

PRELIMINARY REPORT OF 040627

ATTENTION: This report is automatically generated no comments are provided on data analysis

last update on Sun Jun 27 13:05:46 GMT 2004

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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 - Browse Visual Inspection

2.3 - Data Analysis

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

3 - Module Stepping Mode

The MS mode provides an internal health check on an individual module basis. The purpose of this mode is to identify any malfunctioning modules and to identify modules for which calibration offsets are to be applied. No anomalies observed on available MS products:

Polarisation	Start Time
V	20040625 193838
H	20040626 190701

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

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	-3.507361	0.011067	0.048728
7	P1	-3.326760	0.015898	-0.012437
11	P1	-4.532329	0.038679	-0.011668
15	P1	-5.680160	0.059383	0.002715
19	P1	-3.430761	0.005102	-0.020009
22	P1	-4.559543	0.011222	0.008172
24	P1	-4.913578	0.015513	0.016249
30	P1	-6.846718	0.023085	-0.031086

3	P1	-16.097380	0.226487	0.035832
7	P1	-13.993973	0.110272	-0.004059
11	P1	-19.857288	0.314223	-0.215335
15	P1	-11.782523	0.046357	0.041648
19	P1	-13.813960	0.033608	-0.045139
22	P1	-16.561546	0.427555	0.167598
24	P1	-14.692757	0.303564	0.106161
30	P1	-17.679504	0.376277	-0.067506

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.418419	0.082495	0.049503
7	P2	-22.856966	0.122545	0.072259
11	P2	-15.627855	0.137657	0.127146
15	P2	-7.192936	0.097765	0.054568
19	P2	-9.568107	0.147264	0.054879
22	P2	-17.547966	0.106331	0.132963
24	P2	-20.870548	0.087593	0.072705
30	P2	-19.436333	0.079851	0.078478

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.143741	0.002002	0.000538
7	P3	-8.143738	0.002002	0.000525
11	P3	-8.143737	0.002002	0.000510
15	P3	-8.143739	0.002003	0.000503
19	P3	-8.143728	0.002003	0.000463
22	P3	-8.143728	0.002003	0.000471
24	P3	-8.143730	0.002003	0.000486
30	P3	-8.143856	0.002005	0.000272

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1	
<input type="checkbox"/>	
<input type="checkbox"/>	

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	-3.145222	0.134844	0.029683
7	P1	-2.809263	0.072307	-0.009228
11	P1	-3.792588	0.022027	-0.023260
15	P1	-4.264491	1.020629	0.020027
19	P1	-3.356186	0.049123	-0.021705
22	P1	-5.721954	0.044573	0.003214
24	P1	-4.050603	0.080056	-0.007637
30	P1	-6.099702	0.062163	-0.026283
3	P1	-11.028632	0.424144	0.040740
7	P1	-9.764682	0.247559	-0.028501
11	P1	-11.763310	0.169154	-0.058379
15	P1	-11.843798	0.277667	-0.024367
19	P1	-14.993195	0.821074	-0.031279
22	P1	-21.491634	8.928455	0.020635
24	P1	-17.373001	0.286592	-0.070943
30	P1	-21.716059	4.154733	0.018080

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-18.162838	0.043089	0.038548
7	P2	-22.944586	0.029306	0.072679
11	P2	-11.037249	0.218476	0.135321
15	P2	-5.003431	0.044216	0.026126
19	P2	-6.933078	0.043280	-0.000567
22	P2	-7.682368	0.023809	0.088549
24	P2	-11.076044	0.072628	0.048820
30	P2	-22.398682	0.092861	0.102398

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
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3	P3	-7.984538	0.003300	-0.001701
7	P3	-7.984432	0.003291	-0.001747
11	P3	-7.984473	0.003297	-0.001454
15	P3	-7.984512	0.003288	-0.001301
19	P3	-7.984451	0.003300	-0.001689
22	P3	-7.984567	0.003285	-0.001485
24	P3	-7.984349	0.003317	-0.001894
30	P3	-7.984506	0.003290	-0.001406

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	0.000494644
	stdev	2.09965e-07
MEAN Q	mean	0.000545952
	stdev	2.36900e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.129732
	stdev	0.00101743

STDEV Q	mean	0.129978
	stdev	0.00102959



5.3 - Gain imbalance I/Q





6 - Doppler Analysis

Preliminary report. The data is not yet controlled



6.1 - Unbiased Doppler Error for WVS

Evolution of unbiased Doppler error (Real - Expected)

	
	Acsending
	
	Descending

6.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler

	
	Acsending
	
	Descending

6.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX

	
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6.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)	
<input type="checkbox"/>	
	Ascending
<input type="checkbox"/>	
	Descending

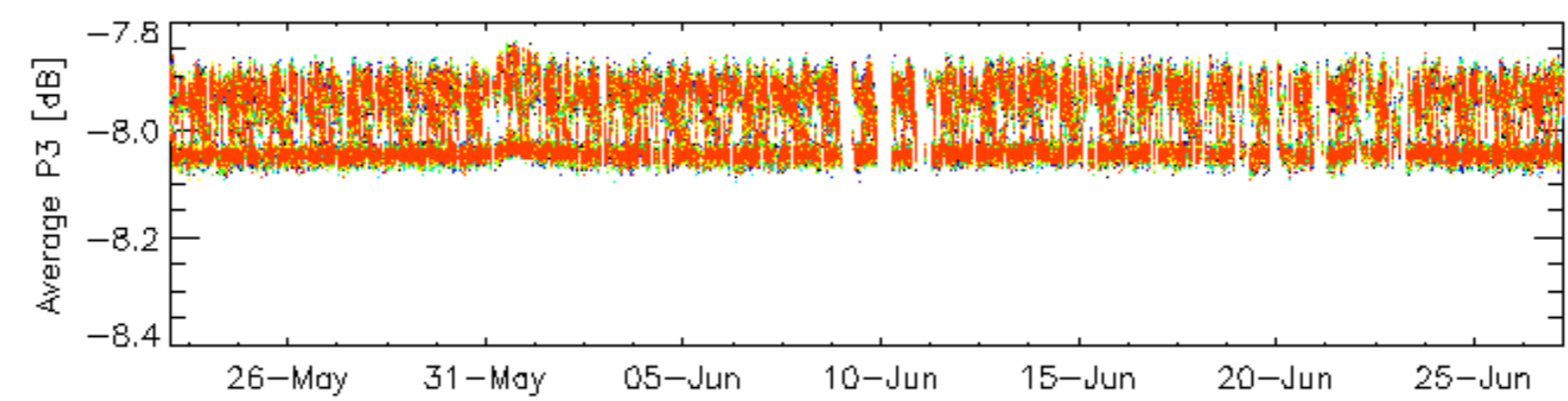
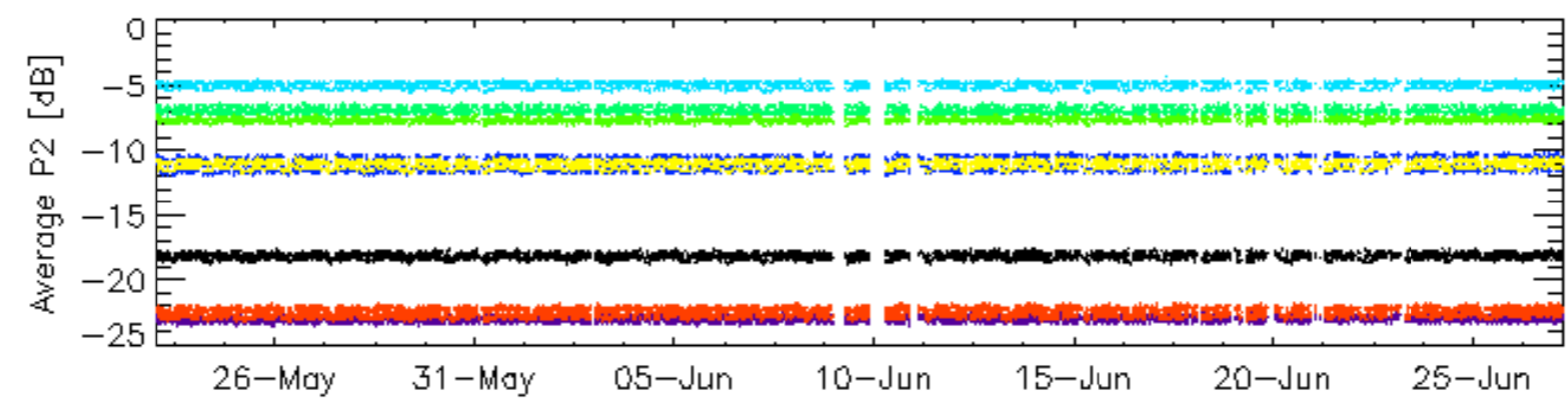
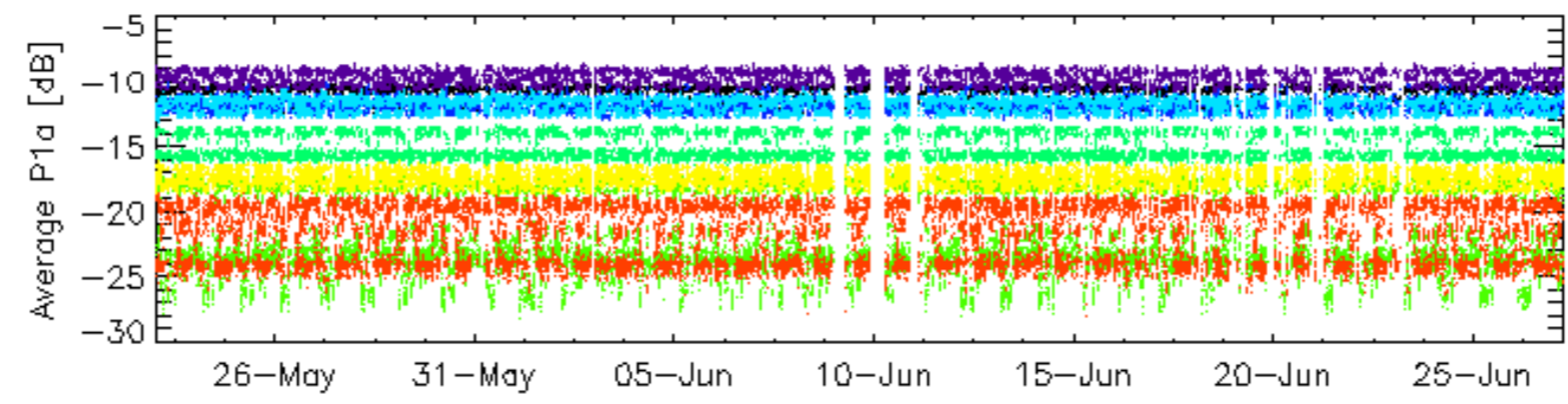
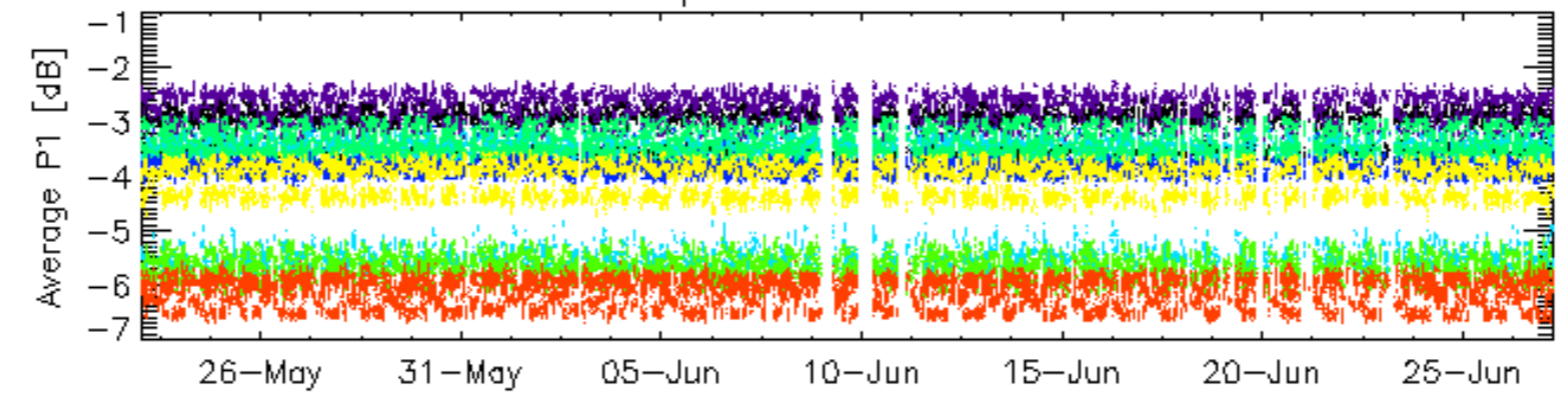
6.5 - Absolute Doppler for GM1

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

6.6 - Doppler evolution versus ANX for GM1

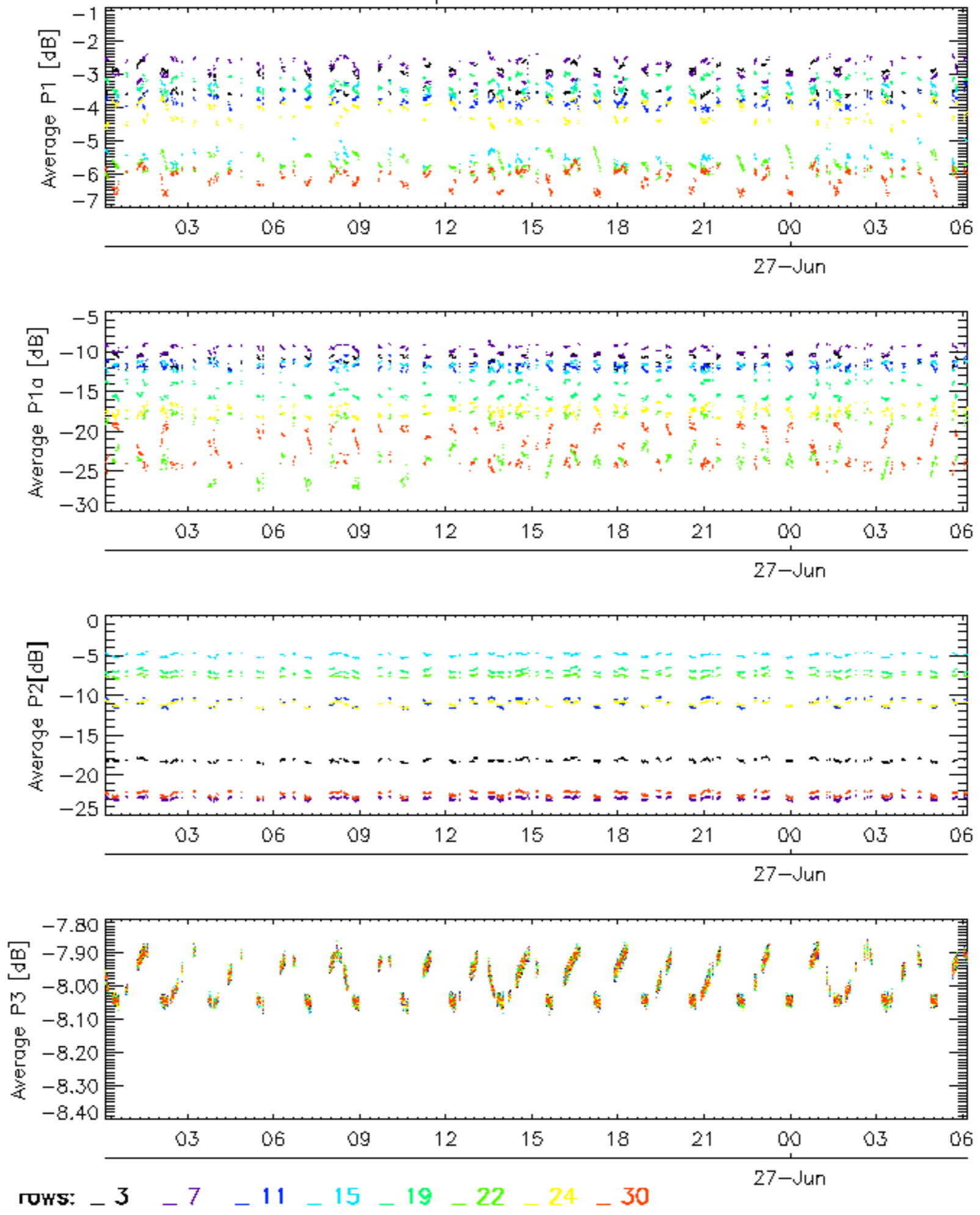
Evolution Doppler error versus ANX	
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Cal pulses for GM1 SS3

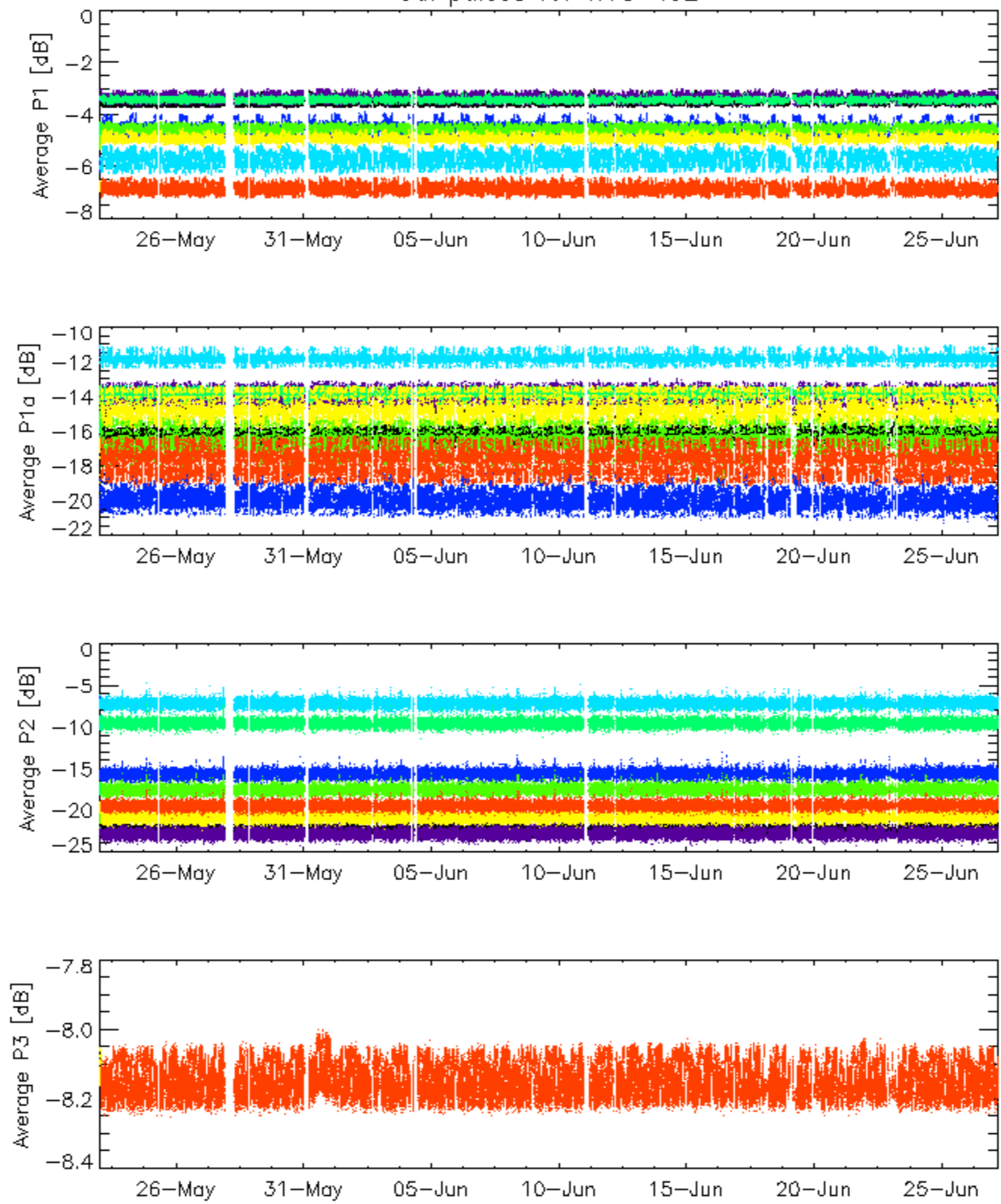


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

Cal pulses for GM1 SS3

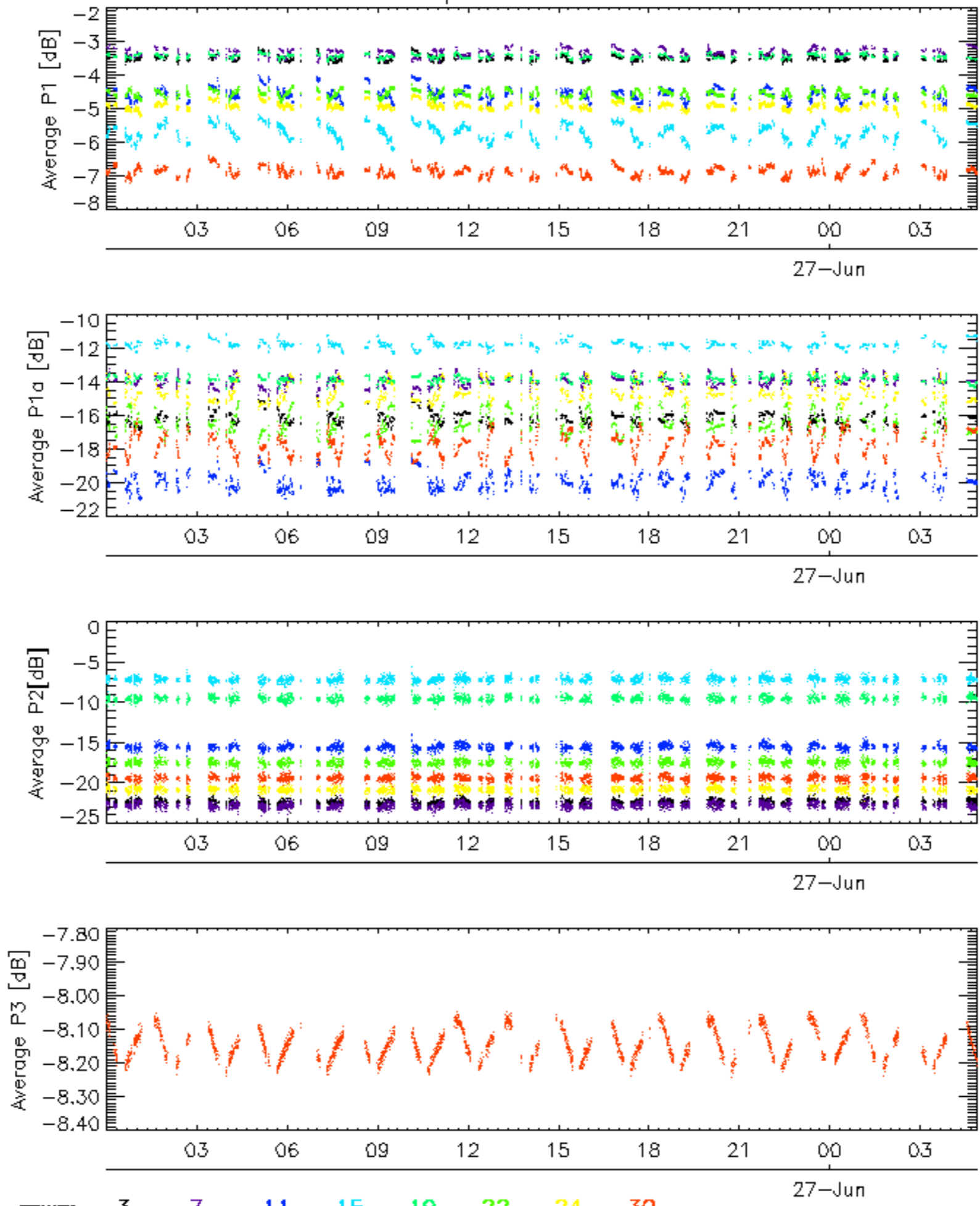


Cal pulses for WVS IS2



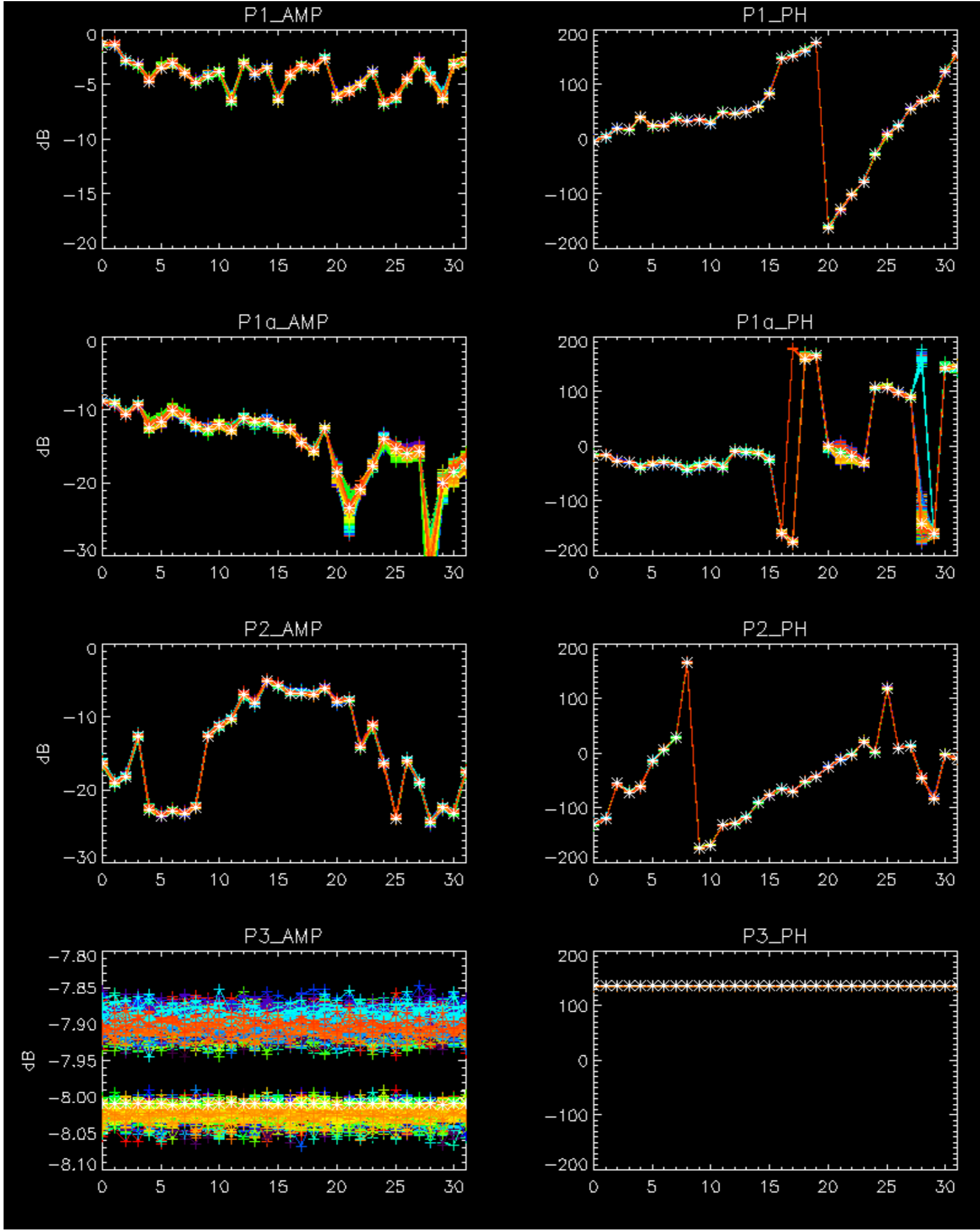
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

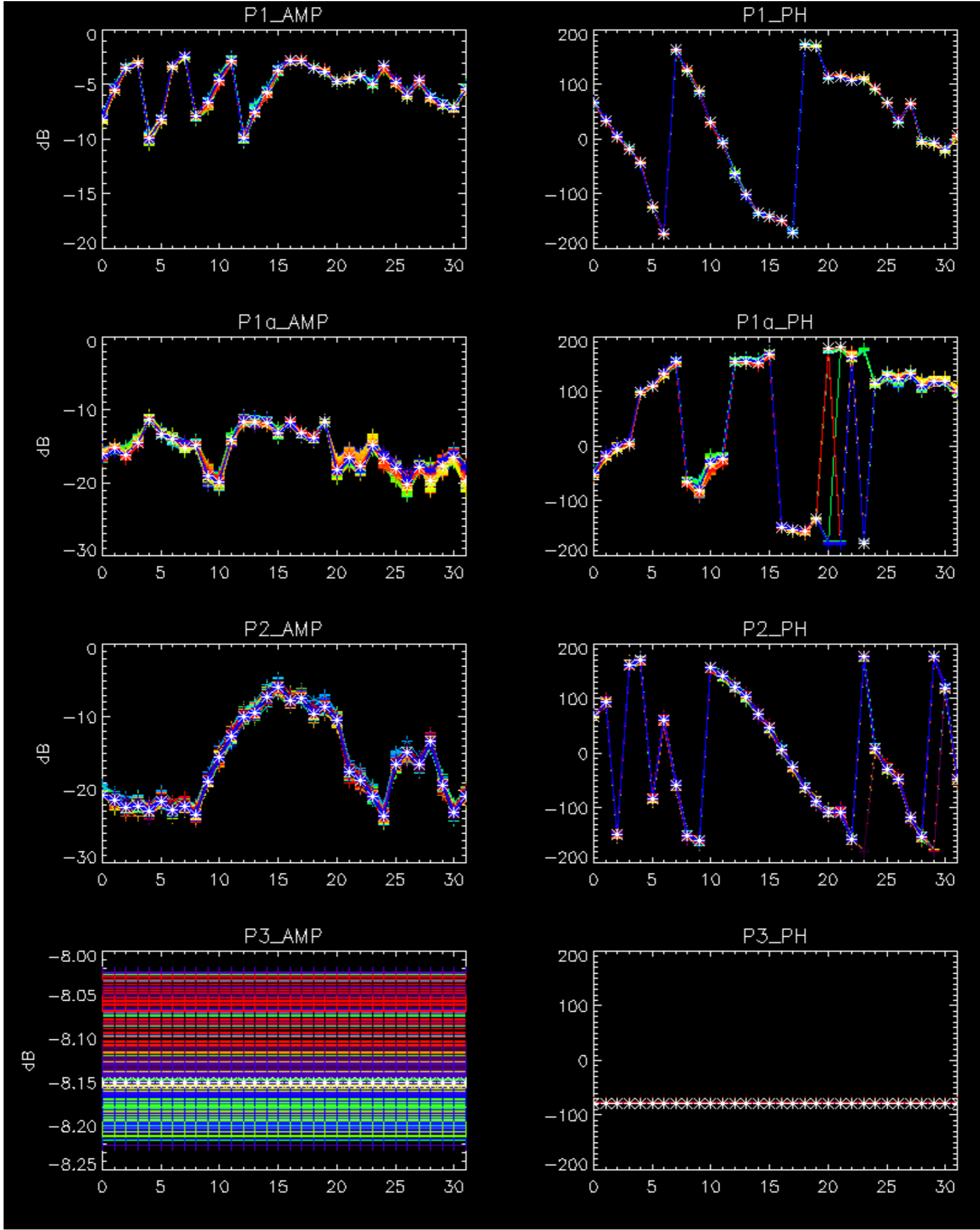
Cal pulses for WVS IS2



rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

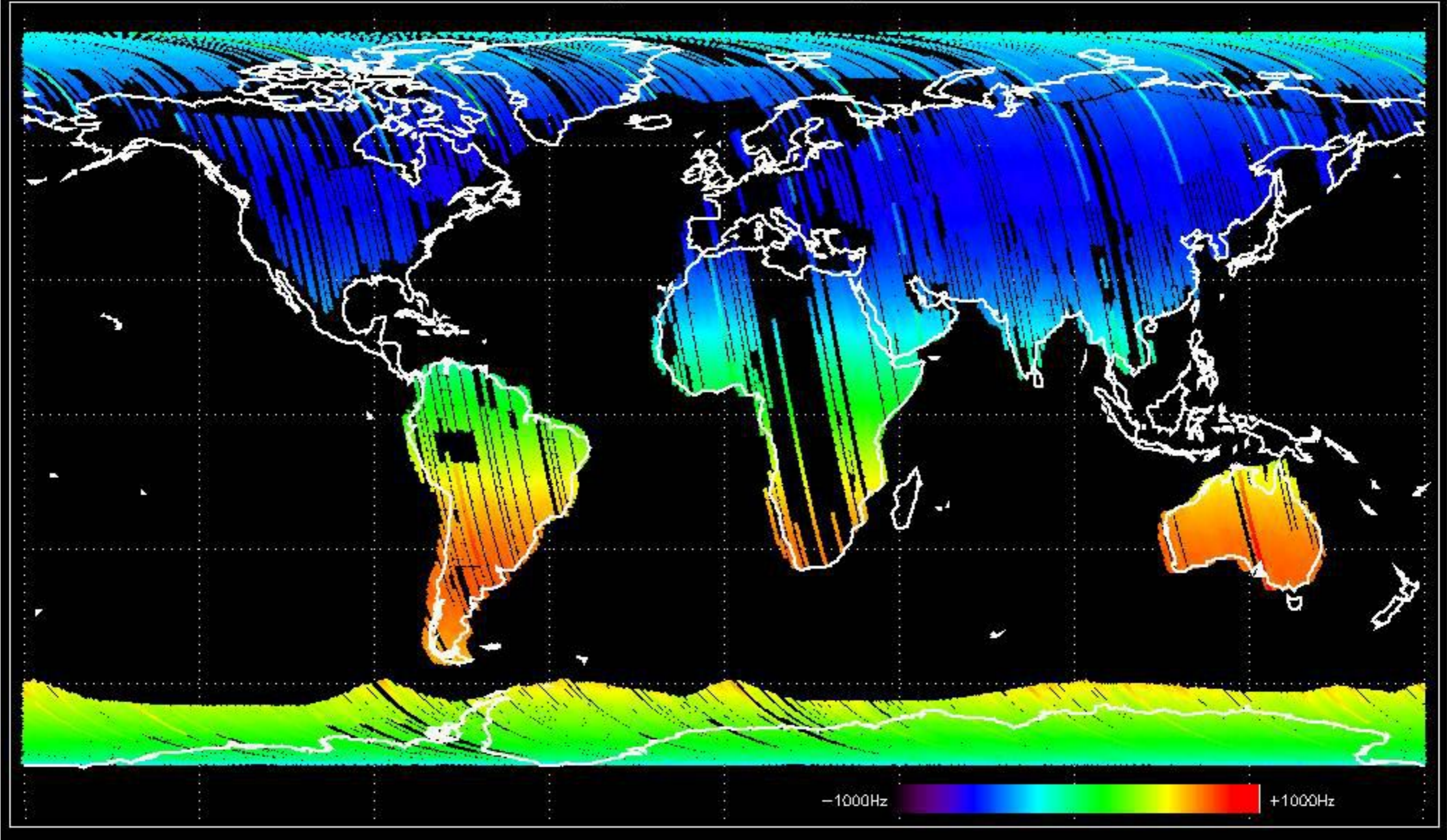
No anomalies observed.



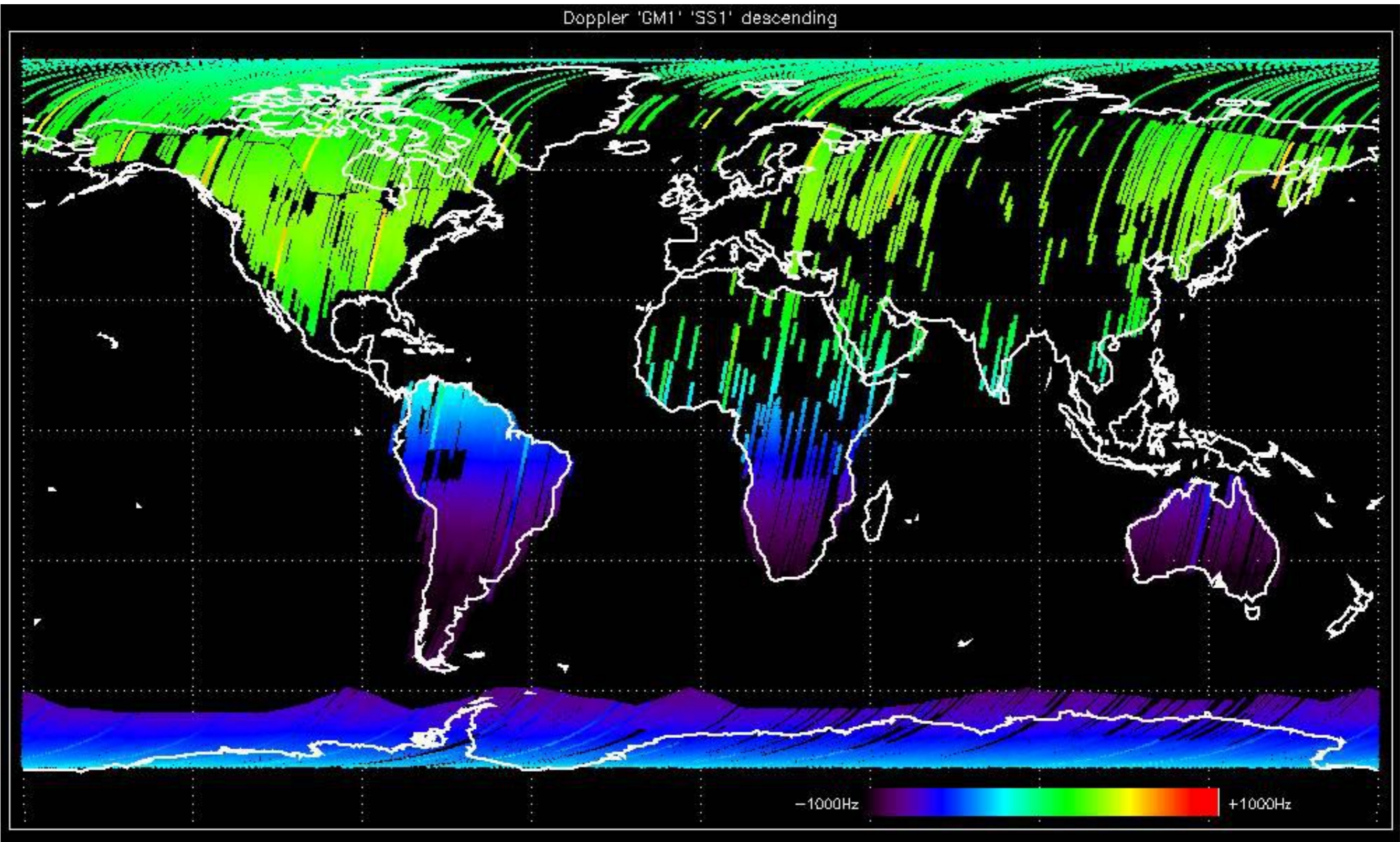


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

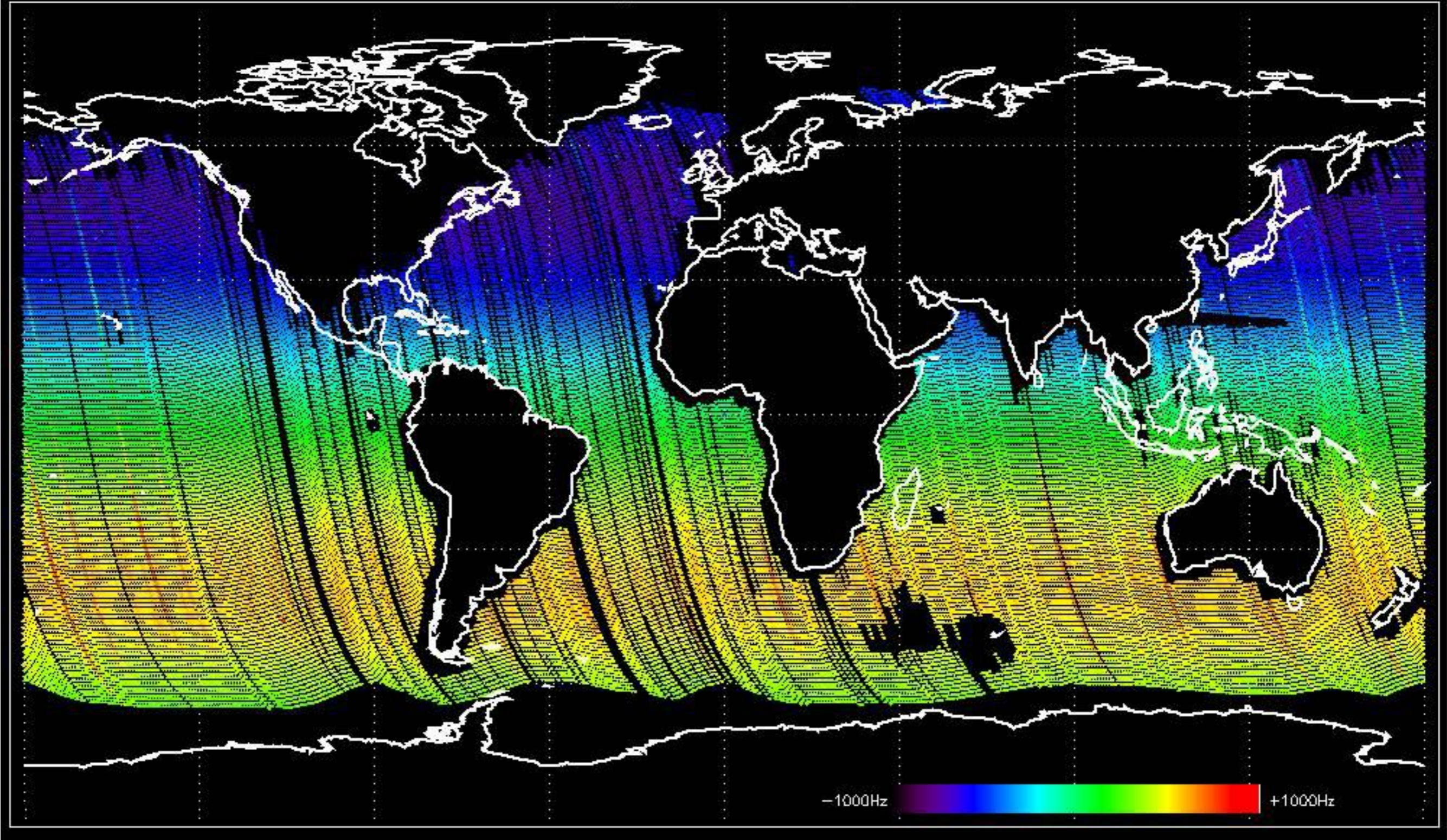
Doppler 'GM1' 'SS1' ascending



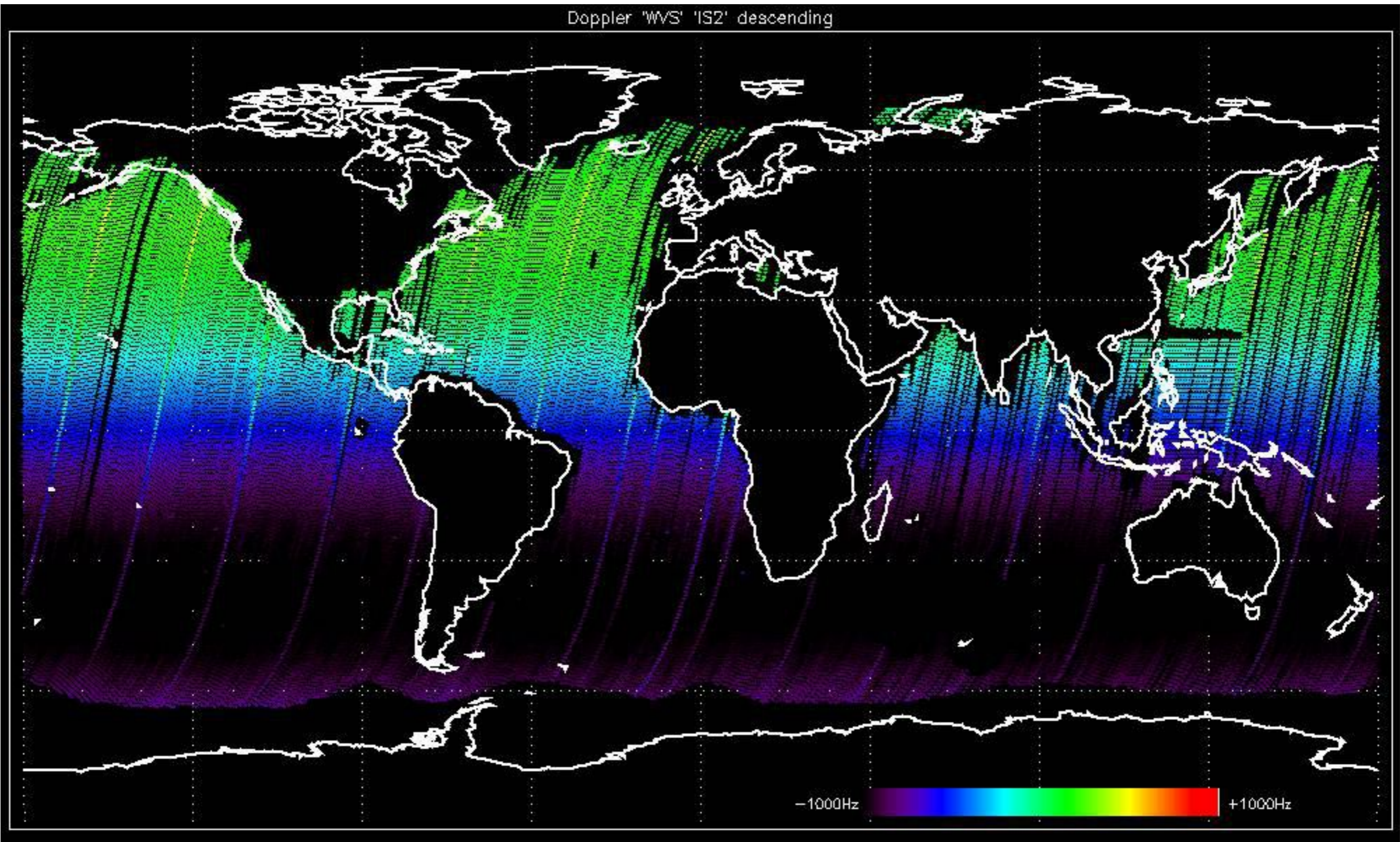
Doppler 'GM1' 'SS1' descending



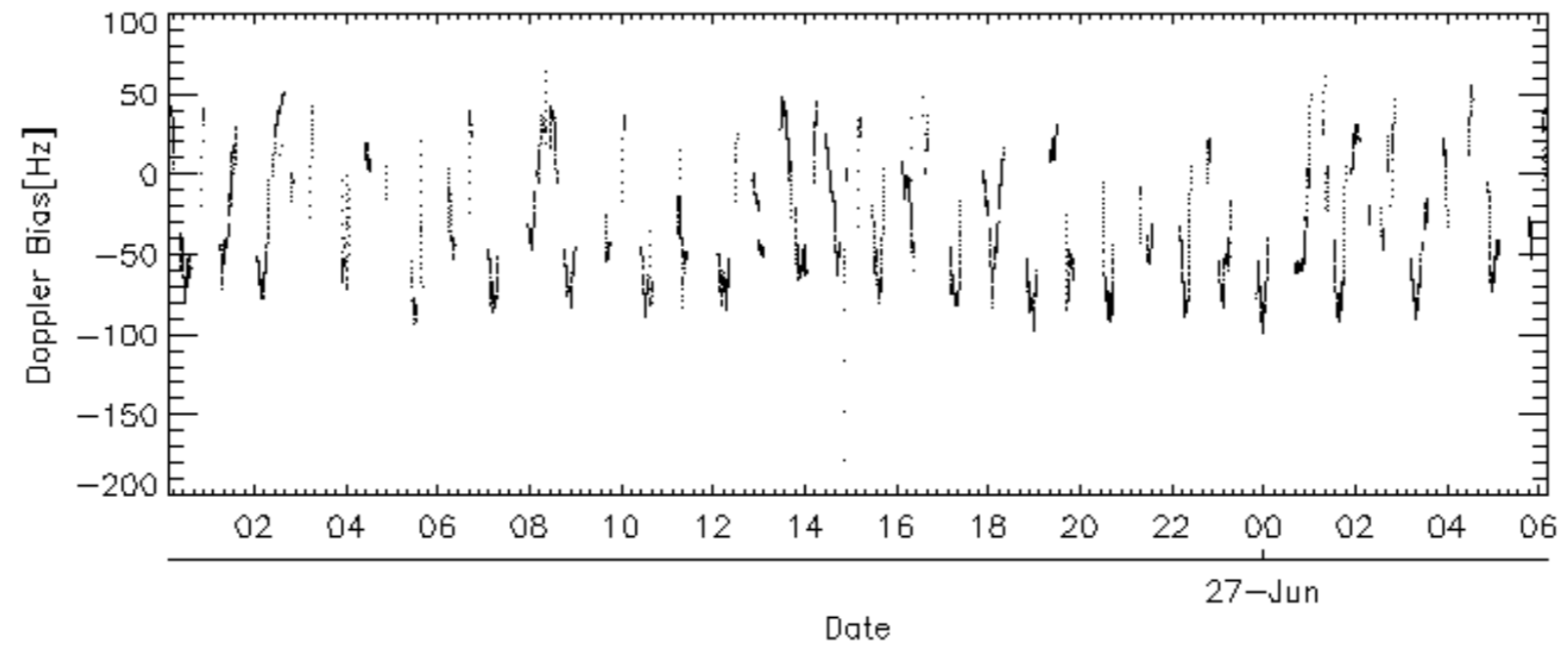
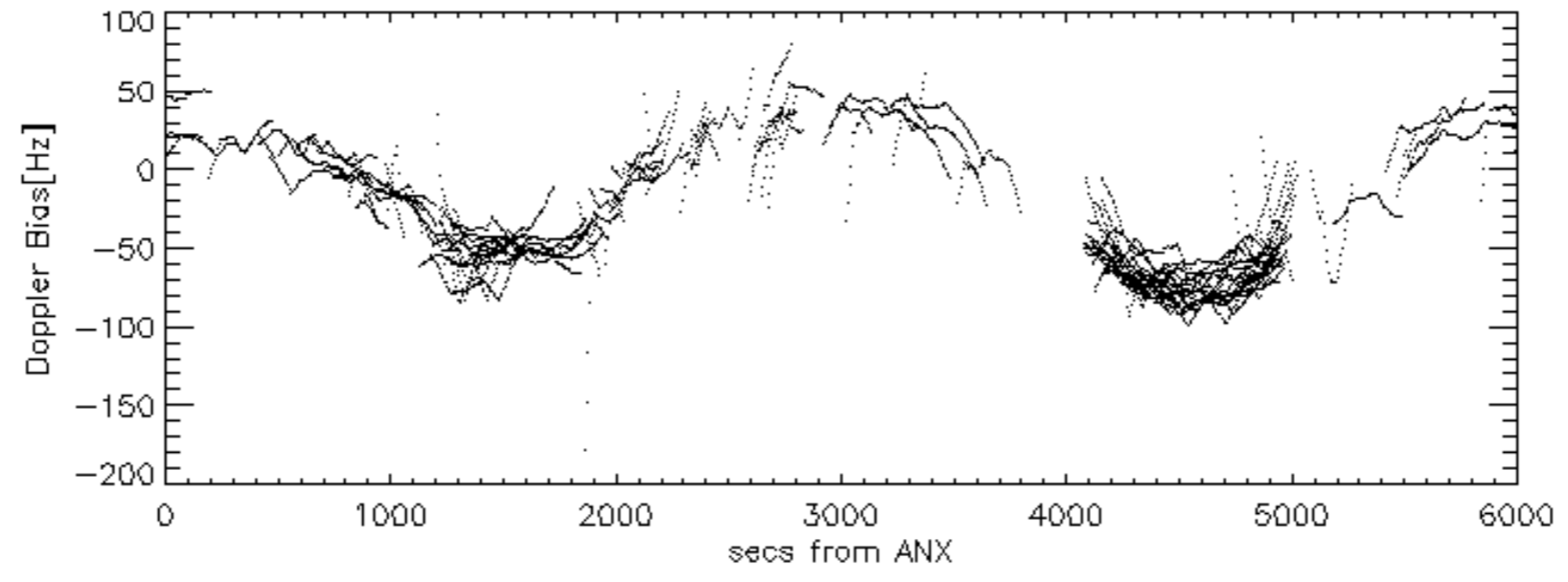
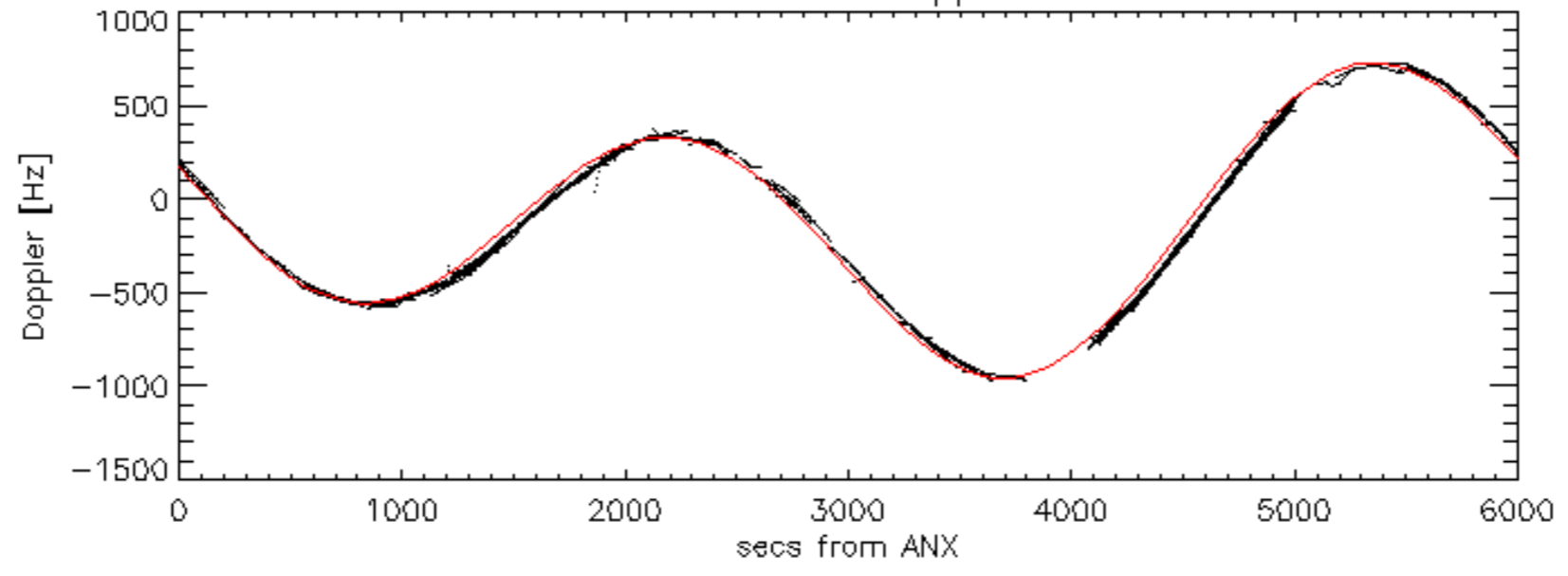
Doppler 'WVS' 'IS2' ascending

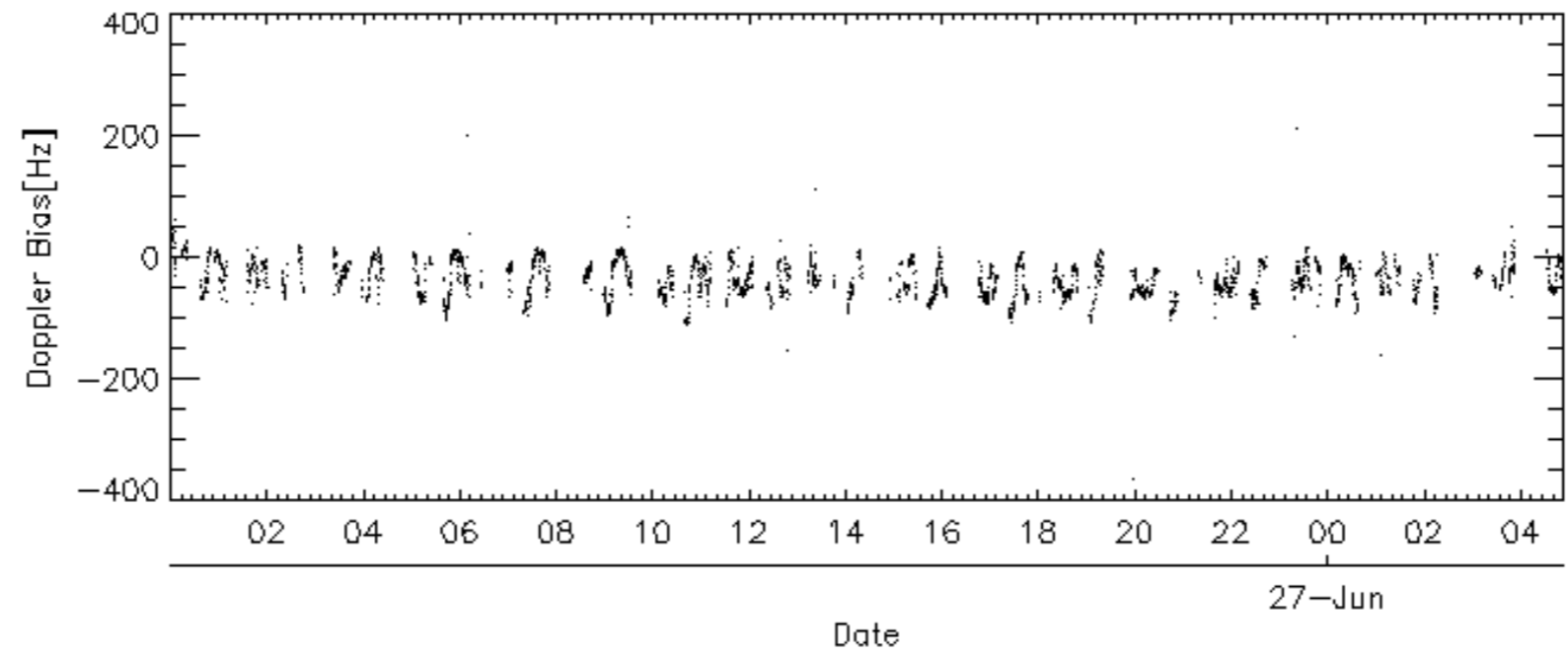
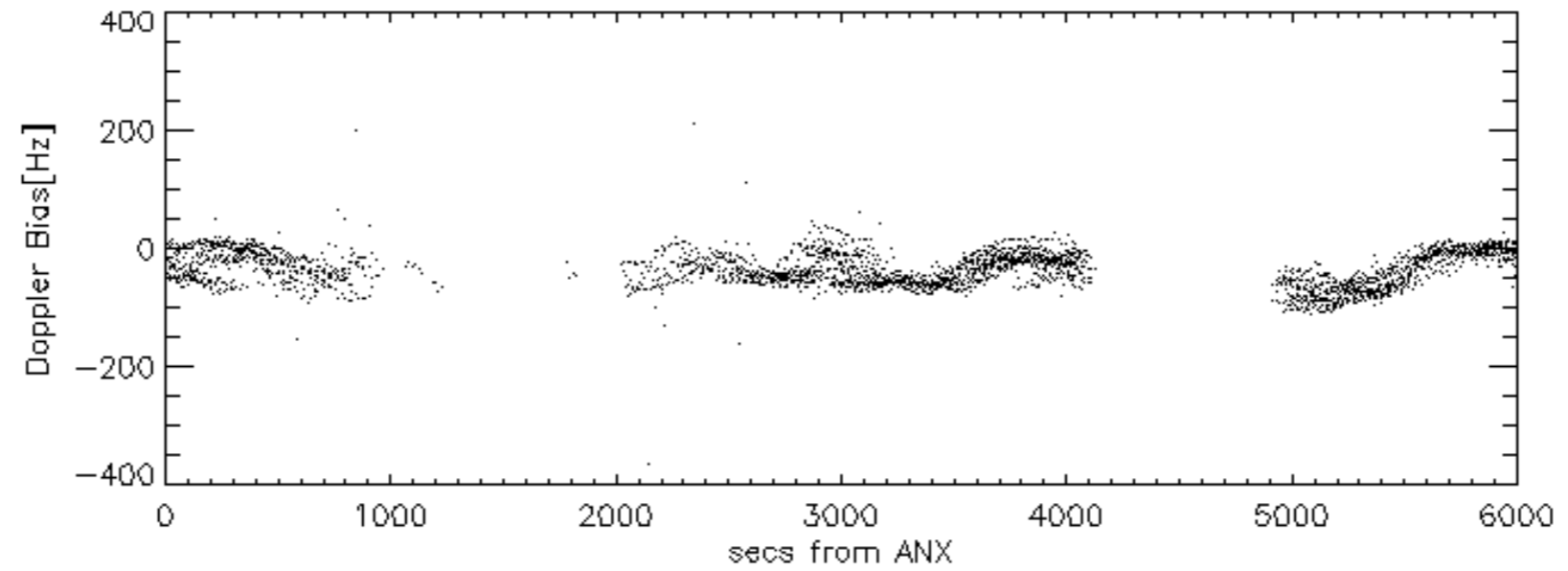
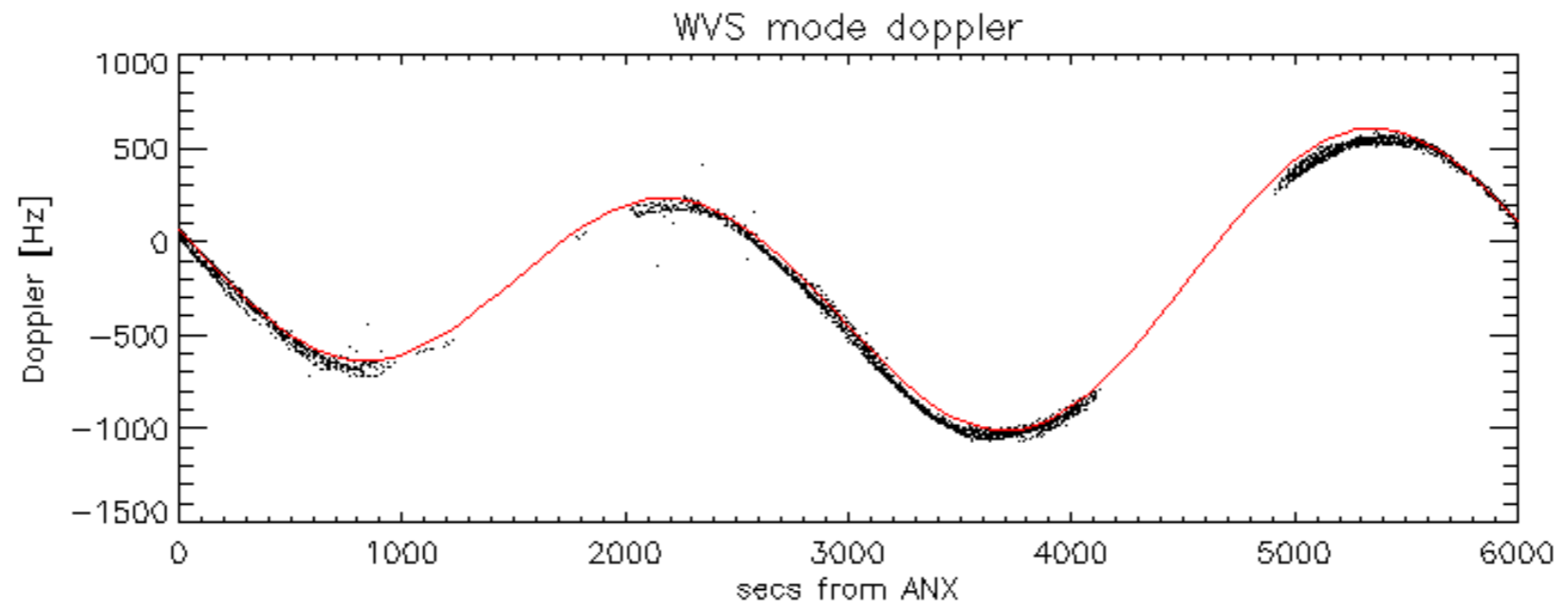


Doppler 'WVS' 'IS2' descending

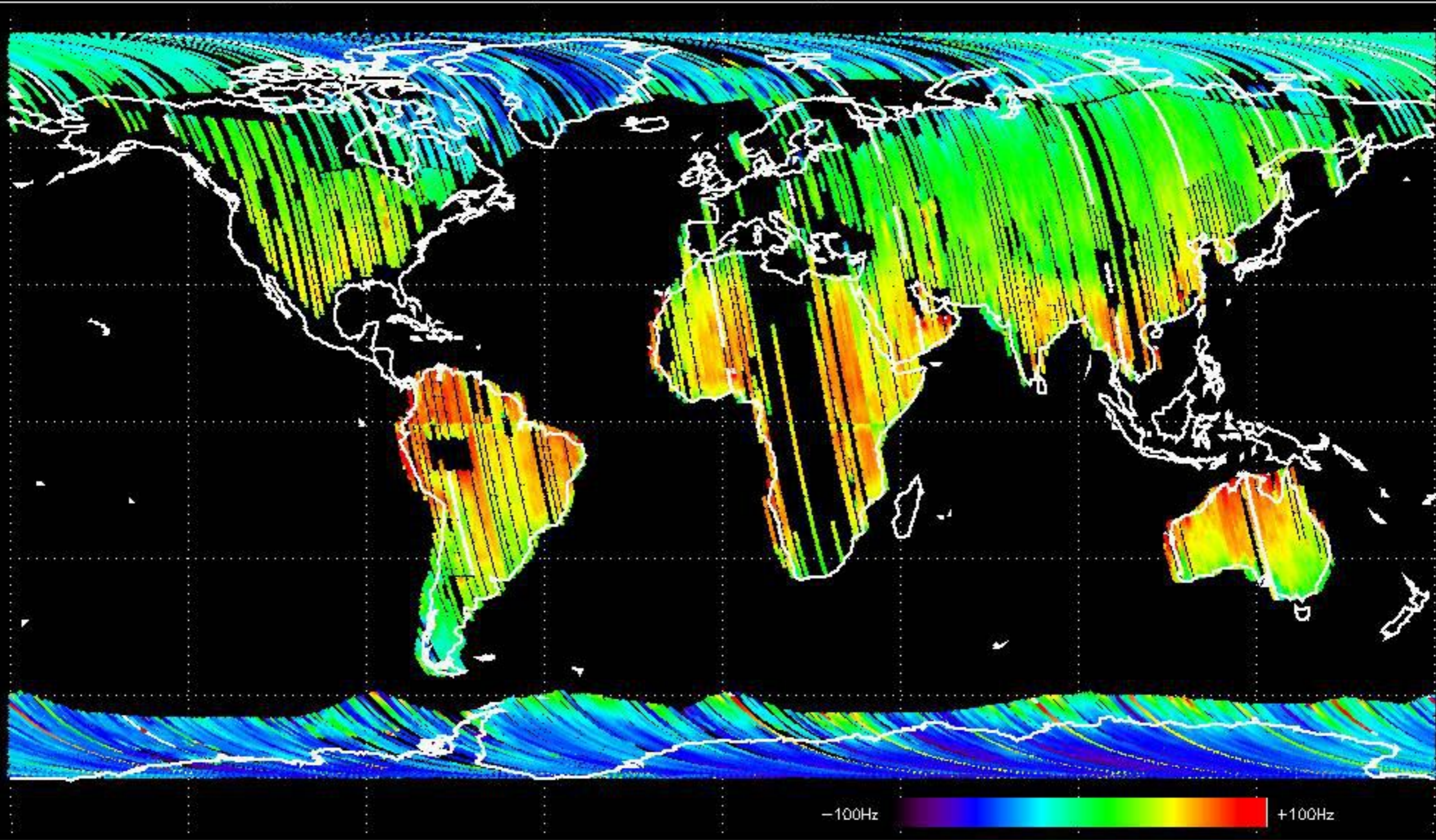


GM1 mode doppler

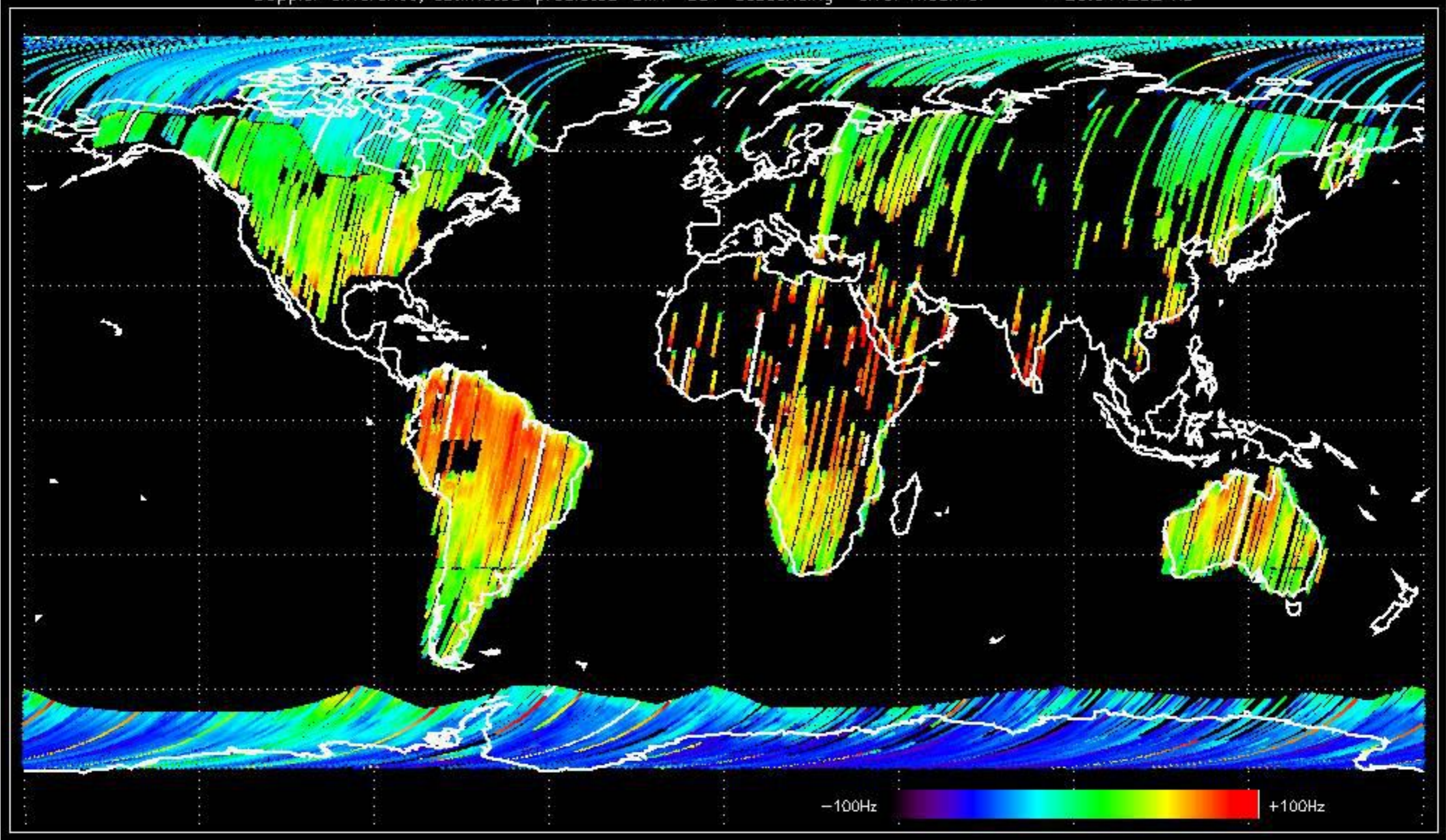




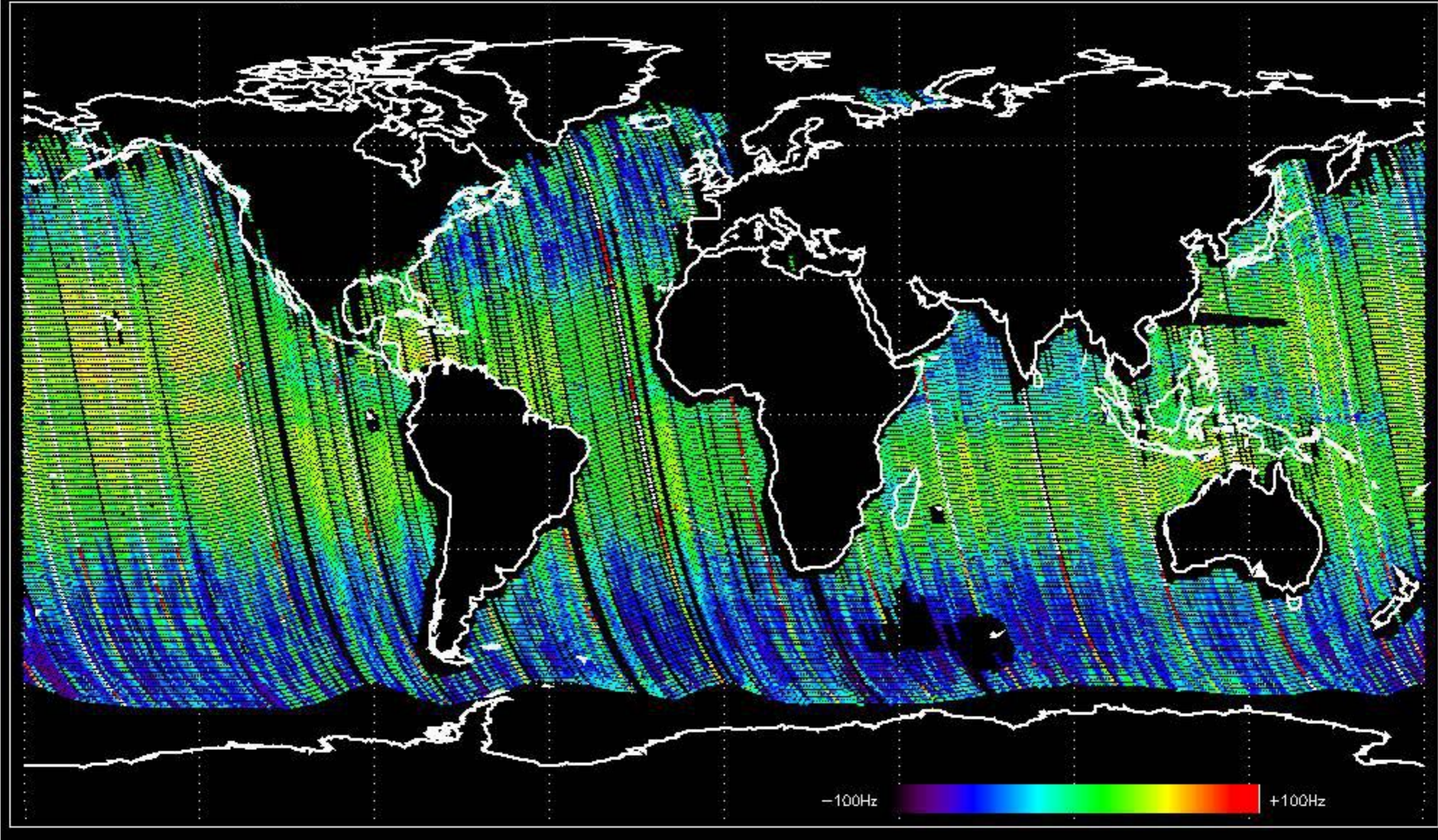
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -26.318443 Hz



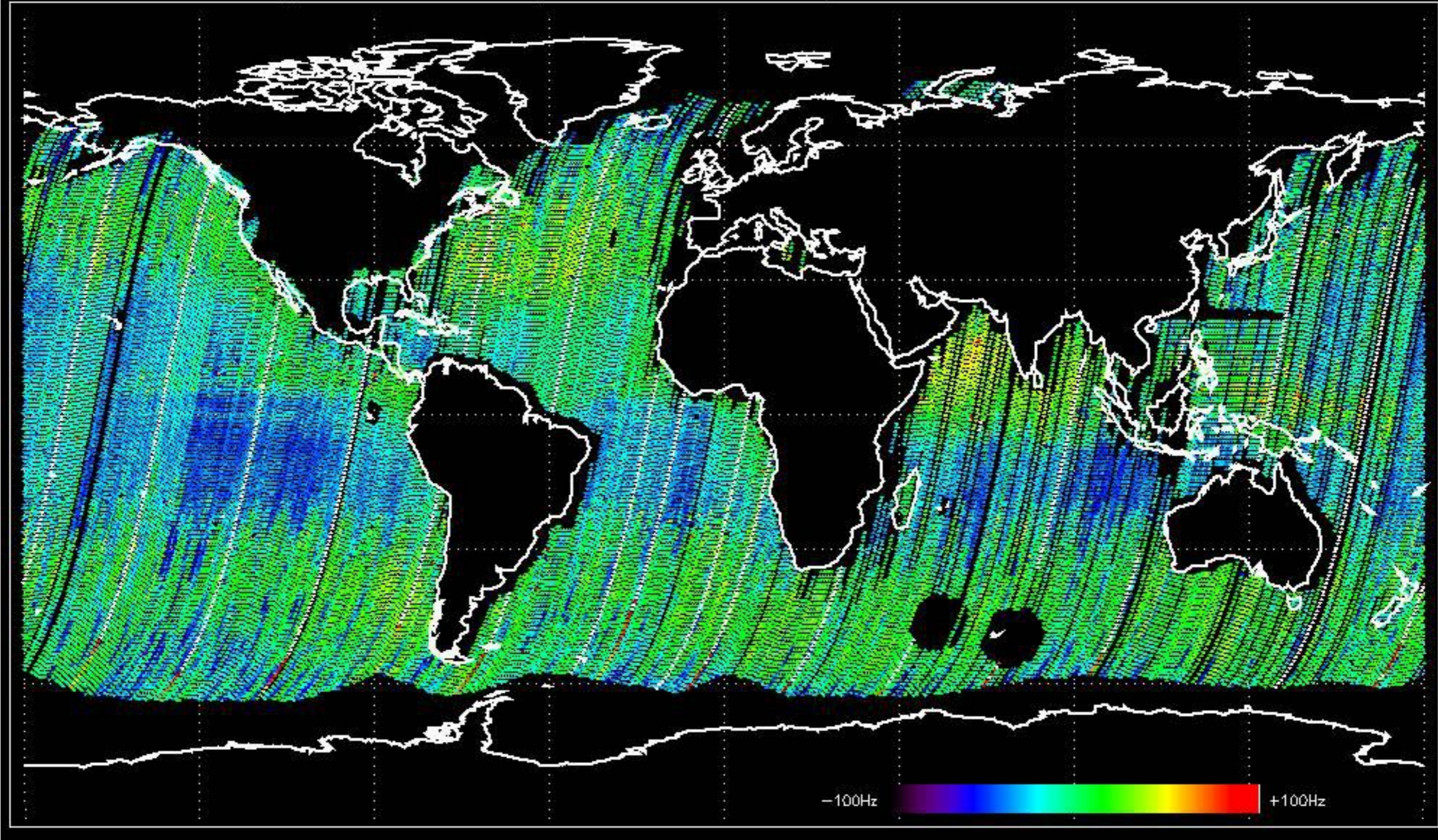
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -23.644202 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -26.938193 Hz

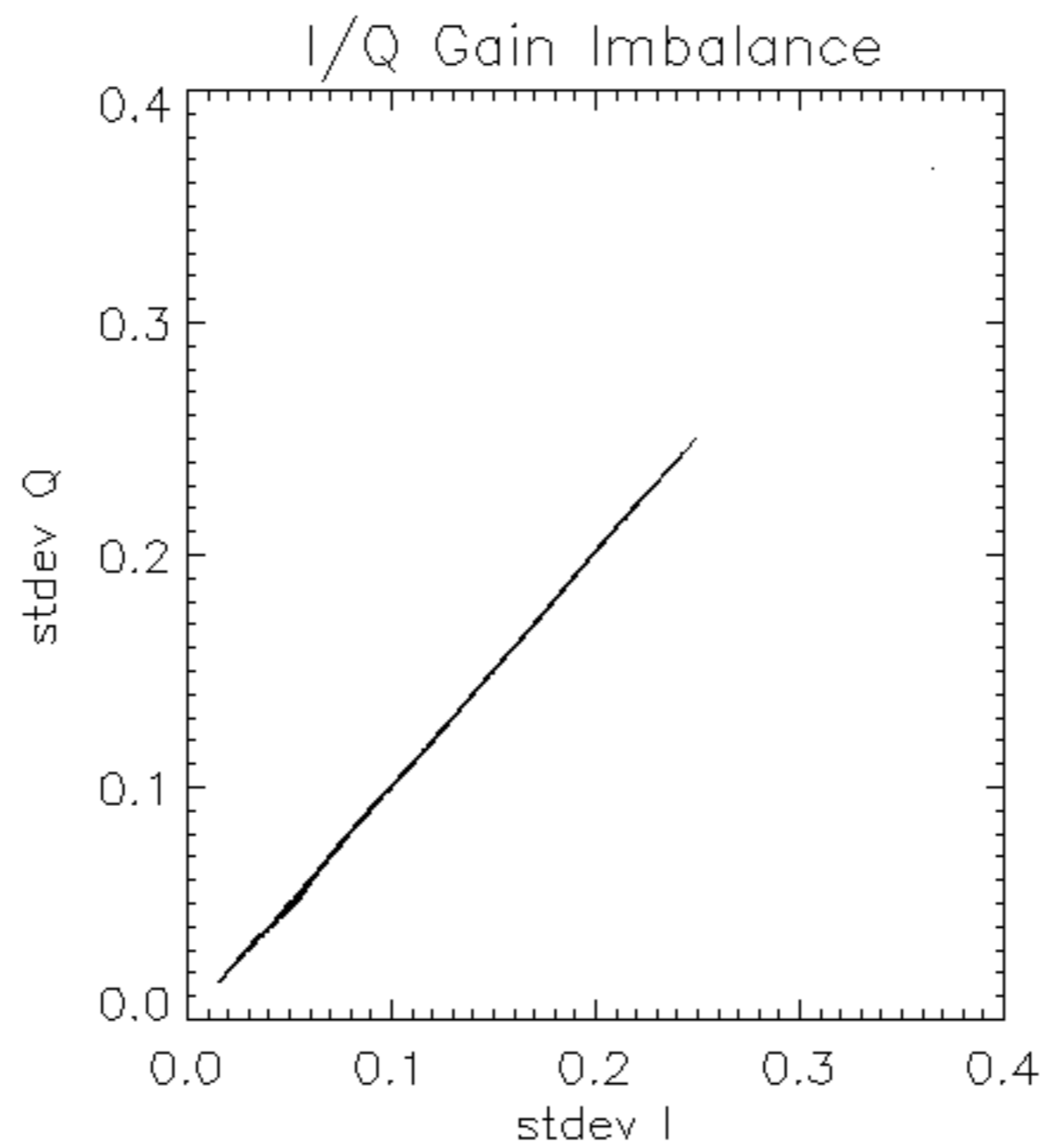


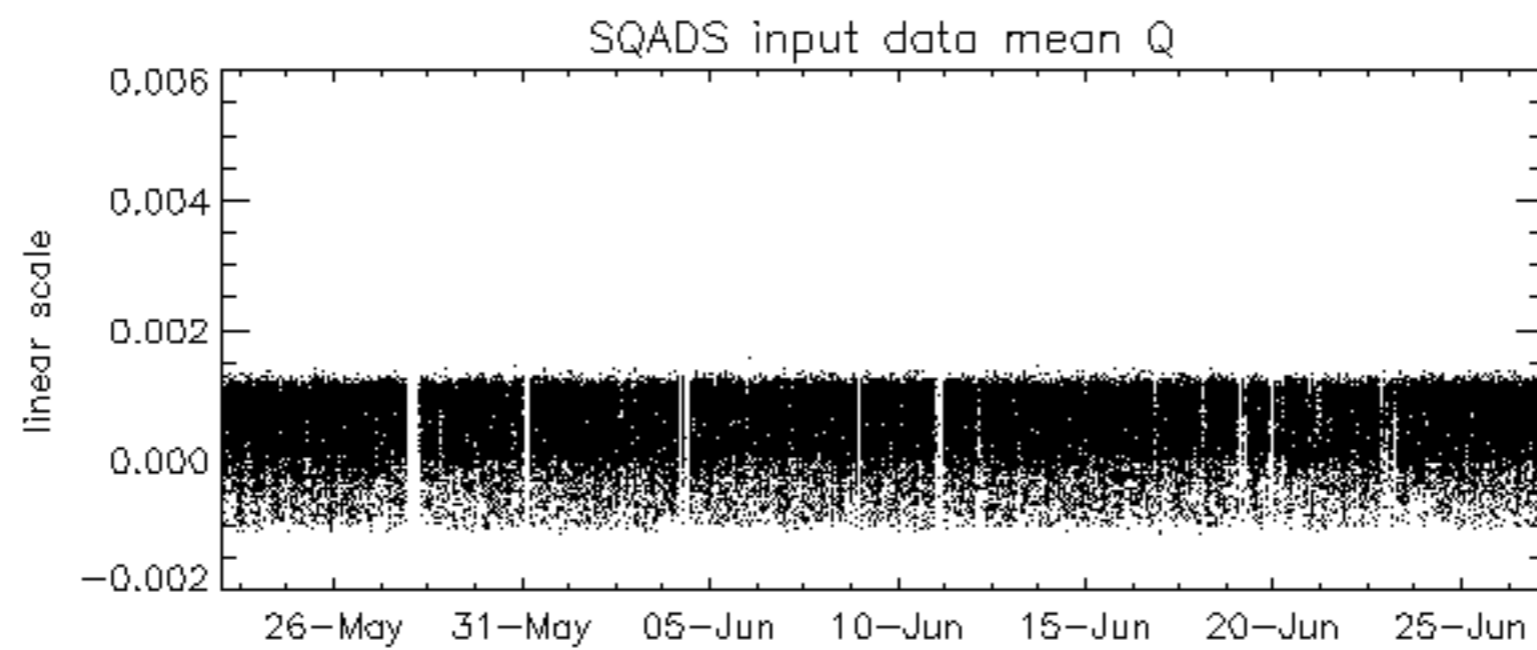
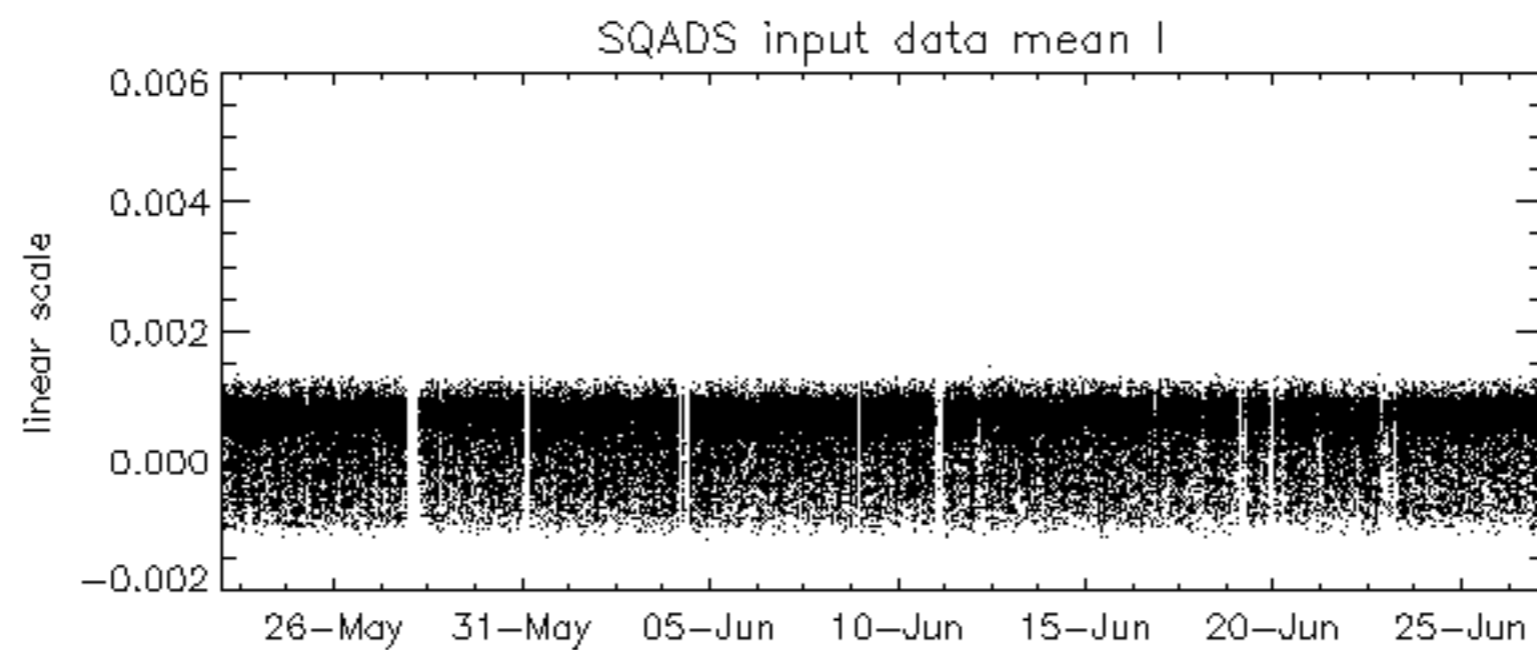
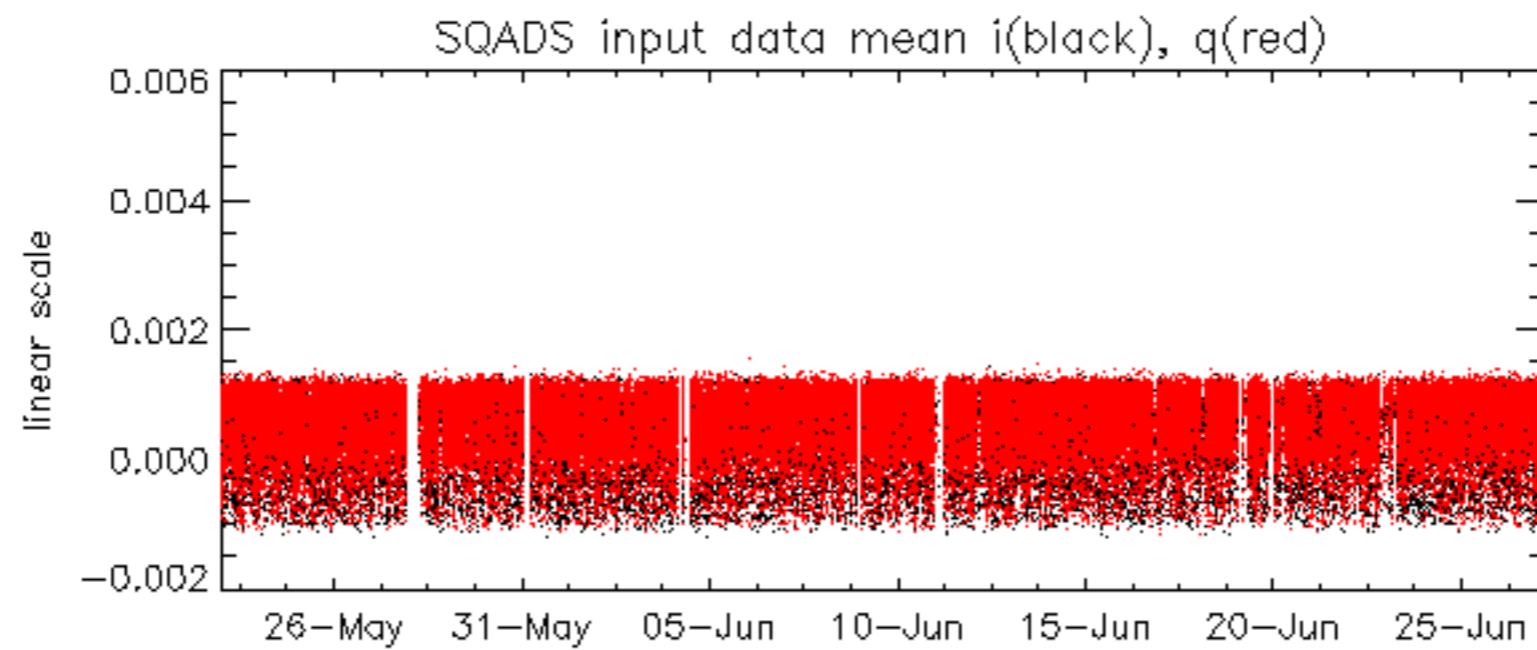
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -24.325054 Hz

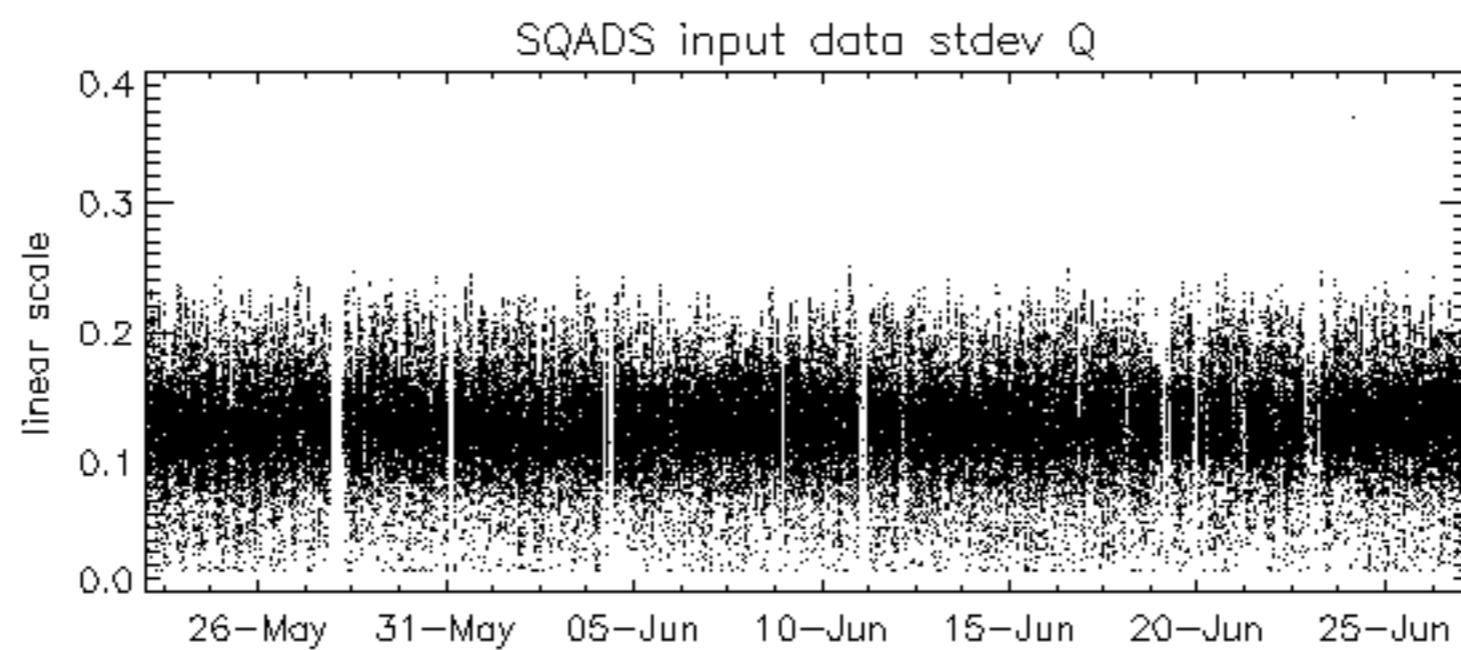
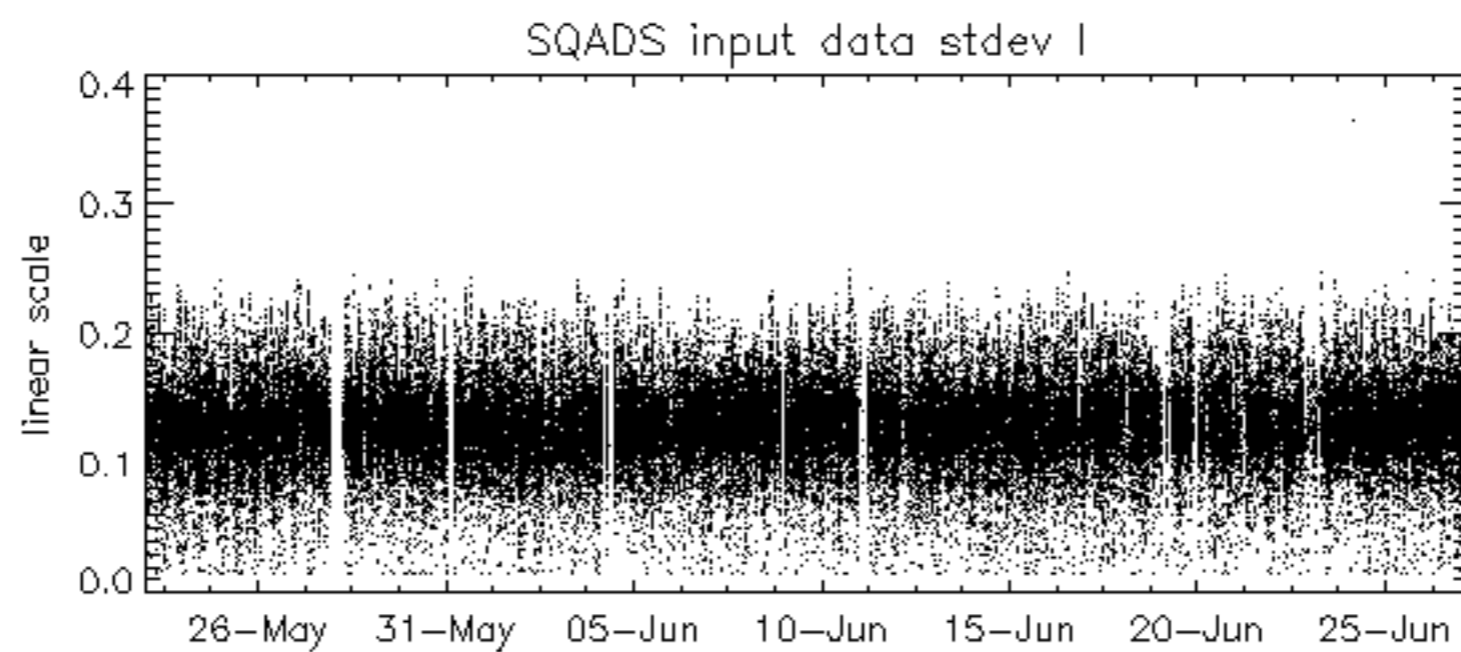
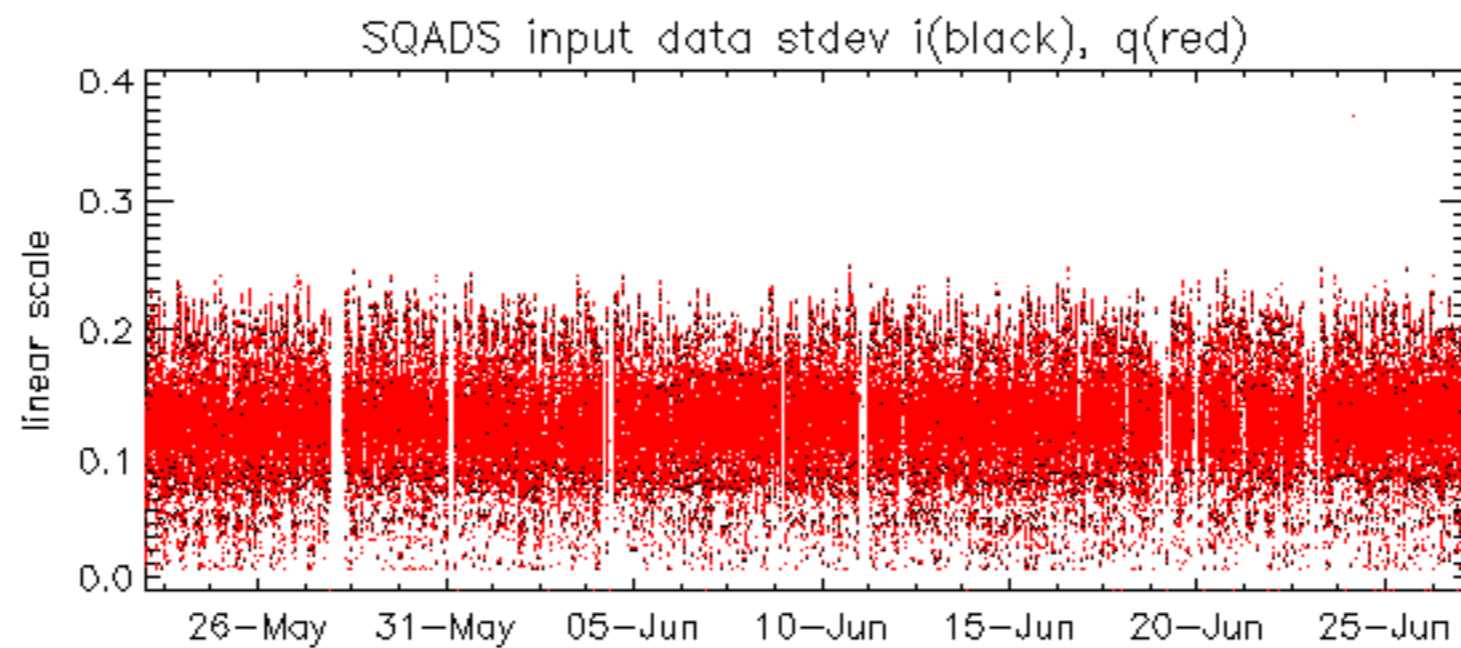


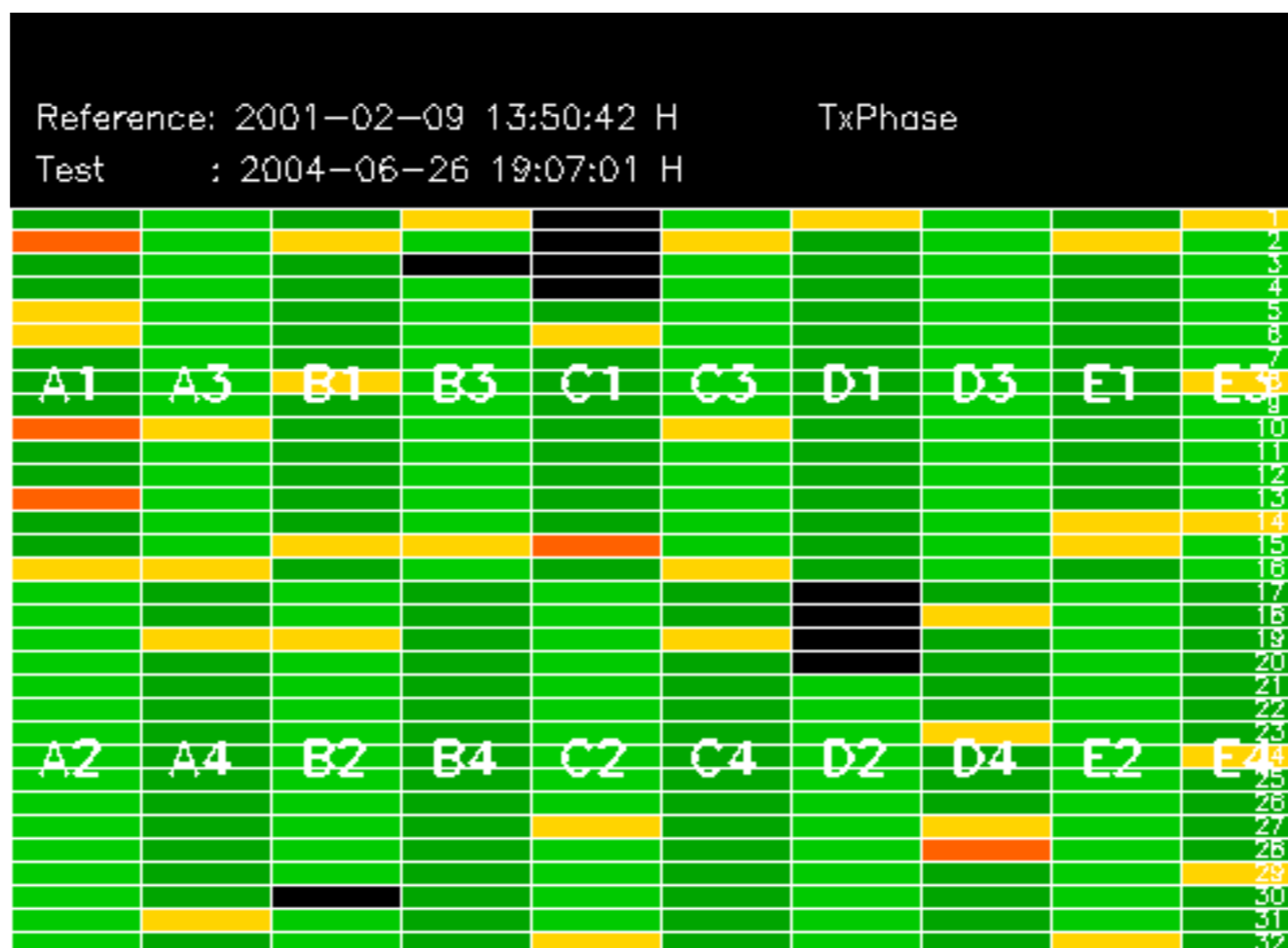
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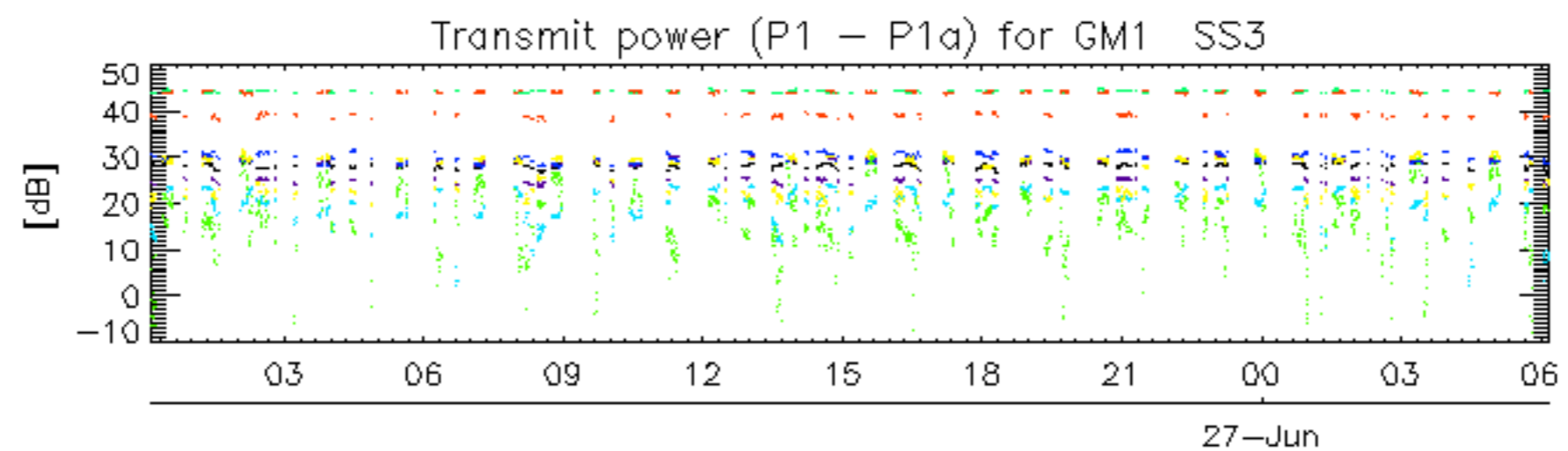
No anomalies observed.



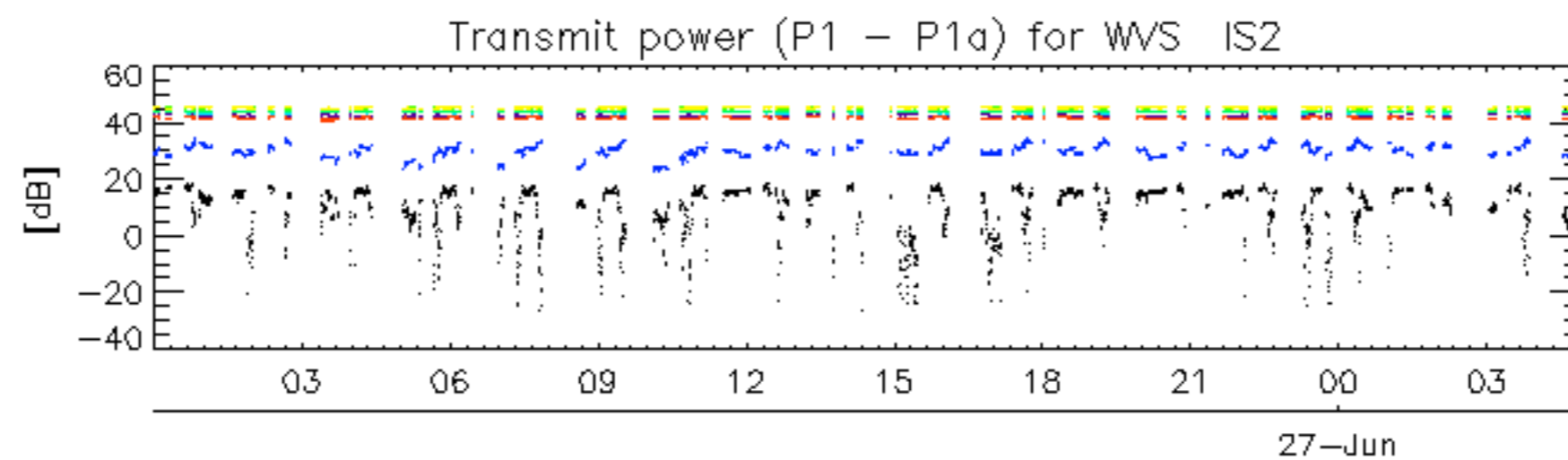








rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30



rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 30

No unavailabilities during the reported period.