

PRELIMINARY REPORT OF 060619

last update on Mon Jun 19 16:45:21 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 2006-06-18 00:00:00 to 2006-06-19 16:45:21

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	31	67	17	1	0
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	31	67	17	1	0
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	31	67	17	1	0
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	31	67	17	1	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20051013_151540_20050916_195733_20061231_000000	43	55	63	11	41
ASA_XCA_AXVIEC20051219_162245_20050916_195733_20061231_000000	43	55	63	11	41
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	43	55	63	11	41
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	43	55	63	11	41

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	20060617 060350

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	-3.935701	0.018469	0.040125
7	P1	-3.133870	0.015848	-0.045826
11	P1	-4.107216	0.019498	0.006635
15	P1	-6.146863	0.020245	-0.039857
19	P1	-3.346779	0.008548	-0.064865
22	P1	-4.515642	0.011562	-0.018091
26	P1	-3.971848	0.017014	0.014060
30	P1	-5.749849	0.008966	-0.016621
3	P1	-16.510826	0.249561	0.073315
7	P1	-17.220337	0.149978	-0.138742
11	P1	-16.953220	0.309294	-0.080100
15	P1	-13.207752	0.216438	0.071279
19	P1	-14.326579	0.051257	-0.148148
22	P1	-16.168161	0.367552	0.009645
26	P1	-15.223079	0.230032	0.104929
30	P1	-17.121939	0.405662	-0.185258

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.147852	0.079515	0.121770
7	P2	-22.032314	0.095494	0.102156
11	P2	-15.876792	0.109155	0.121981
15	P2	-7.159431	0.092370	0.000419
19	P2	-9.172271	0.083724	-0.016469
22	P2	-18.158503	0.081677	-0.072809
26	P2	-16.399569	0.085642	-0.067537
30	P2	-19.560457	0.085523	0.014948

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.184916	0.004042	-0.009810
7	P3	-8.184916	0.004042	-0.009810
11	P3	-8.184916	0.004042	-0.009810
15	P3	-8.184916	0.004042	-0.009810
19	P3	-8.184916	0.004042	-0.009810
22	P3	-8.184916	0.004042	-0.009810
26	P3	-8.184916	0.004042	-0.009810
30	P3	-8.184916	0.004042	-0.009810

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	-3.801677	0.051402	0.010606
7	P1	-2.590940	0.030689	0.044793
11	P1	-2.861283	0.023147	0.025255
15	P1	-3.508904	0.050880	-0.027663
19	P1	-3.408371	0.014356	-0.025675
22	P1	-5.080767	0.019475	0.000429
26	P1	-5.853822	0.015793	-0.034111
30	P1	-5.192325	0.026868	-0.019388
3	P1	-11.624340	0.053463	0.013836
7	P1	-9.966555	0.048969	-0.068960
11	P1	-10.215687	0.086901	-0.071728
15	P1	-10.651015	0.155018	-0.103581
19	P1	-15.536718	0.076001	-0.049323
22	P1	-20.937366	1.173045	-0.140551

26	P1	-16.475935	0.329200	0.033063
30	P1	-17.916050	0.368282	0.185428

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.836489	0.071770	0.158271
7	P2	-22.493504	0.129430	0.060353
11	P2	-11.154276	0.048130	0.076686
15	P2	-4.919017	0.048879	-0.029413
19	P2	-6.882178	0.053078	-0.012653
22	P2	-8.208175	0.042947	-0.019595
26	P2	-24.136099	0.068505	-0.088865
30	P2	-22.063675	0.056212	0.016037

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.019354	0.004898	-0.012095
7	P3	-8.019412	0.004878	-0.012088
11	P3	-8.019360	0.004873	-0.012019
15	P3	-8.019328	0.004883	-0.012076
19	P3	-8.019354	0.004880	-0.012060
22	P3	-8.019567	0.004878	-0.012405
26	P3	-8.019465	0.004879	-0.012016
30	P3	-8.019421	0.004878	-0.012120

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	0.000547075
	stdev	1.80056e-07
MEAN Q	mean	0.000518109
	stdev	2.24205e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.135829
	stdev	0.00116823
STDEV Q	mean	0.136177
	stdev	0.00118553



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2006061[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_1PNPDE20060617_182649_000000352048_00371_22469_7779.N1	0	16
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_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_1PNPDK20060617_082213_000000862048_00365_22463_7763.N1	0	35
ASA_APM_1PNPDE20060617_004226_000000562048_00360_22458_3444.N1	0	19





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)


Acsending

Descending

7.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler


Acsending

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)

Ascending

Descending

7.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler

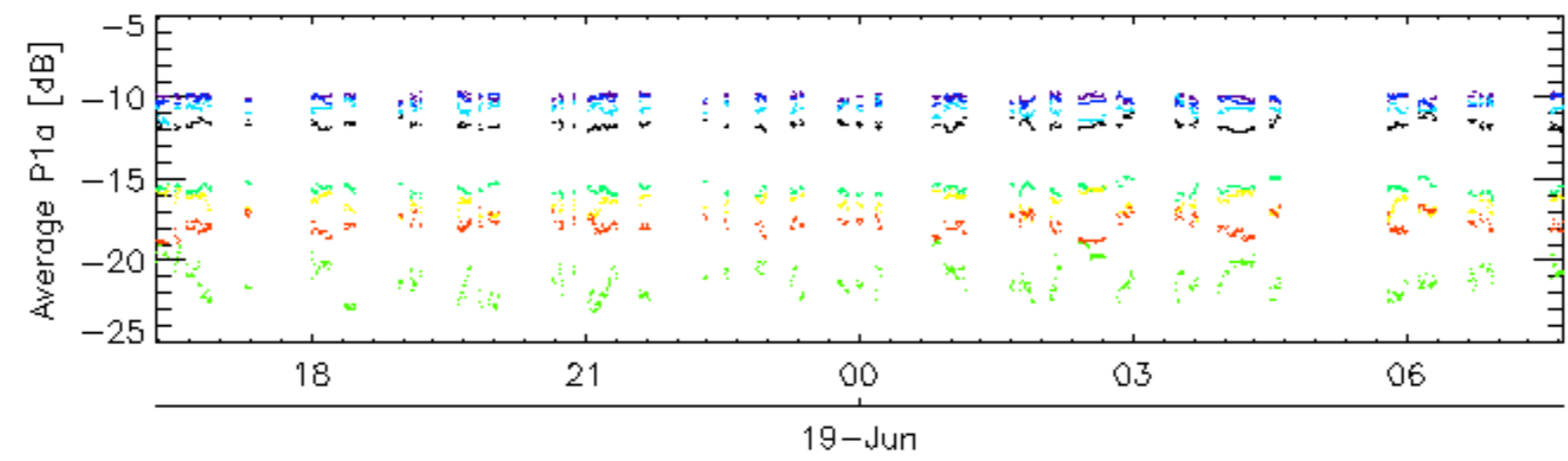
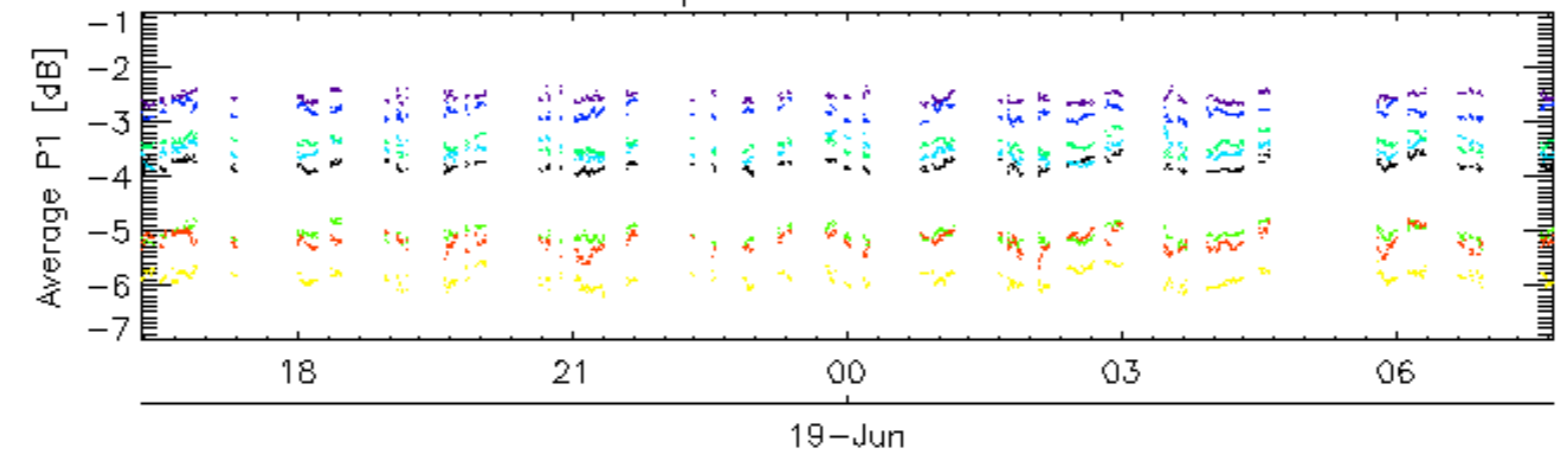
Ascending

Descending

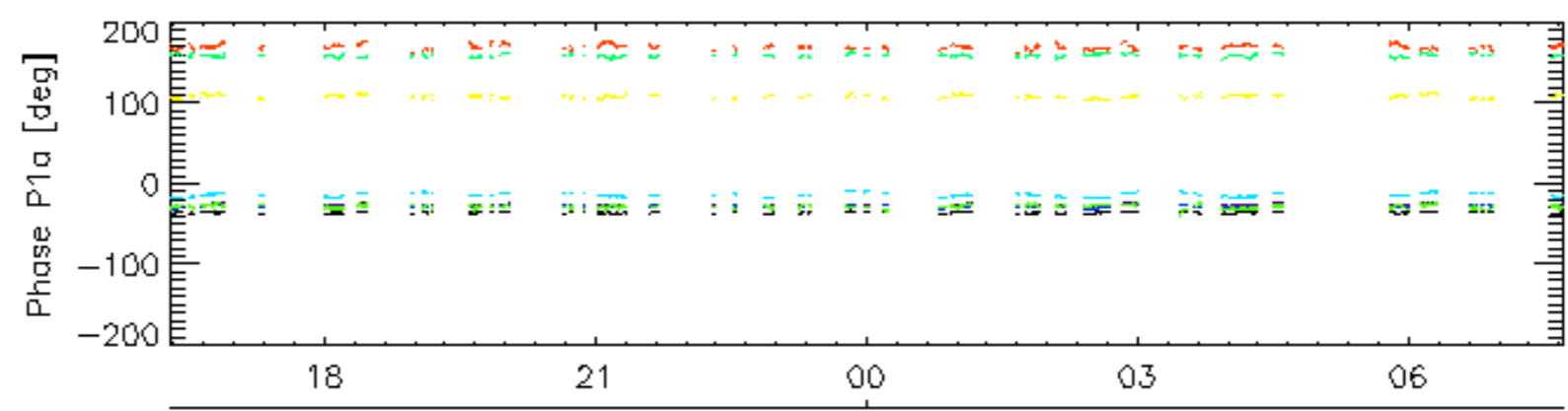
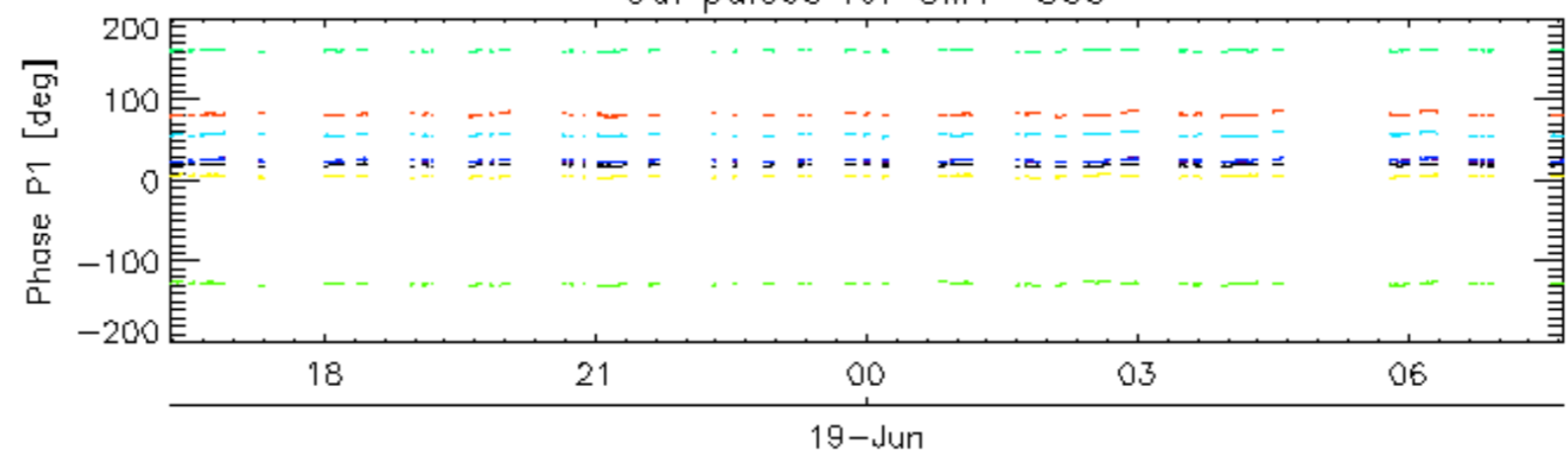
7.6 - Doppler evolution versus ANX for GM1

Evolution Doppler error versus ANX

Cal pulses for GM1 SS3

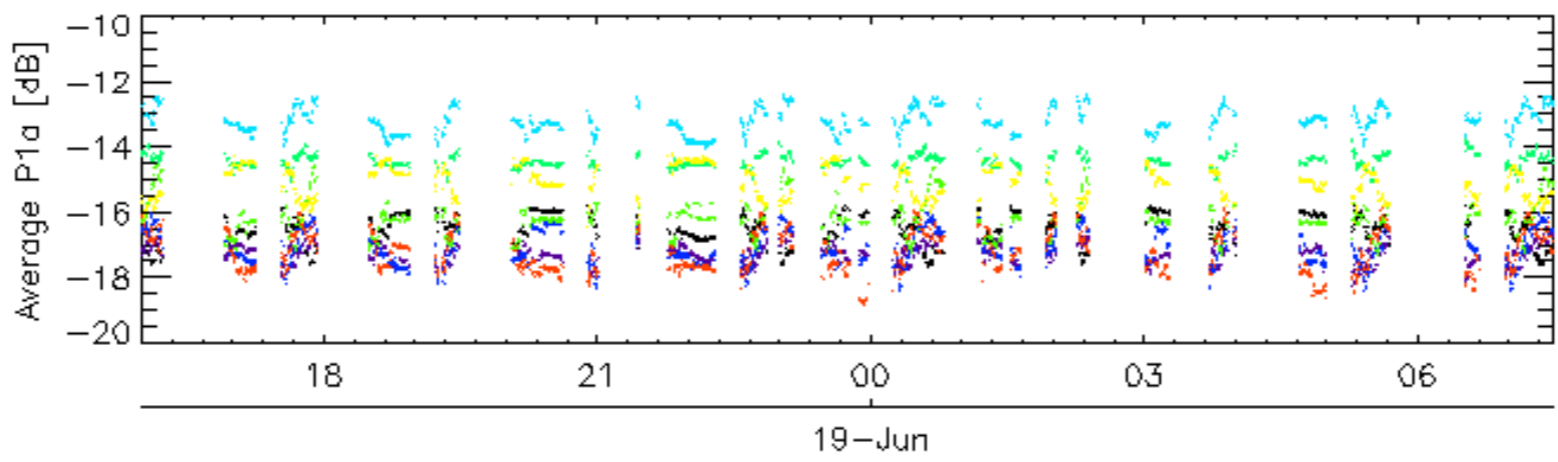
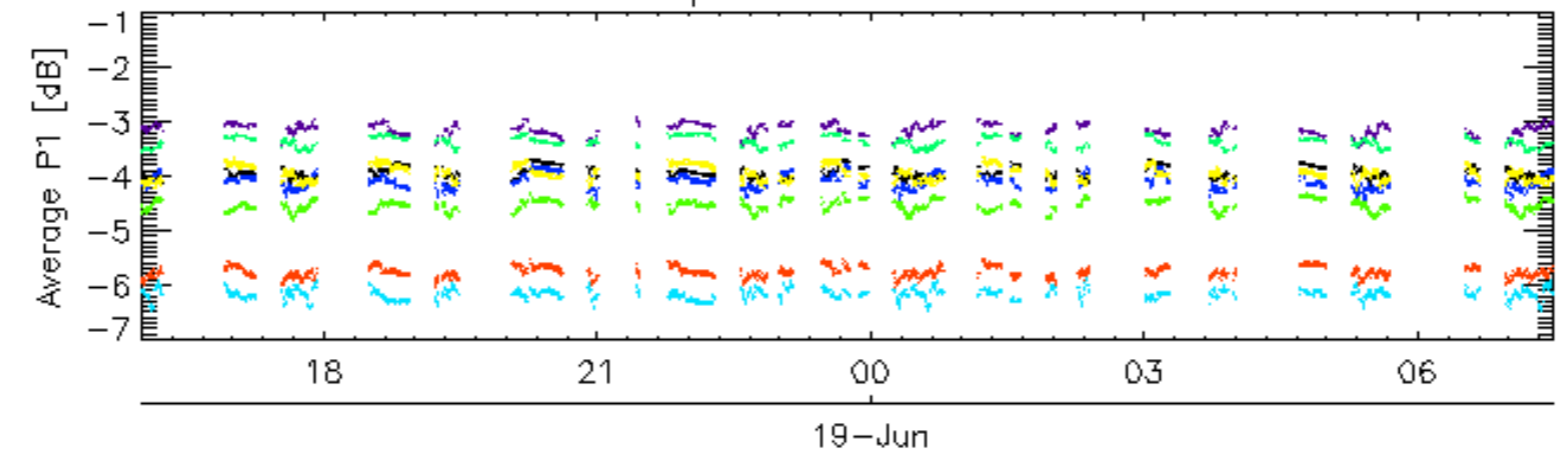


Cal pulses for GM1 SS3

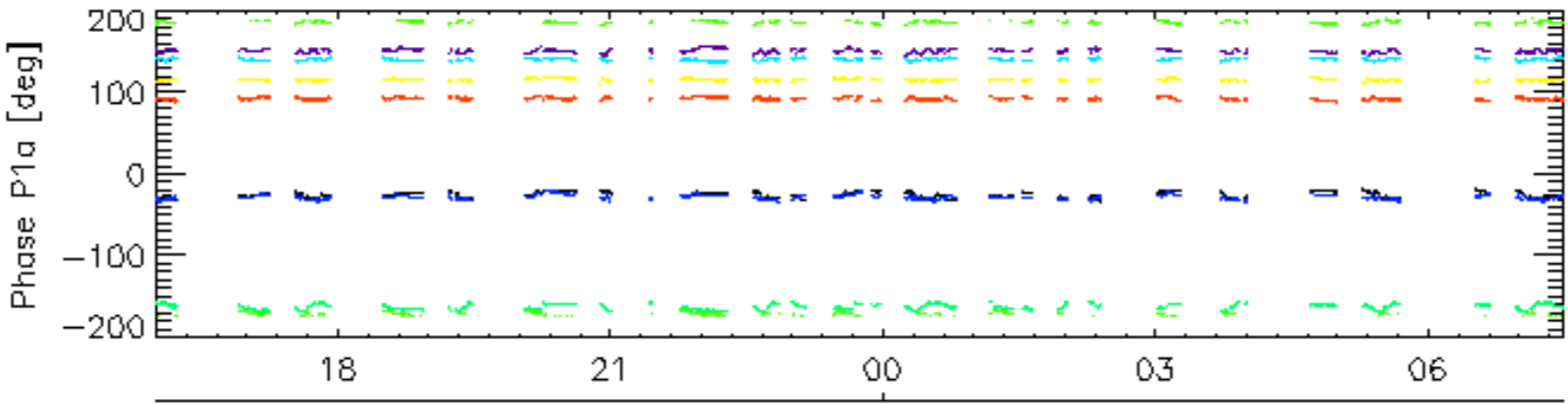
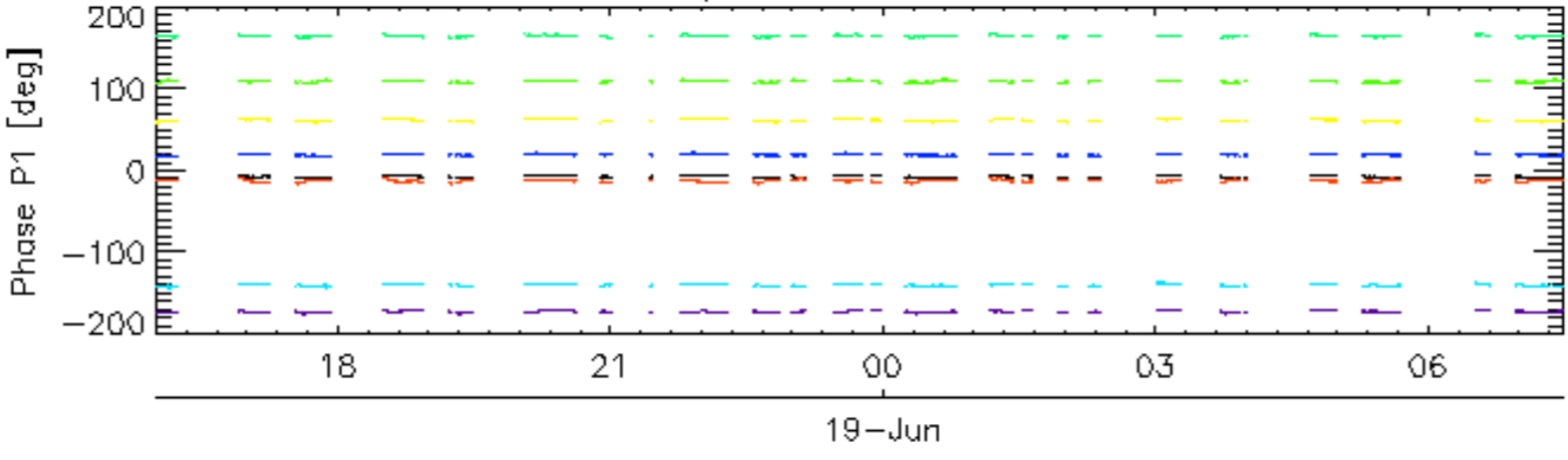


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2

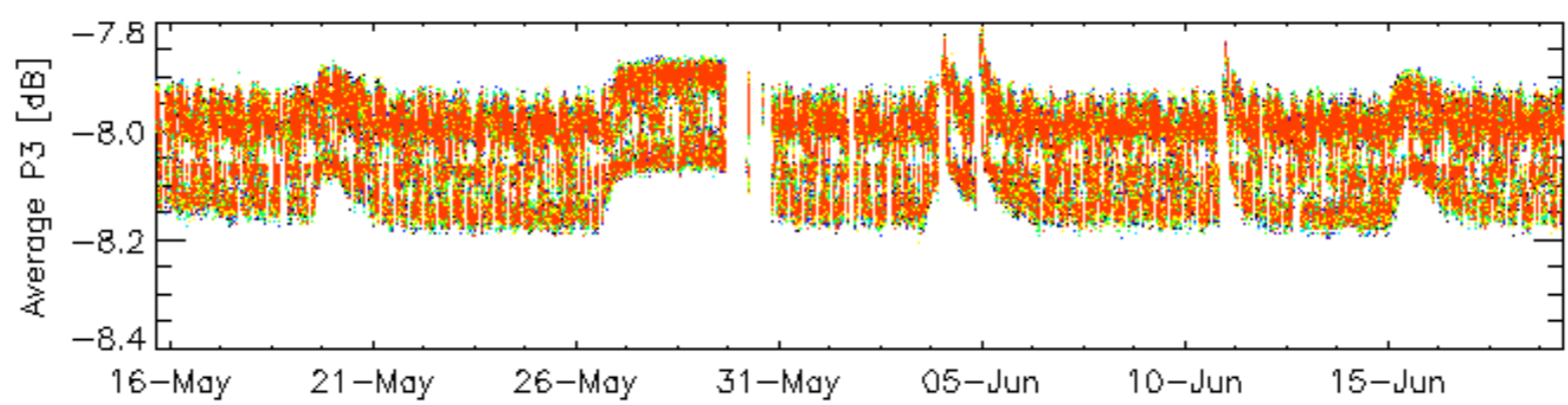
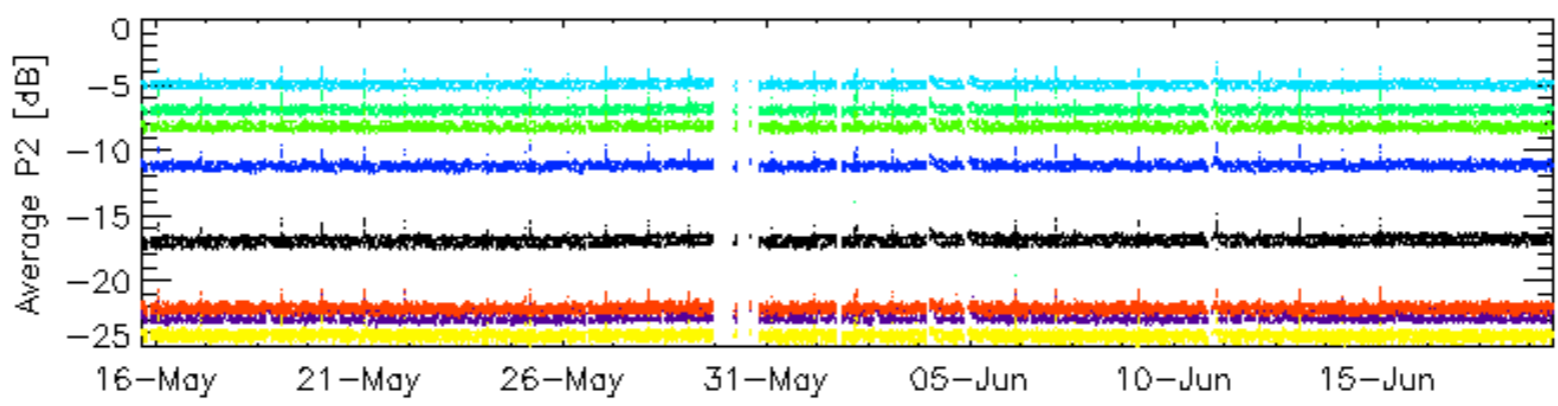
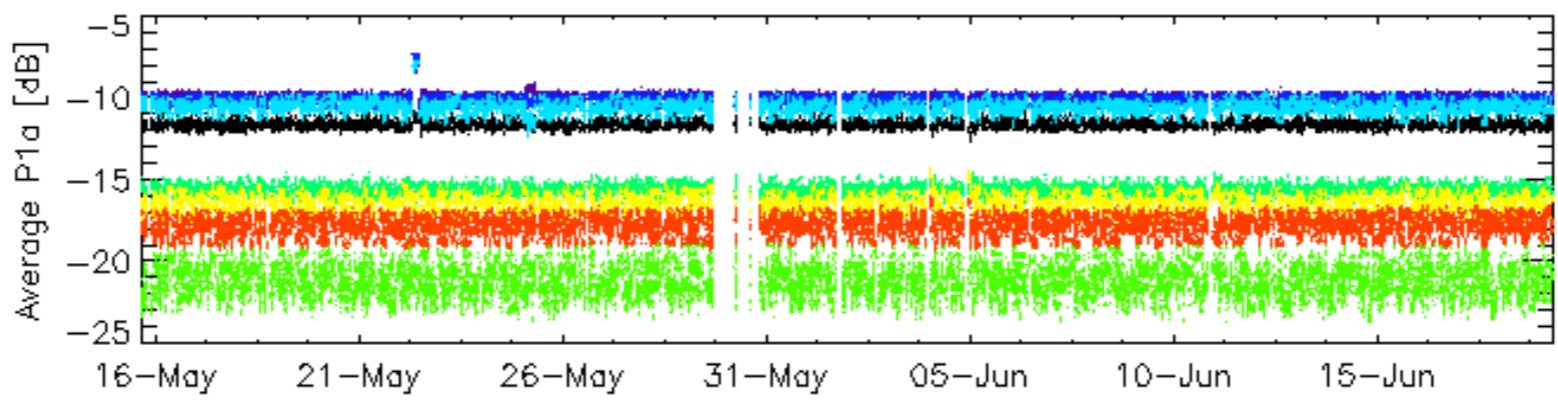
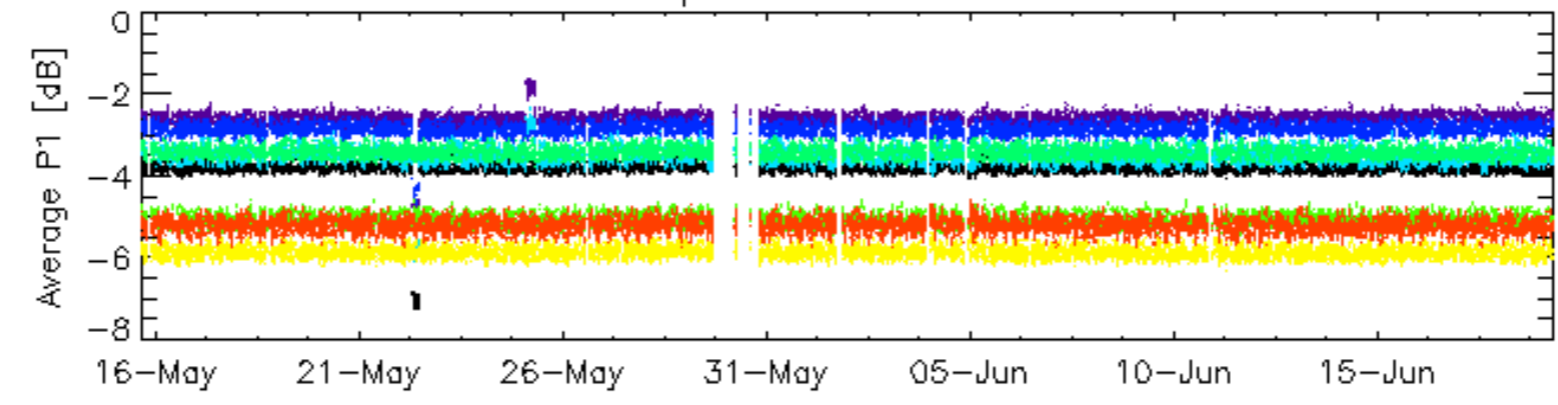


Cal pulses for WVS IS2



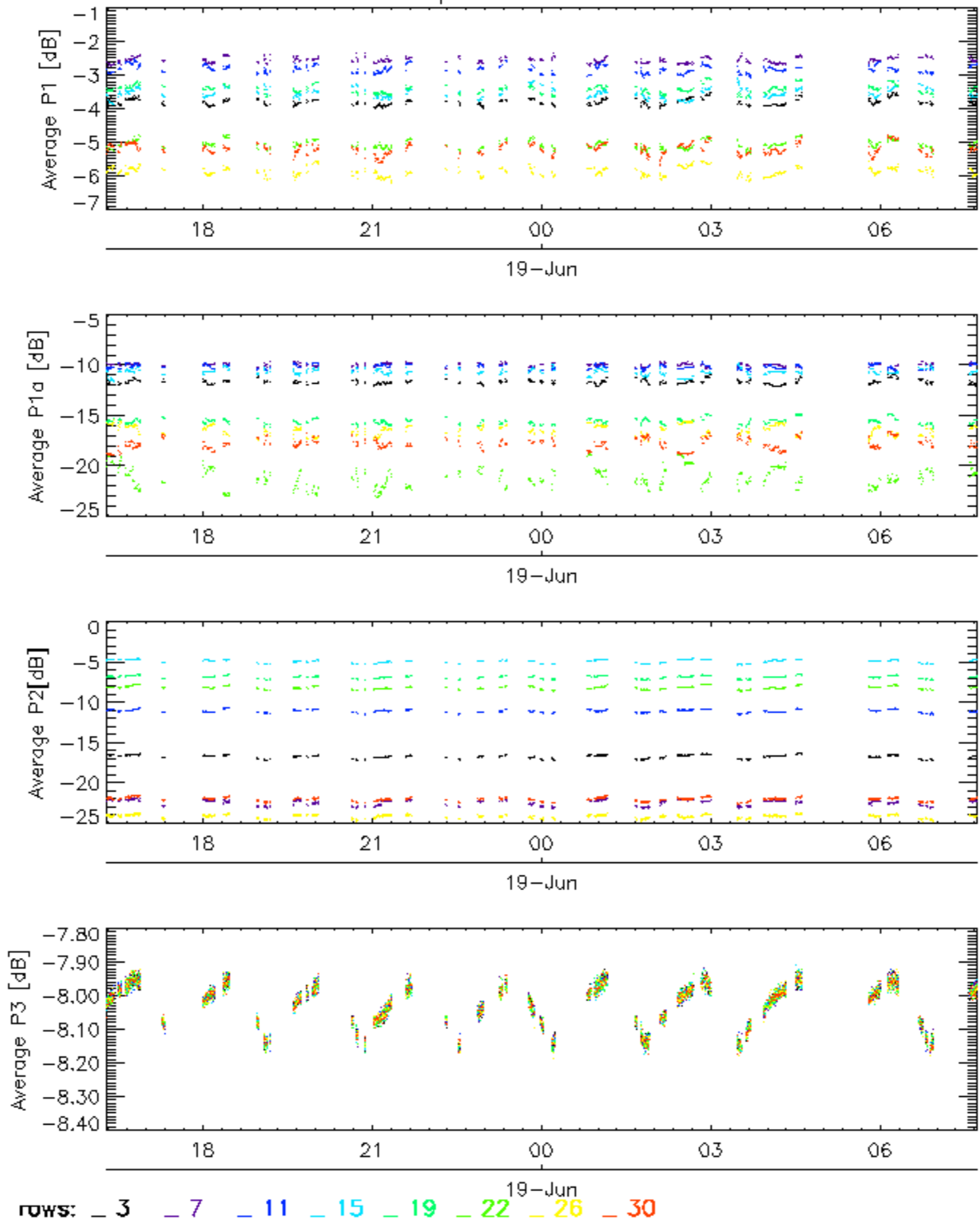
rows: 3 7 11 15 19 22 26 30

Cal pulses for GM1 SS3

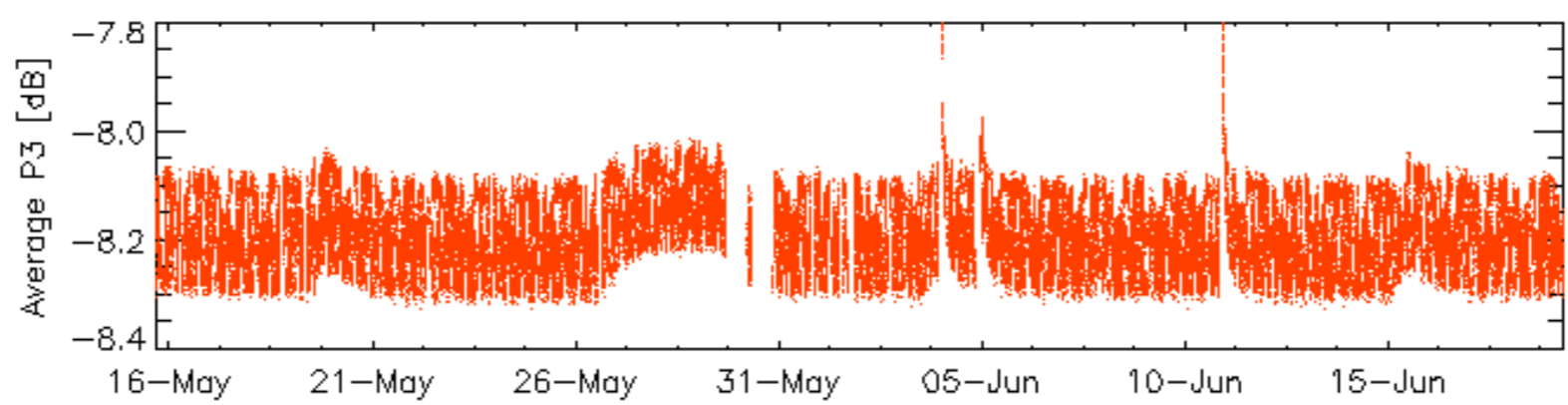
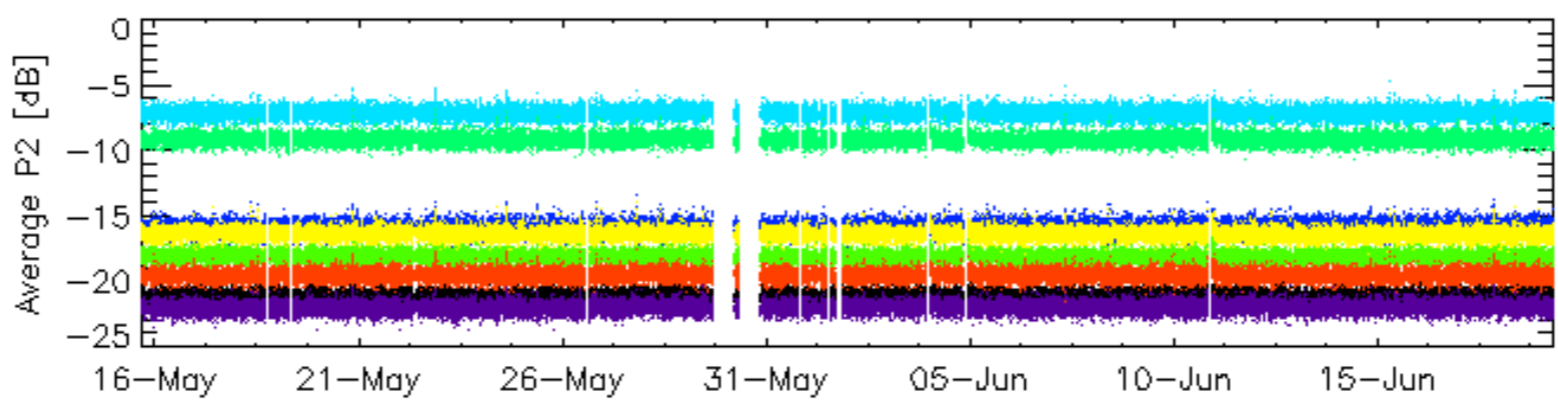
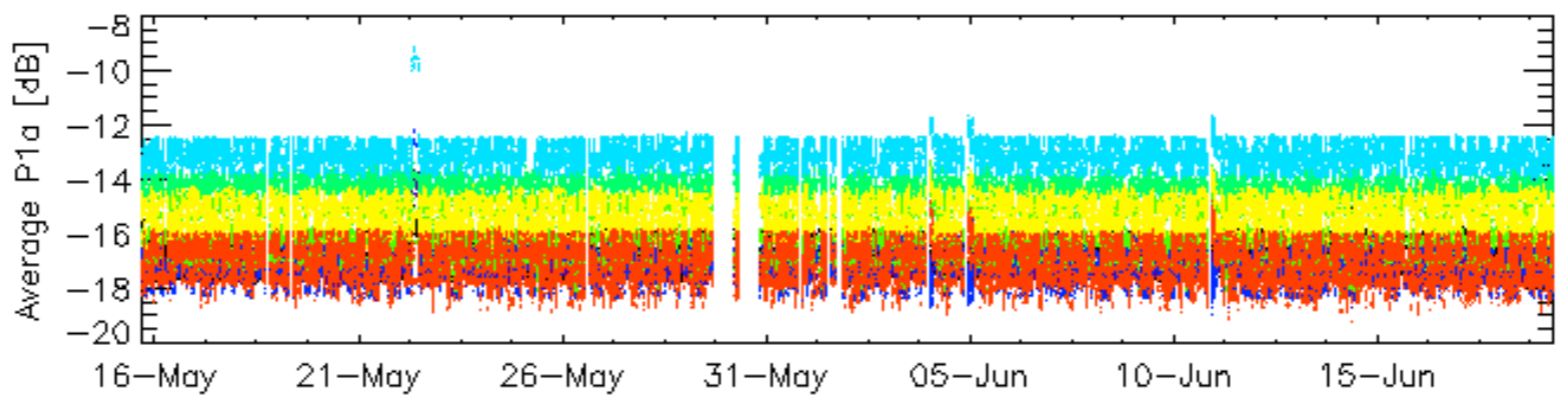
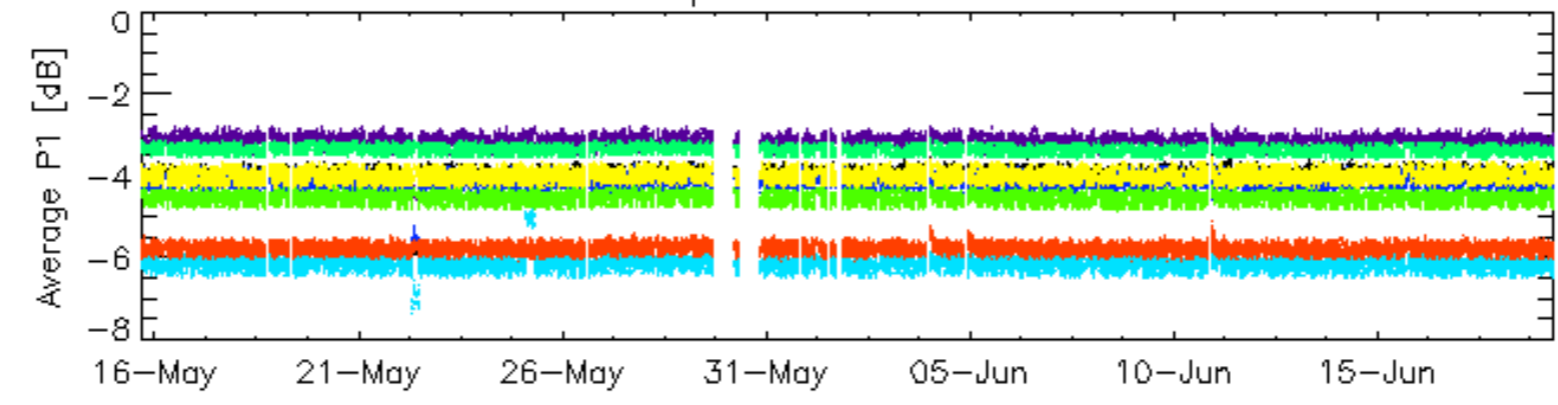


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

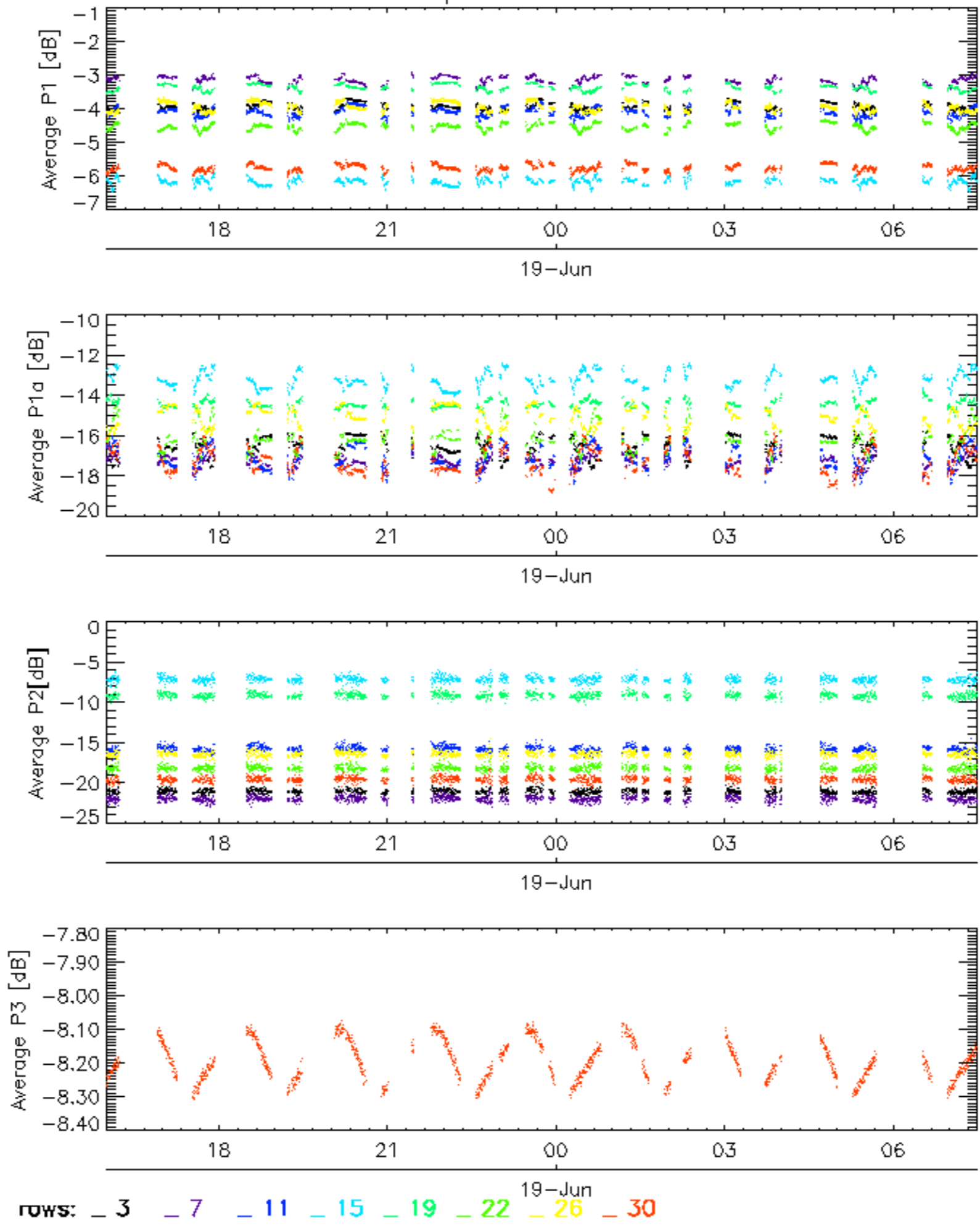


Cal pulses for WVS IS2



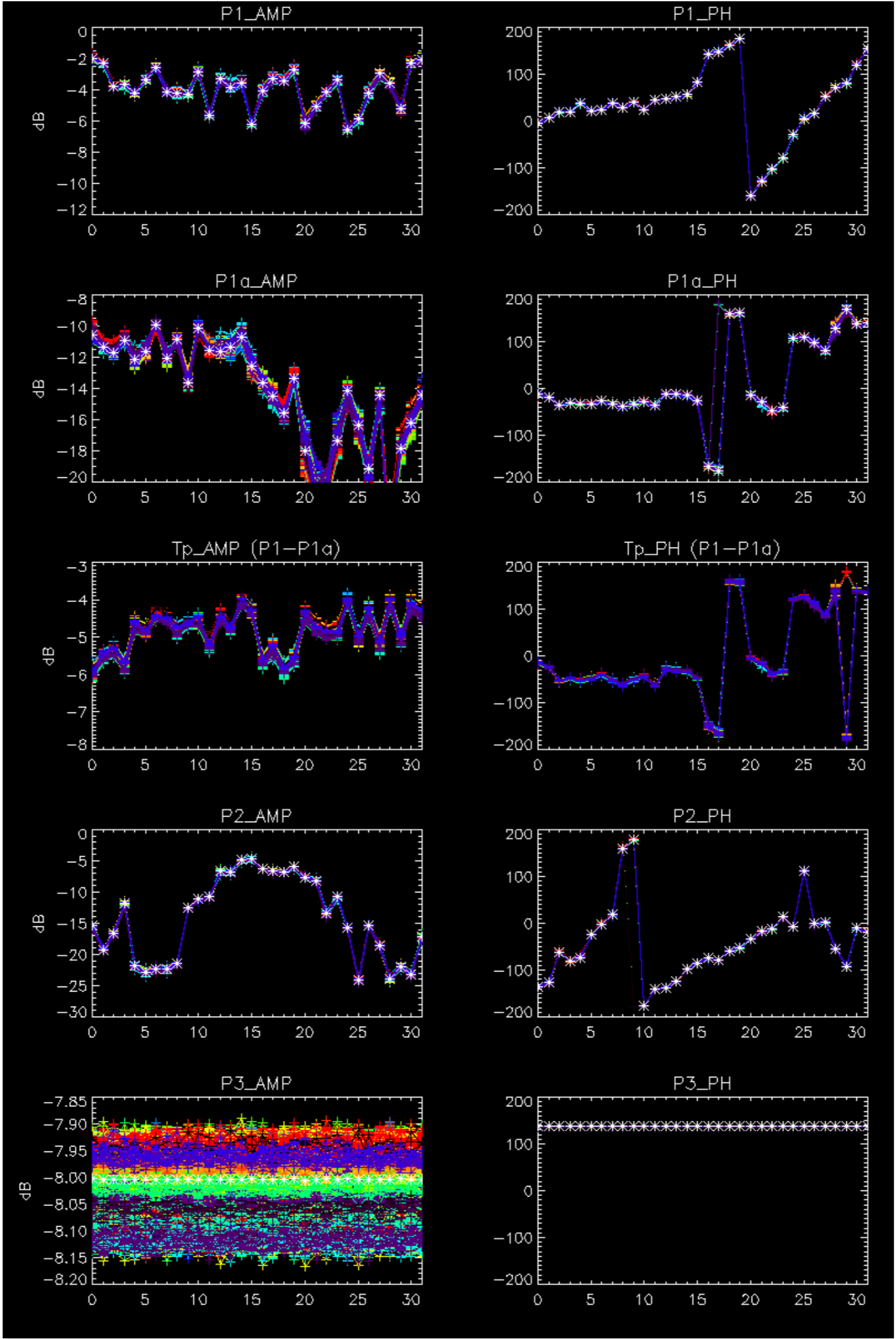
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

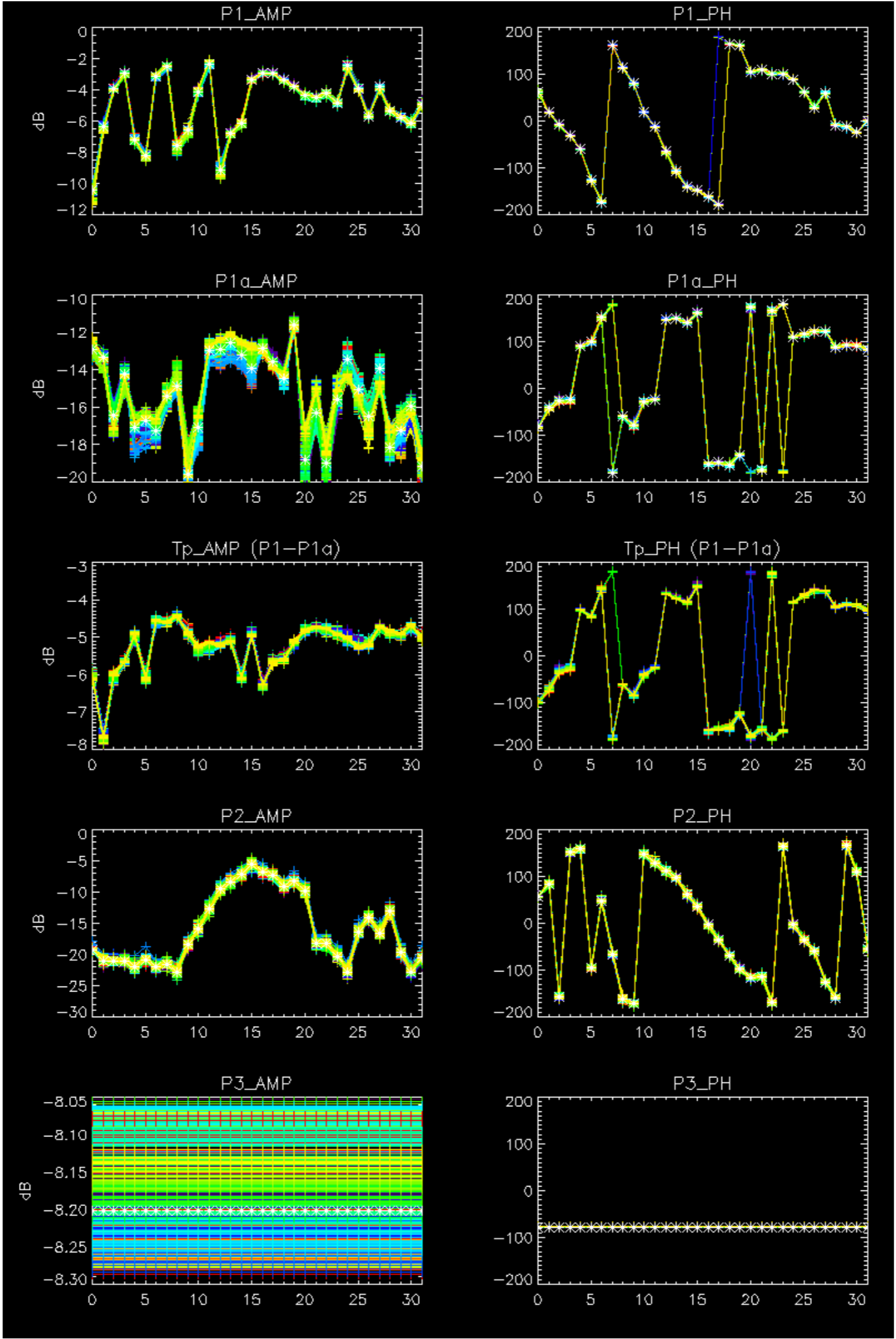
Cal pulses for WVS IS2



No anomalies observed on available browse products

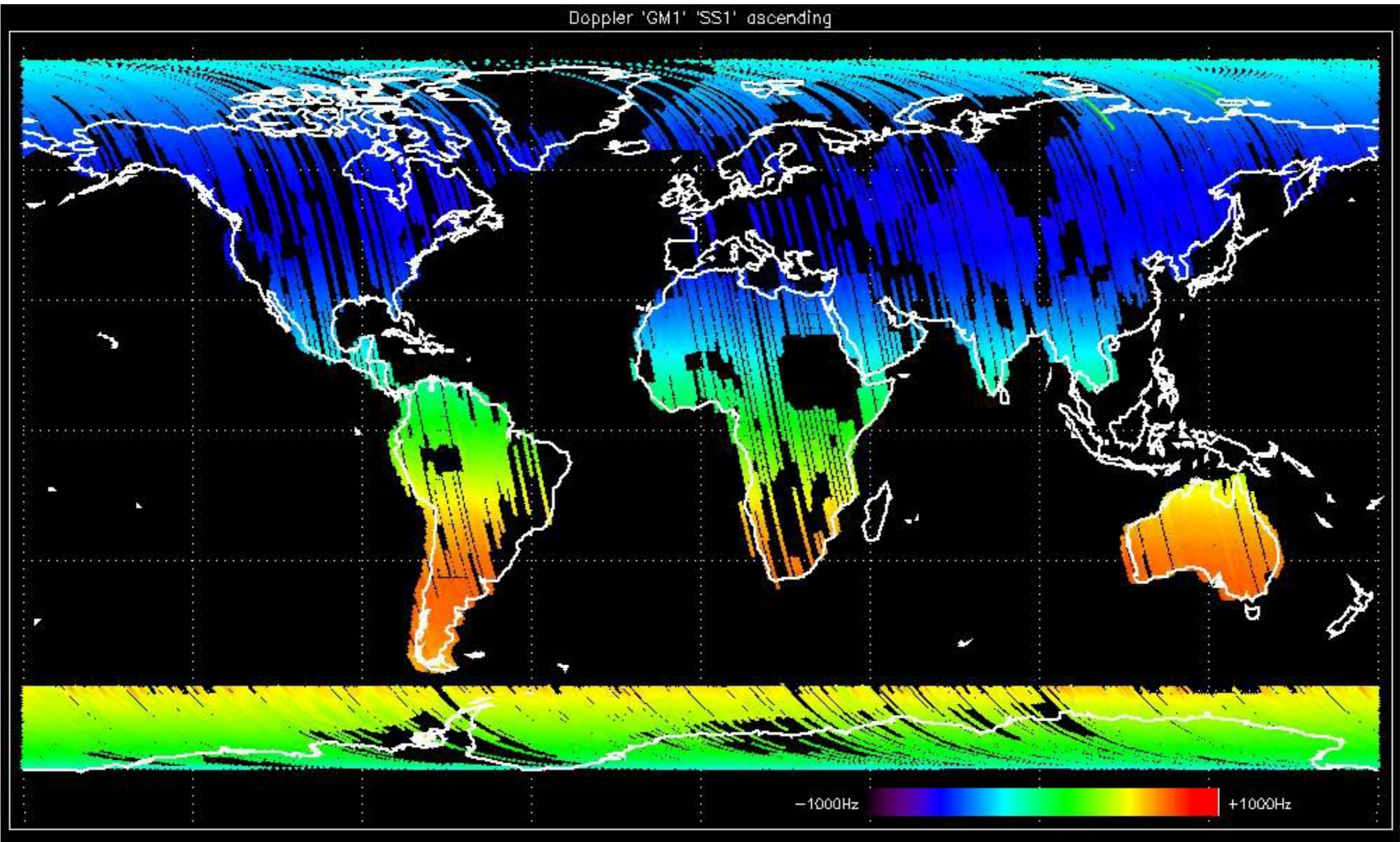
No anomalies observed.



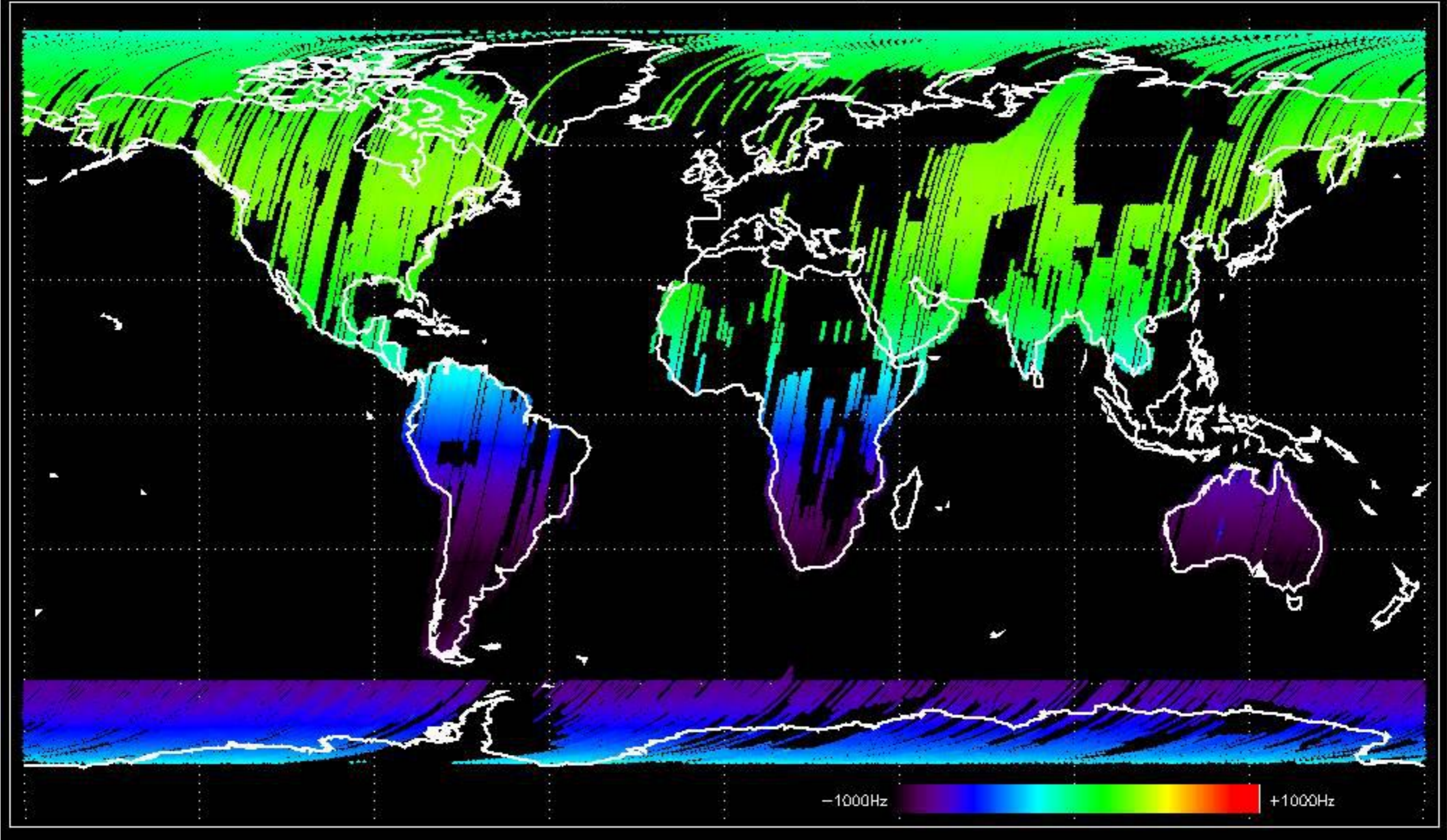


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

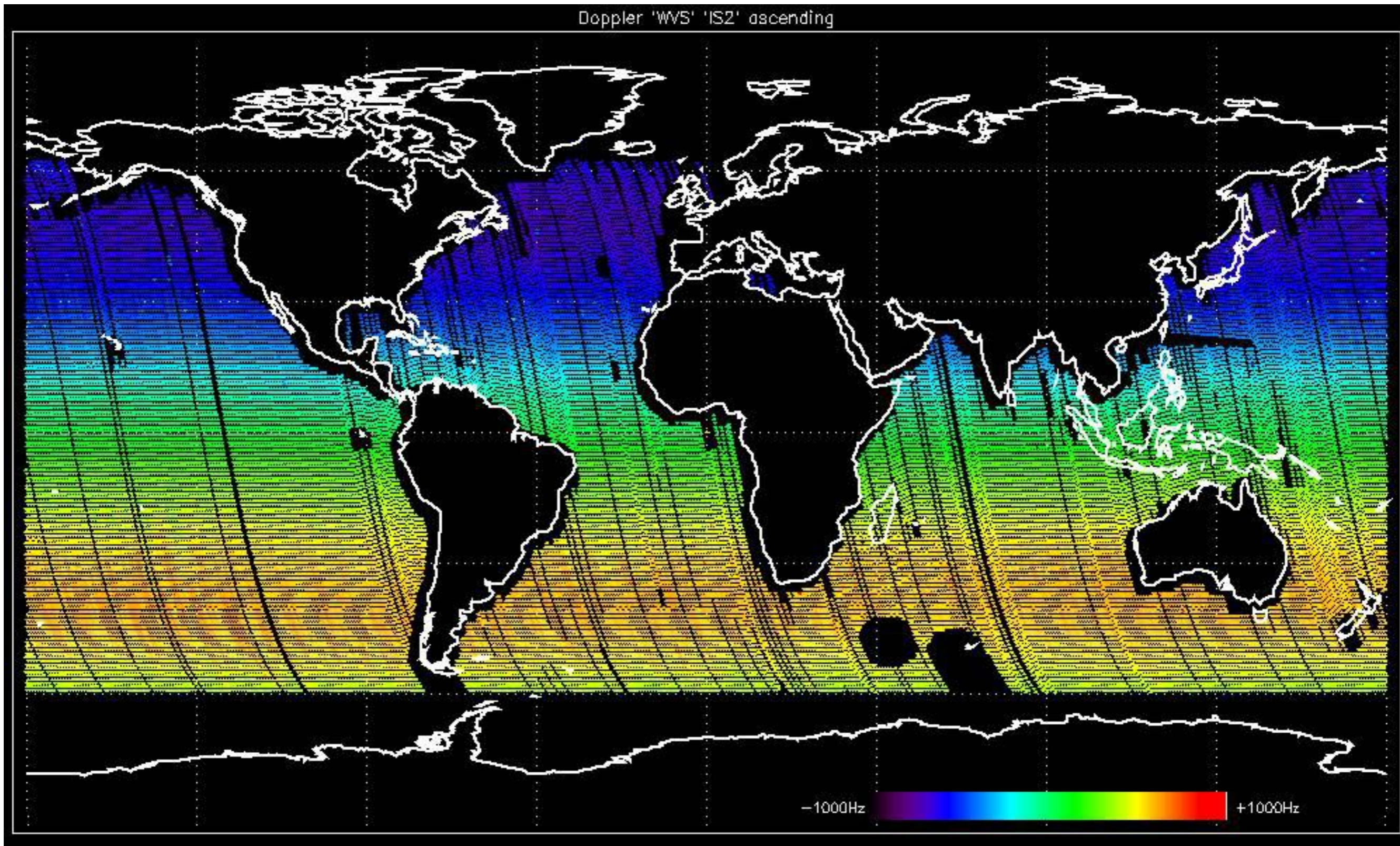
Doppler 'GM1' 'SS1' ascending



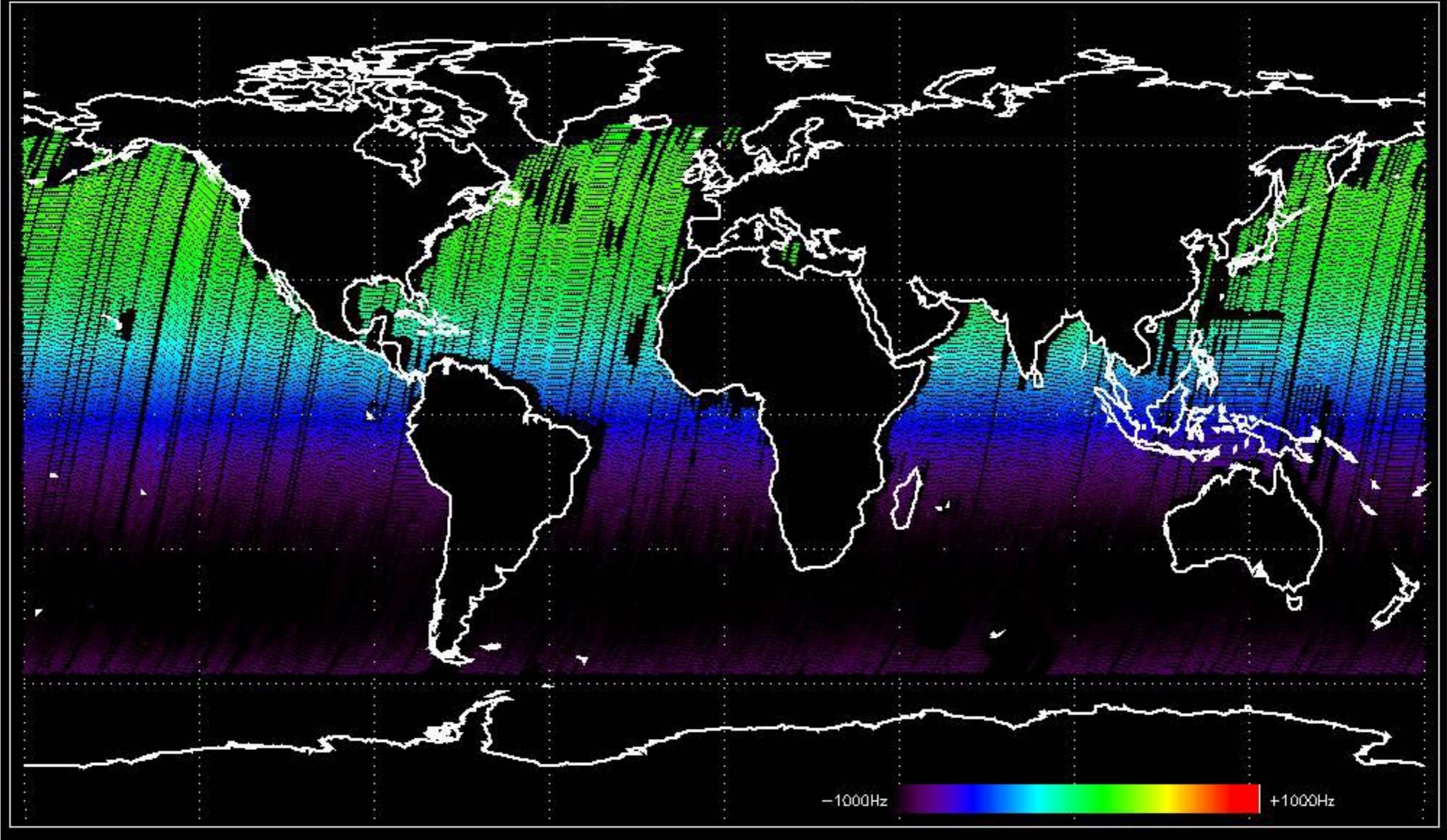
Doppler 'GM1' 'SS1' descending



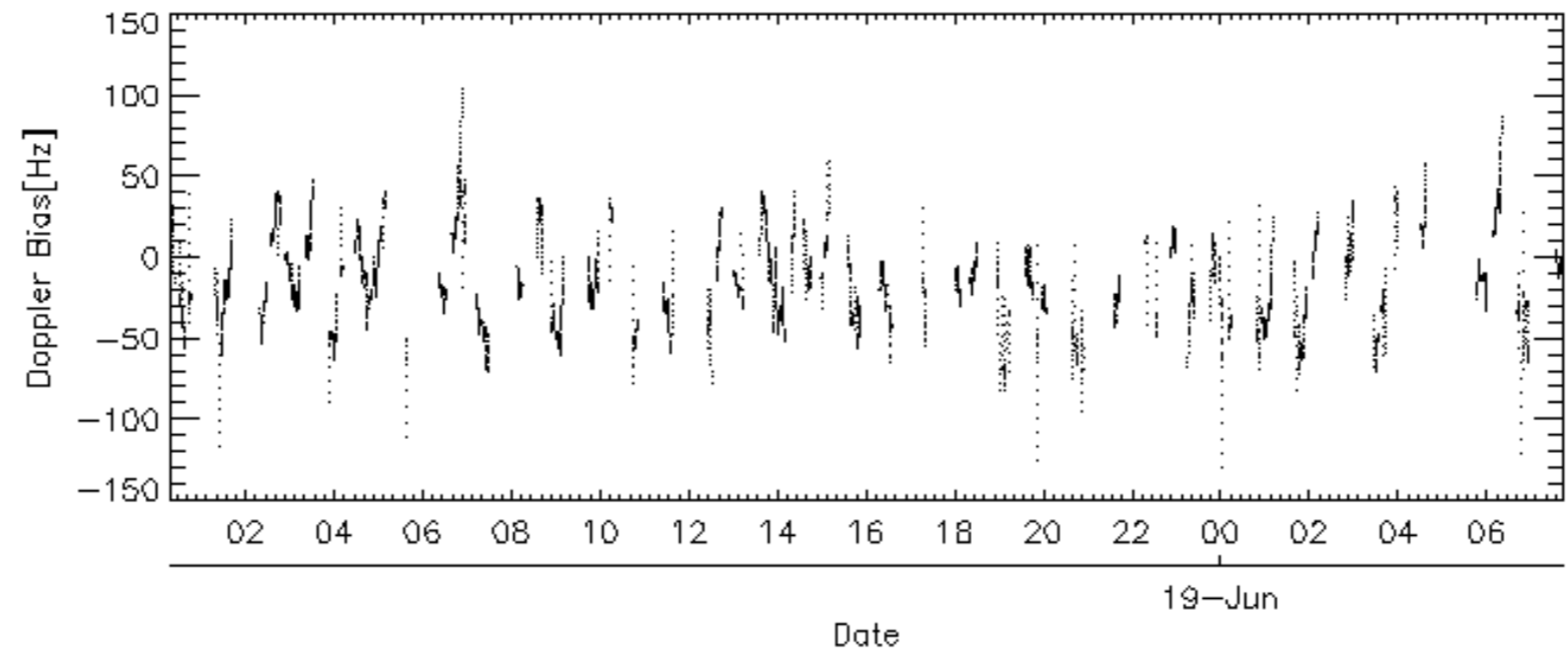
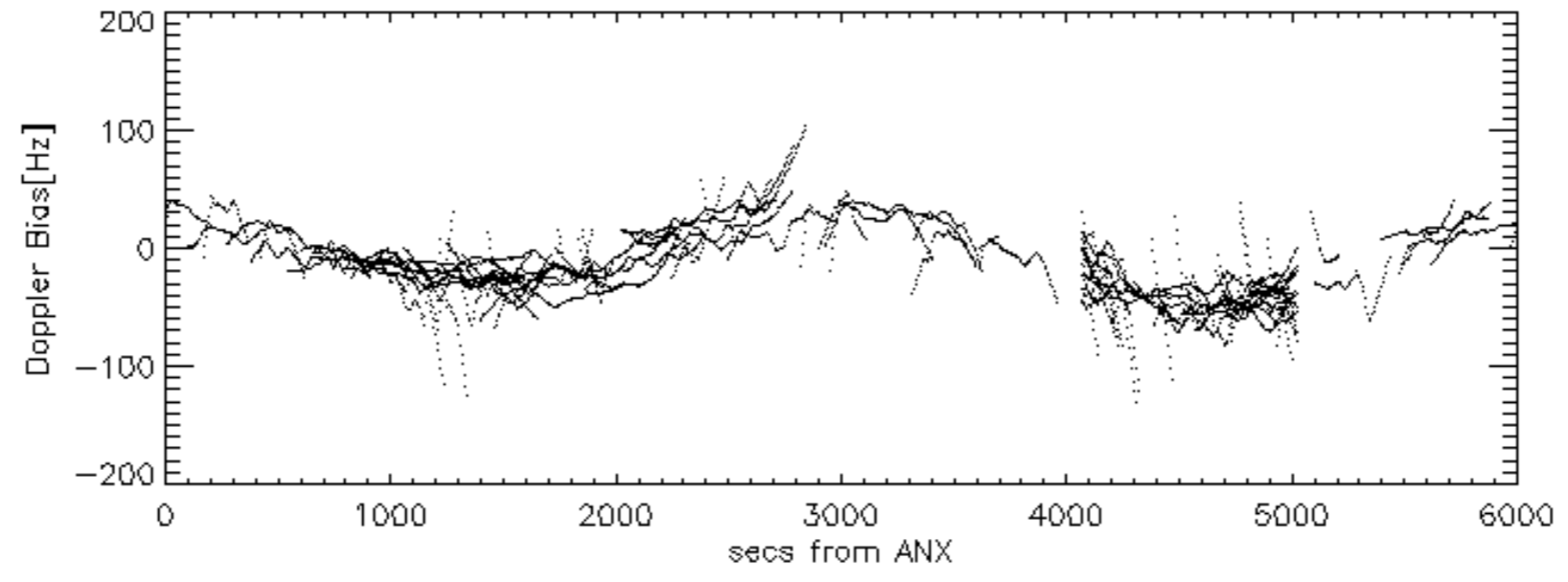
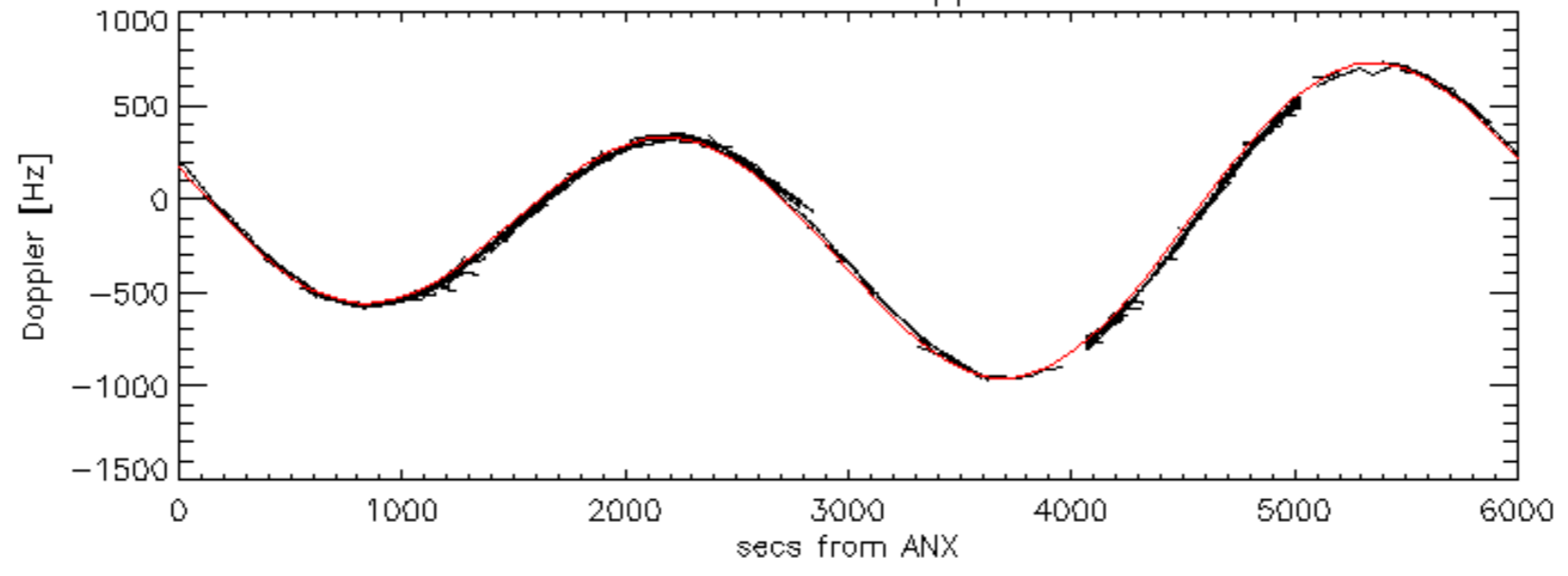
Doppler 'WVS' 'IS2' ascending

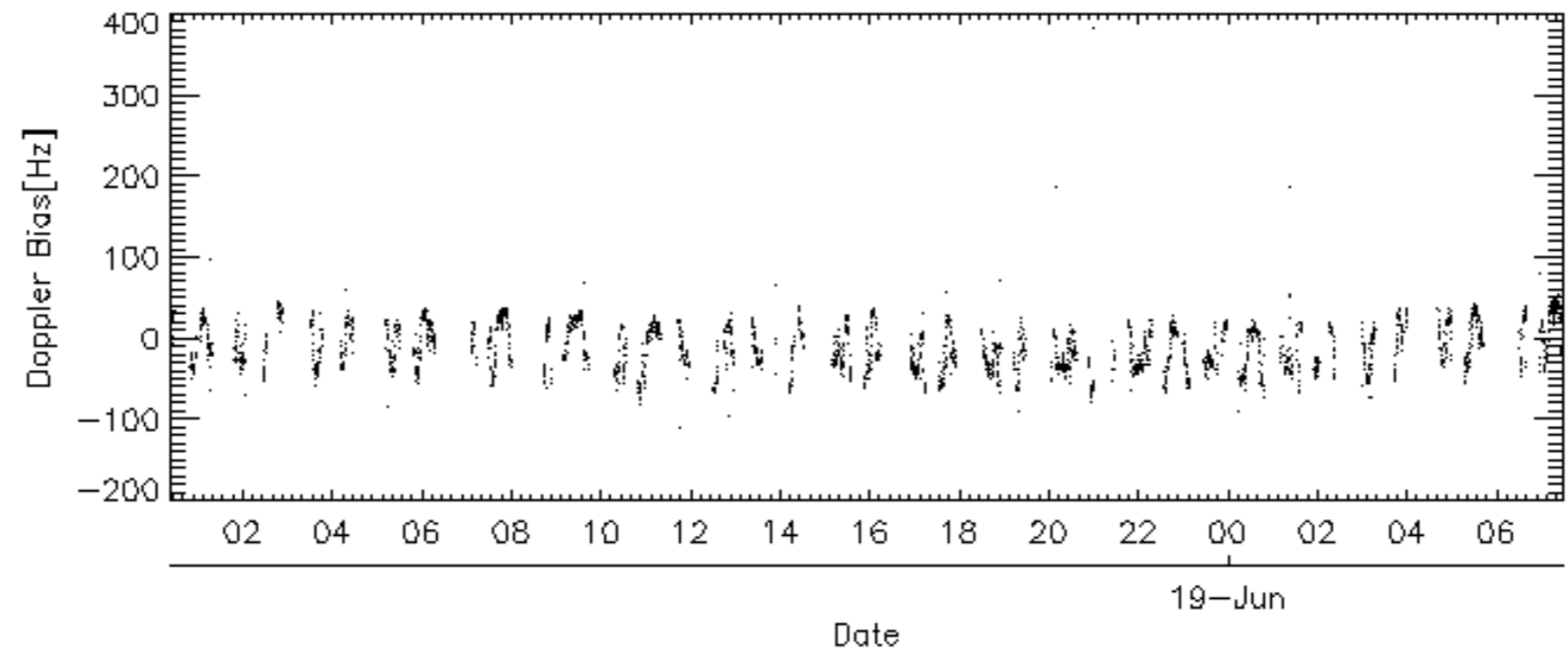
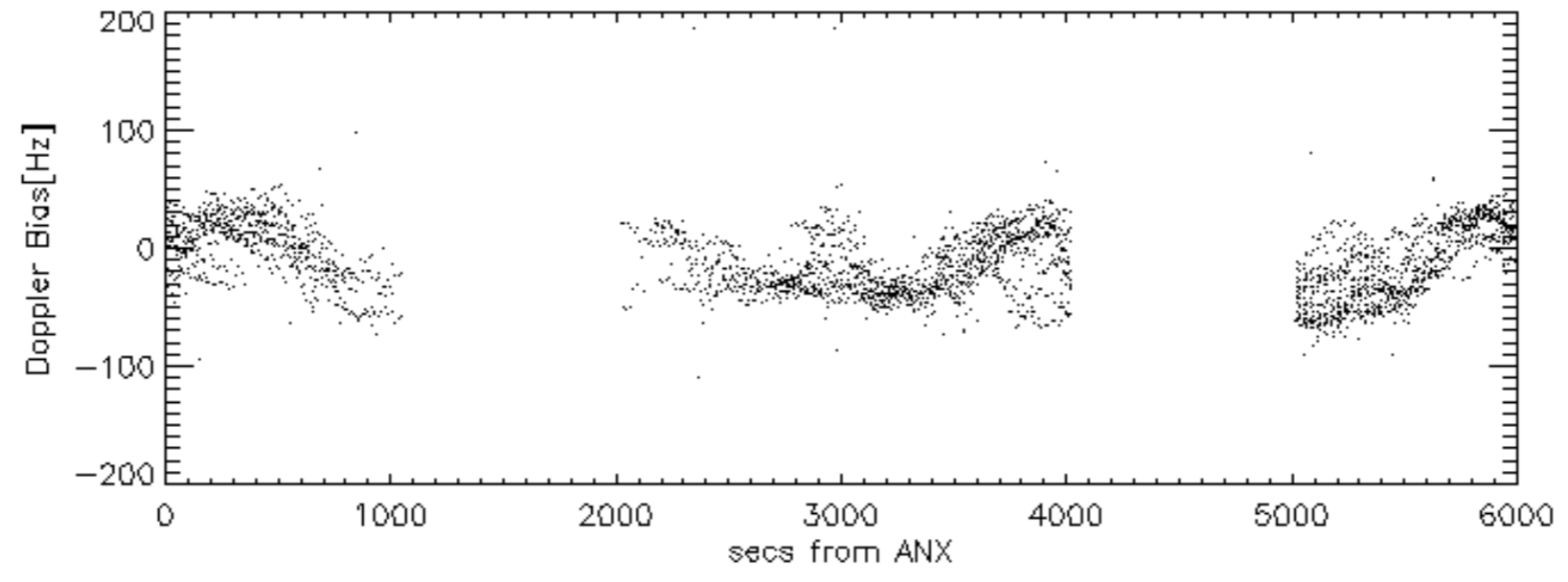
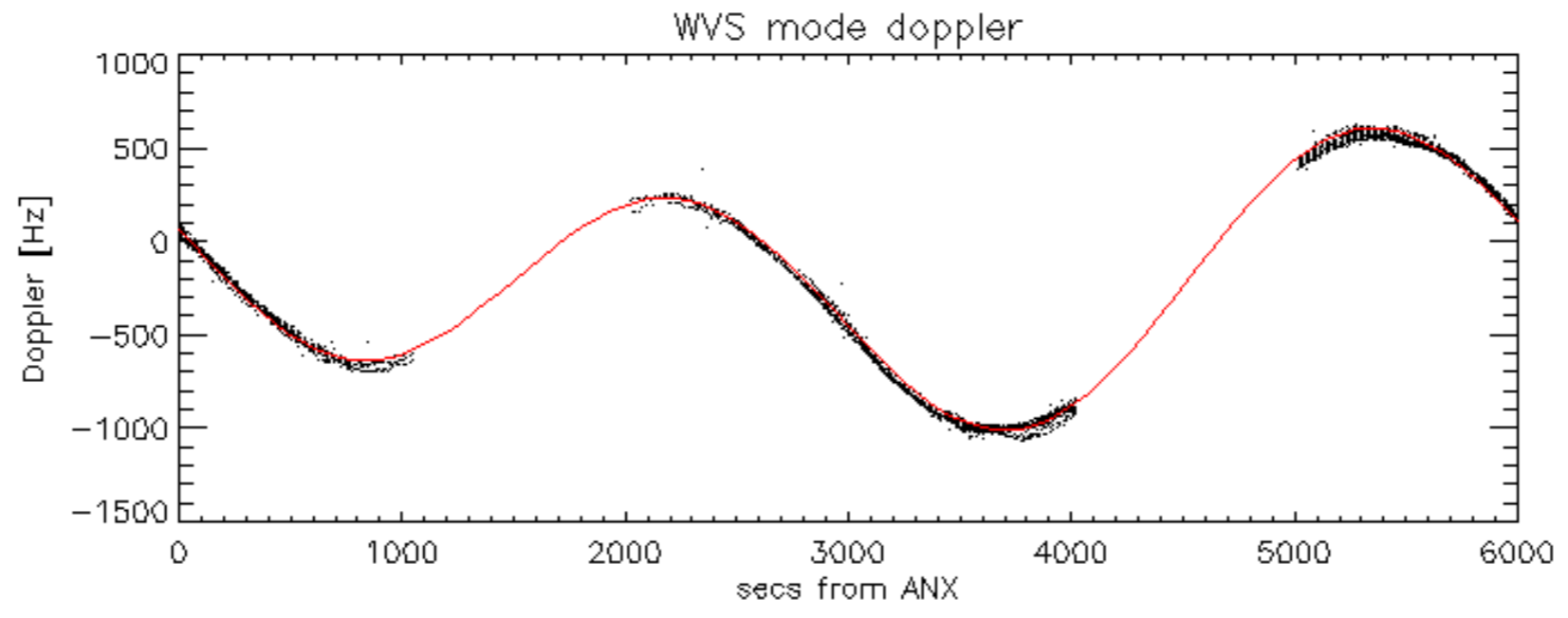


Doppler 'WVS' 'IS2' descending

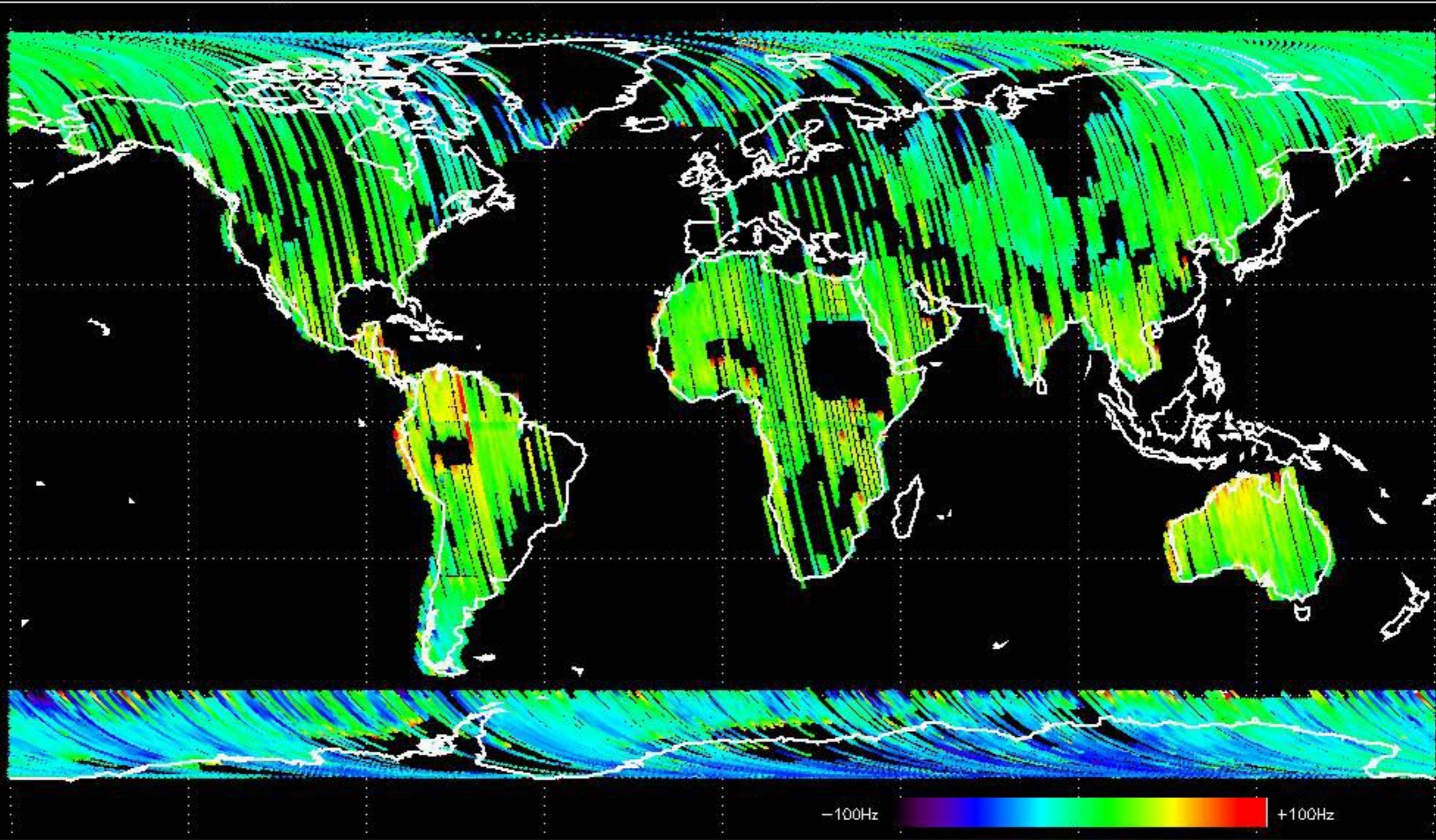


GM1 mode doppler

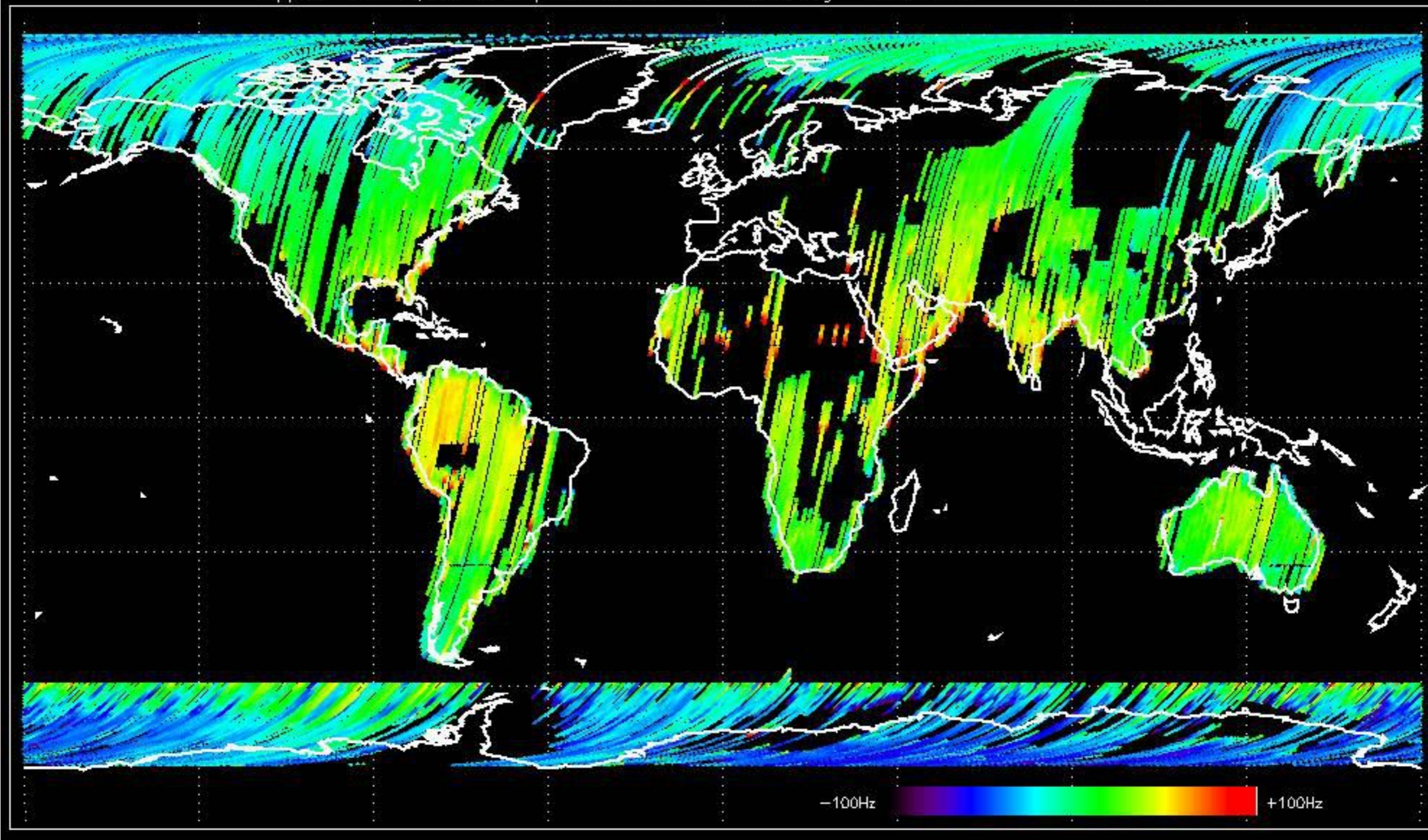




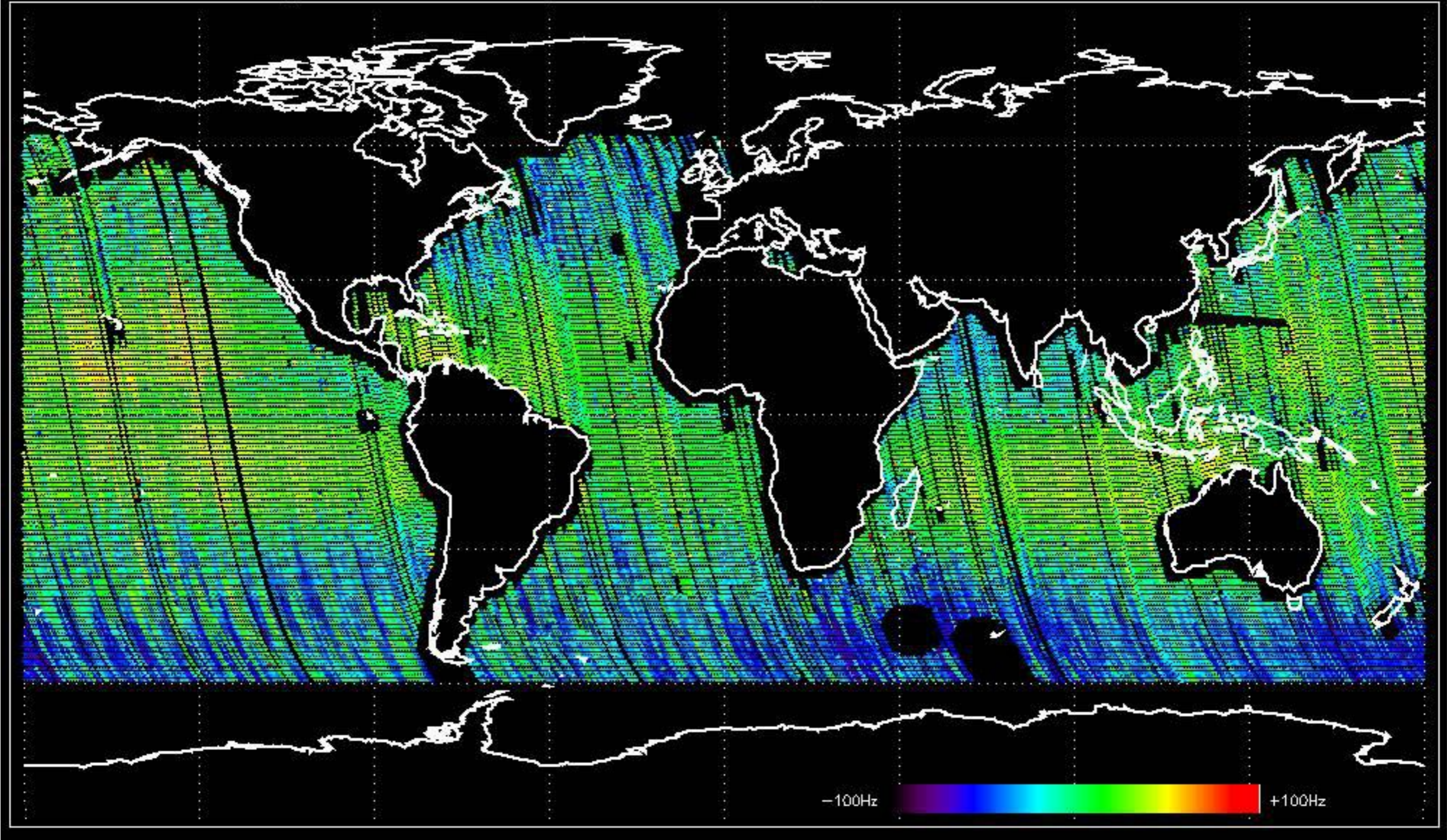
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -16.959724 Hz



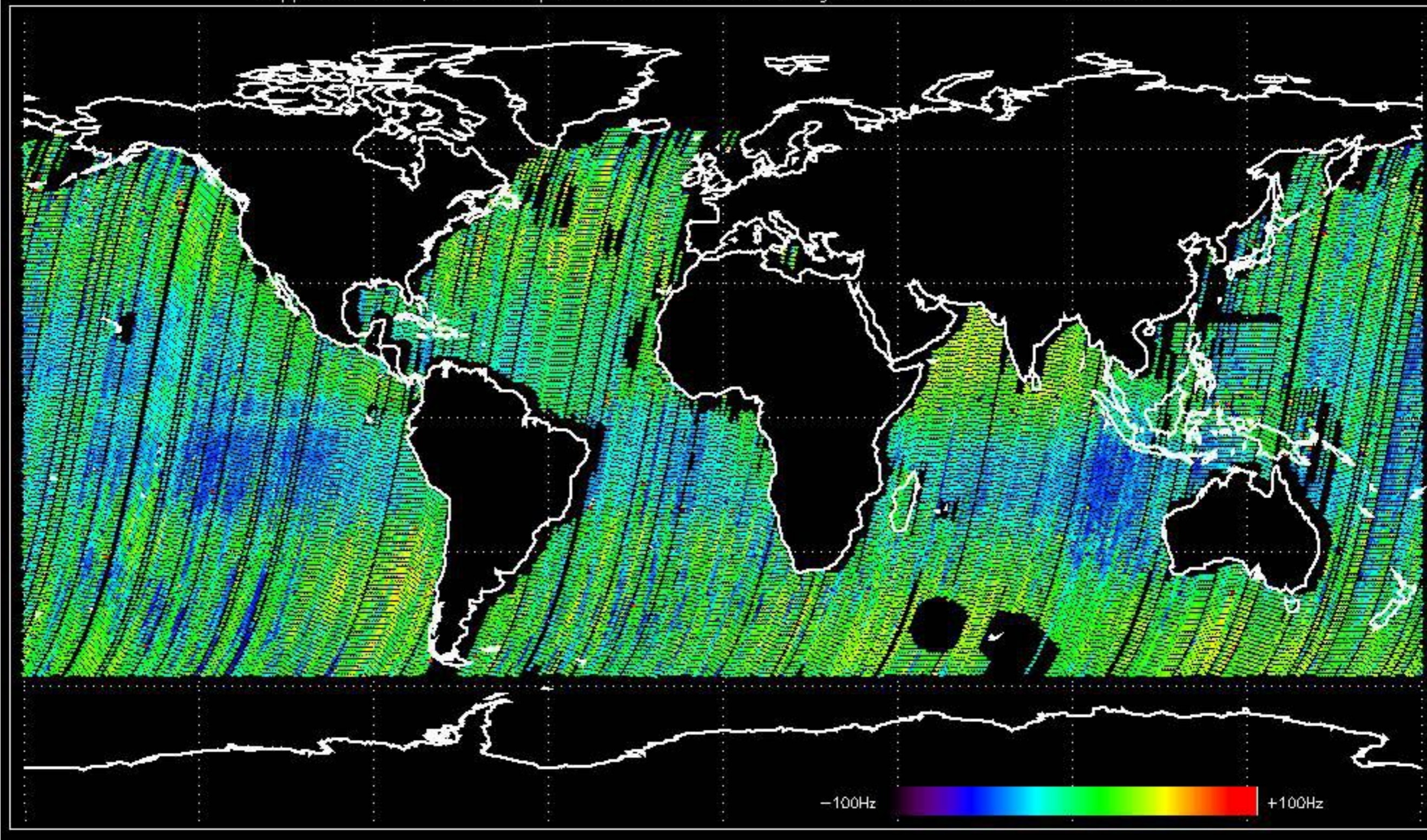
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -6.9606415 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -8.3605004 Hz

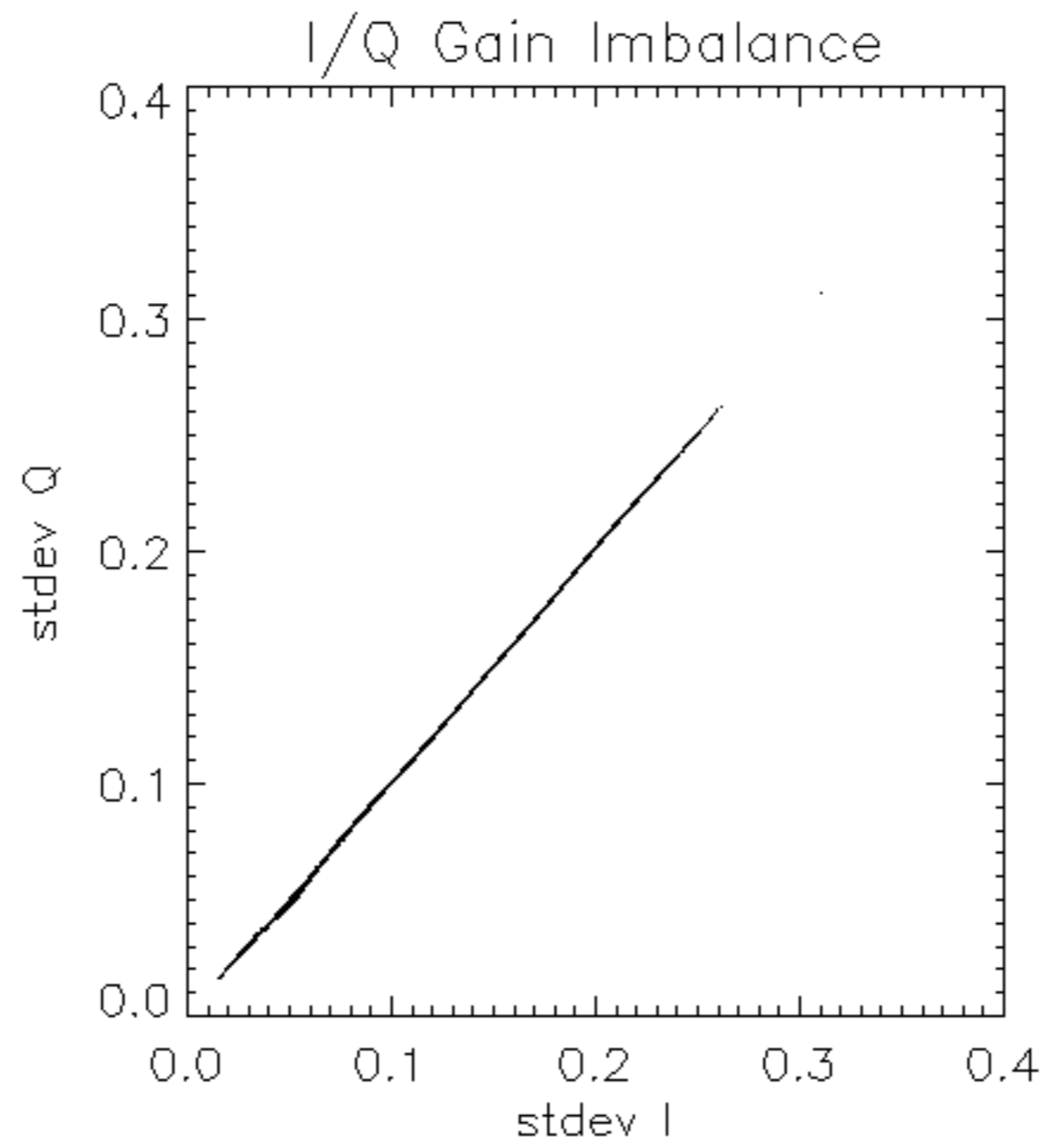


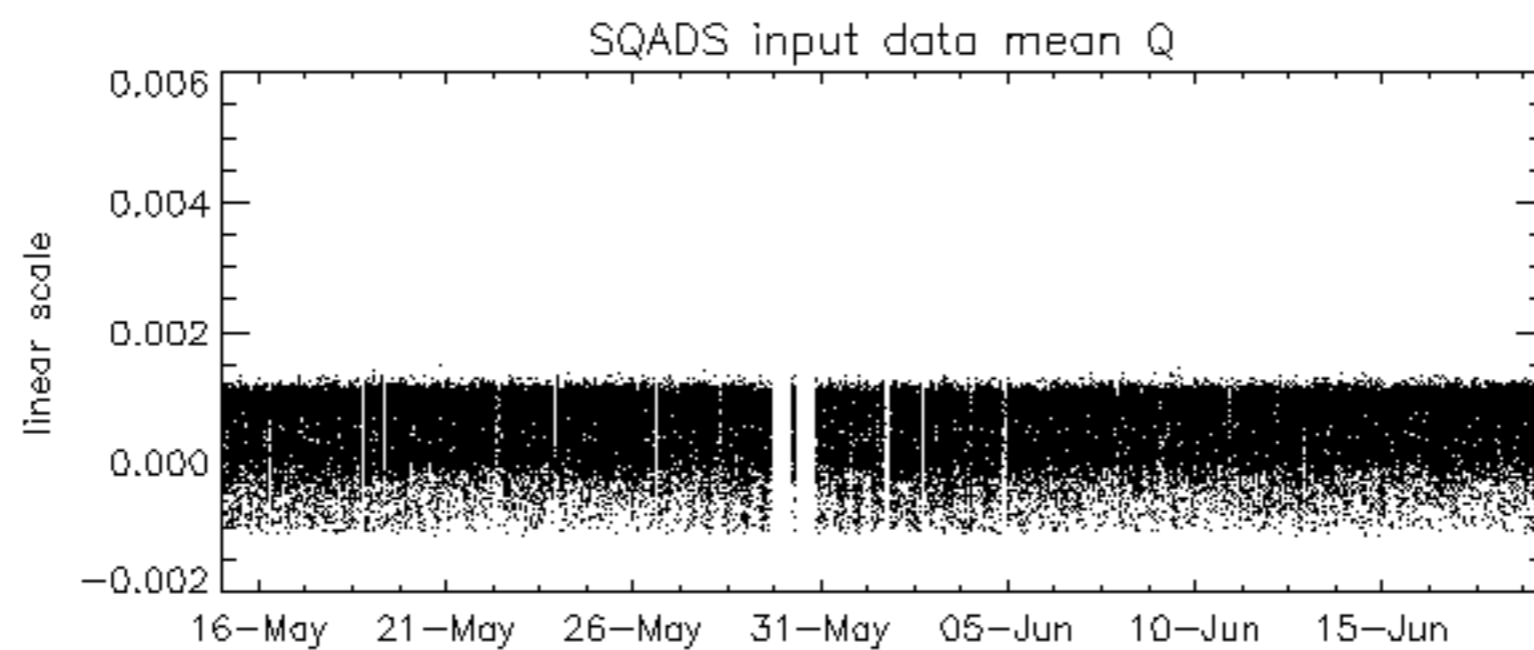
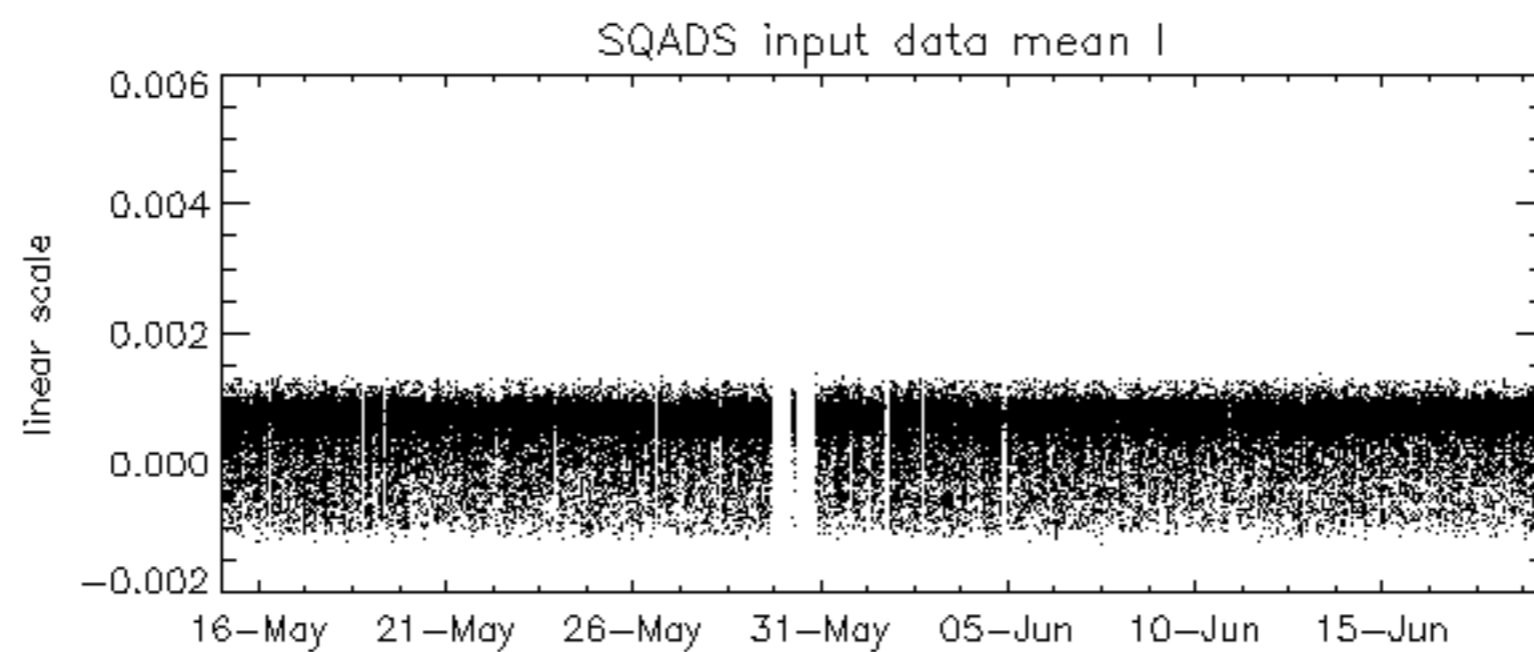
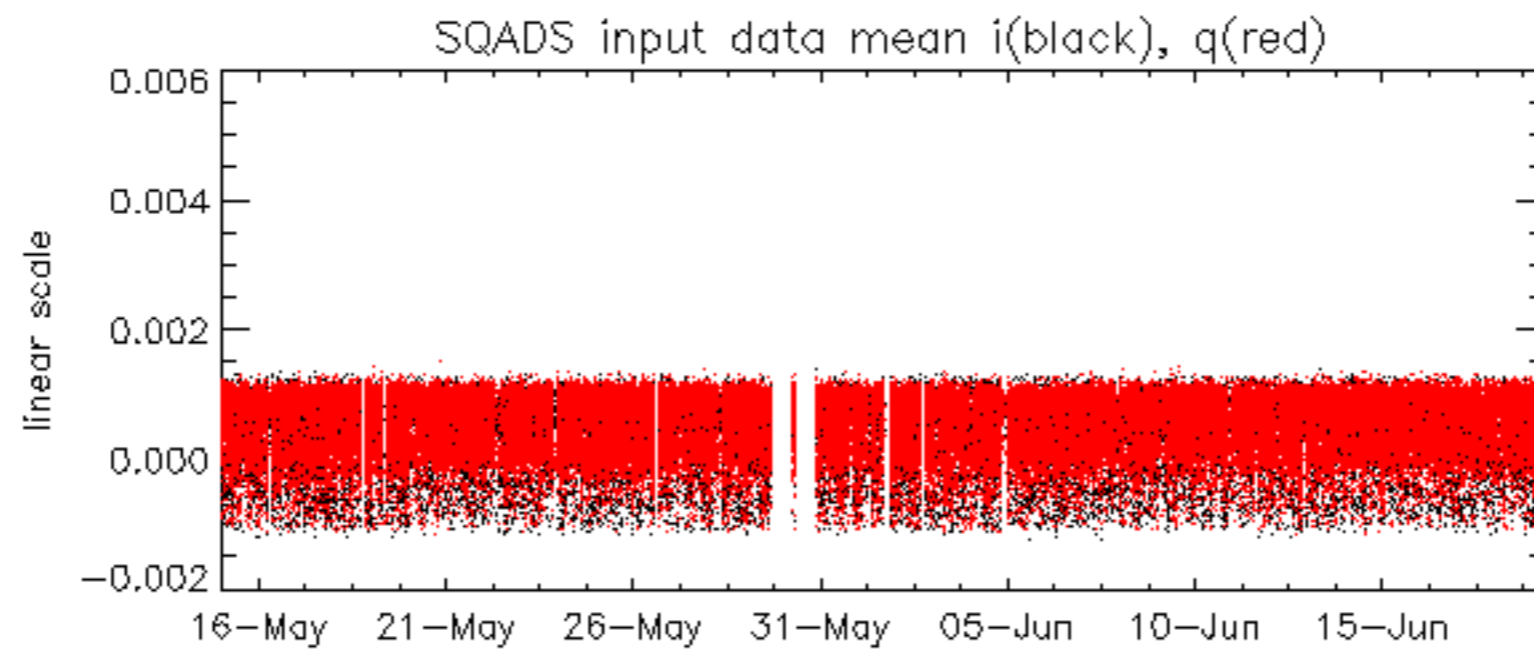
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -10.837312 Hz

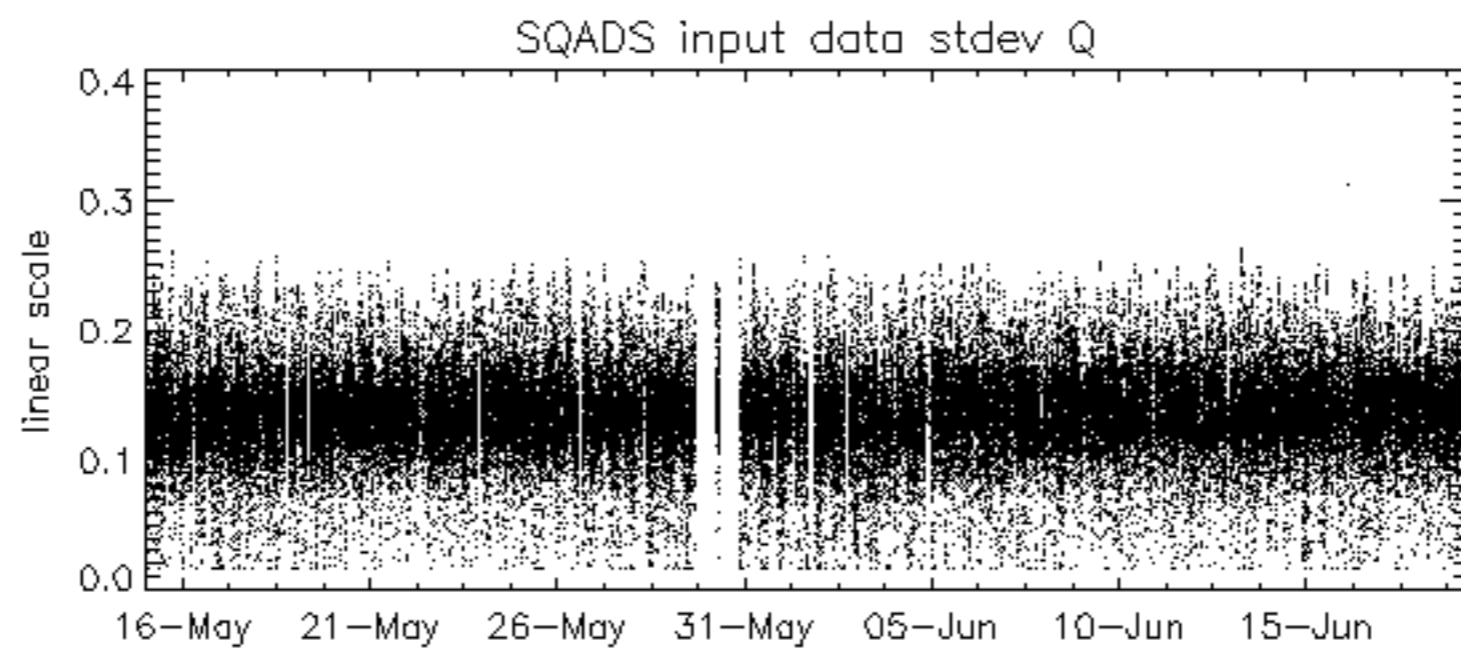
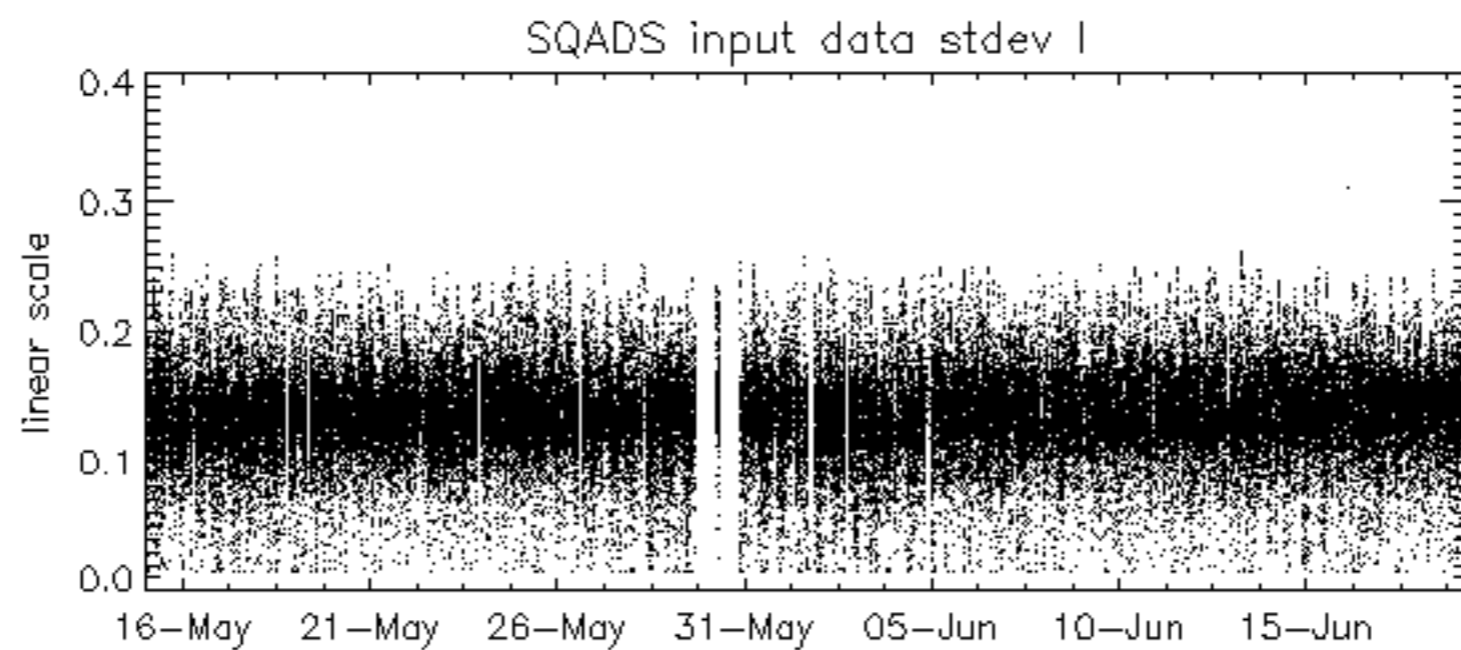
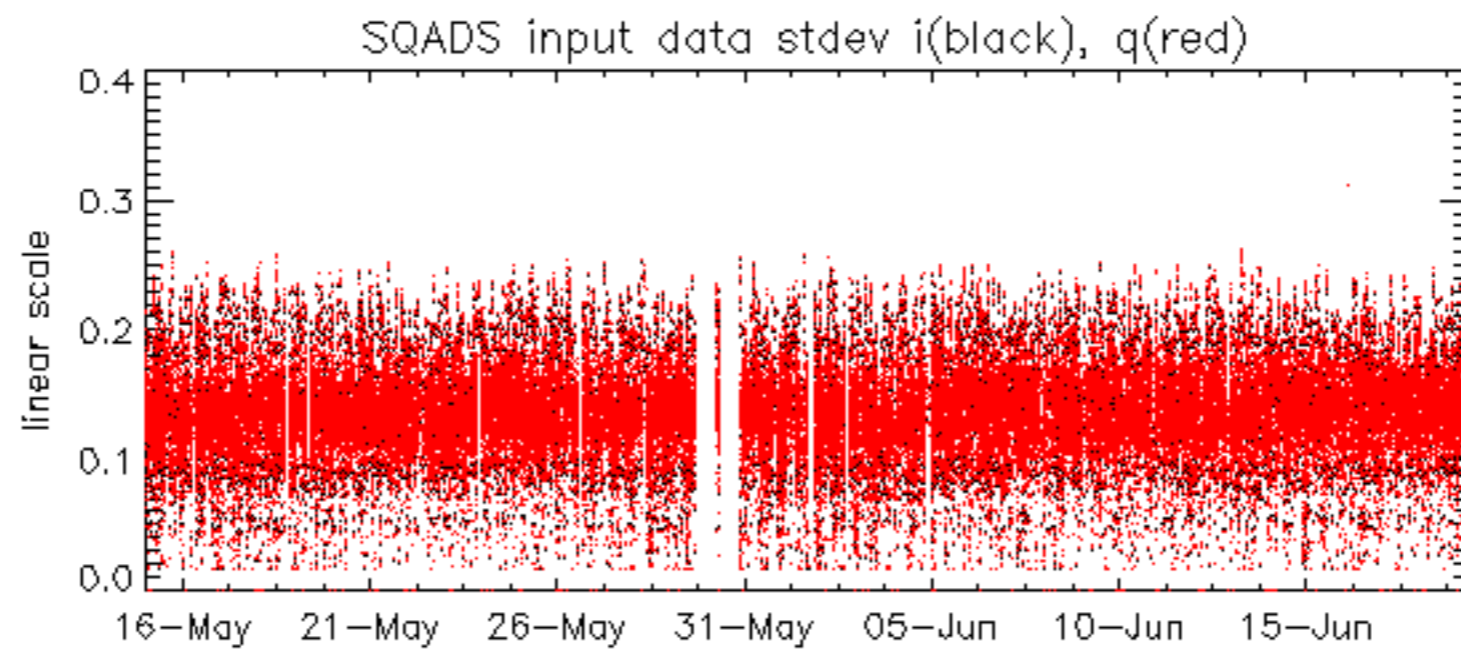


No anomalies observed on available MS products:

No anomalies observed.



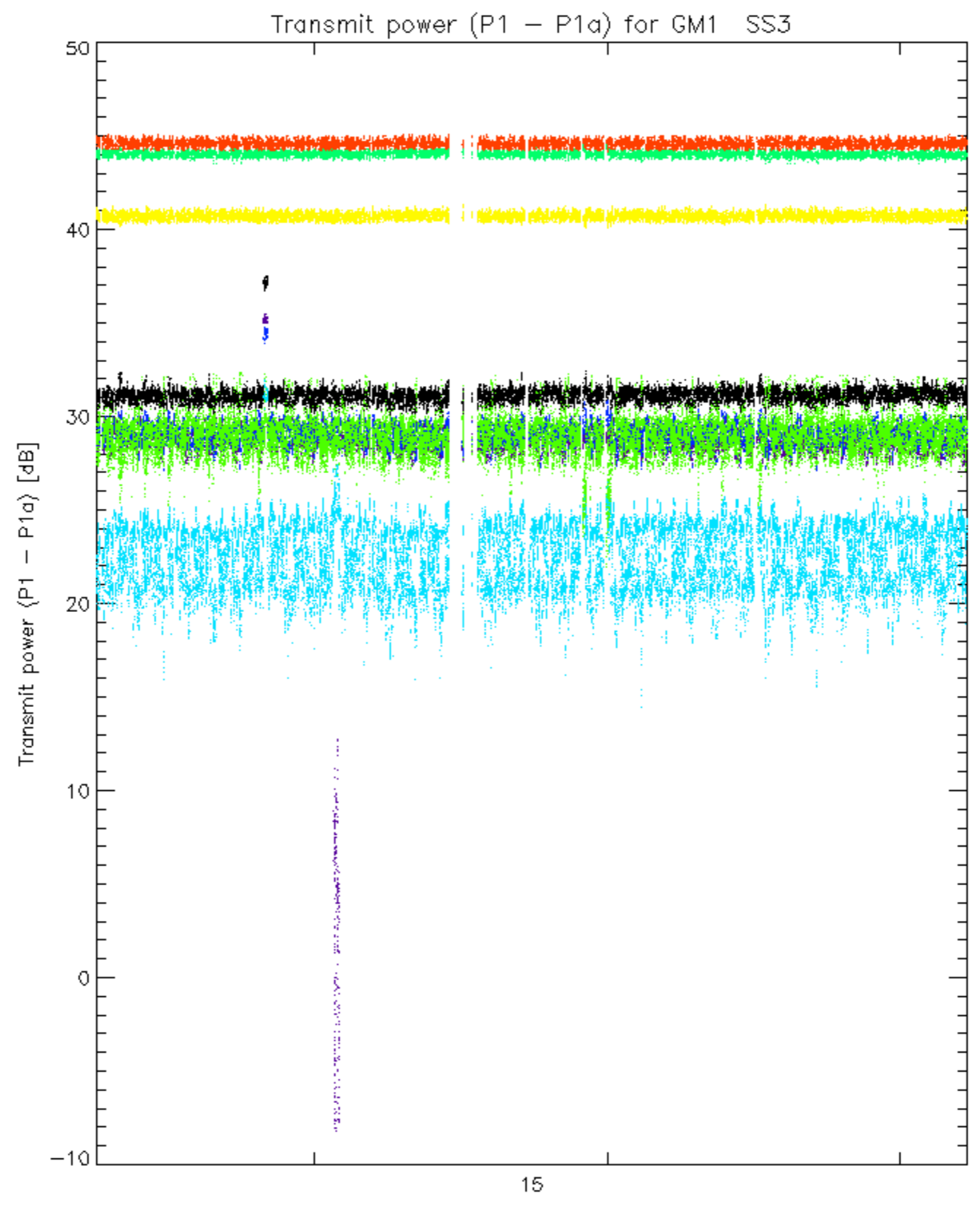




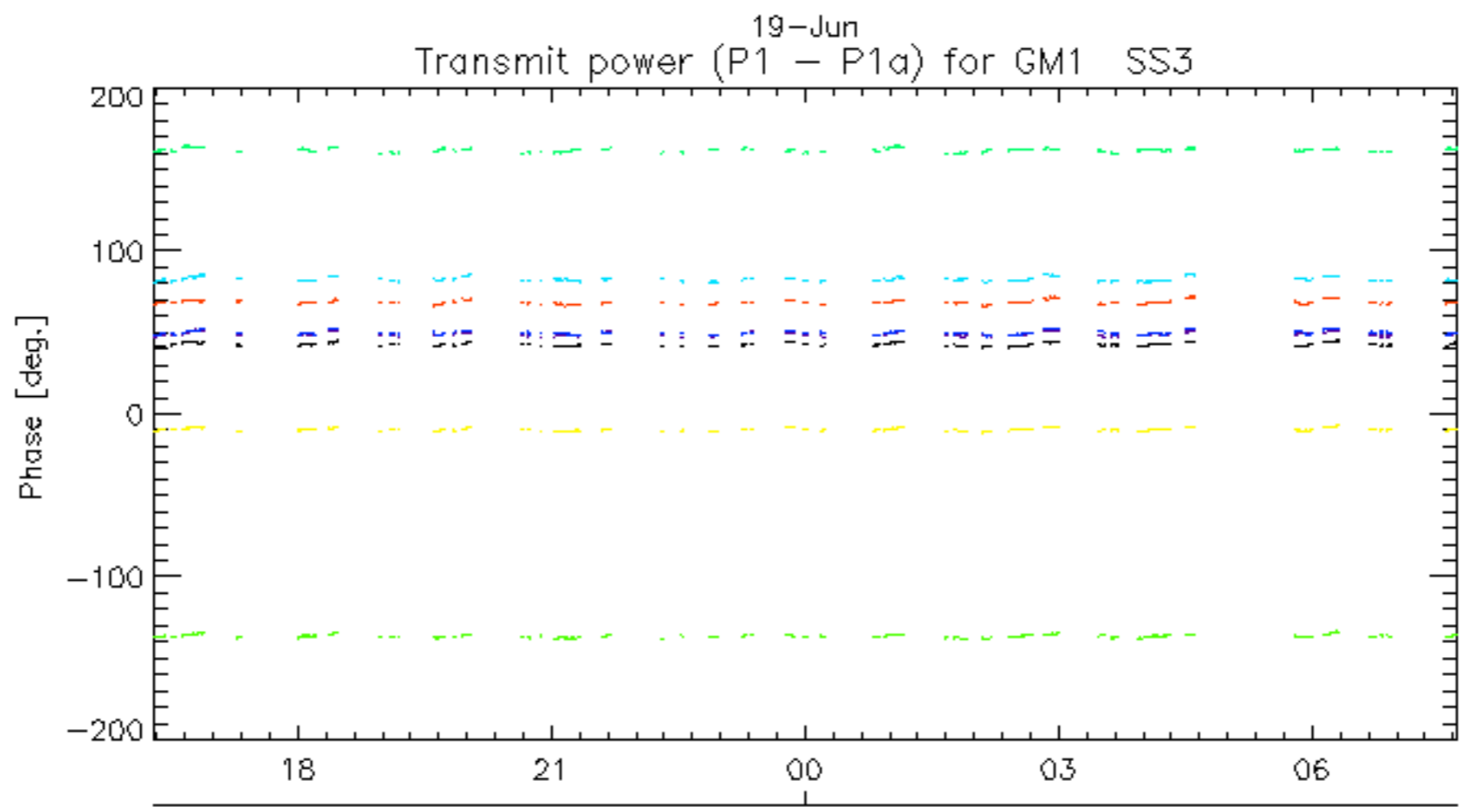
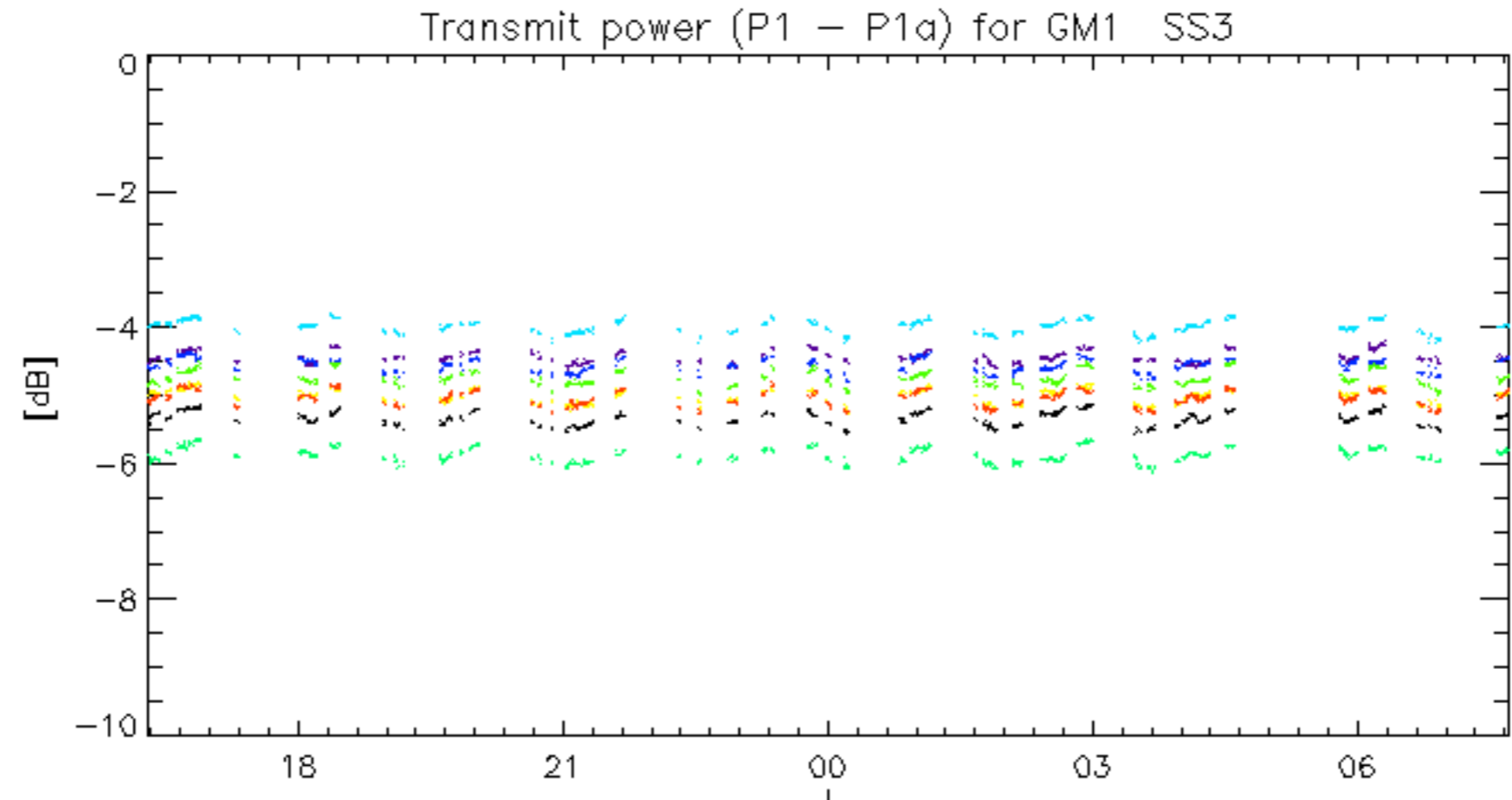
Summary of analysis for the last 3 days 2006061[789]

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

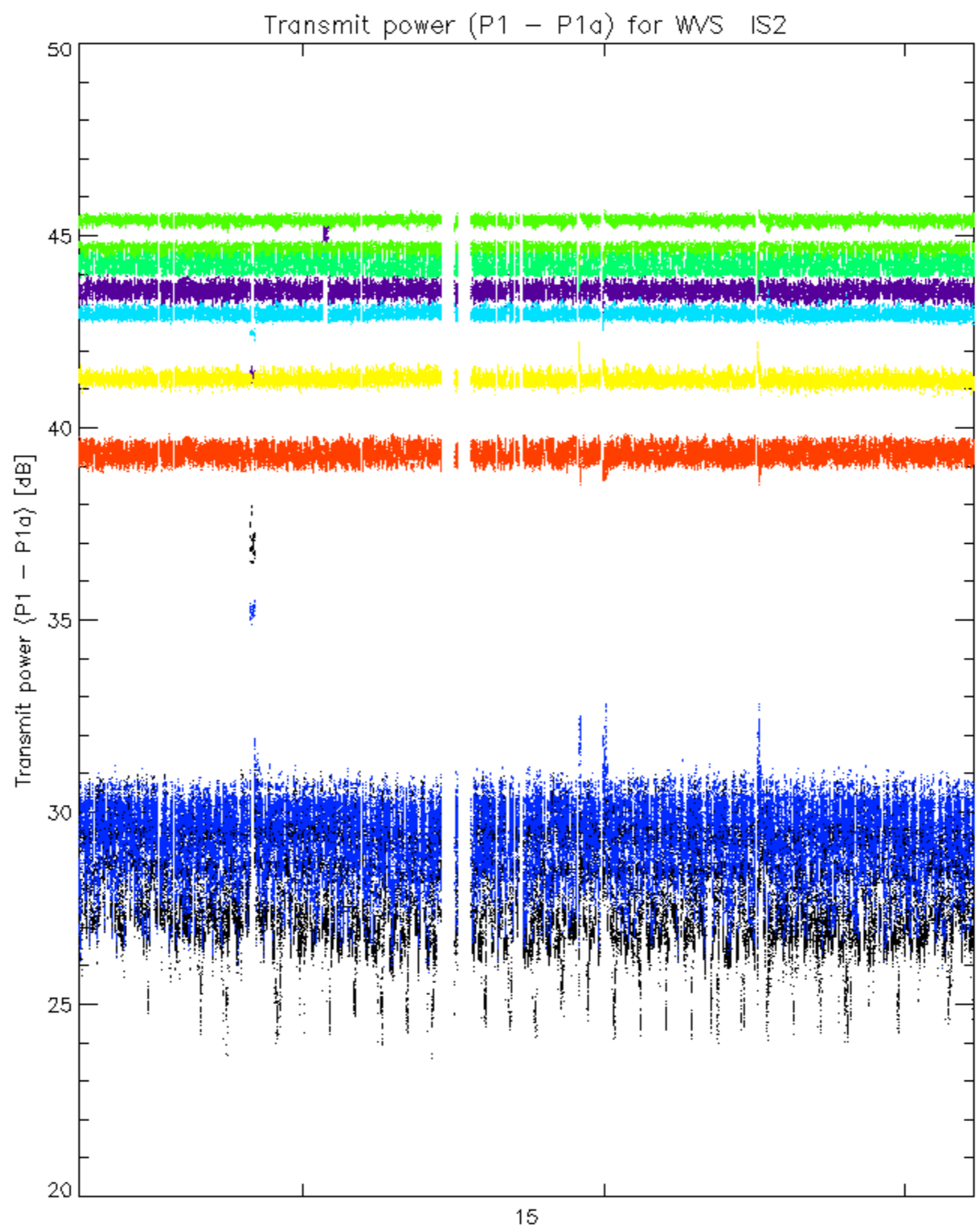
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20060617_182649_00000352048_00371_22469_7779.N1	0	16
ASA_IMM_1PNPDE20060619_062814_000001452048_00392_22490_8058.N1	1	0
ASA_IMM_1PNPDK20060618_121934_00000622048_00381_22479_2870.N1	1	44
ASA_IMM_1PNPDK20060618_125918_00000372048_00382_22480_2868.N1	1	0
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_1PNPDK20060617_082213_000000862048_00365_22463_7763.N1	0	35
ASA_APM_1PNPDE20060617_004226_000000562048_00360_22458_3444.N1	0	19



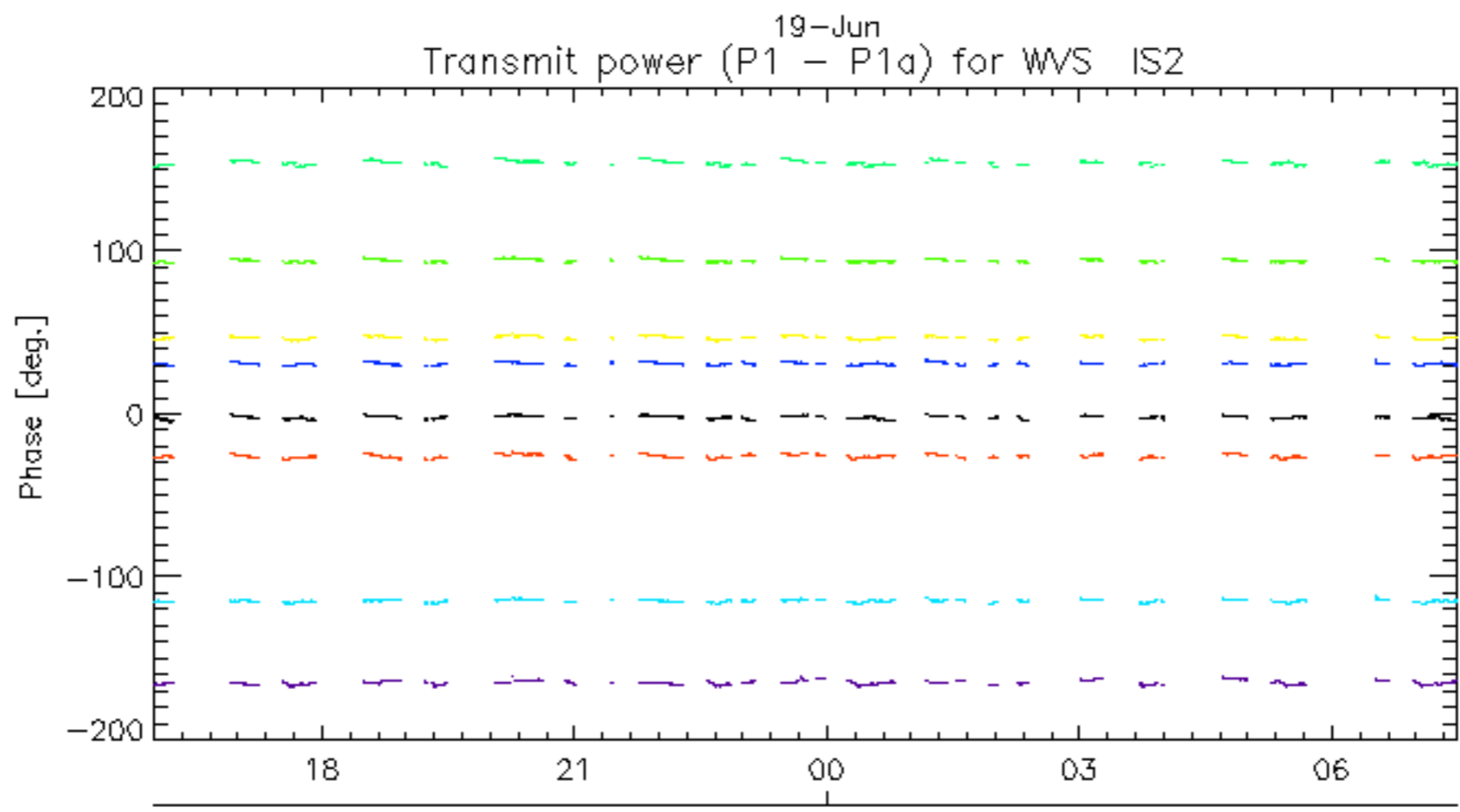
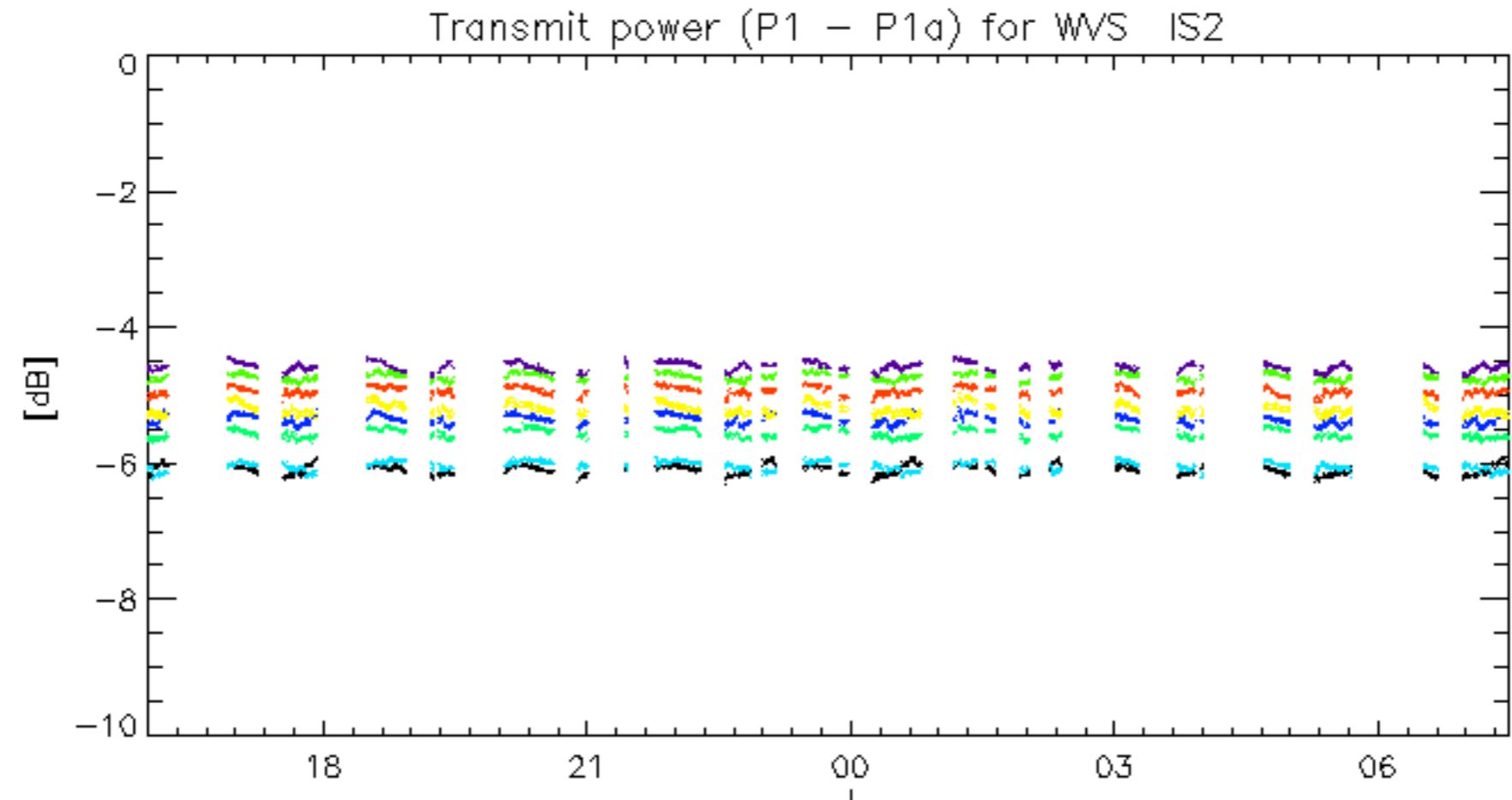
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



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.