

PRELIMINARY REPORT OF 060518

last update on Thu May 18 16:43:03 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 2006-05-17 00:00:00 to 2006-05-18 16:43:03

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	40	65	11	0	27
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	40	65	11	0	27
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	40	65	11	0	27
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	40	65	11	0	27

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	47	67	25	21	60
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	47	67	25	21	60
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	47	67	25	21	60
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	47	67	25	21	60

2.3 - Browse Visual Inspection

No unavailabilities during the reported period.

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	20060518 100806
H	20060517 071831

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
☒
☒

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	-3.970248	0.011491	0.016762
7	P1	-3.071473	0.013698	-0.082268
11	P1	-4.099018	0.015250	-0.032811
15	P1	-6.115138	0.011825	-0.078288
19	P1	-3.311572	0.007960	-0.018077
22	P1	-4.524547	0.010902	-0.004998
26	P1	-4.018104	0.020362	0.089953
30	P1	-5.741148	0.019445	-0.028231
3	P1	-16.643841	0.304052	0.140807
7	P1	-17.029291	0.149280	-0.298203
11	P1	-16.817038	0.314820	-0.359563
15	P1	-13.148355	0.141763	-0.194470
19	P1	-14.192934	0.048662	-0.217402
22	P1	-16.108353	0.441507	-0.161043
26	P1	-15.368004	0.268372	0.336547
30	P1	-16.867815	0.331023	-0.385044

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.266342	0.084576	0.127181
7	P2	-22.160816	0.100405	0.161619
11	P2	-16.002684	0.111885	0.144097
15	P2	-7.168149	0.094388	-0.009532
19	P2	-9.157053	0.087567	-0.025049
22	P2	-18.079901	0.085756	-0.109002
26	P2	-16.332966	0.091063	-0.100305
30	P2	-19.601671	0.085775	0.020243

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.191390	0.003995	-0.000485
7	P3	-8.191390	0.003995	-0.000485
11	P3	-8.191390	0.003995	-0.000485
15	P3	-8.191390	0.003995	-0.000485
19	P3	-8.191390	0.003995	-0.000485
22	P3	-8.191390	0.003995	-0.000485
26	P3	-8.191403	0.003995	-0.000438
30	P3	-8.191403	0.003995	-0.000438

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	-3.747315	0.038650	-0.004336
7	P1	-2.641011	0.101023	0.113604
11	P1	-2.872096	0.030760	0.050451
15	P1	-3.505145	0.029265	0.055167
19	P1	-3.387202	0.014098	-0.016795
22	P1	-5.106847	0.022142	0.058047
26	P1	-5.825714	0.021685	-0.034902
30	P1	-5.183815	0.043921	-0.020701
3	P1	-11.599372	0.134428	-0.032081
7	P1	-9.975227	0.153752	0.007644
11	P1	-10.212871	0.082787	0.058473
15	P1	-10.654952	0.126957	0.176146
19	P1	-15.471333	0.086677	-0.090431
22	P1	-20.765760	1.291424	-0.390413

26	P1	-16.431664	0.392160	-0.181976
30	P1	-18.169027	0.486111	0.376378

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.936934	0.069982	0.103549
7	P2	-22.514635	0.176066	-0.017886
11	P2	-11.193806	0.049202	0.010257
15	P2	-4.882223	0.042047	-0.059044
19	P2	-6.867868	0.041297	-0.022084
22	P2	-8.170842	0.052971	-0.059247
26	P2	-24.067564	0.125152	-0.093510
30	P2	-22.054436	0.086574	-0.009486

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.024818	0.003628	0.004460
7	P3	-8.024841	0.003643	0.003863
11	P3	-8.024938	0.003629	0.004361
15	P3	-8.024693	0.003648	0.004670
19	P3	-8.024898	0.003643	0.004842
22	P3	-8.024899	0.003638	0.004470
26	P3	-8.024703	0.003631	0.004565
30	P3	-8.024765	0.003636	0.004508

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	0.000538251
	stdev	1.89022e-07
MEAN Q	mean	0.000512143
	stdev	2.27867e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.135189
	stdev	0.00119000
STDEV Q	mean	0.135538
	stdev	0.00120711



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006051[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_1PNPDE20060516_003808_000000502047_00403_22000_5316.N1	1	0
ASA_IMM_1PNPDE20060517_202031_000000362047_00429_22026_5398.N1	1	0
ASA_IMM_1PNPDK20060516_082810_000000372047_00408_22005_1794.N1	0	15
ASA_WSM_1PNPDE20060517_001650_000000852047_00417_22014_9559.N1	0	26
ASA_WSM_1PNPDE20060517_015318_000000672047_00418_22015_9563.N1	0	69



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

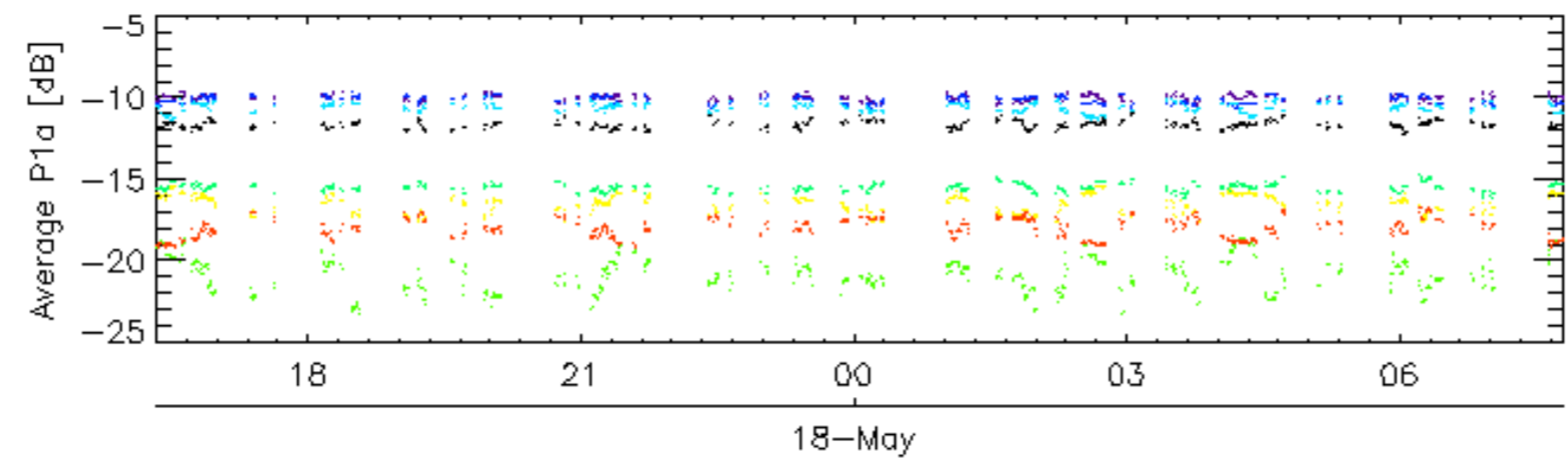
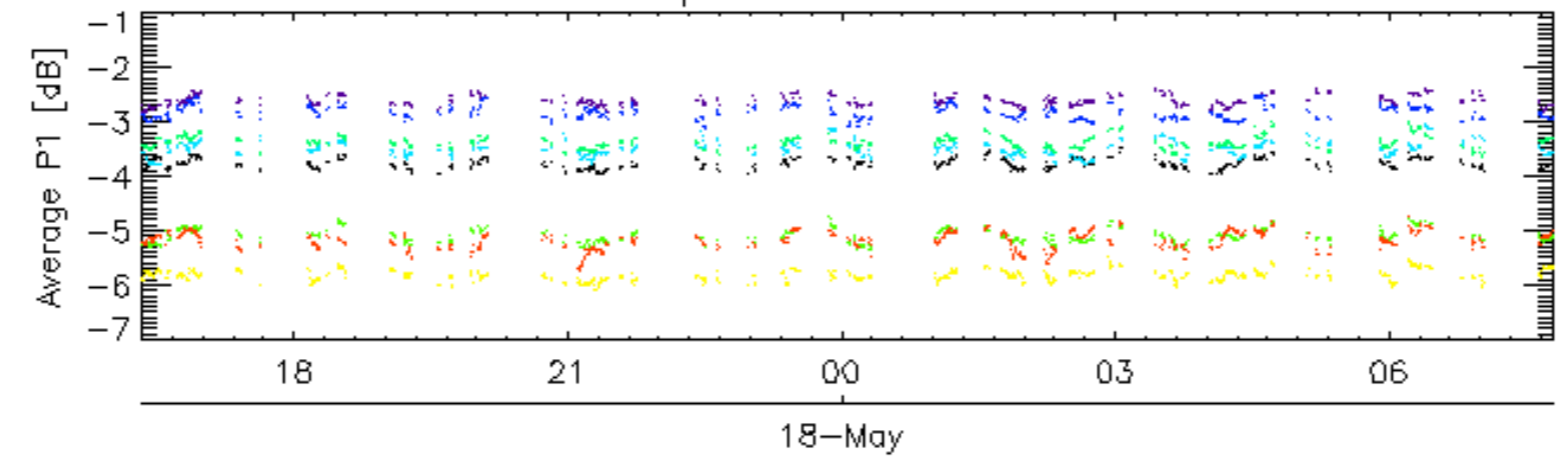
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	Ascending
<input type="checkbox"/>	
	Descending

7.6 - Doppler evolution versus ANX for GM1

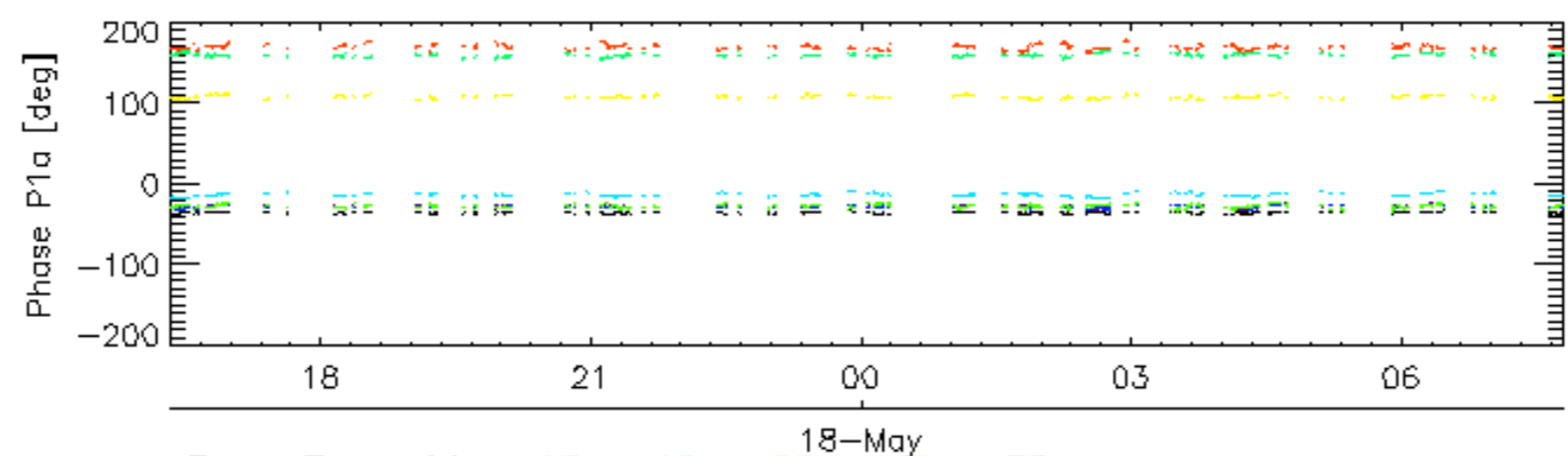
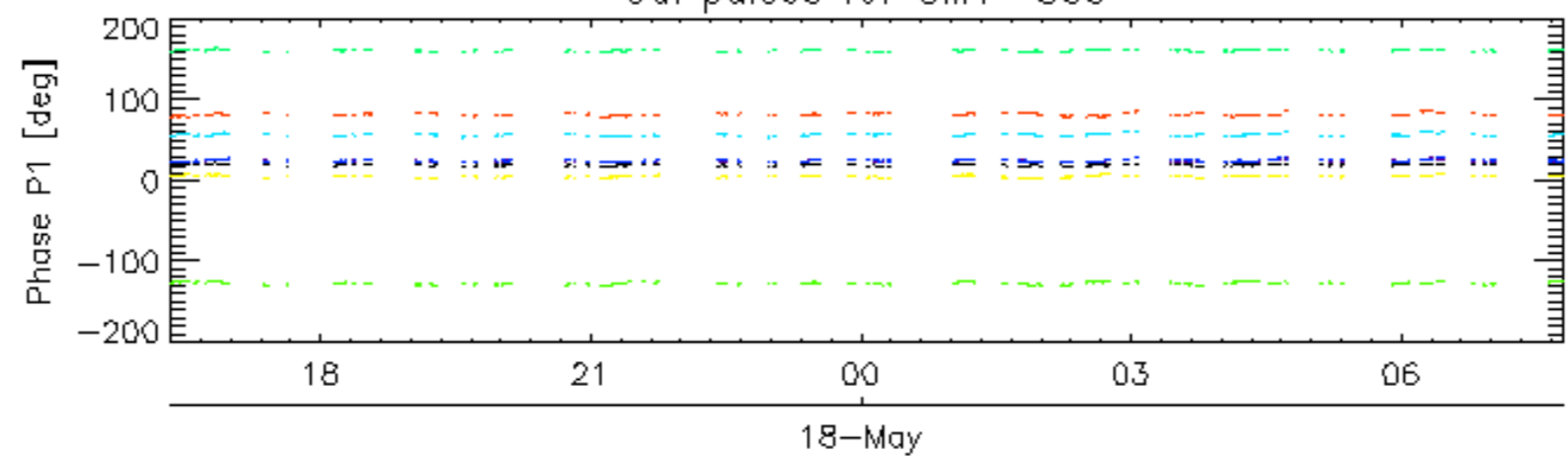
Evolution Doppler error versus ANX

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

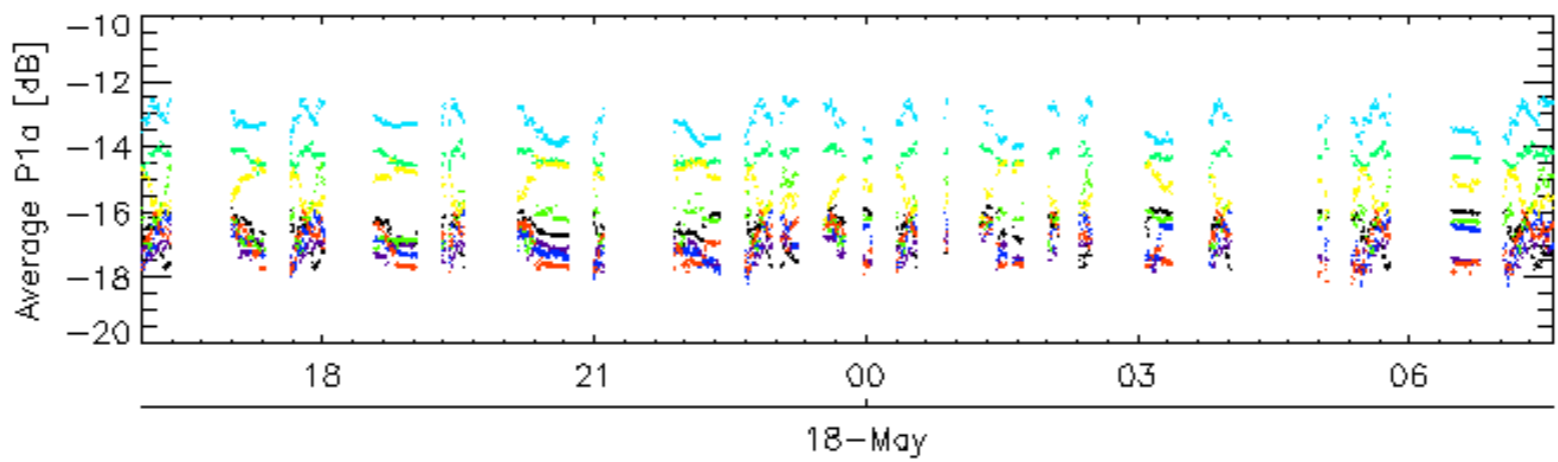
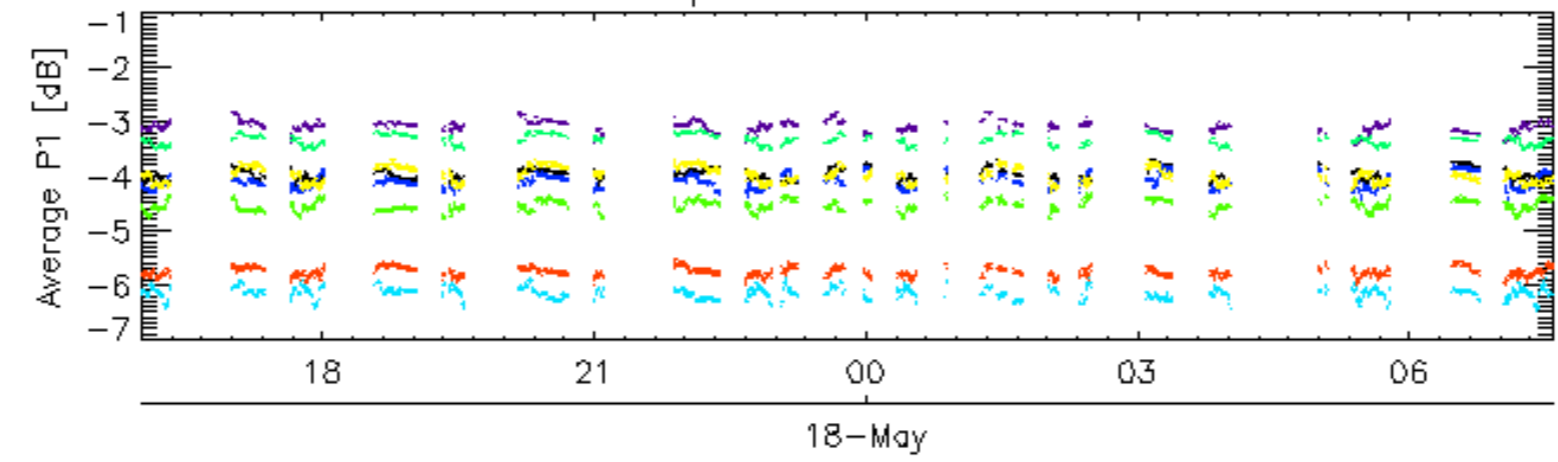


Cal pulses for GM1 SS3

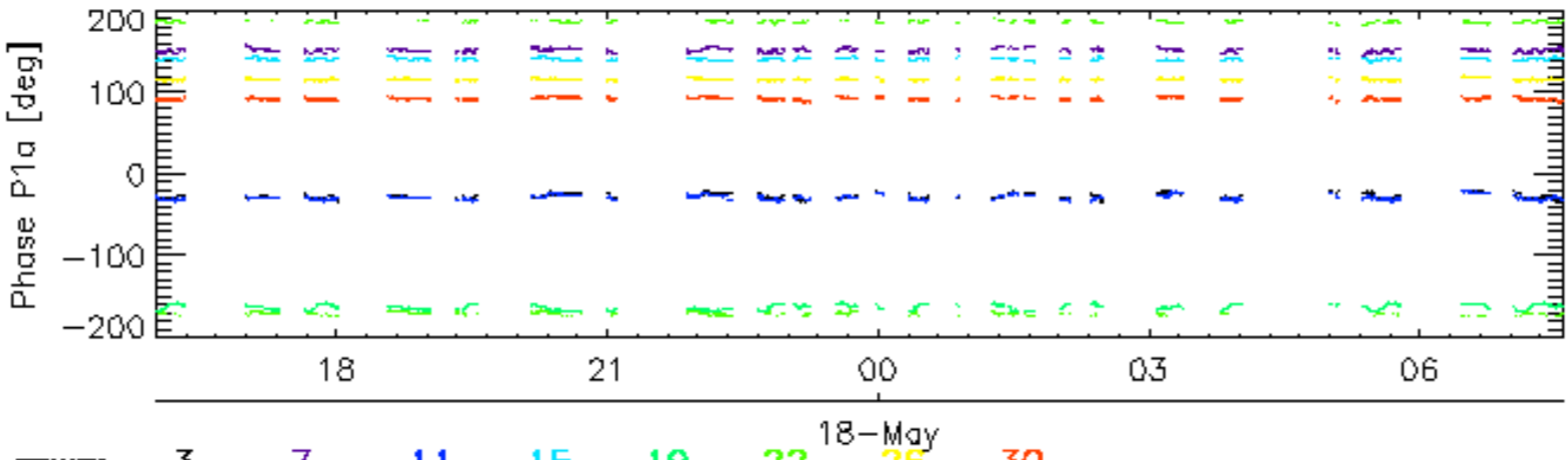
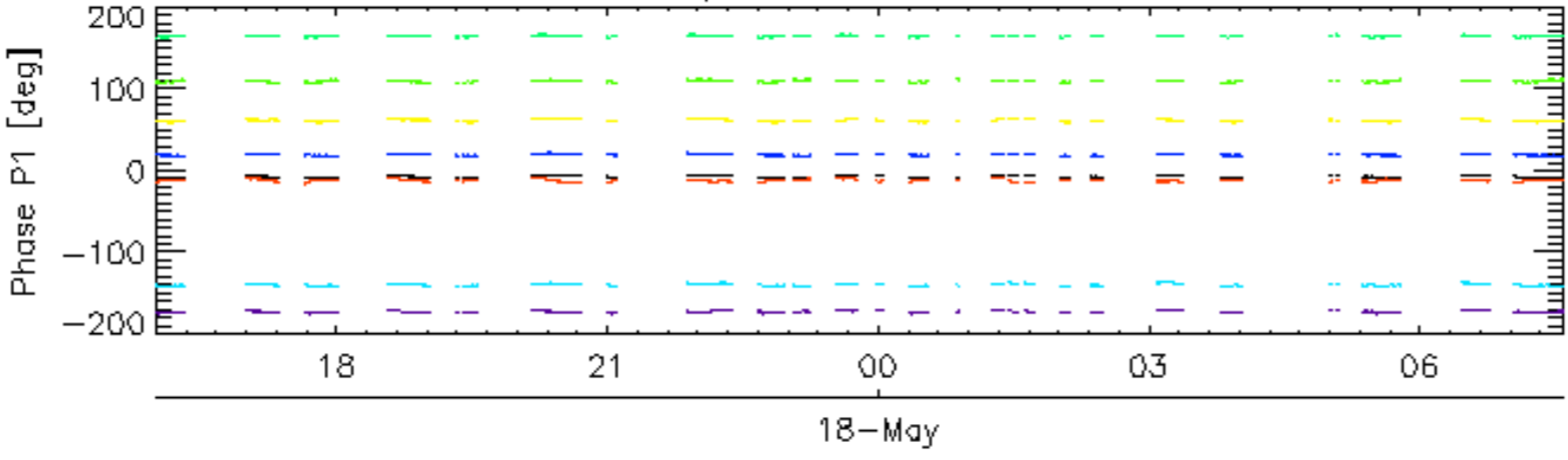


rows: 3 7 11 15 19 22 26 30

Cal pulses for WVS IS2

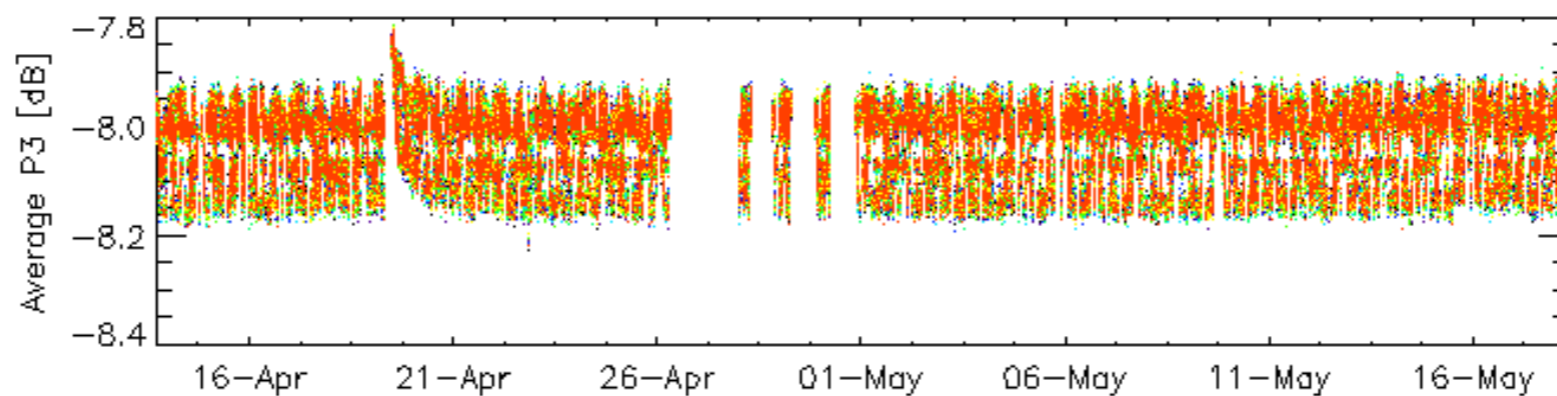
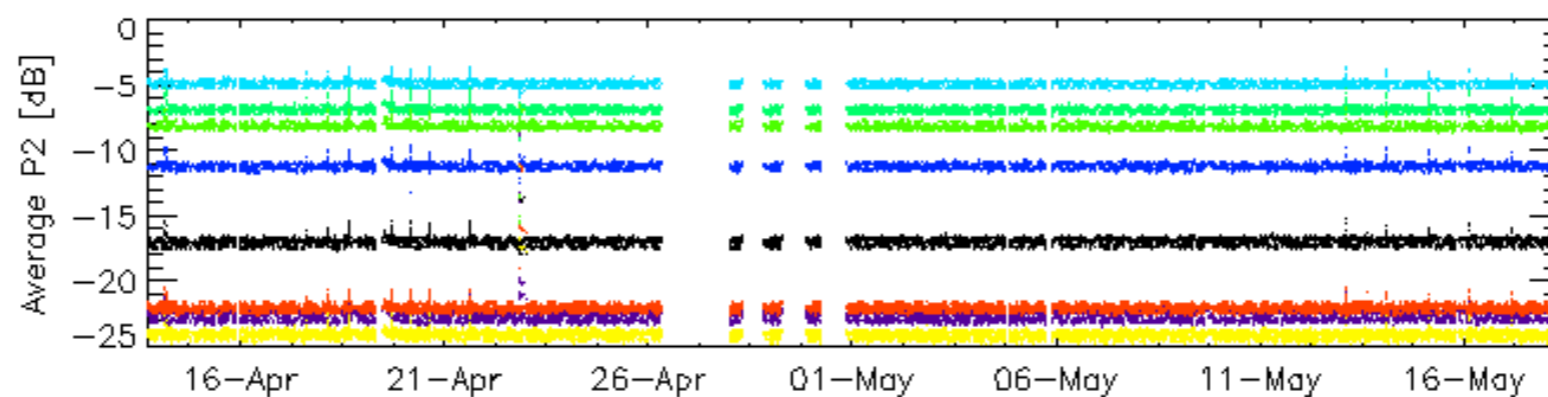
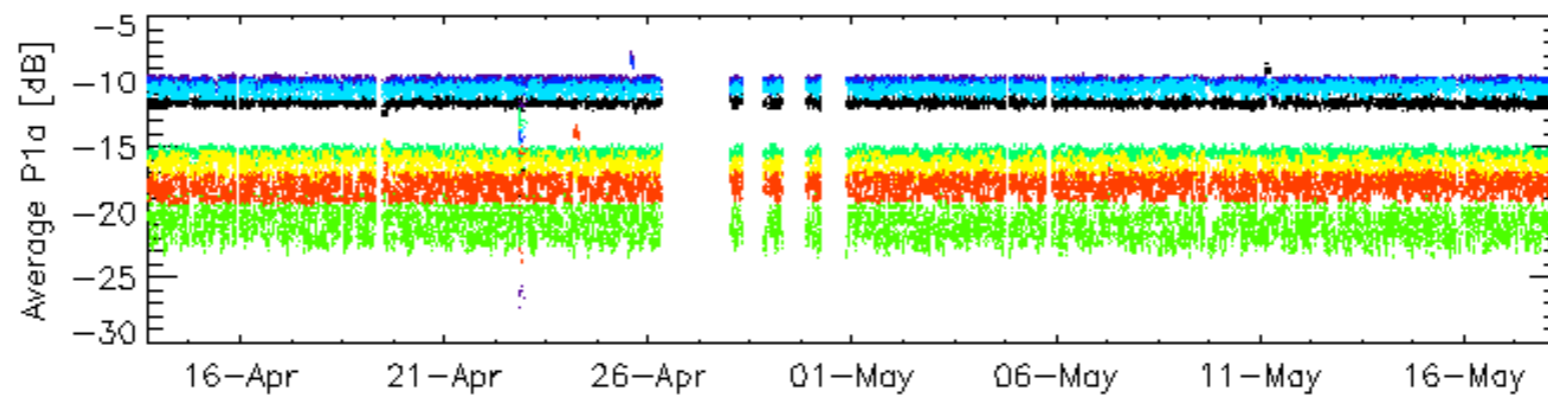
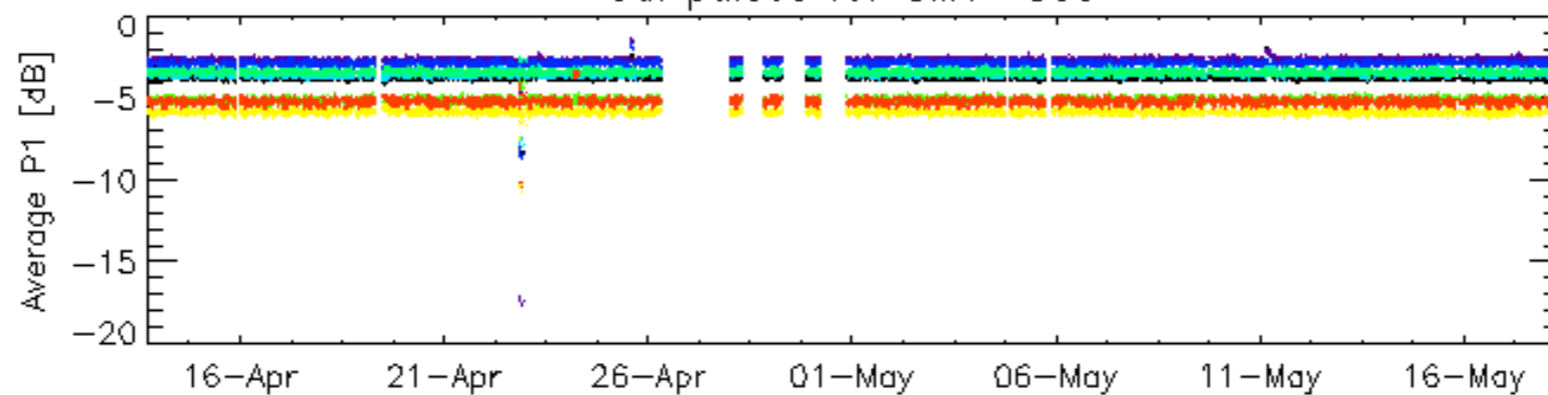


Cal pulses for WVS IS2



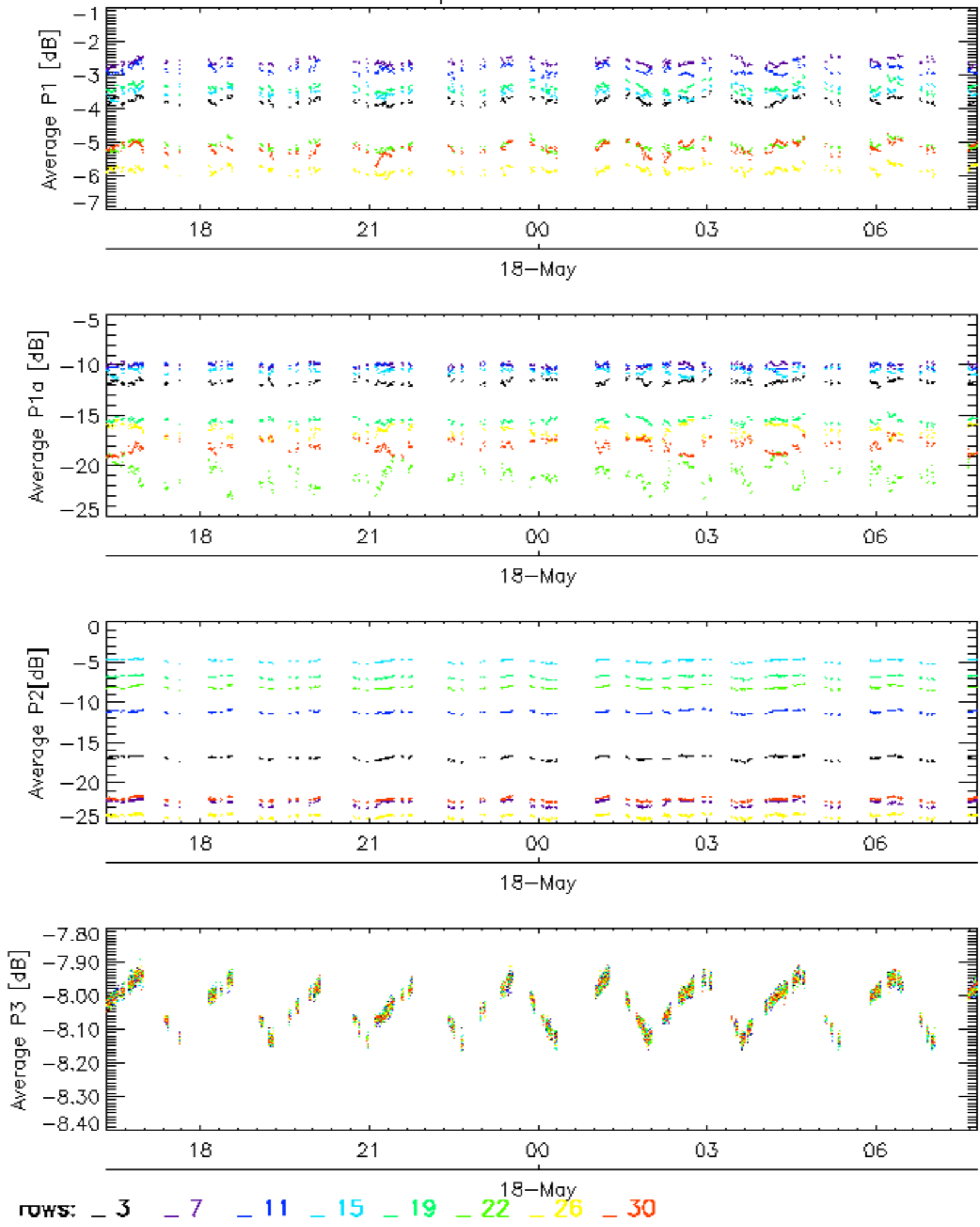
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

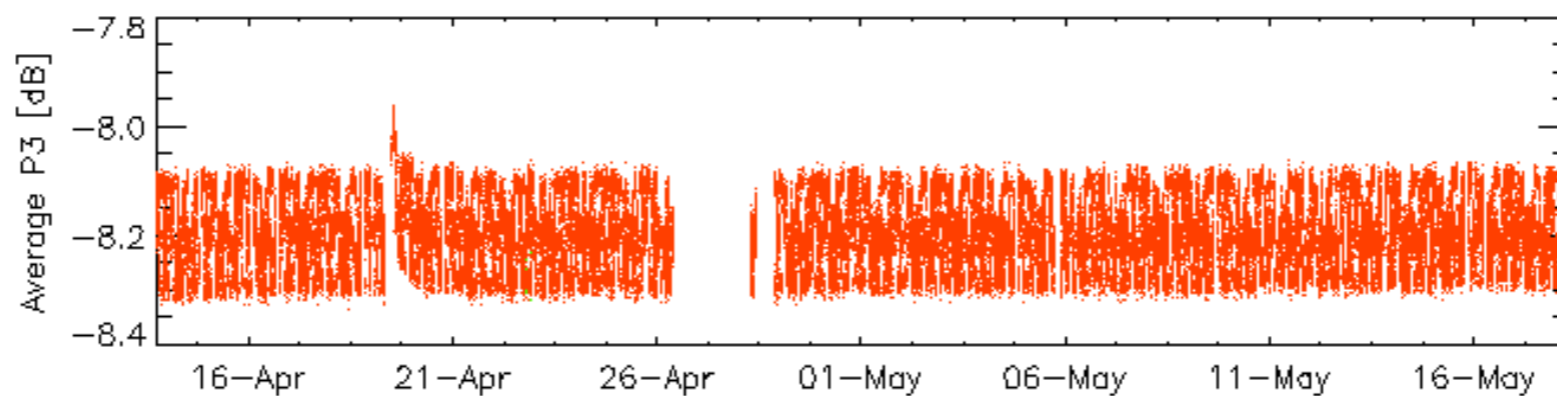
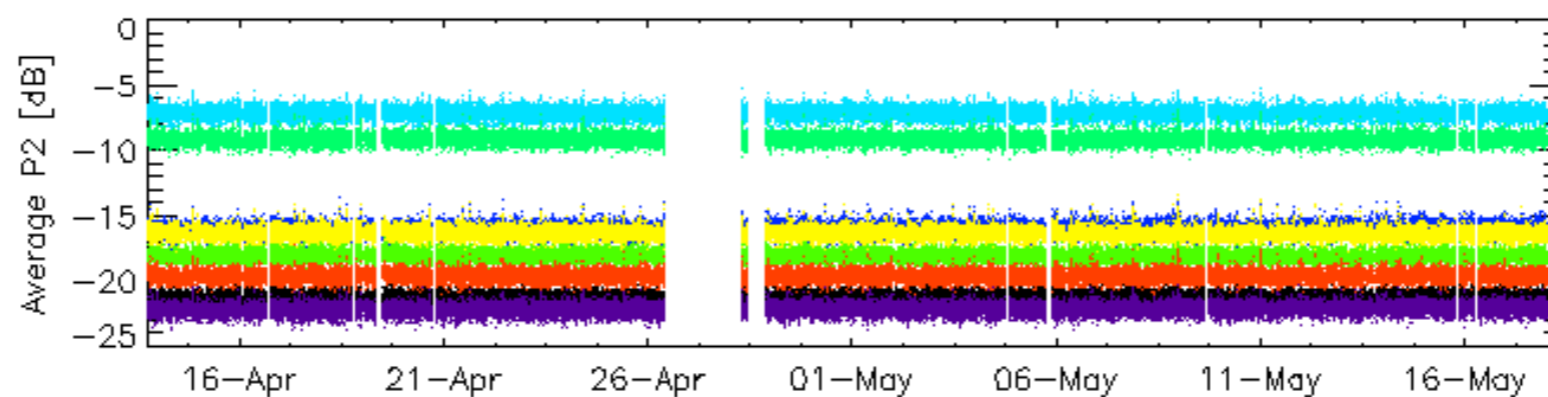
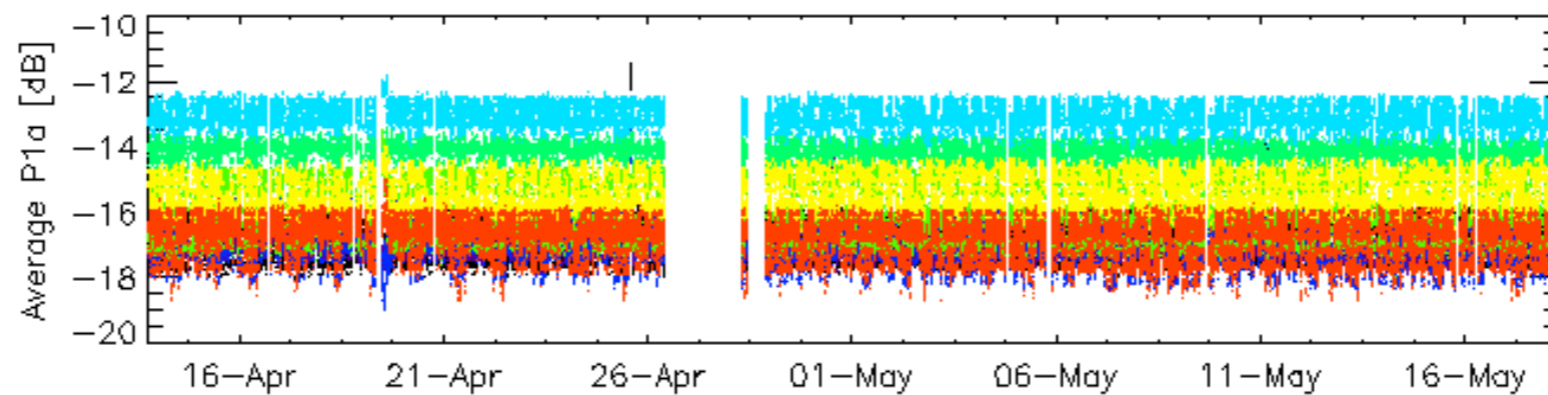
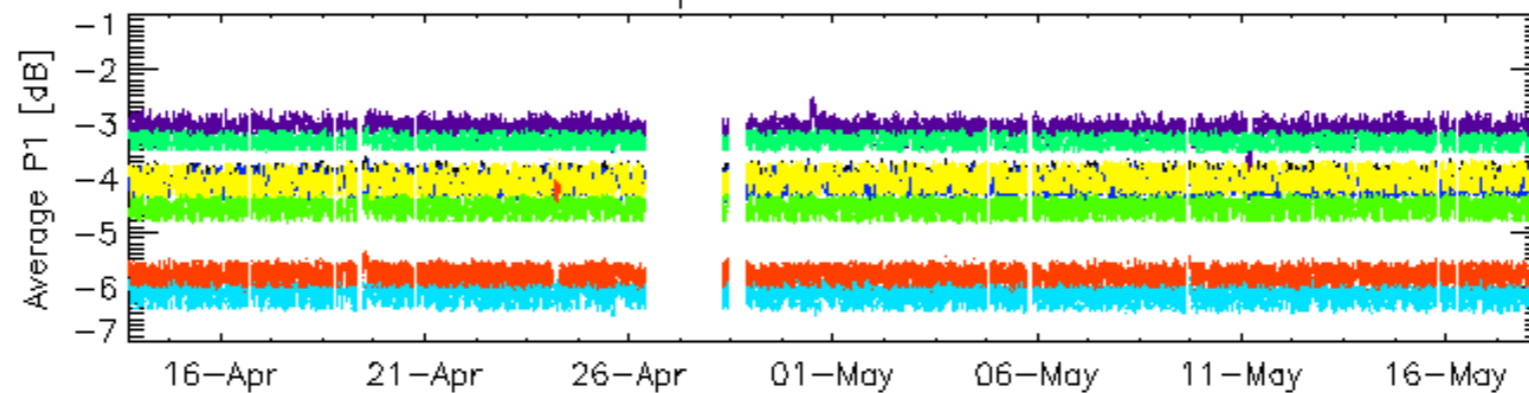


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

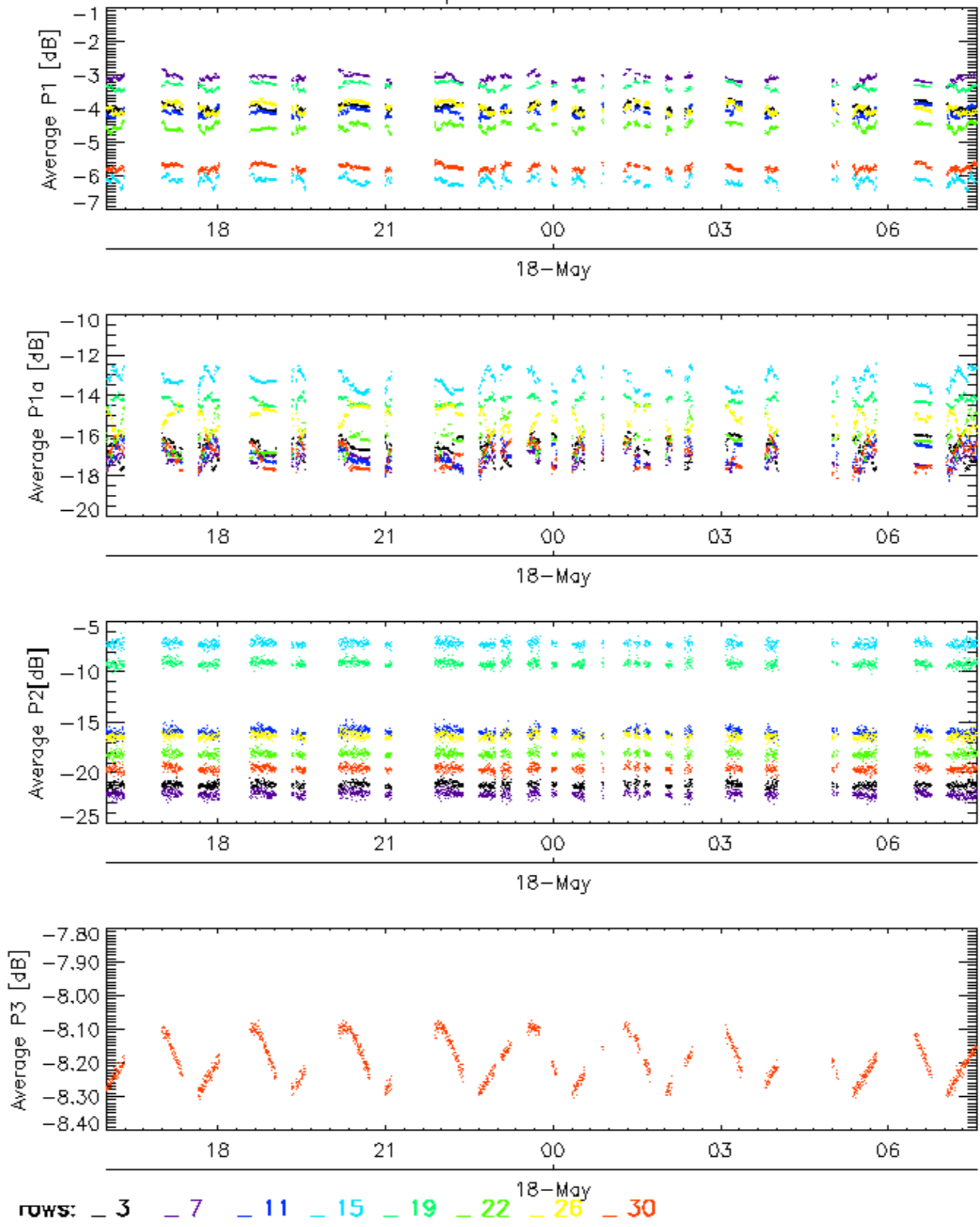


Cal pulses for WVS IS2



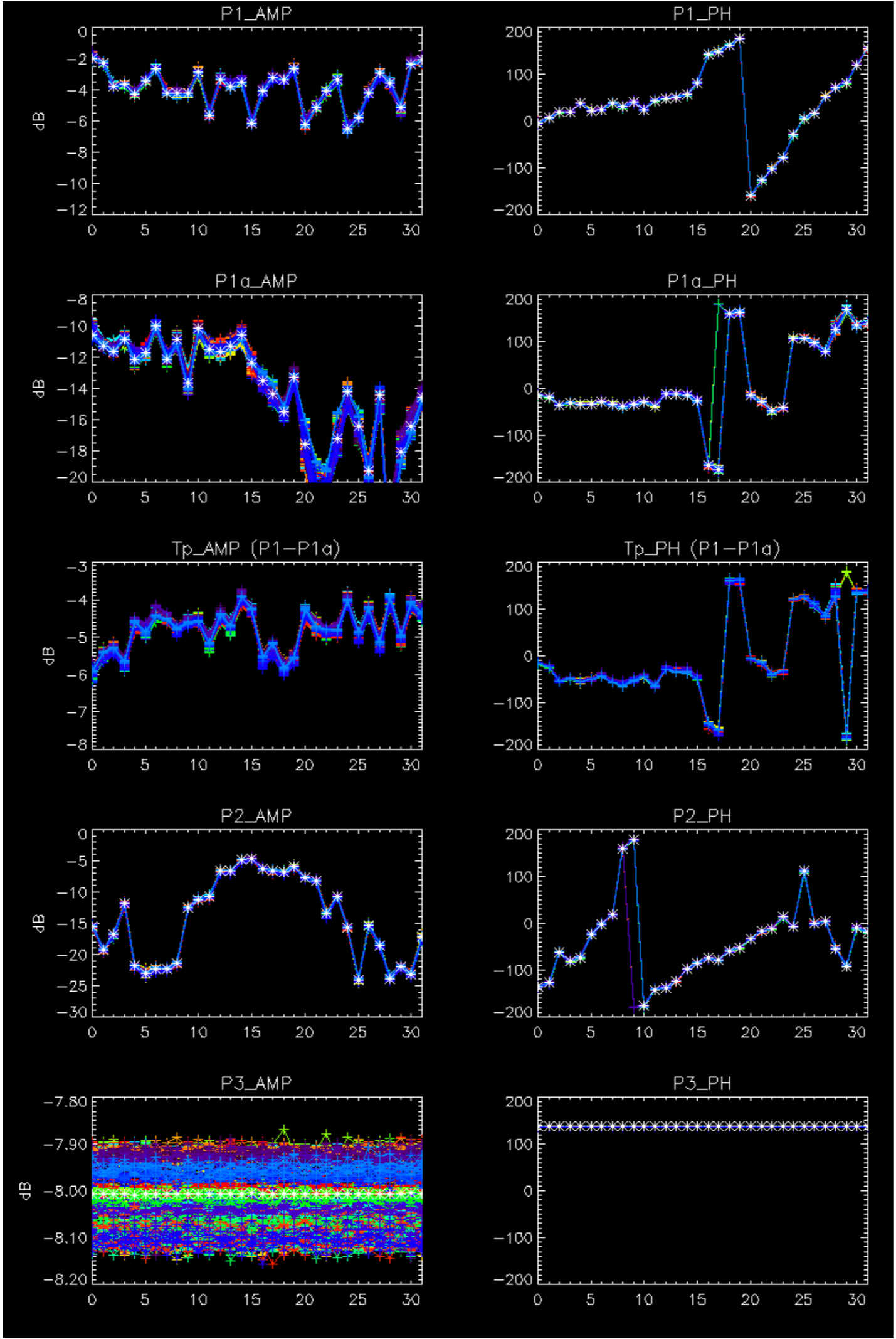
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

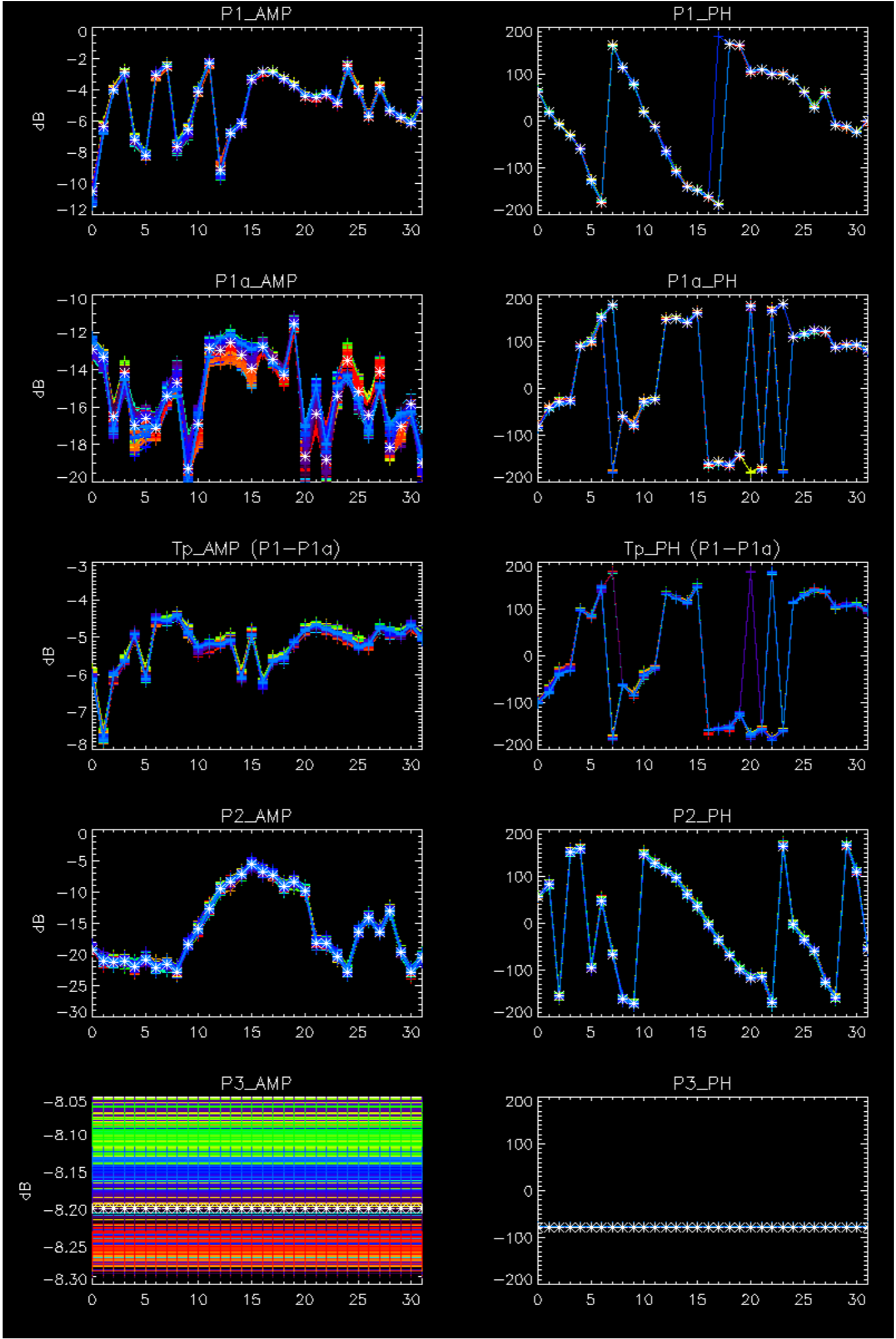
Cal pulses for WVS IS2



No unavailabilities during the reported period.

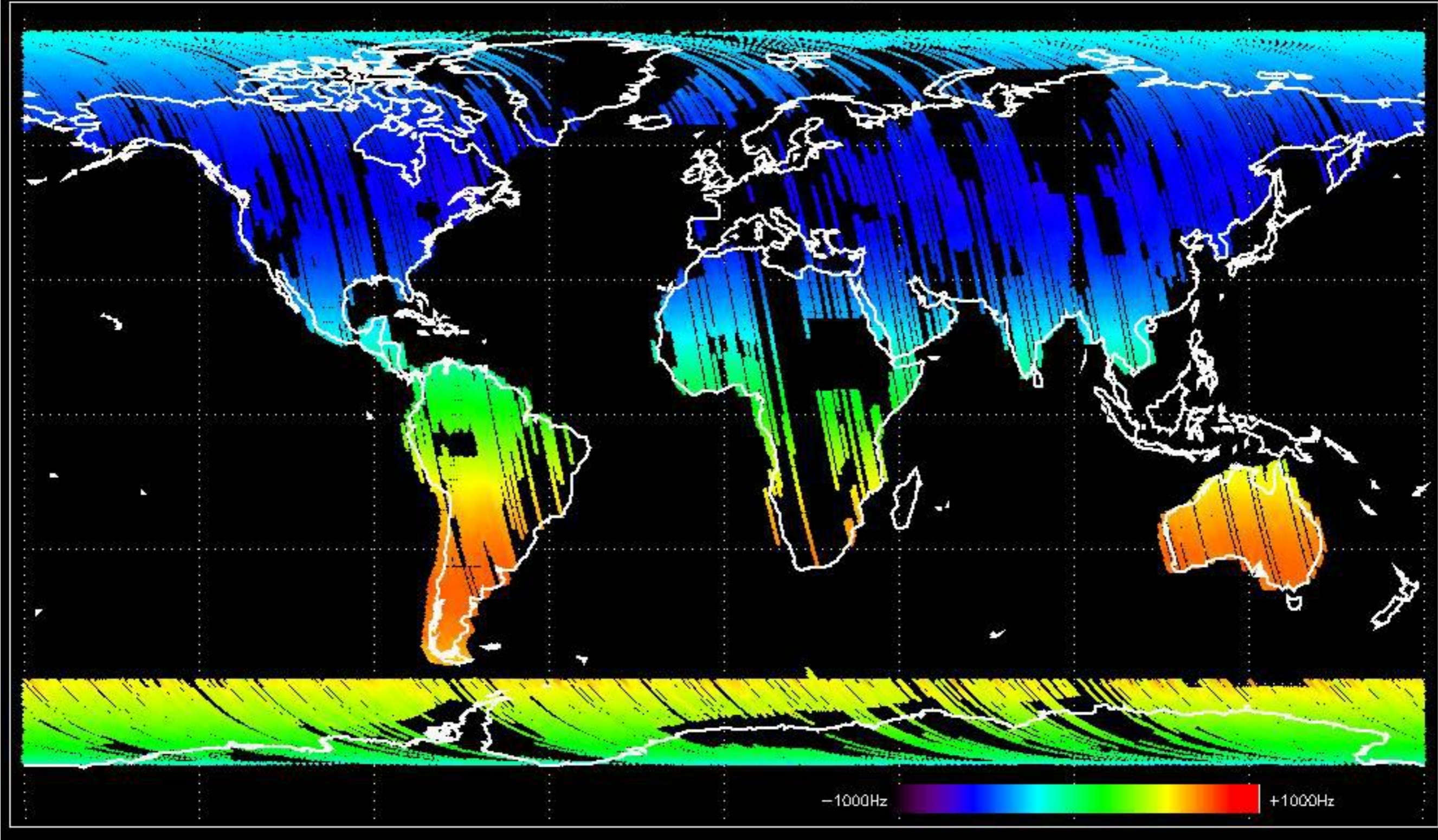
No anomalies observed.



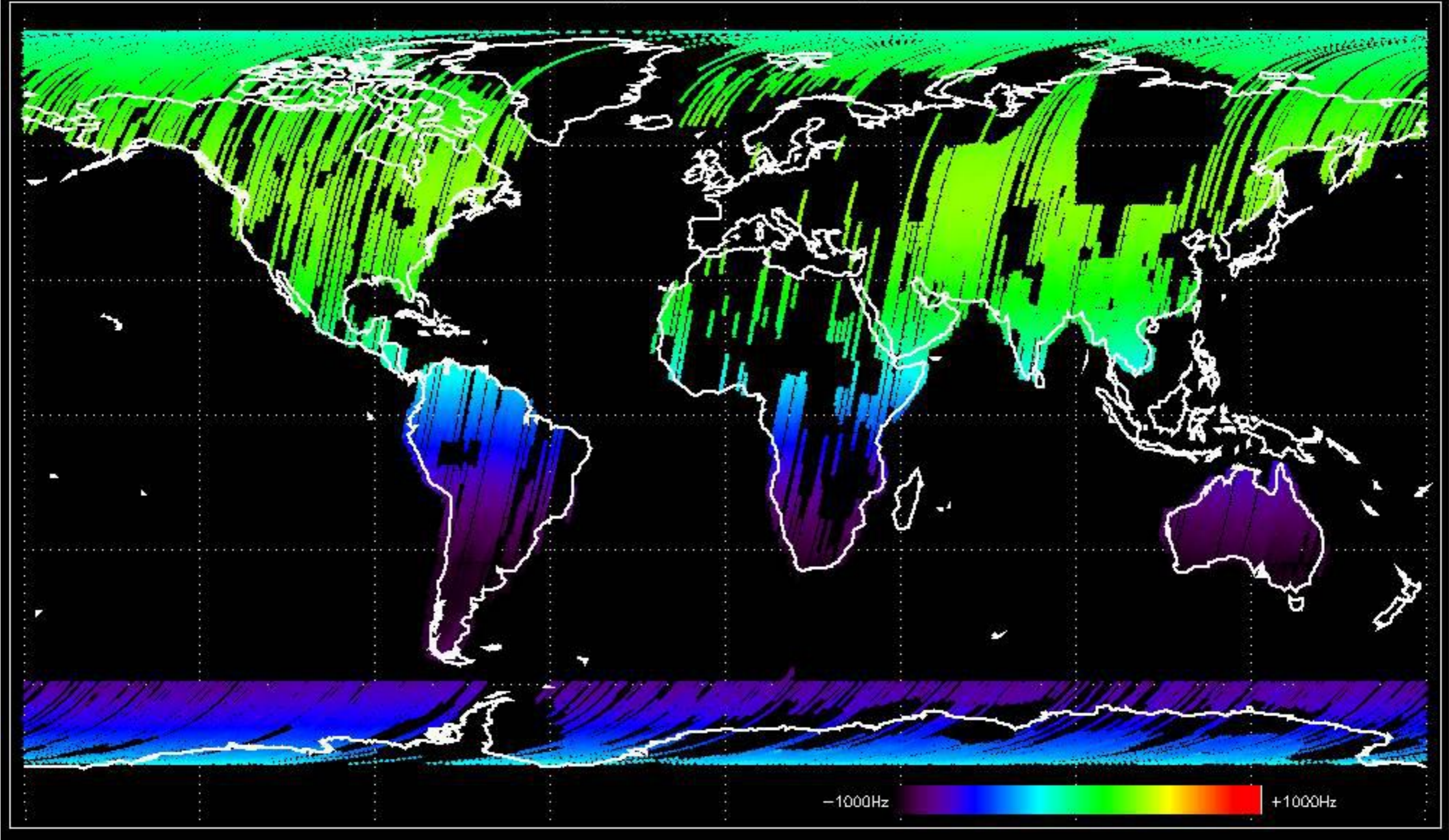


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

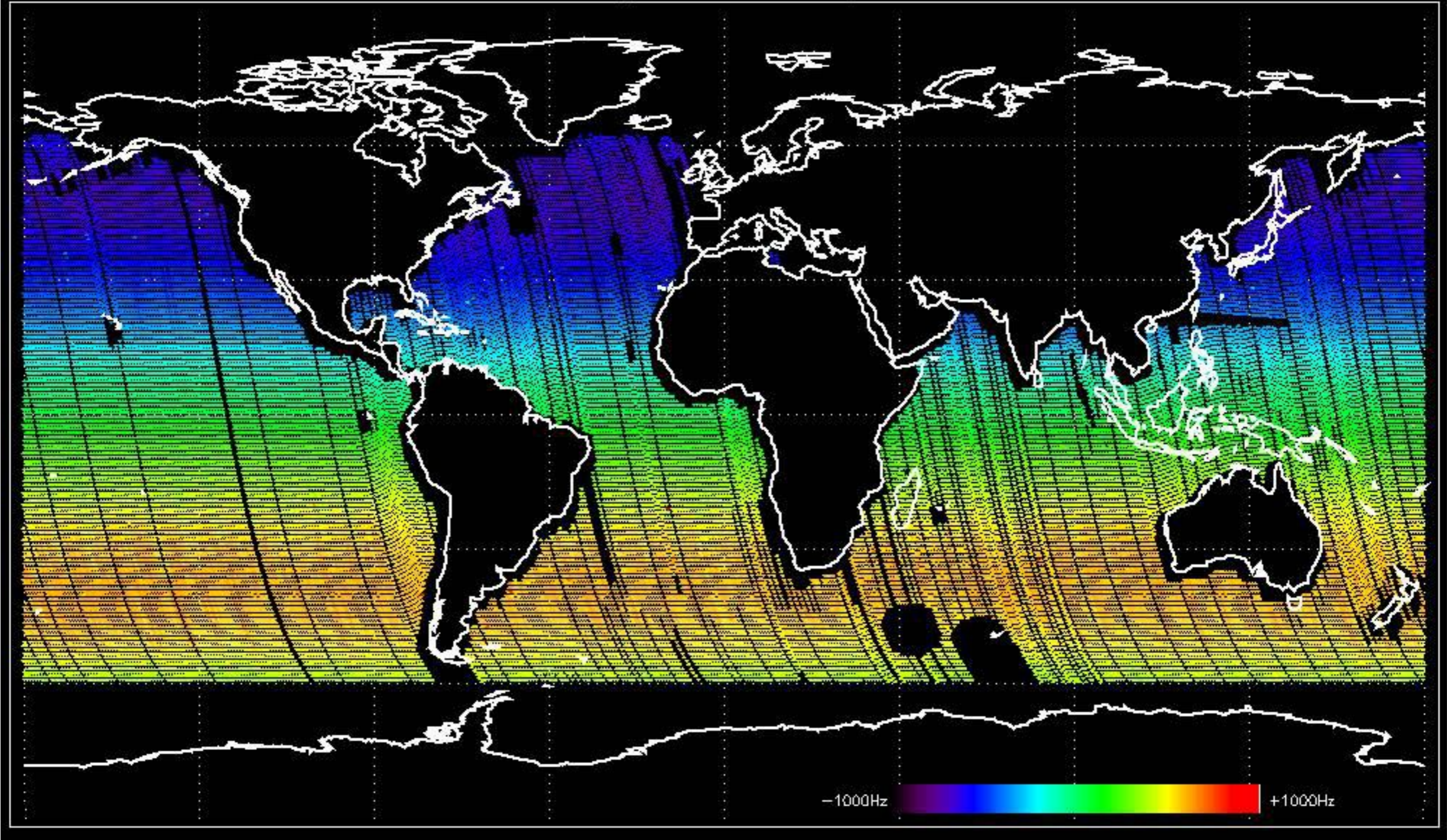
Doppler 'GM1' 'SS1' ascending



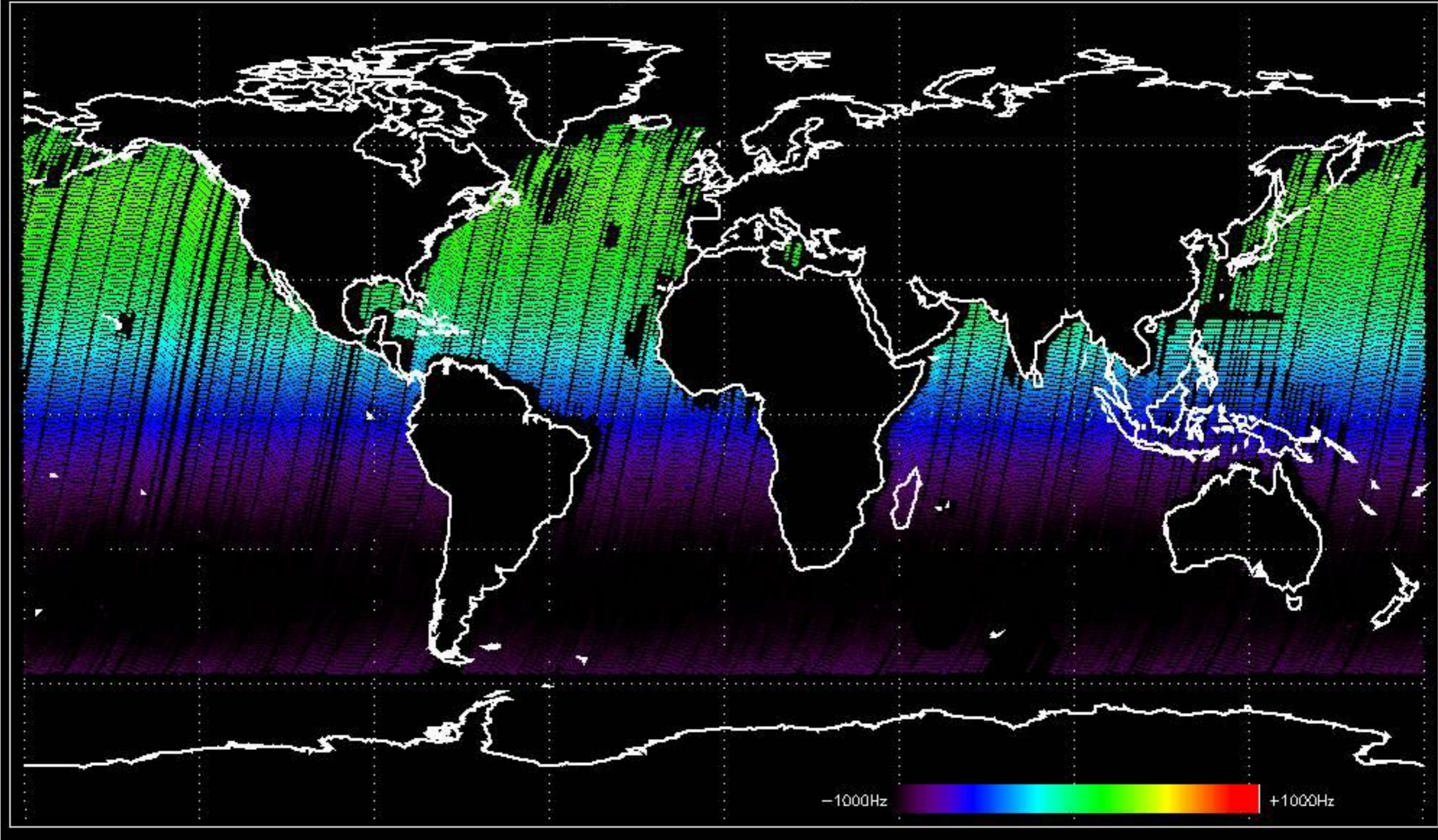
Doppler 'GM1' 'SS1' descending



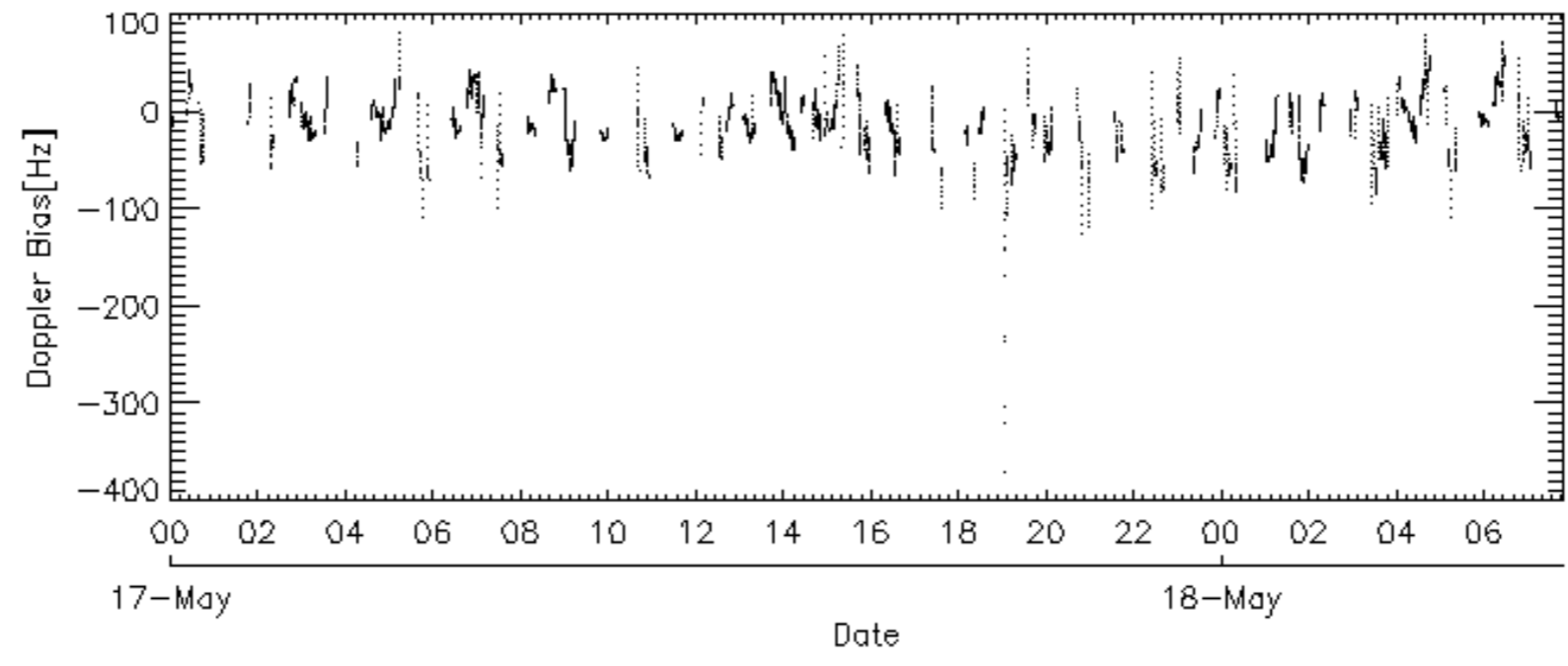
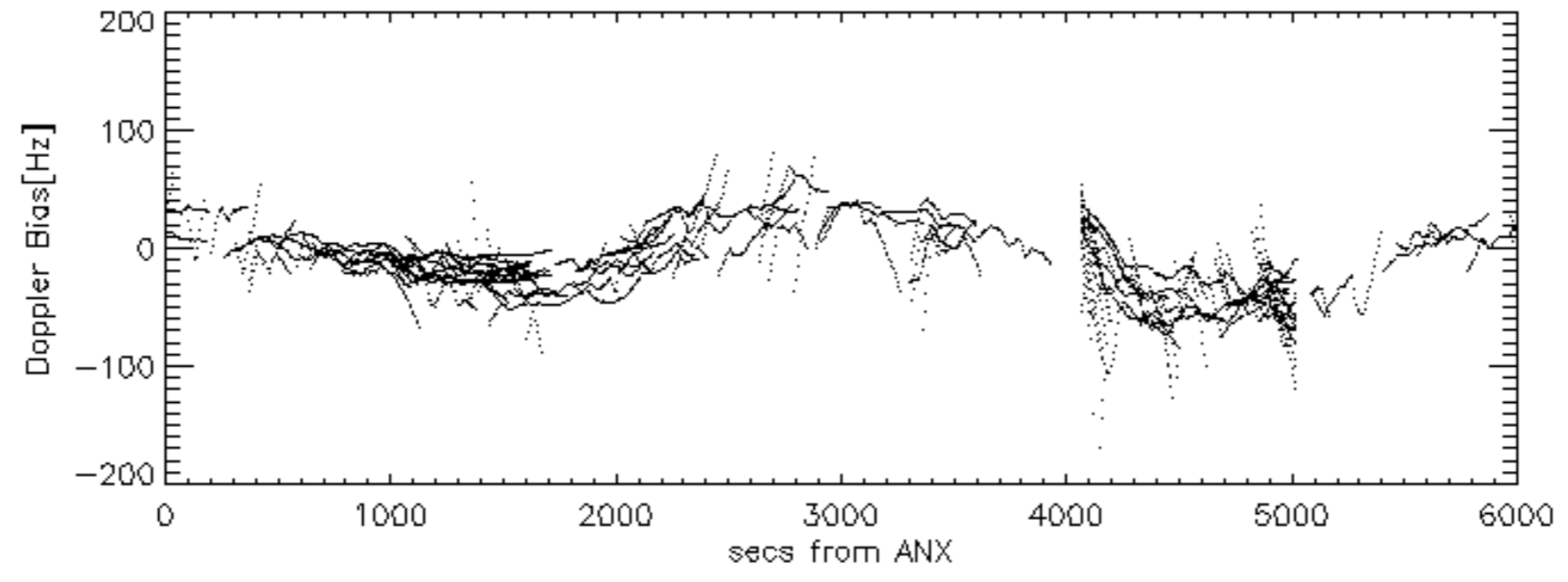
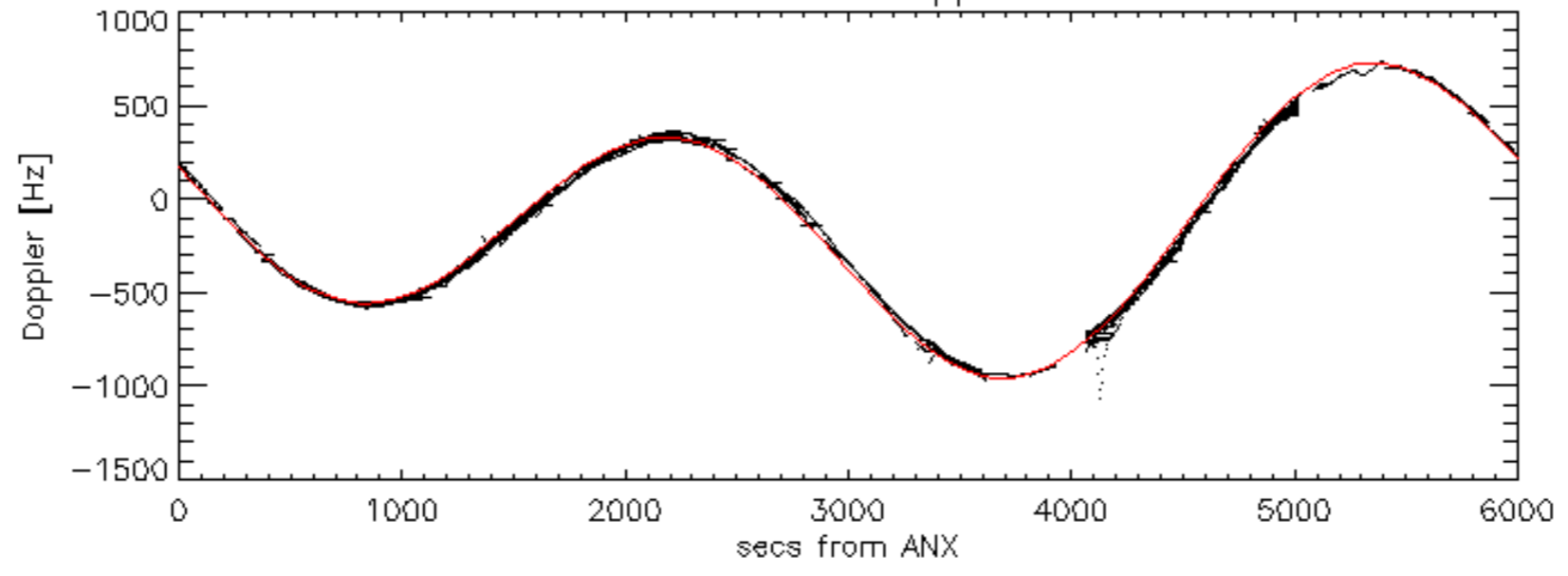
Doppler 'WVS' 'IS2' ascending

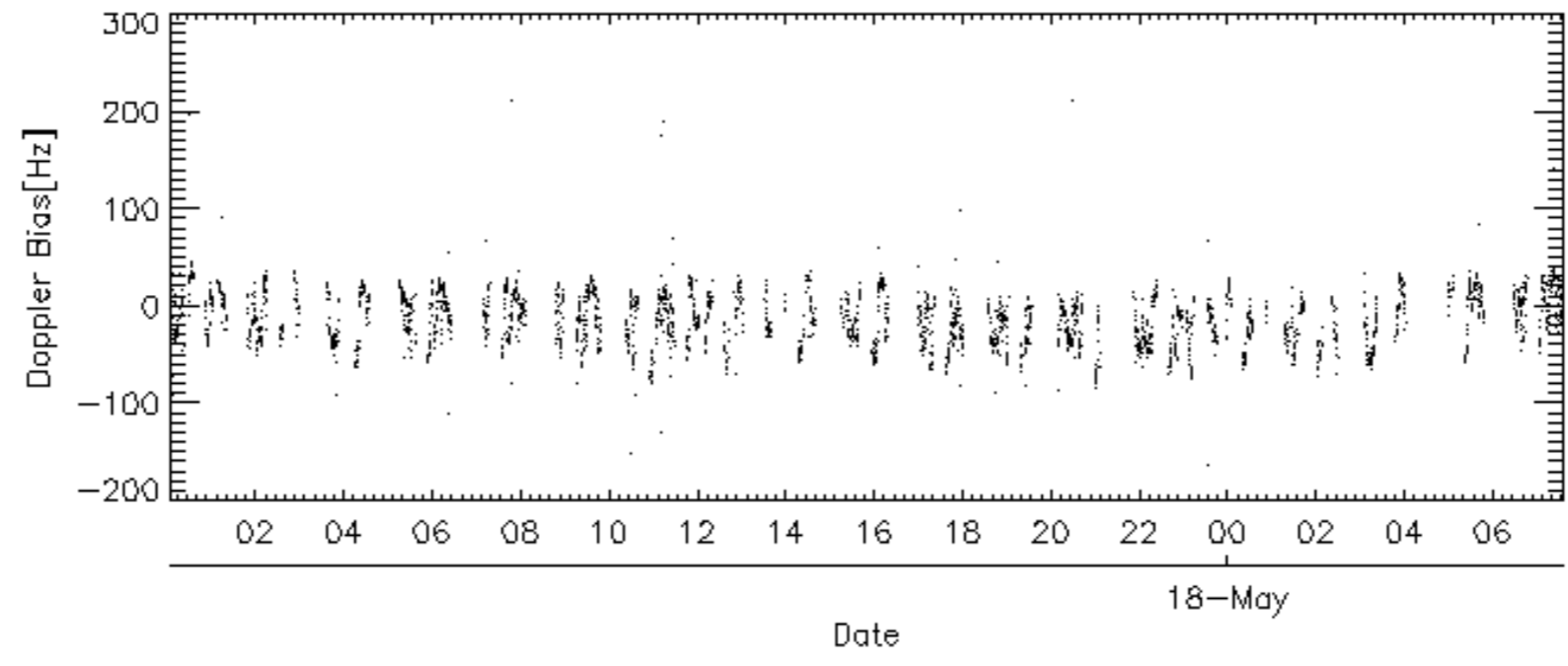
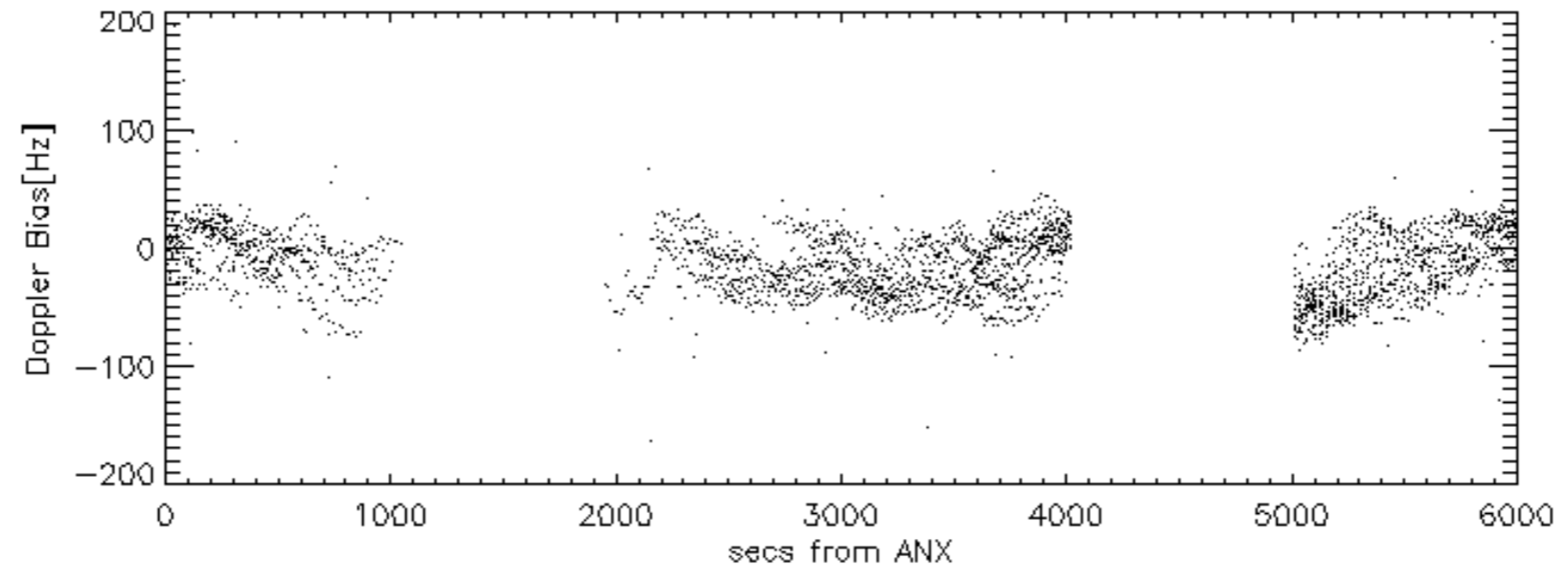
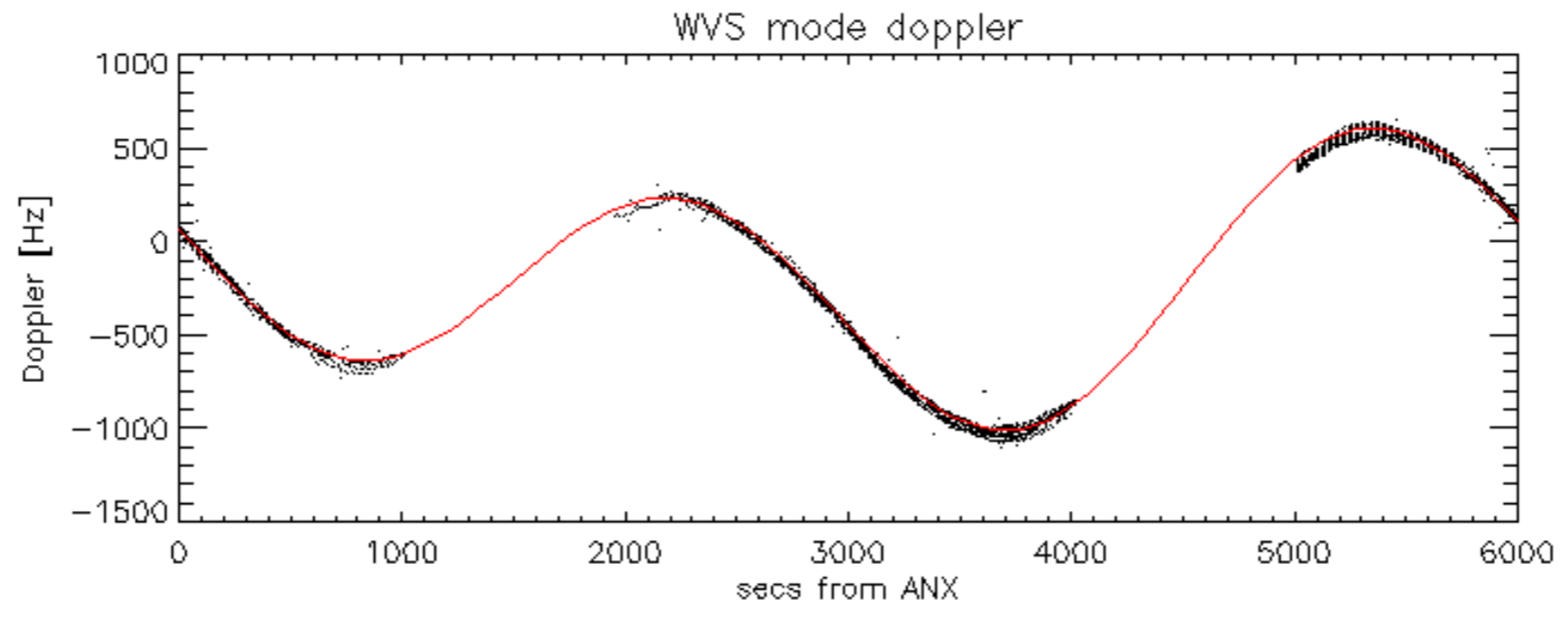


Doppler 'WVS' 'IS2' descending

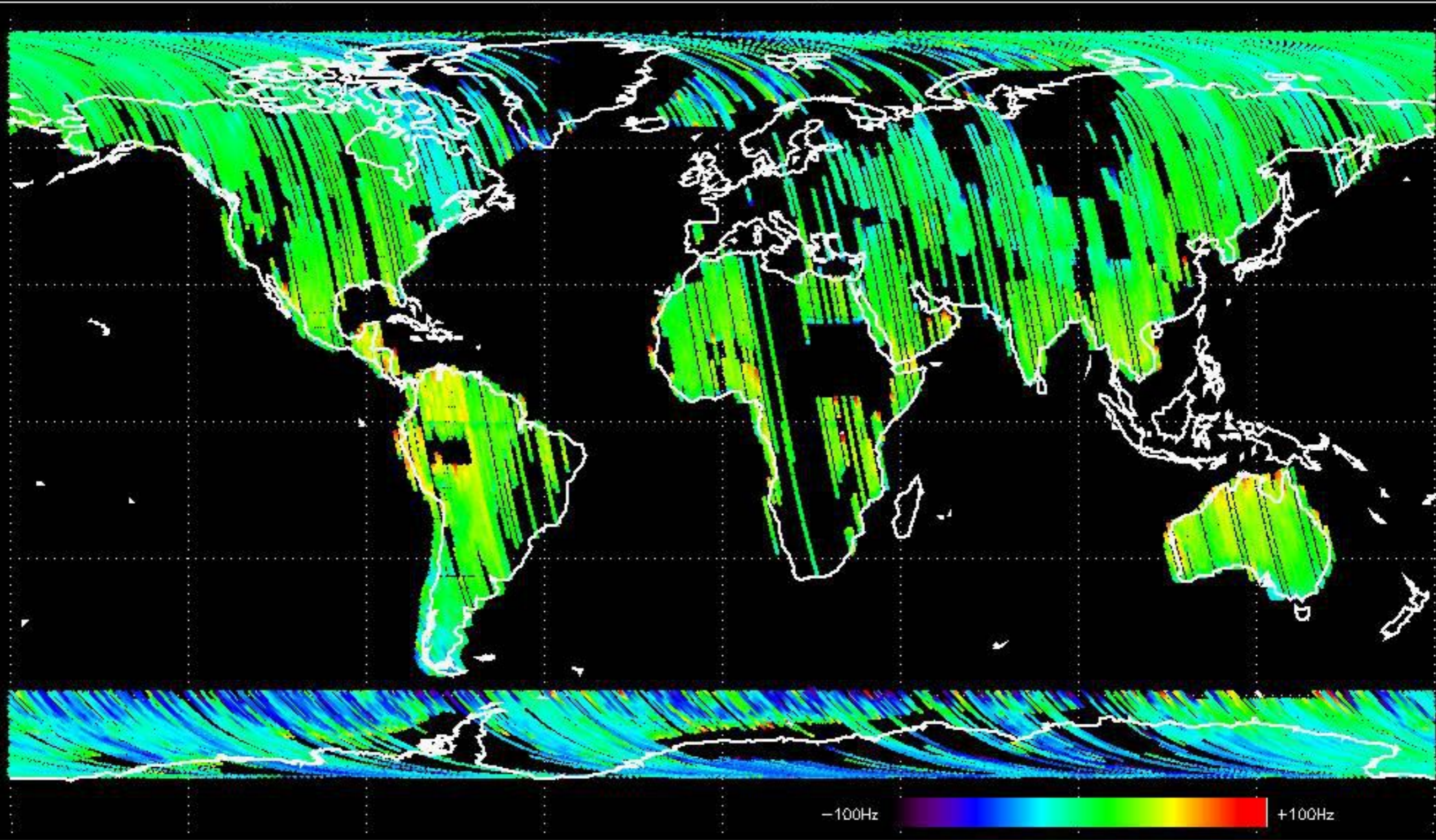


GM1 mode doppler

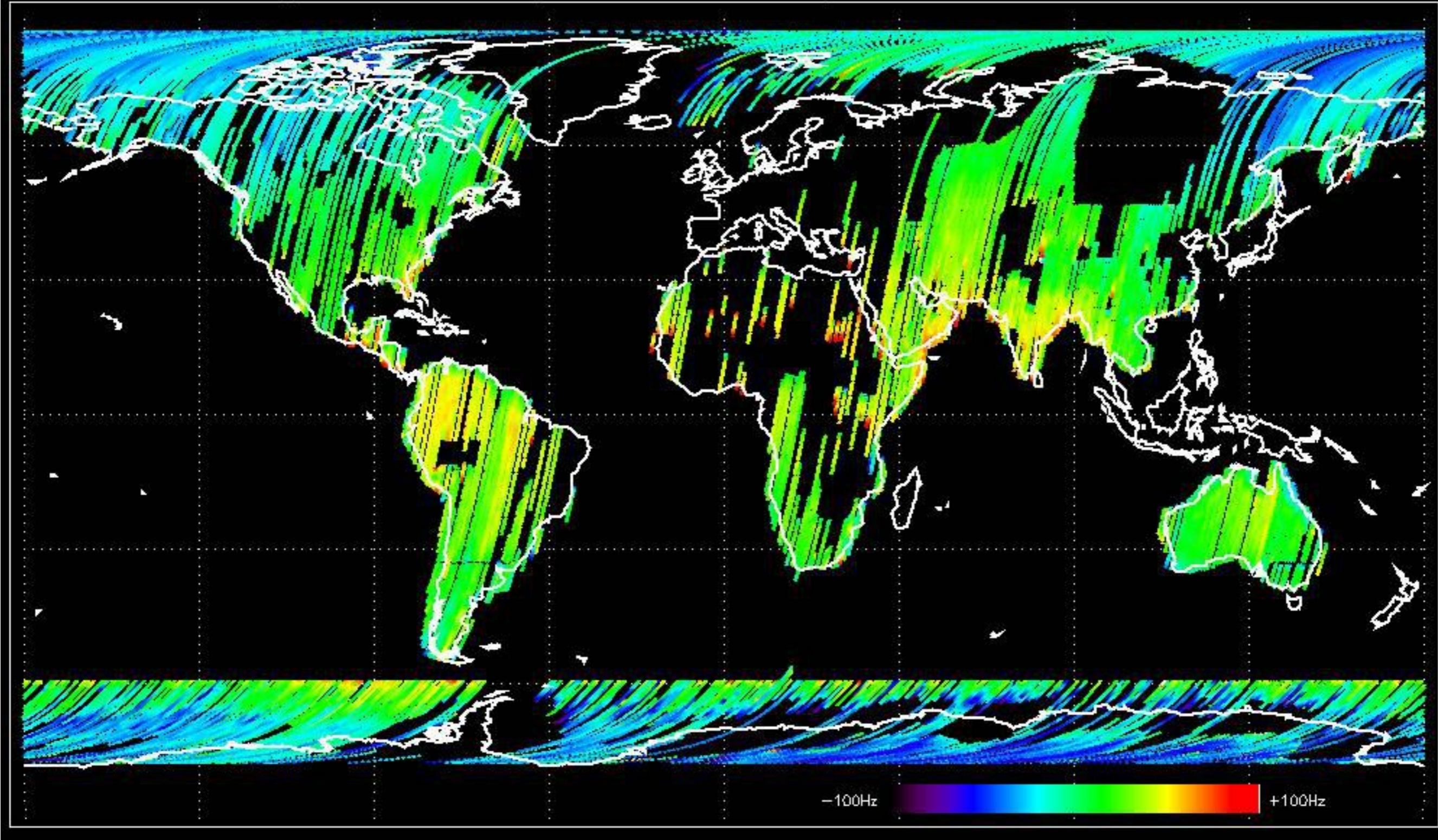




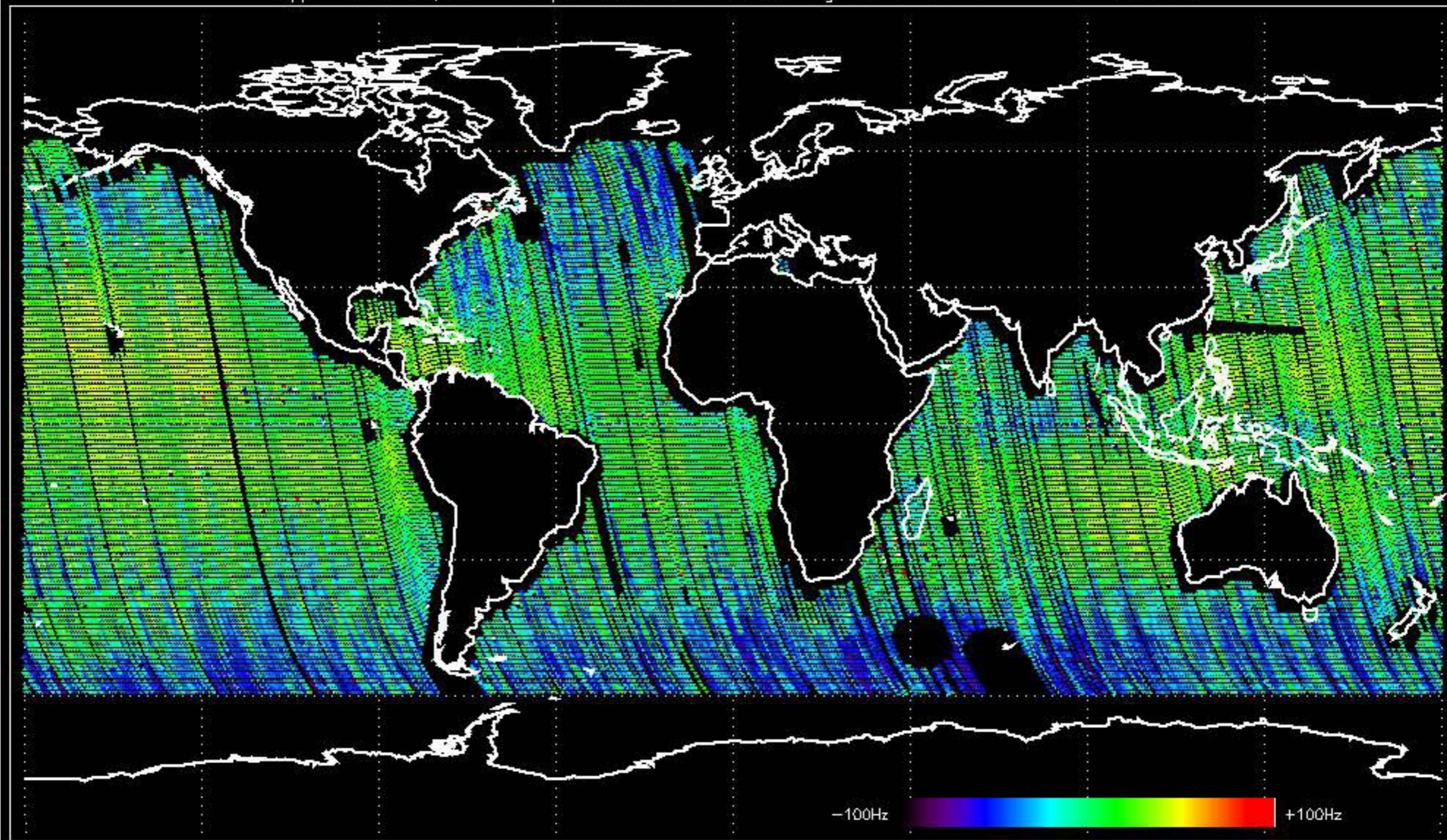
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -14.280578 Hz



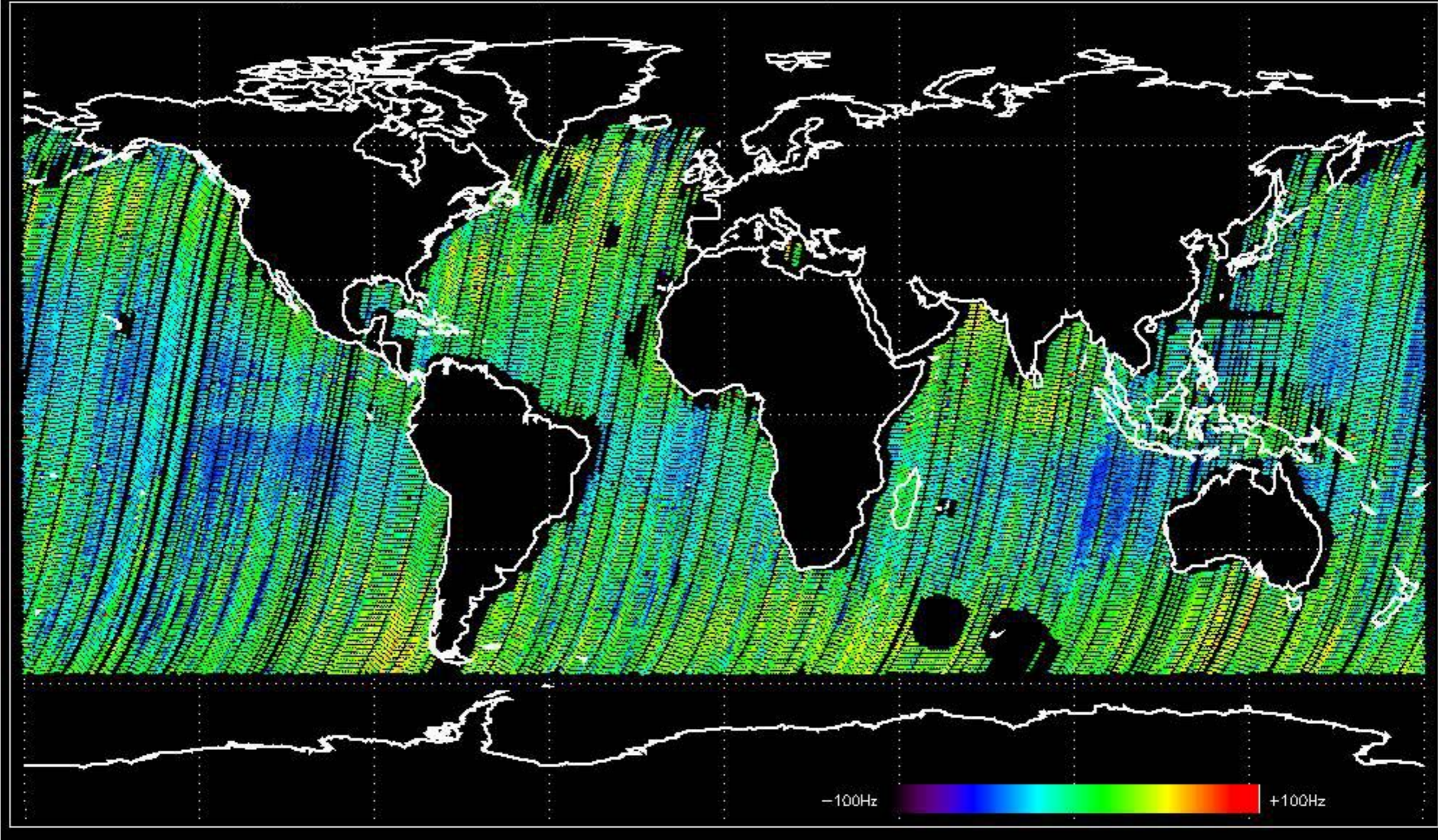
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -3.7699512 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -6.6708843 Hz

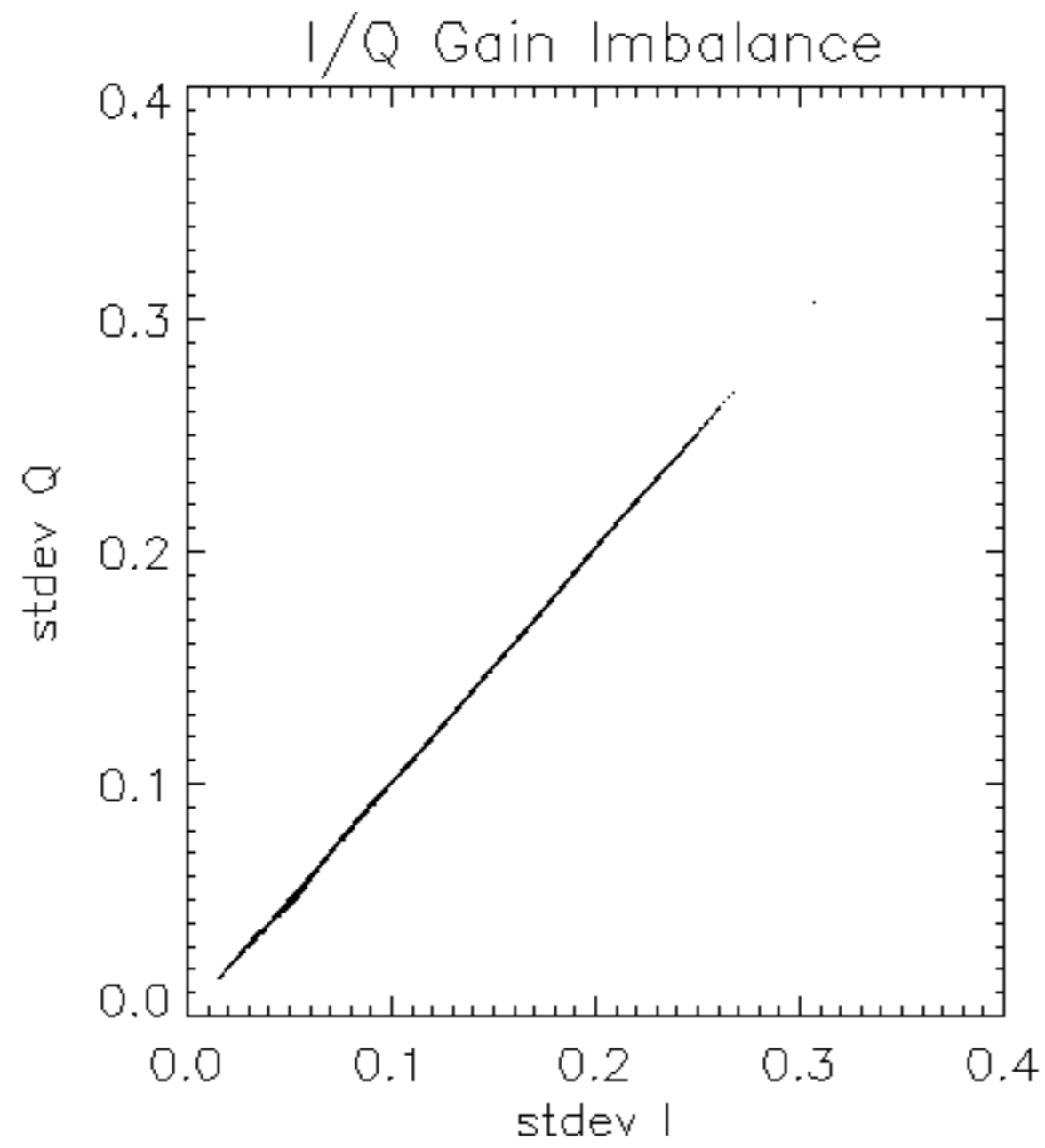


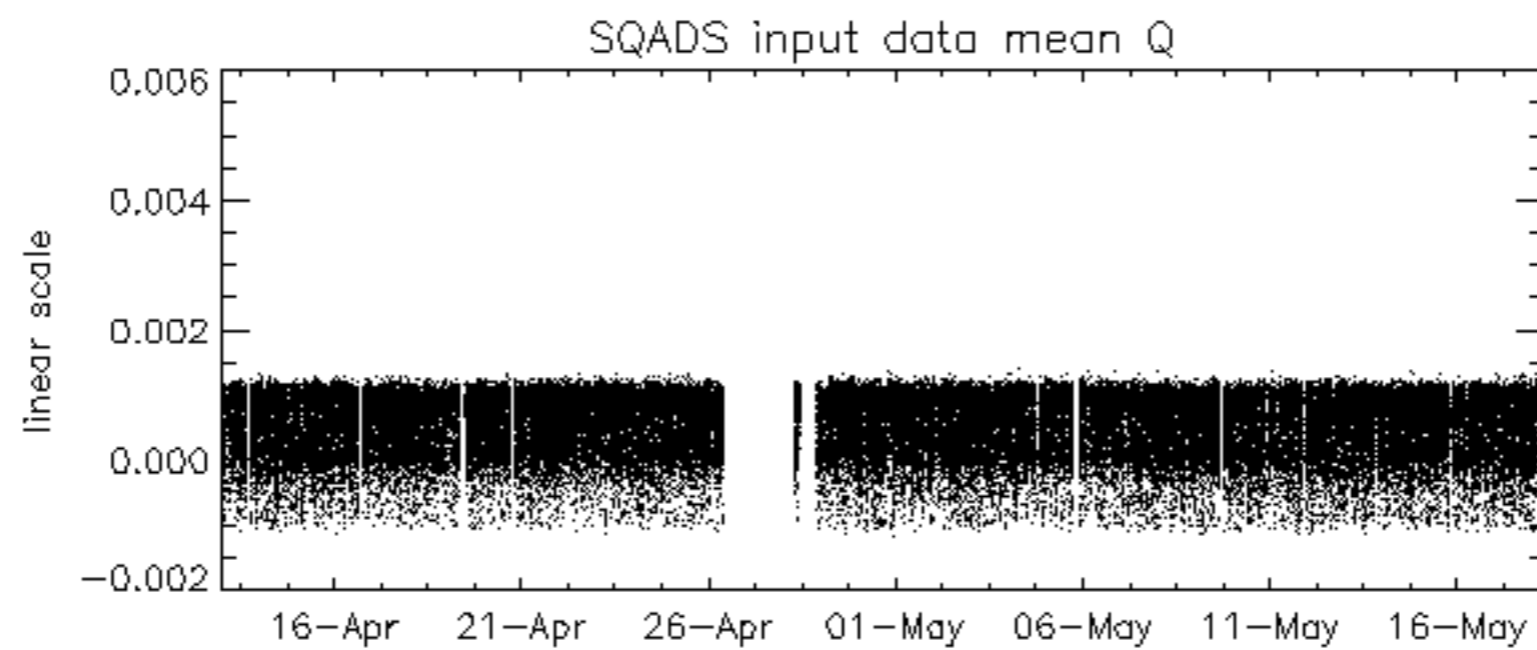
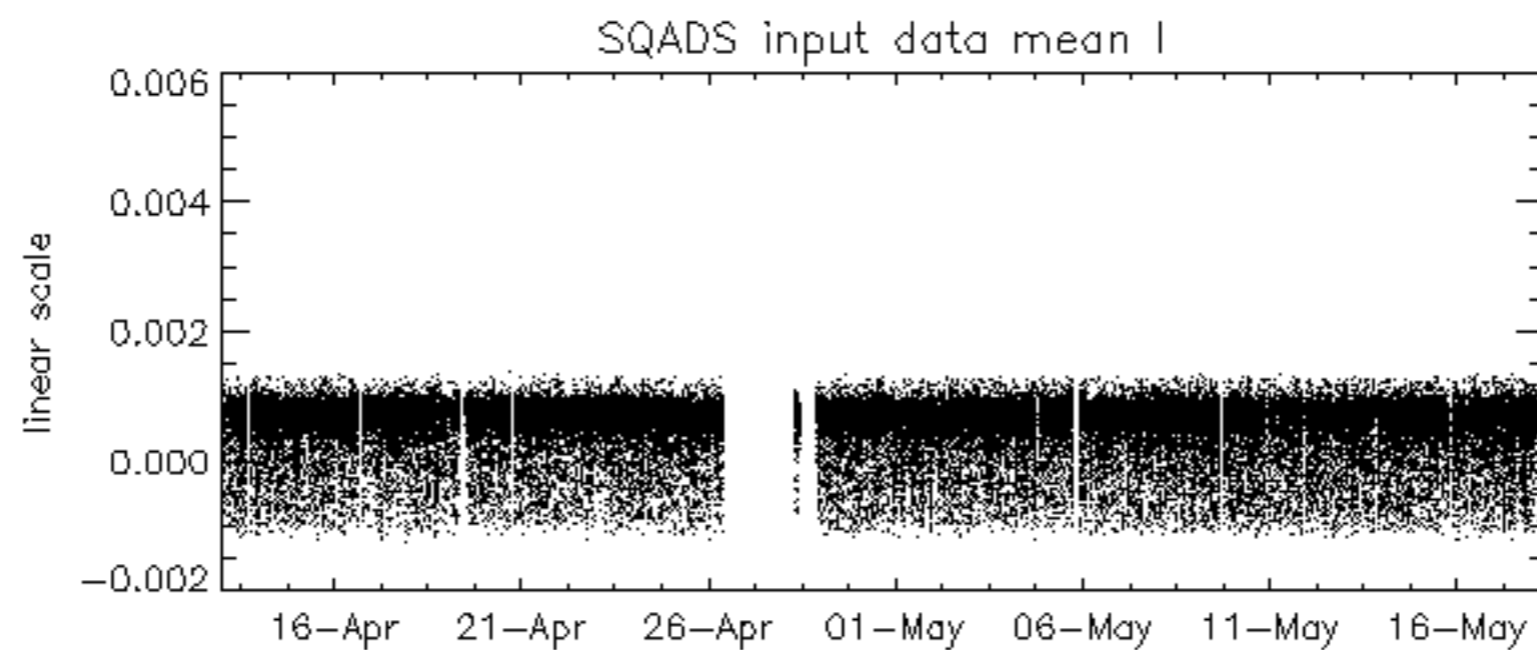
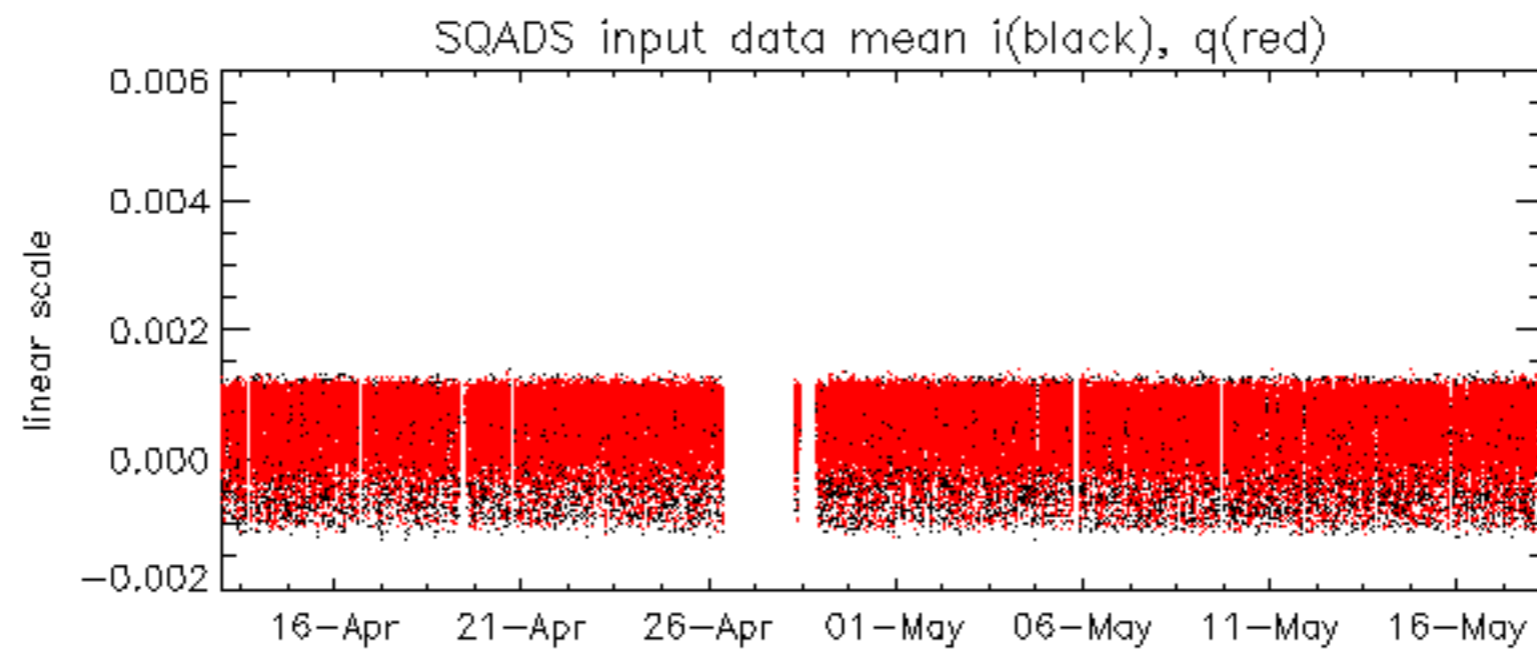
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -11.124566 Hz

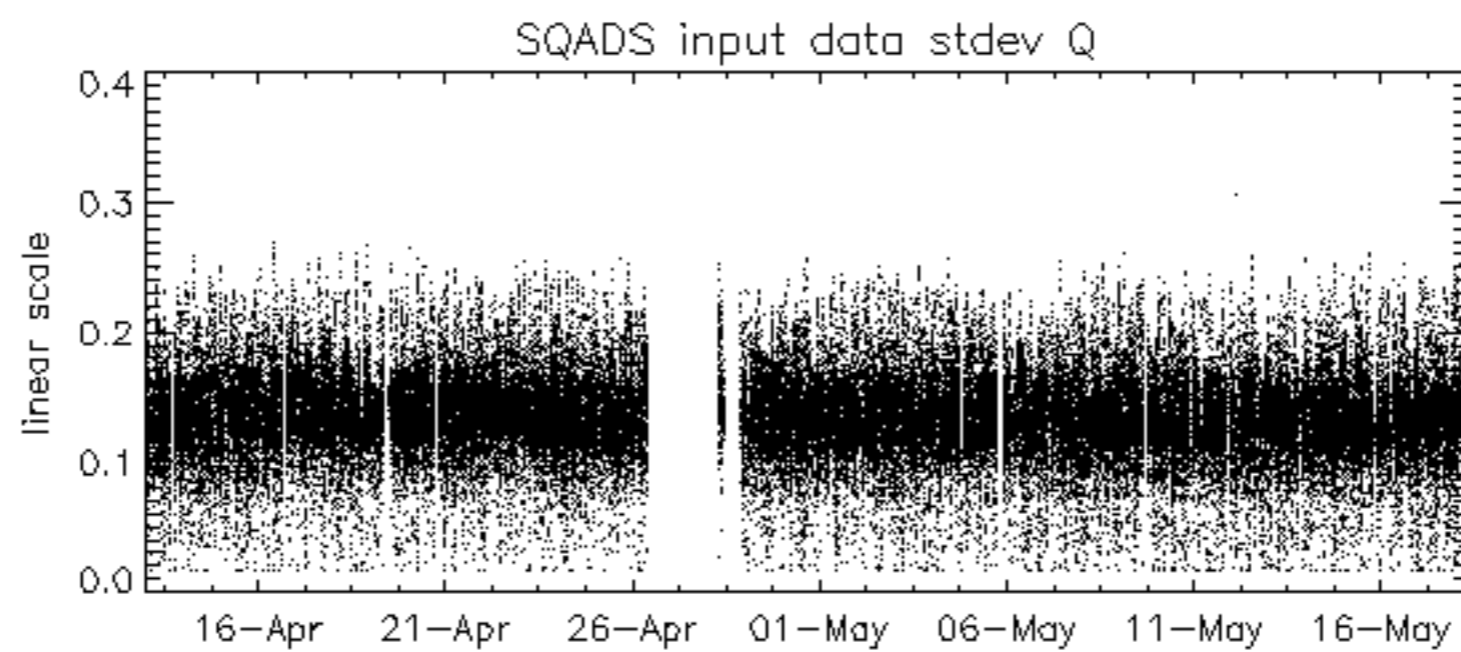
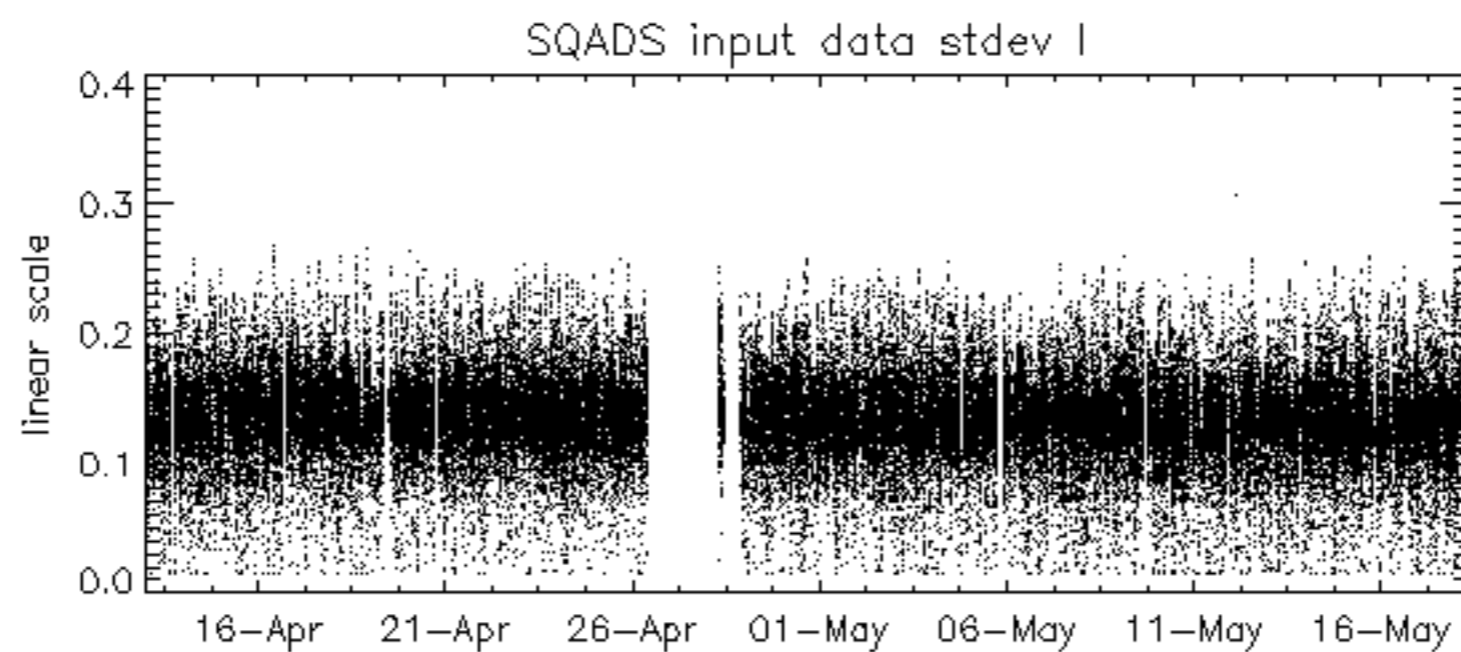
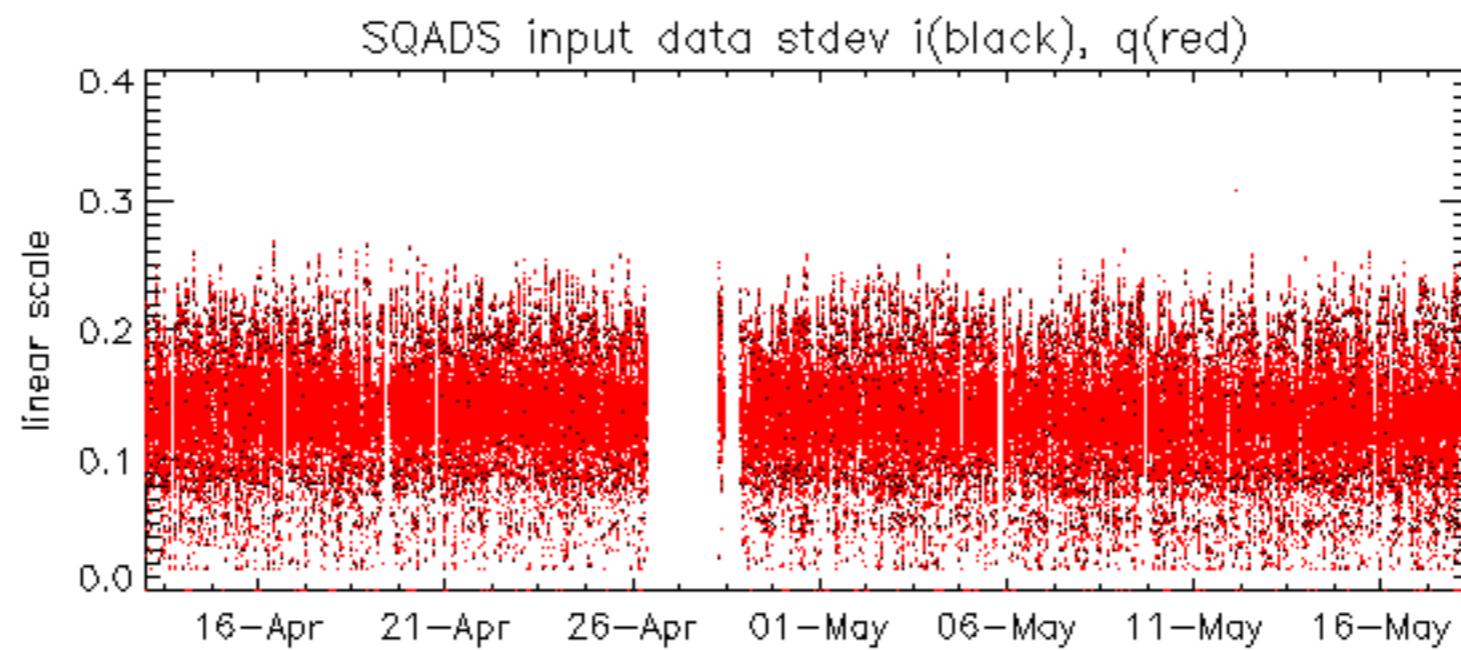


No anomalies observed on available MS products:

No anomalies observed.



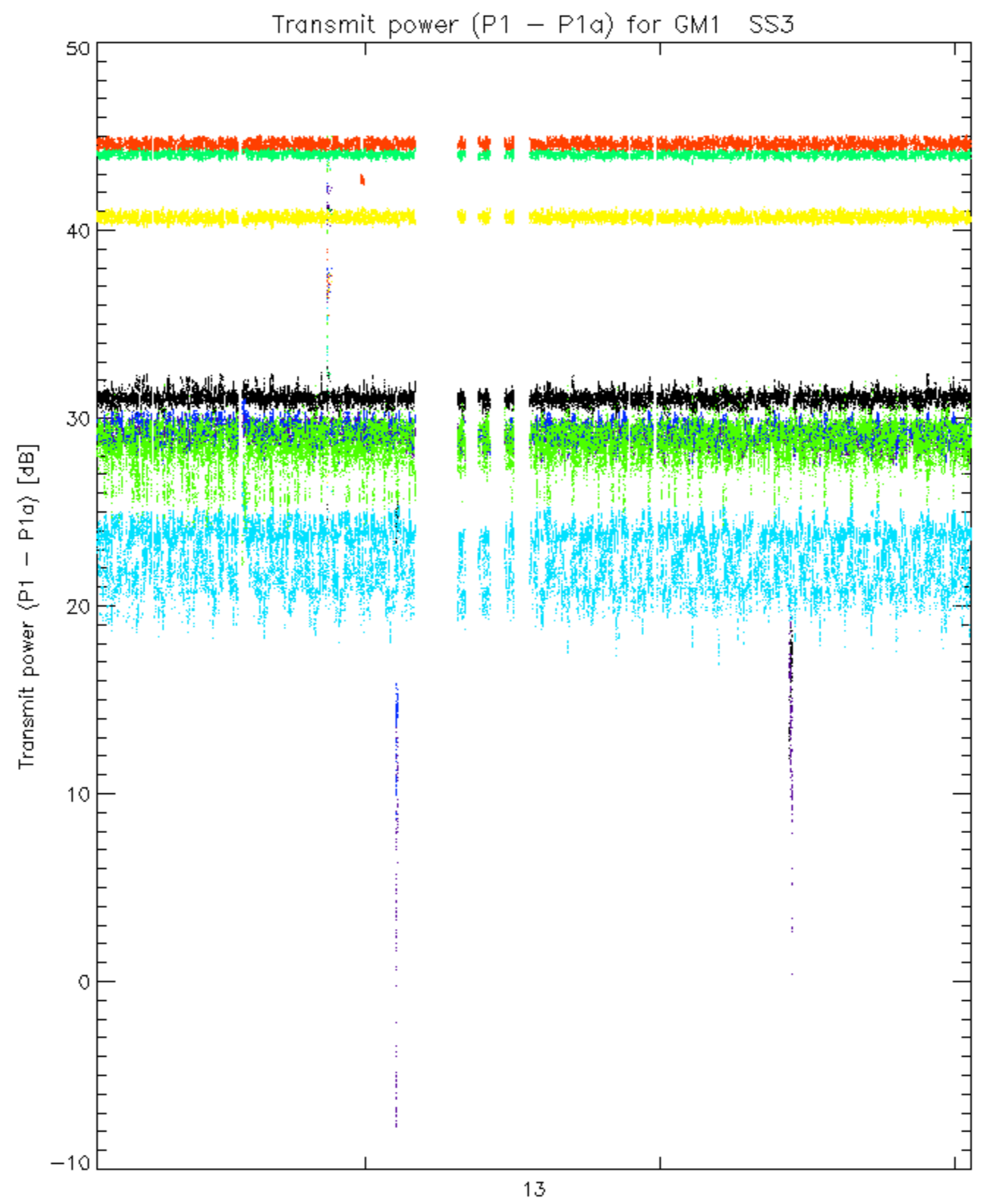




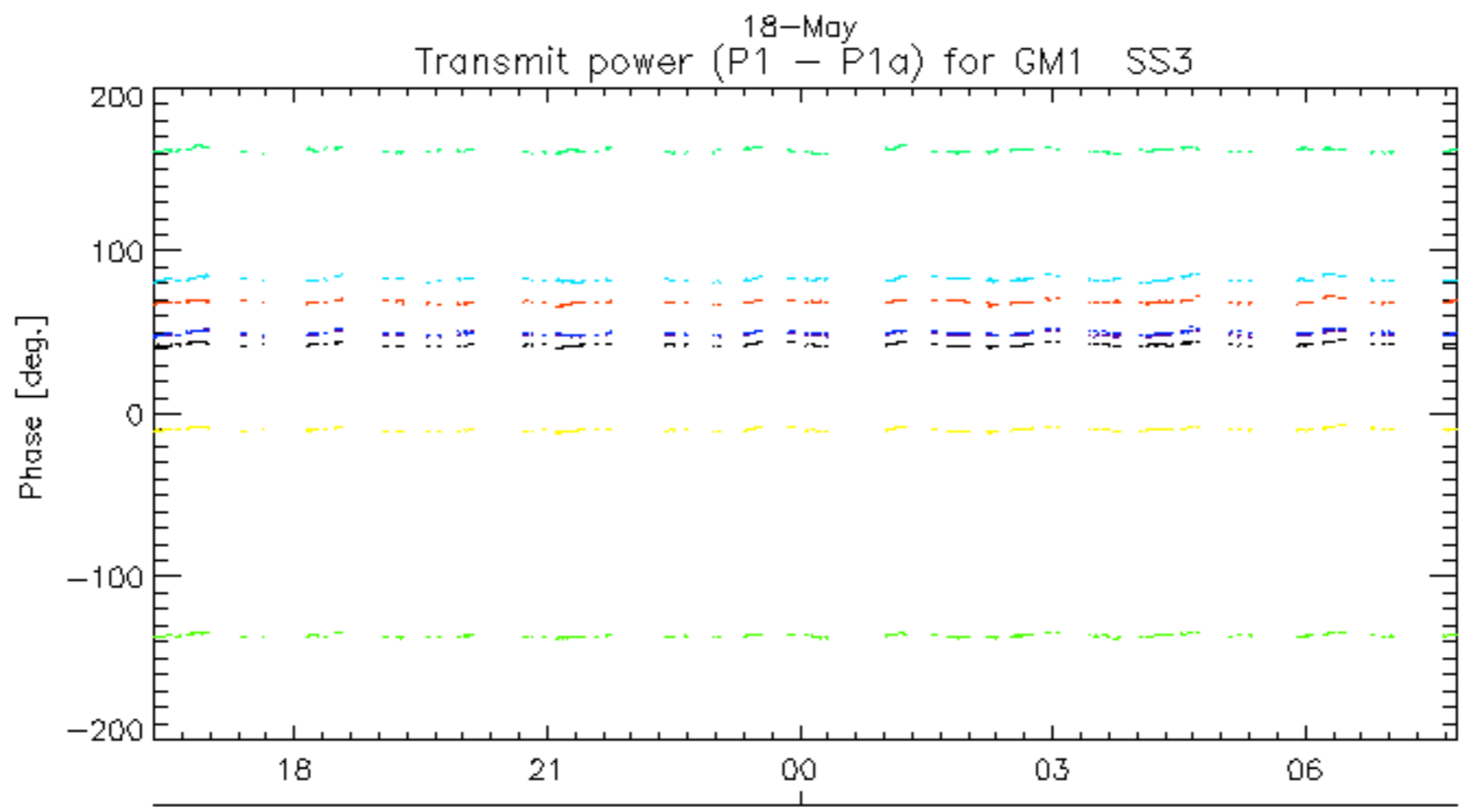
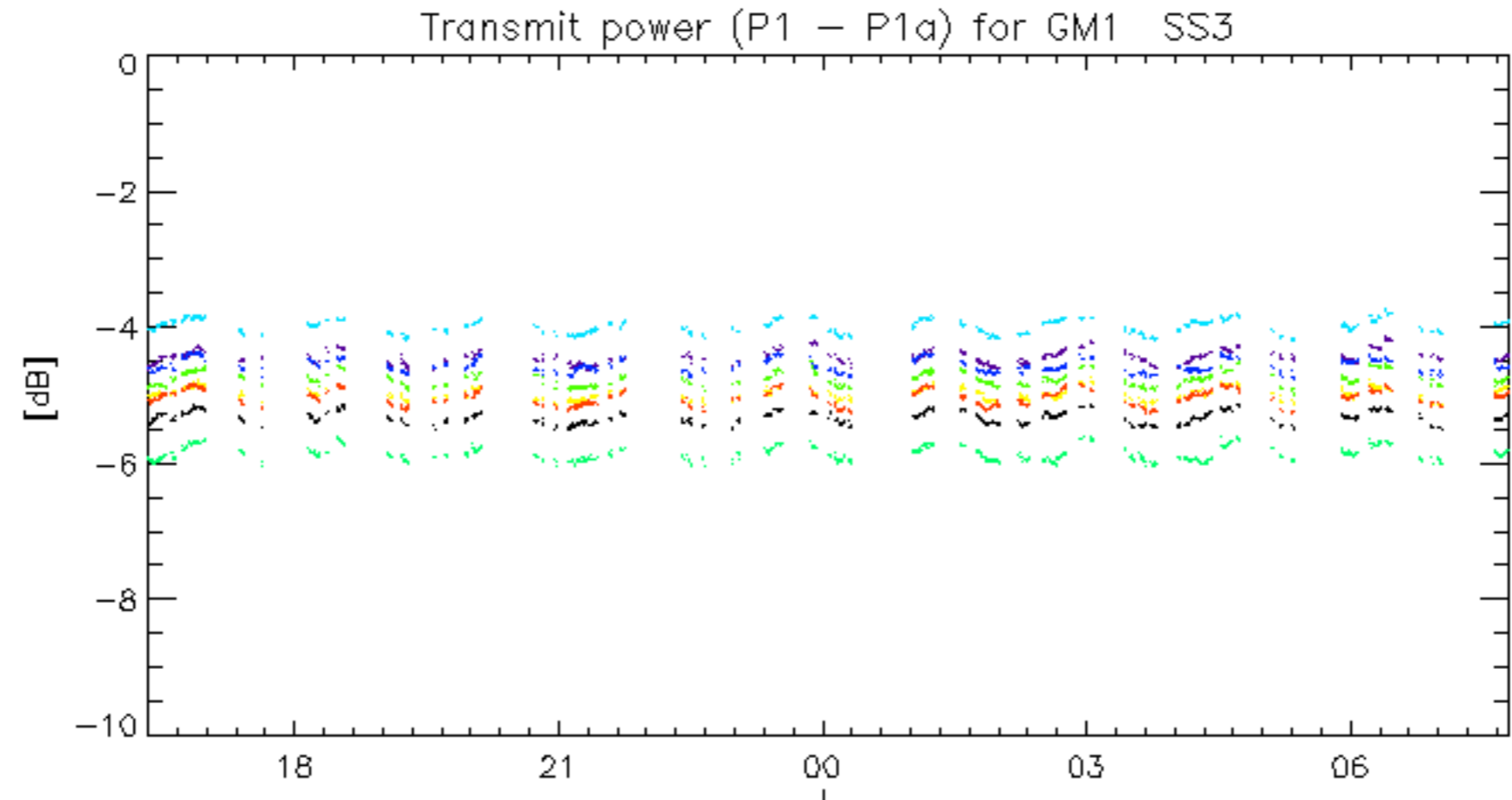
Summary of analysis for the last 3 days 2006051[678]

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

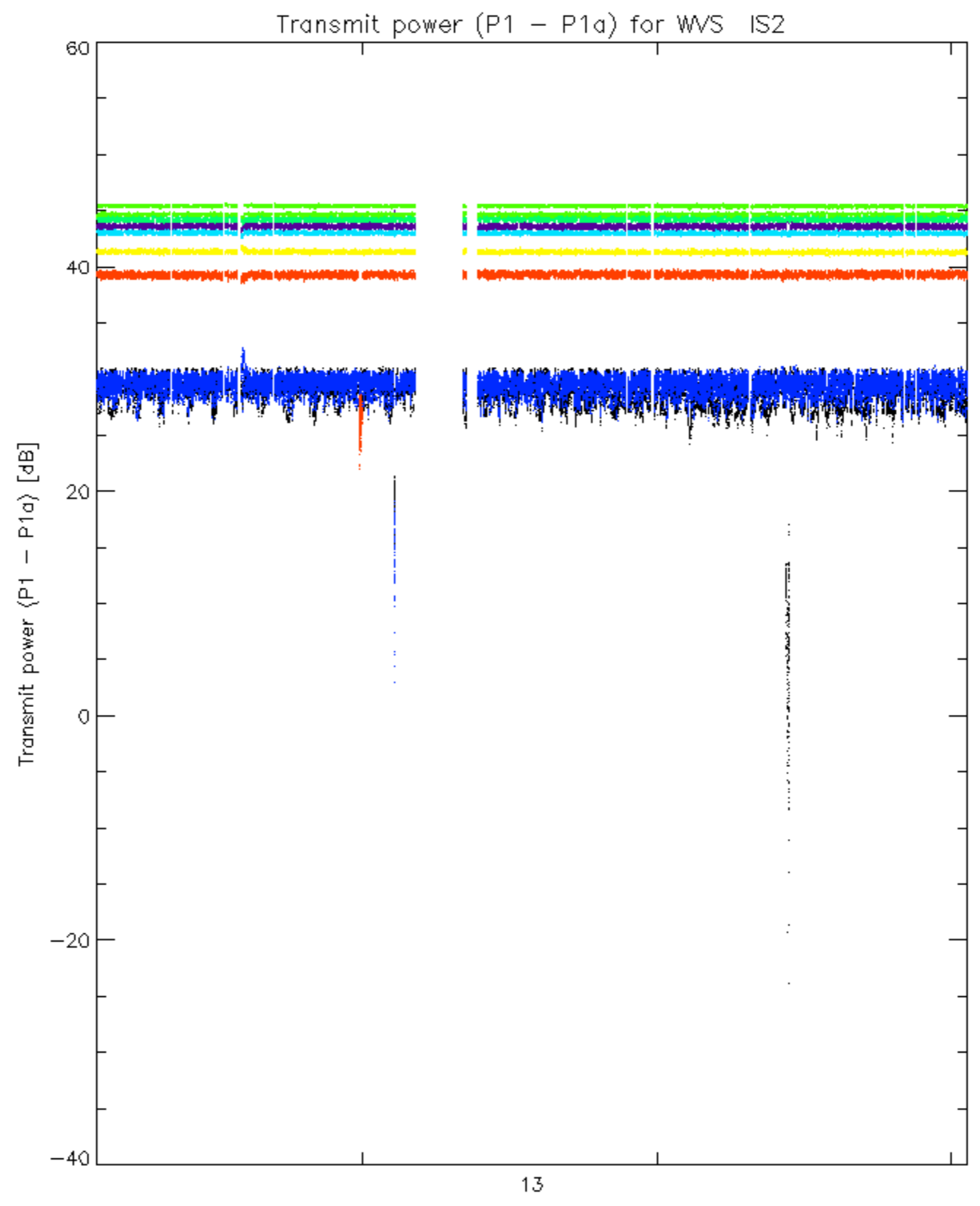
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060516_003808_000000502047_00403_22000_5316.N1	1	0
ASA_IMM_1PNPDE20060517_202031_000000362047_00429_22026_5398.N1	1	0
ASA_IMM_1PNPDK20060516_082810_000000372047_00408_22005_1794.N1	0	15
ASA_WSM_1PNPDE20060517_001650_000000852047_00417_22014_9559.N1	0	26
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ASA_WSM_1PNPDE20060517_234613_0000003302047_00431_22028_9726.N1	0	26



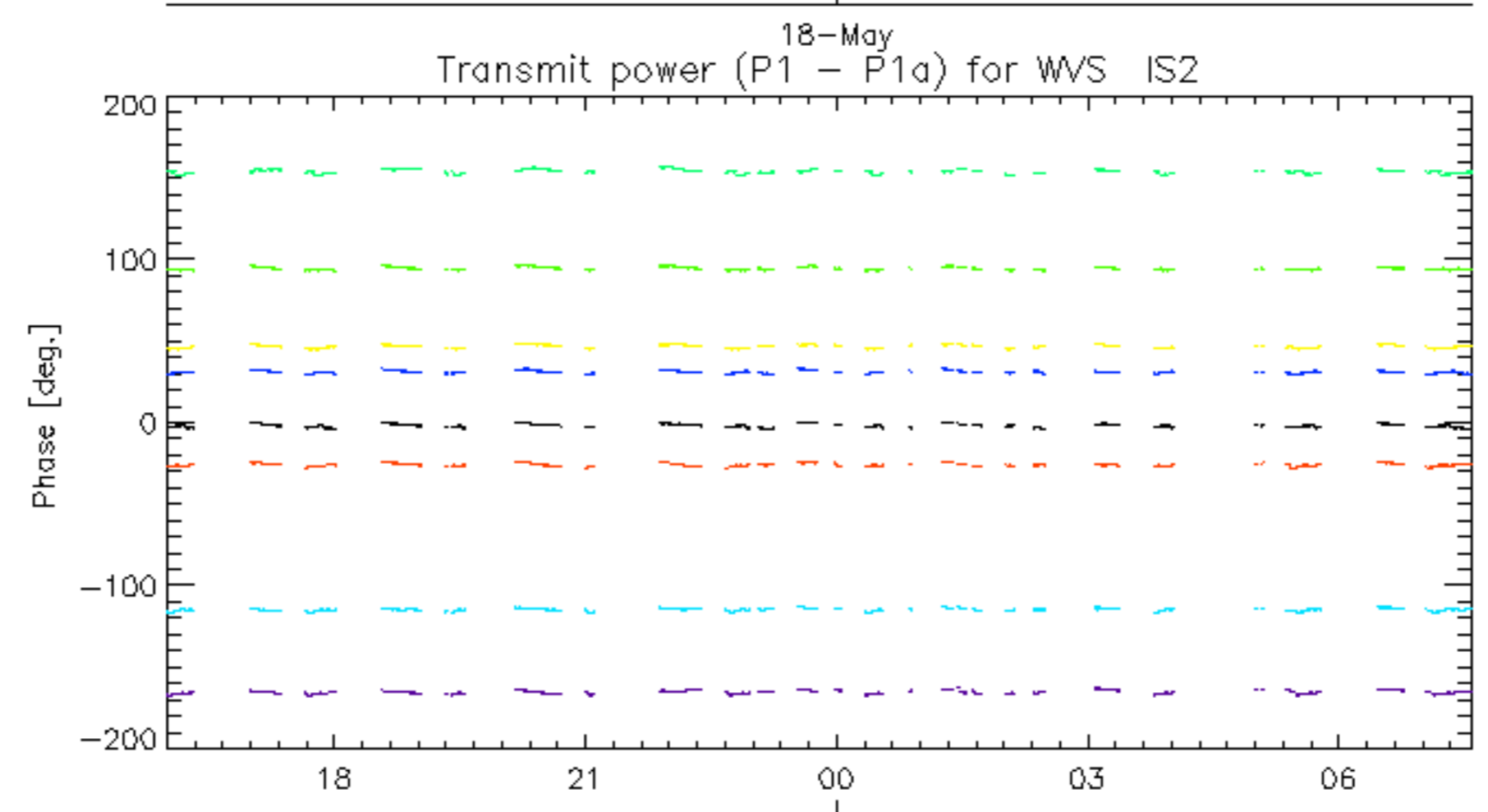
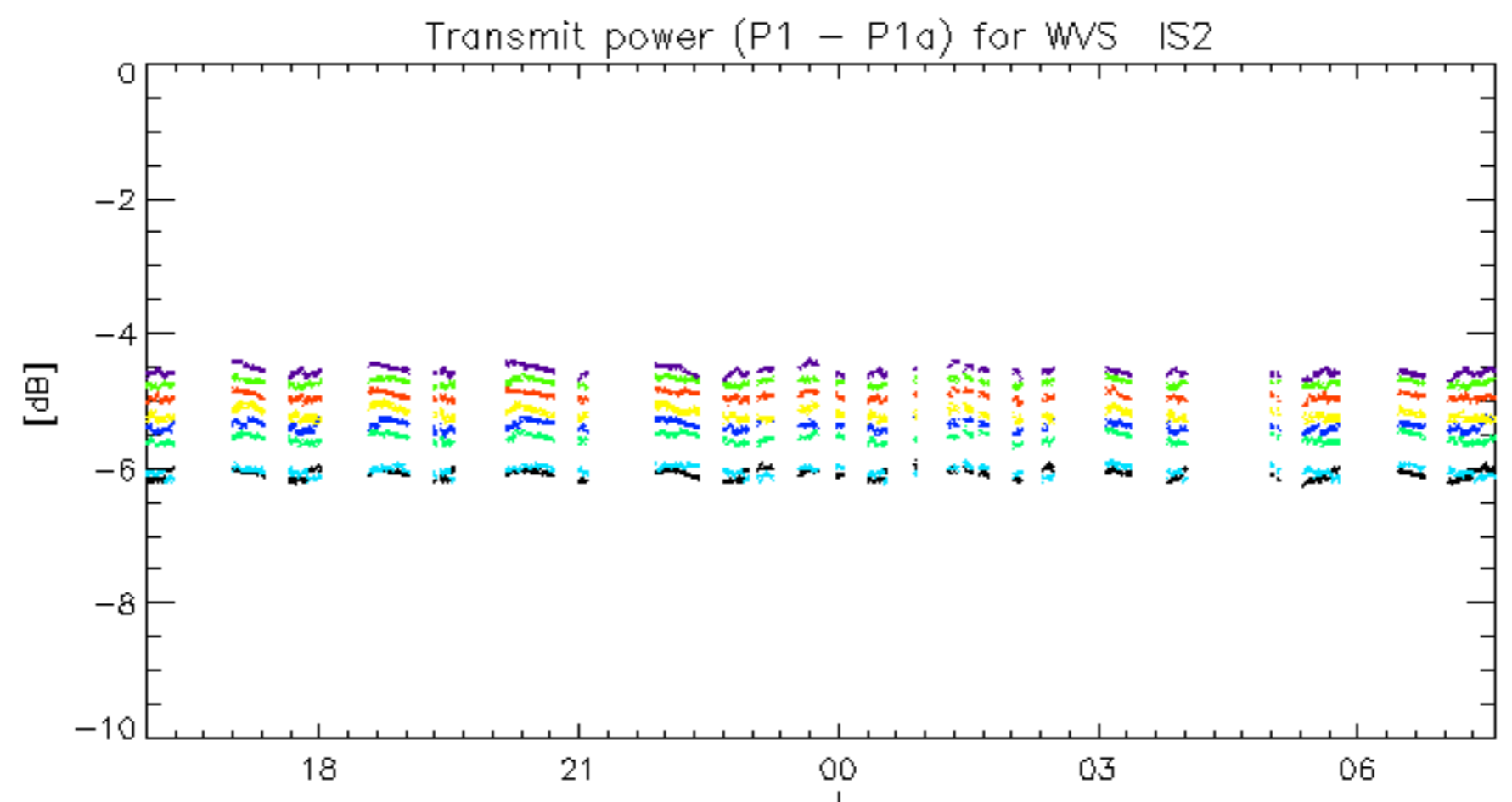
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



18-May
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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



18-May
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

No unavailabilities during the reported period.