

REPORT OF 030919

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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__0PNPDK20030918_201557_000000152020_00042_08112_0076.N1
- ASA_MS__0PNPDK20030918_201737_000000152020_00042_08112_0075.N1

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	20030918 201737
H	20030918 201557

MSM in V/V 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"/>
<input type="checkbox"/>	<input type="checkbox"/>

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

4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.80532	-22.5295	-8.13089
	stdev	0.00588671	0.0626471	0.00239030
10	mean	-6.91079	-19.3292	-8.13089
	stdev	0.0283970	0.0659757	0.00239030



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.80048	-22.5277	-8.11138
	stdev	0.00581968	0.0618237	0.00255289
10	mean	-6.89597	-19.3222	-8.11138
	stdev	0.0272129	0.0610182	0.00255289



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	0.000389356
	stdev	3.41601e-07

MEAN Q	mean	0.000307080
	stdev	3.17871e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115642
	stdev	0.00144154
STDEV Q	mean	0.115854
	stdev	0.00146061



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

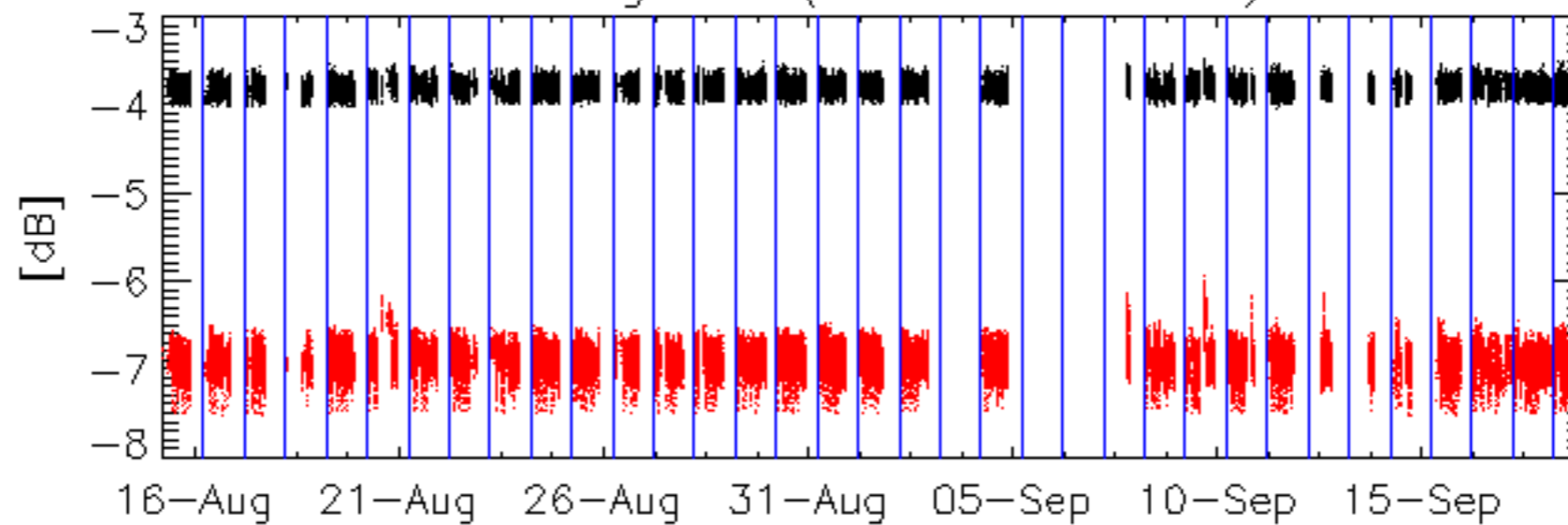
Evolution of Absolute Doppler
Ascending
Descending

6.3 - Doppler evolution versus ANX

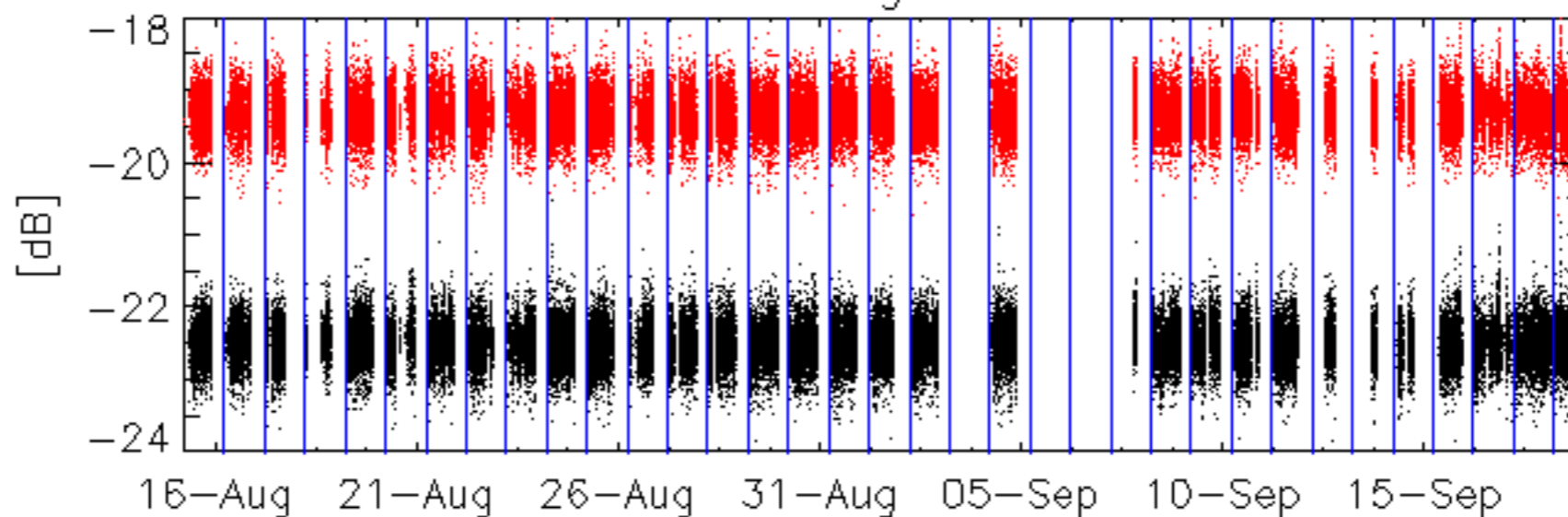
Evolution Doppler error versus ANX



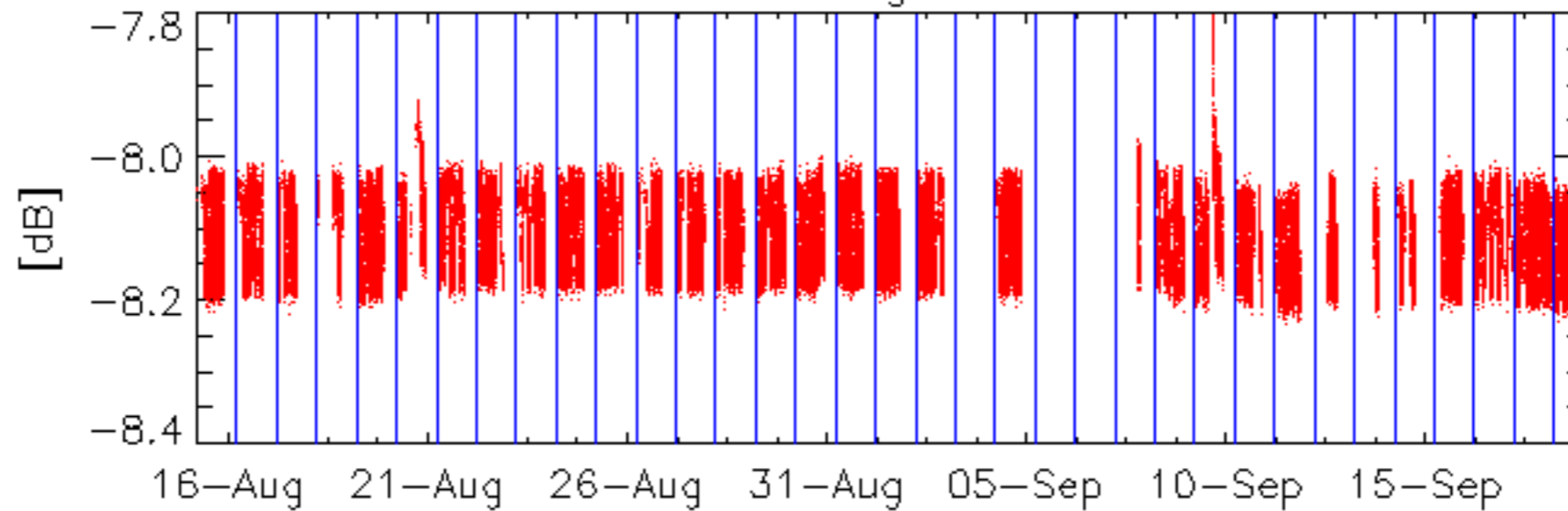
Average P1 (row 3 & row 10)



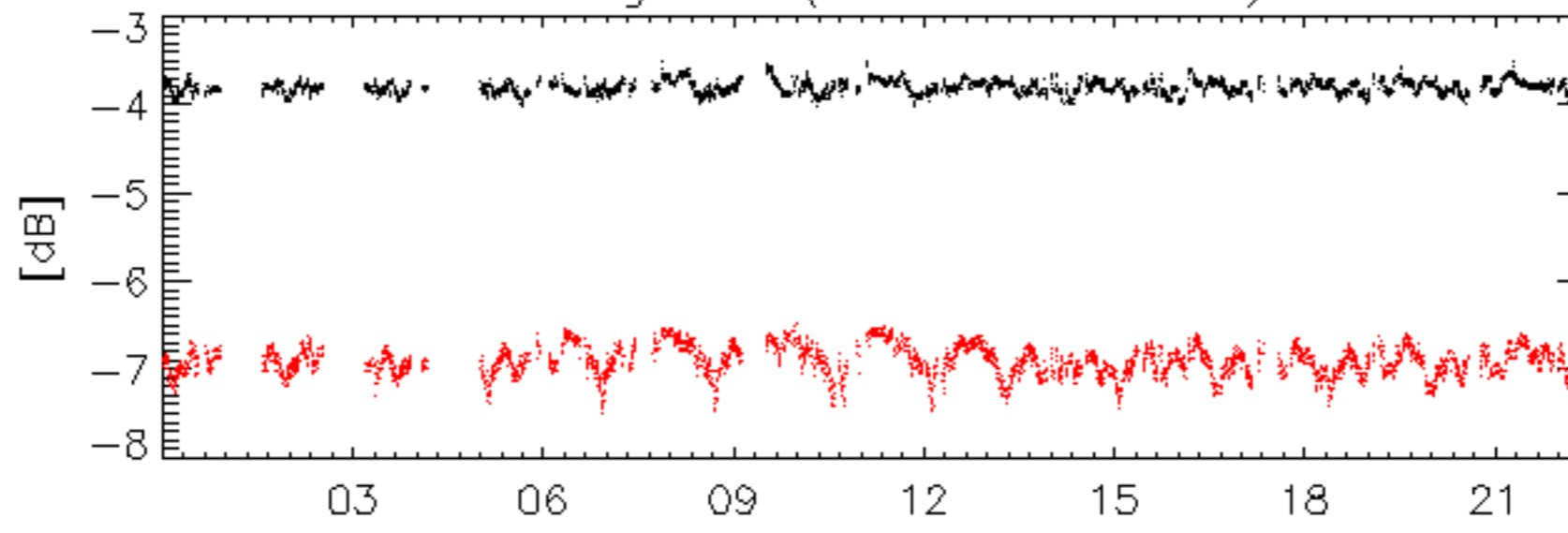
Average P2



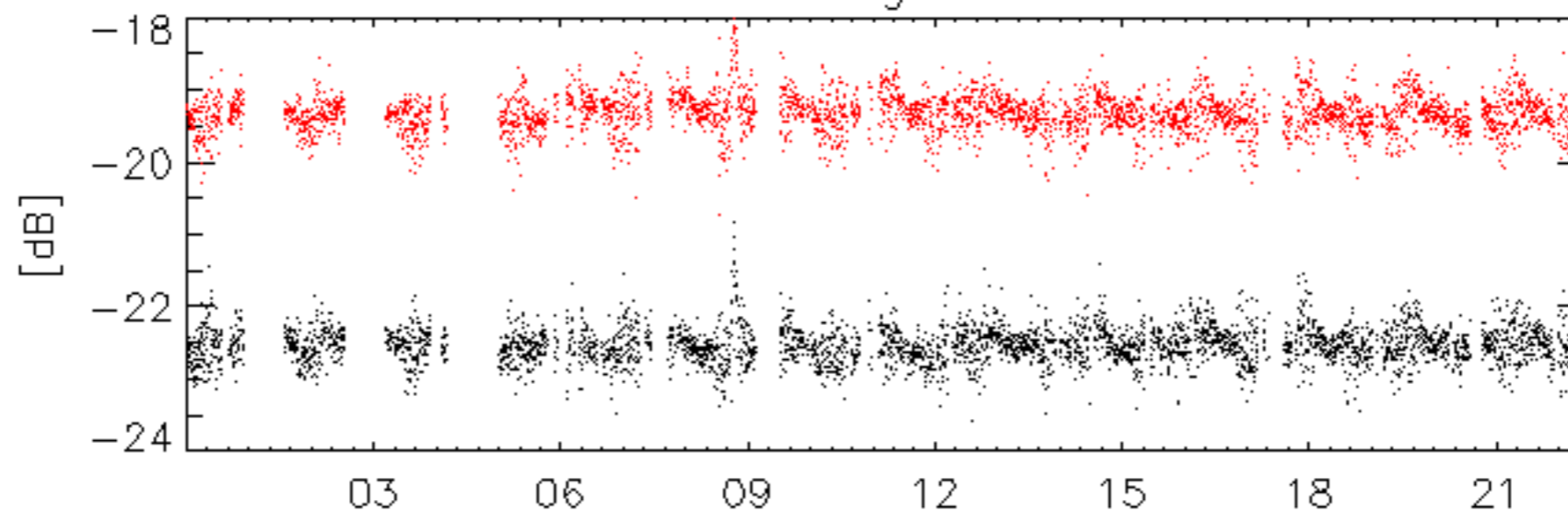
Average P3



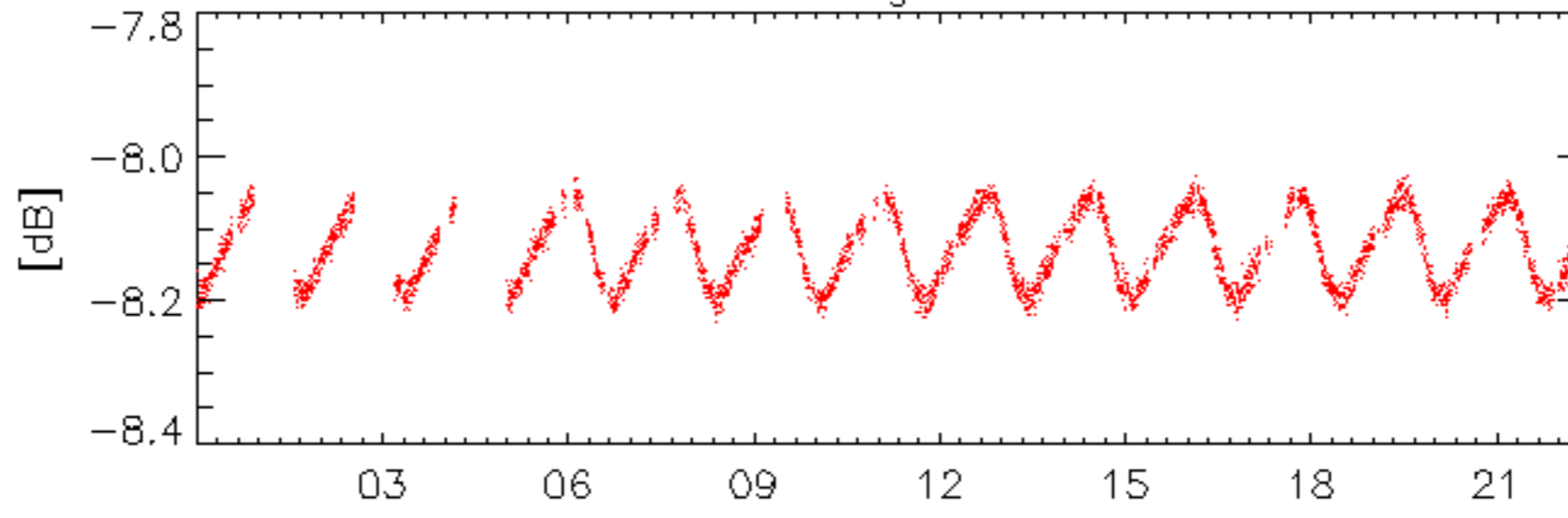
Average P1 (row 3 & row 10)



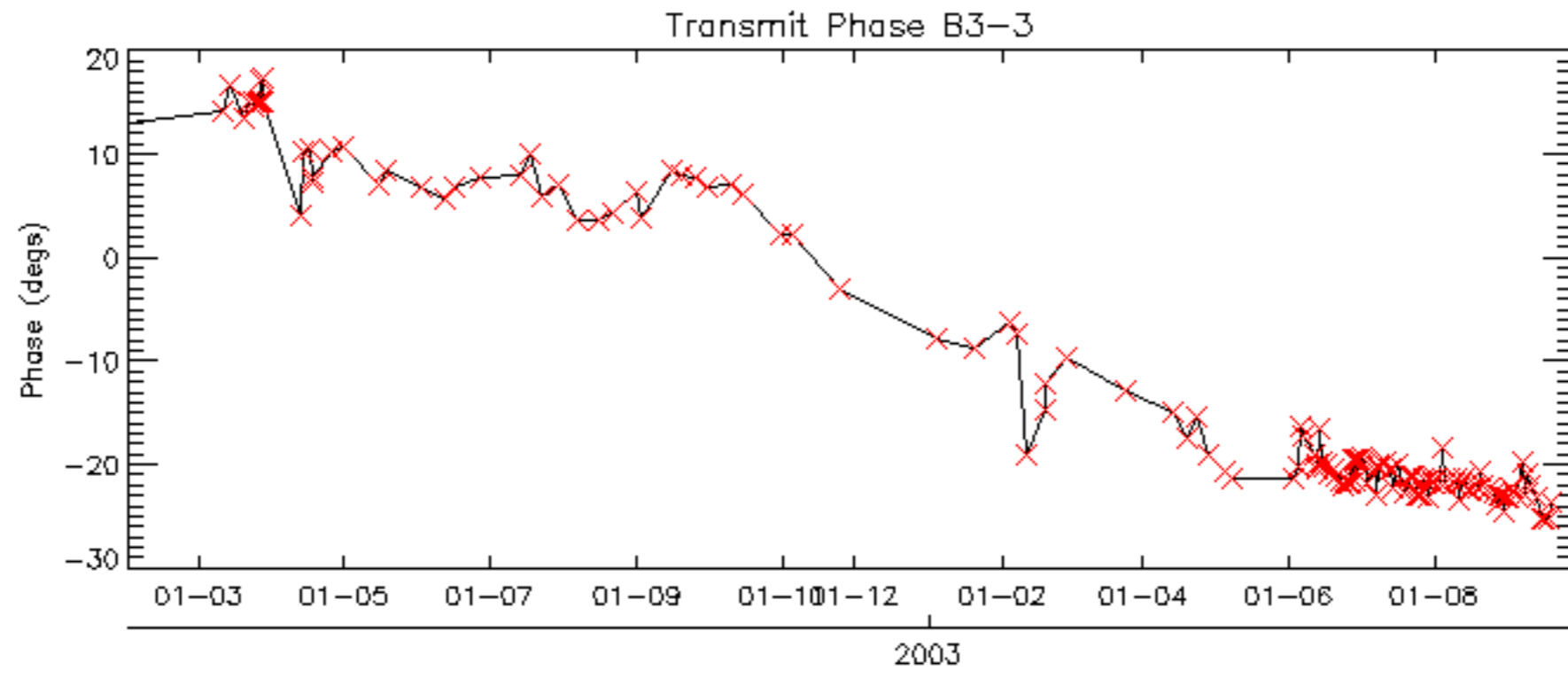
18-Sep
Average P2



18-Sep
Average P3

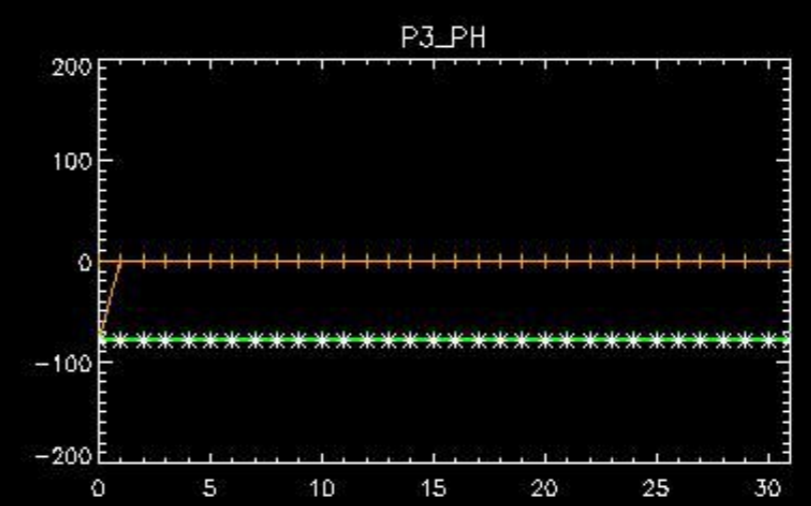
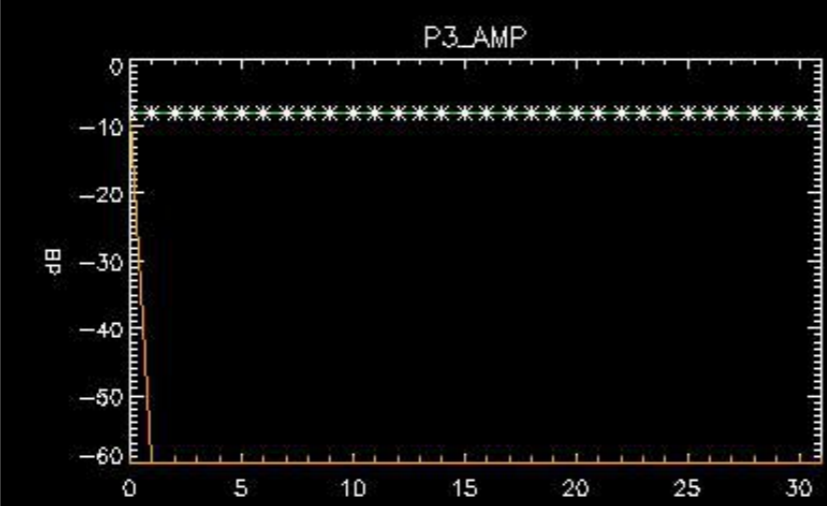
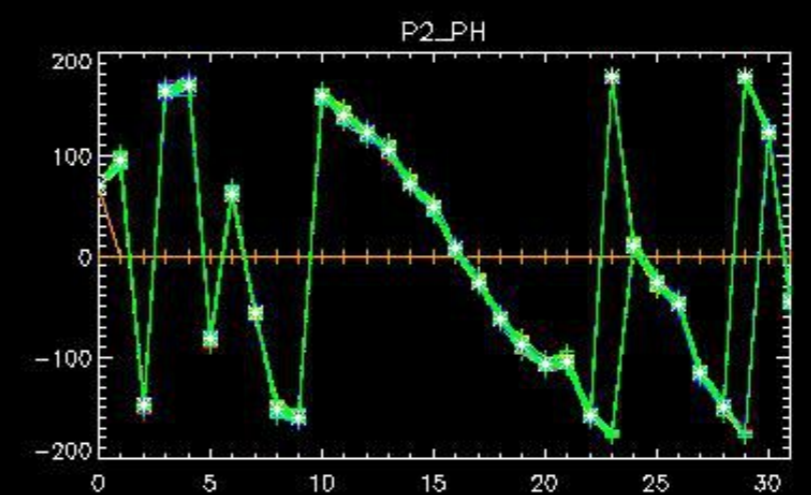
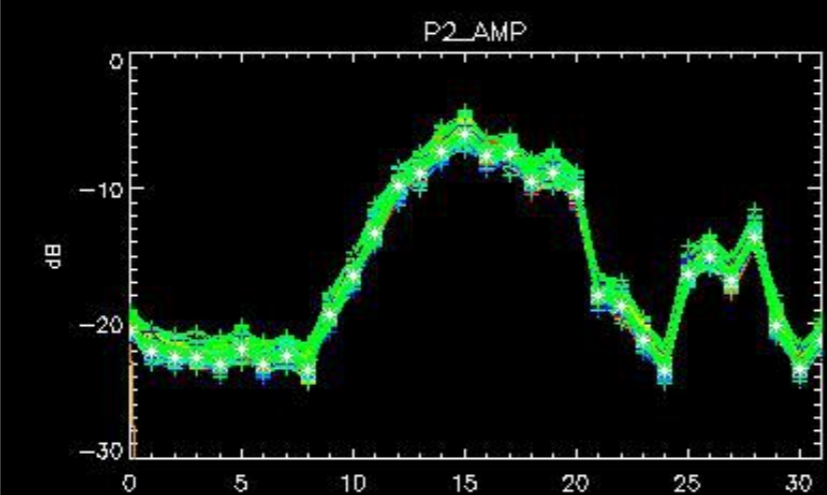
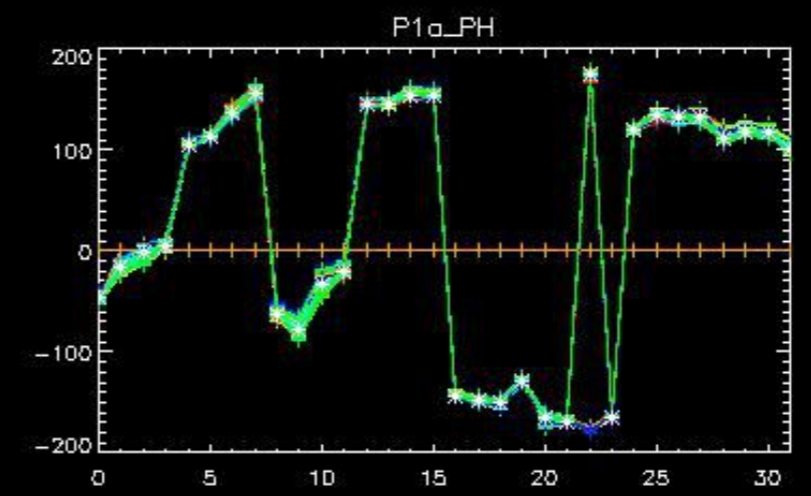
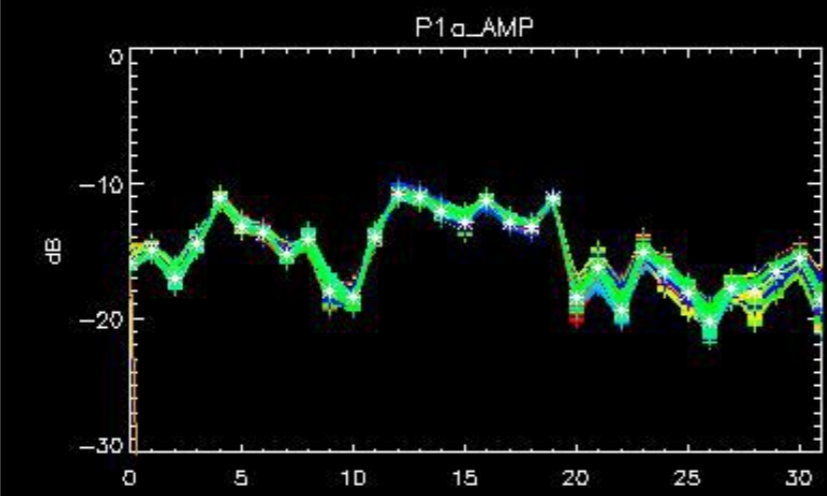
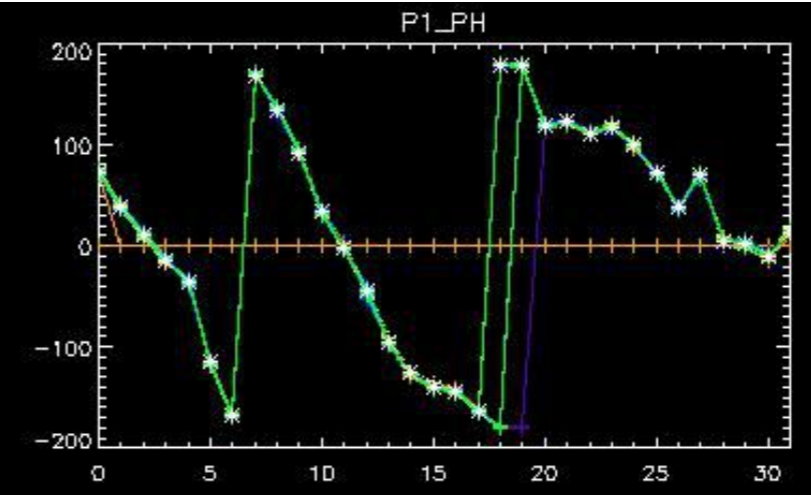
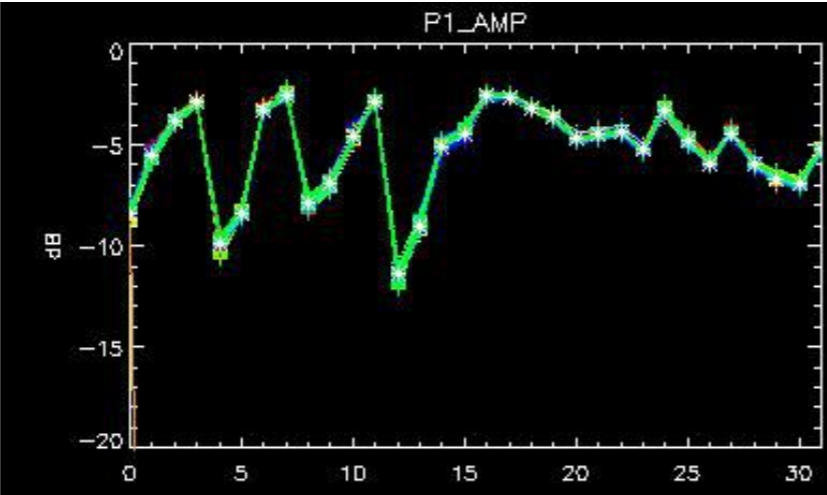


18-Sep



No anomalies observed on available browse products

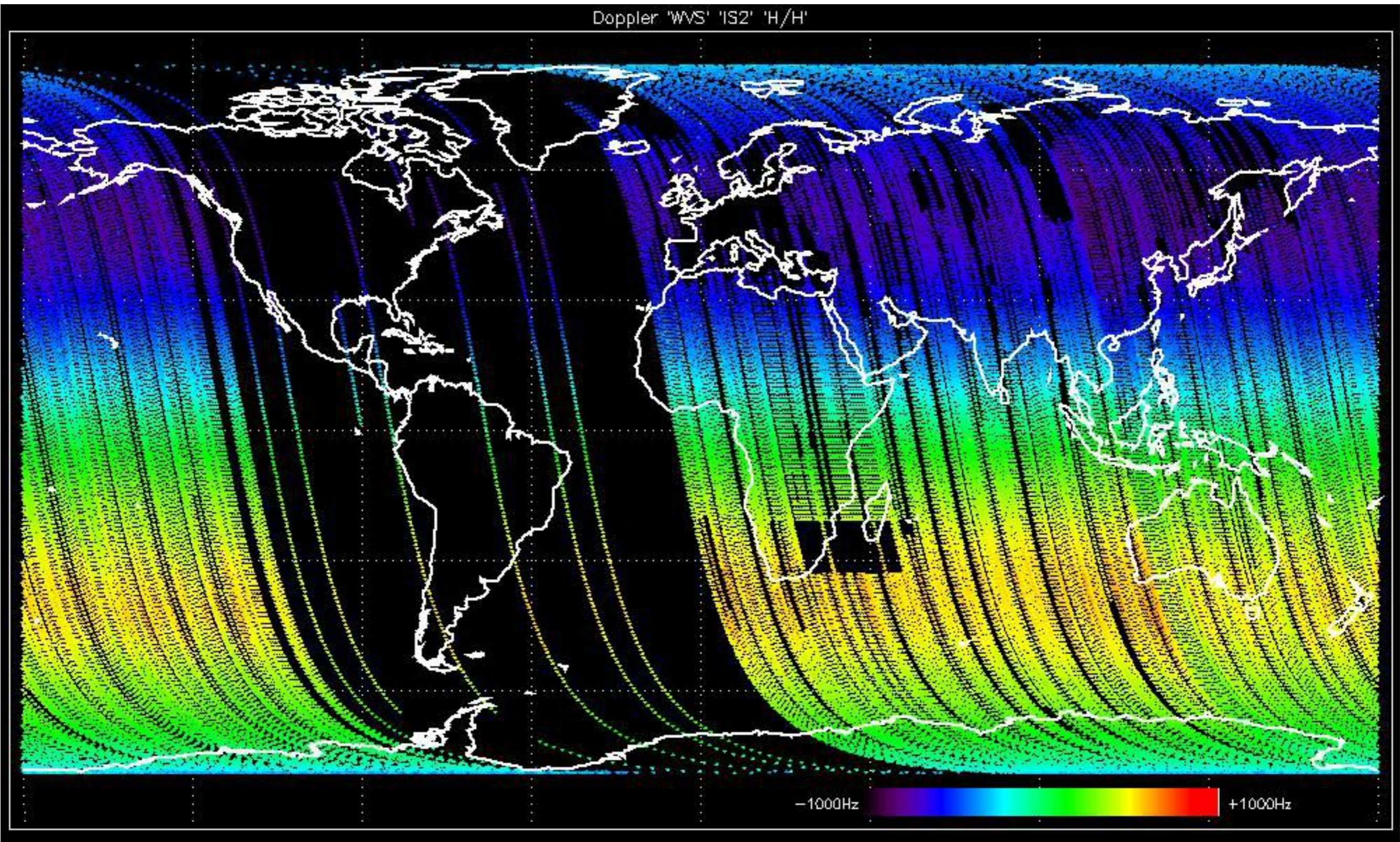
No anomalies observed.



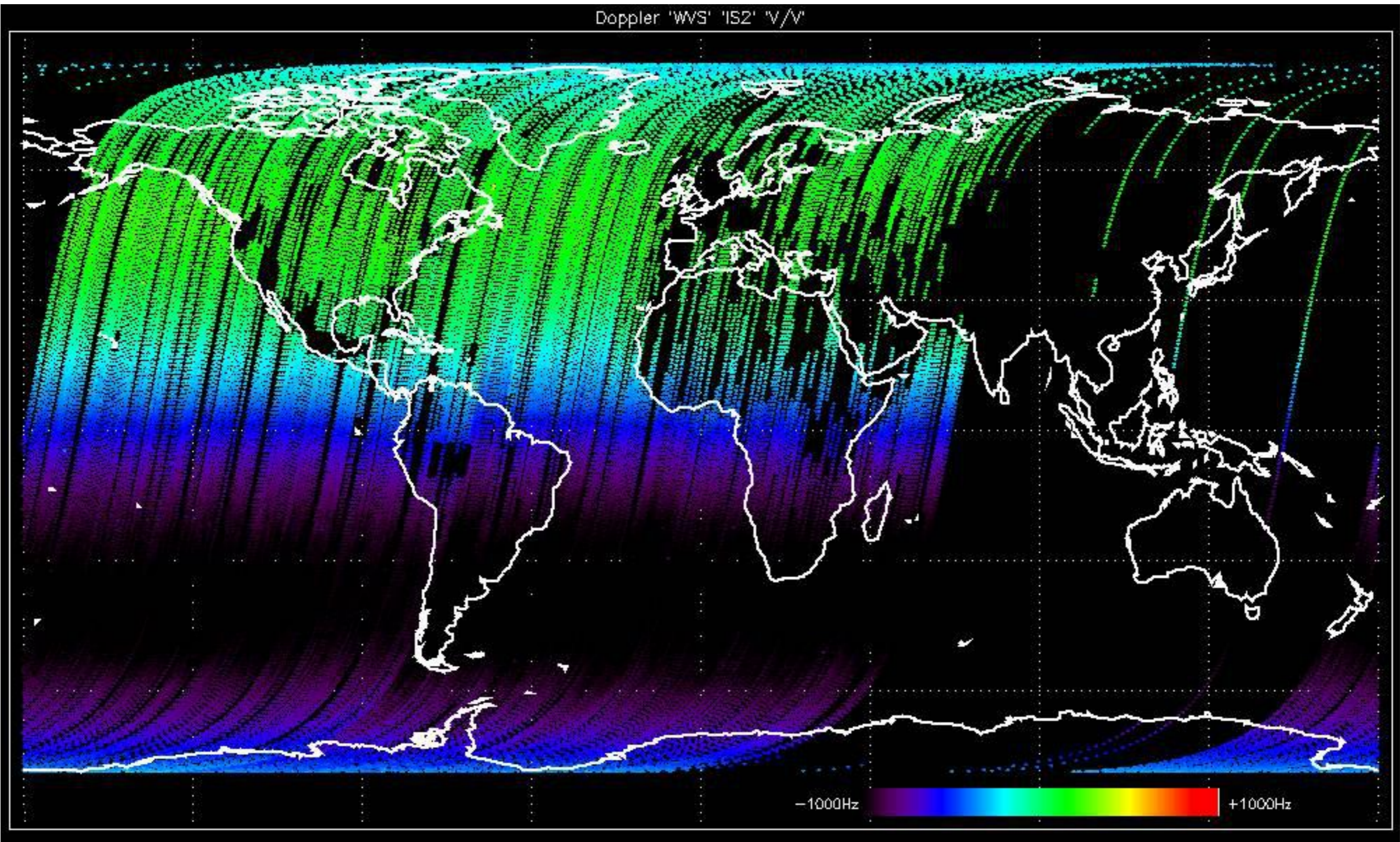
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

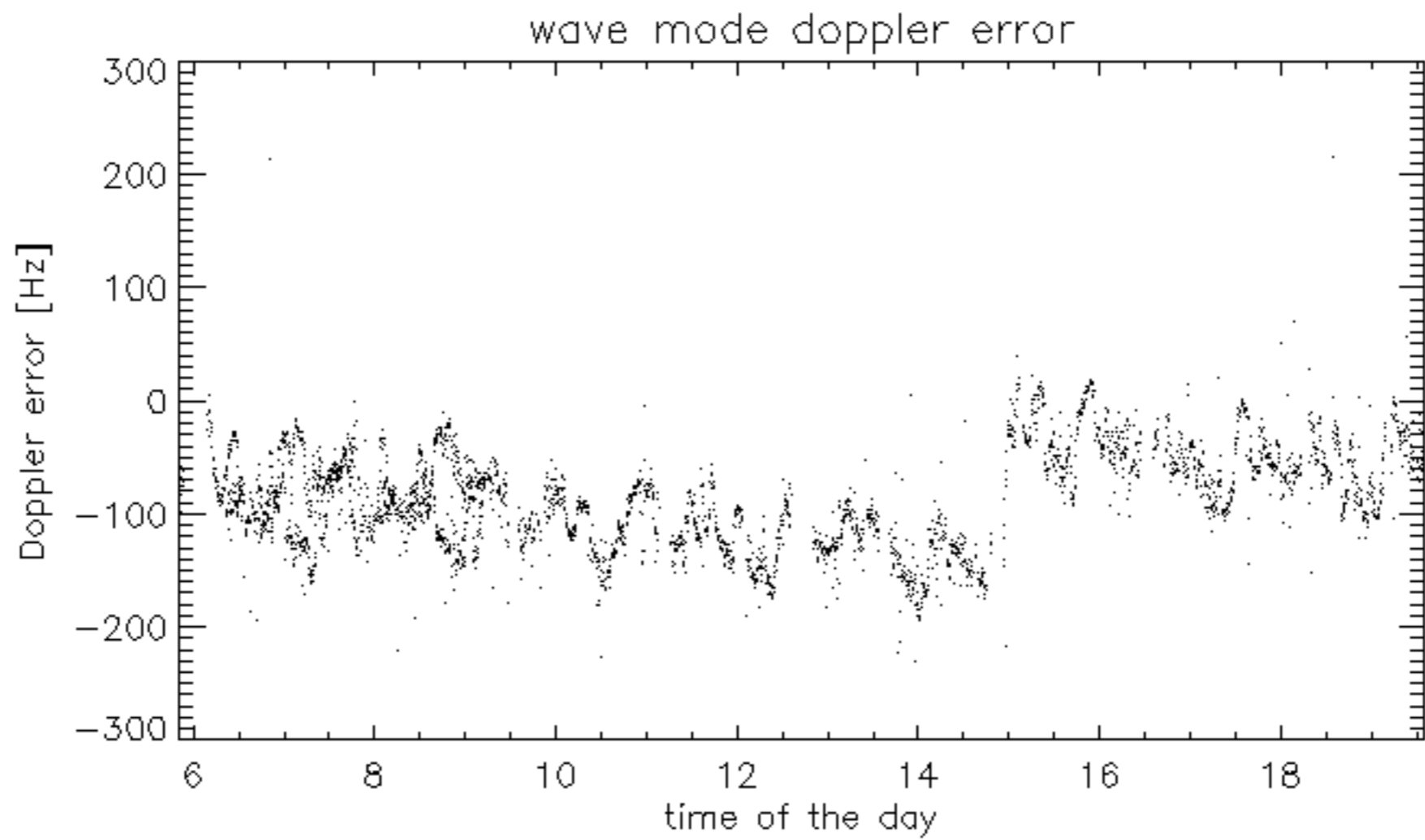
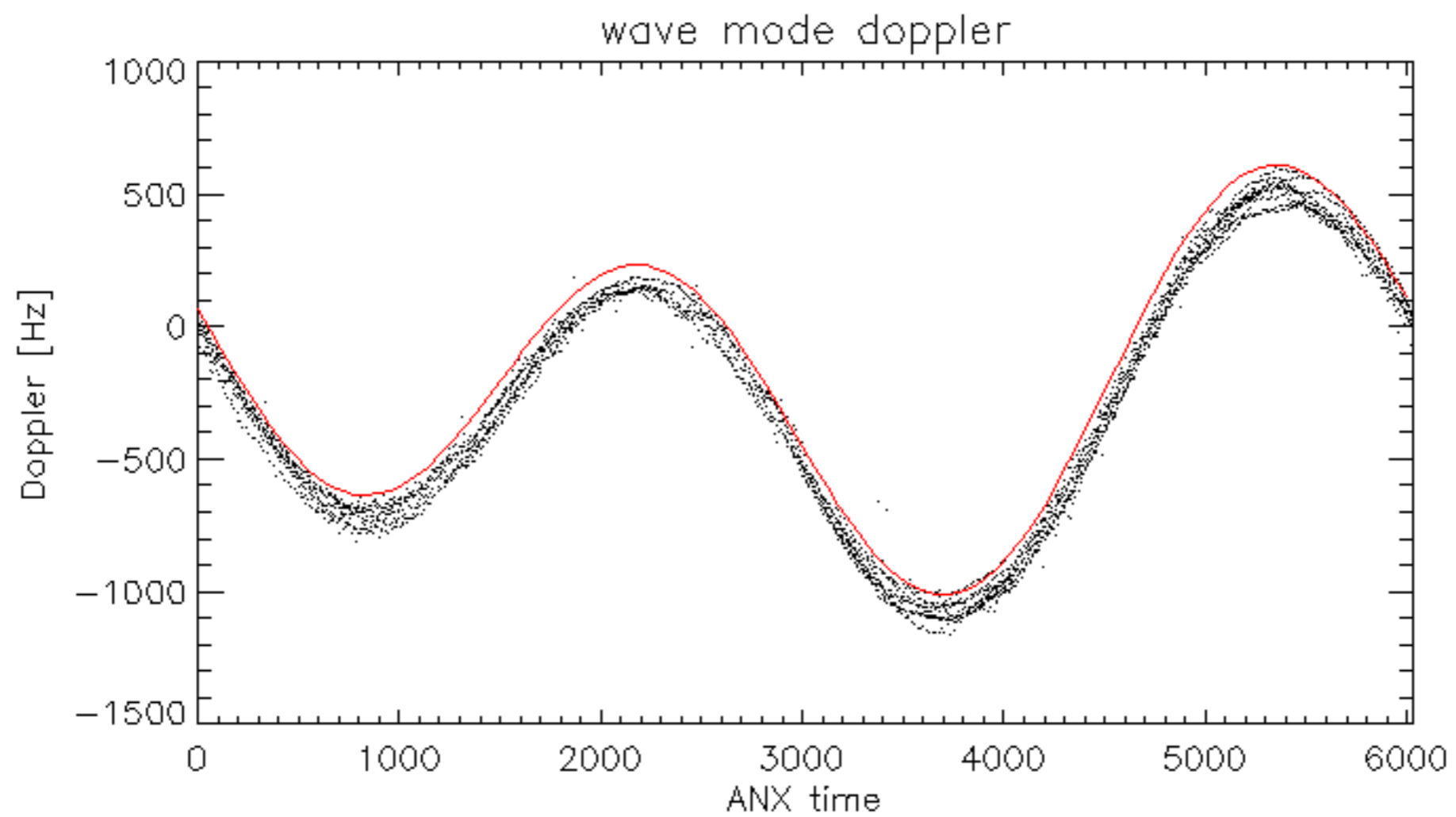
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 60 days

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

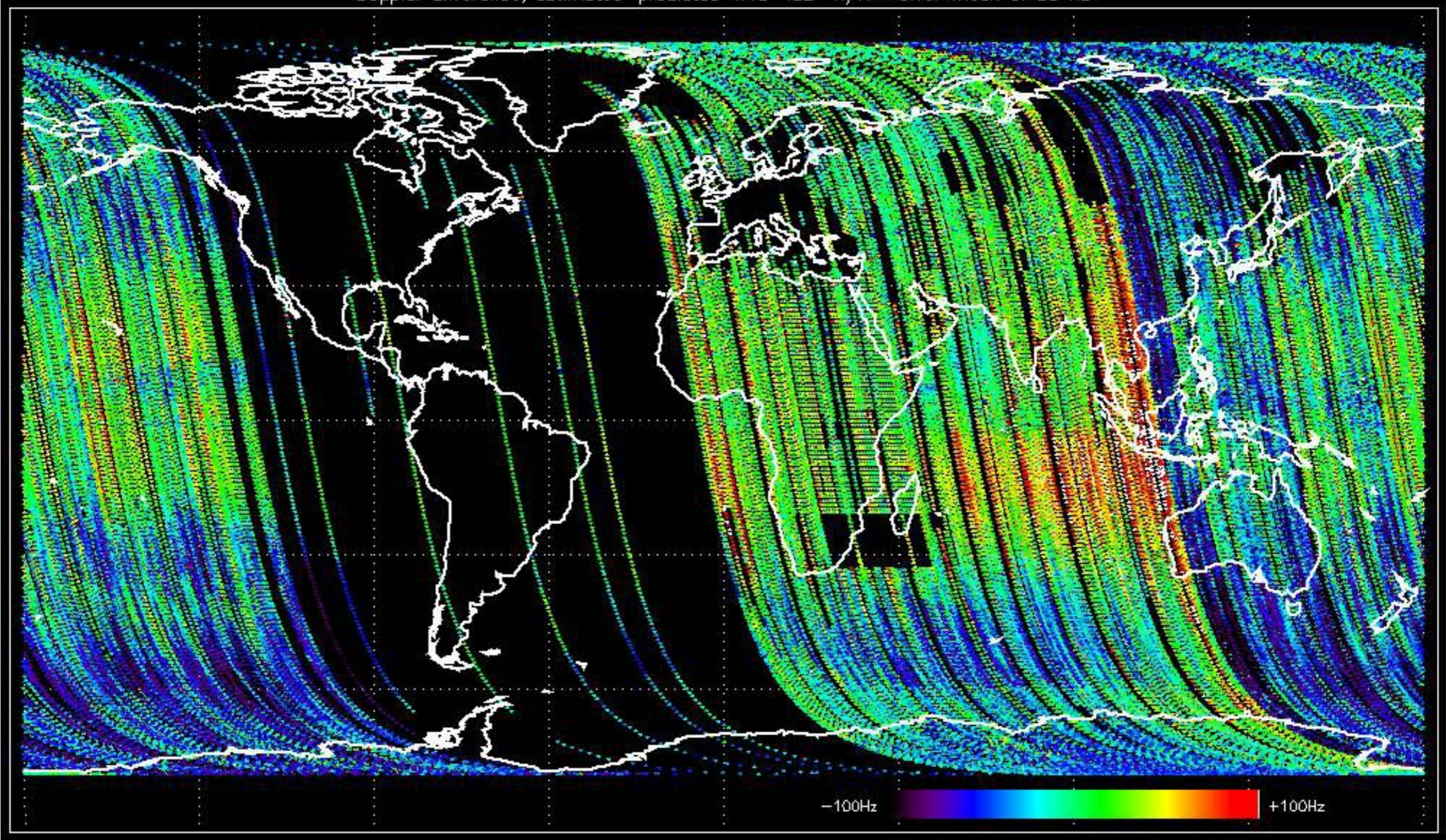


Doppler 'WVS' 'IS2' 'V/V'

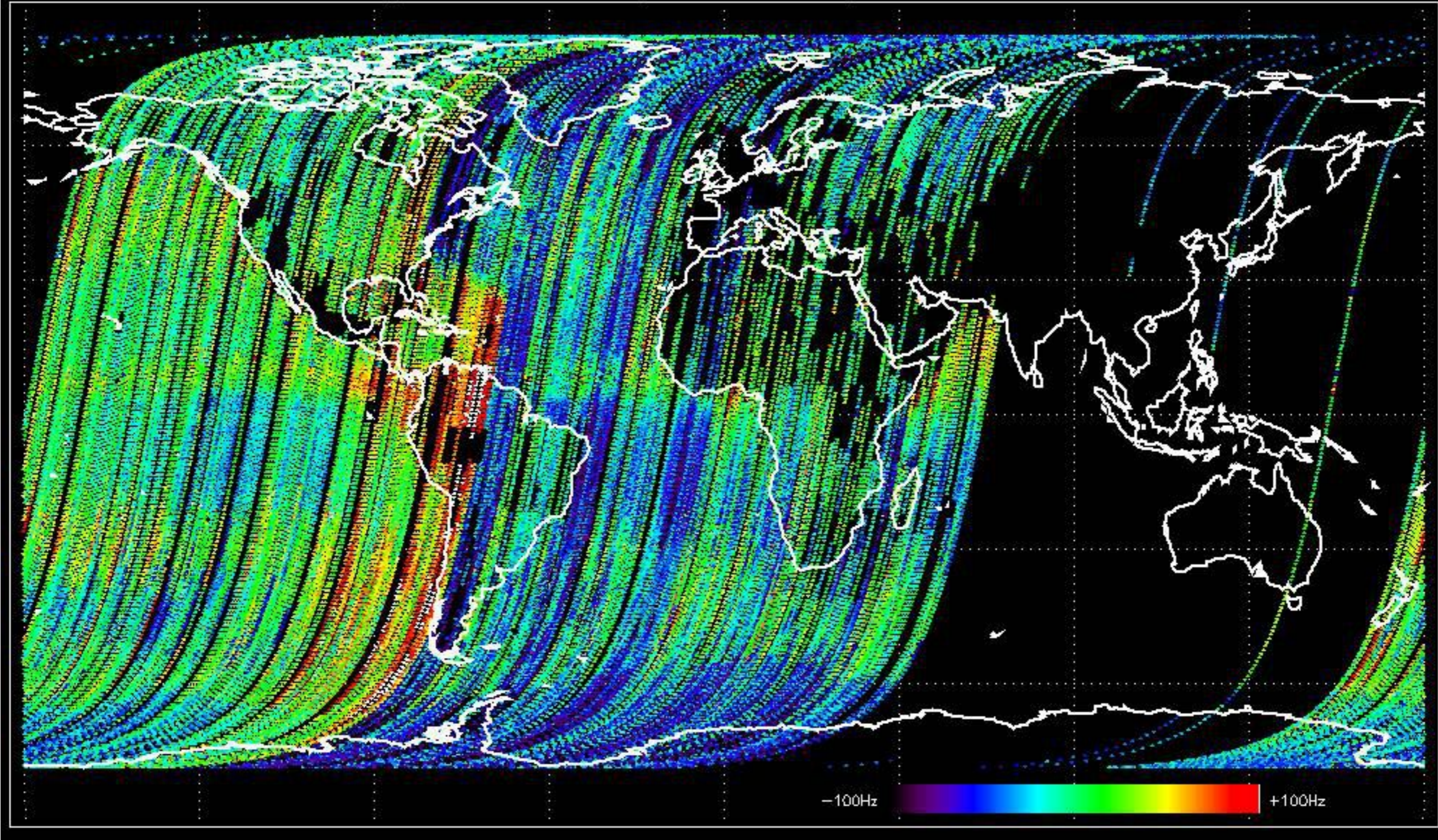




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



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



No anomalies observed on available MS products:

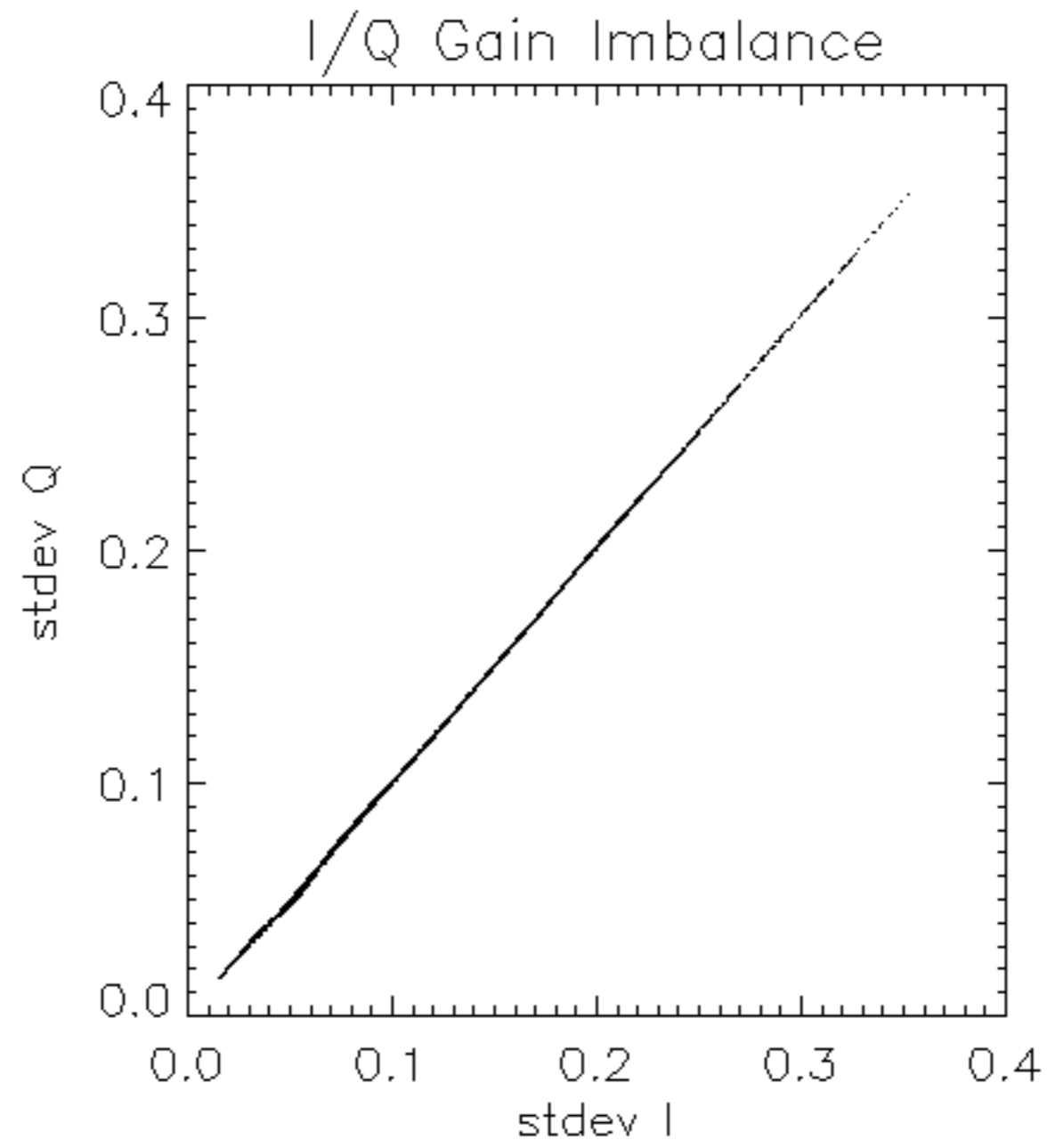
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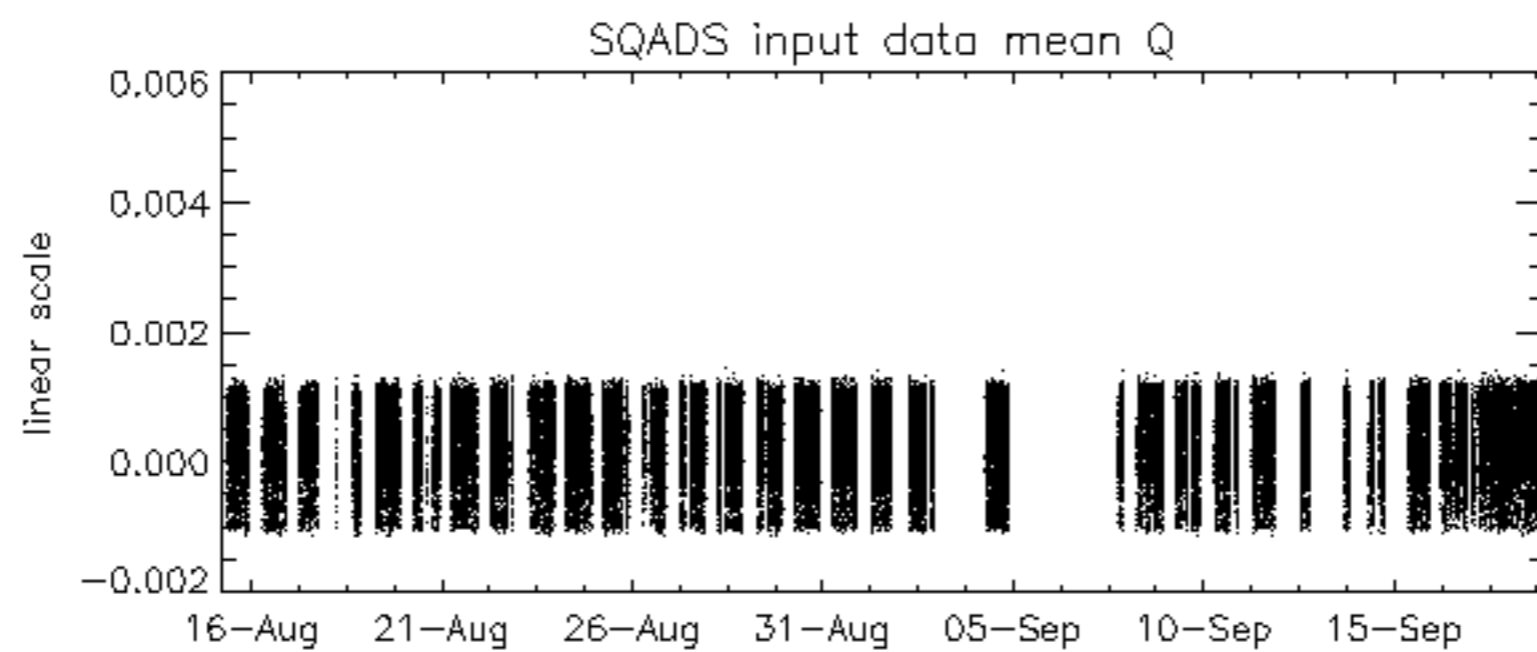
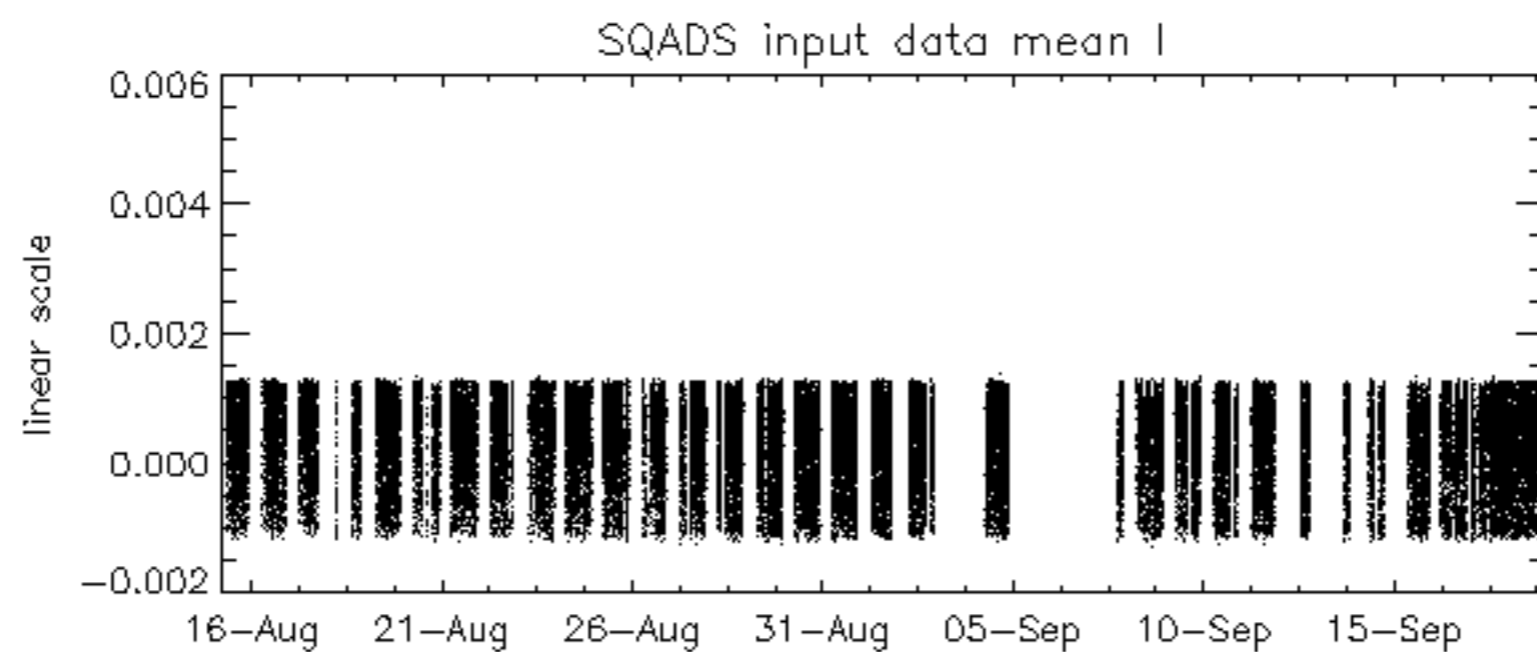
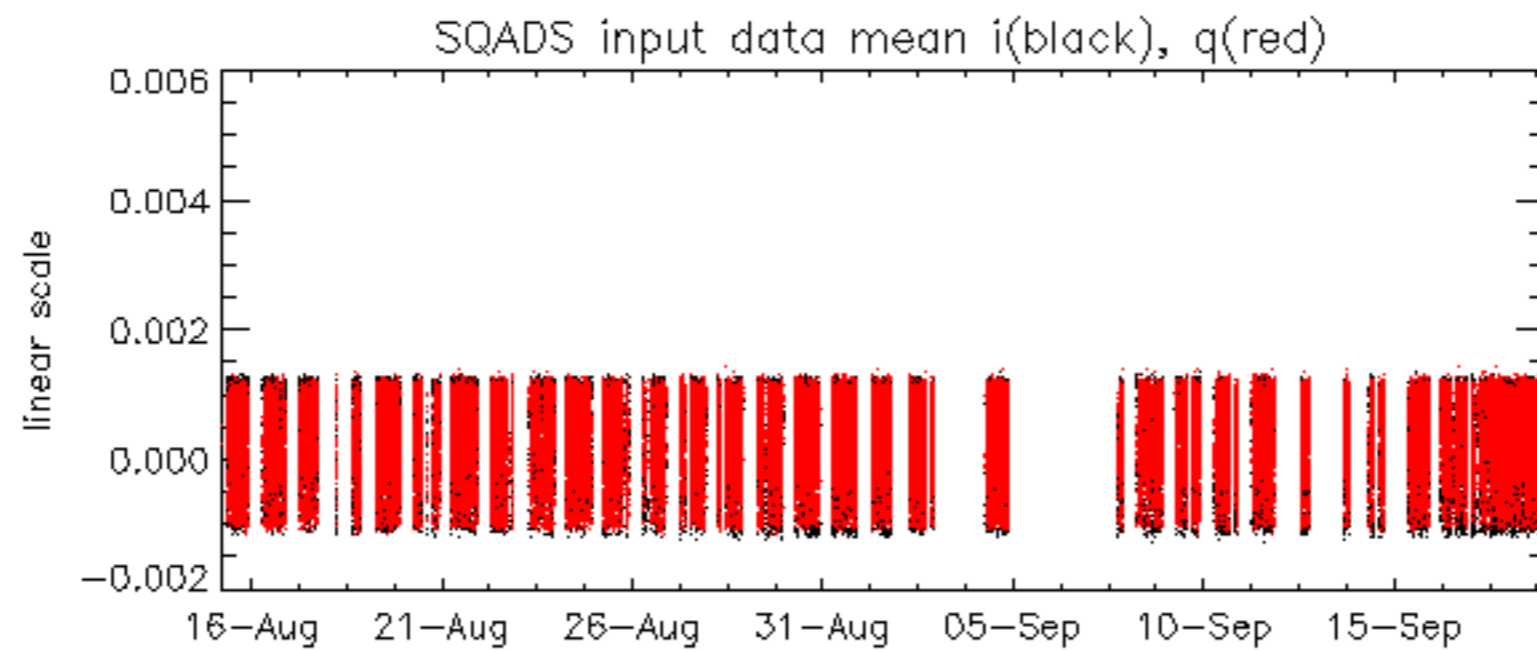
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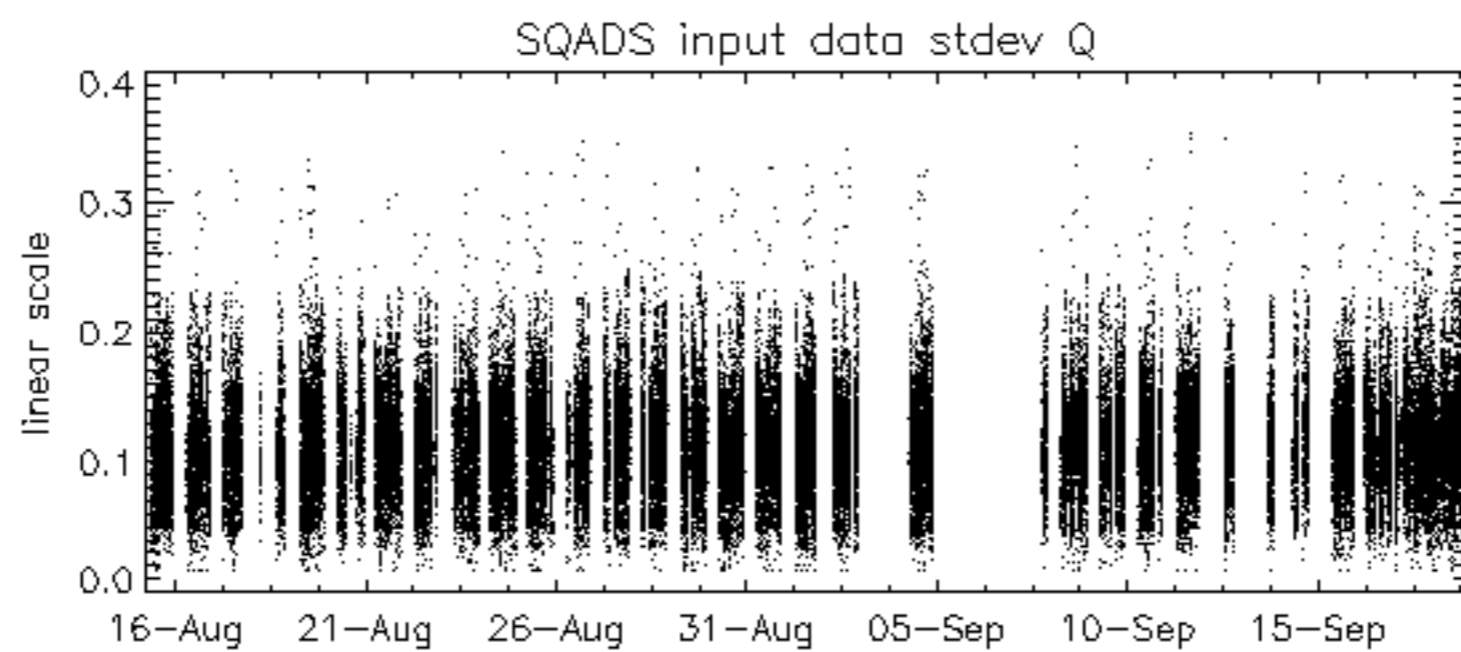
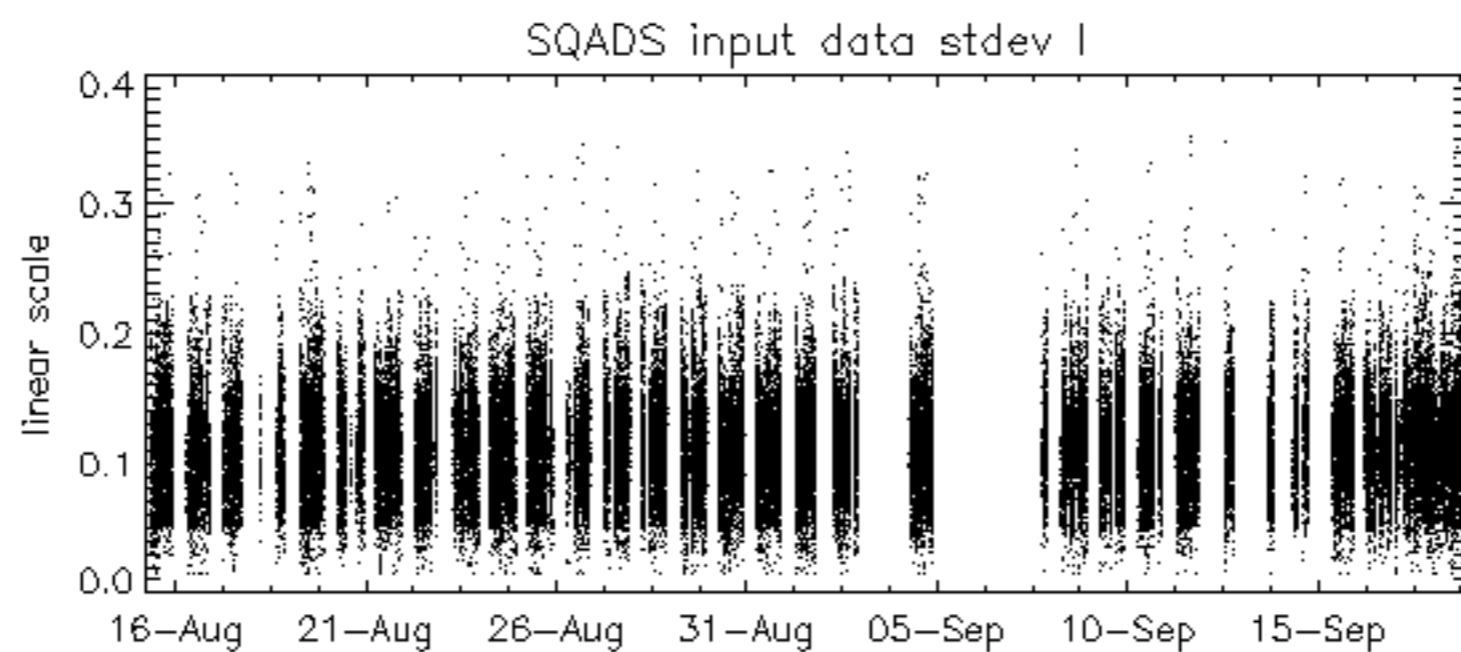
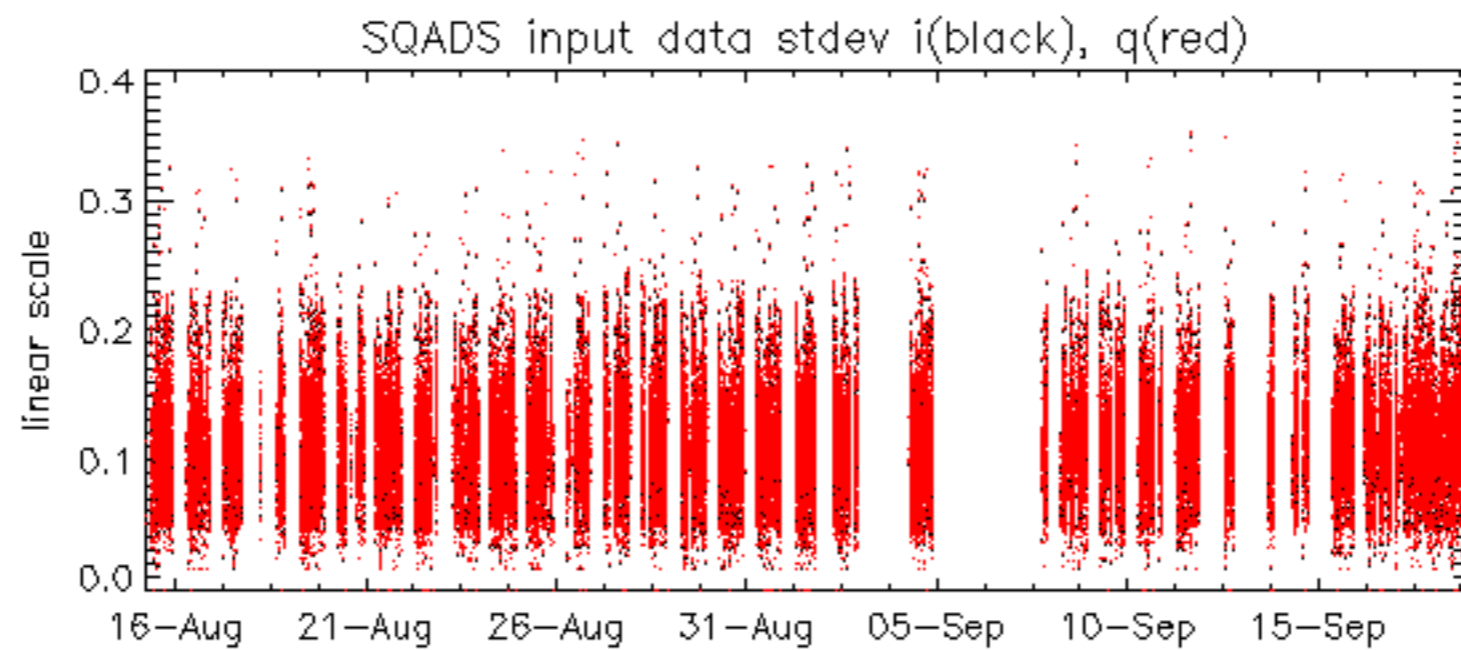
The drift in phase for TR module 3 on Tile B3 has decreased to a stable configuration as shown in the figure below

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No anomalies observed.







No unavailabilities during the reported period.