

REPORT OF 031111

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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 2003-11-11 09:39:41 12:35:40 due to T/R module parity error.

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__0PNPDK20031110_190444_000000152021_00299_08870_0012.N1
- ASA_MS__0PNPDK20031110_190604_000000152021_00299_08870_0011.N1

Polarisation	Start Time
V	20031110 190604
H	20031110 190444

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	-3.77015	-22.5867	-8.16526
	stdev	0.00605635	0.0635688	0.00281388
24	mean	-5.11863	-21.2715	-8.16526
	stdev	0.0121579	0.0528532	0.00281388



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.78548	-22.5491	-8.15068
	stdev	0.00556389	0.0645475	0.00272502
24	mean	-5.34312	-21.2493	-8.15068
	stdev	0.892999	0.0608002	0.00272502



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	0.000377252
	stdev	3.56020e-07
MEAN Q	mean	0.000267619
	stdev	3.42781e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.113934
	stdev	0.00147139
STDEV Q	mean	0.114183
	stdev	0.00148939



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

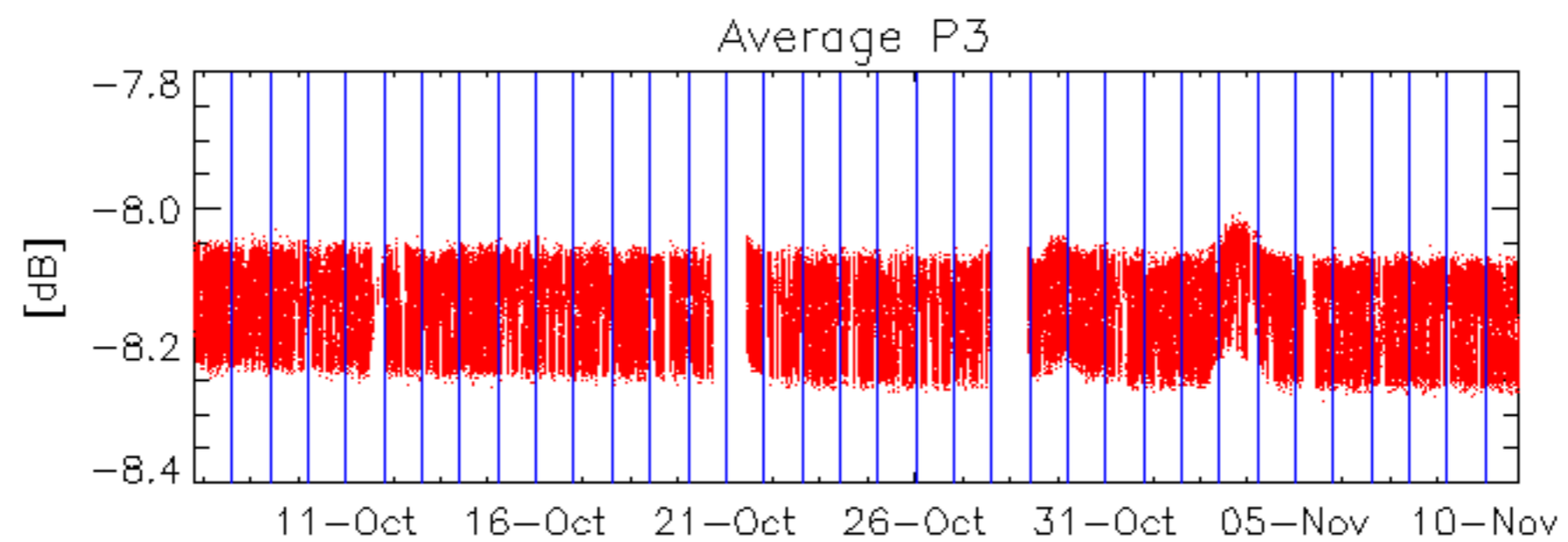
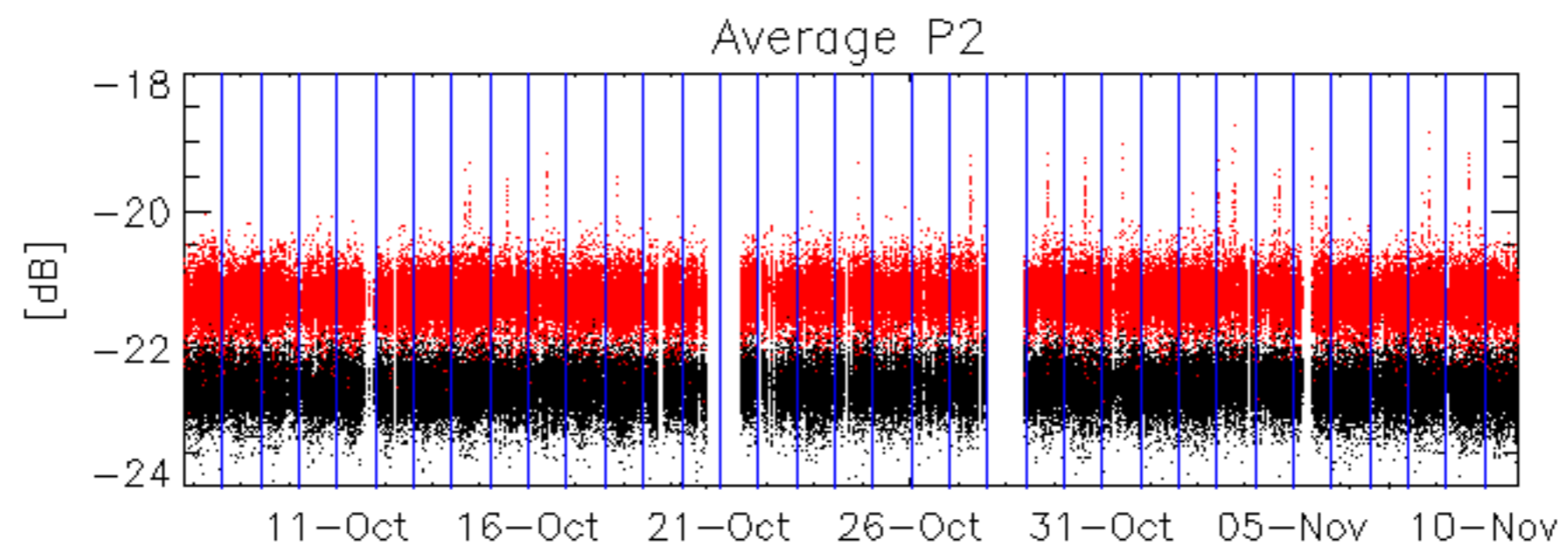
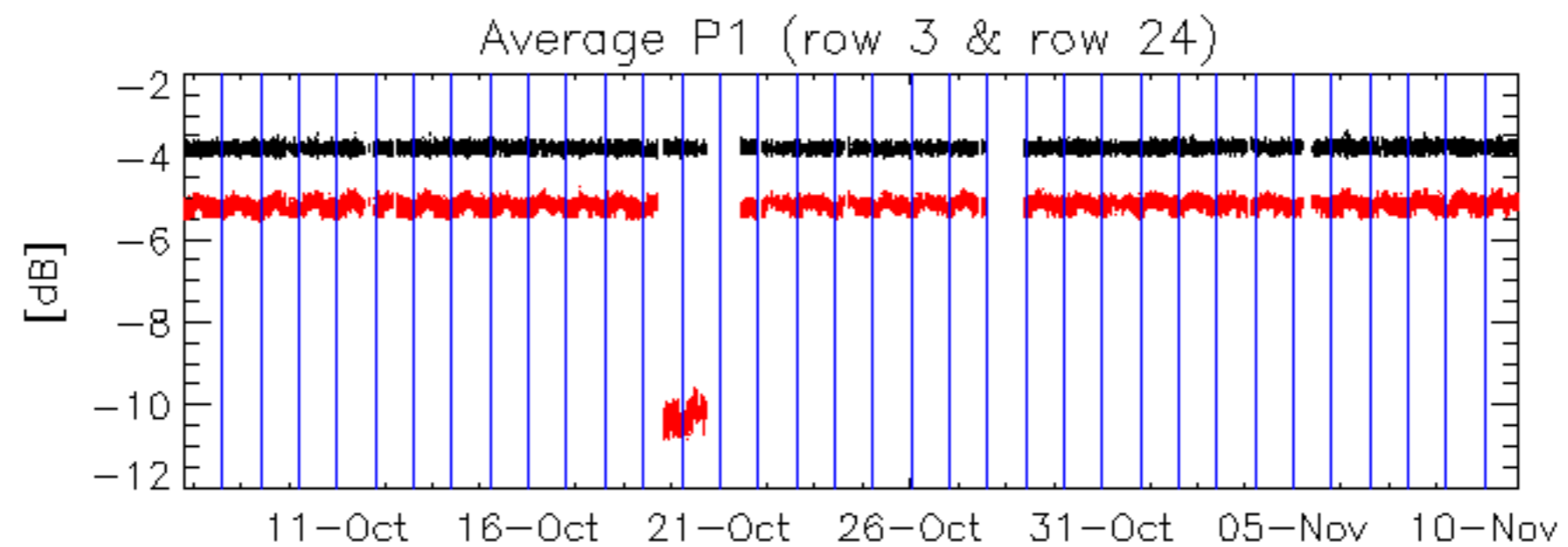
Evolution of unbiased Doppler error (Real - Expected)
Ascending
Descending

6.2 - Absolute Doppler

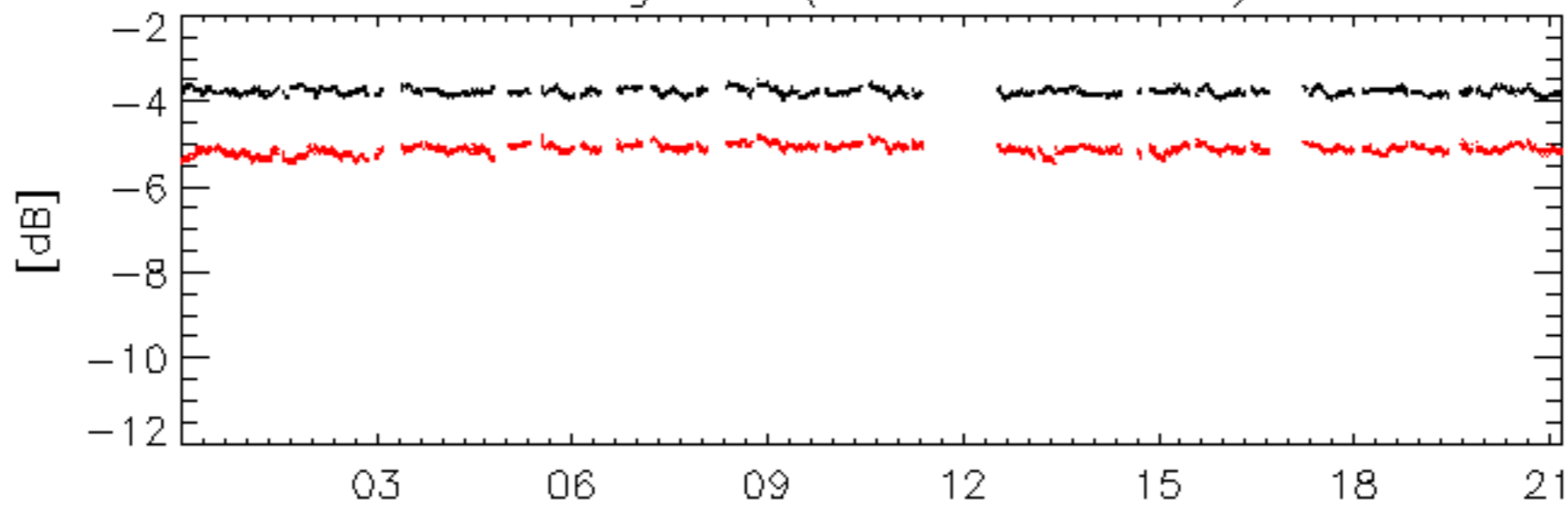
Evolution of Absolute Doppler
Ascending
Descending

6.3 - Doppler evolution versus ANX

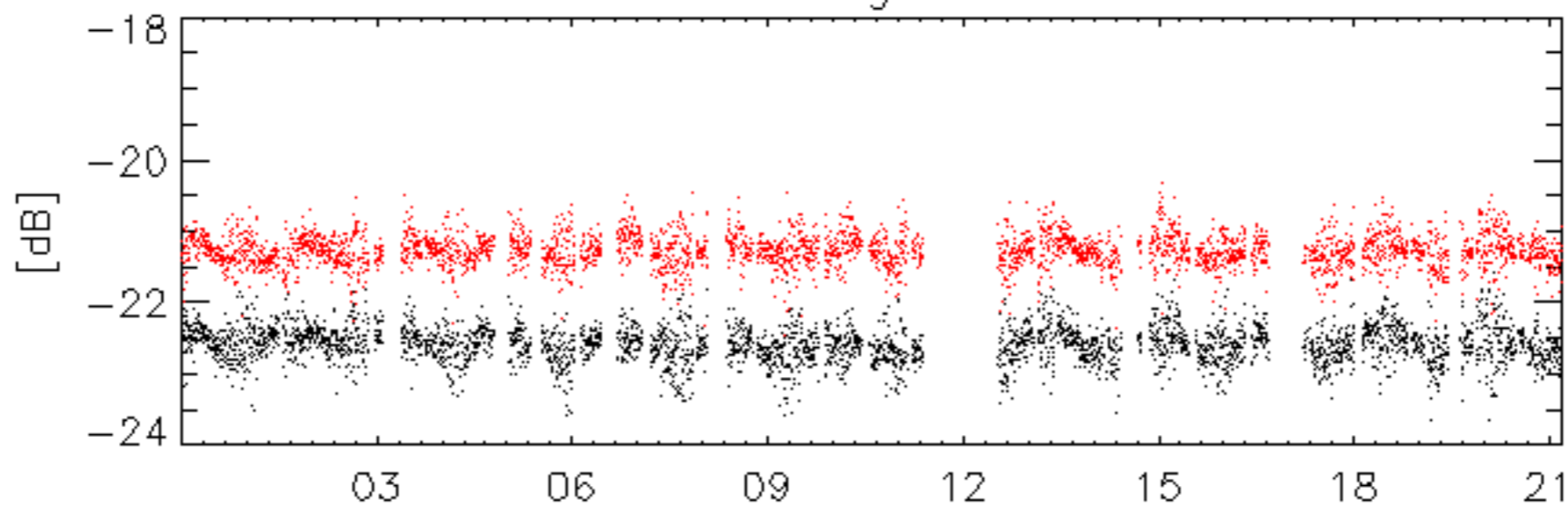
Evolution Doppler error versus ANX

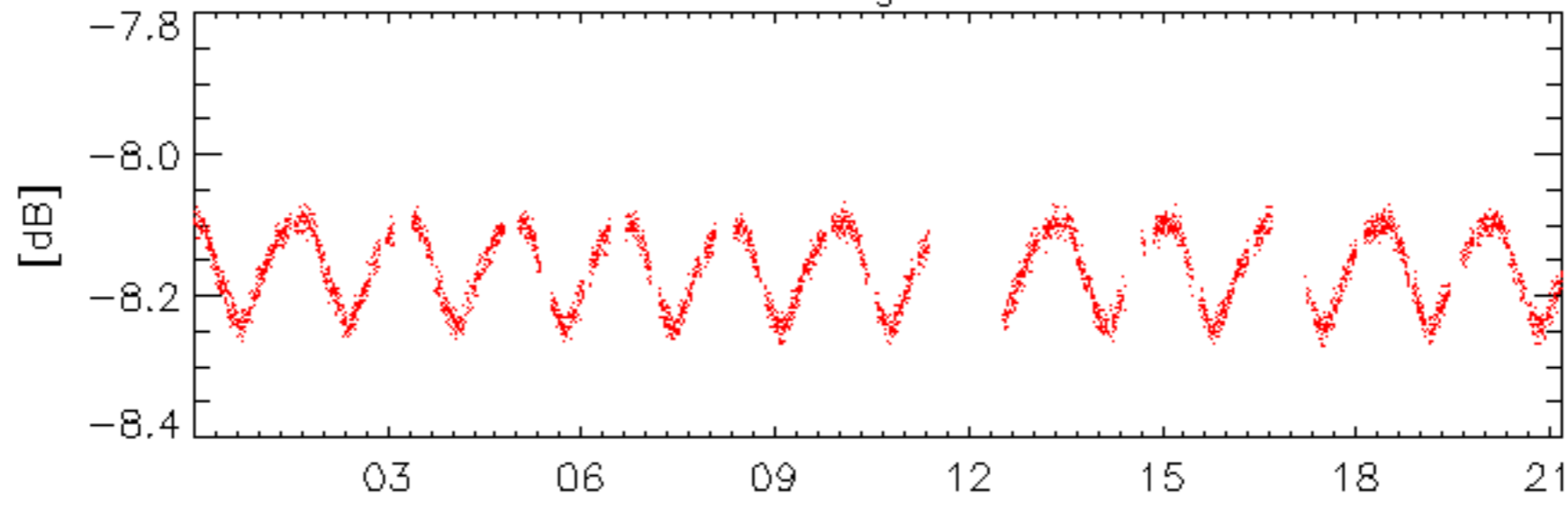
Average P1 (row 3 & row 24)



10-Nov
Average P2



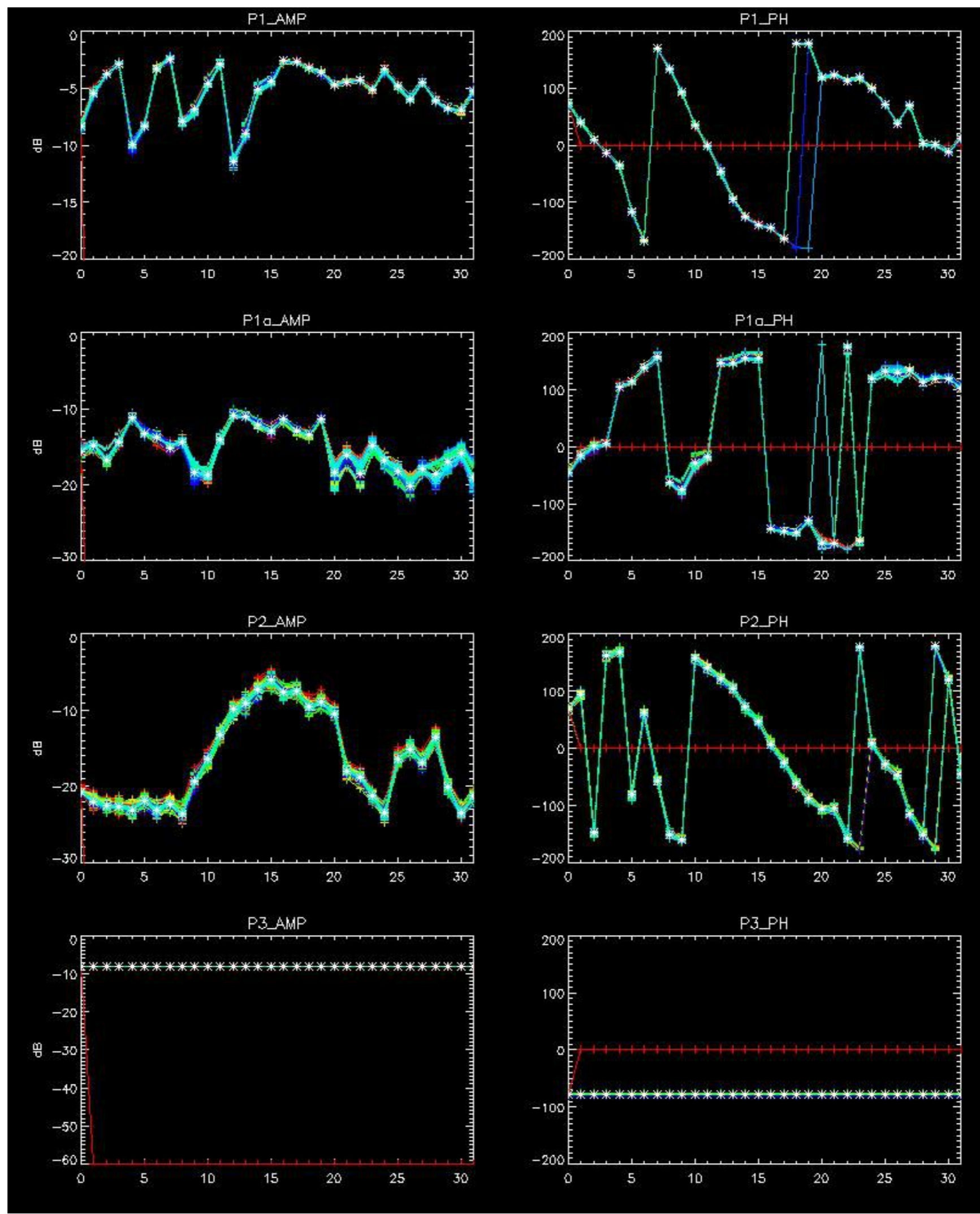
10-Nov
Average P3



10-Nov

No anomalies observed on available browse products

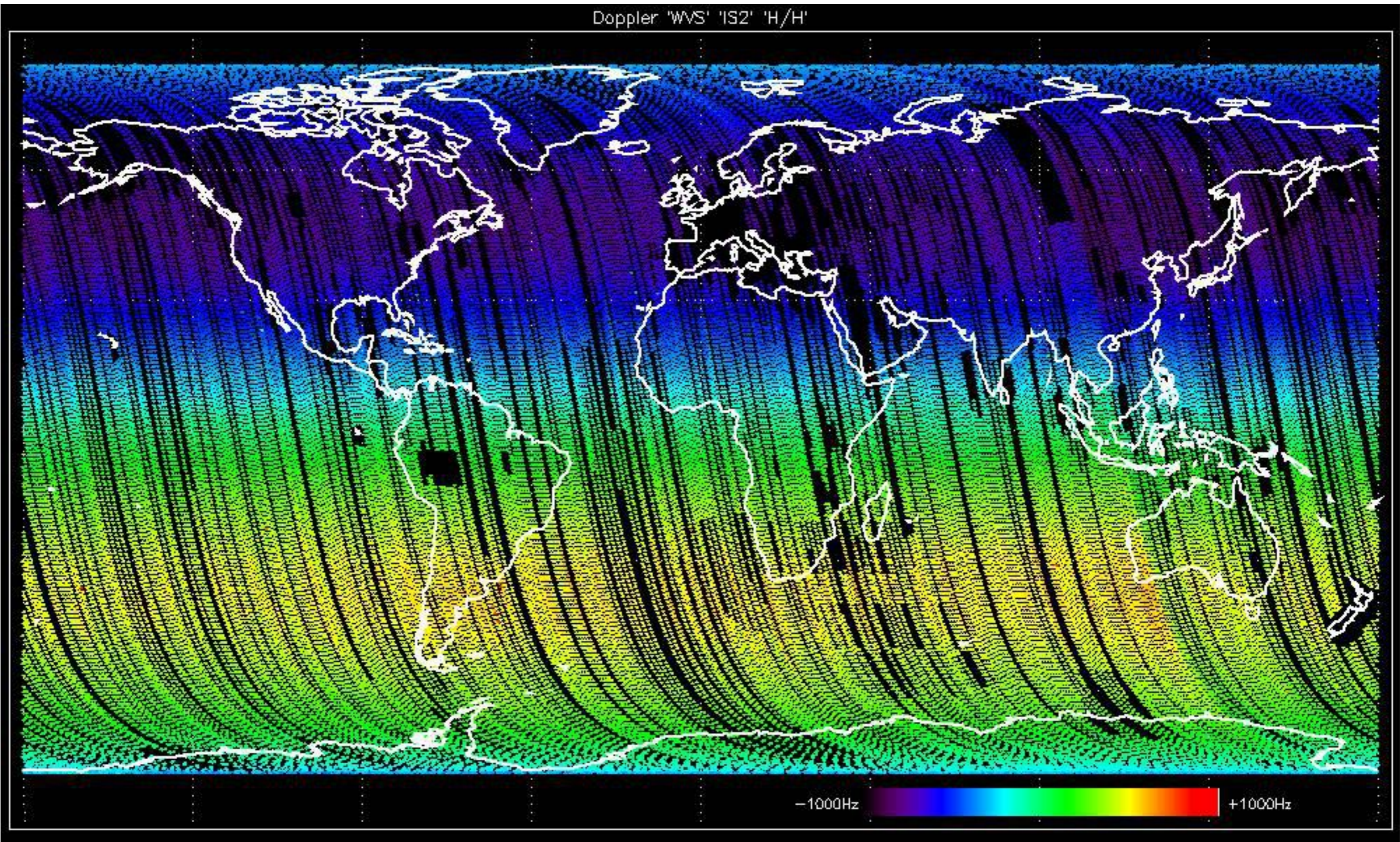
No anomalies observed.



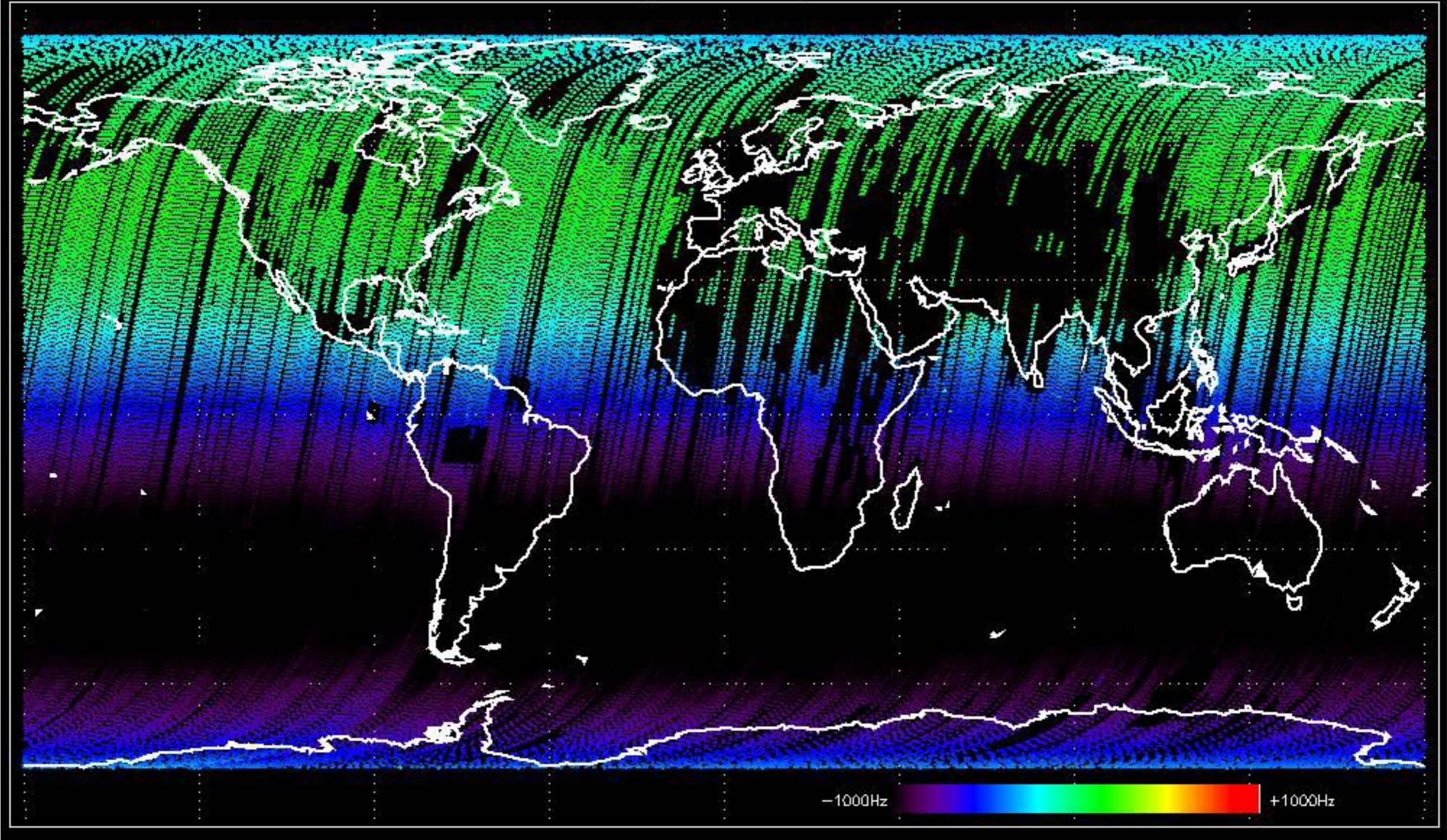
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

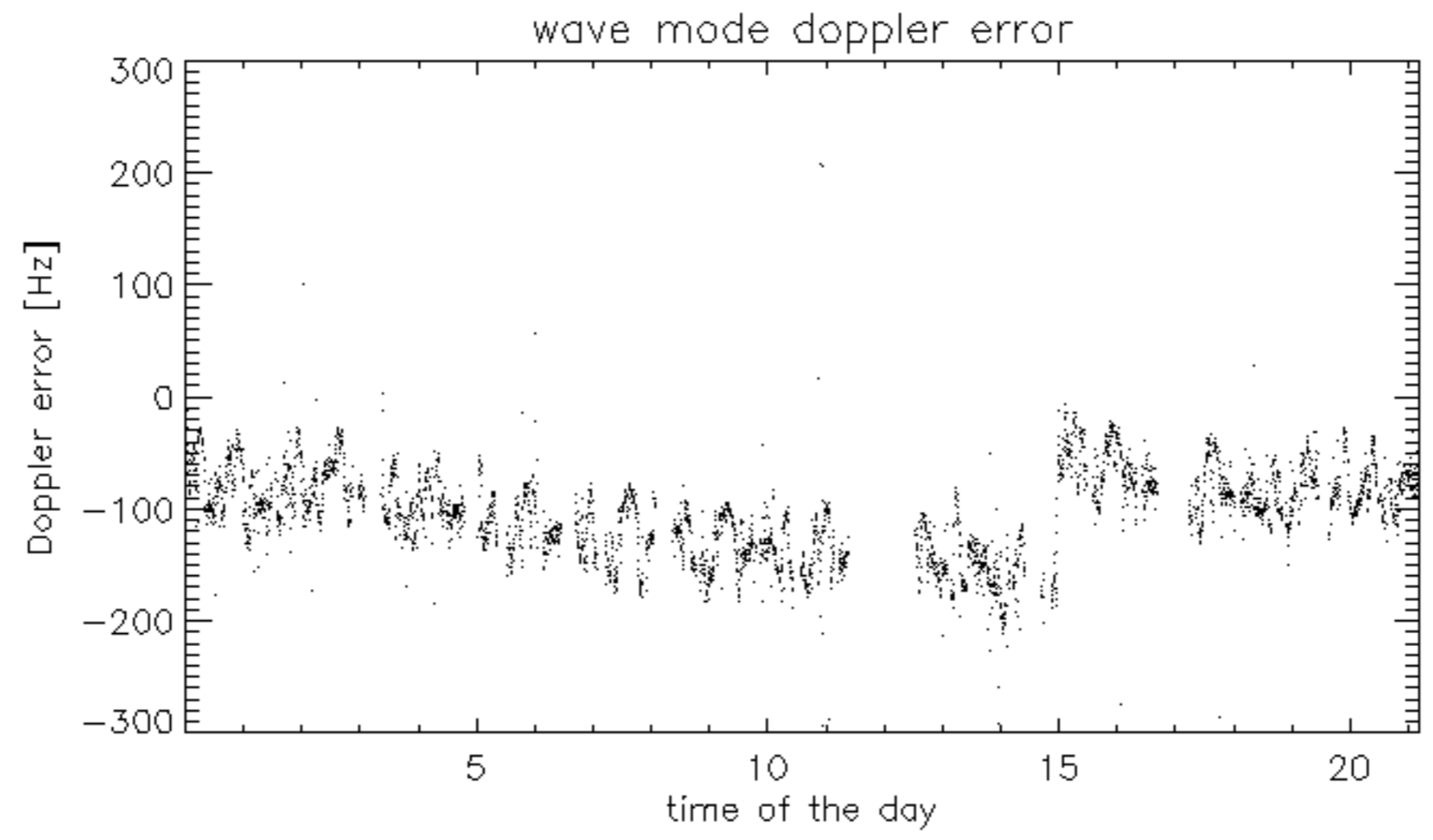
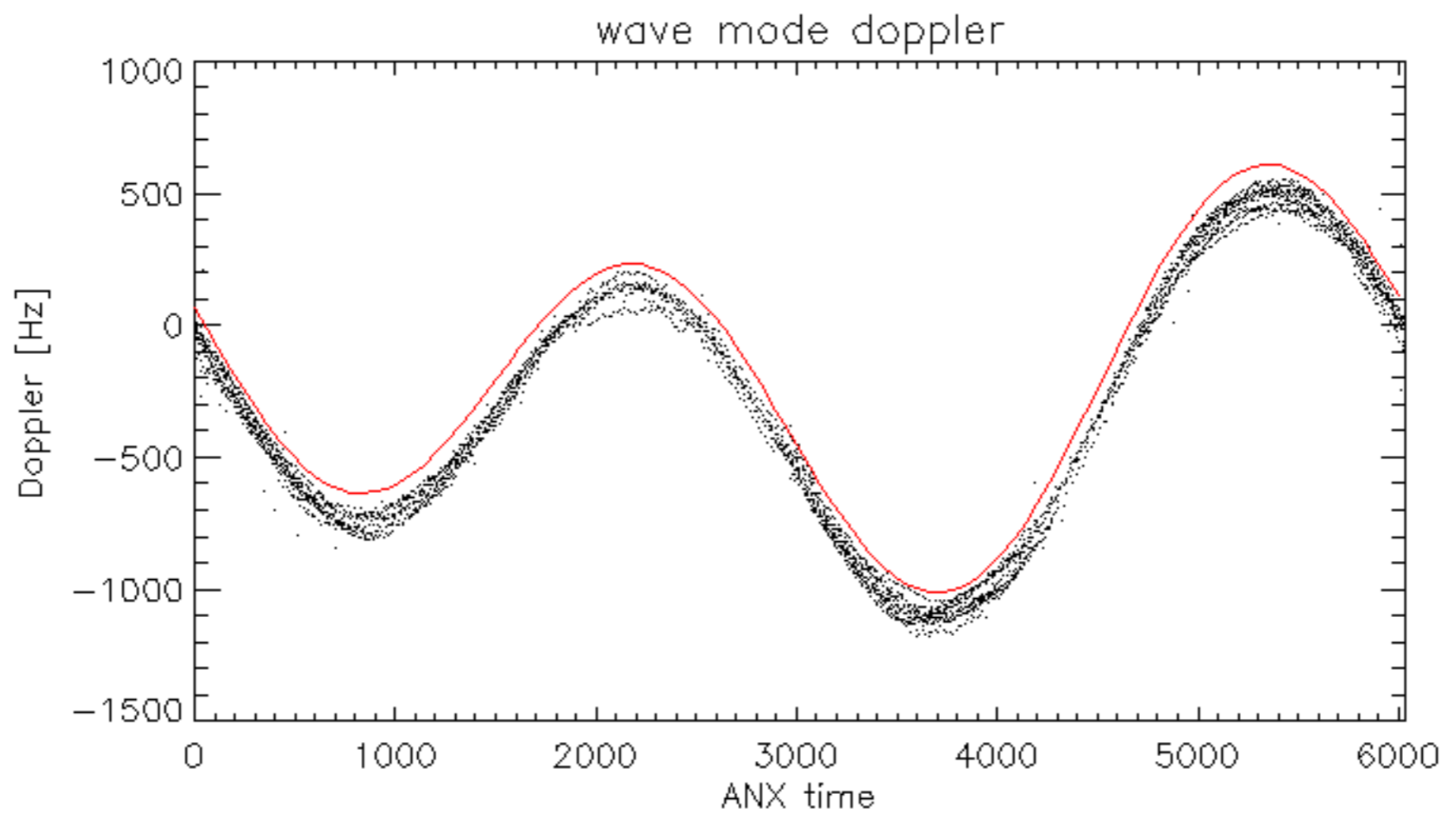
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 35 days

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

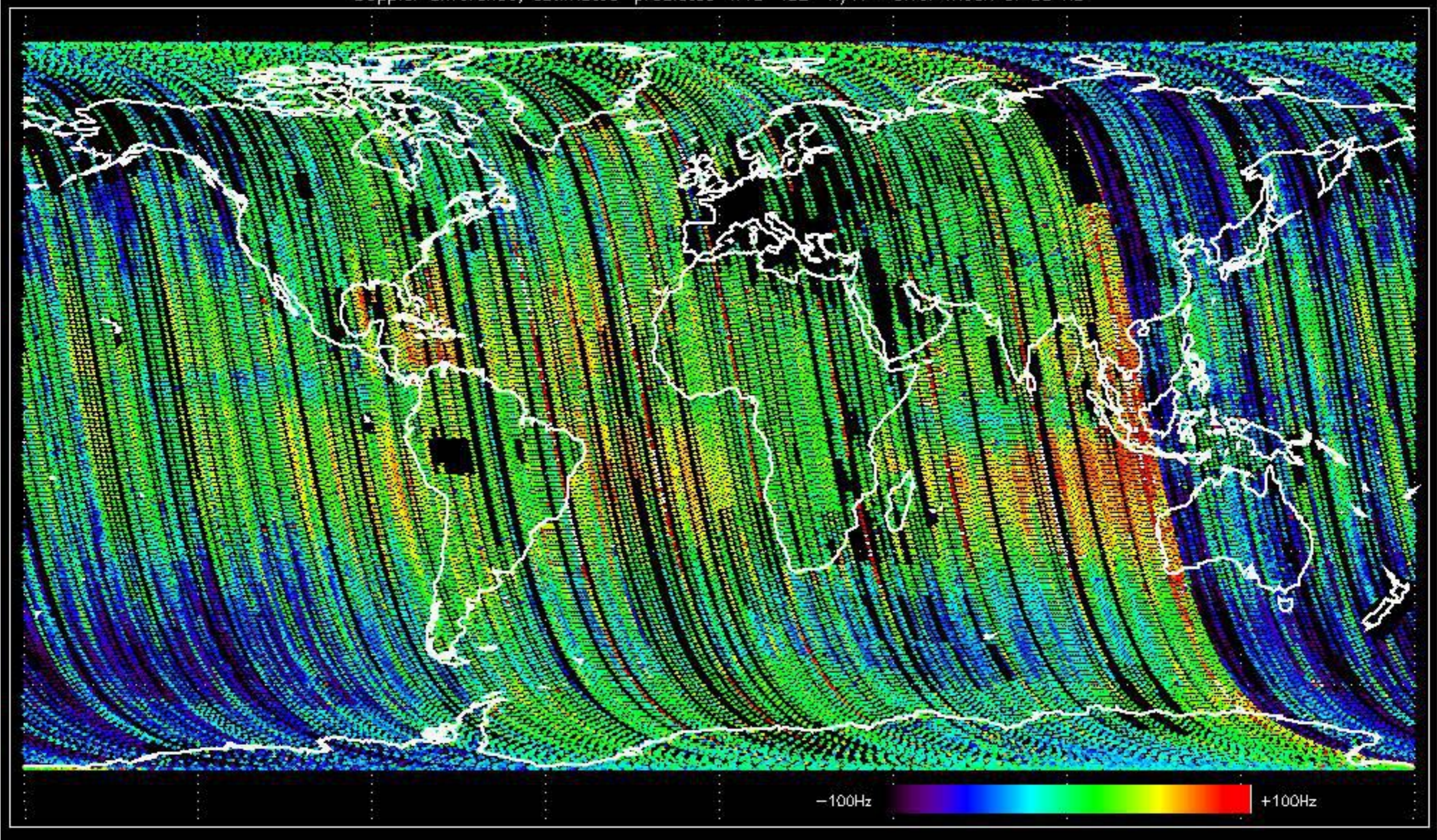


Doppler 'WVS' 'IS2' 'V/V'

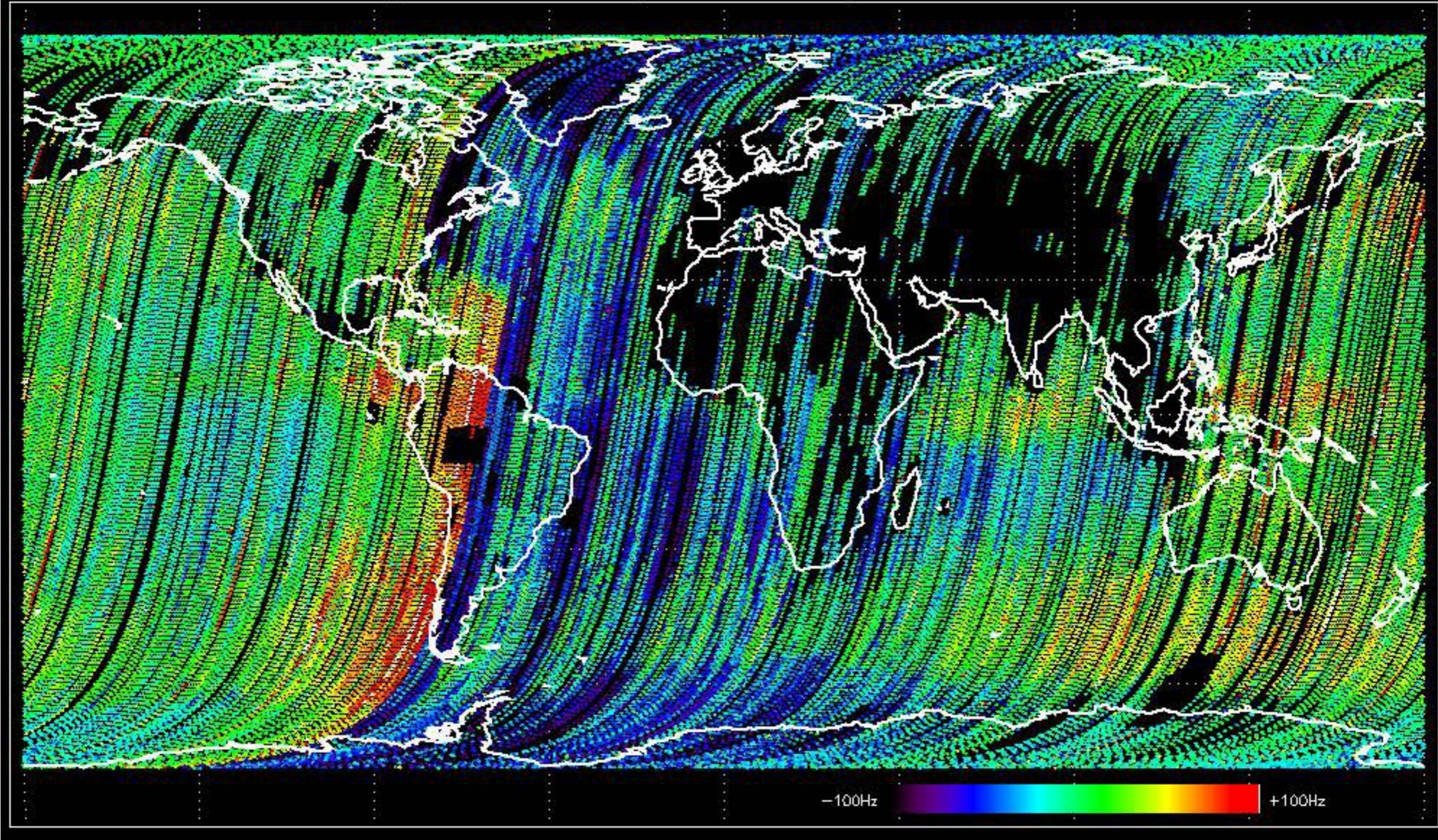




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



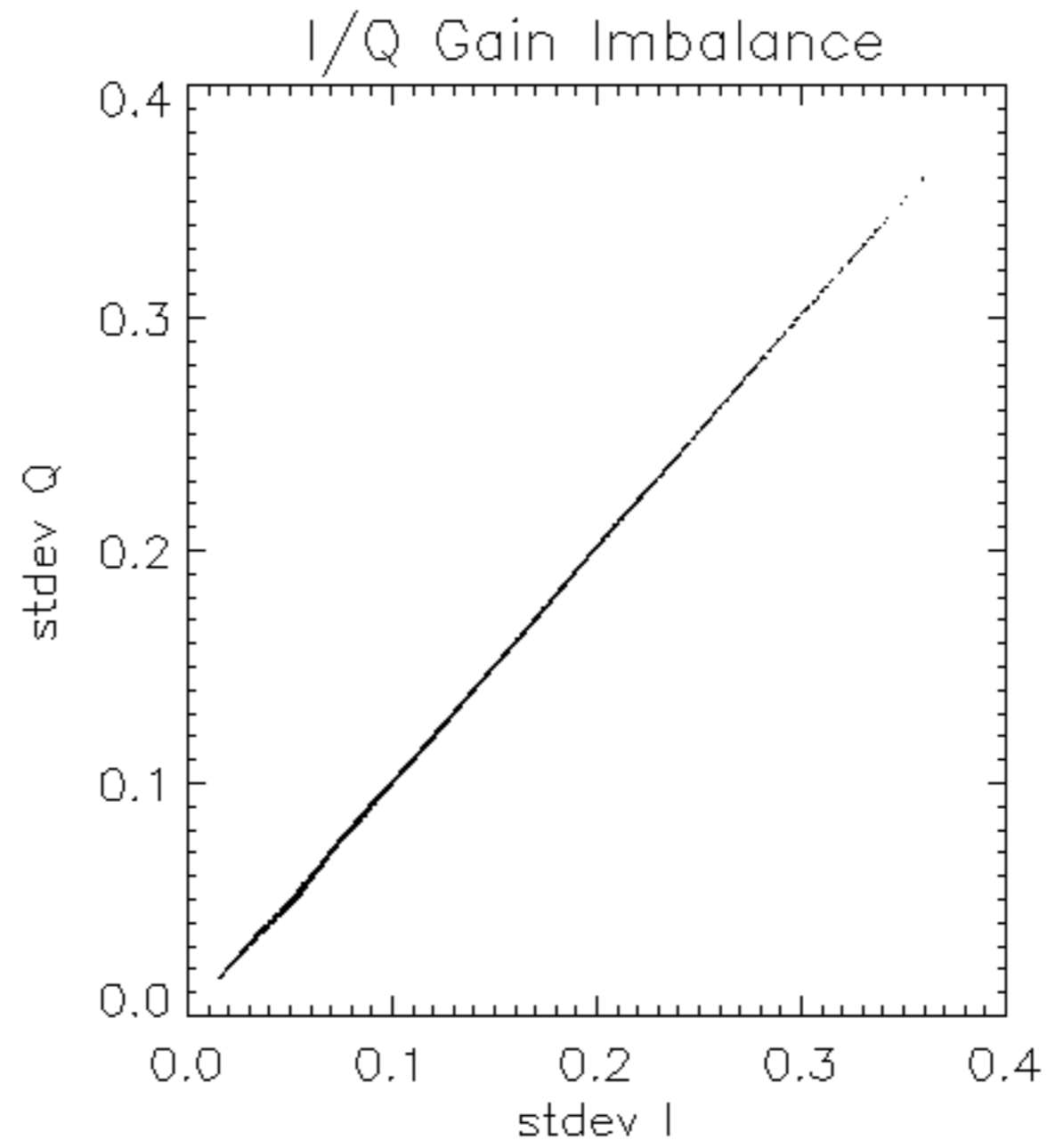
Doppler difference, estimated-predicted 'WS' 'IS2' 'V/V' -error mean of 53 Hz

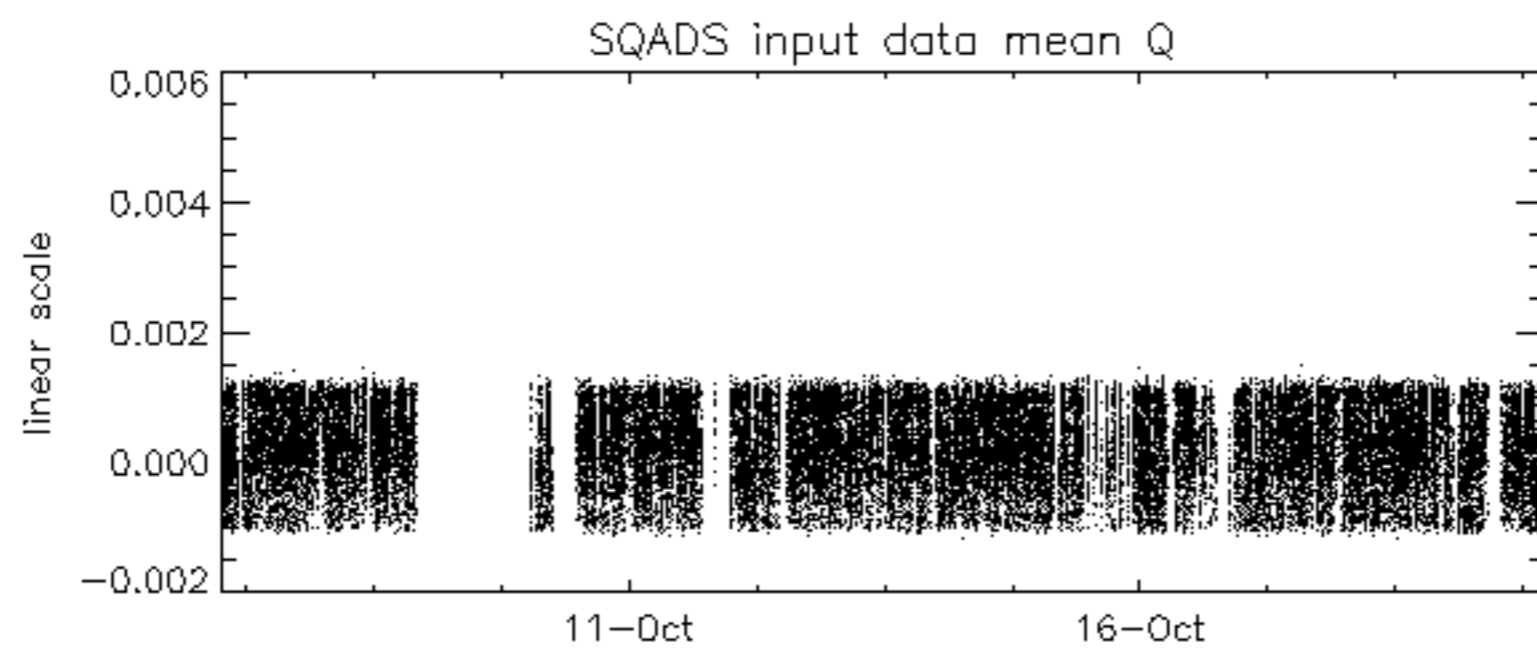
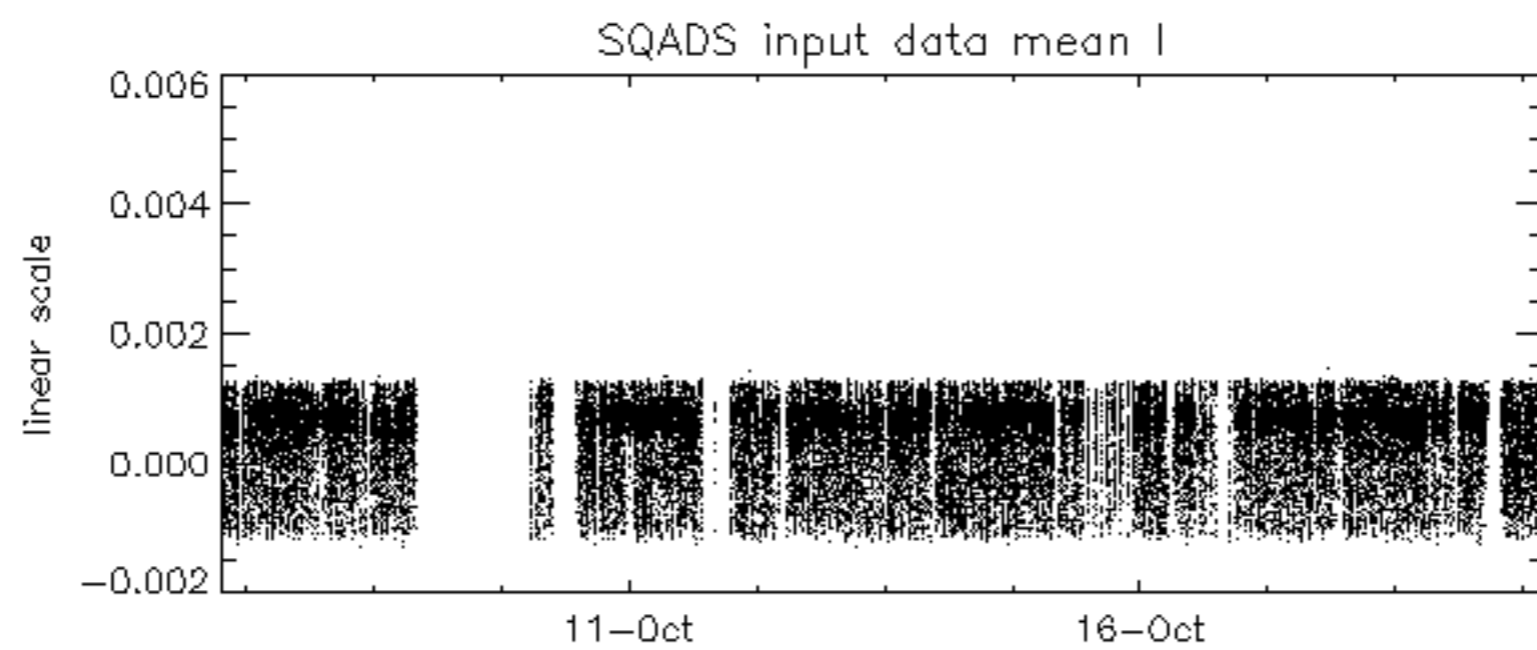
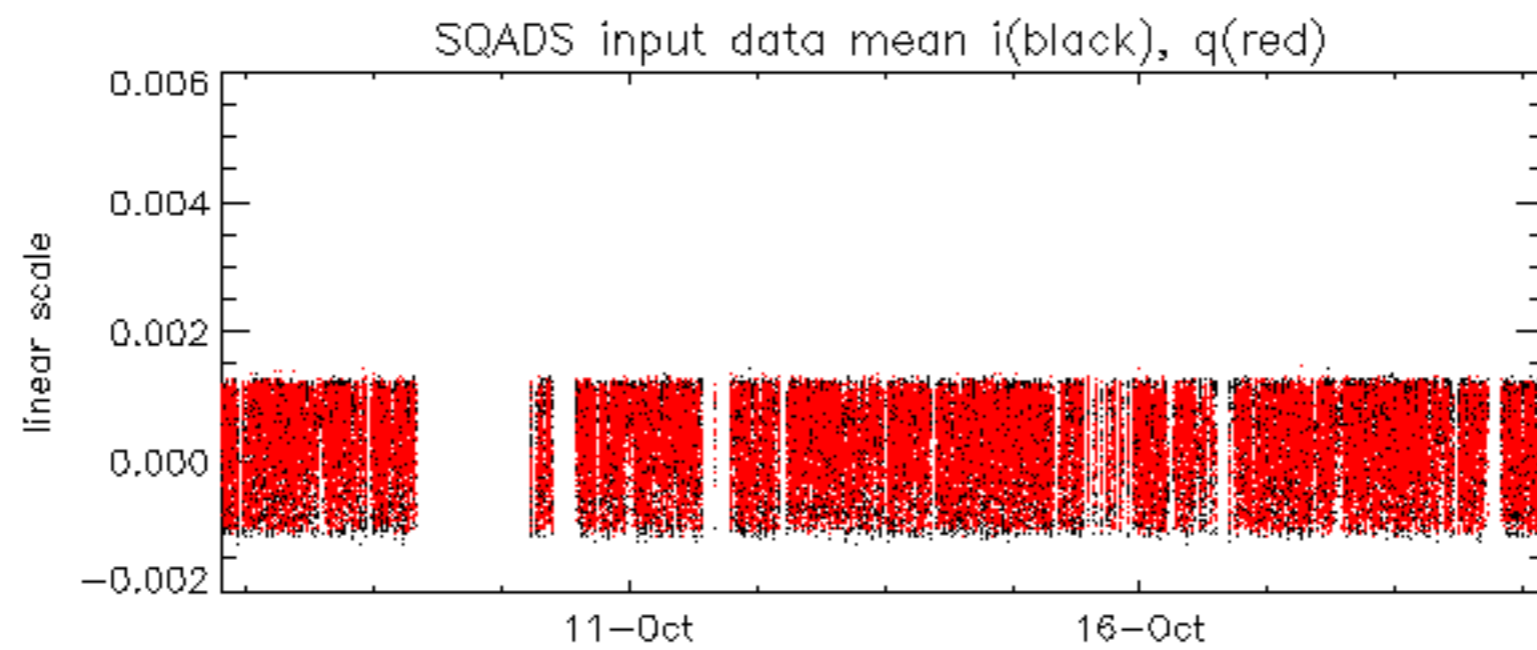


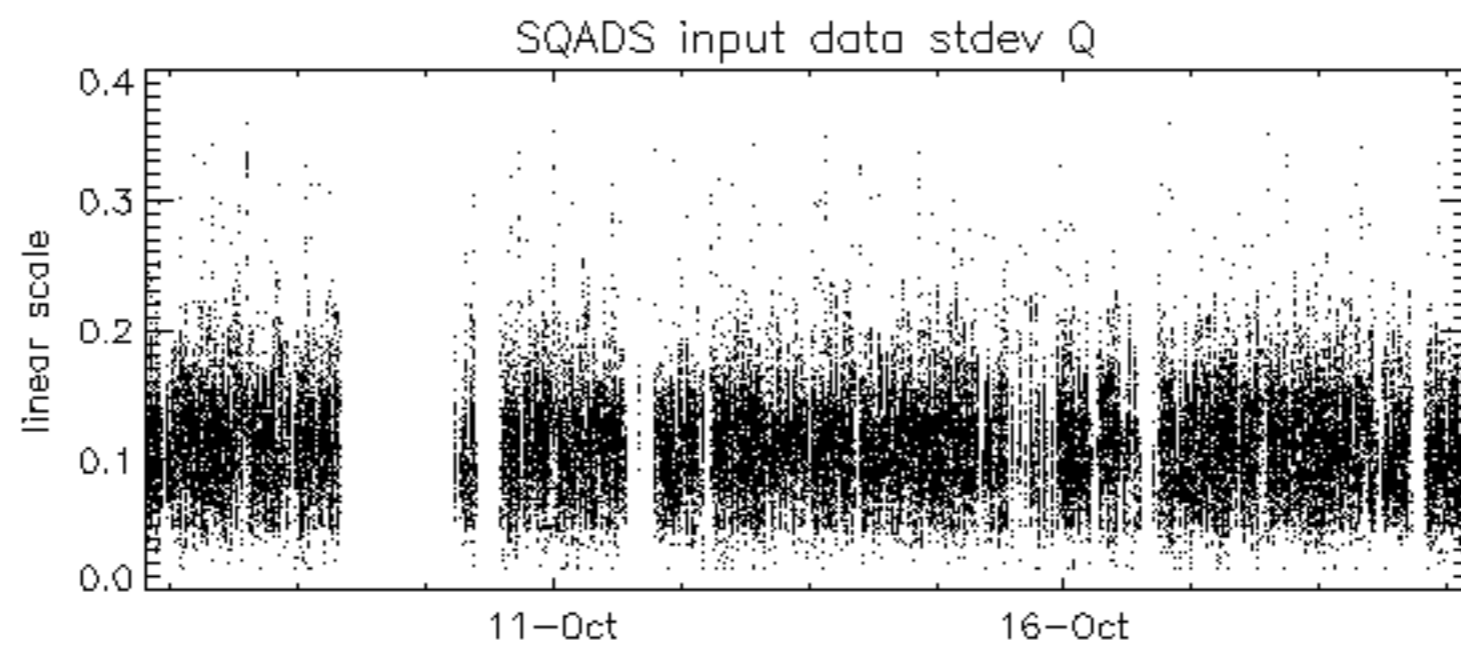
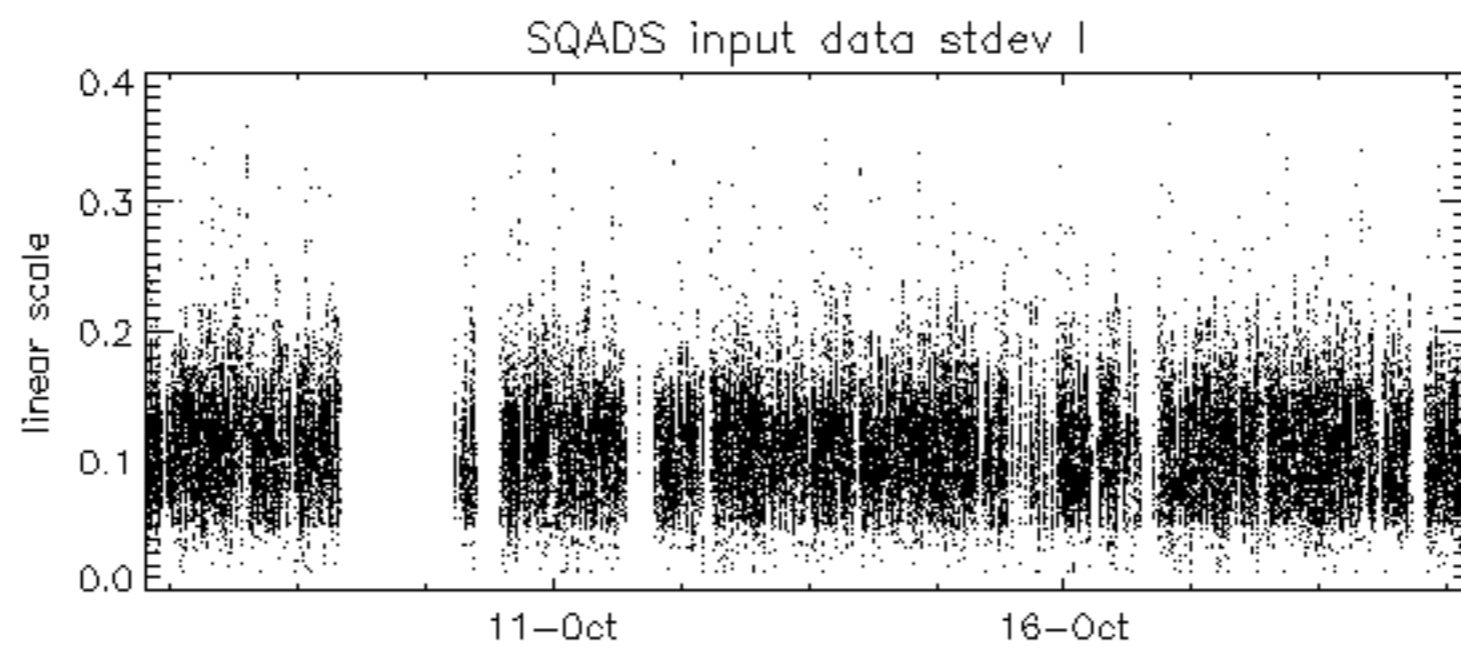
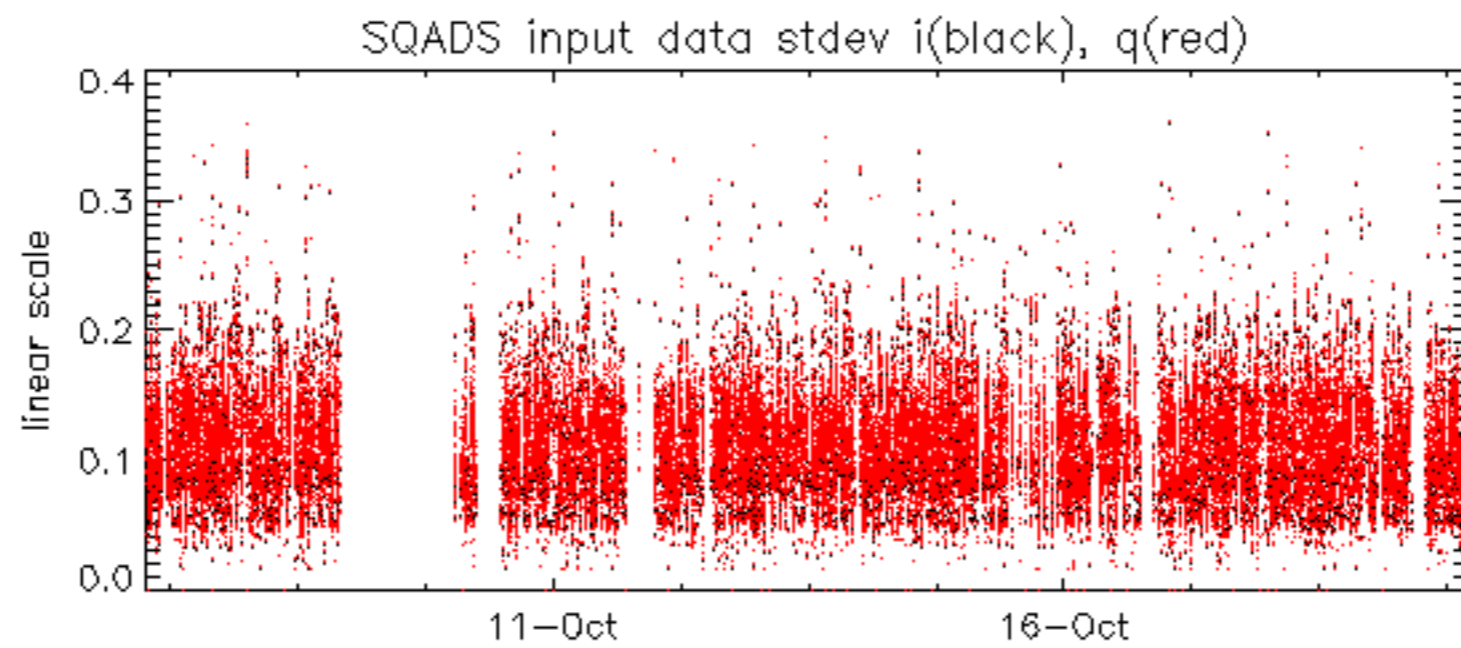
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