PRELIMINARY REPORT OF 040328

ATTENTION: This report is automatically generated no comments are provided on data analysis

last update on Sun Mar 28 12:40:57 GMT 2004

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

No unavailabilities during the reported period.

2.2 - Browse Visual Inspection

2.3 - Data Analysis

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

3 - Module Stepping Mode

The MS mode provides an internal health check on an individual module basis.
The purpose of this mode is to identify to identify any malfunctionning modules and to identify modules for which calibration offsets are to be applied.
No anomalies observed on available MS products:

Polarisation	Start Time
V	20040327 182205
H	20040327 182045

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

☒

4.2 - Cyclic statistics

4.3 - cal pulses monitoring (all rows)

5 - RAW data statistics

No anomalies observed.

5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000472935
	stdev	2.36636e-07
MEAN Q	mean	0.000488330
	stdev	2.63725e-07

5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127364
	stdev	0.00114827
STDEV Q	mean	0.127601
	stdev	0.00116145

5.3 - Gain imbalance I/Q

6 - Doppler Analysis

Preliminary report.The data is not yet controled

6.1 - Unbiased Doppler Error

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

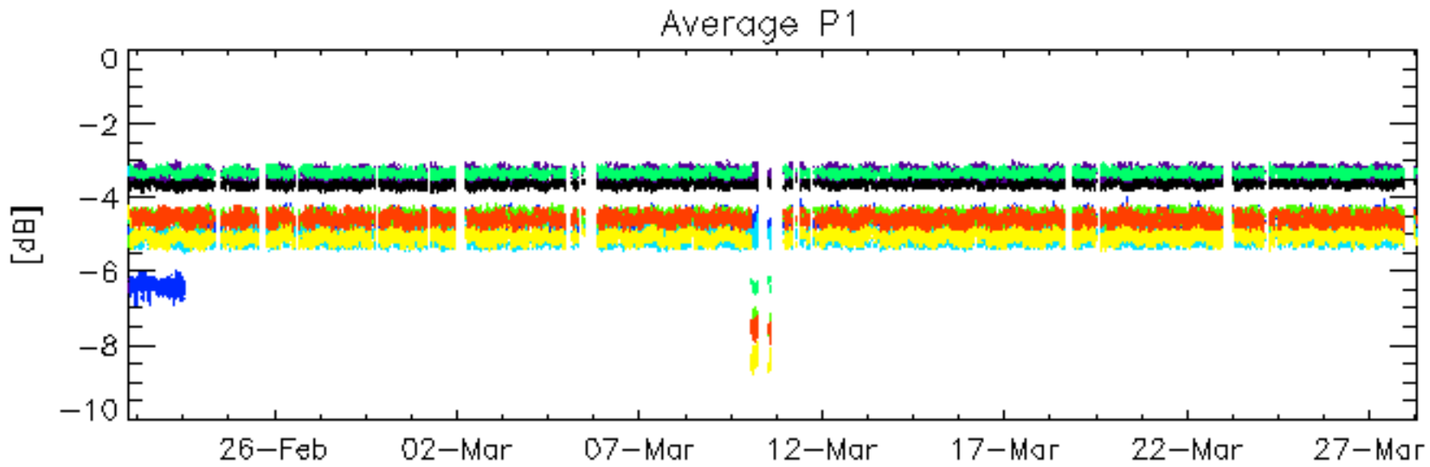
6.2 - Absolute Doppler

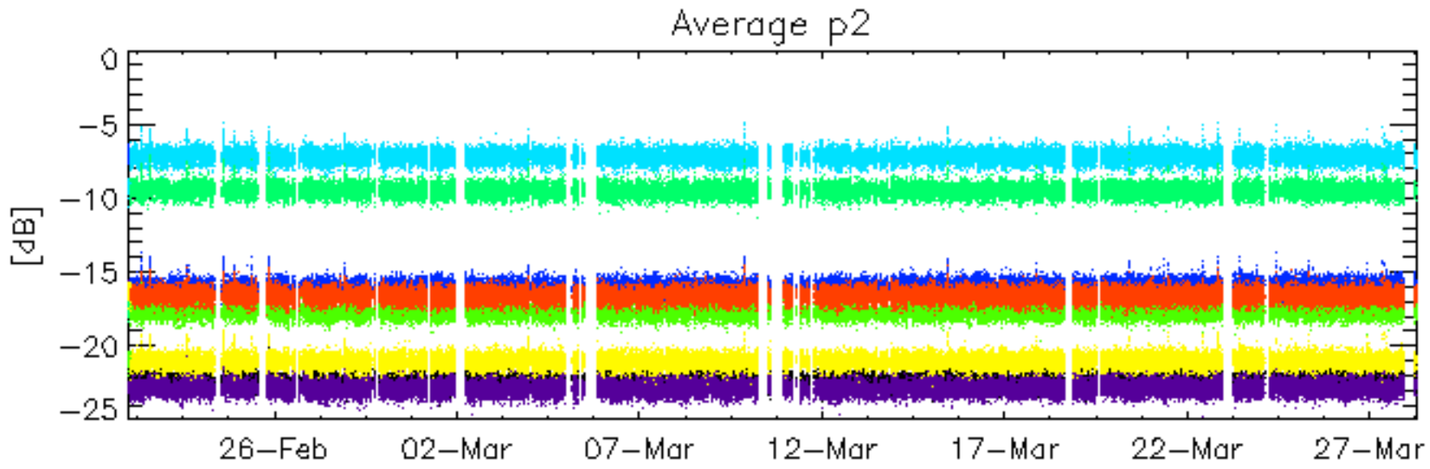
Evolution of Absolute Doppler
Acsending
Descending

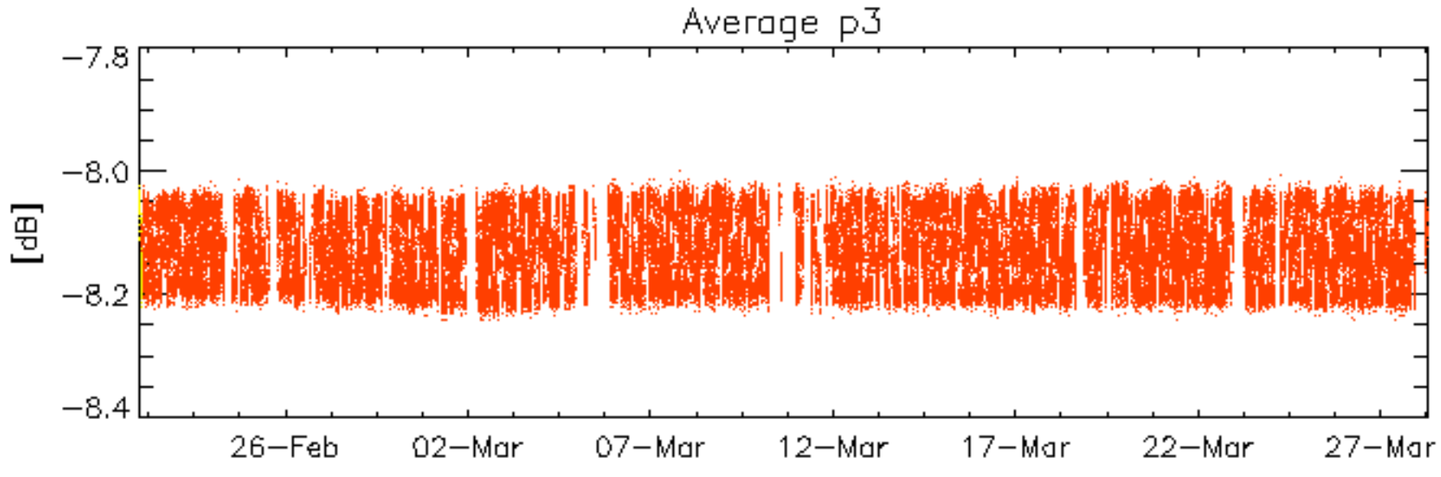
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

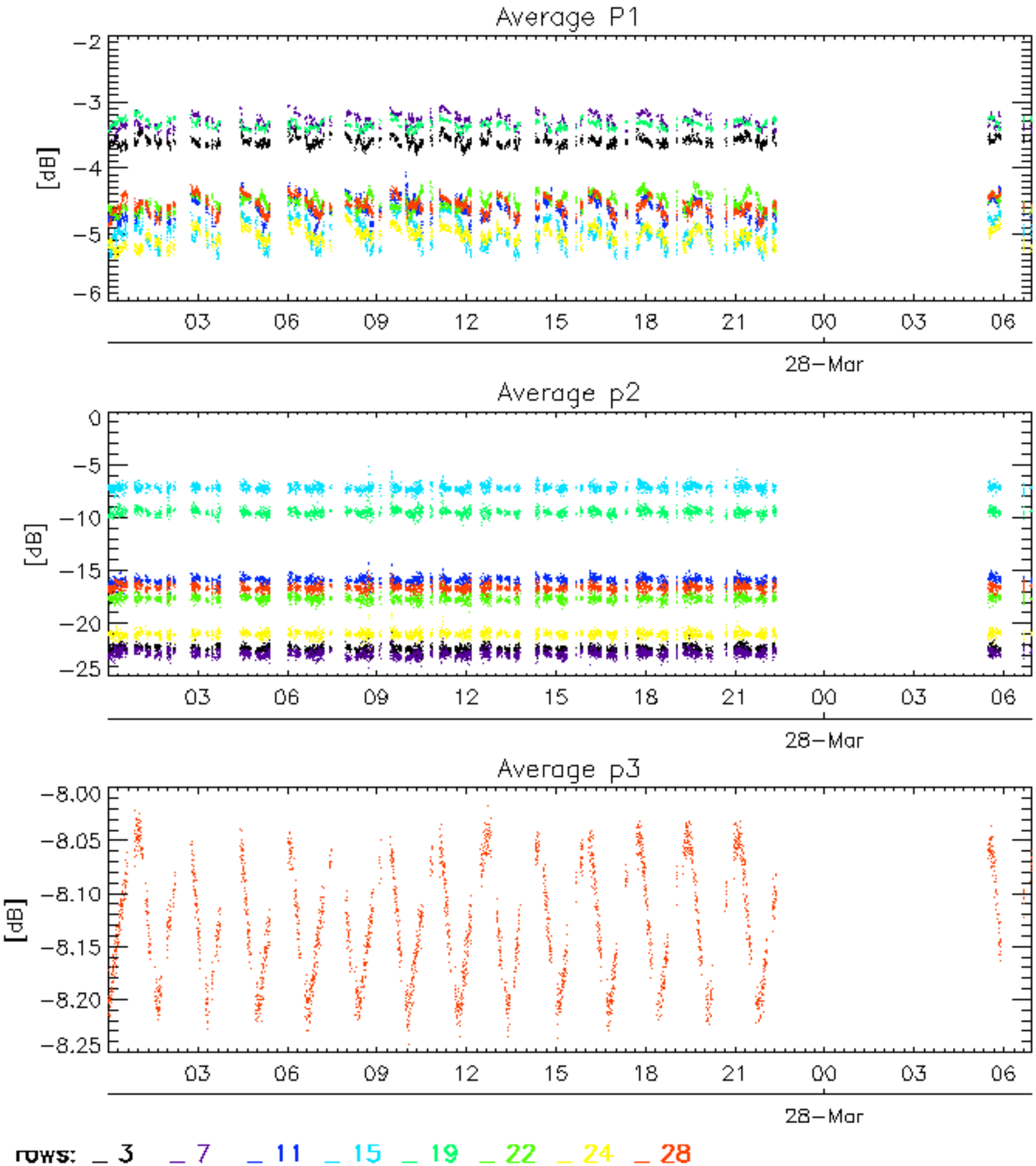
Evolution Doppler error versus ANX



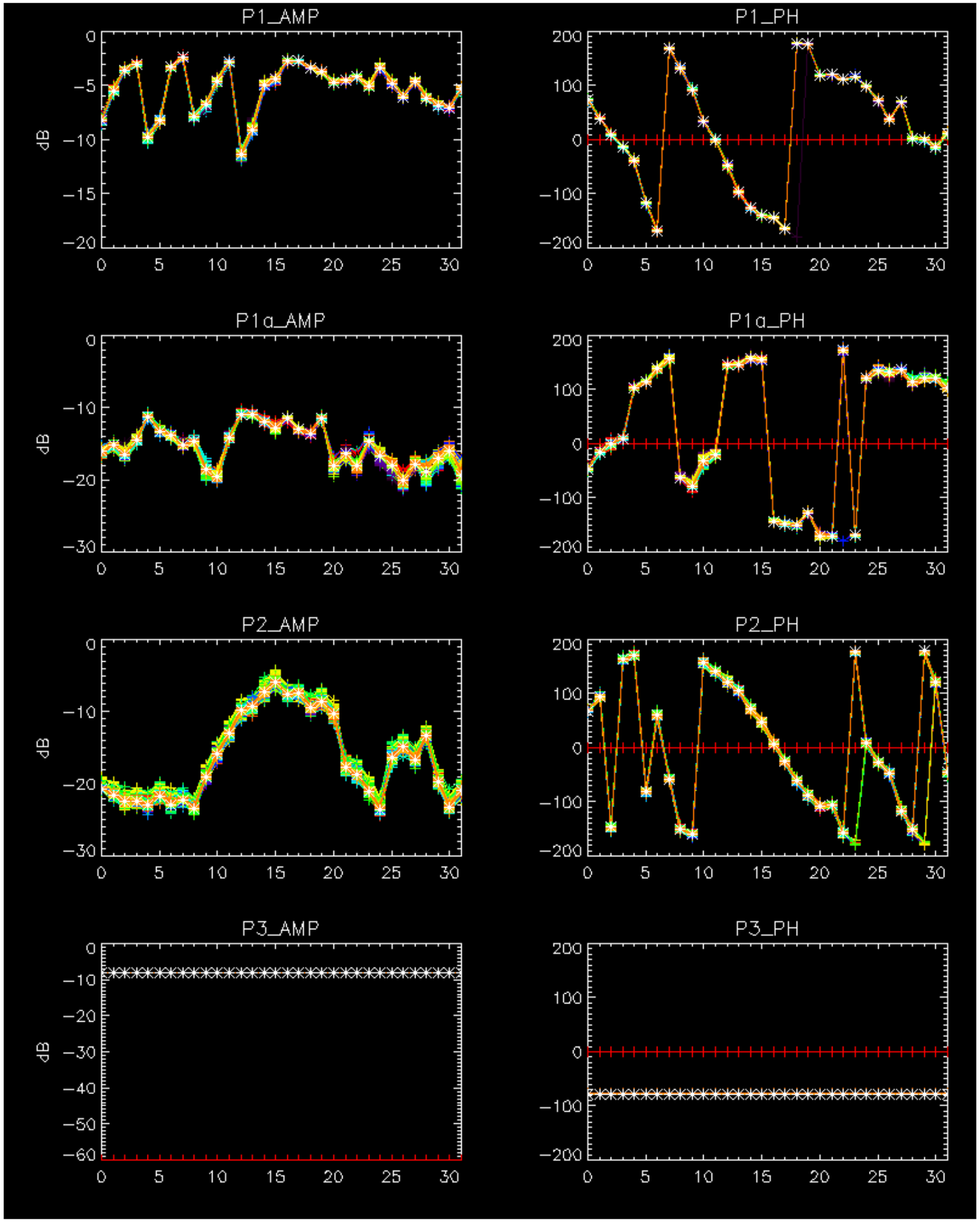




rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 28

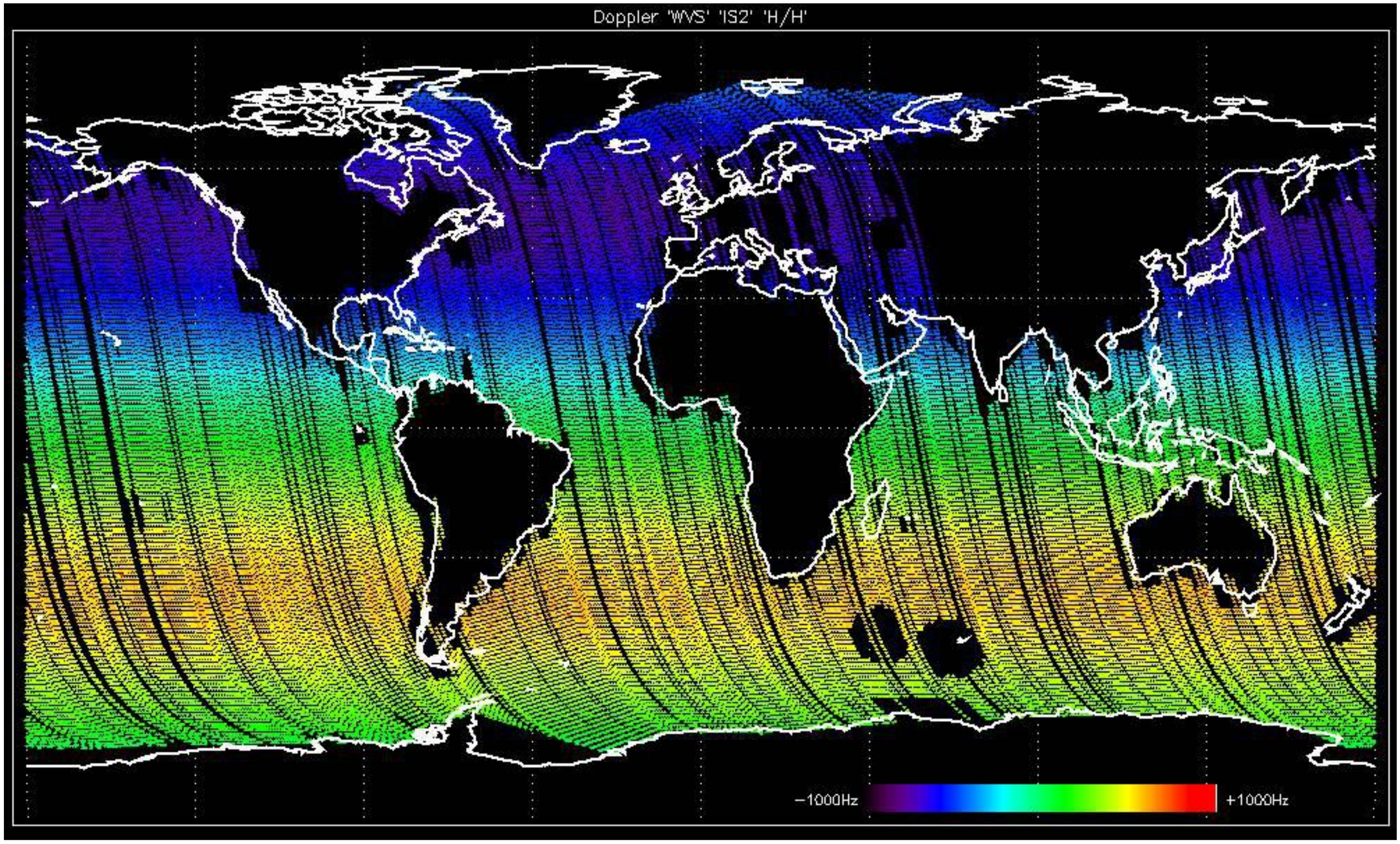

Average P1
[dB]
−2
−3
−4
−5
−6
03
06
09
12
15
18
21
00
03
06
28−Mar
Average p2
[dB]
0
−5
−10
−15
−20
−25
03
06
09
12
15
18
21
00
03
06
28−Mar
Average p3
[dB]
−8.00
−8.05
−8.10
−8.15
−8.20
−8.25
03
06
09
12
15
18
21
00
03
06
28−Mar
rows: 3 7 11 15 19 22 24 28

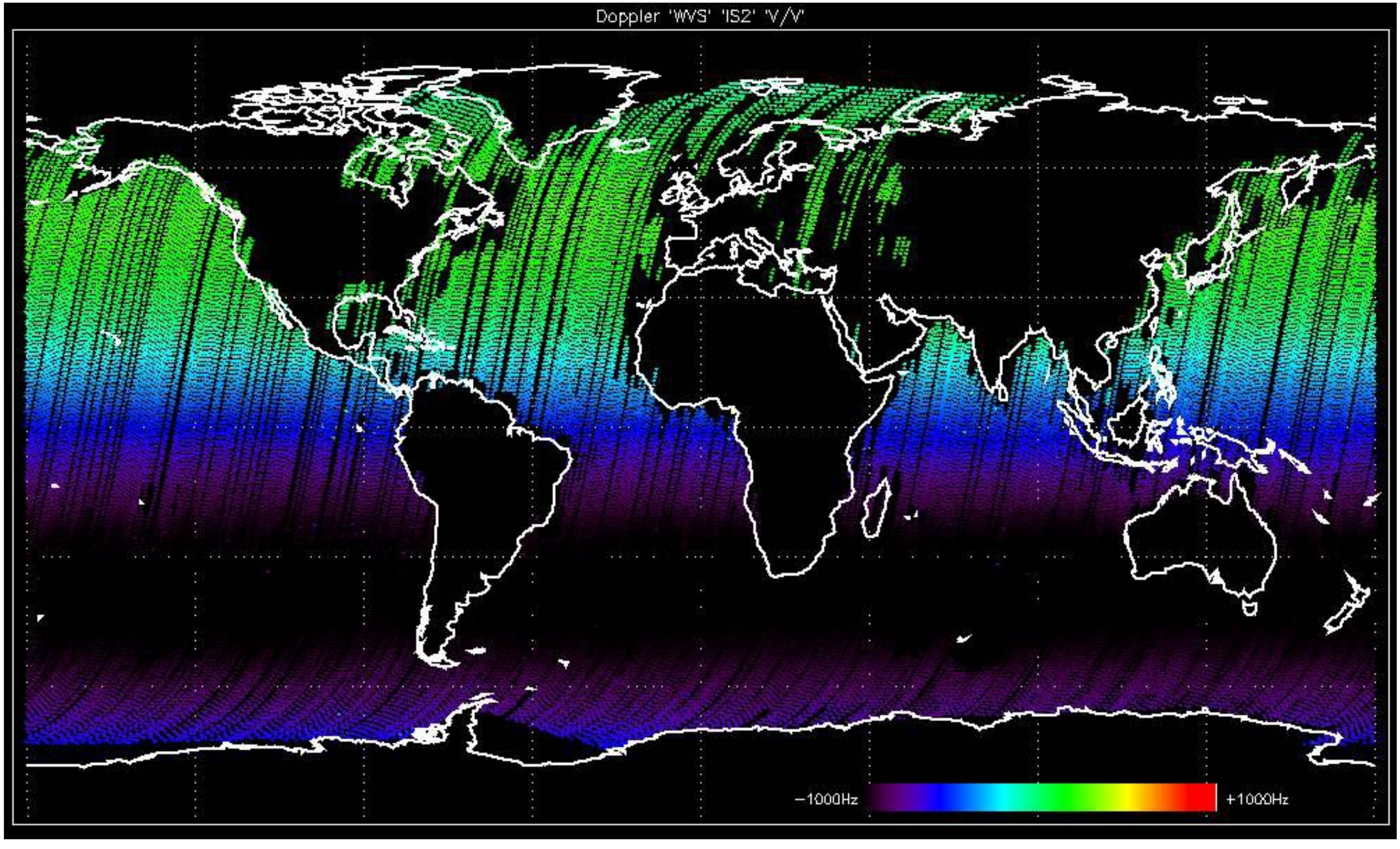
No anomalies observed.

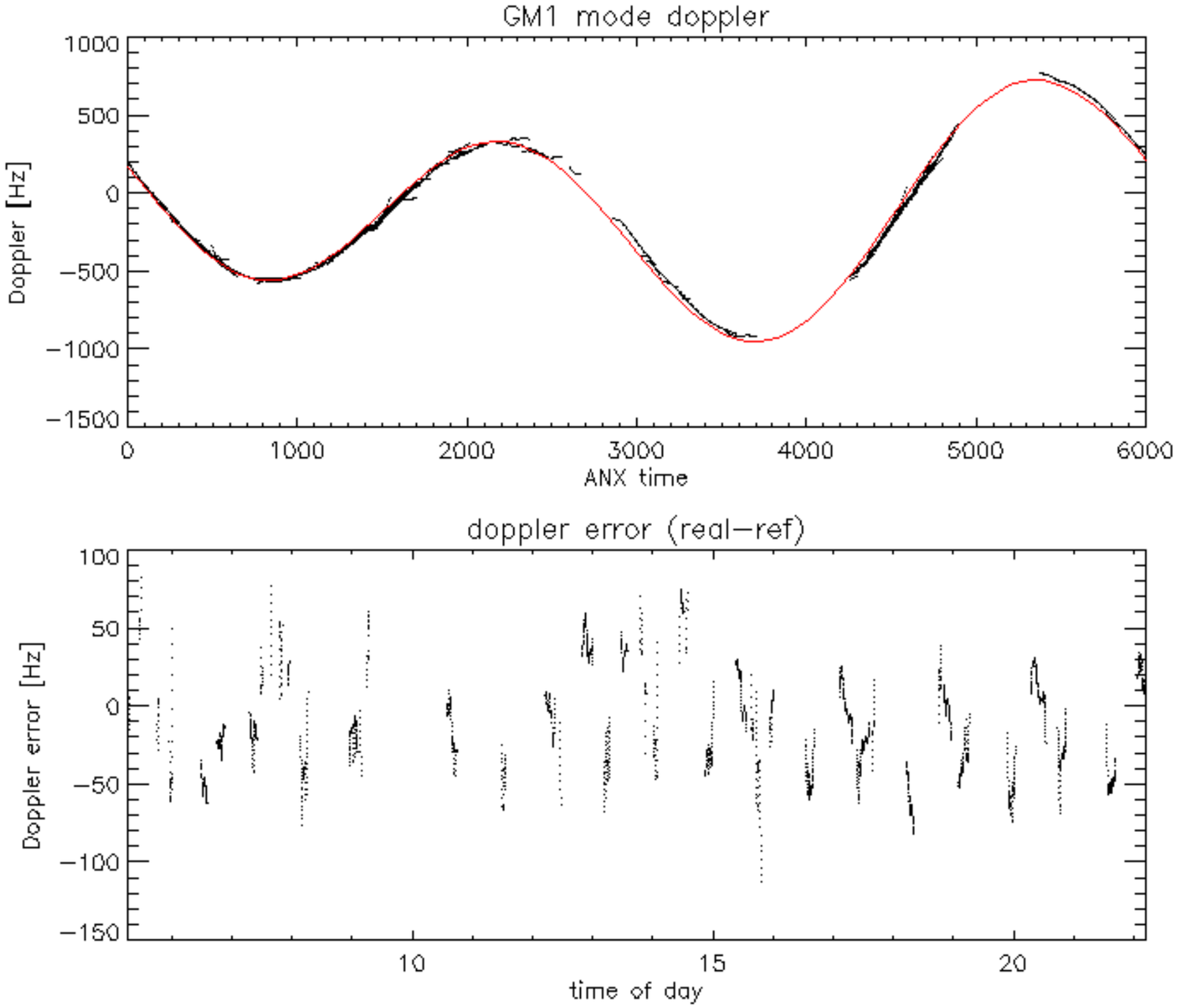

P1_AMP
P1_PH
P1a_AMP
P1a_PH
P2_AMP
P2_PH
P3_AMP
P3_PH
dB

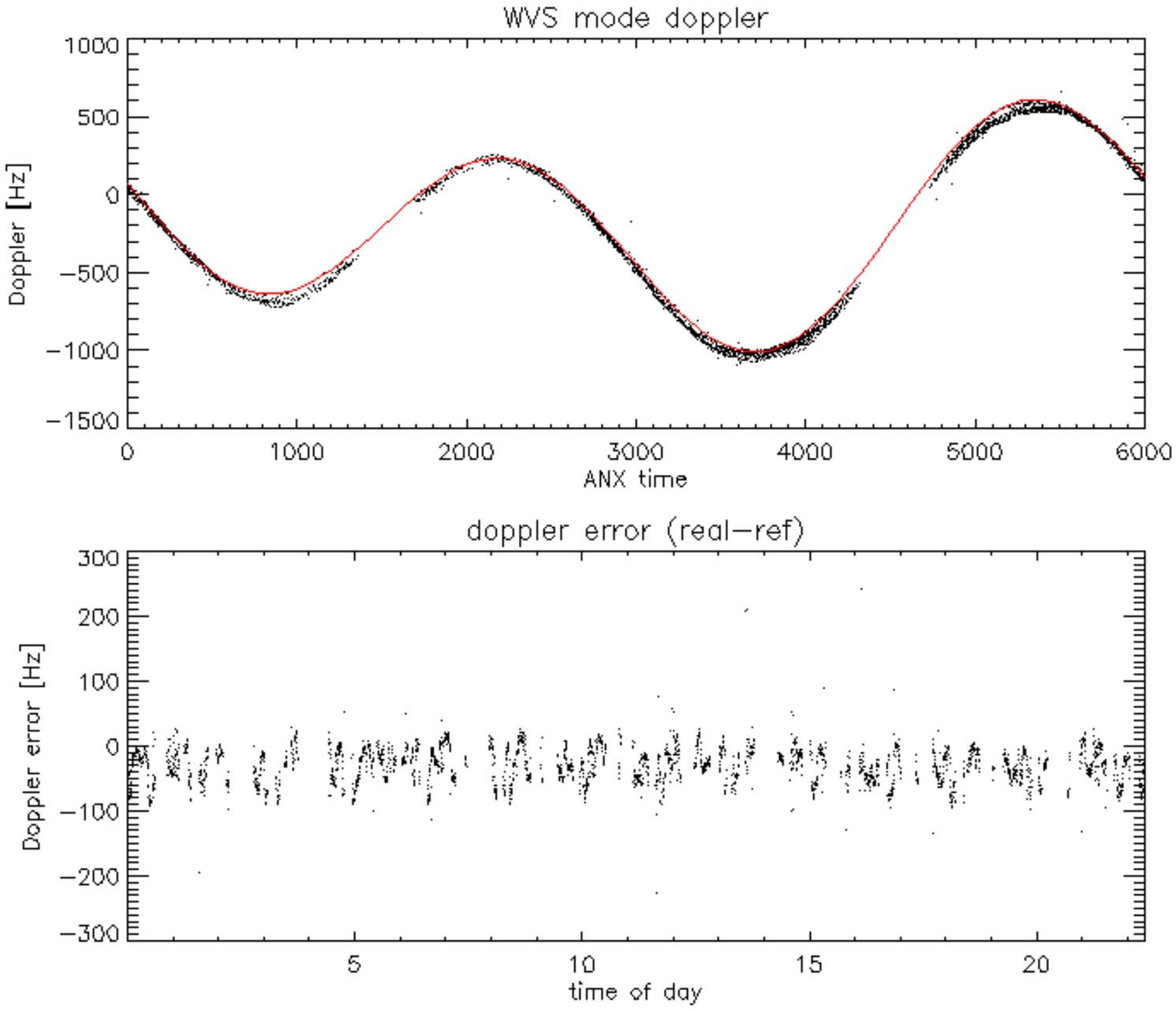
-Stable wave internal calibration pulses gain and phase.
-Stable raw data statistics.
-Nominal Doppler behavior.

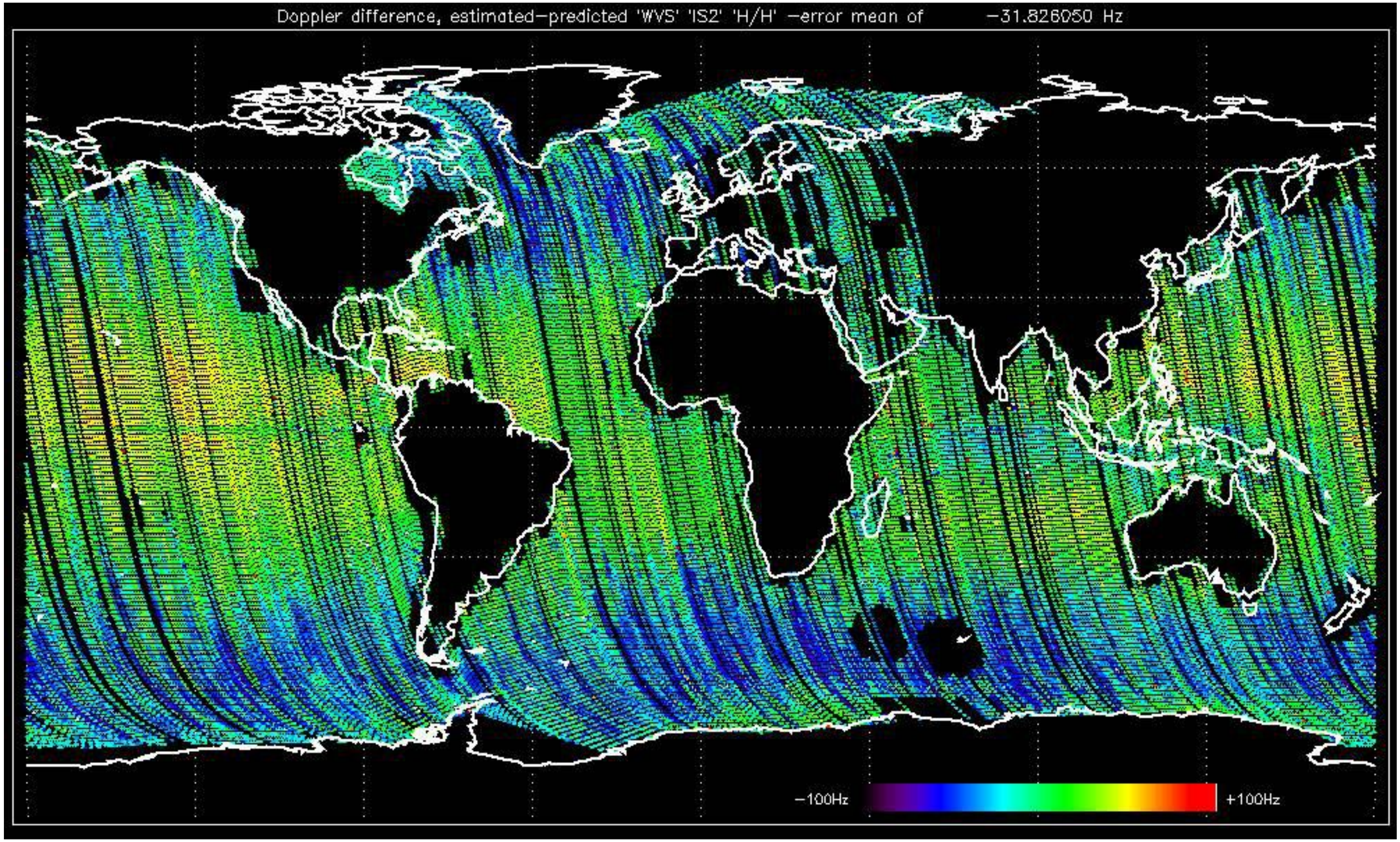
Preliminary report.The data is not yet controled

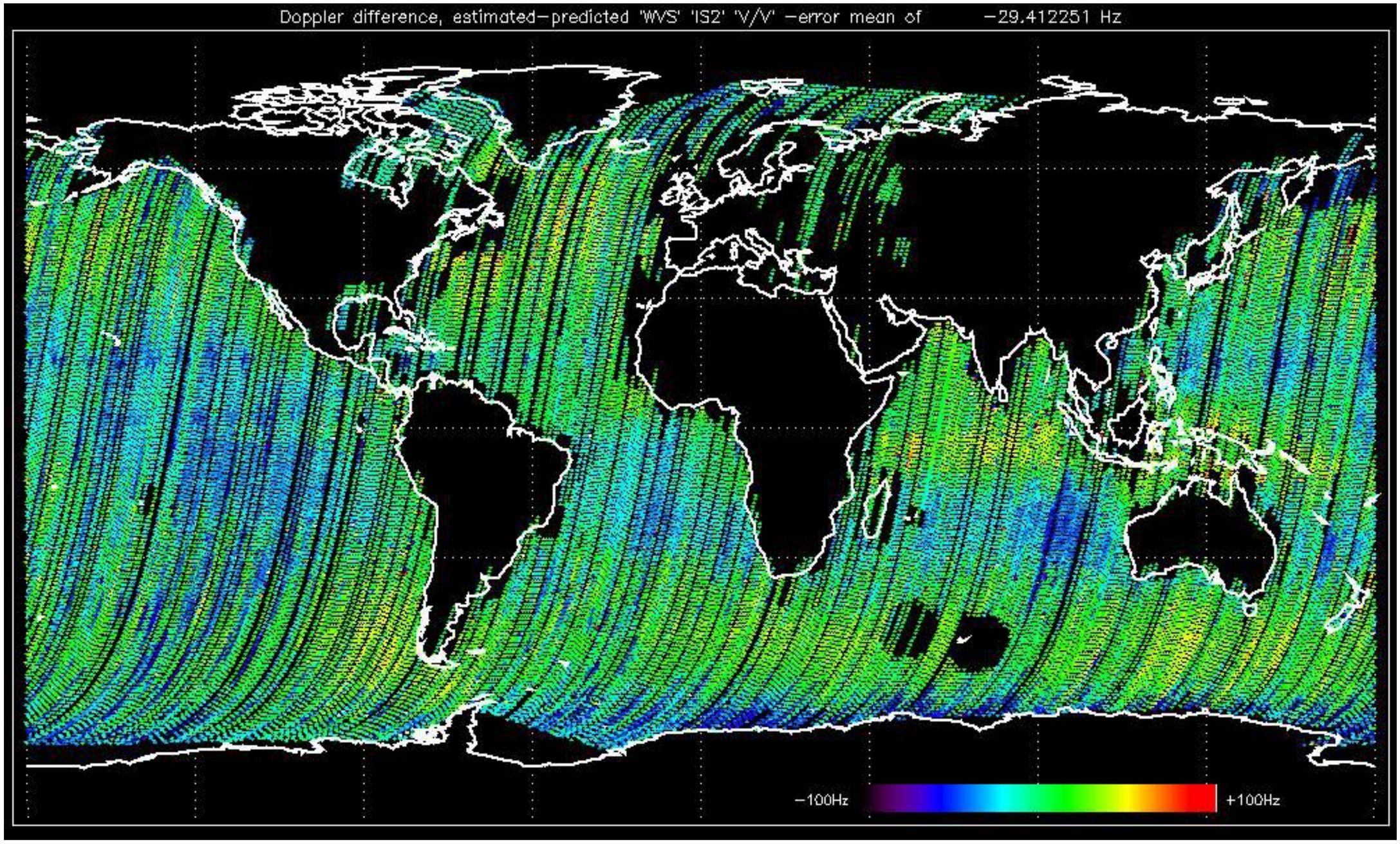

Doppler 'WVS' 'IS2' 'H/H'
−1000Hz
+1000Hz


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


GM1 mode doppler
Doppler [Hz]
1000
500
0
−500
−1000
−1500
0
1000
2000
3000
4000
5000
6000
ANX time
doppler error (real−ref)
Doppler error [Hz]
100
50
0
−50
−100
−150
10
15
20
time of day

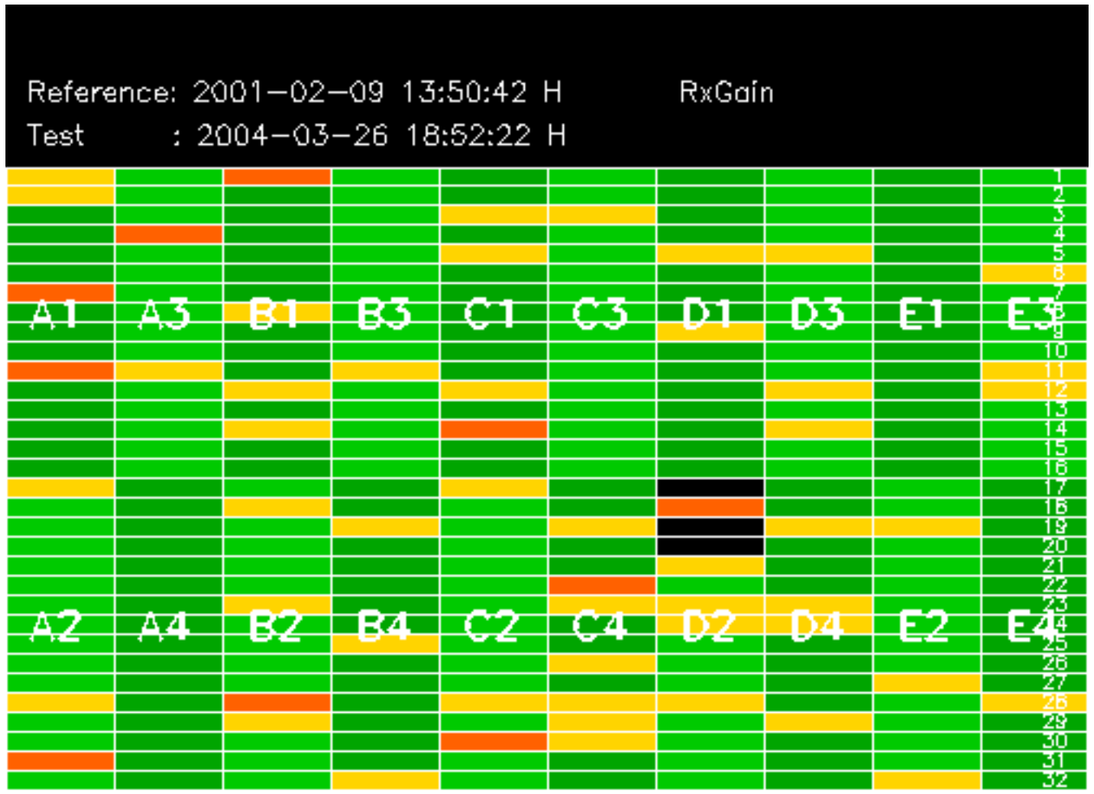

WVS mode doppler
Doppler [Hz]
1000
500
0
−500
−1000
−1500
0
1000
2000
3000
4000
5000
6000
ANX time
doppler error (real−ref)
Doppler error [Hz]
300
200
100
0
−100
−200
−300
5
10
15
20
time of day

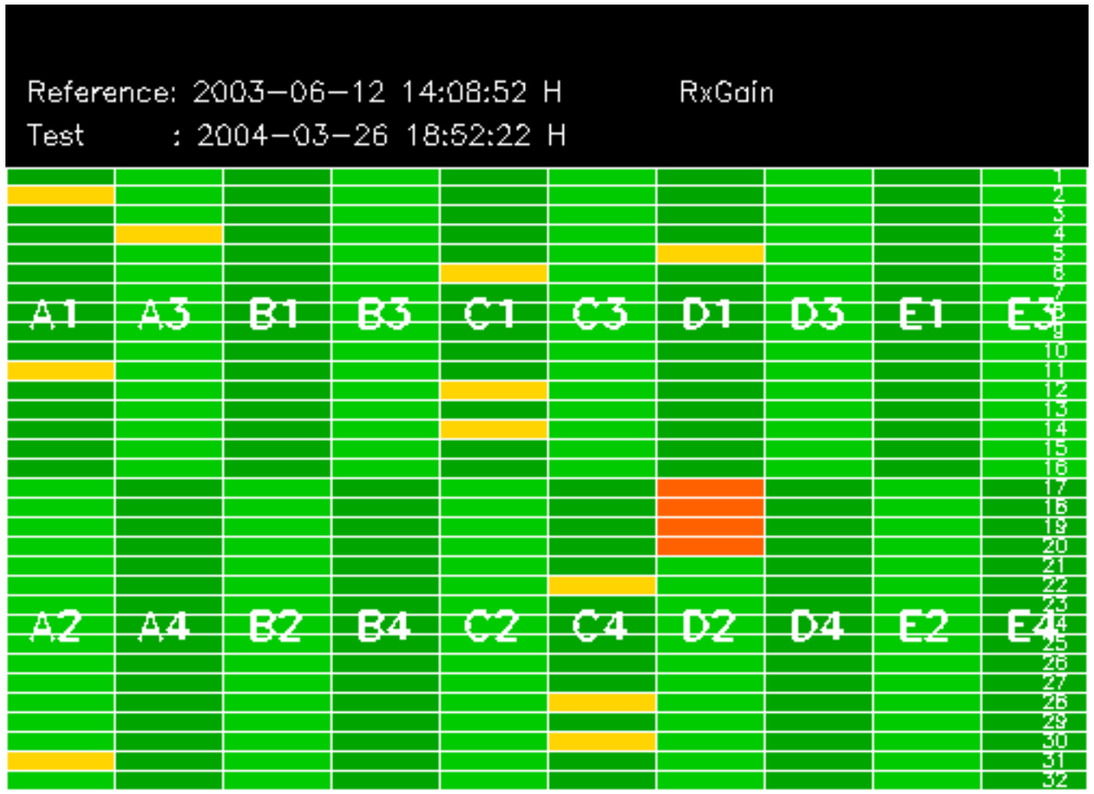

Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -31.826050 Hz
-100Hz
+100Hz


Doppler difference, estimated−predicted 'WVS' 'IS2' 'V/V' −error mean of −29.412251 Hz
−100Hz
+100Hz

The MS mode provides an internal health check on an individual module basis.
The purpose of this mode is to identify to identify any malfunctionning modules and
to identify modules for which calibration offsets are to be applied.
No anomalies observed on available MS products:

No anomalies observed.


Reference: 2001-02-09 13:50:42 H
RxGain
Test : 2004-03-26 18:52:22 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 : 2004-03-26 18:52:22 H
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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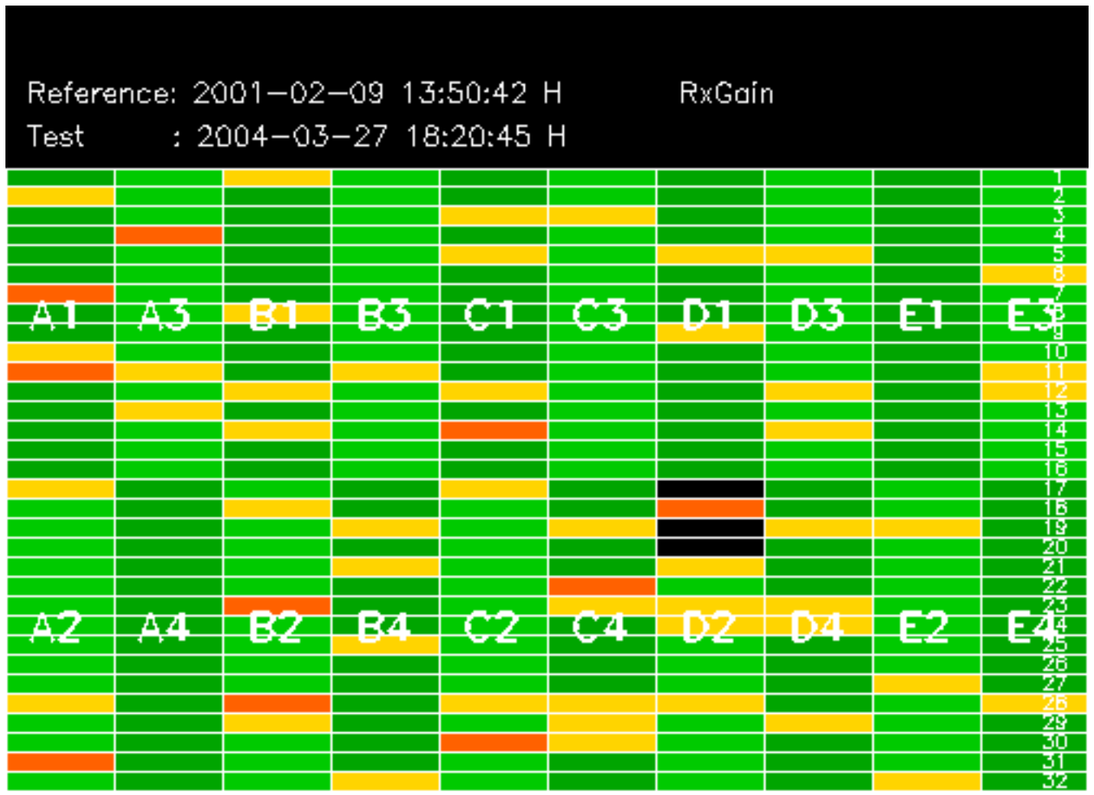
Reference: 2001-02-09 13:50:42 H
Test : 2004-03-27 18:20:45 H
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
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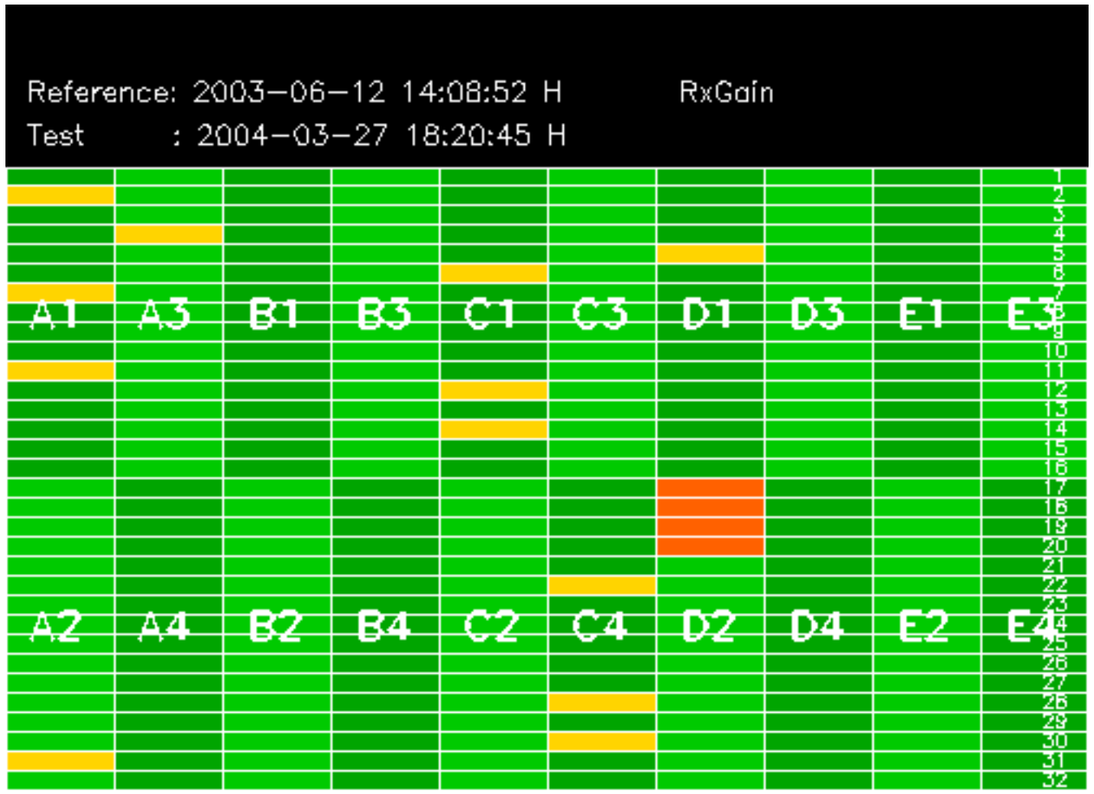
Reference: 2003-06-12 14:08:52 H
Test : 2004-03-27 18:20:45 H
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
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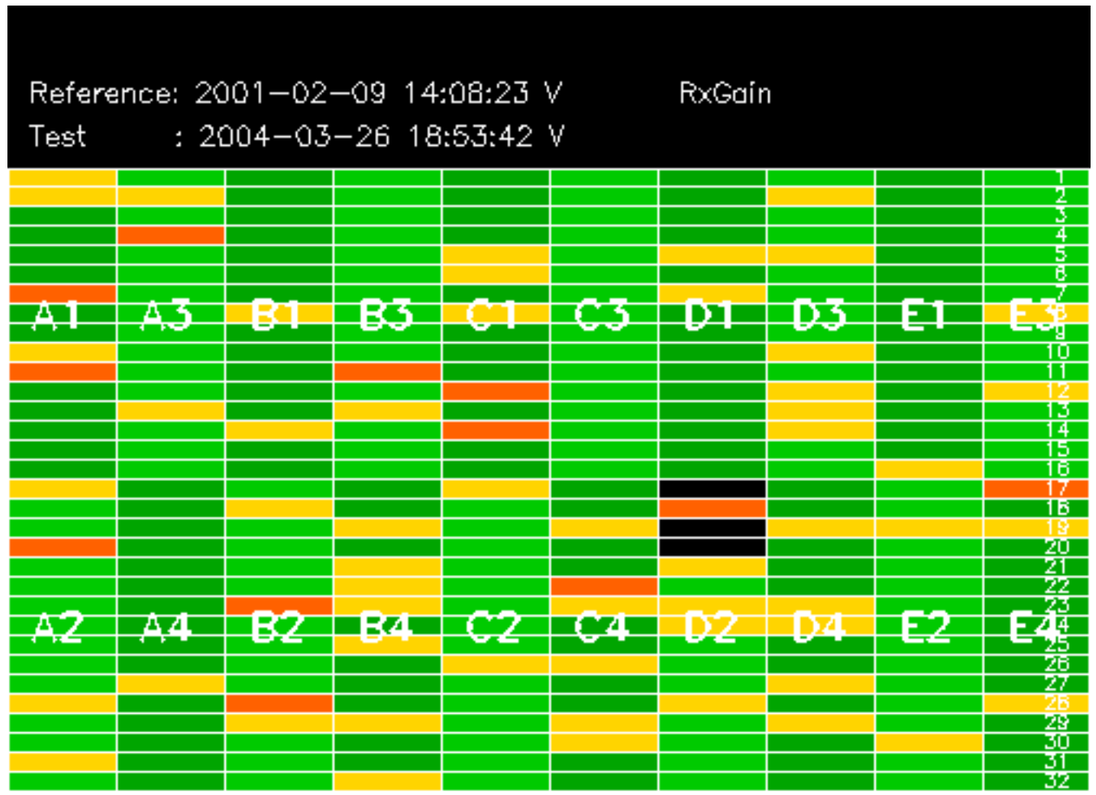
Reference: 2001-02-09 14:08:23 V
Test : 2004-03-26 18:53:42 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
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D4
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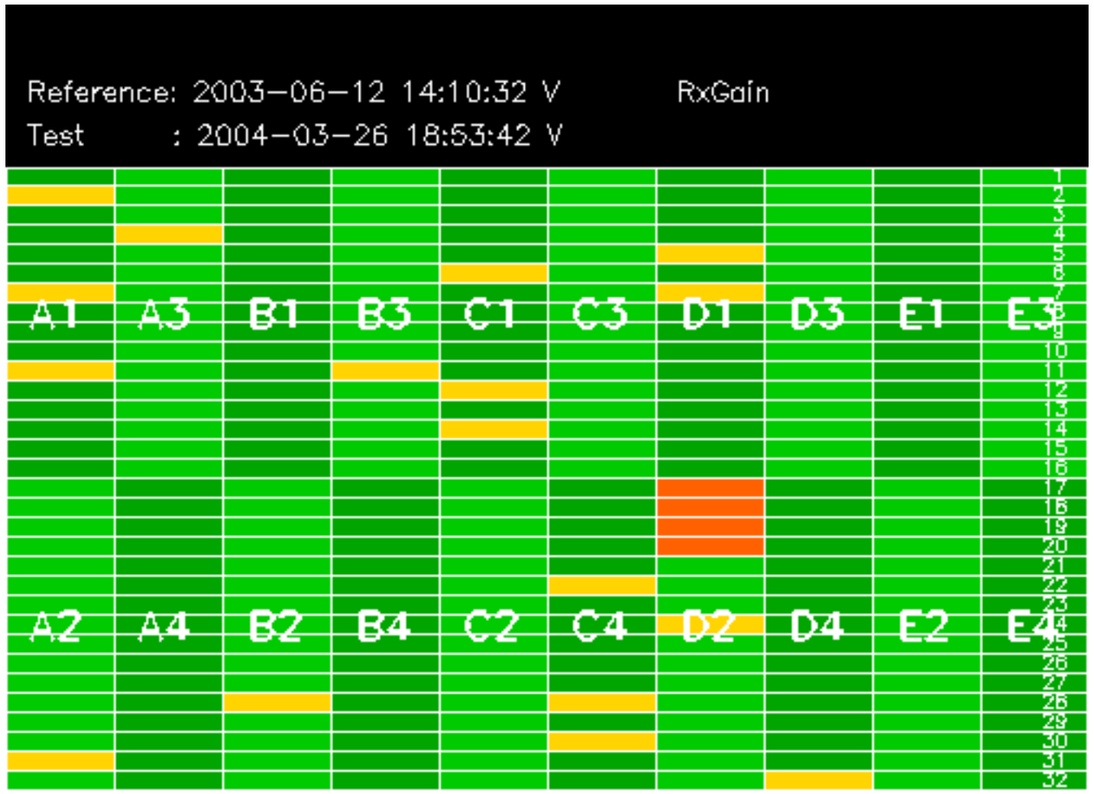
Reference: 2003-06-12 14:10:32 V
Test : 2004-03-26 18:53:42 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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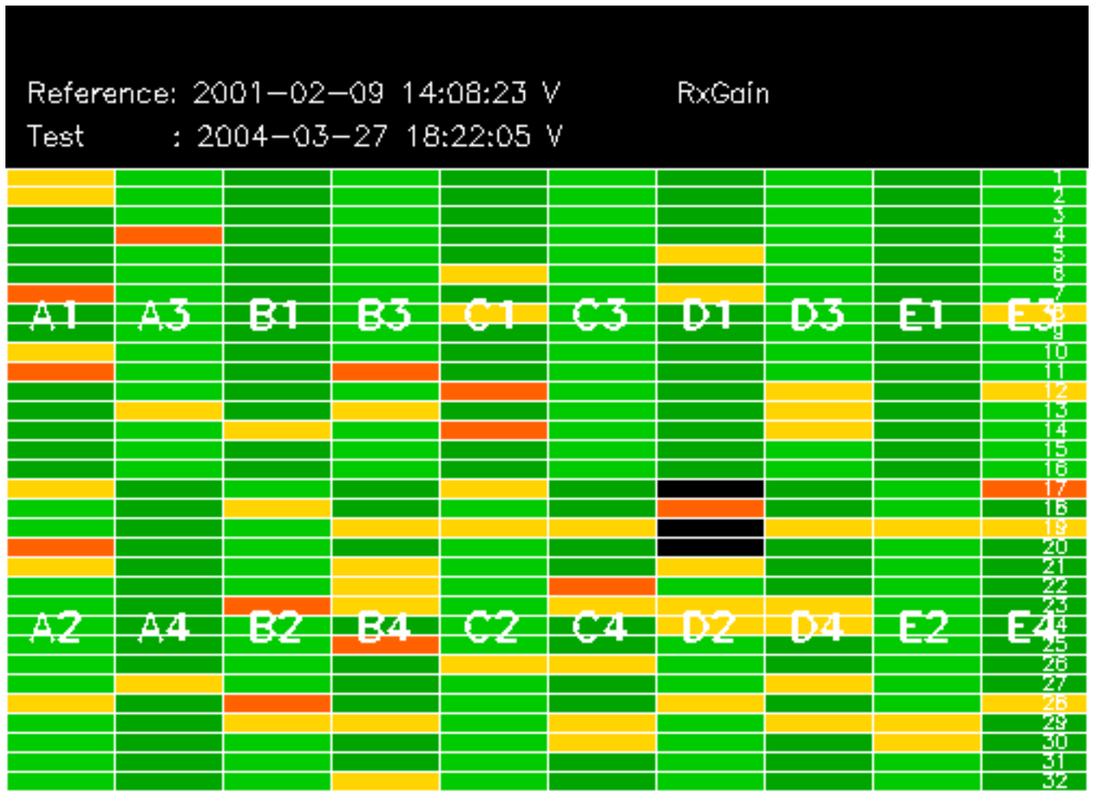
Reference: 2001-02-09 14:08:23 V
Test : 2004-03-27 18:22:05 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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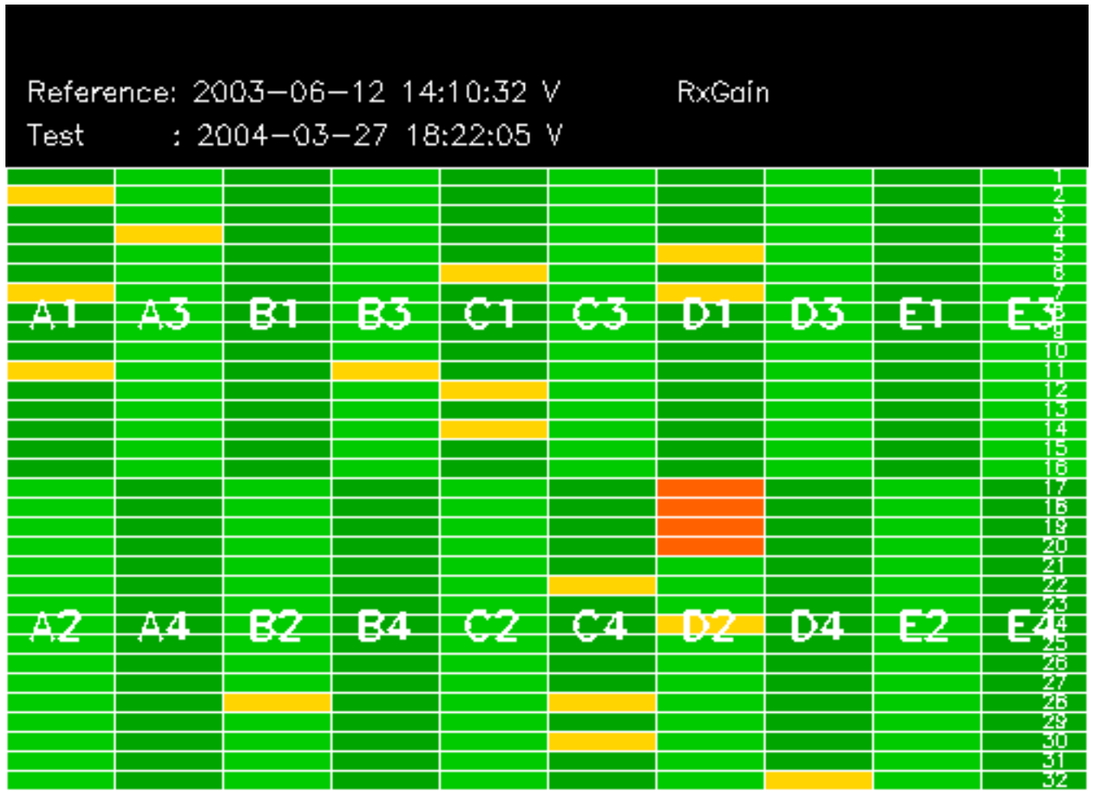
Reference: 2003-06-12 14:10:32 V
Test : 2004-03-27 18:22:05 V
RxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
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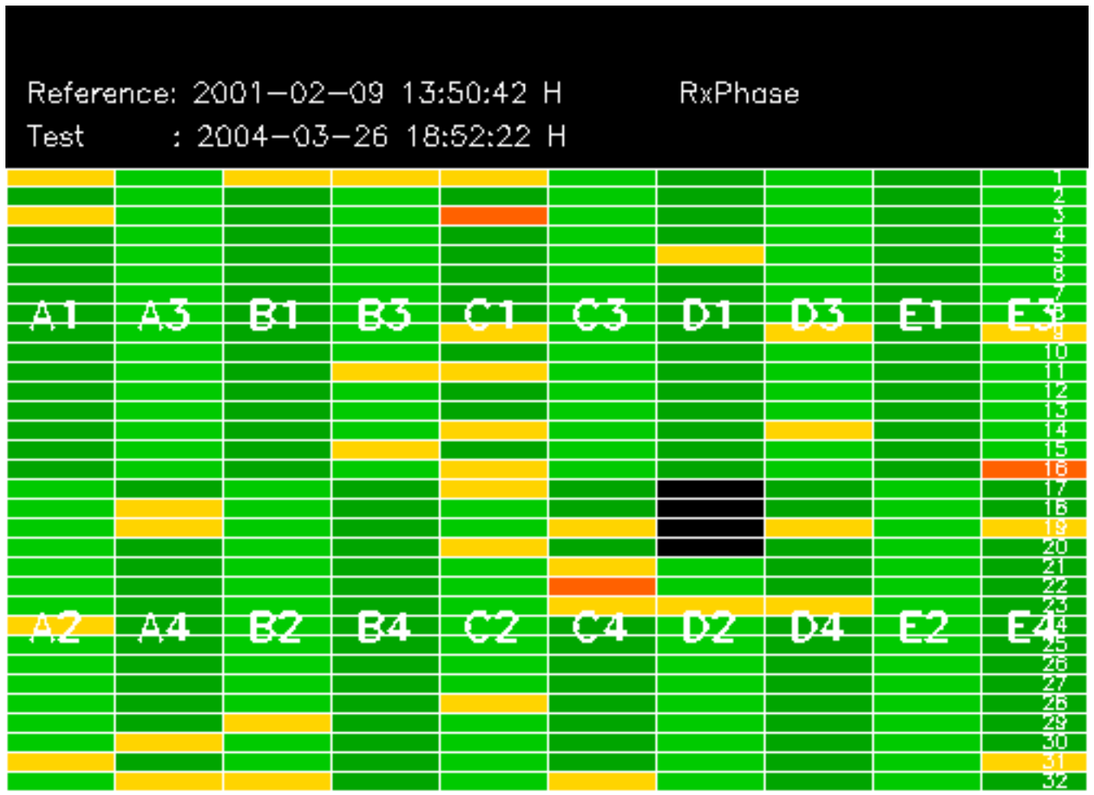
Reference: 2001-02-09 13:50:42 H
RxPhase
Test : 2004-03-26 18:52:22 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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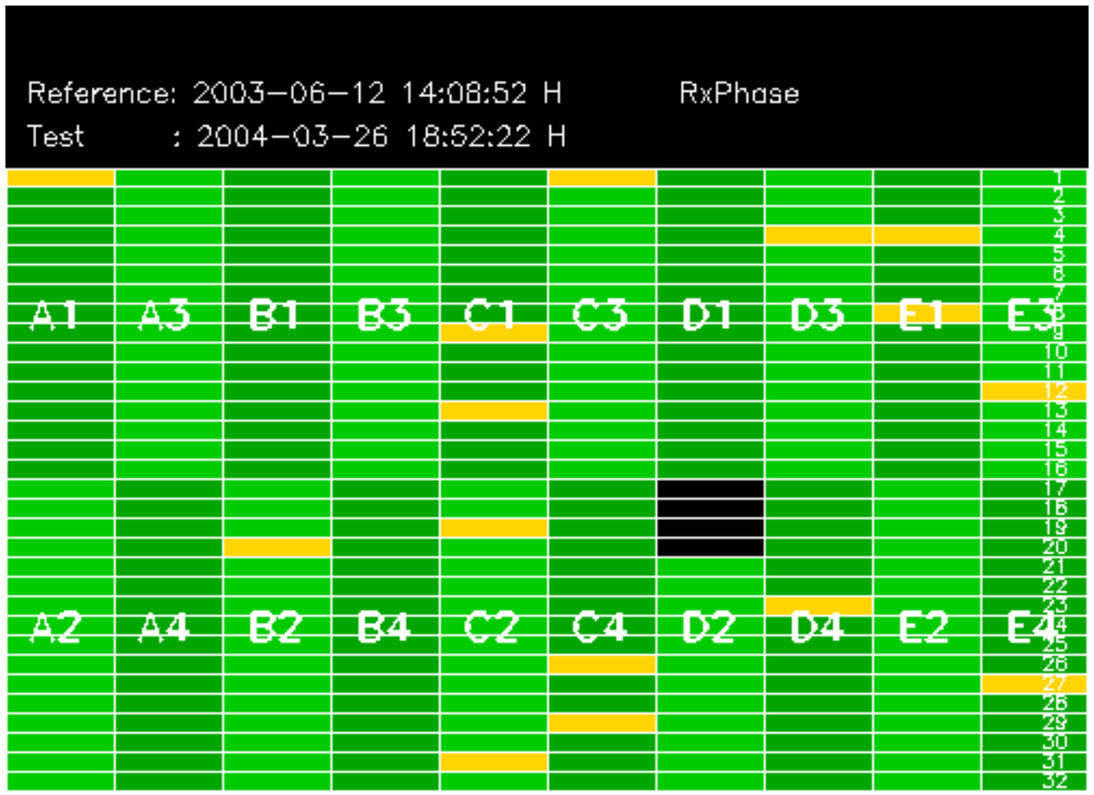
Reference: 2003-06-12 14:08:52 H
Test : 2004-03-26 18:52:22 H
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
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B4
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C4
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D4
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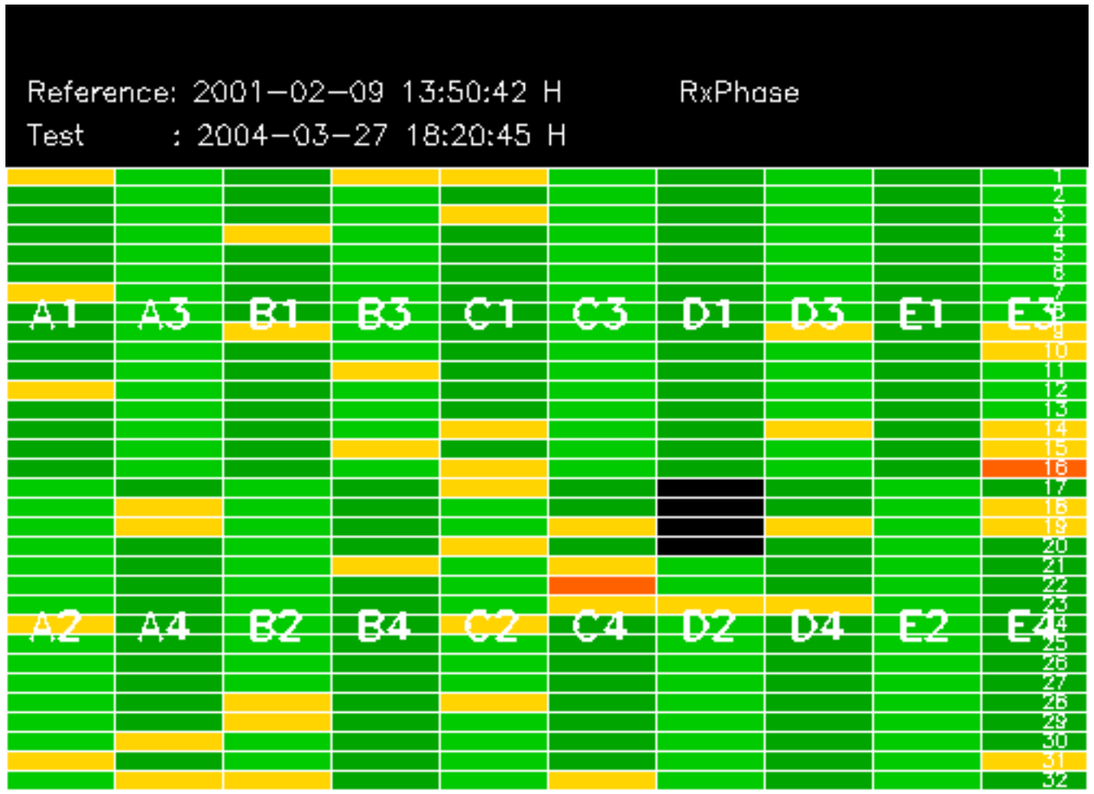
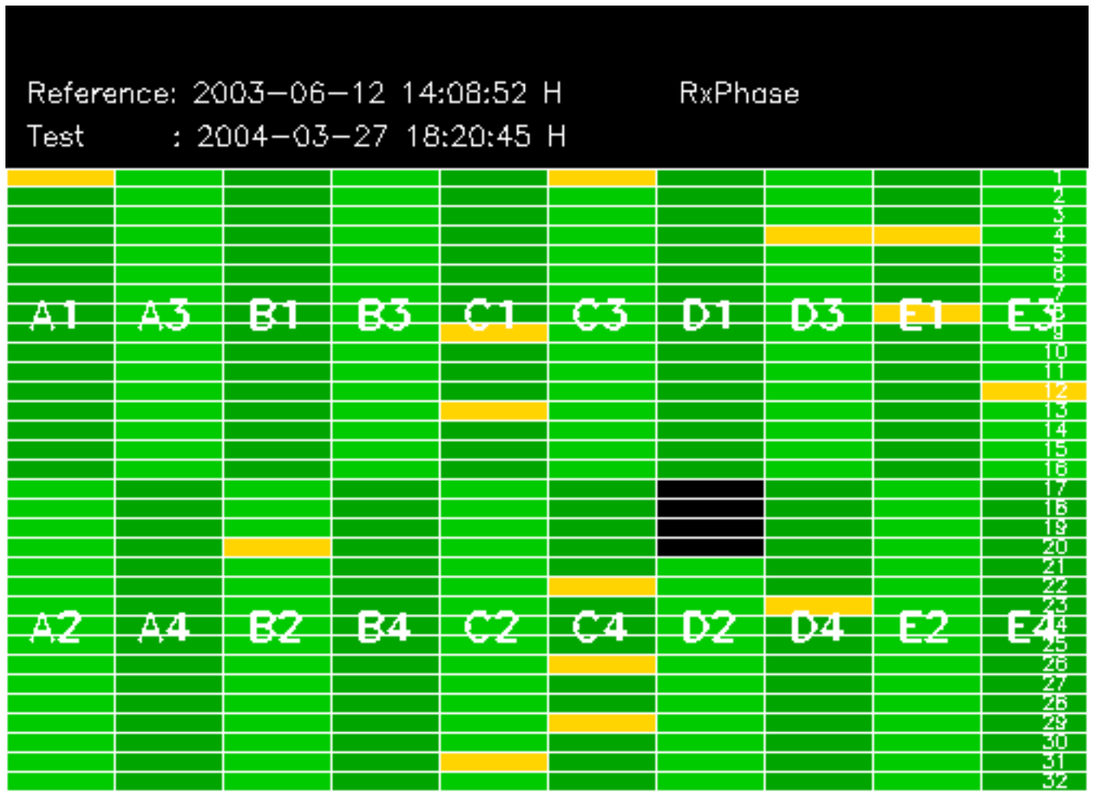

Reference: 2001-02-09 13:50:42 H
RxPhase
Test : 2004-03-27 18:20:45 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2003-06-12 14:08:52 H
RxPhase
Test : 2004-03-27 18:20:45 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
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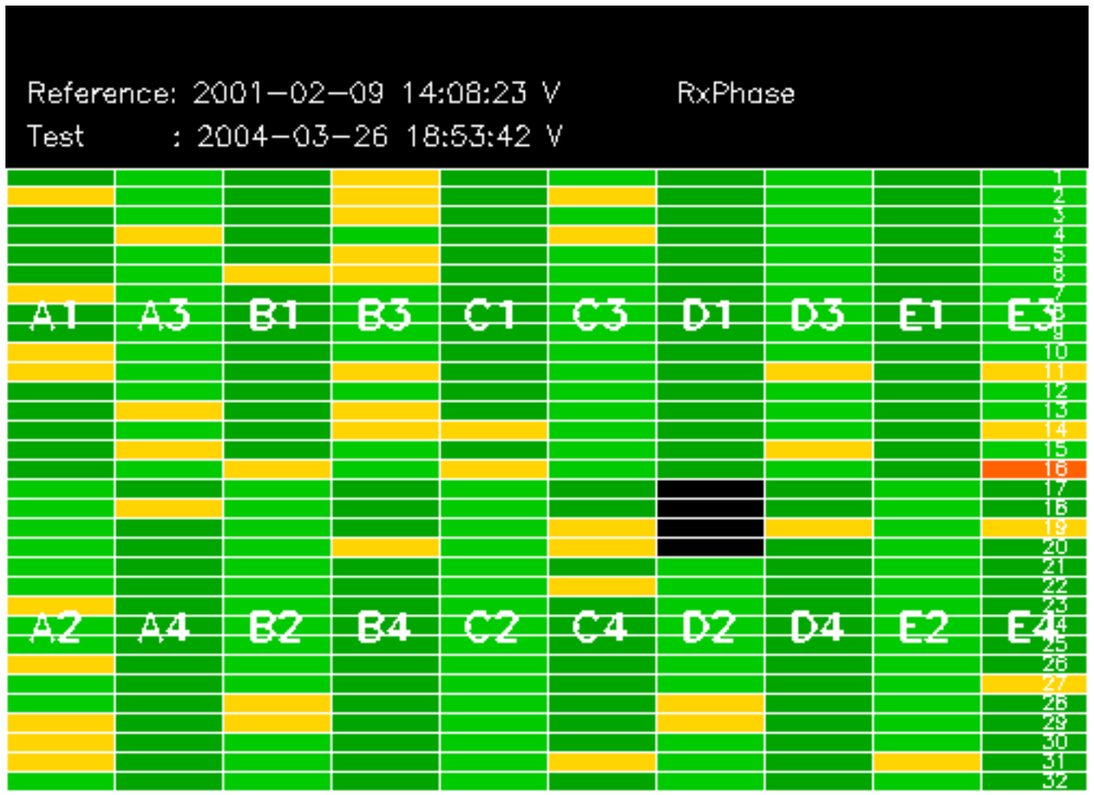
Reference: 2001-02-09 14:08:23 V
Test : 2004-03-26 18:53:42 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
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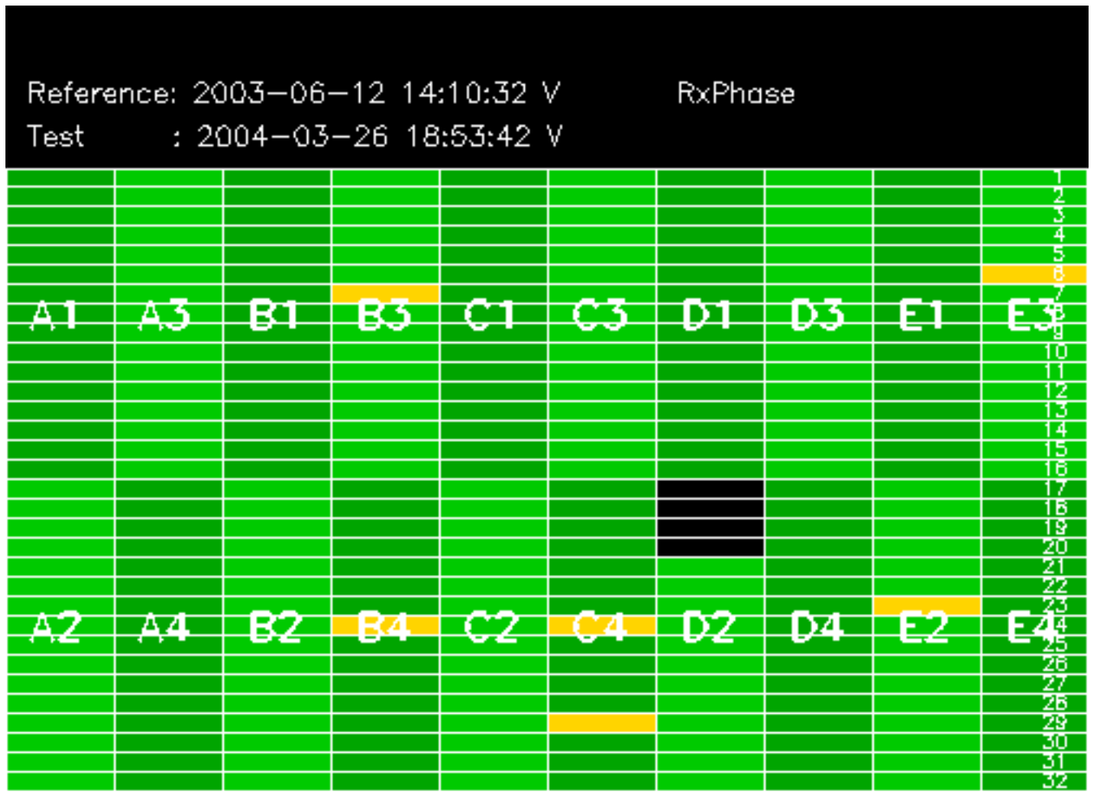
Reference: 2003-06-12 14:10:32 V
Test : 2004-03-26 18:53:42 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
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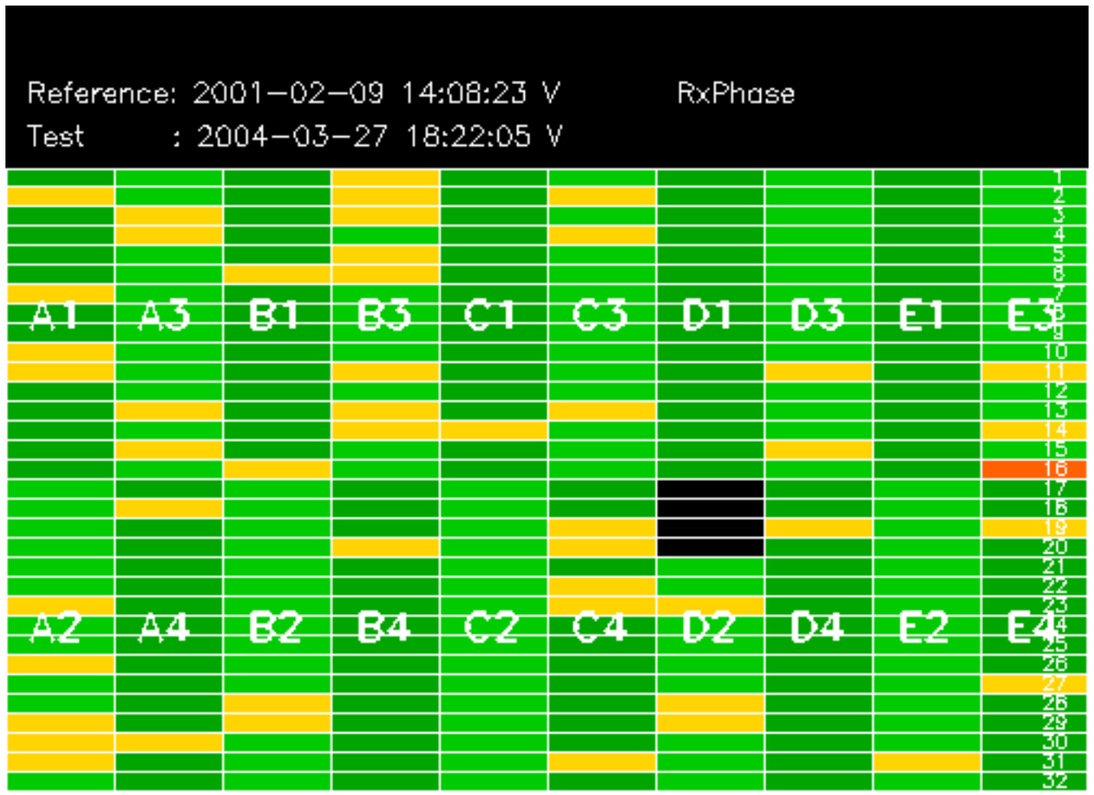
Reference: 2001-02-09 14:08:23 V
Test : 2004-03-27 18:22:05 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
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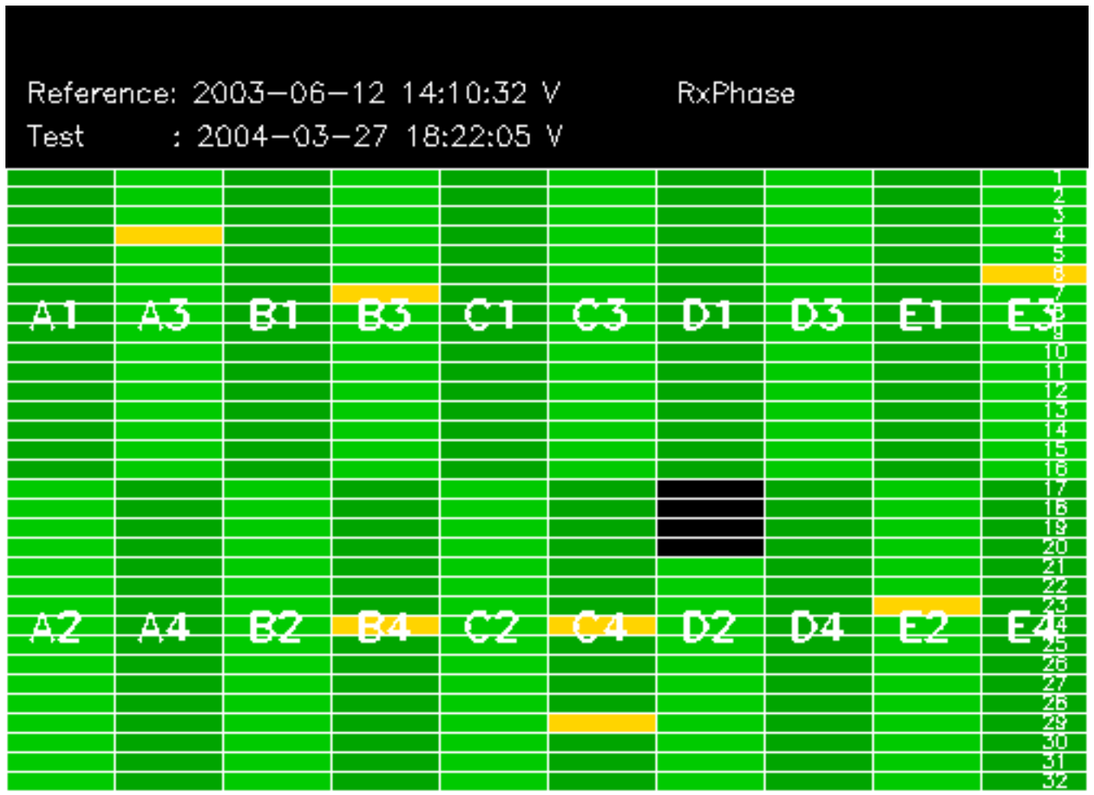
Reference: 2003-06-12 14:10:32 V
Test : 2004-03-27 18:22:05 V
RxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4
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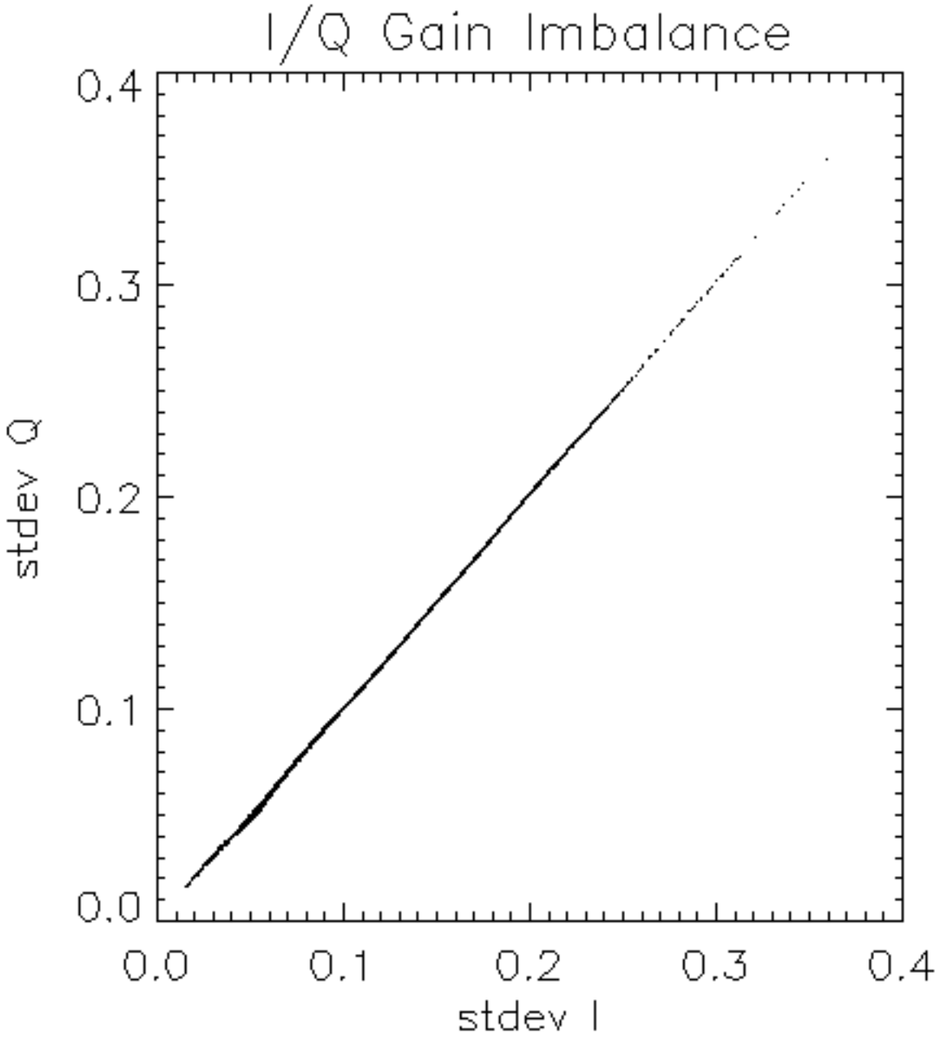
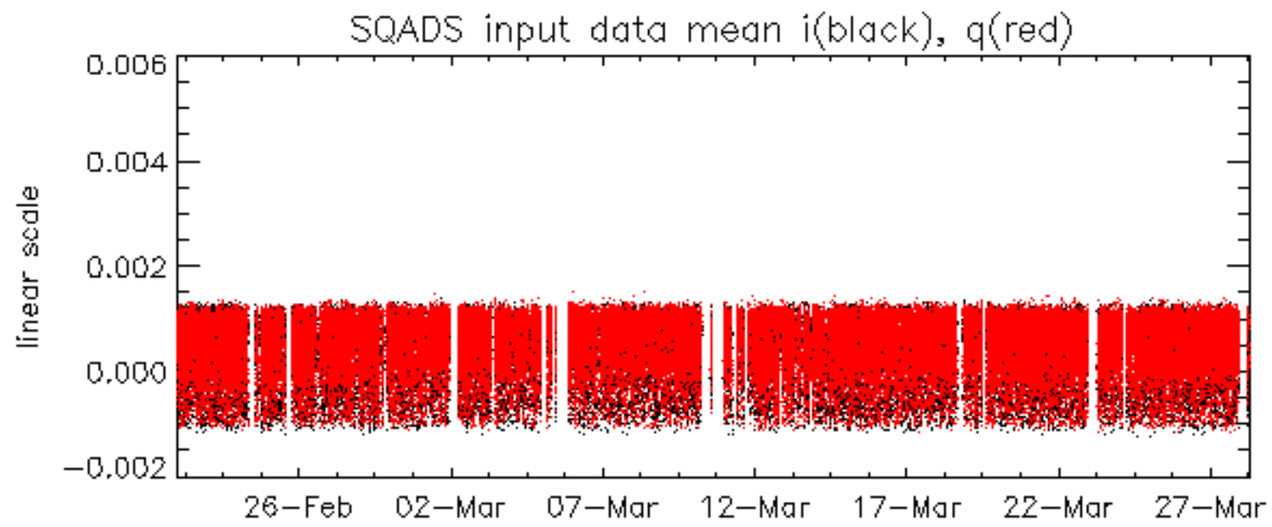
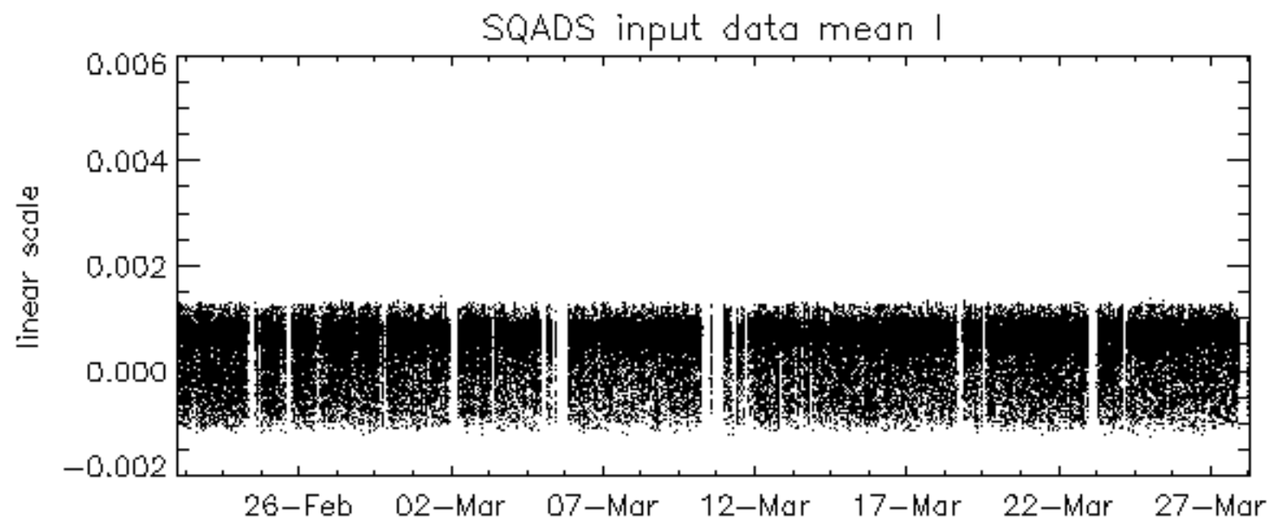
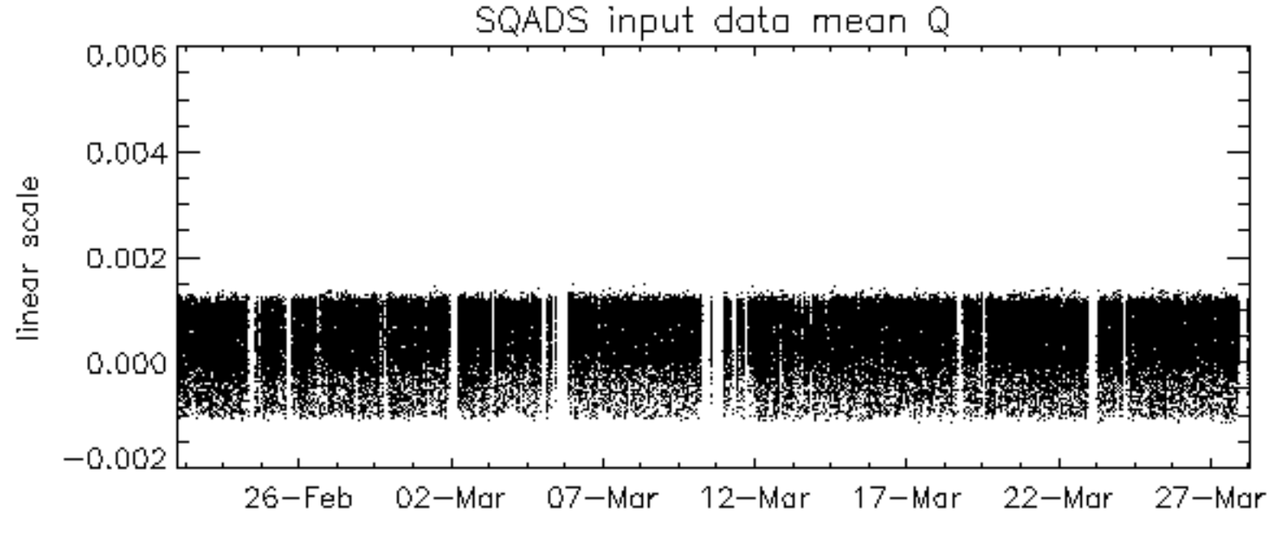
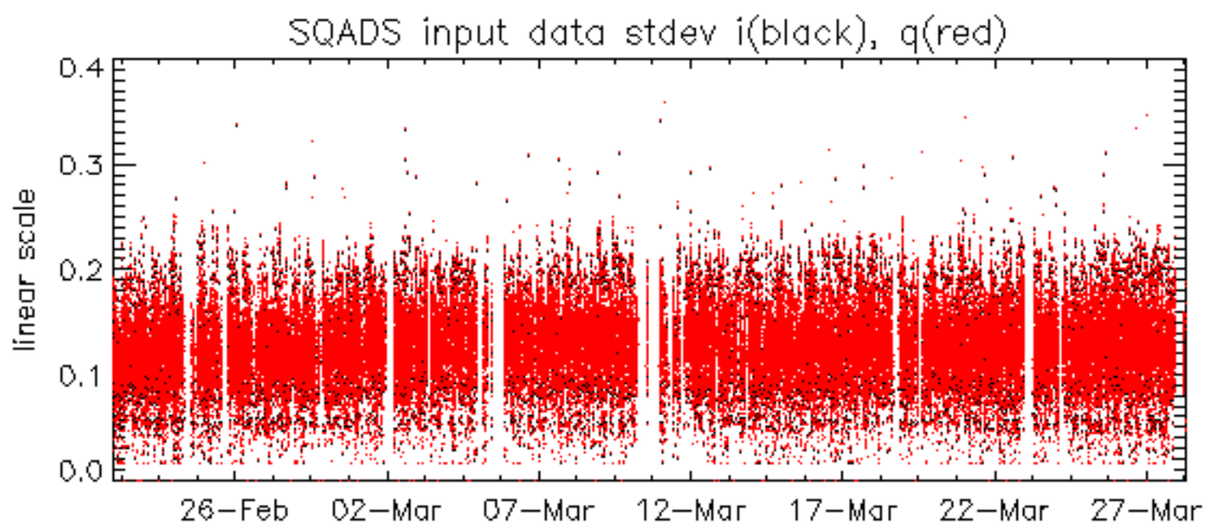

I/Q Gain Imbalance
0.4
0.3
0.2
0.1
0.0
stdev Q
0.0
0.1
0.2
0.3
0.4
stdev I


SQADS input data mean i(black), q(red)
linear scale
0.006
0.004
0.002
0.000
−0.002
26−Feb
02−Mar
07−Mar
12−Mar
17−Mar
22−Mar
27−Mar


SQADS input data mean I
linear scale
0.006
0.004
0.002
0.000
−0.002
26−Feb
02−Mar
07−Mar
12−Mar
17−Mar
22−Mar
27−Mar


SQADS input data mean Q
linear scale
0.006
0.004
0.002
0.000
−0.002
26−Feb
02−Mar
07−Mar
12−Mar
17−Mar
22−Mar
27−Mar


SQADS input data stdev i(black), q(red)
linear scale
0.4
0.3
0.2
0.1
0.0
26−Feb
02−Mar
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17−Mar
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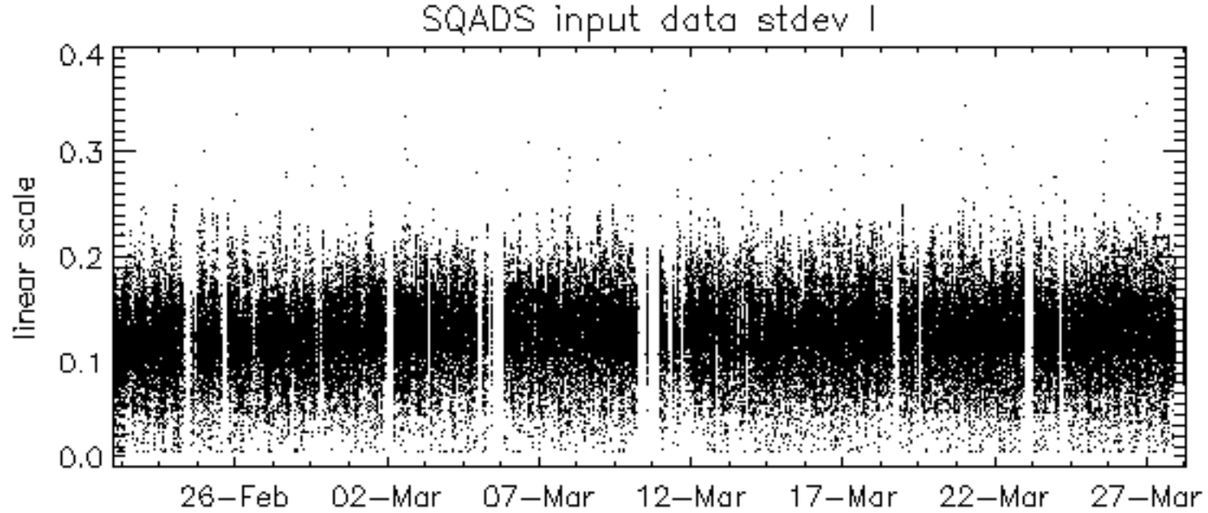
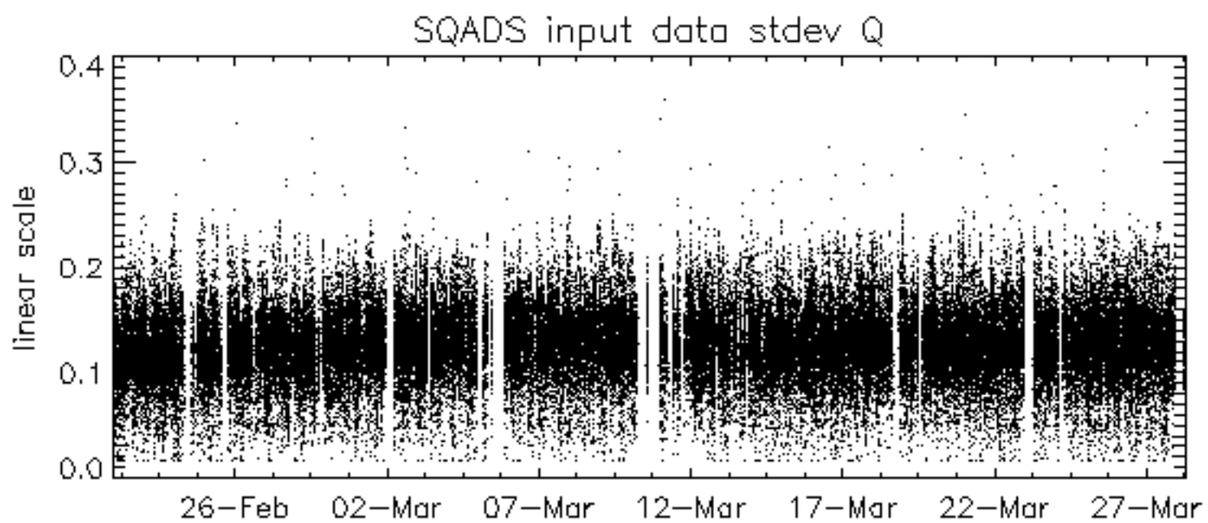
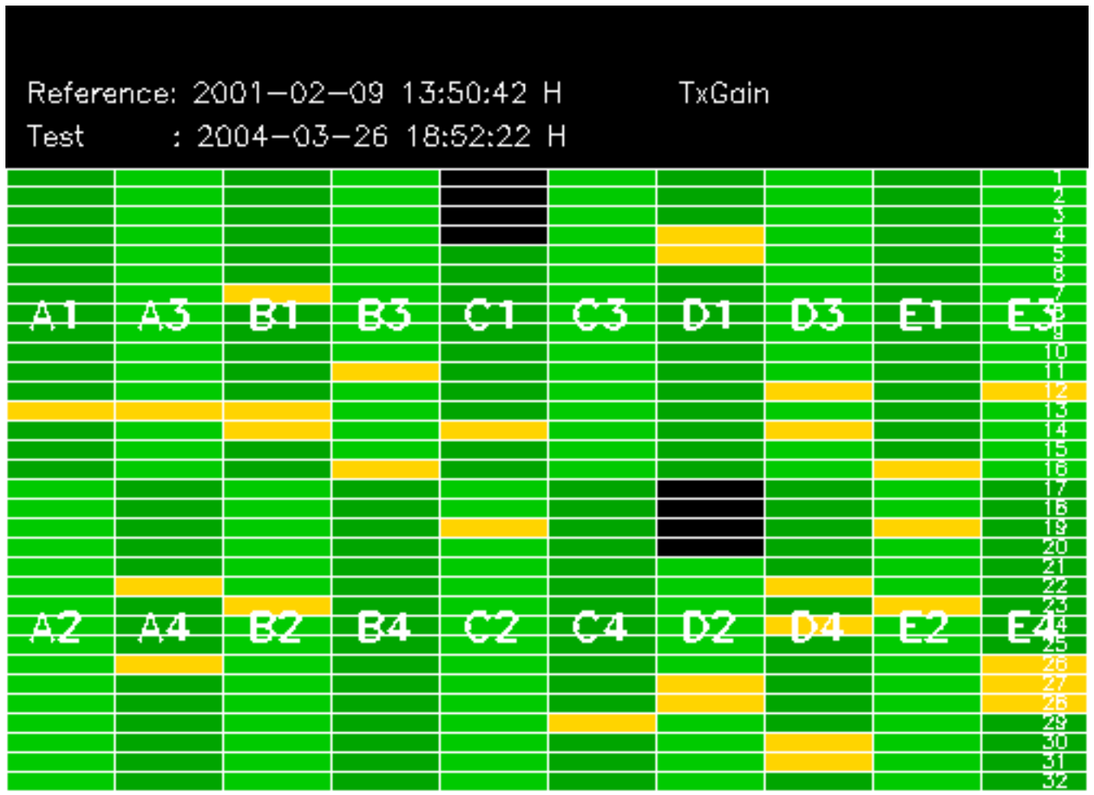
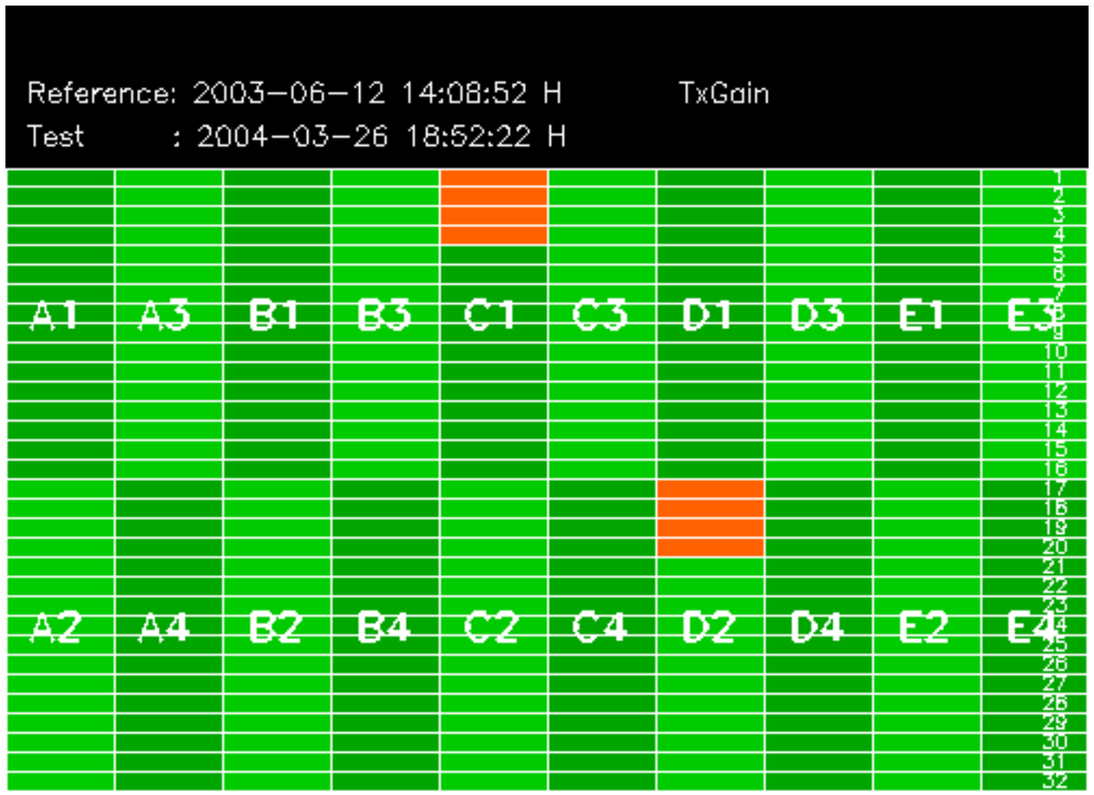
27−Mar


SQADS input data stdev I
linear scale
0.4
0.3
0.2
0.1
0.0
26−Feb
02−Mar
07−Mar
12−Mar
17−Mar
22−Mar
27−Mar


SQADS input data stdev Q
linear scale
0.4
0.3
0.2
0.1
0.0
26−Feb
02−Mar
07−Mar
12−Mar
17−Mar
22−Mar
27−Mar


Reference: 2001-02-09 13:50:42 H
Test : 2004-03-26 18:52:22 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 : 2004-03-26 18:52:22 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
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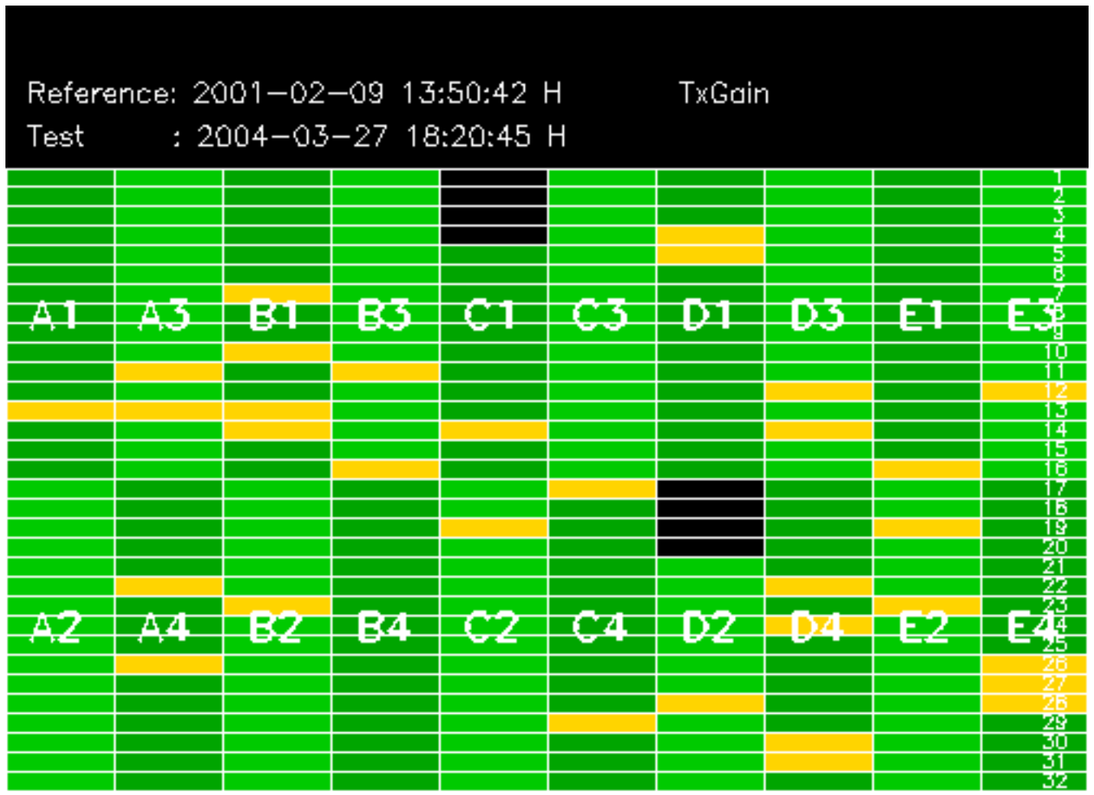
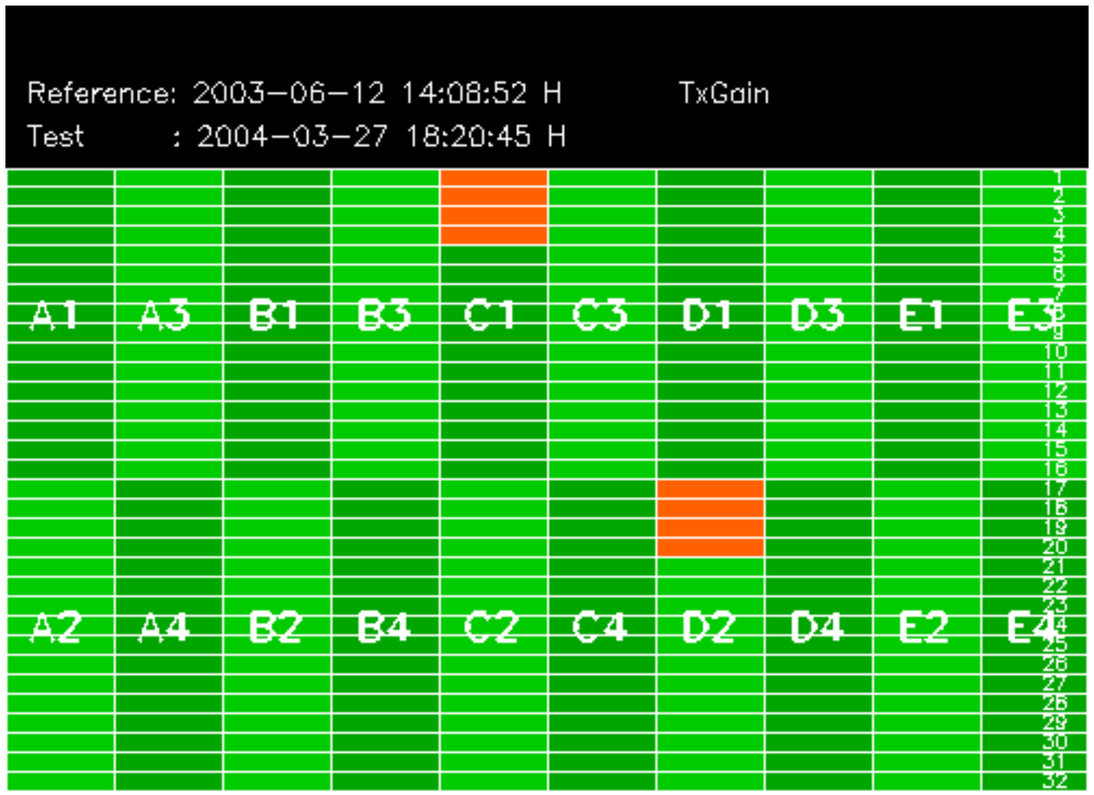

Reference: 2001-02-09 13:50:42 H
Test : 2004-03-27 18:20:45 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2003-06-12 14:08:52 H
Test : 2004-03-27 18:20:45 H
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
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C4
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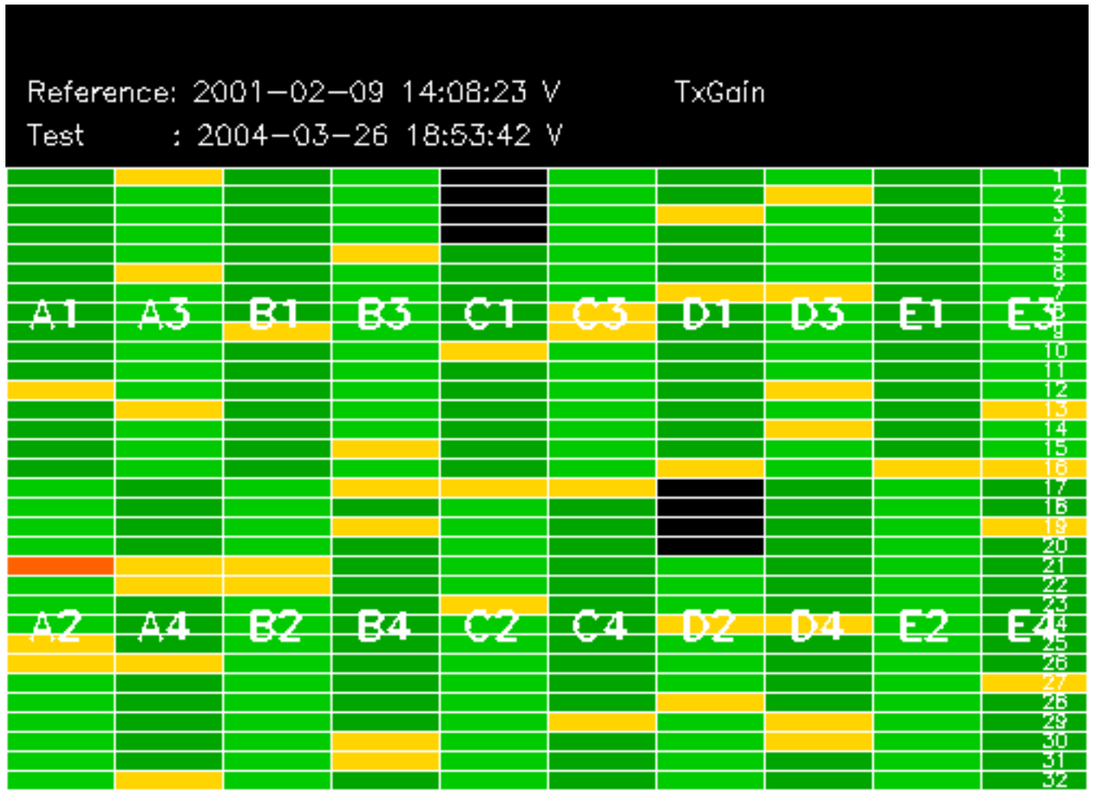
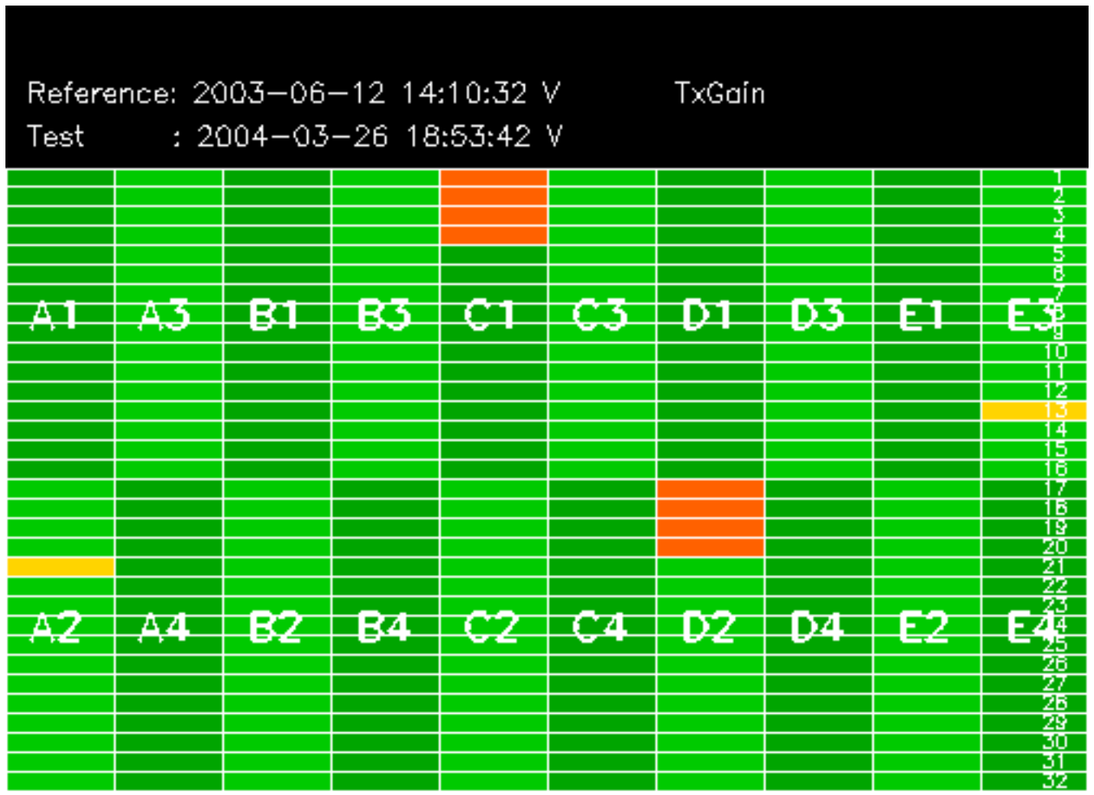

Reference: 2001-02-09 14:08:23 V
Test : 2004-03-26 18:53:42 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2003-06-12 14:10:32 V
Test : 2004-03-26 18:53:42 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
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A2
A4
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B4
C2
C4
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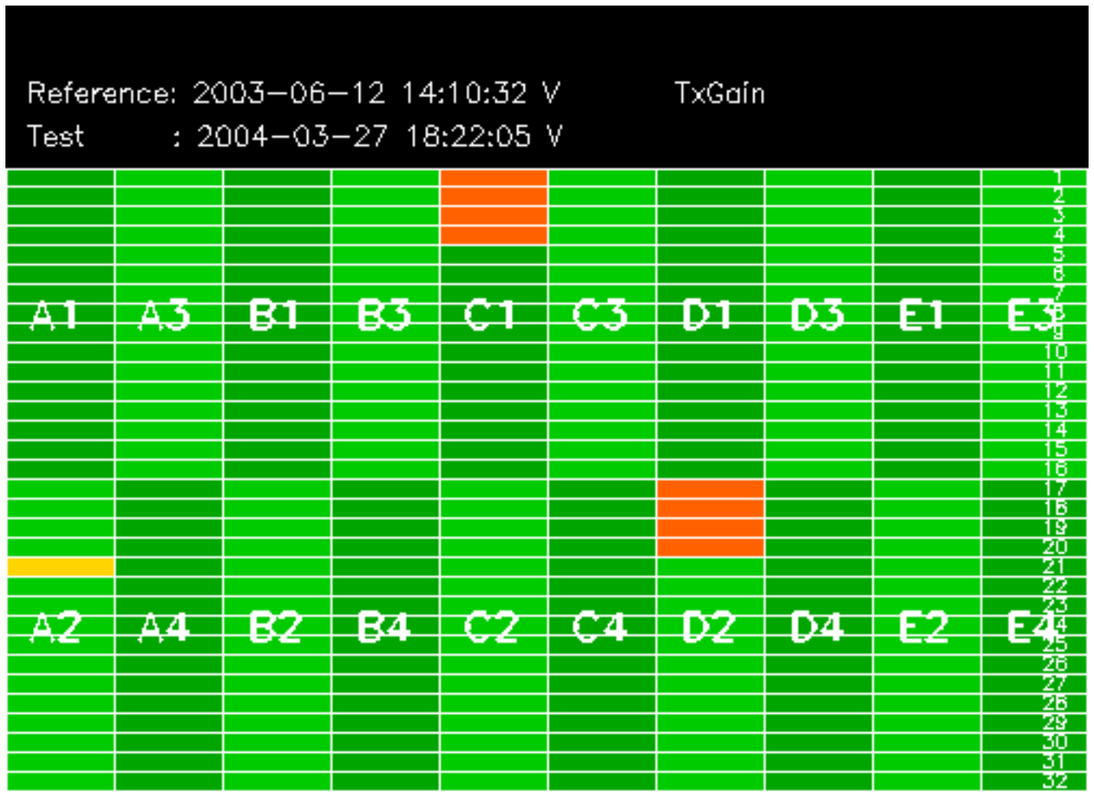
Reference: 2001-02-09 14:08:23 V
Test : 2004-03-27 18:22:05 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4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Test : 2004-03-27 18:22:05 V
TxGain
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
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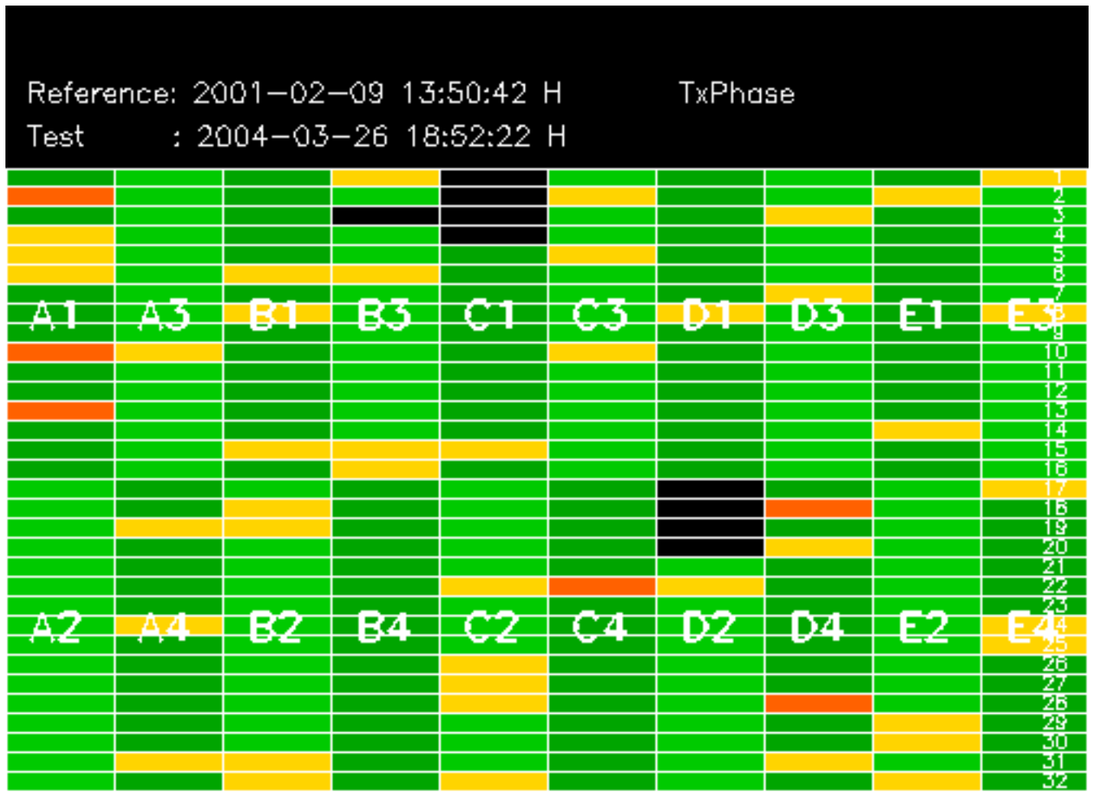
Reference: 2001-02-09 13:50:42 H
TxPhase
Test : 2004-03-26 18:52:22 H
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
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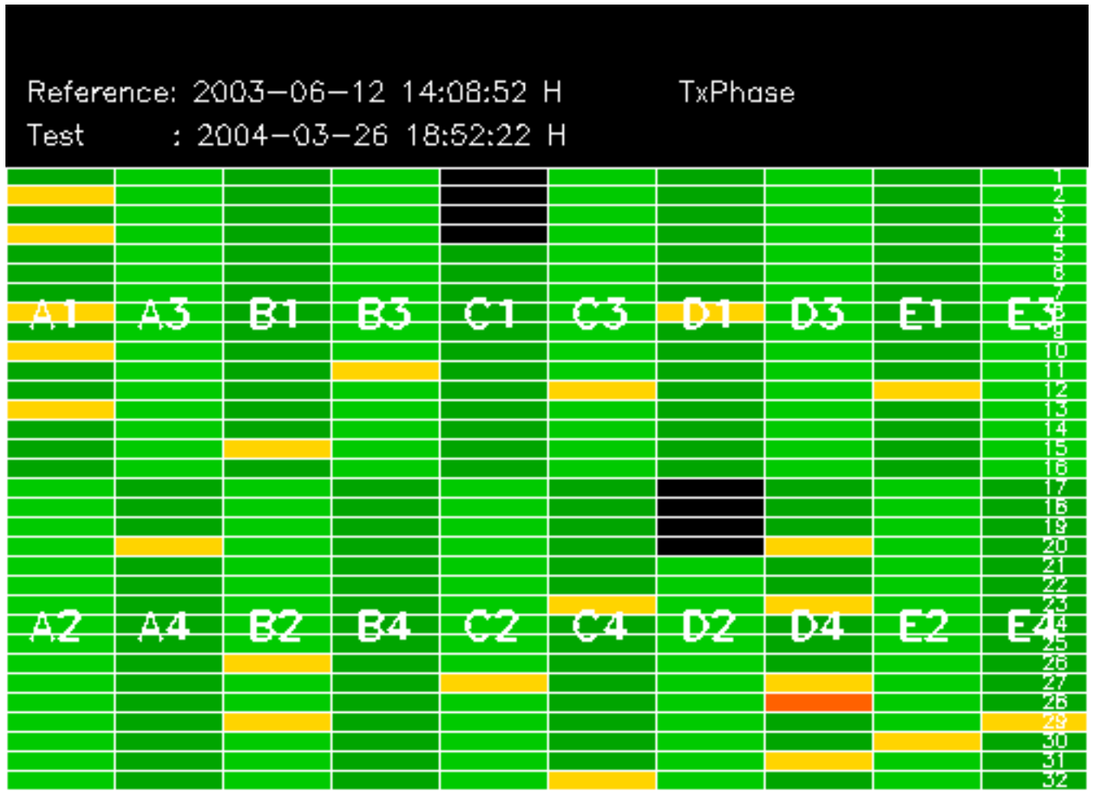
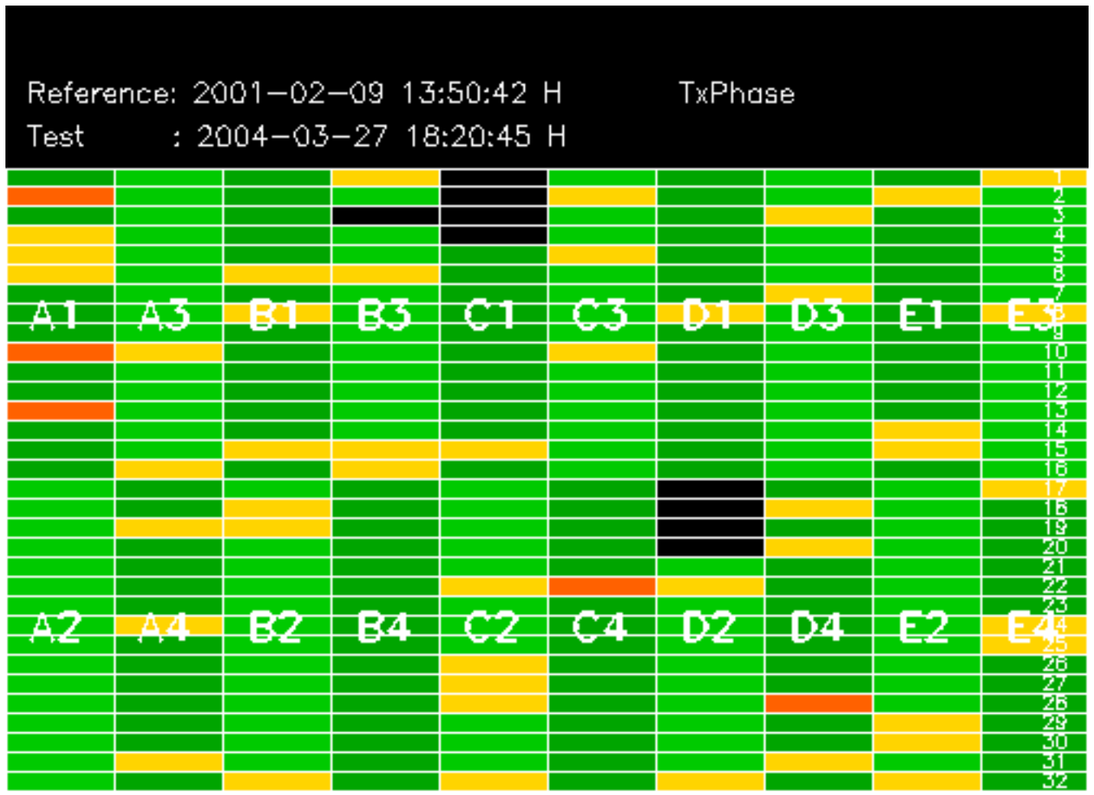

Reference: 2003-06-12 14:08:52 H
Test : 2004-03-26 18:52:22 H
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
A4
B2
B4
C2
C4
D2
D4
E2
E4


Reference: 2001-02-09 13:50:42 H
Test : 2004-03-27 18:20:45 H
TxPhase
A1
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B1
B3
C1
C3
D1
D3
E1
E3
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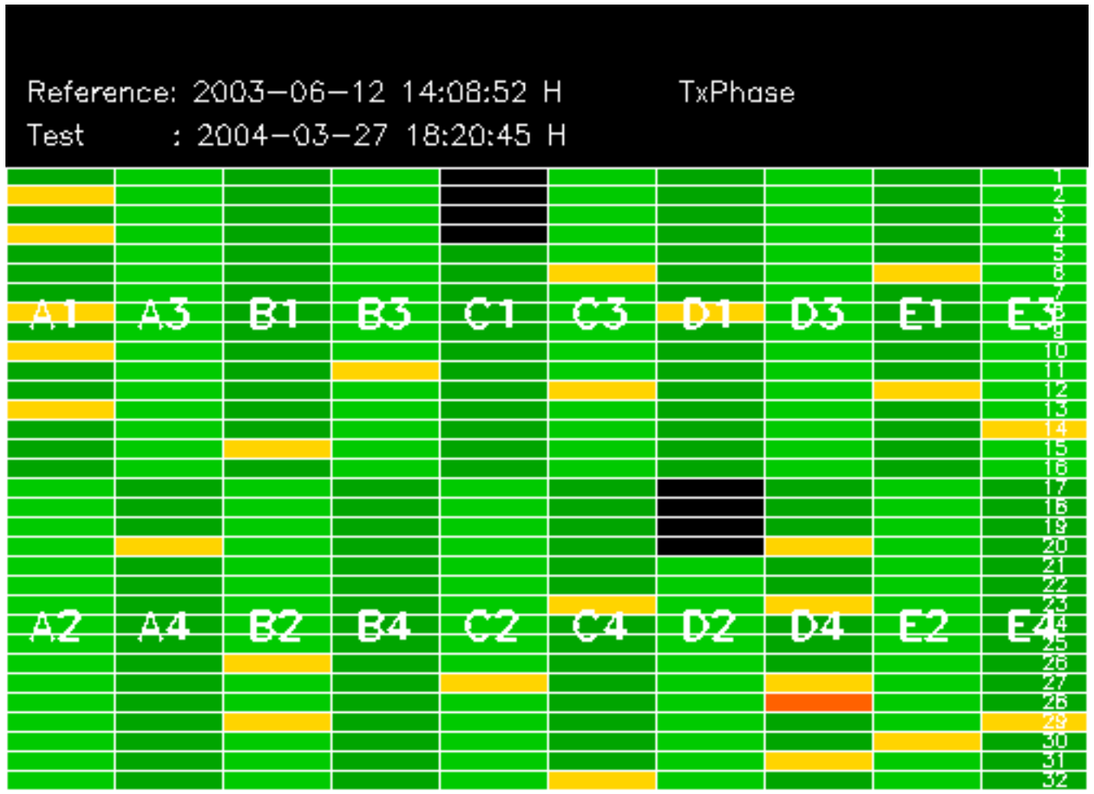
Reference: 2003-06-12 14:08:52 H
Test : 2004-03-27 18:20:45 H
TxPhase
A1
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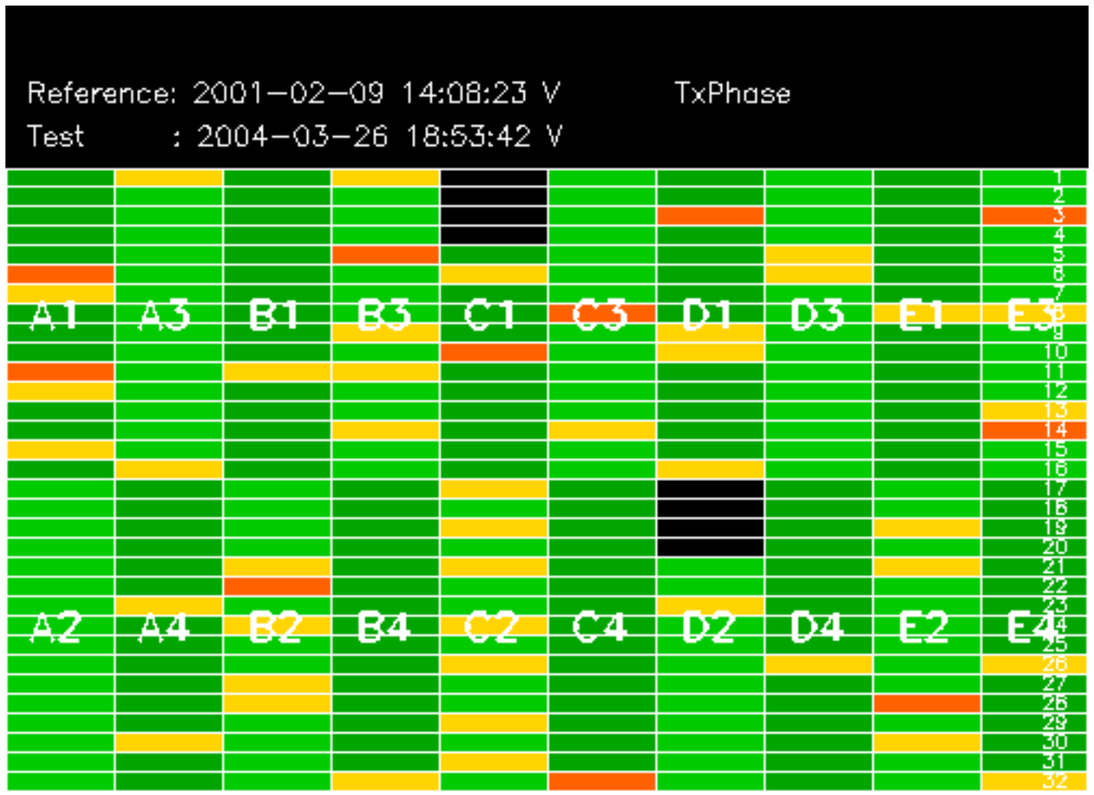
Reference: 2001-02-09 14:08:23 V
TxPhase
Test : 2004-03-26 18:53:42 V
A1
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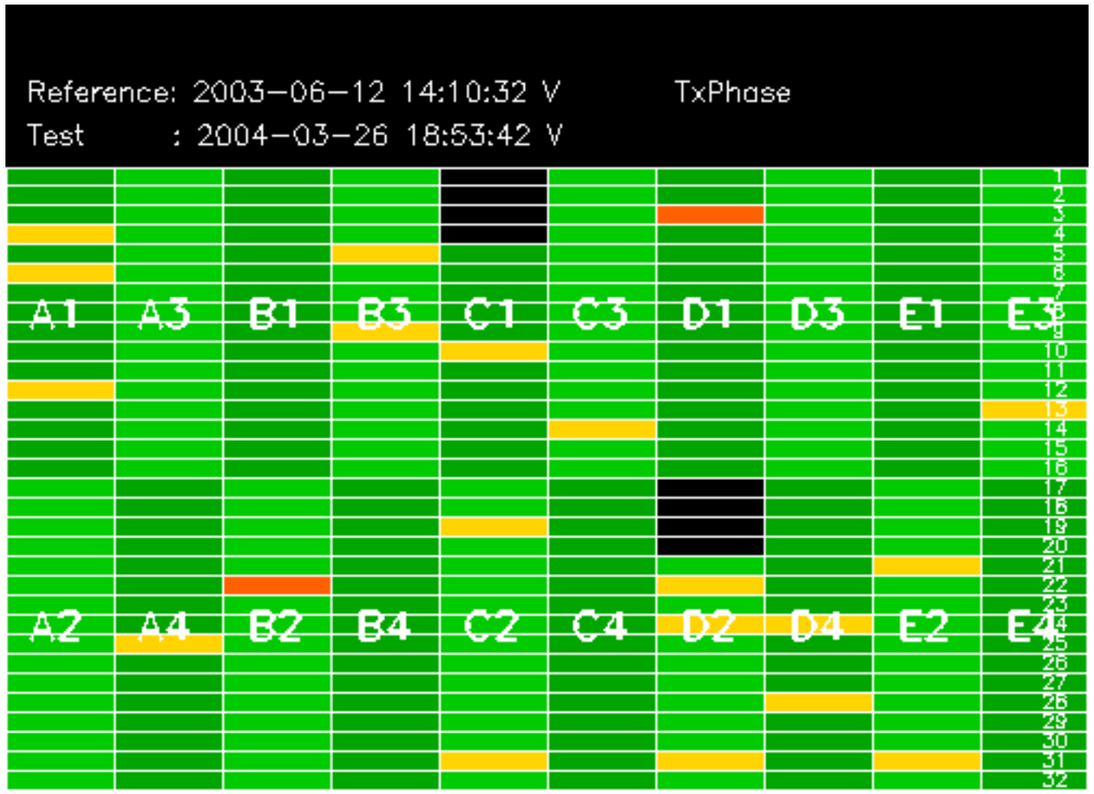
Reference: 2003-06-12 14:10:32 V
Test : 2004-03-26 18:53:42 V
TxPhase
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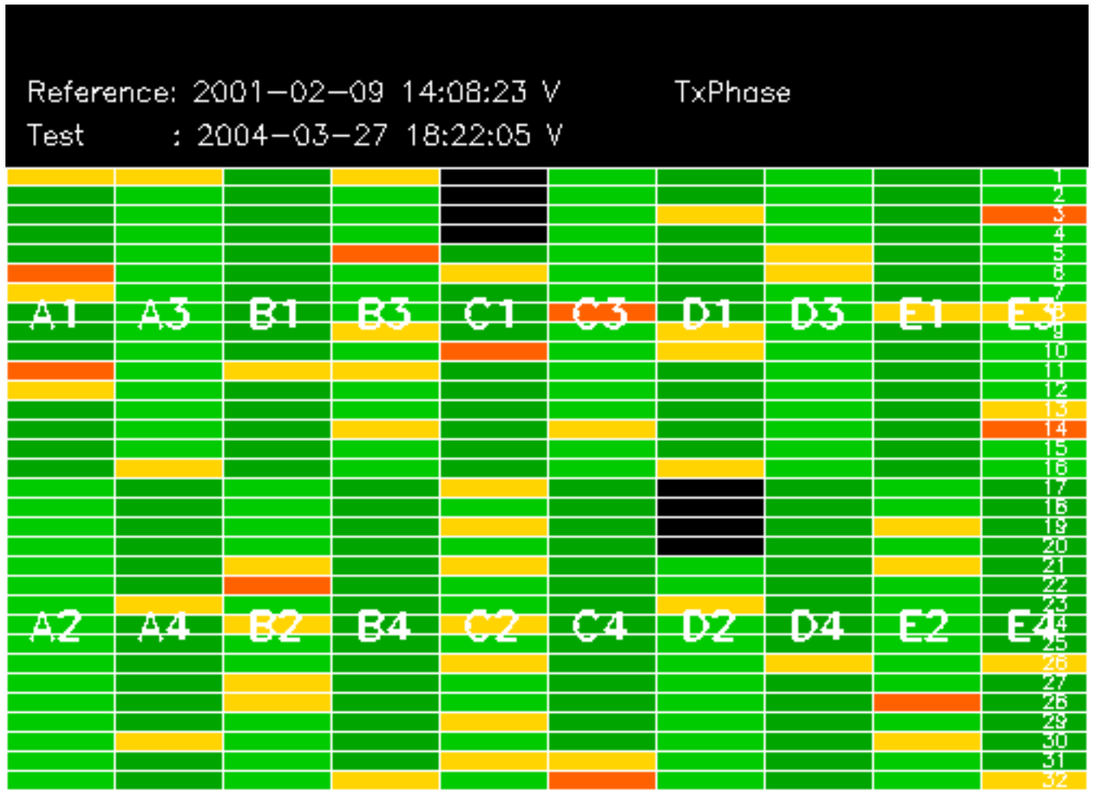
Reference: 2001-02-09 14:08:23 V
Test : 2004-03-27 18:22:05 V
TxPhase
A1
A3
B1
B3
C1
C3
D1
D3
E1
E3
A2
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B4
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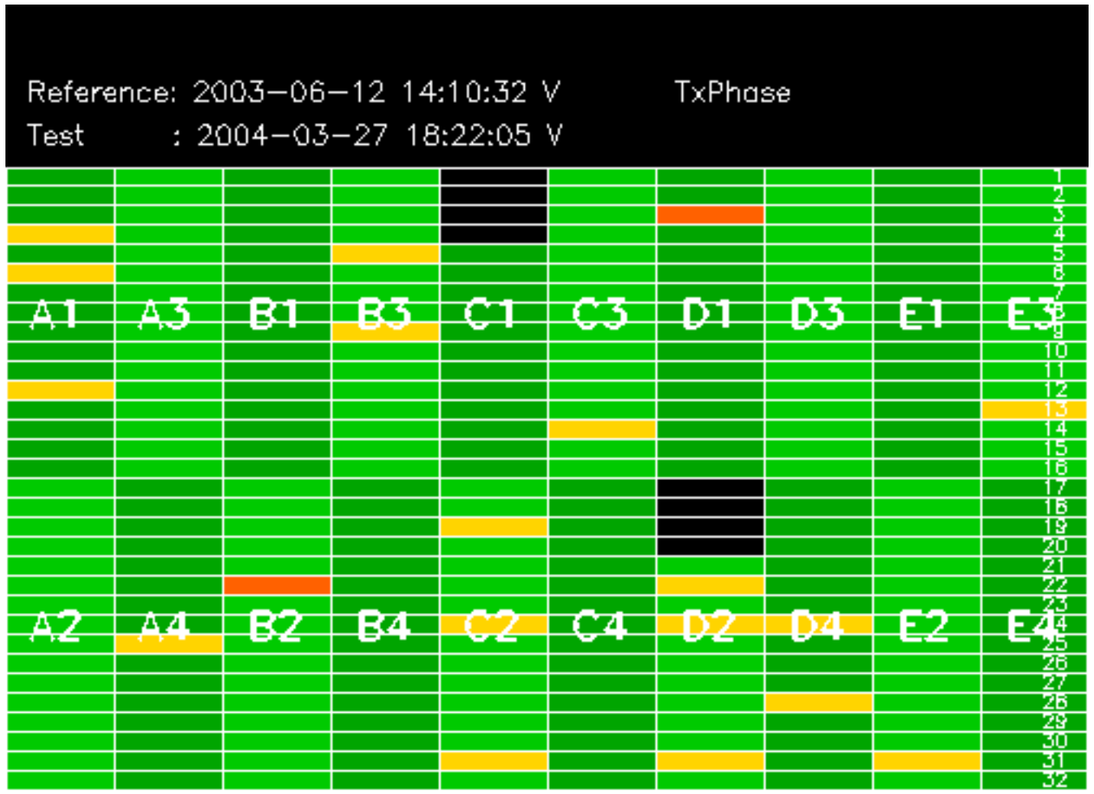
Reference: 2003-06-12 14:10:32 V
Test : 2004-03-27 18:22:05 V
TxPhase
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B3
C1
C3
D1
D3
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No unavailabilities during the reported period.