PRELIMINARY REPORT OF 070319

last update on Mon Mar 19 23:50:44 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

1. Introduction
2. Summary
   - Instrument Unavailability
   - Auxiliary files used
   - Browse Visual Inspection
   - Module Stepping Results
   - Data Analysis
3. Module Stepping
4. Internal Calibration pulses
   - Daily statistics
   - Cyclic statistics
   - cal pulses monitoring (all rows)
5. Raw Data Statistics
   - raw data mean I and Q
   - raw data stdev I and Q
   - raw gain imbalance
6. TLM analysis
7. Wave Doppler analysis
   - Unbiased Doppler Error for WVS
   - Absolute Doppler for WVS
   - Doppler evolution versus ANX for WVS
   - Unbiased Doppler Error for GM1
   - Absolute Doppler for GM1
   - Doppler evolution versus ANX for GM1

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 2007-03-18 00:00:00 to 2007-03-19 23:50:44

PDHS-K					
AUXILIARY FILE	**WVS**	**GM1**	**IMM**	**APM**	**WSM**
ASA_CON_AXVIEC20070222_190441_20070204_165113_20071231_000000	52	87	10	4	30
ASA_INS_AXVIEC20070306_164819_20070307_060000_20071231_000000	52	87	10	4	30
ASA_XCA_AXVIEC20070222_185842_20070204_165113_20071231_000000	52	87	10	4	30
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	52	87	10	4	30

PDHS-E					
AUXILIARY FILE	**WVS**	**GM1**	**IMM**	**APM**	**WSM**
ASA_CON_AXVIEC20070222_190441_20070204_165113_20071231_000000	53	58	81	10	38
ASA_INS_AXVIEC20070306_164819_20070307_060000_20071231_000000	53	58	81	10	38
ASA_XCA_AXVIEC20070222_185842_20070204_165113_20071231_000000	53	58	81	10	38
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	53	58	81	10	38

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	20070319 084149
H	20070319 015926

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

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)
3	P1a	-15.129637	0.118875	-0.072079
7	P1a	-17.480841	0.104655	-0.179707
11	P1a	-17.264011	0.330688	0.114195
15	P1a	-12.903796	0.086050	-0.096417
19	P1a	-15.159184	0.077799	-0.042046
22	P1a	-15.402136	0.719629	-0.069297
26	P1a	-15.018351	0.752429	0.102169
30	P1a	-17.356354	0.379691	-0.047946

P1\t Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-5.745923	0.009936	-0.047497
7	P1	-3.137345	0.008202	-0.020139
11	P1	-4.161854	0.015597	-0.022853
15	P1	-6.384611	0.015463	-0.018826
19	P1	-3.773403	0.008151	-0.030333
22	P1	-4.650907	0.087565	0.017414
26	P1	-3.907734	0.069100	0.083657
30	P1	-5.881881	0.138308	0.063186

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.652298	0.091456	0.058717
7	P2	-21.611347	0.080102	0.025655
11	P2	-15.523363	0.097897	0.089909
15	P2	-7.078371	0.092696	-0.054122

19	P2	-9.108162	0.081980	-0.010272
22	P2	-18.101038	0.074278	0.028412
26	P2	-16.555843	0.084916	-0.071278
30	P2	-19.339714	0.077362	0.054105

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.237473	0.006410	-0.001657
7	P3	-8.237473	0.006410	-0.001657
11	P3	-8.237473	0.006410	-0.001657
15	P3	-8.237473	0.006410	-0.001657
19	P3	-8.237473	0.006410	-0.001657
22	P3	-8.237473	0.006410	-0.001657
26	P3	-8.237473	0.006410	-0.001657
30	P3	-8.237473	0.006410	-0.001657

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	-11.087769	0.055644	-0.100625
7	P1a	-10.069697	0.161696	-0.005357
11	P1a	-10.680795	0.070181	-0.070049
15	P1a	-10.953438	0.142035	0.072209
19	P1a	-15.703121	0.072087	-0.178746
22	P1a	-20.843029	1.598975	0.565400
26	P1a	-15.232610	0.310505	0.115827
30	P1a	-18.351694	0.848195	0.415597

P1\t Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)

3	P1	-8.406506	0.048060	-0.052107
7	P1	-2.426315	0.029995	-0.016245
11	P1	-2.923504	0.021584	0.003732
15	P1	-3.849367	0.043384	-0.033788
19	P1	-3.559653	0.011116	-0.051204
22	P1	-5.032628	0.036304	0.097750
26	P1	-5.941527	0.061649	0.067429
30	P1	-5.267480	0.032911	0.025853

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-18.103363	0.035633	-0.040835
7	P2	-21.954853	0.058745	-0.042067
11	P2	-10.640906	0.031987	-0.005278
15	P2	-4.826687	0.030023	-0.010650
19	P2	-6.812348	0.031807	-0.016695
22	P2	-8.078594	0.034979	-0.008827
26	P2	-24.291609	0.040231	0.041967
30	P2	-21.722321	0.042264	0.073968

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.060235	0.003801	-0.002147
7	P3	-8.060138	0.003790	-0.002226
11	P3	-8.060205	0.003789	-0.002406
15	P3	-8.060290	0.003798	-0.001621
19	P3	-8.060198	0.003803	-0.000669
22	P3	-8.060191	0.003794	-0.002028
26	P3	-8.059984	0.003774	-0.001335
30	P3	-8.060154	0.003796	-0.002656

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	0.000676410
	stdev	2.97986e-07
MEAN Q	mean	0.000274291
	stdev	2.81803e-07

5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.0869986
	stdev	0.00214835
STDEV Q	mean	0.0867660
	stdev	0.00220230

5.3 - Gain imbalance I/Q

6 - Telemetry analysis

Summary of analysis for the last 3 days 2007031[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_1PNPDE20070318_210136_000000982056_00286_26392_7093.N1	1	42
ASA_IMM_1PNPDE20070318_210638_000003002056_00286_26392_7140.N1	2	81
ASA_IMM_1PNPDE20070319_132450_000000502056_00296_26402_8122.N1	6	89
ASA_IMM_1PNPDE20070319_153347_000001132056_00297_26403_8144.N1	15	2759
ASA_IMM_1PNPDE20070319_171525_000002082056_00298_26404_8200.N1	15	6315
ASA_IMM_1PNPDE20070319_171858_000000062056_00298_26404_8182.N1	10	199
ASA_IMM_1PNPDE20070319_174754_000001772056_00299_26405_8212.N1	4	28
ASA_WVS_1PNPDK20070318_191755_000000002056_00285_26391_5999.N1	1	0
ASA_GM1_1PNPDK20070318_150057_000001202056_00283_26389_5642.N1	0	8
ASA_GM1_1PNPDK20070318_191841_000000722056_00285_26391_6049.N1	0	13
ASA_GM1_1PNPDK20070319_112407_000001502056_00295_26401_6492.N1	0	22
ASA_GM1_1PNPDK20070319_112634_000000842056_00295_26401_6497.N1	0	55
ASA_WSM_1PNPDE20070317_153552_000003002056_00269_26375_5553.N1	0	111
ASA_WSM_1PNPDE20070318_145119_000000852056_00283_26389_6914.N1	0	36
ASA_WSM_1PNPDE20070319_031314_000000852056_00290_26396_7687.N1	24	2180
ASA_WSM_1PNPDE20070319_142046_000000852056_00297_26403_8158.N1	0	16
ASA_WSM_1PNPDE20070319_161419_000000362056_00298_26404_8162.N1	17	704
ASA_WSM_1PNPDE20070319_161419_000000362056_00298_26404_8176.N1	17	704
ASA_WSM_1PNPDK20070319_075204_000001592056_00293_26399_6245.N1	0	1
ASA_WSM_1PNPDK20070319_122504_000001292056_00295_26401_6620.N1	0	1
ASA_WSM_1PNPDK20070319_122504_000002632056_00295_26401_6729.N1	0	1
ASA_WSM_1PNPDK20070319_144155_000003242056_00297_26403_6748.N1	0	14

7 - Doppler Analysis

Preliminary report.The data is not yet controled

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)

Acsending

Descending

7.5 - Absolute Doppler for GM1

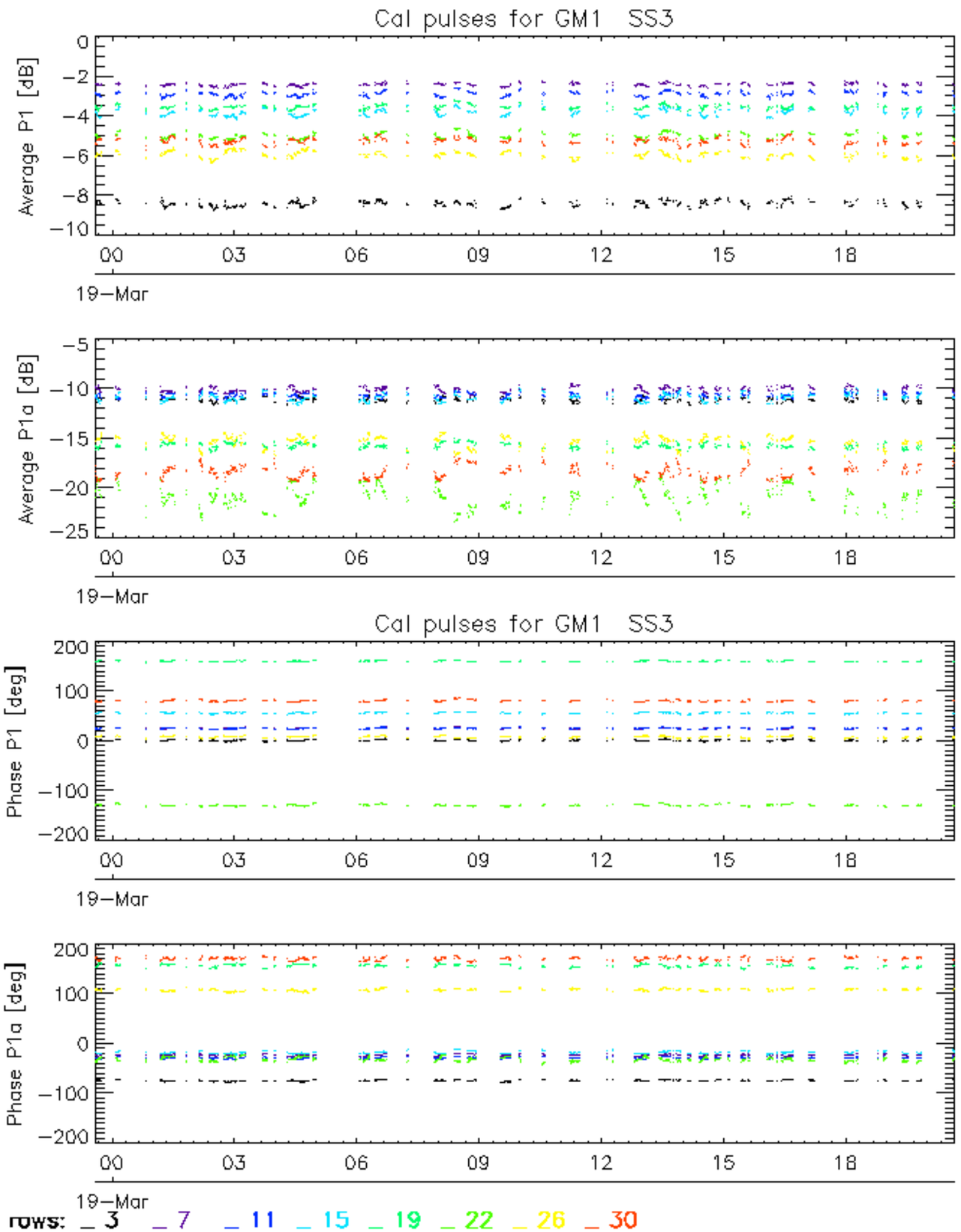
Evolution of Absolute Doppler

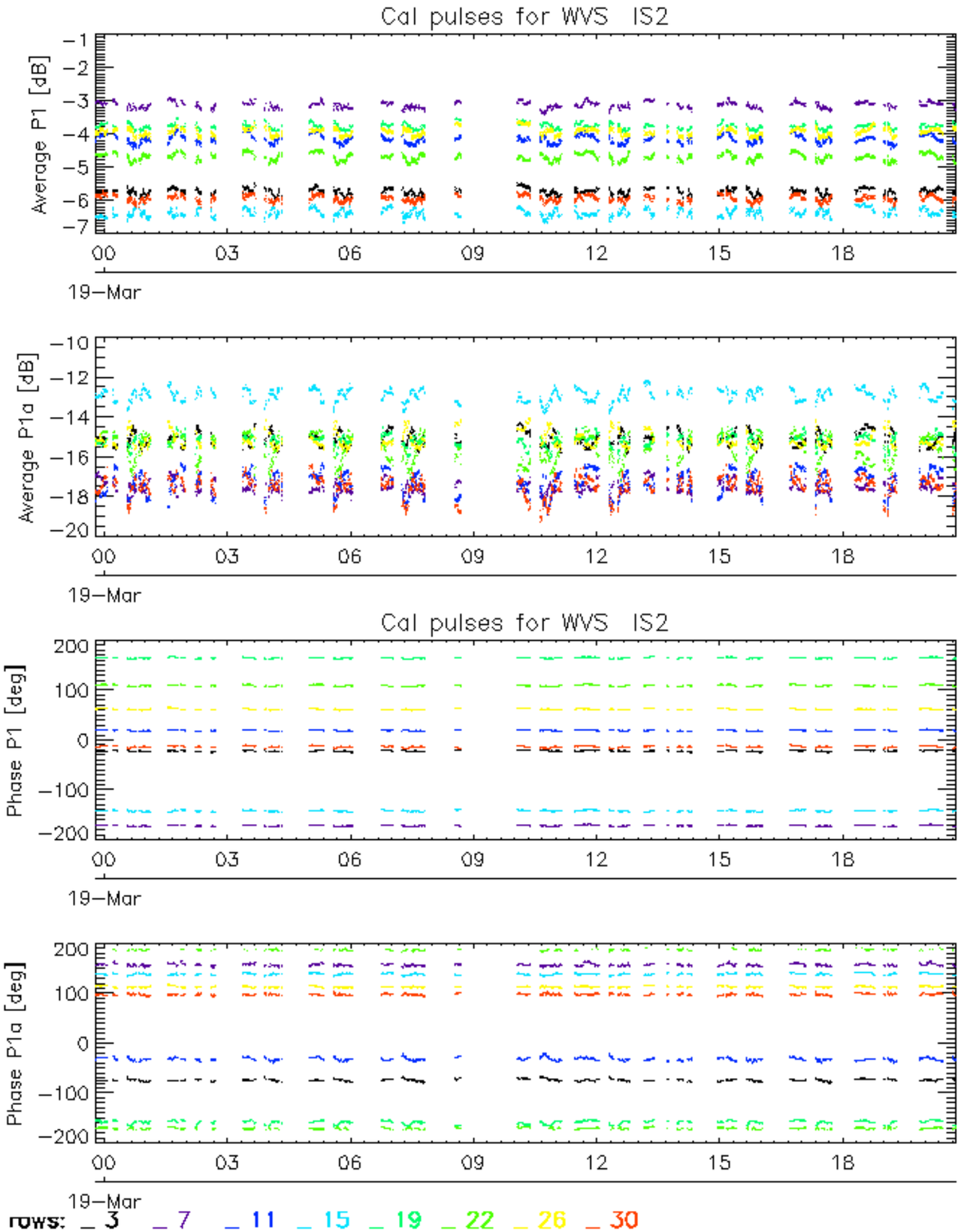
Acsending

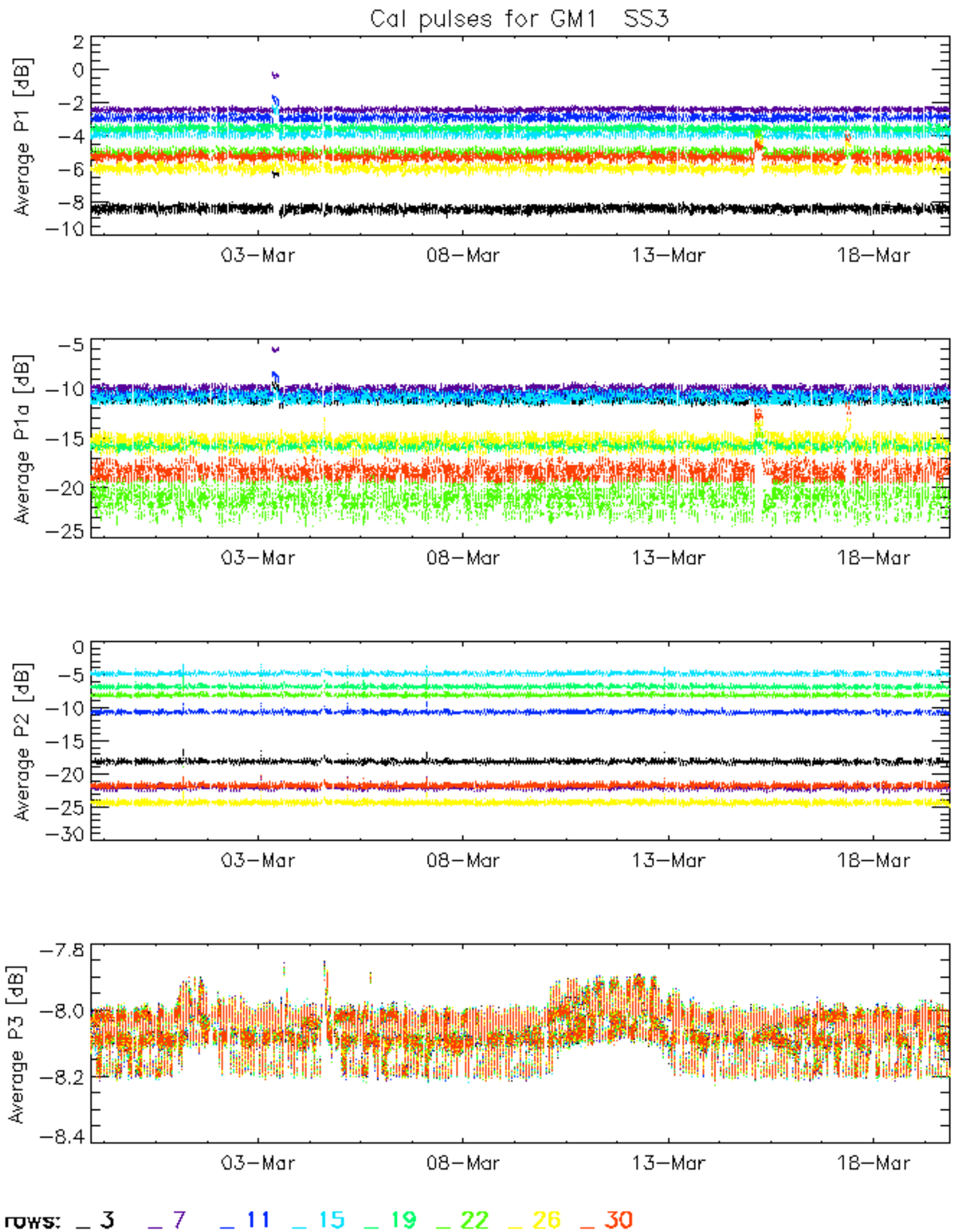
Descending

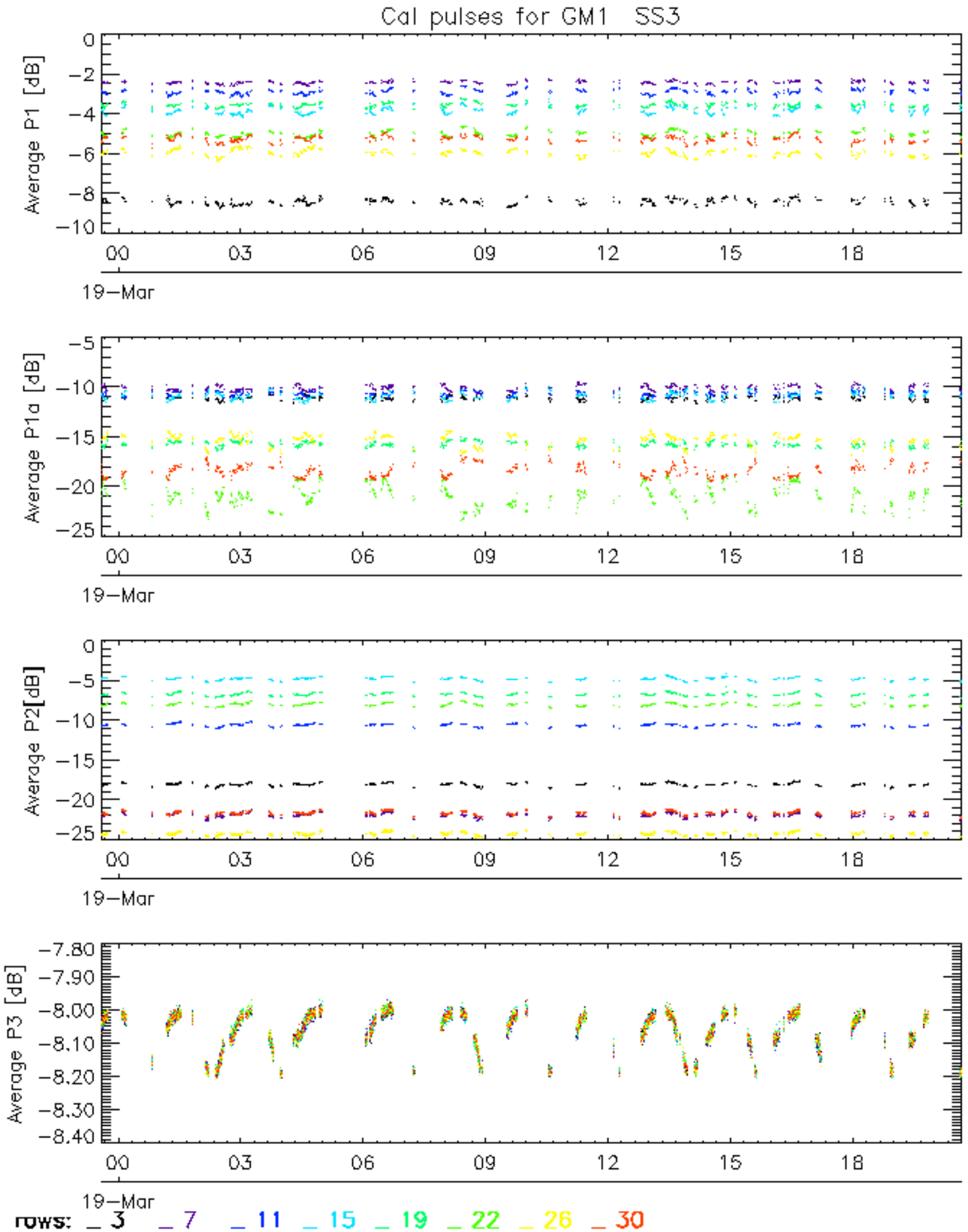
7.6 - Doppler evolution versus ANX for GM1

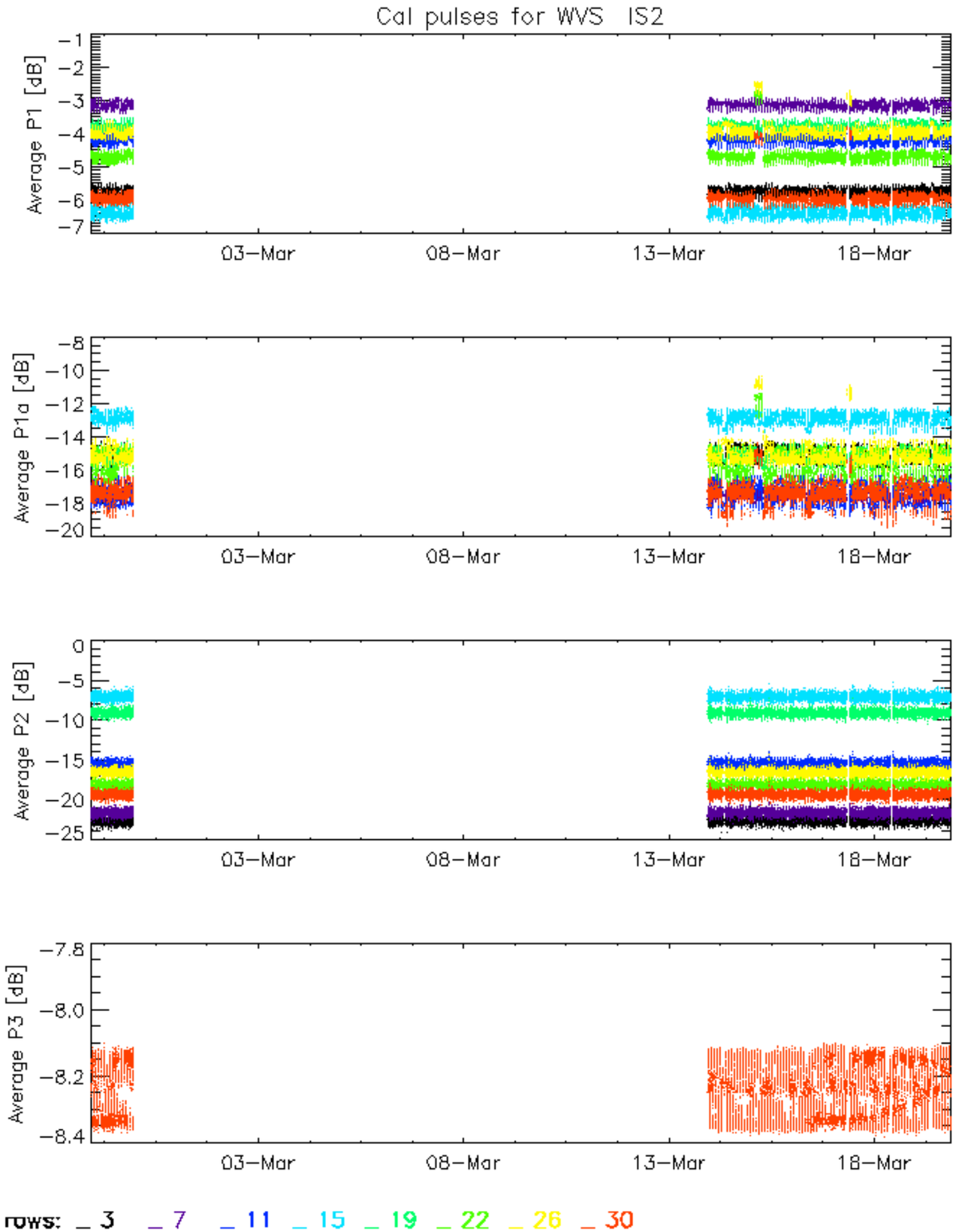
Evolution Doppler error versus ANX

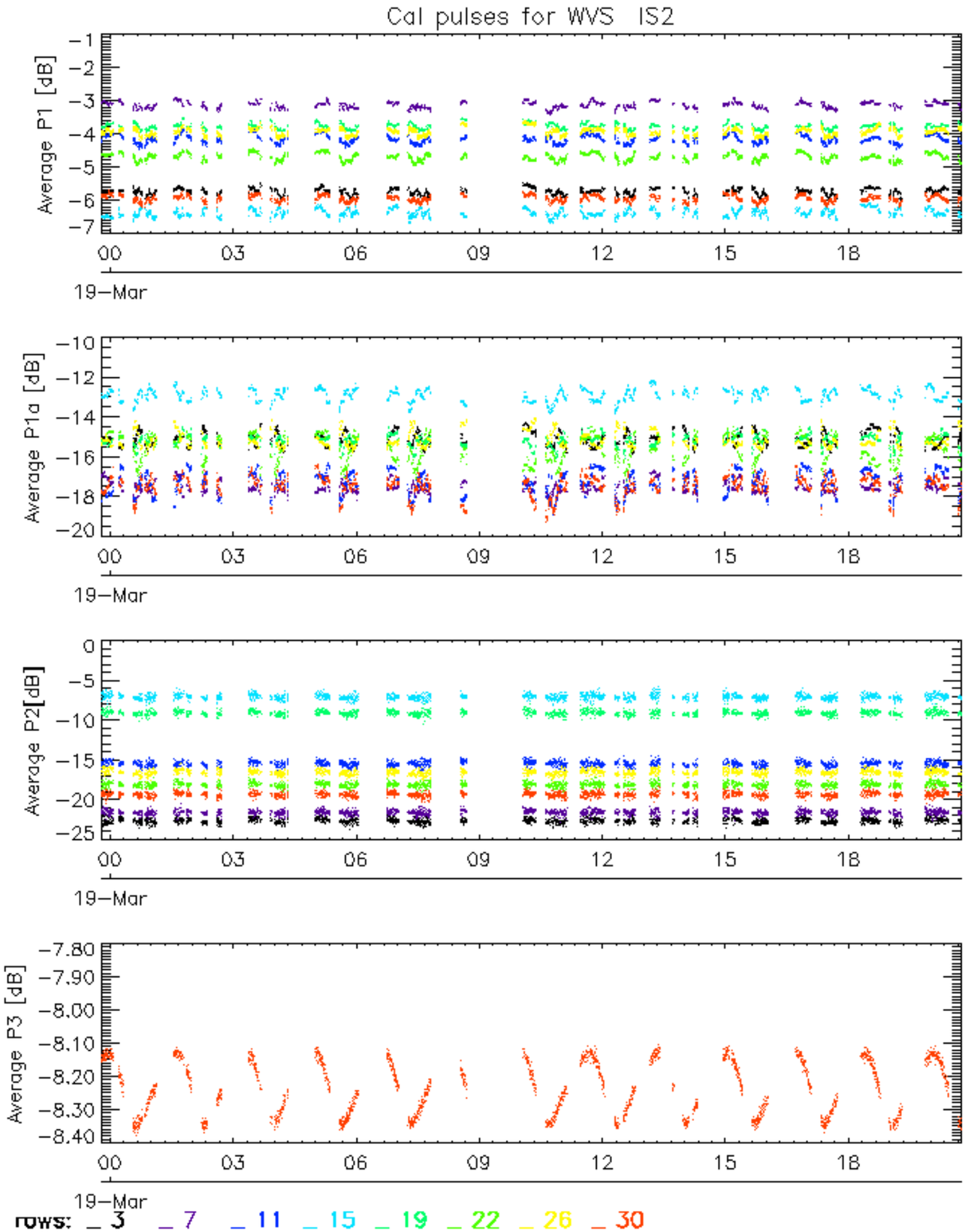


Cal pulses for GM1 SS3
Average P1 [dB]
0
−2
−4
−6
−8
−10
00
03
06
09
12
15
18
19−Mar
Average P1a [dB]
−5
−10
−15
−20
−25
Cal pulses for GM1 SS3
Phase P1 [deg]
200
100
0
−100
−200
Phase P1a [deg]
rows: 3 7 11 15 19 22 26 30


Cal pulses for WVS IS2
Average P1 [dB]
−1
−2
−3
−4
−5
−6
−7
00
03
06
09
12
15
18
19−Mar
Average P1a [dB]
−10
−12
−14
−16
−18
−20
00
03
06
09
12
15
18
19−Mar
Cal pulses for WVS IS2
Phase P1 [deg]
200
100
0
−100
−200
00
03
06
09
12
15
18
19−Mar
Phase P1a [deg]
200
100
0
−100
−200
00
03
06
09
12
15
18
19−Mar
rows: 3 7 11 15 19 22 26 30


Cal pulses for GM1 SS3
Average P1 [dB]
2
0
−2
−4
−6
−8
−10
03−Mar
08−Mar
13−Mar
18−Mar
Average P1a [dB]
−5
−10
−15
−20
−25
Average P2 [dB]
0
−5
−10
−15
−20
−25
−30
Average P3 [dB]
−7.8
−8.0
−8.2
−8.4
rows: 3 7 11 15 19 22 26 30

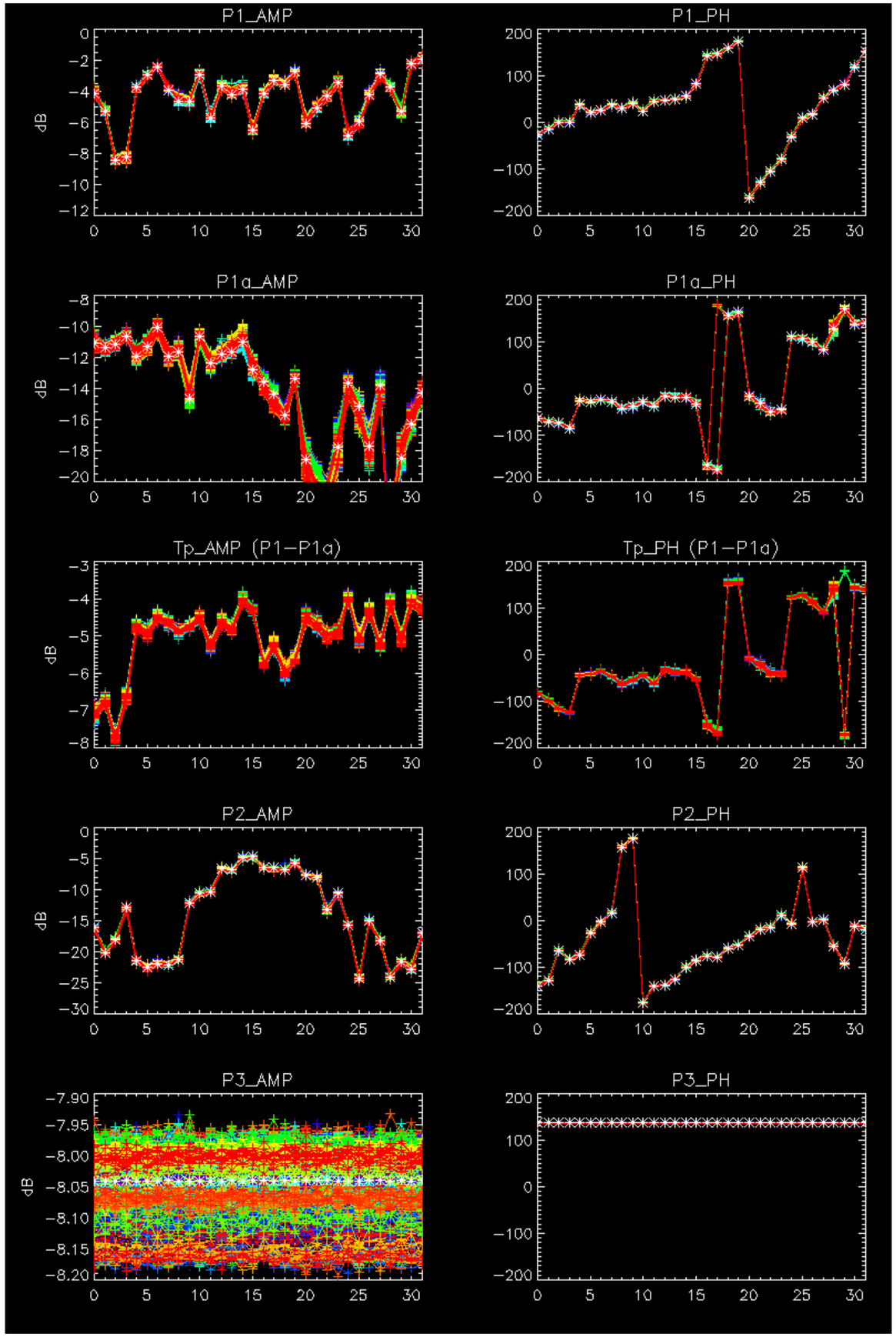

Cal pulses for GM1 SS3
Average P1 [dB]
0
−2
−4
−6
−8
−10
00
03
06
09
12
15
18
19−Mar
Average P1a [dB]
−5
−10
−15
−20
−25
Average P2[dB]
Average P3 [dB]
−7.80
−7.90
−8.00
−8.10
−8.20
−8.30
−8.40
rows: 3 7 11 15 19 22 26 30

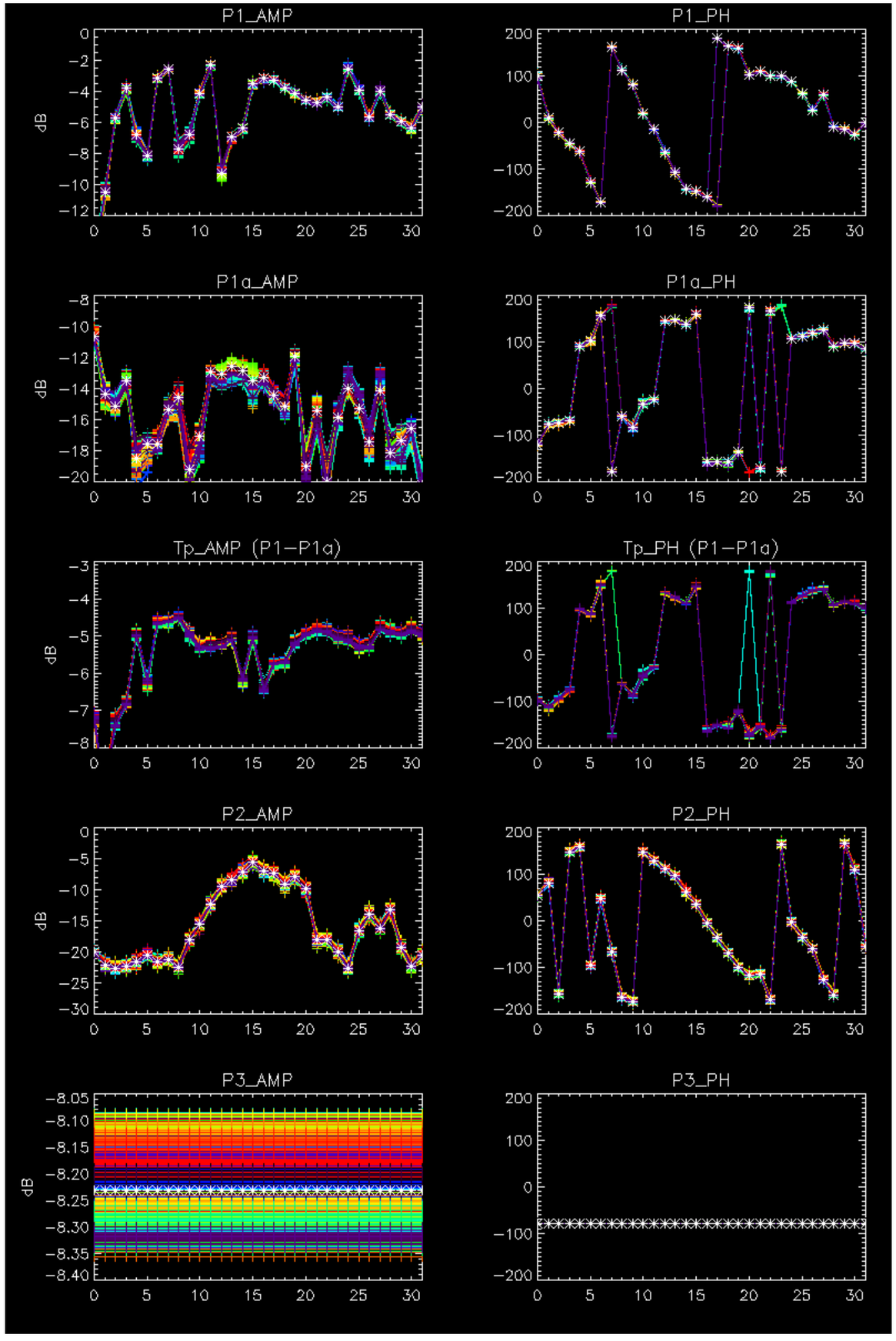

Cal pulses for WVS IS2
Average P1 [dB]
−1
−2
−3
−4
−5
−6
−7
03−Mar
08−Mar
13−Mar
18−Mar
Average P1a [dB]
−8
−10
−12
−14
−16
−18
−20
03−Mar
08−Mar
13−Mar
18−Mar
Average P2 [dB]
0
−5
−10
−15
−20
−25
03−Mar
08−Mar
13−Mar
18−Mar
Average P3 [dB]
−7.8
−8.0
−8.2
−8.4
03−Mar
08−Mar
13−Mar
18−Mar
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30


Cal pulses for WVS IS2
Average P1 [dB]
−1
−2
−3
−4
−5
−6
−7
00
03
06
09
12
15
18
19−Mar
Average P1a [dB]
−10
−12
−14
−16
−18
−20
00
03
06
09
12
15
18
19−Mar
Average P2[dB]
0
−5
−10
−15
−20
−25
00
03
06
09
12
15
18
19−Mar
Average P3 [dB]
−7.80
−7.90
−8.00
−8.10
−8.20
−8.30
−8.40
00
03
06
09
12
15
18
19−Mar
rows: 3 7 11 15 19 22 26 30

No anomalies observed on available browse products

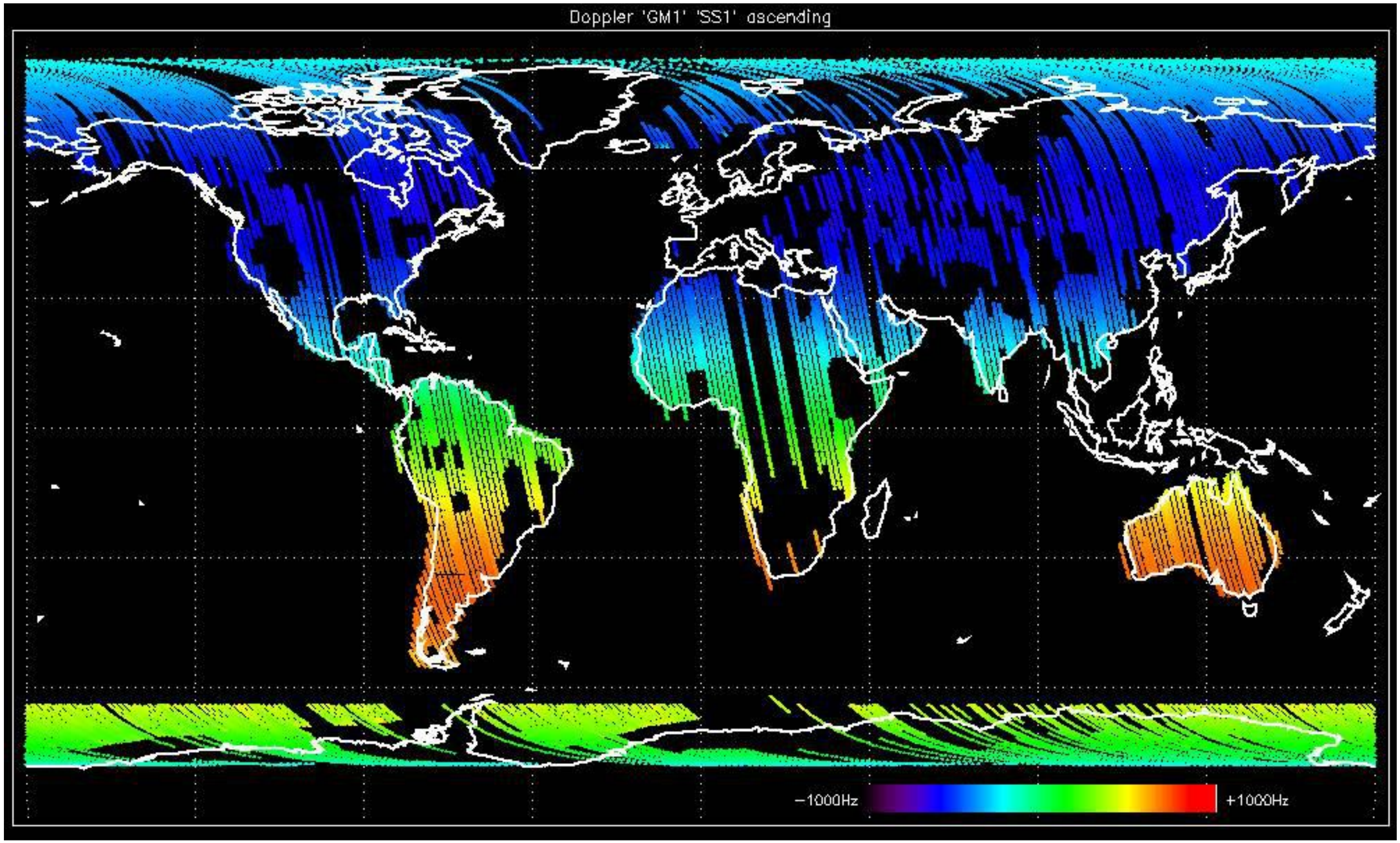
No anomalies observed.

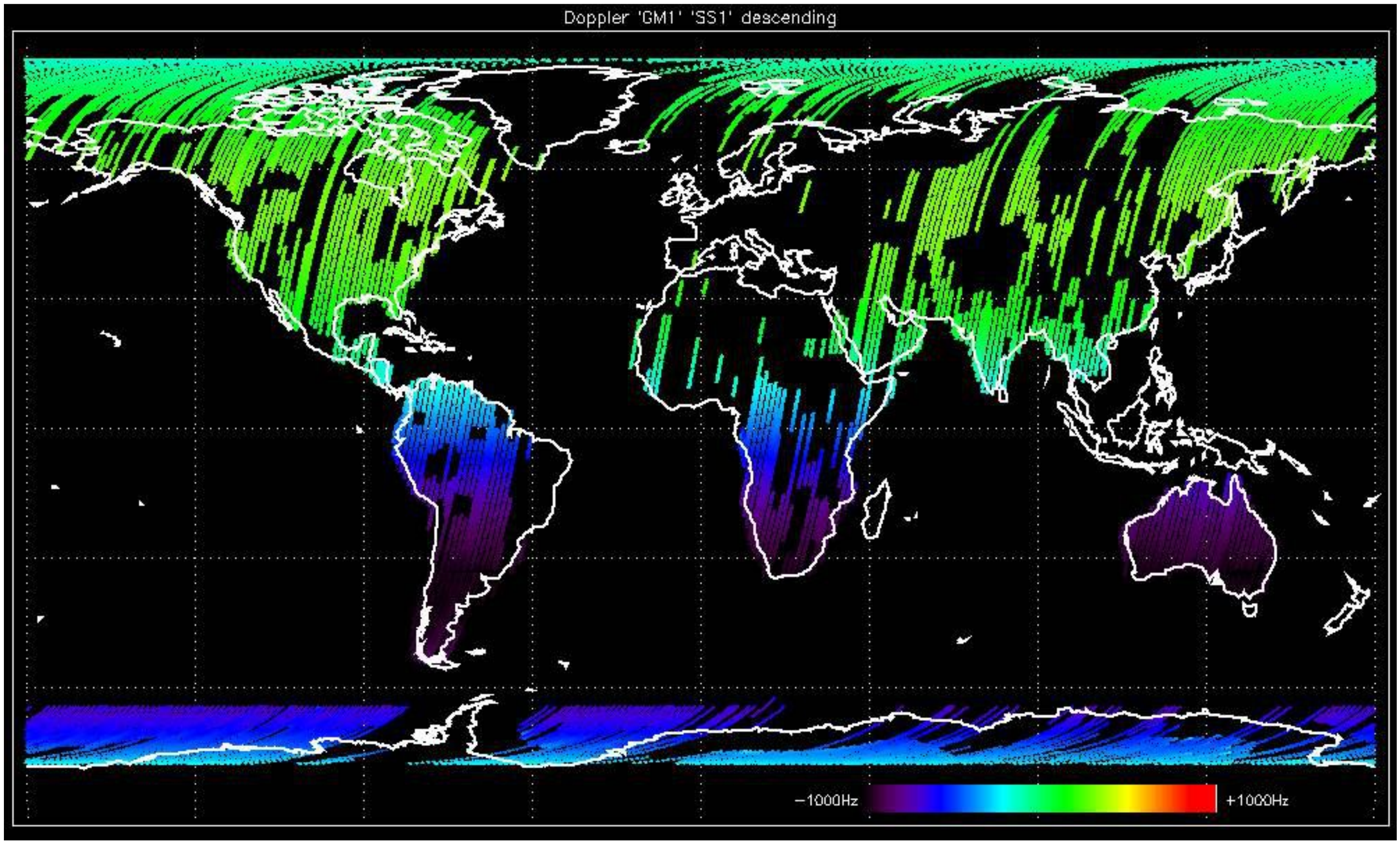

P1_AMP
dB
P1_PH
P1a_AMP
dB
P1a_PH
Tp_AMP (P1−P1a)
dB
Tp_PH (P1−P1a)
P2_AMP
dB
P2_PH
P3_AMP
dB
P3_PH

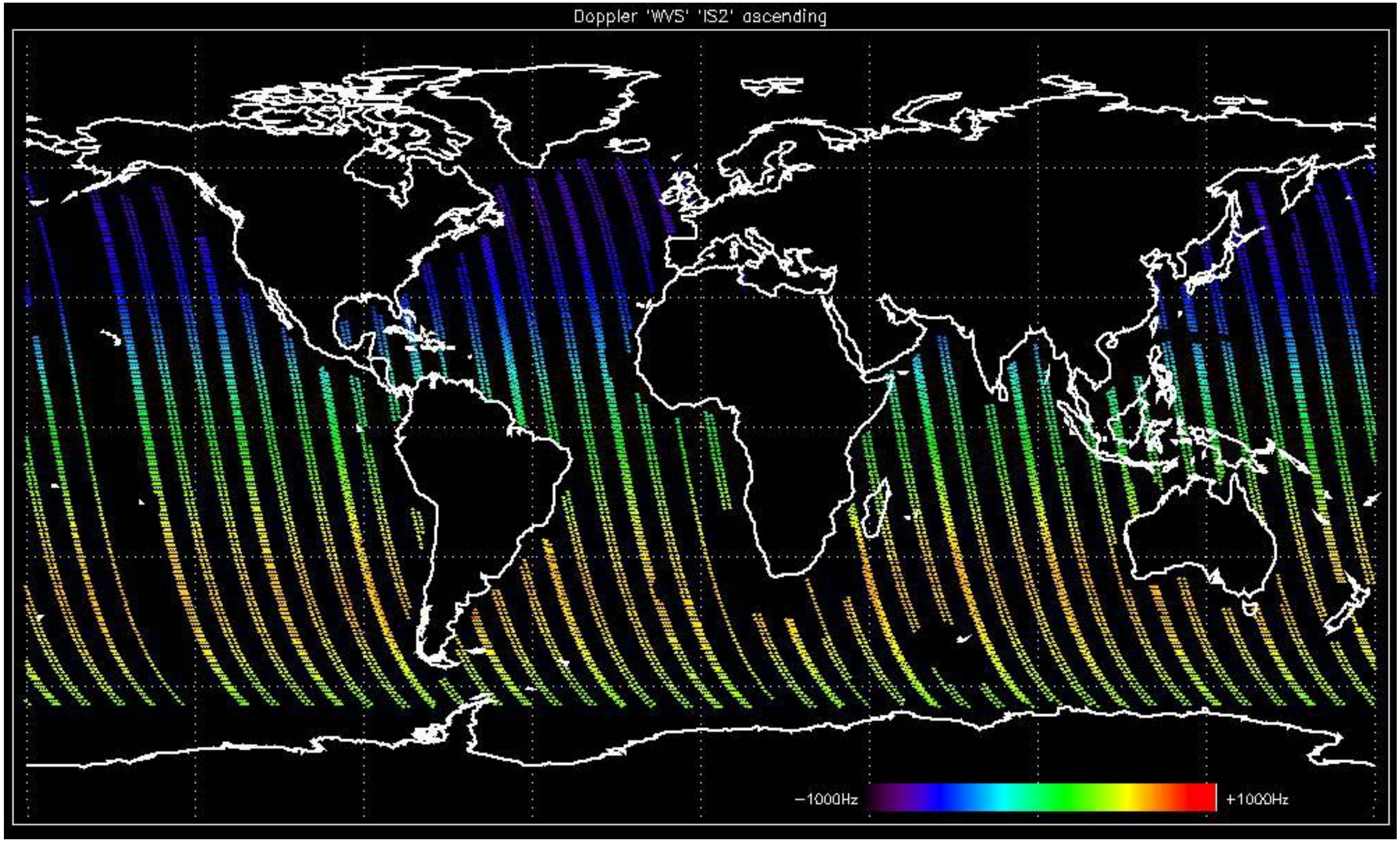

P1_AMP
dB
P1_PH
P1a_AMP
dB
P1a_PH
Tp_AMP (P1−P1a)
dB
Tp_PH (P1−P1a)
P2_AMP
dB
P2_PH
P3_AMP
dB
P3_PH

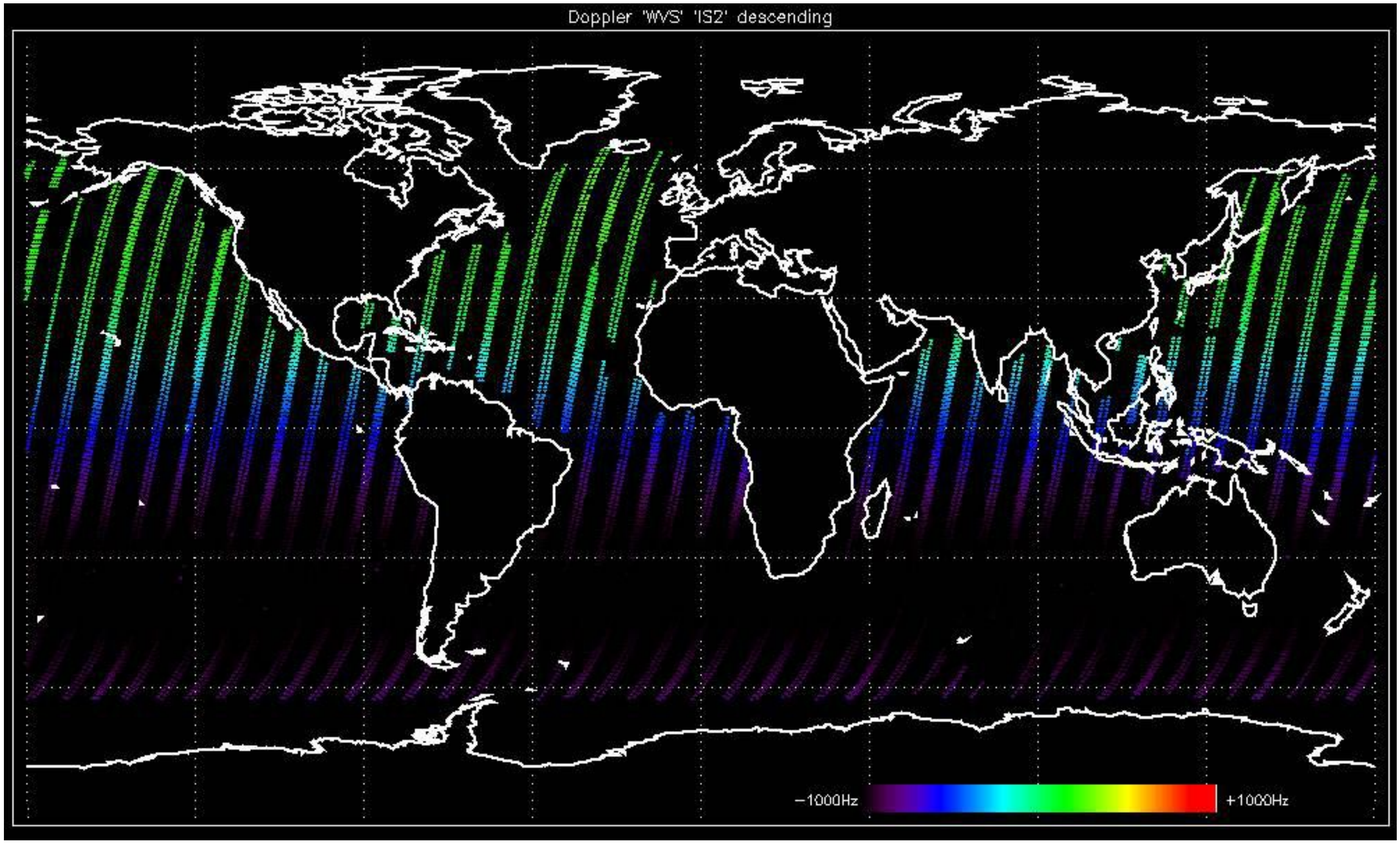
-Stable wave internal calibration pulses gain and phase.
-Stable raw data statistics.
-Nominal Doppler behavior.

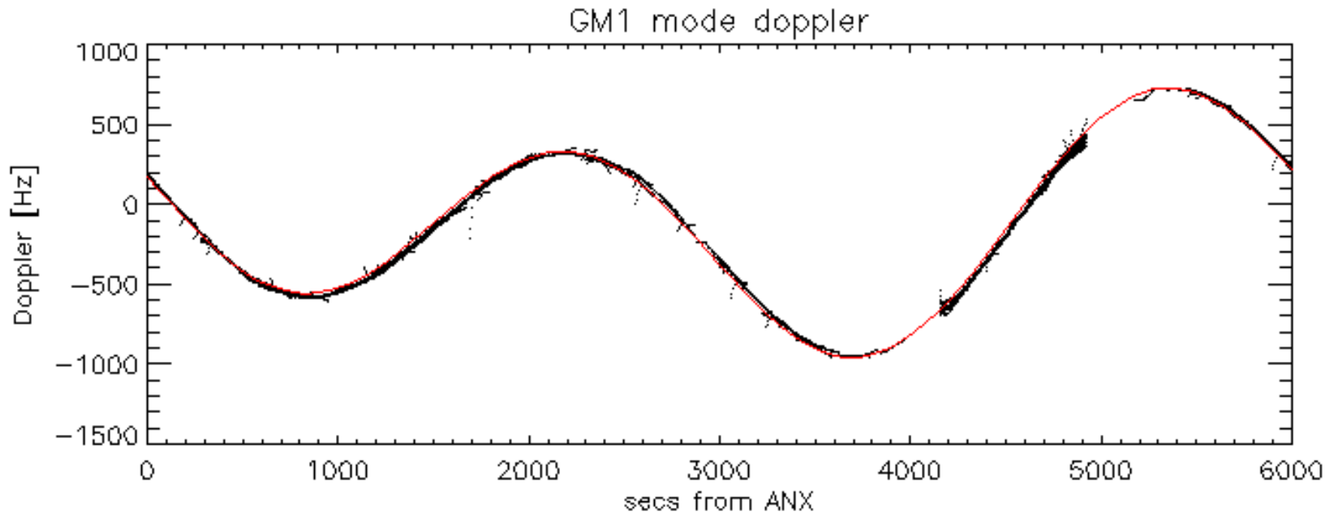
Preliminary report.The data is not yet controled

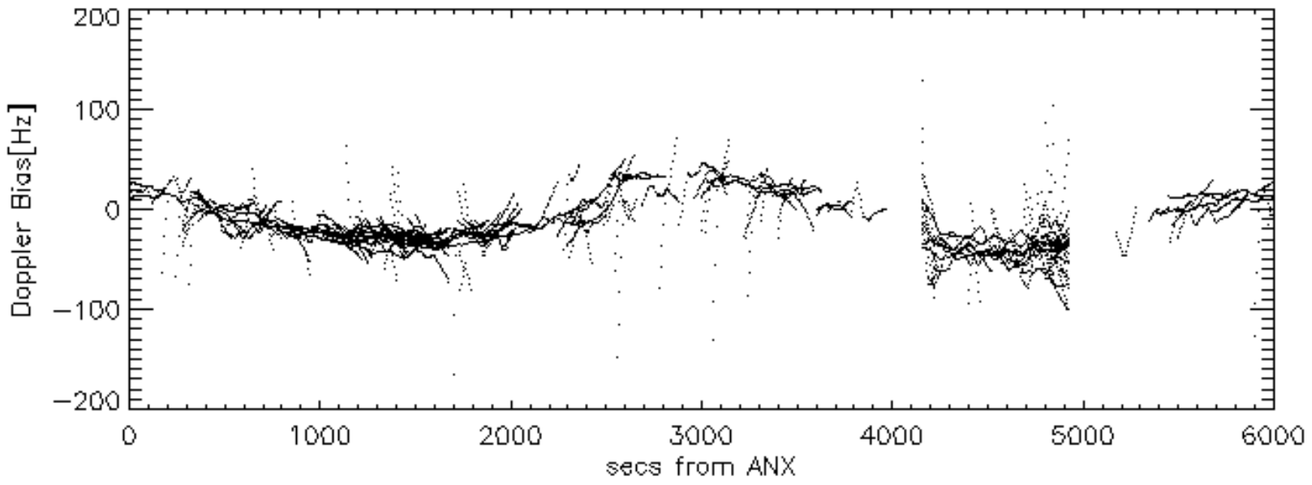

Doppler 'GM1' 'SS1' ascending
−1000Hz
+1000Hz

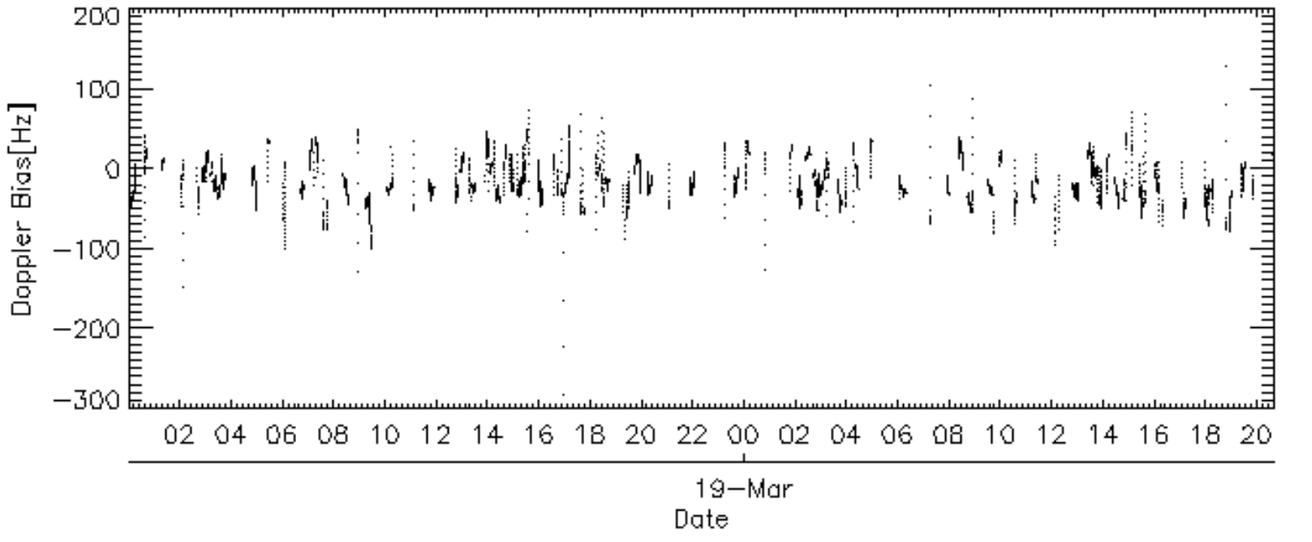

Doppler 'GM1' 'SS1' descending
−1000Hz
+1000Hz

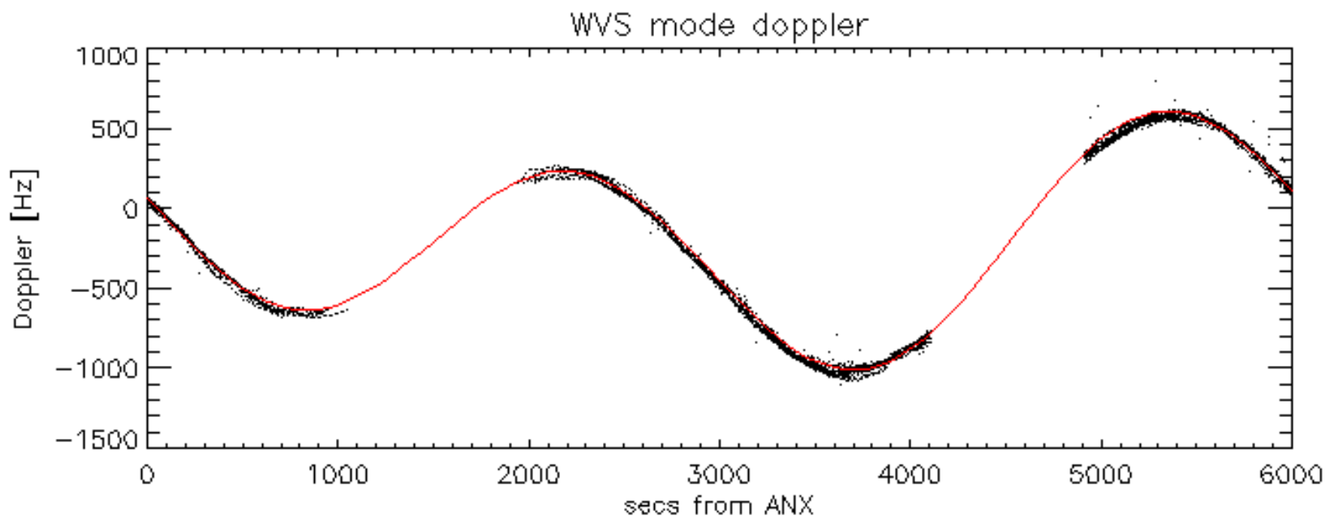

Doppler 'WVS' 'IS2' ascending
−1000Hz
+1000Hz

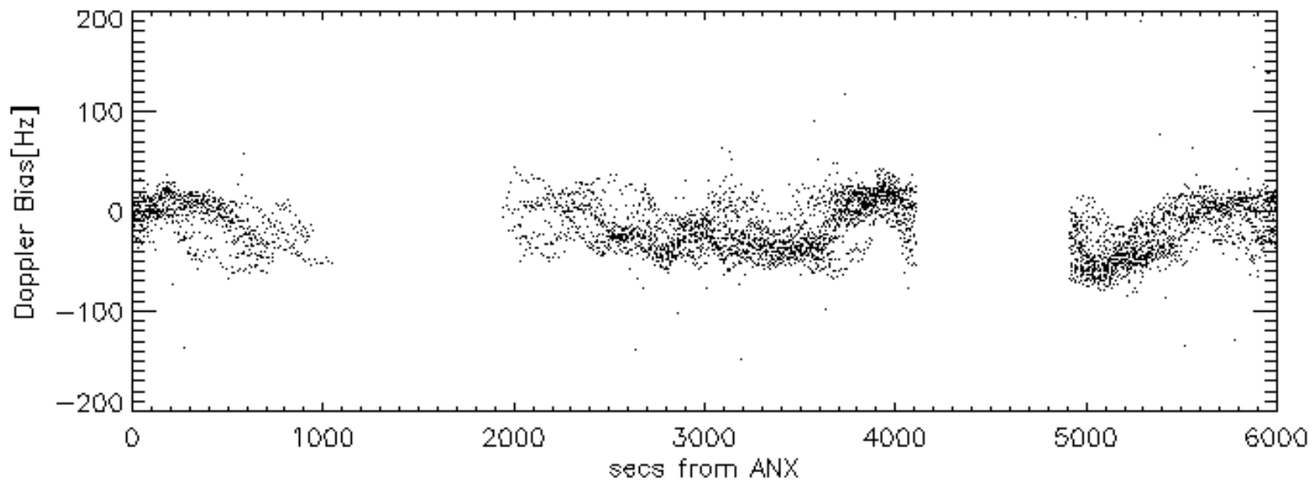

Doppler 'WVS' 'IS2' descending
−1000Hz
+1000Hz

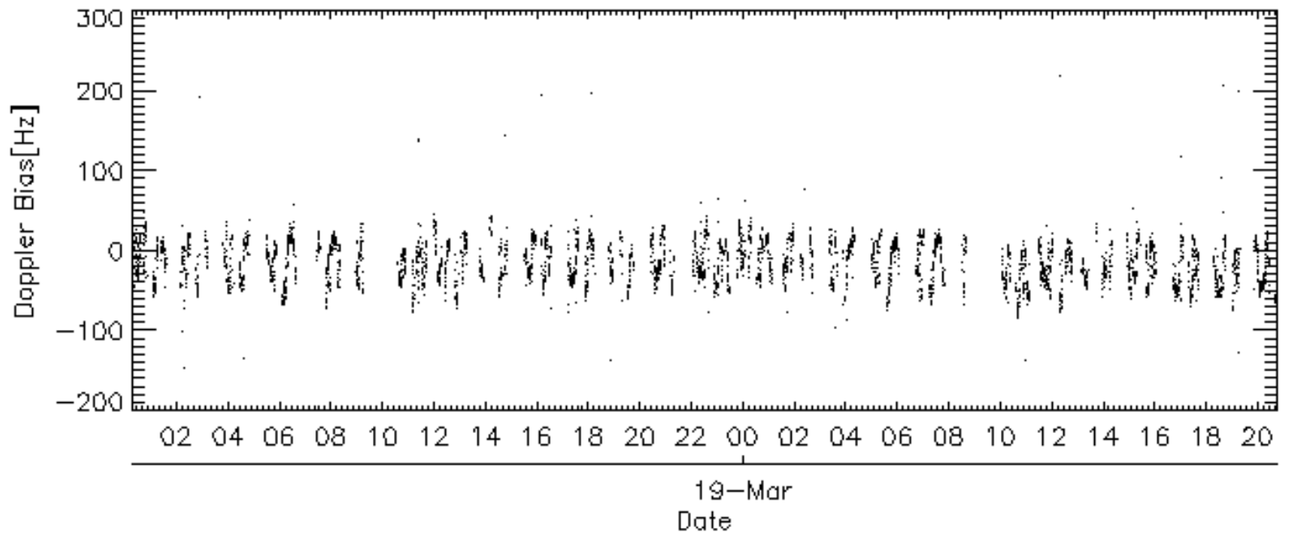

GM1 mode doppler
Doppler [Hz]
1000
500
0
−500
−1000
−1500
0
1000
2000
3000
4000
5000
6000
secs from ANX

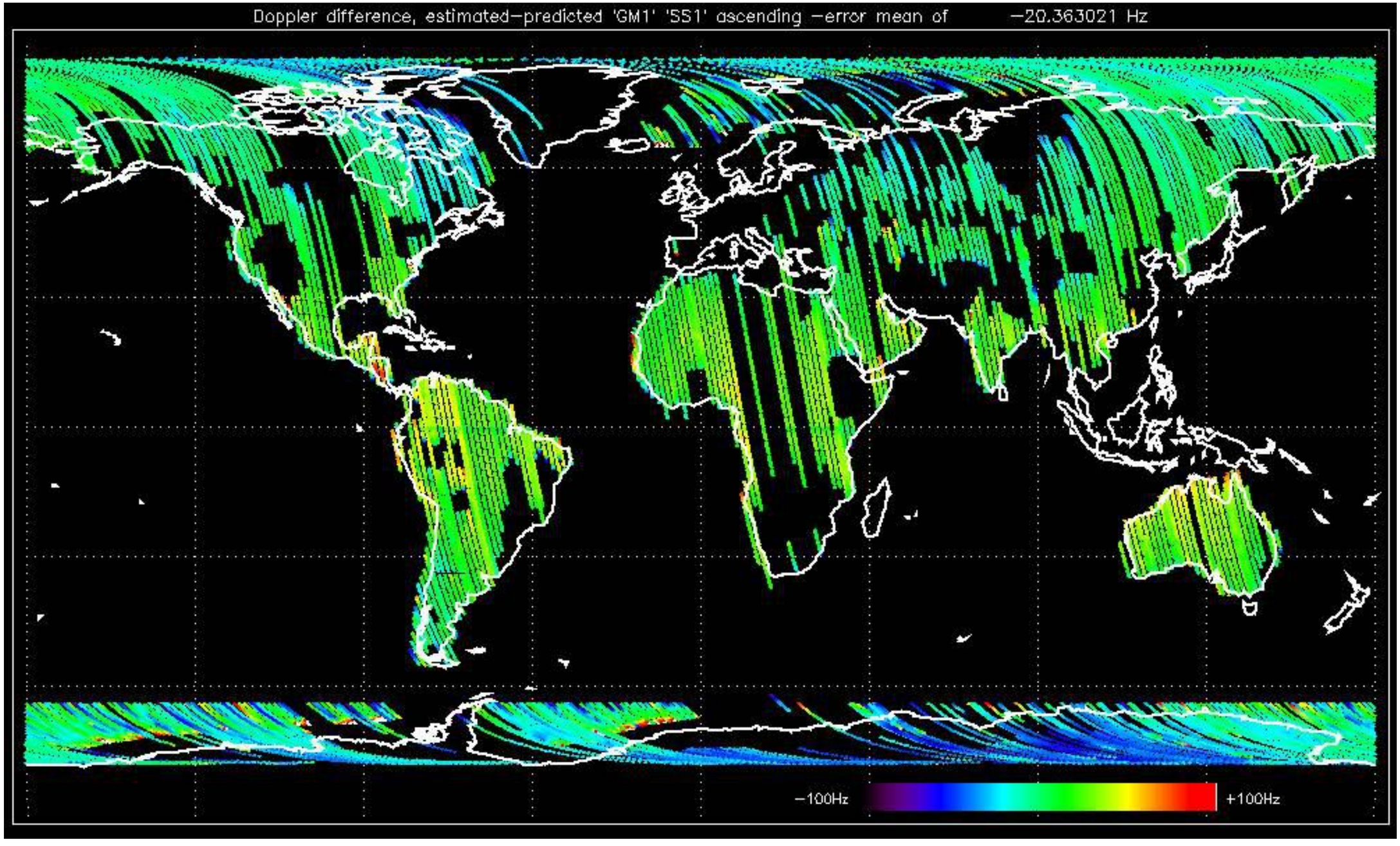

Doppler Bias[Hz]
200
100
0
−100
−200
0
1000
2000
3000
4000
5000
6000
secs from ANX

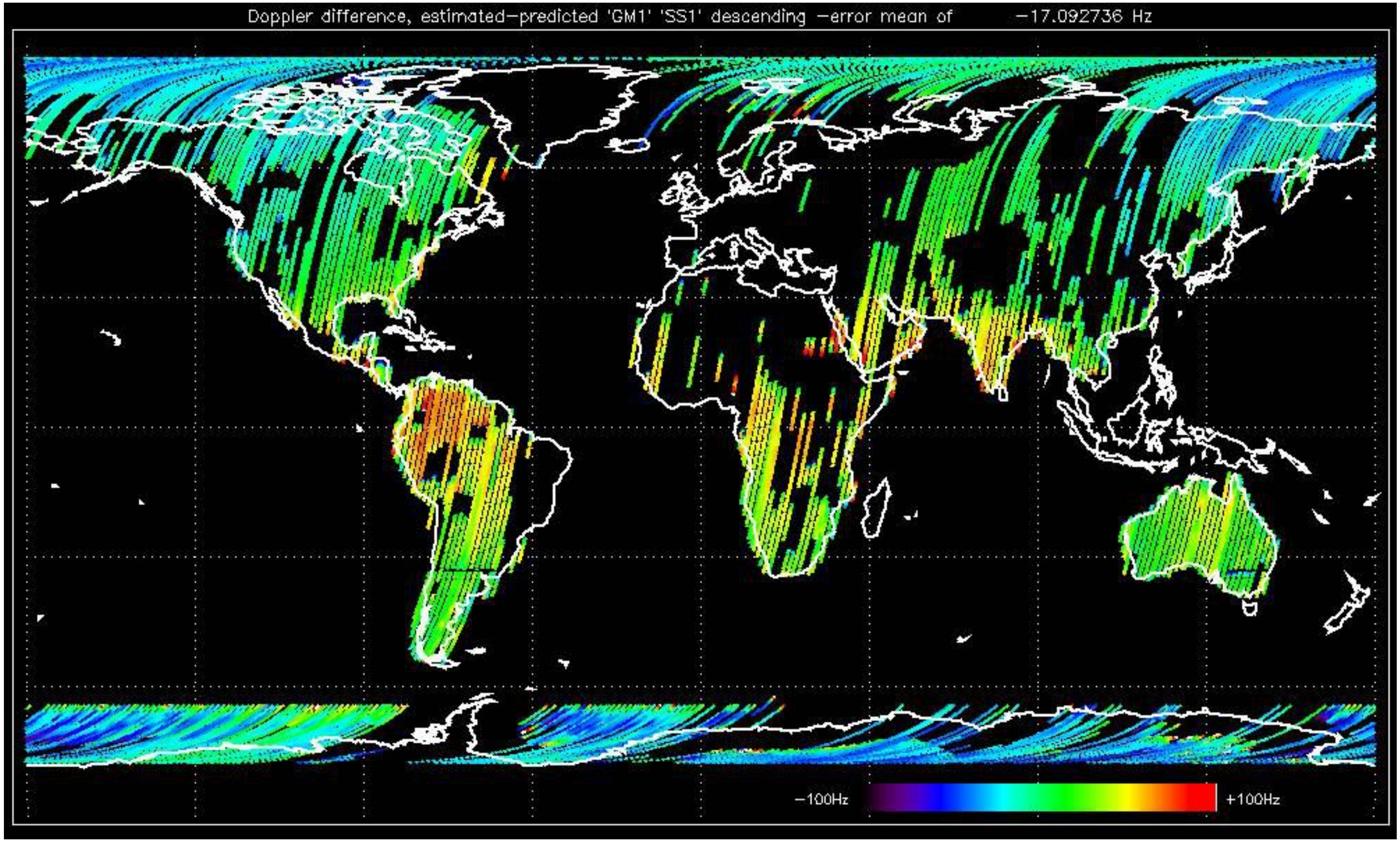

Doppler Bias[Hz]
200
100
0
−100
−200
−300
02 04 06 08 10 12 14 16 18 20 22 00 02 04 06 08 10 12 14 16 18 20
19−Mar
Date

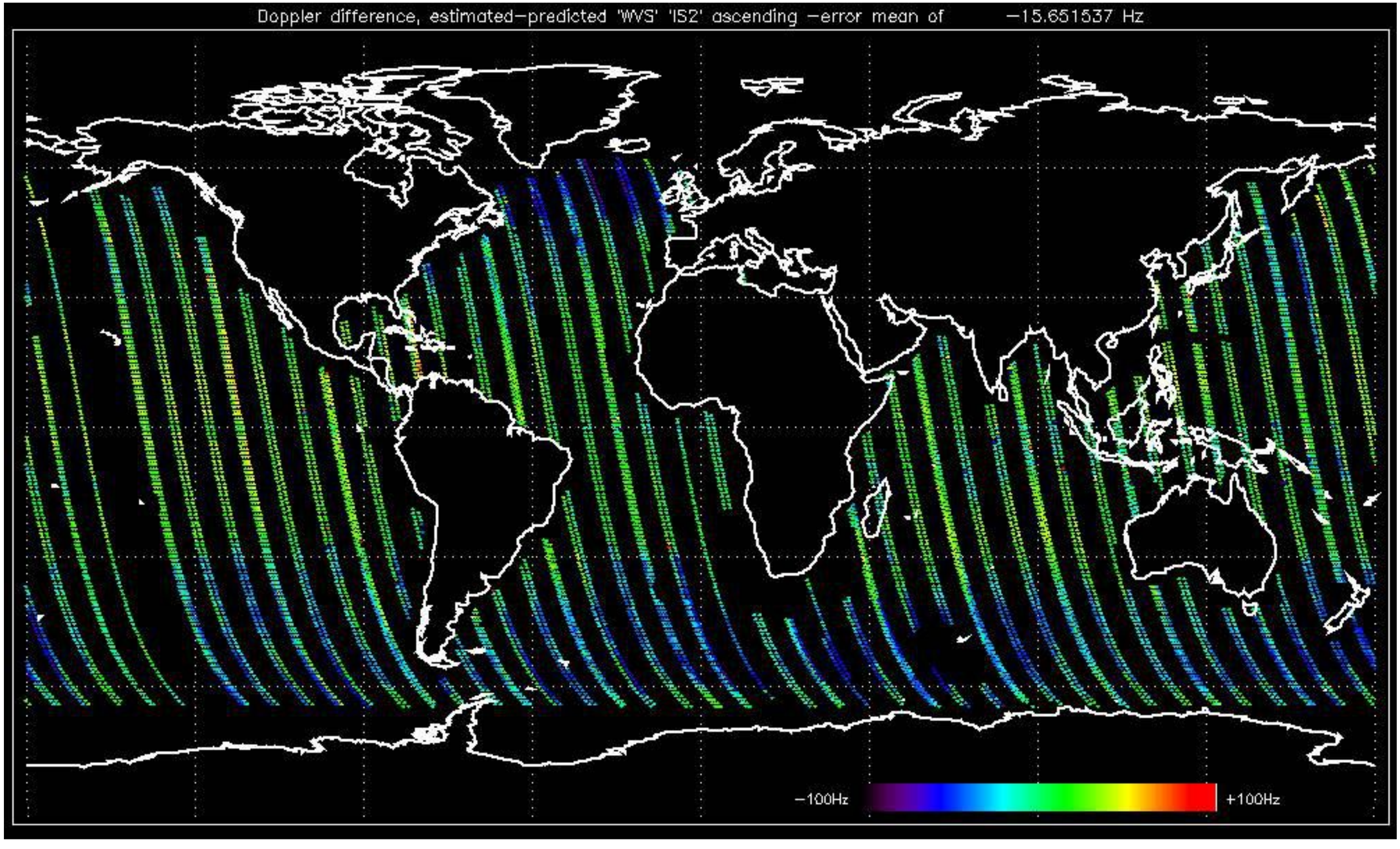

WVS mode doppler
Doppler [Hz]
1000
500
0
−500
−1000
−1500
0
1000
2000
3000
4000
5000
6000
secs from ANX

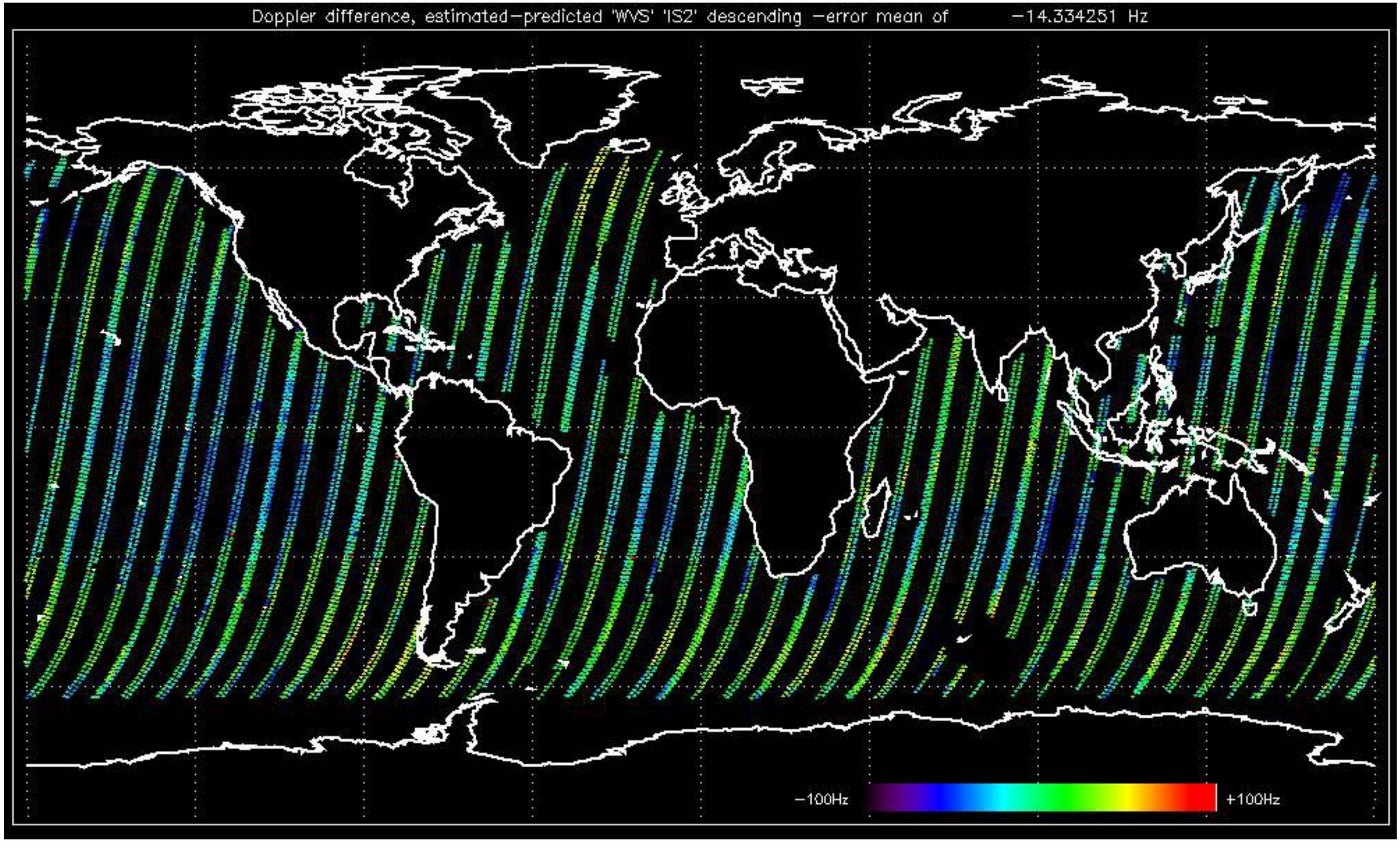

Doppler Bias[Hz]
200
100
0
−100
−200
0
1000
2000
3000
4000
5000
6000
secs from ANX


Doppler Bias[Hz]
300
200
100
0
−100
−200
02 04 06 08 10 12 14 16 18 20 22 00 02 04 06 08 10 12 14 16 18 20
19−Mar
Date


Doppler difference, estimated−predicted 'GM1' 'SS1' ascending −error mean of −20.363021 Hz
−100Hz
+100Hz

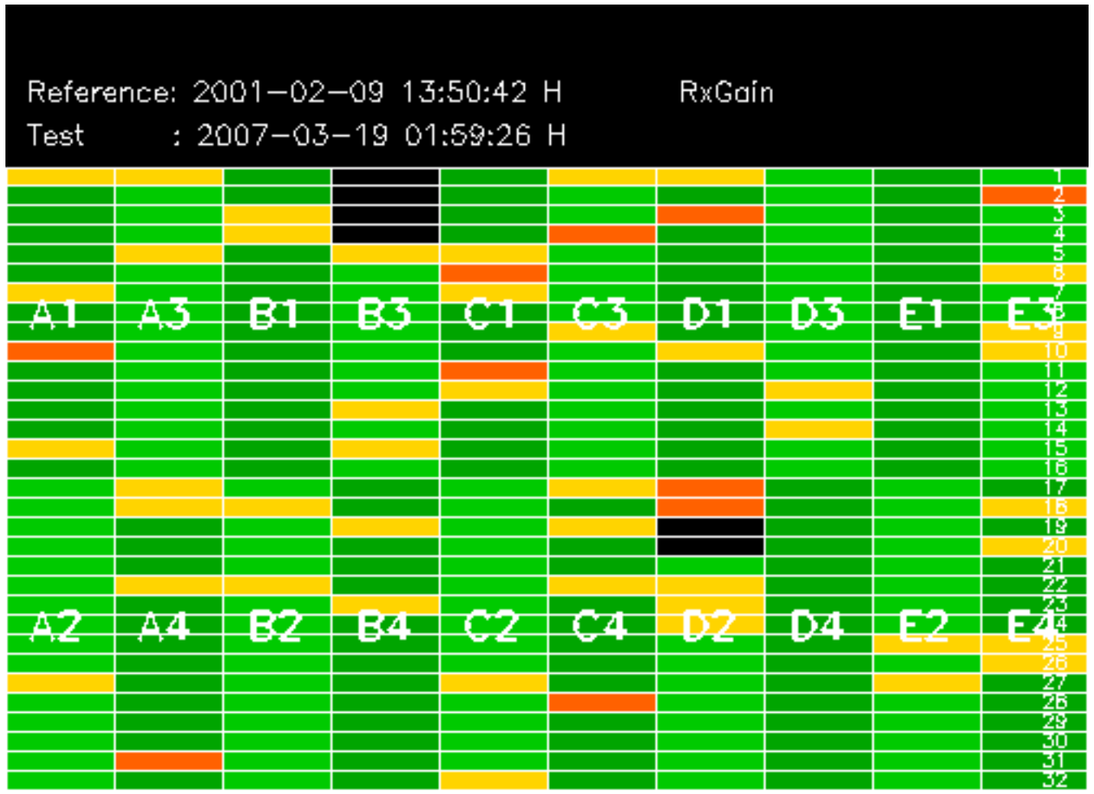

Doppler difference, estimated−predicted 'GM1' 'SS1' descending −error mean of −17.092736 Hz
−100Hz
+100Hz

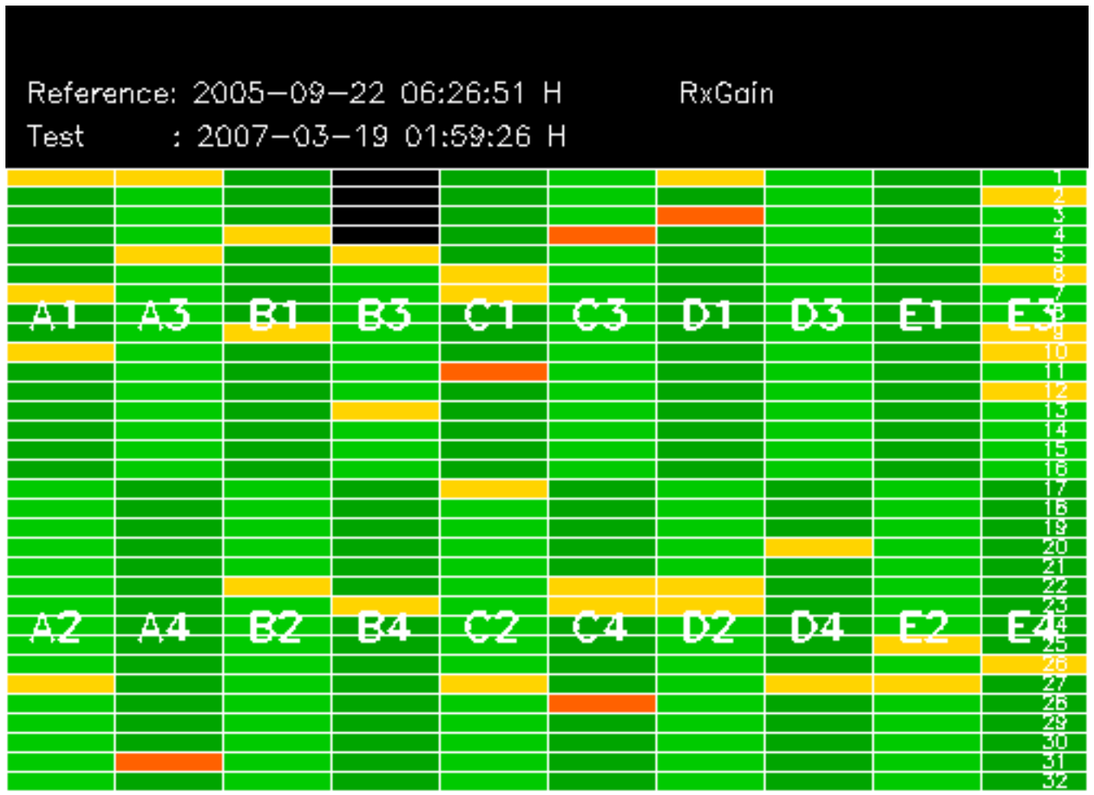

Doppler difference, estimated−predicted 'WVS' 'IS2' ascending −error mean of −15.651537 Hz
−100Hz
+100Hz

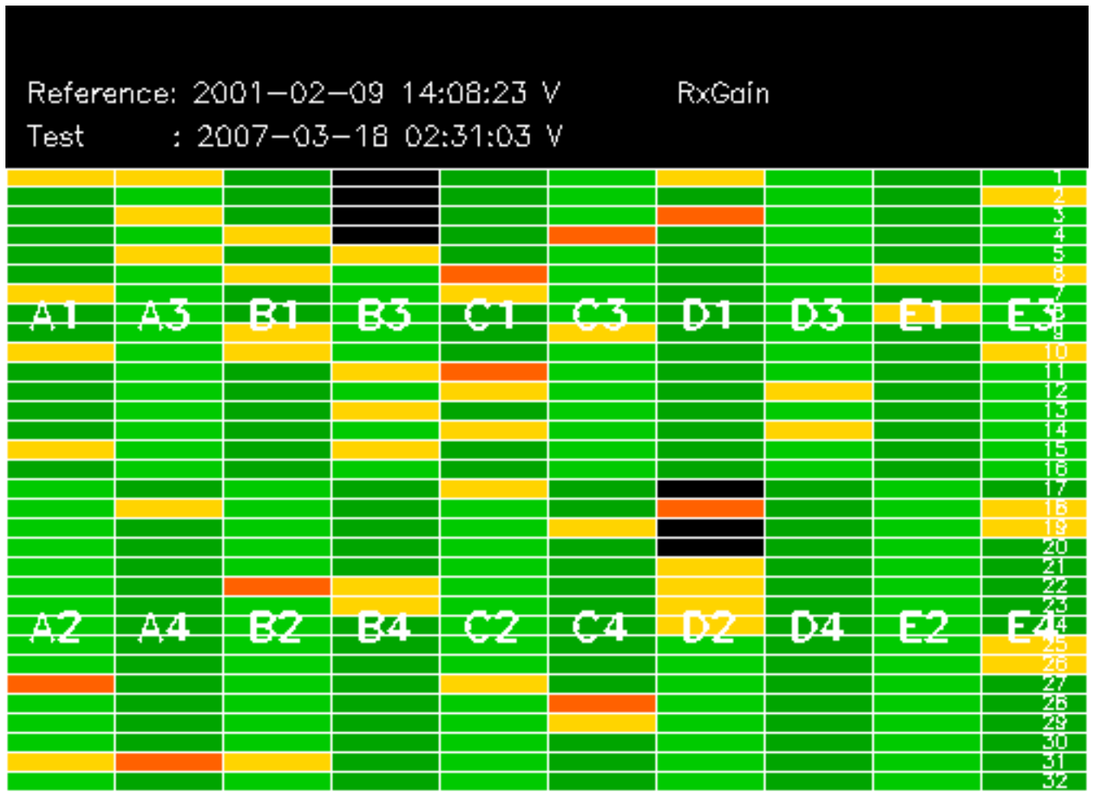

Doppler difference, estimated−predicted 'WVS' 'IS2' descending −error mean of −14.334251 Hz
−100Hz
+100Hz

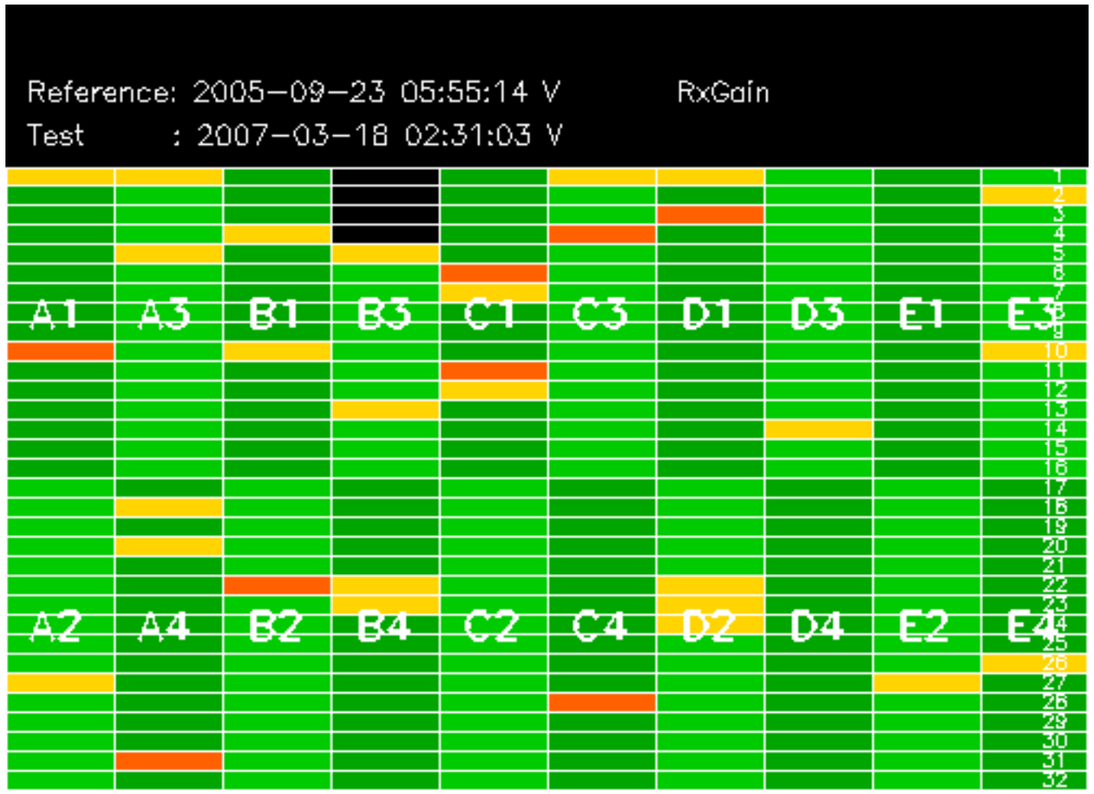
No anomalies observed on available MS products:

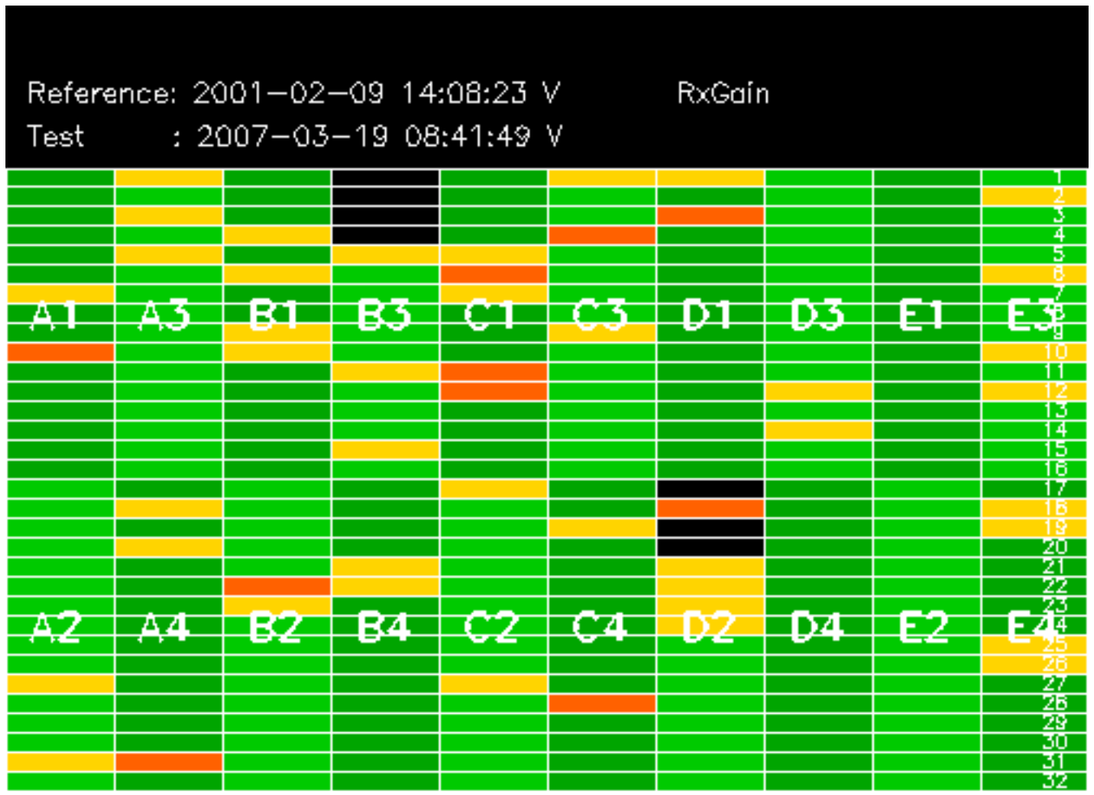
No anomalies observed.

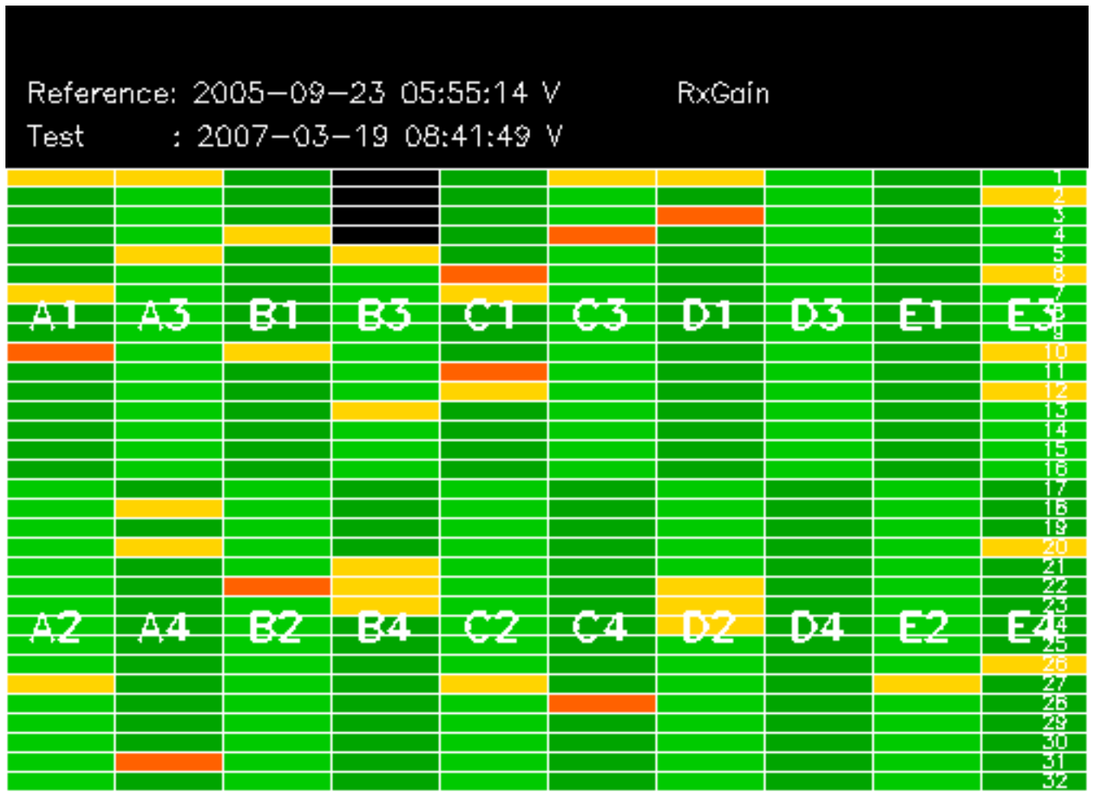

Reference: 2001-02-09 13:50:42 H
RxGain
Test : 2007-03-19 01:59:26 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

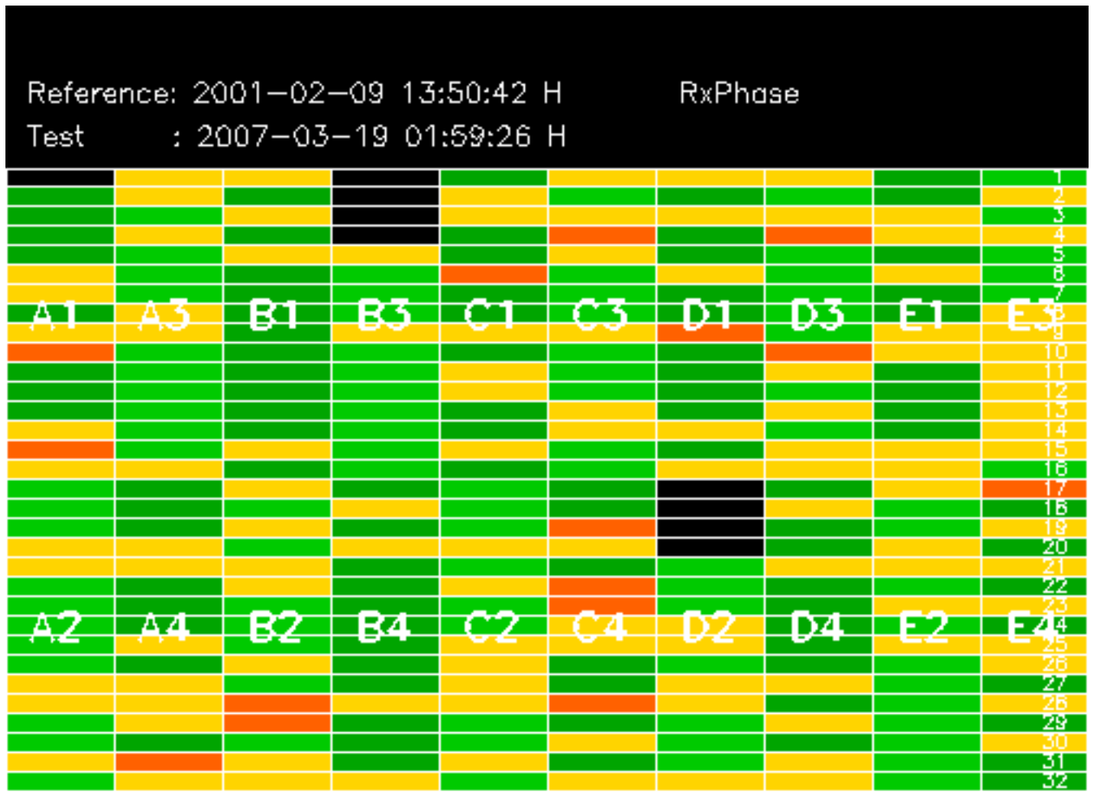

Reference: 2005-09-22 06:26:51 H
RxGain
Test : 2007-03-19 01:59:26 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

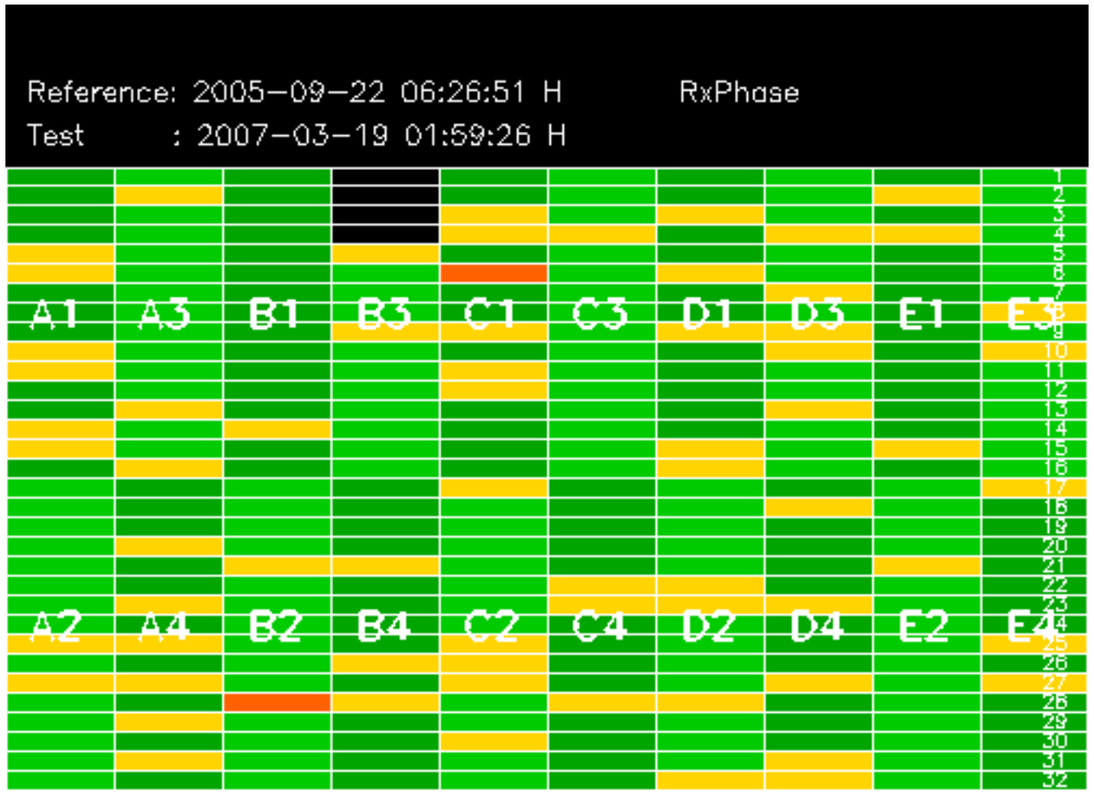

Reference: 2001-02-09 14:08:23 V
Test : 2007-03-18 02:31:03 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

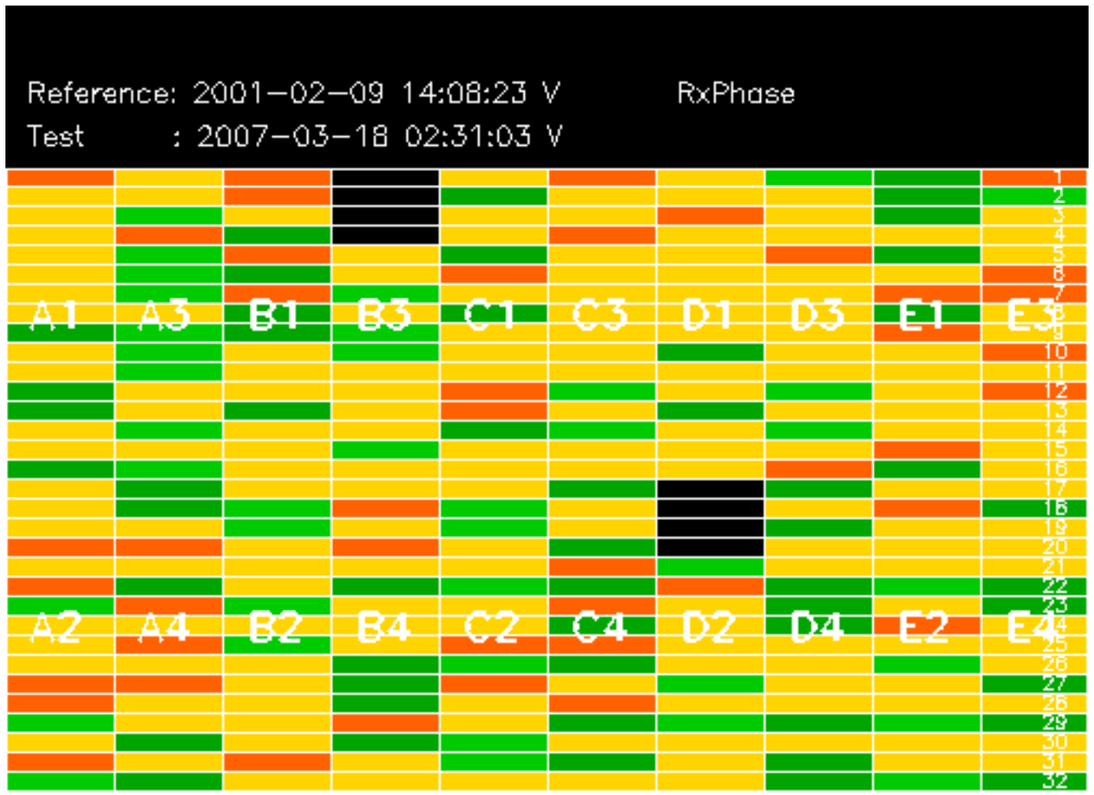

Reference: 2005-09-23 05:55:14 V
Test : 2007-03-18 02:31:03 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

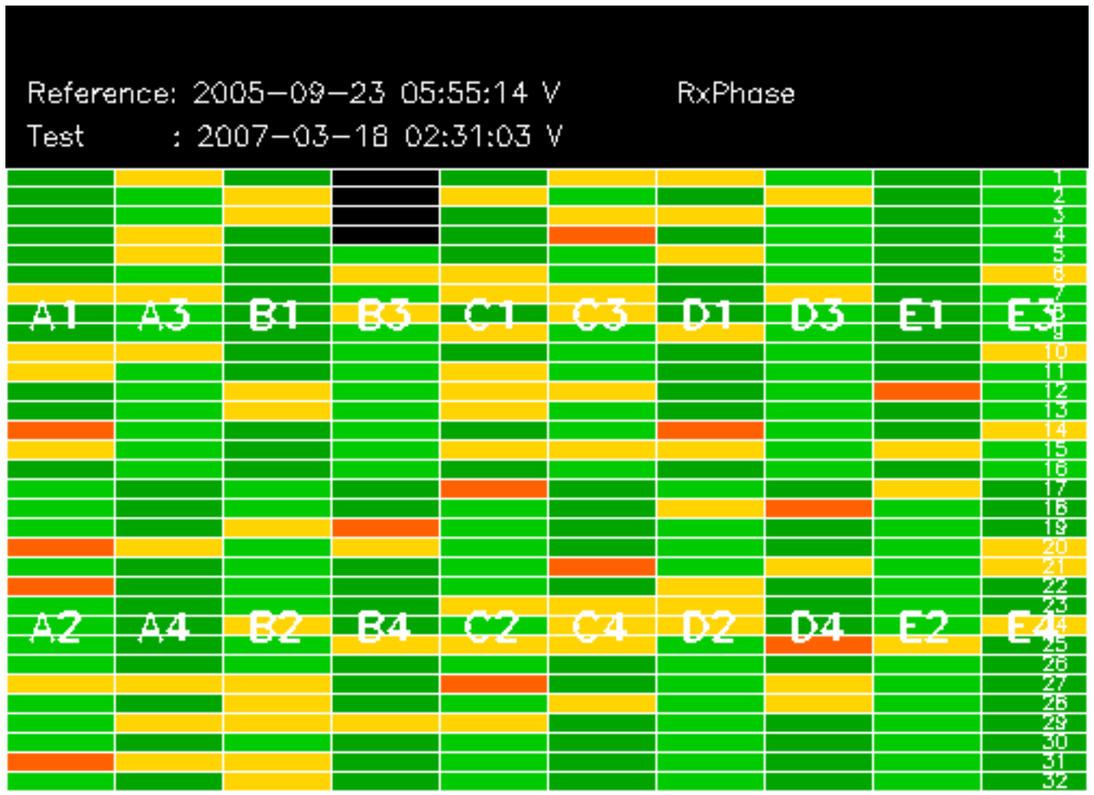

Reference: 2001-02-09 14:08:23 V
Test : 2007-03-19 08:41:49 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

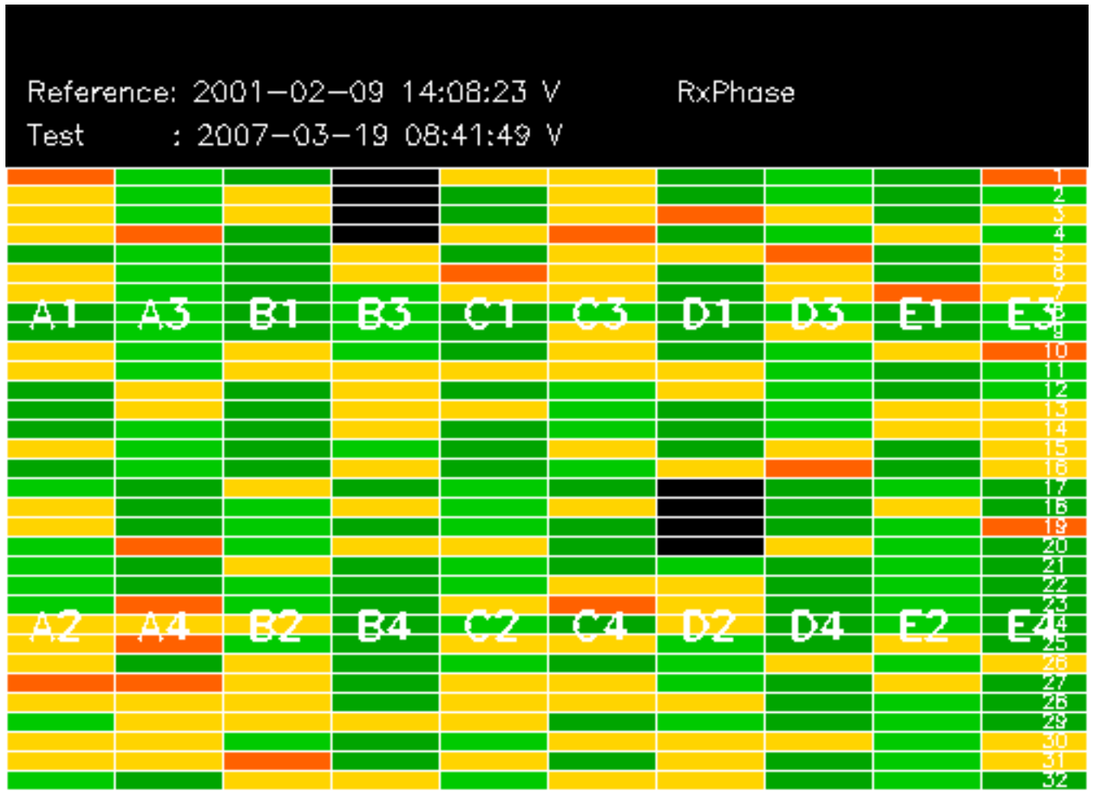

Reference: 2005-09-23 05:55:14 V
Test : 2007-03-19 08:41:49 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

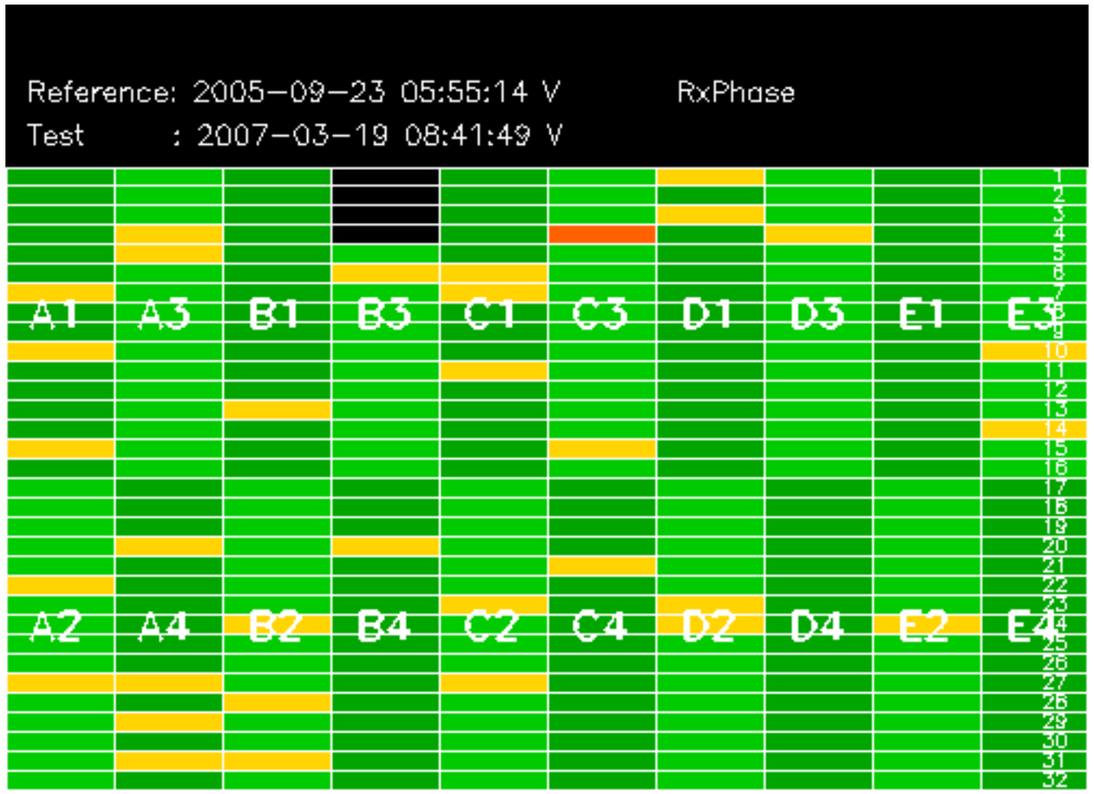

Reference: 2001-02-09 13:50:42 H
RxPhase
Test : 2007-03-19 01:59:26 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

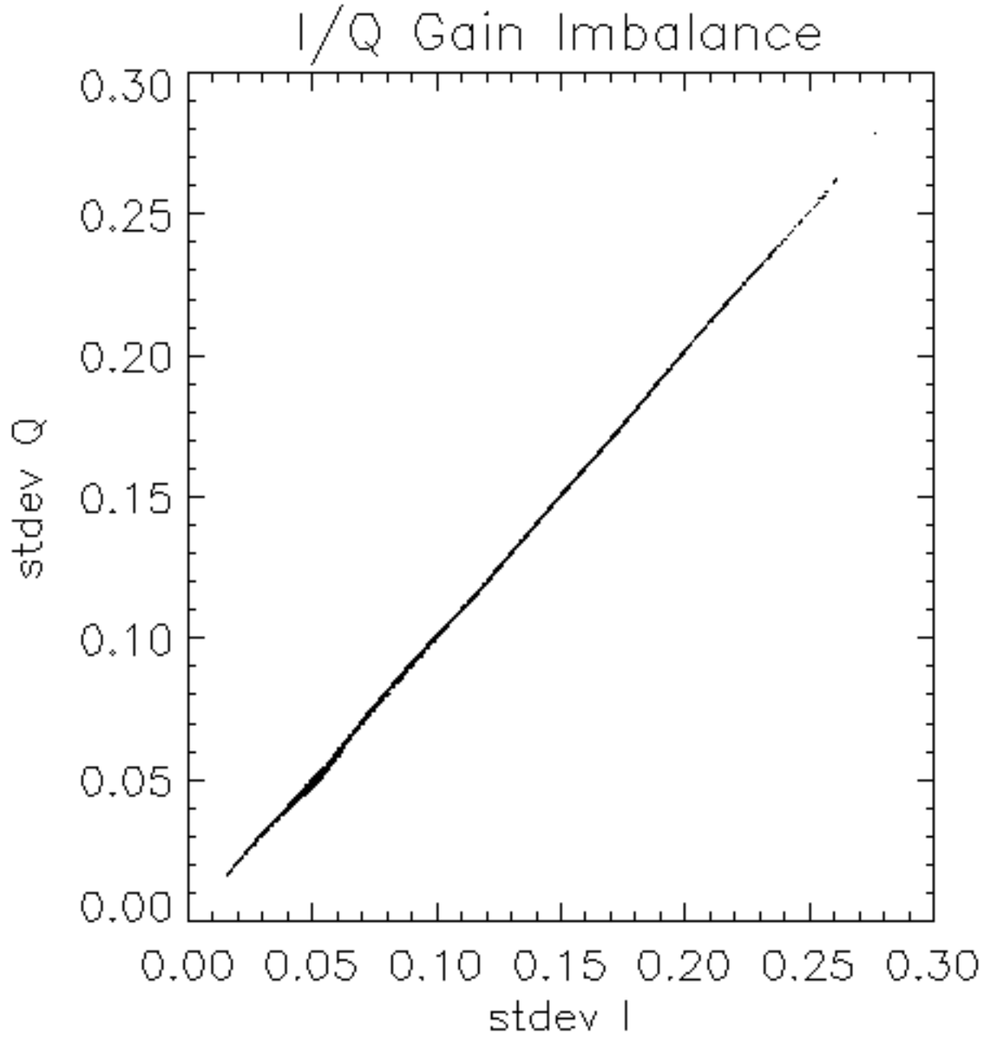

Reference: 2005-09-22 06:26:51 H
RxPhase
Test : 2007-03-19 01:59:26 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

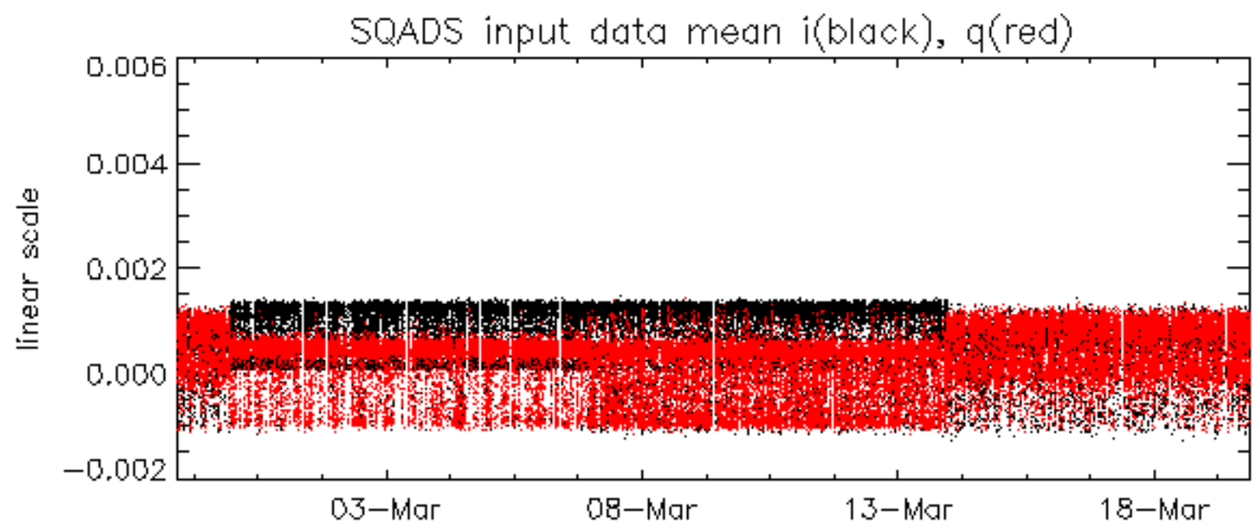

Reference: 2001-02-09 14:08:23 V
Test : 2007-03-18 02:31:03 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

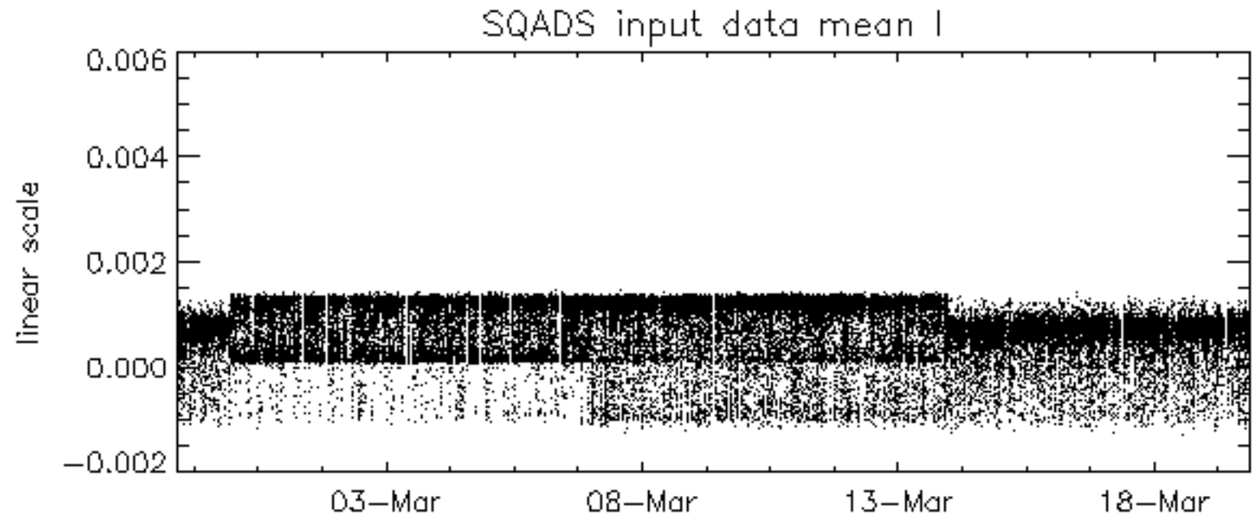

Reference: 2005-09-23 05:55:14 V
Test : 2007-03-18 02:31:03 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

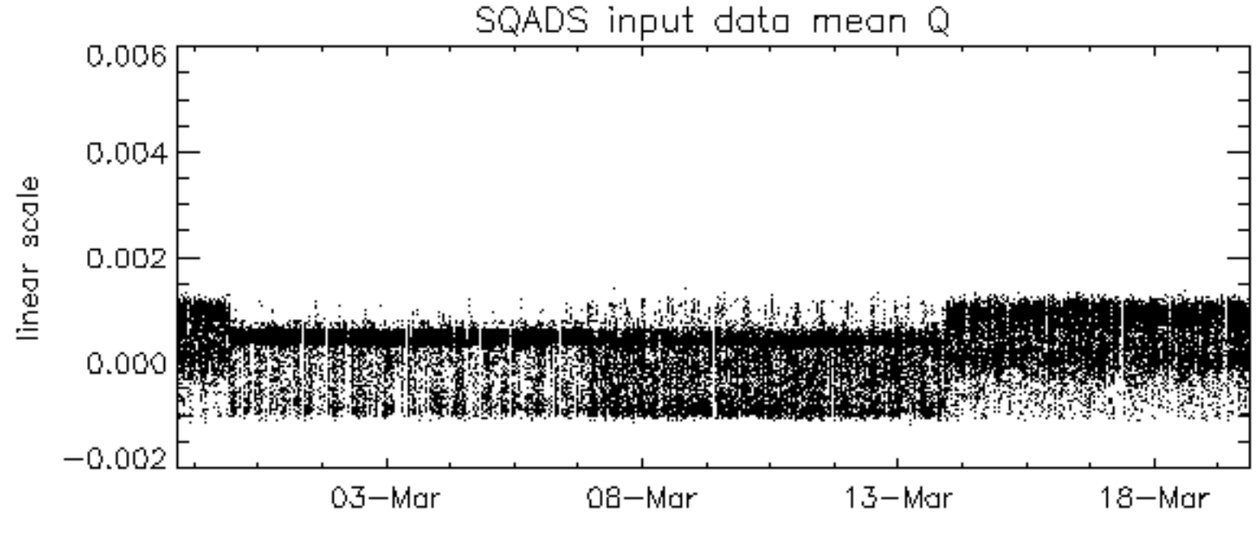

Reference: 2001-02-09 14:08:23 V
RxPhase
Test : 2007-03-19 08:41:49 V
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

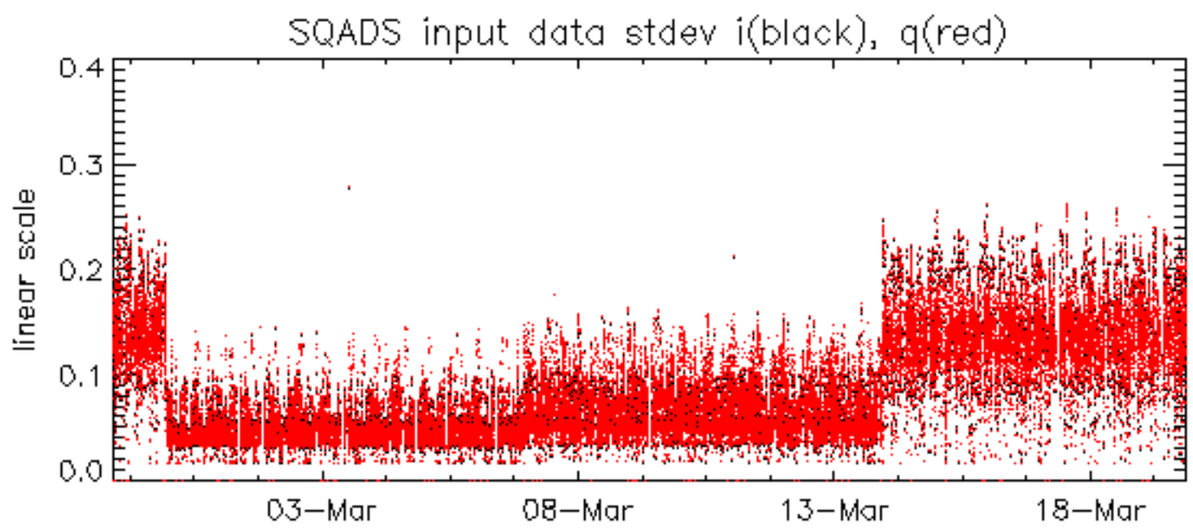

Reference: 2005-09-23 05:55:14 V
Test : 2007-03-19 08:41:49 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

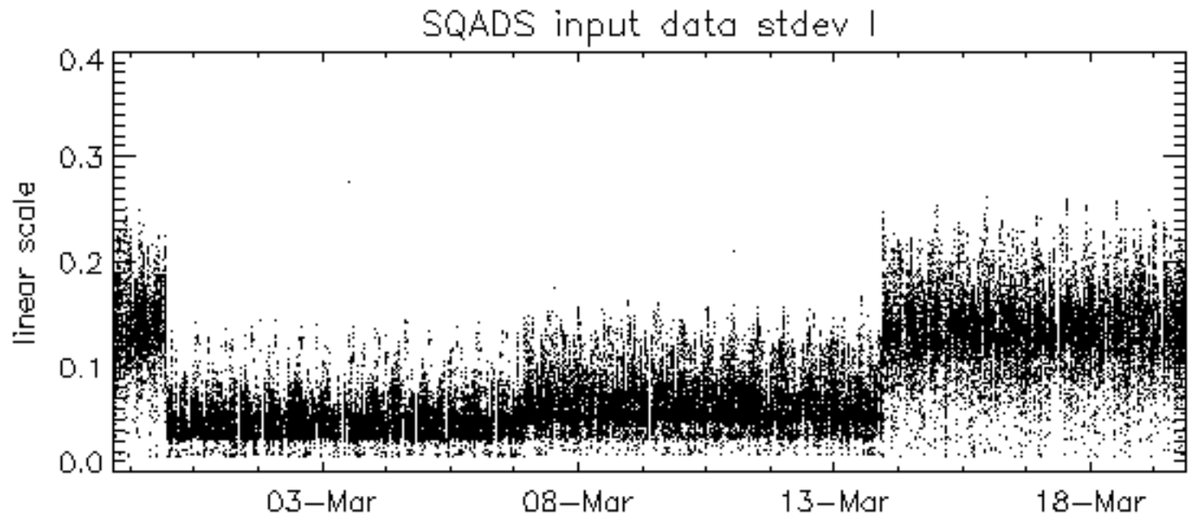

I/Q Gain Imbalance
0.30
0.25
0.20
0.15
0.10
0.05
0.00
stdev Q
0.00 0.05 0.10 0.15 0.20 0.25 0.30
stdev I

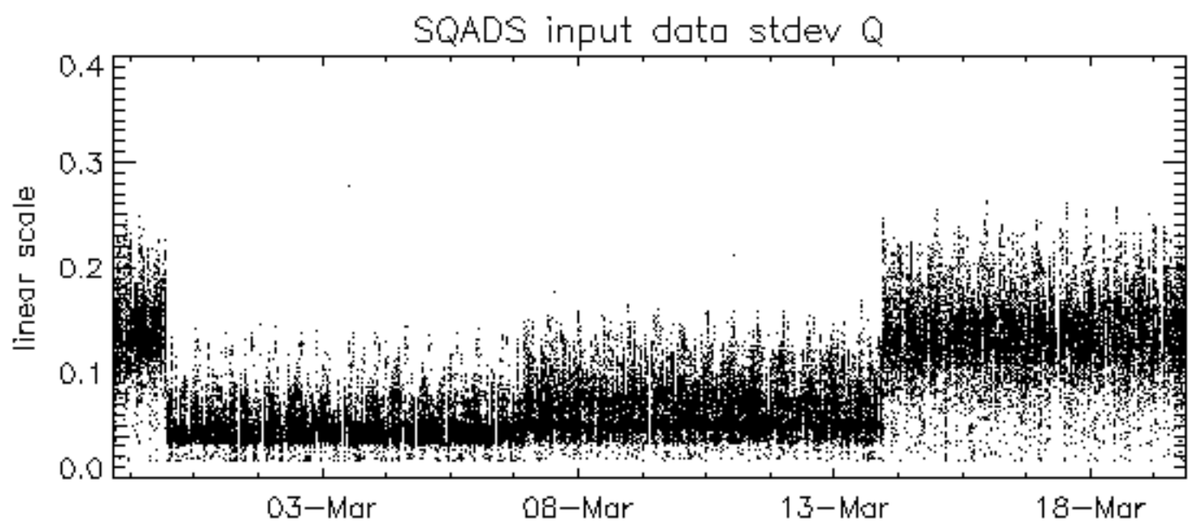

SQADS input data mean i(black), q(red)
linear scale
0.006
0.004
0.002
0.000
−0.002
03−Mar
08−Mar
13−Mar
18−Mar

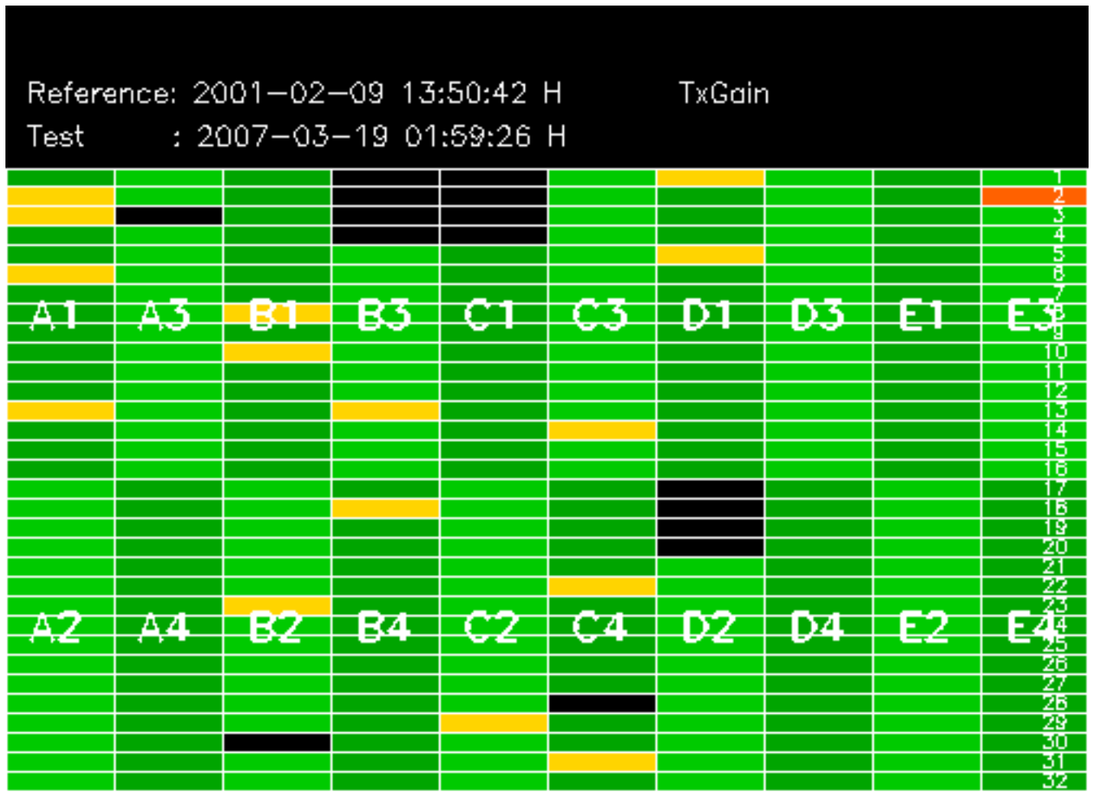

SQADS input data mean I
linear scale
0.006
0.004
0.002
0.000
−0.002
03−Mar
08−Mar
13−Mar
18−Mar

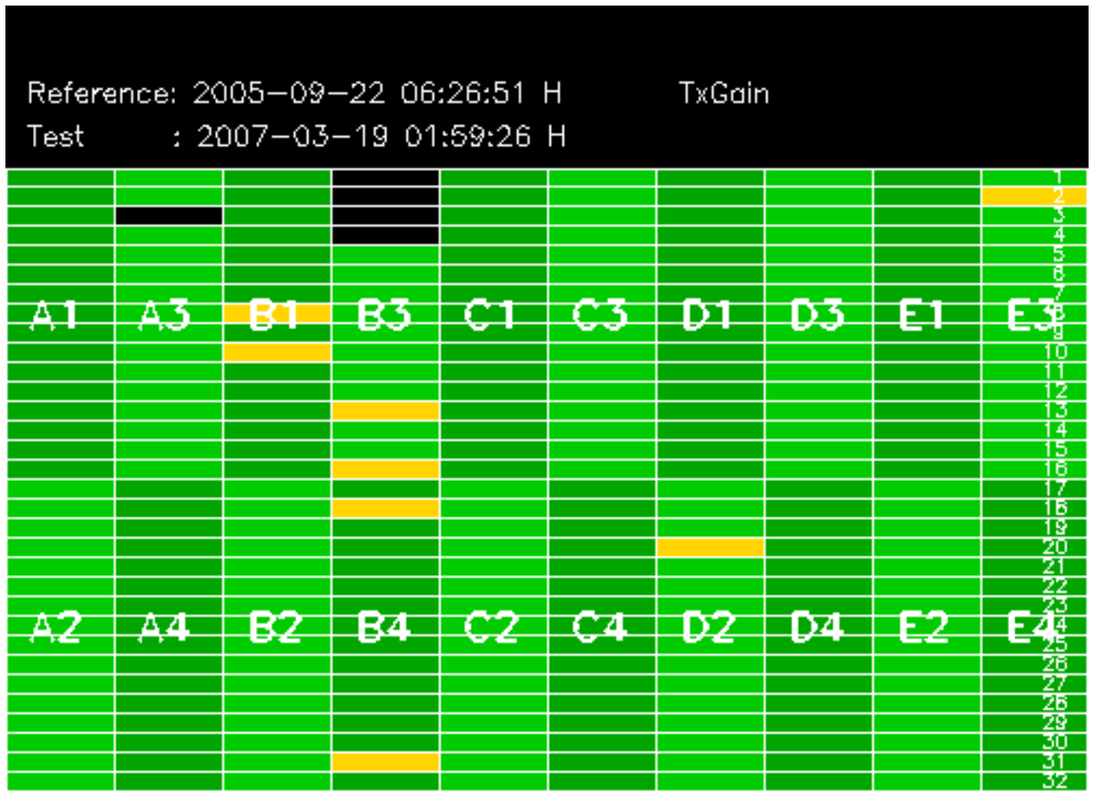

SQADS input data mean Q
linear scale
0.006
0.004
0.002
0.000
−0.002
03−Mar
08−Mar
13−Mar
18−Mar

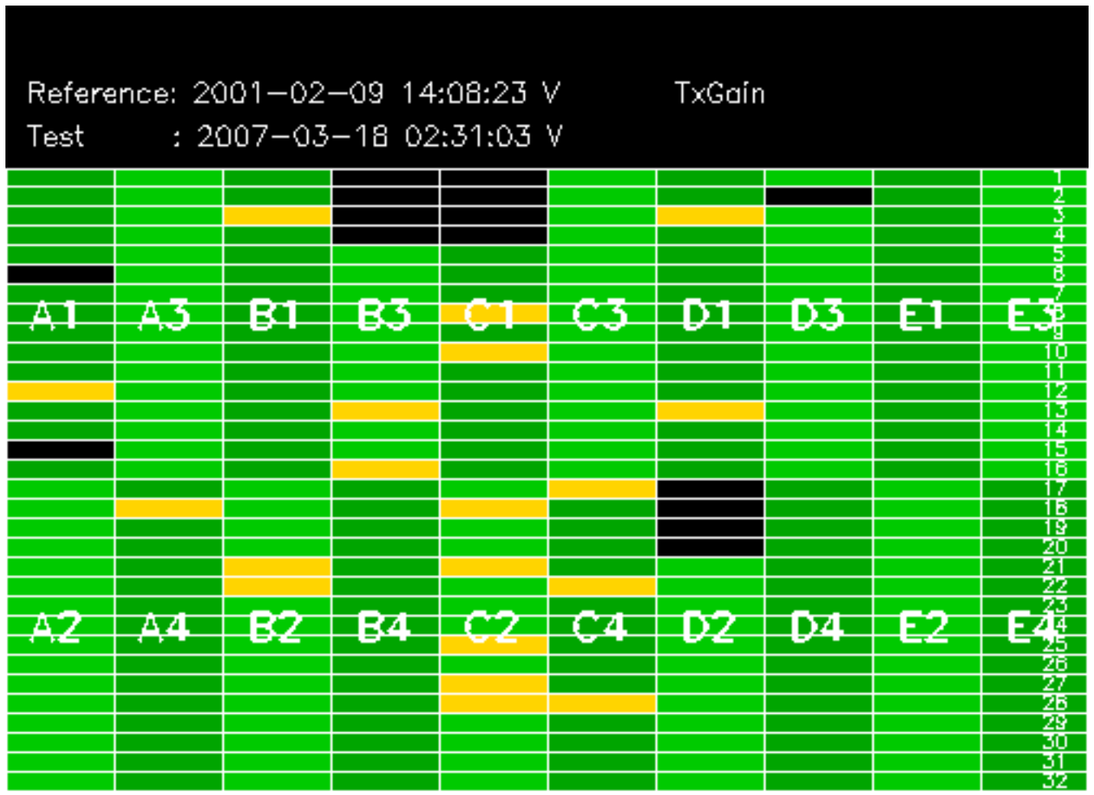

SQADS input data stdev i(black), q(red)
linear scale
0.4
0.3
0.2
0.1
0.0
03−Mar
08−Mar
13−Mar
18−Mar

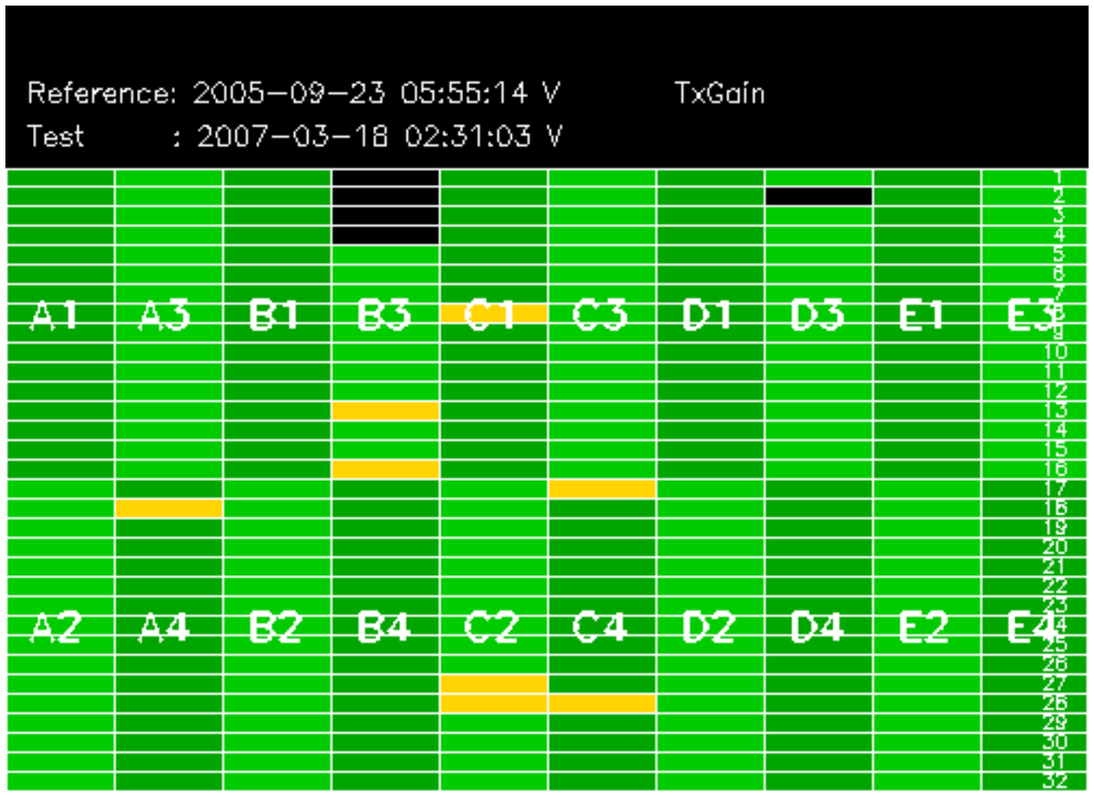

SQADS input data stdev I
linear scale
0.4
0.3
0.2
0.1
0.0
03−Mar
08−Mar
13−Mar
18−Mar

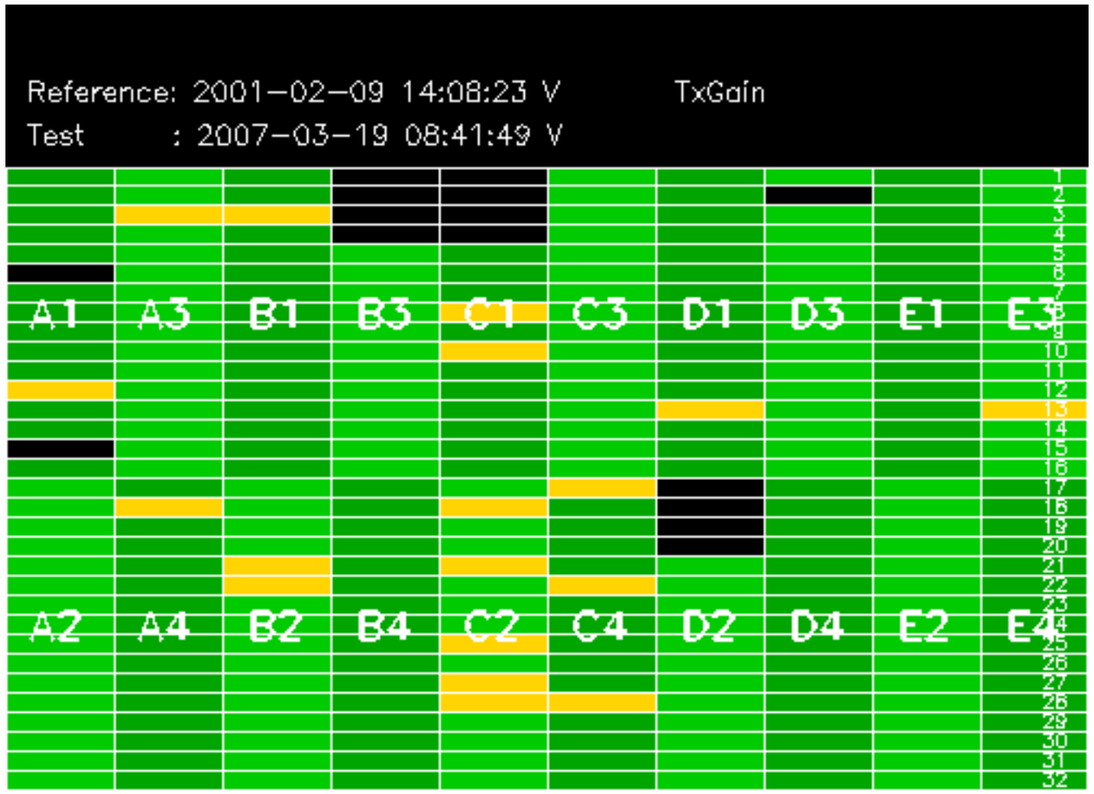

SQADS input data stdev Q
linear scale
0.4
0.3
0.2
0.1
0.0
03−Mar
08−Mar
13−Mar
18−Mar

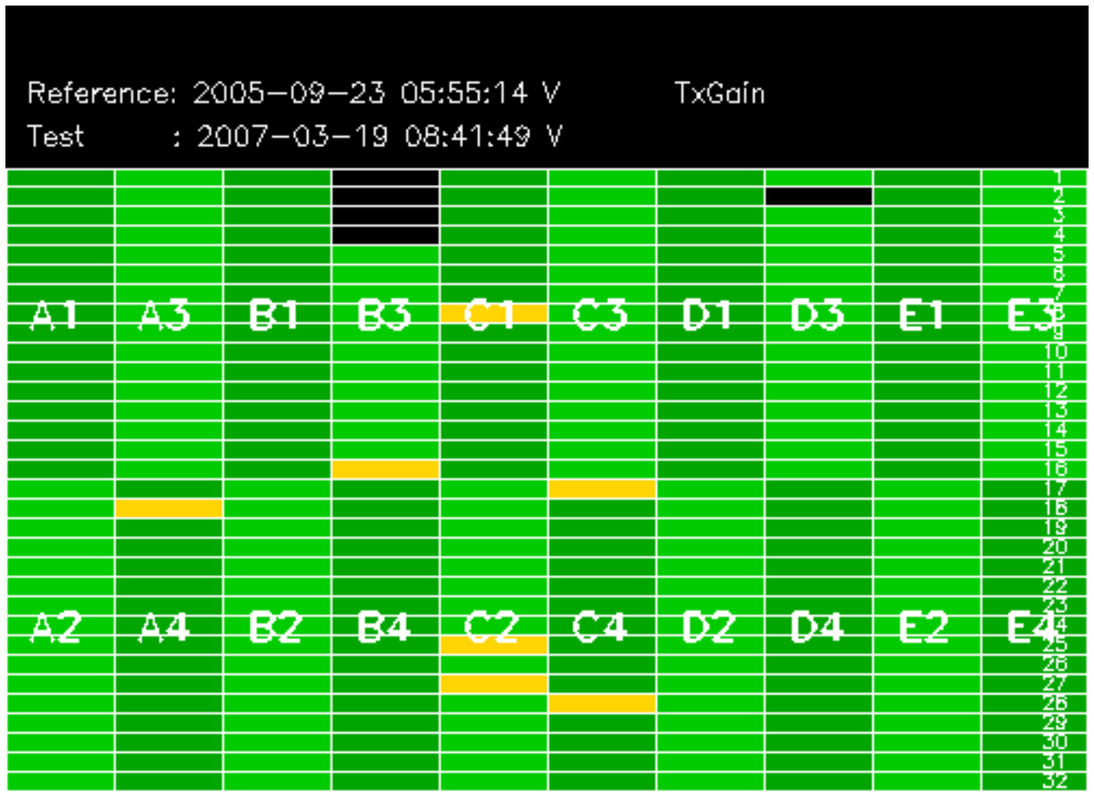

Reference: 2001-02-09 13:50:42 H
TxGain
Test : 2007-03-19 01:59:26 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2005-09-22 06:26:51 H
Test : 2007-03-19 01:59:26 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32


Reference: 2001-02-09 14:08:23 V
Test : 2007-03-18 02:31:03 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

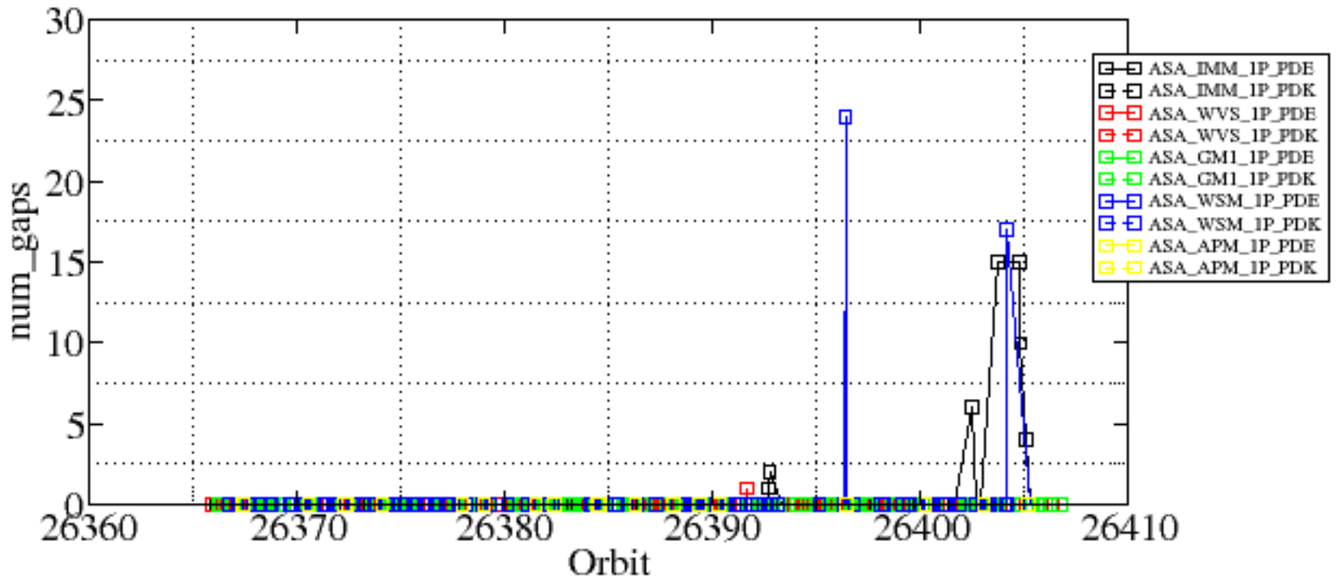

Reference: 2005-09-23 05:55:14 V
Test : 2007-03-18 02:31:03 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

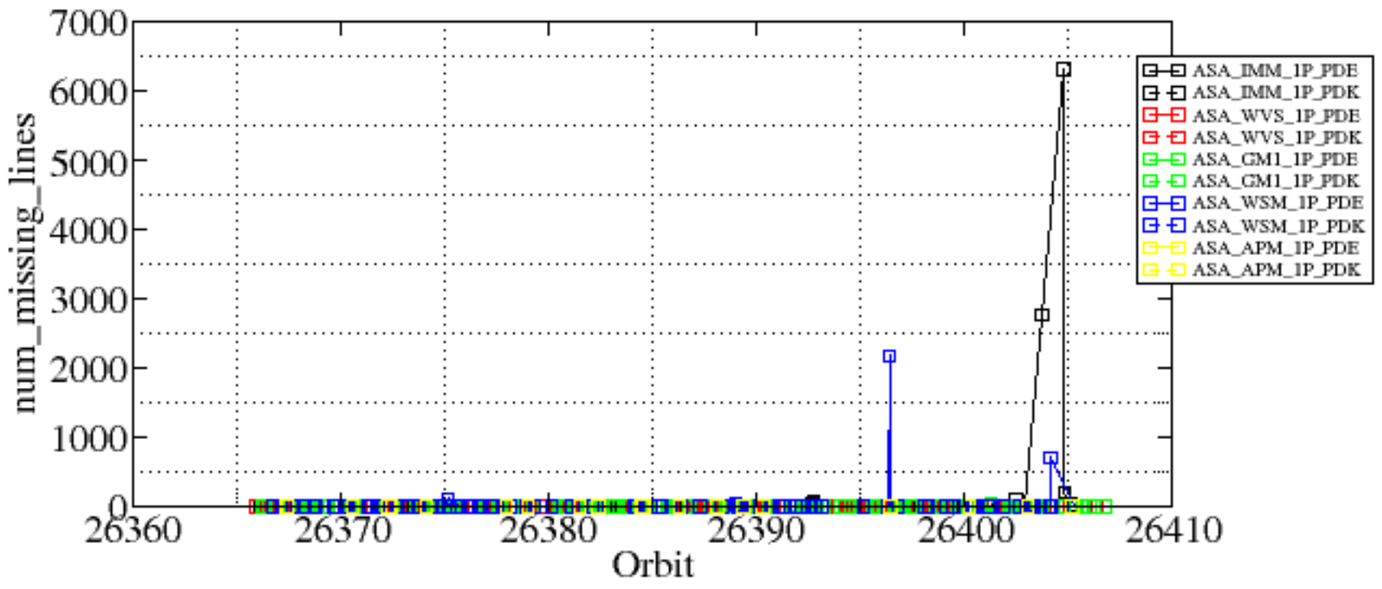

Reference: 2001-02-09 14:08:23 V
Test : 2007-03-19 08:41:49 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

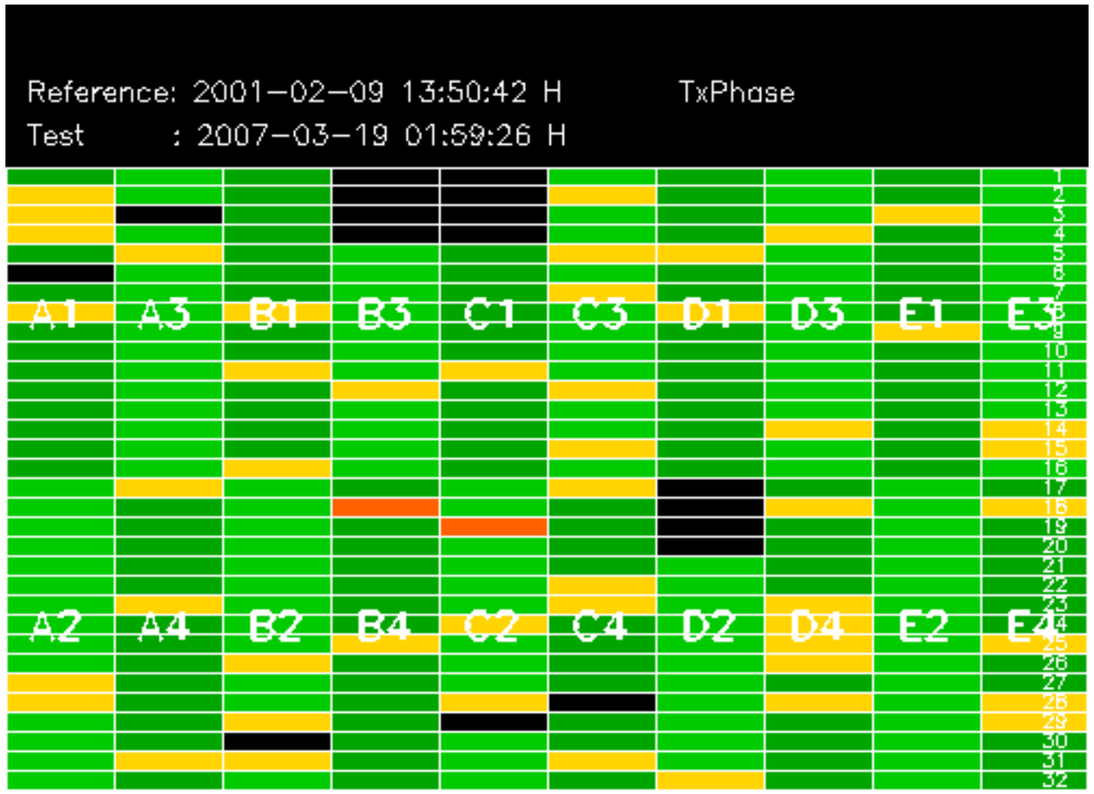

Reference: 2005-09-23 05:55:14 V
Test : 2007-03-19 08:41:49 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

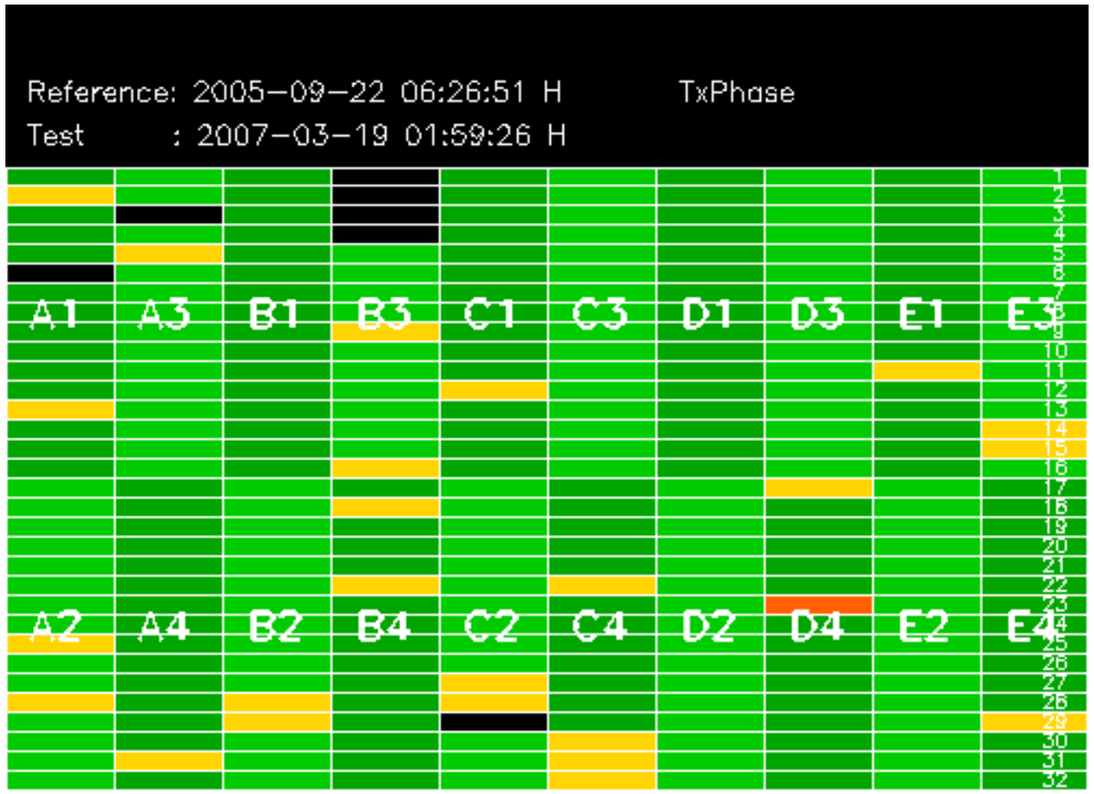
Summary of analysis for the last 3 days 2007031[789]
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

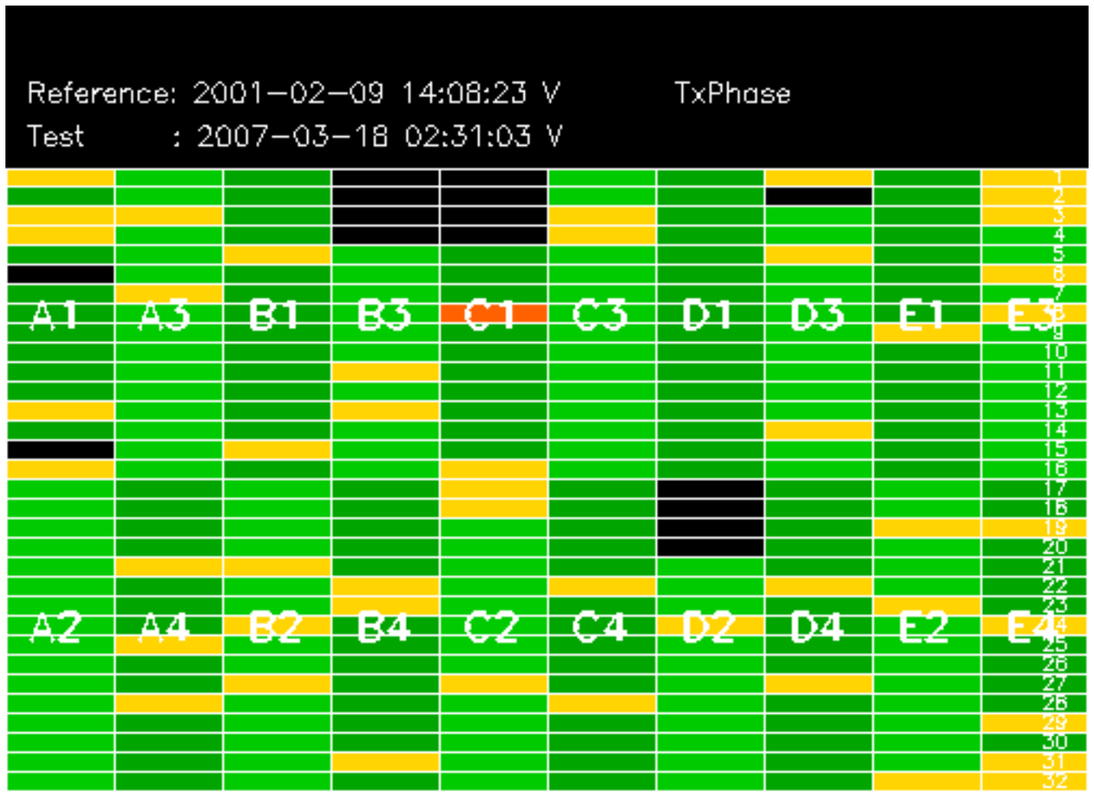
Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20070318_210136_000000982056_00286_26392_7093.N1	1	42
ASA_IMM_1PNPDE20070318_210638_000003002056_00286_26392_7140.N1	2	81
ASA_IMM_1PNPDE20070319_132450_000000502056_00296_26402_8122.N1	6	89
ASA_IMM_1PNPDE20070319_153347_000001132056_00297_26403_8144.N1	15	2759
ASA_IMM_1PNPDE20070319_171525_000002082056_00298_26404_8200.N1	15	6315
ASA_IMM_1PNPDE20070319_171858_000000062056_00298_26404_8182.N1	10	199
ASA_IMM_1PNPDE20070319_174754_000001772056_00299_26405_8212.N1	4	28
ASA_WVS_1PNPDK20070318_191755_000000002056_00285_26391_5999.N1	1	0
ASA_GM1_1PNPDK20070318_150057_000001202056_00283_26389_5642.N1	0	8
ASA_GM1_1PNPDK20070318_191841_000000722056_00285_26391_6049.N1	0	13
ASA_GM1_1PNPDK20070319_112407_000001502056_00295_26401_6492.N1	0	22
ASA_GM1_1PNPDK20070319_112634_000000842056_00295_26401_6497.N1	0	55
ASA_WSM_1PNPDE20070317_153552_000003002056_00269_26375_5553.N1	0	111
ASA_WSM_1PNPDE20070318_145119_000000852056_00283_26389_6914.N1	0	36
ASA_WSM_1PNPDE20070319_031314_000000852056_00290_26396_7687.N1	24	2180
ASA_WSM_1PNPDE20070319_142046_000000852056_00297_26403_8158.N1	0	16
ASA_WSM_1PNPDE20070319_161419_000000362056_00298_26404_8162.N1	17	704
ASA_WSM_1PNPDE20070319_161419_000000362056_00298_26404_8176.N1	17	704
ASA_WSM_1PNPDK20070319_075204_000001592056_00293_26399_6245.N1	0	1
ASA_WSM_1PNPDK20070319_122504_000001292056_00295_26401_6620.N1	0	1
ASA_WSM_1PNPDK20070319_122504_000002632056_00295_26401_6729.N1	0	1
ASA_WSM_1PNPDK20070319_144155_000003242056_00297_26403_6748.N1	0	14

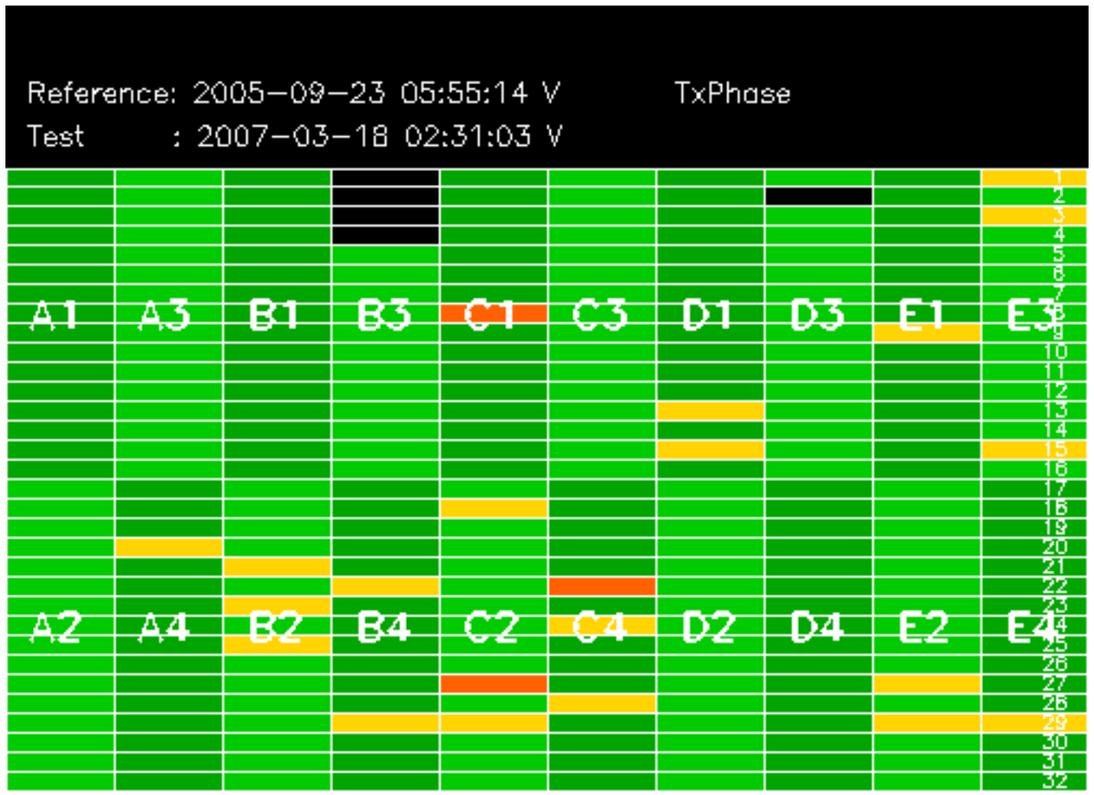

num_gaps
Orbit
30
25
20
15
10
5
0
26360
26370
26380
26390
26400
26410
ASA_IMM_1P_PDE
ASA_IMM_1P_PDK
ASA_WVS_1P_PDE
ASA_WVS_1P_PDK
ASA_GM1_1P_PDE
ASA_GM1_1P_PDK
ASA_WSM_1P_PDE
ASA_WSM_1P_PDK
ASA_APM_1P_PDE
ASA_APM_1P_PDK

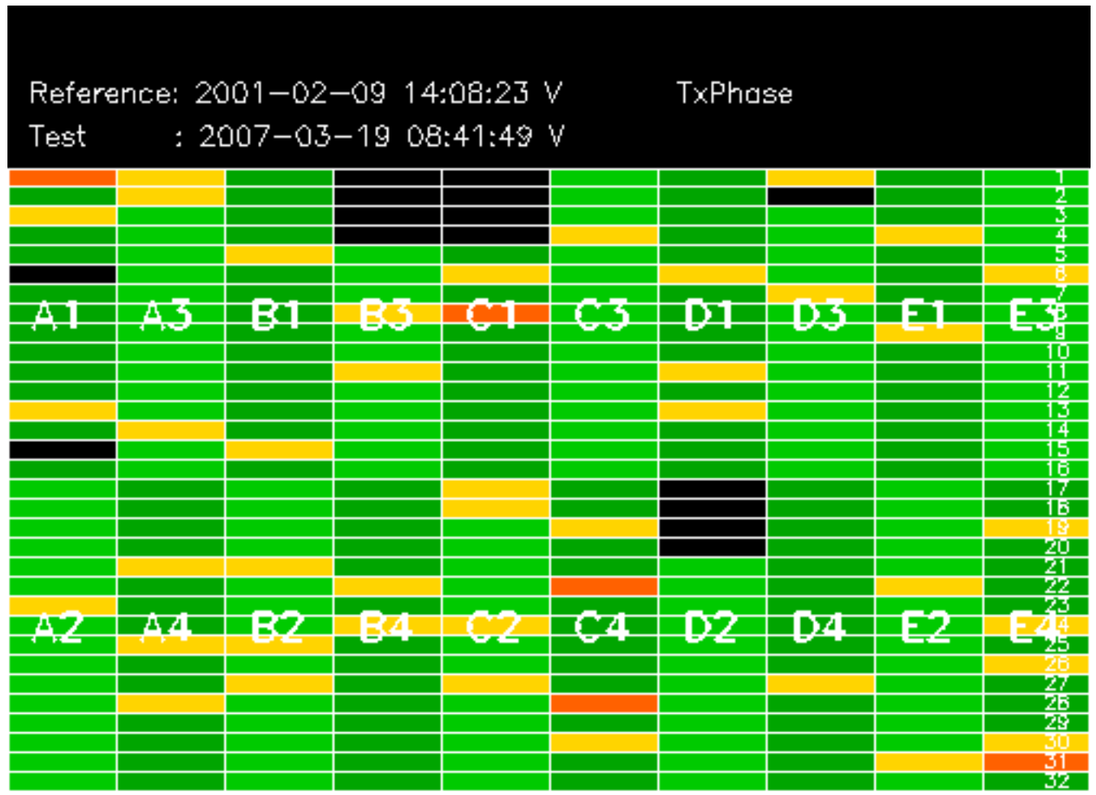

num_missing_lines
7000
6000
5000
4000
3000
2000
1000
0
26360
26370
26380
26390
26400
26410
Orbit
ASA_IMM_1P_PDE
ASA_IMM_1P_PDK
ASA_WVS_1P_PDE
ASA_WVS_1P_PDK
ASA_GM1_1P_PDE
ASA_GM1_1P_PDK
ASA_WSM_1P_PDE
ASA_WSM_1P_PDK
ASA_APM_1P_PDE
ASA_APM_1P_PDK

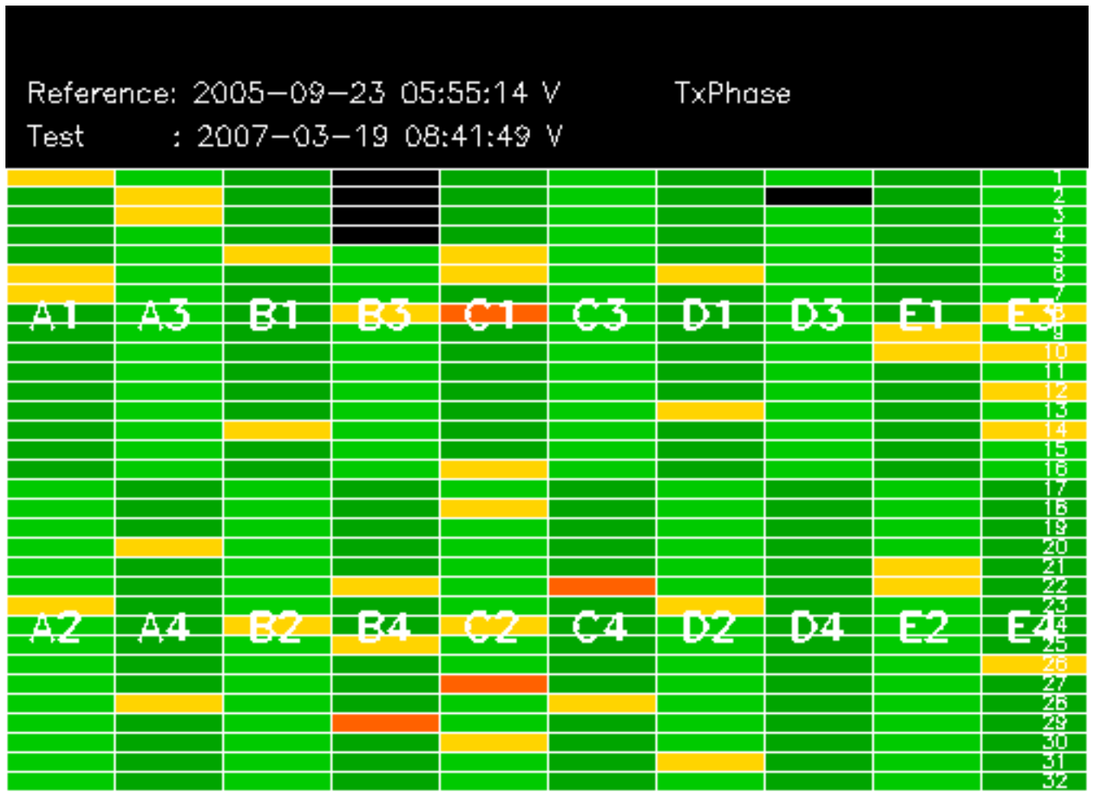

Reference: 2001-02-09 13:50:42 H
TxPhase
Test : 2007-03-19 01:59:26 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

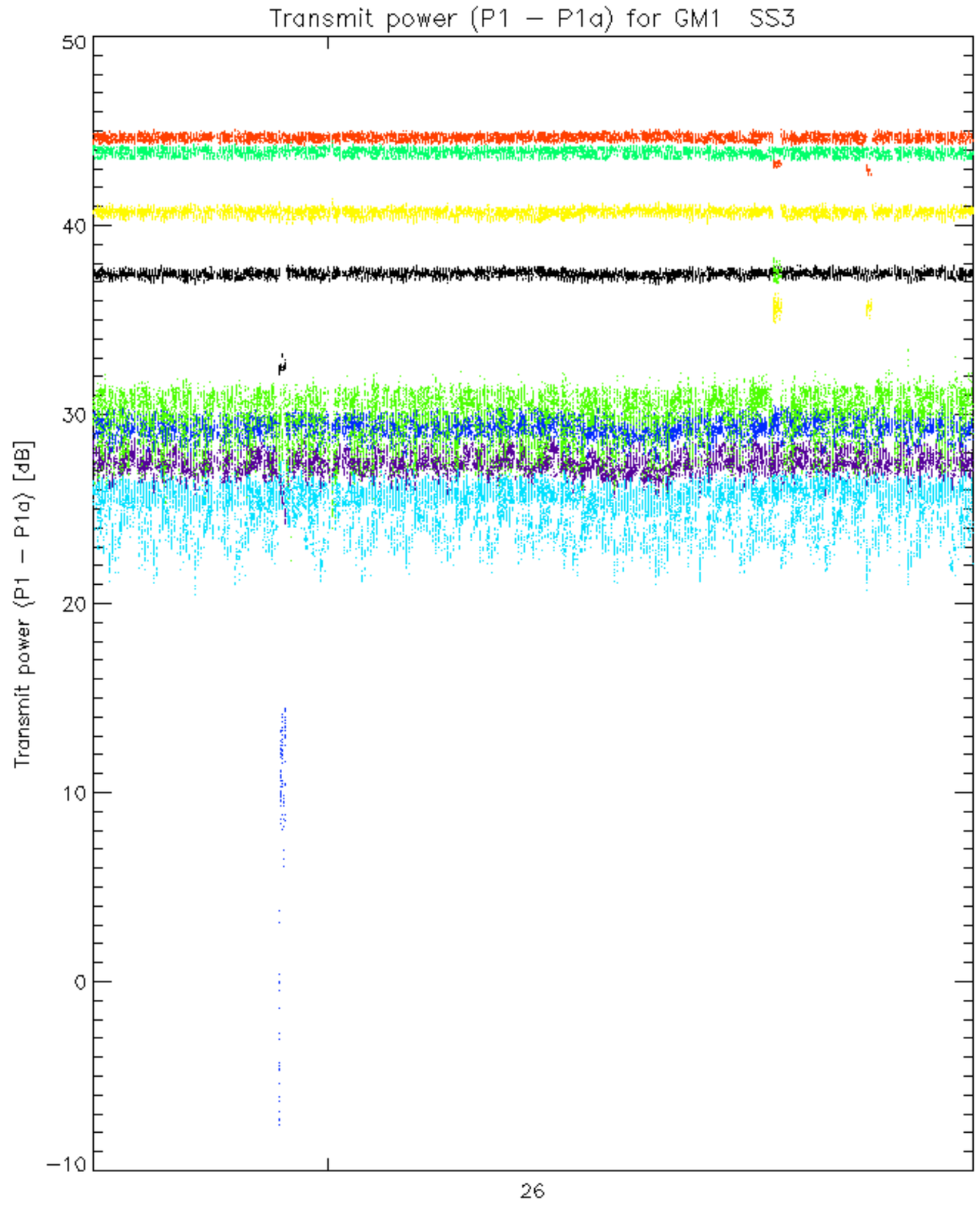

Reference: 2005-09-22 06:26:51 H
TxPhase
Test : 2007-03-19 01:59:26 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

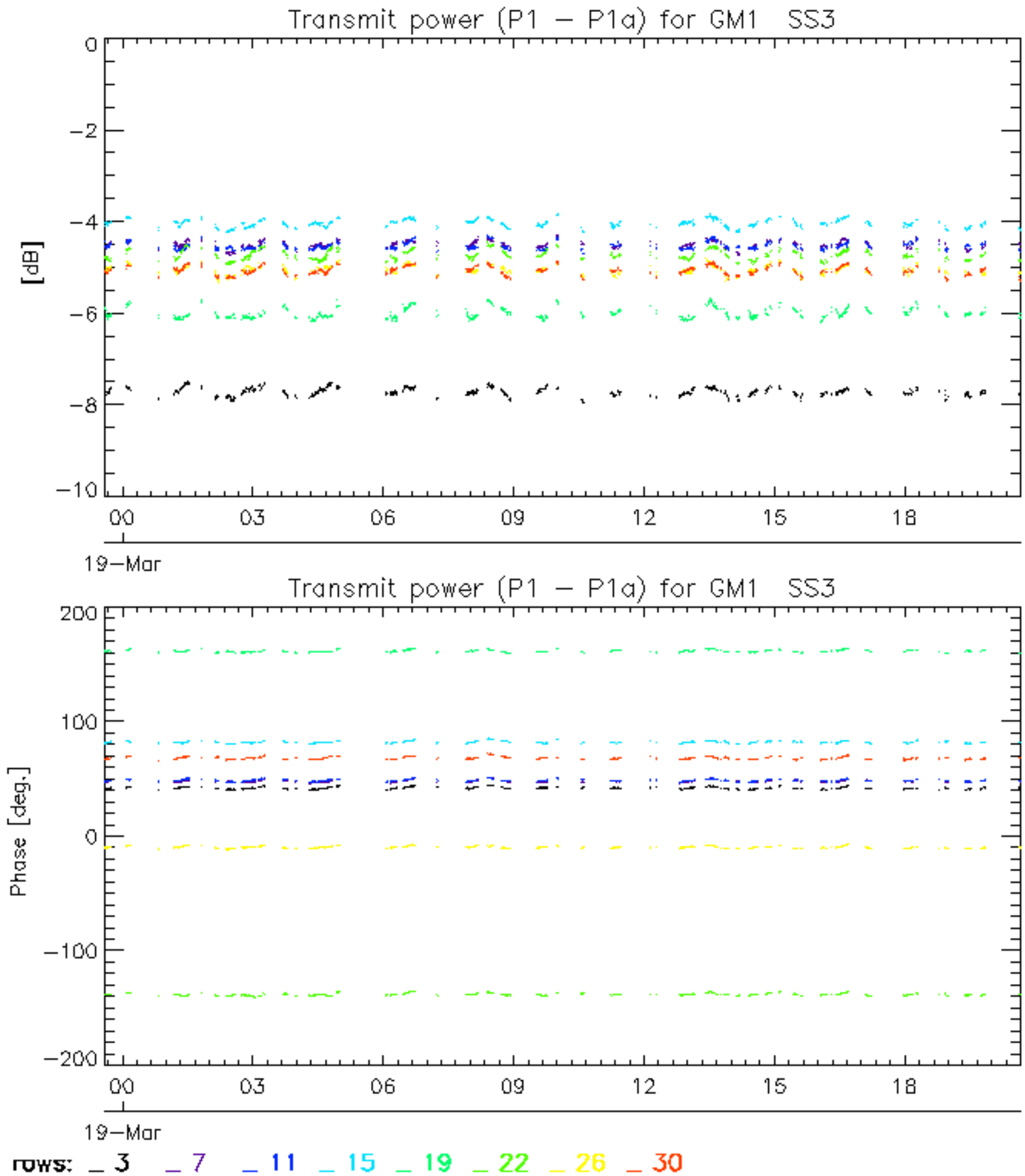

Reference: 2001-02-09 14:08:23 V
Test : 2007-03-18 02:31:03 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

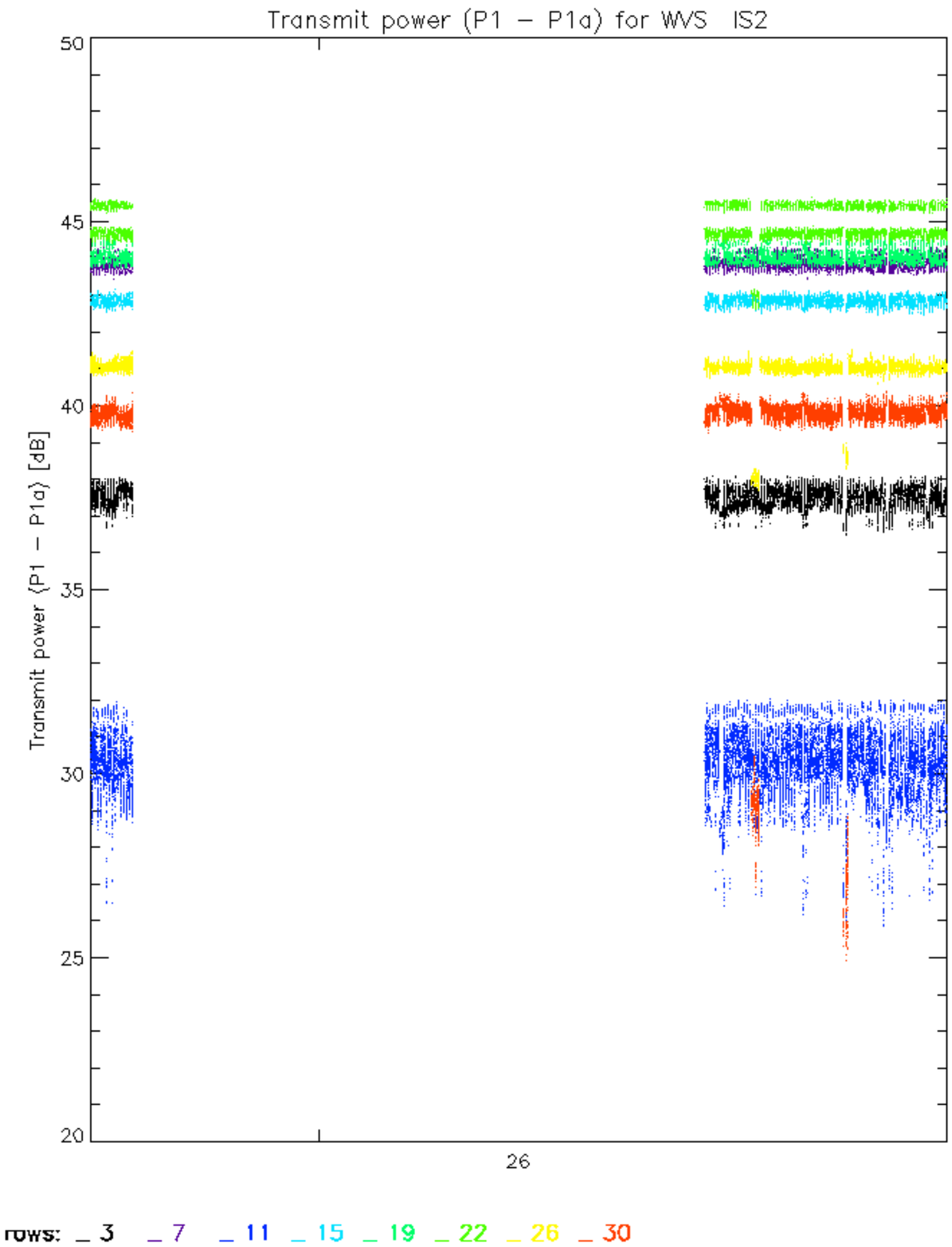

Reference: 2005-09-23 05:55:14 V
Test : 2007-03-18 02:31:03 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

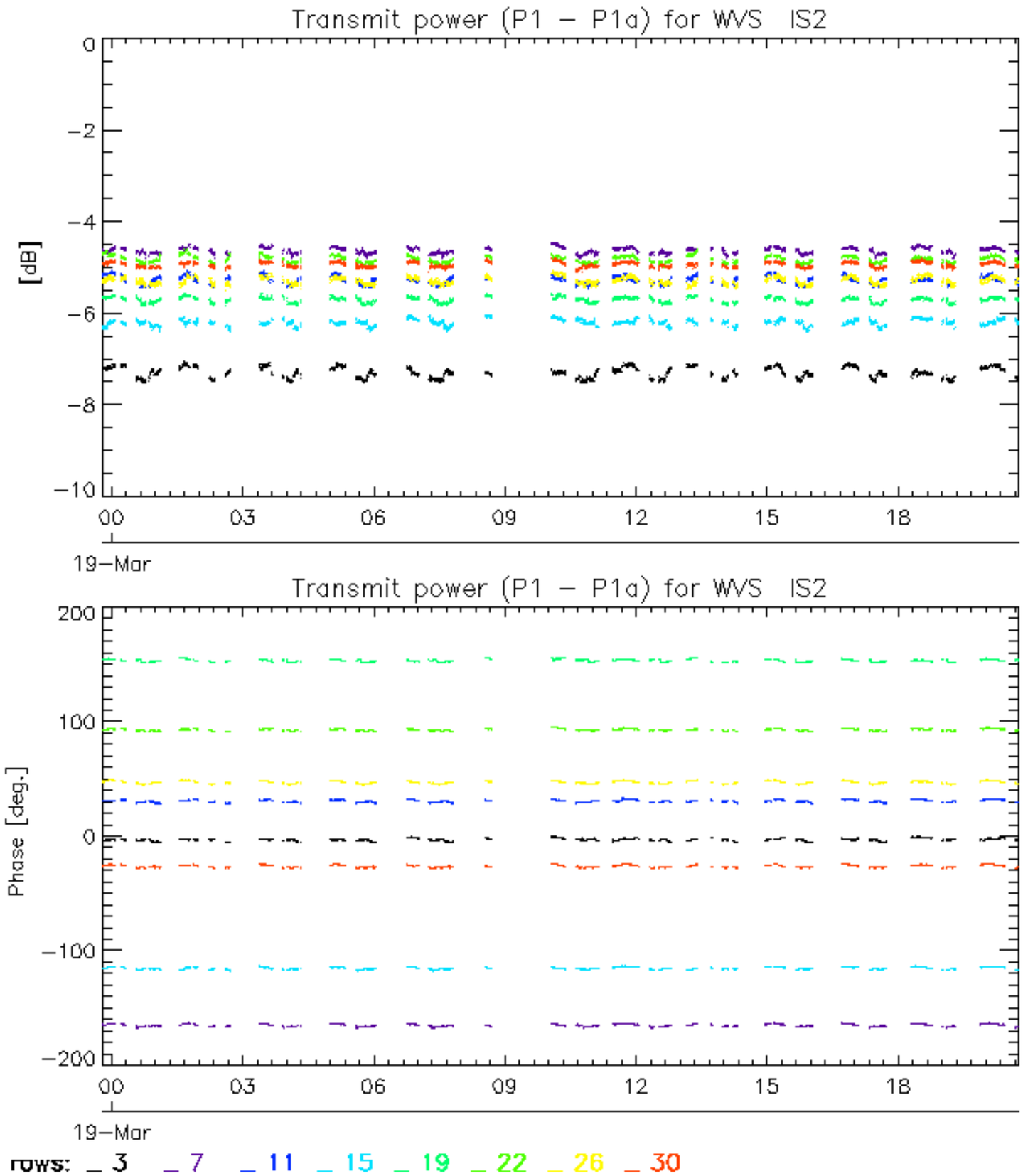

Reference: 2001-02-09 14:08:23 V
Test : 2007-03-19 08:41:49 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32


Reference: 2005-09-23 05:55:14 V
Test : 2007-03-19 08:41:49 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32


Transmit power (P1 – P1a) for GM1 SS3
Transmit power (P1 – P1a) [dB]
50
40
30
20
10
0
−10
26
rows: 3 7 11 15 19 22 26 30


Transmit power (P1 – P1a) for GM1 SS3
0
−2
−4
−6
−8
−10
[dB]
00
03
06
09
12
15
18
19–Mar
Transmit power (P1 – P1a) for GM1 SS3
200
100
0
−100
−200
Phase [deg.]
00
03
06
09
12
15
18
19–Mar
rows: 3 7 11 15 19 22 26 30


Transmit power (P1 – P1a) for WVS IS2
Transmit power ⟨P1 – P1a⟩ [dB]
50
45
40
35
30
25
20
26
rows: 3 7 11 15 19 22 26 30


Transmit power (P1 – P1a) for WVS IS2
0
−2
−4
−6
−8
−10
[dB]
00
03
06
09
12
15
18
19–Mar
Transmit power (P1 – P1a) for WVS IS2
200
100
0
−100
−200
Phase [deg.]
00
03
06
09
12
15
18
19–Mar
rows: 3 7 11 15 19 22 26 30

No unavailabilities during the reported period.