

# REPORT OF 030918

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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.

Sub-system	Start	Stop	Planned
ASAR	YYYY-MM-DD hh:mm:ss	YYYY-MM-DD hh:mm:ss	---

### 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

No anomalies observed on available MS products:



Polarisation	Start Time
V	20030917 190838
H	20030917 190658

### 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	-3.80347	-22.5330	-8.12500
	stdev	0.00558220	0.0663812	0.00245059
10	mean	-6.89699	-19.3168	-8.12500
	stdev	0.0275736	0.0651523	0.00245059



#### 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.80084	-22.5278	-8.11069
	stdev	0.00584000	0.0619402	0.00253644
10	mean	-6.89518	-19.3215	-8.11069
	stdev	0.0272348	0.0609804	0.00253644



#### 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	0.000391960
	stdev	3.39685e-07
MEAN Q	mean	0.000306718
	stdev	3.18005e-07



## 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115539
	stdev	0.00144163
STDEV Q	mean	0.115748
	stdev	0.00146079



## 5.3 - Gain imbalance I/Q



## 6 - Wave Doppler Analysis

No anomalies observed Doppler evolution.  
Doppler analysis performed over the last 60 days

### 6.1 - Unbiased Doppler Error

Evolution of unbiased Doppler error (Real - Expected)
Ascending
Descending

### 6.2 - Absolute Doppler

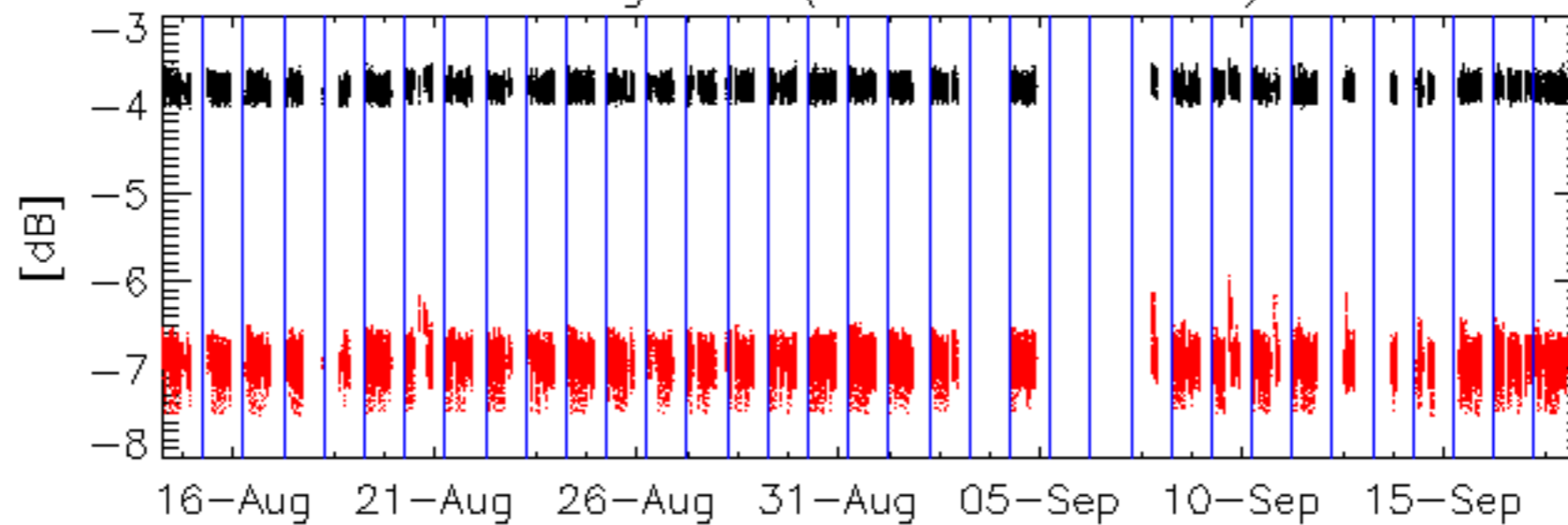
Evolution of Absolute Doppler
Ascending
Descending

### 6.3 - Doppler evolution versus ANX

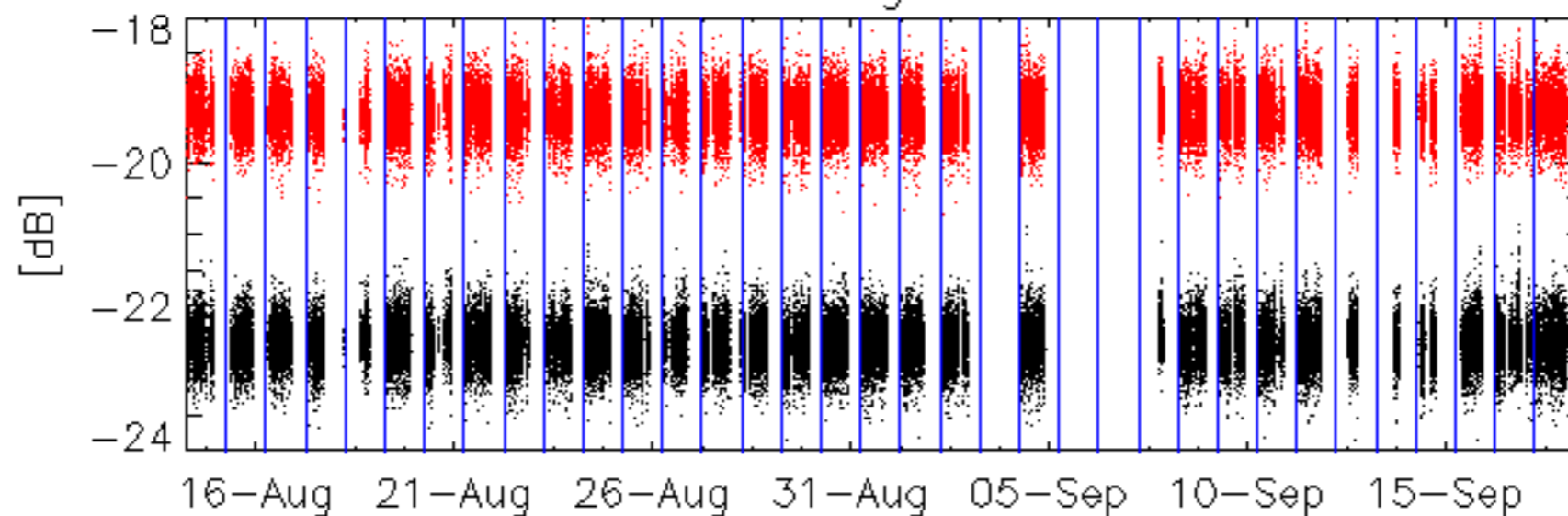
**Evolution Doppler error versus ANX**



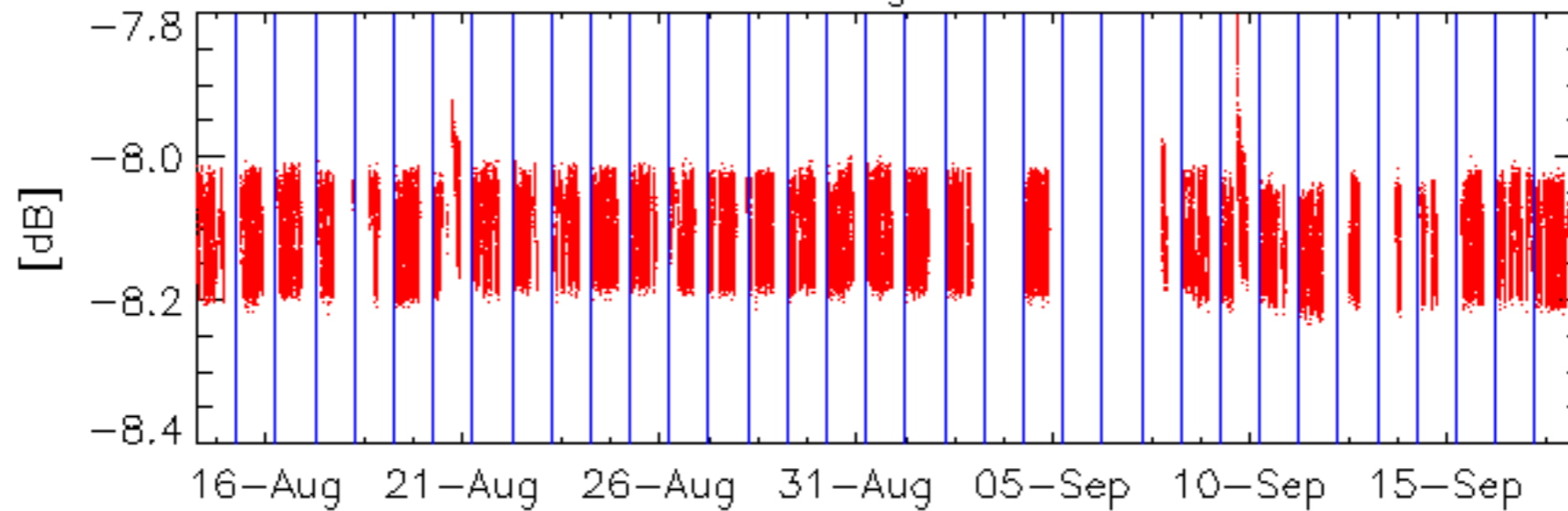
Average P1 (row 3 & row 10)



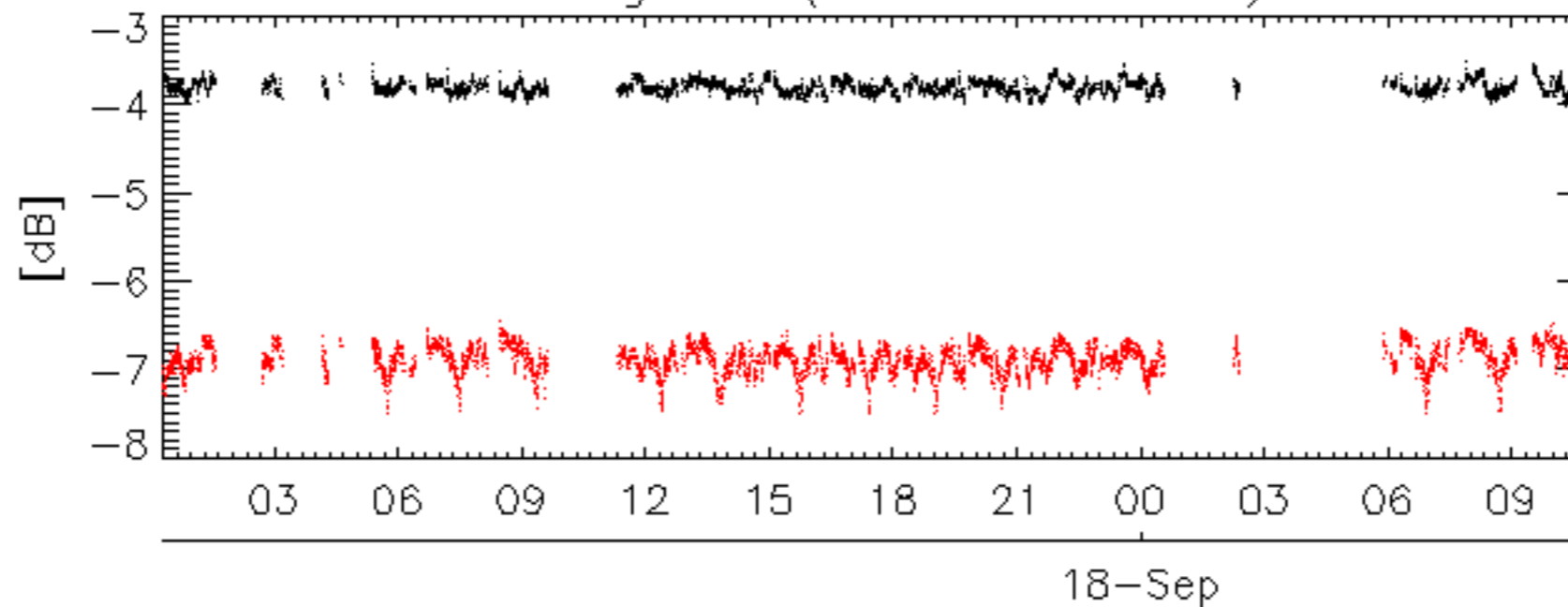
Average P2



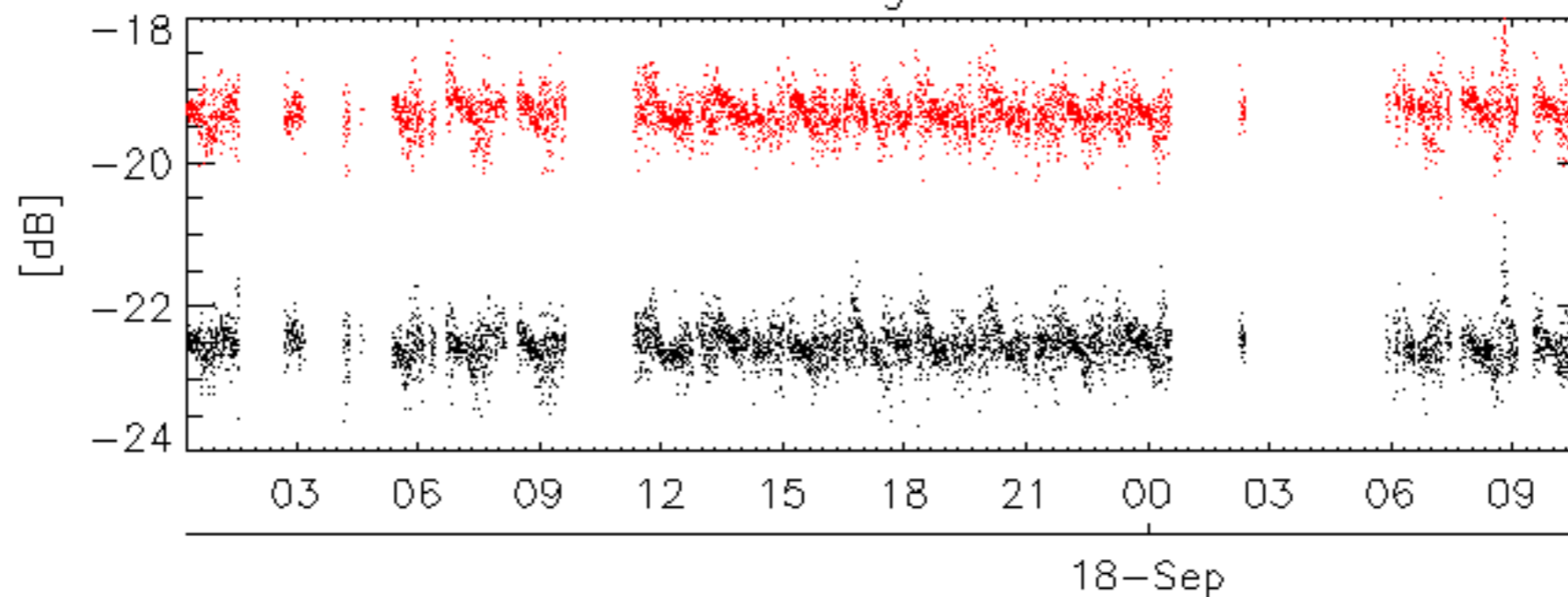
Average P3



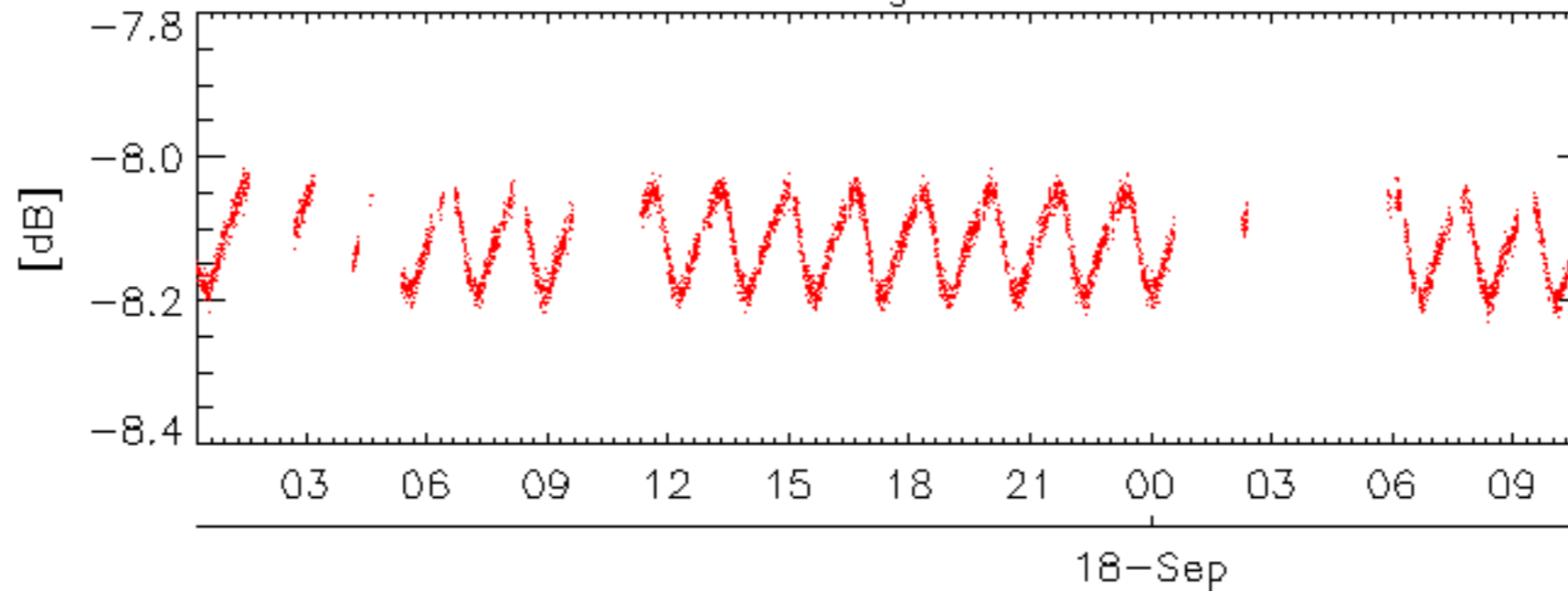
Average P1 (row 3 & row 10)



Average P2



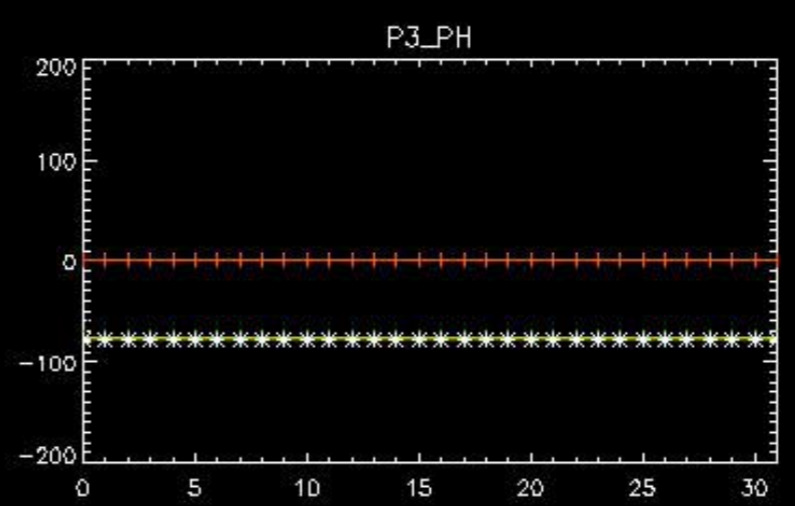
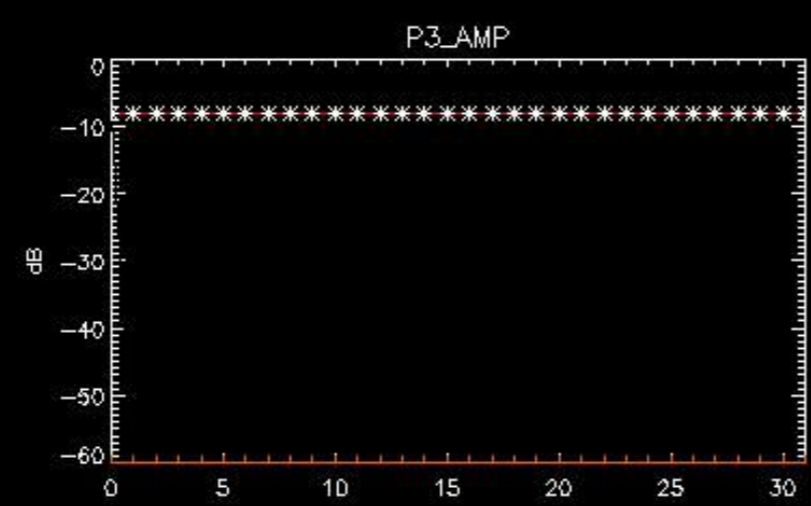
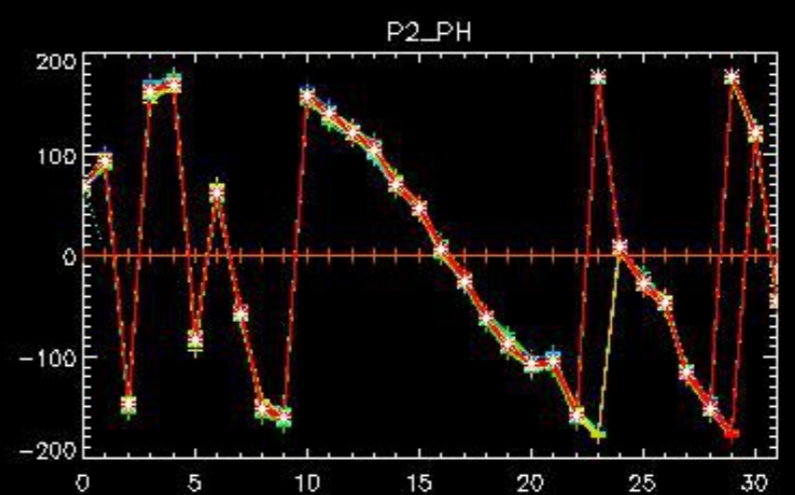
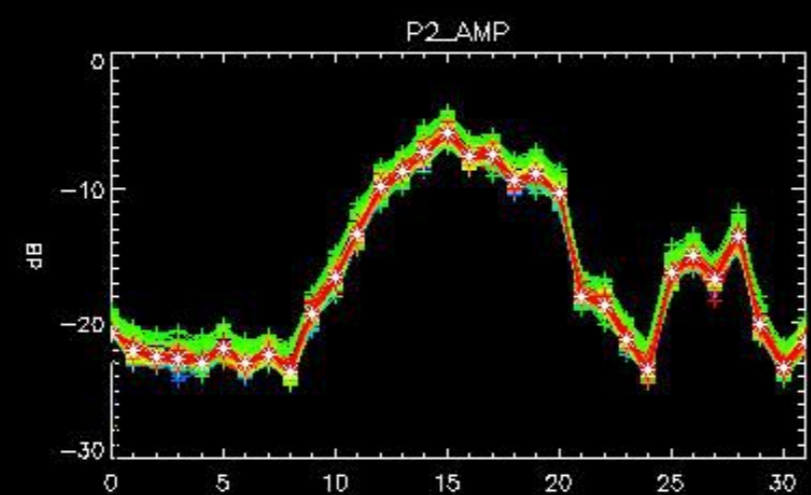
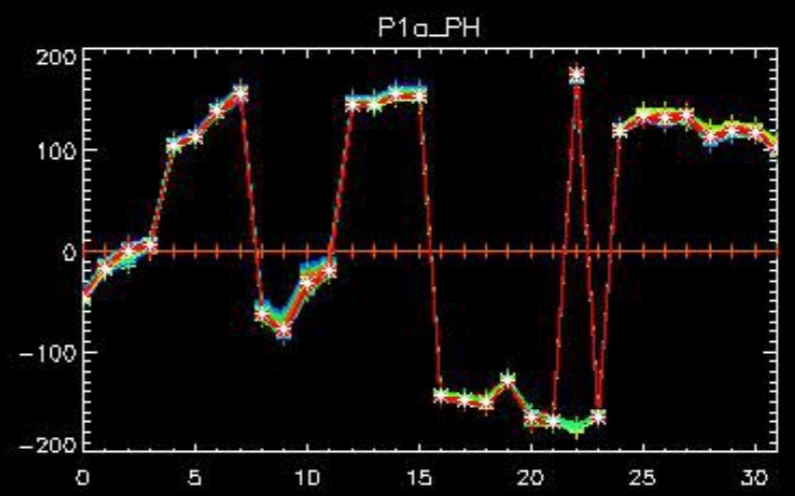
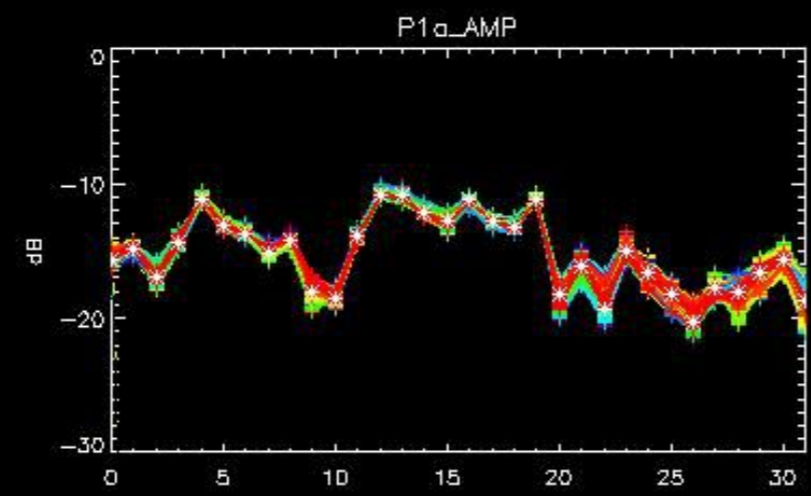
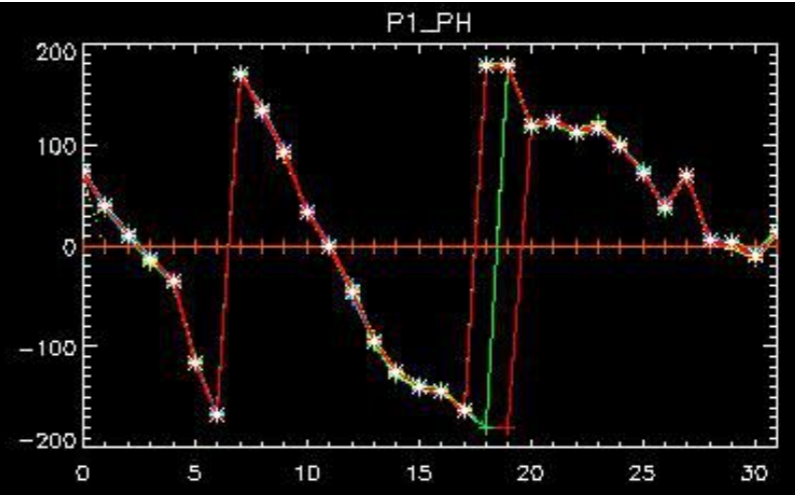
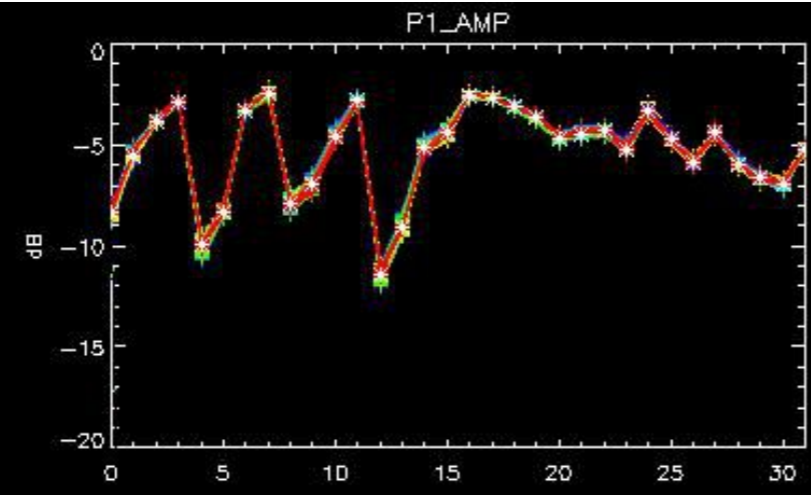
Average P3



No anomalies observed on available browse products



No anomalies observed.

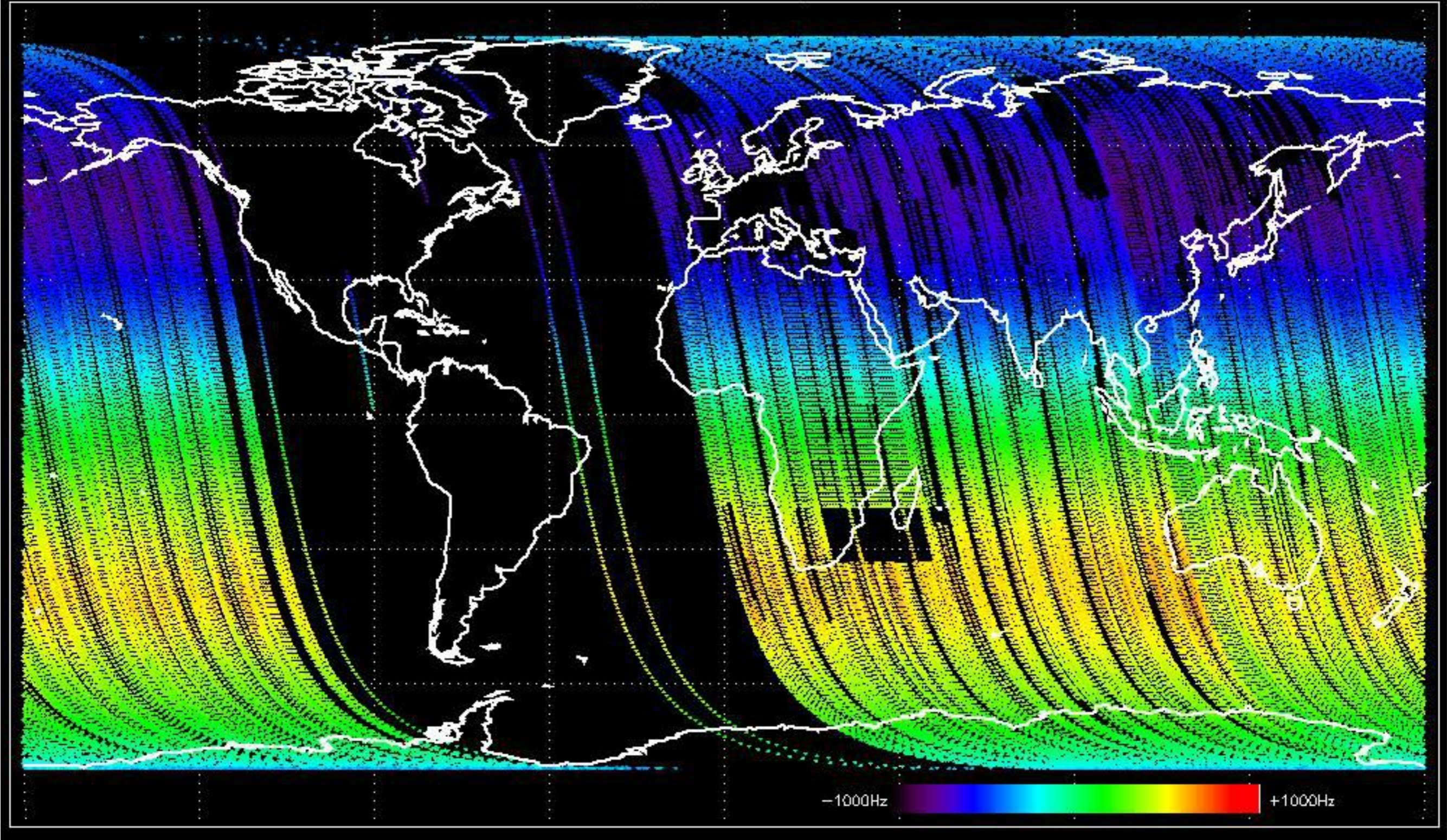


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

No anomalies observed Doppler evolution.  
Doppler analysis performed over the last 60 days

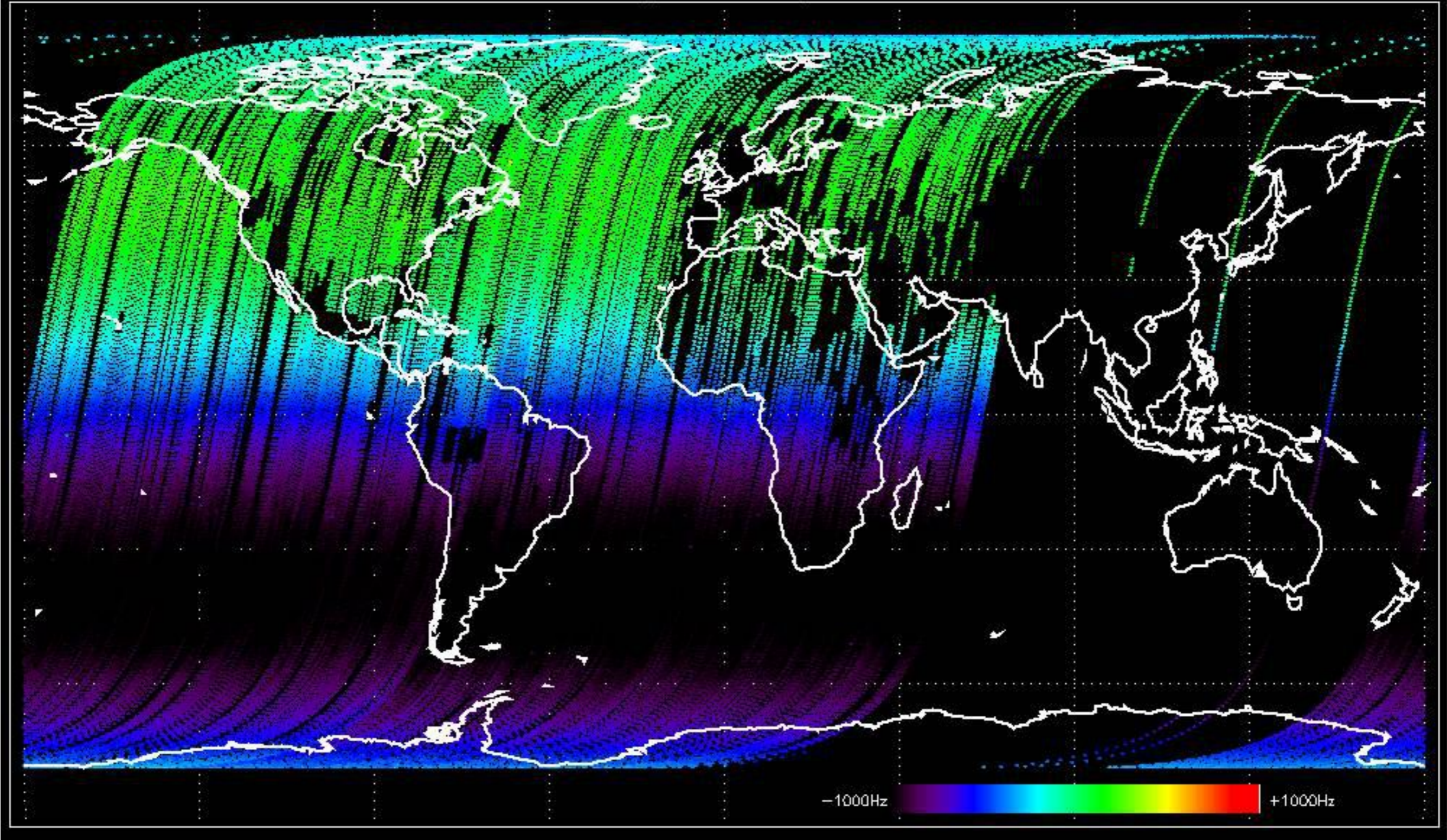


Doppler 'WVS' 'IS2' 'H/H'

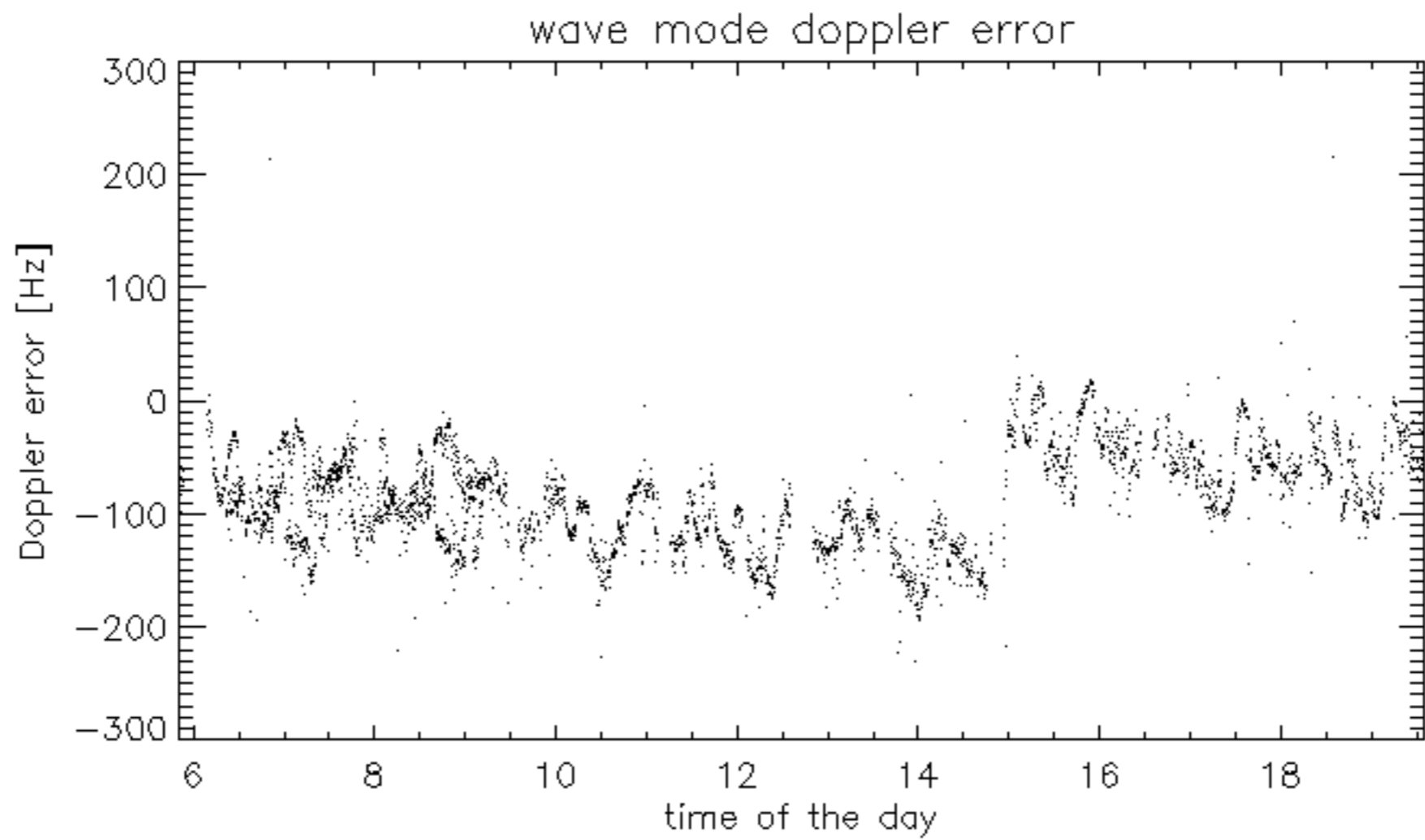
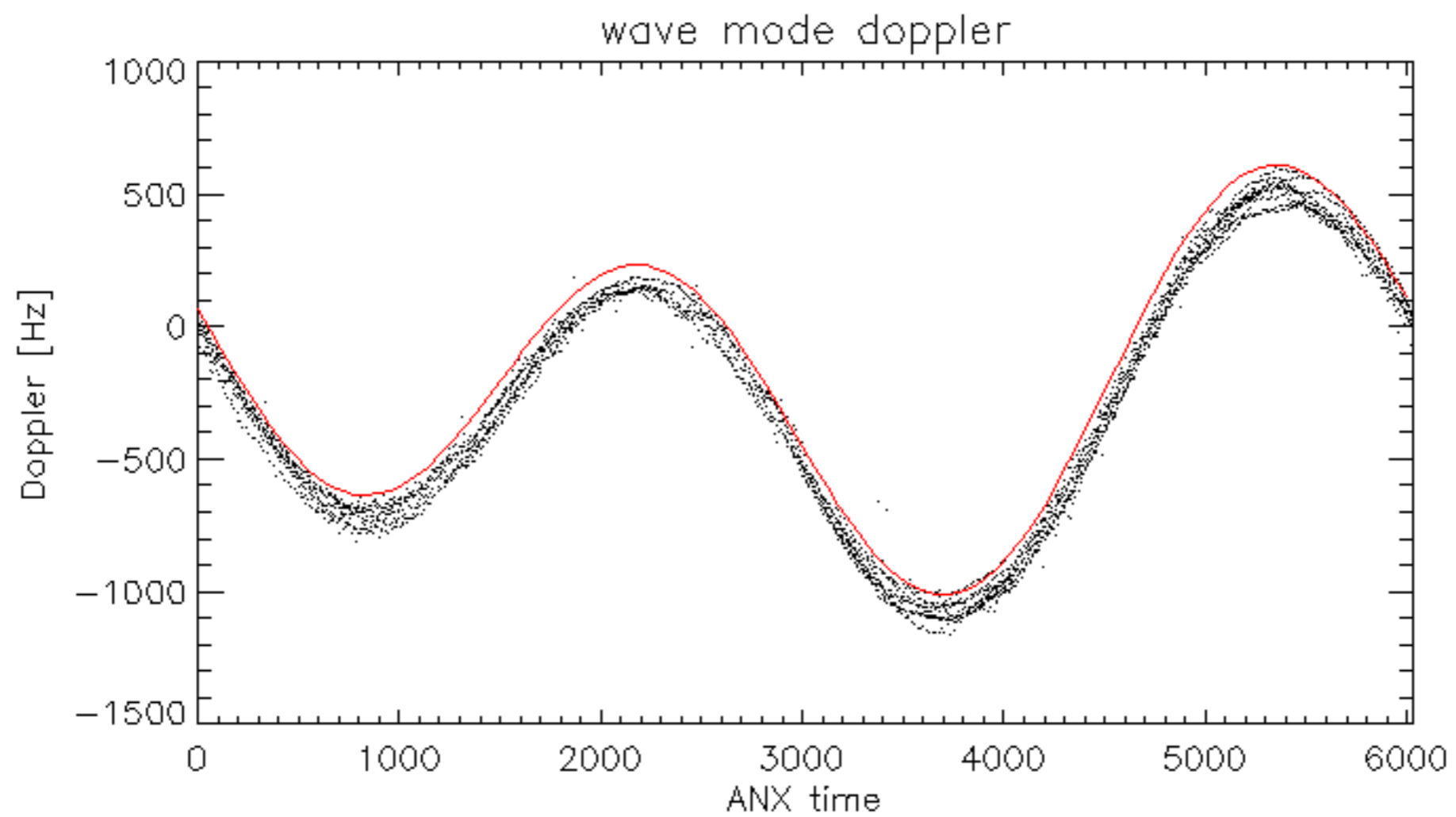




Doppler 'WVS' 'IS2' 'V/V'

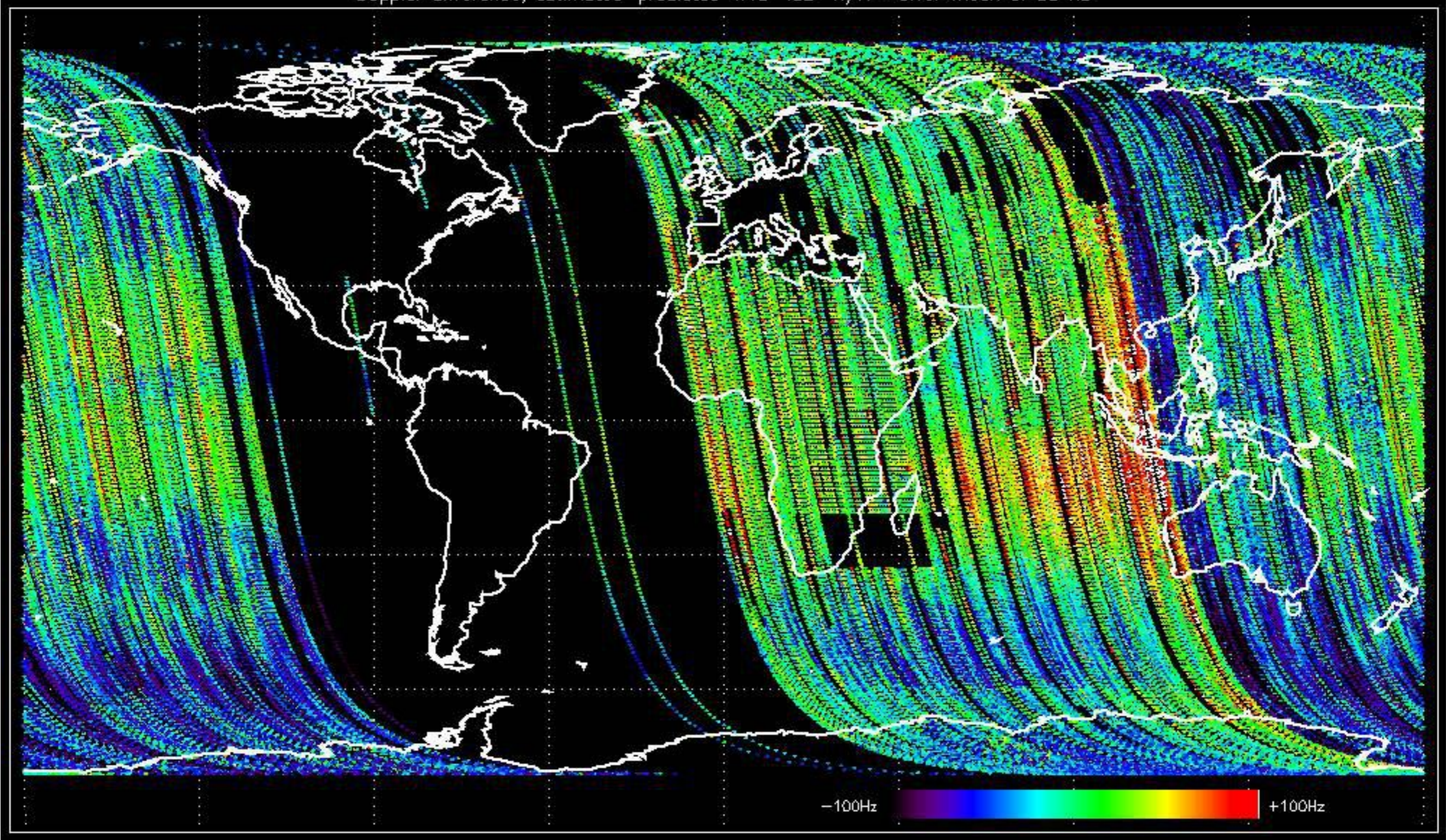






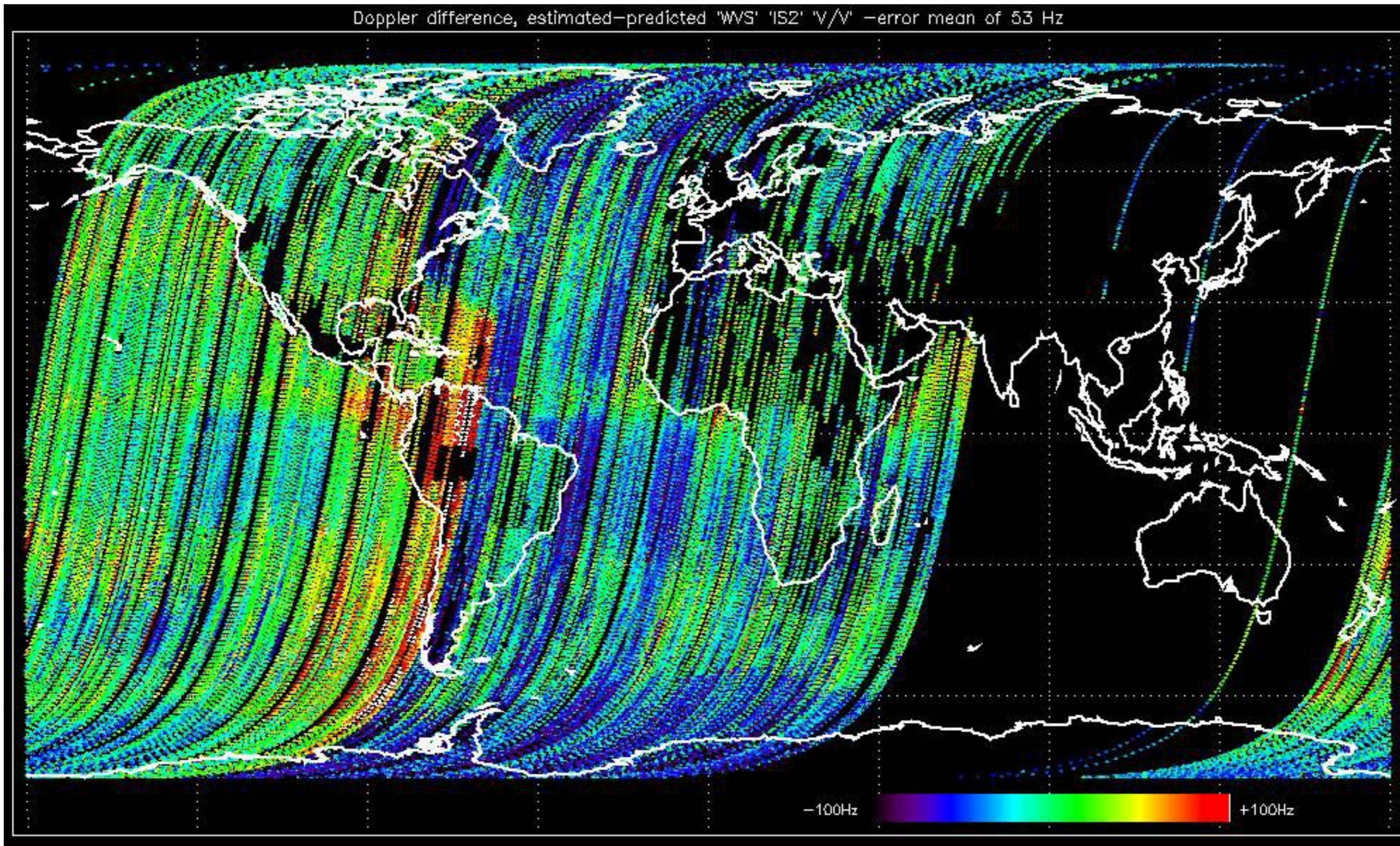


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz





Doppler difference, estimated-predicted 'WS' 'IS2' 'V/V' -error mean of 53 Hz



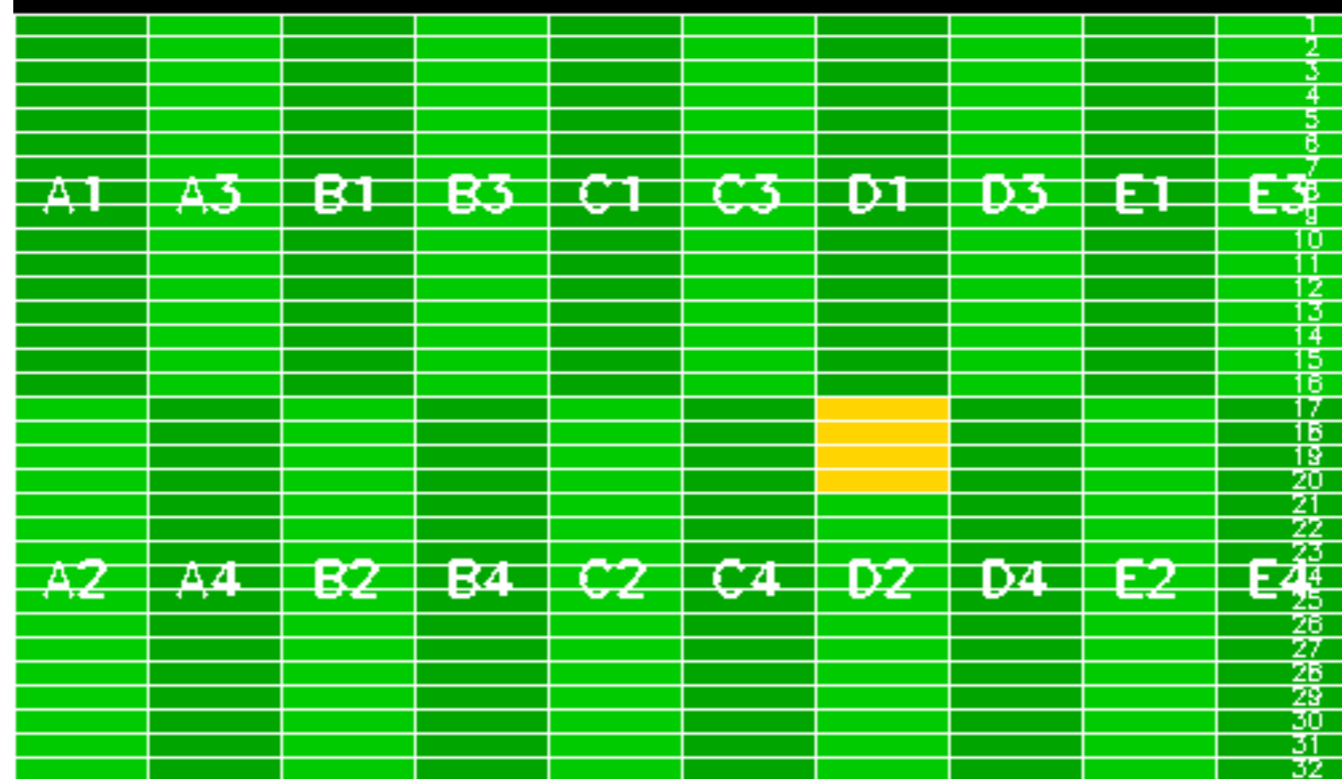


No anomalies observed on available MS products:

No anomalies observed.



Reference: 2003-06-12 14:08:52 H RxGain  
 Test : 2003-09-17 19:06:58 H







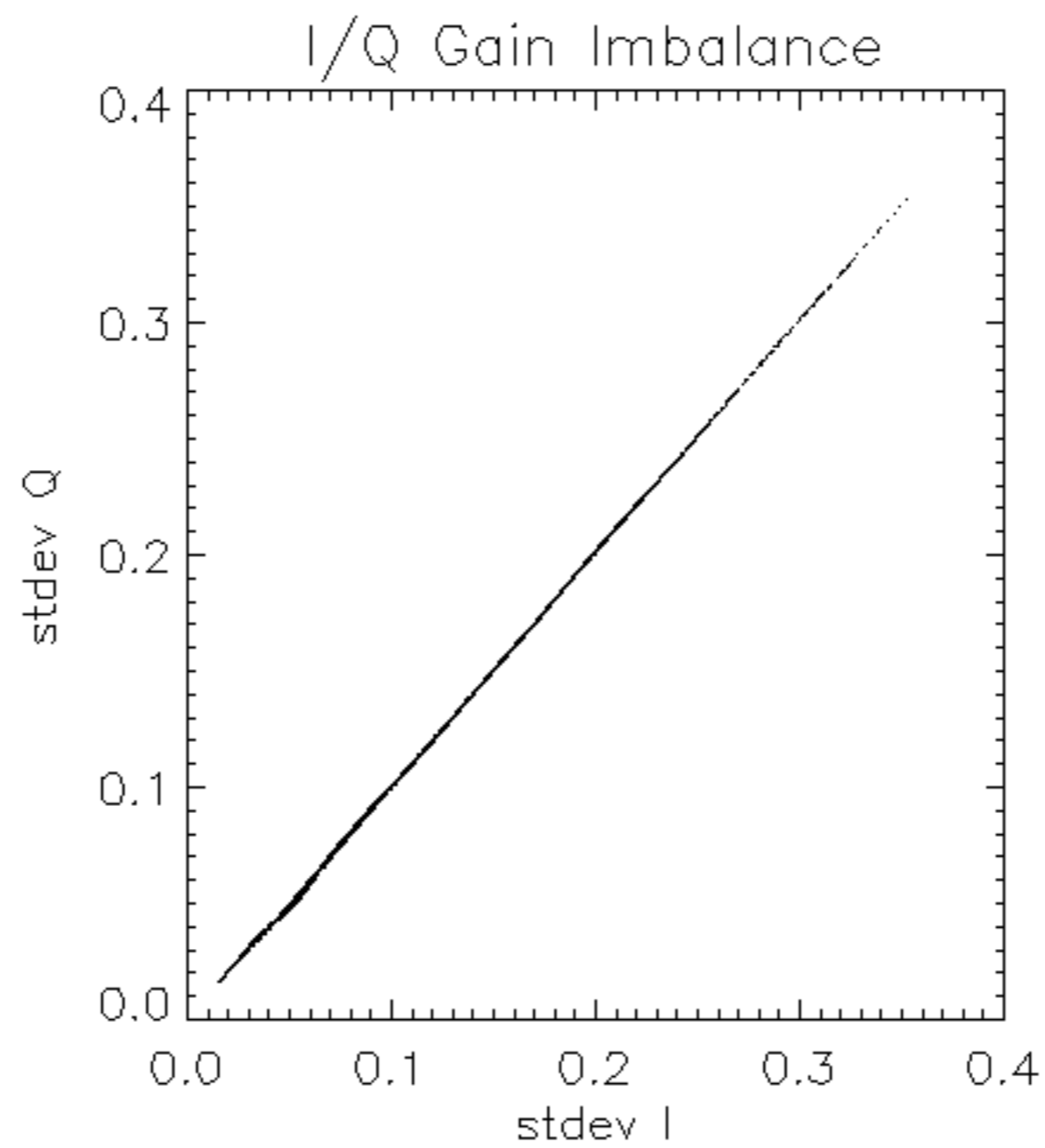


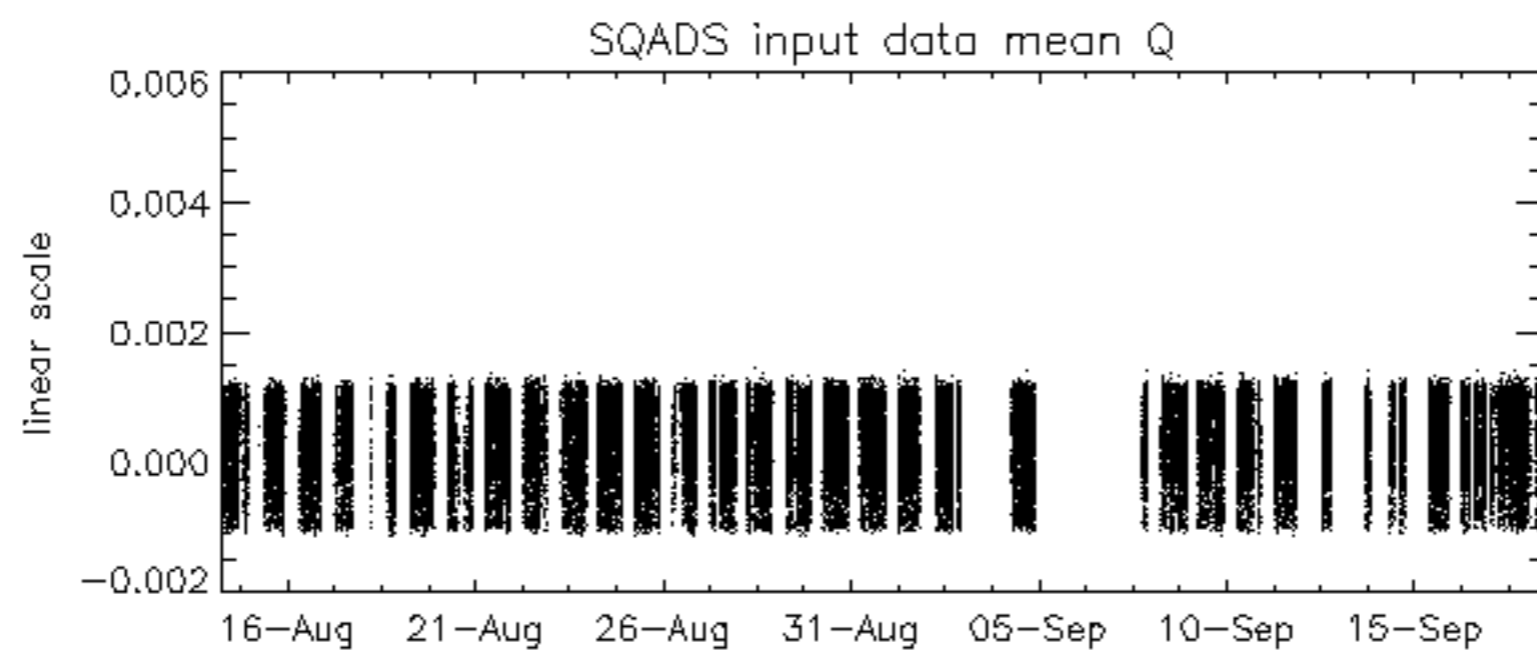
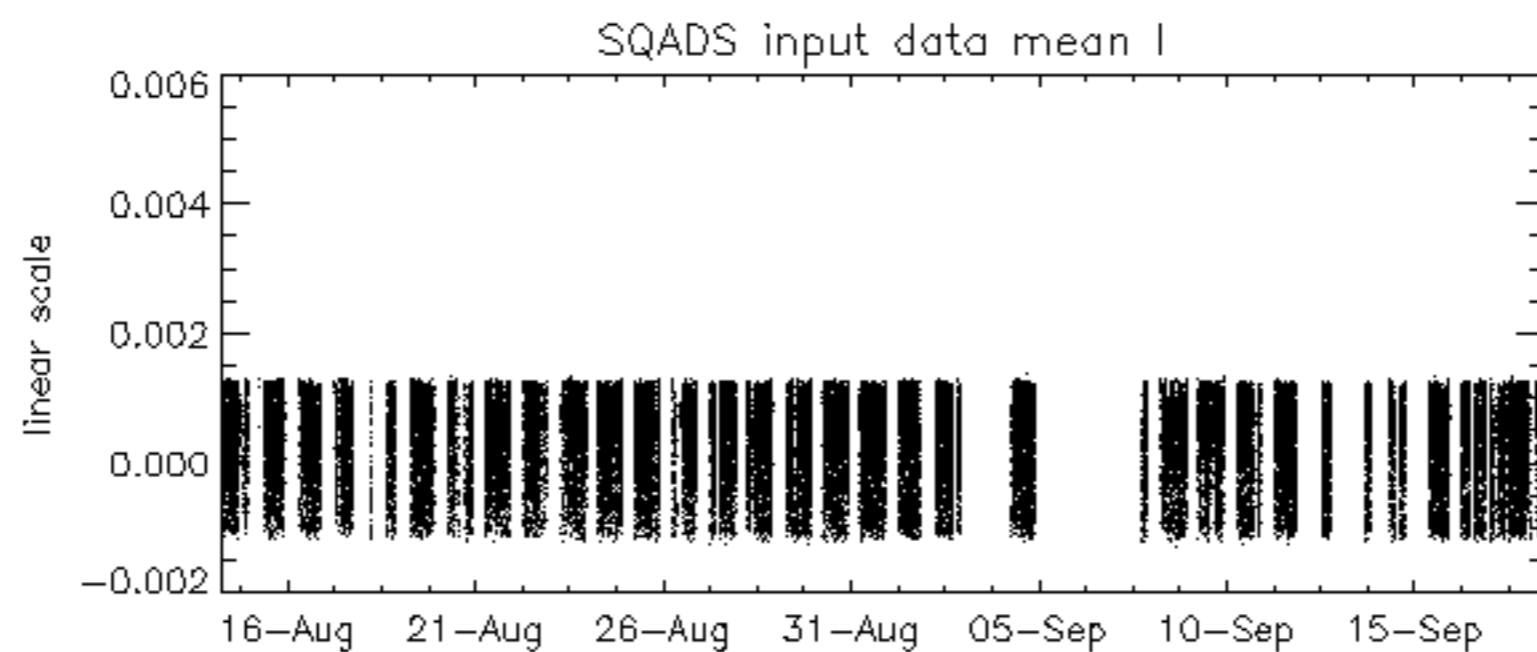
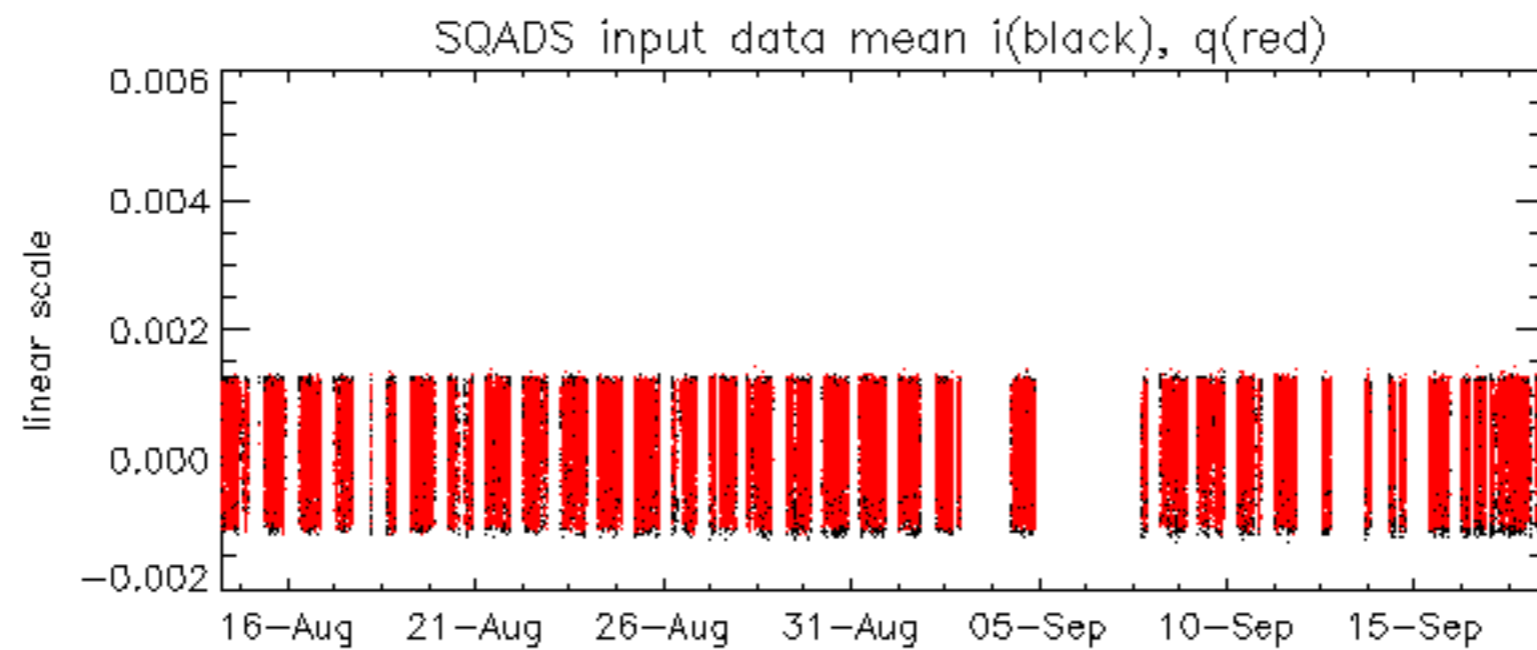


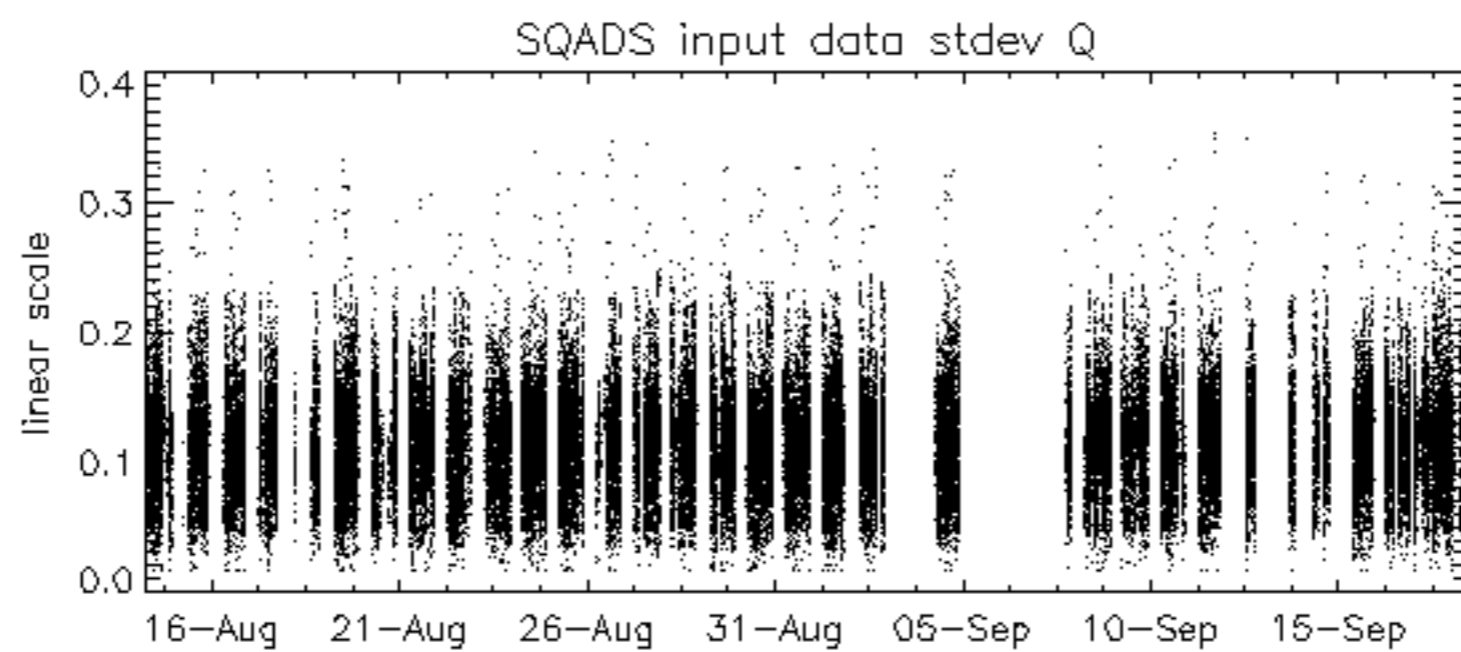
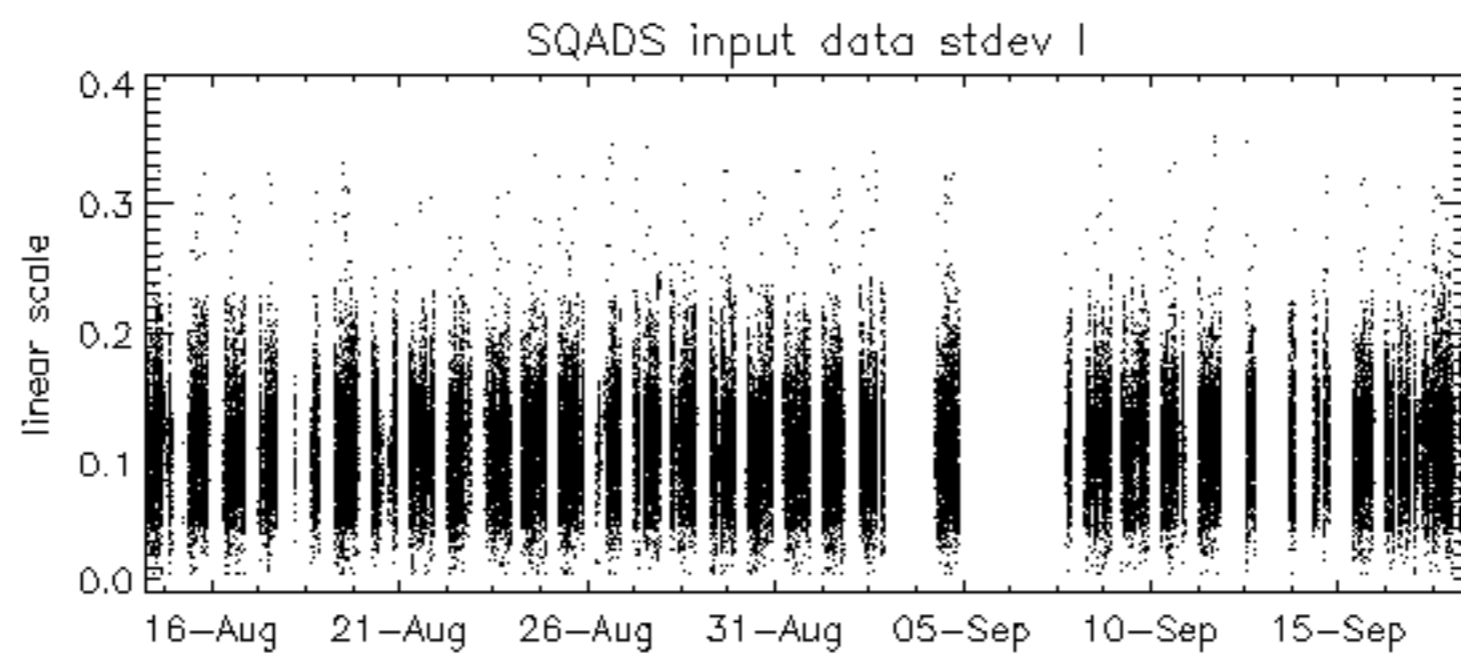
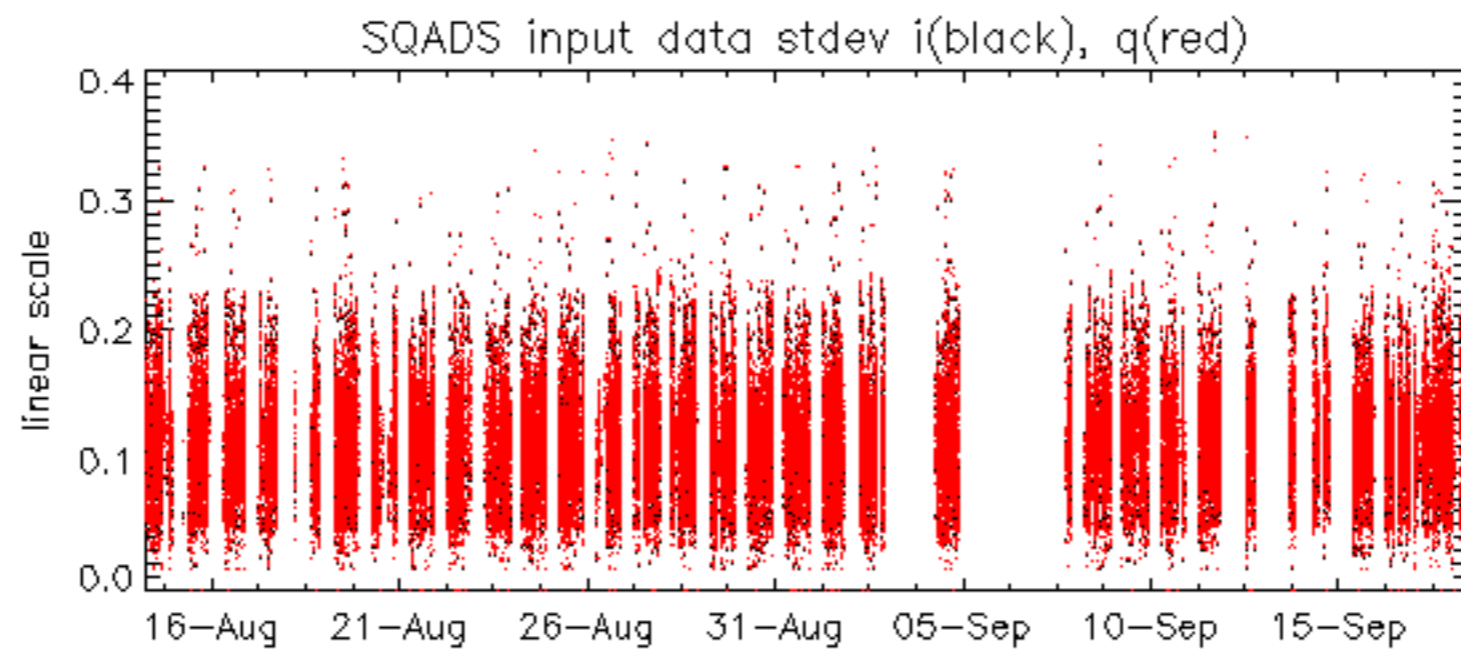






























No unavailabilities during the reported period.