

# SUMMARY

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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 last MS available products:









- ASA\_MS\_\_0PNPDK20030728\_190948\_000000152018\_00299\_07367\_0046.N1
- ASA\_MS\_\_0PNPDK20030728\_191128\_000000152018\_00299\_07367\_0045.N1

The drift in phase for TR module 3 on Tile B3 has decreased to a stable configuration as shown in the figure below.











Polarisation	Start Time
V	20030728 191128
H	20030728 190948

#### 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	-3.81649	-22.5738	-8.10563
	stdev	0.00528619	0.0628867	0.00220541
10	mean	-6.90722	-19.3322	-8.10563
	stdev	0.0220113	0.0589293	0.00220541



### 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.87066	-22.5695	-8.10021
	stdev	0.0846594	0.0625208	0.00287832
10	mean	-6.97393	-19.3244	-8.10028
	stdev	0.405231	0.0614368	0.00287807



### 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	0.000479461
	stdev	3.02287e-07
MEAN Q	mean	0.000312780
	stdev	3.15665e-07



## 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.114769
	stdev	0.00161001
STDEV Q	mean	0.114878
	stdev	0.00164181



## 5.3 - Gain imbalance I/Q



## 6 - Wave Doppler Analysis

No anomalies observed Doppler evolution.  
 Doppler analysis performed over the last 60 days  
 The data gap on the following is due to the missing product of Svalbard station.

### 6.1 - Unbiased Doppler Error

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

### 6.2 - Absolute Doppler

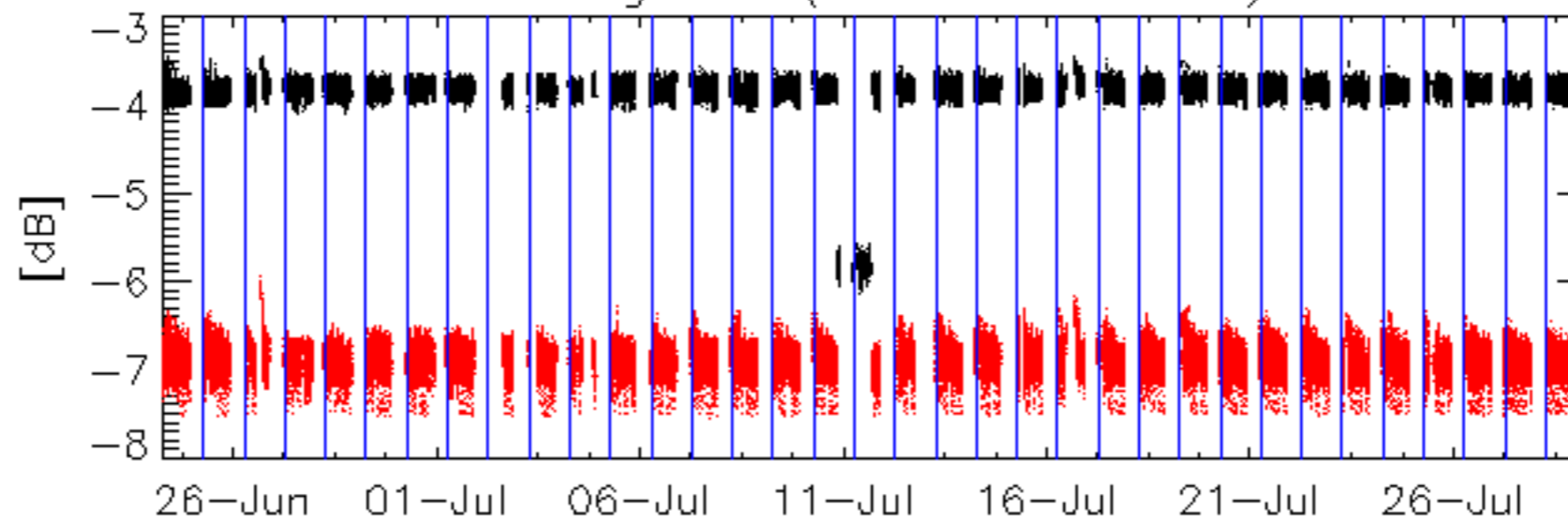
Evolution of Absolute Doppler
Ascending
Descending

### 6.3 - Doppler evolution versus ANX

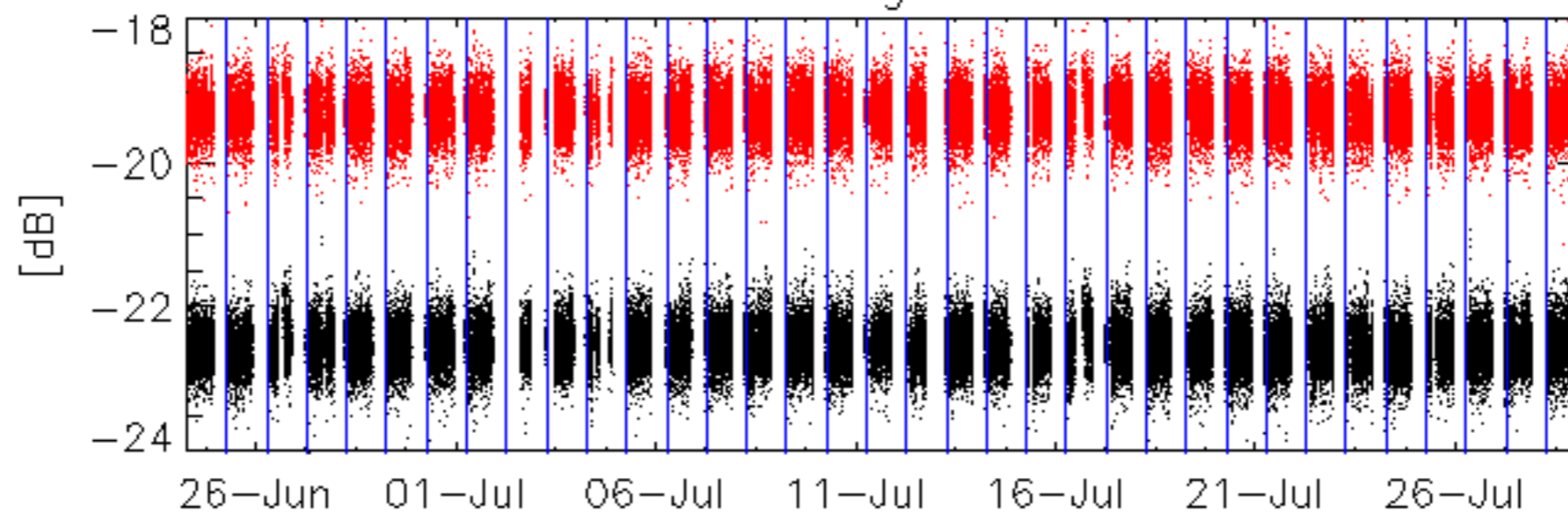
Evolution Doppler error versus ANX



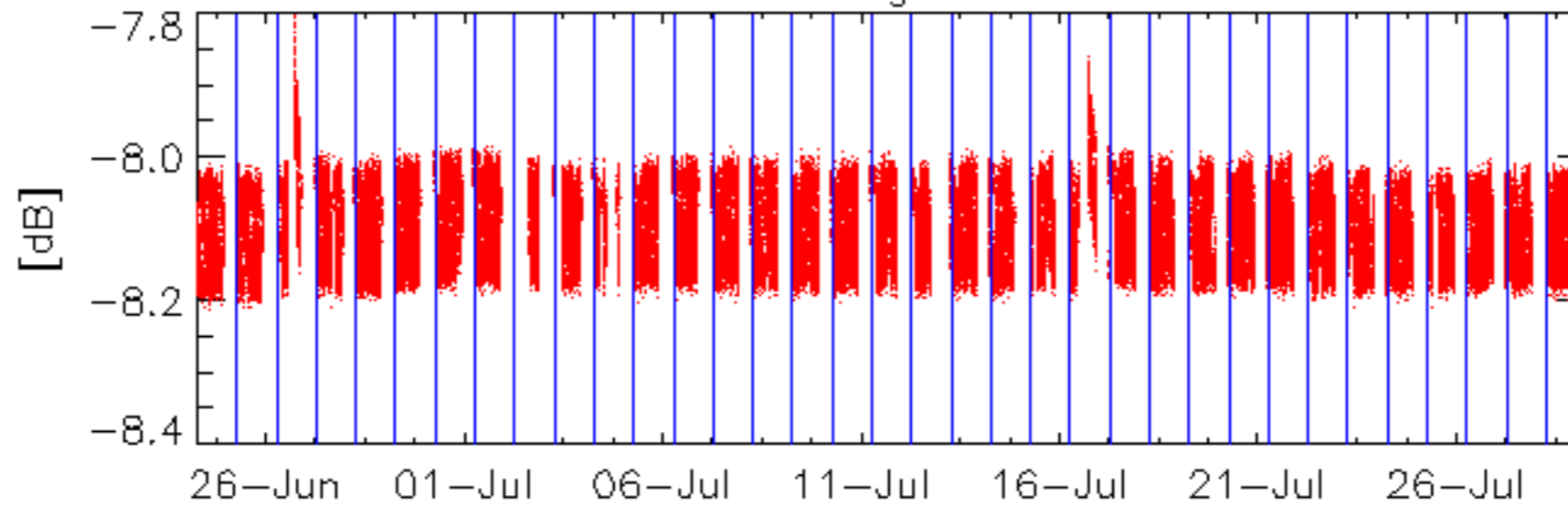
Average P1 (row 3 & row 10)



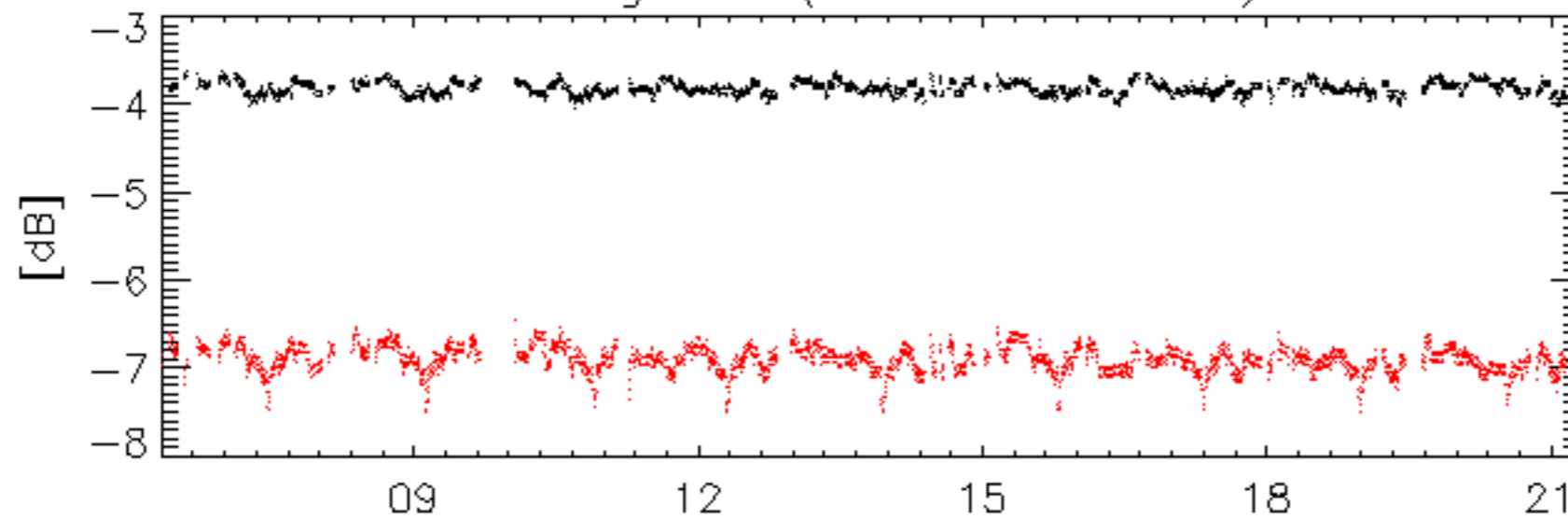
Average P2



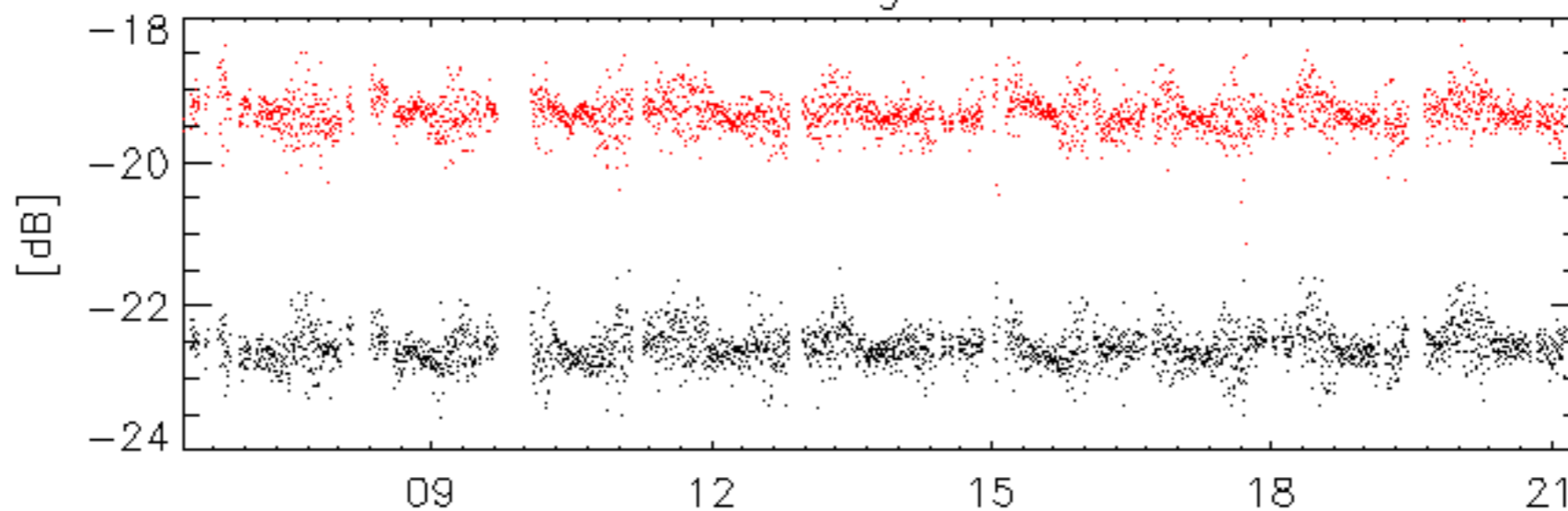
Average P3



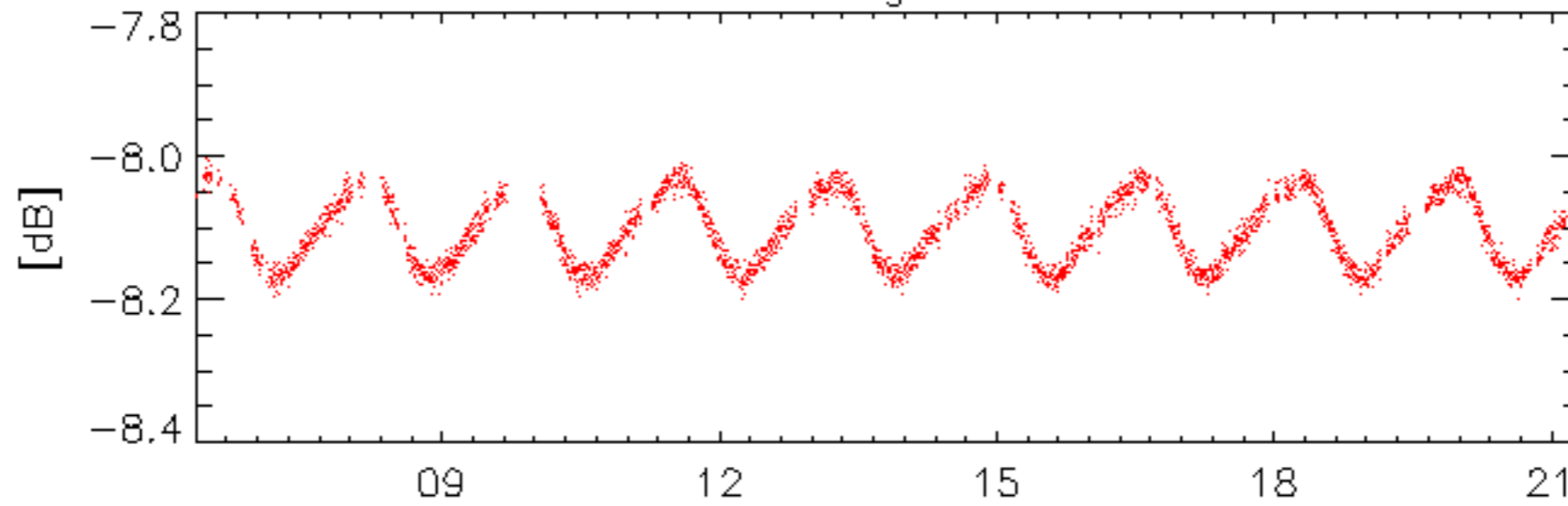
Average P1 (row 3 & row 10)



28-Jul  
Average P2



28-Jul  
Average P3

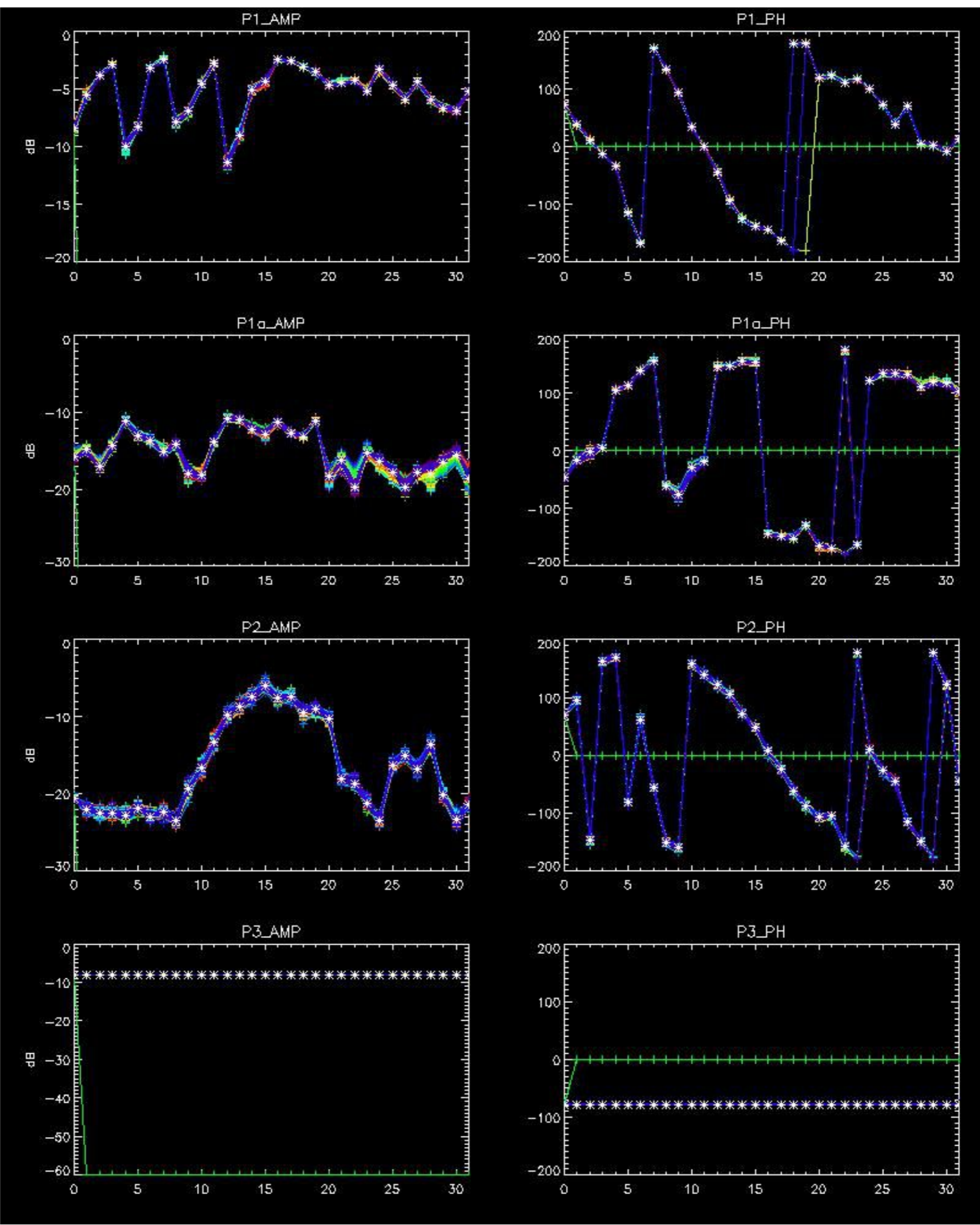


28-Jul

No anomalies observed on available browse products.



No anomalies observed.

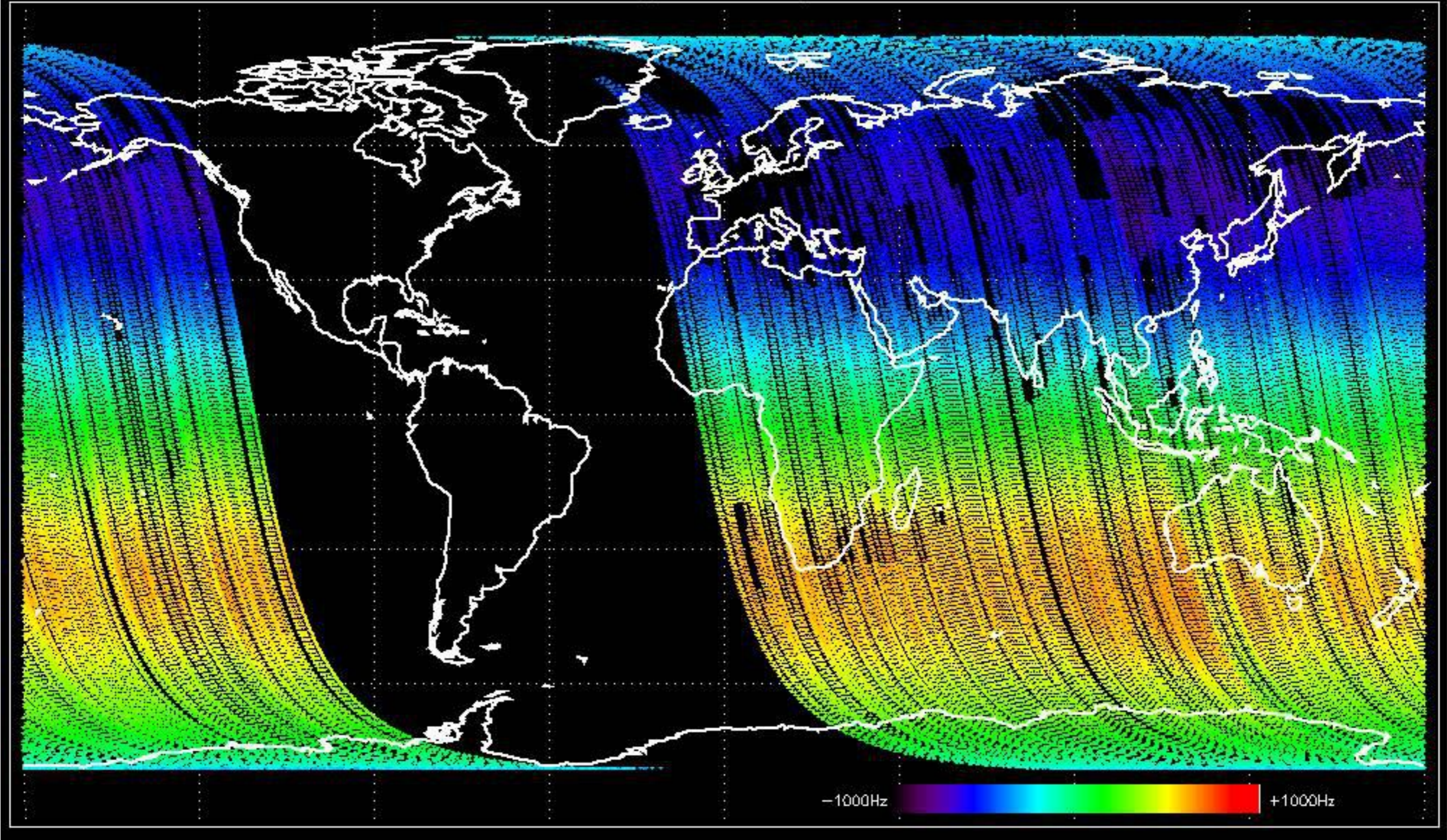


- Stable wave internal calibration pulses gain and phase.
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- Nominal Doppler behavior.

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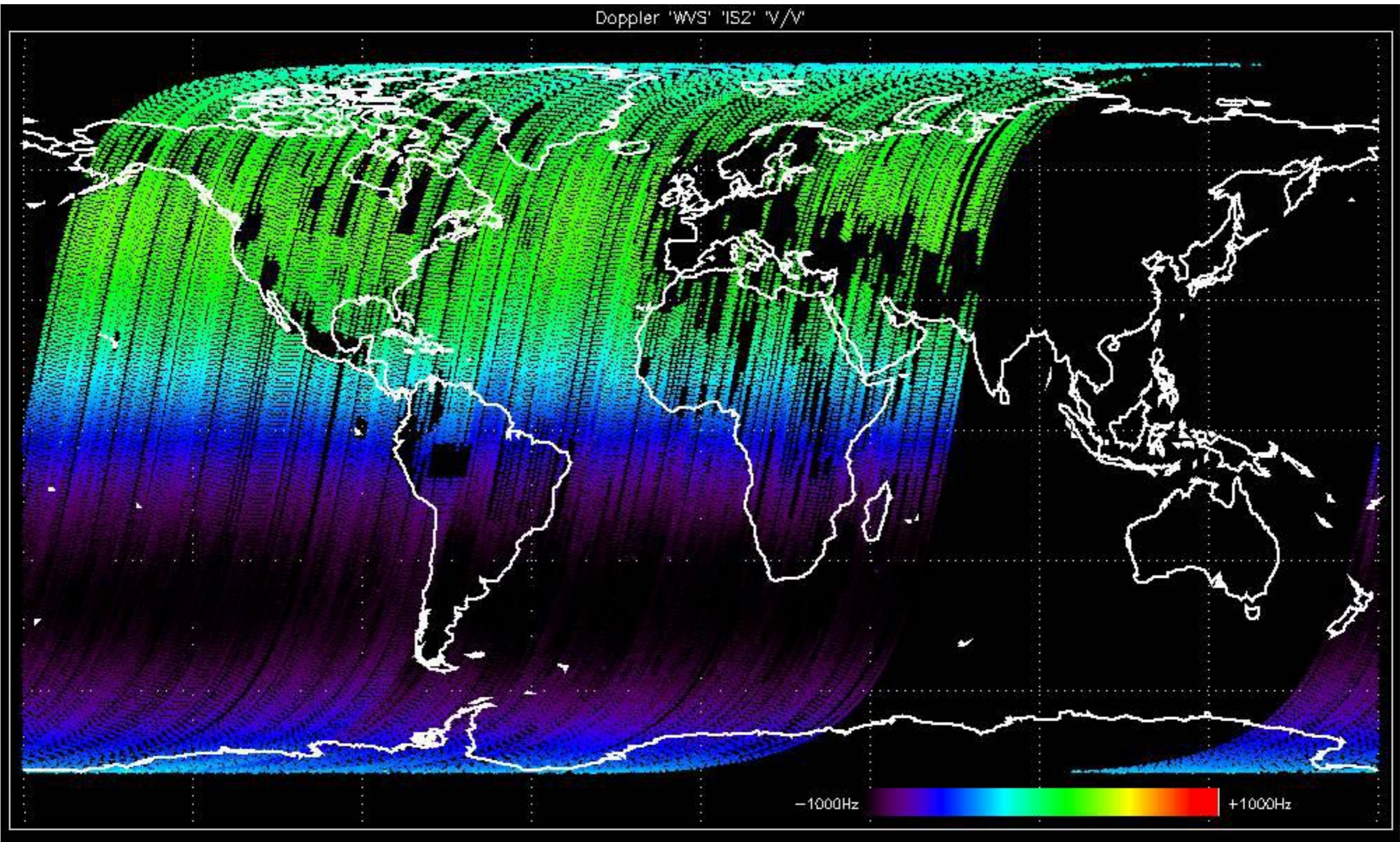


Doppler 'WVS' 'IS2' 'H/H'

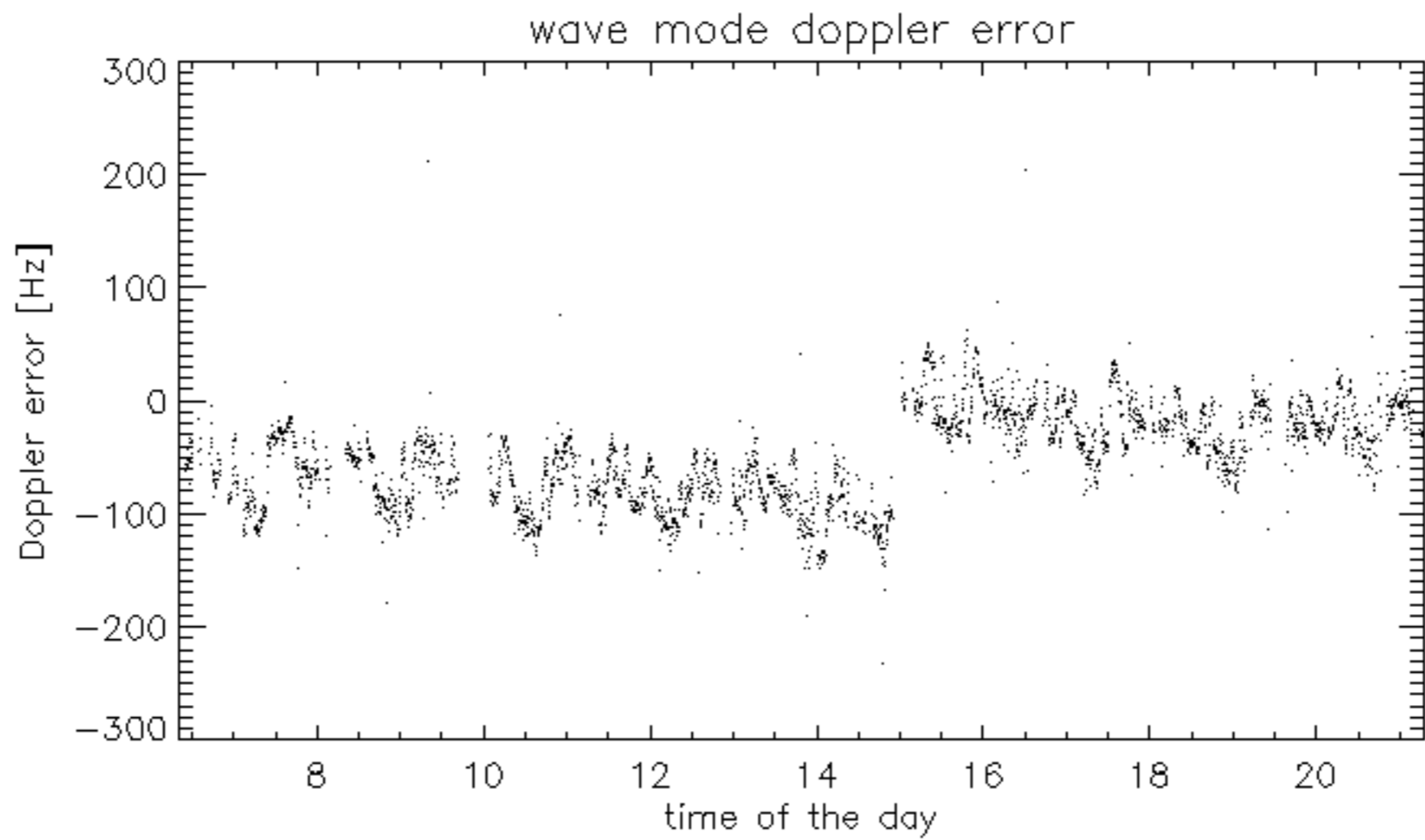
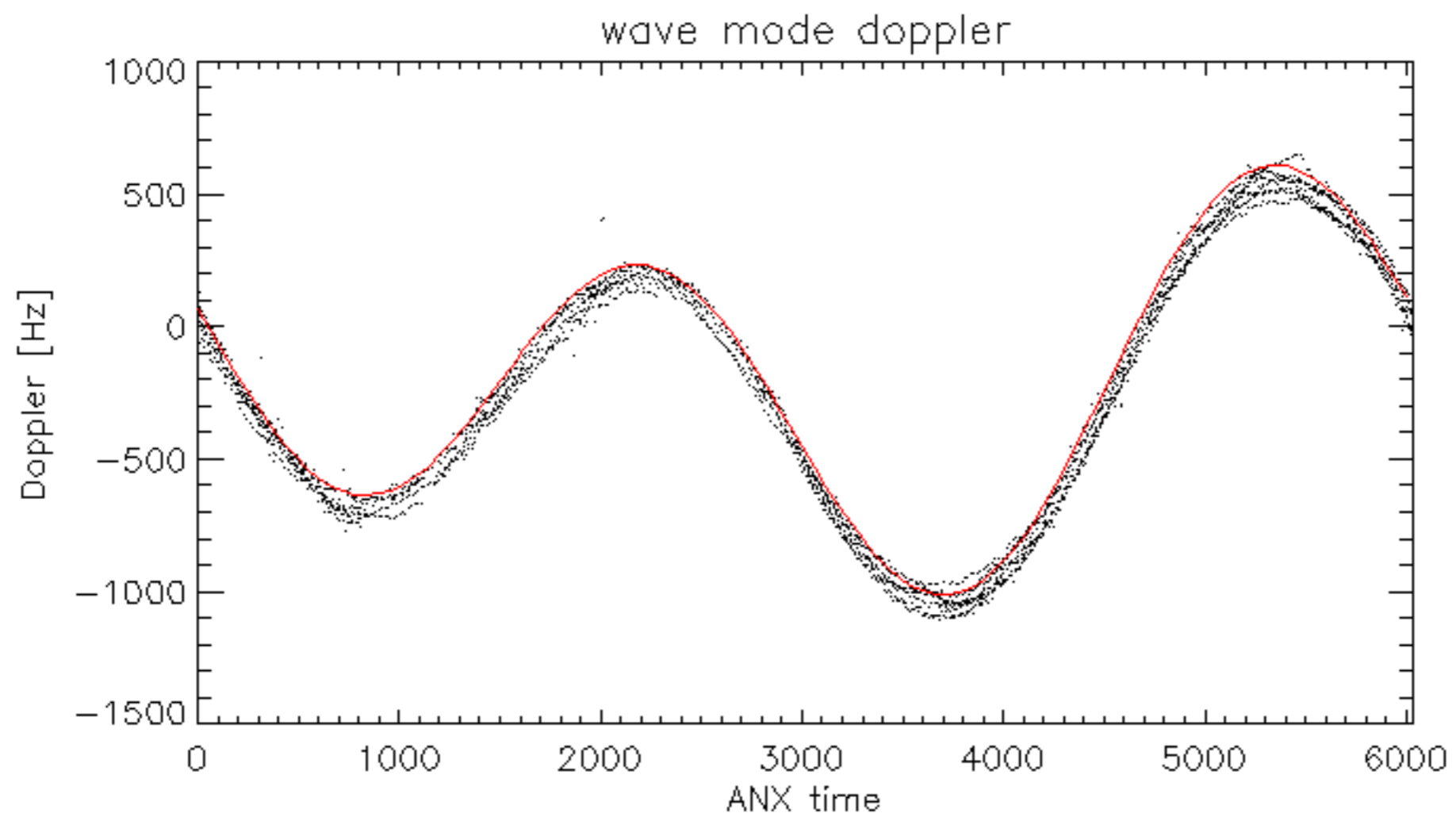




Doppler 'WVS' 'IS2' 'V/V'

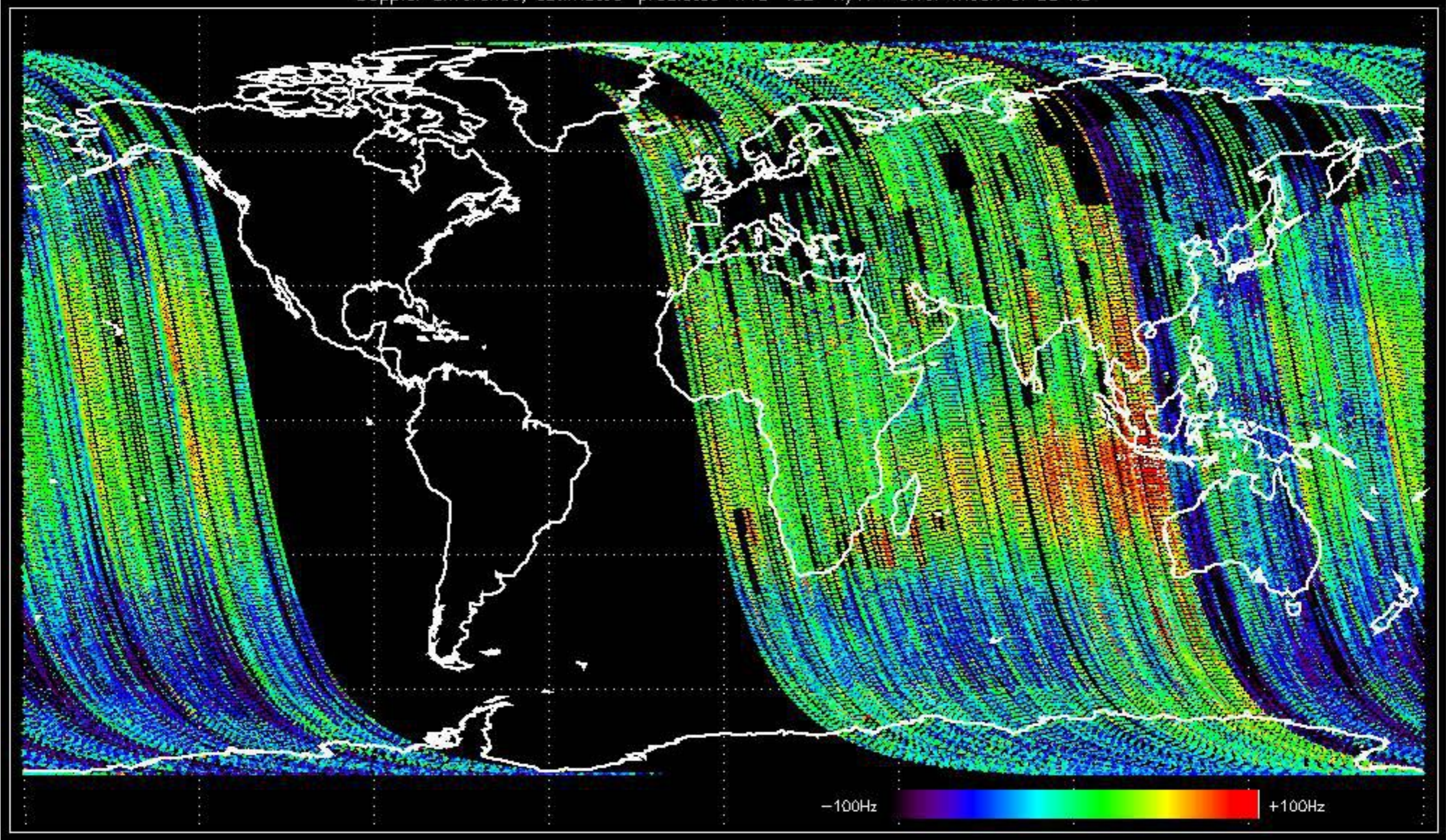






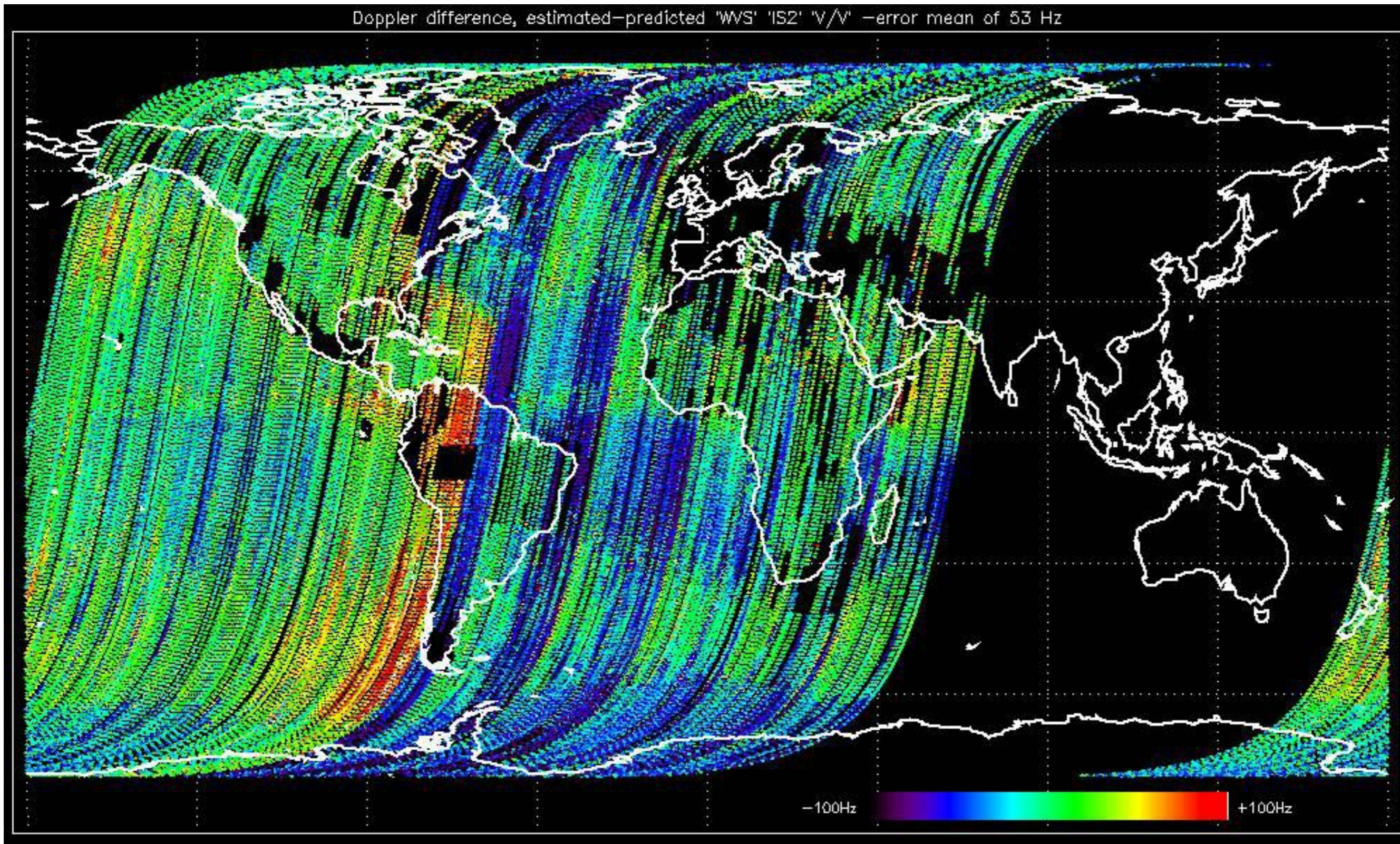


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz





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





No anomalies observed on last MS available products:

- ASA\_MS\_\_0PNPK20030728\_190948\_000000152018\_00299\_07367\_0046.N1
- ASA\_MS\_\_0PNPK20030728\_191128\_000000152018\_00299\_07367\_0045.N1

The drift in phase for TR module 3 on Tile B3 has decreased to a stable configuration as shown in the figure below.

No anomalies observed.









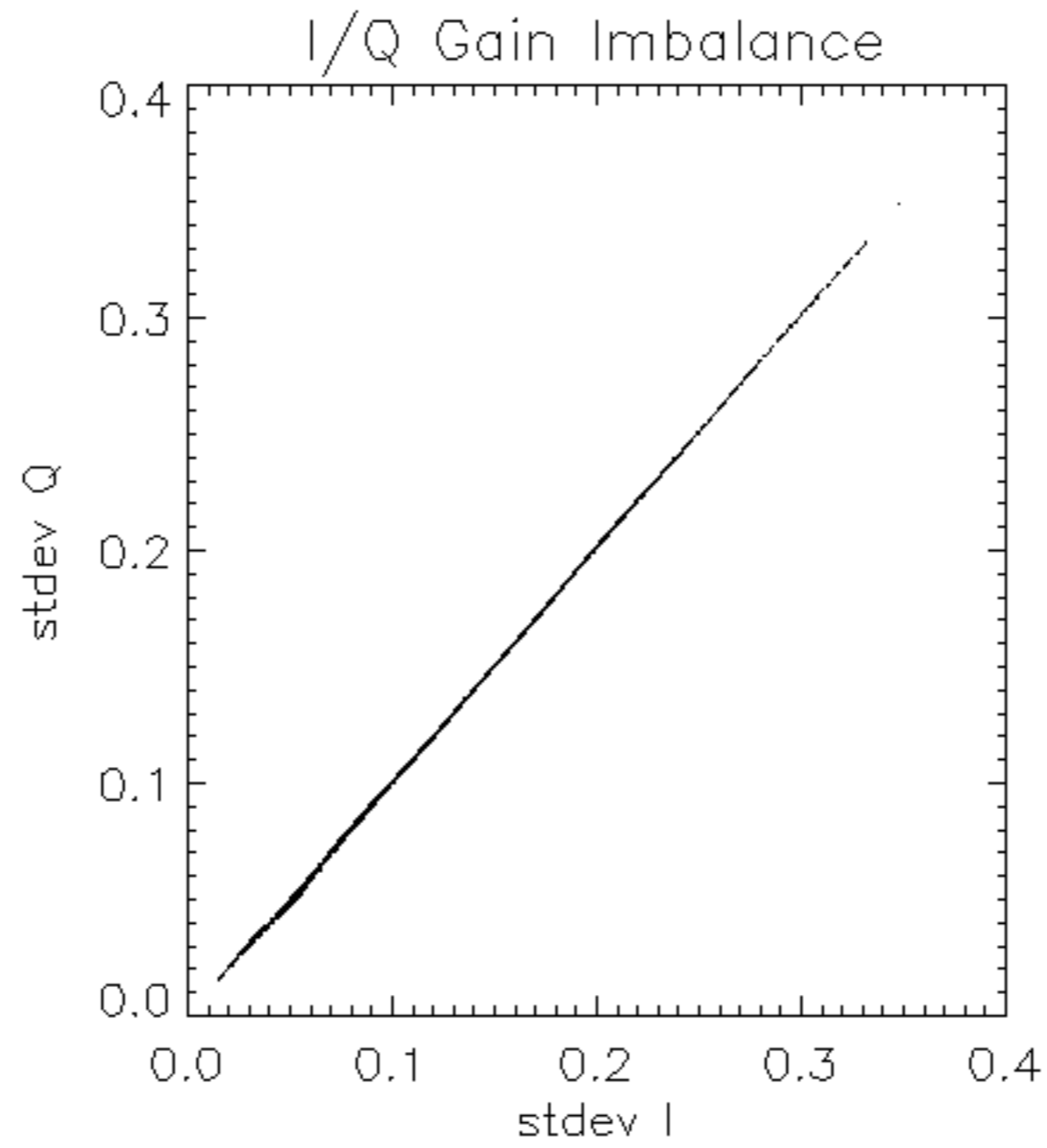


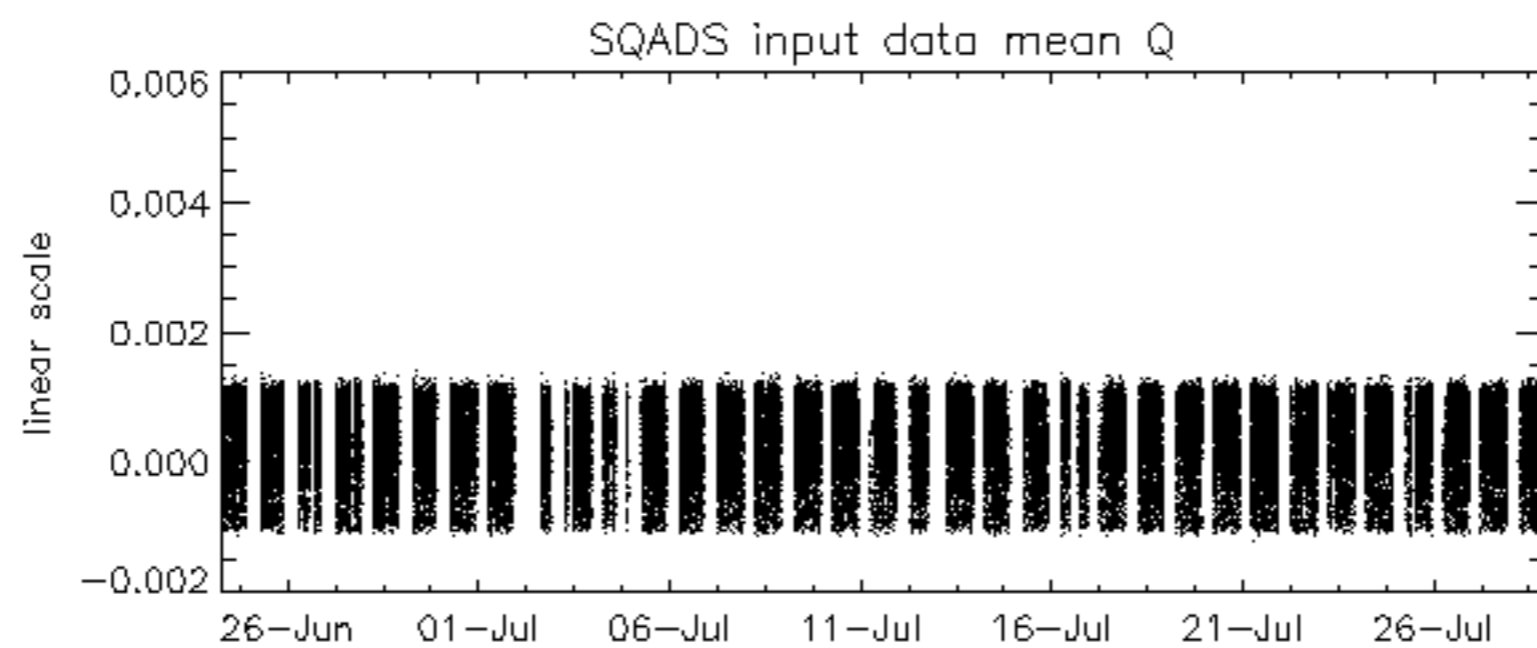
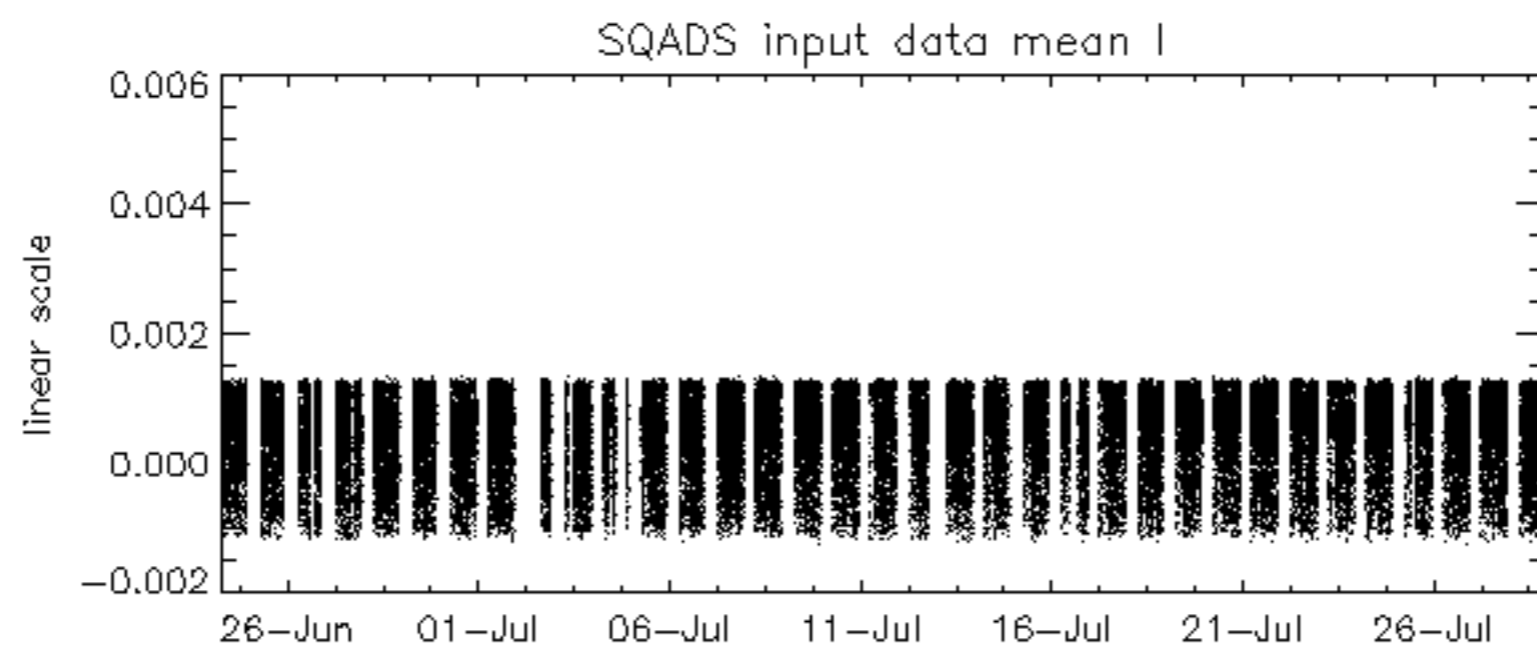
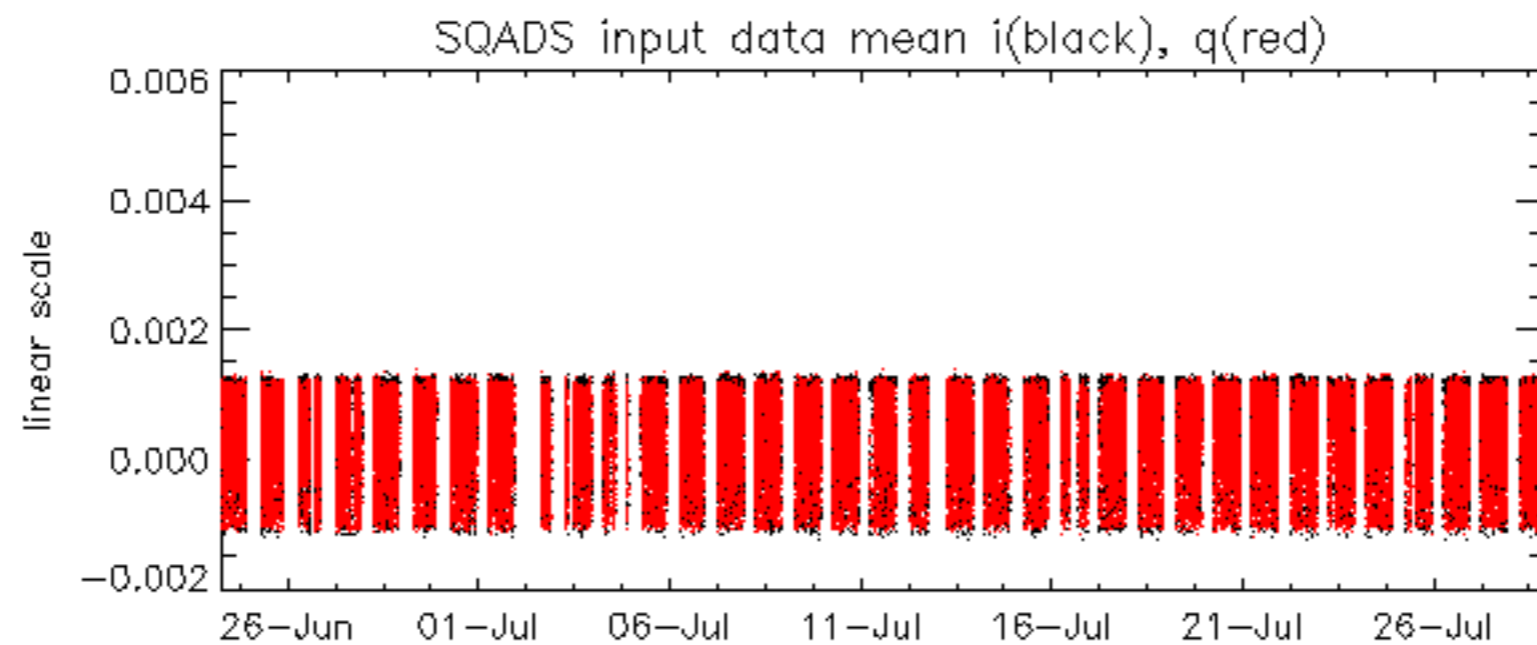


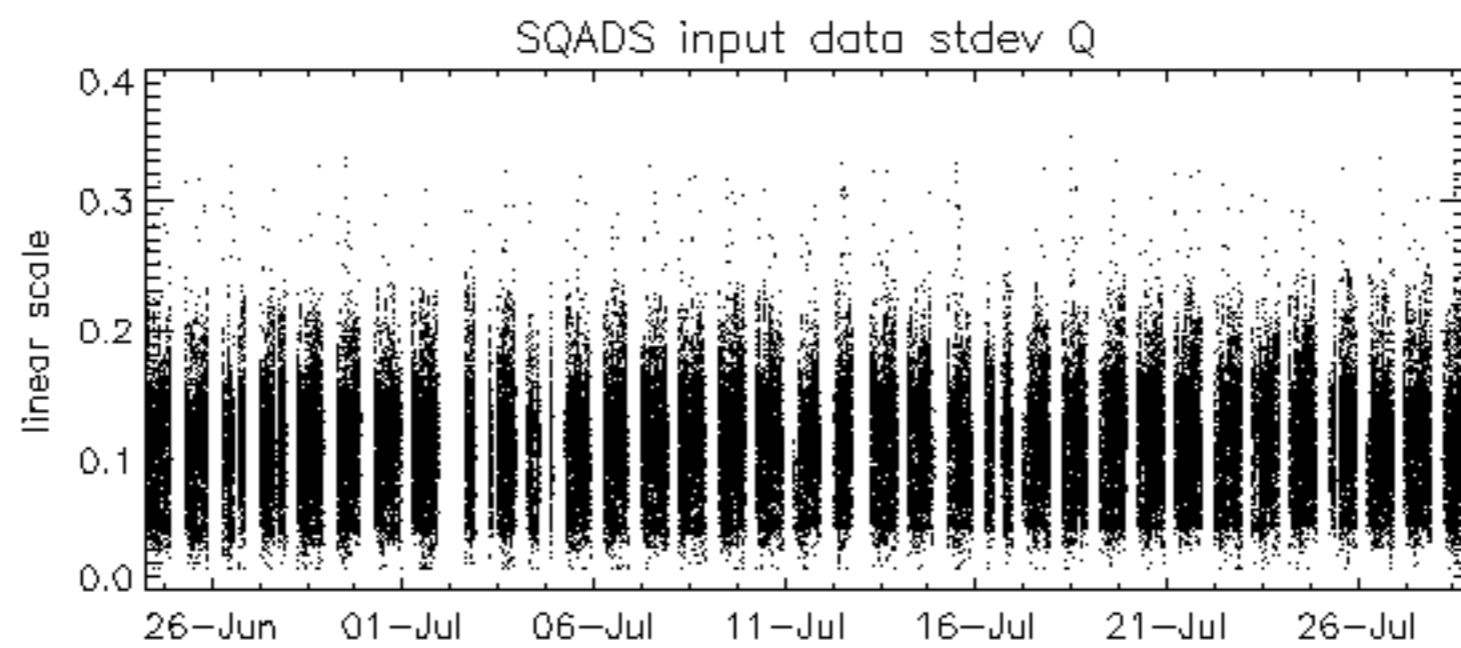
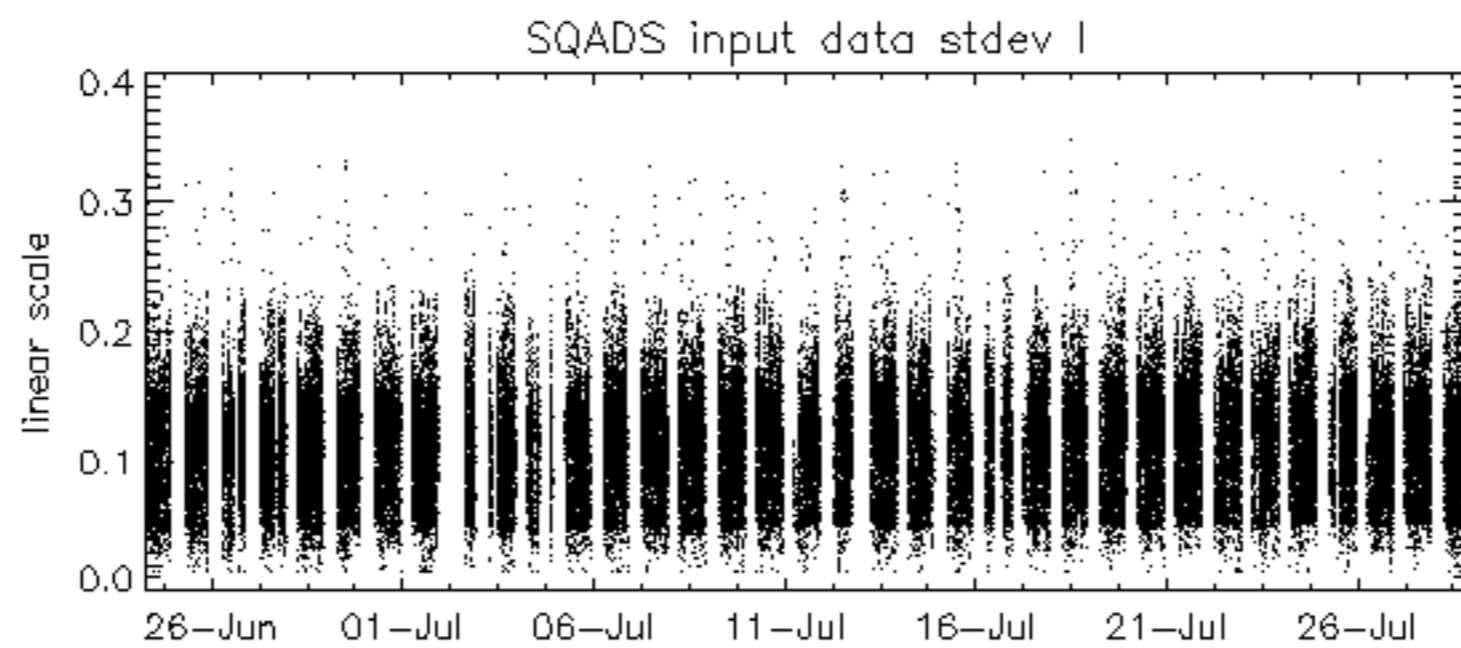
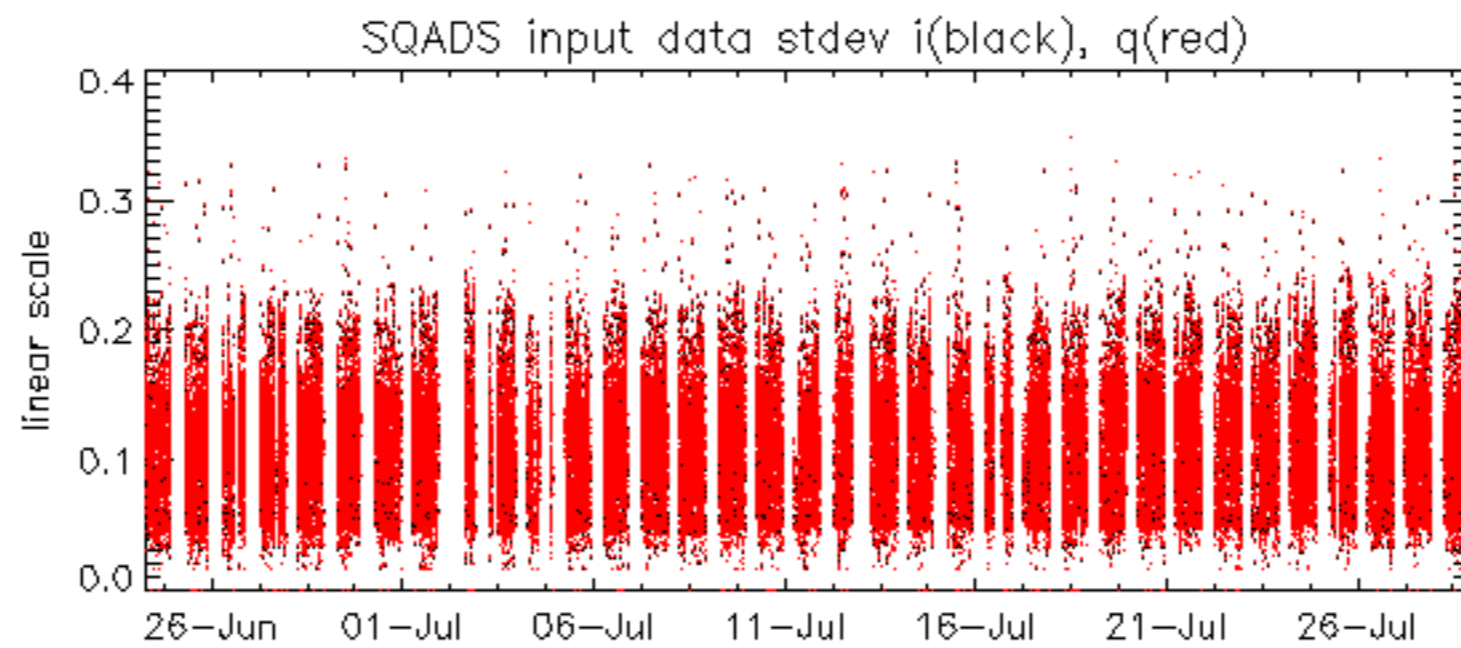






























No unavailabilities during the reported period