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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 EOLI catalogue.

### 2.3 - Data Analysis

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

### 3 - Module Stepping Mode

FOur MS products available on 08-JUL-2003:

- ASA\_MS\_\_OPNPDE20030708\_011333\_000000152018\_00002\_07070\_0030.N1
- ASA\_MS\_\_OPNPDE20030708\_011153\_000000152018\_00002\_07070\_0029.N1
- ASA\_MS\_\_OPNPDK20030708\_194009\_000000152018\_00013\_07081\_0002.N1
- ASA\_MS\_\_OPNPDK20030708\_193829\_000000152018\_00013\_07081\_0003.N1

The following results are based on the last available MS products.









No anomalies to be reported.

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	20030708 011333
H	20030708 011153
V	20030708 194009
H	20030708 193829

#### 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
	
	

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

## 4 - Internal calibration Results

Analysis based on data available since 08-JUL-2003 till 09-JUL-2003 09:41:00 UTC

No anomalies observed on internal calibration pulses.

Very stable evolution of the calibration pulses

### 4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
8	mean	-2.44581	-22.5168	-8.10232
	stdev	0.0132886	0.0621500	0.00243416
24	mean	-5.15739	-21.2231	-8.10232
	stdev	0.0161016	0.0579188	0.00243416

### 4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
8	mean	-2.44589	-22.5396	-8.10679
	stdev	0.0127521	0.0683468	0.00305714
24	mean	-5.15796	-21.1981	-8.10679
	stdev	0.0131468	0.0567419	0.00305714

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

## 5 - RAW data statistics

Analysis based on data available since 08-JUL-2003 till 09-JUL-2003 09:41:00 UTC

Nominal level of I and Q level 0 statistics.

No anomalies observed.

### 5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000459936
	stdev	3.04936e-07
MEAN Q	mean	0.000295985
	stdev	3.13328e-07



### 5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.112642
	stdev	0.00157761
STDEV Q	mean	0.112744
	stdev	0.00160713





### 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

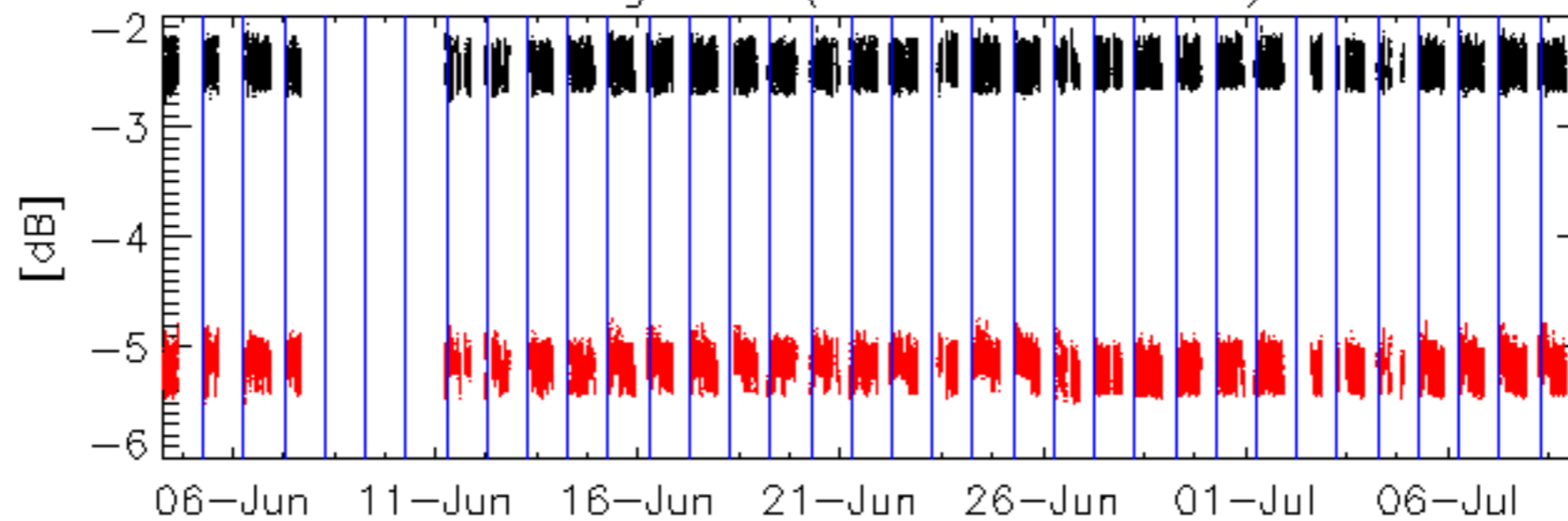
Ascending

Descending

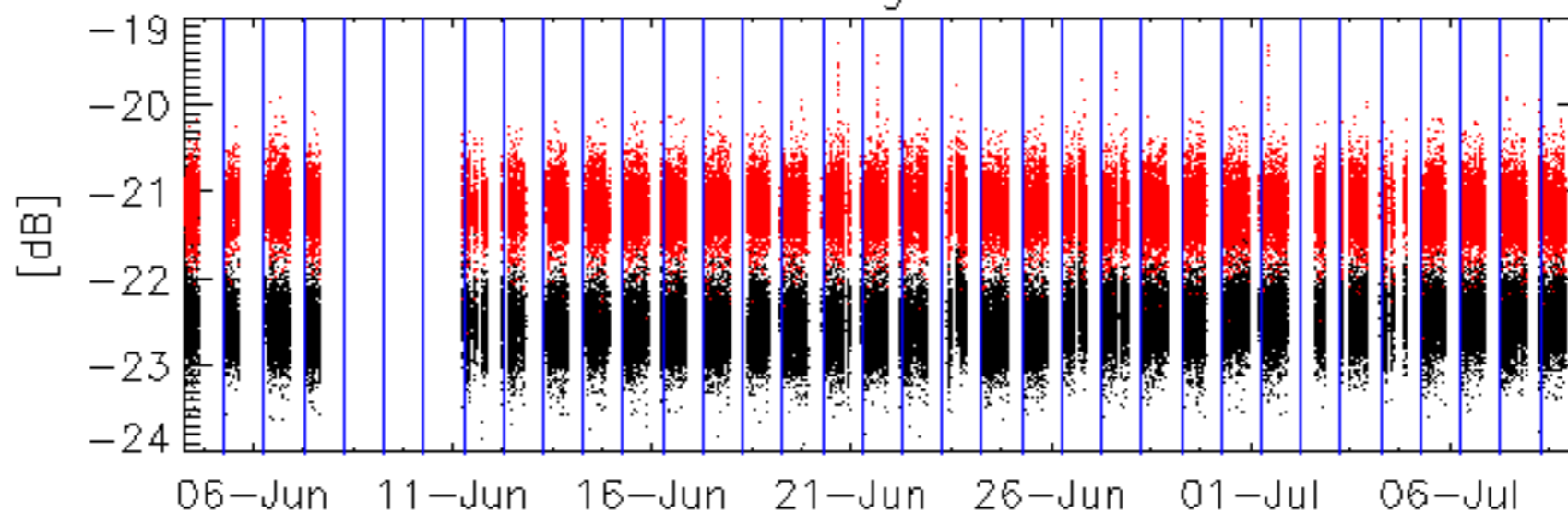
## 6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

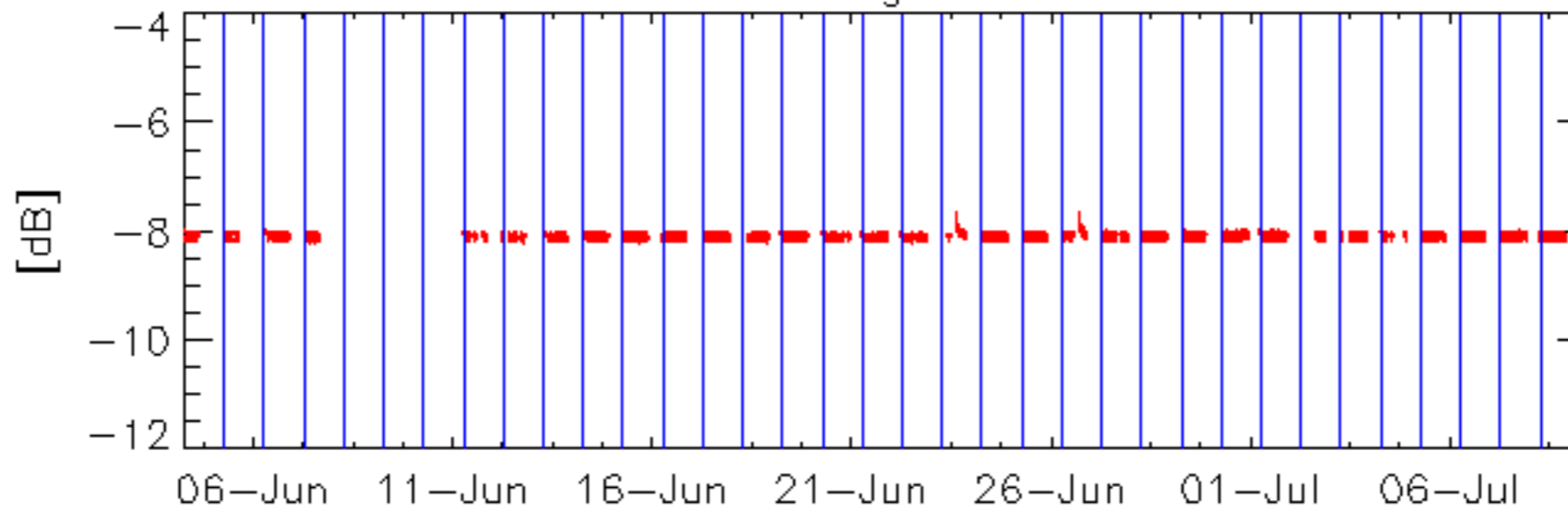
Average P1 (row 8 & row 24)



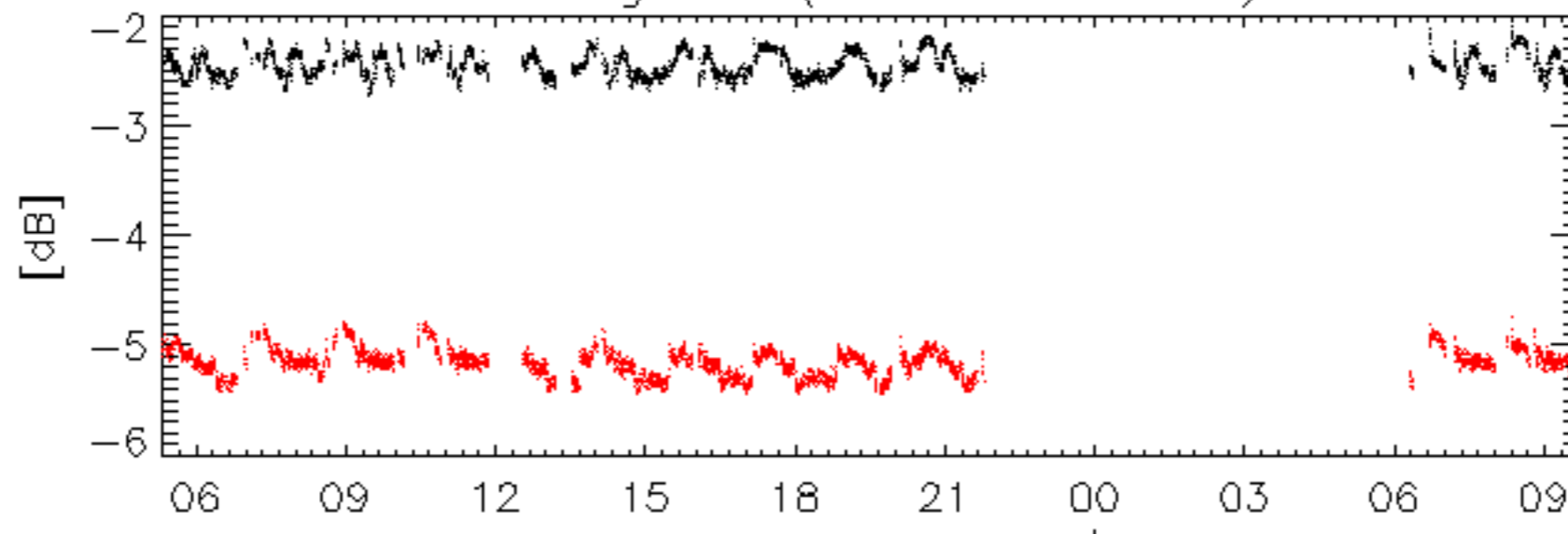
Average P2



Average P3

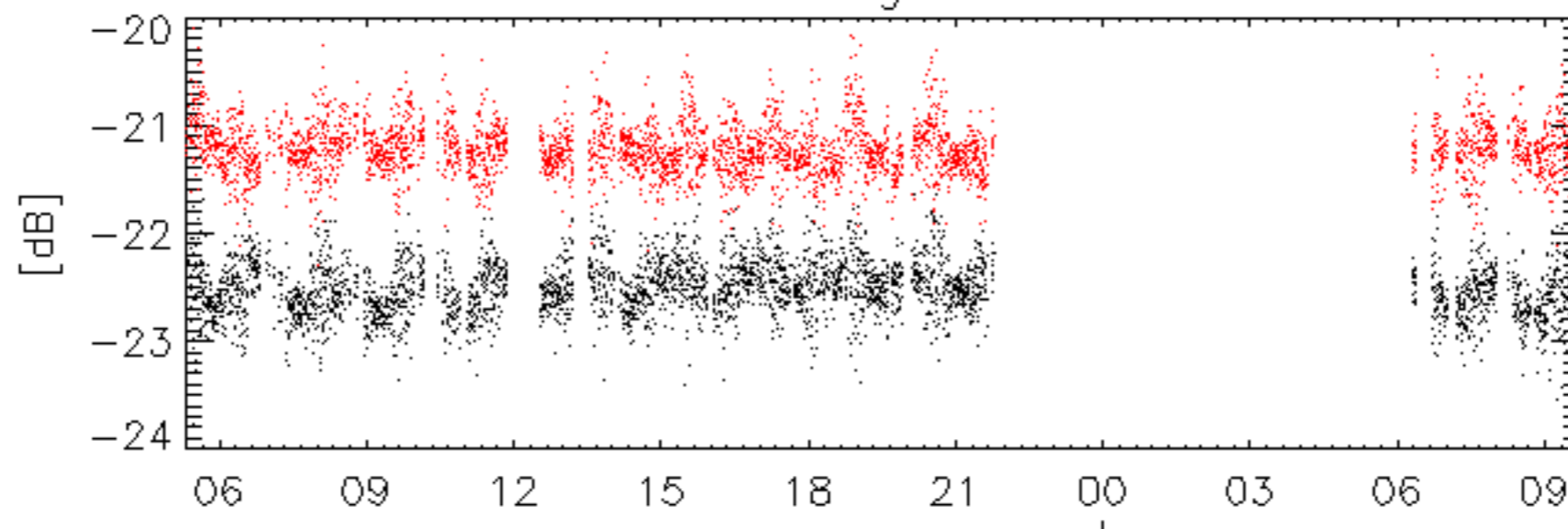


Average P1 (row 8 & row 24)



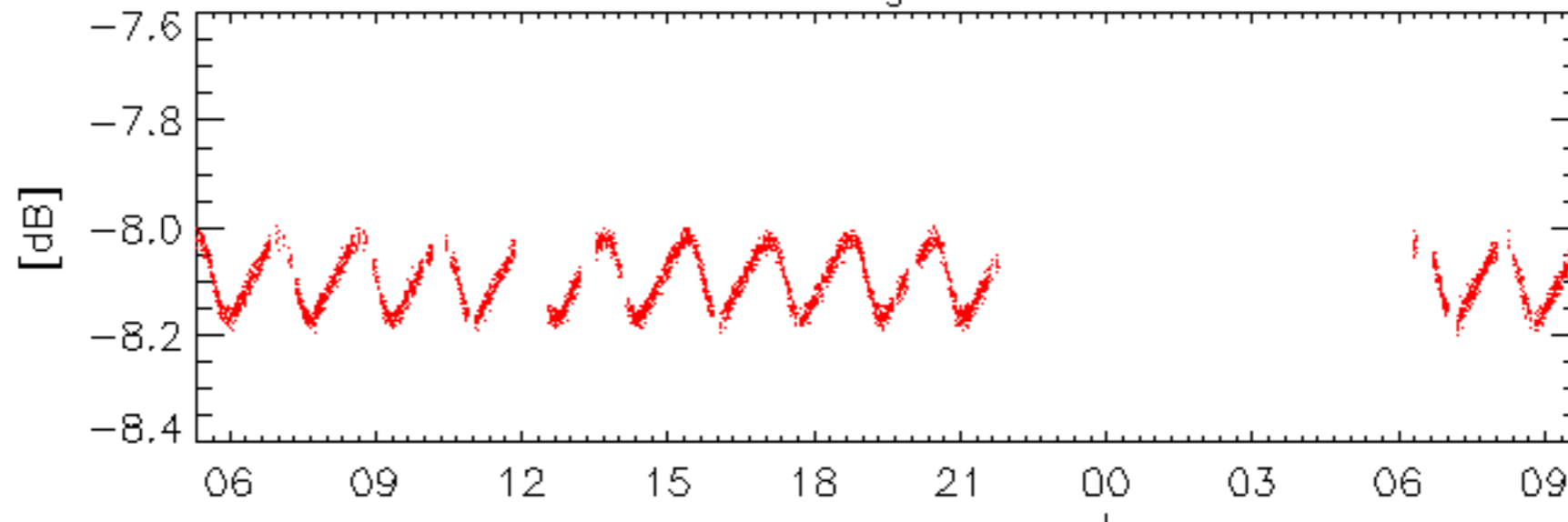
09-Jul

Average P2



09-Jul

Average P3

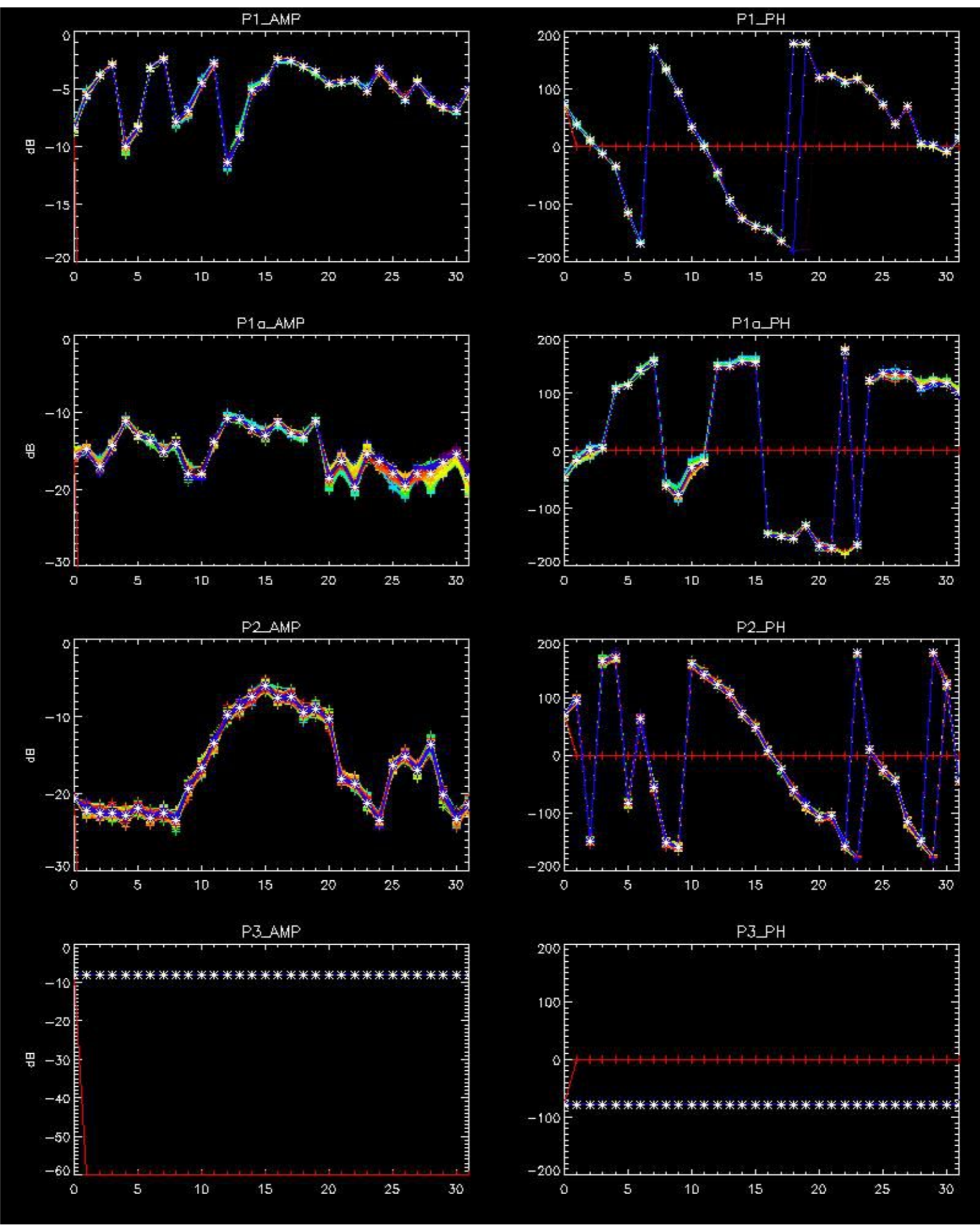


09-Jul

No anomalies observed on EOLI catalogue.



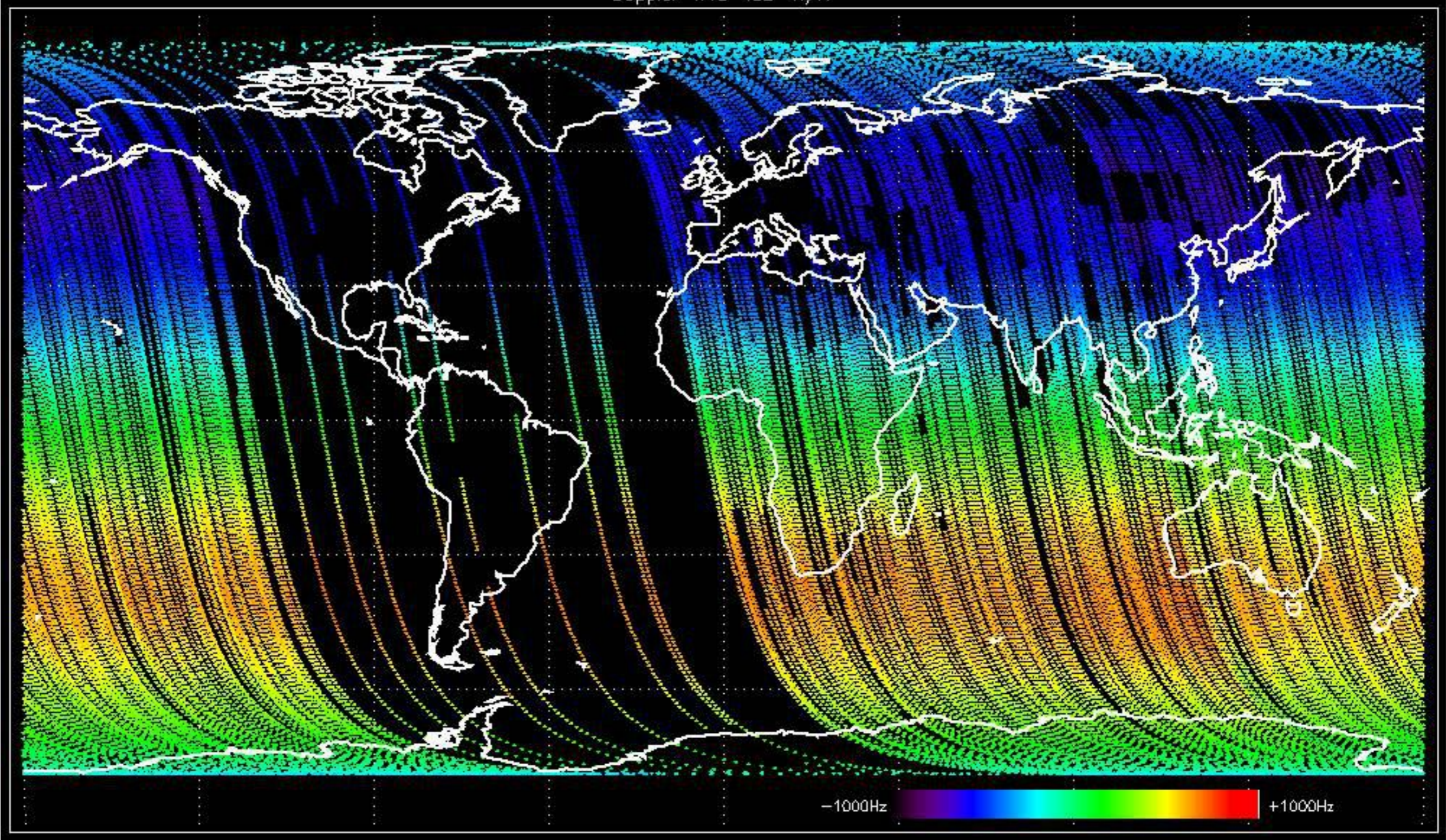
Analysis based on data available since 08-JUL-2003 till 09-JUL-2003 09:41:00 UTC  
No anomalies observed on internal calibration pulses.  
The level of calibration pulses is very stable during the previous 35 days.



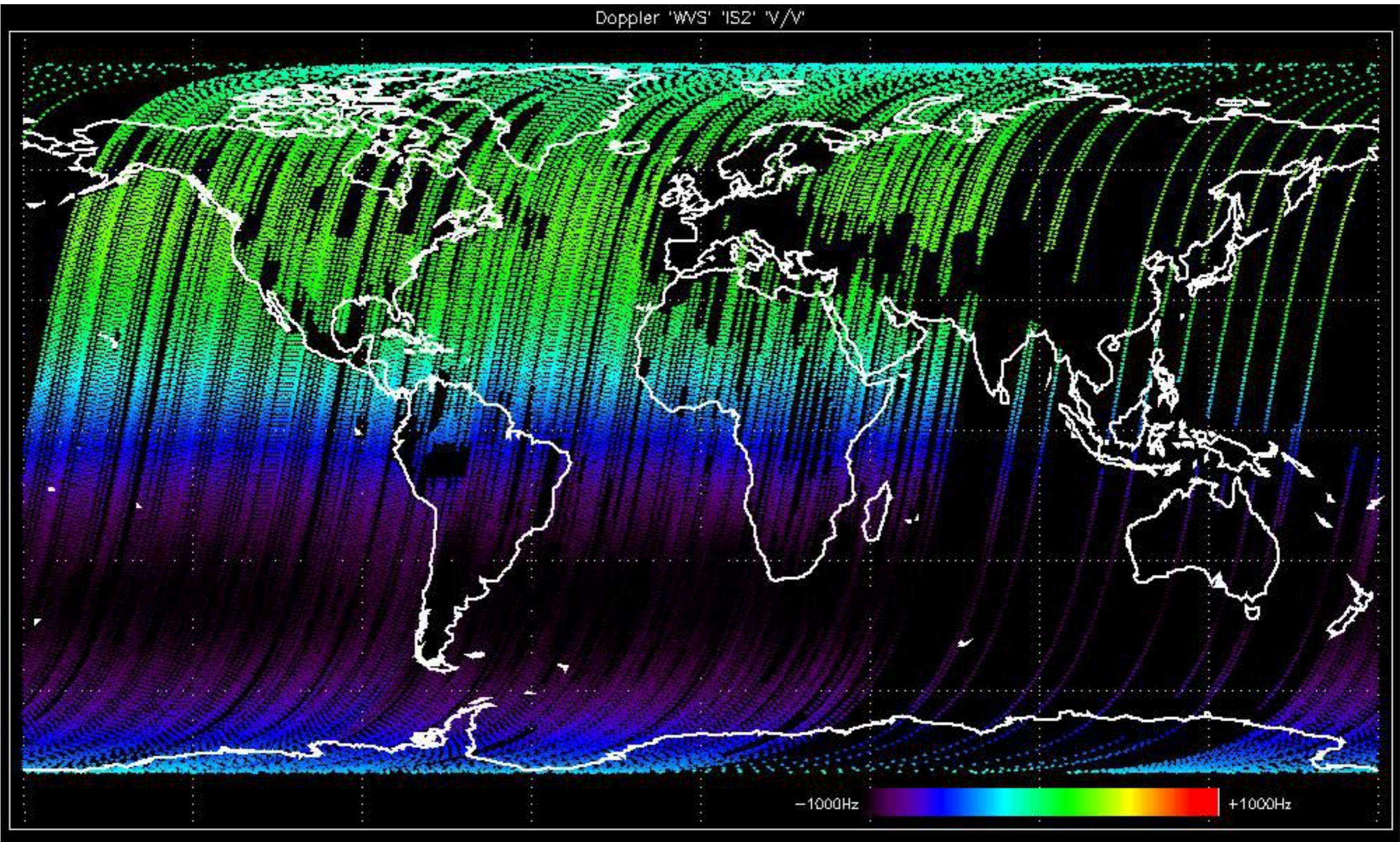
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

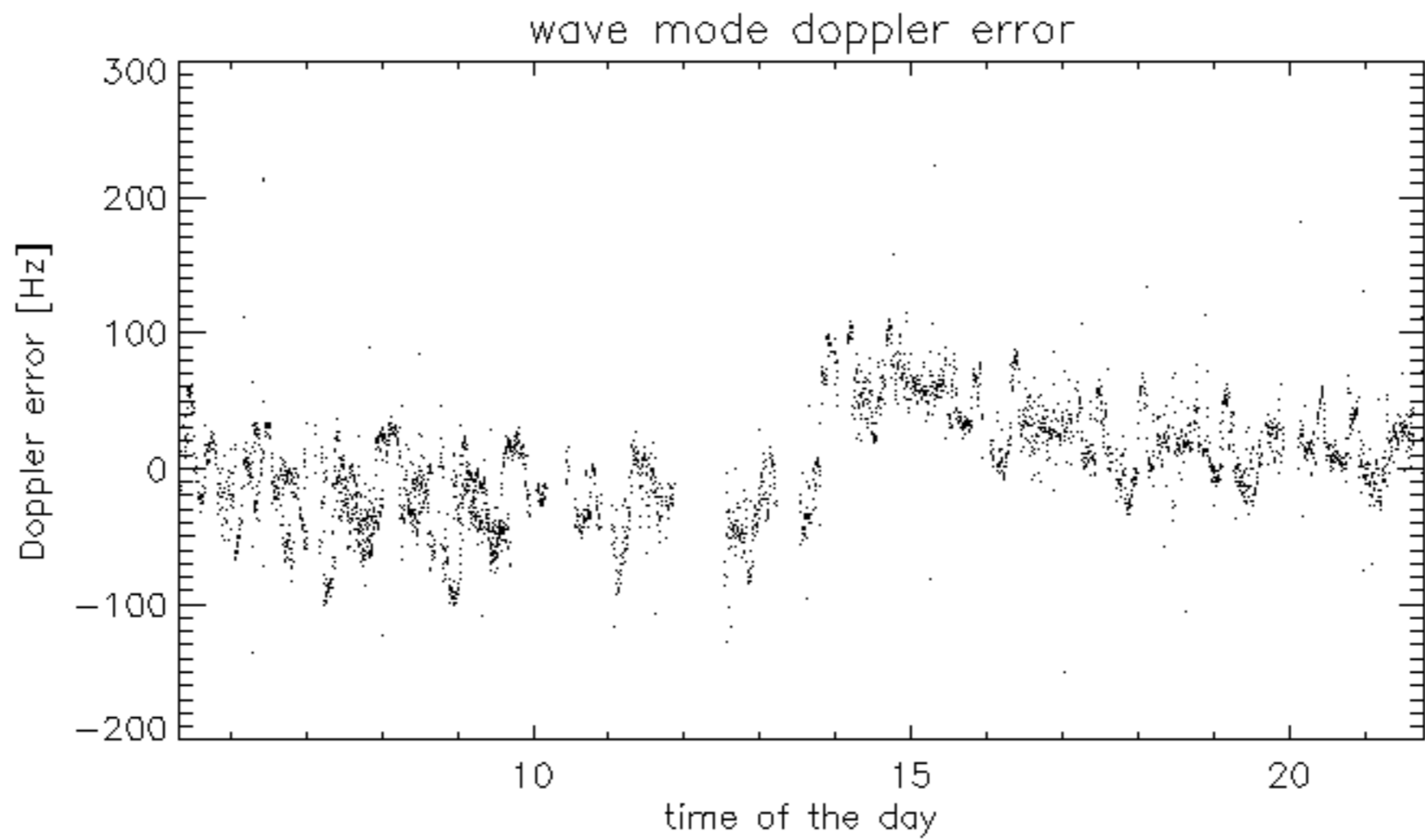
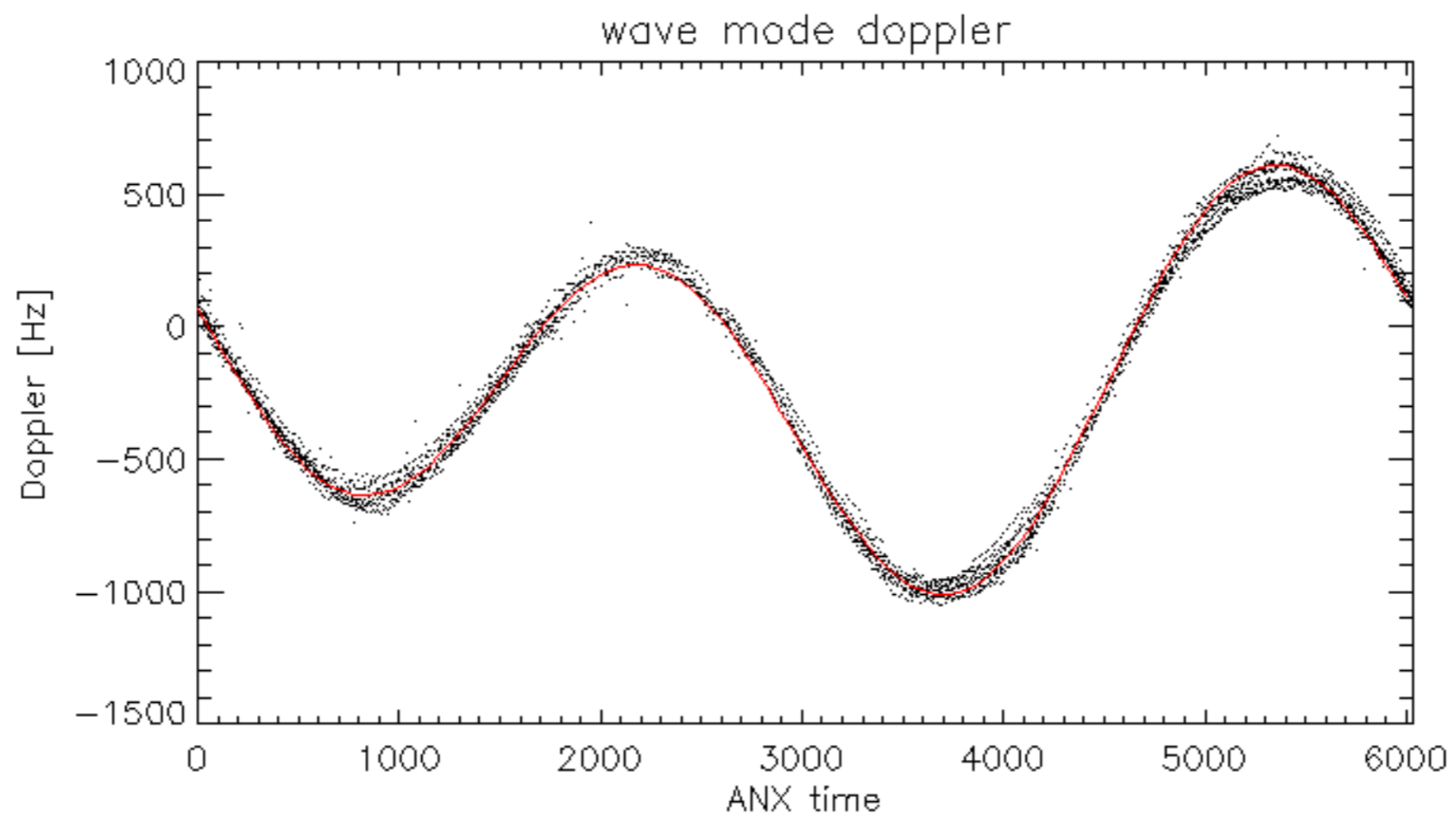
No anomalies observed Doppler evolution.  
Doppler analysis performed over the last 60 days

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

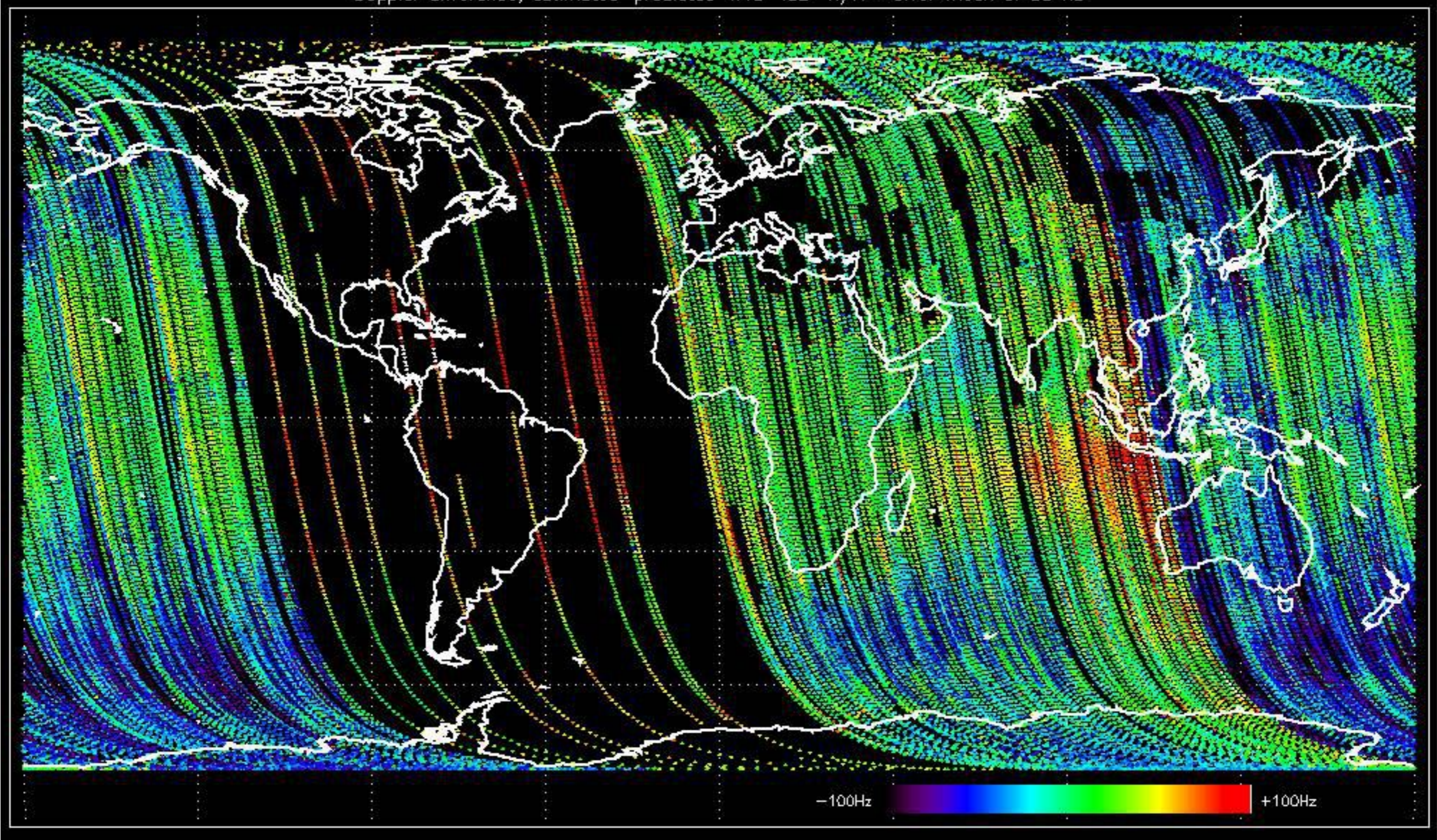


Doppler 'WVS' 'IS2' 'V/V'



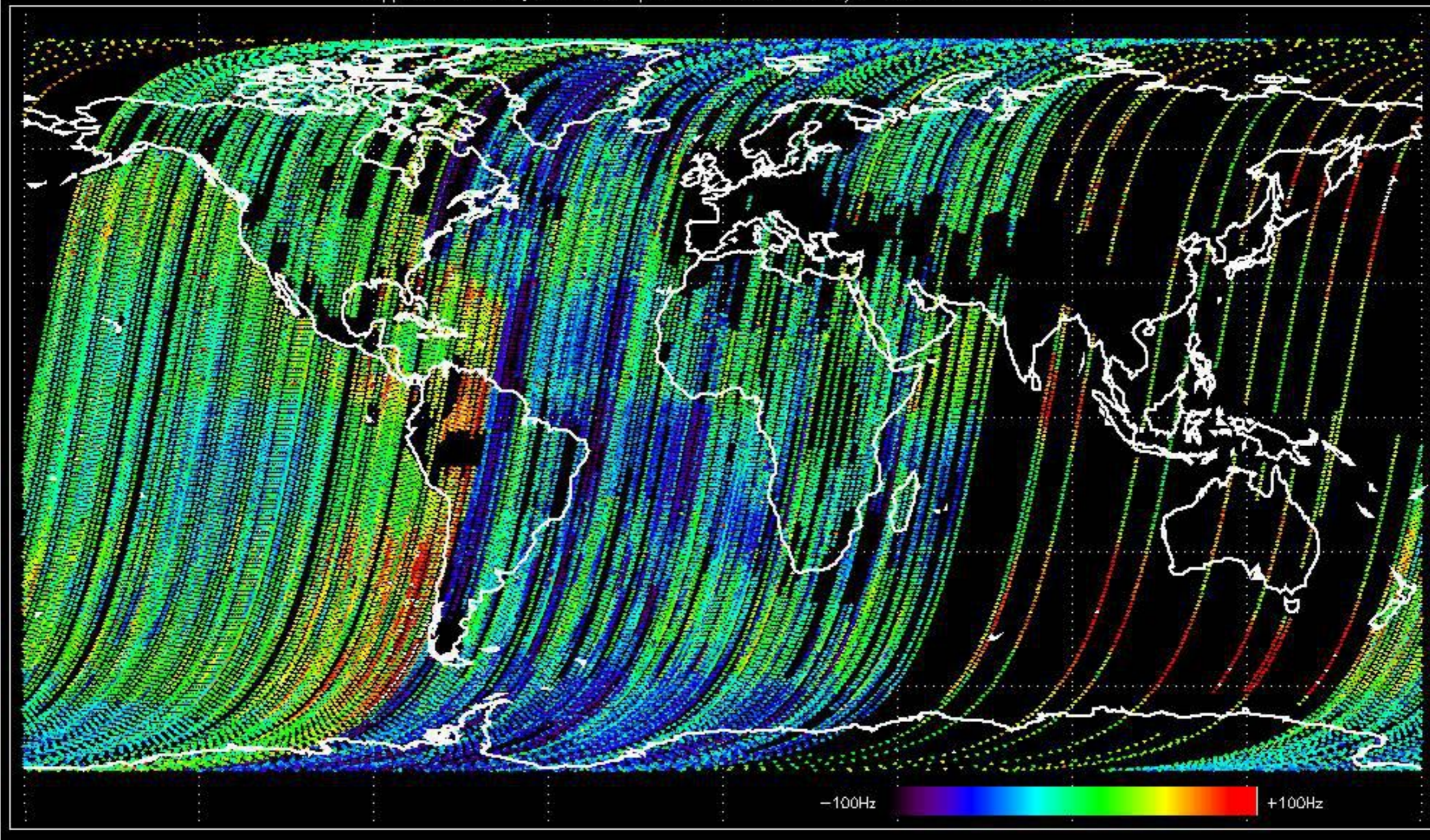


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz





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



FOur MS products available on 08-JUL-2003:

- ASA\_MS\_\_0PNPDK20030708\_193829\_000000152018\_00013\_07081\_0003.N1
- ASA\_MS\_\_0PNPDE20030708\_011333\_000000152018\_00002\_07070\_0030.N1
- ASA\_MS\_\_0PNPDE20030708\_011153\_000000152018\_00002\_07070\_0029.N1
- ASA\_MS\_\_0PNPDK20030708\_194009\_000000152018\_00013\_07081\_0002.N1

The following results are based on the last available MS products.  
No anomalies to be reported.

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

Analysis based on data available since 08-JUL-2003 till 09-JUL-2003 09:41:00 UTC  
Nominal level of I and Q level 0 statistics.  
No anomalies observed.









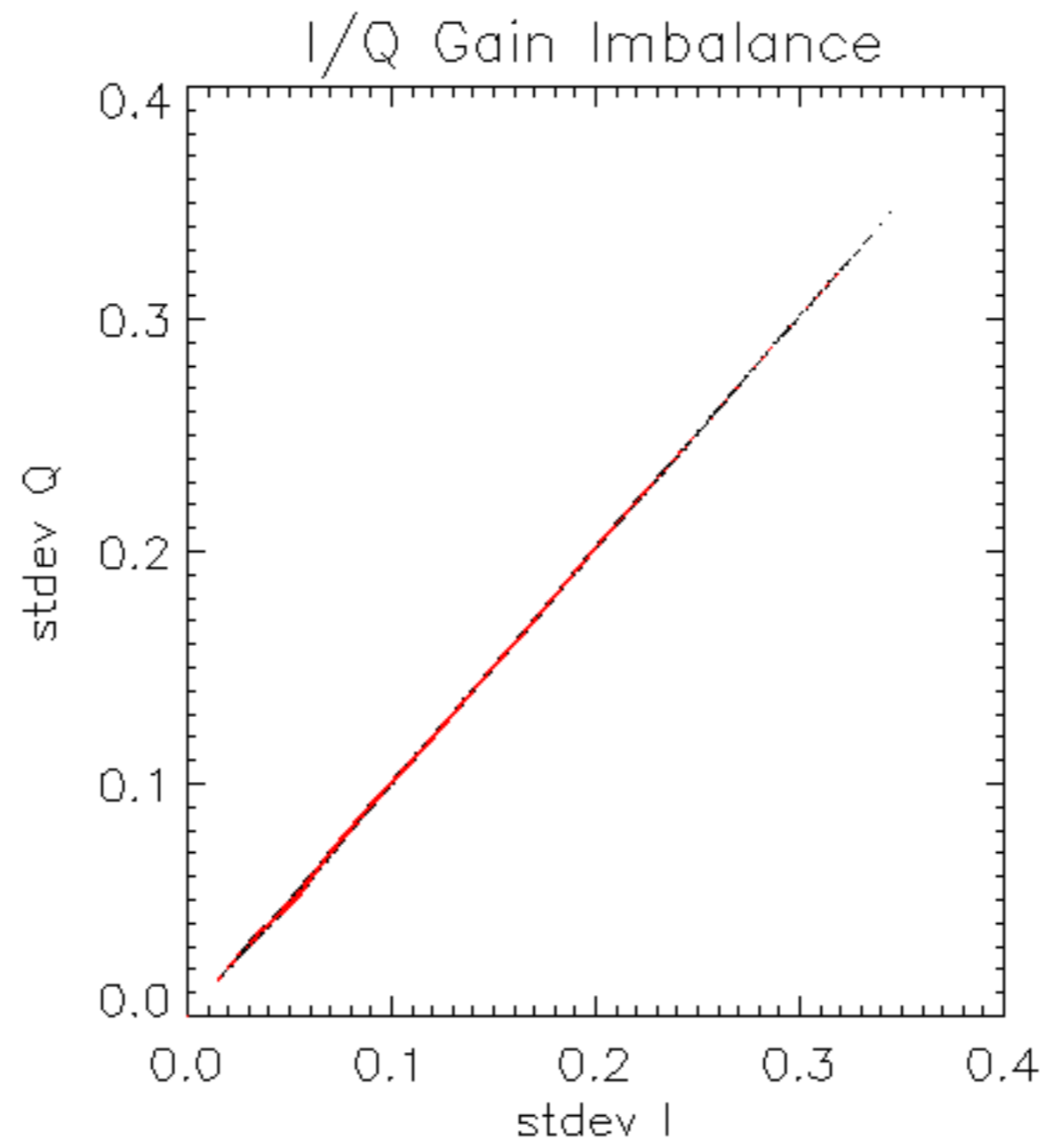


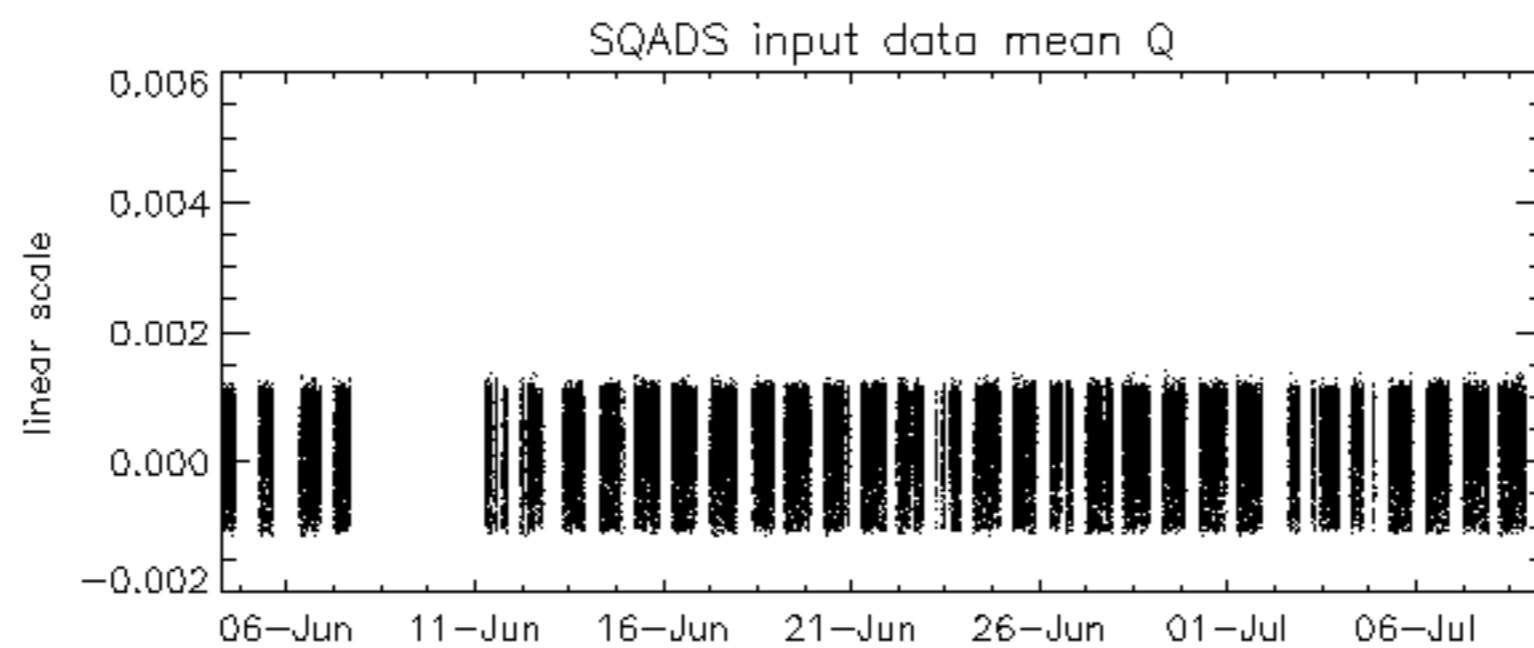
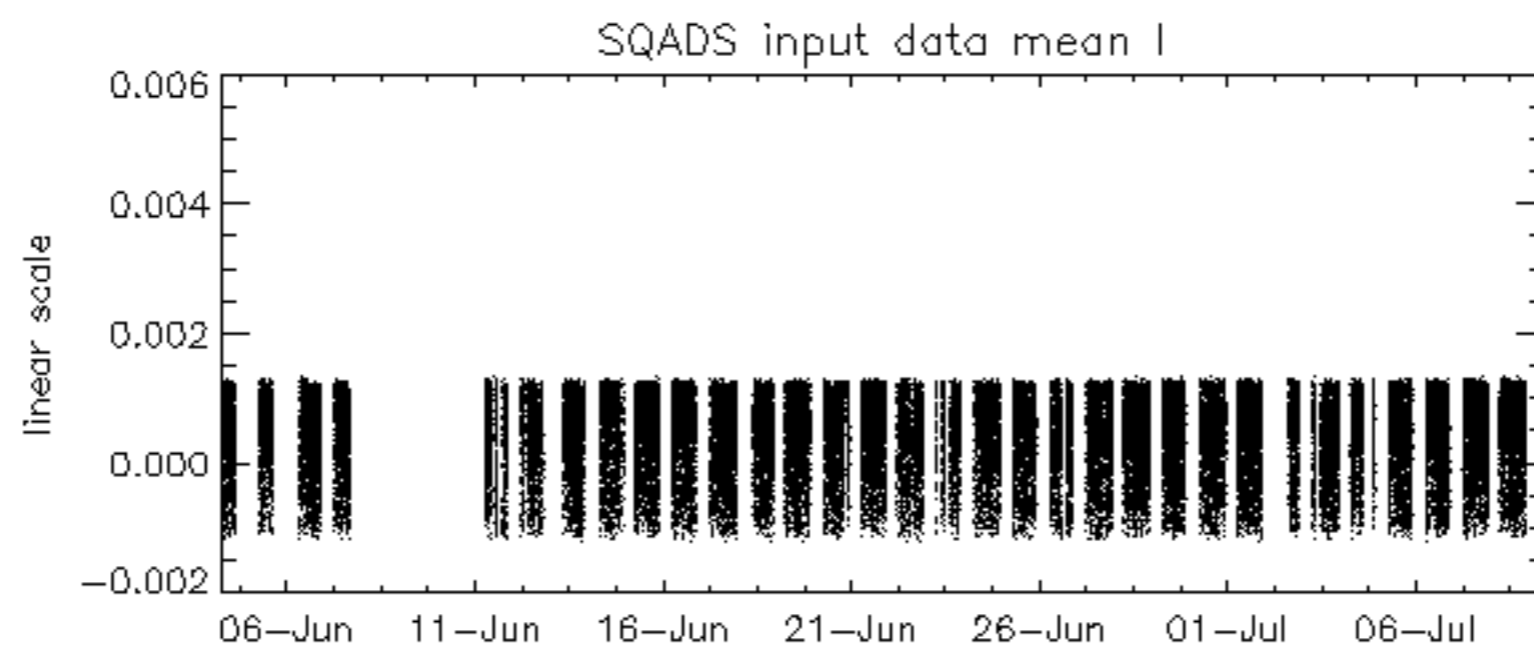
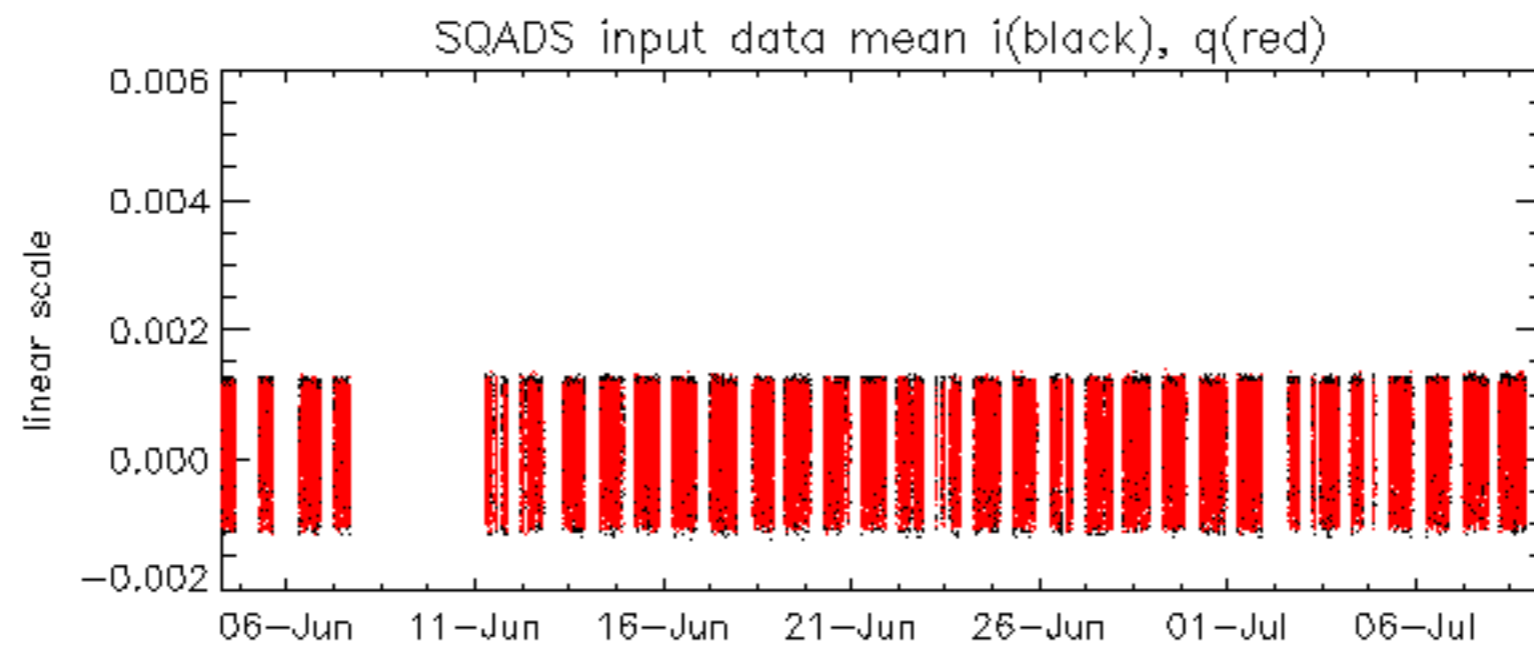


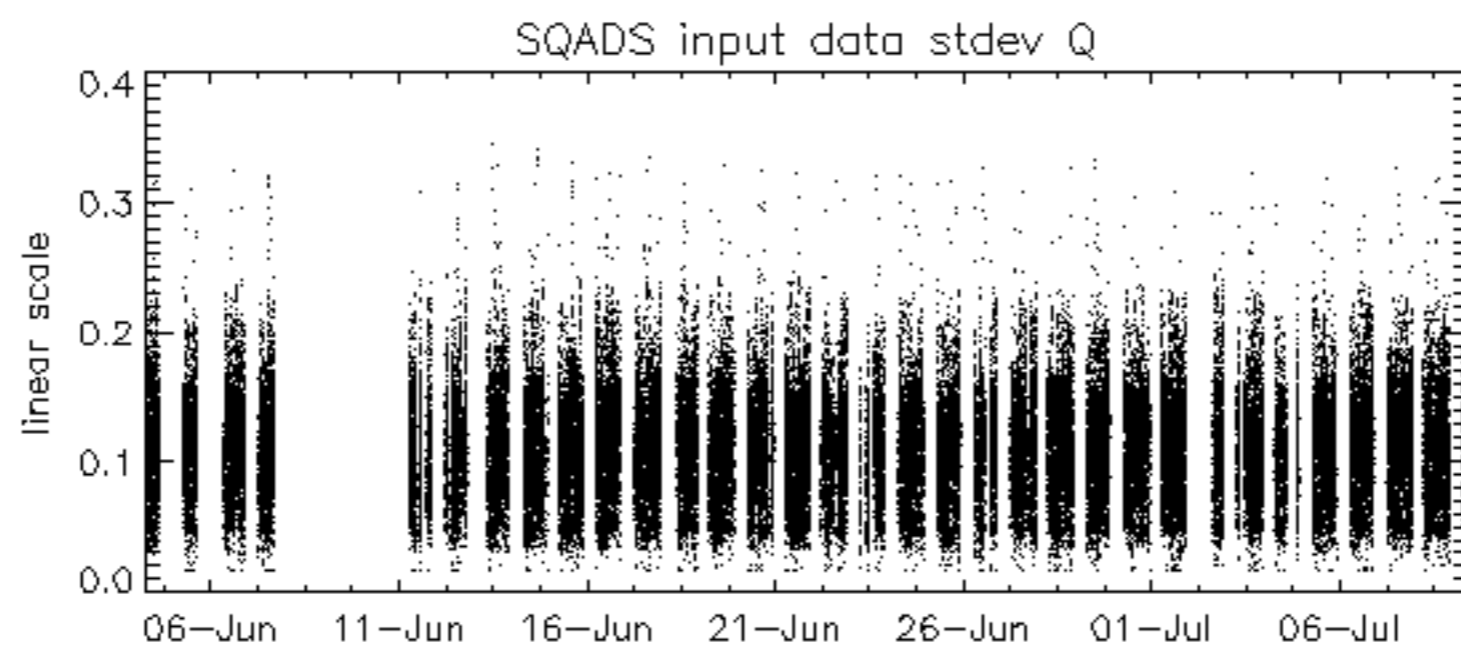
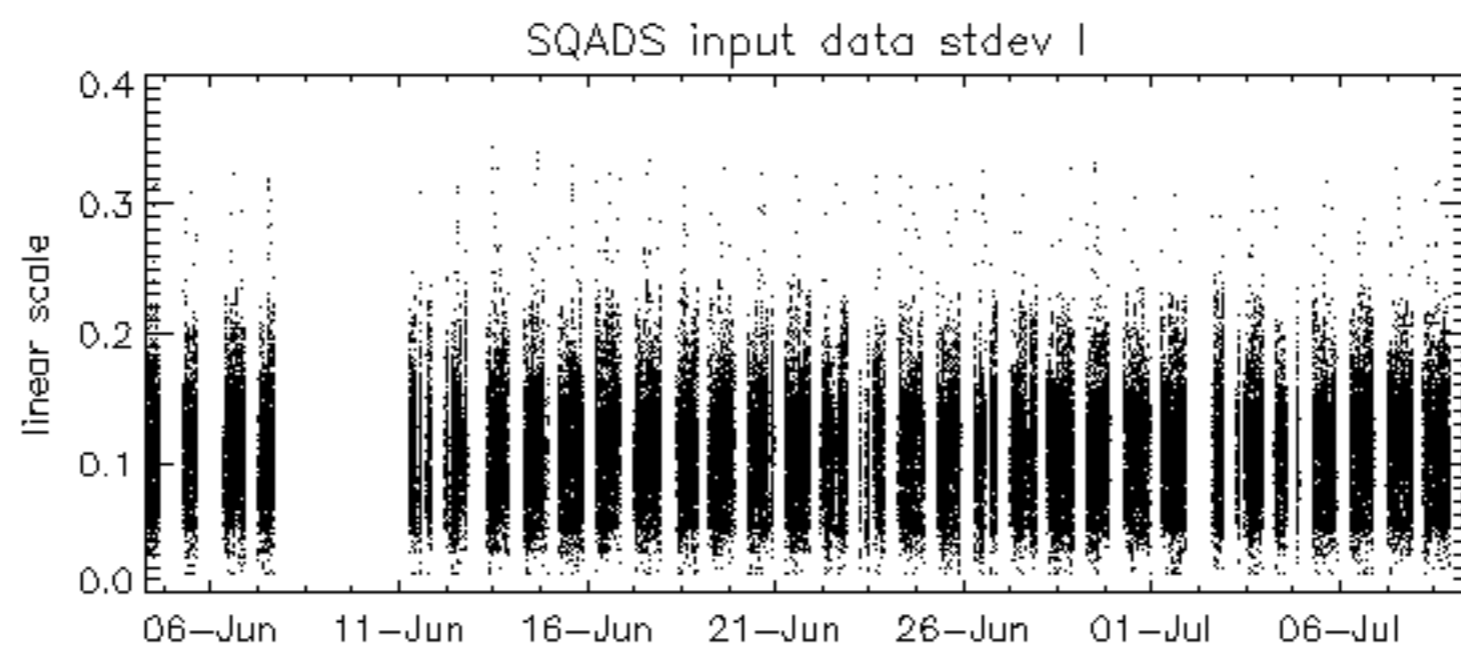
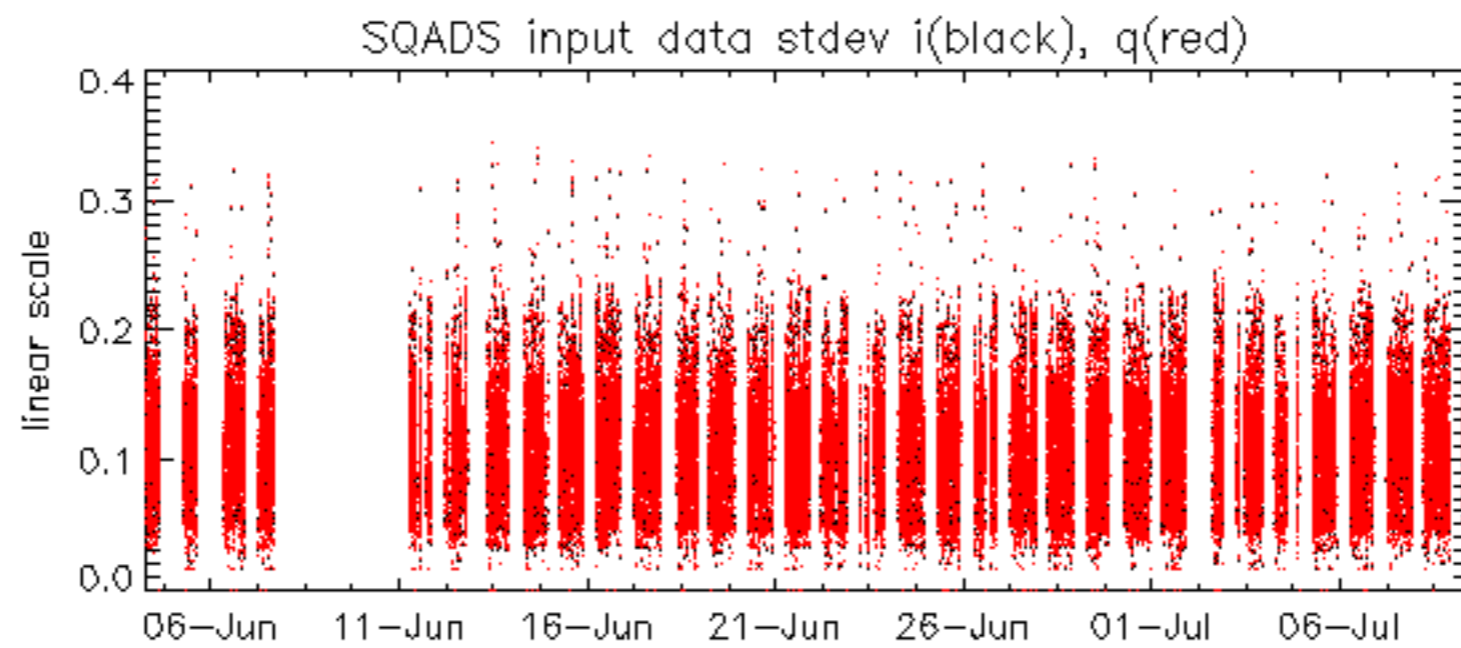






























No unavailabilities during the reported period