

REPORT OF 031110

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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.

No anomalies observed on available MS products:









- ASA_MS__0PNPDK20031109_193301_000000152021_00285_08856_0009.N1
- ASA_MS__0PNPDK20031109_193421_000000152021_00285_08856_0008.N1

Stabilization of the B3-3 module drift in transmit phase on H polarisation as shown below.











Polarisation	Start Time
V	20031109 193421
H	20031109 193301

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
3	mean	-3.76622	-22.5652	-8.16066
	stdev	0.00572453	0.0719667	0.00269913
24	mean	-5.12113	-21.2508	-8.16066
	stdev	0.0132103	0.0677388	0.00269913



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.78618	-22.5479	-8.14985
	stdev	0.00554160	0.0644132	0.00271075
24	mean	-5.34526	-21.2498	-8.14985
	stdev	0.892571	0.0609776	0.00271075



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	0.000379817
	stdev	3.54217e-07
MEAN Q	mean	0.000271534
	stdev	3.42179e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.114085
	stdev	0.00146643
STDEV Q	mean	0.114329
	stdev	0.00148462



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

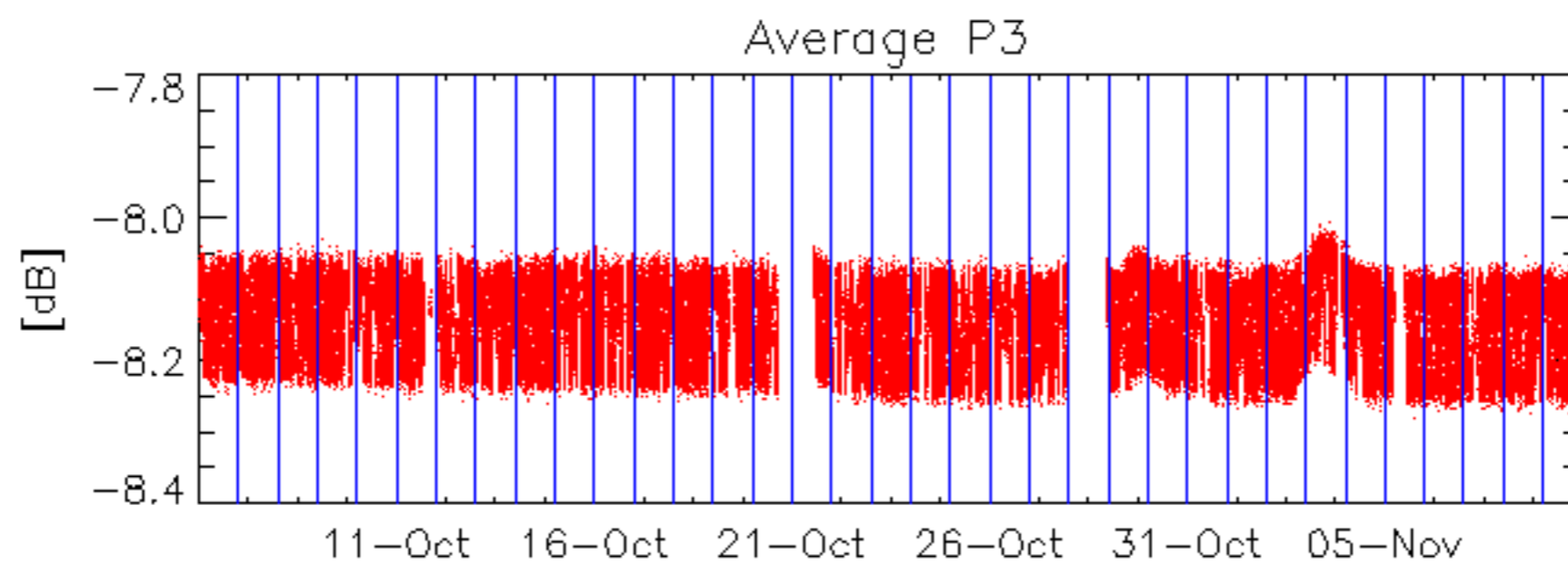
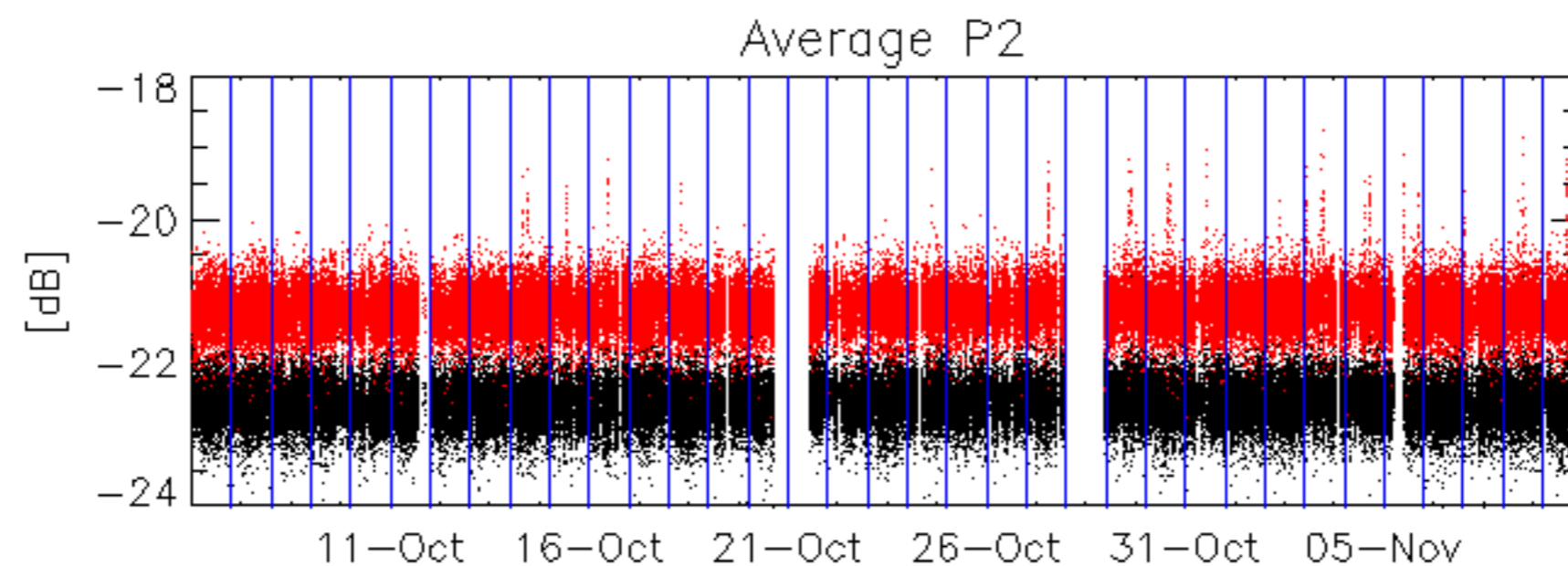
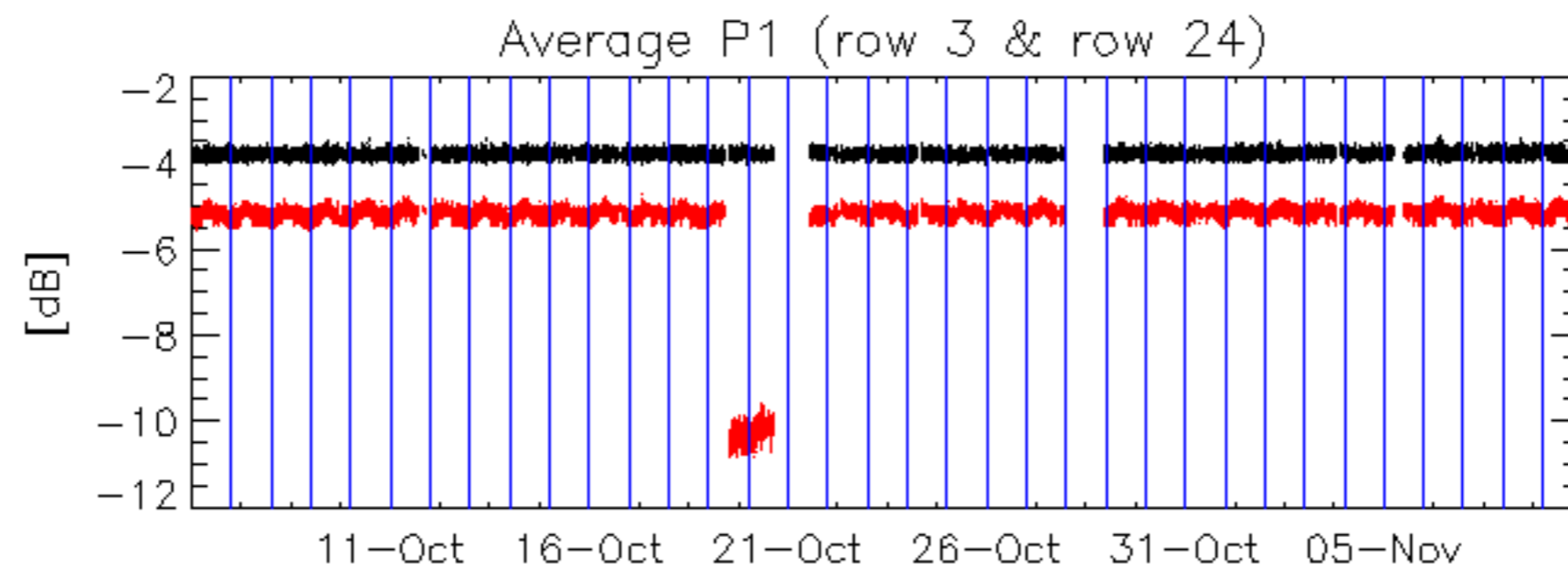
6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

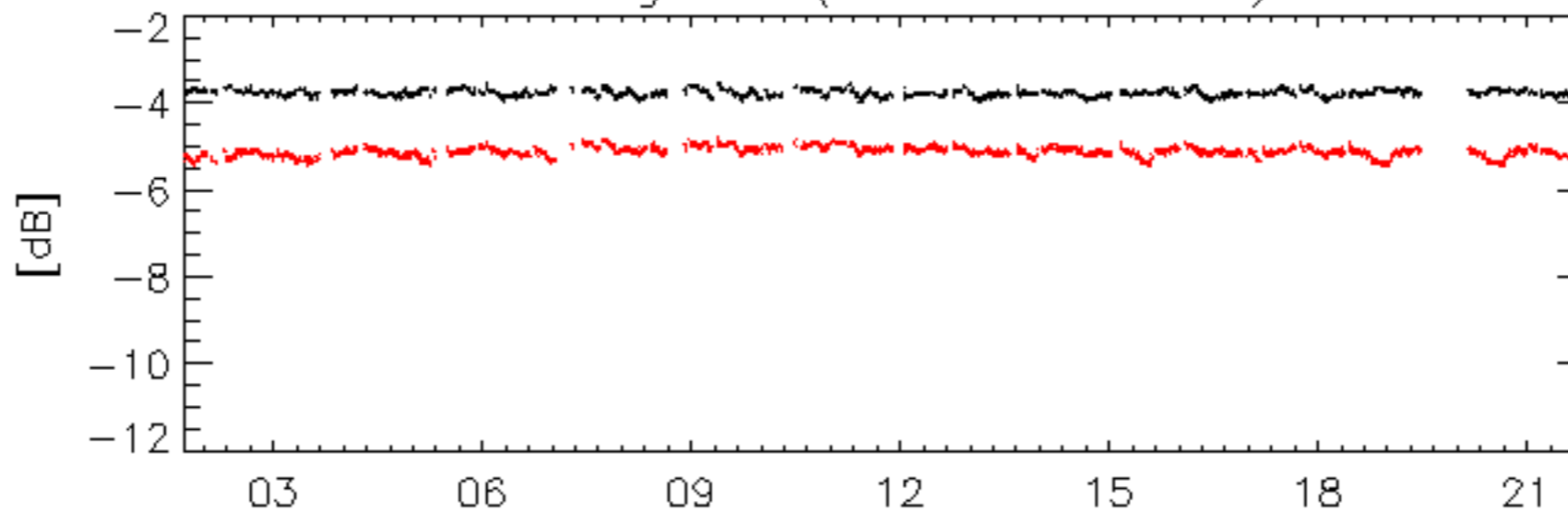
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

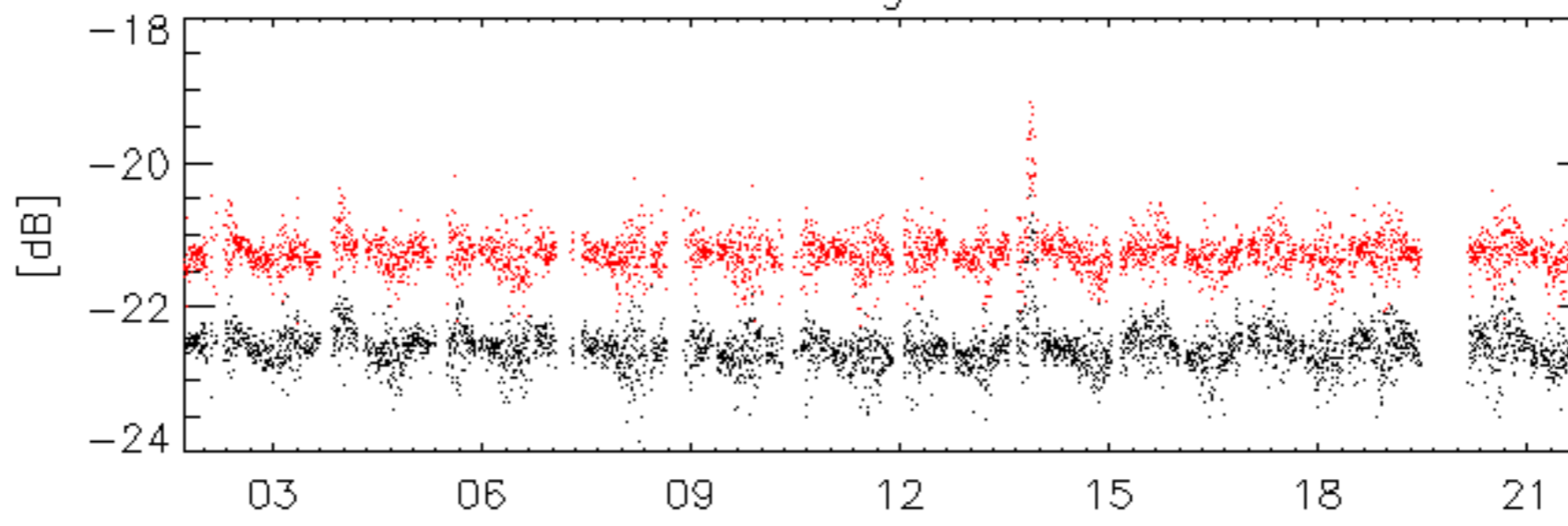




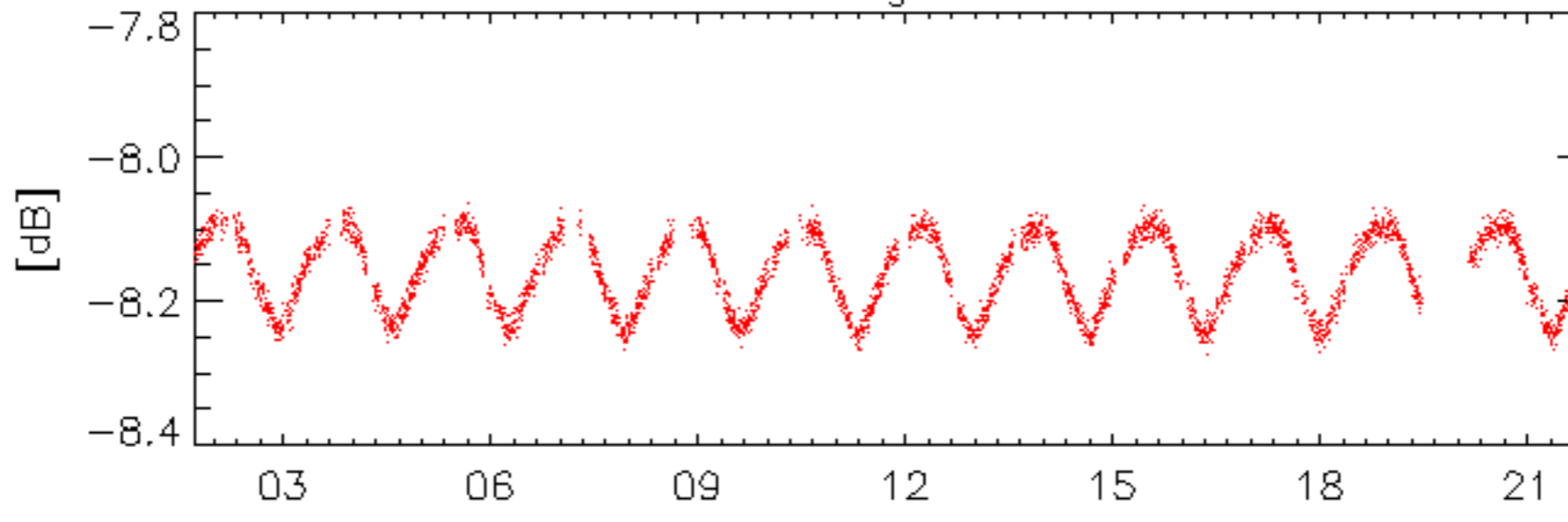
Average P1 (row 3 & row 24)



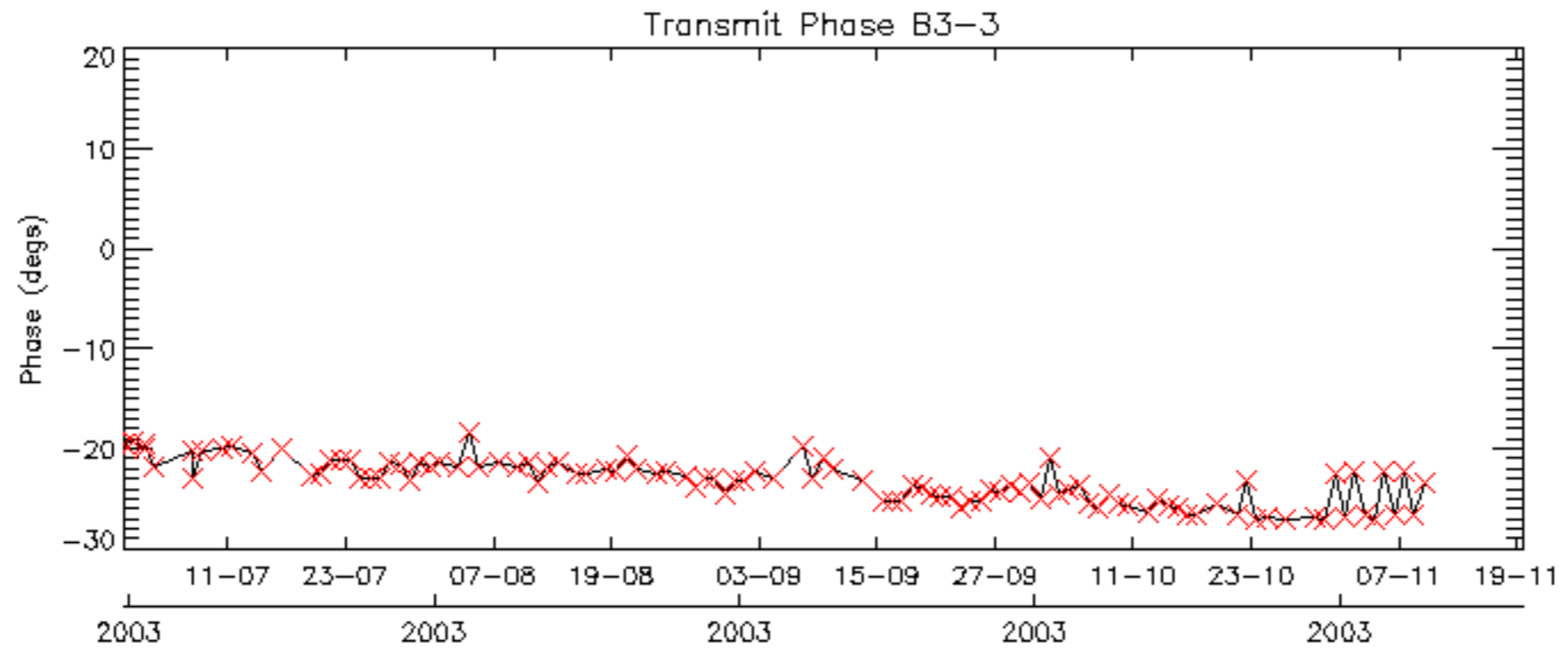
09-Nov
Average P2



09-Nov
Average P3

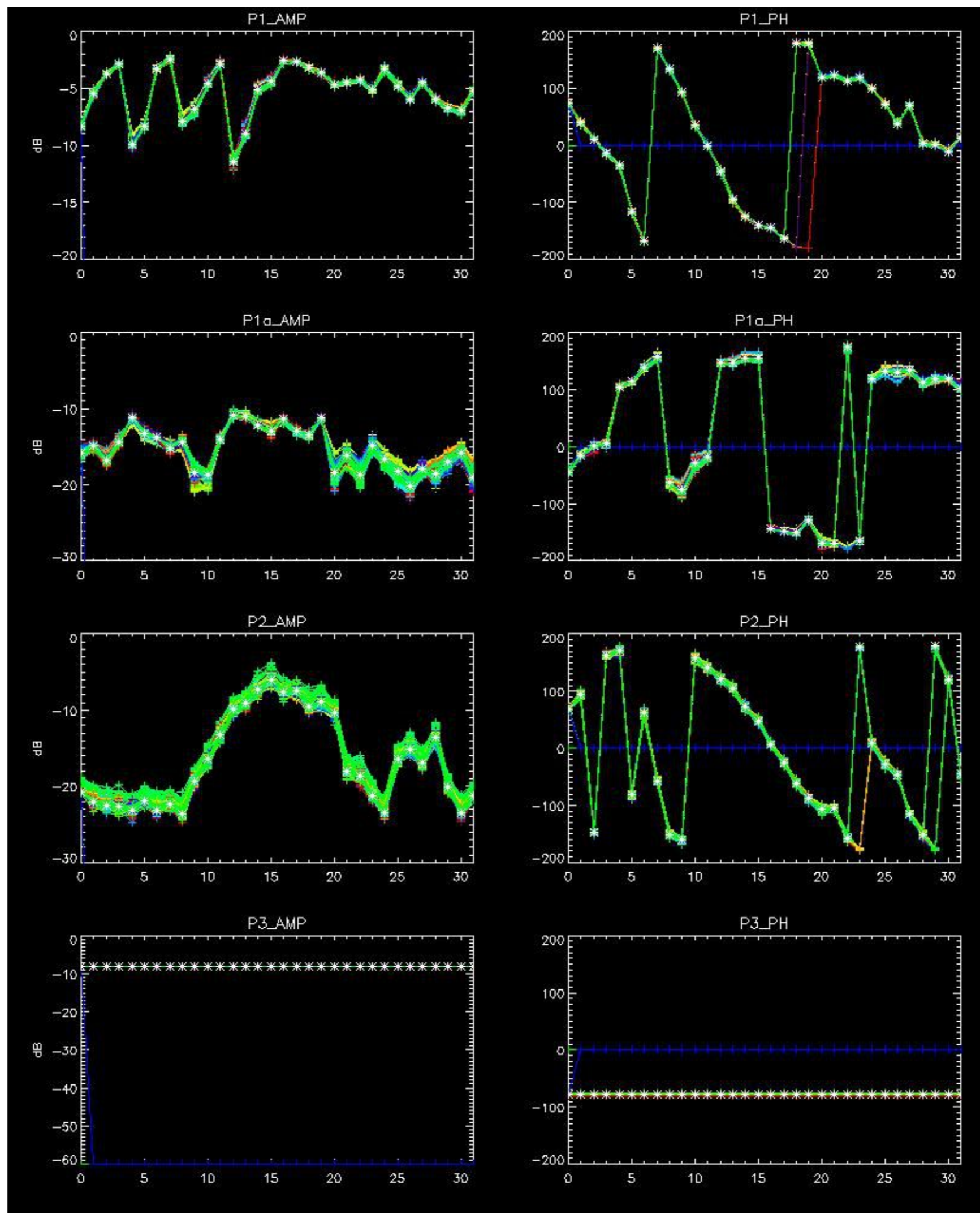


09-Nov



No anomalies observed on available browse products.

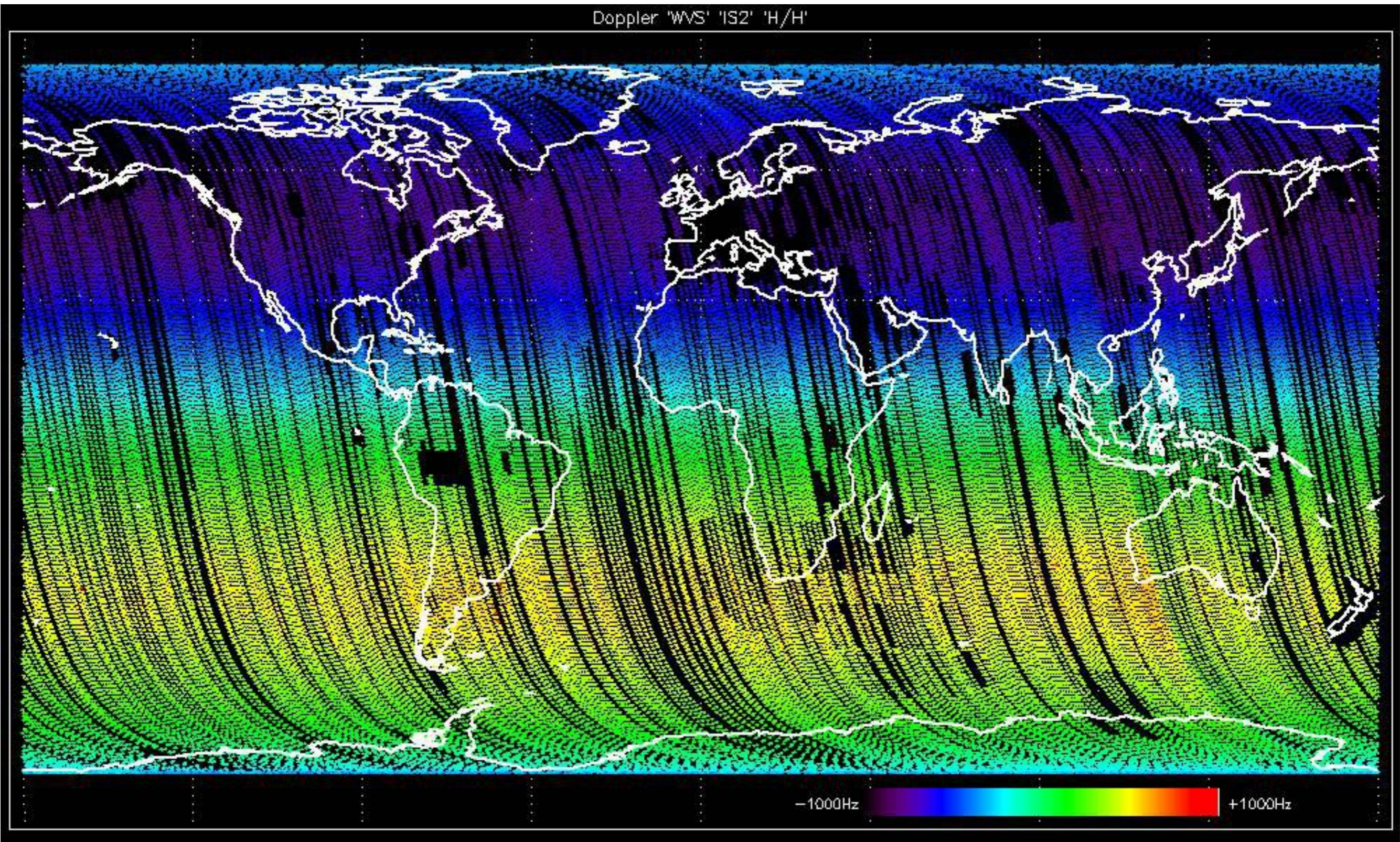
No anomalies observed.



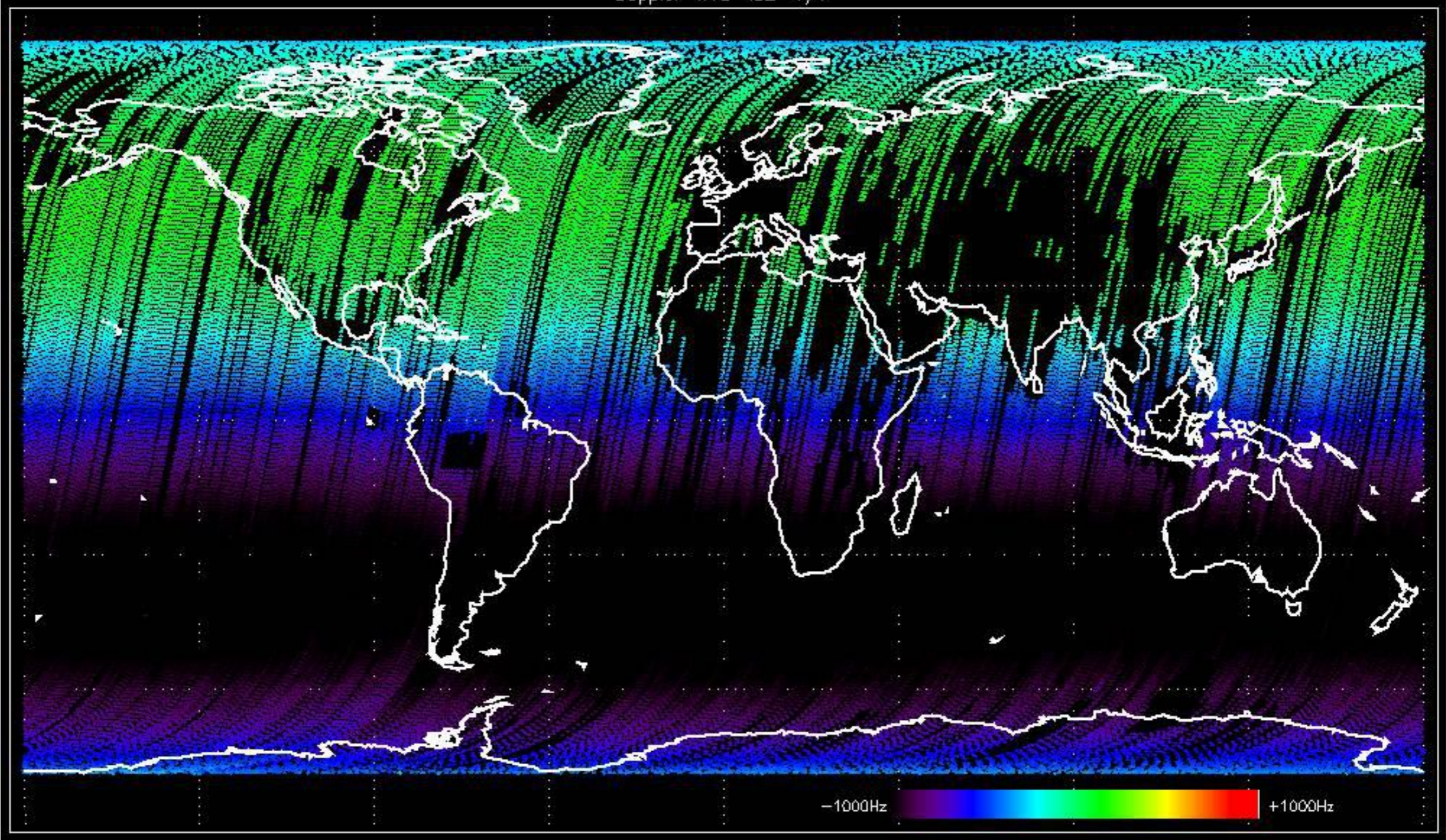
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

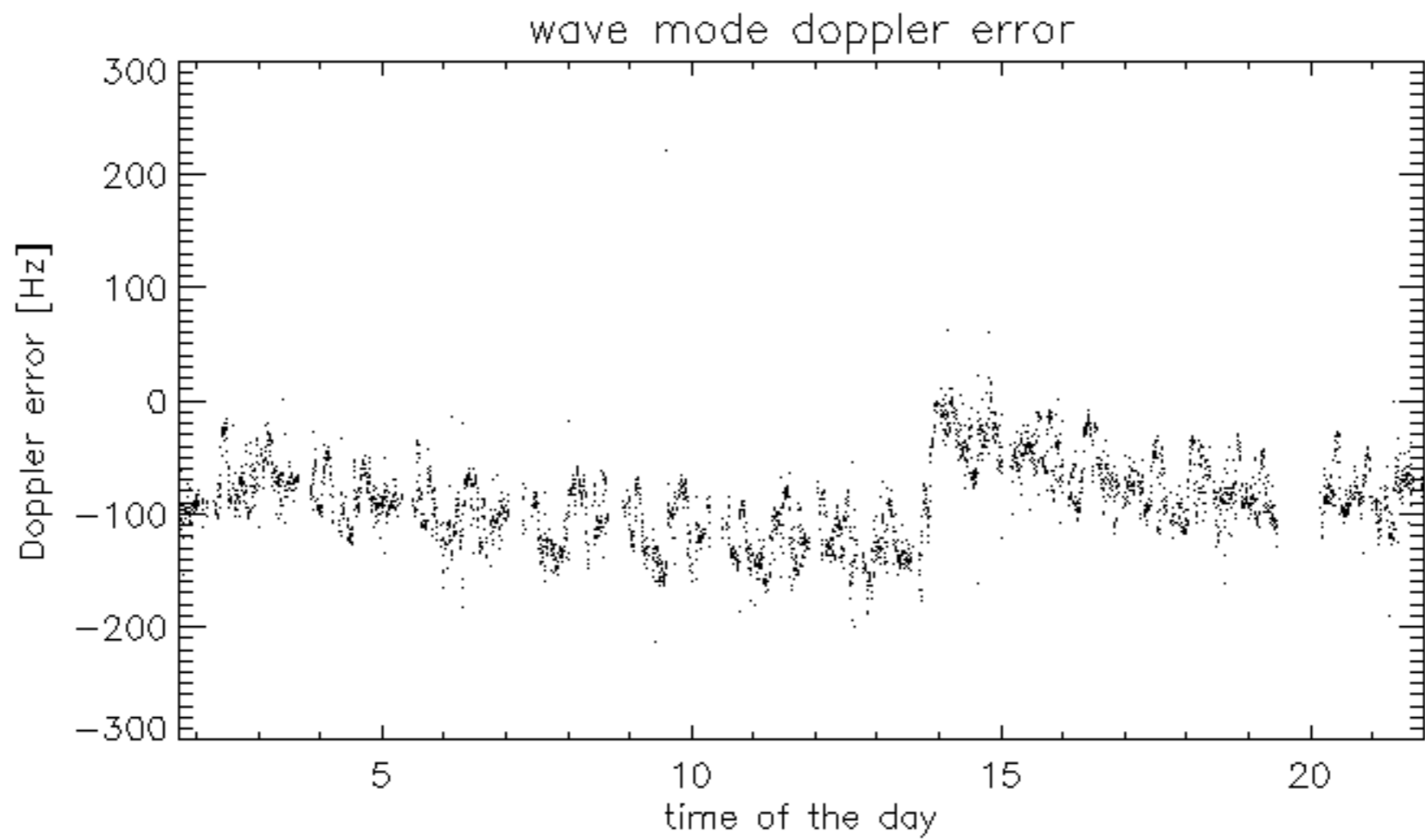
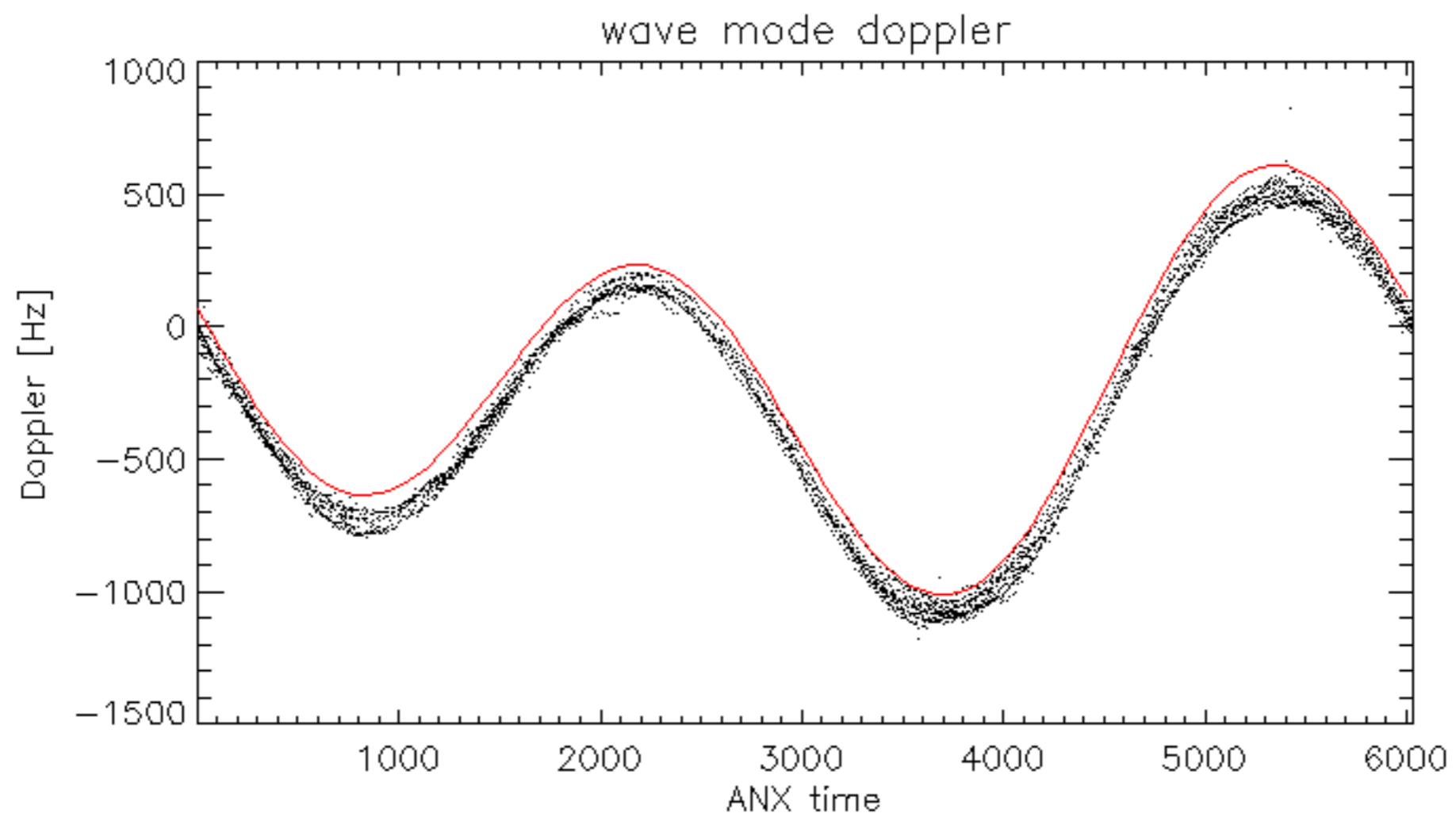
No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 35 days.

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

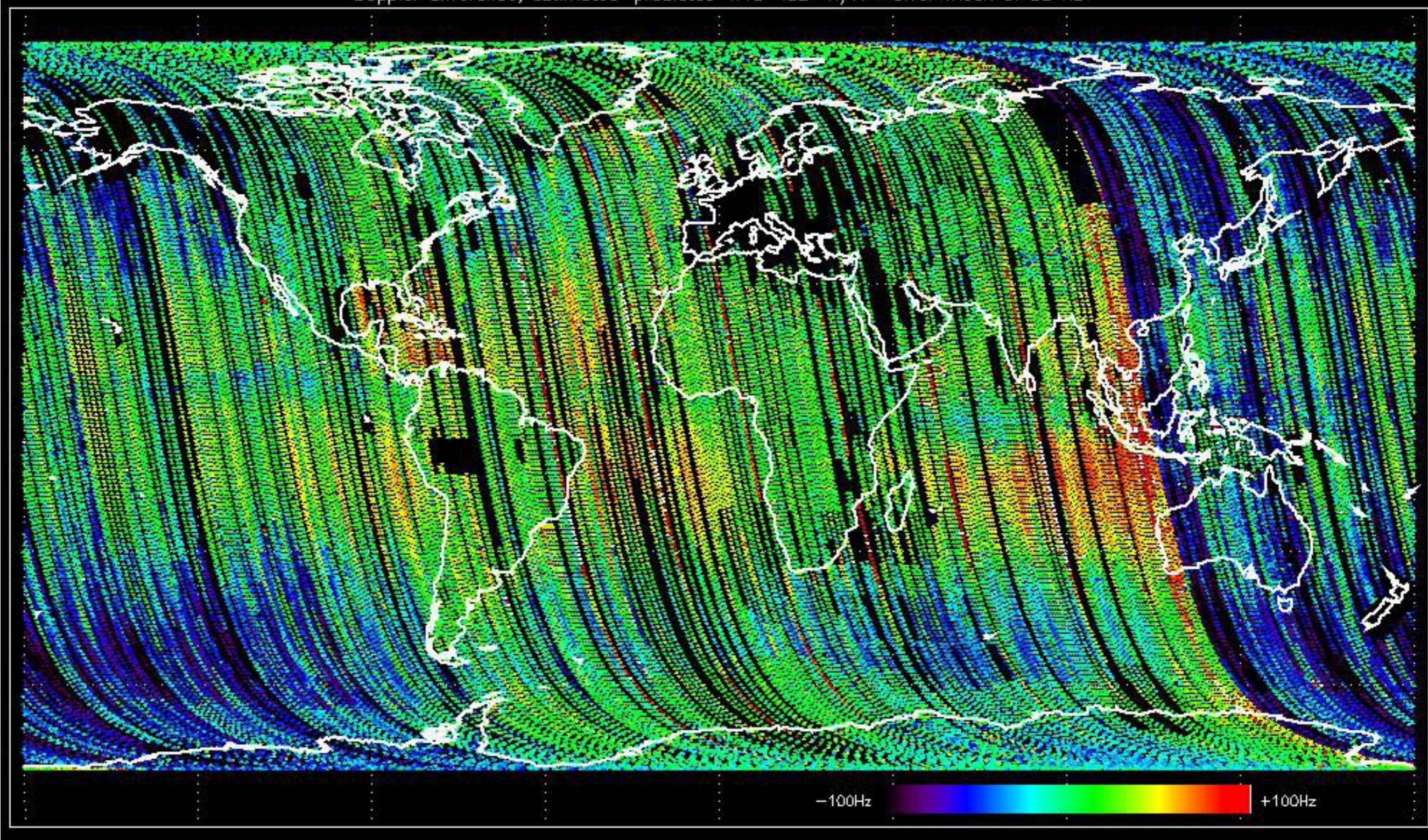


Doppler 'WVS' 'ISZ' 'V/V'

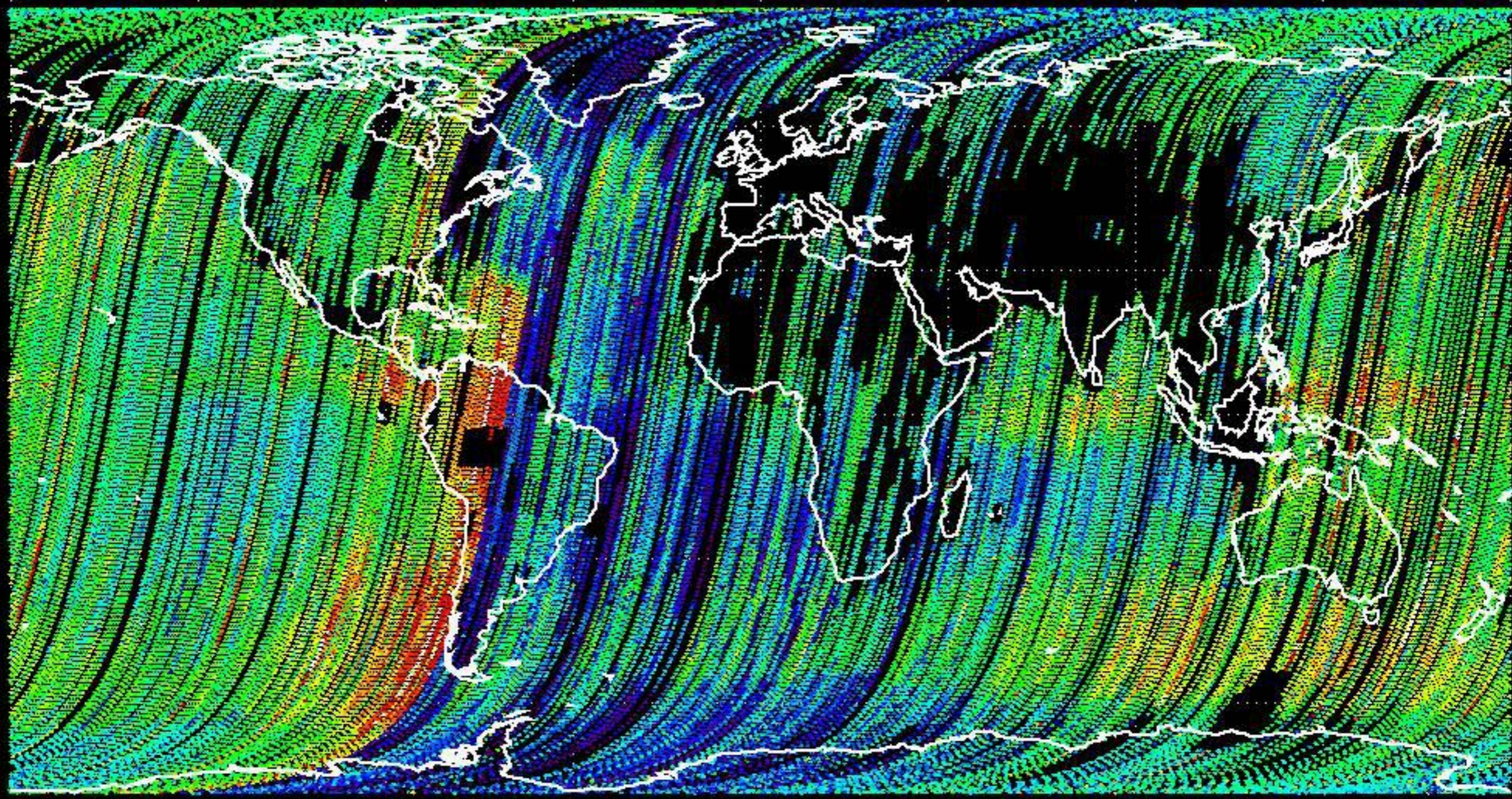




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



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



-100Hz

+100Hz

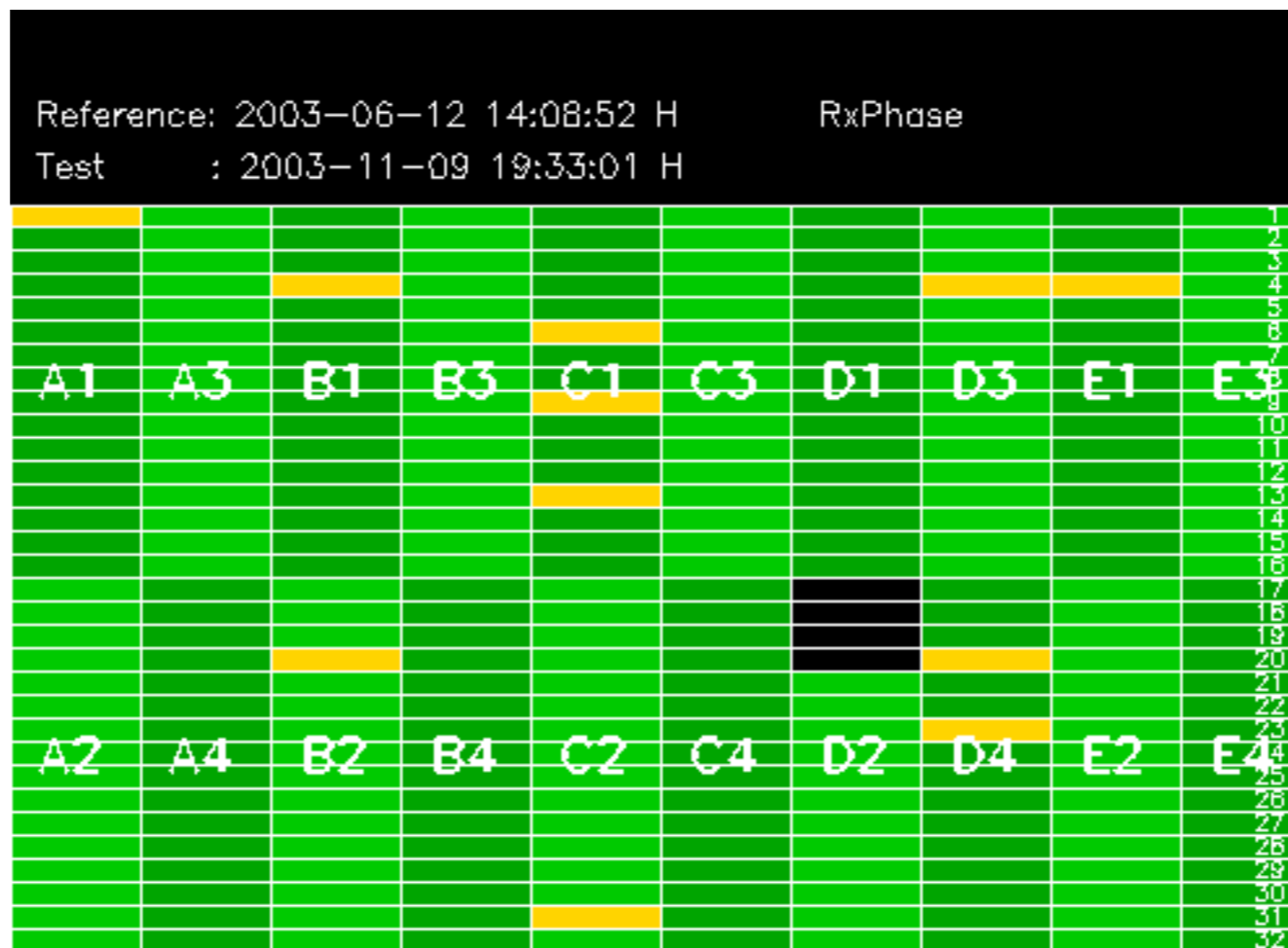
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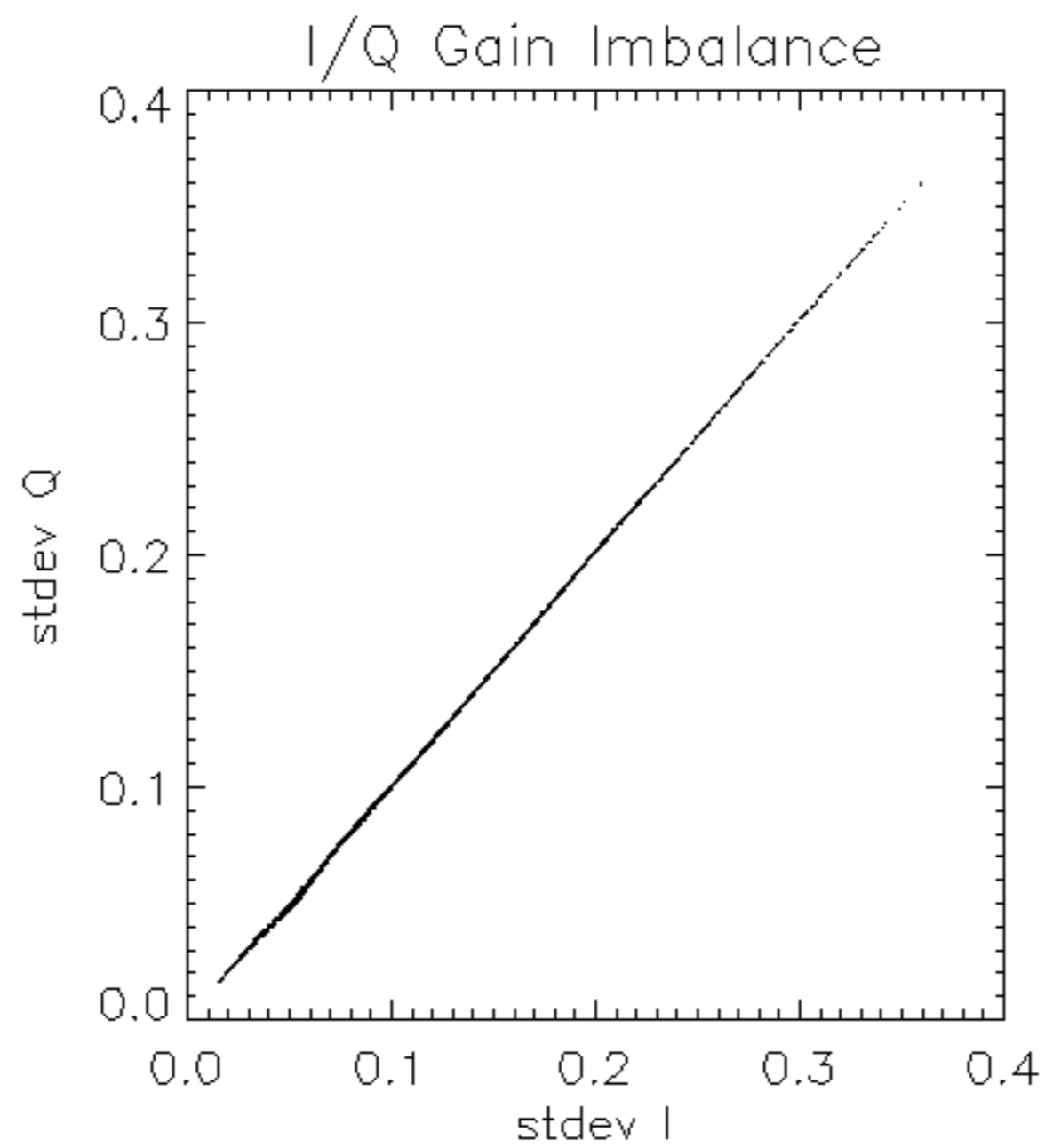
No anomalies observed on available MS products:

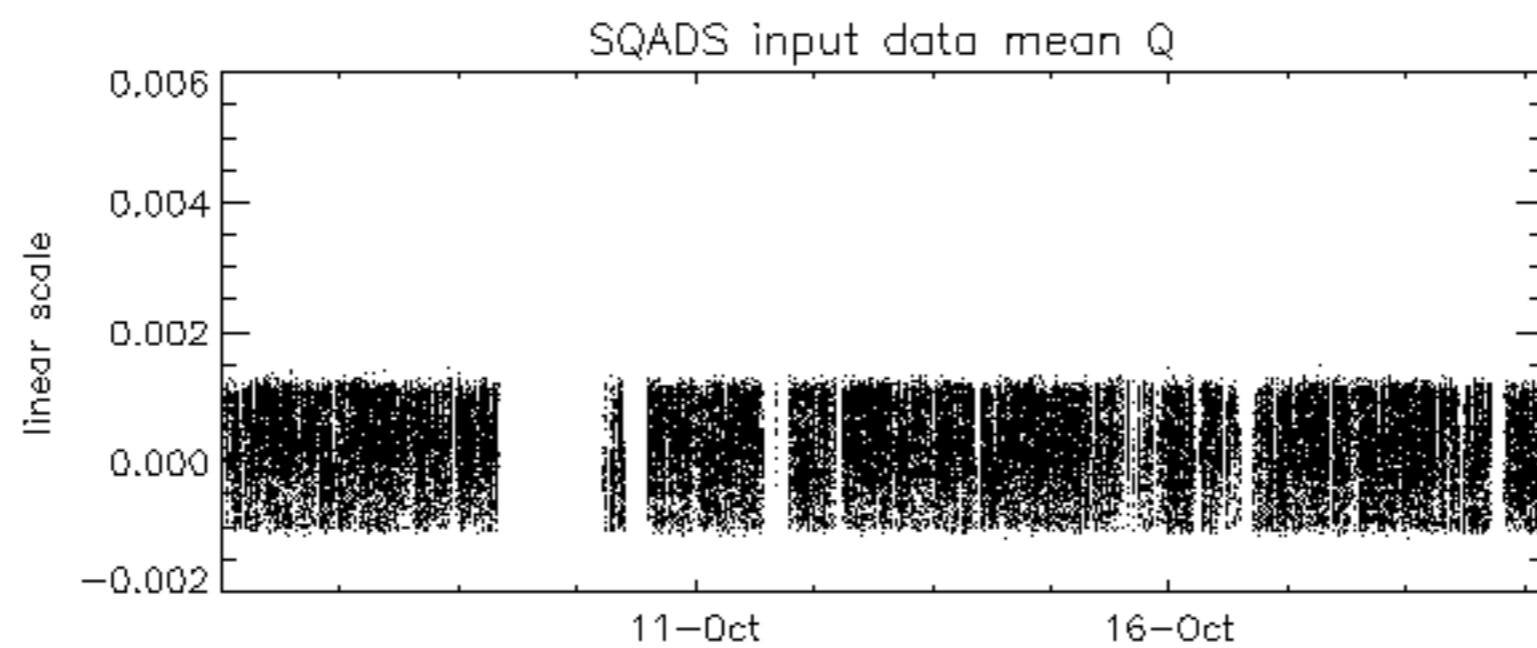
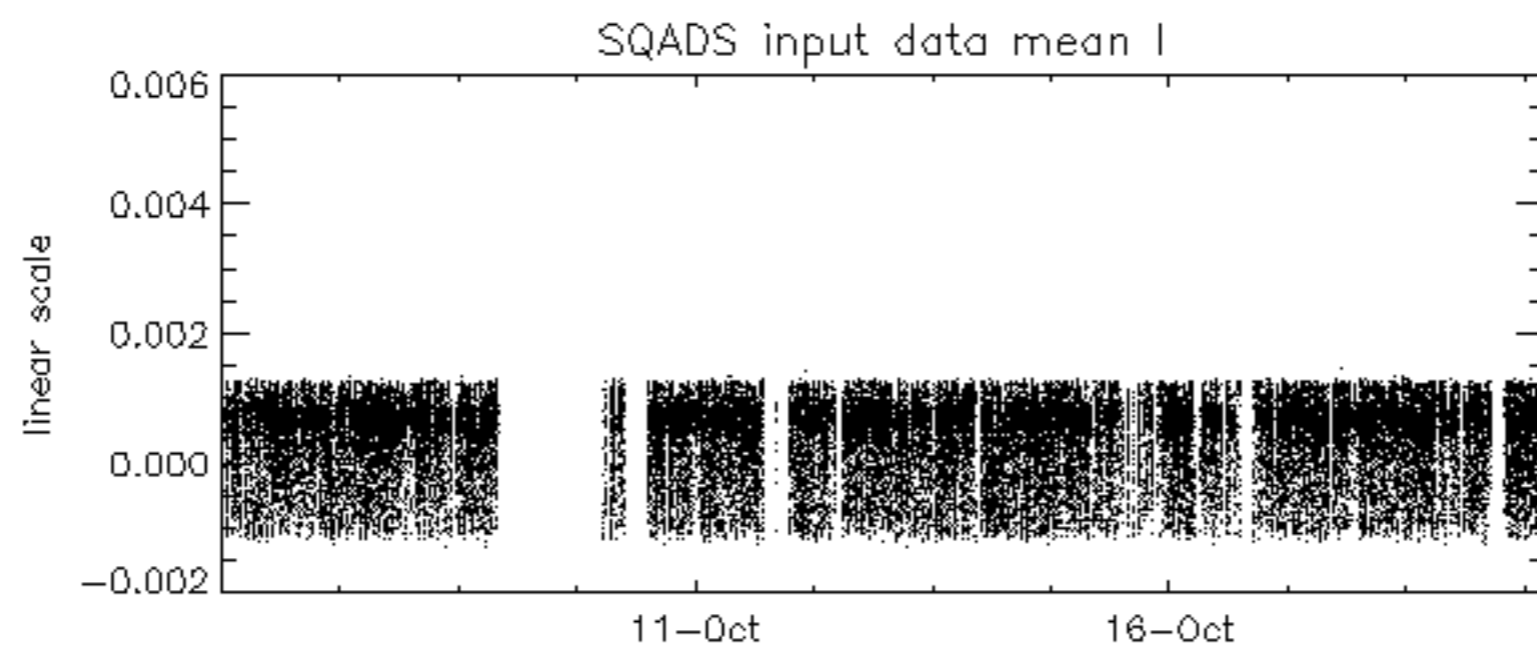
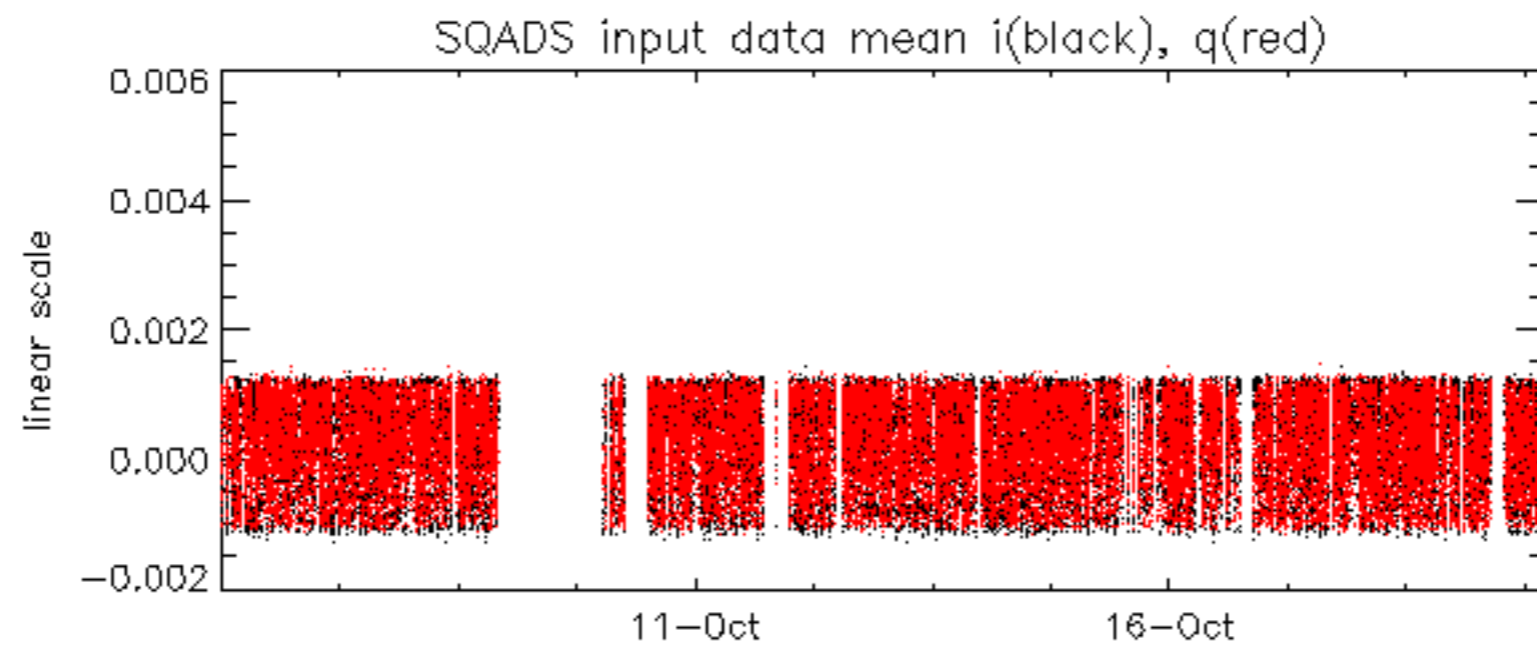
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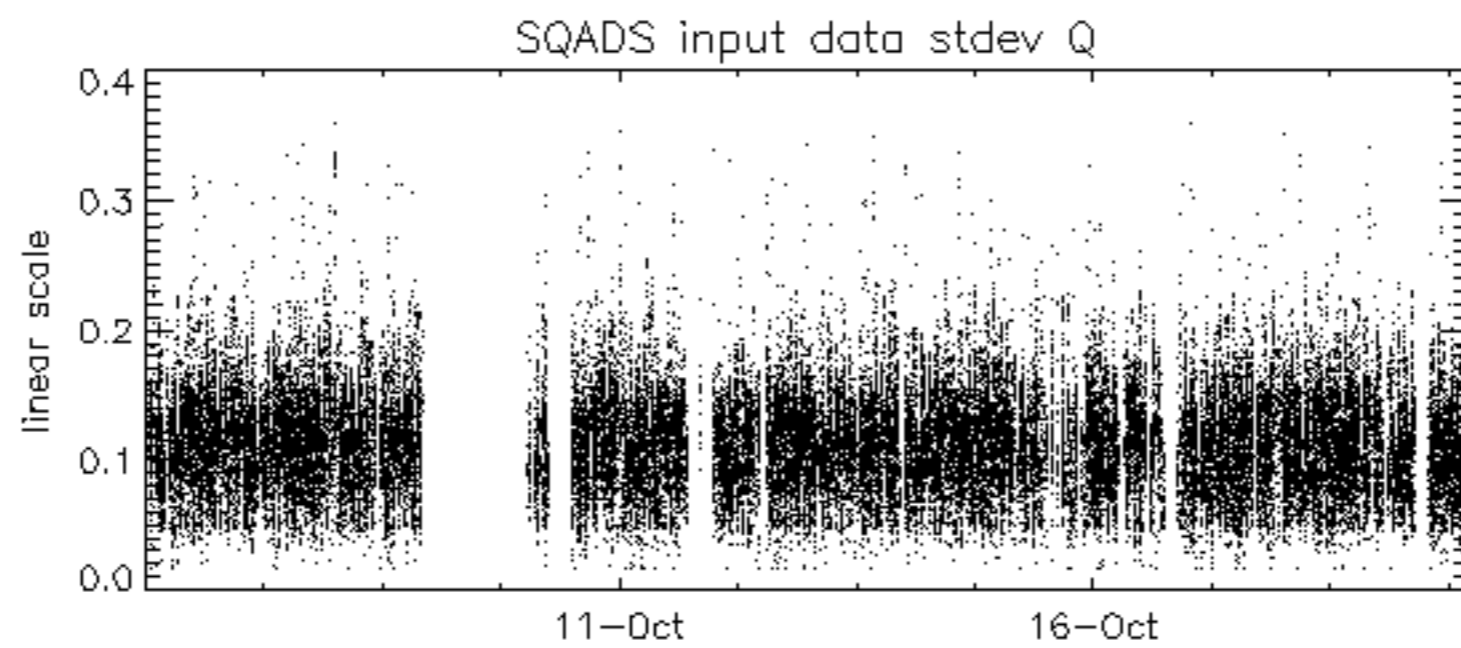
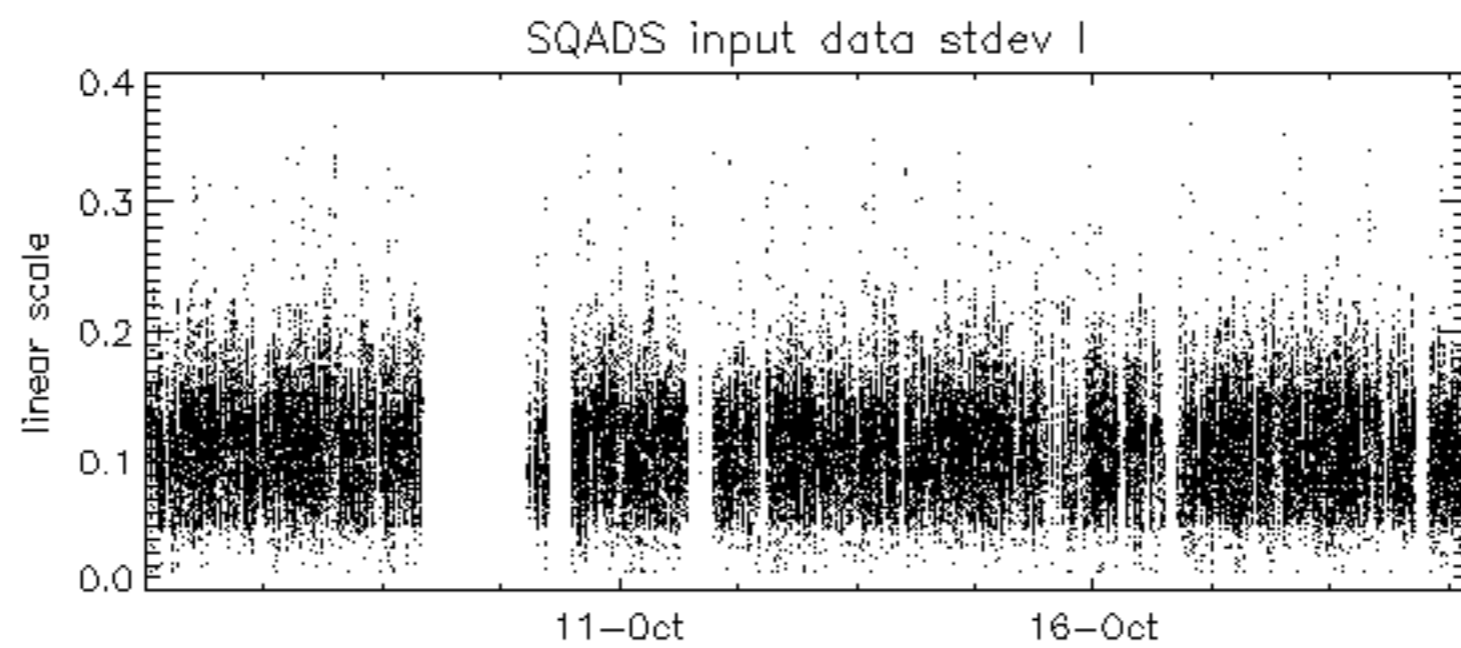
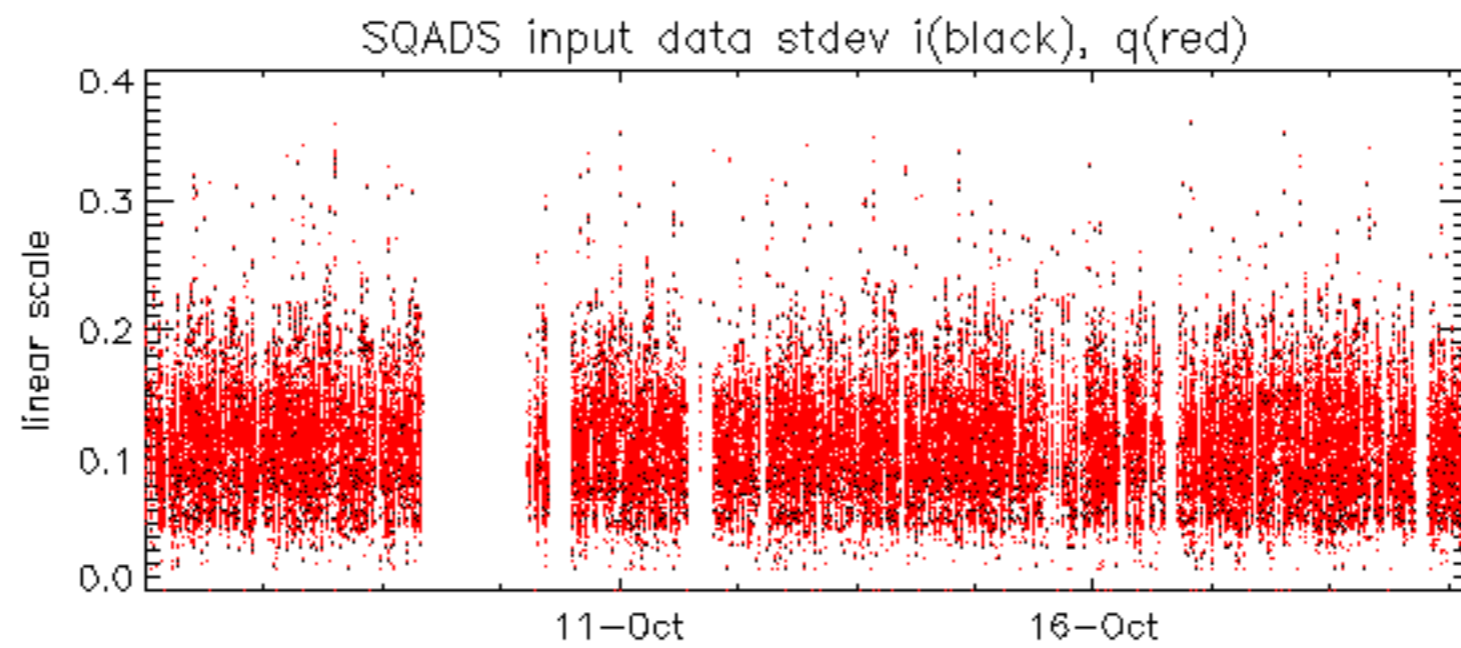
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No anomalies observed.









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