

PRELIMINARY REPORT OF 060630

last update on Fri Jun 30 16:49:19 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 2006-06-29 00:00:00 to 2006-06-30 16:49:19

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	44	80	15	1	16
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	44	80	15	1	16
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	44	80	15	1	16
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	44	80	15	1	16

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	30	41	34	21	56
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	30	41	34	21	56
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	30	41	34	21	56
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	30	41	34	21	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	20060630 055514
H	20060629 062651

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

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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	-3.939852	0.046924	-0.062766
7	P1	-3.133630	0.012733	0.002329
11	P1	-4.100872	0.016309	-0.003254
15	P1	-6.158300	0.011415	-0.044096
19	P1	-3.362245	0.008665	-0.060052
22	P1	-4.522544	0.011528	-0.059280
26	P1	-3.960948	0.017287	0.026731
30	P1	-5.753169	0.008876	-0.037337
3	P1	-16.546541	0.578565	-0.188599
7	P1	-17.239288	0.112271	0.015482
11	P1	-16.972383	0.281369	-0.065532
15	P1	-13.175508	0.157593	0.016412
19	P1	-14.363928	0.051529	-0.146260
22	P1	-16.139975	0.377805	0.088545
26	P1	-15.188703	0.228665	0.101370
30	P1	-17.144747	0.407853	-0.006689

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.100904	0.082713	0.134527
7	P2	-21.992785	0.099011	0.083735
11	P2	-15.838881	0.112717	0.081008
15	P2	-7.151419	0.096343	-0.014441
19	P2	-9.163733	0.087951	0.012174
22	P2	-18.166964	0.084355	-0.024774
26	P2	-16.406651	0.090166	-0.039542
30	P2	-19.550138	0.088885	-0.008148

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.182305	0.003887	-0.024164
7	P3	-8.182305	0.003887	-0.024164
11	P3	-8.182305	0.003887	-0.024164
15	P3	-8.182305	0.003887	-0.024164
19	P3	-8.182305	0.003887	-0.024164
22	P3	-8.182305	0.003887	-0.024164
26	P3	-8.182305	0.003887	-0.024164
30	P3	-8.182305	0.003887	-0.024164

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	-3.811773	0.052281	-0.088871
7	P1	-2.574723	0.008737	0.026386
11	P1	-2.854926	0.013500	-0.007782
15	P1	-3.523155	0.027999	-0.063445
19	P1	-3.411743	0.014379	-0.030833
22	P1	-5.082832	0.019625	-0.018672
26	P1	-5.856171	0.016027	-0.028306
30	P1	-5.189128	0.026613	-0.015742
3	P1	-11.637753	0.141775	-0.083846
7	P1	-9.978220	0.033168	0.000687
11	P1	-10.234505	0.059359	-0.018871
15	P1	-10.691881	0.130551	-0.082950
19	P1	-15.538307	0.077805	-0.033711
22	P1	-20.942999	1.176168	-0.003894

26	P1	-16.436844	0.336314	0.101910
30	P1	-17.873077	0.373786	0.051878

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.773941	0.074763	0.183564
7	P2	-22.464754	0.131661	0.063050
11	P2	-11.119173	0.048420	0.080573
15	P2	-4.918787	0.049138	-0.030108
19	P2	-6.879004	0.054035	-0.020697
22	P2	-8.205133	0.043079	-0.015370
26	P2	-24.159466	0.069808	-0.089556
30	P2	-22.048773	0.056446	0.028062

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.017133	0.004751	-0.023358
7	P3	-8.017271	0.004735	-0.023253
11	P3	-8.017159	0.004750	-0.023318
15	P3	-8.017131	0.004752	-0.023290
19	P3	-8.017146	0.004750	-0.022754
22	P3	-8.017267	0.004740	-0.022886
26	P3	-8.017297	0.004745	-0.023124
30	P3	-8.017194	0.004724	-0.023221

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	0.000566467
	stdev	1.67257e-07
MEAN Q	mean	0.000528948
	stdev	2.18511e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.137485
	stdev	0.00116270
STDEV Q	mean	0.137845
	stdev	0.00118050



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006062[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_1PNPDE20060620_115627_000000512048_00410_22508_8157.N1	1	0
ASA_IMM_1PNPDE20060628_004521_000001932049_00016_22615_0034.N1	1	0
ASA_IMM_1PNPDE20060628_010203_000000692049_00017_22616_0025.N1	1	0
ASA_IMM_1PNPDE20060628_155408_000000412049_00025_22624_0069.N1	1	0
ASA_IMM_1PNPDE20060629_125213_000000502049_00038_22637_0120.N1	1	0

ASA_GM1_1PNPDK20060628_092952_000005862049_00022_22621_0014.N1	0	7
ASA_GM1_1PNPDK20060628_174527_000005672049_00027_22626_0046.N1	0	6
ASA_WSM_1PNPDE20060628_113740_000000862049_00023_22622_0179.N1	0	47
ASA_WSM_1PNPDE20060628_223813_000002452049_00030_22629_0252.N1	0	17
ASA_WSM_1PNPDE20060629_184756_000002082049_00042_22641_0407.N1	0	6
ASA_WSM_1PNPDK20060620_082754_000000862048_00408_22506_7972.N1	0	58



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

7.2 - Absolute Doppler for WVS

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

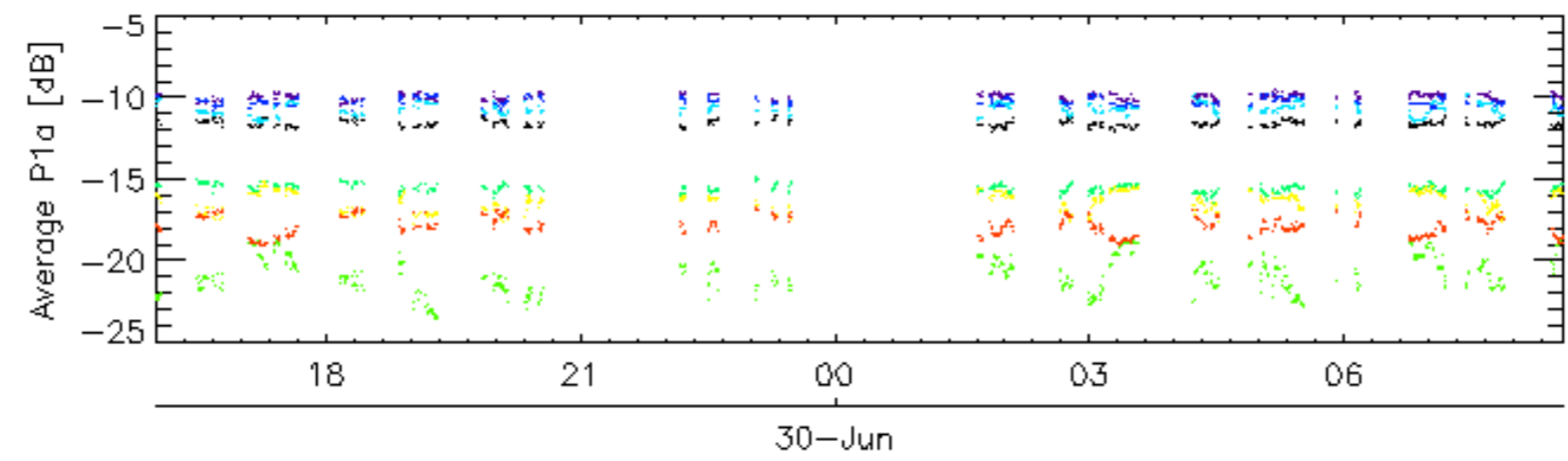
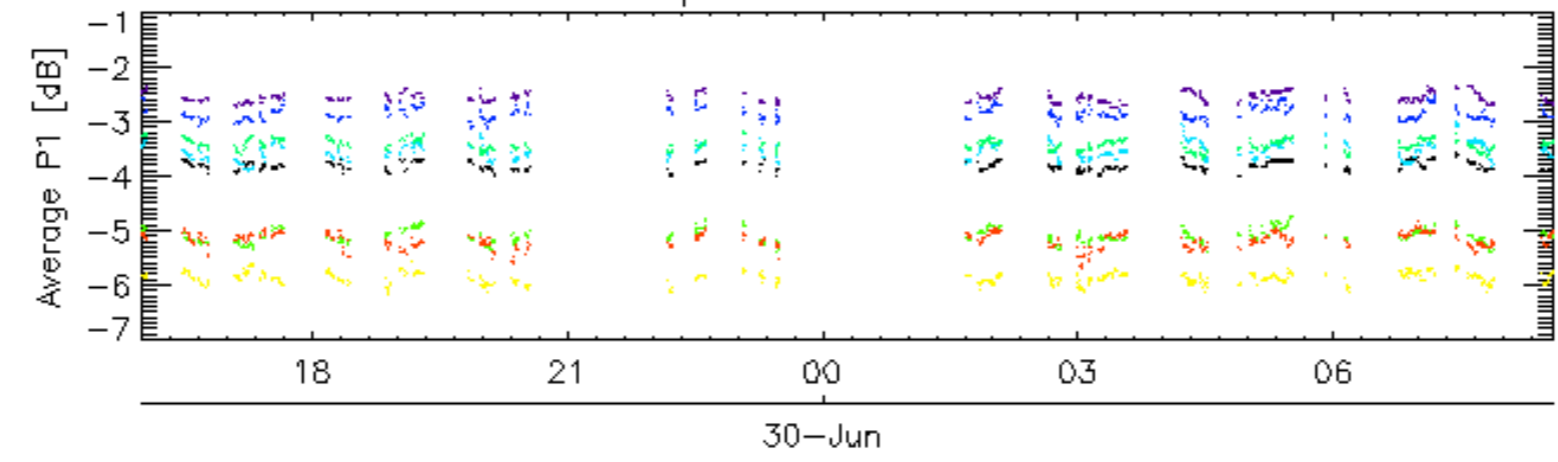
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

Acsending

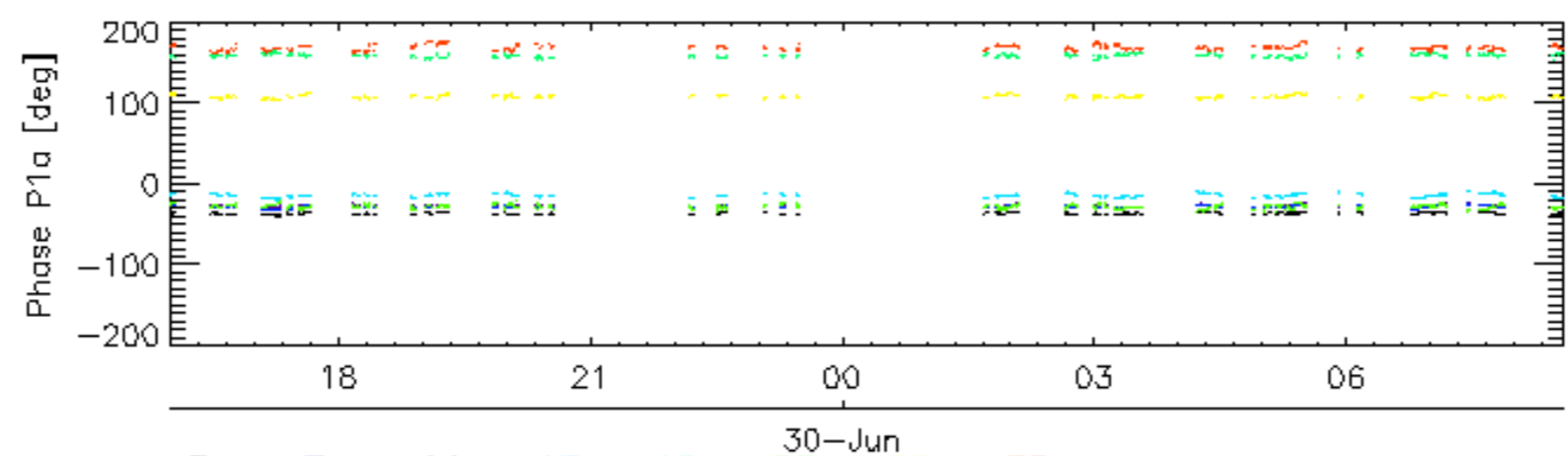
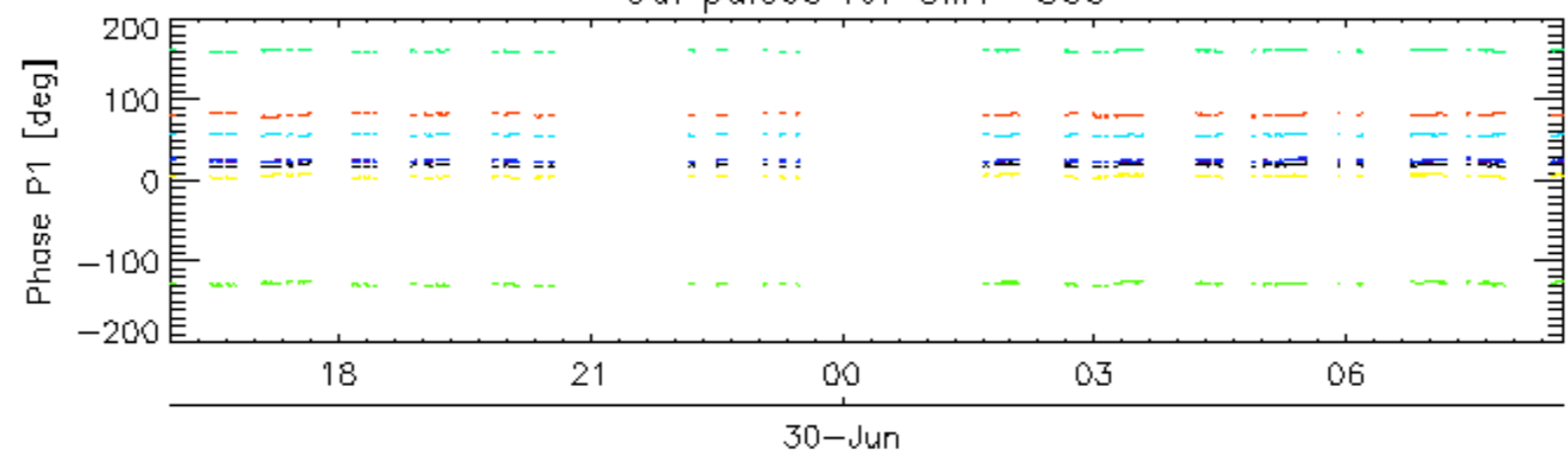
Descending

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

Cal pulses for GM1 SS3

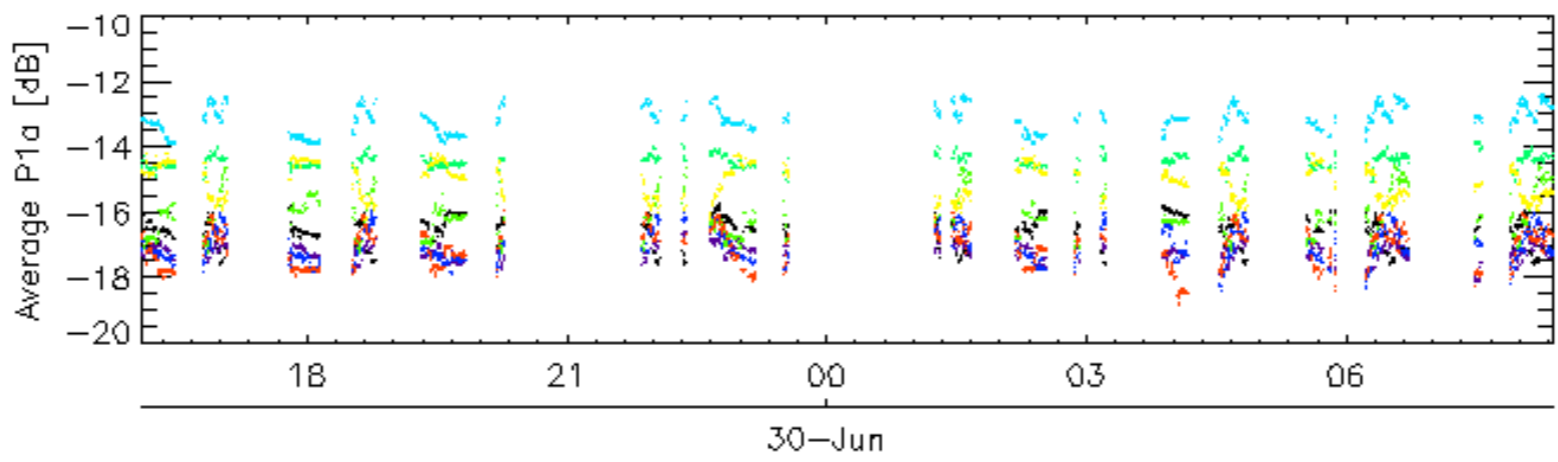
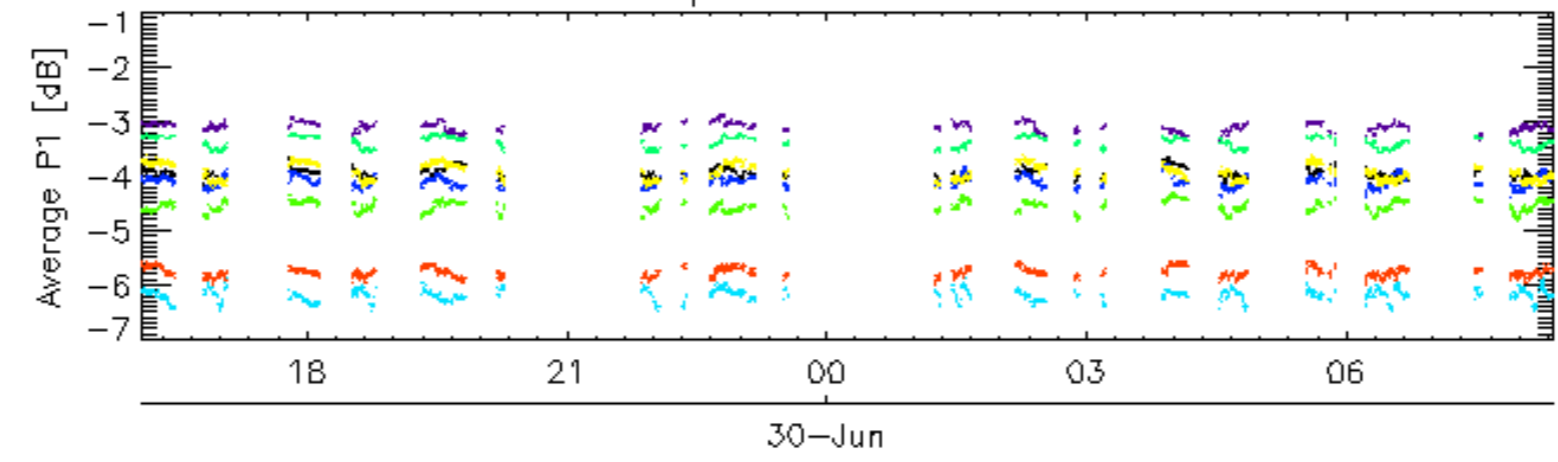


Cal pulses for GM1 SS3

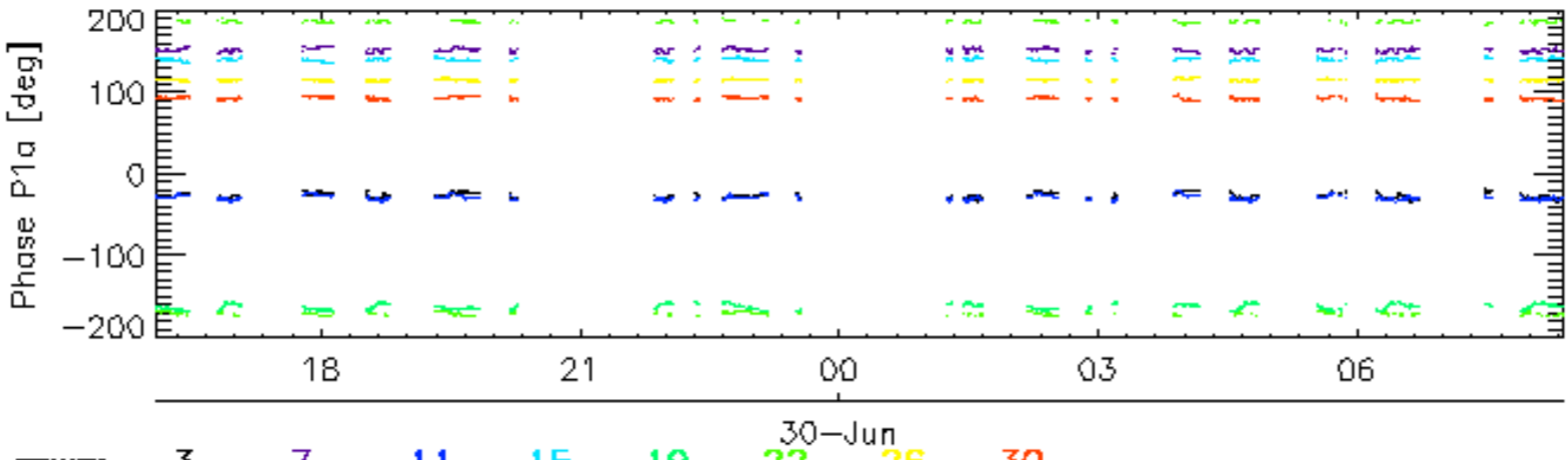
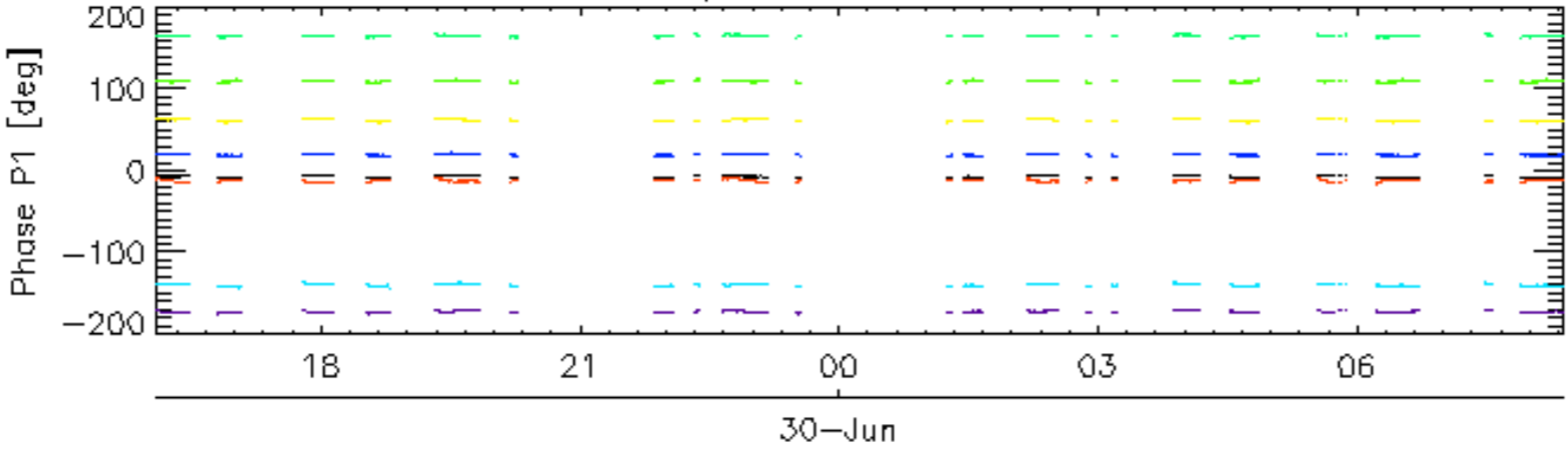


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

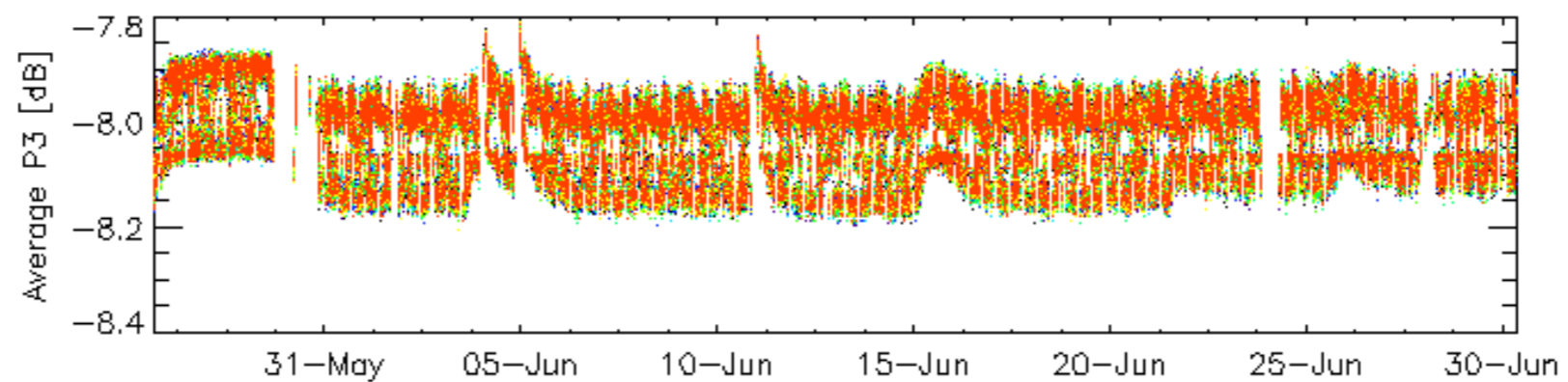
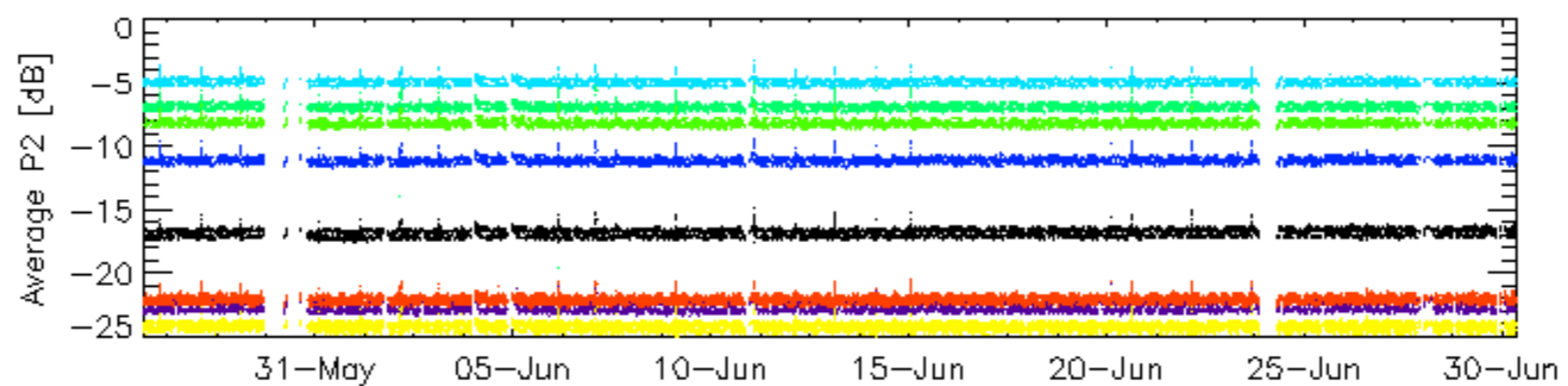
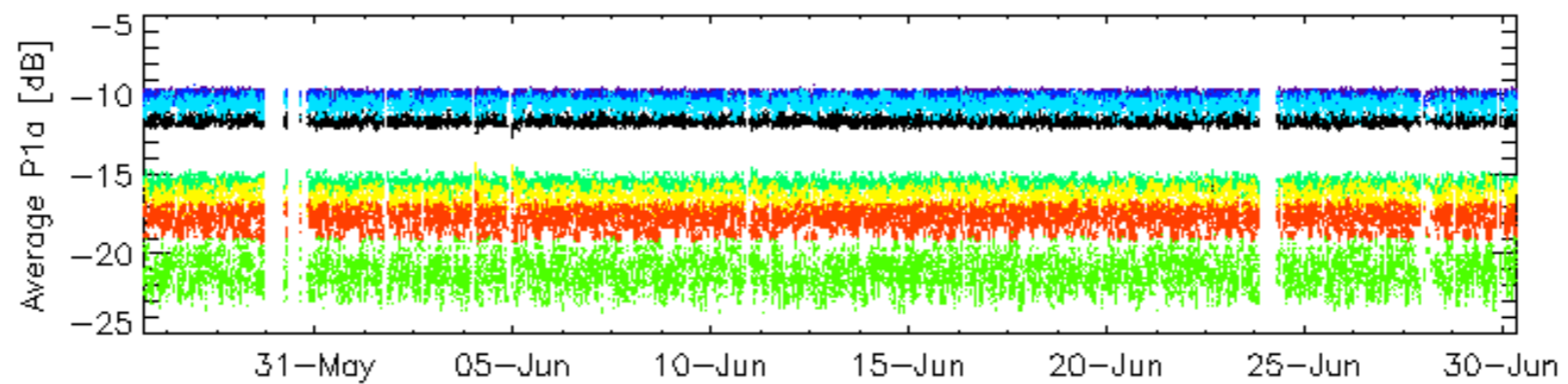
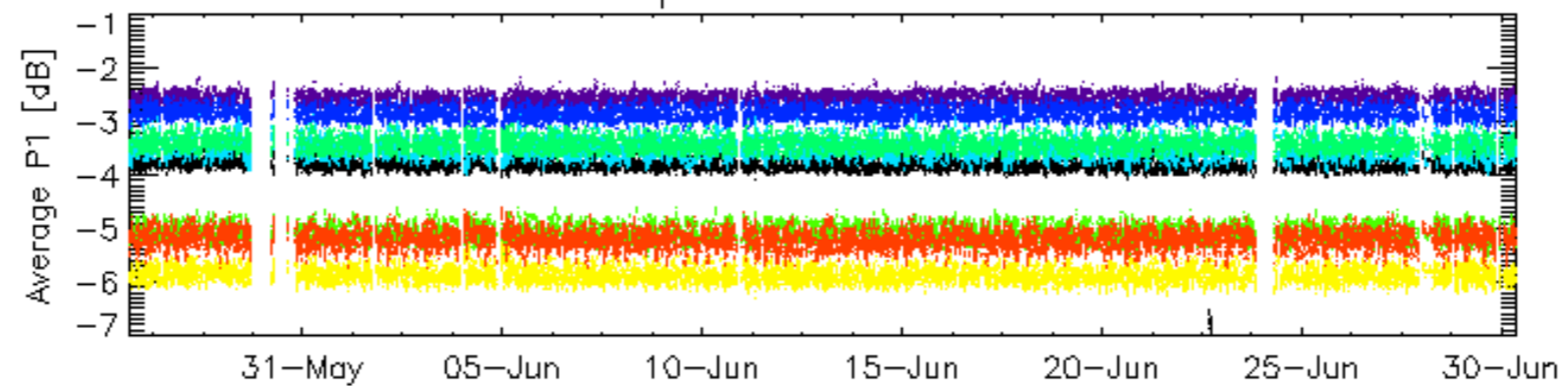


Cal pulses for WVS IS2



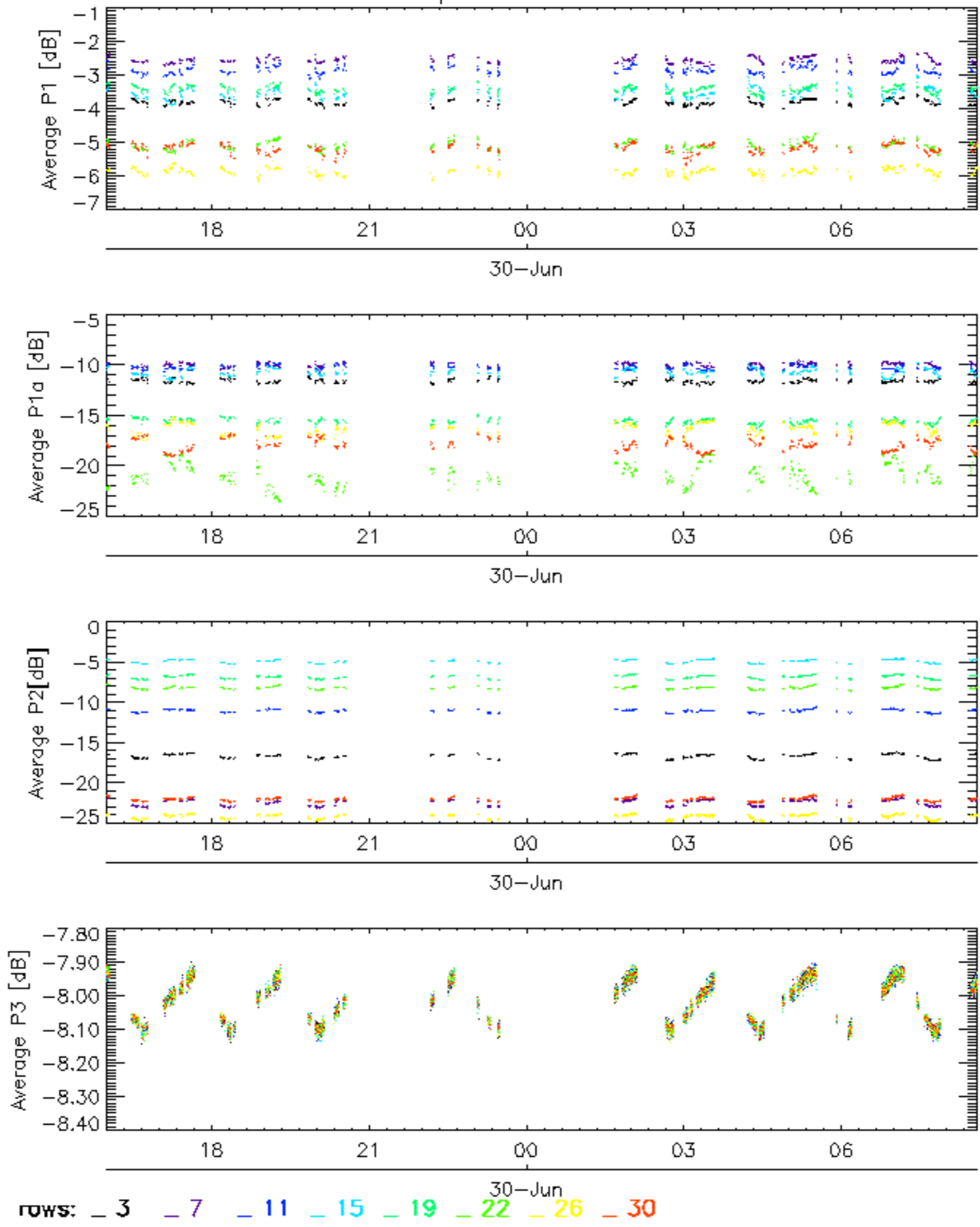
rows: 3 7 11 15 19 22 26 30

Cal pulses for GM1 SS3

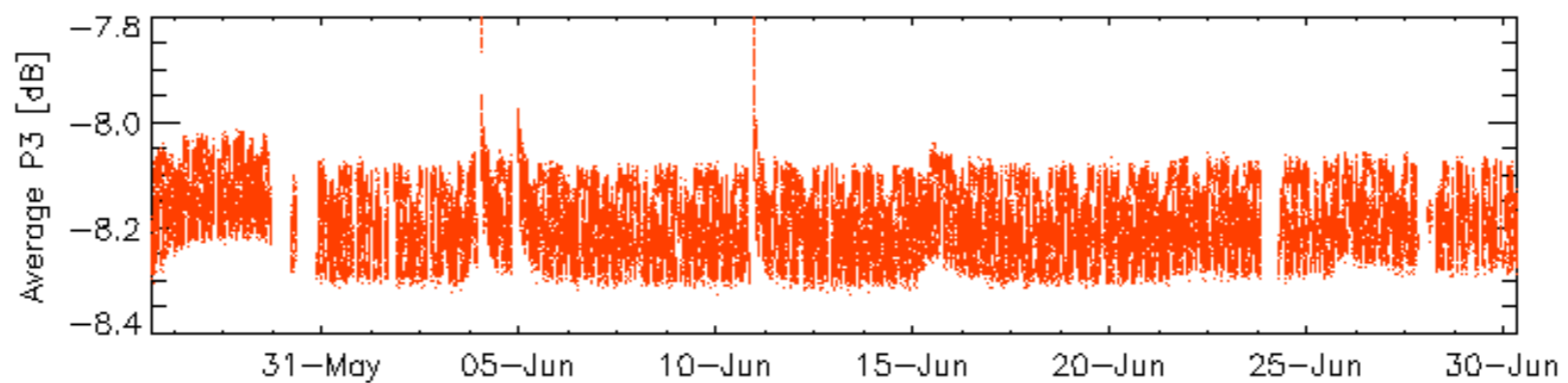
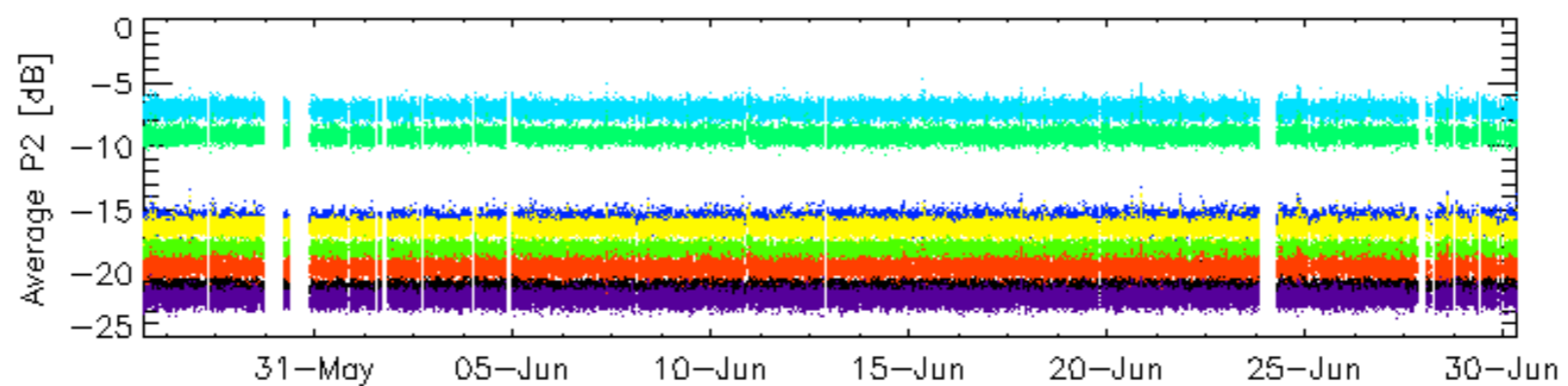
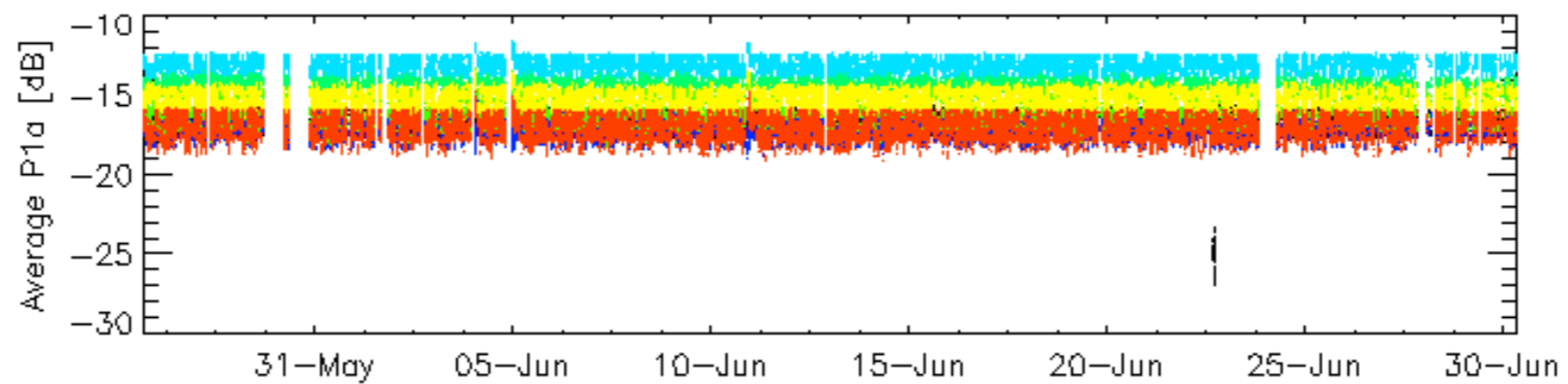
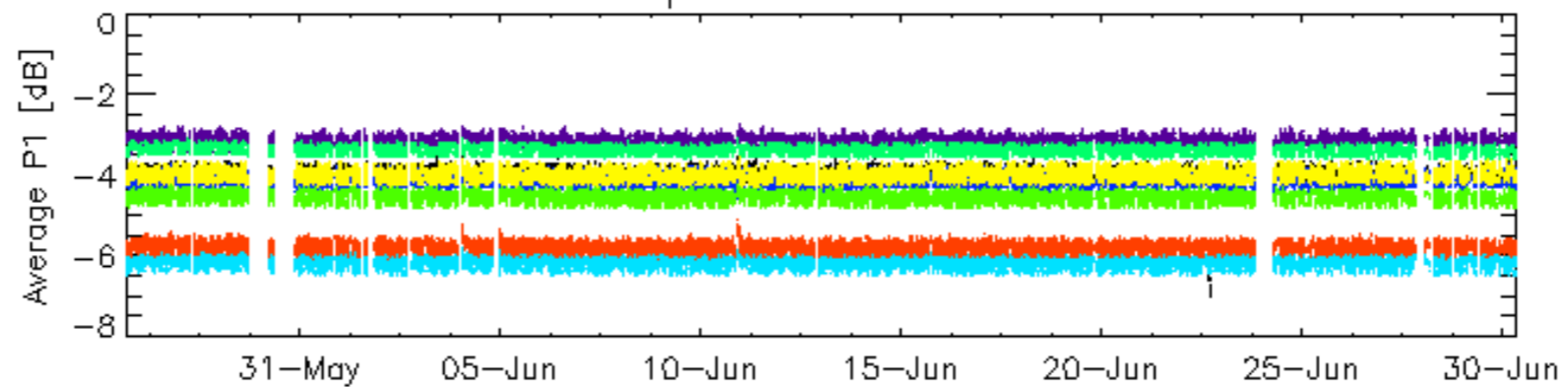


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

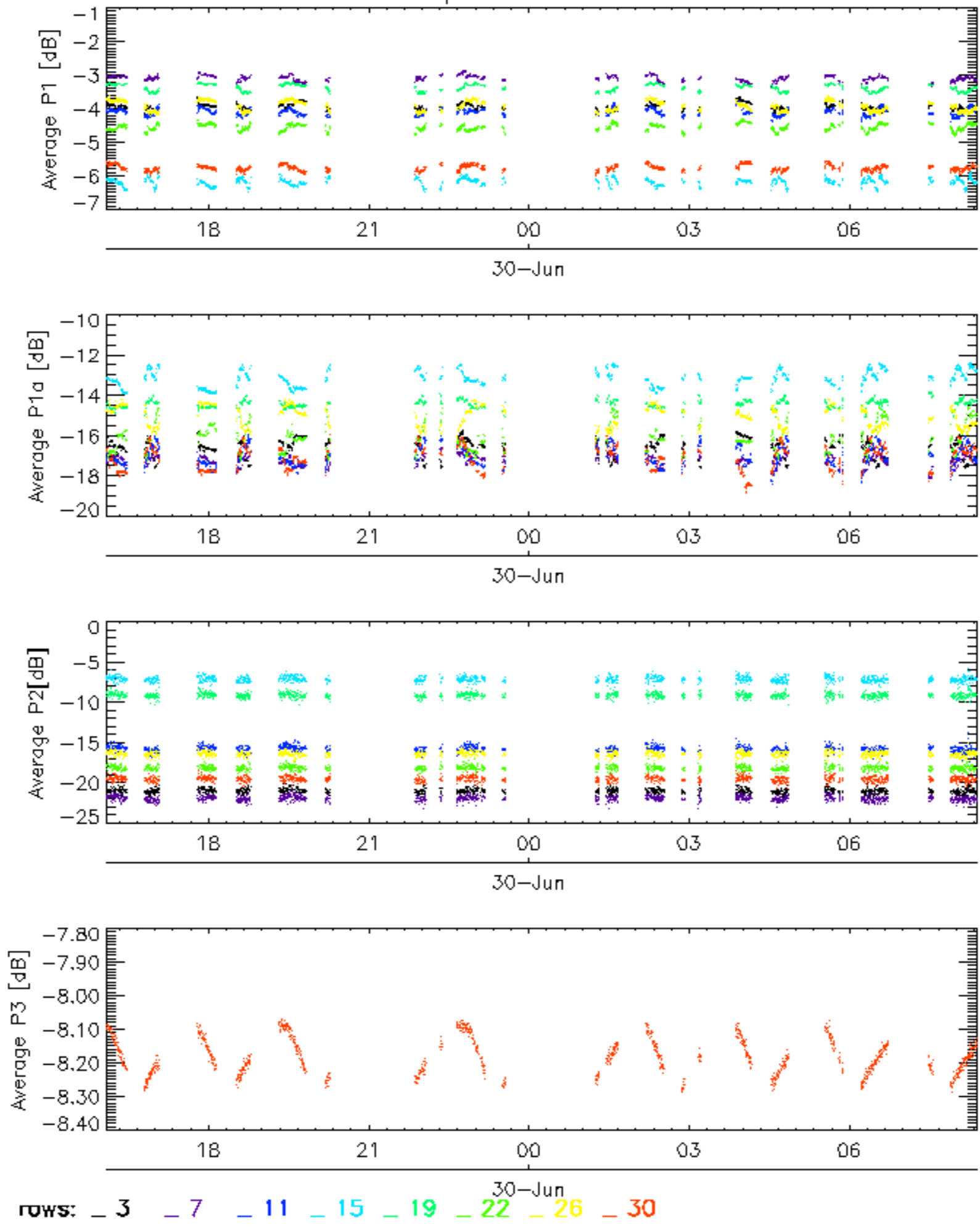


Cal pulses for WVS IS2



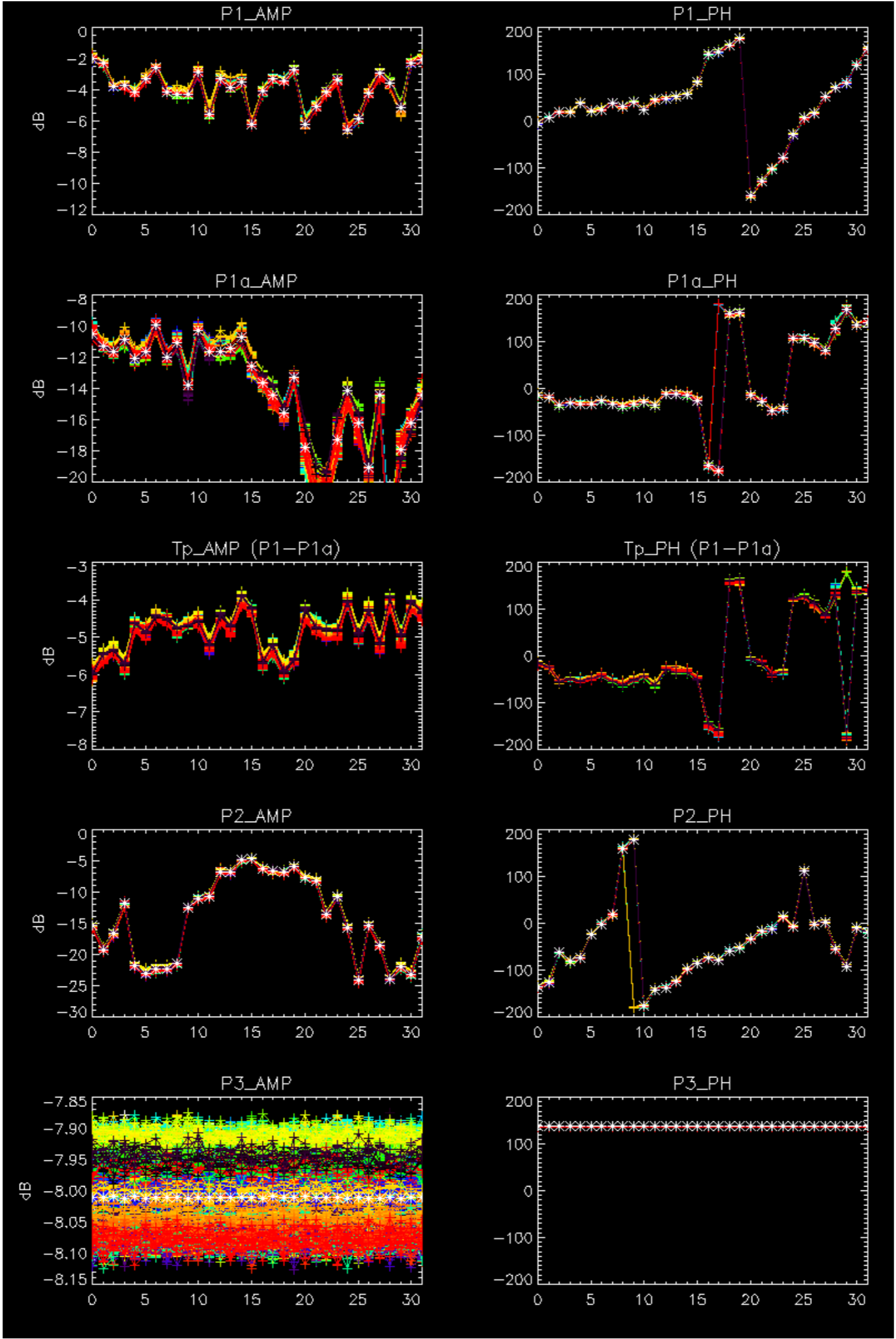
rows: [_ 3](#) [_ 7](#) [_ 11](#) [_ 15](#) [_ 19](#) [_ 22](#) [_ 26](#) [_ 30](#)

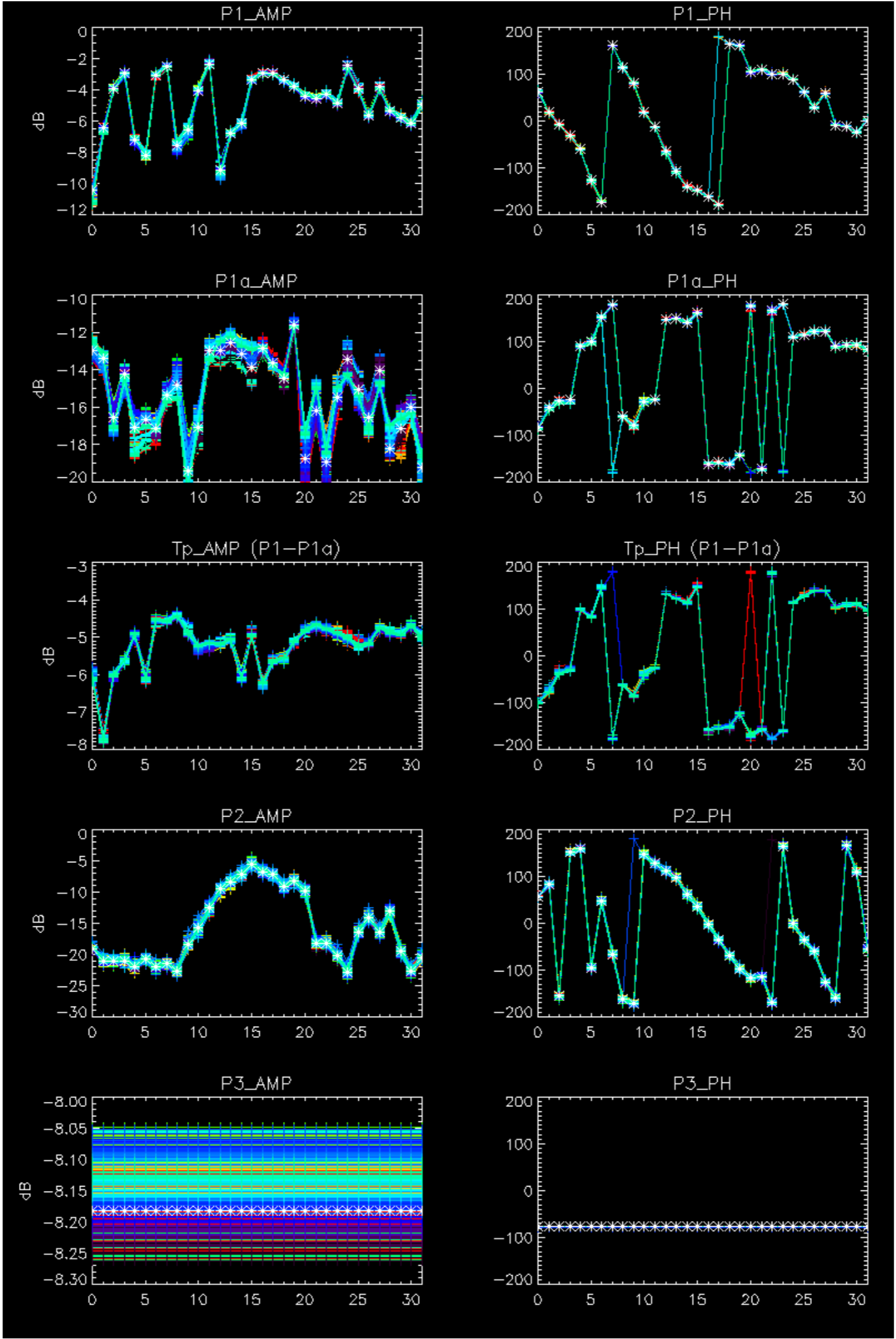
Cal pulses for WVS IS2



No anomalies observed on available browse products

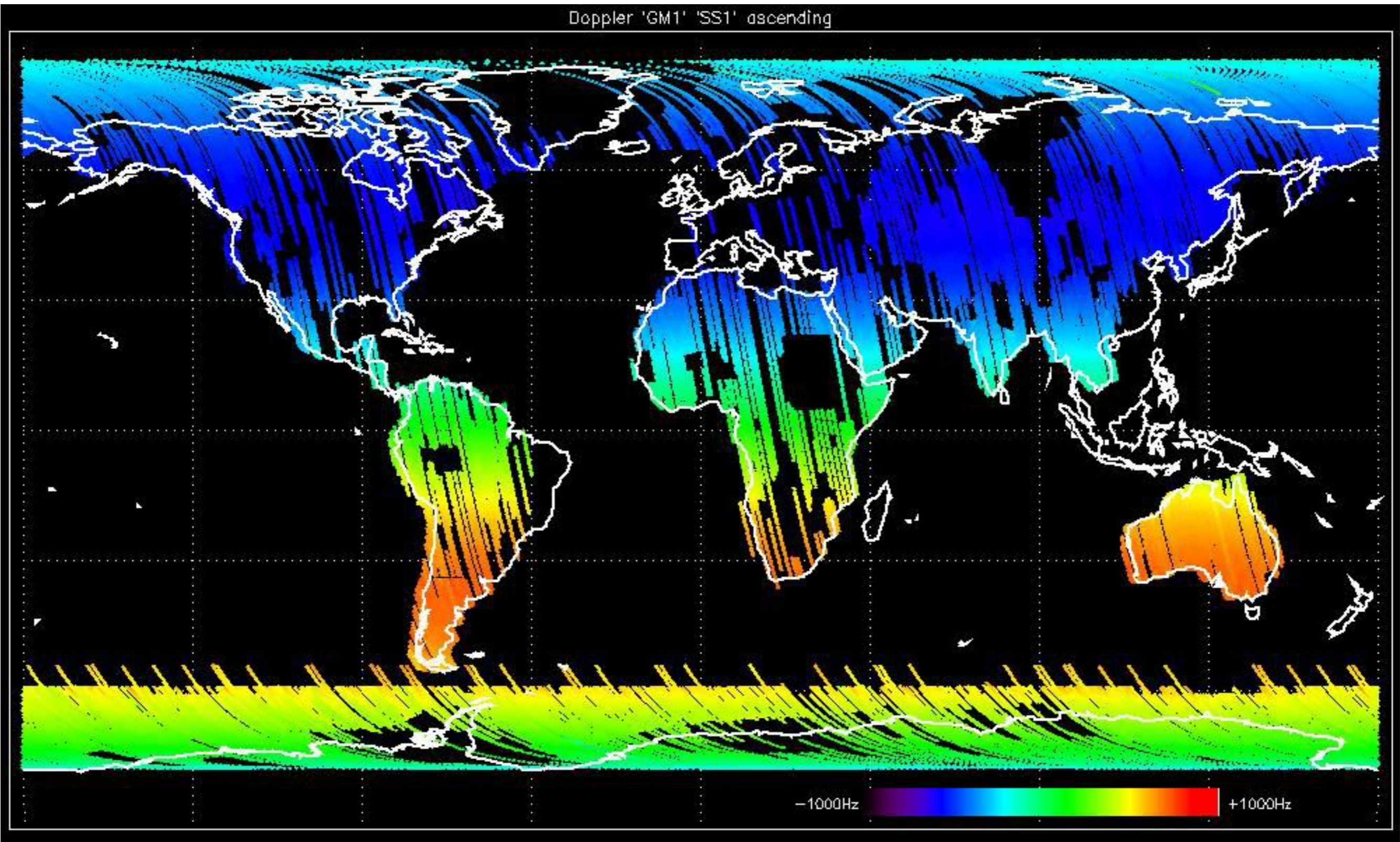
No anomalies observed.



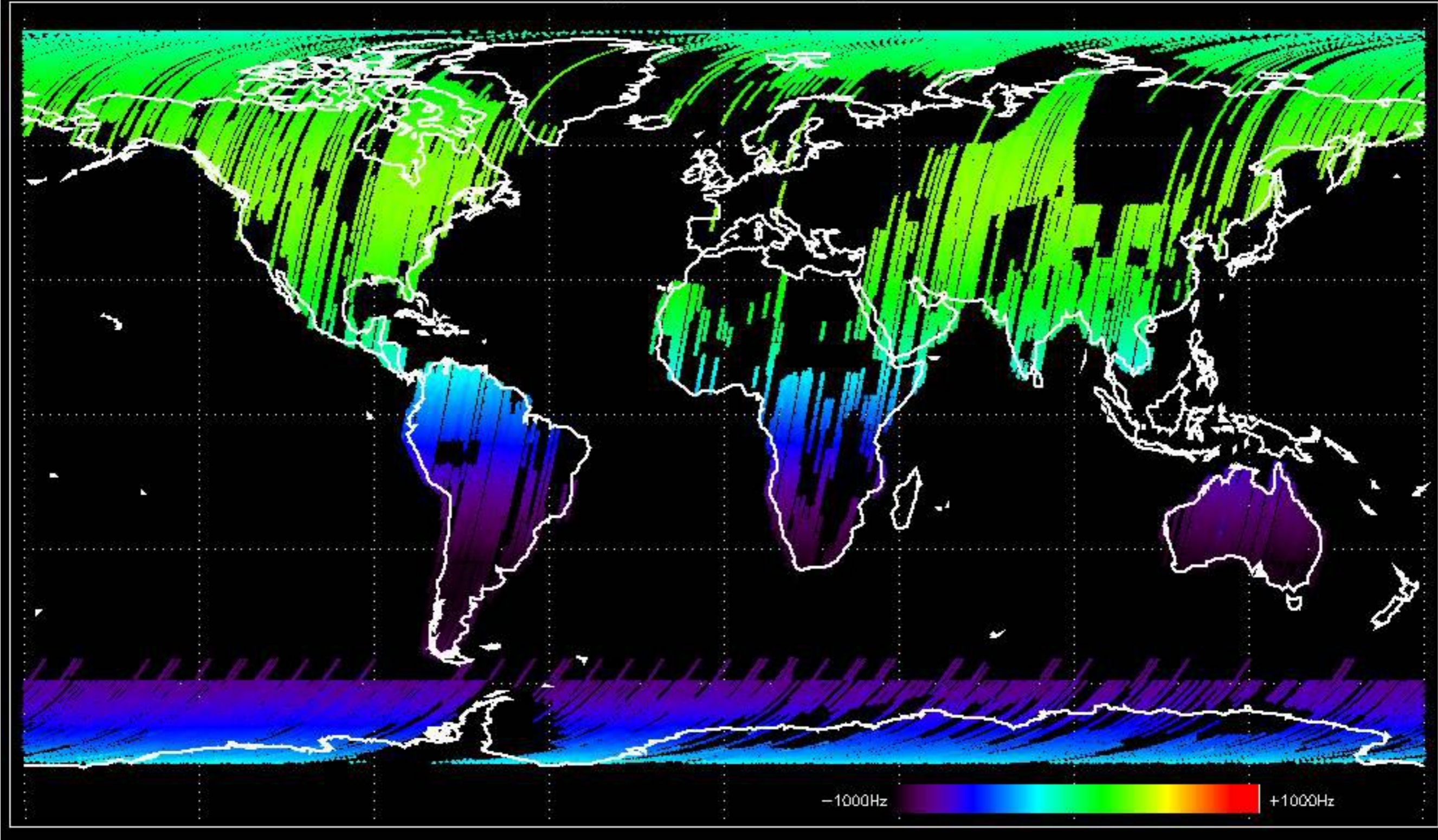


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

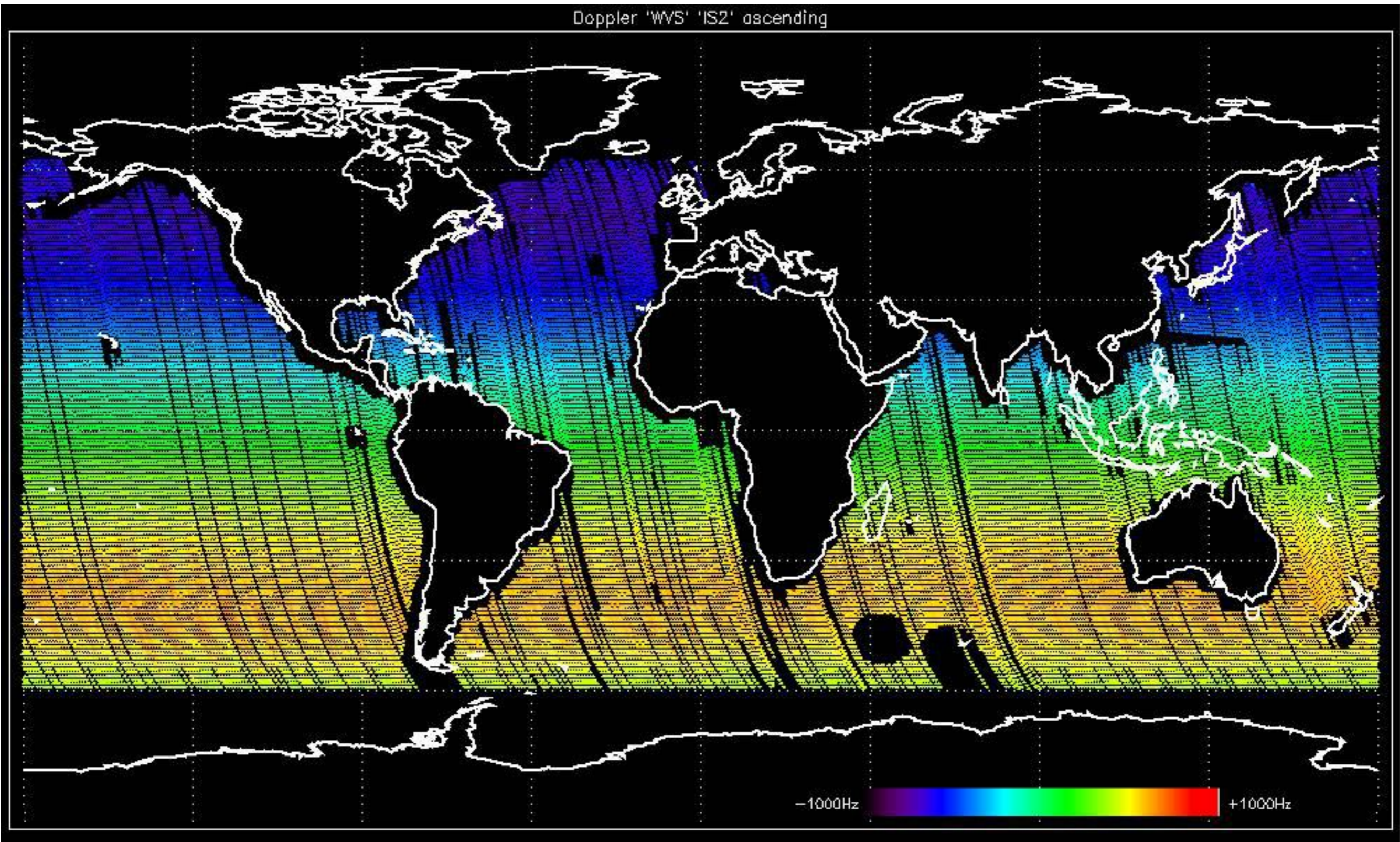
Doppler 'GM1' 'SS1' ascending



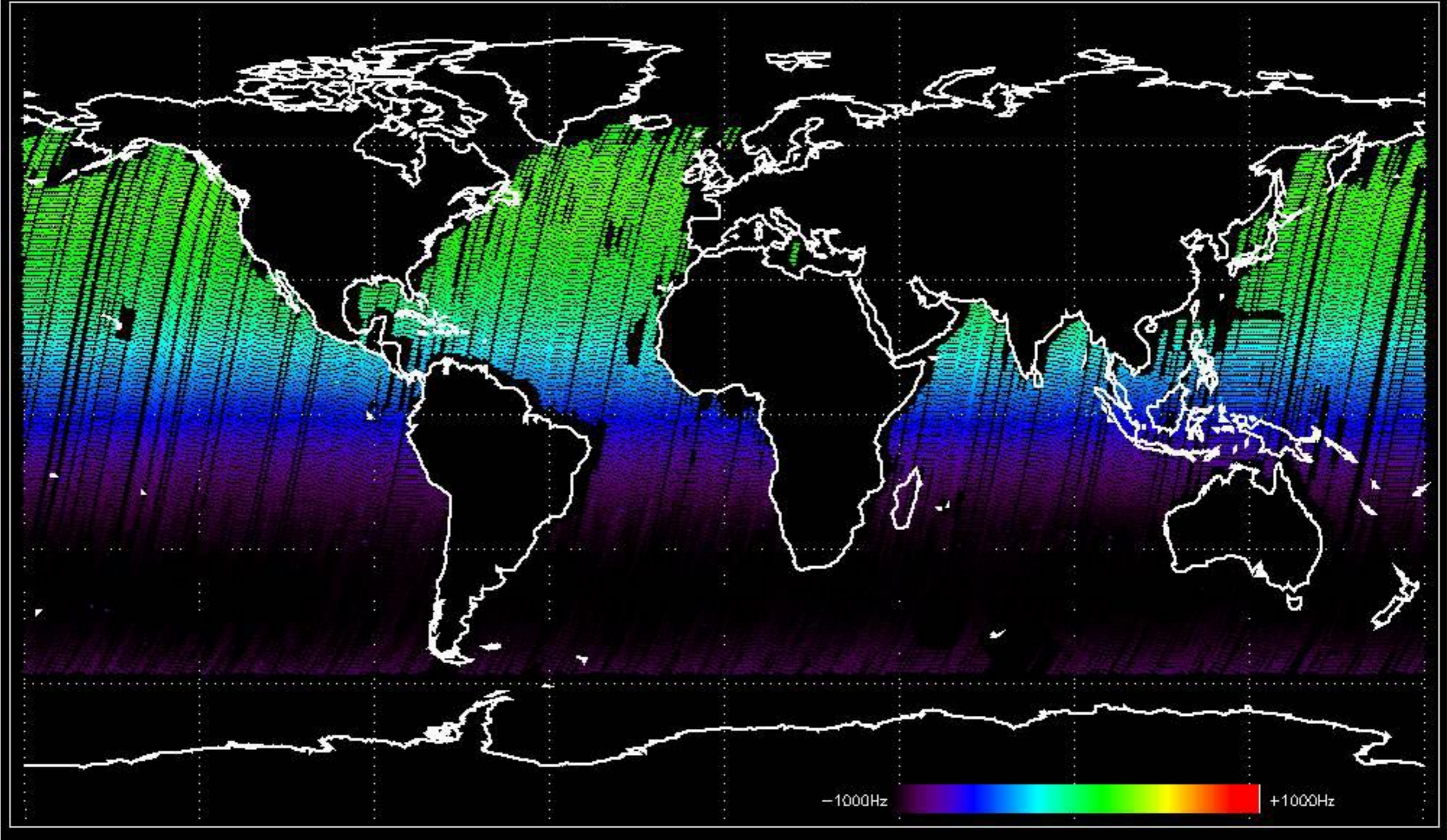
Doppler 'GM1' 'SS1' descending

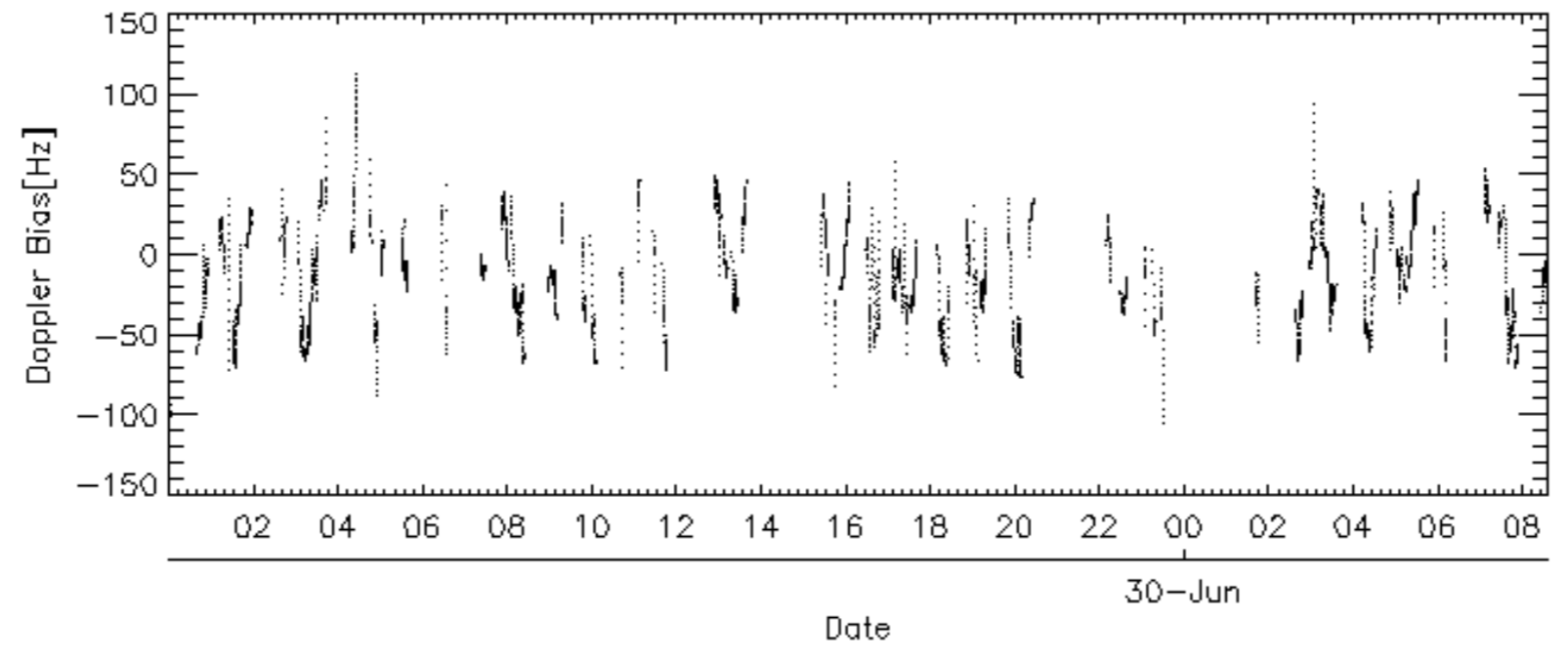
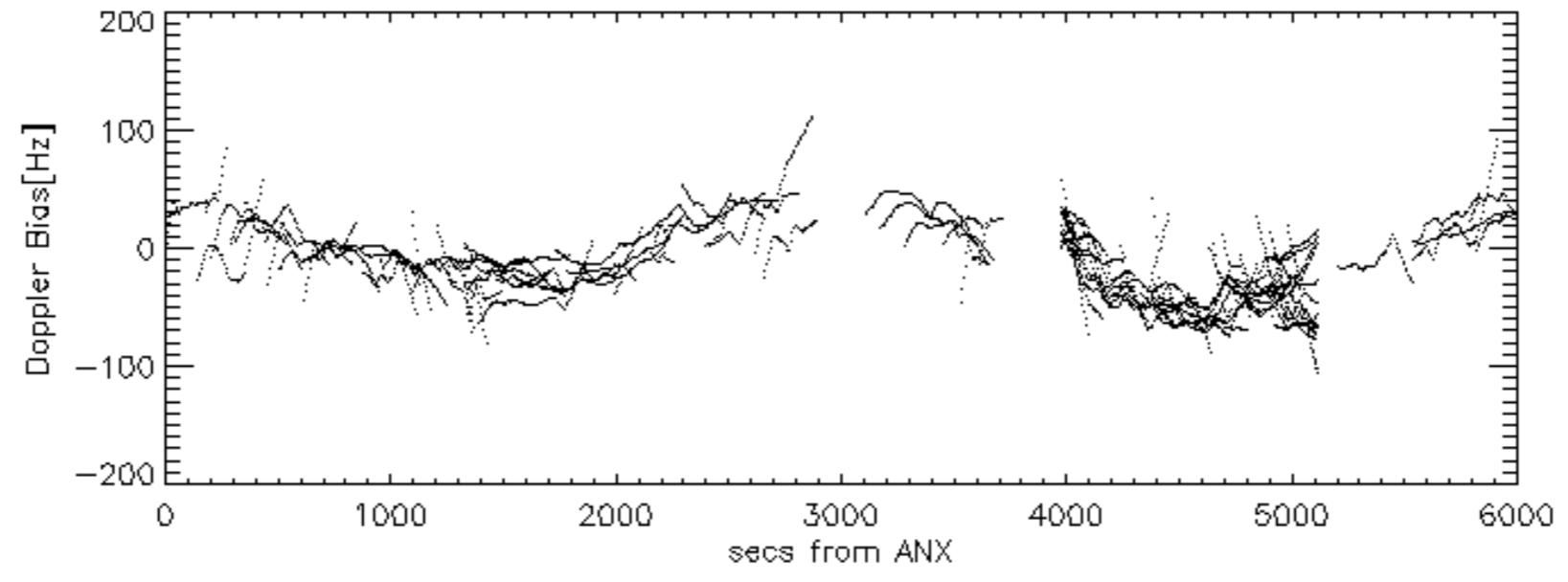
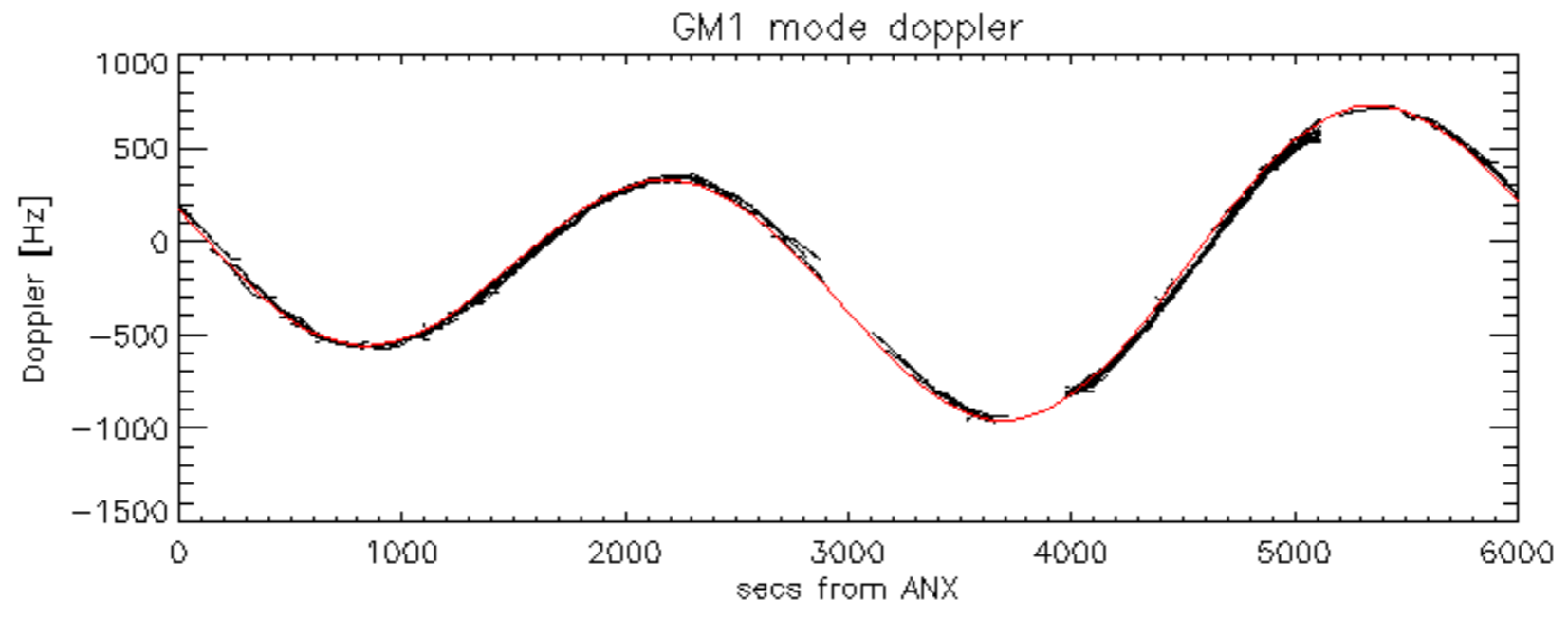


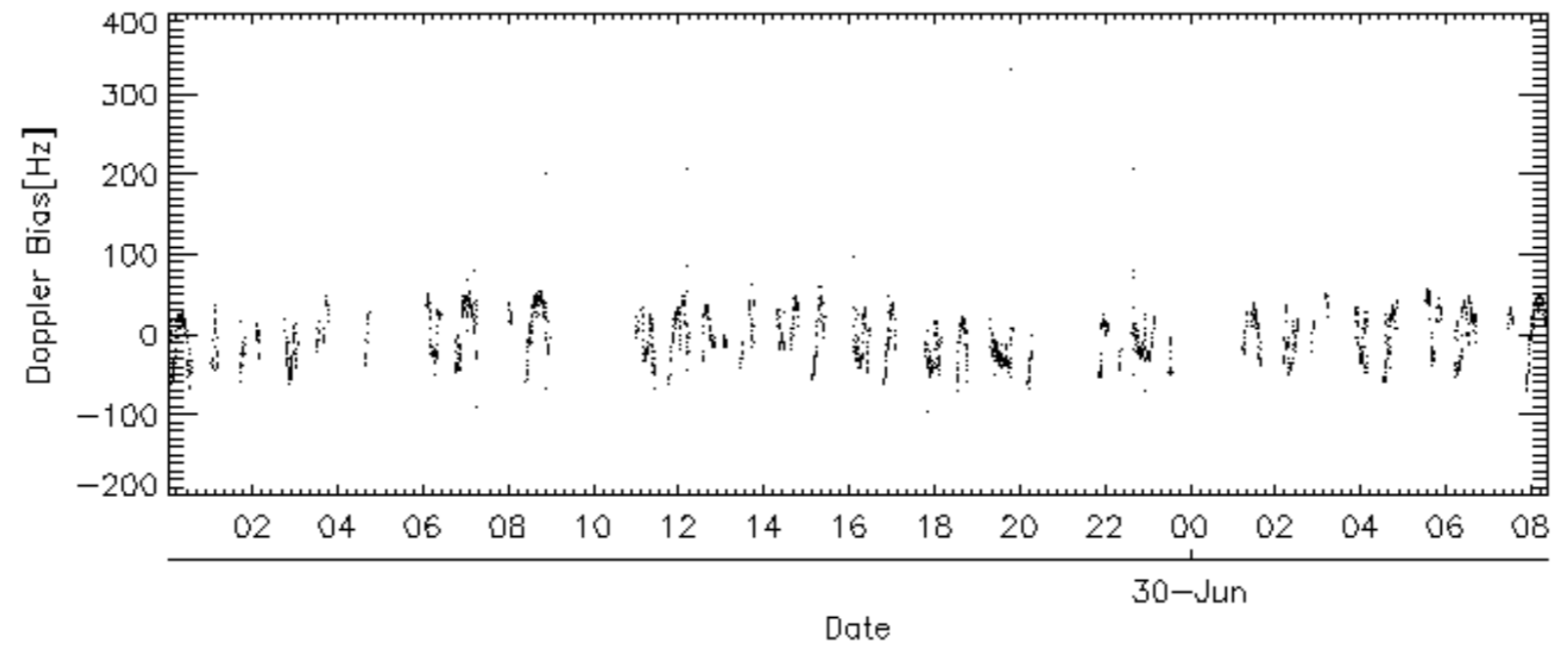
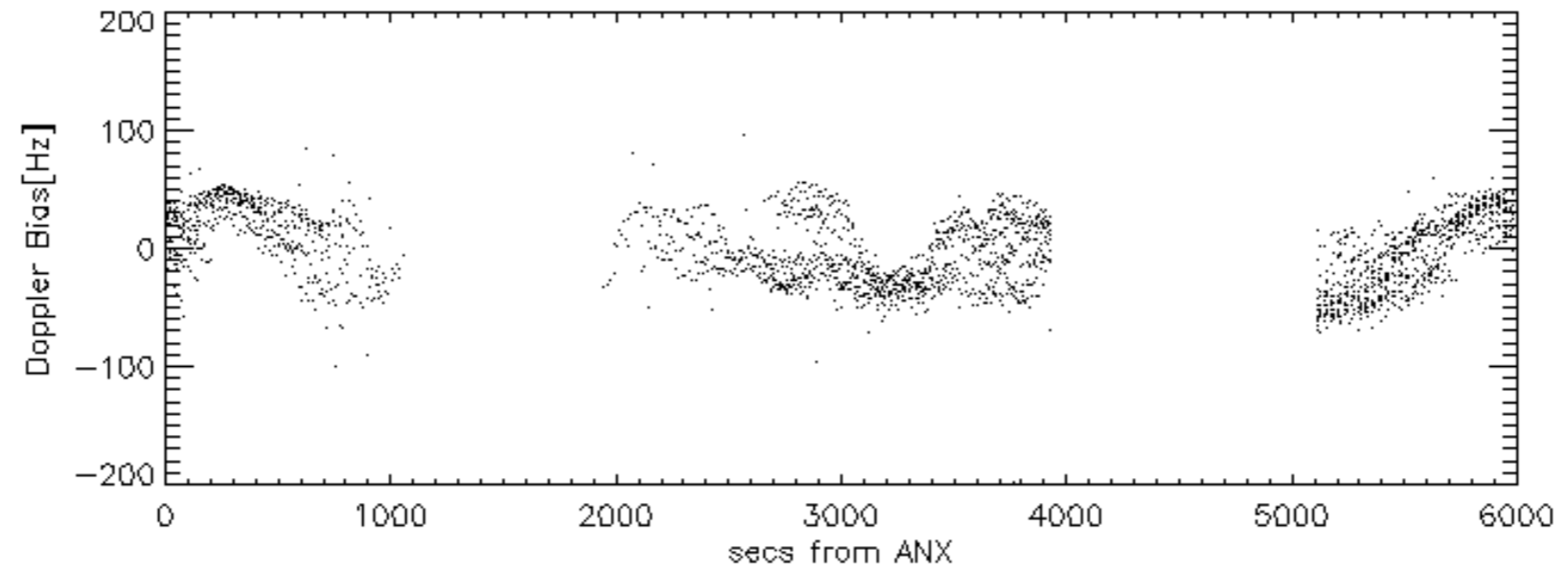
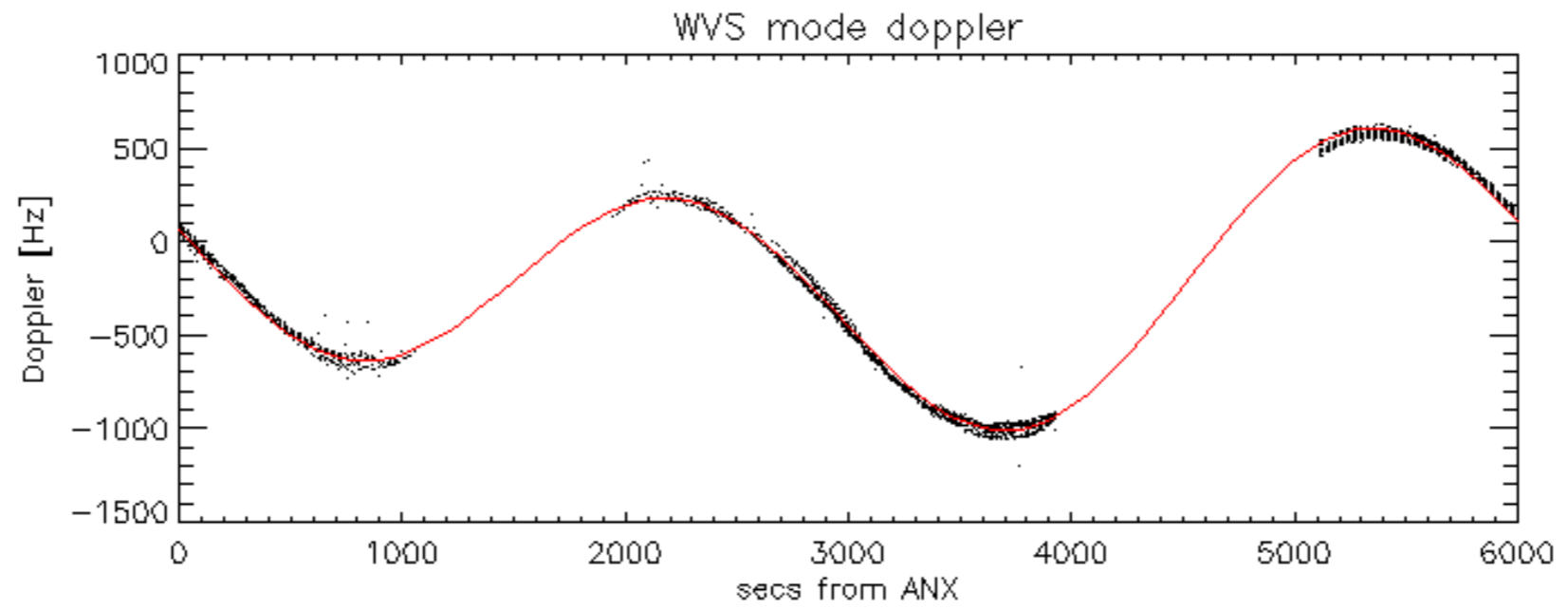
Doppler 'WVS' 'IS2' ascending



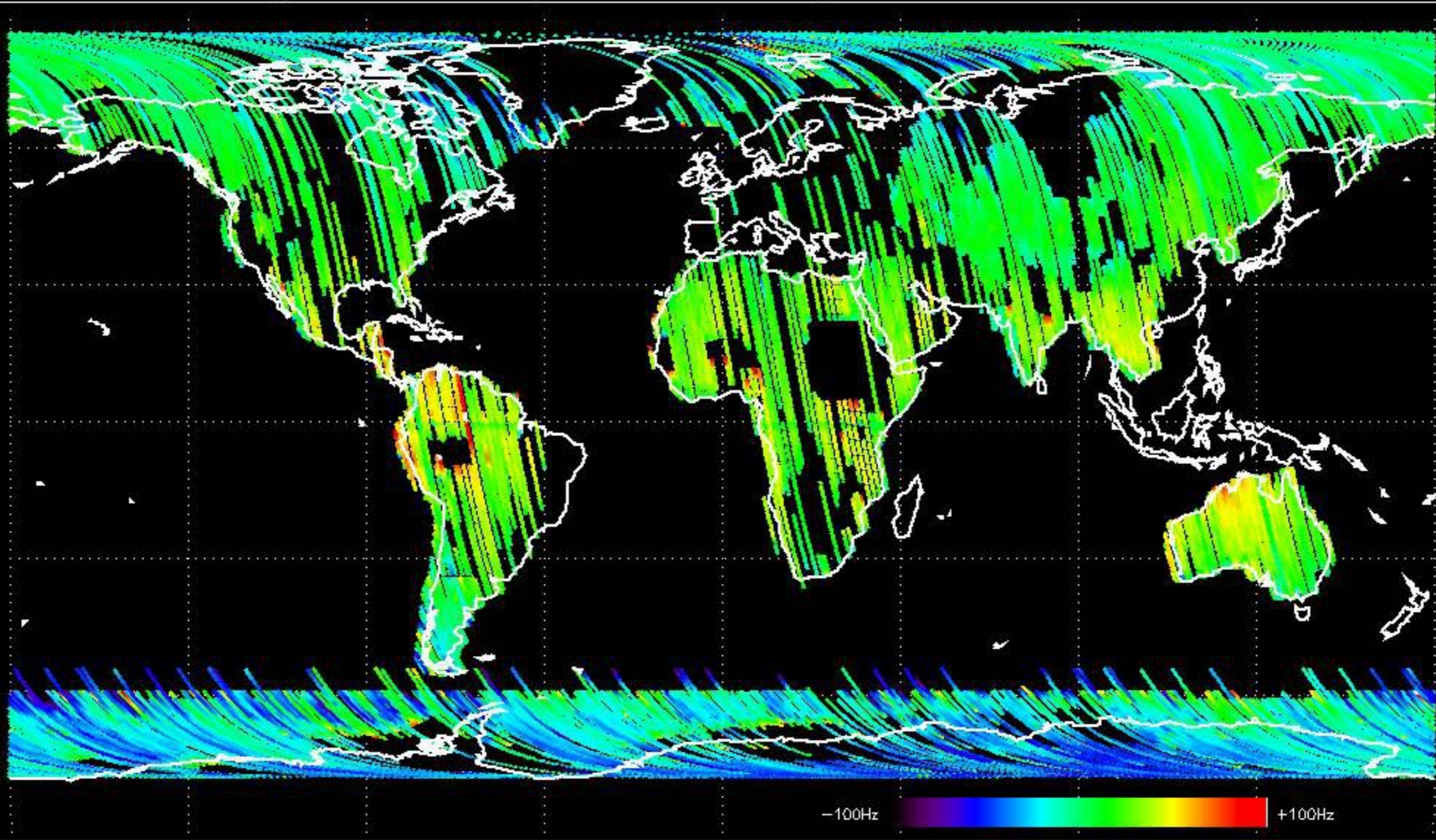
Doppler 'WVS' 'IS2' descending



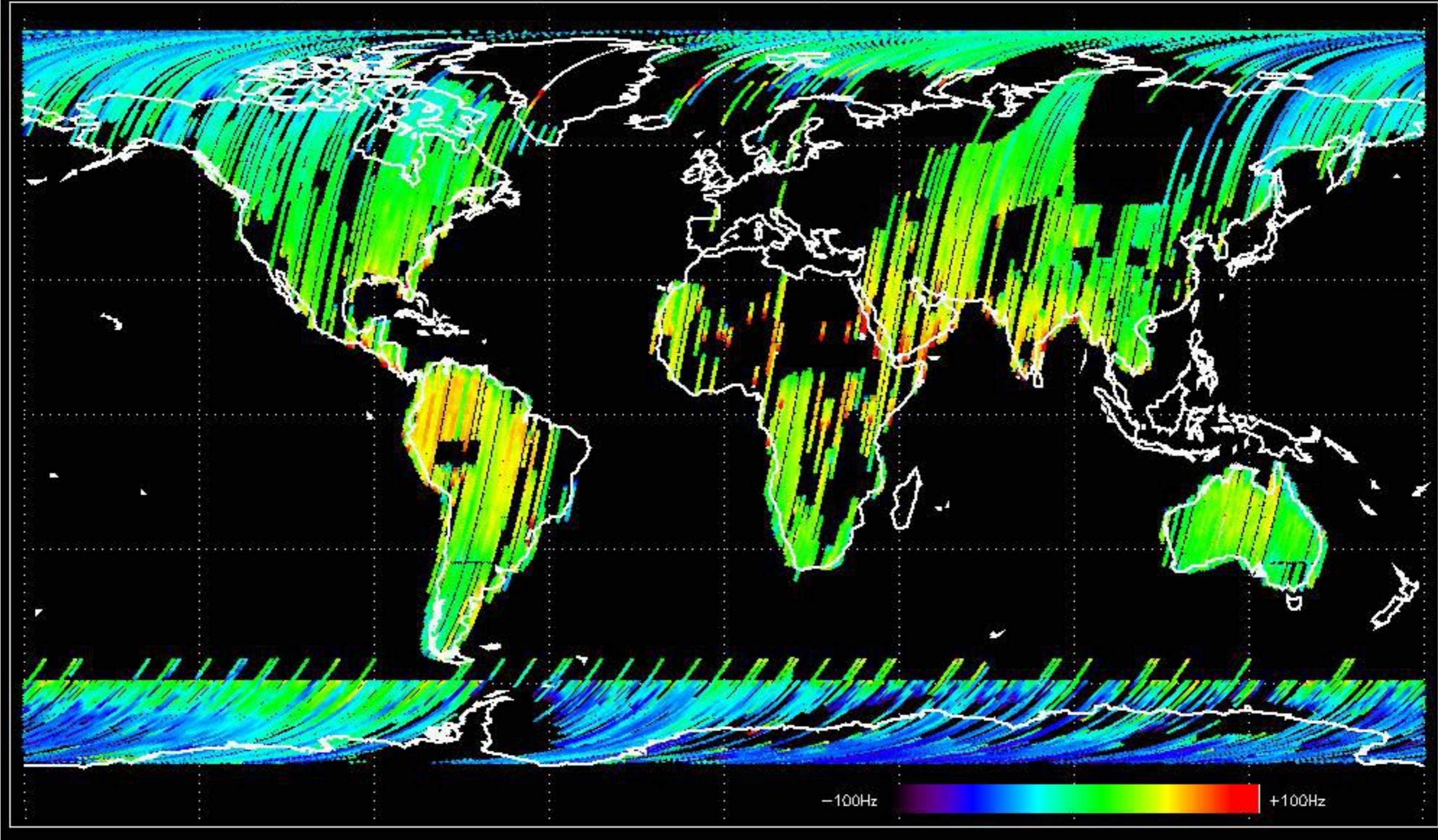




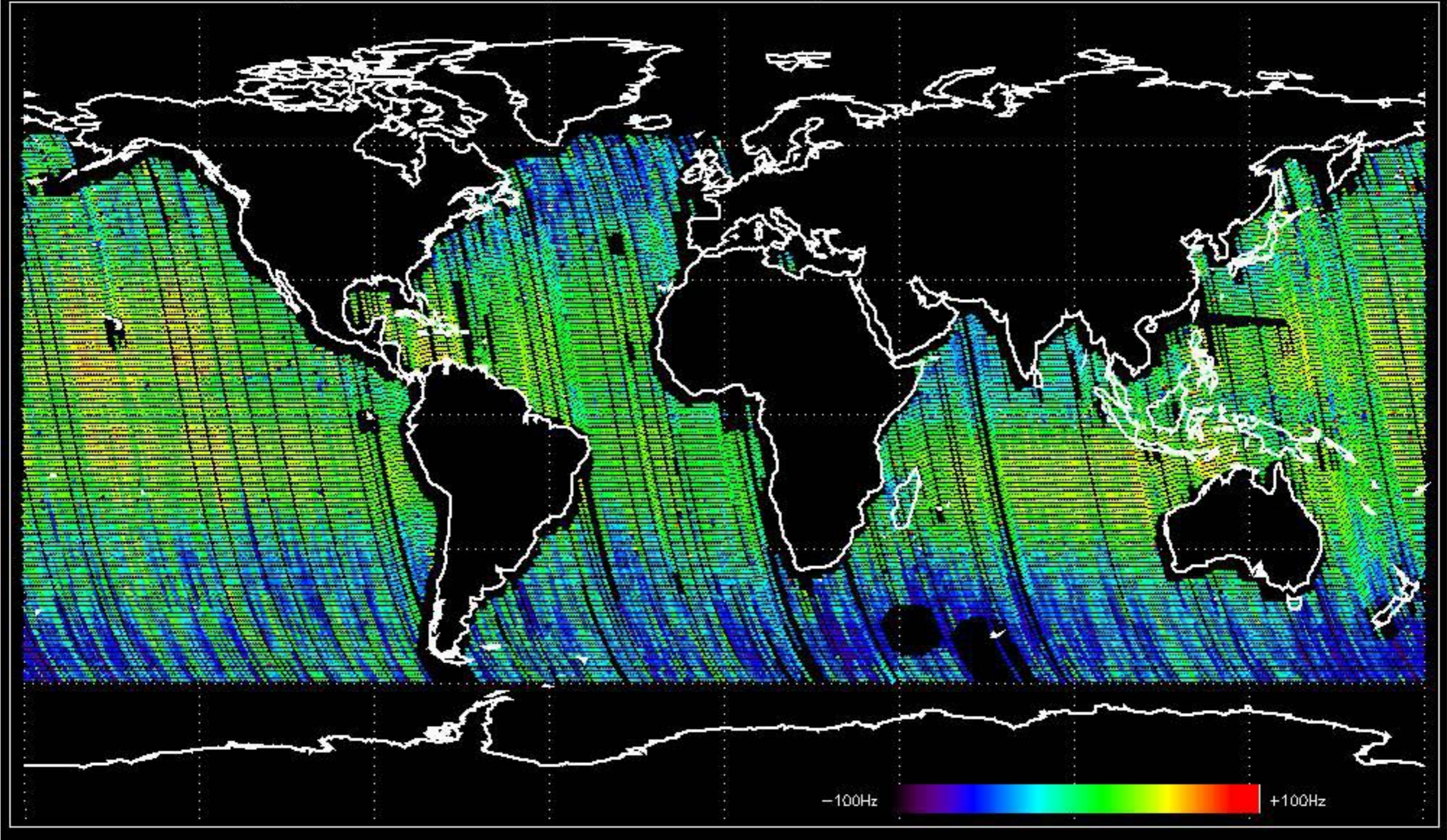
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -18.993715 Hz



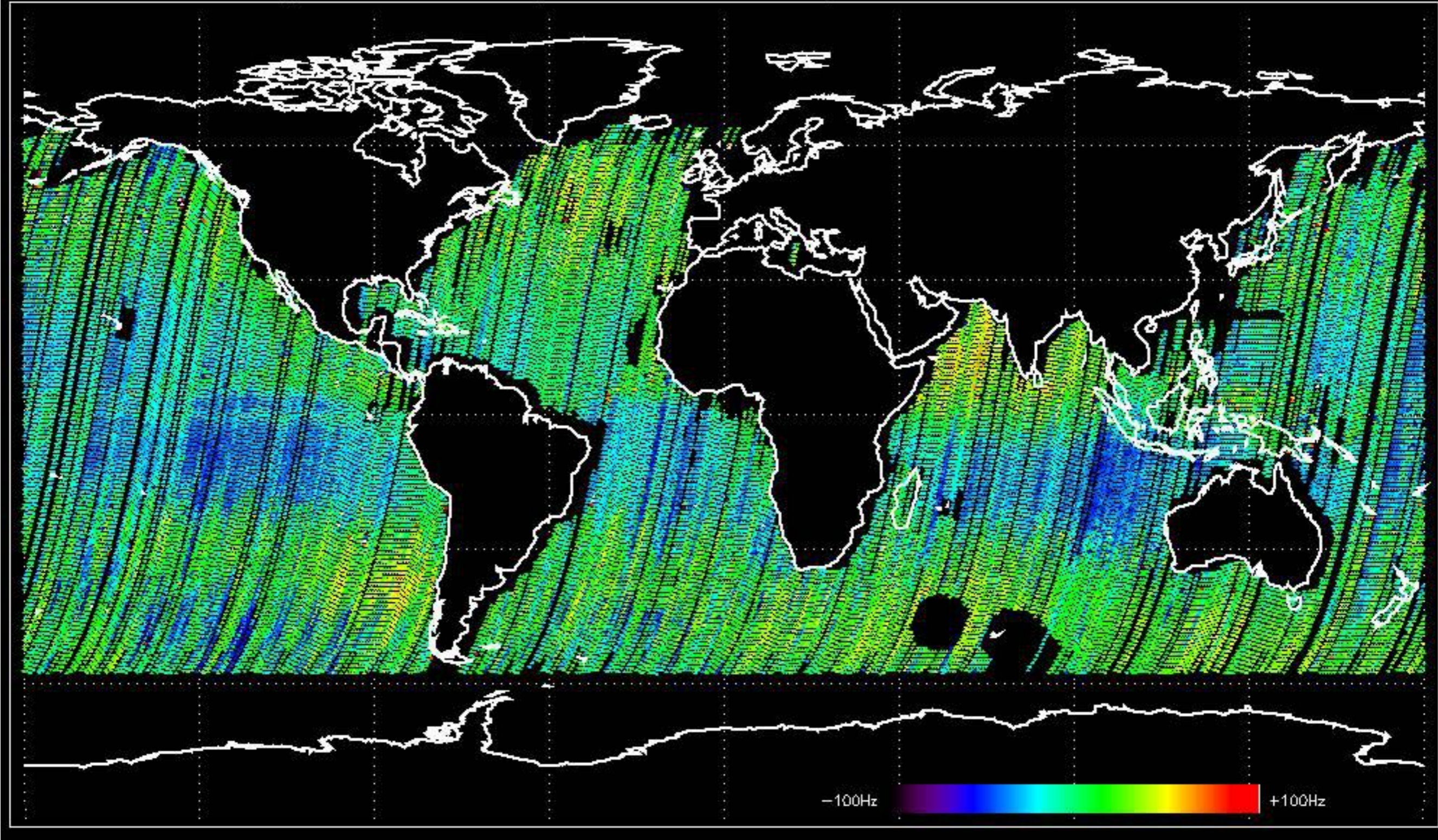
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -9.4136422 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -7.3556933 Hz

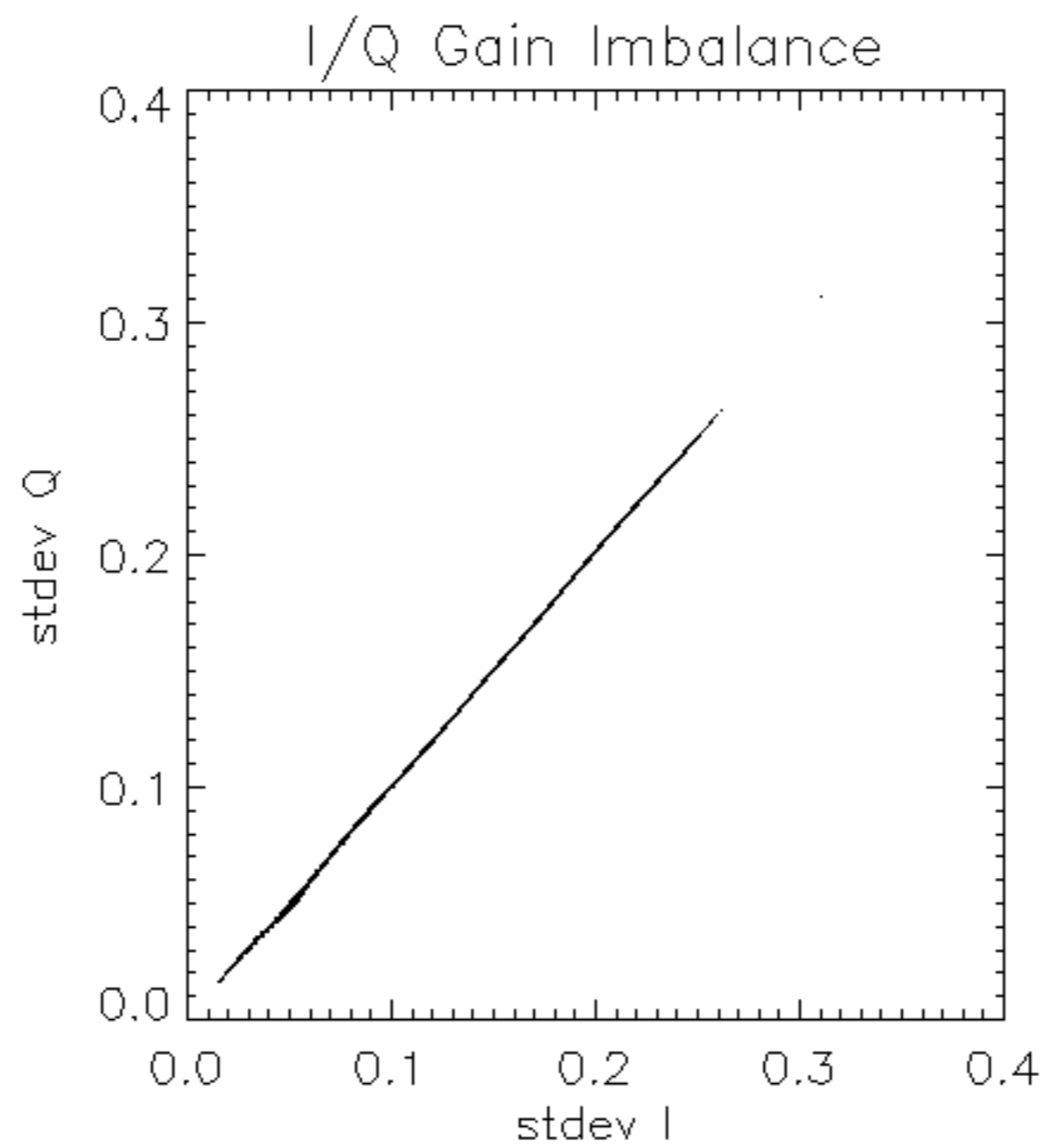


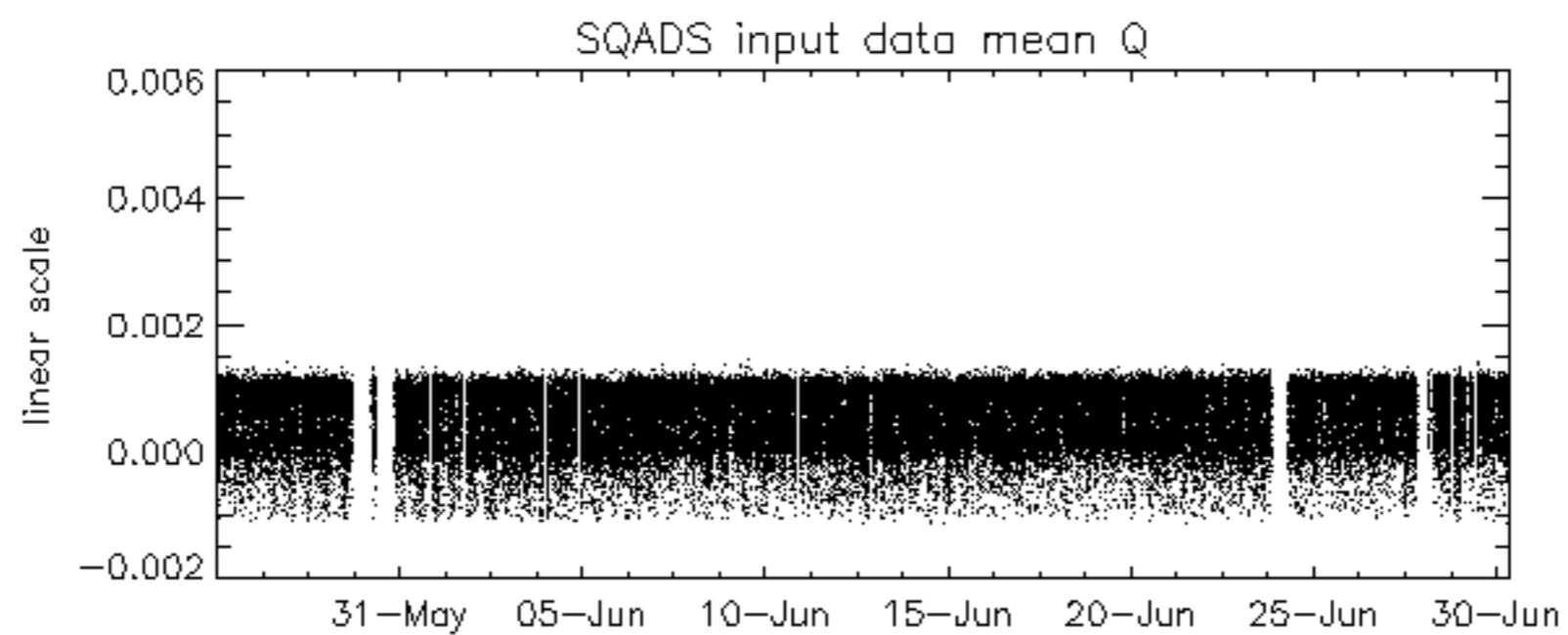
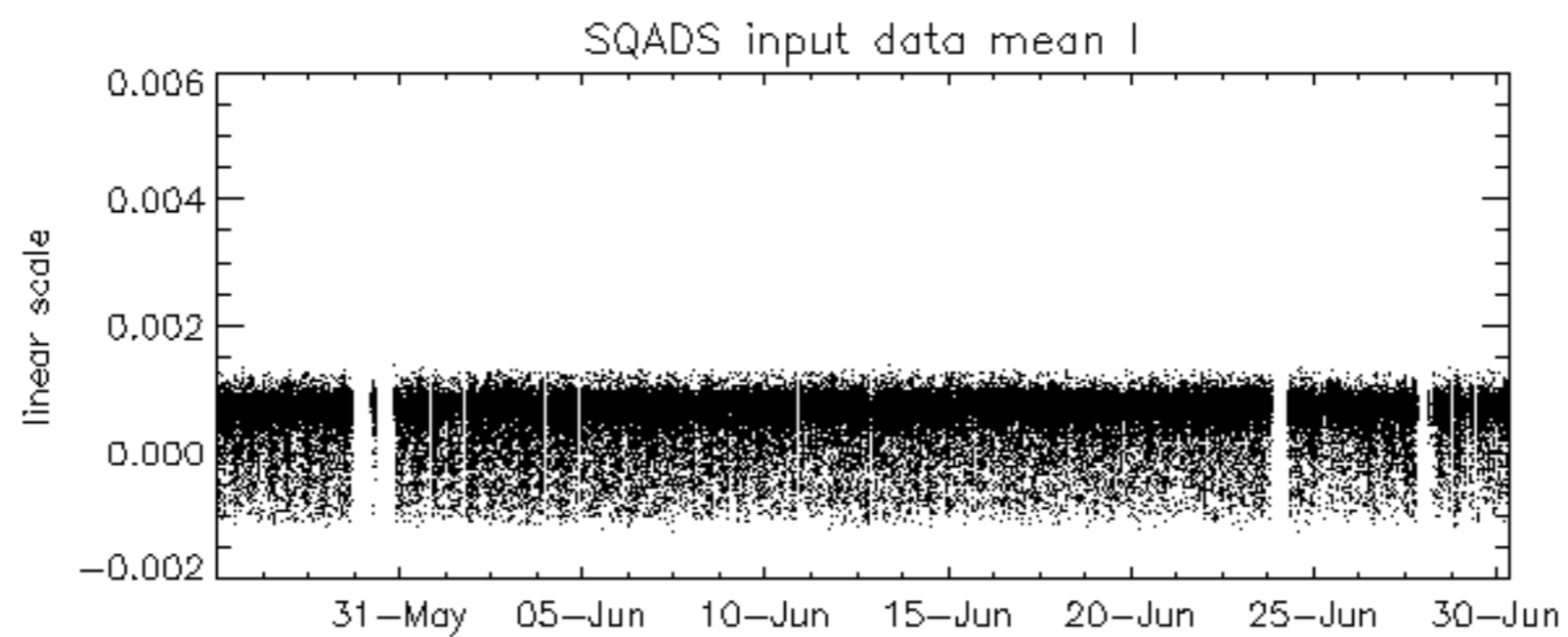
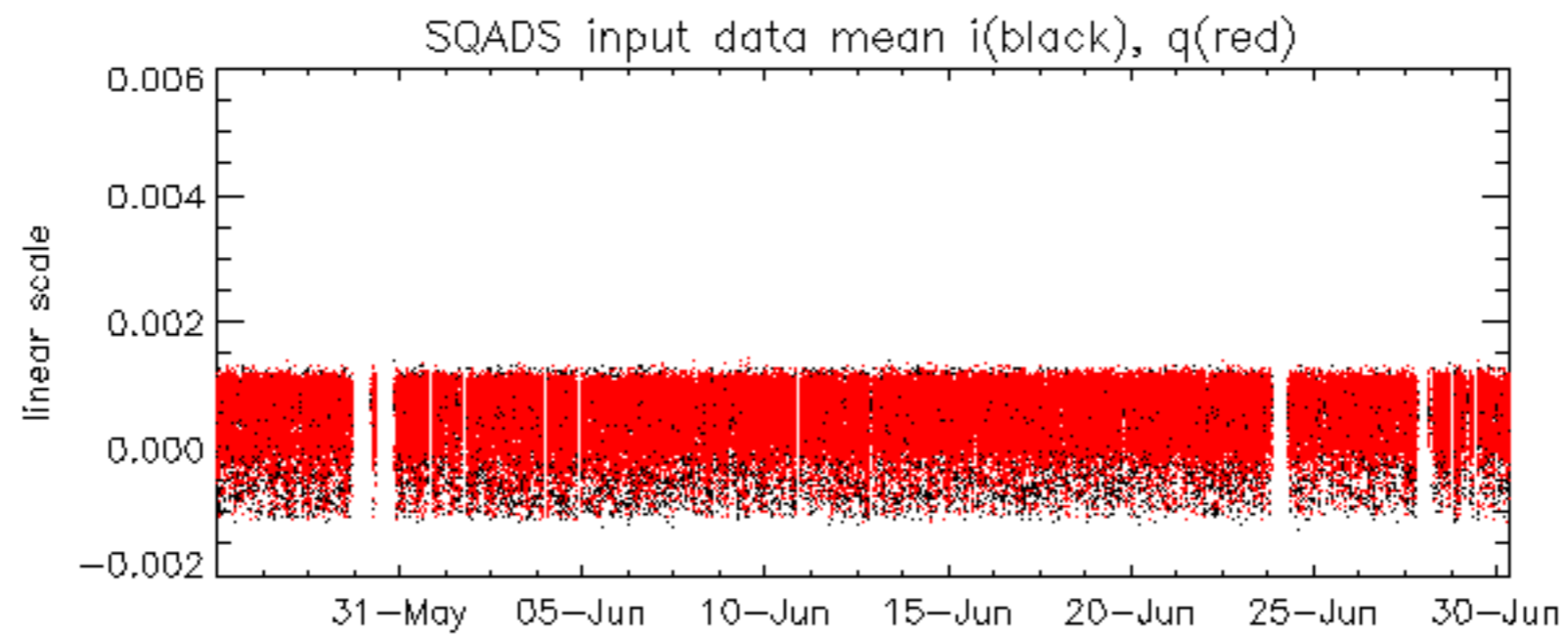
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -11.962916 Hz

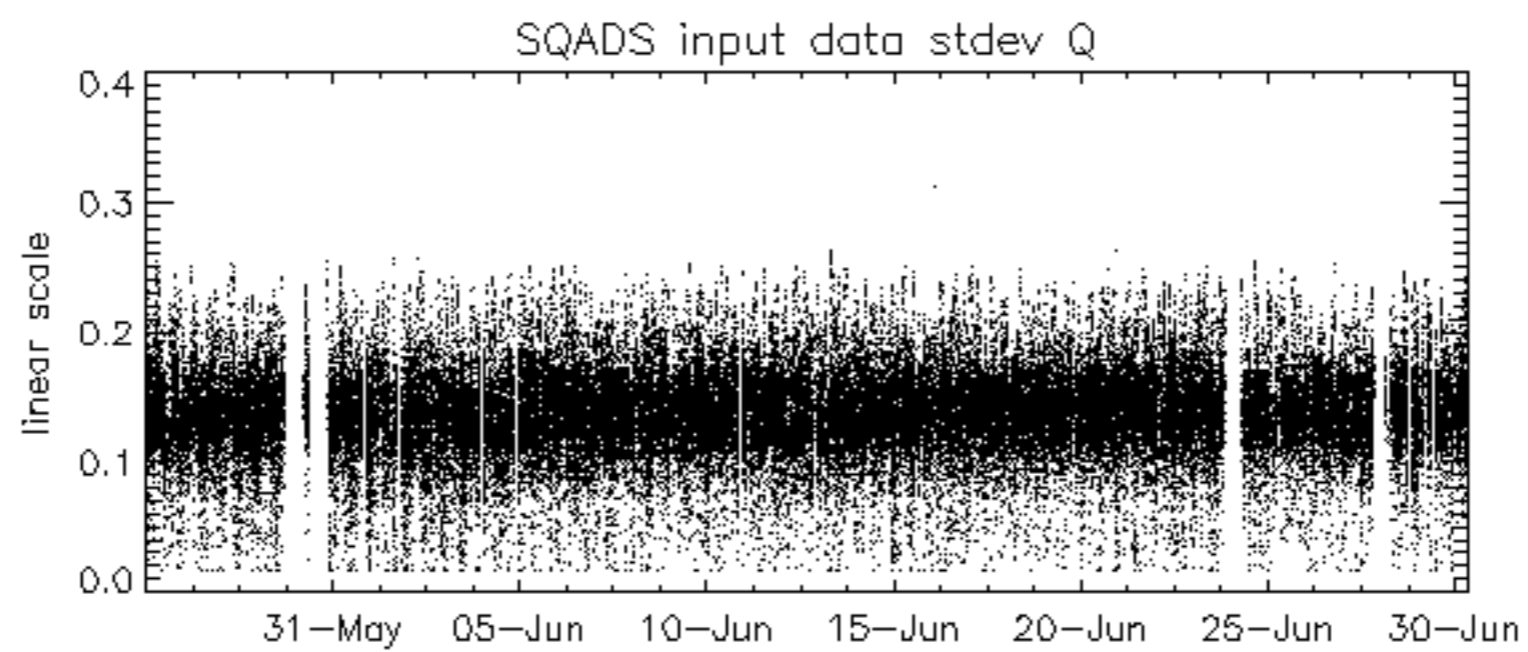
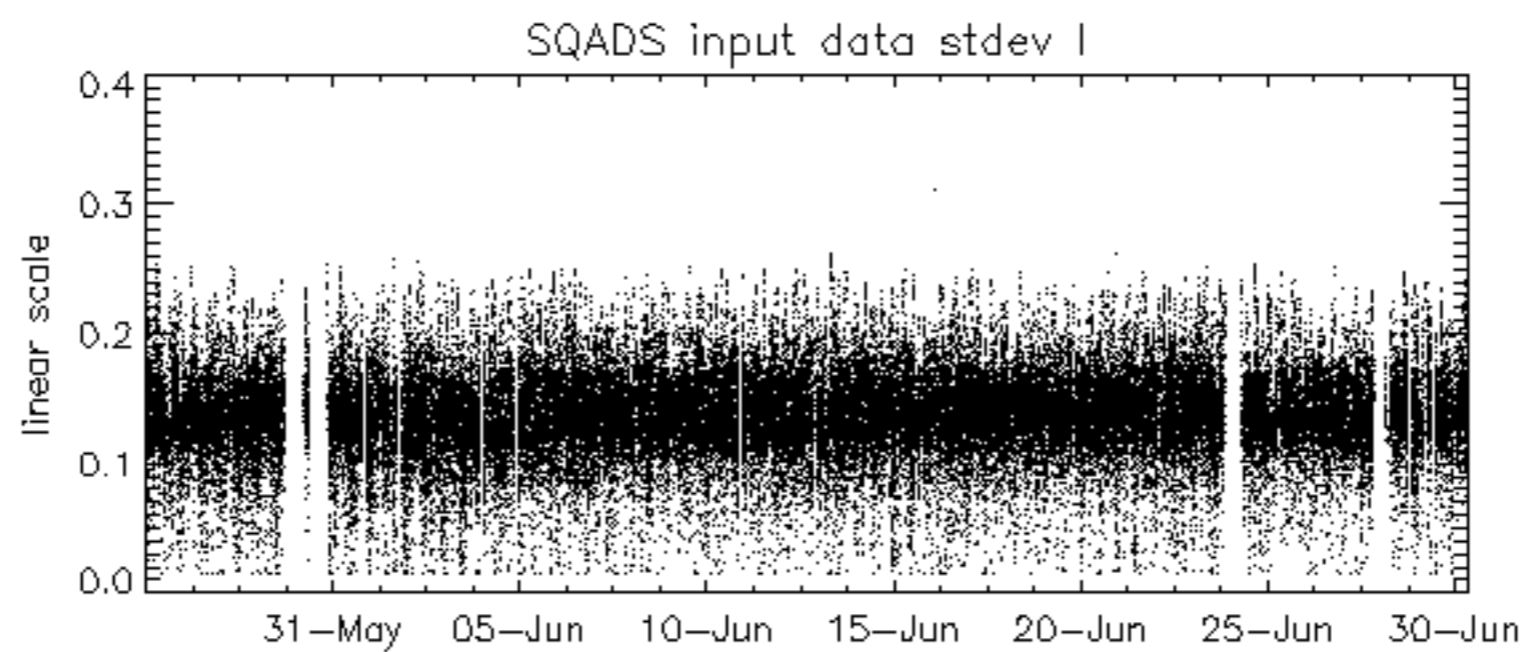
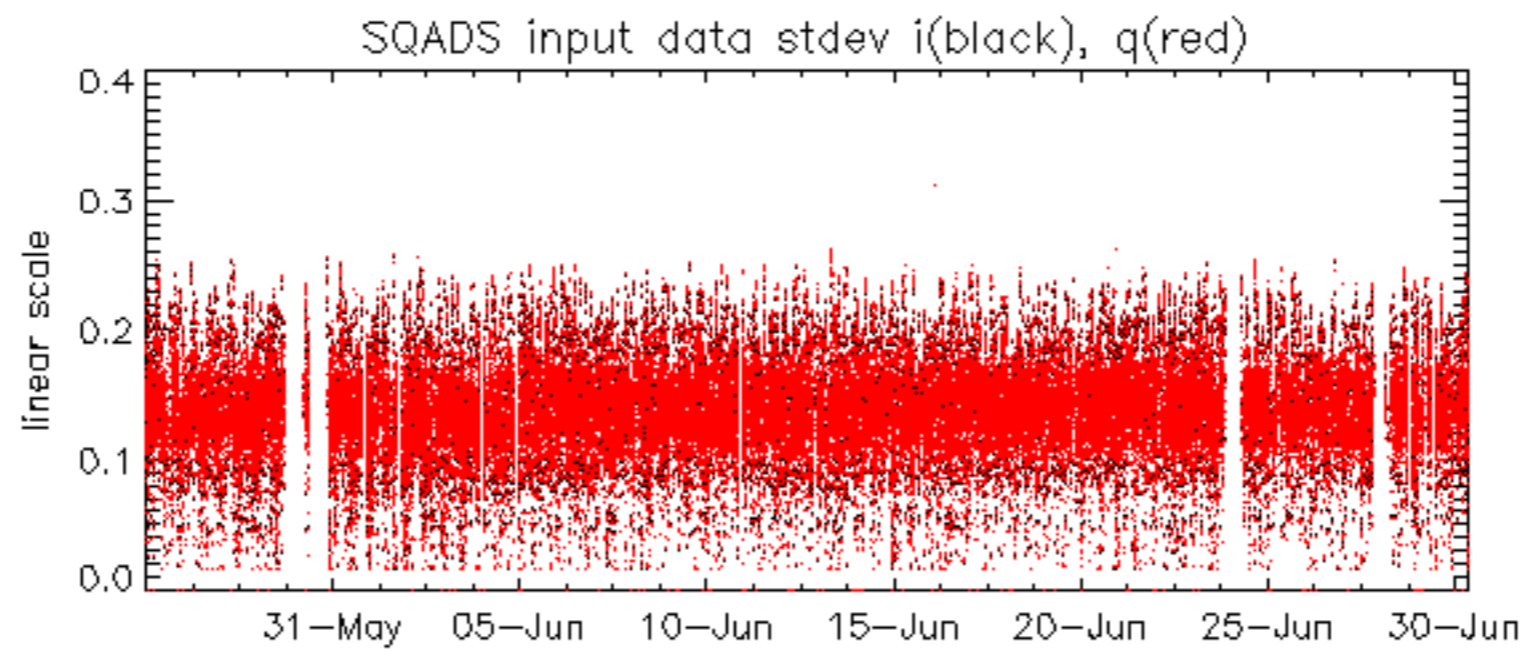


No anomalies observed on available MS products:

No anomalies observed.



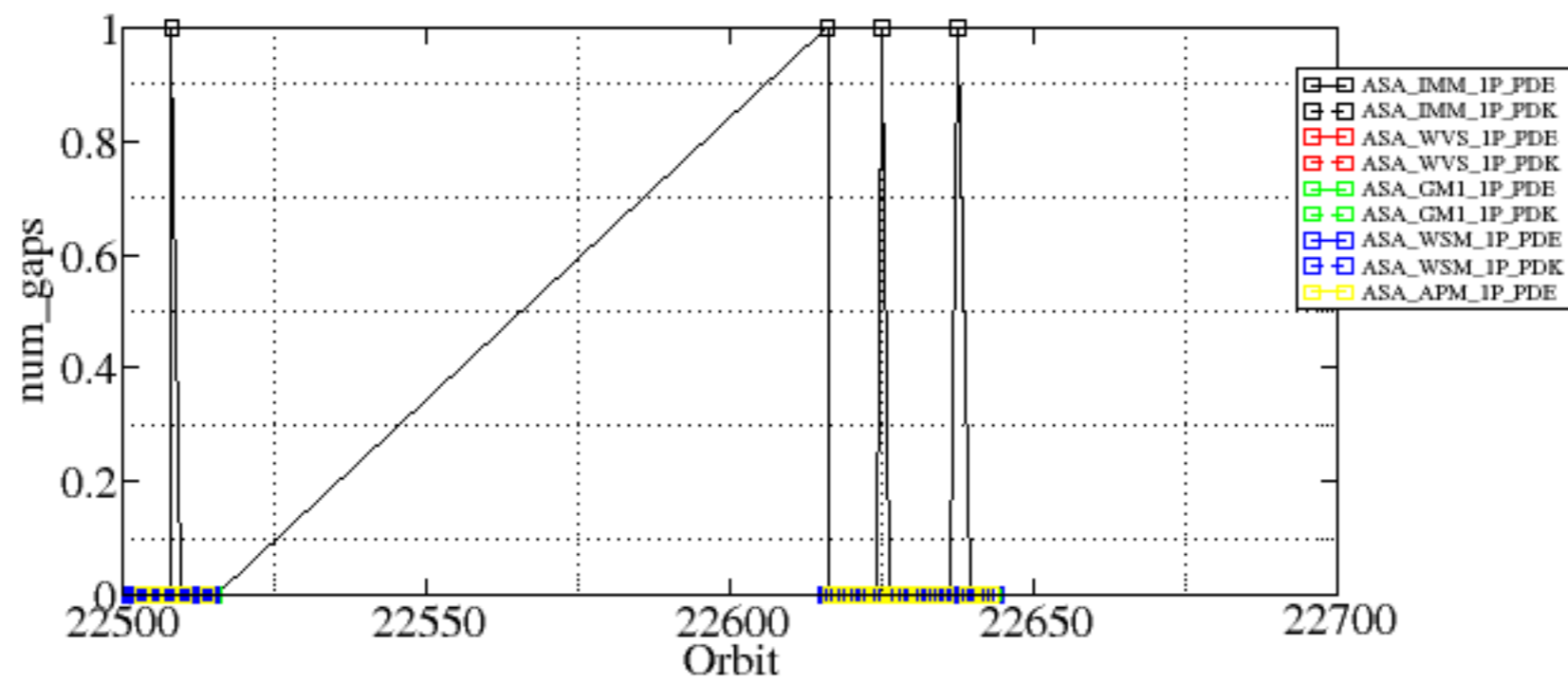


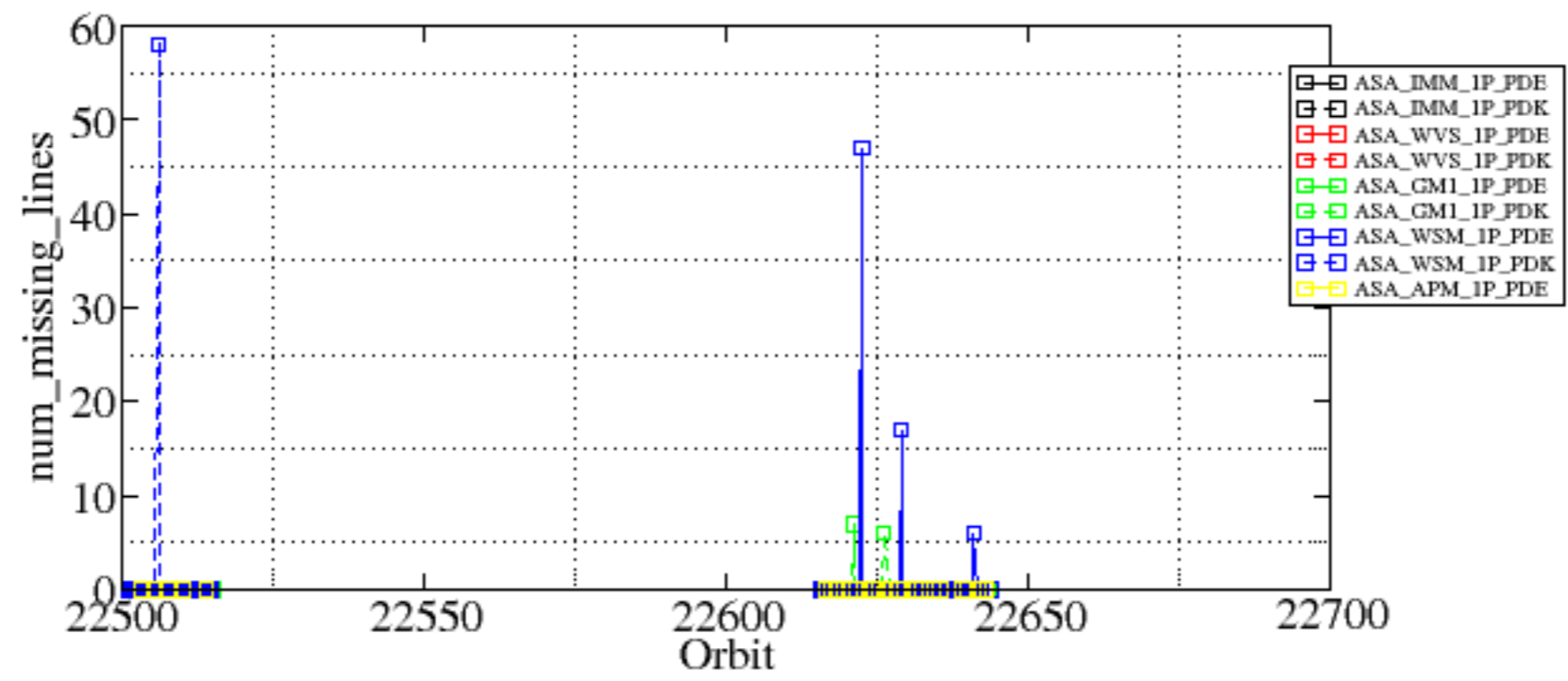


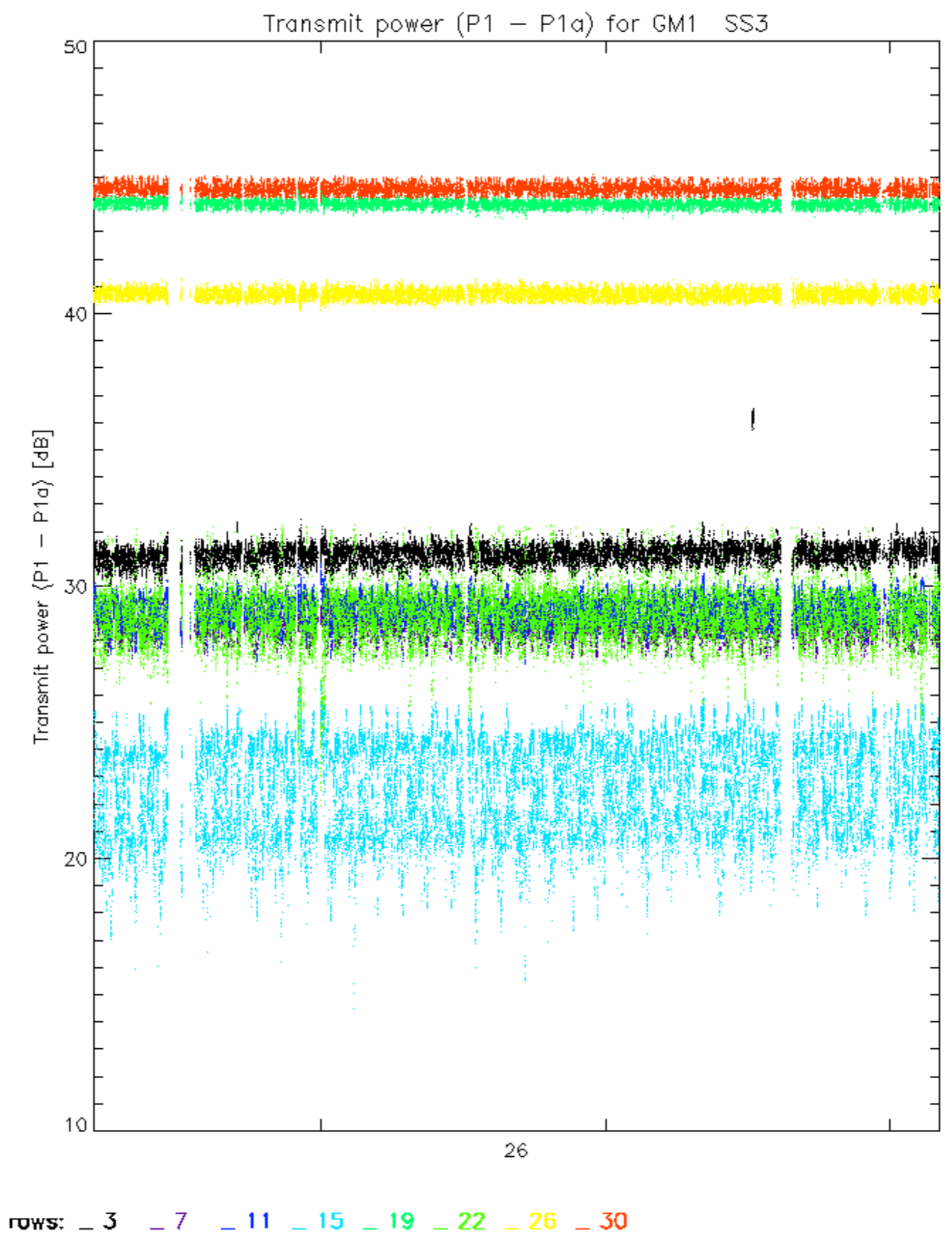
Summary of analysis for the last 3 days 2006062[890]

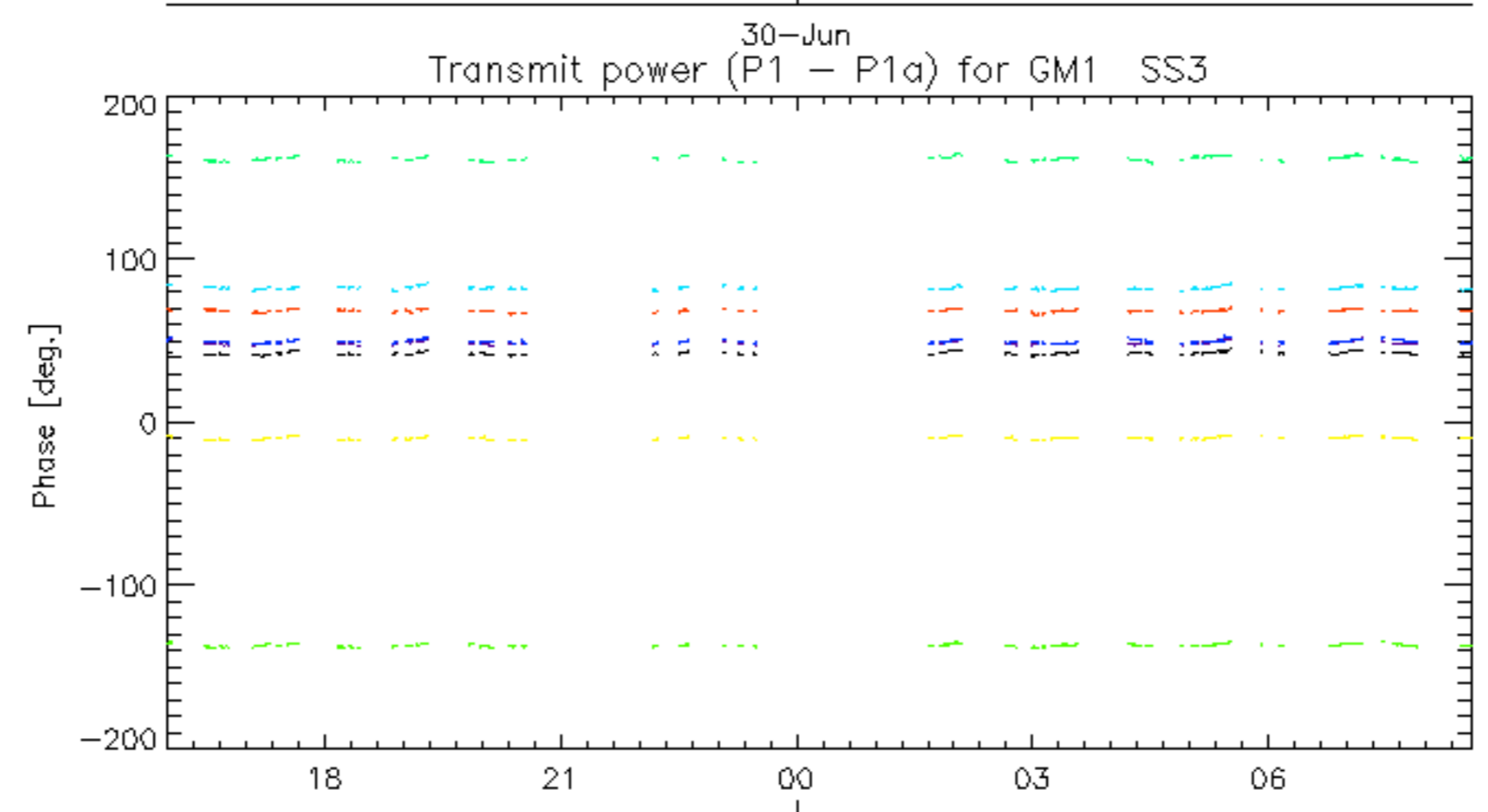
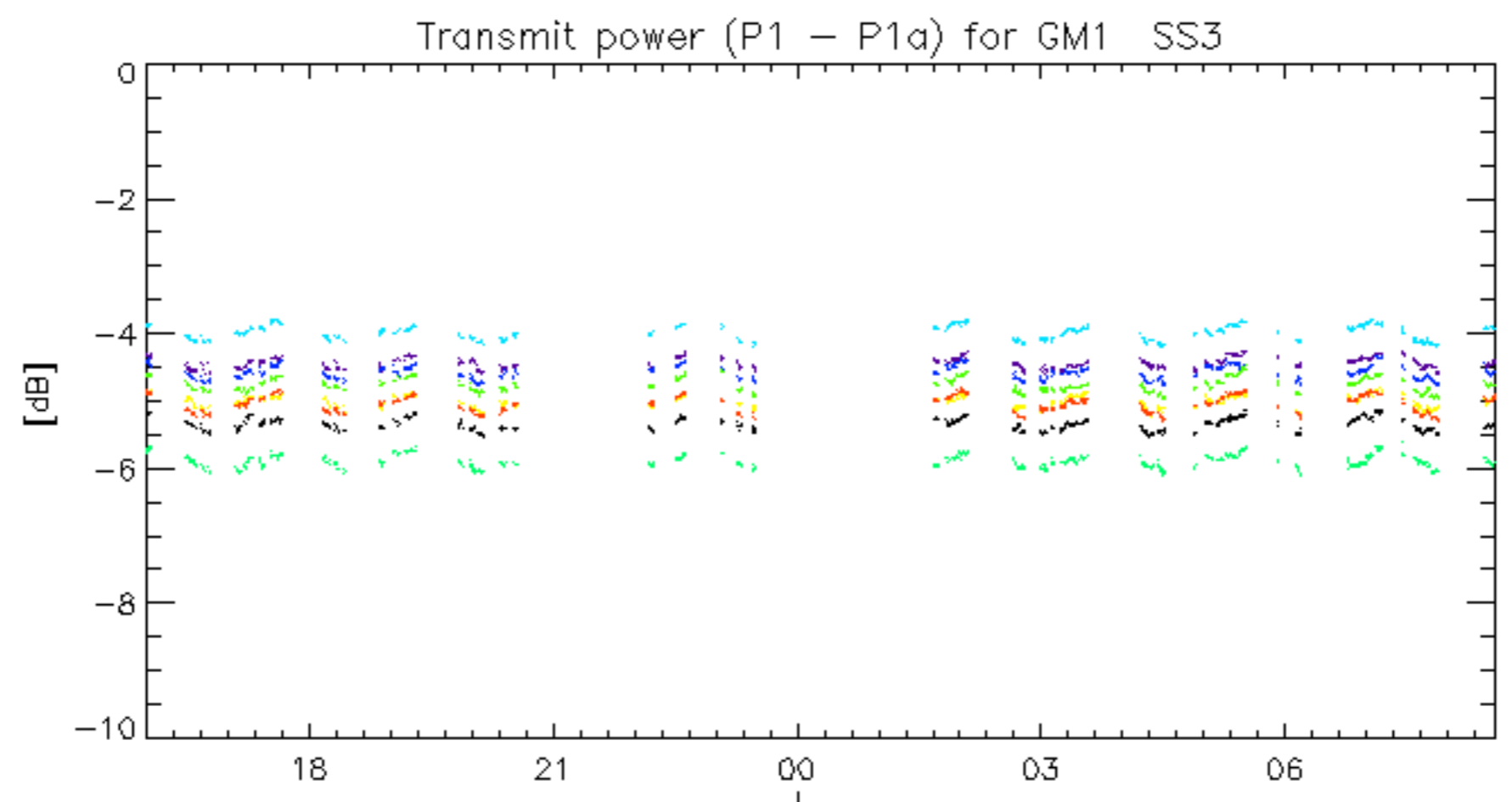
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060620_115627_000000512048_00410_22508_8157.N1	1	0
ASA_IMM_1PNPDE20060628_004521_000001932049_00016_22615_0034.N1	1	0
ASA_IMM_1PNPDE20060628_010203_000000692049_00017_22616_0025.N1	1	0
ASA_IMM_1PNPDE20060628_155408_000000412049_00025_22624_0069.N1	1	0
ASA_IMM_1PNPDE20060629_125213_000000502049_00038_22637_0120.N1	1	0
ASA_GM1_1PNPDK20060628_092952_000005862049_00022_22621_0014.N1	0	7
ASA_GM1_1PNPDK20060628_174527_000005672049_00027_22626_0046.N1	0	6
ASA_WSM_1PNPDE20060628_113740_000000862049_00023_22622_0179.N1	0	47
ASA_WSM_1PNPDE20060628_223813_000002452049_00030_22629_0252.N1	0	17
ASA_WSM_1PNPDE20060629_184756_000002082049_00042_22641_0407.N1	0	6
ASA_WSM_1PNPDK20060620_082754_000000862048_00408_22506_7972.N1	0	58



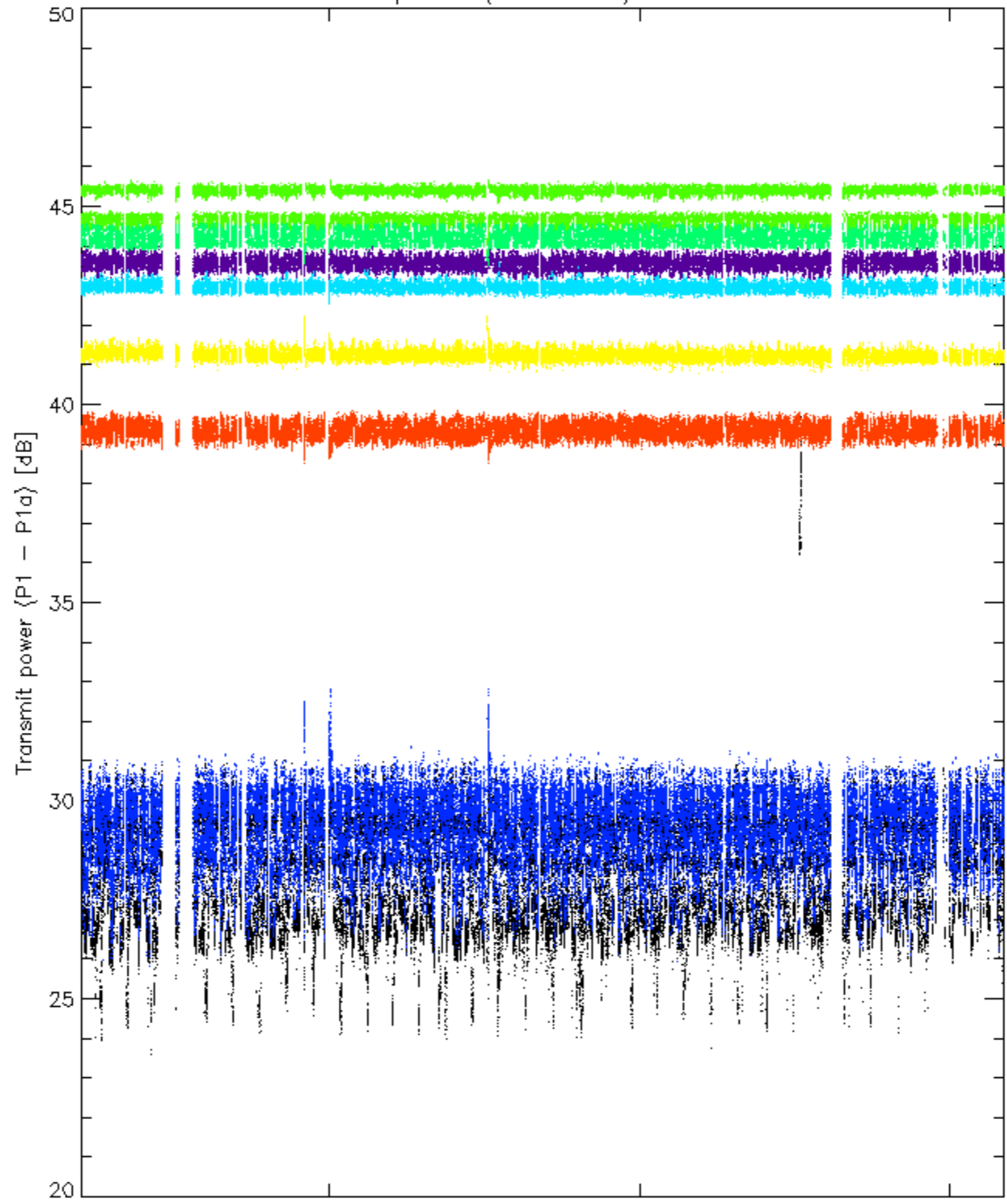




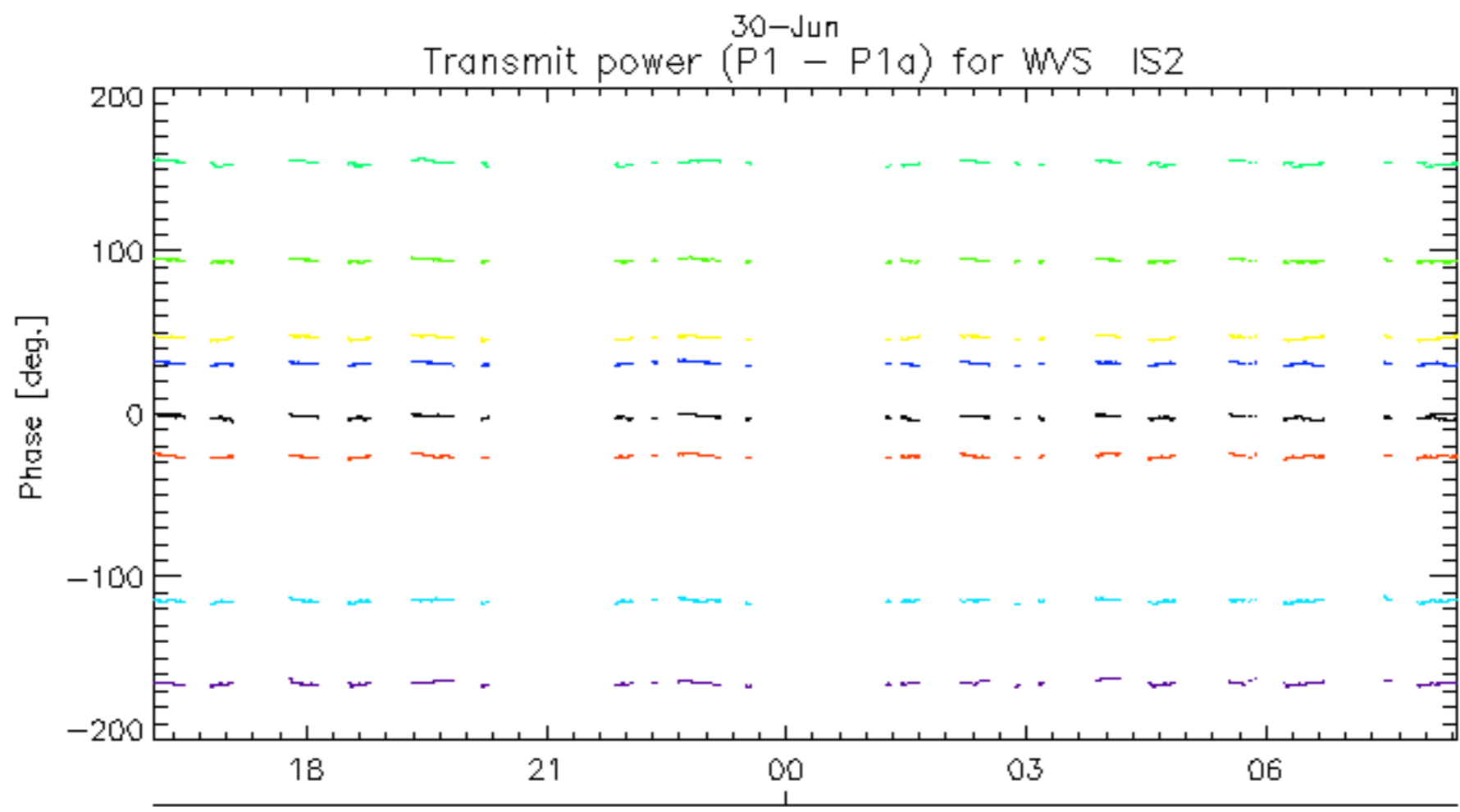
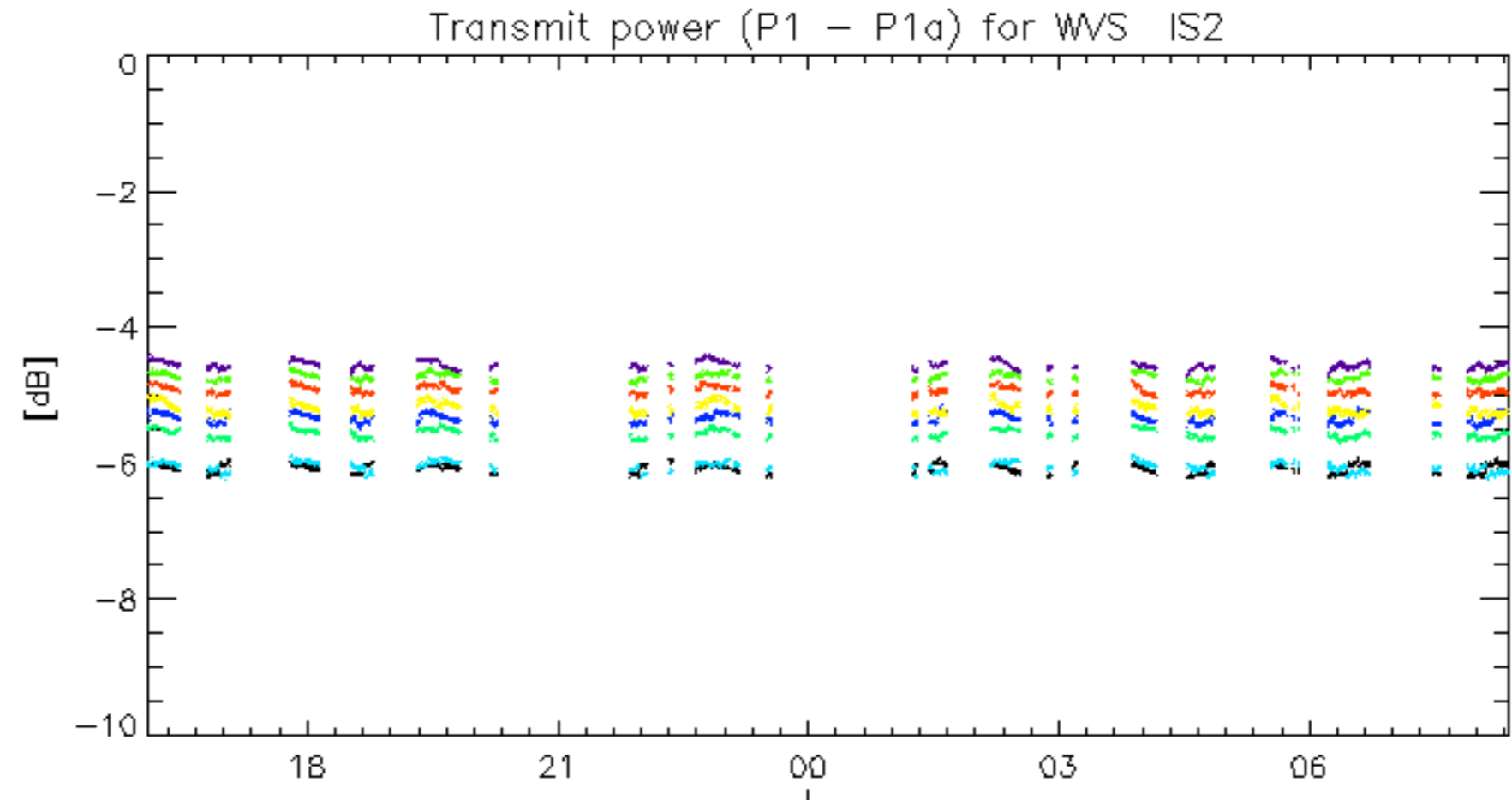


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Transmit power (P1 - P1a) for WVS IS2



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



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

No unavailabilities during the reported period.