

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 browse product available since 22-Aug-2003 due to network problems.

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 MS products acquired since 23-Aug-2003.

Analysis performed on data acquired on 24-Aug-2003 (H and V polarisation):

-ASA_MS__0PNPDK20030824_200134_000000152019_00185_07754_0022.N1









-ASA_MS__0PNPDK20030824_200314_000000152019_00185_07754_0021.N1

Stable configuration for the phase of TR module 3 on Tile B3, as shown in the figure below.











Polarisation	Start Time
V	20030824 200314
H	20030824 200134

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	-3.80036	-22.5316	-8.10460
	stdev	0.00589593	0.0637167	0.00203012
10	mean	-6.90694	-19.3318	-8.10460
	stdev	0.0224671	0.0634114	0.00203012



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.81425	-22.5509	-8.10643
	stdev	0.00569343	0.0622045	0.00233216
10	mean	-6.89600	-19.3292	-8.10643
	stdev	0.0254327	0.0608878	0.00233216



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	0.000451503
	stdev	3.14378e-07
MEAN Q	mean	0.000291318

stdev	3.27050e-07
-------	-------------



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.114843
	stdev	0.00155369
STDEV Q	mean	0.115007
	stdev	0.00157892



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

No anomalies observed on 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

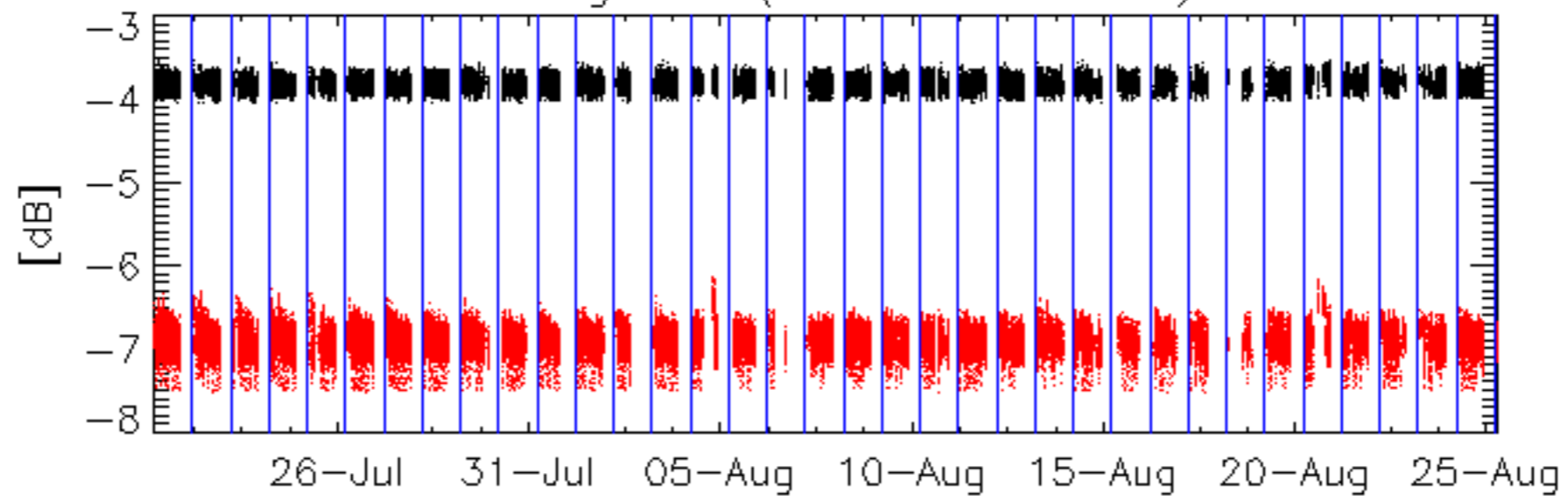
Evolution of Absolute Doppler
Ascending
Descending

6.3 - Doppler evolution versus ANX

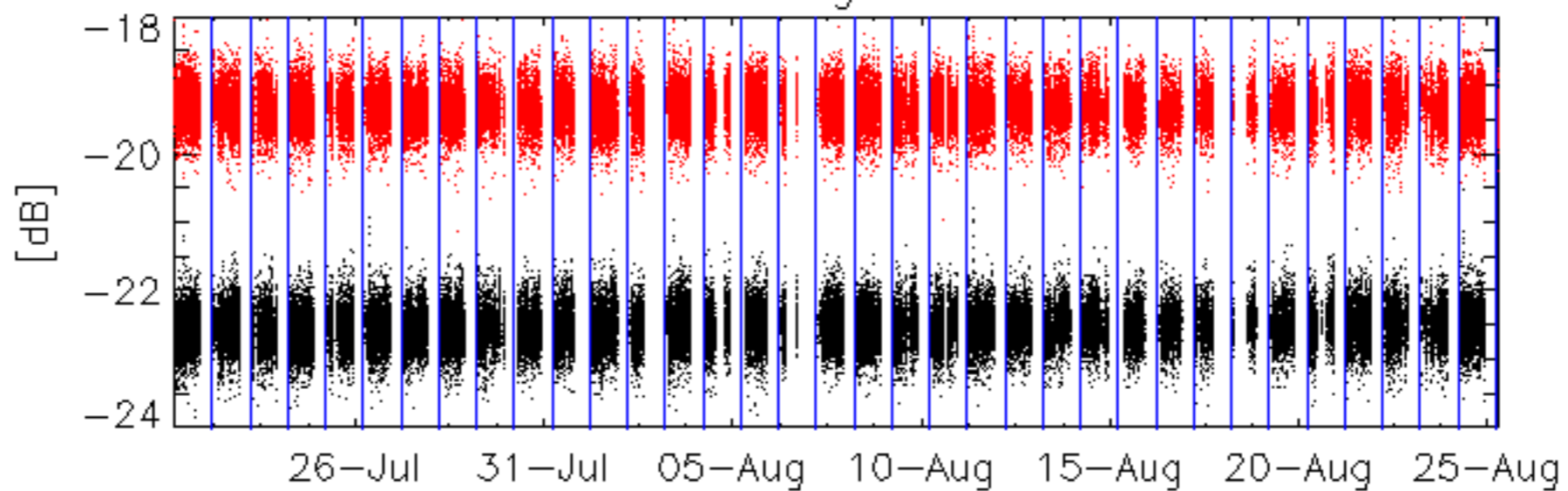
Evolution Doppler error versus ANX



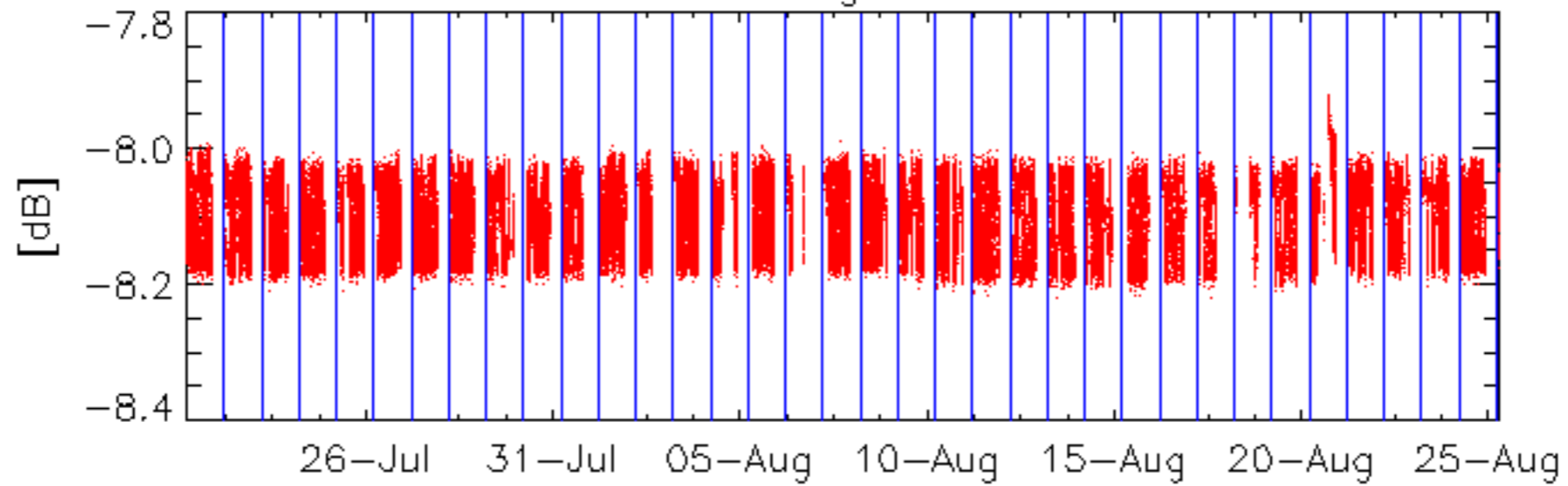
Average P1 (row 3 & row 10)

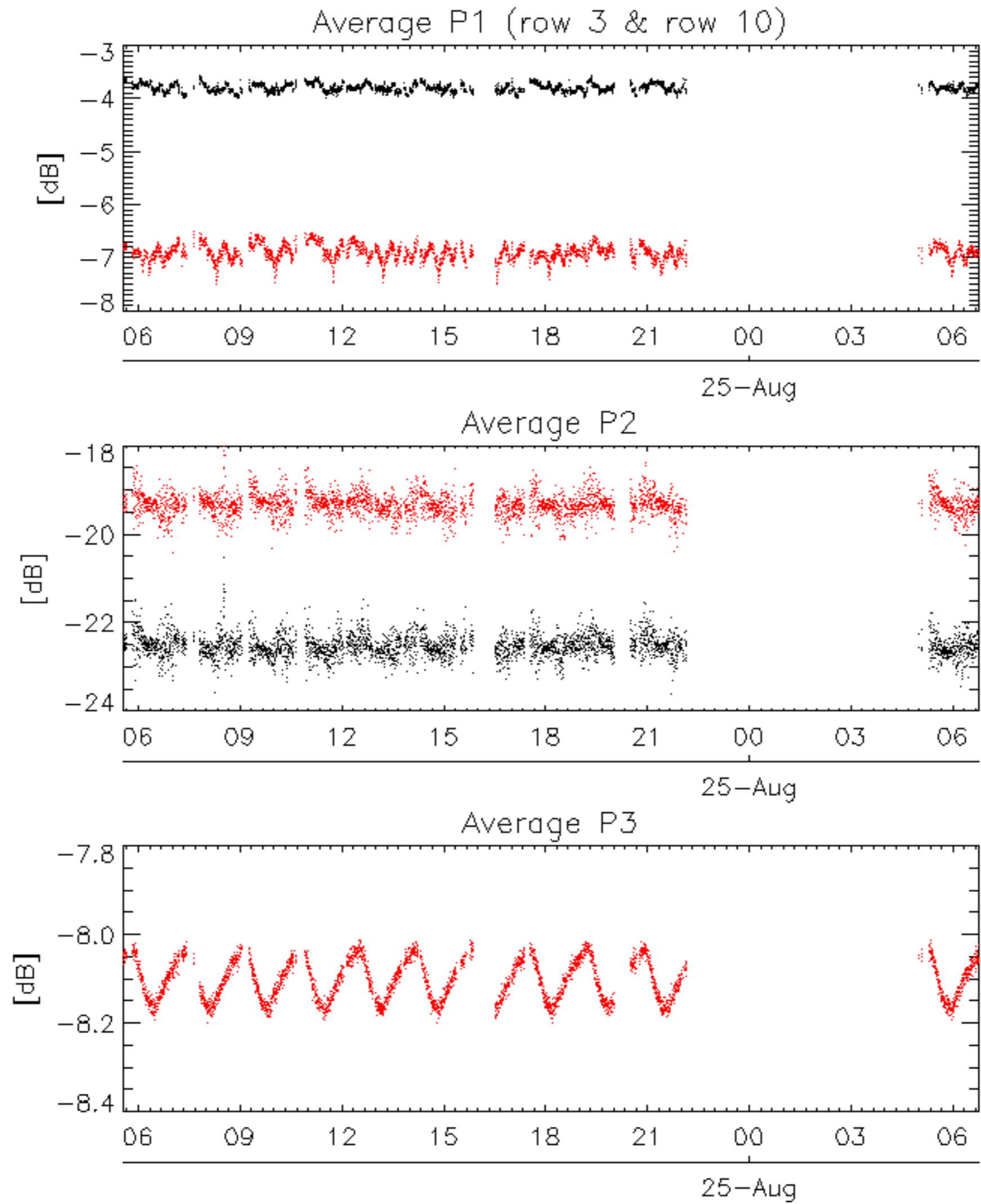


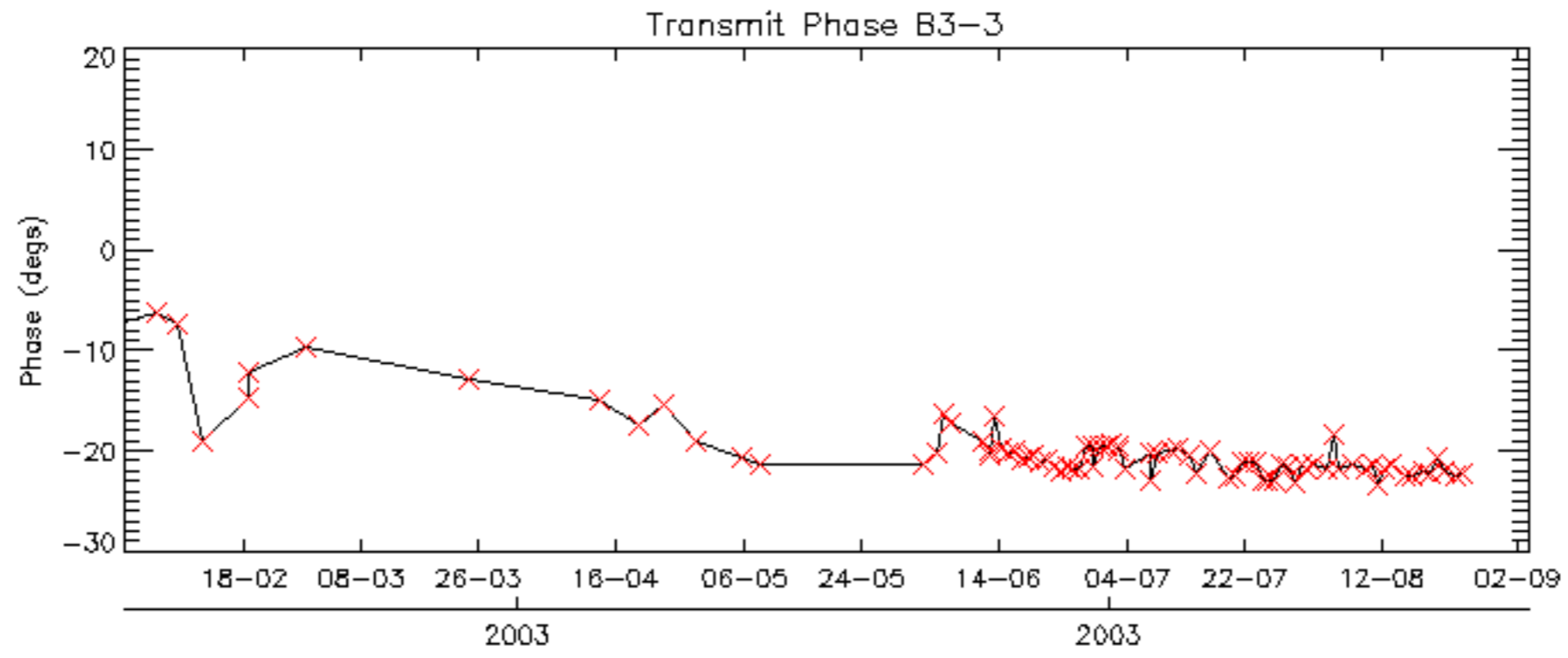
Average P2



Average P3



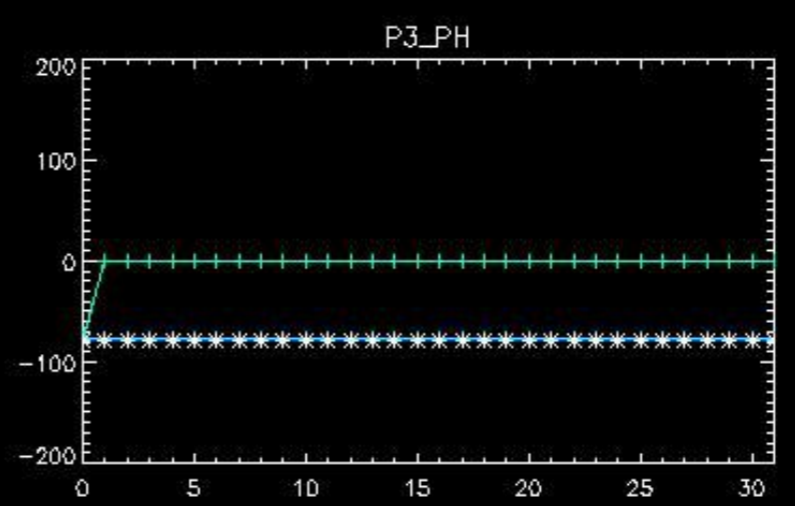
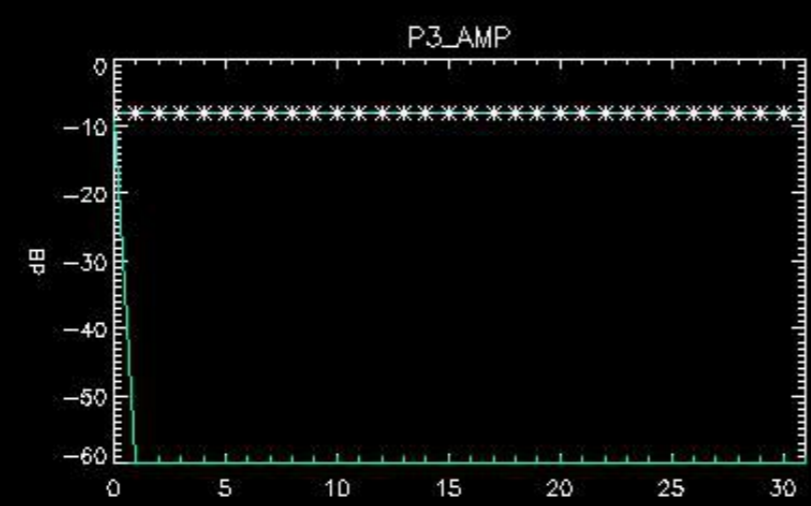
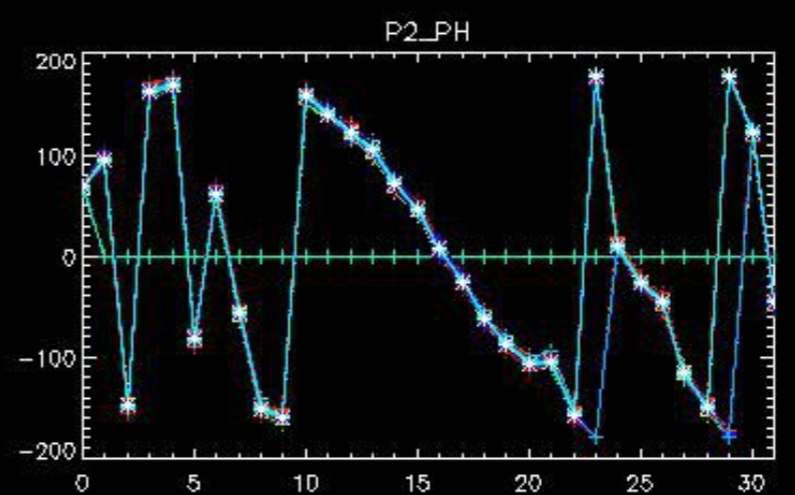
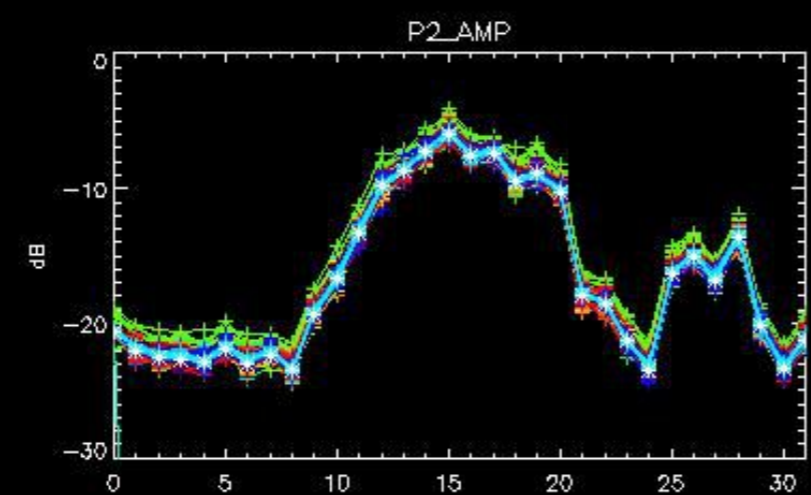
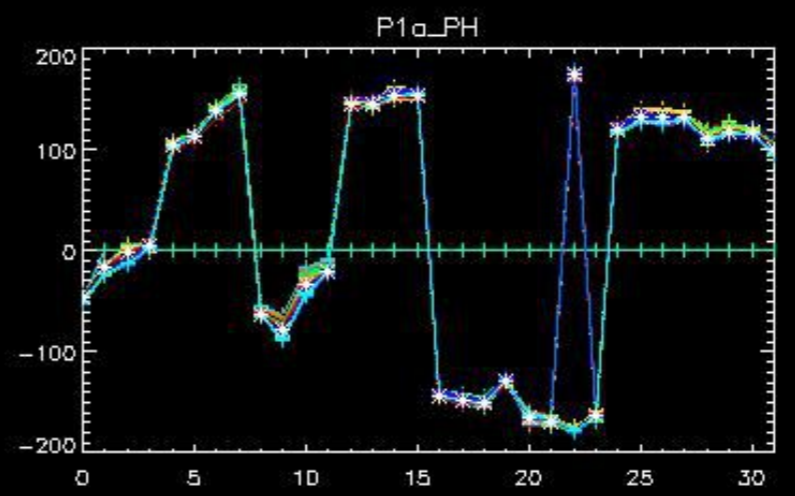
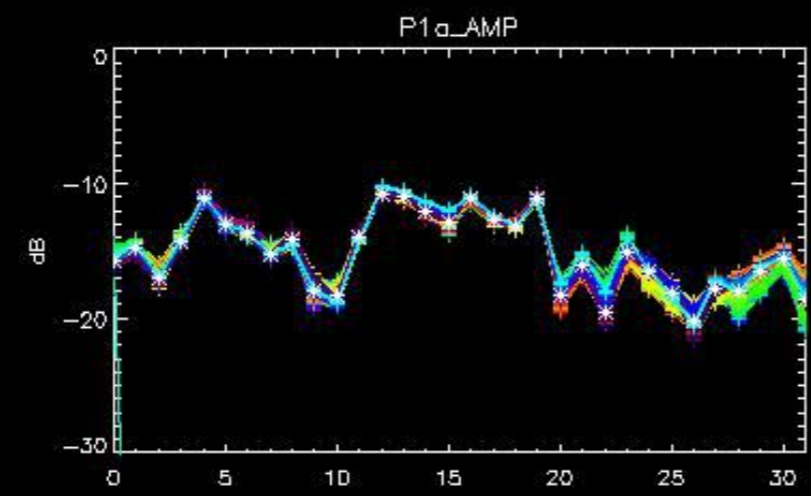
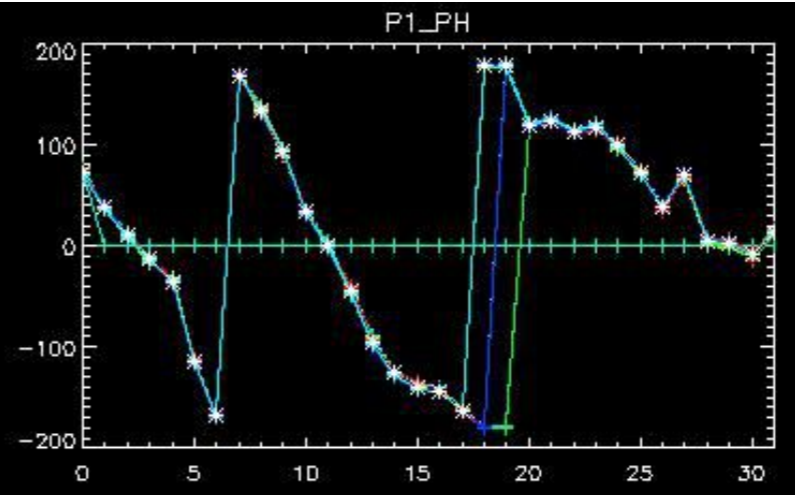
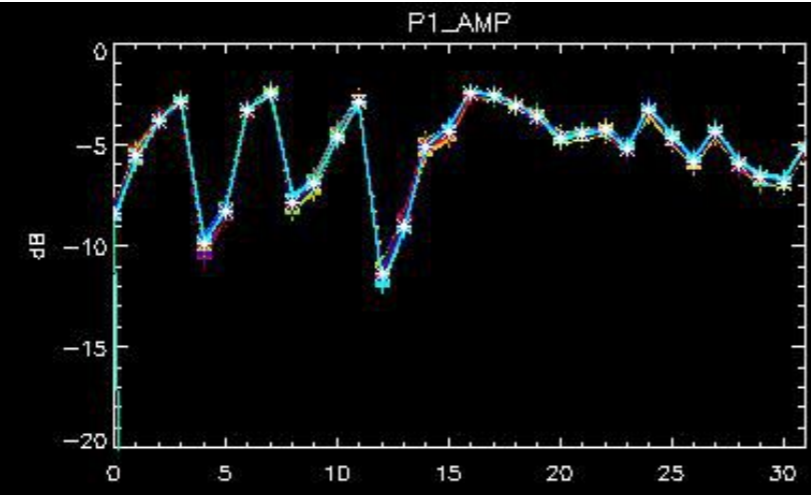




No browse product available since 22-Aug-2003 due to network problems.



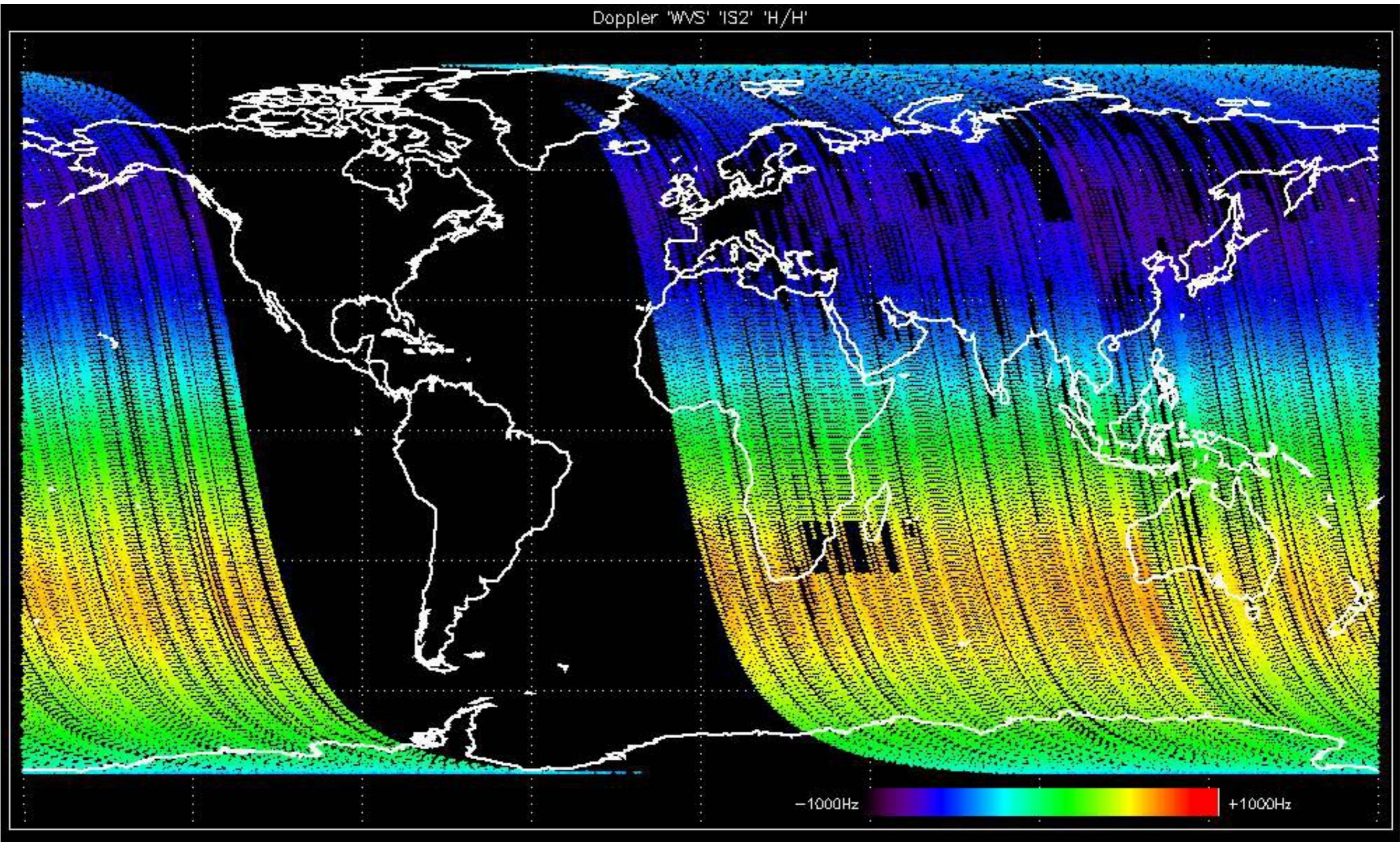
No anomalies observed.



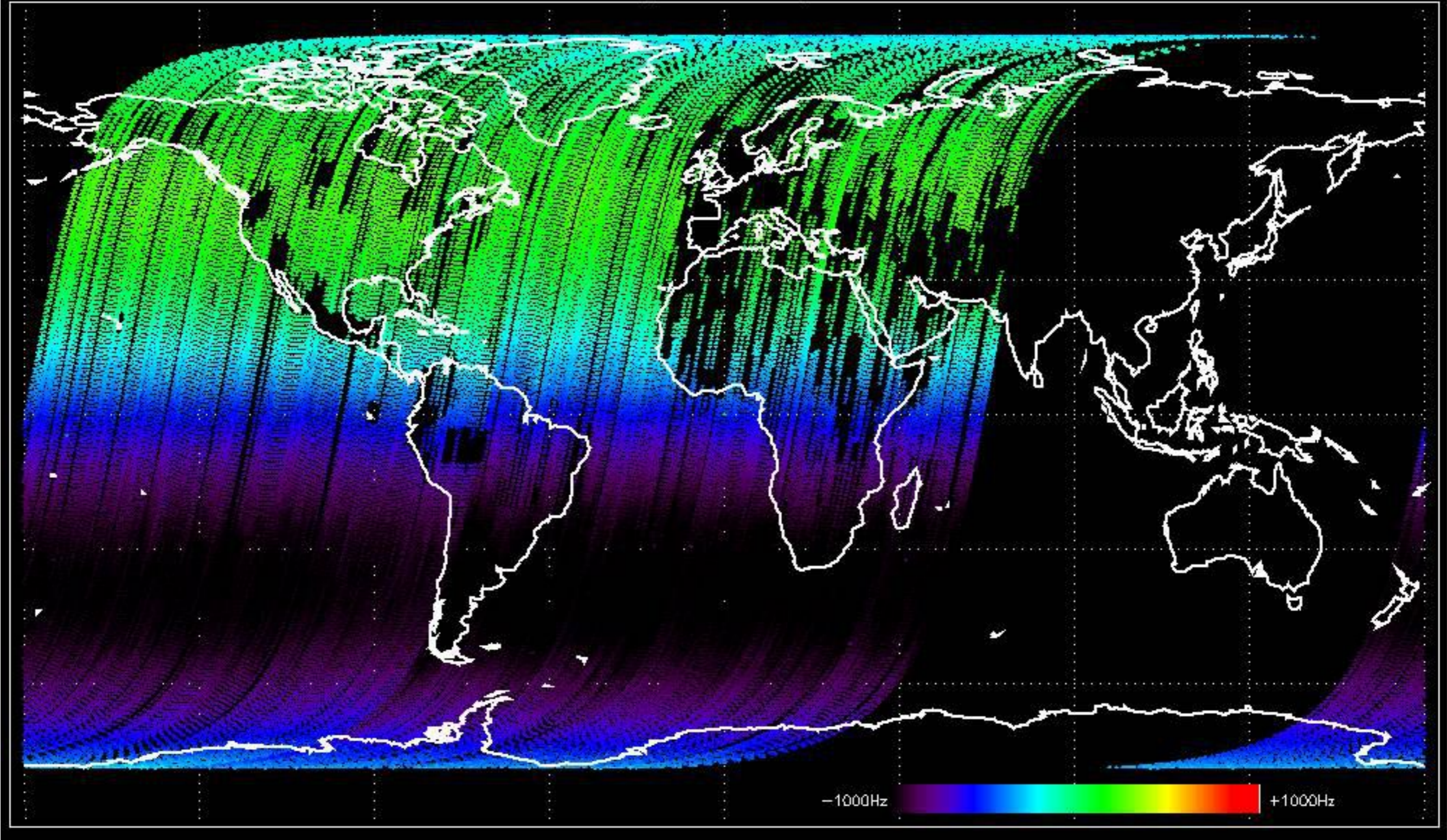
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

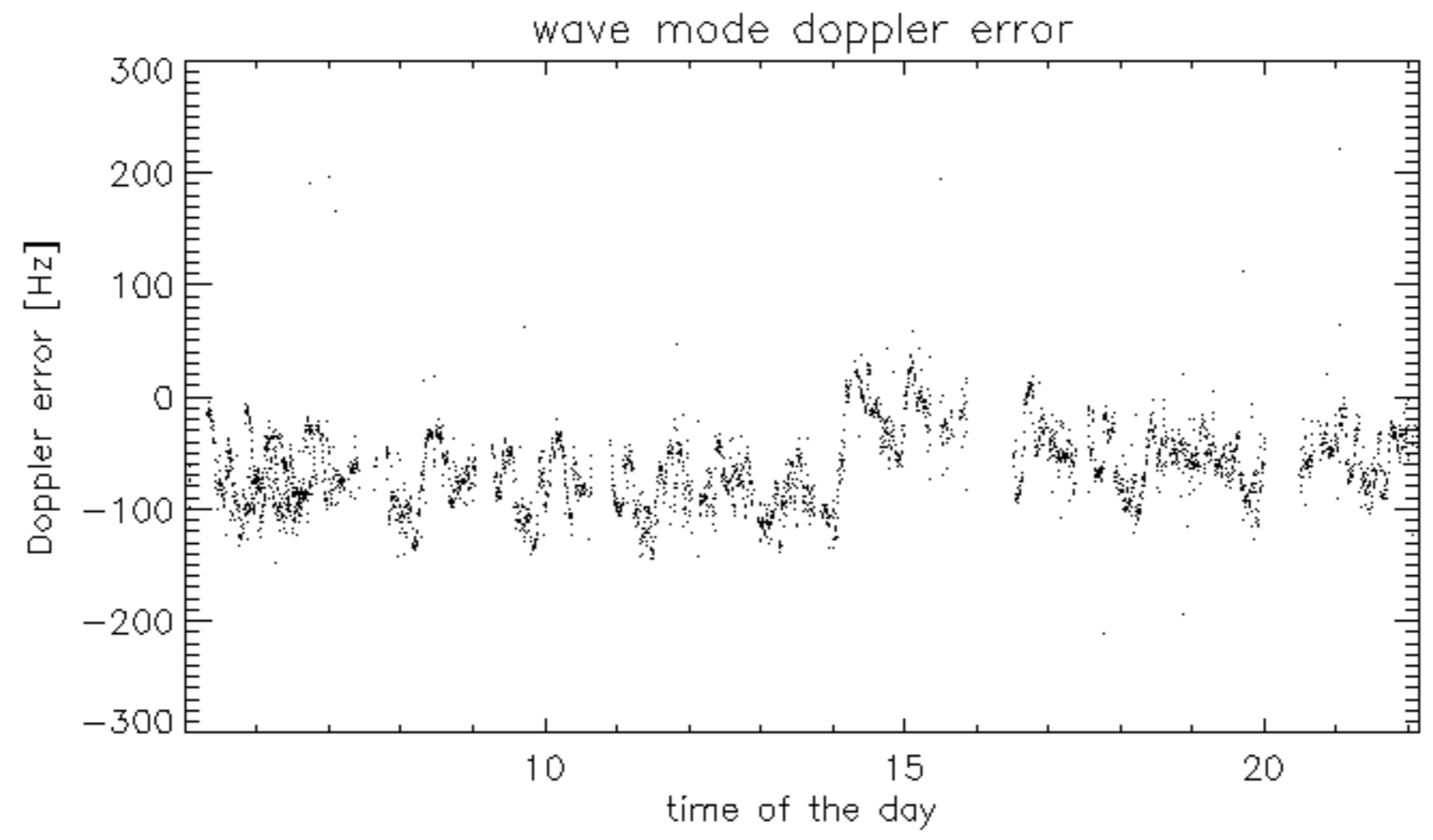
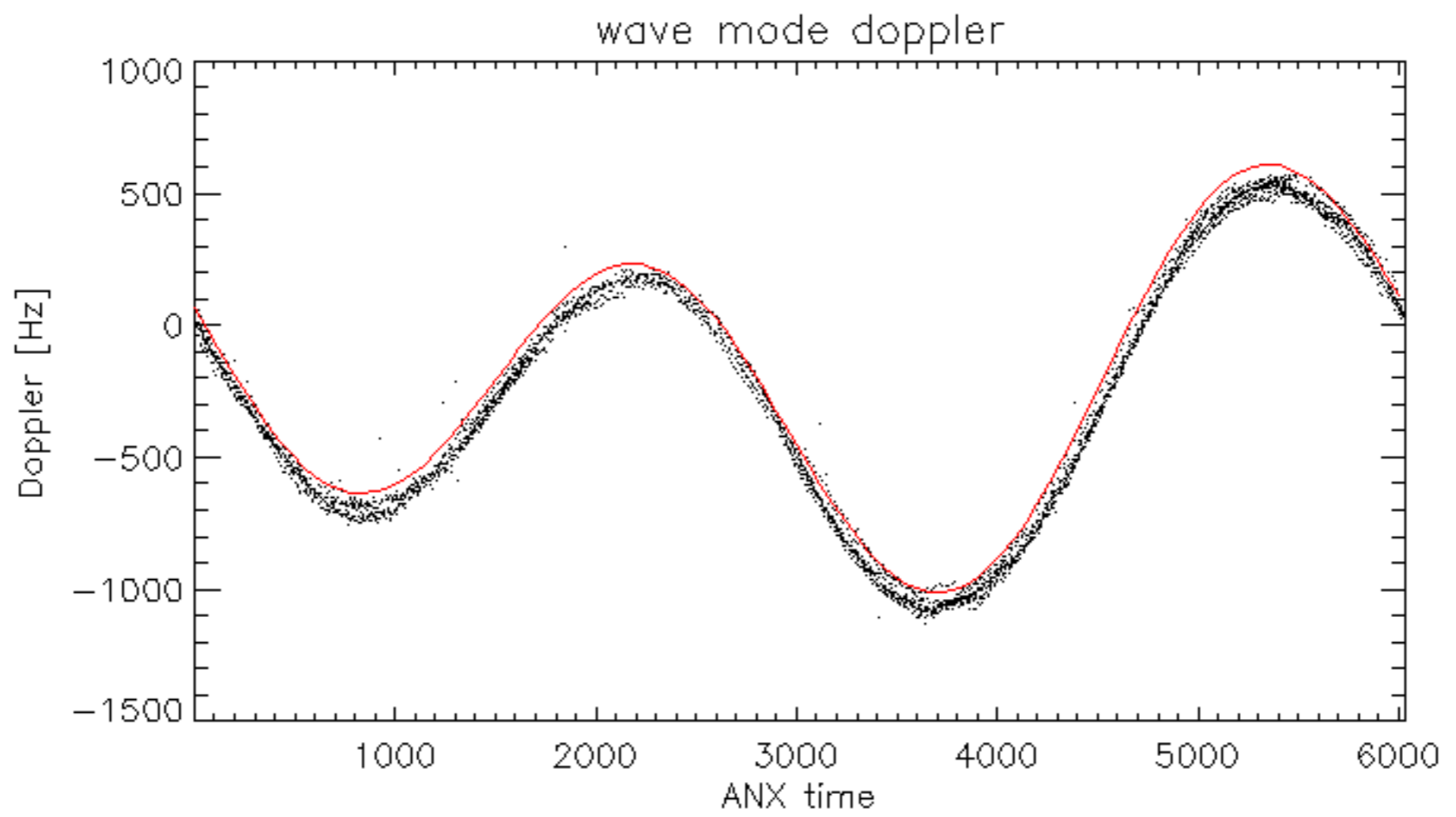
No anomalies observed on Doppler evolution.
Doppler analysis performed over the last 60 days.

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

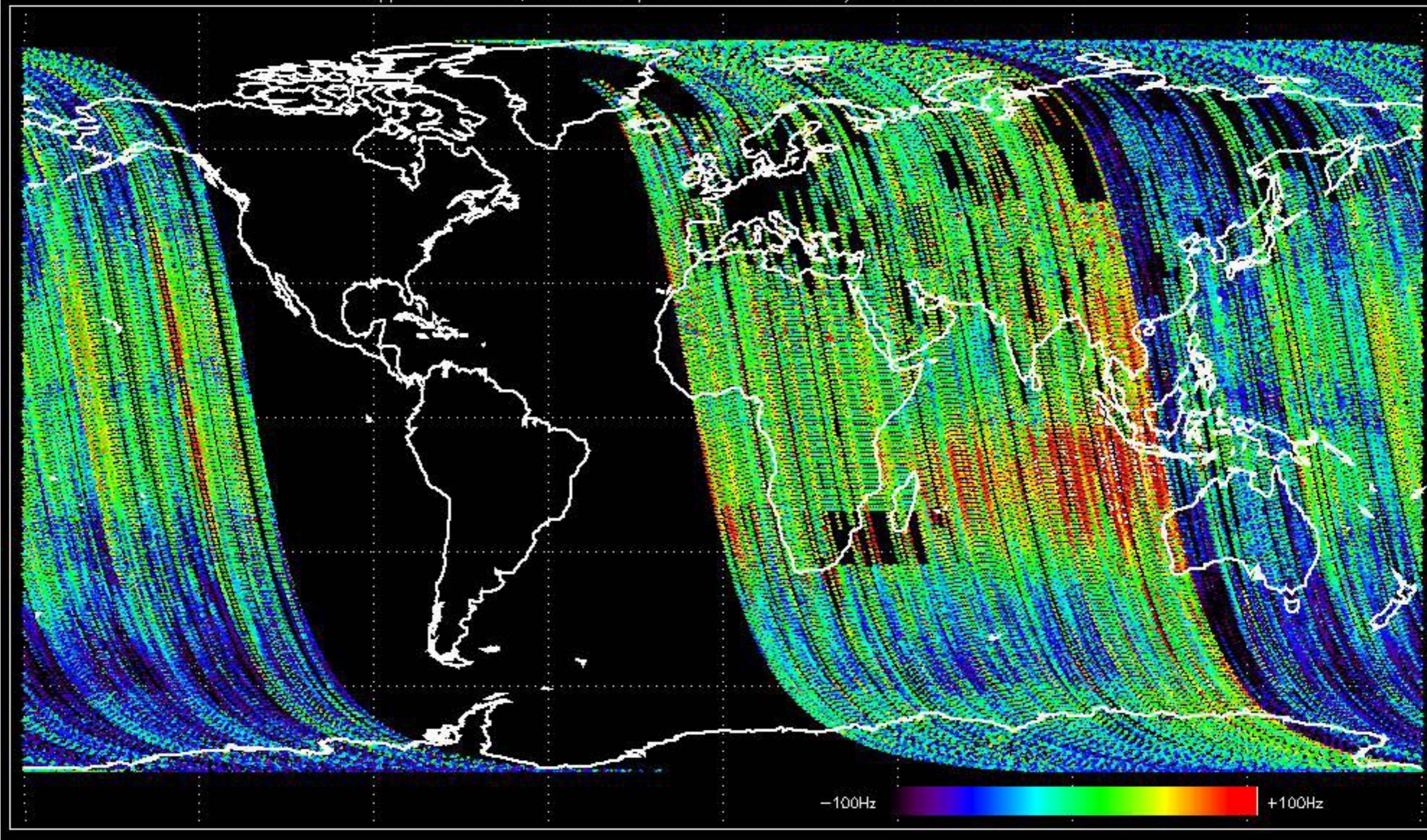


Doppler 'WVS' 'IS2' 'V/V'

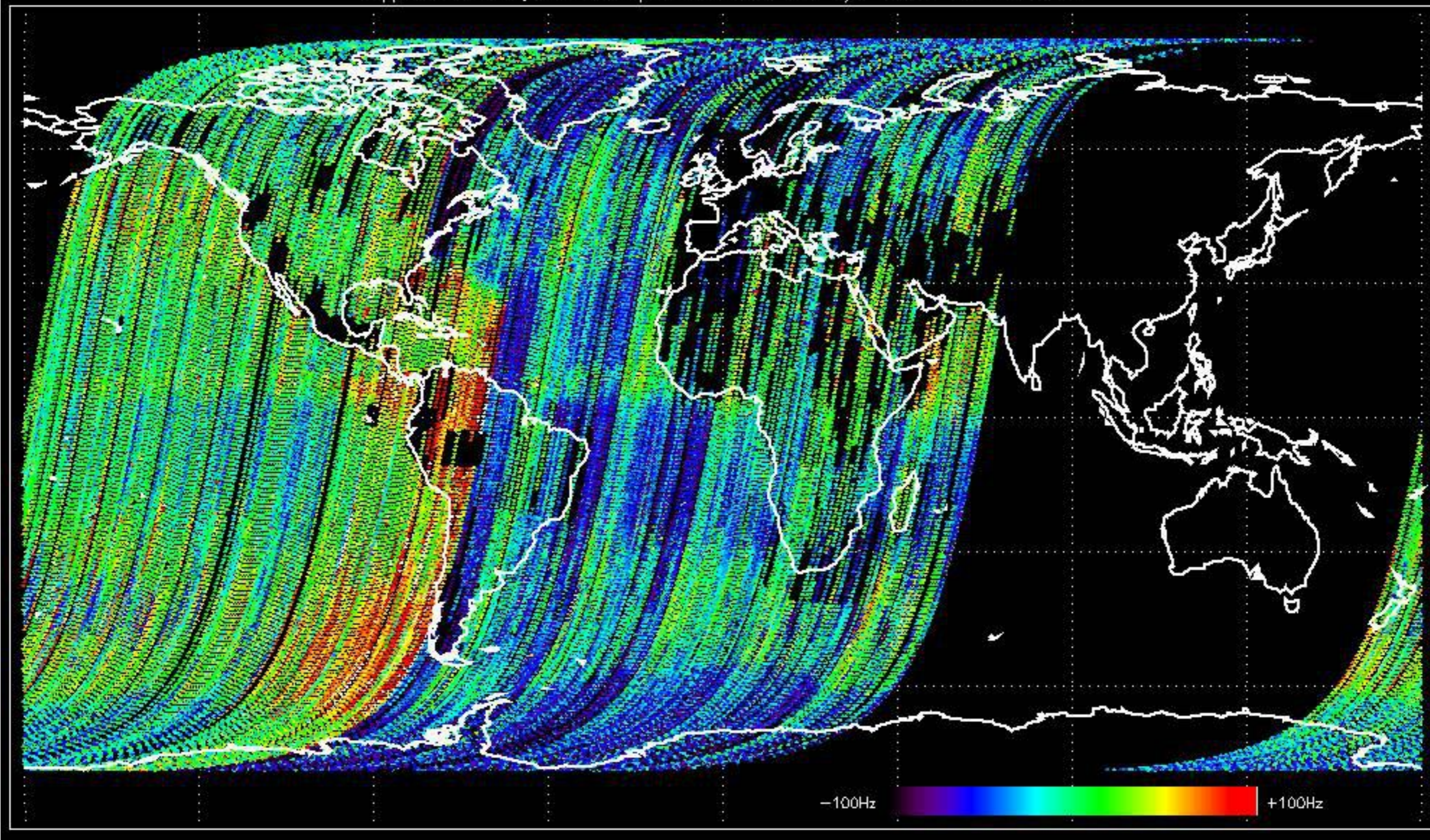




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



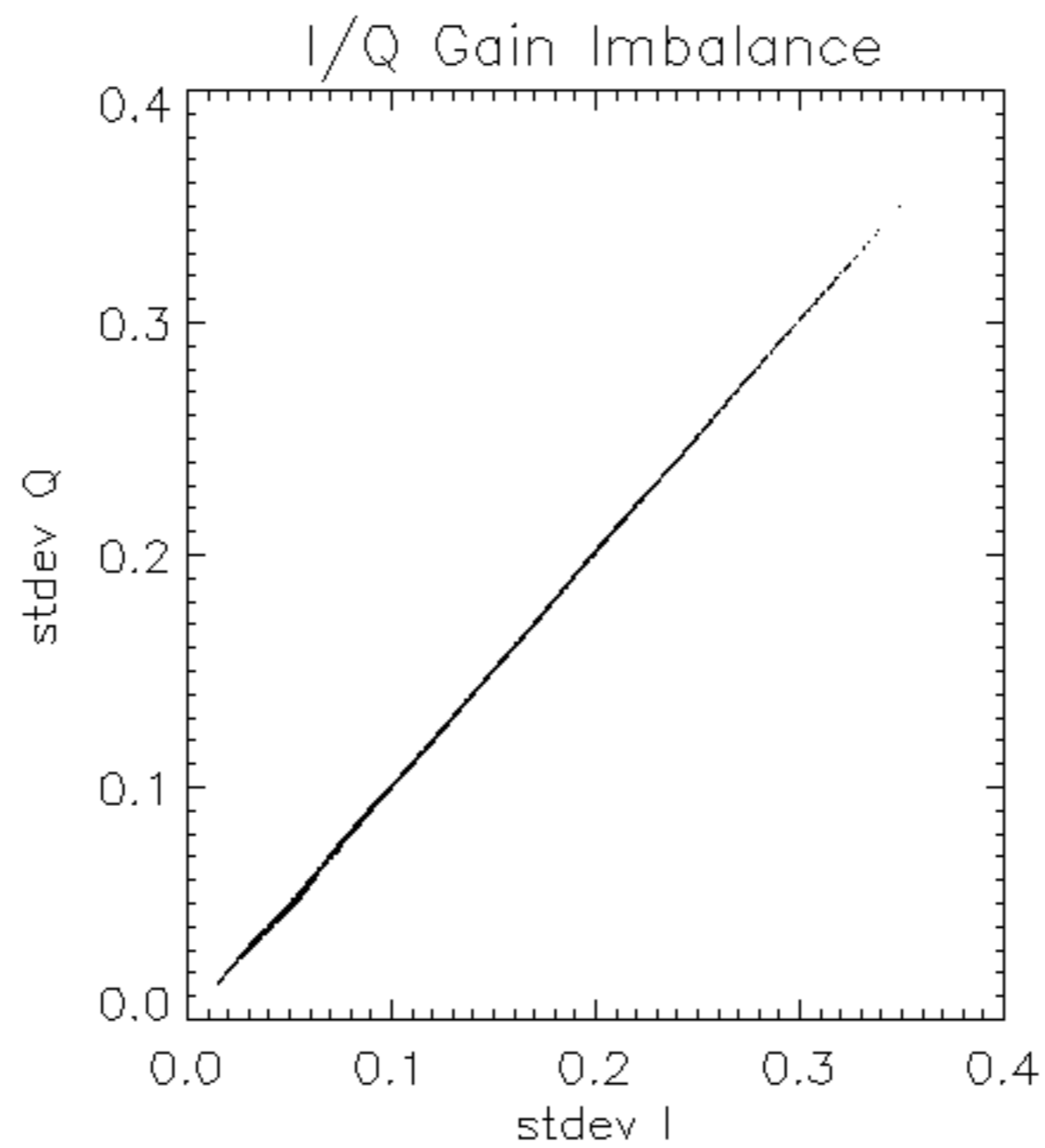
Doppler difference, estimated-predicted 'WS' 'IS2' 'V/V' -error mean of 53 Hz

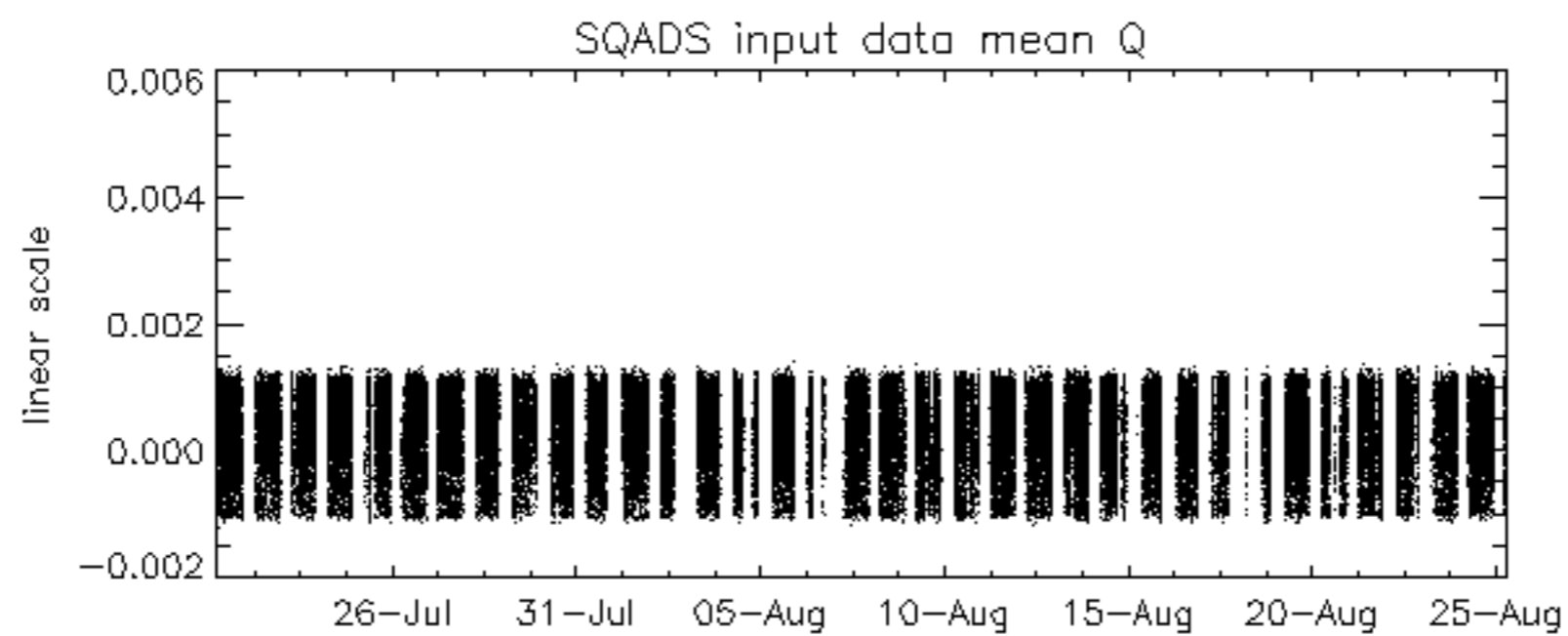
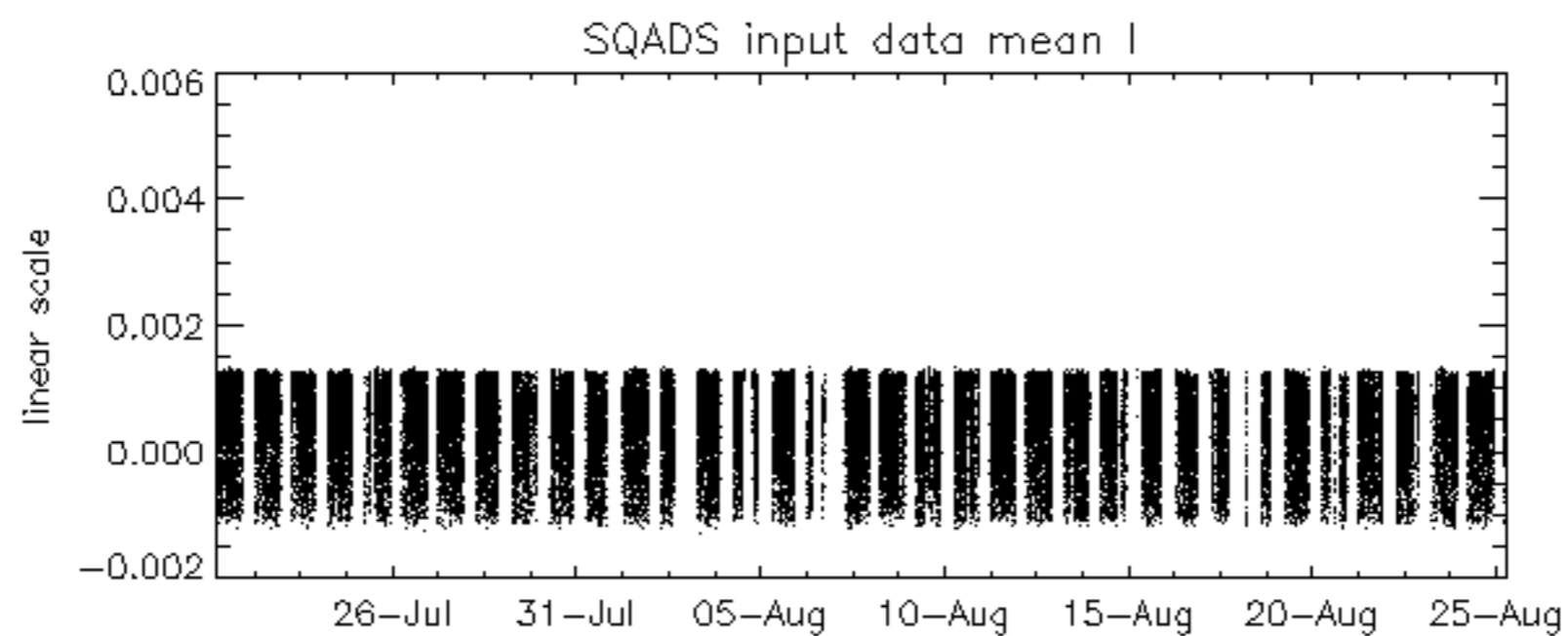
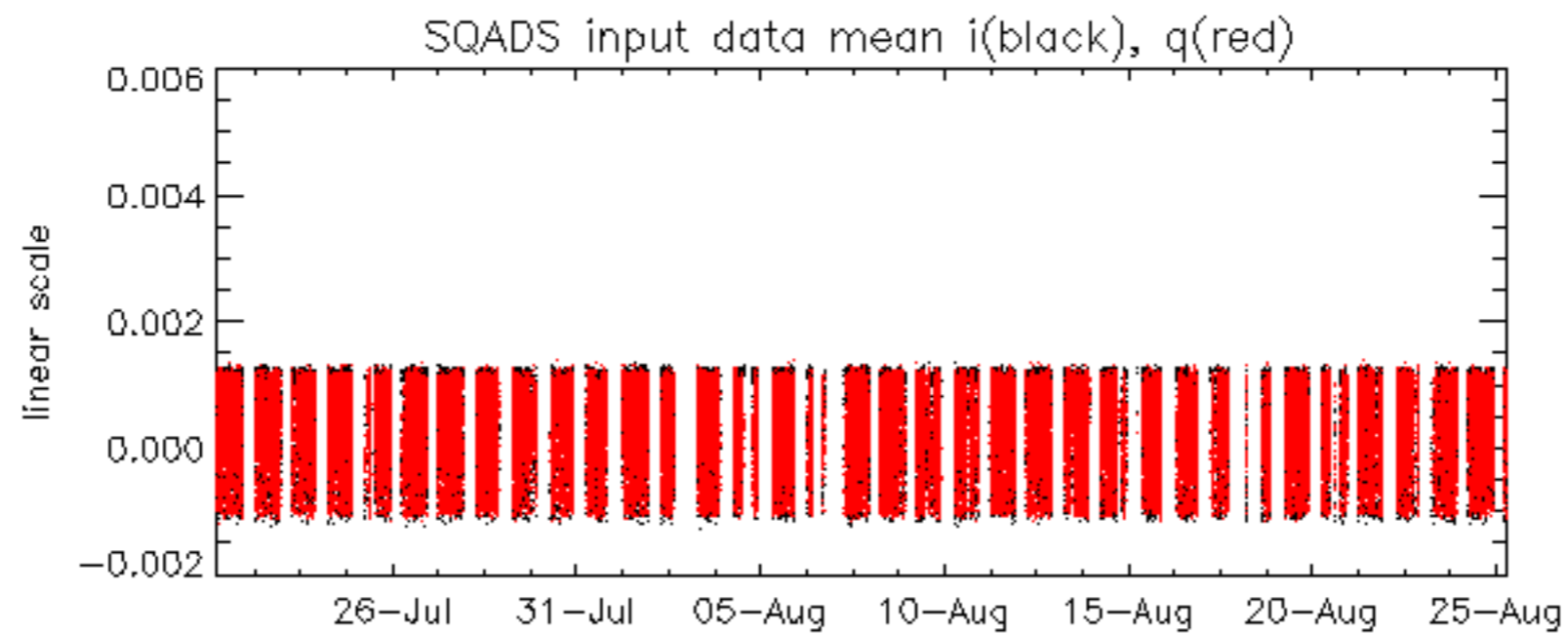


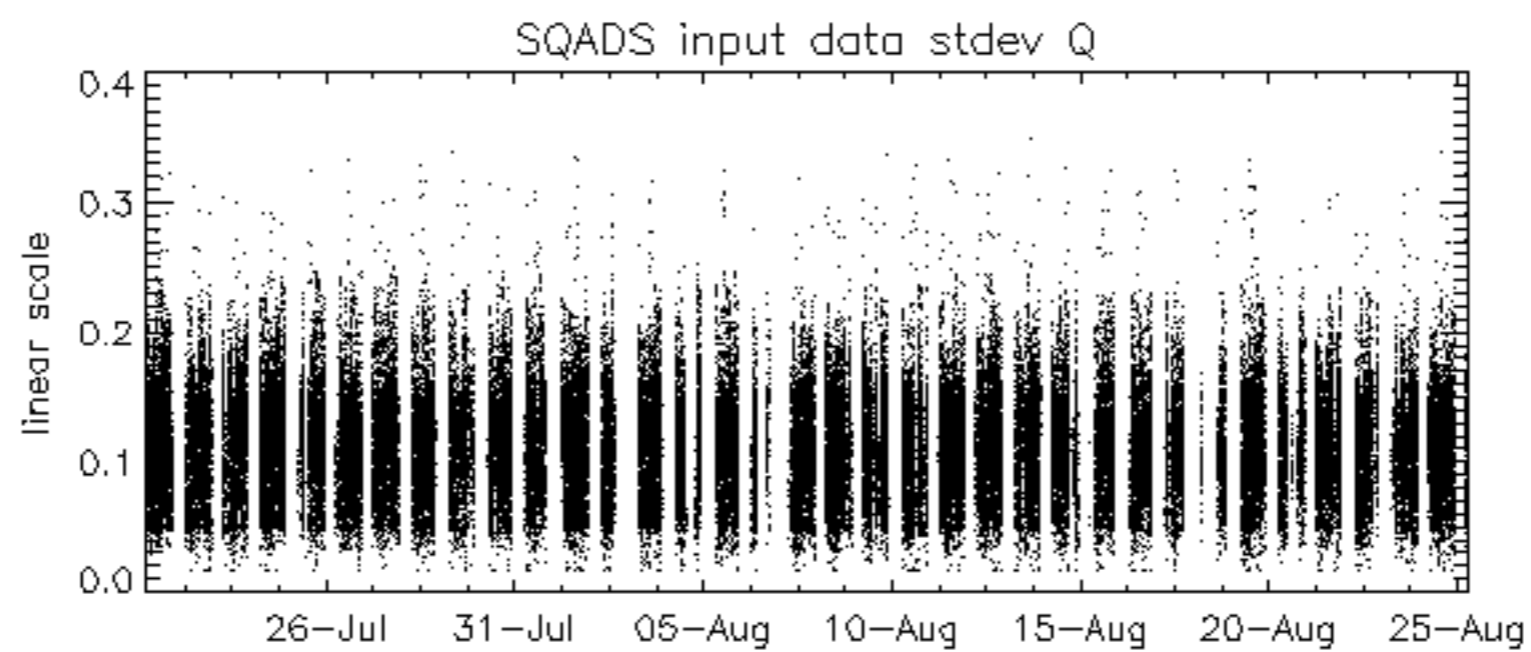
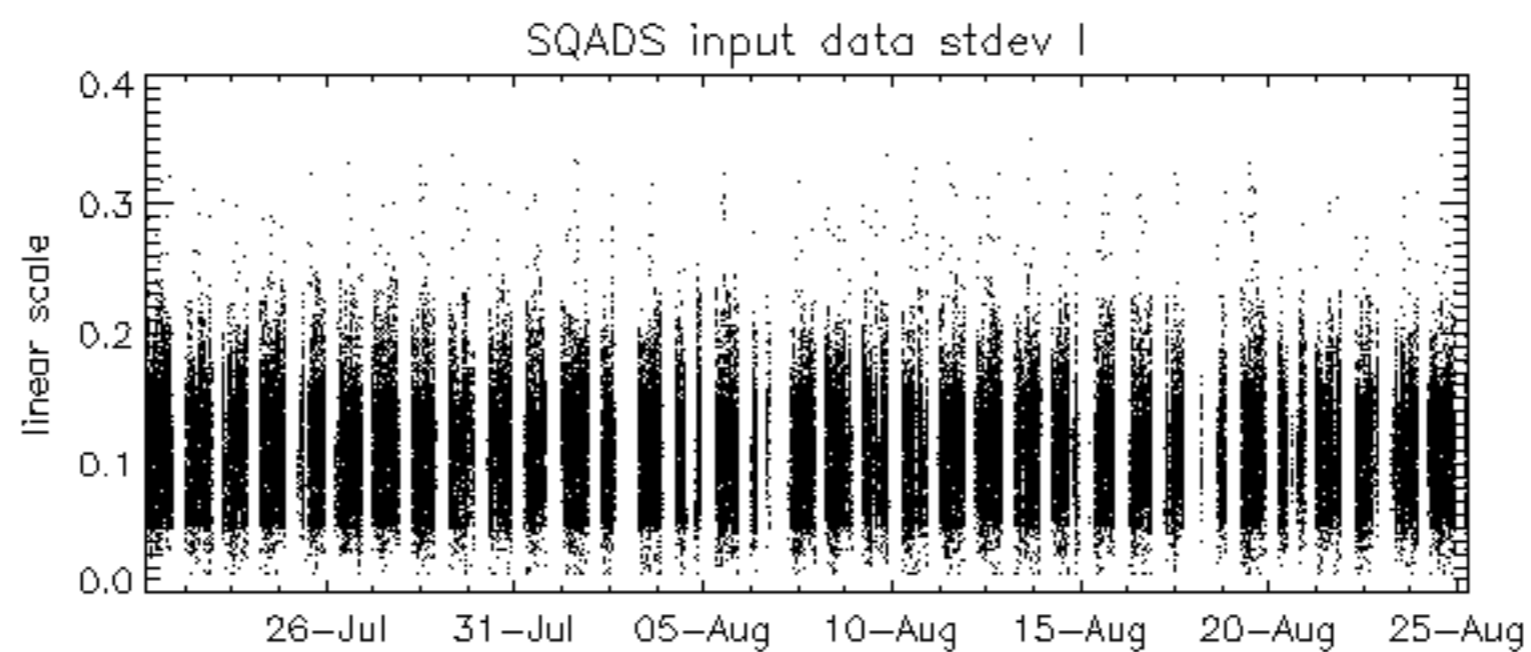
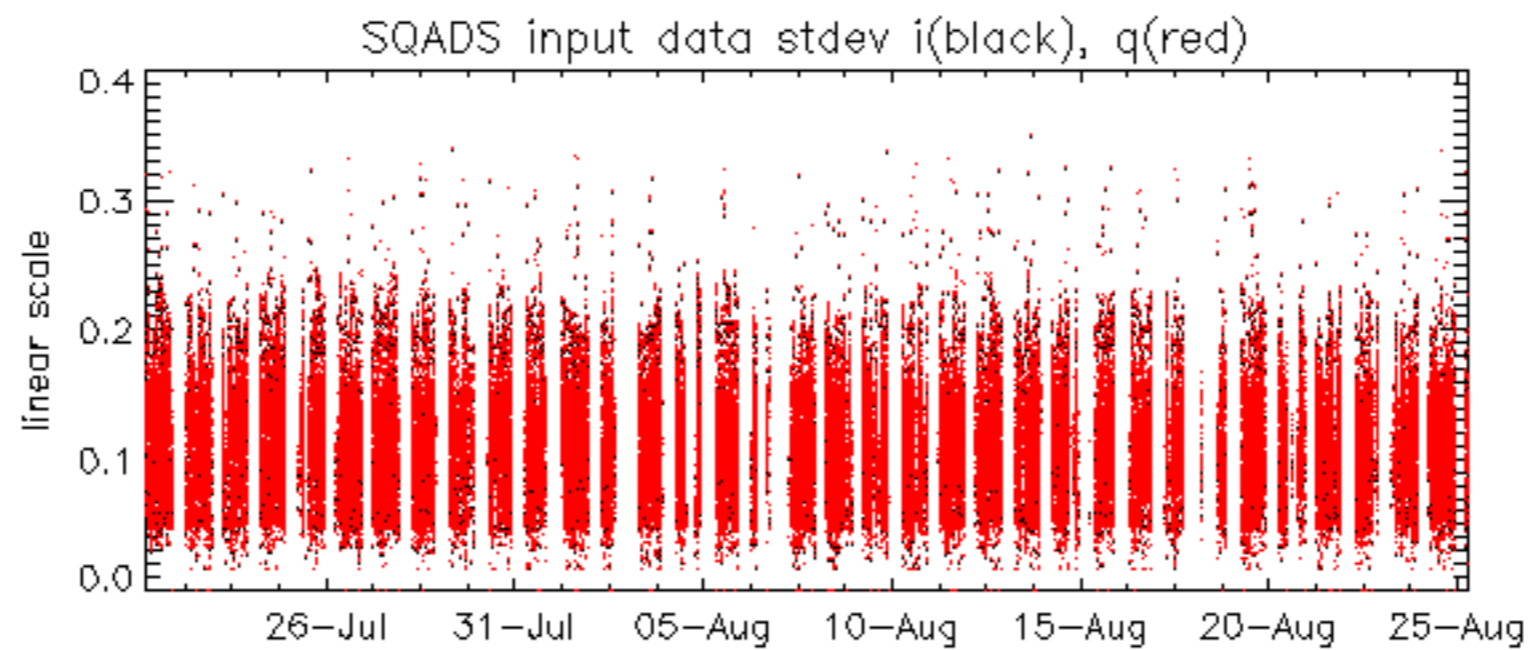
No anomalies observed on MS products acquired since 23-Aug-2003.
Analysis performed on data acquired on 24-Aug-2003 (H and V polarisation):
-ASA_MS__0PNPDK20030824_200134_000000152019_00185_07754_0022.N1
-ASA_MS__0PNPDK20030824_200314_000000152019_00185_07754_0021.N1

Stable configuration for the phase of TR module 3 on Tile B3, as shown in the figure below.

No anomalies observed.







No unavailabilities during the reported period.