

REPORT OF 031112

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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

ASAR was unavailable from 11-NOV-2003 21:00:55 to 12-NOV-2003 13:40:20

2.2 - Browse Visual Inspection

No anomalies observed on available browse products

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 any malfunctioning modules and to identify modules for which calibration offsets are to be applied.

No anomalies observed on available MS products:

Polarisation	Start Time
V	20031111 201143
H	20031111 201023

MSM in V/V polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

MSM in H/H polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.76946	-22.5740	-8.16961
	stdev	0.00650277	0.0767465	0.00285688

24	mean	-5.16326	-21.2630	-8.16961
	stdev	0.0163743	0.0725441	0.00285688



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.78477	-22.5495	-8.15123
	stdev	0.00558356	0.0647268	0.00273801
24	mean	-5.34480	-21.2483	-8.15123
	stdev	0.908518	0.0608930	0.00273801



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	0.000377235
	stdev	3.56757e-07
MEAN Q	mean	0.000264083
	stdev	3.43359e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.113638
	stdev	0.00146808

STDEV Q	mean	0.113884
	stdev	0.00148613



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

No anomalies observed Doppler evolution.
Doppler analysis performed over the last 35 days

6.1 - Unbiased Doppler Error

Evolution of unbiased Doppler error (Real - Expected)

Ascending
Descending

6.2 - Absolute Doppler

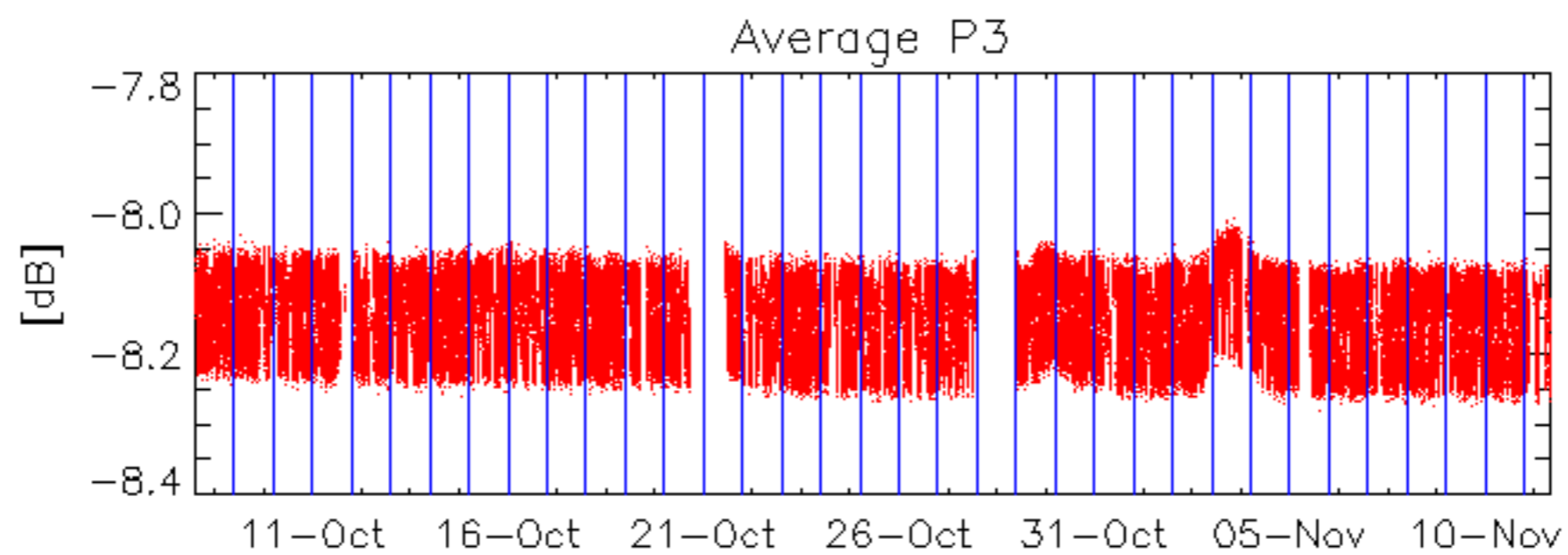
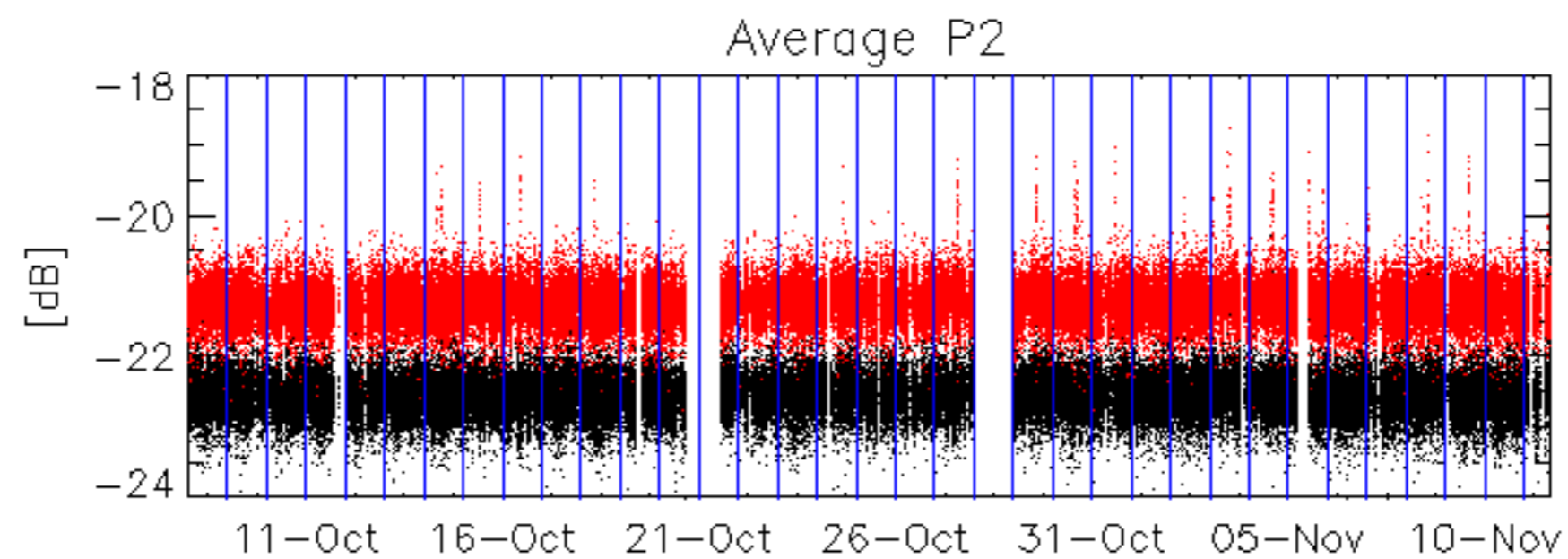
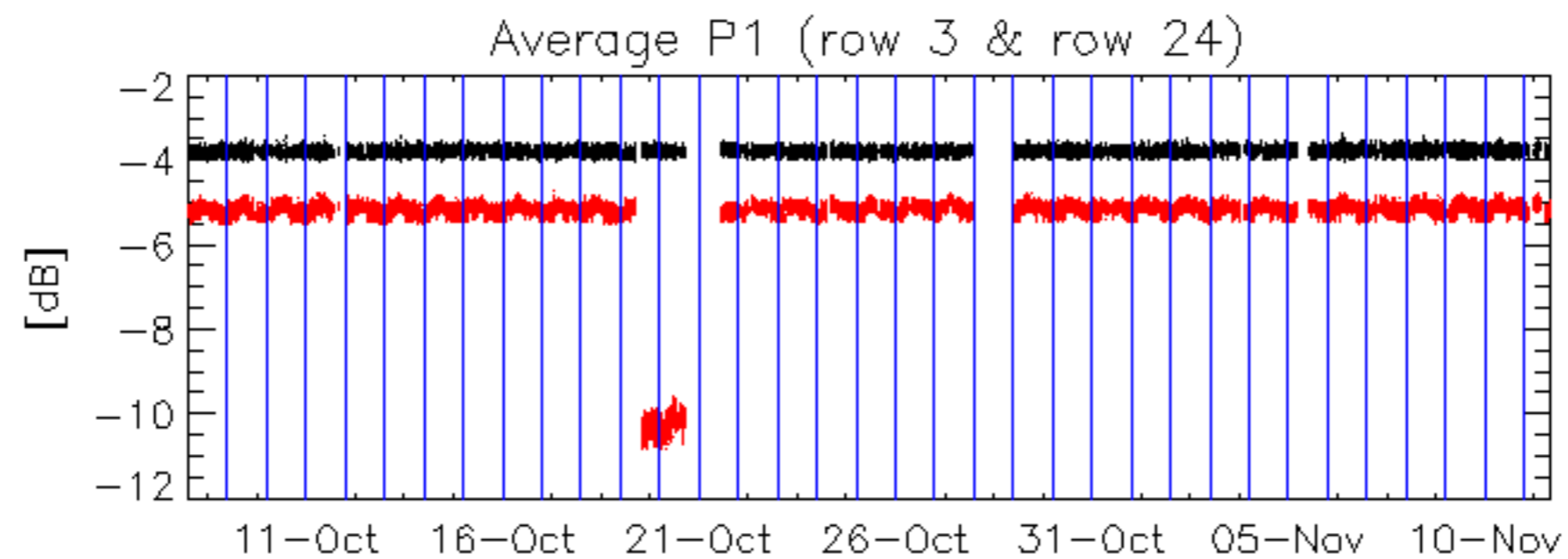
Evolution of Absolute Doppler

Ascending
Descending

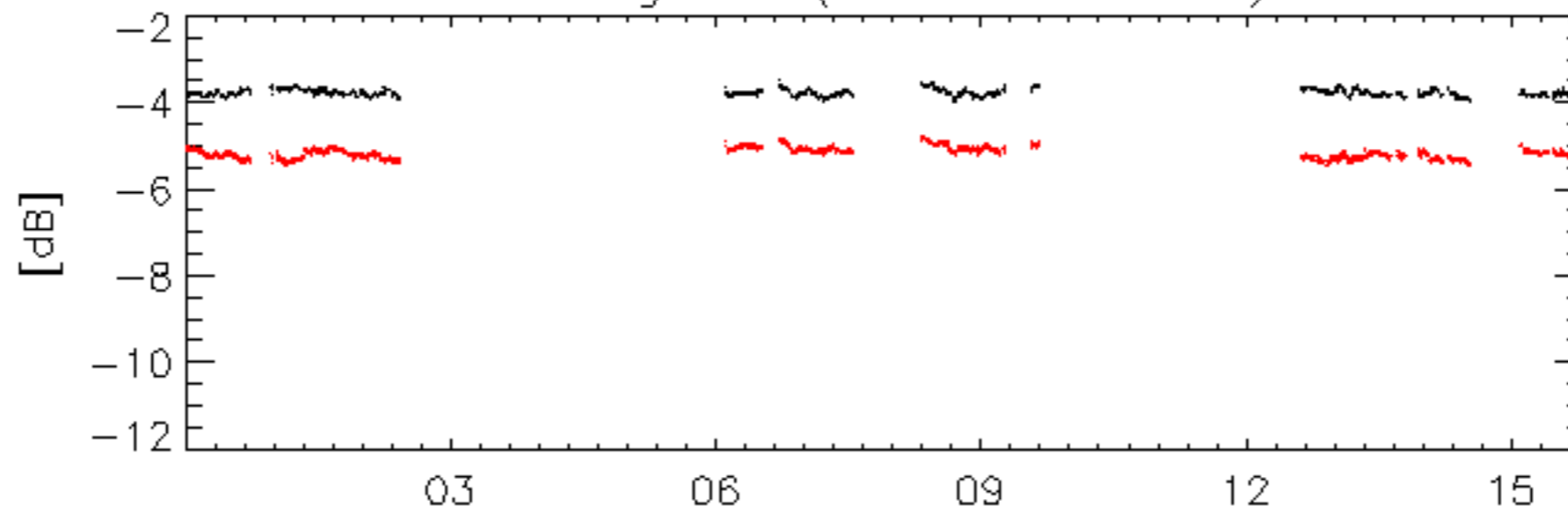
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

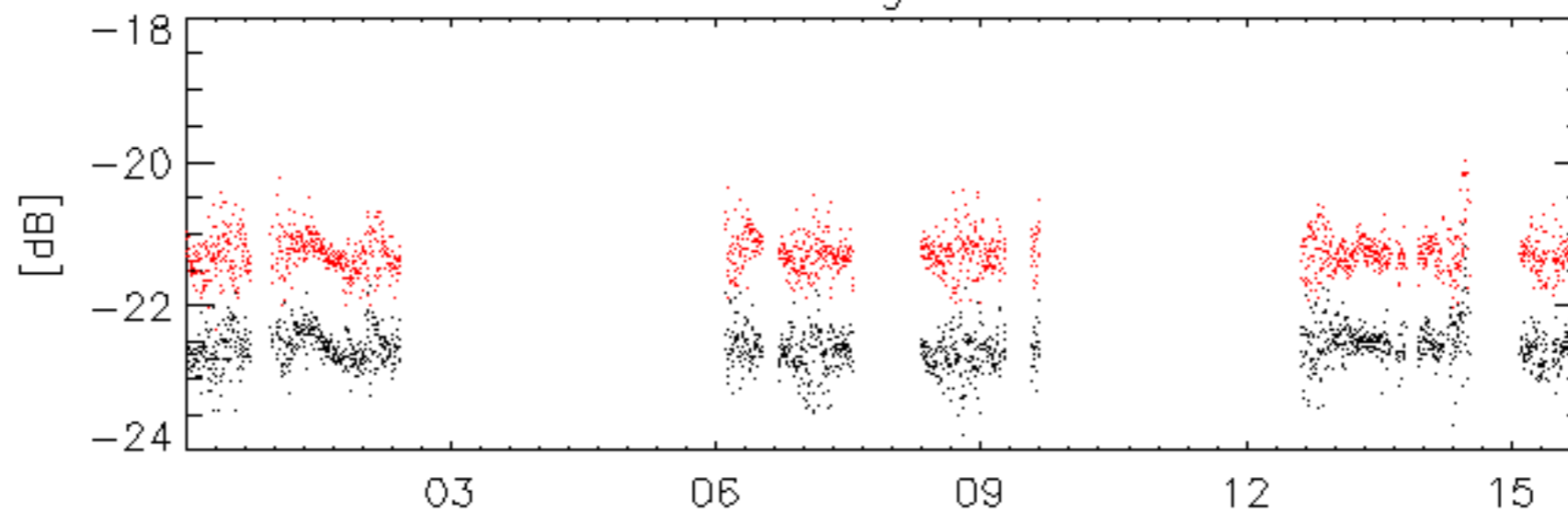




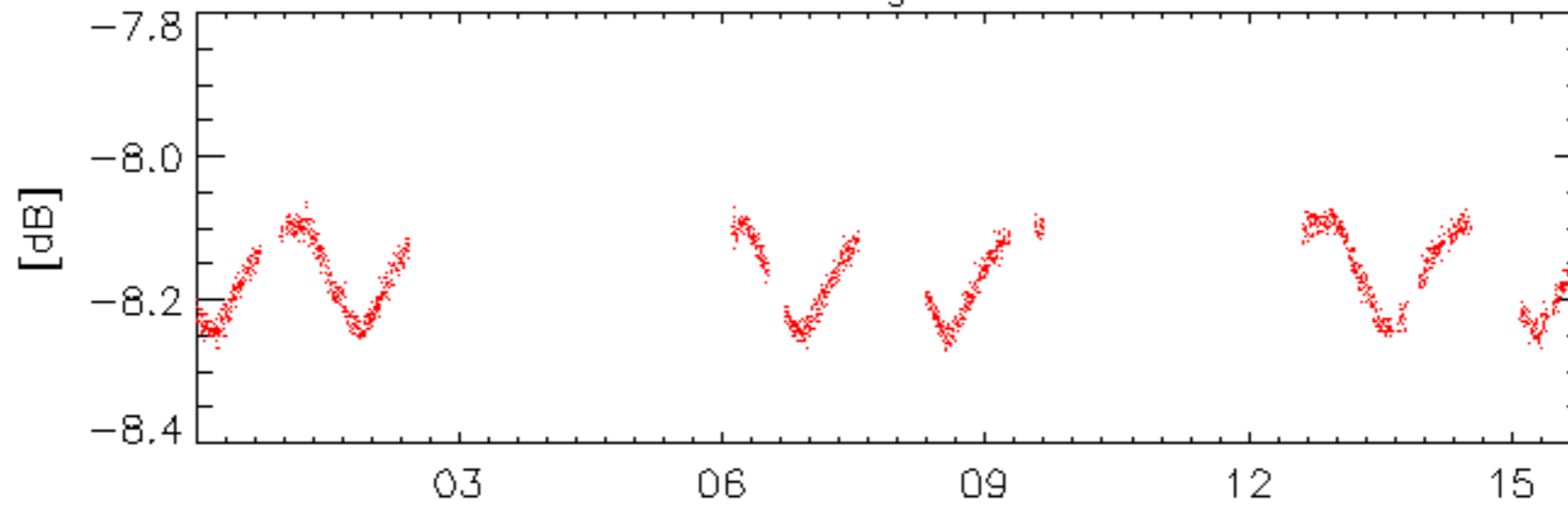
Average P1 (row 3 & row 24)



11-Nov
Average P2



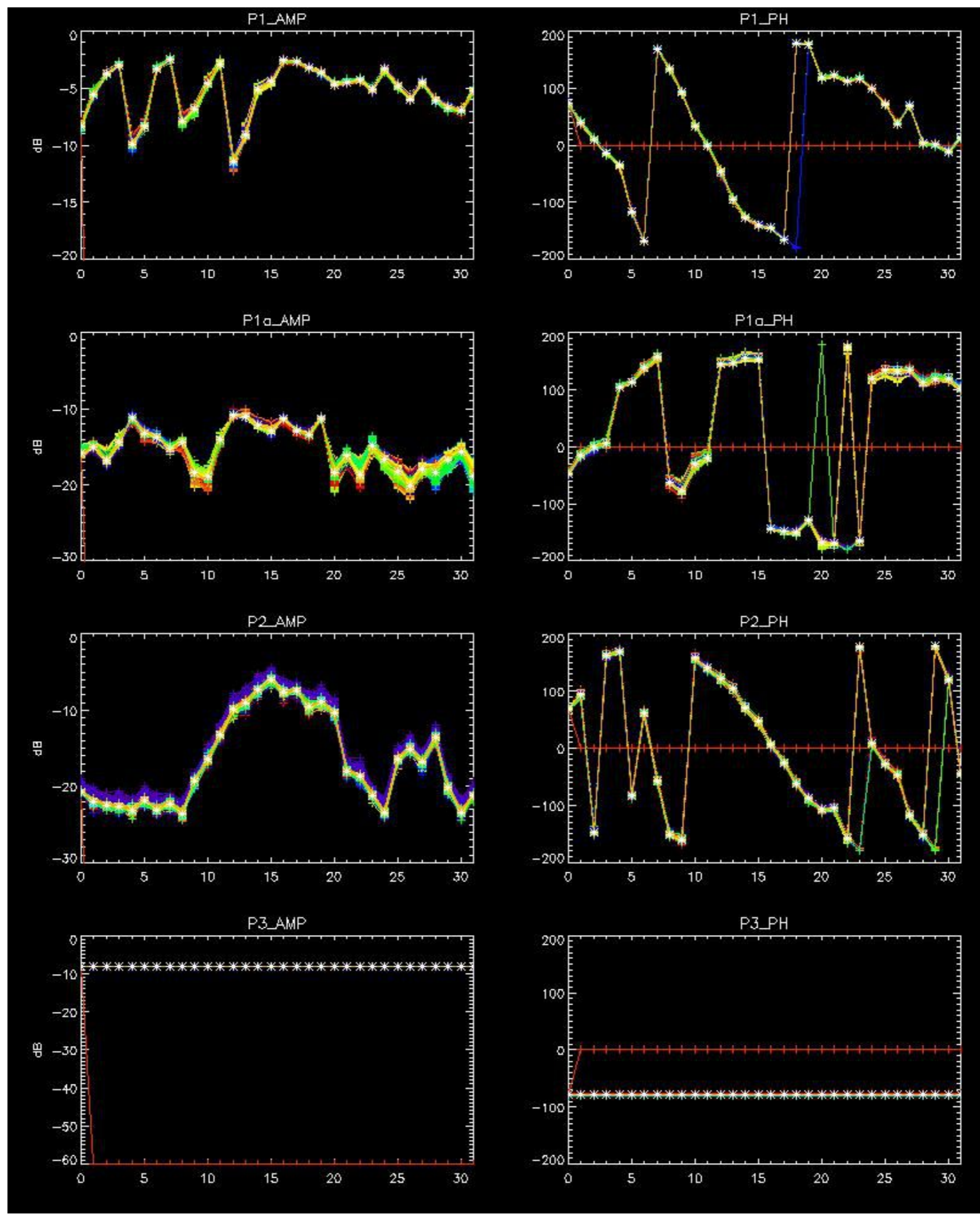
11-Nov
Average P3



11-Nov

No anomalies observed on available browse products

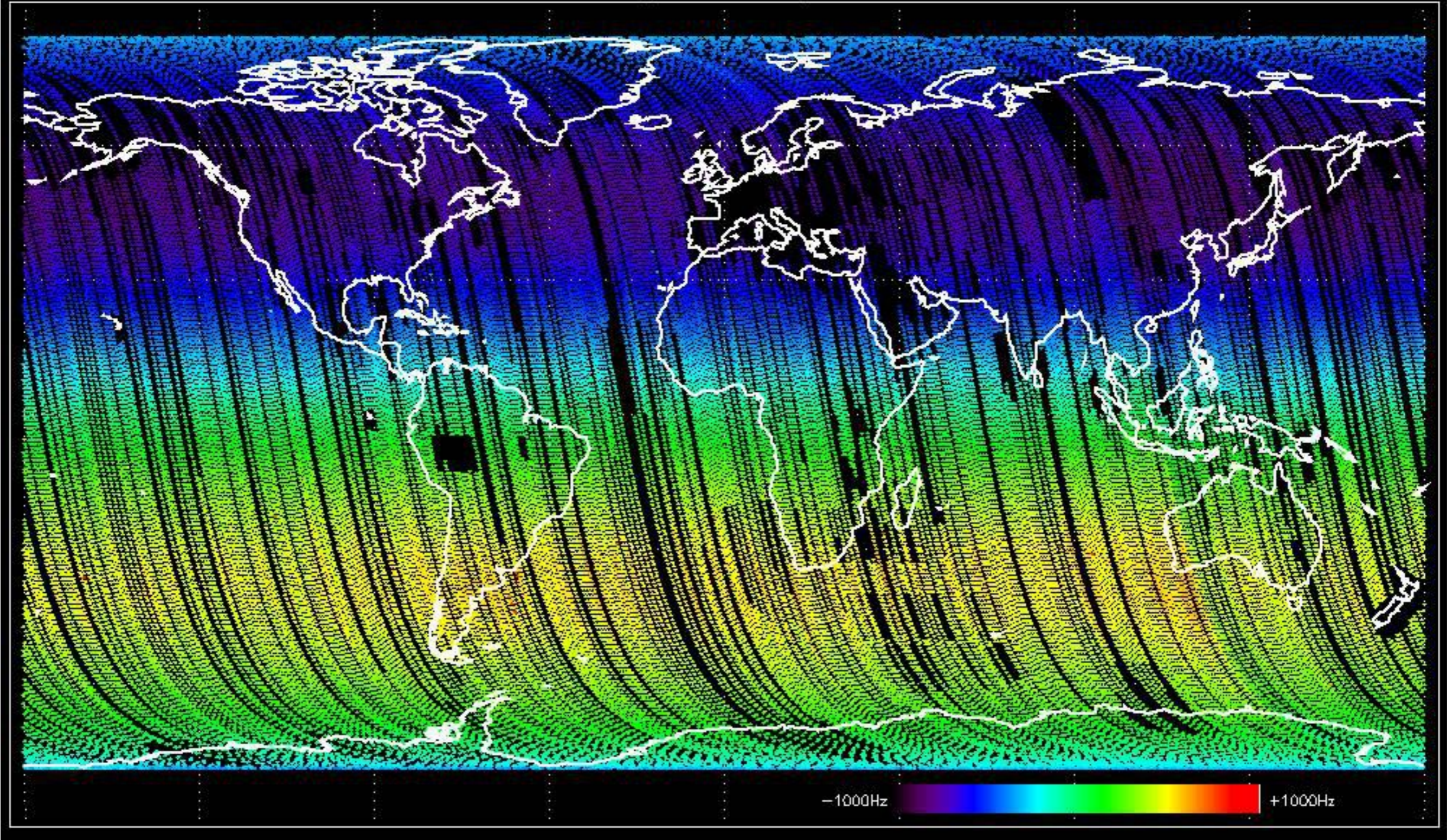
No anomalies observed.



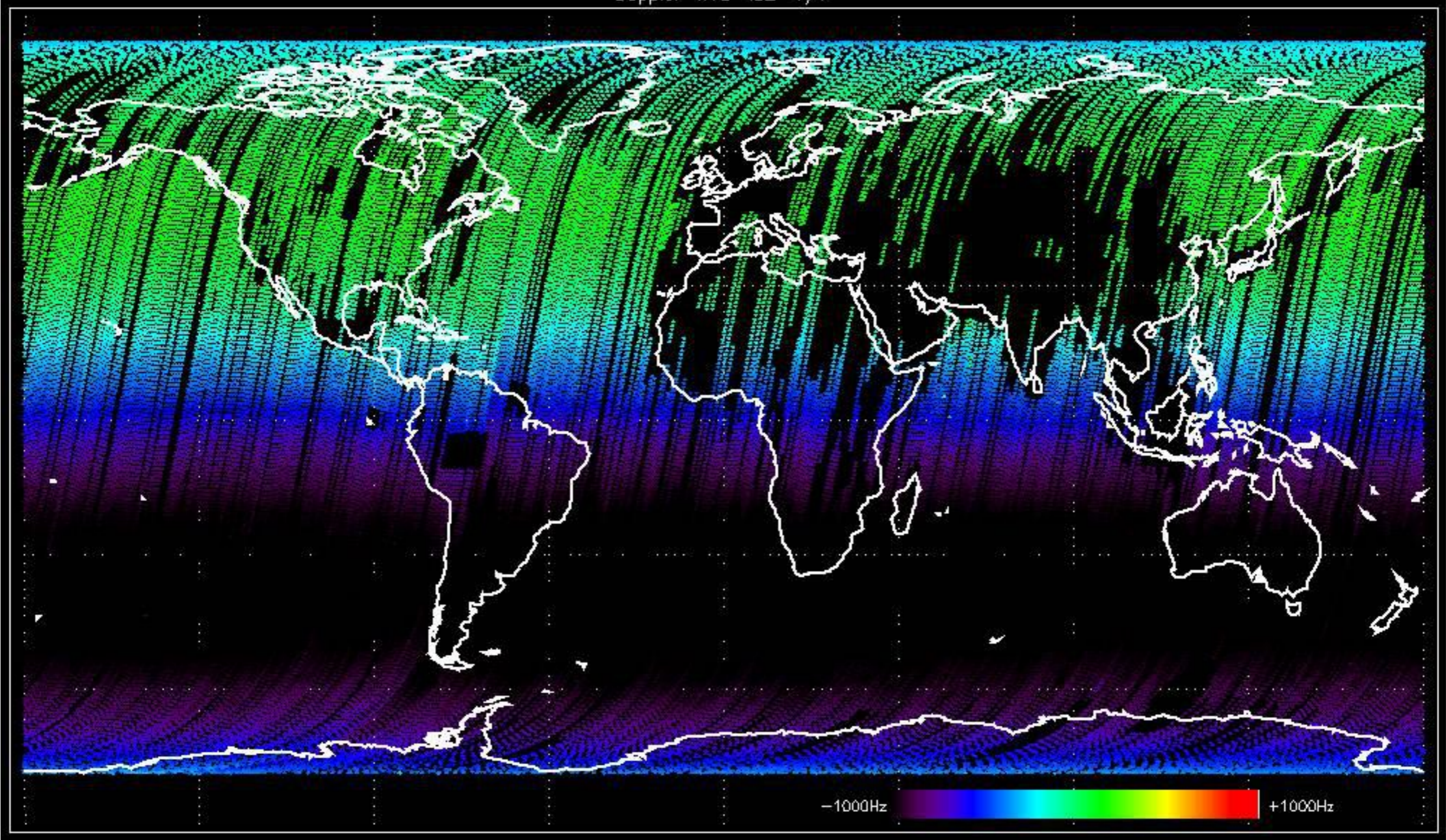
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

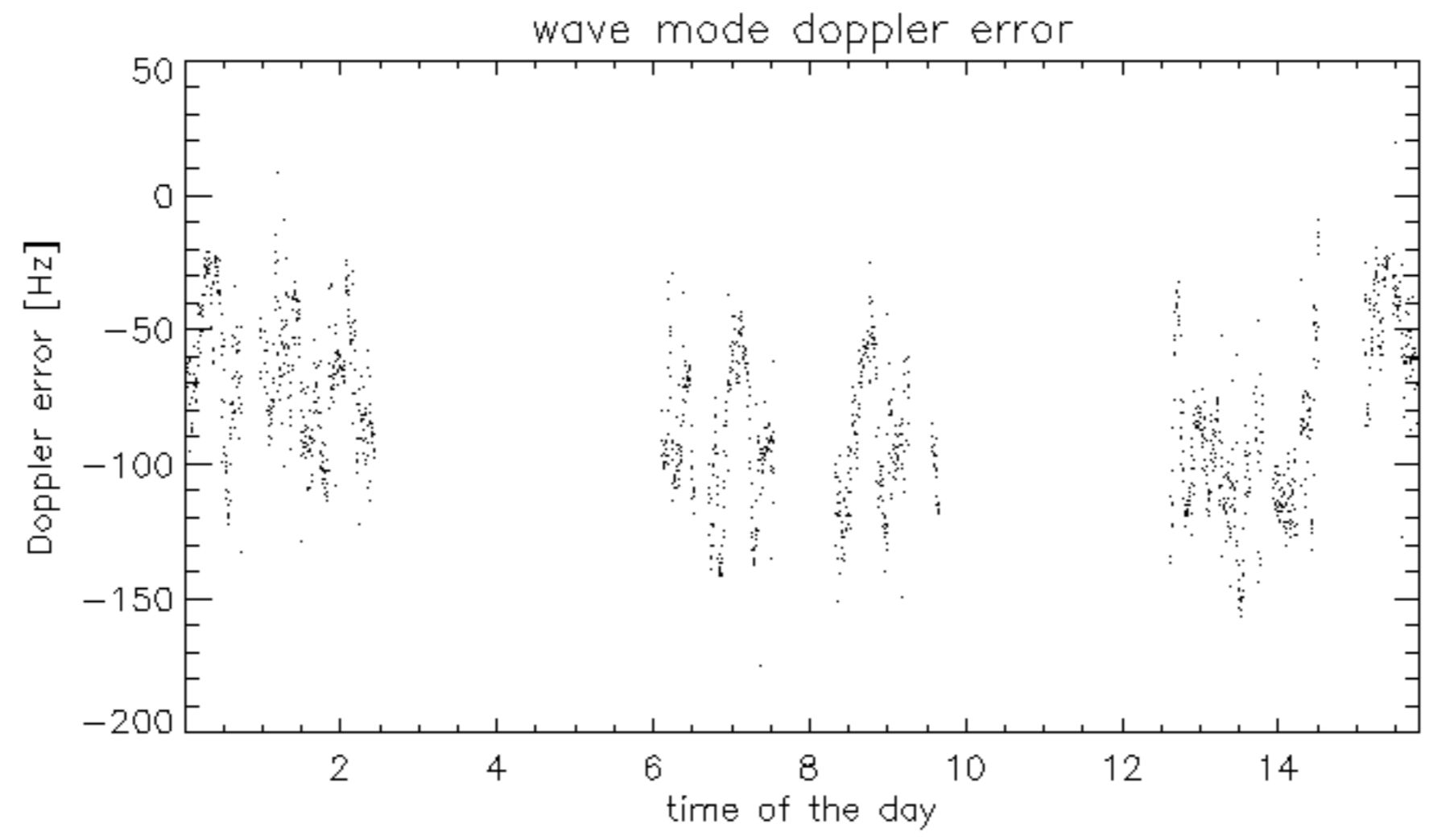
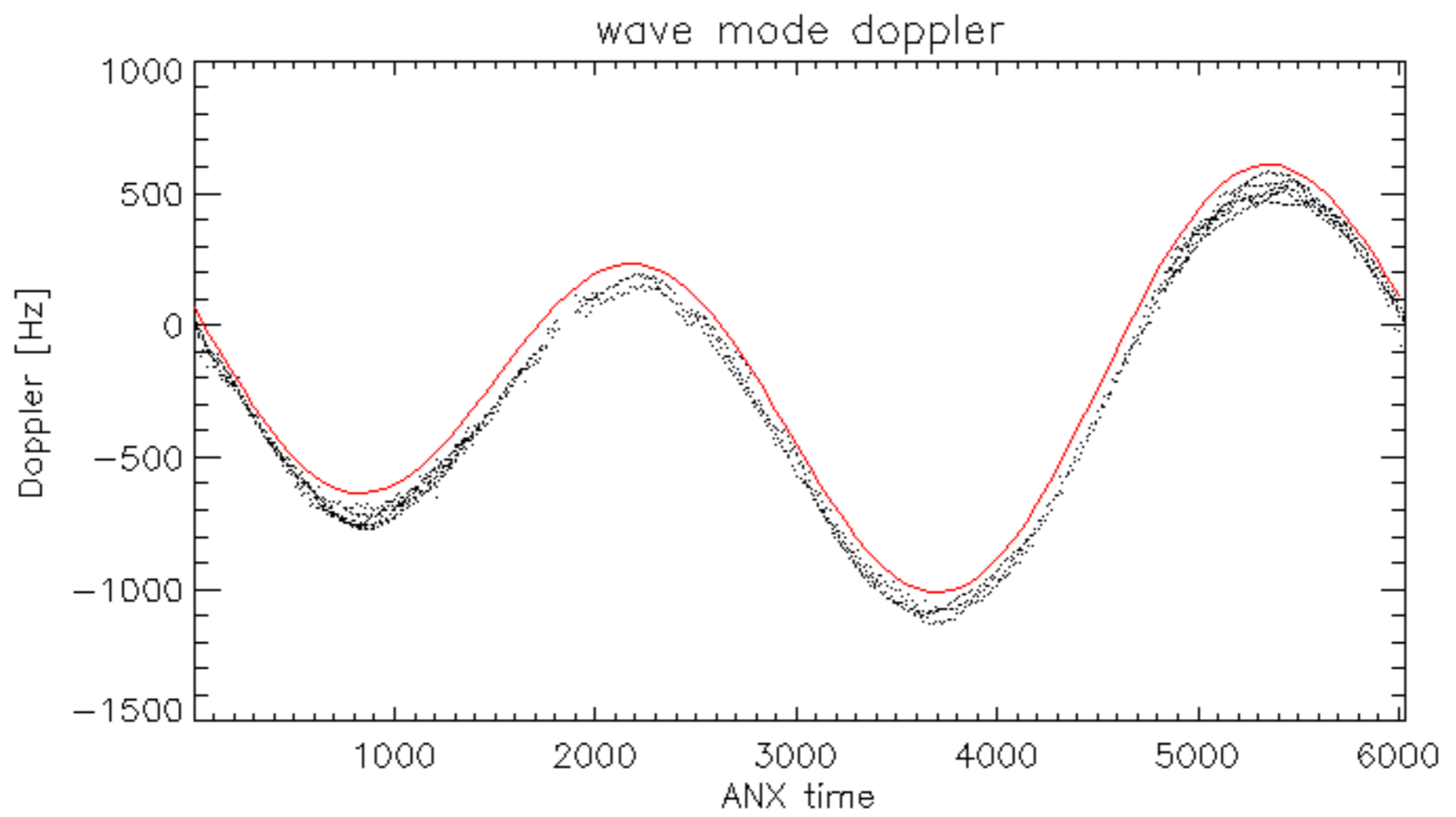
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 35 days

Doppler 'WVS' 'IS2' 'H/H'

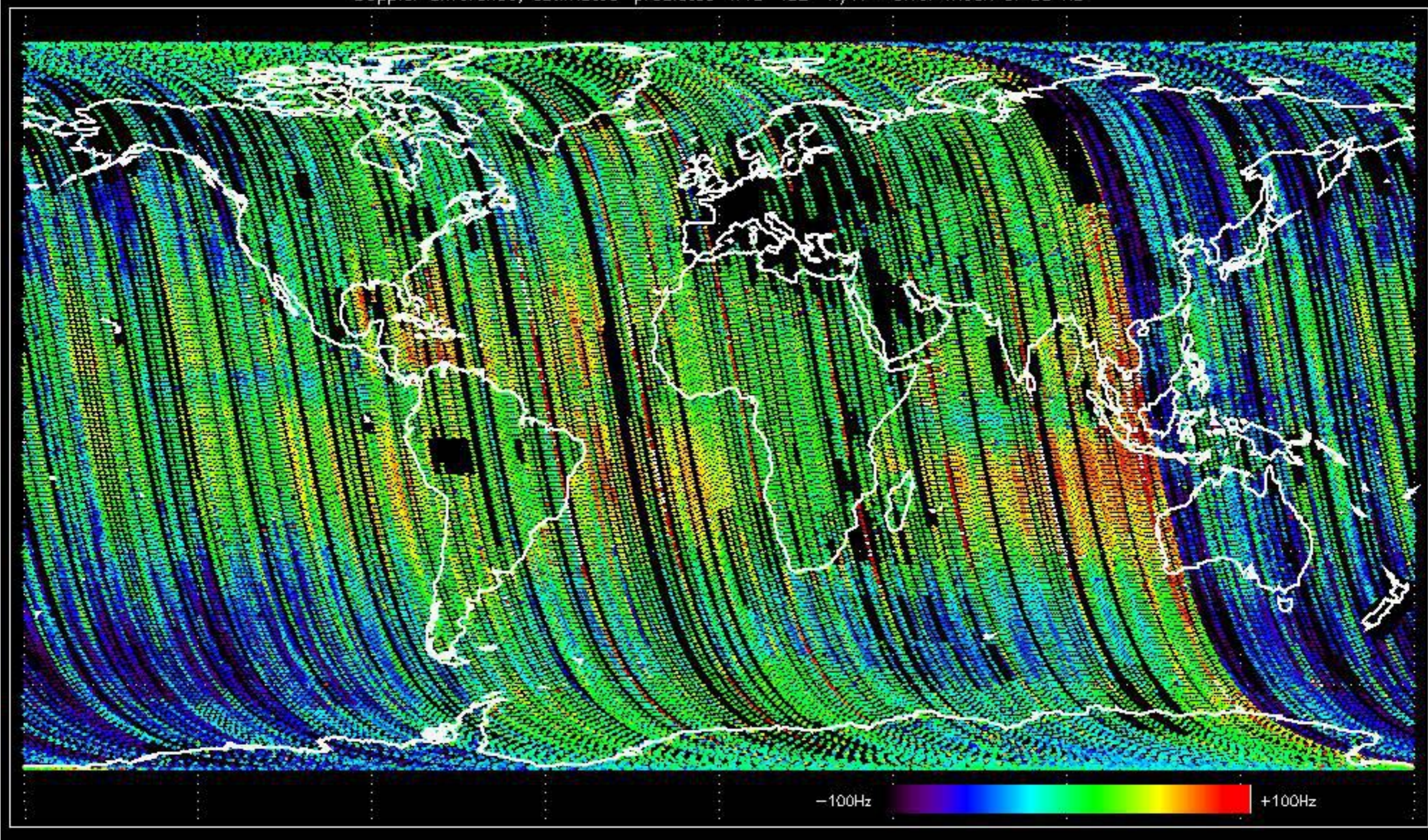


Doppler 'WVS' 'IS2' 'V/V'

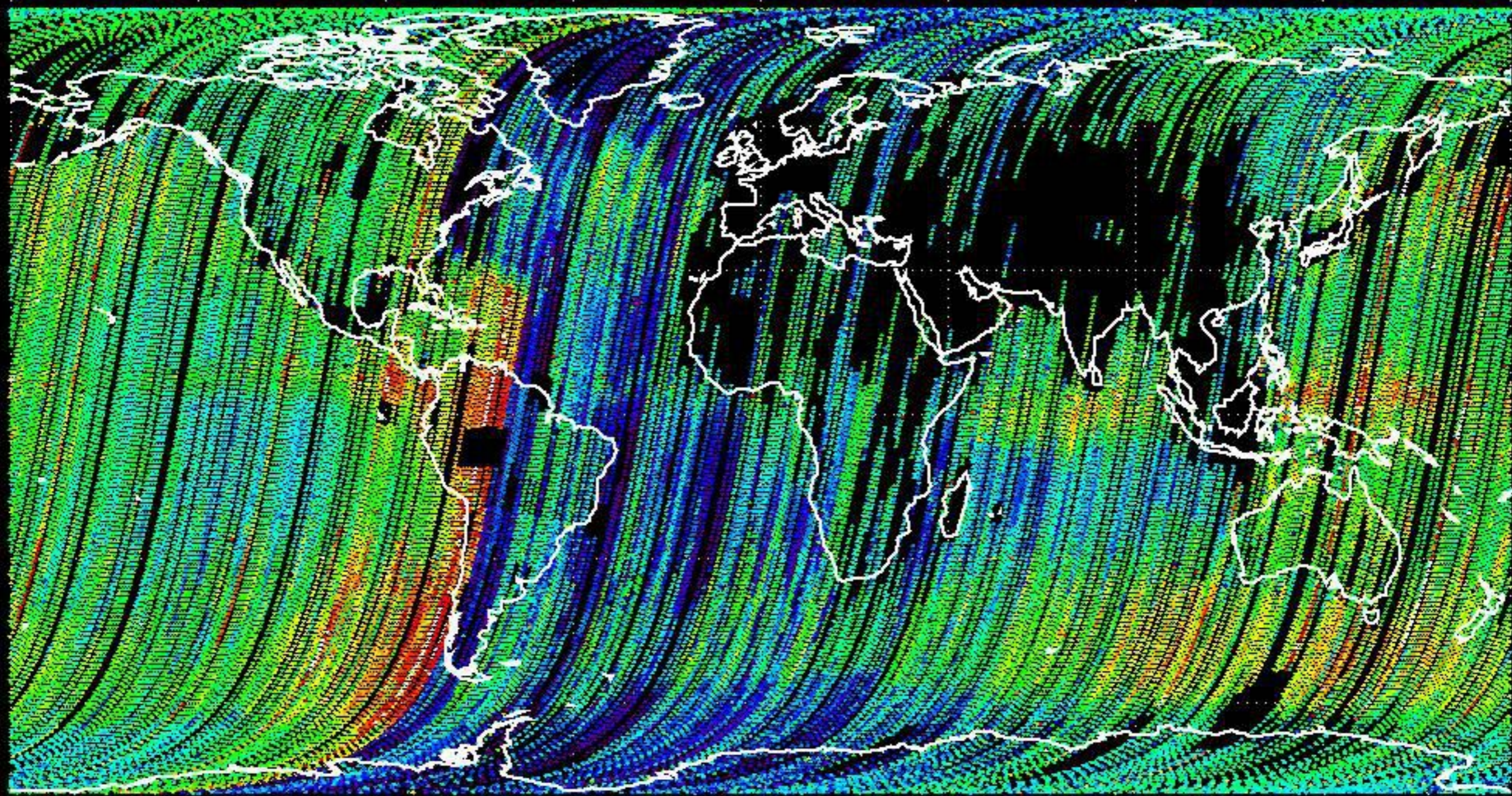




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



Doppler difference, estimated-predicted 'WS' 'IS2' 'V/V' -error mean of 53 Hz



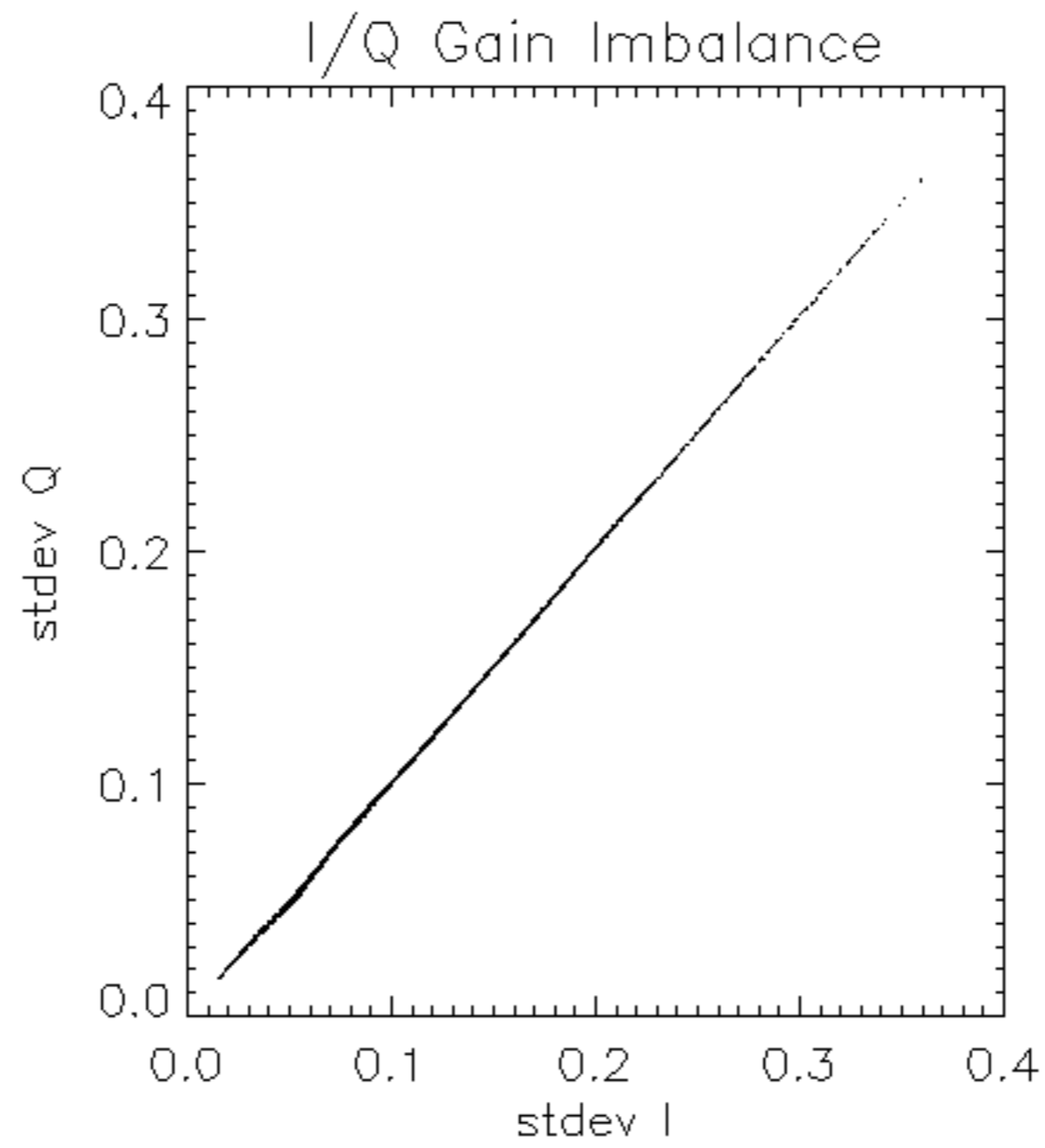
-100Hz

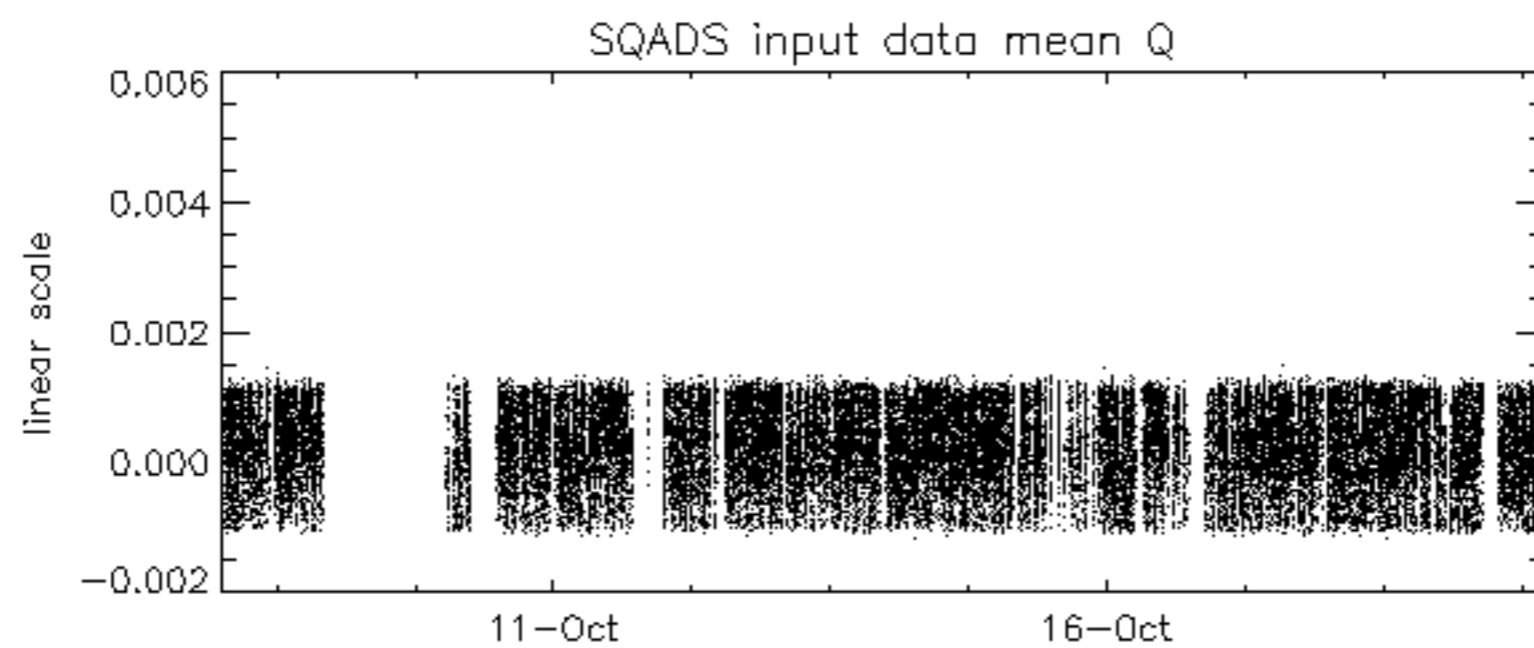
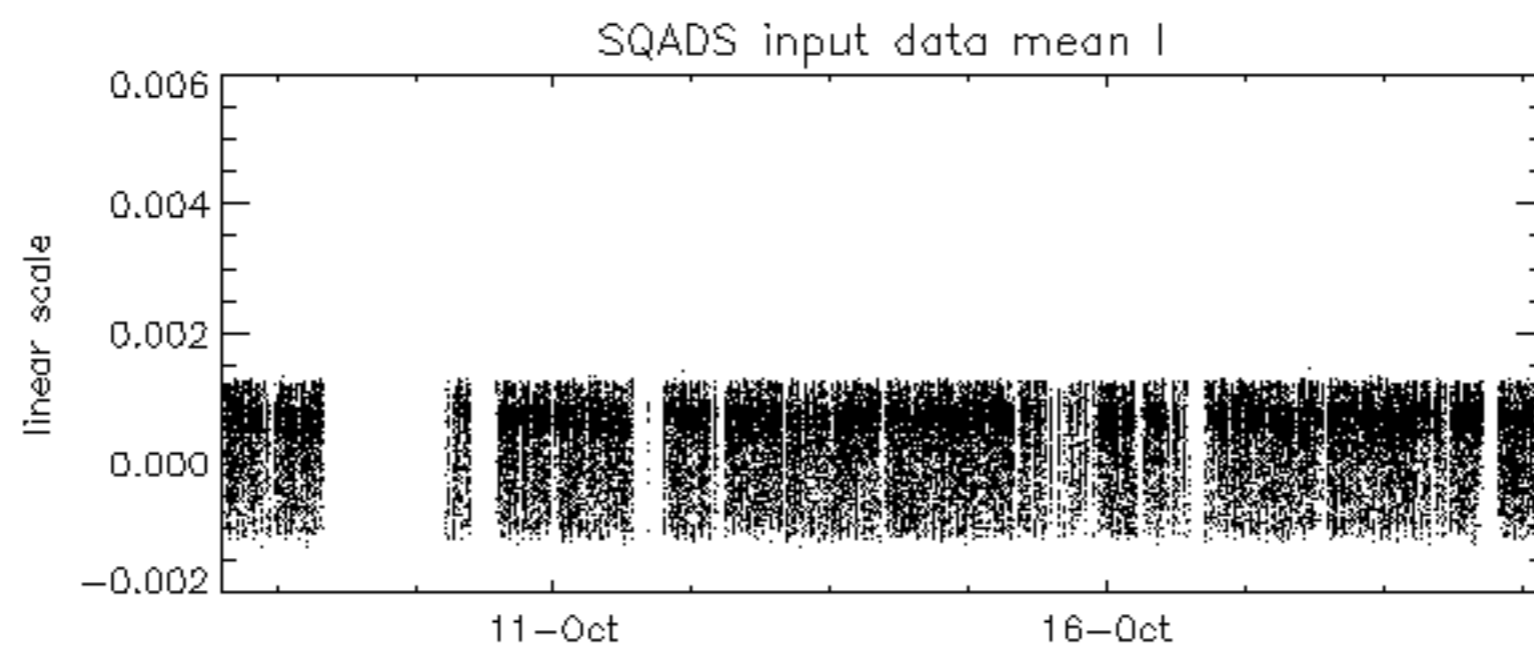
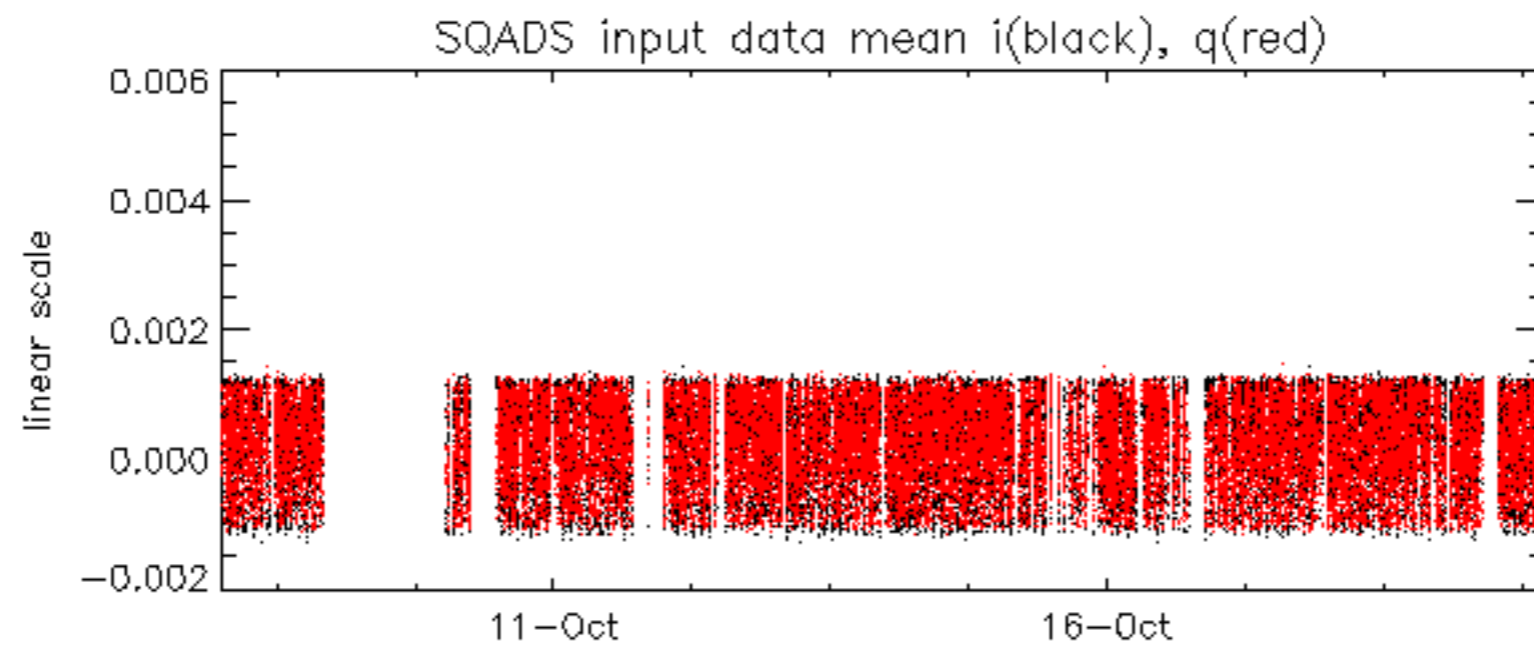


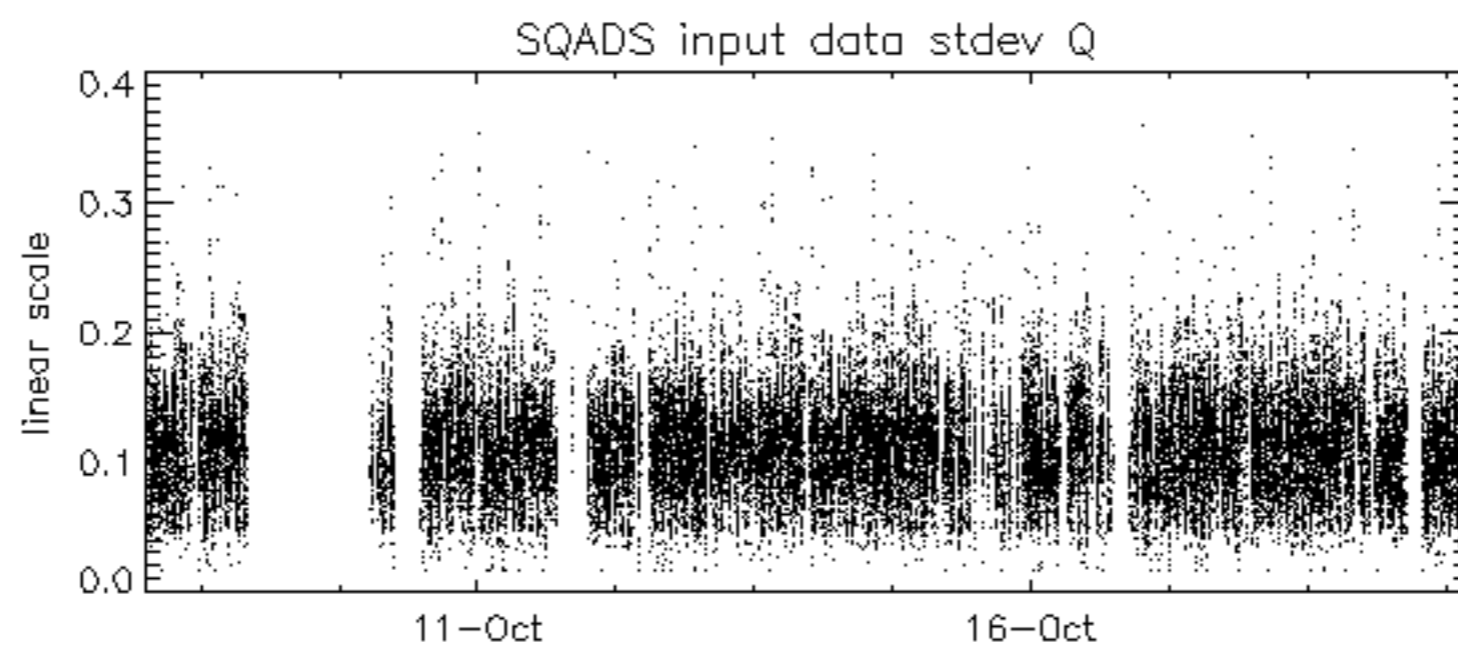
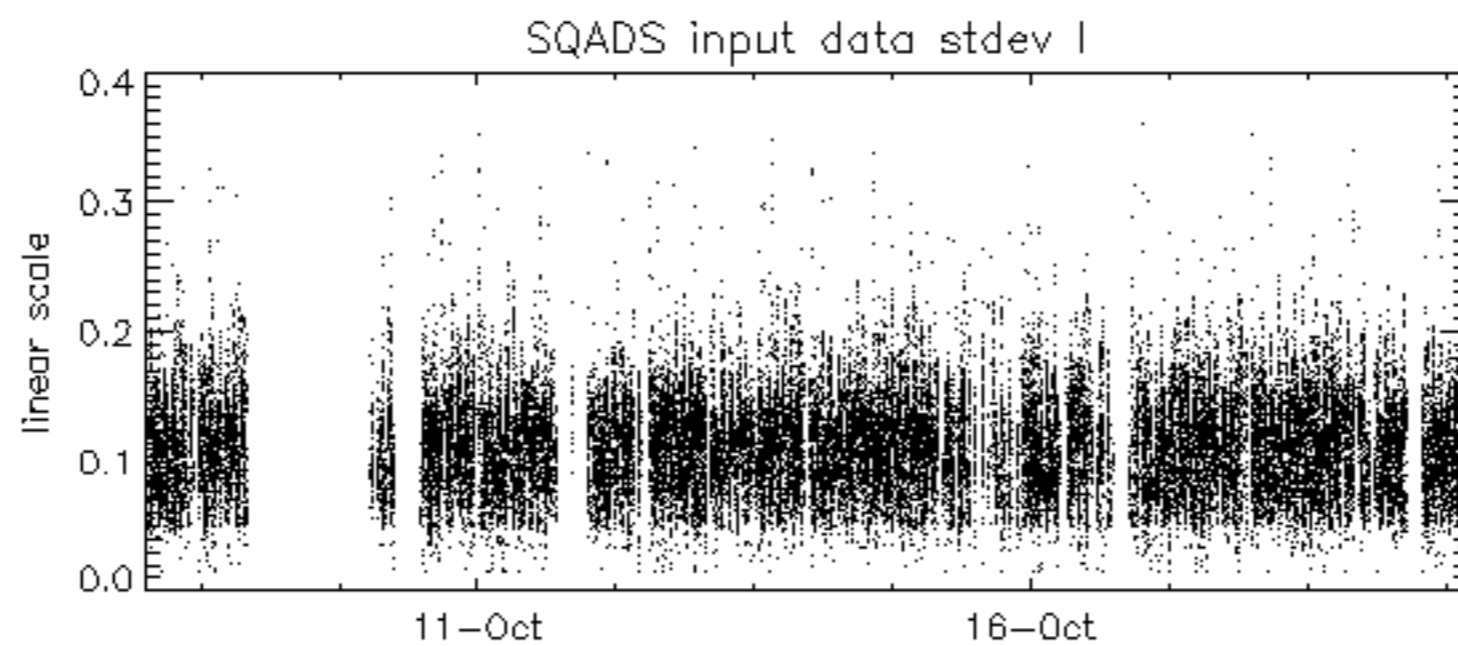
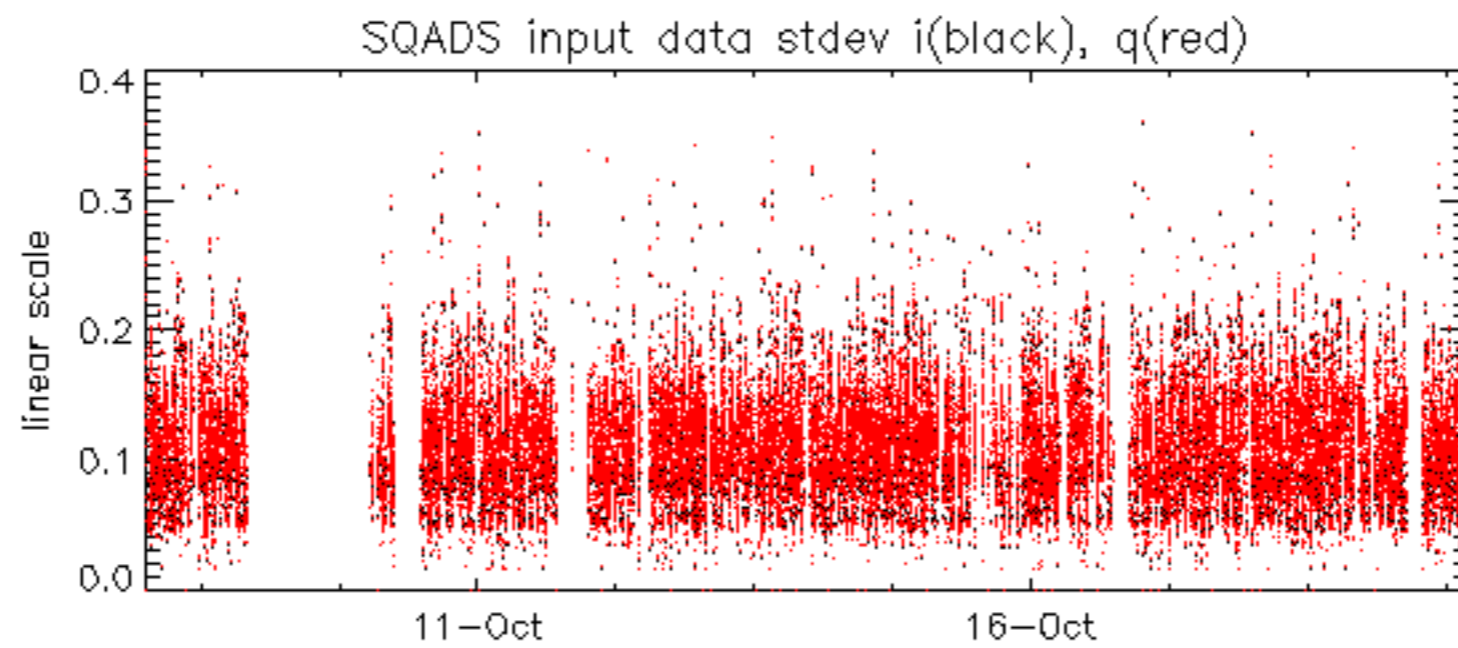
+100Hz

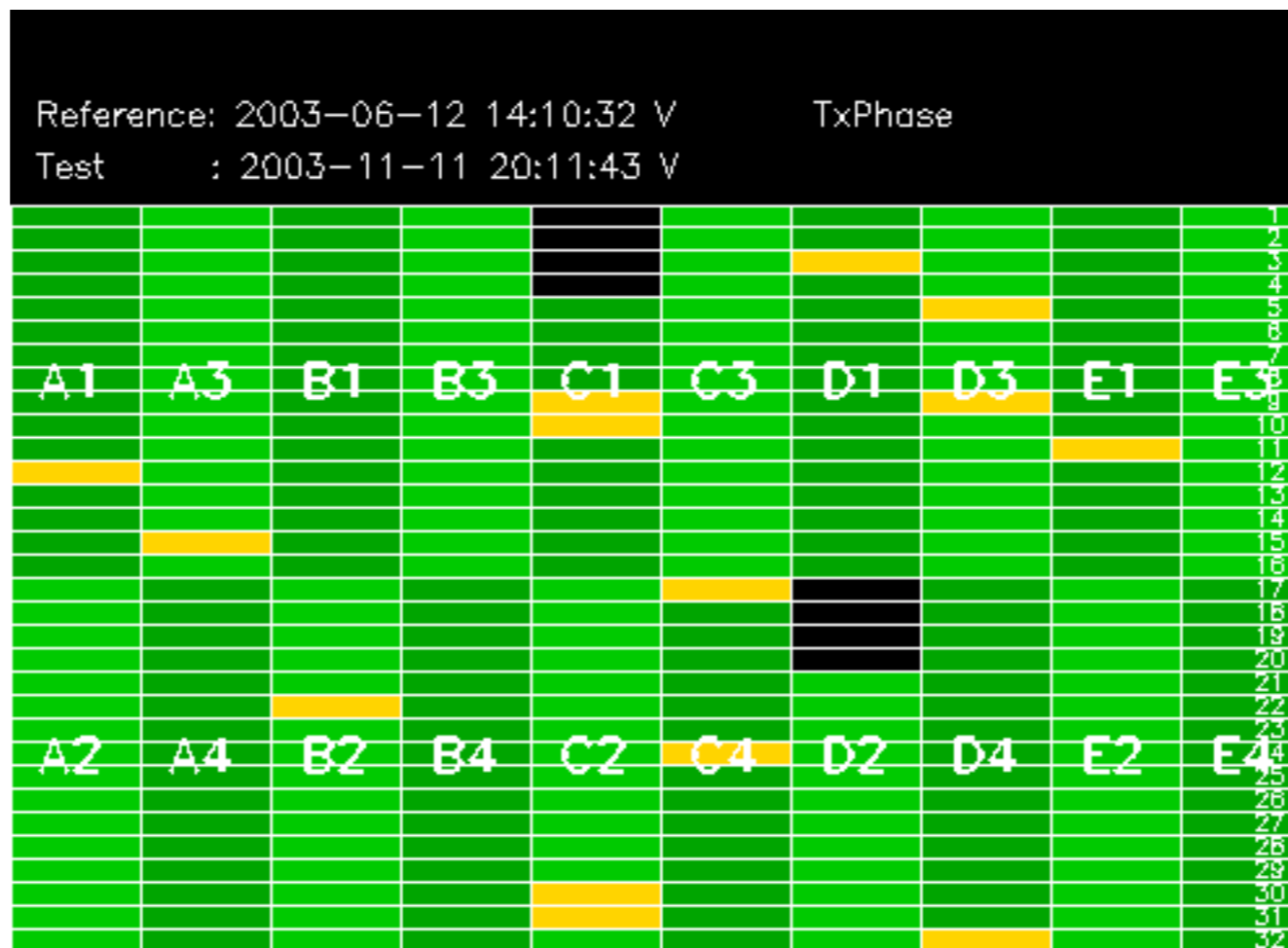
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