

REPORT OF 030917

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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 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:









- ASA_MS__0PNPDK20030916_193835_000000152020_00013_08083_0069
- ASA_MS__0PNPDK20030916_194015_000000152020_00013_08083_0070

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	20030916 194015
H	20030916 193835

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	-3.79709	-22.5098	-8.11377
	stdev	0.00571524	0.0674418	0.00252960
10	mean	-6.90567	-19.2805	-8.11377
	stdev	0.0317798	0.0668634	0.00252960



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.80103	-22.5271	-8.10982
	stdev	0.00584428	0.0615365	0.00252686
10	mean	-6.89497	-19.3219	-8.10982
	stdev	0.0270842	0.0605700	0.00252686



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	0.000395207
	stdev	3.38448e-07
MEAN Q	mean	0.000304591

stdev	3.19700e-07
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5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115376
	stdev	0.00144176
STDEV Q	mean	0.115583
	stdev	0.00146083



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

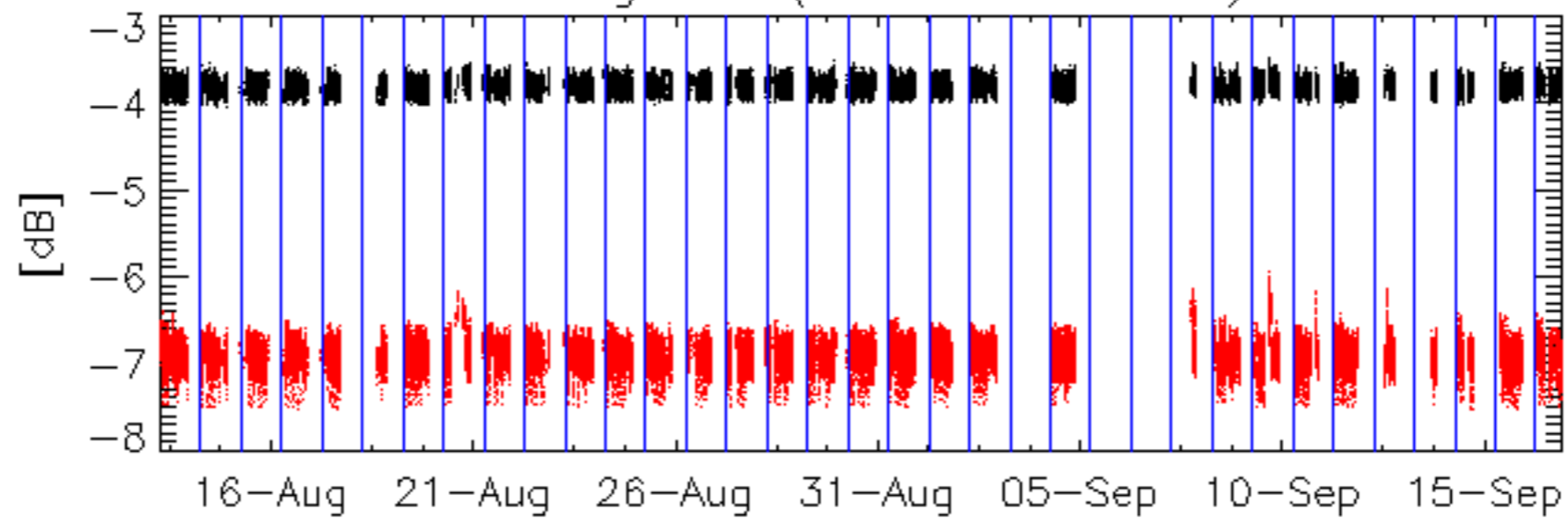
Evolution of Absolute Doppler
Ascending
Descending

6.3 - Doppler evolution versus ANX

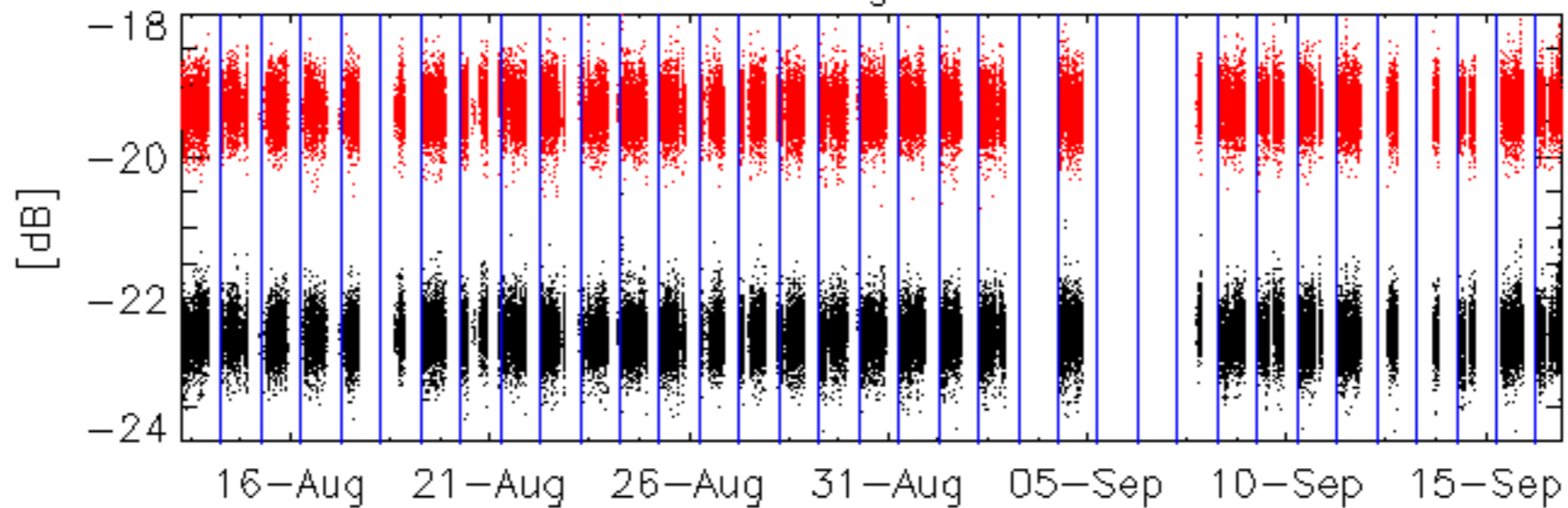
Evolution Doppler error versus ANX



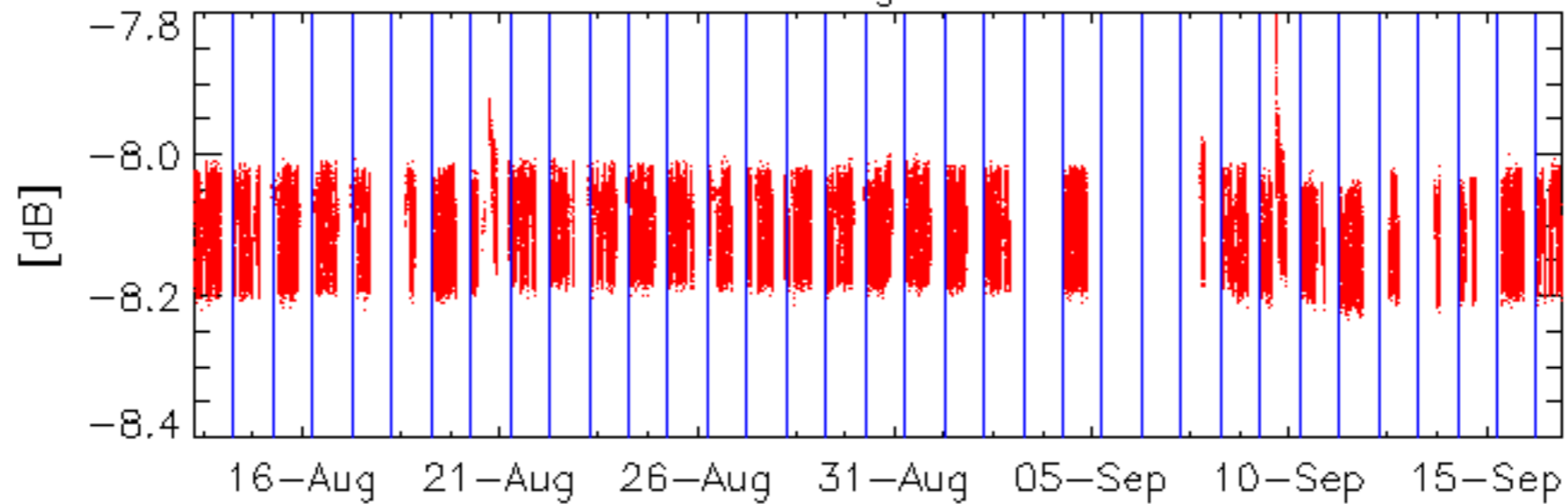
Average P1 (row 3 & row 10)



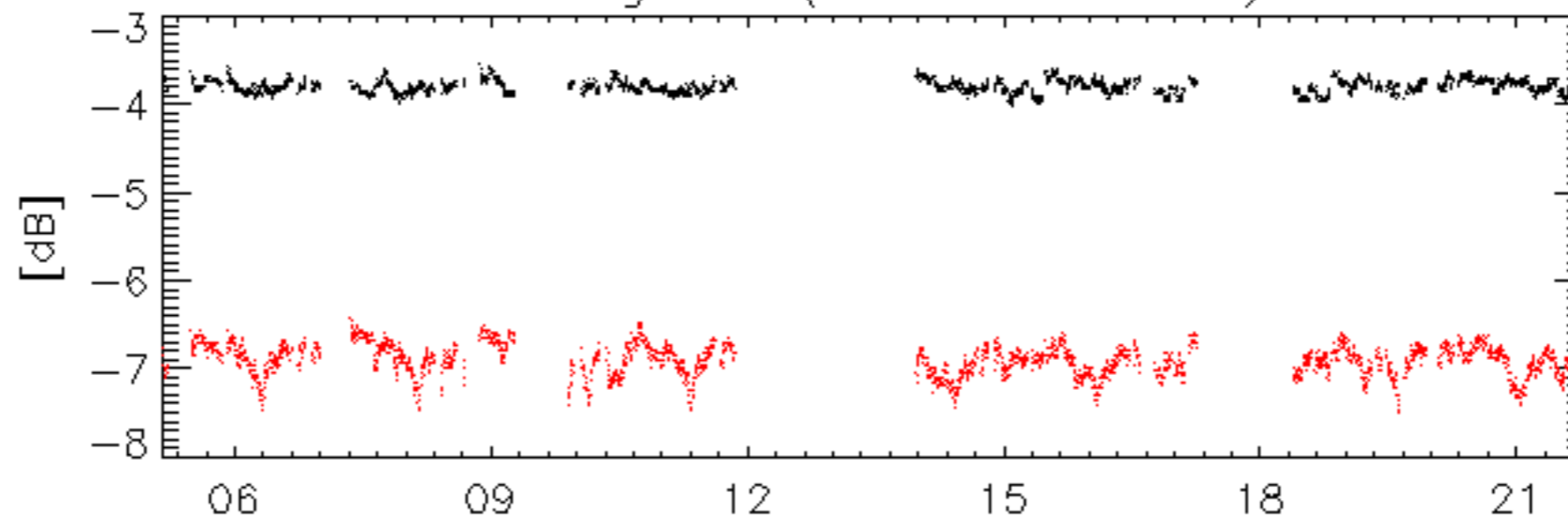
Average P2



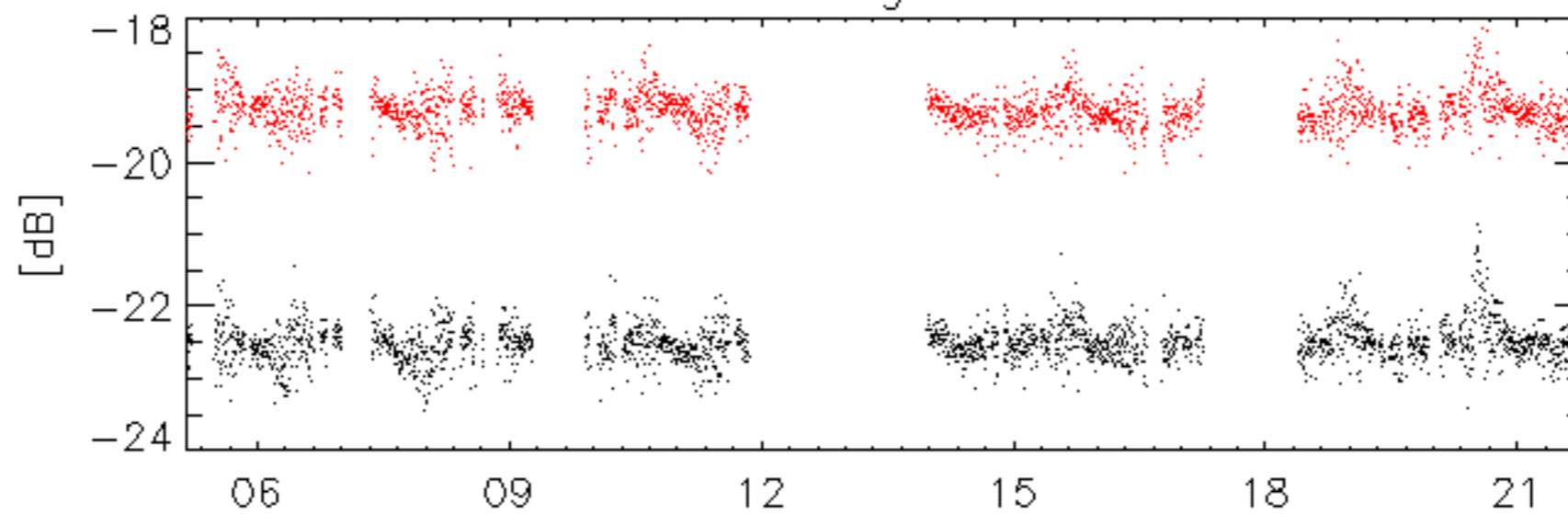
Average P3



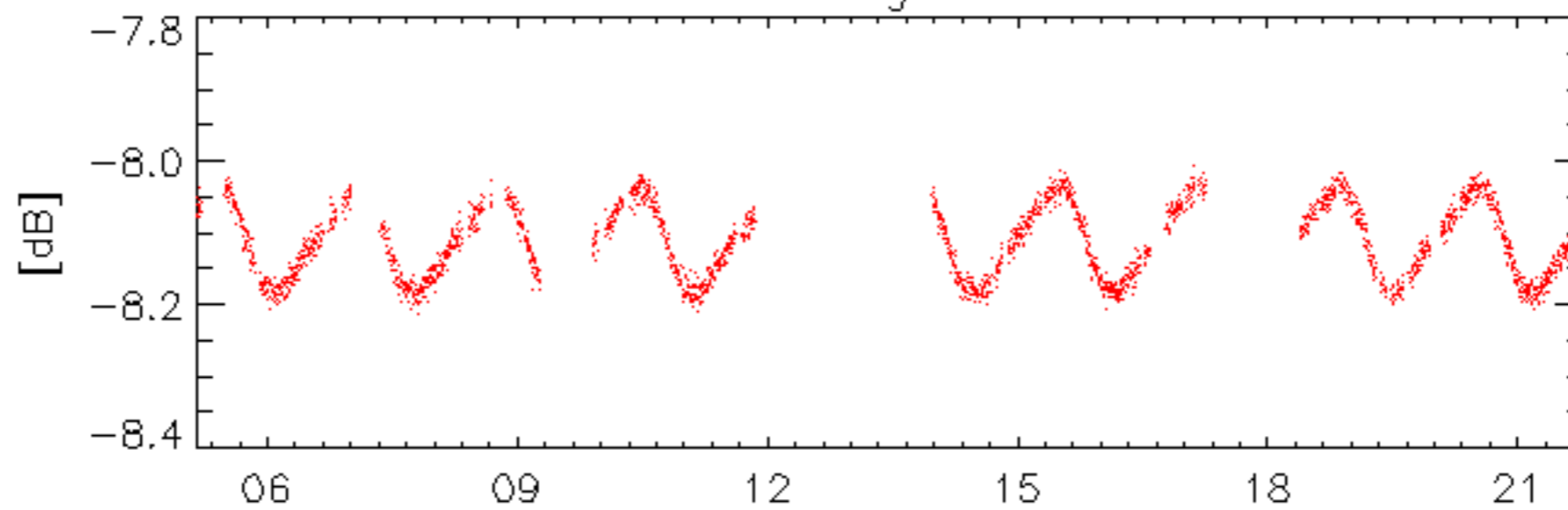
Average P1 (row 3 & row 10)



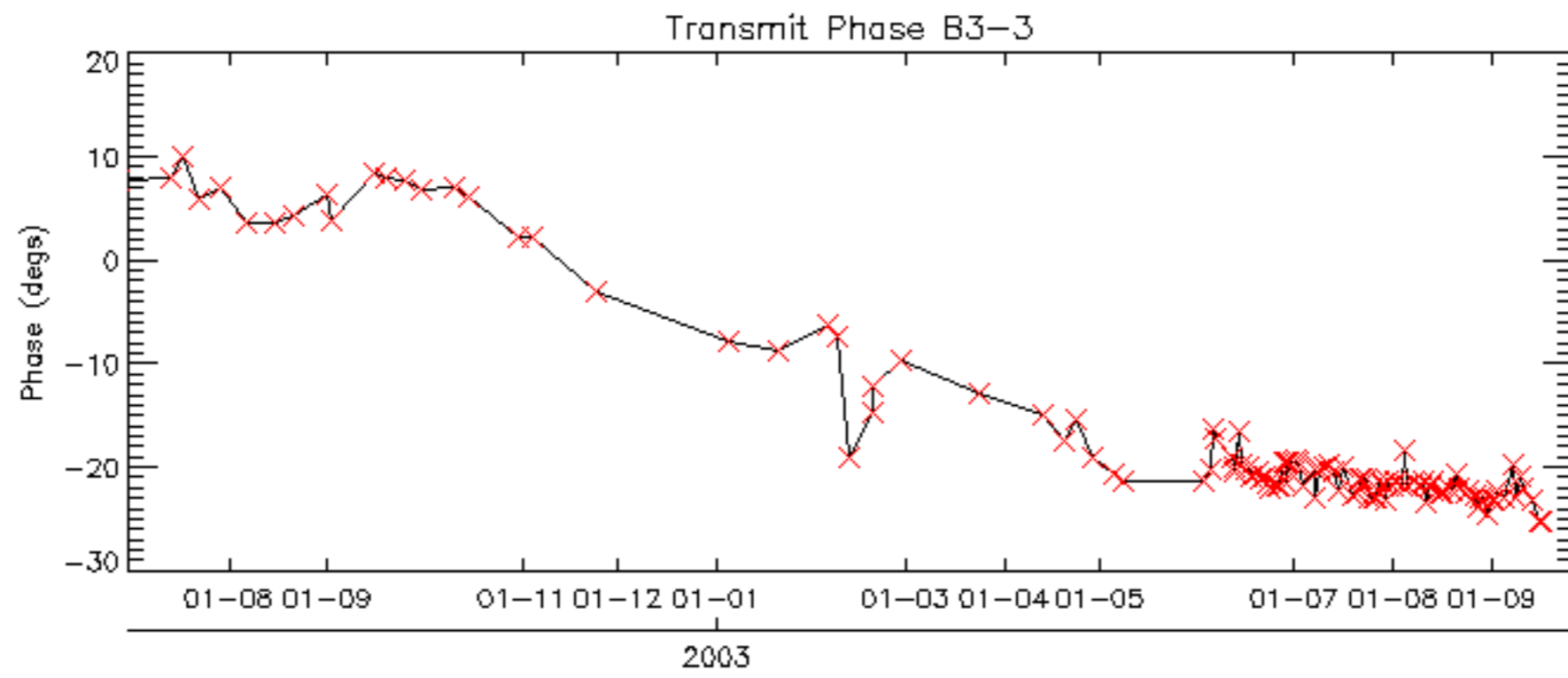
16-Sep
Average P2



16-Sep
Average P3

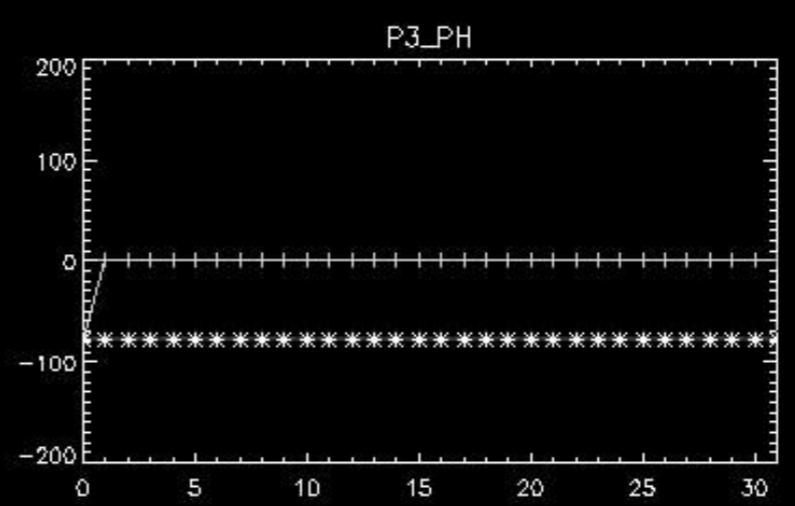
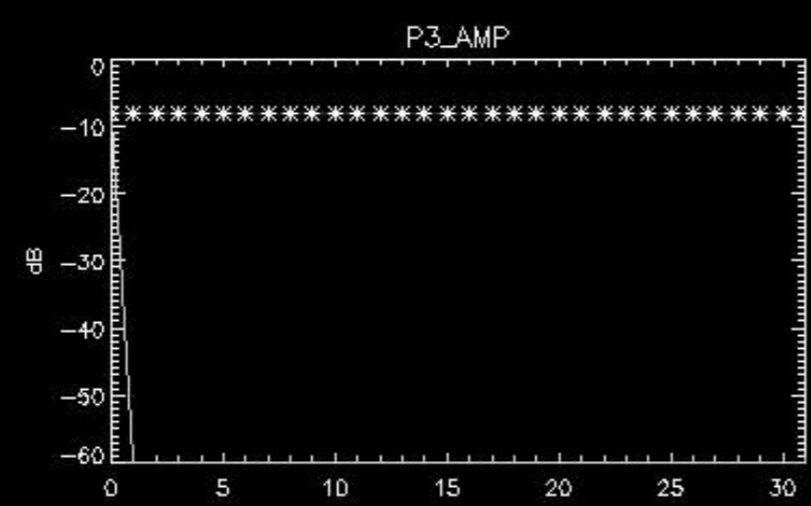
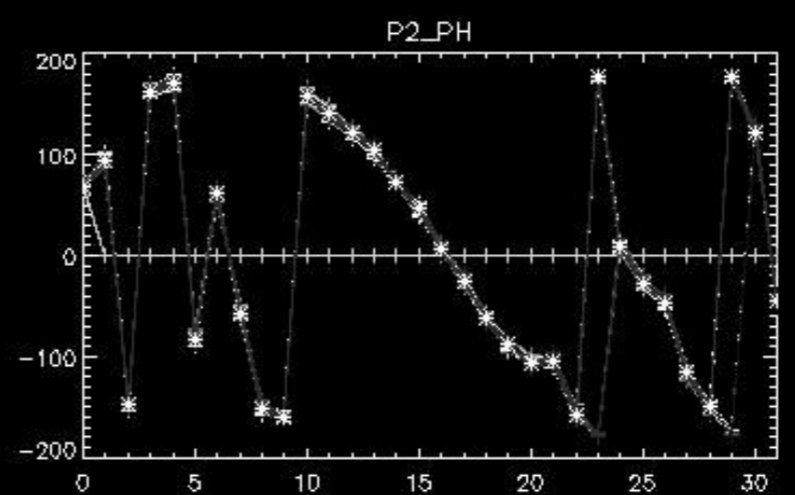
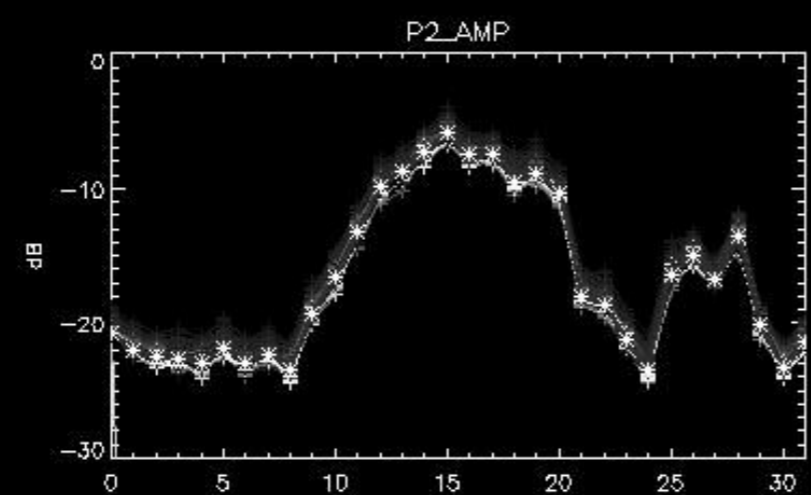
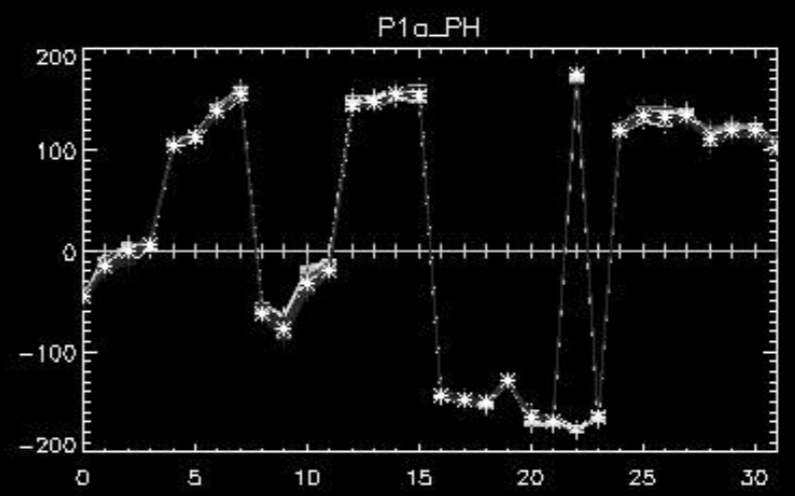
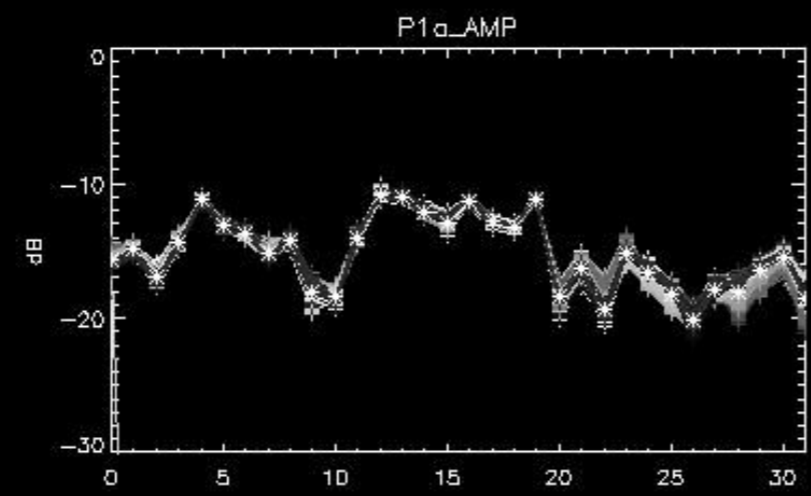
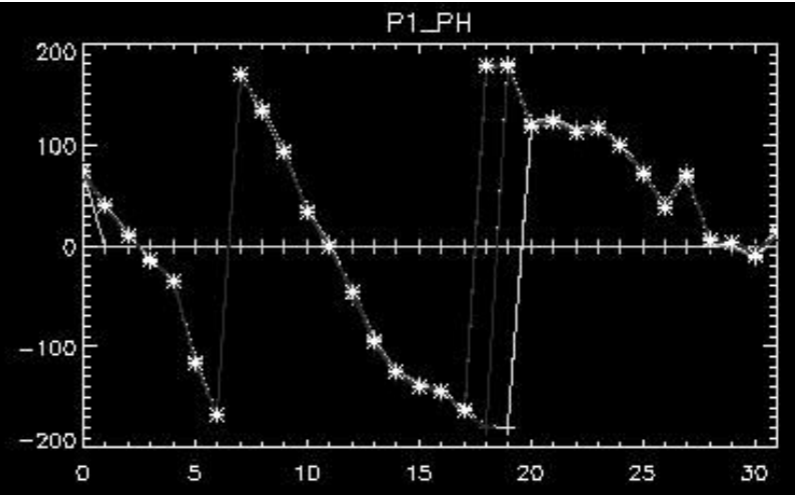
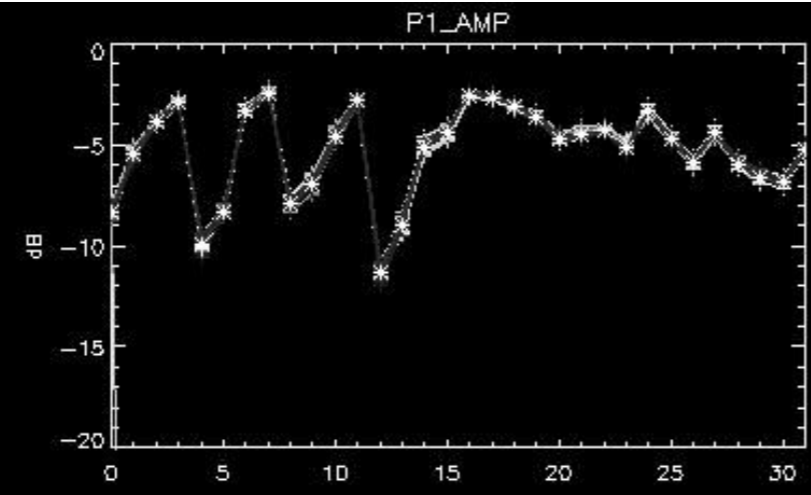


16-Sep



No anomalies observed on available browse products

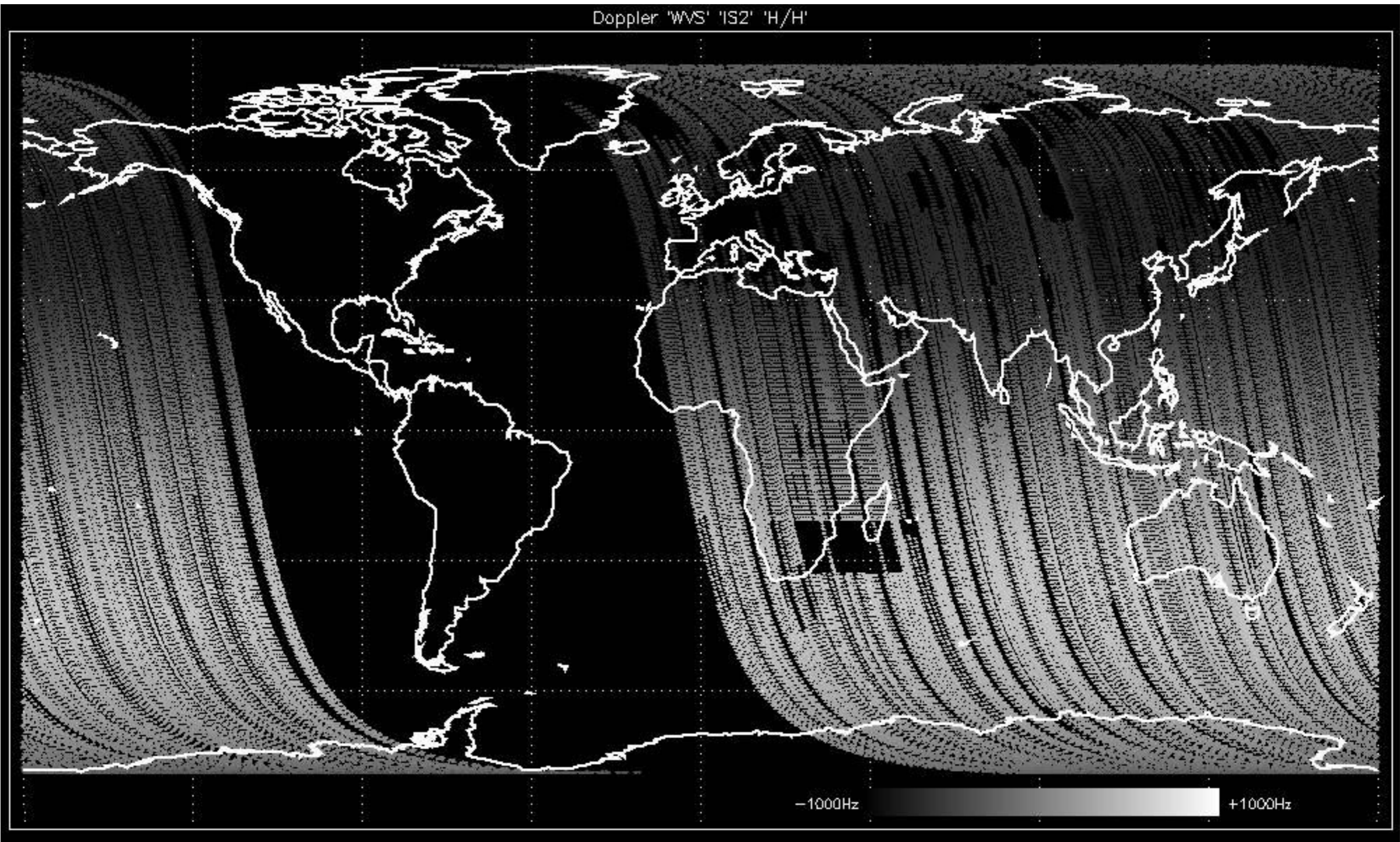
No anomalies observed.



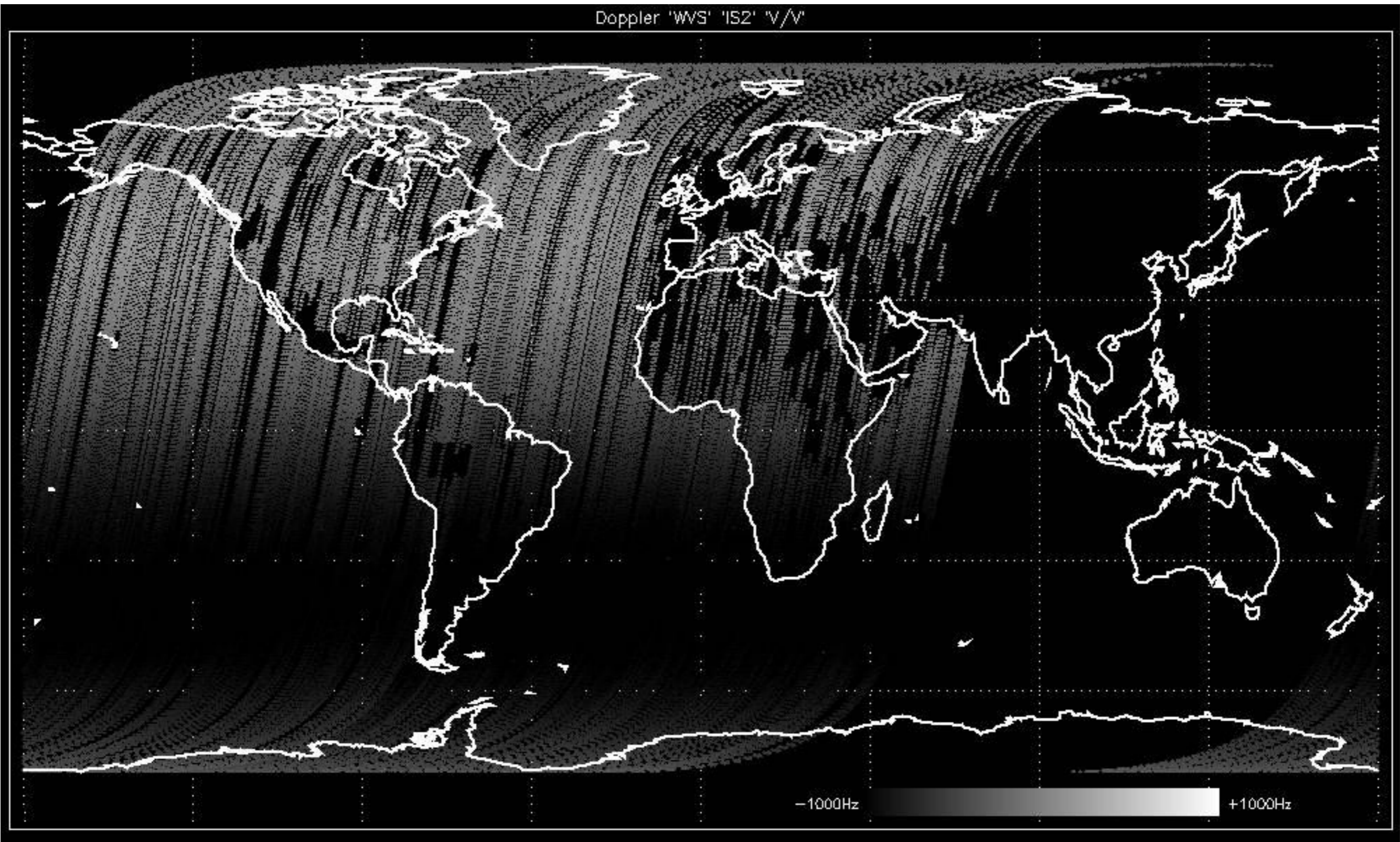
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

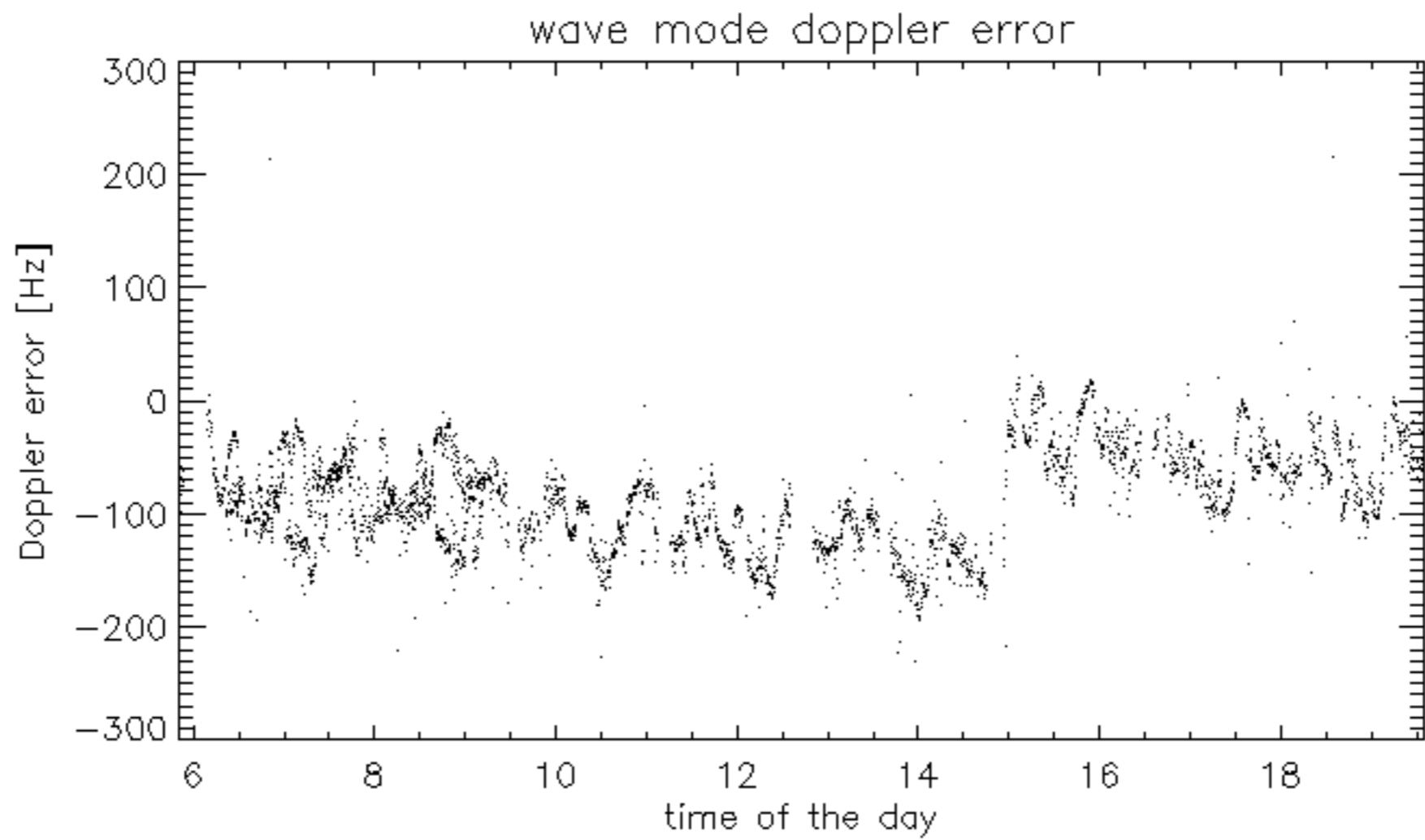
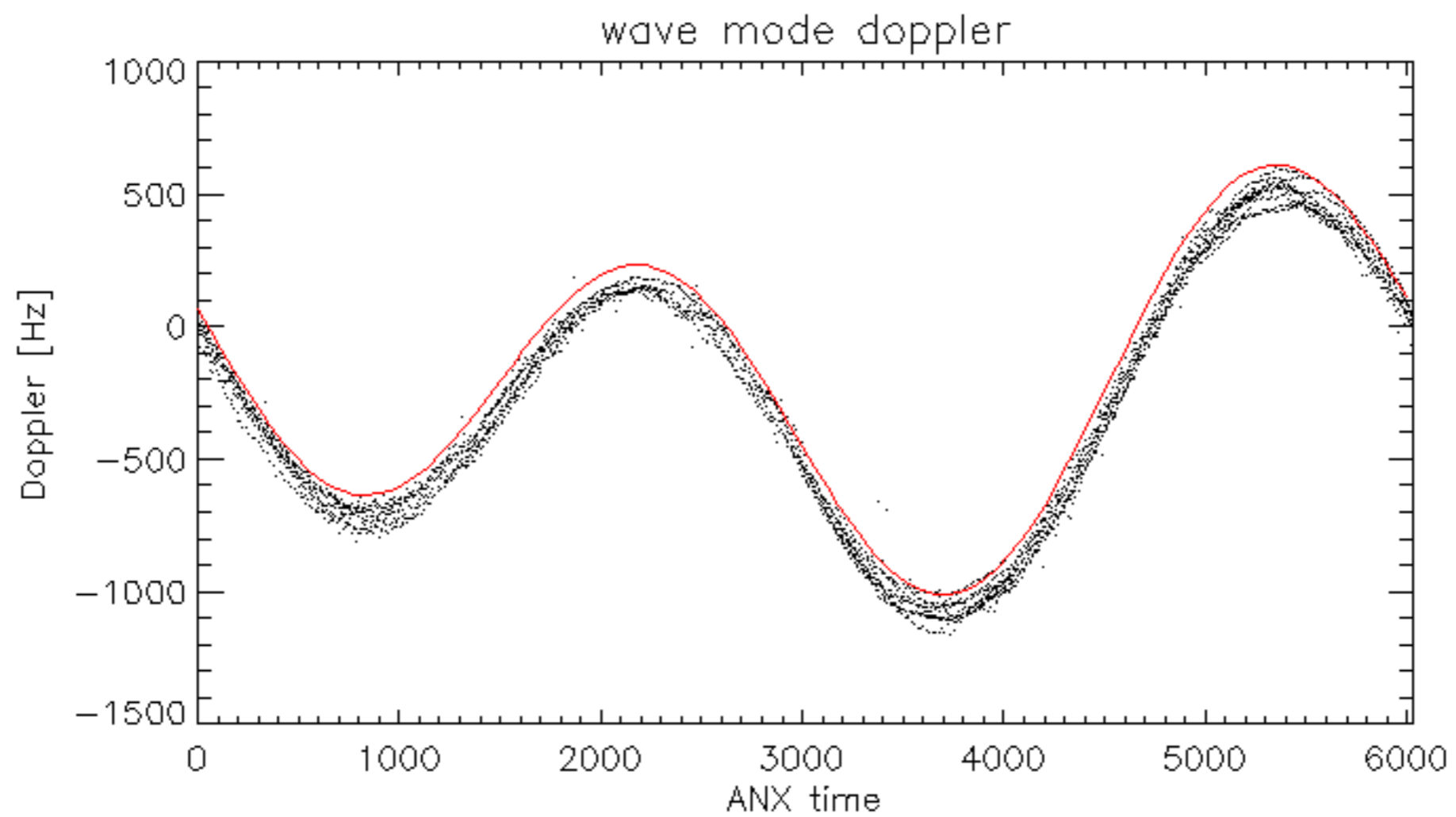
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 60 days

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

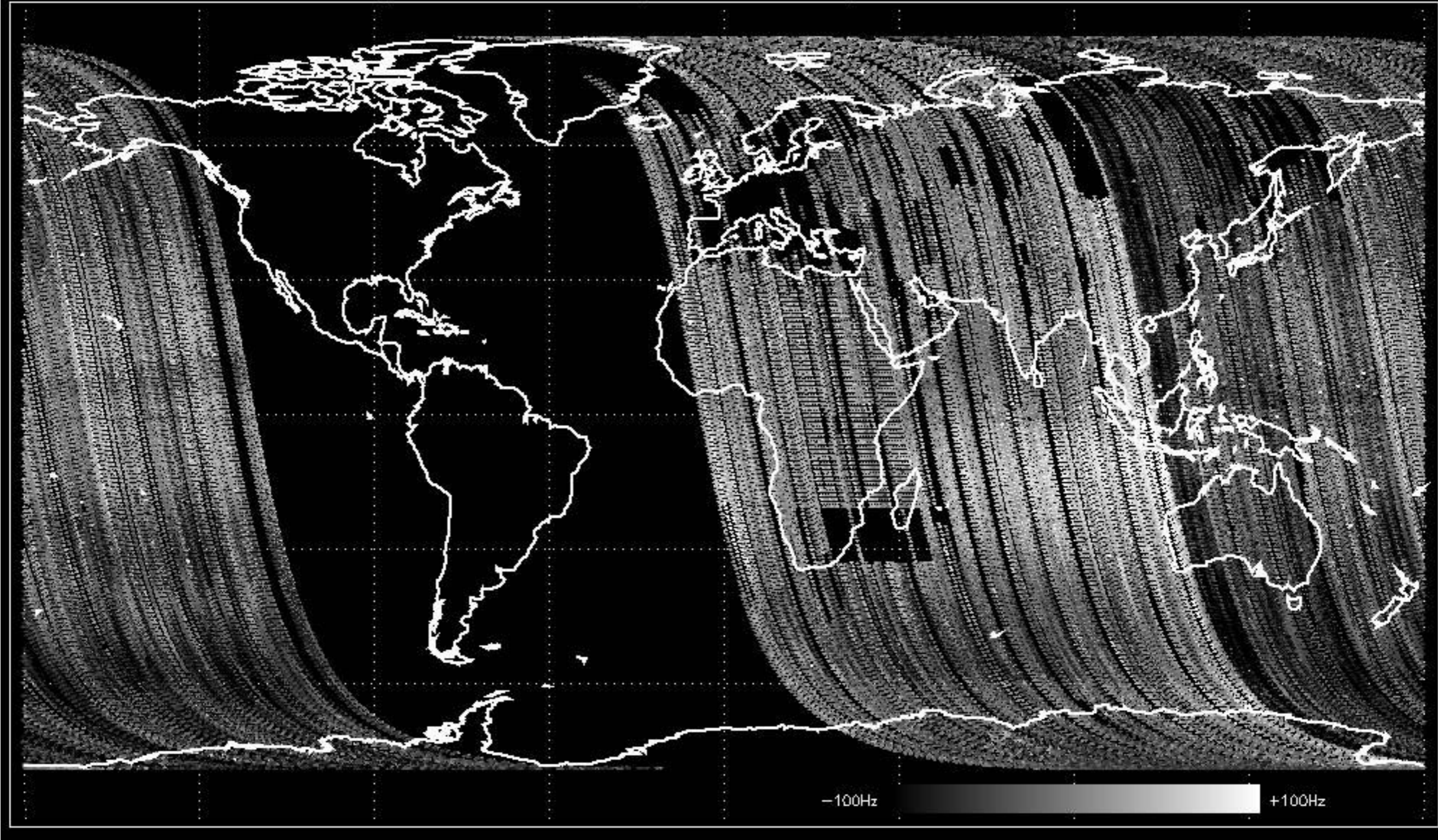


Doppler 'WVS' 'IS2' 'V/V'

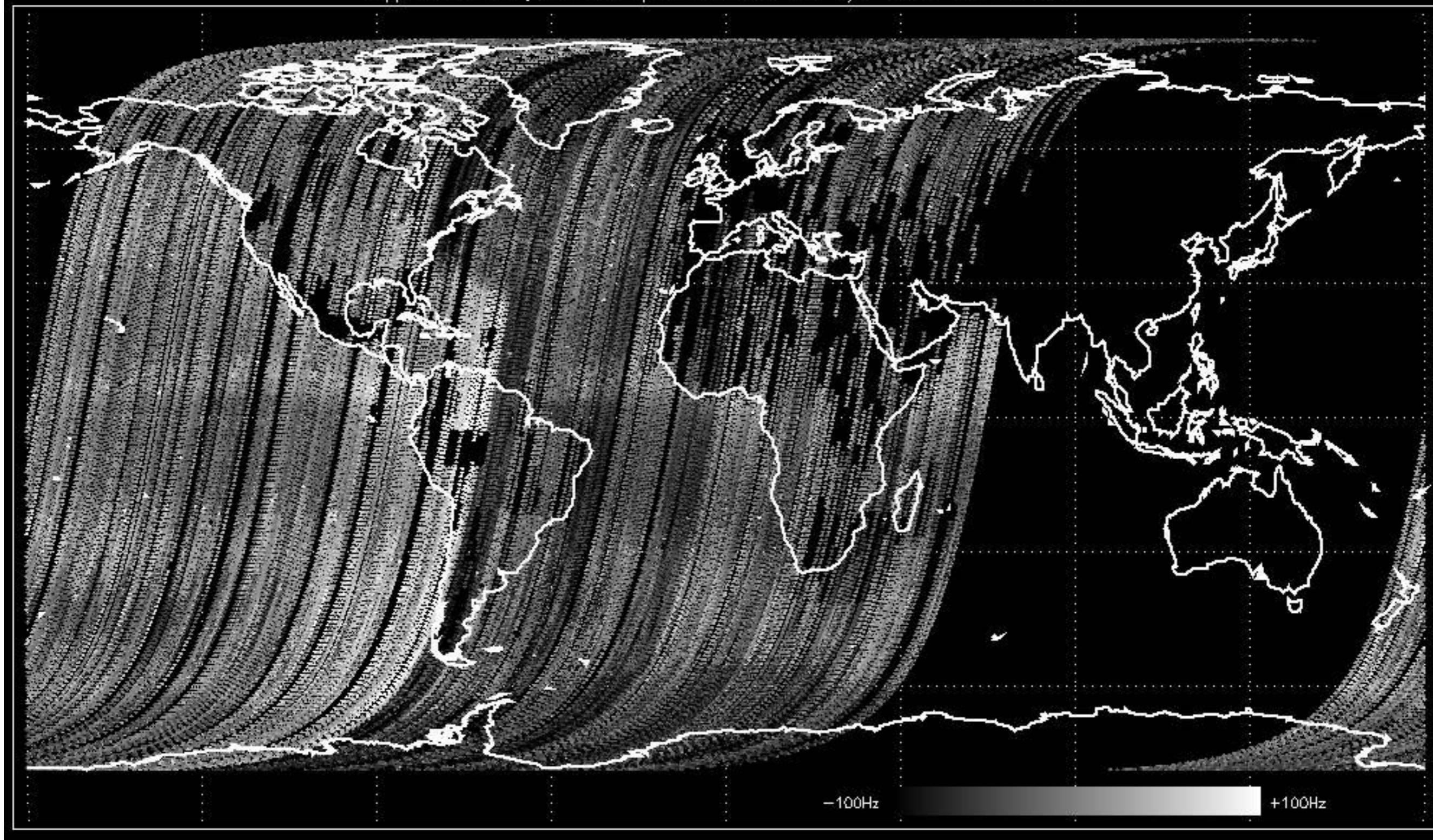




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



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



No anomalies observed on available MS products:

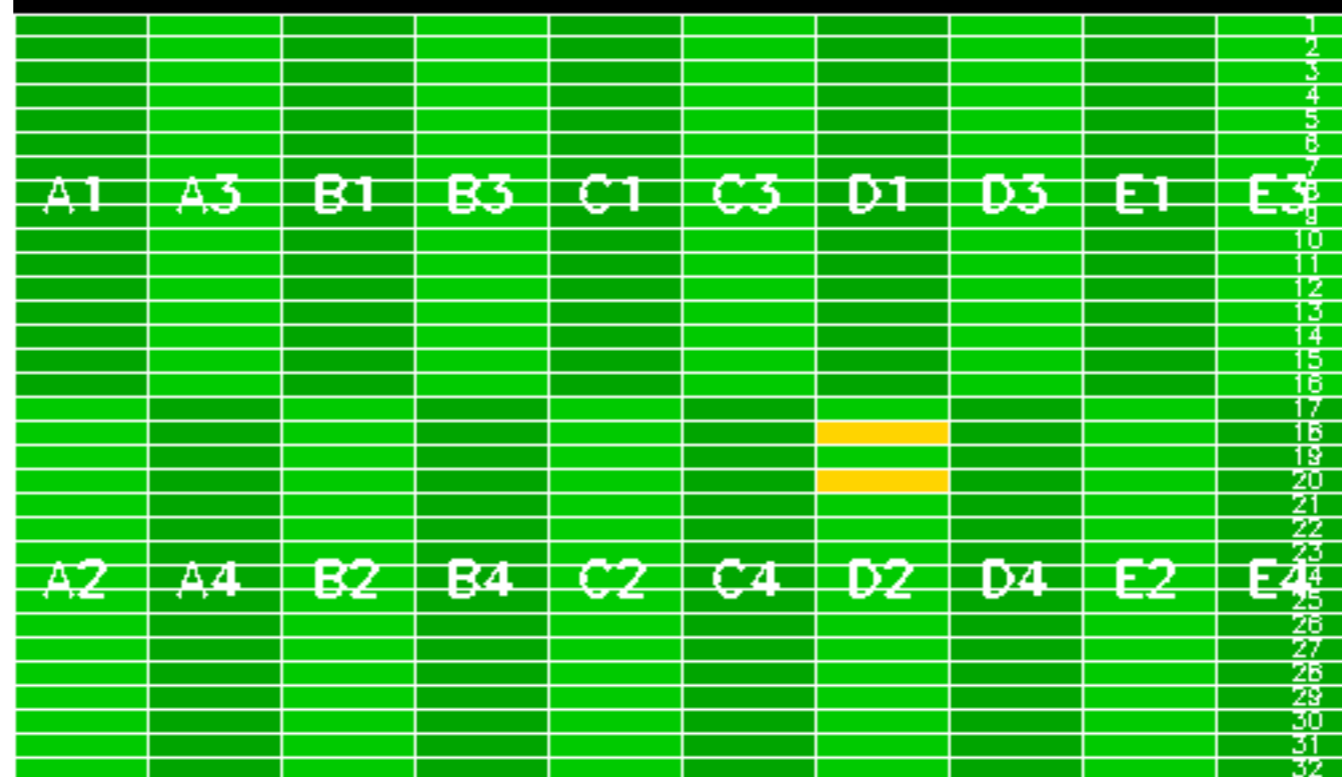
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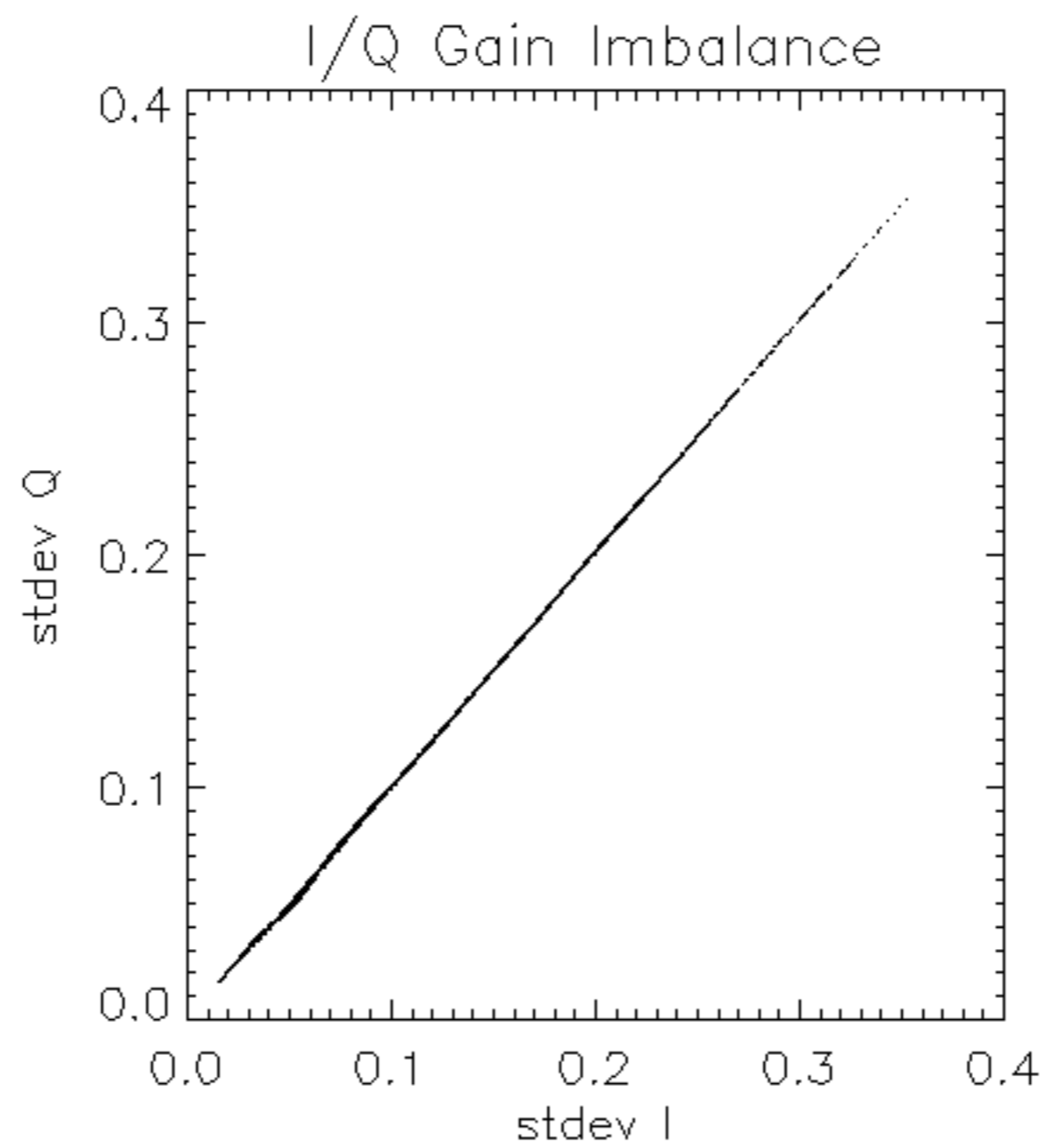
-ASA_MS__0PNPDK20030916_194015_000000152020_00013_08083_0070

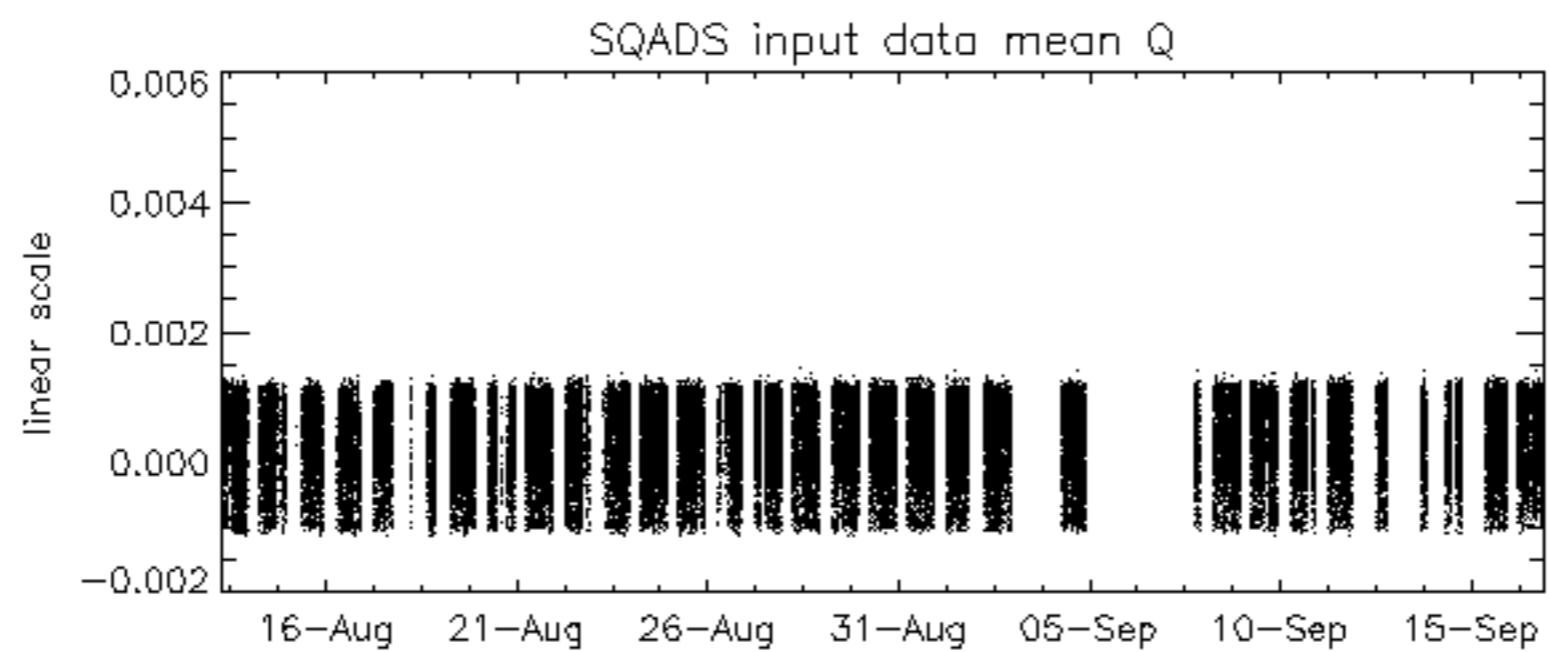
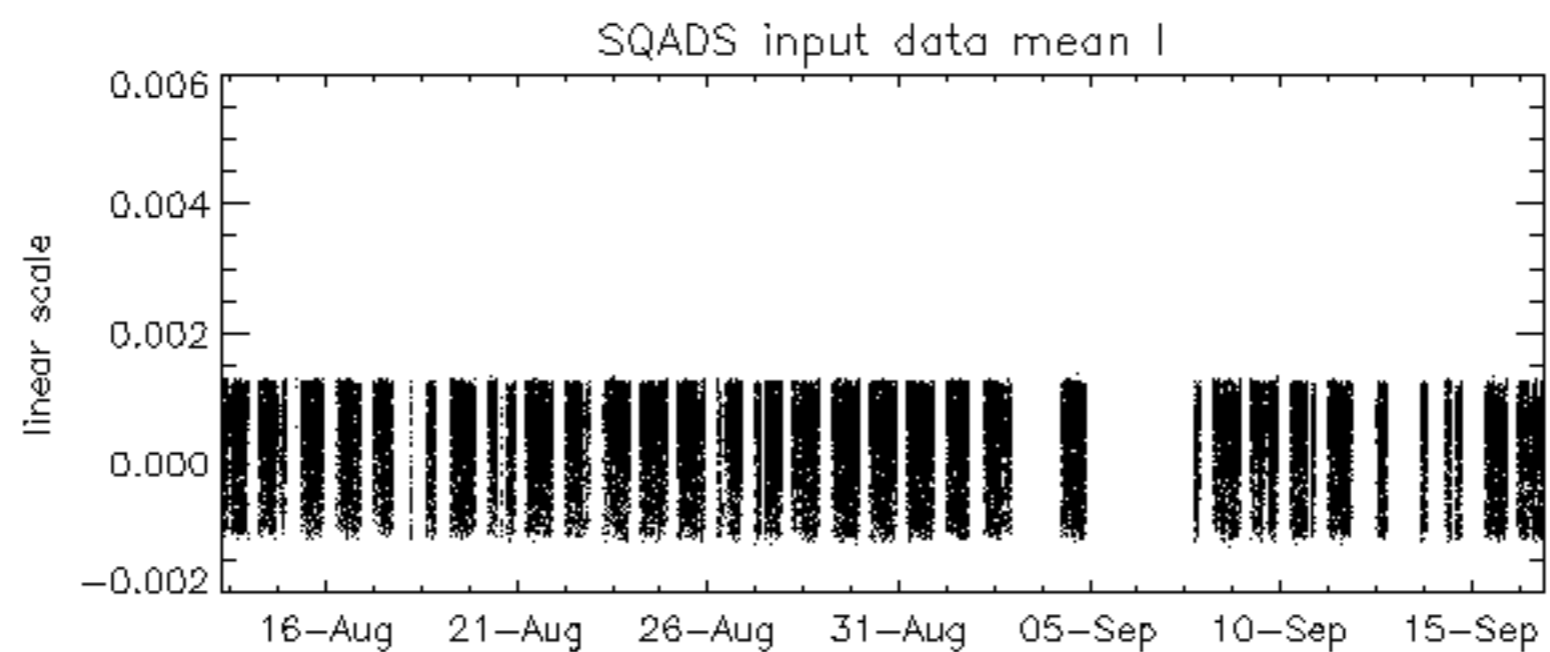
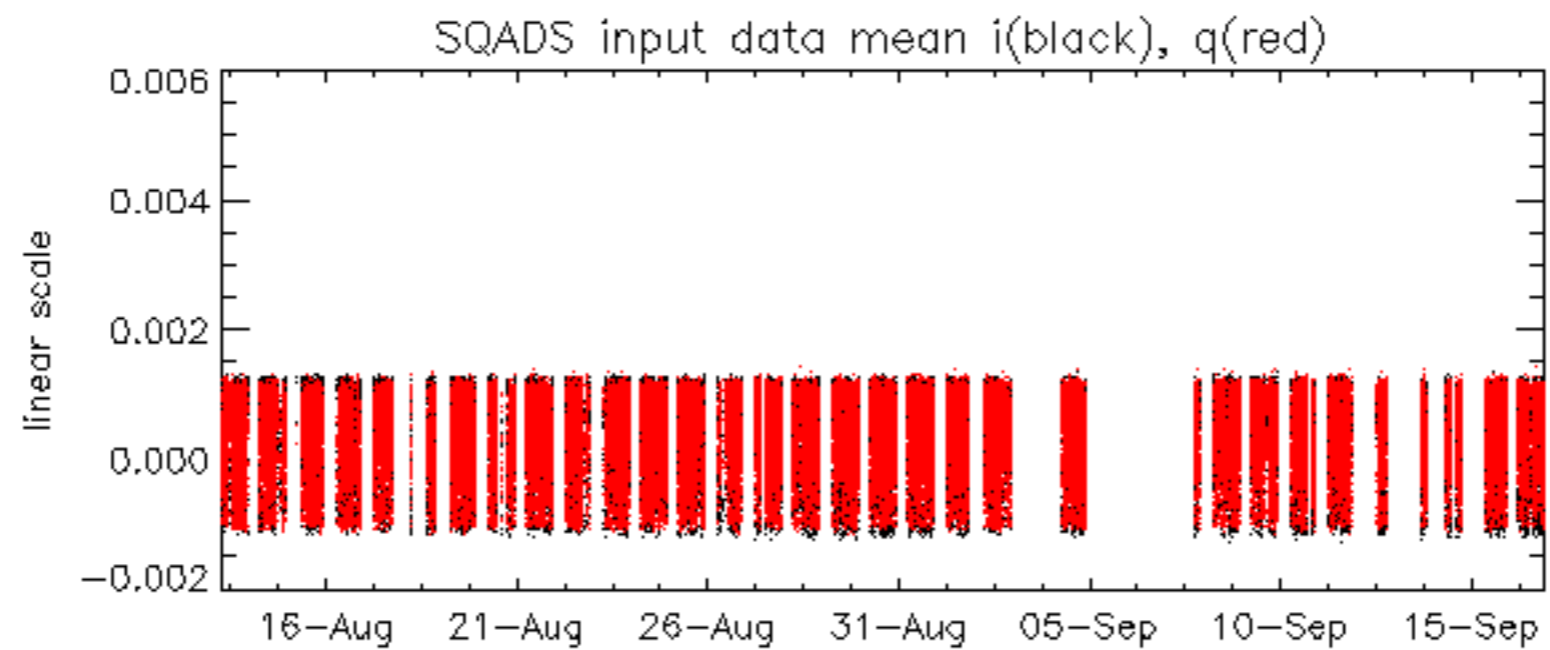
The drift in phase for TR module 3 on Tile B3 has decreased to a stable configuration as shown in the figure below

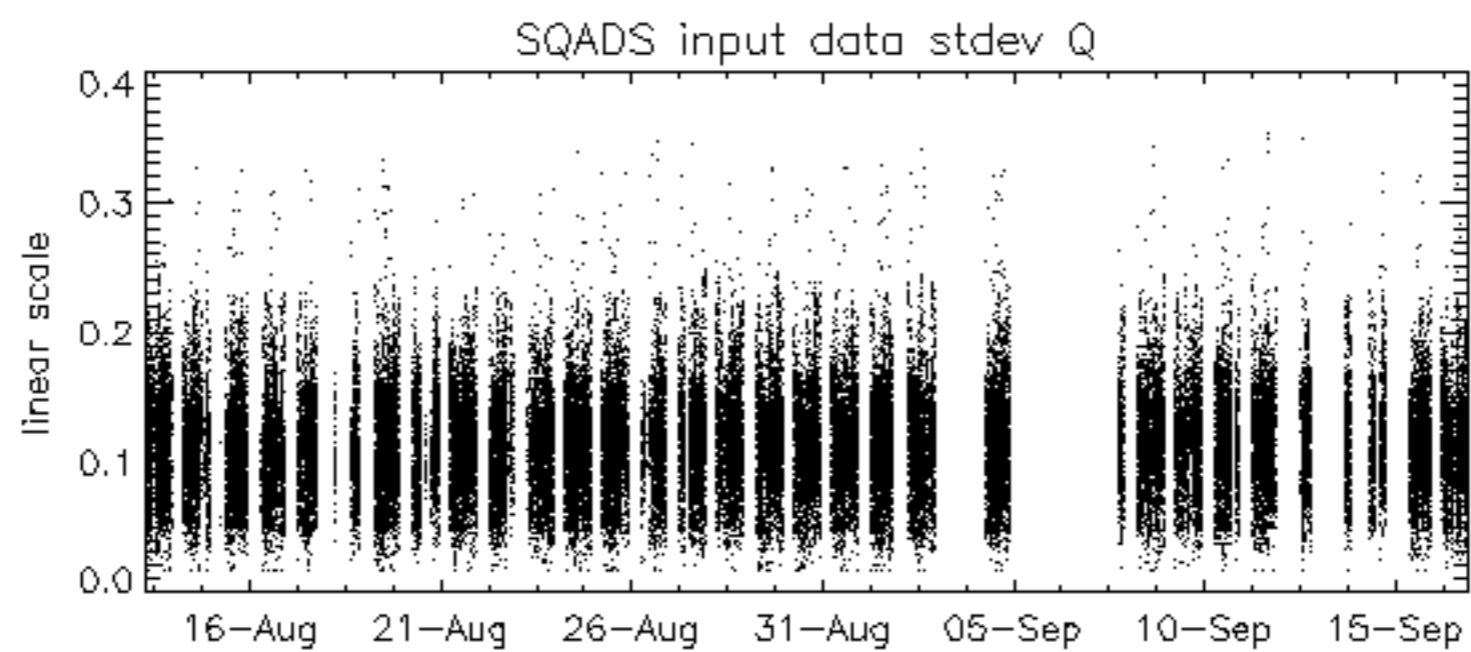
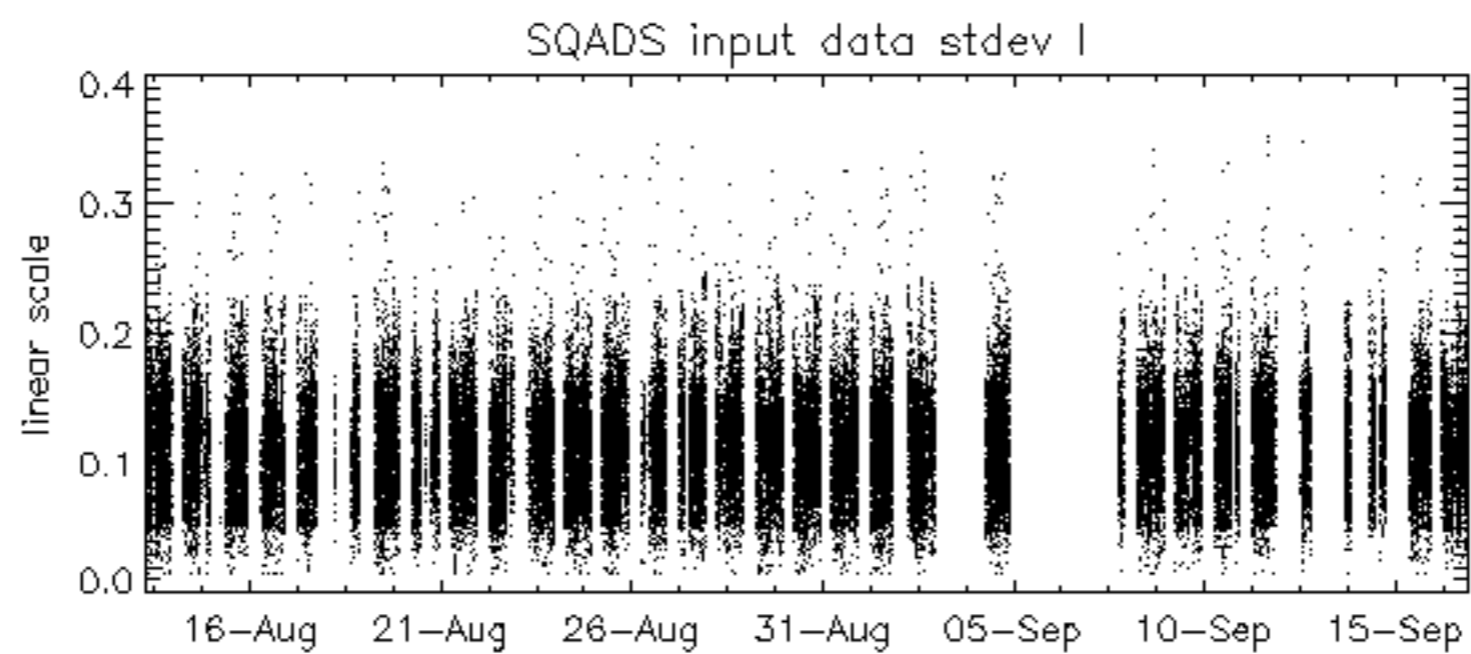
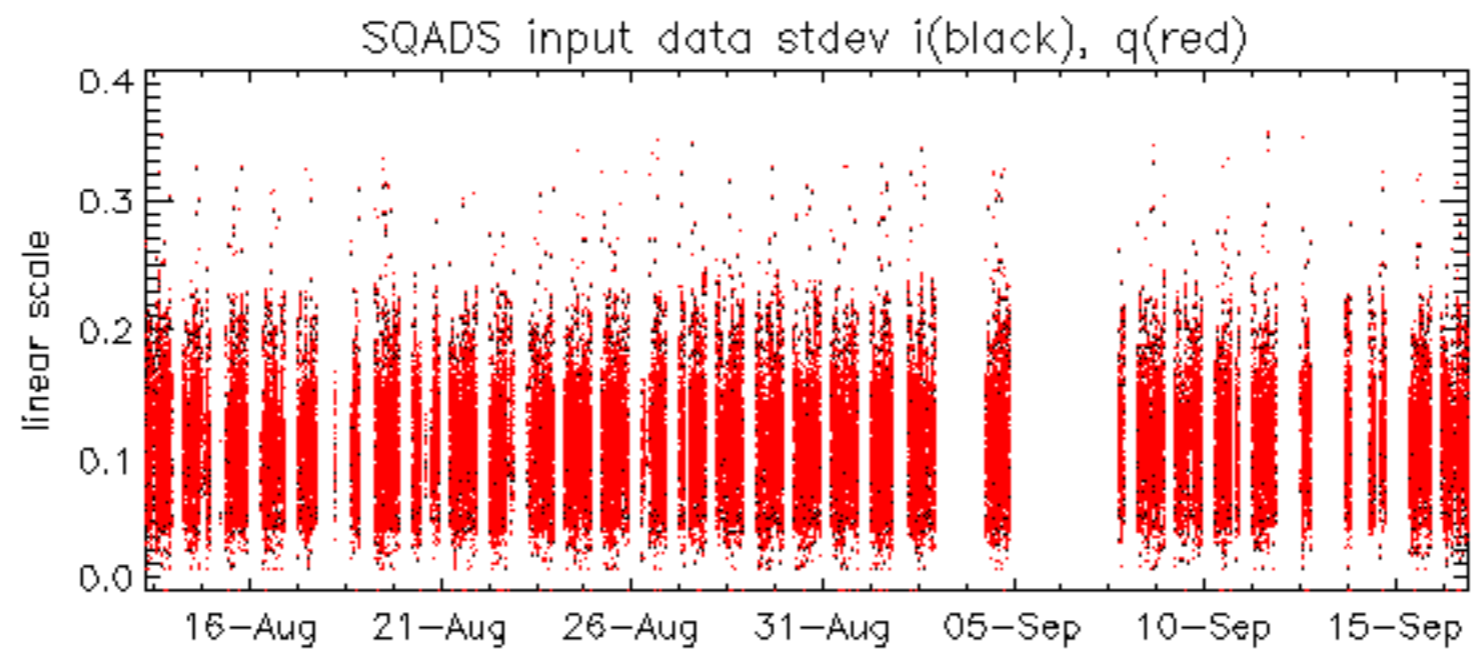
No anomalies observed.

Reference: 2003-06-12 14:10:32 V RxGain
 Test : 2003-09-16 19:40:15 V









No unavailabilities during the reported period.