

PRELIMINARY REPORT OF 050523

last update on Mon May 23 12:34:00 GMT 2005

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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

Preliminary report. Instrument unavailabilities are not yet reported

2.2 - Auxiliary files

Summary of the auxiliary files used from 2005-05-22 00:00:00 to 2005-05-23 12:34:00

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	28	48	14	3	0
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	28	48	14	3	0
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	28	48	14	3	0
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	28	48	14	3	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	47	52	40	16	2
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	47	52	40	16	2
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	47	52	40	16	2
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	47	52	40	16	2

2.3 - Browse Visual Inspection

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	20050523 084200
H	20050521 030250

MSM in V/V polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
☒	☒
☒	☒
☒	☒
☒	☒

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

-Preliminary report.The data is not yet controled

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

<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	-3.346423	0.006795	0.001441
7	P1	-3.109791	0.014526	-0.017624
11	P1	-4.653046	0.028090	0.047696
15	P1	-5.534207	0.045626	0.082048
19	P1	-3.723523	0.003929	-0.019412
22	P1	-4.589491	0.013643	0.006121
26	P1	-4.876582	0.018438	0.023884
30	P1	-7.140054	0.028591	-0.000233
3	P1	-15.696864	0.082661	0.113019
7	P1	-15.500962	0.100954	-0.052159
11	P1	-21.283487	0.229540	-0.069947
15	P1	-11.408298	0.037286	0.183986
19	P1	-14.348755	0.033476	-0.084625
22	P1	-15.949031	0.334283	-0.066054
26	P1	-17.650059	0.198344	-0.118319
30	P1	-17.862240	0.244215	0.067067

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.050697	0.078103	0.012441
7	P2	-22.229834	0.101188	0.025573
11	P2	-14.105541	0.100067	0.122499
15	P2	-7.103213	0.086128	-0.041782
19	P2	-9.643810	0.090302	0.034576
22	P2	-16.888985	0.089429	-0.008469
26	P2	-16.488464	0.091585	-0.025122
30	P2	-18.816959	0.079776	0.008287

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.166568	0.003215	0.003535
7	P3	-8.166568	0.003215	0.003535
11	P3	-8.166568	0.003215	0.003535
15	P3	-8.166568	0.003215	0.003535
19	P3	-8.166568	0.003215	0.003535
22	P3	-8.166568	0.003215	0.003535
26	P3	-8.166568	0.003215	0.003535
30	P3	-8.166568	0.003215	0.003535

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	-2.772389	0.012186	-0.047107
7	P1	-2.985902	0.030812	0.061299
11	P1	-3.961291	0.017776	0.023149
15	P1	-3.523270	0.023316	0.000777
19	P1	-3.629261	0.015053	-0.013032
22	P1	-5.654236	0.049564	0.021882
26	P1	-7.315686	0.023440	-0.000626
30	P1	-6.272976	0.056977	-0.031787
3	P1	-10.787061	0.044718	-0.079698
7	P1	-10.416608	0.157605	0.049824
11	P1	-12.544028	0.103843	0.029590
15	P1	-11.627283	0.071253	0.044395
19	P1	-15.620534	0.065099	-0.027531
22	P1	-25.509808	2.357907	-0.820032
26	P1	-15.669779	0.329222	0.001633
30	P1	-20.251278	1.212566	-0.024124

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.773394	0.038352	-0.040211
7	P2	-22.248034	0.046498	0.127633
11	P2	-10.018433	0.053320	0.081345
15	P2	-5.087835	0.039816	-0.059269
19	P2	-6.901312	0.053504	-0.035757
22	P2	-7.104771	0.035933	-0.019613
26	P2	-23.921991	0.037388	-0.071753
30	P2	-21.942421	0.039955	-0.030693

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.001382	0.003652	0.002313
7	P3	-8.001369	0.003649	0.002979
11	P3	-8.001328	0.003656	0.002411
15	P3	-8.001427	0.003643	0.002828
19	P3	-8.001414	0.003652	0.002650
22	P3	-8.001412	0.003643	0.002832
26	P3	-8.001339	0.003659	0.002831
30	P3	-8.001362	0.003673	0.002556

4.3 - cal pulses monitoring (all rows)

4.3.1 - Evolution for WVS



4.3.2 - Evolution for GM1



5 - RAW data statistics

-Preliminary report. The data is not yet controlled

5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000434696
	stdev	2.33754e-07
MEAN Q	mean	0.000463353
	stdev	2.43681e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.125276
	stdev	0.00104549
STDEV Q	mean	0.125515
	stdev	0.00105517



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2005052[123]

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_1PNPDK20050521_072959_000002402037_00264_16851_4821.N1	0	6
ASA_IMM_1PNPDK20050521_074032_000000622037_00264_16851_4831.N1	0	14
ASA_IMM_1PNPDK20050521_085157_000000692037_00265_16852_4829.N1	0	7
ASA_IMM_1PNPDK20050521_090859_000000622037_00265_16852_4827.N1	0	7
ASA_IMM_1PNPDK20050521_091100_000000302037_00265_16852_4828.N1	0	12
ASA_IMM_1PNPDK20050521_104453_000000622037_00266_16853_4835.N1	0	7
ASA_IMM_1PNPDK20050521_104654_000000342037_00266_16853_4836.N1	0	10
ASA_IMM_1PNPDK20050521_134748_000000432037_00268_16855_4838.N1	0	7
ASA_IMM_1PNPDK20050522_082106_000000532037_00279_16866_4889.N1	0	5

ASA_IMM_1PNPDK20050522_083702_000004282037_00279_16866_4898.N1	0	15
ASA_IMM_1PNPDK20050522_115824_000001212037_00281_16868_4901.N1	0	3
ASA_IMM_1PNPDK20050522_132153_000000932037_00282_16869_4904.N1	0	6
ASA_IMM_1PNPDK20050522_151439_000002202037_00283_16870_4909.N1	0	1
ASA_GM1_1PNPDK20050521_074554_000006942037_00264_16851_1258.N1	0	6
ASA_GM1_1PNPDK20050521_085554_000006402037_00265_16852_1260.N1	0	14
ASA_GM1_1PNPDK20050521_094520_000009242037_00265_16852_1269.N1	0	6
ASA_GM1_1PNPDK20050521_135741_000007002037_00268_16855_1296.N1	0	15
ASA_GM1_1PNPDK20050522_105419_000009242037_00280_16867_1428.N1	0	9
ASA_GM1_1PNPDK20050522_132945_000007062037_00282_16869_1453.N1	0	8
ASA_APM_1PNPDK20050521_074432_000000572037_00264_16851_2097.N1	0	9
ASA_APM_1PNPDK20050522_132037_000000432037_00282_16869_2099.N1	0	1

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

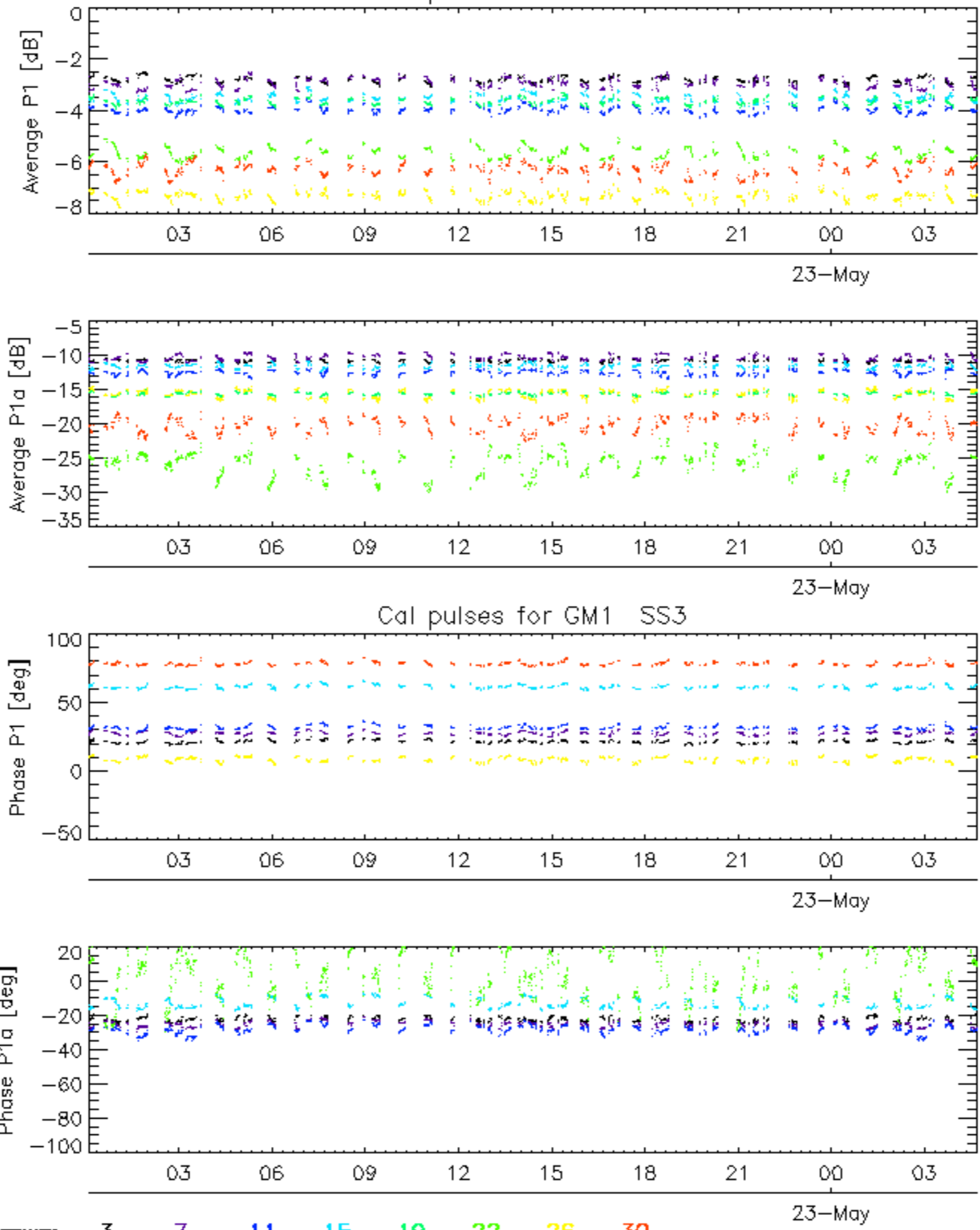
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

Acsending

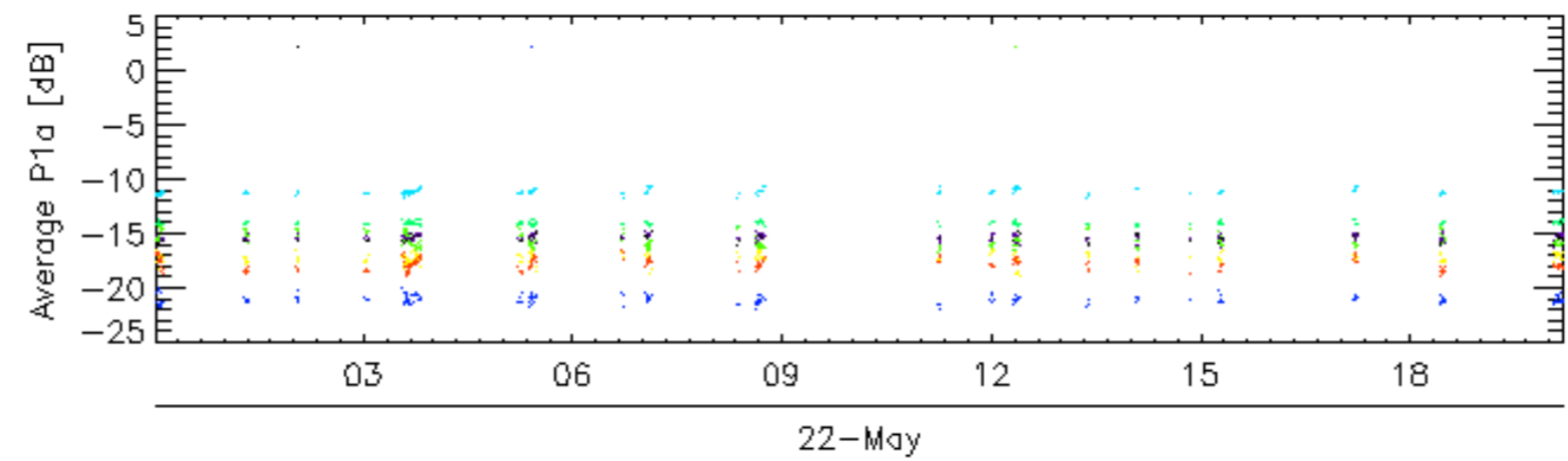
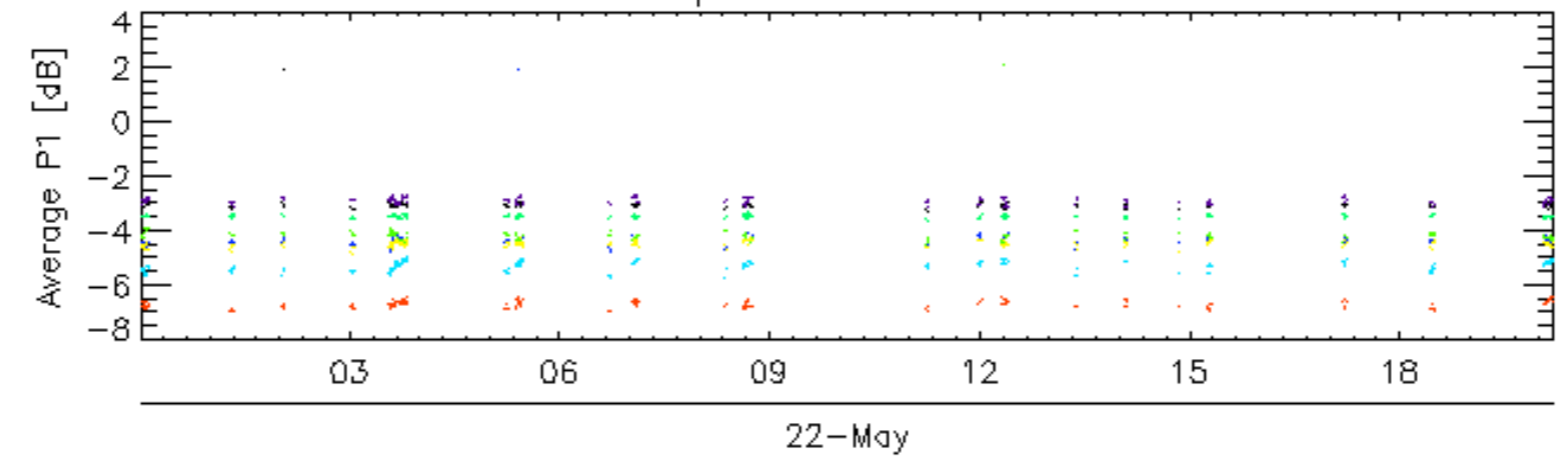
Descending

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

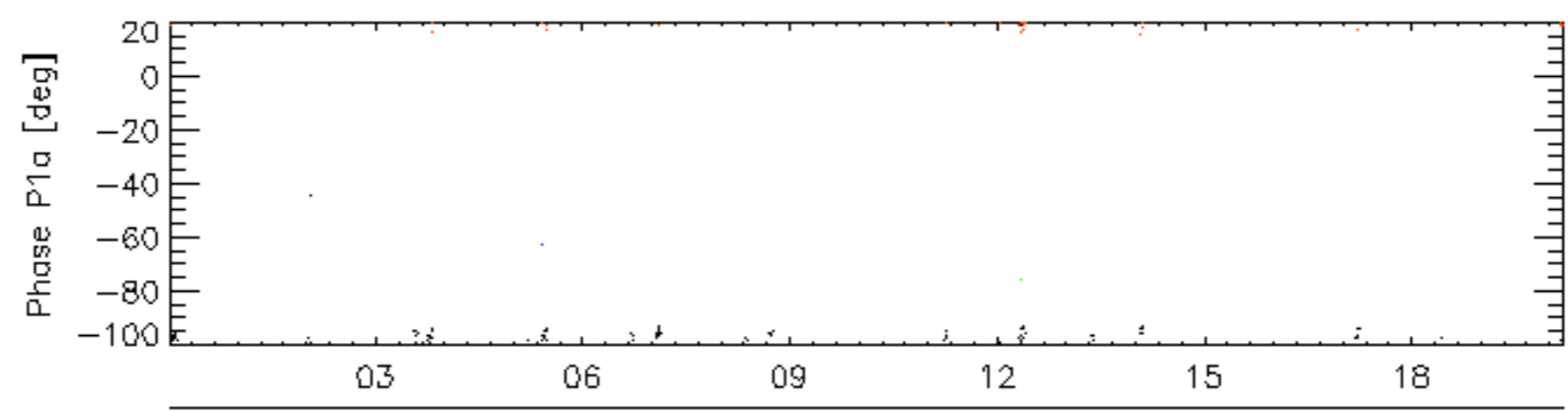
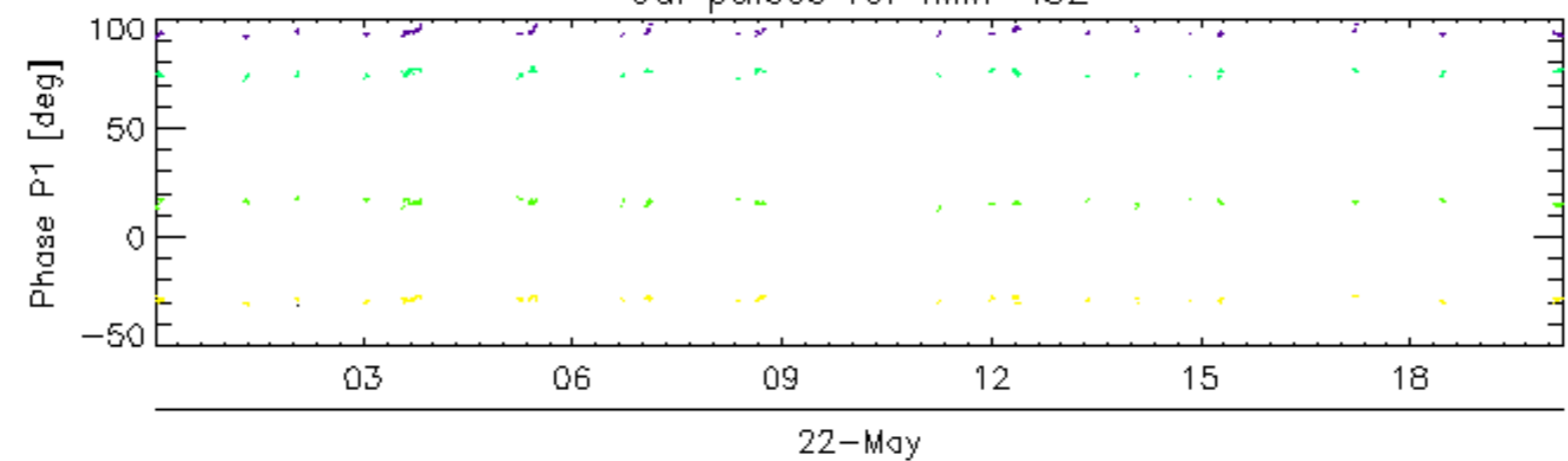
Cal pulses for GM1 SS3



Cal pulses for IMM IS2

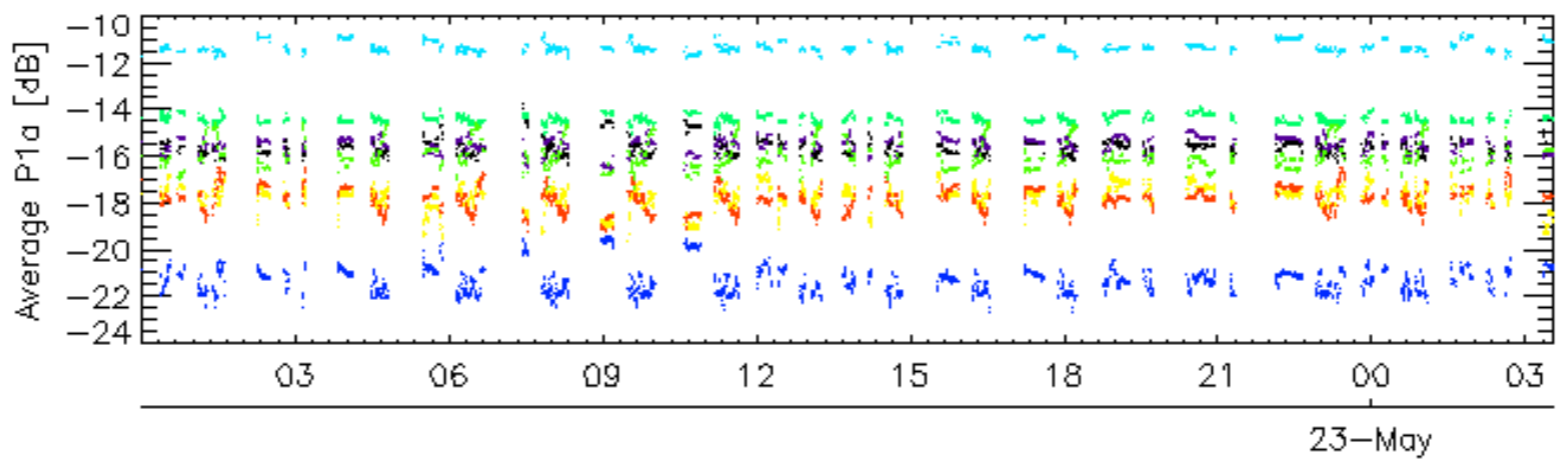
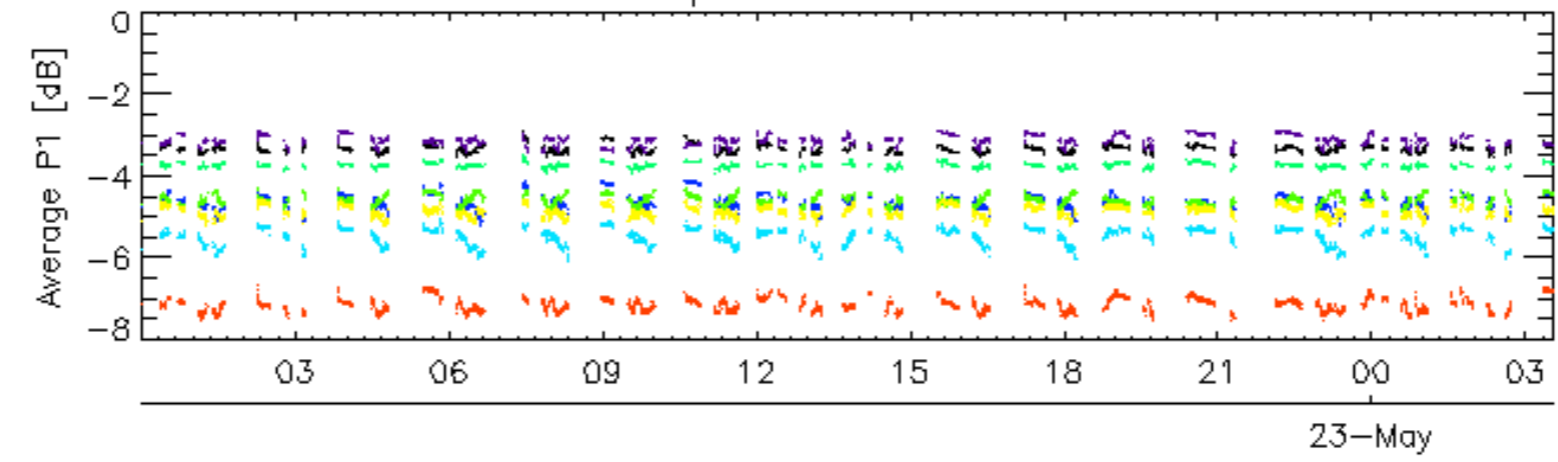


Cal pulses for IMM IS2

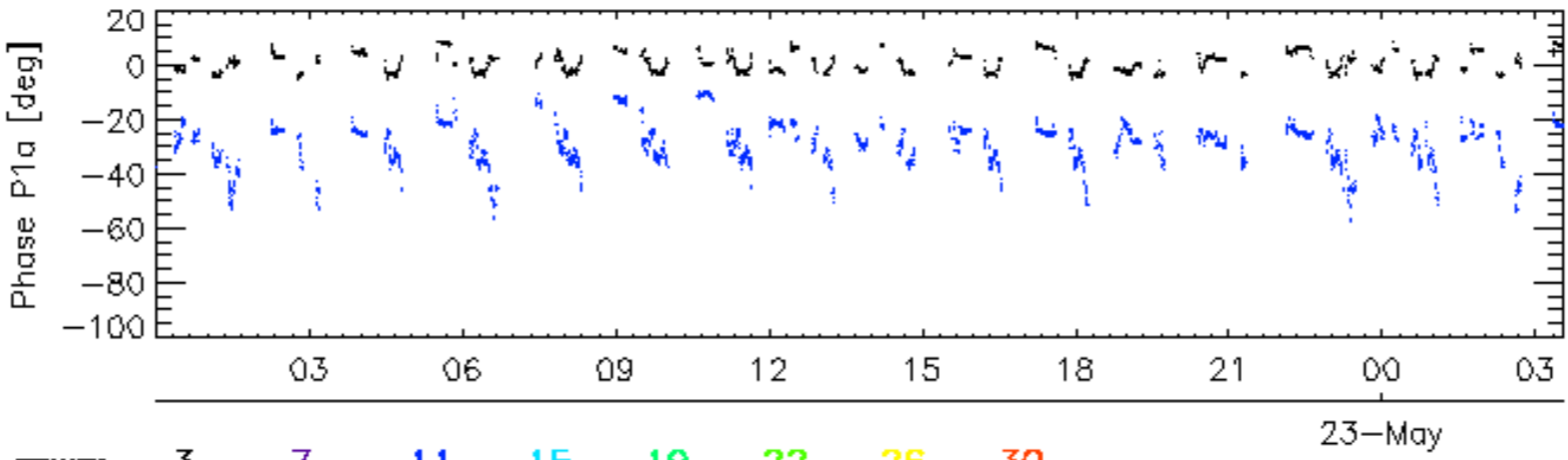
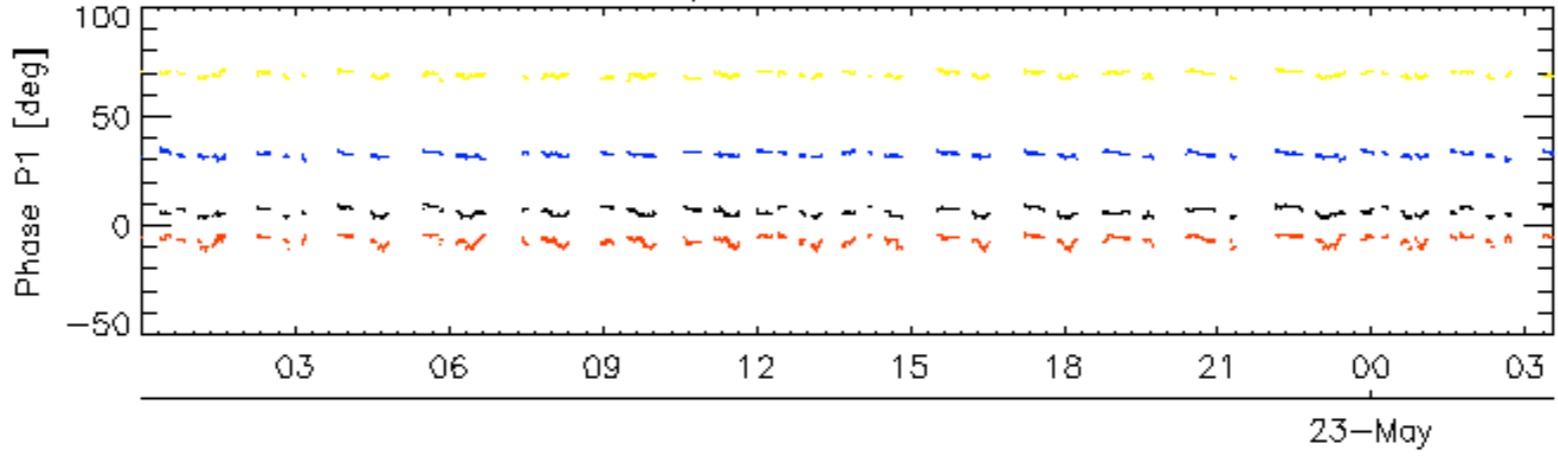


rows: **3** **7** **11** **15** **19** **22** **26** **30** 22-May

Cal pulses for WVS IS2

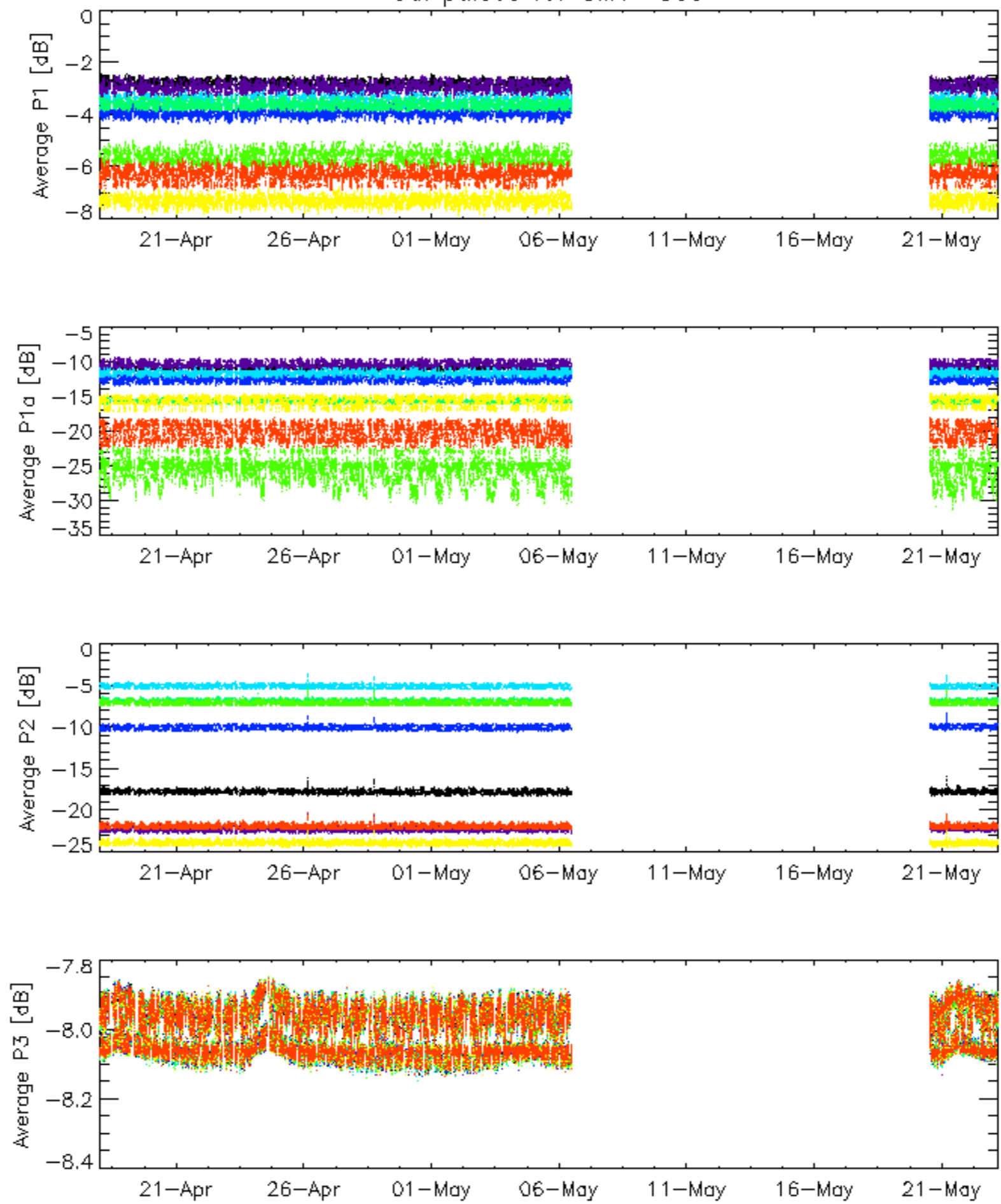


Cal pulses for WVS IS2



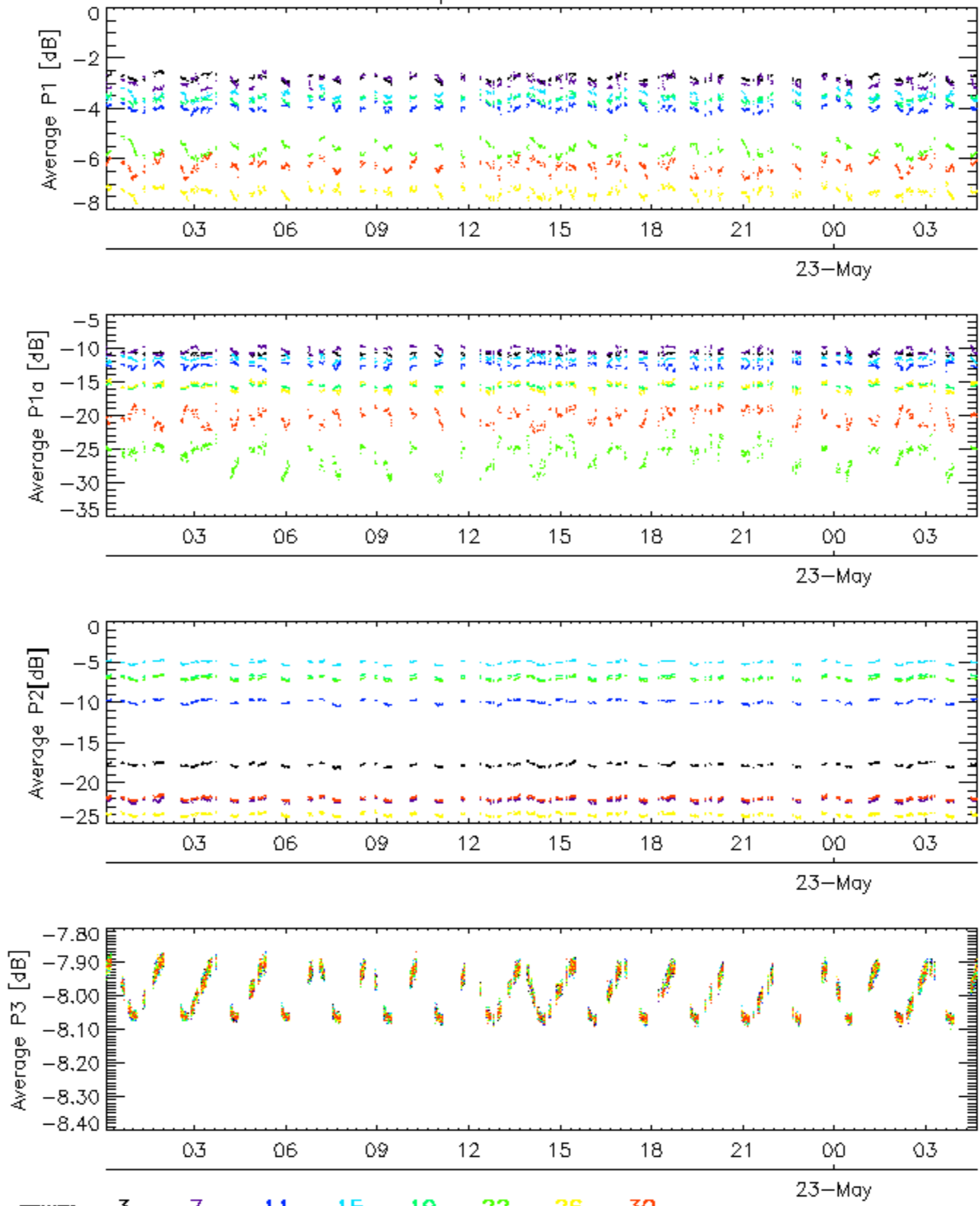
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

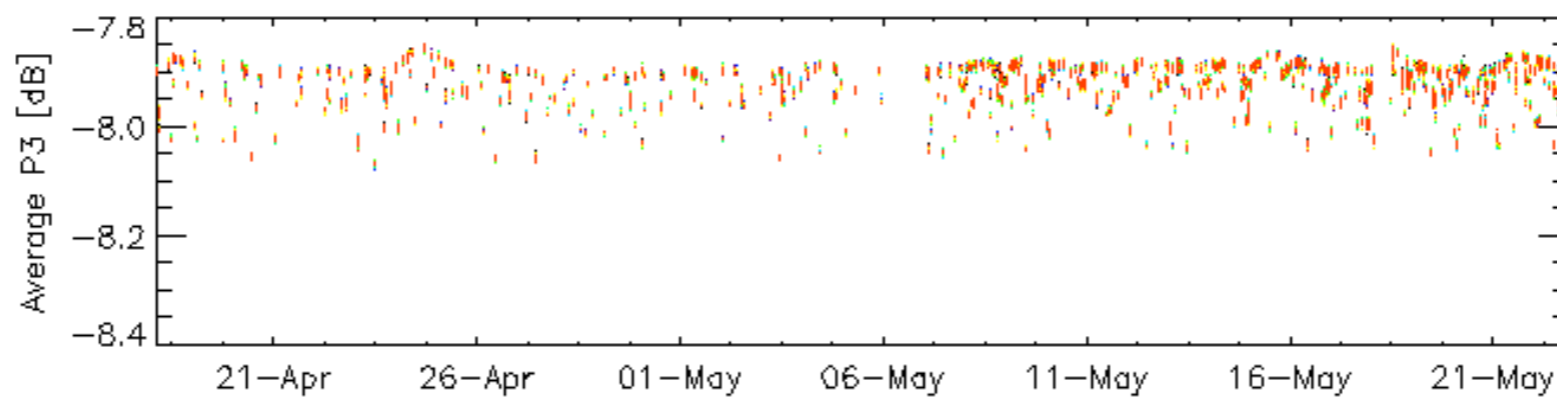
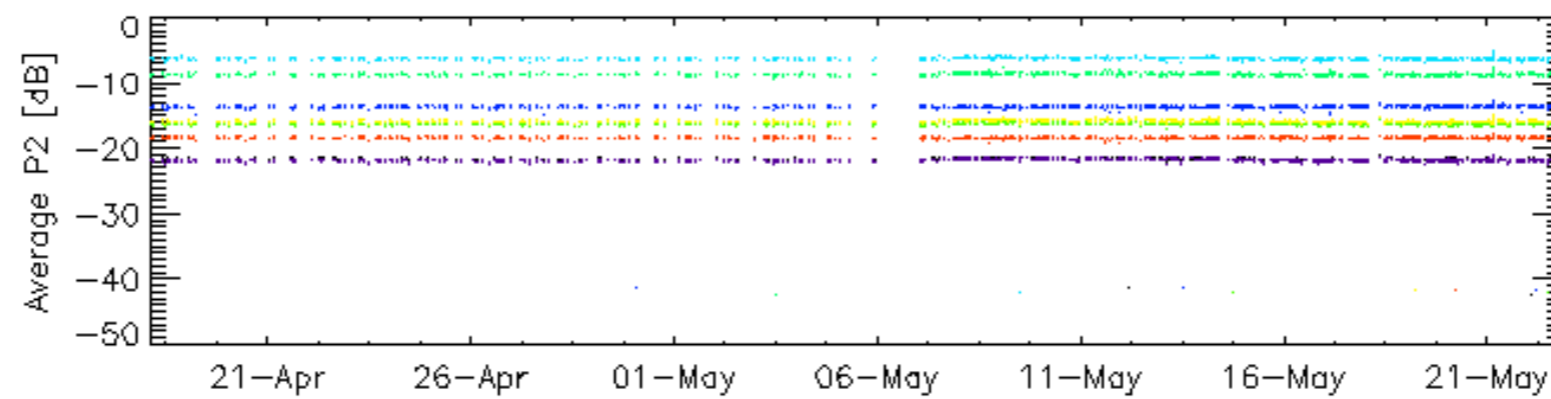
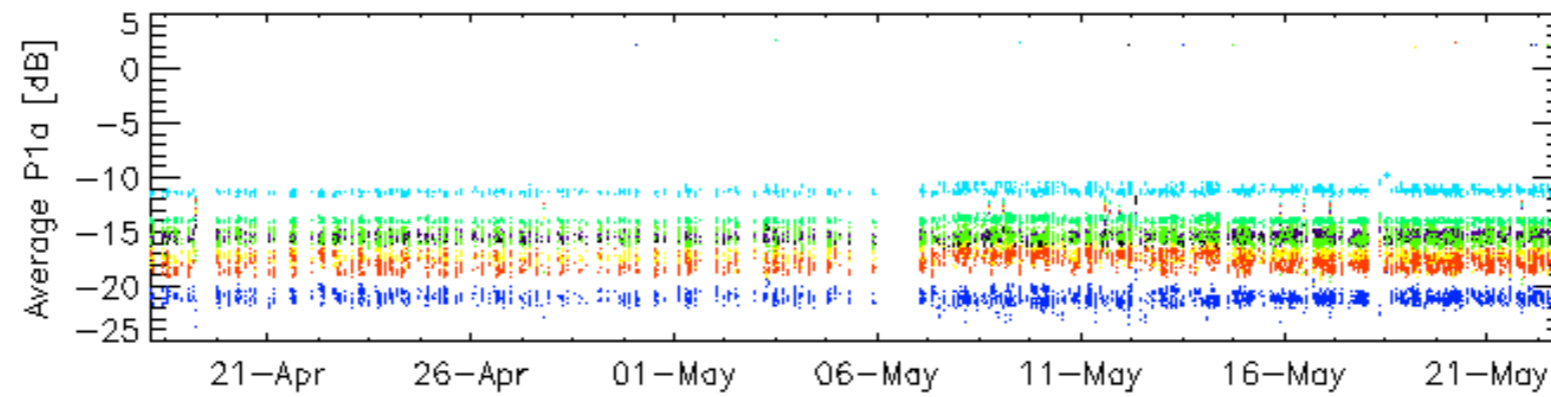
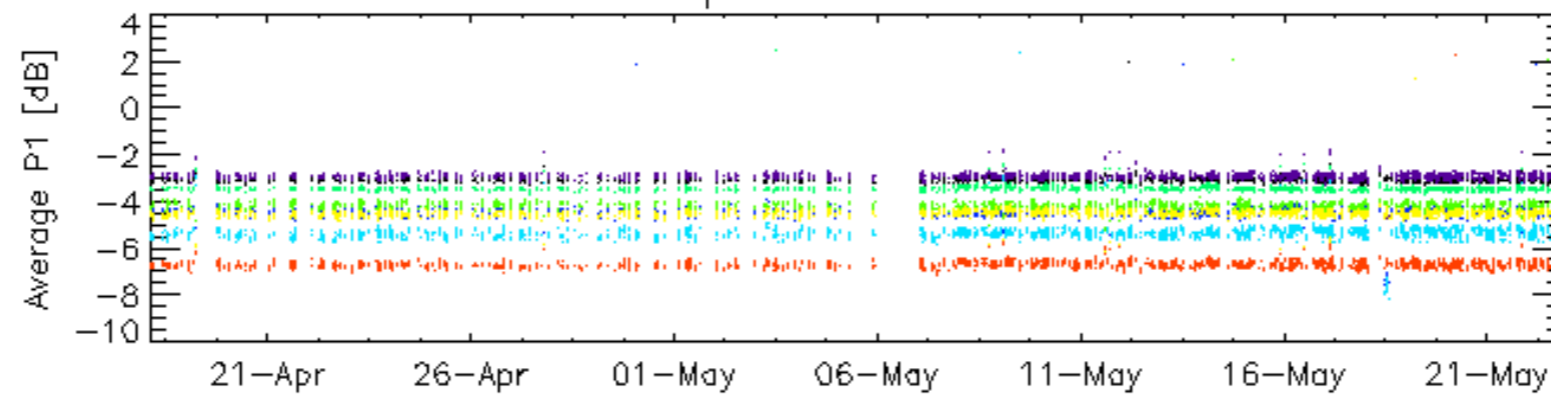


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

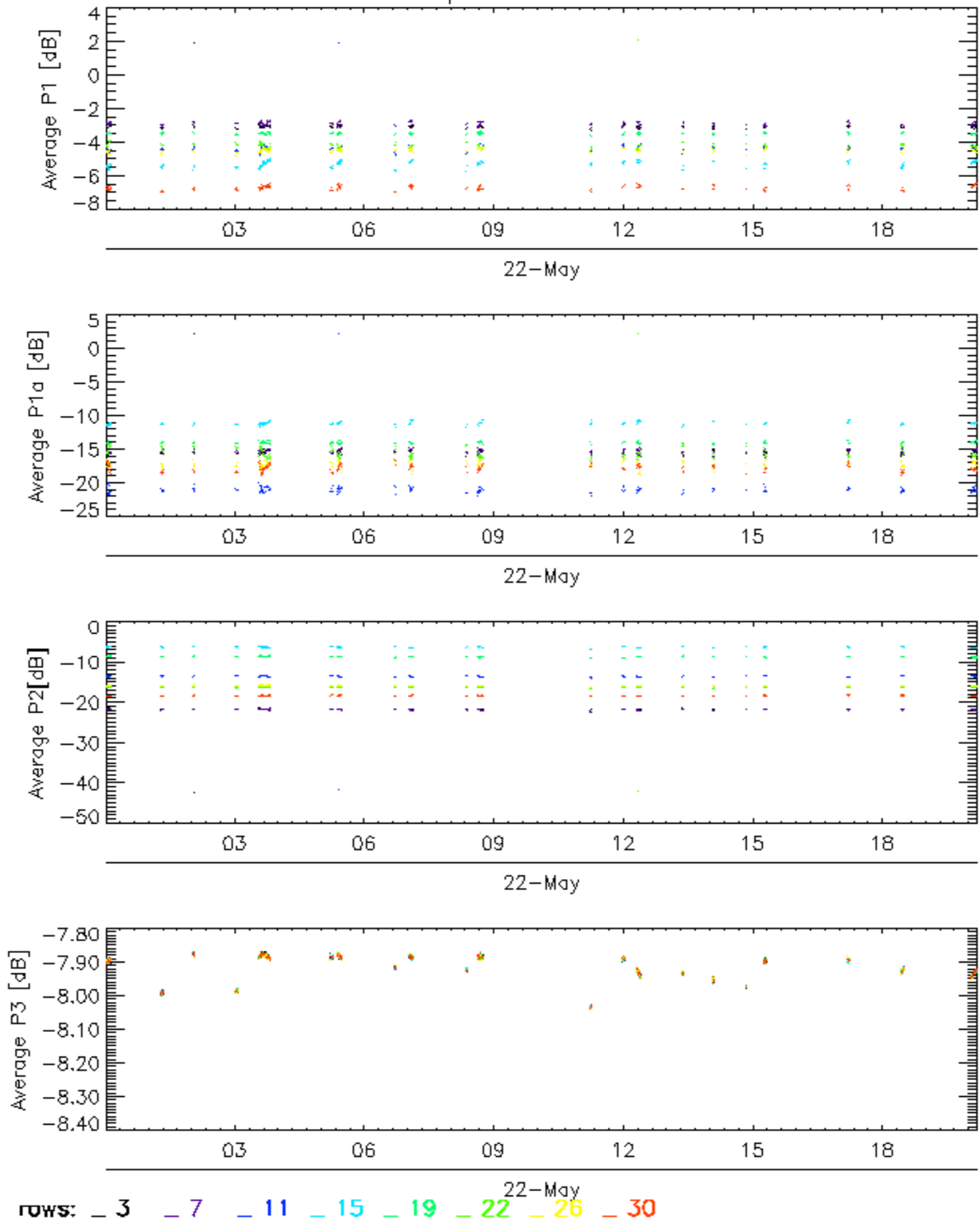


Cal pulses for IMM IS2

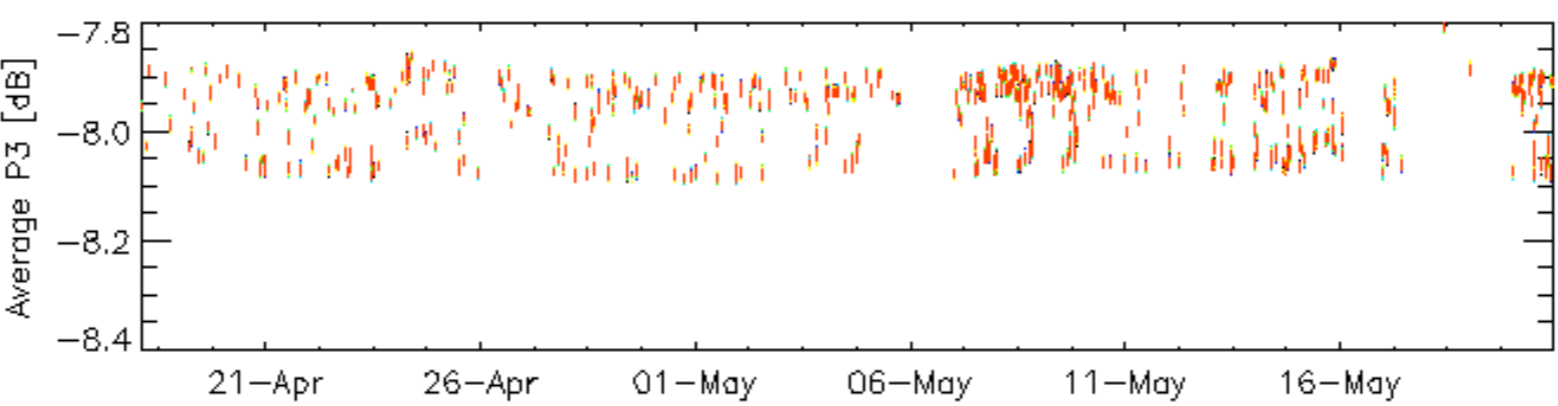
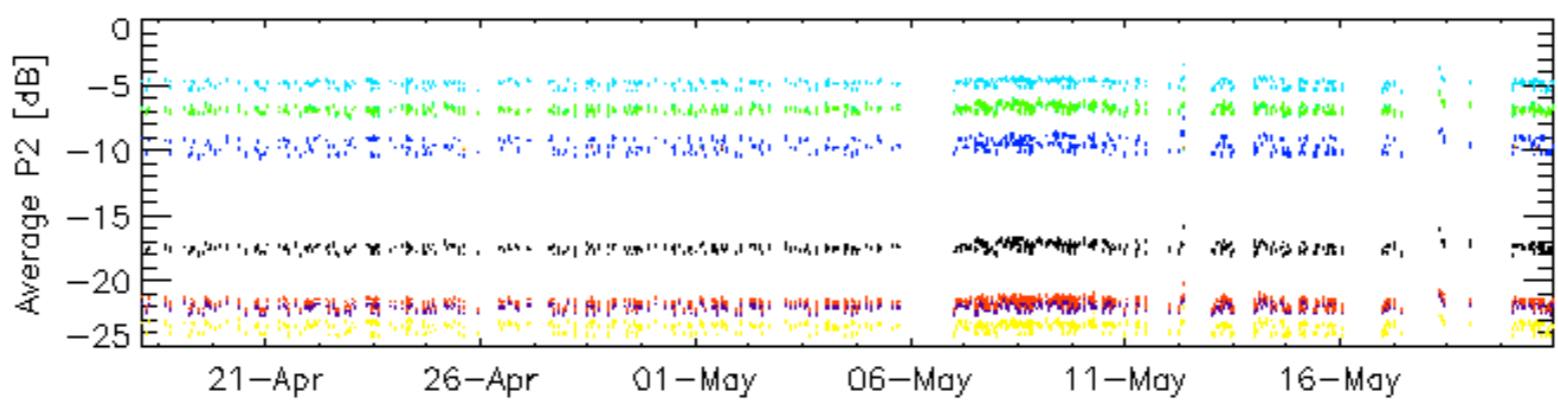
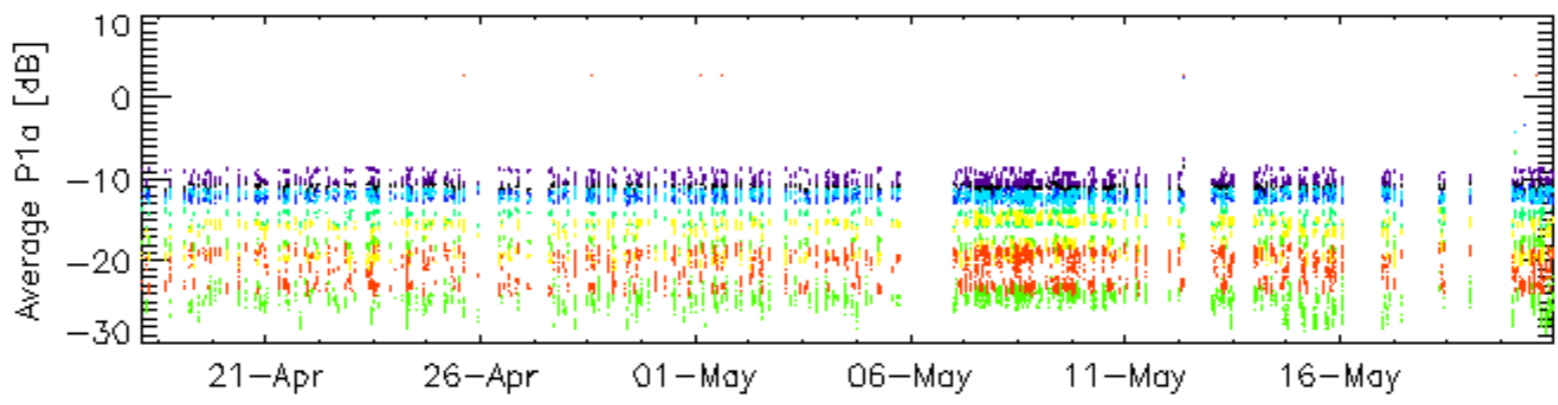
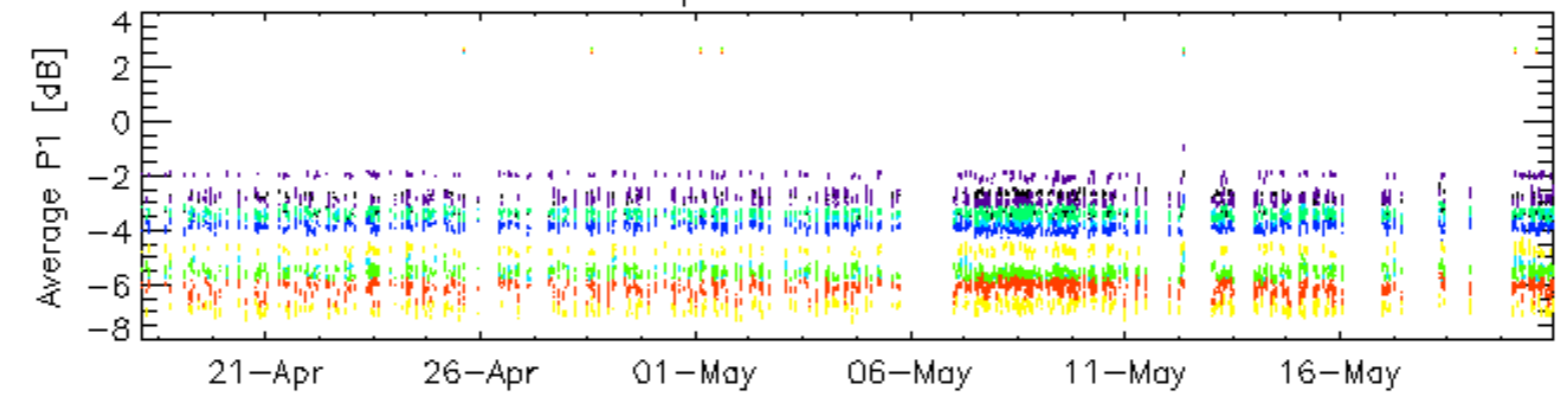


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for IMM IS2

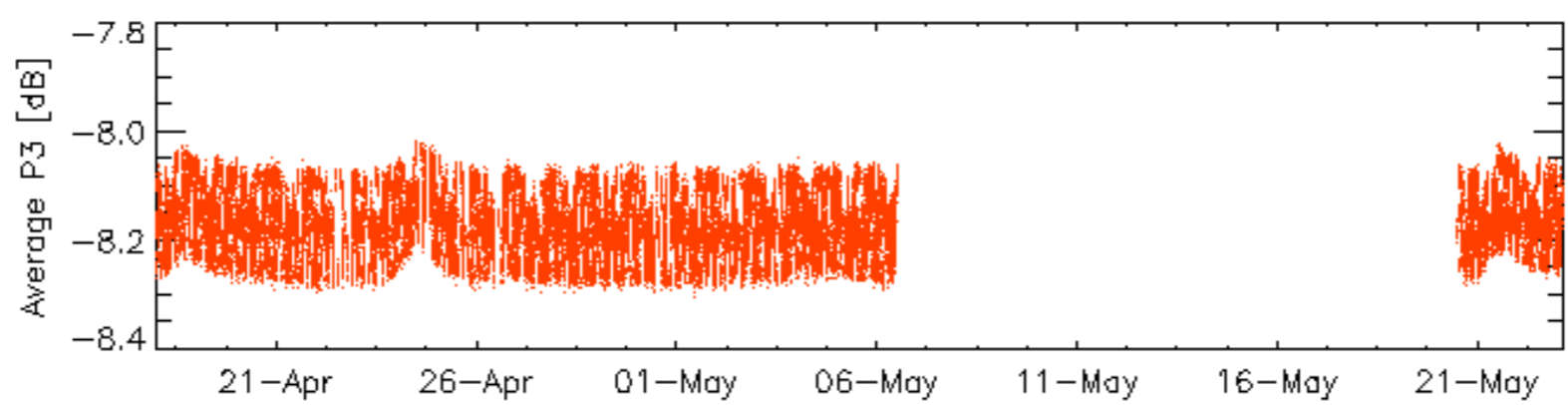
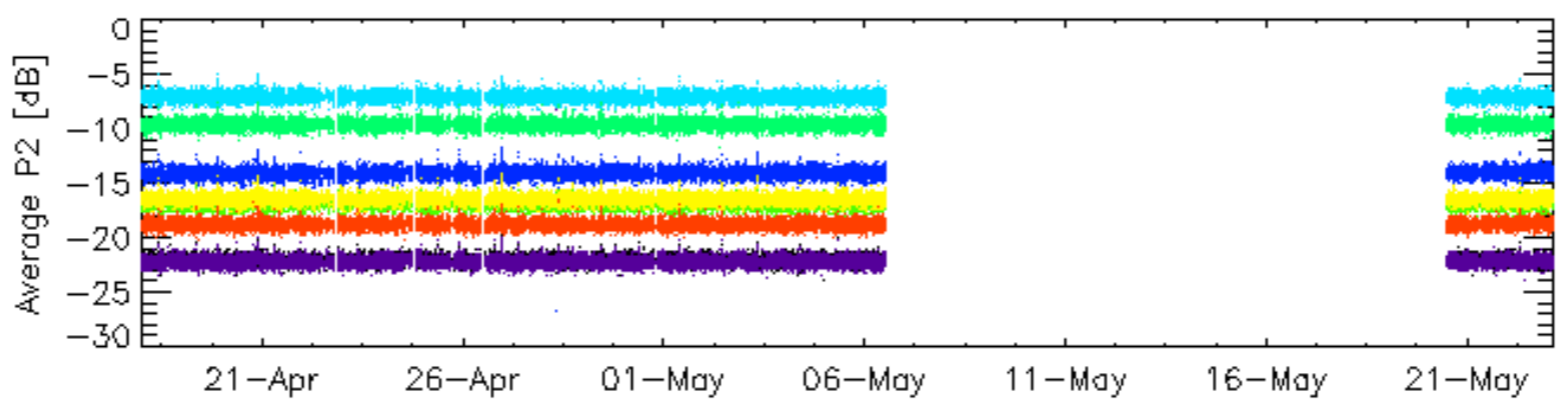
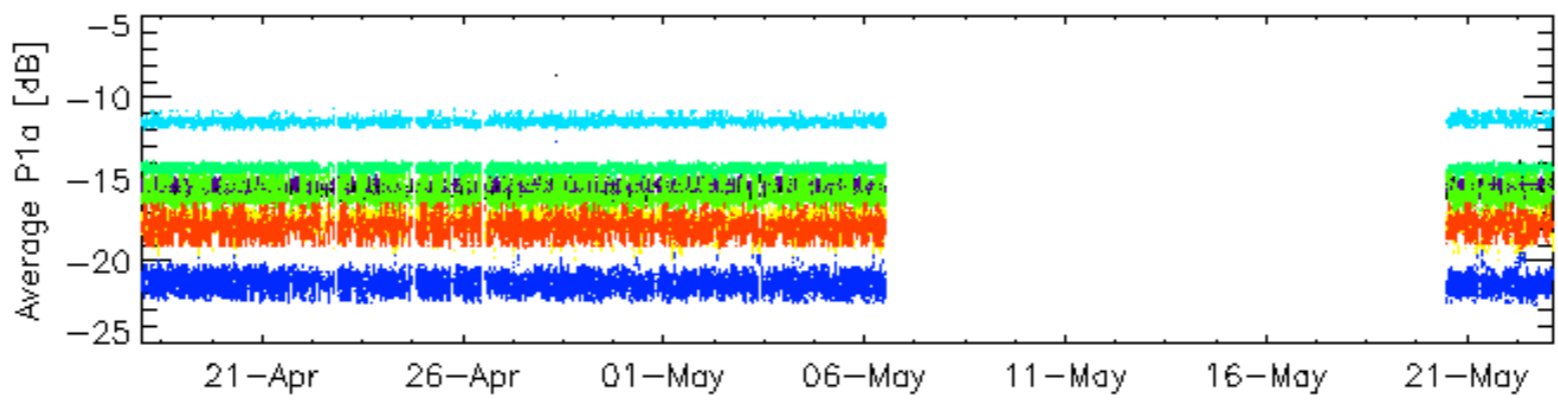
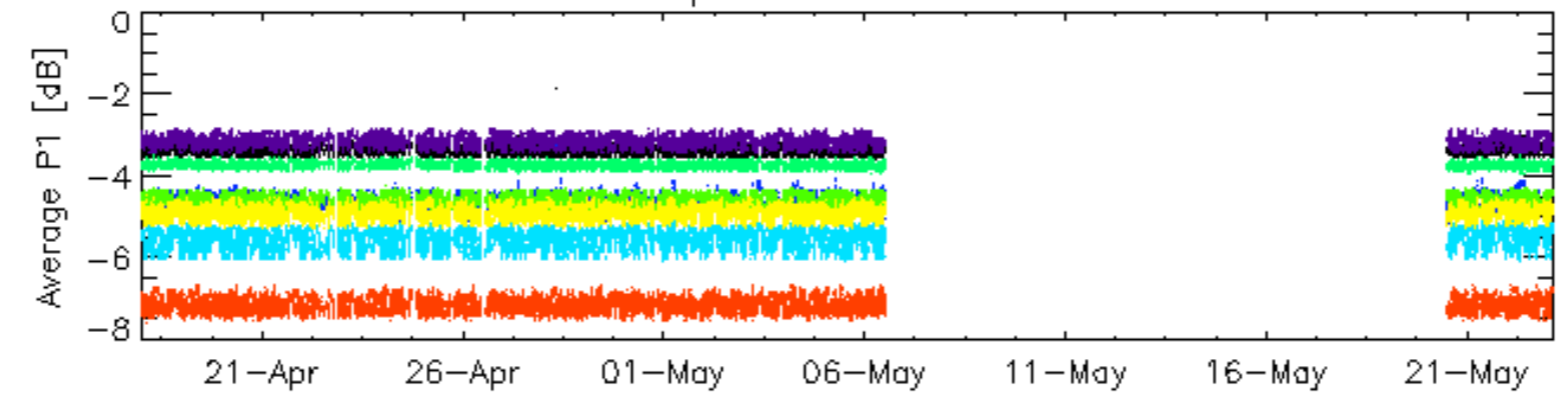


Cal pulses for WSM SS3



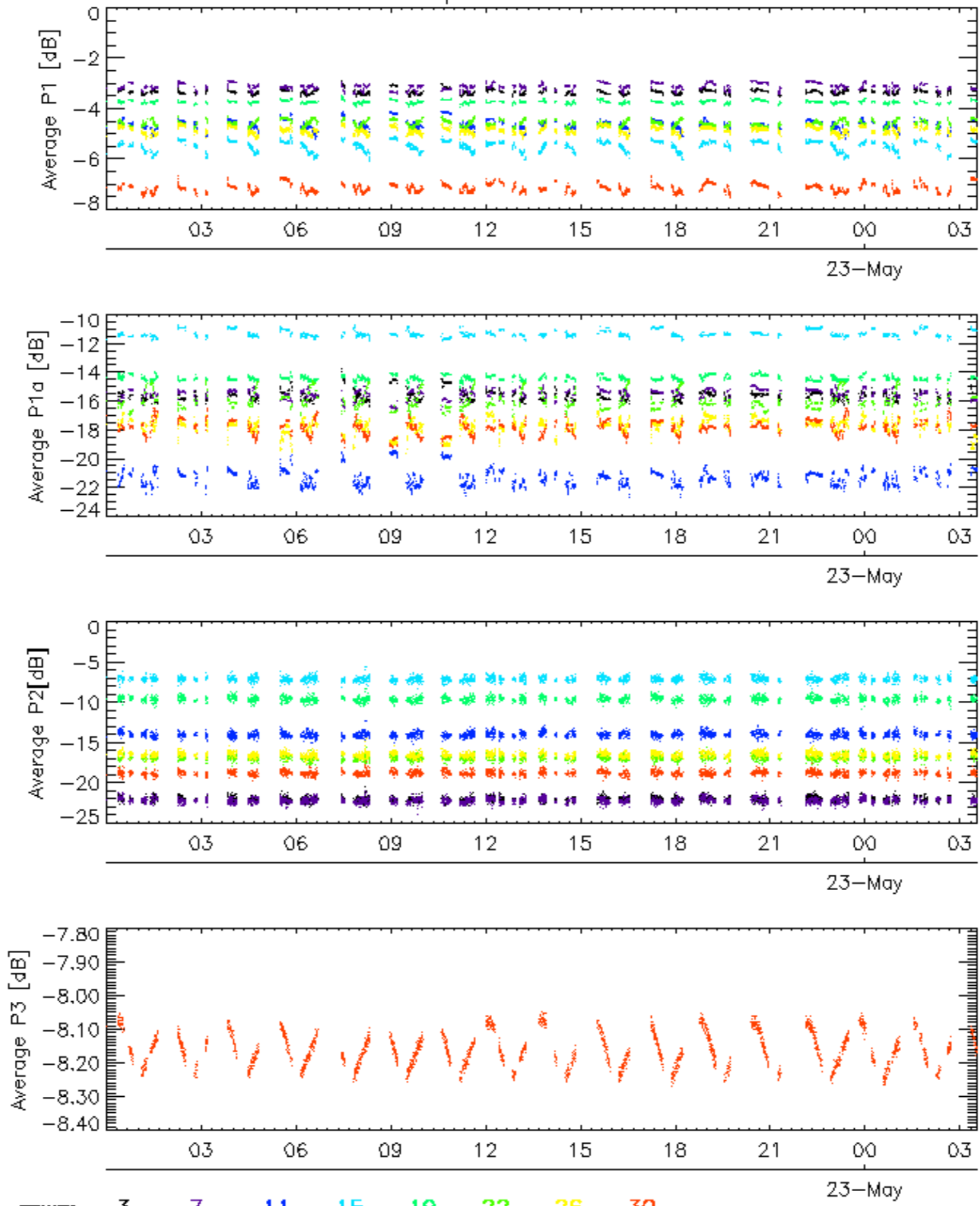
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



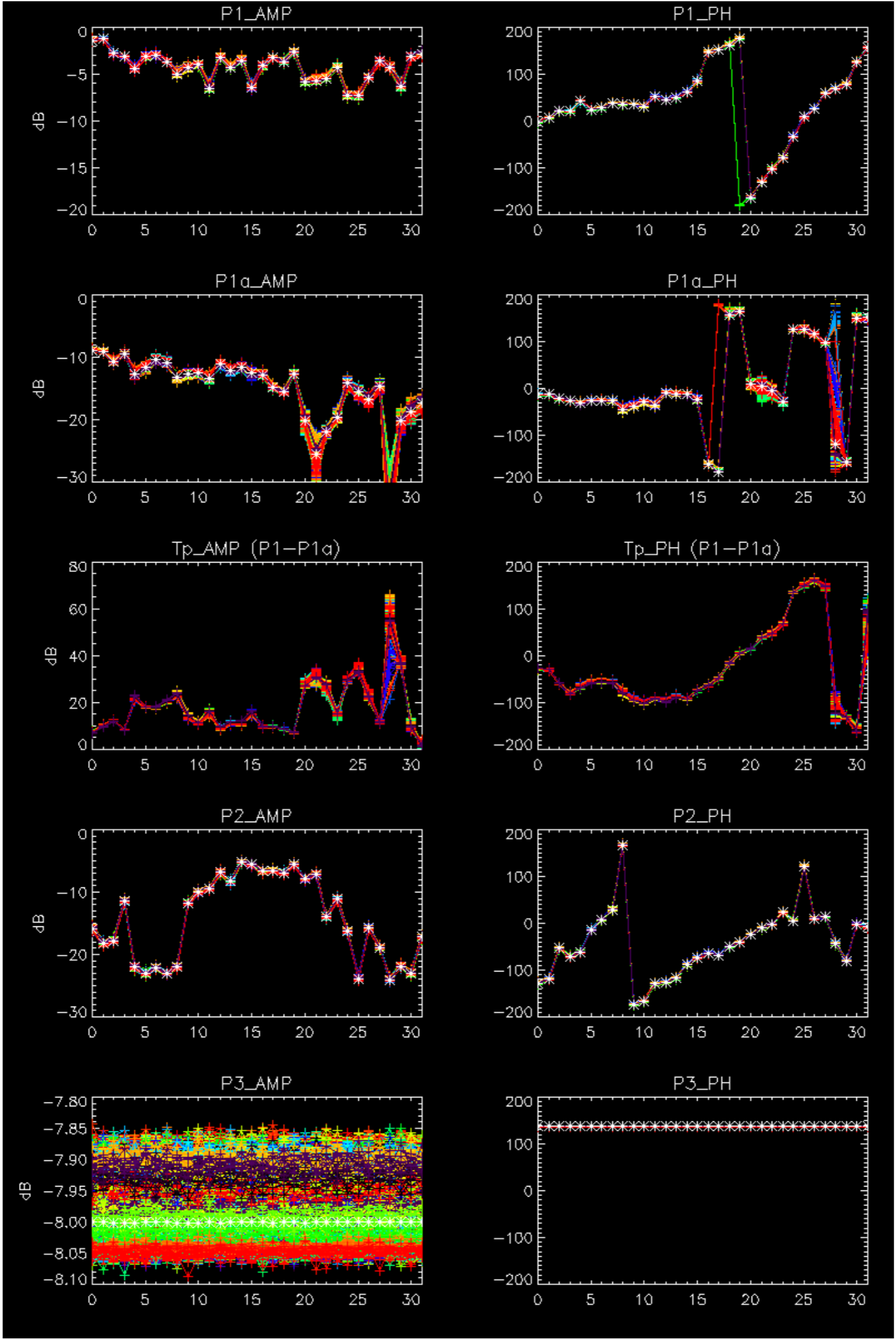
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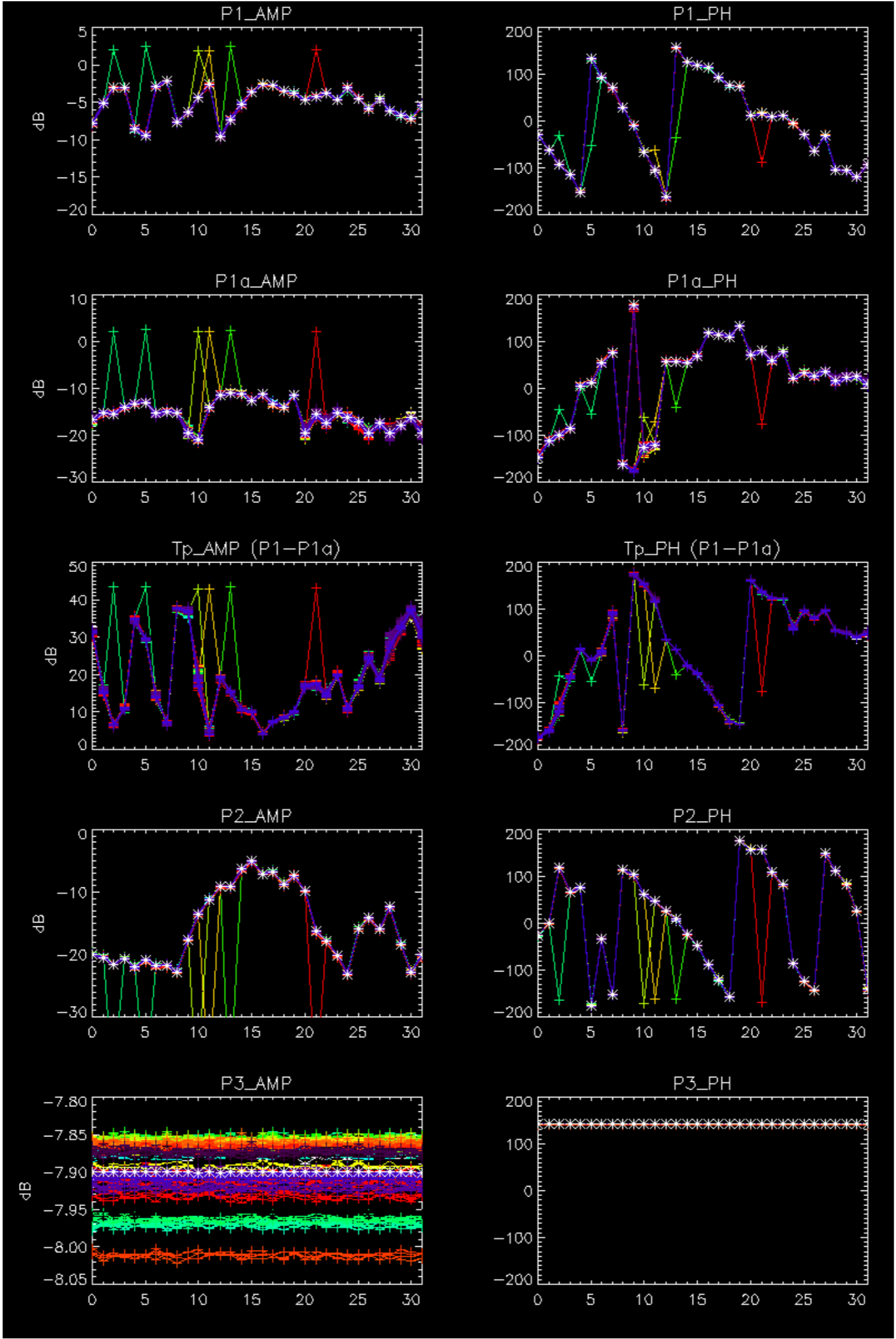
Cal pulses for WVS IS2

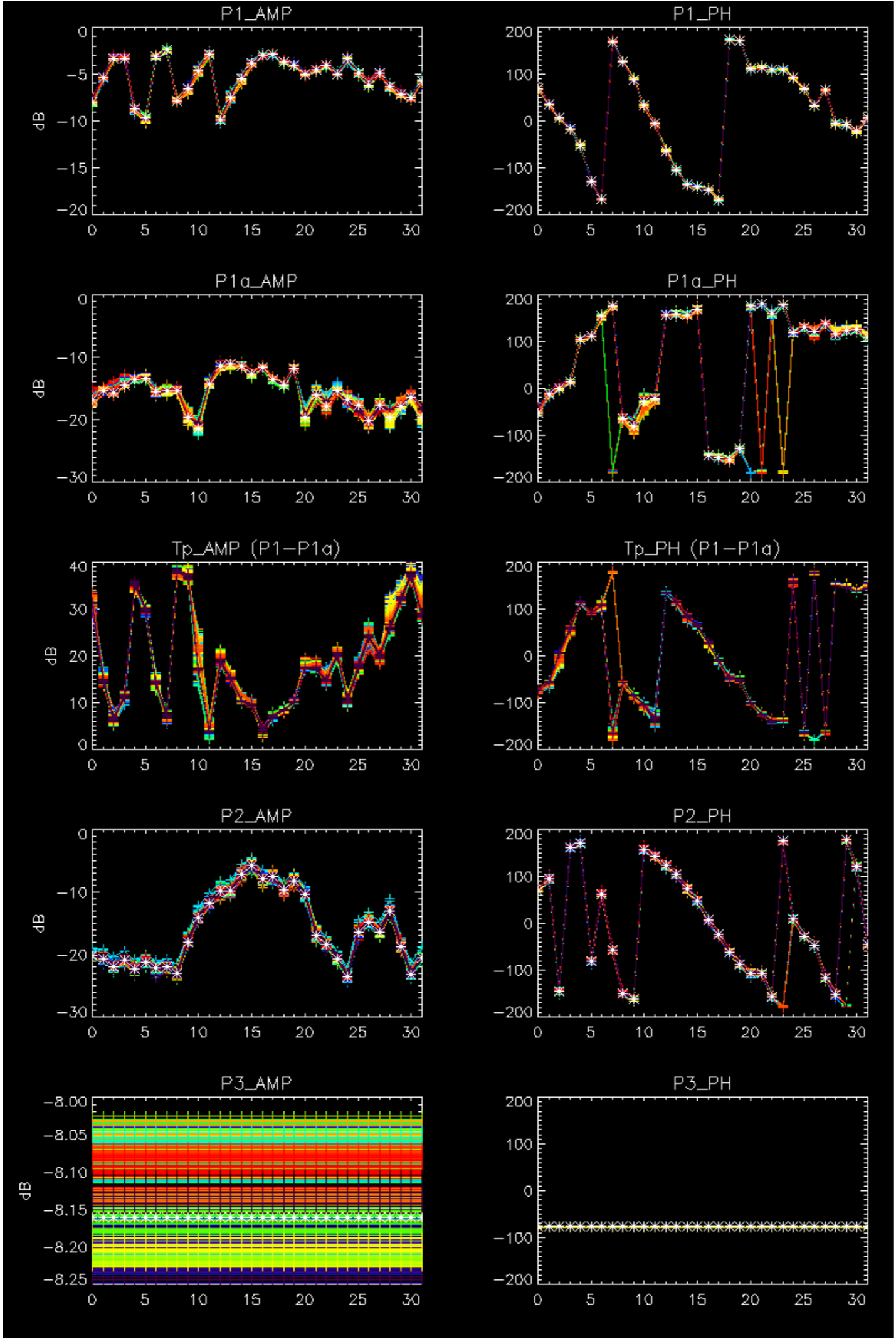


-Preliminary report.The data is not yet controled



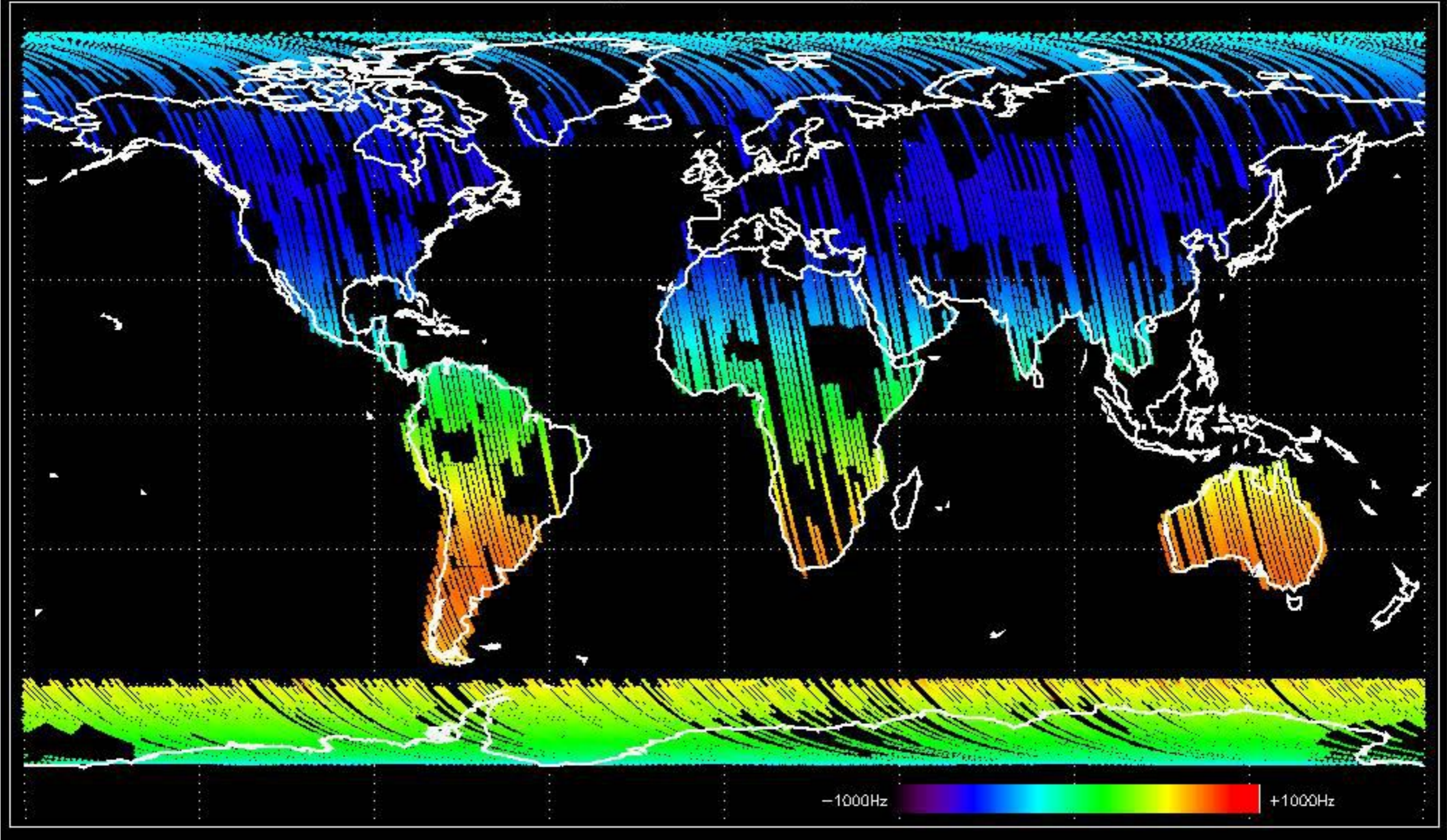




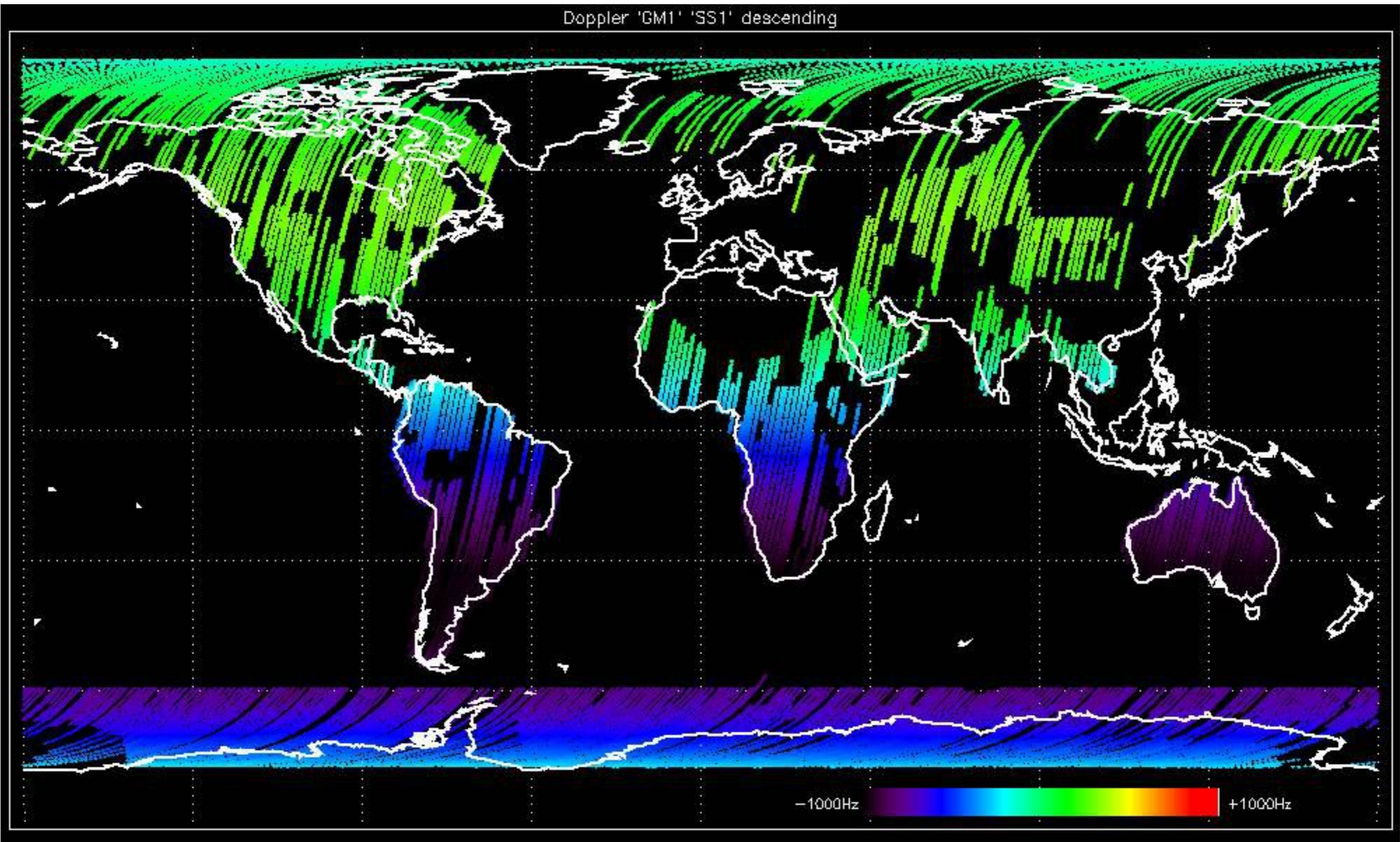


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

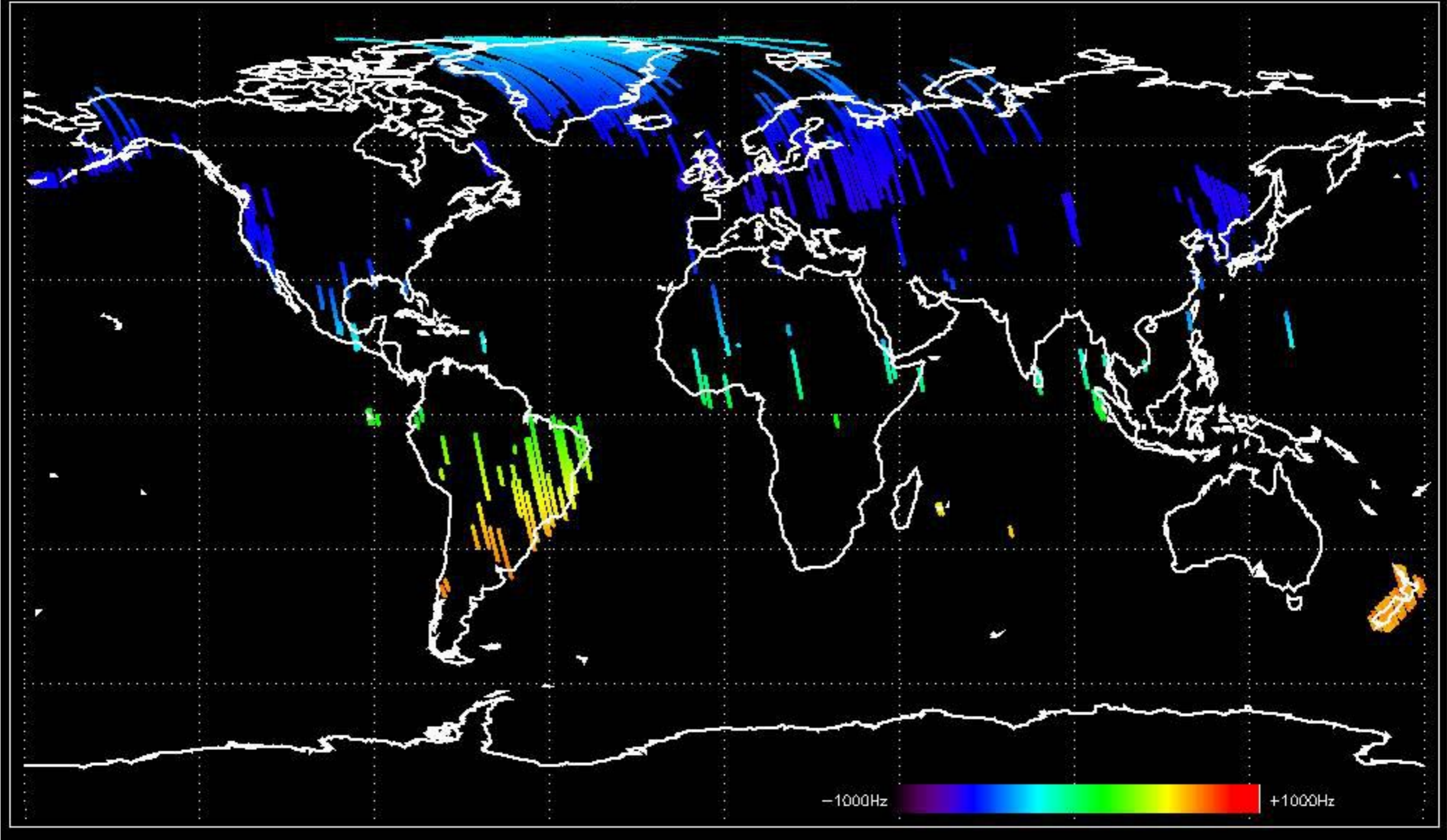
Doppler 'GM1' 'SS1' ascending



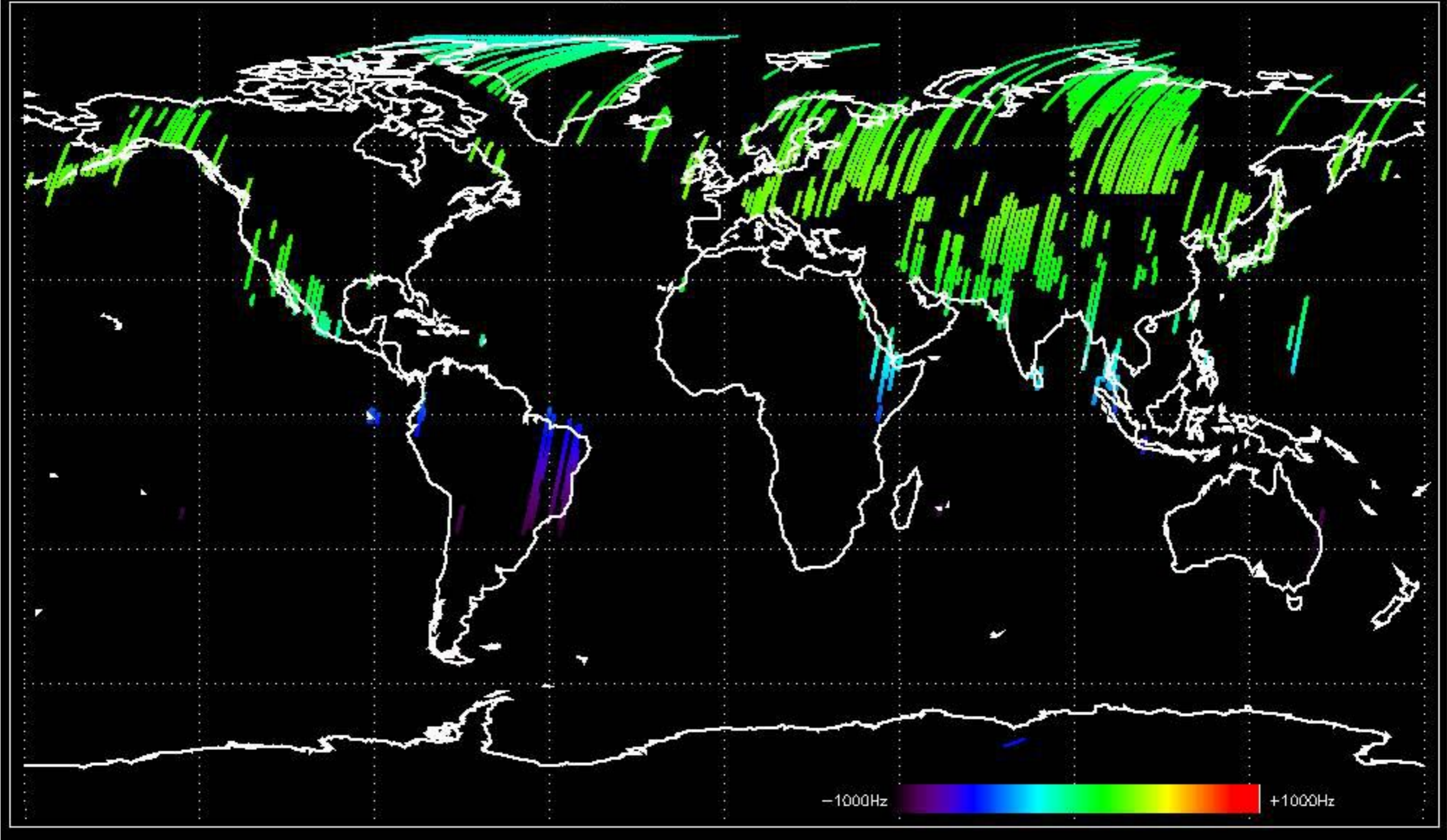
Doppler 'GM1' 'SS1' descending



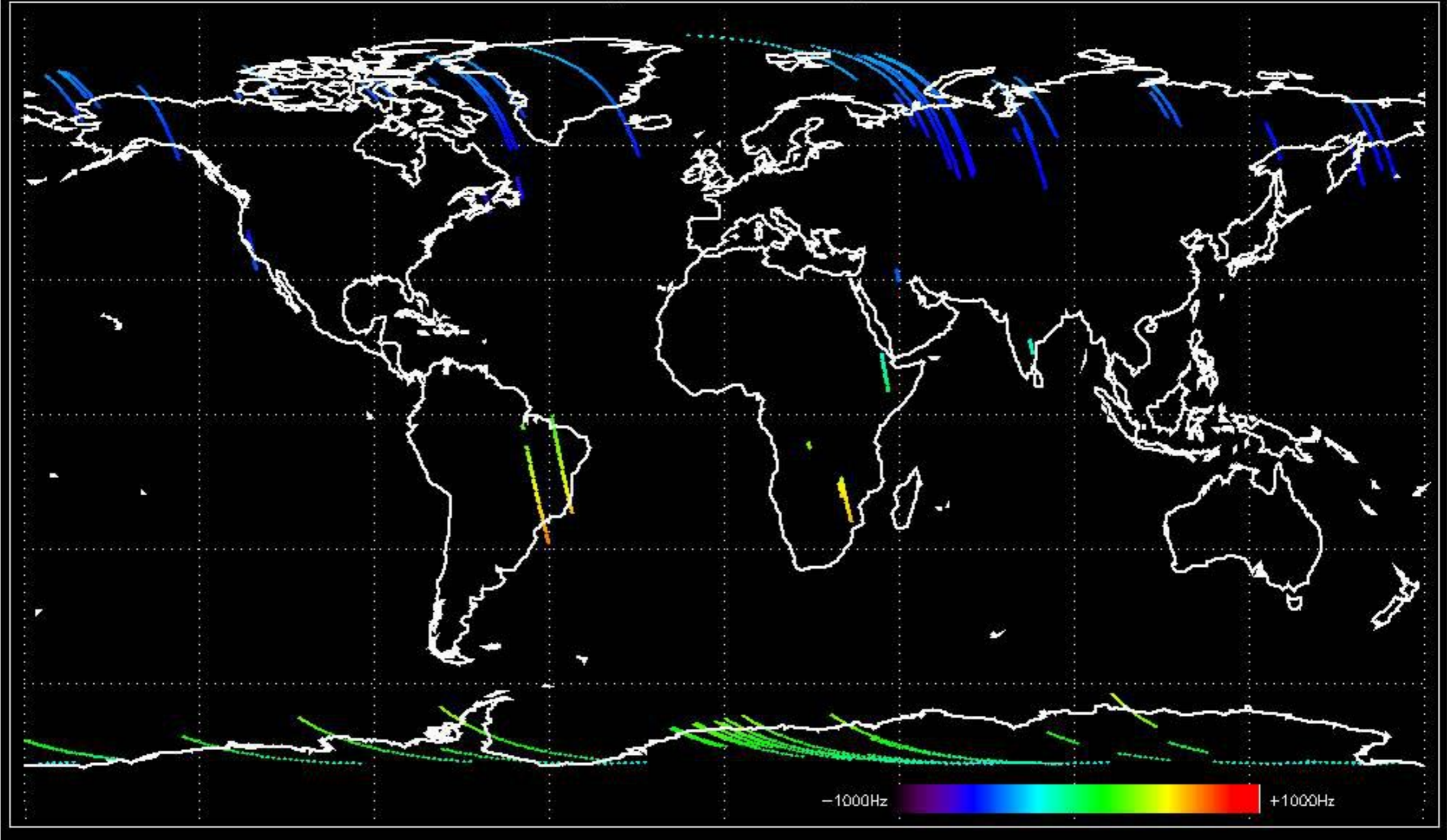
Doppler 'IMM' 'IS2' ascending



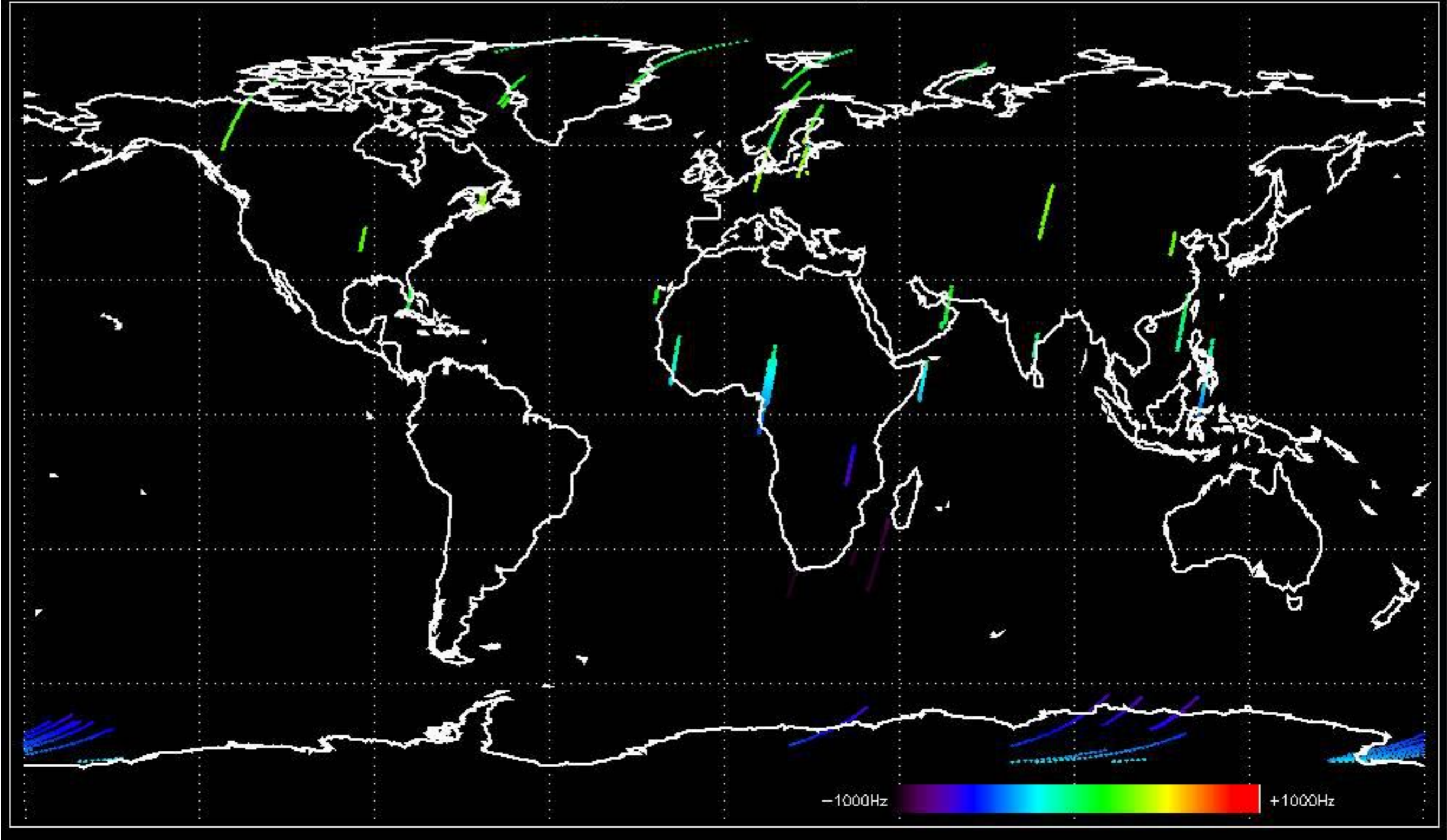
Doppler 'IMM' 'IS2' descending



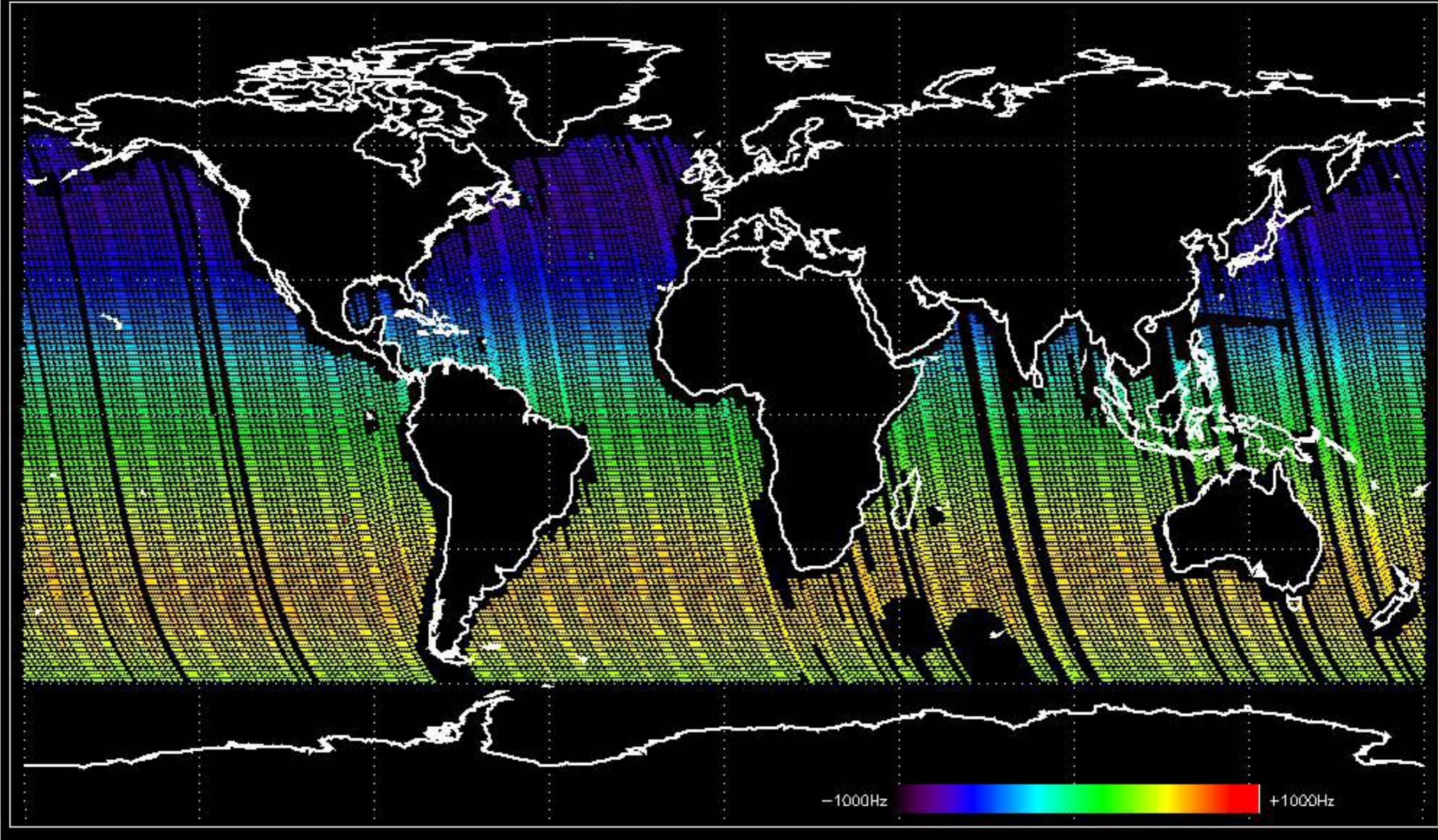
Doppler 'WSM' 'SS1' ascending



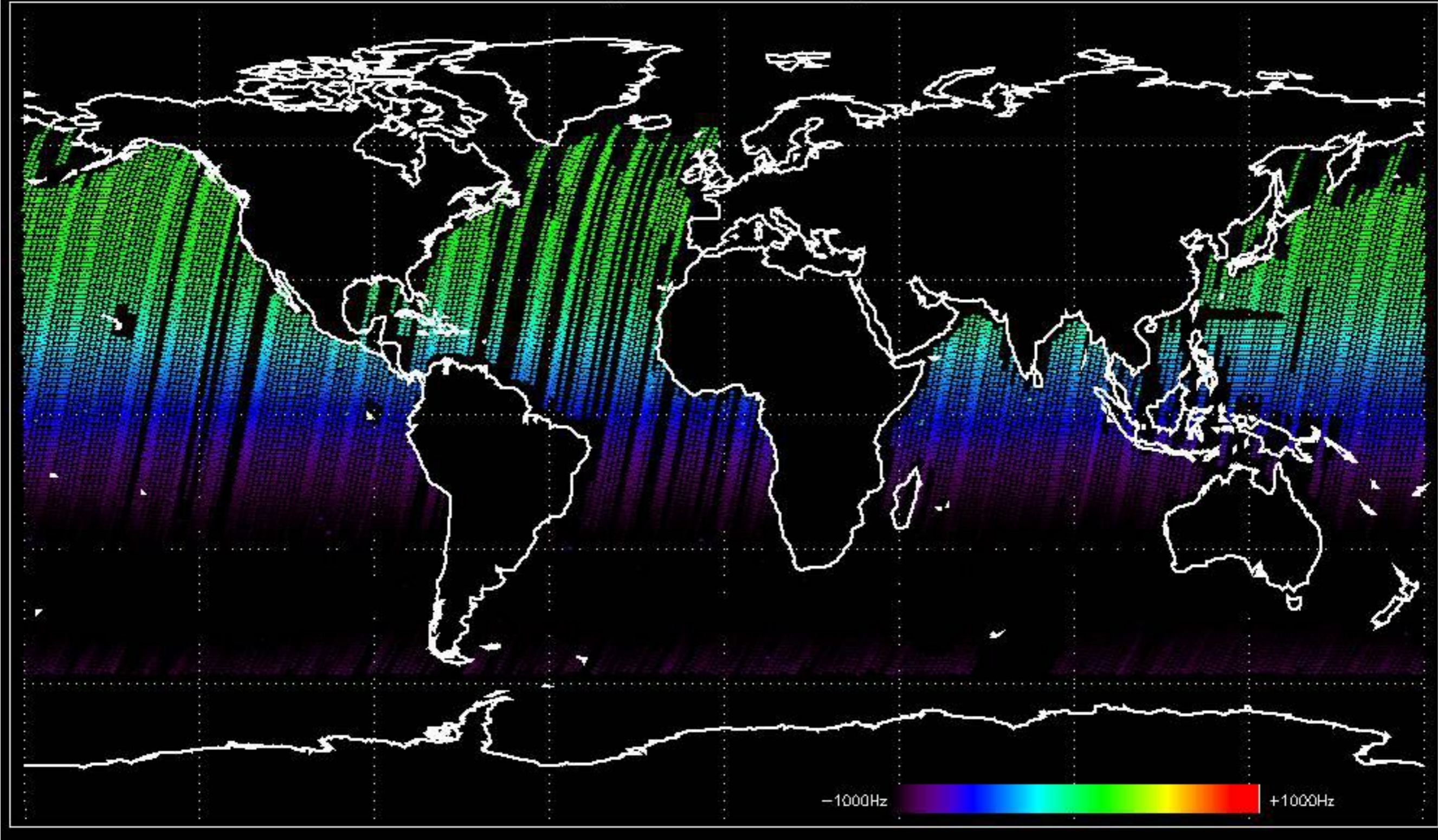
Doppler 'WSM' 'SS1' descending



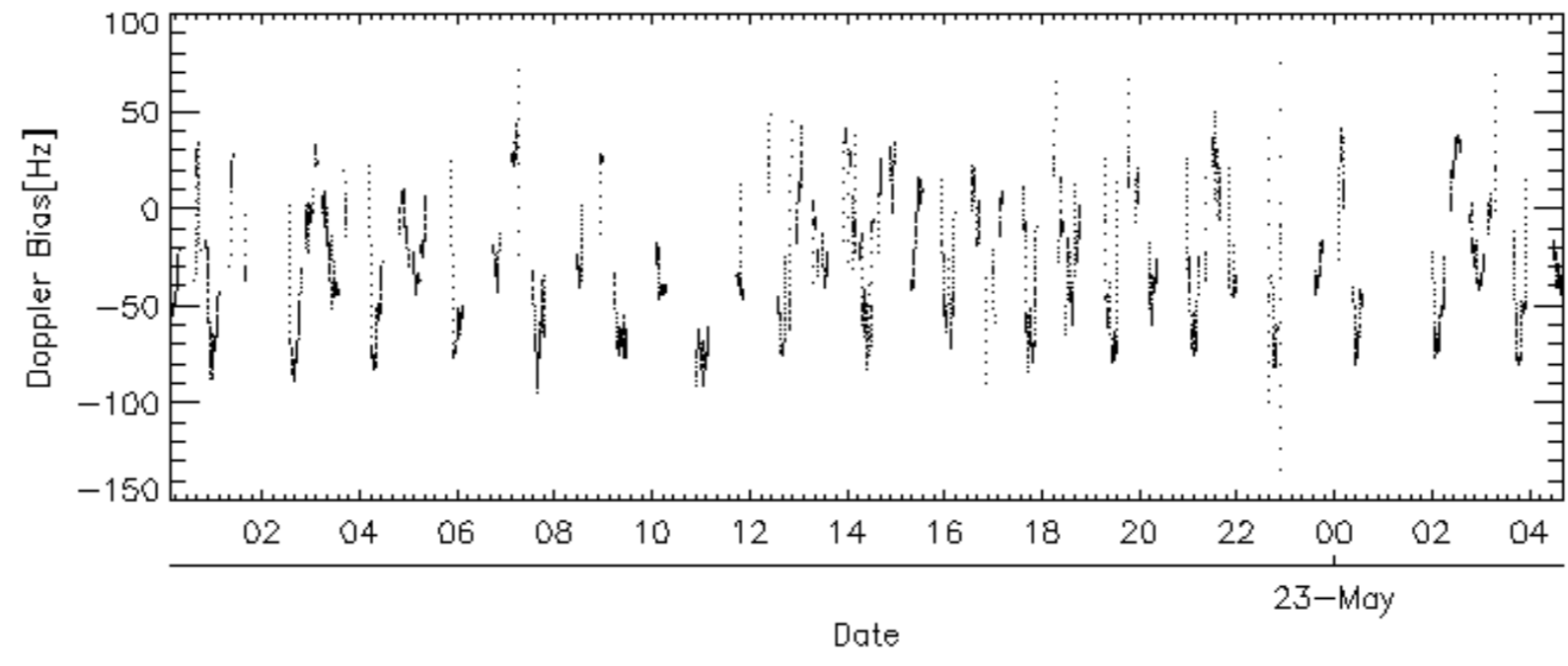
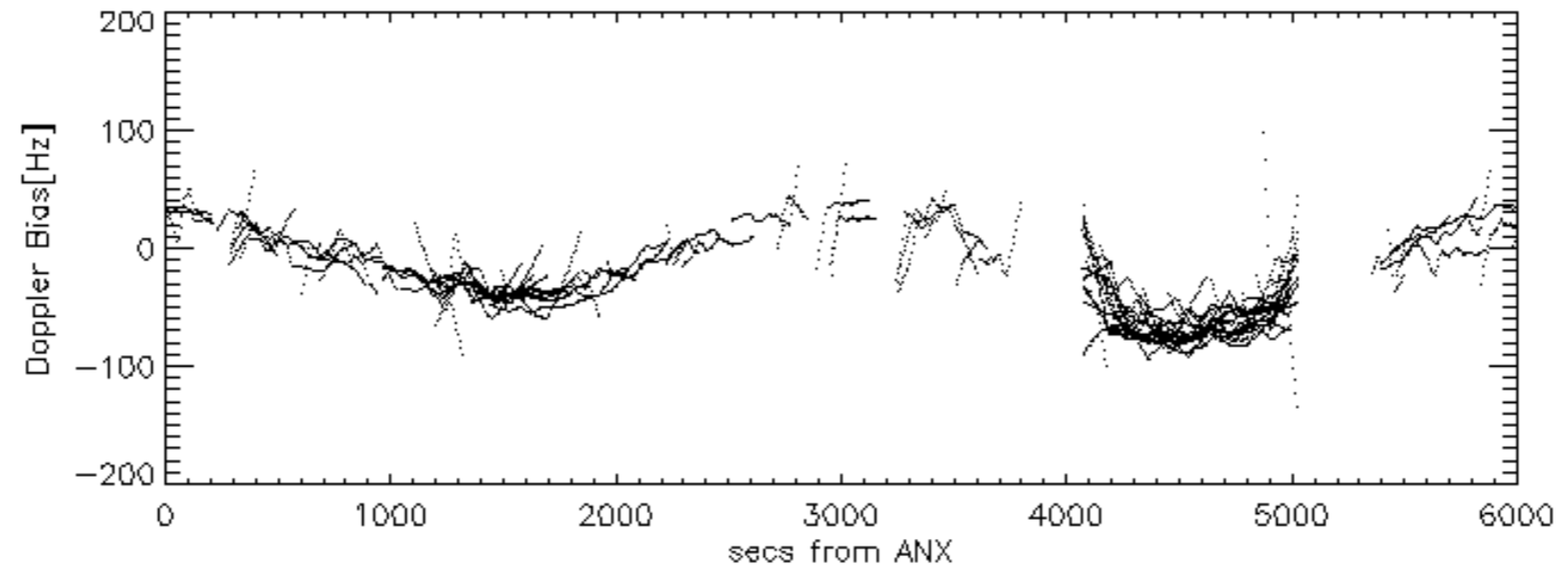
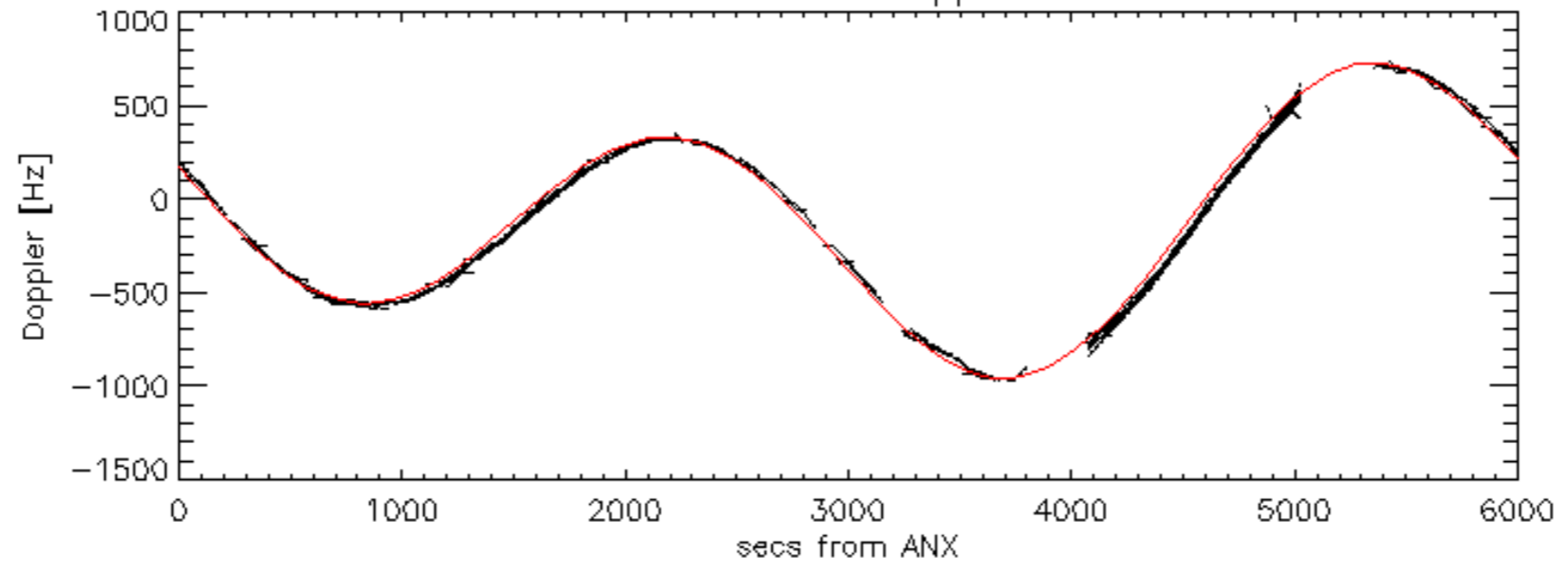
Doppler 'WVS' 'IS2' ascending

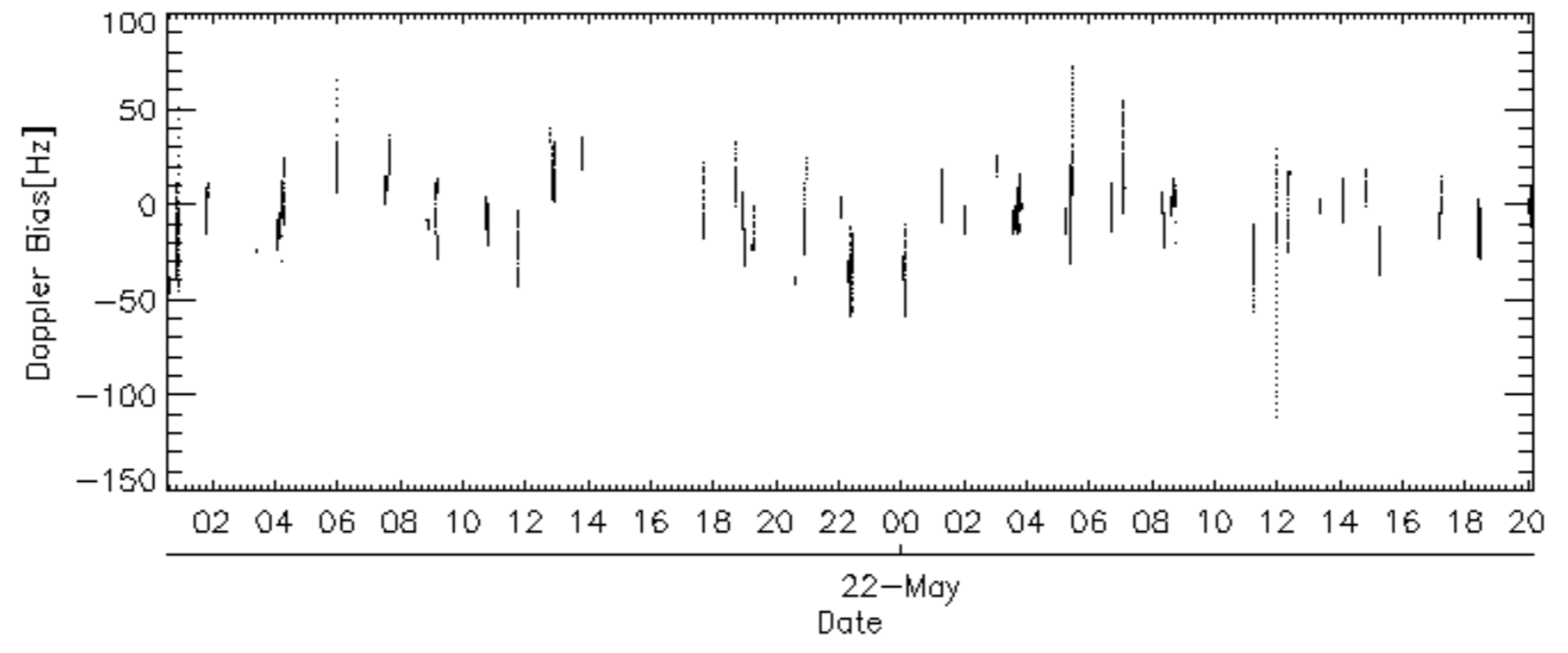
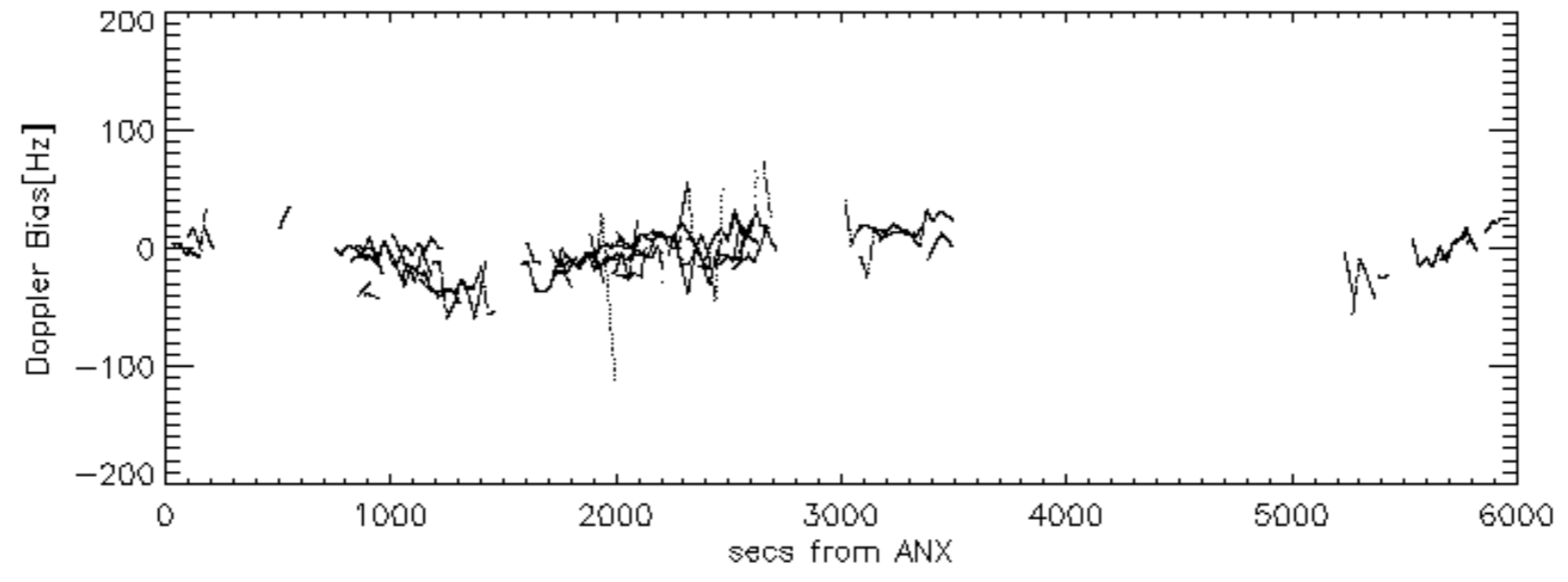
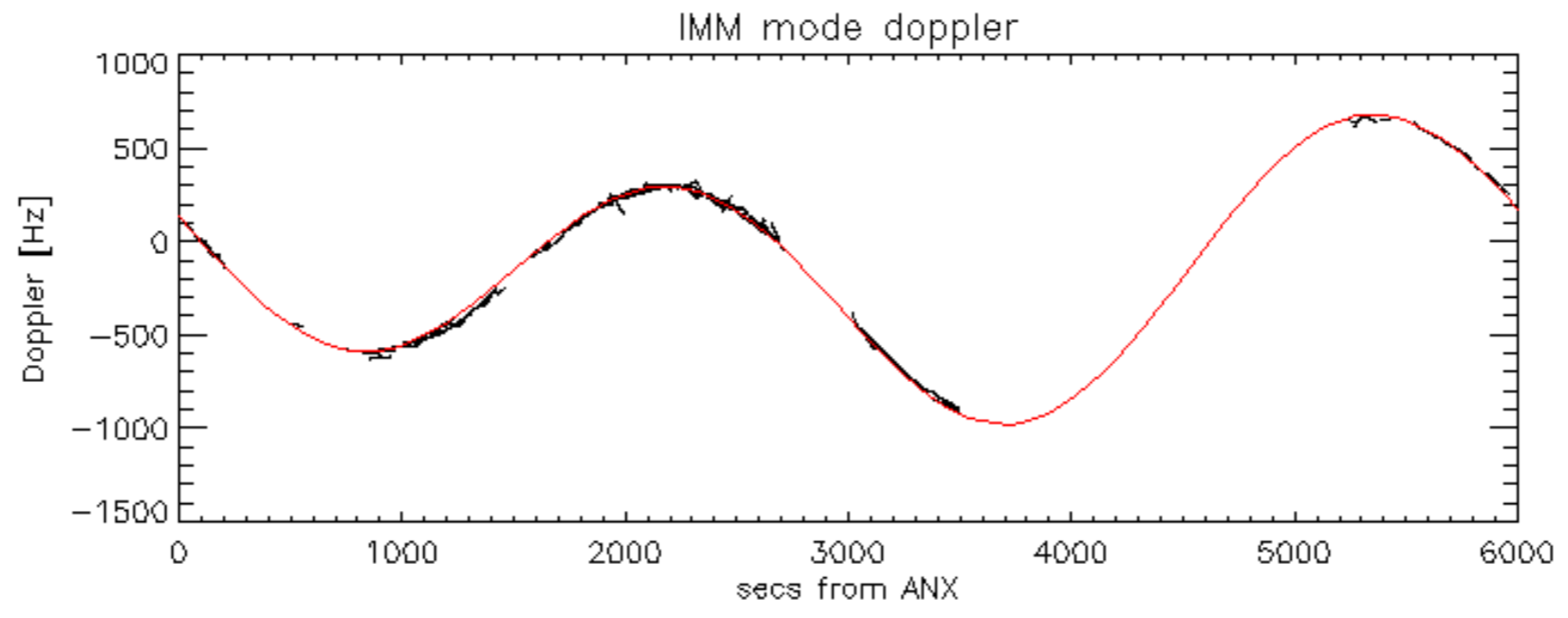


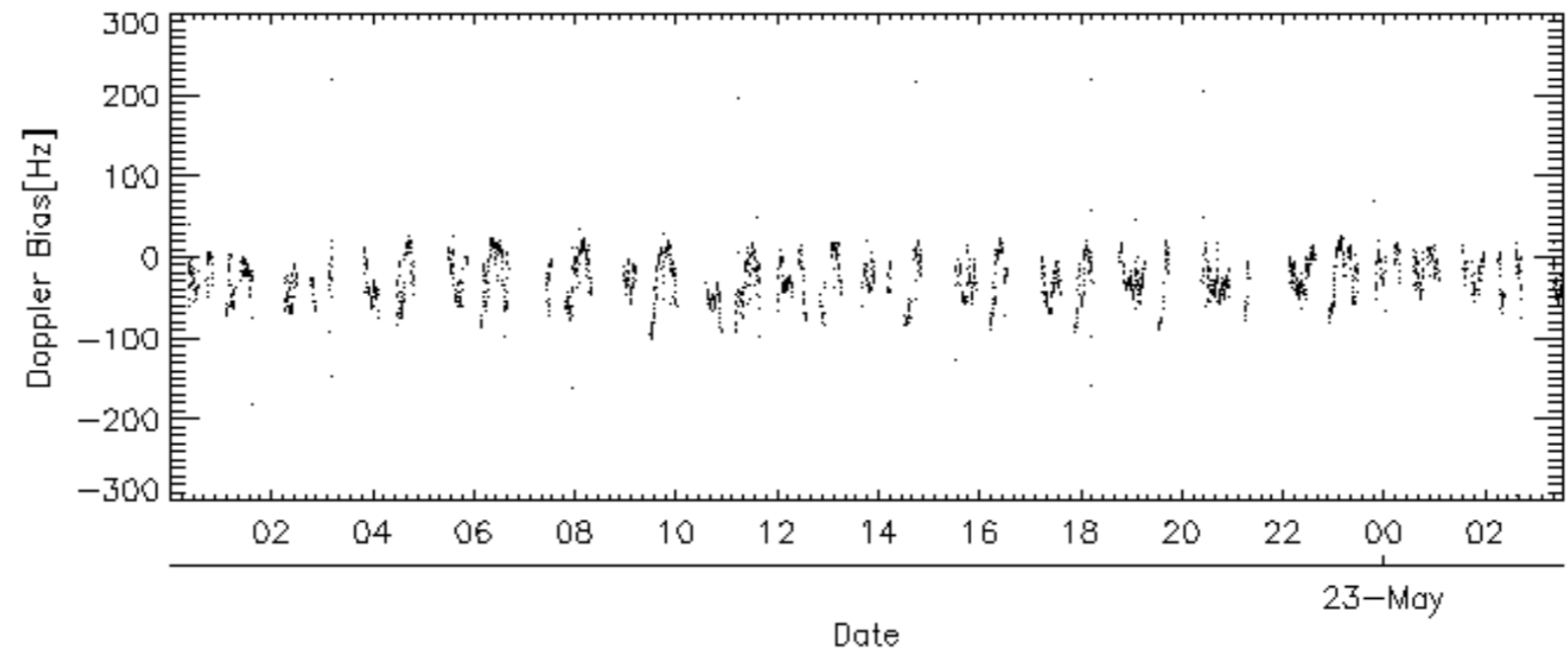
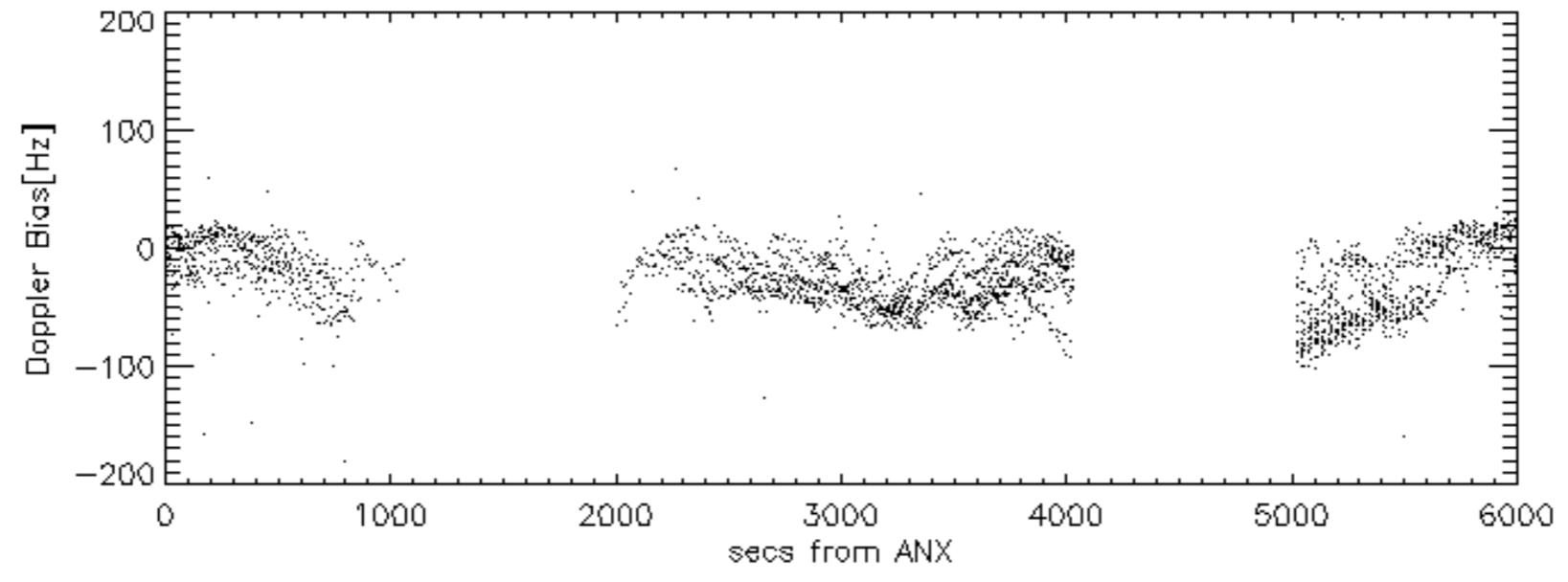
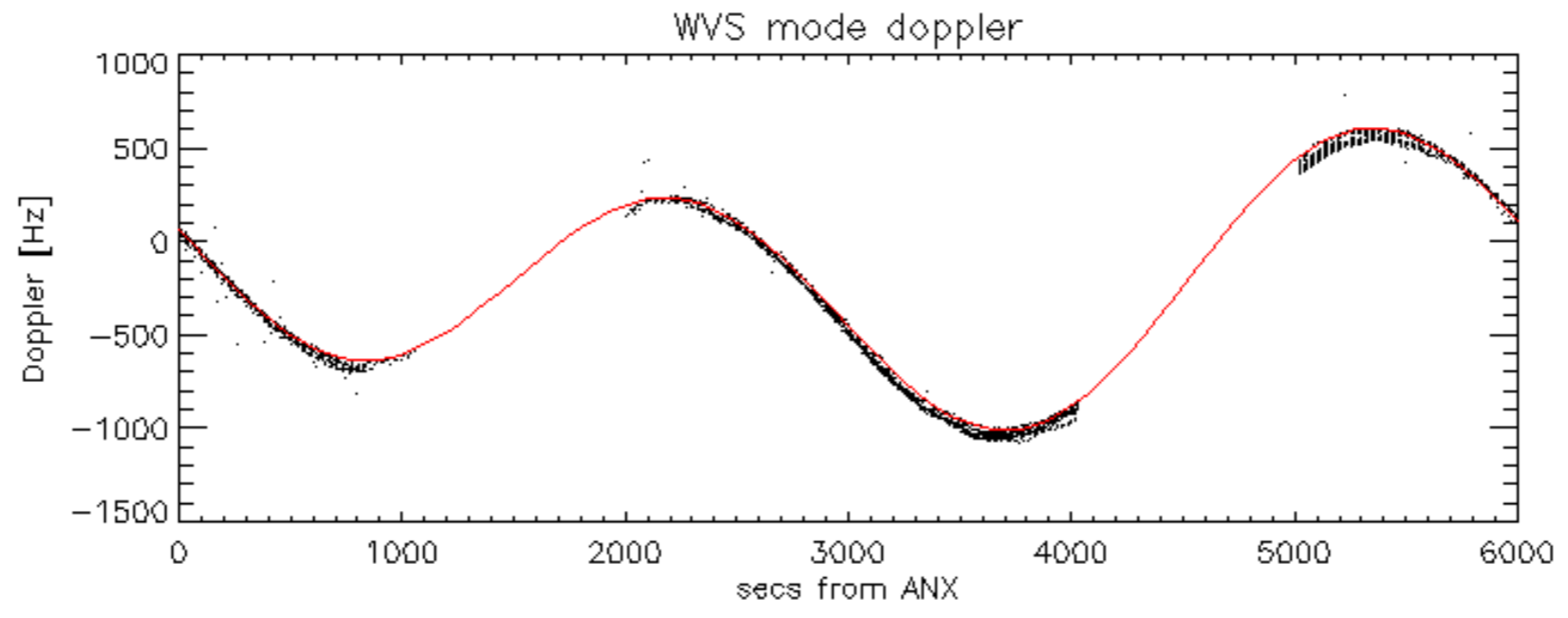
Doppler 'WVS' 'IS2' descending



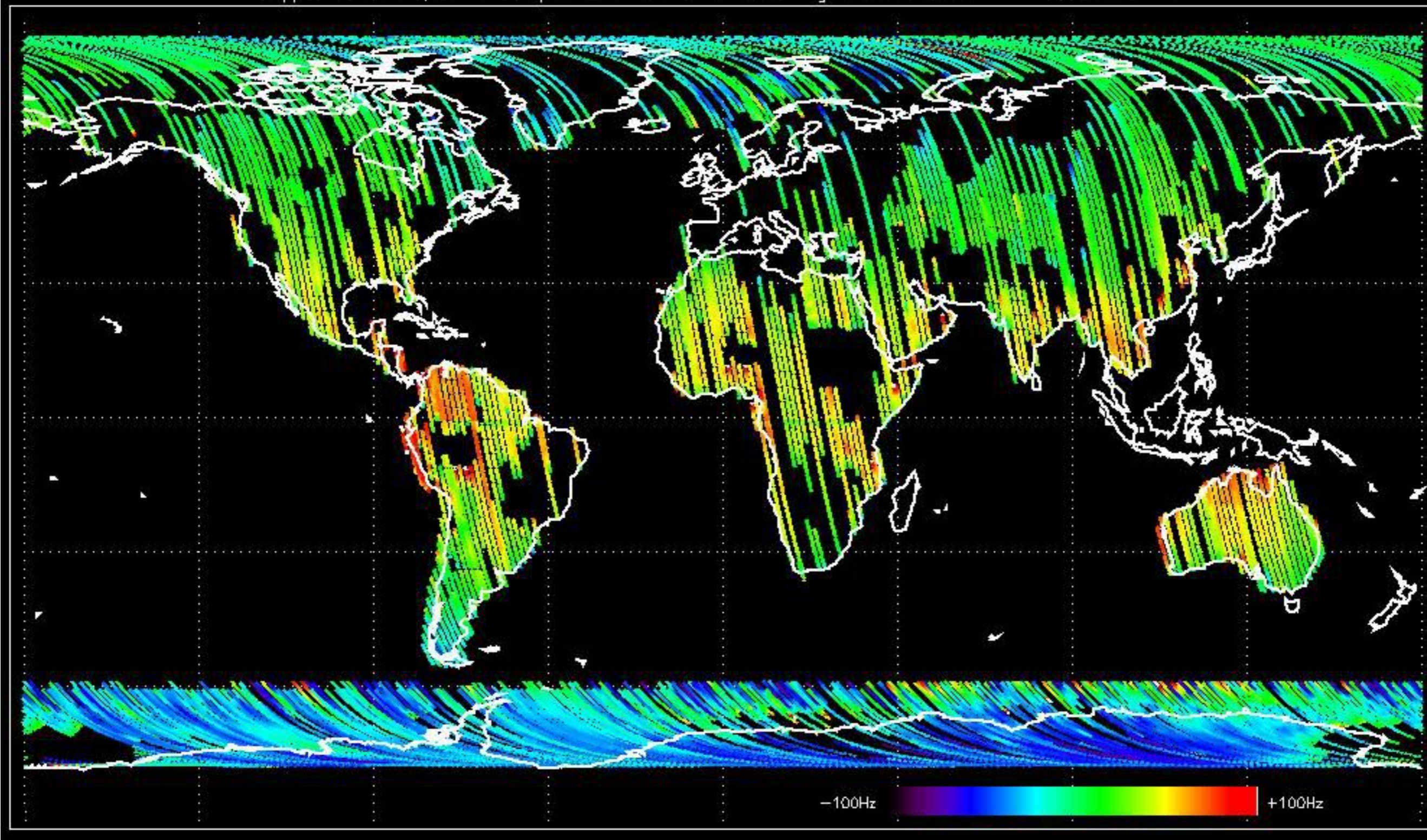
GM1 mode doppler



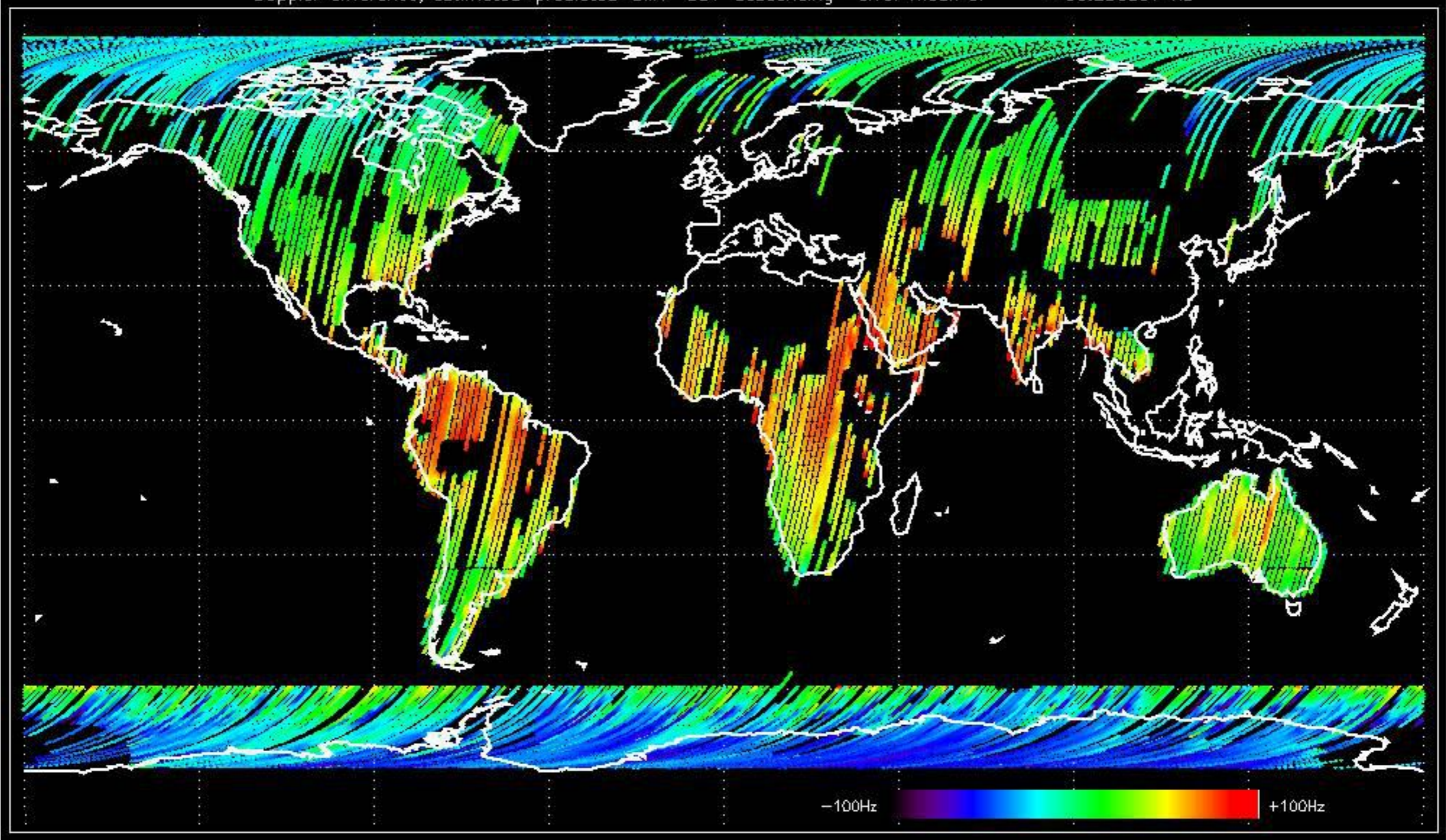




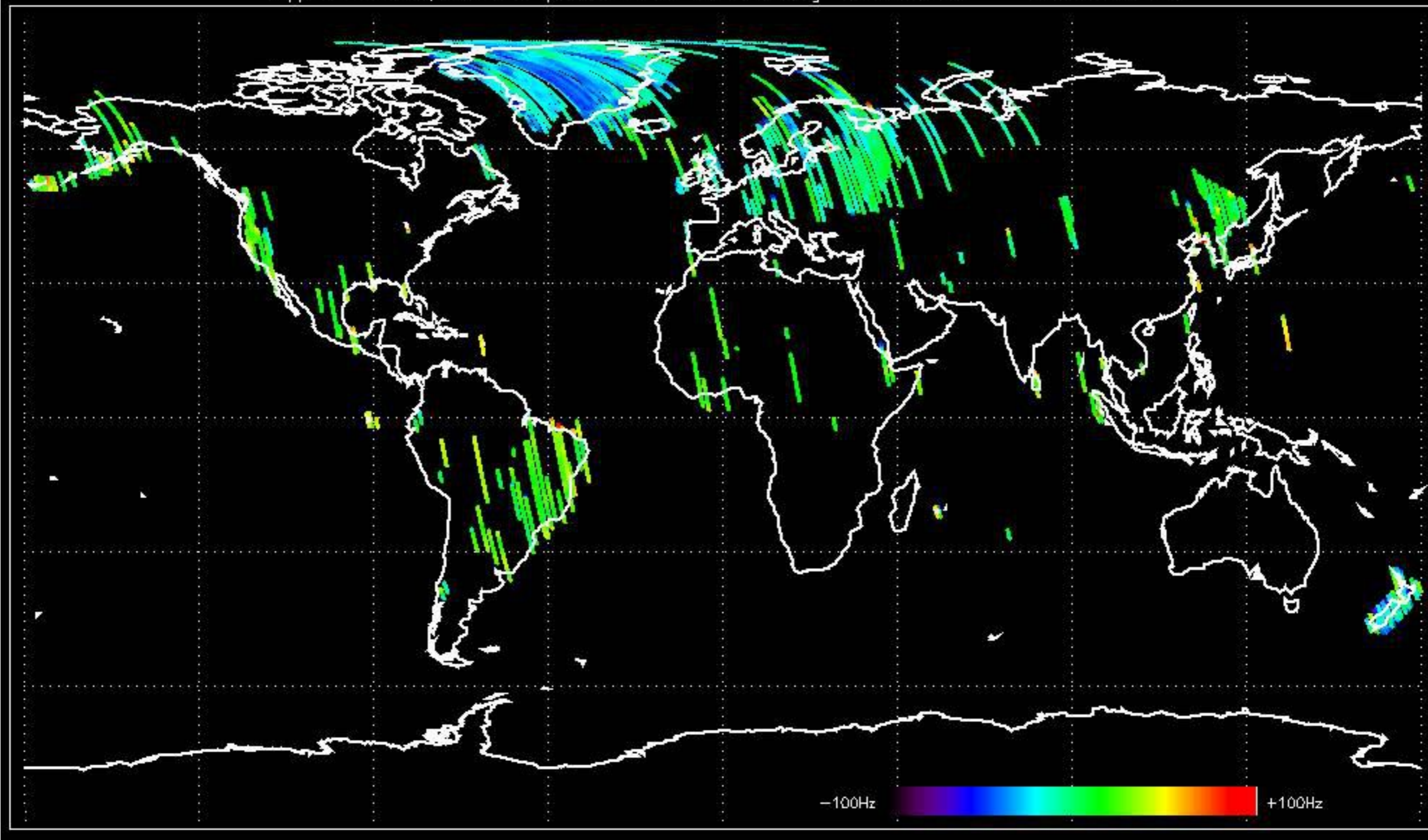
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -39.806768 Hz



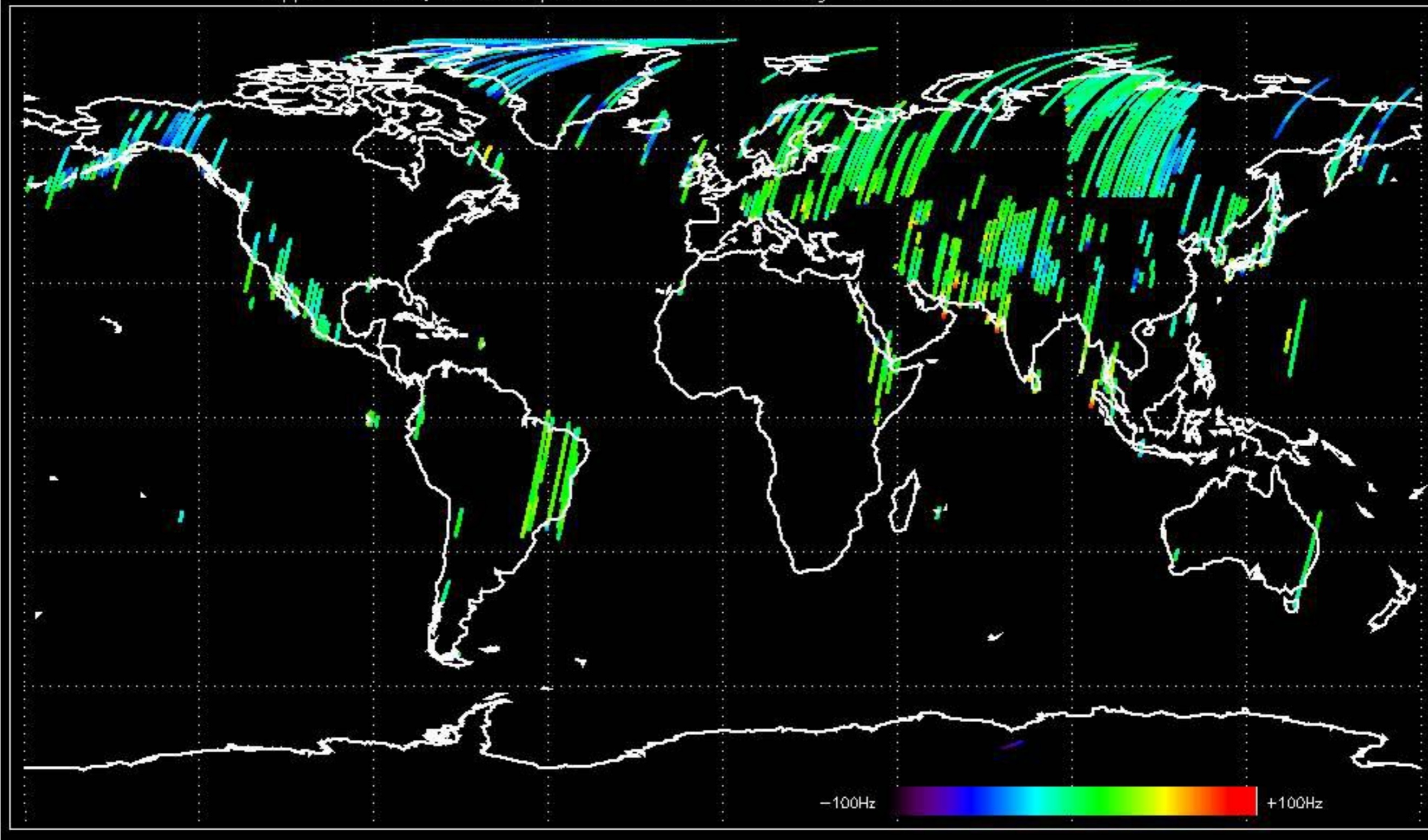
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -33.250397 Hz



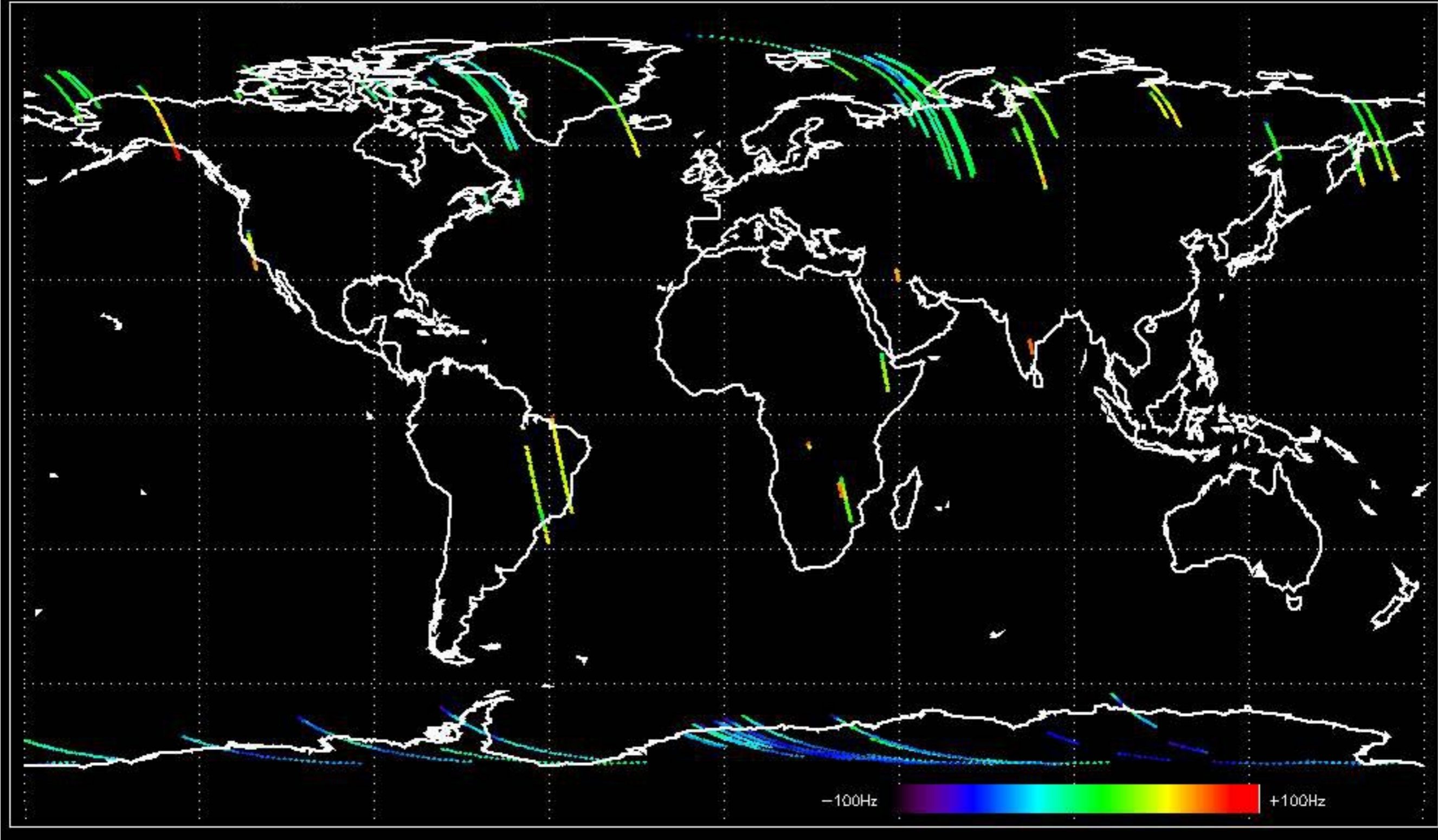
Doppler difference, estimated-predicted 'IMM' 'IS2' ascending -error mean of -16.252167 Hz



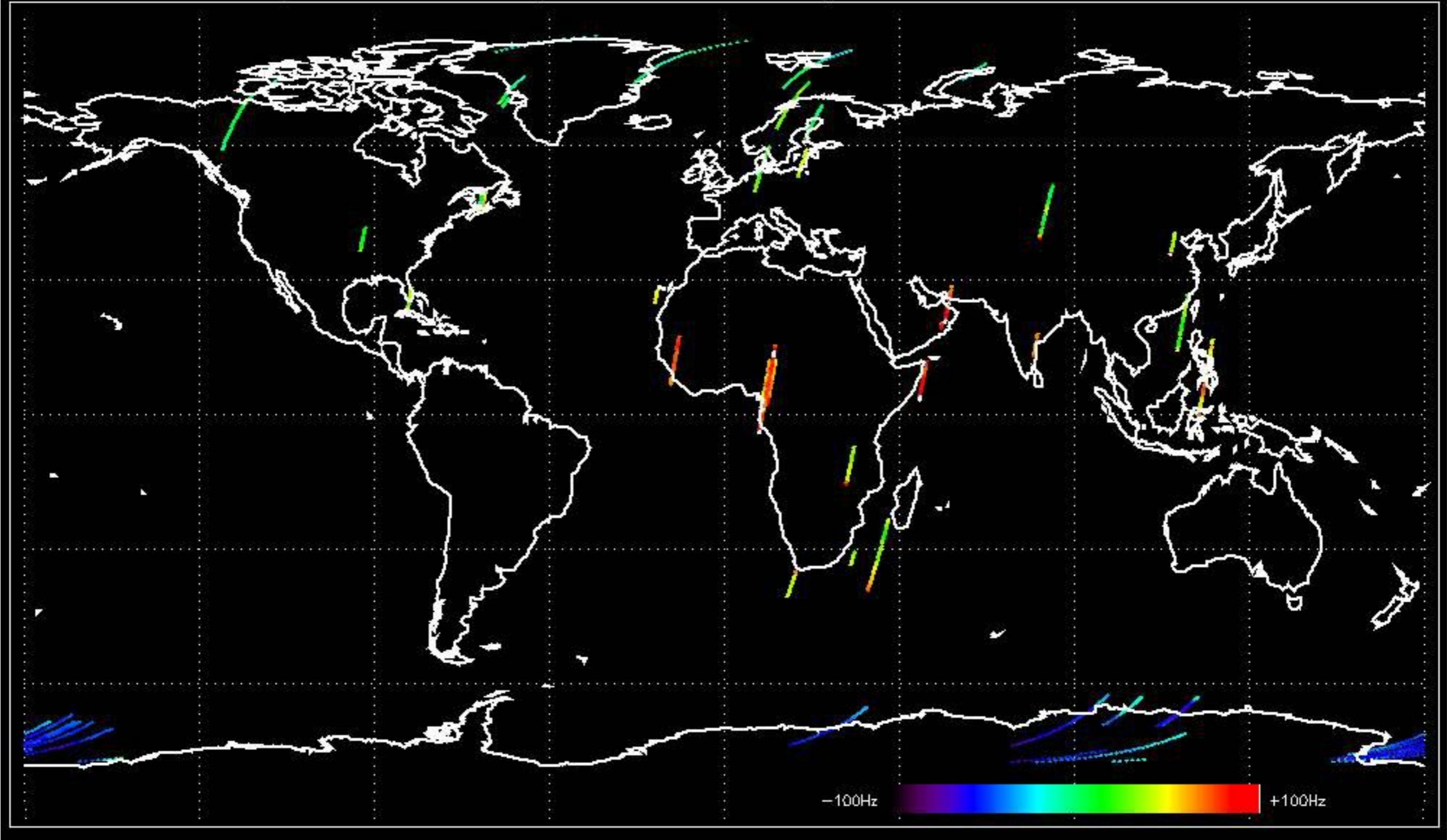
Doppler difference, estimated-predicted 'IMM' 'IS2' descending -error mean of -5.8680112 Hz



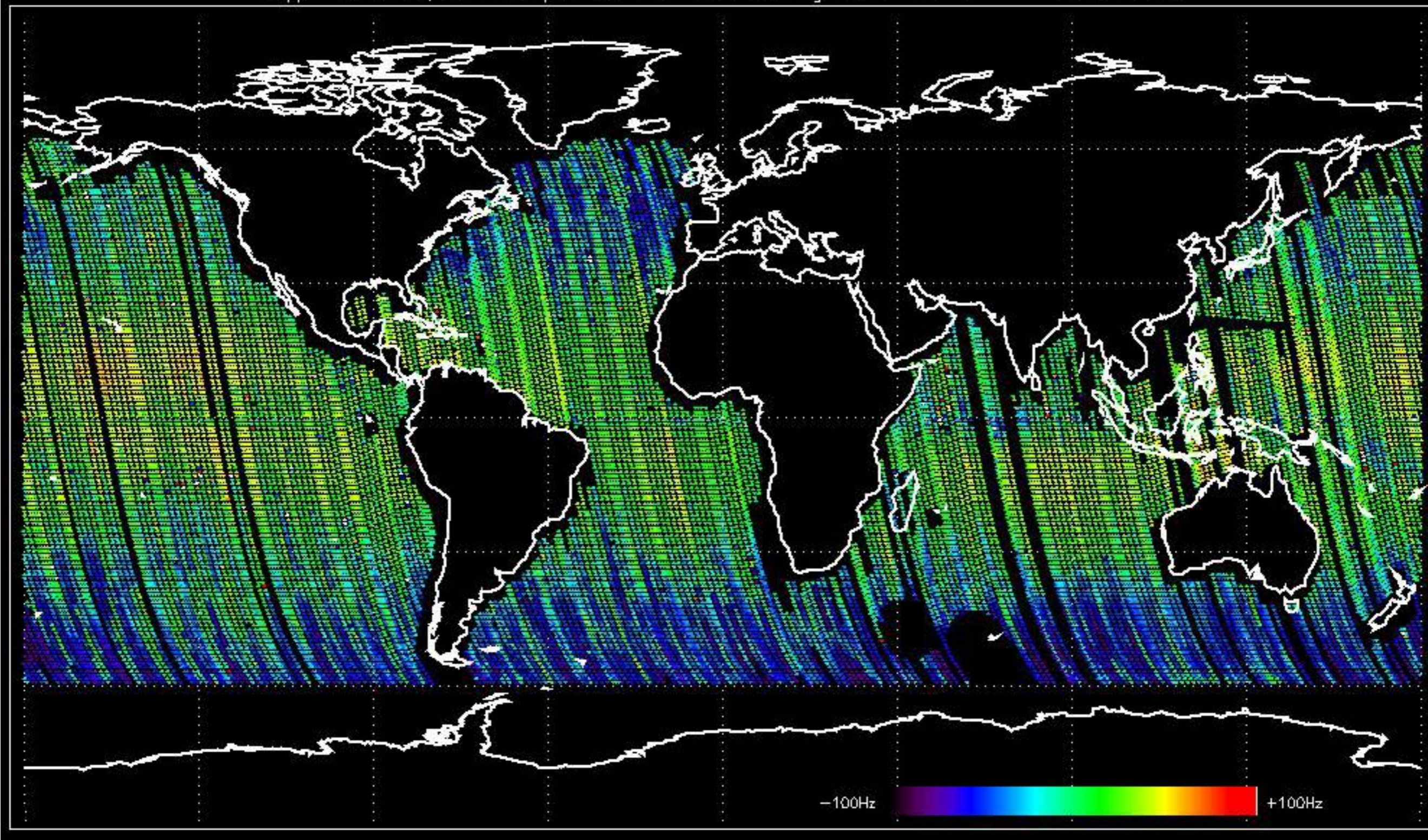
Doppler difference, estimated-predicted 'WSM' 'SS1' ascending -error mean of -37.702442 Hz



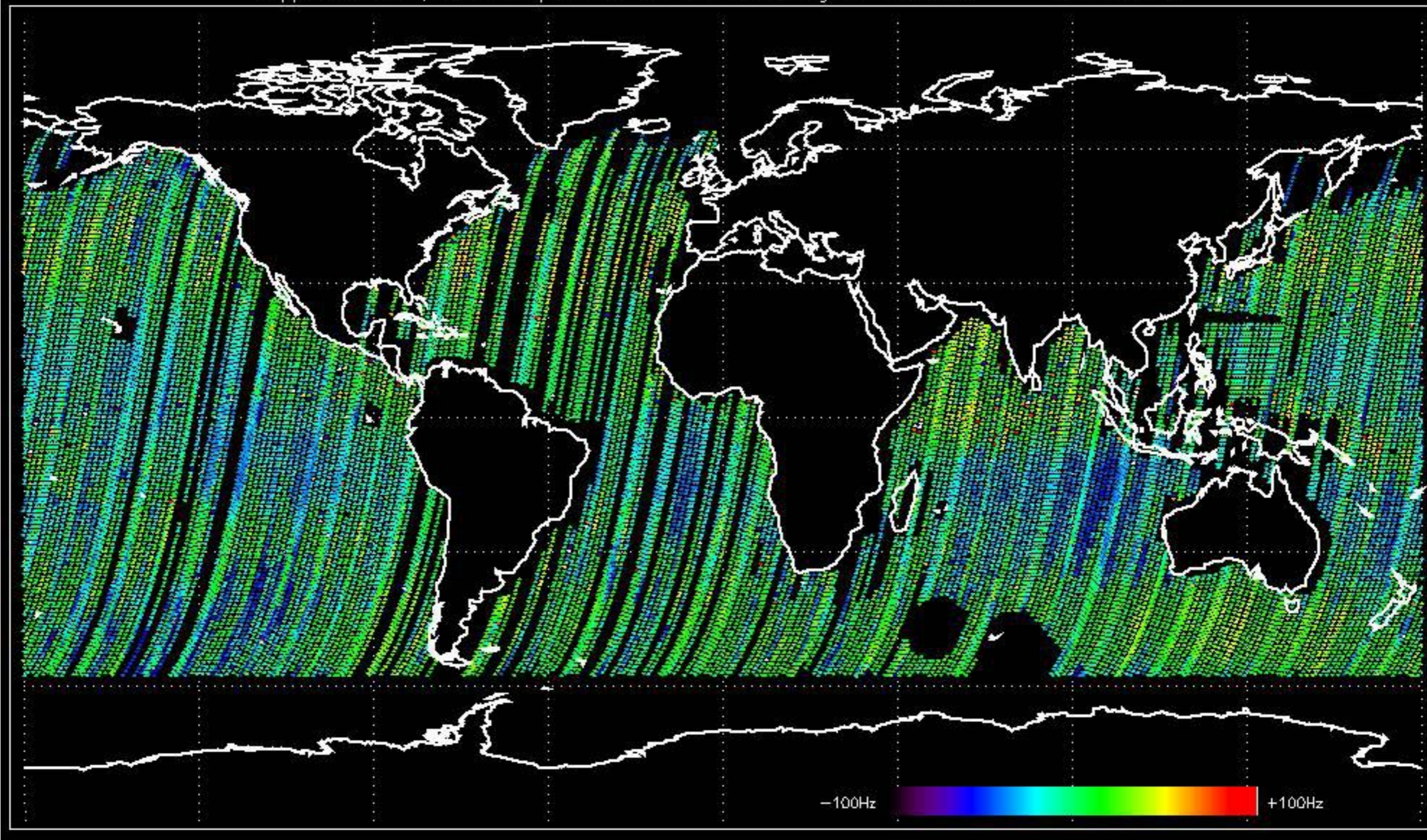
Doppler difference, estimated-predicted 'WSM' 'SS1' descending -error mean of -19.826956 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -31.674782 Hz



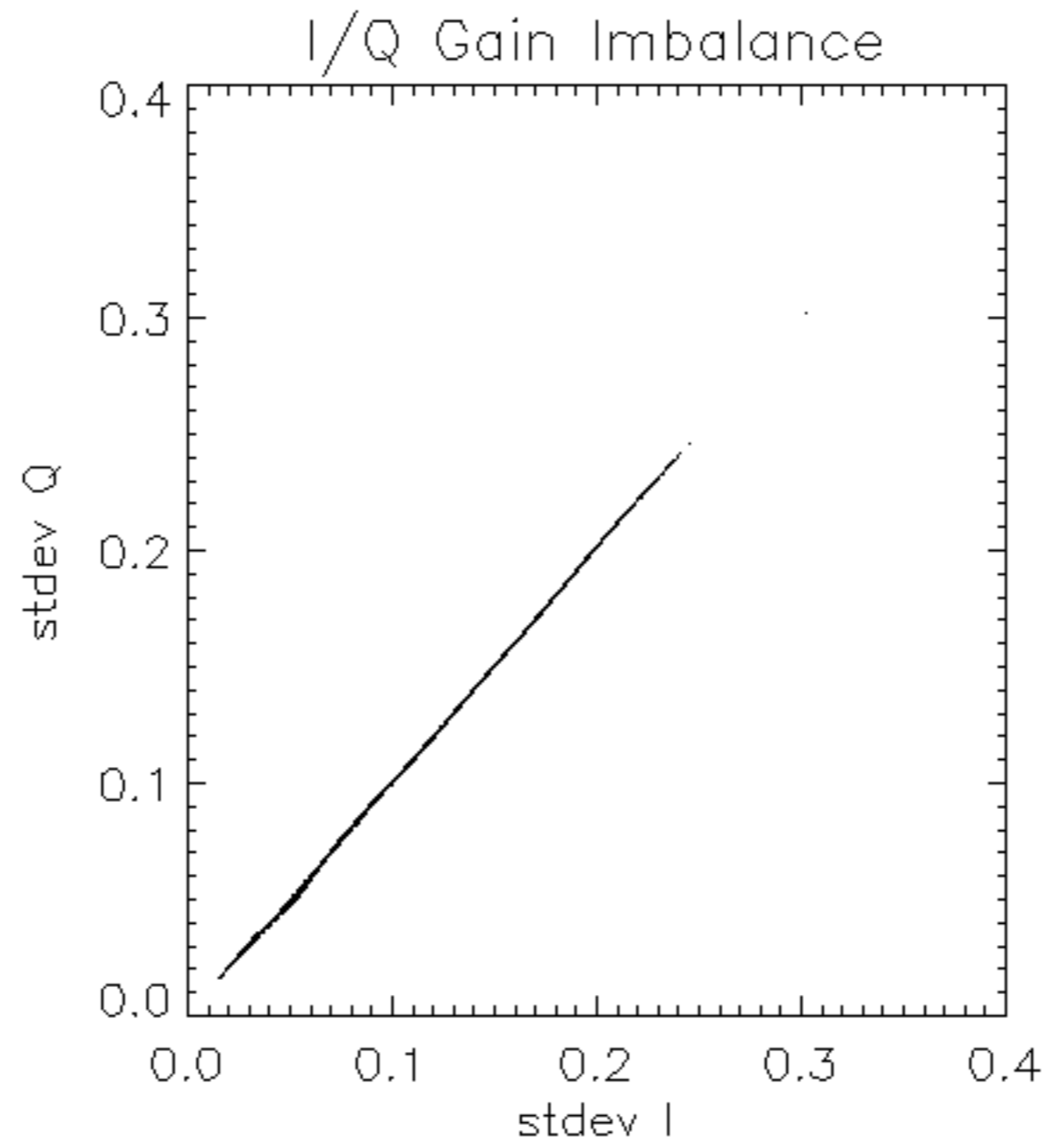
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -36.211363 Hz

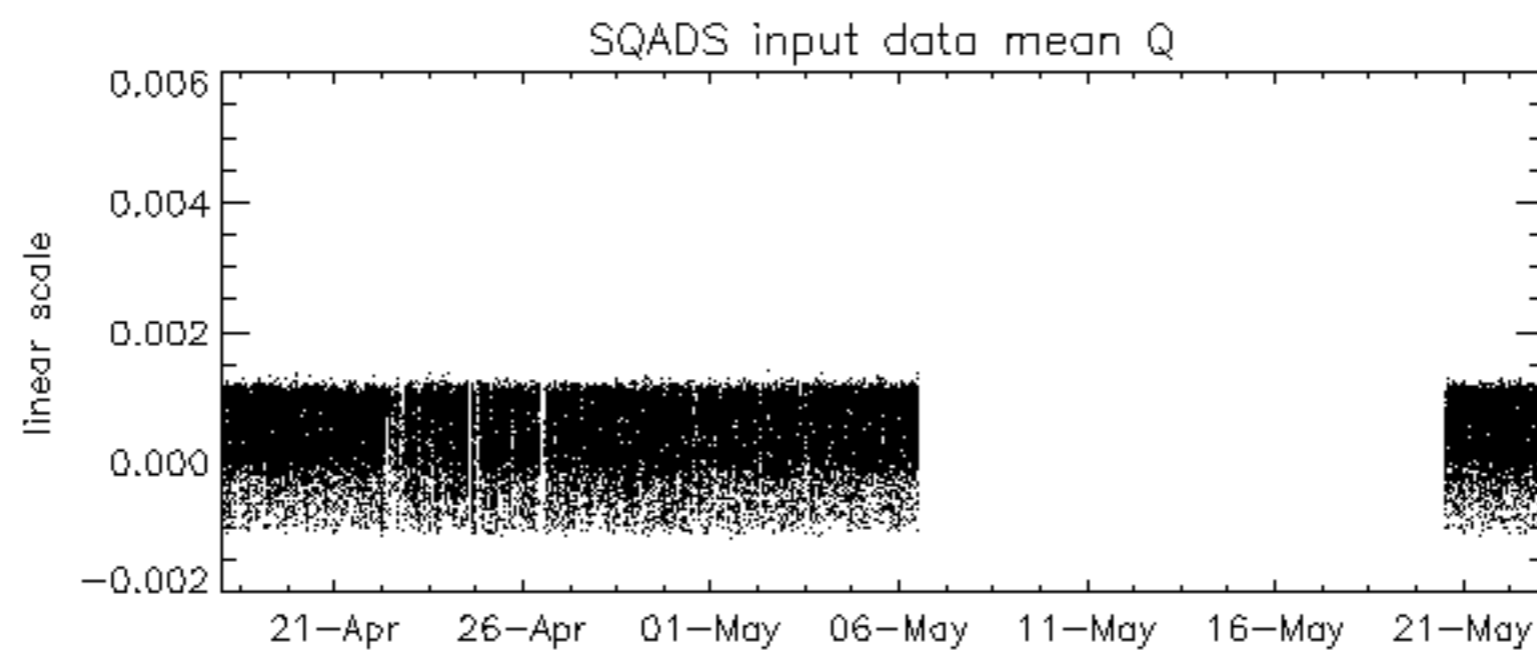
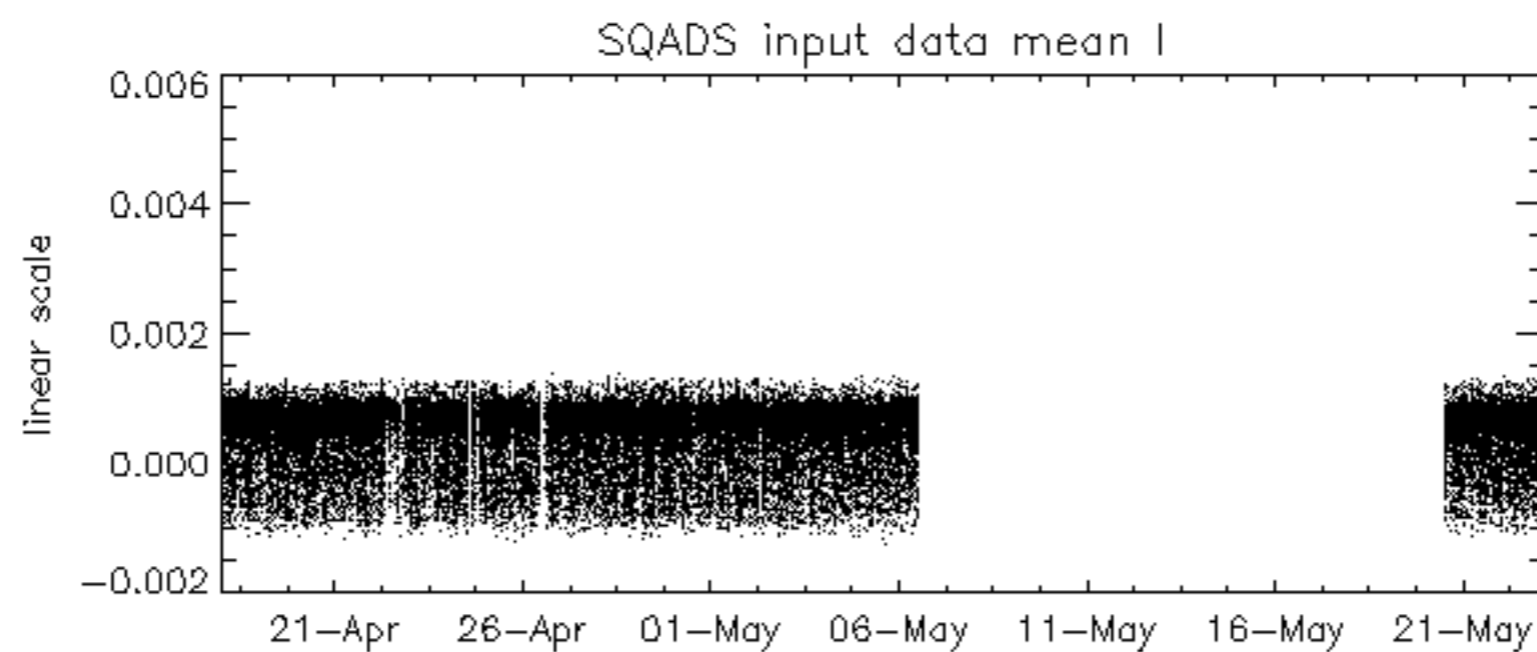
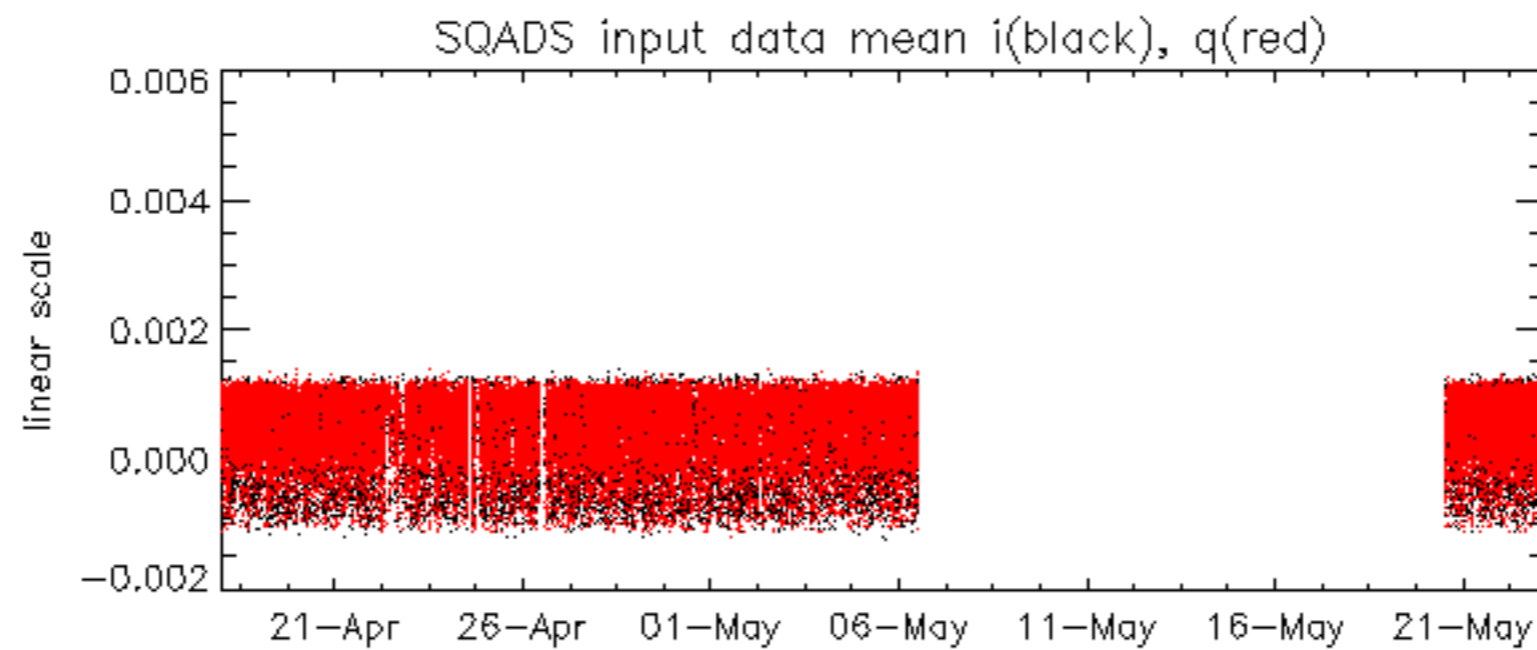


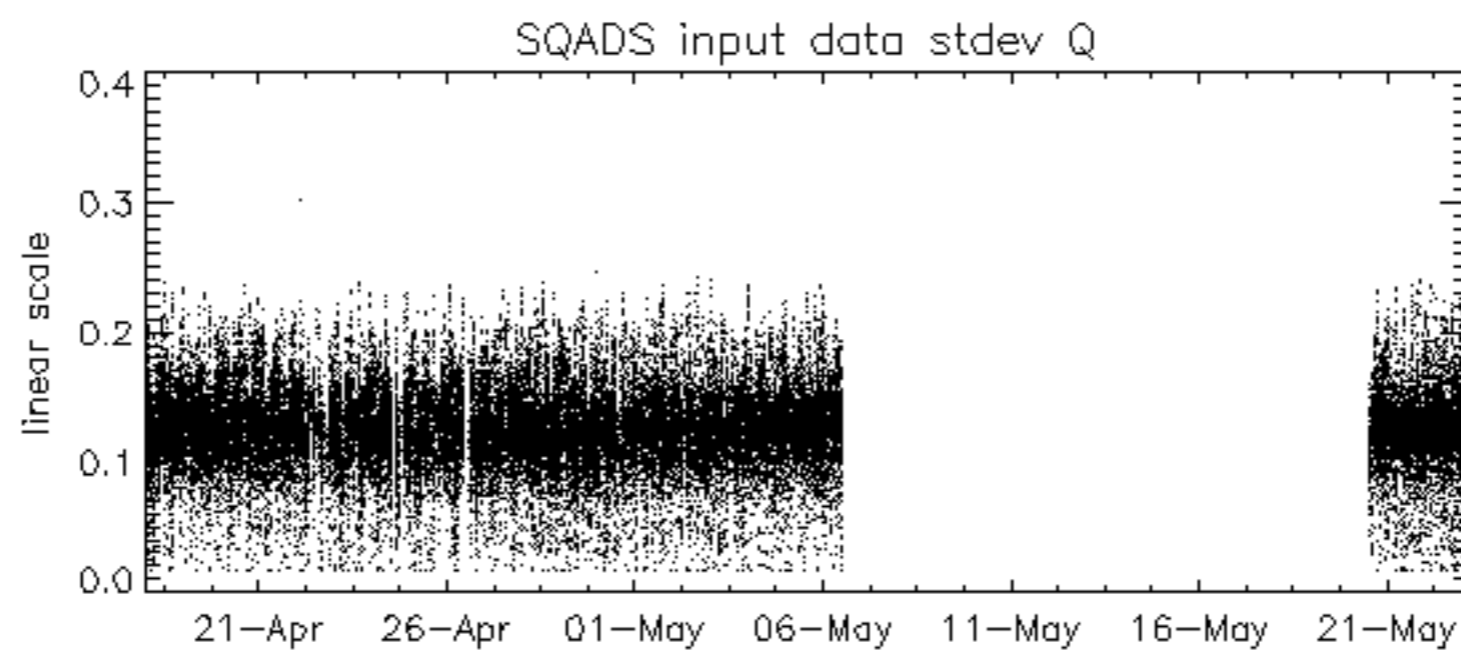
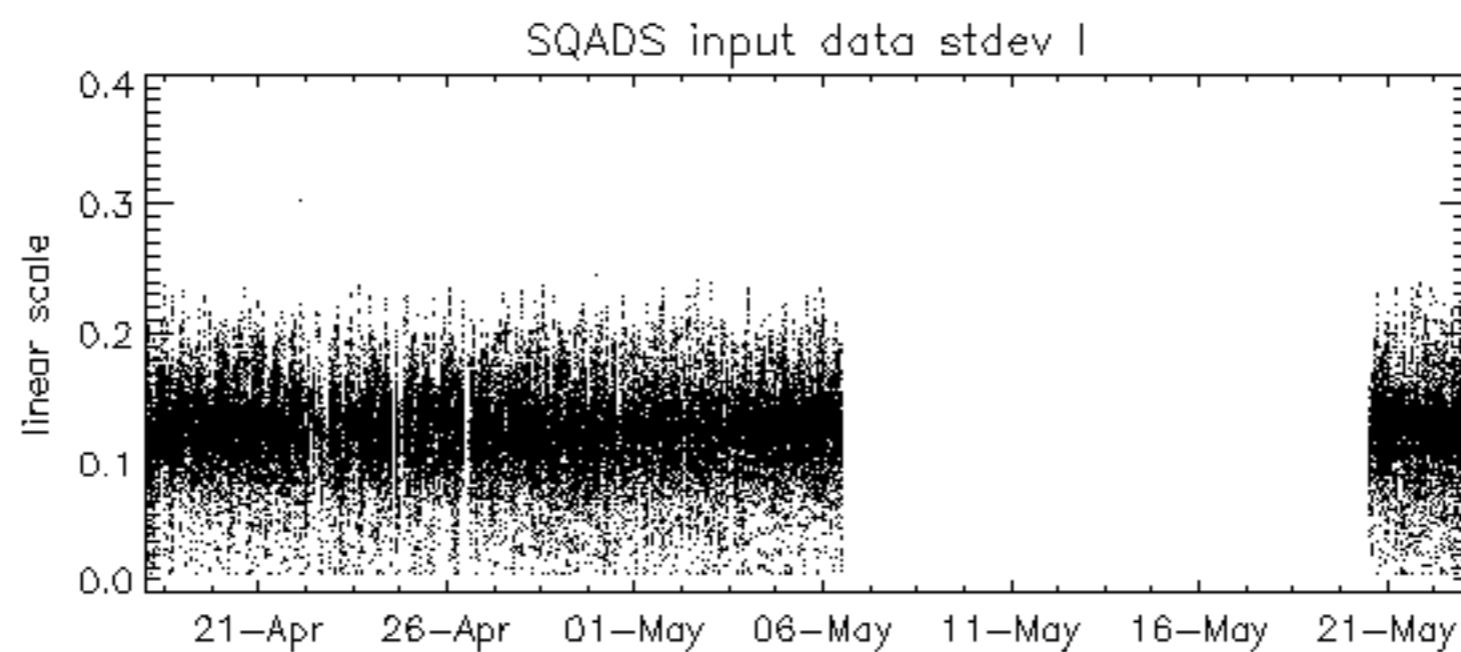
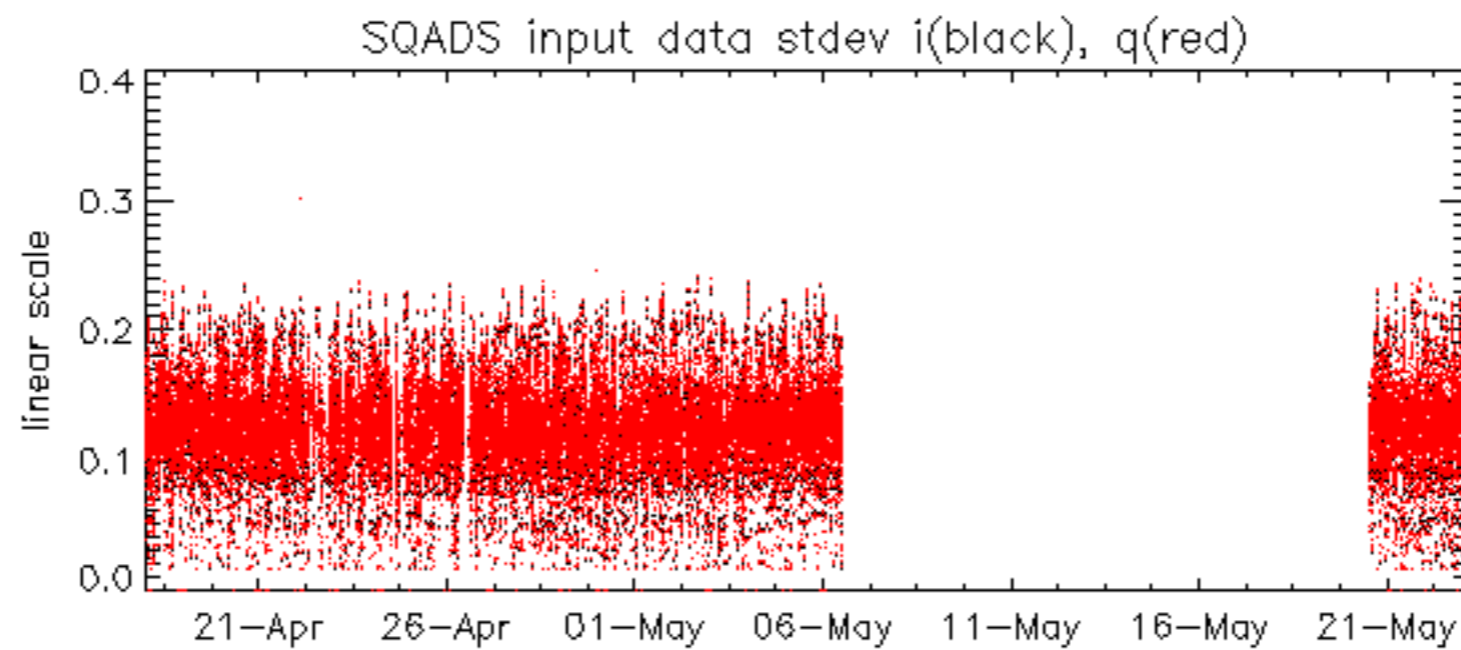
No anomalies observed on available MS products:

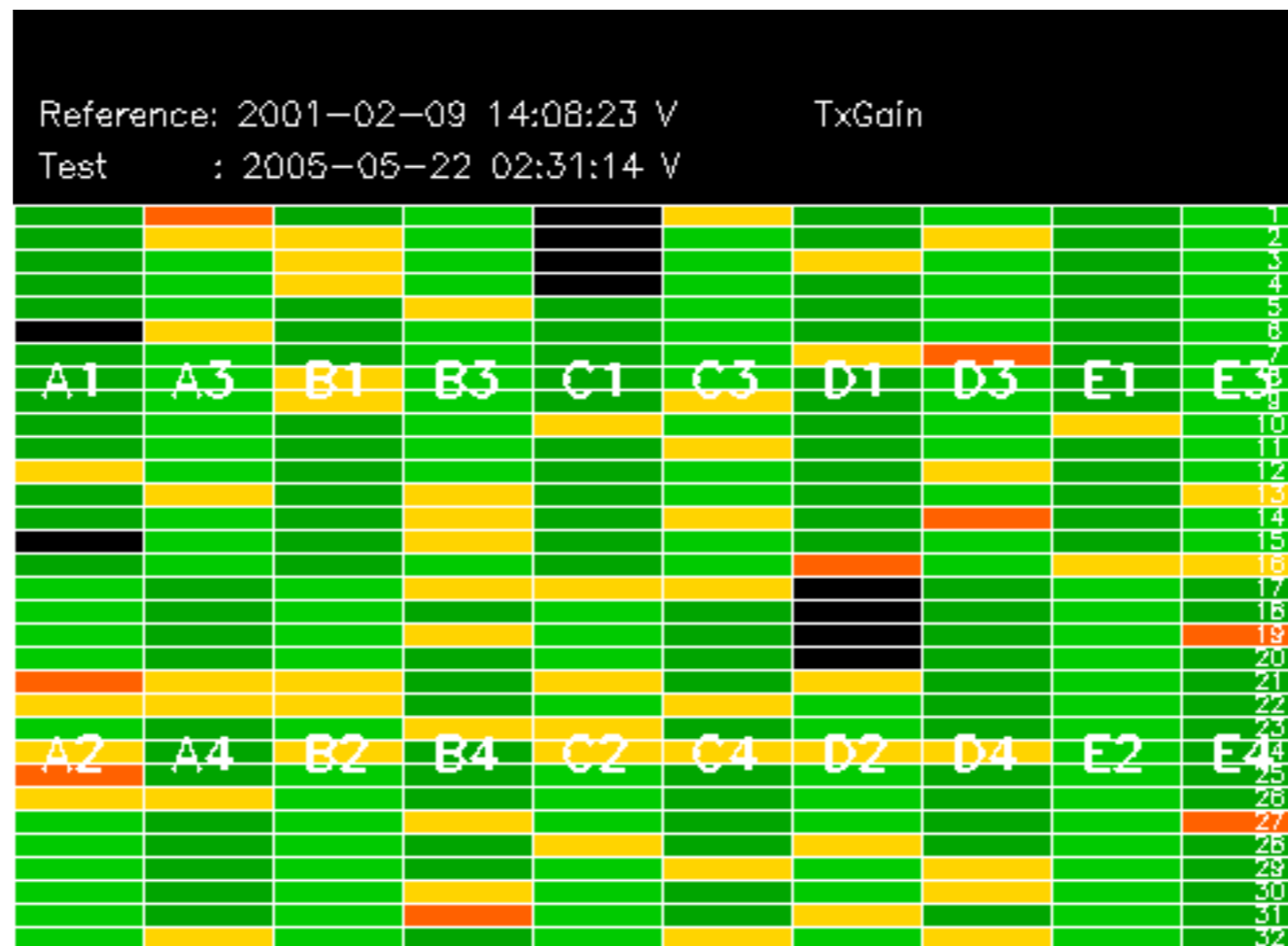
-Preliminary report. The data is not yet controled







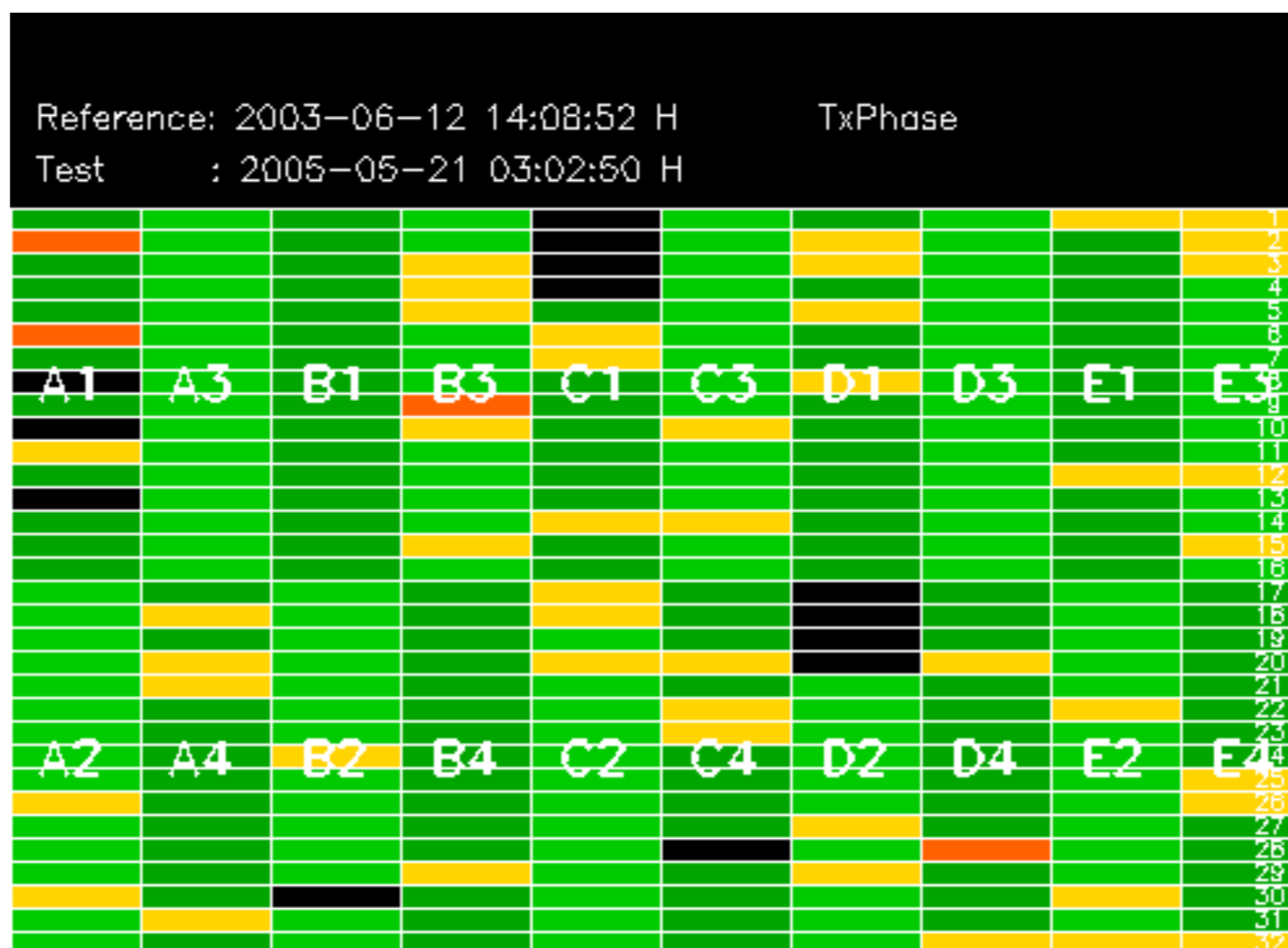


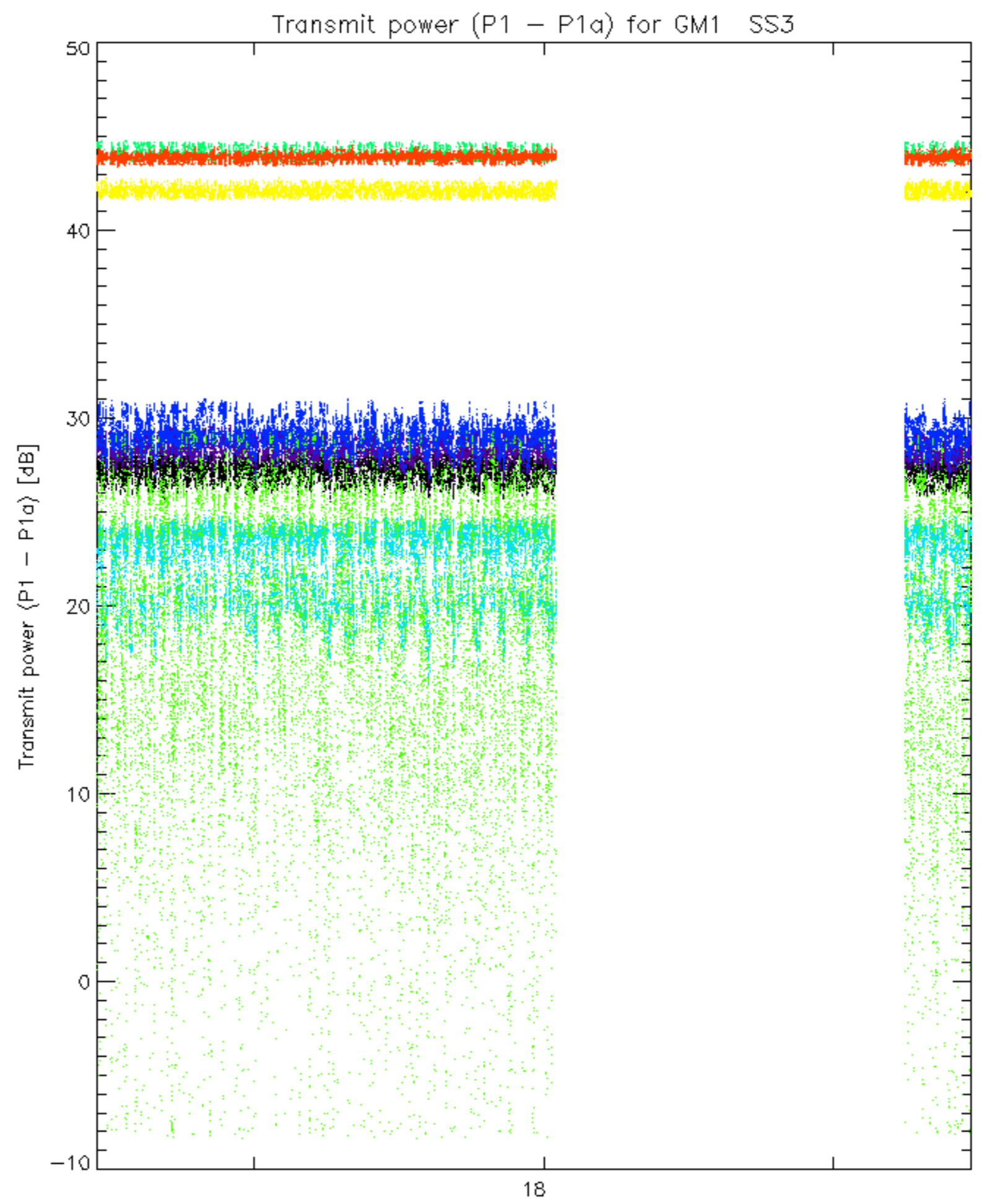


Summary of analysis for the last 3 days 2005052[123]

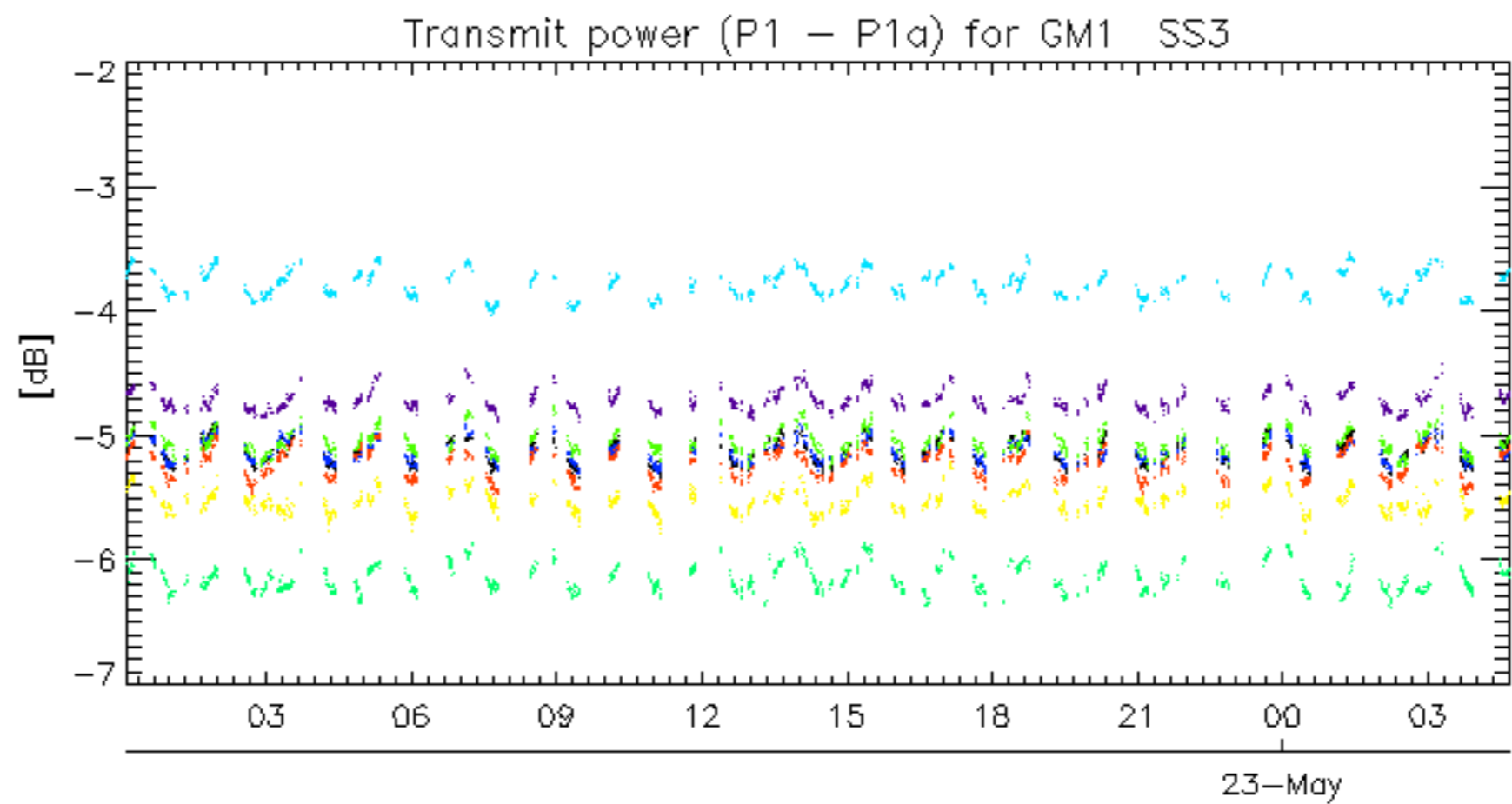
The assumption is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDK20050521_072959_000002402037_00264_16851_4821.N1	0	6
ASA_IMM_1PNPDK20050521_074032_00000622037_00264_16851_4831.N1	0	14
ASA_IMM_1PNPDK20050521_085157_00000692037_00265_16852_4829.N1	0	7
ASA_IMM_1PNPDK20050521_090859_00000622037_00265_16852_4827.N1	0	7
ASA_IMM_1PNPDK20050521_091100_00000302037_00265_16852_4828.N1	0	12
ASA_IMM_1PNPDK20050521_104453_00000622037_00266_16853_4835.N1	0	7
ASA_IMM_1PNPDK20050521_104654_00000342037_00266_16853_4836.N1	0	10
ASA_IMM_1PNPDK20050521_134748_00000432037_00268_16855_4838.N1	0	7
ASA_IMM_1PNPDK20050522_082106_00000532037_00279_16866_4889.N1	0	5
ASA_IMM_1PNPDK20050522_083702_000004282037_00279_16866_4898.N1	0	15
ASA_IMM_1PNPDK20050522_115824_000001212037_00281_16868_4901.N1	0	3
ASA_IMM_1PNPDK20050522_132153_00000932037_00282_16869_4904.N1	0	6
ASA_IMM_1PNPDK20050522_151439_000002202037_00283_16870_4909.N1	0	1
ASA_GM1_1PNPDK20050521_074554_000006942037_00264_16851_1258.N1	0	6
ASA_GM1_1PNPDK20050521_085554_000006402037_00265_16852_1260.N1	0	14
ASA_GM1_1PNPDK20050521_094520_000009242037_00265_16852_1269.N1	0	6
ASA_GM1_1PNPDK20050521_135741_000007002037_00268_16855_1296.N1	0	15
ASA_GM1_1PNPDK20050522_105419_000009242037_00280_16867_1428.N1	0	9
ASA_GM1_1PNPDK20050522_132945_000007062037_00282_16869_1453.N1	0	8
ASA_APM_1PNPDK20050521_074432_00000572037_00264_16851_2097.N1	0	9
ASA_APM_1PNPDK20050522_132037_00000432037_00282_16869_2099.N1	0	1



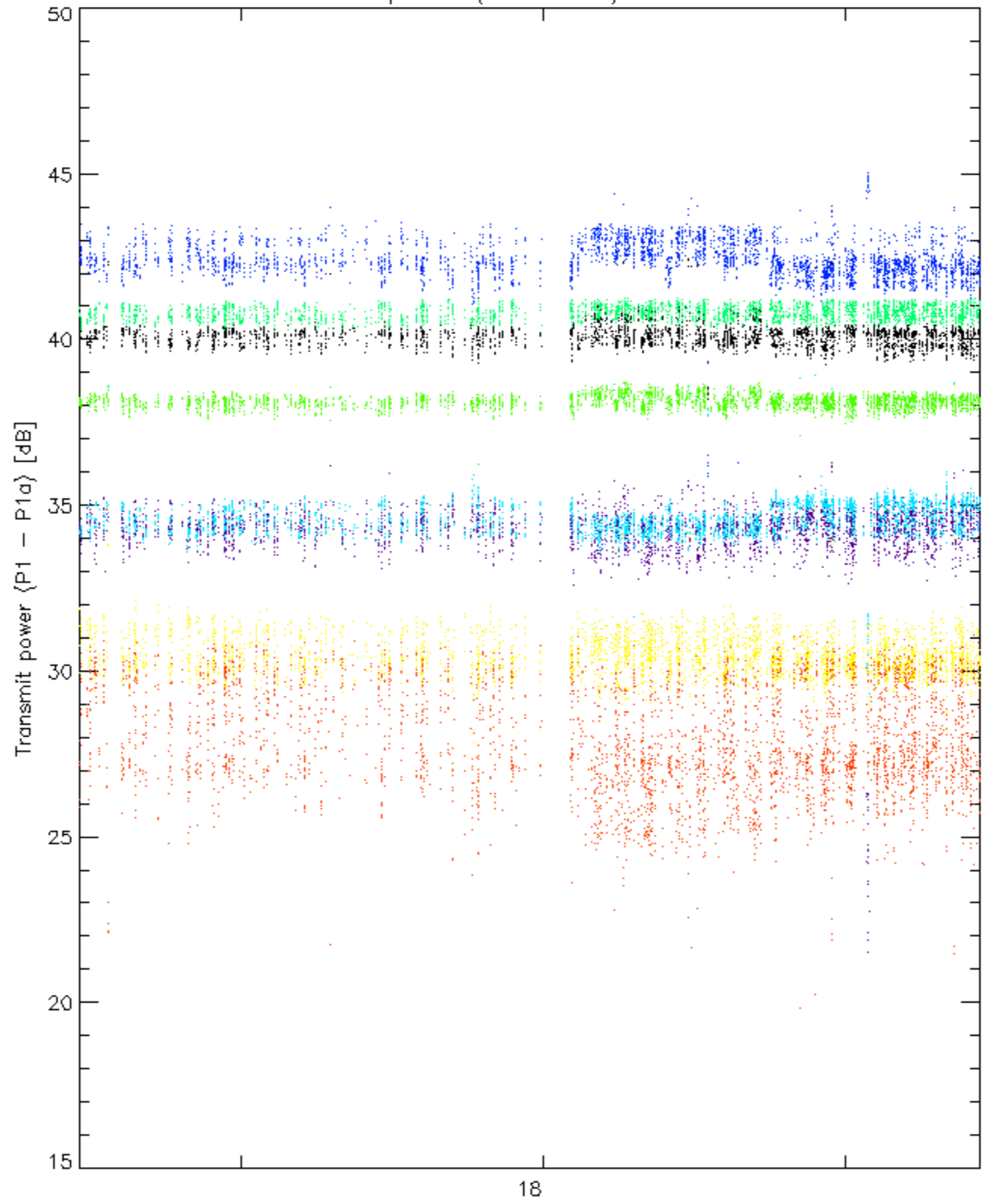


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

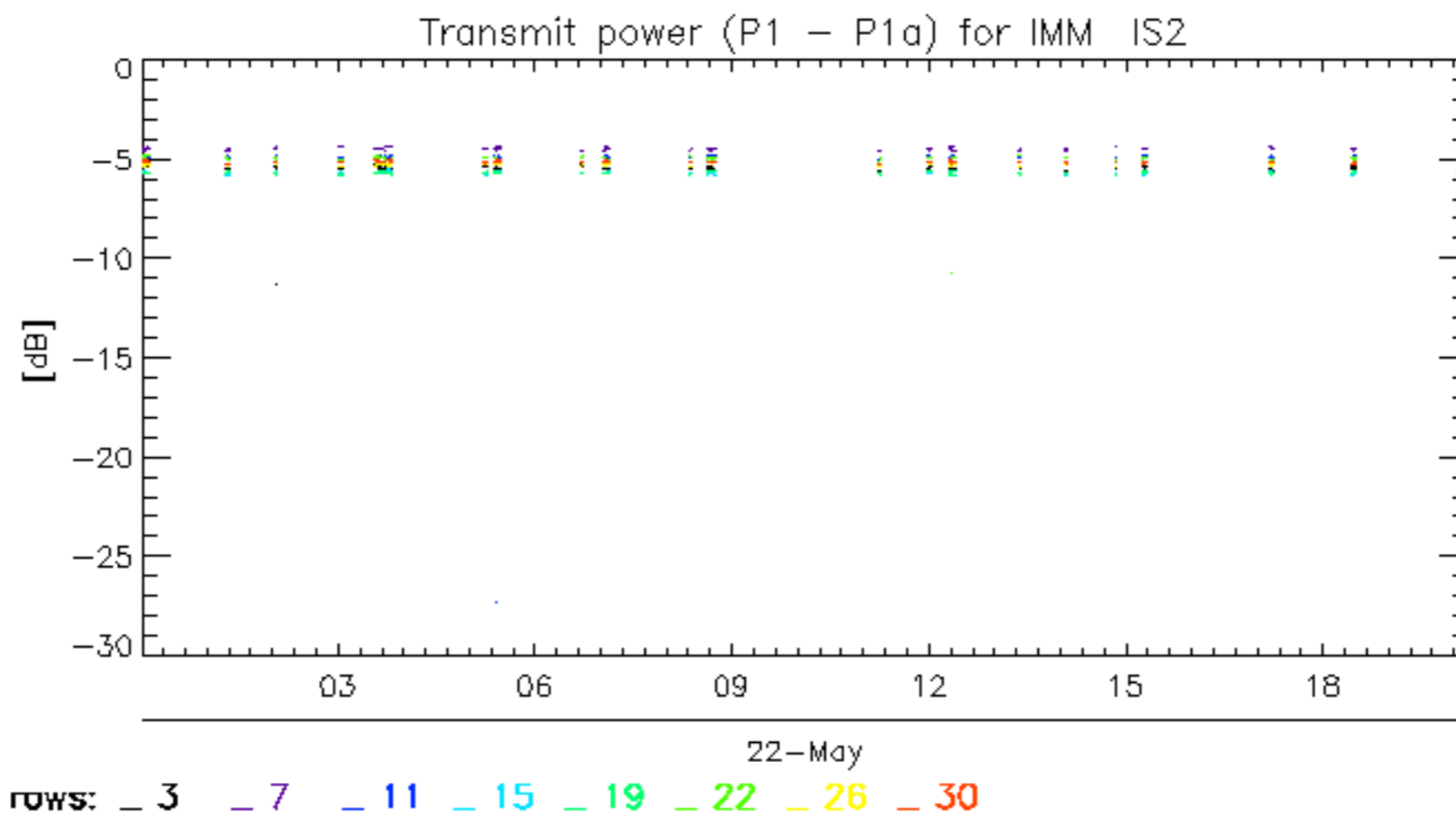


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

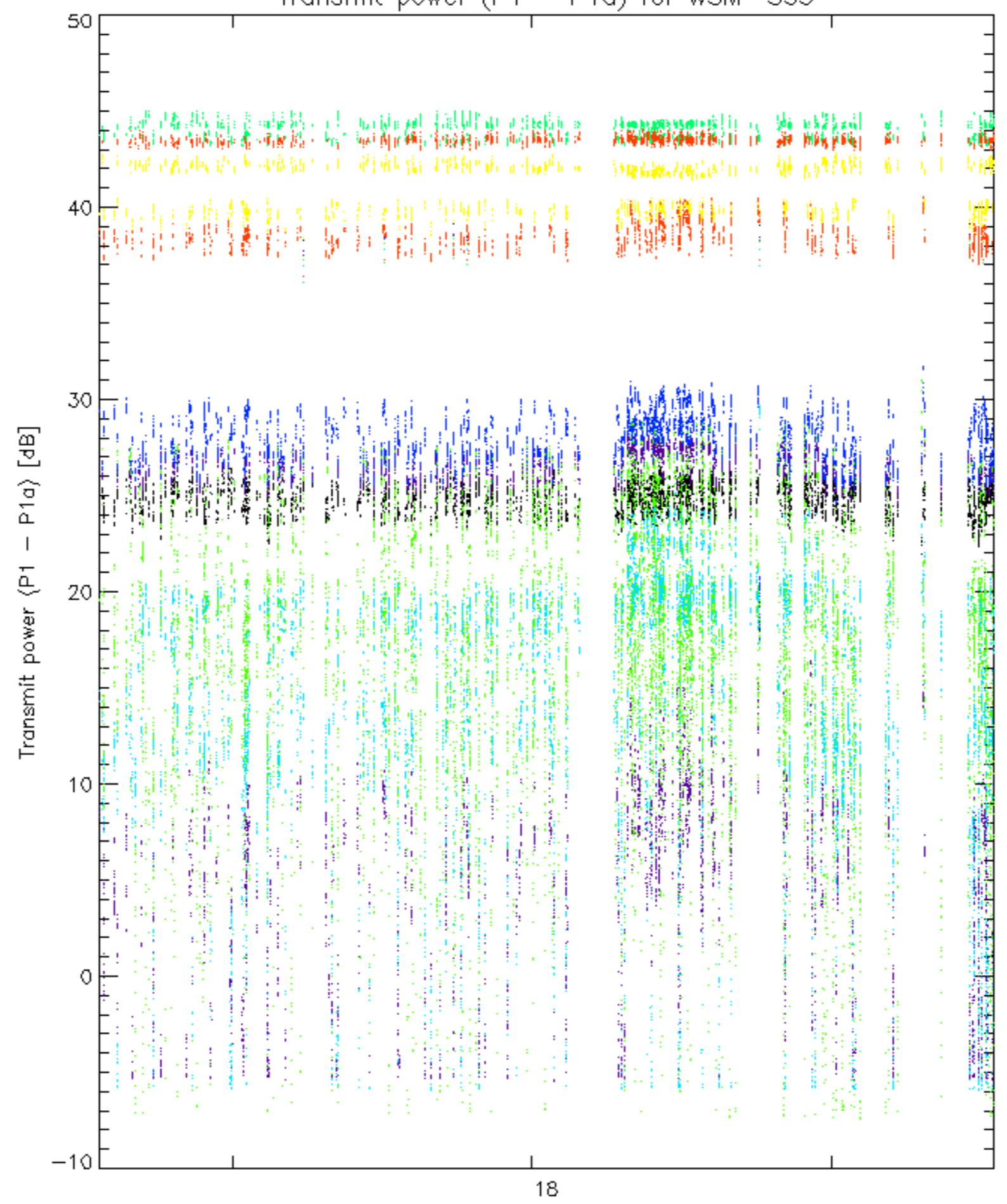
Transmit power (P1 - P1a) for IMM IS2



rows: 3 7 11 15 19 22 26 30



Transmit power (P1 - P1a) for WSM SS3



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

