

# REPORT OF 040220

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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.  
MS products of 19 february are missing

Polarisation	Start Time
V	20040217 202830
H	20040217 202710

#### 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	-3.63240	-22.3830	-8.13716
	stdev	0.00678917	0.0919295	0.00297804

24	mean	-5.05898	-21.0133	-8.13716
	stdev	0.0134918	0.0940523	0.00297804



## 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.65793	-22.4299	-8.13783
	stdev	0.00683061	0.0737670	0.00309214
24	mean	-5.10528	-21.0886	-8.13783
	stdev	0.0150973	0.0698240	0.00309214



## 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	0.000443938
	stdev	2.73251e-07
MEAN Q	mean	0.000389712
	stdev	3.20326e-07



### 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.121112
	stdev	0.00133901

STDEV Q	mean	0.121345
	stdev	0.00135388



### 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

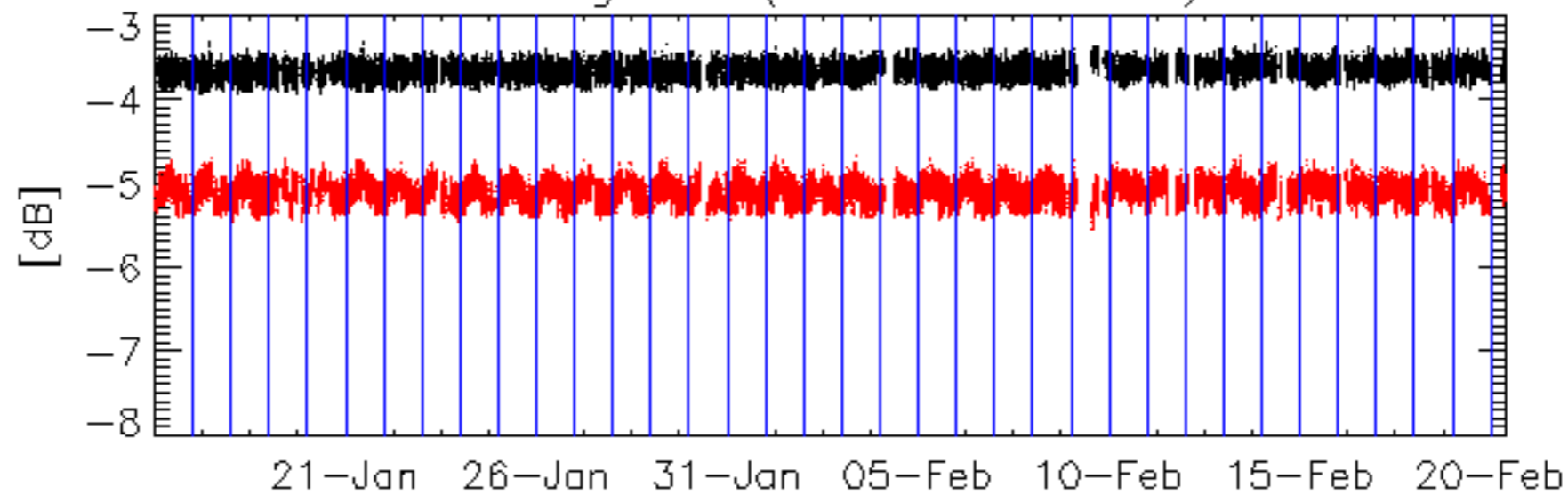
### 6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

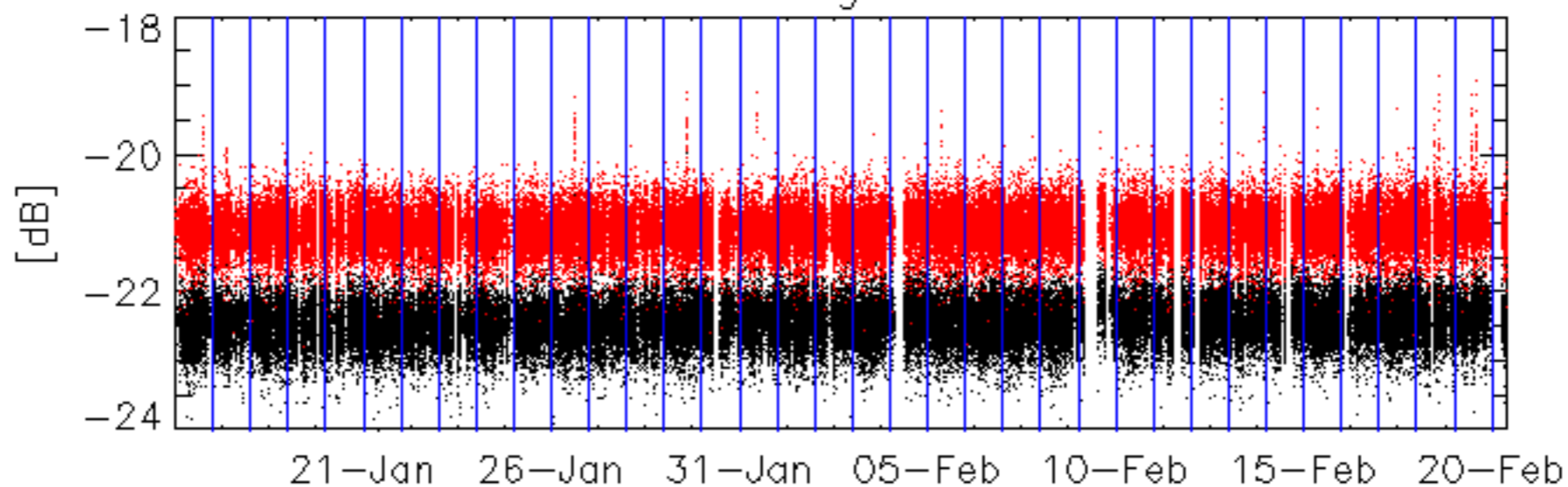
### 6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

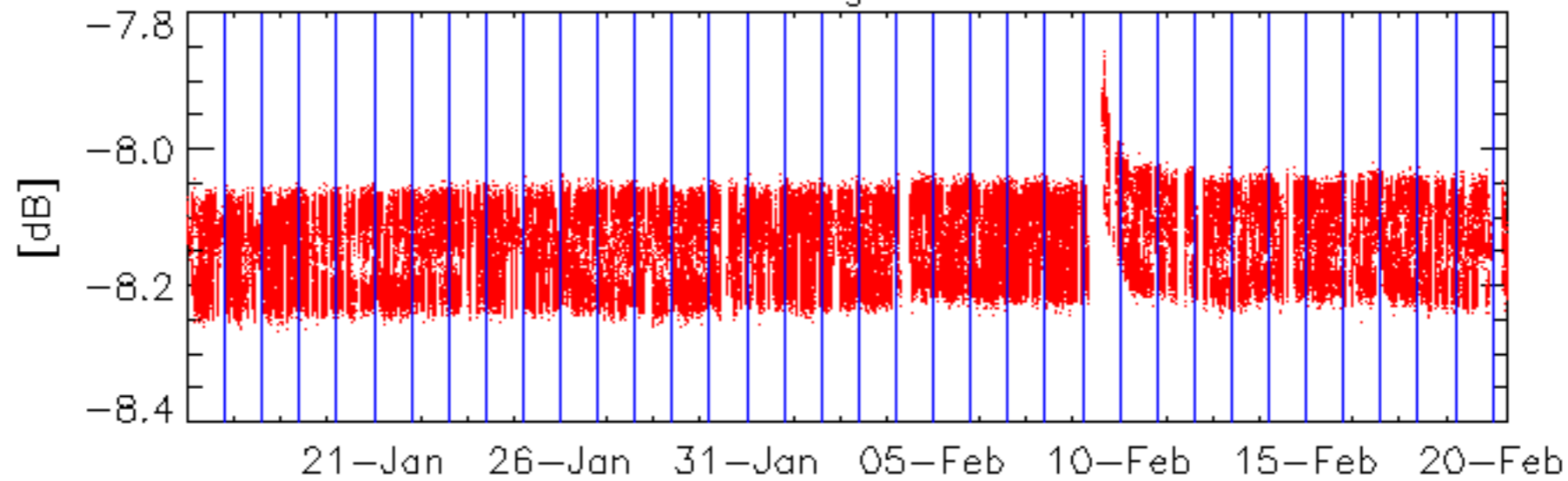

Average P1 (row 3 & row 24)



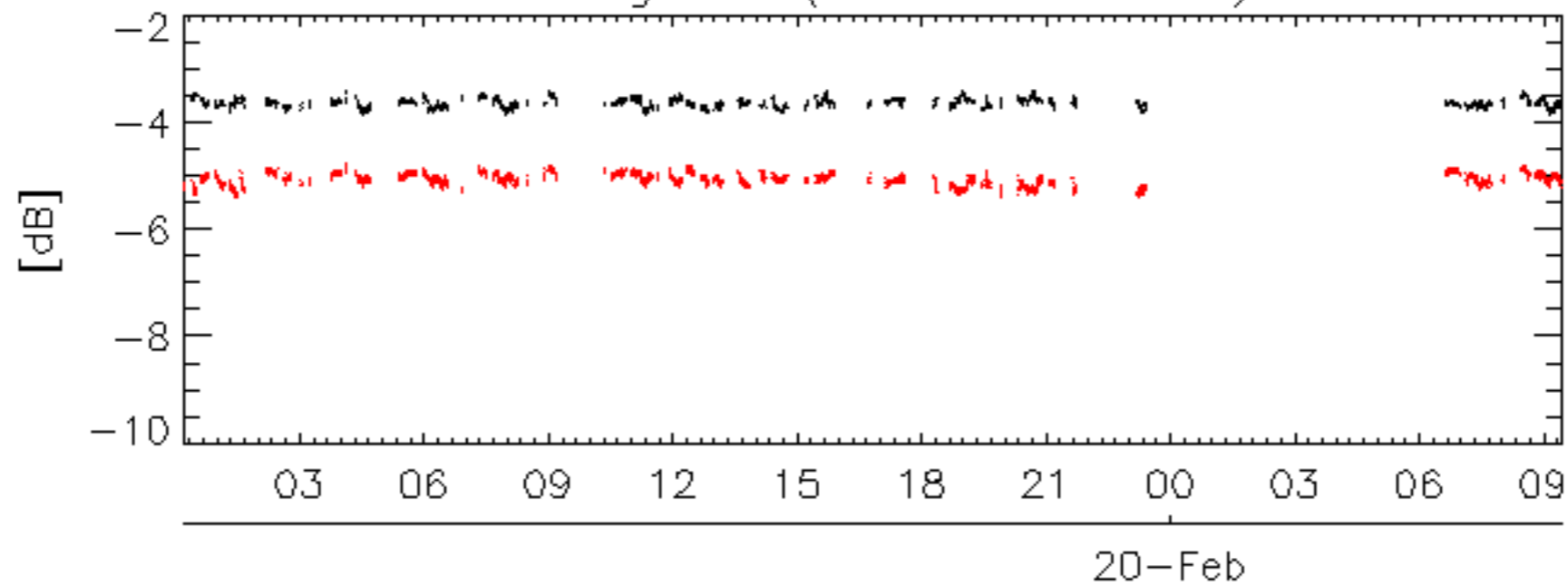
Average P2



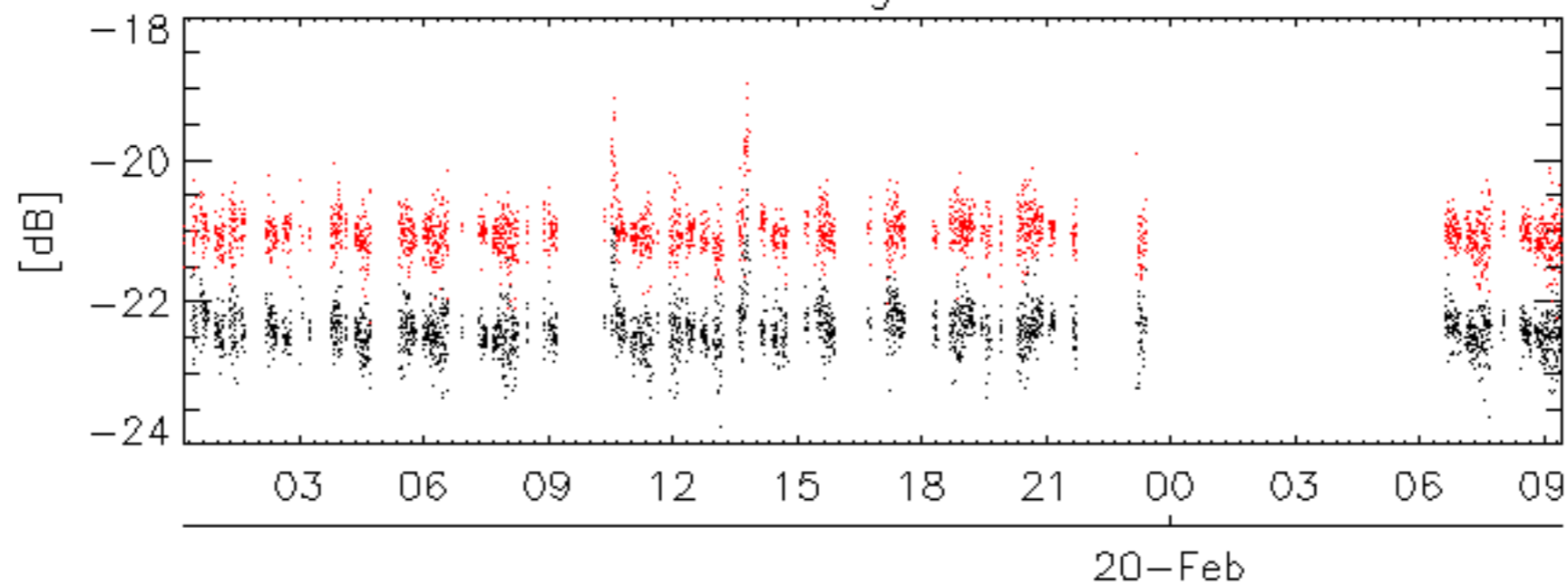
Average P3



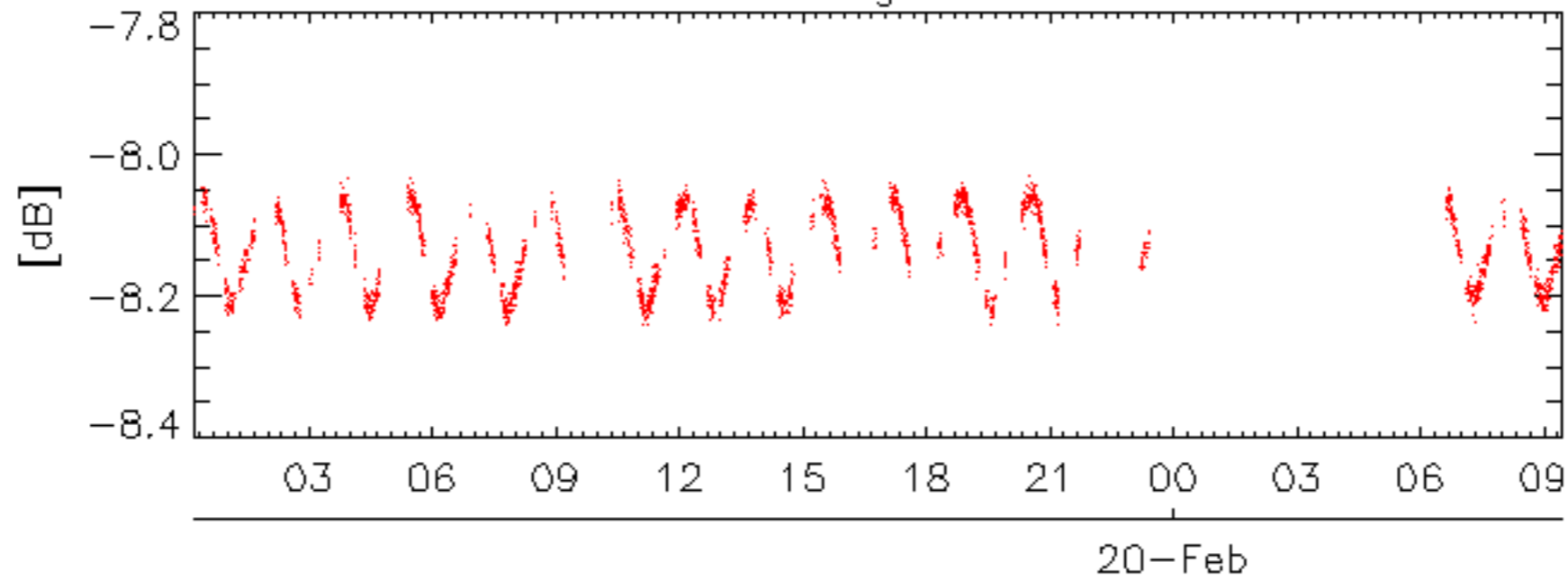
Average P1 (row 3 & row 24)

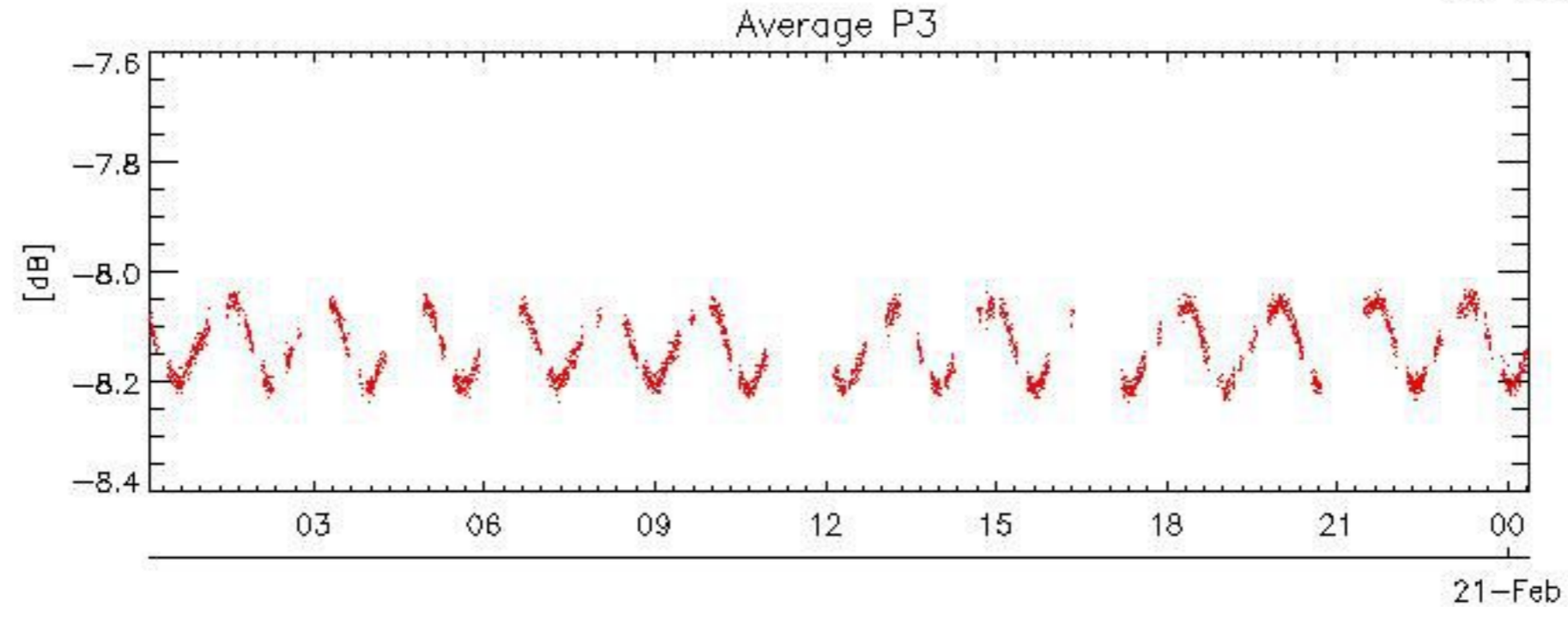
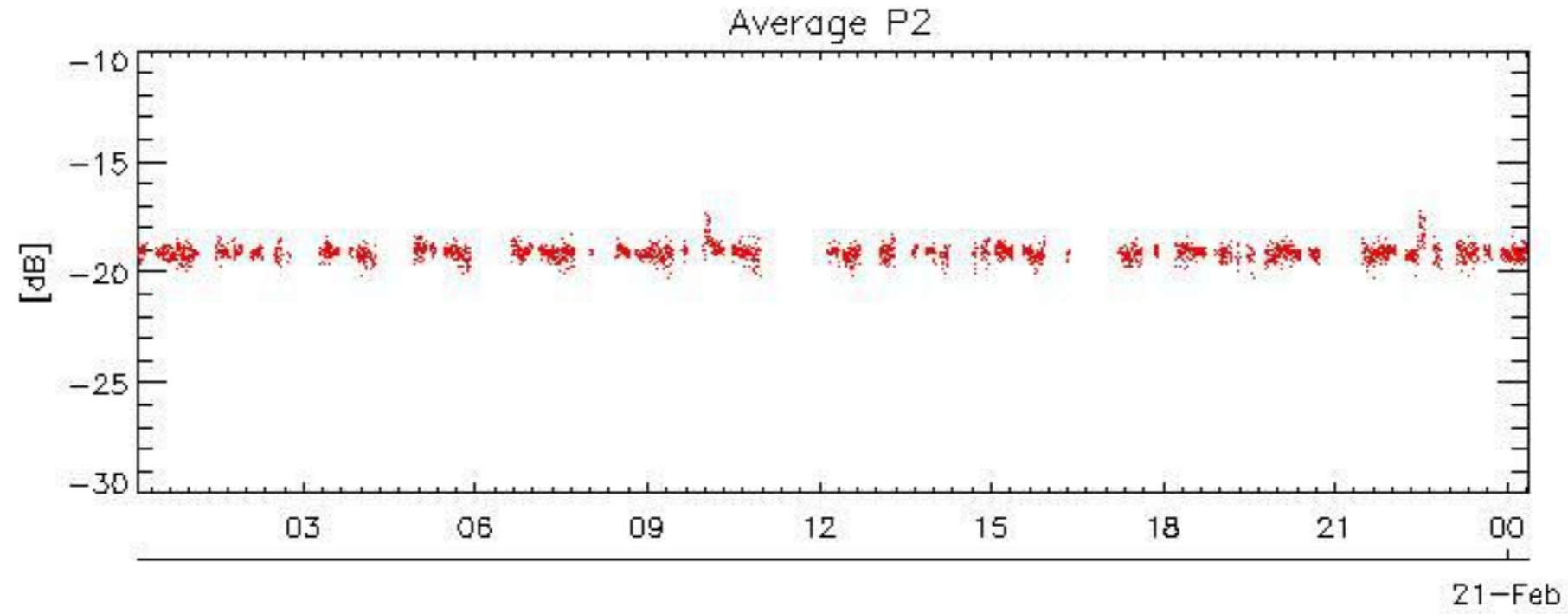
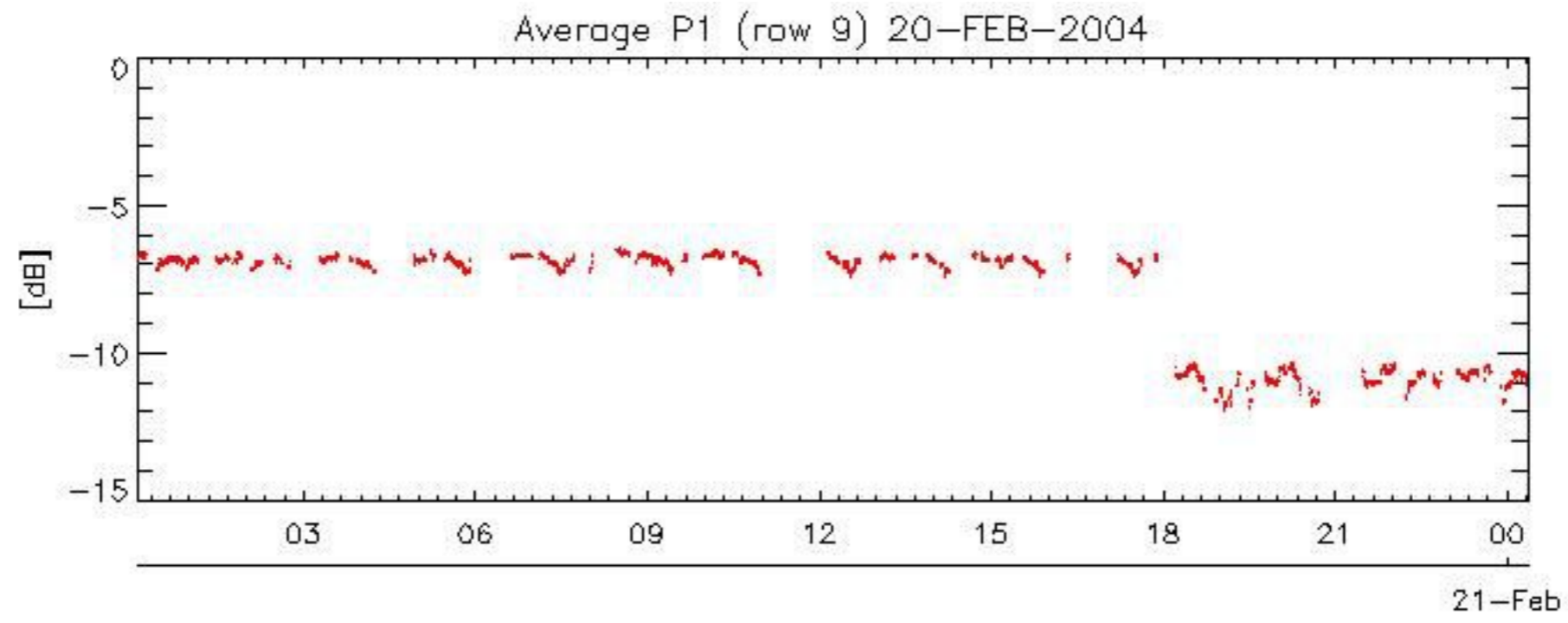


Average P2



Average P3

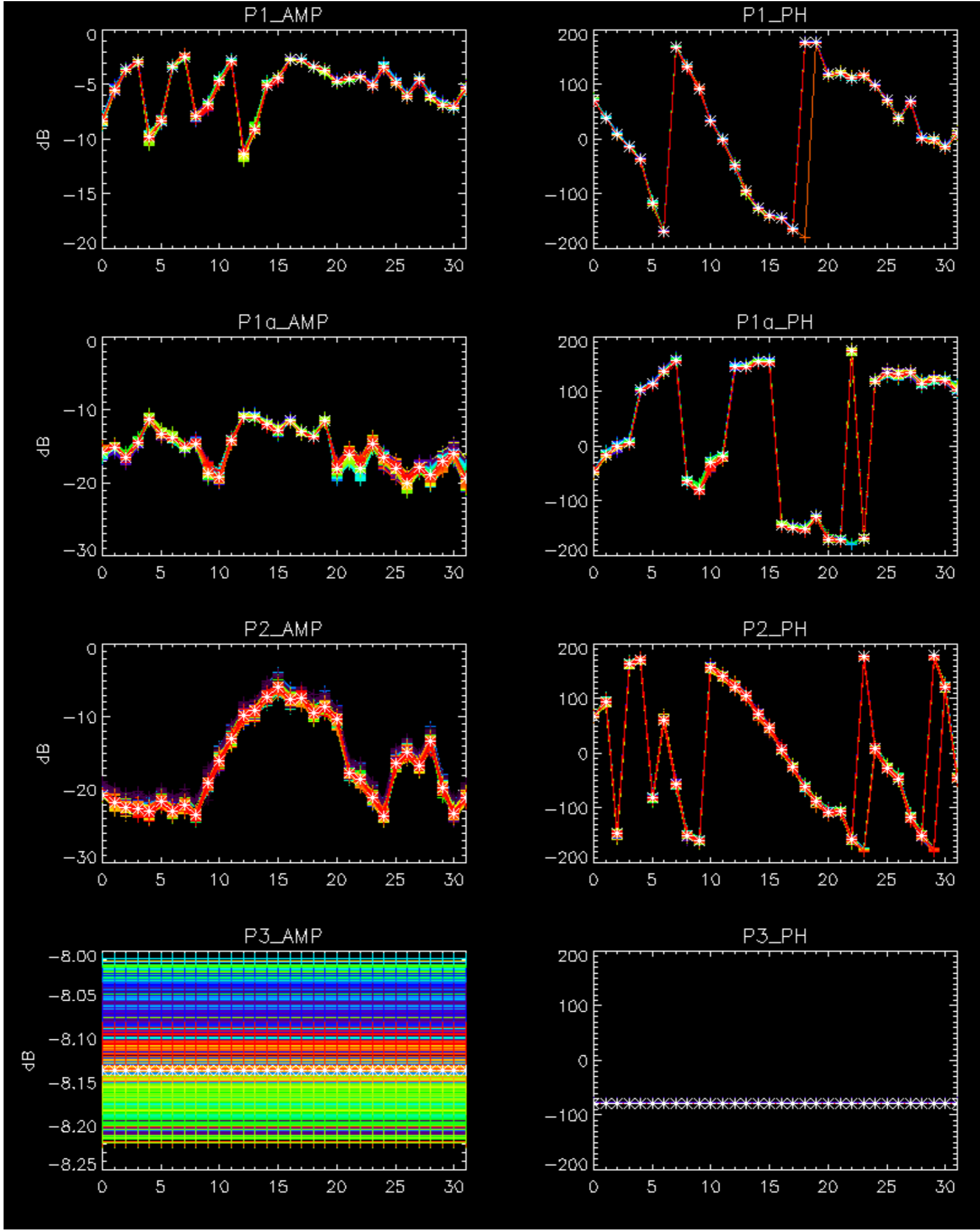




No anomalies observed on available browse products



No anomalies observed.

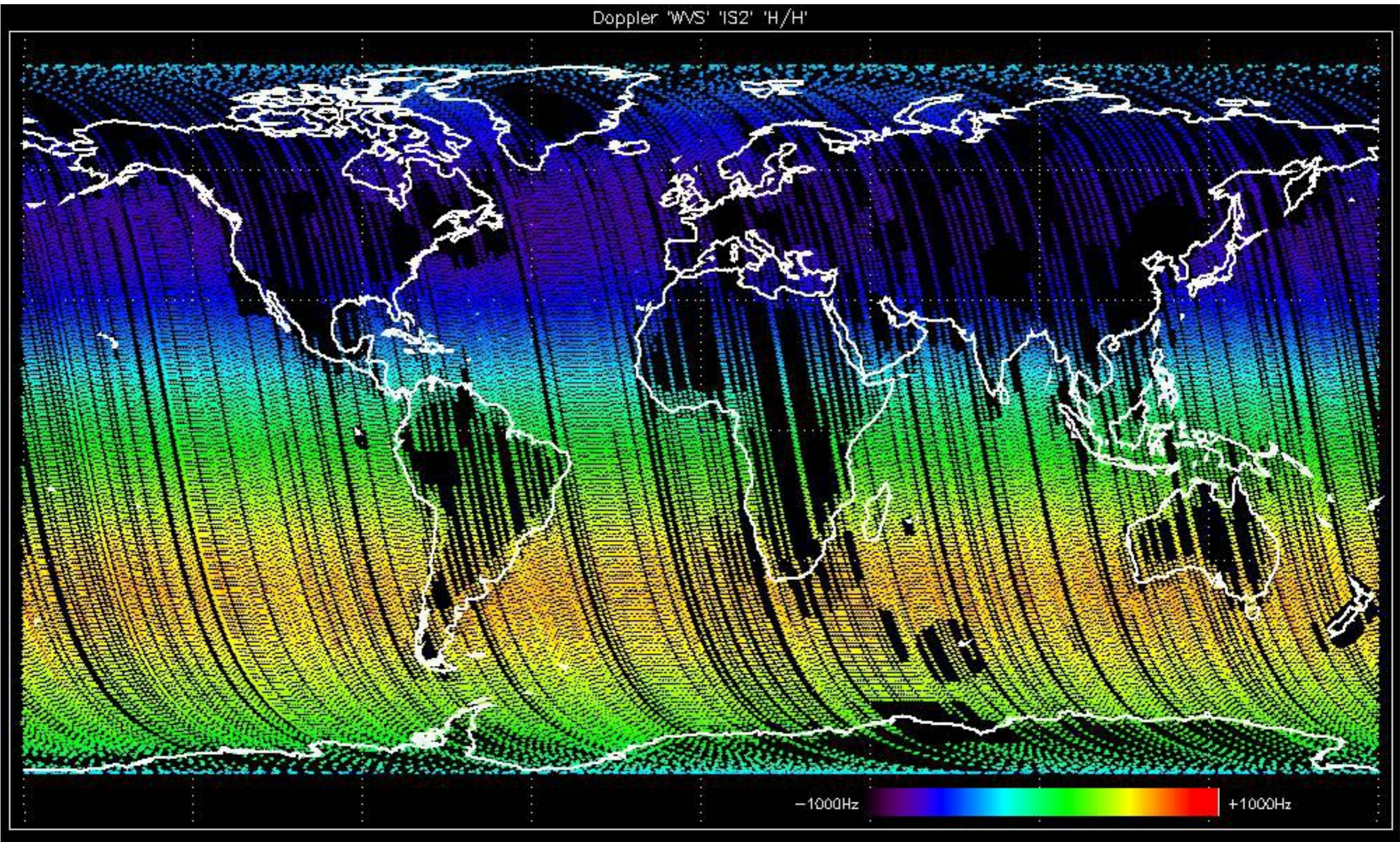


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.



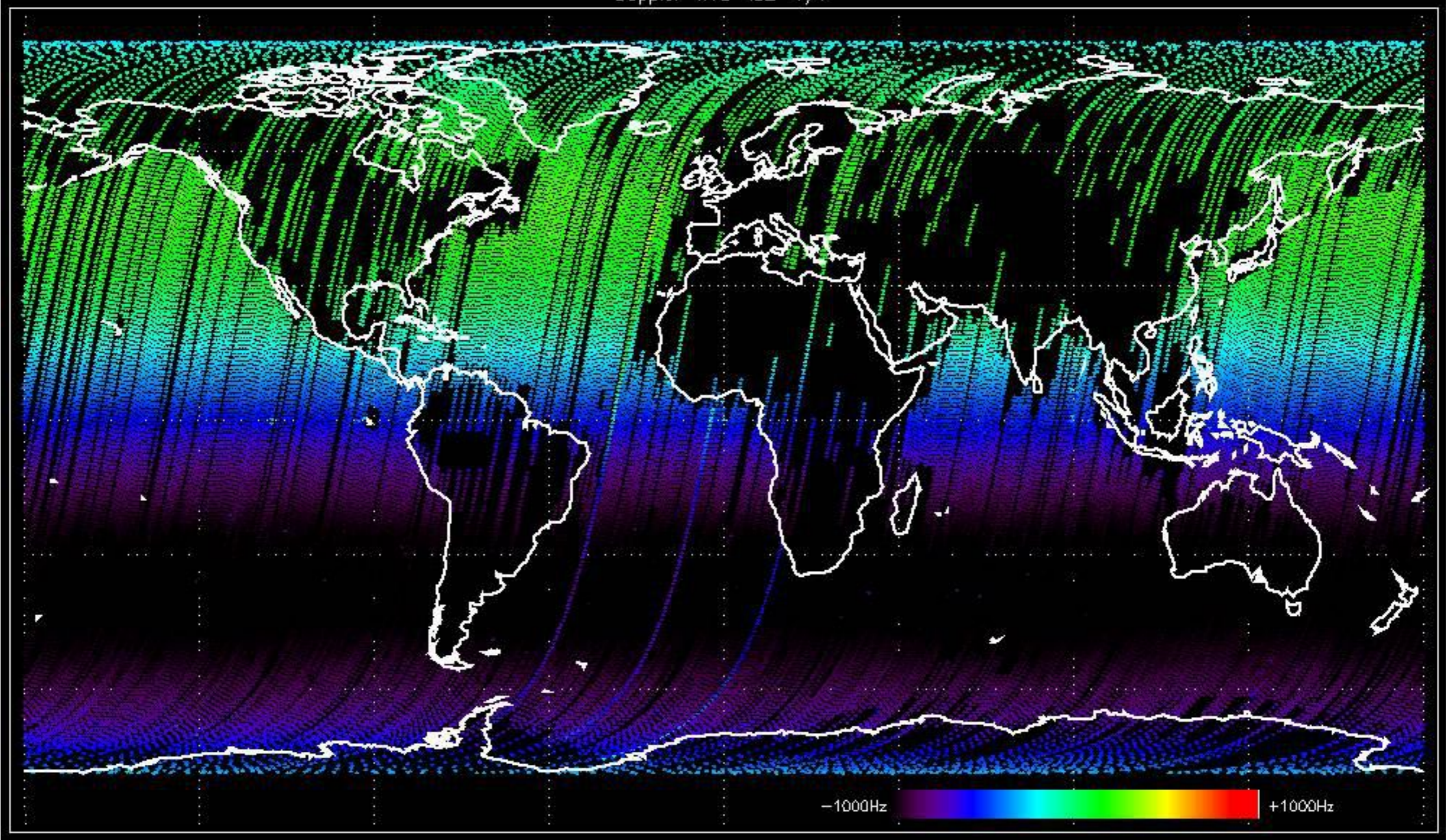


Doppler 'WVS' 'IS2' 'H/H'

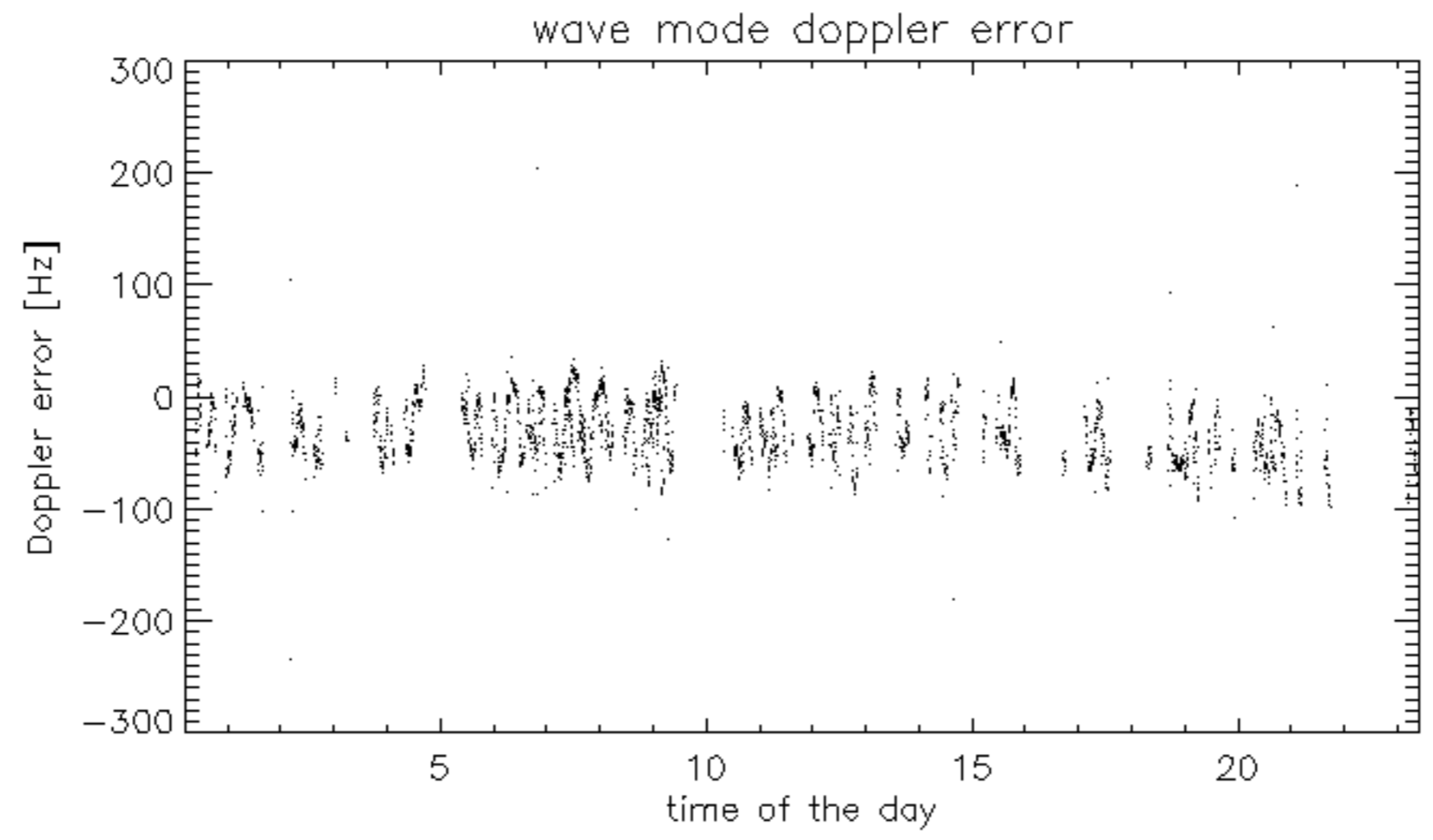
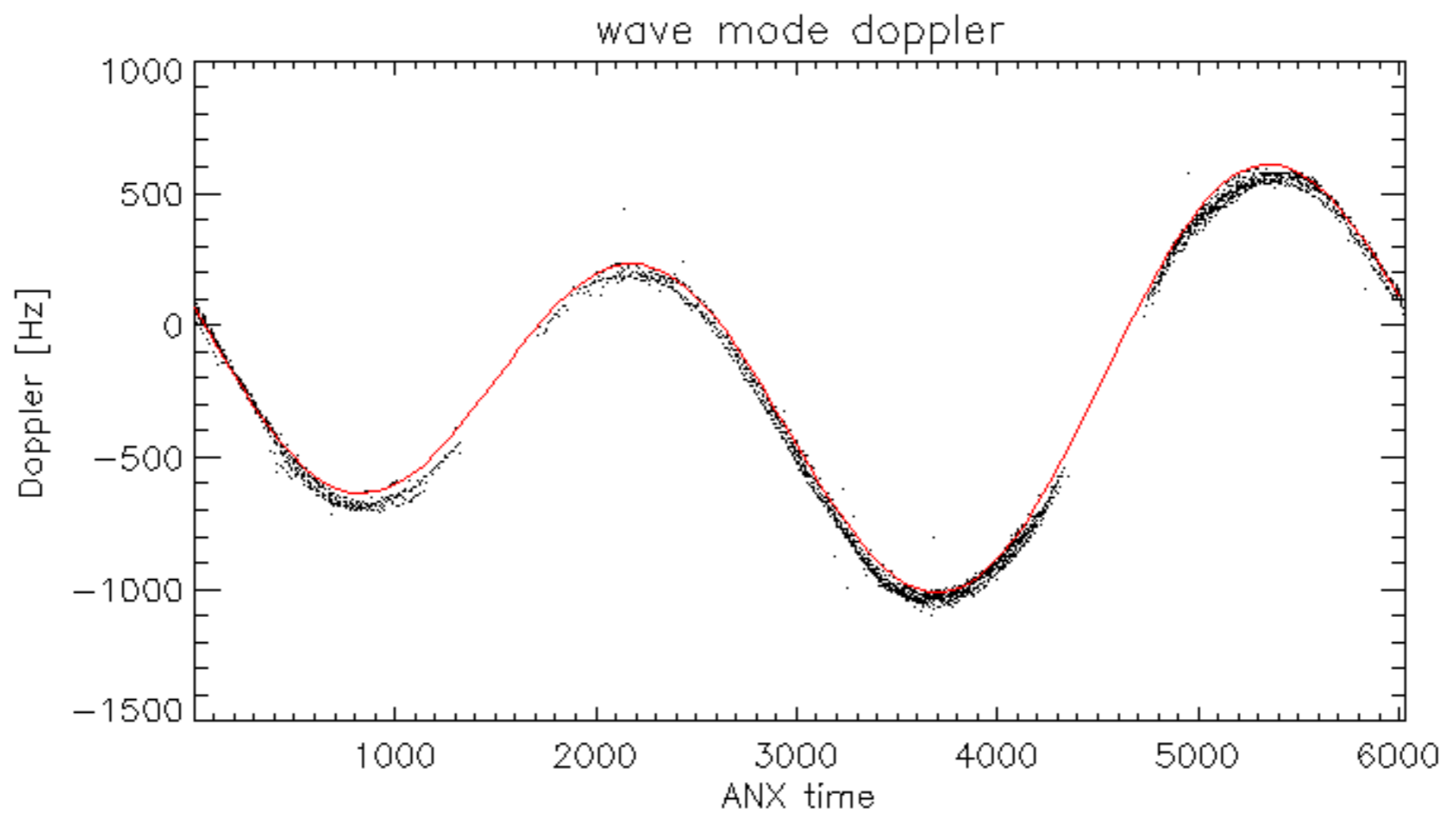




Doppler 'WVS' 'IS2' 'V/V'

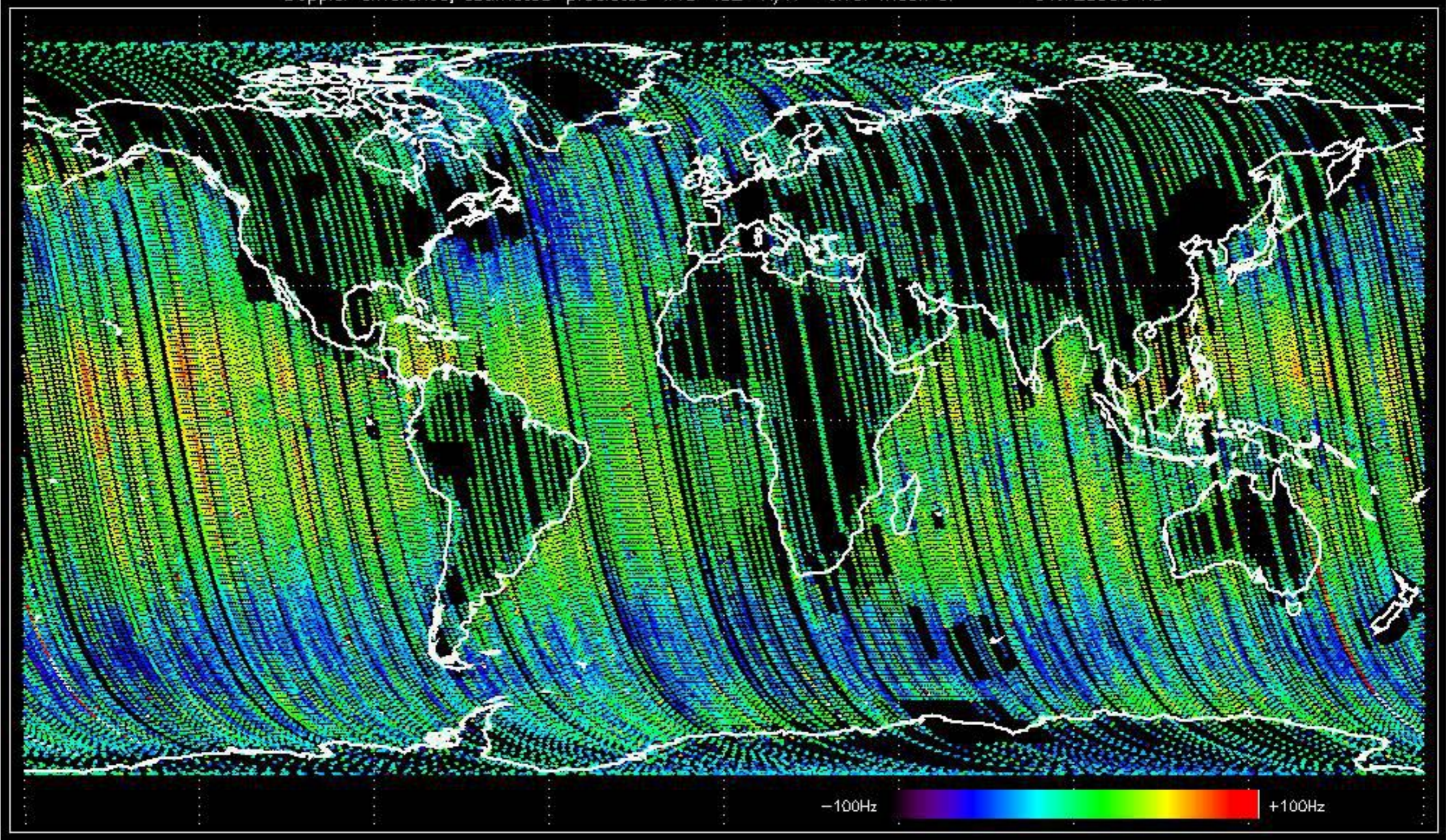






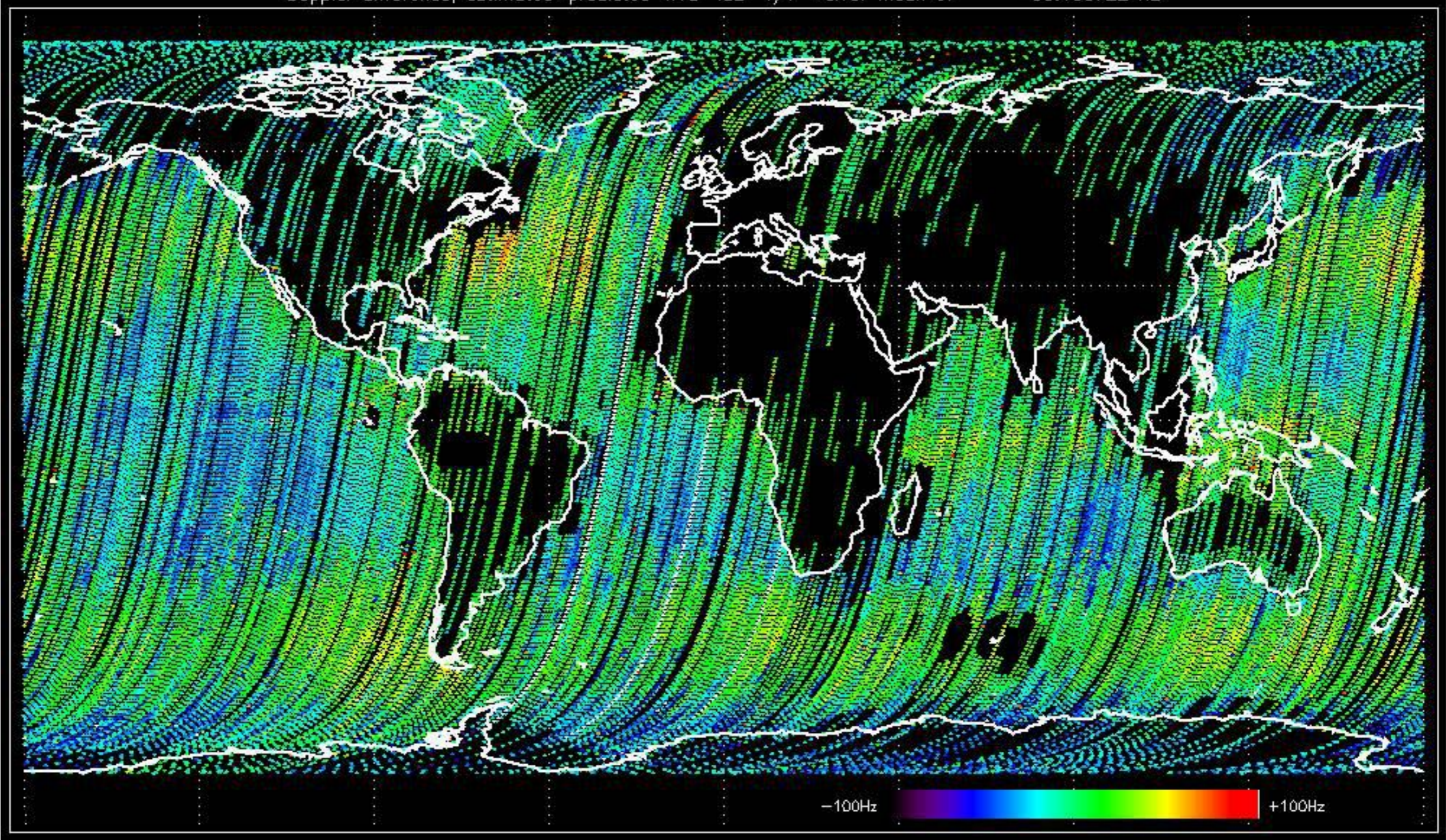


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -31.720909 Hz





Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -30.106722 Hz





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No anomalies observed.









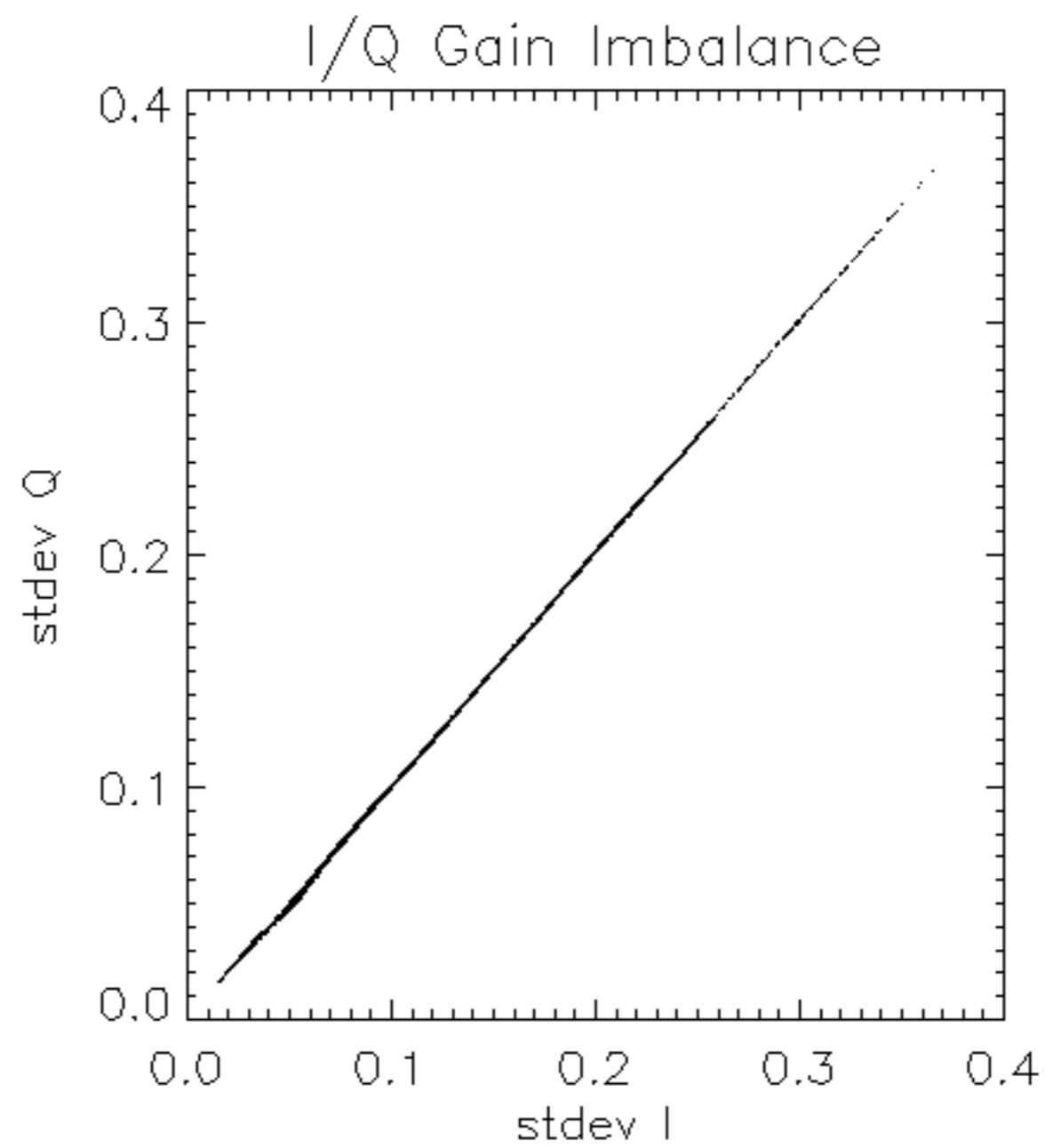


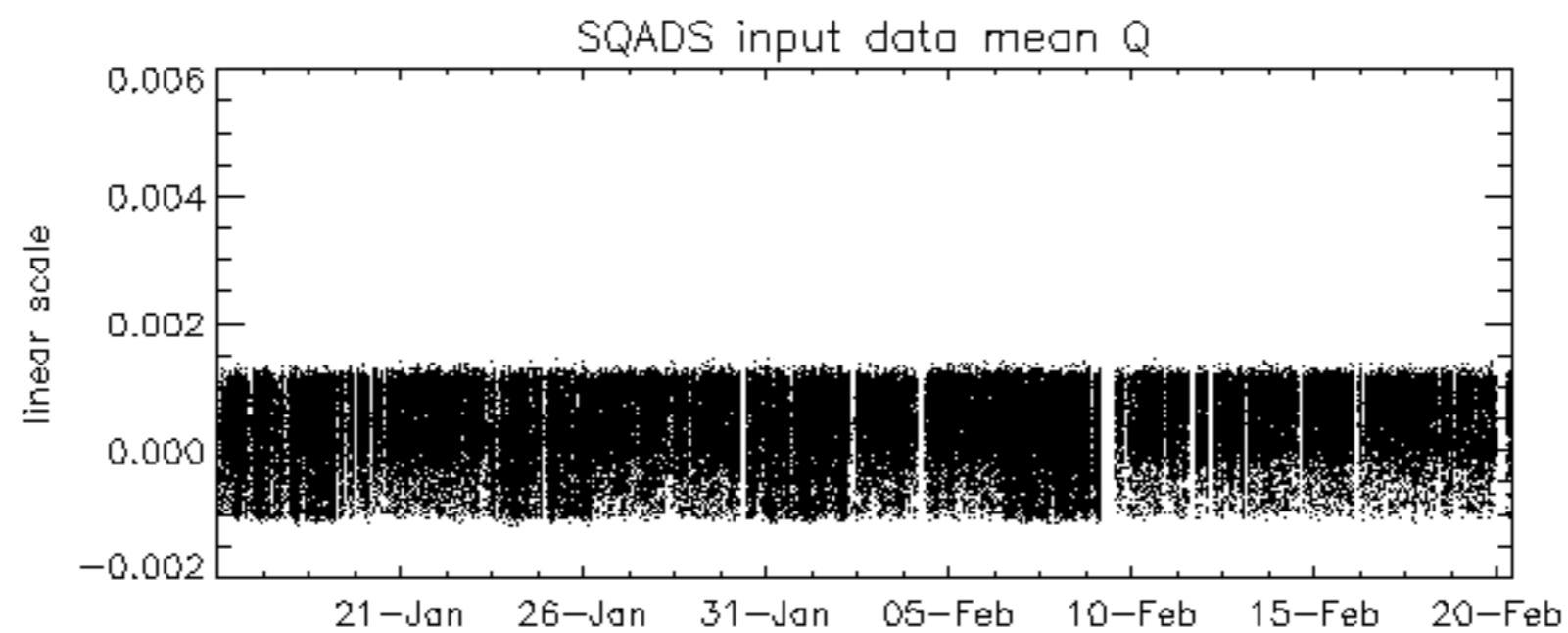
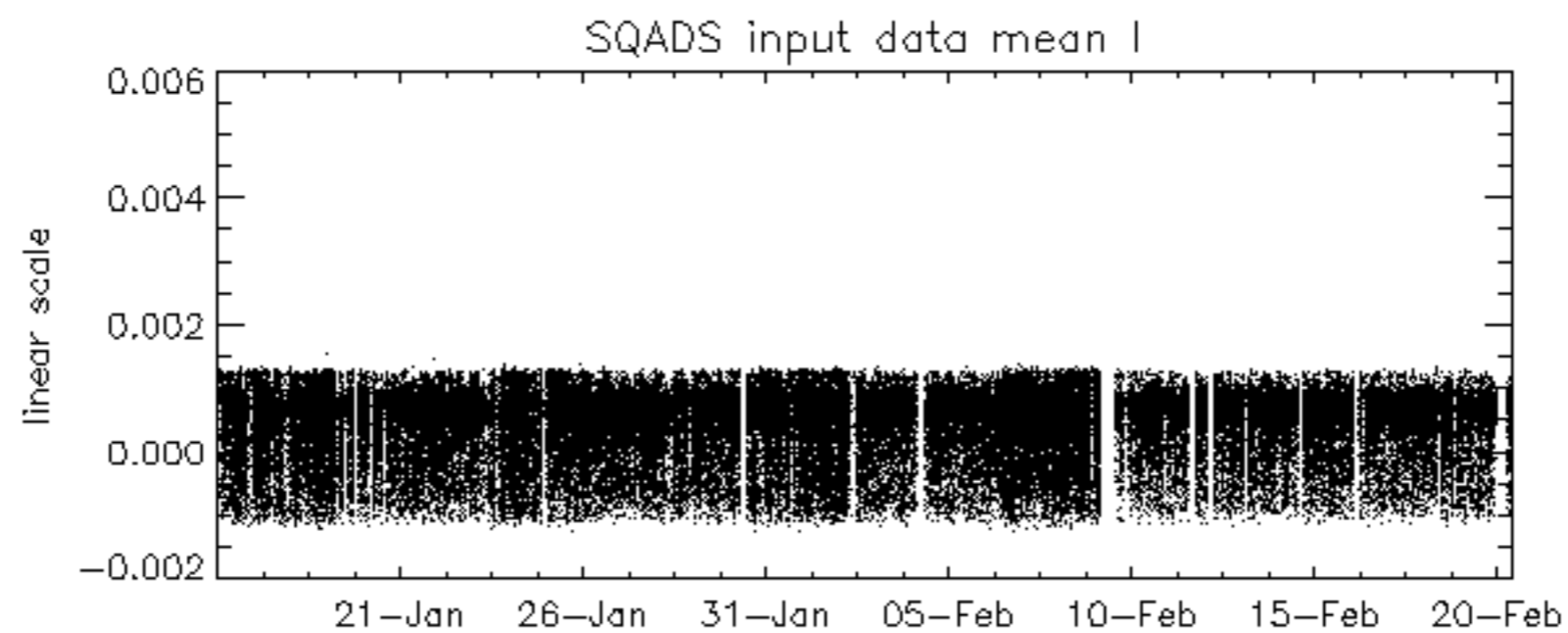
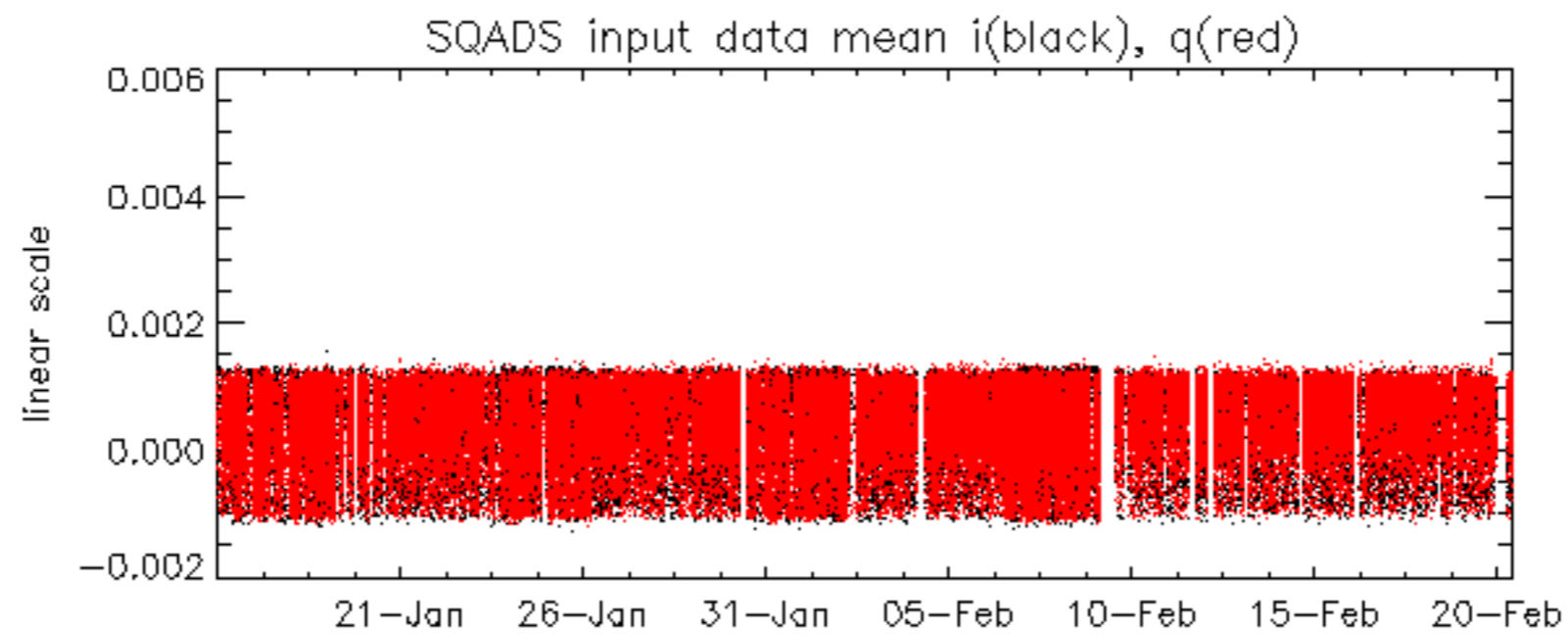


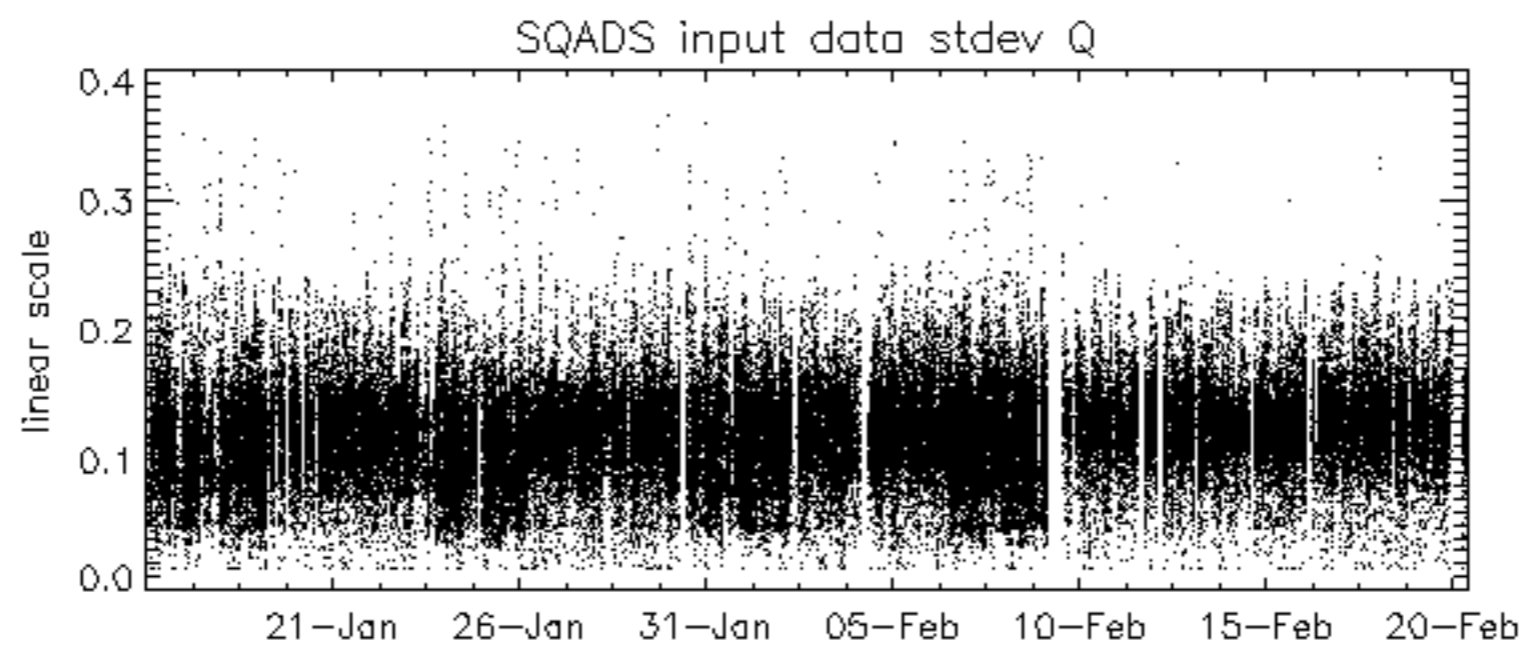
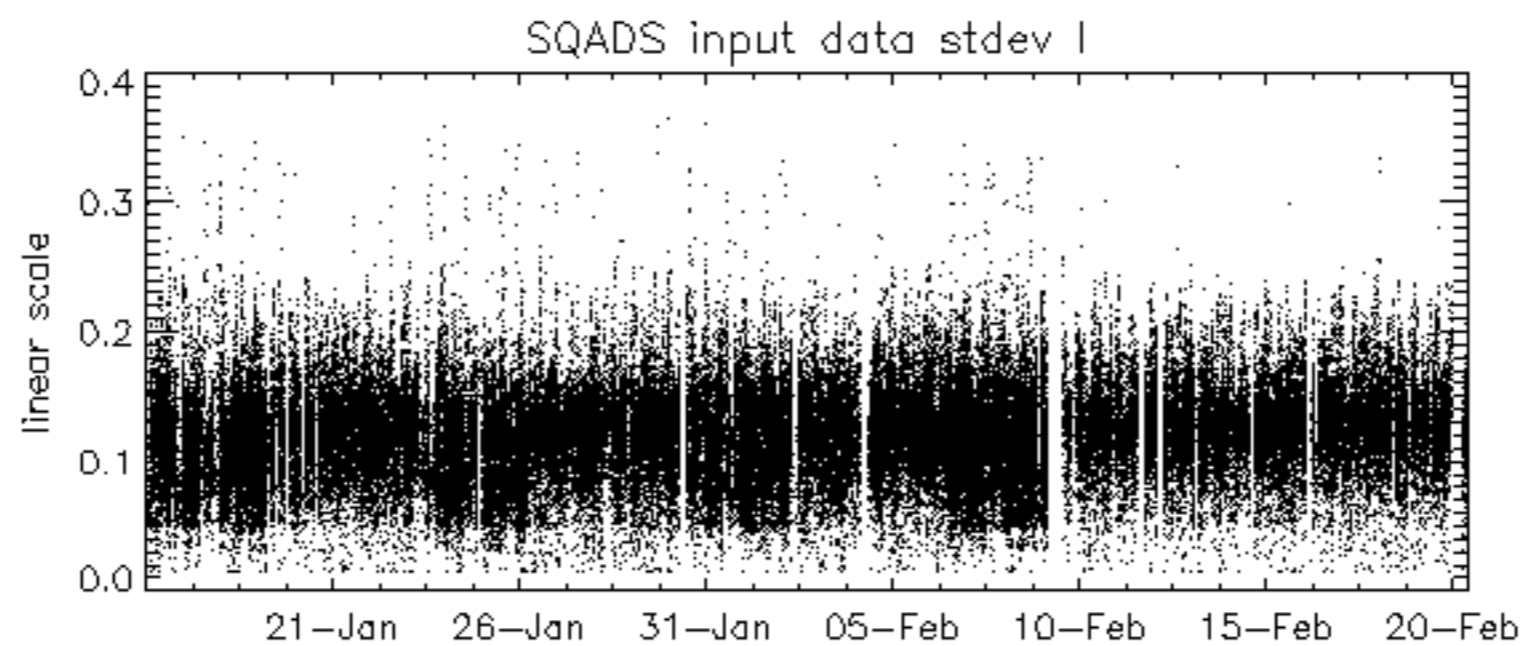
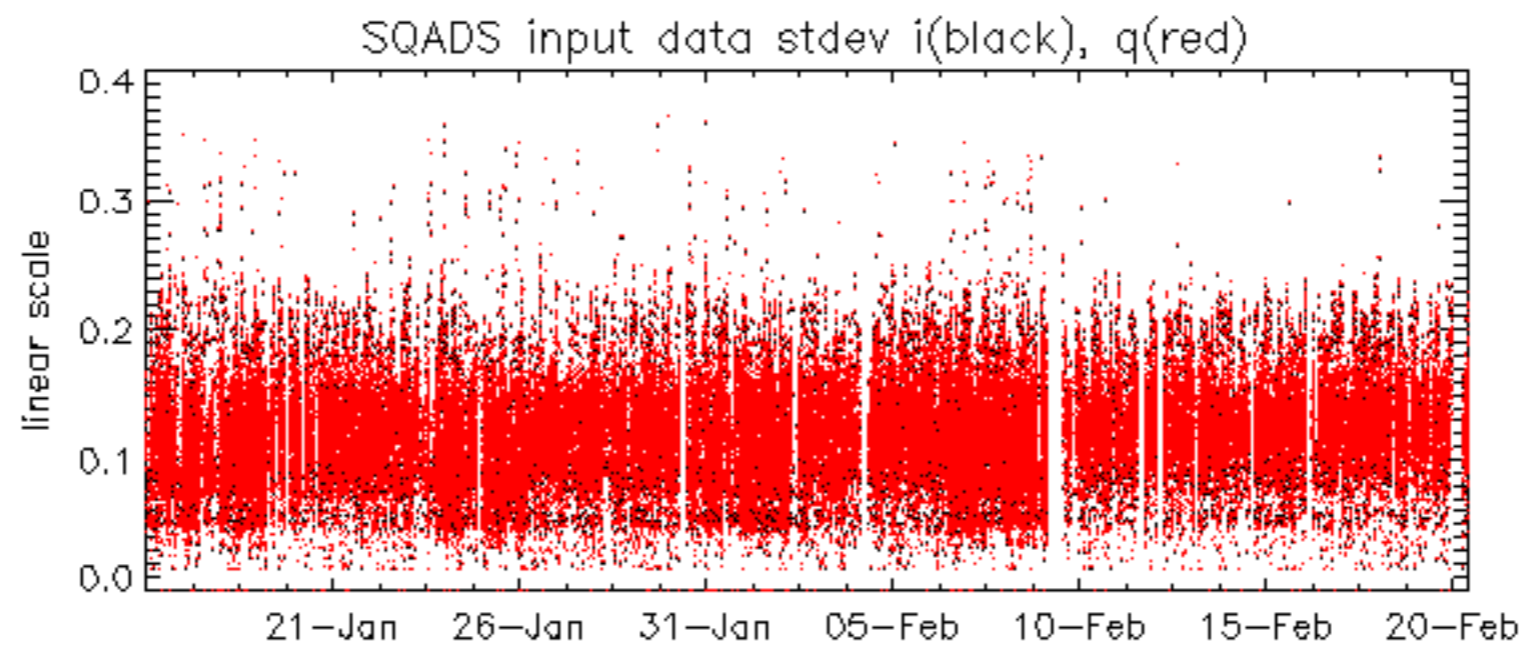
































No unavailabilities during the reported period.