

REPORT OF 040121

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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 product in VV polarisation presents 319 source packets.

- ASA_MS__0PNPDK20040121_193525_000000152023_00328_09901_0157.N1
- ASA_MS__0PNPDK20040121_193645_000000152023_00328_09901_0156.N1

Polarisation	Start Time
V	20040118 193101
H	20040120 200702

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

row	stat	AveP1	AveP2	AveP3
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3	mean	-3.67756	-22.4714	-8.14687
	stdev	0.00535021	0.0708651	0.00352058
24	mean	-5.11253	-21.0835	-8.14843
	stdev	0.0159494	0.0695356	0.00346017



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.70837	-22.5328	-8.15925
	stdev	0.00719108	0.0692323	0.00337481
24	mean	-5.22499	-21.1585	-8.15925
	stdev	0.575086	0.0632682	0.00337481



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	0.000426375
	stdev	3.02080e-07
MEAN Q	mean	0.000303741
	stdev	3.63072e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
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STDEV I	mean	0.115680
	stdev	0.00140062
STDEV Q	mean	0.115921
	stdev	0.00141541



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

Preliminary report. The data is not yet controlled

6.1 - Unbiased Doppler Error

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

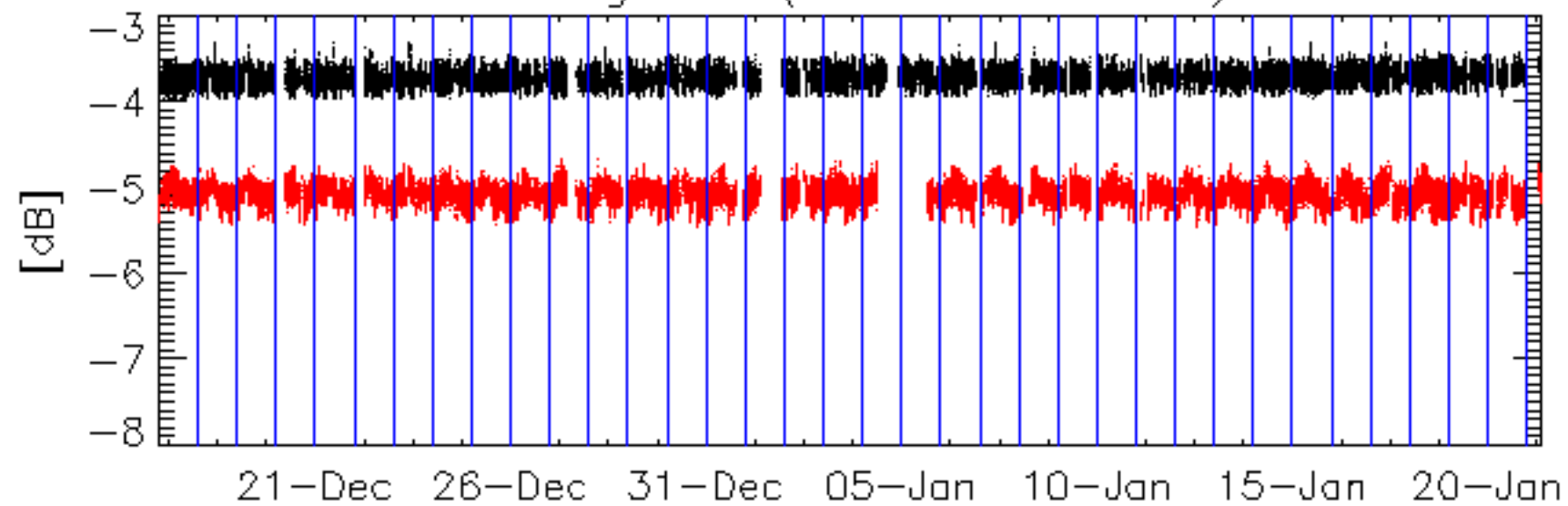
6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

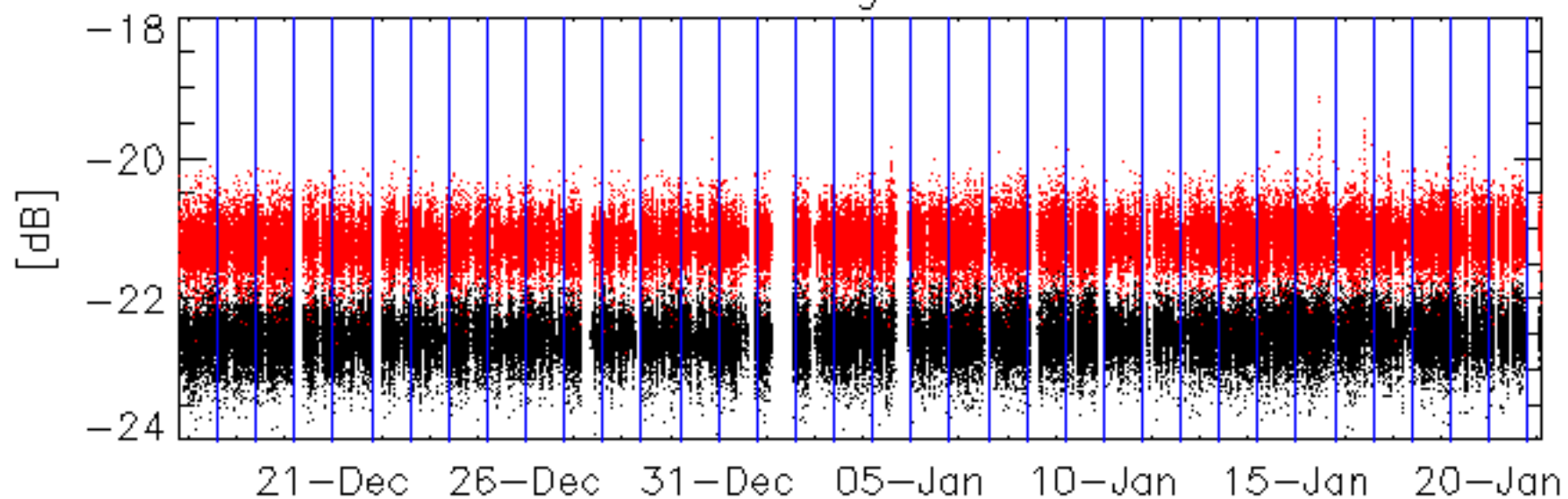
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

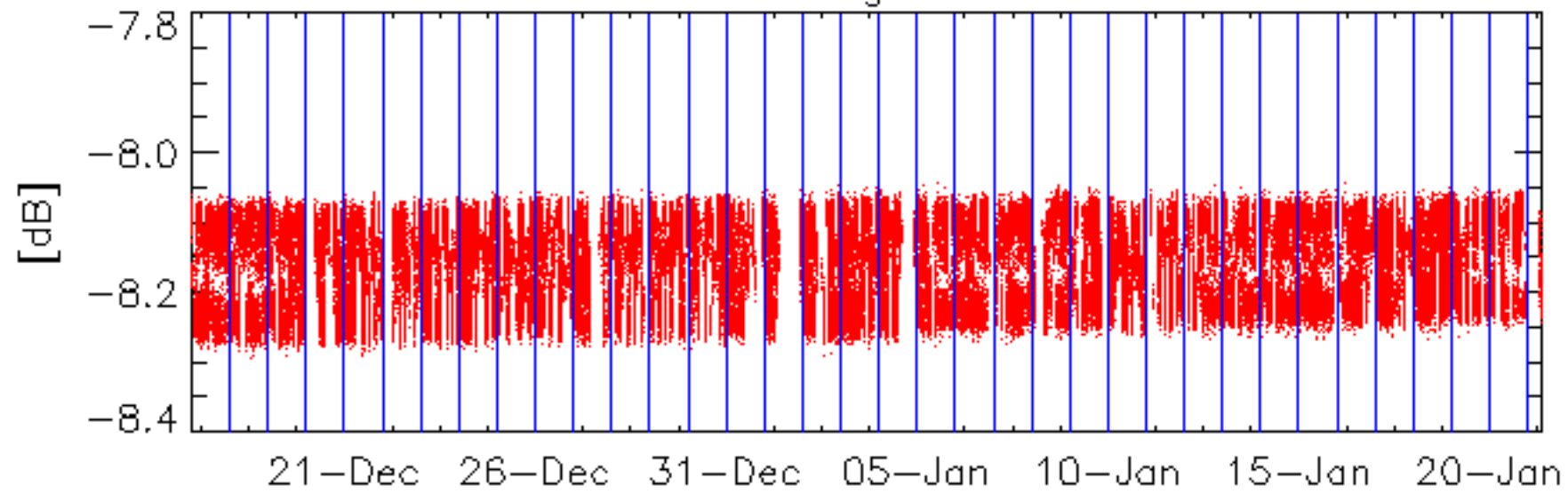

Average P1 (row 3 & row 24)



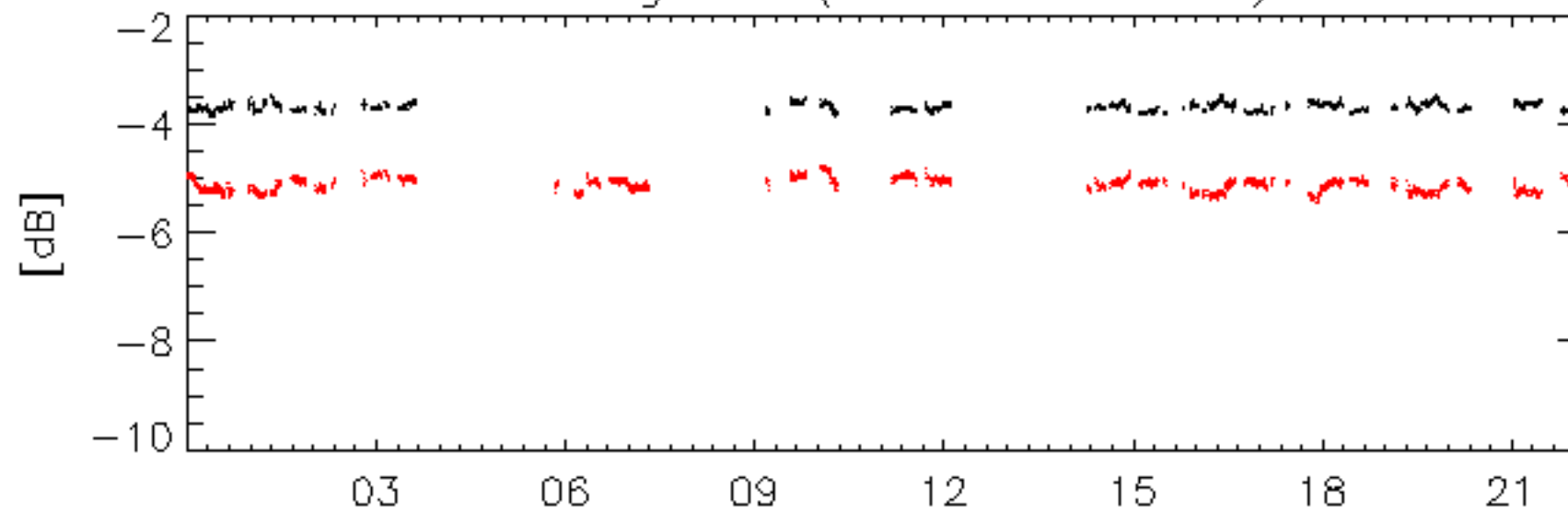
Average P2



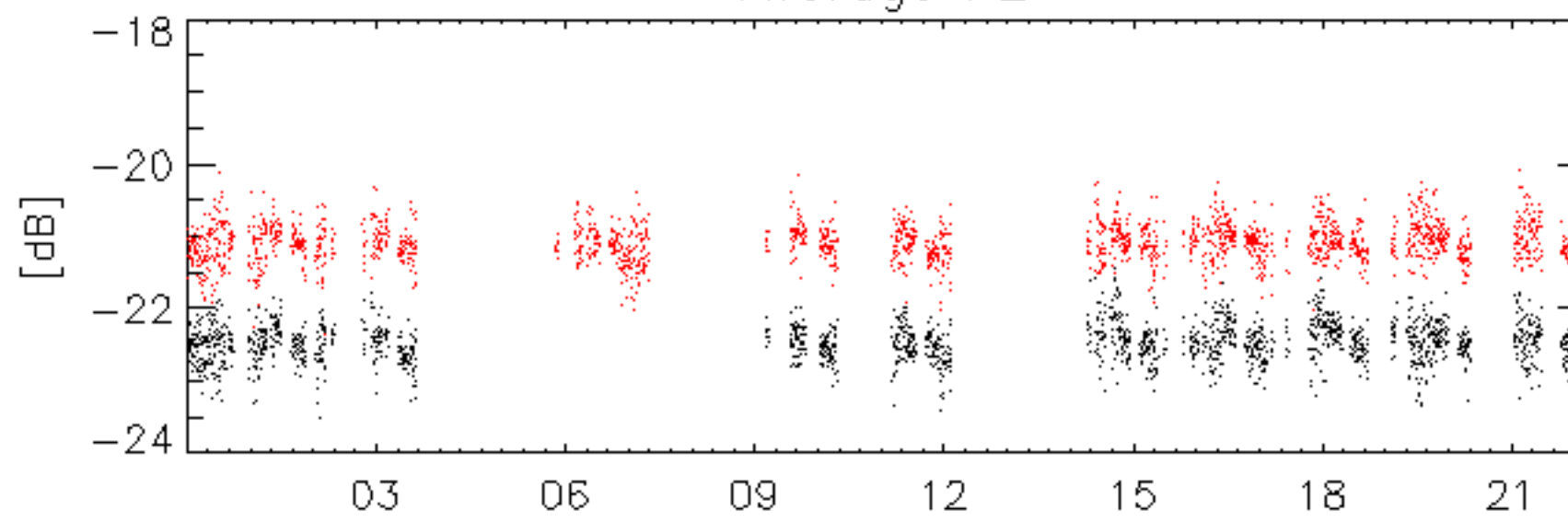
Average P3



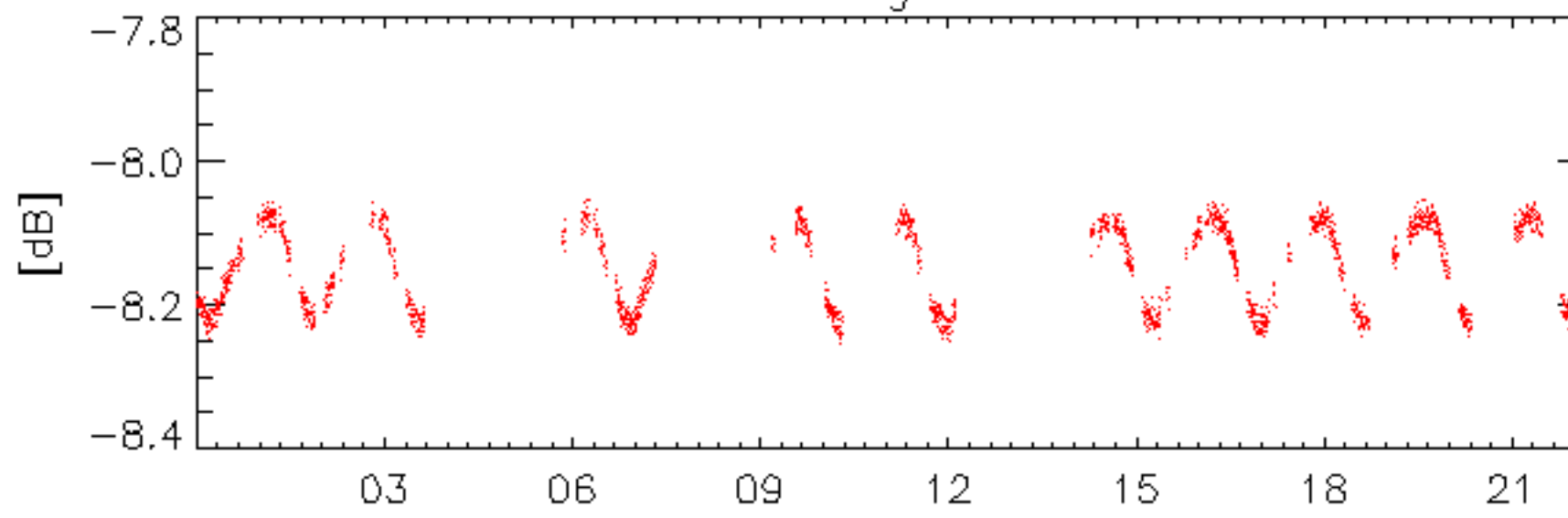
Average P1 (row 3 & row 24)



20-Jan
Average P2



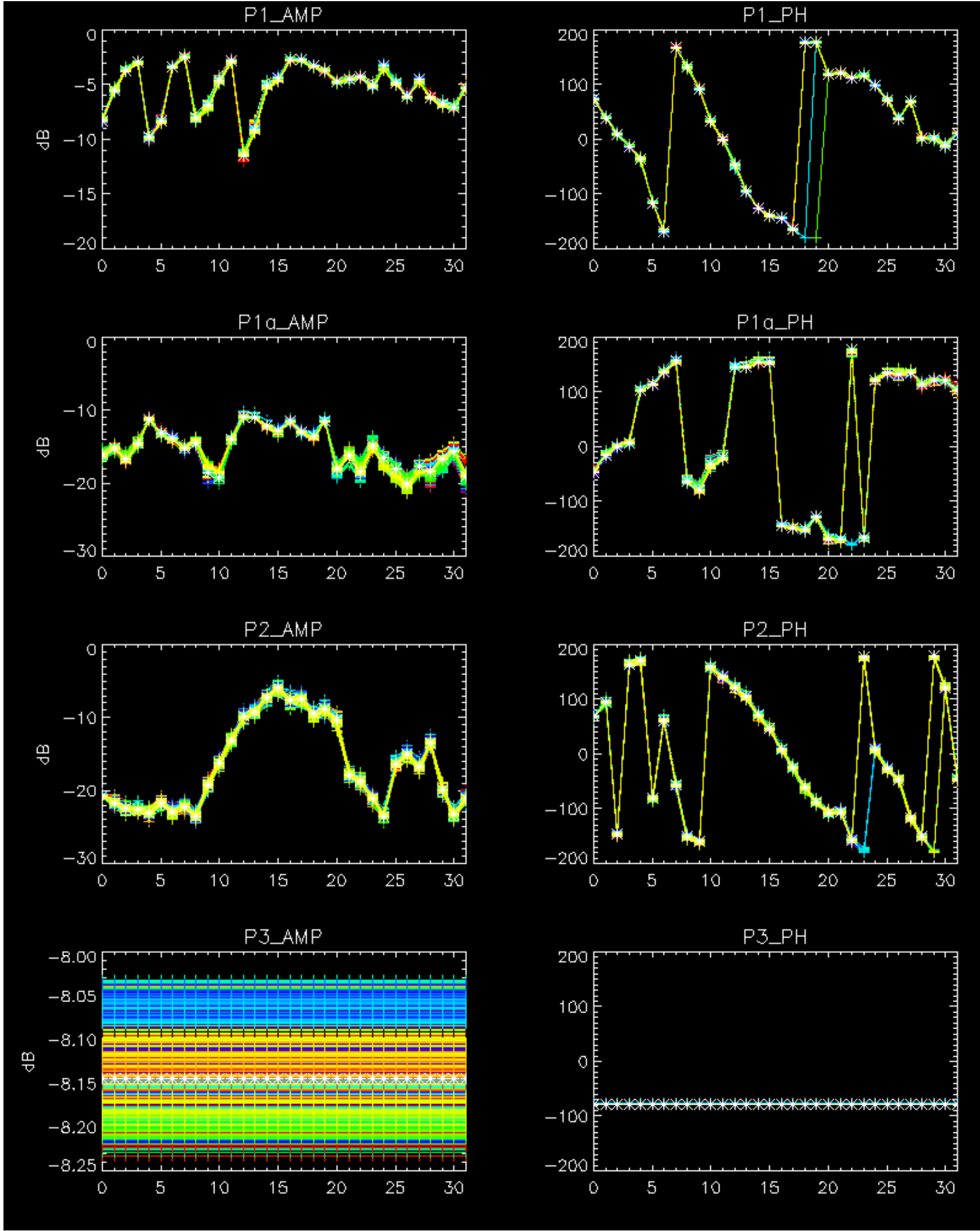
20-Jan
Average P3



20-Jan

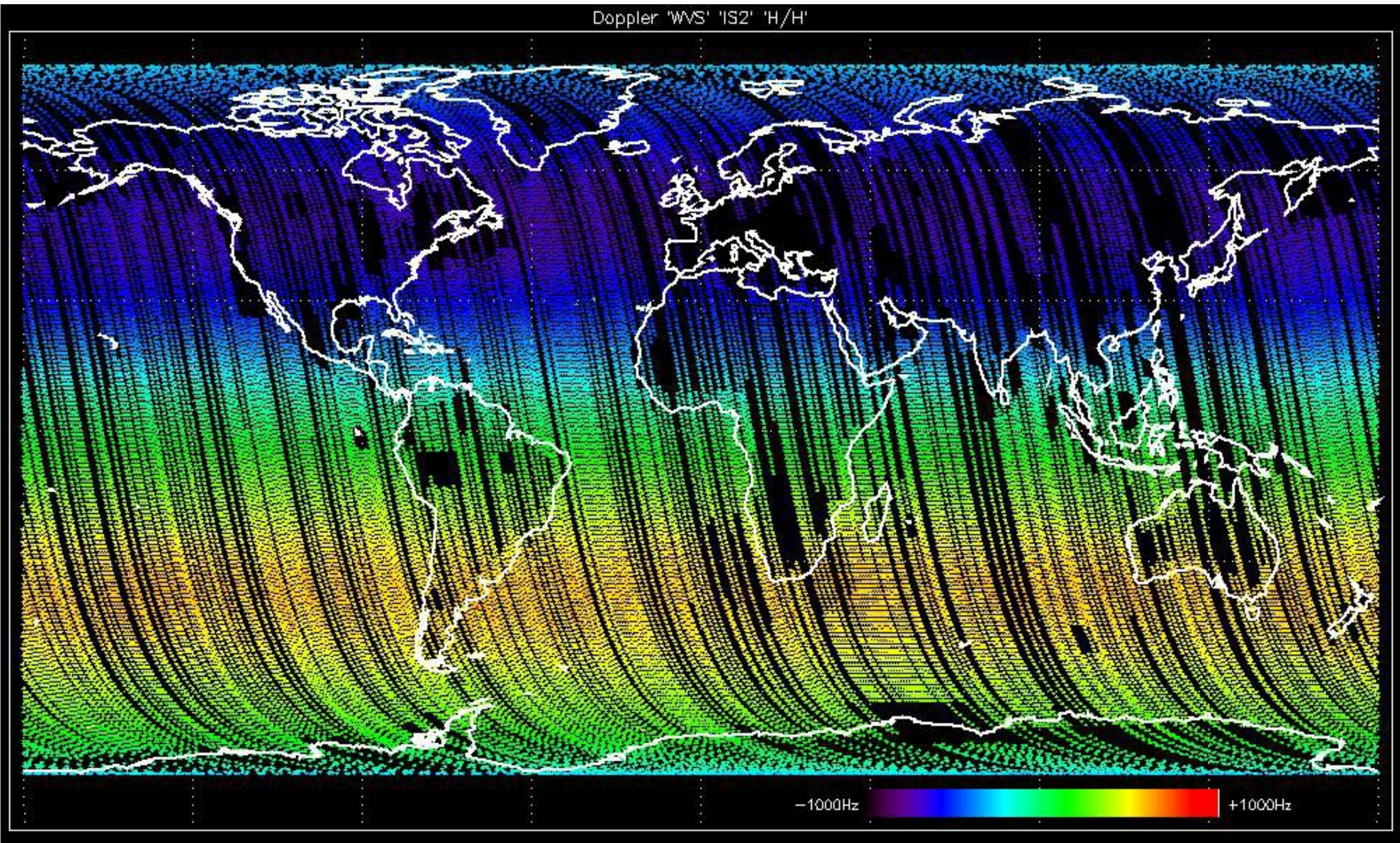
No anomalies observed on available browse products

No anomalies observed.

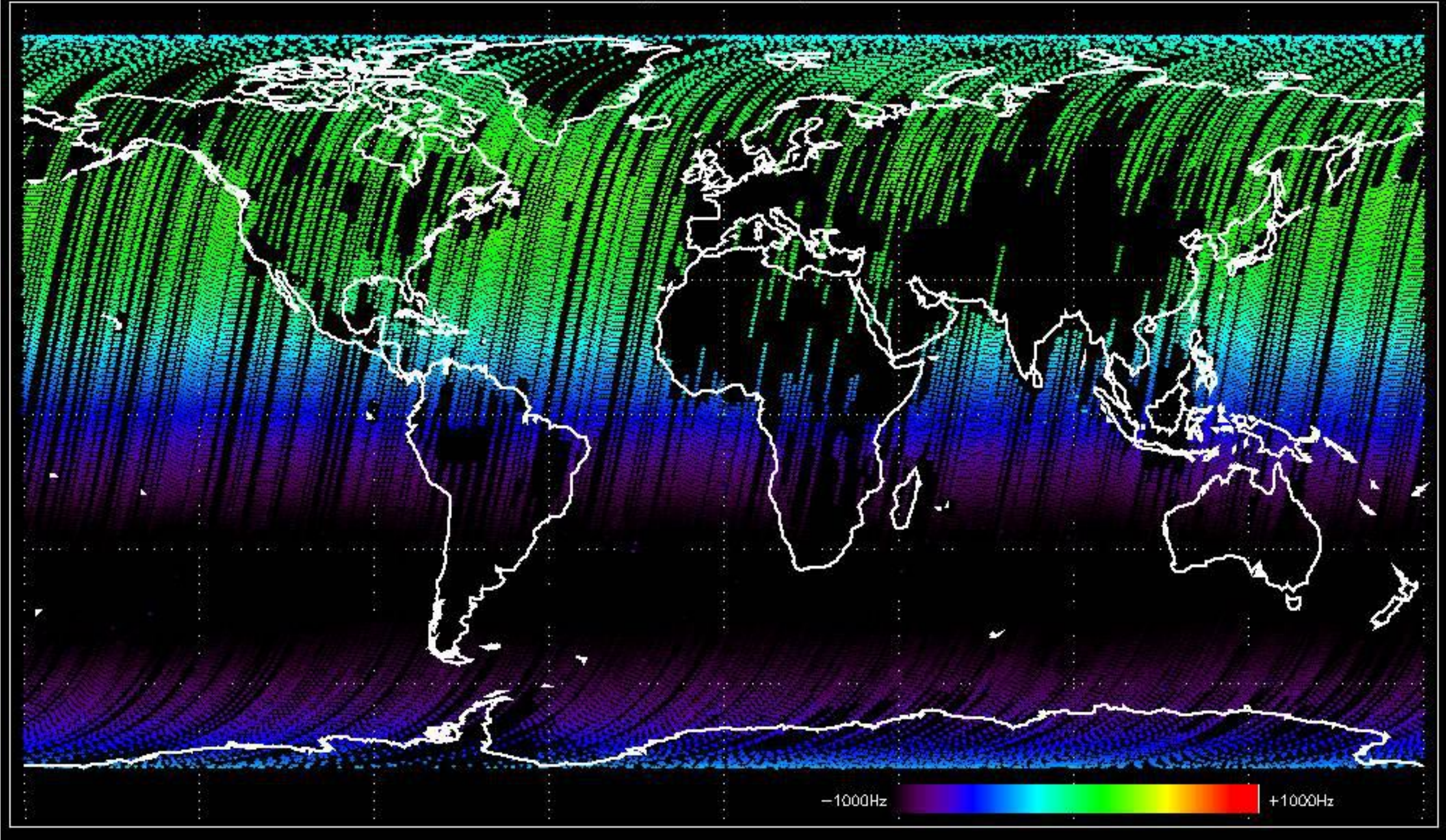


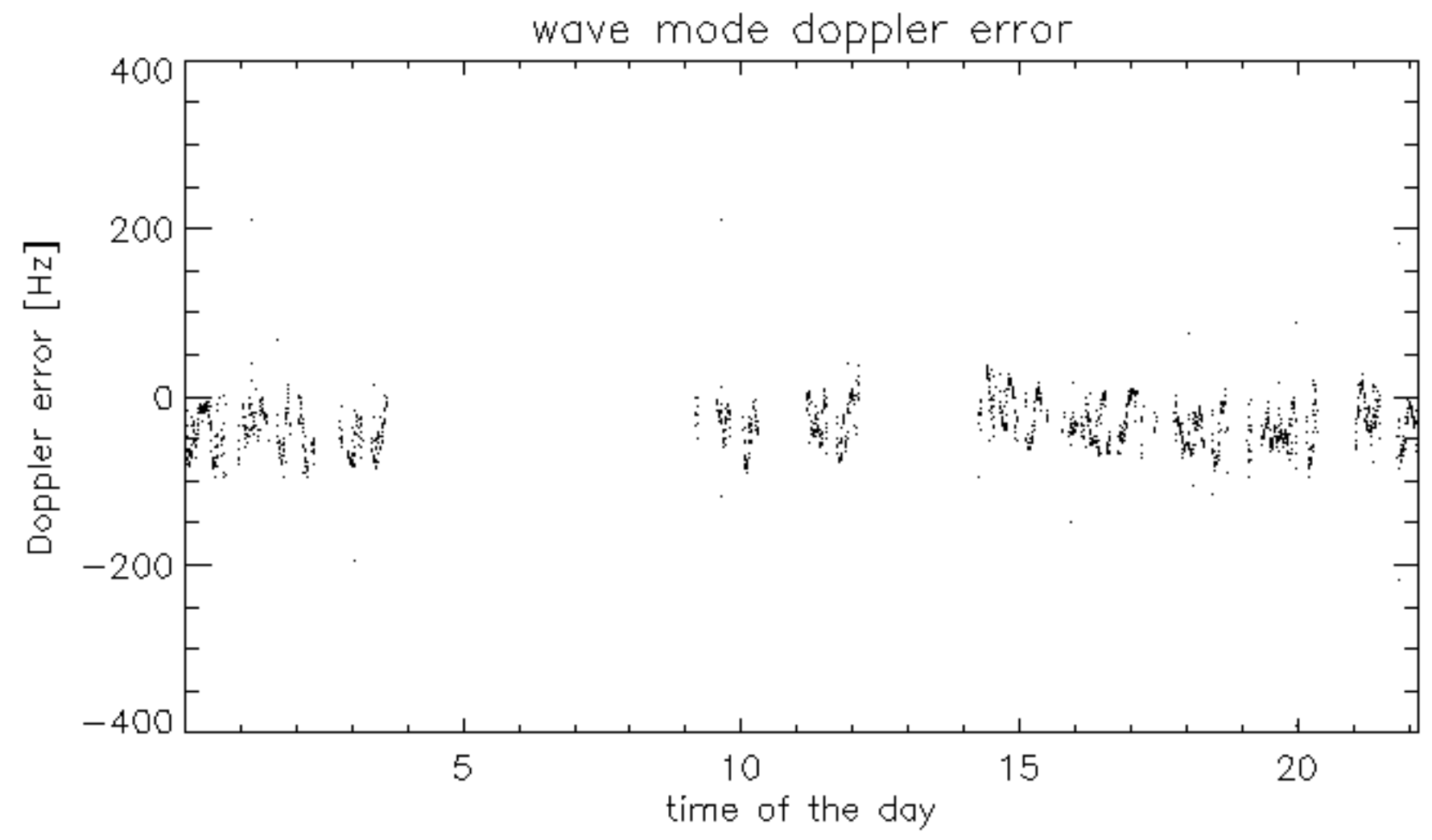
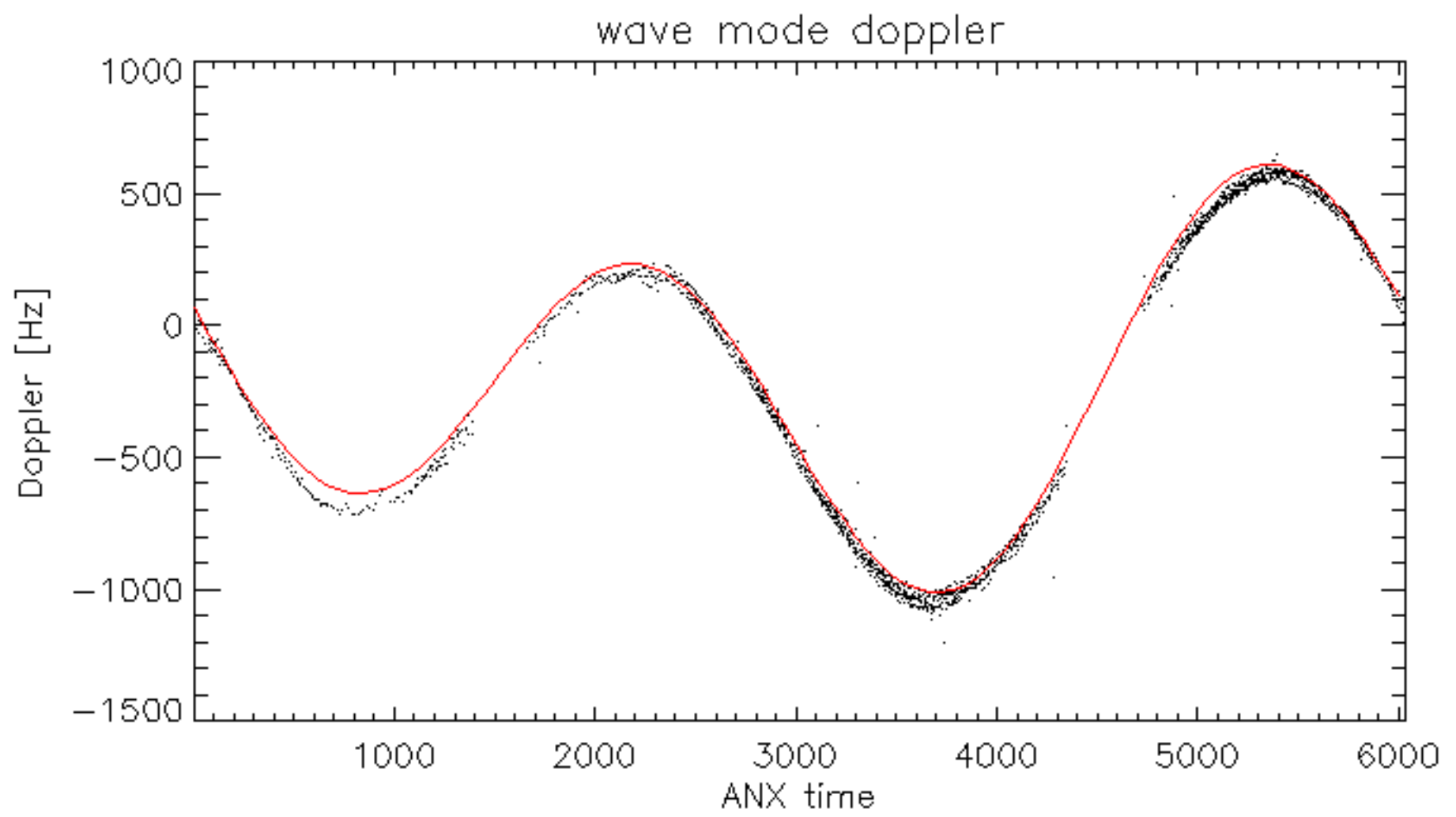
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- Stable raw data statistics.
- Nominal Doppler behavior.

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

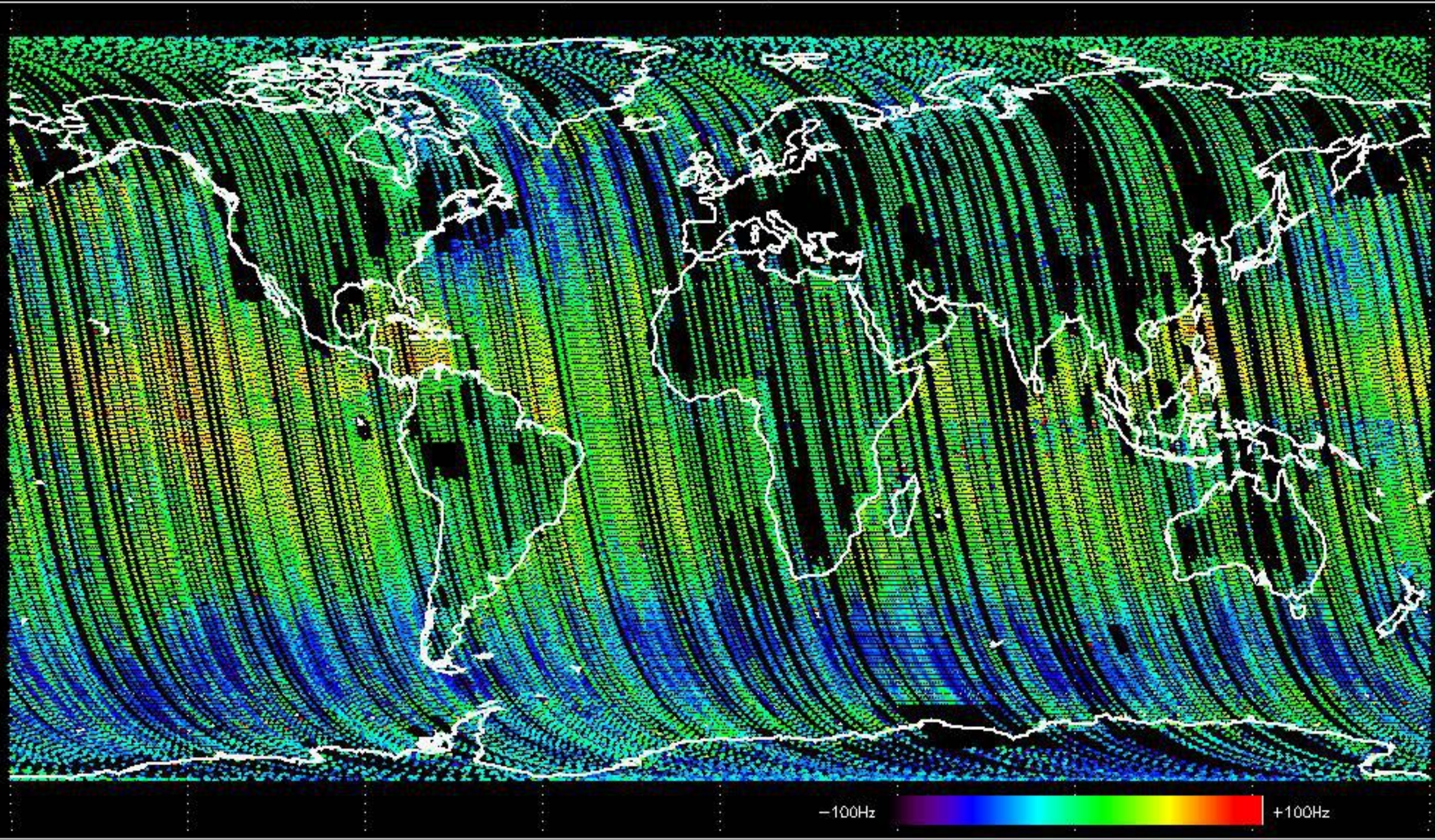


Doppler 'WVS' 'IS2' 'V/V'

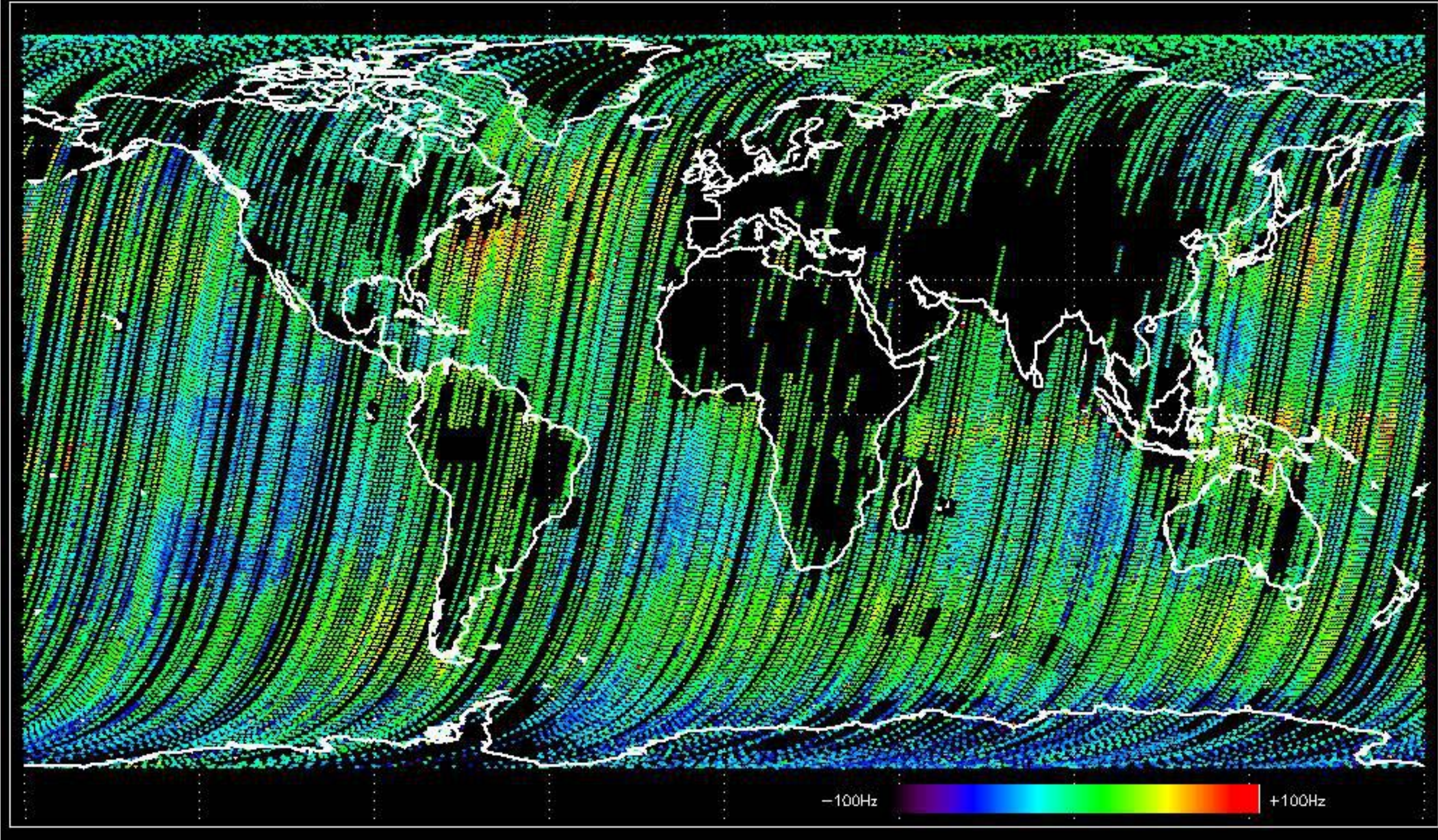




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -35.289840 Hz



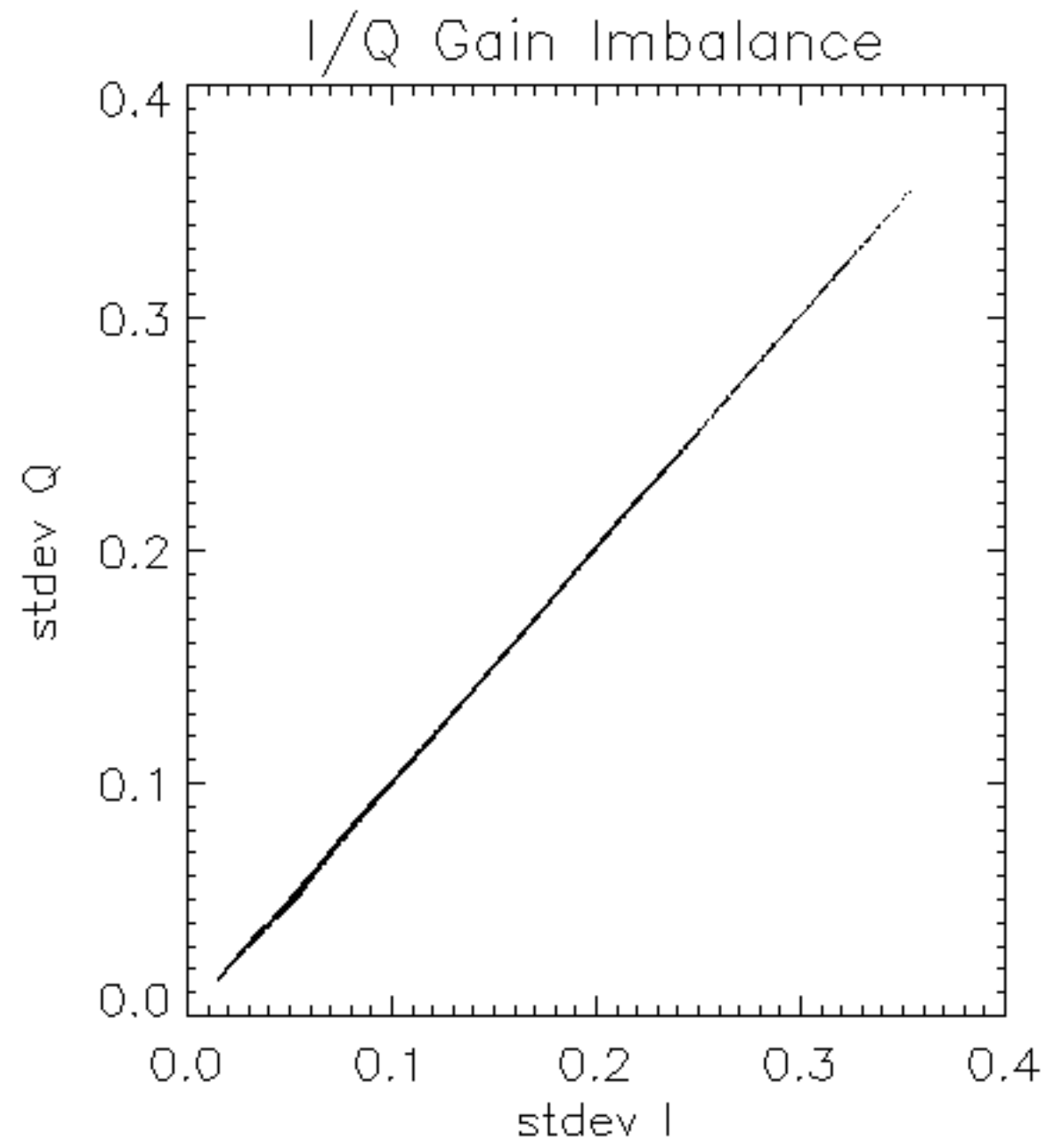
Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -33.723223 Hz

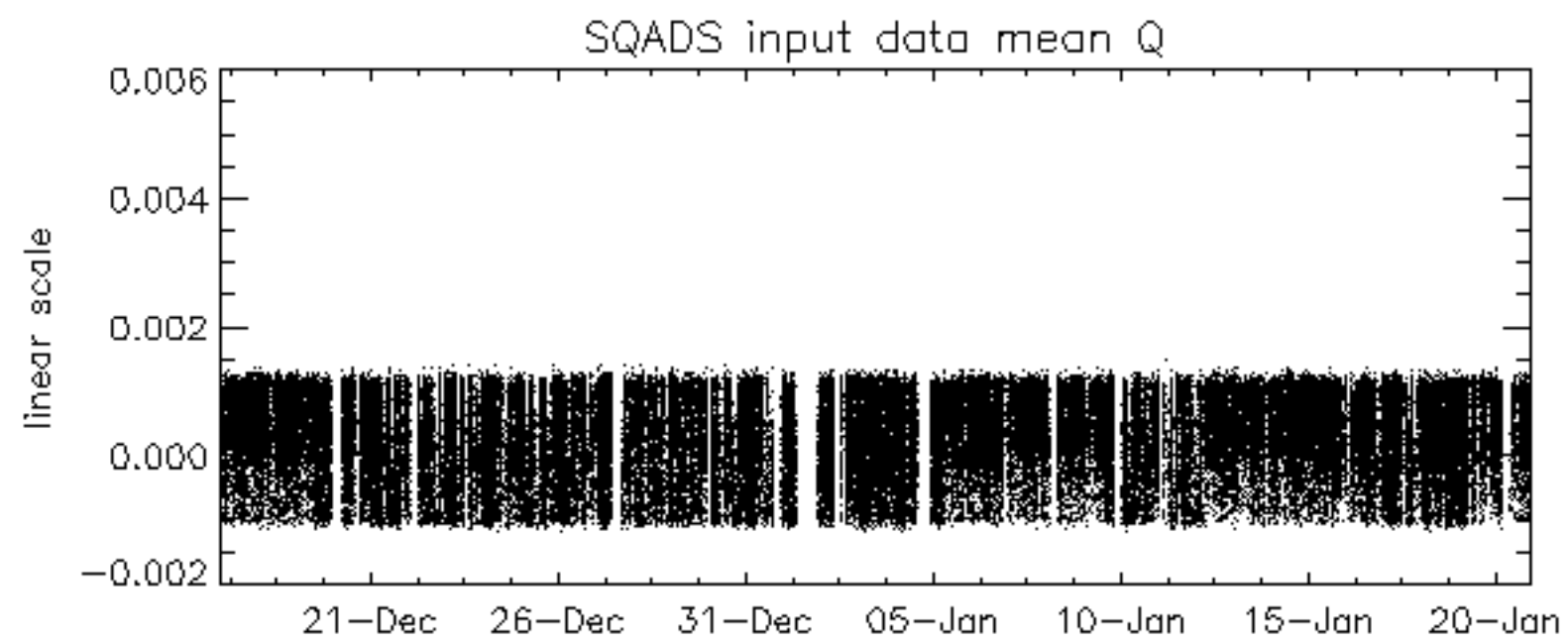
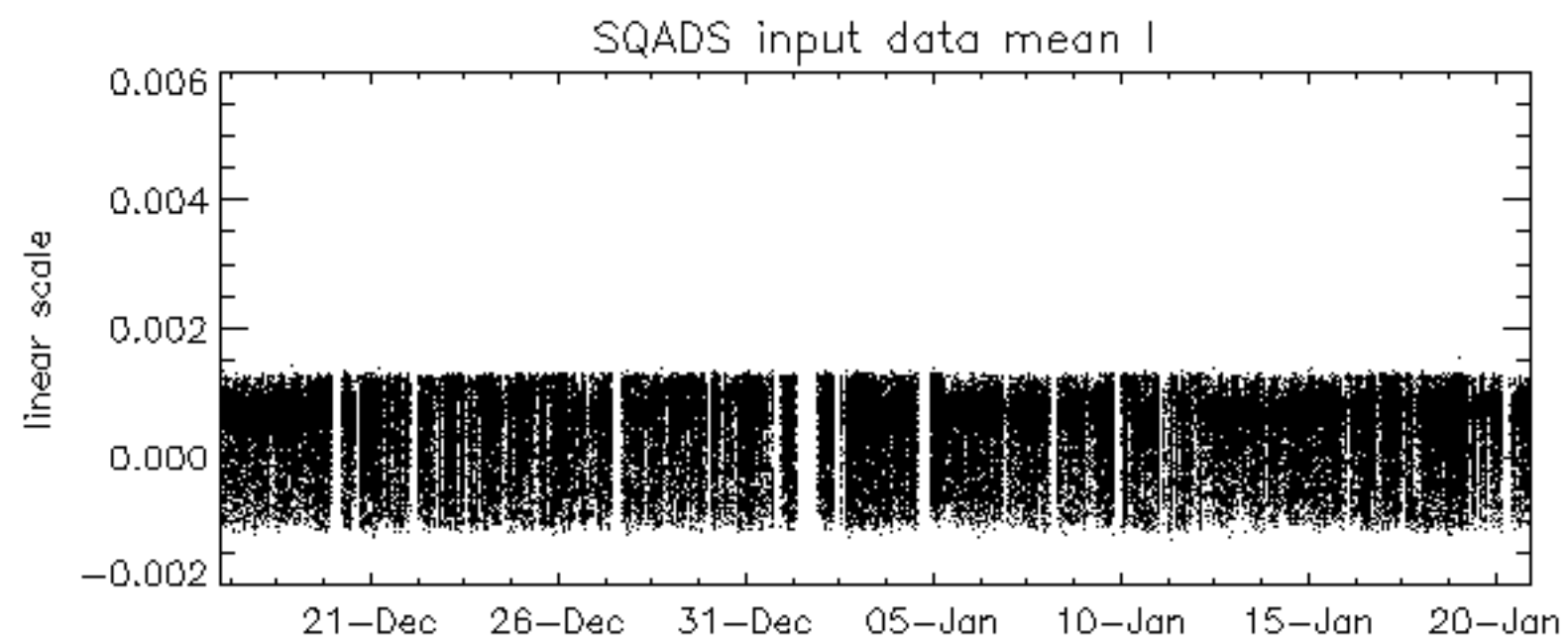
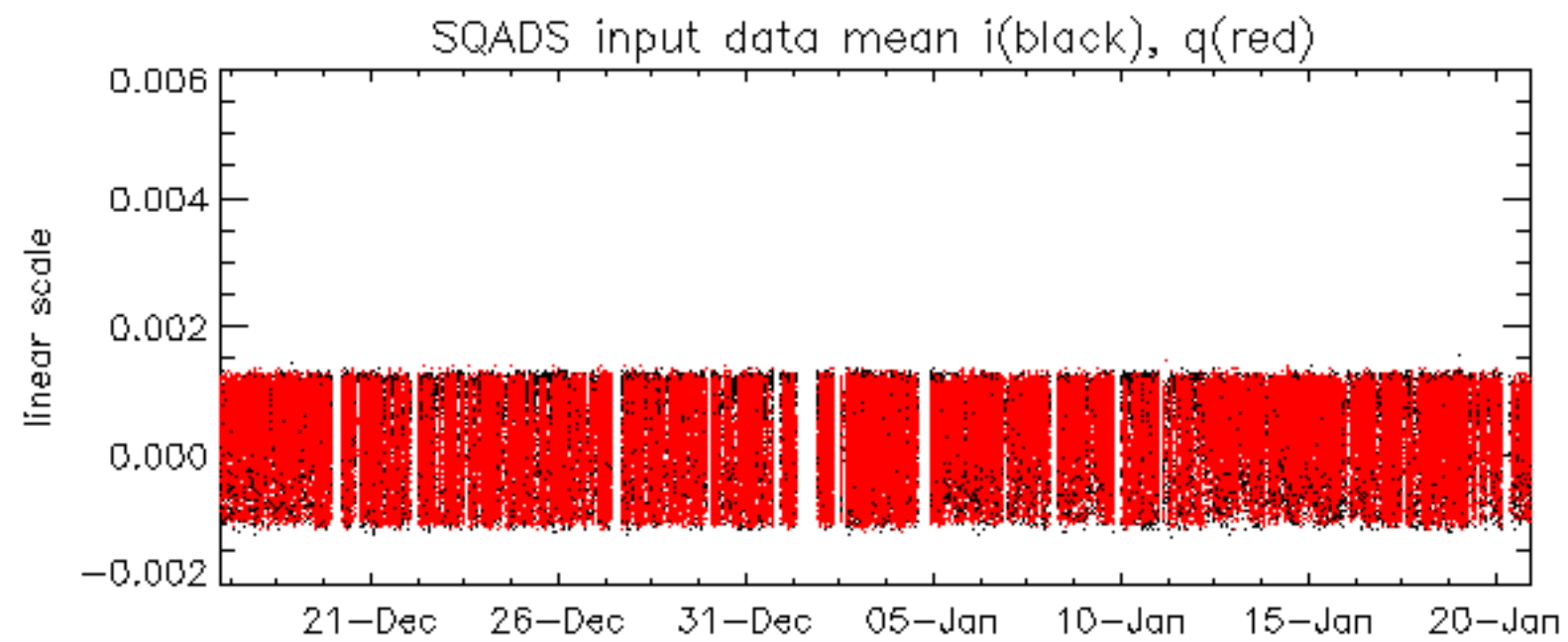


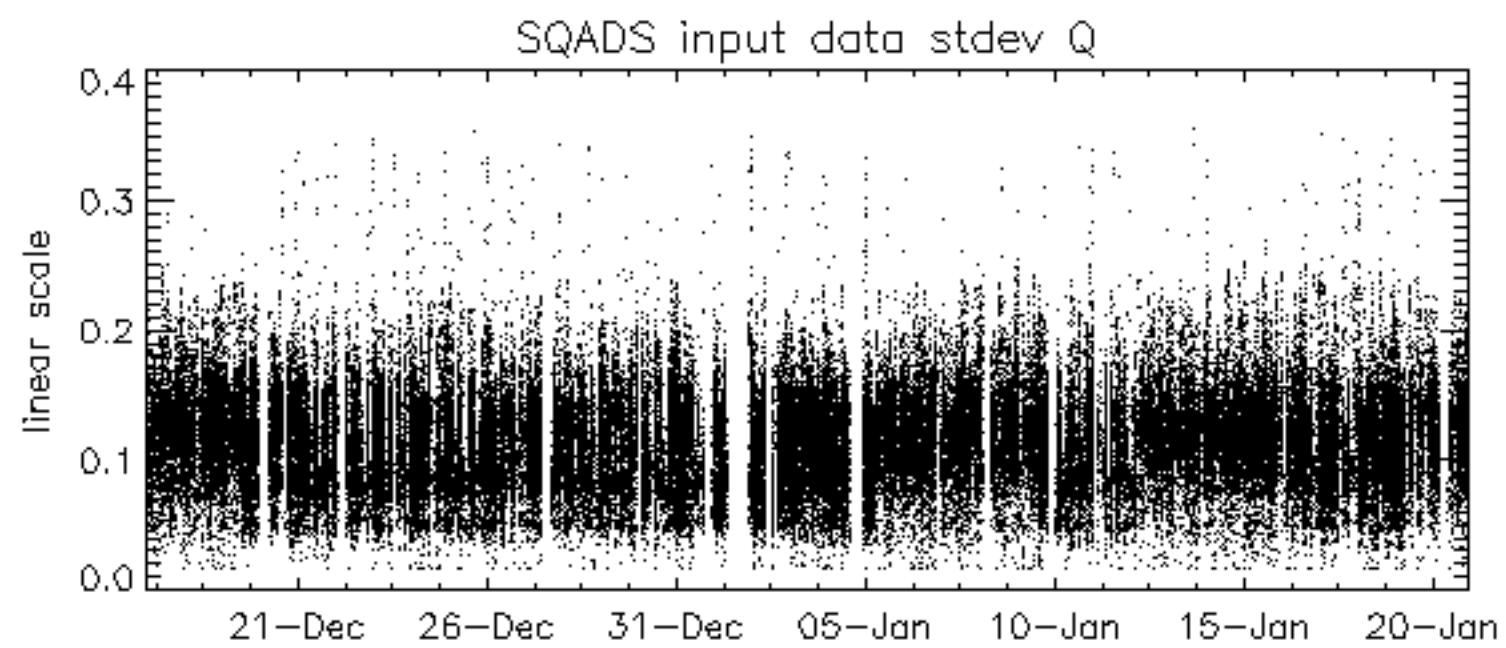
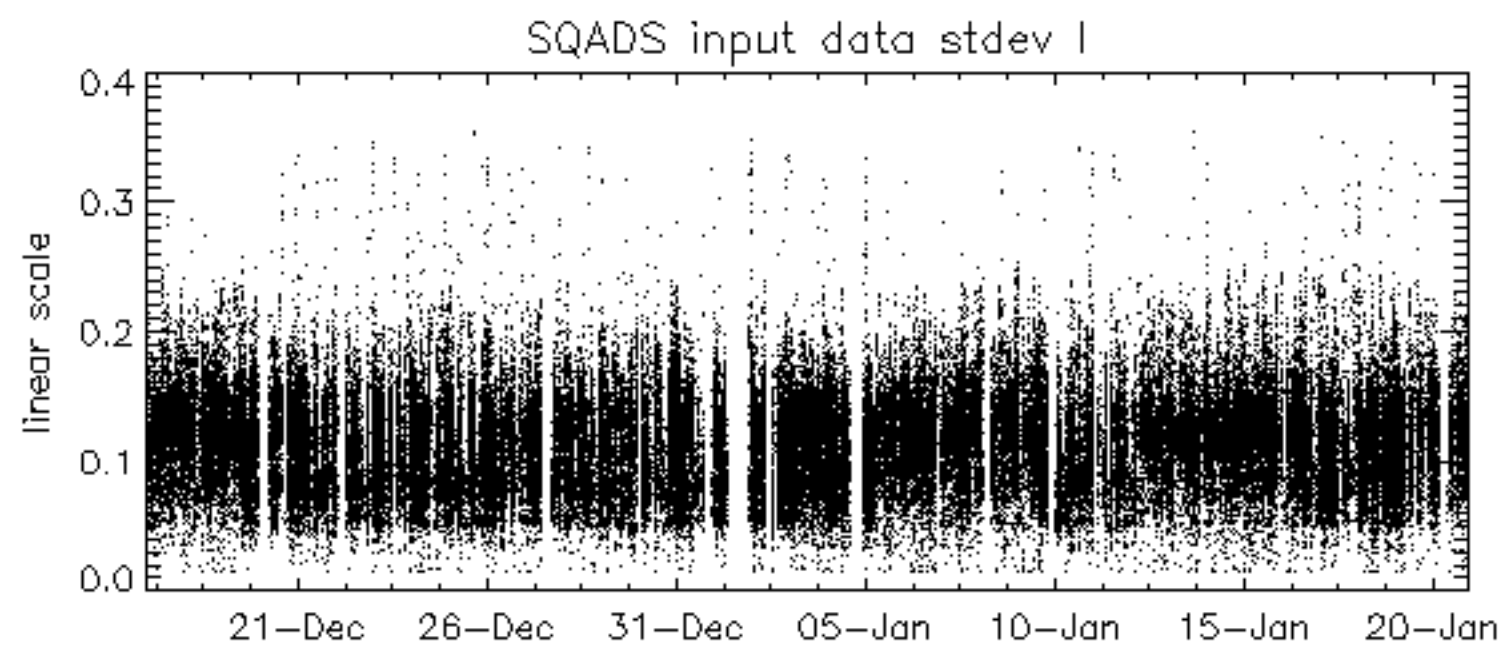
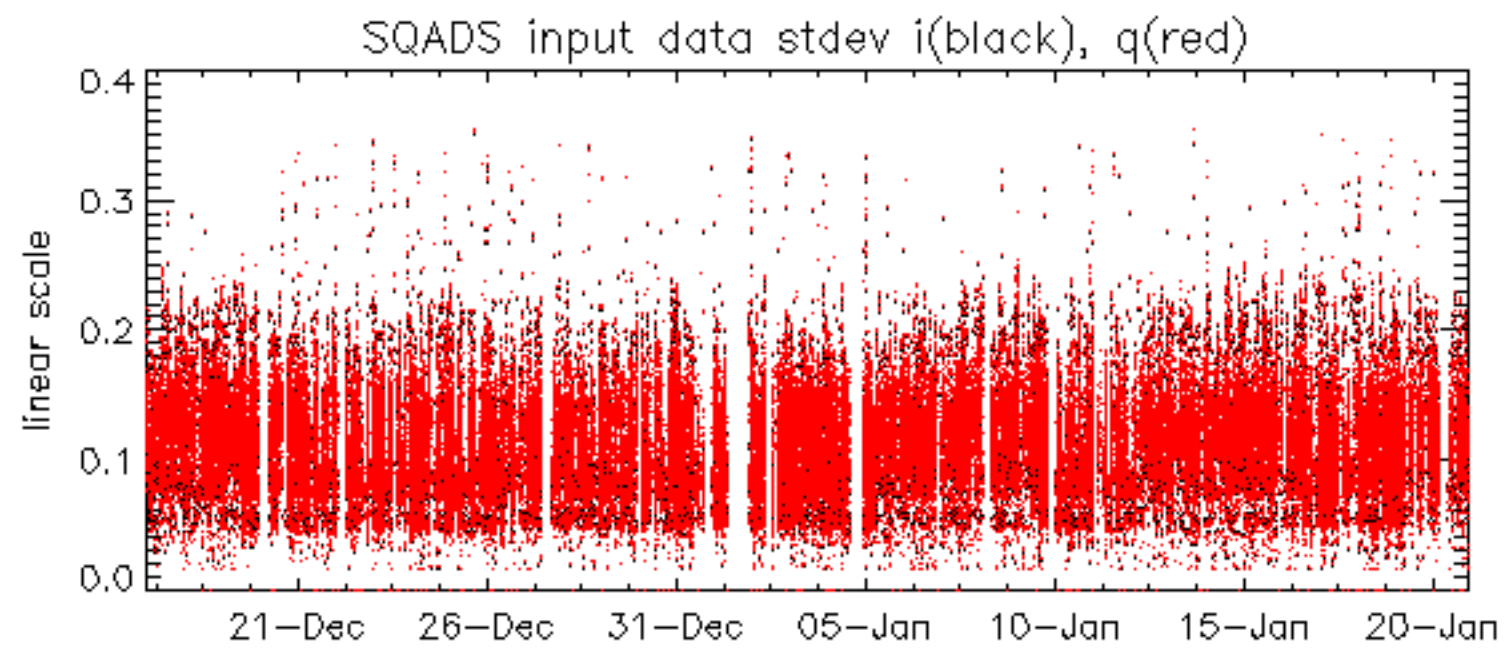
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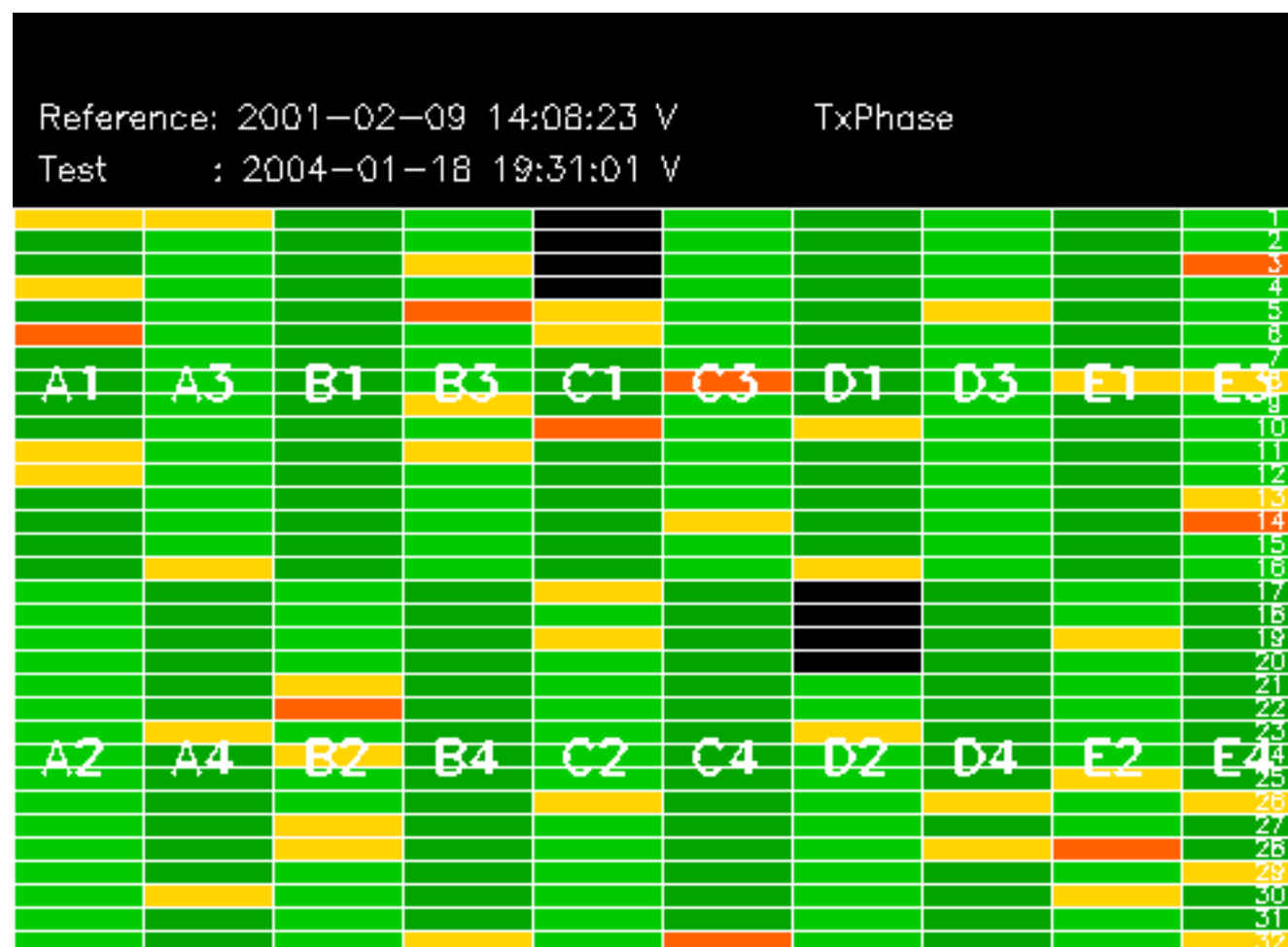
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No anomalies observed.









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