

PRELIMINARY REPORT OF 060118

last update on Wed Jan 18 16:44:47 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 2006-01-17 00:00:00 to 2006-01-18 16:44:47

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	45	0	6	0	35
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	45	0	6	0	35
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	45	0	6	0	35
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	45	0	6	0	35

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	44	48	30	11	56
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	44	48	30	11	56
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	44	48	30	11	56
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	44	48	30	11	56

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	20060116 054040
H	20060117 050903

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
☒	☒
☒	☒
☒	☒
☒	☒

4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

4.1.1 - Evolution for WVS

Evolution of cal pulses for WVS
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☒

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	-4.050101	0.007512	0.053733
7	P1	-2.997047	0.015214	0.011681
11	P1	-4.102527	0.022848	0.017210
15	P1	-6.067324	0.017180	0.028838
19	P1	-3.241085	0.005493	-0.026905
22	P1	-4.486968	0.020269	0.018307
26	P1	-4.220564	0.011927	0.016388
30	P1	-5.770908	0.009915	-0.000843
3	P1	-16.989956	0.251978	0.122641
7	P1	-16.576998	0.127526	-0.069166
11	P1	-16.597050	0.329944	0.034487
15	P1	-13.270820	0.130822	0.190756
19	P1	-13.874570	0.073862	-0.003932
22	P1	-15.958325	0.570442	0.289907
26	P1	-15.778724	0.261954	-0.032768
30	P1	-16.616610	0.356288	0.139557

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.653141	0.097731	0.150842
7	P2	-22.502975	0.097853	0.096280
11	P2	-16.340561	0.103446	0.112788
15	P2	-7.230799	0.102109	0.054898
19	P2	-9.190271	0.098366	0.070113
22	P2	-17.939999	0.096535	0.021876
26	P2	-16.228939	0.100049	0.041914
30	P2	-19.665163	0.084083	0.048787

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.220138	0.007694	0.027338
7	P3	-8.220138	0.007694	0.027338
11	P3	-8.220138	0.007694	0.027338
15	P3	-8.220138	0.007694	0.027338
19	P3	-8.220138	0.007694	0.027338
22	P3	-8.220138	0.007694	0.027338
26	P3	-8.220138	0.007694	0.027338
30	P3	-8.220138	0.007694	0.027338

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1

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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	-3.719692	0.008532	-0.009799
7	P1	-2.761831	0.007652	0.027817
11	P1	-2.867975	0.010484	0.014872
15	P1	-3.448233	0.018074	-0.055439
19	P1	-3.384055	0.014016	0.038095
22	P1	-5.123576	0.021209	0.007510
26	P1	-5.854230	0.015624	0.010024
30	P1	-5.261950	0.031443	0.064512
3	P1	-11.511935	0.034183	-0.060089
7	P1	-9.935193	0.050112	0.077560
11	P1	-10.062649	0.051332	-0.035877
15	P1	-10.603192	0.080226	-0.090671
19	P1	-15.493191	0.065175	0.101845
22	P1	-20.724716	1.109461	0.460019

26	P1	-16.936932	0.324984	0.471156
30	P1	-18.160938	0.300248	-0.026119

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.488235	0.032822	0.258697
7	P2	-22.930761	0.059326	0.290068
11	P2	-11.482003	0.020806	0.195942
15	P2	-4.944707	0.023858	0.119211
19	P2	-6.942999	0.022821	0.105633
22	P2	-8.200615	0.022878	0.052795
26	P2	-23.997606	0.026610	0.127196
30	P2	-22.112589	0.017249	0.077360

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.064950	0.002517	0.040874
7	P3	-8.064922	0.002516	0.041518
11	P3	-8.065037	0.002518	0.041575
15	P3	-8.064946	0.002517	0.041267
19	P3	-8.065075	0.002518	0.041004
22	P3	-8.064883	0.002512	0.040981
26	P3	-8.064811	0.002507	0.041016
30	P3	-8.064957	0.002517	0.040687

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	0.000543480
	stdev	1.81257e-07
MEAN Q	mean	0.000510343
	stdev	2.21307e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.137645
	stdev	0.00122004
STDEV Q	mean	0.137994
	stdev	0.00123884



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006011[678]

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_1PNPDE20060118_004619_000001942044_00217_20311_0394.N1	1	0
ASA_WSM_1PNPDE20060116_162331_000002082044_00198_20292_0958.N1	0	49
ASA_WSM_1PNPDE20060116_180329_000001712044_00199_20293_0974.N1	0	13
ASA_WSM_1PNPDE20060117_112911_000001832044_00209_20303_1118.N1	0	28
ASA_WSM_1PNPDE20060117_175924_000000792044_00213_20307_1178.N1	5	29



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

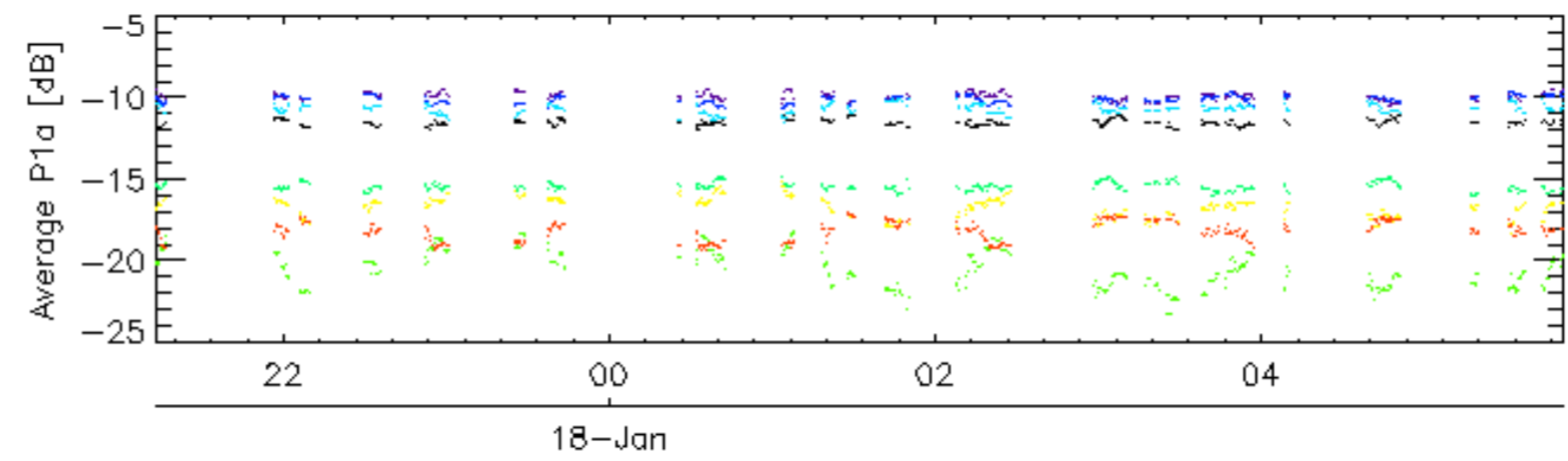
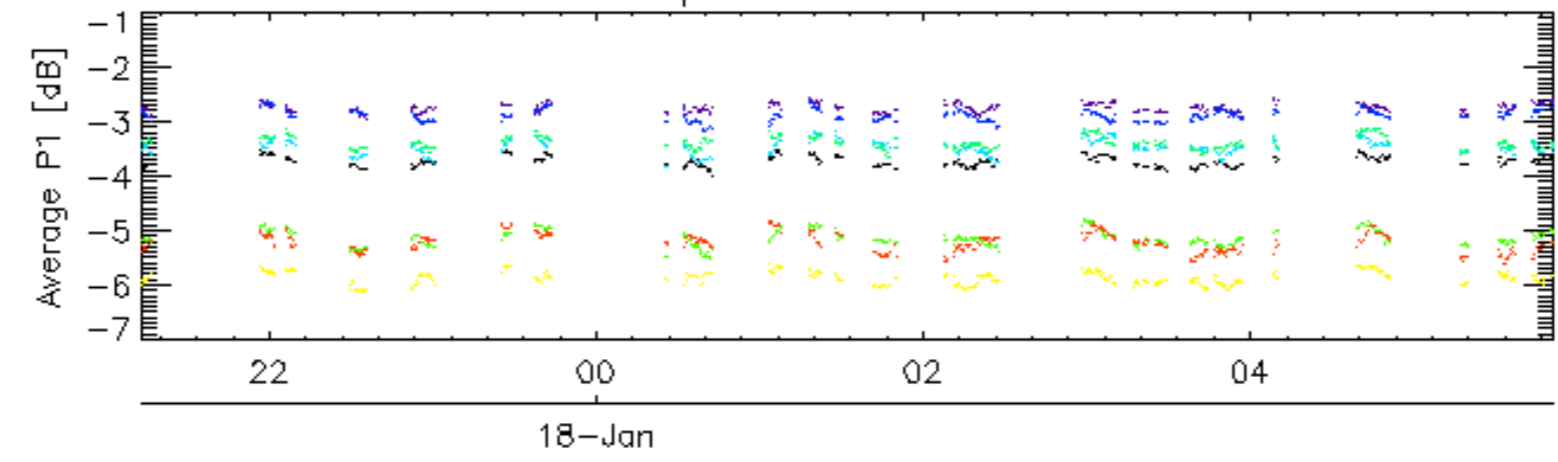
<input type="checkbox"/>	
	Ascending
<input type="checkbox"/>	
	Descending

7.6 - Doppler evolution versus ANX for GM1

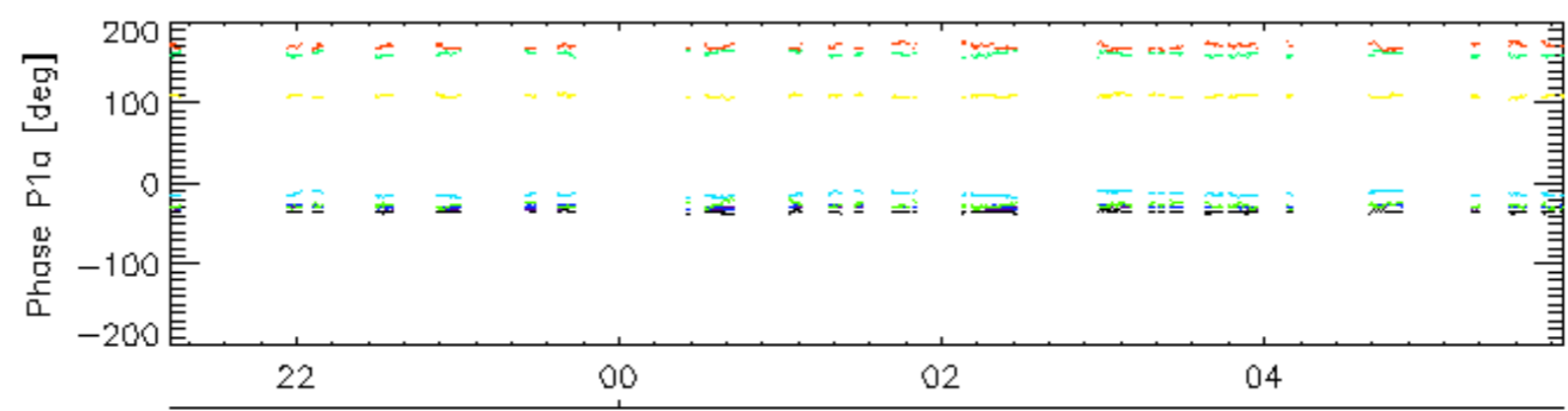
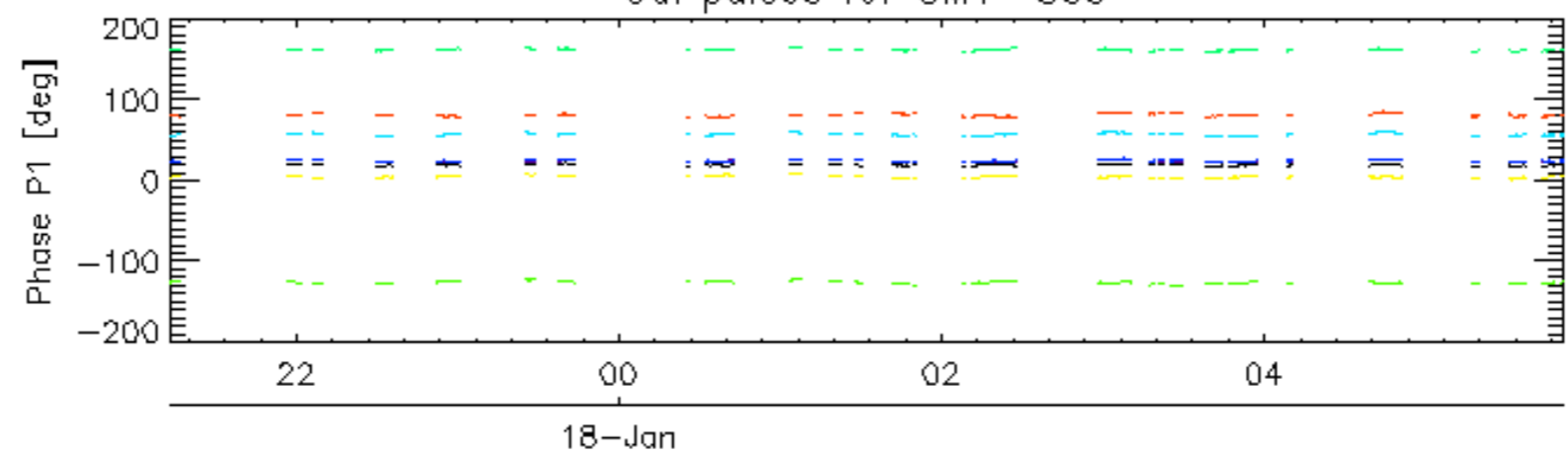
Evolution Doppler error versus ANX

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

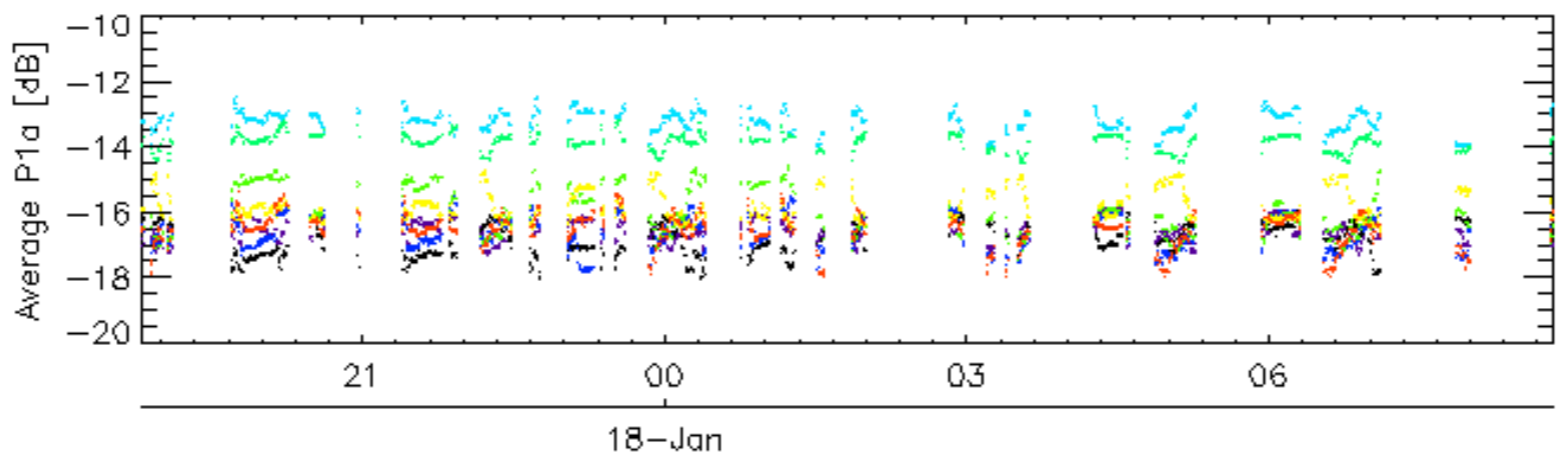
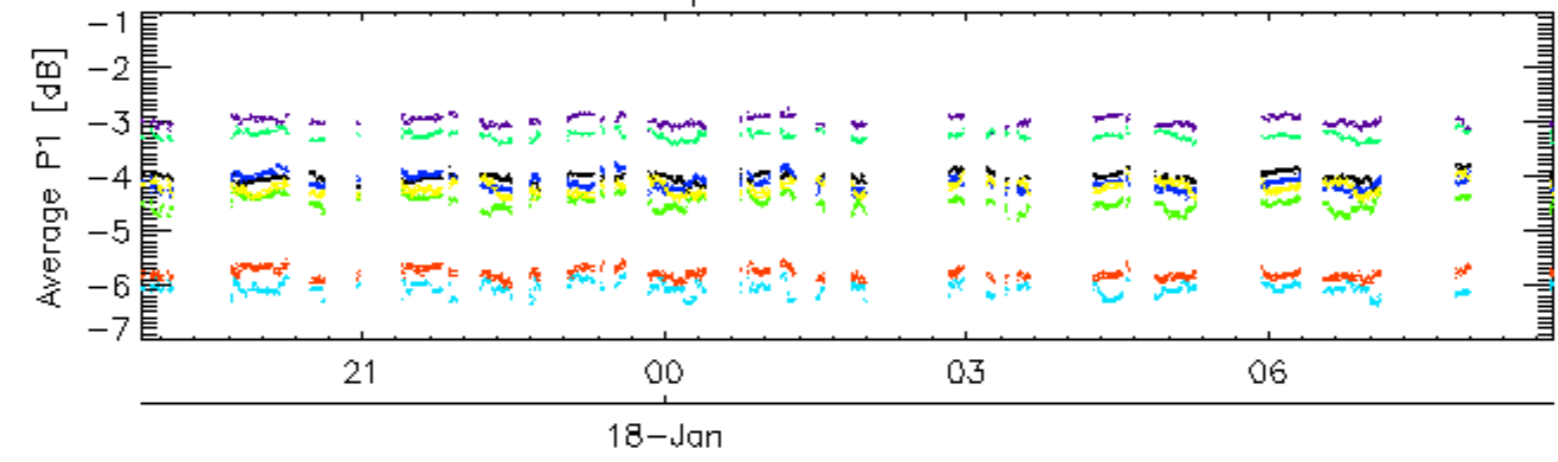


Cal pulses for GM1 SS3

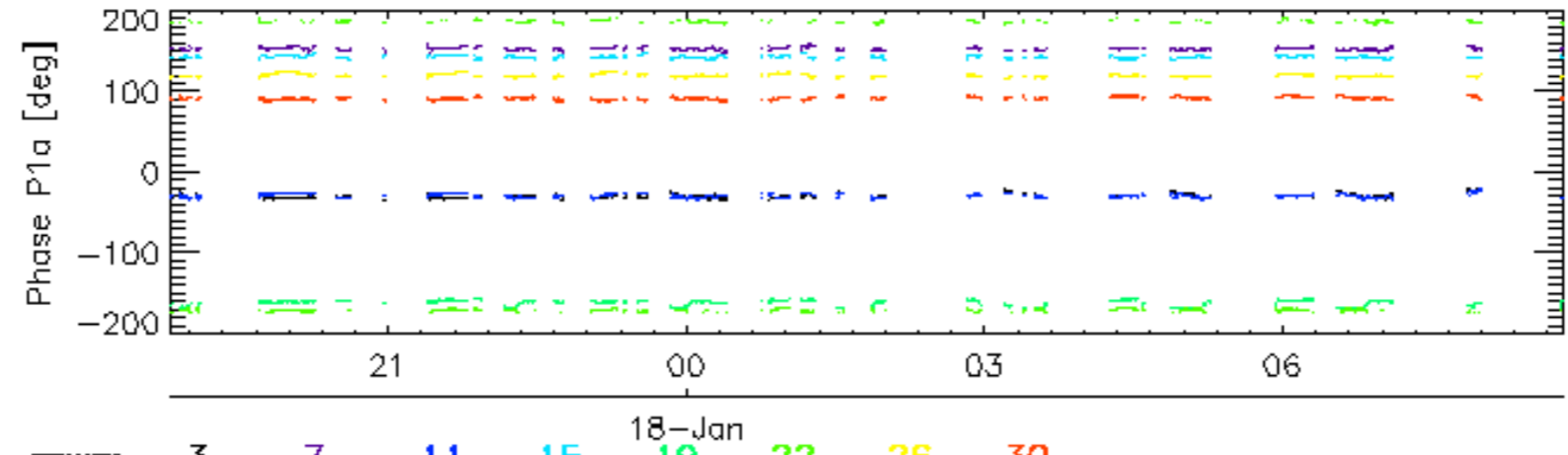
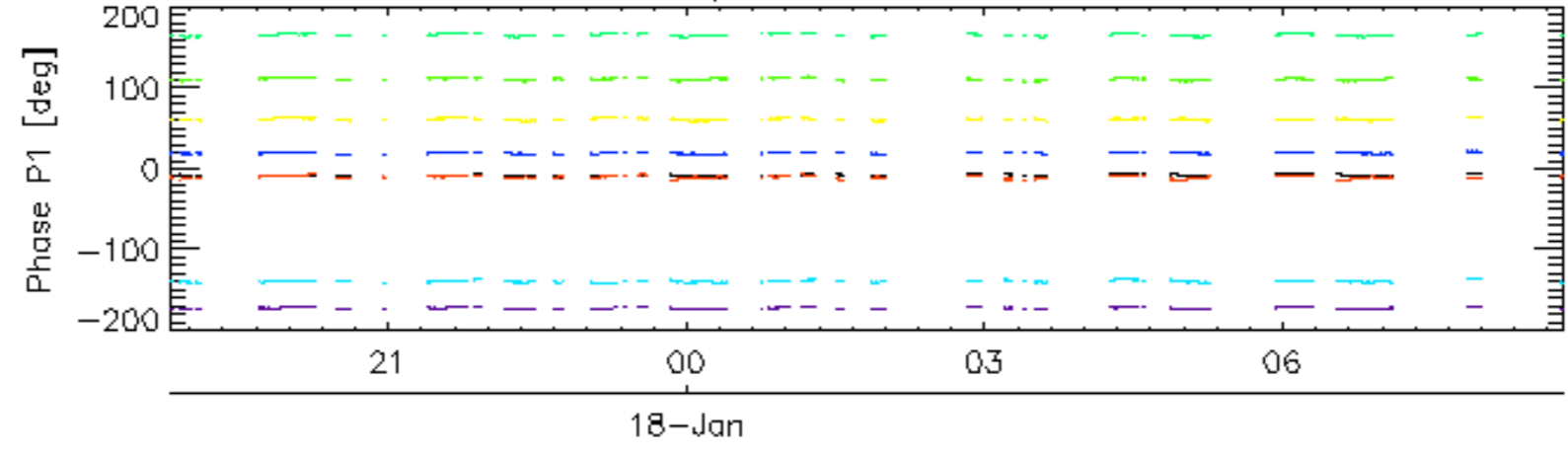


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

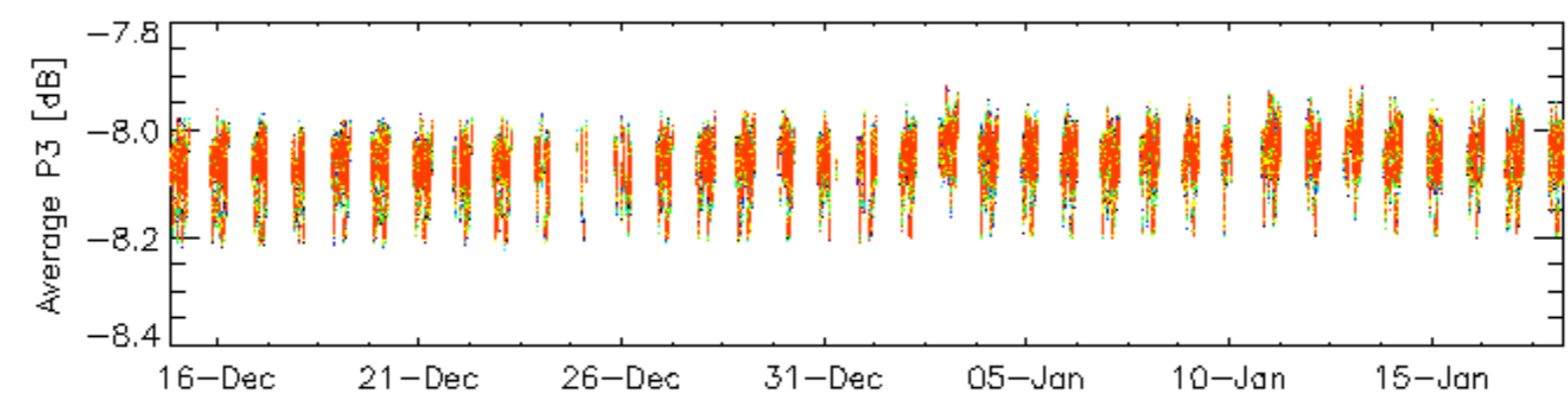
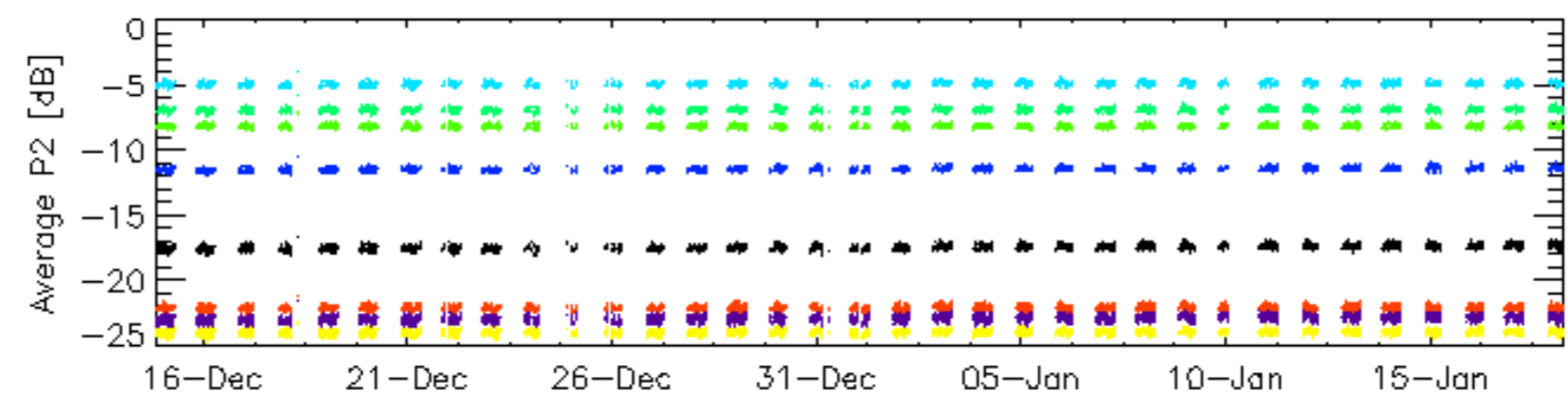
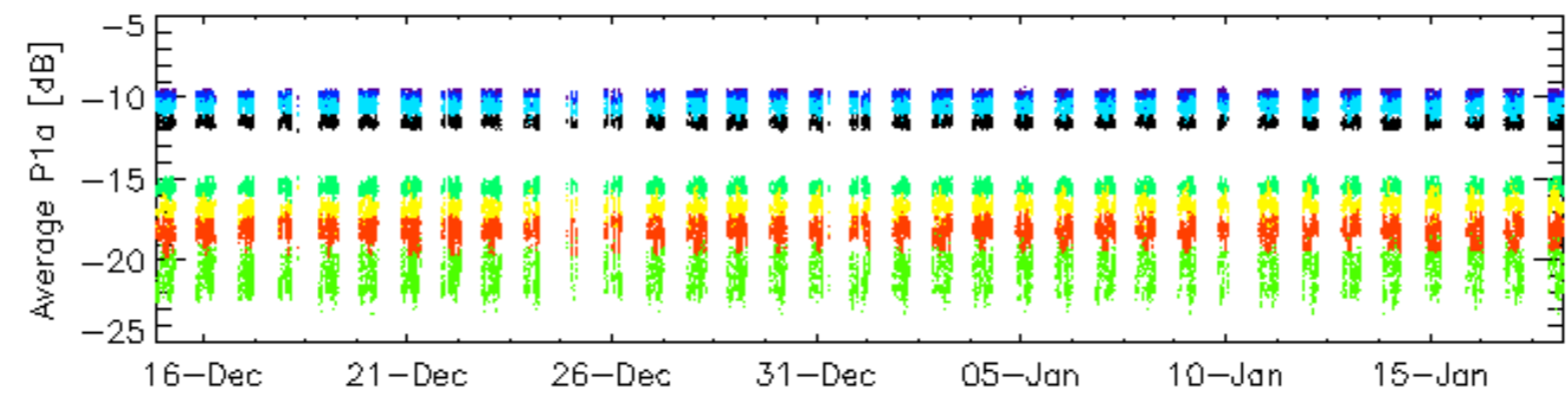
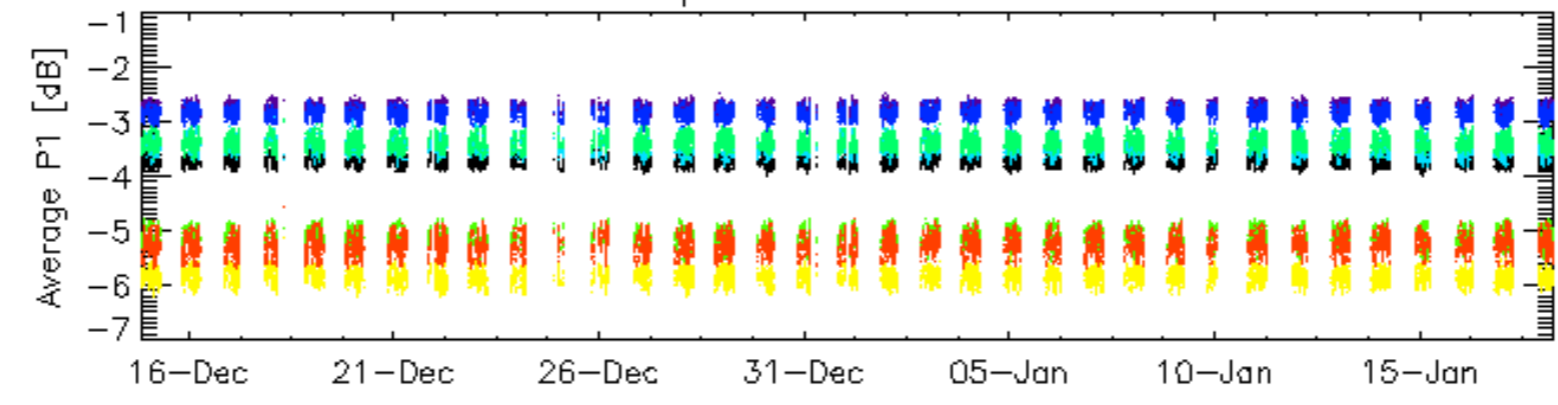


Cal pulses for WVS IS2



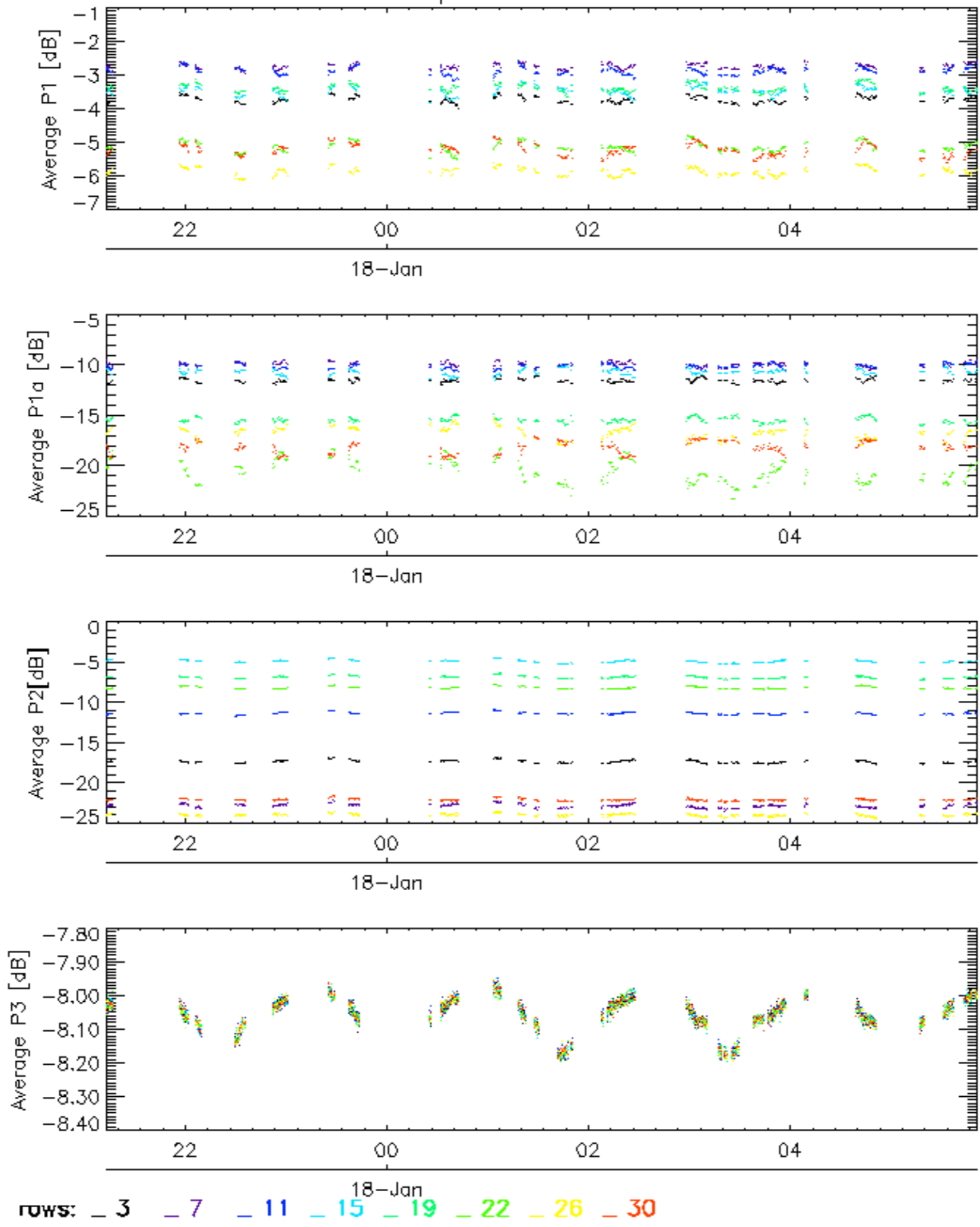
rows: 3 7 11 15 19 22 26 30

Cal pulses for GM1 SS3

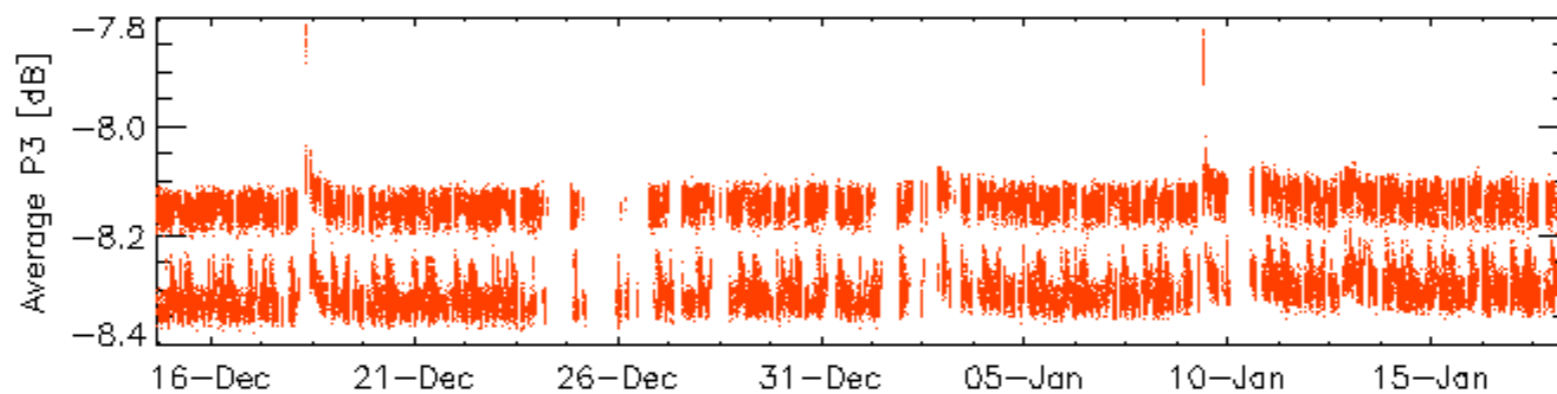
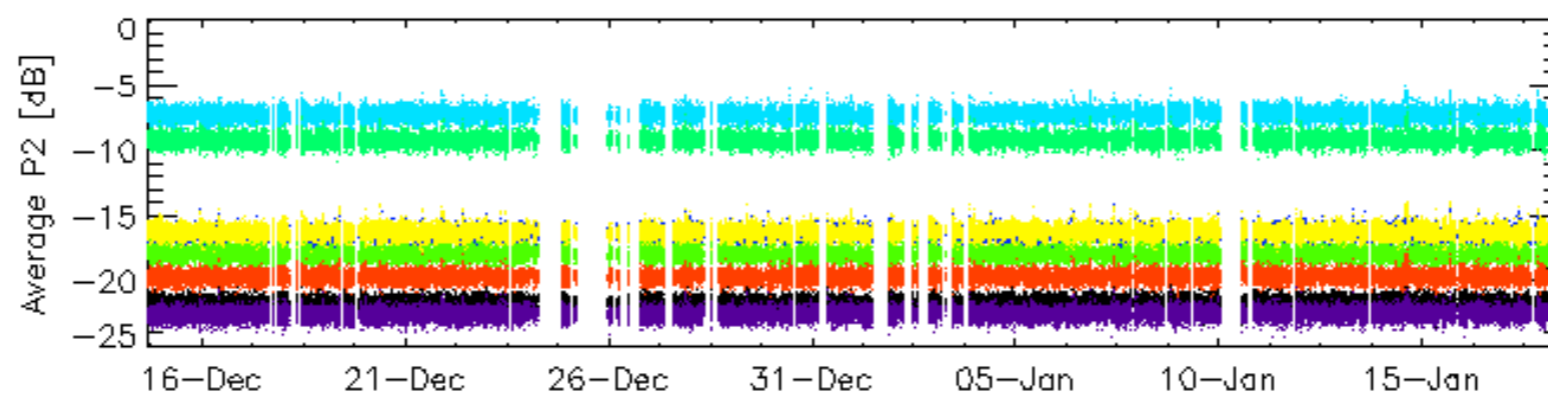
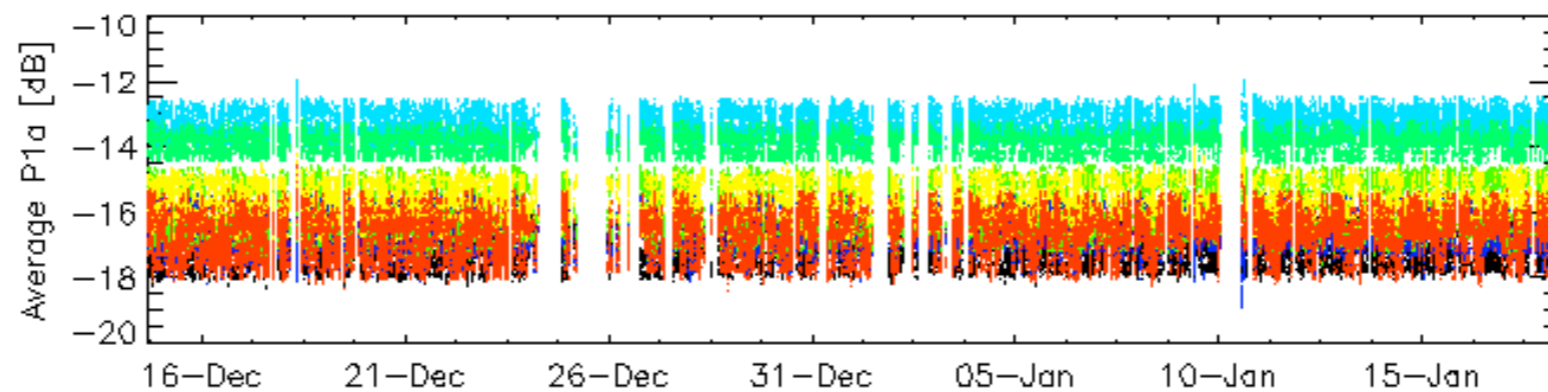
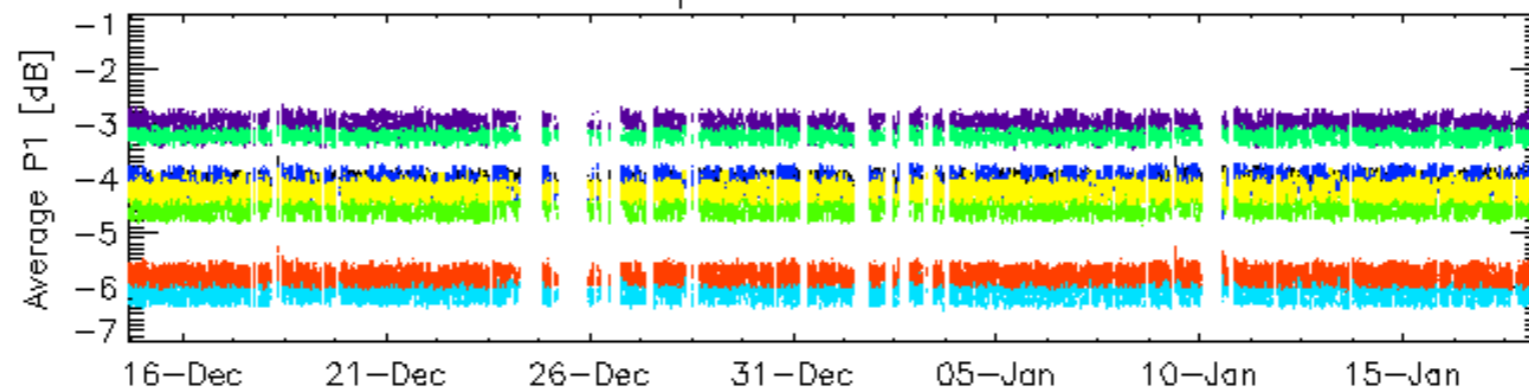


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

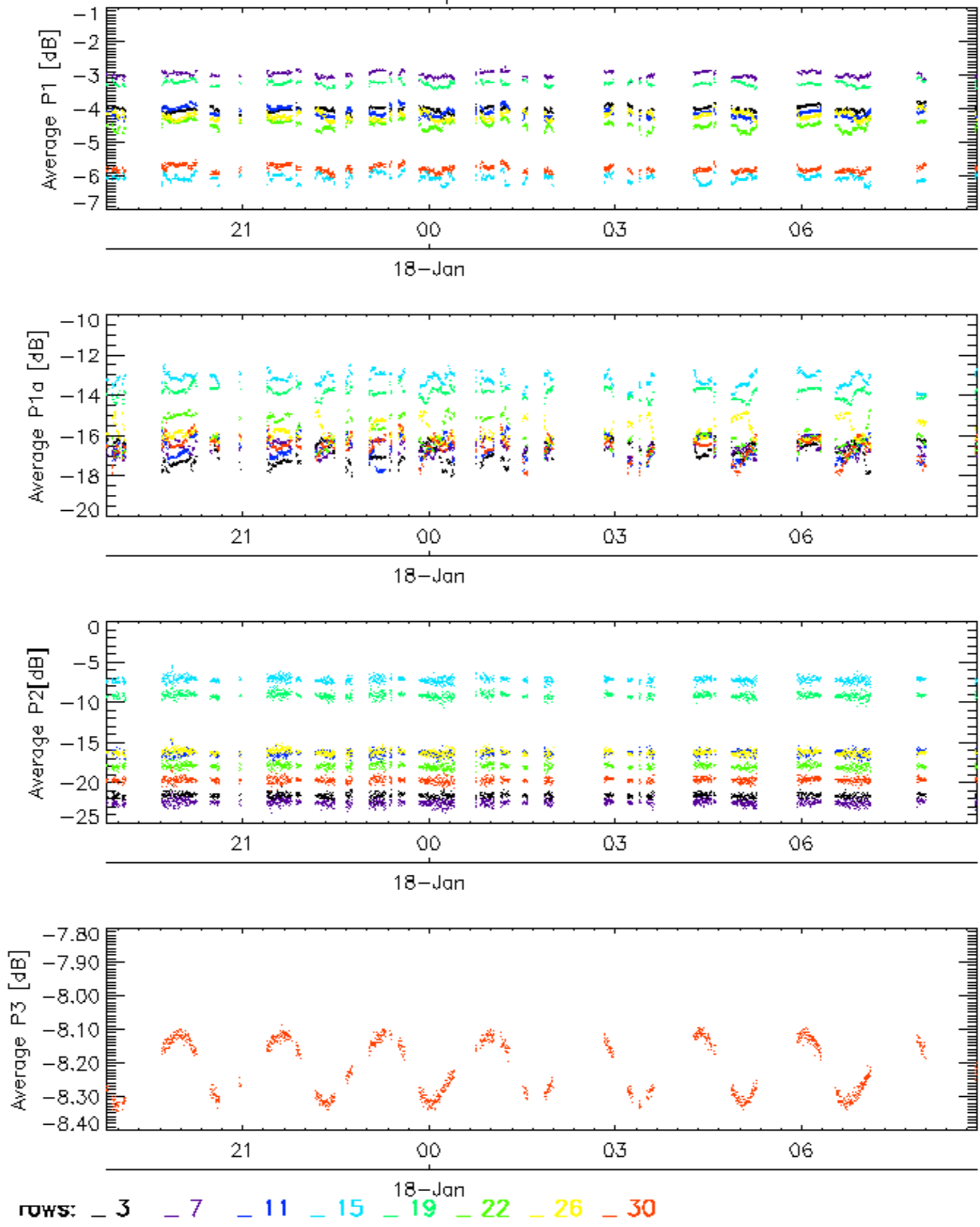


Cal pulses for WVS IS2



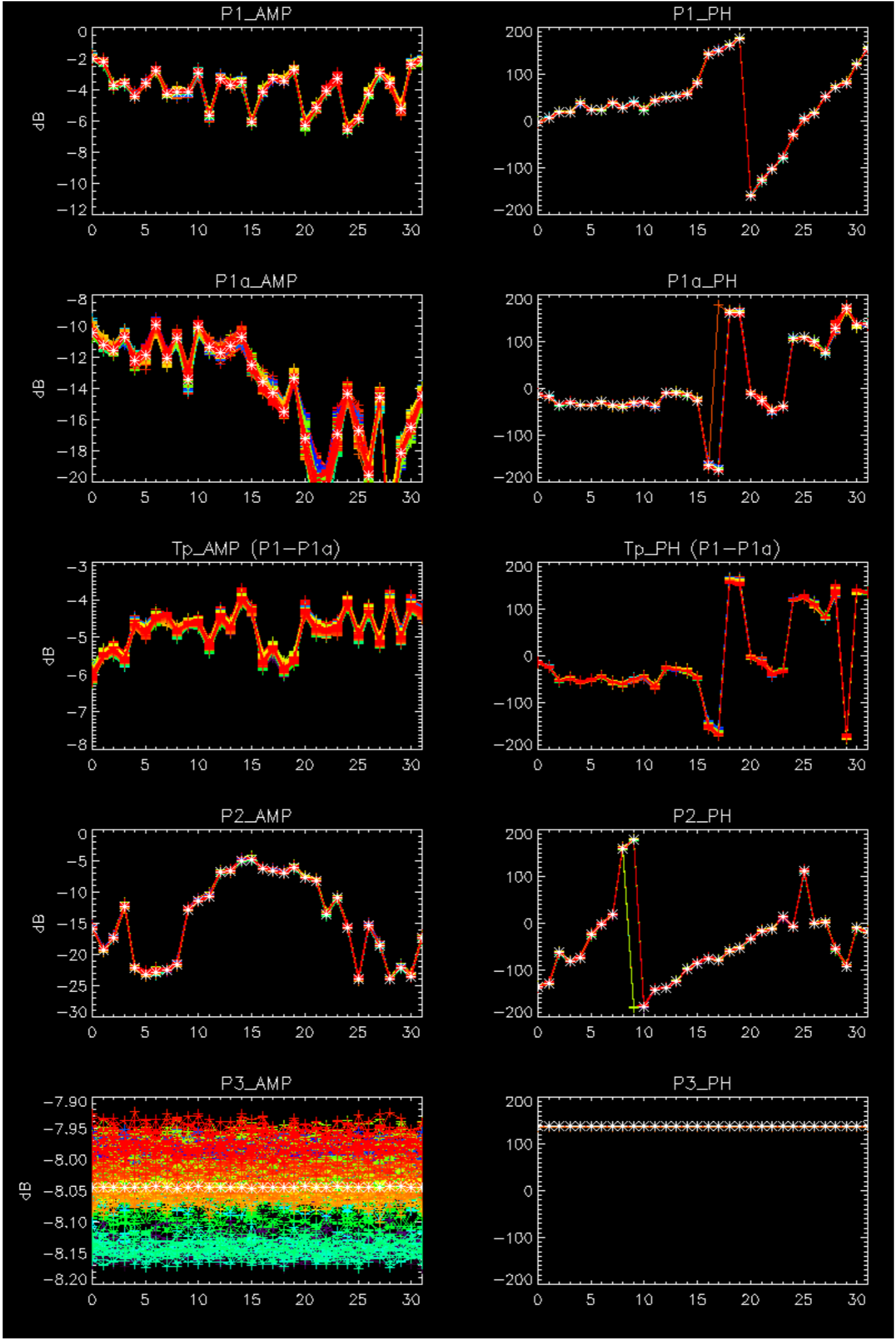
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

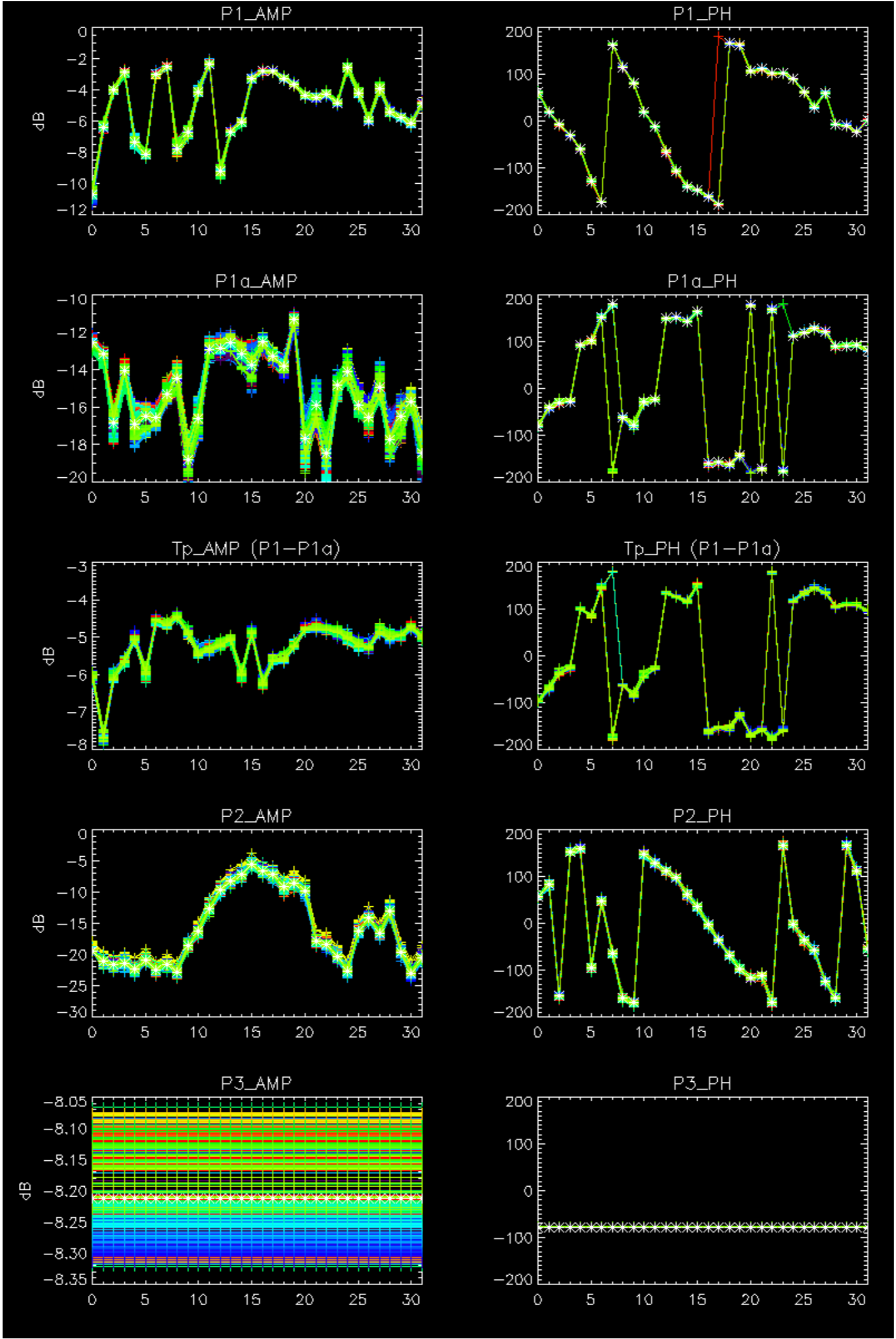
Cal pulses for WVS IS2



No anomalies observed on available browse products

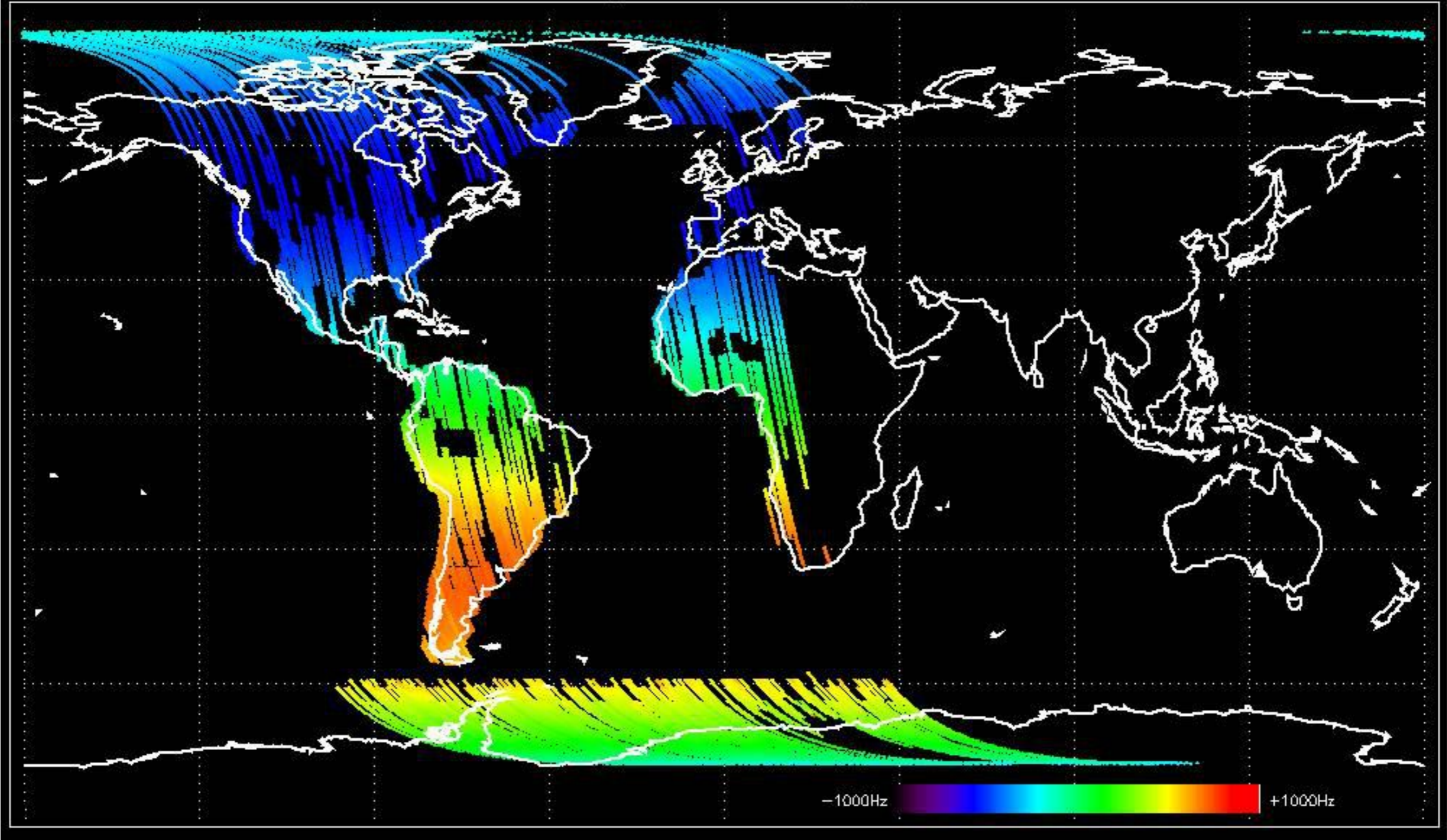
No anomalies observed.



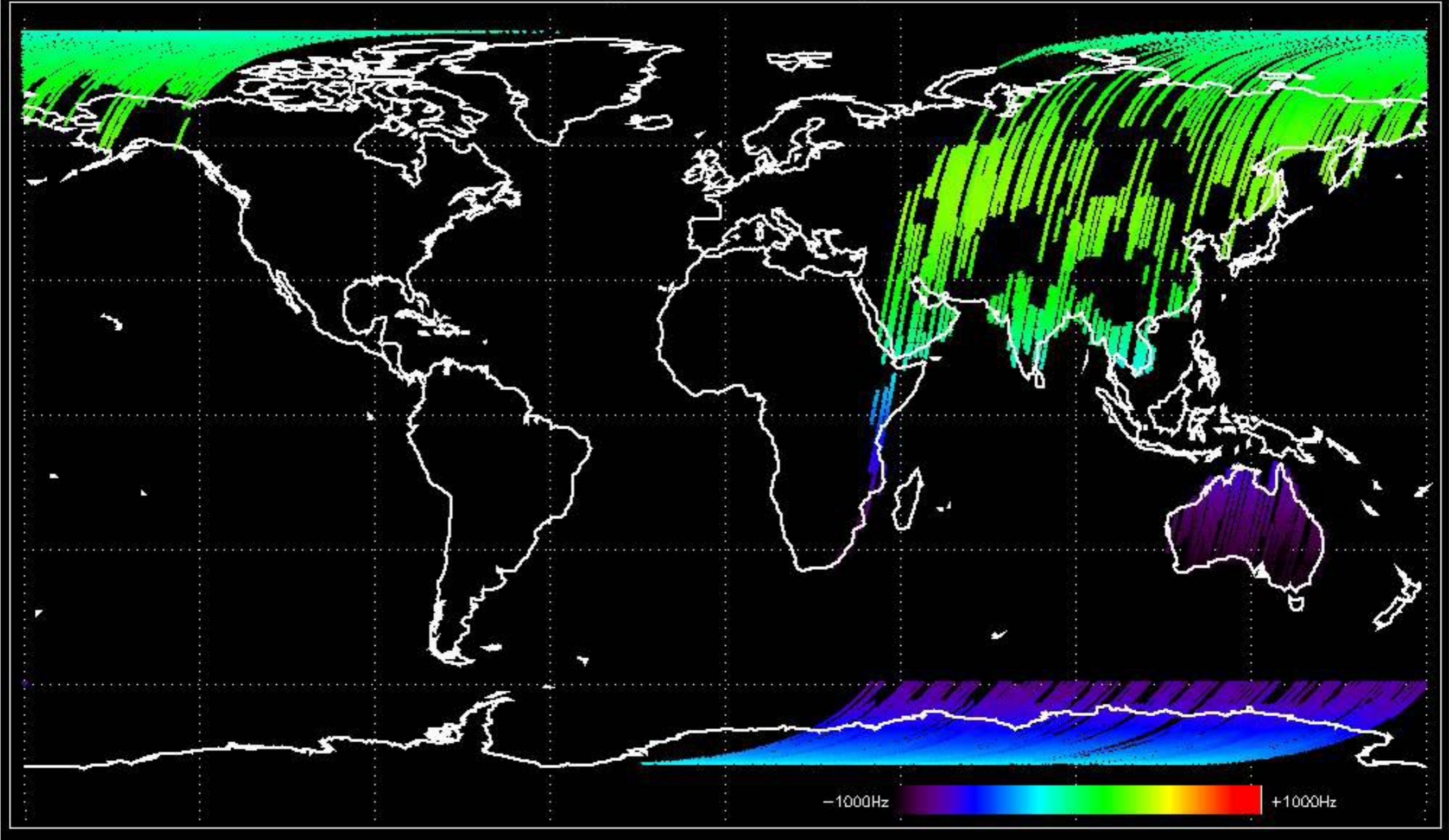


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

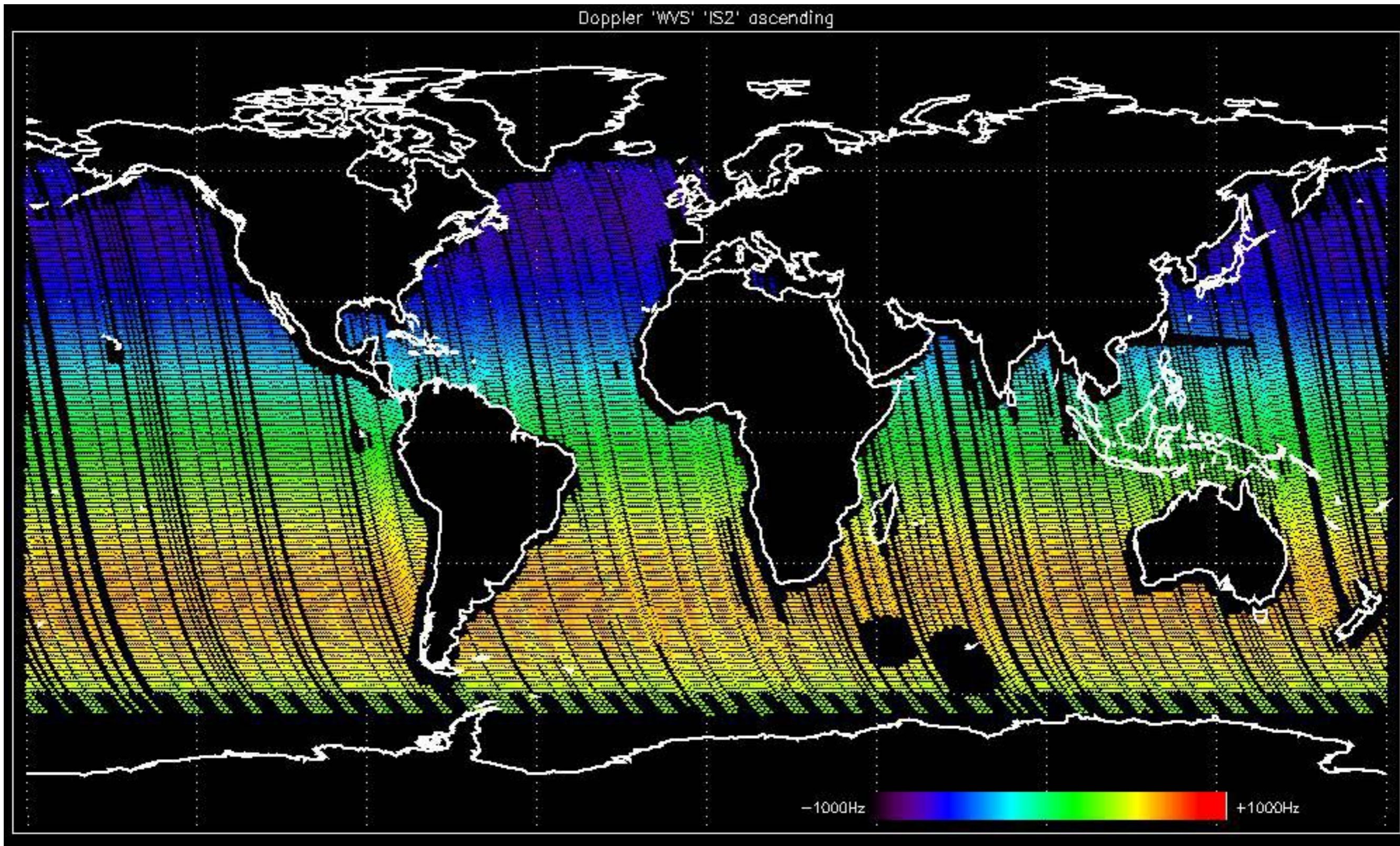
Doppler 'GM1' 'SS1' ascending



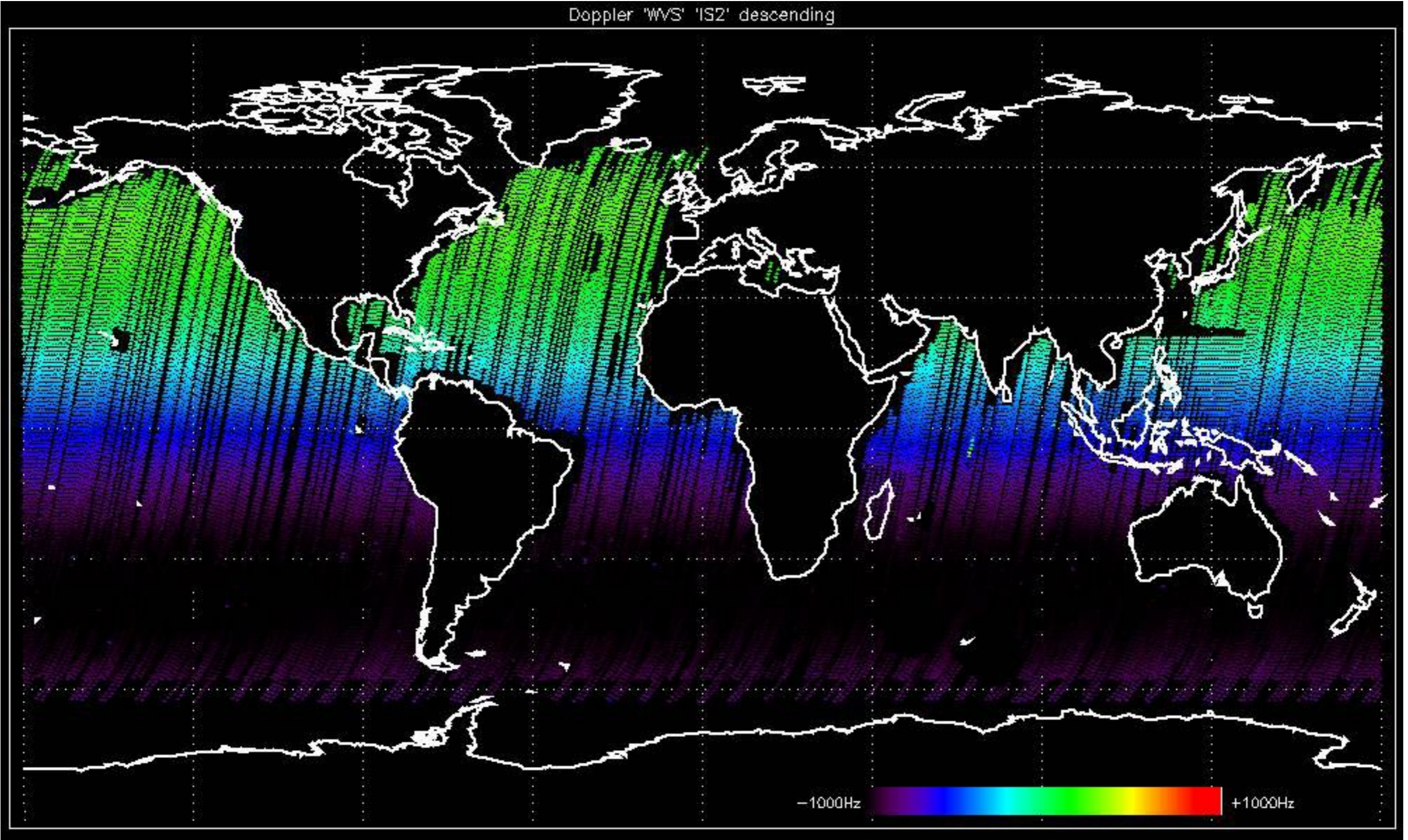
Doppler 'GM1' 'SS1' descending

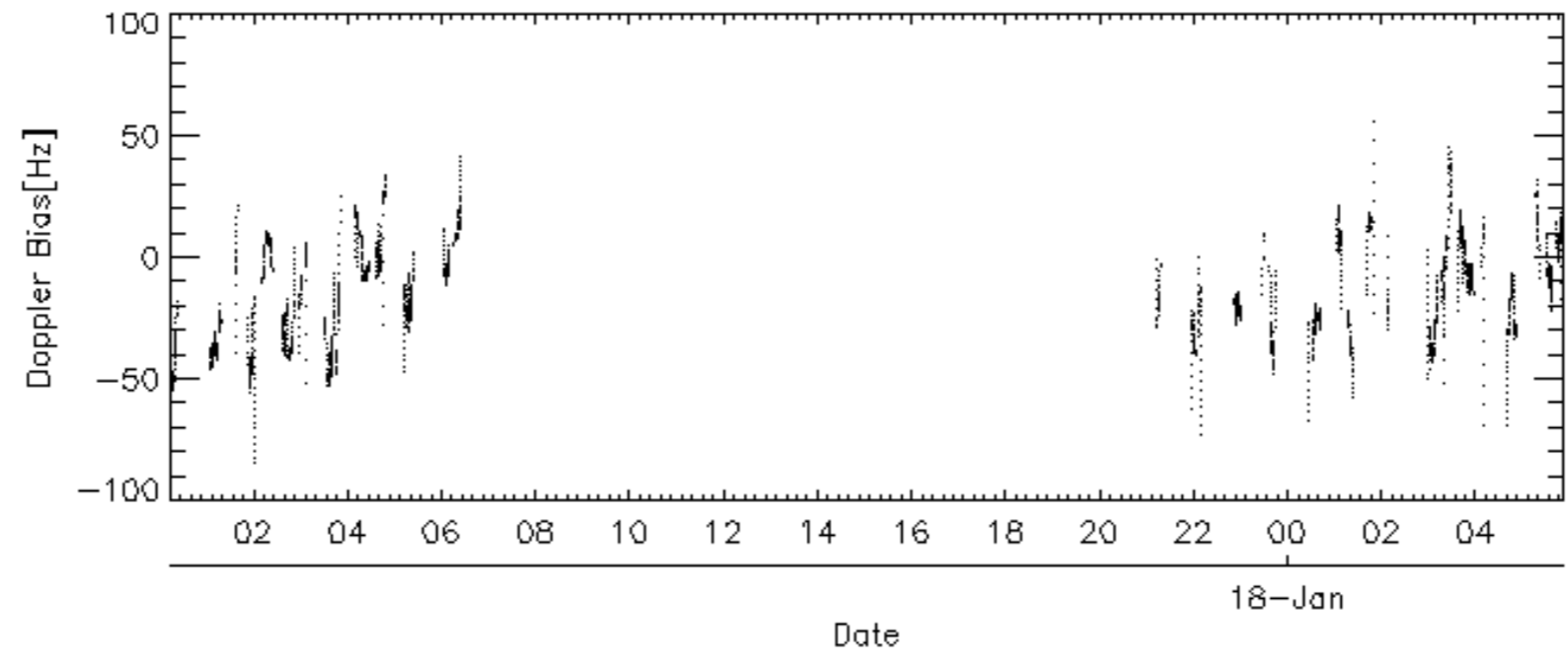
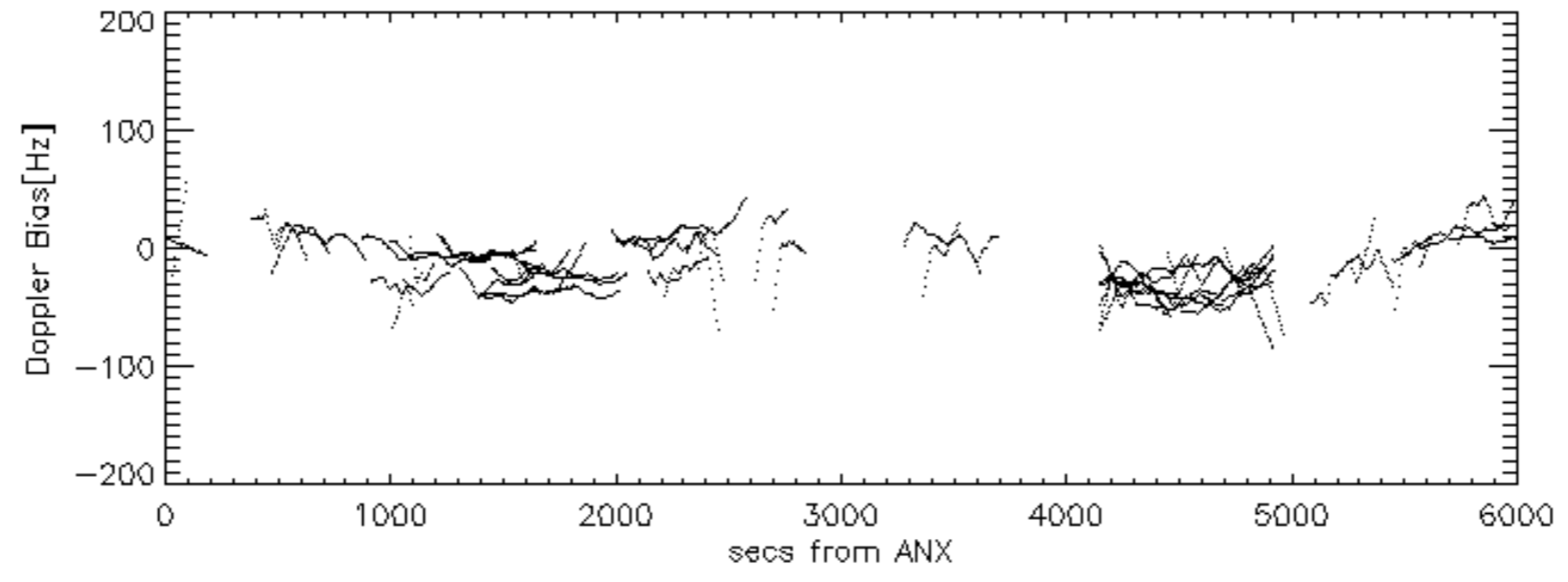
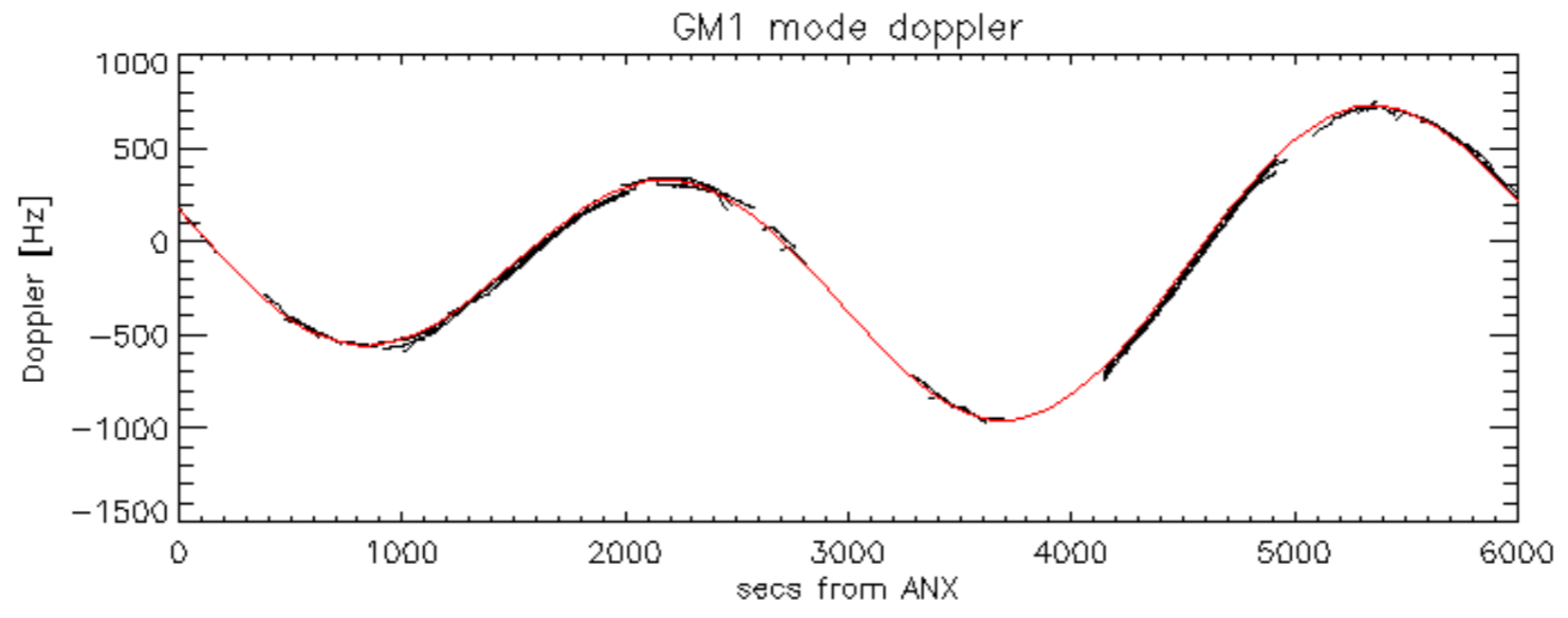


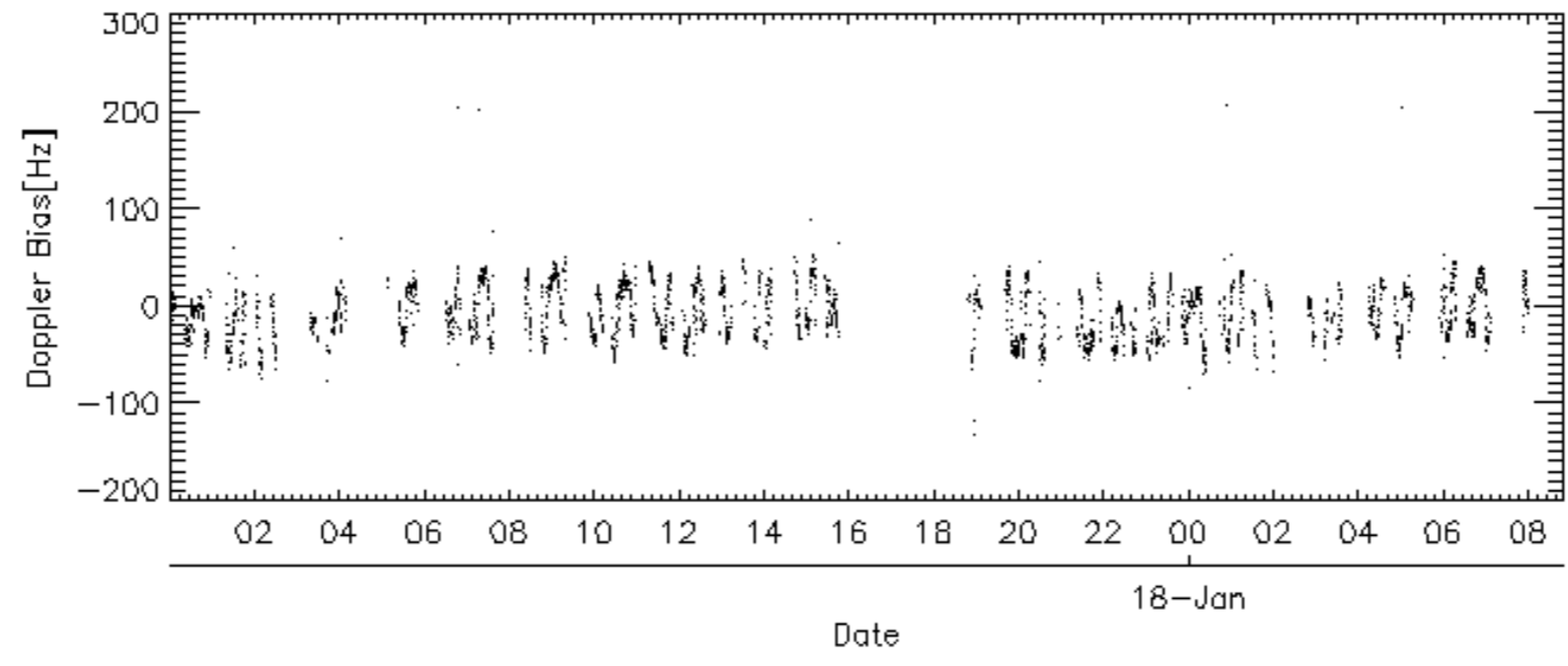
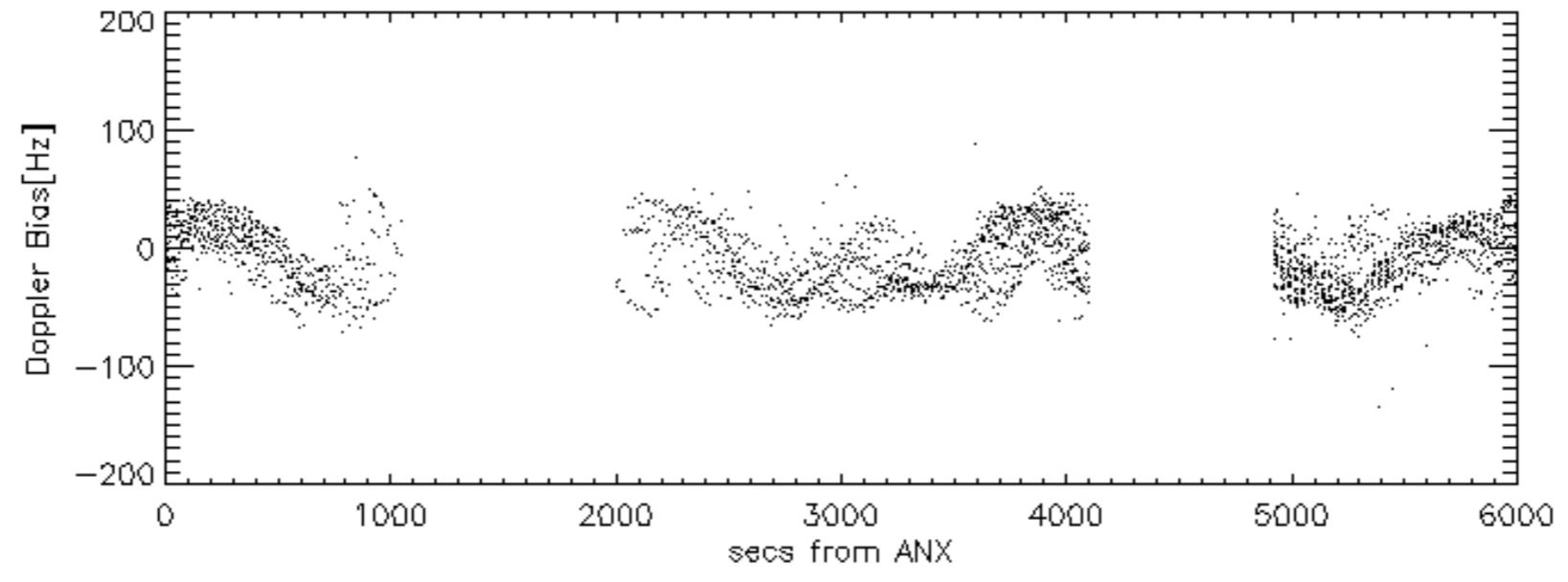
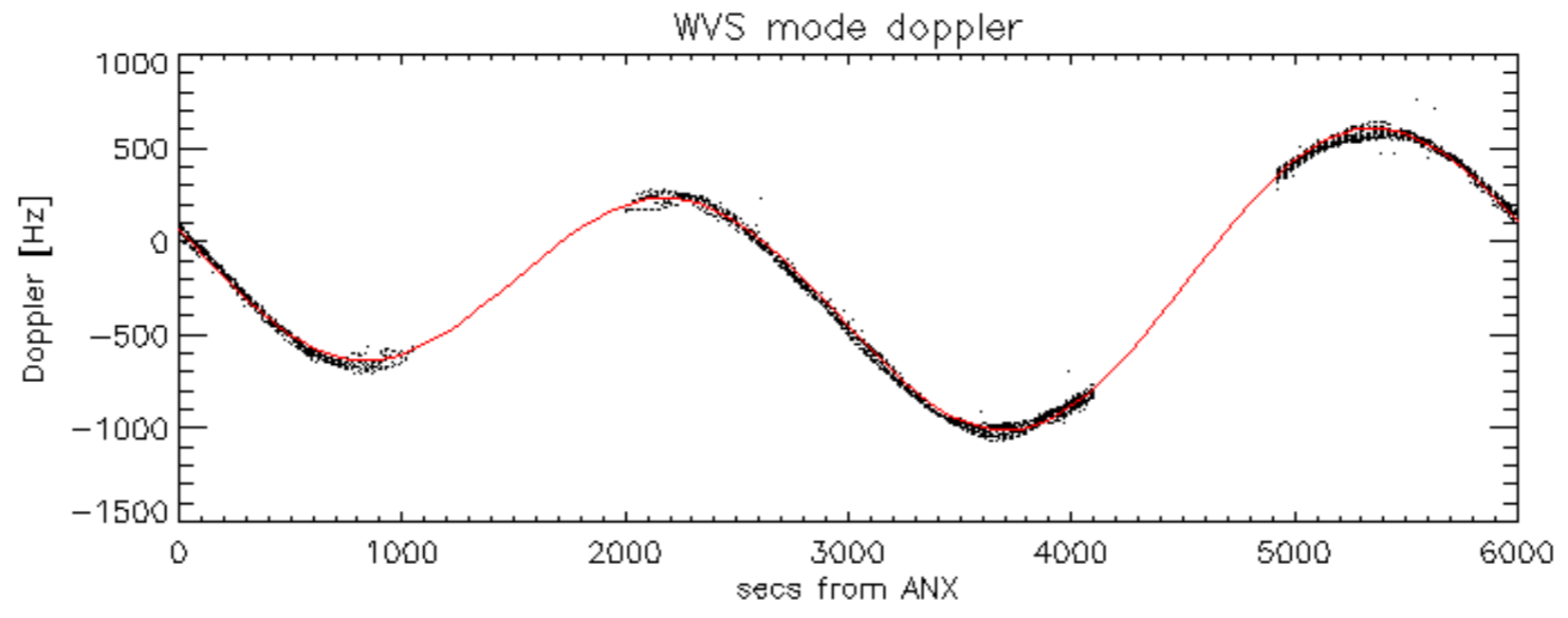
Doppler 'WVS' 'IS2' ascending



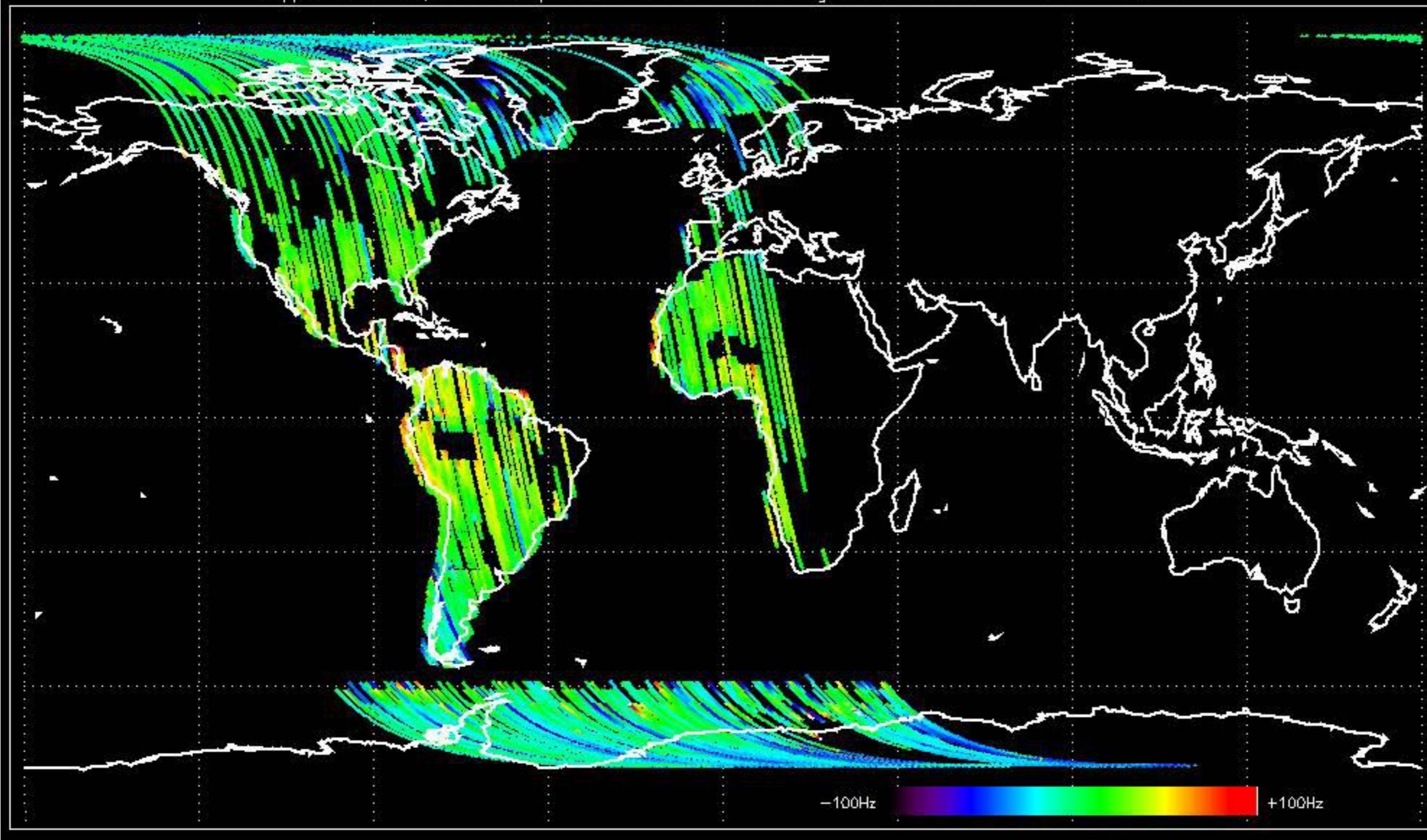
Doppler 'WVS' 'IS2' descending



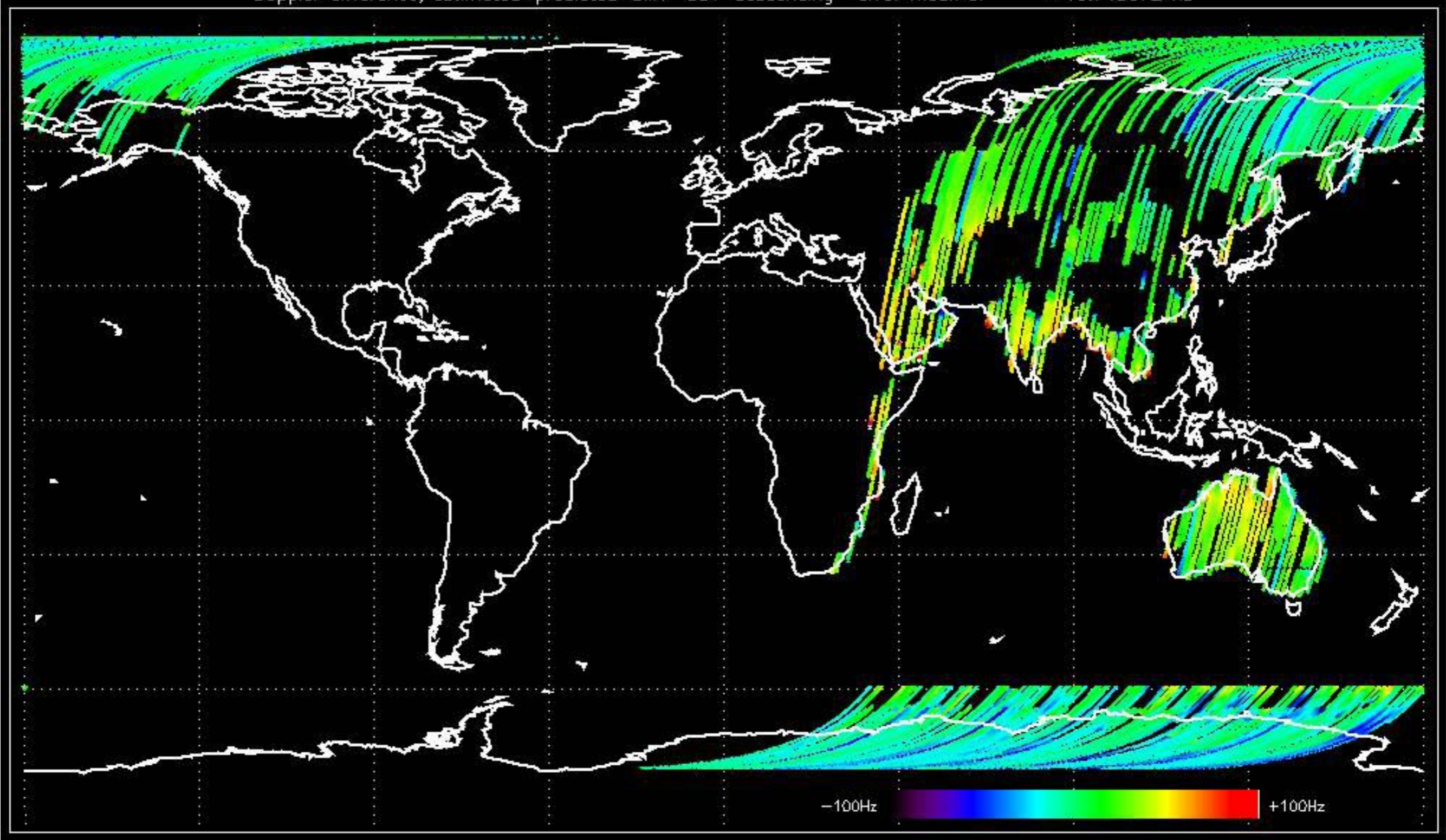




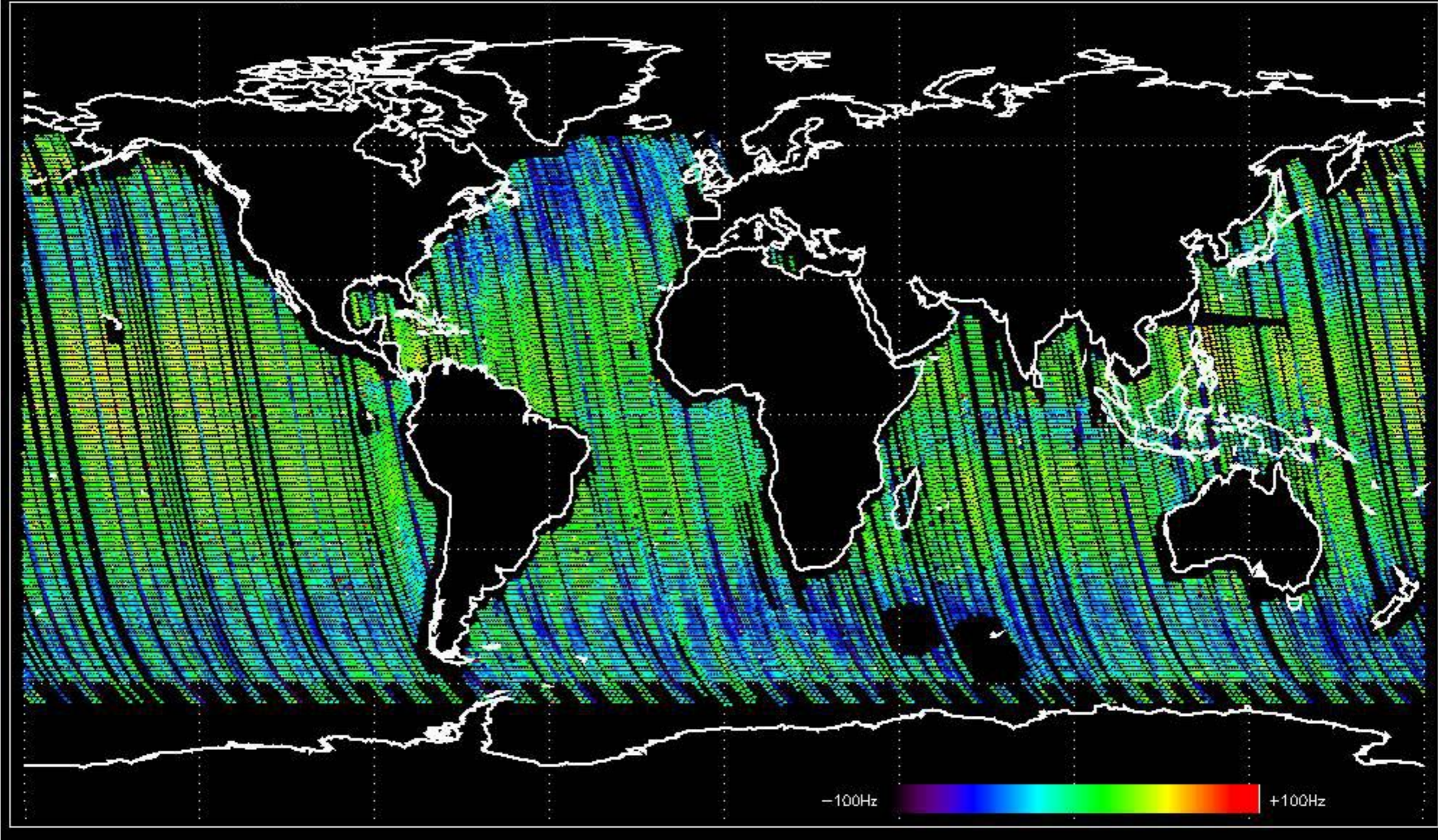
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -12.905352 Hz



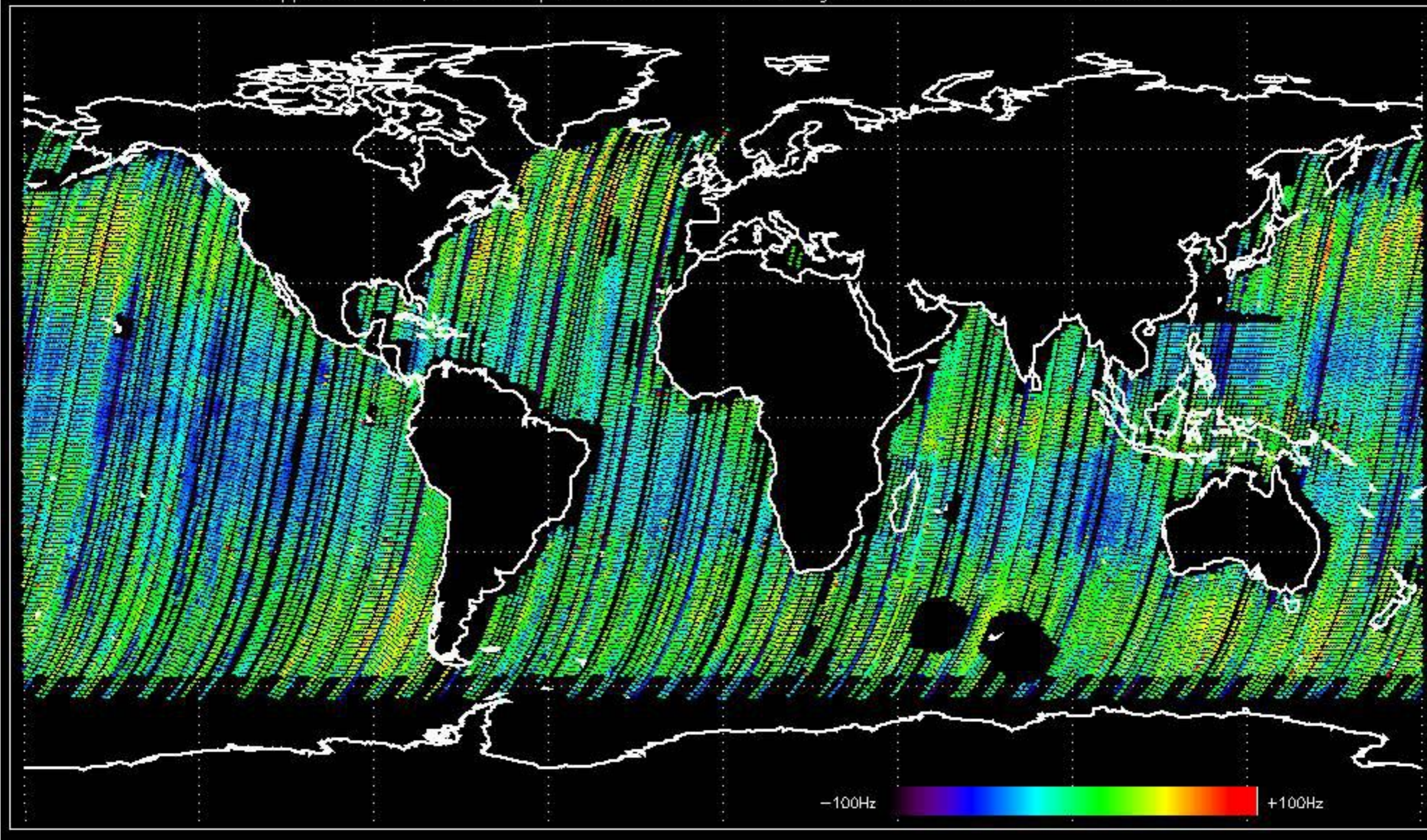
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -18.718672 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -7.9845873 Hz

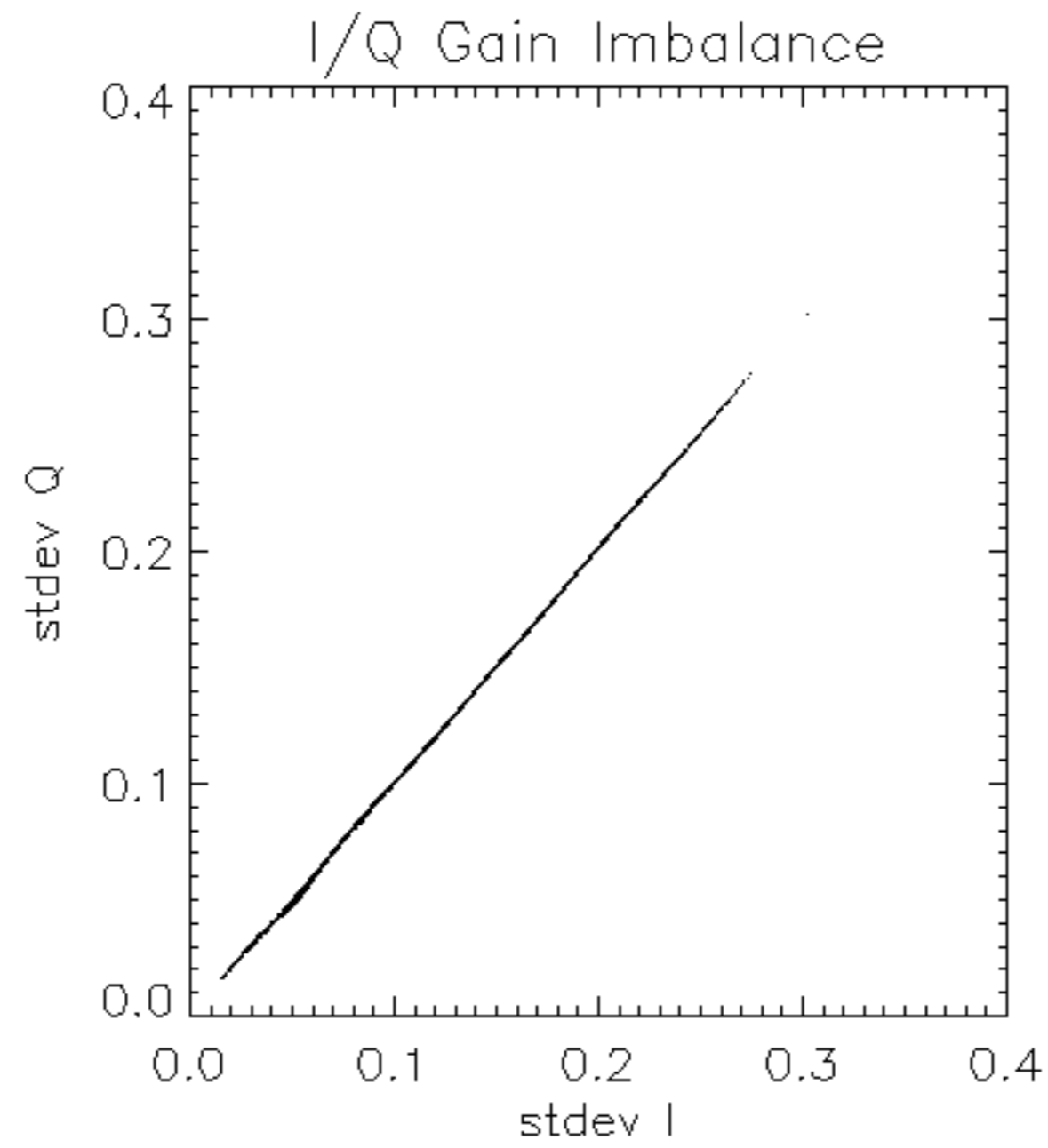


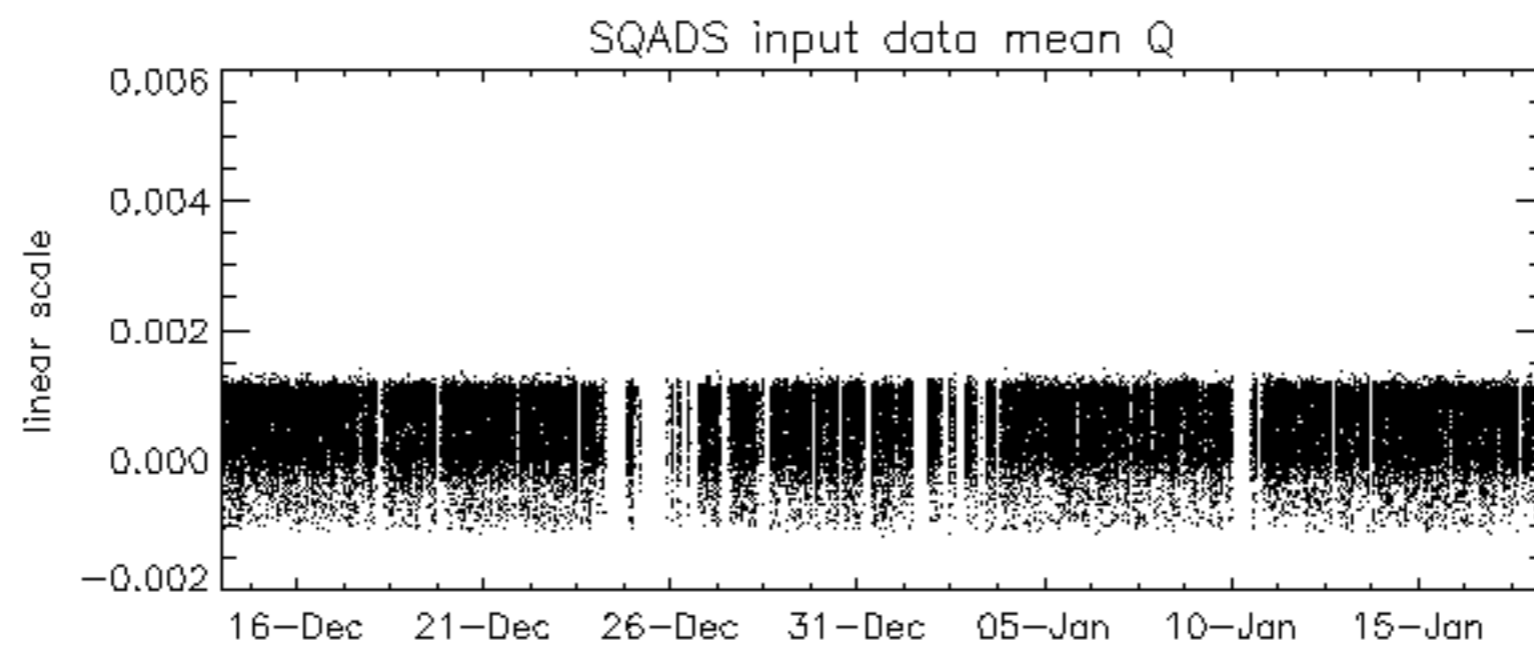
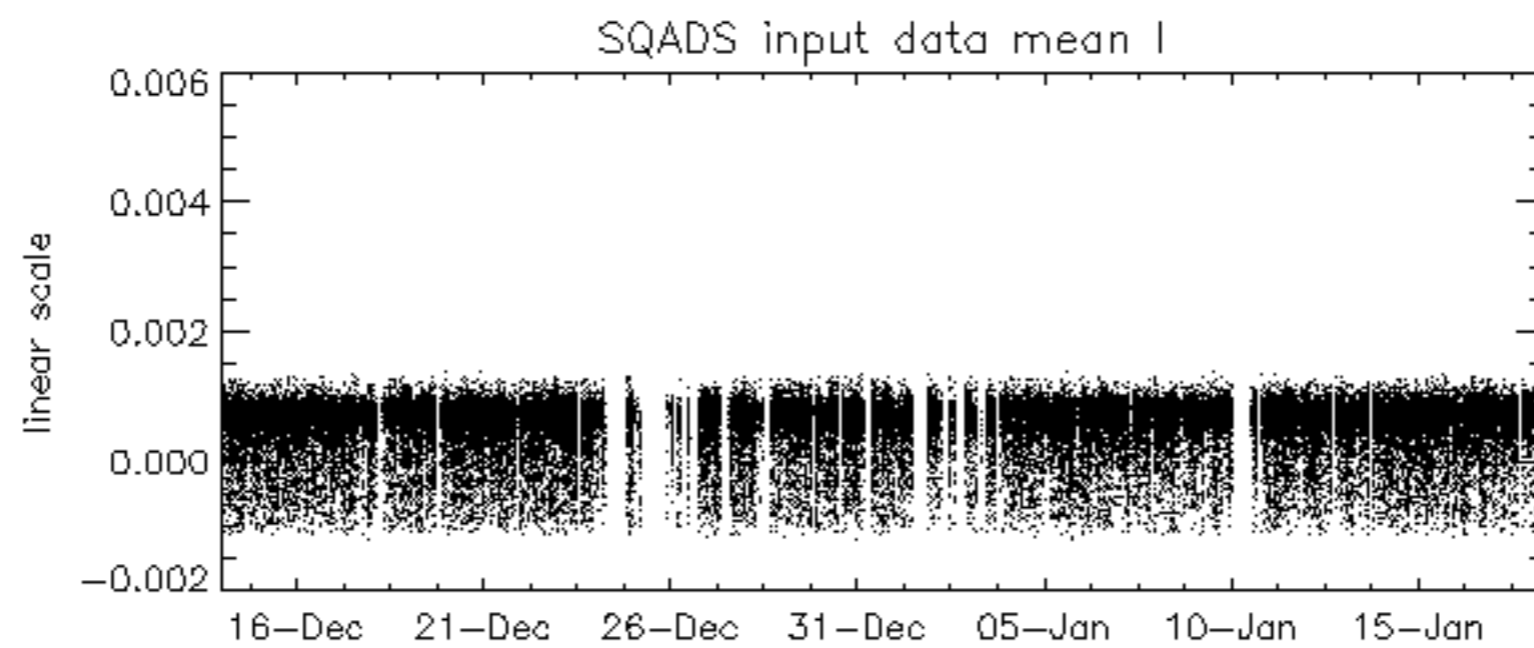
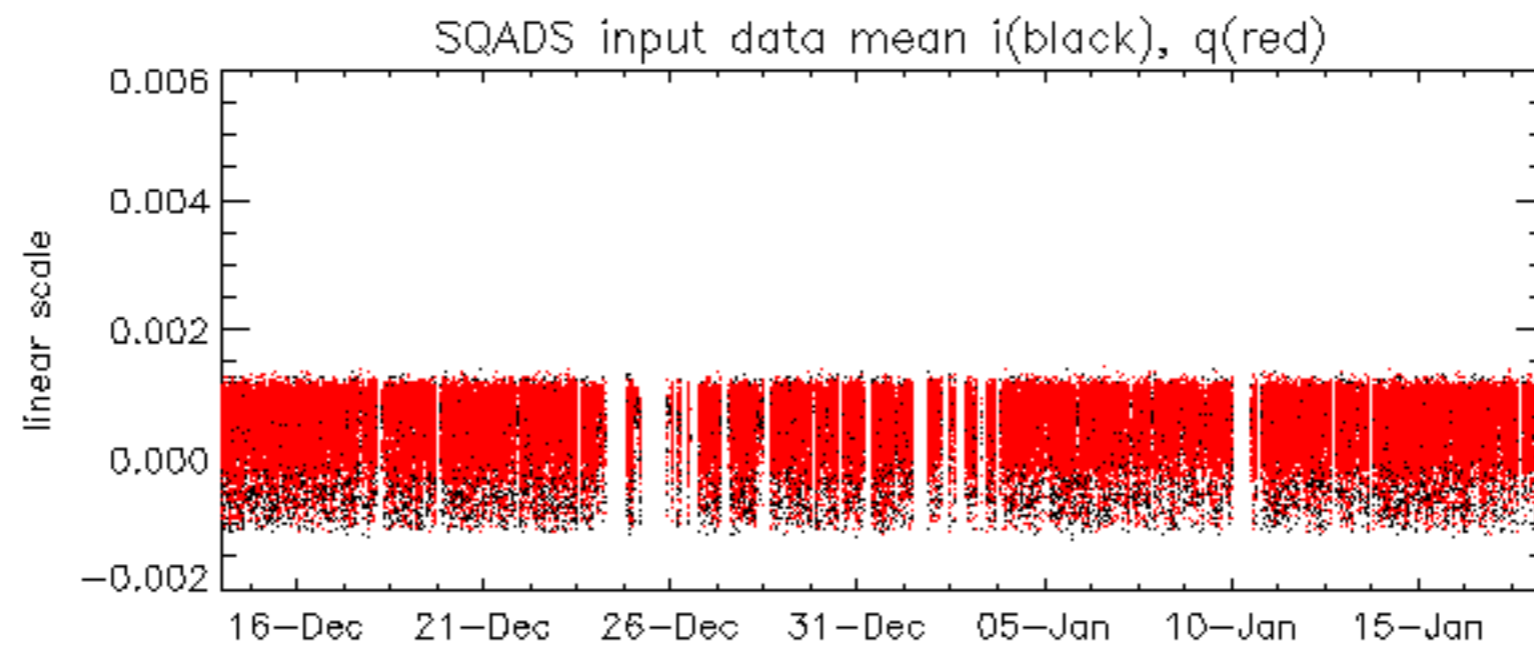
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -9.5481992 Hz

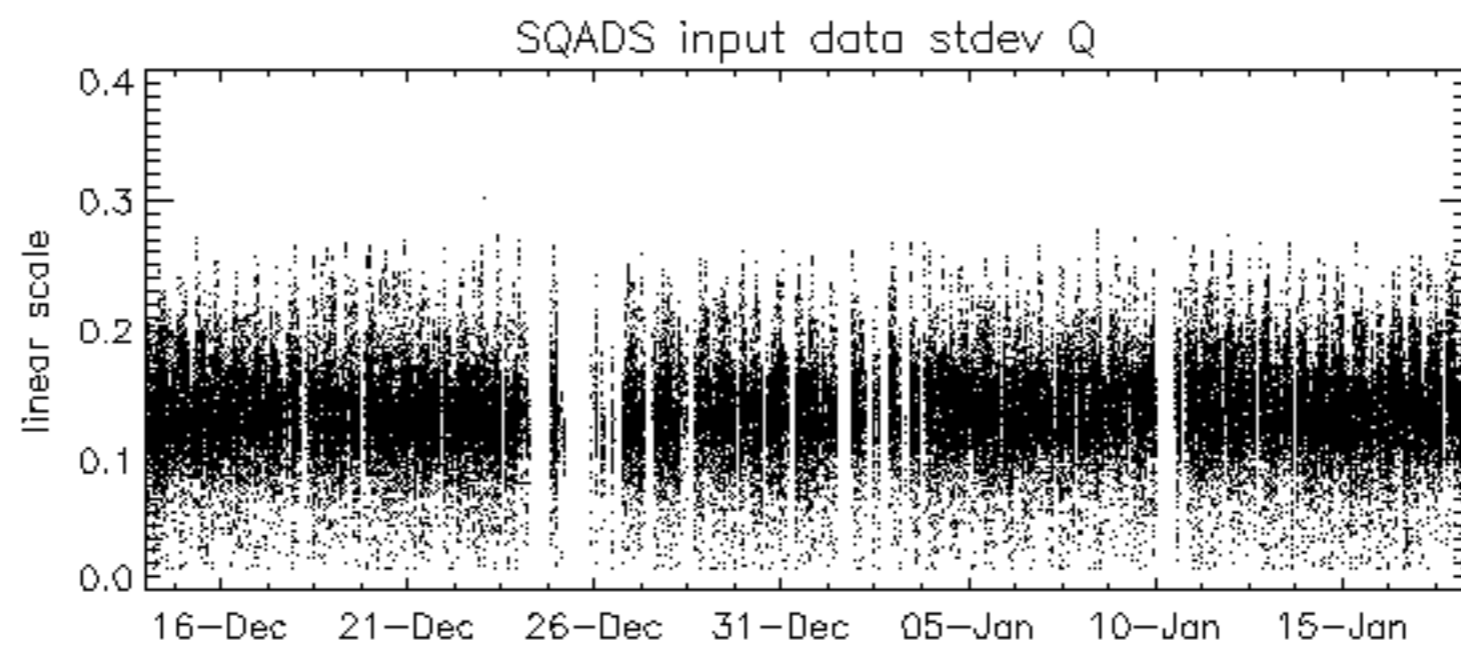
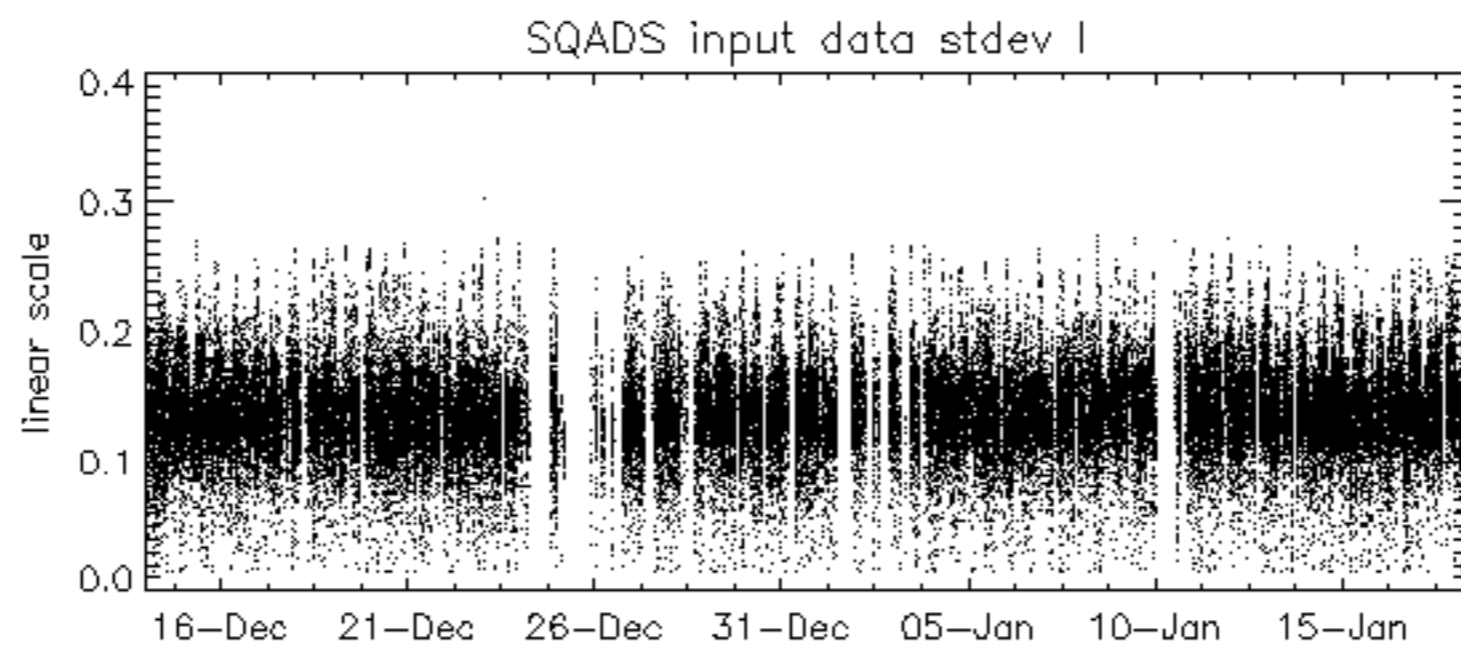
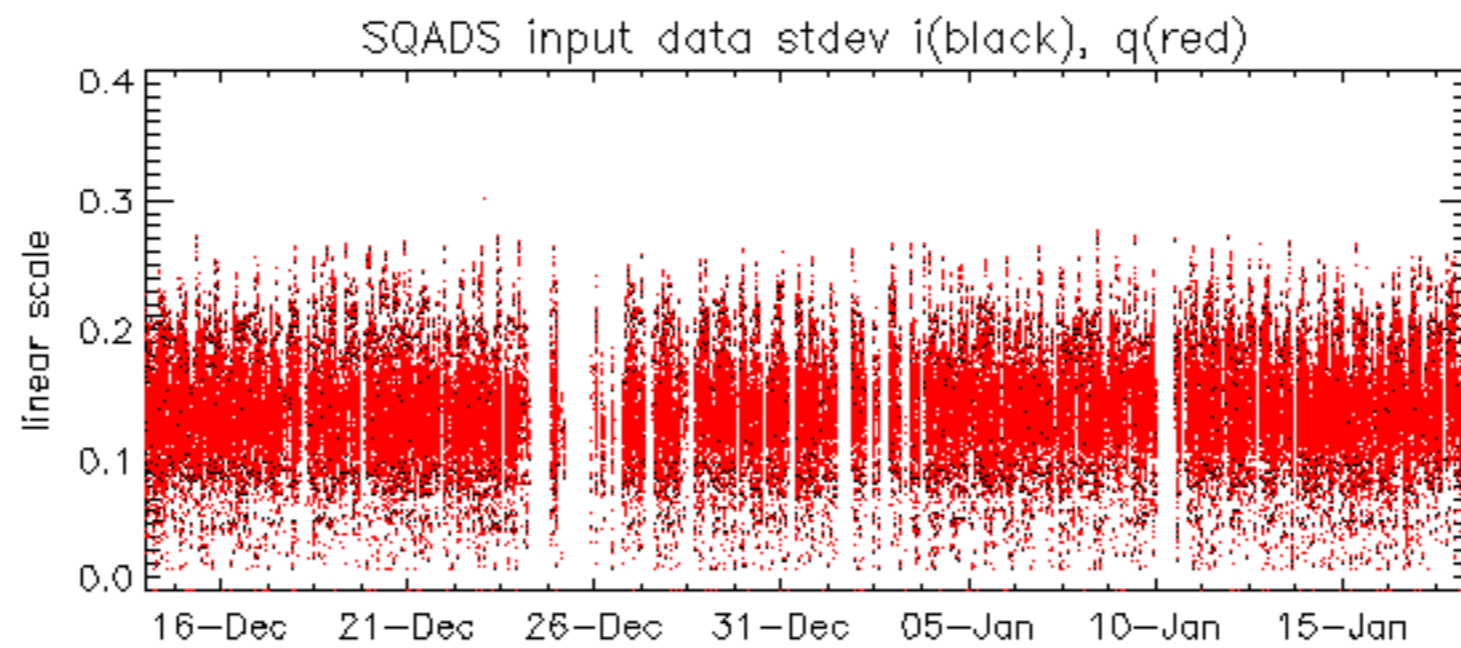


No anomalies observed on available MS products:

No anomalies observed.





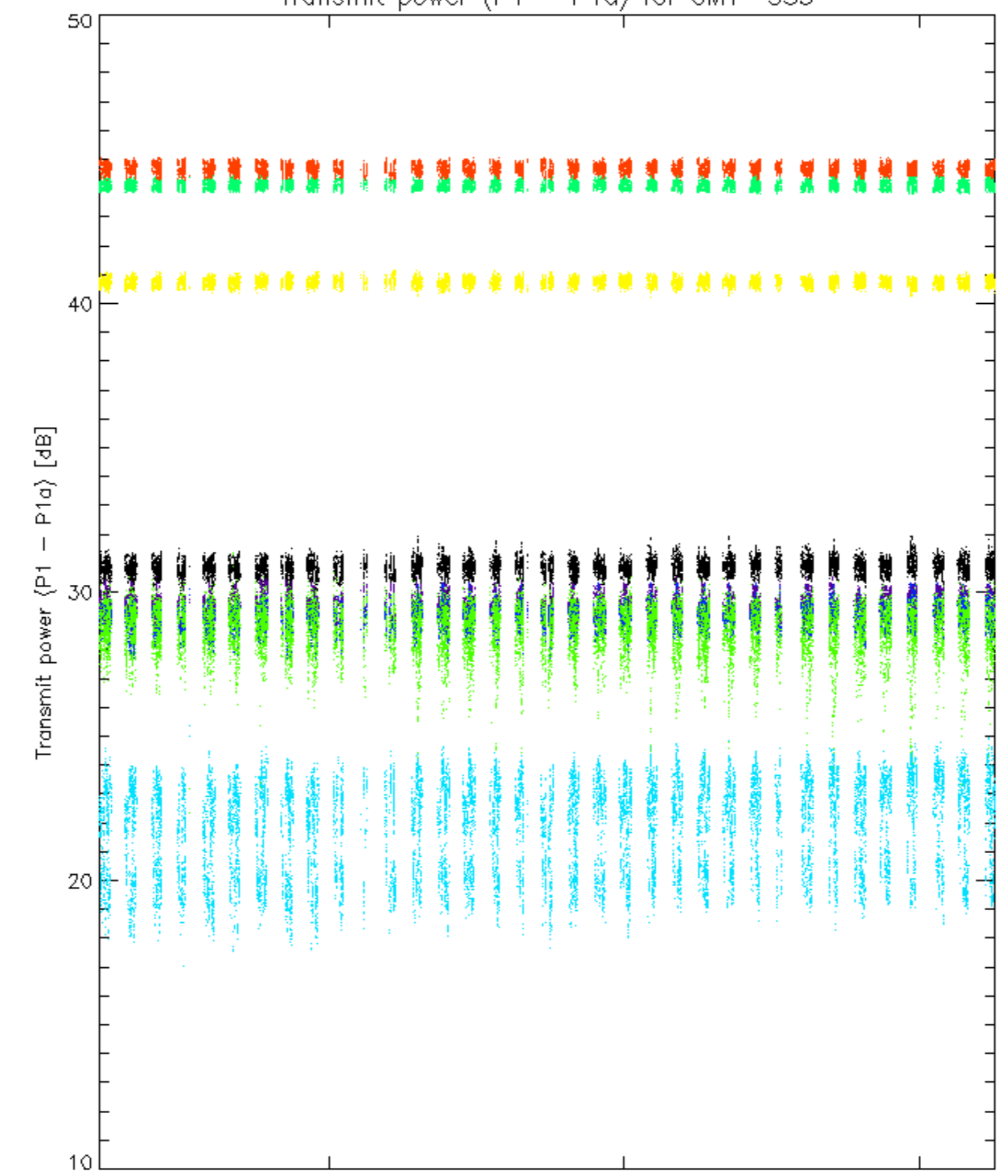


Summary of analysis for the last 3 days 2006011[678]

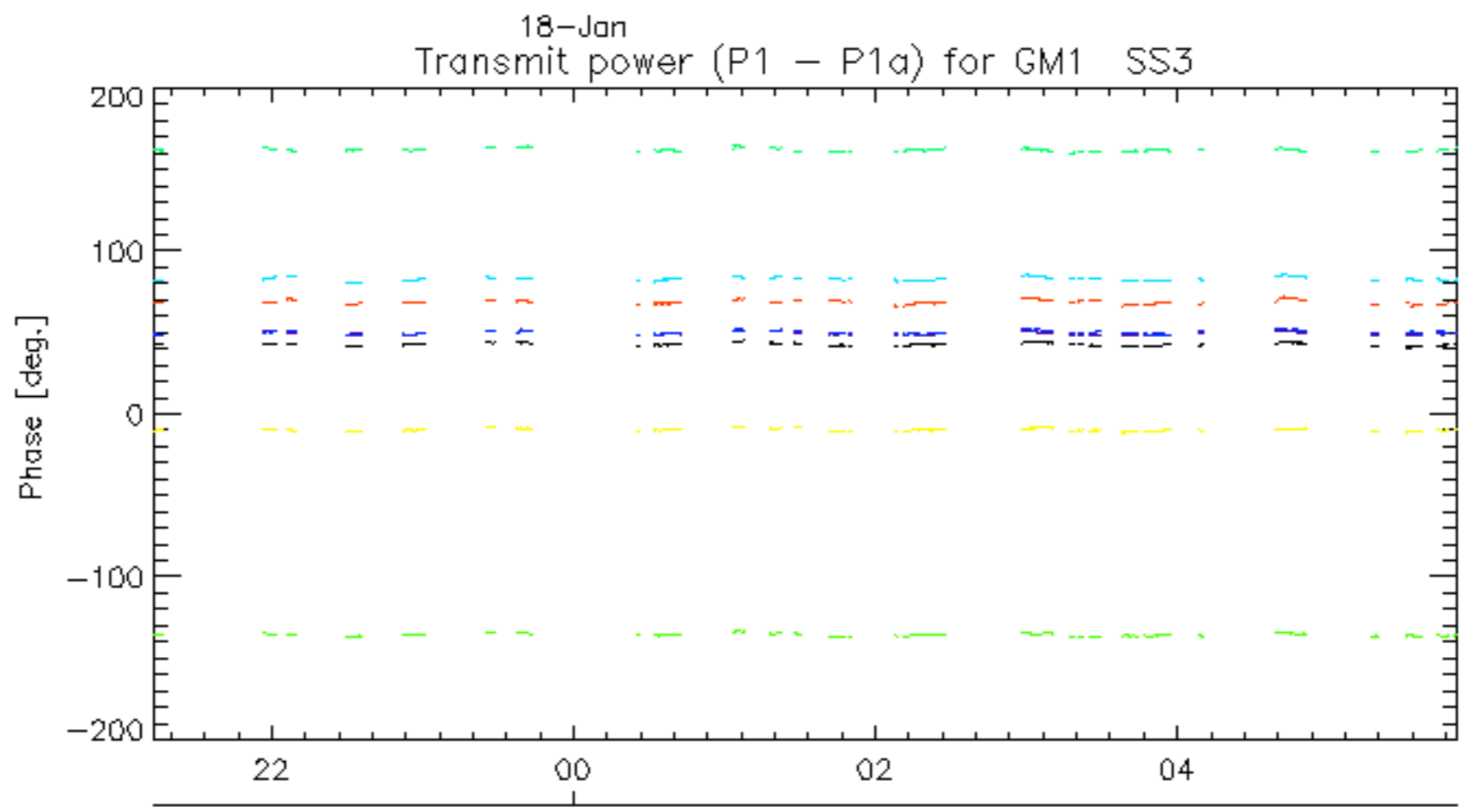
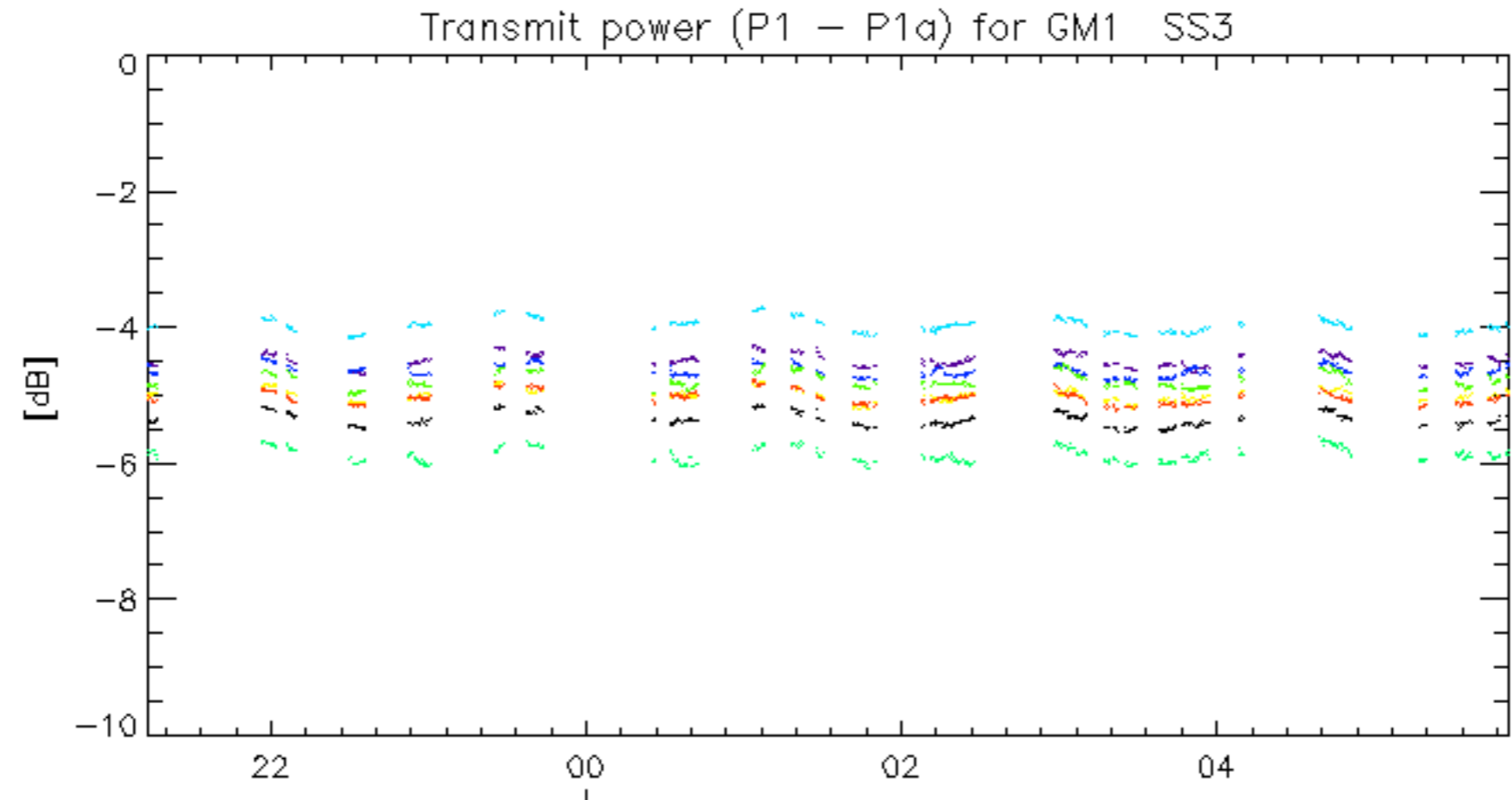
The assumption is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060118_004619_000001942044_00217_20311_0394.N1	1	0
ASA_WSM_1PNPDE20060116_162331_000002082044_00198_20292_0958.N1	0	49
ASA_WSM_1PNPDE20060116_180329_000001712044_00199_20293_0974.N1	0	13
ASA_WSM_1PNPDE20060117_112911_000001832044_00209_20303_1118.N1	0	28
ASA_WSM_1PNPDE20060117_175924_000000792044_00213_20307_1178.N1	5	29
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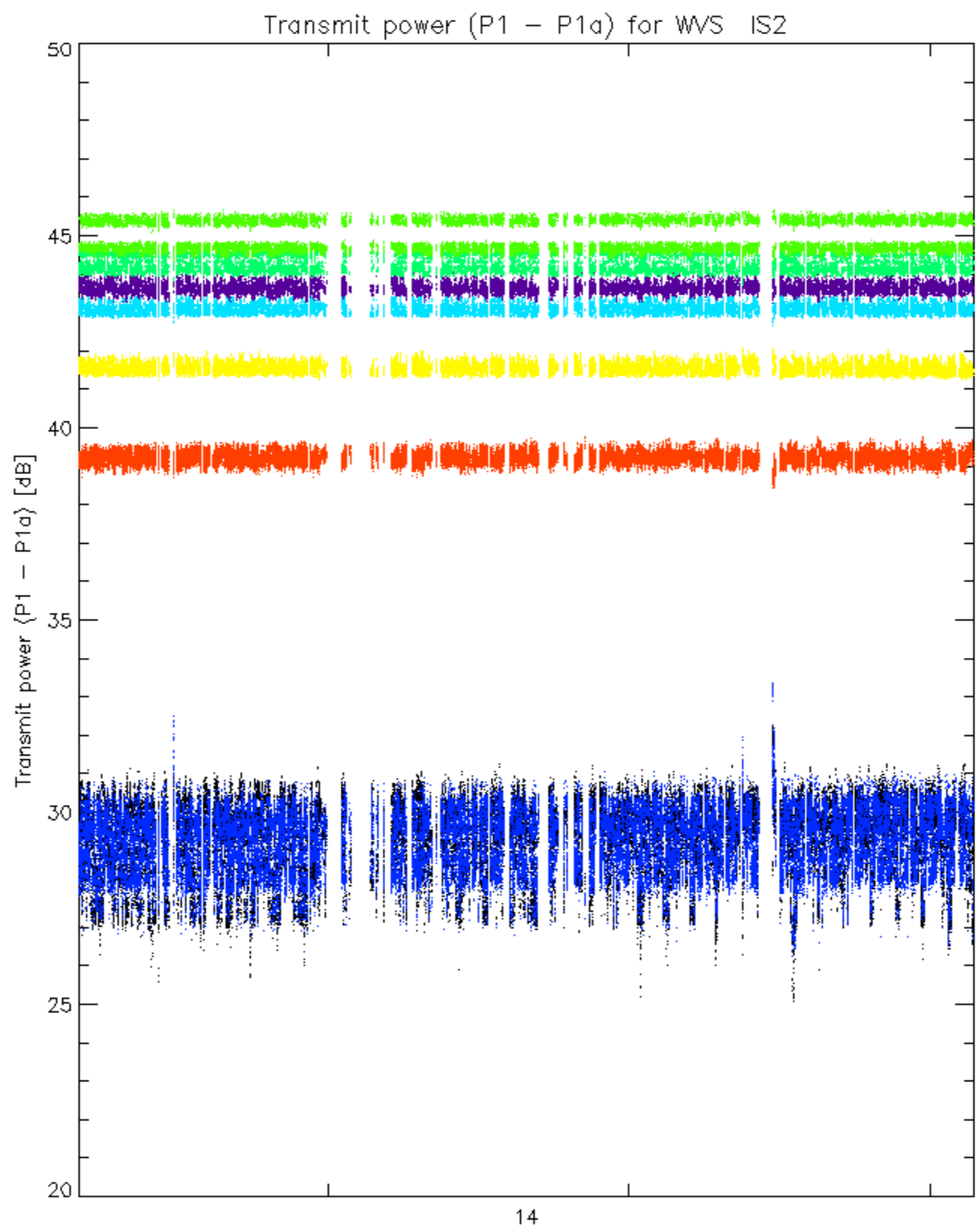
Transmit power (P1 - P1a) for GM1 SS3



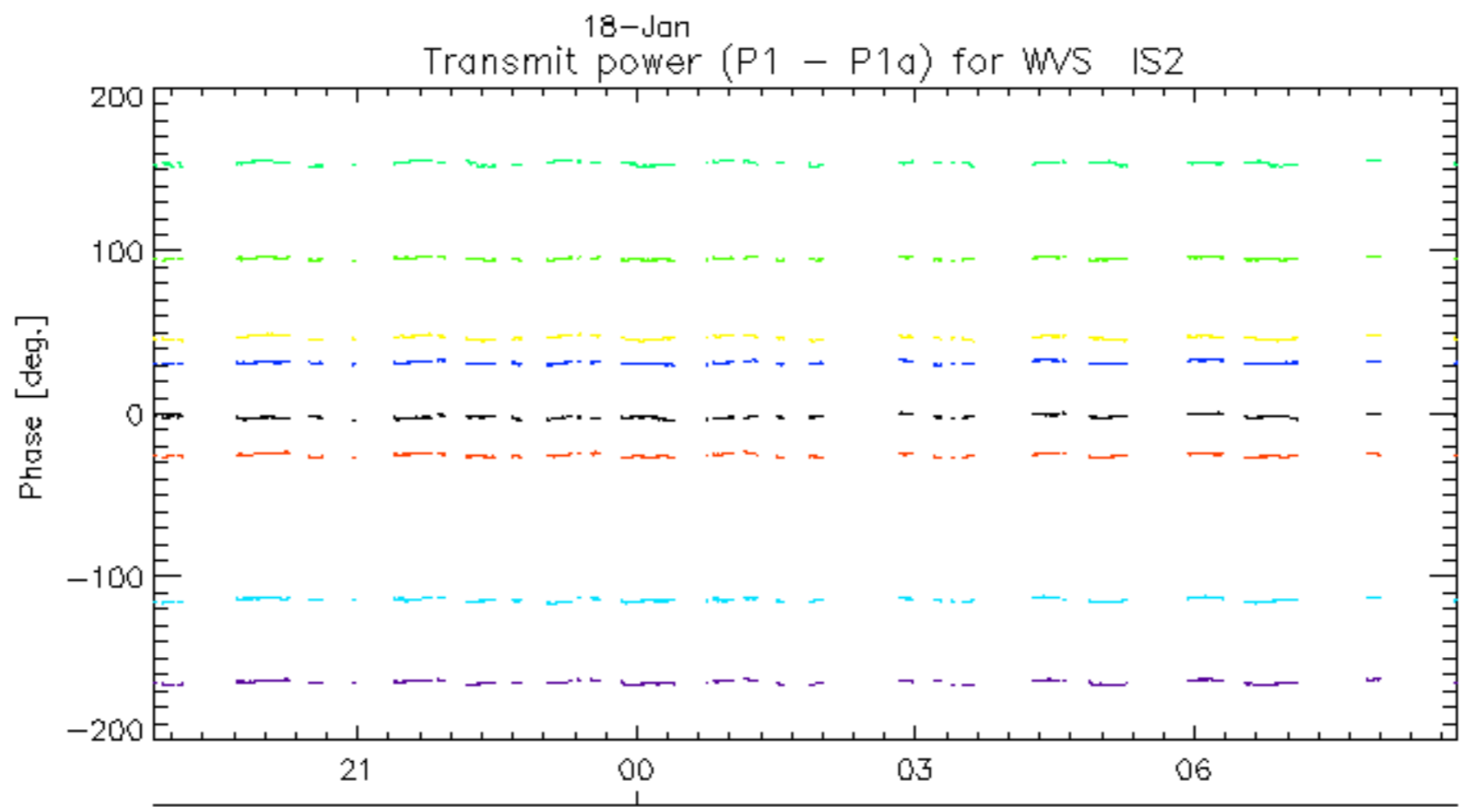
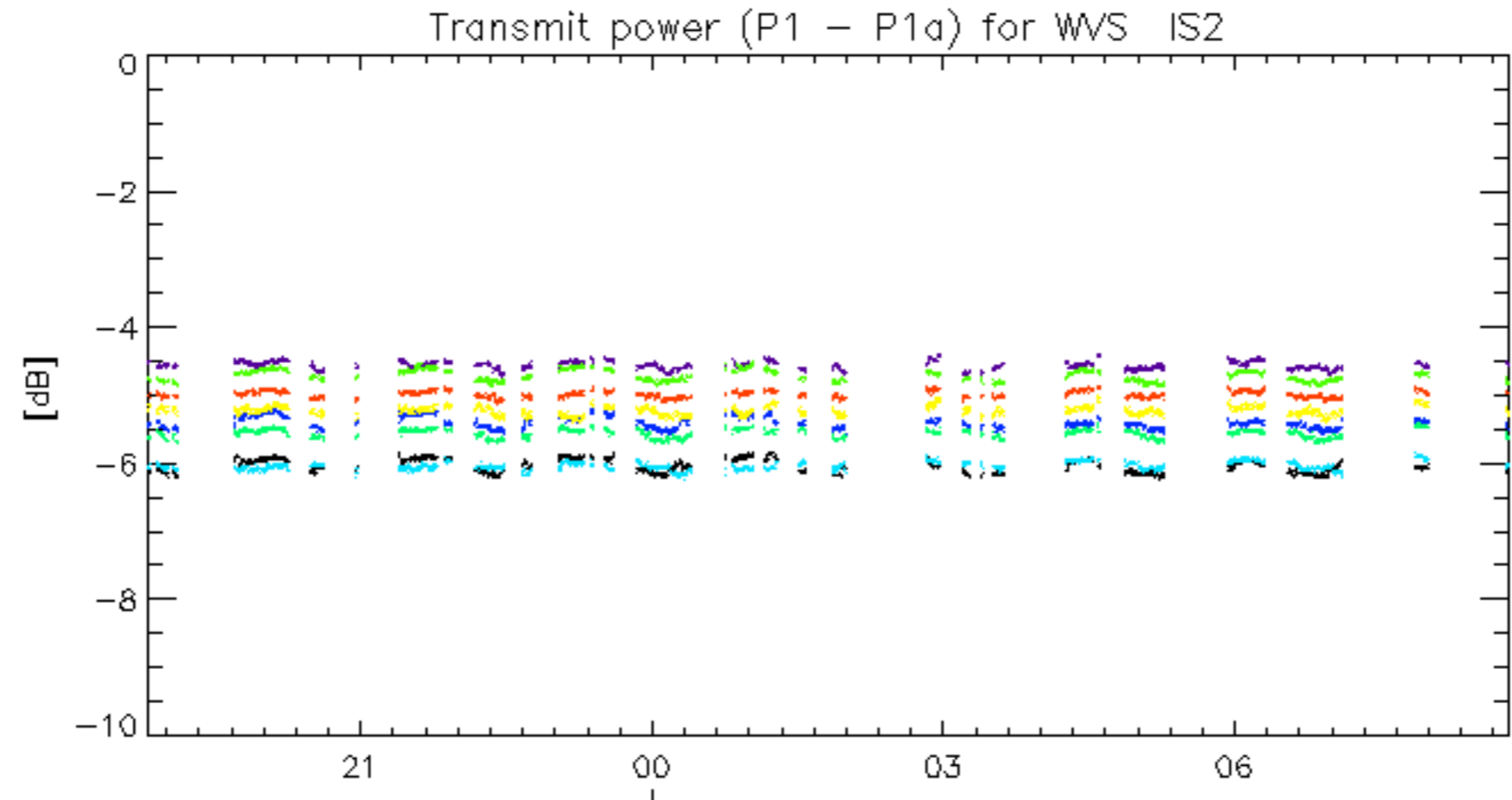
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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



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



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

No unavailabilities during the reported period.