

REPORT OF 030922

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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

Please see table below:

Sub-system	Start	Stop	Planned
ASAR	2003-09-22 02:00:25	2003-09-22 02:00:47	No

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__0PNPDK20030919_194559_000000152020_00056_08126_0077.N1
- ASA_MS__0PNPDK20030919_194419_000000152020_00056_08126_0078.N1
- ASA_MS__0PNPDK20030920_191242_000000152020_00070_08140_0079.N1
- ASA_MS__0PNPDK20030920_191422_000000152020_00070_08140_0080.N1
- ASA_MS__0PNPDK20030921_202141_000000152020_00085_08155_0081.N1
- ASA_MS__0PNPDK20030921_202321_000000152020_00085_08155_0082.N1

Results below are given for the last available pair.

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



Polarisation	Start Time
V	20030921 202321
H	20030921 202141

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
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4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.79835	-22.5375	-8.12920
	stdev	0.00530901	0.0627344	0.00252096
10	mean	-6.89313	-19.3146	-8.12920
	stdev	0.0288995	0.0636554	0.00252096

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4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.79955	-22.5276	-8.11387
	stdev	0.00573281	0.0623995	0.00258111
10	mean	-6.89466	-19.3202	-8.11387
	stdev	0.0270925	0.0618487	0.00258111

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4.3 - cal pulses monitoring (all rows)

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5 - RAW data statistics

No anomalies observed.

5.1 - Input mean I/Q

channel	stat	DSS-B
MEAN I	mean	0.000385165
	stdev	3.46085e-07
MEAN Q	mean	0.000308817
	stdev	3.17525e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115965
	stdev	0.00145875
STDEV Q	mean	0.116187
	stdev	0.00147816



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

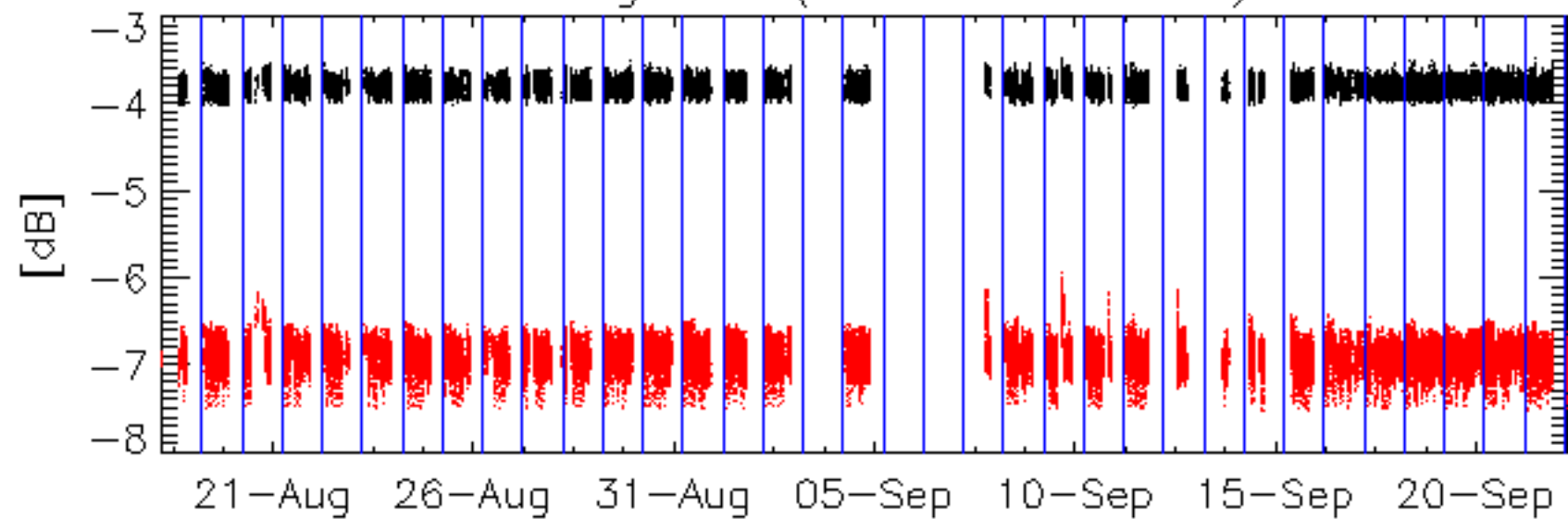
Descending

6.3 - Doppler evolution versus ANX

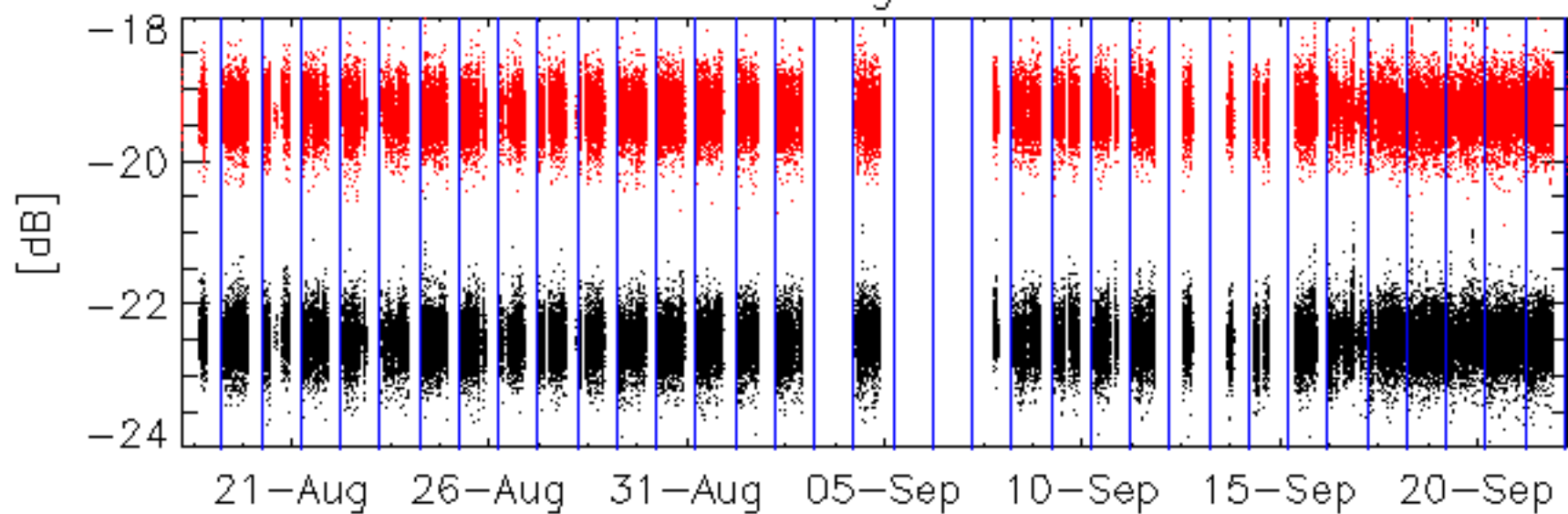
Evolution Doppler error versus ANX

<input type="checkbox"/>

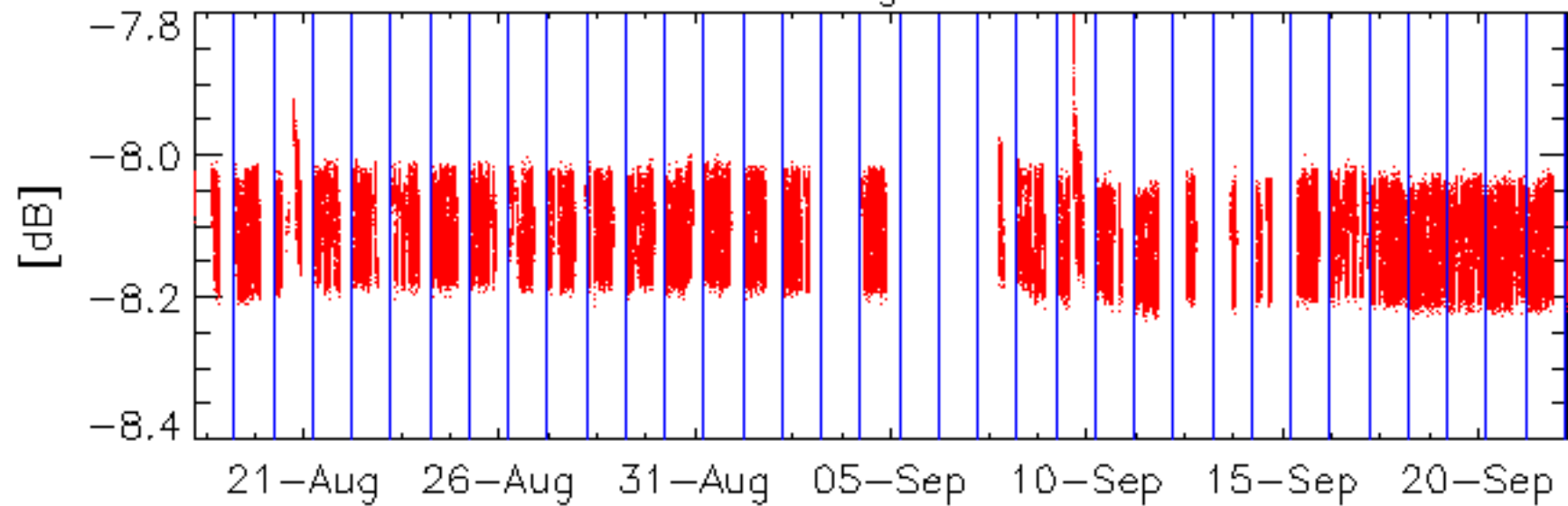
Average P1 (row 3 & row 10)



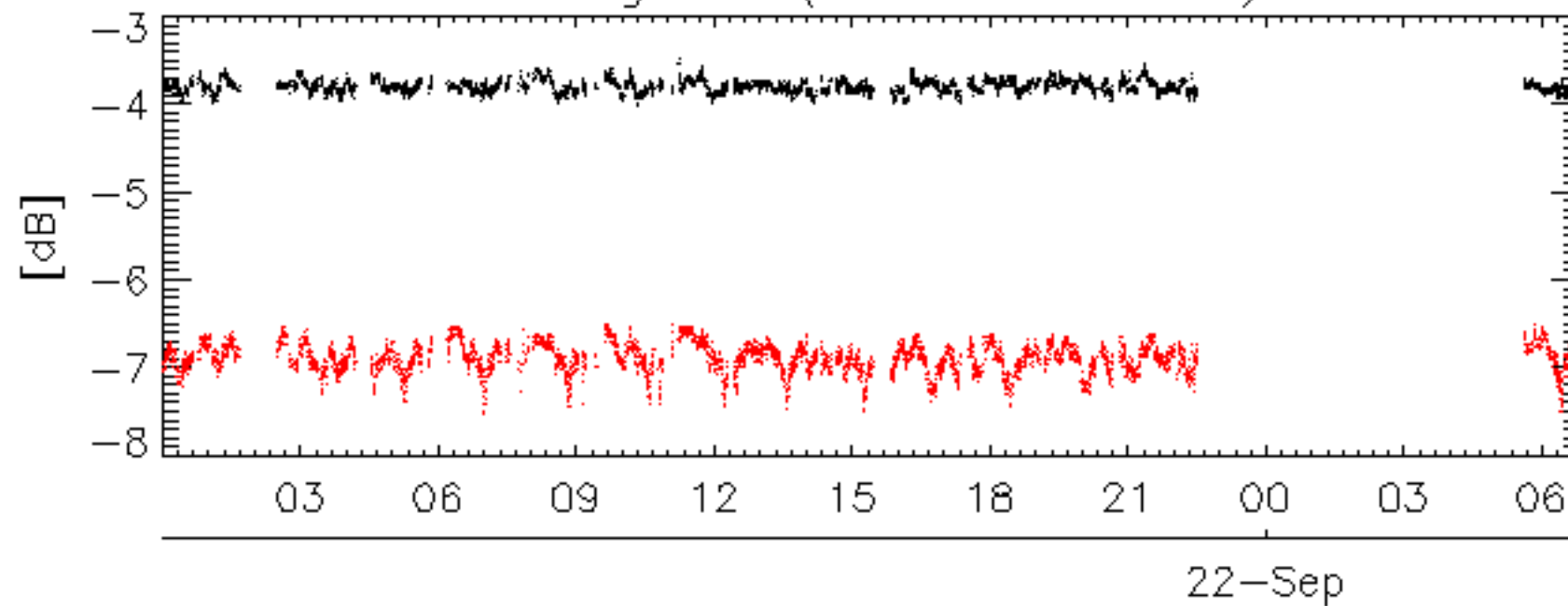
Average P2



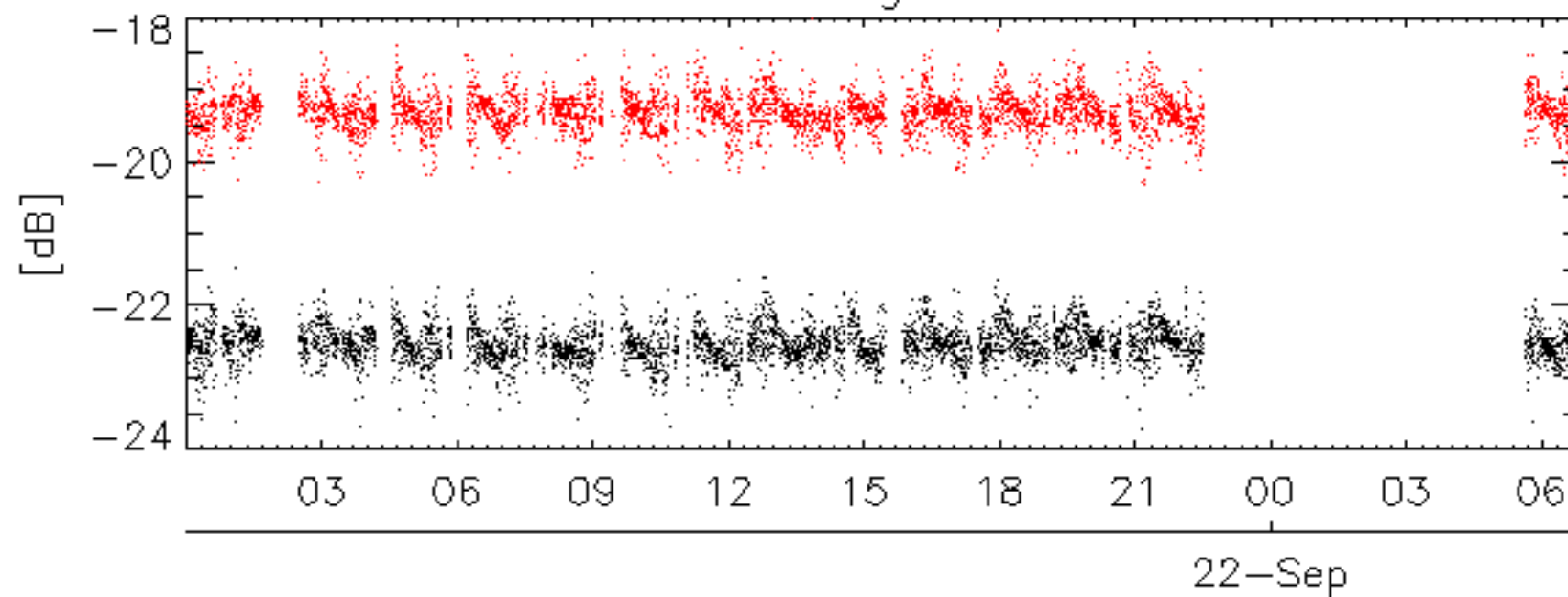
Average P3



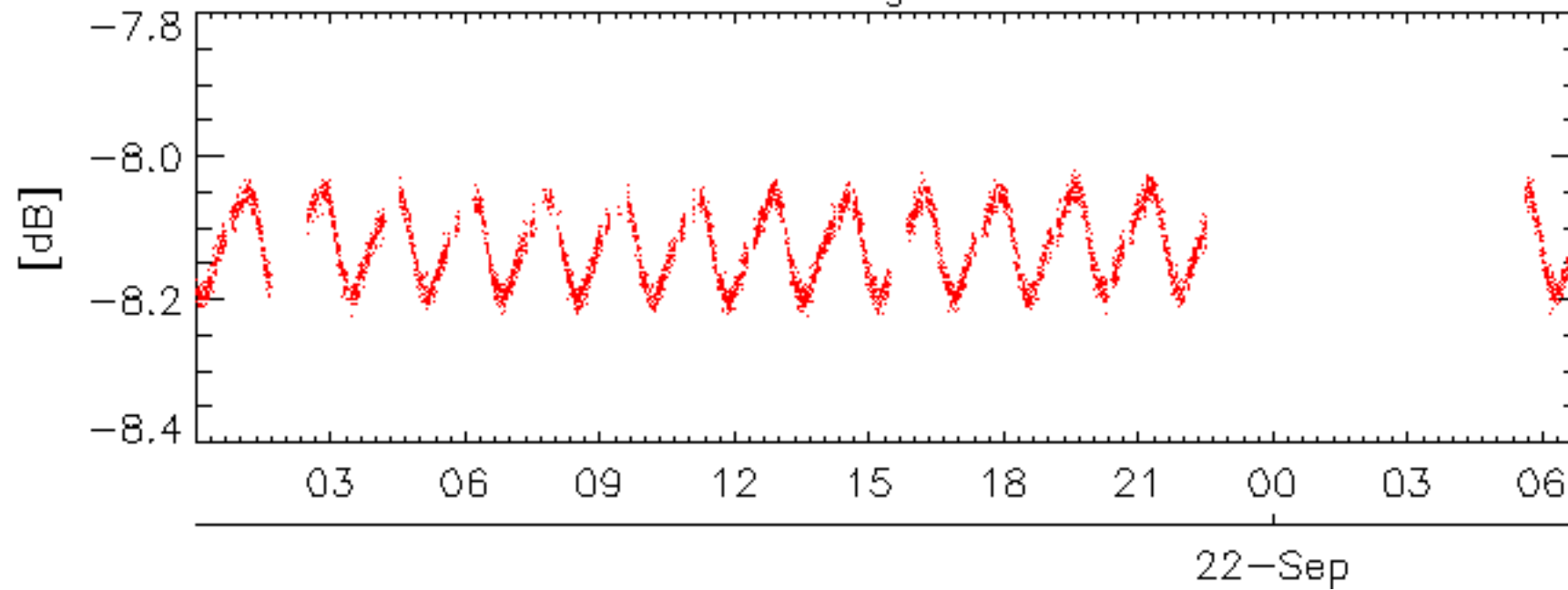
Average P1 (row 3 & row 10)

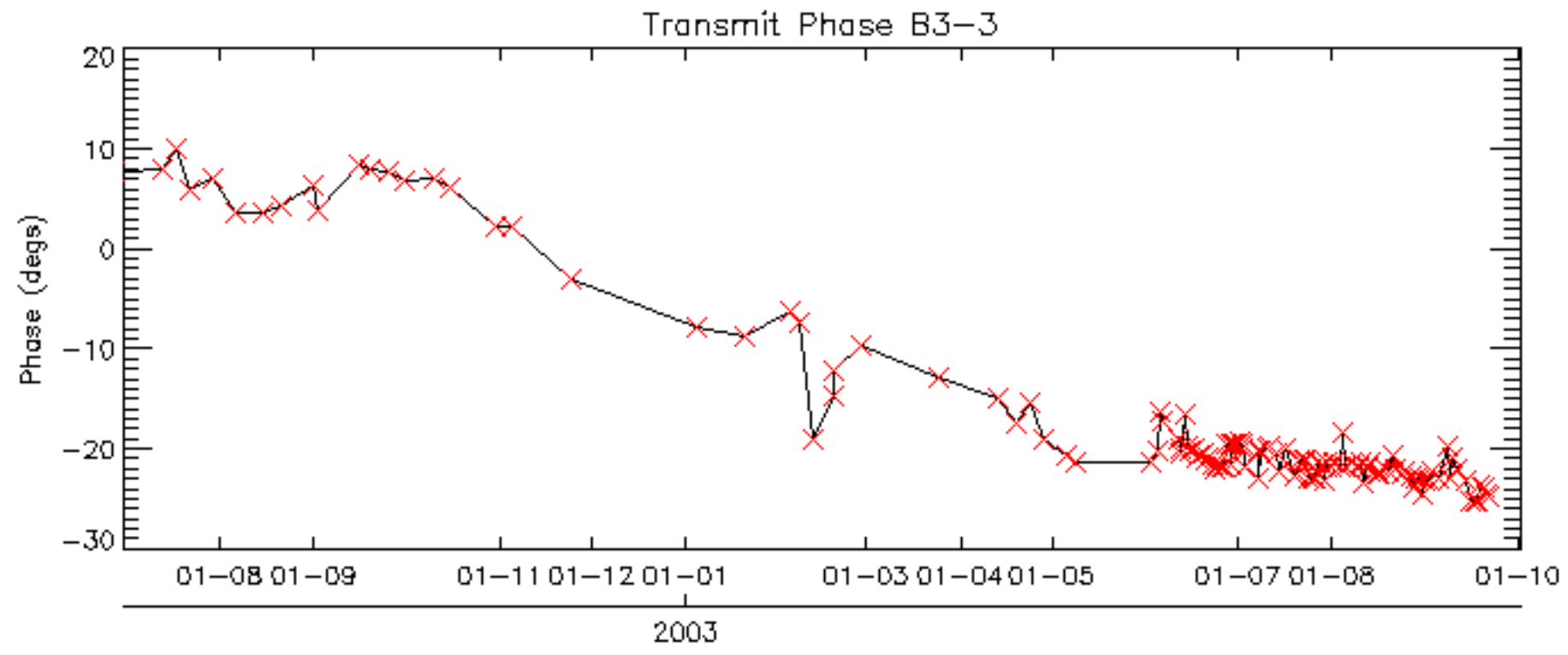


Average P2



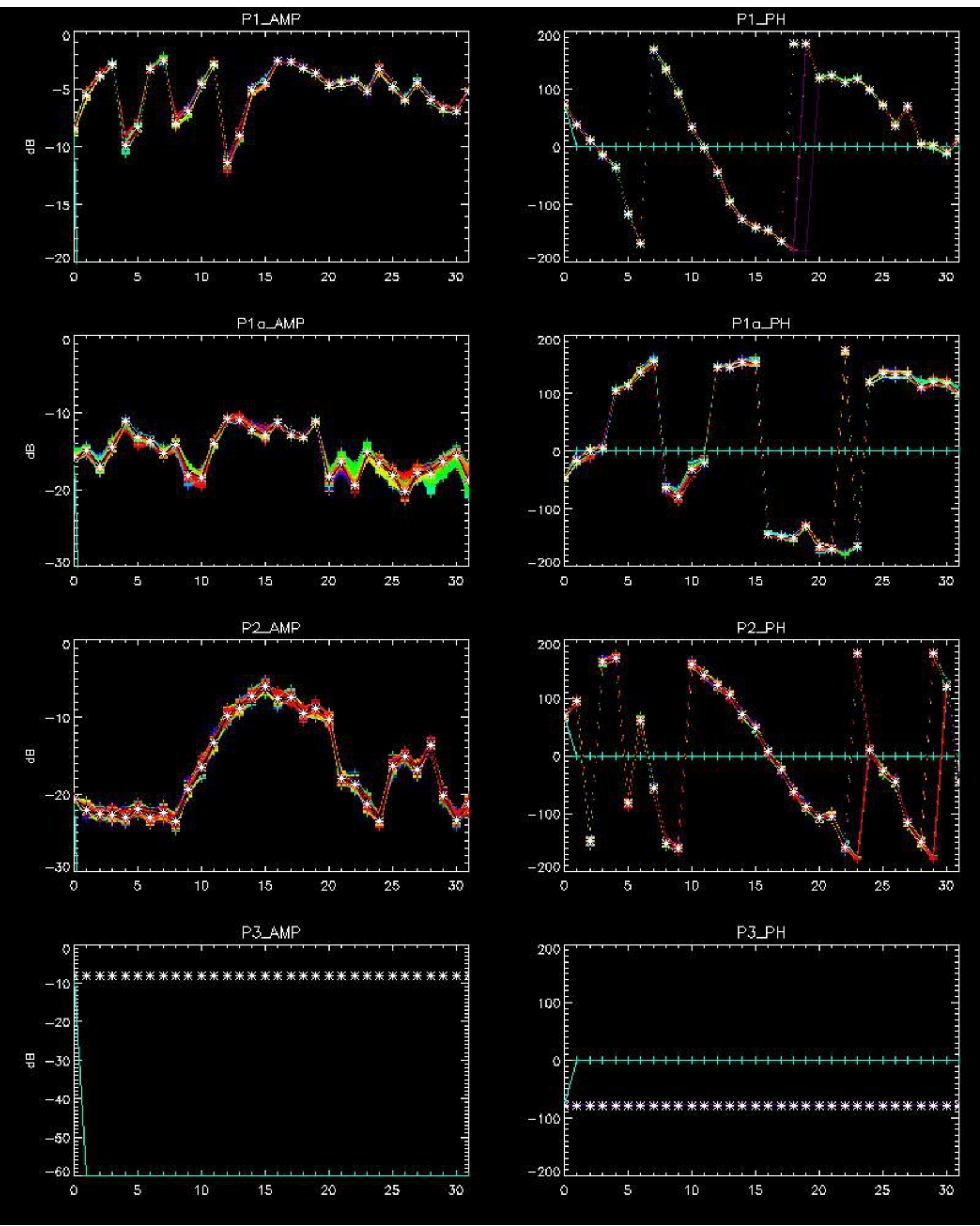
Average P3





No anomalies observed on available browse products

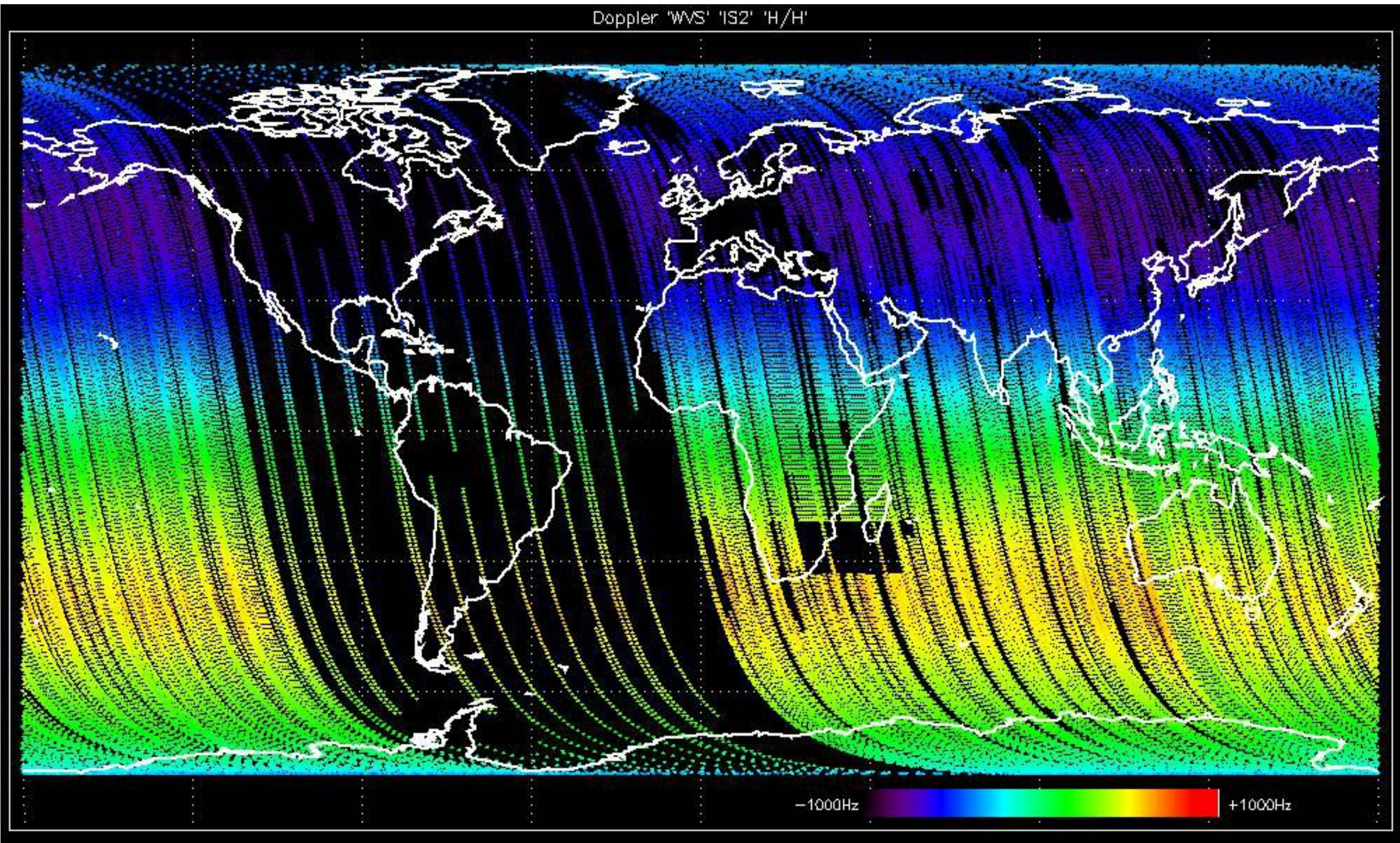
No anomalies observed.



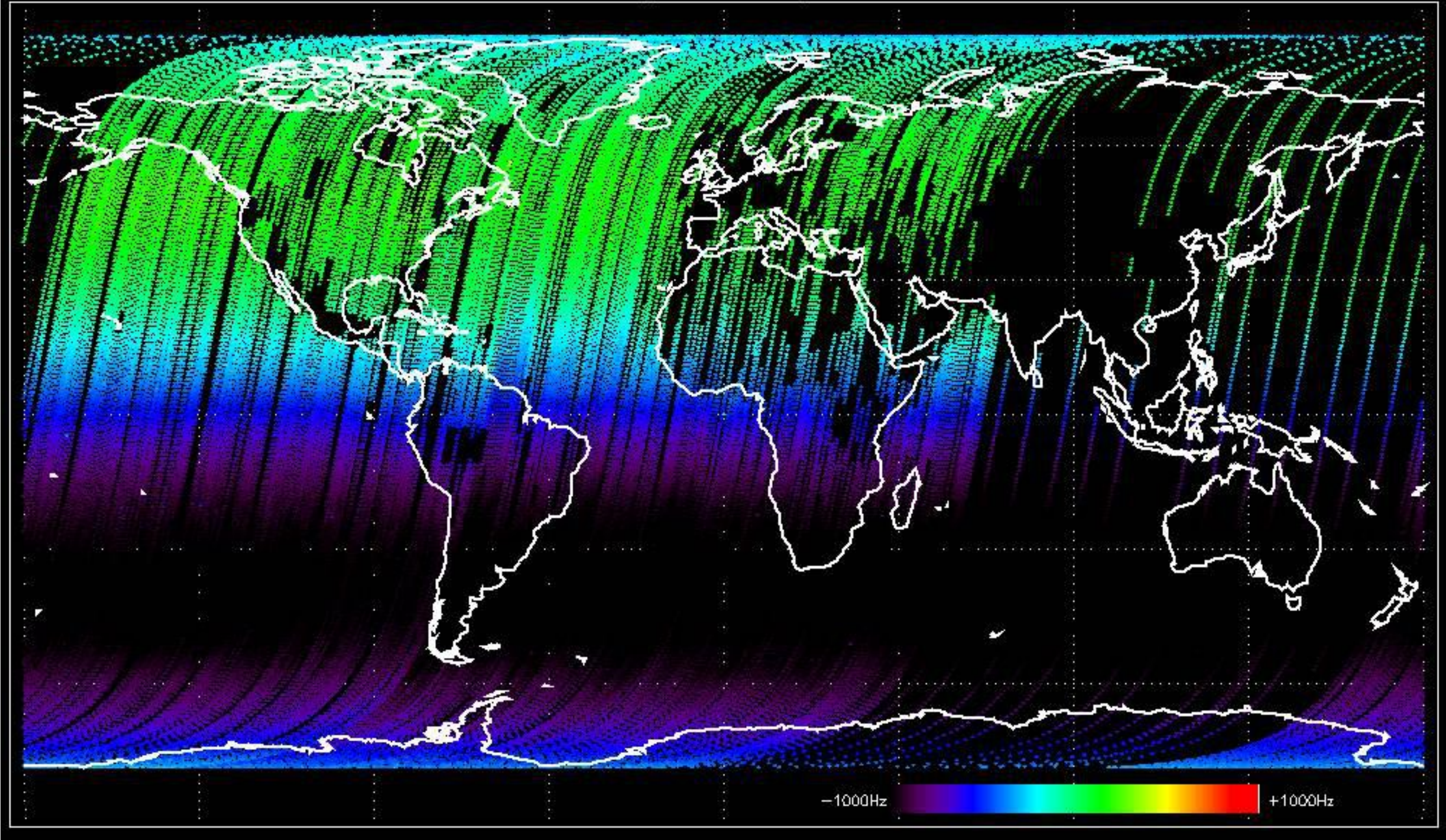
- Stable wave internal calibration pulses gain and phase.
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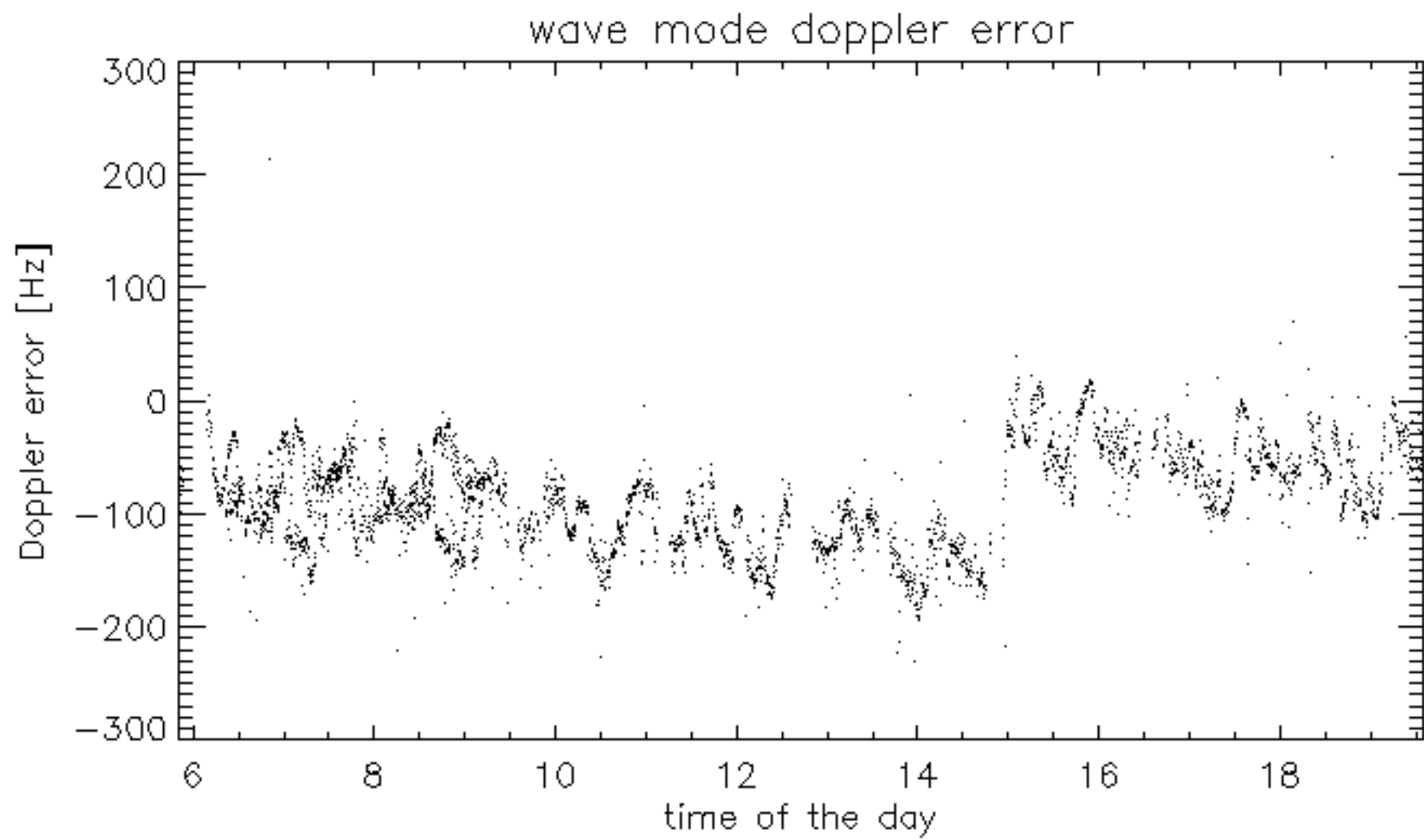
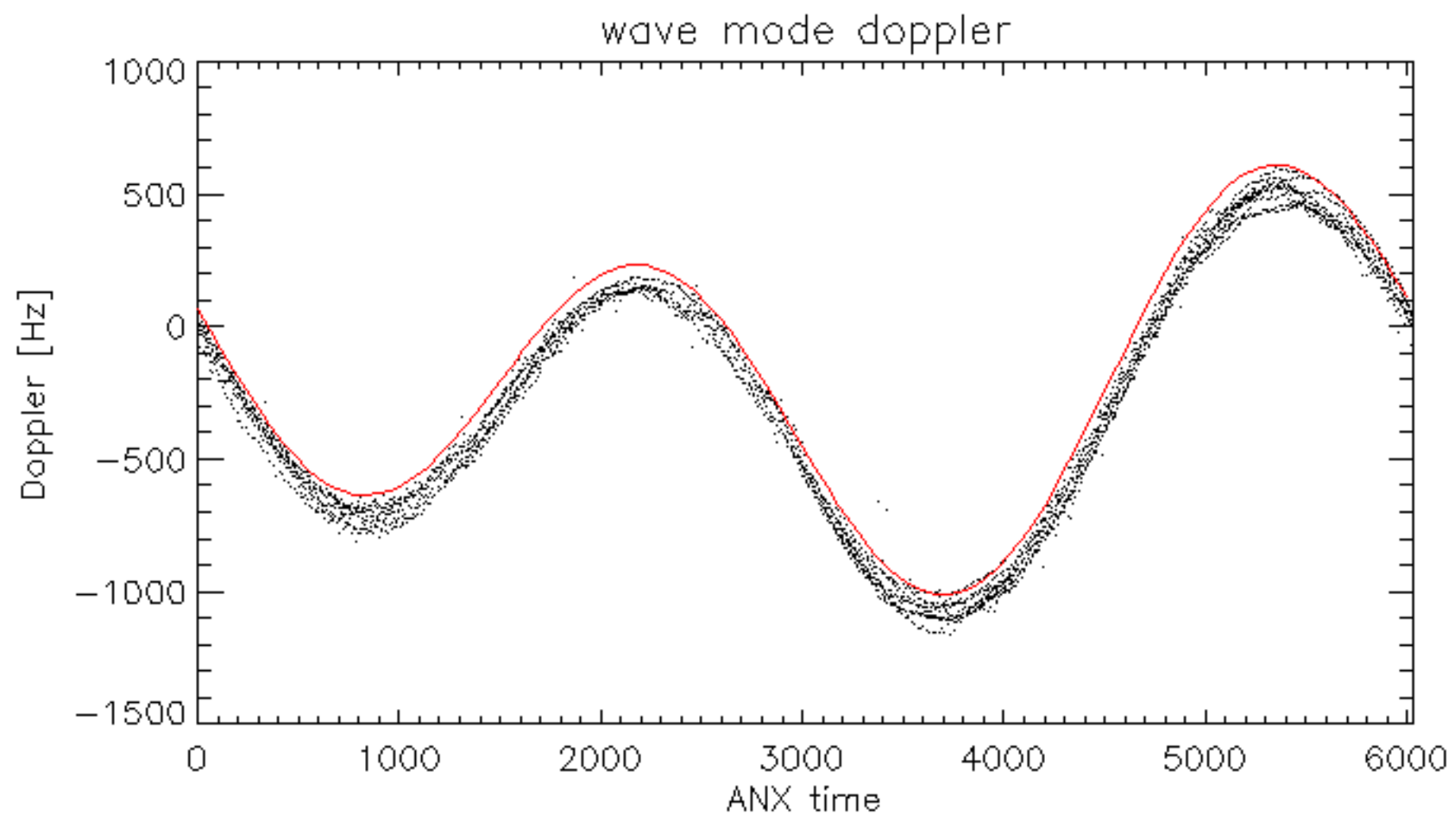
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 60 days

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

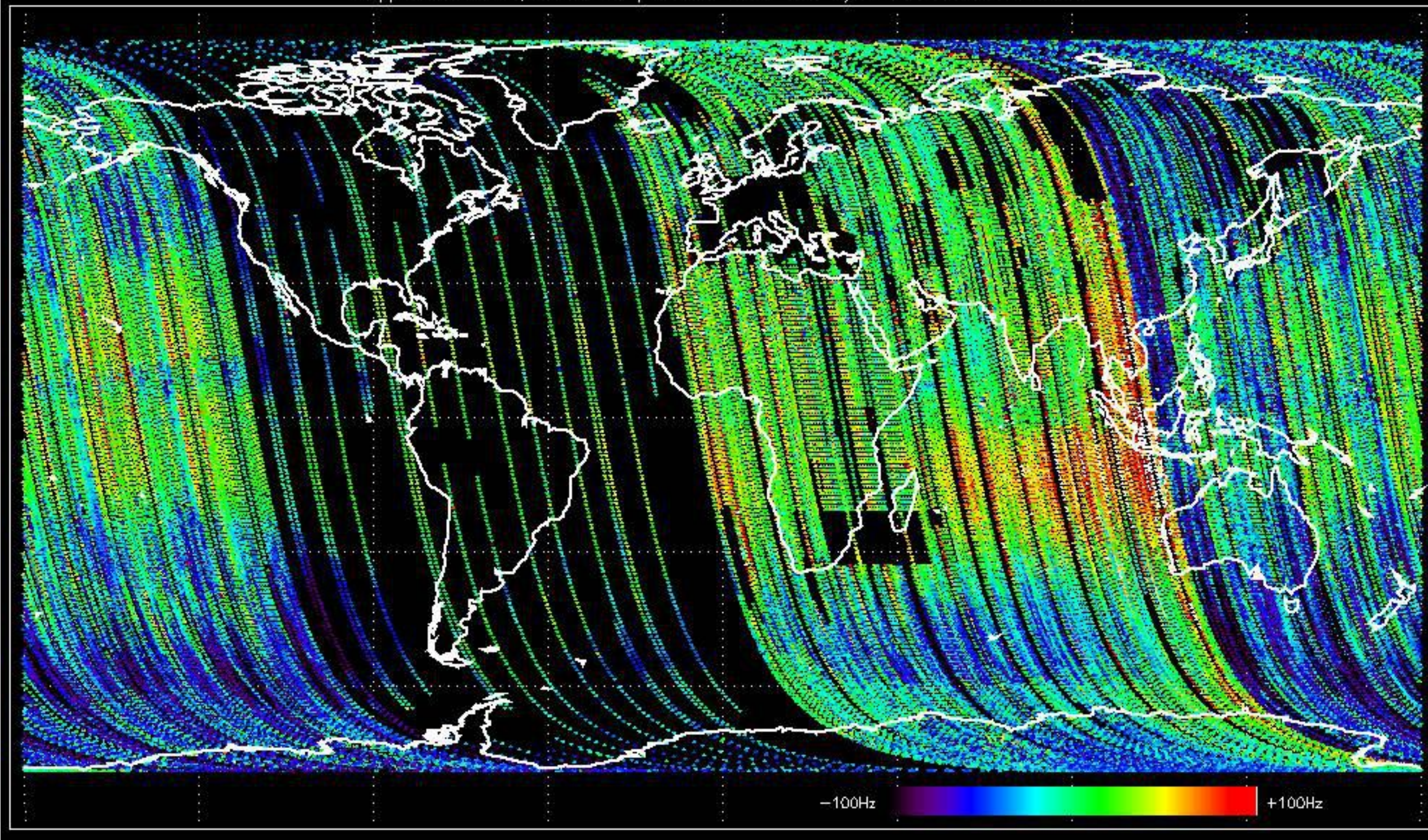


Doppler 'WVS' 'ISZ' 'V/V'

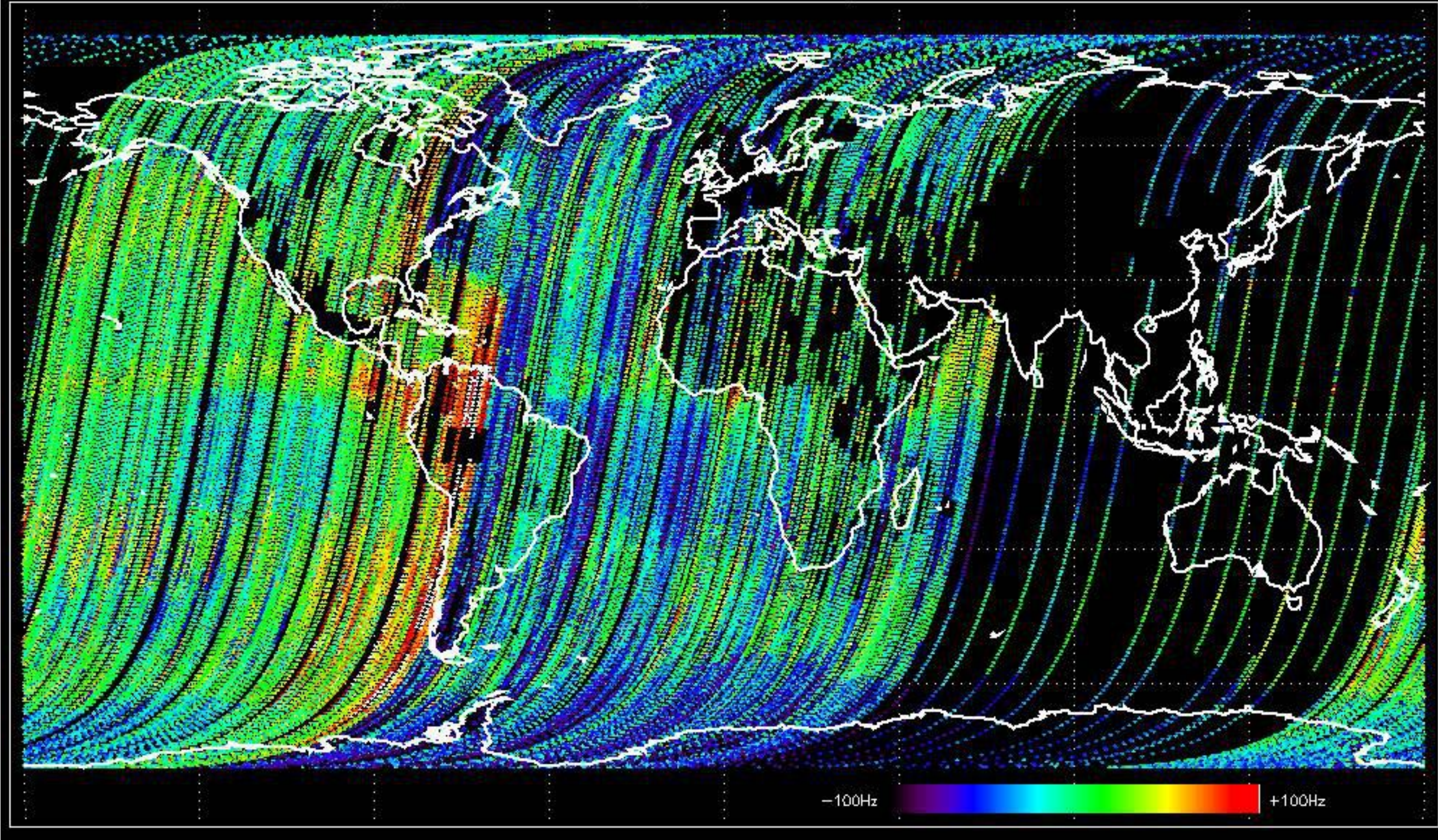




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of 53 Hz



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



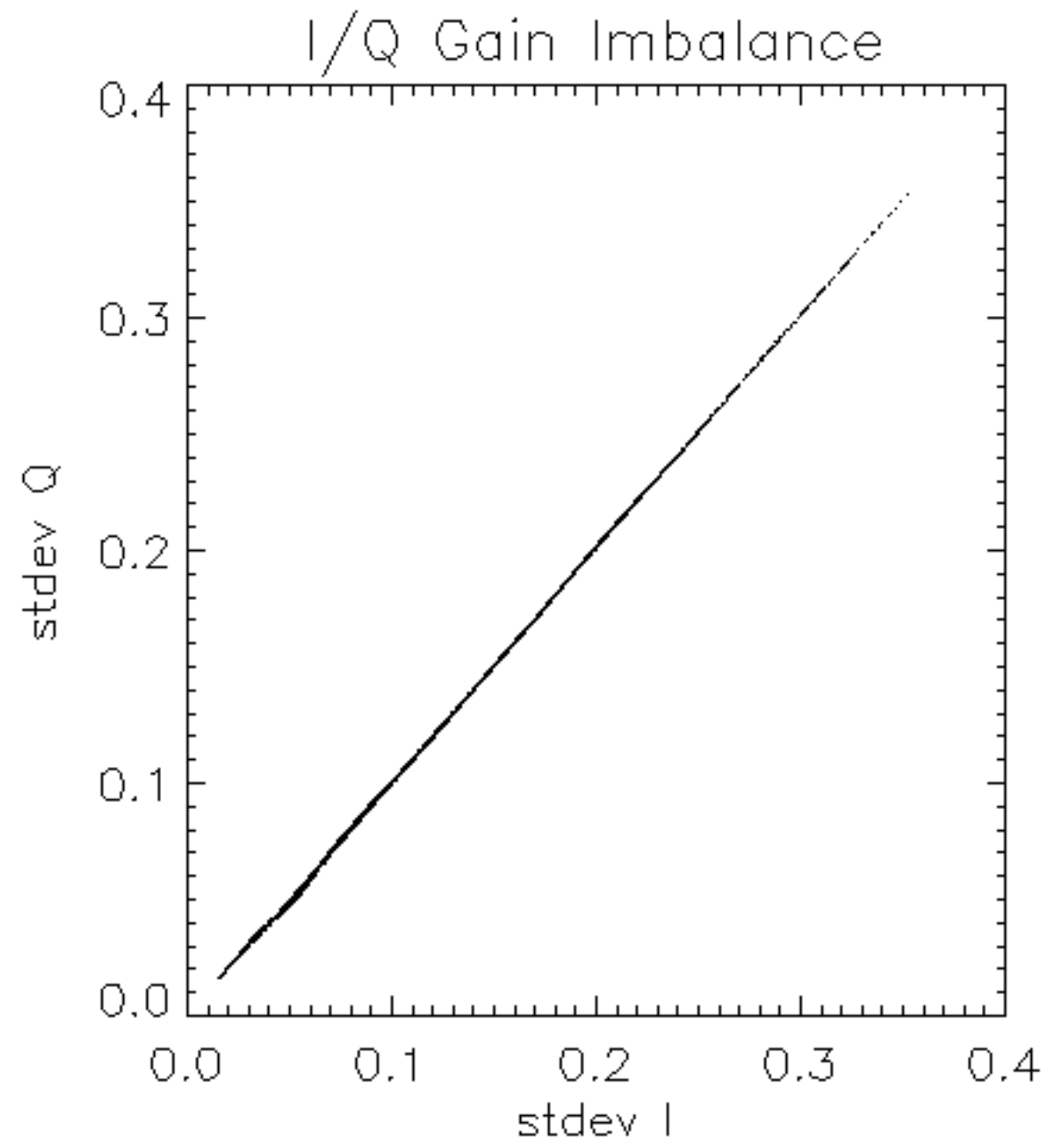
No anomalies observed on available MS products:

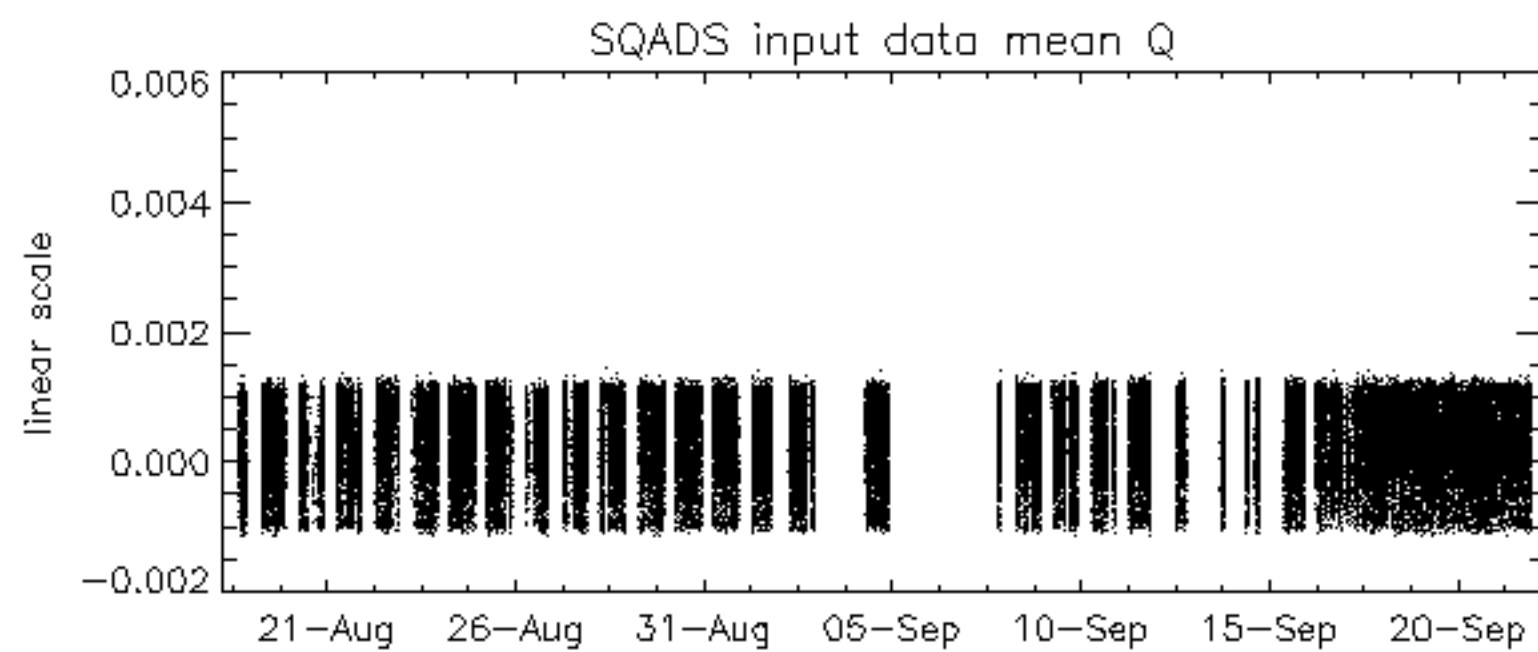
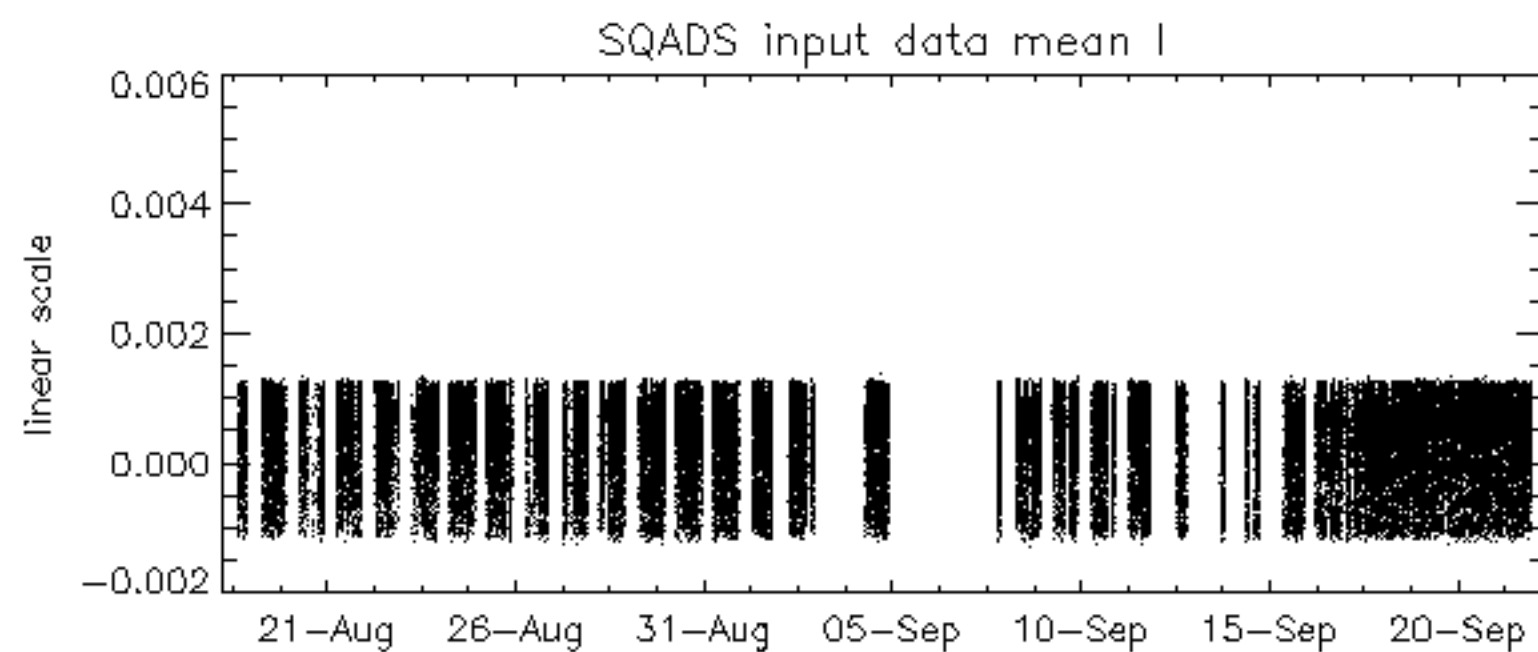
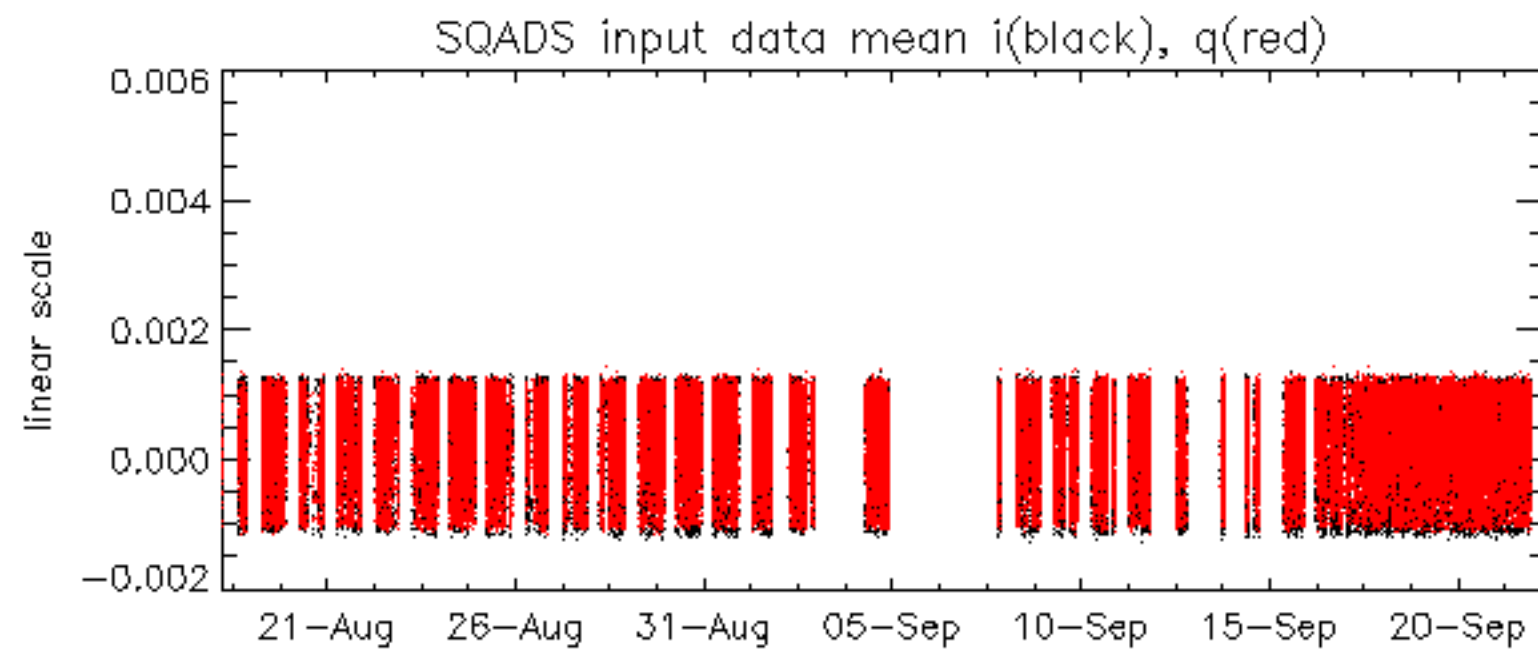
-ASA_MS__0PNPDK20030919_194559_000000152020_00056_08126_0077.N1
-ASA_MS__0PNPDK20030919_194419_000000152020_00056_08126_0078.N1
-ASA_MS__0PNPDK20030920_191242_000000152020_00070_08140_0079.N1
-ASA_MS__0PNPDK20030920_191422_000000152020_00070_08140_0080.N1
-ASA_MS__0PNPDK20030921_202141_000000152020_00085_08155_0081.N1
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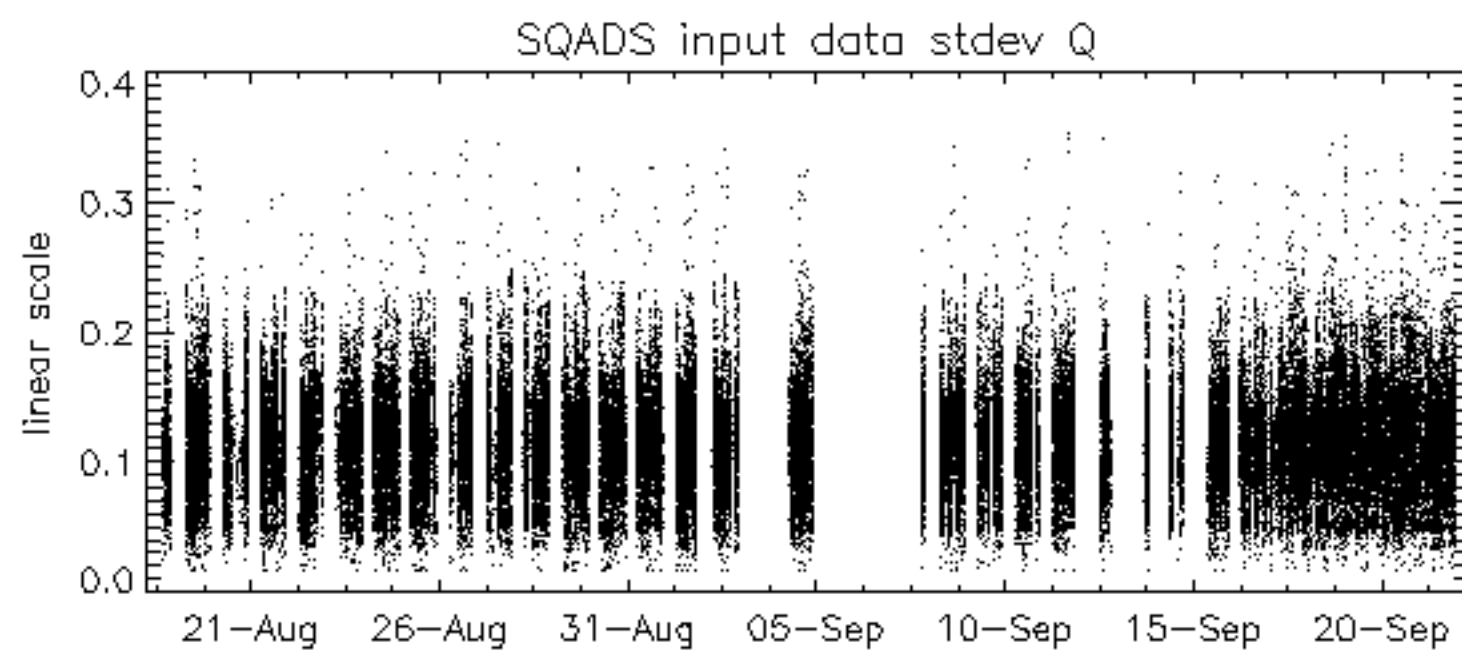
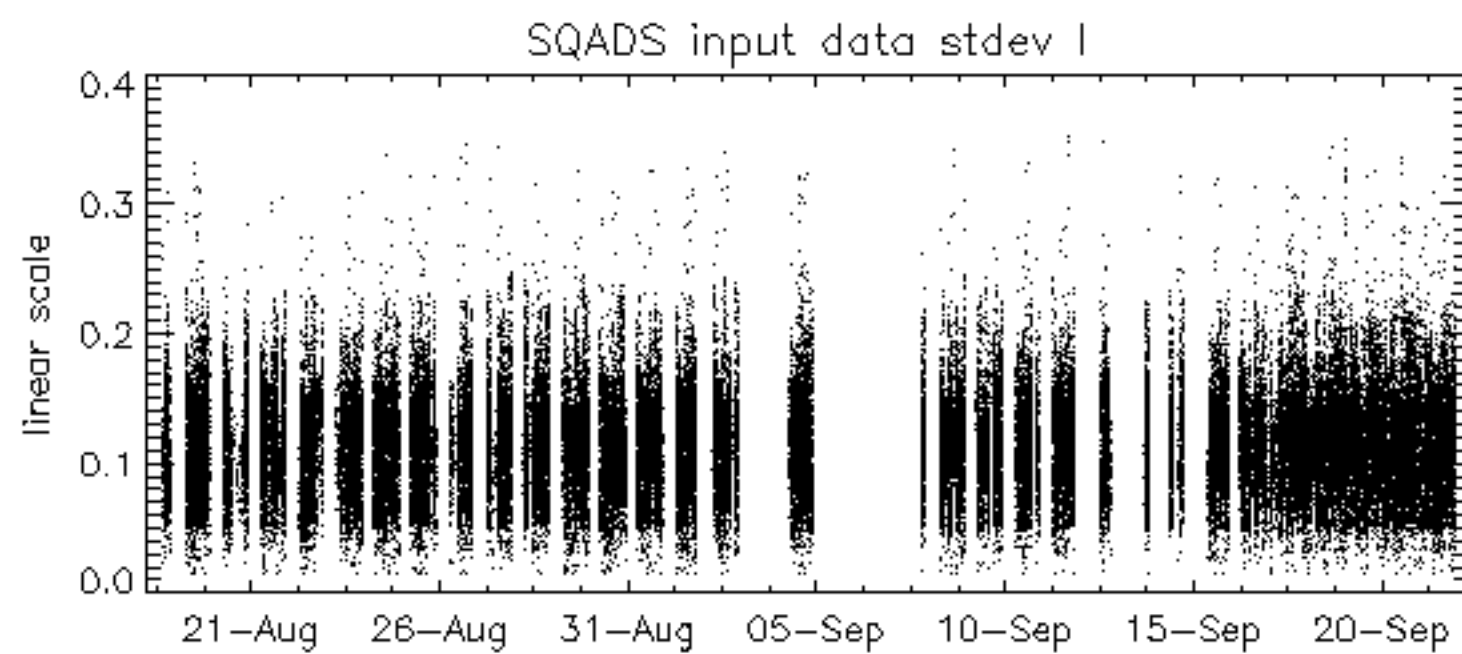
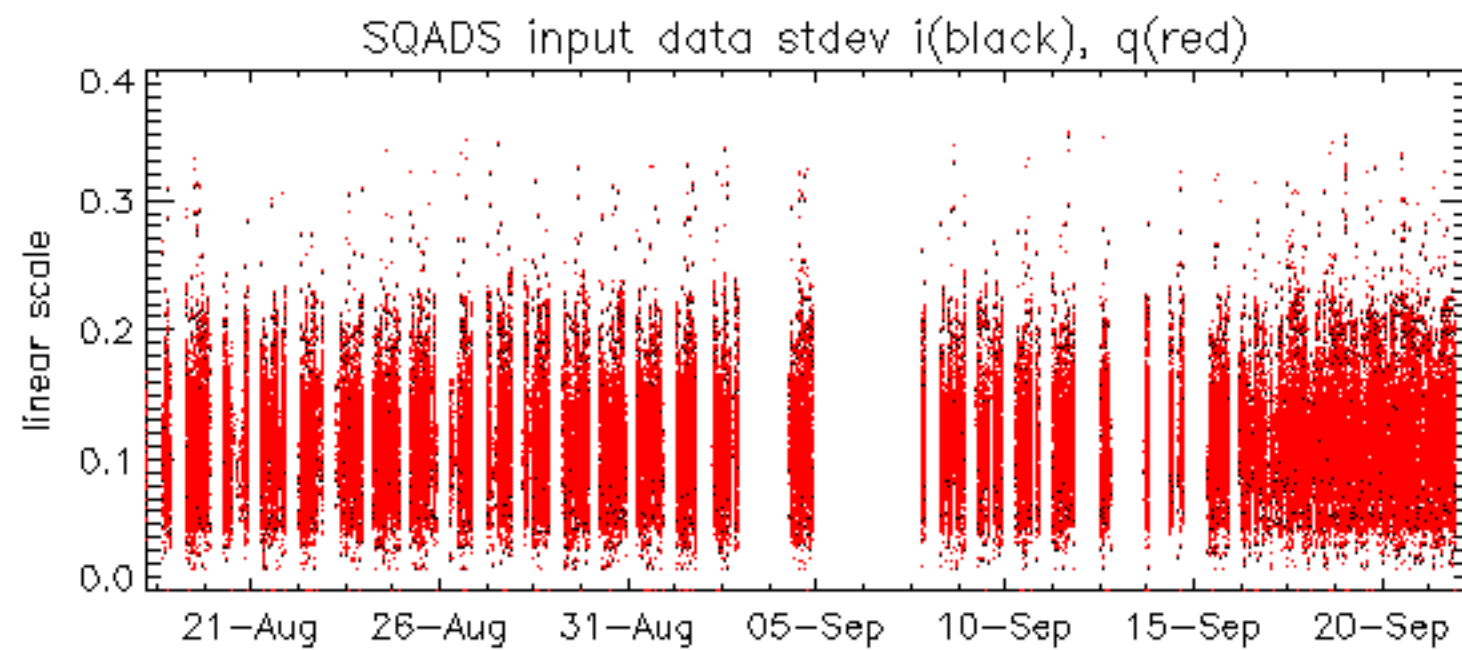
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No anomalies observed.







Please see table below: