

# REPORT OF 040210

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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 unavailable from 09 Feb 2004 03:27:37 to 09 Feb 2004 13:13:07.

### 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 last available MS products (08 Feb 2004).

Polarisation	Start Time
V	20040208 201116
H	20040208 200956

#### 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	-3.60424	-22.3151	-8.08514
	stdev	0.0104913	0.0780648	0.00802748

24	mean	-5.12440	-21.0432	-8.08514
	stdev	0.0143231	0.0695501	0.00802748



## 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.67482	-22.4642	-8.14465
	stdev	0.00698918	0.0718771	0.00313876
24	mean	-5.10346	-21.1089	-8.14465
	stdev	0.0149974	0.0664296	0.00313876



## 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	0.000429488
	stdev	2.87264e-07
MEAN Q	mean	0.000355026
	stdev	3.31941e-07



### 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.118990
	stdev	0.00138753

STDEV Q	mean	0.119225
	stdev	0.00140267



### 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

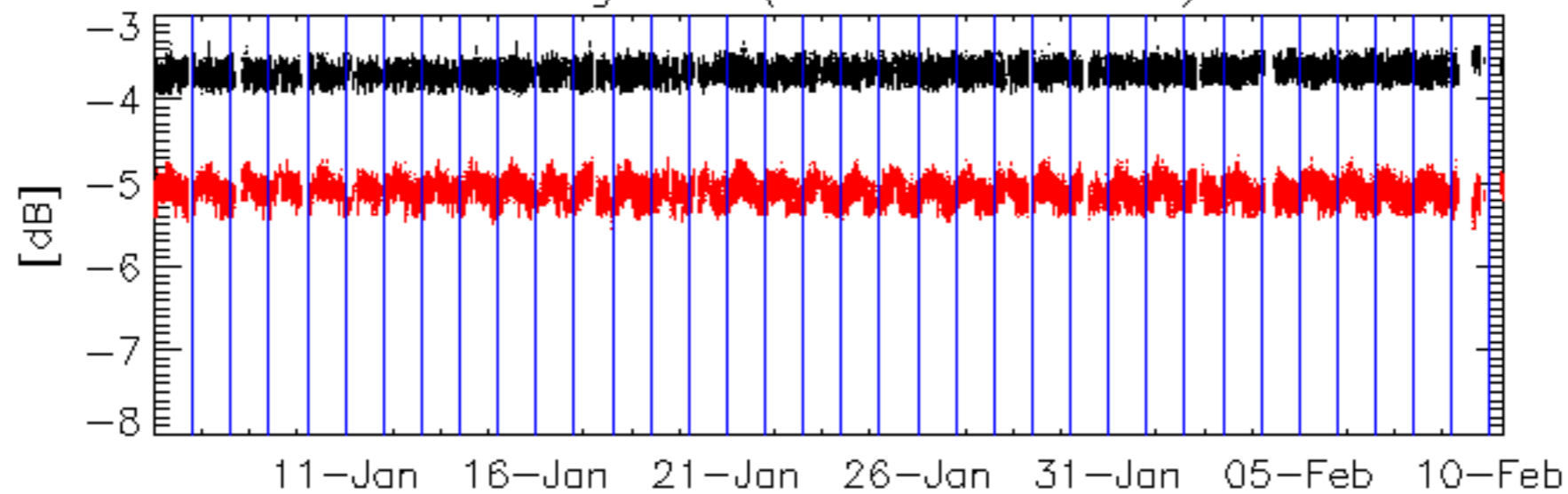
Evolution of Absolute Doppler
Ascending
Descending

### 6.3 - Doppler evolution versus ANX

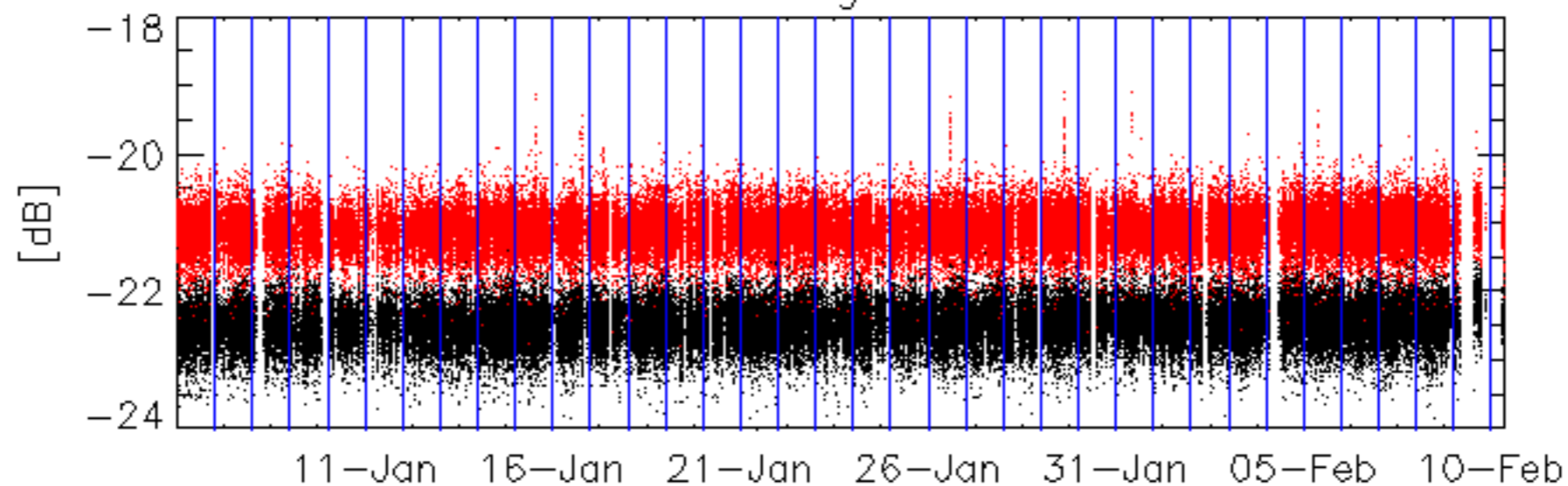
Evolution Doppler error versus ANX



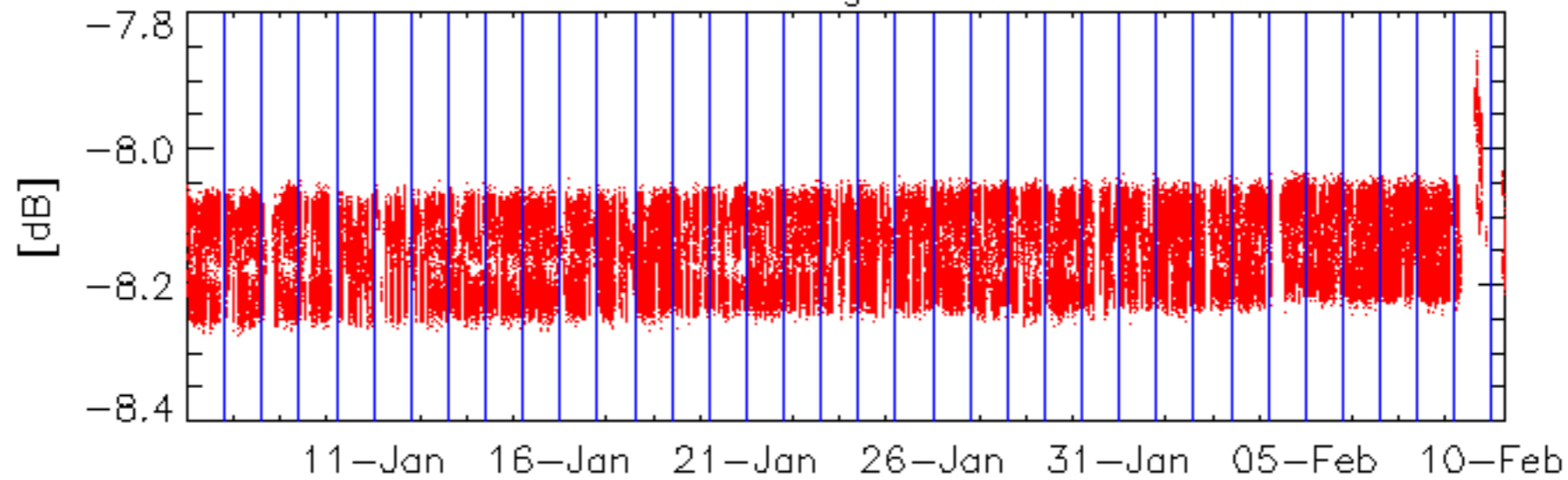

Average P1 (row 3 & row 24)



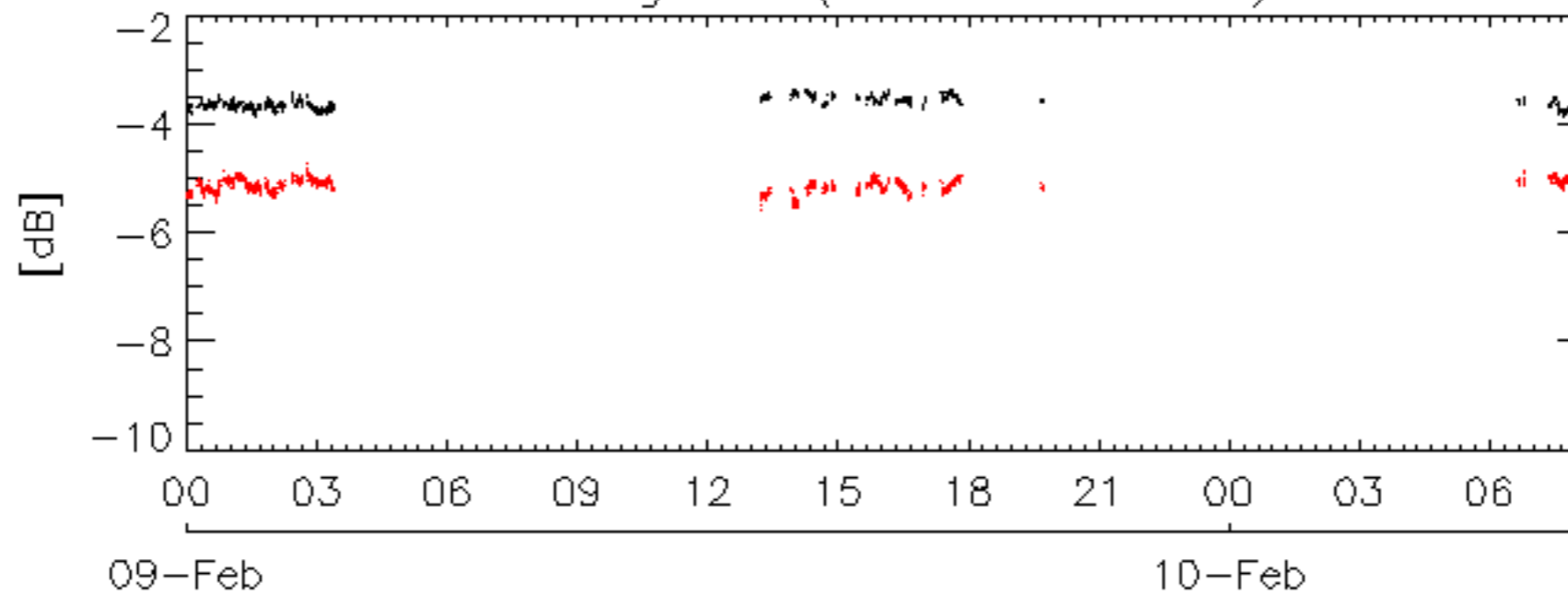
Average P2



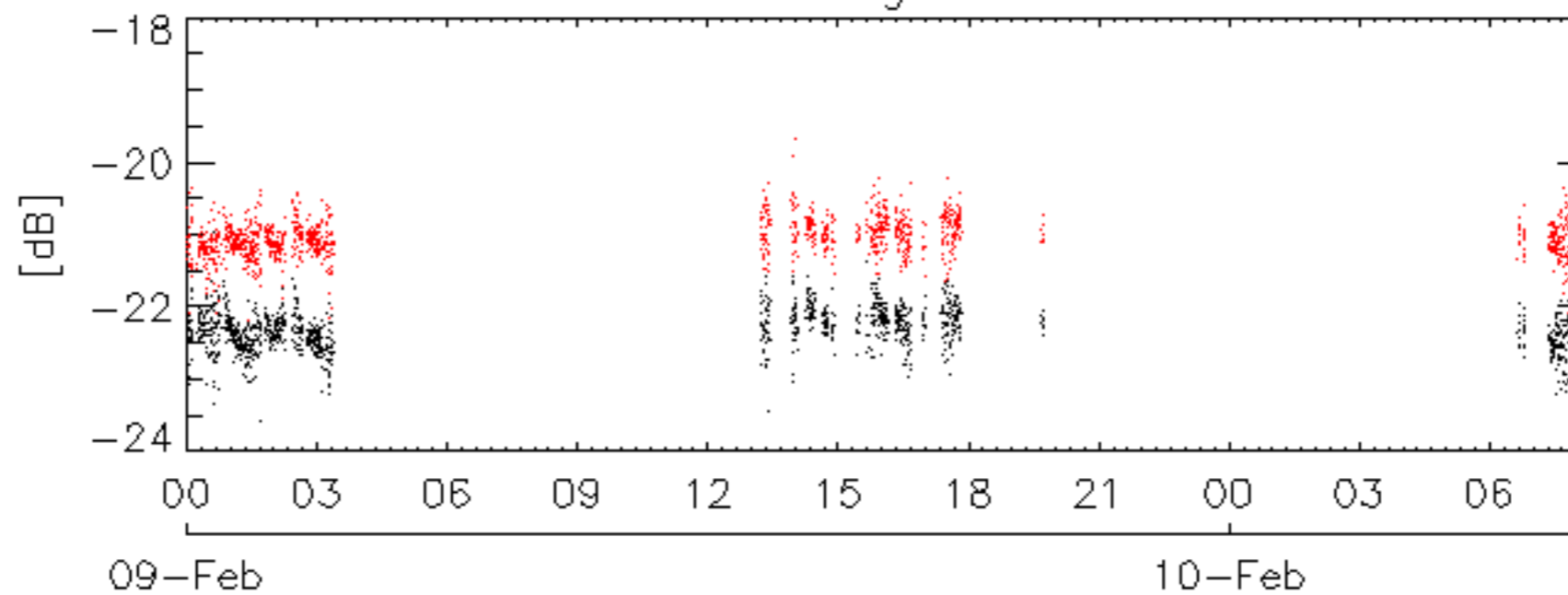
Average P3



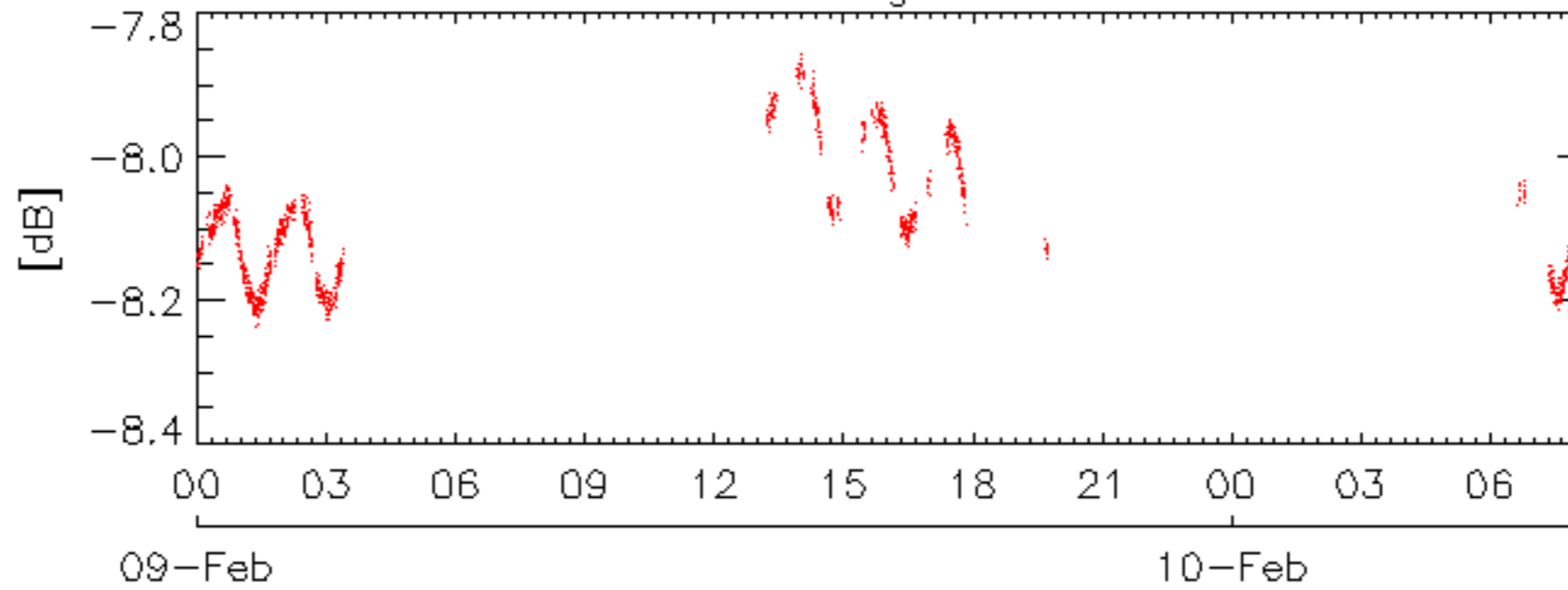
Average P1 (row 3 & row 24)



Average P2



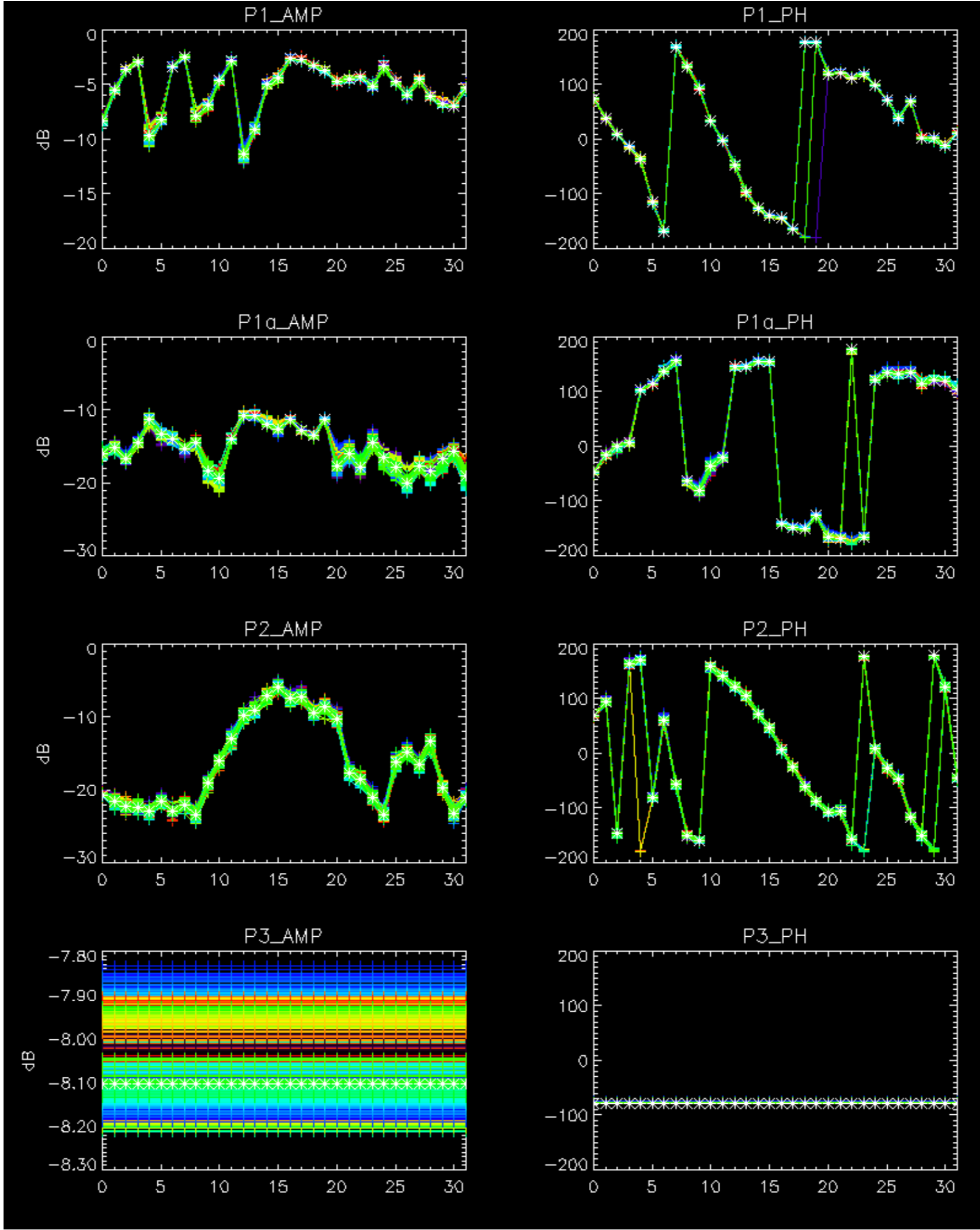
Average P3



No anomalies observed on available browse products.



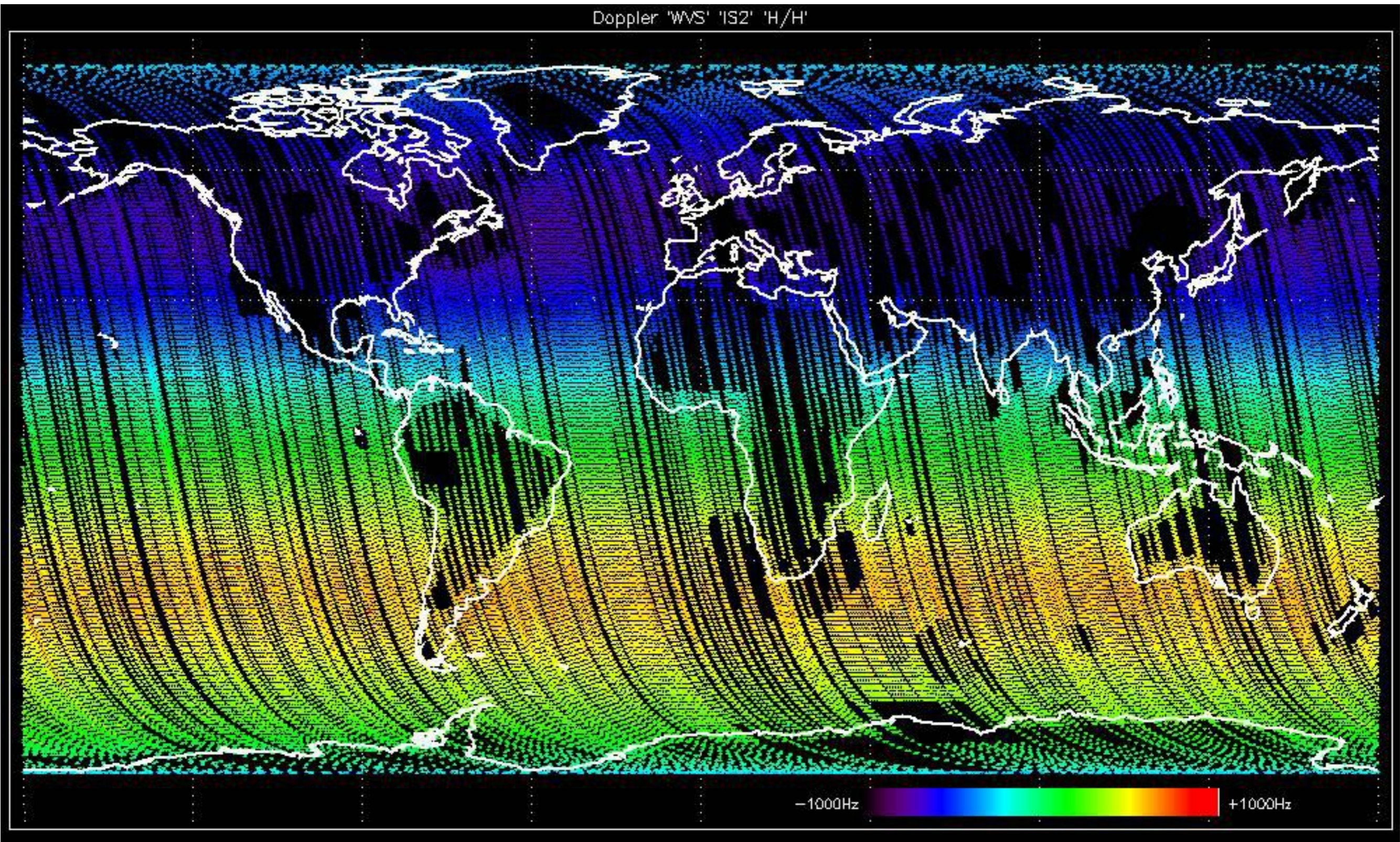
No anomalies observed.



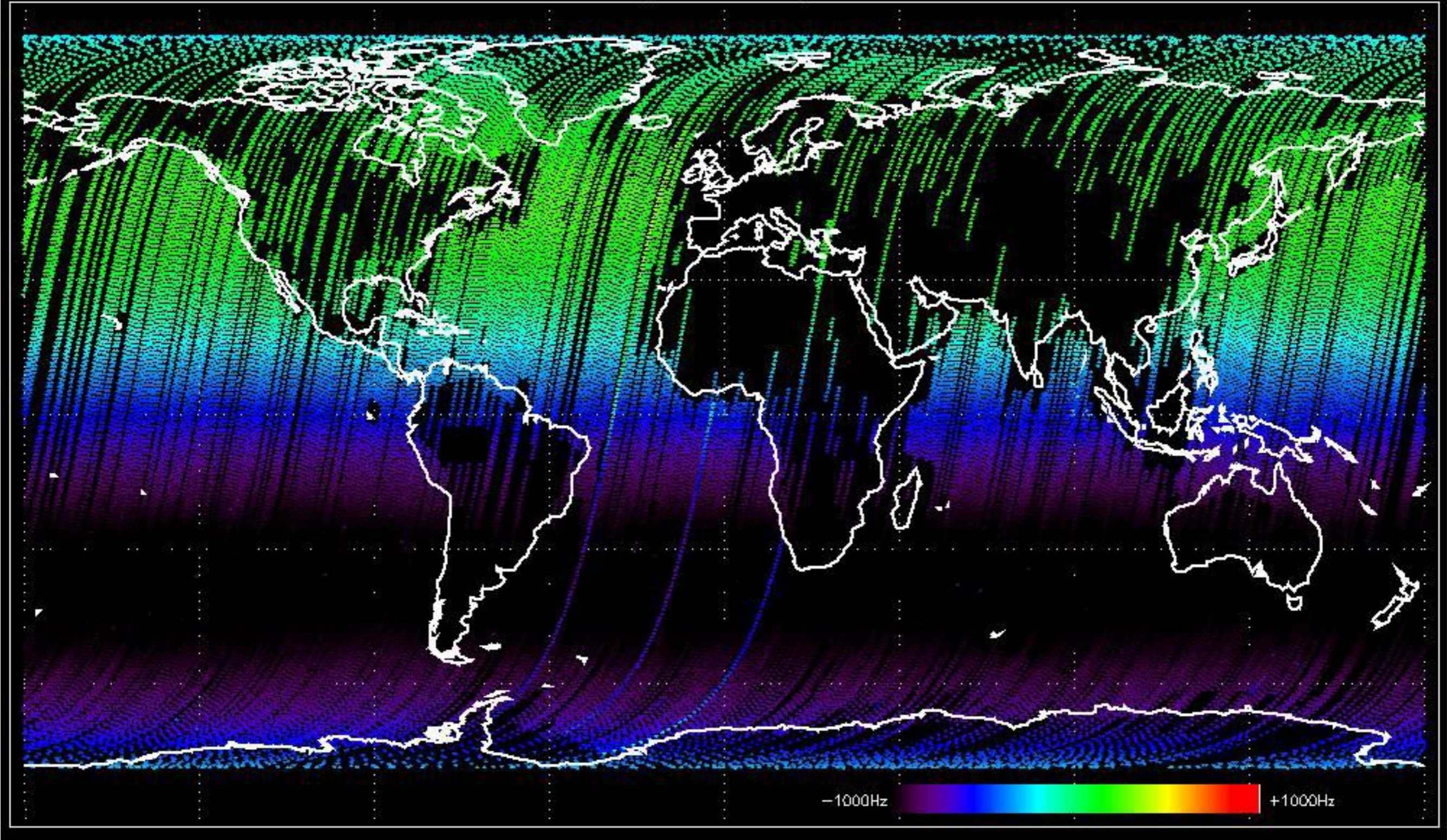
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

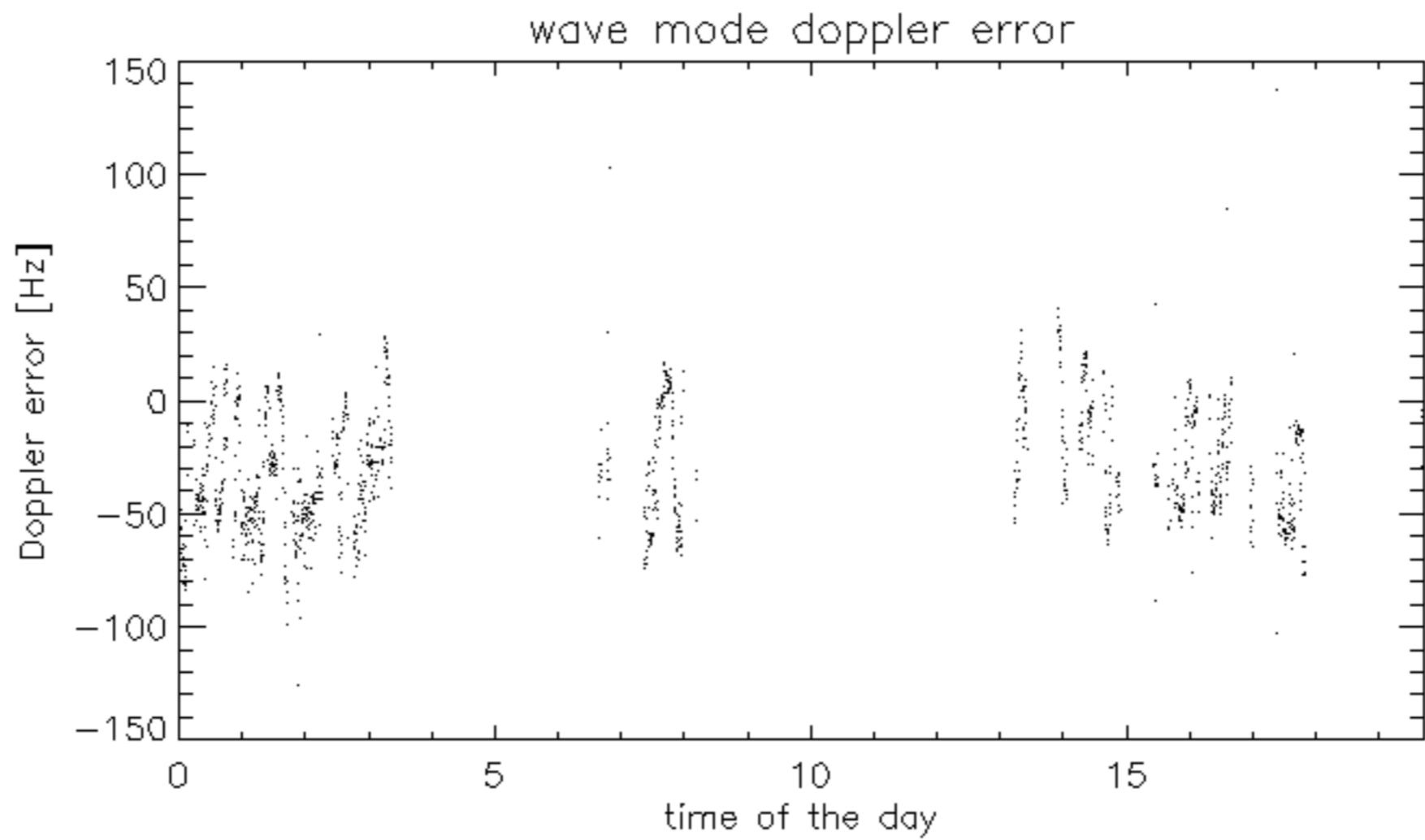
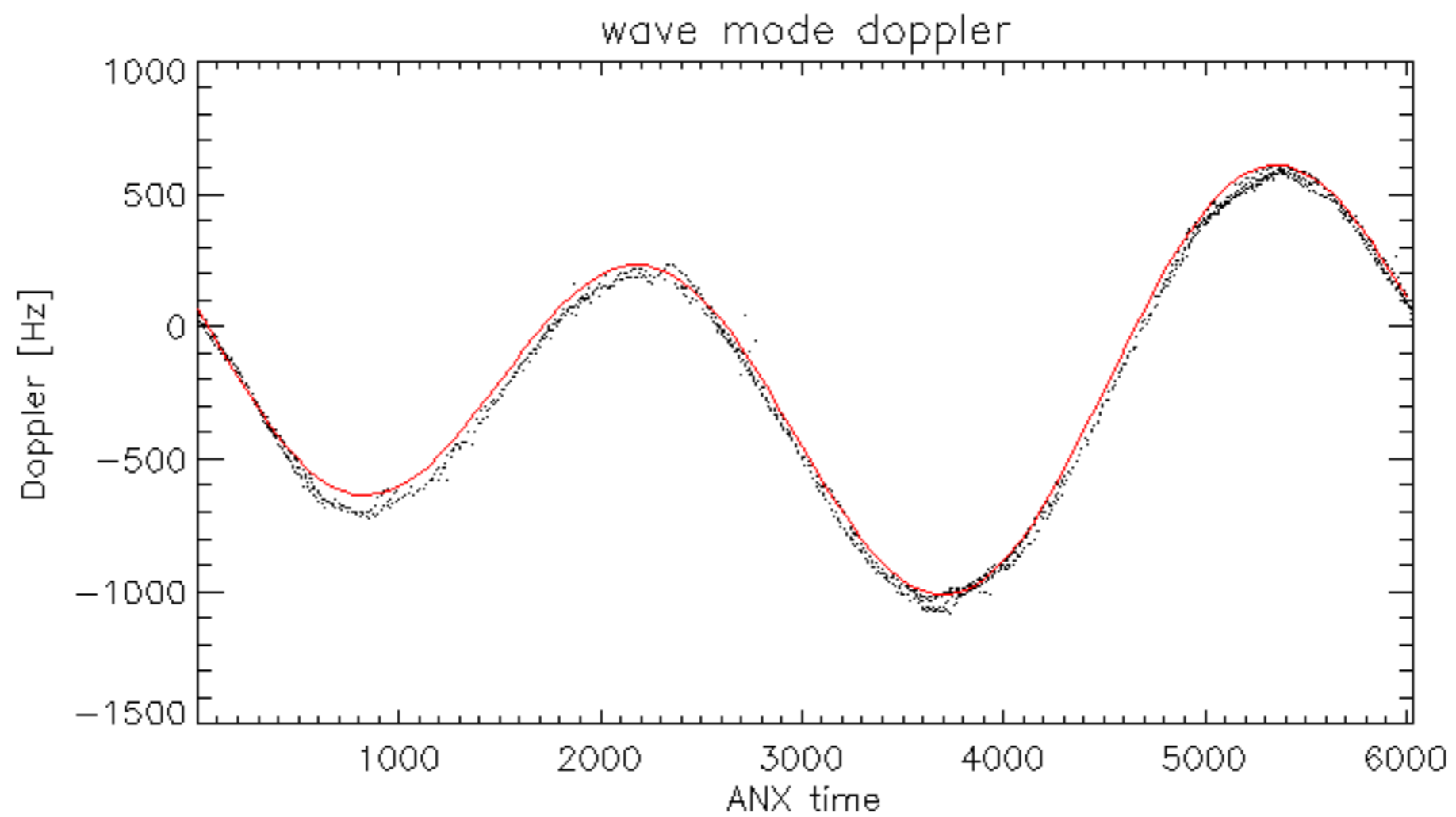
No anomalies observed in Doppler evolution.  
Doppler analysis performed over the last 35 days.

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

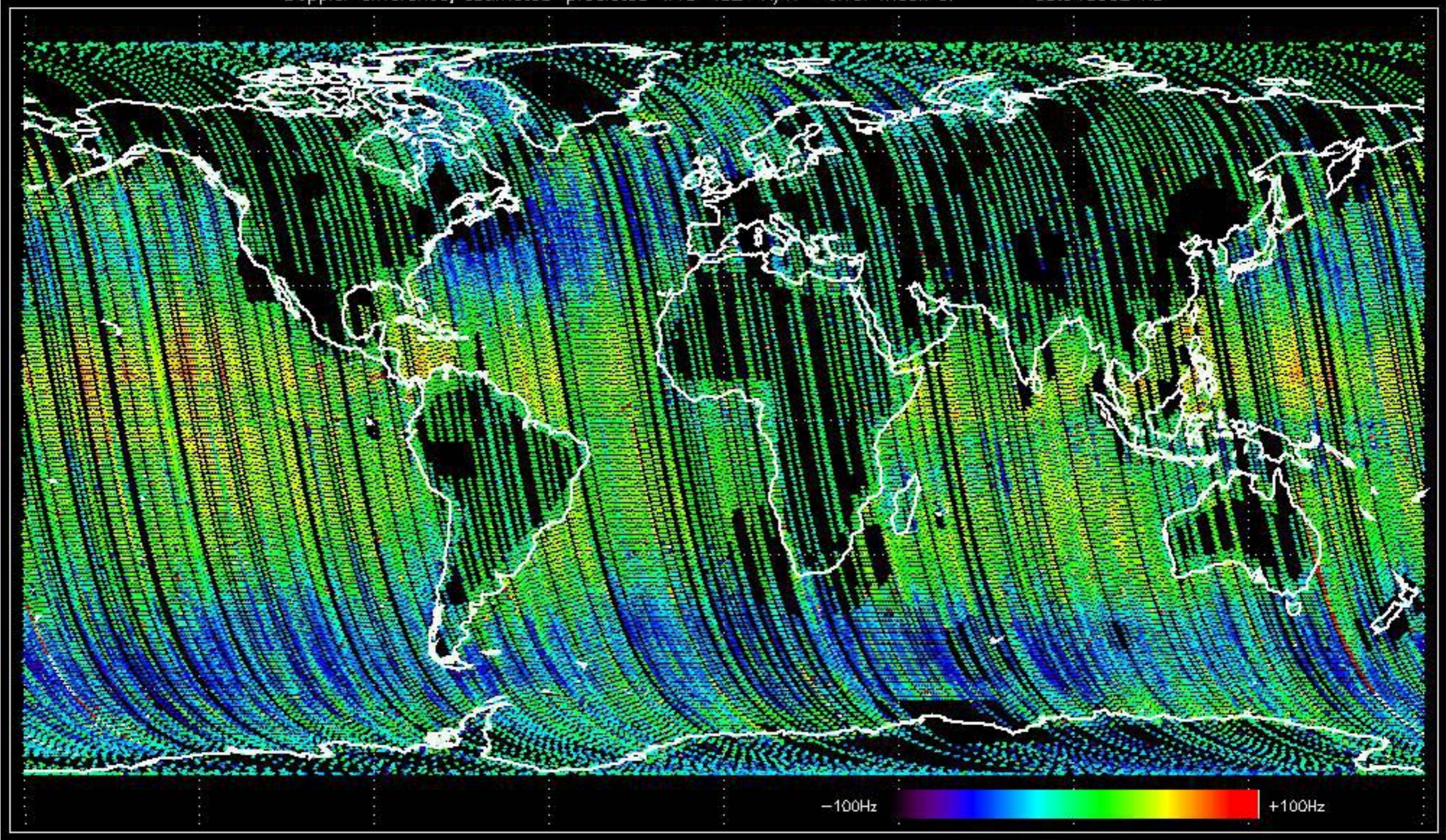


Doppler 'WVS' 'IS2' 'V/V'



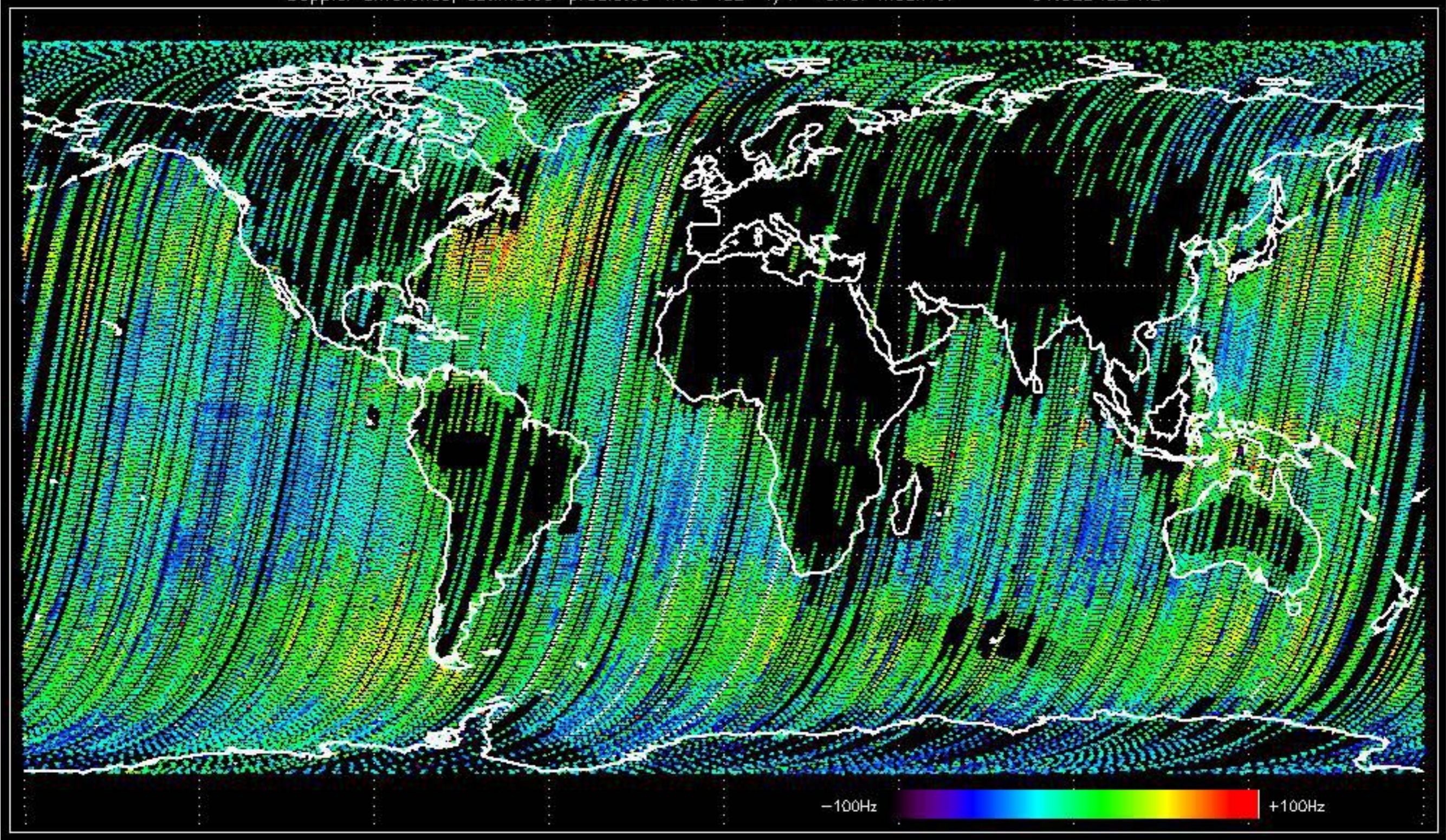


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -33.913302 Hz





Doppler difference, estimated-predicted 'wvs' 'IS2' 'v/v' -error mean of -31.925432 Hz



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No anomalies observed on last available MS products (08 Feb 2004).

No anomalies observed.









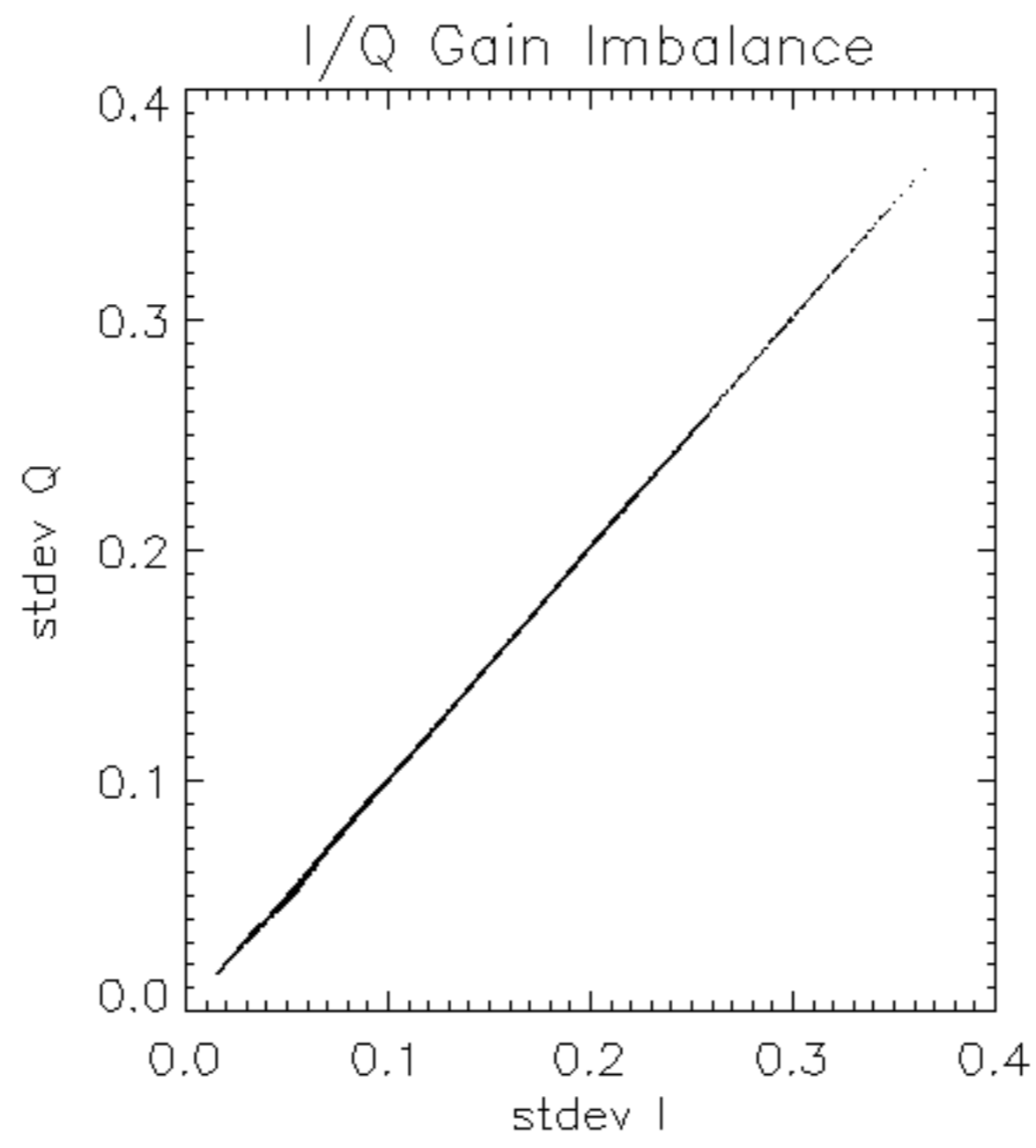


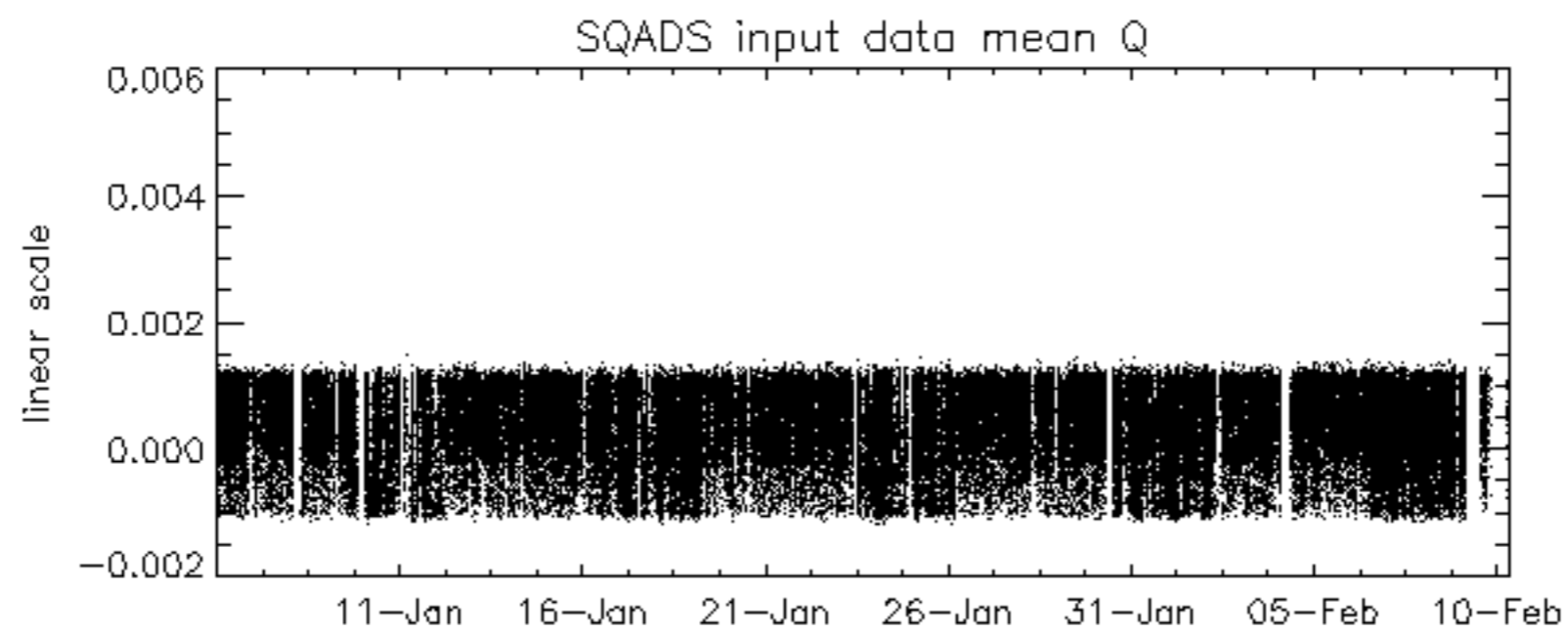
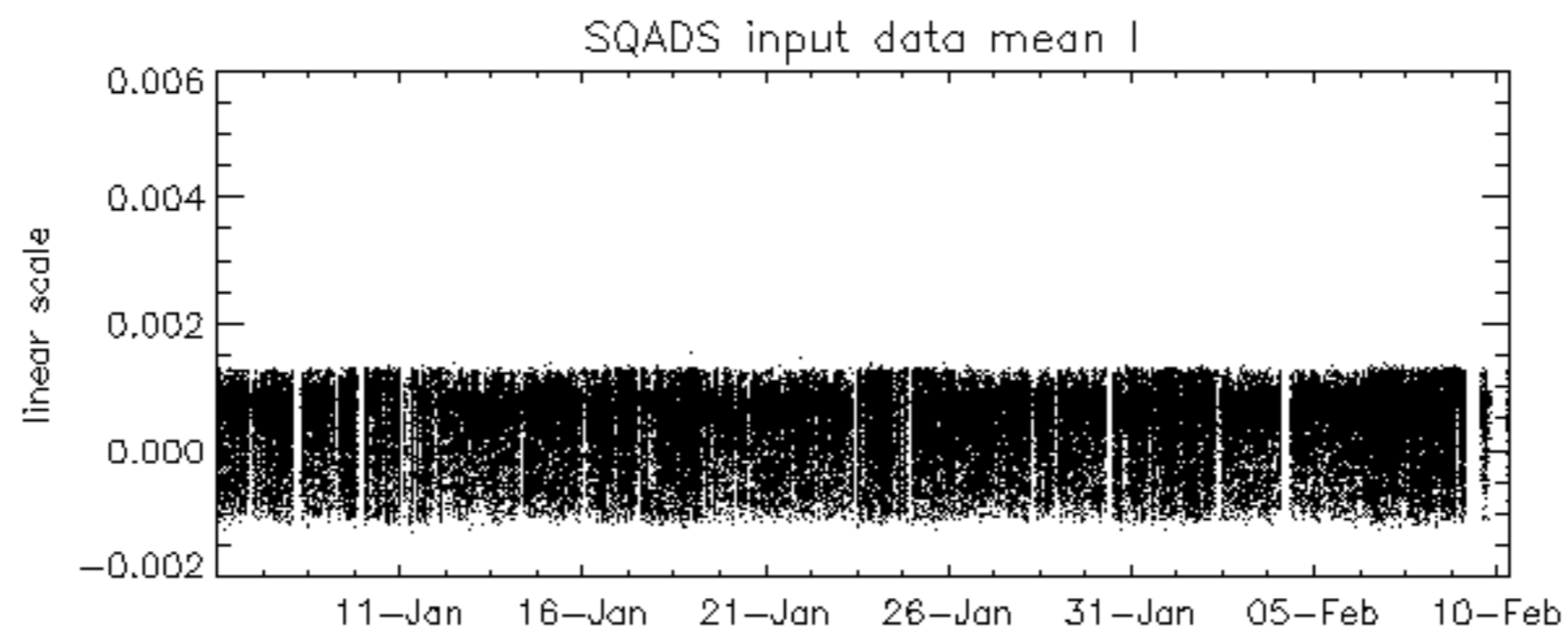
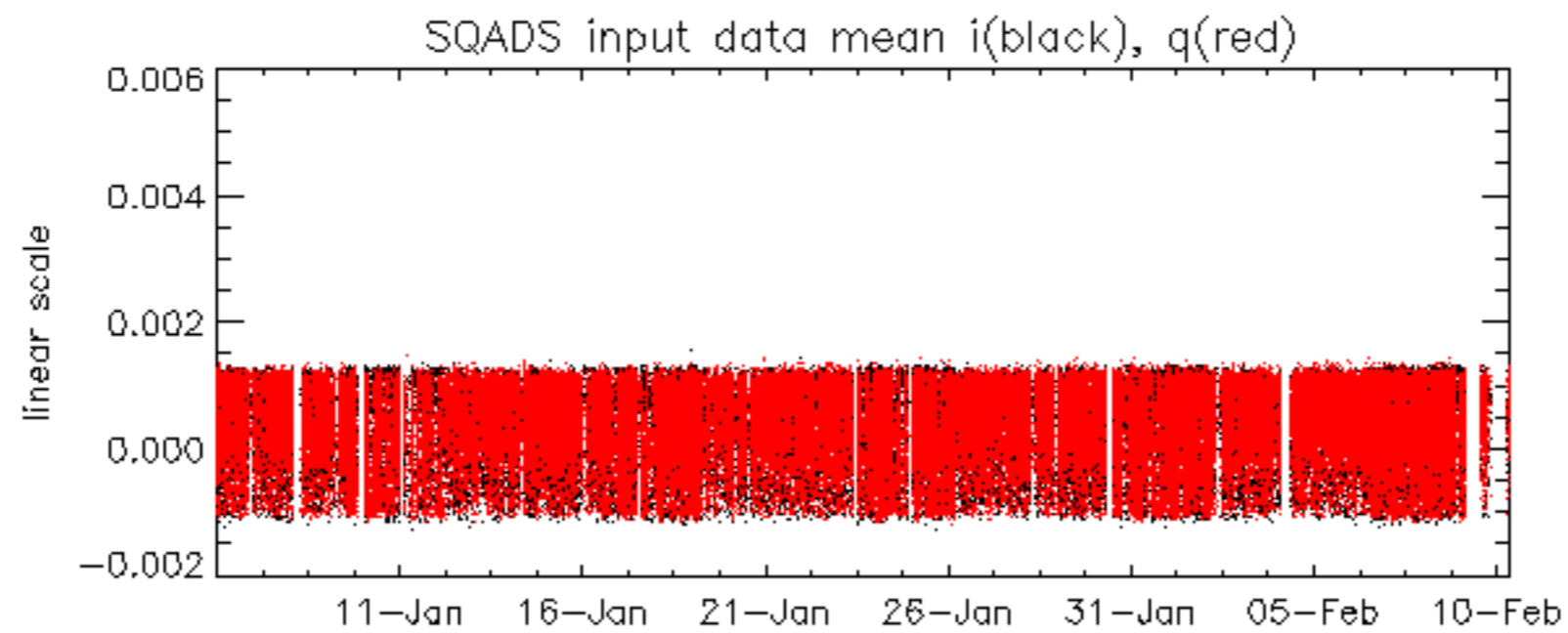


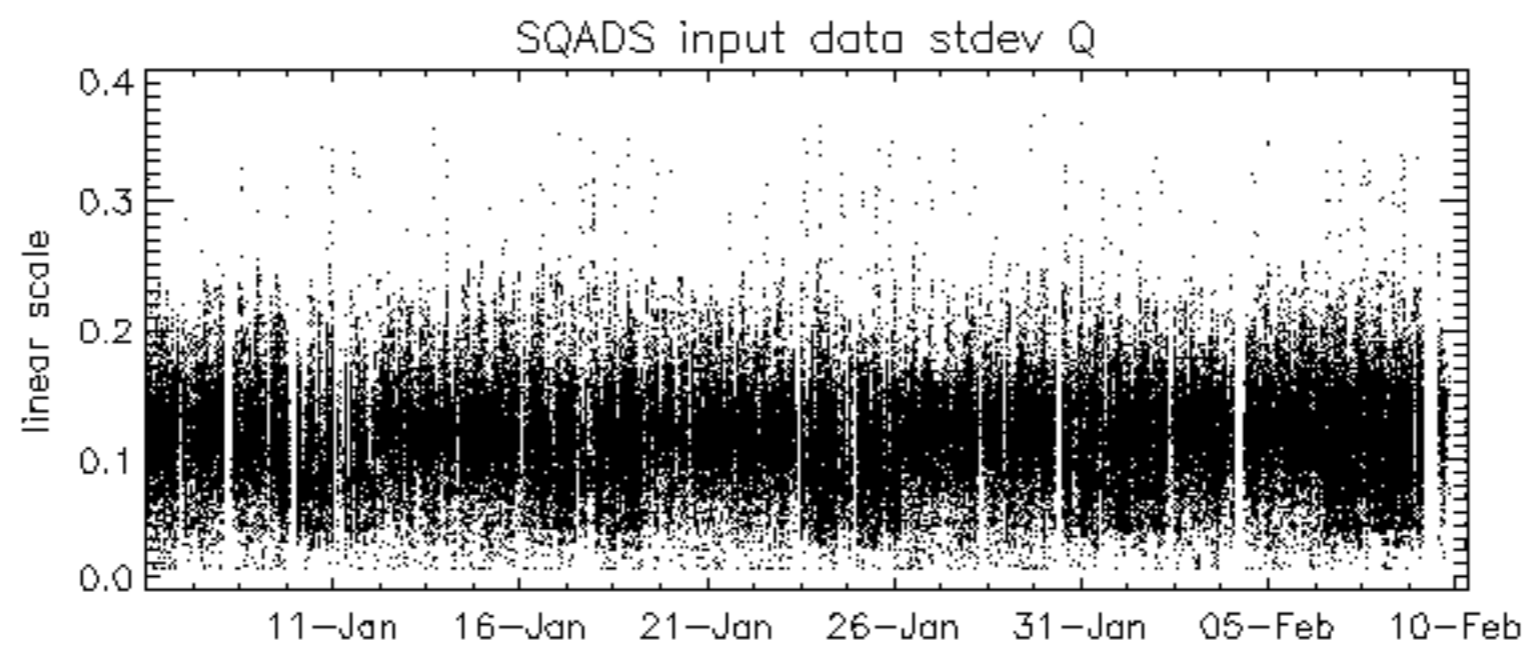
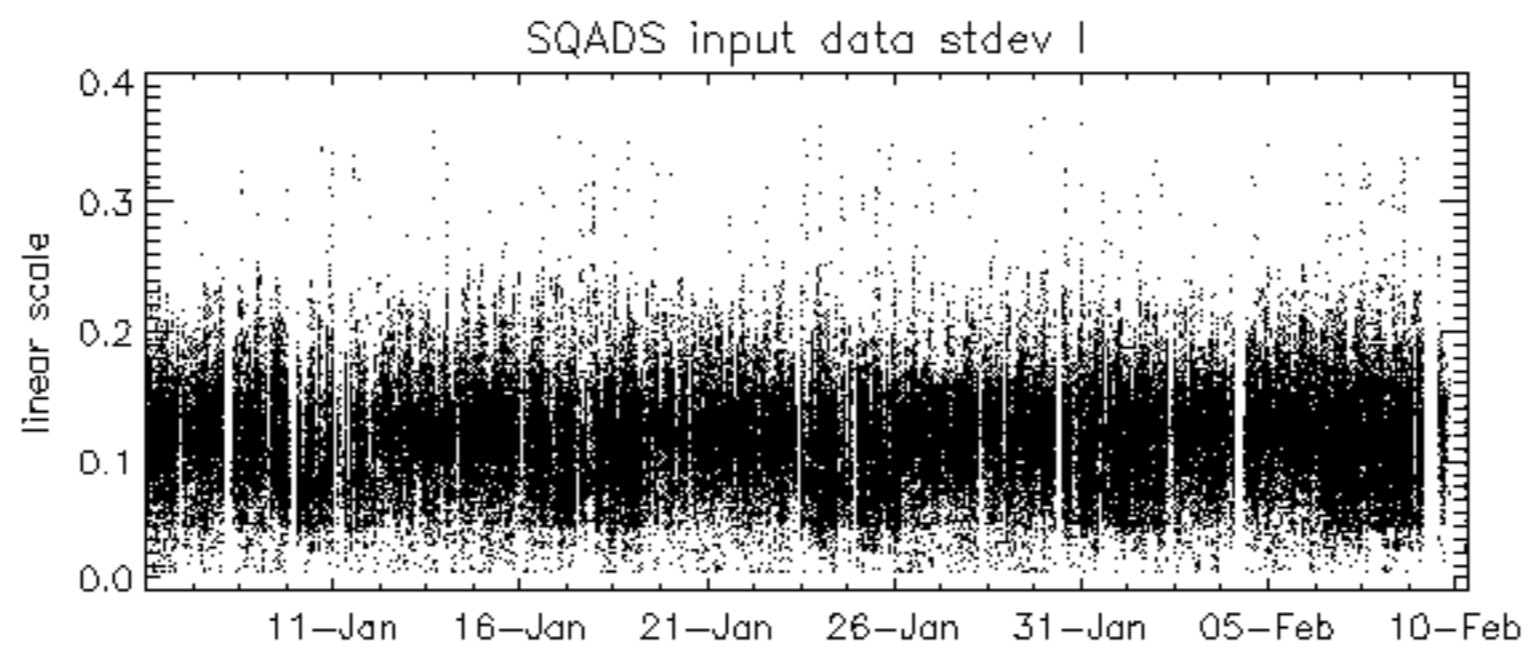
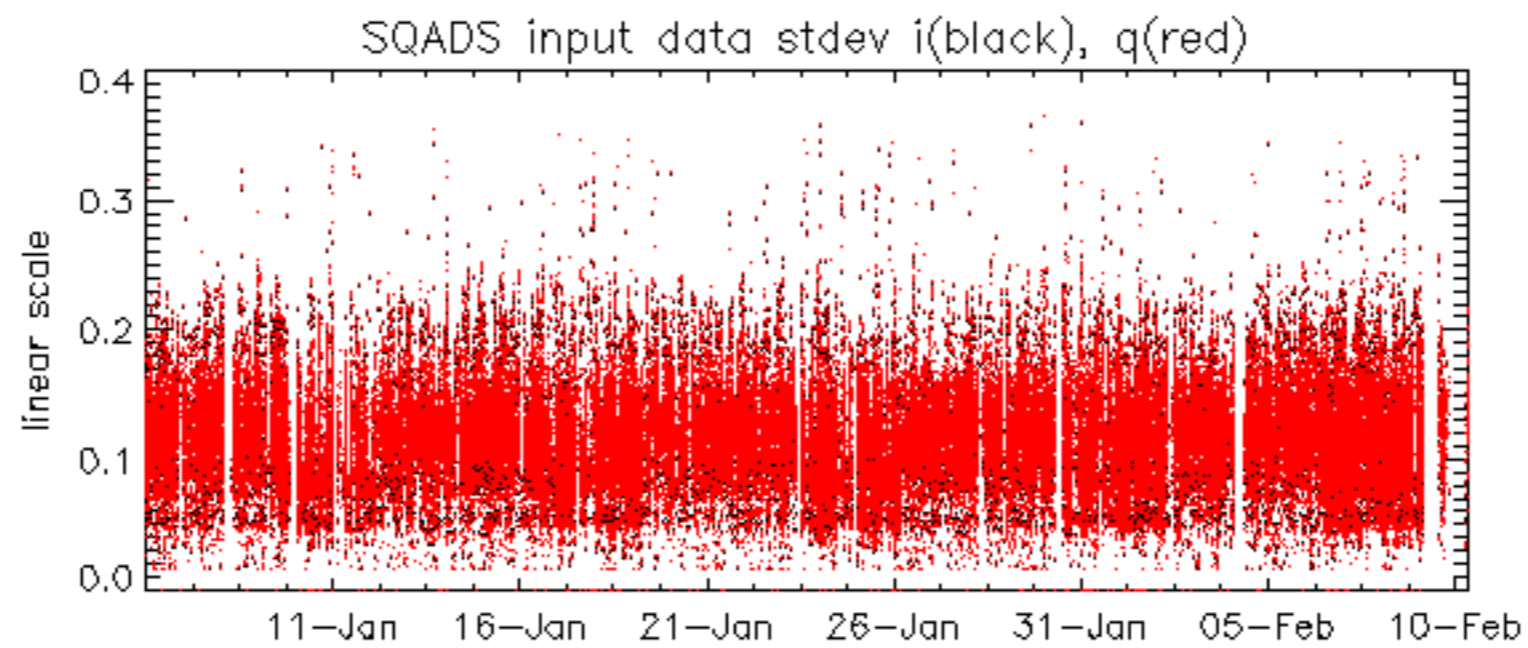






























ASAR unavailable from 09 Feb 2004 03:27:37 to 09 Feb 2004 13:13:07.

