

# REPORT OF 040122

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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	20040121 193645
H	20040121 193525

#### 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	-3.68334	-22.4980	-8.15303
	stdev	0.00771807	0.0710433	0.00315175

24	mean	-5.07342	-21.1162	-8.15303
	stdev	0.0161577	0.0674639	0.00315175



## 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.70721	-22.5303	-8.15867
	stdev	0.00720959	0.0688284	0.00333898
24	mean	-5.22620	-21.1559	-8.15867
	stdev	0.576224	0.0631980	0.00333898



## 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	0.000424852
	stdev	3.02602e-07
MEAN Q	mean	0.000303534
	stdev	3.61797e-07



### 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115724
	stdev	0.00140111

STDEV Q	mean	0.115967
	stdev	0.00141587



### 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

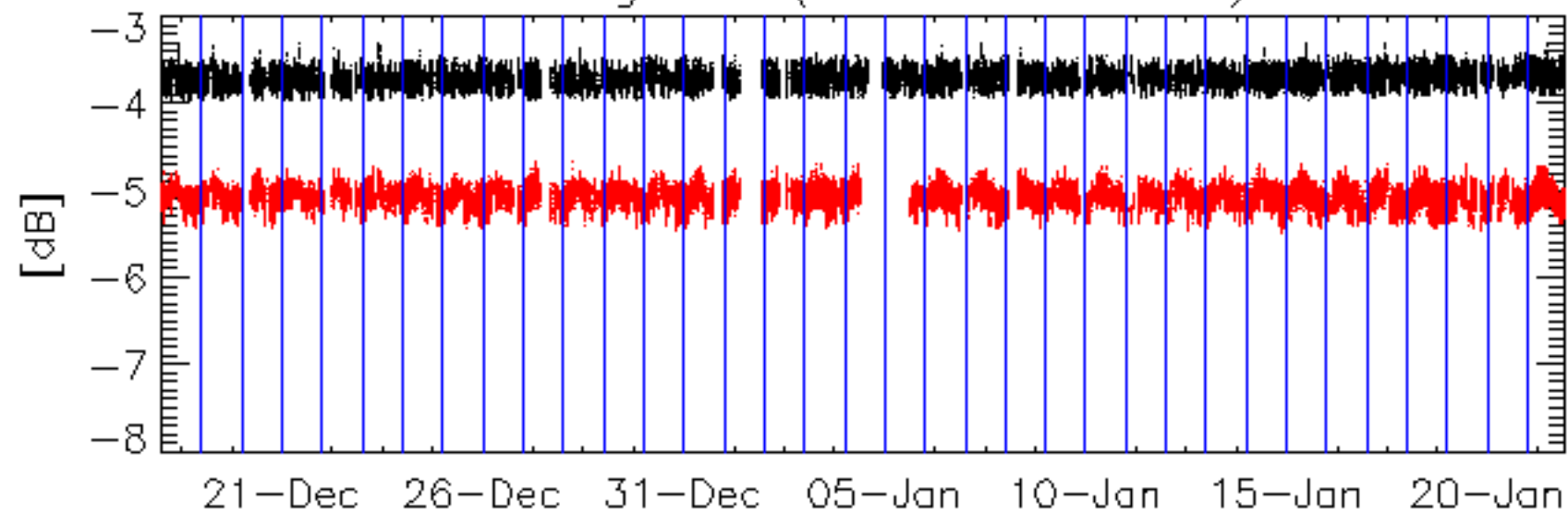
### 6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

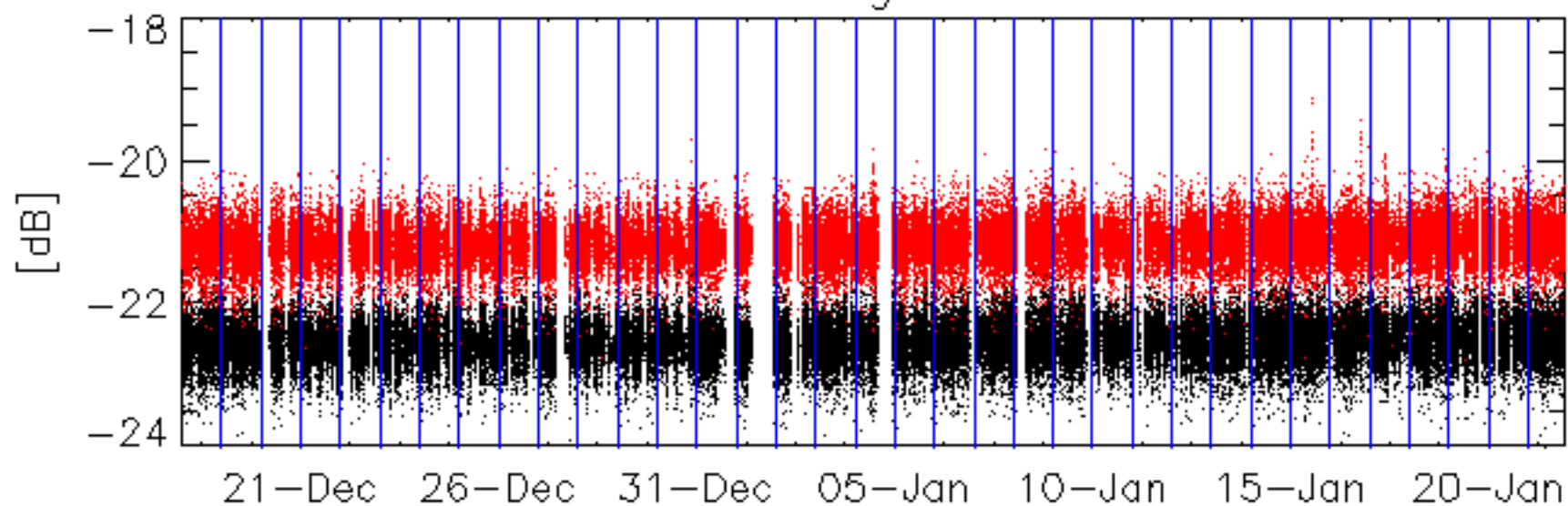
### 6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

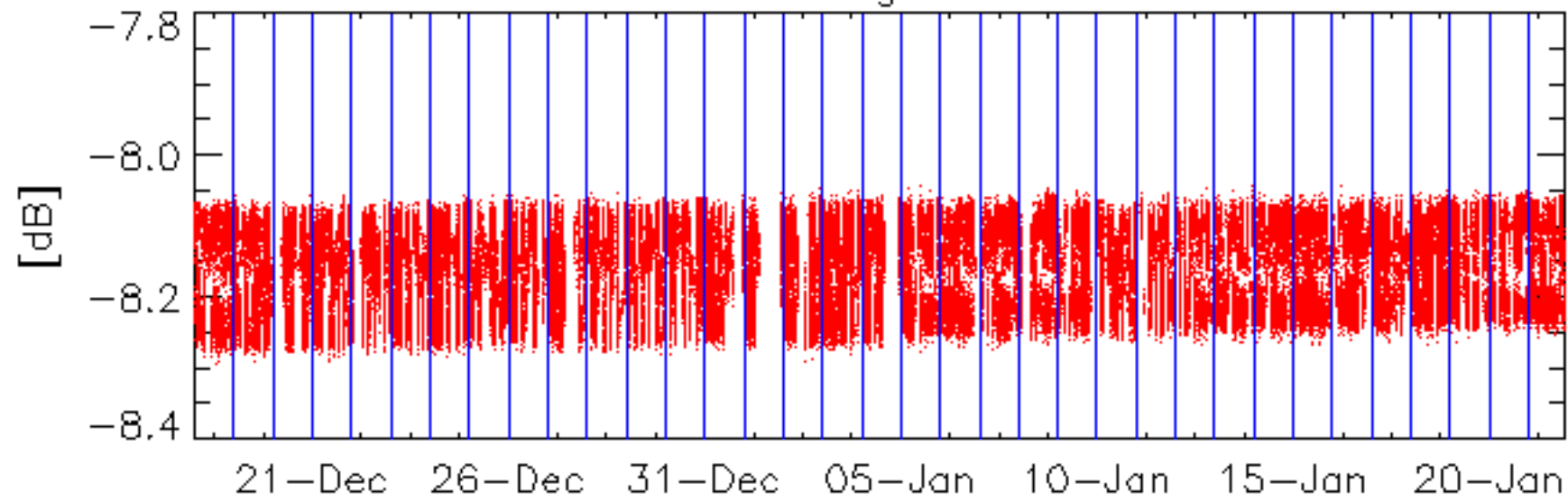

Average P1 (row 3 & row 24)



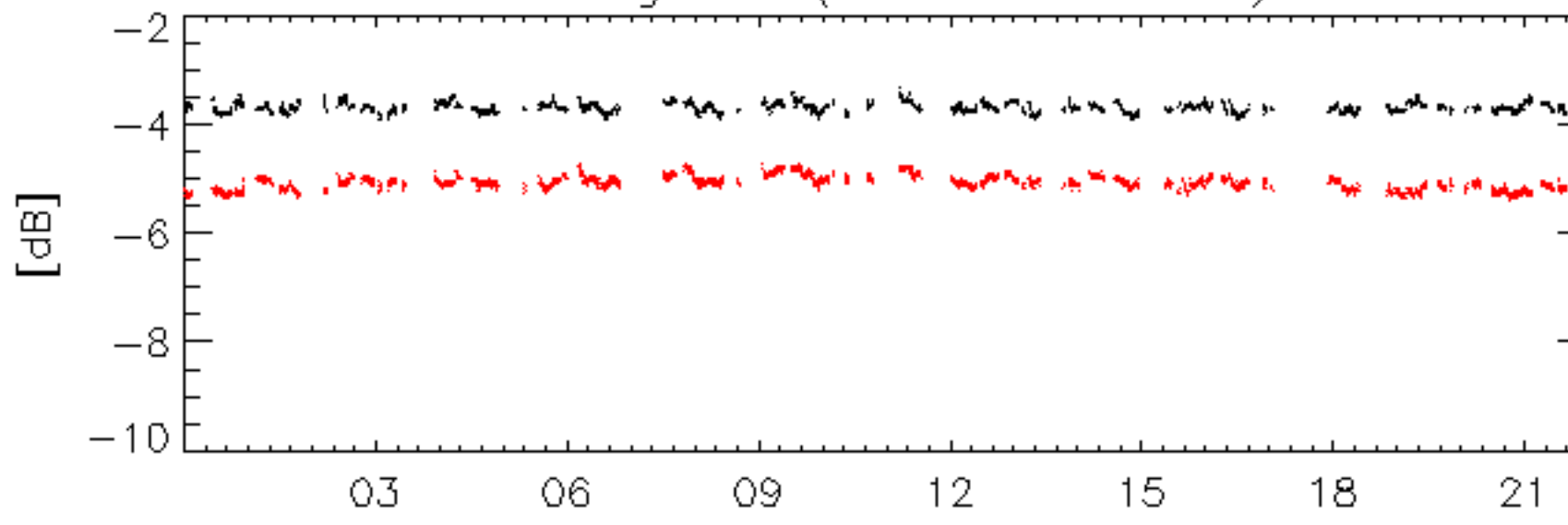
Average P2



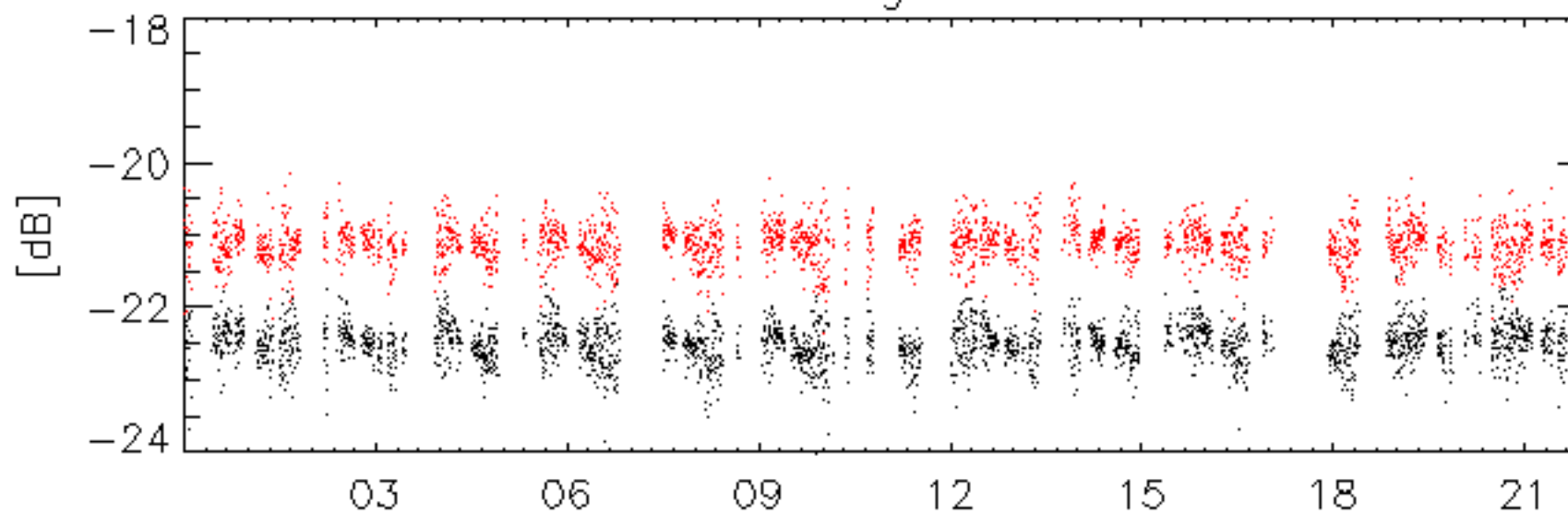
Average P3



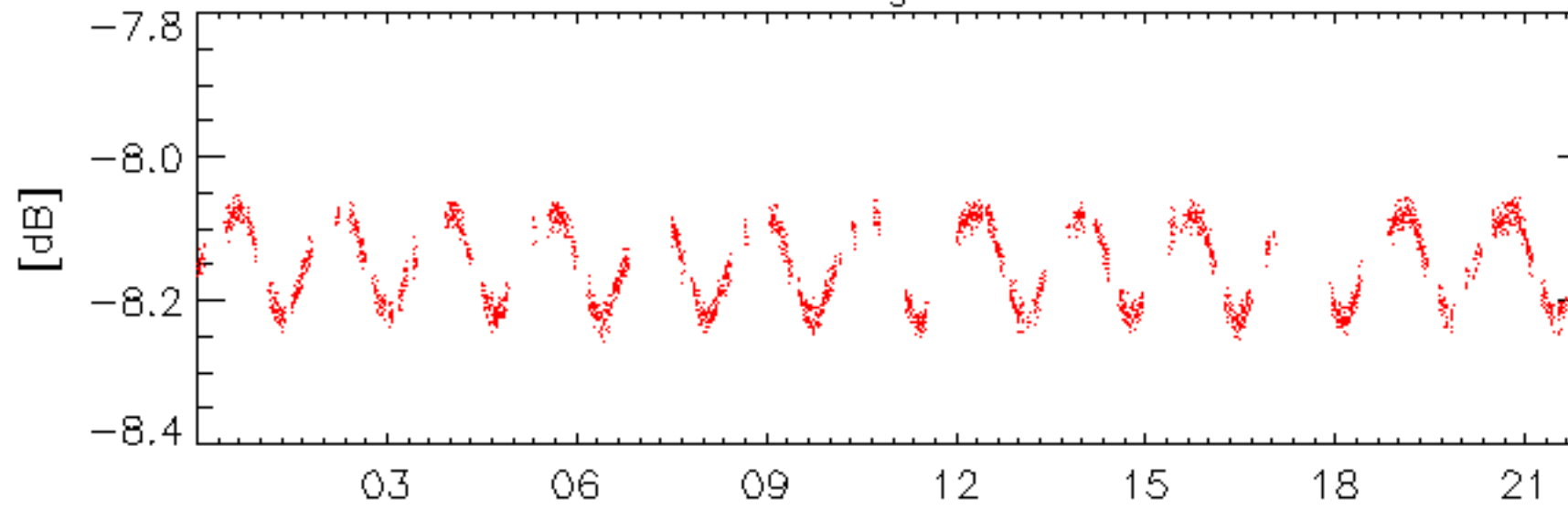
Average P1 (row 3 & row 24)



21-Jan  
Average P2



21-Jan  
Average P3

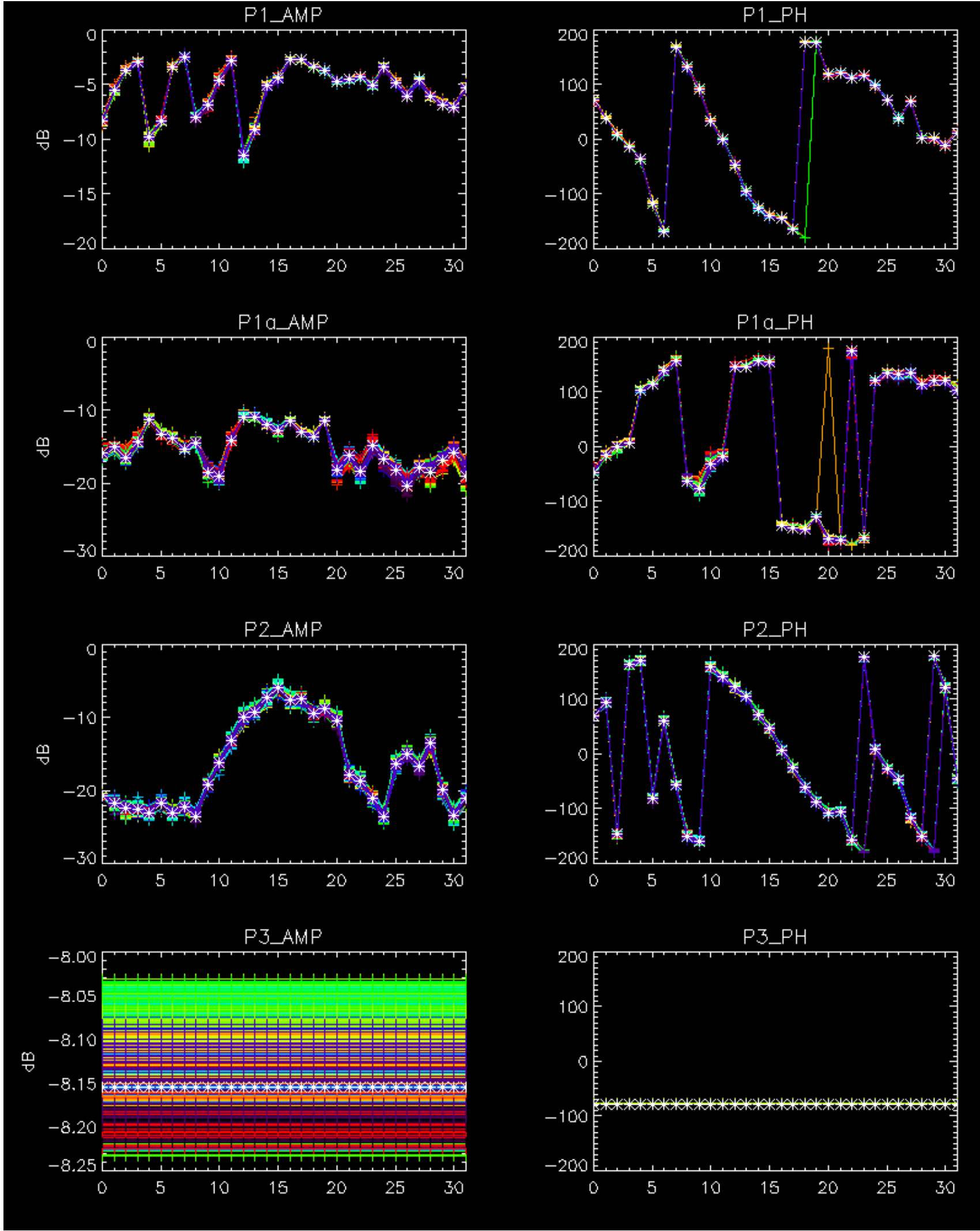


21-Jan

No anomalies observed on available browse products

No anomalies observed.



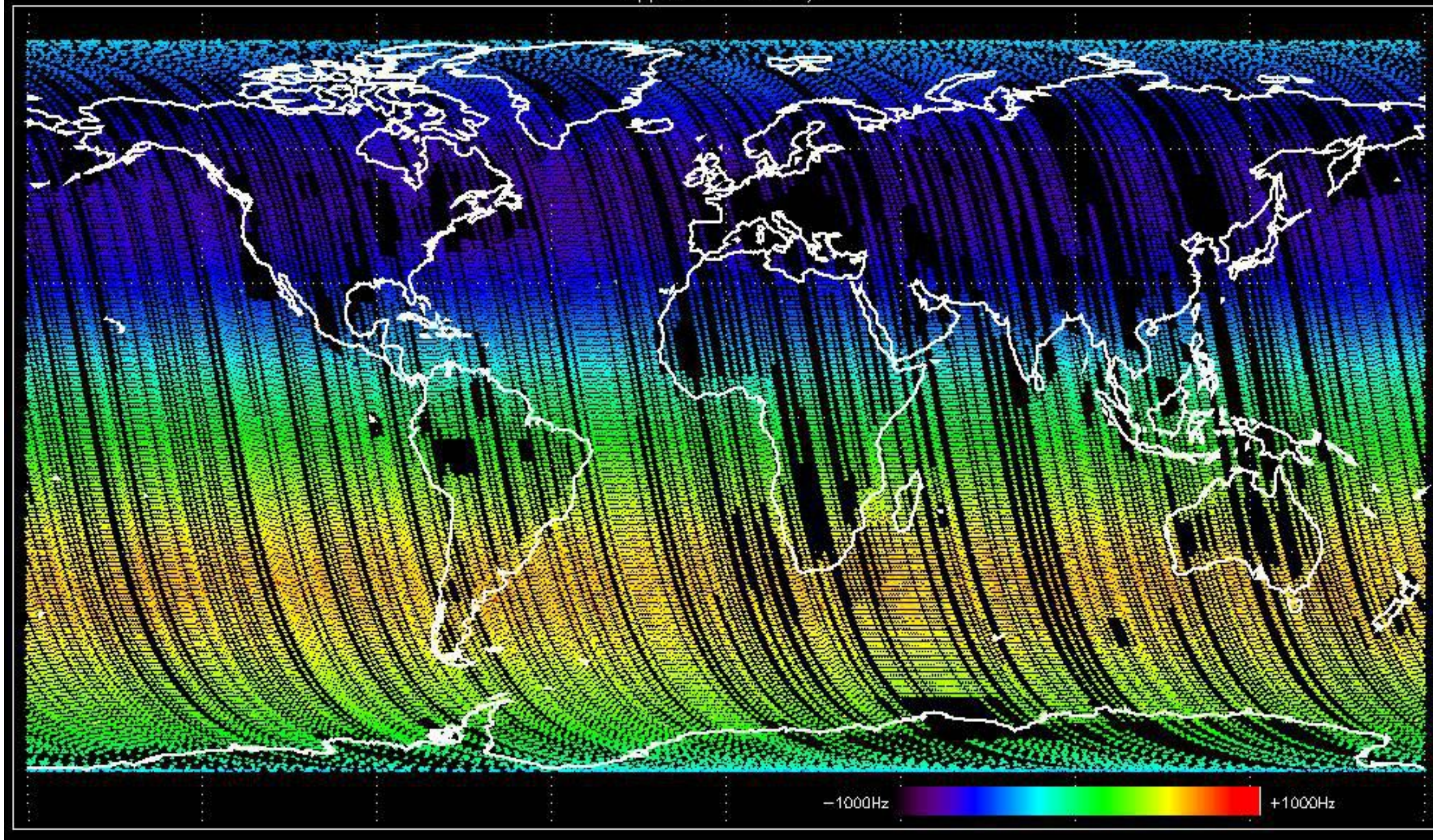


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.



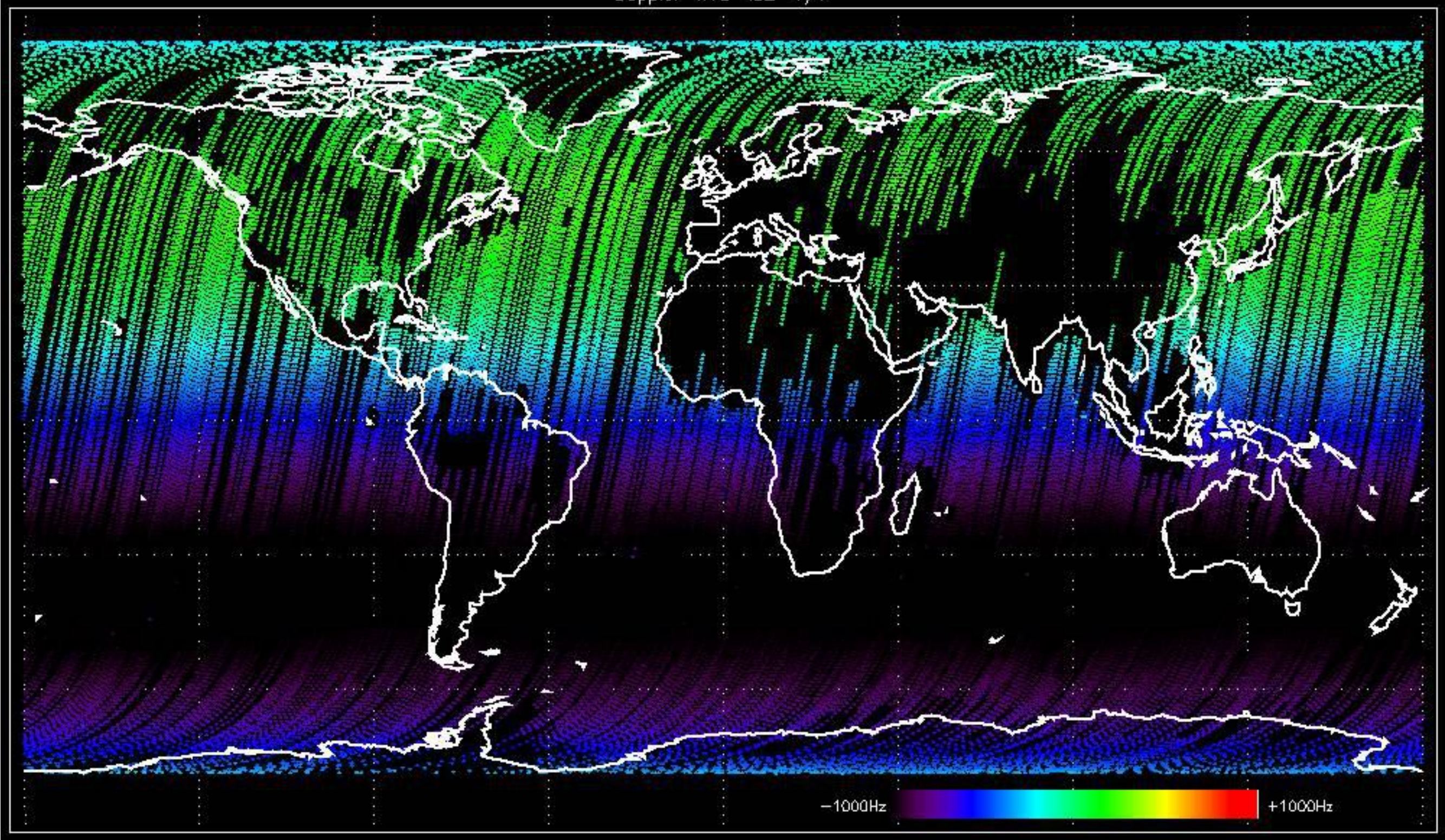


Doppler 'WVS' 'IS2' 'H/H'

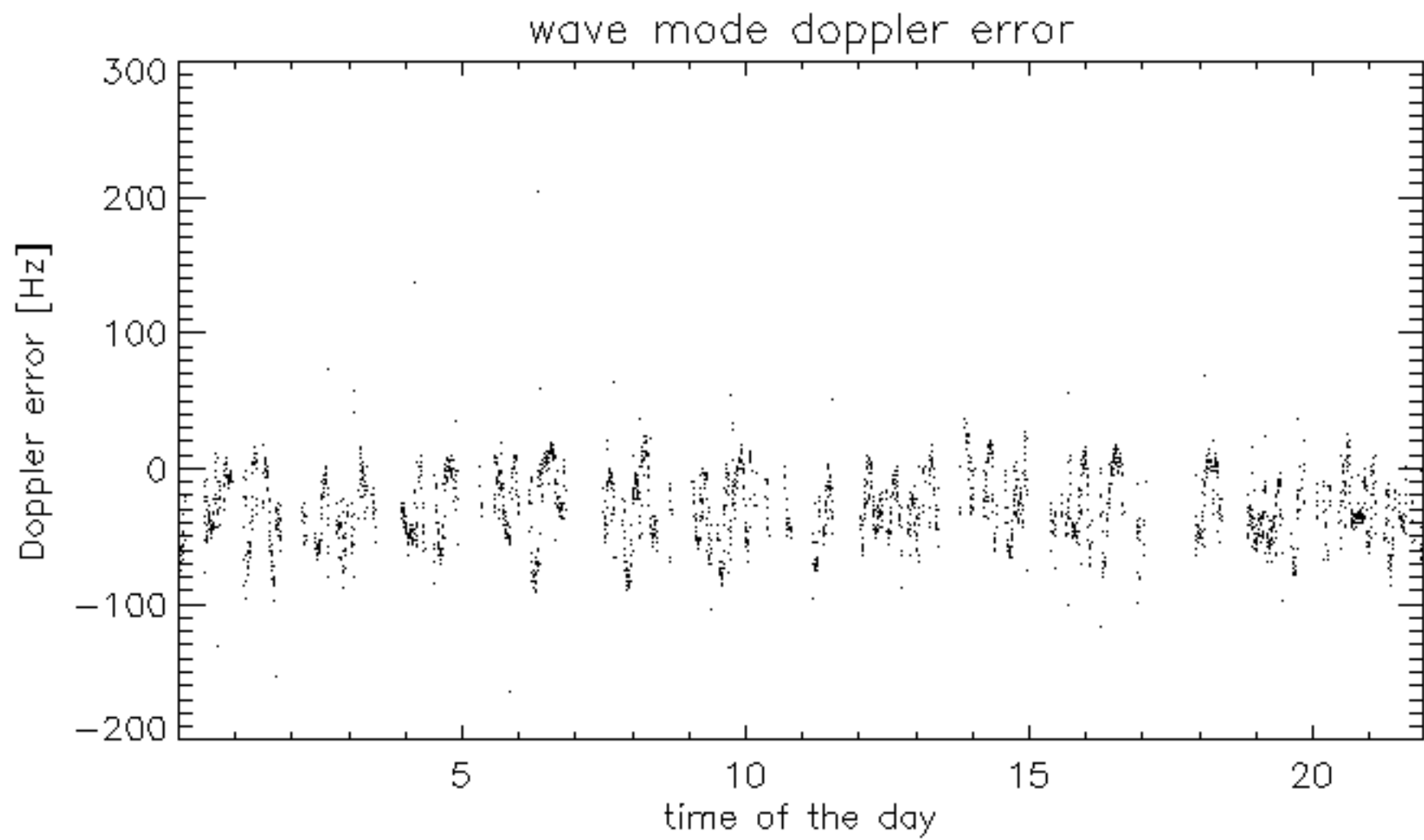
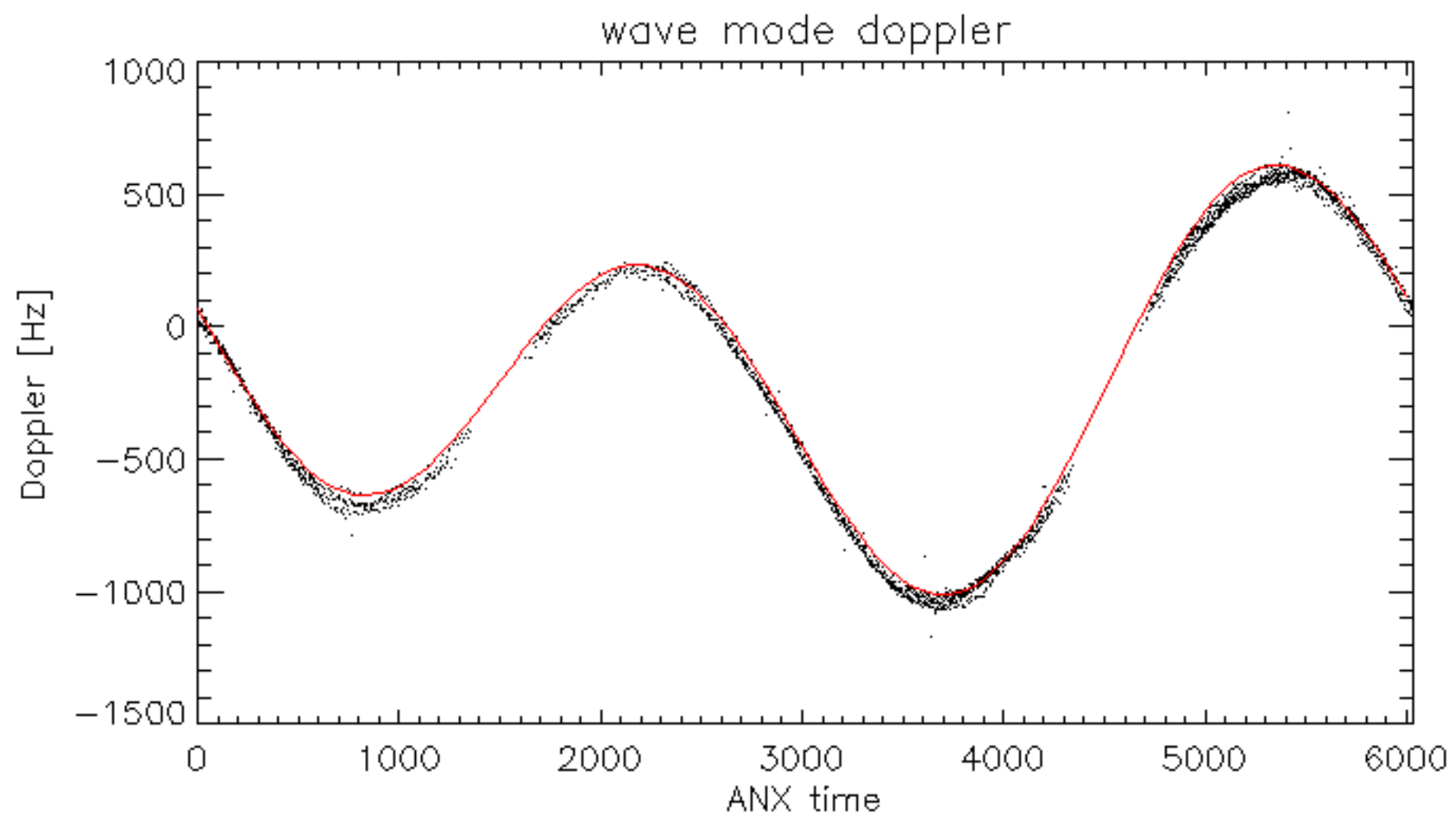




Doppler 'WVS' 'ISZ' 'V/V'

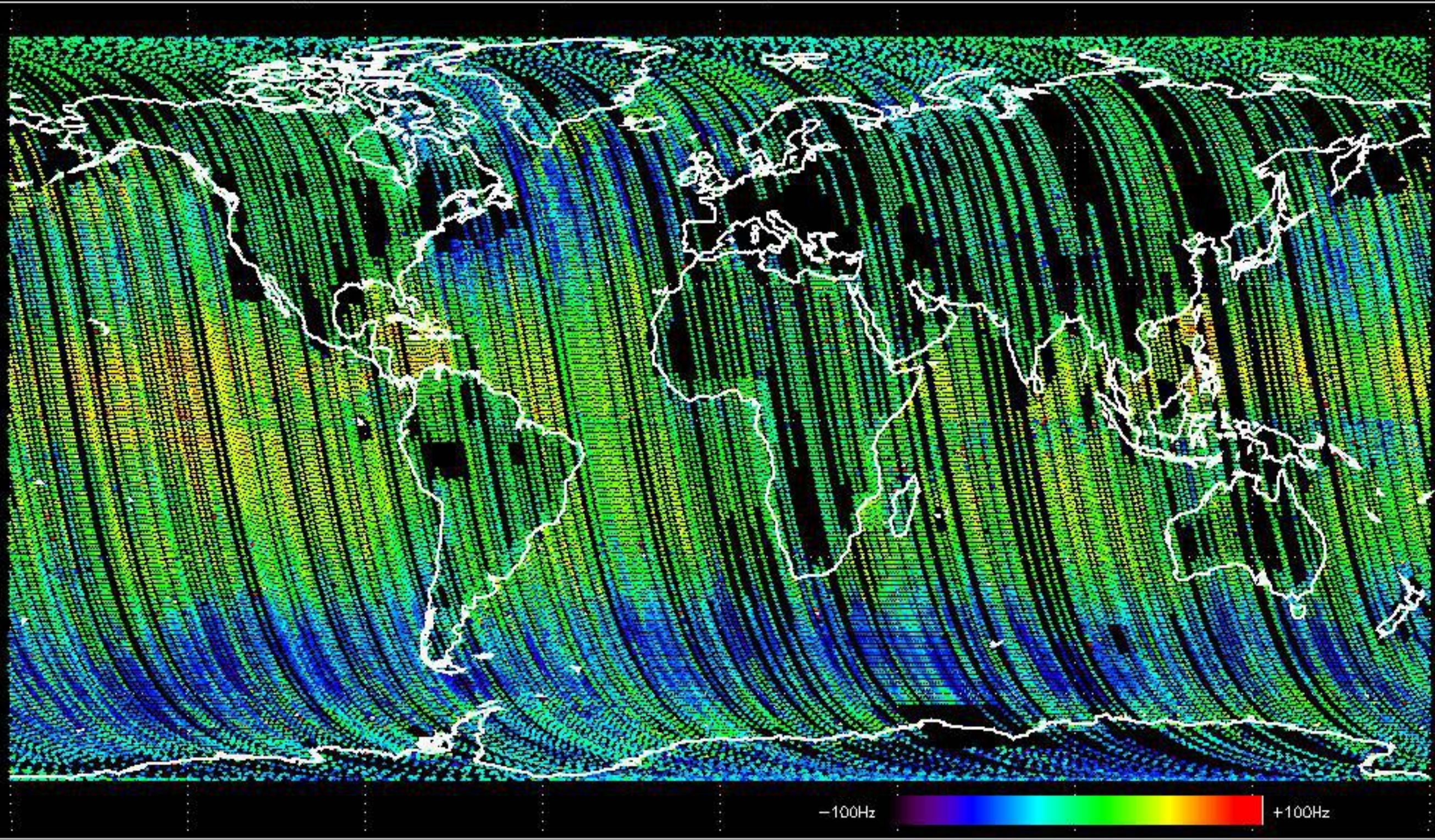






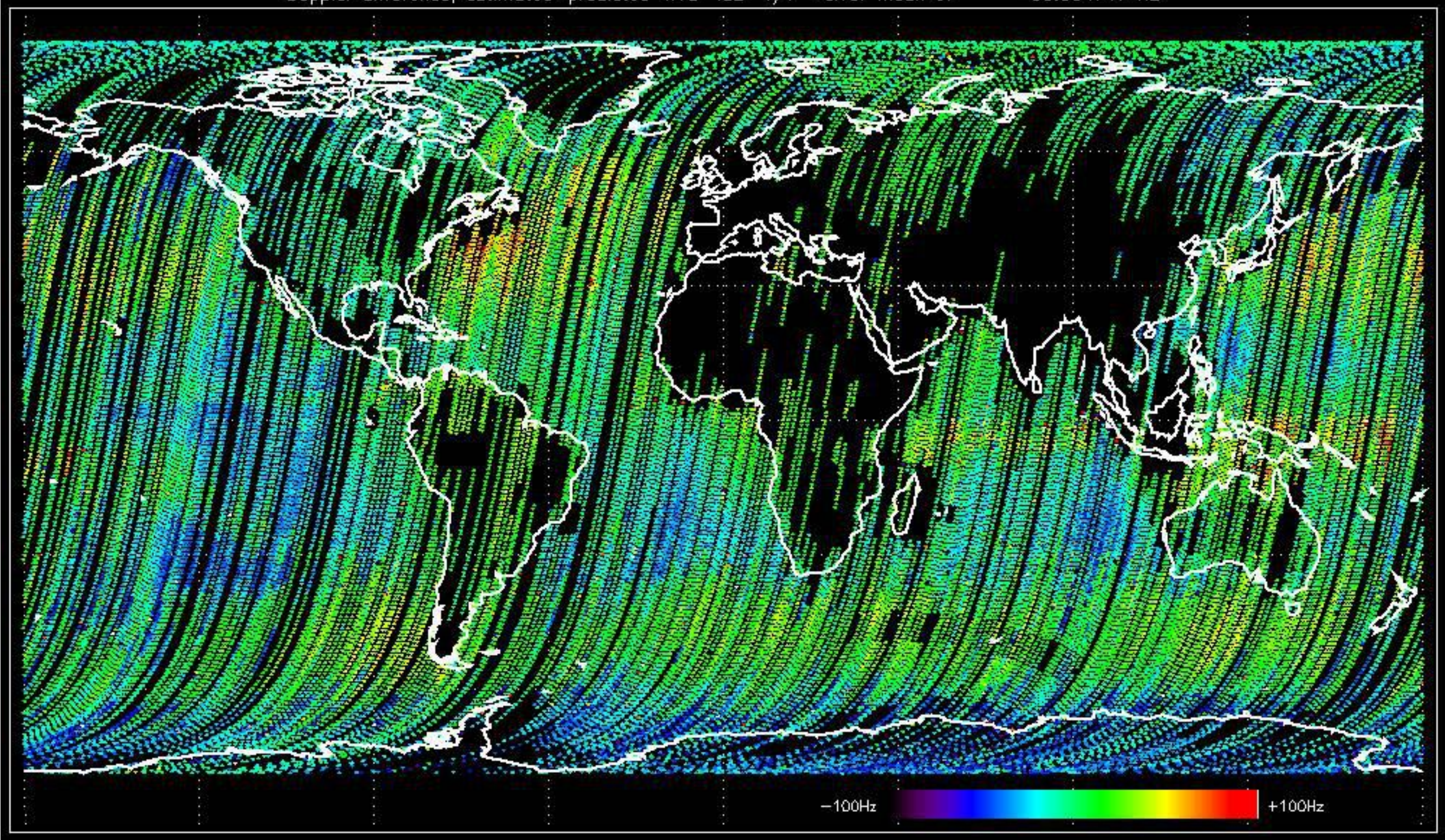


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -35.016033 Hz





Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -33.604717 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.









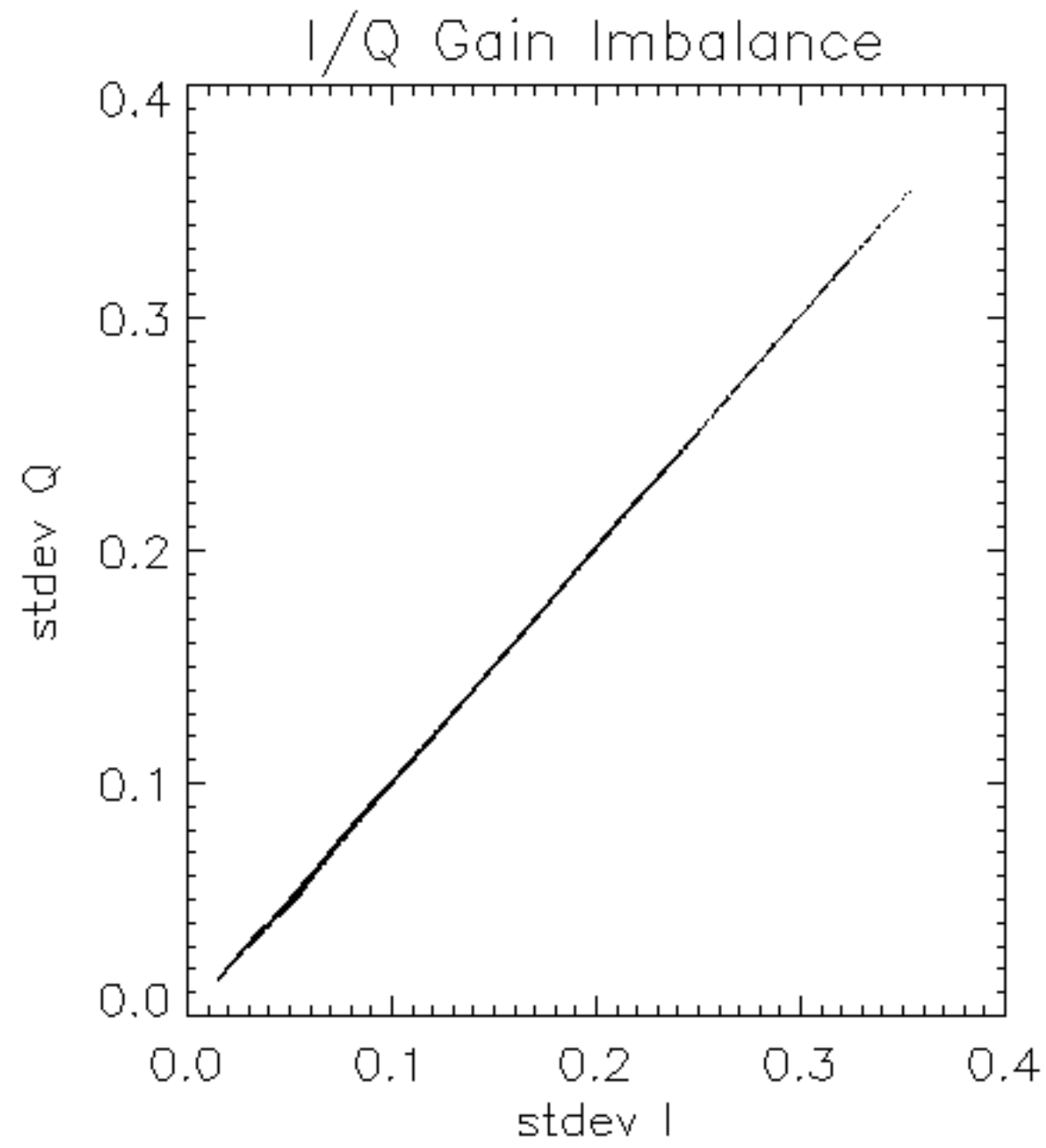


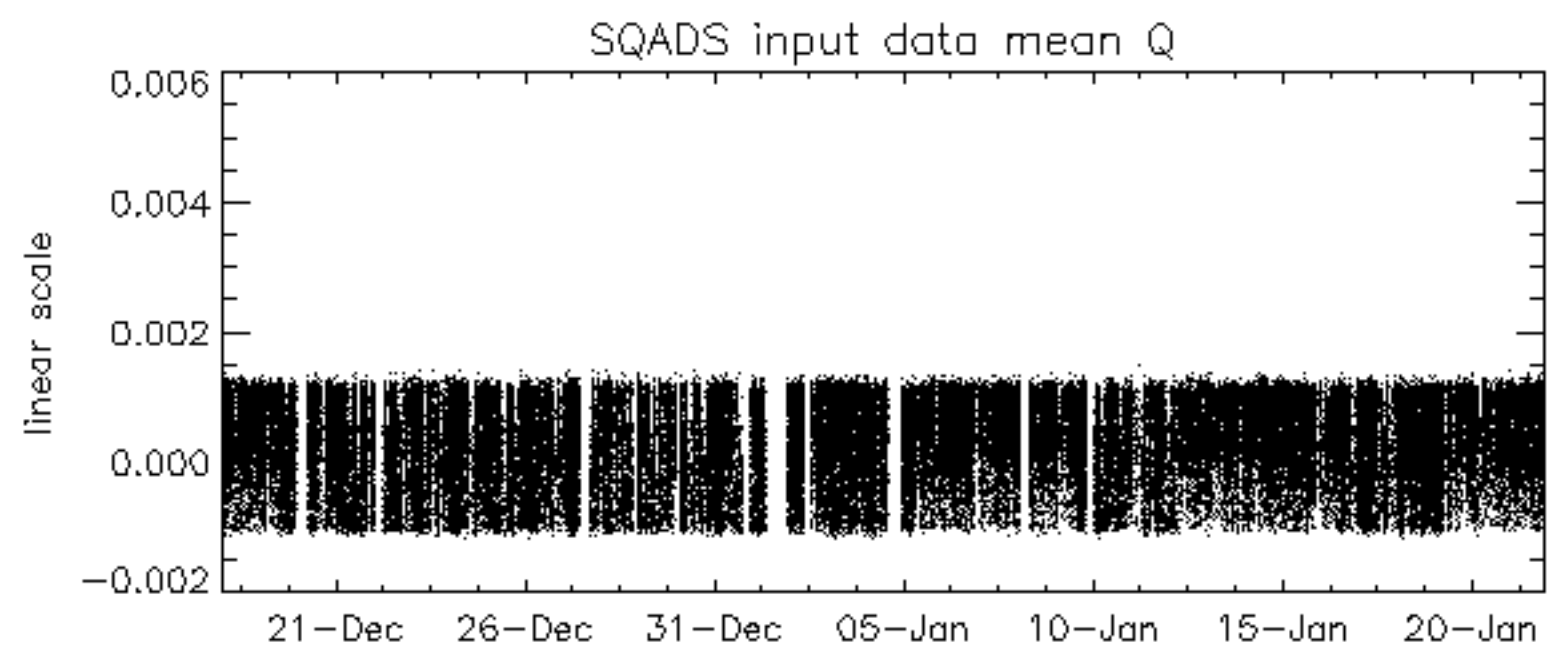
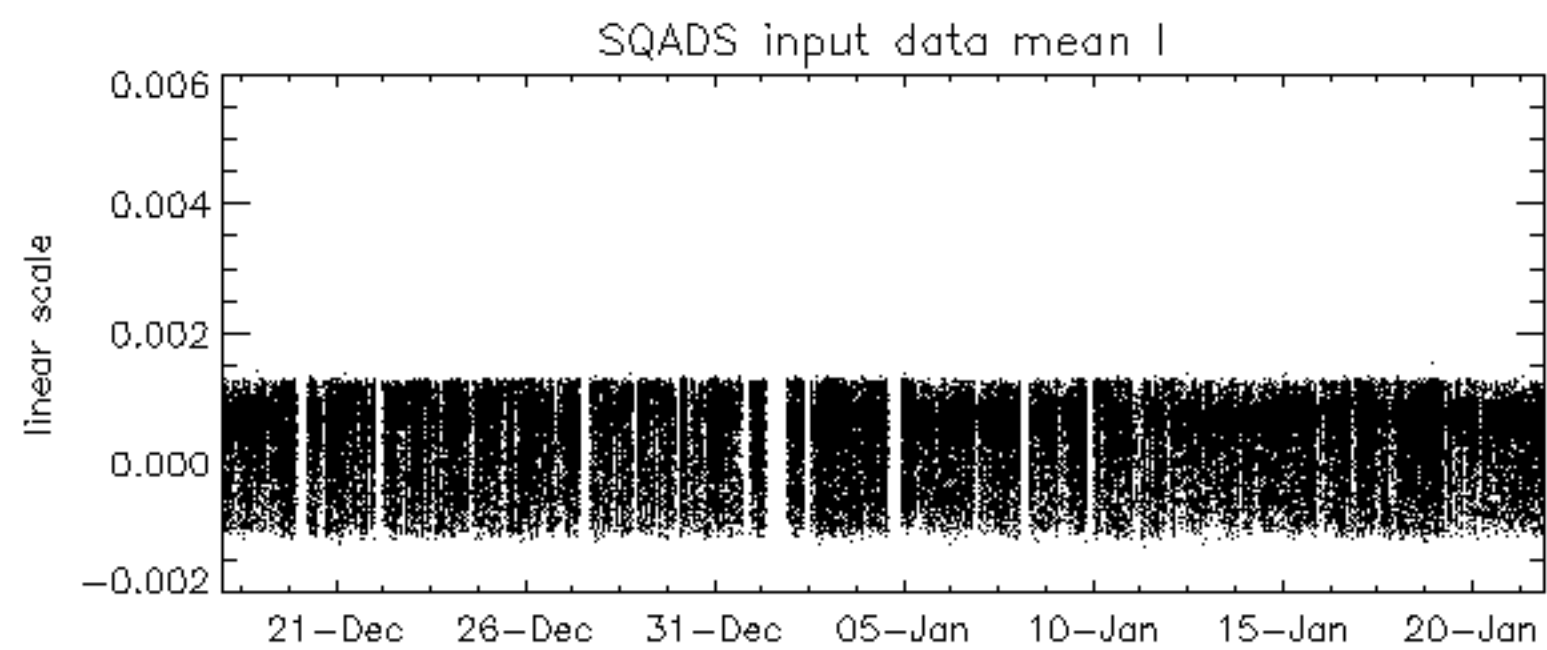
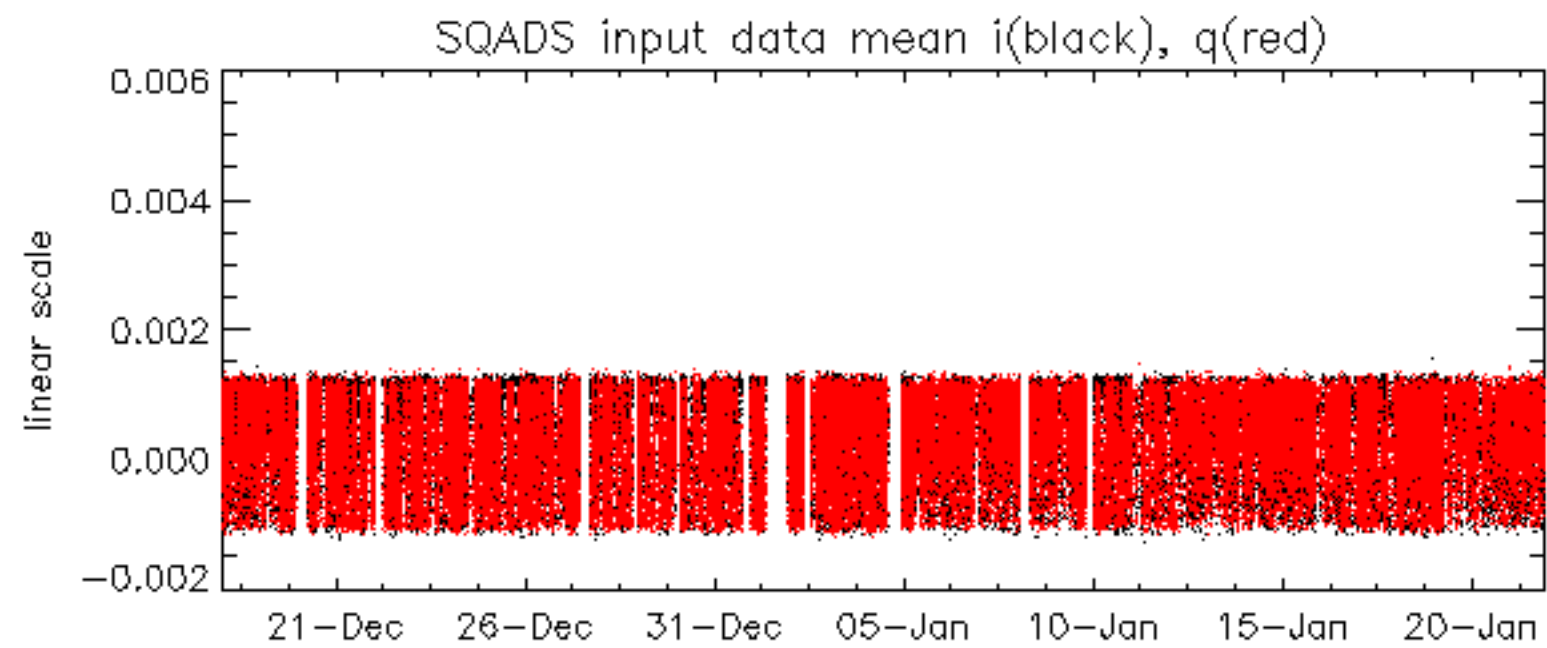


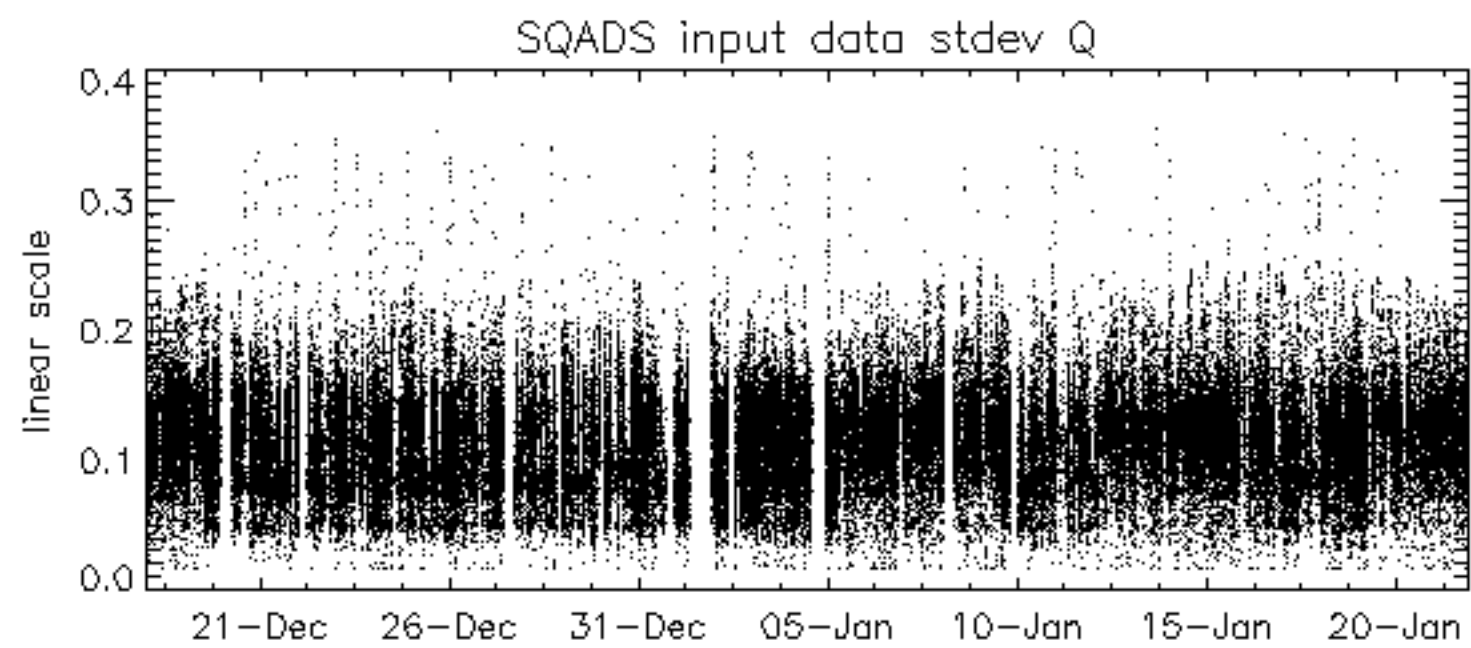
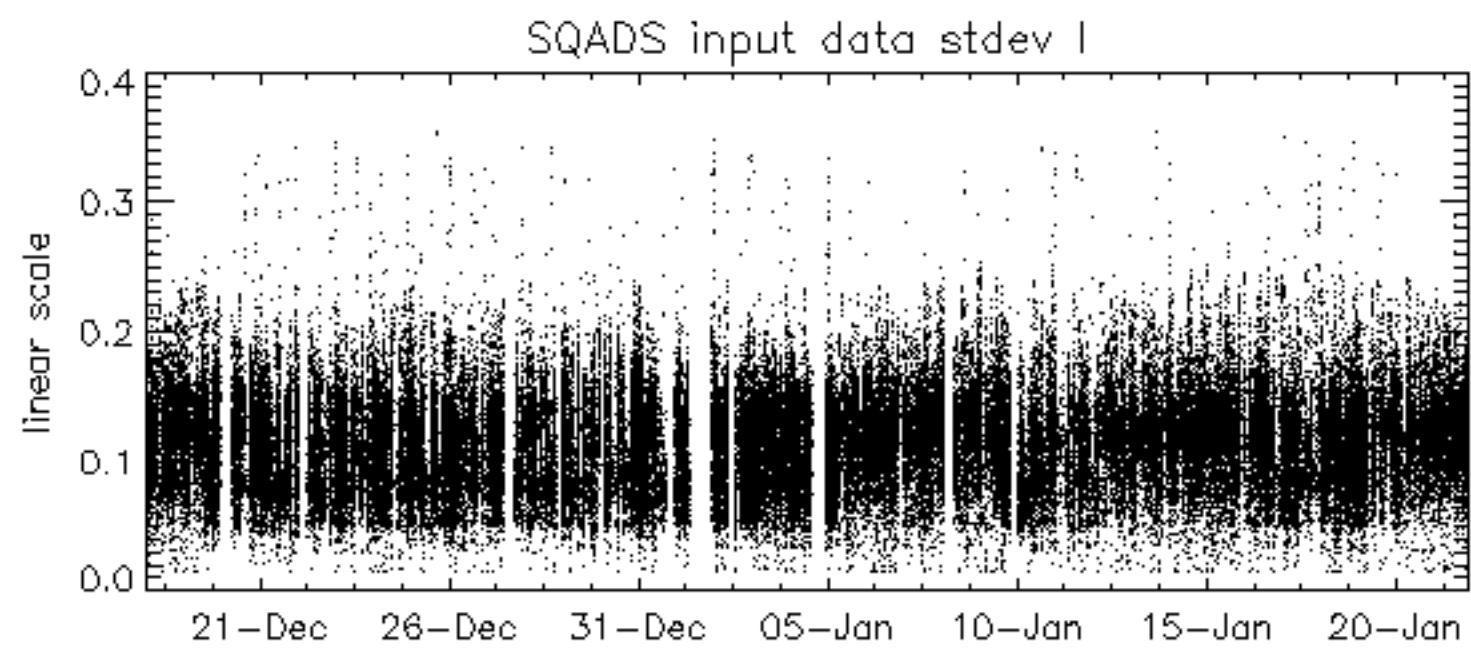
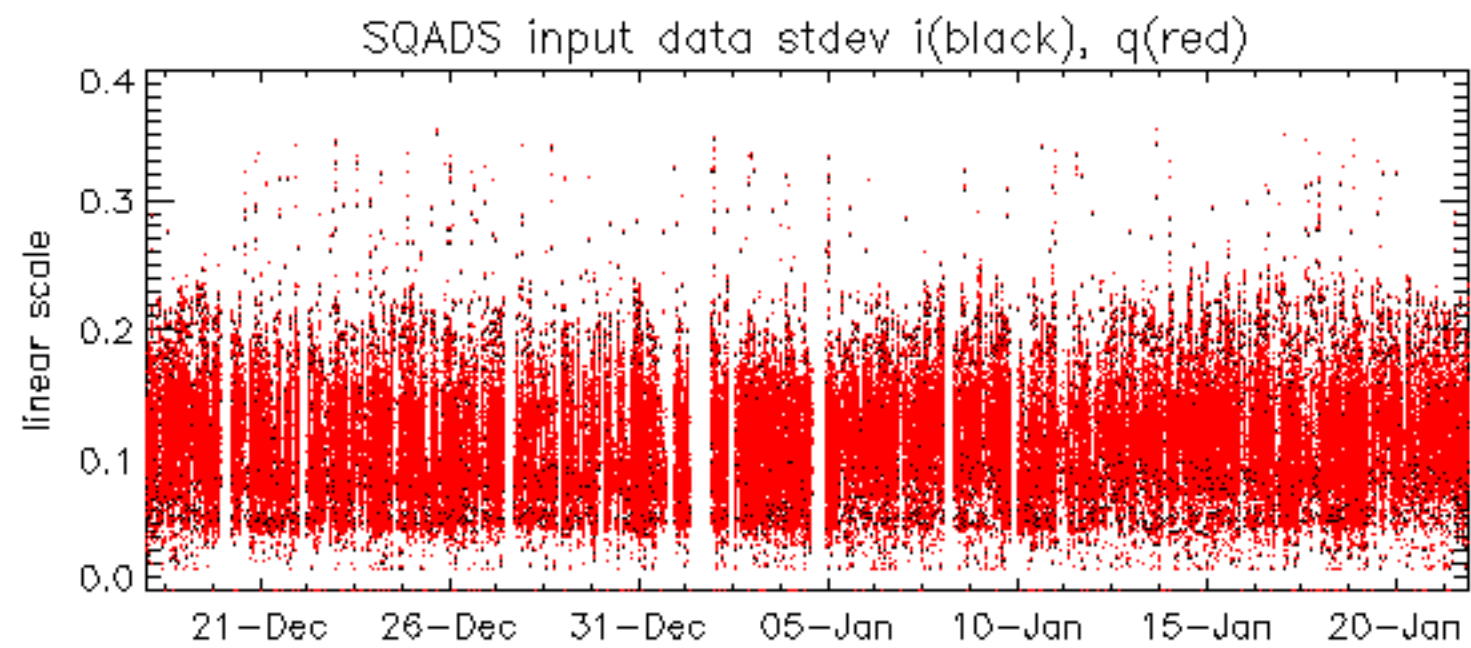






























No unavailabilities during the reported period.