

# 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.
- Missing products from Svalbard station

## 3 - Module Stepping Mode

No anomalies observed on available MS products:

- ASA\_MS\_\_0PNPDK20030730\_194710\_000000152018\_00328\_07396\_0049.N1
- ASA\_MS\_\_0PNPDK20030730\_194850\_000000152018\_00328\_07396\_0050.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	20030730 194850
H	20030730 194710

### 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. Nominal behaviour.  
Stable statistics regarding the last 35 days.

#### 4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.82021	-22.5716	-8.11074
	stdev	0.00530368	0.0608998	0.00200769
10	mean	-6.91579	-19.3331	-8.11074
	stdev	0.0244937	0.0611543	0.00200769



#### 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.86970	-22.5672	-8.10006
	stdev	0.0851507	0.0626268	0.00284706
10	mean	-6.97766	-19.3249	-8.10006
	stdev	0.406867	0.0615327	0.00284706



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



### 5 - RAW data statistics

No anomalies observed. Nominal behavior.

#### 5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000478395
	stdev	3.02791e-07
MEAN Q	mean	0.000311849
	stdev	3.15654e-07



## 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115041
	stdev	0.00161057
STDEV Q	mean	0.115155
	stdev	0.00164224



## 5.3 - Gain imbalance I/Q



## 6 - Wave Doppler Analysis

No anomalies observed Doppler evolution.  
 Doppler analysis performed over the last 60 days  
 Data gap is relative to the missing data of Svalbard station.

### 6.1 - Unbiased Doppler Error

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

### 6.2 - Absolute Doppler

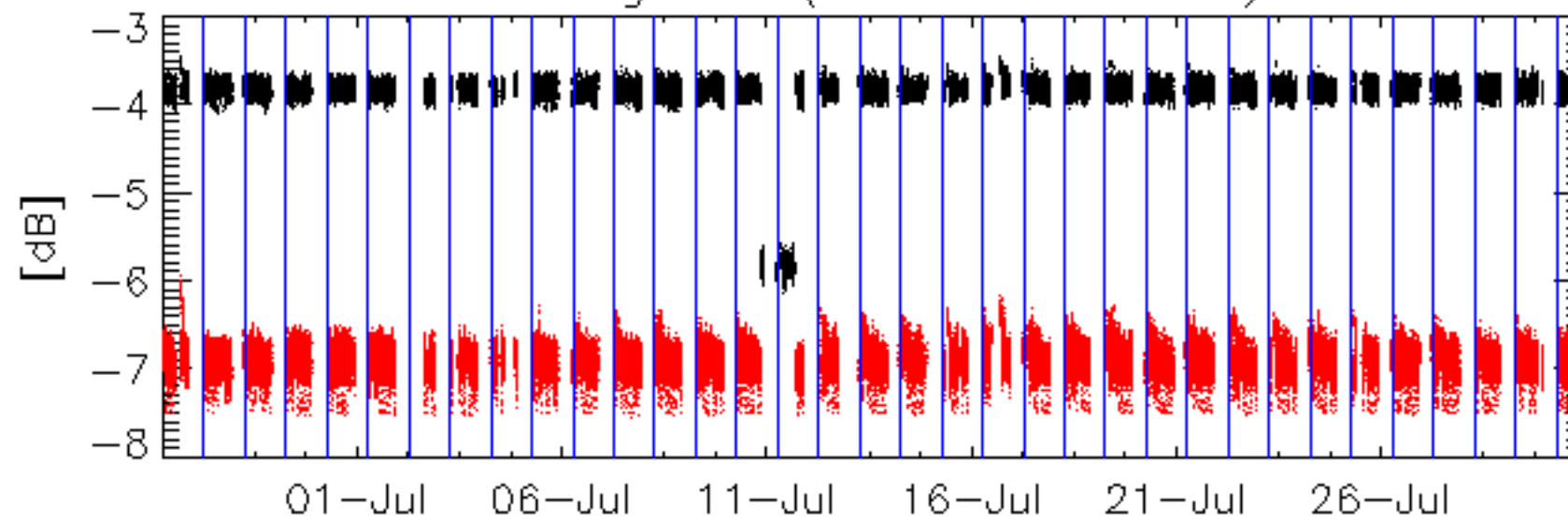
Evolution of Absolute Doppler
Ascending
Descending

### 6.3 - Doppler evolution versus ANX

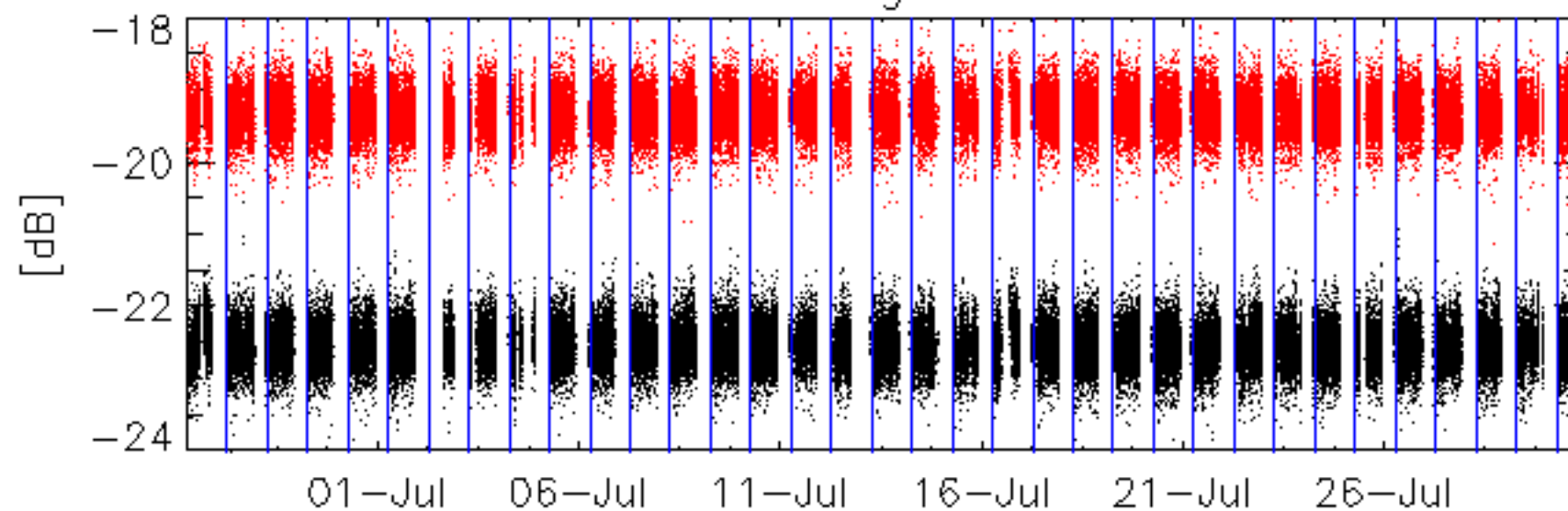
Evolution Doppler error versus ANX



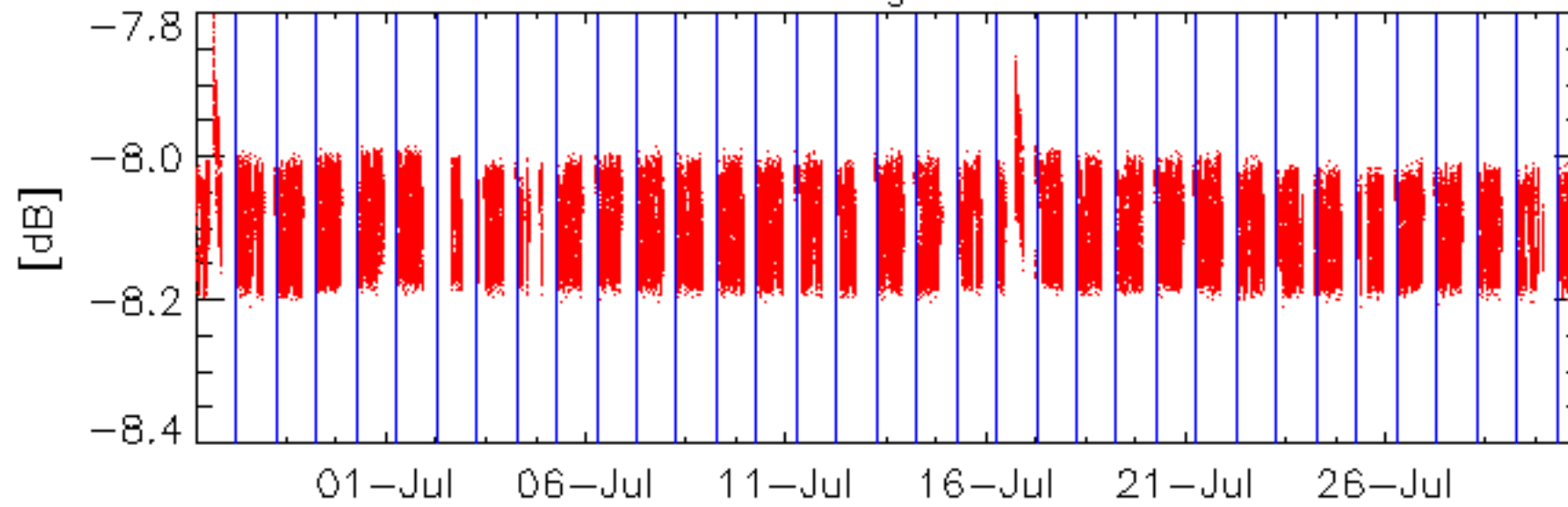
Average P1 (row 3 & row 10)



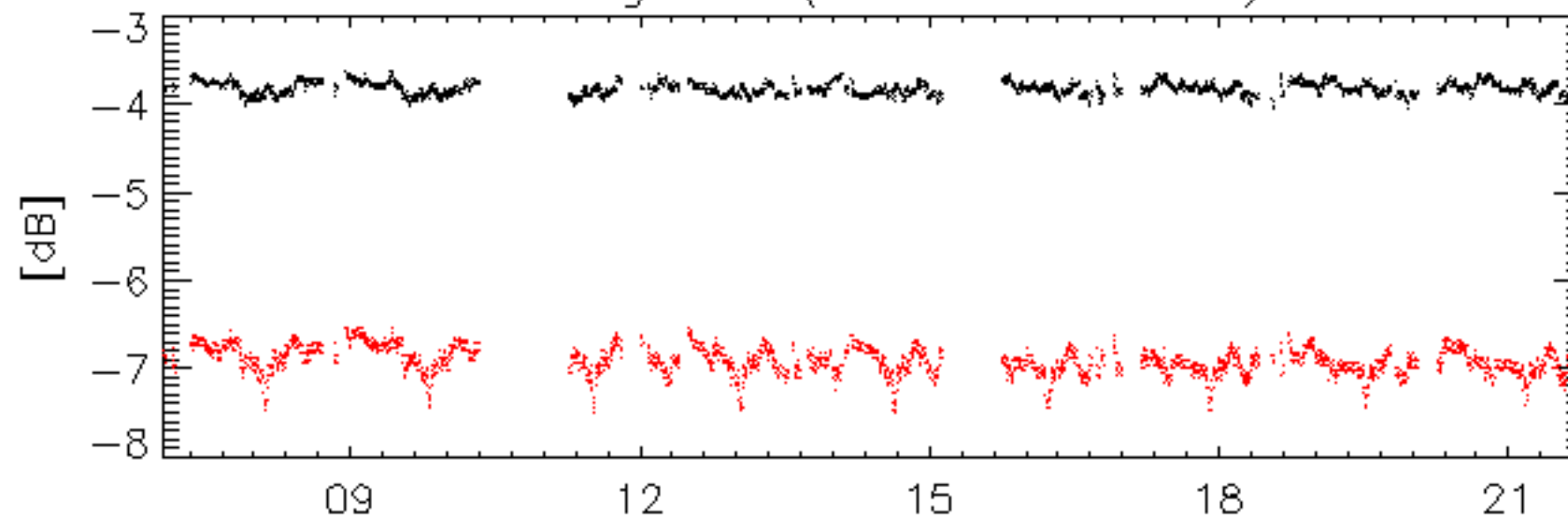
Average P2



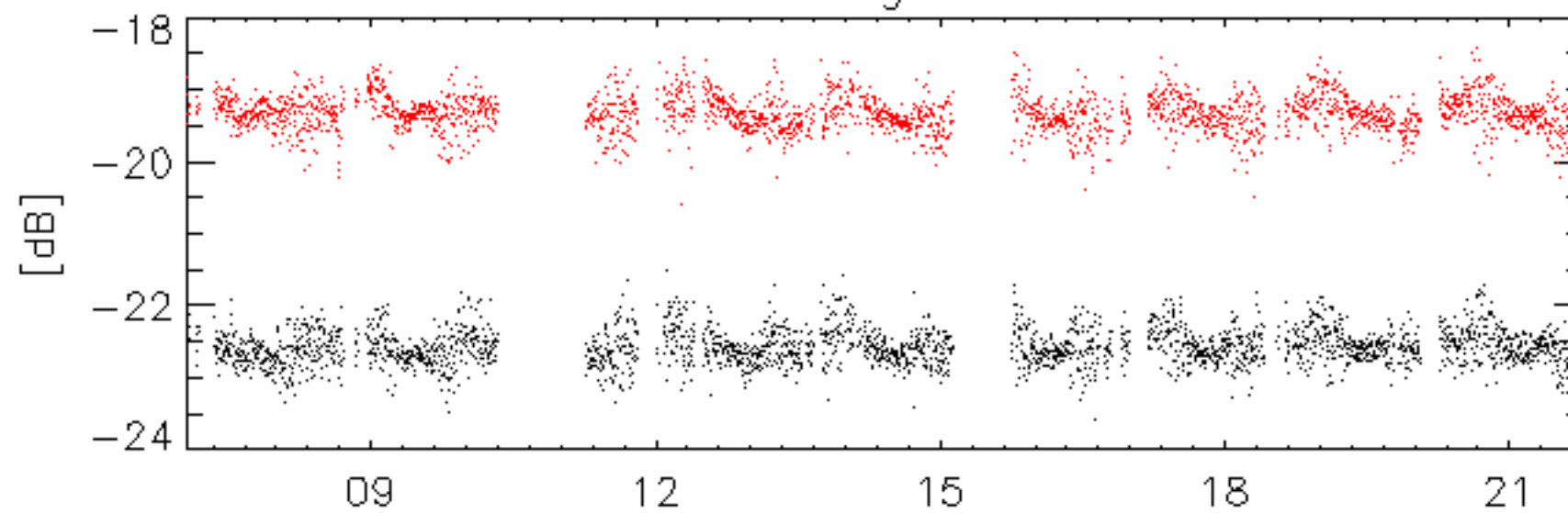
Average P3



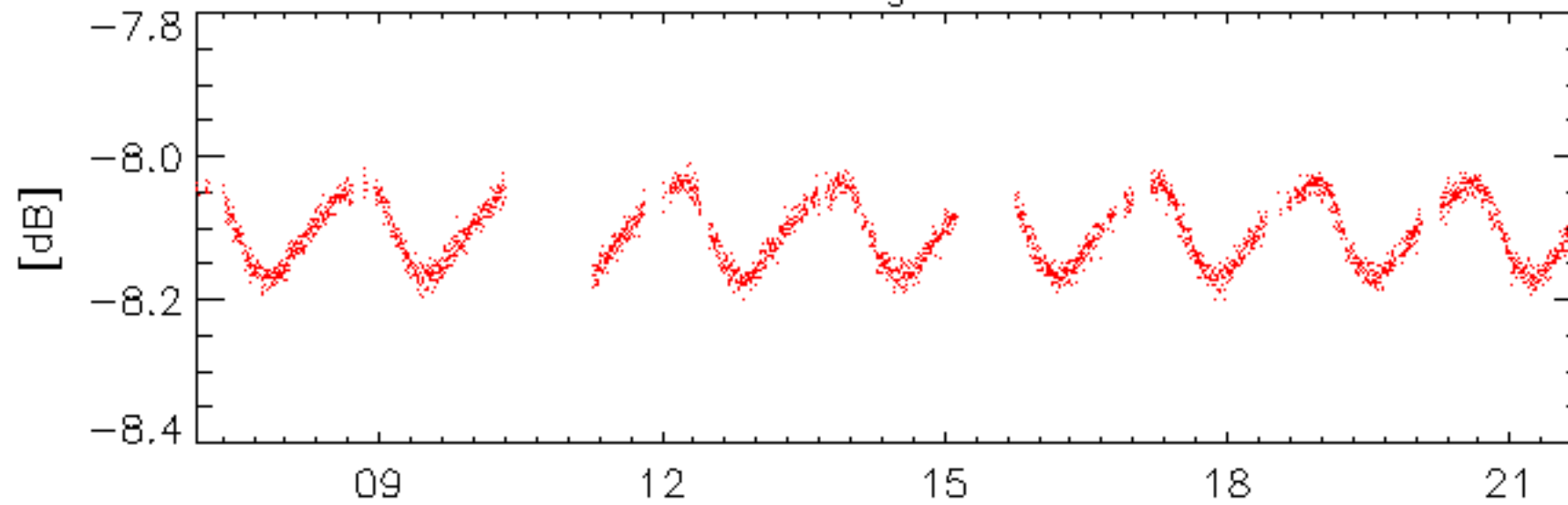
Average P1 (row 3 & row 10)



30-Jul  
Average P2



30-Jul  
Average P3

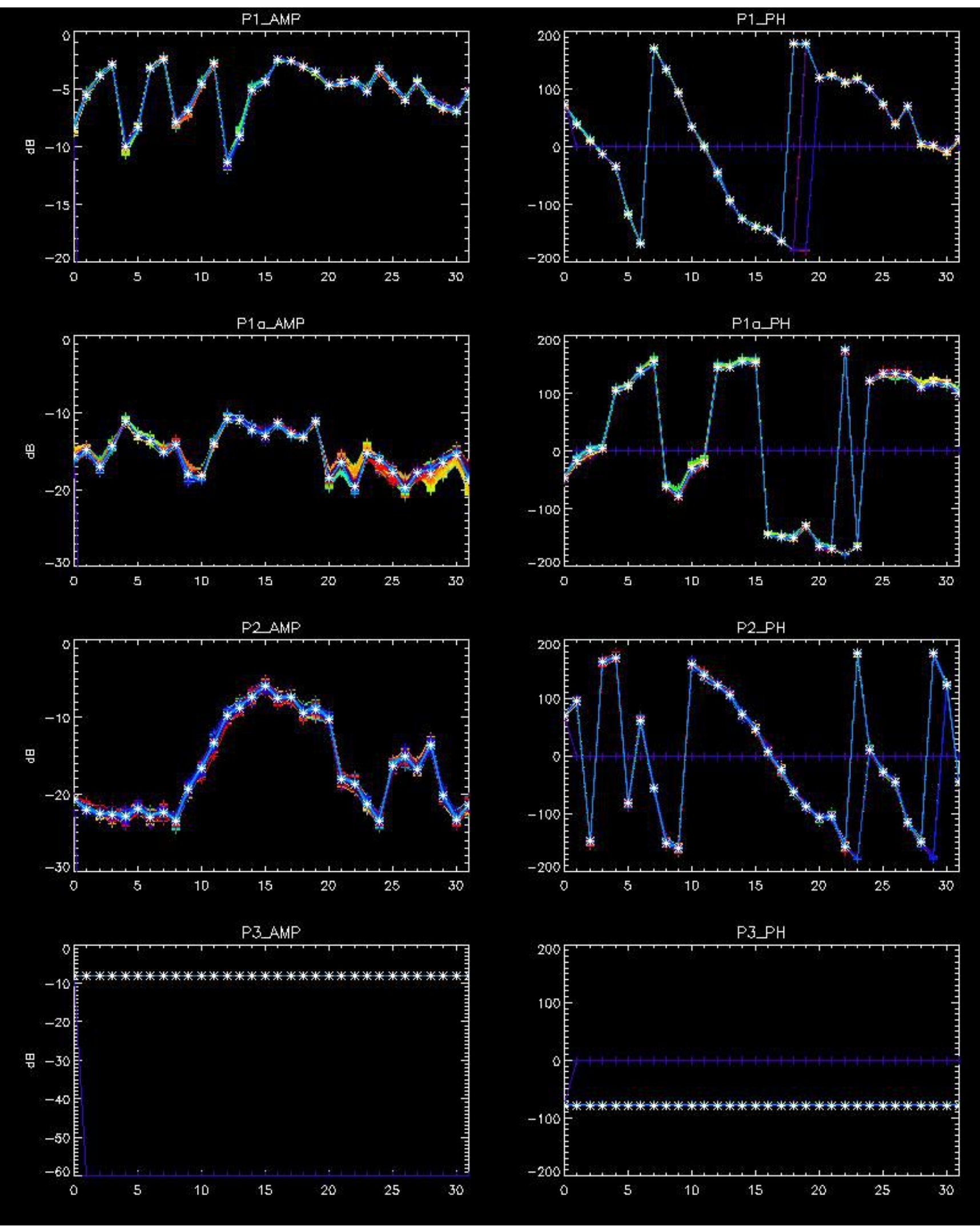


30-Jul

No anomalies observed on available browse products.



No anomalies observed. Nominal behaviour.  
Stable statistics regarding the last 35 days.

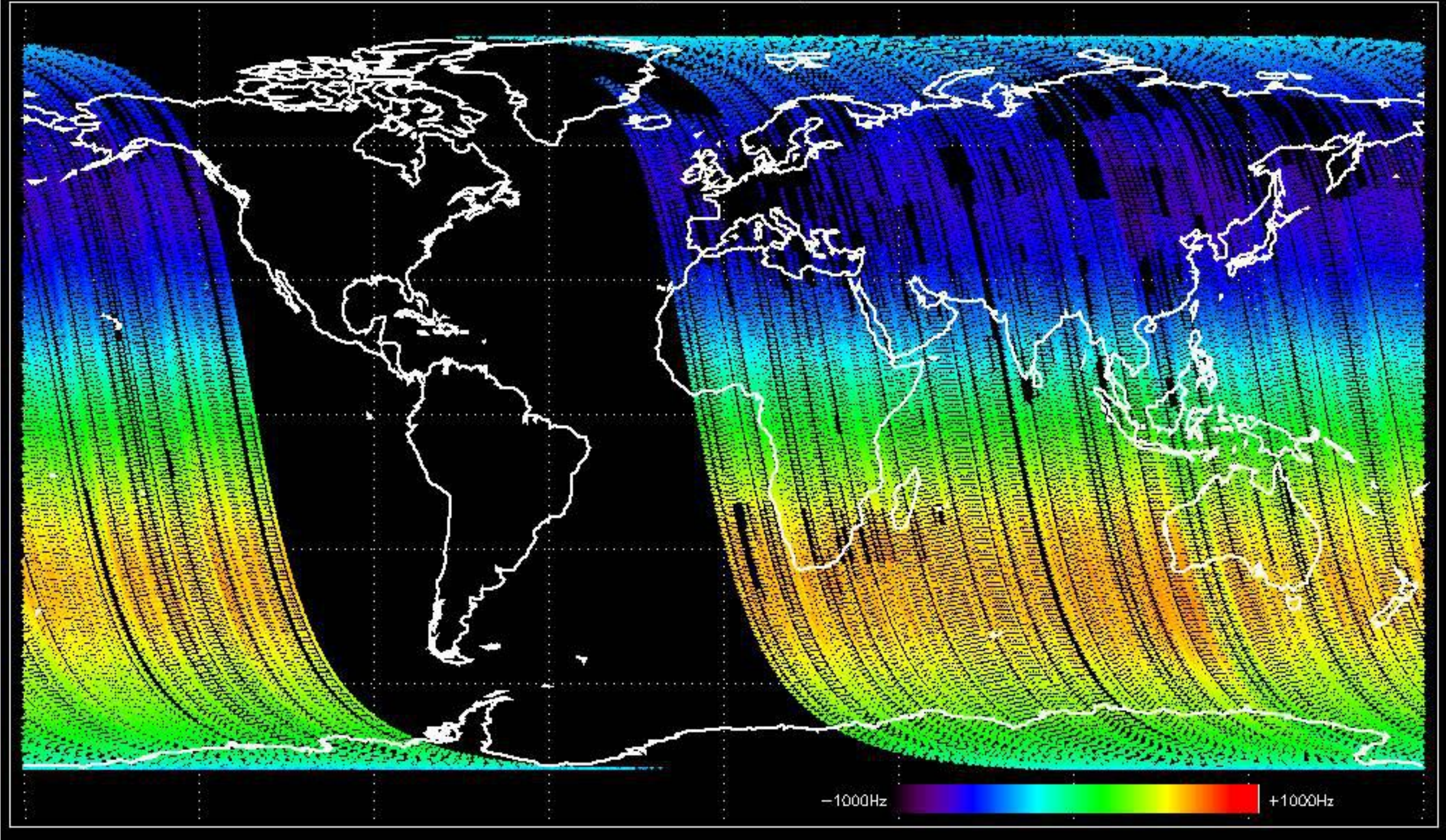


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.
- Missing products from Svalbard station

No anomalies observed Doppler evolution.  
Doppler analysis performed over the last 60 days  
Data gap is relative to the missing data of Svalbard station.

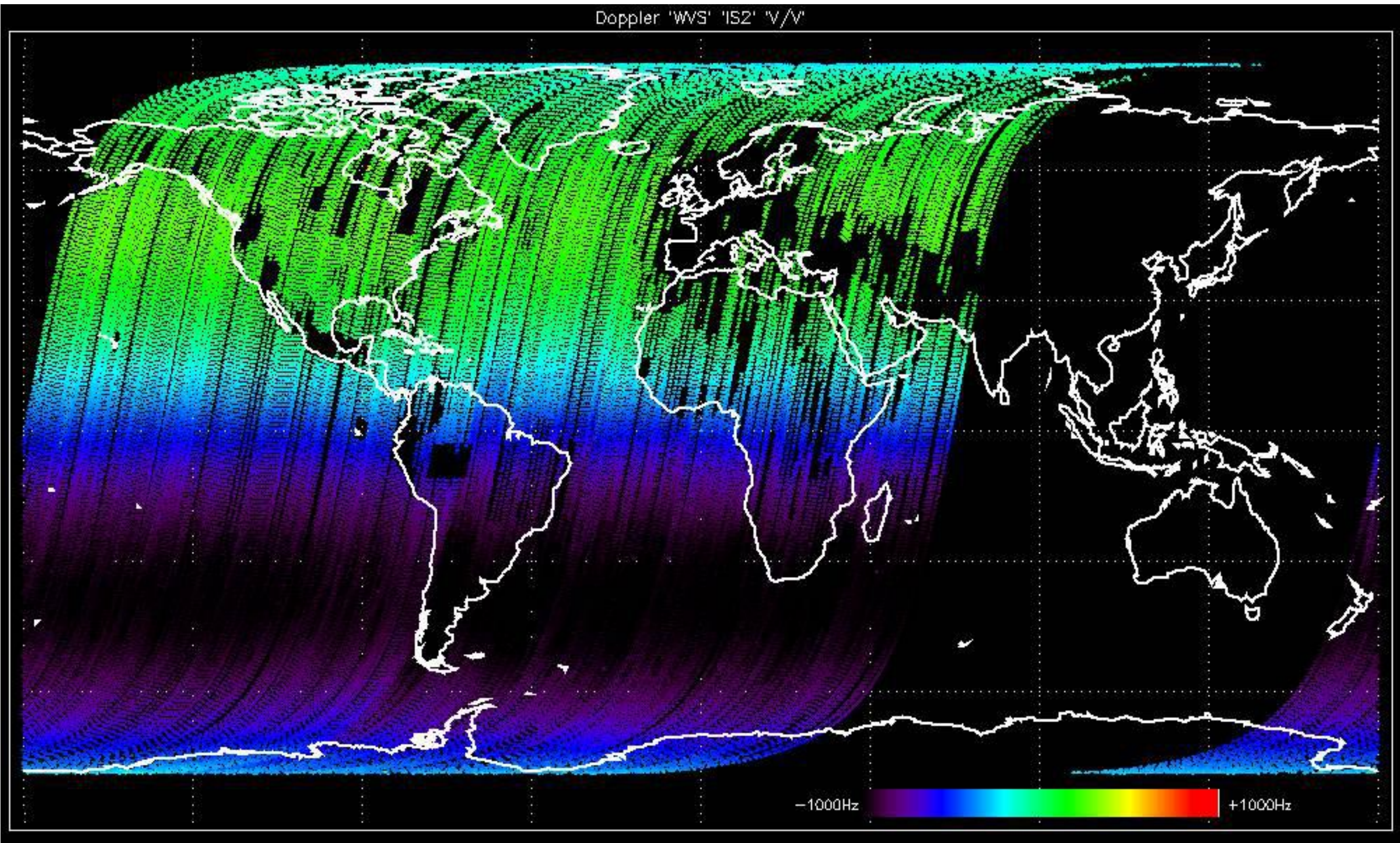


Doppler 'WVS' 'IS2' 'H/H'

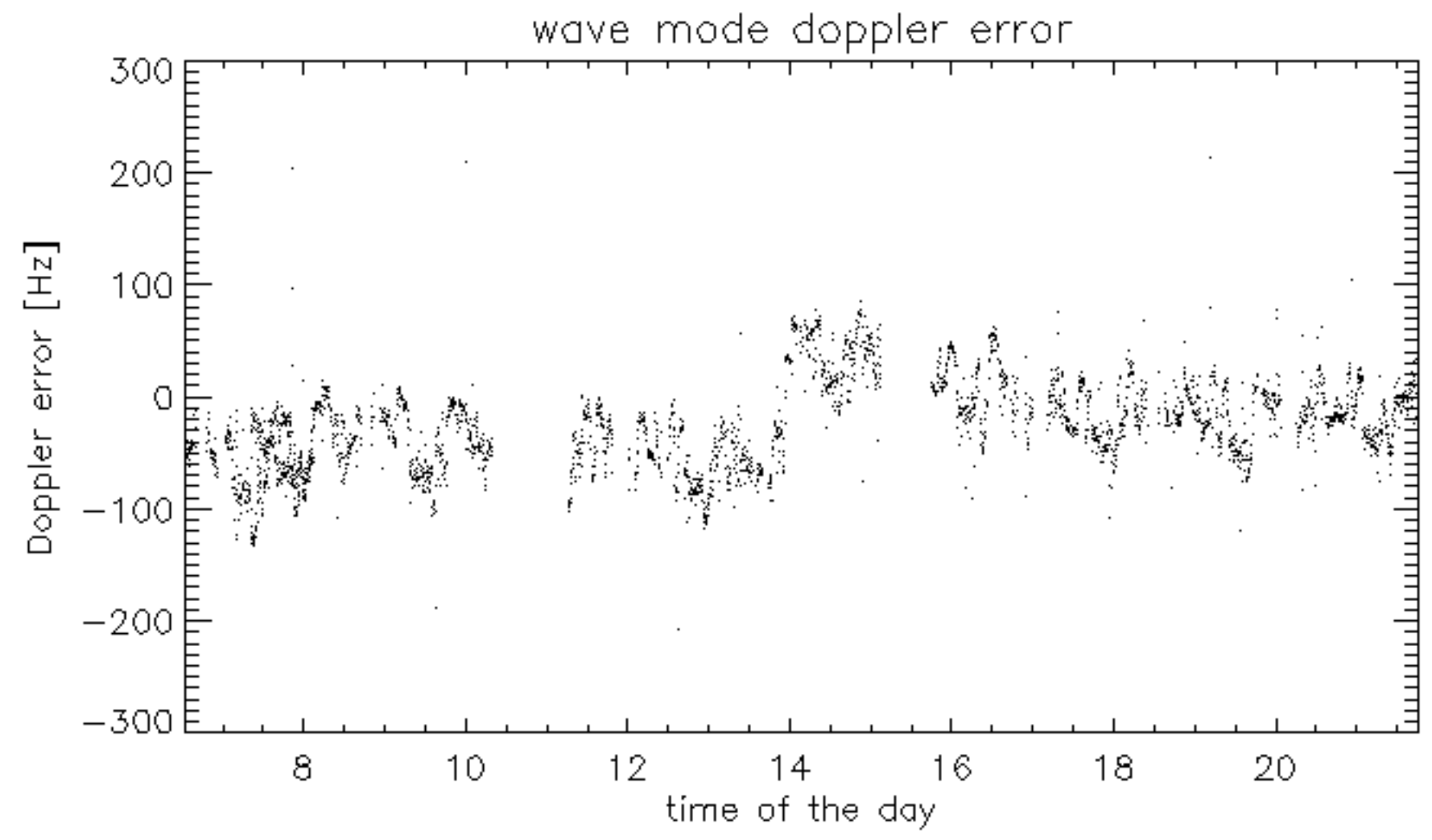
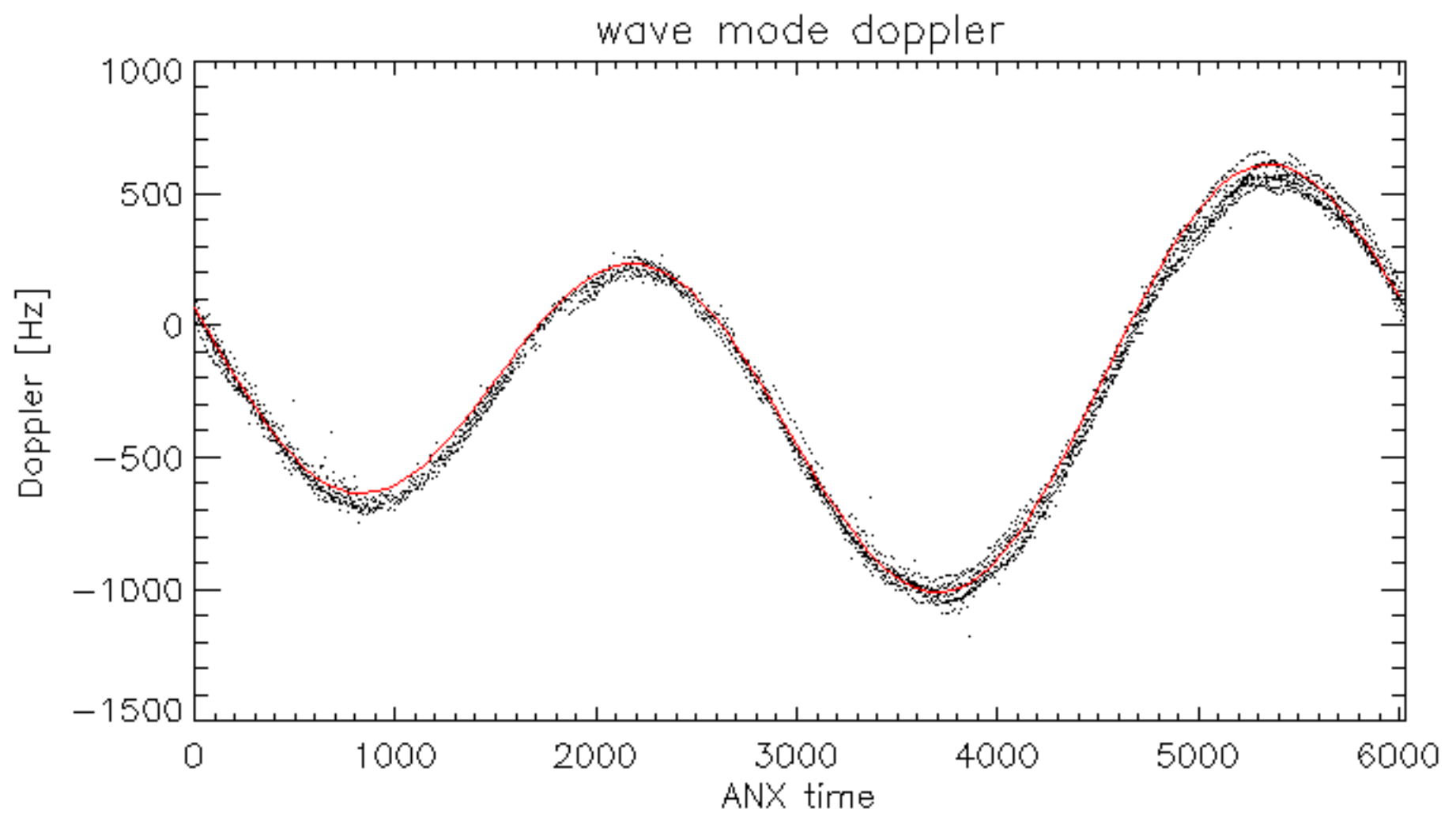




Doppler 'WVS' 'ISZ' 'V/V'

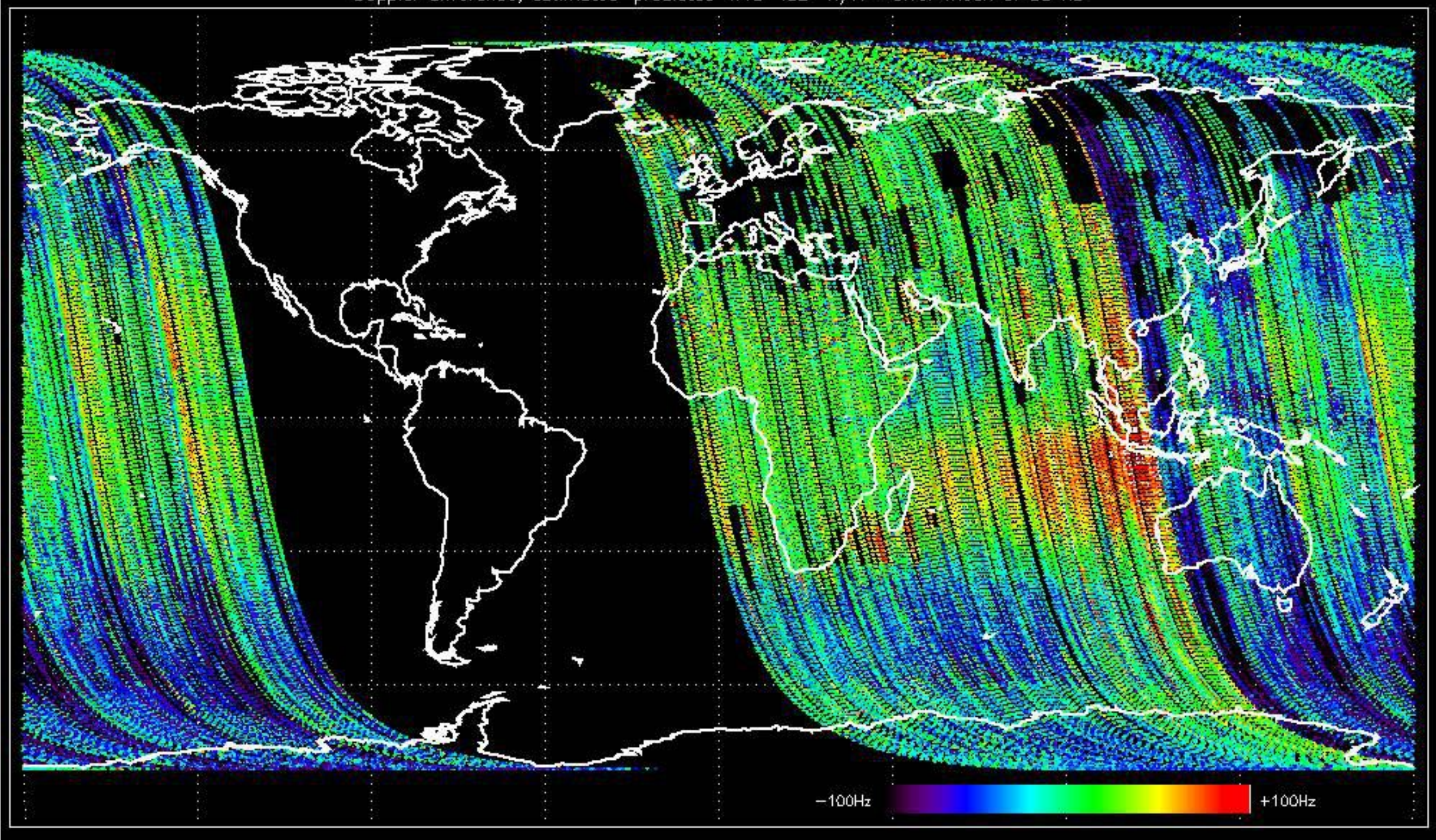






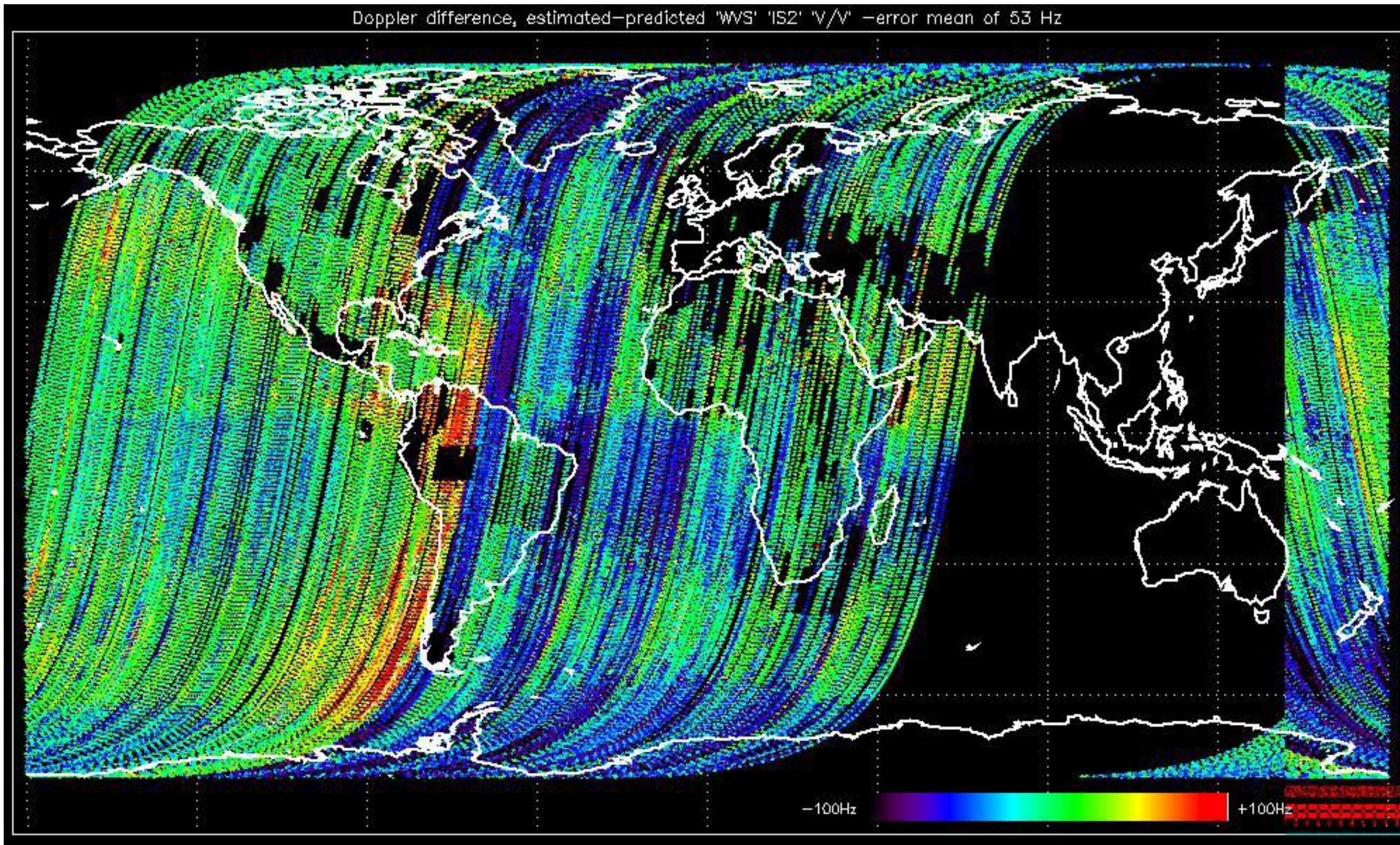


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz





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





No anomalies observed on available MS products:

- ASA\_MS\_\_0PNPDK20030730\_194710\_000000152018\_00328\_07396\_0049.N1
- ASA\_MS\_\_0PNPDK20030730\_194850\_000000152018\_00328\_07396\_0050.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. Nominal behavior.









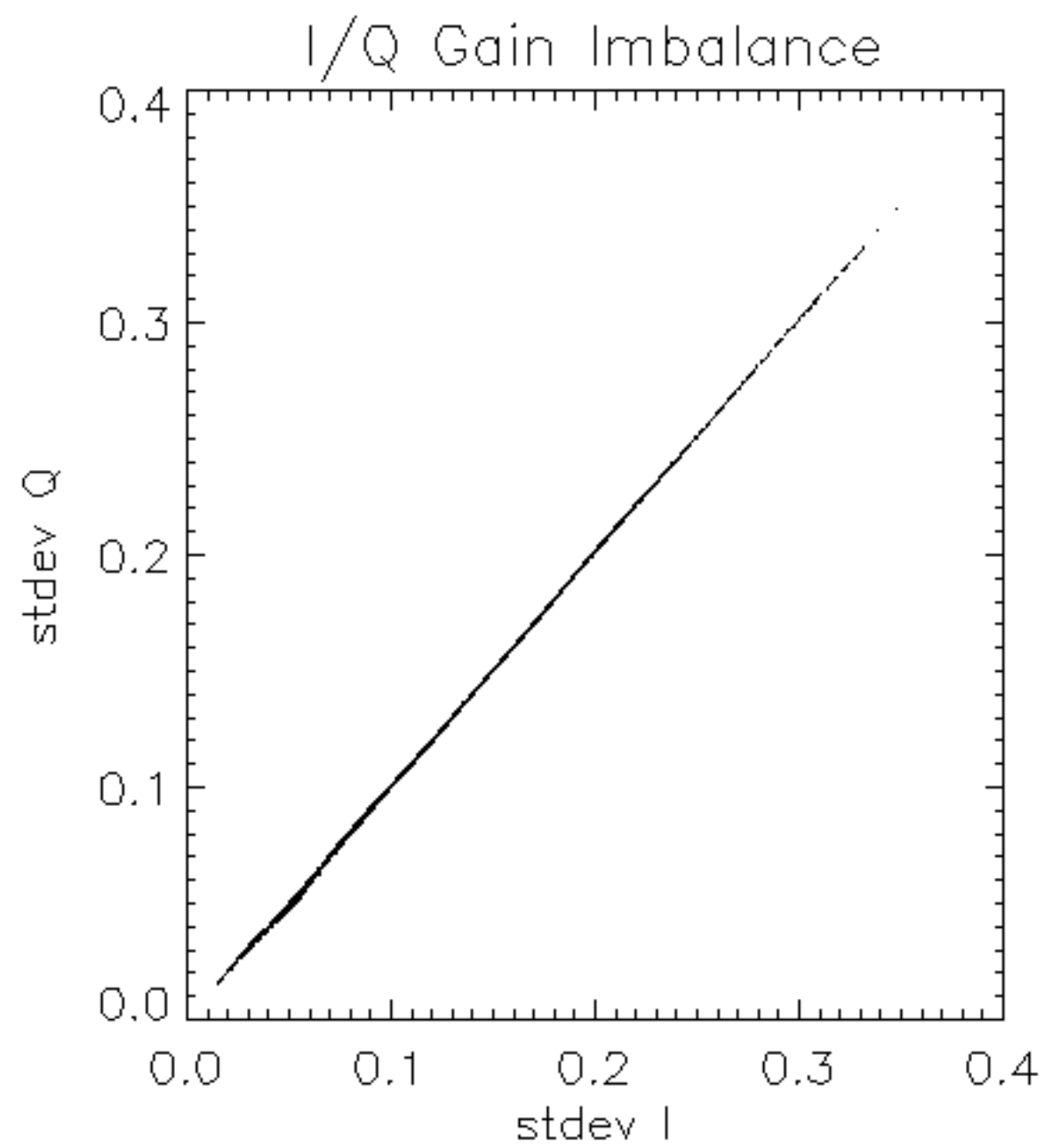


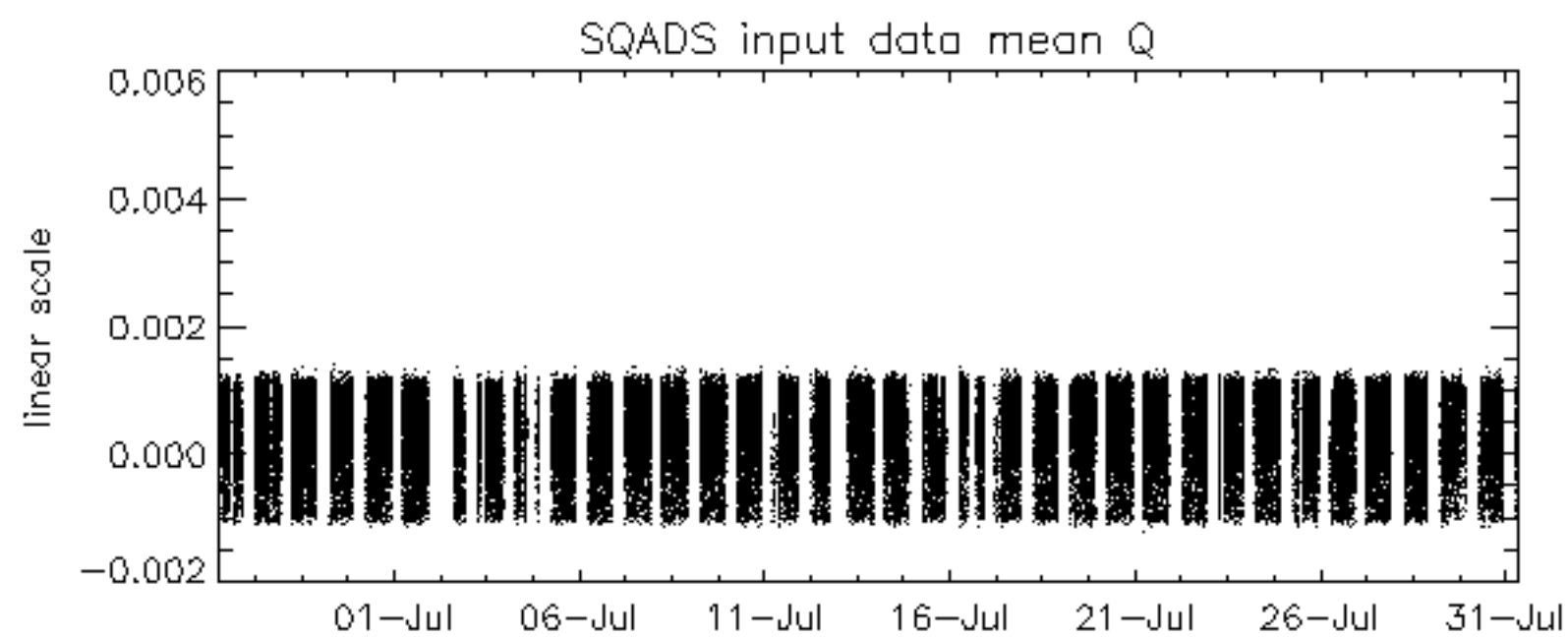
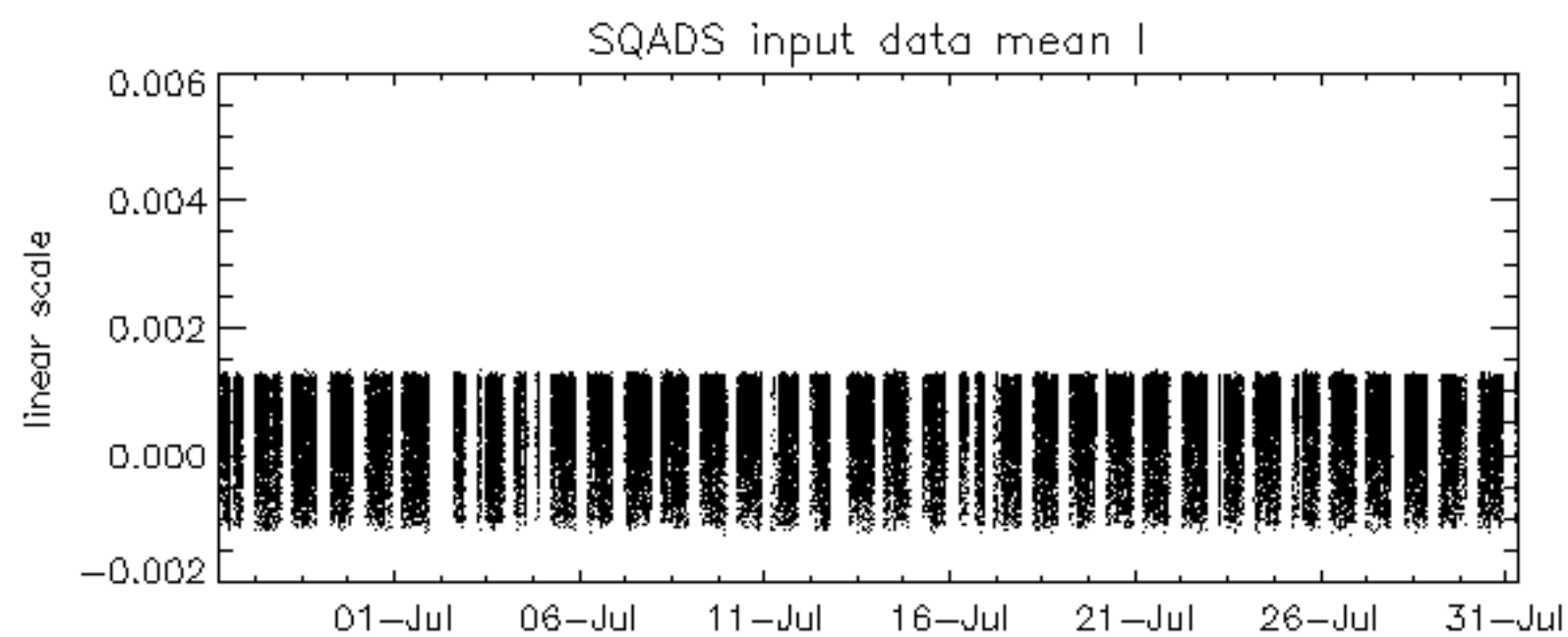
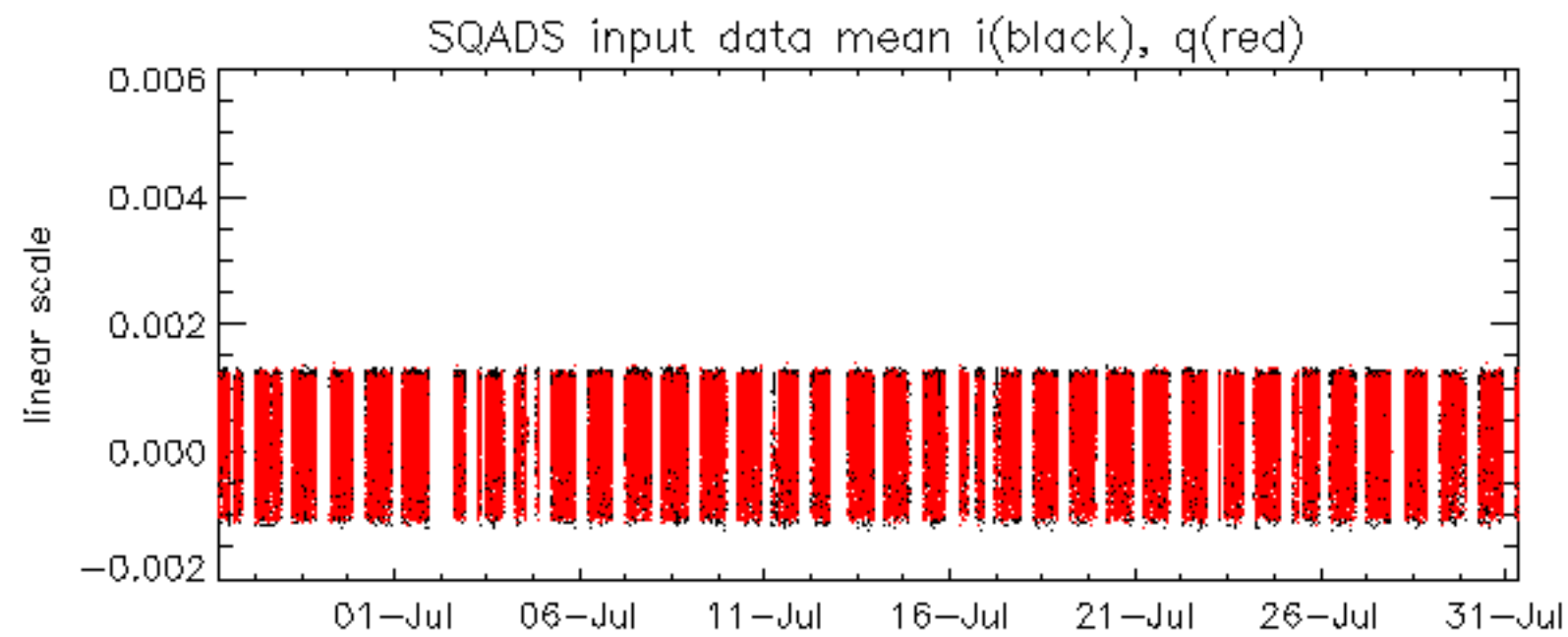


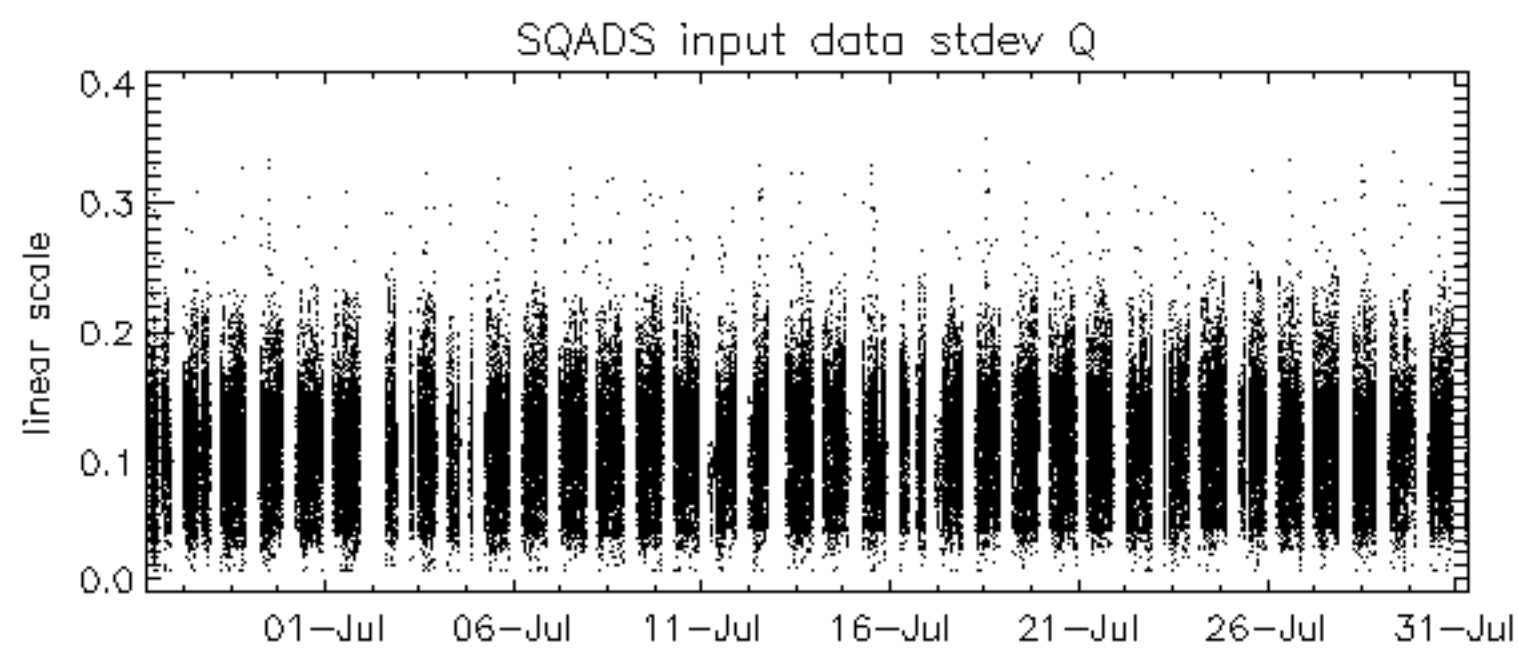
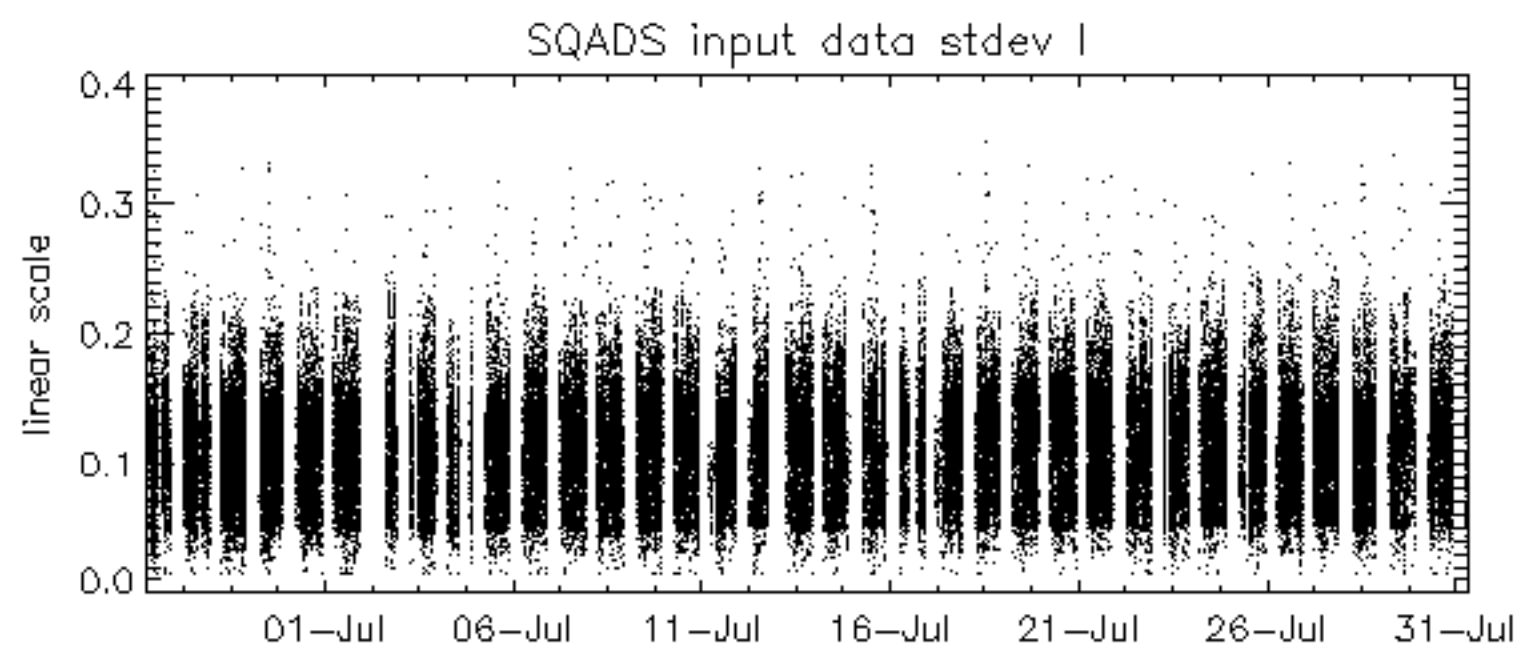
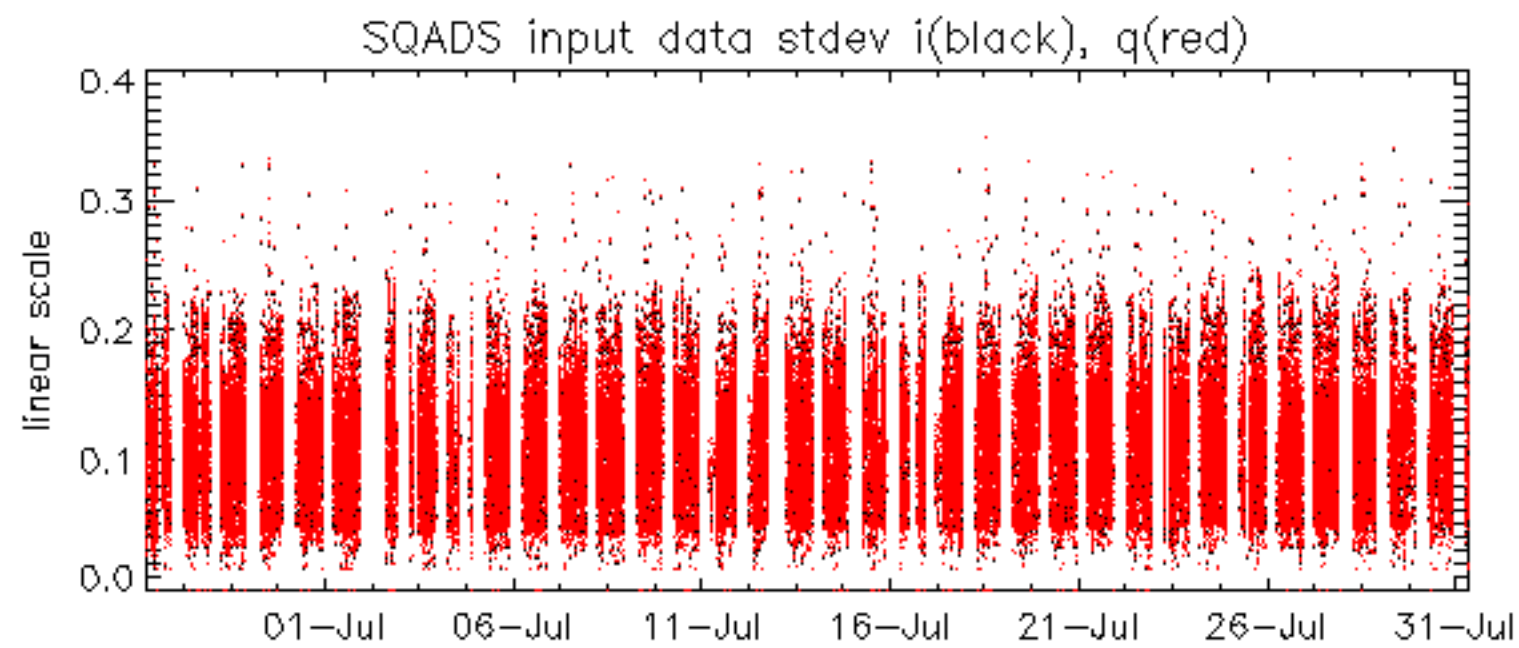






























No unavailabilities during the reported period