REPORT OF 031222

1 - Introduction

This report is based on the analysis of wave mode level-1 cross spectra (ASA_WVS_1P) products, which are the available few hours after the acquisition, on the high rate 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 - Browse Visual Inspection

Preliminary report. Browse are not yet controled

2.3 - Data Analysis

Preliminary report.The data is not yet controled

3 - Module Stepping Mode

-Preliminary report. MS data is not yet controled

Polarisation	Start Time
V	20031221 191057
H	20031220 194114

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

-Preliminary report.The data is not yet controled

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.71924	-22.5726	-8.16795
	stdev	0.00784937	0.0578174	0.00340835
24	mean	-5.05690	-21.1995	-8.16795
	stdev	0.0101187	0.0554288	0.00340835

☒

4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.76584	-22.5602	-8.14866
	stdev	0.0805354	0.0722646	0.00529320
24	mean	-5.09359	-21.2180	-8.14866
	stdev	0.0137993	0.0657649	0.00529320

4.3 - cal pulses monitoring (all rows)

5 - RAW data statistics

-Preliminary report. The data is not yet controled

5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000339394
	stdev	1.14344e-05
MEAN Q	mean	0.000200909
	stdev	1.14432e-05

5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115983
	stdev	0.00152229
STDEV Q	mean	0.116232
	stdev	0.00153763

5.3 - Gain imbalance I/Q

6 - Wave Doppler Analysis

Preliminary report.The data is not yet controled

6.1 - Unbiased Doppler Error

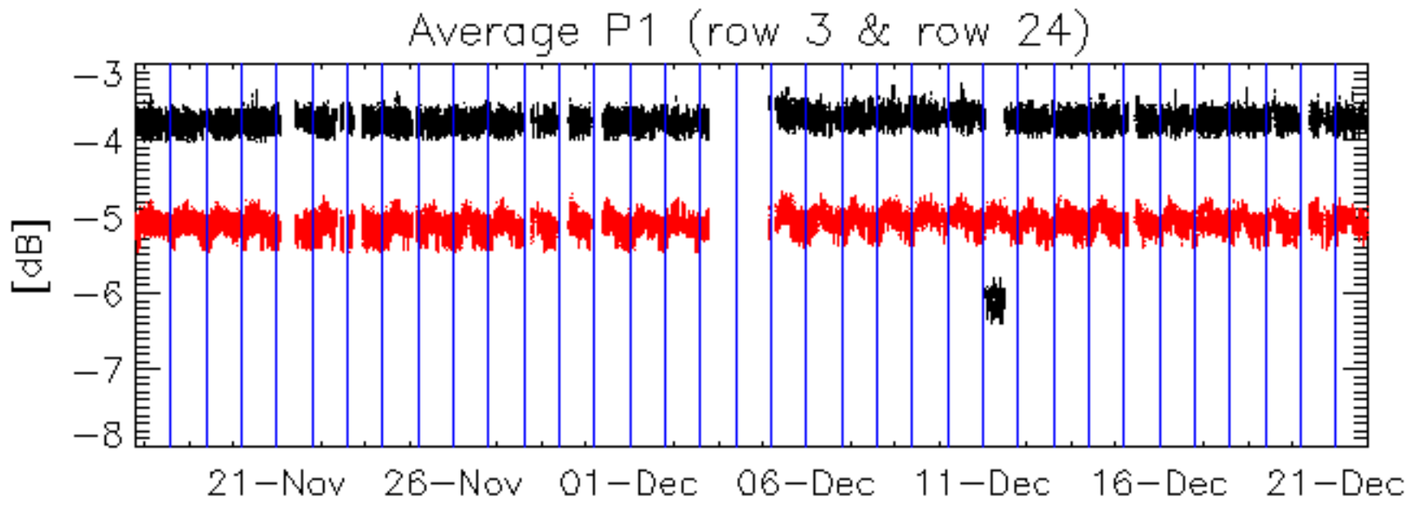
Evolution of unbiased Doppler error (Real - Expected)
Acsending
Descending

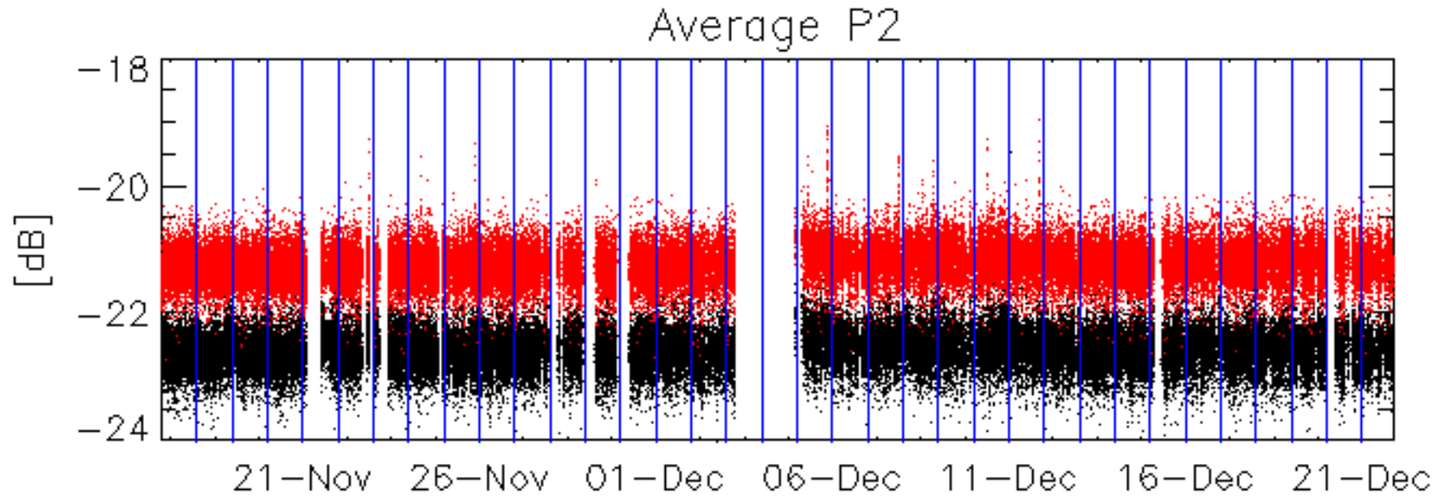
6.2 - Absolute Doppler

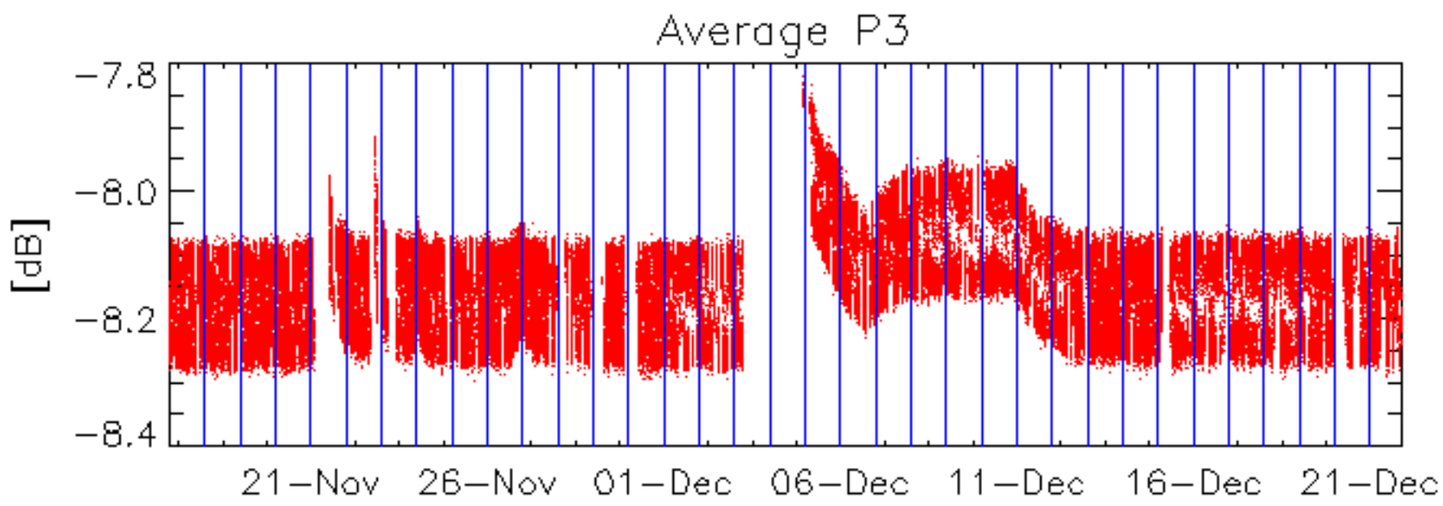
Evolution of Absolute Doppler
Acsending
Descending

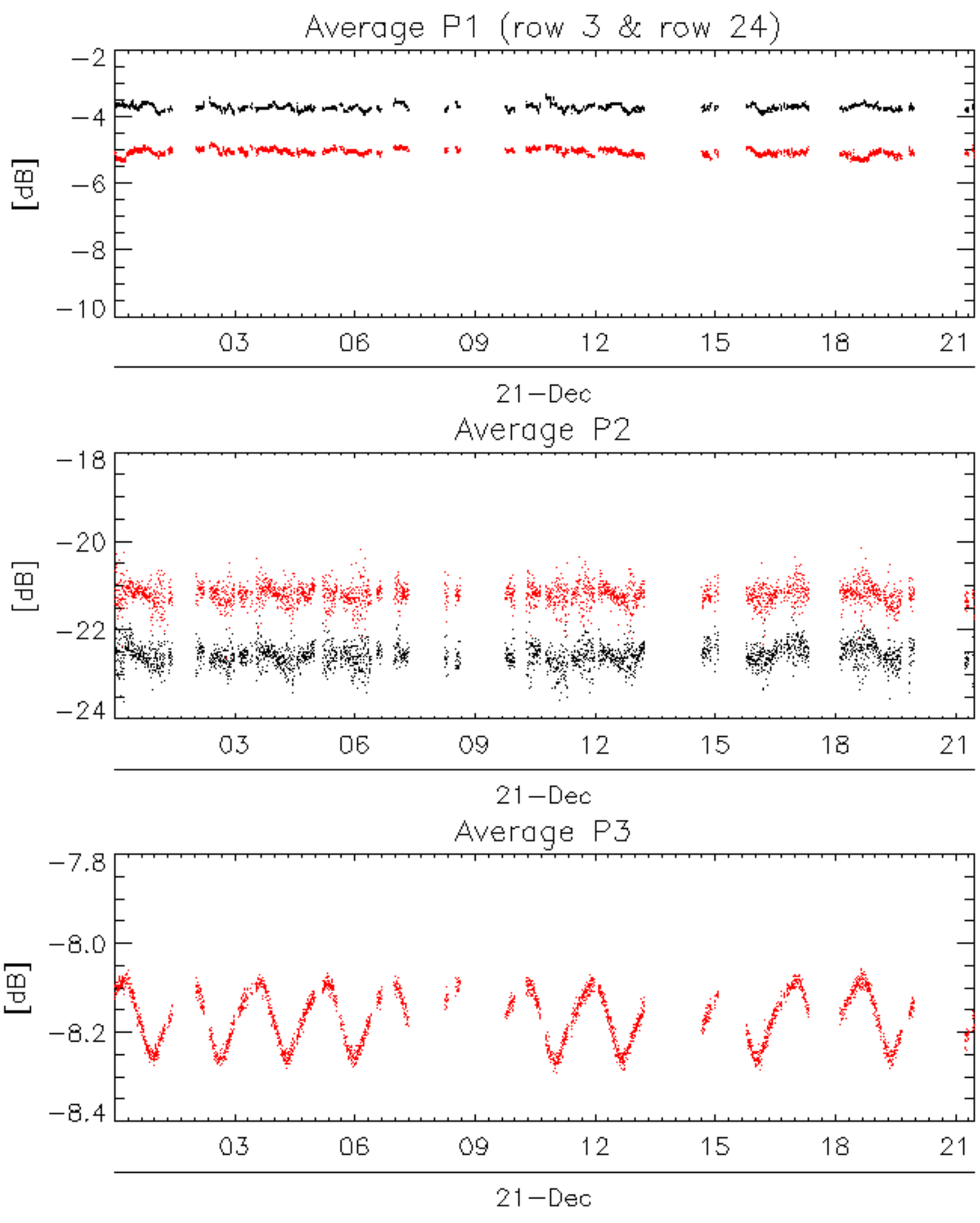
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX


Average P1 (row 3 & row 24)
[dB]
−3
−4
−5
−6
−7
−8
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec

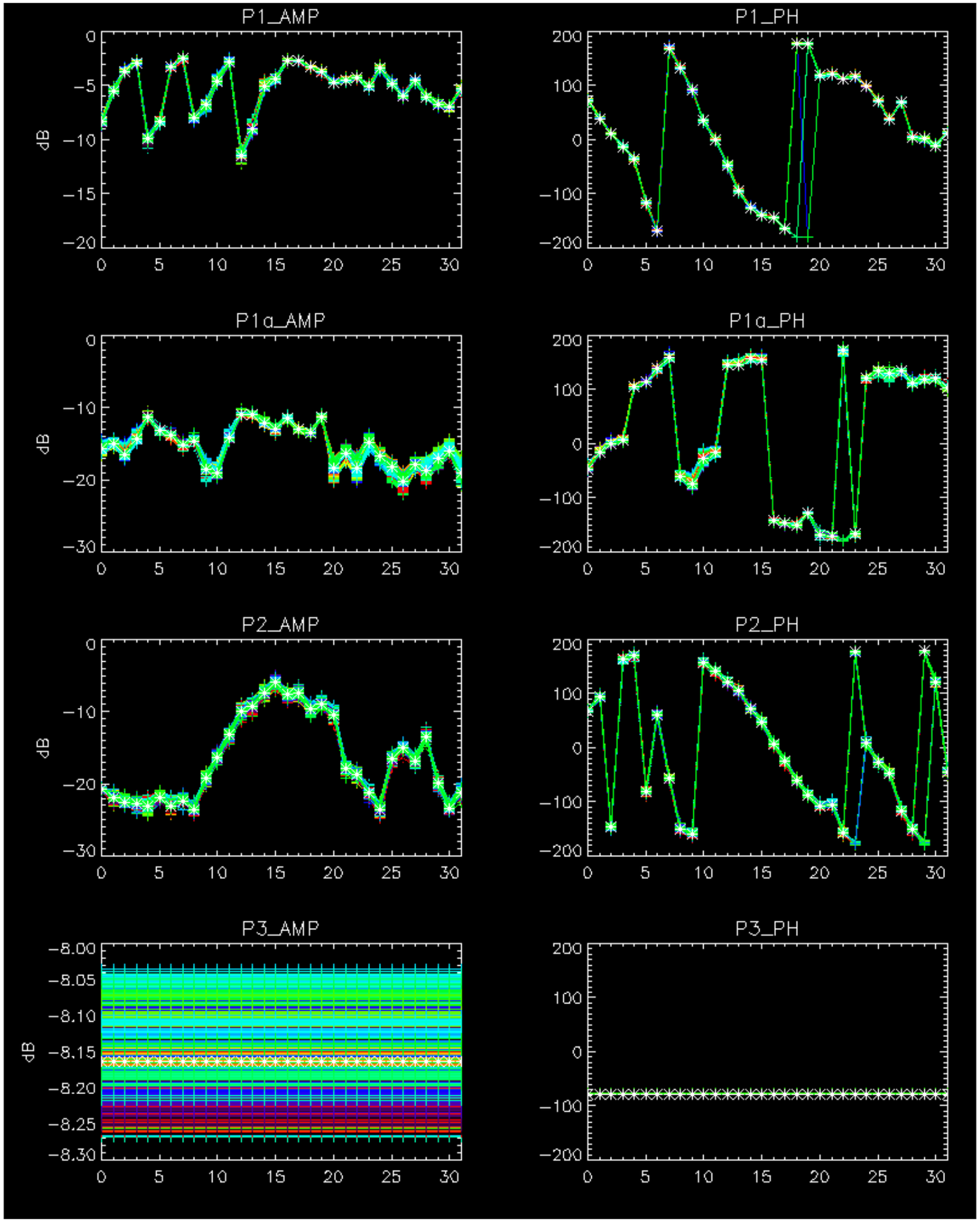

Average P2
[dB]
−18
−20
−22
−24
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec


Average P3
[dB]
−7.8
−8.0
−8.2
−8.4
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec


Average P1 (row 3 & row 24)
[dB]
−2
−4
−6
−8
−10
03
06
09
12
15
18
21
21−Dec
Average P2
[dB]
−18
−20
−22
−24
03
06
09
12
15
18
21
21−Dec
Average P3
[dB]
−7.8
−8.0
−8.2
−8.4
03
06
09
12
15
18
21
21−Dec

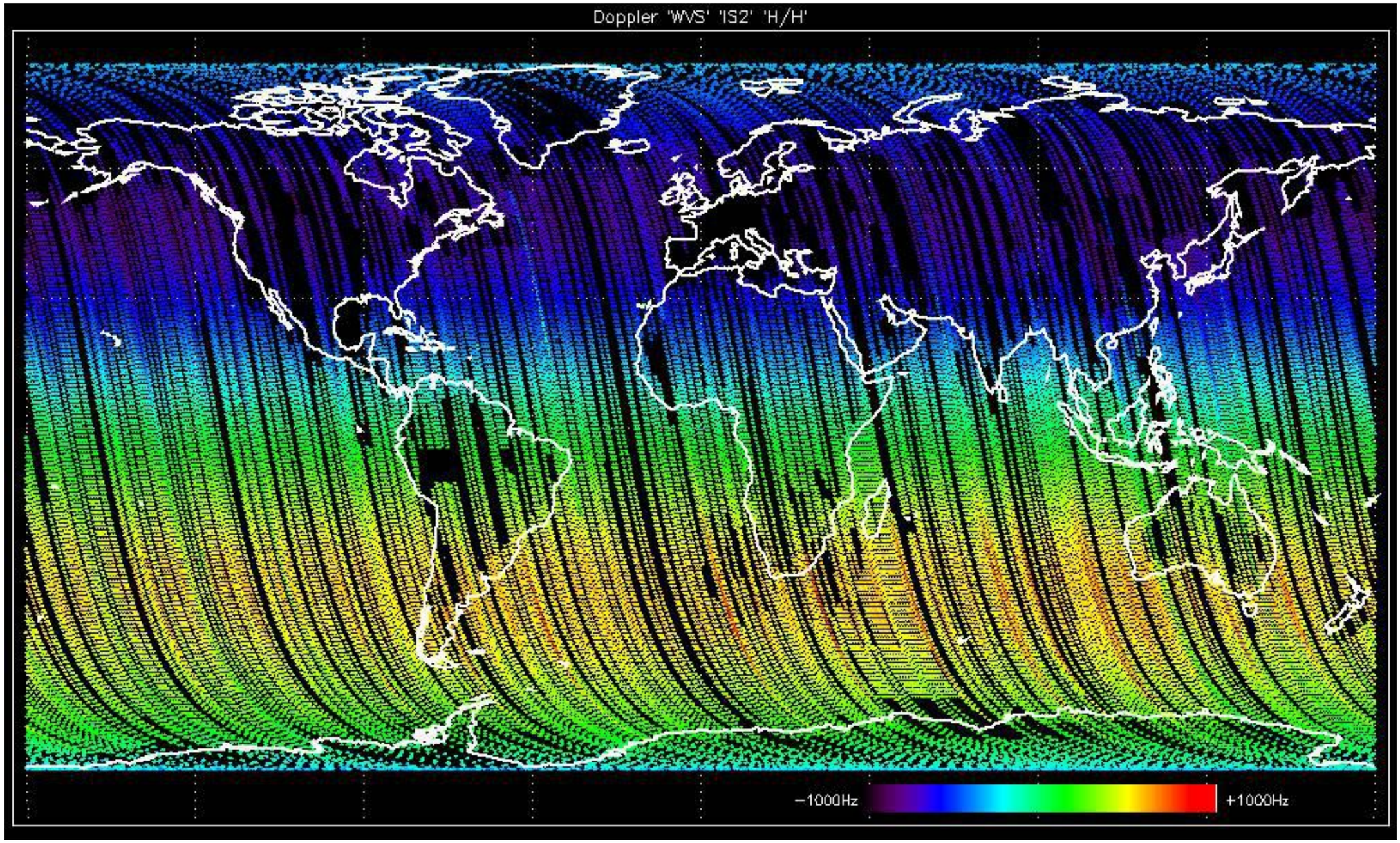
Preliminary report. Browse are not yet controled

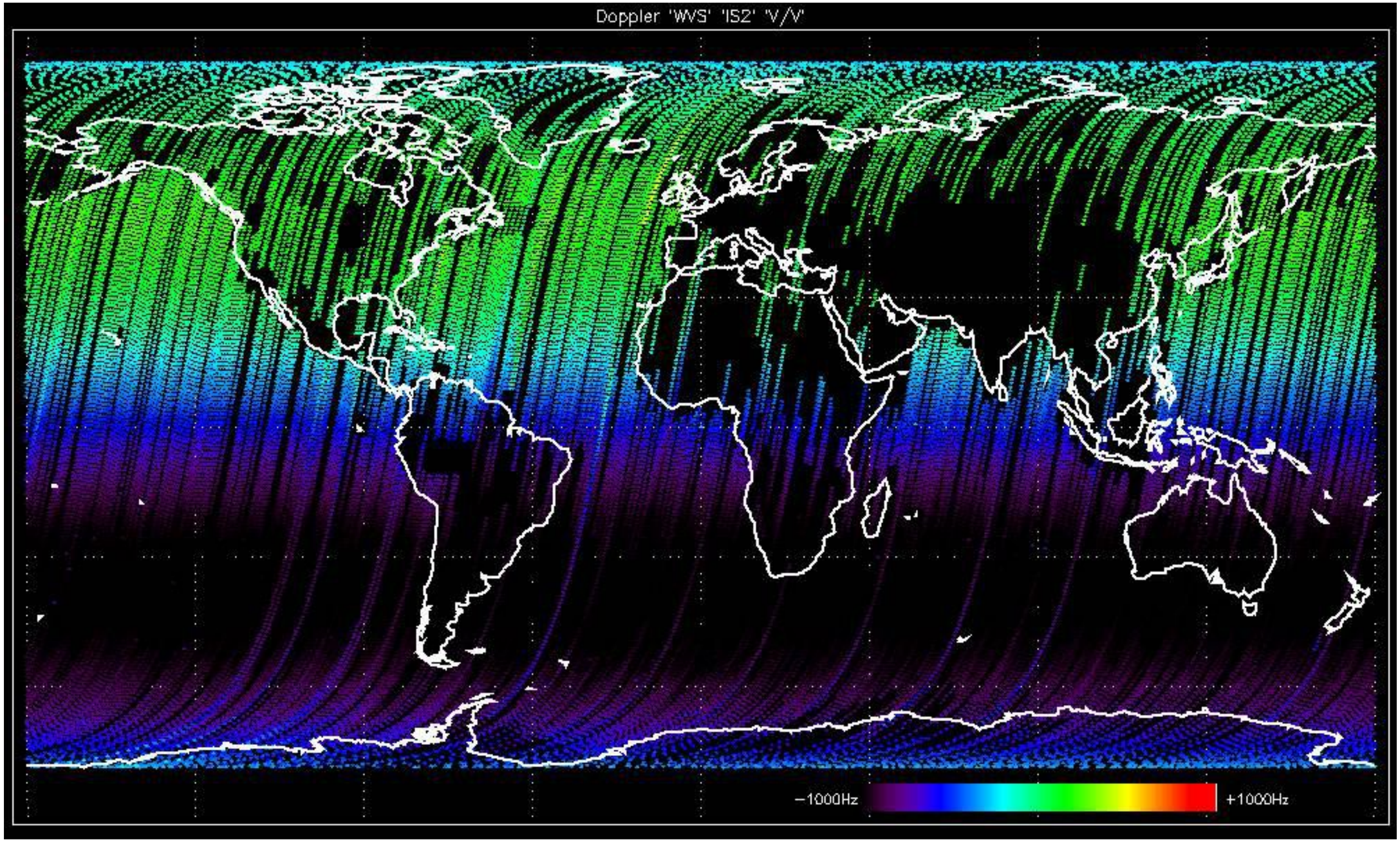
-Preliminary report.The data is not yet controled

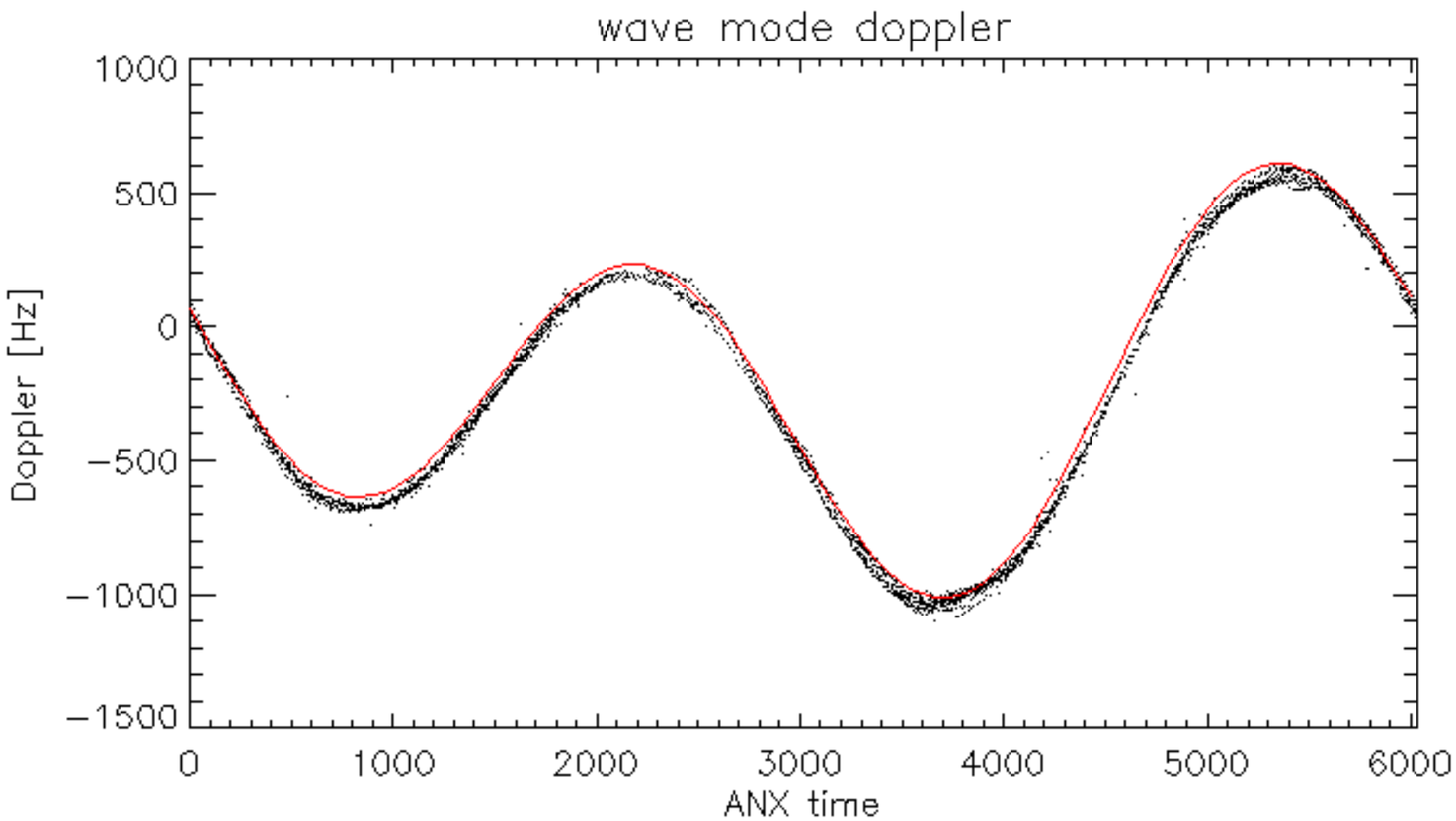

P1_AMP
dB
0
−5
−10
−15
−20
0 5 10 15 20 25 30
P1_PH
200
100
0
−100
−200
0 5 10 15 20 25 30
P1a_AMP
dB
0
−10
−20
−30
0 5 10 15 20 25 30
P1a_PH
200
100
0
−100
−200
0 5 10 15 20 25 30
P2_AMP
dB
0
−10
−20
−30
0 5 10 15 20 25 30
P2_PH
200
100
0
−100
−200
0 5 10 15 20 25 30
P3_AMP
dB
−8.00
−8.05
−8.10
−8.15
−8.20
−8.25
−8.30
0 5 10 15 20 25 30
P3_PH
200
100
0
−100
−200
0 5 10 15 20 25 30

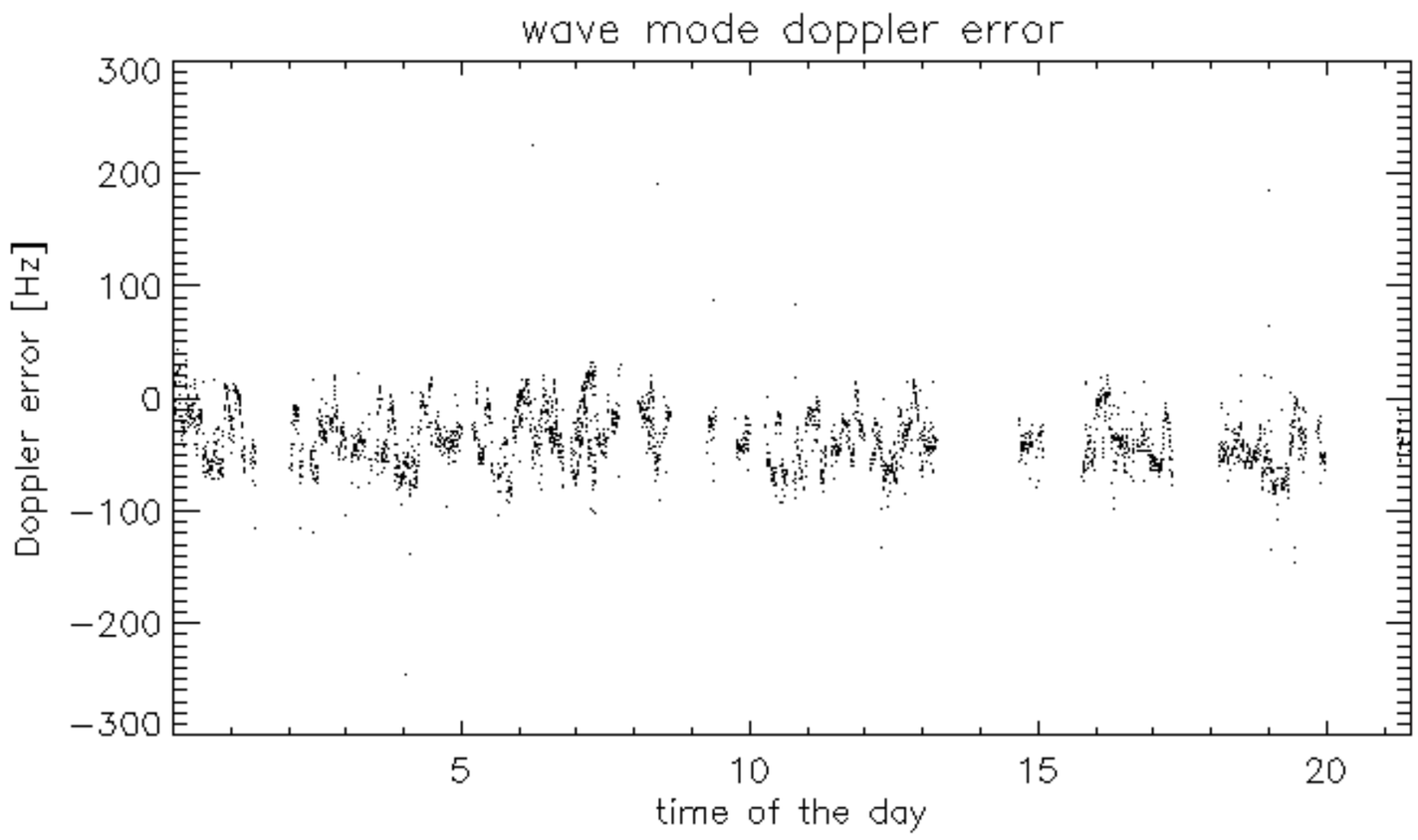
Preliminary report.The data is not yet controled

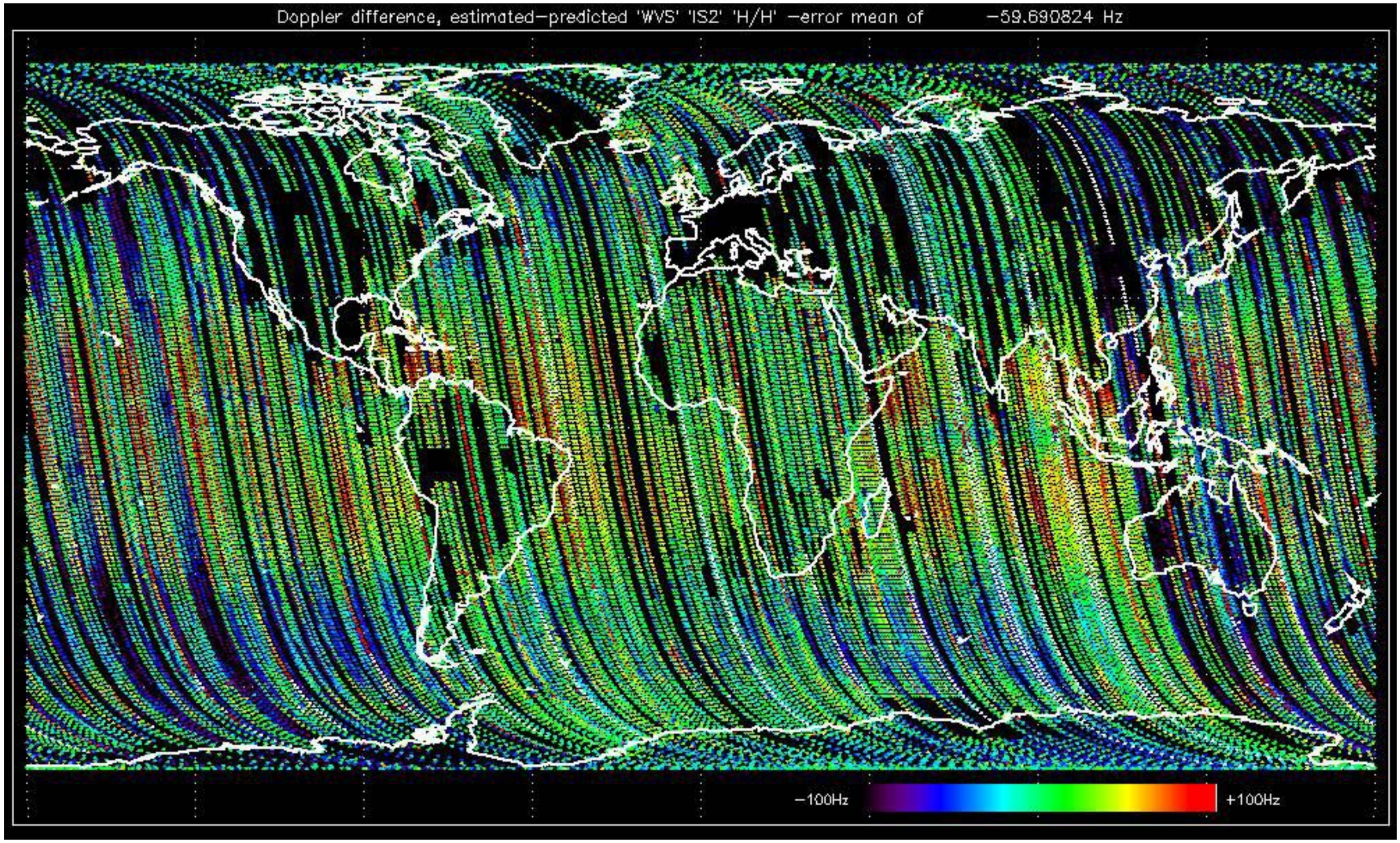
Preliminary report.The data is not yet controled

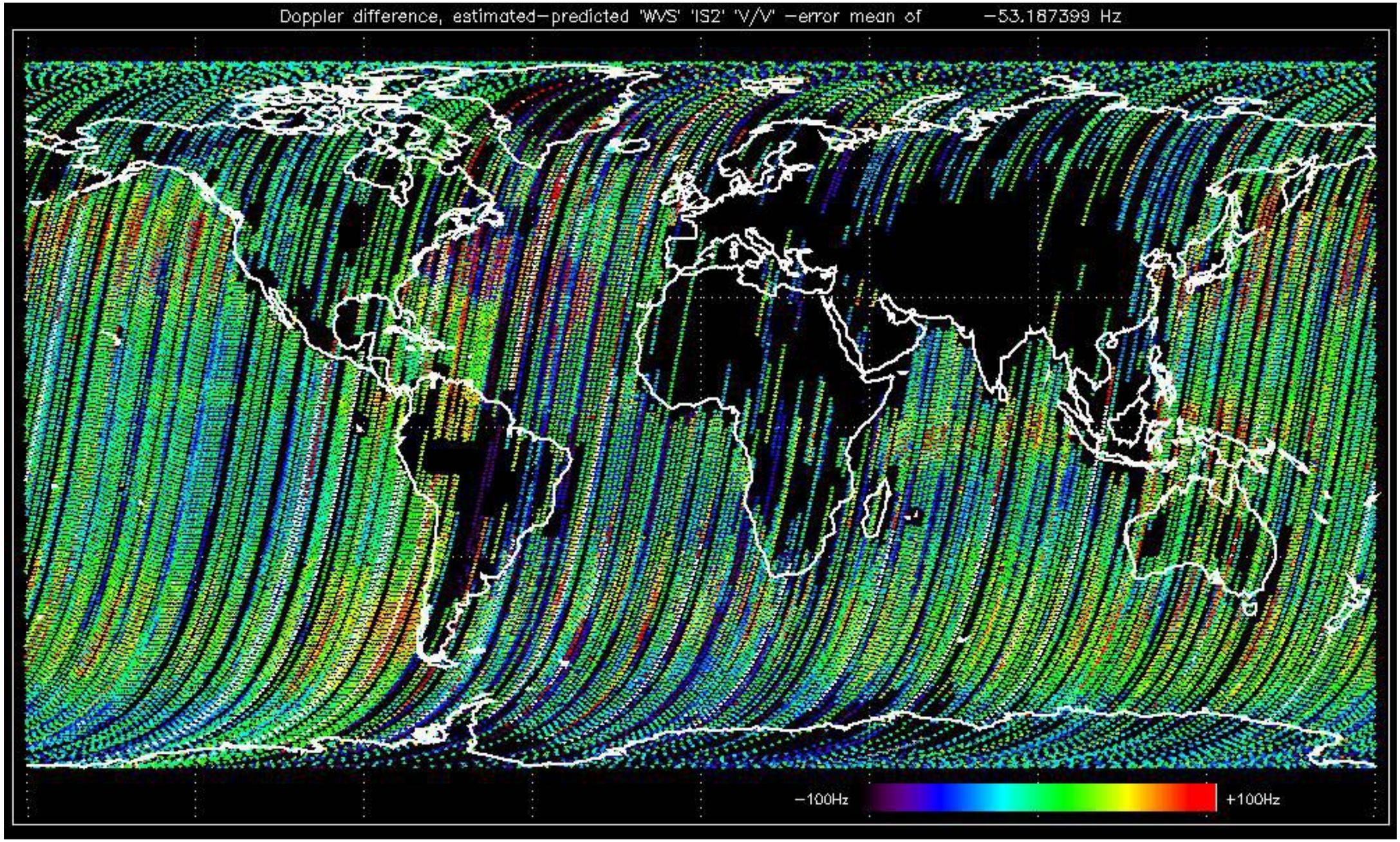

Doppler 'WVS' 'IS2' 'H/H'
−1000Hz
+1000Hz


Doppler 'WVS' 'IS2' 'V/V'
−1000Hz
+1000Hz


wave mode doppler
Doppler [Hz]
1000
500
0
−500
−1000
−1500
0
1000
2000
3000
4000
5000
6000
ANX time

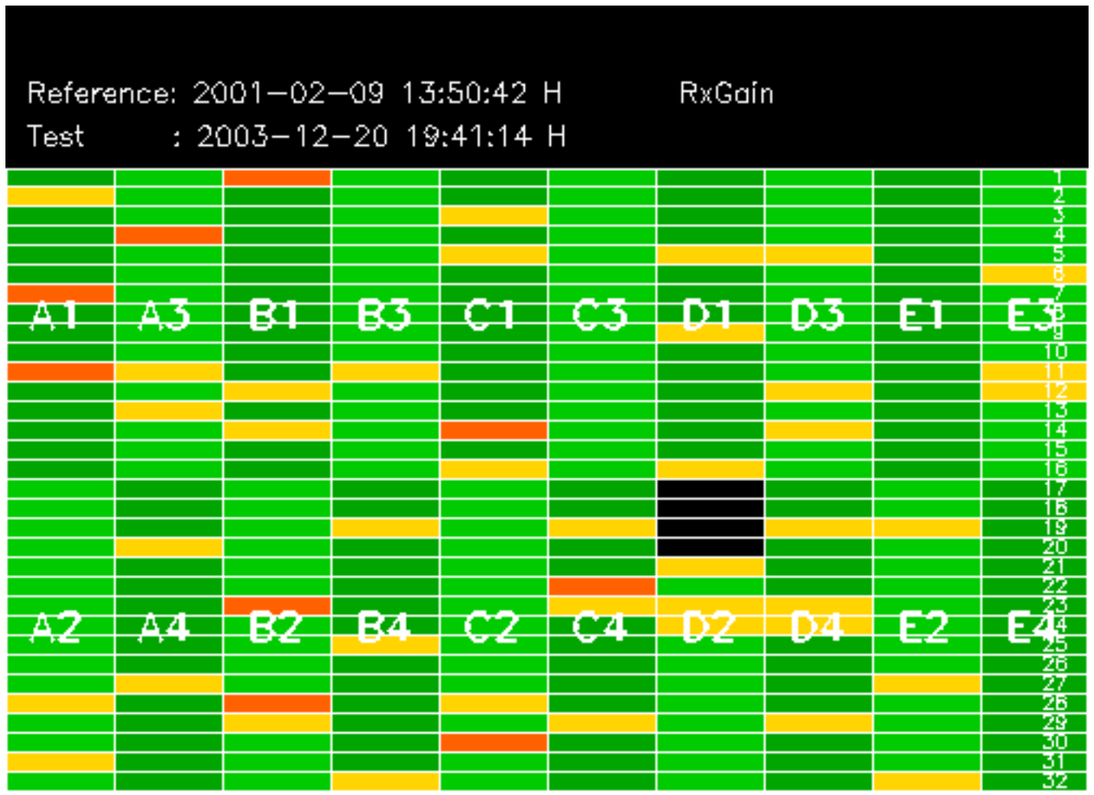

wave mode doppler error
Doppler error [Hz]
300
200
100
0
−100
−200
−300
5
10
15
20
time of the day

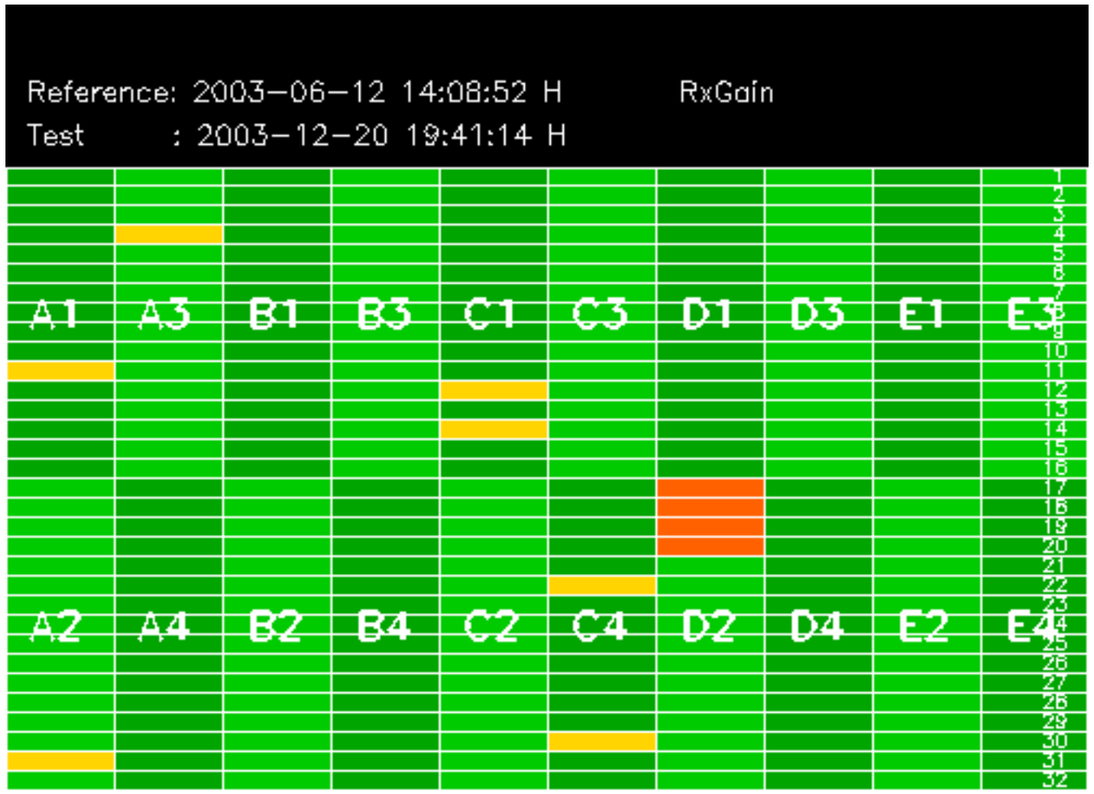

Doppler difference, estimated−predicted 'WVS' 'IS2' 'H/H' −error mean of −59.690824 Hz
−100Hz
+100Hz


Doppler difference, estimated−predicted 'WVS' 'IS2' 'V/V' −error mean of −53.187399 Hz
−100Hz
+100Hz

-Preliminary report. MS data is not yet controled

-Preliminary report. The data is not yet controled


Reference: 2001-02-09 13:50:42 H
Test : 2003-12-20 19:41:14 H
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2003-06-12 14:08:52 H
Test : 2003-12-20 19:41:14 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
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8
9
10
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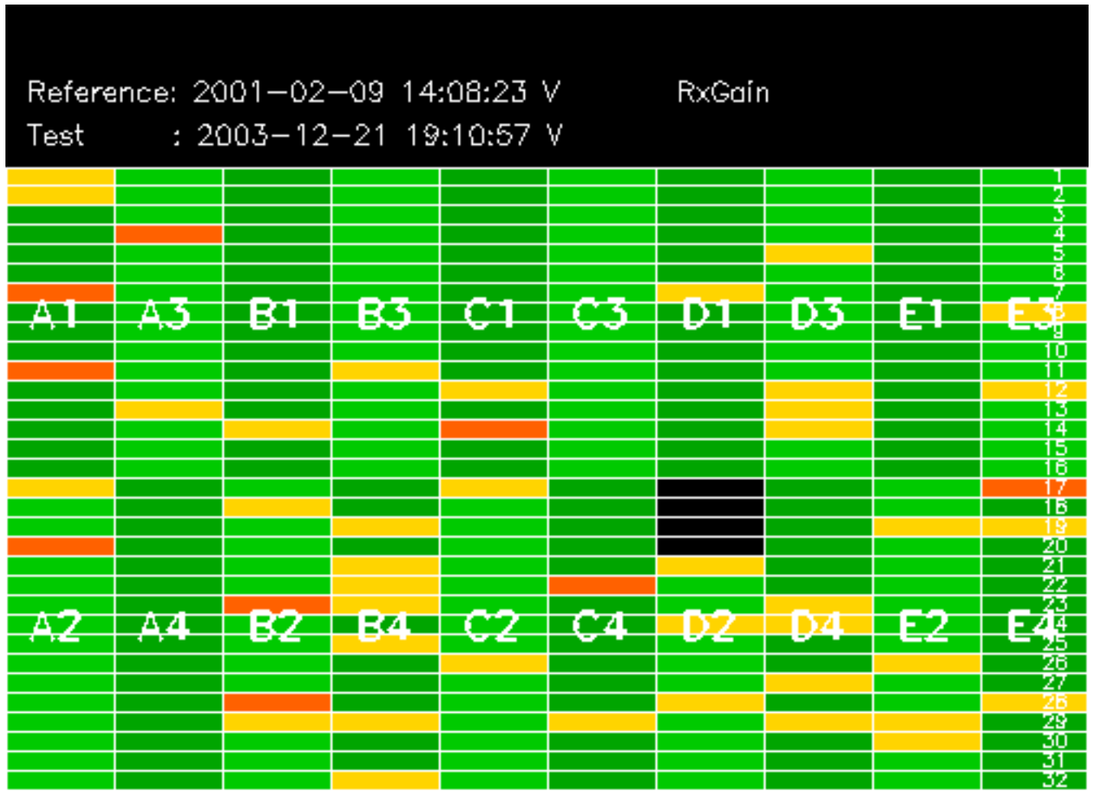
Reference: 2001-02-09 14:08:23 V
Test : 2003-12-21 19:10:57 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
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8
9
10
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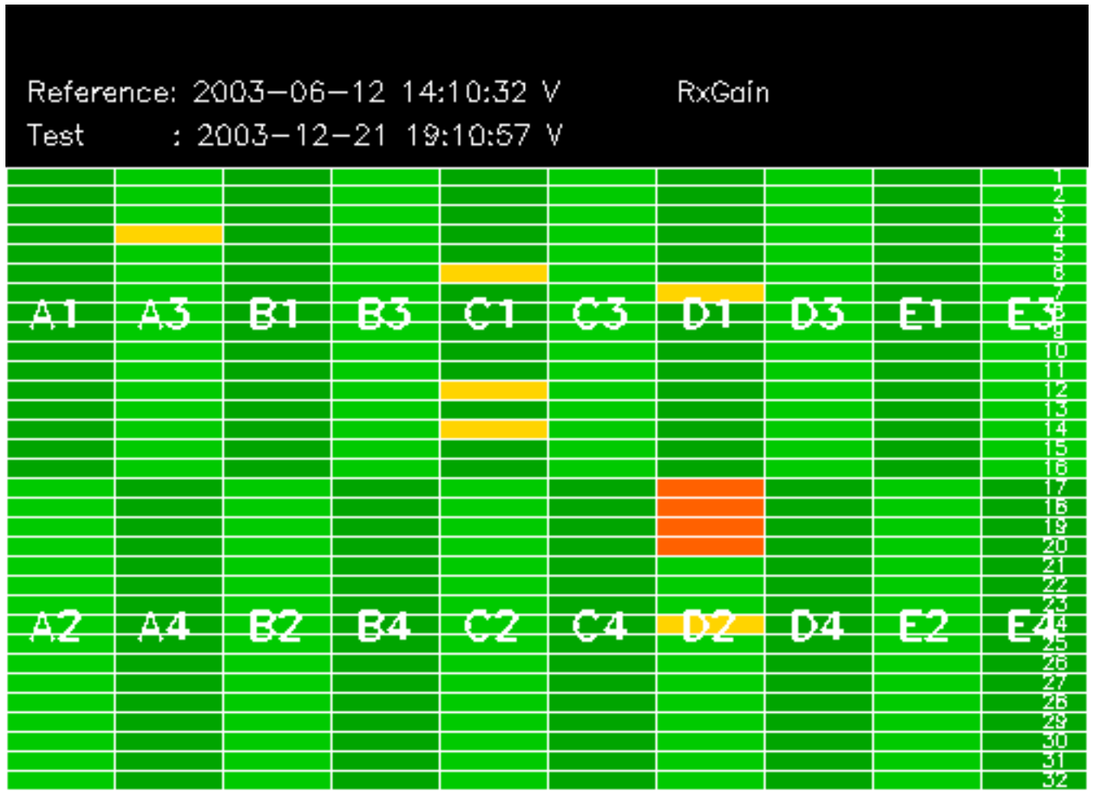
Reference: 2003-06-12 14:10:32 V
Test : 2003-12-21 19:10:57 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
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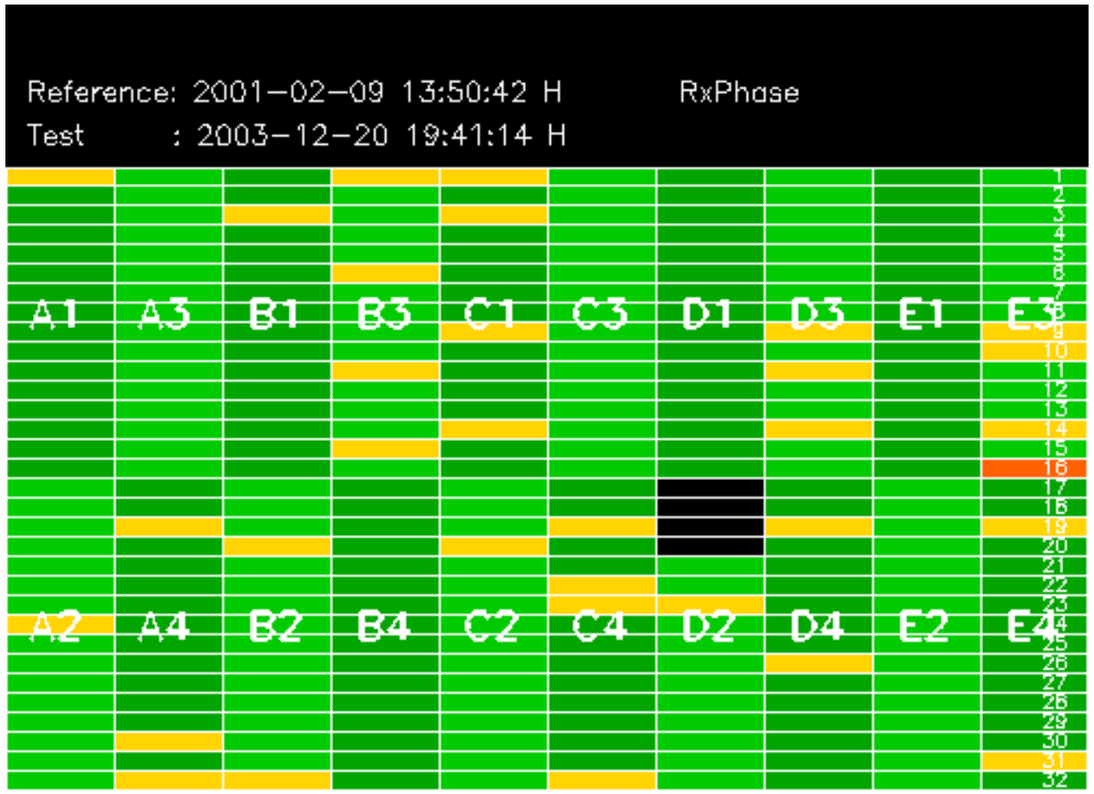
Reference: 2001-02-09 13:50:42 H
Test : 2003-12-20 19:41:14 H
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
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8
9
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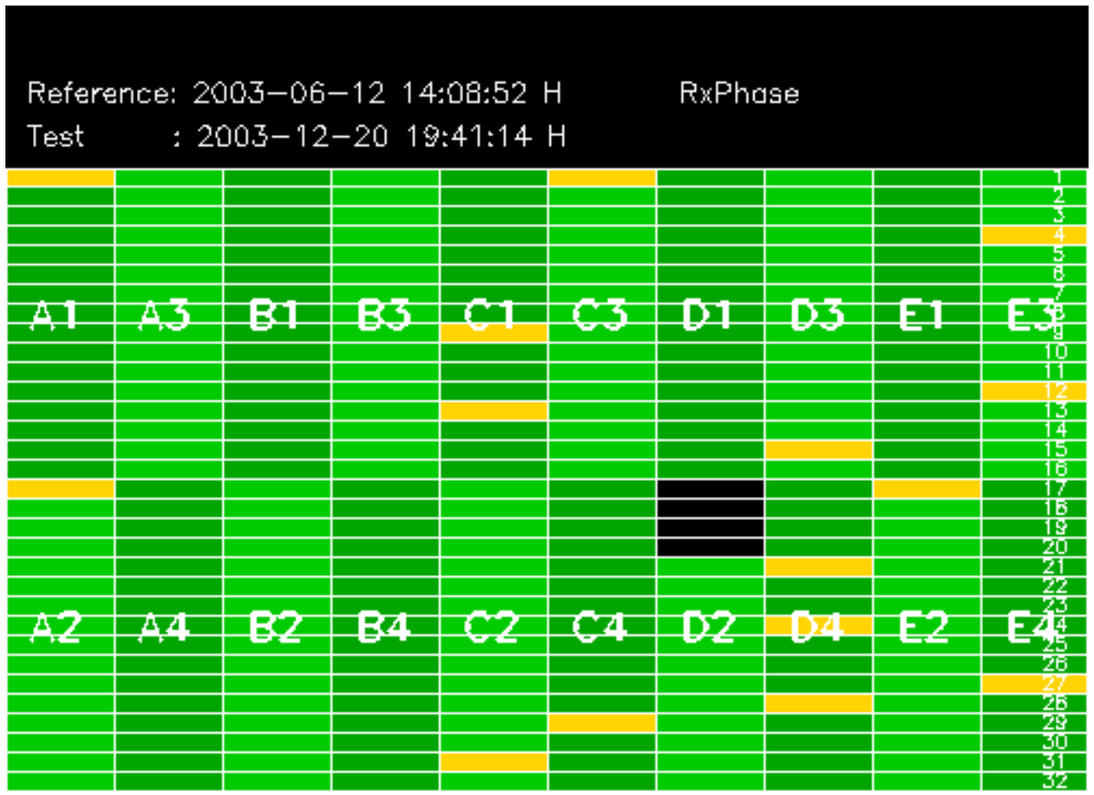
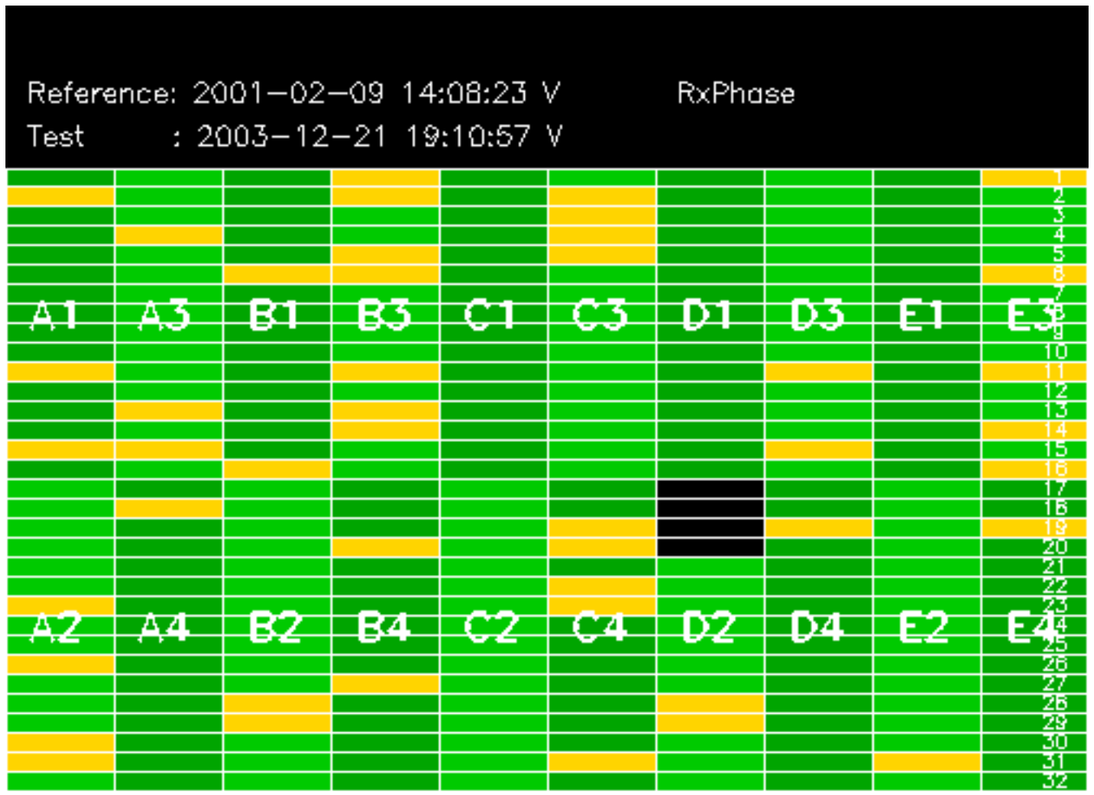
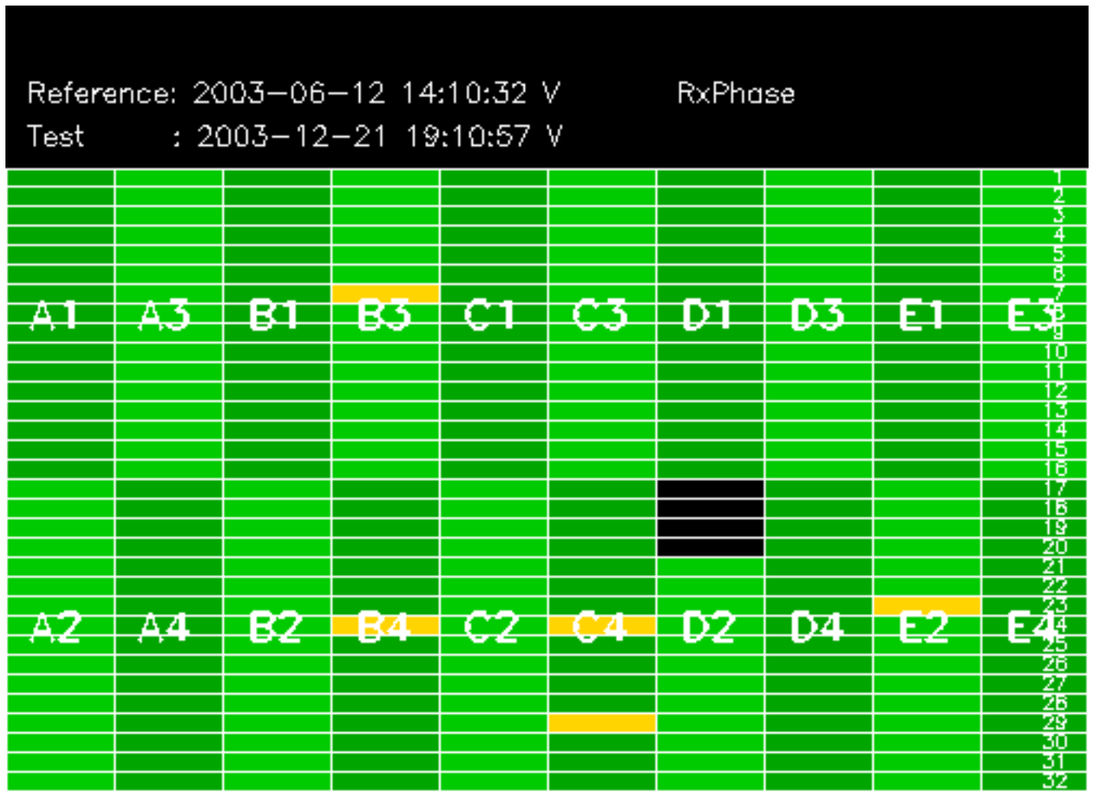
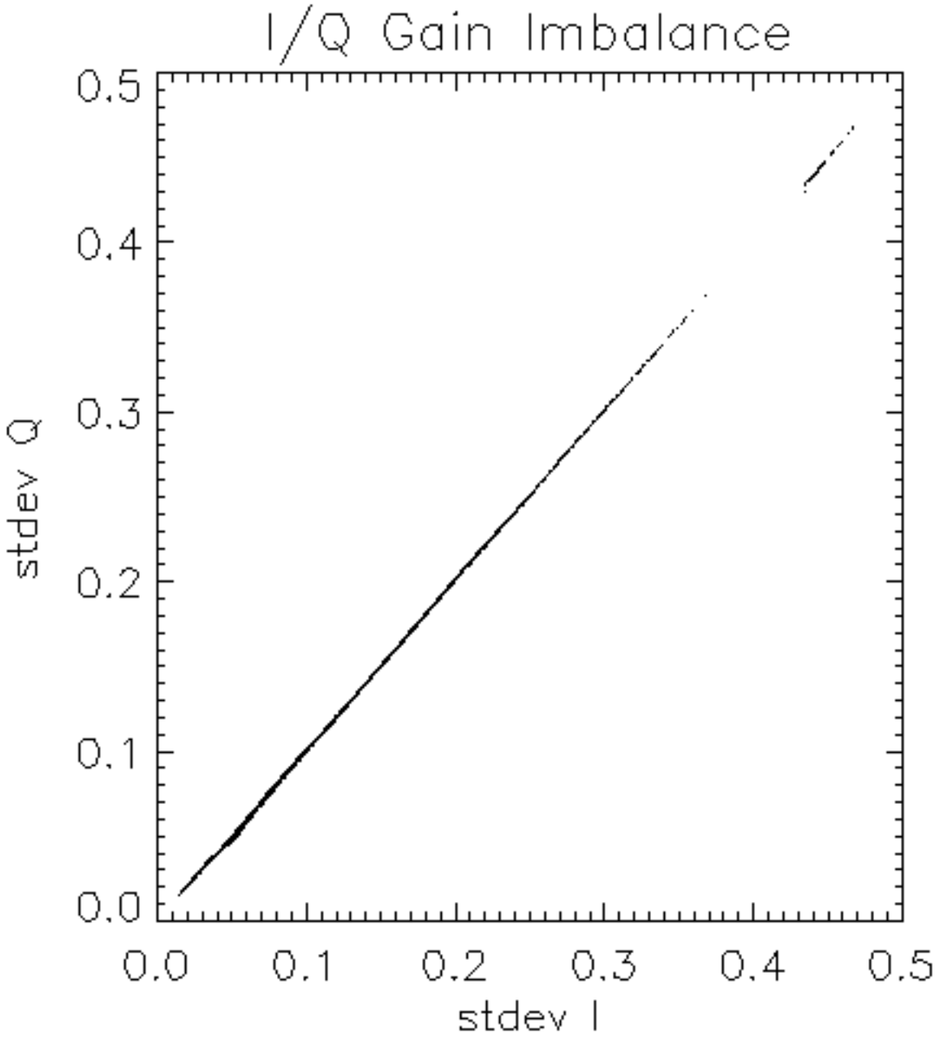
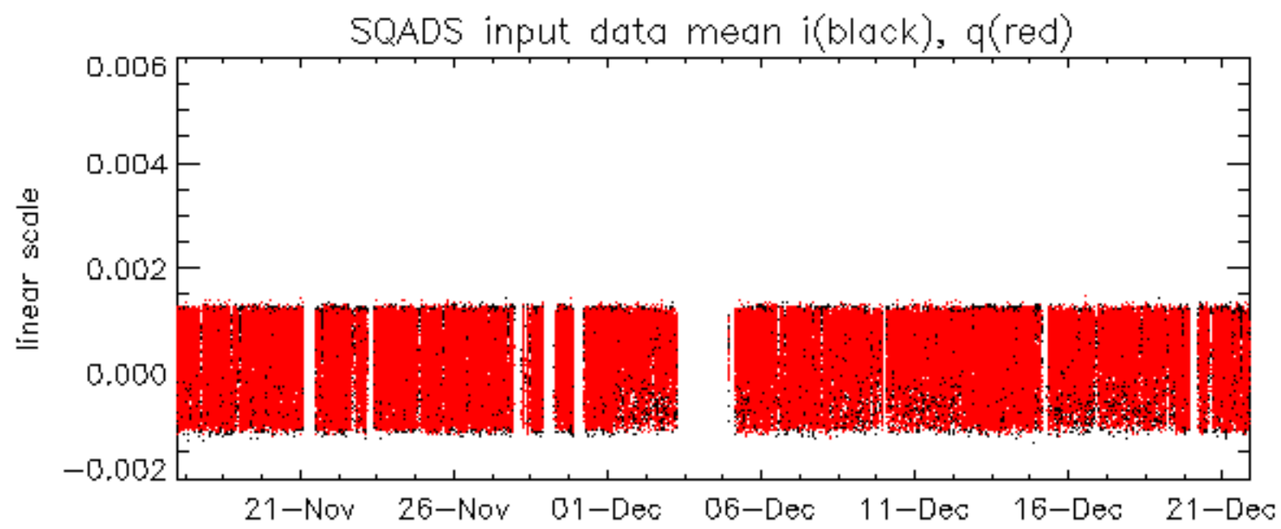
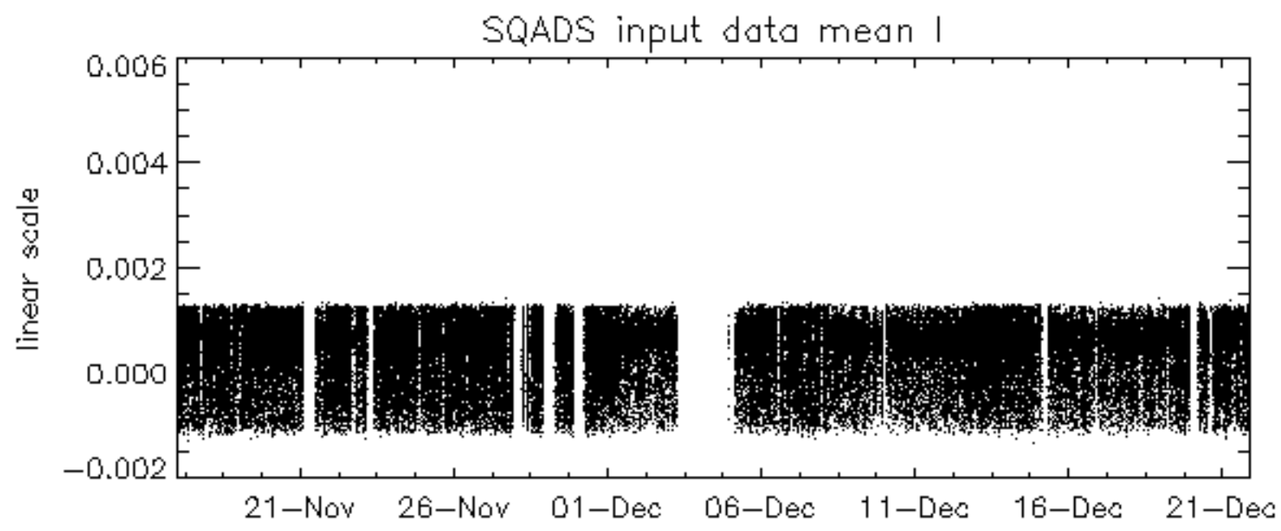

Reference: 2003-06-12 14:08:52 H
Test : 2003-12-20 19:41:14 H
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

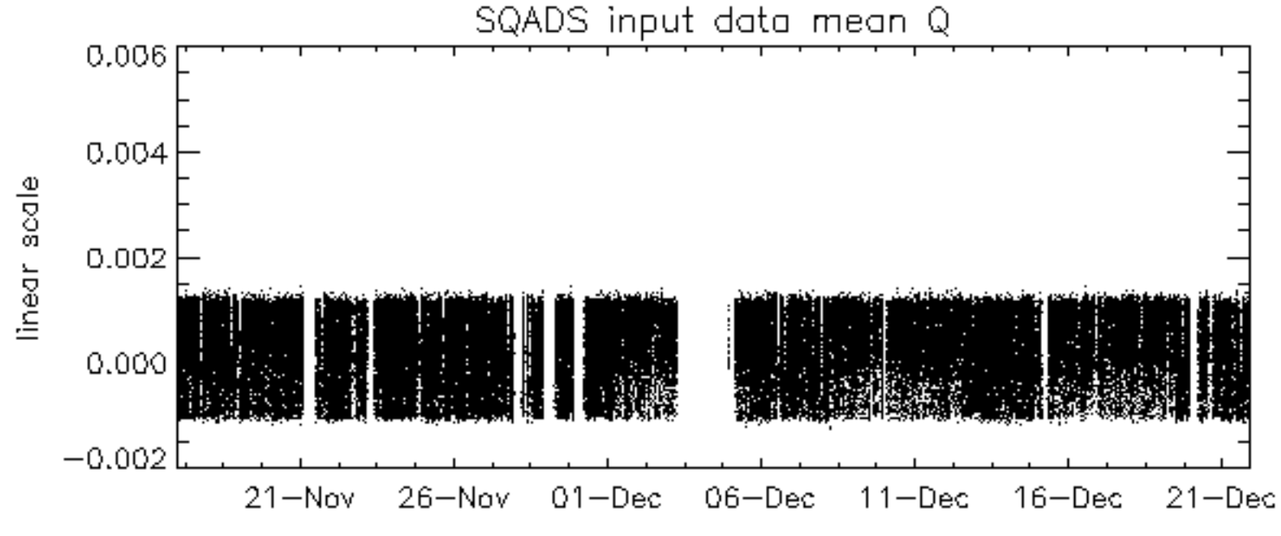

Reference: 2001-02-09 14:08:23 V
Test : 2003-12-21 19:10:57 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

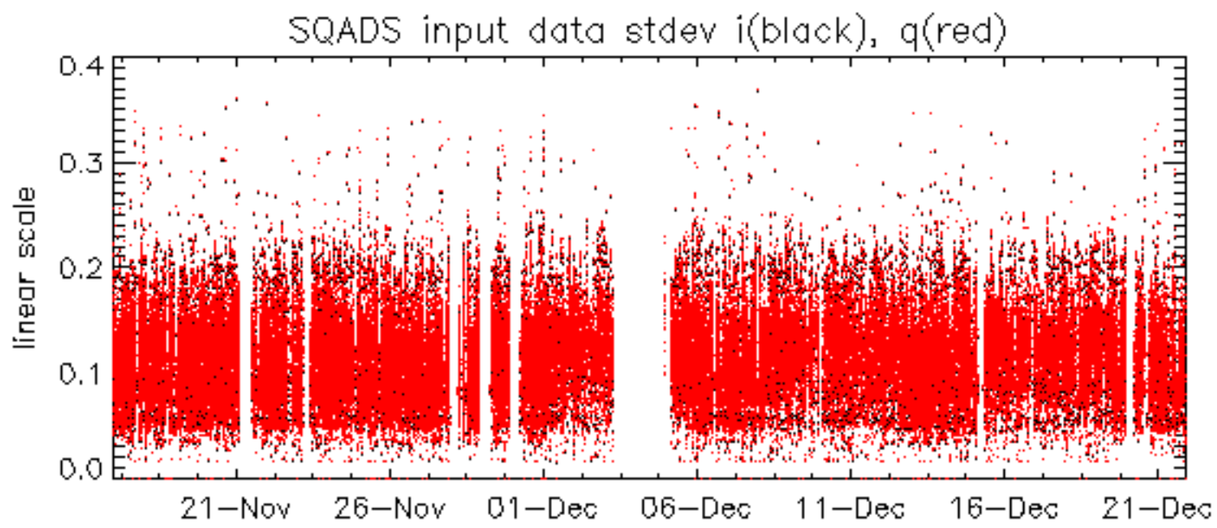

Reference: 2003-06-12 14:10:32 V
Test : 2003-12-21 19:10:57 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4

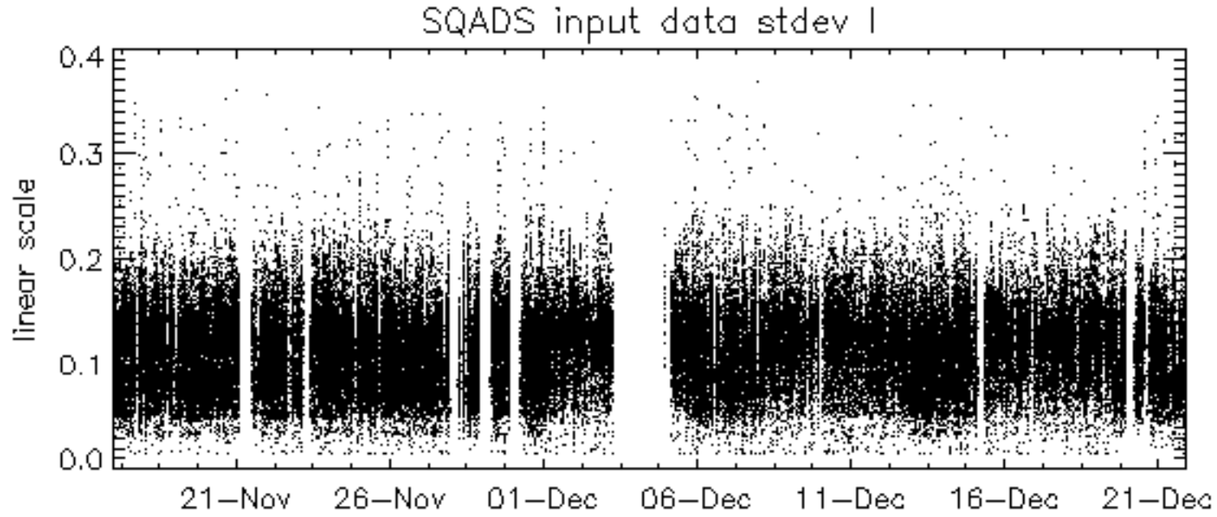

I/Q Gain Imbalance
stdev Q
stdev I
0.0
0.1
0.2
0.3
0.4
0.5

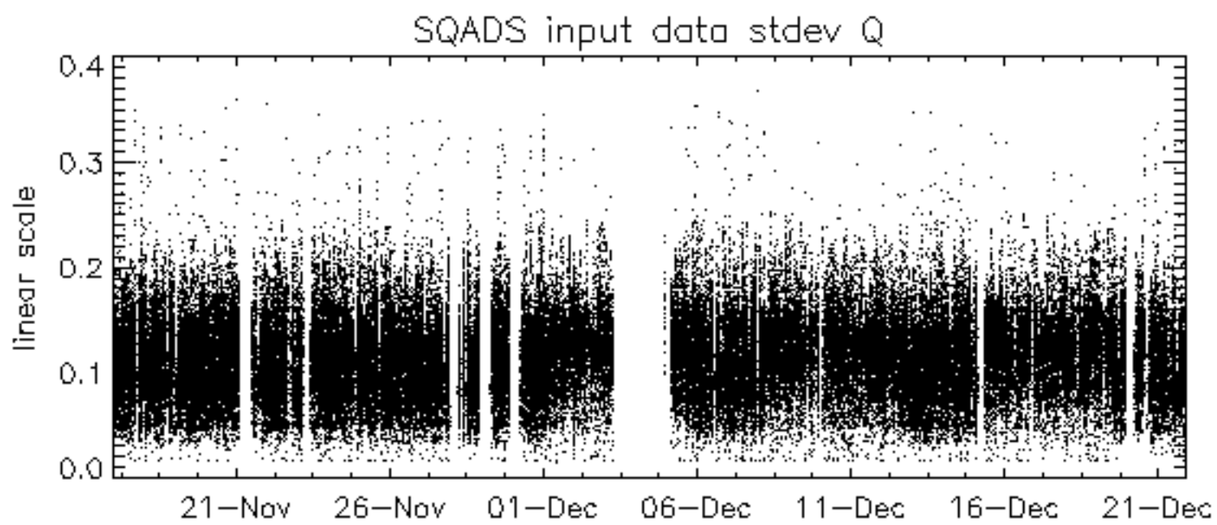

SQADS input data mean i(black), q(red)
linear scale
0.006
0.004
0.002
0.000
−0.002
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec

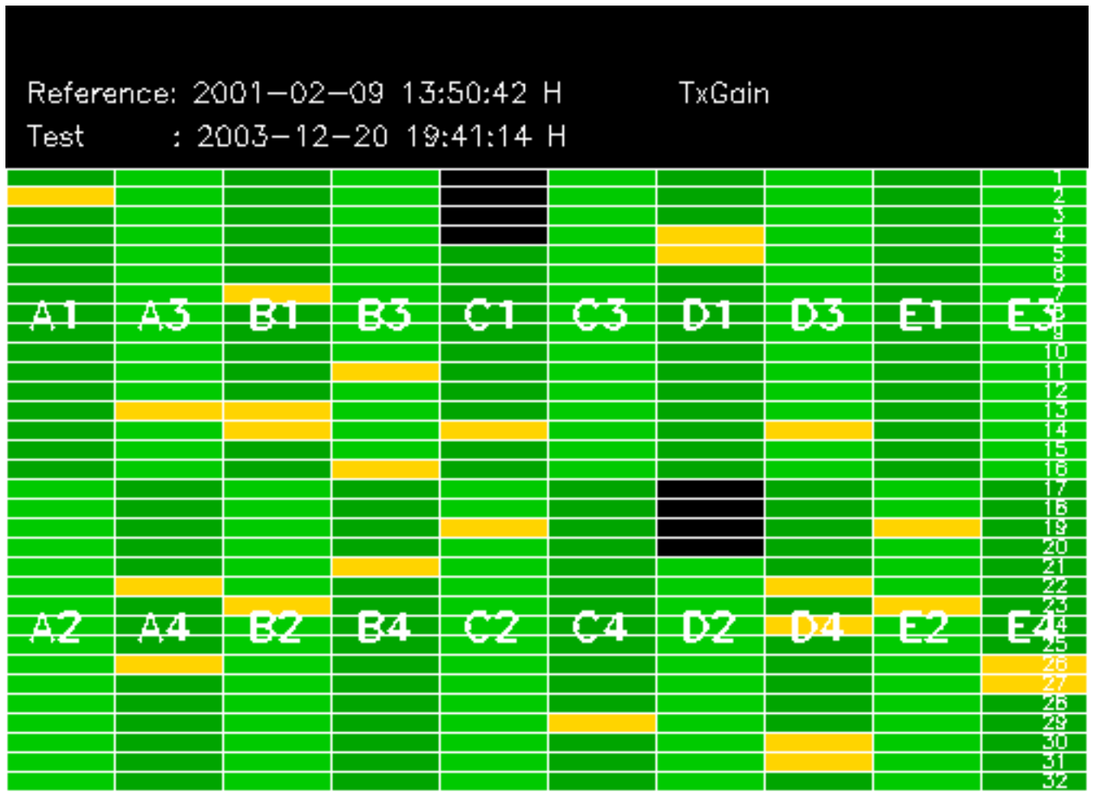

SQADS input data mean I
linear scale
0.006
0.004
0.002
0.000
−0.002
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec

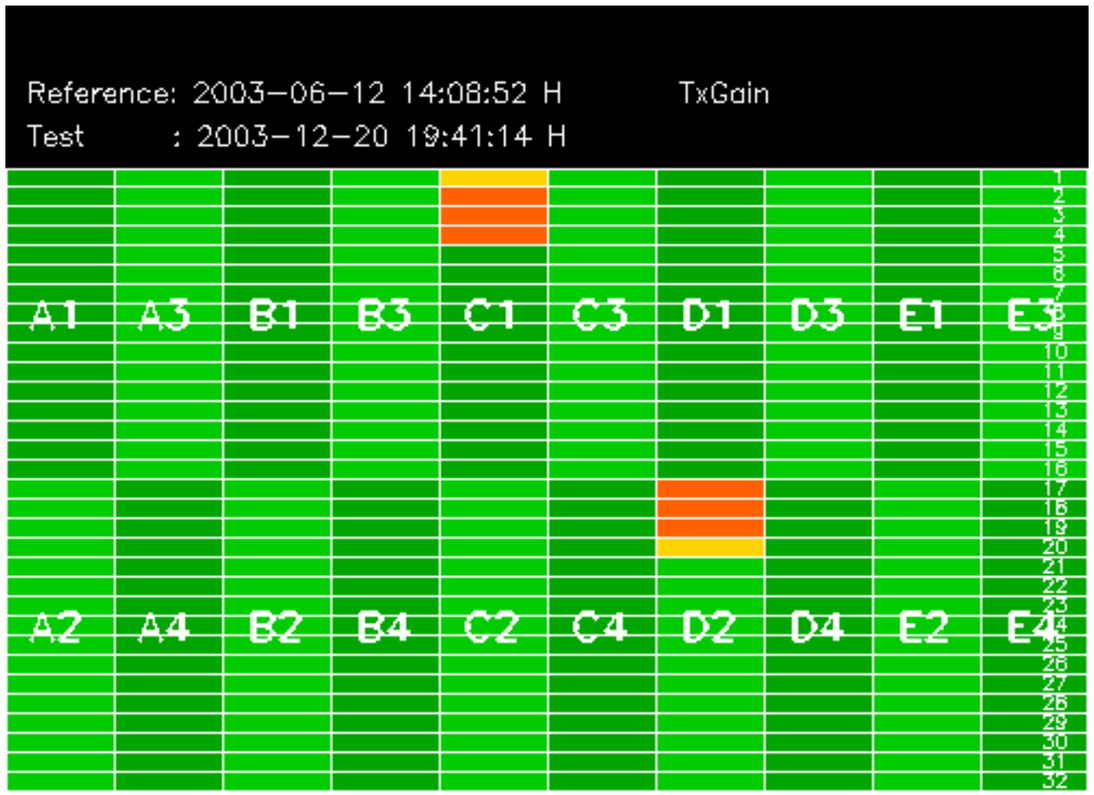

SQADS input data mean Q
linear scale
0.006
0.004
0.002
0.000
−0.002
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec


SQADS input data stdev i(black), q(red)
linear scale
0.4
0.3
0.2
0.1
0.0
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec


SQADS input data stdev I
linear scale
0.4
0.3
0.2
0.1
0.0
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec


SQADS input data stdev Q
linear scale
0.4
0.3
0.2
0.1
0.0
21−Nov
26−Nov
01−Dec
06−Dec
11−Dec
16−Dec
21−Dec


Reference: 2001-02-09 13:50:42 H
Test : 2003-12-20 19:41:14 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2003-06-12 14:08:52 H
Test : 2003-12-20 19:41:14 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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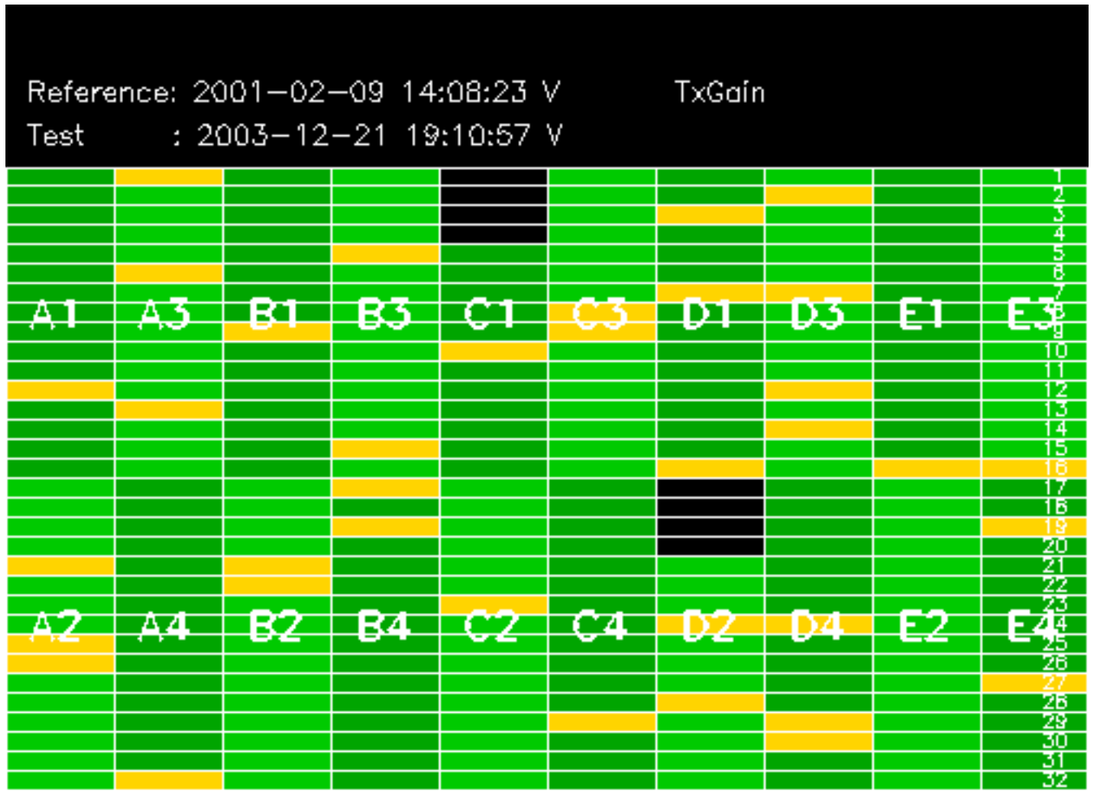
Reference: 2001-02-09 14:08:23 V
Test : 2003-12-21 19:10:57 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
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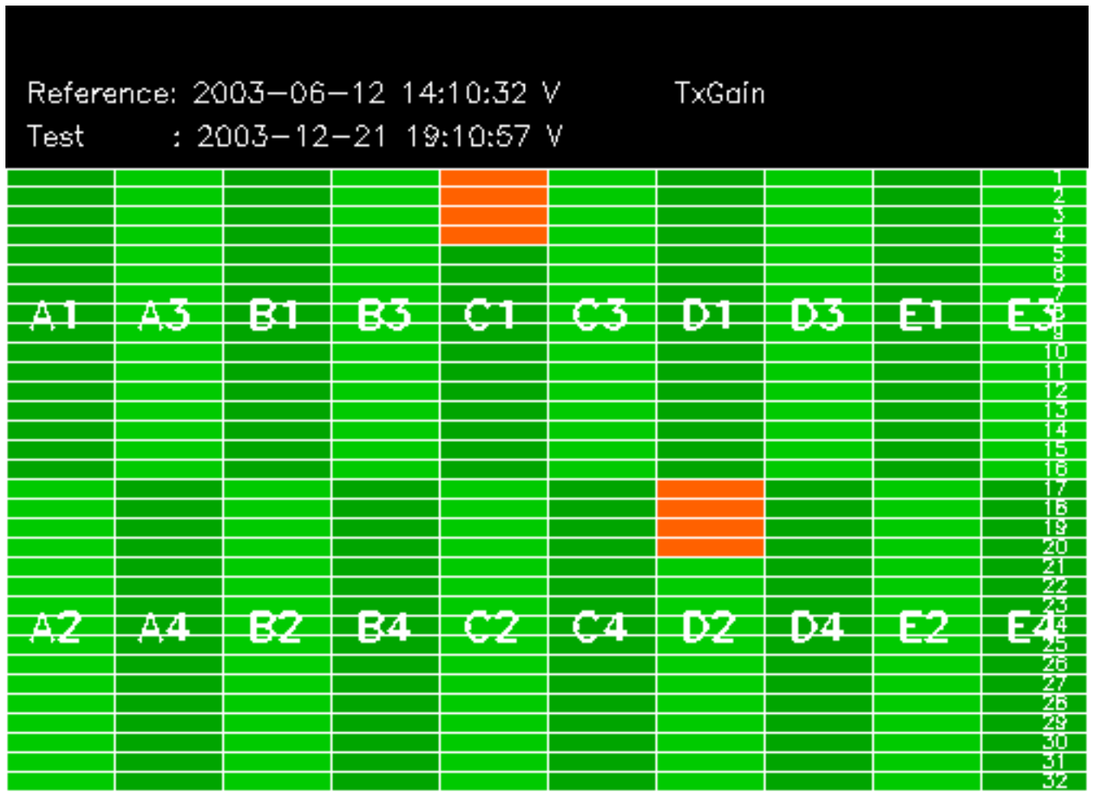
Reference: 2003-06-12 14:10:32 V
Test : 2003-12-21 19:10:57 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
1
2
3
4
5
6
7
8
9
10
11
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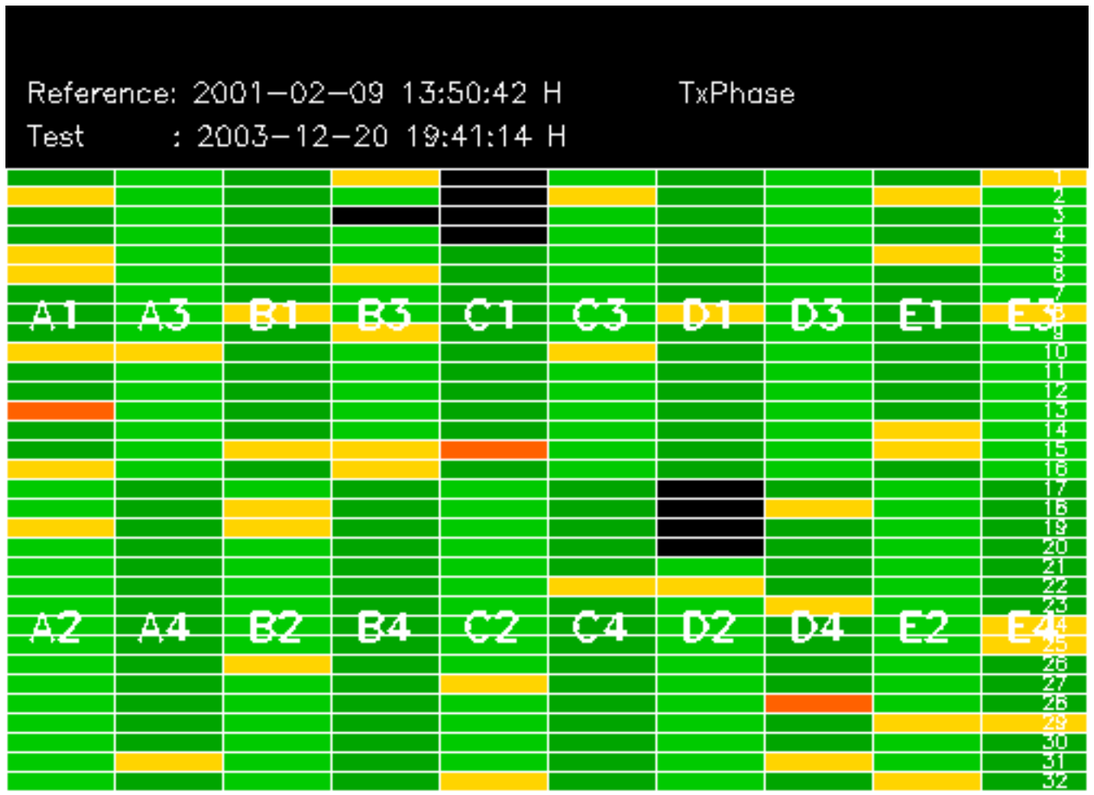
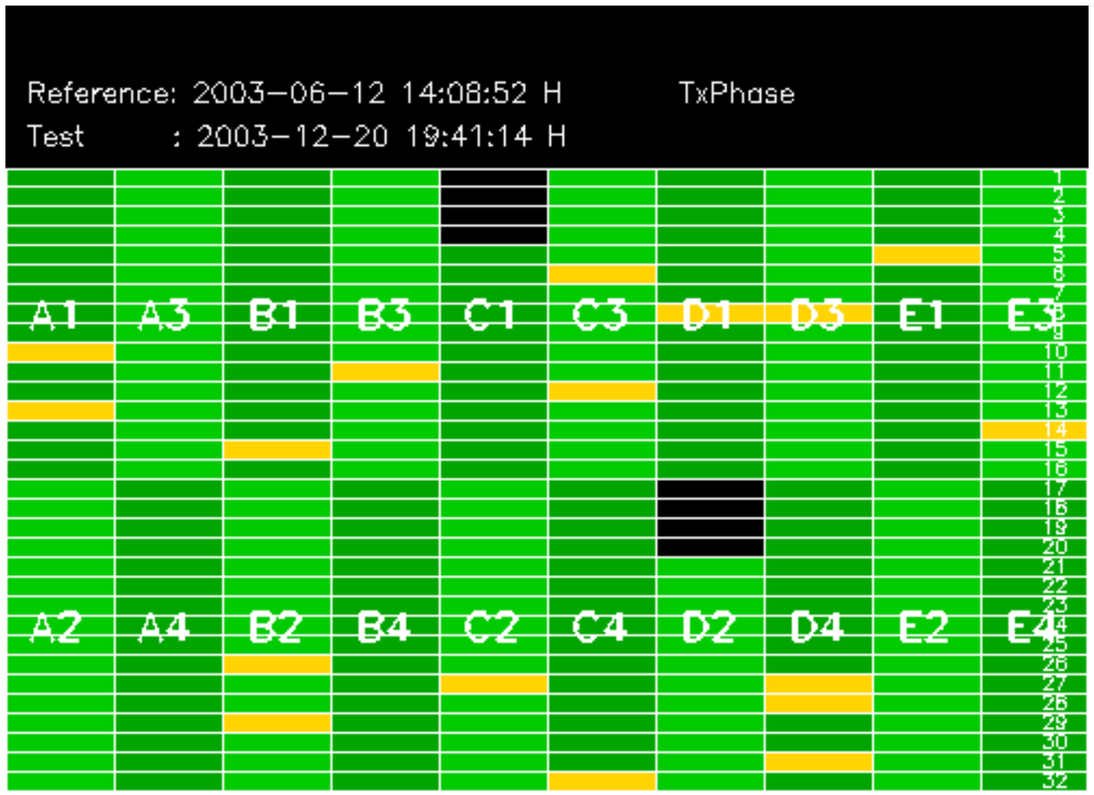

Reference: 2001-02-09 13:50:42 H
TxPhase
Test : 2003-12-20 19:41:14 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2003-06-12 14:08:52 H
Test : 2003-12-20 19:41:14 H
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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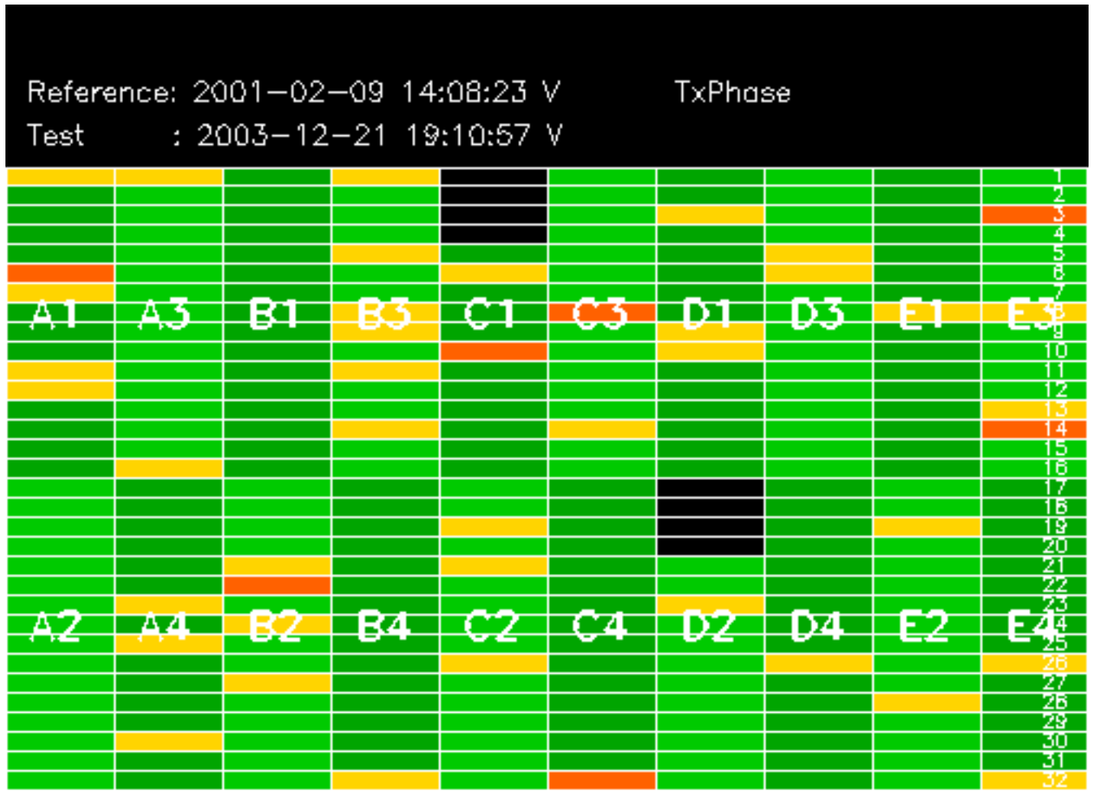
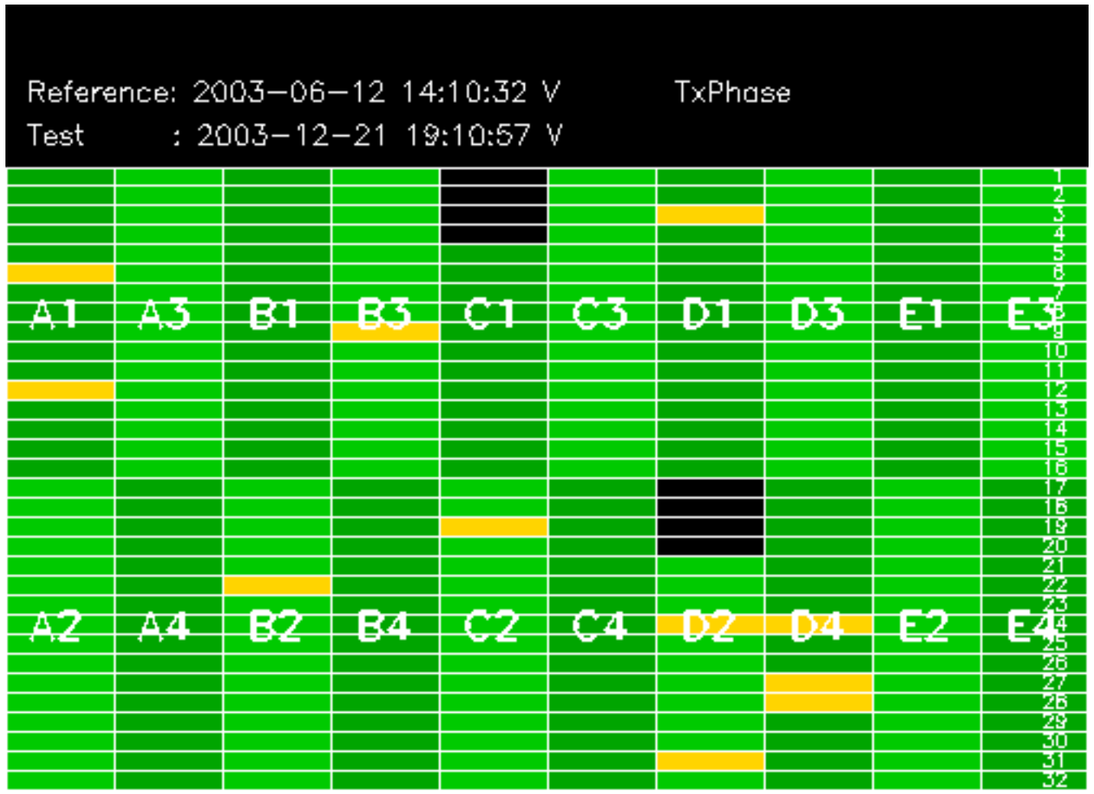

Reference: 2001-02-09 14:08:23 V
Test : 2003-12-21 19:10:57 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2003-06-12 14:10:32 V
Test : 2003-12-21 19:10:57 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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Preliminary report. Instrument unavailabilities are not yet reported