

# REPORT OF 040129

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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:

Polarisation	Start Time
V	20040125 191054
H	20040127 194656

#### 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	-3.66578	-22.4637	-8.14642
	stdev	0.00759173	0.0707744	0.00355809

24	mean	-5.09181	-21.0972	-8.14642
	stdev	0.0141014	0.0705227	0.00355809



## 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.69587	-22.5084	-8.15381
	stdev	0.00714618	0.0696122	0.00324003
24	mean	-5.23262	-21.1379	-8.15381
	stdev	0.568924	0.0641560	0.00324003



## 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	0.000424114
	stdev	2.97937e-07
MEAN Q	mean	0.000320151
	stdev	3.52505e-07



### 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.116255
	stdev	0.00138164

STDEV Q	mean	0.116488
	stdev	0.00139610



### 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

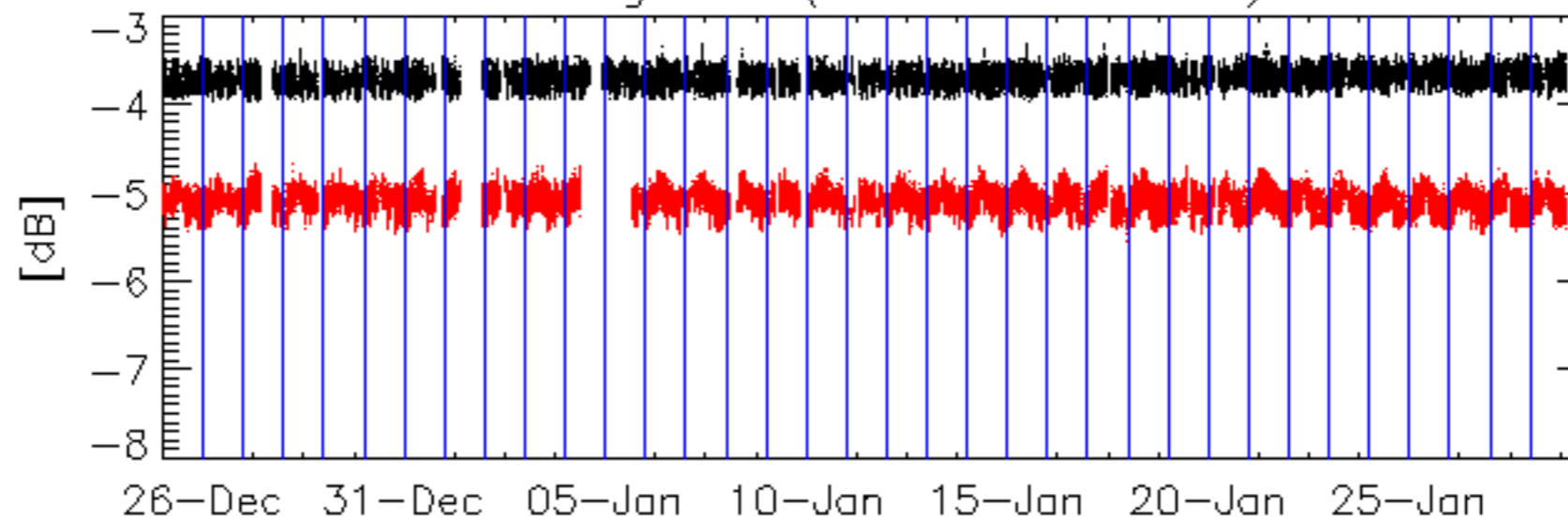
### 6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

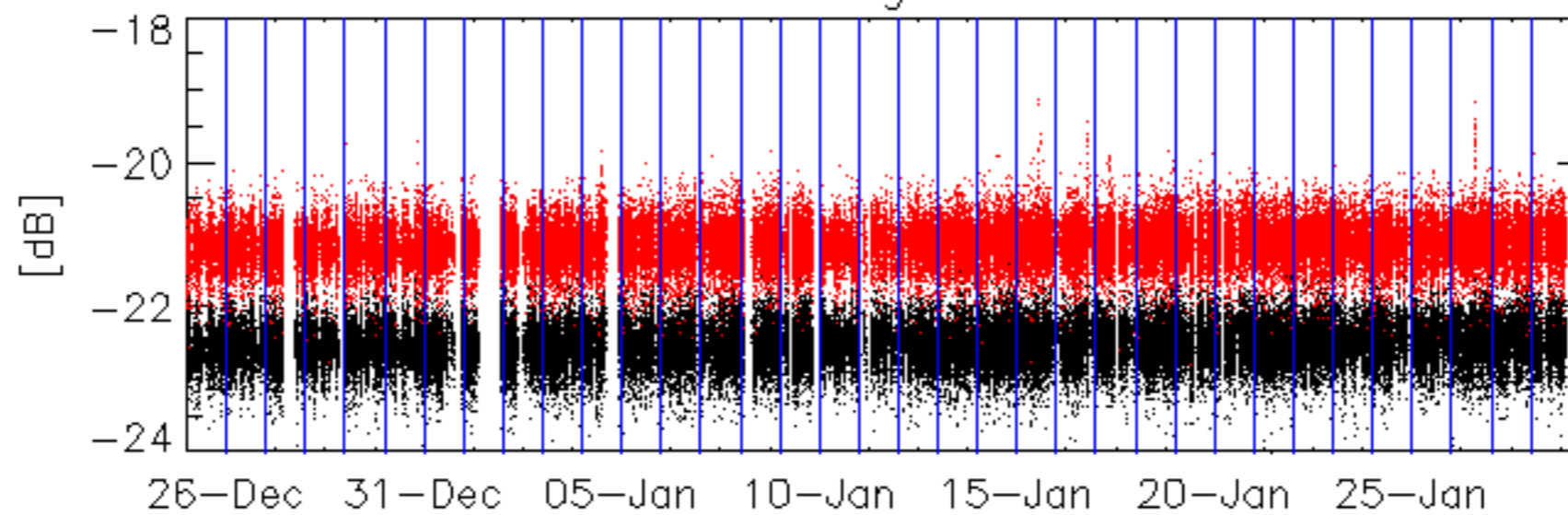
### 6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

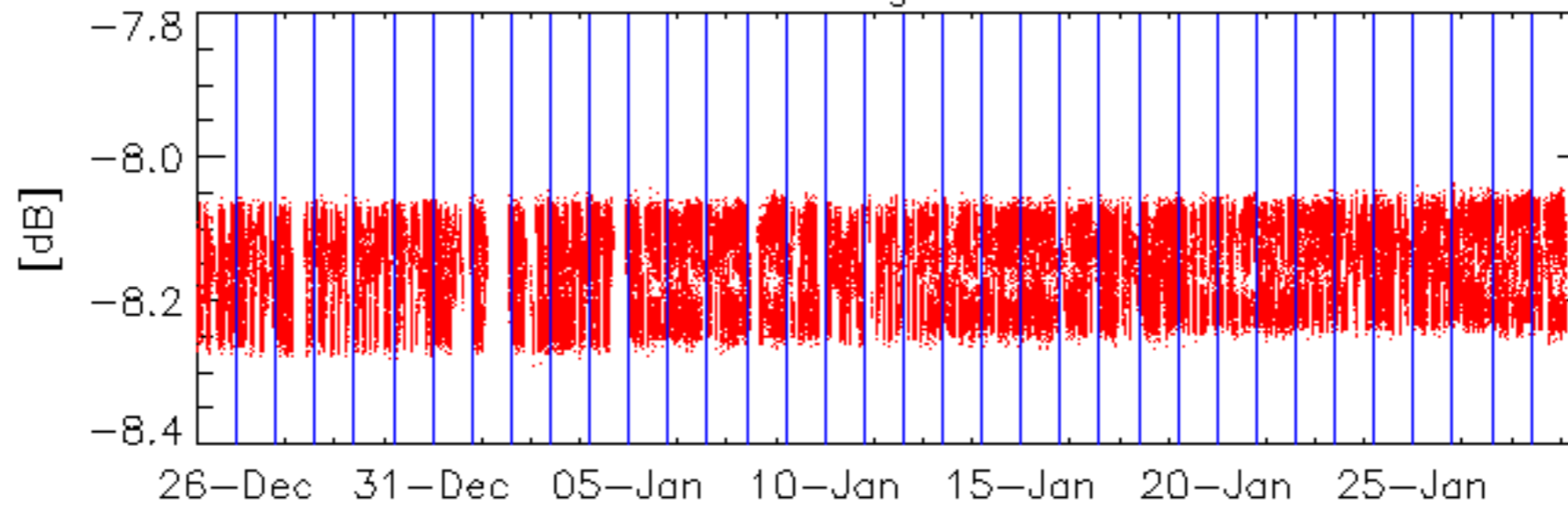

Average P1 (row 3 & row 24)



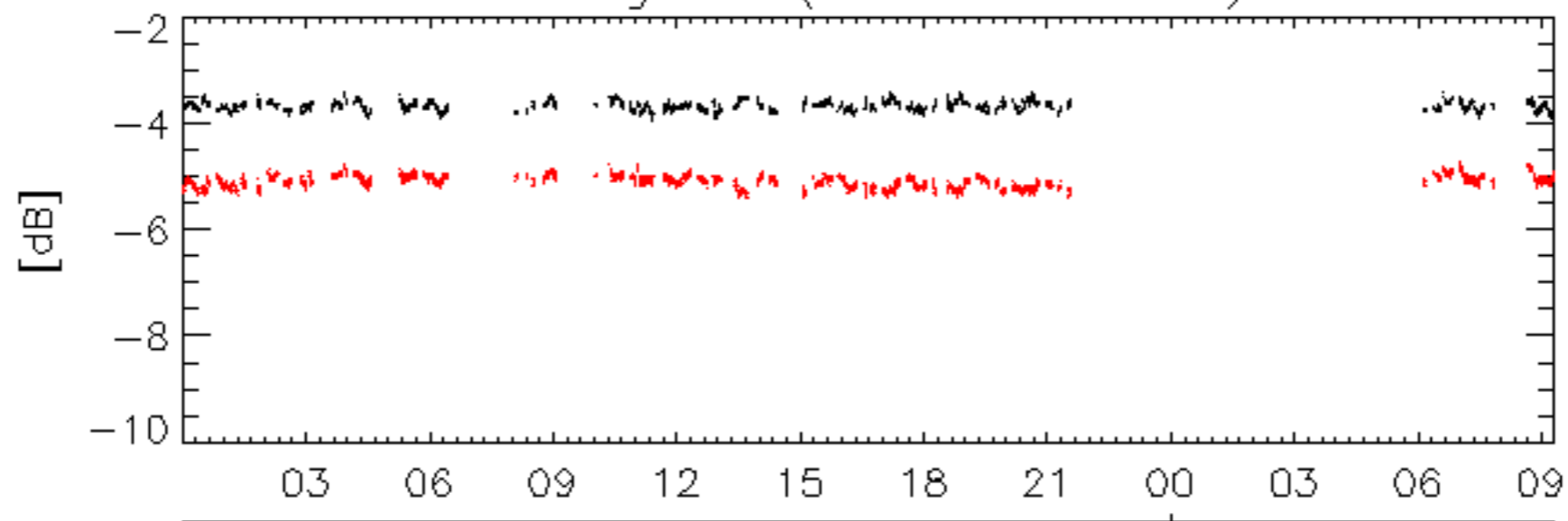
Average P2



Average P3

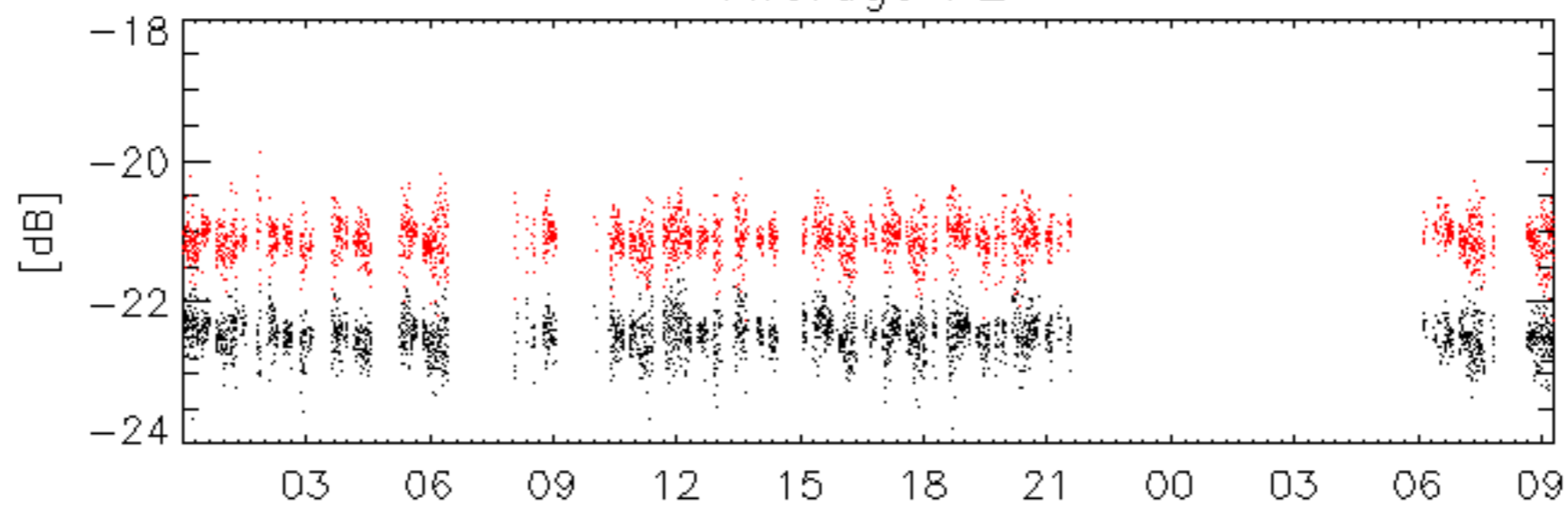


Average P1 (row 3 & row 24)



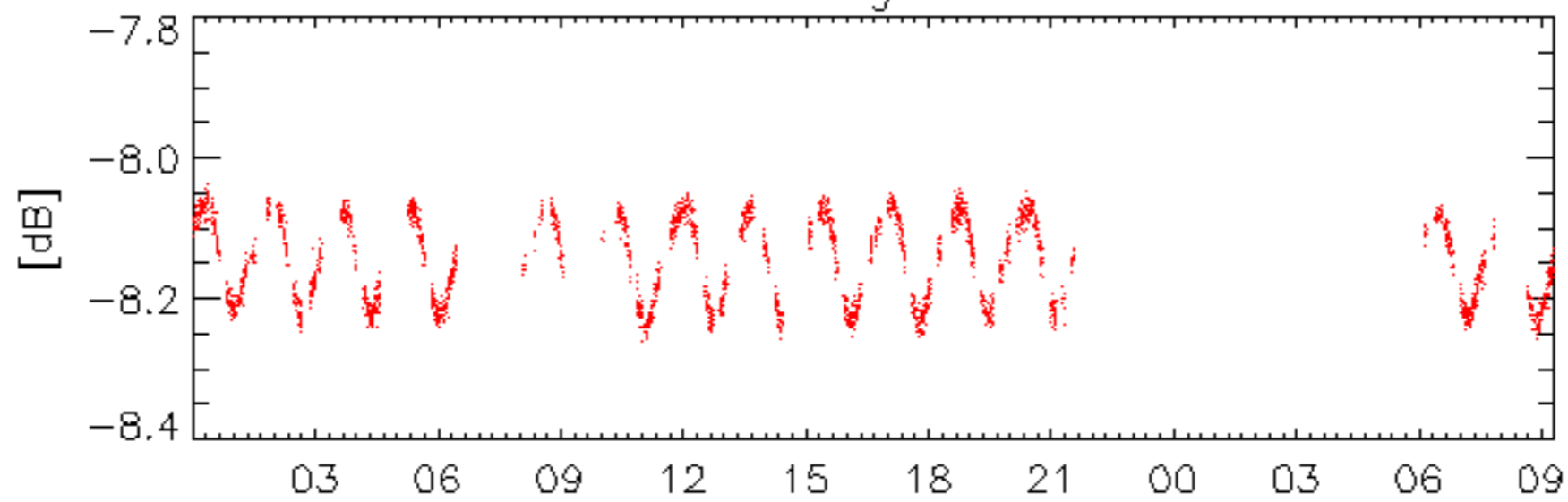
29-Jan

Average P2



29-Jan

Average P3

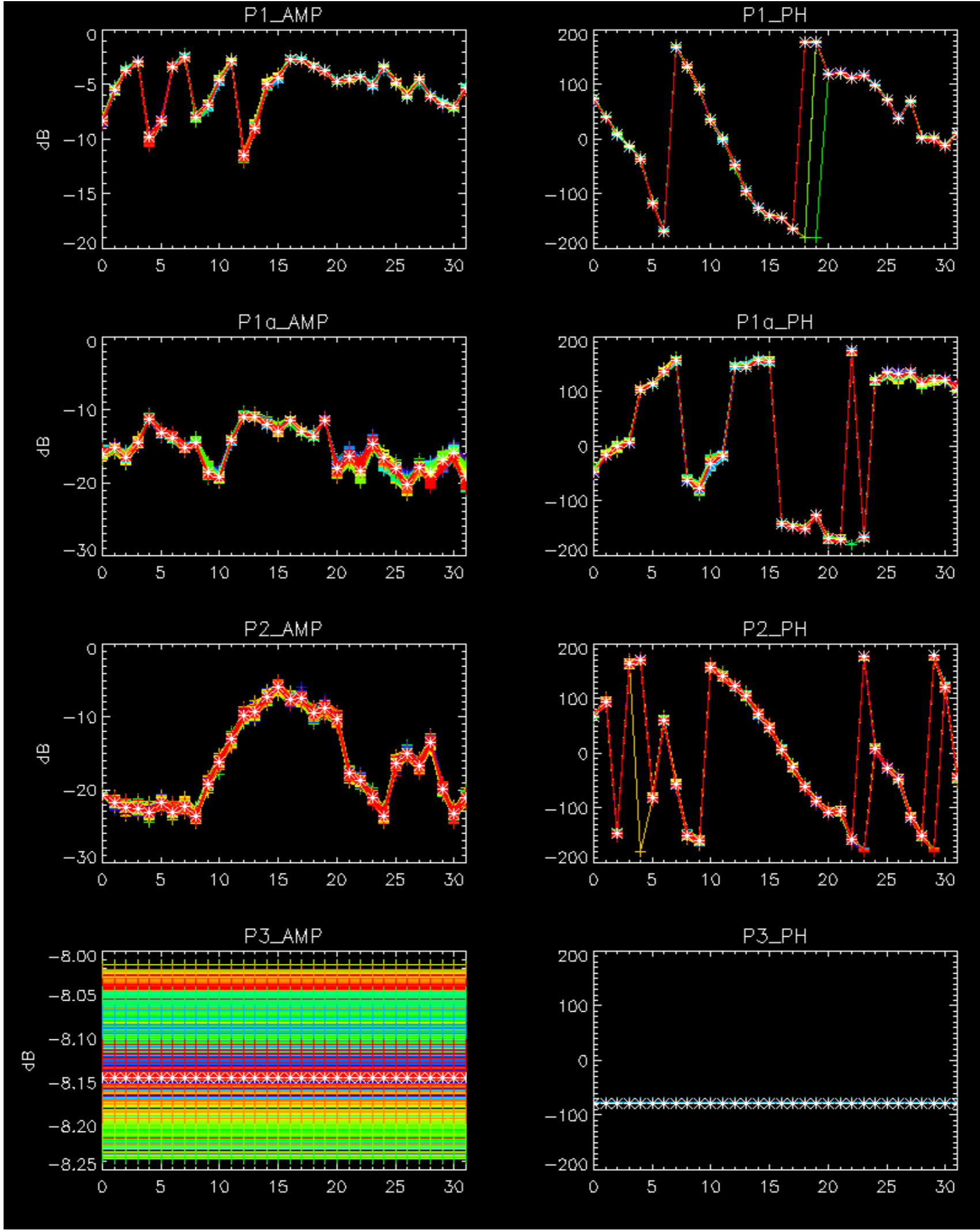


29-Jan

No anomalies observed on available browse products

No anomalies observed.

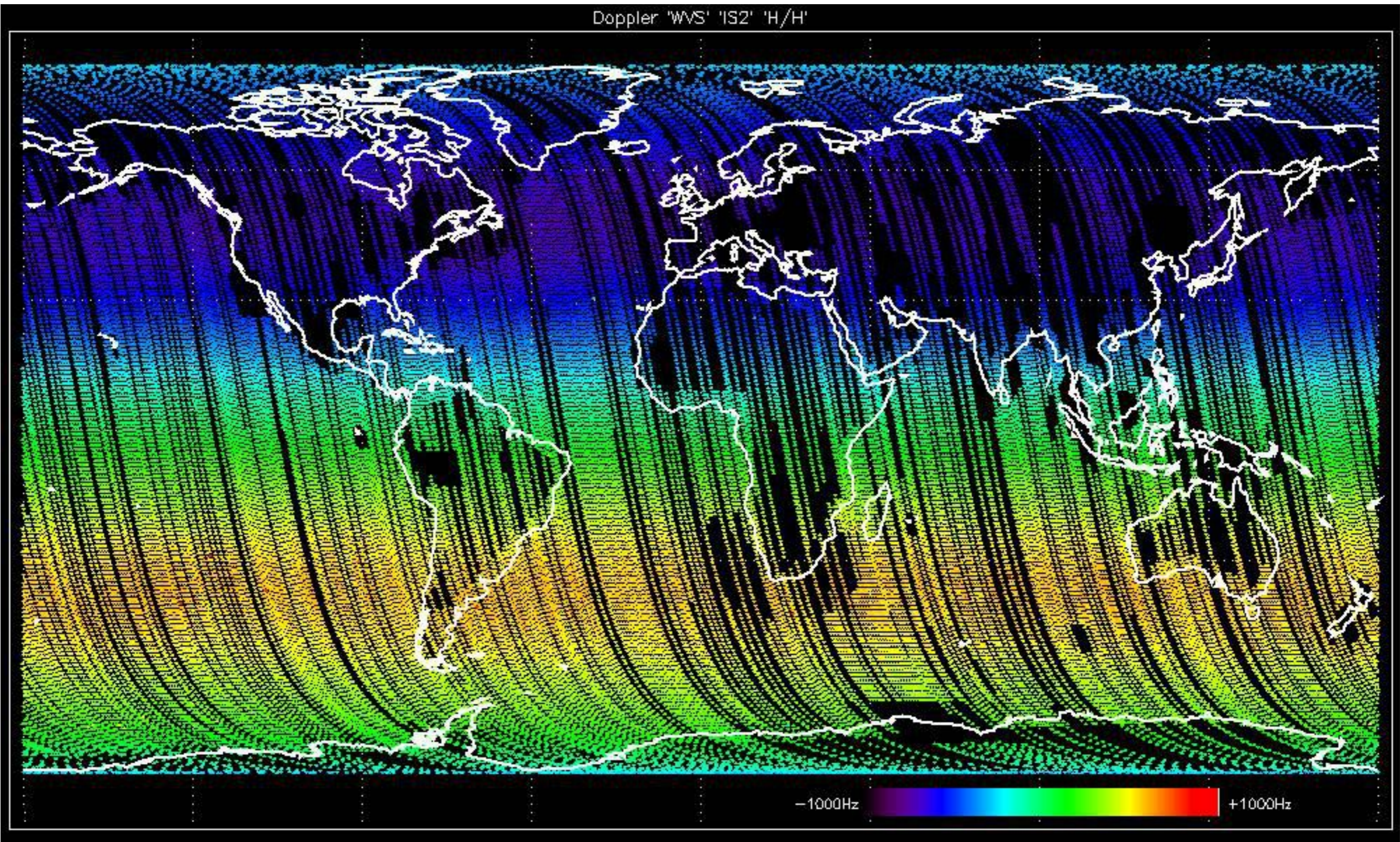




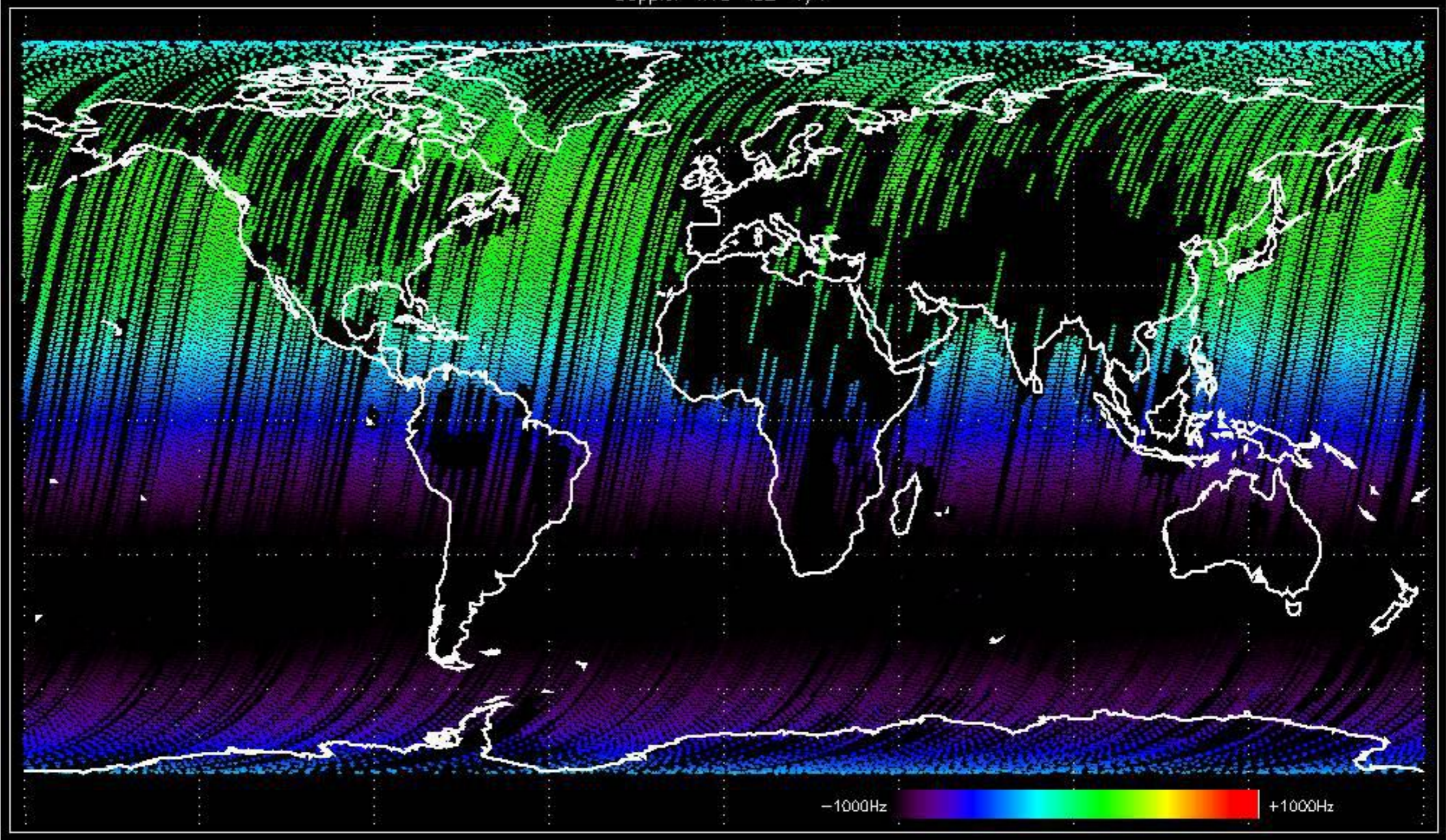
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

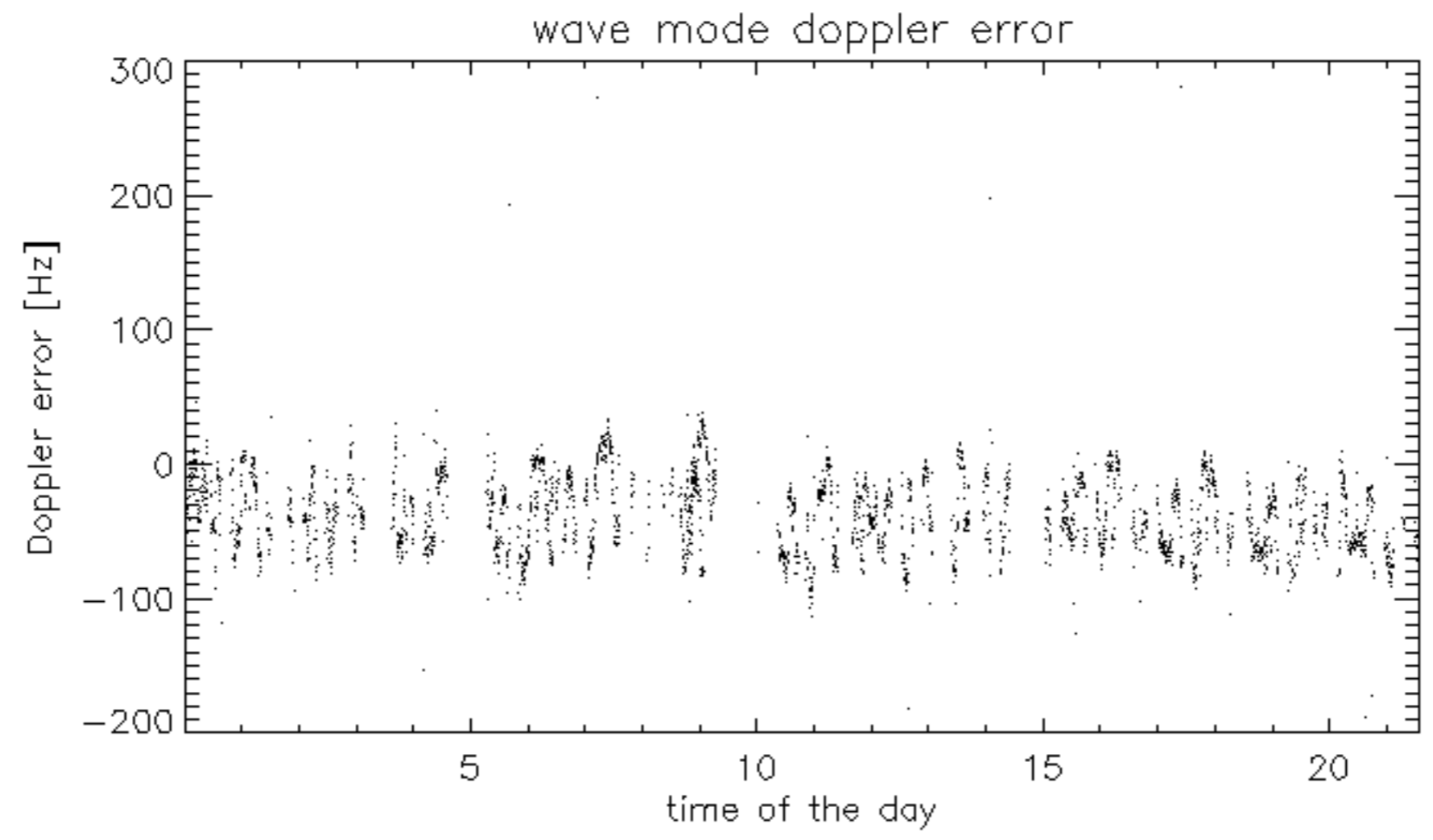
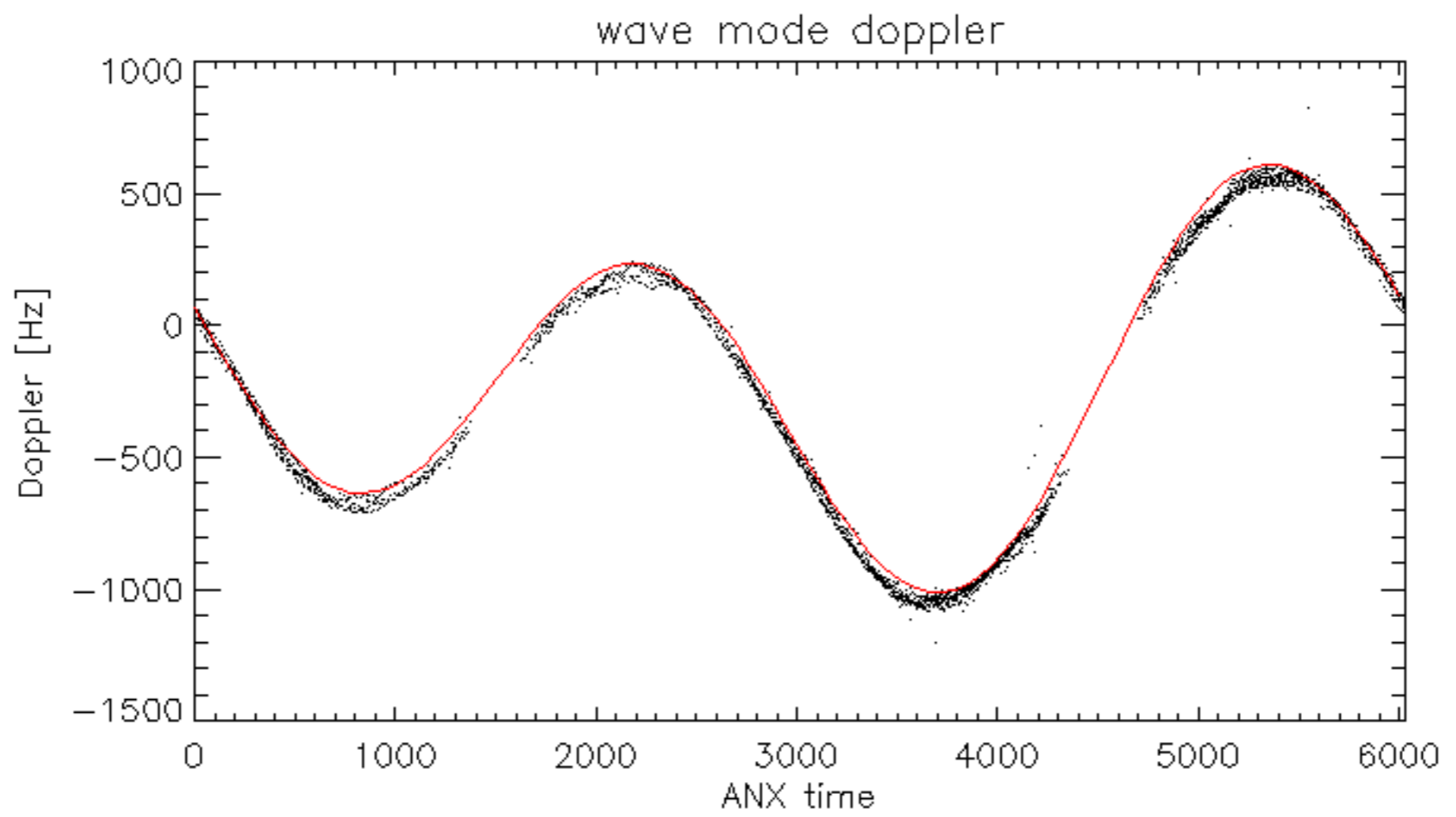


Doppler 'WVS' 'IS2' 'H/H'

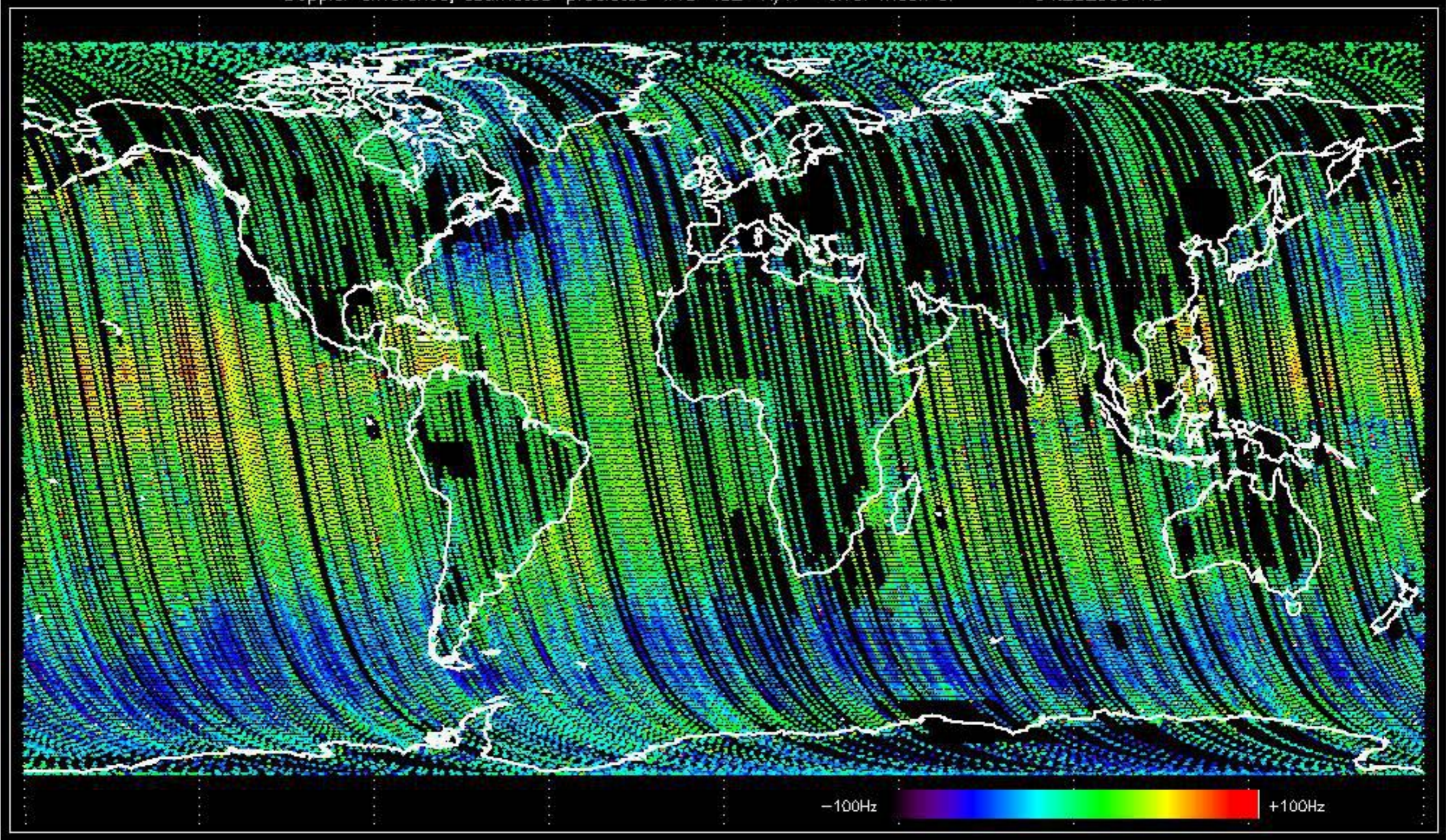


Doppler 'WVS' 'ISZ' 'V/V'

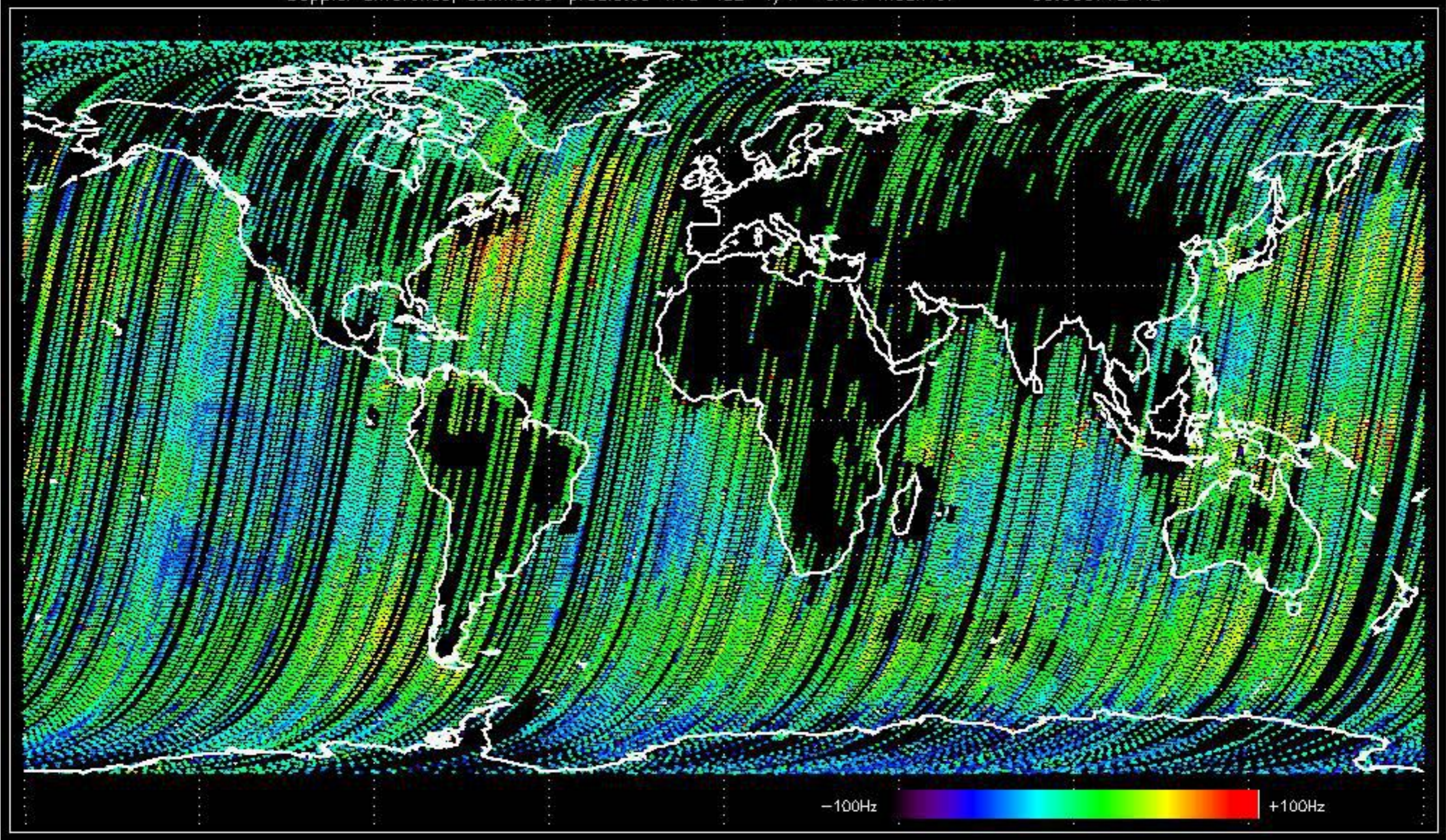




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -34.252990 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -33.590772 Hz





The MS mode provides an internal health check on an individual module basis.  
The purpose of this mode is to identify to identify any malfunctioning modules and  
to identify modules for which calibration offsets are to be applied.  
No anomalies observed on available MS products:

No anomalies observed.









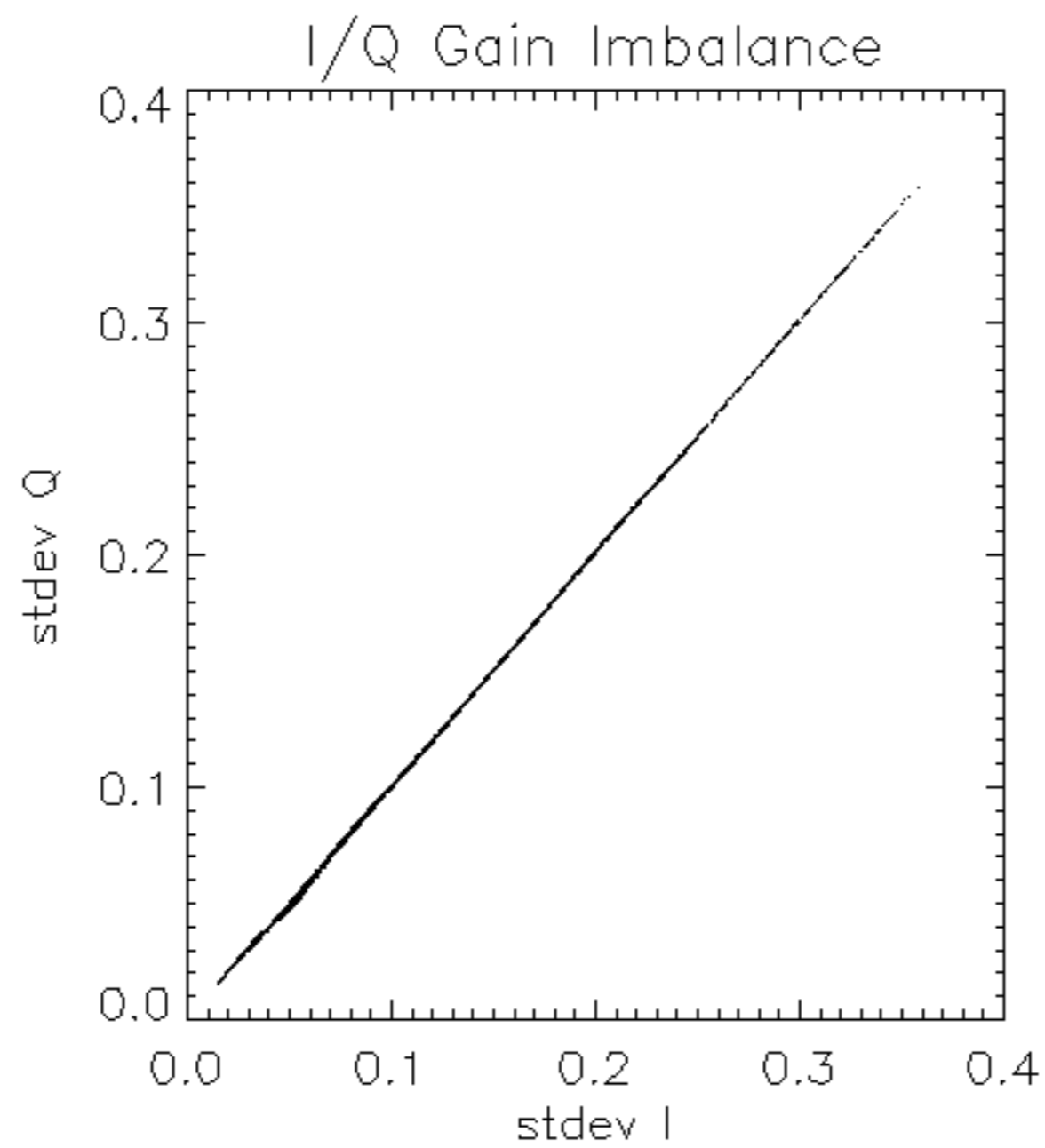


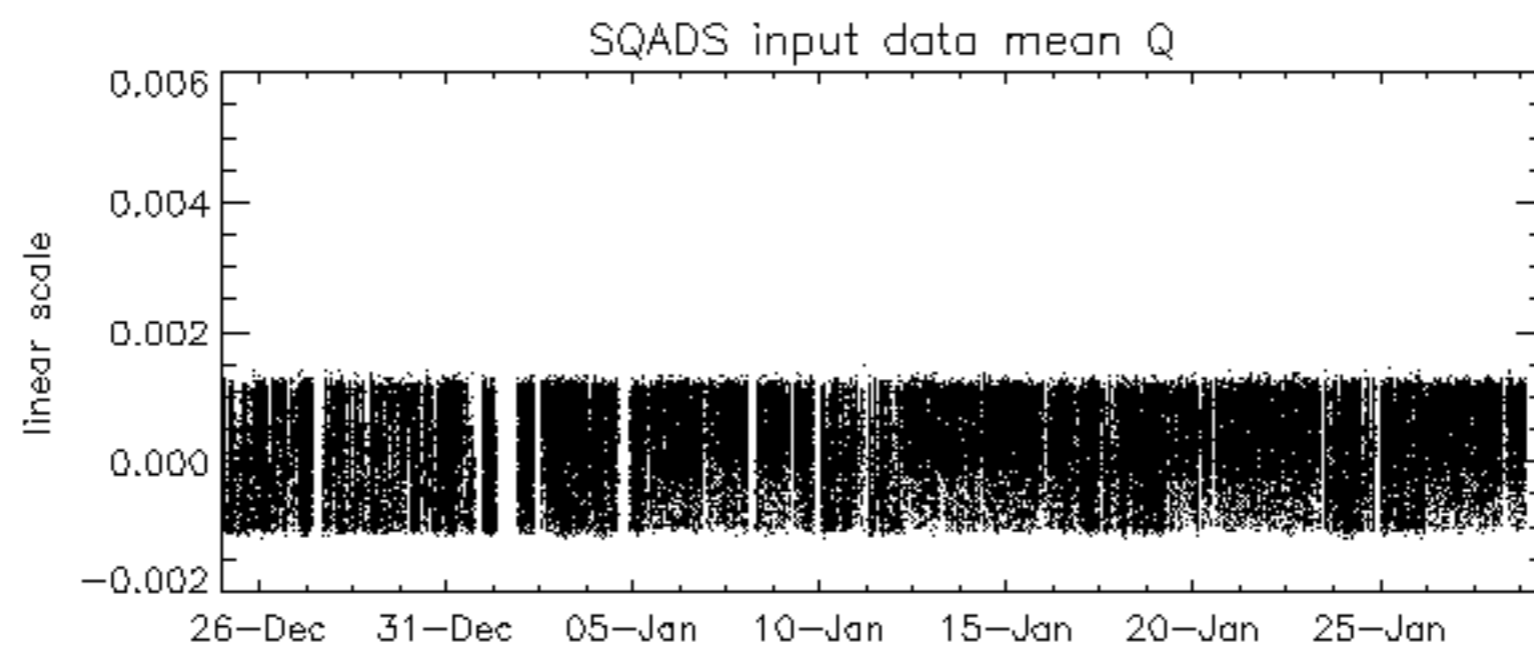
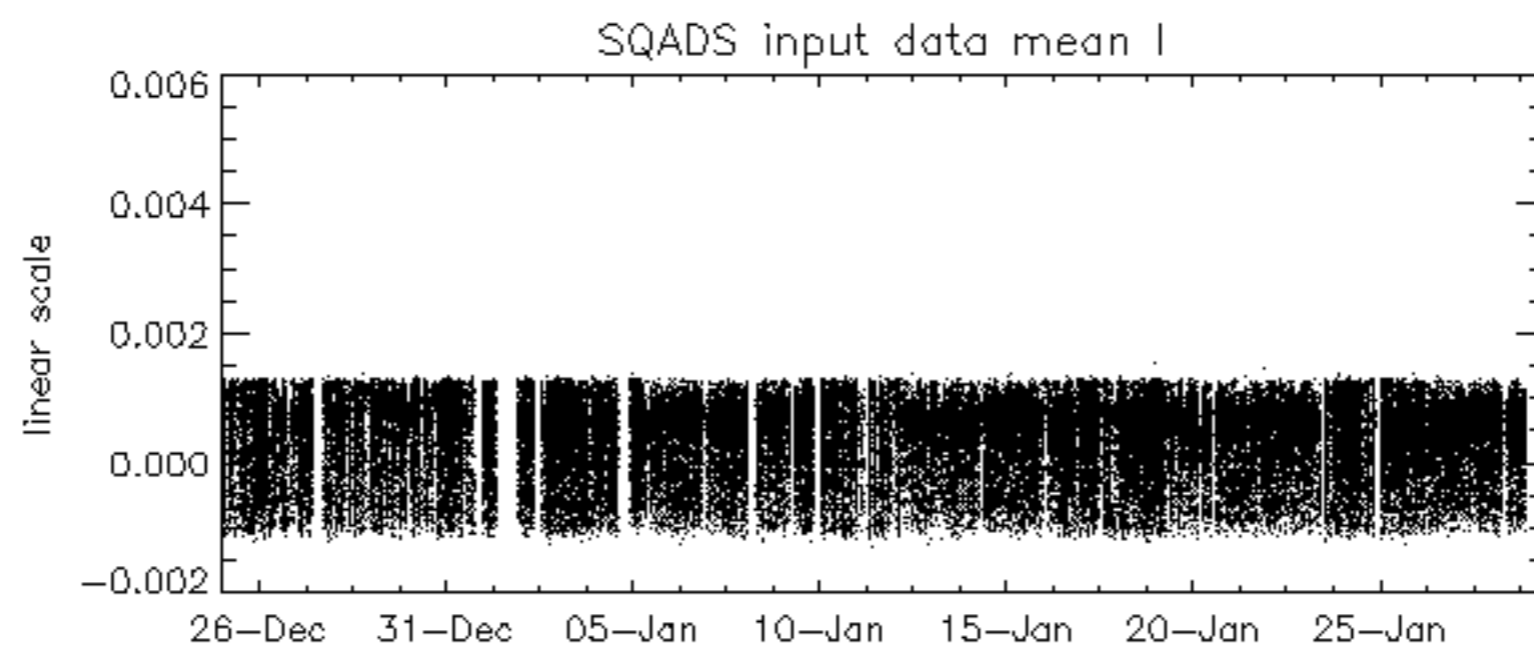
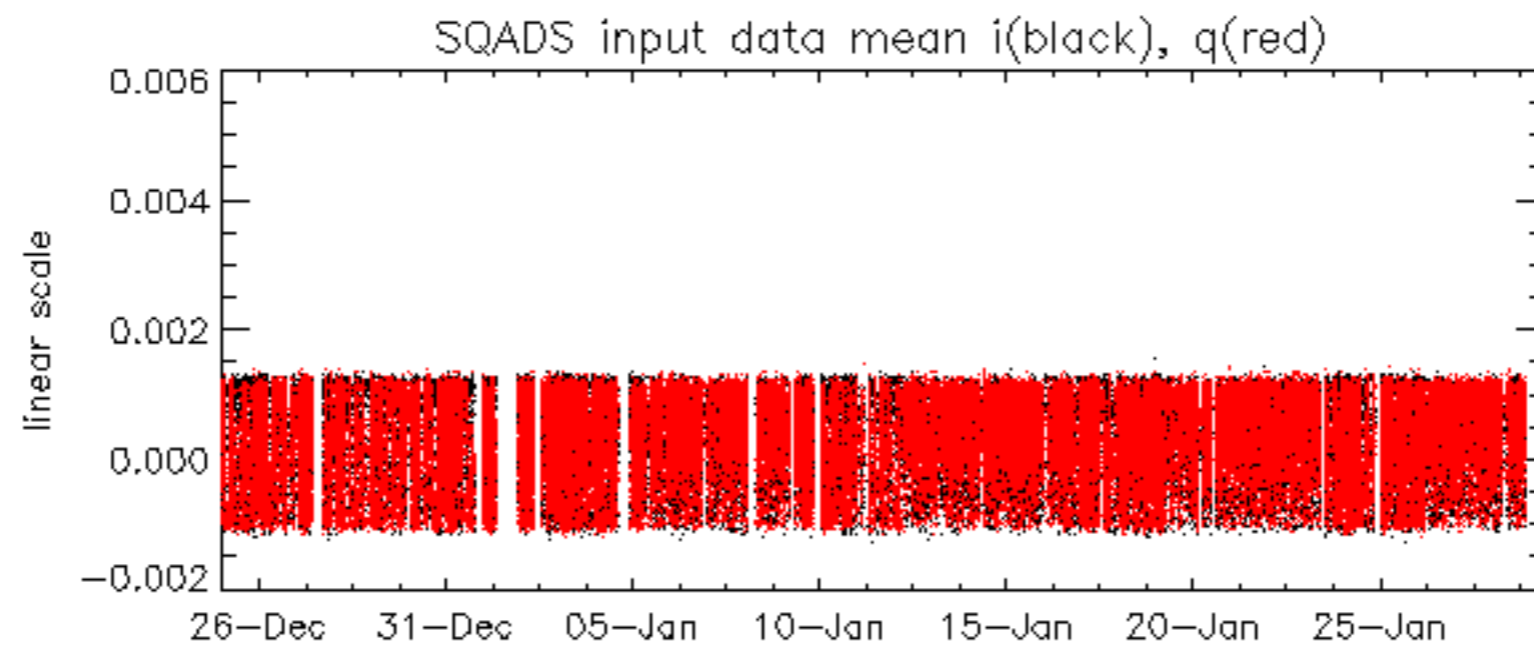


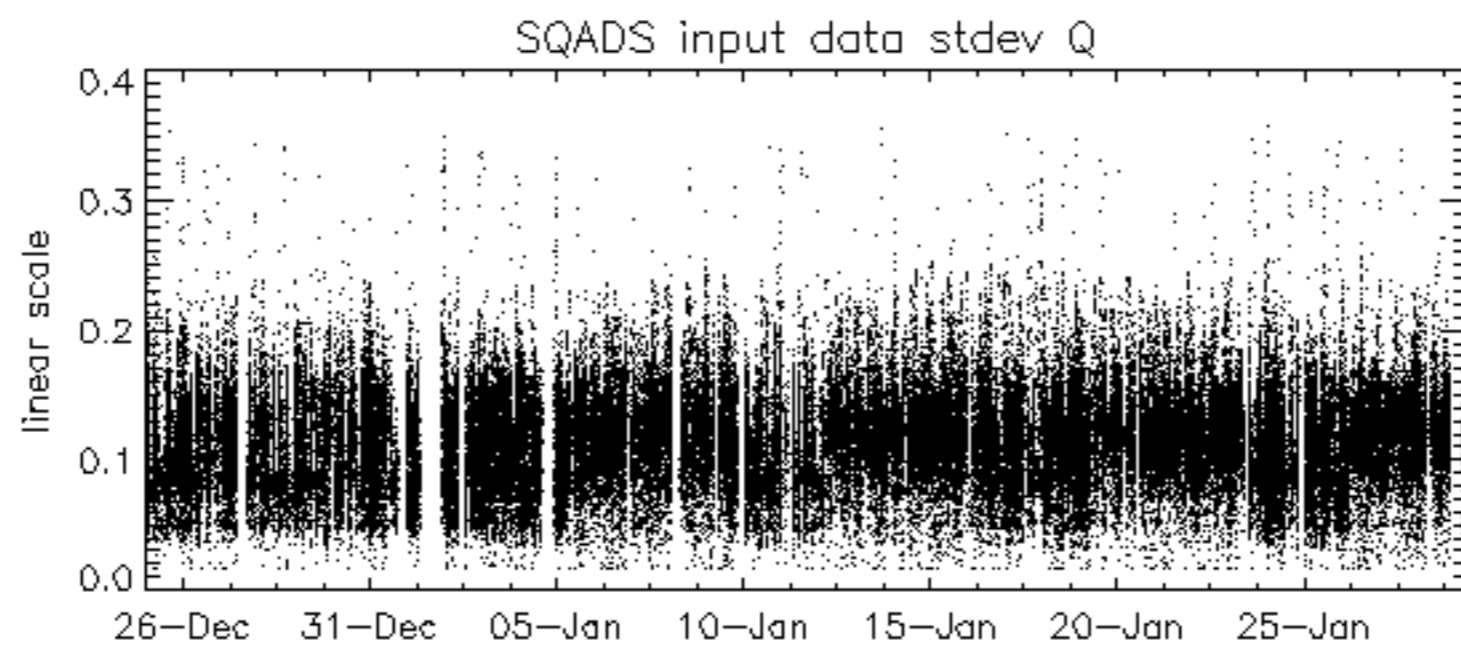
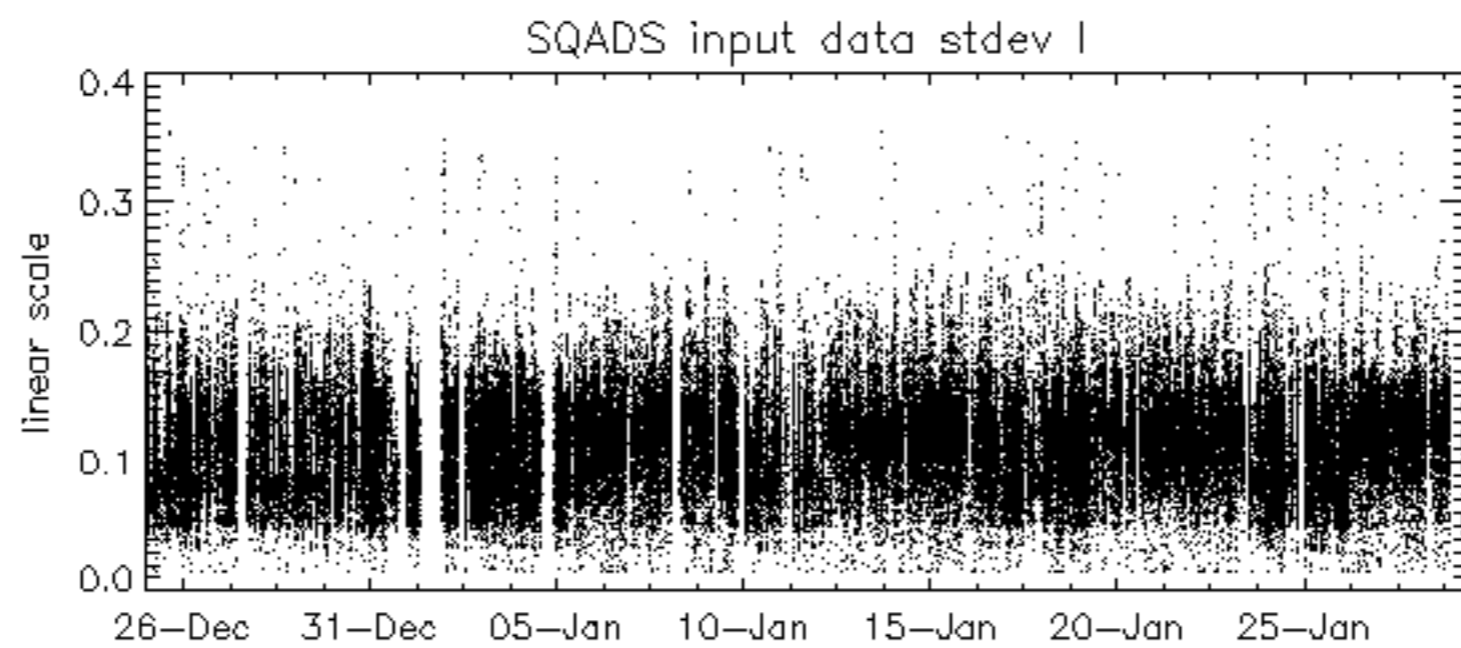
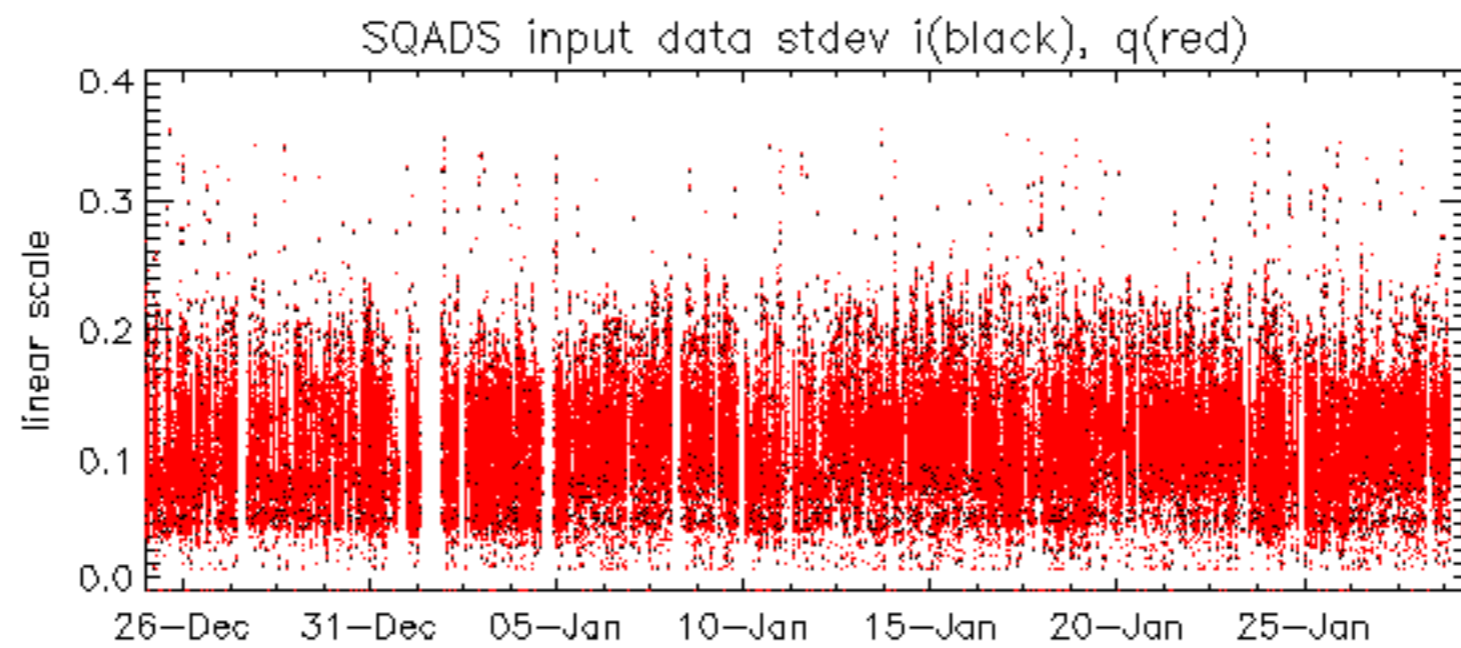






























No unavailabilities during the reported period.