

SUMMARY

1. [Introduction](#)
2. [Summary](#)
 - [Instrument Unavailability](#)
 - [Browse Visual Inspection](#)
 - [Module Stepping Results](#)
 - [Data Analysis](#)
3. [Module Stepping](#)
4. [Internal Calibration pulses](#)
 - [Daily statistics \(row 8 and 24\)](#)
 - [Cyclic statistics \(row 8 and 24\)](#)
 - [cal pulses monitoring \(all row\)](#)
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 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

Four MS products available on 07-JUL-2003:

- ASA_MS__0PNPDE20030707_014510_000000152017_00489_07056_0028.N1
- ASA_MS__0PNPDE20030707_014330_000000152017_00489_07056_0027.N1
- ASA_MS__0PNPDK20030707_142458_000000152017_00497_07064_0000.N1
- ASA_MS__0PNPDK20030707_142318_000000152017_00497_07064_0001.N1









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

No anomalies to be reported.

Polarisation	Start Time
V	20030707 014510
H	20030707 014330
V	20030707 142458
H	20030707 142318



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

4 - Internal calibration Results

Analysis based on data available since 07-JUL-2003 till 08-JUL-2003 07:00:00 UTC
Nominal behavior of P1, P2 and P3 calibration pulses.

No anomalies observed.

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
8	mean	-2.44664	-22.4976	-8.09898
	stdev	0.0130825	0.0666972	0.00256108
24	mean	-5.16537	-21.2100	-8.09898
	stdev	0.0149546	0.0600396	0.00256108

4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
8	mean	-2.44586	-22.5406	-8.10694
	stdev	0.0127312	0.0686088	0.00308568
24	mean	-5.15781	-21.1969	-8.10694
	stdev	0.0130403	0.0566389	0.00308479

4.3 - cal pulses monitoring (all row)

5 - RAW data statistics

Analysis based on data available since 07-JUL-2003 till 07-JUL-2003 07:00:00 UTC
 Nominal level of I and Q level 0 statistics.

No anomalies observed.No anomalies observed.

5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000458656
	stdev	3.05282e-07
MEAN Q	mean	0.000295097
	stdev	3.13019e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.112542
	stdev	0.00157558
STDEV Q	mean	0.112643
	stdev	0.00160494



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

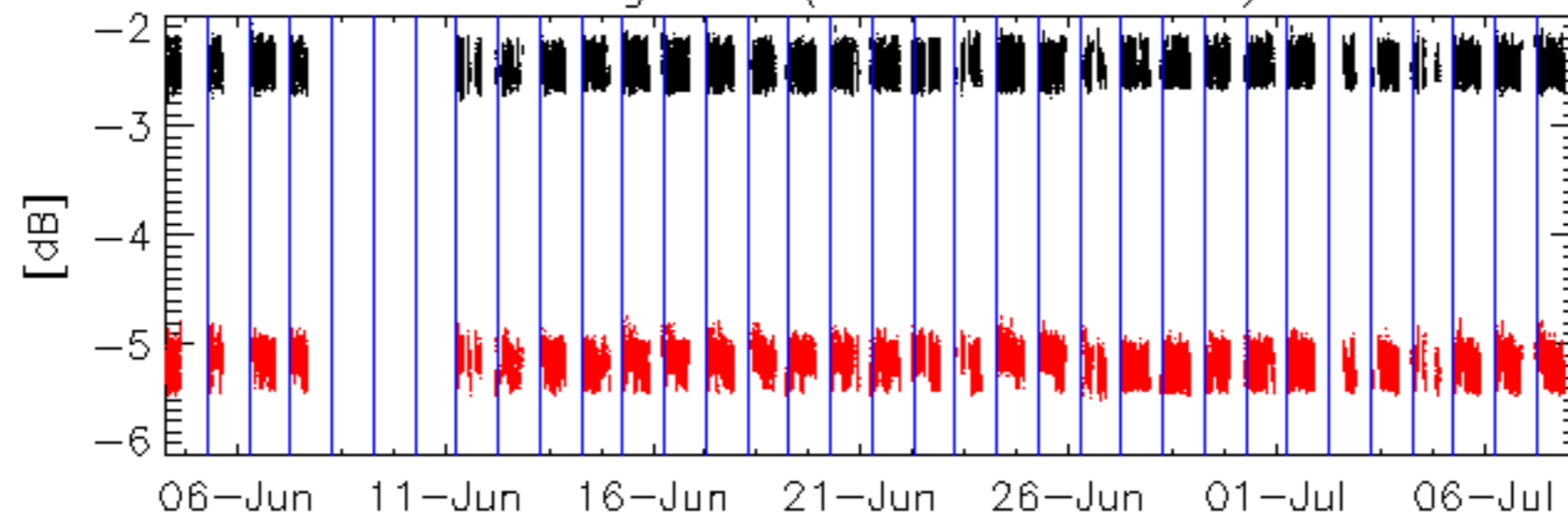
Descending

6.3 - Doppler evolution versus ANX

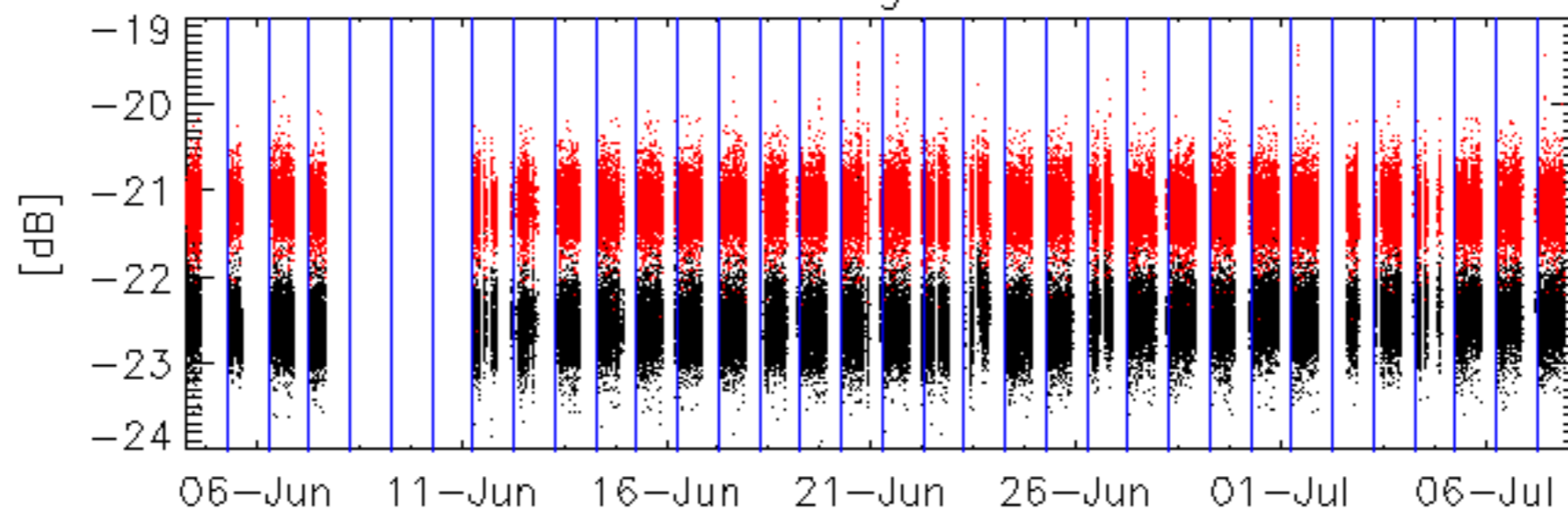
Evolution Doppler error versus ANX



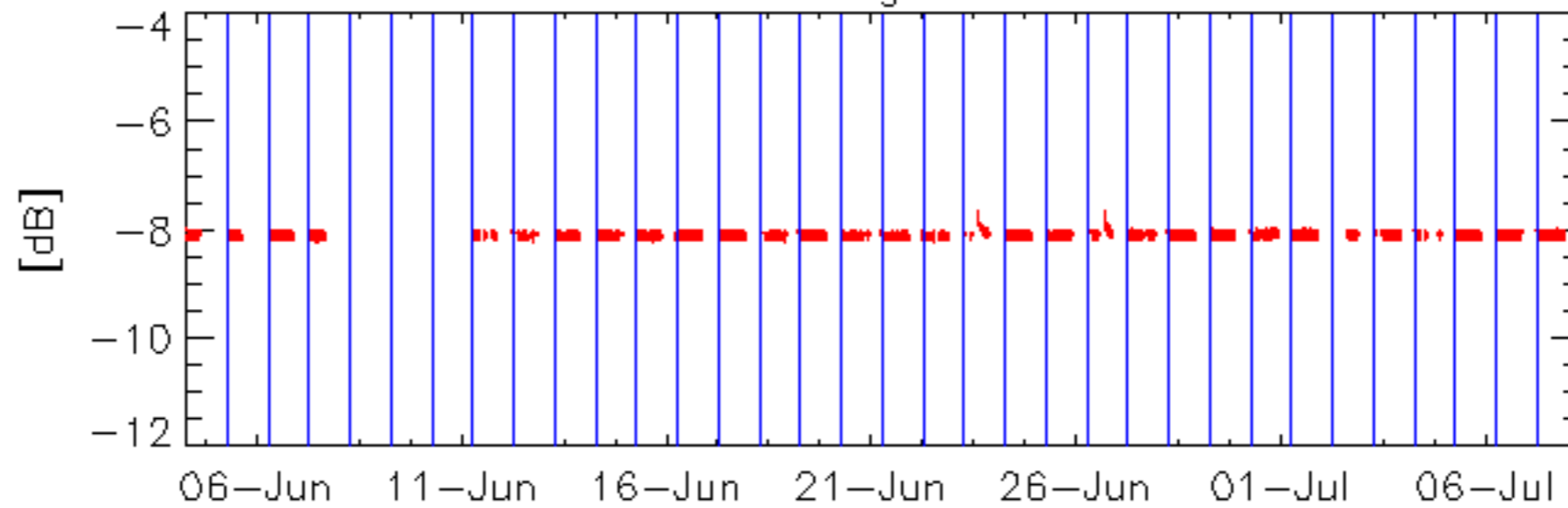
Average P1 (row 8 & row 24)

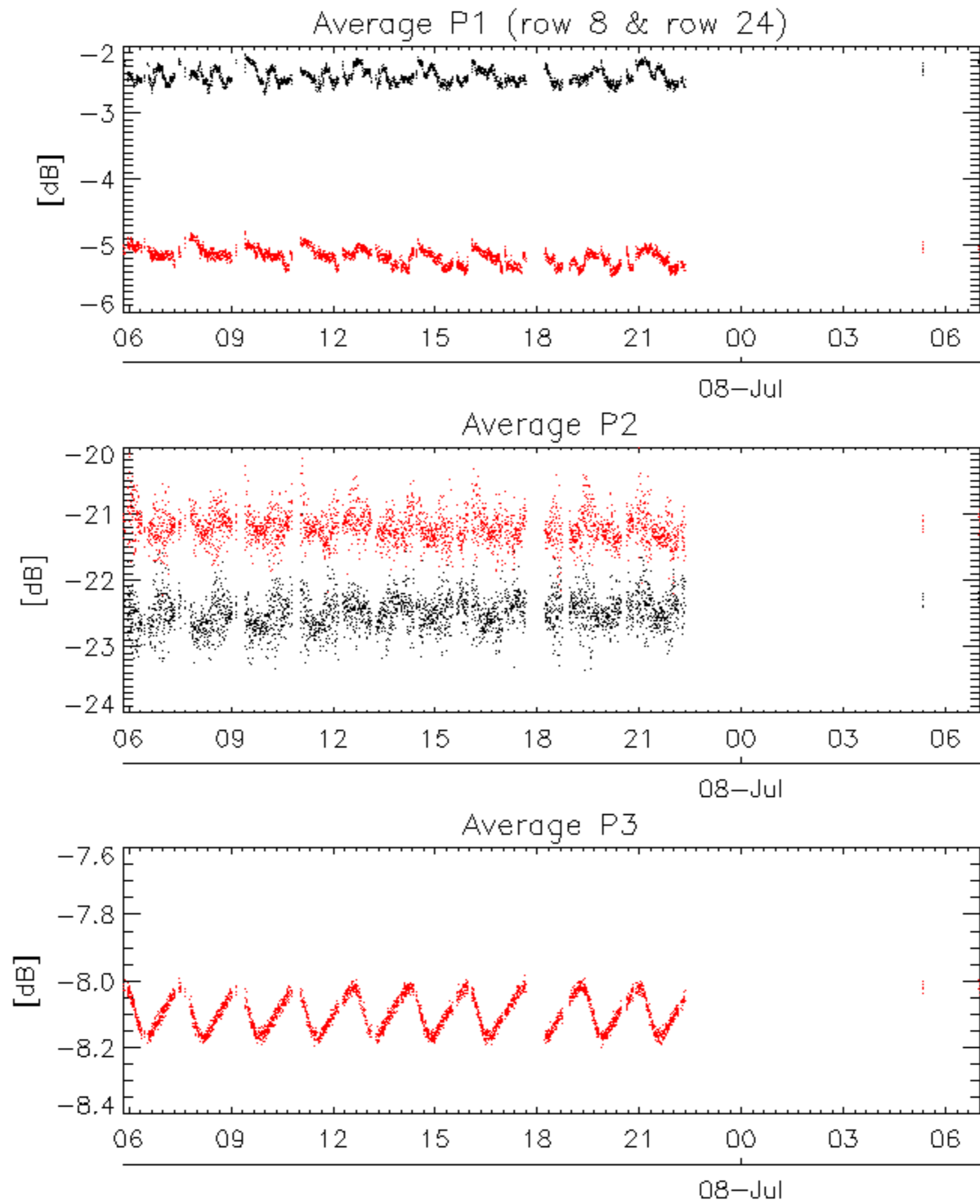


Average P2



Average P3

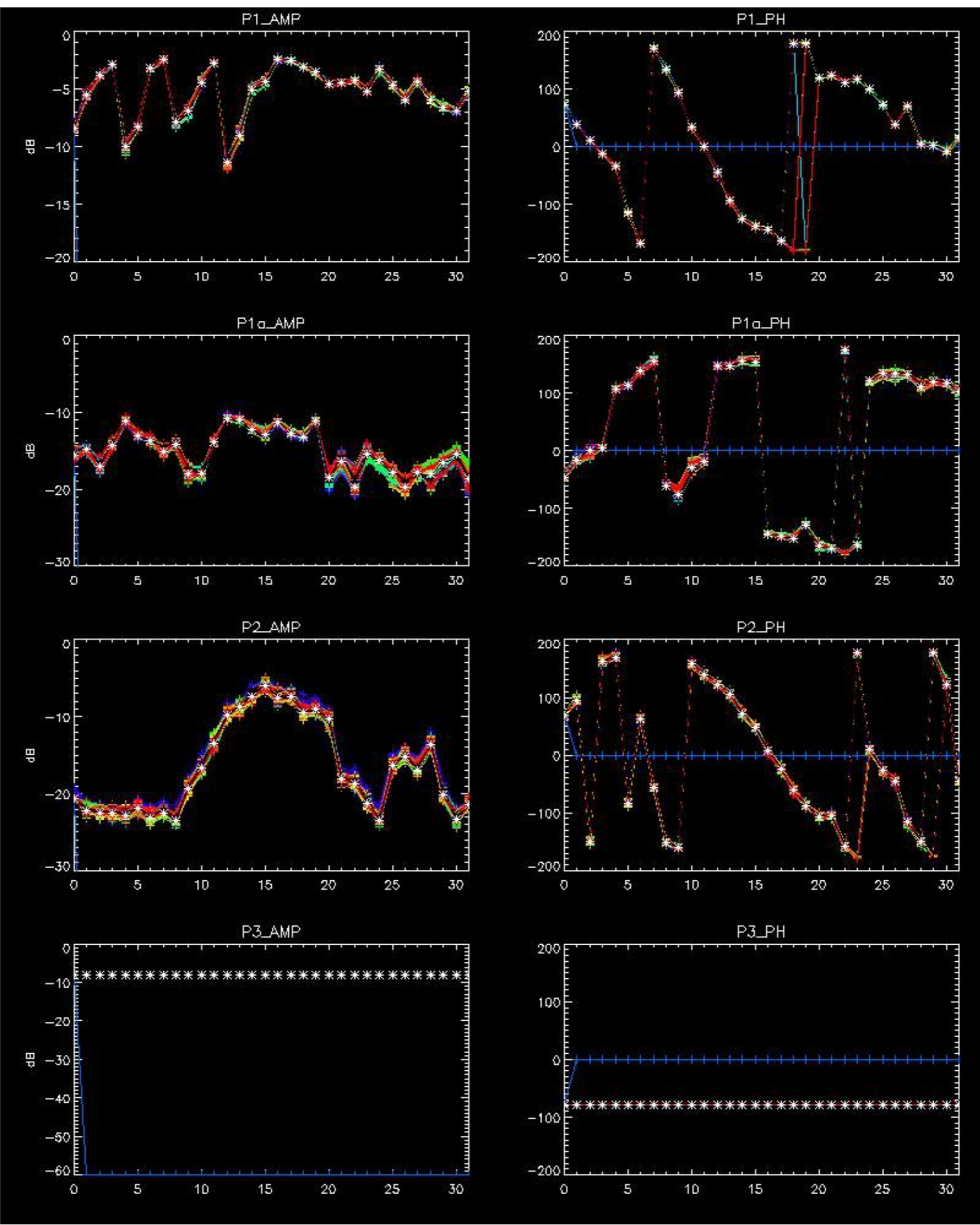




No anomalies observed on browse products.

Analysis based on data available since 07-JUL-2003 till 08-JUL-2003 07:00:00 UTC
Nominal behavior of P1, P2 and P3 calibration pulses.

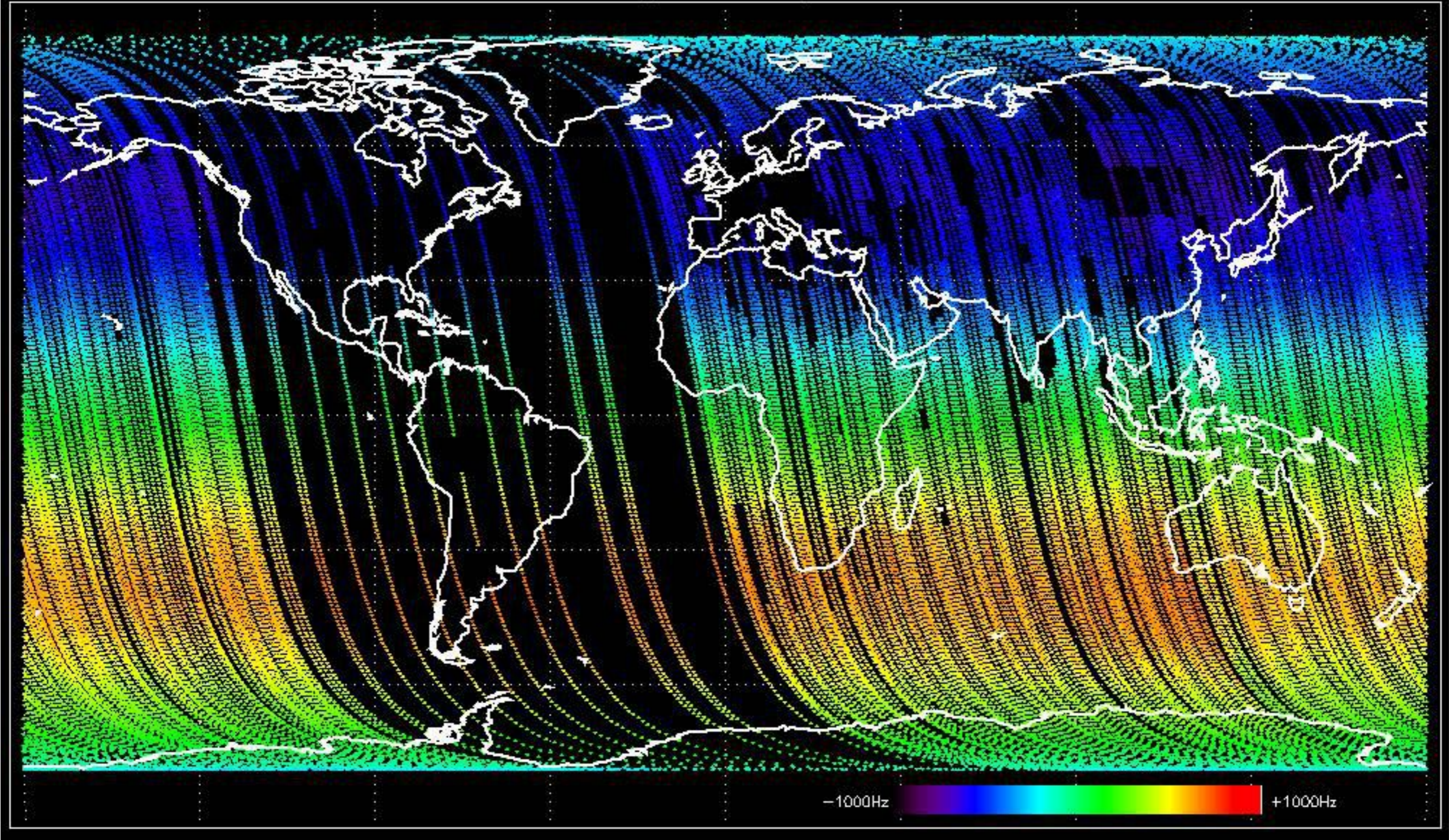
No anomalies observed.



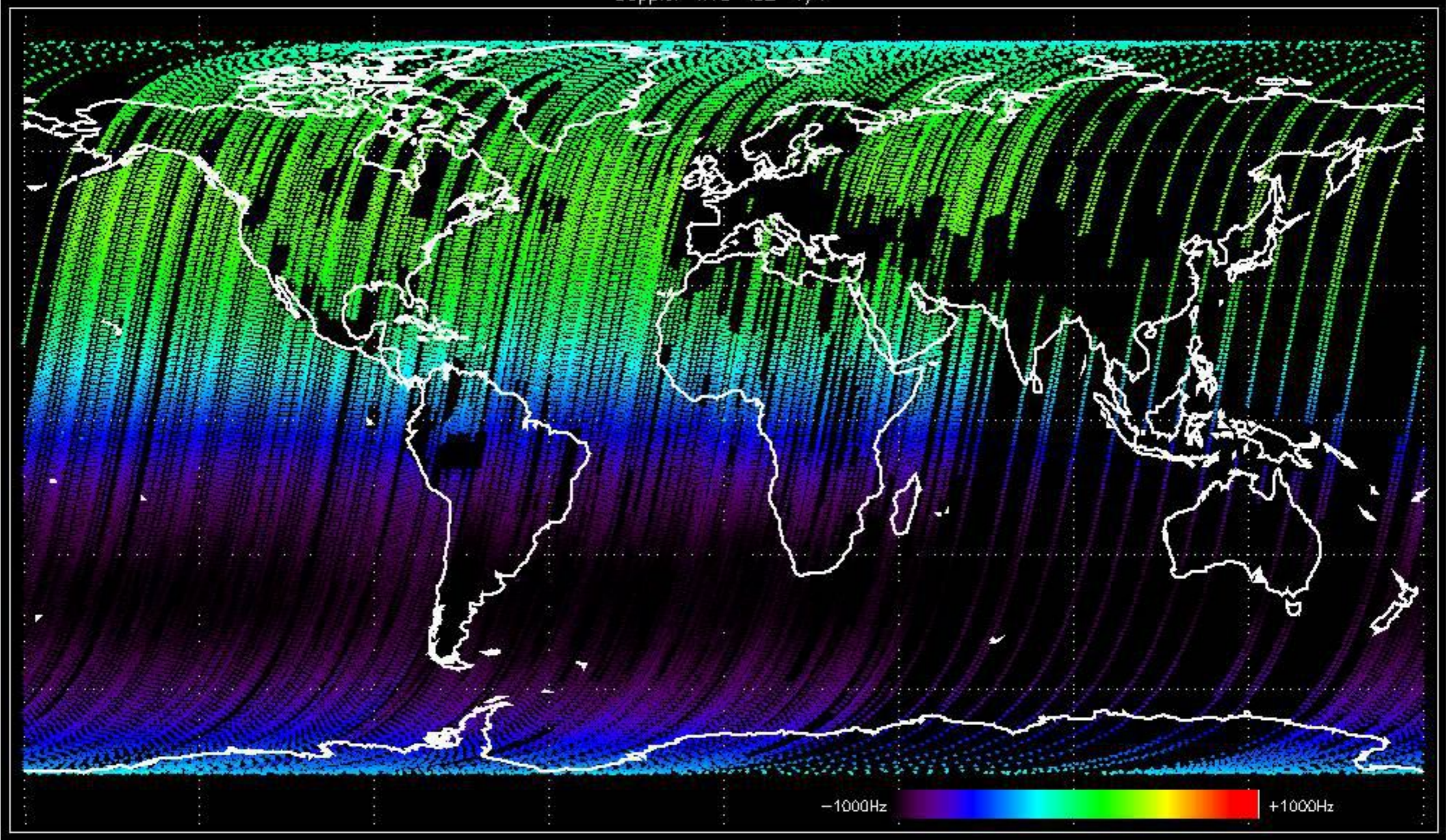
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

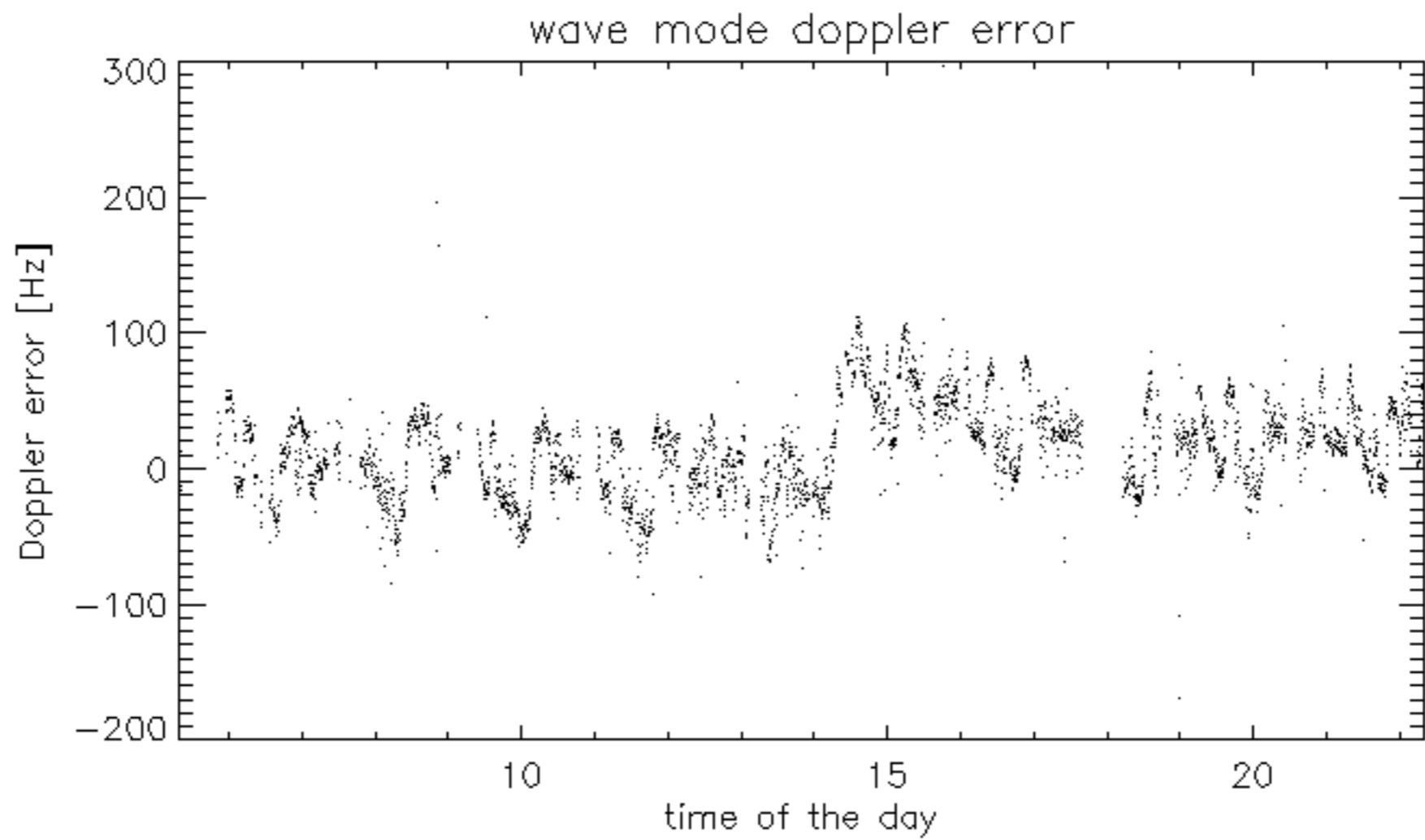
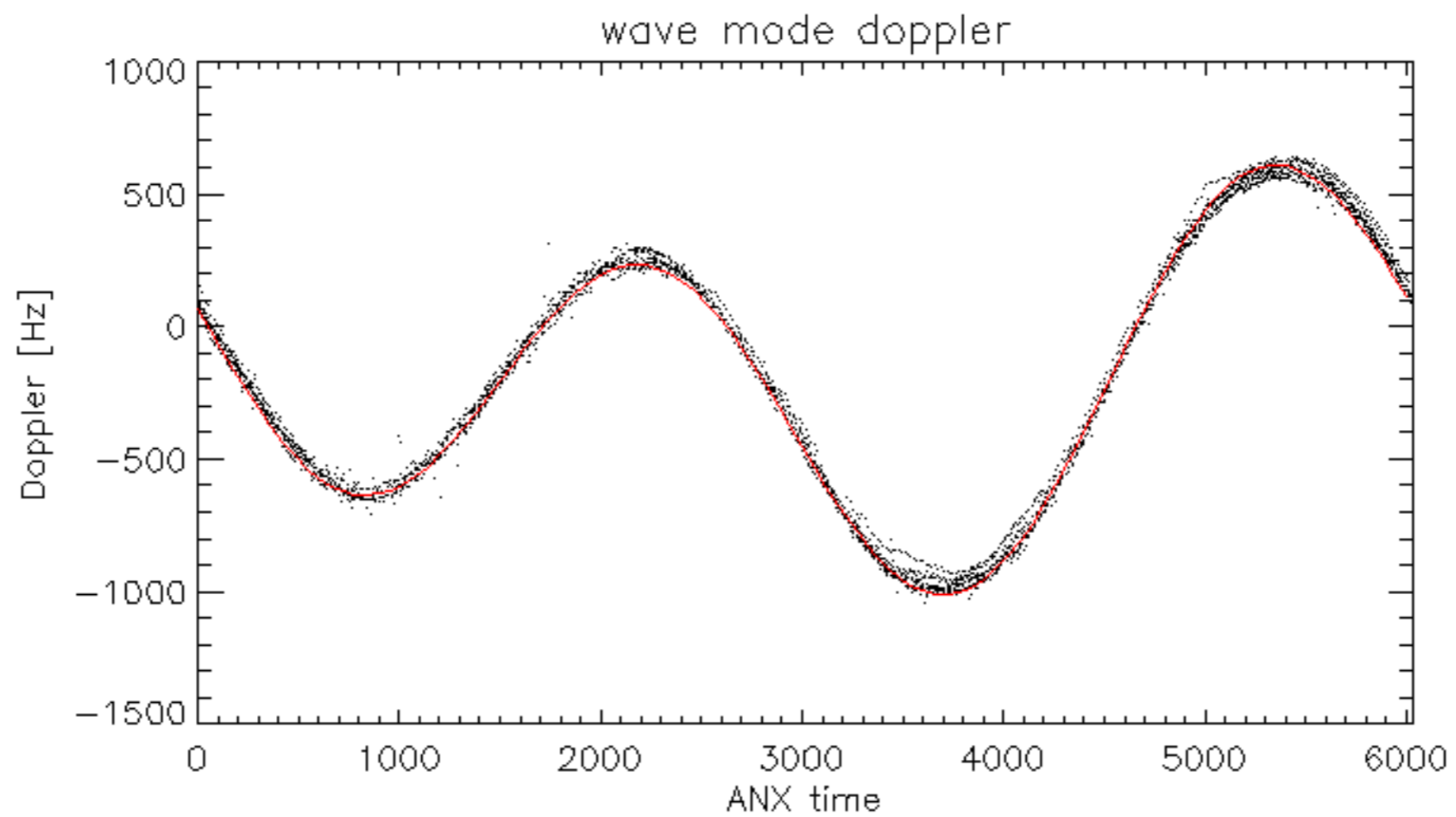
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 60 days

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

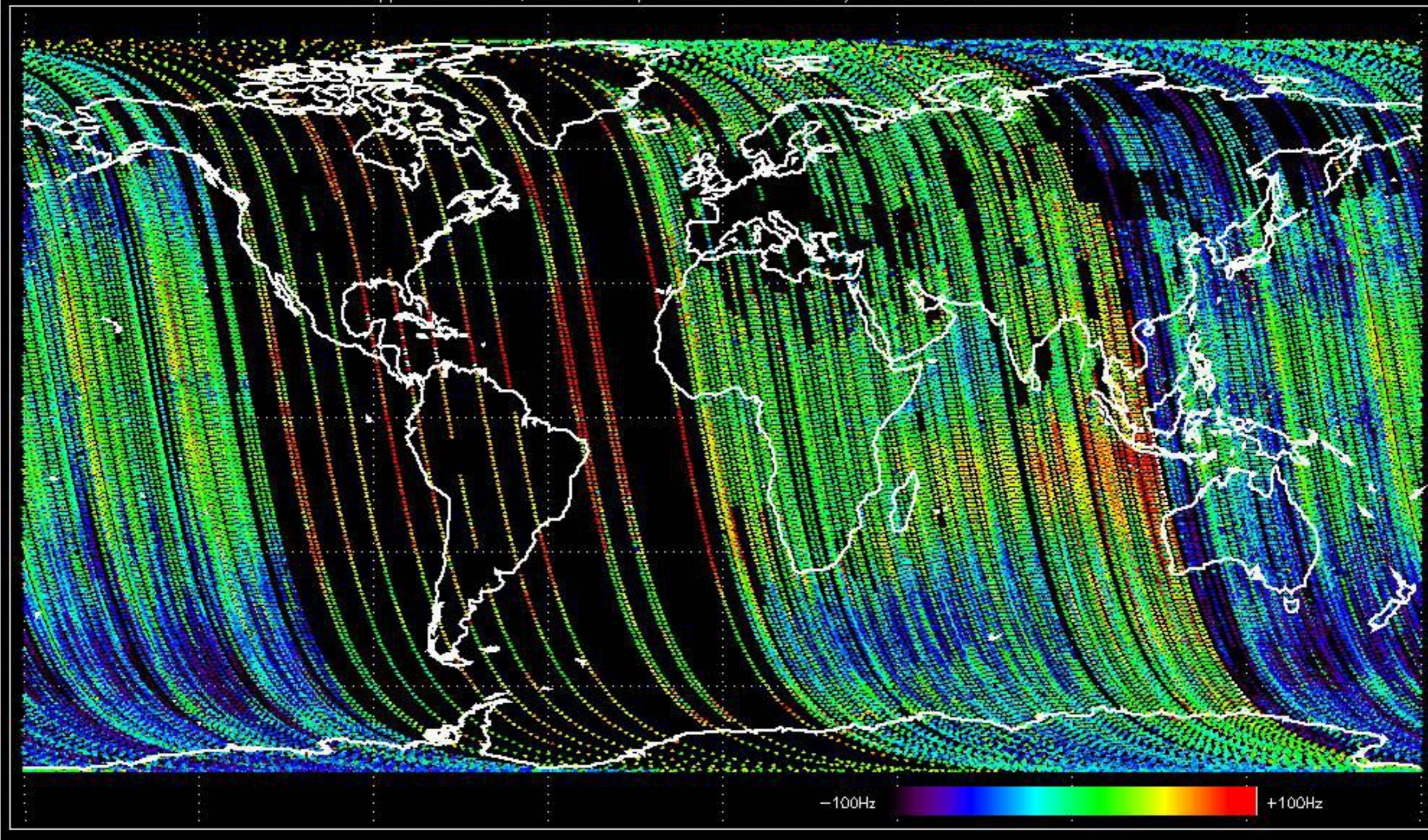


Doppler 'WVS' 'IS2' 'V/V'

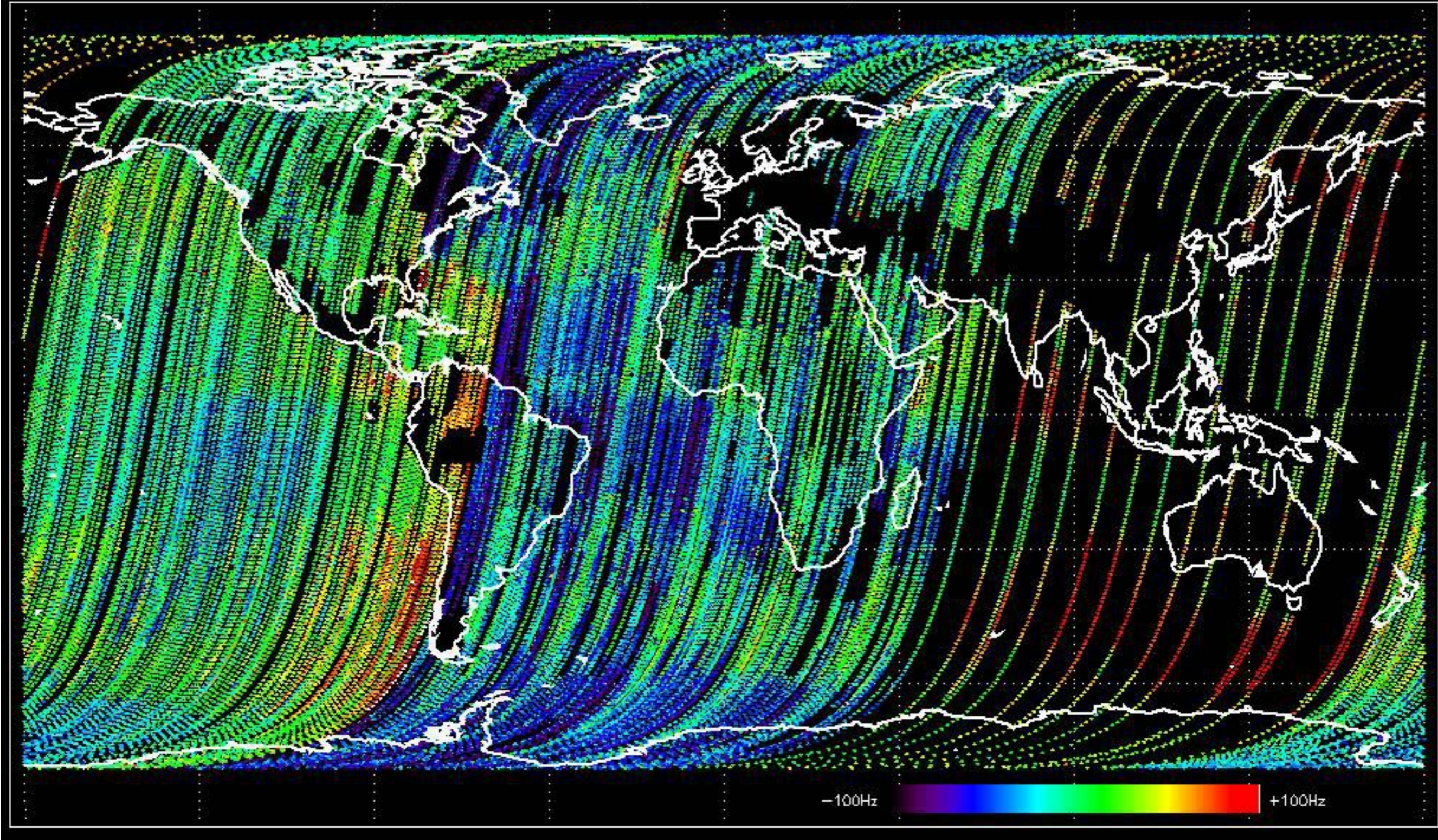




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



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



Four MS products available on 07-JUL-2003:

- ASA_MS__0PNPDE20030707_014510_000000152017_00489_07056_0028.N1
- ASA_MS__0PNPDE20030707_014330_000000152017_00489_07056_0027.N1
- ASA_MS__0PNPDK20030707_142458_000000152017_00497_07064_0000.N1
- ASA_MS__0PNPDK20030707_142318_000000152017_00497_07064_0001.N1

SUMMARY

- 1.Introduction
- 2.Summary
 - Instrument Unavailability
 - Browse Visual Inspection
 - Module Stepping Results
 - Data Analysis
- 3.Module Stepping
- 4.Internal Calibration pulses
 - Daily statistics (row 8 and 24)
 - Cyclic statistics (row 8 and 24)
 - cal pulses monitoring (all row)
- 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 instrument unavailabilities between 04-JUL-2003 00:00:00 and 07-JUL-2003 12:00:00 UTC.

Sub-system

	Start	Stop	Planned
ASAR	YYYY-MM-DD hh:mm:ss	YYYY-MM-DD hh:mm:ss	---

2.2 - Browse Visual Inspection

Only browse products of the 04-JUL-2003 are available.
No anomalies detected on available browse.

2.3 - Data Analysis

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

-Nominal Doppler behavior.

3 - Module Stepping Mode

One MS received on 04-JUL-2003: ASA_MS__0PNPDE20030704_032002_000000152017_00447_07014_0024.N1
No MS products received on 05-JUL-2003 and on 06-JUL-2003.
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	20030704 032002
H	20030703 002847

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

Analysis based on data available since 06-JUL-2003 till 07-JUL-2003 08:58:02 UTC
Nominal behavior of P1, P2 and P3 calibration pulses.

No anomalies observed.

4.1 - Daily statistics

```

row
stat
      AveP1
            AveP2
                  AveP3
8
mean
  -2.44855
    -22.4861
      -8.09899
stdev
  0.0124128
    0.0657130
      0.00246192
24
mean
  -5.16476
    -21.2204
      -8.09899
stdev
  0.0154832
    0.0575364
      0.00246192

```

4.2 - Cyclic statistics

```

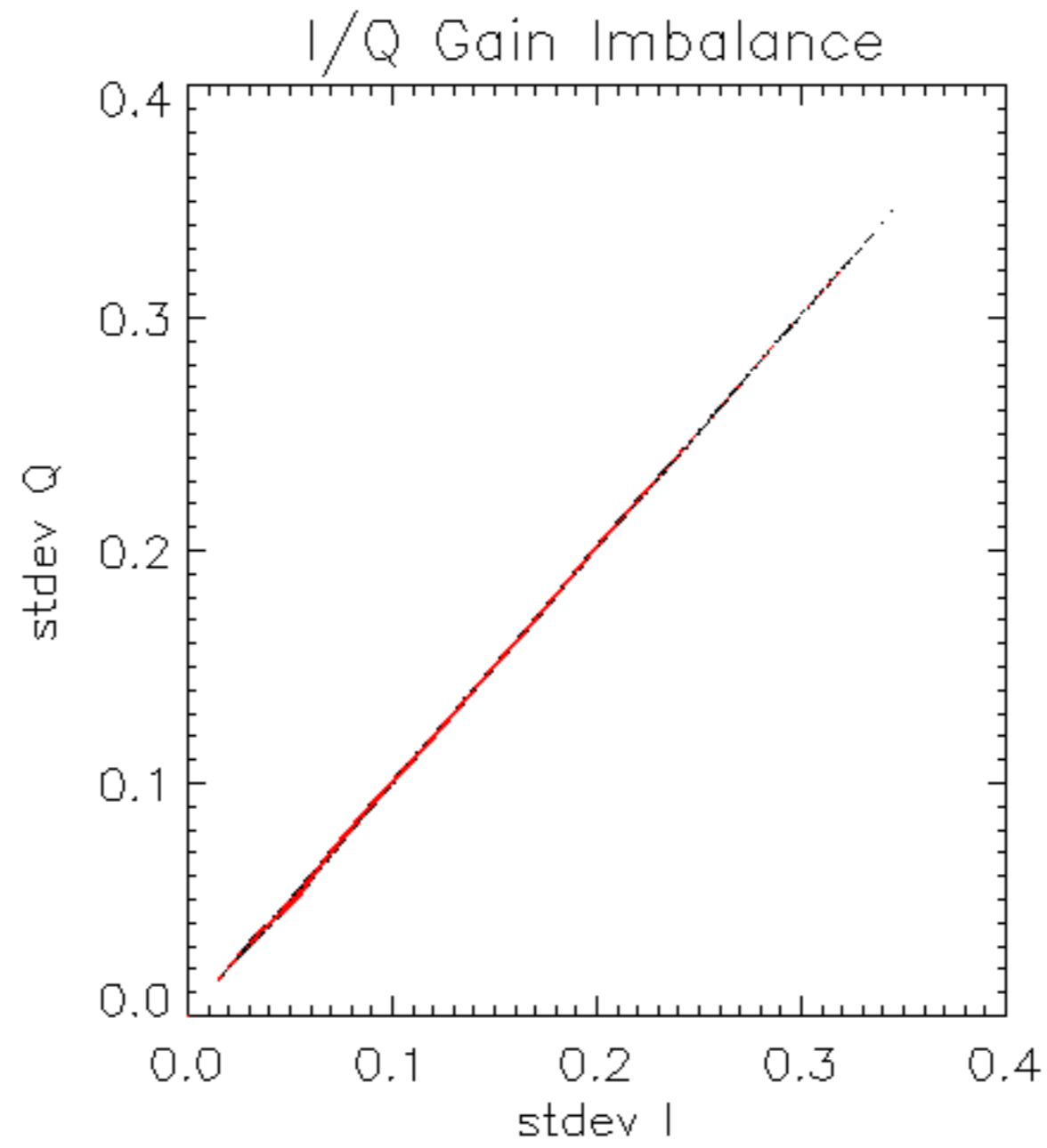
row
stat
      AveP1
            AveP2
                  AveP3
8
mean
  -2.44588
    -22.5425
      -8.10722
stdev
  0.0127043
    0.0686633
      0.00309738
24
mean
  -5.15715
    -21.1962
      -8.10722
stdev
  0.0129387
    0.0565546
      0.00309738

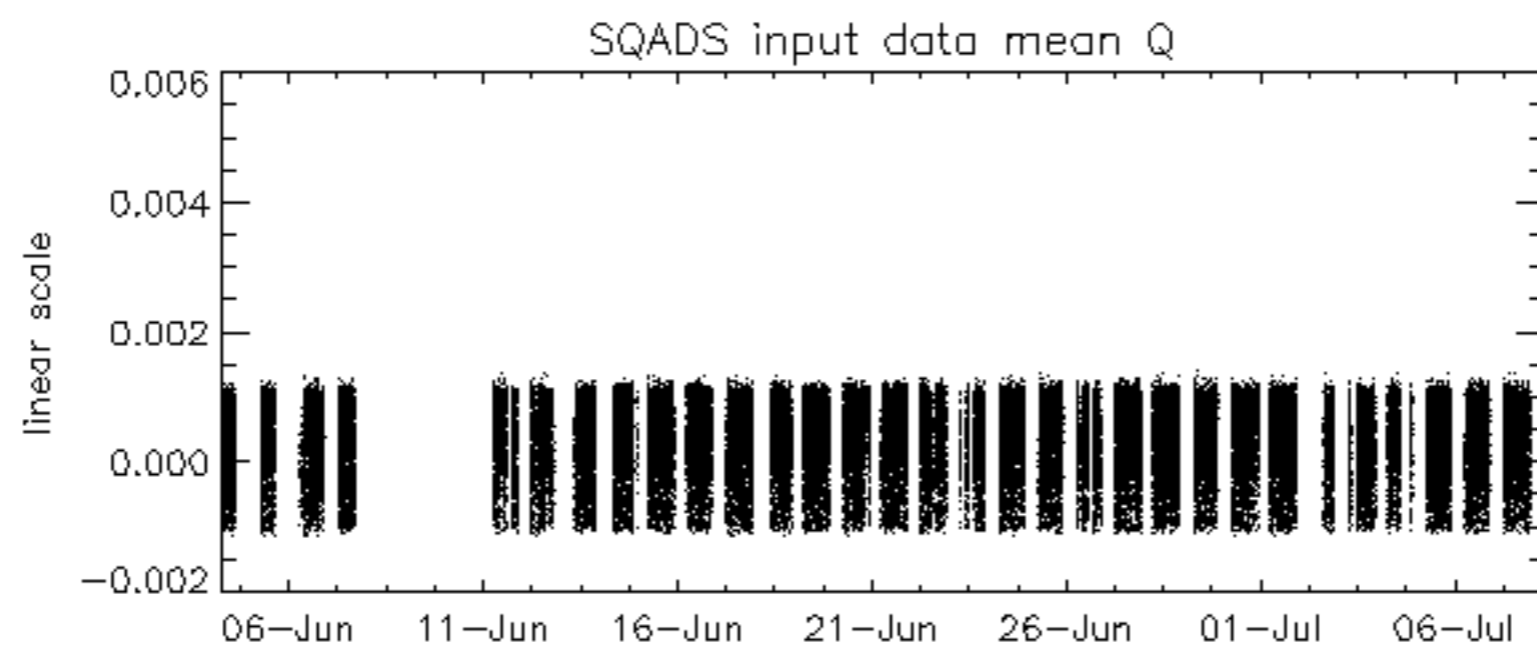
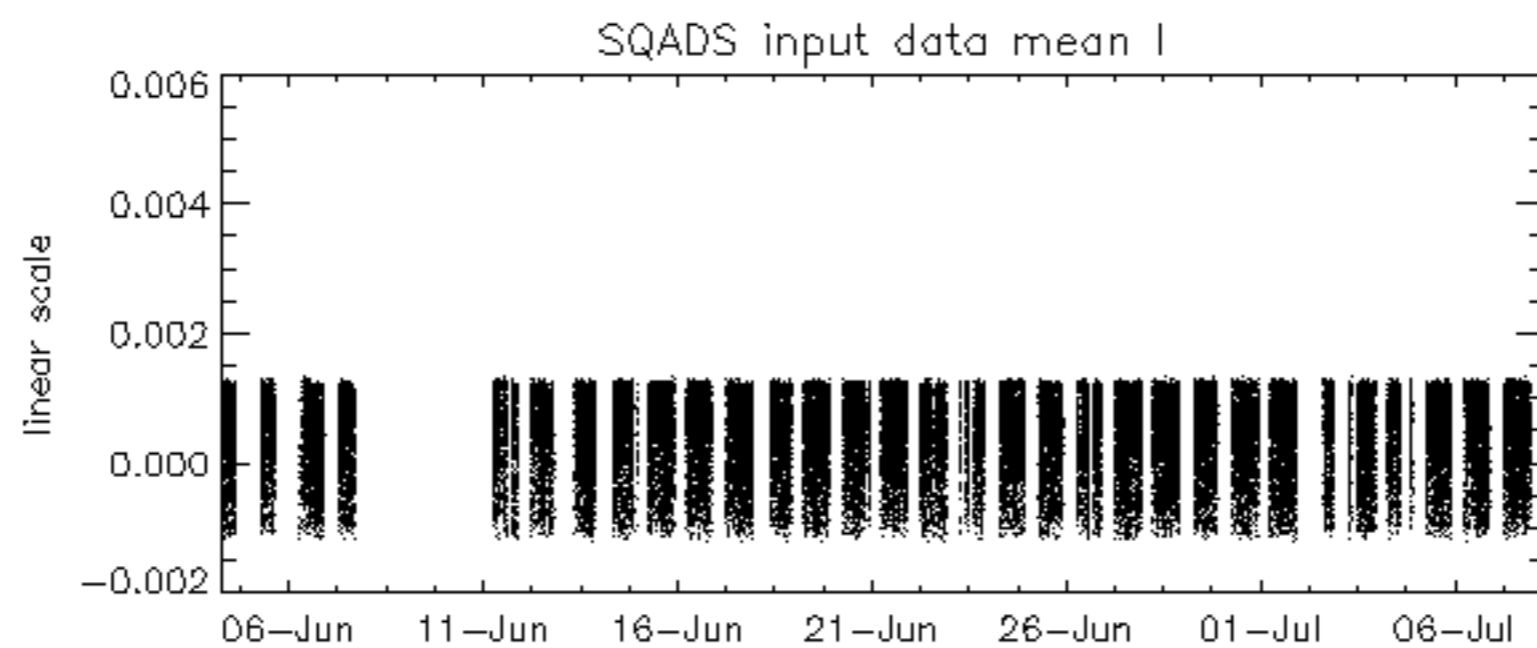
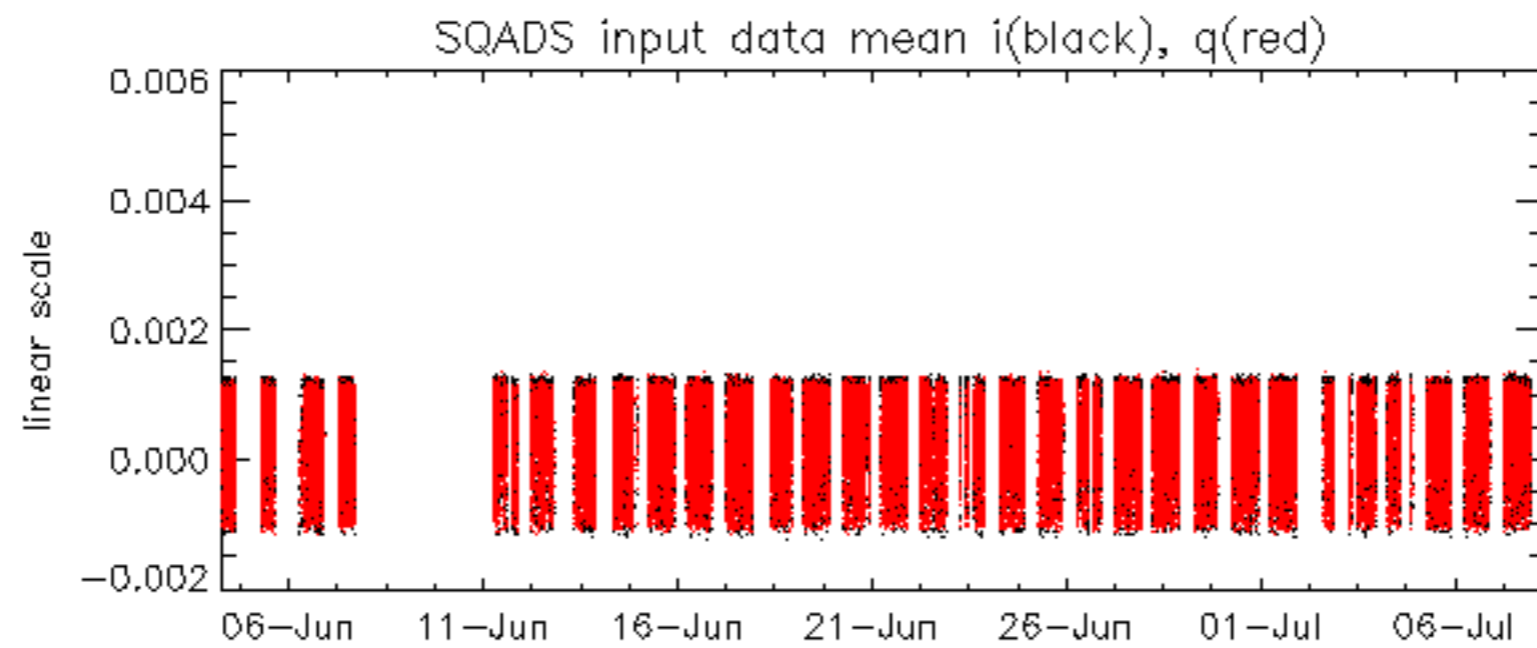
```

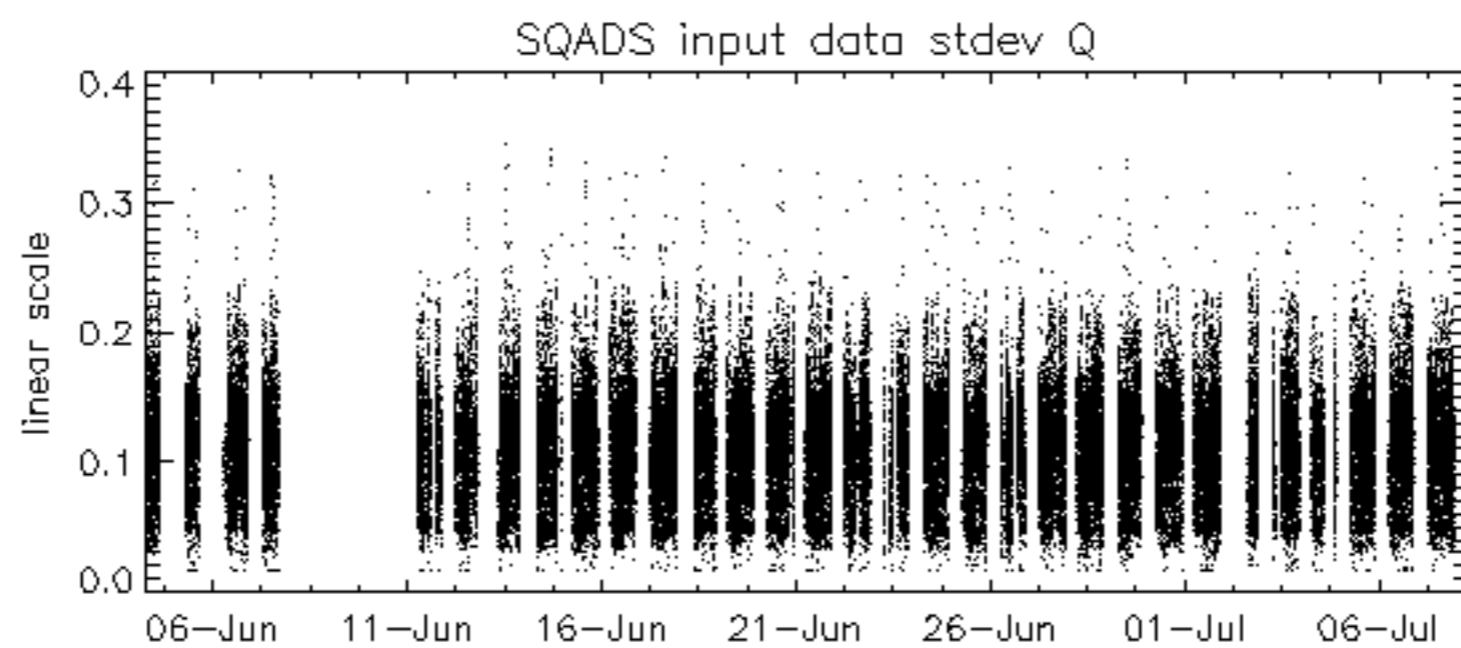
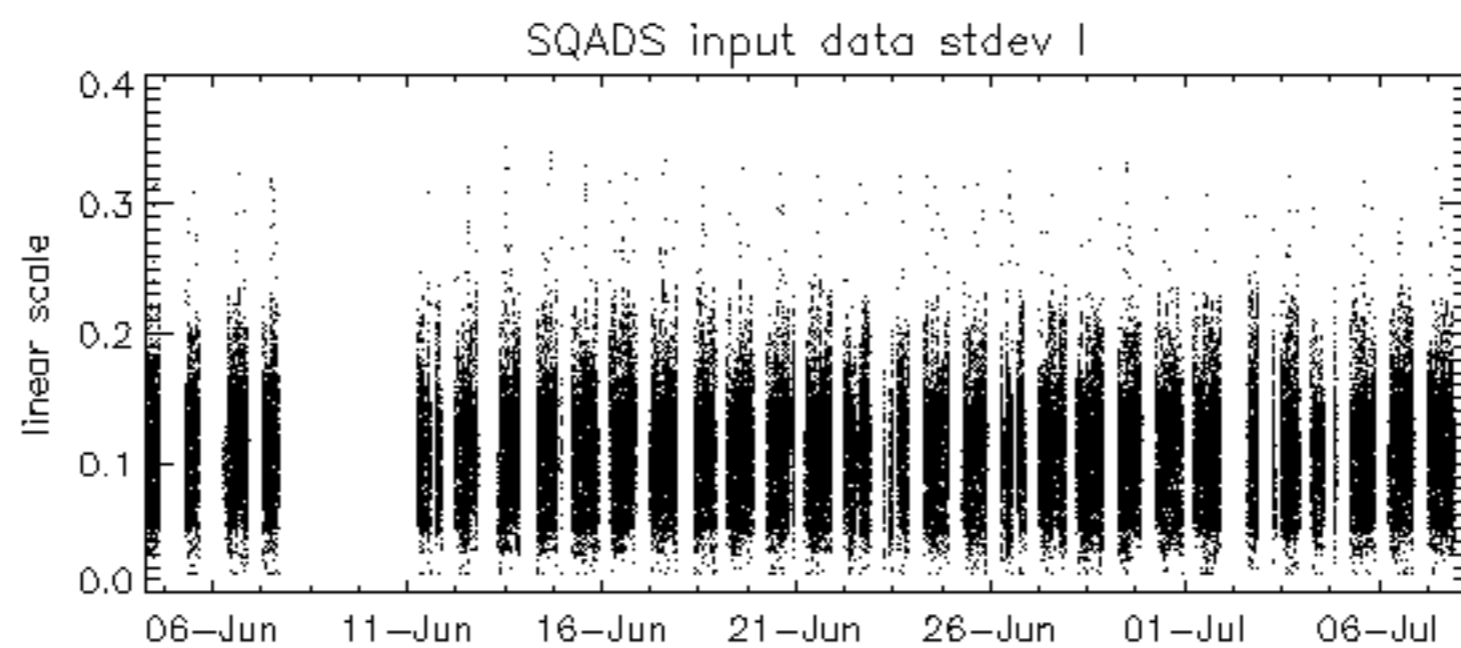
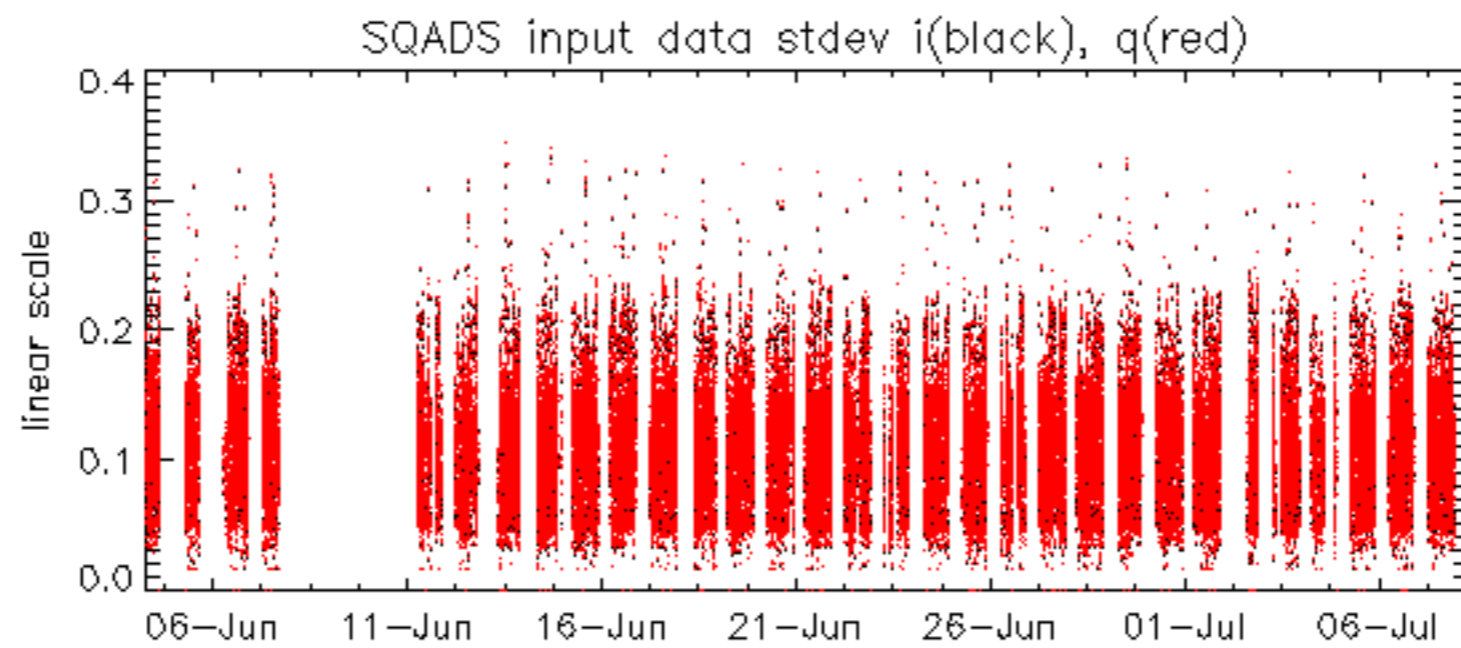
4.3 - cal pulses monitoring (all row)

No anomalies observed.No anomalies observed.









No unavailabilities during the reported period