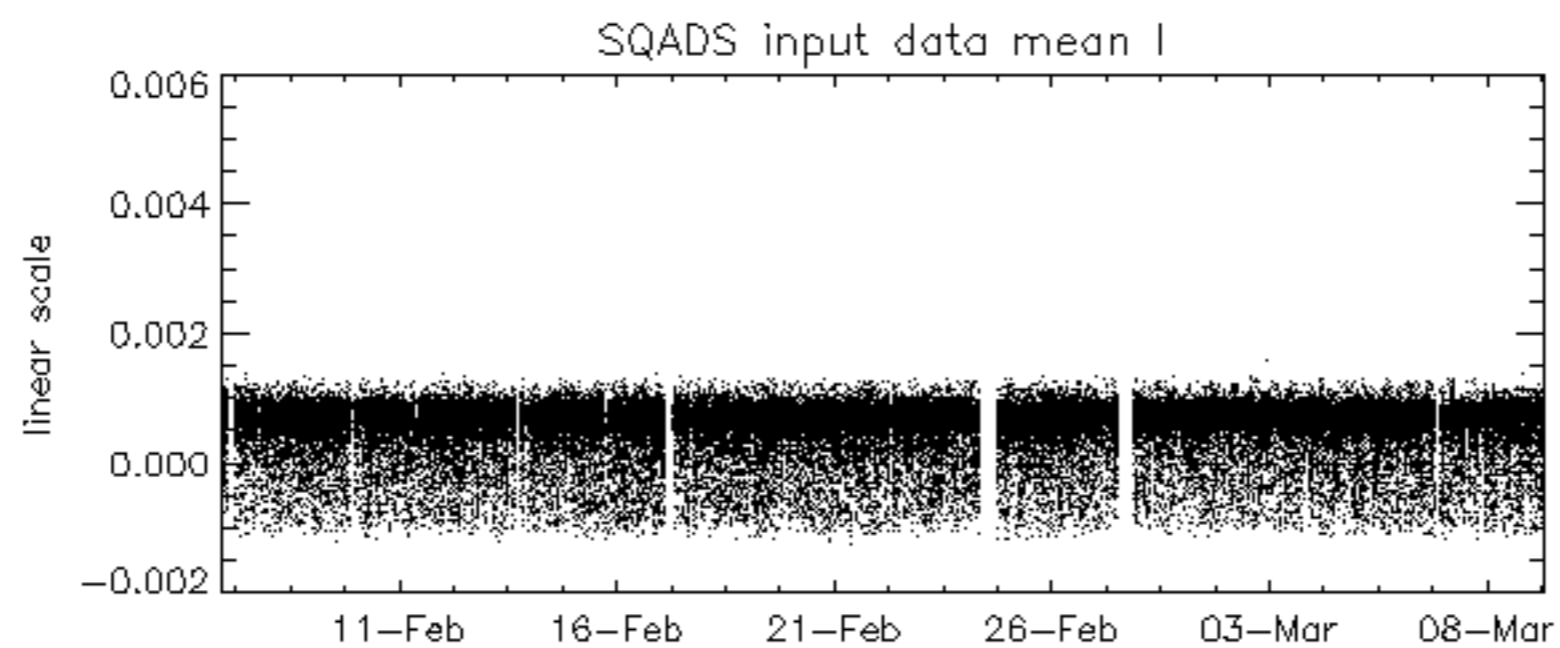
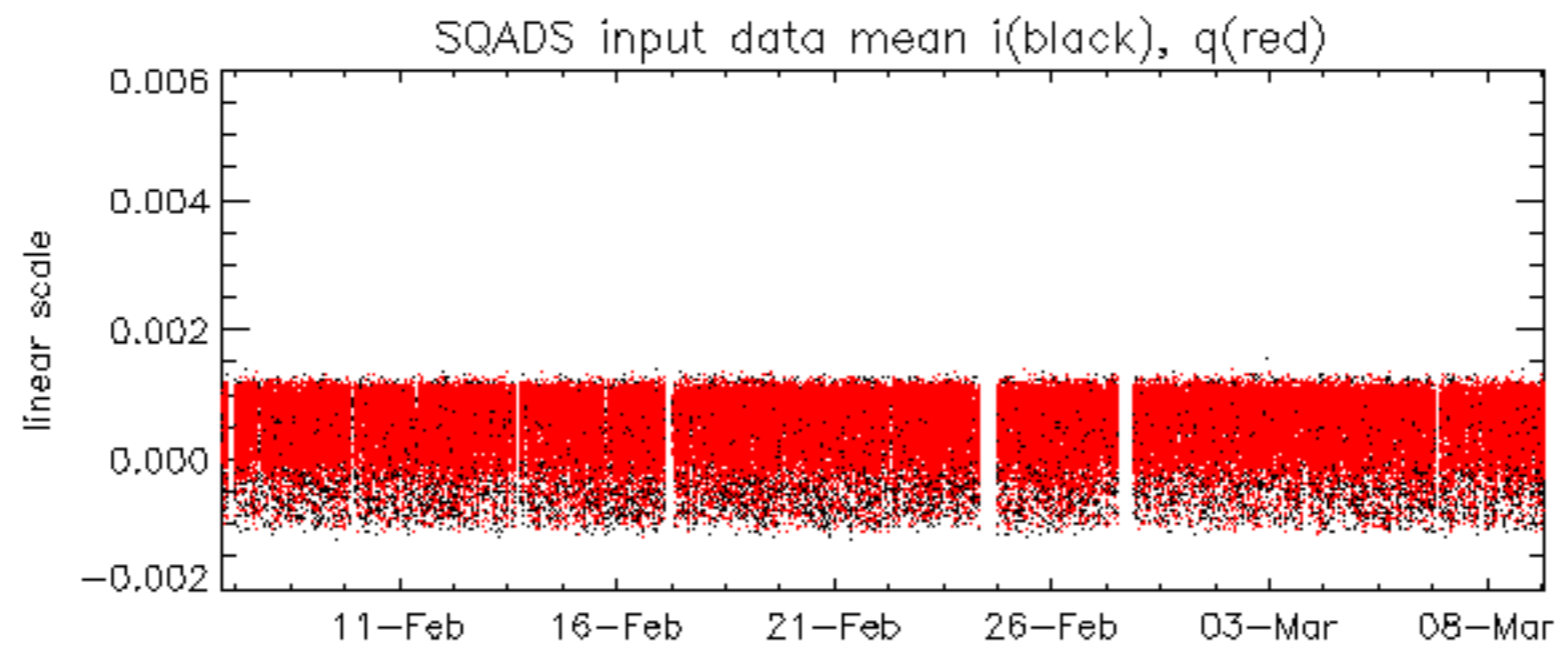
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -7.4992334 Hz

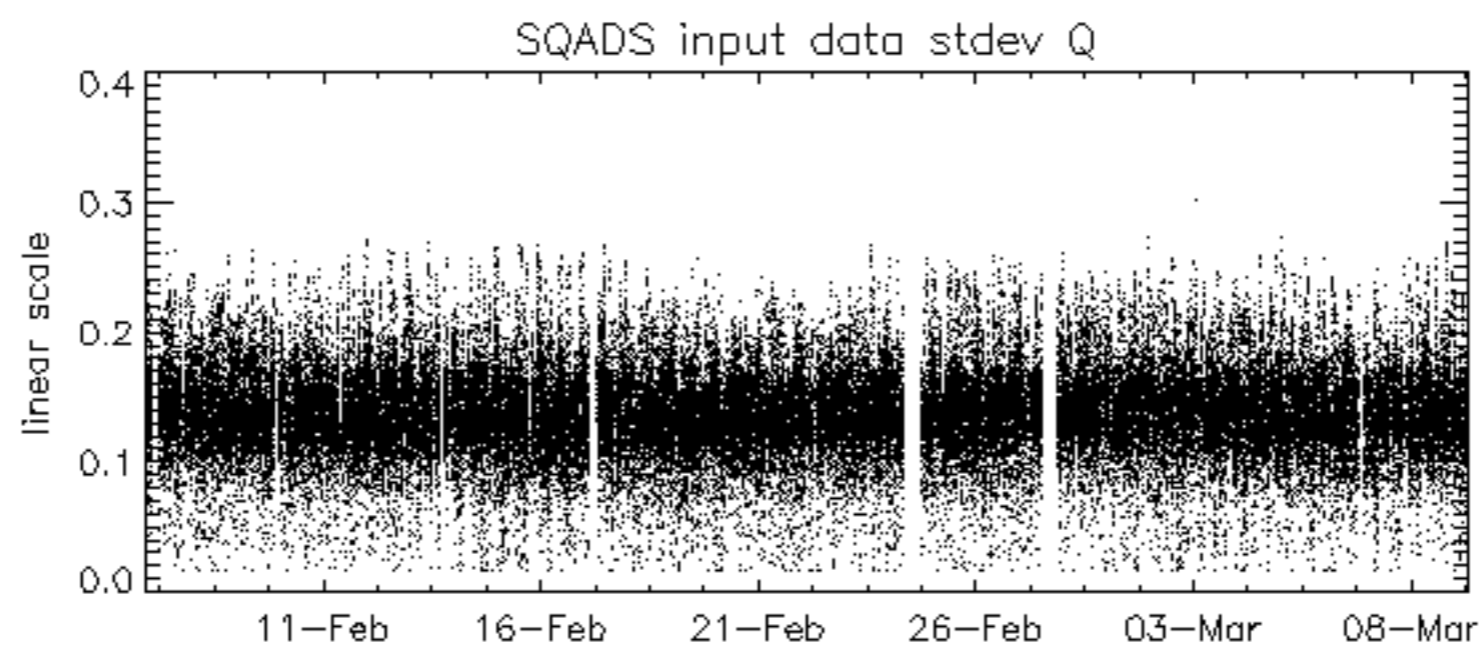
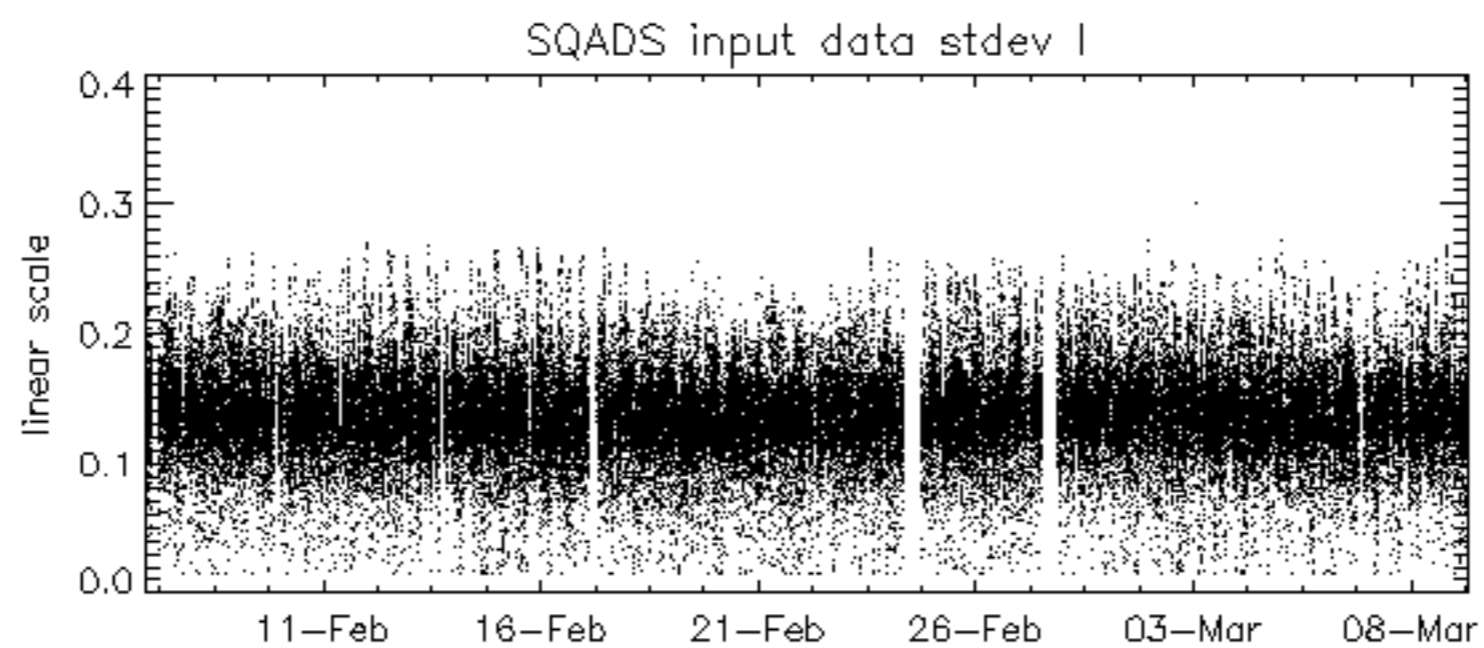
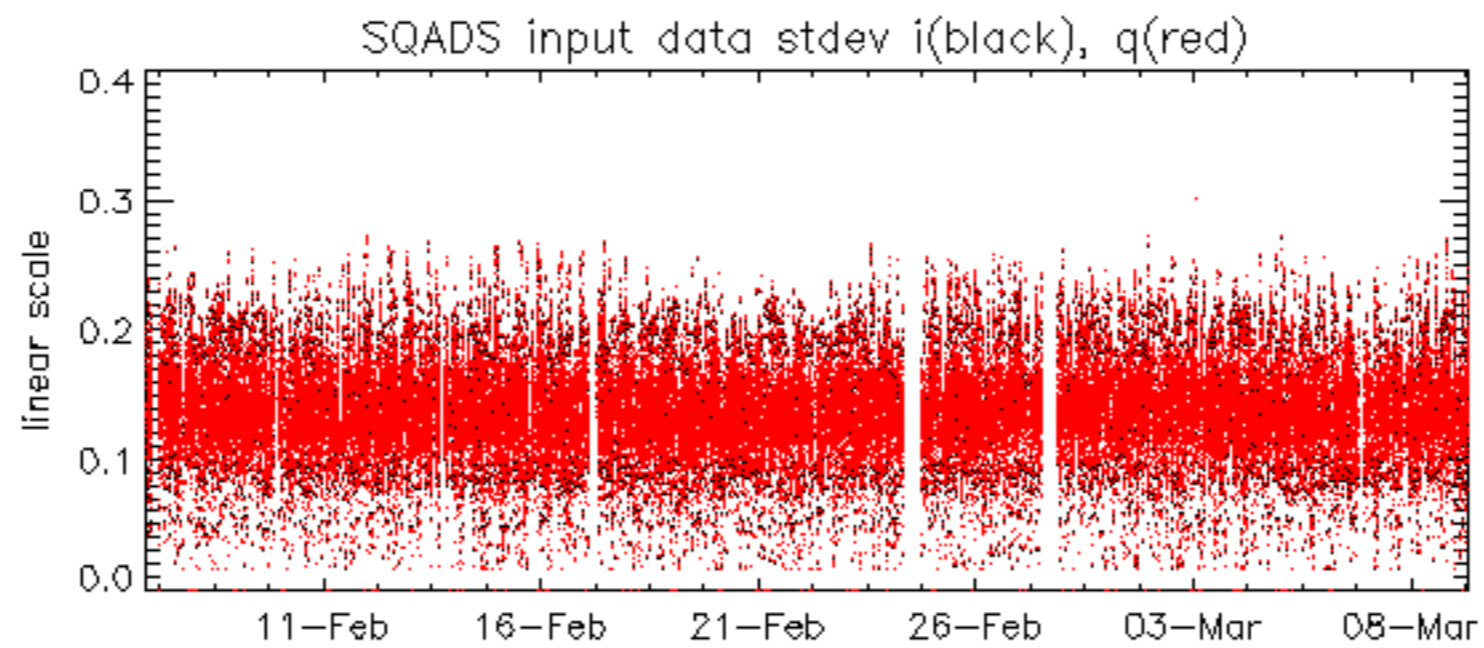


No anomalies observed on available MS products:

No anomalies observed.



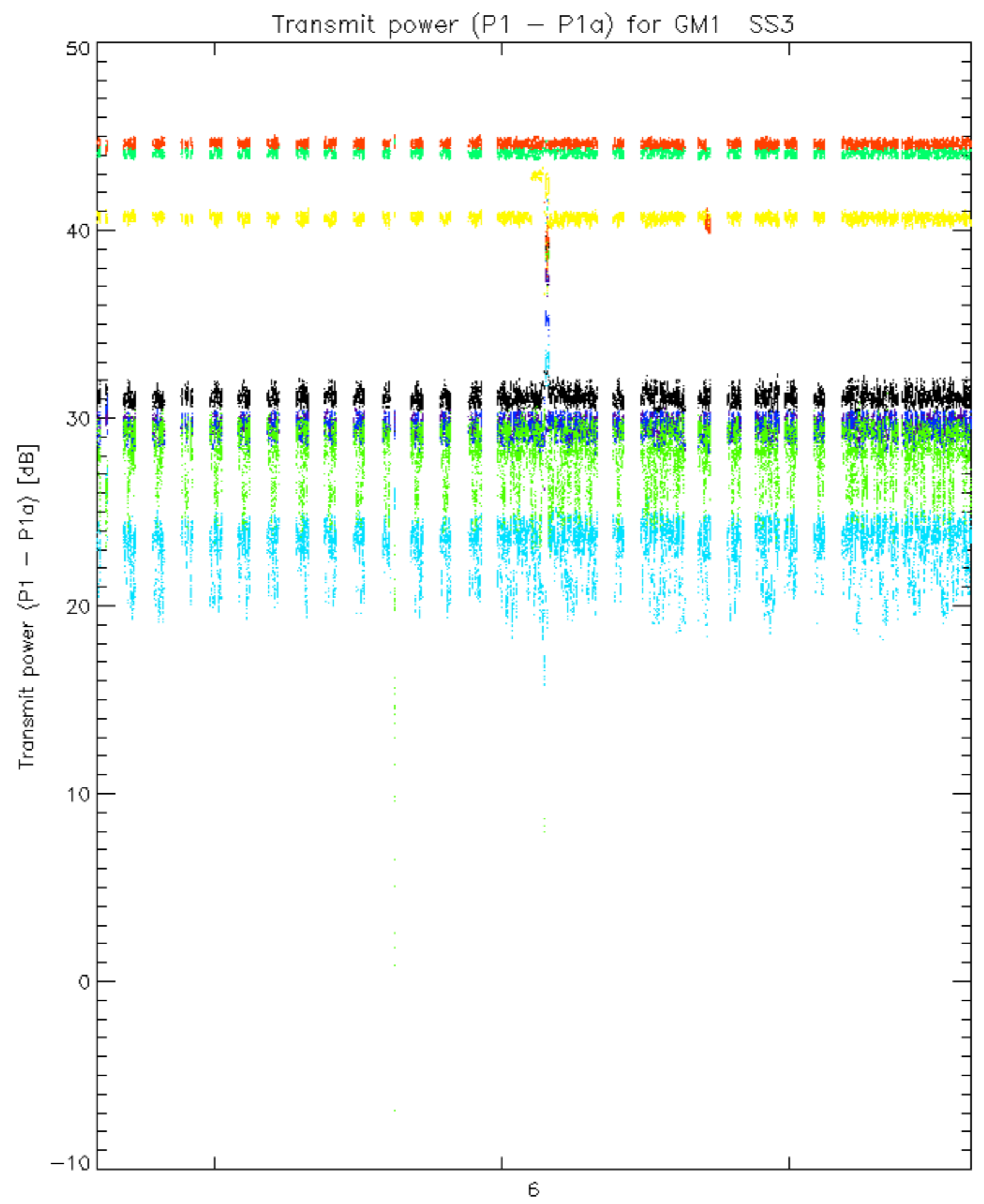




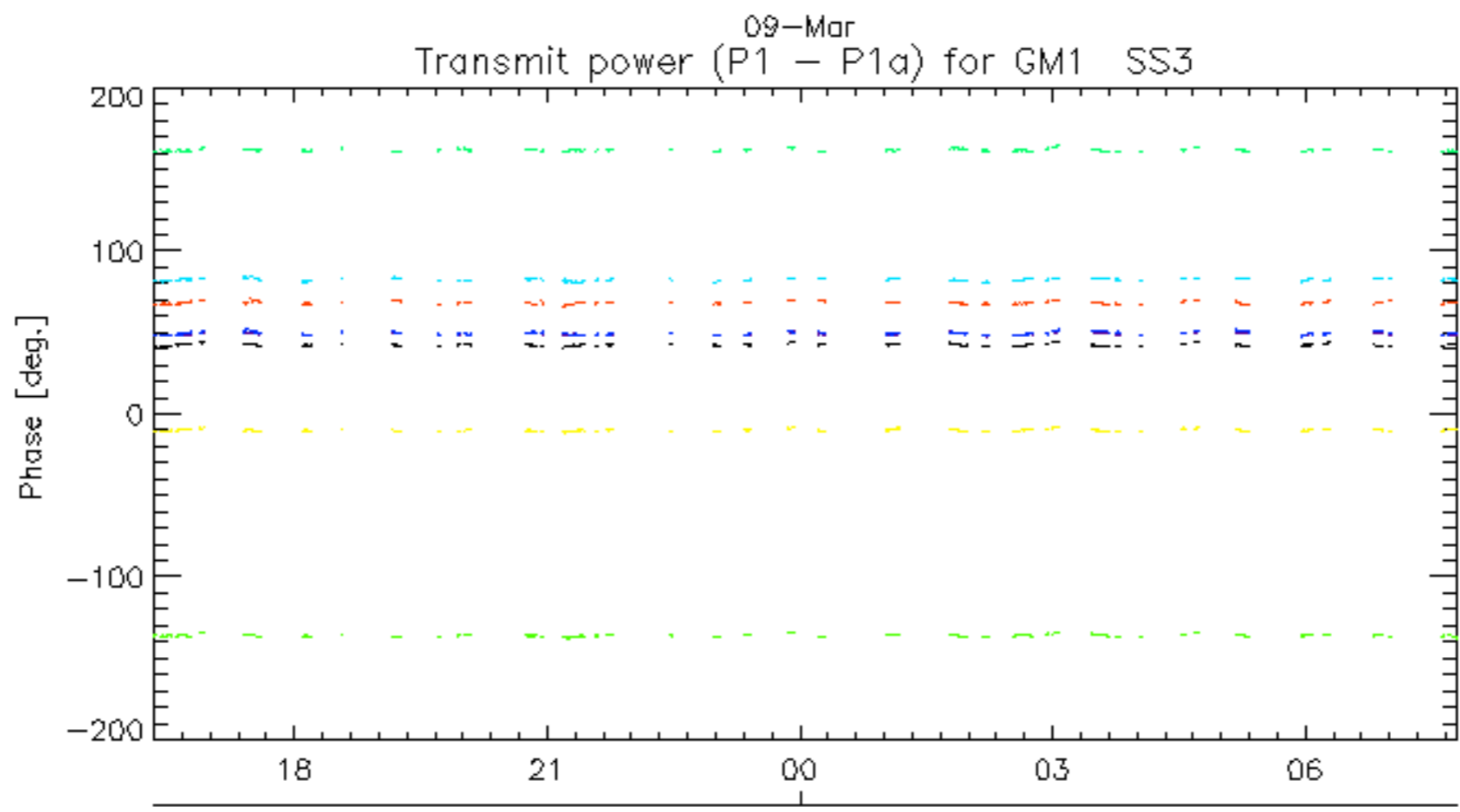
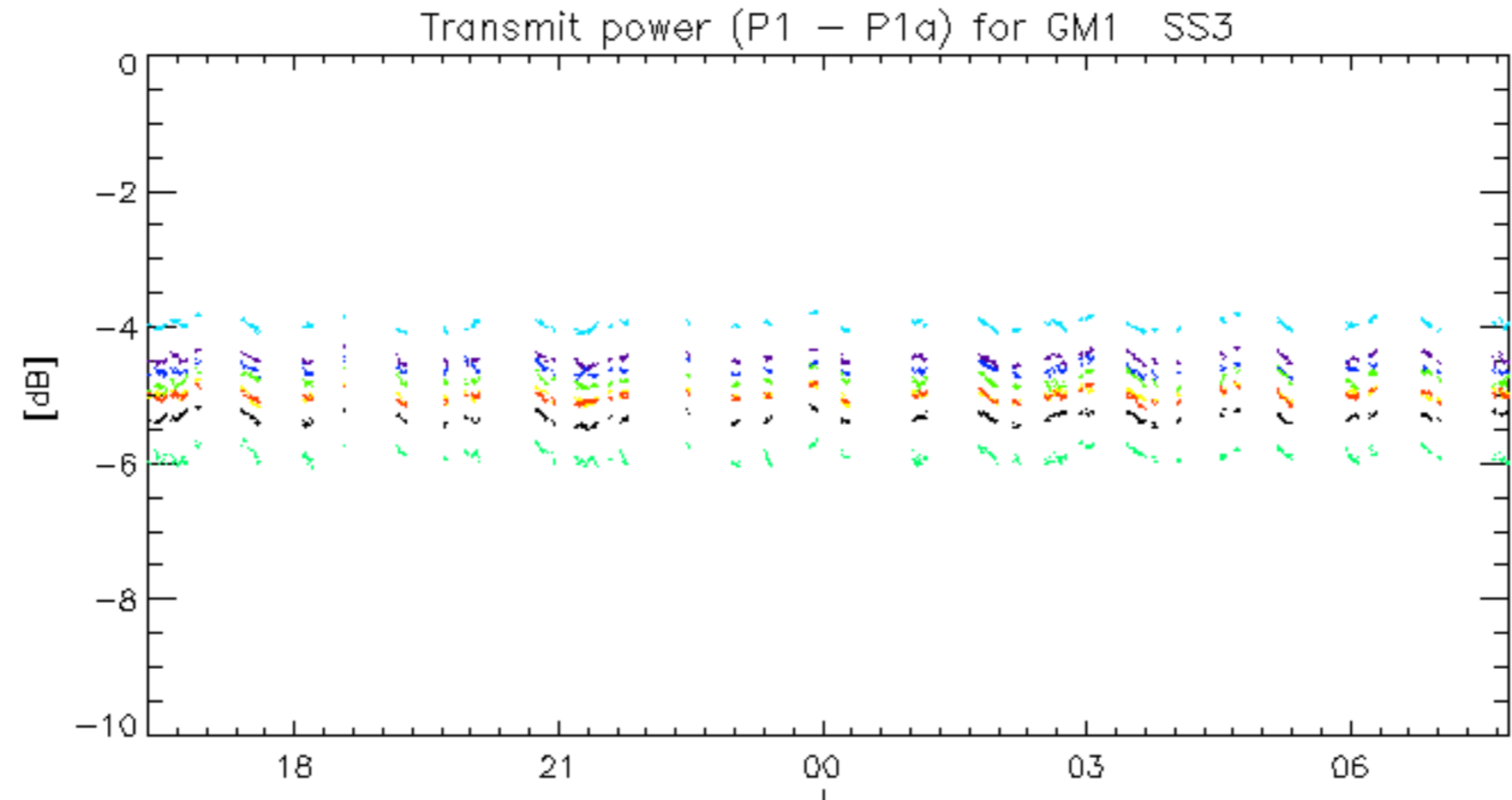
Summary of analysis for the last 3 days 2006030[789]

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

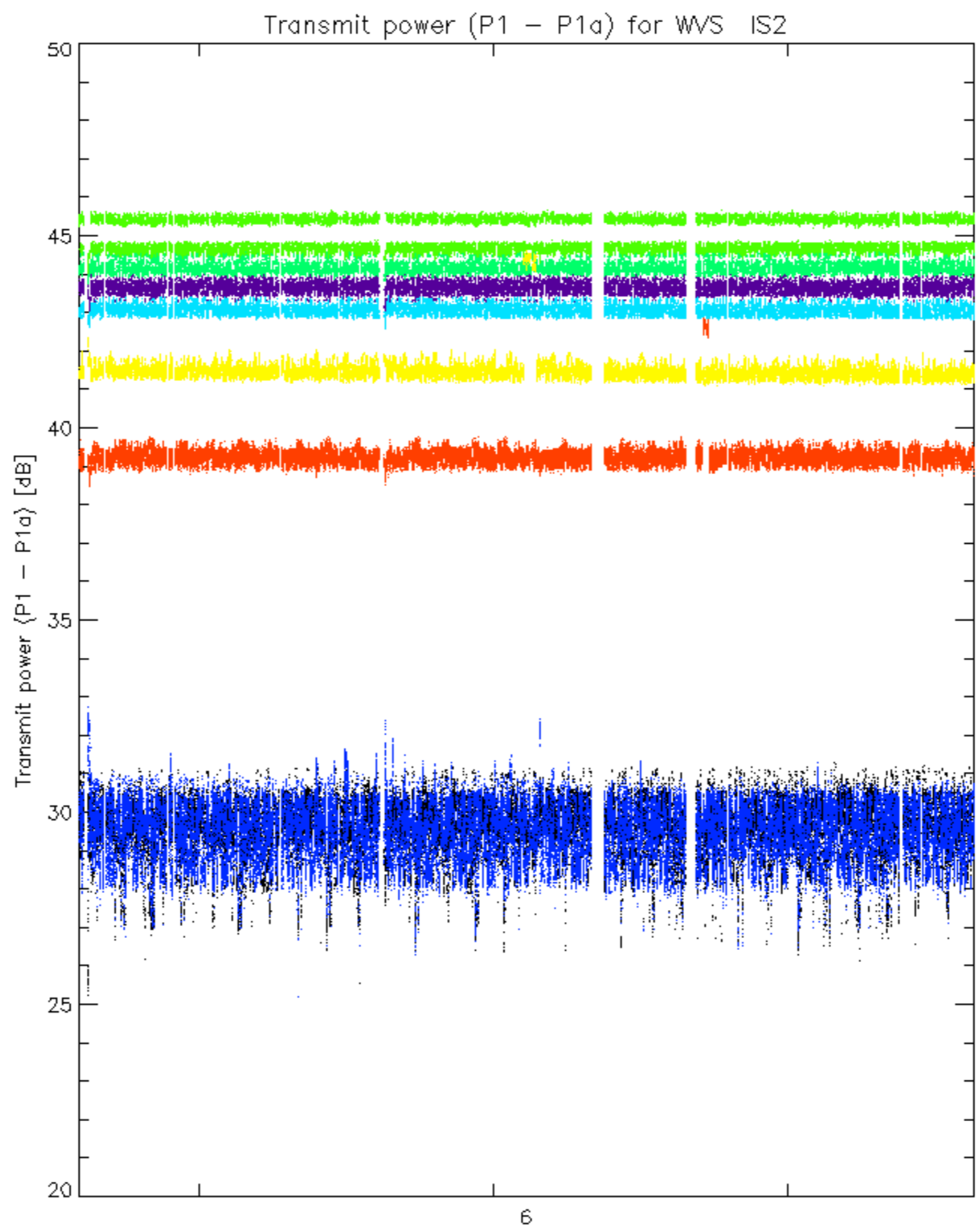
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060307_003803_00000502045_00403_20998_5624.N1	1	0
ASA_IMM_1PNPDE20060307_115630_000002682045_00410_21005_5678.N1	1	0
ASA_IMM_1PNPDE20060309_003426_000001152045_00431_21026_0116.N1	1	0
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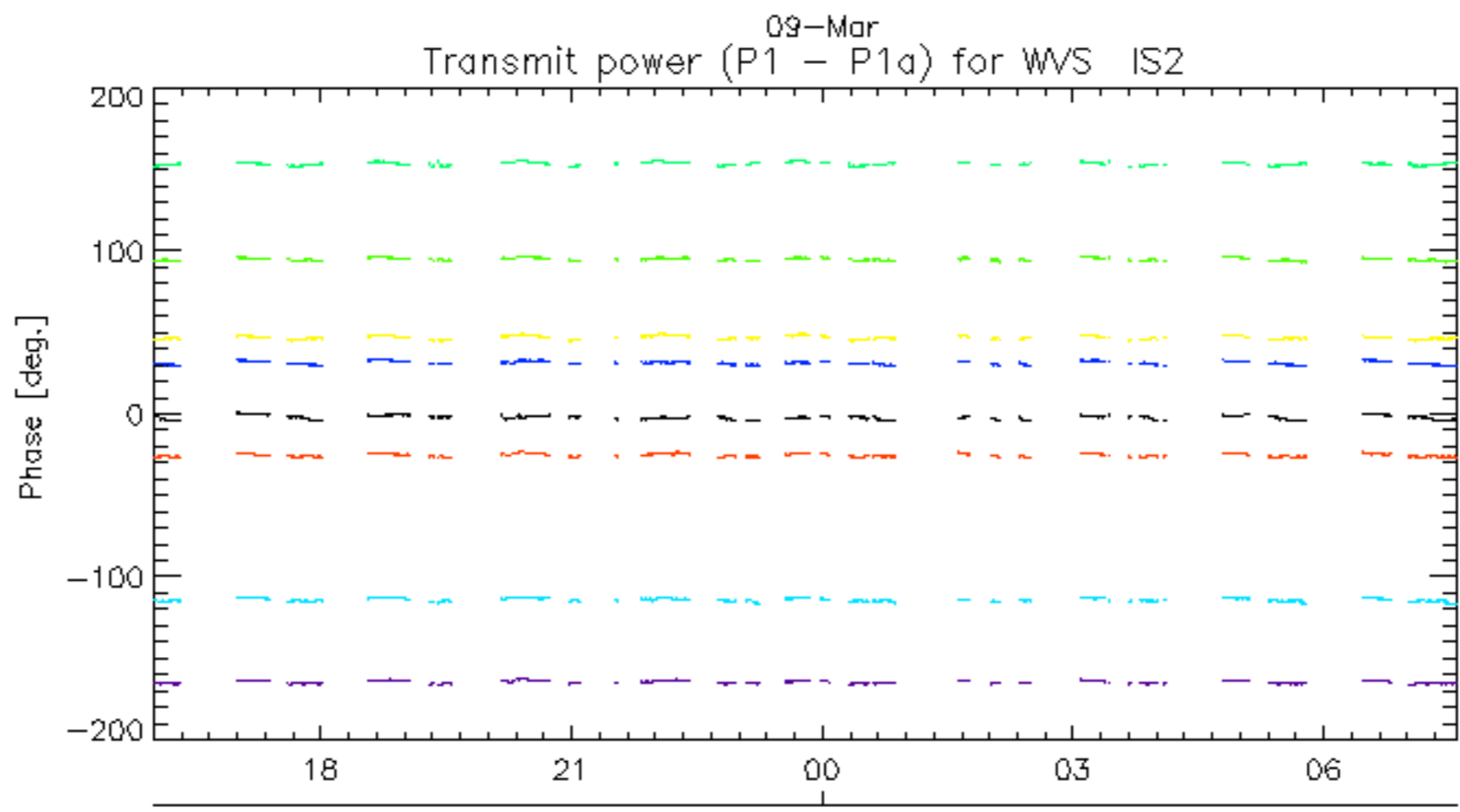
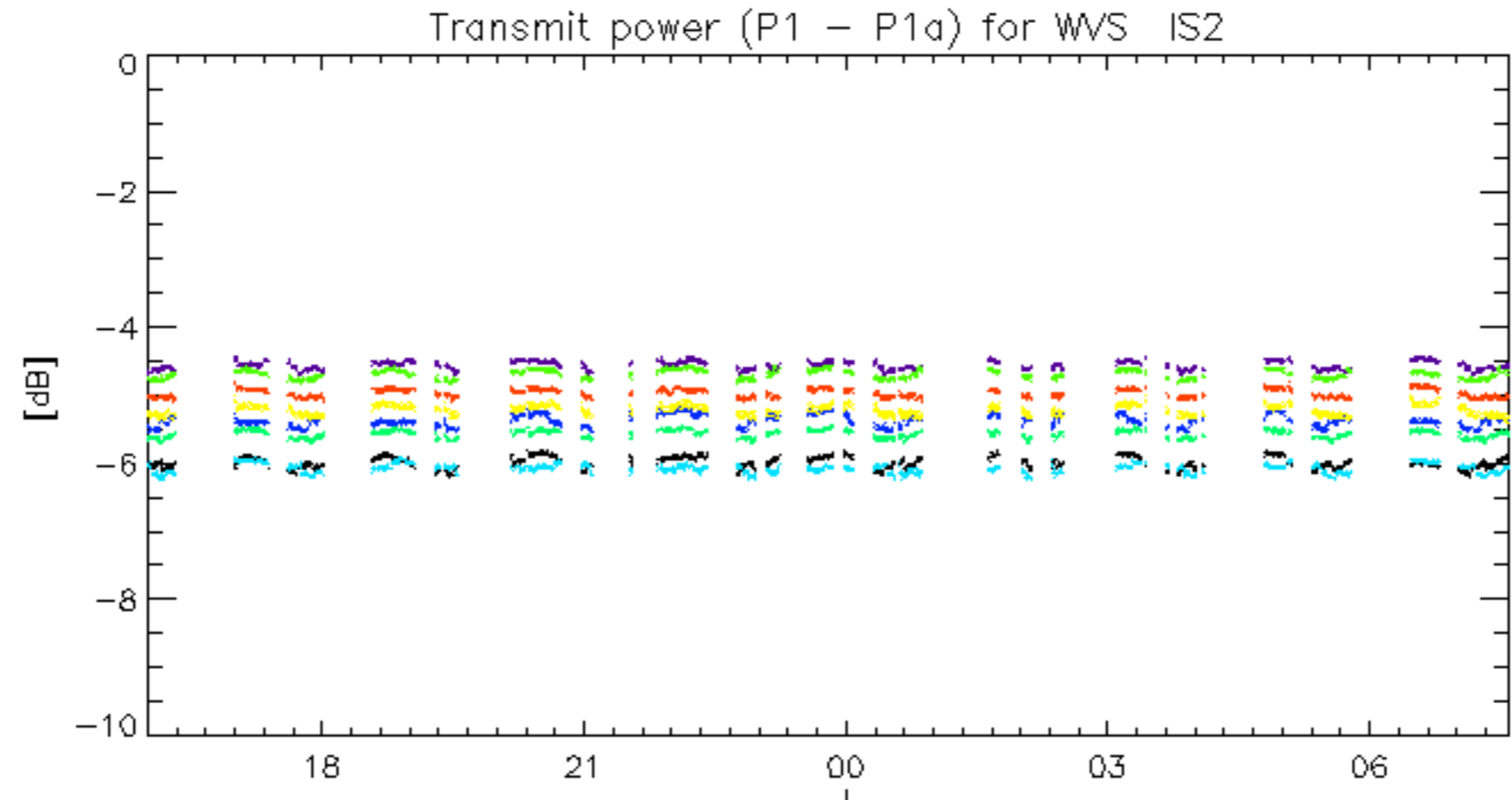
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No unavailabilities during the reported period.