PRELIMINARY REPORT OF 061202

last update on Sat Dec 2 16:56:47 GMT 2006

1 - Introduction

This report is based on the analysis of wave mode level-1 cross spectra (ASA_WVS_1P), global monitoring products (ASA_GM1_1P), which are the available few hours after the acquisition, on the browse (BP) products and
on the Module Stepping (MS) product.

2 - Summary

2.1 - Instrument Unavailability

No unavailabilities during the reported period.

2.2 - Auxiliary files

Summary of the auxiliary files used from 2006-12-01 00:00:00 to 2006-12-02 16:56:47

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20061107_090002_20050916_195733_20071231_000000	34	59	2	5	12
ASA_XCA_AXVIEC20060717_154125_20050916_195733_20061231_000000	34	59	2	5	12
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	34	59	2	5	12
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	34	59	2	5	12

PDHS-E					
AUXILIARY FILE	**WVS**	**GM1**	**IMM**	**APM**	**WSM**
ASA_CON_AXVIEC20061107_090002_20050916_195733_20071231_000000	34	41	27	13	71
ASA_XCA_AXVIEC20060717_154125_20050916_195733_20061231_000000	34	41	27	13	71
ASA_INS_AXVIEC20051219_161945_20030211_000000_20061231_000000	34	41	27	13	71
ASA_XCH_AXVIEC20051219_162547_20020301_000000_20081231_000000	34	41	27	13	71

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	20061201 033423
H	20061128 050914

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)

P1 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-3.958583	0.008372	-0.012959
7	P1	-3.151304	0.023737	0.013308
11	P1	-4.128525	0.025198	0.019526
15	P1	-6.299009	0.014740	-0.025800
19	P1	-3.613501	0.006272	-0.048024
22	P1	-4.646470	0.012907	-0.015418
26	P1	-3.948904	0.010525	0.007132
30	P1	-5.866806	0.009540	-0.043973
3	P1	-16.517151	0.235204	-0.068920
7	P1	-17.281702	0.177454	-0.001294
11	P1	-17.177719	0.460082	-0.145354
15	P1	-13.066165	0.136176	0.023620
19	P1	-14.916841	0.090449	-0.161209
22	P1	-15.847570	0.517887	0.163539
26	P1	-15.052680	0.196036	0.071362
30	P1	-17.478481	0.475863	-0.020851

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-20.836172	0.091381	0.058879
7	P2	-21.730465	0.093783	0.003338
11	P2	-15.644068	0.102626	0.068595
15	P2	-7.120633	0.106402	0.017945
19	P2	-9.189456	0.104411	0.019654
22	P2	-18.233124	0.096608	-0.005183
26	P2	-16.554008	0.111164	-0.032515
30	P2	-19.472130	0.088064	0.020655

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.239919	0.008581	-0.011529
7	P3	-8.239919	0.008581	-0.011529
11	P3	-8.239919	0.008581	-0.011529
15	P3	-8.239919	0.008581	-0.011529
19	P3	-8.239919	0.008581	-0.011529
22	P3	-8.239919	0.008581	-0.011529
26	P3	-8.239870	0.008595	-0.011802
30	P3	-8.239870	0.008595	-0.011802

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1


P1a Cyclic statistics

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

P1 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-3.908226	0.027878	0.007688
7	P1	-2.502904	0.131553	0.067773
11	P1	-2.854568	0.027901	0.041594
15	P1	-3.681734	0.041560	0.011518
19	P1	-3.524434	0.017416	-0.015824
22	P1	-5.035754	0.022242	0.051467
26	P1	-6.000170	0.026666	-0.027264
30	P1	-5.319381	0.037322	-0.031662
3	P1	-11.722016	0.087985	-0.017410
7	P1	-10.049446	0.210397	0.022961
11	P1	-10.321704	0.126759	0.014726
15	P1	-10.738234	0.165671	0.110266
19	P1	-15.695454	0.108666	-0.065534
22	P1	-21.464083	1.455724	-0.337021
26	P1	-16.059296	0.322504	0.017226
30	P1	-17.894106	0.390197	0.084702

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-16.459564	0.106930	0.011080
7	P2	-22.225071	0.296207	0.000683
11	P2	-10.935010	0.119607	0.049168
15	P2	-4.969075	0.201779	-0.017356
19	P2	-6.951989	0.232653	0.008838
22	P2	-8.255413	0.174255	0.029707
26	P2	-24.325132	0.183601	0.023006
30	P2	-21.949337	0.144143	0.043704

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.086898	0.003475	-0.009578
7	P3	-8.086930	0.003463	-0.009529
11	P3	-8.086979	0.003470	-0.009603
15	P3	-8.086853	0.003469	-0.009722
19	P3	-8.086896	0.003474	-0.009672
22	P3	-8.086867	0.003468	-0.009822
26	P3	-8.086860	0.003477	-0.009825
30	P3	-8.086917	0.003478	-0.009273

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	0.000546593
	stdev	1.78091e-07
MEAN Q	mean	0.000524797
	stdev	2.19824e-07

5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.136242
	stdev	0.00110983
STDEV Q	mean	0.136600
	stdev	0.00112693

5.3 - Gain imbalance I/Q

6 - Telemetry analysis

Summary of analysis for the last 3 days 2006120[012]
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_GM1_1PNPDK20061201_191311_000006402053_00257_24860_9532.N1	0	13
ASA_WSM_1PNPDE20061201_013231_000001402053_00246_24849_3285.N1	0	39
ASA_WSM_1PNPDE20061201_141605_000000852053_00254_24857_4521.N1	0	29
ASA_WSM_1PNPDE20061202_010155_000000672053_00260_24863_5042.N1	0	35

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

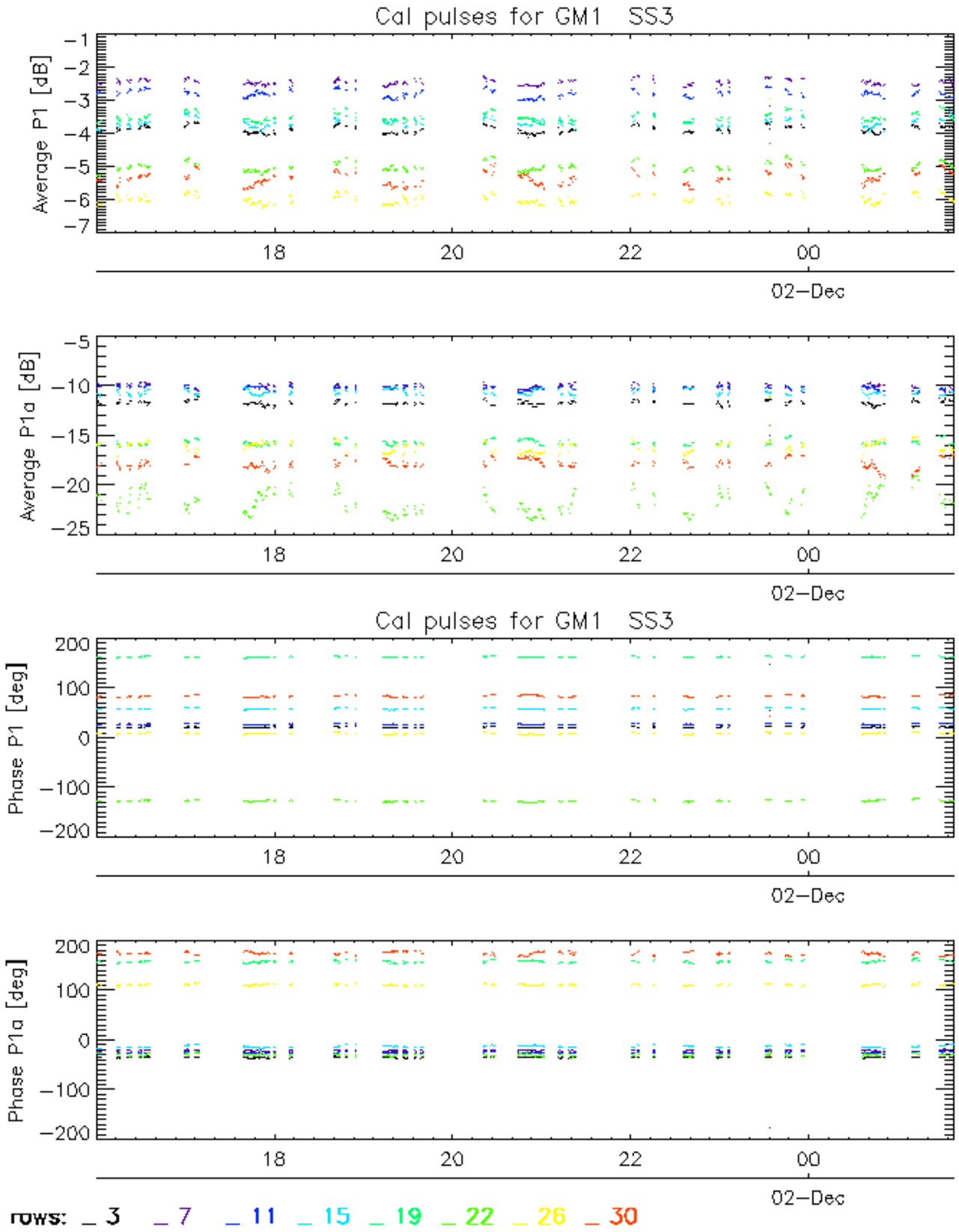
Descending

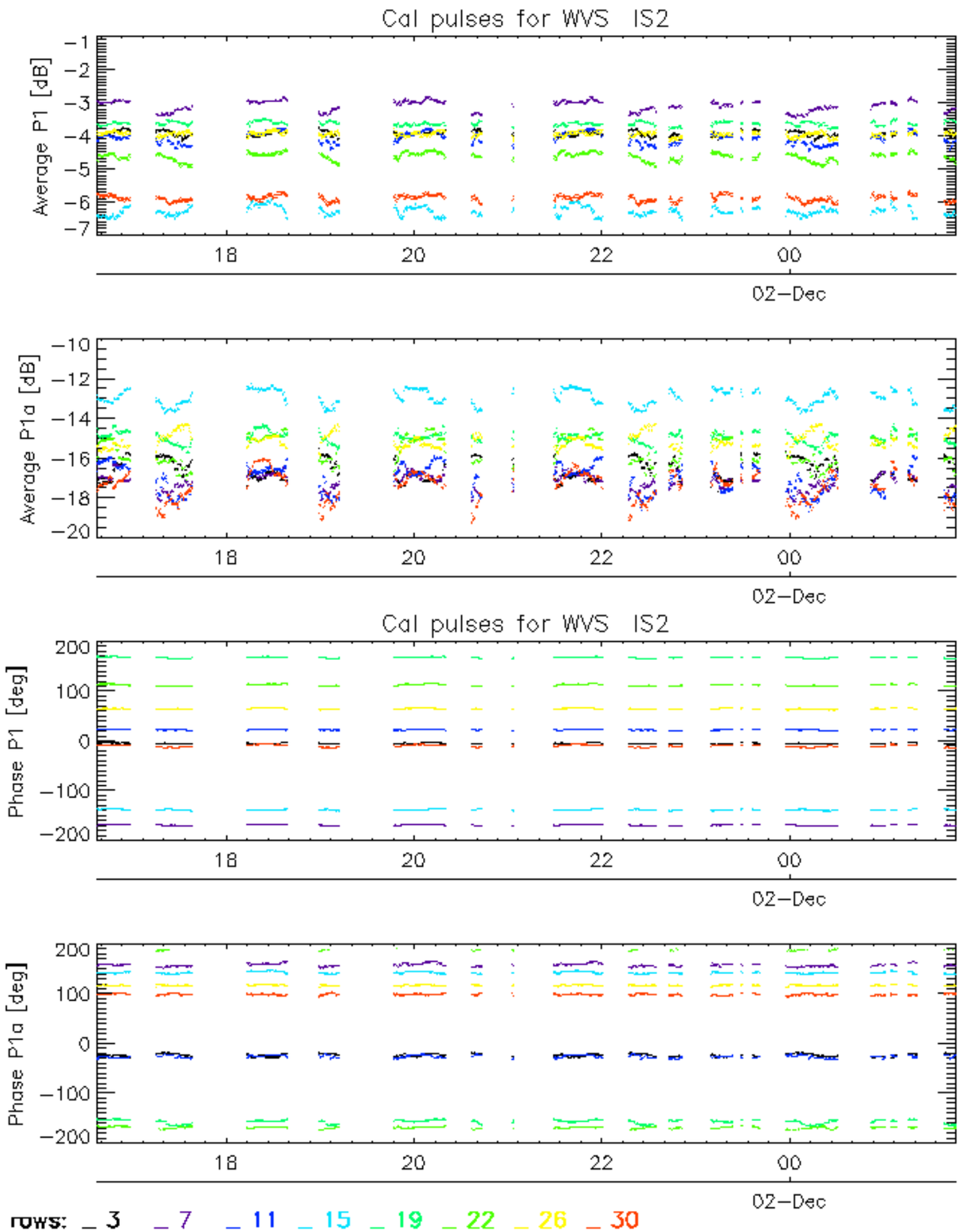
7.5 - Absolute Doppler for GM1

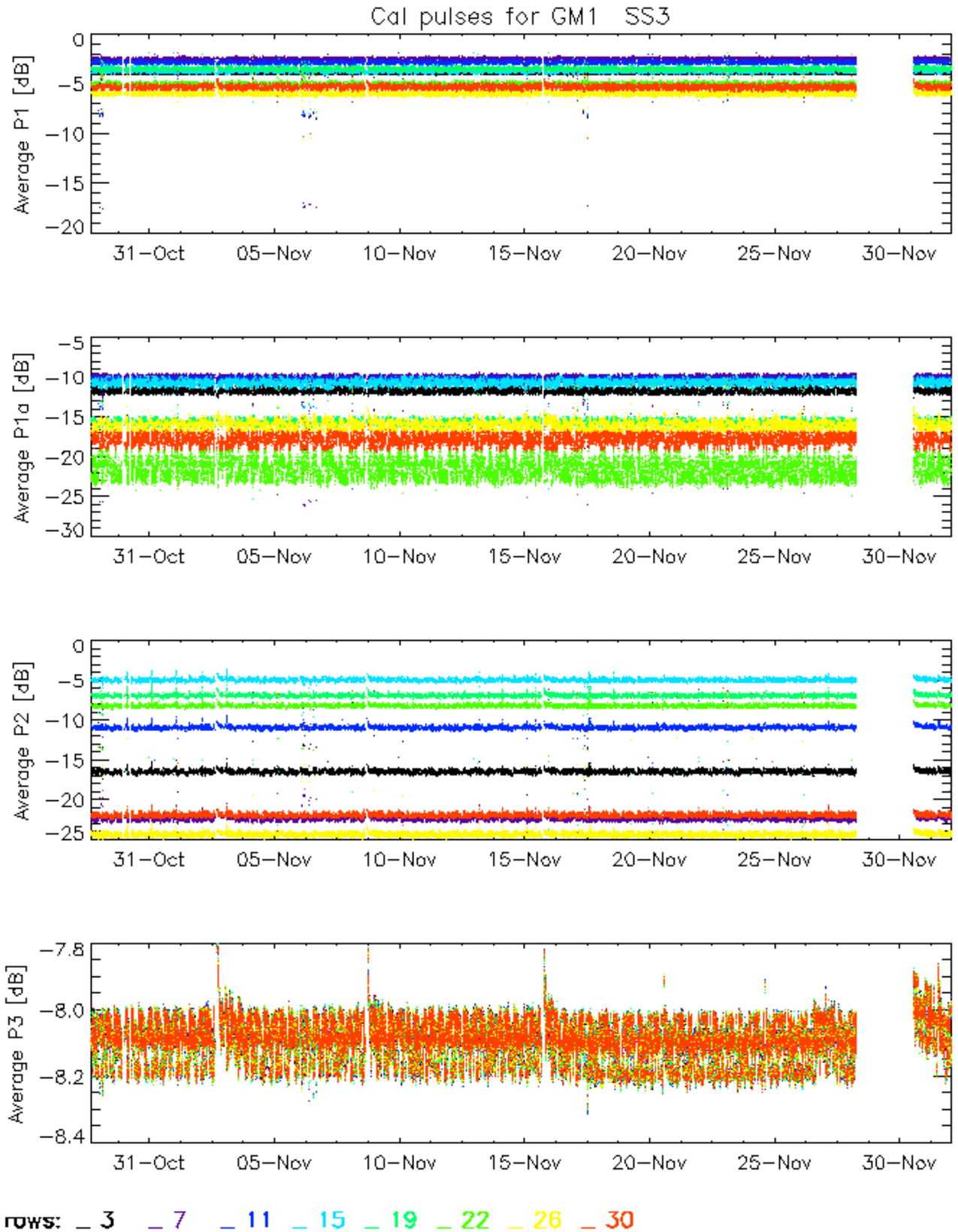
Evolution of Absolute Doppler
Acsending
Descending

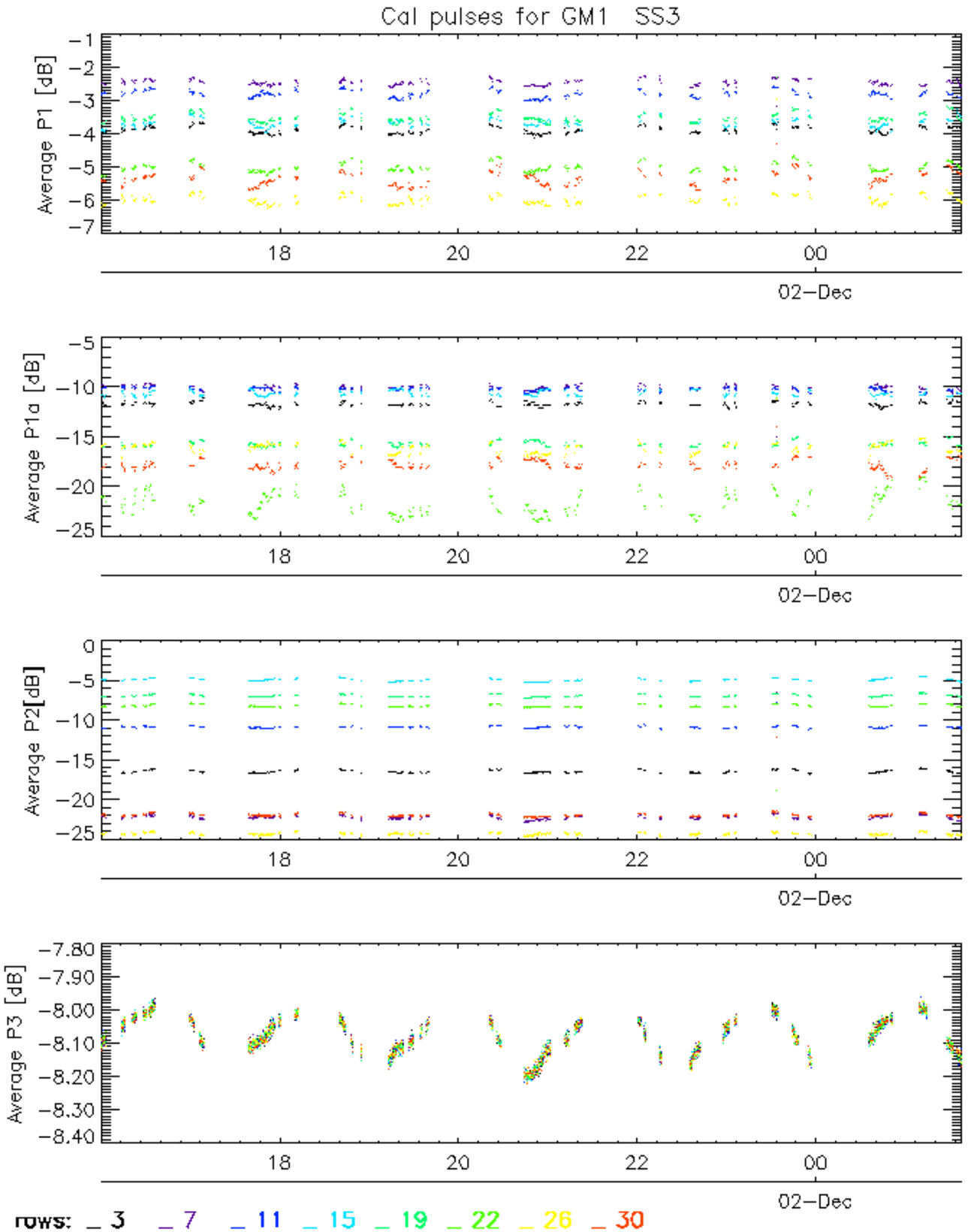
7.6 - Doppler evolution versus ANX for GM1

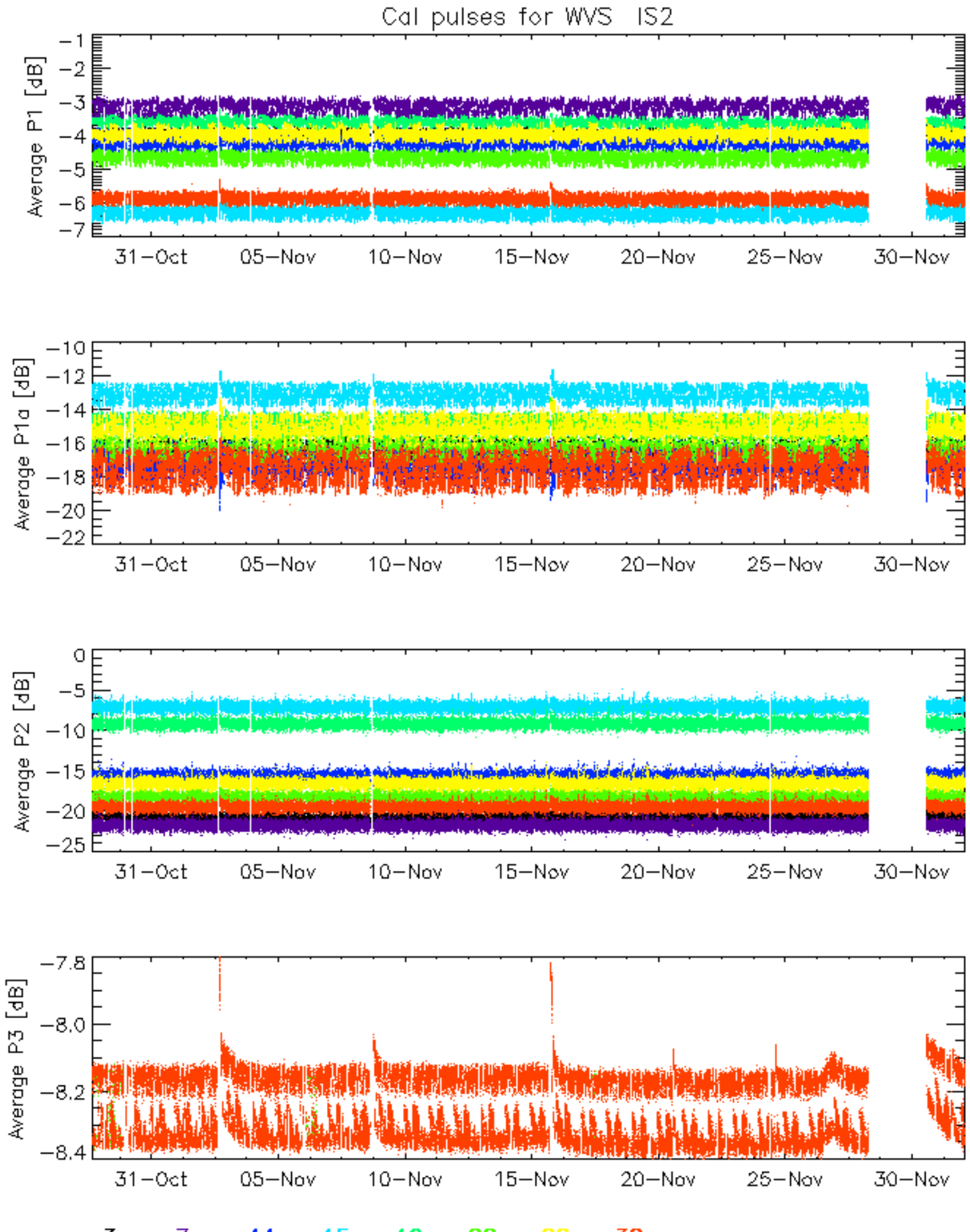
Evolution Doppler error versus ANX

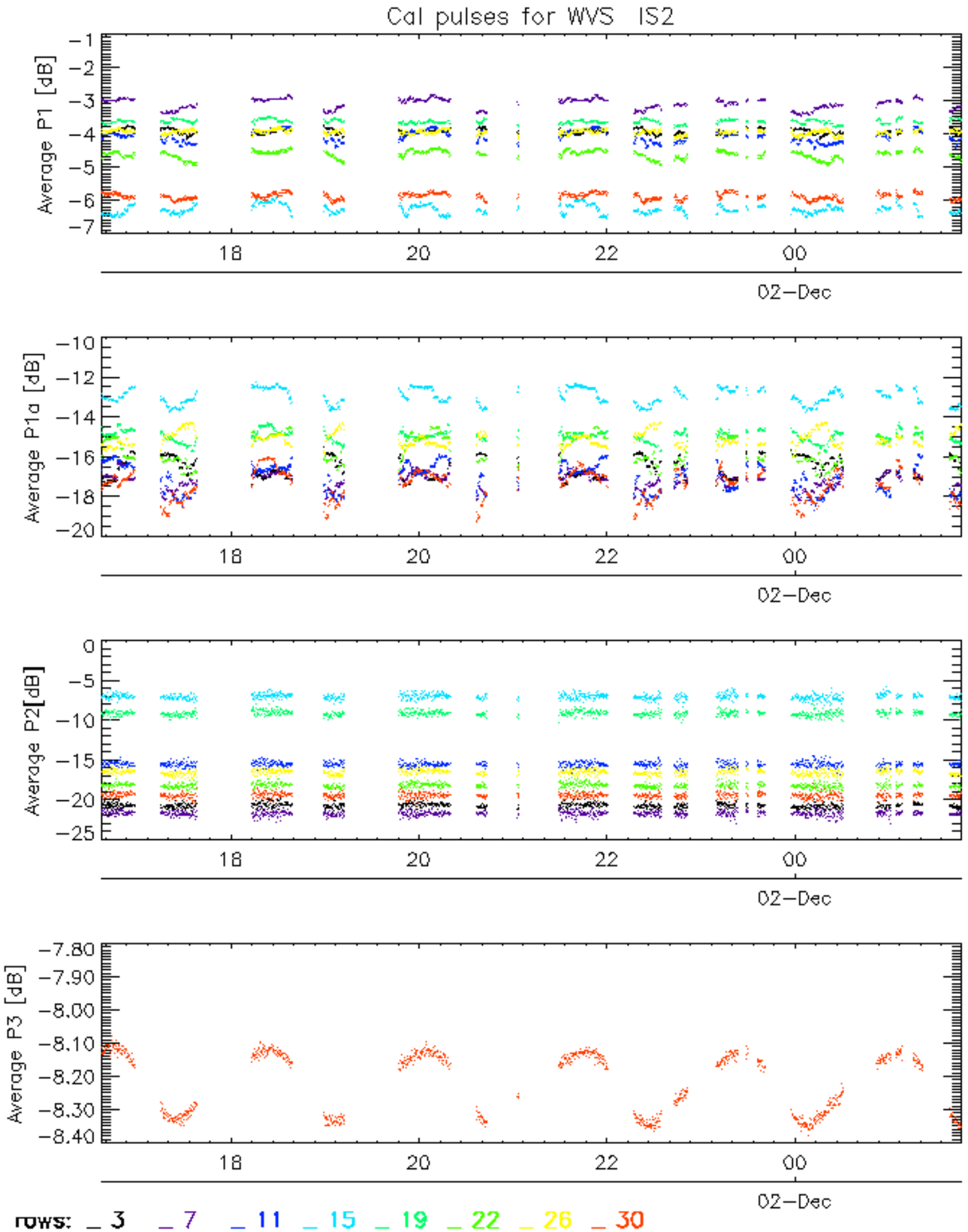

Cal pulses for GM1 SS3
Average P1 [dB]
−1
−2
−3
−4
−5
−6
−7
18
20
22
00
02−Dec
Average P1a [dB]
−5
−10
−15
−20
−25
18
20
22
00
02−Dec
Cal pulses for GM1 SS3
Phase P1 [deg]
200
100
0
−100
−200
18
20
22
00
02−Dec
Phase P1a [deg]
200
100
0
−100
−200
18
20
22
00
02−Dec
rows: 3 7 11 15 19 22 26 30


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

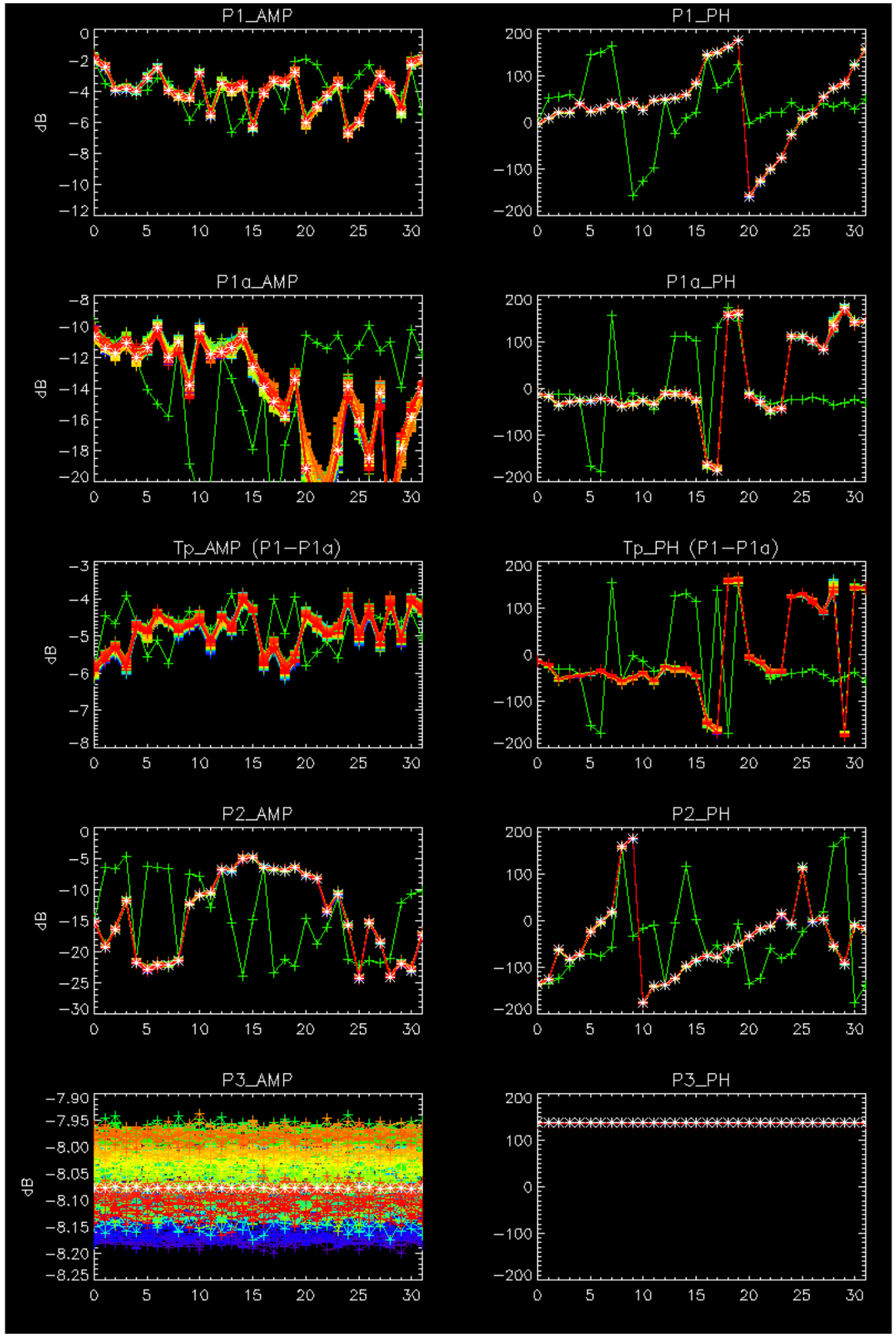

Cal pulses for GM1 SS3
Average P1 [dB]
0
−5
−10
−15
−20
31−Oct
05−Nov
10−Nov
15−Nov
20−Nov
25−Nov
30−Nov
Average P1a [dB]
−5
−10
−15
−20
−25
−30
Average P2 [dB]
Average P3 [dB]
−7.8
−8.0
−8.2
−8.4
rows: 3 7 11 15 19 22 26 30

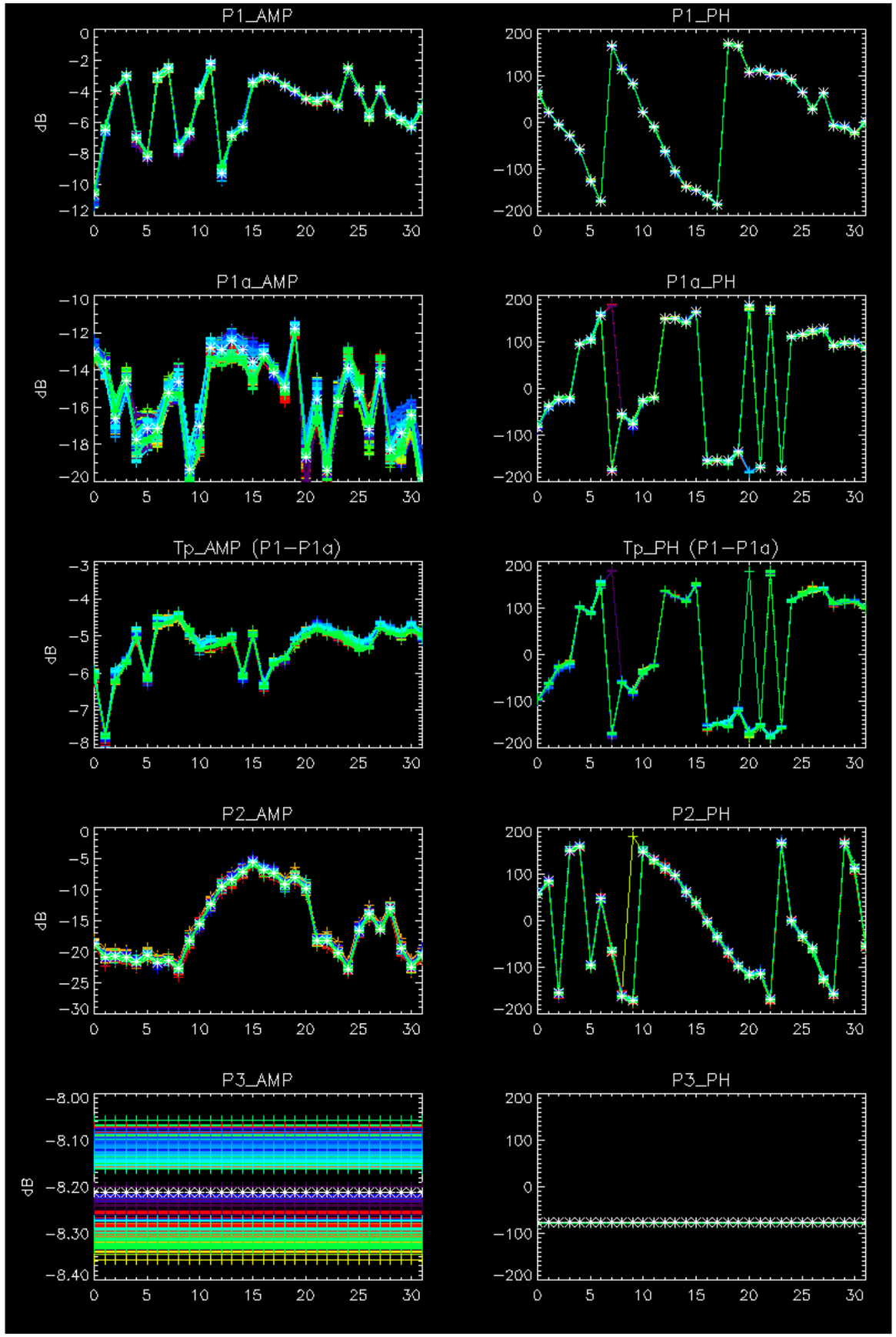

Cal pulses for GM1 SS3
Average P1 [dB]
−1
−2
−3
−4
−5
−6
−7
18
20
22
00
02−Dec
Average P1a [dB]
−5
−10
−15
−20
−25
18
20
22
00
02−Dec
Average P2[dB]
0
−5
−10
−15
−20
−25
18
20
22
00
02−Dec
Average P3 [dB]
−7.80
−7.90
−8.00
−8.10
−8.20
−8.30
−8.40
18
20
22
00
02−Dec
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30


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


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

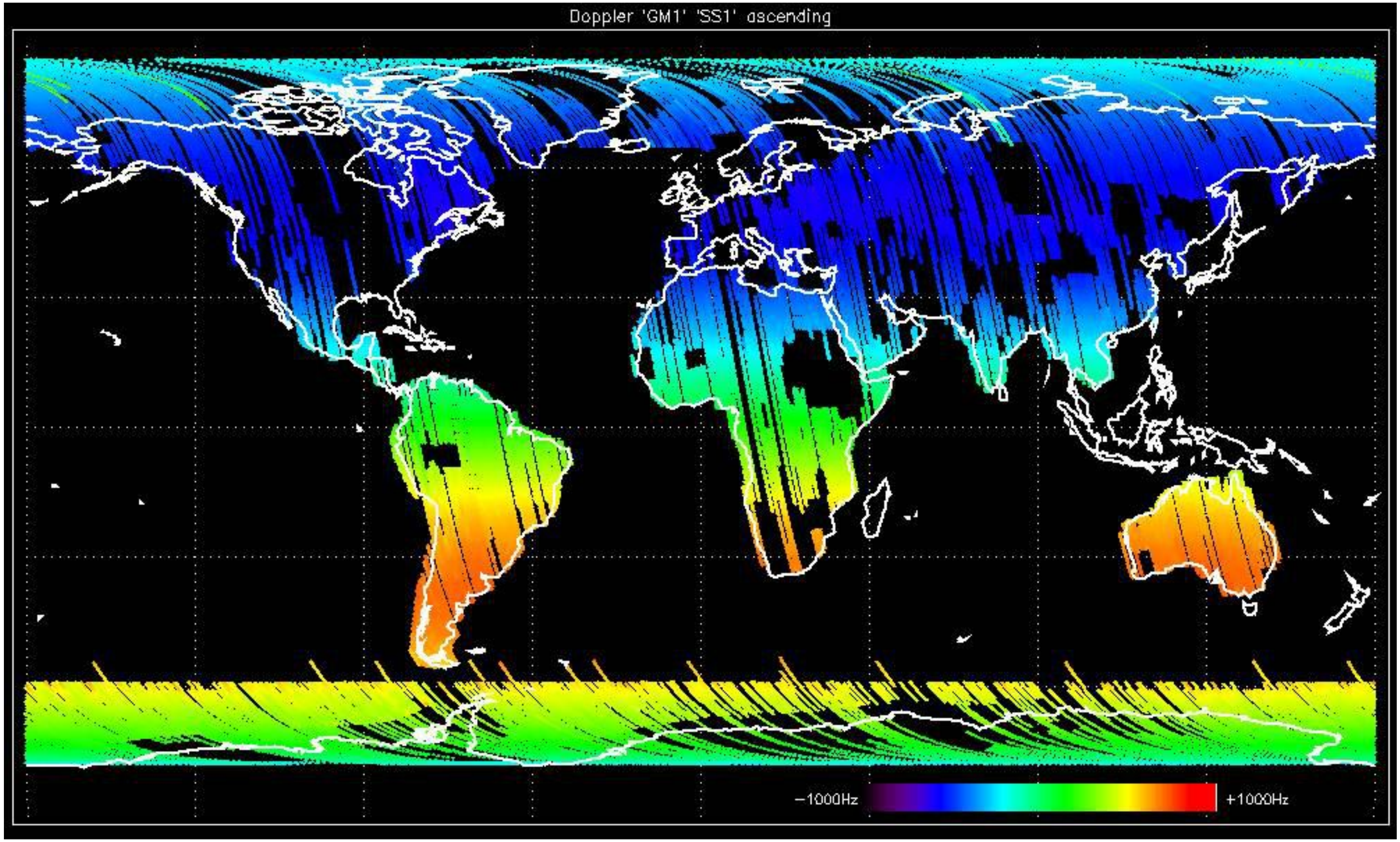
No anomalies observed.

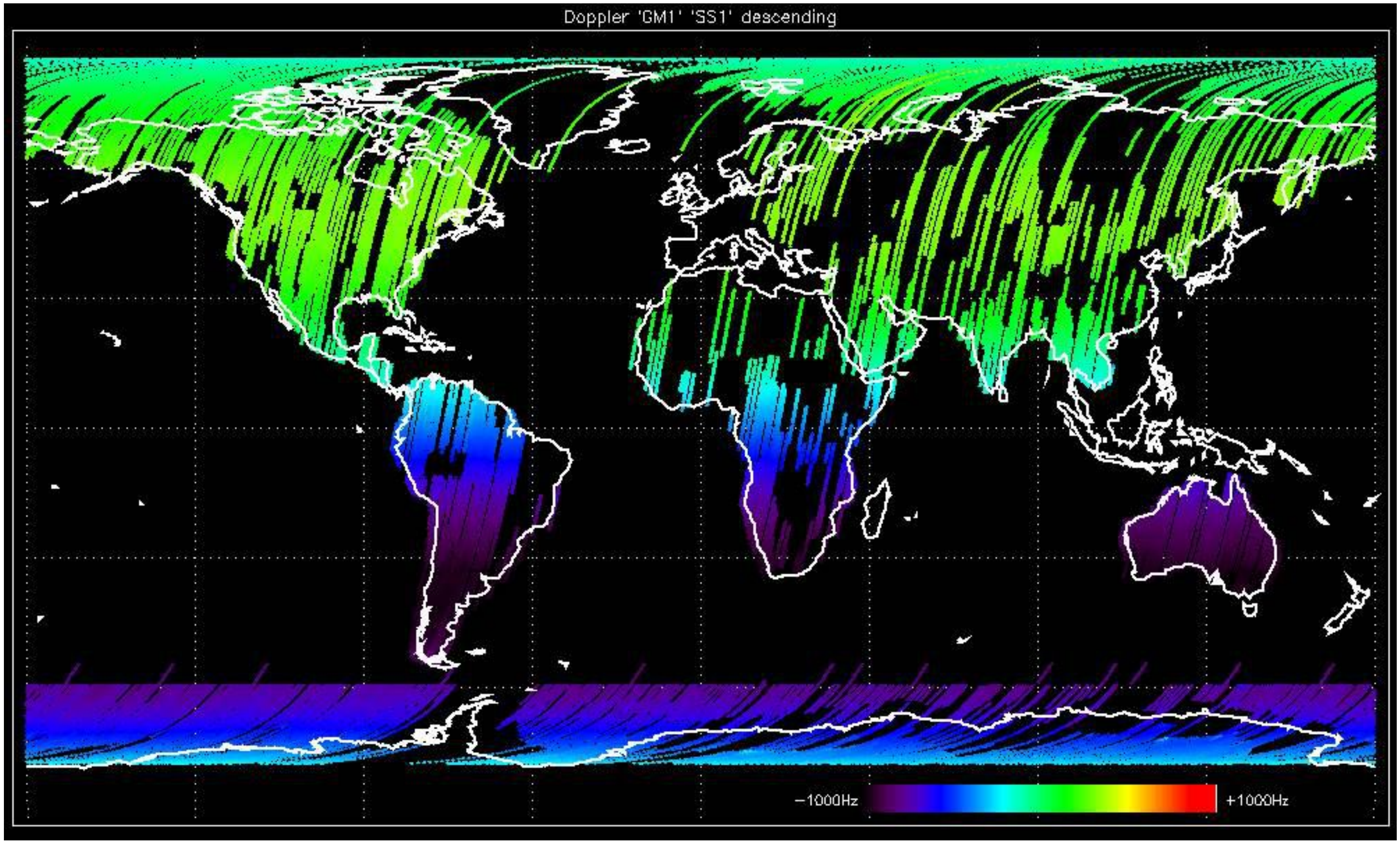

P1_AMP
dB
P1_PH
P1a_AMP
dB
P1a_PH
Tp_AMP (P1−P1a)
dB
Tp_PH (P1−P1a)
P2_AMP
dB
P2_PH
P3_AMP
dB
P3_PH

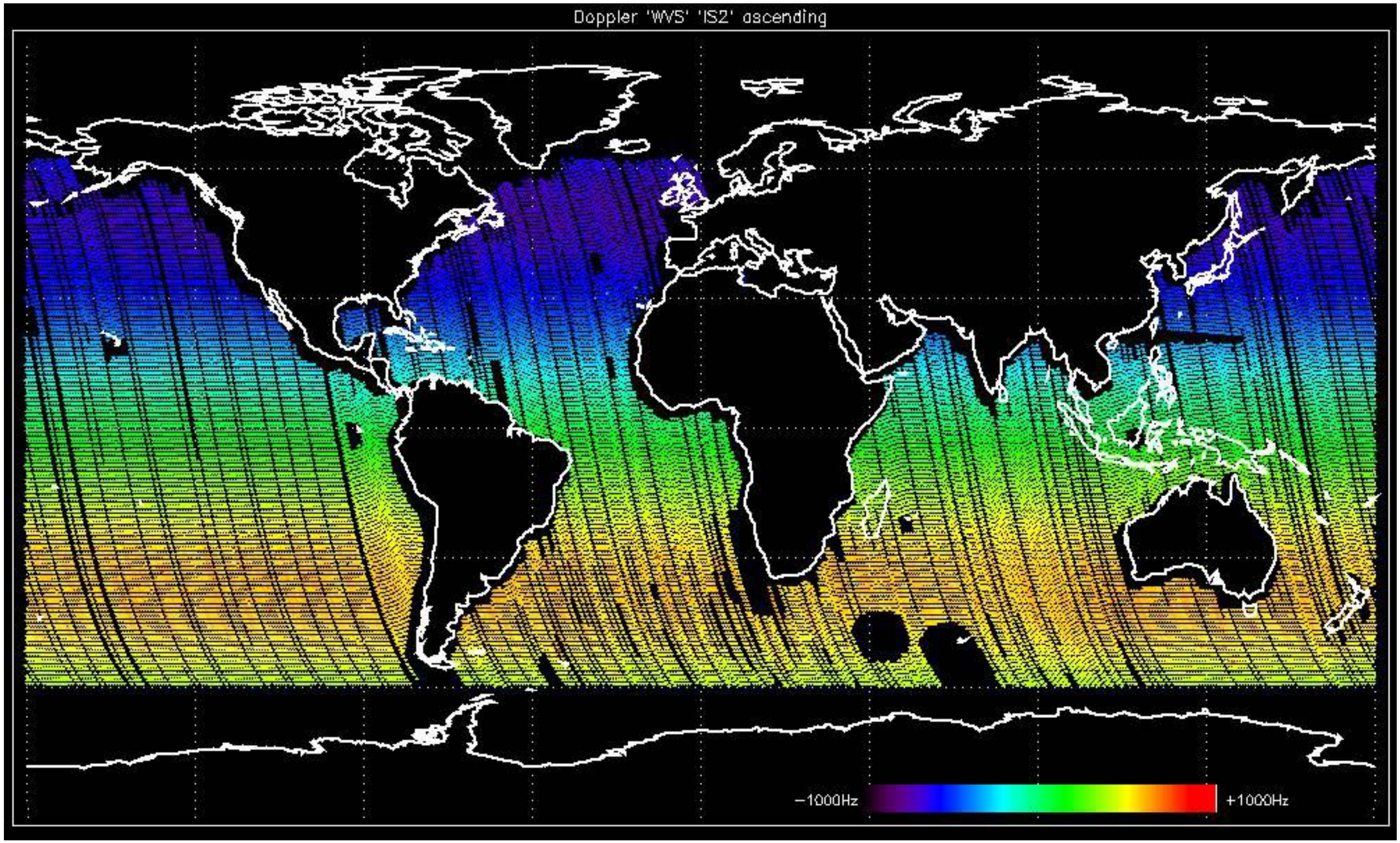

P1_AMP
dB
P1_PH
P1a_AMP
dB
P1a_PH
Tp_AMP (P1−P1a)
dB
Tp_PH (P1−P1a)
P2_AMP
dB
P2_PH
P3_AMP
dB
P3_PH

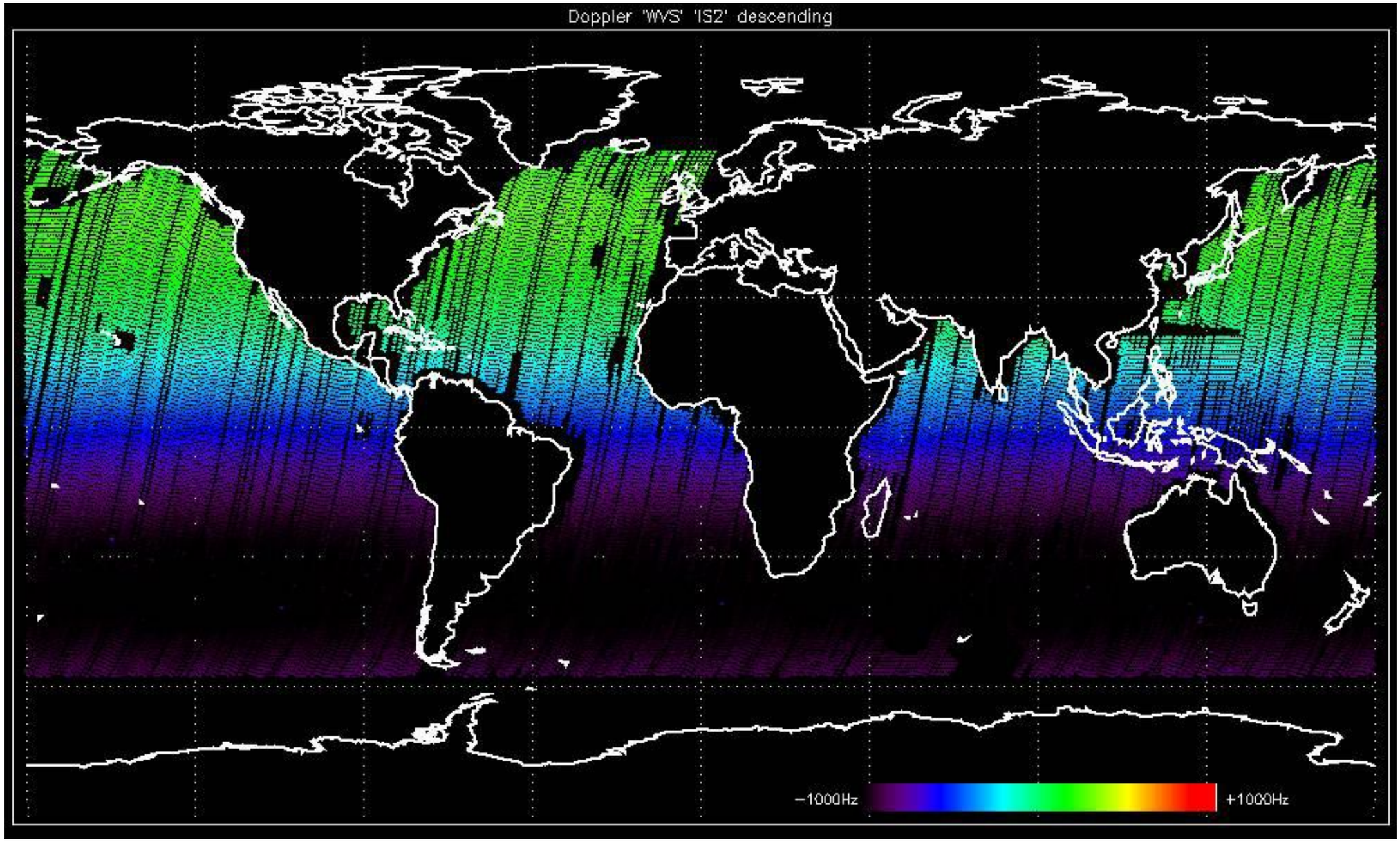
-Stable wave internal calibration pulses gain and phase.
-Stable raw data statistics.
-Nominal Doppler behavior.

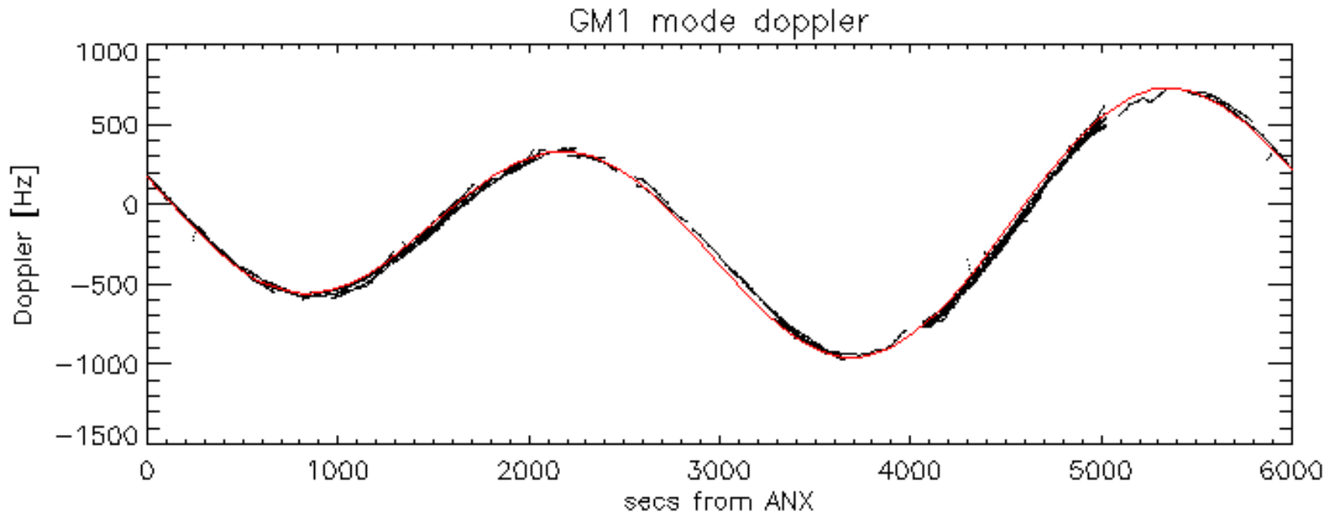
Preliminary report.The data is not yet controled

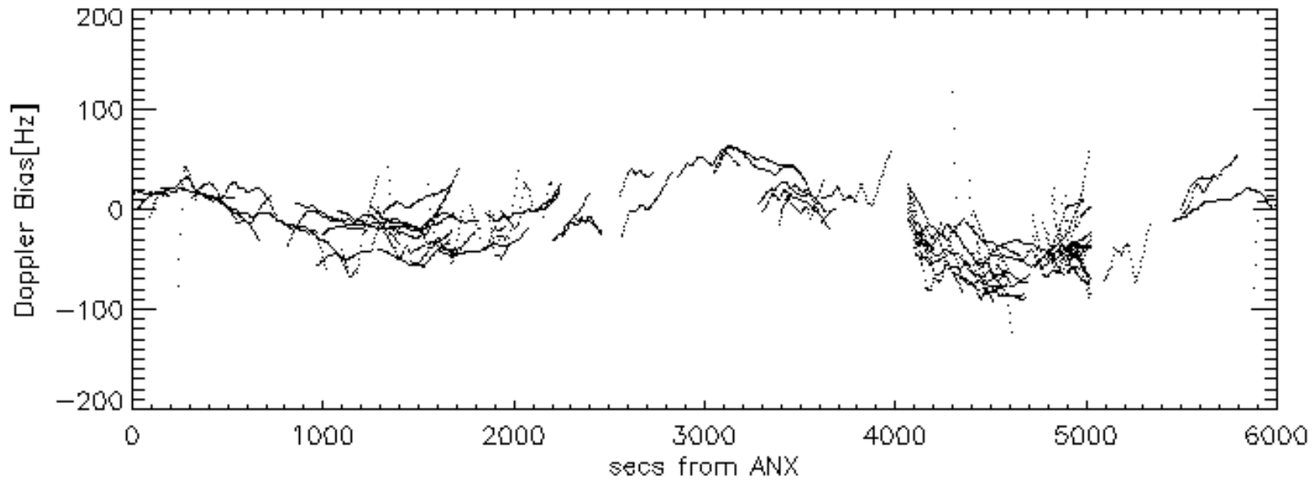

Doppler 'GM1' 'SS1' ascending
−1000Hz
+1000Hz

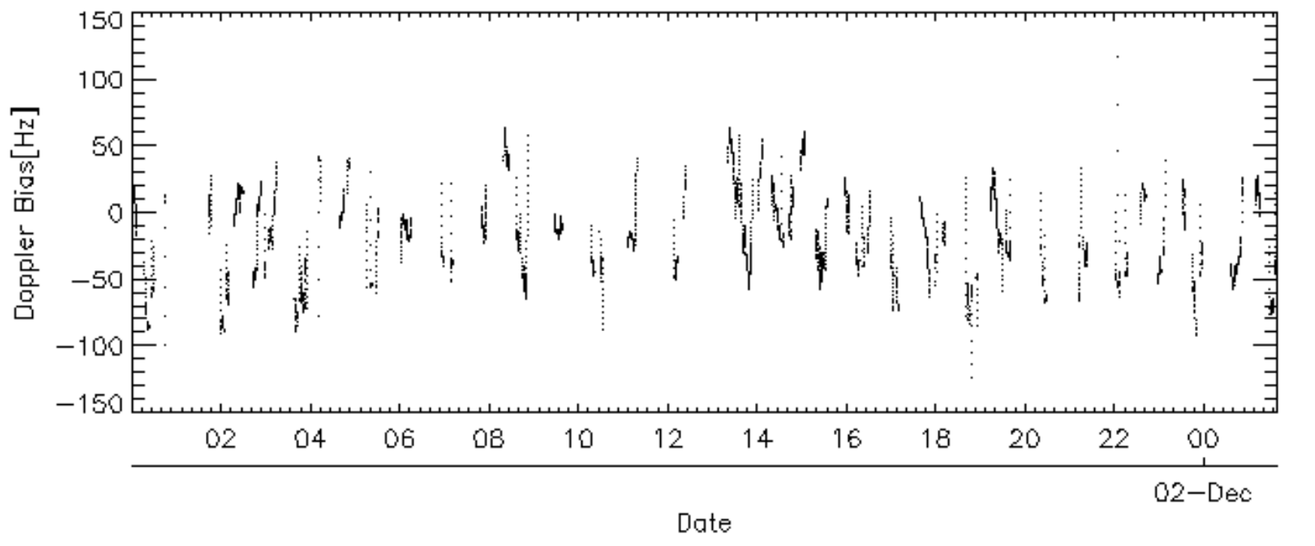

Doppler 'GM1' 'SS1' descending
−1000Hz
+1000Hz

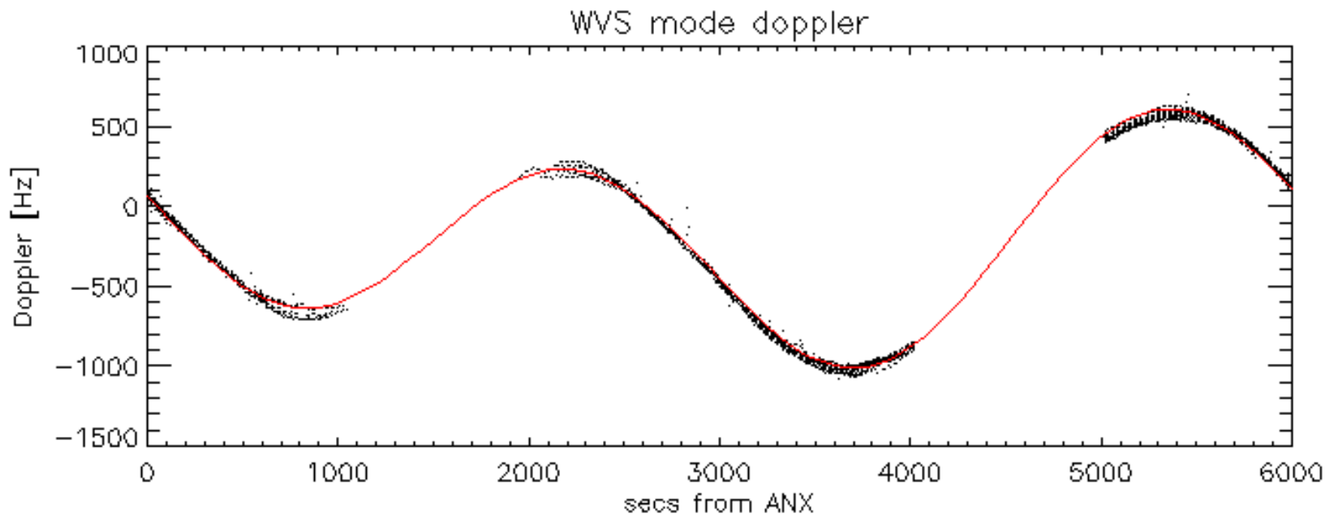

Doppler 'WVS' 'IS2' ascending
−1000Hz
+1000Hz

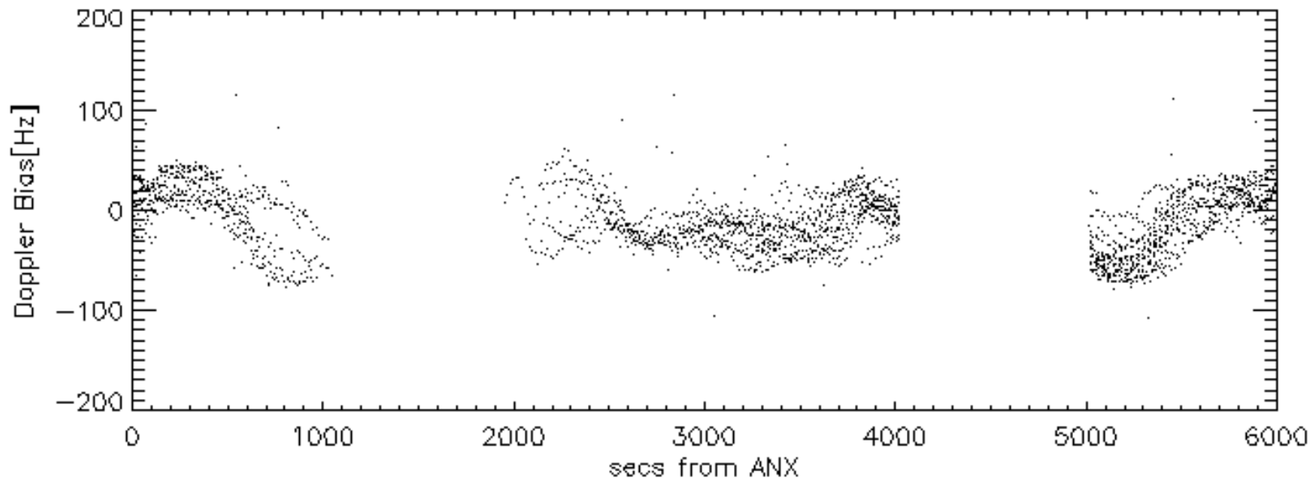

Doppler 'WVS' 'IS2' descending
−1000Hz
+1000Hz

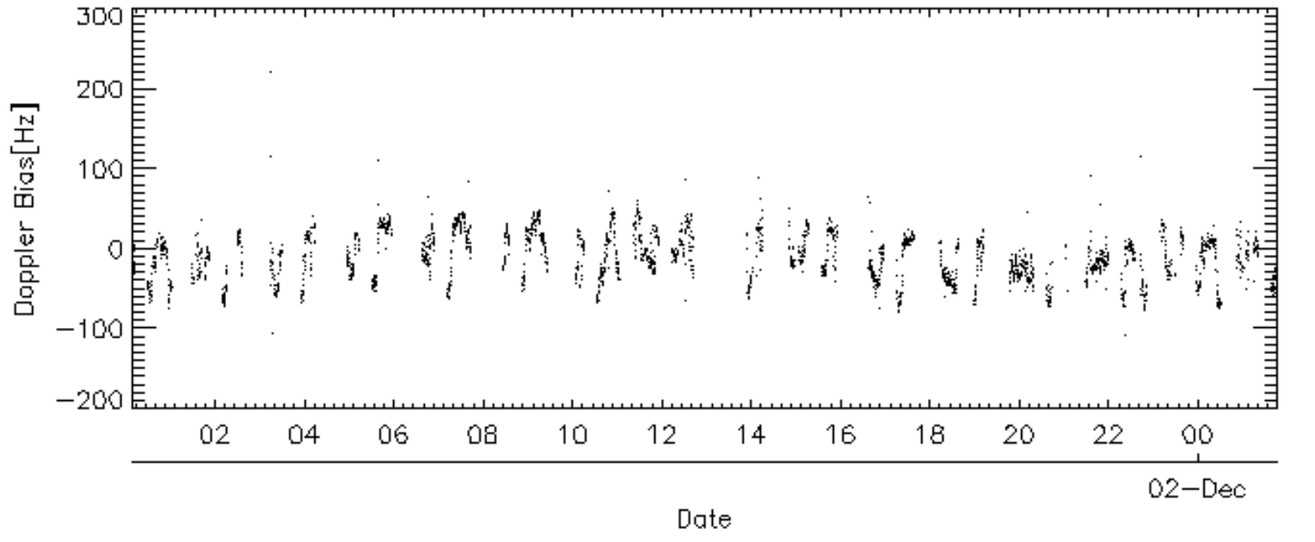

GM1 mode doppler
Doppler [Hz]
1000
500
0
−500
−1000
−1500
0
1000
2000
3000
4000
5000
6000
secs from ANX

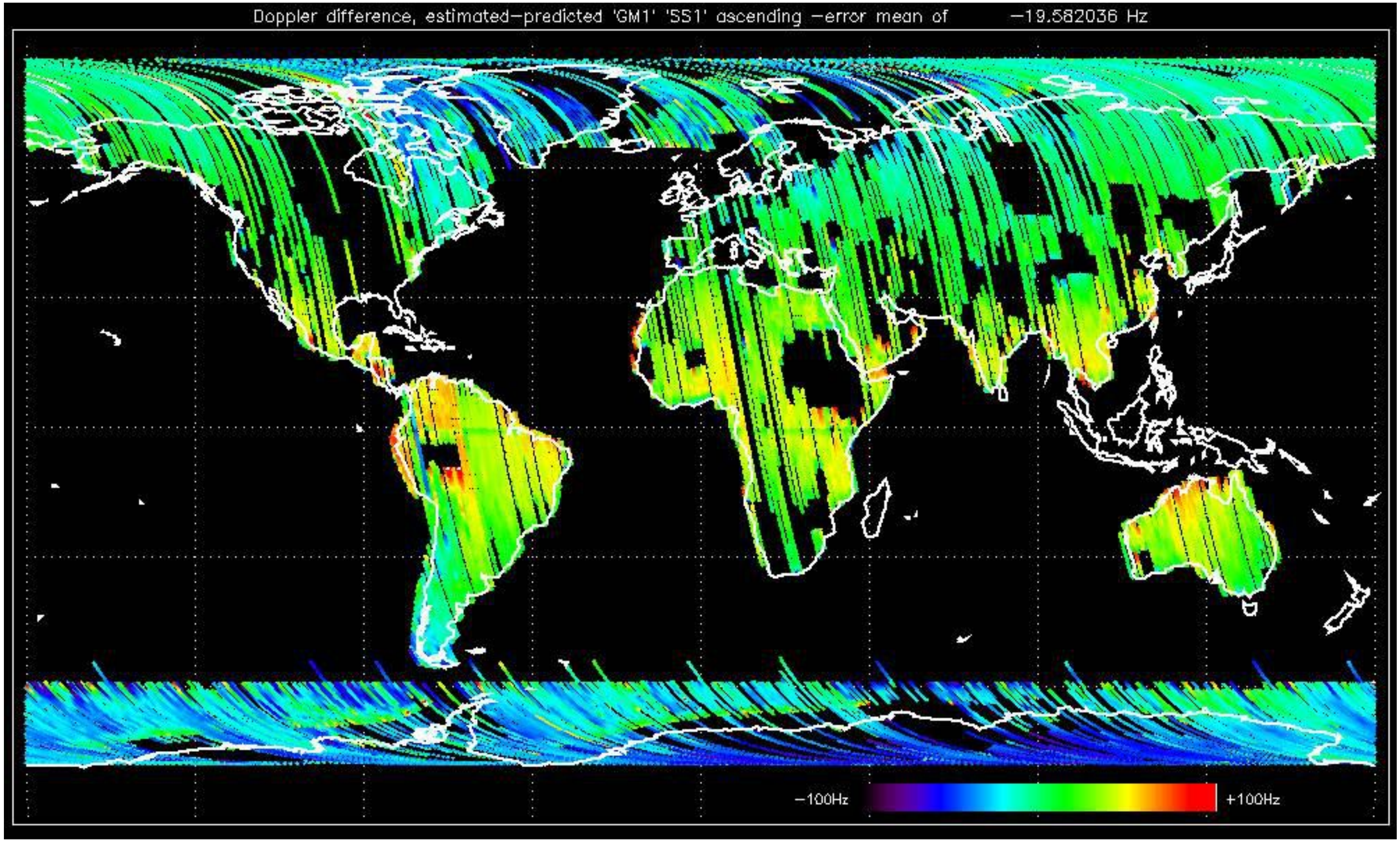

Doppler Bias[Hz]
200
100
0
−100
−200
0
1000
2000
3000
4000
5000
6000
secs from ANX

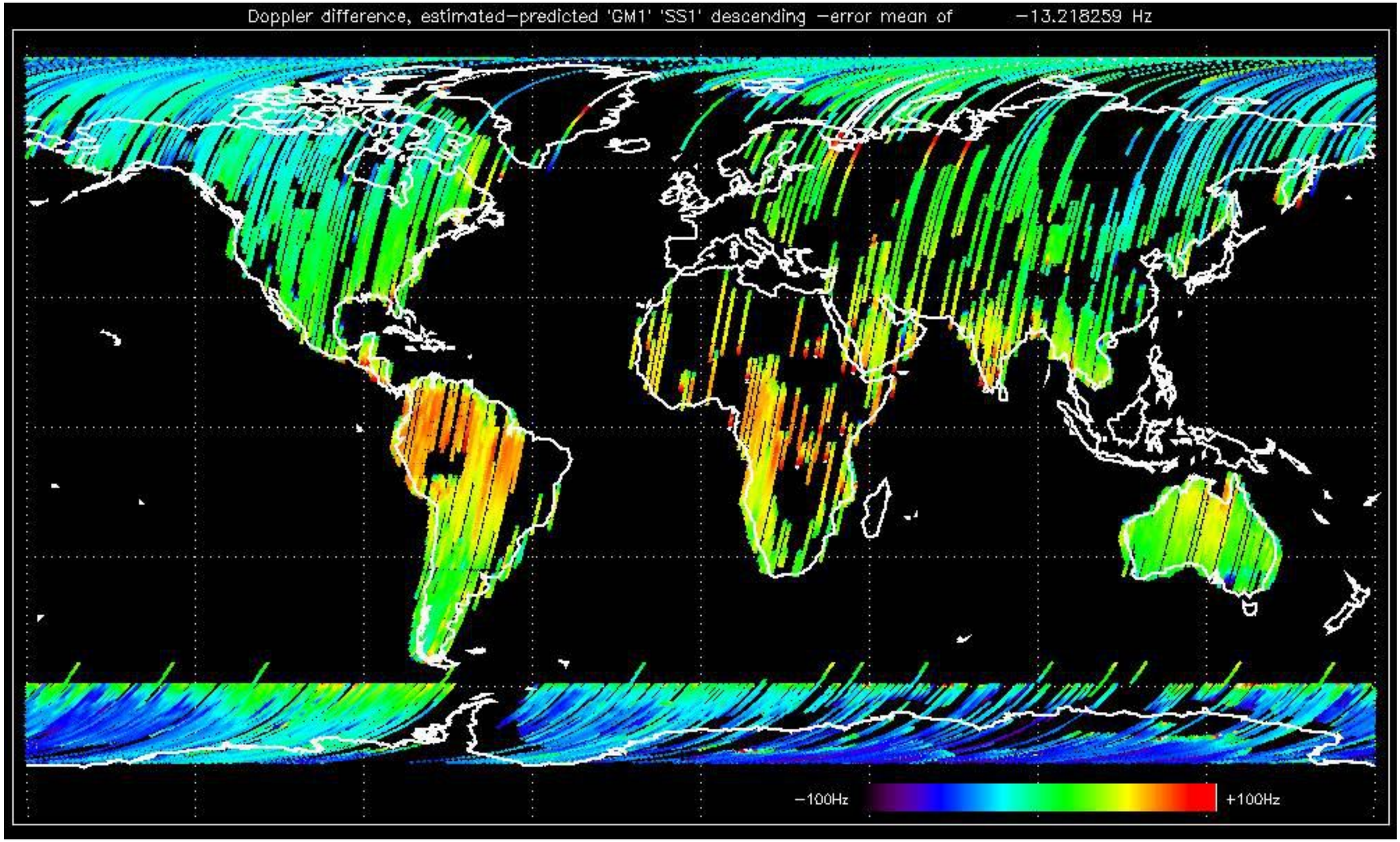

Doppler Bias[Hz]
150
100
50
0
−50
−100
−150
02
04
06
08
10
12
14
16
18
20
22
00
02−Dec
Date

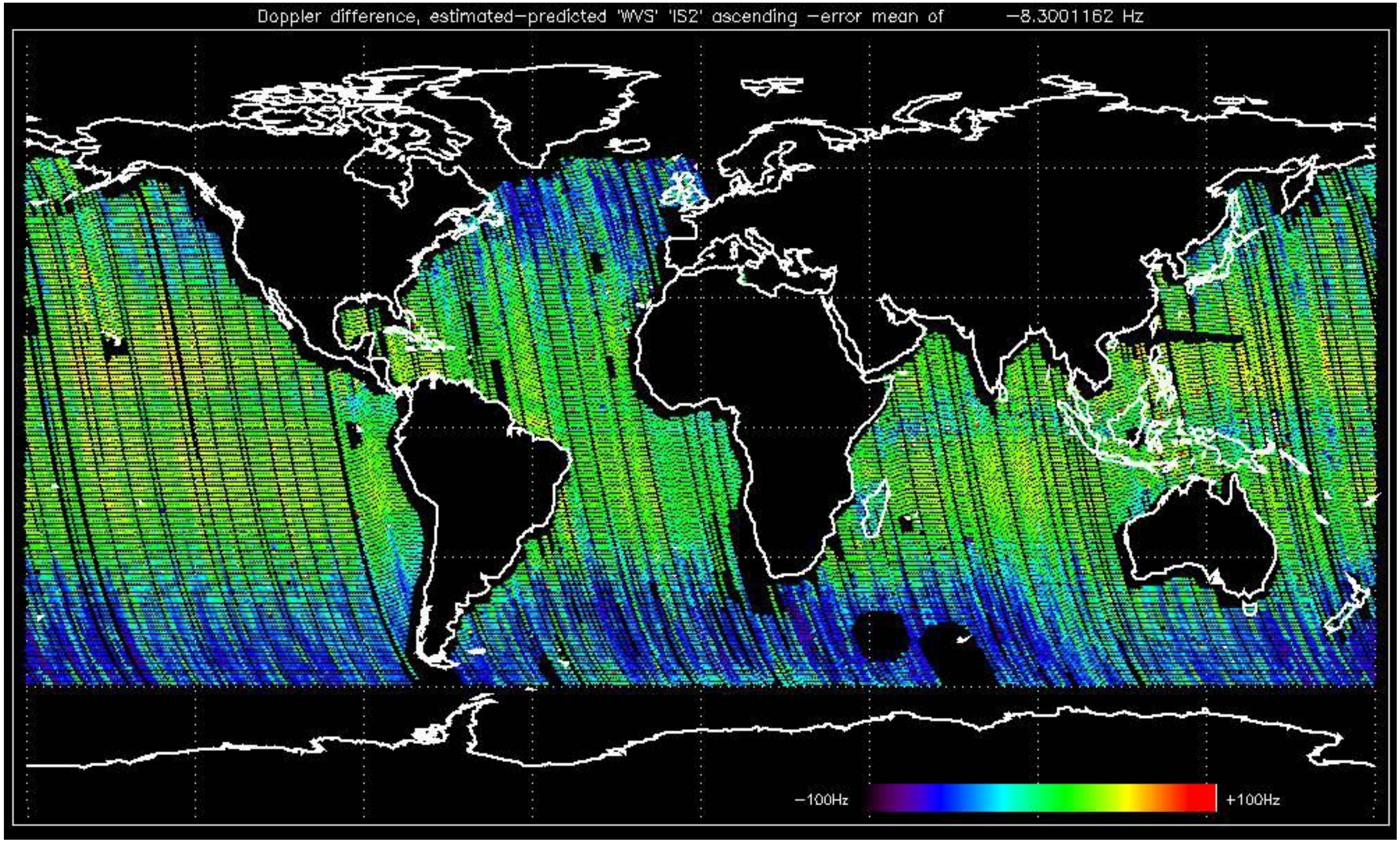

WVS mode doppler
Doppler [Hz]
1000
500
0
−500
−1000
−1500
0
1000
2000
3000
4000
5000
6000
secs from ANX

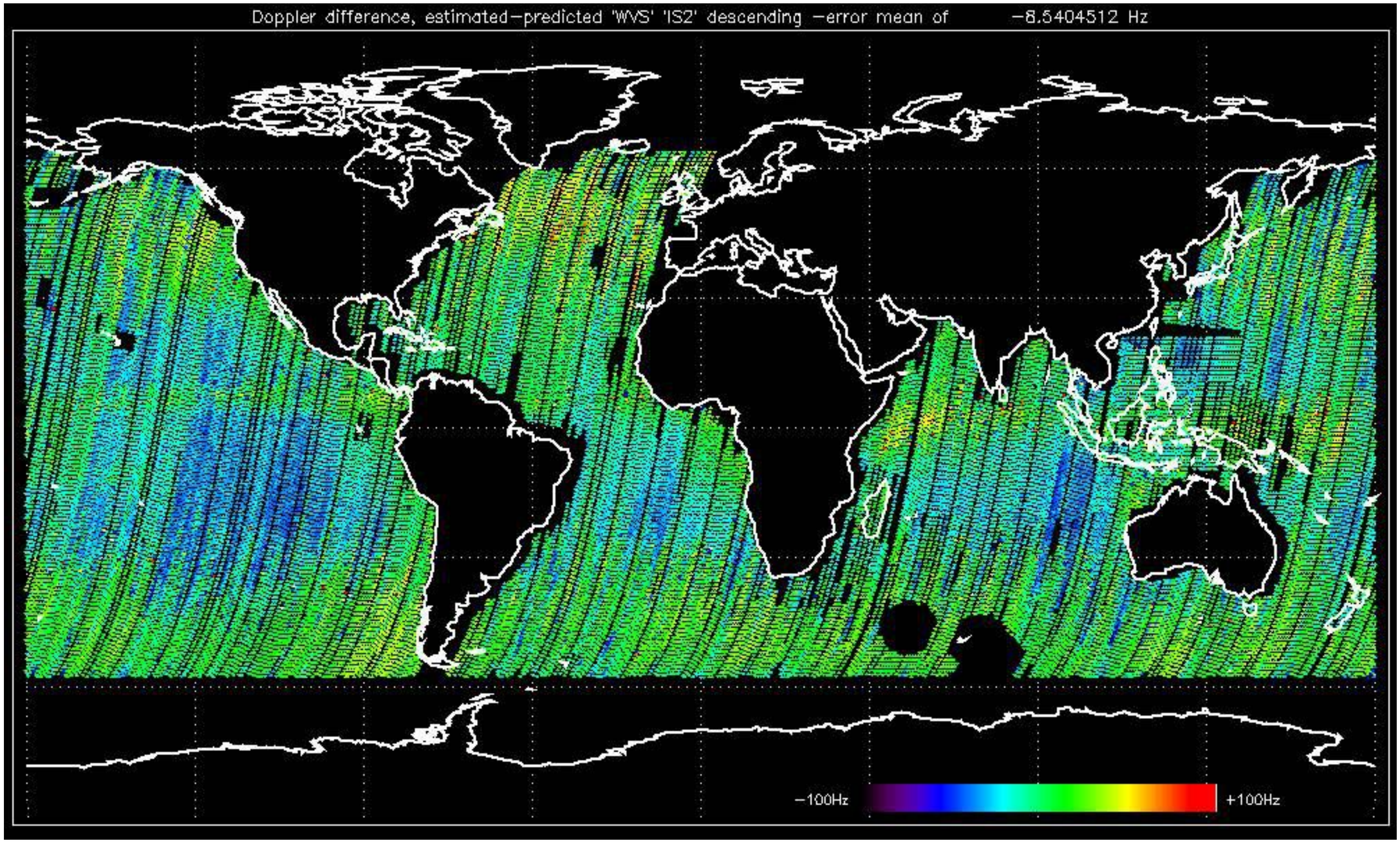

Doppler Bias[Hz]
200
100
0
−100
−200
0
1000
2000
3000
4000
5000
6000
secs from ANX


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


Doppler difference, estimated−predicted 'GM1' 'SS1' ascending −error mean of −19.582036 Hz
−100Hz
+100Hz

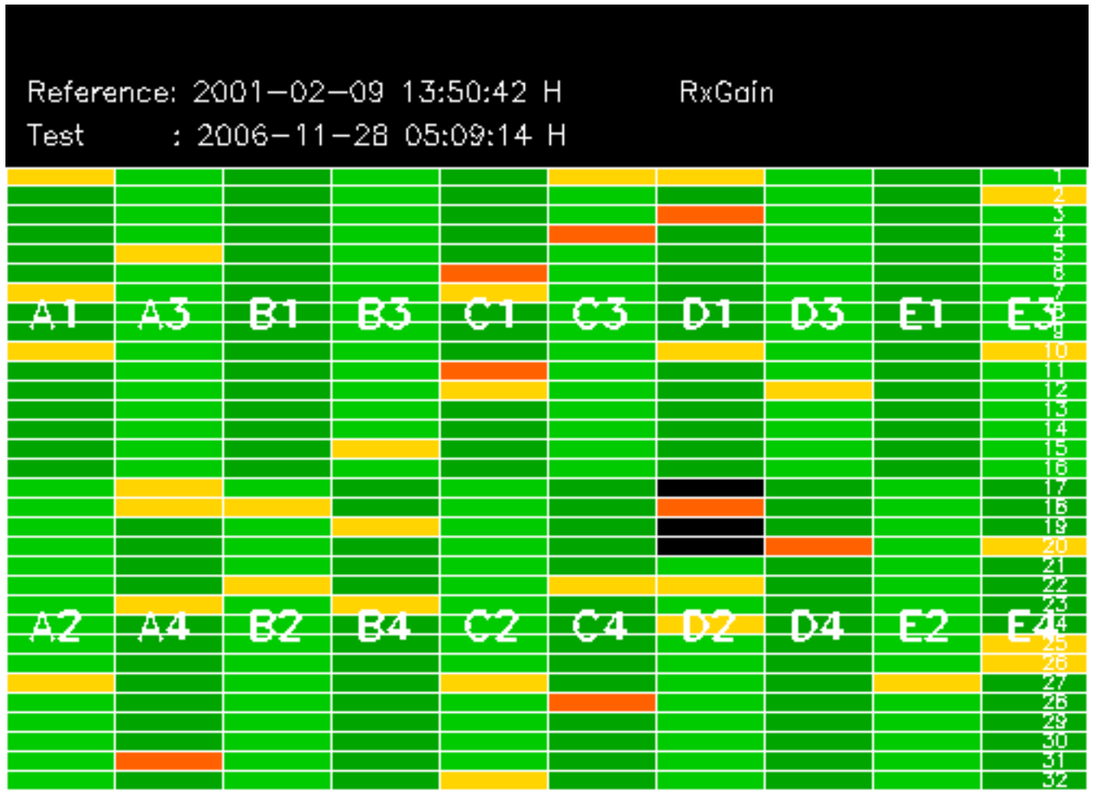

Doppler difference, estimated−predicted 'GM1' 'SS1' descending −error mean of −13.218259 Hz
−100Hz
+100Hz

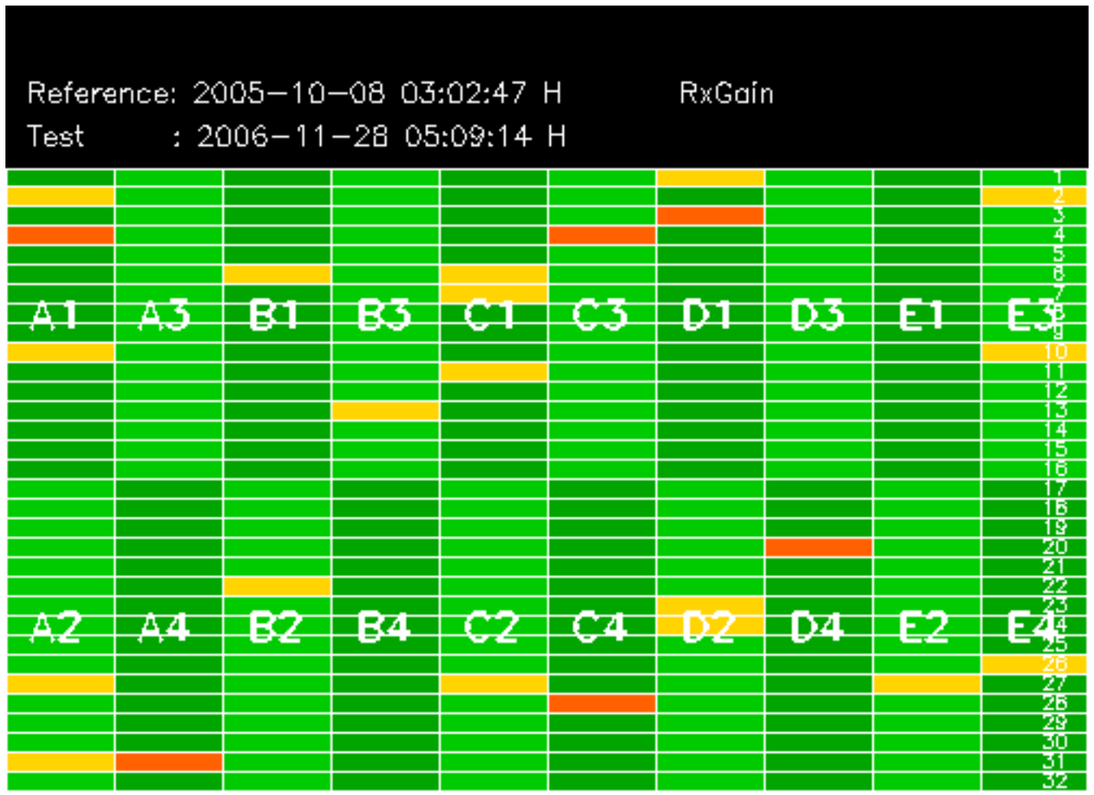

Doppler difference, estimated−predicted 'WVS' 'IS2' ascending −error mean of −8.3001162 Hz
−100Hz
+100Hz

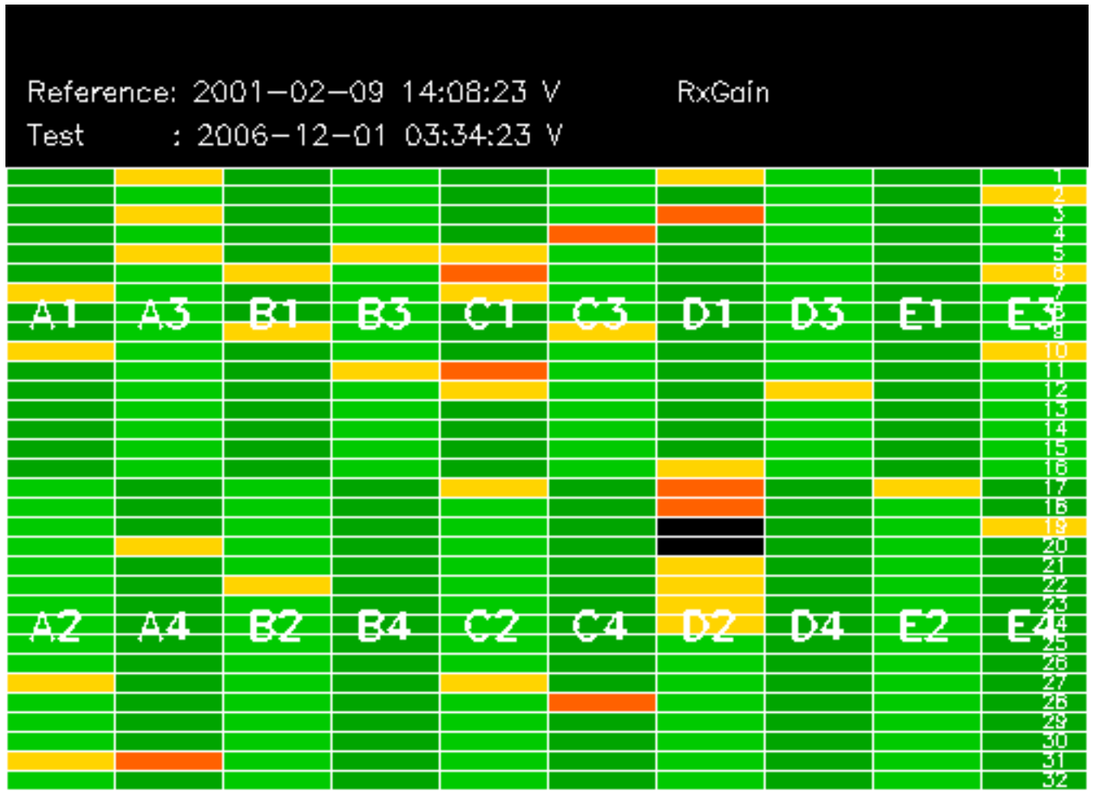

Doppler difference, estimated−predicted 'WVS' 'IS2' descending −error mean of −8.5404512 Hz
−100Hz
+100Hz

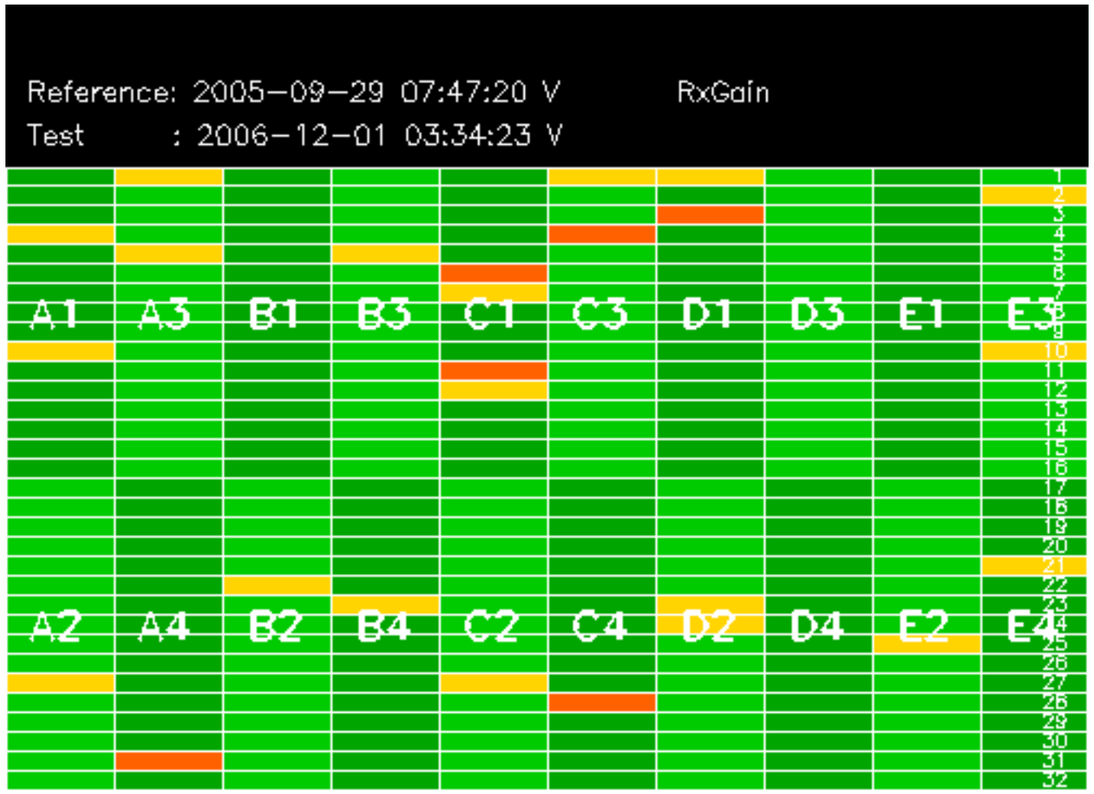
No anomalies observed on available MS products:

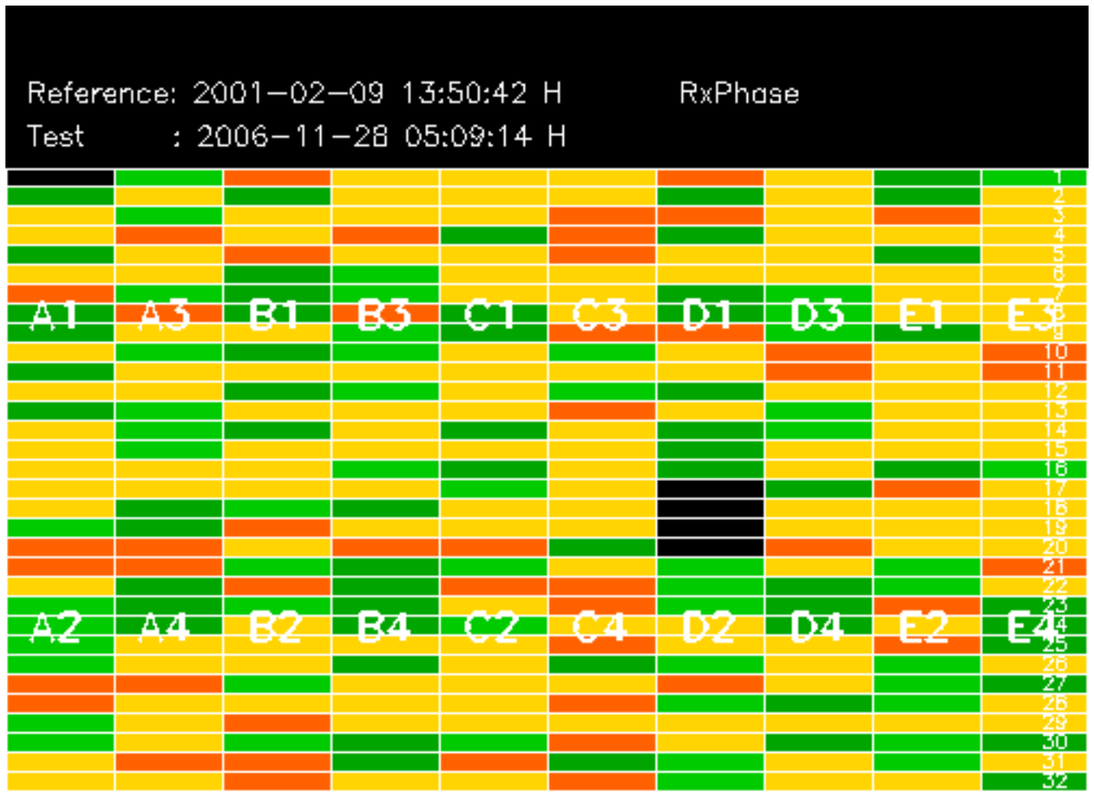
No anomalies observed.


Reference: 2001-02-09 13:50:42 H
Test : 2006-11-28 05:09:14 H
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

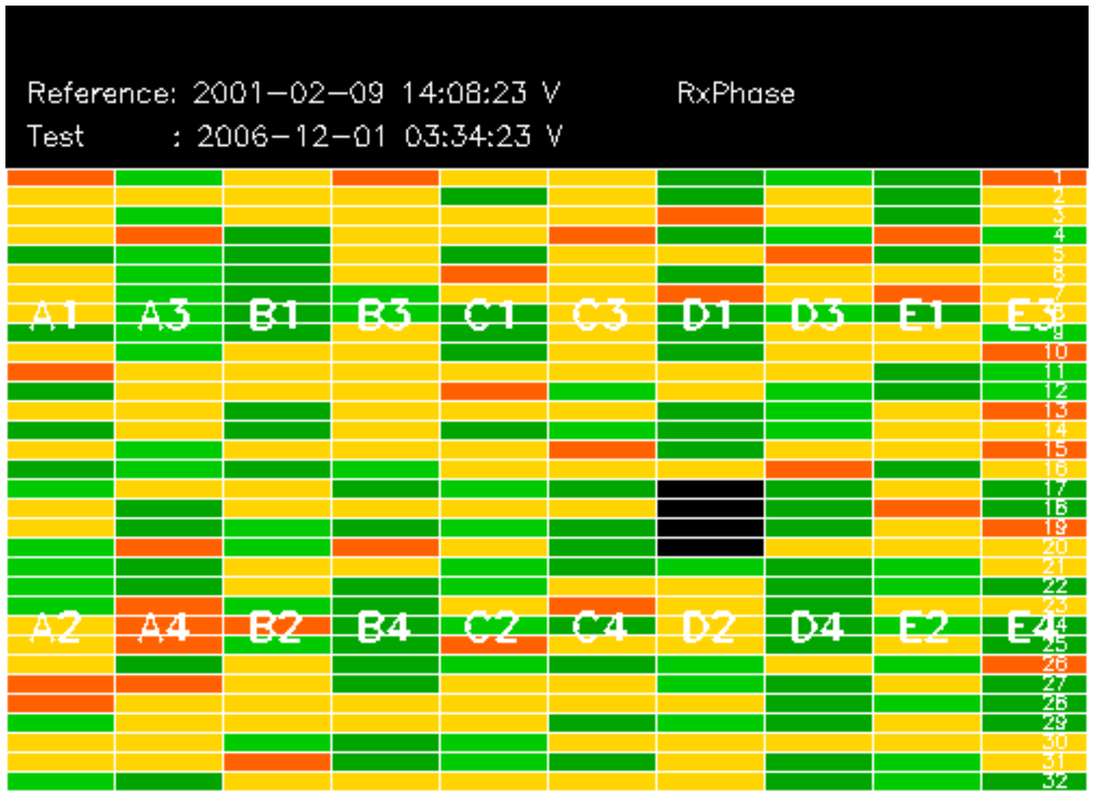

Reference: 2005-10-08 03:02:47 H
Test : 2006-11-28 05:09:14 H
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

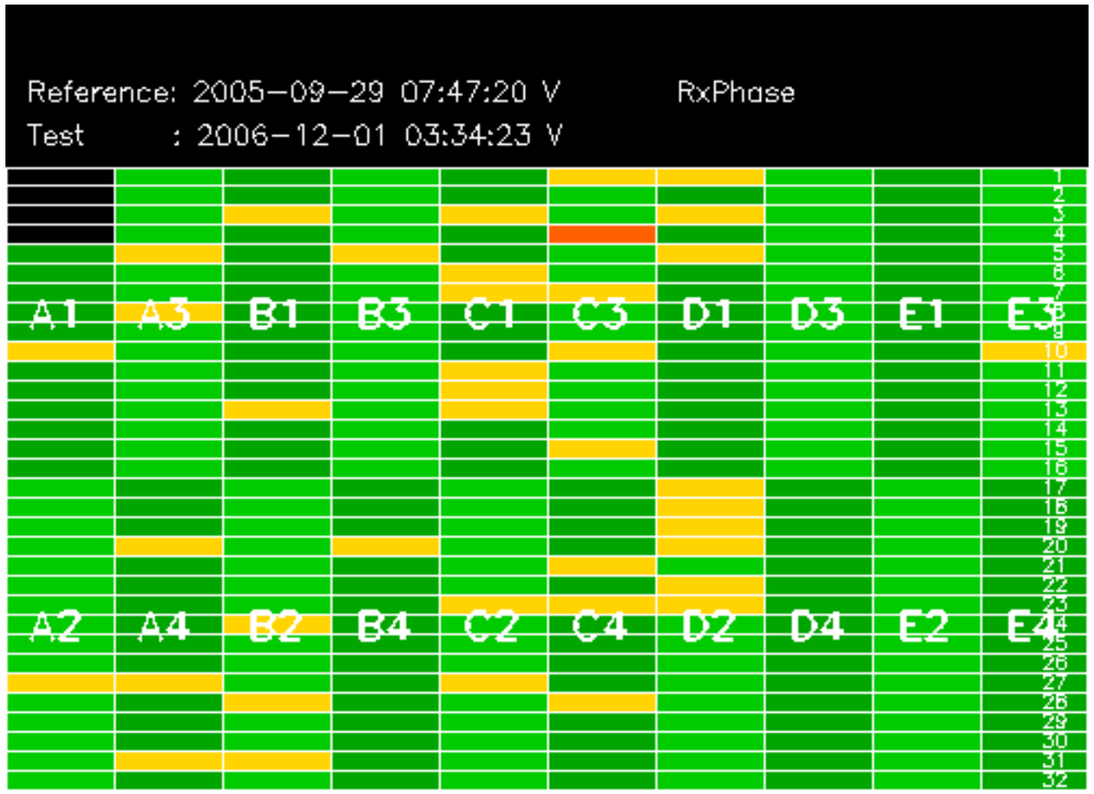

Reference: 2001-02-09 14:08:23 V
Test : 2006-12-01 03:34:23 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

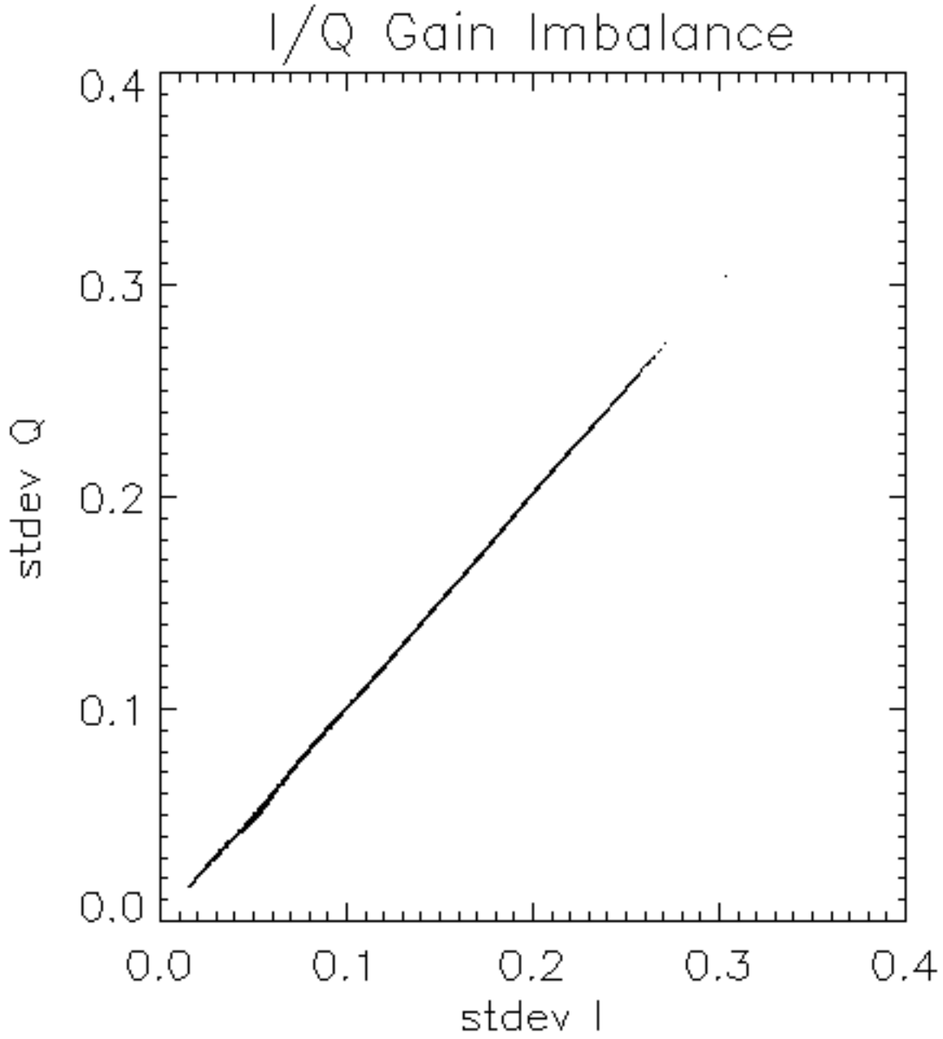

Reference: 2005-09-29 07:47:20 V
Test : 2006-12-01 03:34:23 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

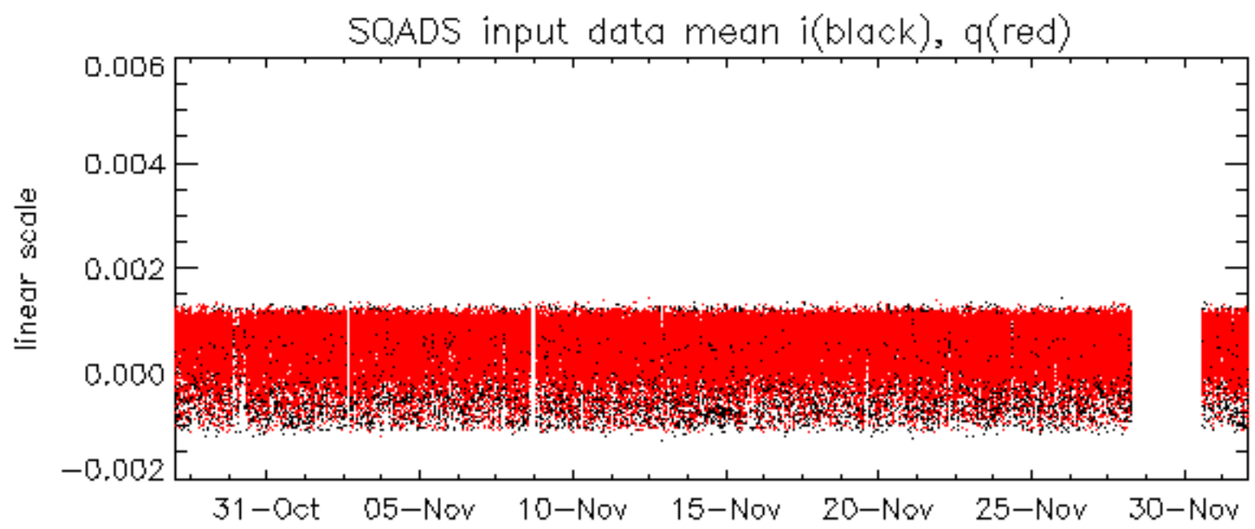

Reference: 2001-02-09 13:50:42 H
RxPhase
Test : 2006-11-28 05:09:14 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

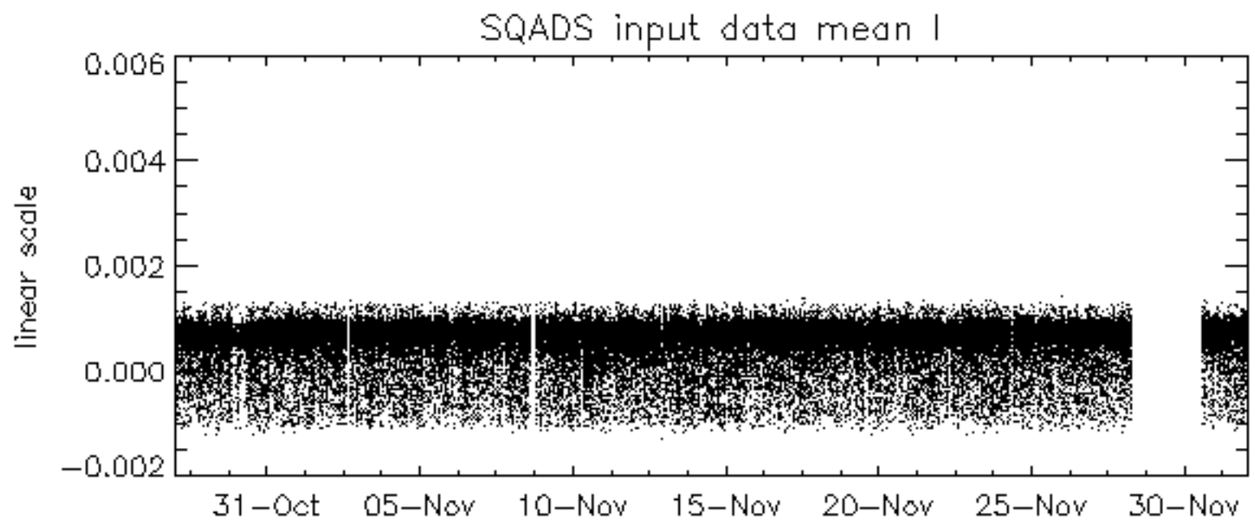

Reference: 2005-10-08 03:02:47 H
RxPhase
Test : 2006-11-28 05:09:14 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

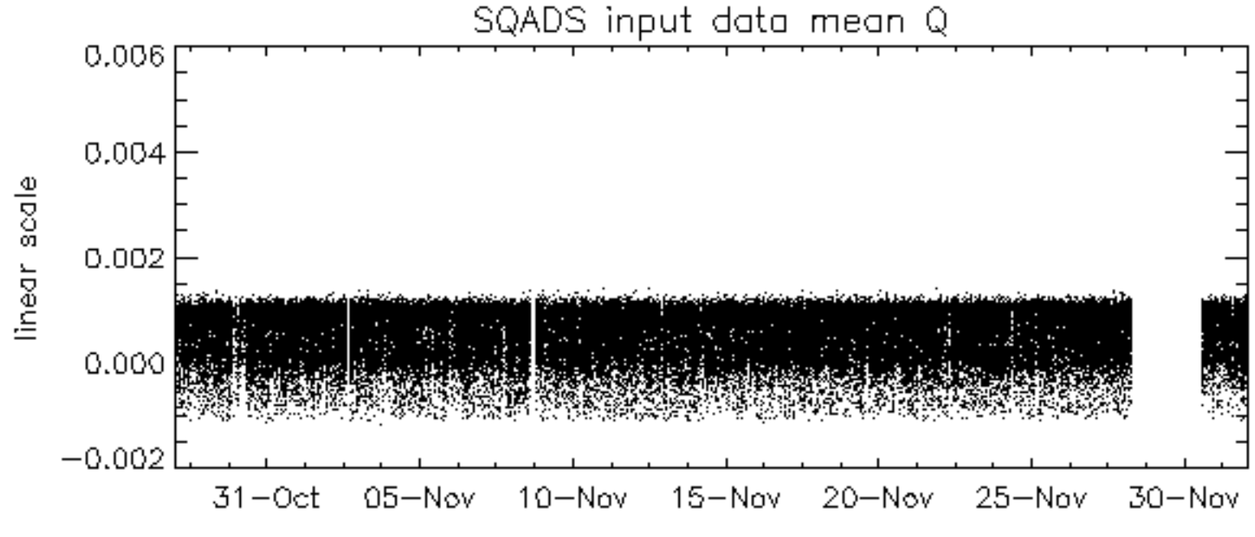

Reference: 2001-02-09 14:08:23 V
Test : 2006-12-01 03:34:23 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

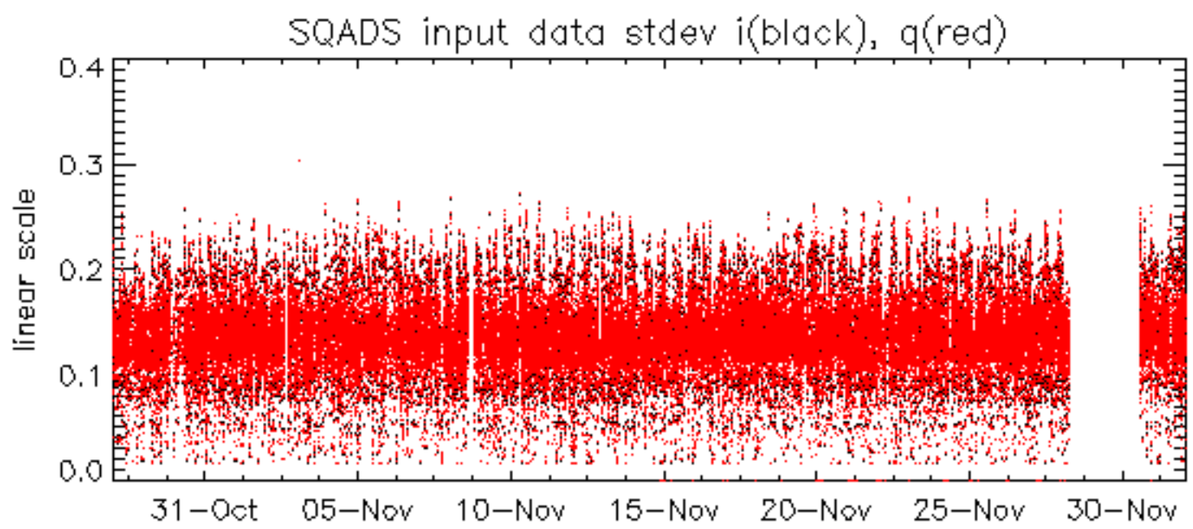

Reference: 2005-09-29 07:47:20 V
Test : 2006-12-01 03:34:23 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

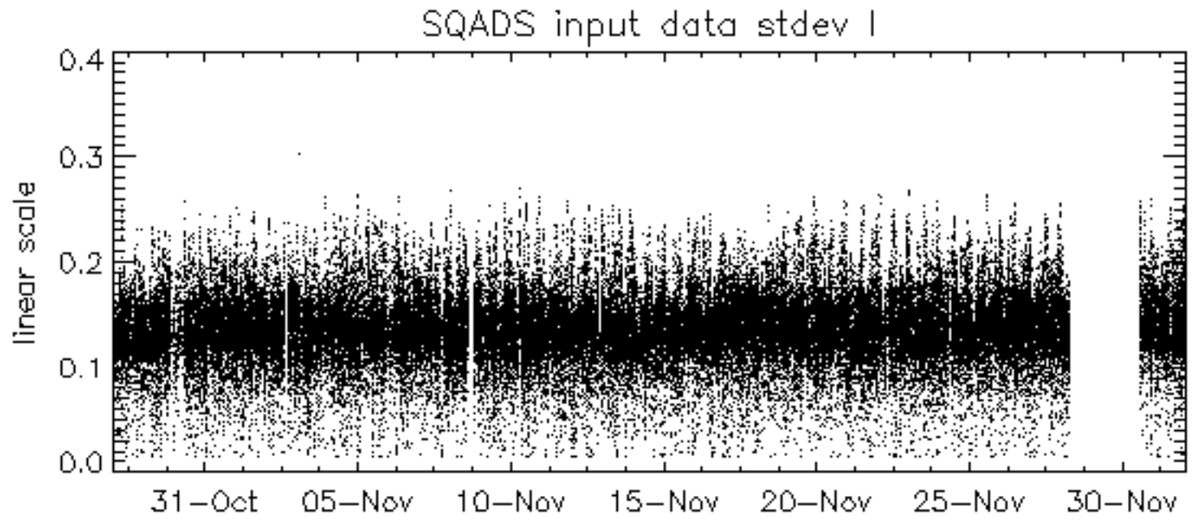

I/Q Gain Imbalance
0.4
0.3
0.2
0.1
0.0
stdev Q
0.0
0.1
0.2
0.3
0.4
stdev I

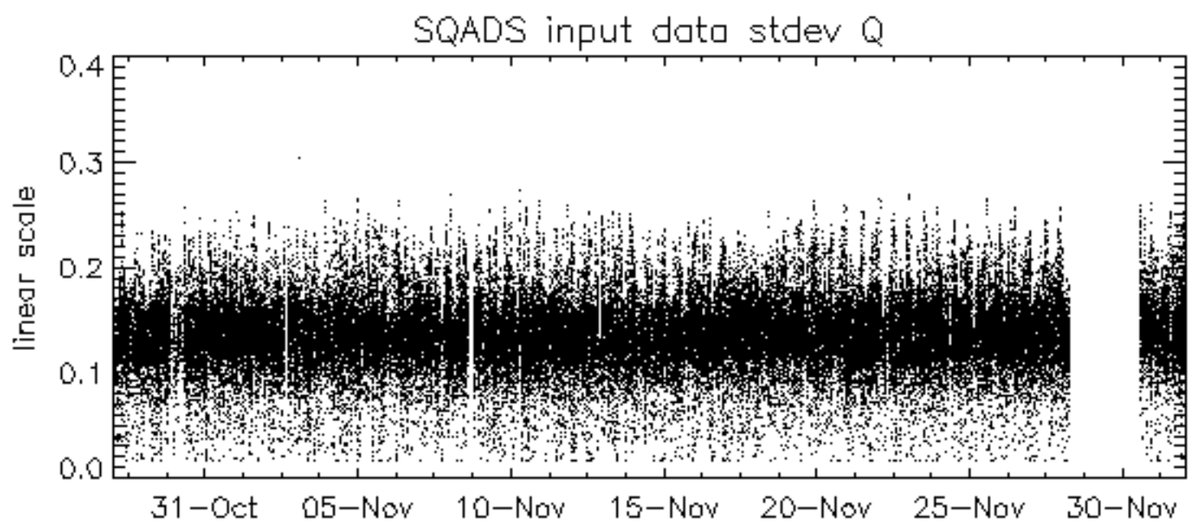

SQADS input data mean i(black), q(red)
linear scale
0.006
0.004
0.002
0.000
−0.002
31−Oct
05−Nov
10−Nov
15−Nov
20−Nov
25−Nov
30−Nov

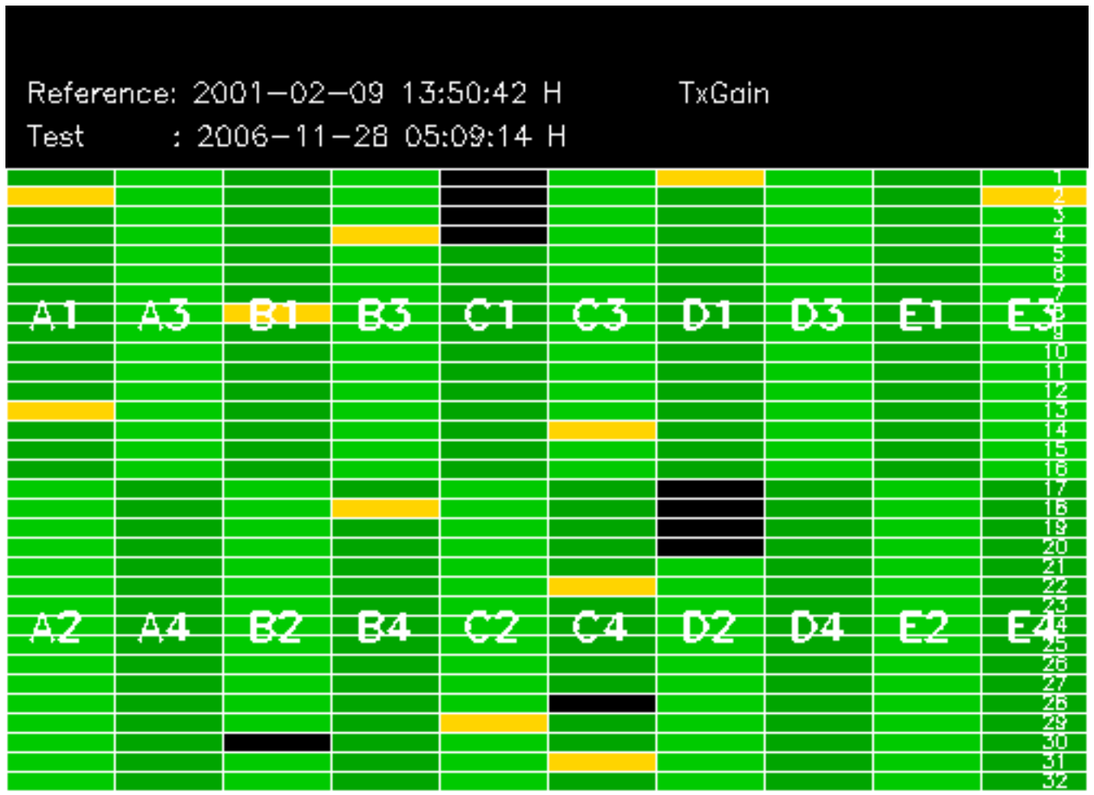

SQADS input data mean I
linear scale
0.006
0.004
0.002
0.000
−0.002
31−Oct
05−Nov
10−Nov
15−Nov
20−Nov
25−Nov
30−Nov

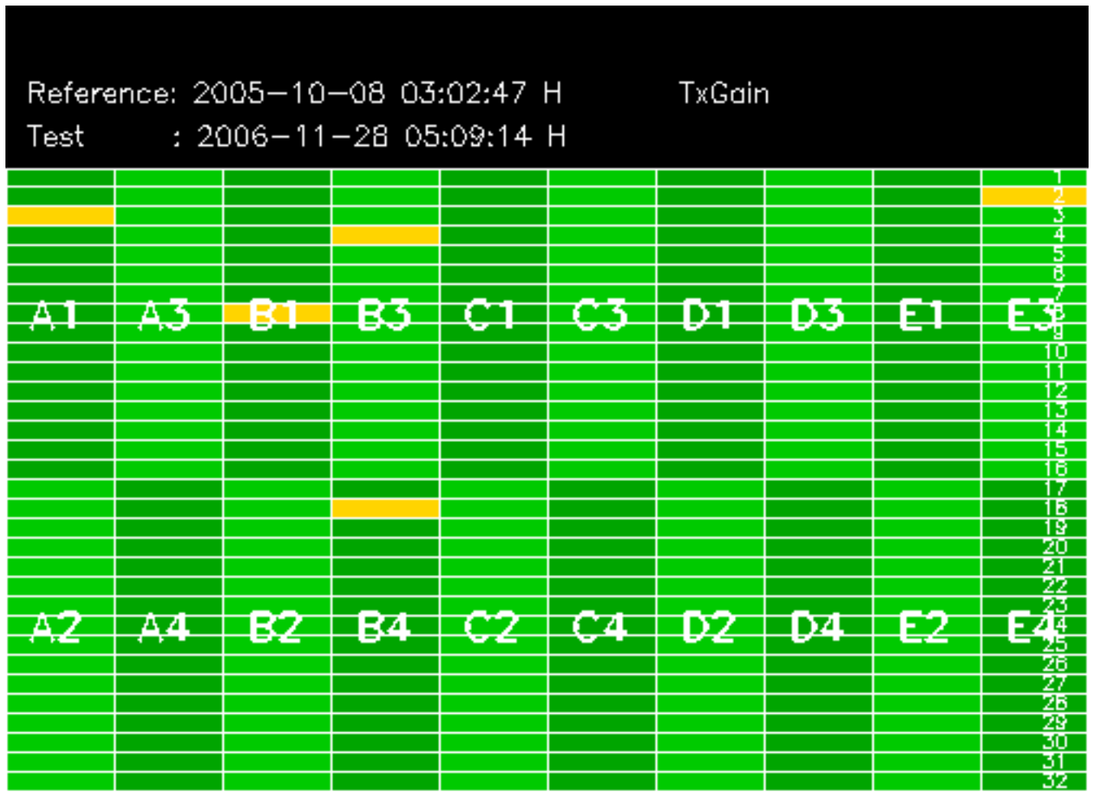

SQADS input data mean Q
linear scale
0.006
0.004
0.002
0.000
−0.002
31−Oct
05−Nov
10−Nov
15−Nov
20−Nov
25−Nov
30−Nov

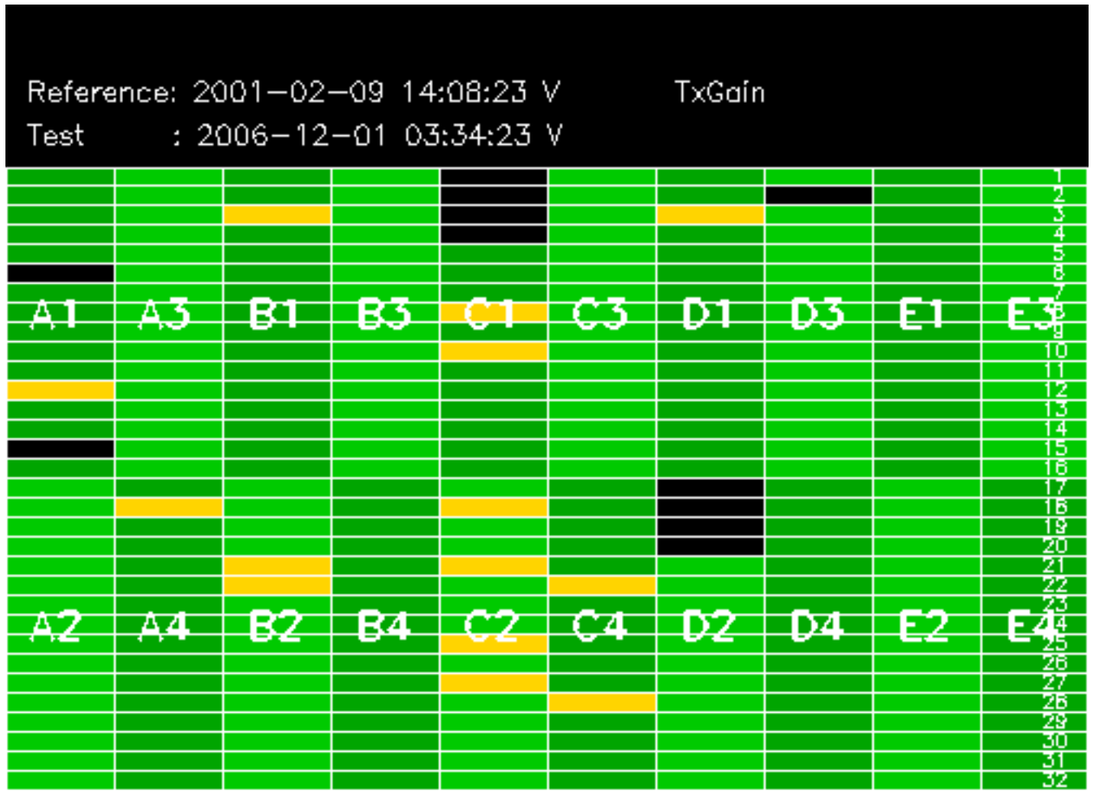

SQADS input data stdev i(black), q(red)
linear scale
0.4
0.3
0.2
0.1
0.0
31−Oct
05−Nov
10−Nov
15−Nov
20−Nov
25−Nov
30−Nov

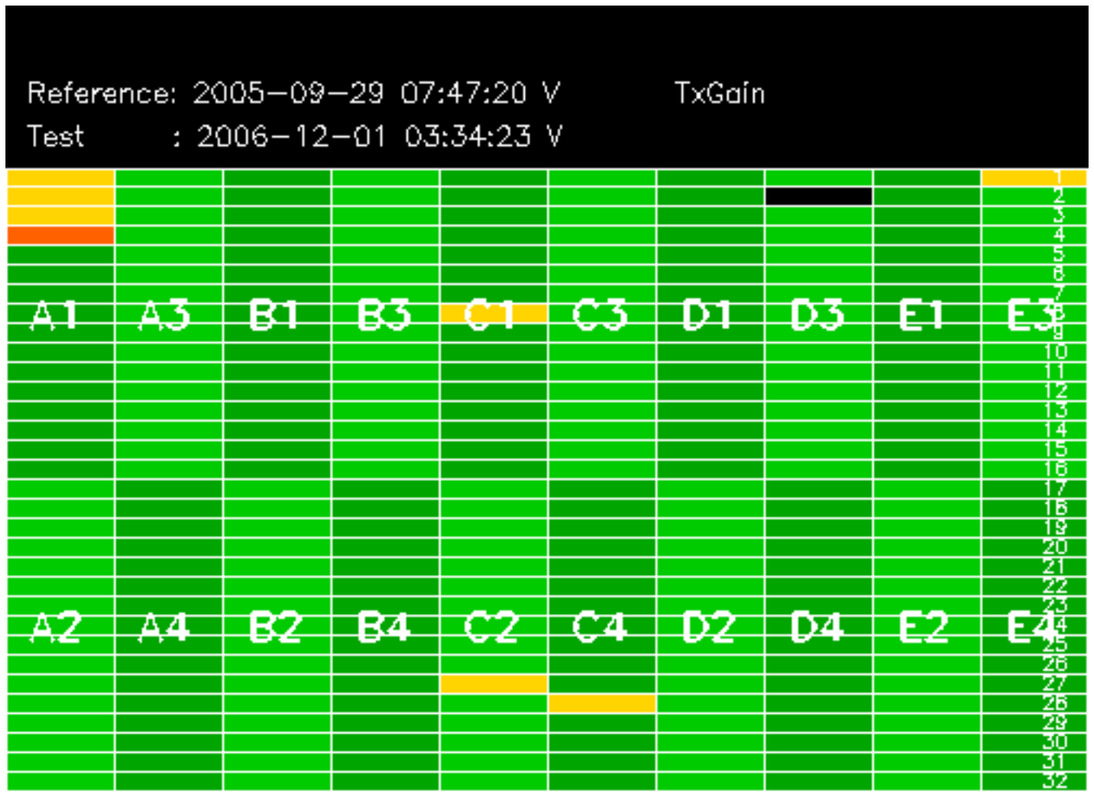

SQADS input data stdev I
linear scale
0.4
0.3
0.2
0.1
0.0
31−Oct
05−Nov
10−Nov
15−Nov
20−Nov
25−Nov
30−Nov


SQADS input data stdev Q
linear scale
0.4
0.3
0.2
0.1
0.0
31−Oct
05−Nov
10−Nov
15−Nov
20−Nov
25−Nov
30−Nov

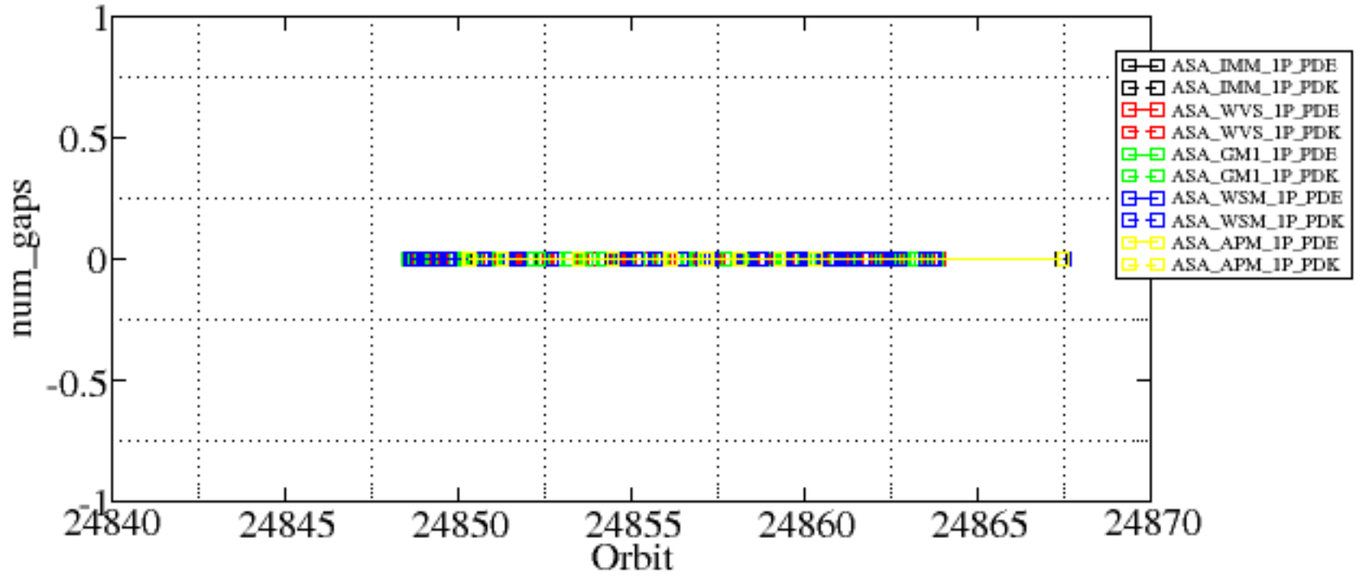

Reference: 2001-02-09 13:50:42 H
Test : 2006-11-28 05:09:14 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

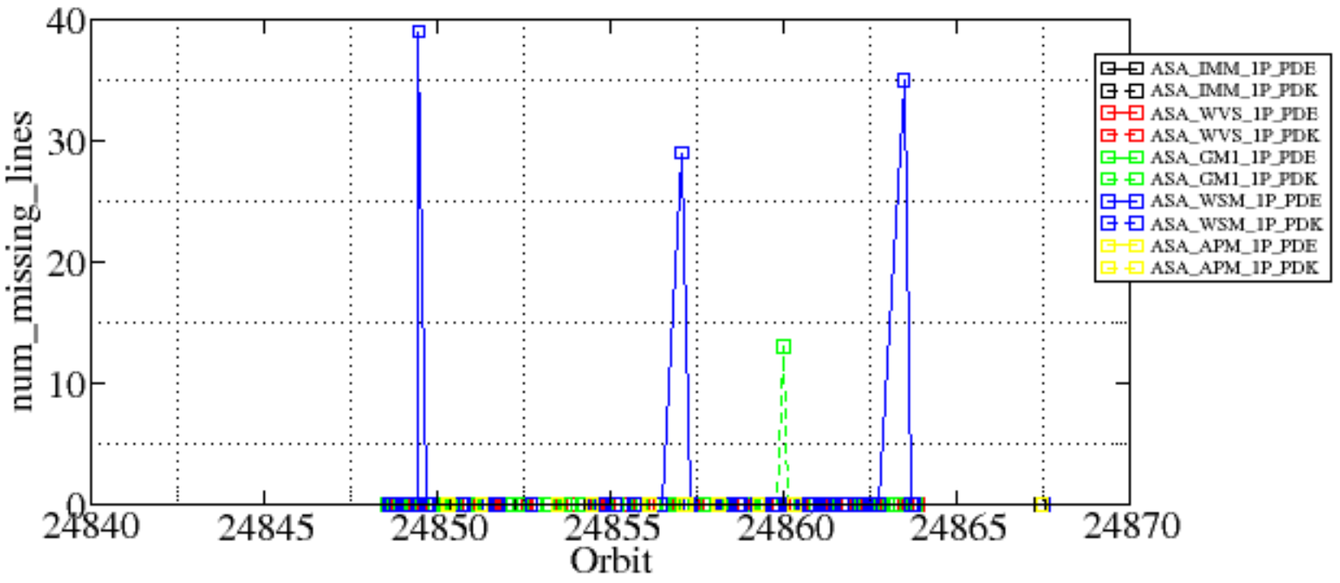

Reference: 2005-10-08 03:02:47 H
Test : 2006-11-28 05:09:14 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

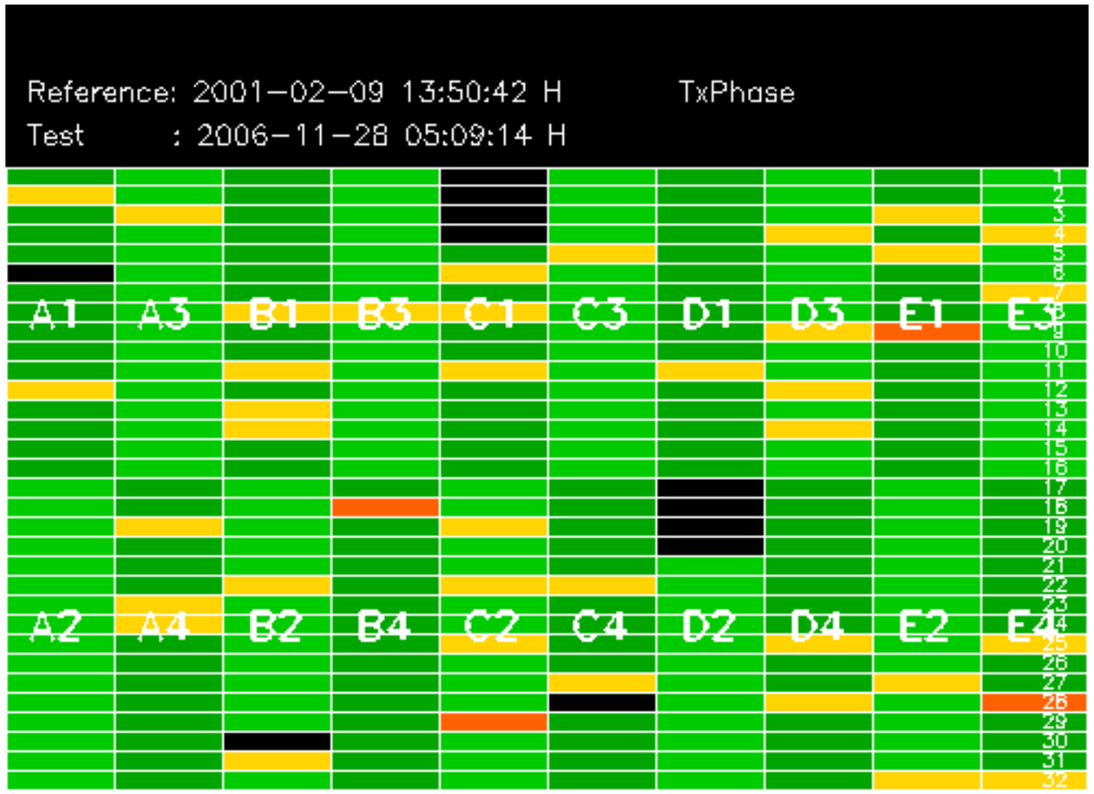

Reference: 2001-02-09 14:08:23 V
Test : 2006-12-01 03:34:23 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

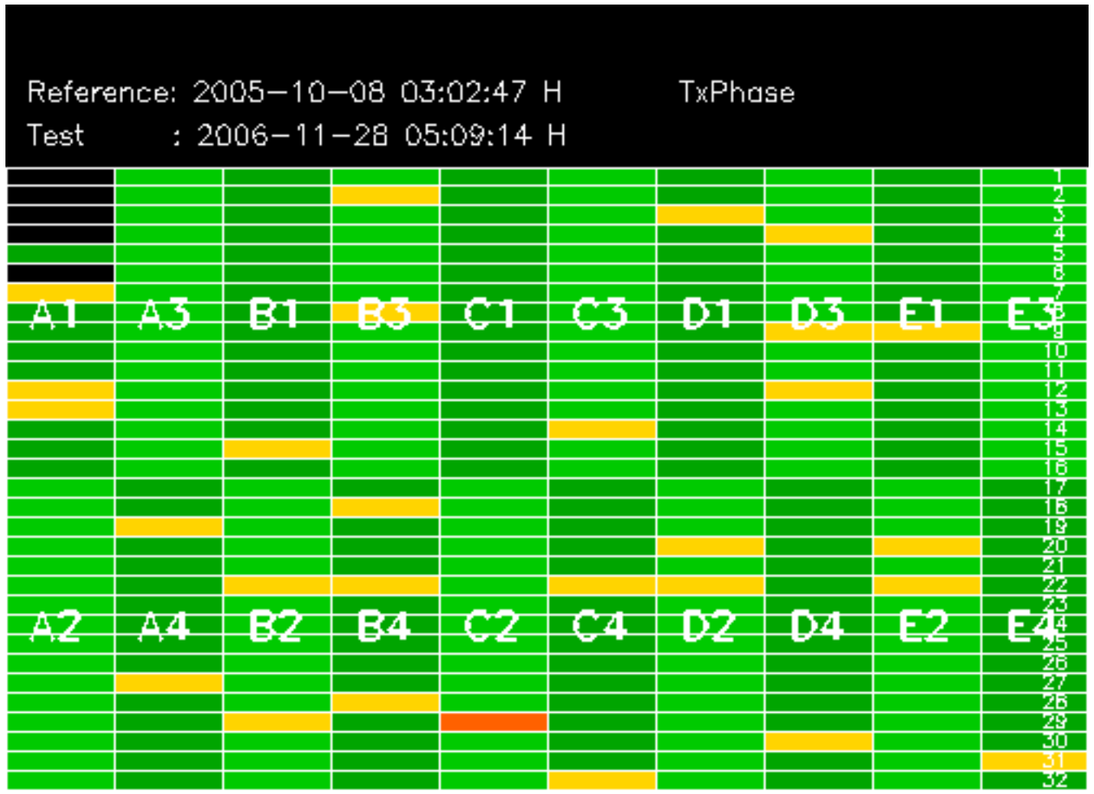

Reference: 2005-09-29 07:47:20 V
Test : 2006-12-01 03:34:23 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

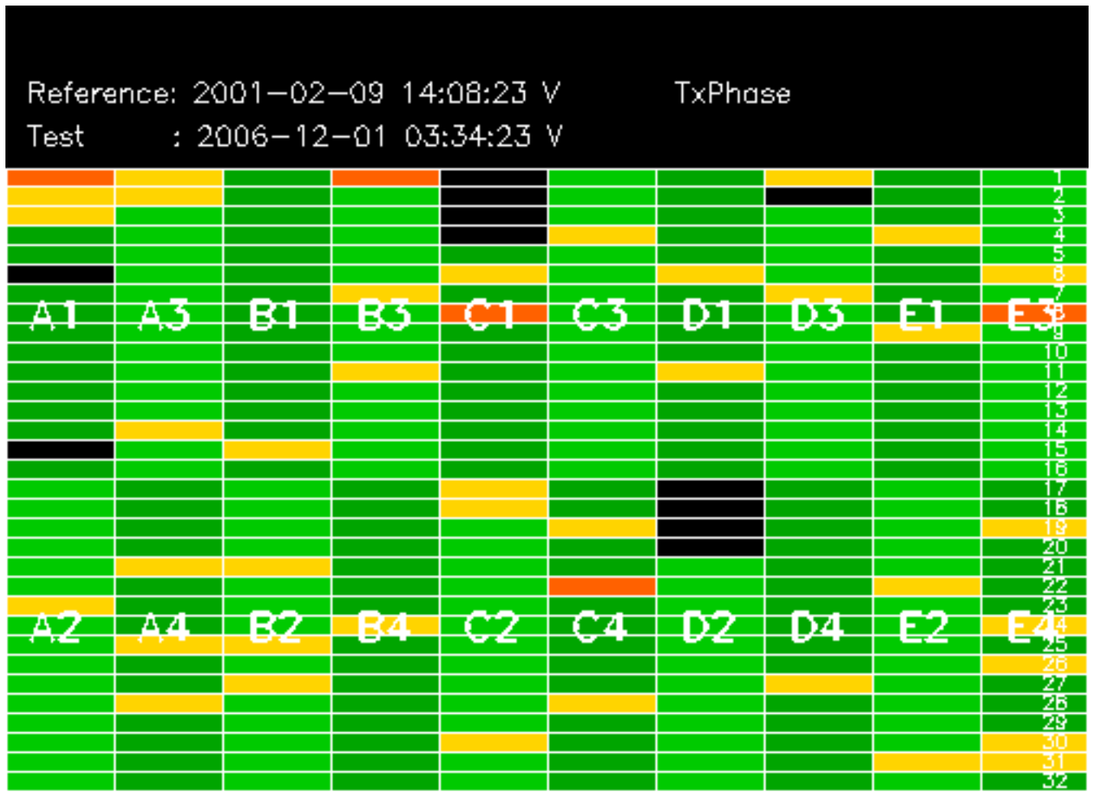
Summary of analysis for the last 3 days 2006120[012]
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems
<table border=1>
<tr> <th>Filename </th><th> num_gaps</th><th>num_missing_lines</th></tr>
<tr> <td>ASA_GM1_1PNPDK20061201_191311_000006402053_00257_24860_9532.N1 </td> <td>0 </td> <td>13 </td></tr>
<tr> <td>ASA_WSM_1PNPDE20061201_013231_000001402053_00246_24849_3285.N1 </td> <td>0 </td> <td>39 </td></tr>
<tr> <td>ASA_WSM_1PNPDE20061201_141605_000000852053_00254_24857_4521.N1 </td> <td>0 </td> <td>29 </td></tr>
<tr> <td>ASA_WSM_1PNPDE20061202_010155_000000672053_00260_24863_5042.N1 </td> <td>0 </td> <td>35 </td></tr>
</table>

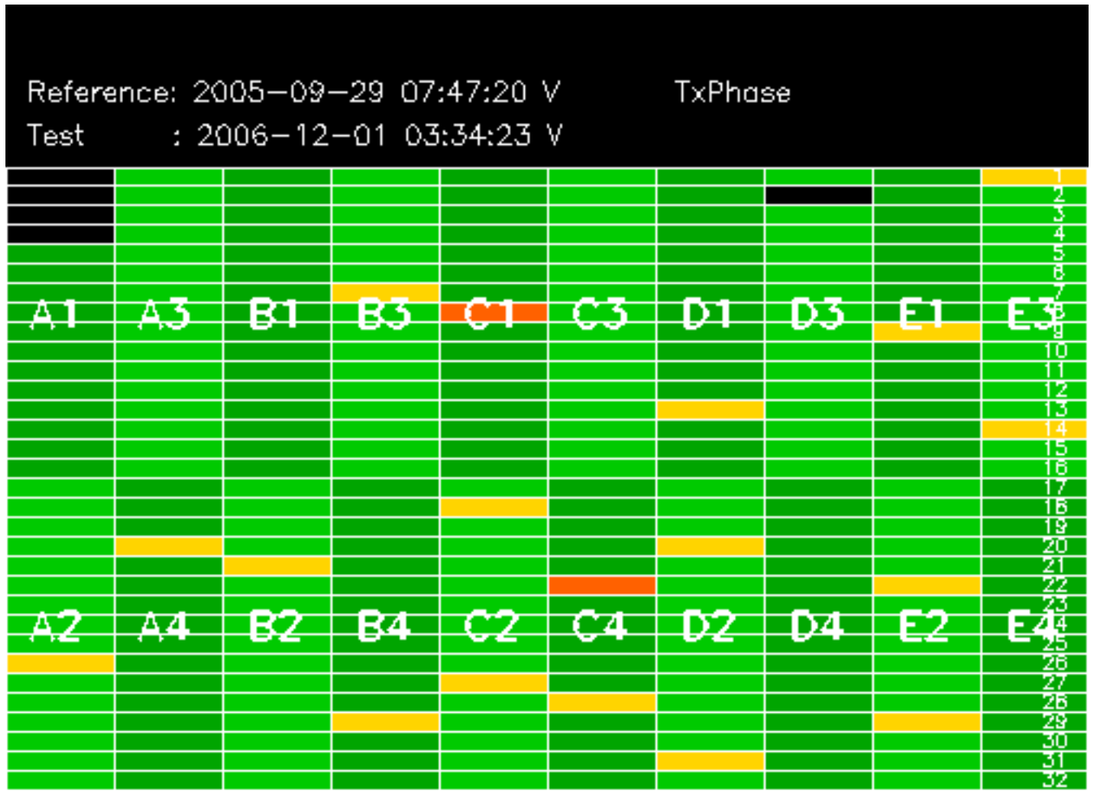

num_gaps
1
0.5
0
-0.5
-1
24840
24845
24850
24855
24860
24865
24870
Orbit
ASA_IMM_1P_PDE
ASA_IMM_1P_PDK
ASA_WVS_1P_PDE
ASA_WVS_1P_PDK
ASA_GM1_1P_PDE
ASA_GM1_1P_PDK
ASA_WSM_1P_PDE
ASA_WSM_1P_PDK
ASA_APM_1P_PDE
ASA_APM_1P_PDK

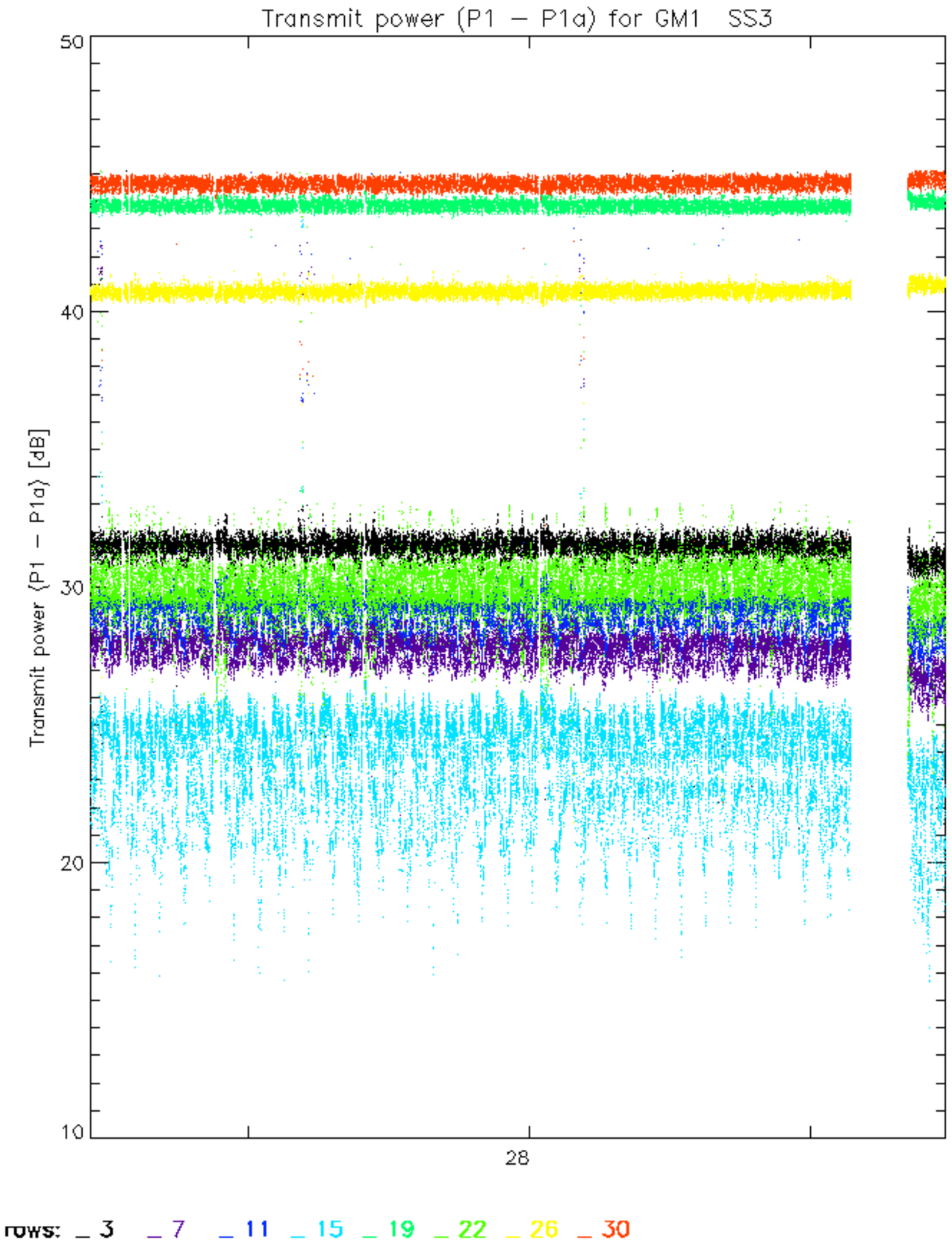

num_missing_lines
Orbit
40
30
20
10
0
24840
24845
24850
24855
24860
24865
24870
ASA_IMM_1P_PDE
ASA_IMM_1P_PDK
ASA_WVS_1P_PDE
ASA_WVS_1P_PDK
ASA_GM1_1P_PDE
ASA_GM1_1P_PDK
ASA_WSM_1P_PDE
ASA_WSM_1P_PDK
ASA_APM_1P_PDE
ASA_APM_1P_PDK

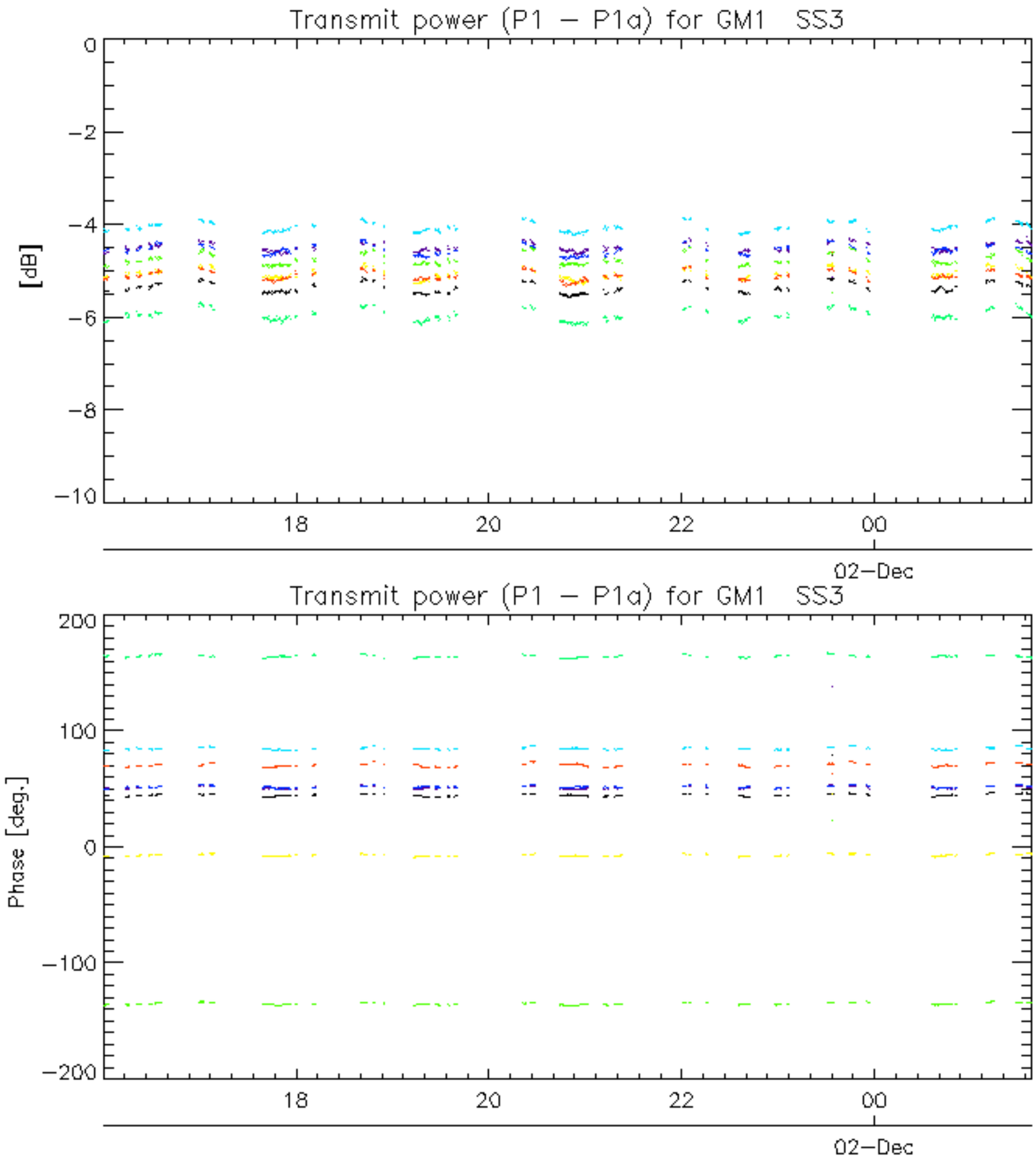

Reference: 2001-02-09 13:50:42 H
Test : 2006-11-28 05:09:14 H
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

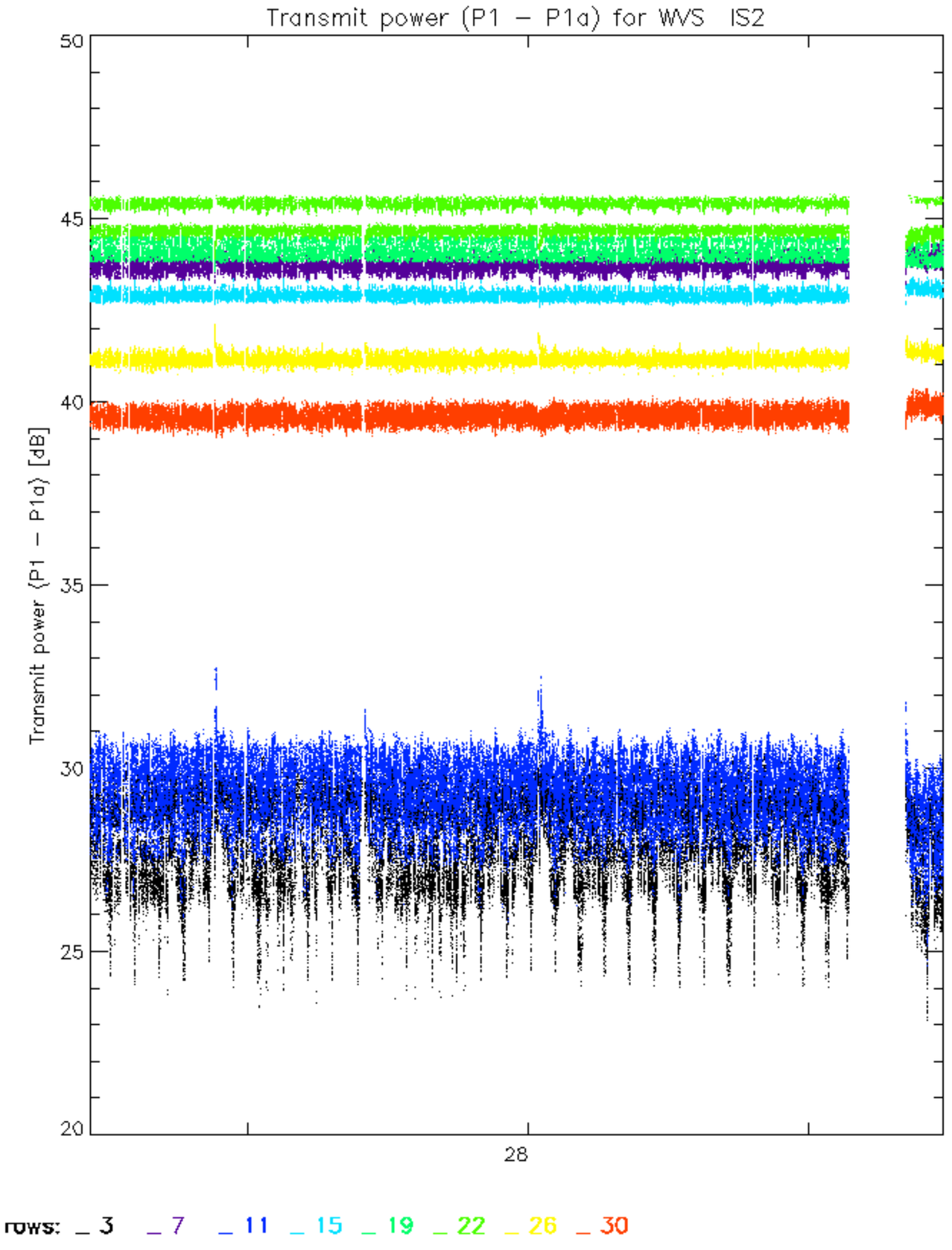

Reference: 2005-10-08 03:02:47 H
Test : 2006-11-28 05:09:14 H
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

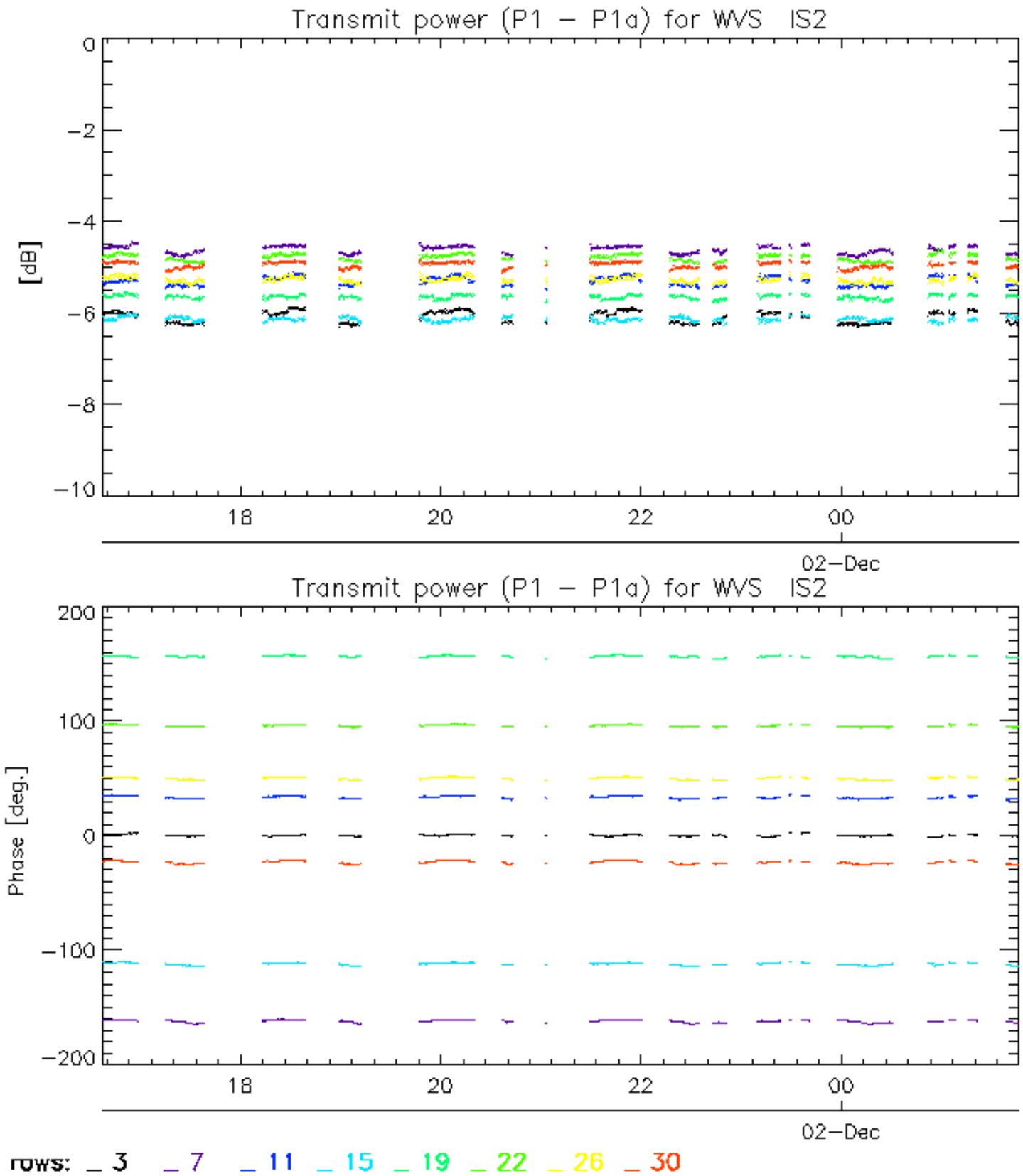

Reference: 2001-02-09 14:08:23 V
Test : 2006-12-01 03:34:23 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2005-09-29 07:47:20 V
Test : 2006-12-01 03:34:23 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
28
rows: 3 7 11 15 19 22 26 30


Transmit power (P1 – P1a) for GM1 SS3
0
−2
−4
−6
−8
−10
[dB]
18
20
22
00
02–Dec
Transmit power (P1 – P1a) for GM1 SS3
200
100
0
−100
−200
Phase [deg.]
18
20
22
00
02–Dec
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
28
rows: 3 7 11 15 19 22 26 30


Transmit power (P1 – P1a) for WVS IS2
0
−2
−4
−6
−8
−10
[dB]
18
20
22
00
02–Dec
Transmit power (P1 – P1a) for WVS IS2
200
100
0
−100
−200
Phase [deg.]
18
20
22
00
02–Dec
rows: 3 7 11 15 19 22 26 30

No unavailabilities during the reported period.