

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

ASAR went to Heater/Refuse due to the PSU reported off.
Time details in the table below.

Sub-system	Start	Stop	Planned
ASAR	2003-07-16 11:30:33	2003-07-16 16:03:34	No

2.2 - Browse Visual Inspection

No anomalies observed on EOLI catalogue.

2.3 - Data Analysis

Analysis performed on data available since 16-Jul-2003 06:14:22 until 17-Jul-2003 07:00:28.

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

3 - Module Stepping Mode

Two MS products available for analysis on 16-Jul-2003 (H and V polarization):

ASA_MS__0PNPDK20030716_202722_000000152018_00128_07196_0018.N1

ASA_MS__0PNPDK20030716_202902_000000152018_00128_07196_0019.N1









No anomalies observed.

Quite stable level for TR module 3 phase on tile B3 as shown in the figure below.











Polarisation	Start Time
V	20030716 202902
H	20030716 202722

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
8	mean	-2.43436	-22.3933	-8.04641
	stdev	0.0108003	0.0845783	0.00852757
24	mean	-5.14086	-21.1914	-8.04641
	stdev	0.0146688	0.0637623	0.00852757



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
8	mean	-2.44687	-22.5275	-8.10438
	stdev	0.0130316	0.0690582	0.00317580
24	mean	-5.15677	-21.2035	-8.10438
	stdev	0.0134534	0.0574463	0.00317580



4.3 - cal pulses monitoring (all row)



5 - RAW data statistics

No anomalies observed.

Nominal values of I and Q level0 statistics.

5.1 - Input mean I/Q

channel	stat	DSS-B
---------	------	-------

MEAN I	mean	0.000469321
	stdev	3.02425e-07
MEAN Q	mean	0.000305931
	stdev	3.12344e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.113307
	stdev	0.00159406
STDEV Q	mean	0.113402
	stdev	0.00162489



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

No anomalies observed in 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

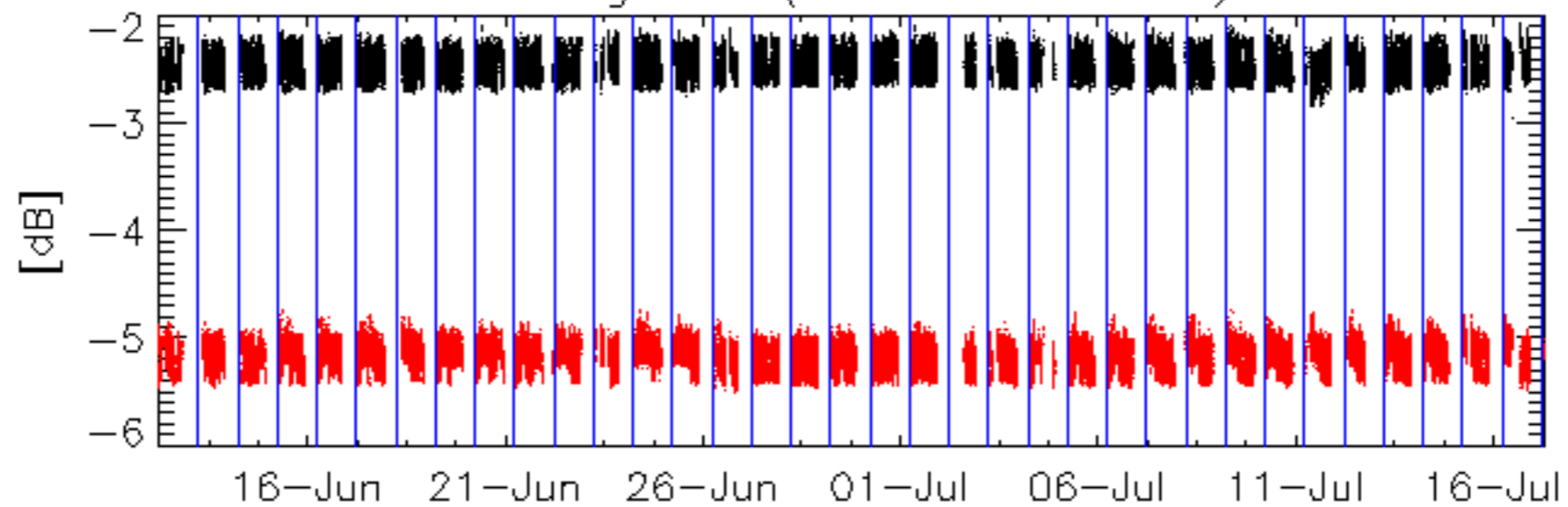
Descending

6.3 - Doppler evolution versus ANX

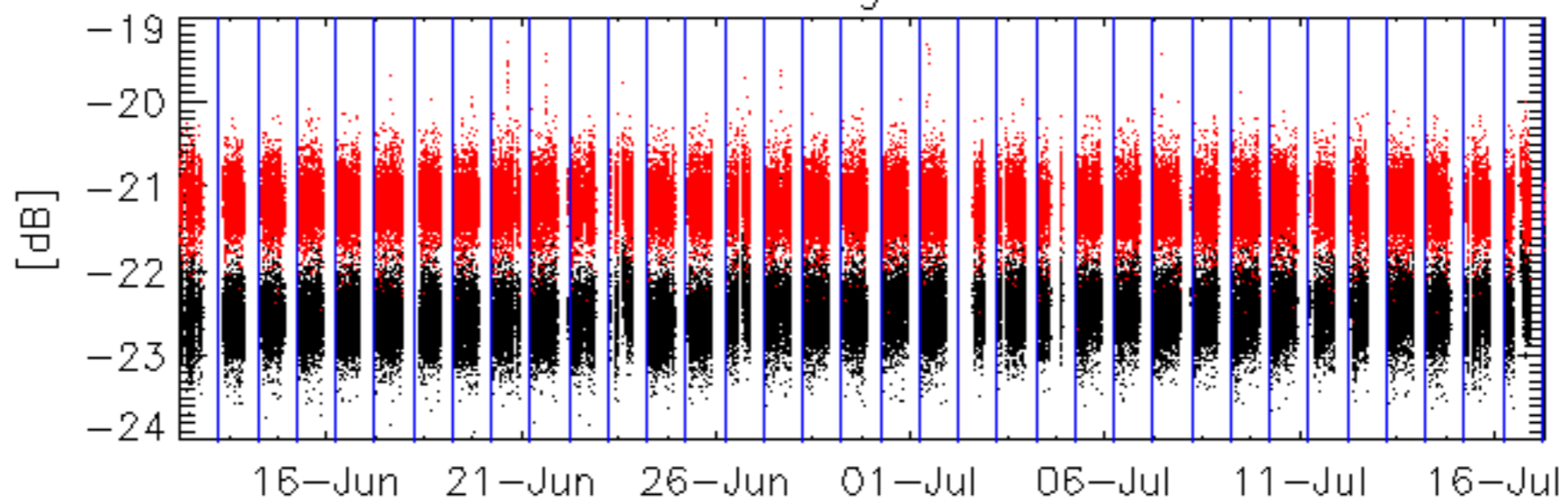
Evolution Doppler error versus ANX



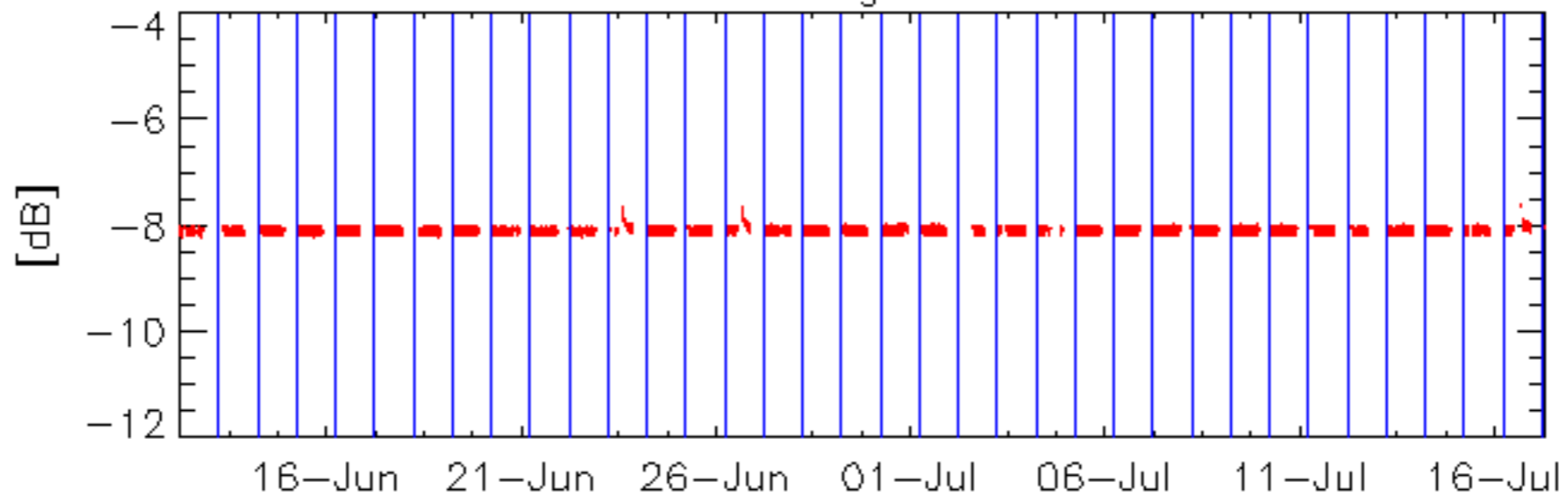
Average P1 (row 8 & row 24)

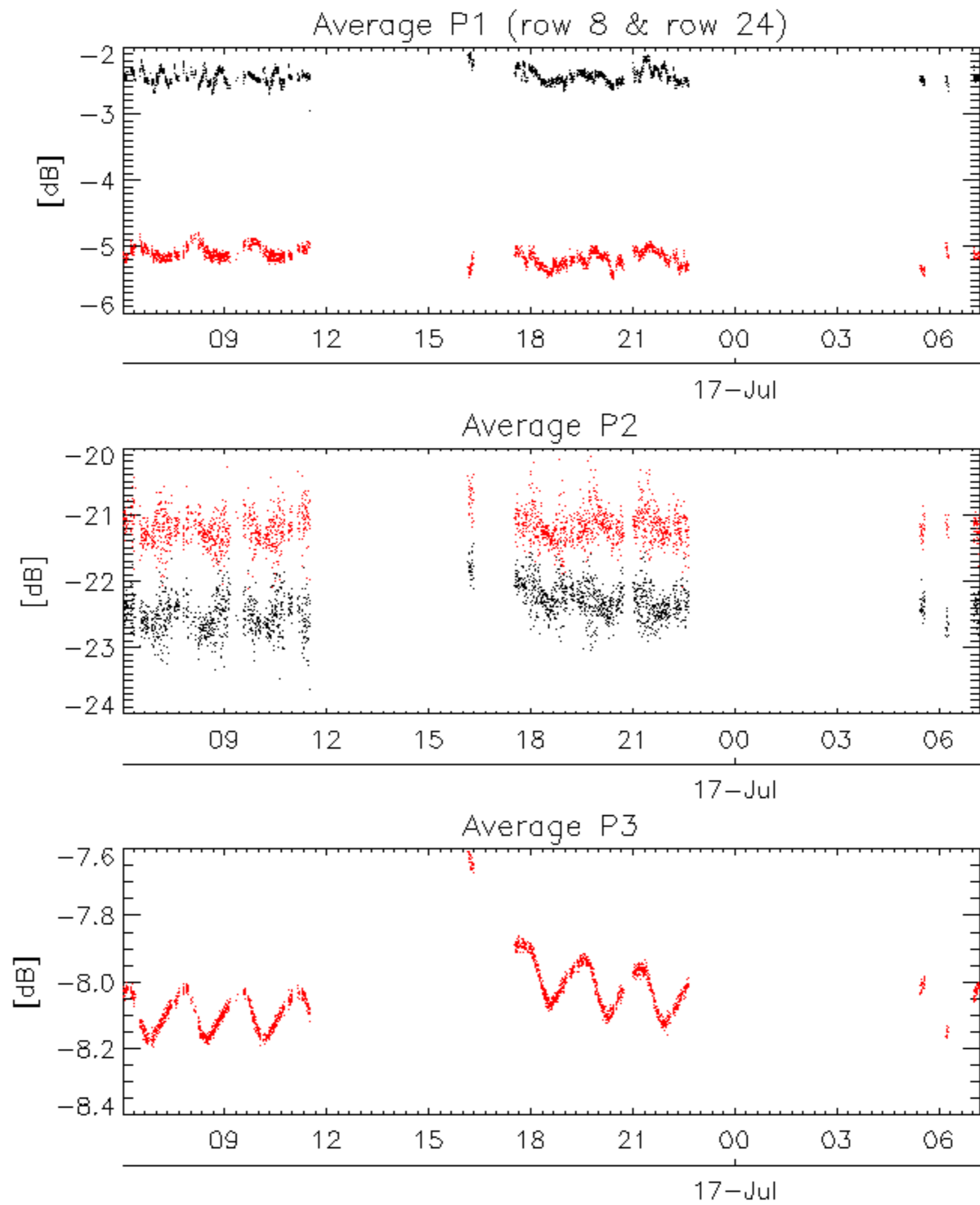


Average P2



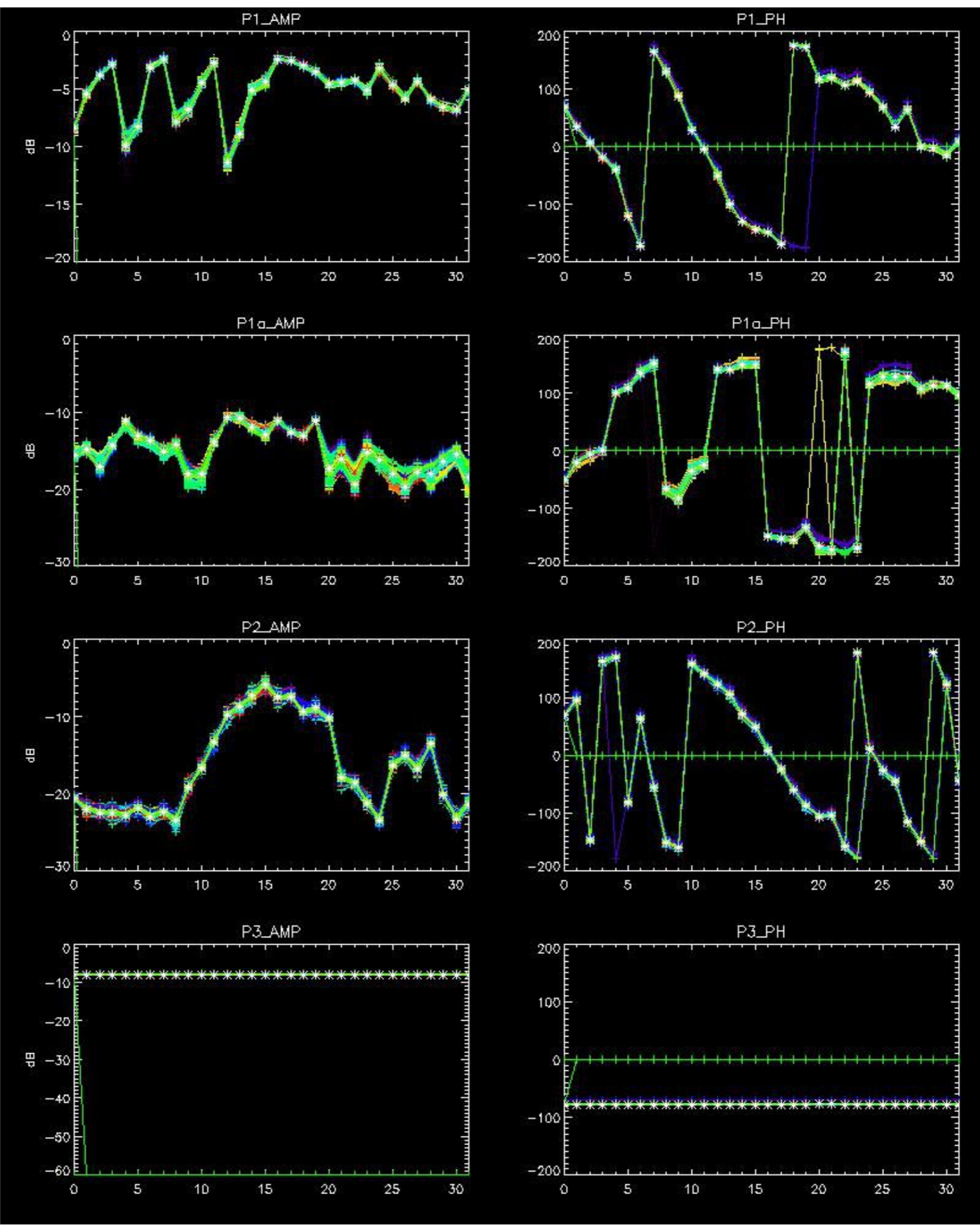
Average P3





No anomalies observed on EOLI catalogue.

No anomalies observed.



Analysis performed on data available since 16-Jul-2003 06:14:22 until 17-Jul-2003 07:00:28.

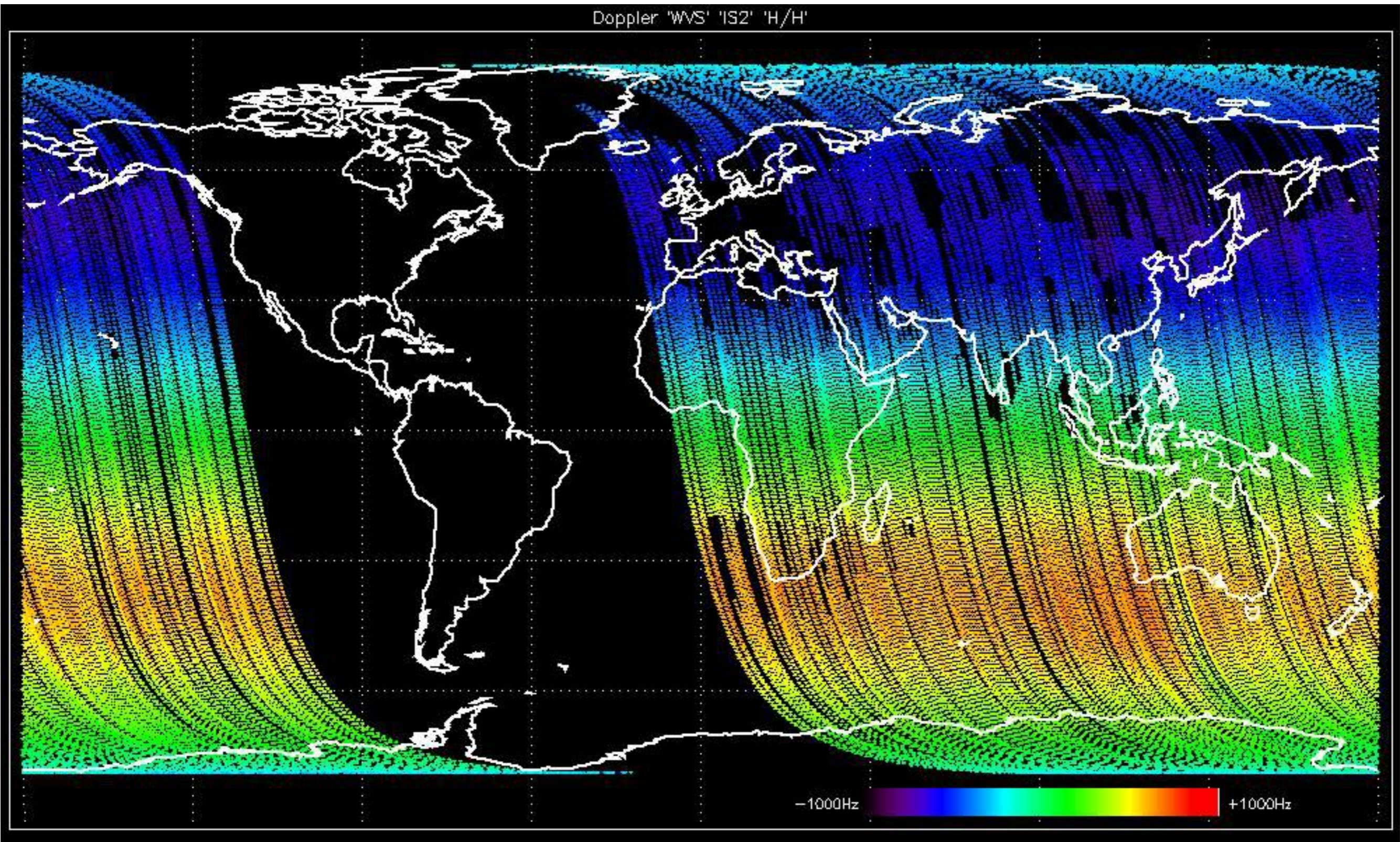
-Stable wave internal calibration pulses gain and phase.

-Stable raw data statistics.

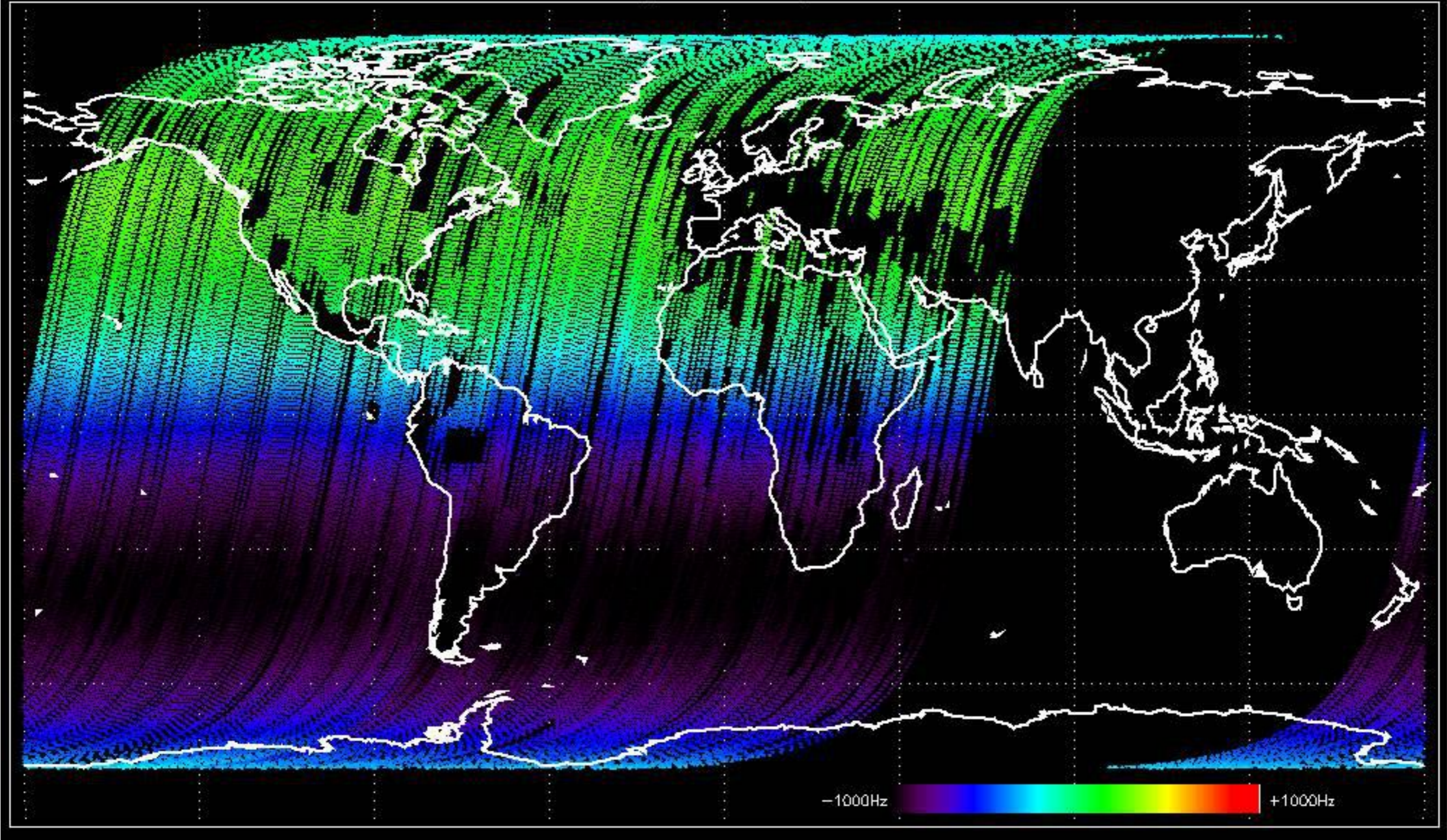
-Nominal Doppler behavior.

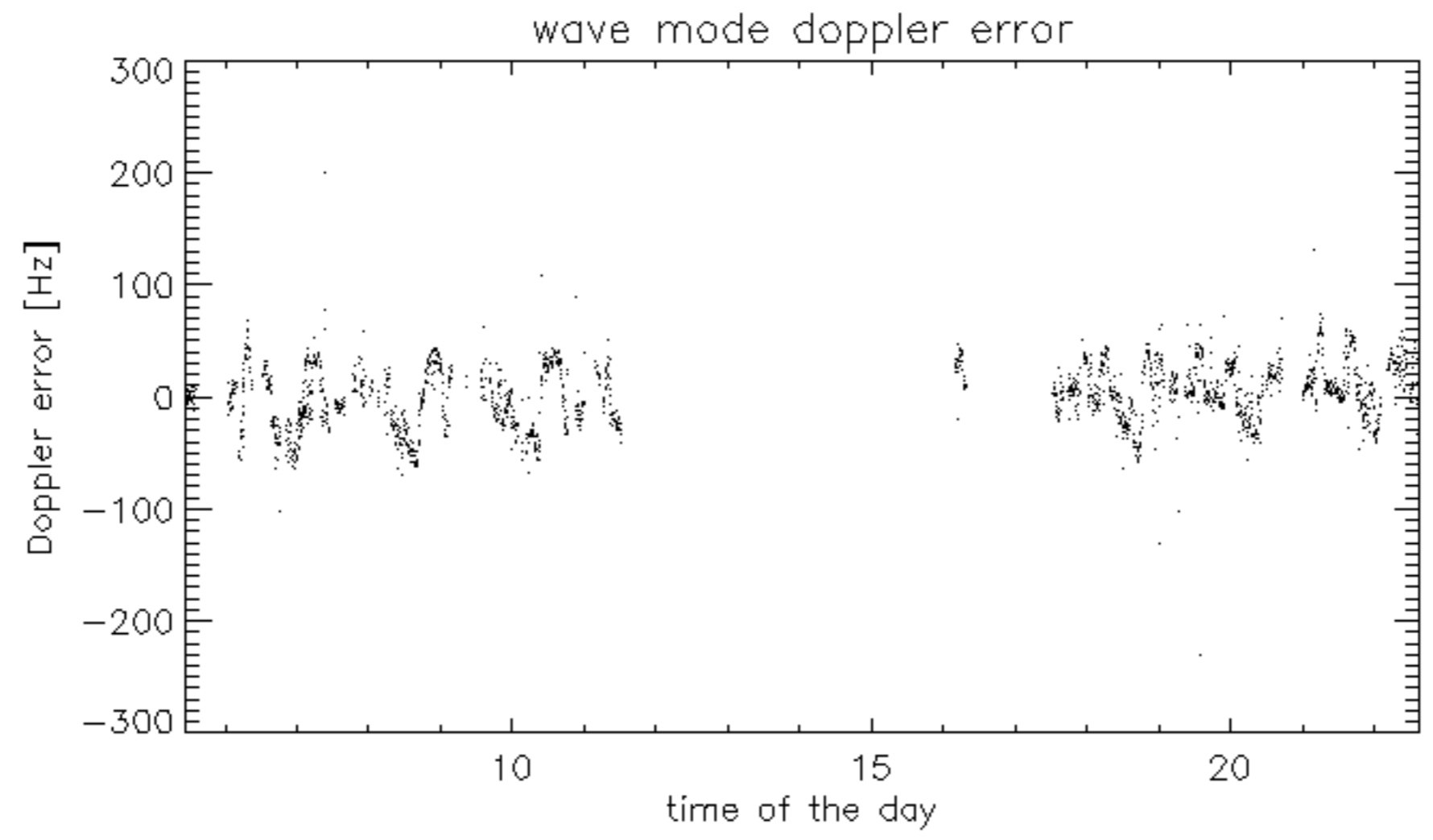
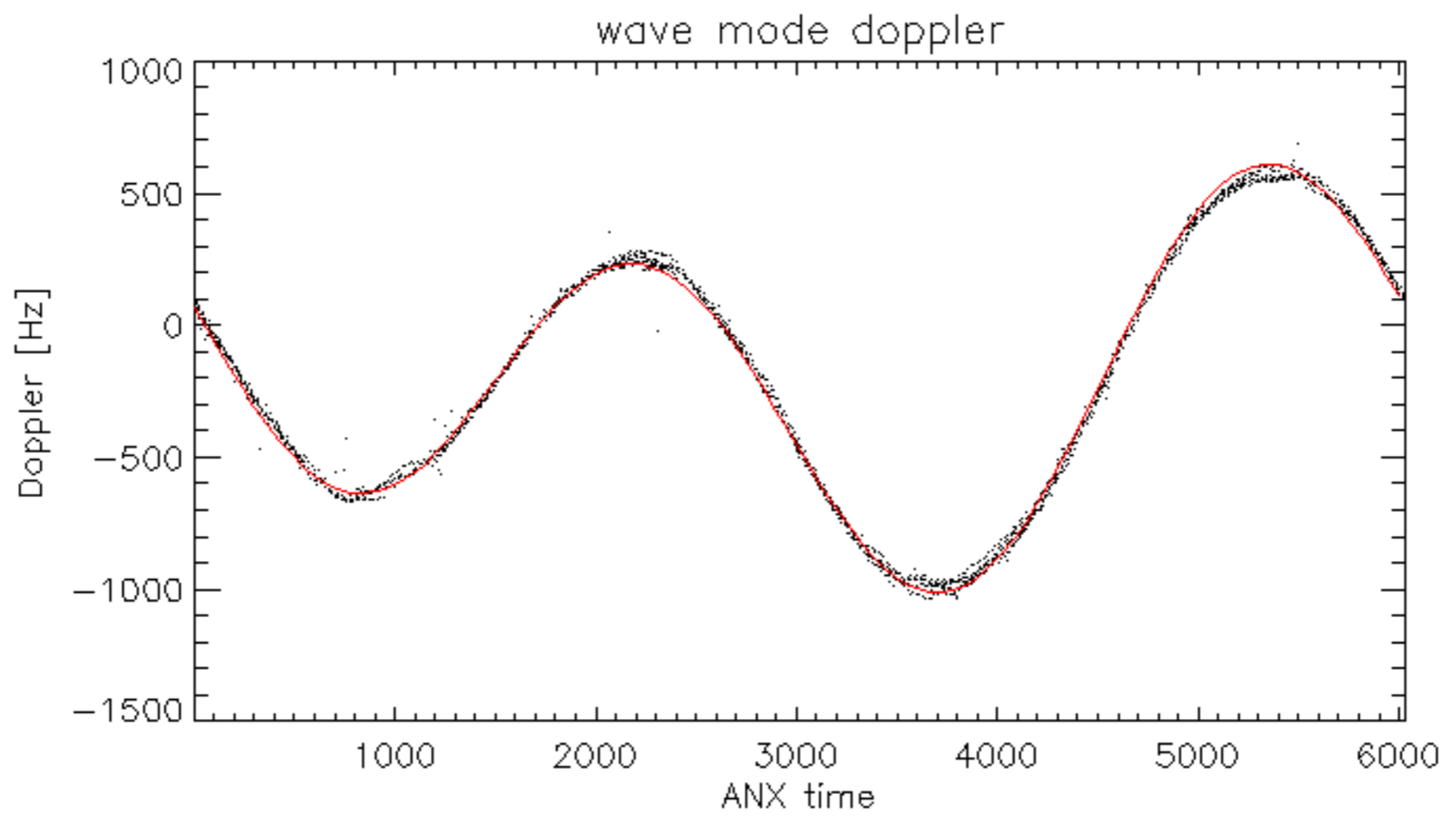
No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 60 days.

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

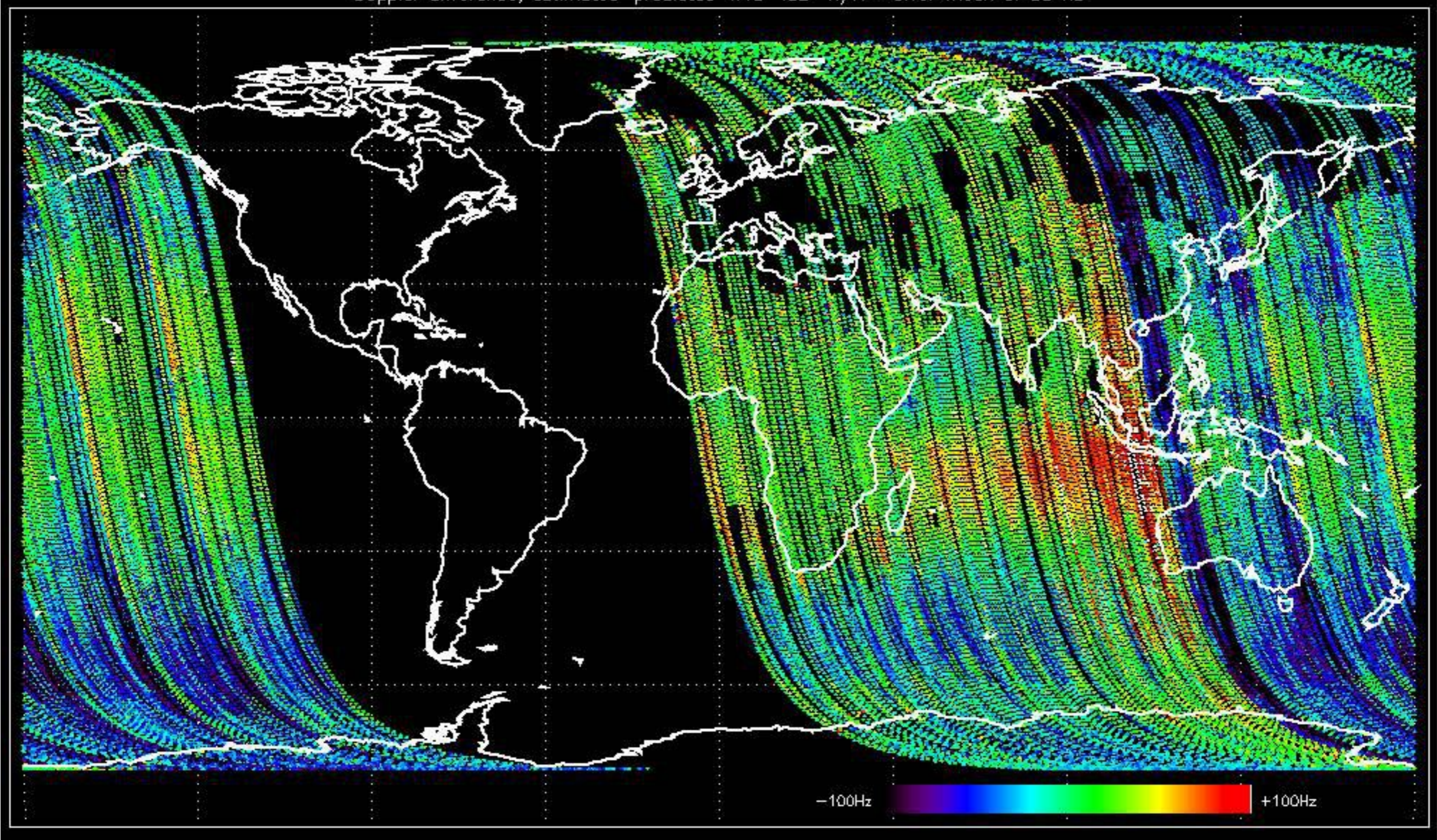


Doppler 'WS' 'ISZ' 'V/V'

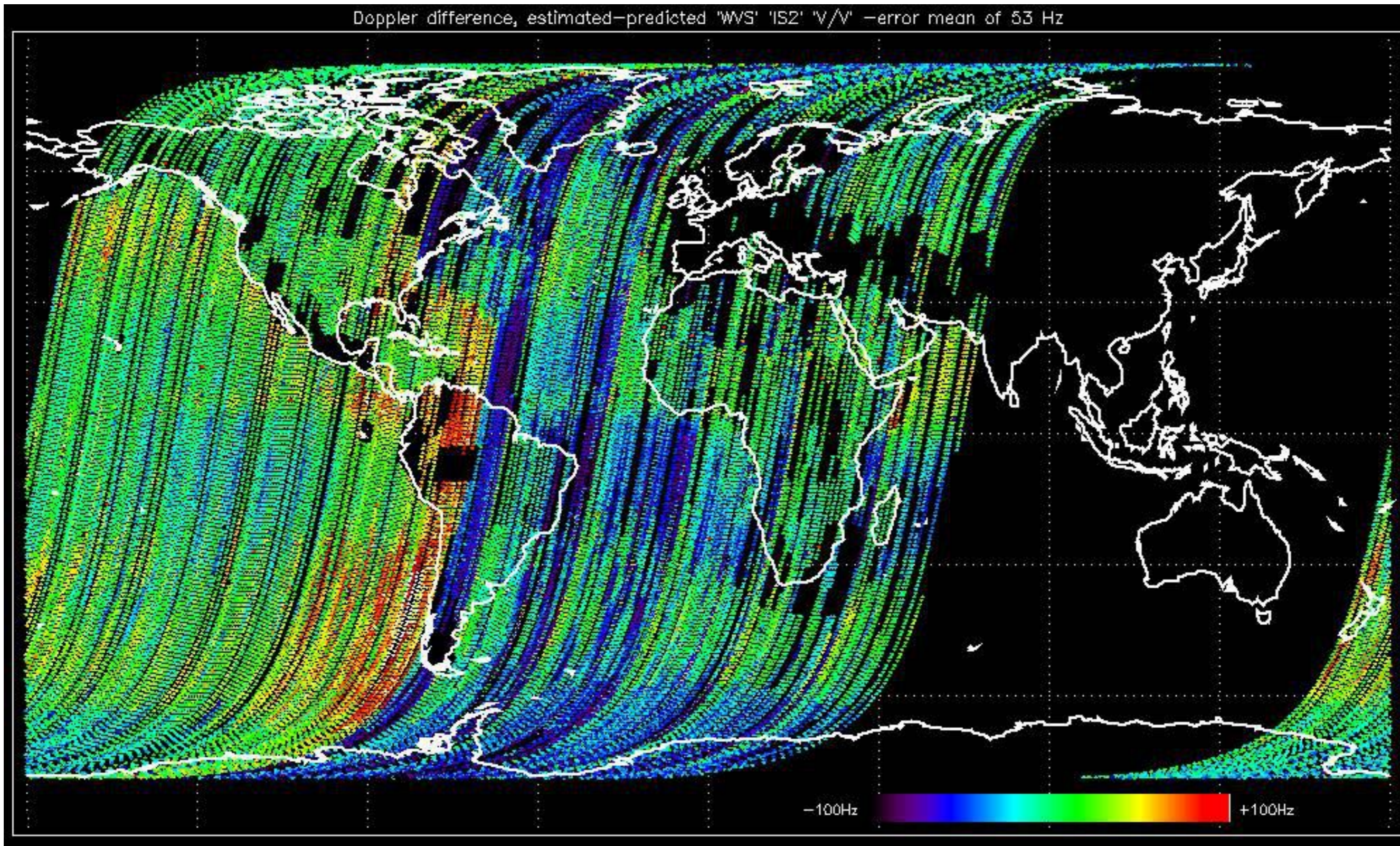




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



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



Two MS products available for analysis on 16-Jul-2003 (H and V polarization):

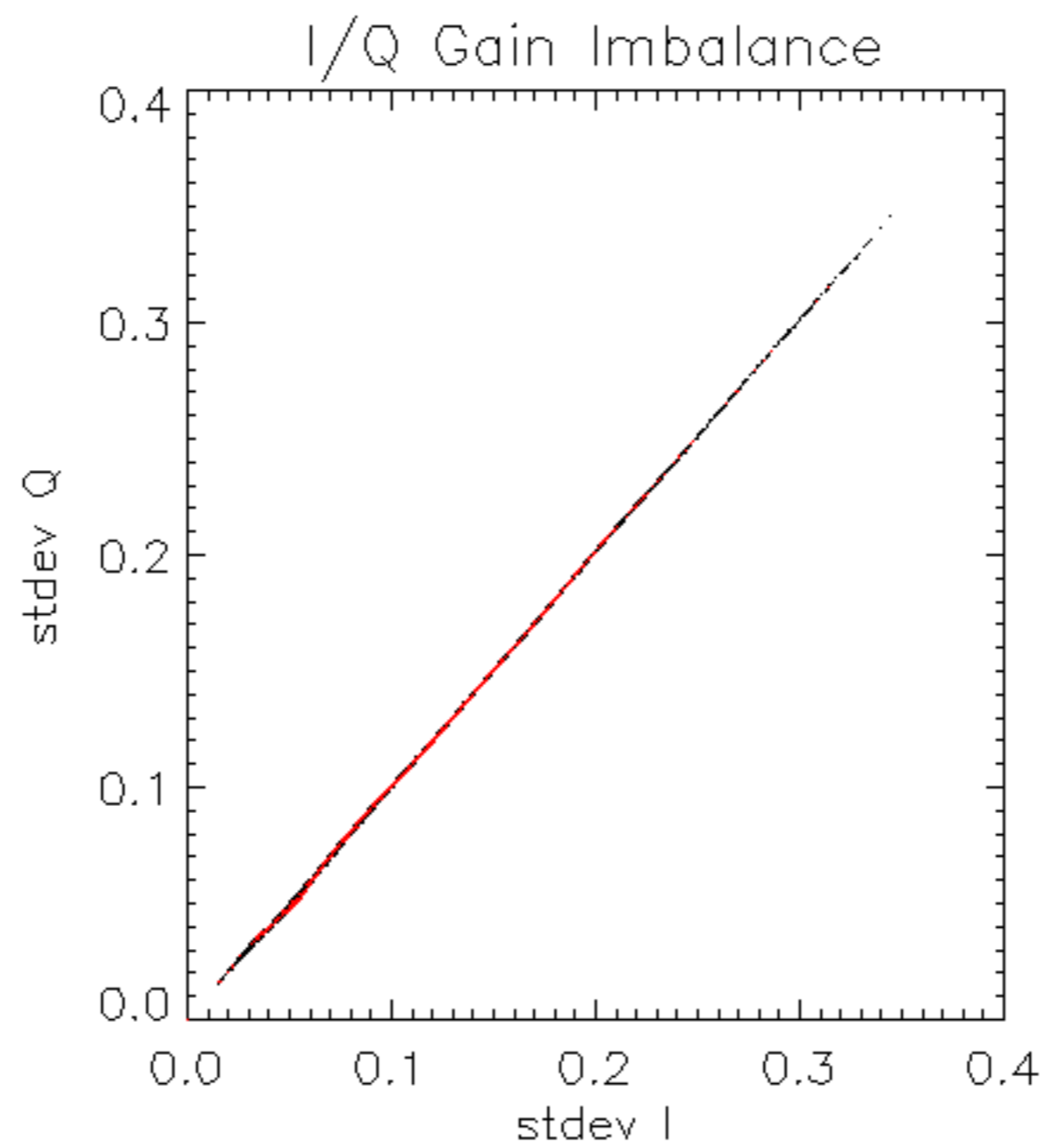
ASA_MS__0PNPDK20030716_202722_000000152018_00128_07196_0018.N1

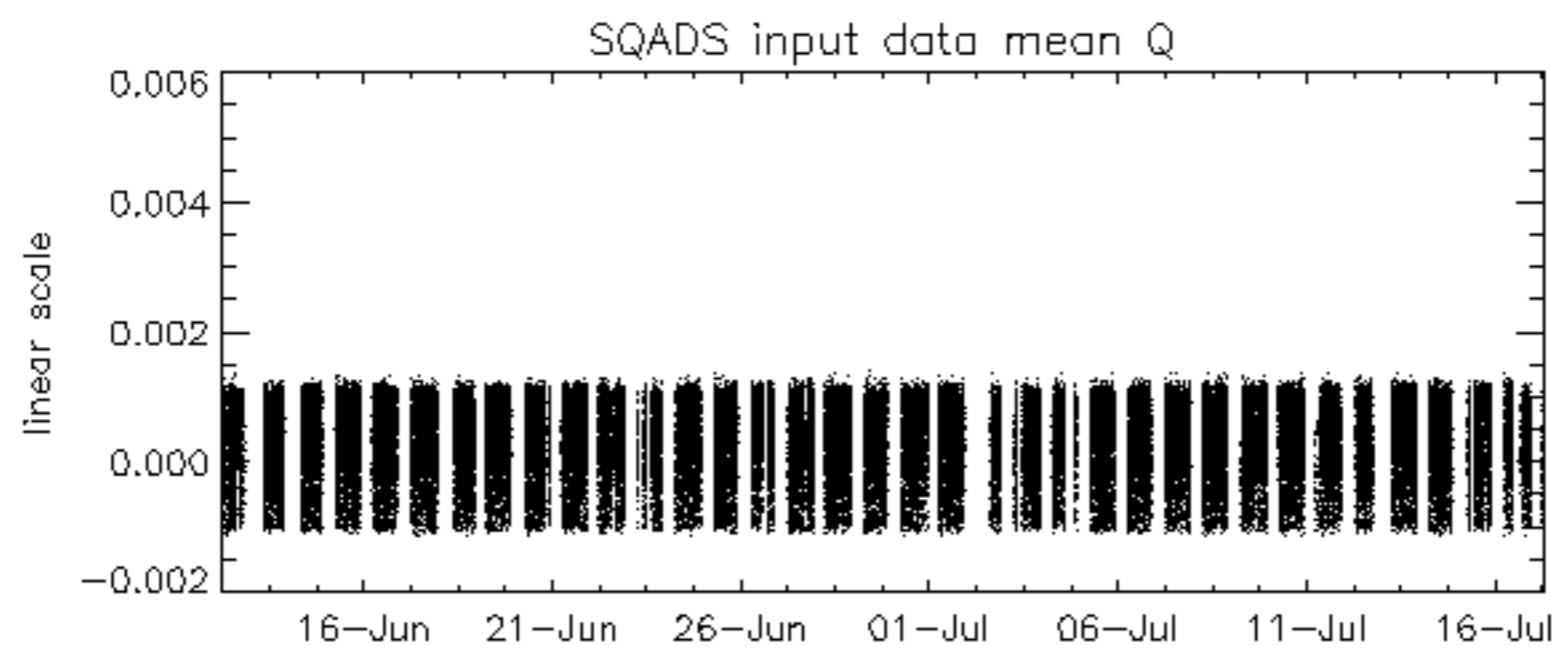
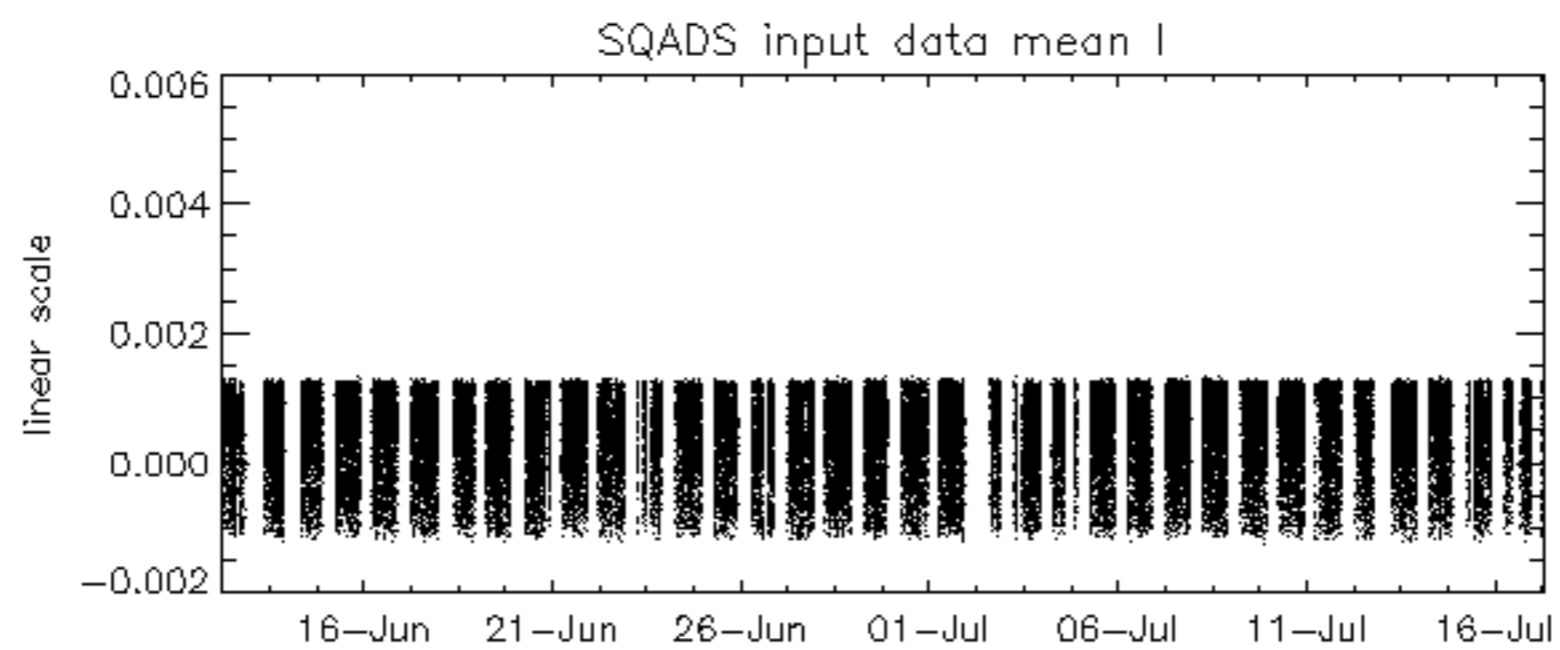
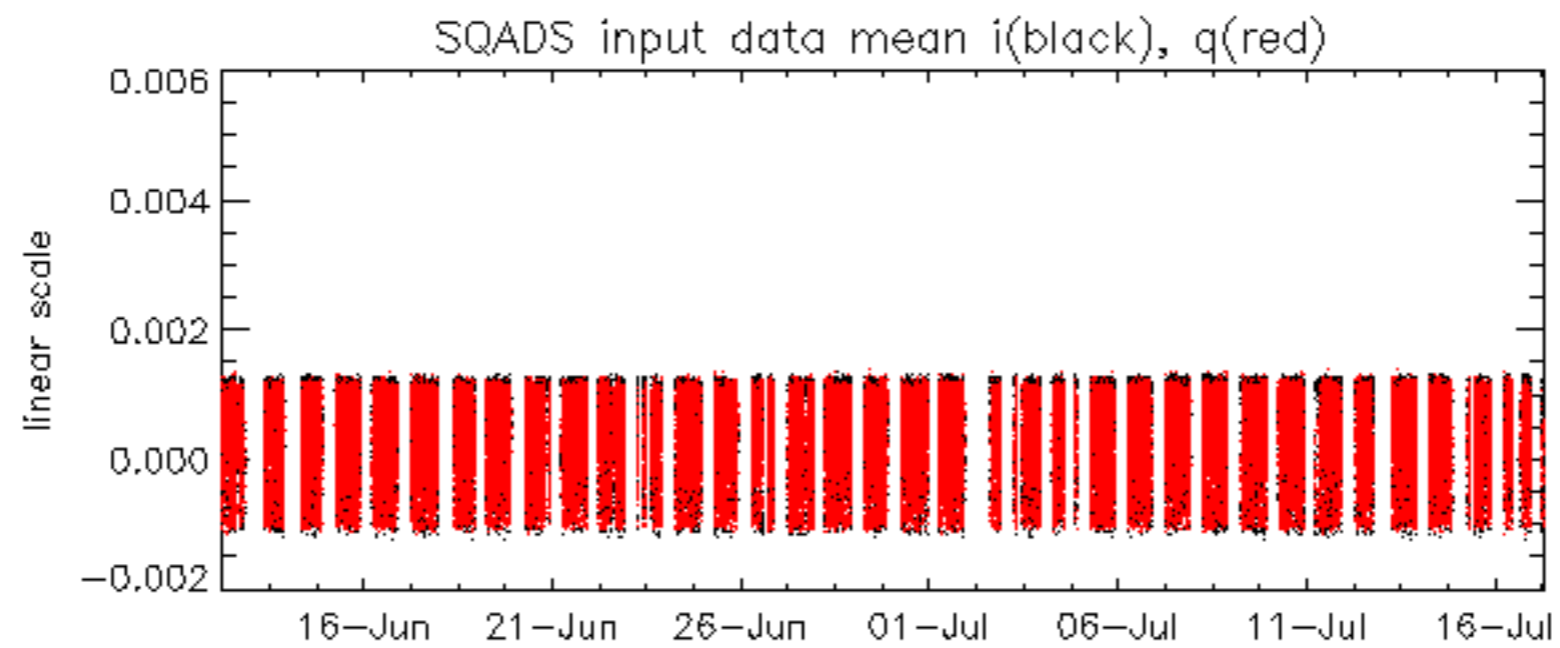
ASA_MS__0PNPDK20030716_202902_000000152018_00128_07196_0019.N1

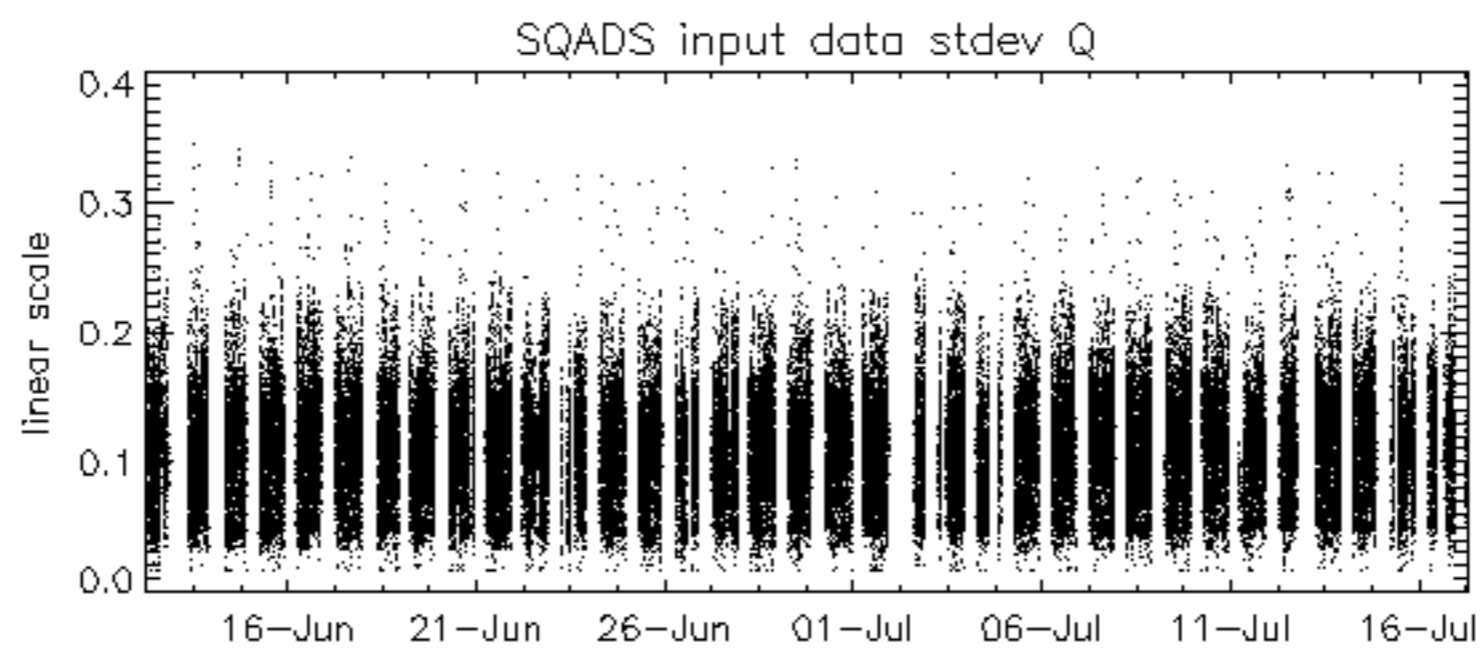
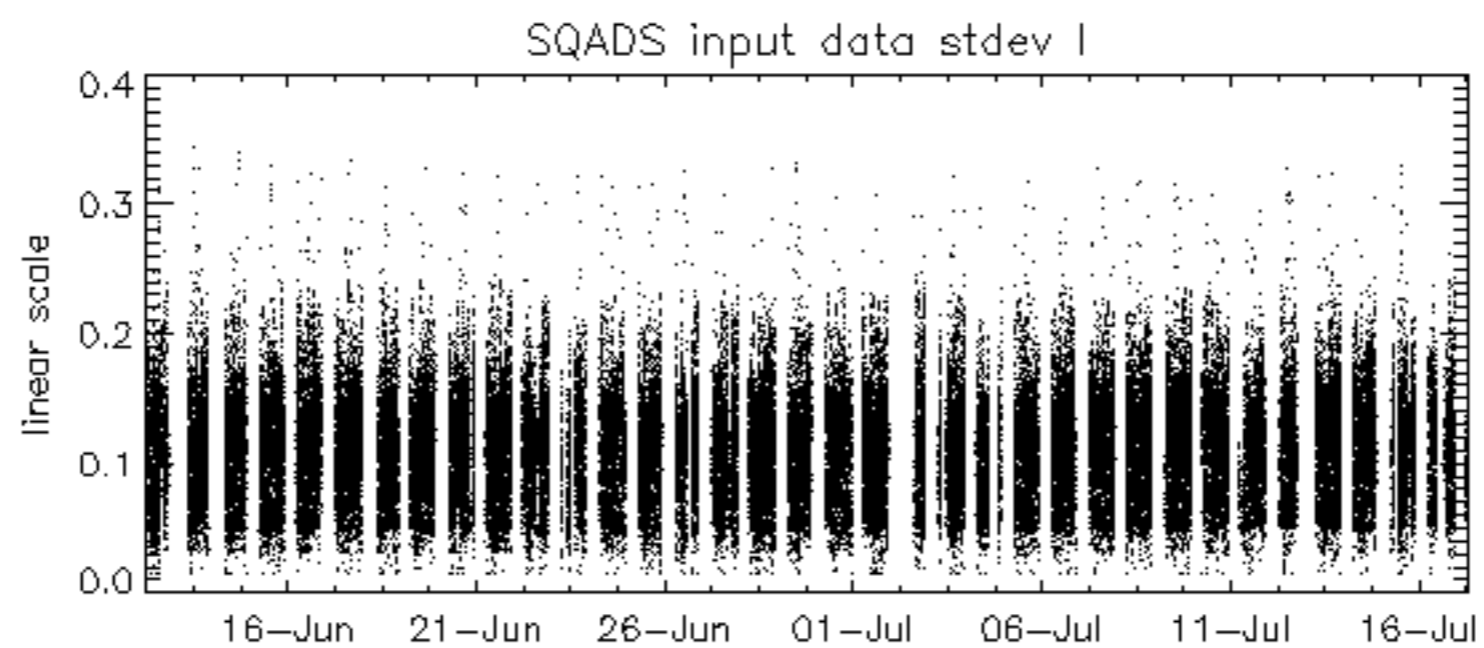
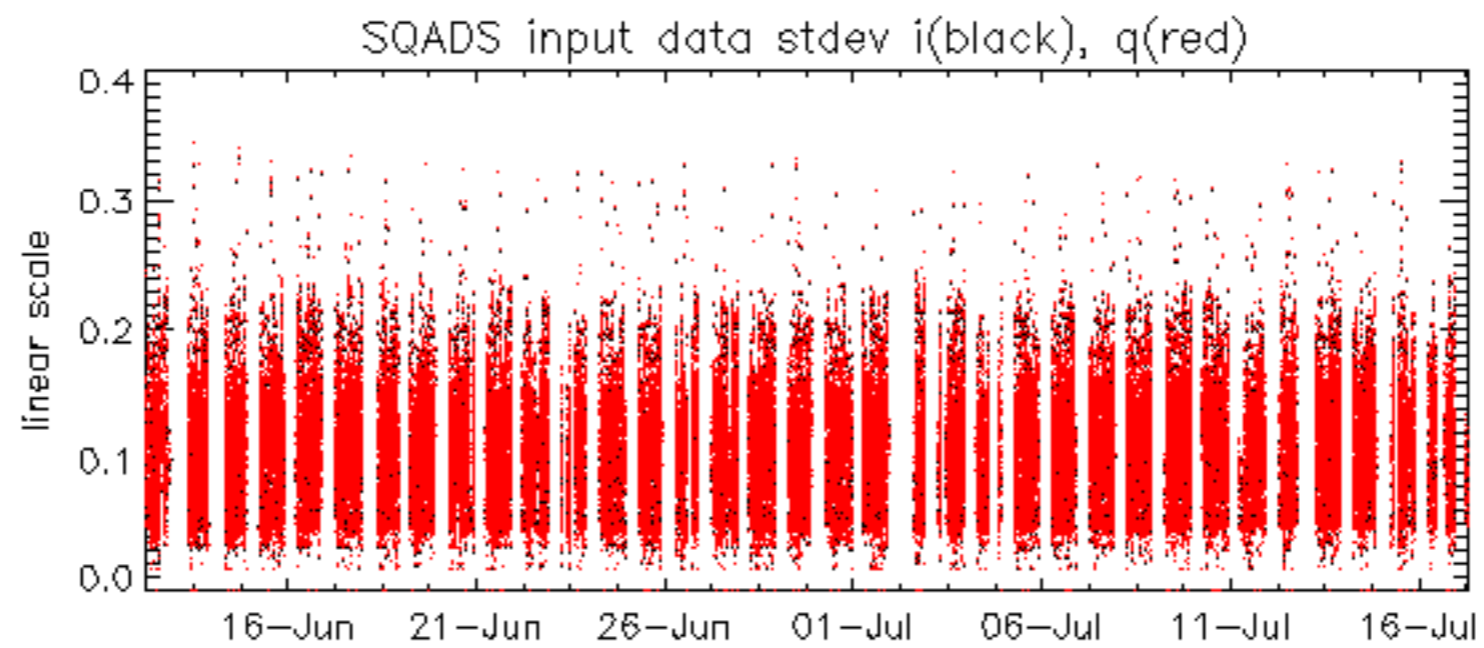
No anomalies observed.

Quite stable level for TR module 3 phase on tile B3 as shown in the figure below.

No anomalies observed.
Nominal values of I and Q level0 statistics.







ASAR went to Heater/Refuse due to the PSU reported off.
Time details in the table below.