

PRELIMINARY REPORT OF 060620

last update on Tue Jun 20 16:46:13 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 2006-06-19 00:00:00 to 2006-06-20 16:46:13

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	54	91	14	1	0
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	54	91	14	1	0
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	54	91	14	1	0
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	54	91	14	1	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	40	43	37	21	49
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	40	43	37	21	49
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	40	43	37	21	49
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	40	43	37	21	49

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	20060618 053213
H	20060619 050036

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	-3.935501	0.018388	0.035385
7	P1	-3.135209	0.015705	-0.040229
11	P1	-4.107825	0.019416	0.008419
15	P1	-6.148764	0.020303	-0.045550
19	P1	-3.348471	0.008631	-0.064797
22	P1	-4.516940	0.011575	-0.022353
26	P1	-3.970774	0.017056	0.015528
30	P1	-5.751197	0.008934	-0.021312
3	P1	-16.510250	0.249409	0.055562
7	P1	-17.223921	0.149537	-0.132567
11	P1	-16.958208	0.309159	-0.090243
15	P1	-13.208629	0.216499	0.059729
19	P1	-14.331546	0.051510	-0.156239
22	P1	-16.168154	0.368586	0.029018
26	P1	-15.218514	0.229816	0.115100
30	P1	-17.125162	0.404186	-0.162069

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.143885	0.079851	0.121914
7	P2	-22.029232	0.095932	0.100620
11	P2	-15.872431	0.109500	0.119707
15	P2	-7.159547	0.092704	-0.003556
19	P2	-9.172943	0.084159	-0.016974
22	P2	-18.160940	0.081815	-0.070596
26	P2	-16.402033	0.085864	-0.071685
30	P2	-19.560461	0.085589	0.008835

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.185525	0.004026	-0.012877
7	P3	-8.185525	0.004026	-0.012877
11	P3	-8.185525	0.004026	-0.012877
15	P3	-8.185525	0.004026	-0.012877
19	P3	-8.185525	0.004026	-0.012877
22	P3	-8.185525	0.004026	-0.012877
26	P3	-8.185525	0.004026	-0.012877
30	P3	-8.185525	0.004026	-0.012877

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	-3.802365	0.051202	0.011428
7	P1	-2.590234	0.030586	0.048690
11	P1	-2.861282	0.023085	0.027236
15	P1	-3.511114	0.051004	-0.029044
19	P1	-3.408804	0.014346	-0.027163
22	P1	-5.081067	0.019552	0.002640
26	P1	-5.854166	0.015630	-0.037055
30	P1	-5.191666	0.026612	-0.023228
3	P1	-11.622822	0.053481	0.003925
7	P1	-9.968618	0.049008	-0.062342
11	P1	-10.216754	0.086893	-0.064318
15	P1	-10.656304	0.156210	-0.102879
19	P1	-15.536956	0.076348	-0.050142
22	P1	-20.933985	1.169516	-0.175493

26	P1	-16.474157	0.328215	0.044737
30	P1	-17.909462	0.369311	0.162786

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.831865	0.072268	0.166355
7	P2	-22.491564	0.129417	0.070098
11	P2	-11.152468	0.048389	0.086933
15	P2	-4.919391	0.048754	-0.029375
19	P2	-6.882842	0.053210	-0.009361
22	P2	-8.208750	0.042742	-0.018235
26	P2	-24.138979	0.068650	-0.085351
30	P2	-22.063089	0.056114	0.021624

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.019727	0.004916	-0.013456
7	P3	-8.019818	0.004893	-0.013426
11	P3	-8.019821	0.004889	-0.013268
15	P3	-8.019761	0.004895	-0.013432
19	P3	-8.019776	0.004897	-0.013198
22	P3	-8.019965	0.004893	-0.013677
26	P3	-8.019925	0.004893	-0.013336
30	P3	-8.019830	0.004892	-0.013494

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	0.000549619
	stdev	1.78269e-07
MEAN Q	mean	0.000521973
	stdev	2.22364e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.136102
	stdev	0.00115732
STDEV Q	mean	0.136451
	stdev	0.00117459



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006061[890]

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_1PNPDE20060610_110007_000000342048_00266_22364_6947.N1	0	18
ASA_IMM_1PNPDE20060619_062814_000001452048_00392_22490_8058.N1	1	0
ASA_IMM_1PNPDK20060618_121934_000000622048_00381_22479_2870.N1	1	44
ASA_IMM_1PNPDK20060618_125918_000000372048_00382_22480_2868.N1	1	0
ASA_WSM_1PNPDE20060610_015903_000001462048_00261_22359_3573.N1	0	75

ASA_WSM_1PNPDE20060610_033801_000000852048_00262_22360_3591.N1	0	39
ASA_WSM_1PNPDE20060610_184505_000001842048_00271_22369_3667.N1	0	58
ASA_WSM_1PNPDE20060618_143248_000001282048_00383_22481_4580.N1	0	22
ASA_WSM_1PNPDE20060618_161434_000001832048_00384_22482_4579.N1	0	47
ASA_WSM_1PNPDE20060618_201434_000000852048_00386_22484_4597.N1	0	30
ASA_WSM_1PNPDE20060618_234032_000000852048_00388_22486_4614.N1	0	27
ASA_WSM_1PNPDK20060610_134308_000002082048_00268_22366_7314.N1	0	30





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)


Ascending

Descending

7.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler


Ascending

Descending

7.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX**7.4 - Unbiased Doppler Error for GM1****Evolution of unbiased Doppler error (Real - Expected)**

Acsending

Descending

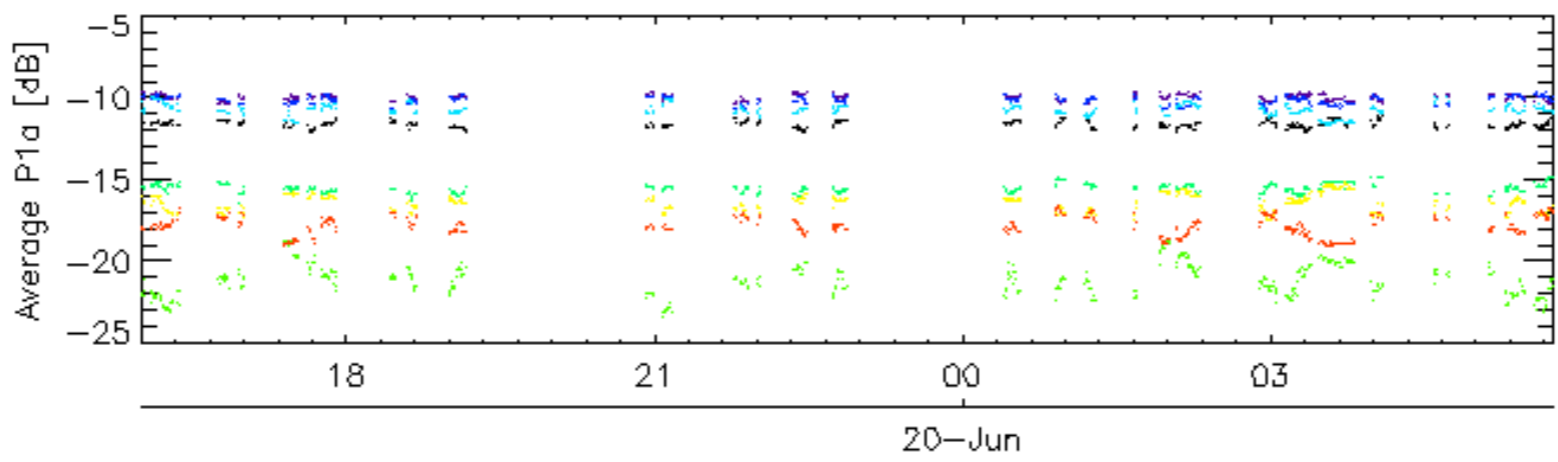
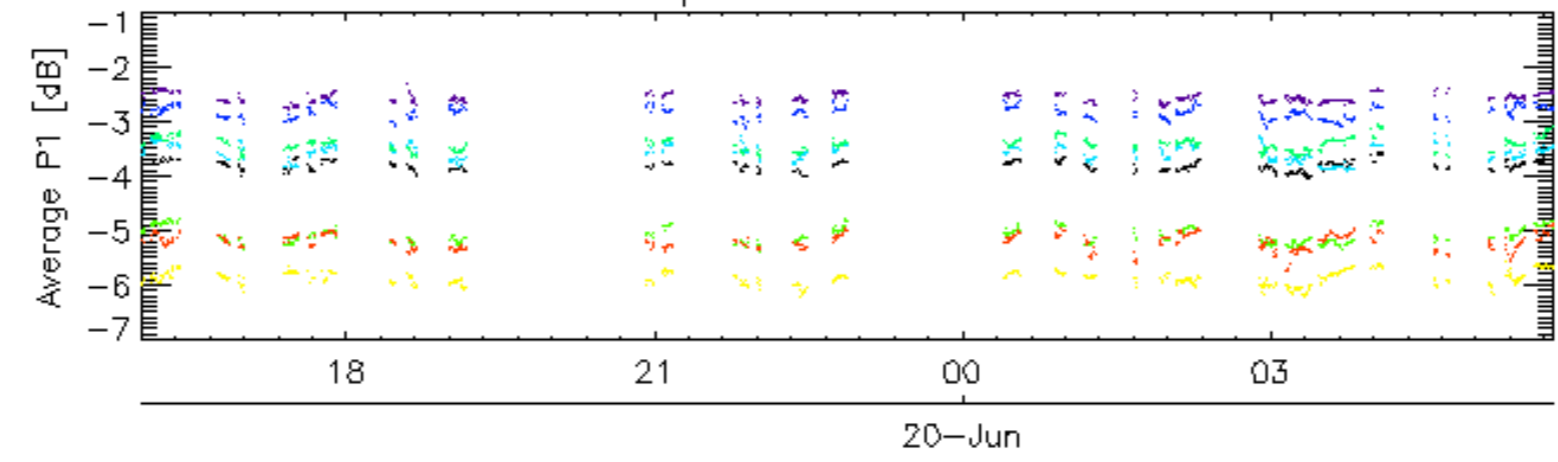
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

Acsending

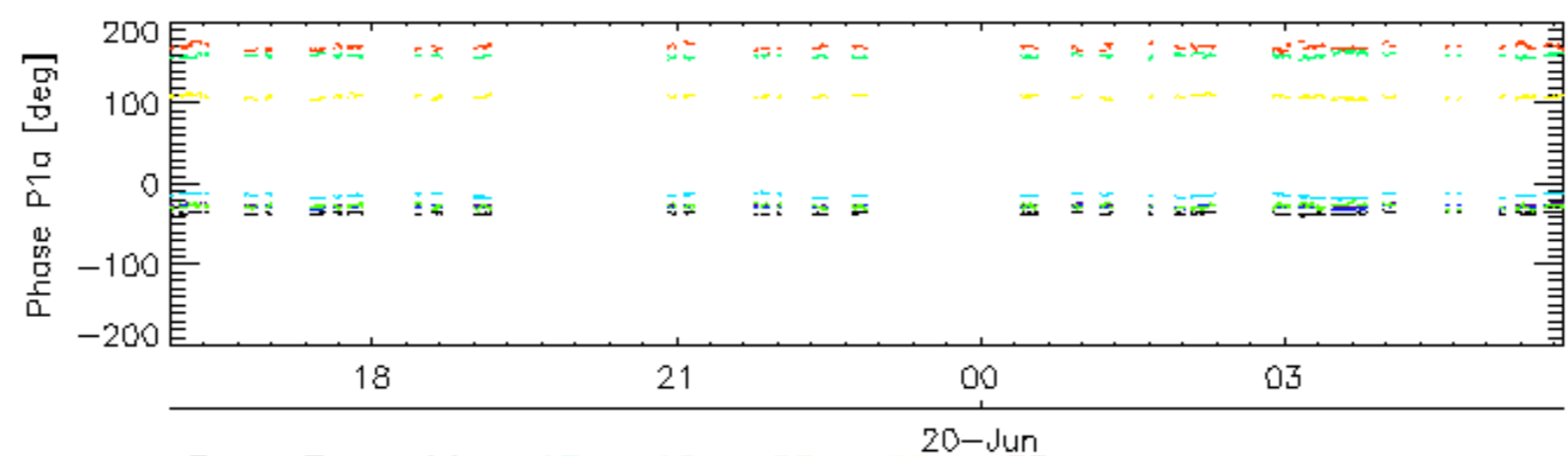
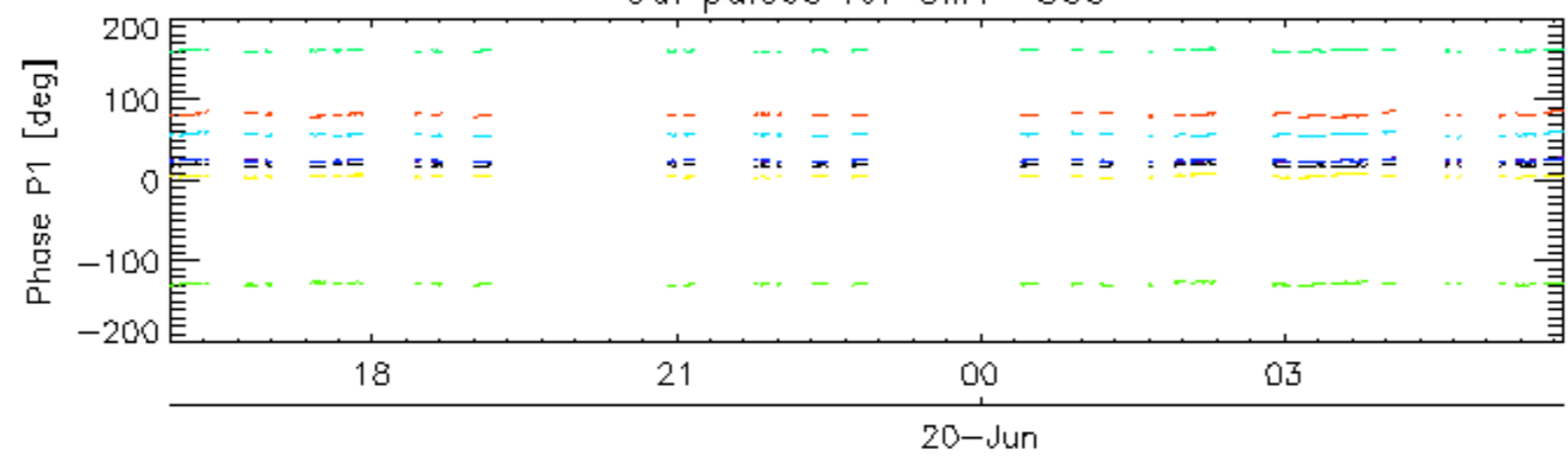
Descending

7.6 - Doppler evolution versus ANX for GM1**Evolution Doppler error versus ANX**

Cal pulses for GM1 SS3

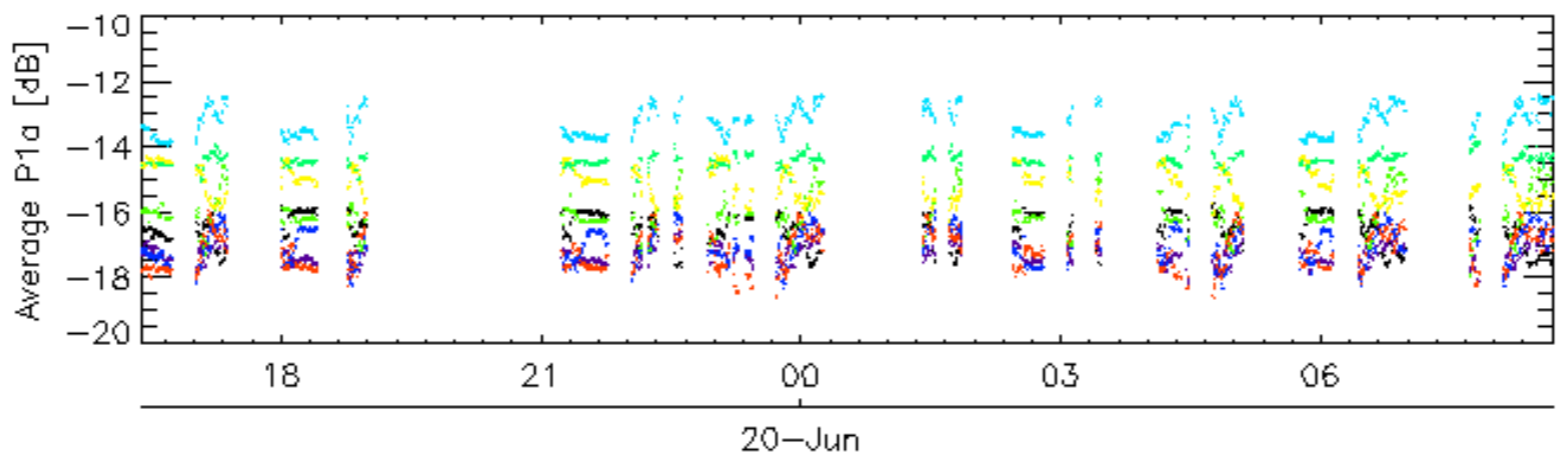
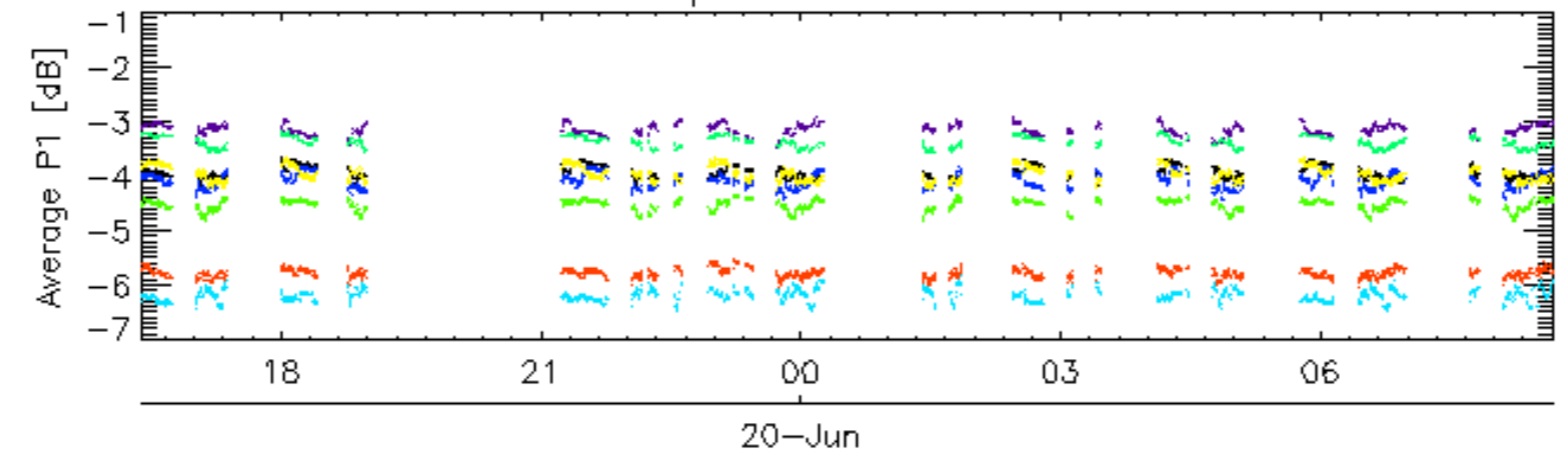


Cal pulses for GM1 SS3

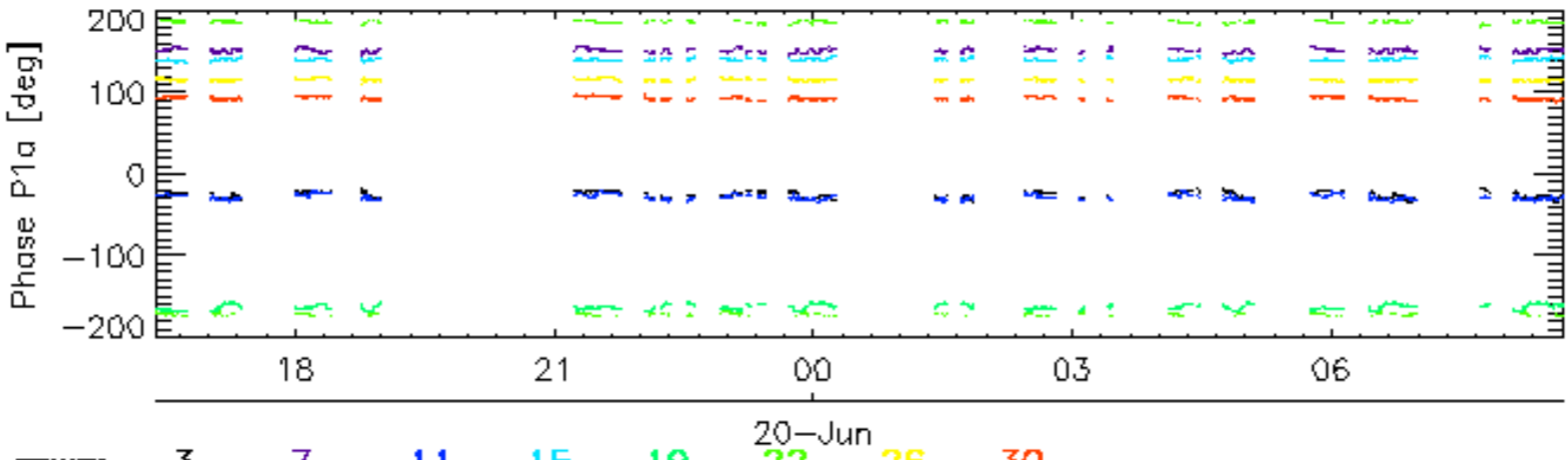
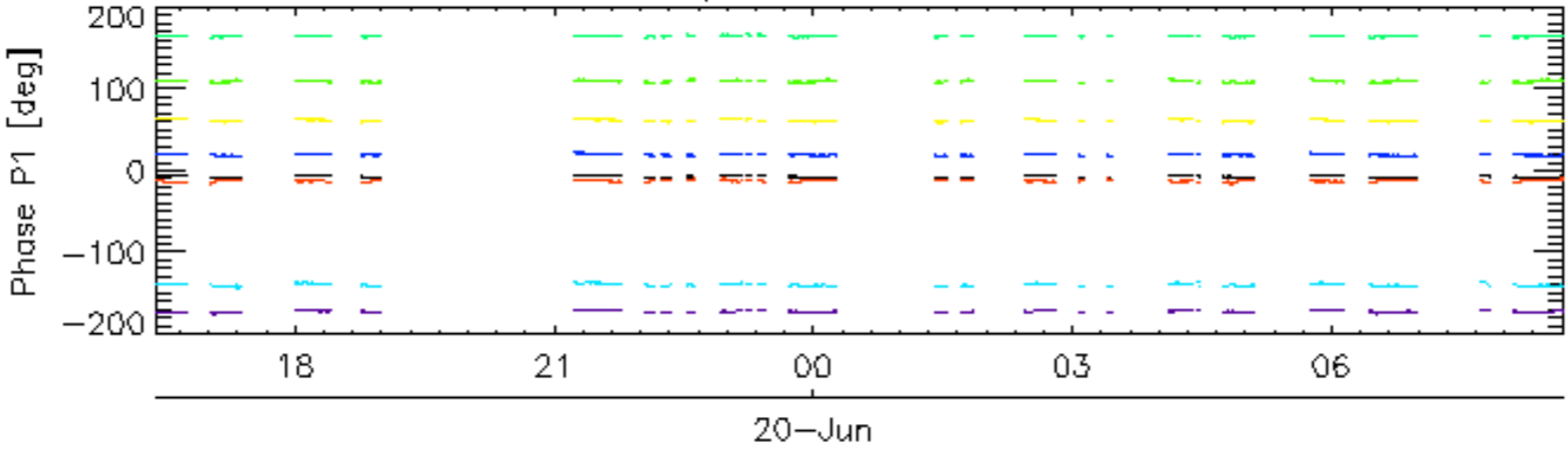


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

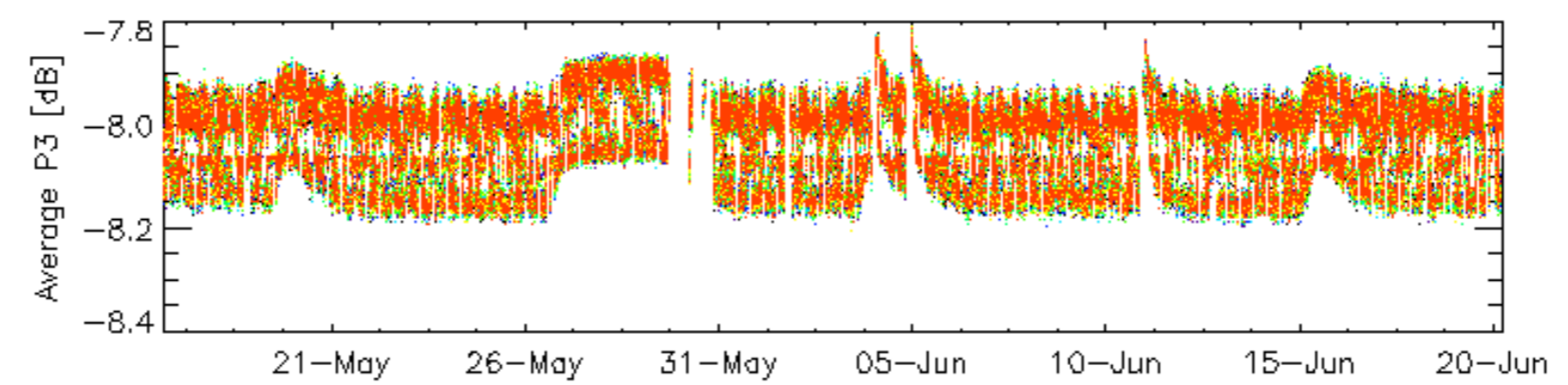
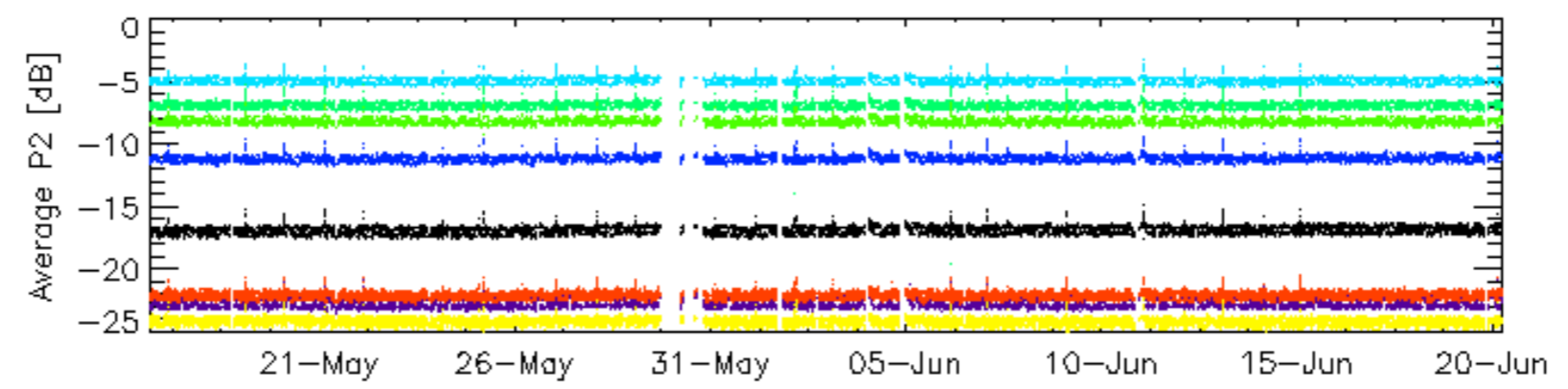
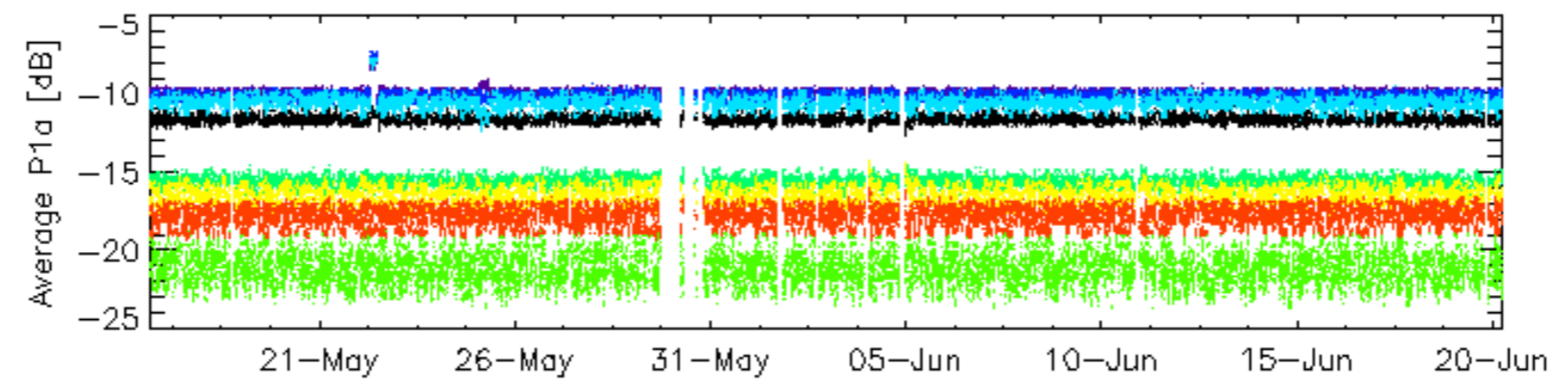
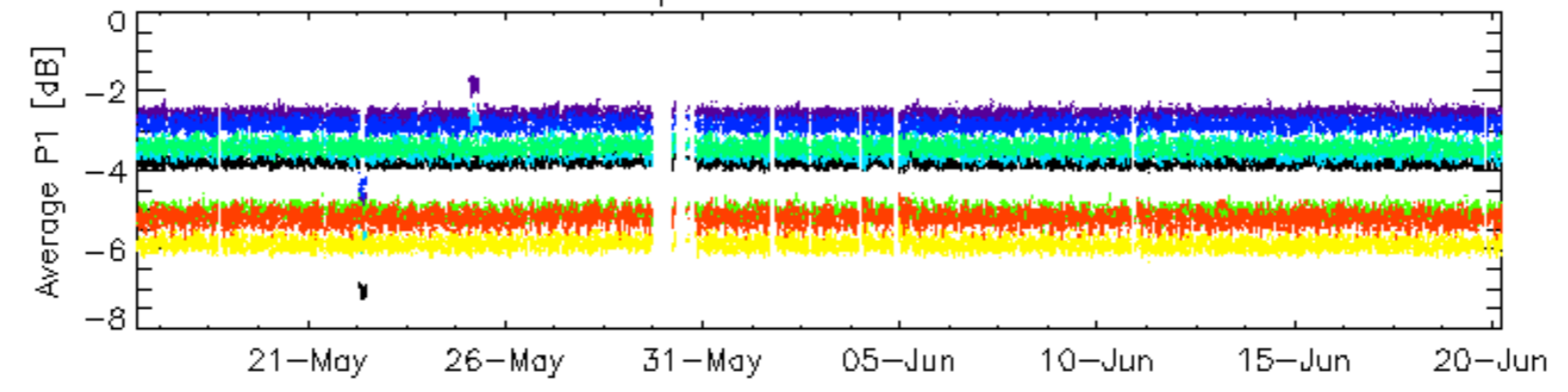


Cal pulses for WVS IS2



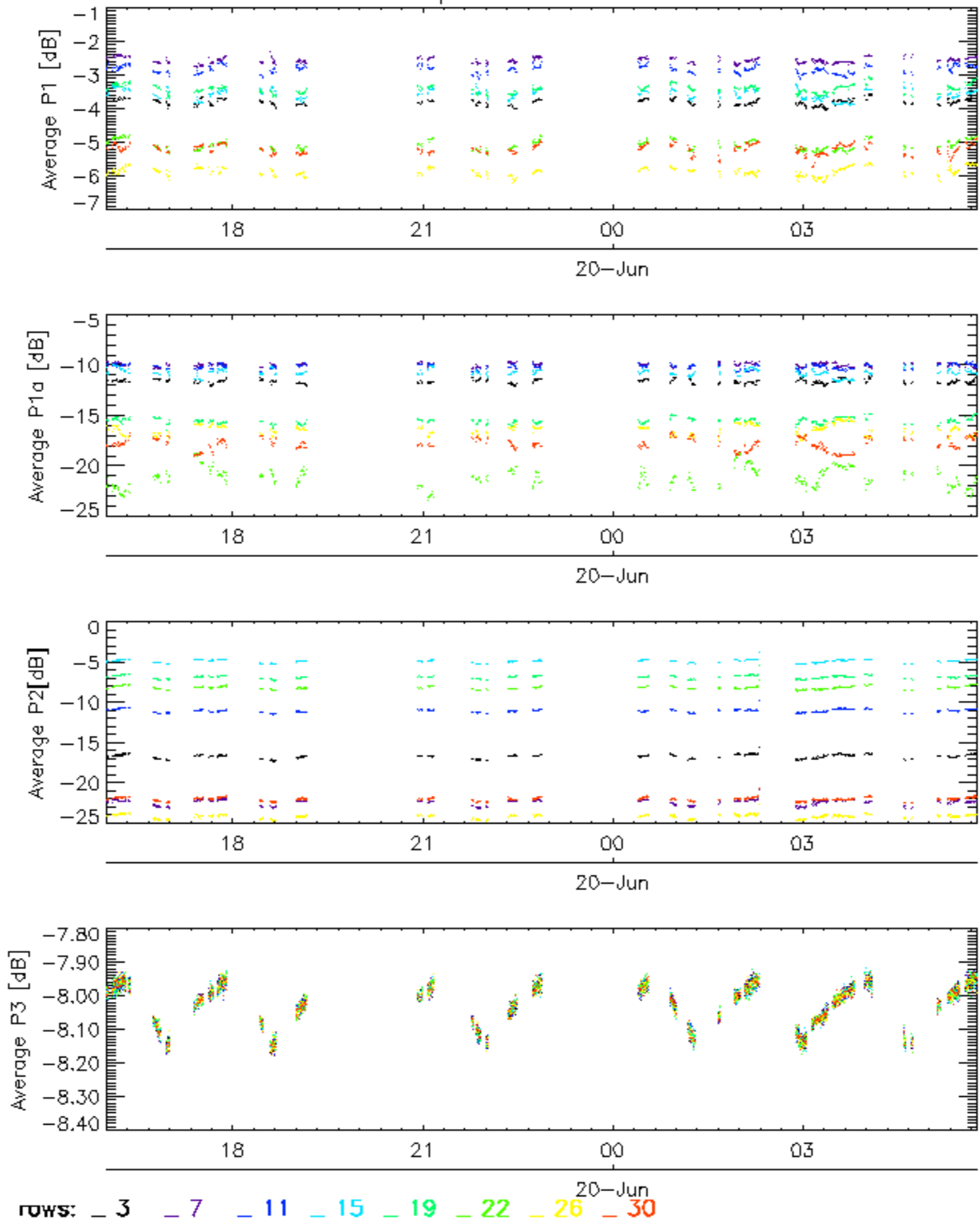
rows: **3** **7** **11** **15** **19** **22** **26** **30**

Cal pulses for GM1 SS3

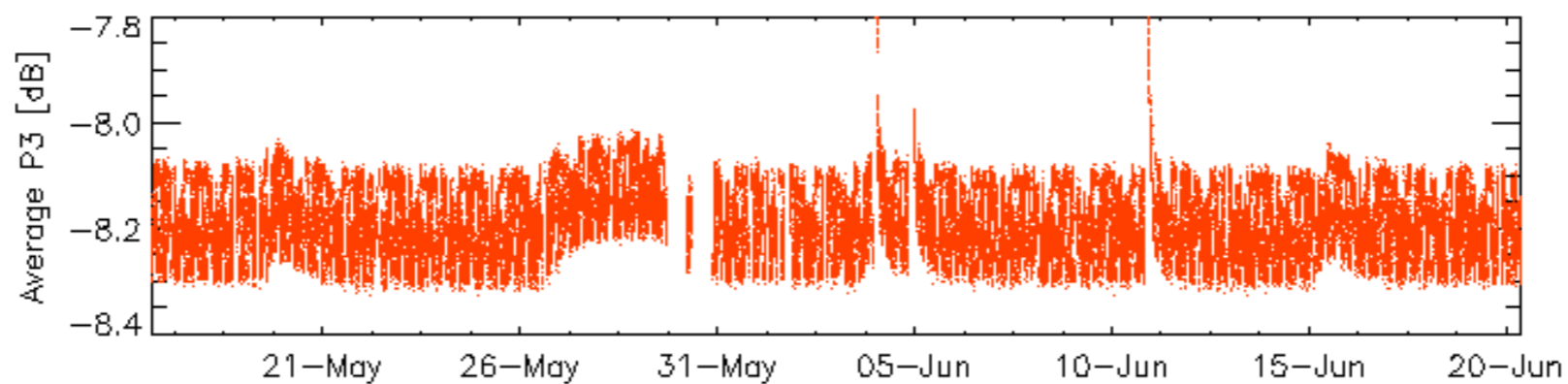
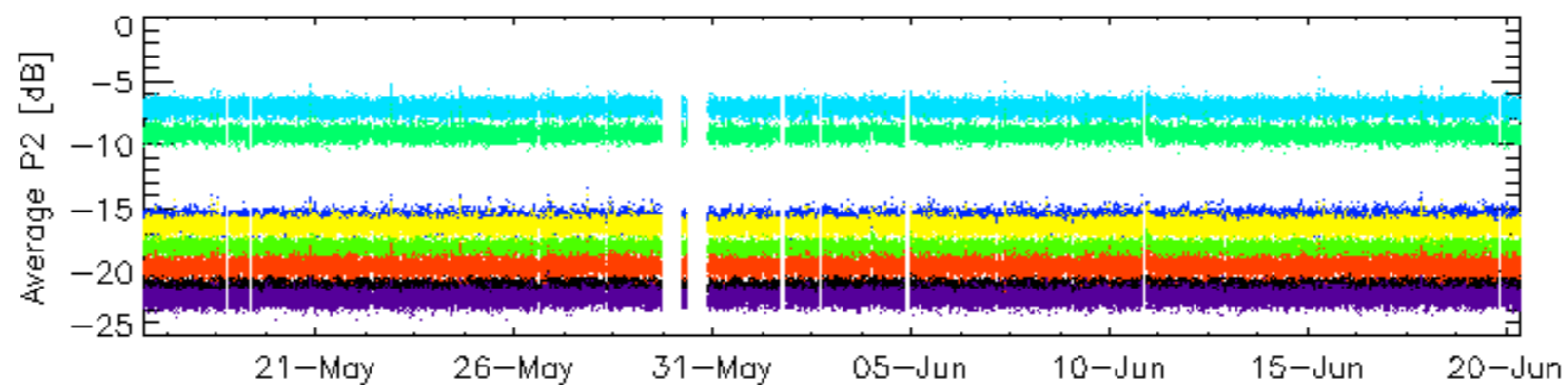
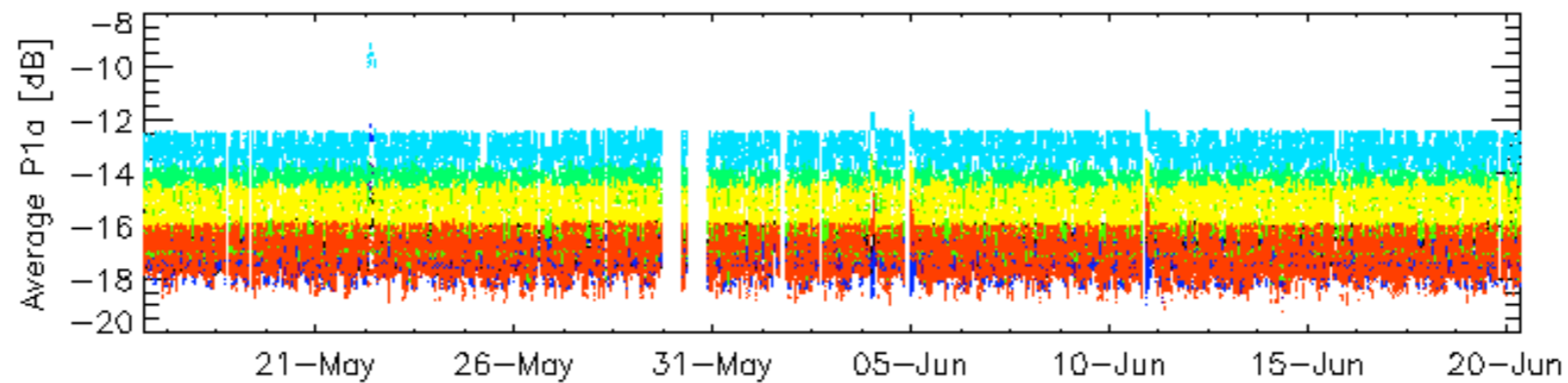
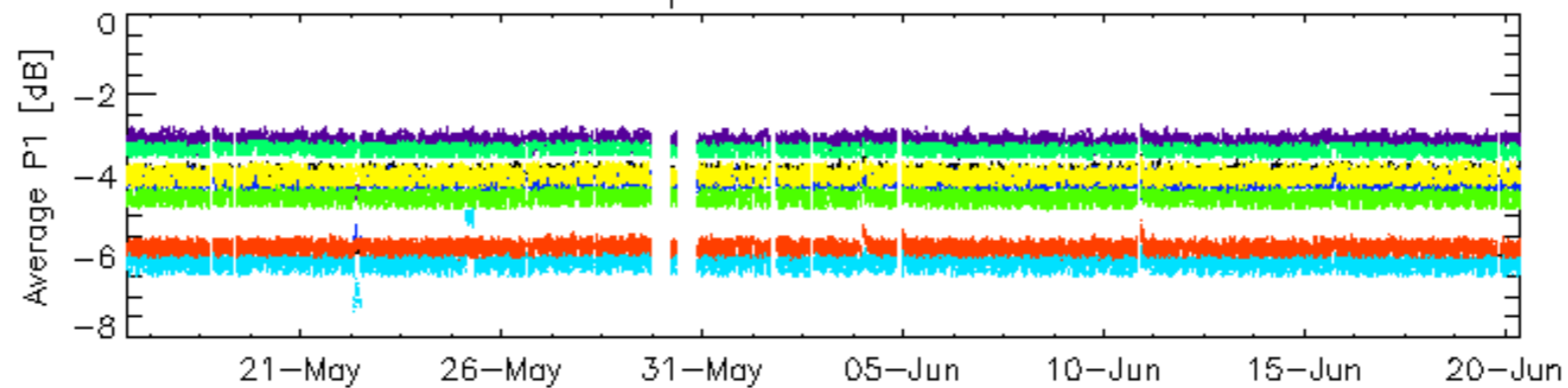


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

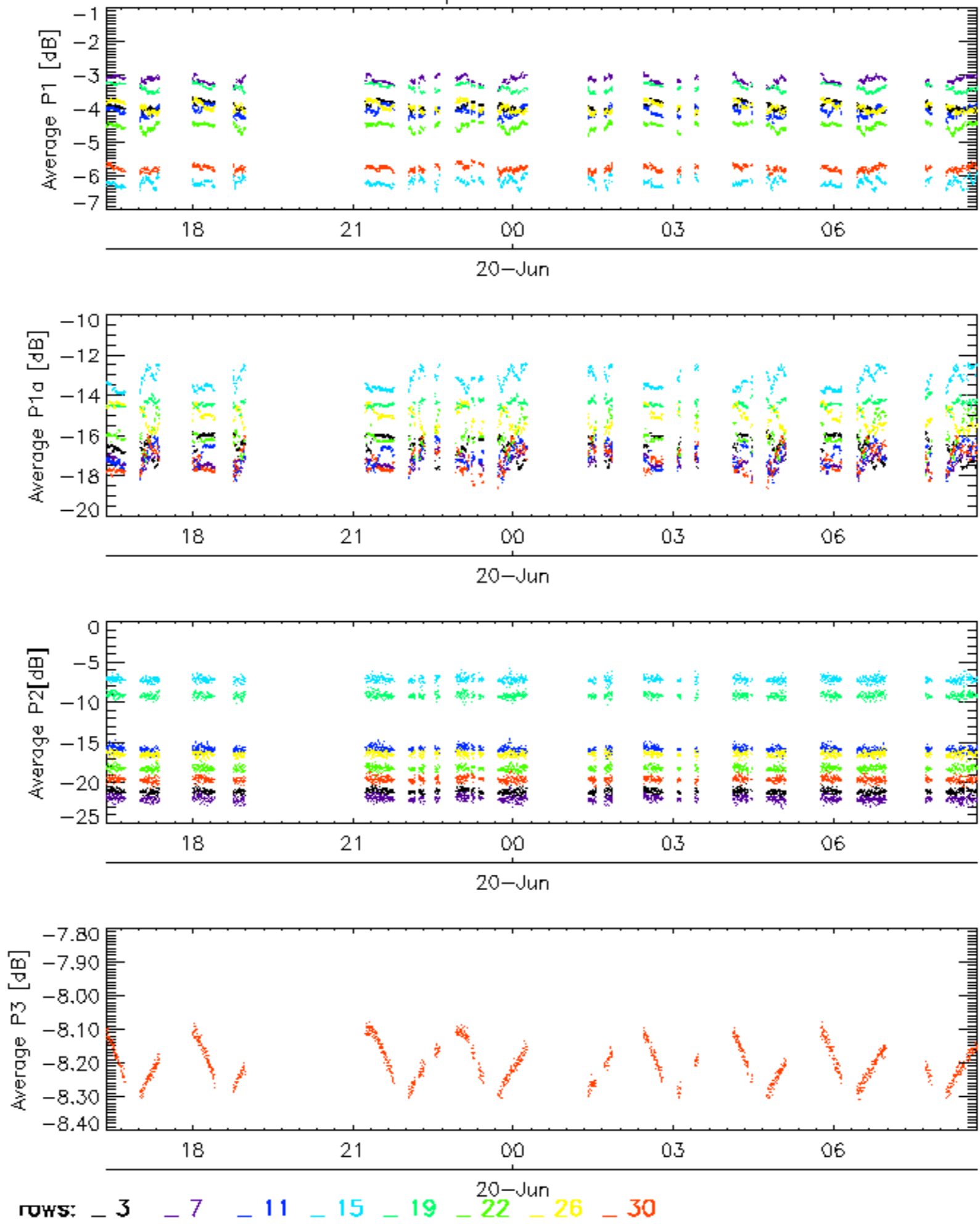


Cal pulses for WVS IS2



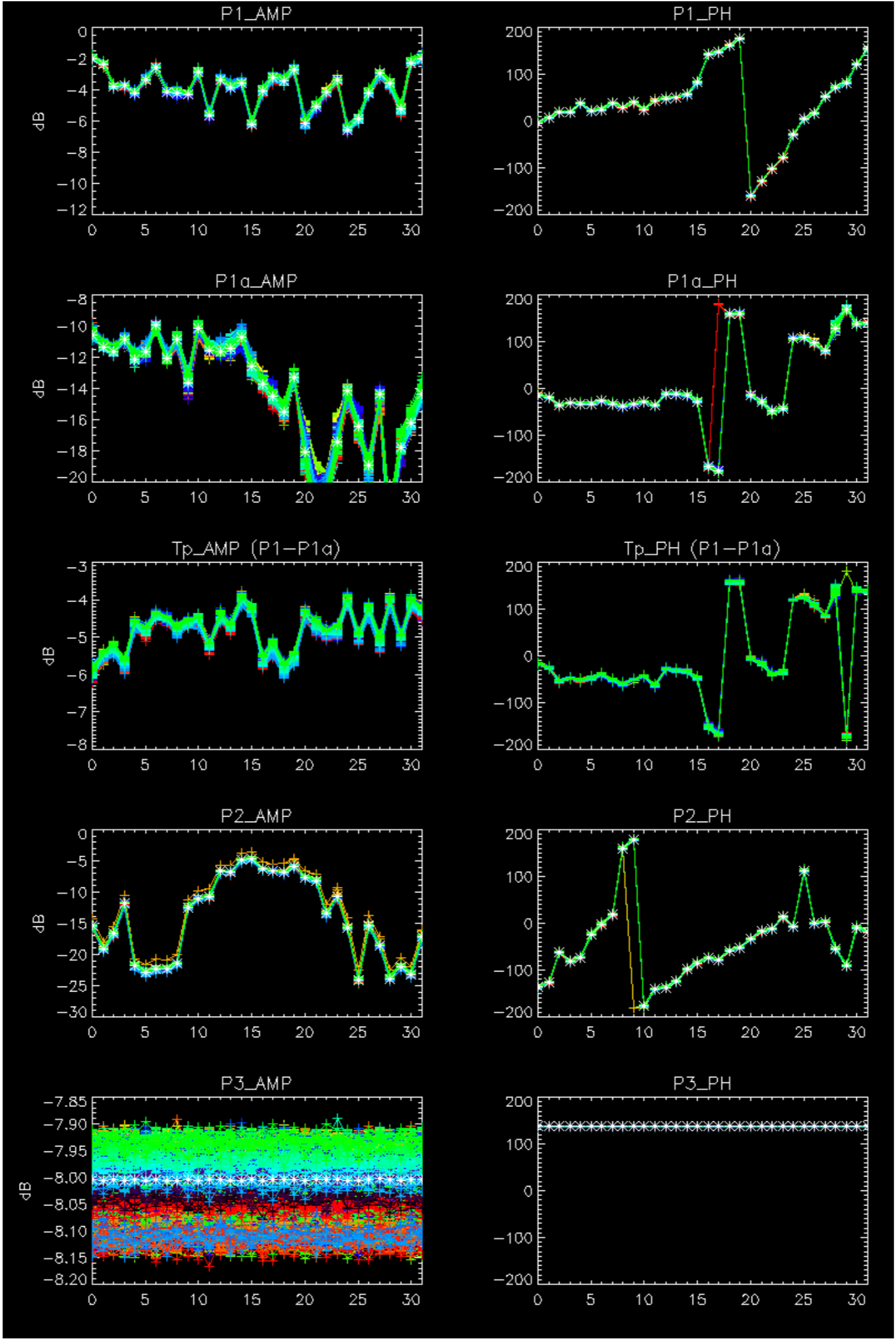
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

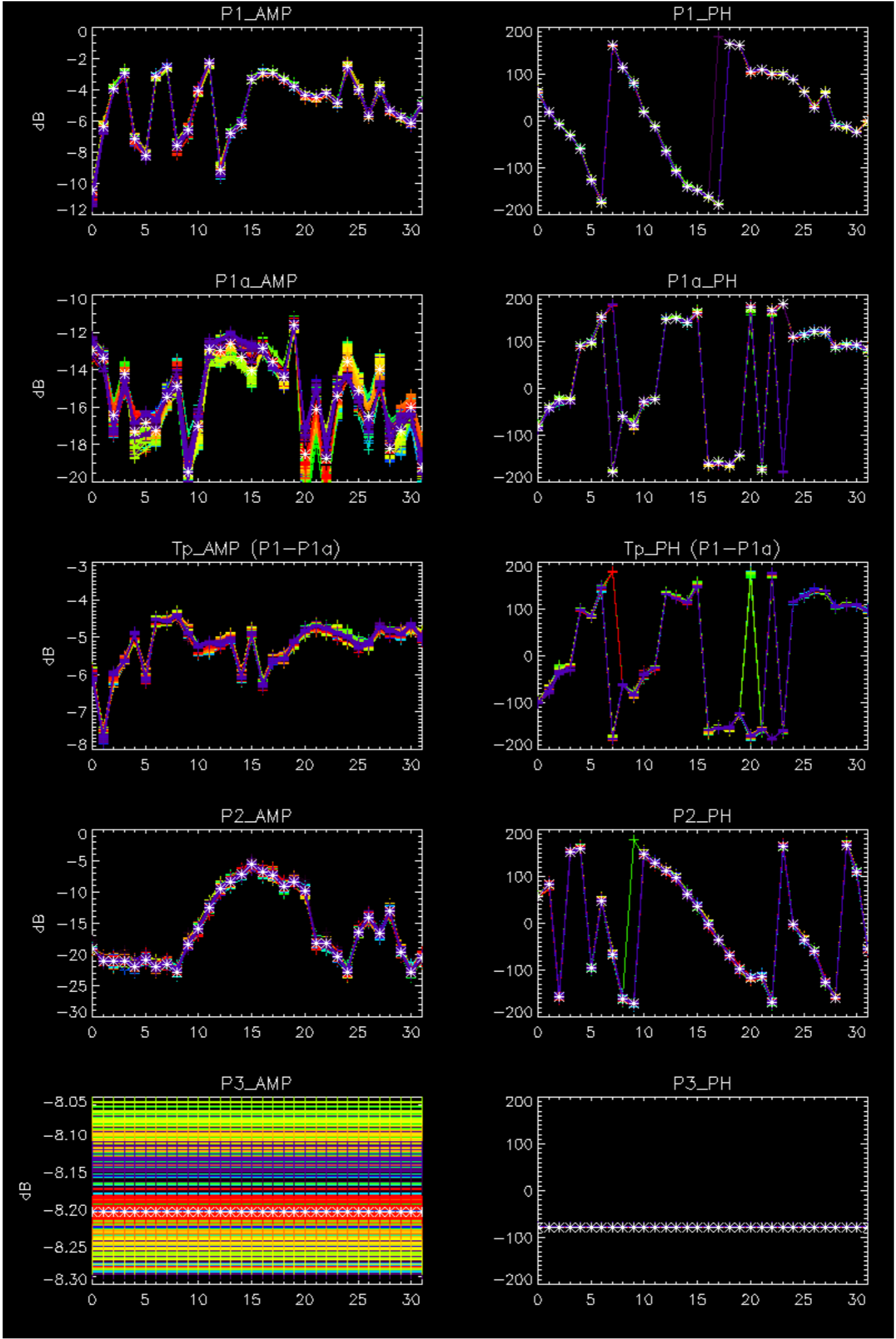
Cal pulses for WVS IS2



No anomalies observed on available browse products

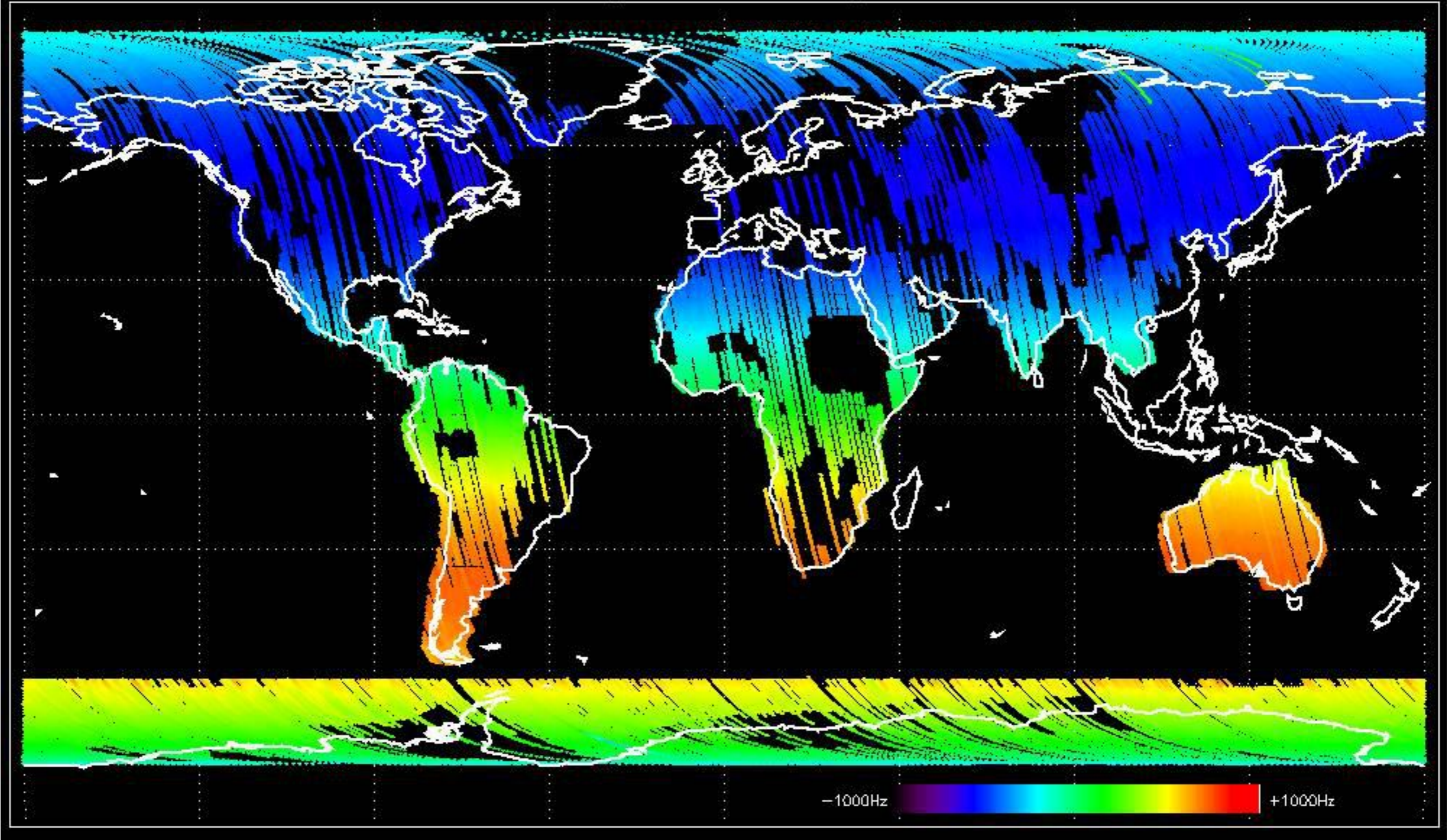
No anomalies observed.



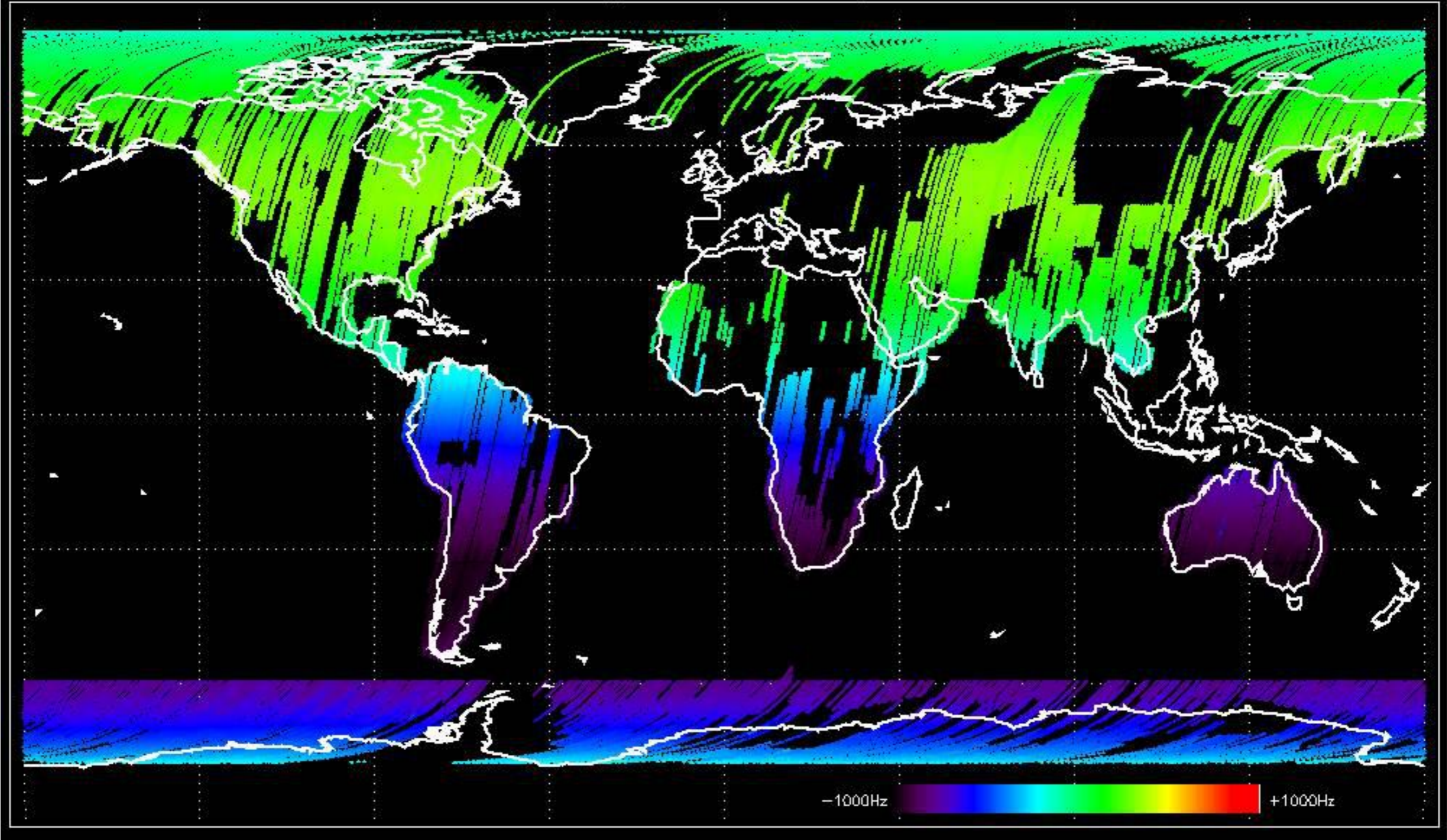


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

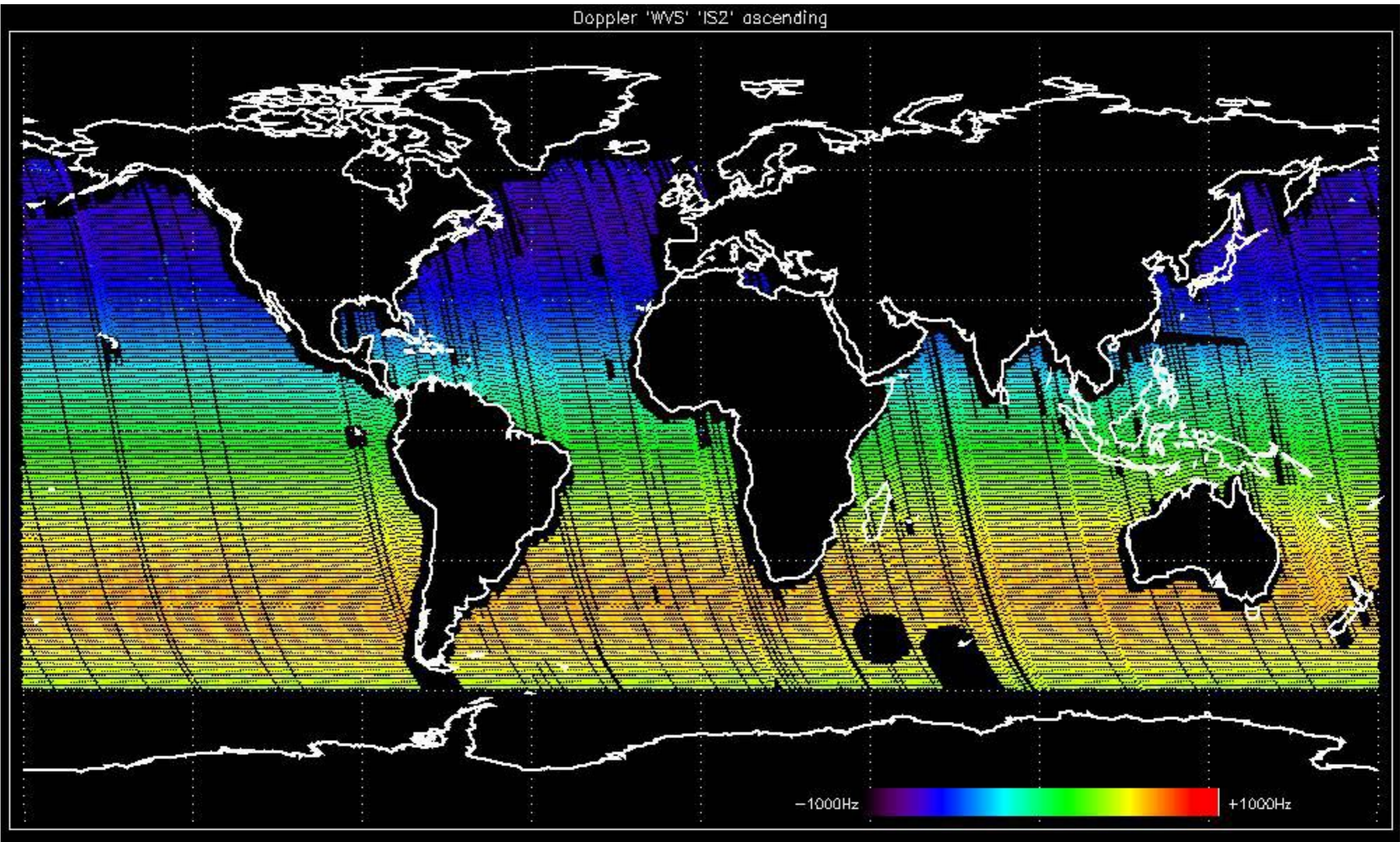
Doppler 'GM1' 'SS1' ascending



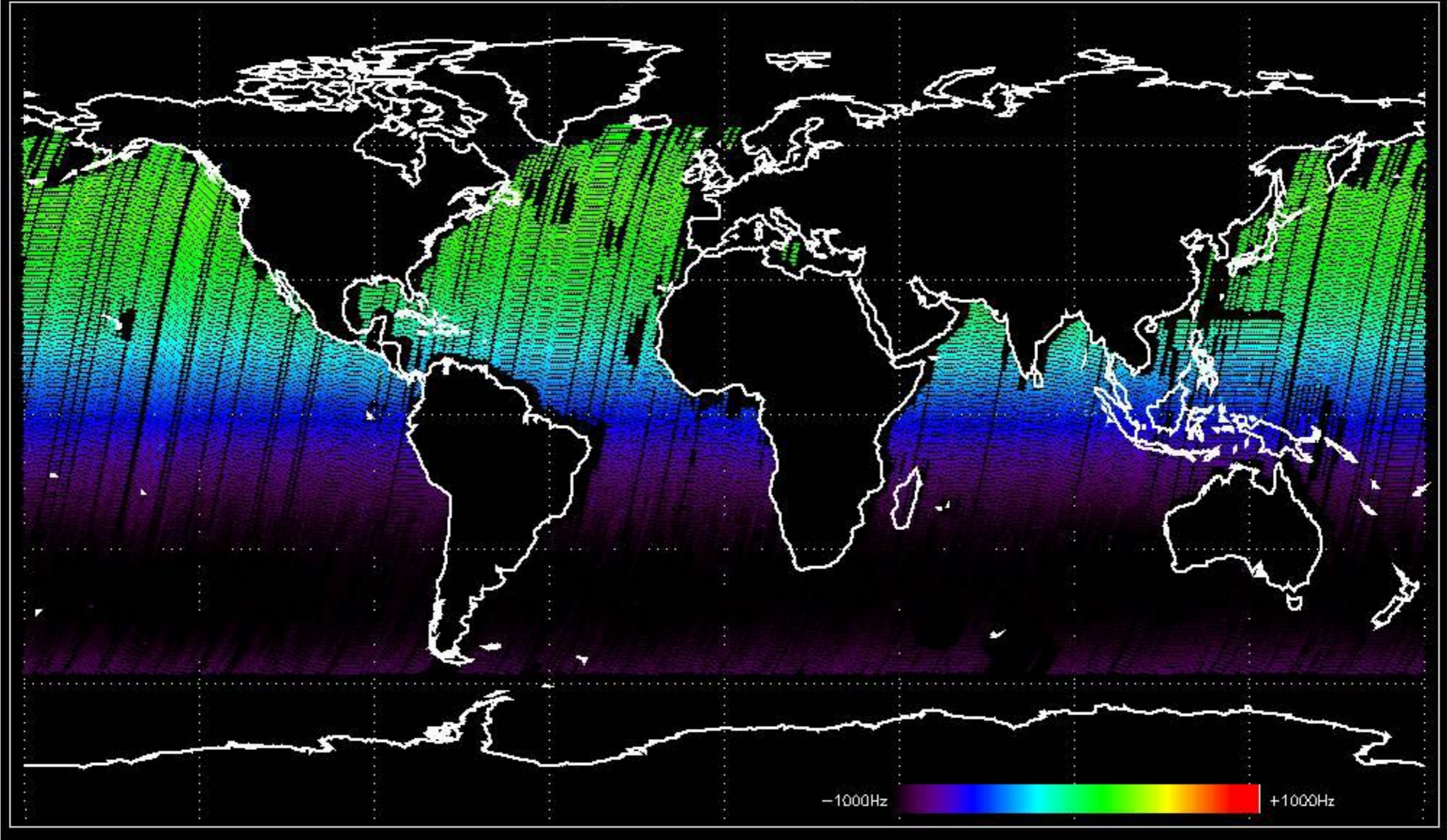
Doppler 'GM1' 'SS1' descending

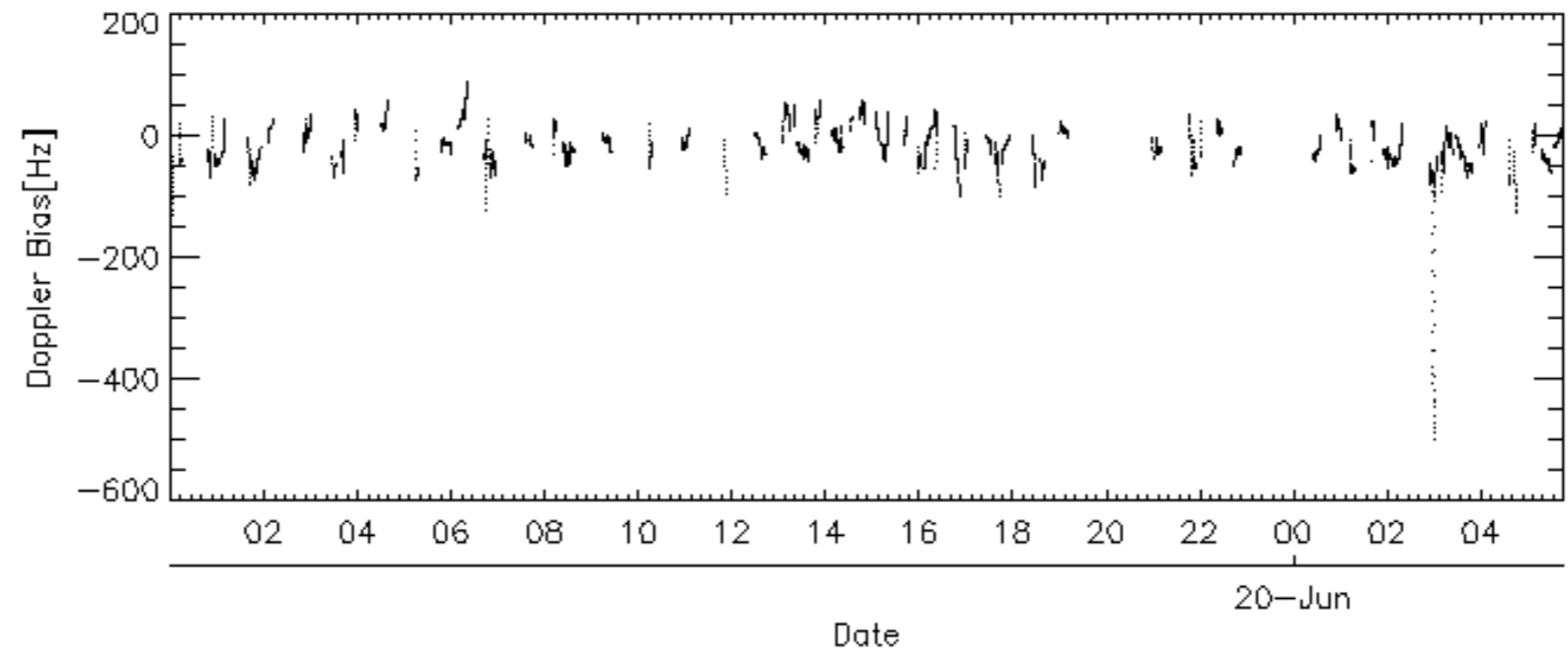
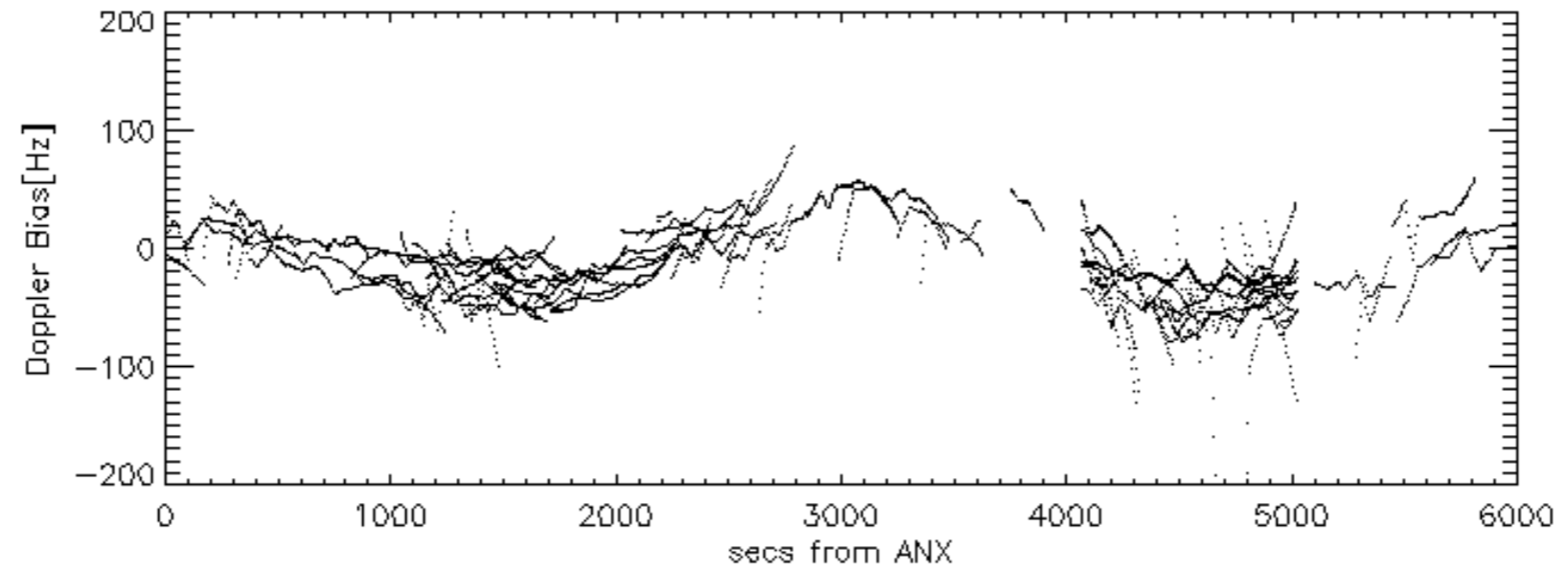
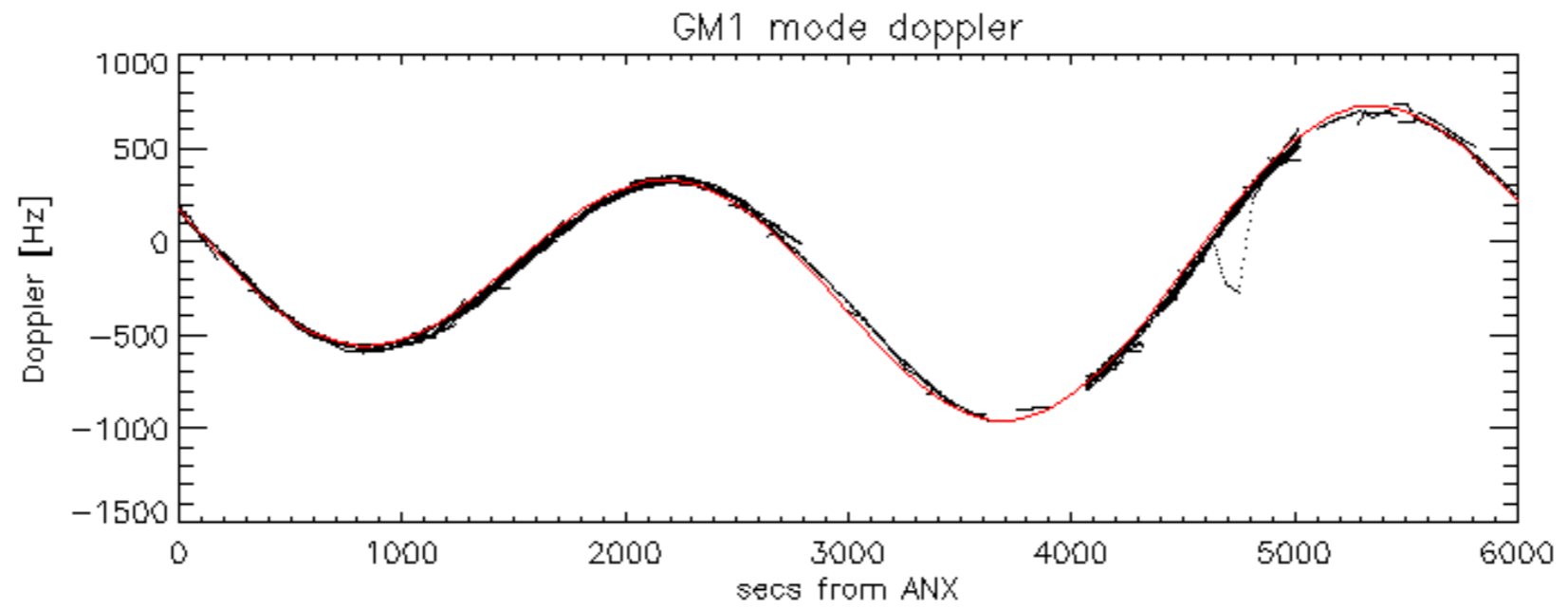


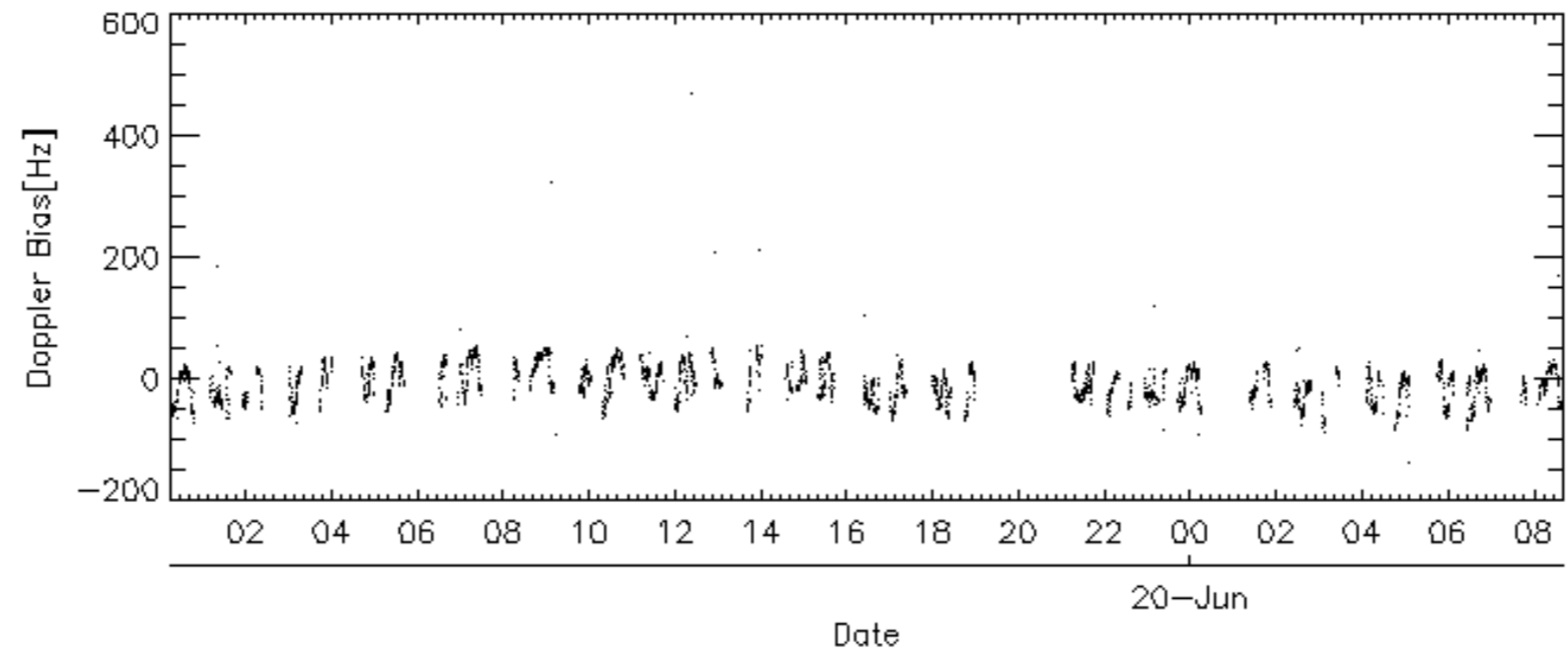
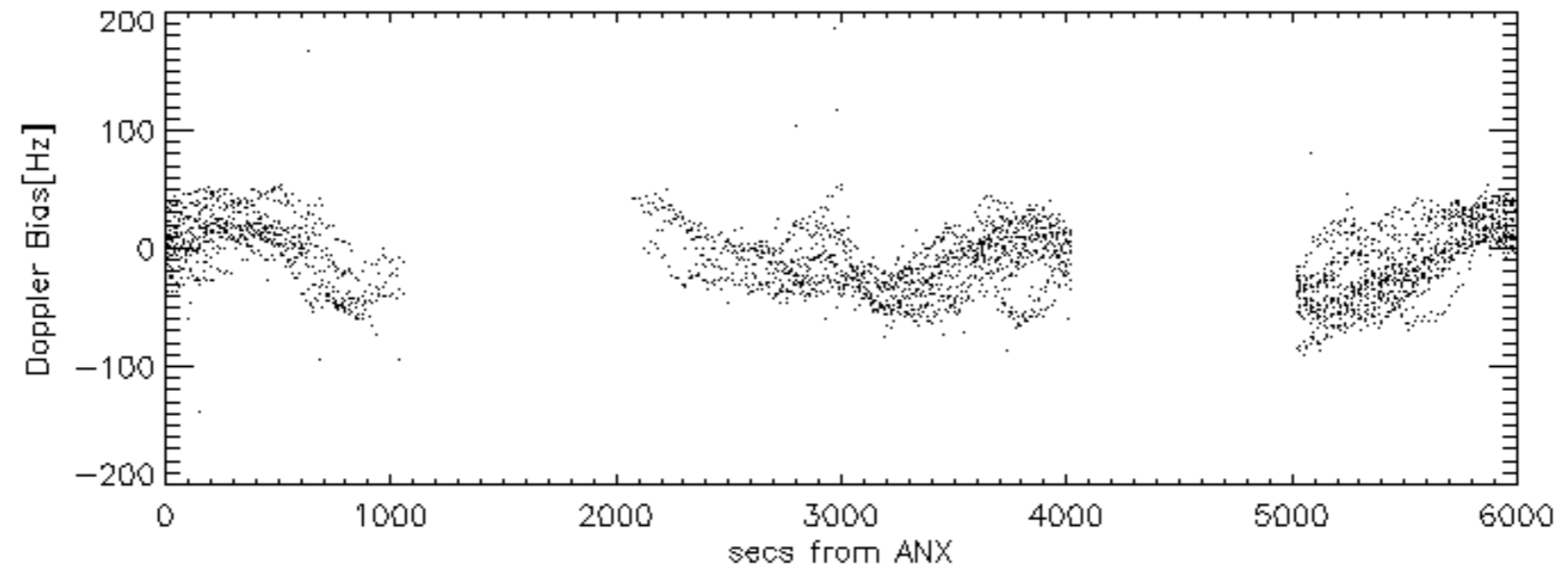
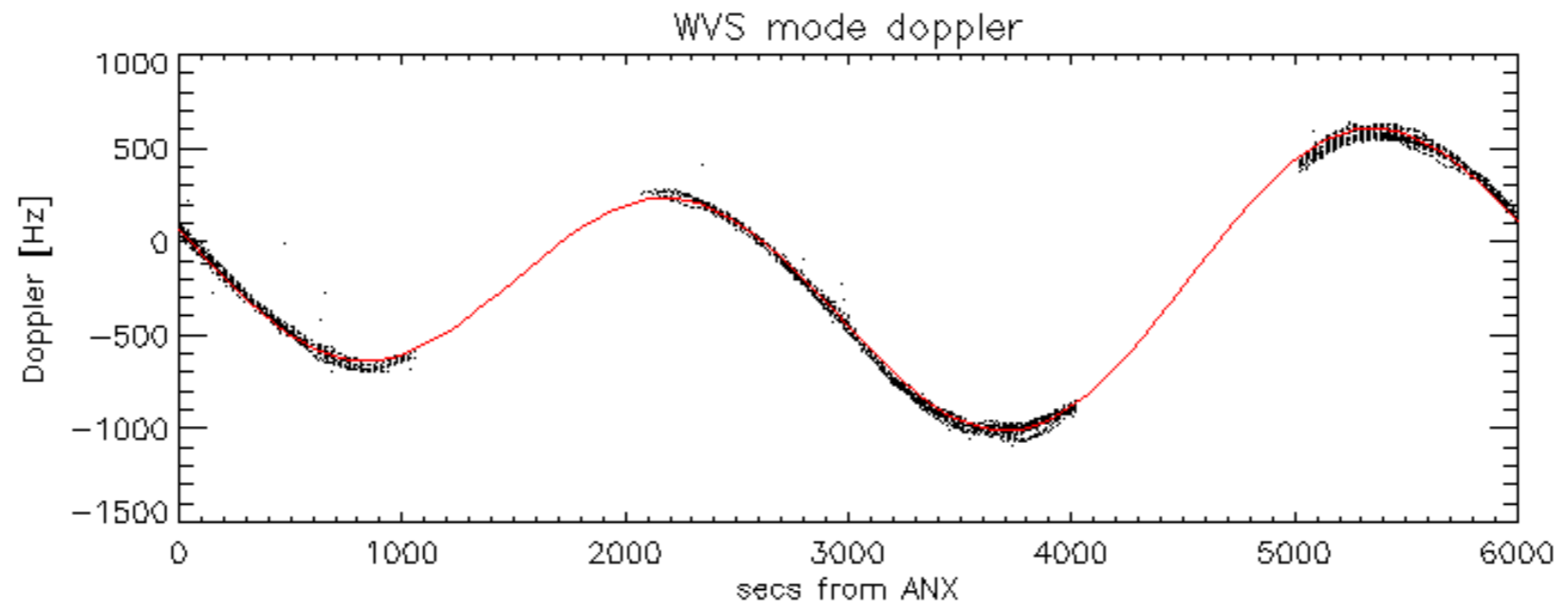
Doppler 'WVS' 'IS2' ascending



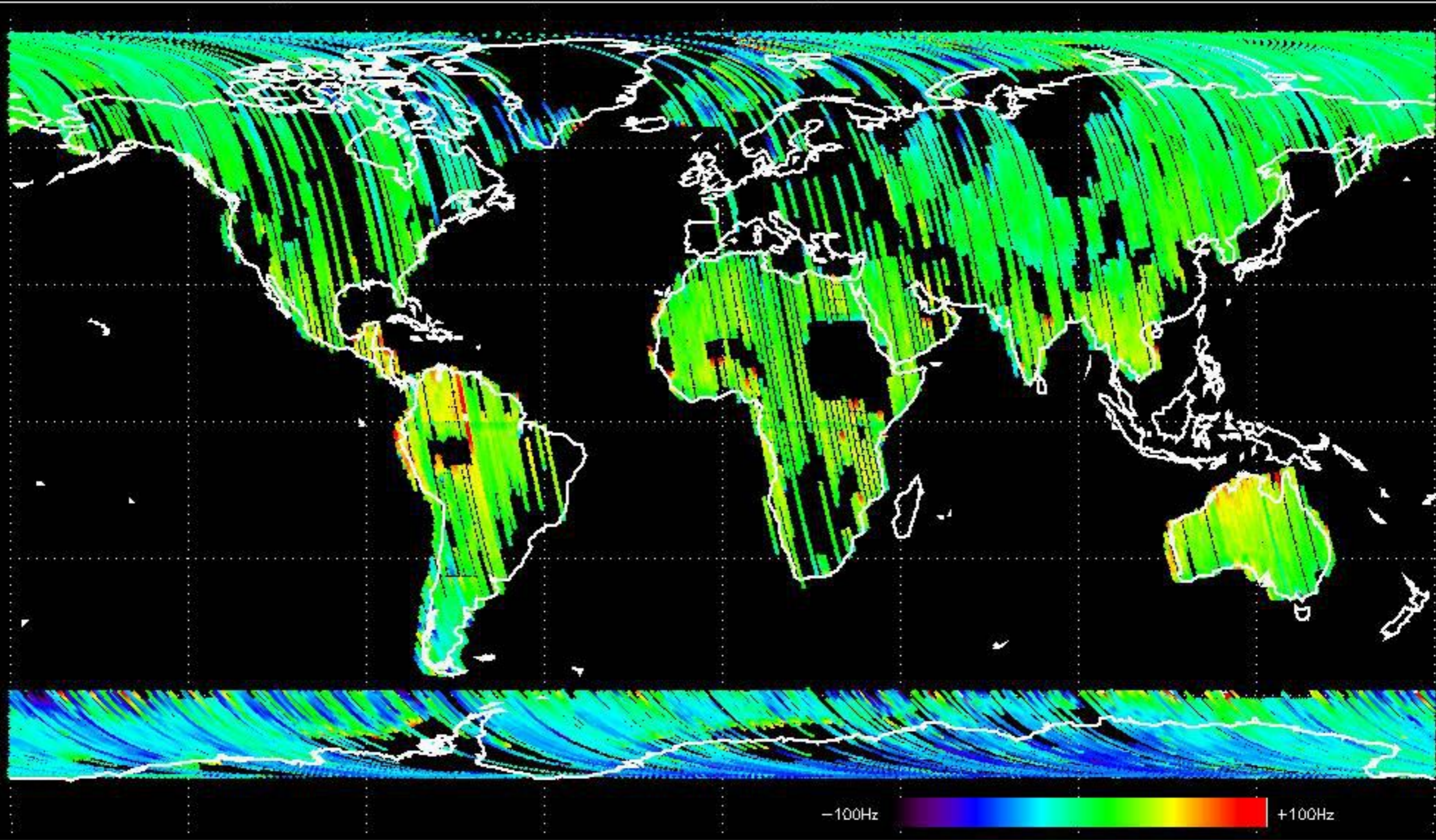
Doppler 'WVS' 'IS2' descending



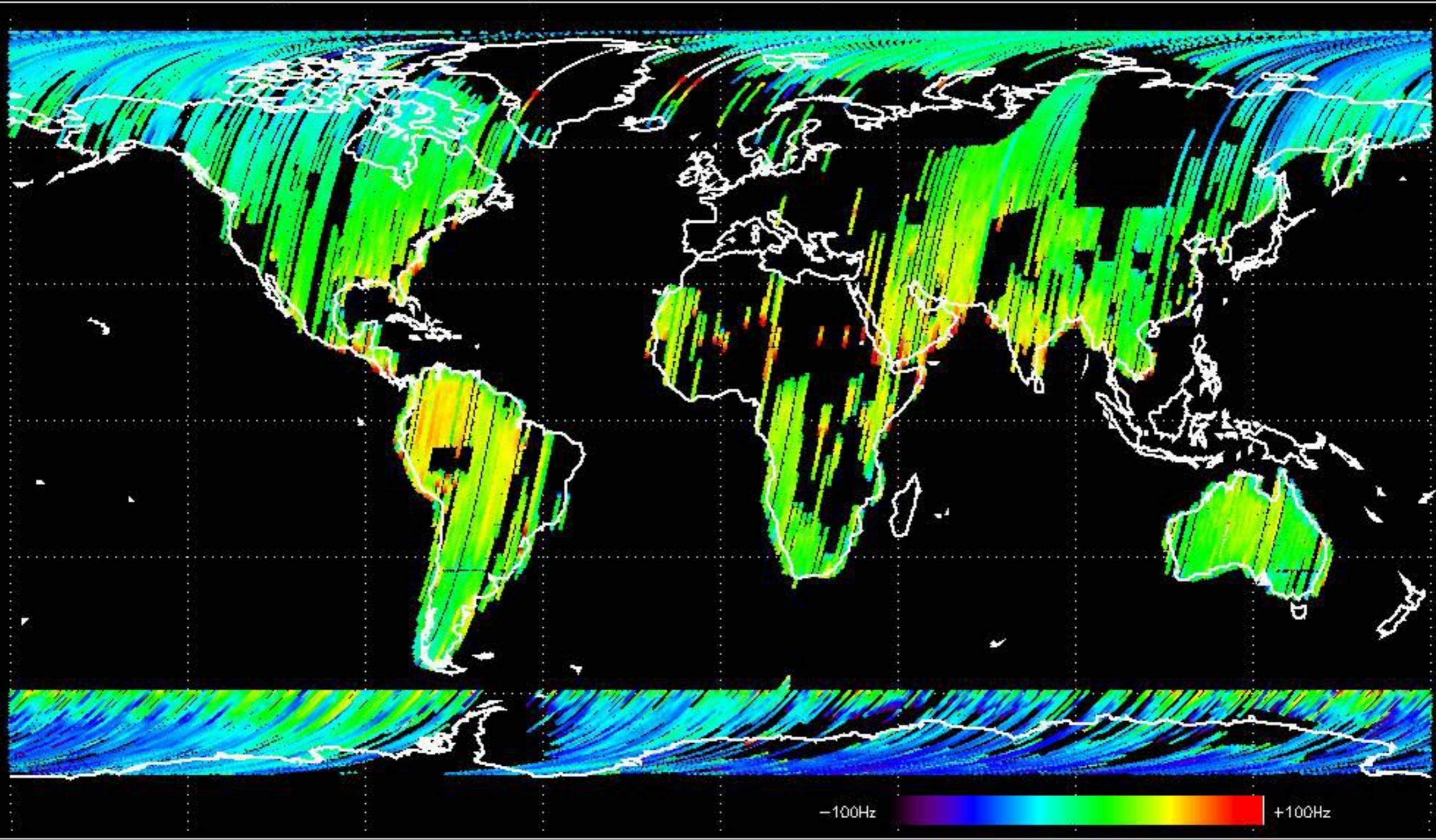




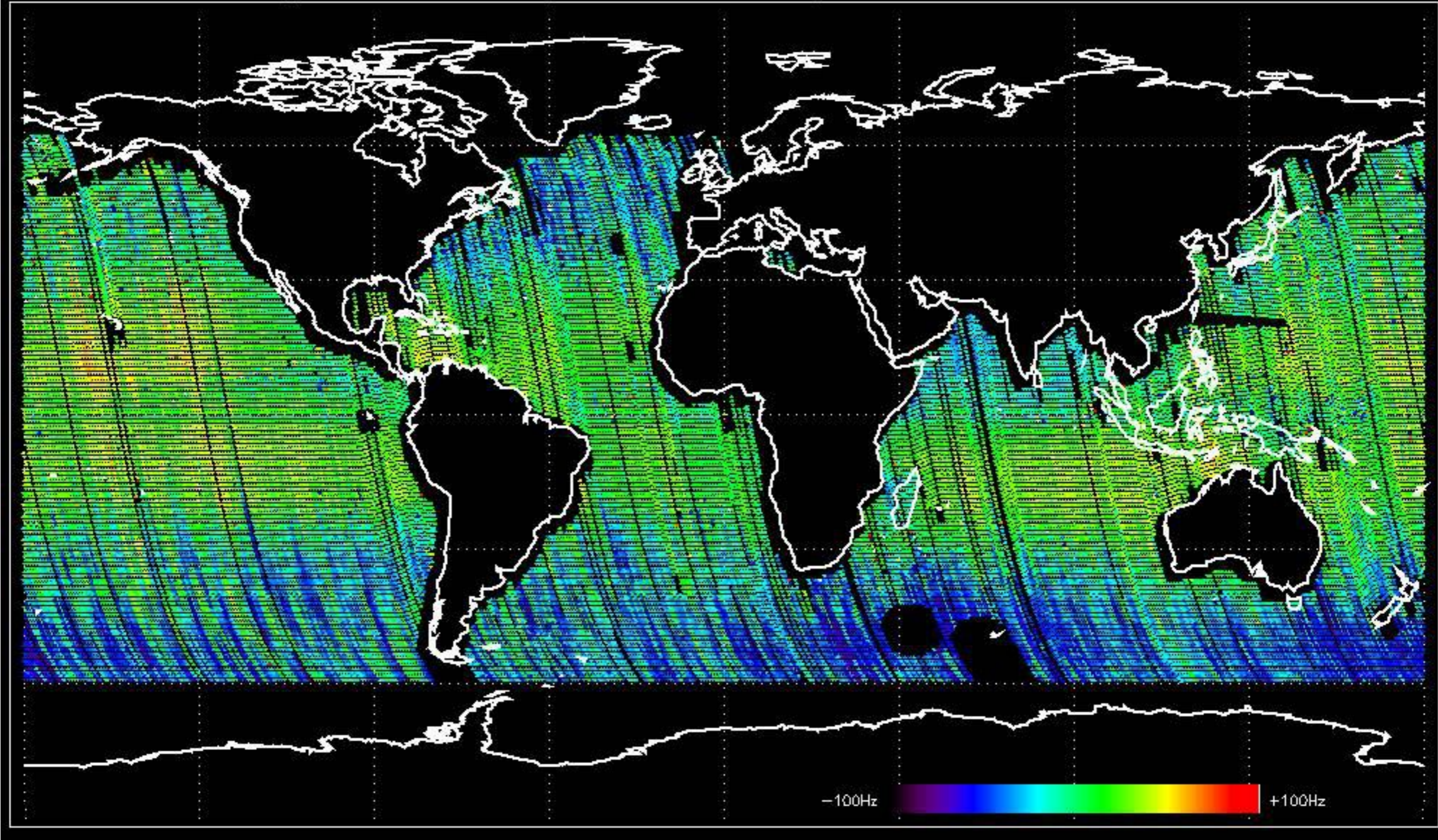
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -17.165810 Hz



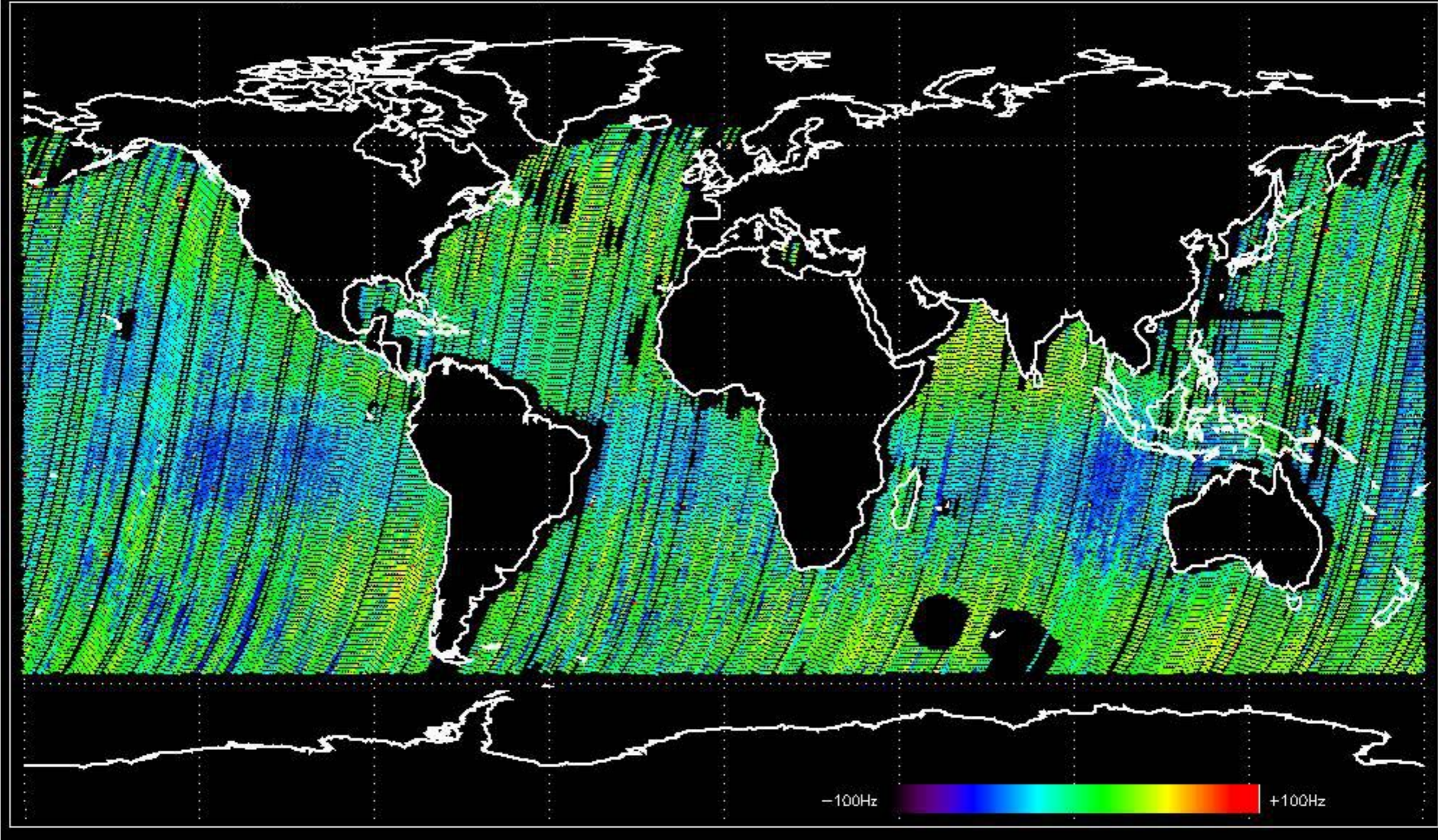
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -7.2077246 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -8.2202819 Hz

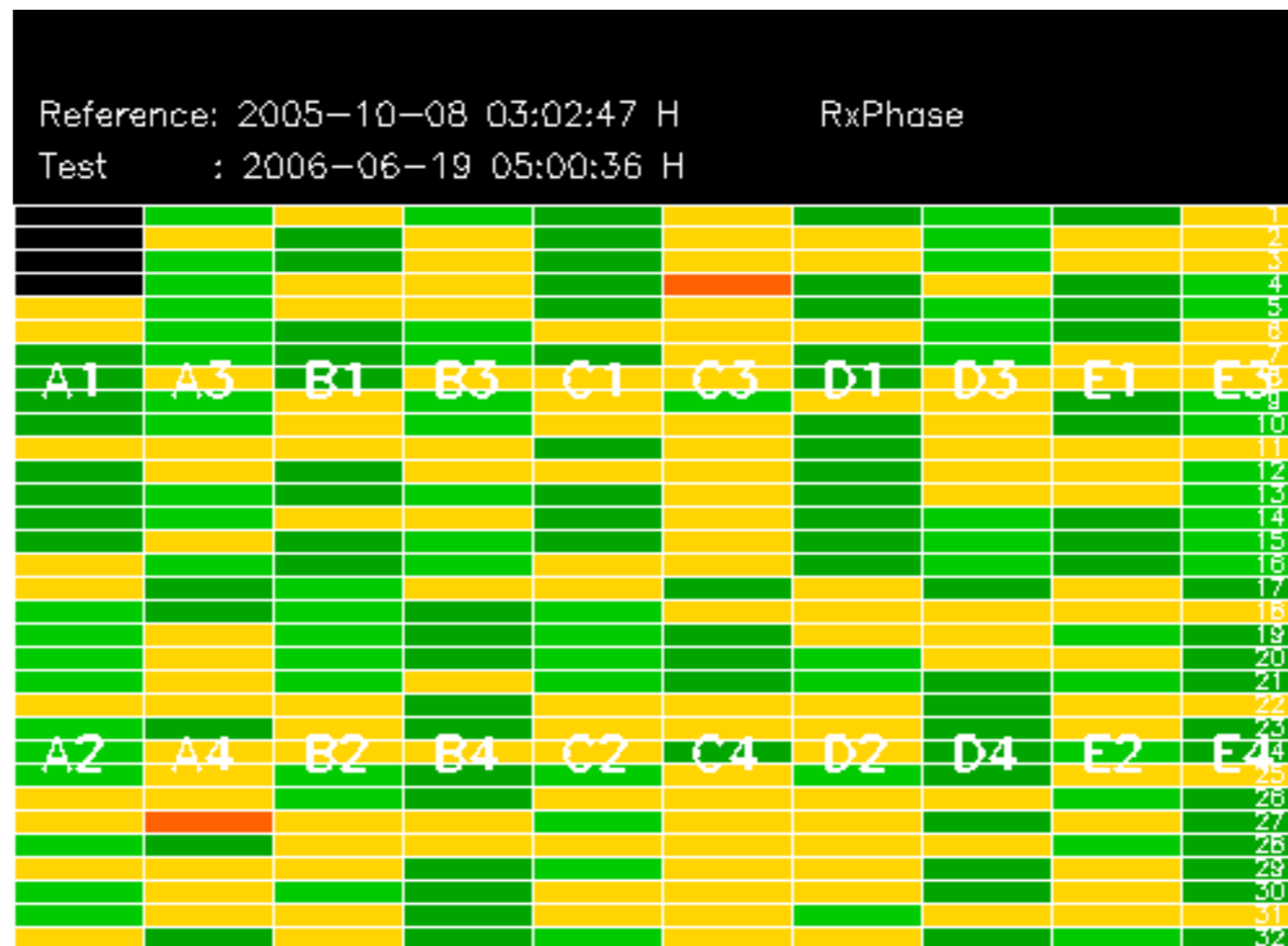


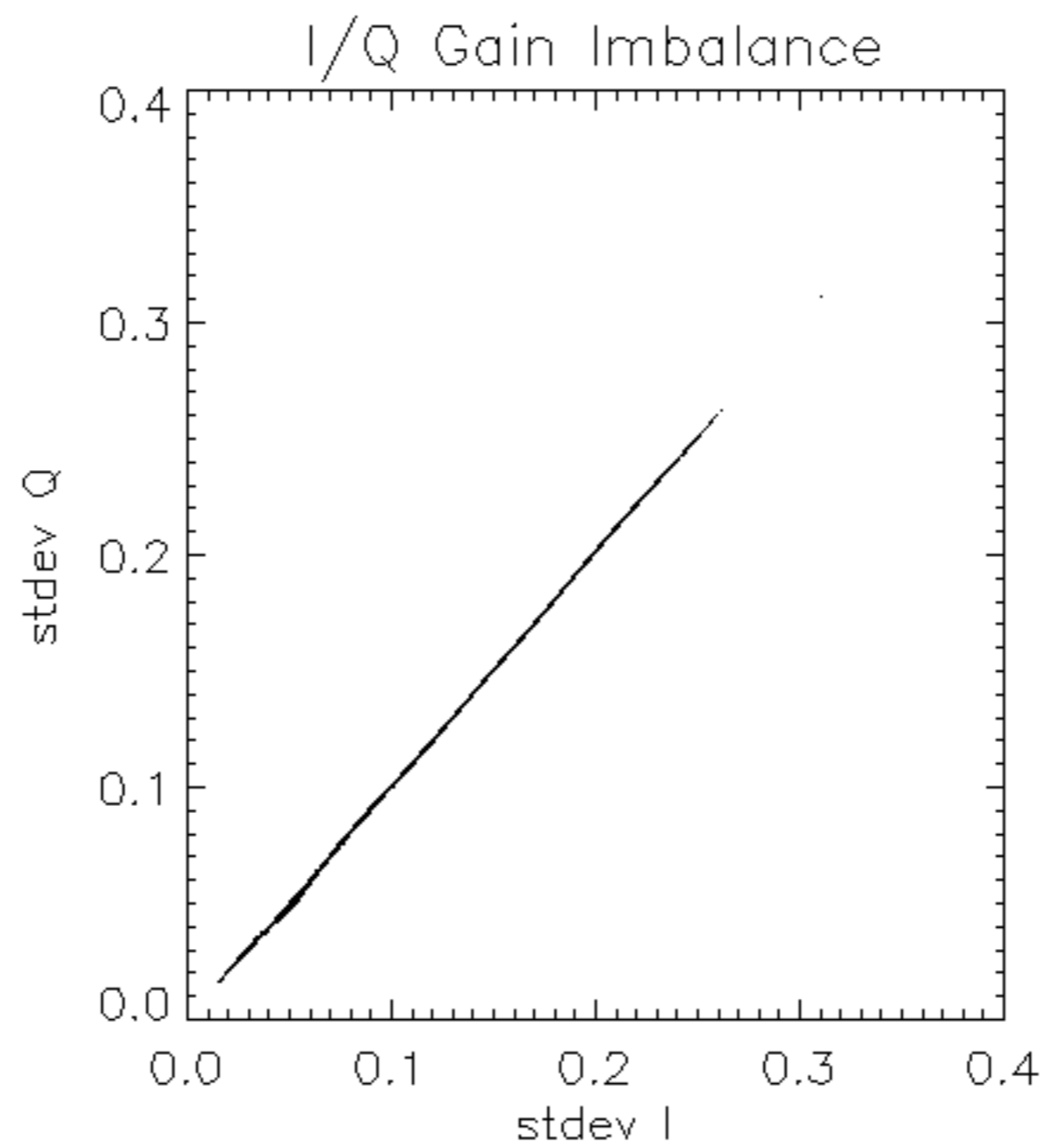
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -10.821217 Hz

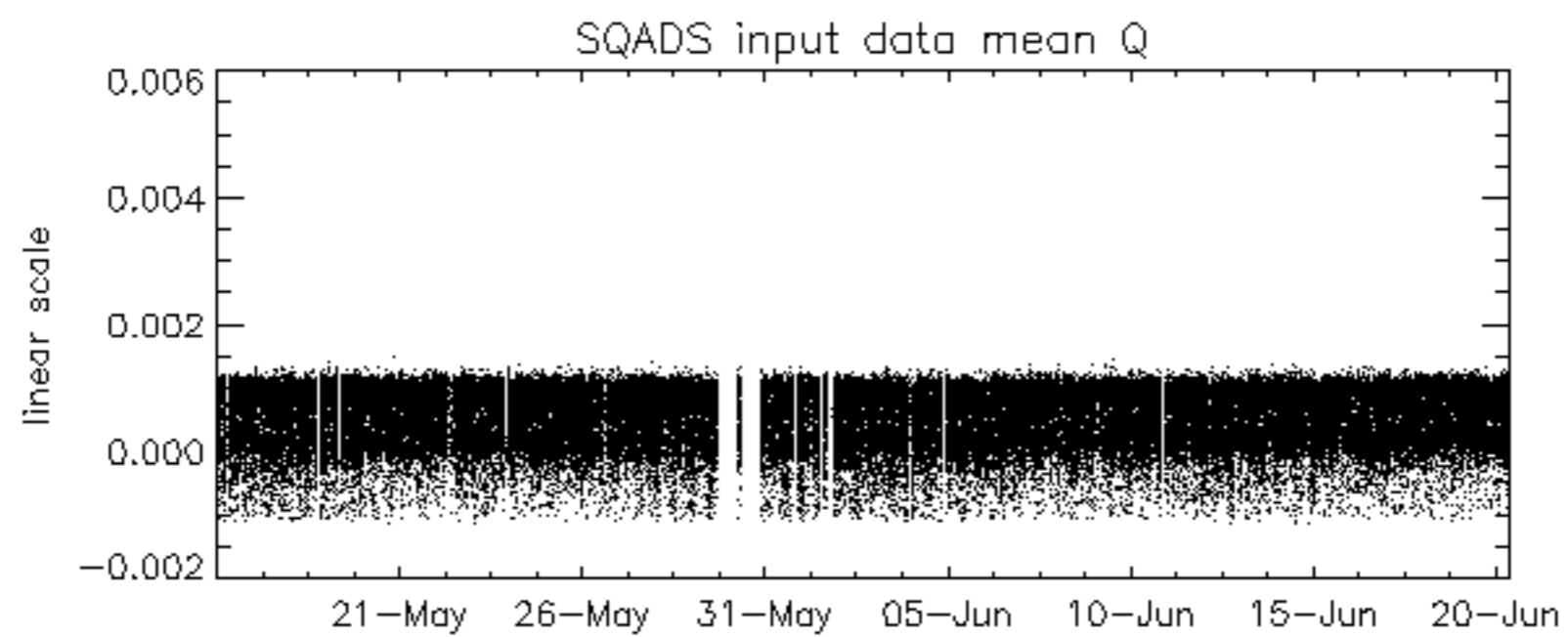
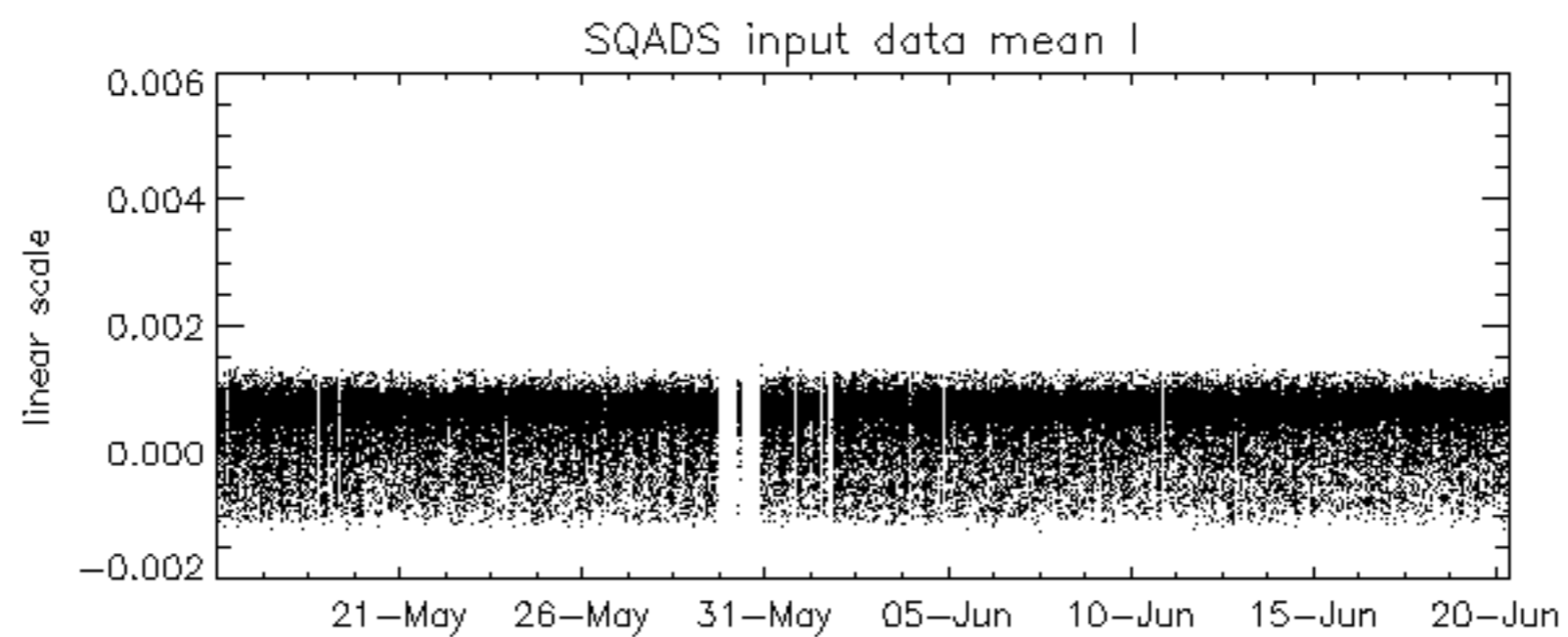
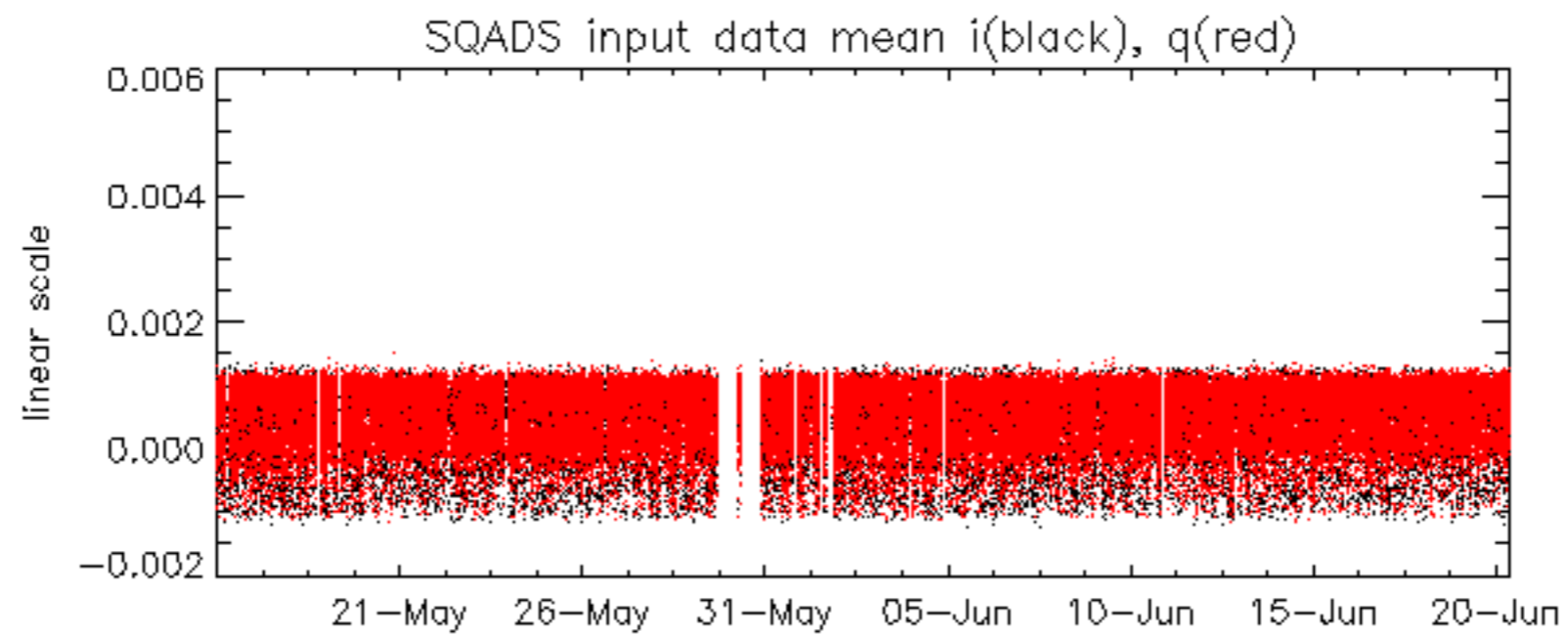


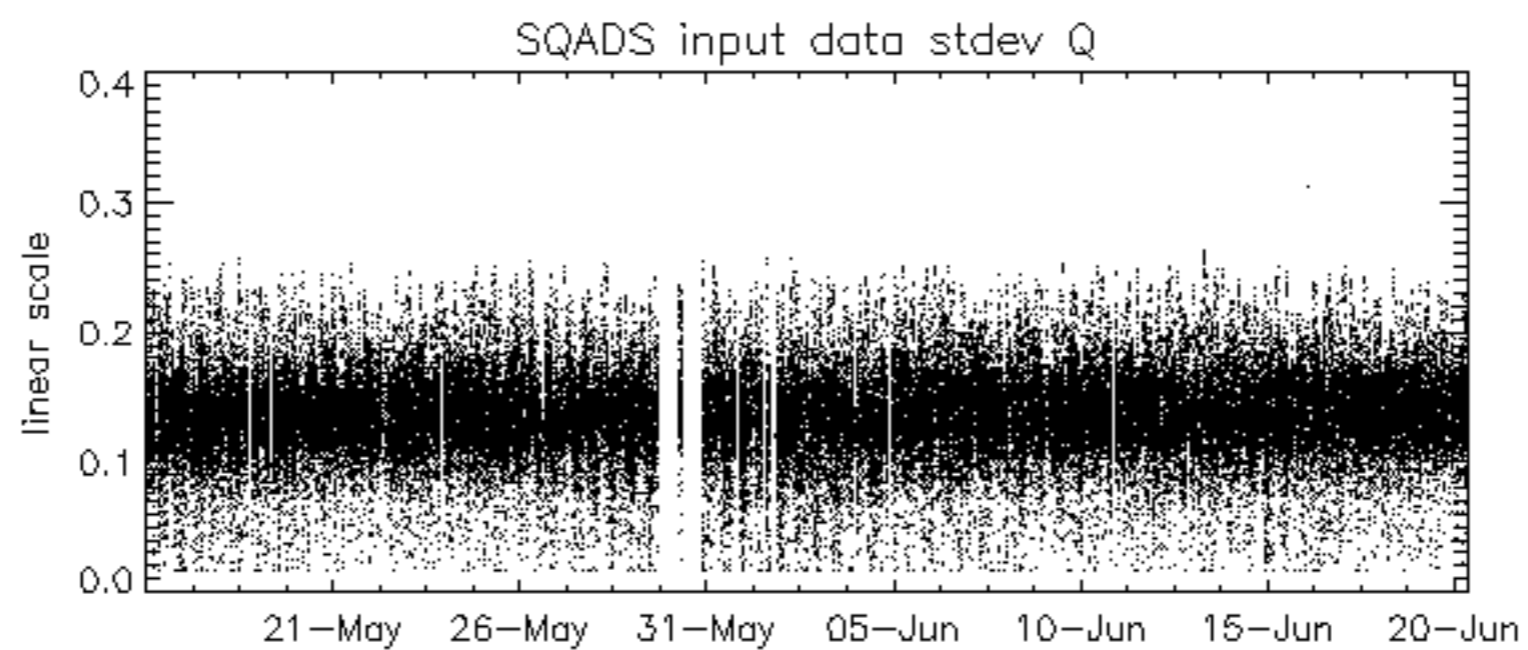
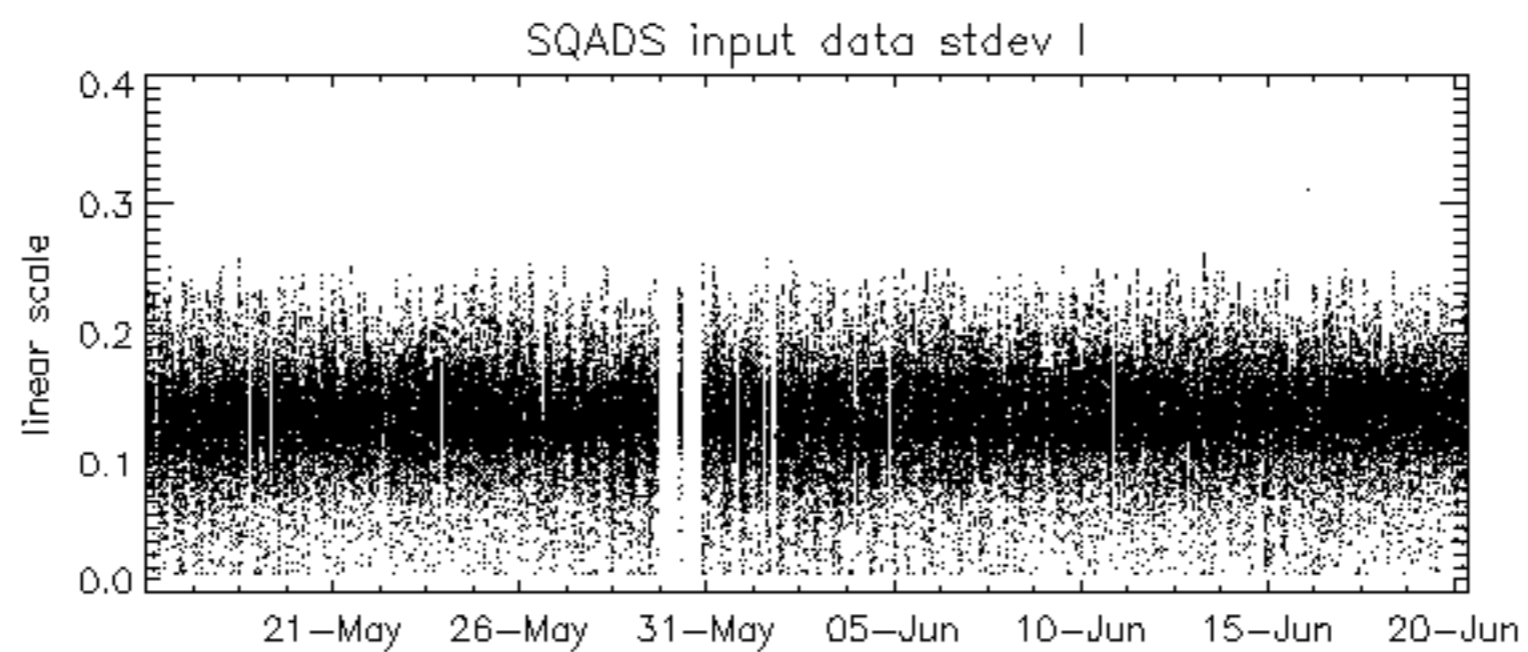
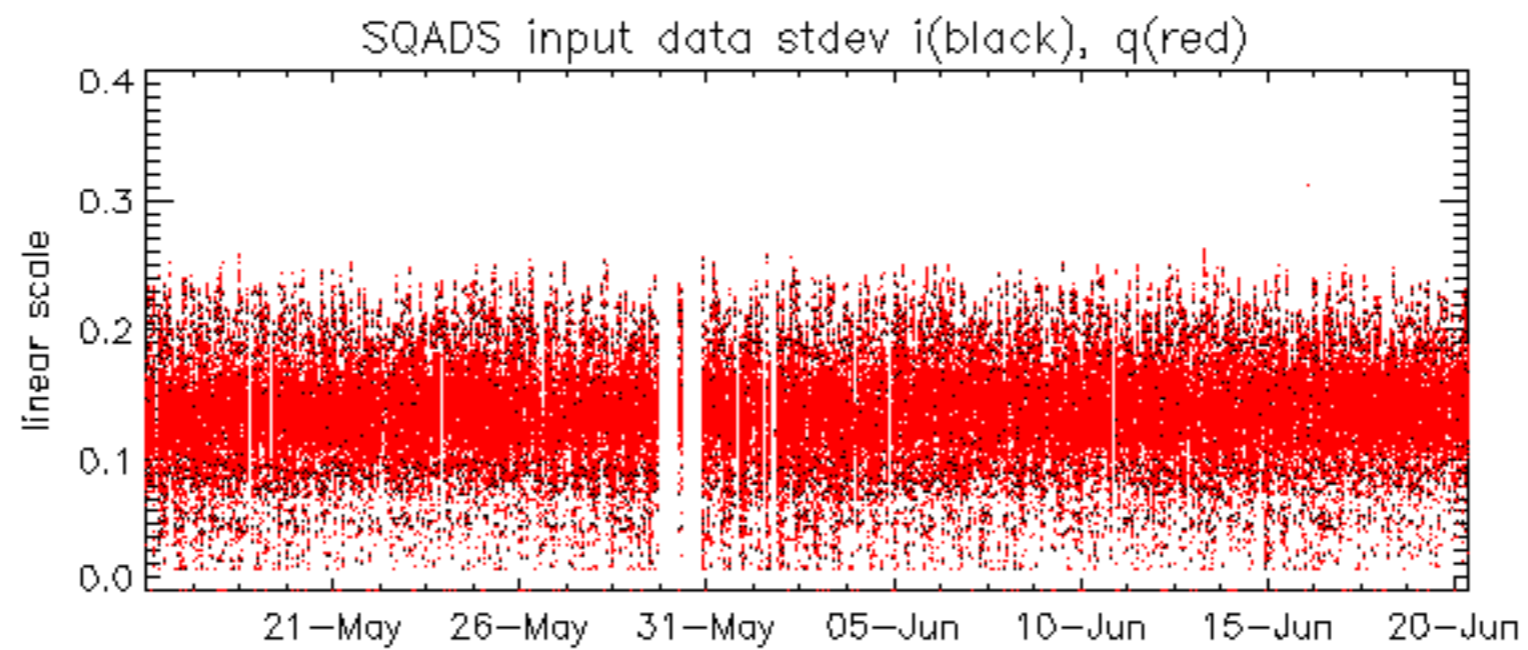
No anomalies observed on available MS products:

No anomalies observed.





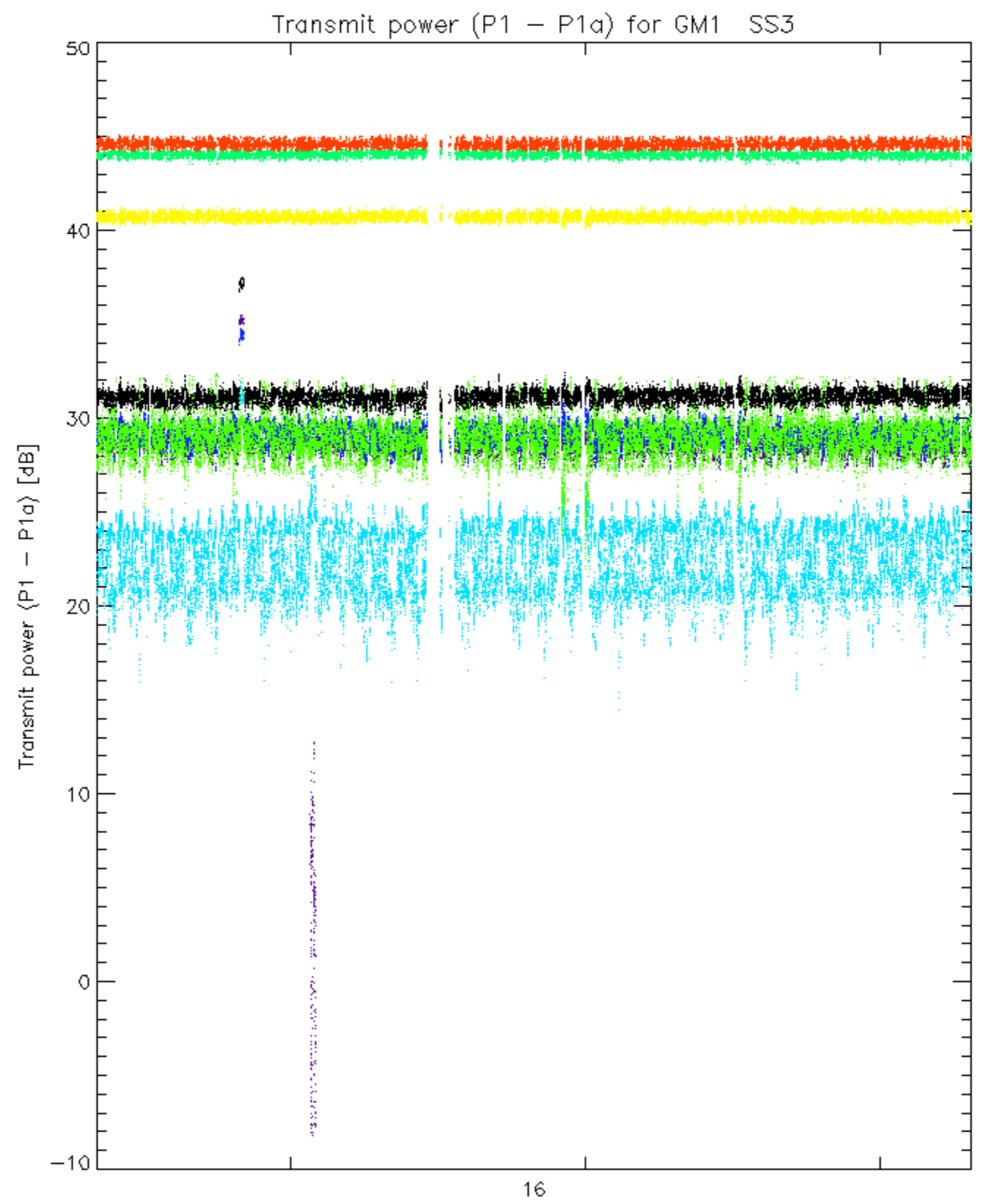




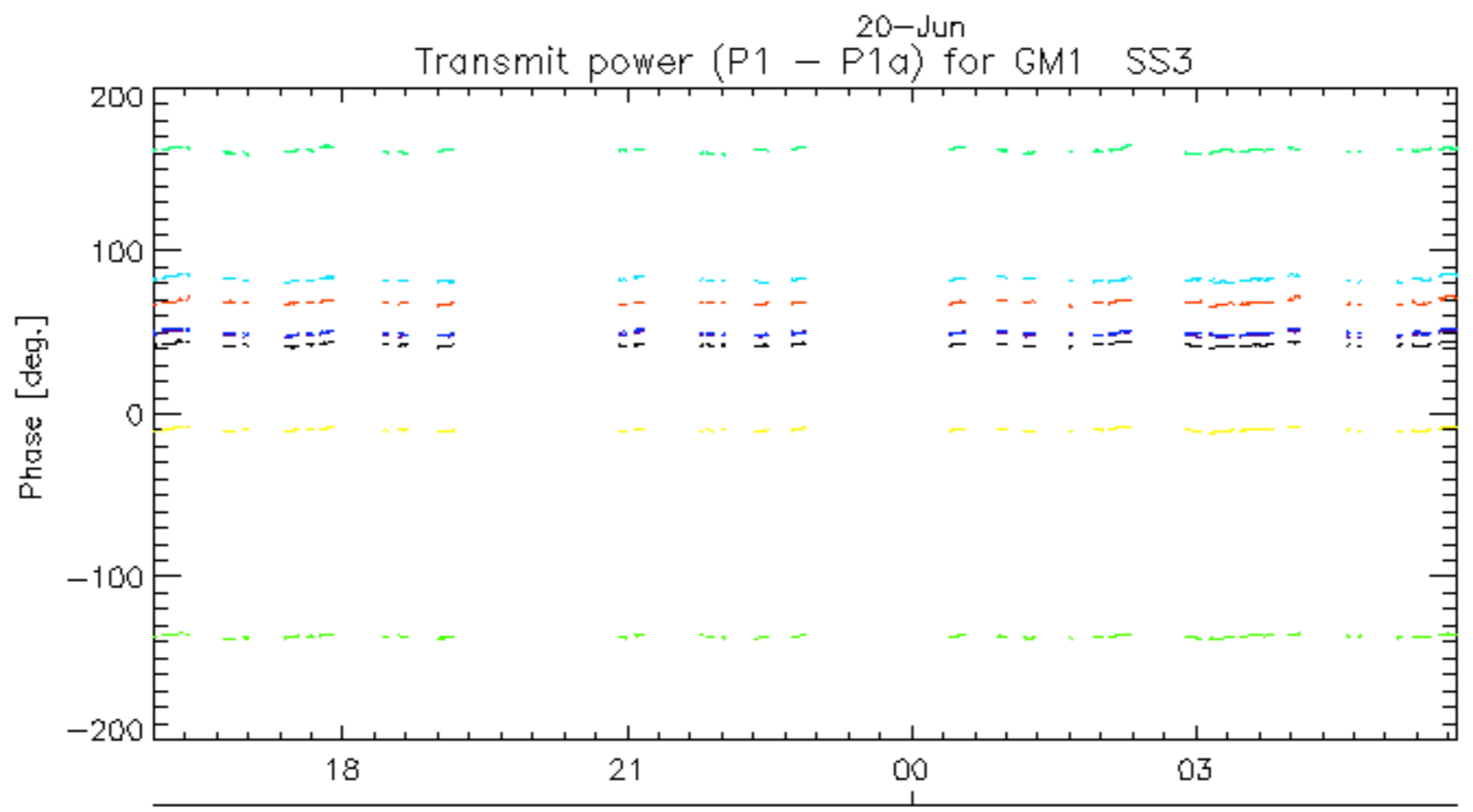
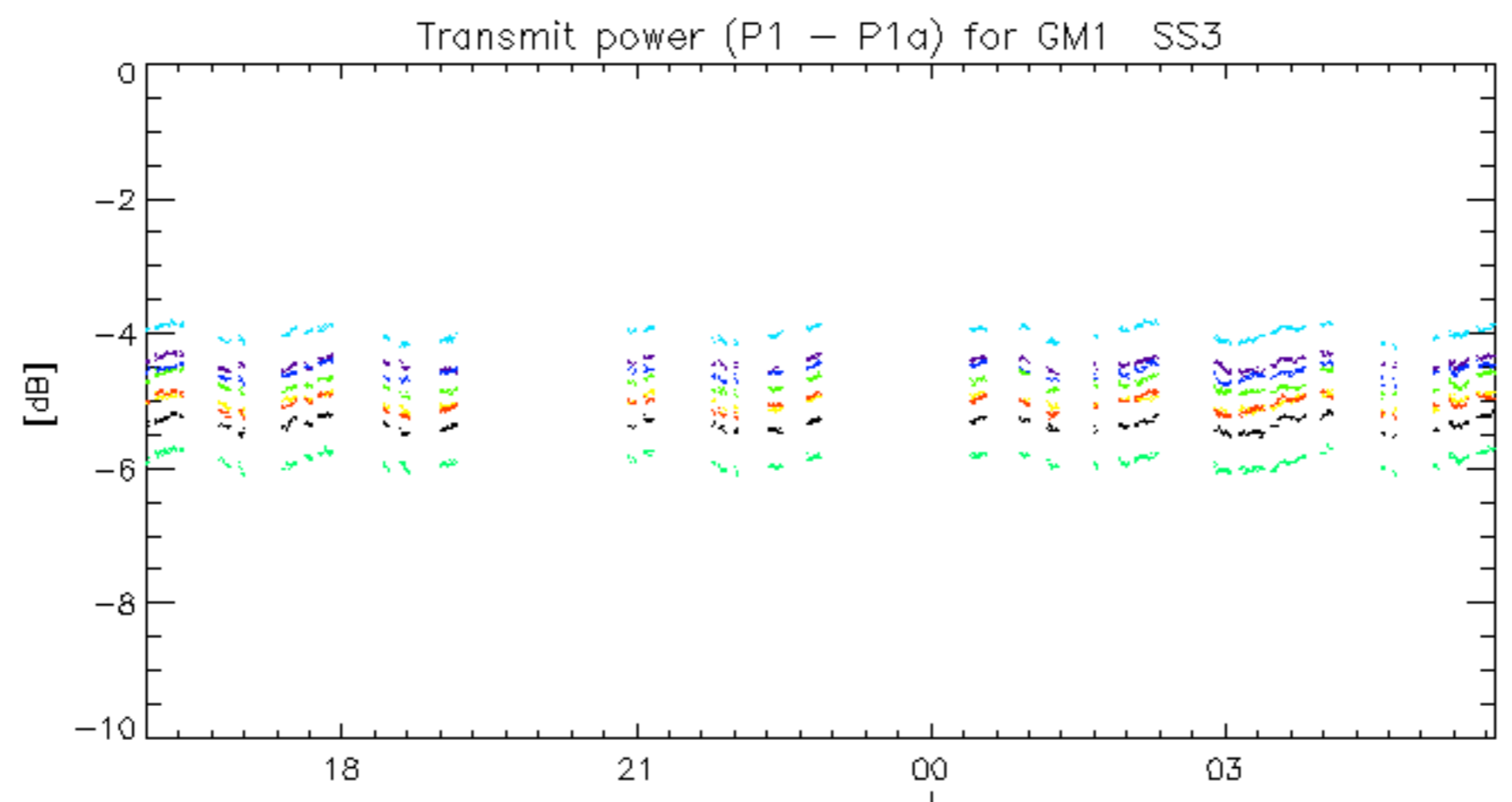
Summary of analysis for the last 3 days 2006061[890]

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

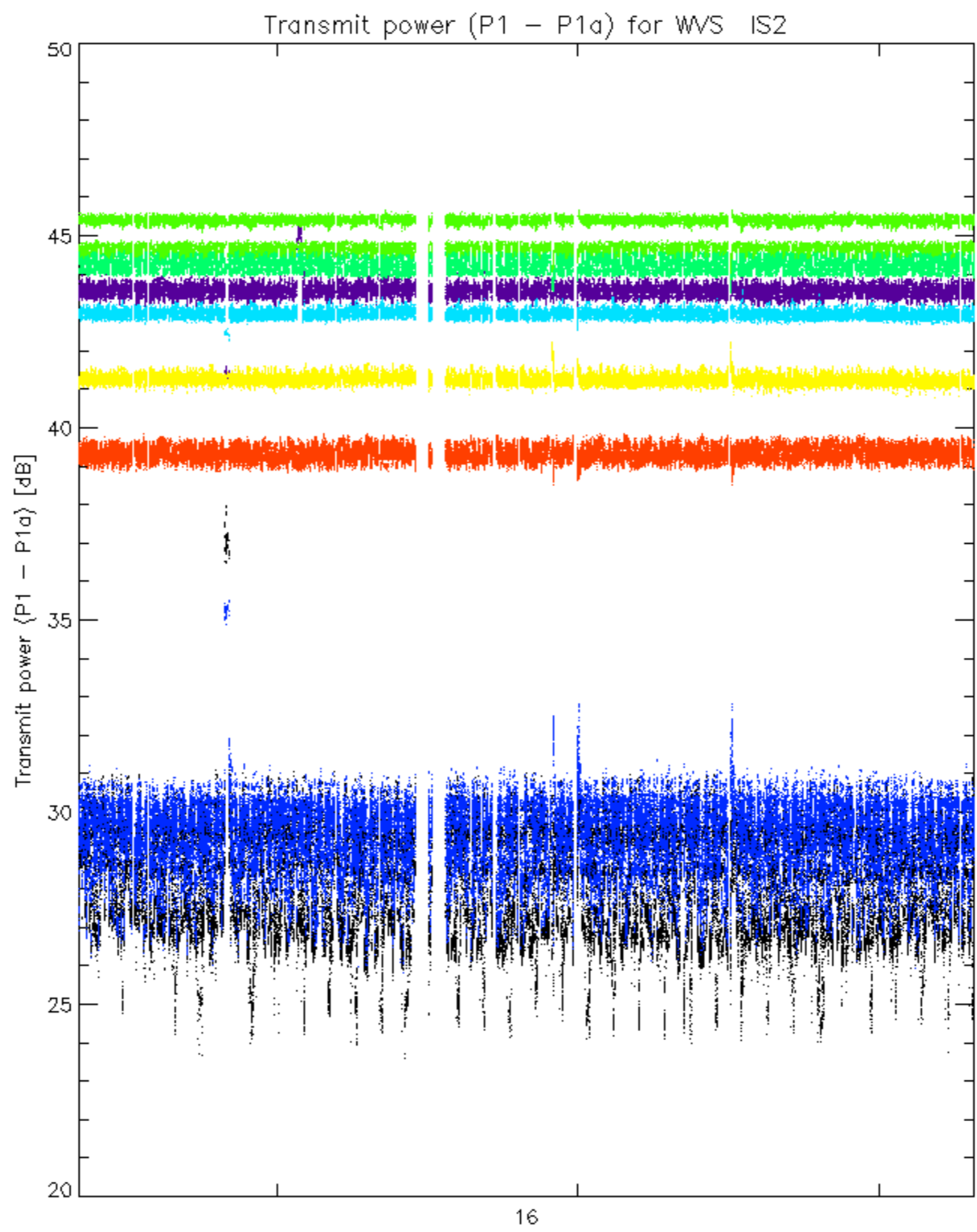
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060610_110007_000000342048_00266_22364_6947.N1	0	18
ASA_IMM_1PNPDE20060619_062814_000001452048_00392_22490_8058.N1	1	0
ASA_IMM_1PNPDK20060618_121934_000000622048_00381_22479_2870.N1	1	44
ASA_IMM_1PNPDK20060618_125918_000000372048_00382_22480_2868.N1	1	0
ASA_WSM_1PNPDE20060610_015903_000001462048_00261_22359_3573.N1	0	75
ASA_WSM_1PNPDE20060610_033801_000000852048_00262_22360_3591.N1	0	39
ASA_WSM_1PNPDE20060610_184505_000001842048_00271_22369_3667.N1	0	58
ASA_WSM_1PNPDE20060618_143248_000001282048_00383_22481_4580.N1	0	22
ASA_WSM_1PNPDE20060618_161434_000001832048_00384_22482_4579.N1	0	47
ASA_WSM_1PNPDE20060618_201434_000000852048_00386_22484_4597.N1	0	30
ASA_WSM_1PNPDE20060618_234032_000000852048_00388_22486_4614.N1	0	27
ASA_WSM_1PNPDK20060610_134308_000002082048_00268_22366_7314.N1	0	30



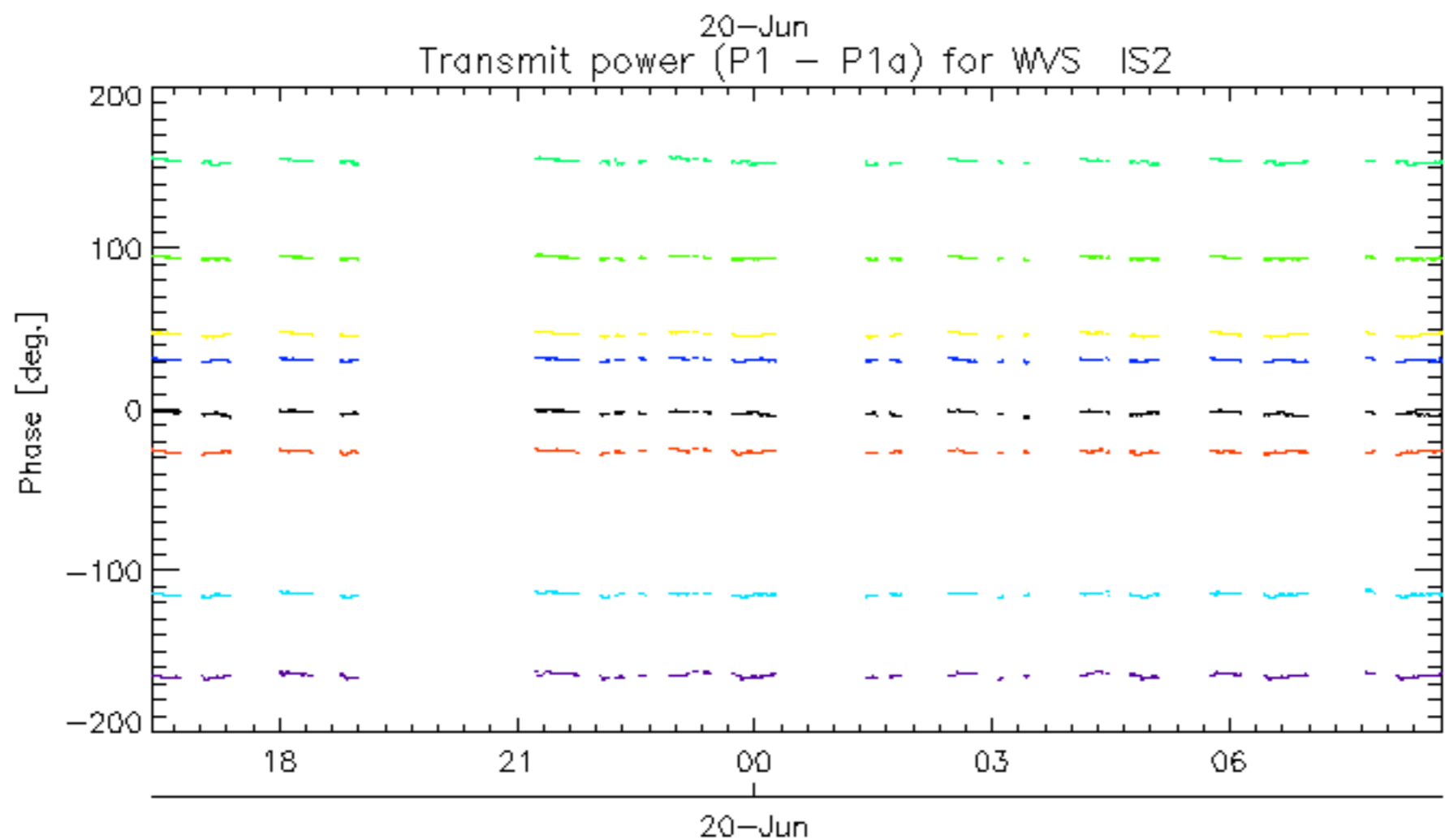
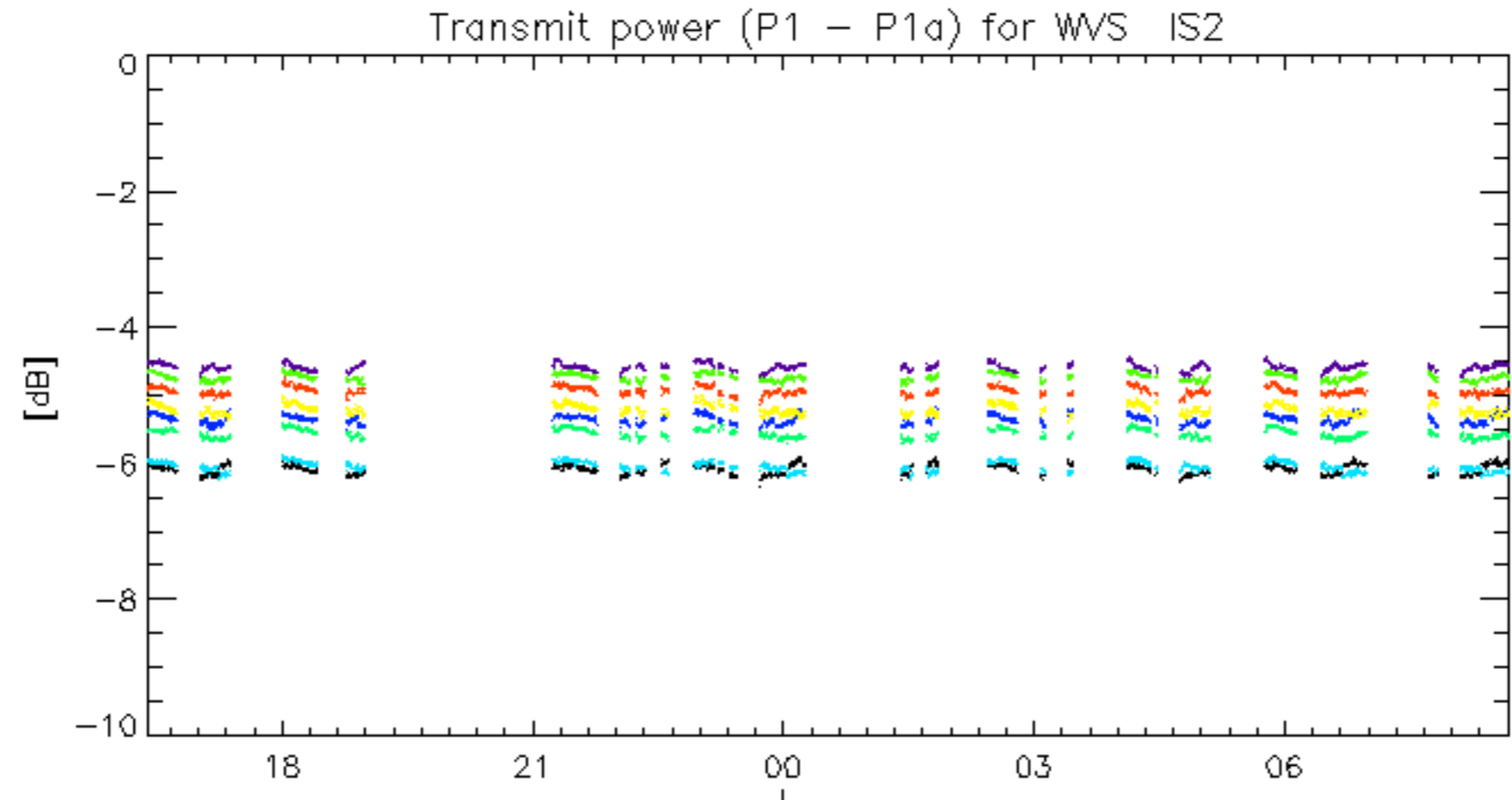
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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



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



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

No unavailabilities during the reported period.