

PRELIMINARY REPORT OF 070302

last update on Fri Mar 2 23:58:37 GMT 2007

Due to an ASAR test acquisition campaign, the daily analysis on WVS products will be based on IS4 instead of IS2 during the following periods:

From orbit 25621 (23-Jan-2007) to 25720 (30-Jan-2007) in HH polarization
From orbit 26122 (27-Feb-2007) to 26221 (06-Mar-2007) in HH polarization
From orbit 25721 (30-Jan-2007) to 25820 (06-Feb-2007) in VV polarization
From orbit 26222 (06-Mar-2007) to 26321 (13-Mar-2007) in VV polarization

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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 2007-03-01 00:00:00 to 2007-03-02 23:58:37

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20070222_190441_20070204_165113_20071231_000000	48	91	10	3	39
ASA_INS_AXVIEC20070227_105626_20070228_060000_20071231_000000	48	91	10	3	39
ASA_XCA_AXVIEC20070222_185842_20070204_165113_20071231_000000	48	91	10	3	39
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	48	91	10	3	39

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20070222_190441_20070204_165113_20071231_000000	46	55	44	17	70
ASA_INS_AXVIEC20070227_105626_20070228_060000_20071231_000000	46	55	44	17	70
ASA_XCA_AXVIEC20070222_185842_20070204_165113_20071231_000000	46	55	44	17	70
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	46	55	44	17	70

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	20070228 170158
H	20070301 062645

MSM in V/V polarisation

<input type="checkbox"/>	<input checked="" type="checkbox"/>

MSM in H/H polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
<input type="checkbox"/>	<input checked="" 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)
3	P1a	-11.122066	0.414328	0.525279
7	P1a	-10.130492	0.089582	0.080009
11	P1a	-10.728820	0.104104	-0.063558
15	P1a	-11.687213	1.565269	0.747528
19	P1a	-15.072269	1.070830	-0.629615
22	P1a	-19.574249	7.679734	-1.337060
26	P1a	-15.619824	0.475840	0.358476
30	P1a	-20.052956	7.110830	1.429431

P1\l Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-6.361422	3.546323	-4.156004
7	P1	-2.599021	0.014067	0.045381
11	P1	-3.232418	0.139638	0.159270
15	P1	-4.602378	1.316956	0.636943
19	P1	-3.419802	0.091818	-0.183583
22	P1	-5.345045	0.145099	0.244614
26	P1	-5.402623	0.696871	-0.525499
30	P1	-5.441177	0.066767	0.108215

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.109945	0.896744	-1.848703
7	P2	-21.916582	0.145979	-0.021887
11	P2	-10.810659	0.136352	-0.159789
15	P2	-5.107785	0.087775	-0.006416
19	P2	-7.238626	0.080299	0.013721
22	P2	-8.369545	0.077869	0.073887

26	P2	-24.166452	0.129819	-0.148776
30	P2	-21.680771	0.069333	0.079829

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.220369	0.007830	-0.005021
7	P3	-8.220369	0.007830	-0.005021
11	P3	-8.220369	0.007830	-0.005021
15	P3	-8.220369	0.007830	-0.005021
19	P3	-8.220369	0.007830	-0.005021
22	P3	-8.220369	0.007830	-0.005021
26	P3	-8.220369	0.007830	-0.005021
30	P3	-8.220369	0.007830	-0.005021

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1

P1a Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1a	-11.185799	0.099845	0.600529
7	P1a	-10.048883	0.068966	-0.099704
11	P1a	-10.618198	0.055313	-0.185266
15	P1a	-10.883698	0.134318	-0.141287
19	P1a	-15.732397	0.066014	0.072225
22	P1a	-20.832760	1.205181	0.025297
26	P1a	-15.375396	0.263420	0.274675
30	P1a	-18.367966	0.354858	-0.129931

P1lt Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-7.691172	2.183148	-3.730603
7	P1	-2.435782	0.005782	-0.002297

11	P1	-2.899647	0.015778	-0.091052
15	P1	-3.819042	0.033130	-0.097358
19	P1	-3.552401	0.011961	-0.002446
22	P1	-5.030981	0.023033	-0.039771
26	P1	-5.983075	0.024263	0.058851
30	P1	-5.281508	0.021992	0.023435

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.770109	0.508236	-1.718921
7	P2	-21.981270	0.053646	0.118983
11	P2	-10.664026	0.030180	0.065643
15	P2	-4.821839	0.026914	0.034079
19	P2	-6.817905	0.027646	0.045390
22	P2	-8.118030	0.033521	0.088644
26	P2	-24.259247	0.033637	-0.027979
30	P2	-21.760300	0.036667	0.087286

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.045393	0.003380	0.006330
7	P3	-8.045405	0.003393	0.006653
11	P3	-8.045464	0.003388	0.005950
15	P3	-8.045409	0.003401	0.006106
19	P3	-8.045481	0.003381	0.005903
22	P3	-8.045502	0.003389	0.006180
26	P3	-8.045395	0.003388	0.006177
30	P3	-8.045440	0.003398	0.006193

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	0.000621362
	stdev	2.32580e-07
MEAN Q	mean	0.000395355
	stdev	2.51406e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.108552
	stdev	0.00255995
STDEV Q	mean	0.108605
	stdev	0.00261163



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2007030[812]

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_WSM_1PNPDE20070301_152552_000001832056_00040_26146_6817.N1	0	26
ASA_WSM_1PNPDE20070301_153707_000002392056_00040_26146_6781.N1	0	93

ASA_WSM_1PNPDE20070301_184853_000000852056_00042_26148_6897.N1	0	7
ASA_WSM_1PNPDE20070302_003405_000002632056_00045_26151_7324.N1	0	32
ASA_WSM_1PNPDE20070302_145414_000000852056_00054_26160_8003.N1	0	31
ASA_WSM_1PNPDE20070302_181712_000000852056_00056_26162_8077.N1	0	27



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"/>
Acsending
<input checked="" type="checkbox"/>
Descending

7.2 - Absolute Doppler for WVS

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

7.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX
<input type="checkbox"/>

7.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)

<input checked="" type="checkbox"/>	Acsending
<input checked="" type="checkbox"/>	Descending

7.5 - Absolute Doppler for GM1

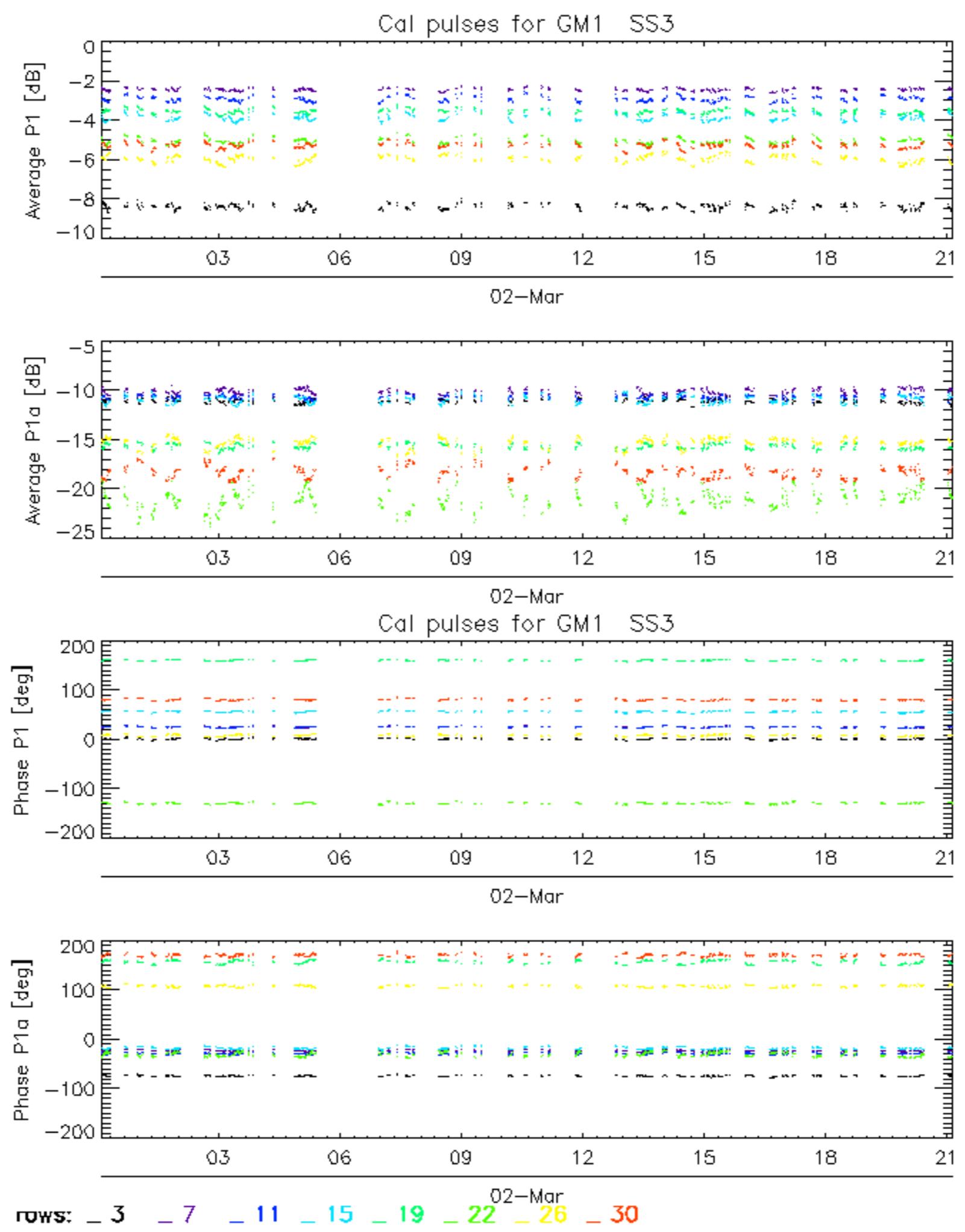
Evolution of Absolute Doppler

<input checked="" type="checkbox"/>	Acsending
<input checked="" type="checkbox"/>	Descending

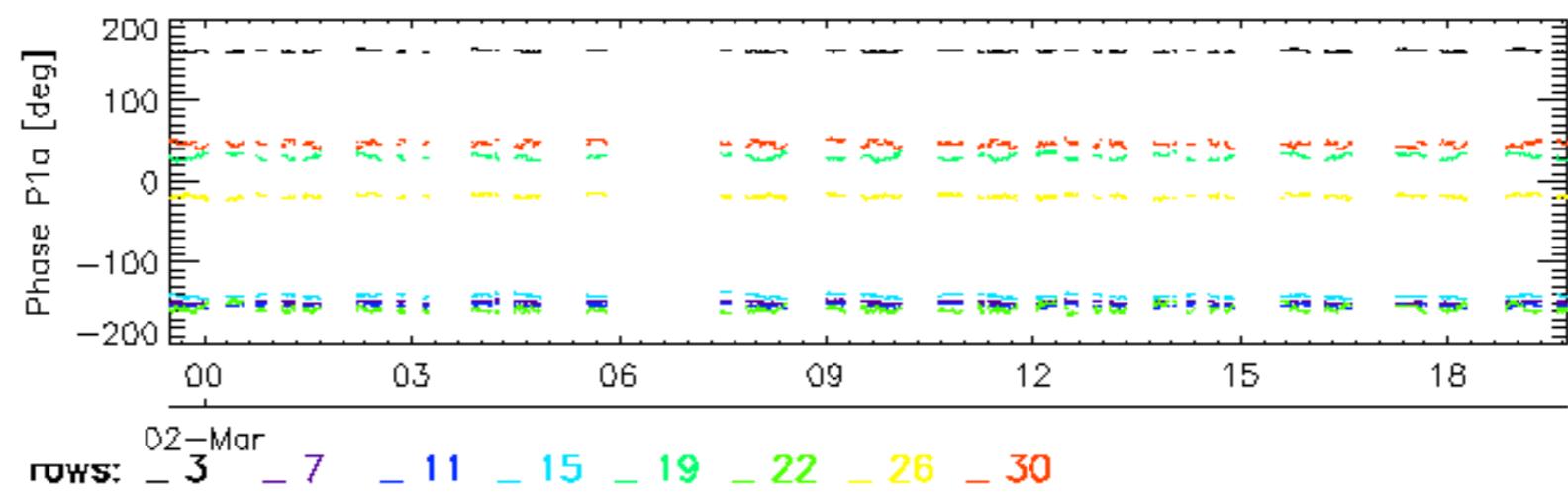
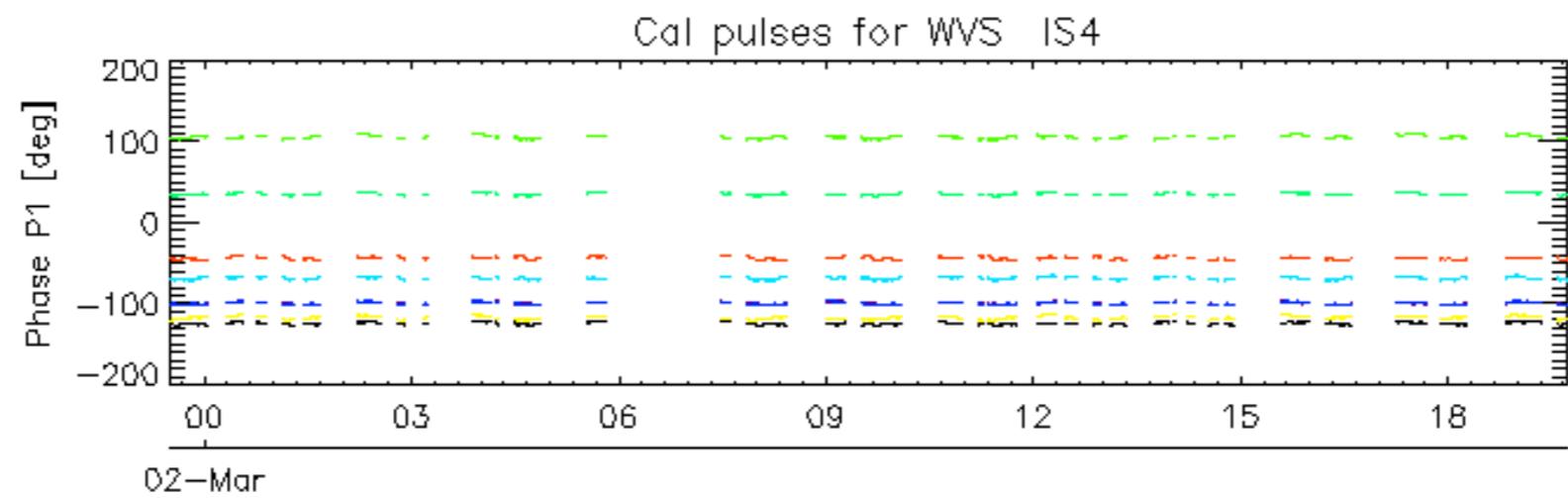
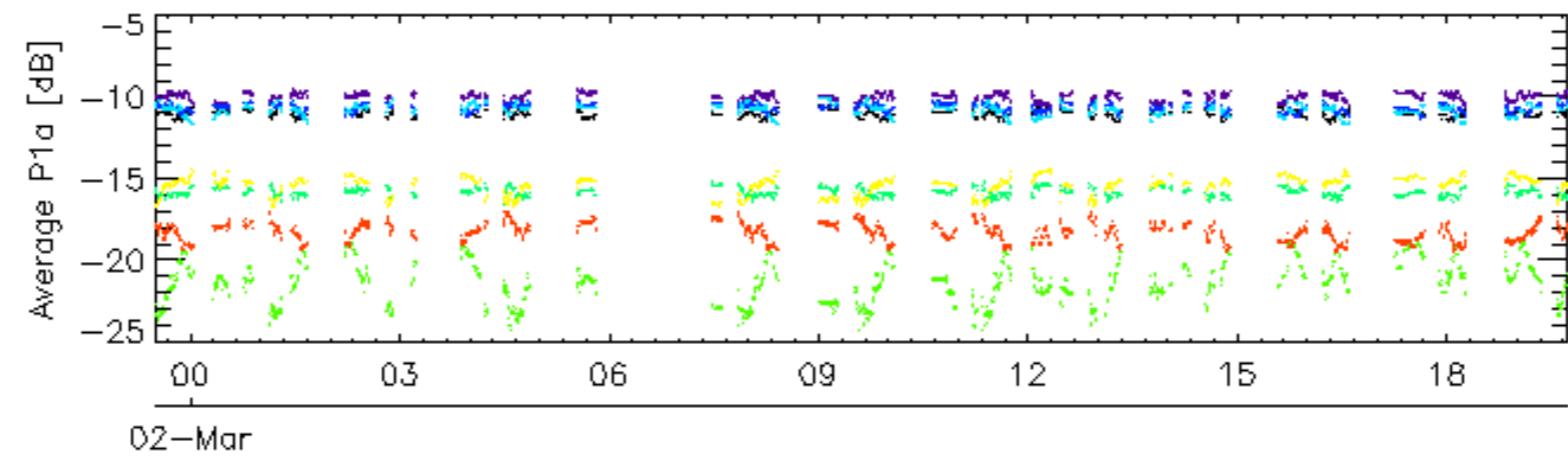
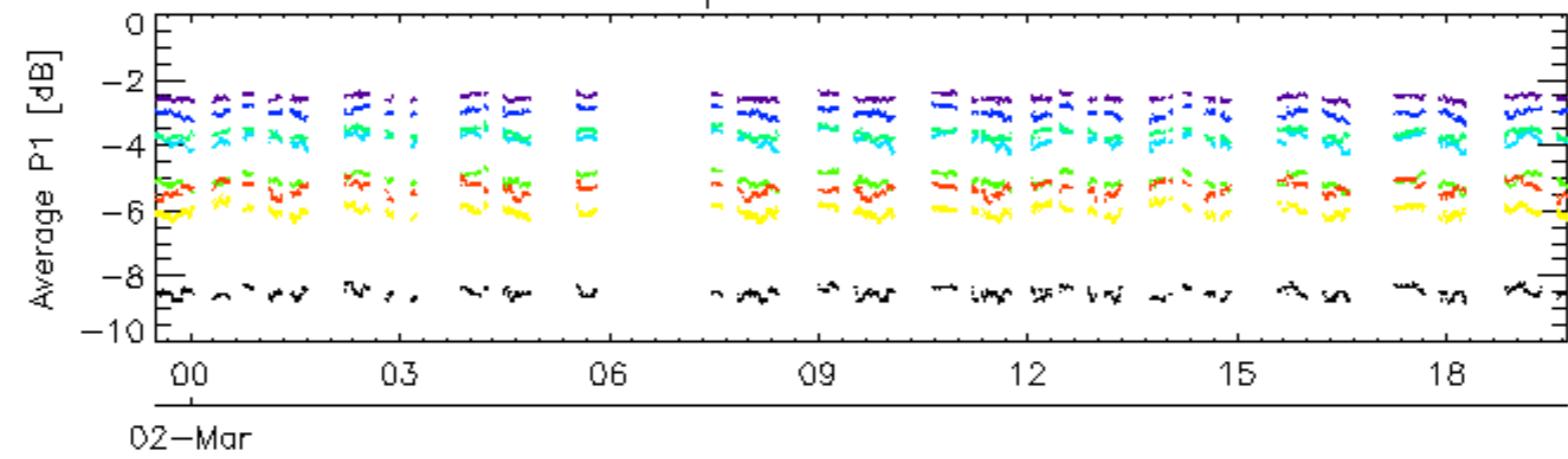
7.6 - Doppler evolution versus ANX for GM1

Evolution Doppler error versus ANX

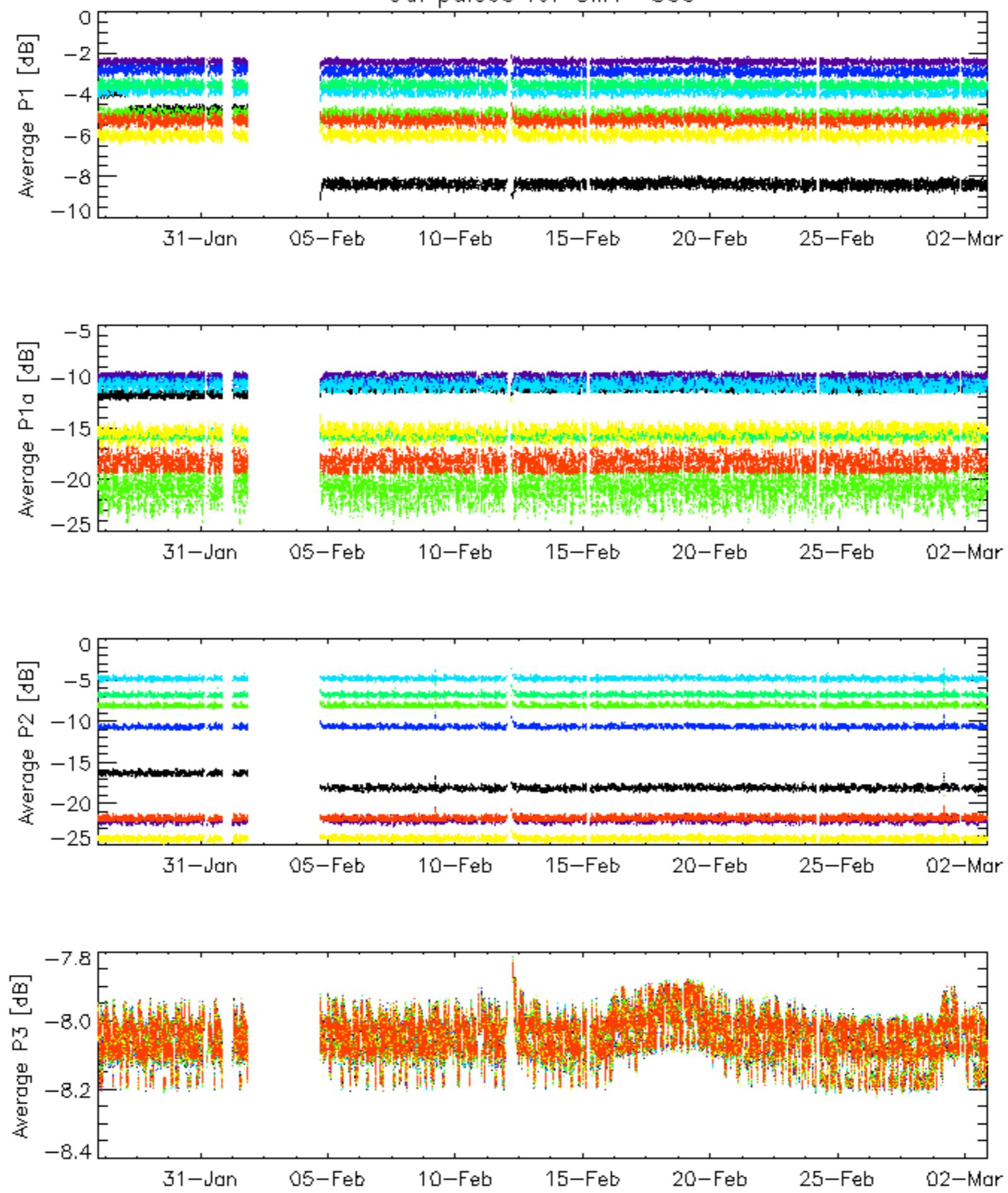
<input checked="" type="checkbox"/>



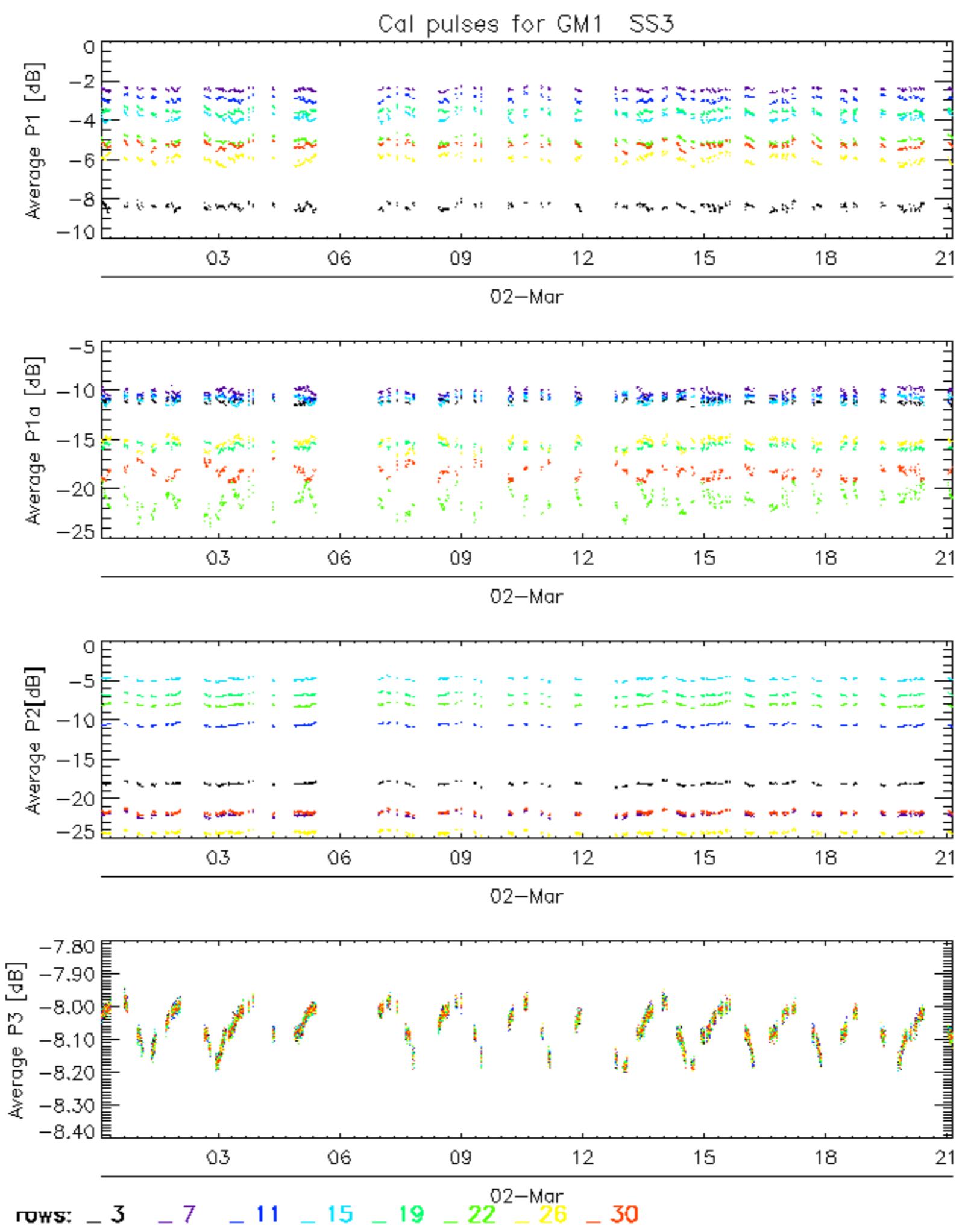
Cal pulses for WVS IS4



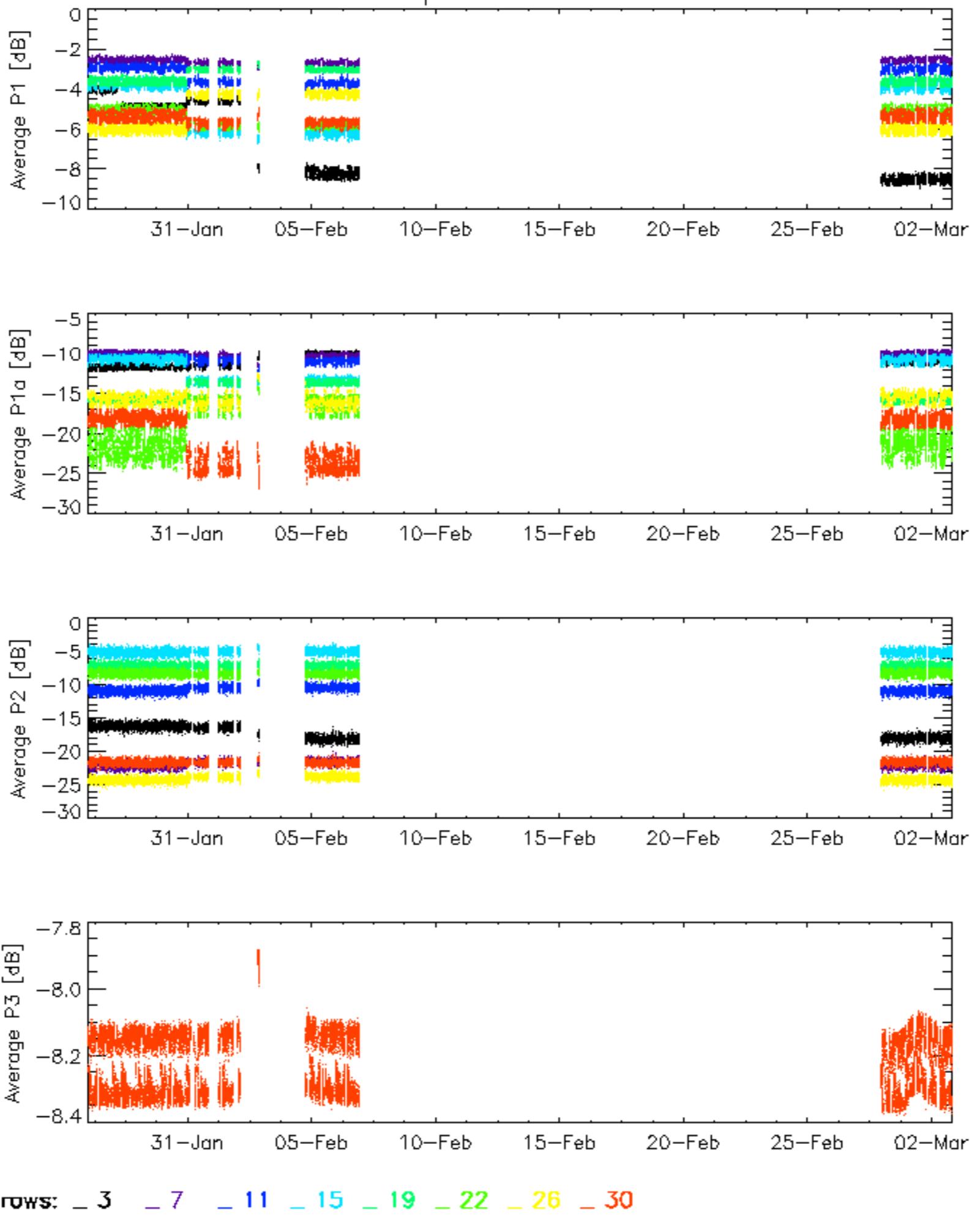
Cal pulses for GM1 SS3

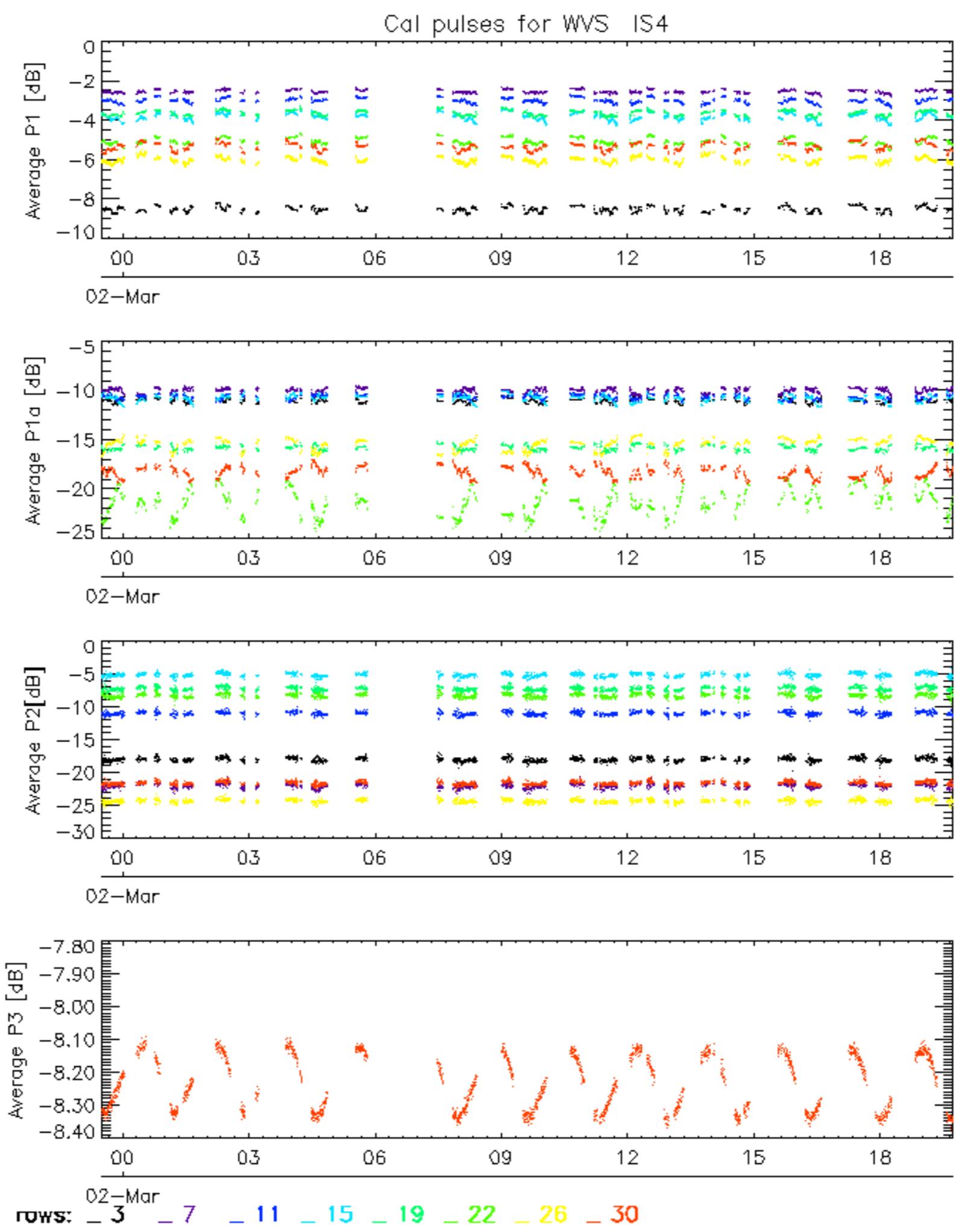


ROWS: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



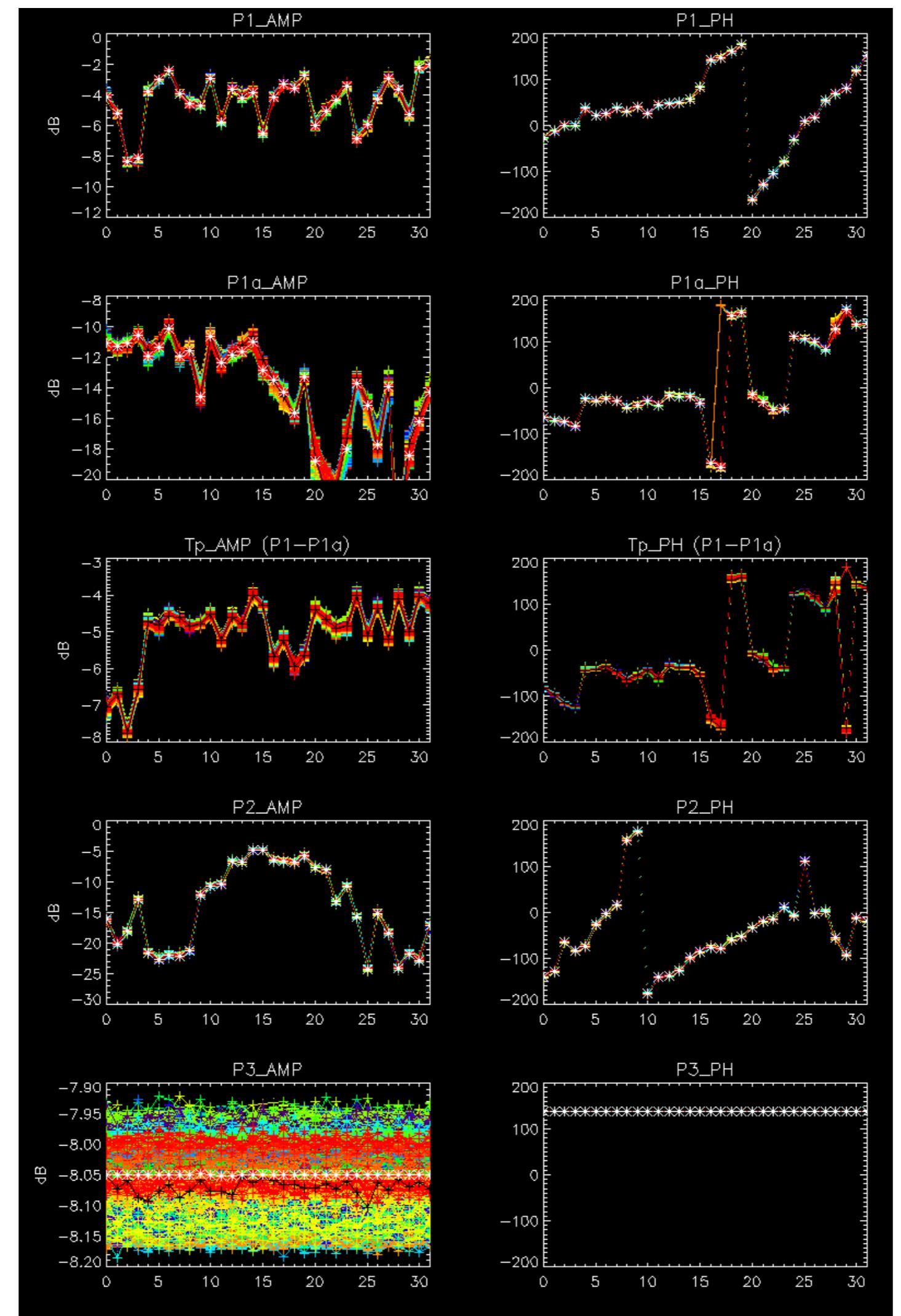
Cal pulses for WVS IS4

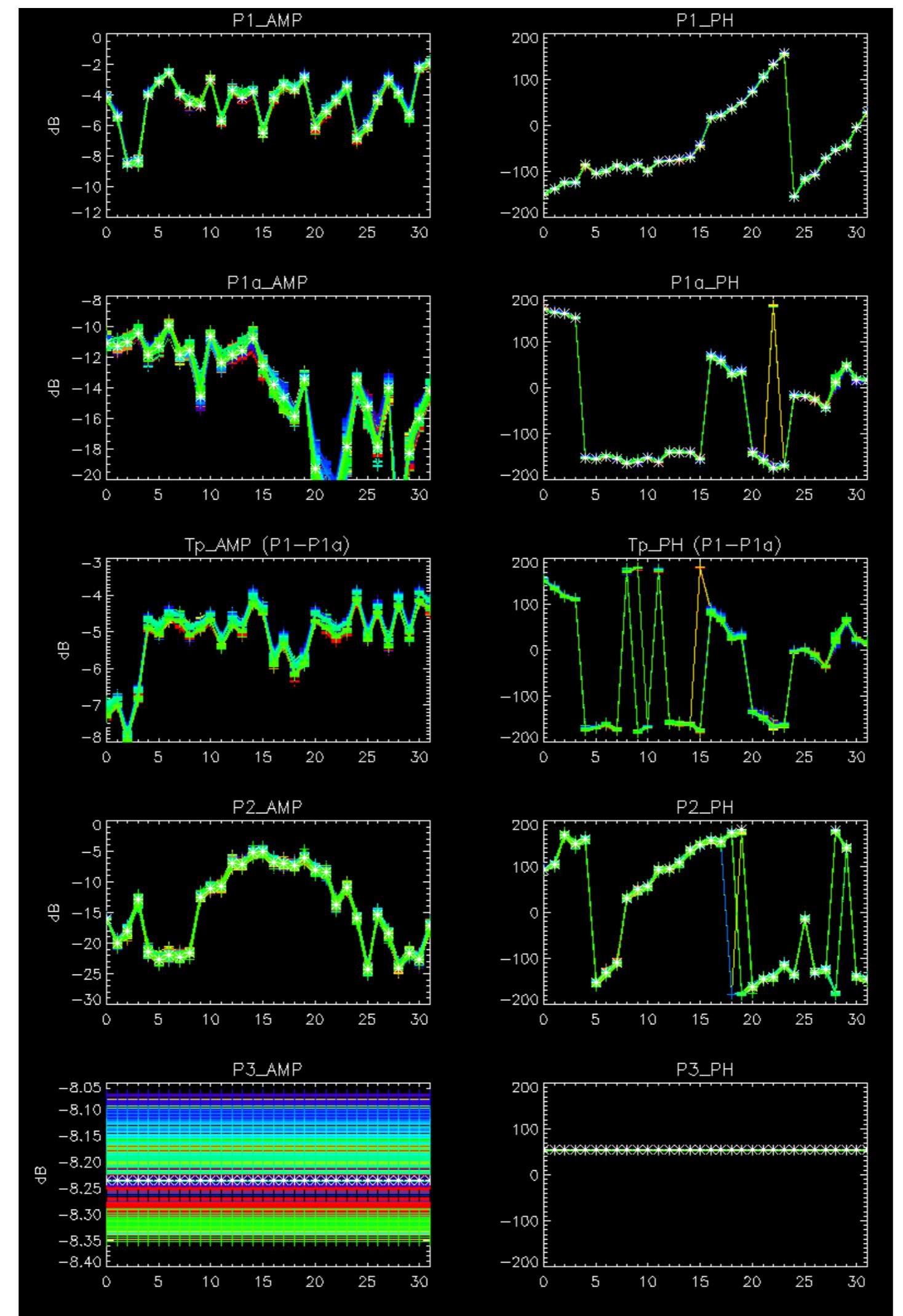




No anomalies observed.

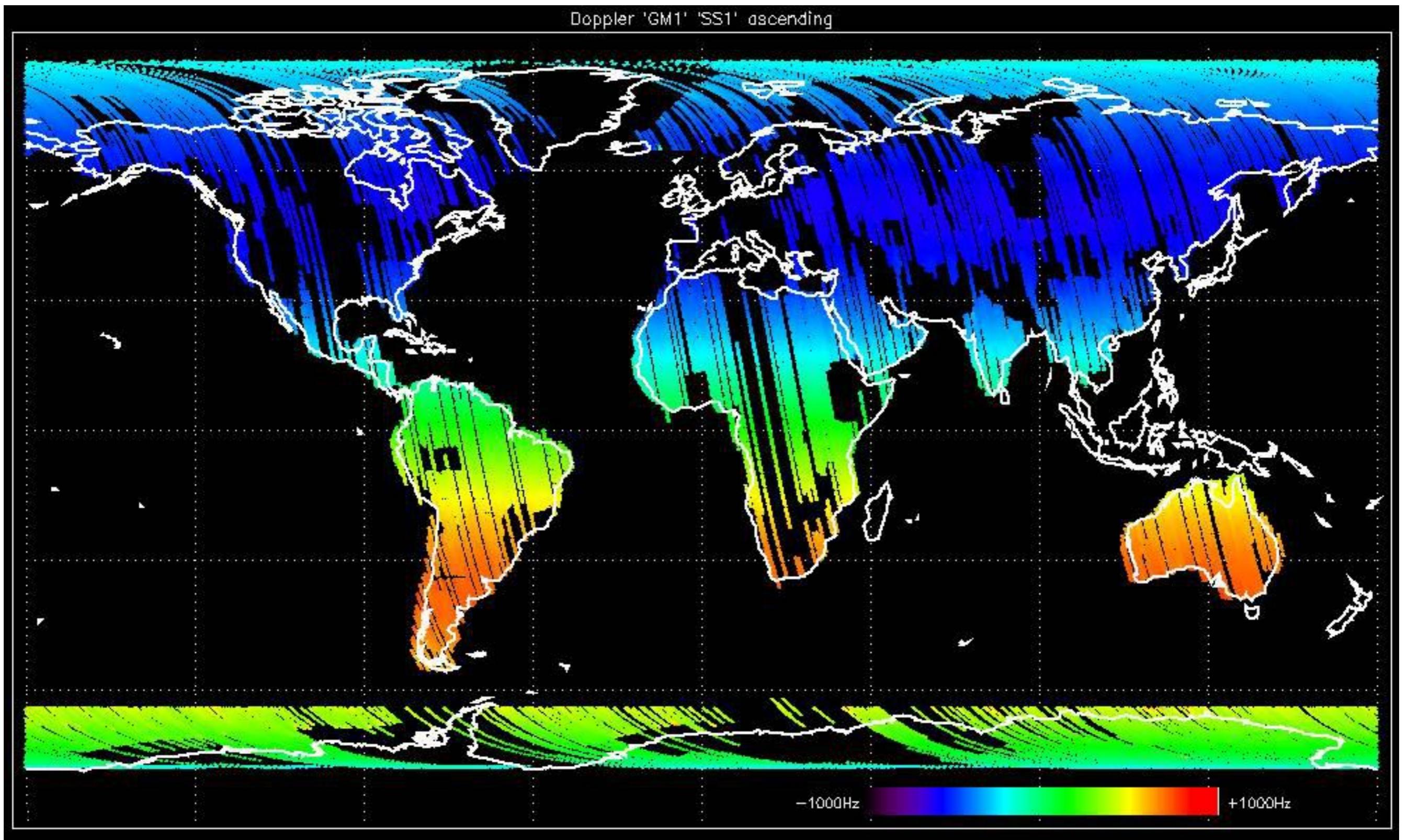


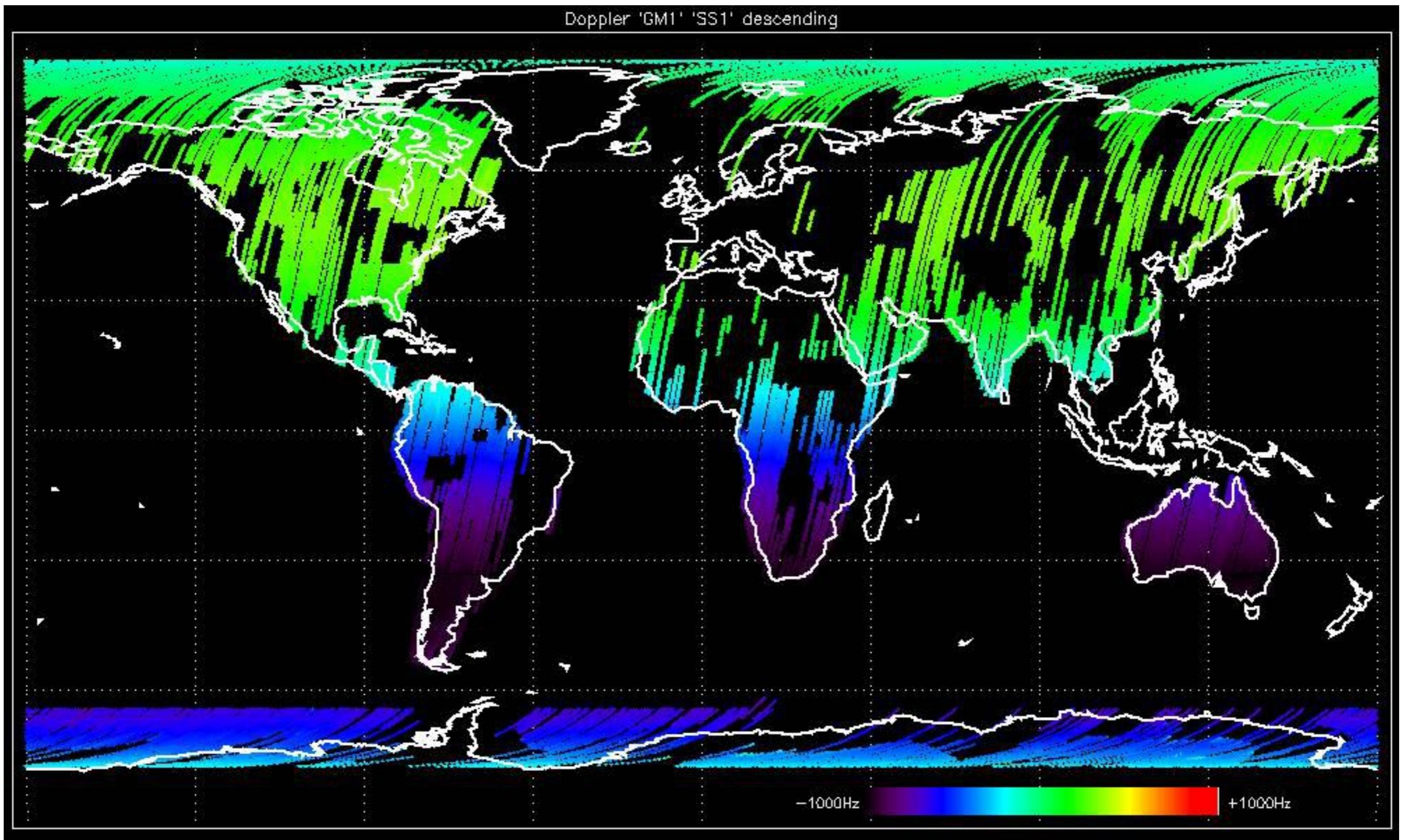


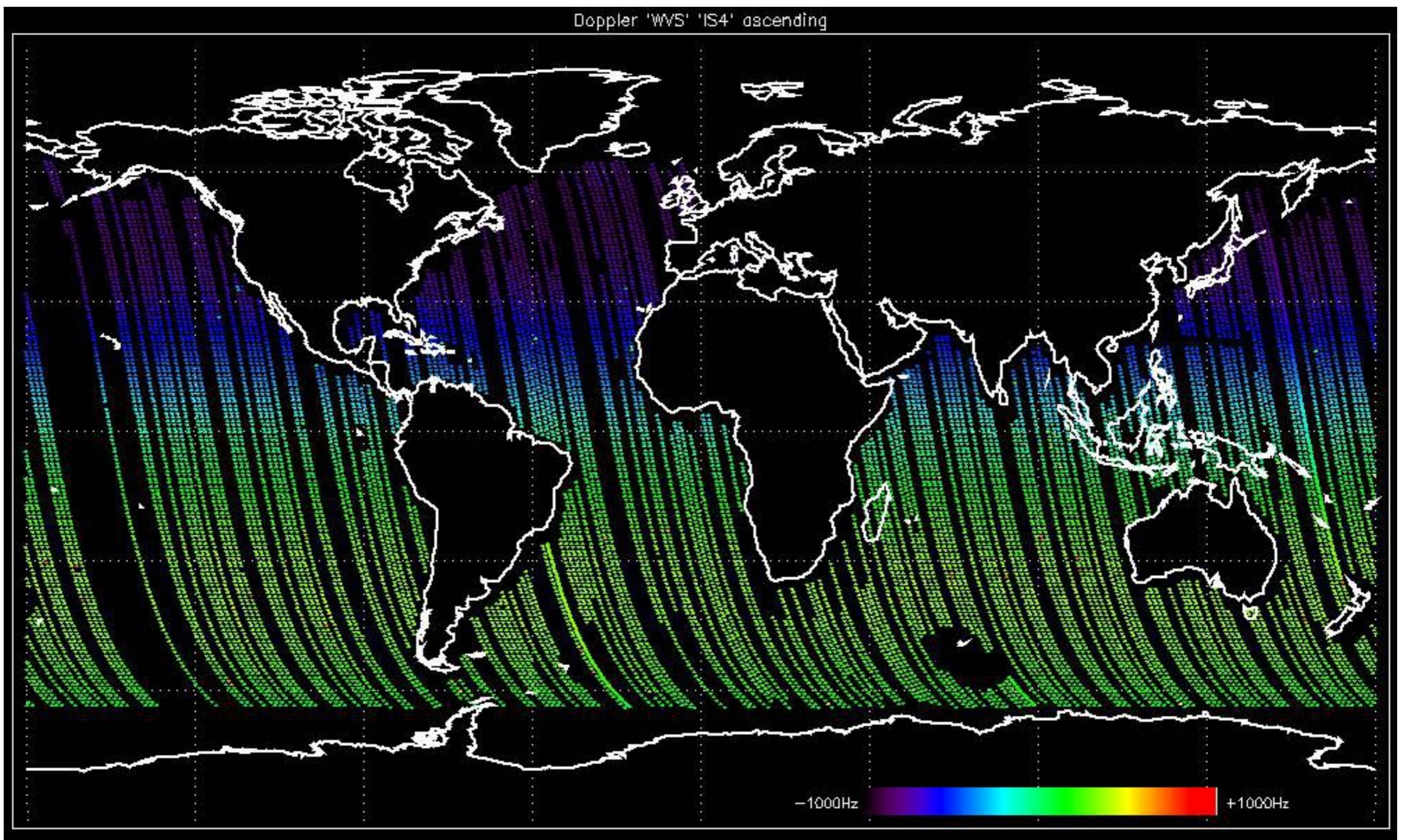


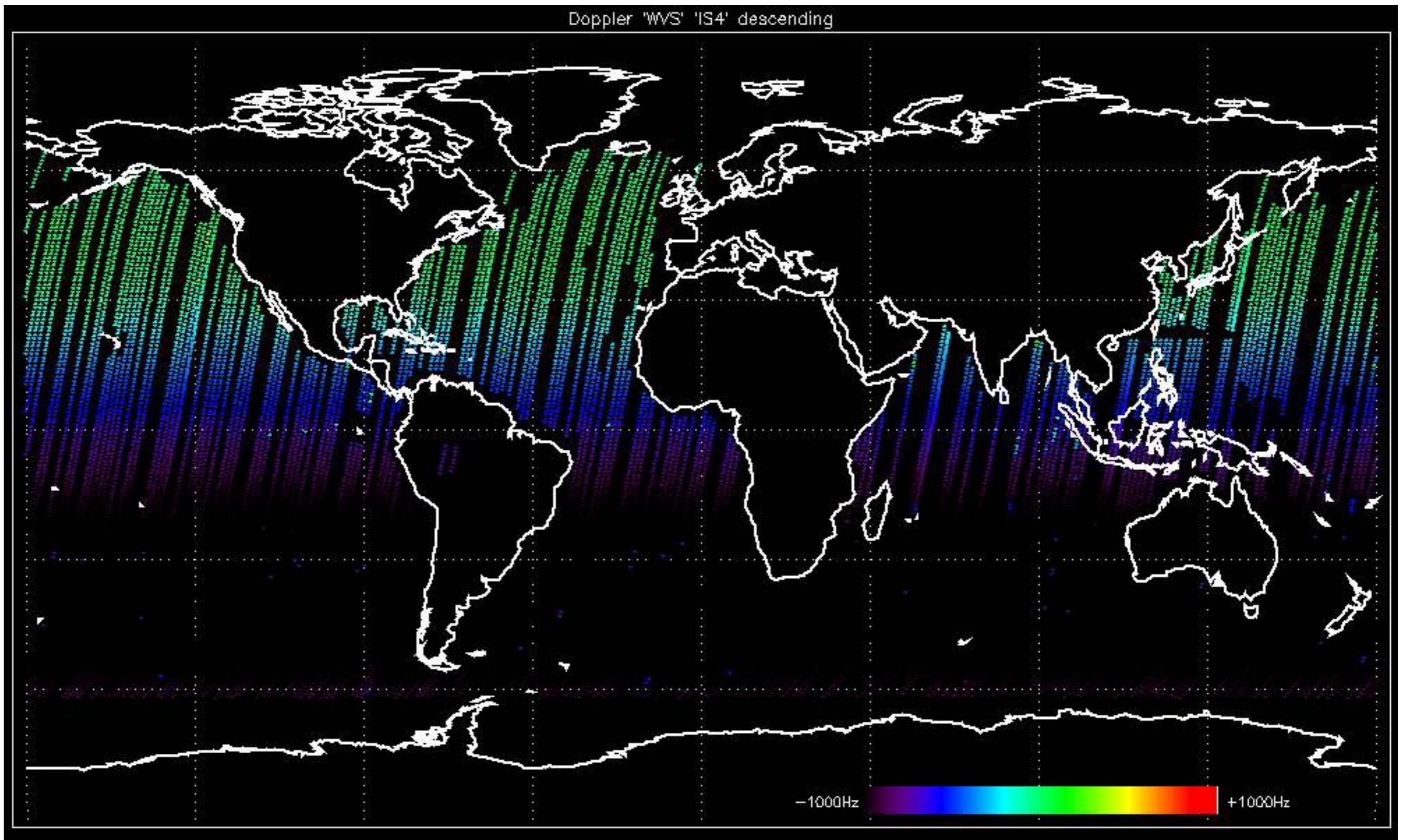
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

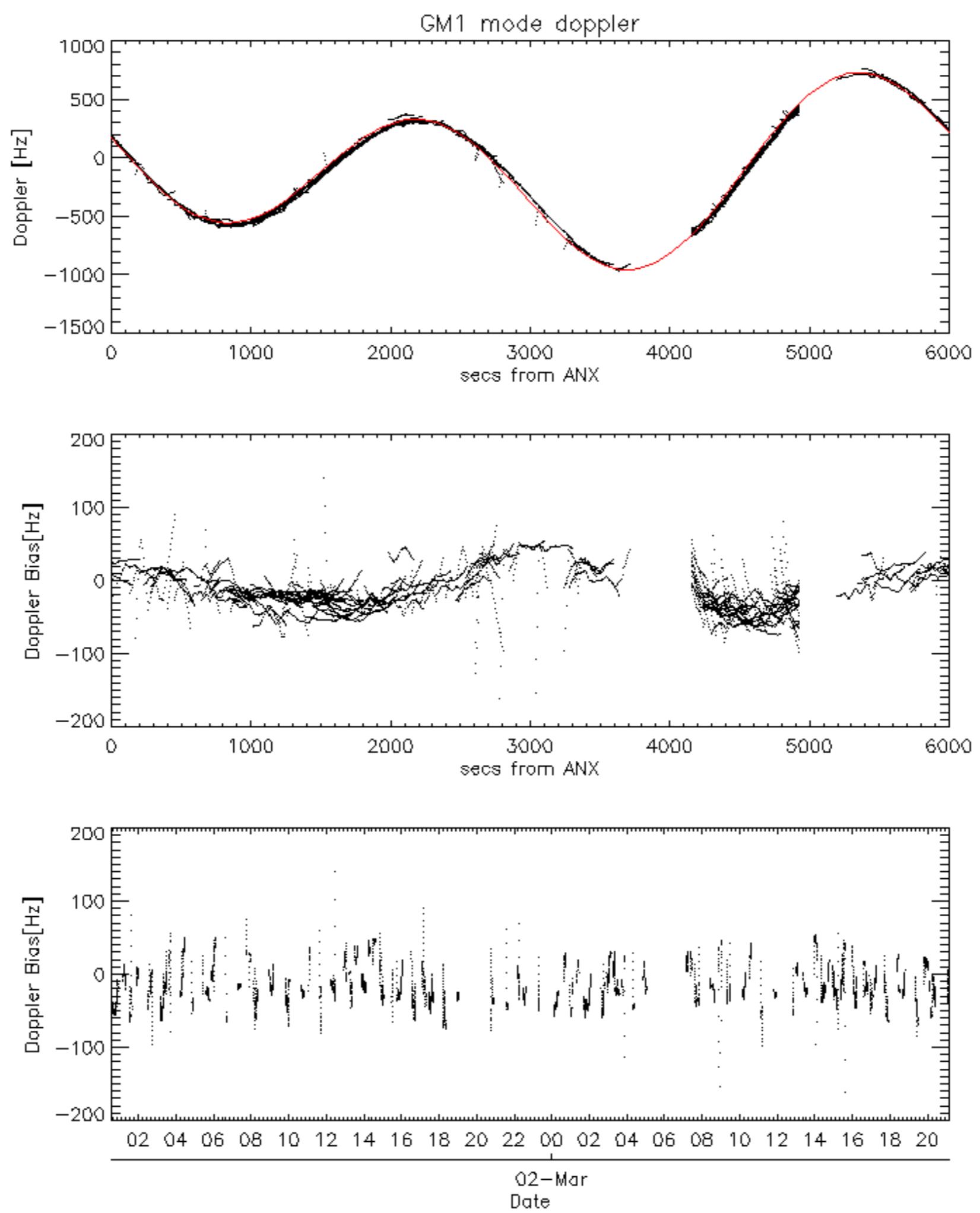


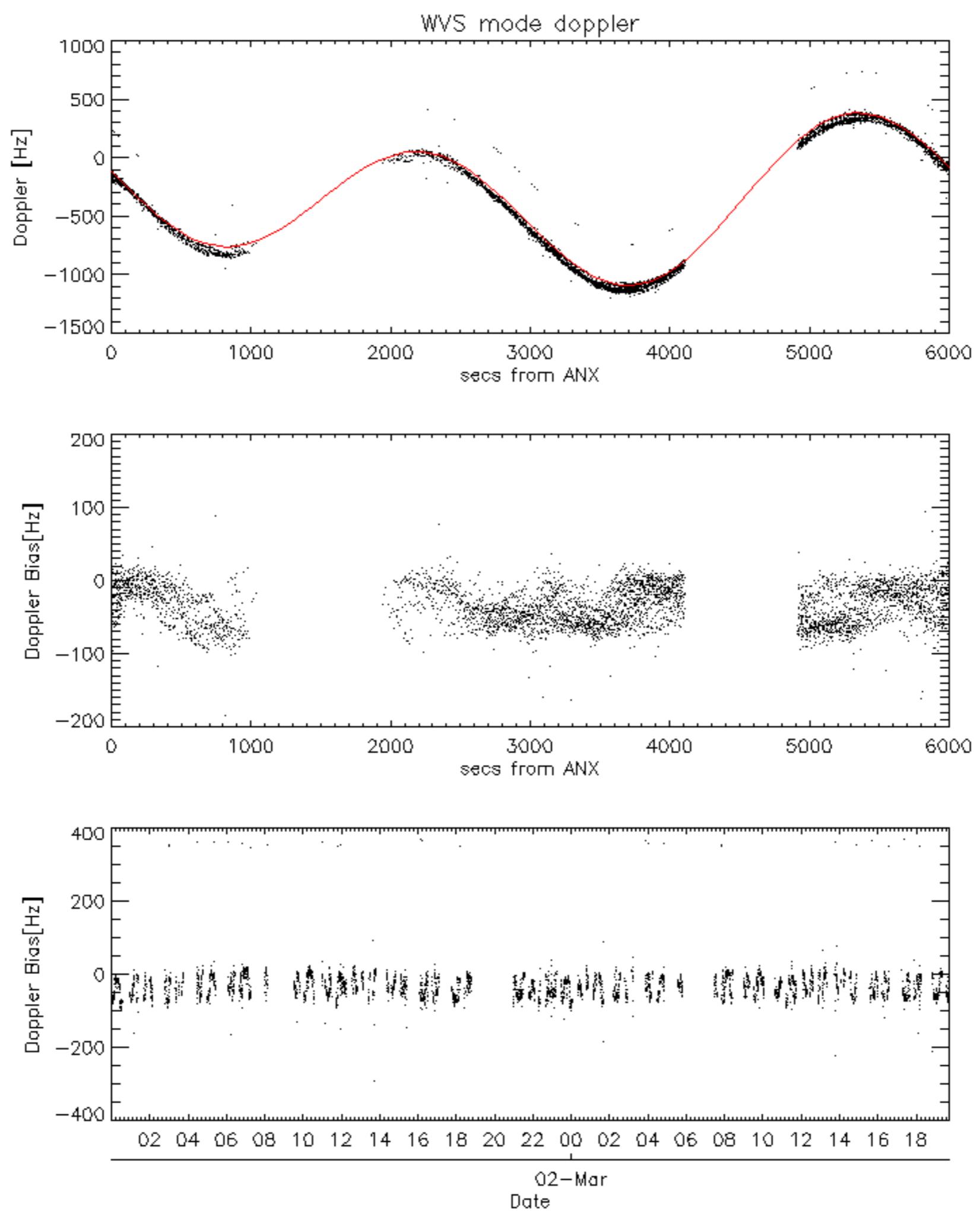


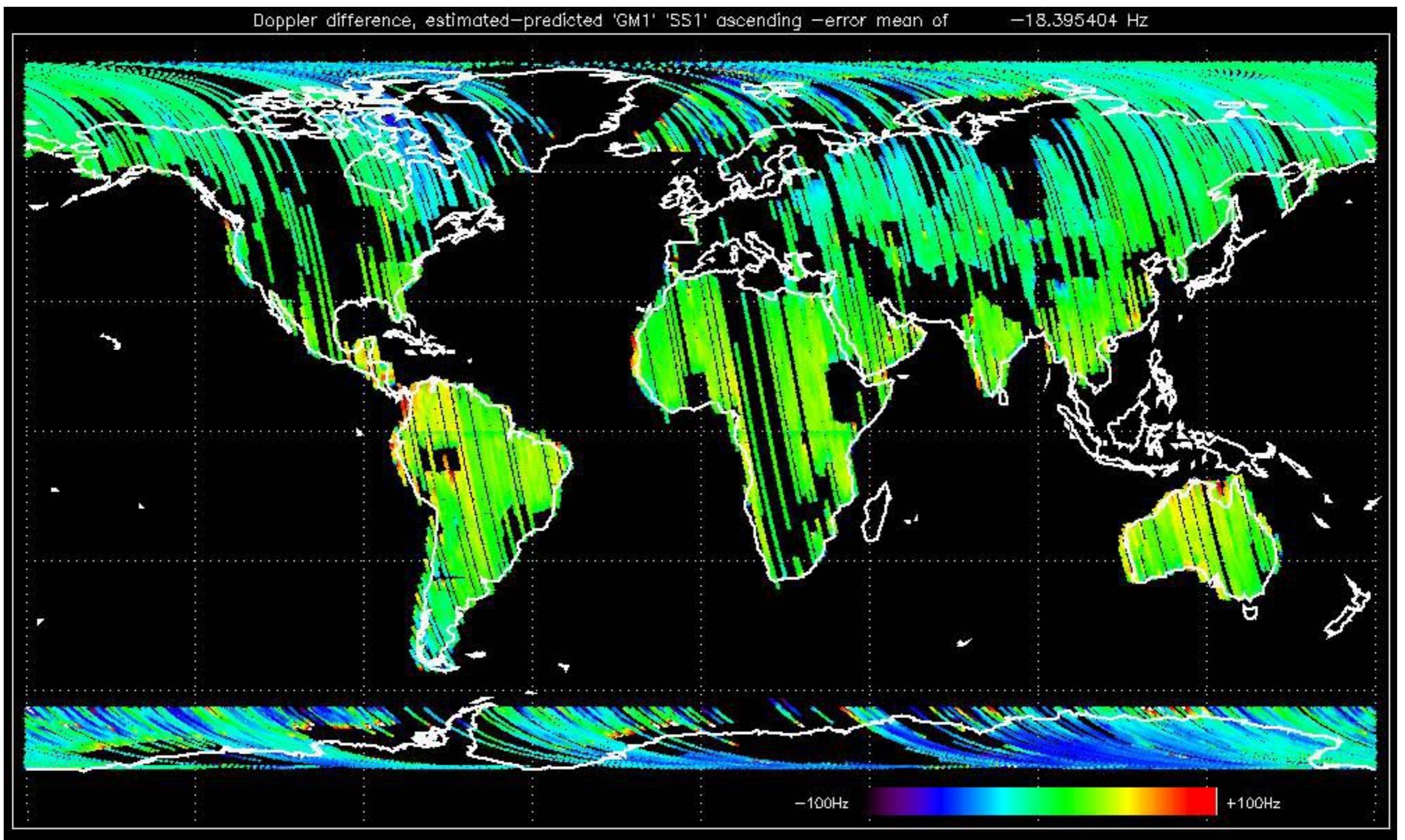


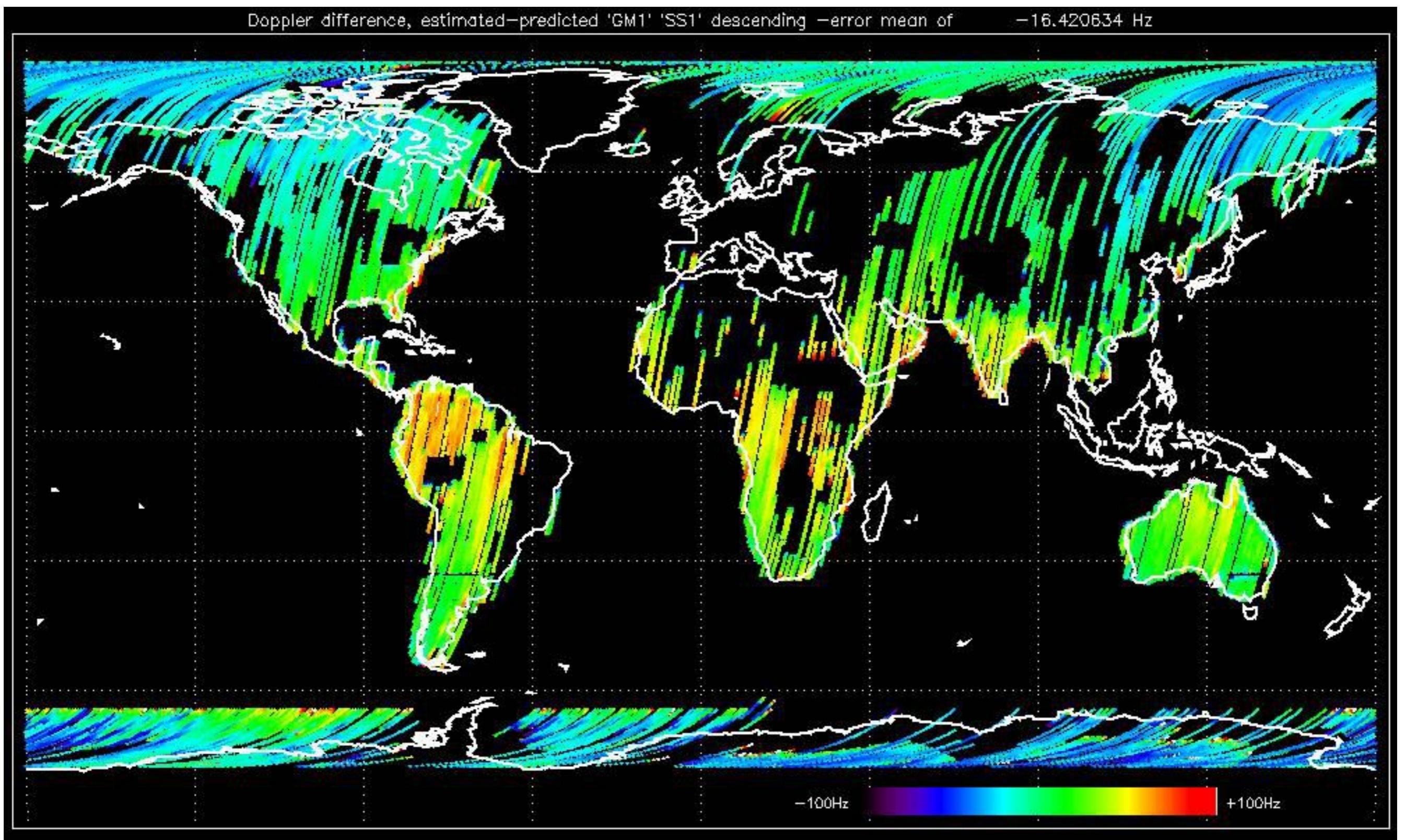


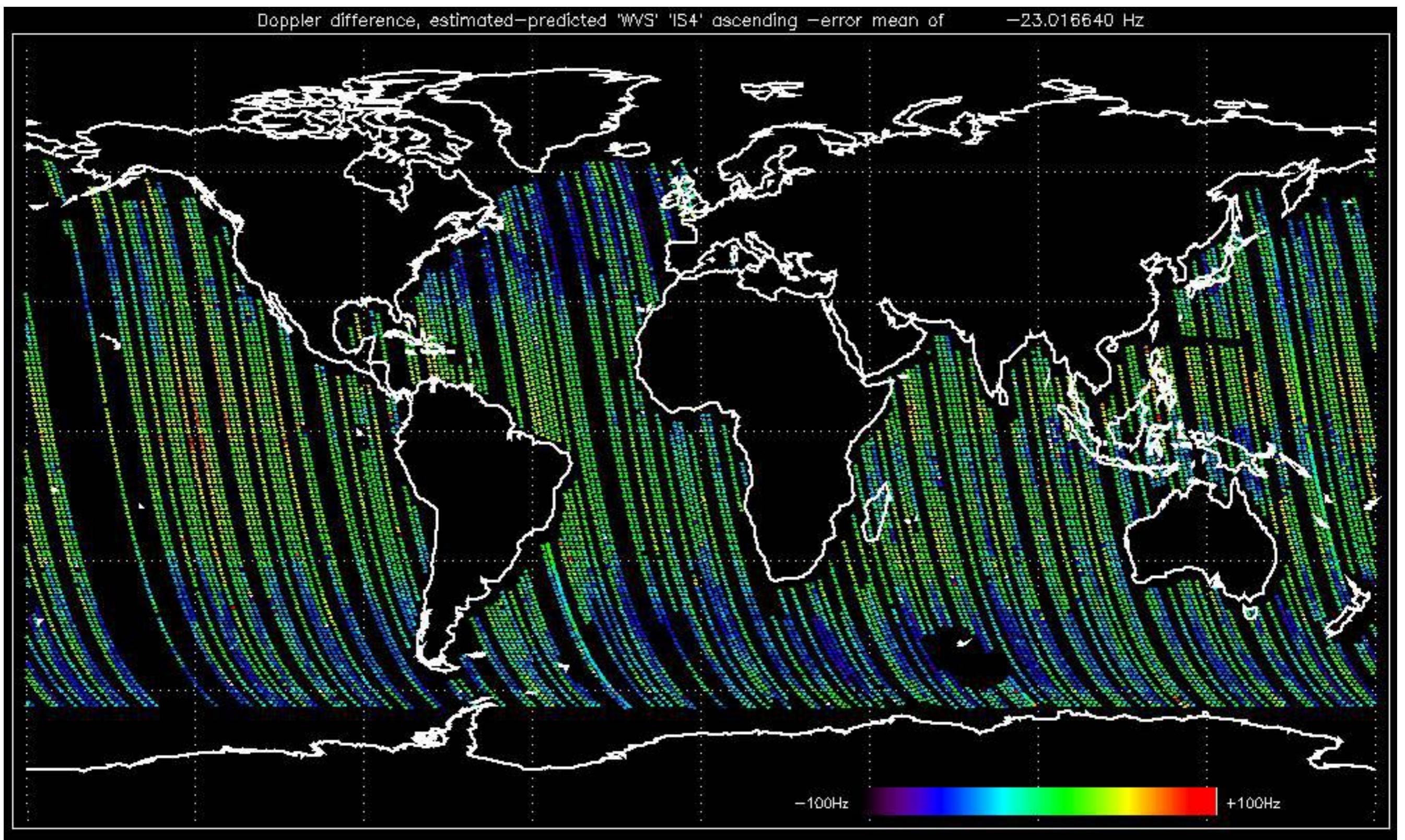


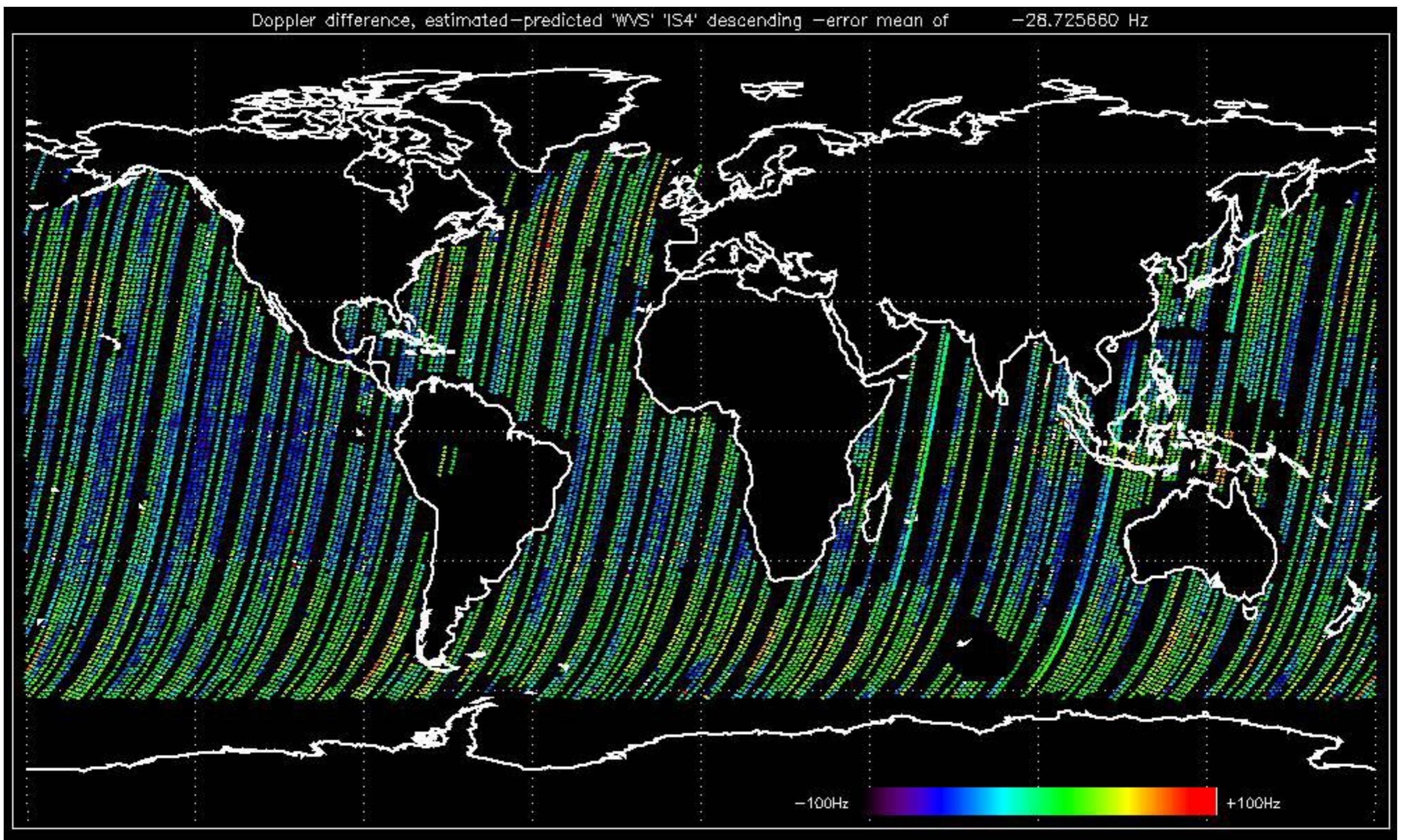










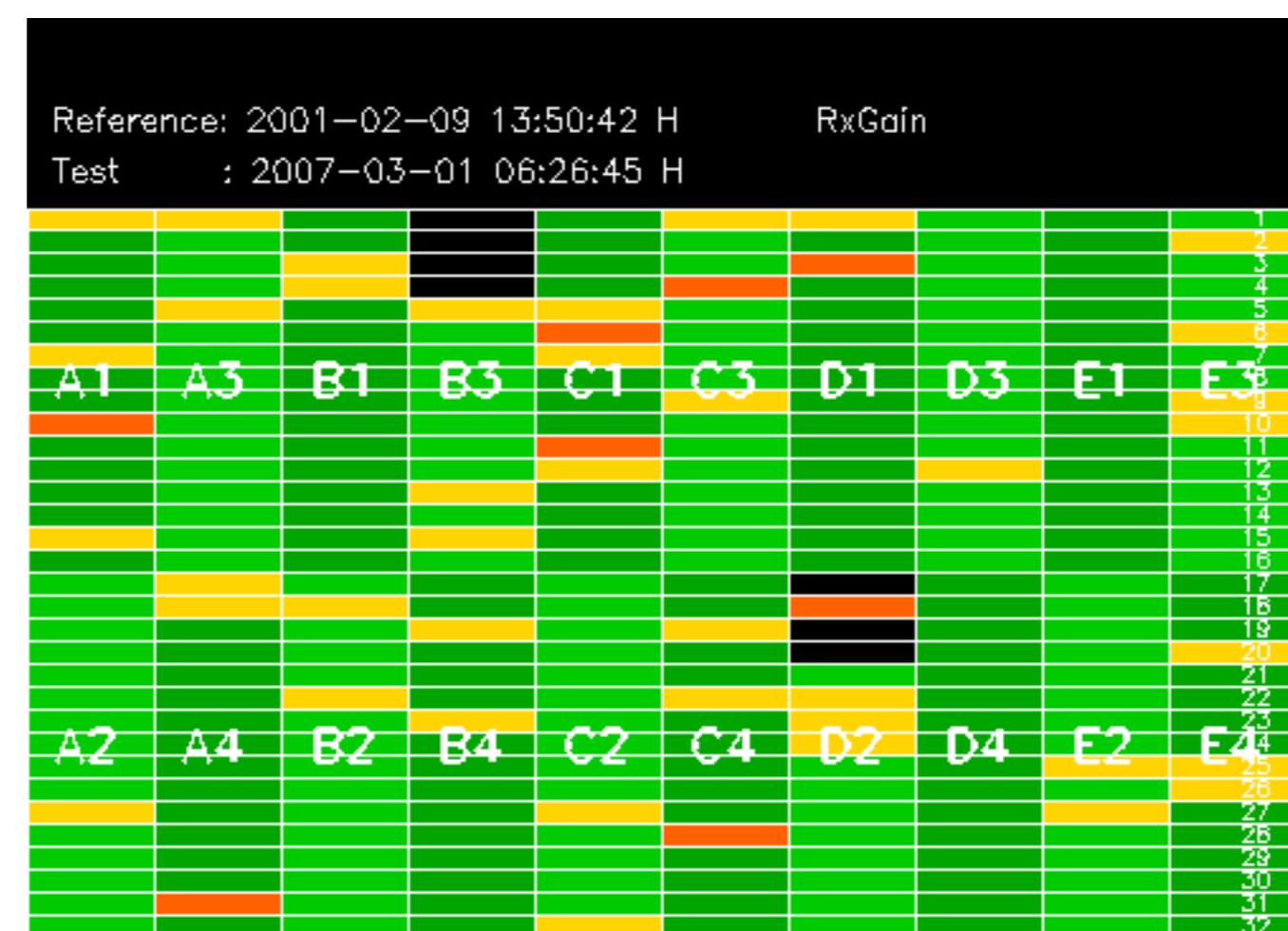


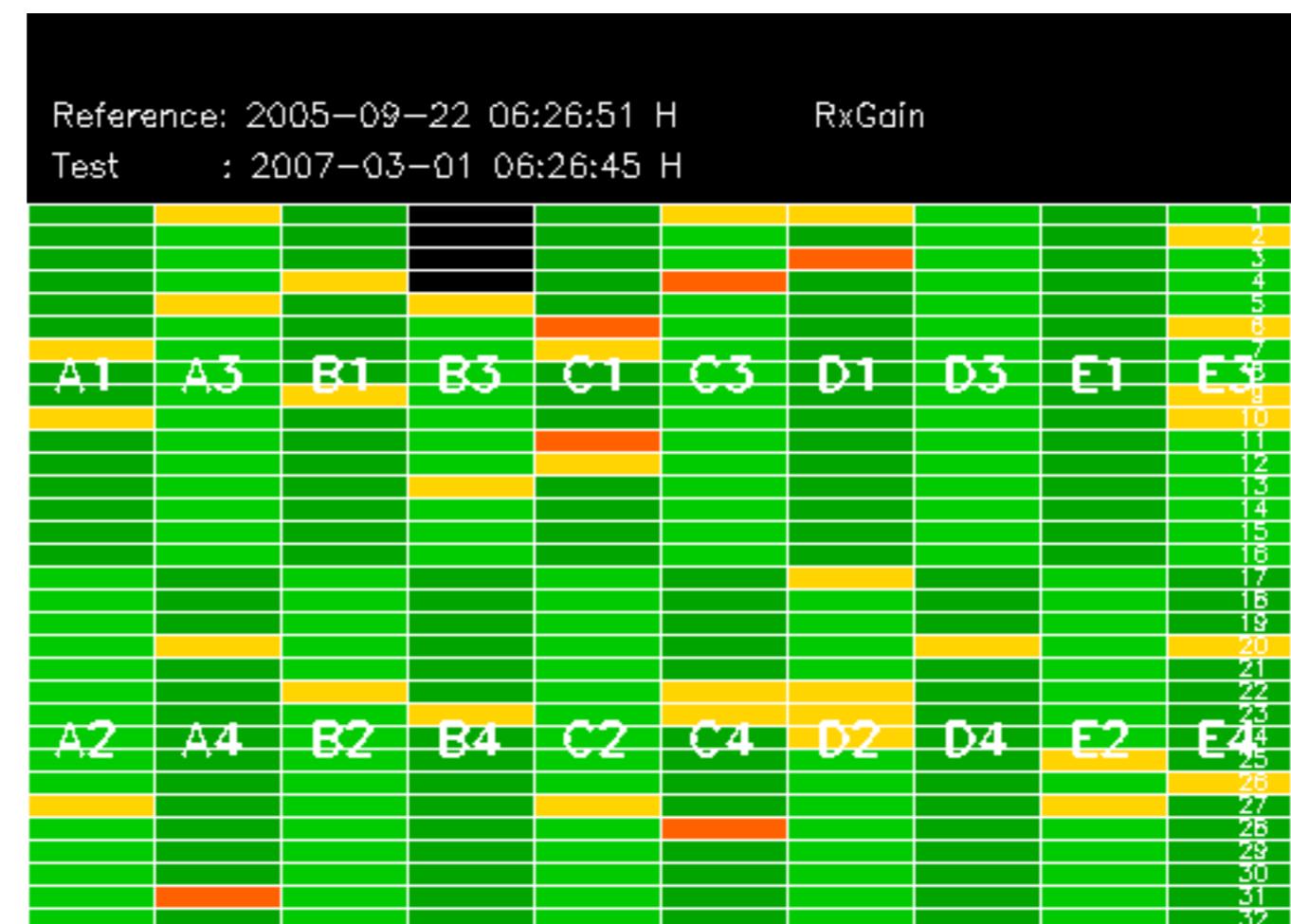
No anomalies observed on available MS products:

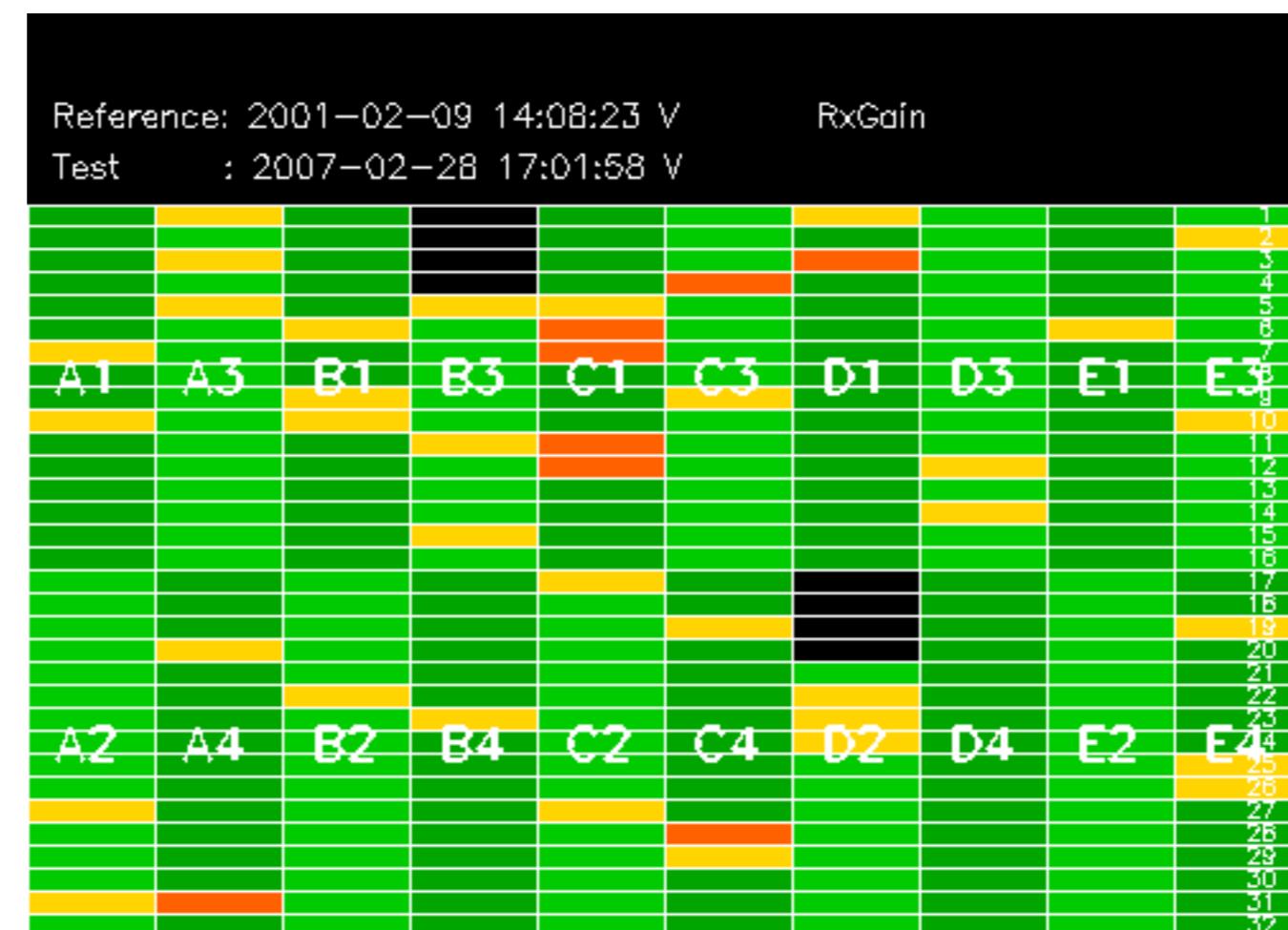


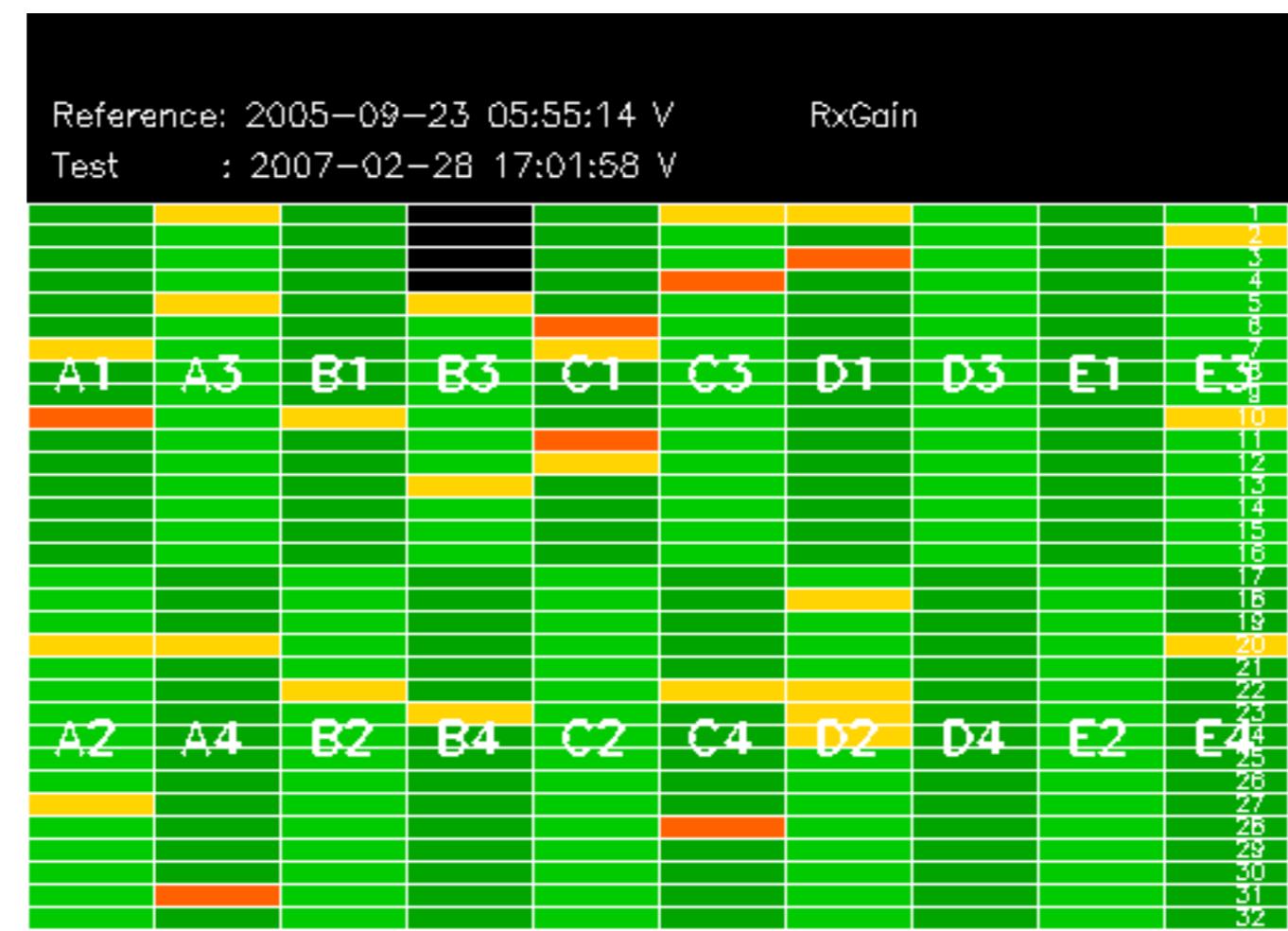
No anomalies observed.











Reference: 2001-02-09 13:50:42 H RxPhase

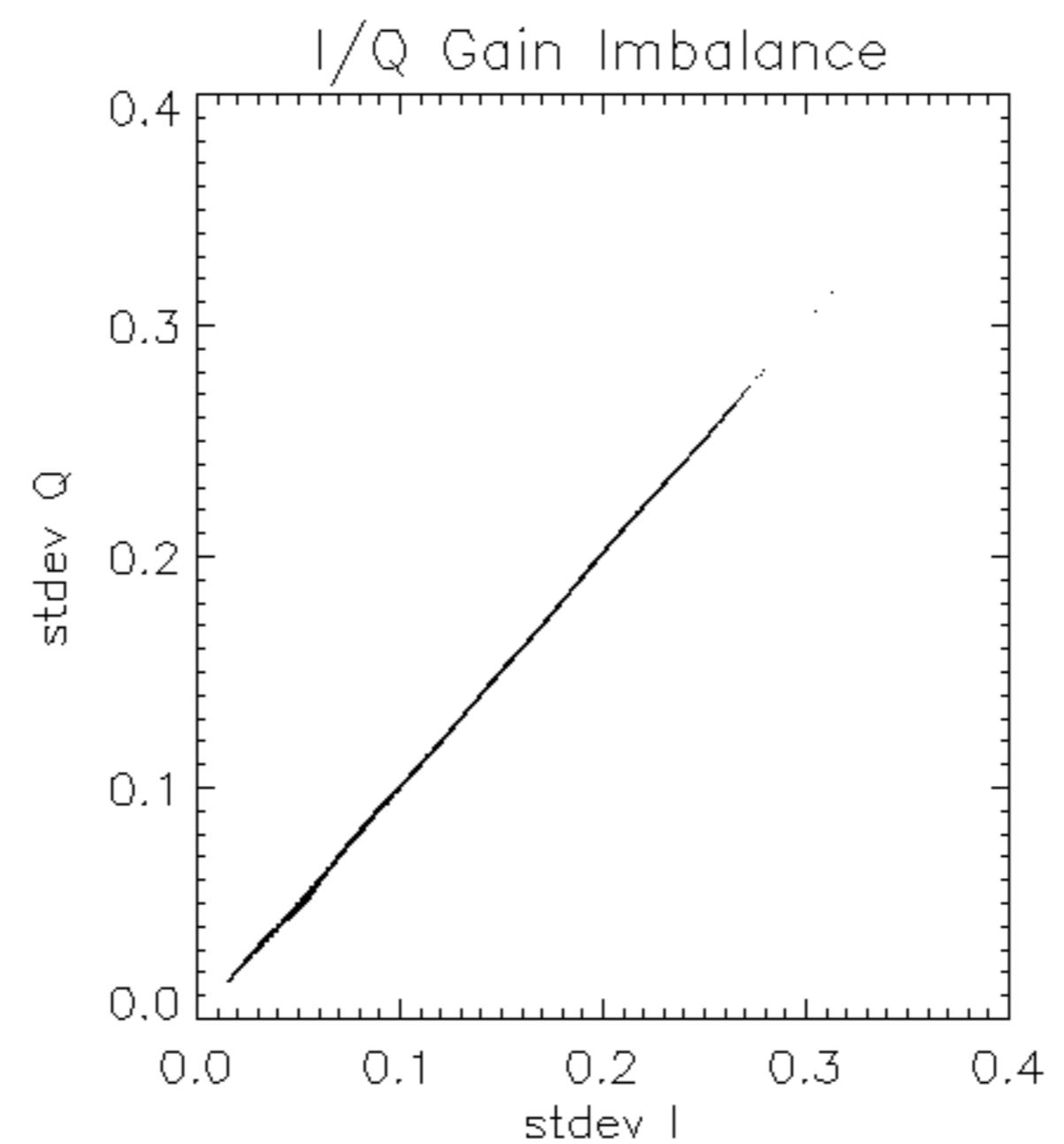
Test : 2007-03-01 06:26:45 H

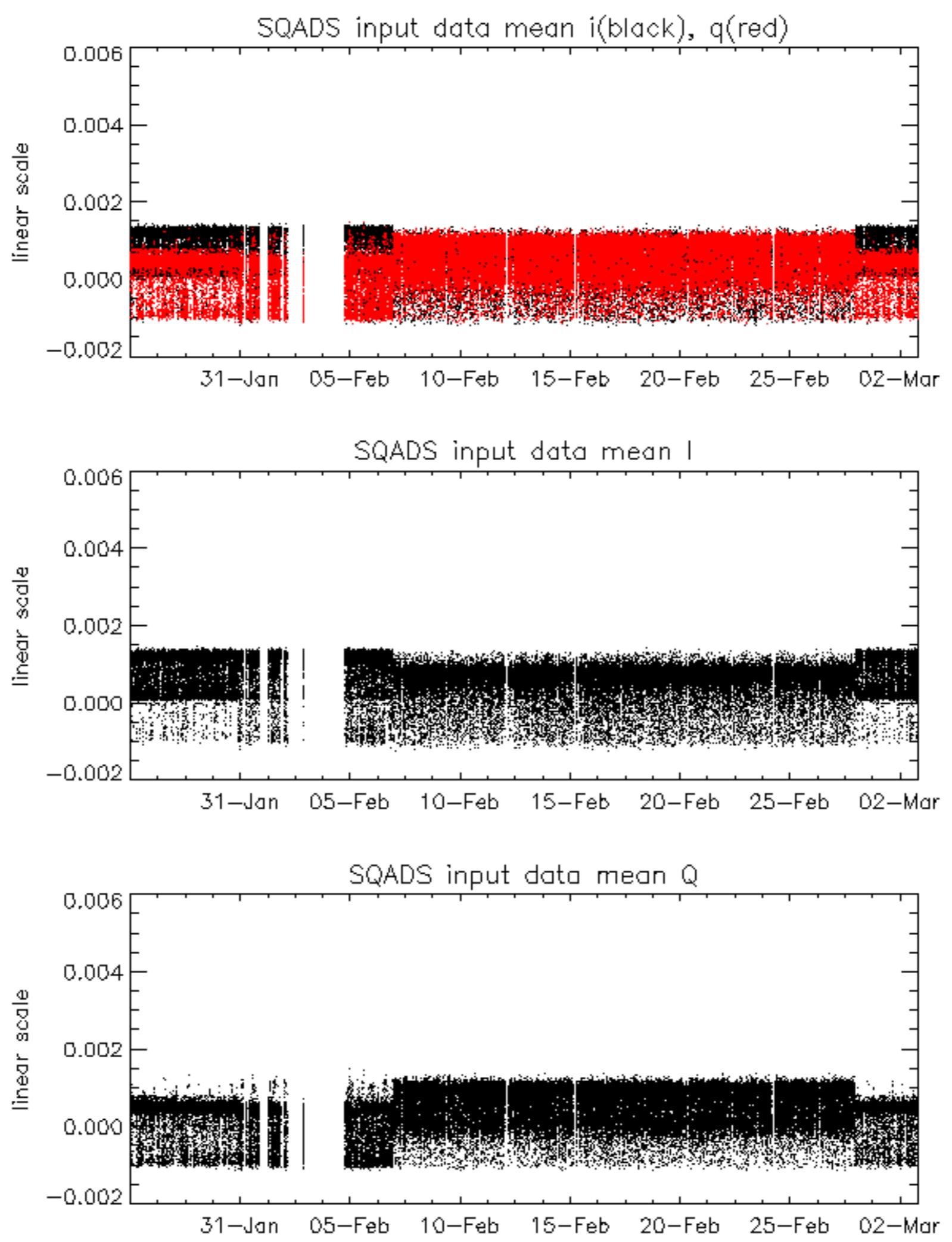
Reference: 2005-09-22 06:26:51 H RxPhase

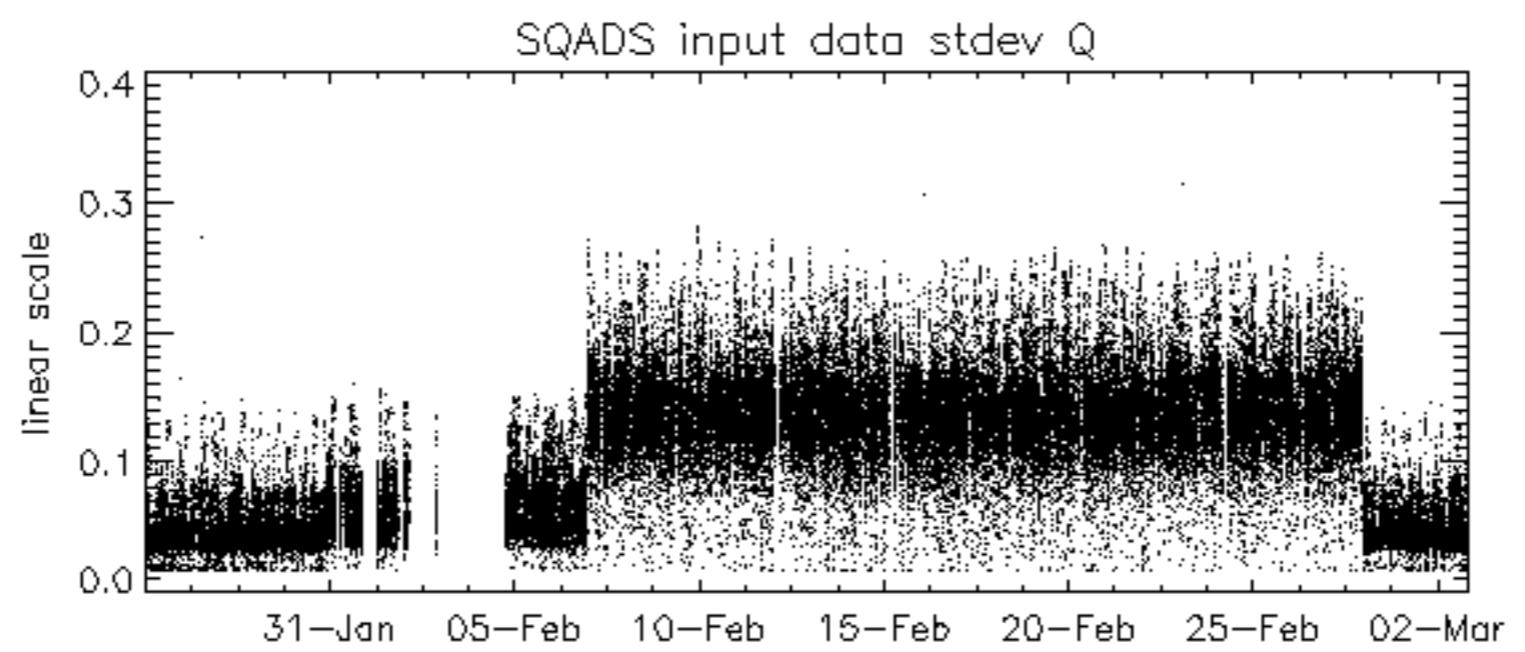
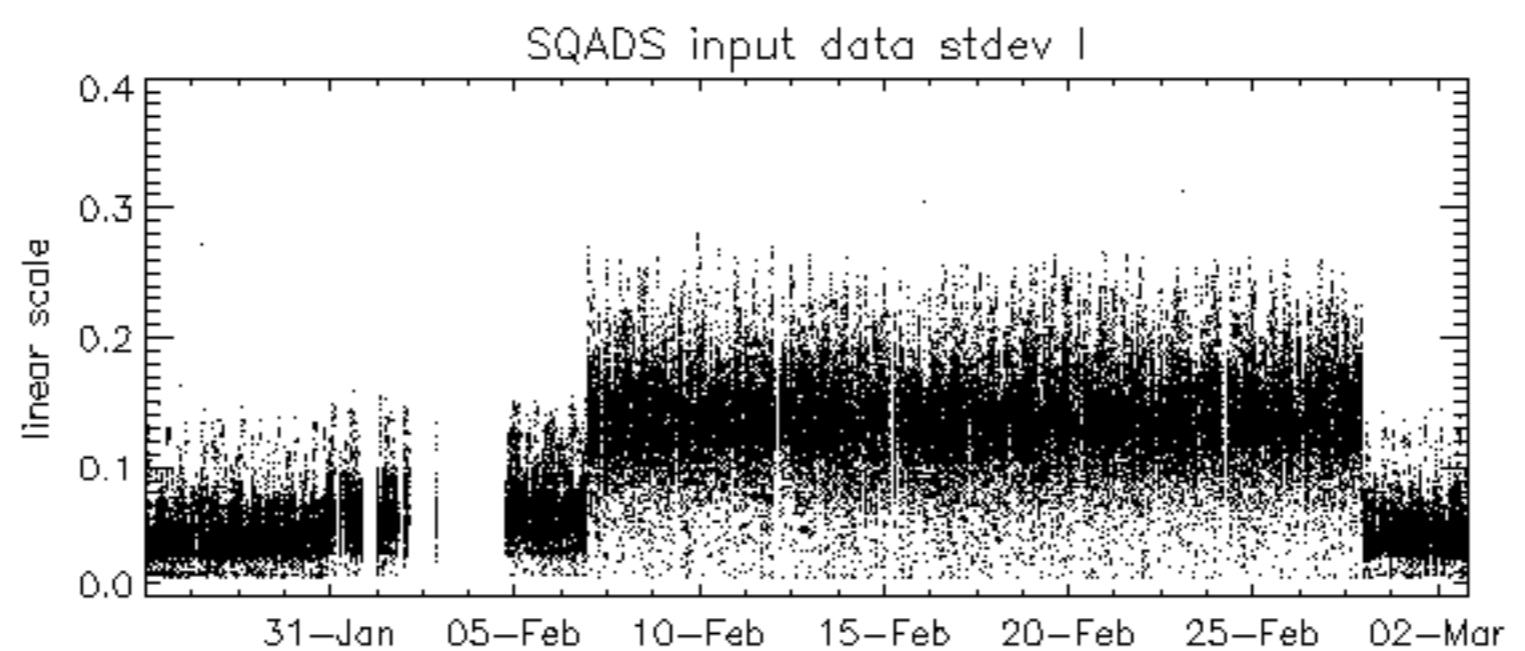
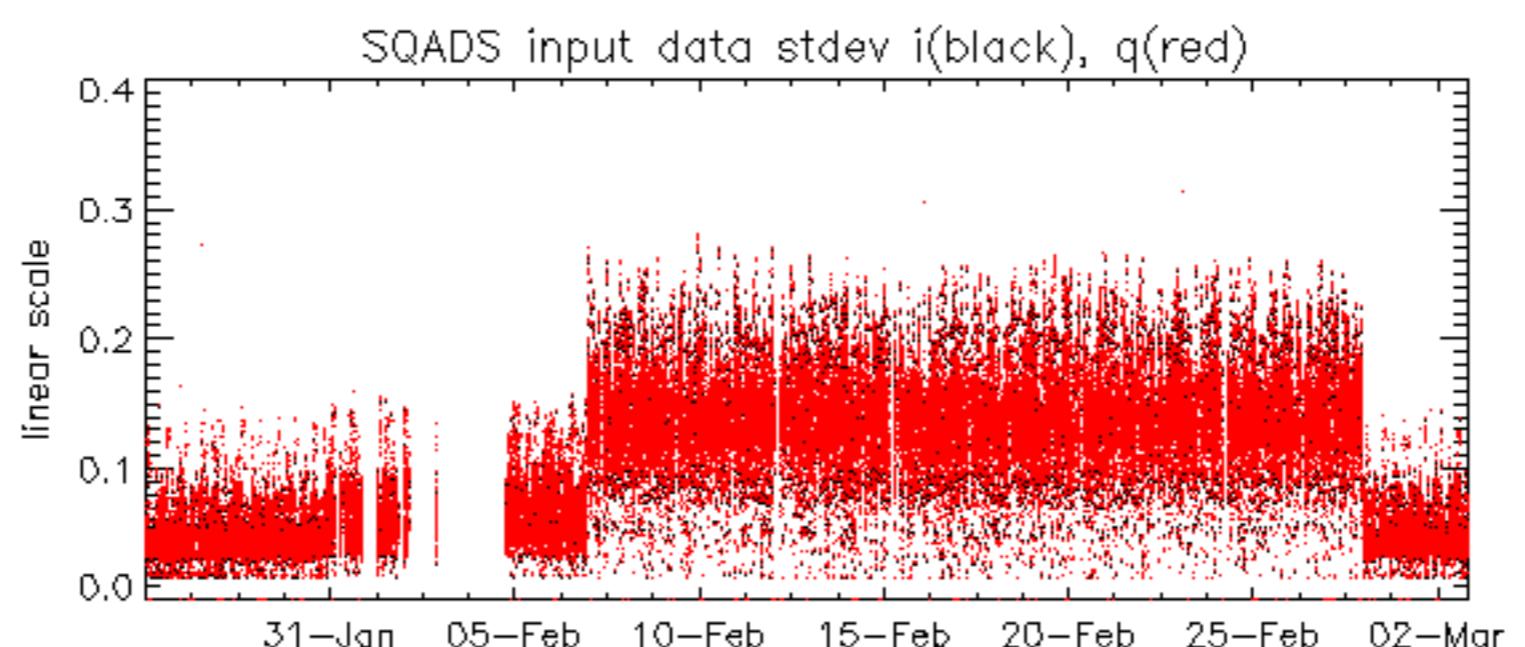
Test : 2007-03-01 06:26:45 H

<img alt="A grid-based visualization comparing two datasets. The columns are labeled A1 through E5 and the rows are numbered 1 through 32. The background is green, and yellow bars indicate specific data points or events. In the Reference dataset (top), there are yellow bars at positions (A1, 1), (B1, 1), (C1, 1), (D1, 1), (E1, 1), (A3, 2), (B3, 2), (C3, 2), (D3, 2), (E3, 2), (A1, 3), (B1, 3), (C1, 3), (D1, 3), (E1, 3), (A3, 4), (B3, 4), (C3, 4), (D3, 4), (E3, 4), (A1, 5), (B1, 5), (C1, 5), (D1, 5), (E1, 5), (A3, 6), (B3, 6), (C3, 6), (D3, 6), (E3, 6), (A1, 7), (B1, 7), (C1, 7), (D1, 7), (E1, 7), (A3, 8), (B3, 8), (C3, 8), (D3, 8), (E3, 8), (A1, 9), (B1, 9), (C1, 9), (D1, 9), (E1, 9), (A3, 10), (B3, 10), (C3, 10), (D3, 10), (E3, 10), (A1, 11), (B1, 11), (C1, 11), (D1, 11), (E1, 11), (A3, 12), (B3, 12), (C3, 12), (D3, 12), (E3, 12), (A1, 13), (B1, 13), (C1, 13), (D1, 13), (E1, 13), (A3, 14), (B3, 14), (C3, 14), (D3, 14), (E3, 14), (A1, 15), (B1, 15), (C1, 15), (D1, 15), (E1, 15), (A3, 16), (B3, 16), (C3, 16), (D3, 16), (E3, 16), (A1, 17), (B1, 17), (C1, 17), (D1, 17), (E1, 17), (A3, 18), (B3, 18), (C3, 18), (D3, 18), (E3, 18), (A1, 19), (B1, 19), (C1, 19), (D1, 19), (E1, 19), (A3, 20), (B3, 20), (C3, 20), (D3, 20), (E3, 20), (A1, 21), (B1, 21), (C1, 21), (D1, 21), (E1, 21), (A3, 22), (B3, 22), (C3, 22), (D3, 22), (E3, 22), (A1, 23), (B1, 23), (C1, 23), (D1, 23), (E1, 23), (A3, 24), (B3, 24), (C3, 24), (D3, 24), (E3, 24), (A1, 25), (B1, 25), (C1, 25), (D1, 25), (E1, 25), (A3, 26), (B3, 26), (C3, 26), (D3, 26), (E3, 26), (A1, 27), (B1, 27), (C1, 27), (D1, 27), (E1, 27), (A3, 28), (B3, 28), (C3, 28), (D3, 28), (E3, 28), (A1, 29), (B1, 29), (C1, 29), (D1, 29), (E1, 29), (A3, 30), (B3, 30), (C3, 30), (D3, 30), (E3, 30), (A1, 31), (B1, 31), (C1, 31), (D1, 31), (E1, 31), (A3, 32), (B3, 32), (C3, 32), (D3, 32), (E3, 32). In the Test dataset (bottom), there are yellow bars at positions (A2, 1), (B2, 1), (C2, 1), (D2, 1), (E2, 1), (A4, 2), (B4, 2), (C4, 2), (D4, 2), (E4, 2), (A2, 3), (B2, 3), (C2, 3), (D2, 3), (E2, 3), (A4, 4), (B4, 4), (C4, 4), (D4, 4), (E4, 4), (A2, 5), (B2, 5), (C2, 5), (D2, 5), (E2, 5), (A4, 6), (B4, 6), (C4, 6), (D4, 6), (E4, 6), (A2, 7), (B2, 7), (C2, 7), (D2, 7), (E2, 7), (A4, 8), (B4, 8), (C4, 8), (D4, 8), (E4, 8), (A2, 9), (B2, 9), (C2, 9), (D2, 9), (E2, 9), (A4, 10), (B4, 10), (C4, 10), (D4, 10), (E4, 10), (A2, 11), (B2, 11), (C2, 11), (D2, 11), (E2, 11), (A4, 12), (B4, 12), (C4, 12), (D4, 12), (E4, 12), (A2, 13), (B2, 13), (C2, 13), (D2, 13), (E2, 13), (A4, 14), (B4, 14), (C4, 14), (D4, 14), (E4, 14), (A2, 15), (B2, 15), (C2, 15), (D2, 15), (E2, 15), (A4, 16), (B4, 16), (C4, 16), (D4, 16), (E4, 16), (A2, 17), (B2, 17), (C2, 17), (D2, 17), (E2, 17), (A4, 18), (B4, 18), (C4, 18), (D4, 18), (E4, 18), (A2, 19), (B2, 19), (C2, 19), (D2, 19), (E2, 19), (A4, 20), (B4, 20), (C4, 20), (D4, 20), (E4, 20), (A2, 21), (B2, 21), (C2, 21), (D2, 21), (E2, 21), (A4, 22), (B4, 22), (C4, 22), (D4, 22), (E4, 22), (A2, 23), (B2, 23), (C2, 23), (D2, 23), (E2, 23), (A4, 24), (B4, 24), (C4, 24), (D4, 24), (E4, 24), (A2, 25), (B2, 25), (C2, 25), (D2, 25), (E2, 25), (A4, 26), (B4, 26), (C4, 26), (D4, 26), (E4, 26), (A2, 27), (B2, 27), (C2, 27), (D2, 27), (E2, 27), (A4, 28), (B4, 28), (C4, 28), (D4, 28), (E4, 28), (A2, 29), (B2, 29), (C2, 29), (D2, 29), (E2, 29), (A4, 30), (B4, 30), (C4, 30), (D4, 30), (E4, 30), (A2, 31), (B2, 31), (C2, 31), (D2, 31), (E2, 31), (A4, 32), (B4, 32), (C4, 32), (D4, 32), (E4, 32).</p>

Reference: 2001-02-09 14:08:23 V RxPhase
Test : 2007-02-28 17:01:58 V







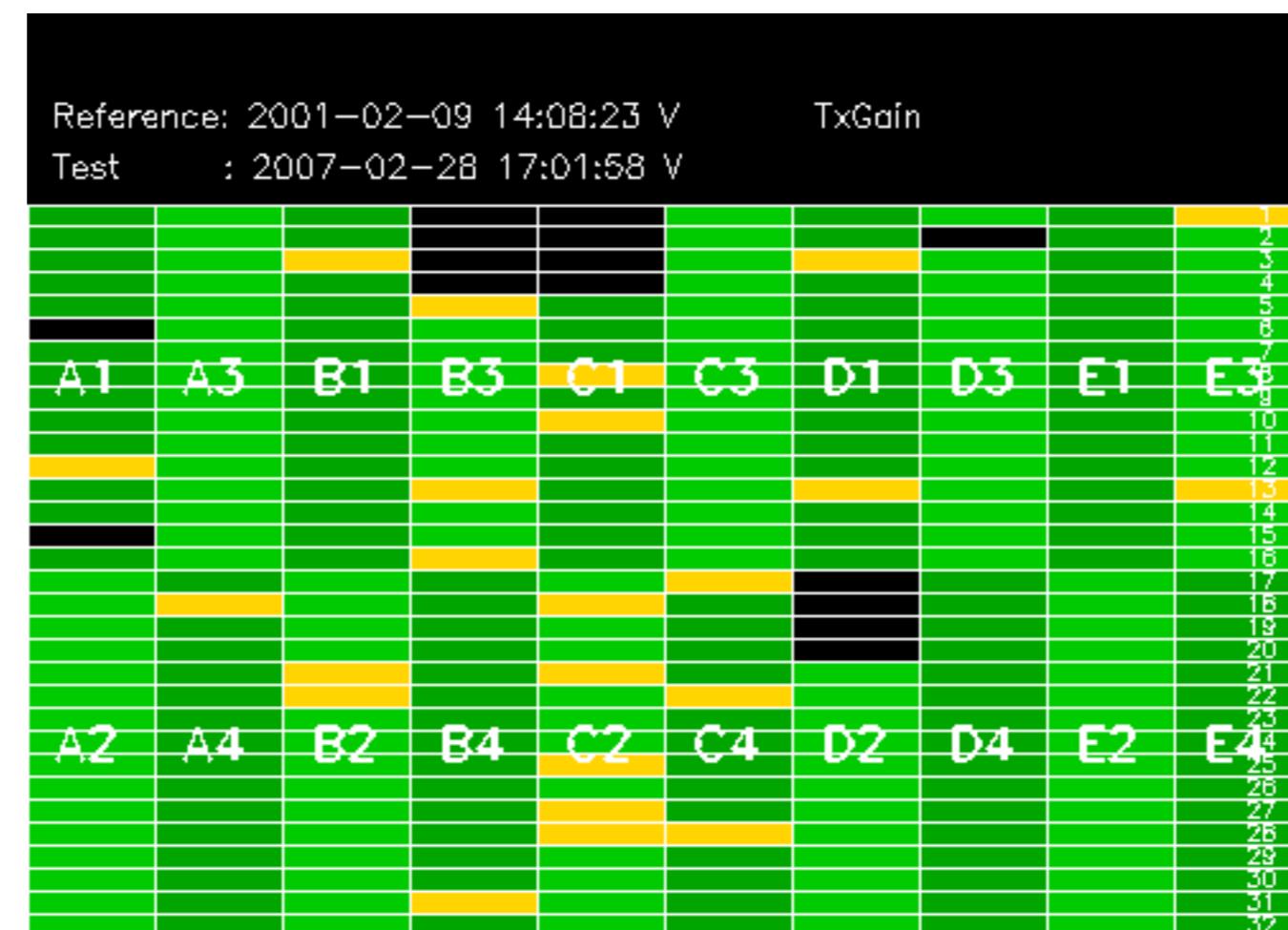
Reference: 2001-02-09 13:50:42 H

TxGain

Test : 2007-03-01 06:26:45 H

Reference: 2005-09-22 06:26:51 H

Test : 2007-03-01 06:26:45 H



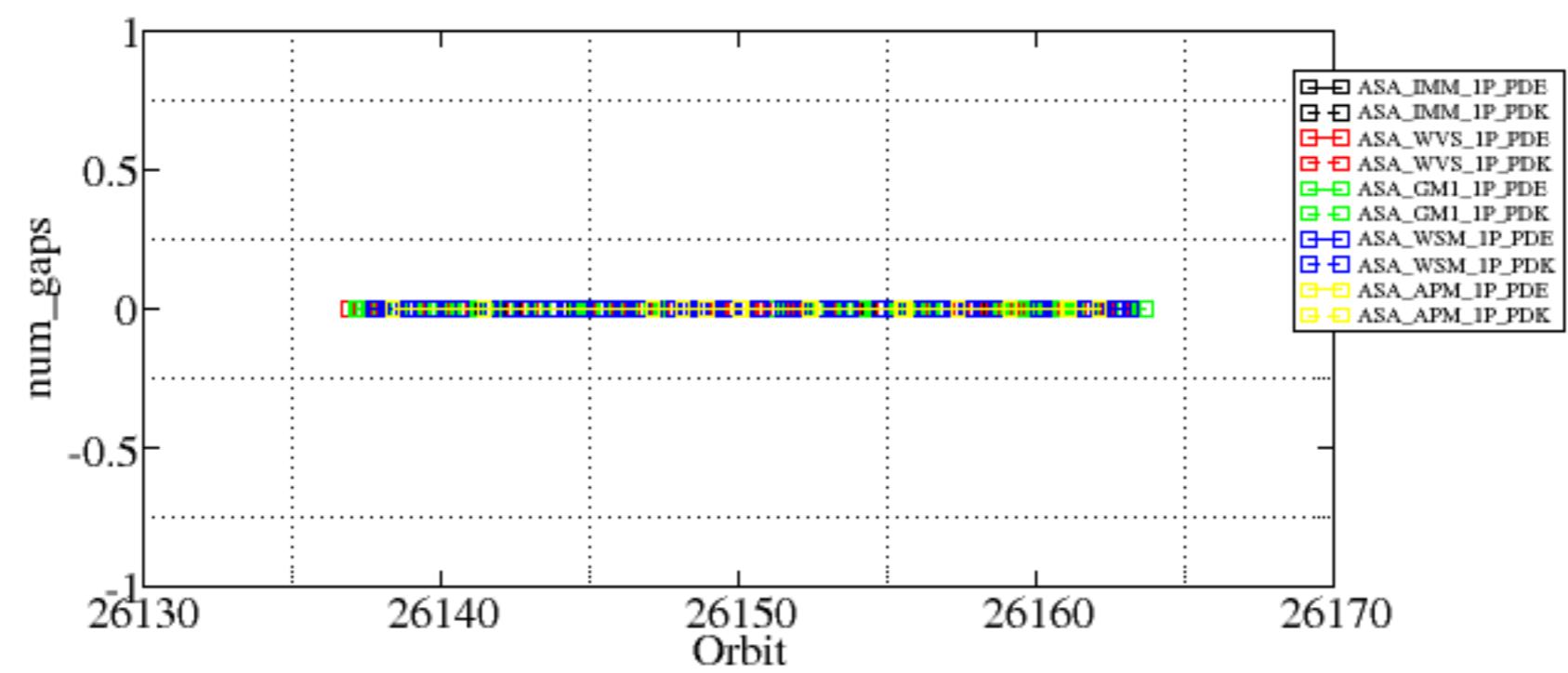
Reference: 2005-09-23 05:55:14 V

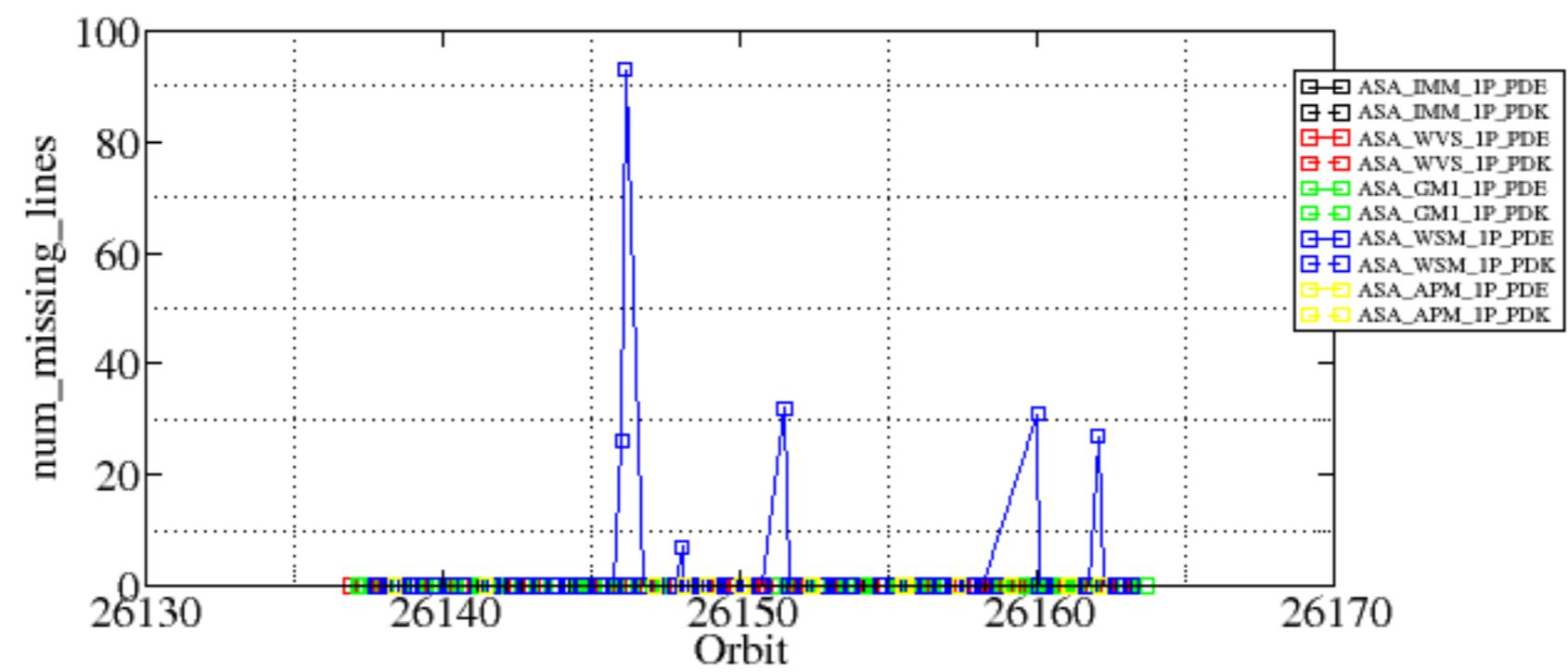
Test : 2007-02-28 17:01:58 V

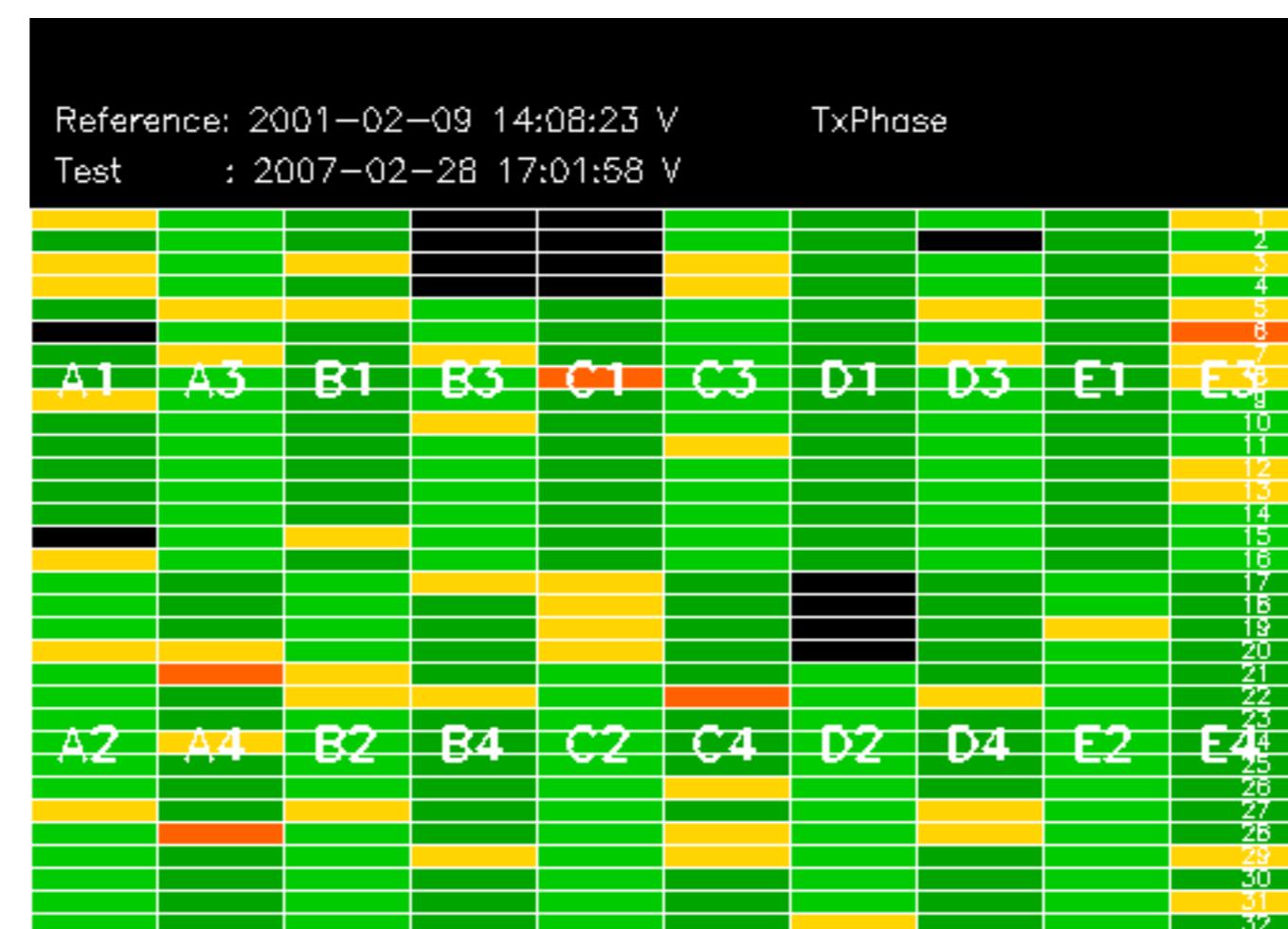
Summary of analysis for the last 3 days 2007030[812]

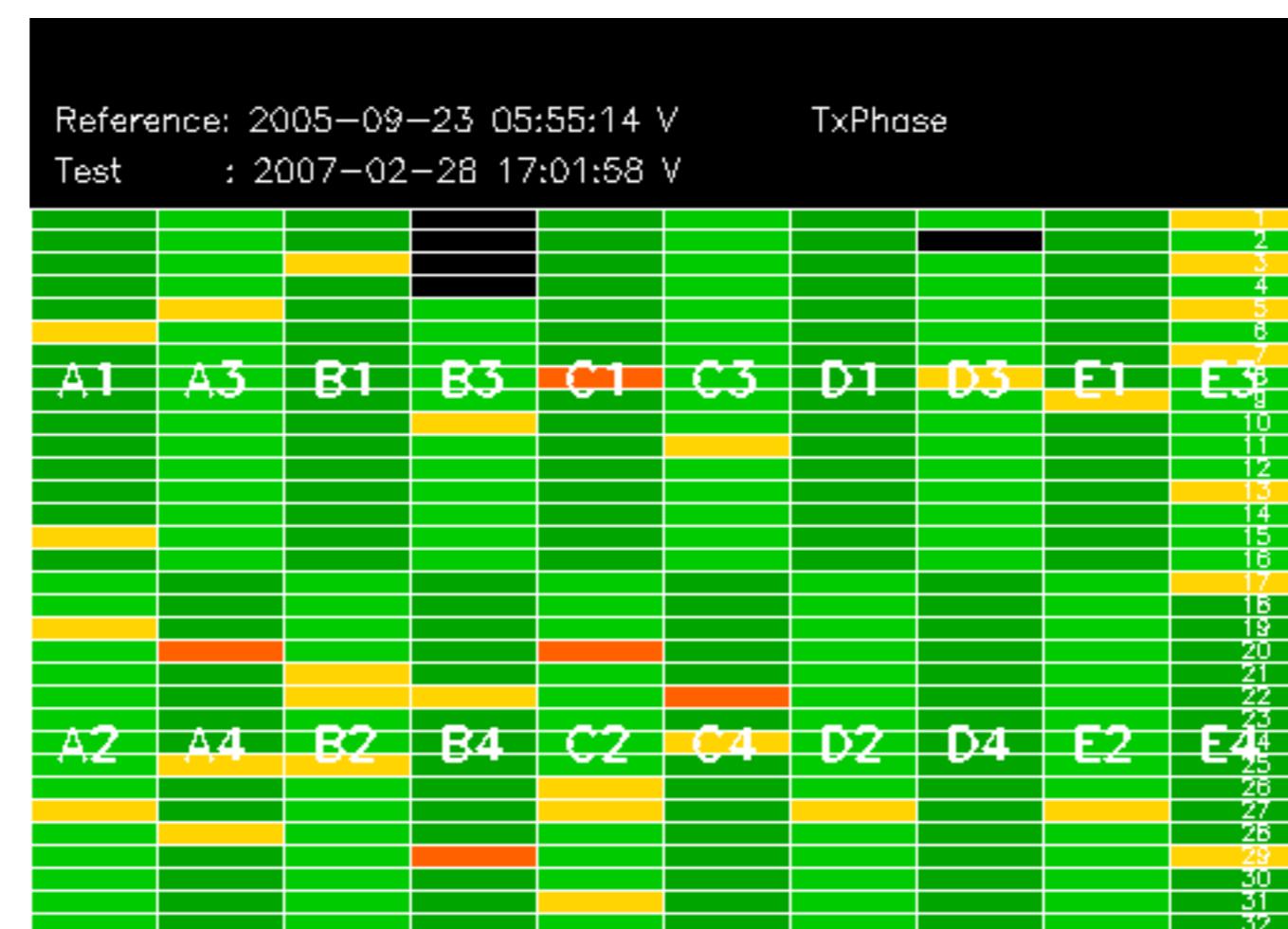
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

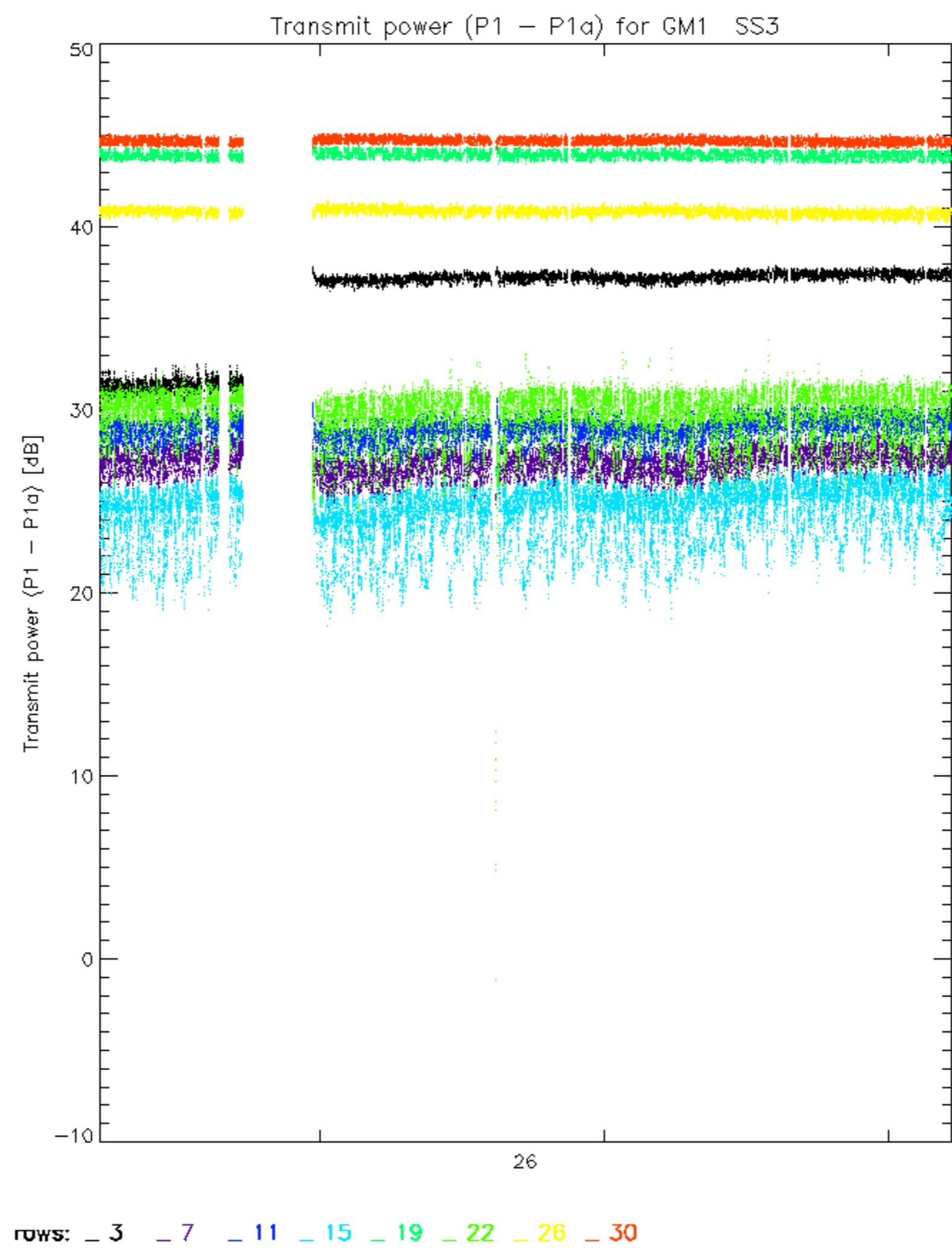
Filename	num_gaps	num_missing_lines
ASA_WSM_1PNPDE20070301_152552_000001832056_00040_26146_6817.N1	0	26
ASA_WSM_1PNPDE20070301_153707_000002392056_00040_26146_6781.N1	0	93
ASA_WSM_1PNPDE20070301_184853_000000852056_00042_26148_6897.N1	0	7
ASA_WSM_1PNPDE20070302_003405_000002632056_00045_26151_7324.N1	0	32
ASA_WSM_1PNPDE20070302_145414_000000852056_00054_26160_8003.N1	0	31
ASA_WSM_1PNPDE20070302_181712_000000852056_00056_26162_8077.N1	0	27

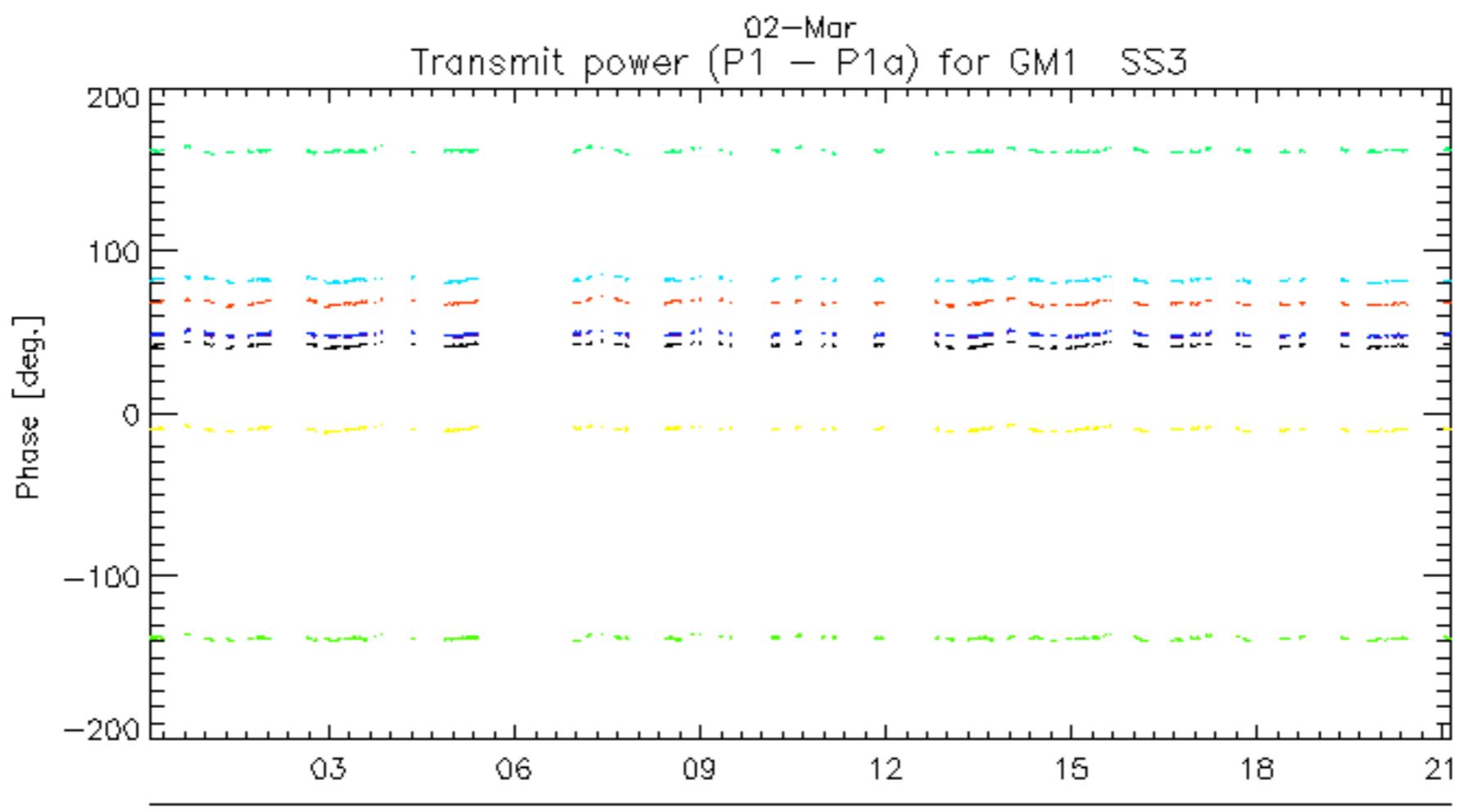
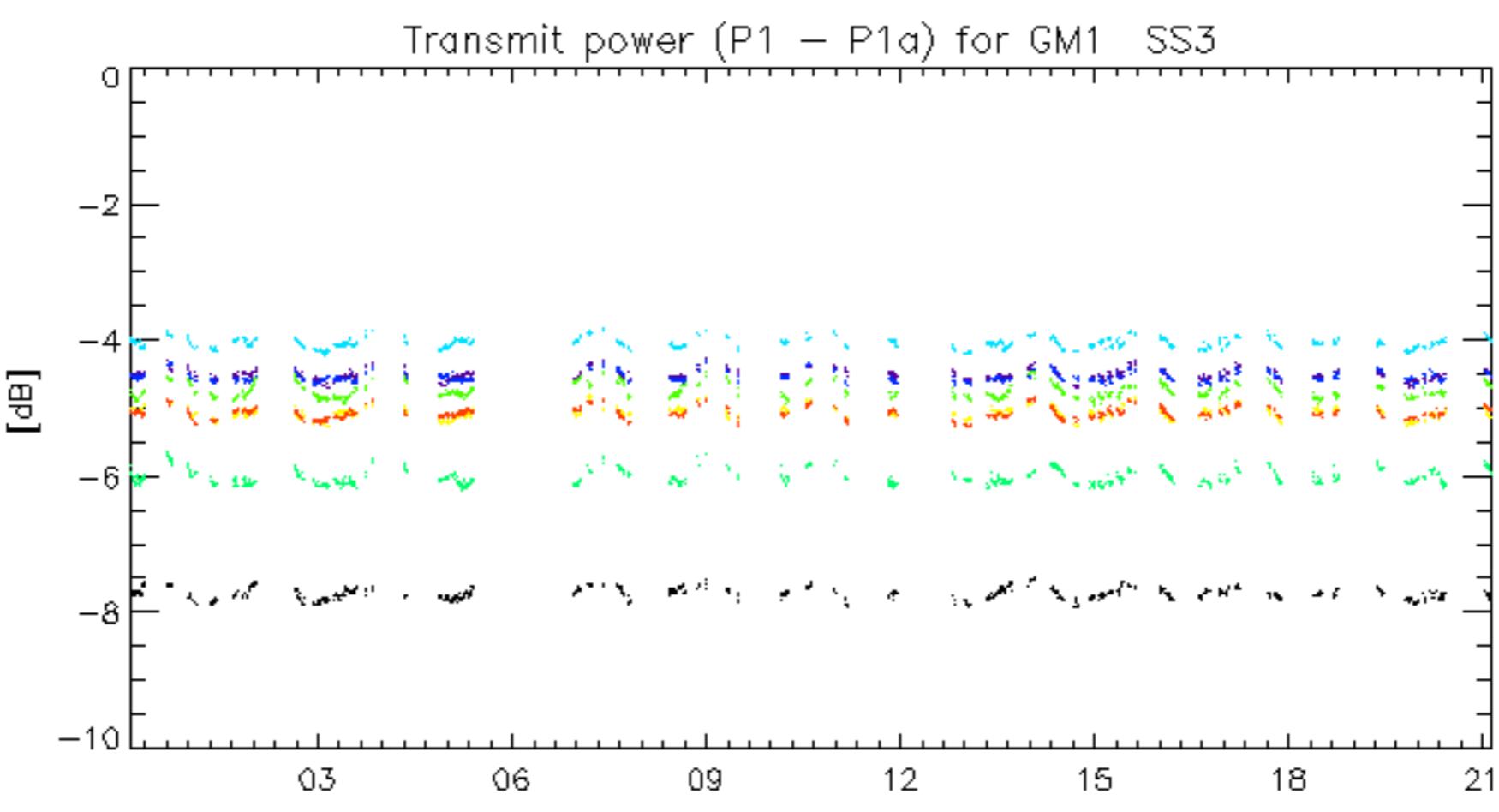




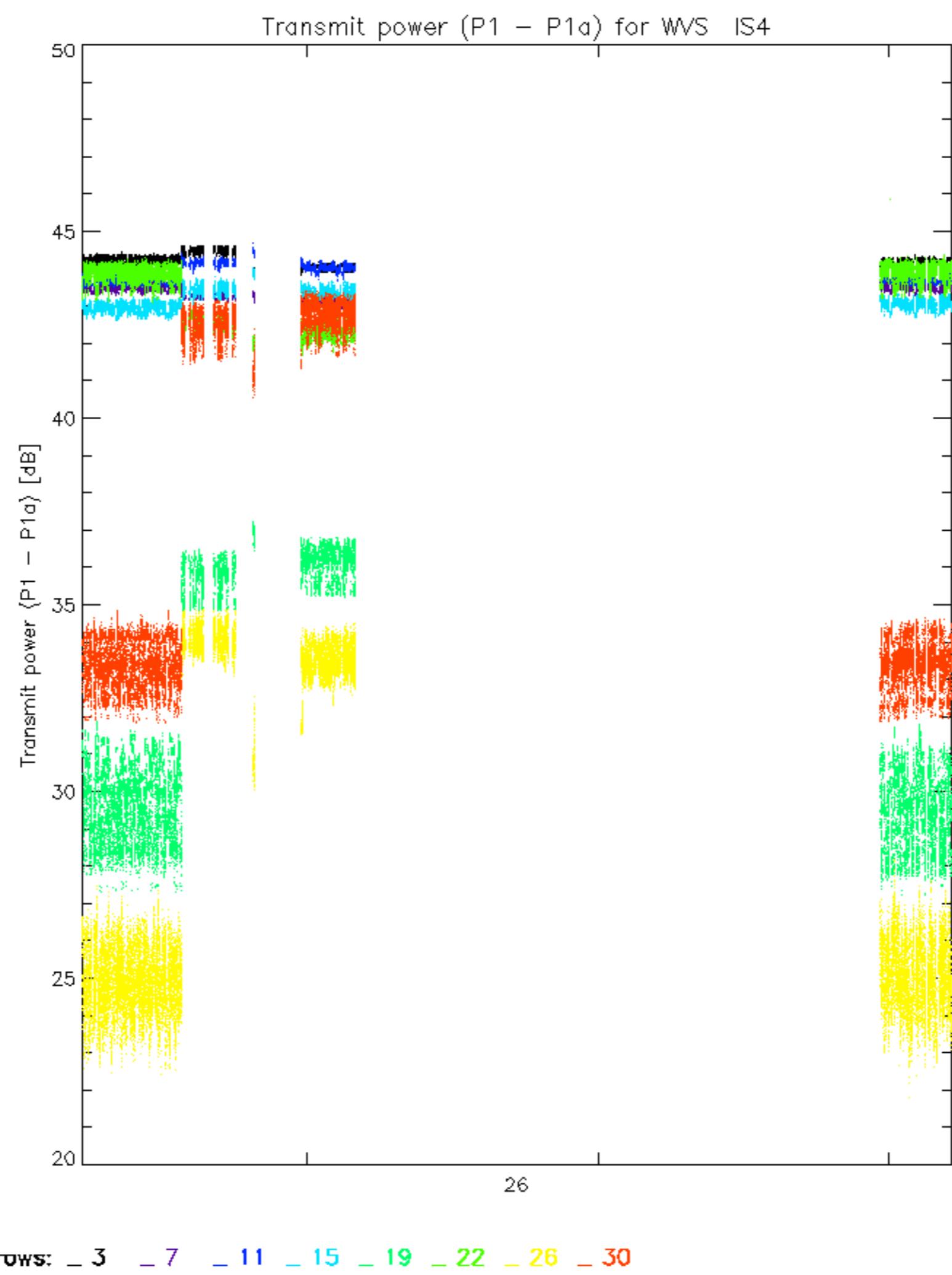


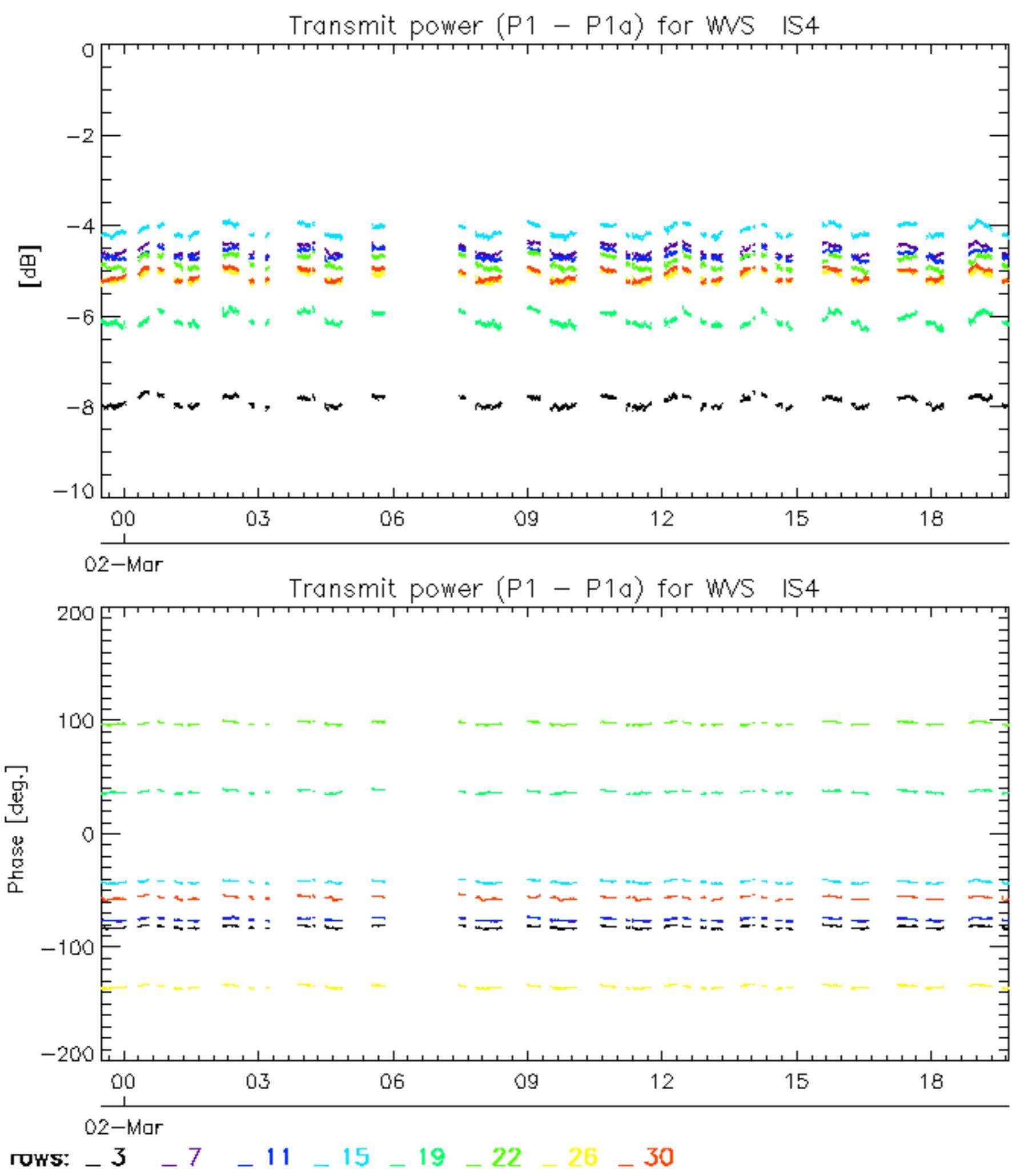






02-Mar
rows: -3 -7 -11 -15 -19 -22 -26 -30





No unavailabilities during the reported period.

