

REPORT OF 040213

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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

No unavailabilities during the reported period.

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. MS products not yet available for 12-Feb-2004.

Polarisation	Start Time
V	20040211 201701
H	20040211 201541

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	-3.63785	-22.3851	-8.13067
	stdev	0.00606219	0.0869399	0.00300966

24	mean	-5.06897	-21.0458	-8.13067
	stdev	0.0130165	0.0804707	0.00300966



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.67004	-22.4534	-8.14221
	stdev	0.00700013	0.0721233	0.00314941
24	mean	-5.10383	-21.1026	-8.14221
	stdev	0.0149732	0.0669820	0.00314941



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	0.000433190
	stdev	2.85099e-07
MEAN Q	mean	0.000359928
	stdev	3.30679e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.119322
	stdev	0.00138603

STDEV Q	mean	0.119556
	stdev	0.00140132



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

No anomalies observed in 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

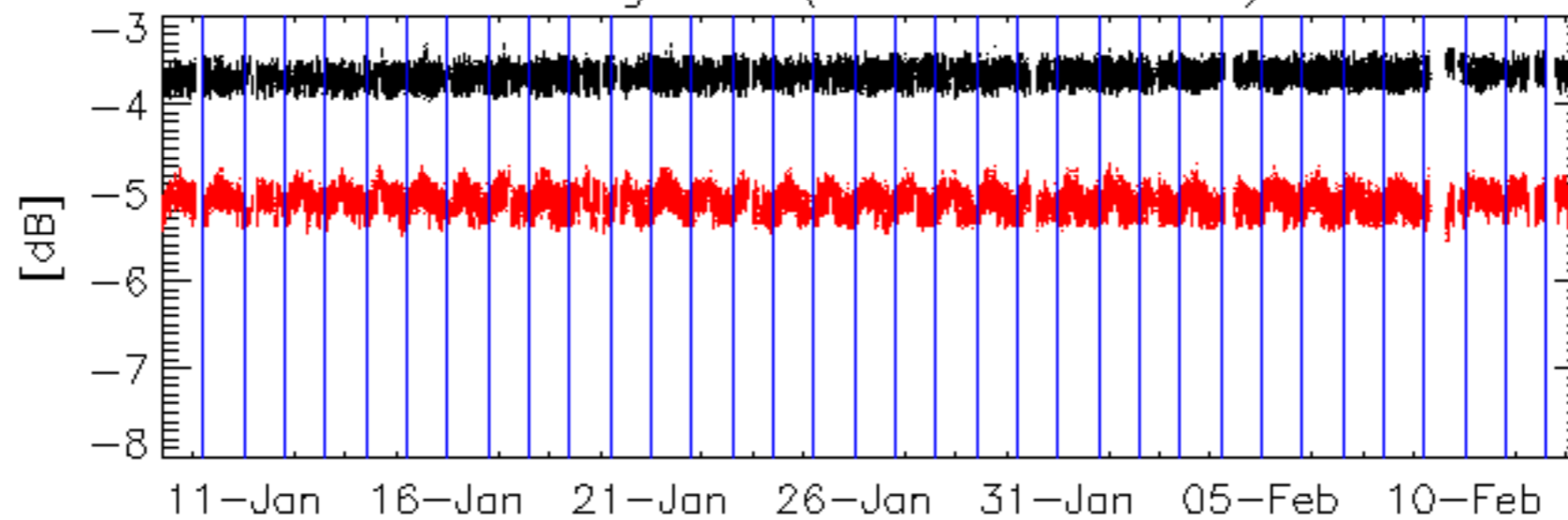
Ascending
Descending

6.3 - Doppler evolution versus ANX

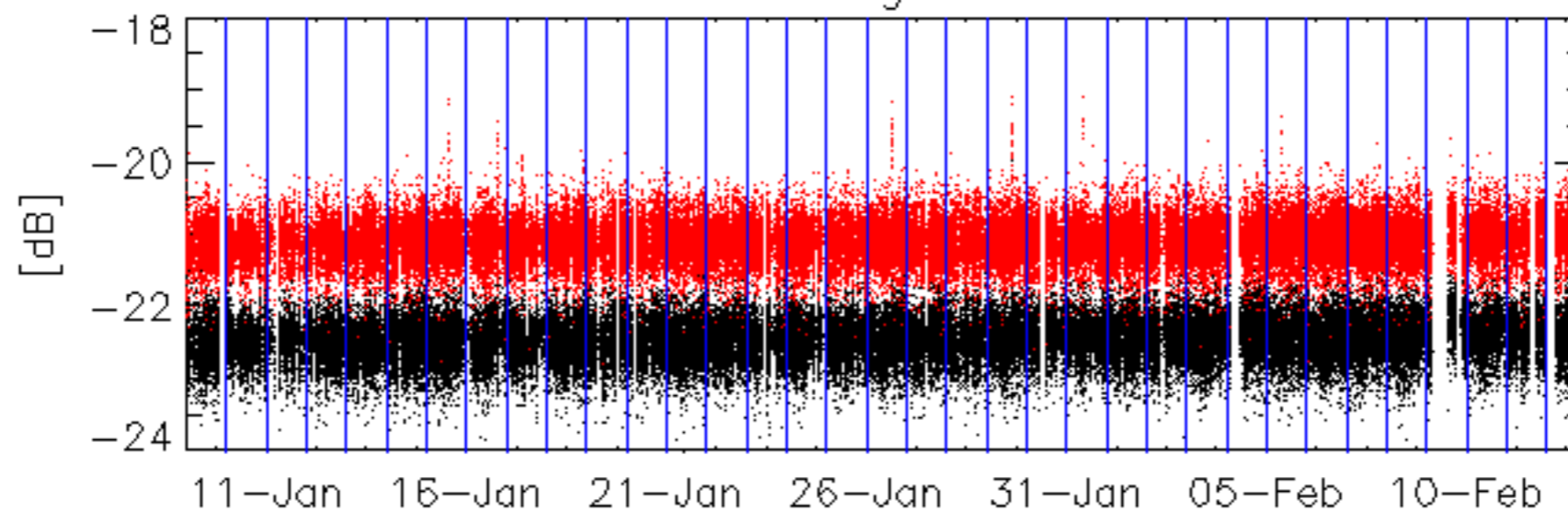
Evolution Doppler error versus ANX



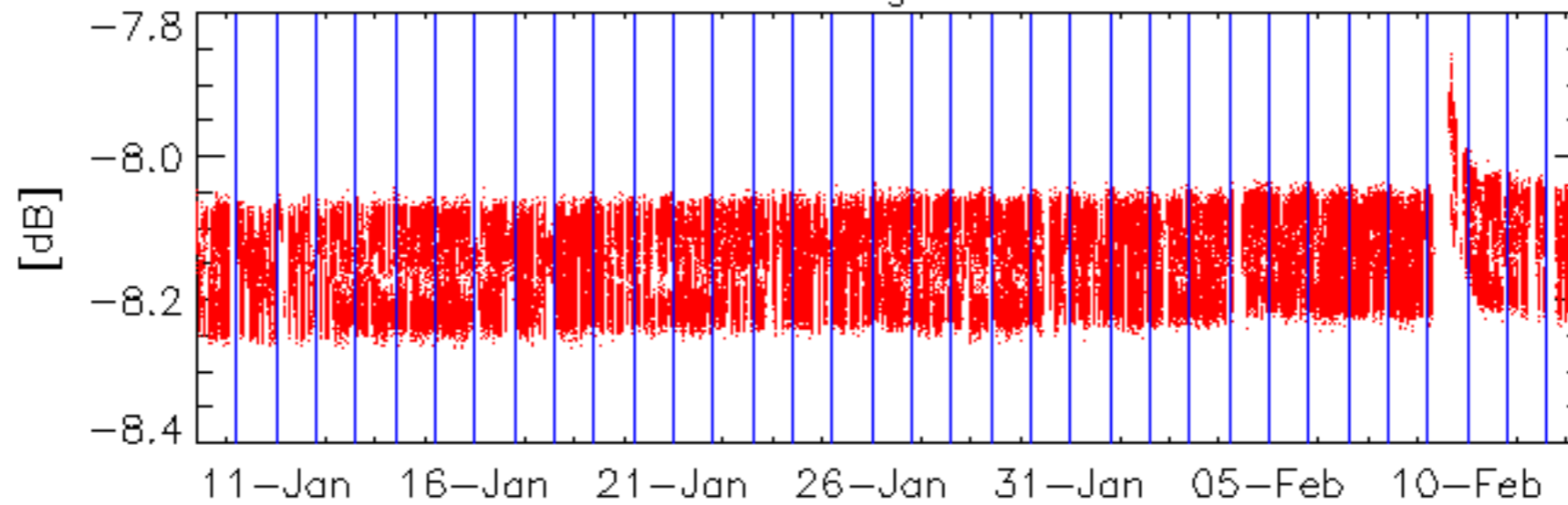
Average P1 (row 3 & row 24)



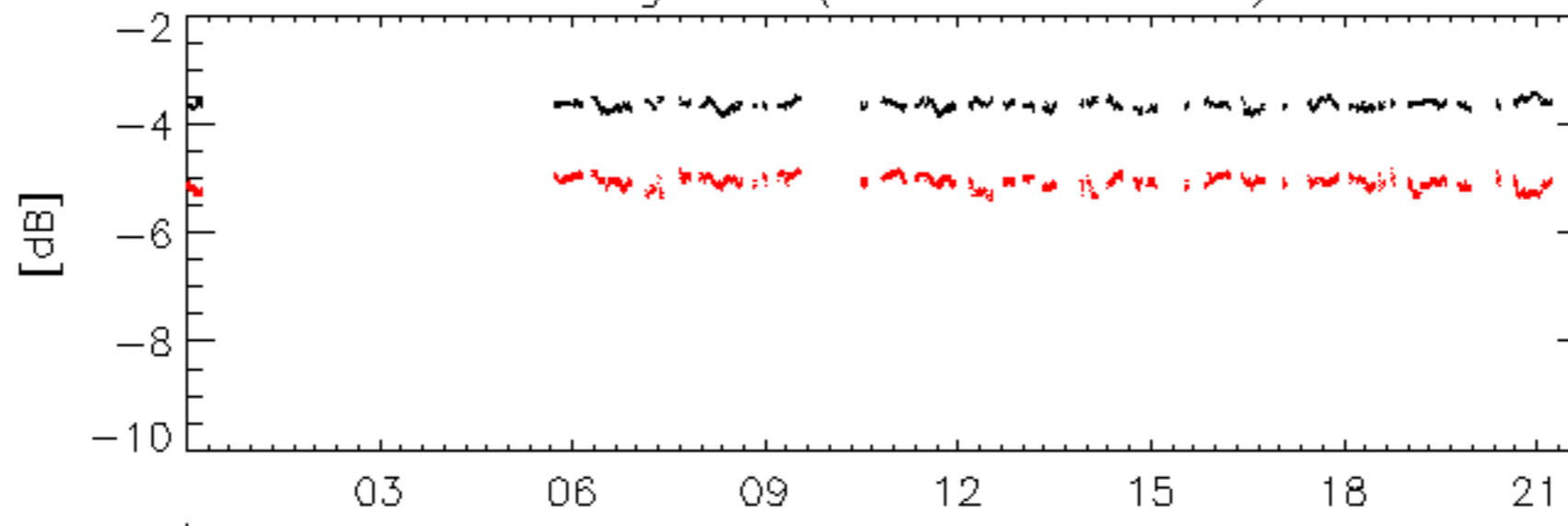
Average P2



Average P3

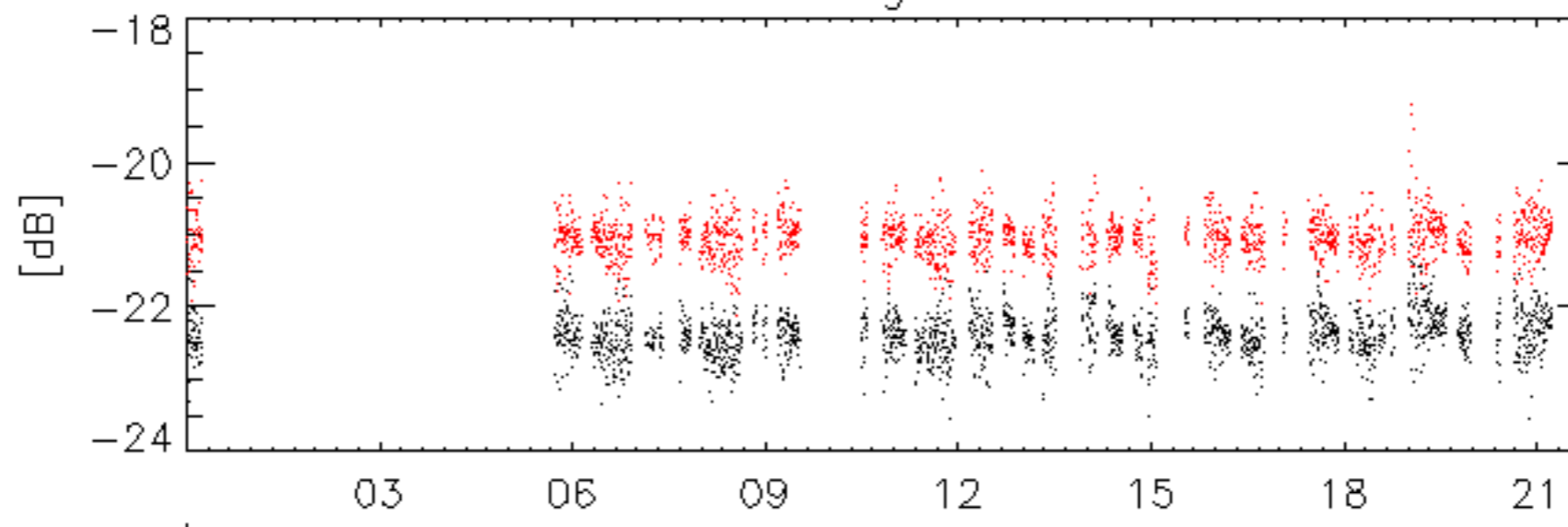


Average P1 (row 3 & row 24)



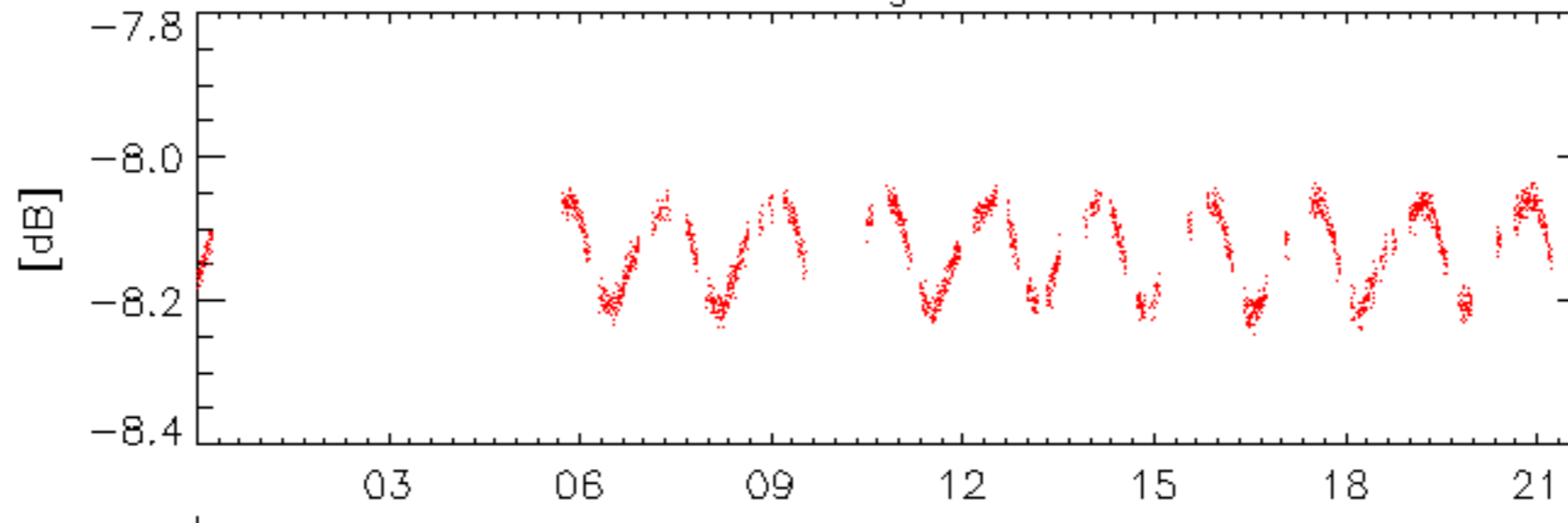
12-Feb

Average P2



12-Feb

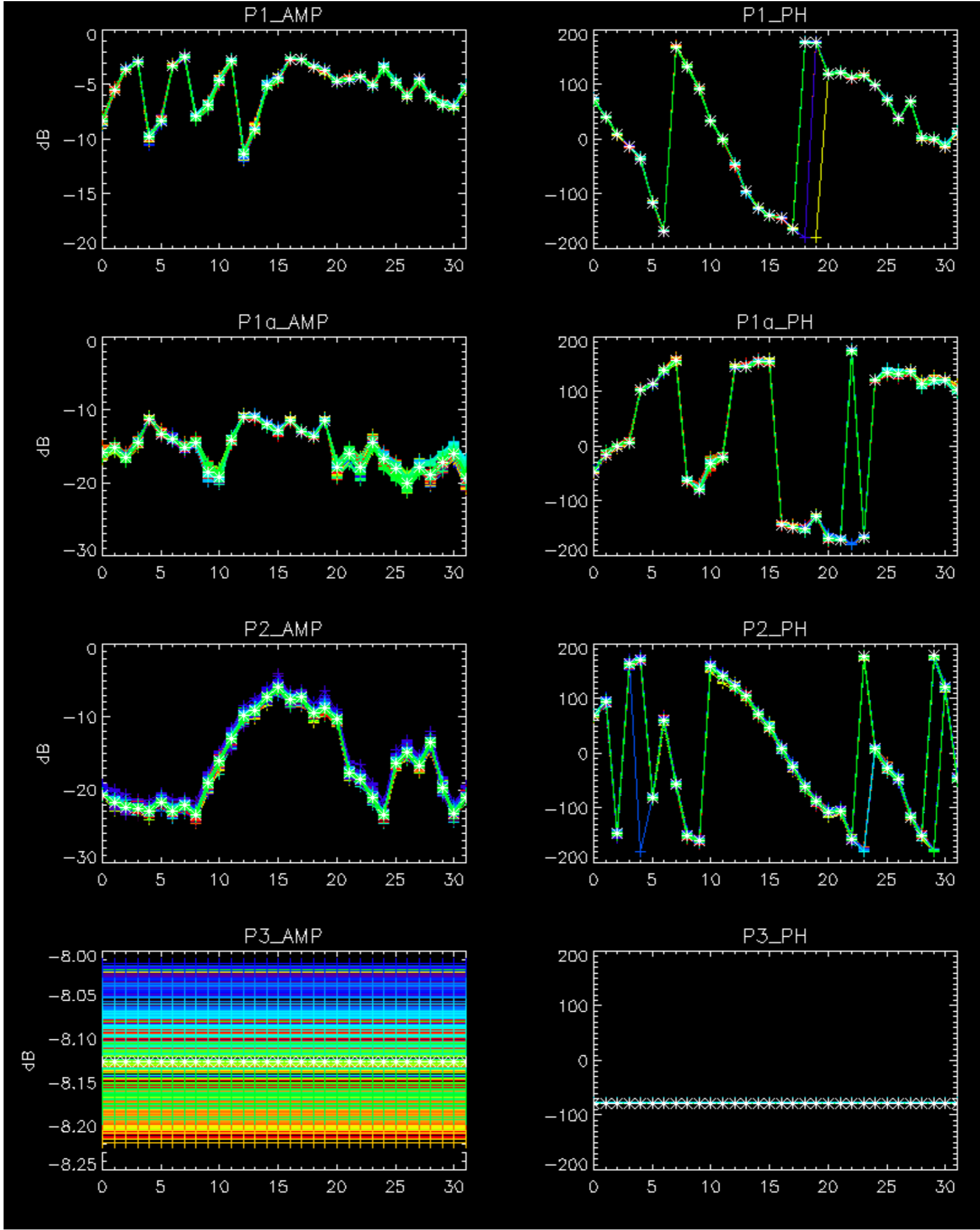
Average P3



12-Feb

No anomalies observed on available browse products.

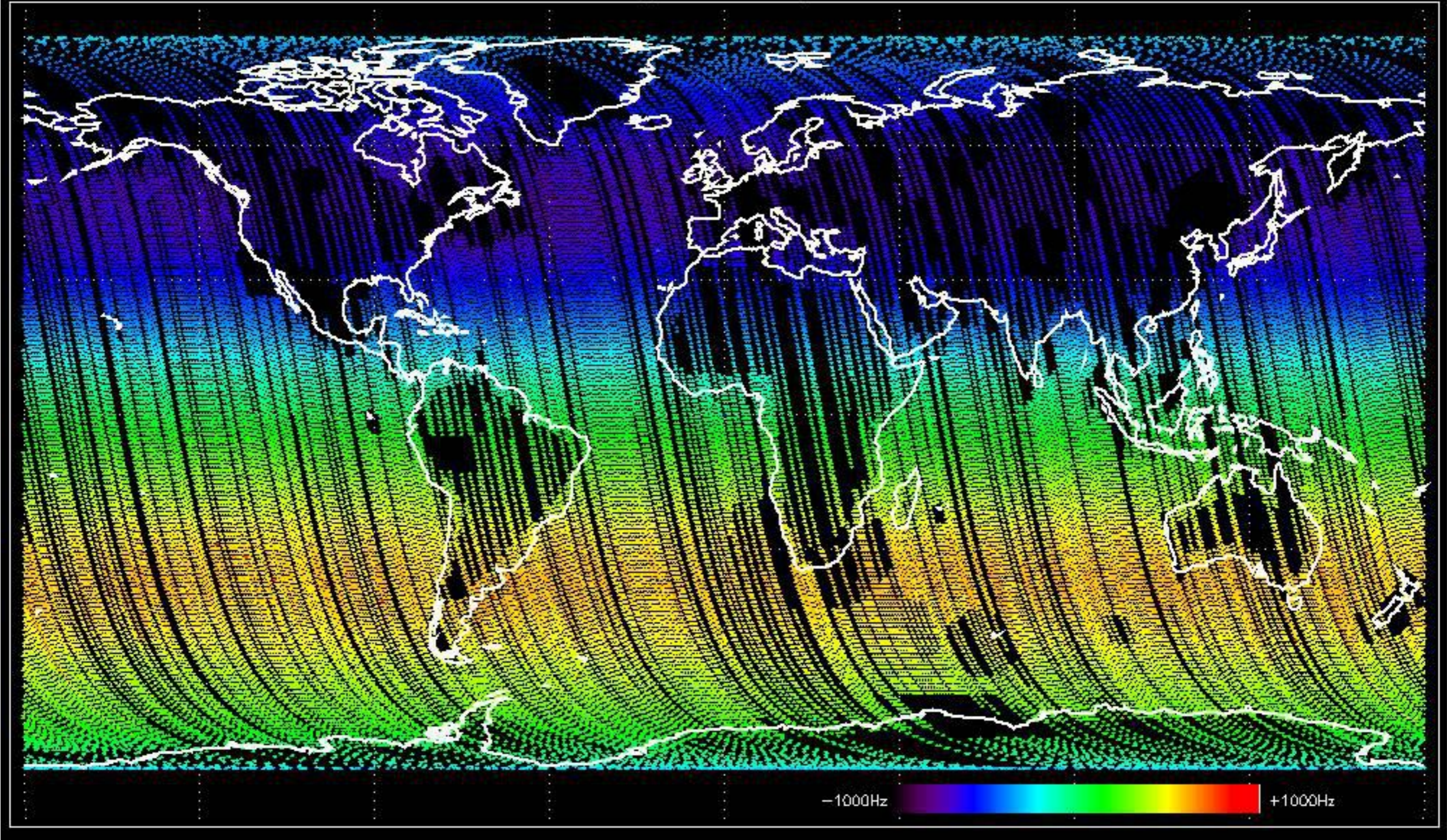
No anomalies observed.



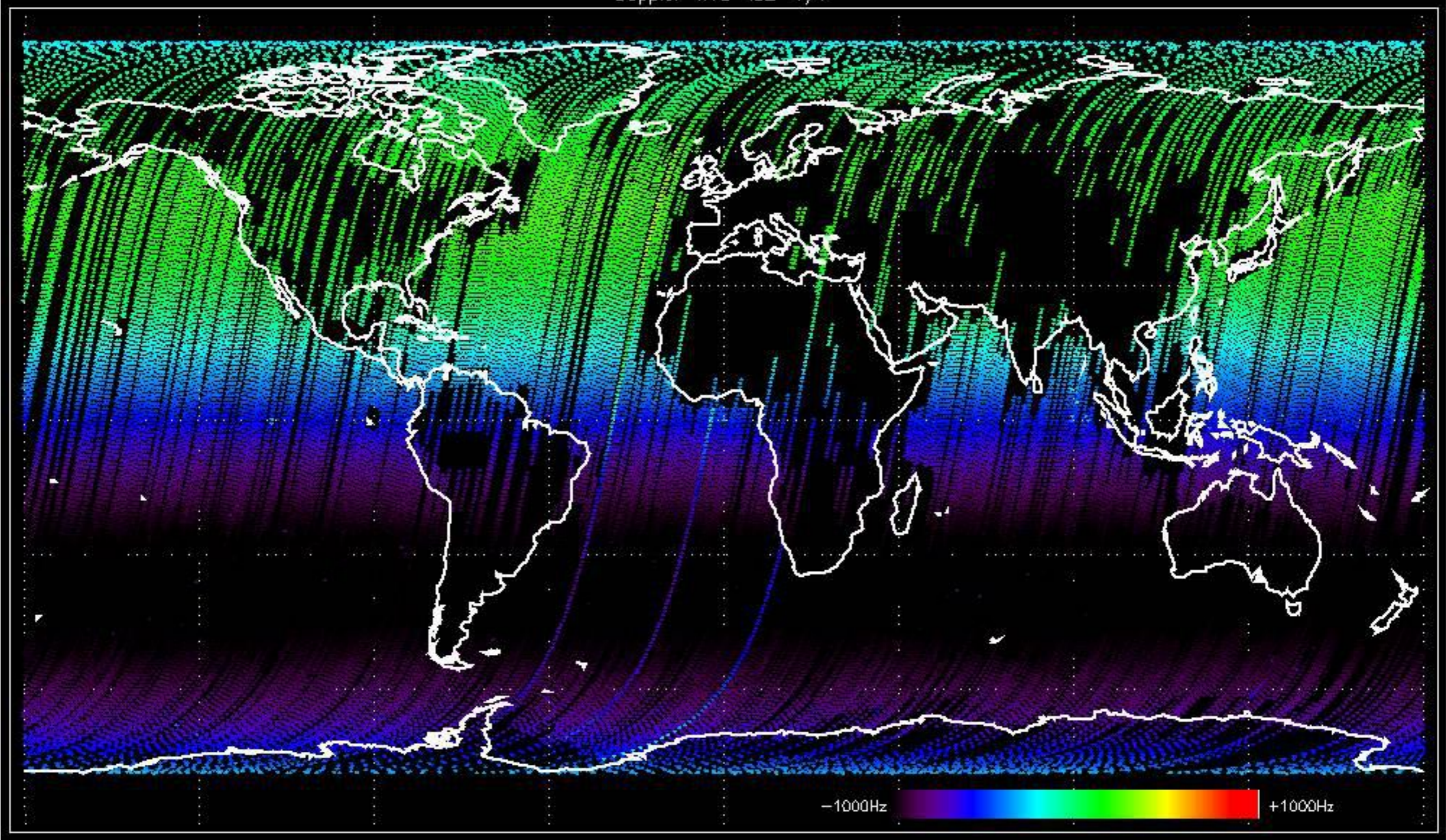
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

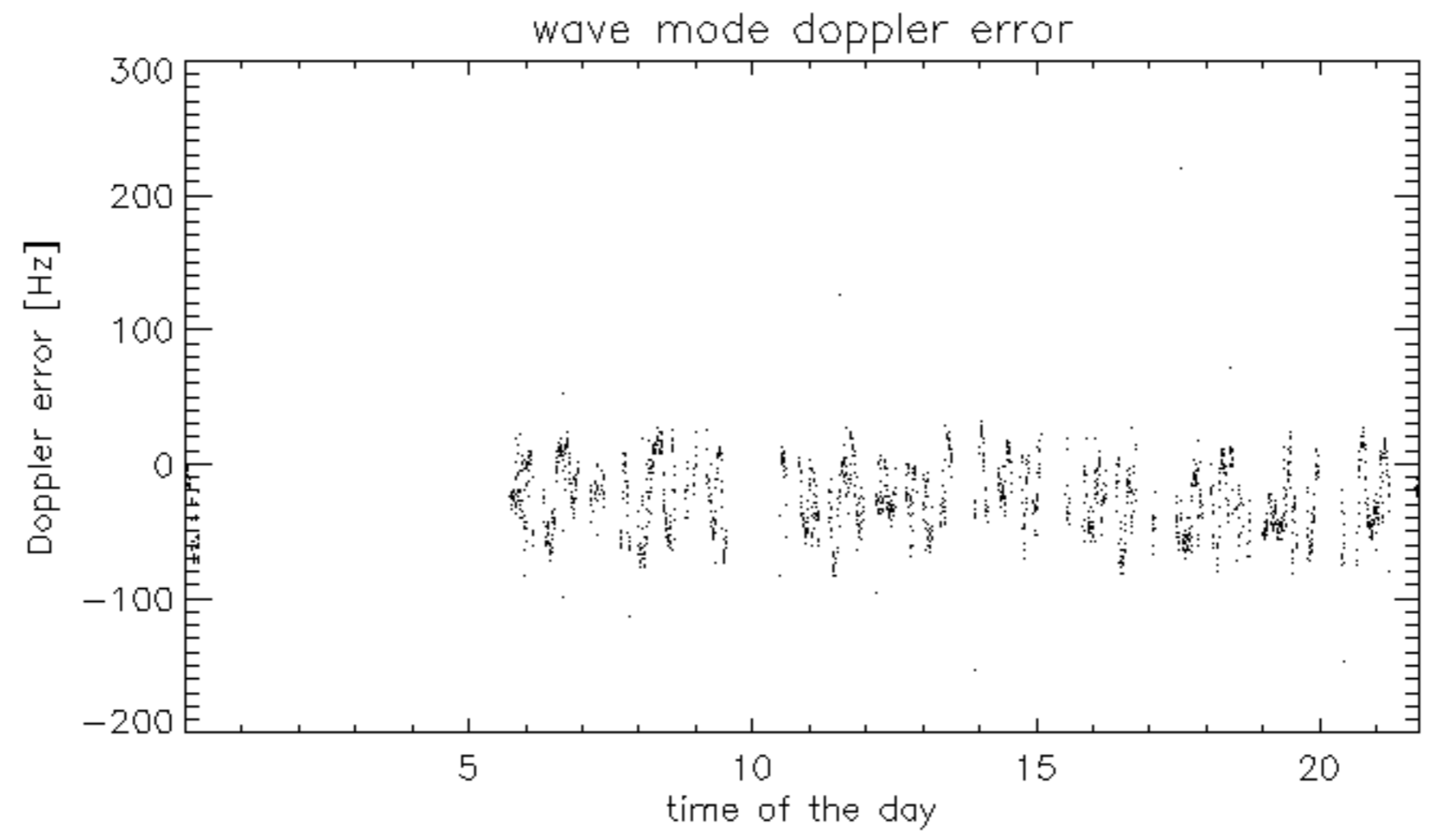
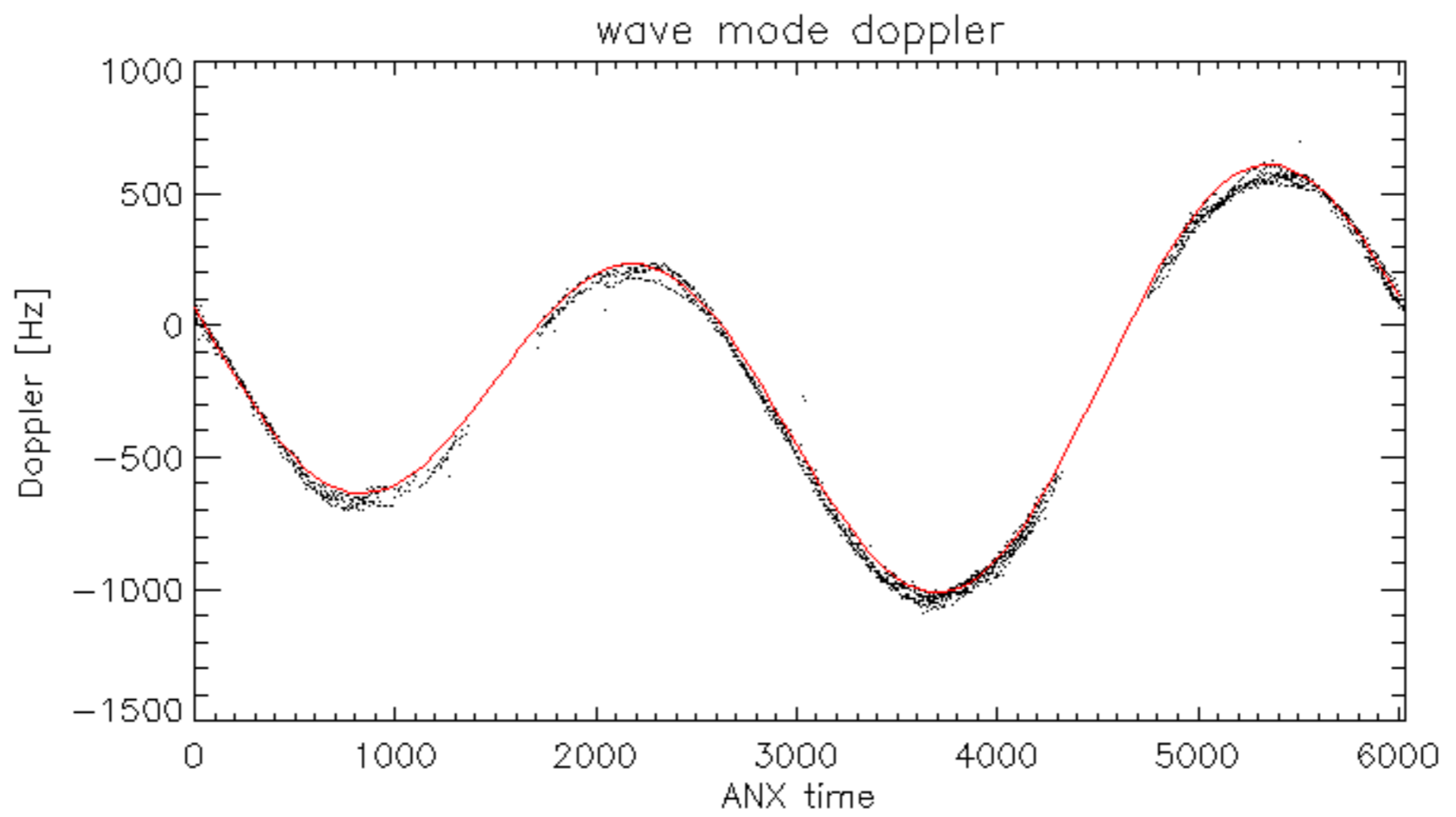
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Doppler analysis performed over the last 35 days.

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

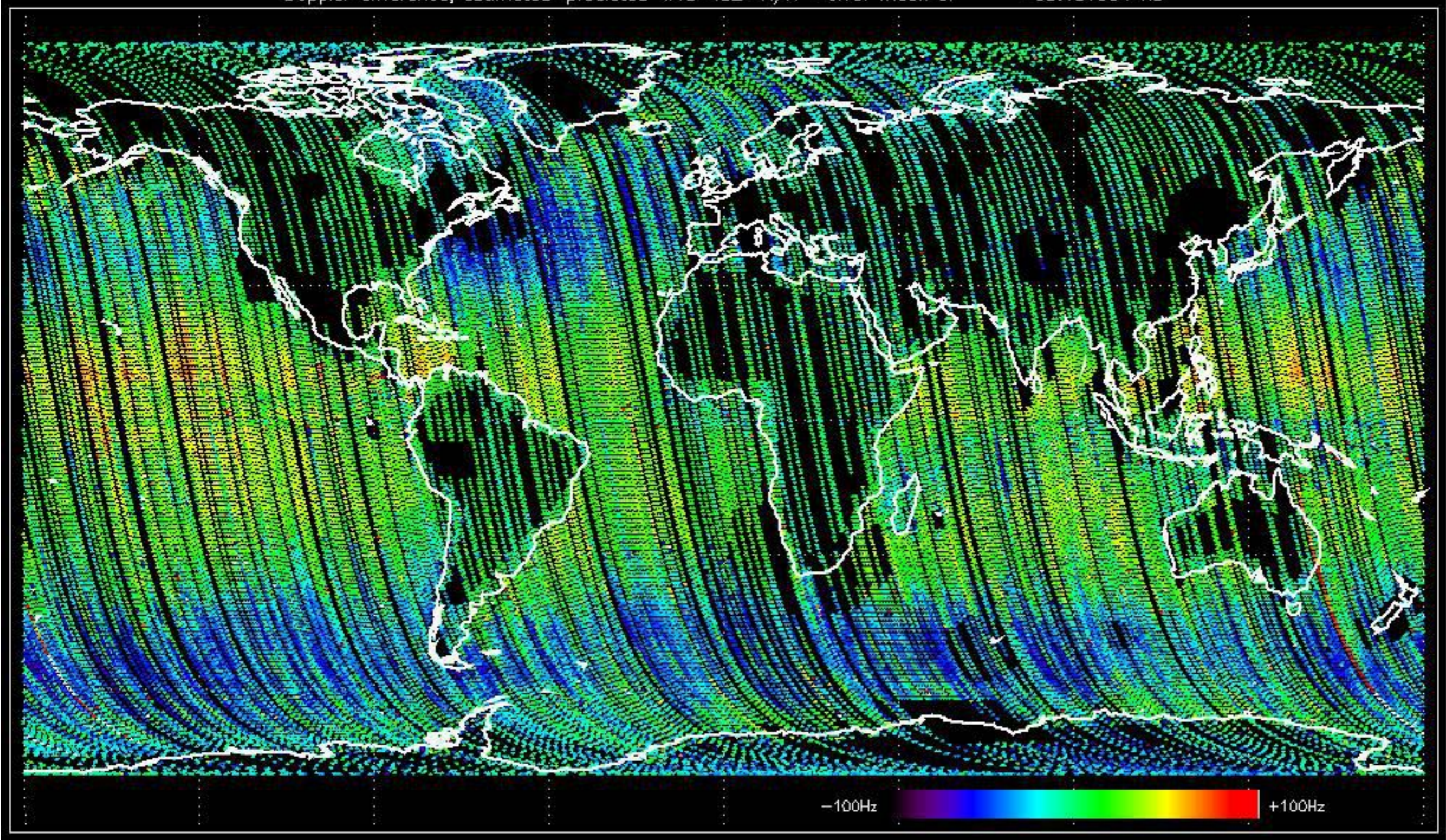


Doppler 'WVS' 'IS2' 'V/V'

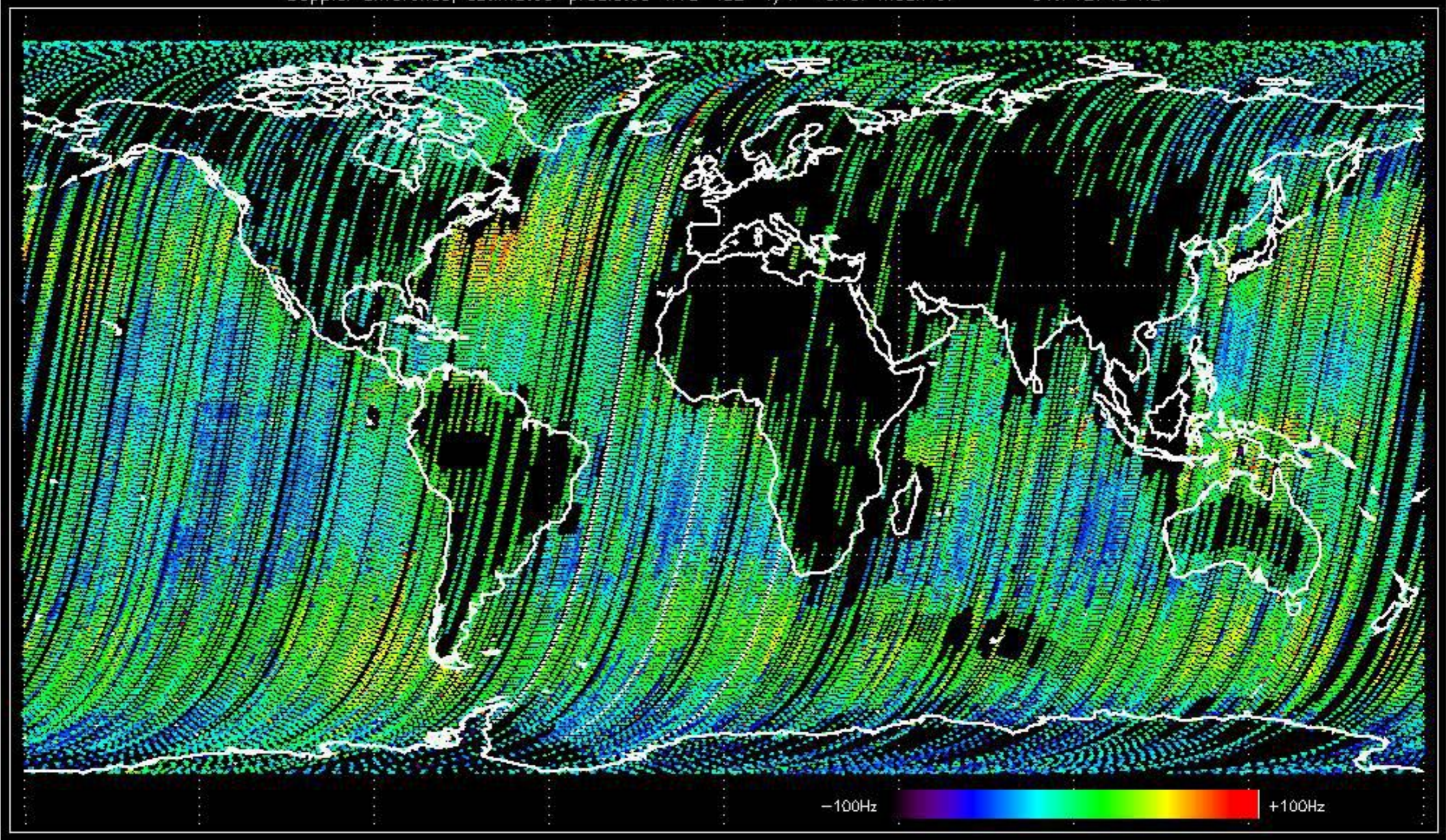




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -33.451094 Hz

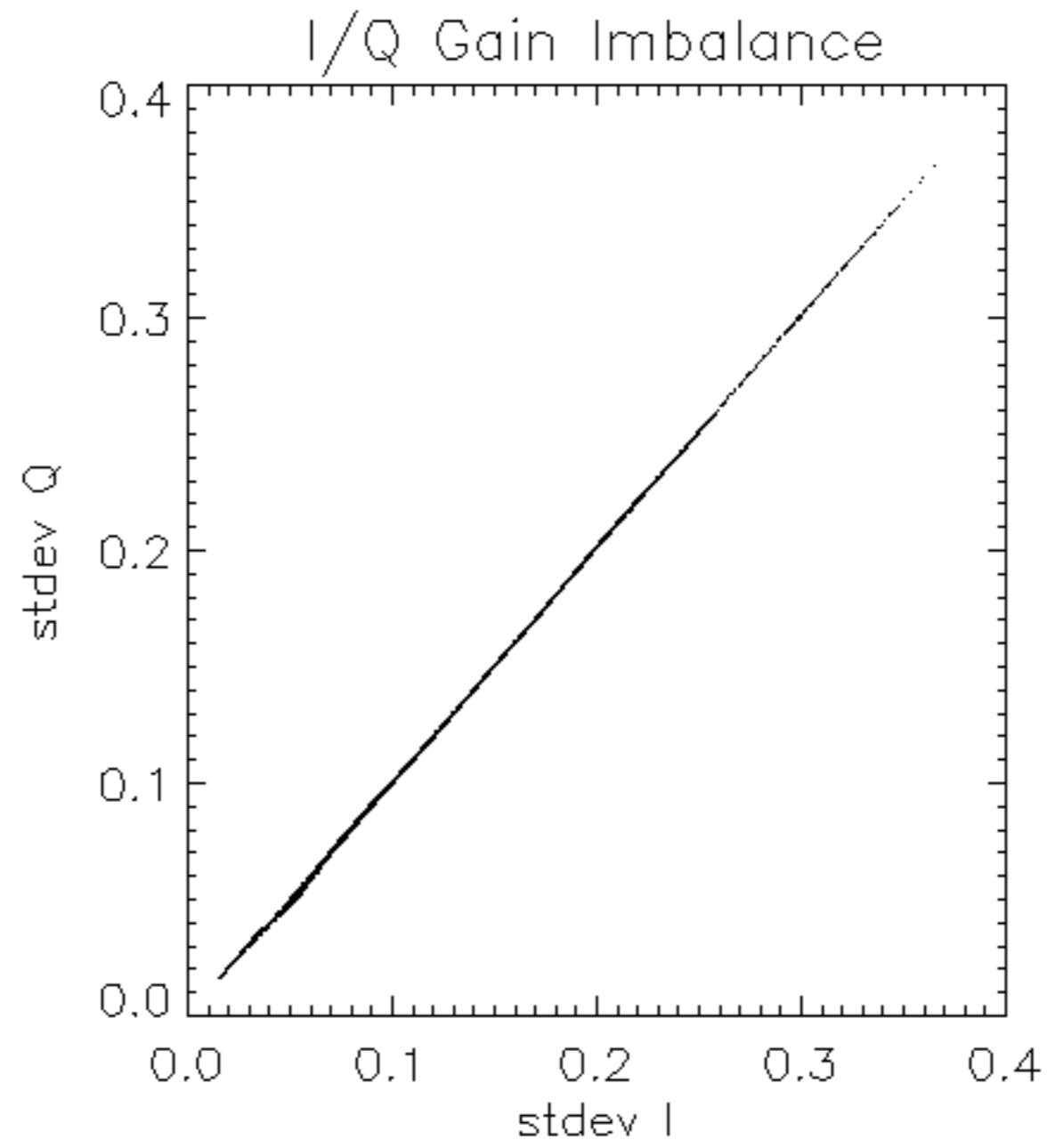


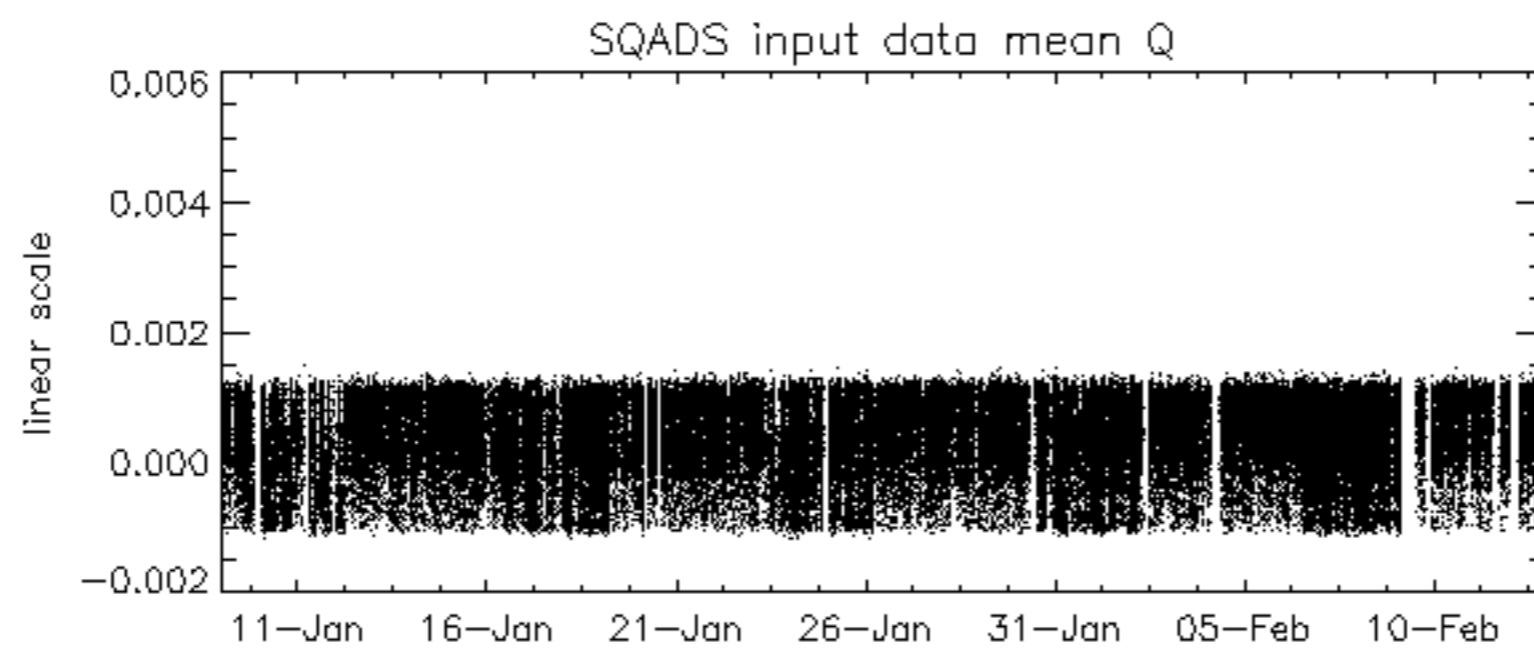
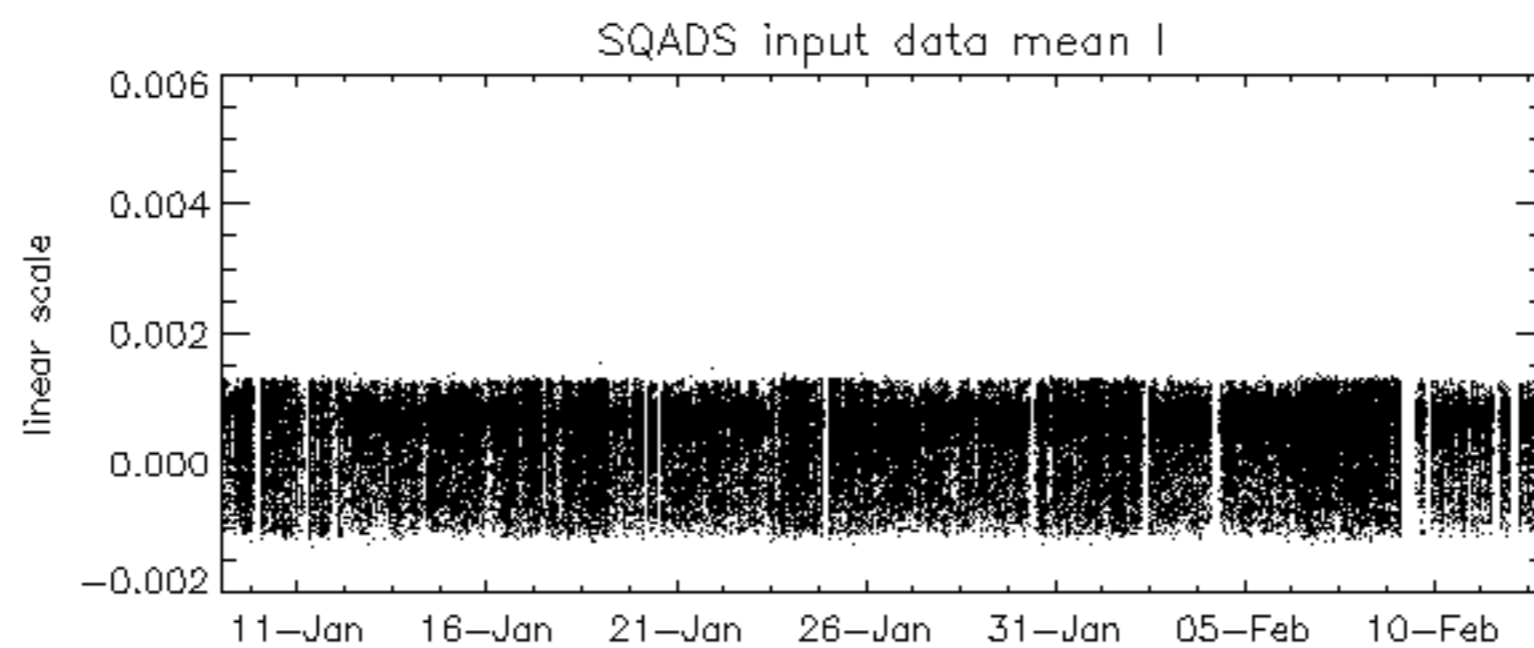
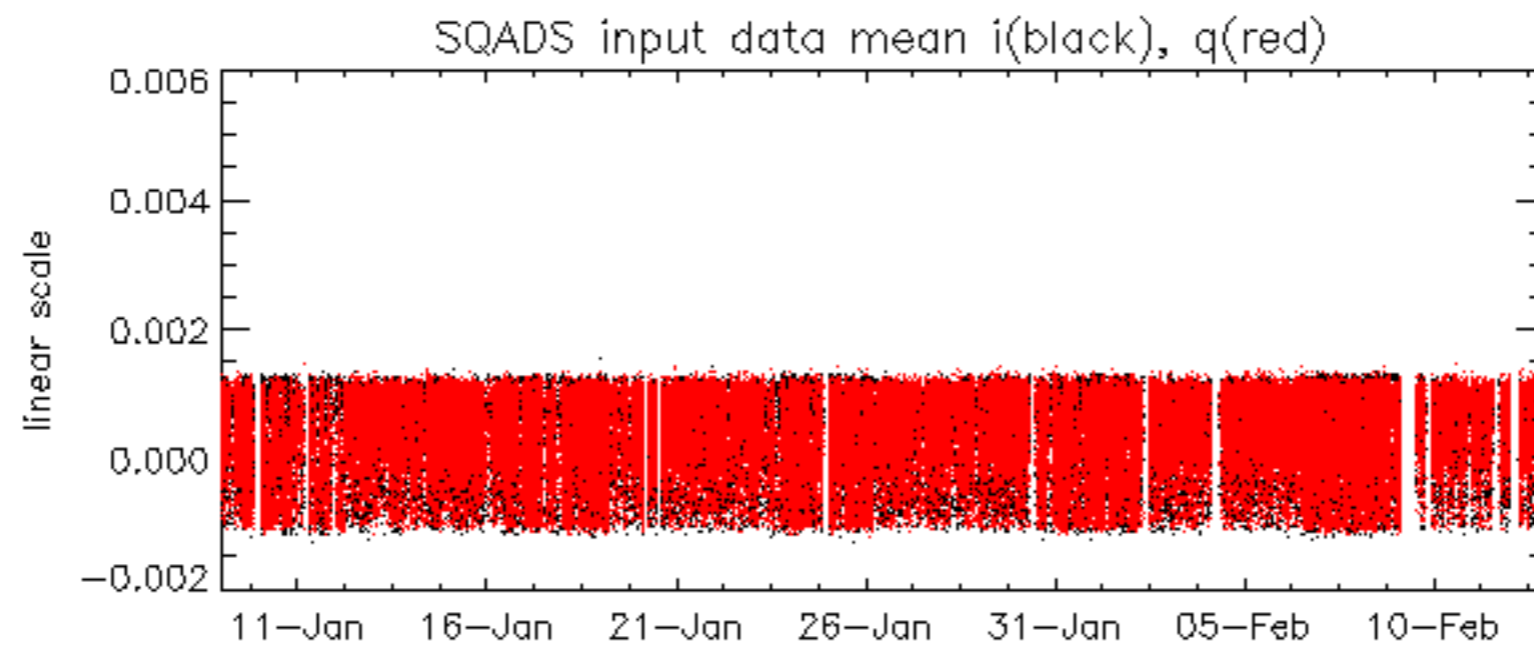
Doppler difference, estimated-predicted 'wvs' 'IS2' 'V/V' -error mean of -31.712745 Hz

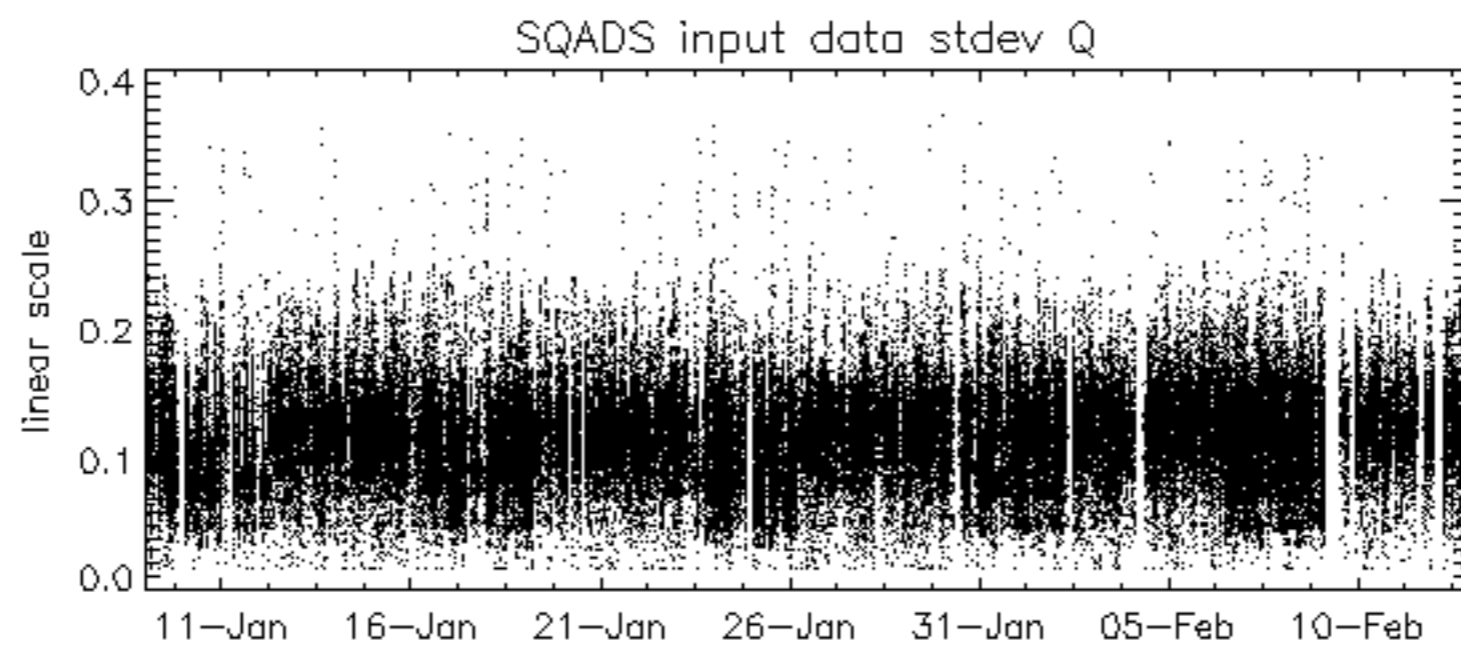
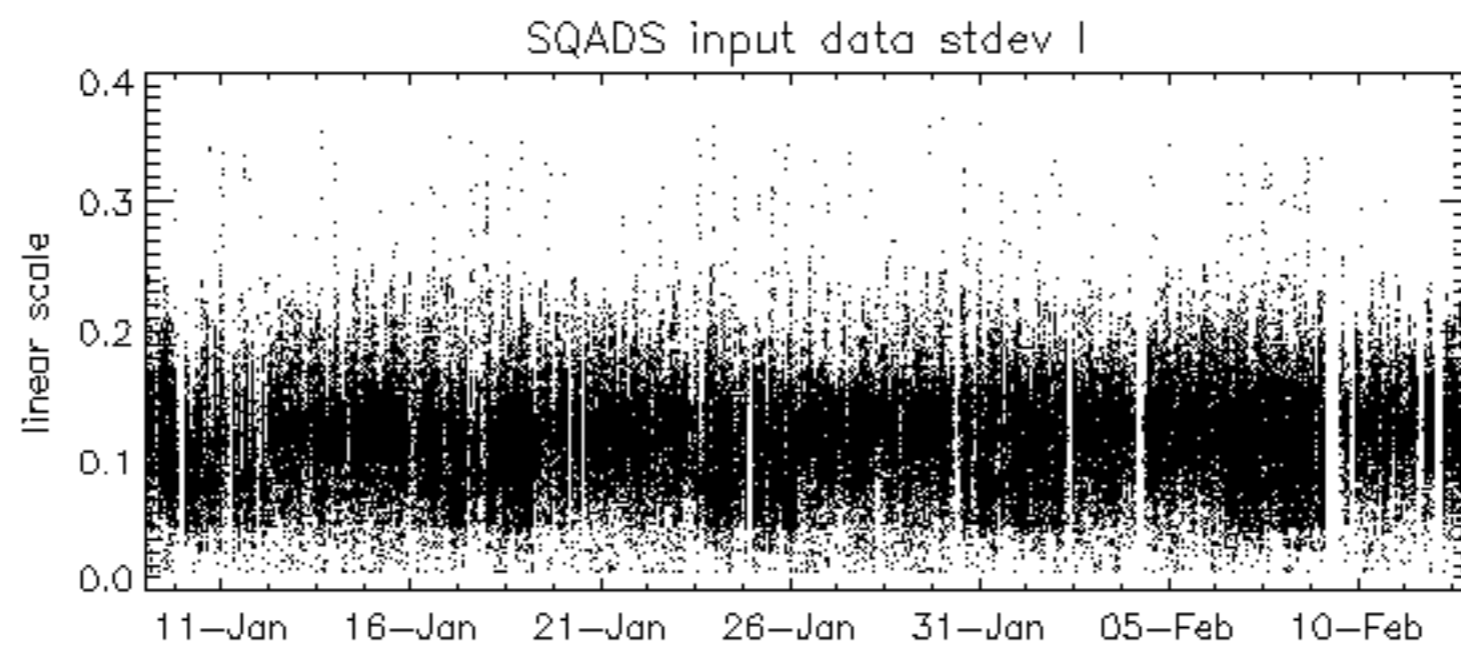
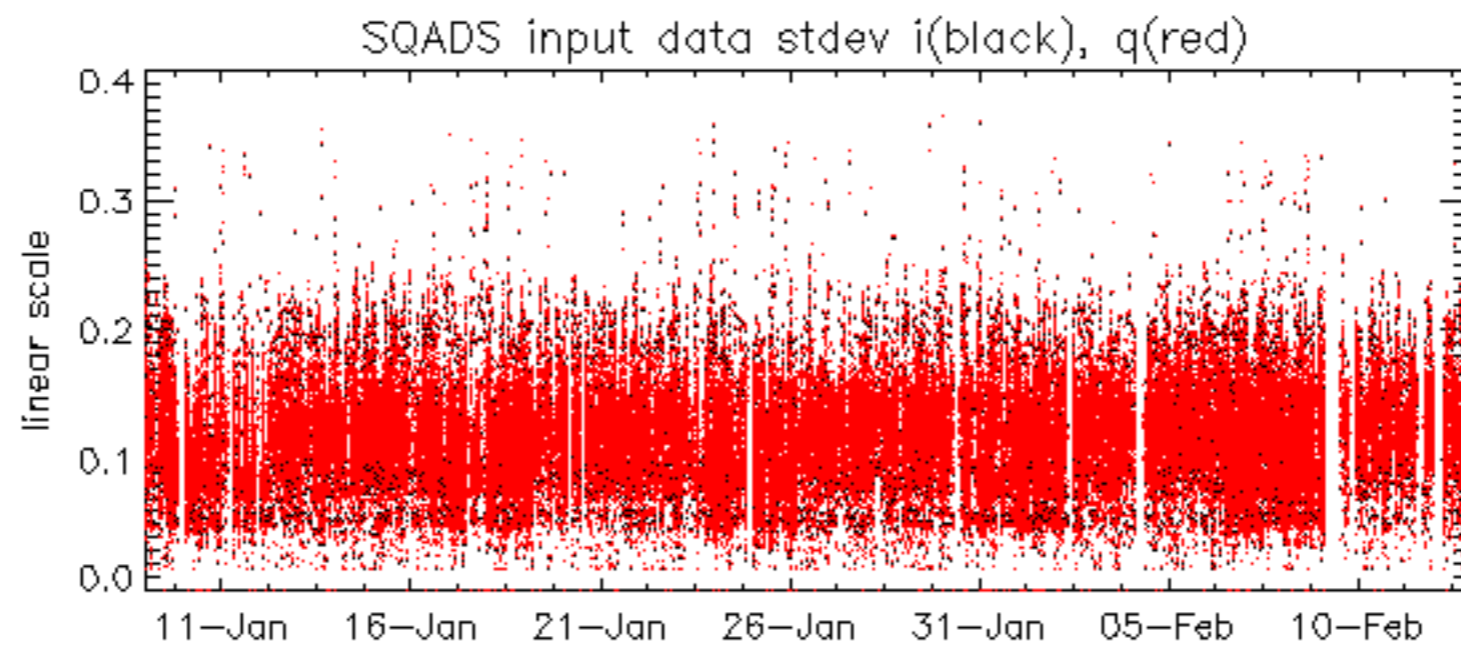


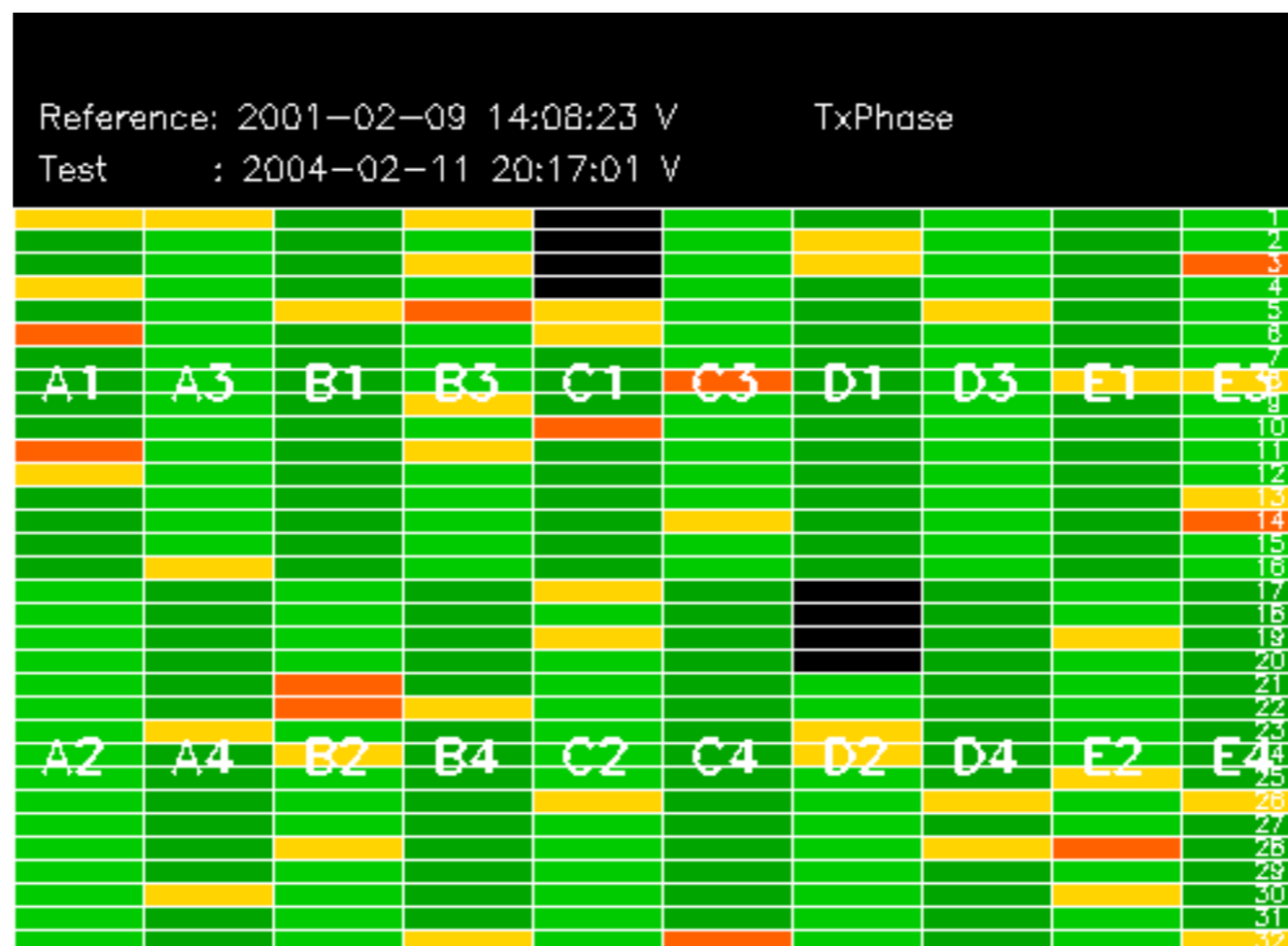
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