

# REPORT OF 040211

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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 MS products available since 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	-3.63700	-22.3800	-8.11644
	stdev	0.00604417	0.0766784	0.00330975

24	mean	-5.03979	-21.0448	-8.11644
	stdev	0.00918881	0.0720902	0.00330975



## 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.67294	-22.4599	-8.14343
	stdev	0.00698995	0.0720104	0.00316533
24	mean	-5.10308	-21.1061	-8.14343
	stdev	0.0149650	0.0665739	0.00316533



## 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	0.000431681
	stdev	2.85530e-07
MEAN Q	mean	0.000357876
	stdev	3.31021e-07



### 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.119191
	stdev	0.00138740

STDEV Q	mean	0.119425
	stdev	0.00140264



### 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

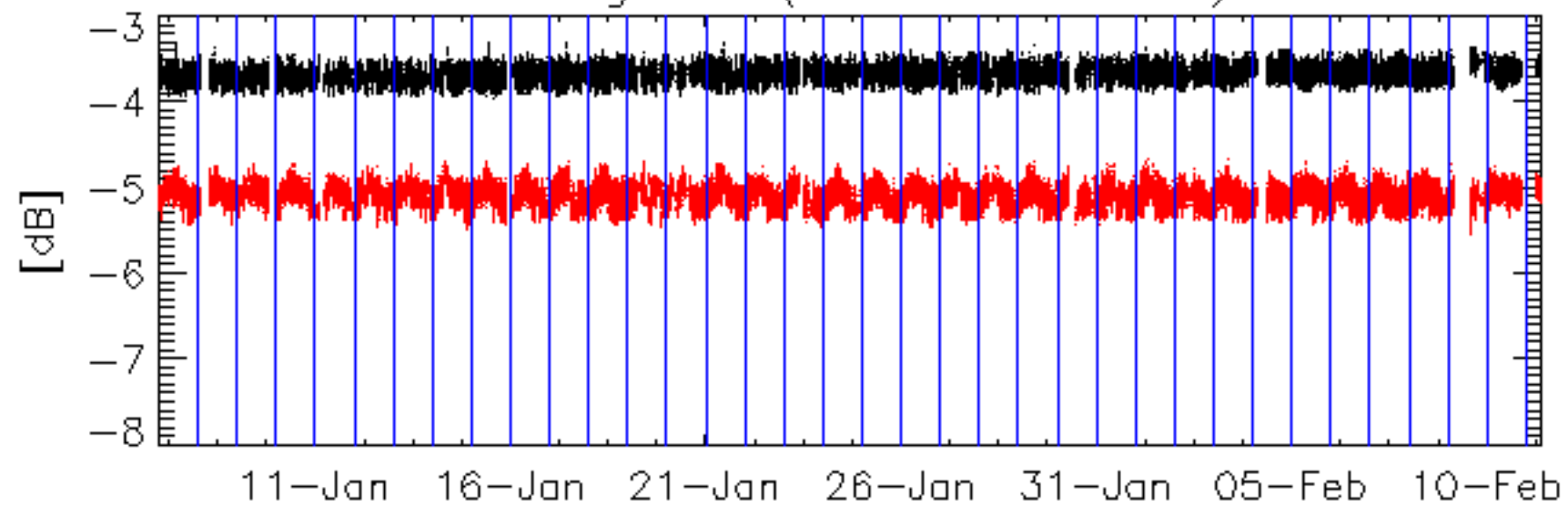
### 6.3 - Doppler evolution versus ANX

#### Evolution Doppler error versus ANX

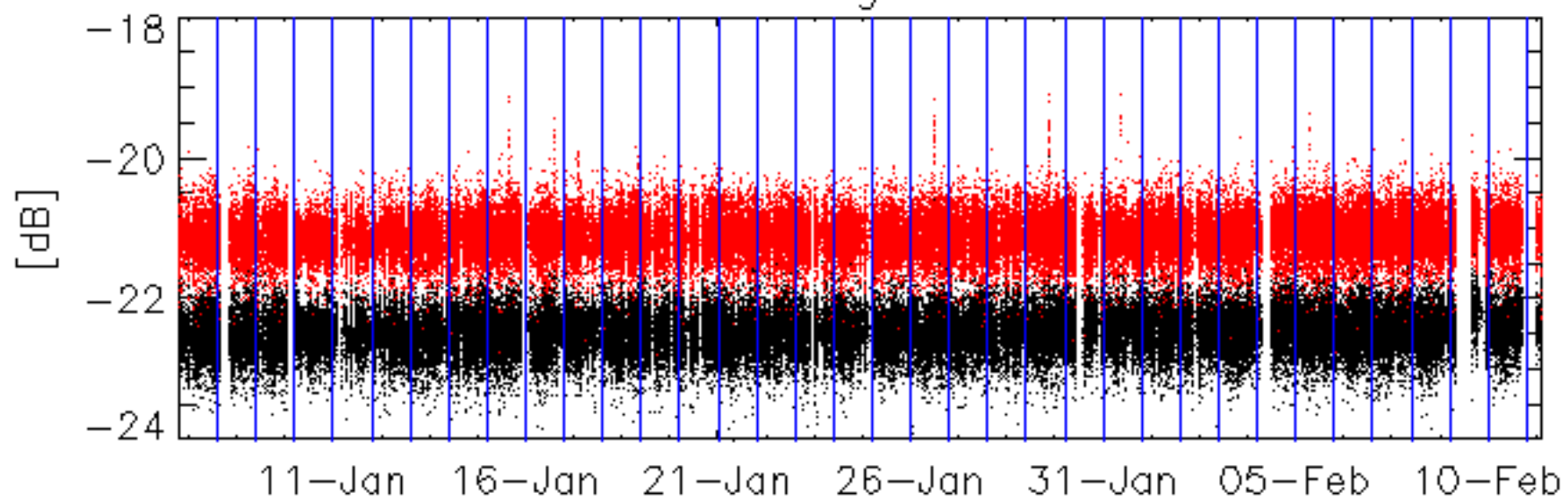




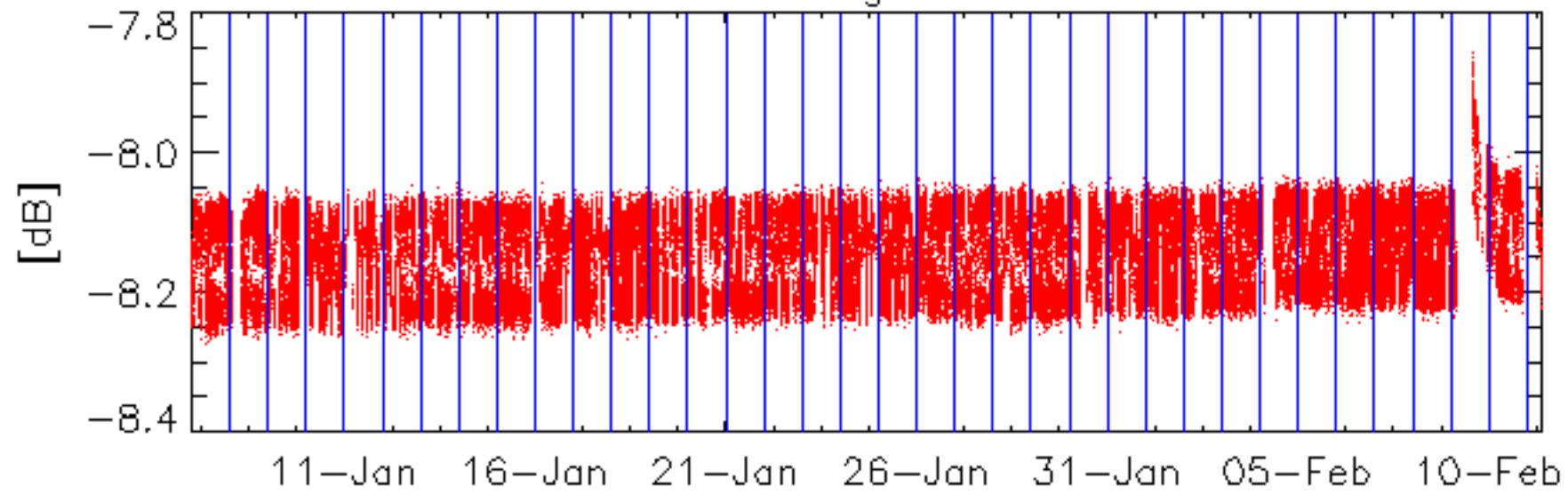
Average P1 (row 3 & row 24)



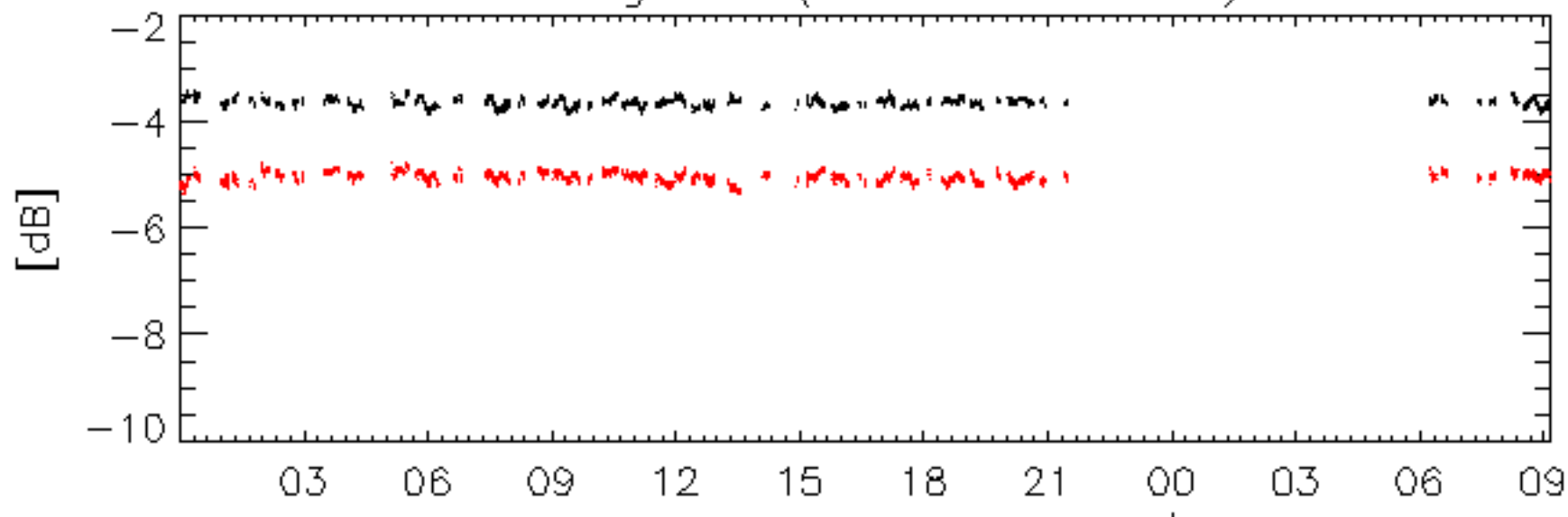
Average P2



Average P3

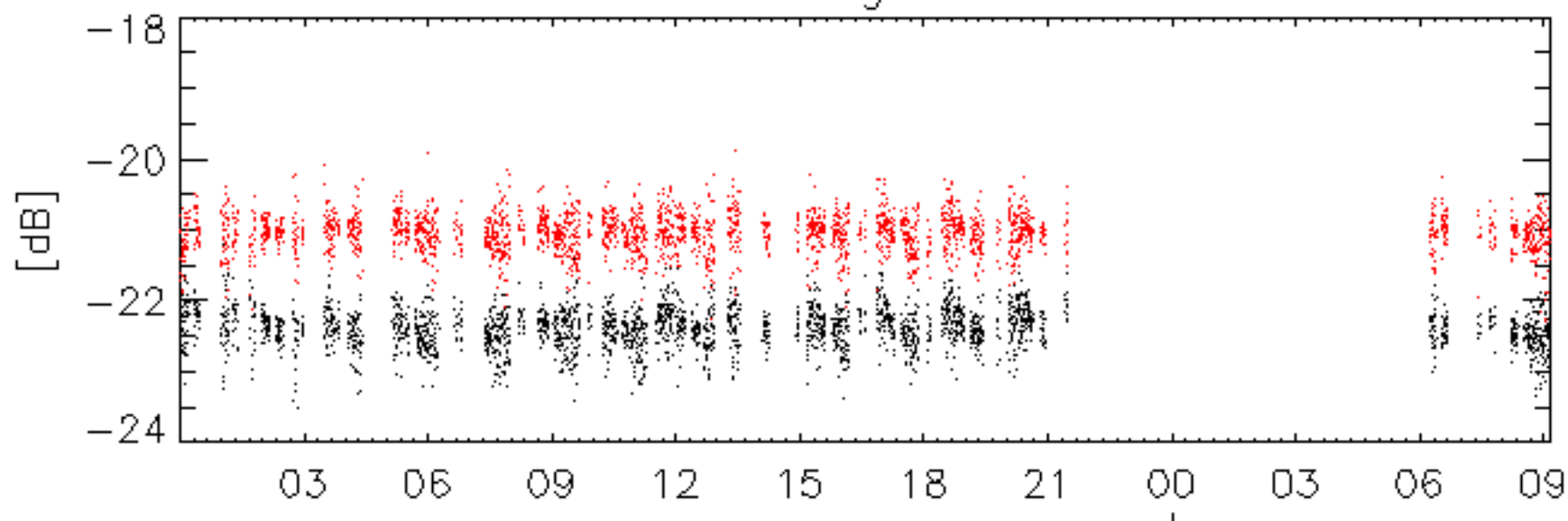


Average P1 (row 3 & row 24)



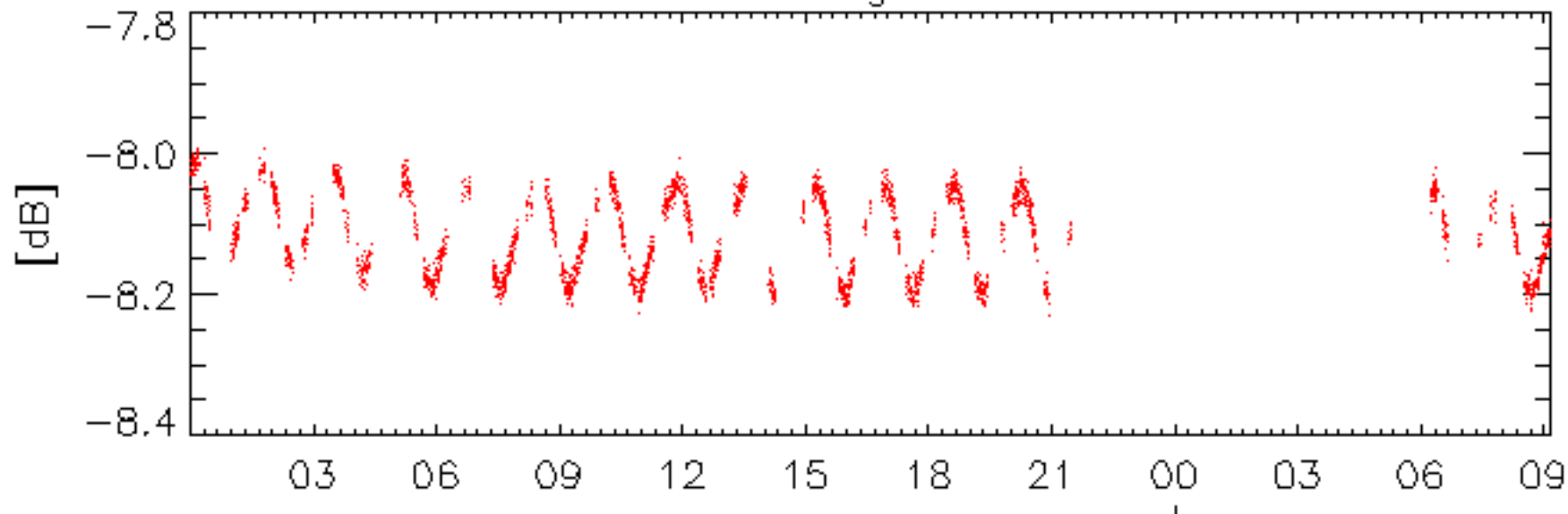
11-Feb

Average P2



11-Feb

Average P3

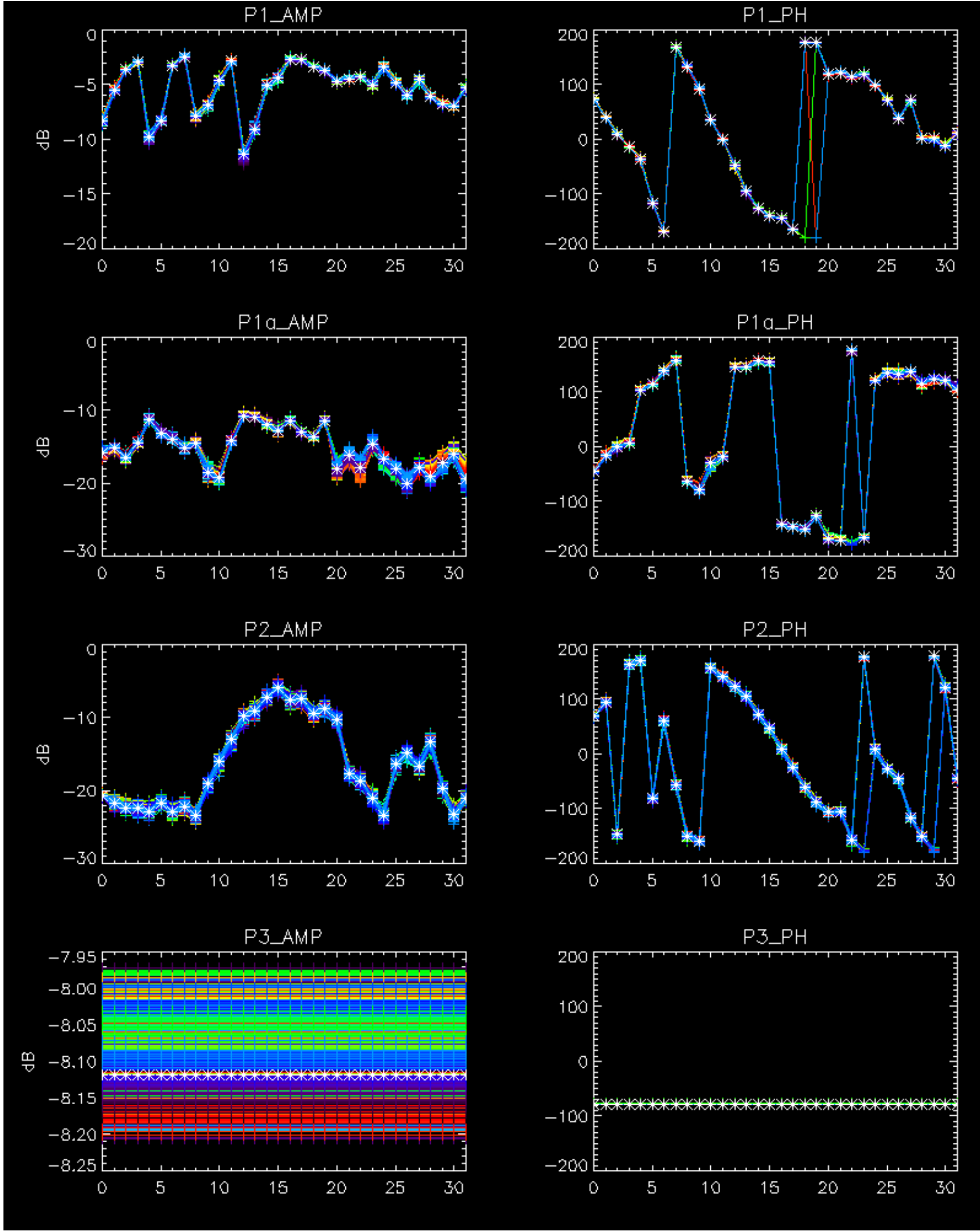


11-Feb

No anomalies observed on available browse products.



No anomalies observed.

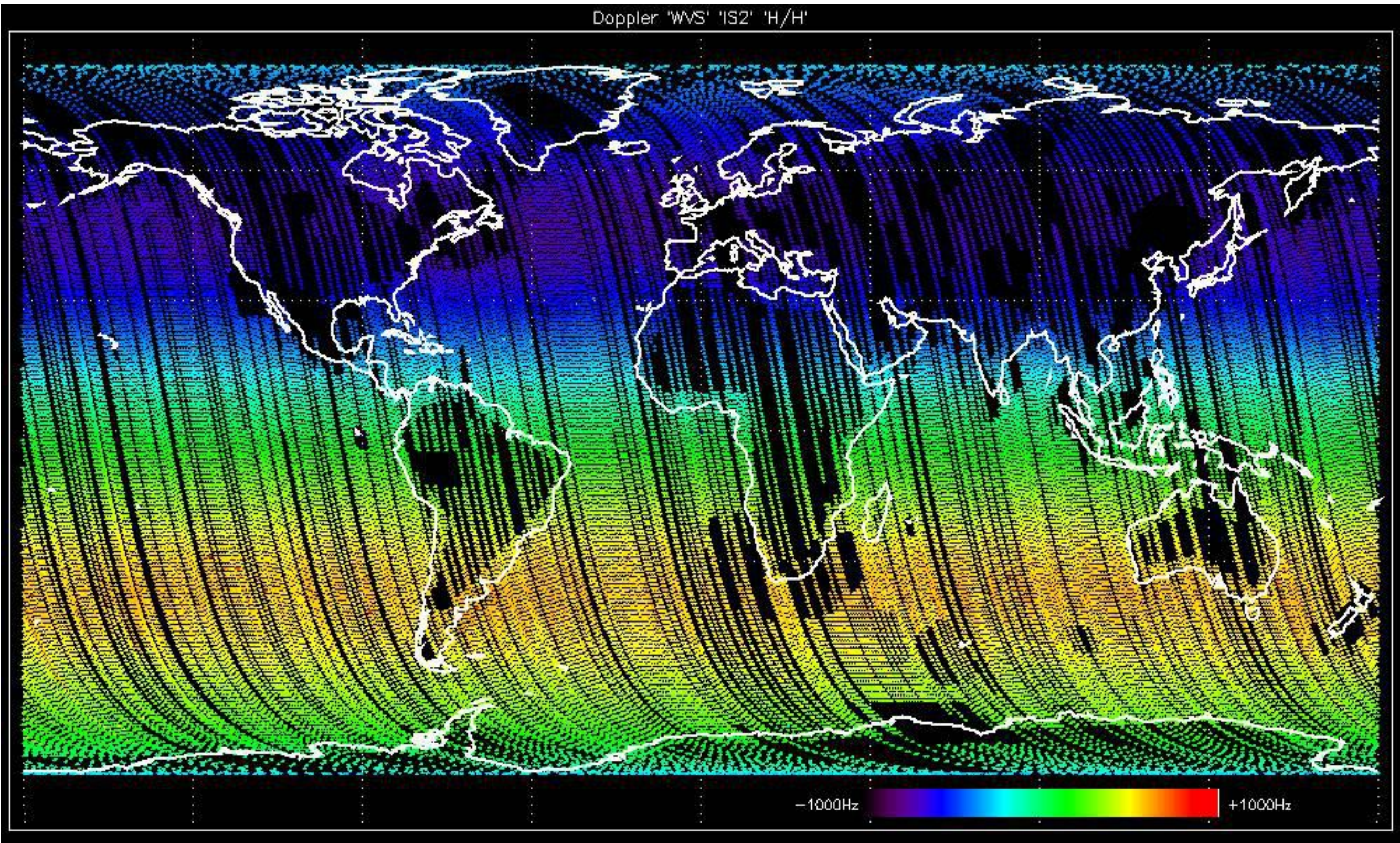


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

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

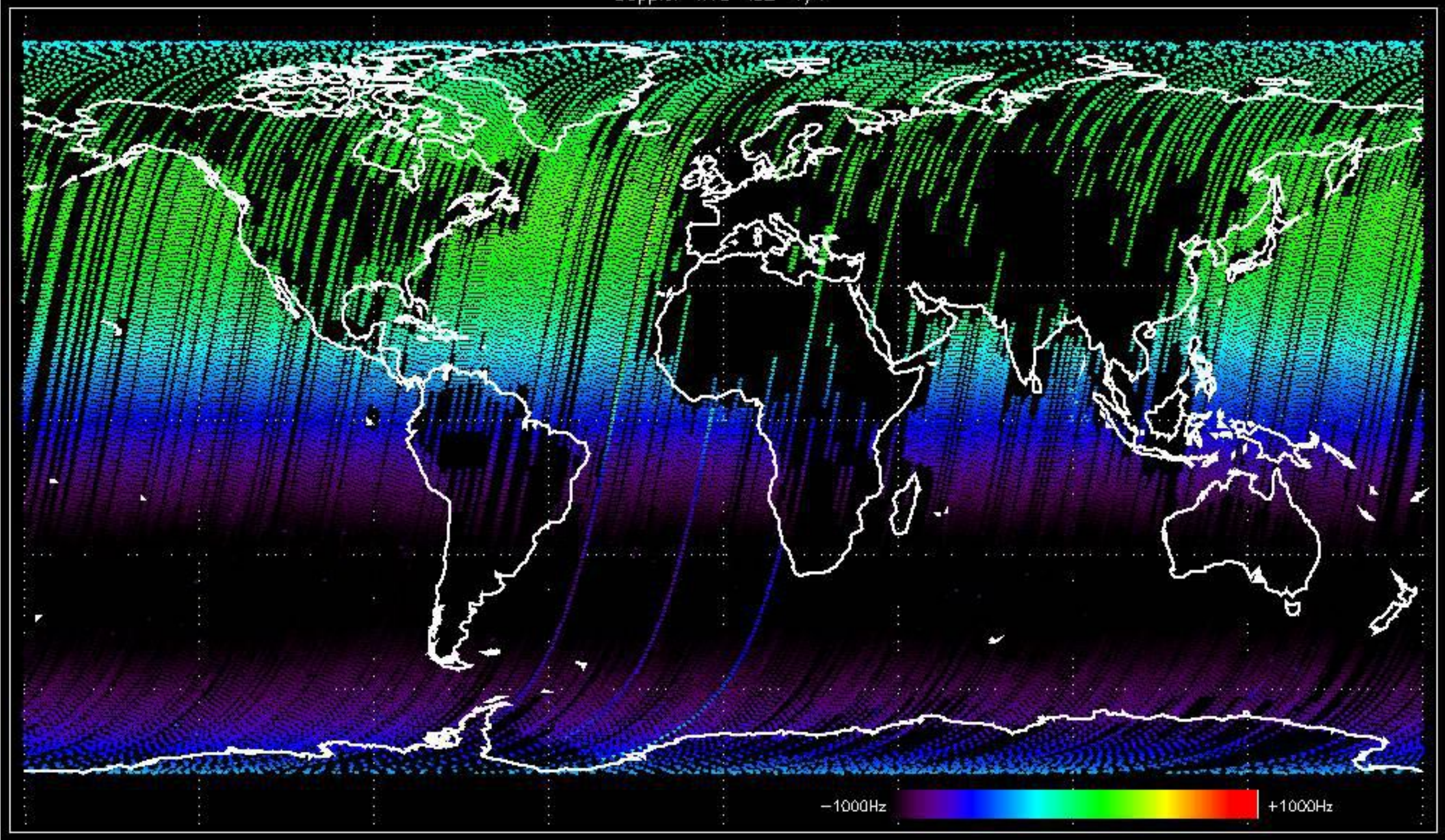


Doppler 'WVS' 'IS2' 'H/H'

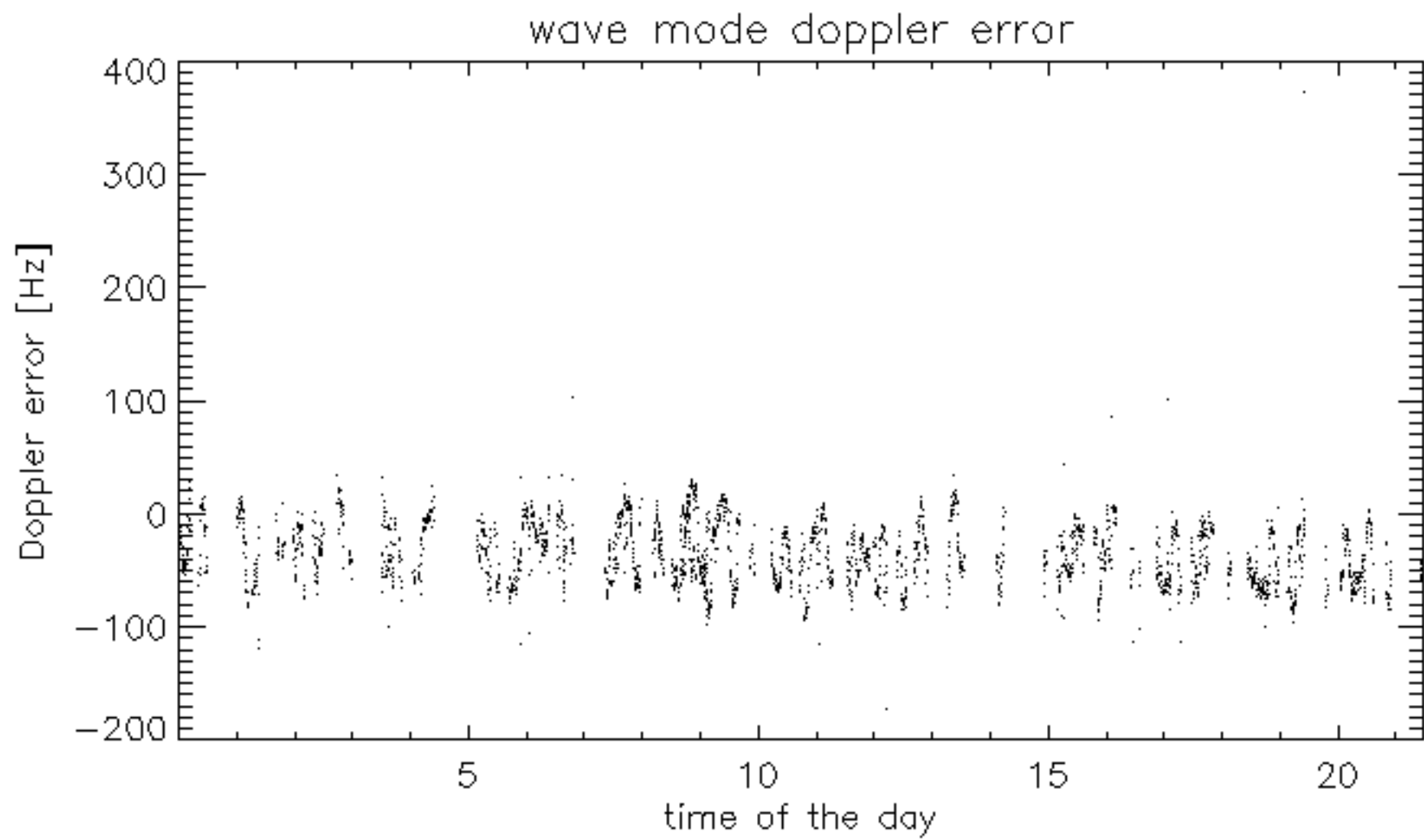
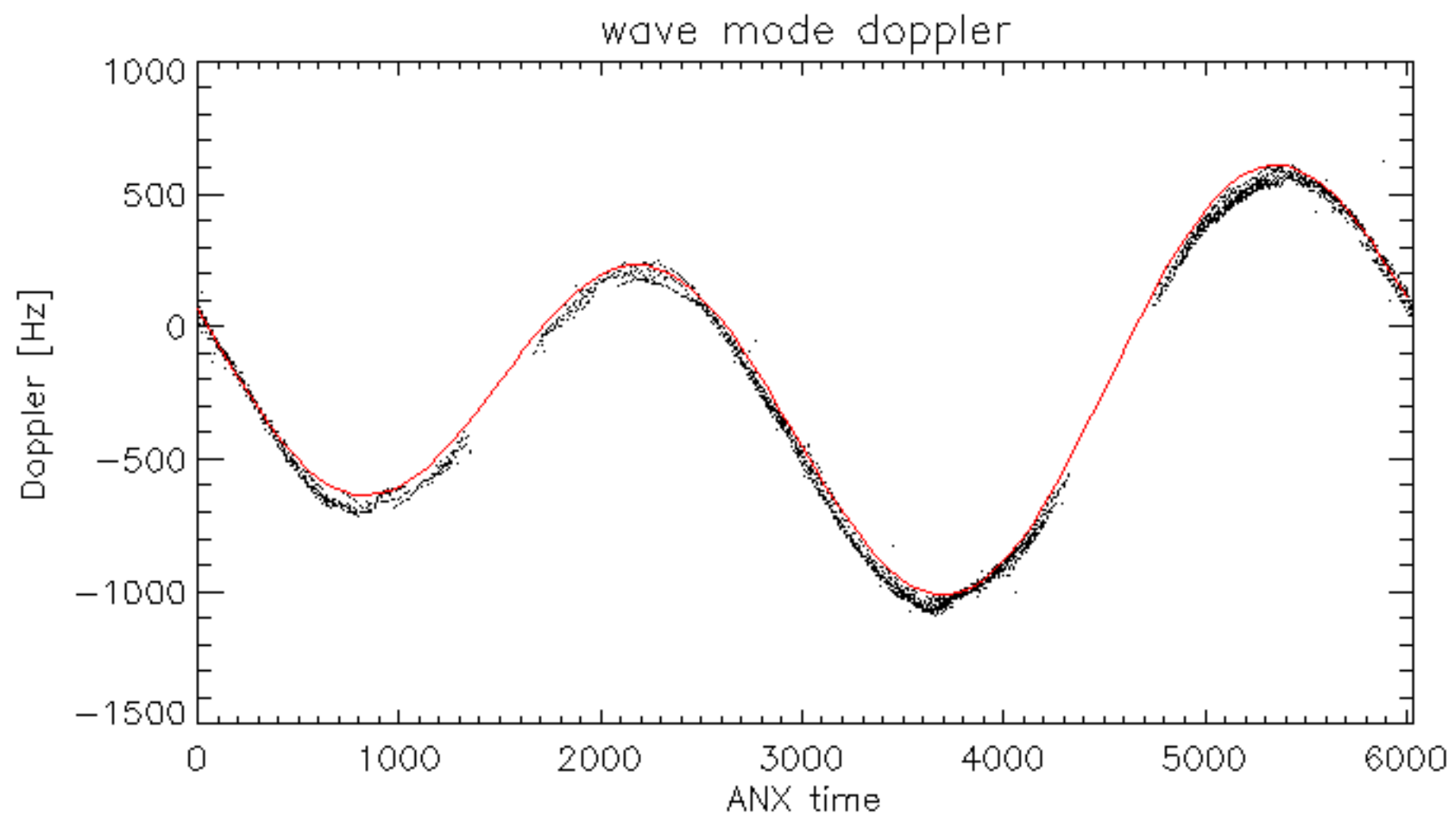




Doppler 'WVS' 'IS2' 'V/V'

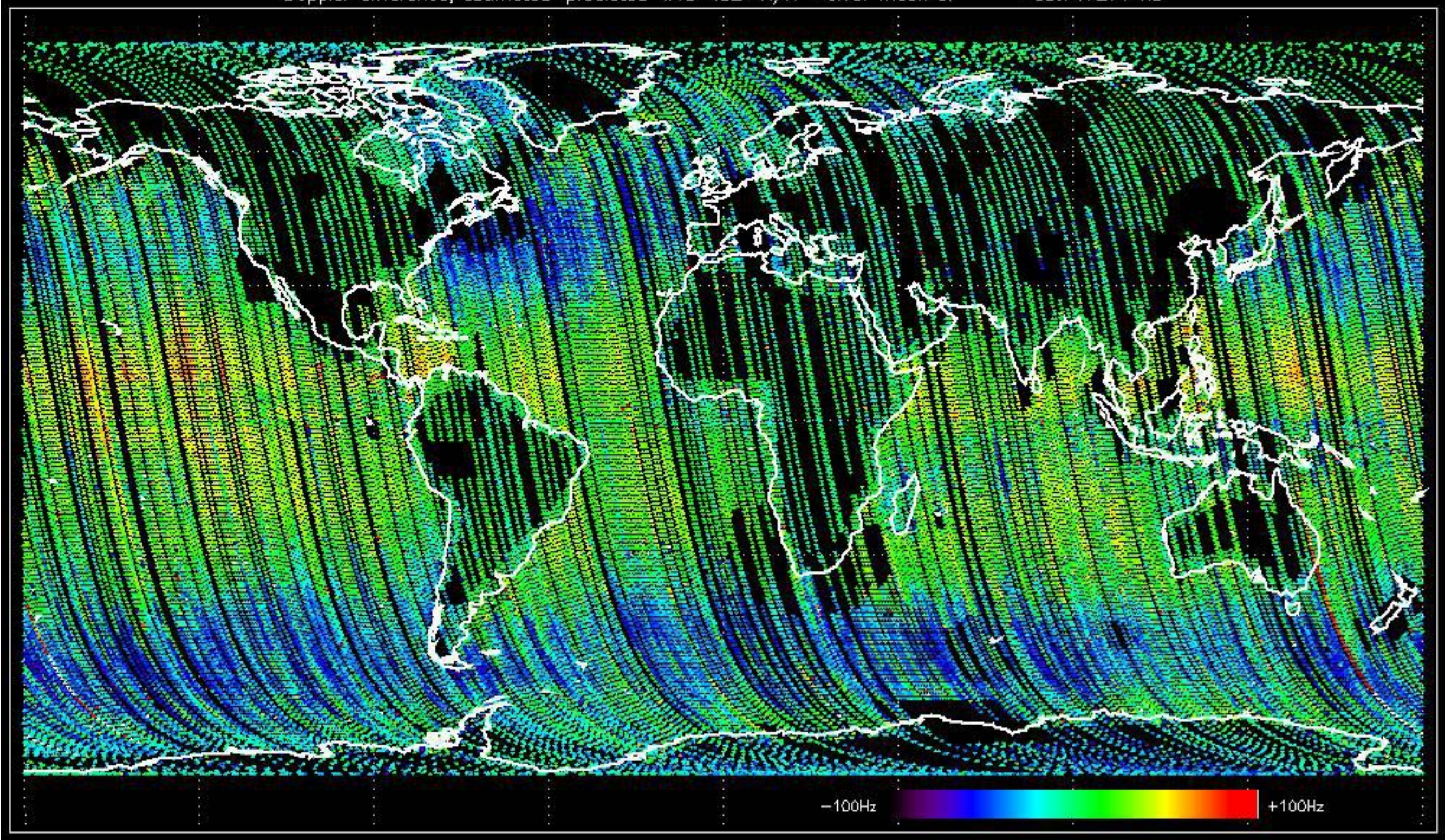






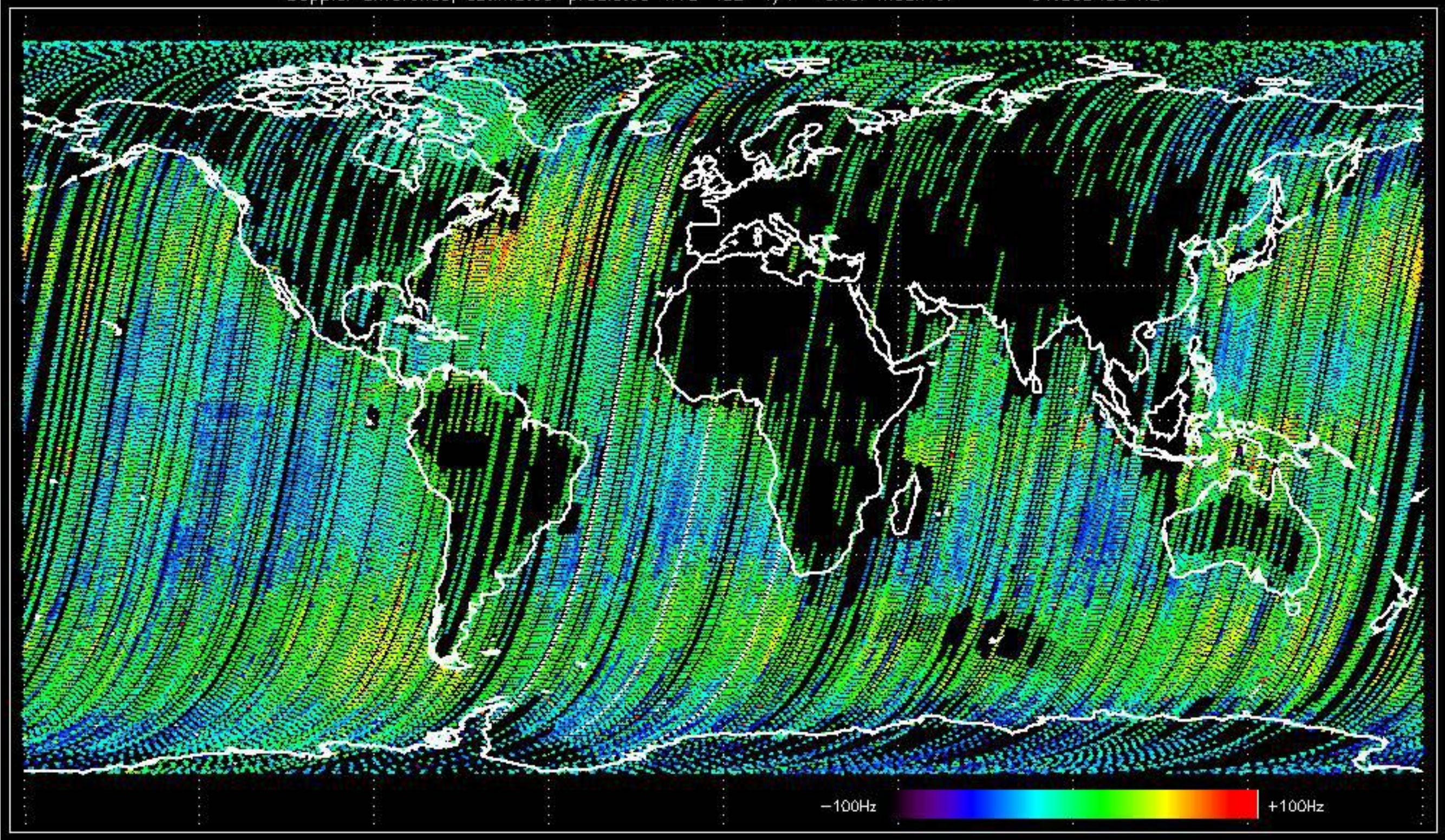


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -33.717271 Hz





Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -31.803433 Hz





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No MS products available since 08 Feb 2004.

No anomalies observed.









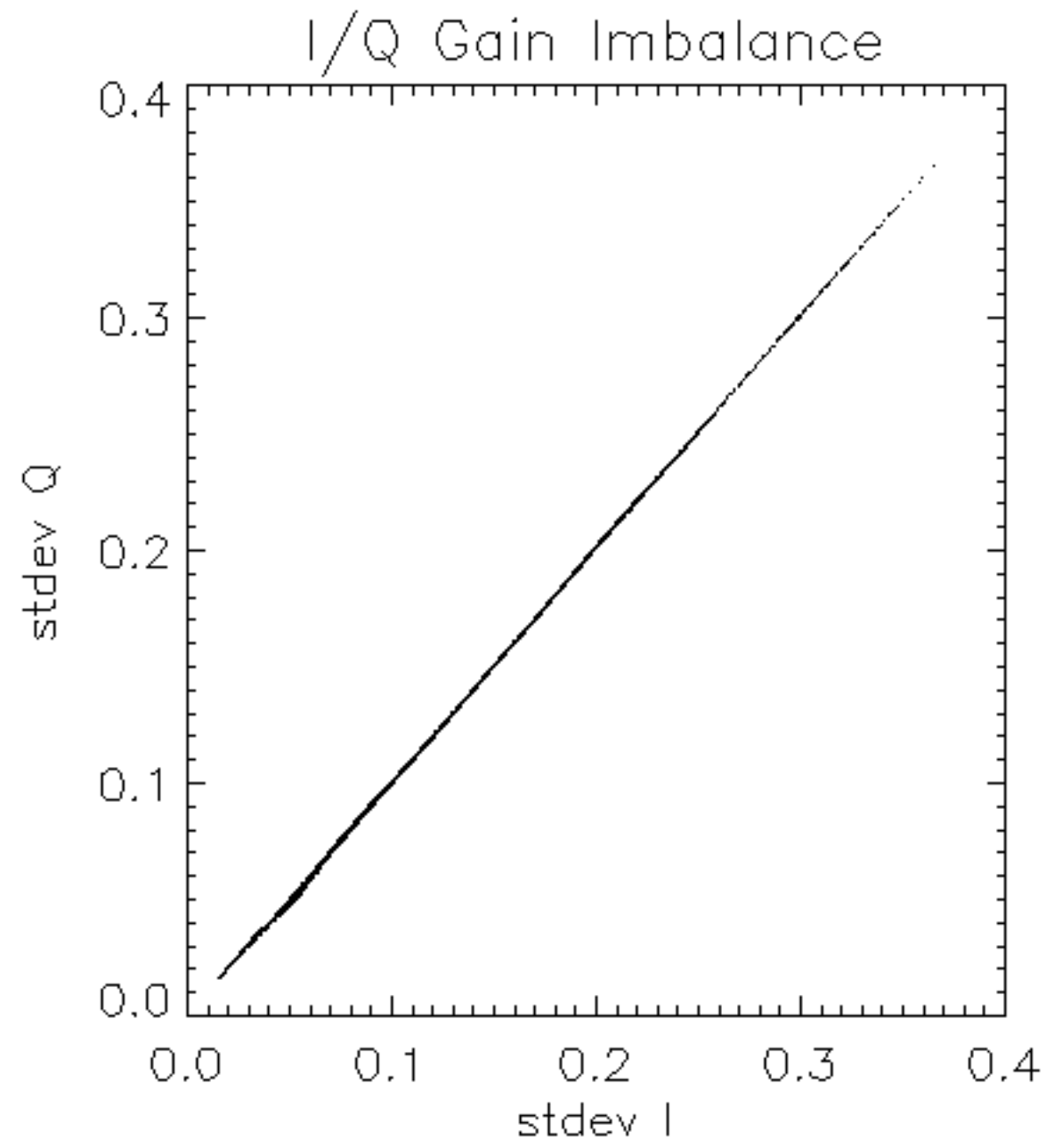


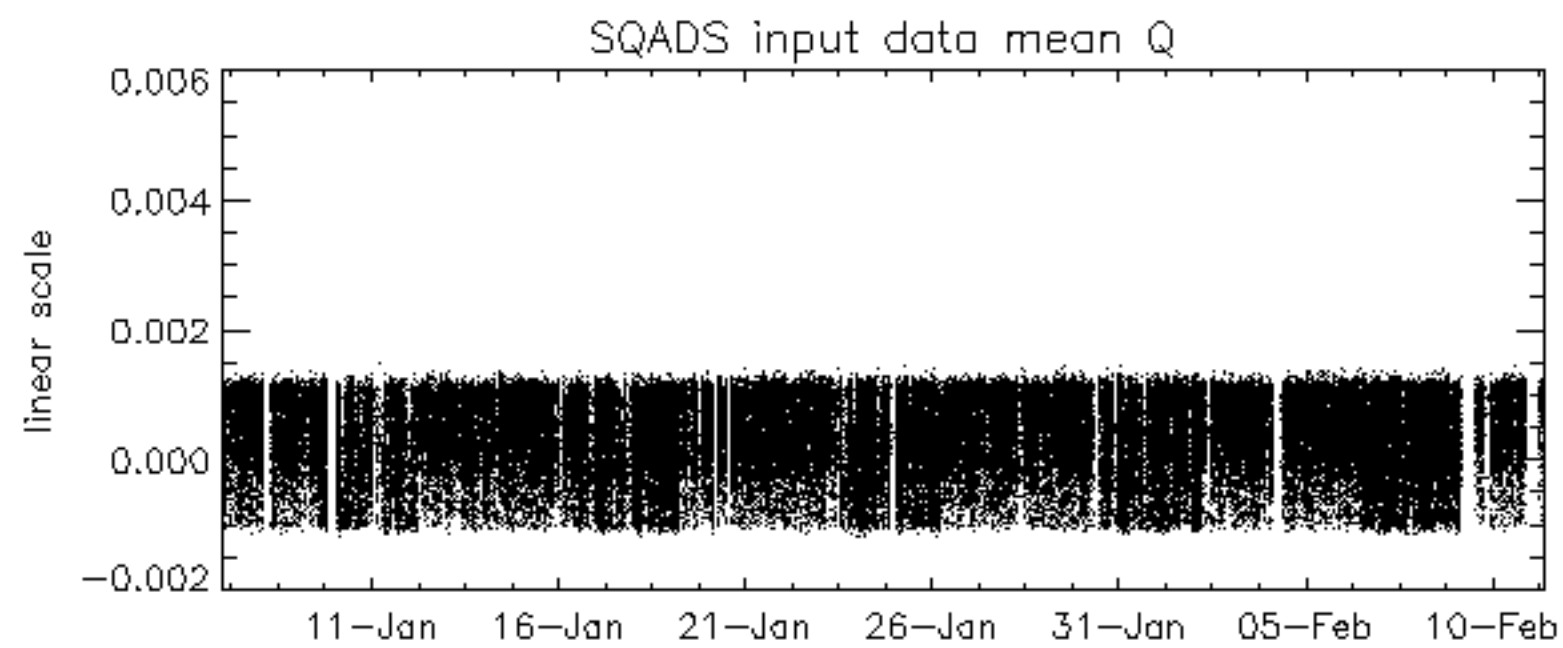
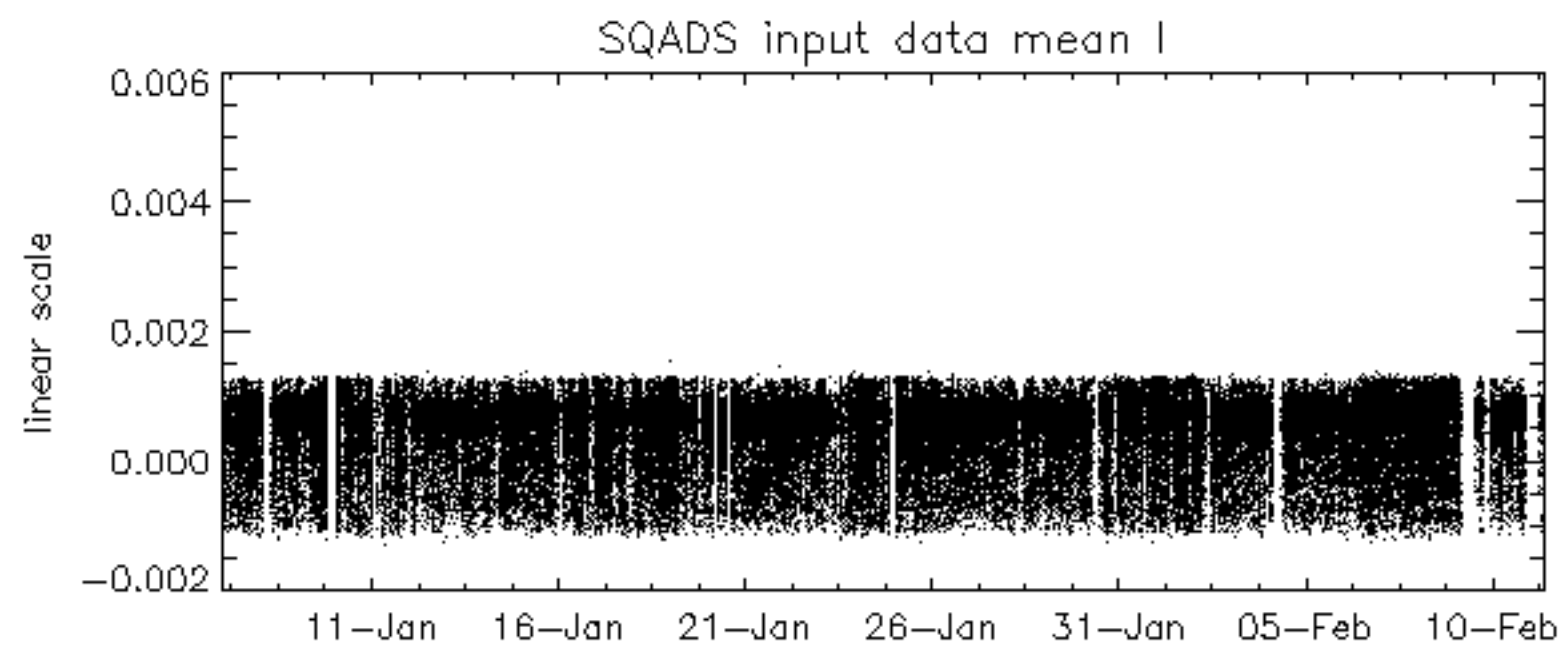
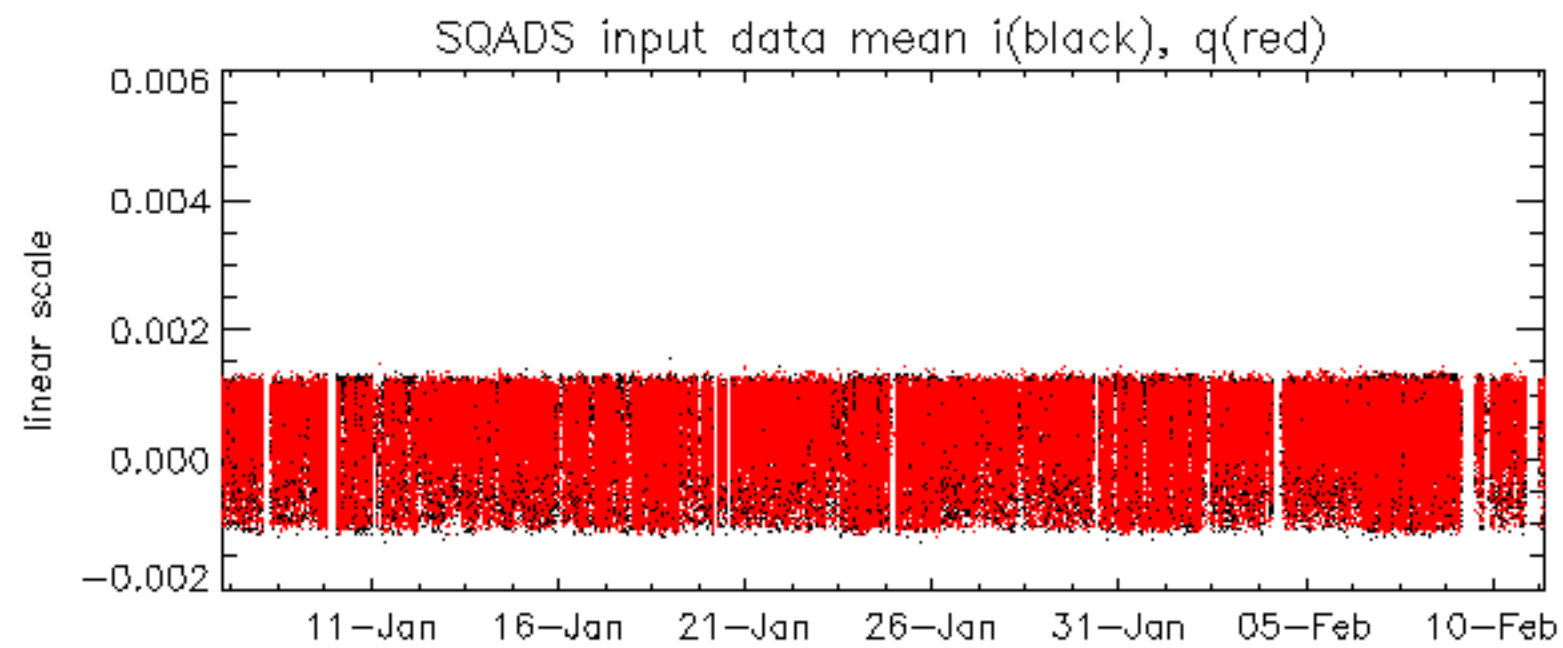


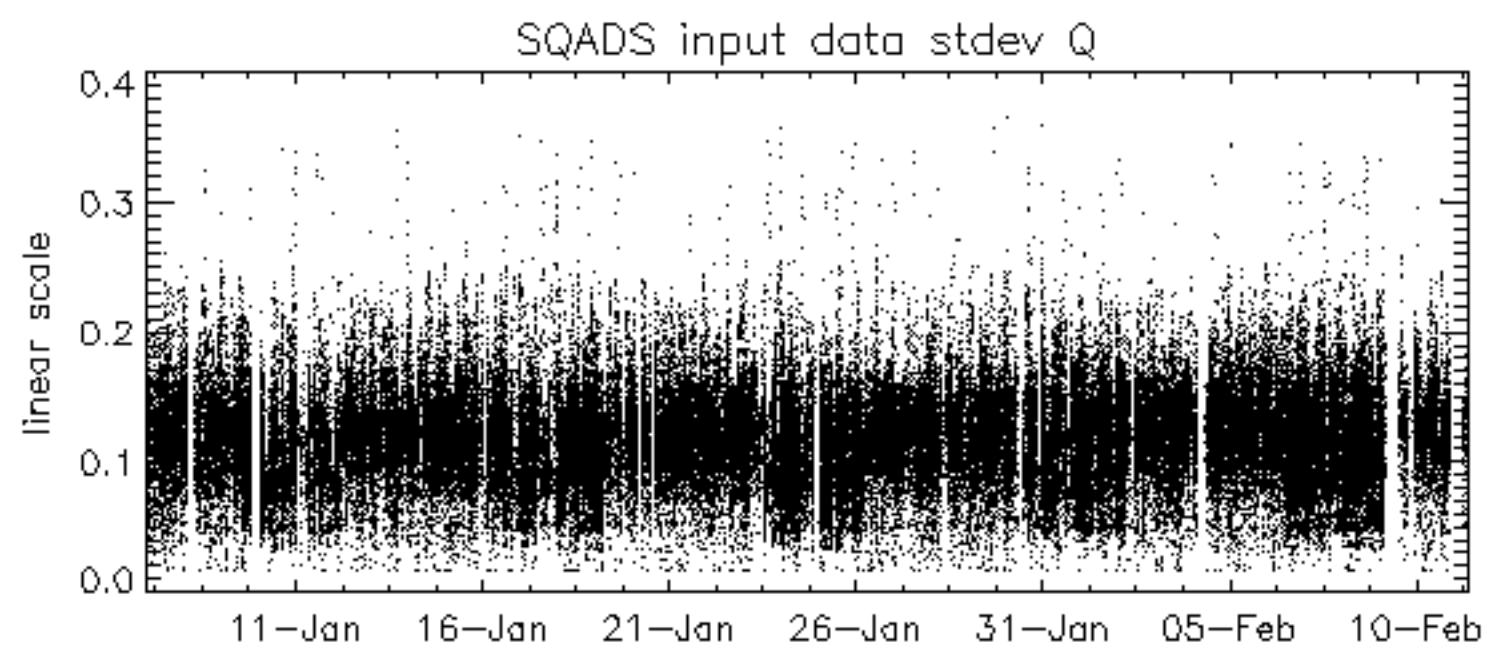
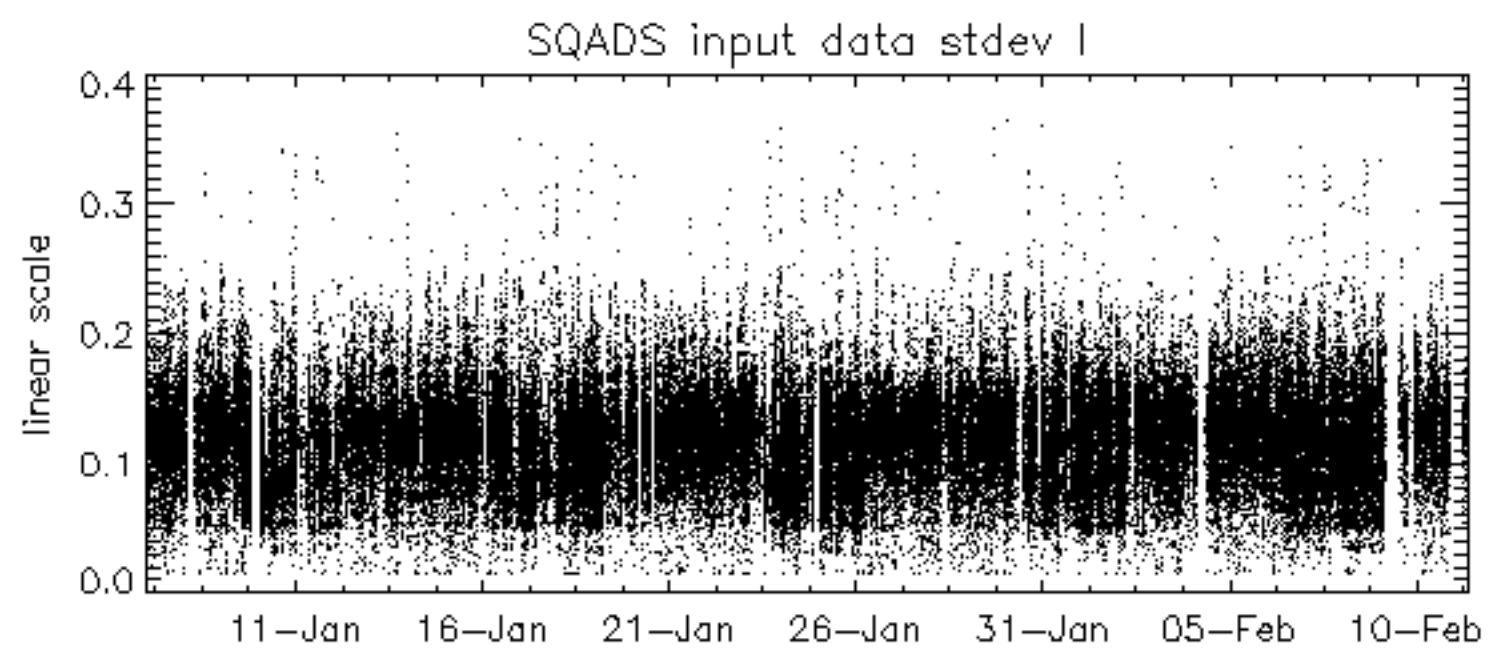
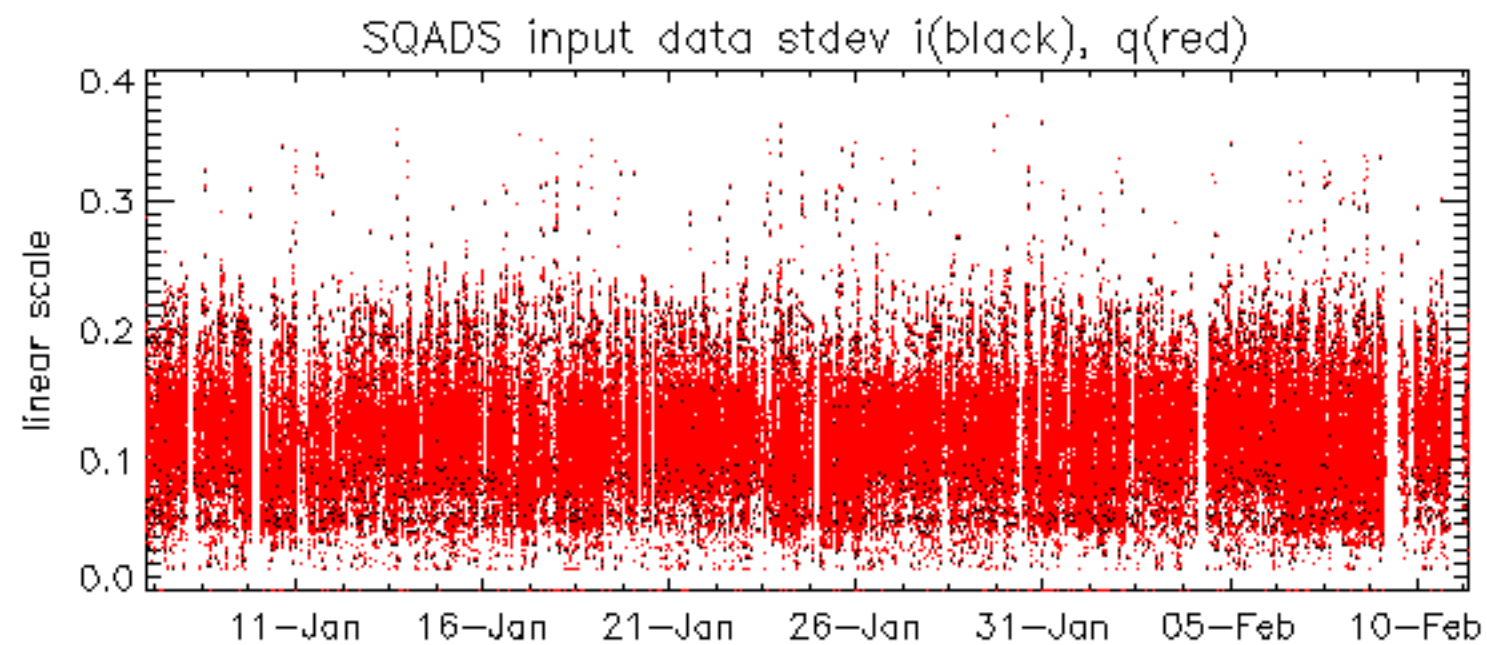






























No unavailabilities during the reported period.