

SUMMARY

1. [Introduction](#)
2. [Summary](#)
 - [Instrument Unavailability](#)
 - [Browse Visual Inspection](#)
 - [Module Stepping Results](#)
 - [Data Analysis](#)
3. [Module Stepping](#)
4. [Internal Calibration pulses](#)
 - [Daily statistics \(row 3 and 10\)](#)
 - [Cyclic statistics \(row 3 and 10\)](#)
 - [cal pulses monitoring \(all rows\)](#)
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 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 available MS products:











Polarisation	Start Time
V	20030811 201150
H	20030811 201010

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	-3.81314	-22.5480	-8.11290
	stdev	0.00608670	0.0641913	0.00252121
10	mean	-6.89542	-19.3122	-8.11289
	stdev	0.0238991	0.0661360	0.00251896



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.86286	-22.5660	-8.10345
	stdev	0.0871624	0.0628871	0.00256141
10	mean	-6.97727	-19.3246	-8.10345
	stdev	0.412429	0.0617628	0.00256135



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	0.000477135
	stdev	3.04381e-07
MEAN Q	mean	0.000306726
	stdev	3.21453e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115467
	stdev	0.00161352
STDEV Q	mean	0.115601
	stdev	0.00164351



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

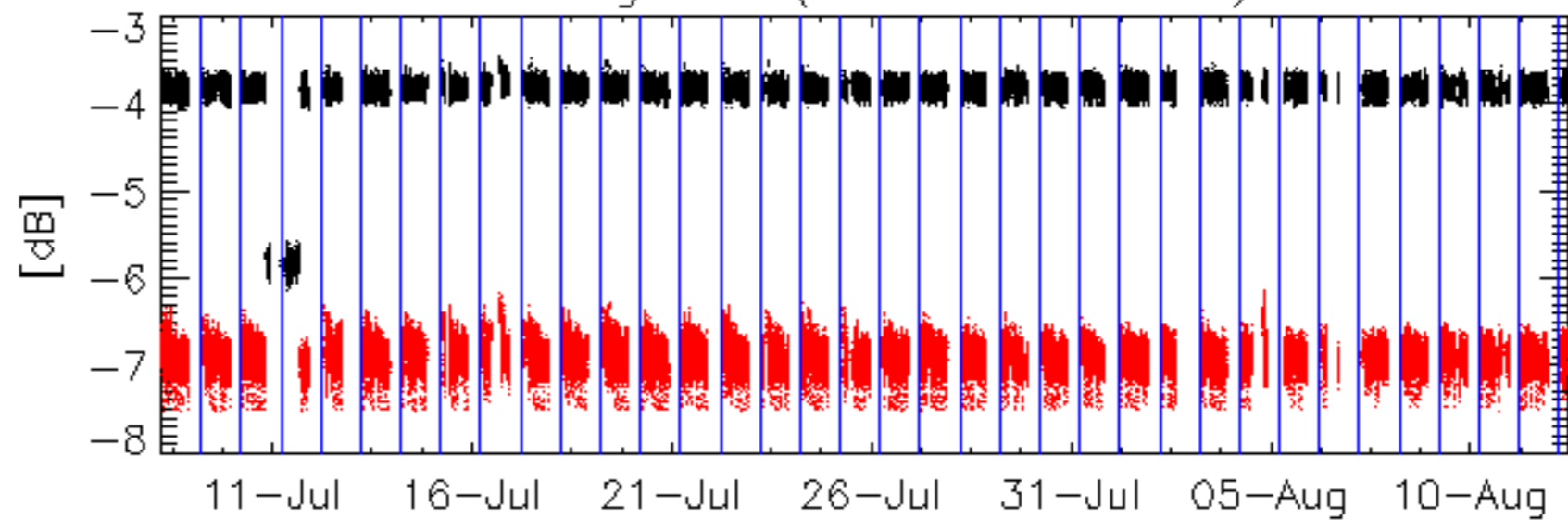
Evolution of Absolute Doppler
Ascending
Descending

6.3 - Doppler evolution versus ANX

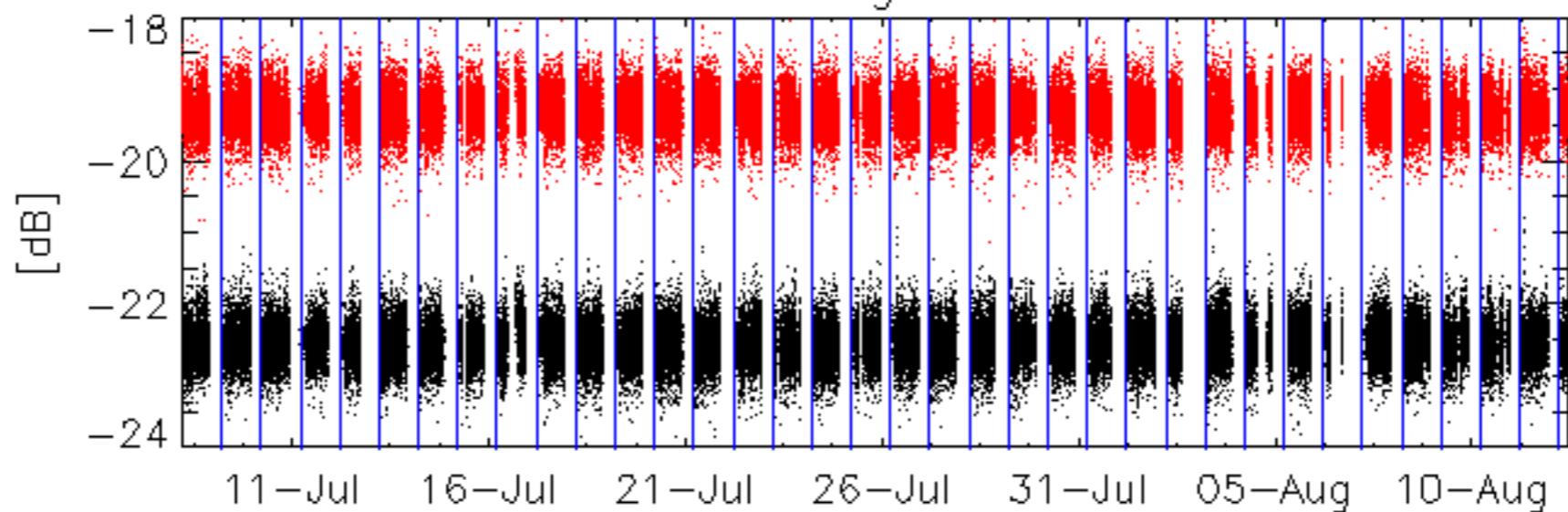
Evolution Doppler error versus ANX



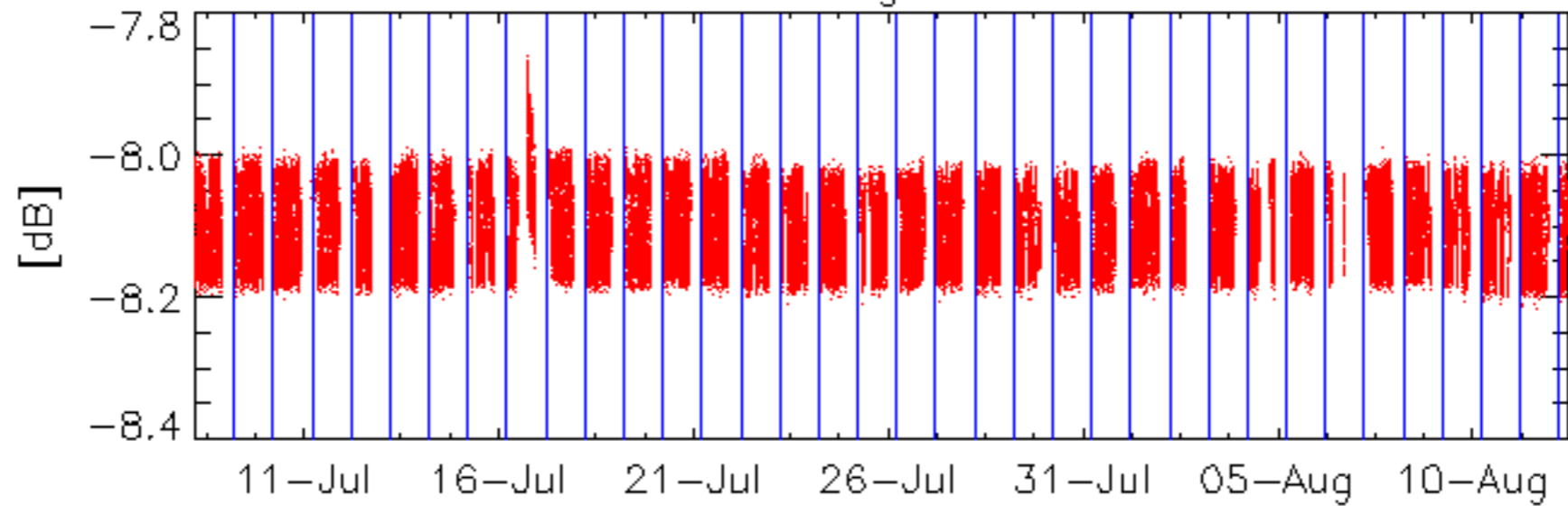
Average P1 (row 3 & row 10)



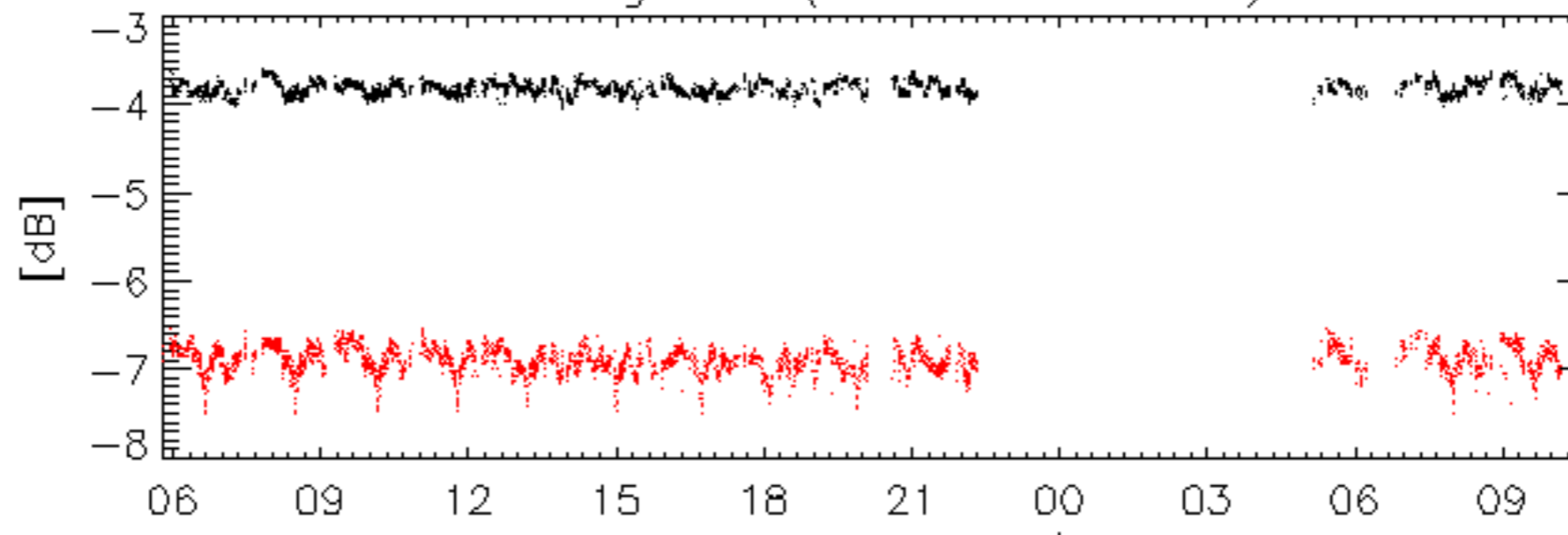
Average P2



Average P3

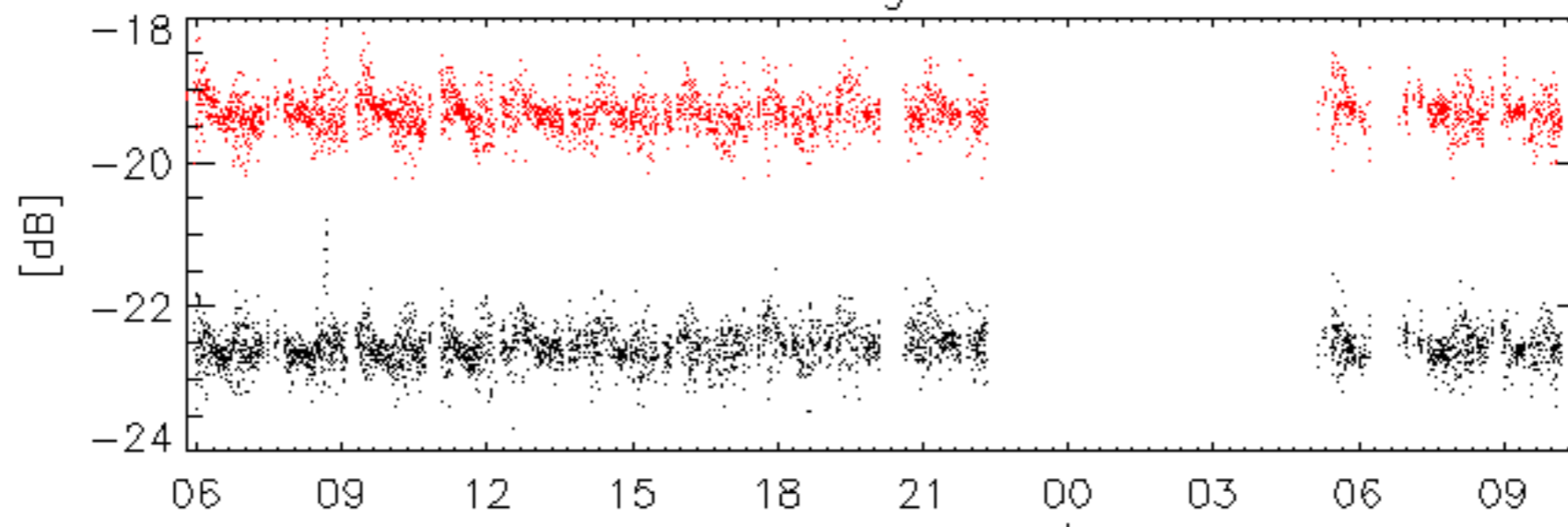


Average P1 (row 3 & row 10)



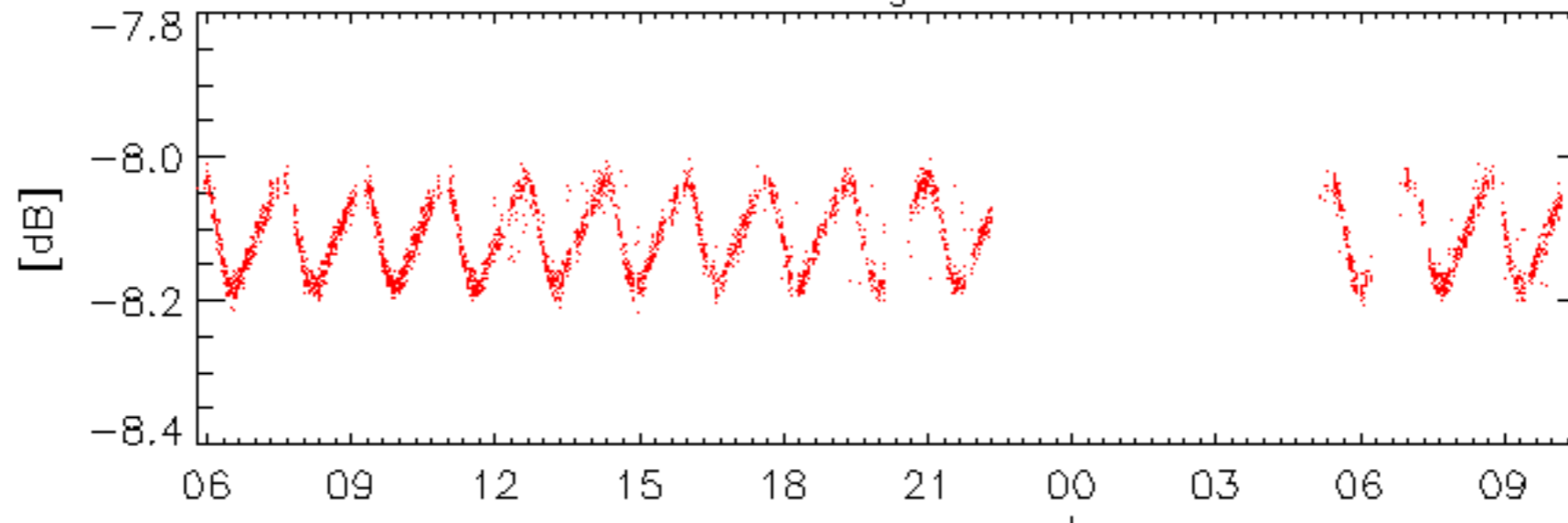
12-Aug

Average P2

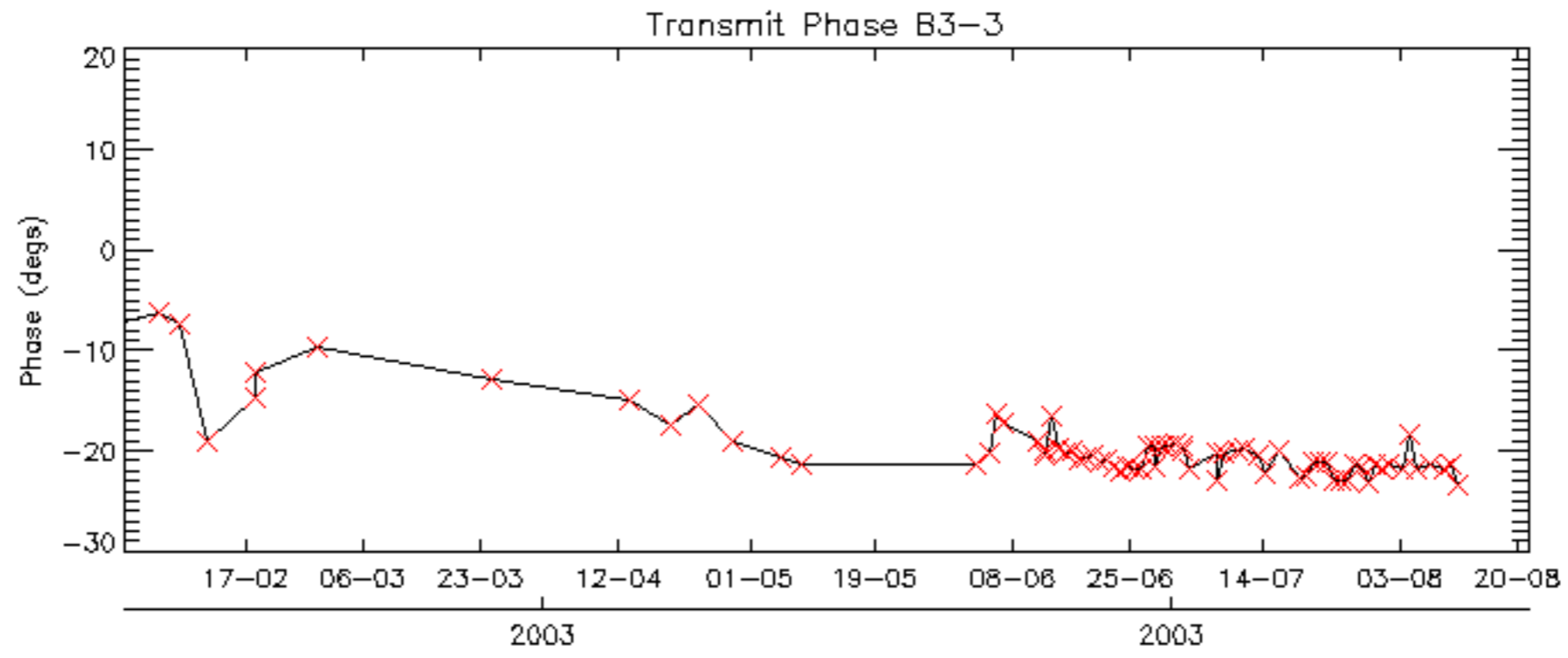


12-Aug

Average P3



12-Aug



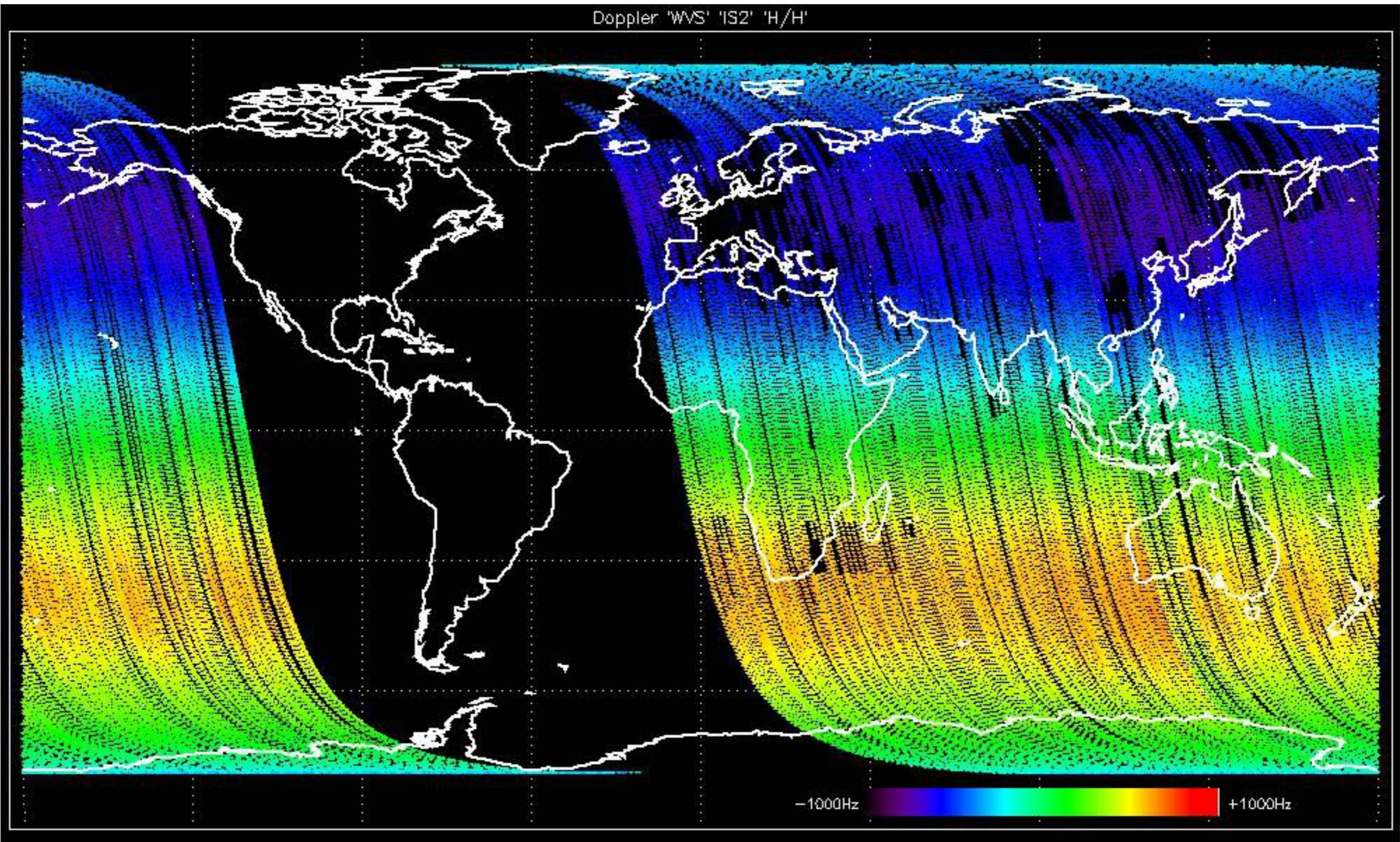
No anomalies observed on available browse products

No anomalies observed.

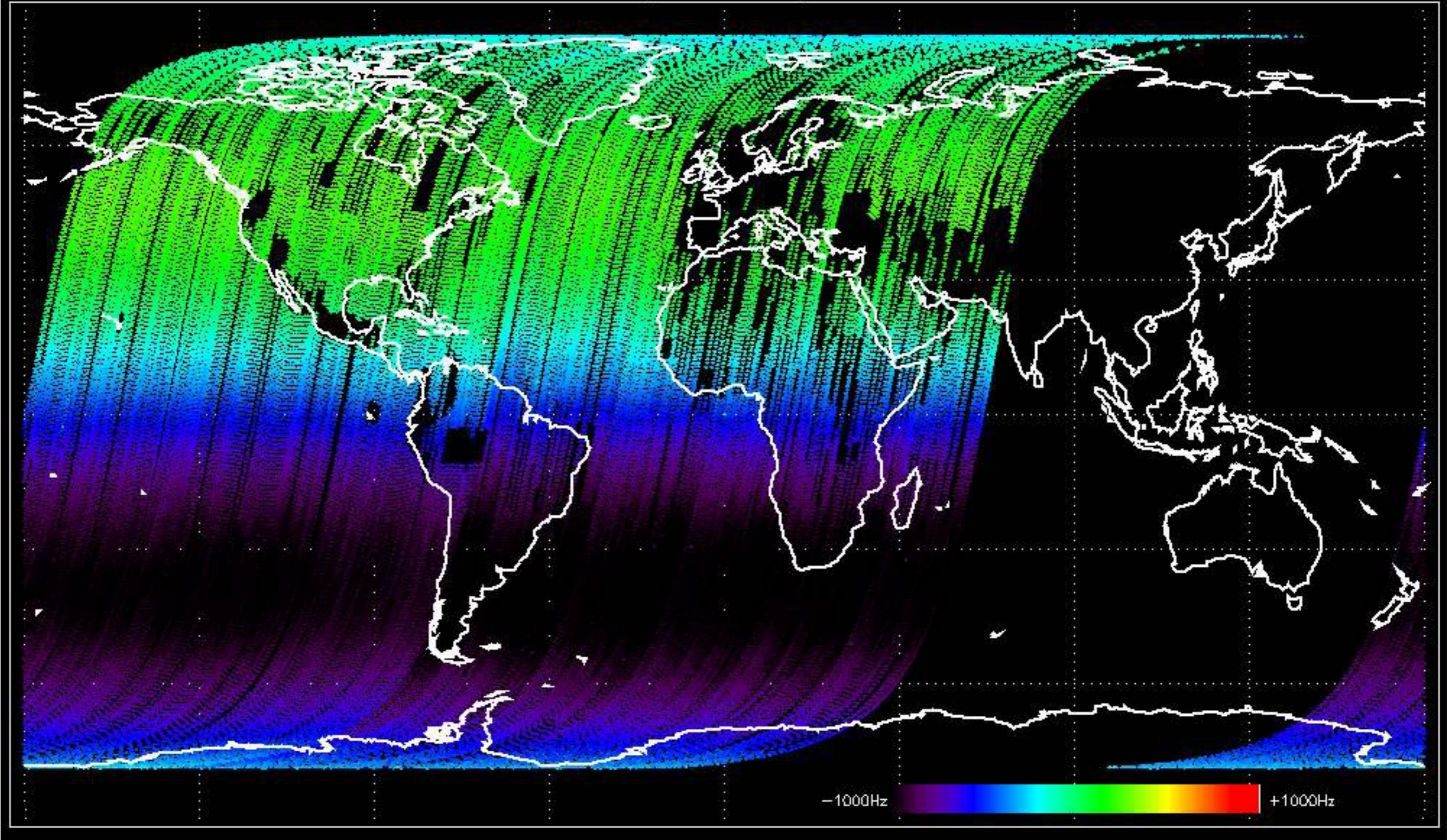
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

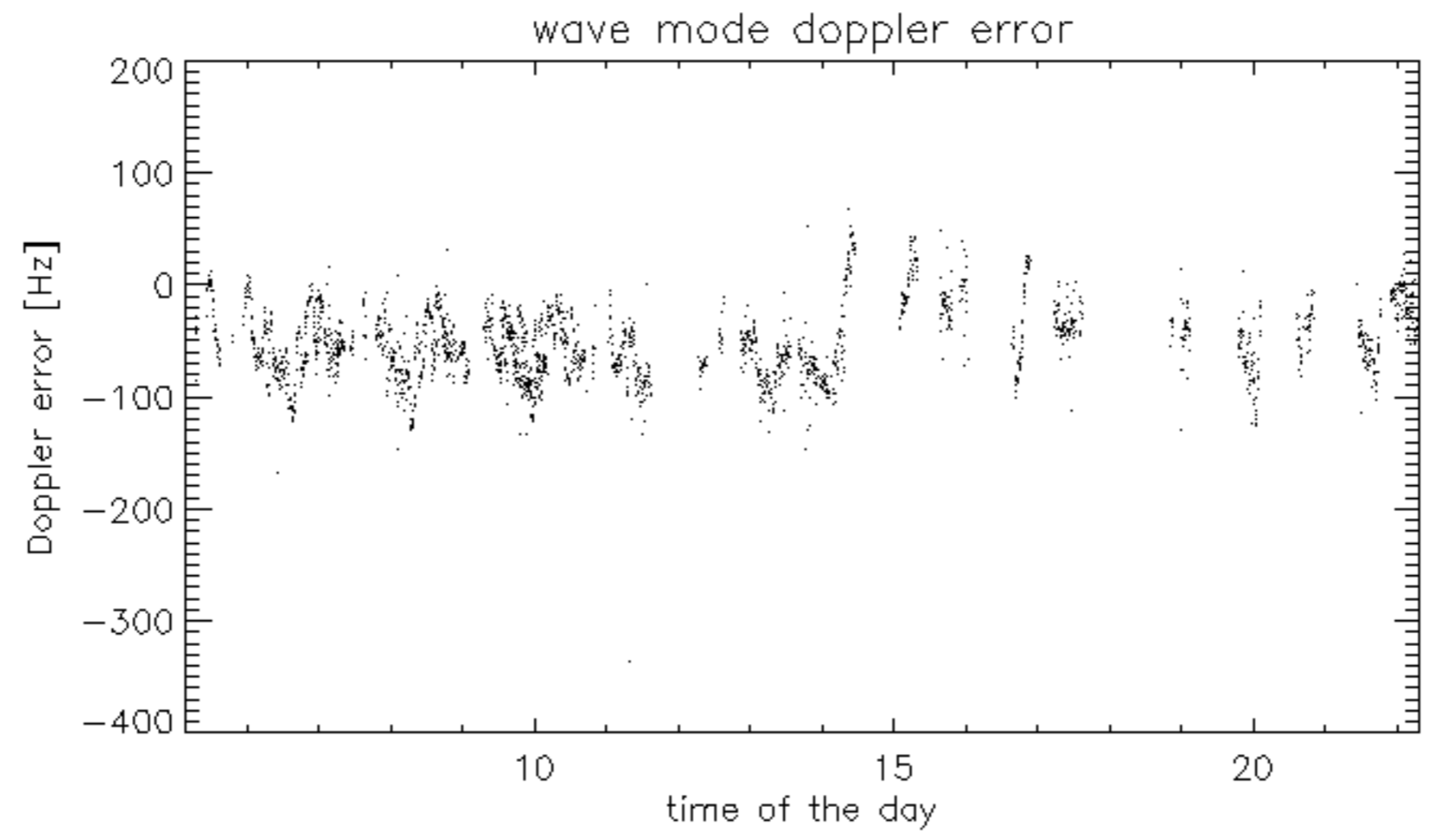
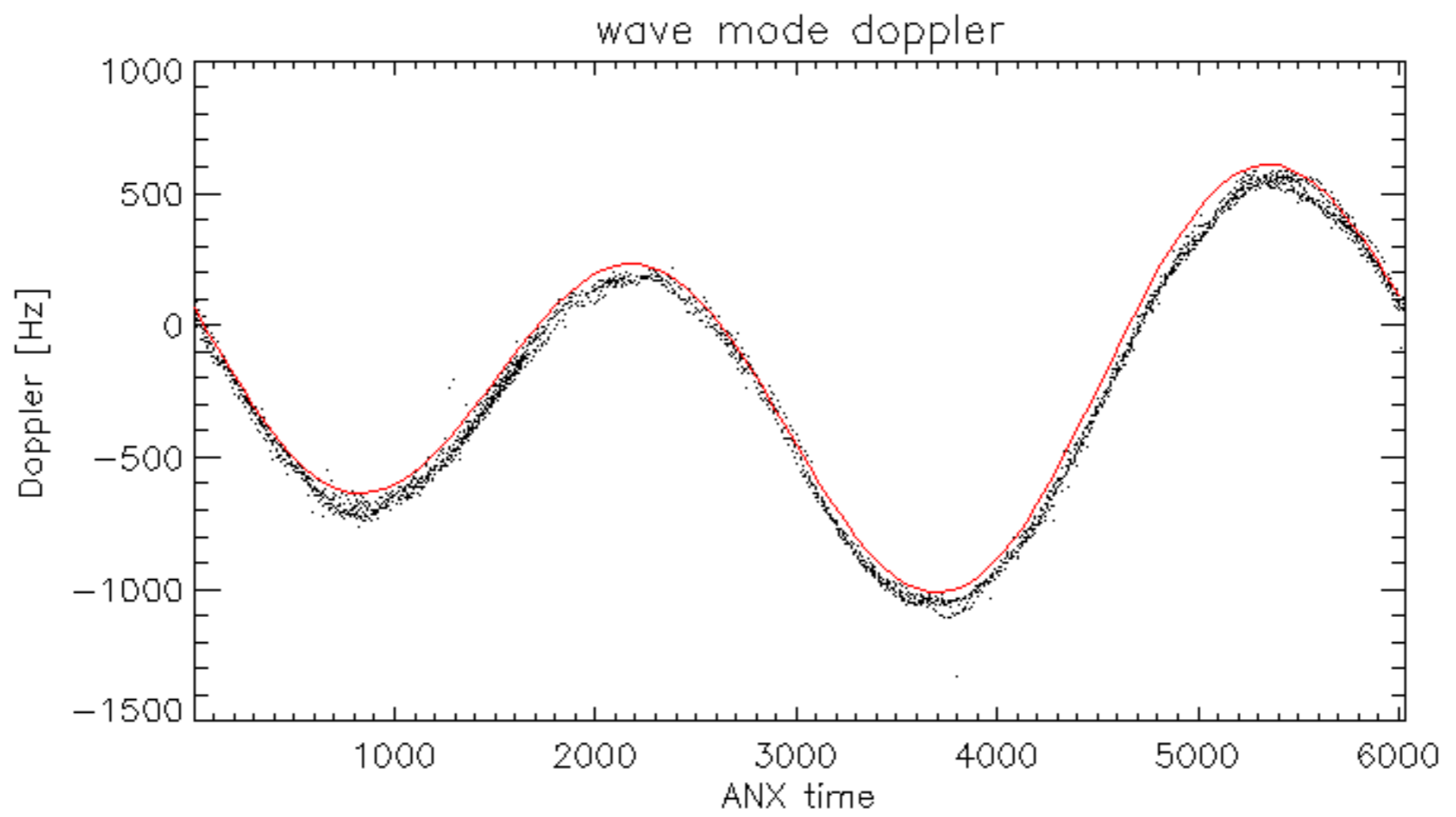
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 60 days

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

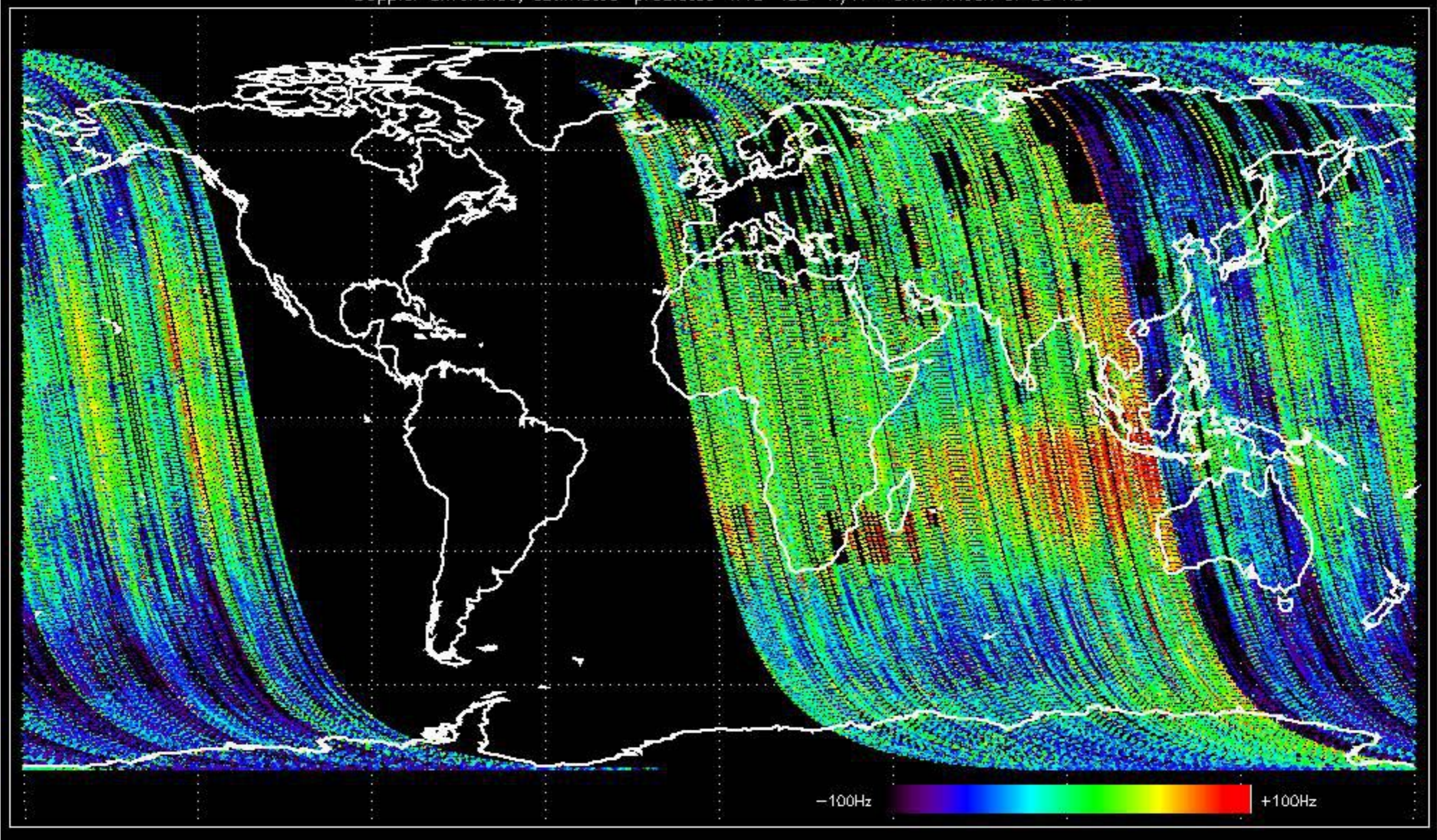


Doppler 'WVS' 'IS2' 'V/V'

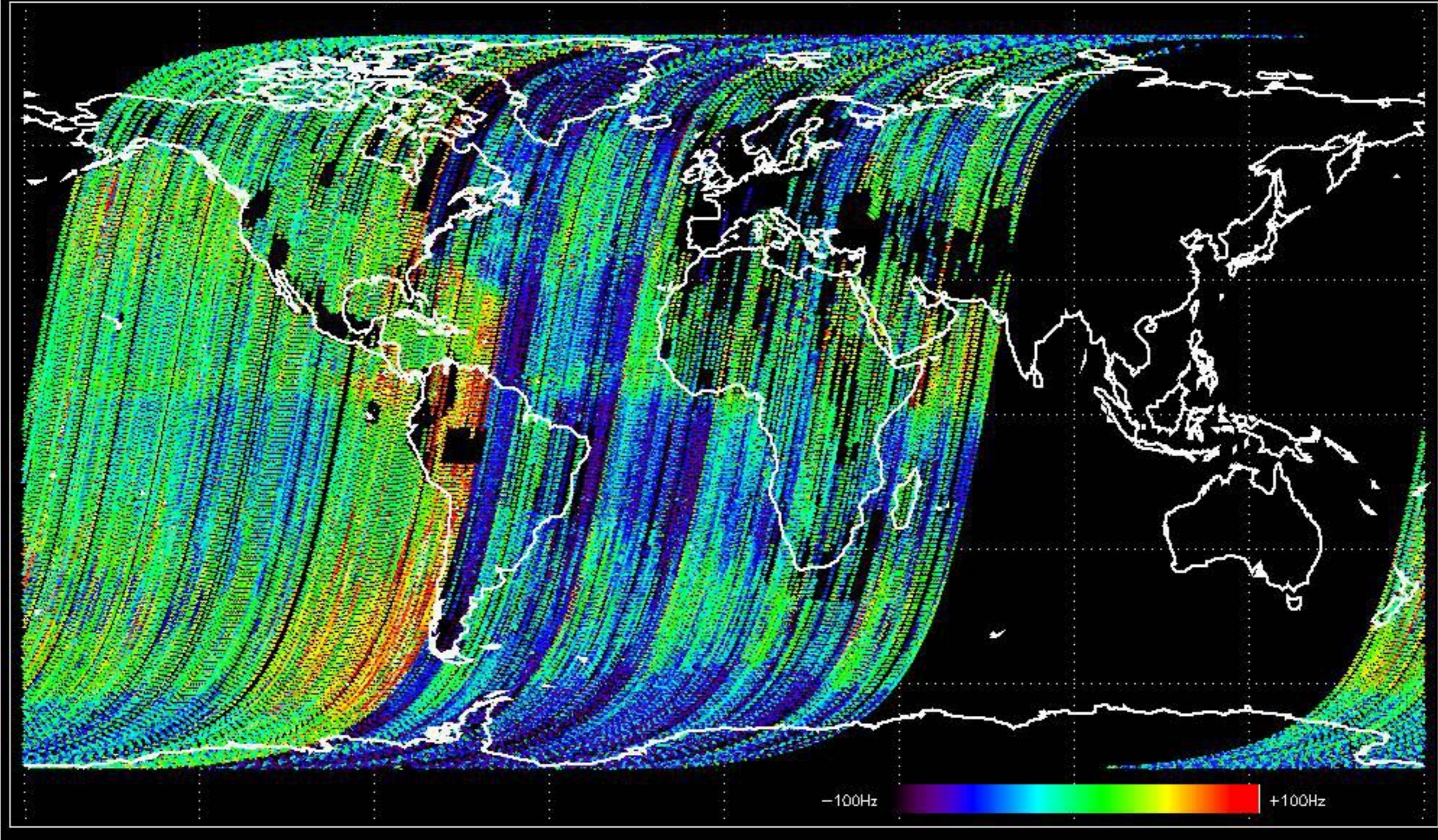




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



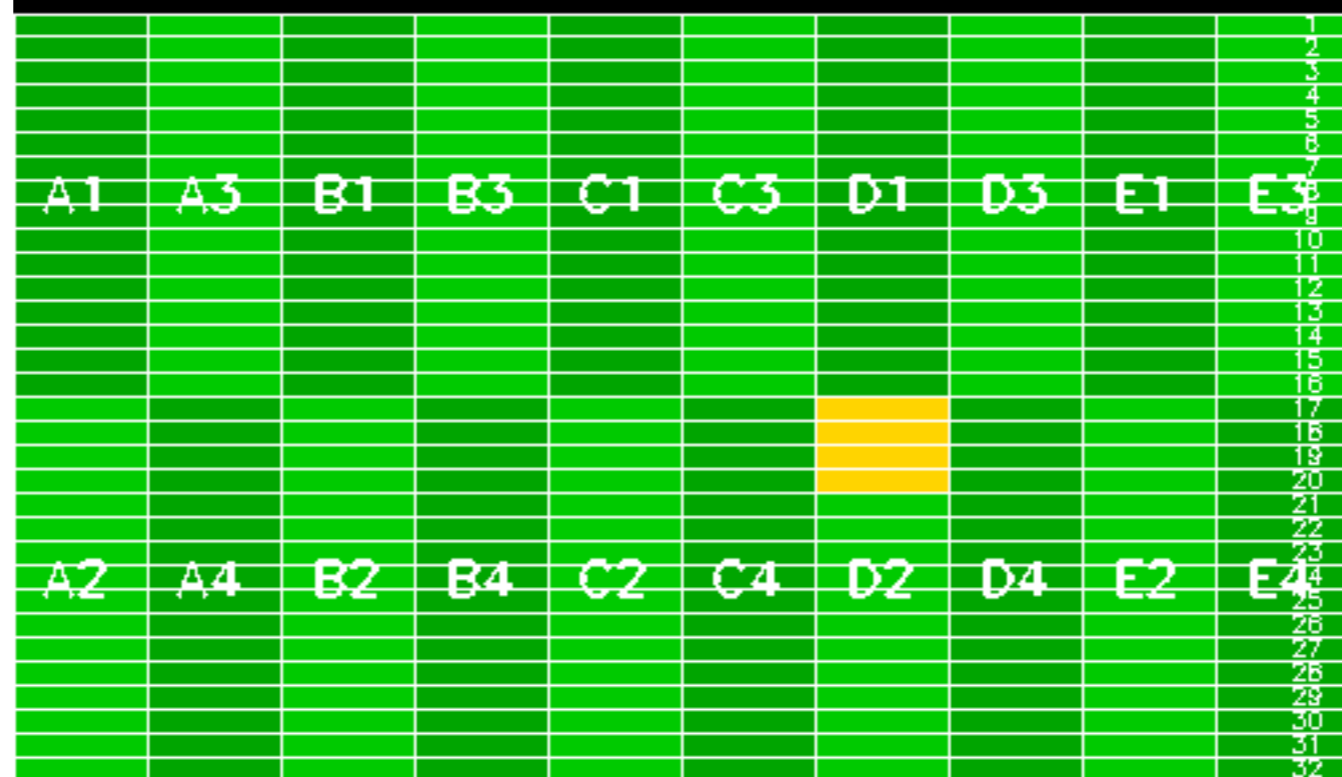
Doppler difference, estimated-predicted 'WS' 'IS2' 'V/V' -error mean of 53 Hz



No anomalies observed on available MS products:

No anomalies observed.

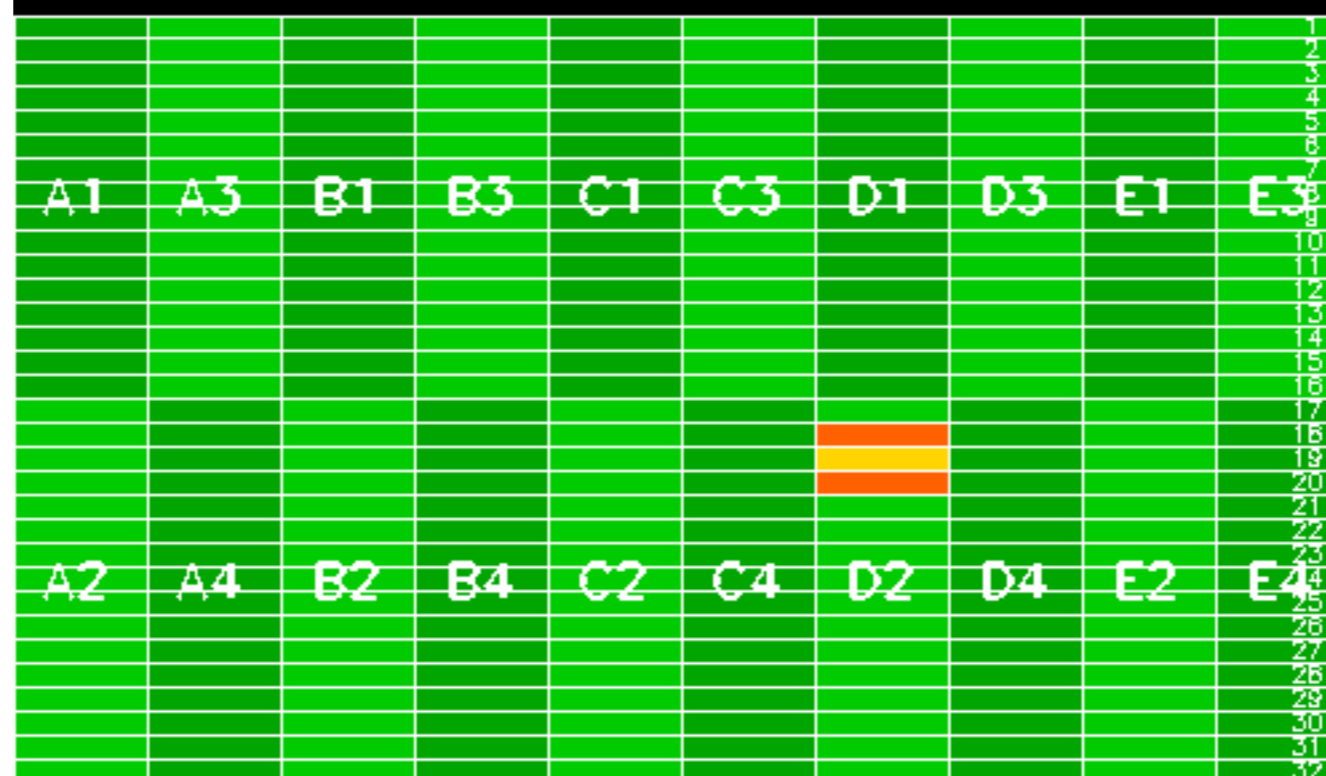
Reference: 2003-06-12 14:08:52 H RxGain
 Test : 2003-08-11 20:10:10 H

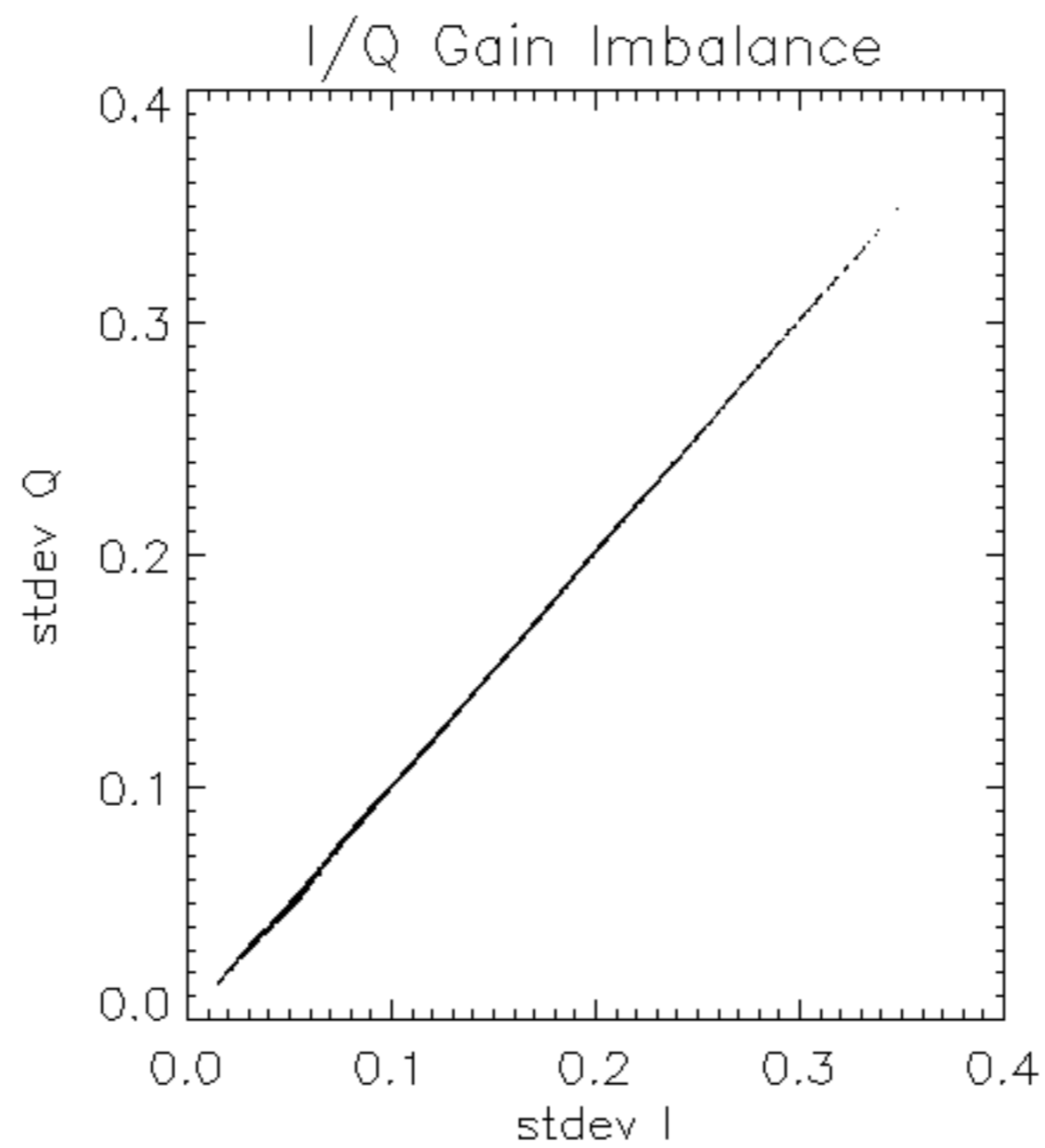


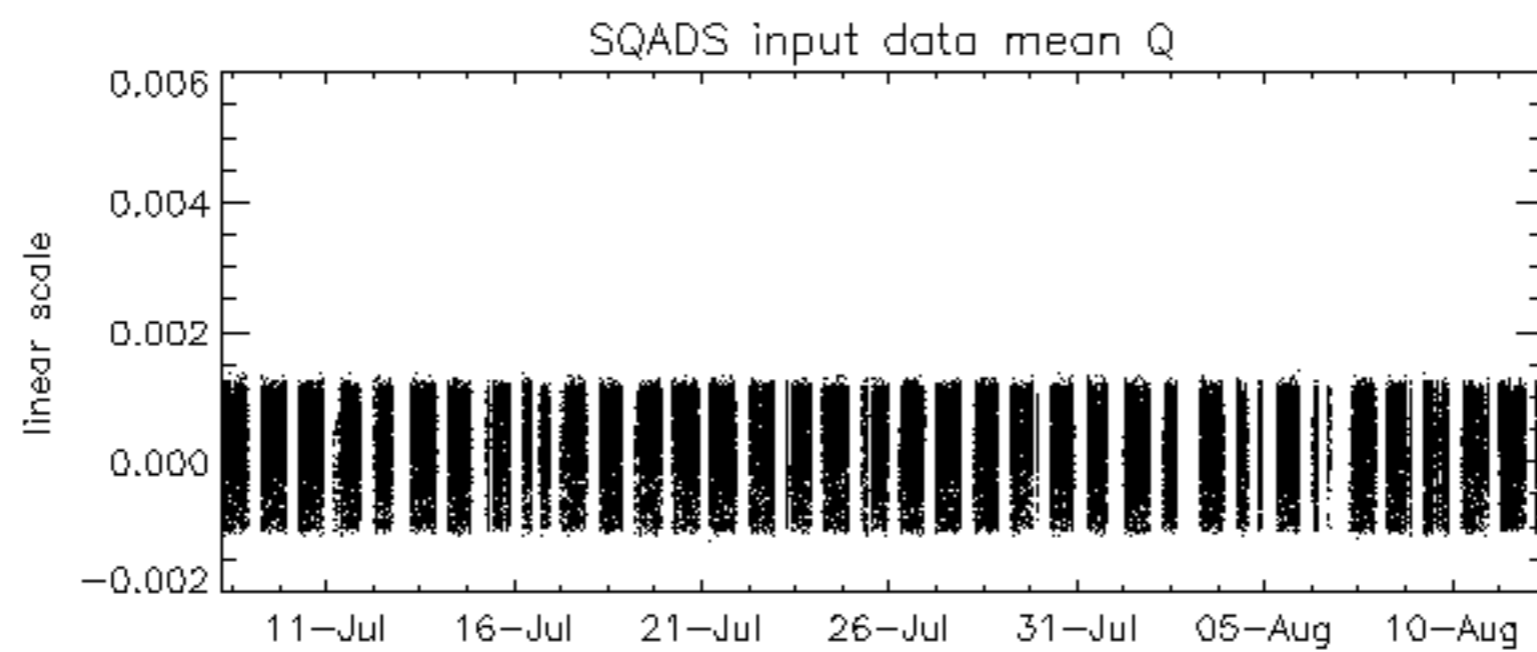
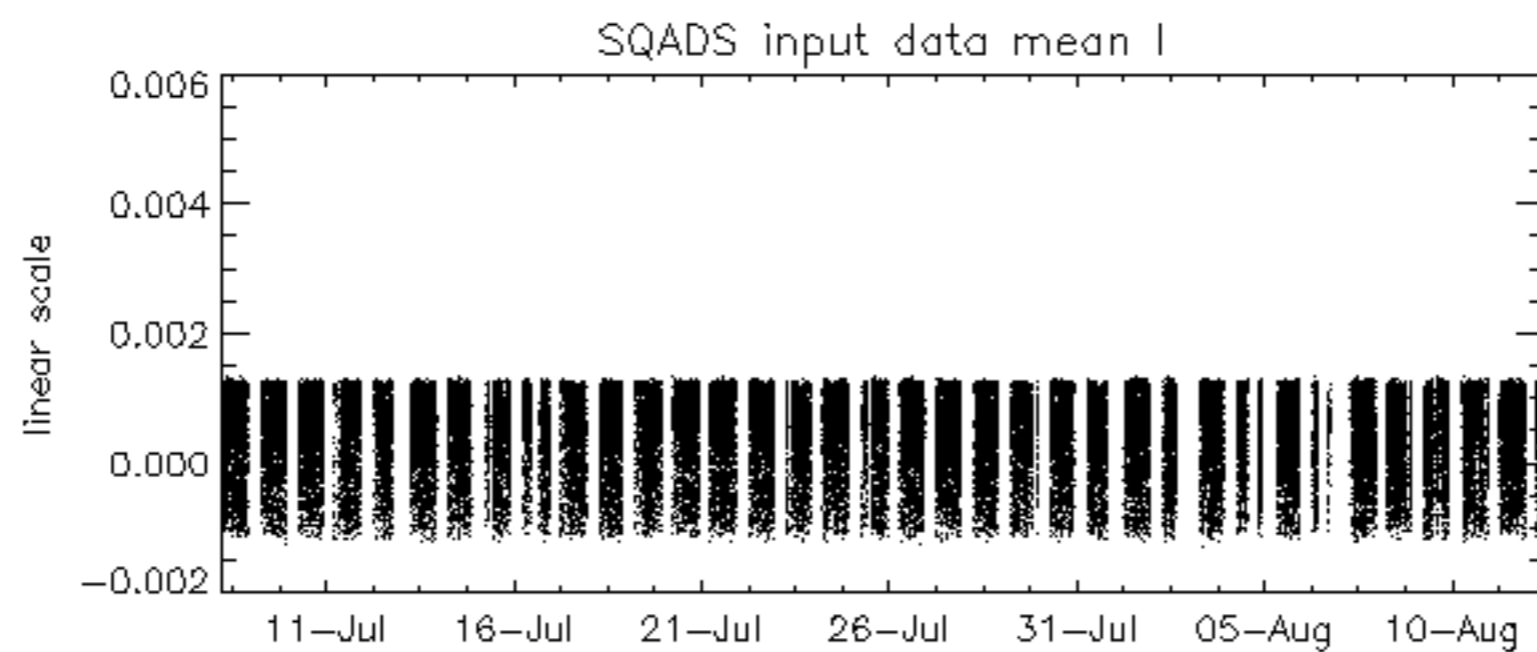
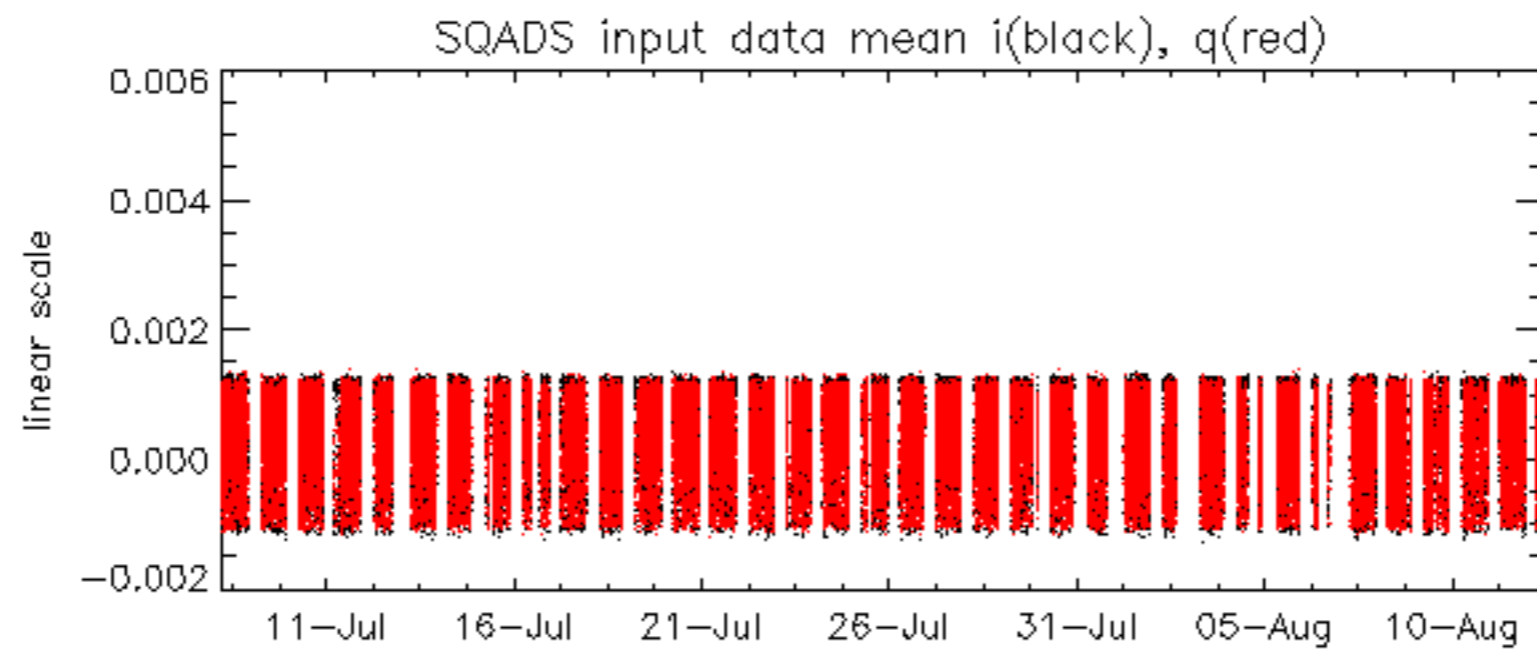
Reference: 2003-06-12 14:10:32 V

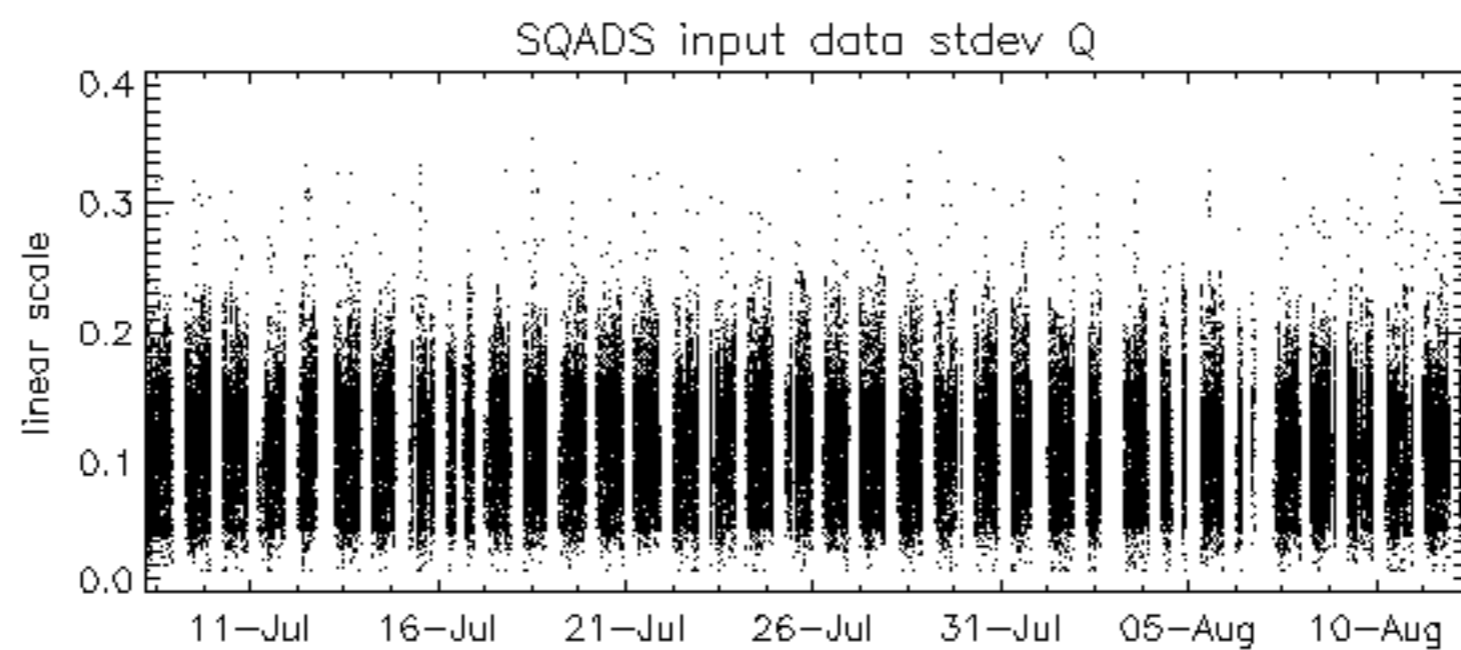
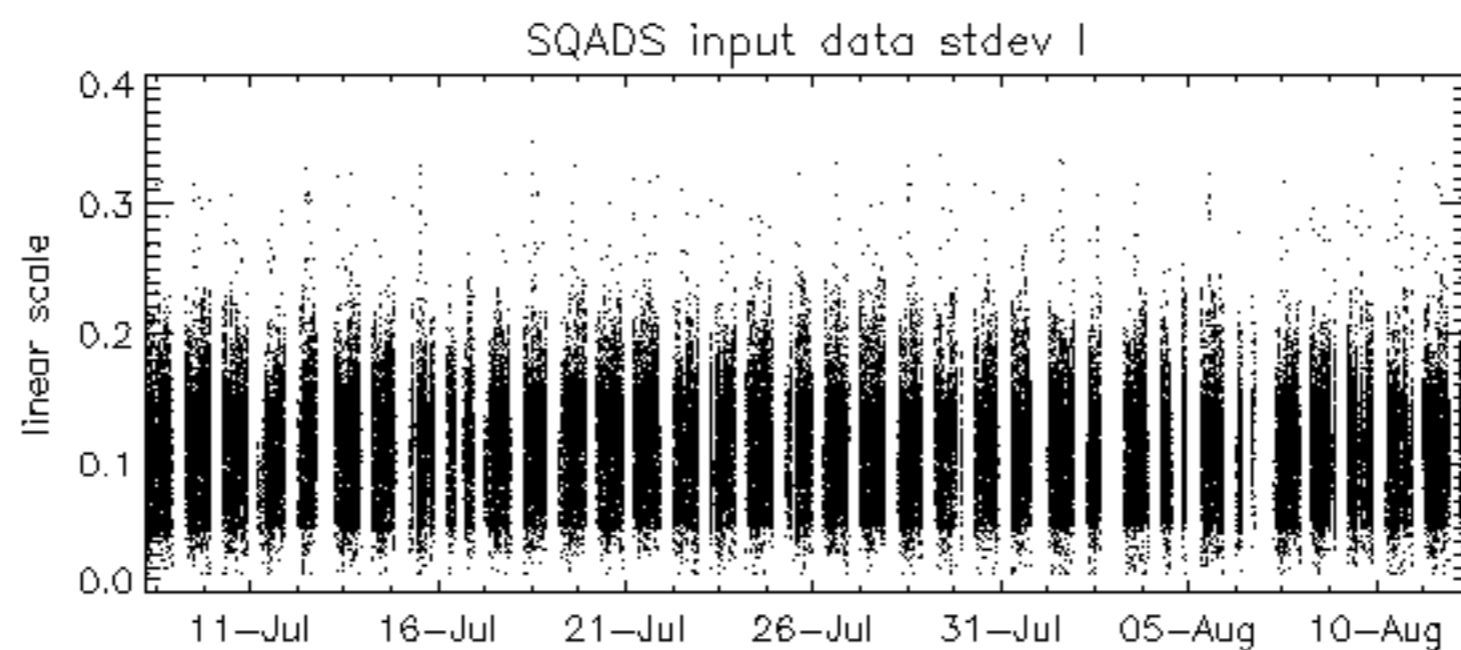
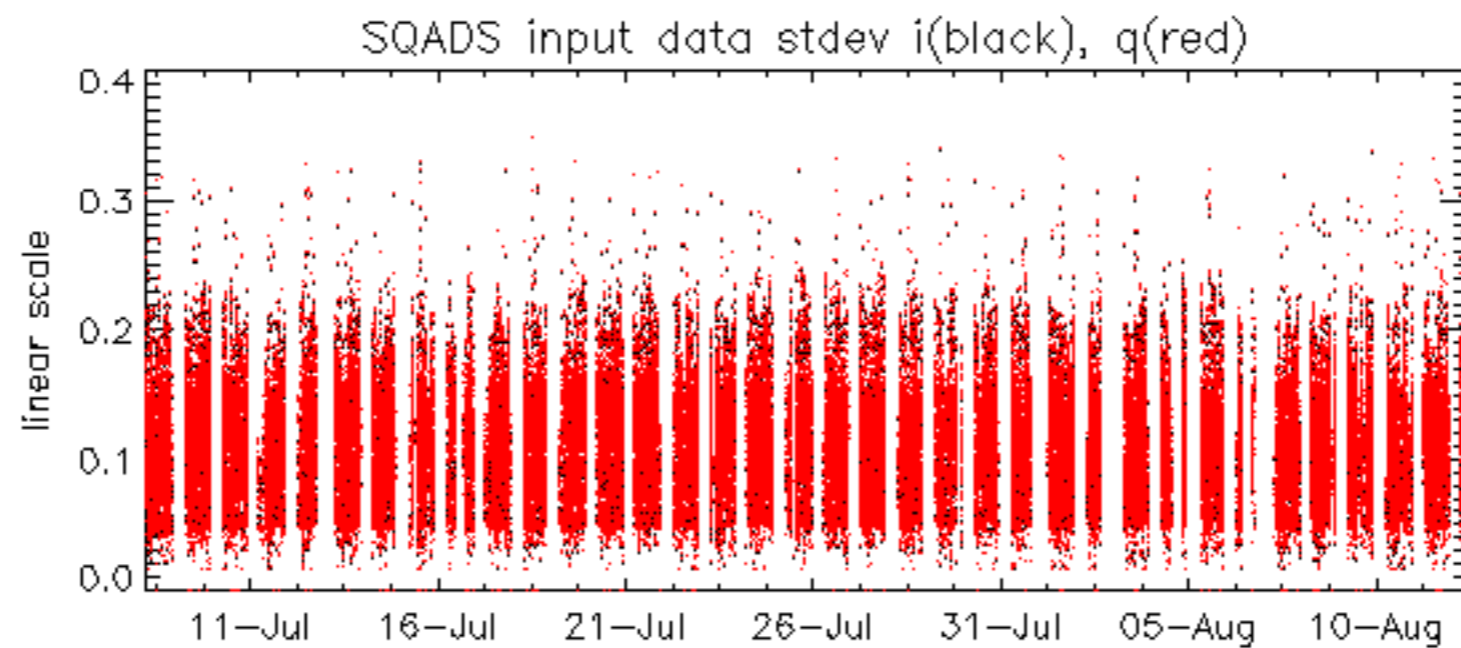
RxGain

Test : 2003-08-11 20:11:50 V









No unavailabilities during the reported period.