

# REPORT OF 030926

1. [Introduction](#)
2. [Summary](#)
  - [Instrument Unavailability](#)
  - [Browse Visual Inspection](#)
  - [Module Stepping Results](#)
  - [Data Analysis](#)
3. [Module Stepping](#)
4. [Internal Calibration pulses](#)
  - [Daily statistics \(row 3 and 10\)](#)
  - [Cyclic statistics \(row 3 and 10\)](#)
  - [cal pulses monitoring \(all rows\)](#)
5. [Raw Data Statistics](#)
  - [raw data mean I and Q](#)
  - [raw data stdev I and Q](#)
  - [raw gain imbalance](#)
6. [Wave Doppler analysis](#)
  - [Unbiased Doppler Error](#)
  - [Absolute Doppler](#)
  - [Doppler evolution versus ANX](#)

## 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	20030925 195728
H	20030925 195548

#### 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	-3.80886	-22.5256	-8.13522
	stdev	0.00558657	0.0719643	0.00228743
10	mean	-6.91055	-19.3168	-8.13522
	stdev	0.0240233	0.0693821	0.00228743



#### 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.79918	-22.5293	-8.11790
	stdev	0.00553025	0.0629726	0.00257638
10	mean	-6.89698	-19.3190	-8.11790
	stdev	0.0269156	0.0618235	0.00257638



#### 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	0.000379627
	stdev	3.48831e-07
MEAN Q	mean	0.000309365
	stdev	3.16075e-07



## 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115946
	stdev	0.00146167
STDEV Q	mean	0.116170
	stdev	0.00148142



## 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

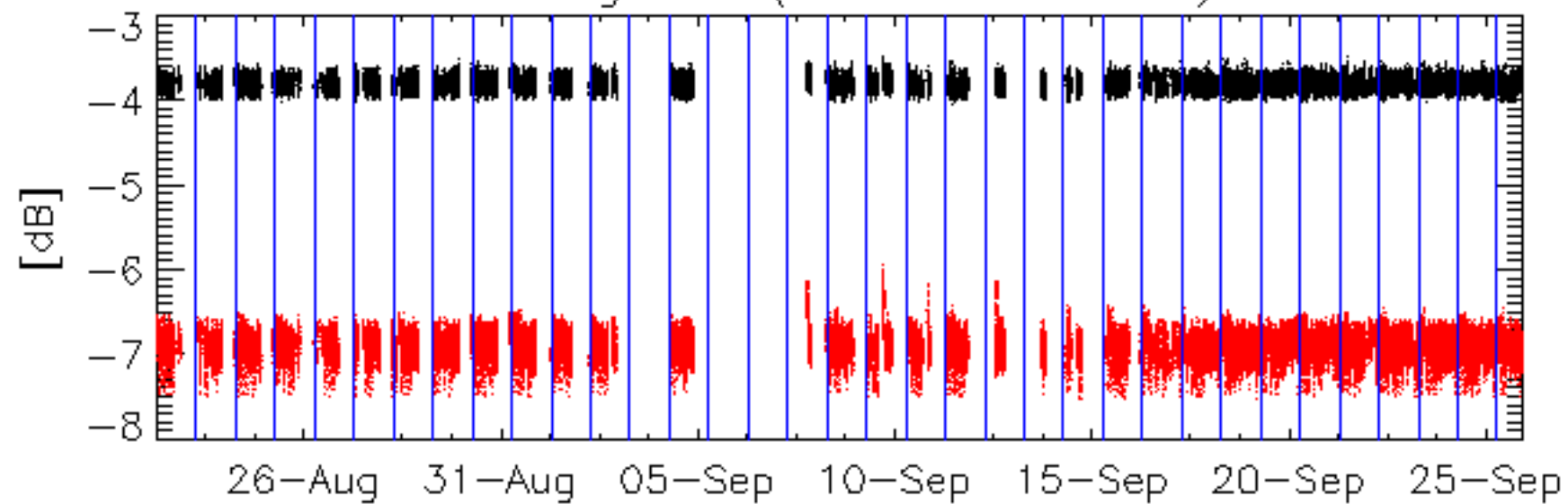
Evolution of Absolute Doppler
Ascending
Descending

### 6.3 - Doppler evolution versus ANX

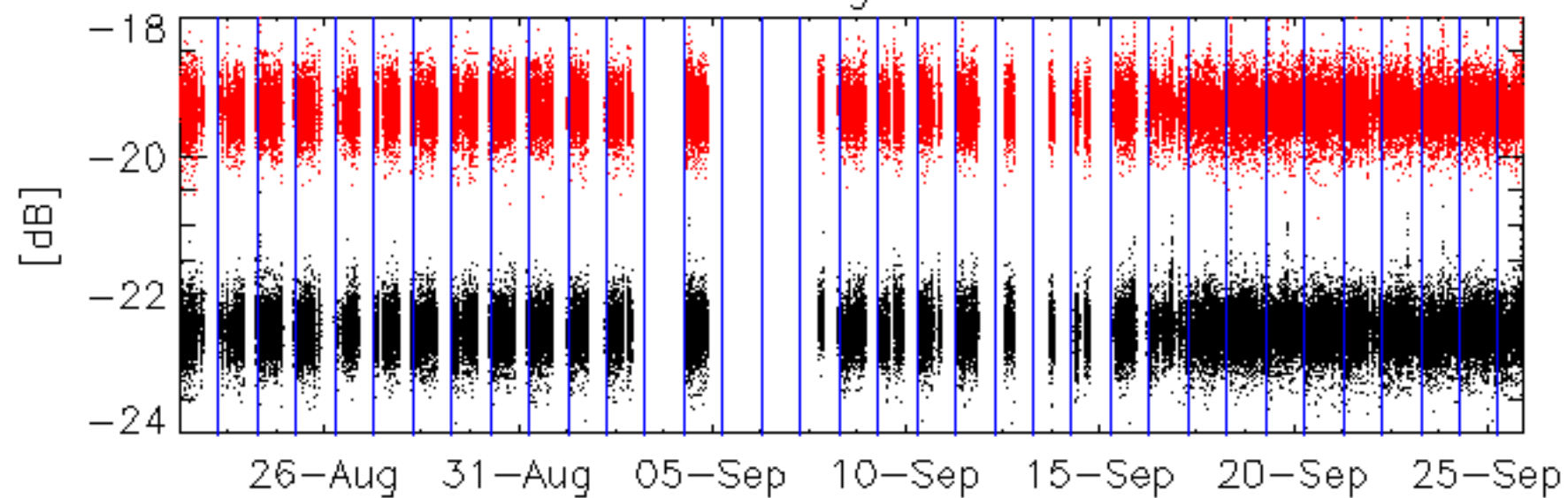
**Evolution Doppler error versus ANX**



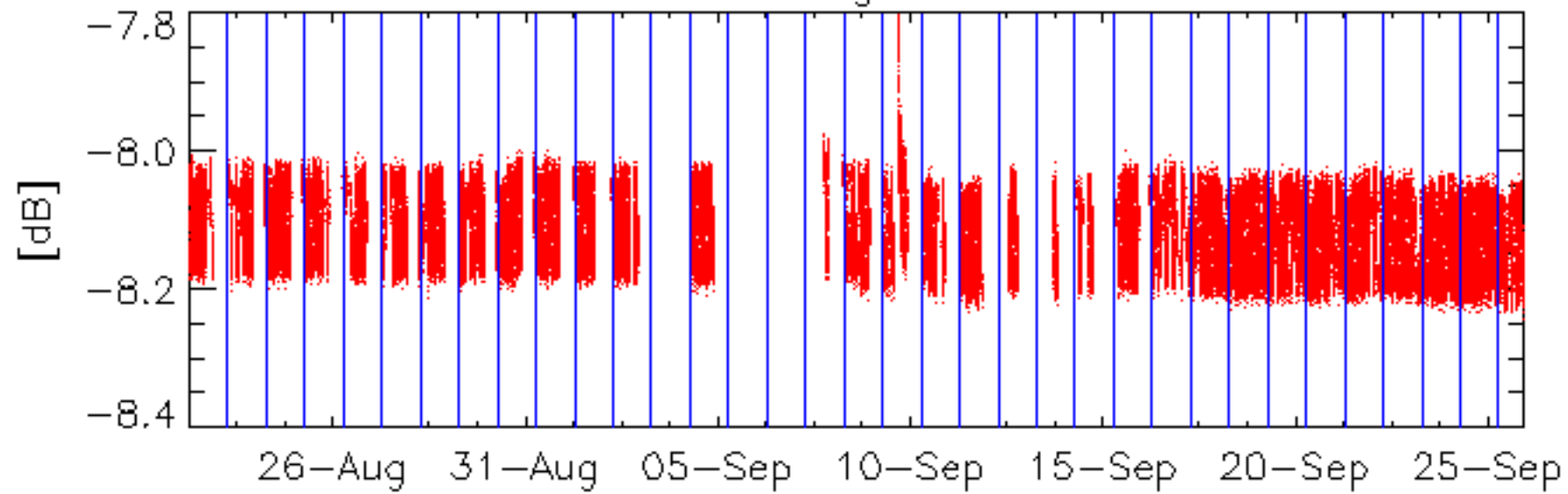
Average P1 (row 3 & row 10)



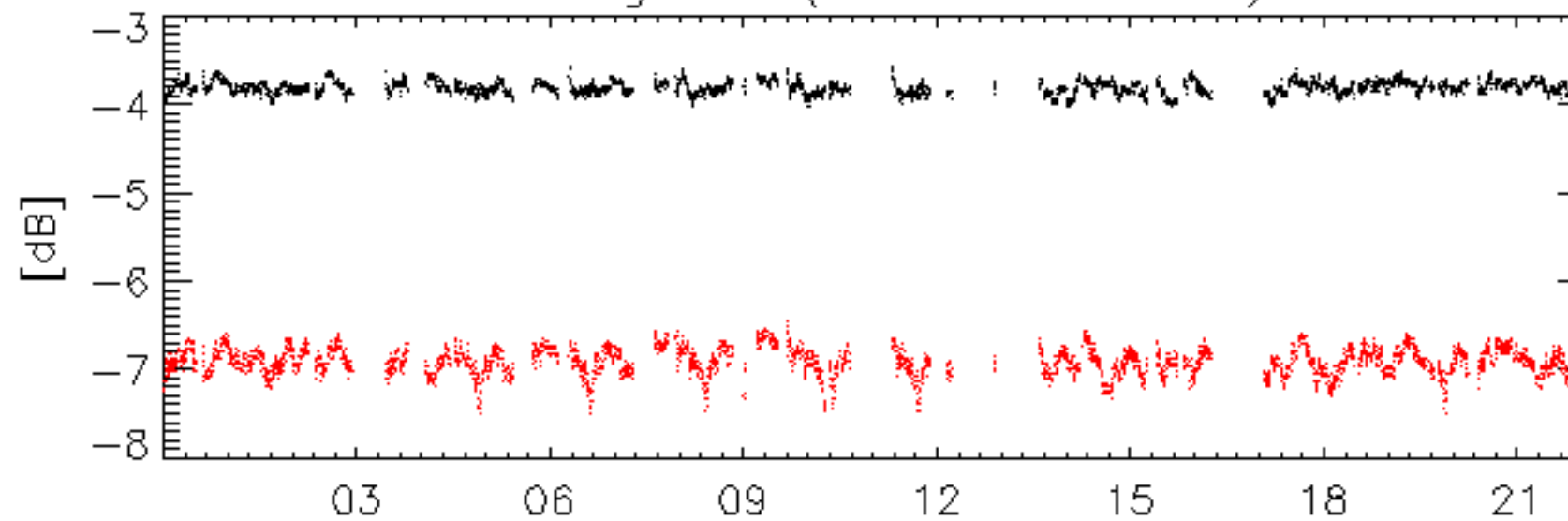
Average P2



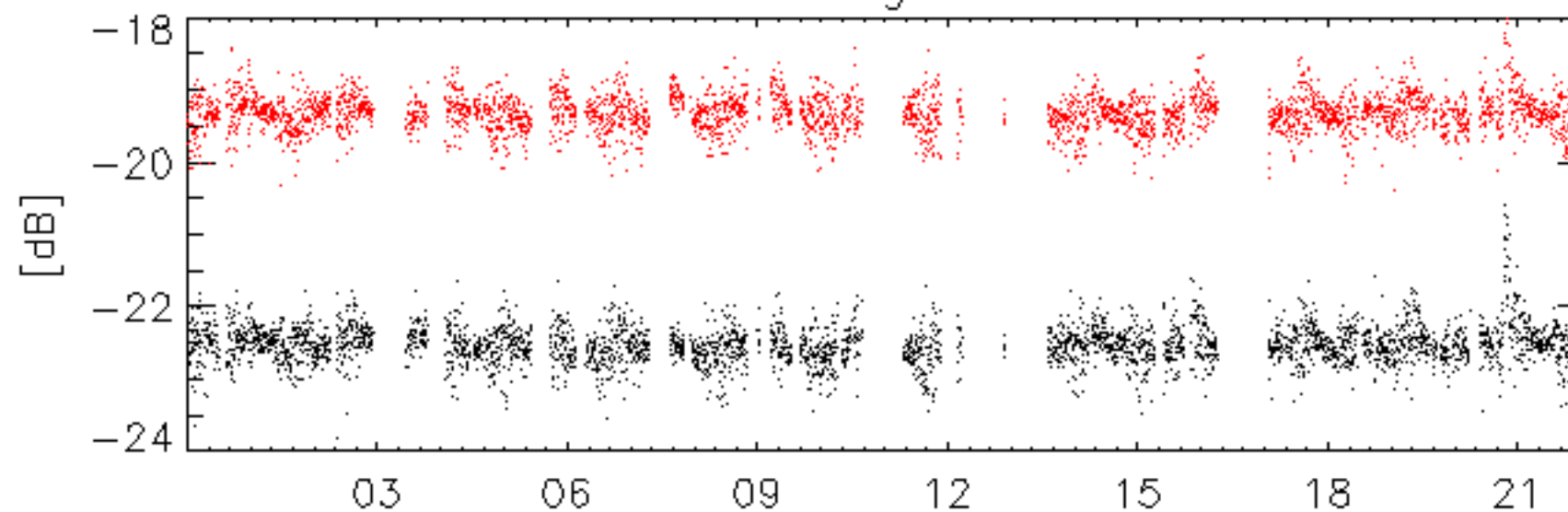
Average P3



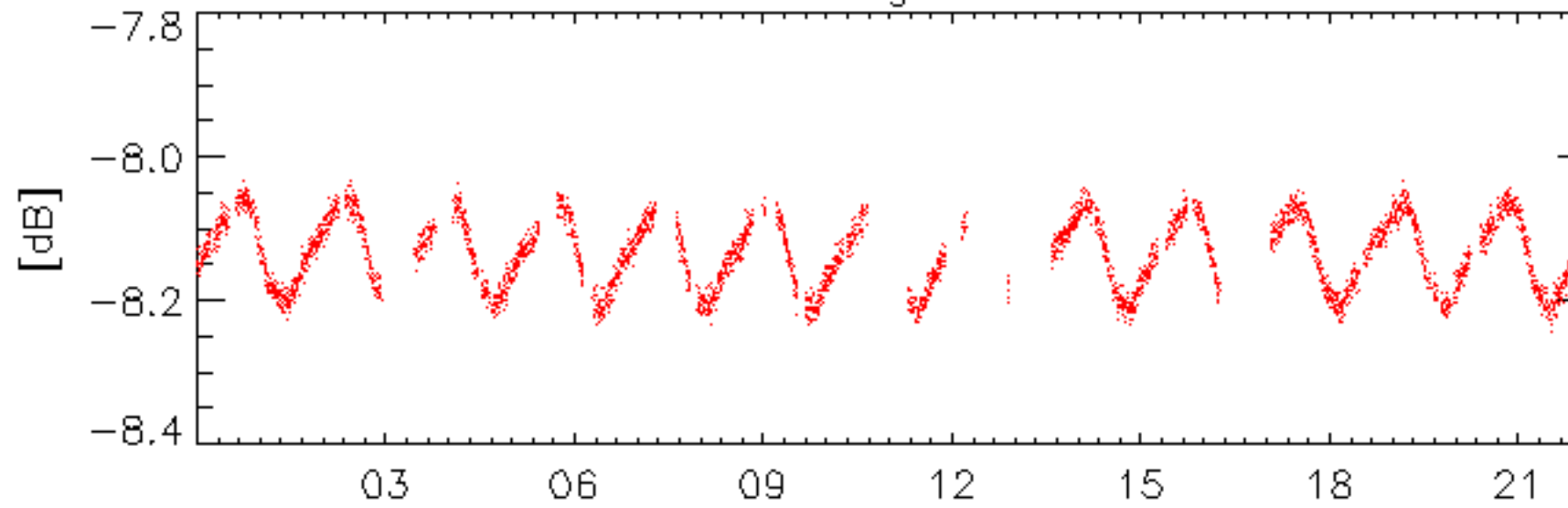
Average P1 (row 3 & row 10)



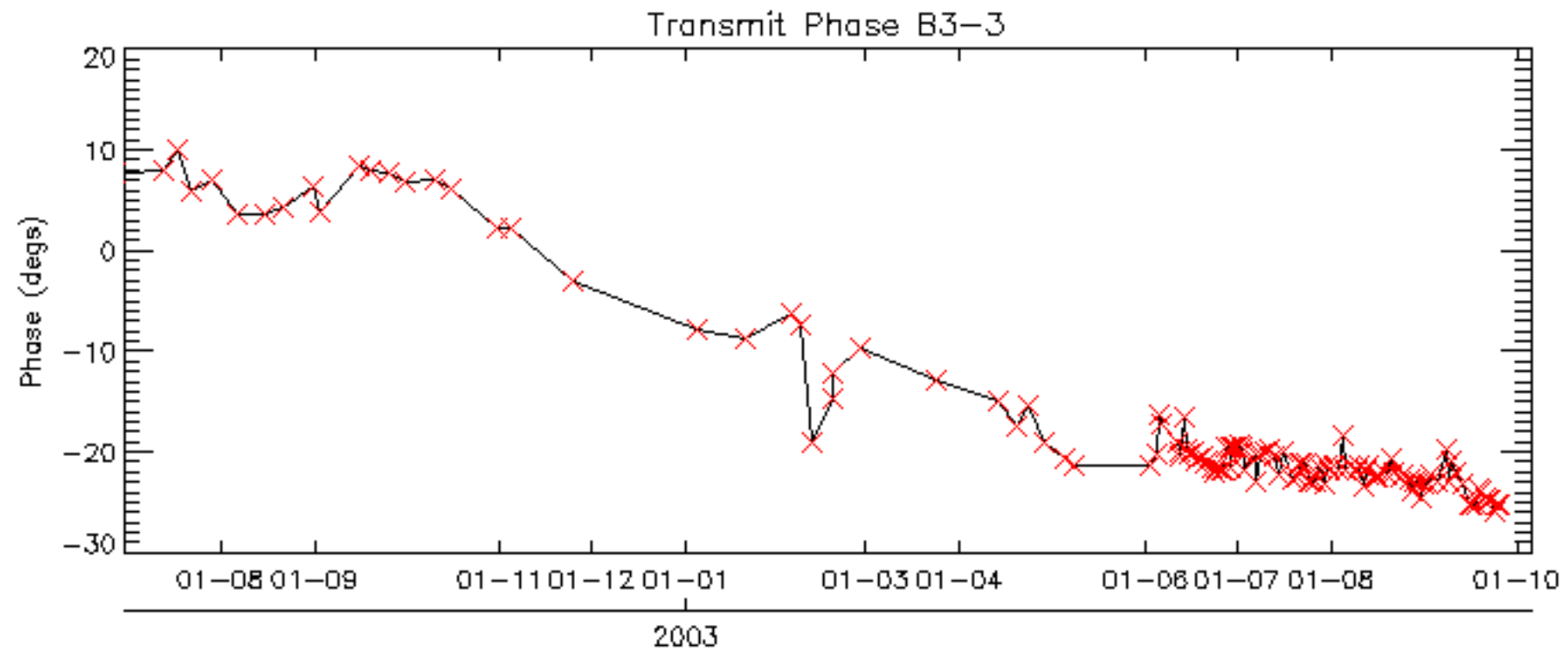
25-Sep  
Average P2



25-Sep  
Average P3



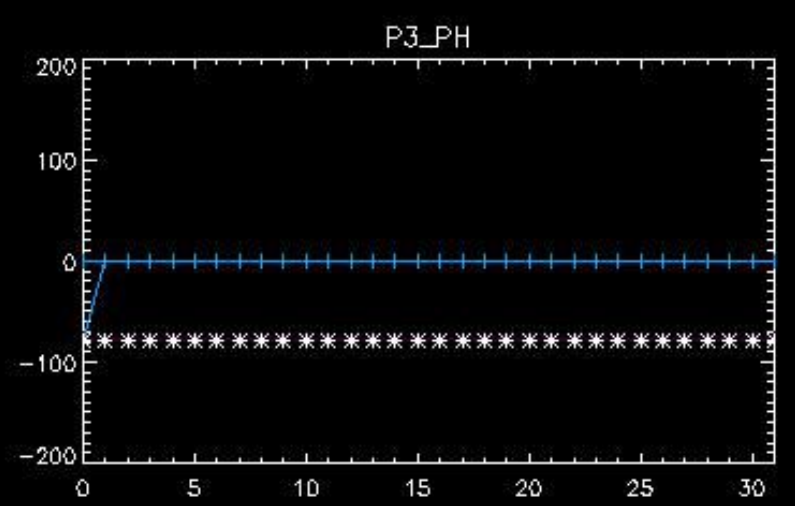
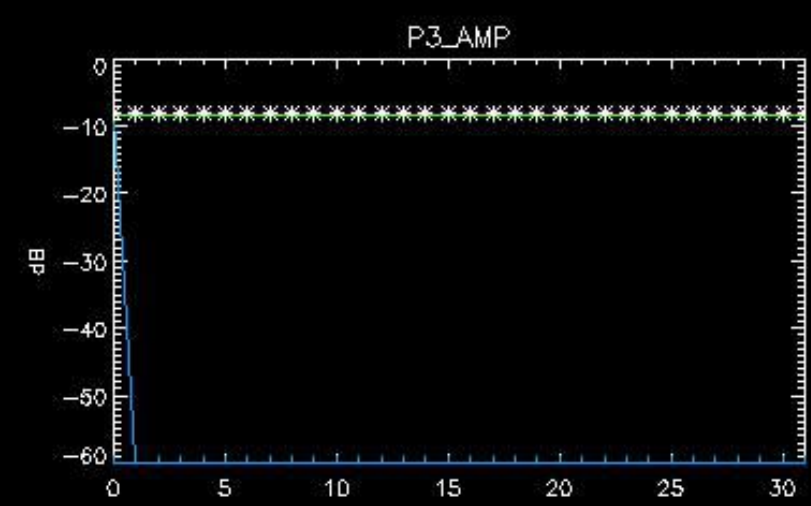
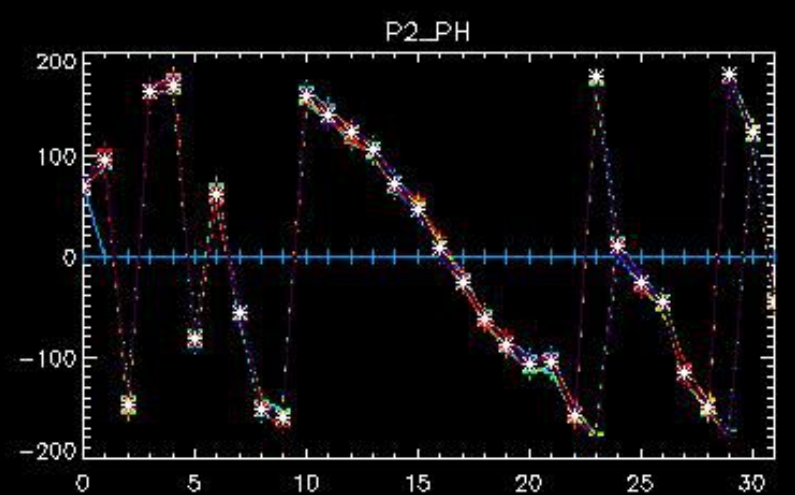
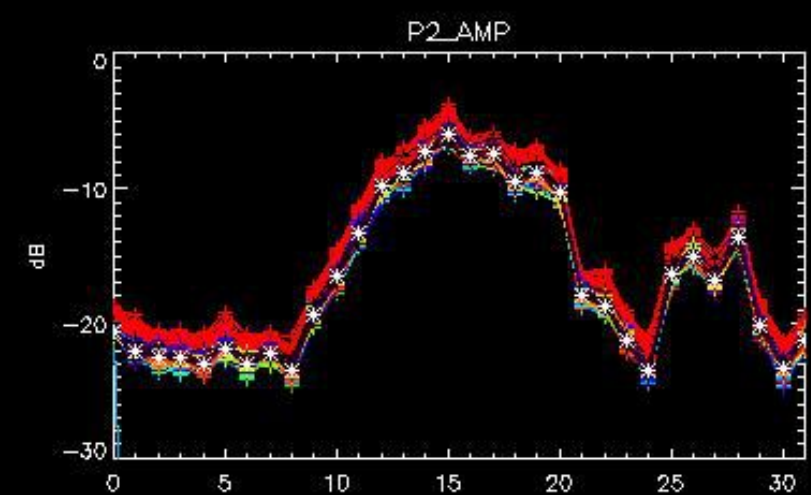
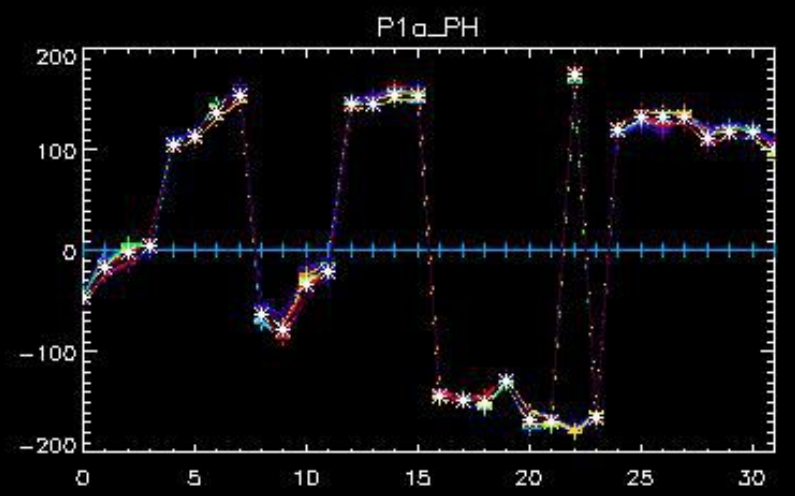
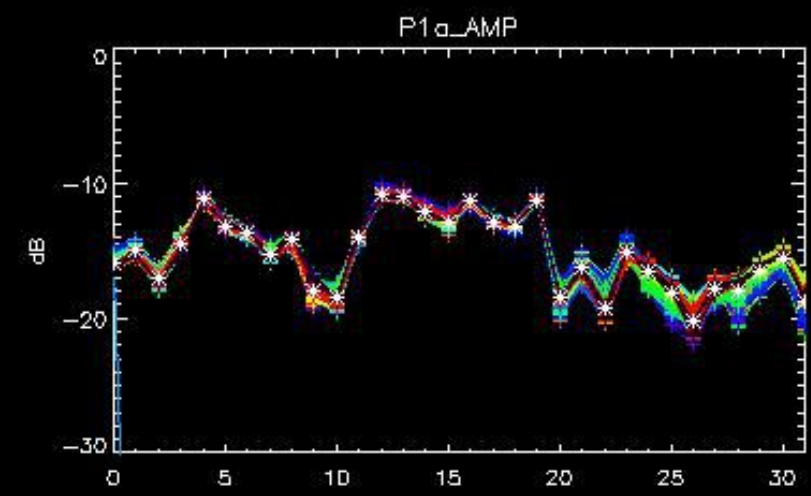
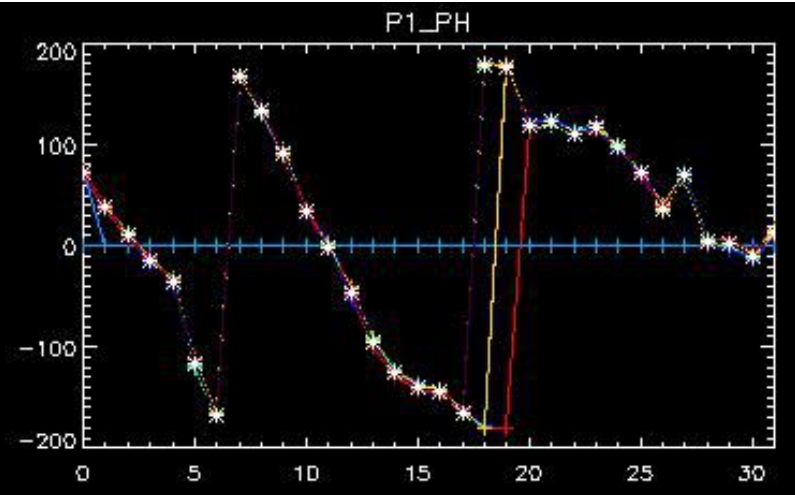
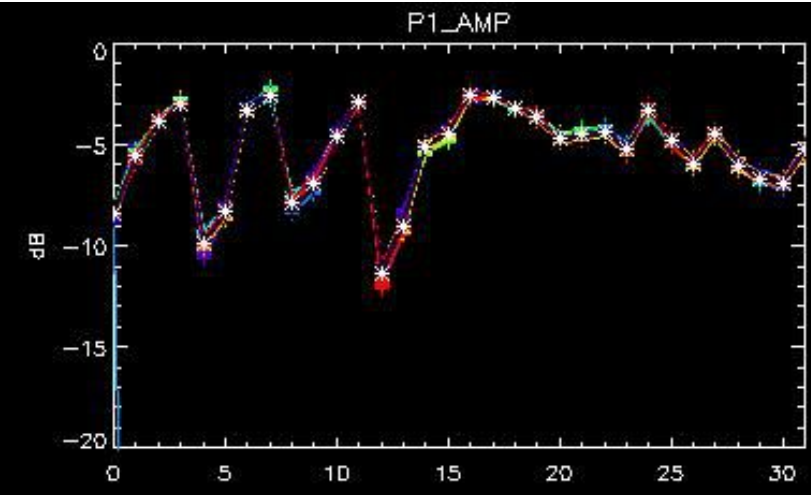
25-Sep





No anomalies observed on available browse products

No anomalies observed.

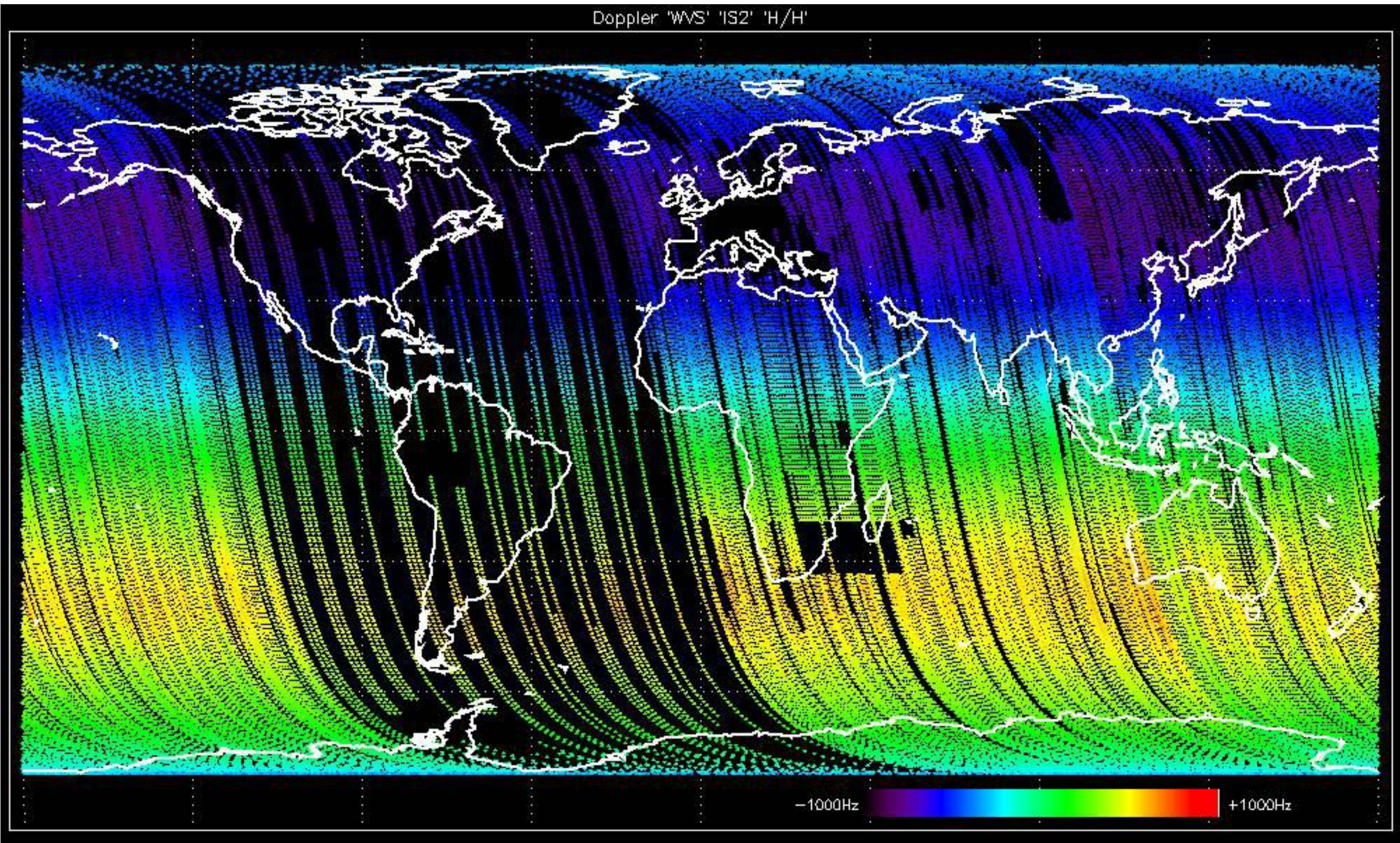


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

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

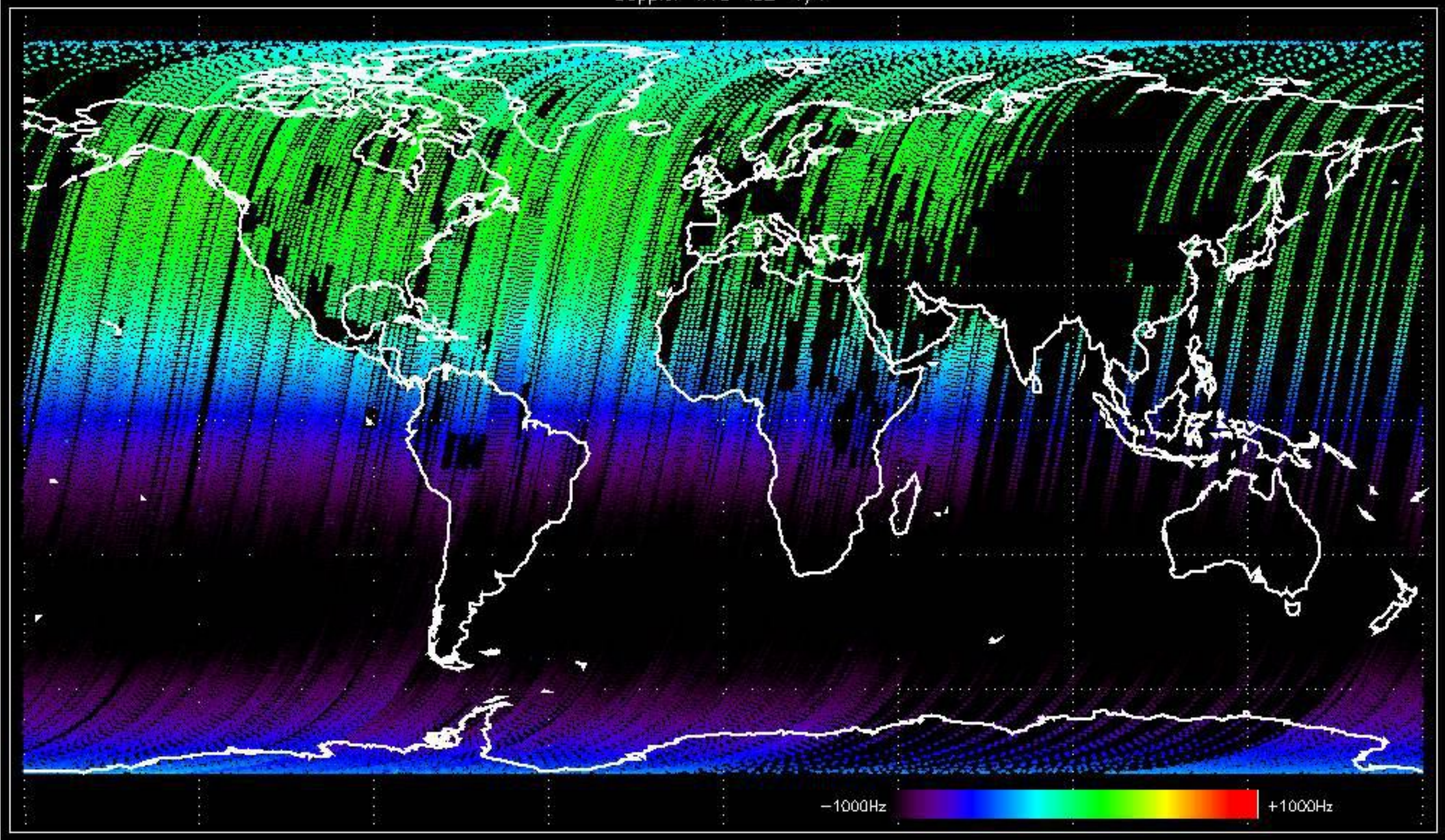


Doppler 'WVS' 'IS2' 'H/H'

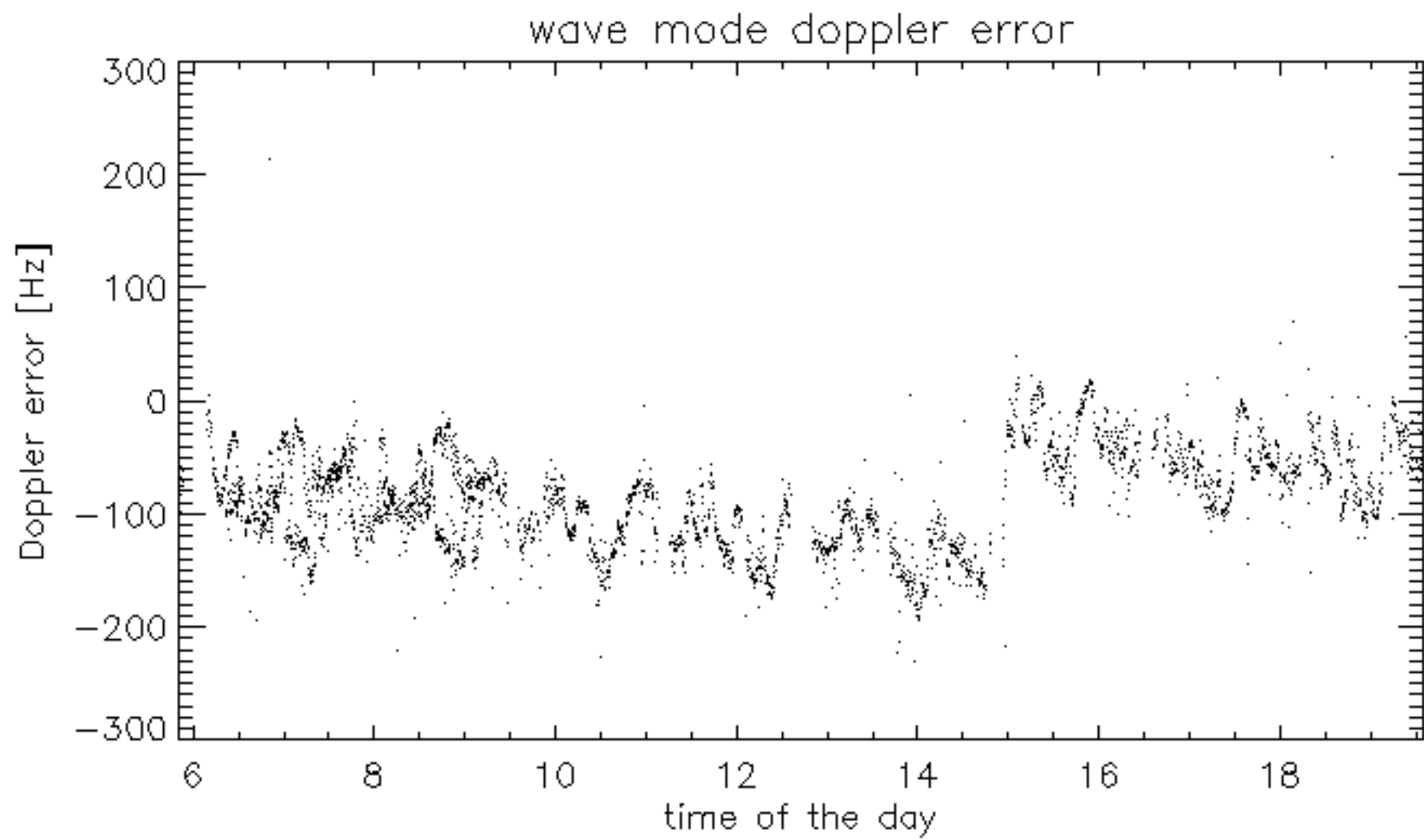
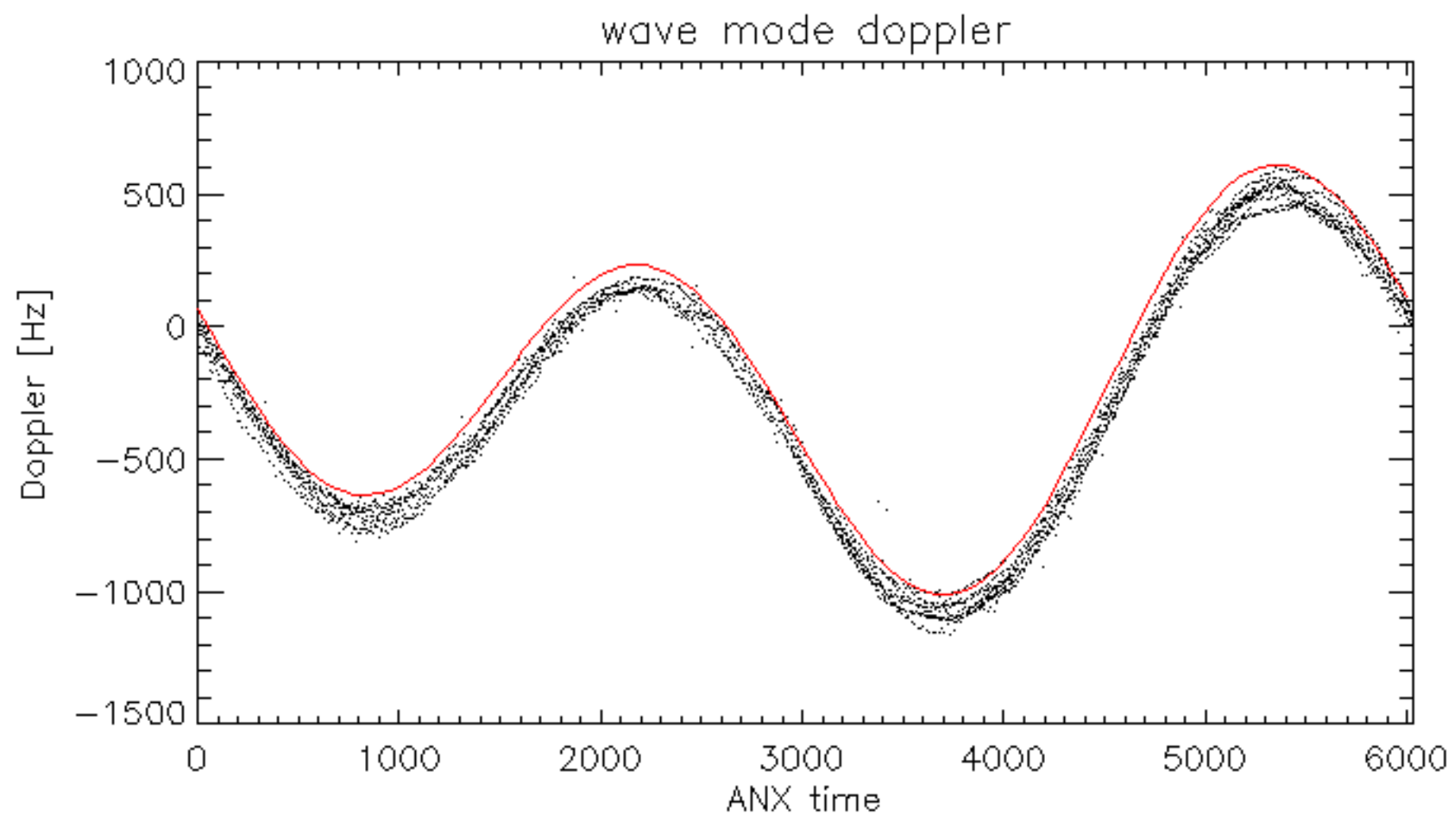




Doppler 'WS' 'IS2' 'V/V'

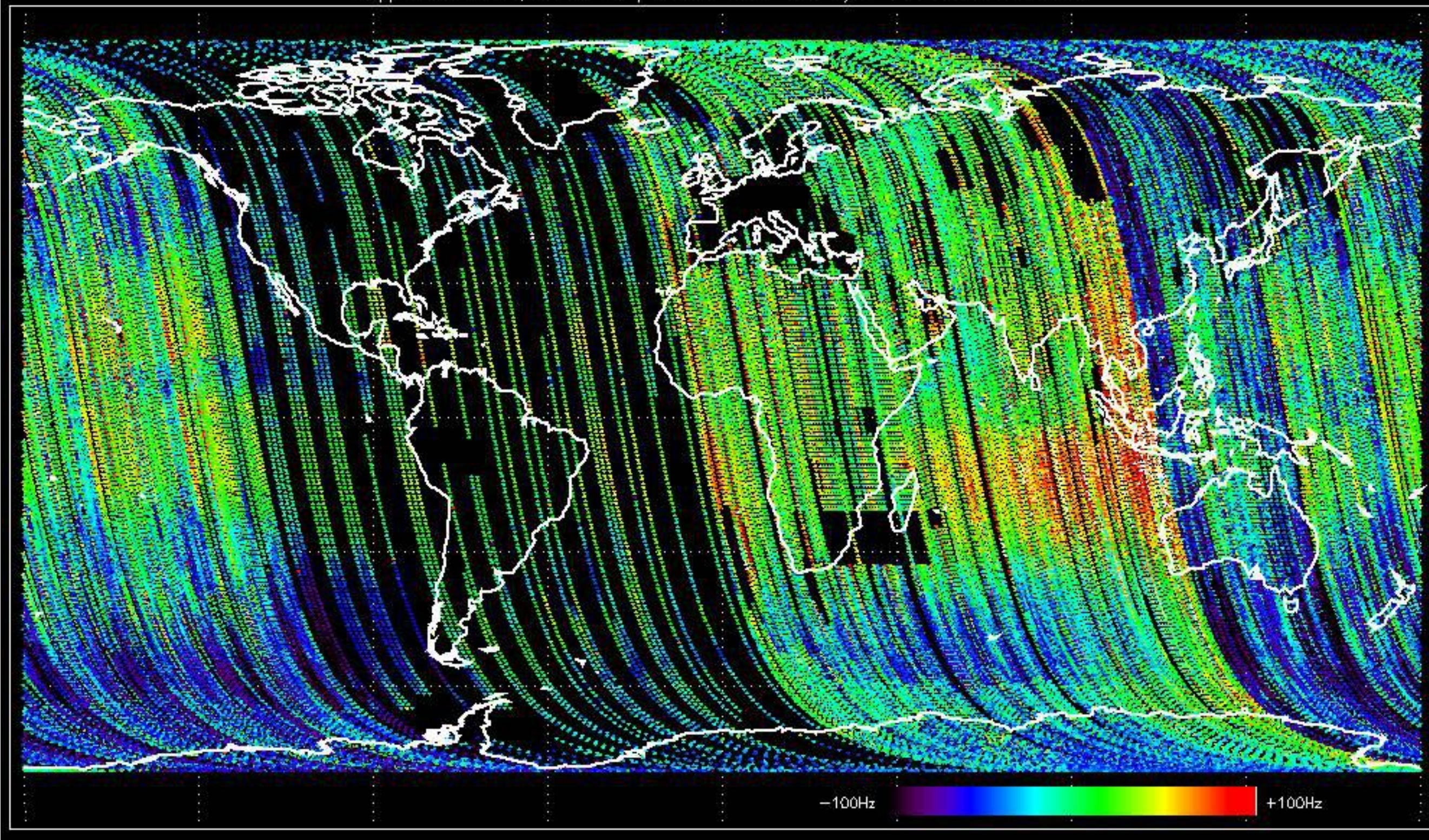






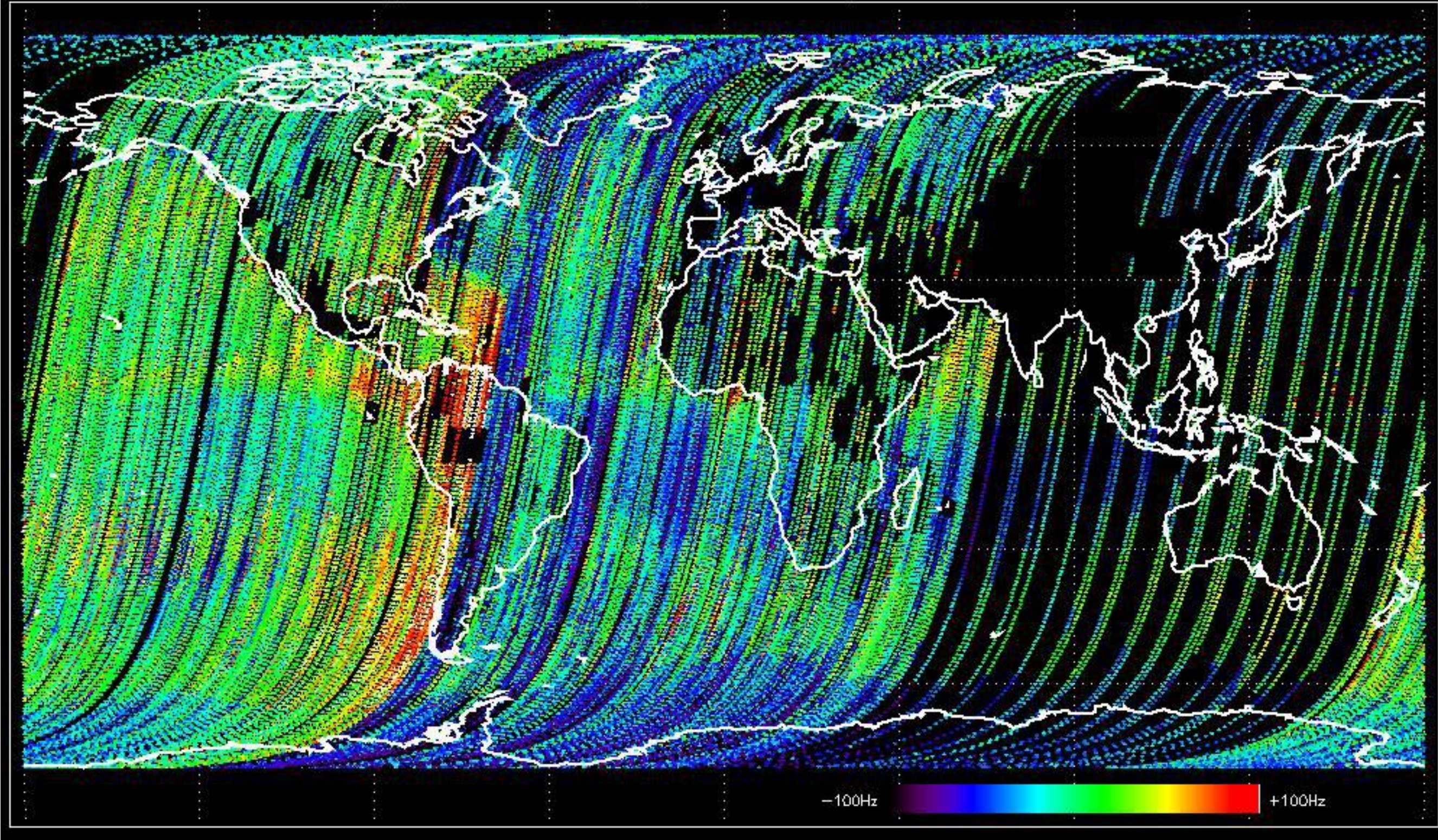


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz





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





No anomalies observed on available MS products:

No anomalies observed.









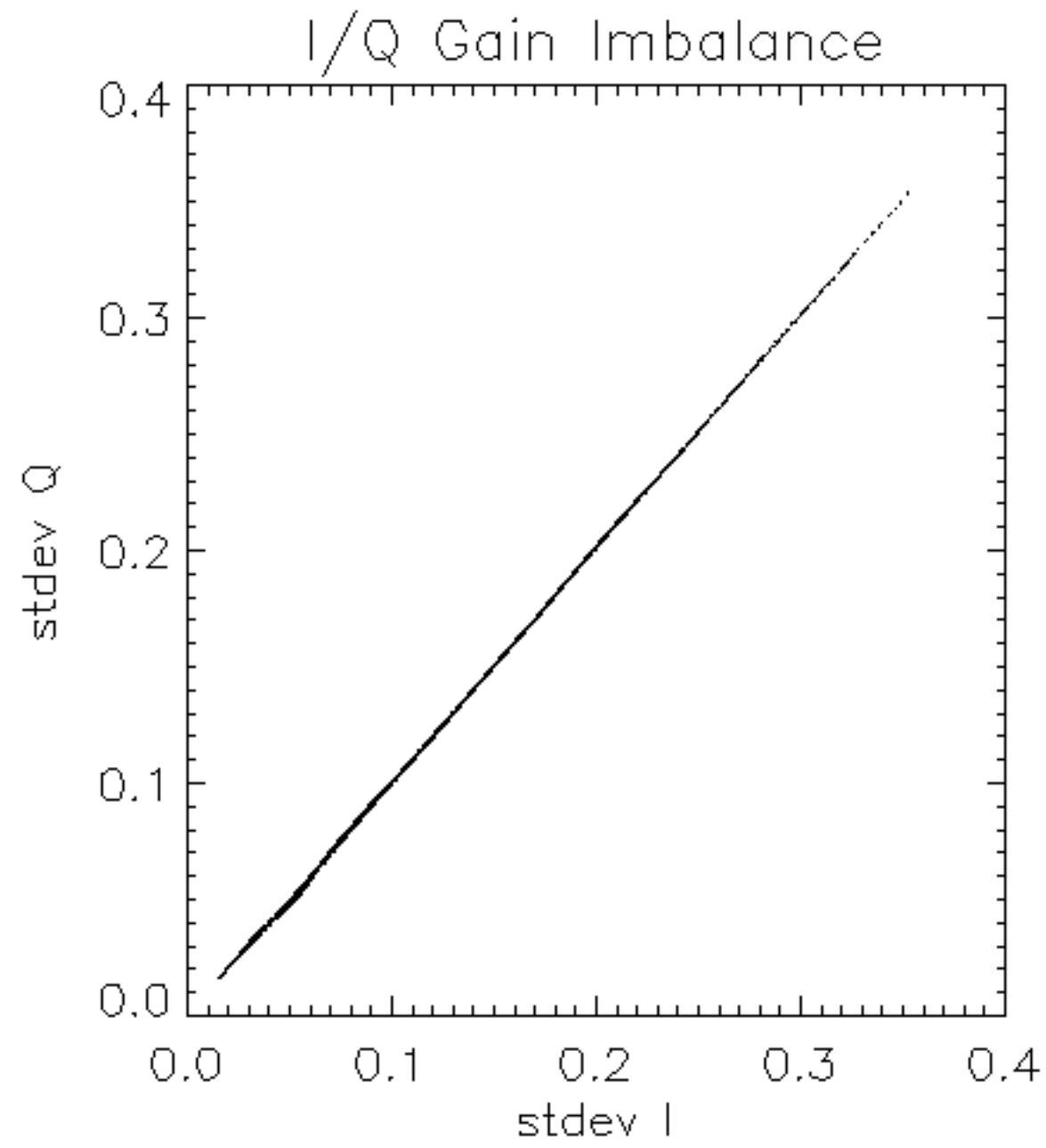


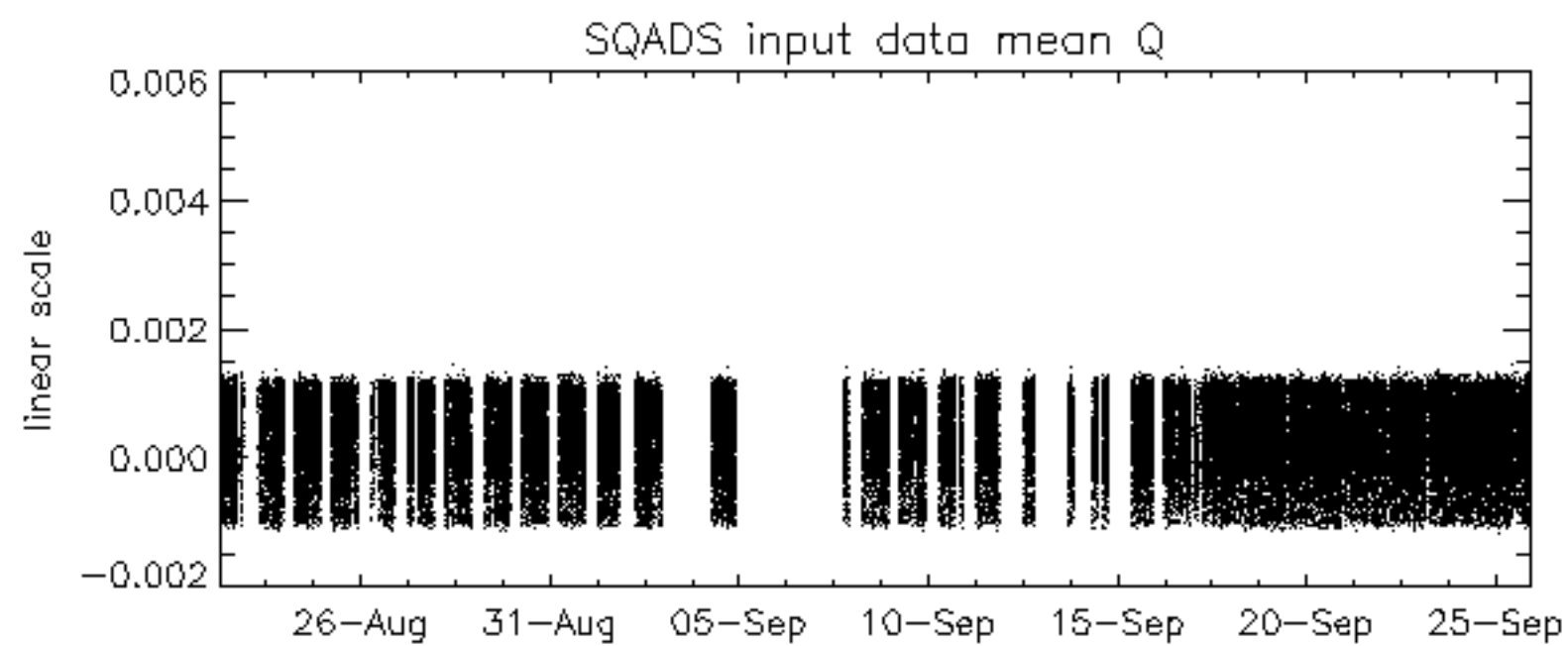
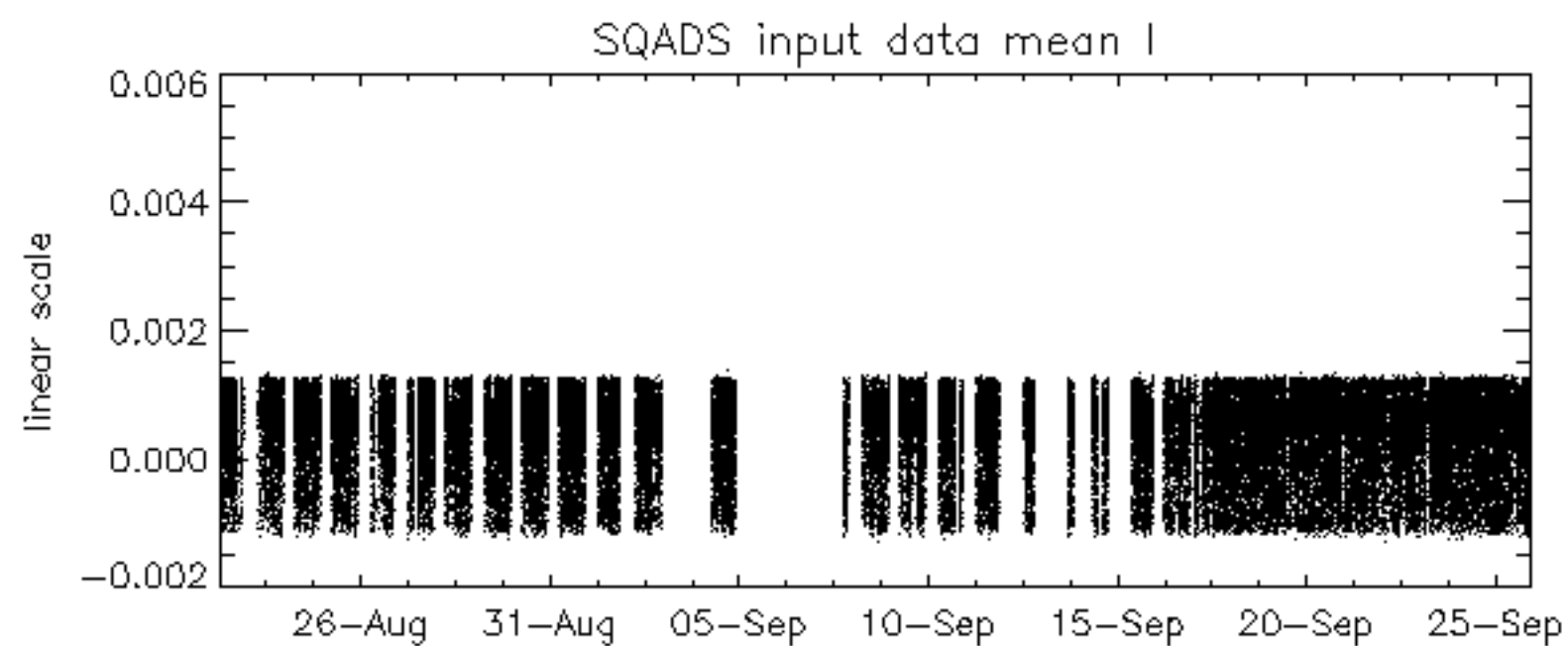
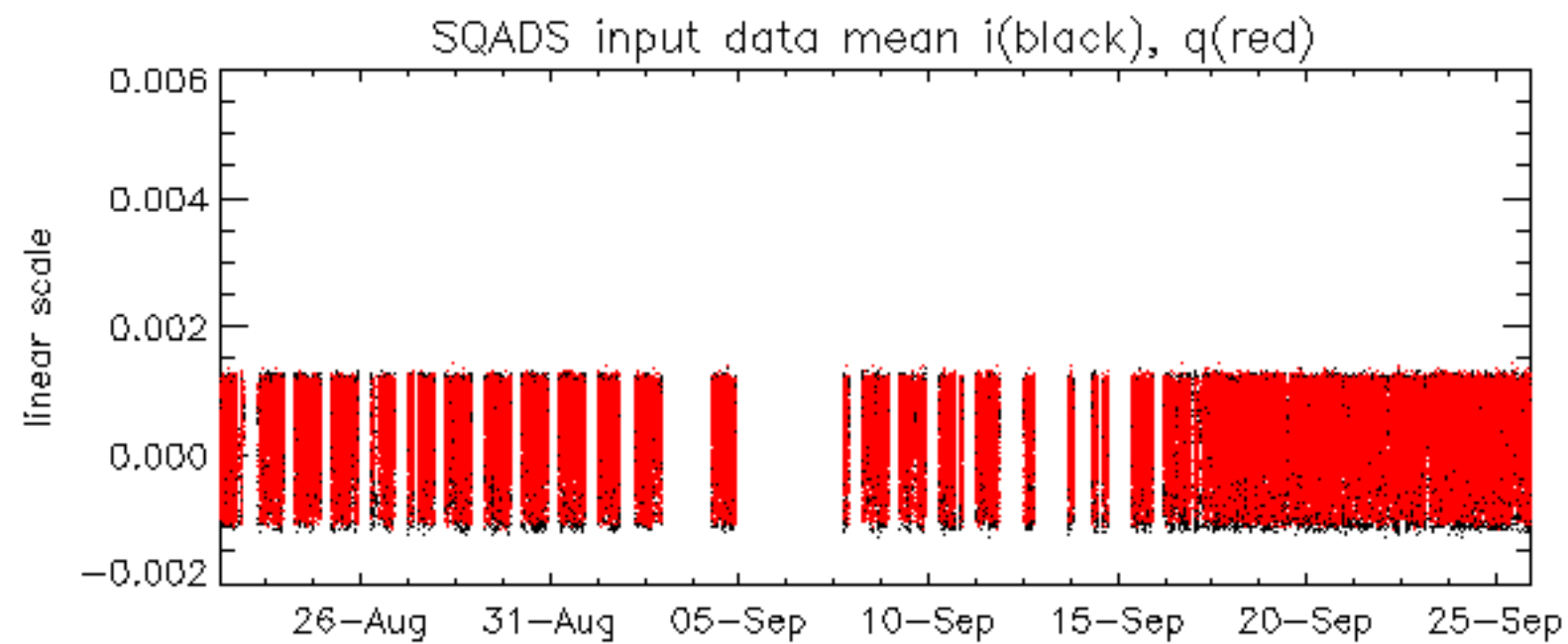


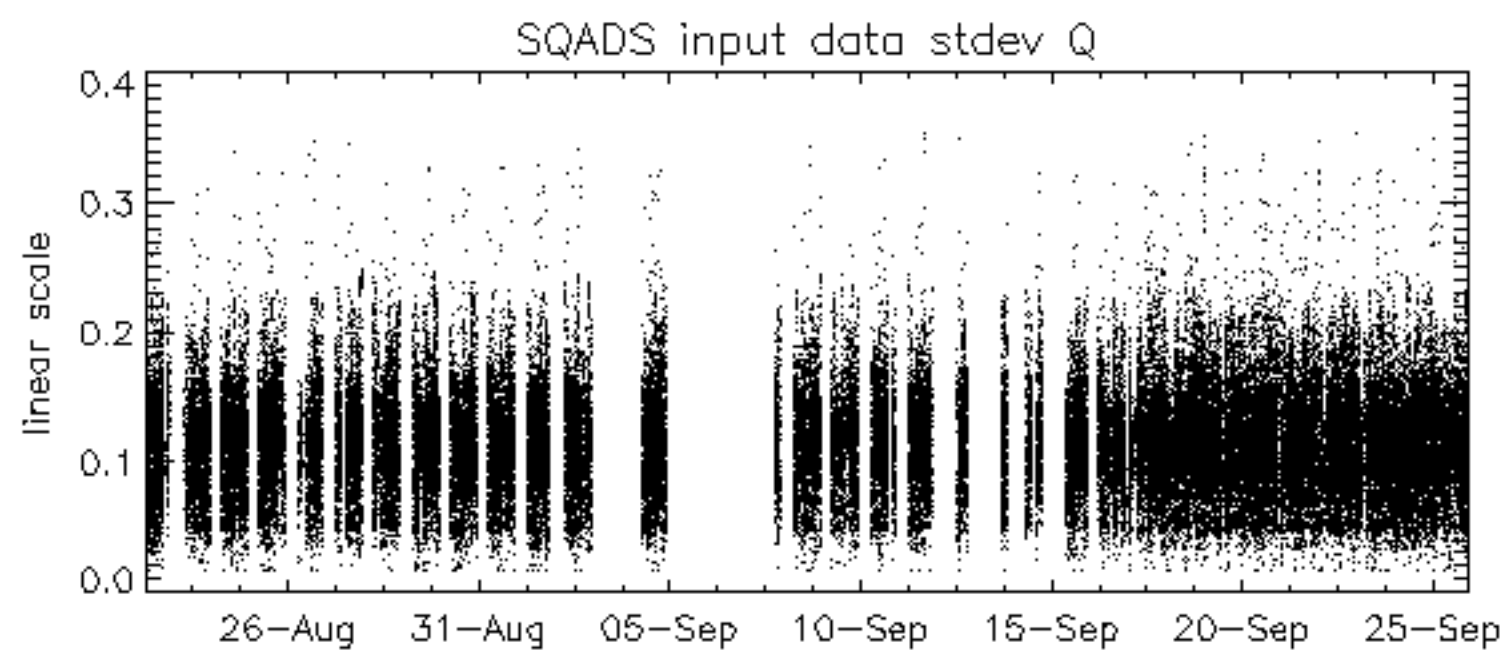
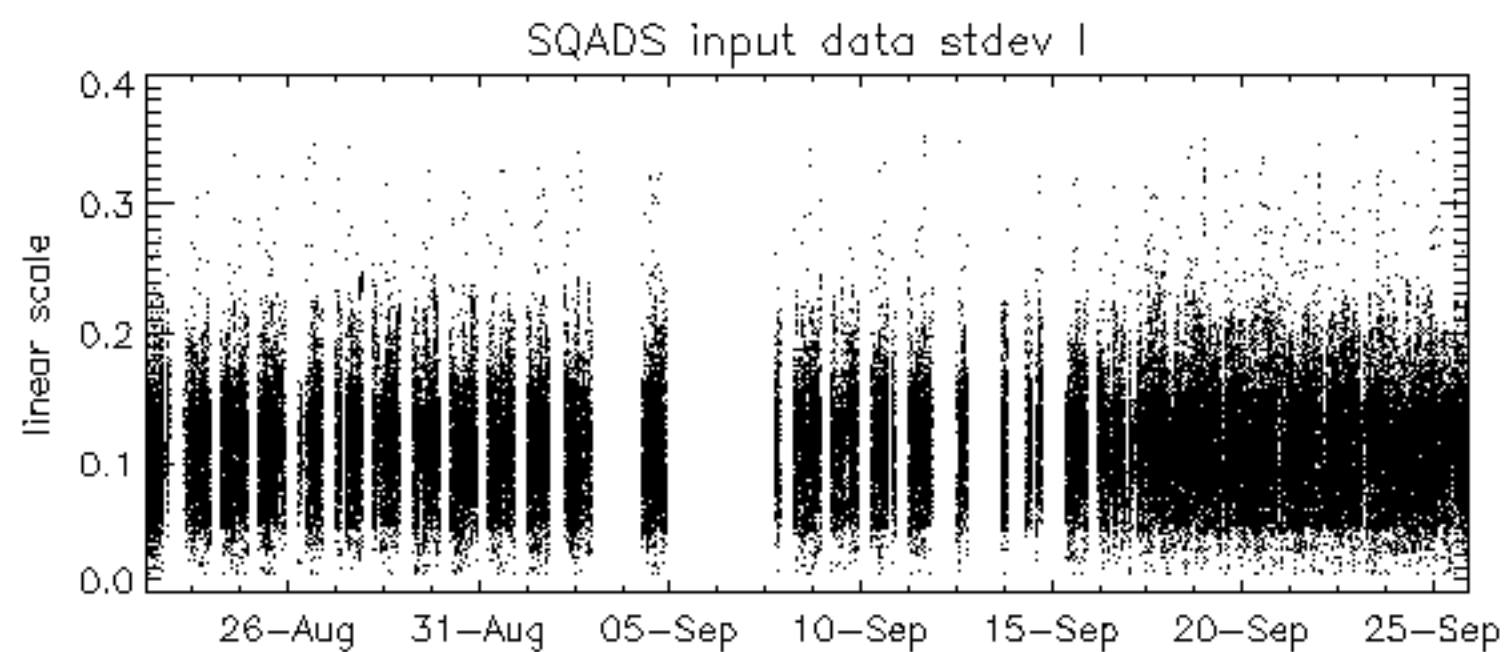
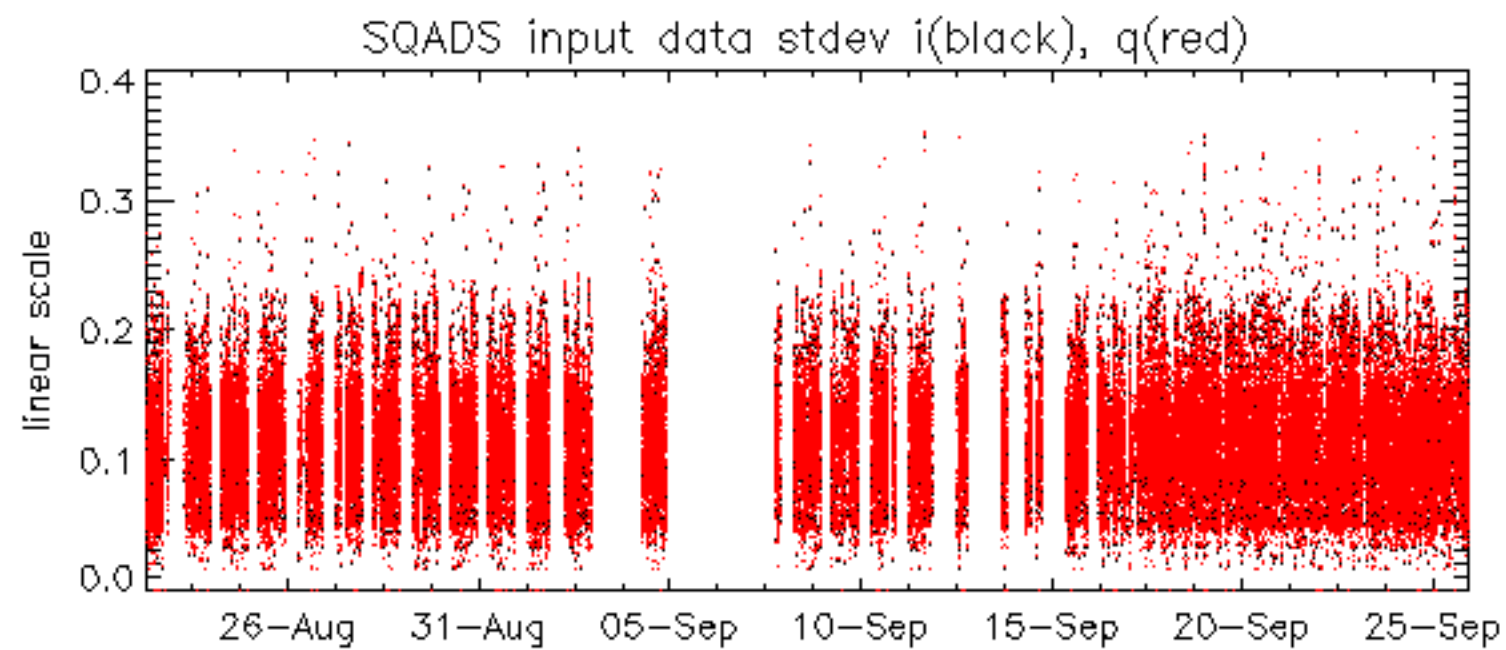






























No unavailabilities during the reported period.