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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.

## 2.3 - Data Analysis

Analysis performed on data available since 15-Jul-2003 06:33:32 until 16-Jul-2003 07:31:55.

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

## 3 - Module Stepping Mode

One MS product on 15-Jul-2003 (V polarization): ASA\_MS\_\_0PNPDK20030715\_210039\_000000152018\_00114\_07182\_0016.N1

The analysis for H polarization is performed on data acquired on 14-Jul-2003

No anomalies observed.

Polarisation	Start Time
V	20030715 210039
H	20030714 195000

### 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
8	mean	-2.44094	-22.5038	-8.10145
	stdev	0.0117768	0.0680108	0.00255219
24	mean	-5.13370	-21.2236	-8.10145
	stdev	0.0126733	0.0548593	0.00255219



#### 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
8	mean	-2.44708	-22.5317	-8.10595
	stdev	0.0130575	0.0683382	0.00297786
24	mean	-5.15629	-21.2036	-8.10595
	stdev	0.0133476	0.0571790	0.00297786



#### 4.3 - cal pulses monitoring (all row)



### 5 - RAW data statistics

No anomalies observed.  
Nominal value of I and Q level0 statistics.

#### 5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000468823
	stdev	3.03233e-07
MEAN Q	mean	0.000304397
	stdev	3.12710e-07



## 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.113188
	stdev	0.00159479
STDEV Q	mean	0.113283
	stdev	0.00162565



## 5.3 - Gain imbalance I/Q



# 6 - Wave Doppler Analysis

No anomalies observed in 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

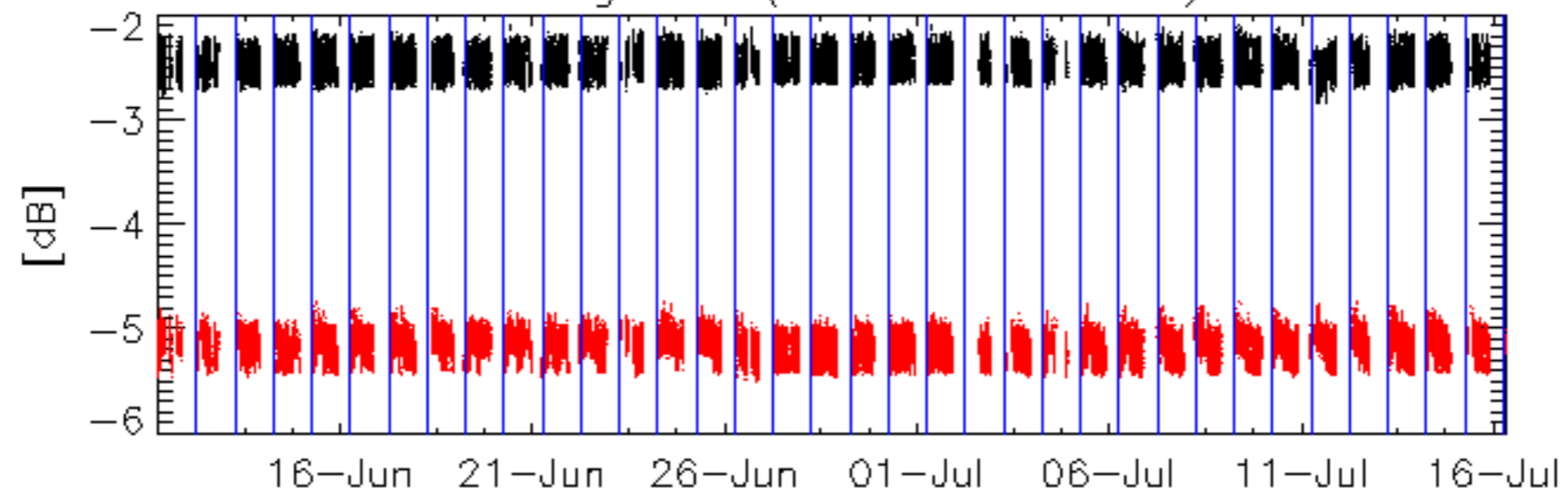
Evolution of Absolute Doppler
Ascending
Descending

## 6.3 - Doppler evolution versus ANX

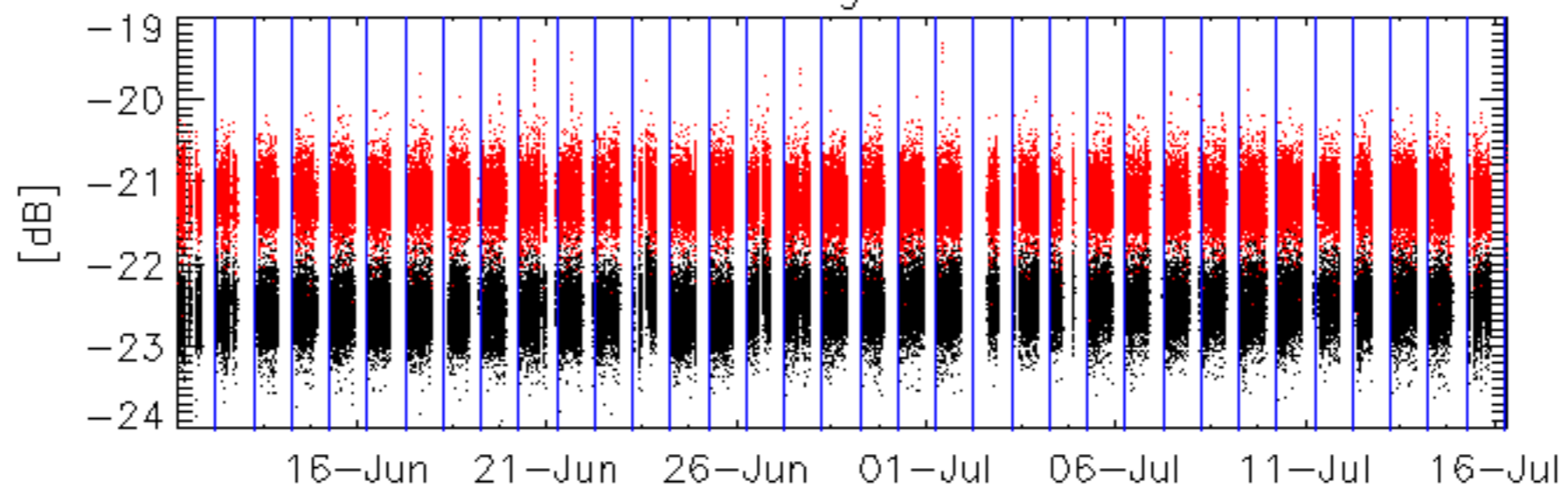
**Evolution Doppler error versus ANX**



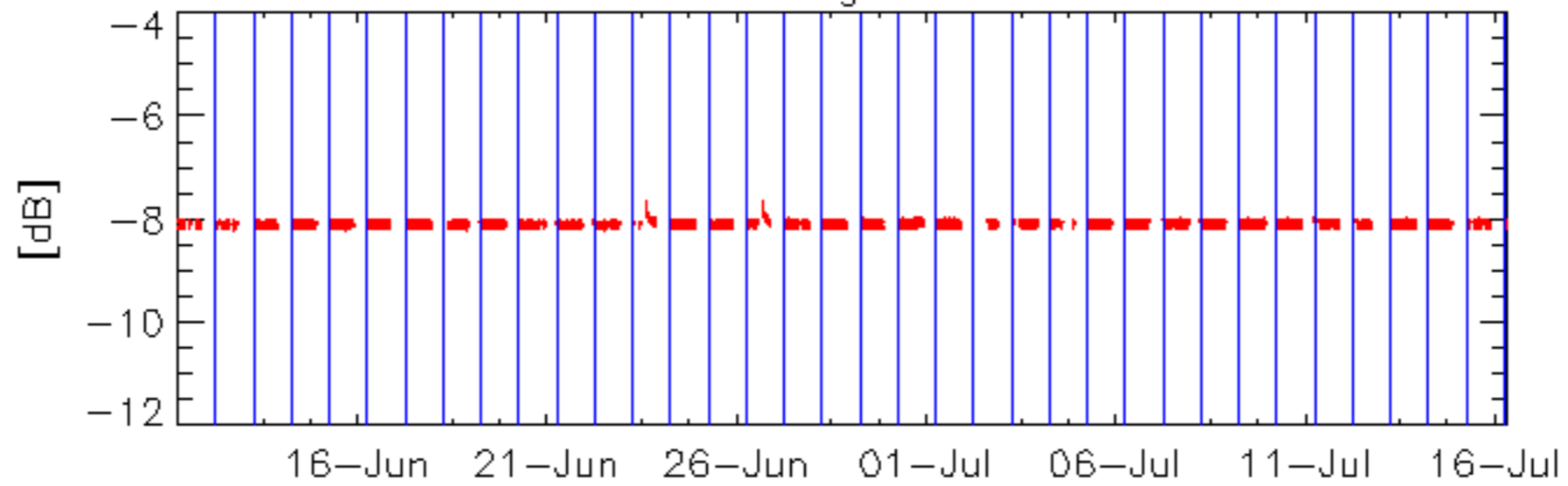
Average P1 (row 8 & row 24)

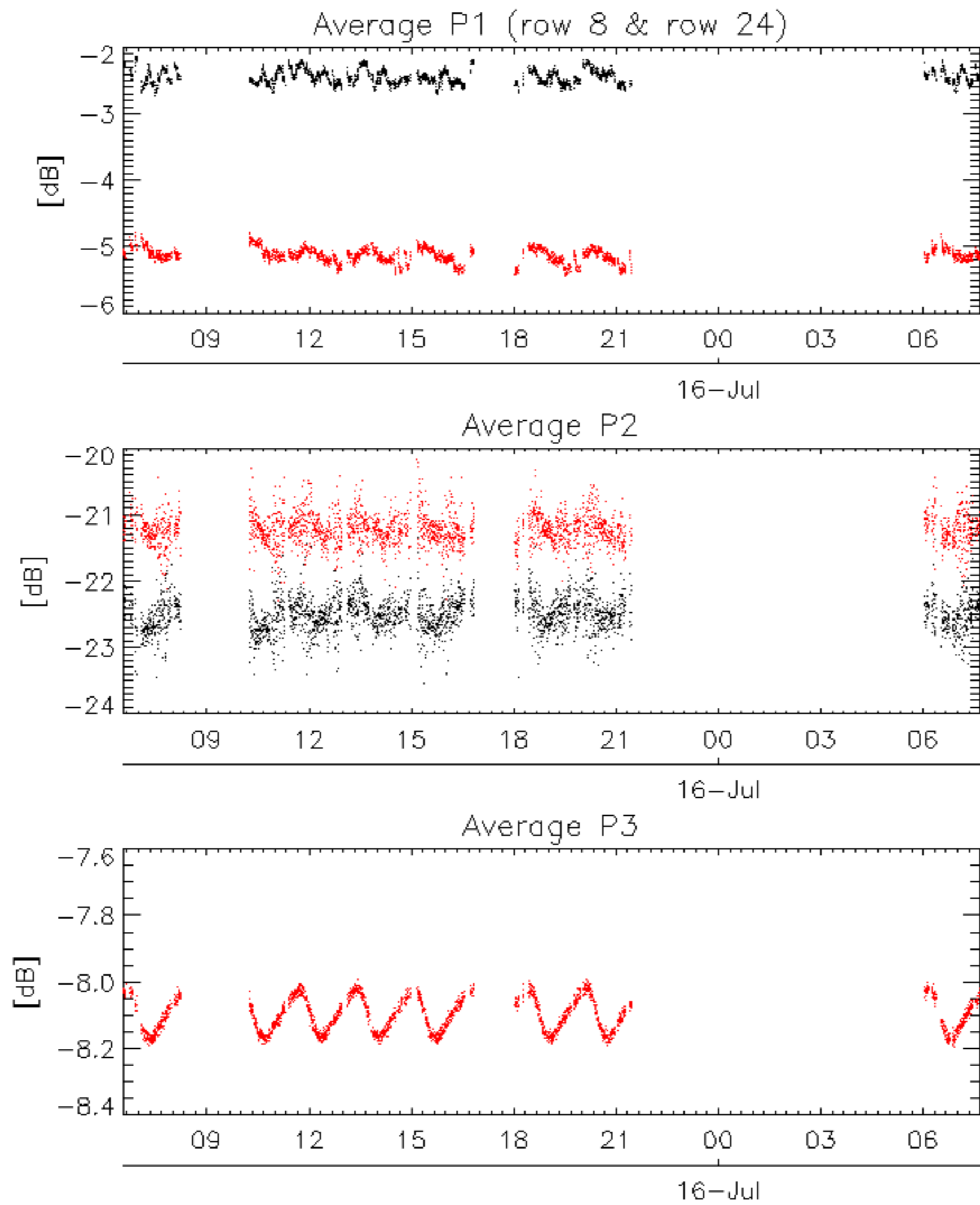


Average P2



Average P3

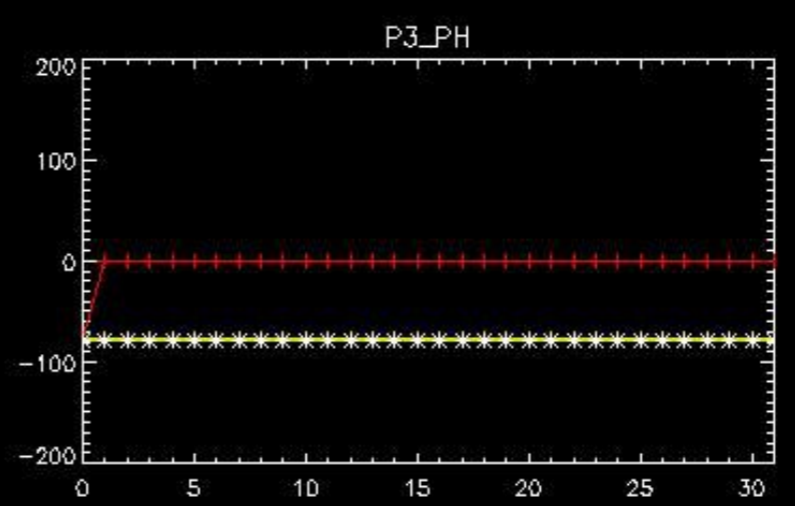
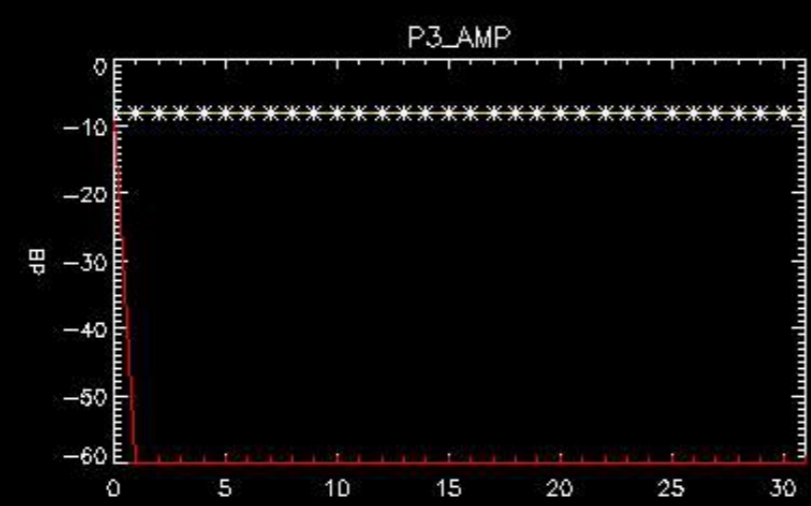
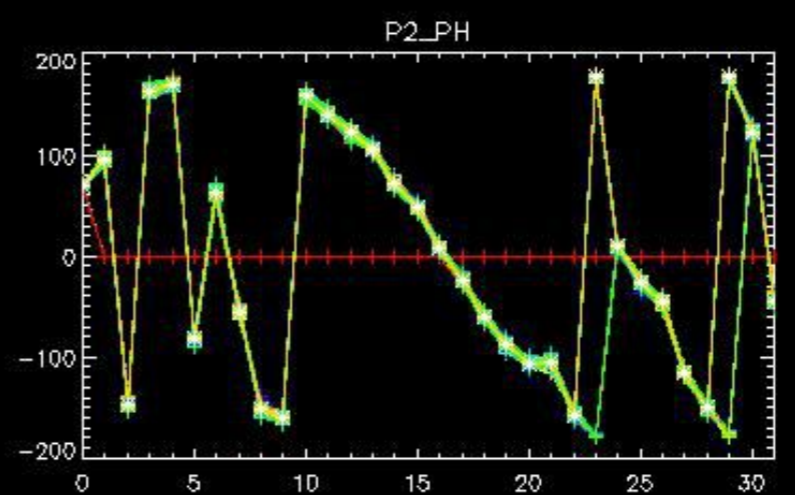
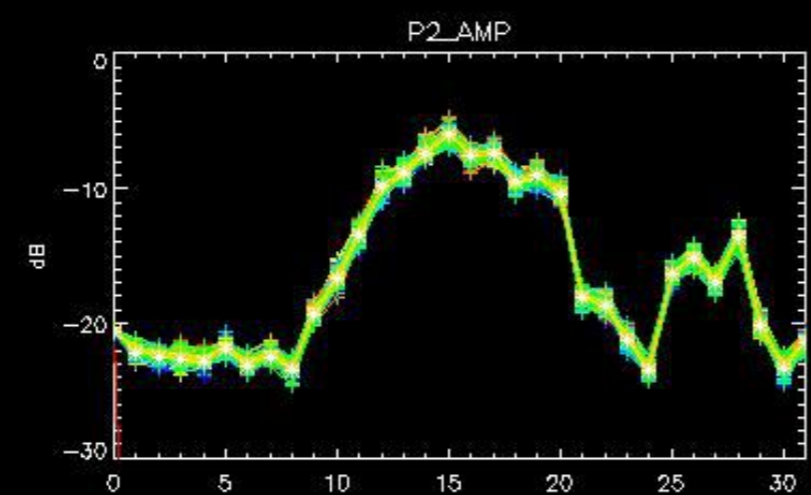
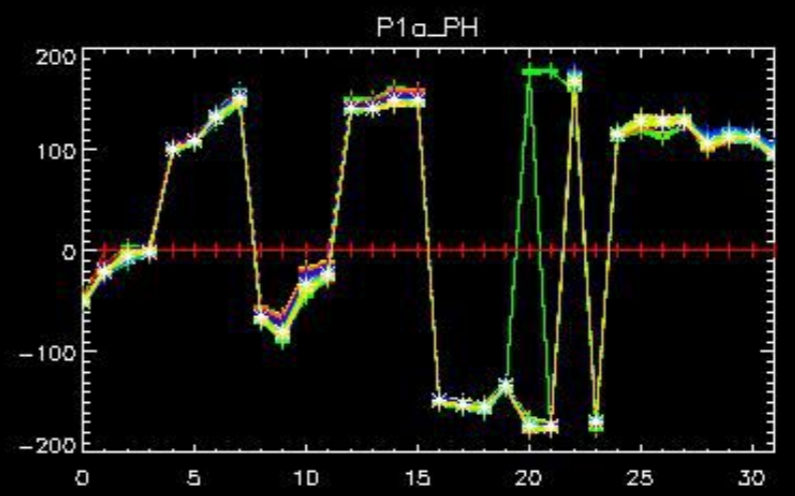
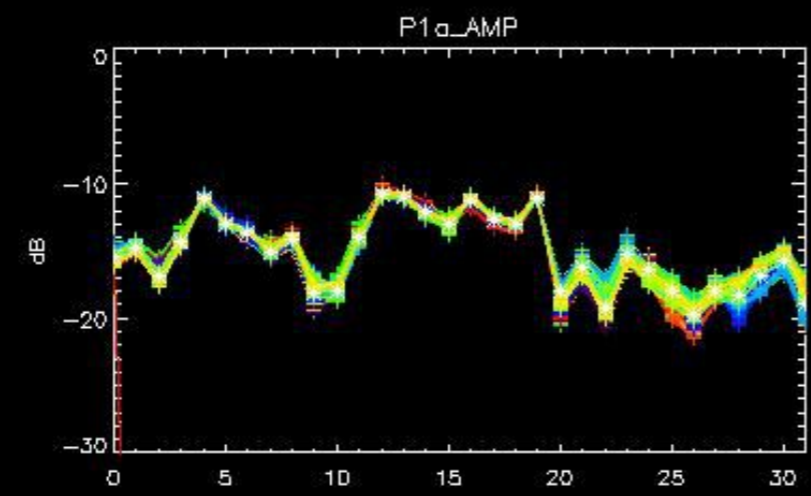
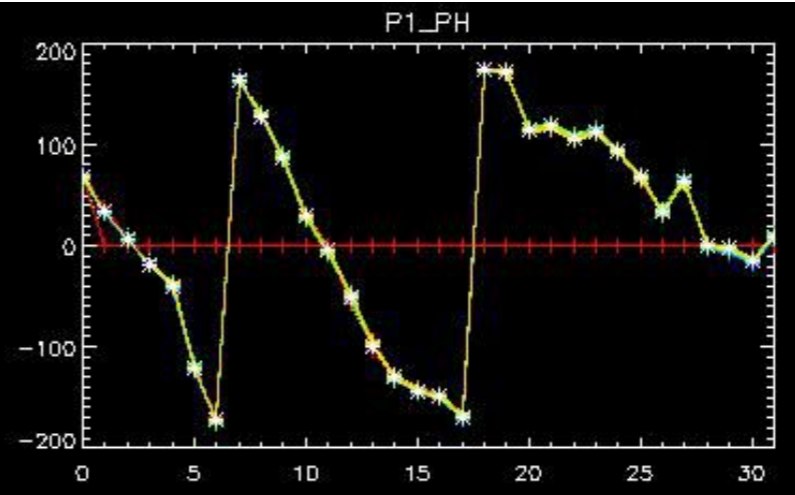
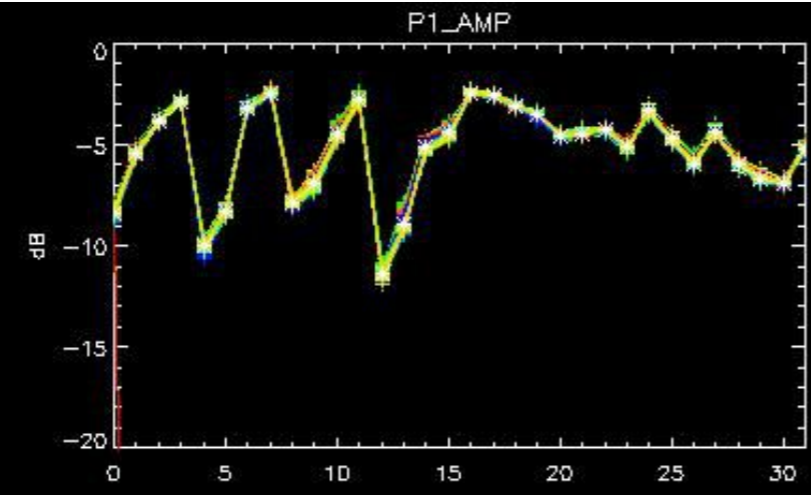




No anomalies observed.



No anomalies observed.



Analysis performed on data available since 15-Jul-2003 06:33:32 until 16-Jul-2003 07:31:55.

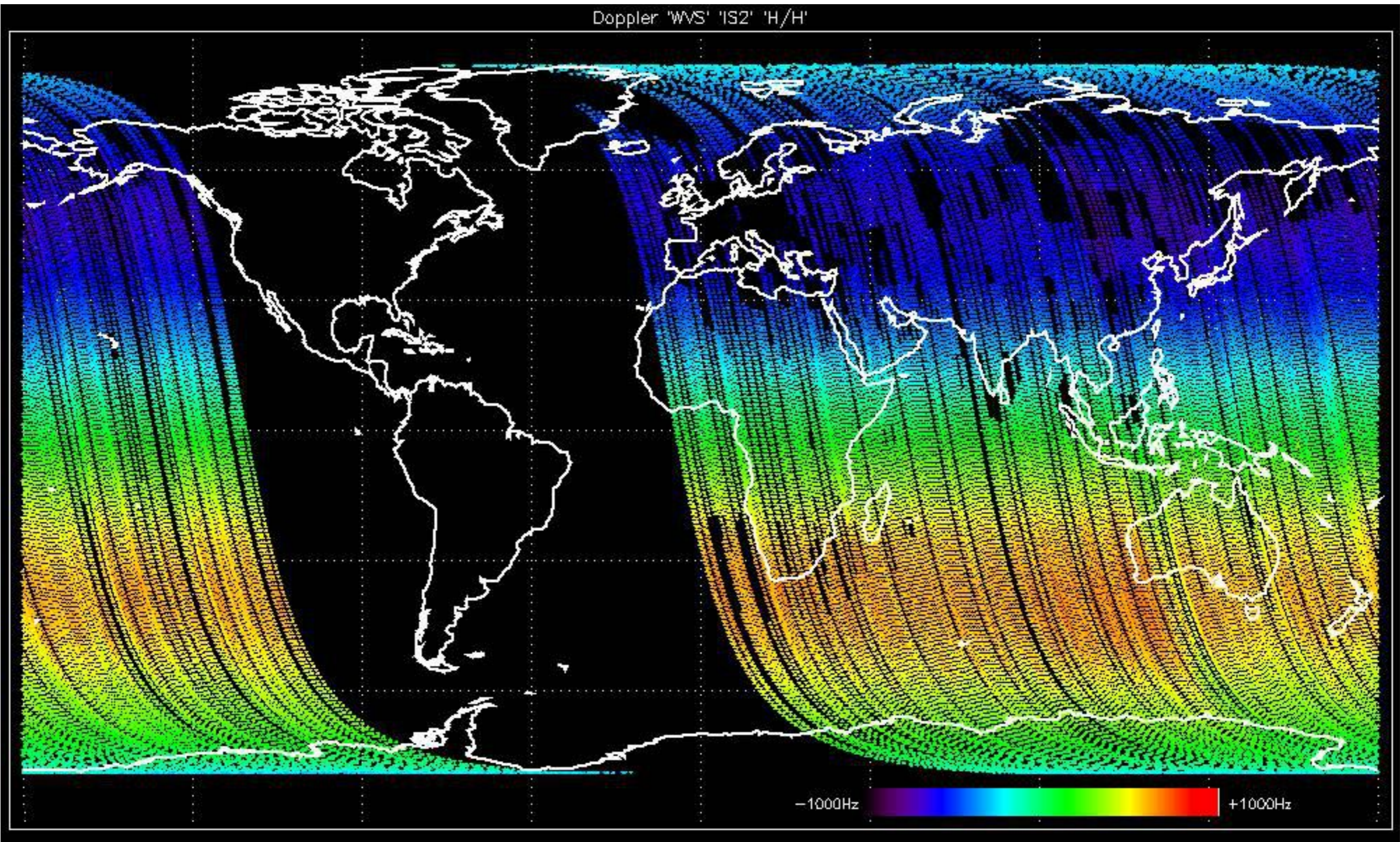
-Stable wave internal calibration pulses gain and phase.

-Stable raw data statistics.

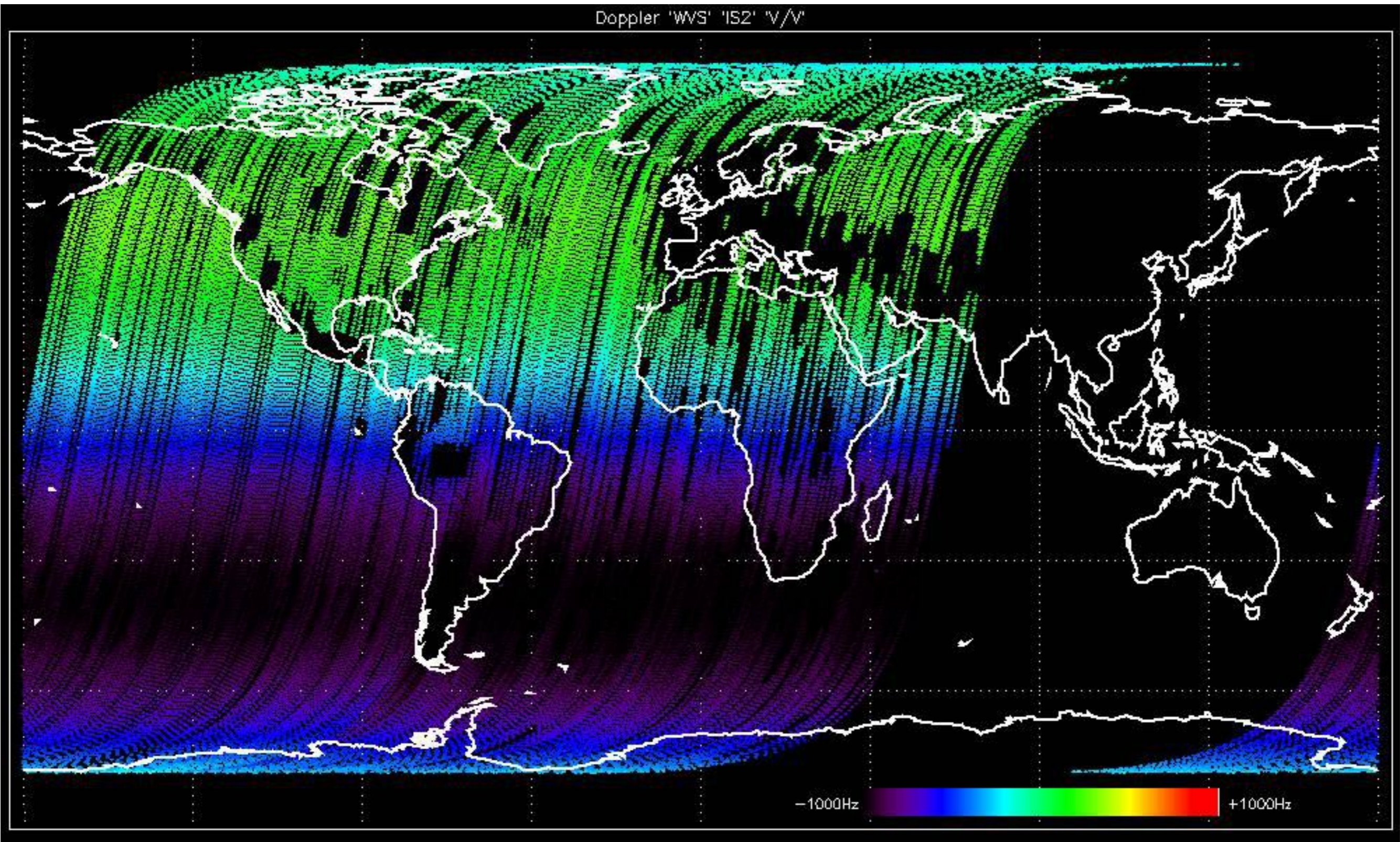
-Nominal Doppler behavior.

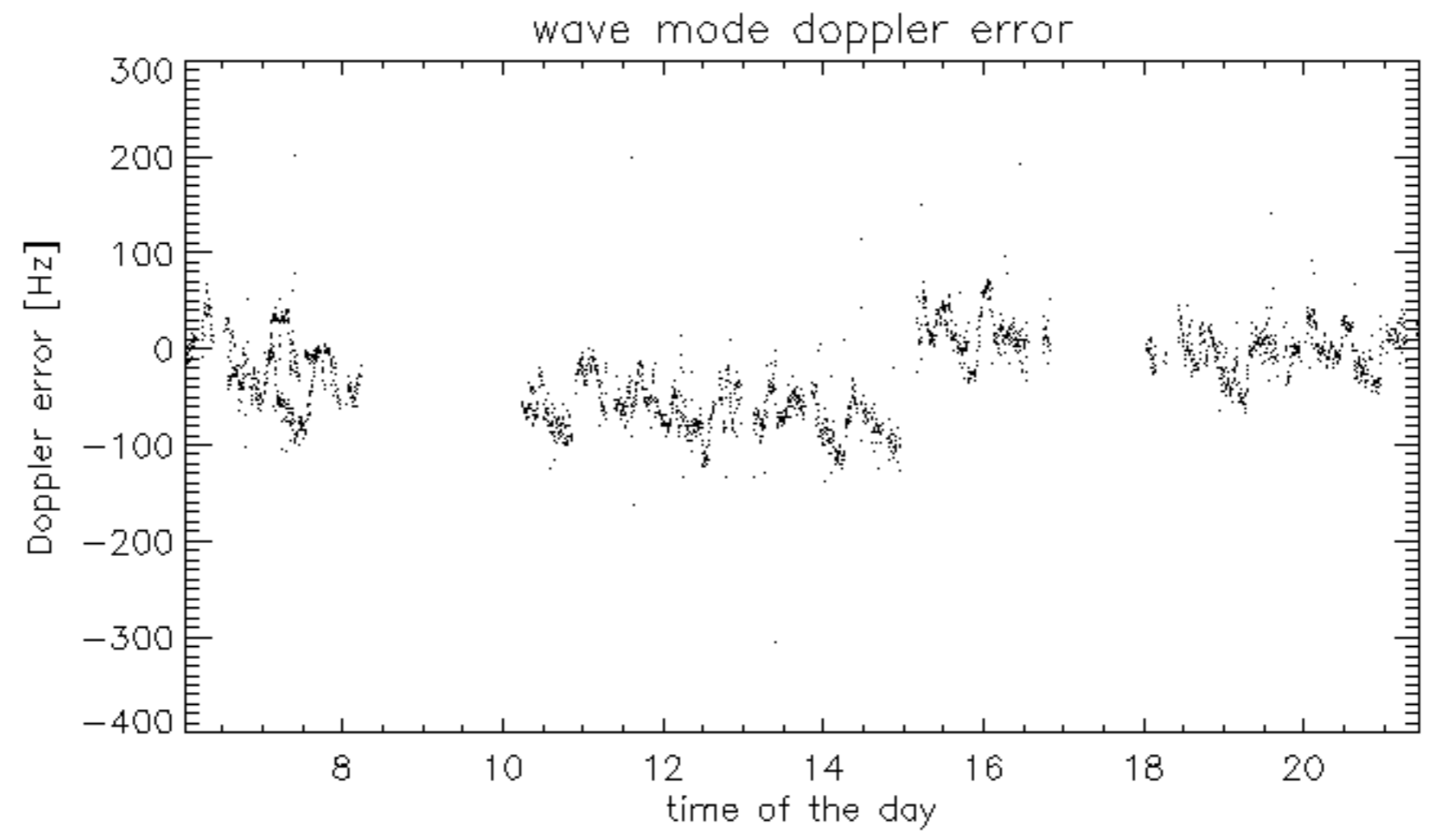
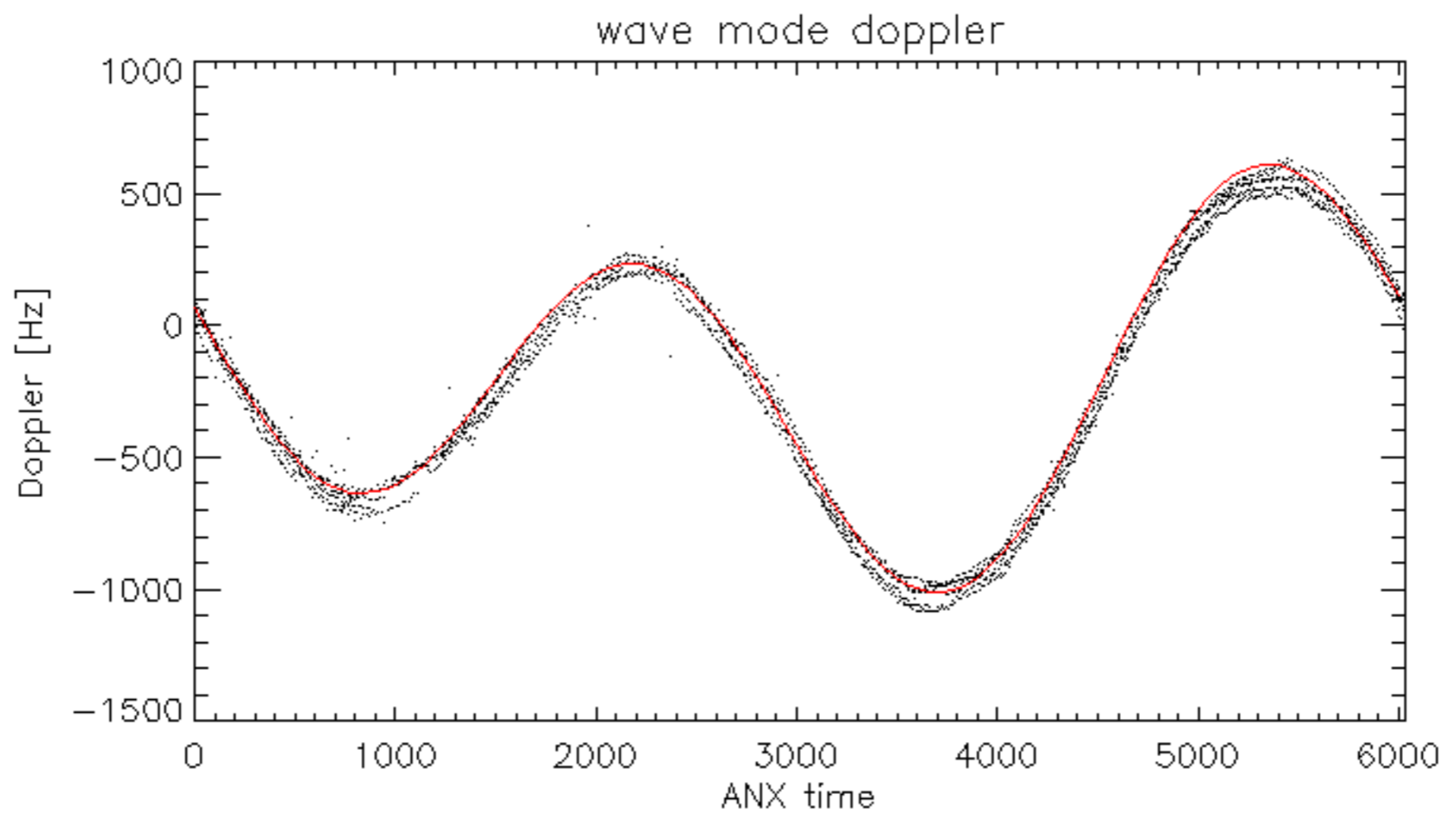
No anomalies observed in Doppler evolution.  
Doppler analysis performed over the last 60 days.

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

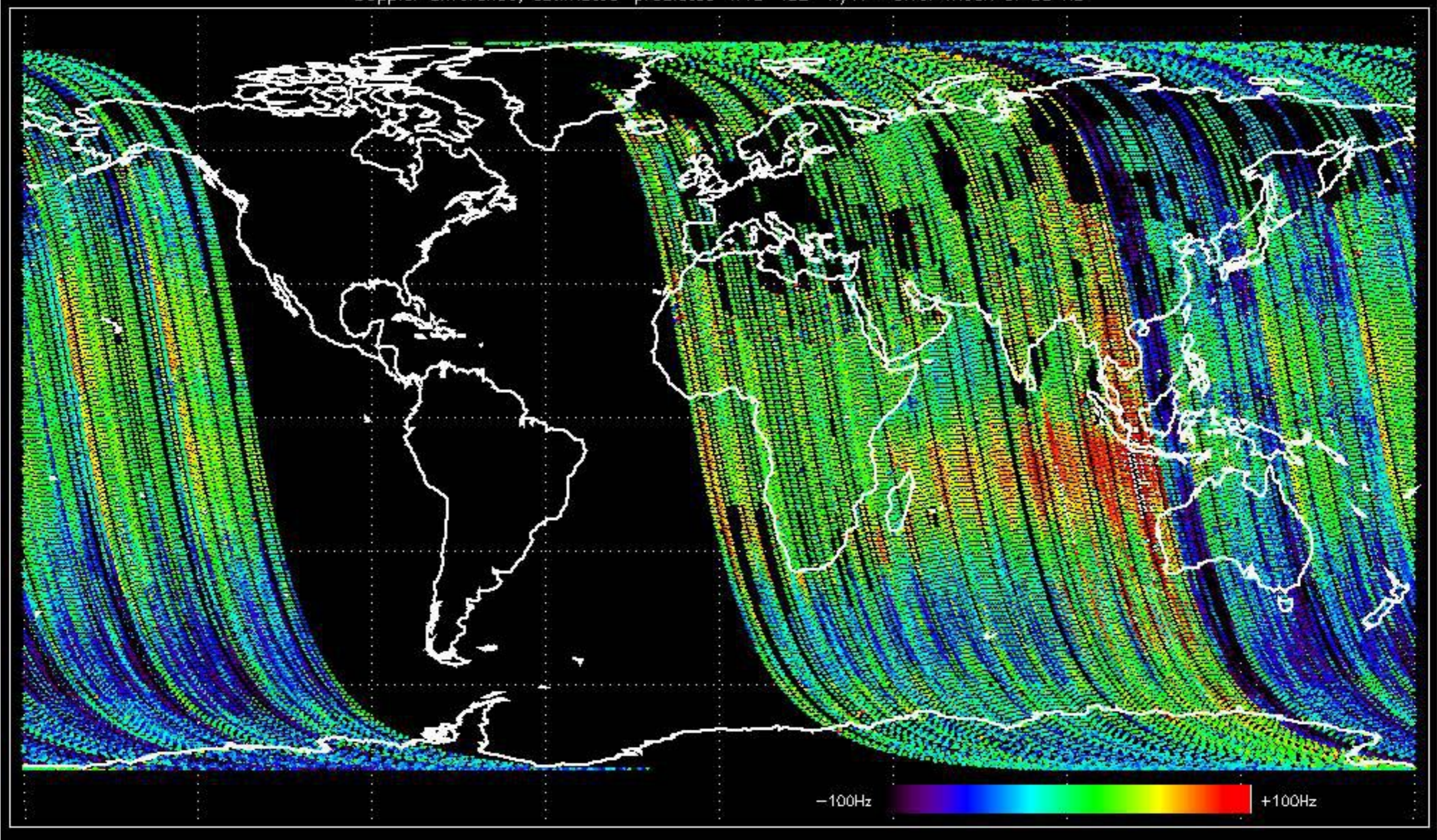


Doppler 'WVS' 'ISZ' 'V/V'



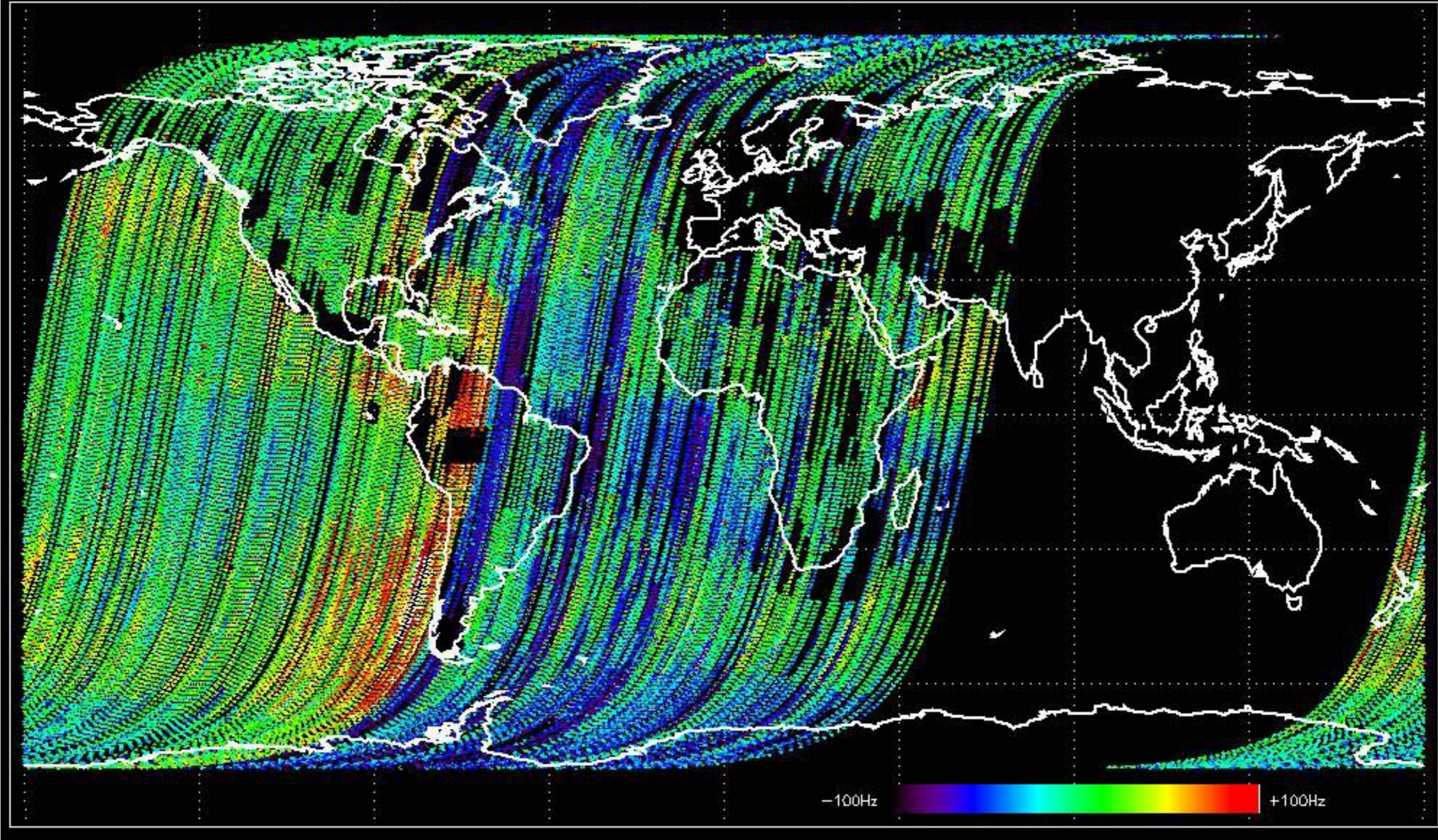


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz





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



One MS product on 15-Jul-2003 (V polarization): ASA\_MS\_\_0PNPK20030715\_210039\_000000152018\_00114\_07182\_0016.N1  
The analysis for H polarization is performed on data acquired on 14-Jul-2003  
No anomalies observed.



No anomalies observed.  
Nominal value of I and Q level0 statistics.









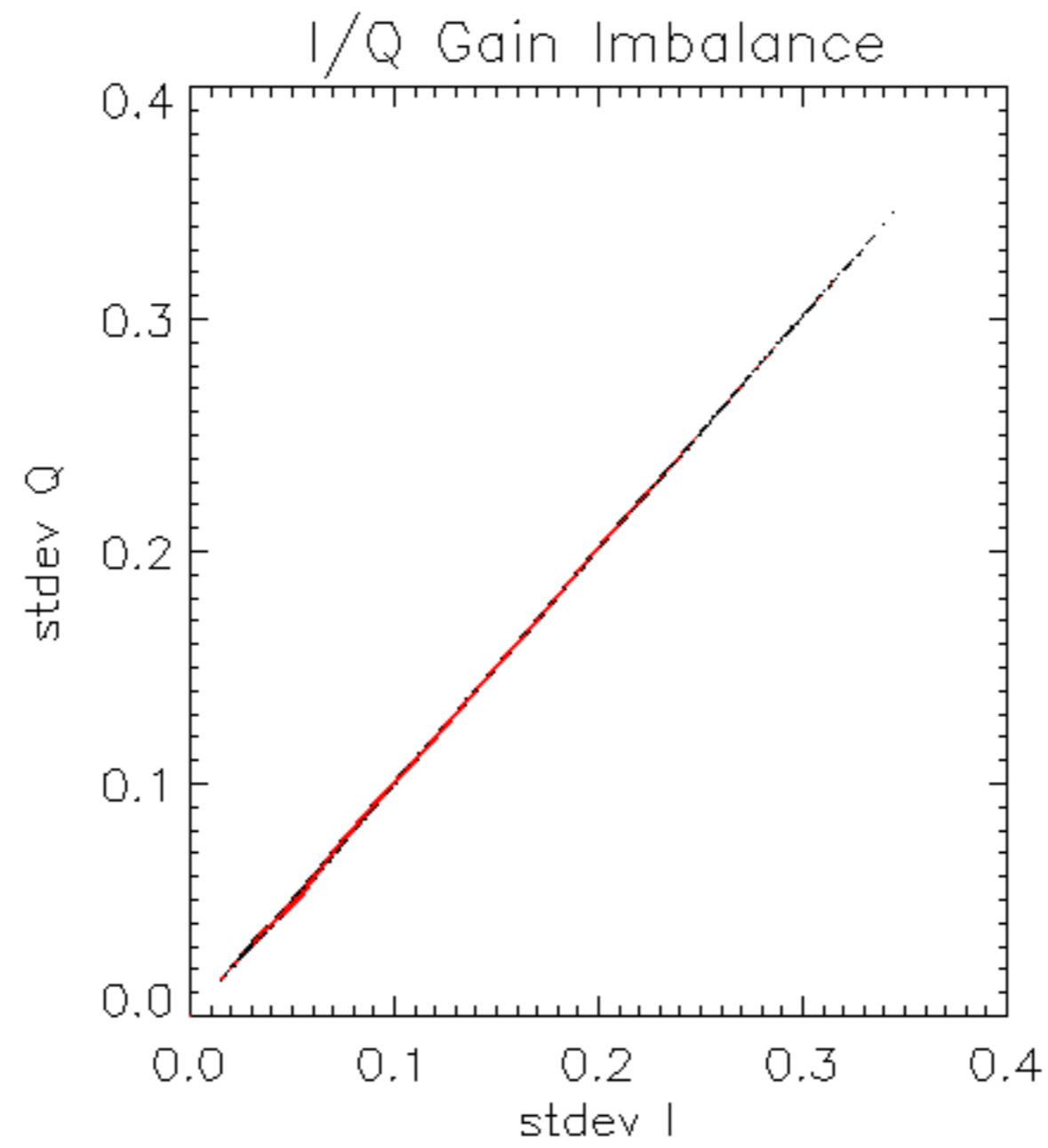


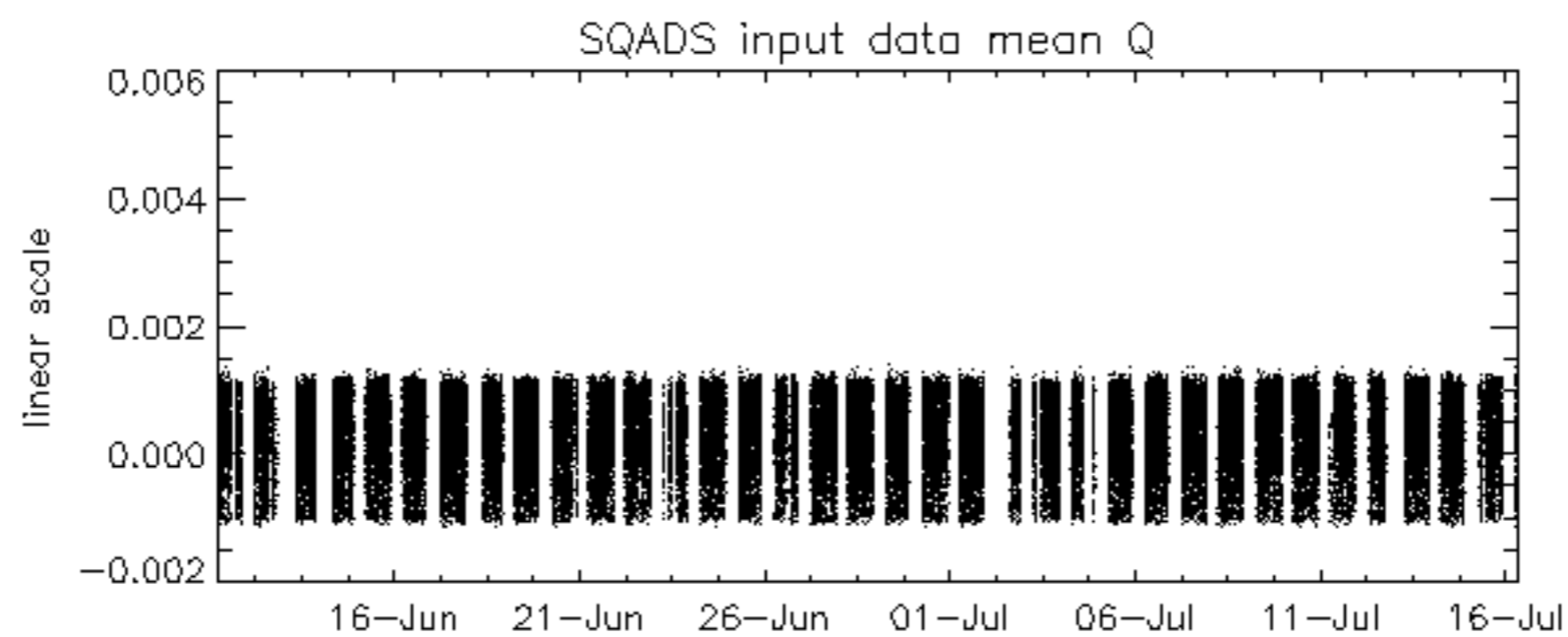
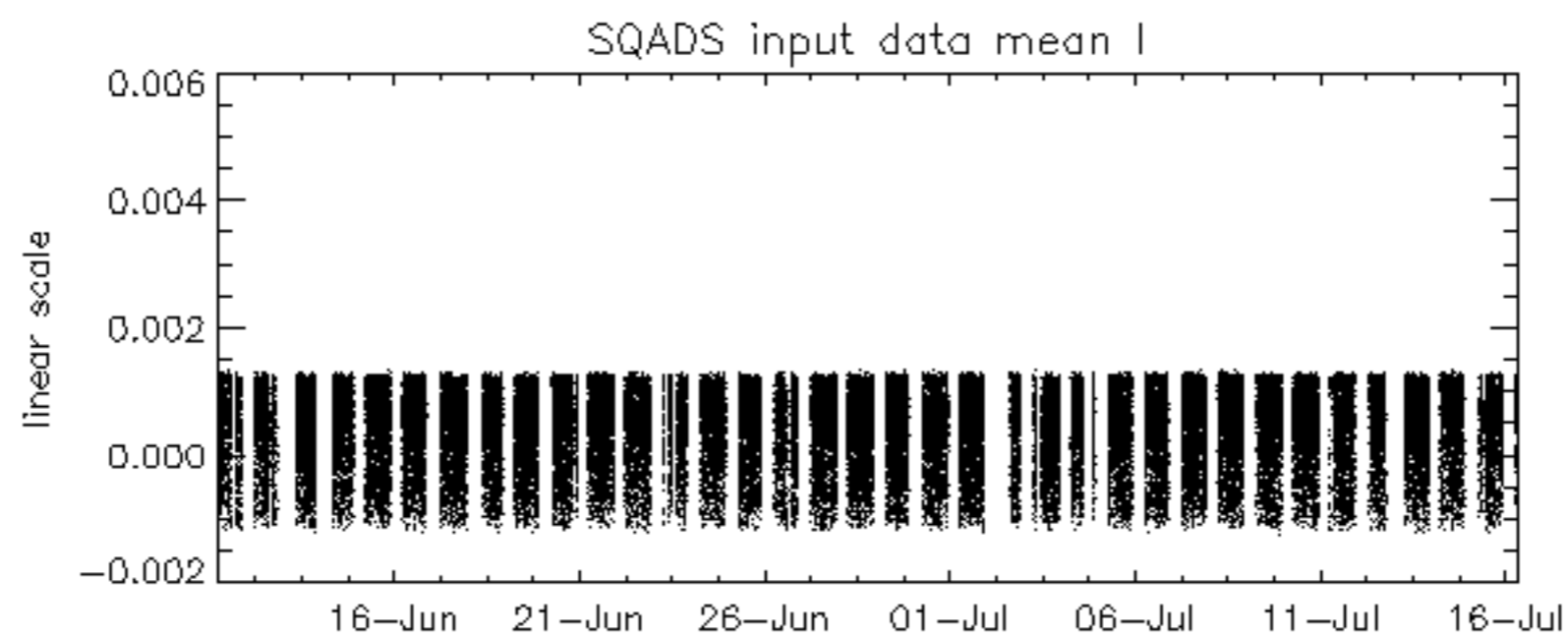
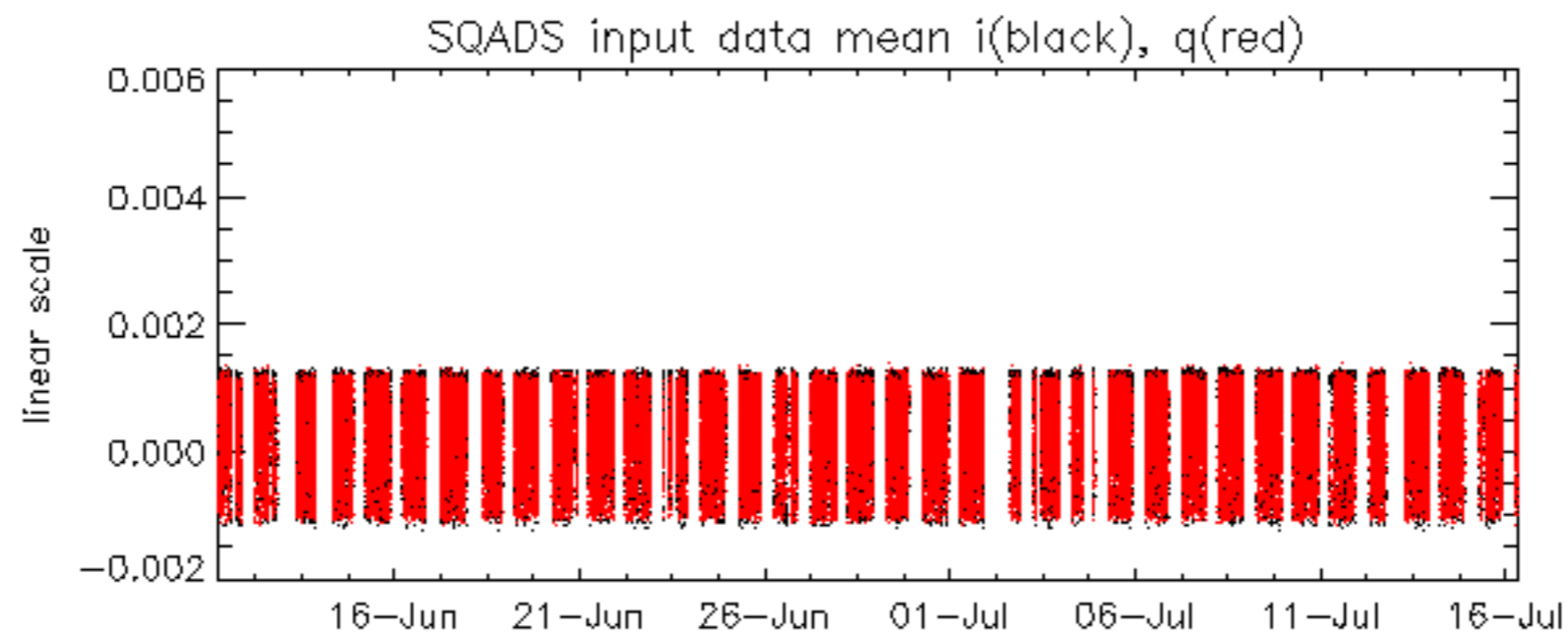


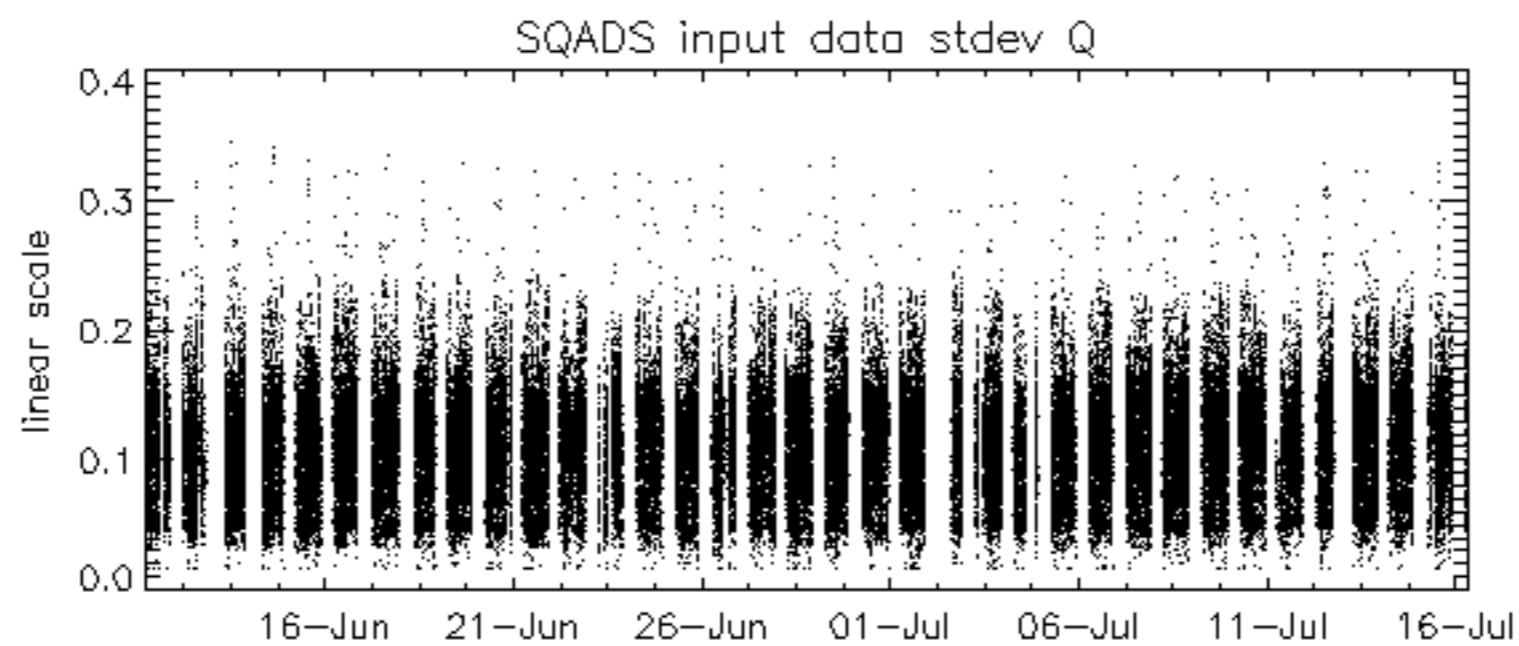
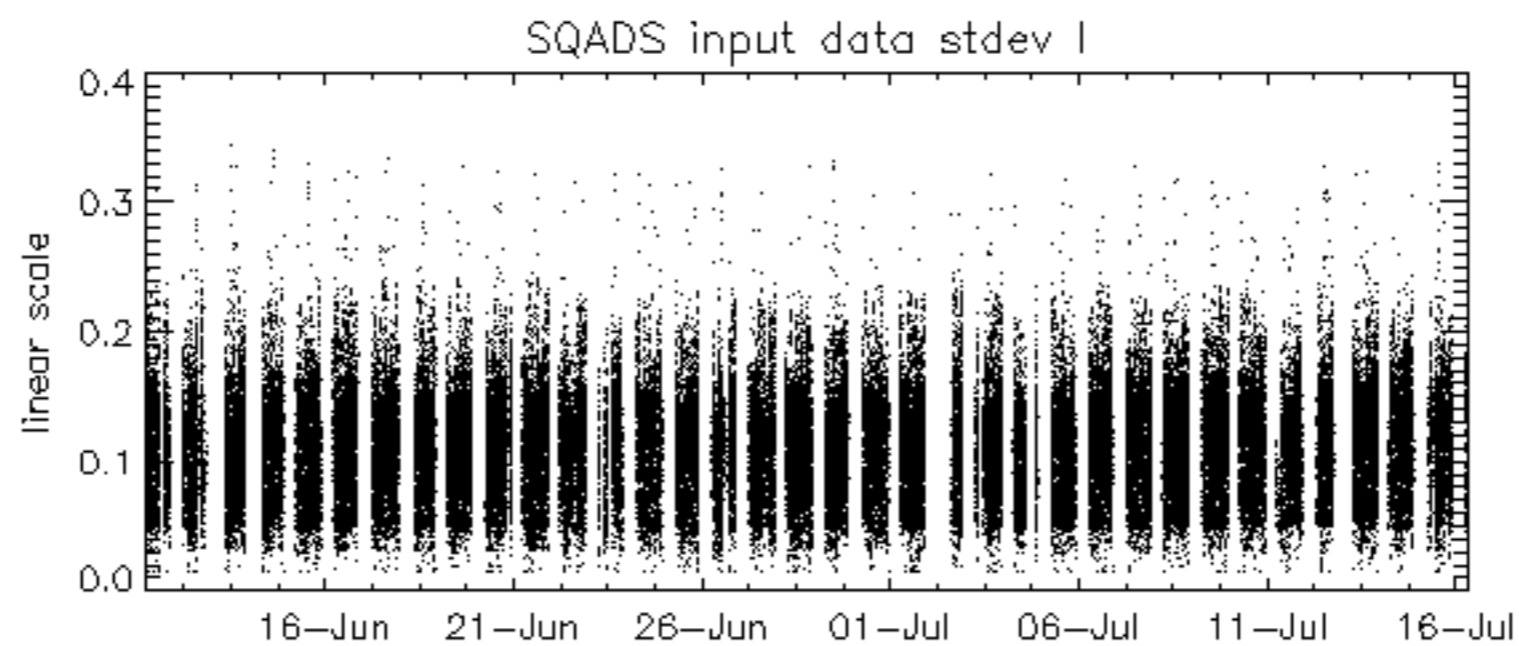
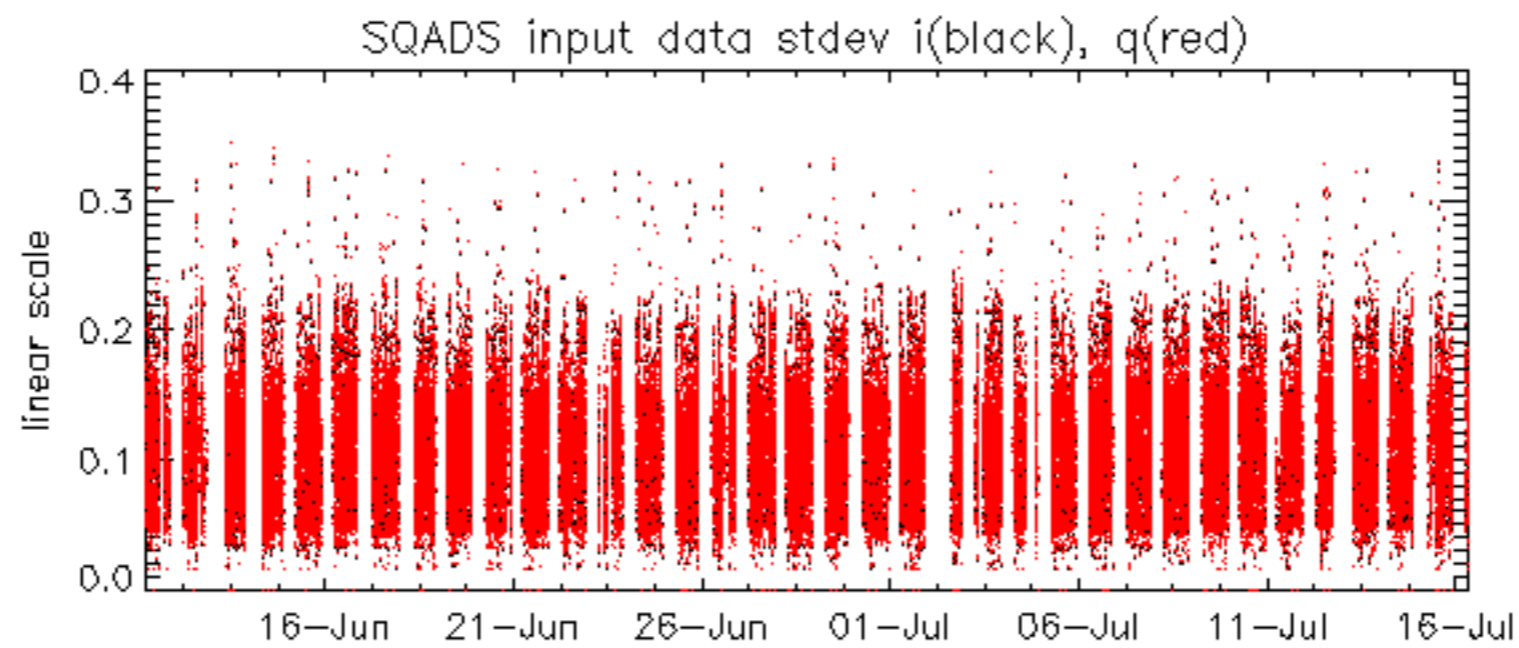






























No unavailabilities during the reported period