

REPORT OF 031120

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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.

2.2 - Browse Visual Inspection

No anomalies observed from browse products visual inspection.

2.3 - Data Analysis

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

-Nominal Doppler behavior.

3 - Module Stepping Mode

The MS mode provides an internal health check on an individual module basis. The purpose of this mode is to identify any malfunctioning modules and to identify modules for which calibration offsets are to be applied.

No anomalies observed on available MS products:

- ASA_MS__0PNPDK20031119_205915_000000152021_00429_09000_0026.N1
- ASA_MS__0PNPDK20031119_210035_000000152021_00429_09000_0025.N1

Polarisation	Start Time
V	20031119 210035
H	20031119 205915

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
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3	mean	-3.77552	-22.6138	-8.17885
	stdev	0.00558069	0.0577424	0.00347058
24	mean	-5.09667	-21.2864	-8.17885
	stdev	0.00826421	0.0544200	0.00347058



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.77756	-22.5543	-8.15574
	stdev	0.00599905	0.0658355	0.00307743
24	mean	-5.32821	-21.2455	-8.15574
	stdev	0.917553	0.0603433	0.00307743



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	0.000406355
	stdev	3.34338e-07
MEAN Q	mean	0.000237758
	stdev	3.68105e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
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STDEV I	mean	0.112472
	stdev	0.00147370
STDEV Q	mean	0.112721
	stdev	0.00149106



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 35 days.

6.1 - Unbiased Doppler Error

Evolution of unbiased Doppler error (Real - Expected)
Ascending
Descending

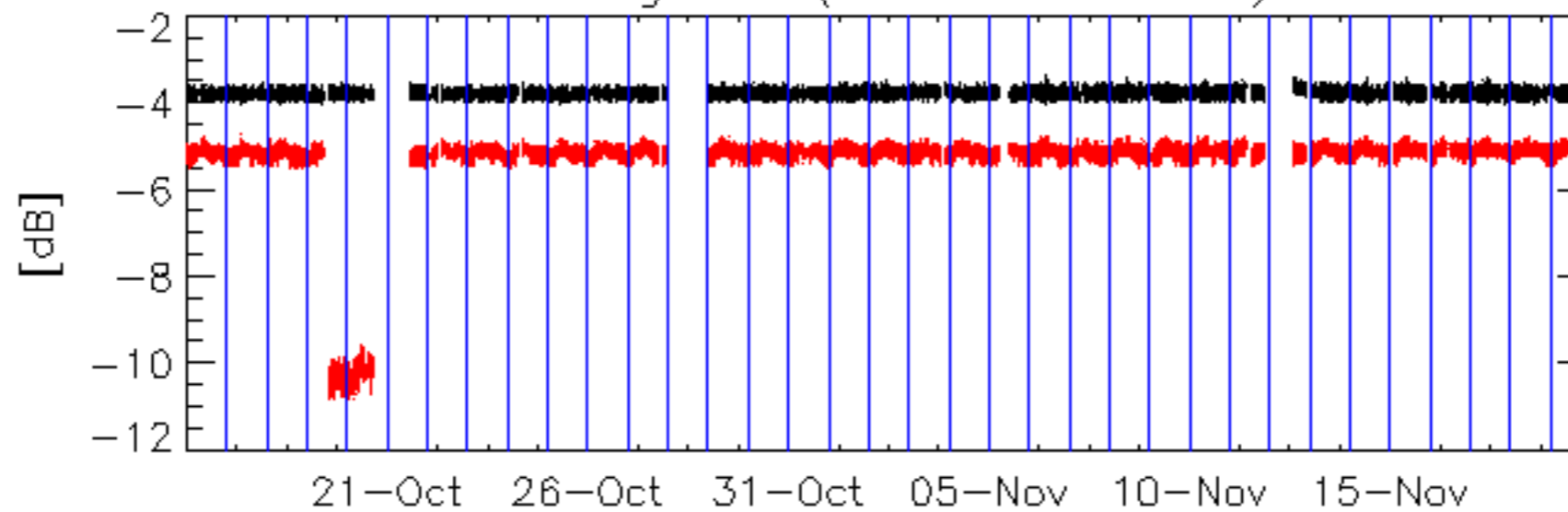
6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

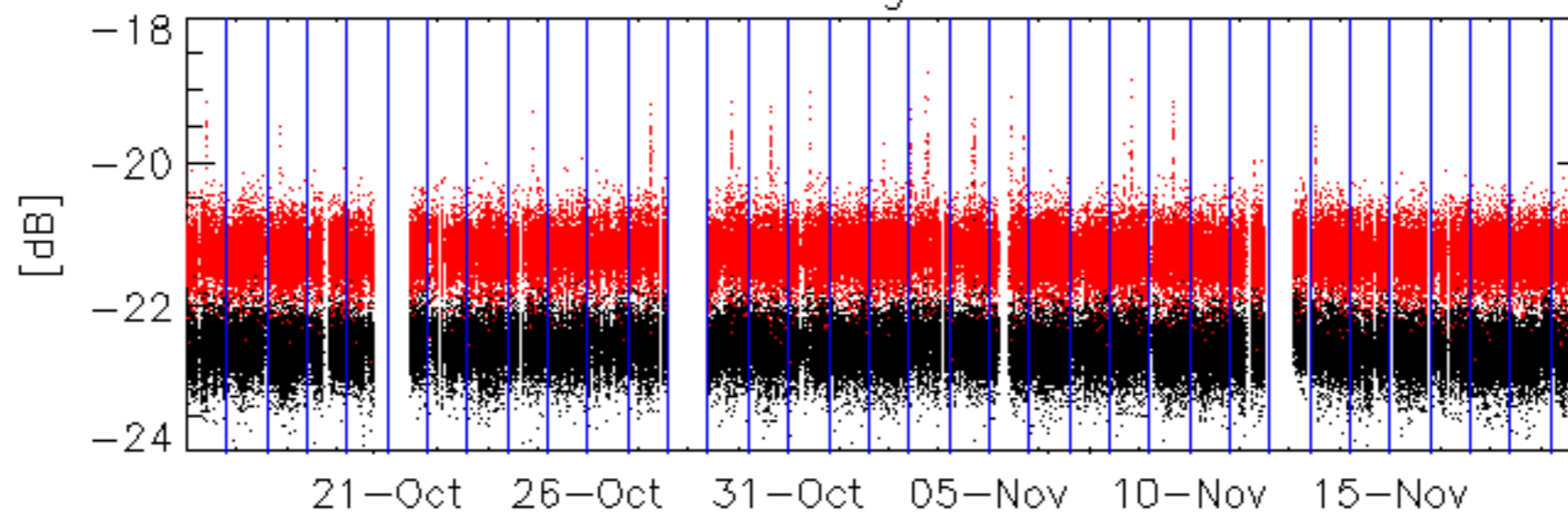
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

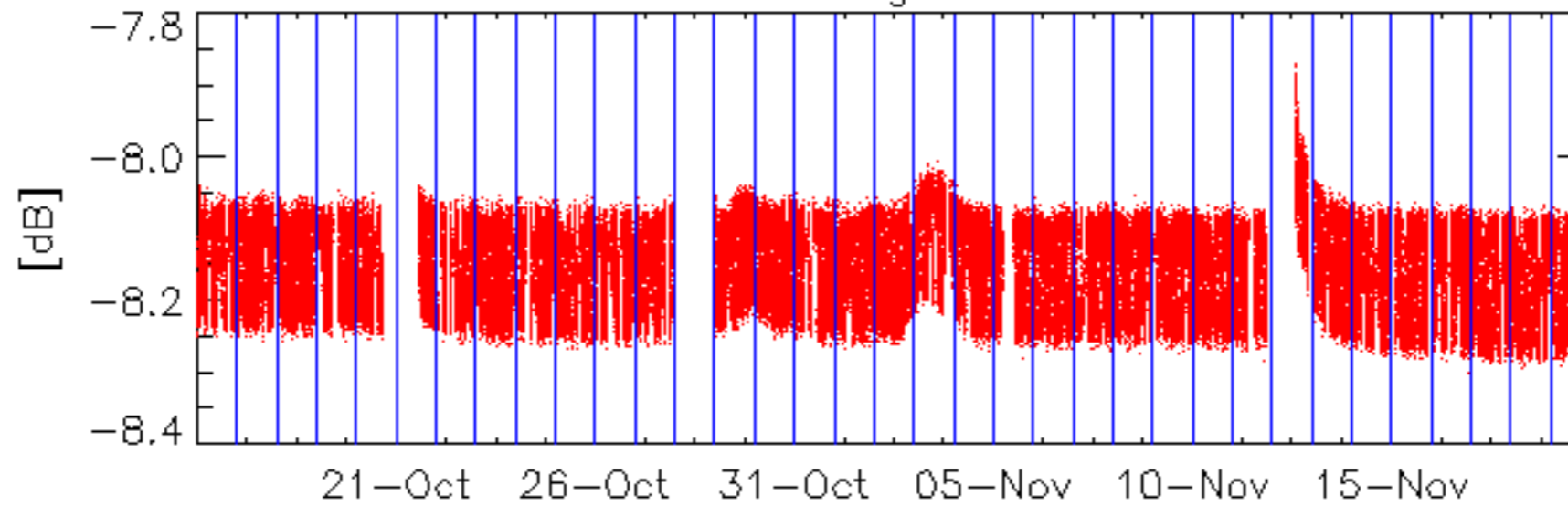

Average P1 (row 3 & row 24)

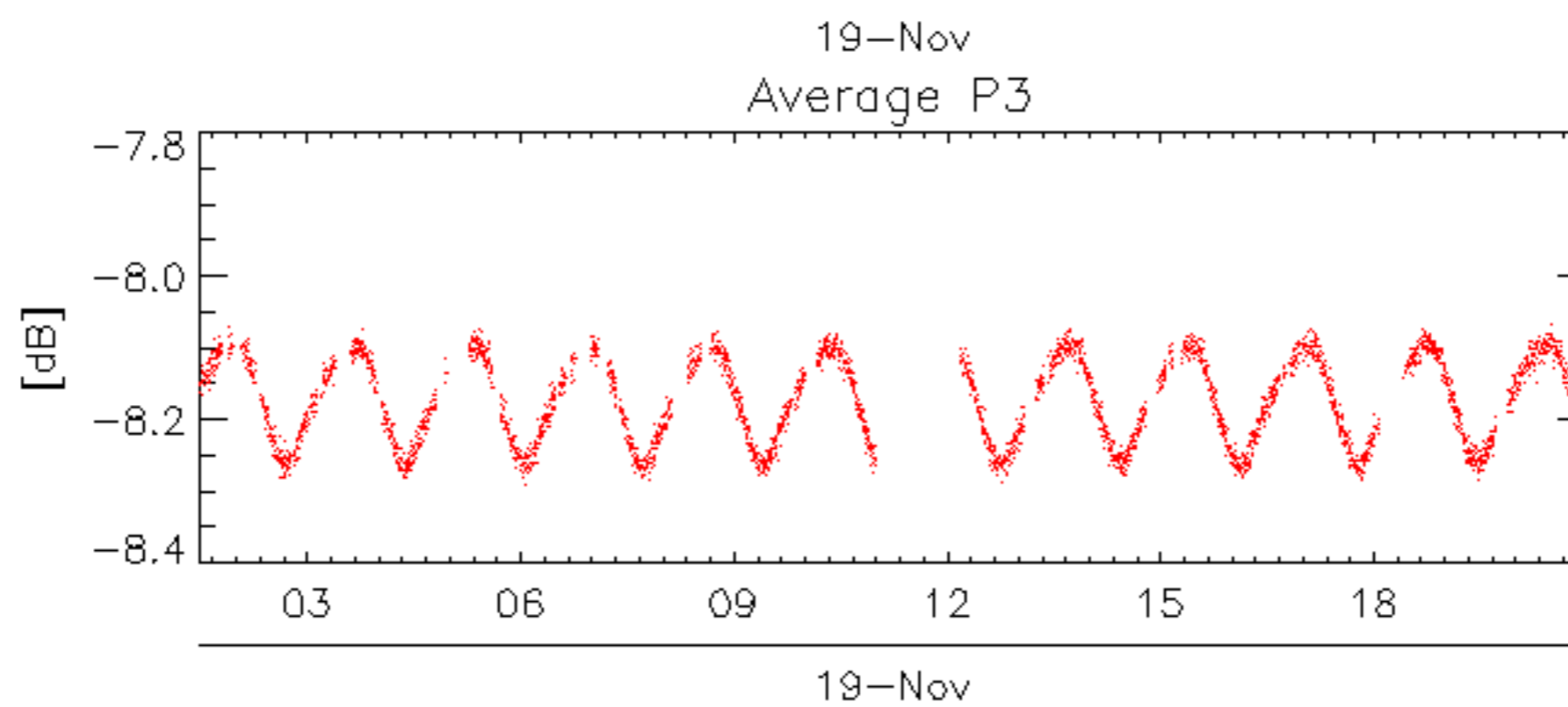
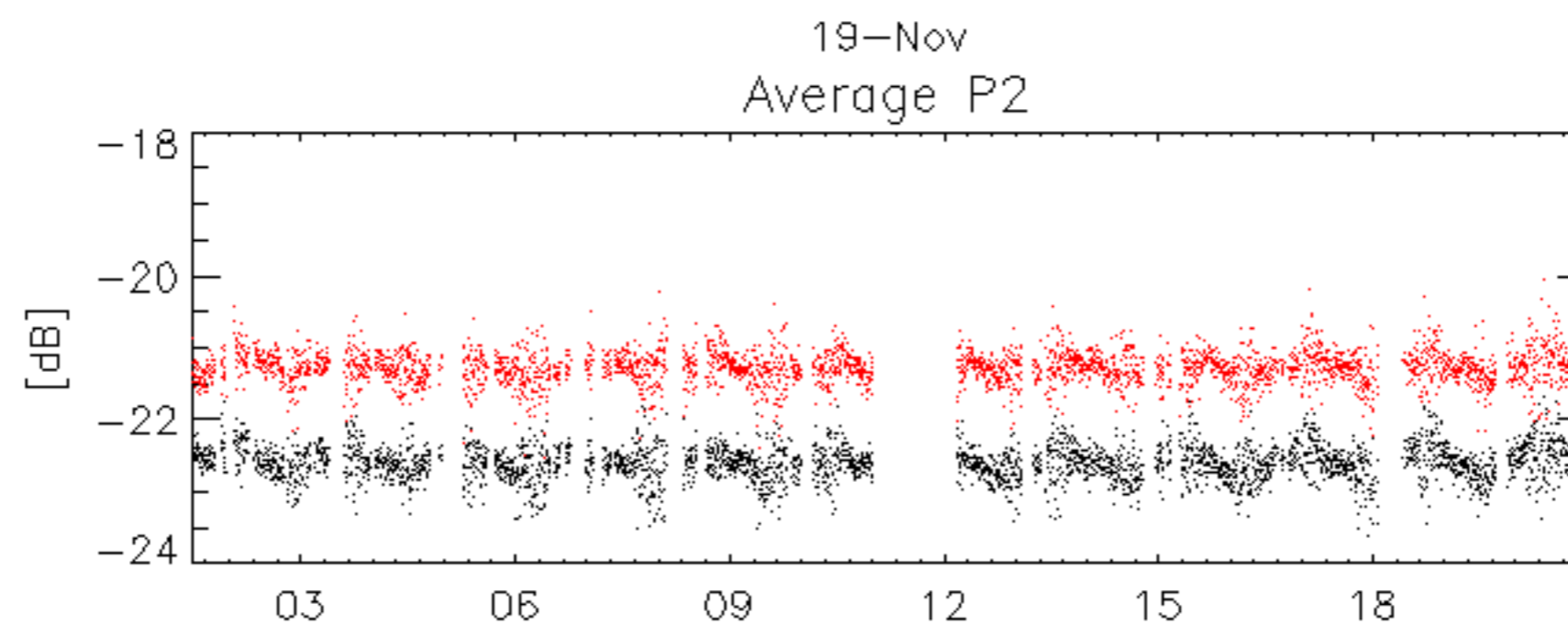
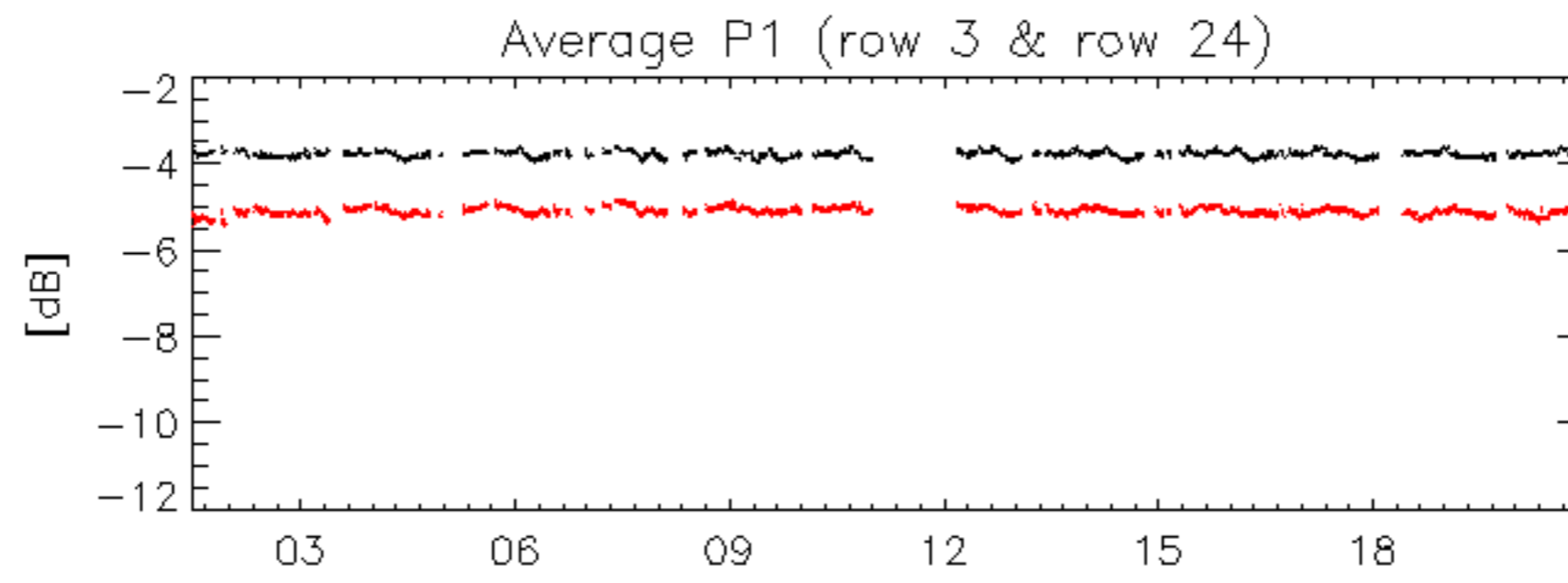


Average P2



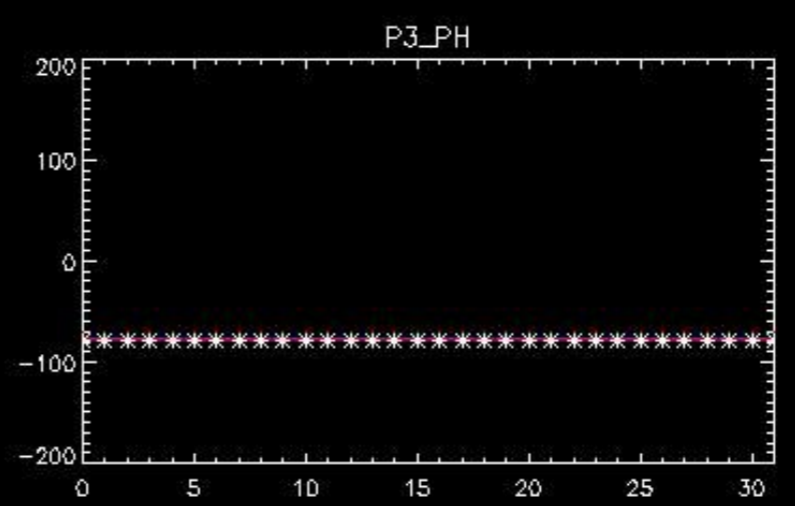
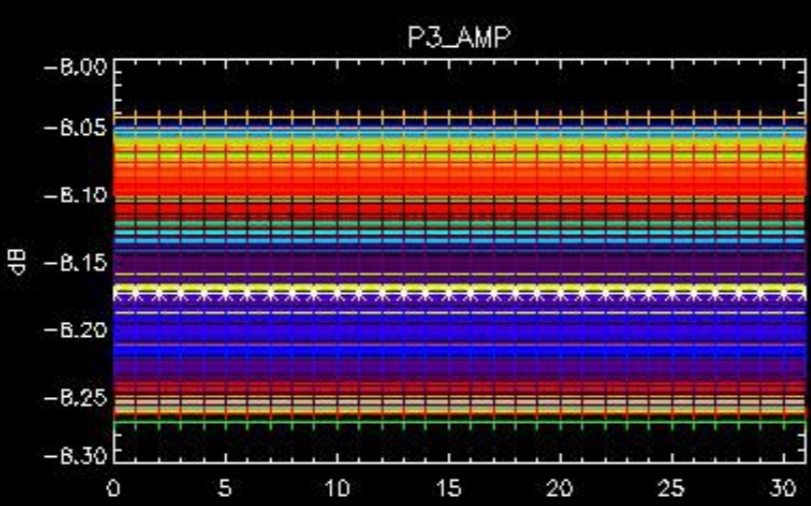
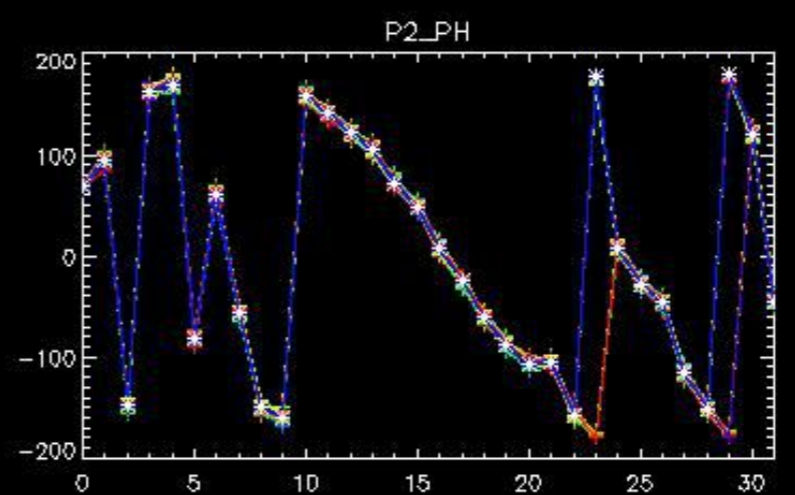
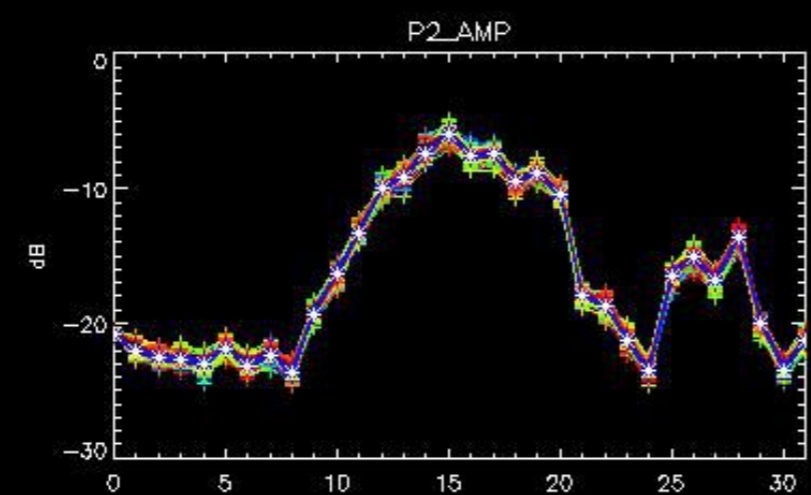
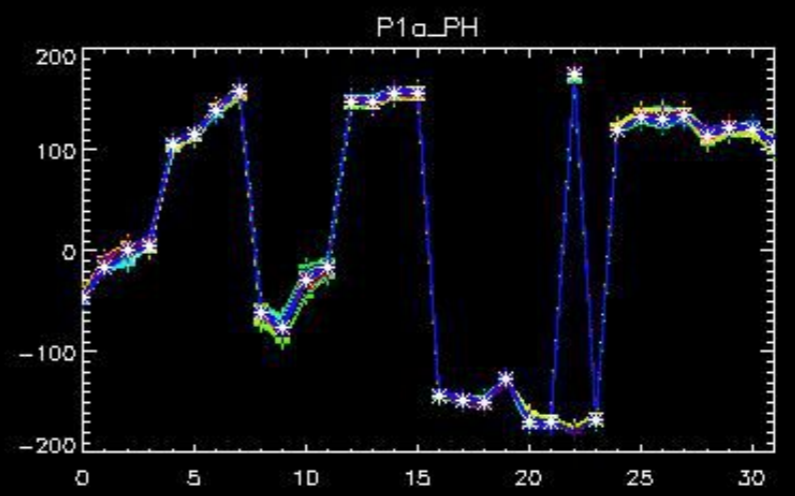
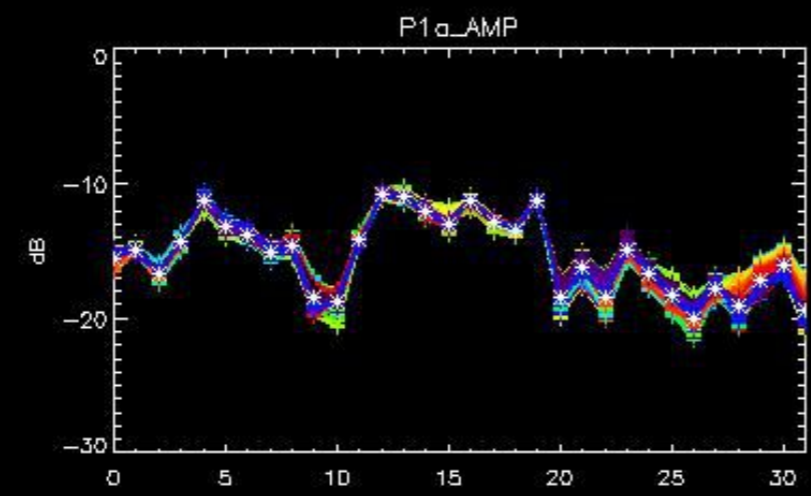
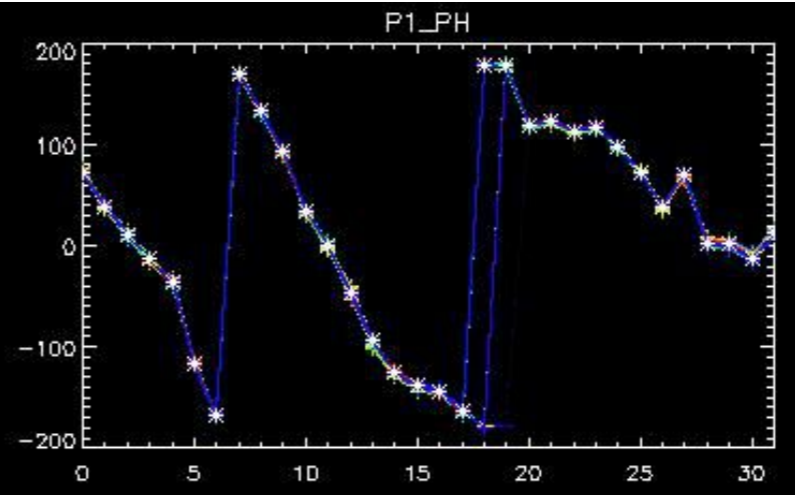
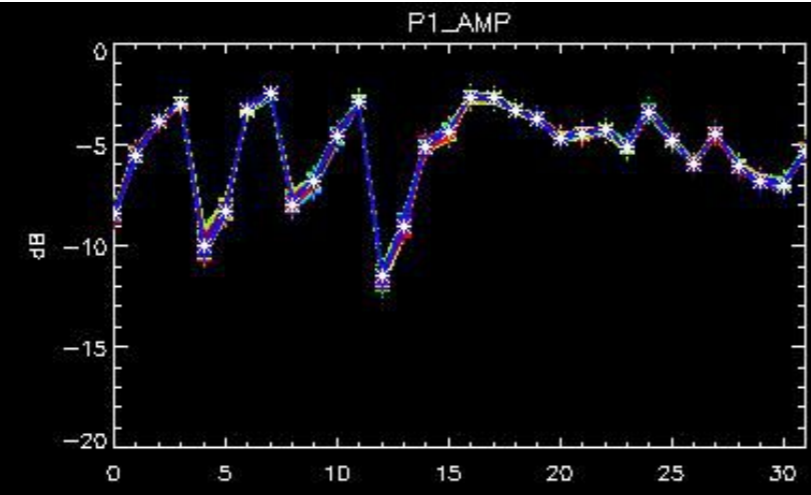
Average P3





Anomalies observed from browse products visual inspection:

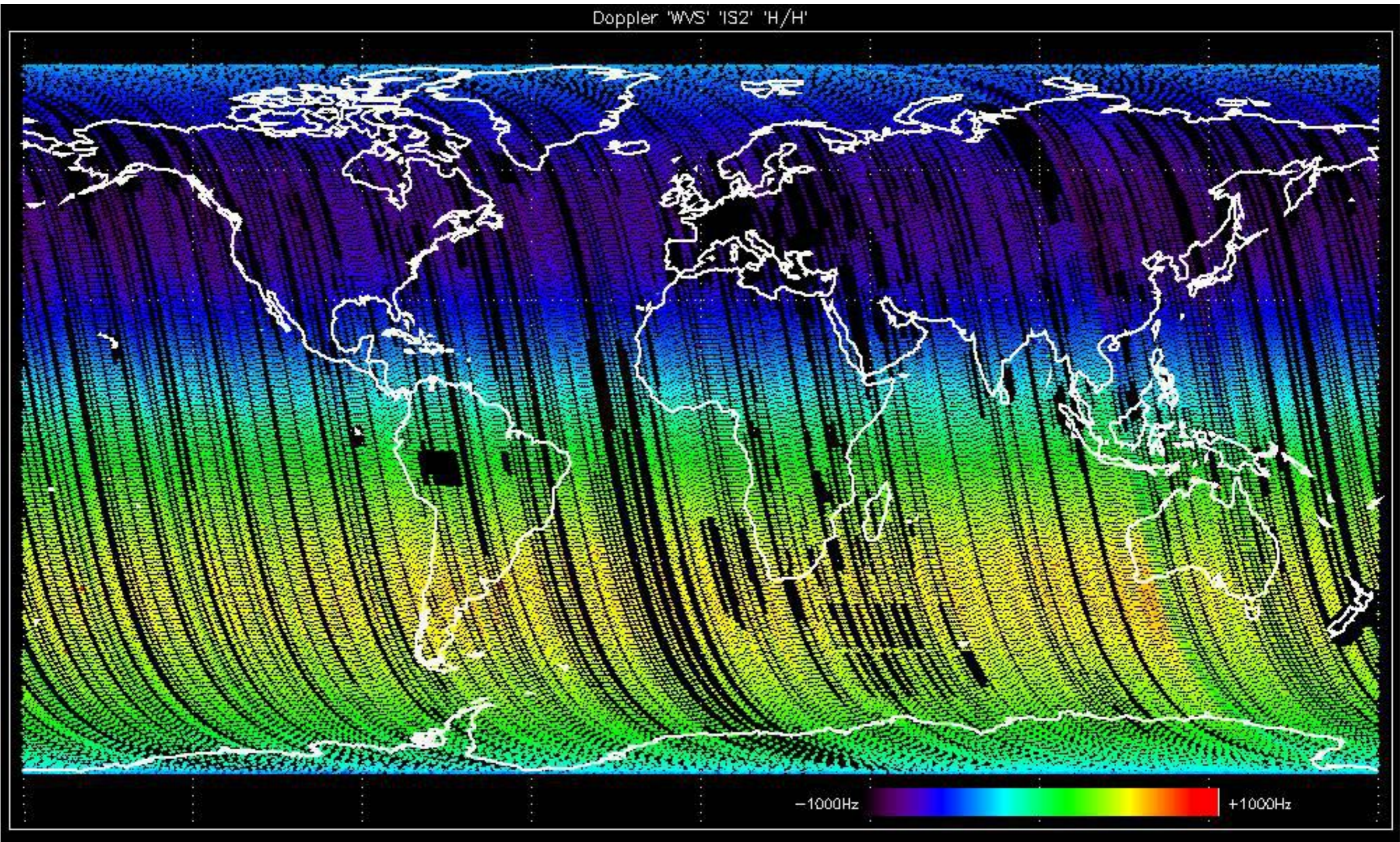
No anomalies observed.



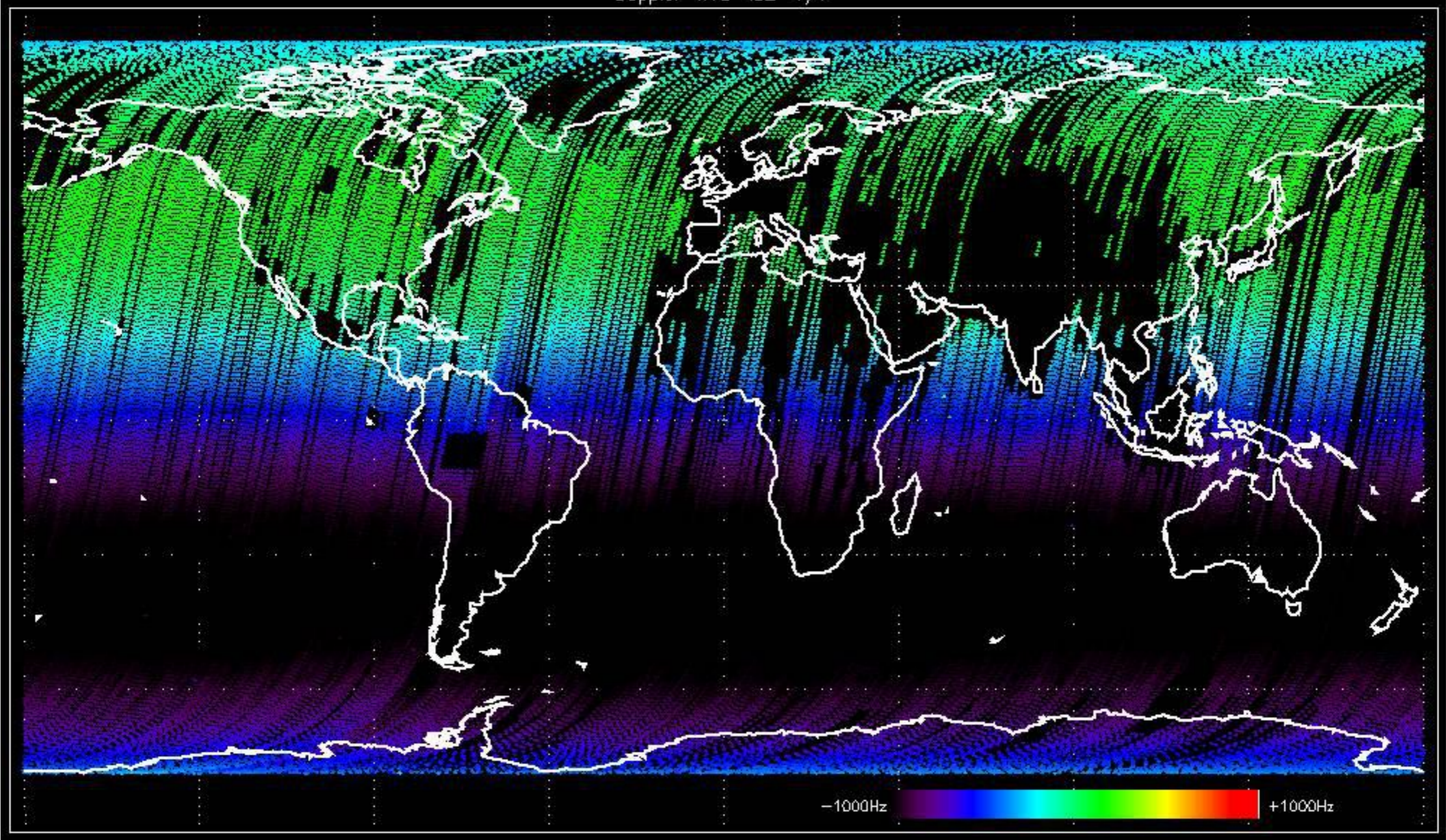
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

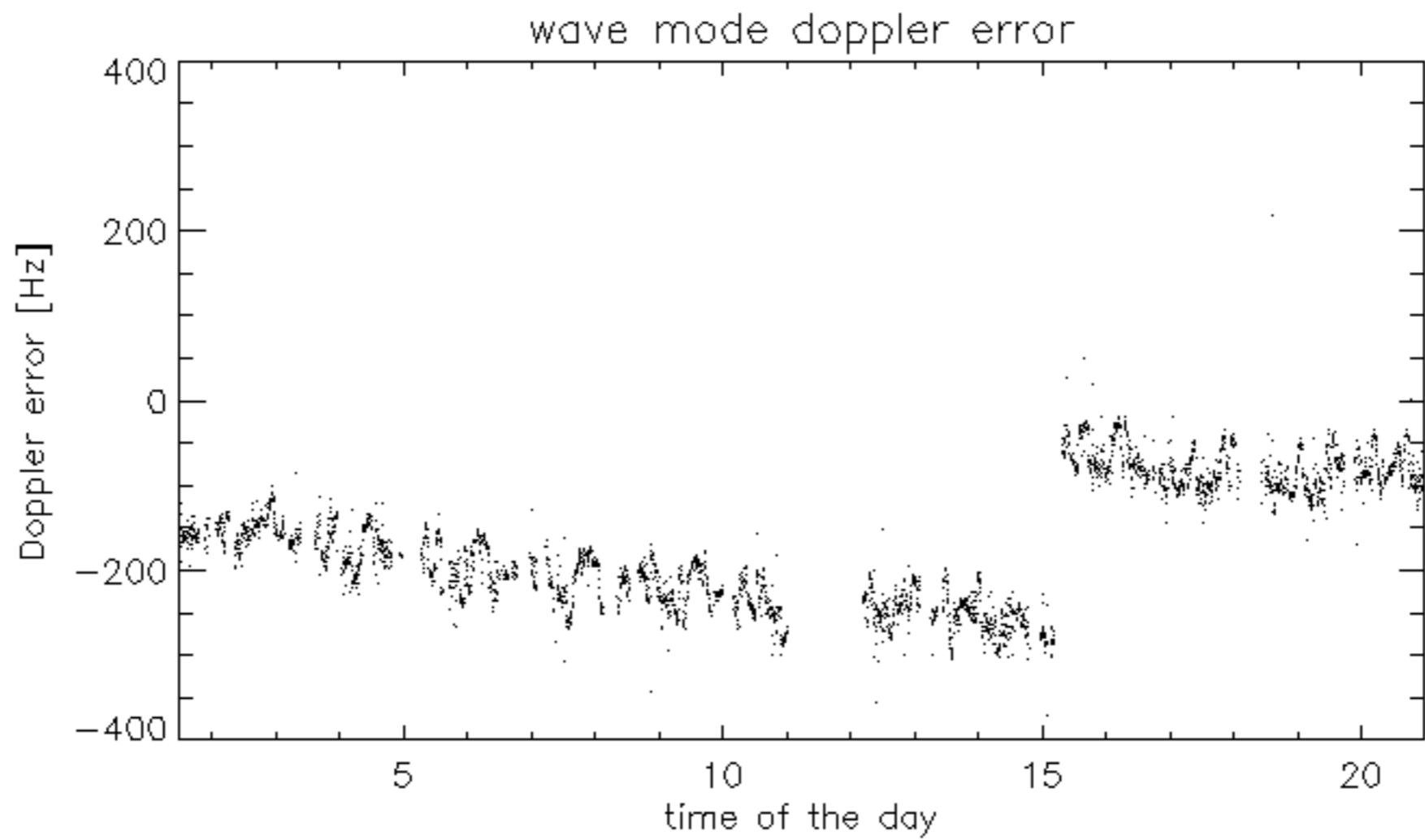
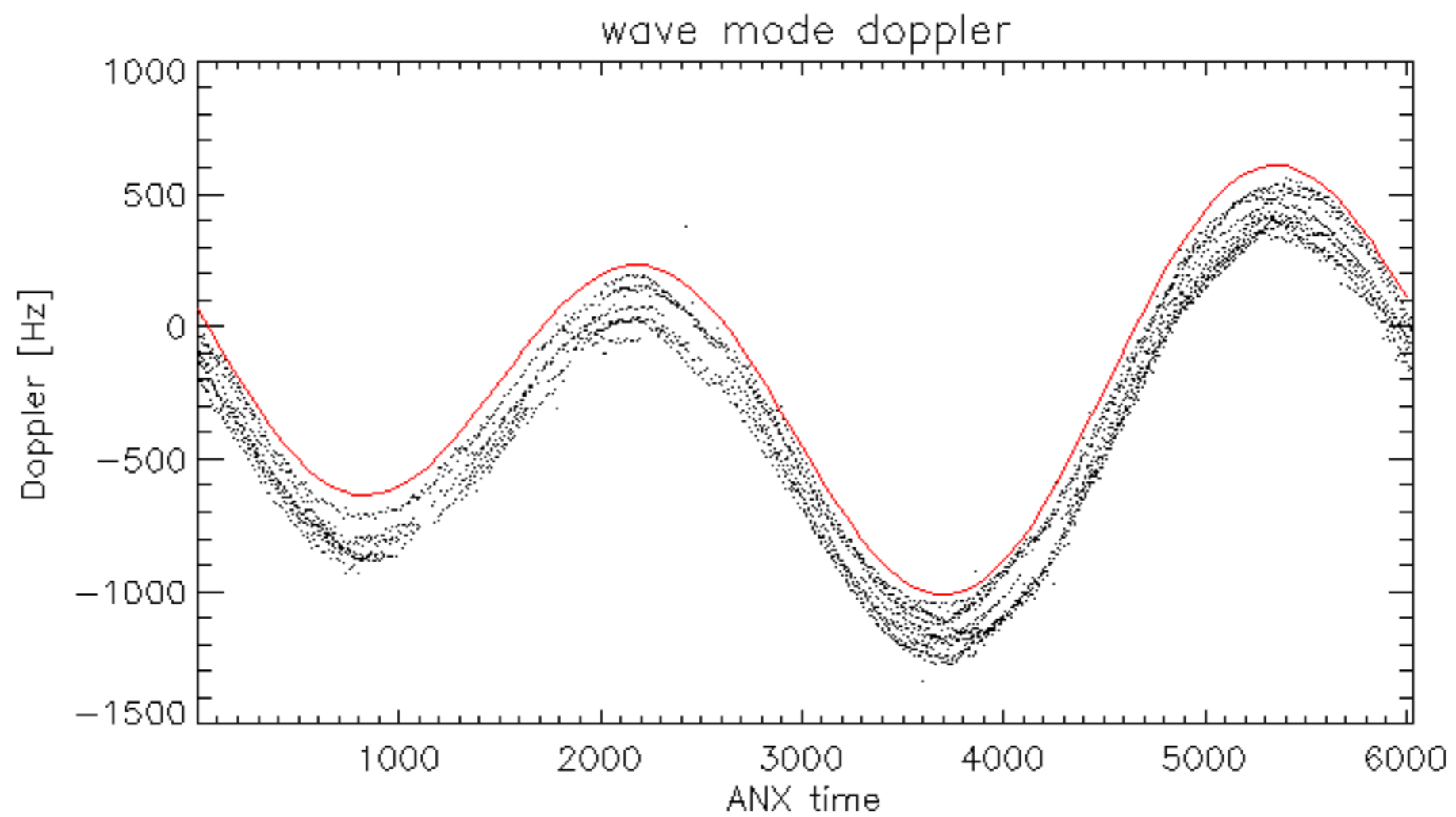
No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 35 days.

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

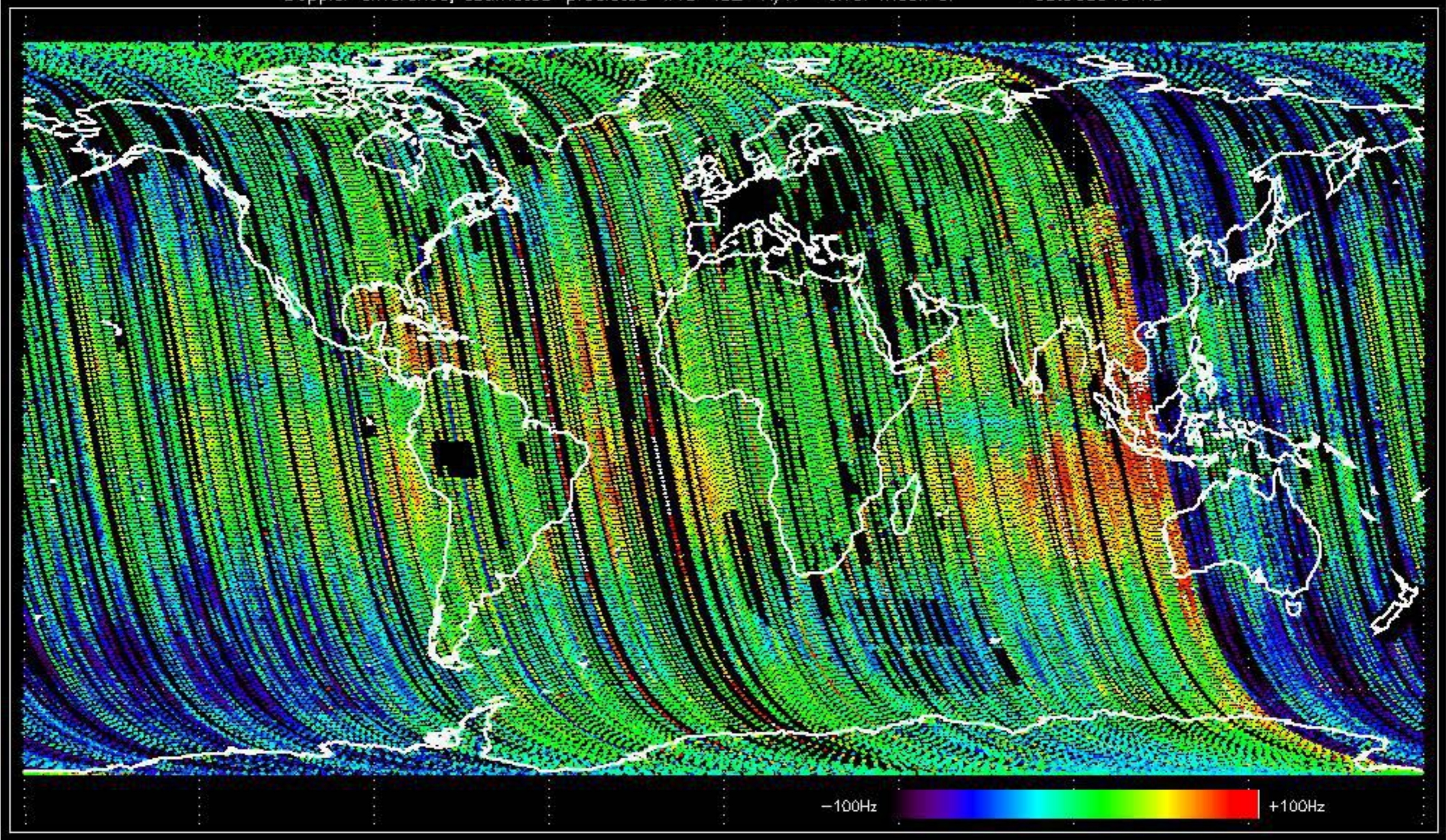


Doppler 'WVS' 'ISZ' 'V/V'

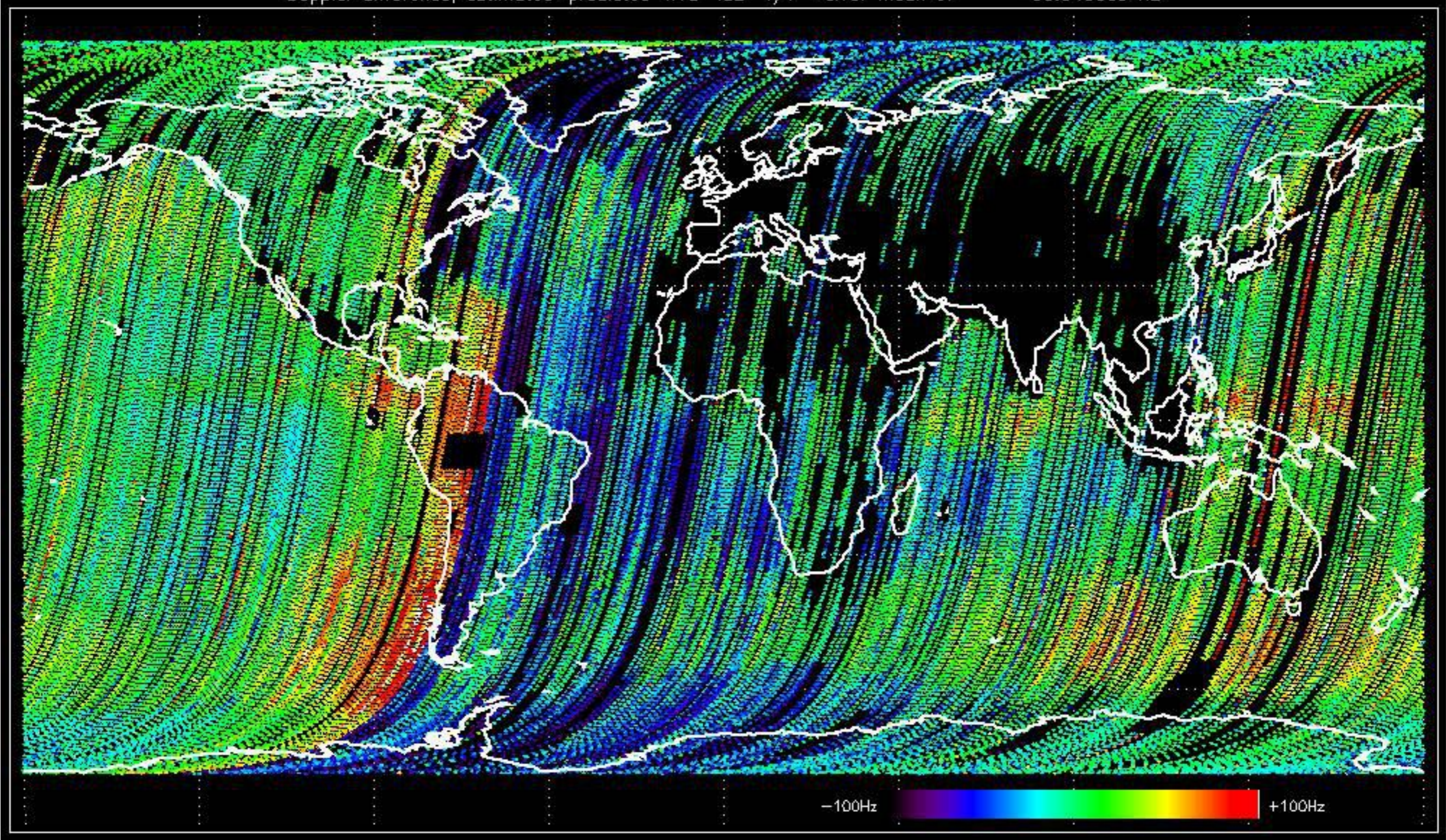




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -95.960940 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -90.540009 Hz

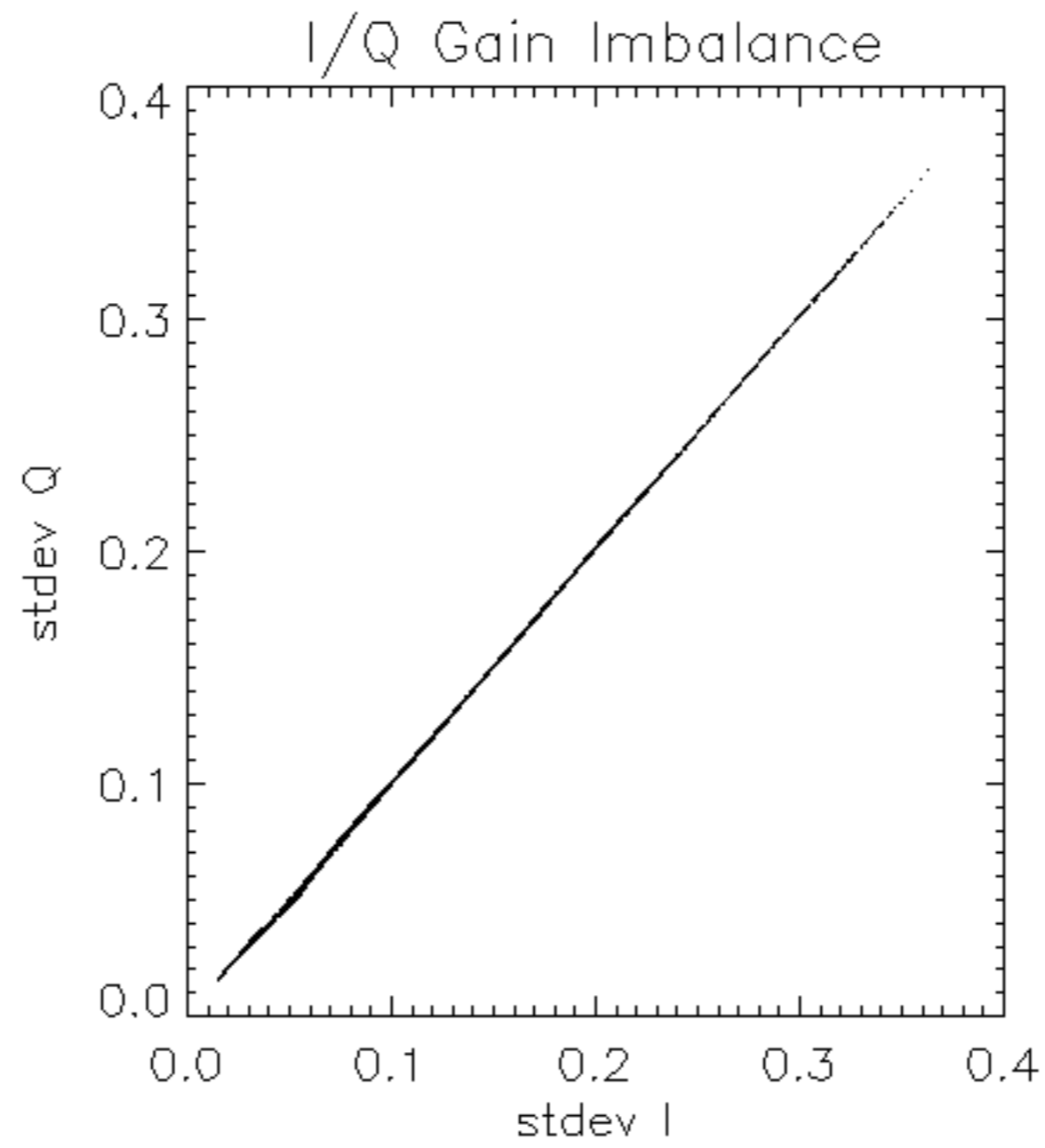


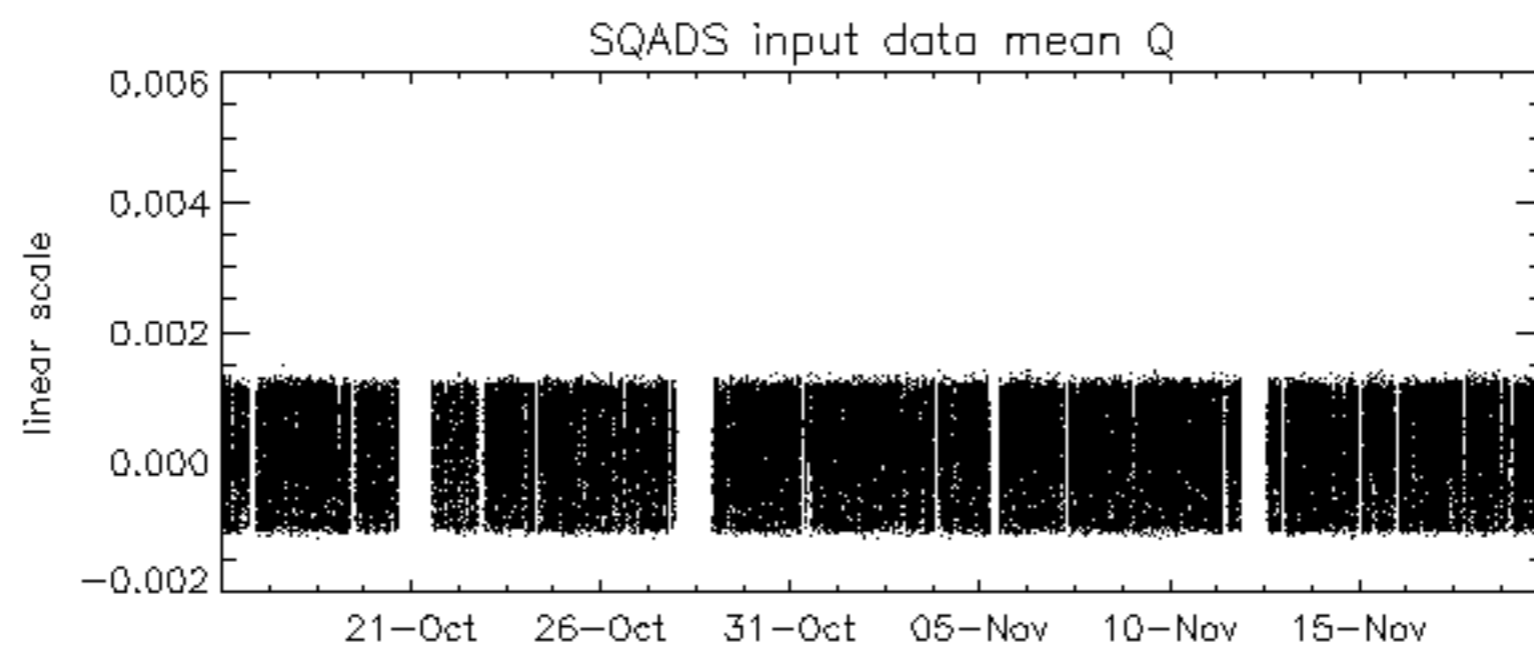
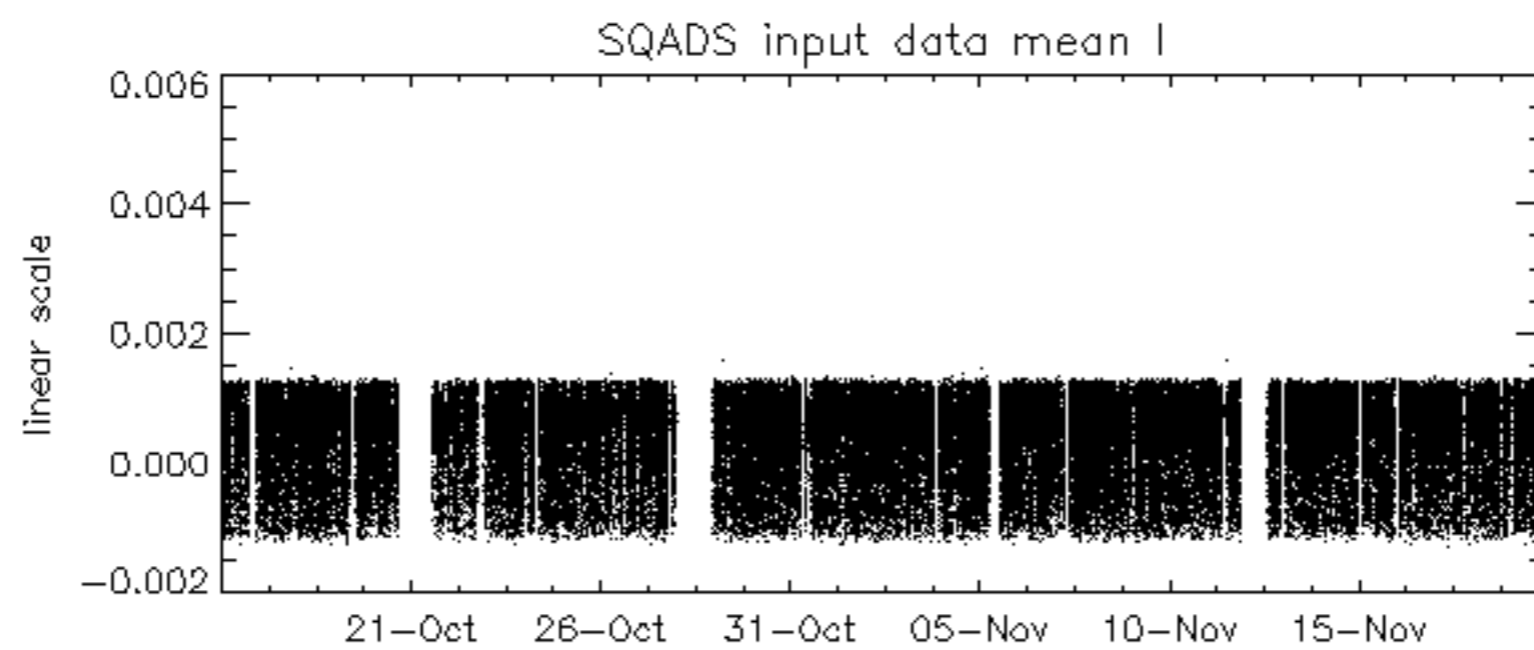
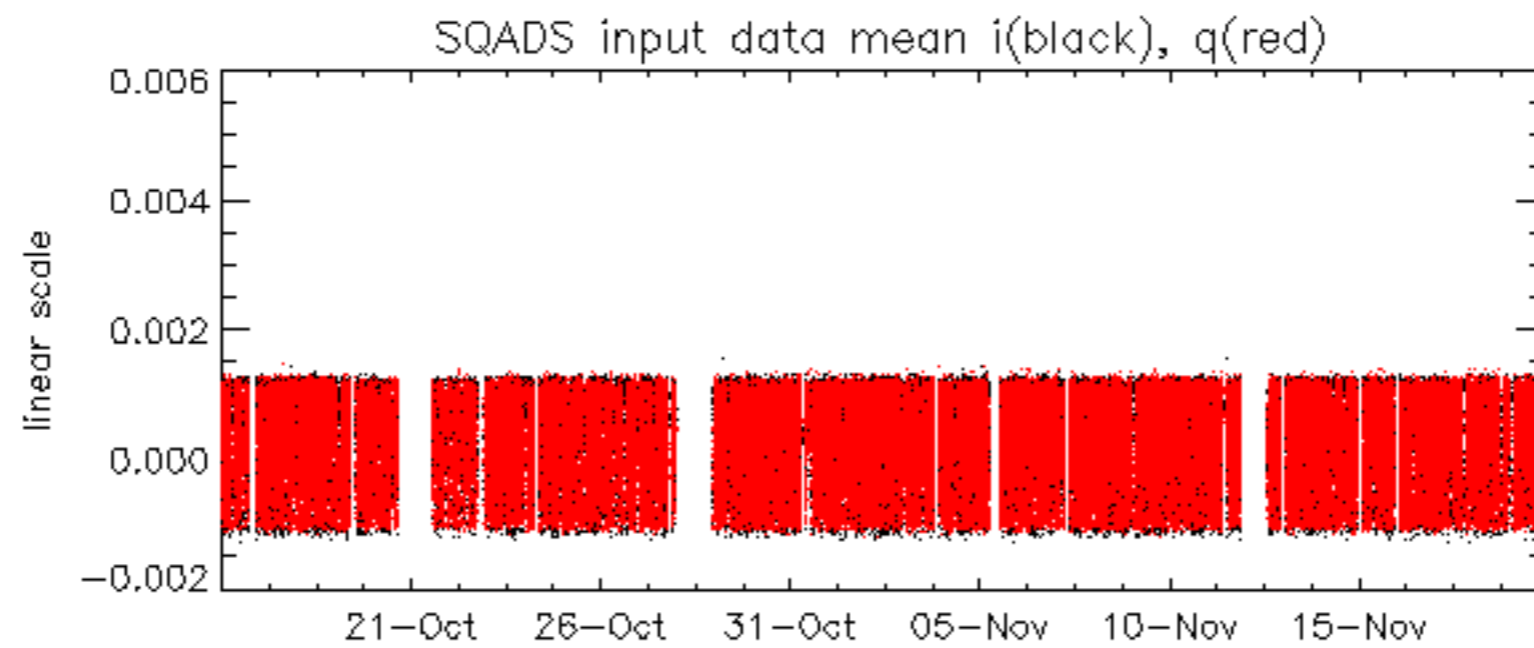
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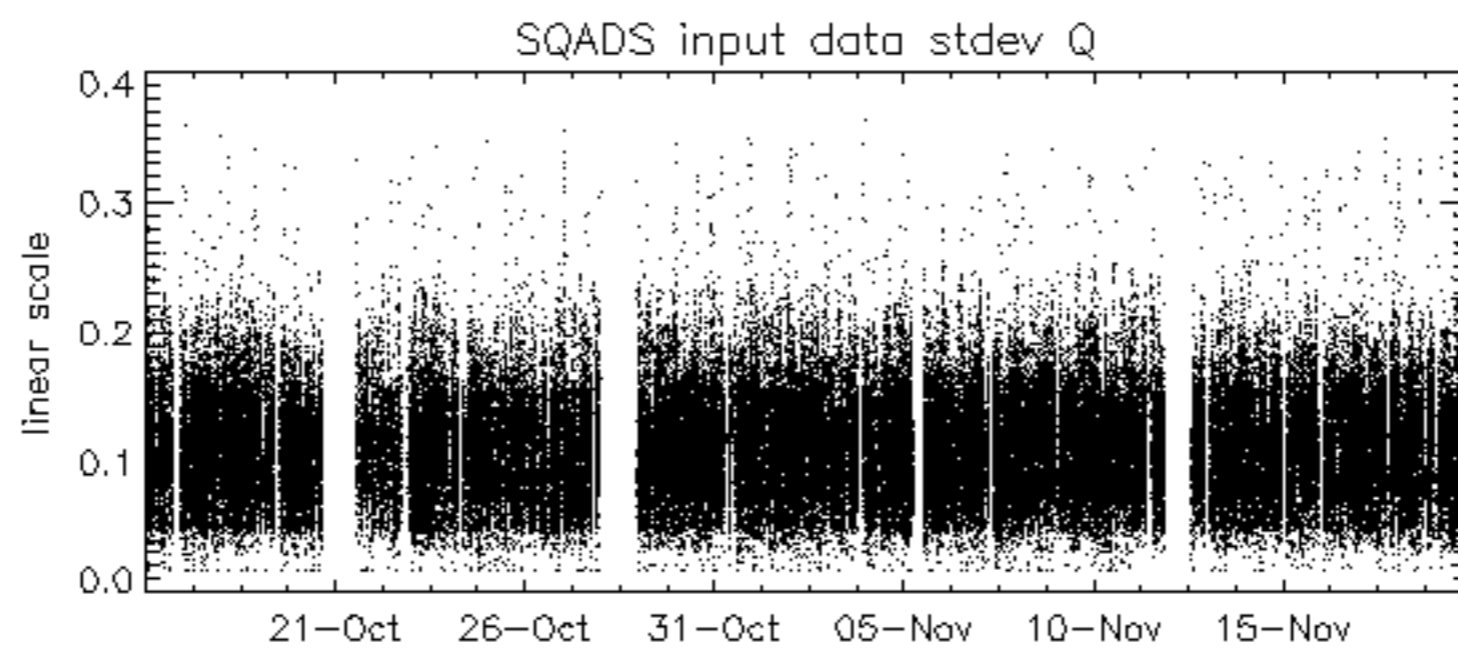
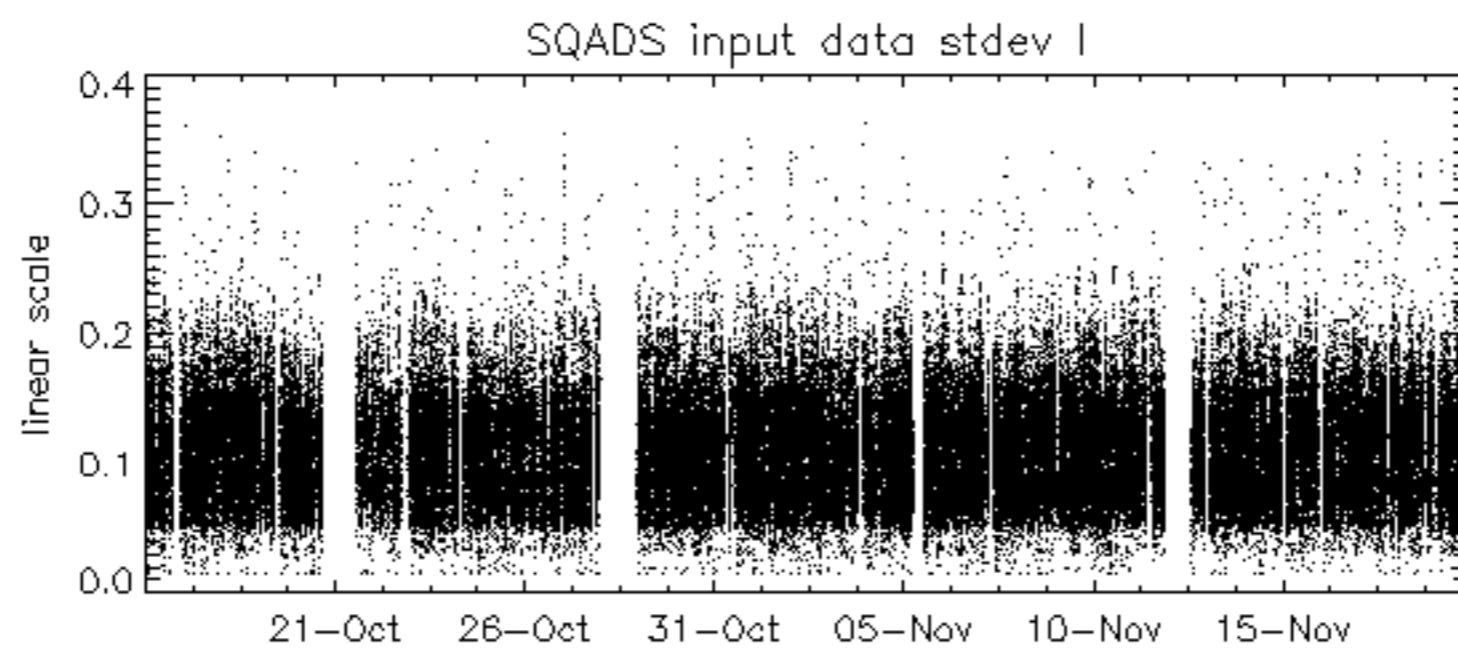
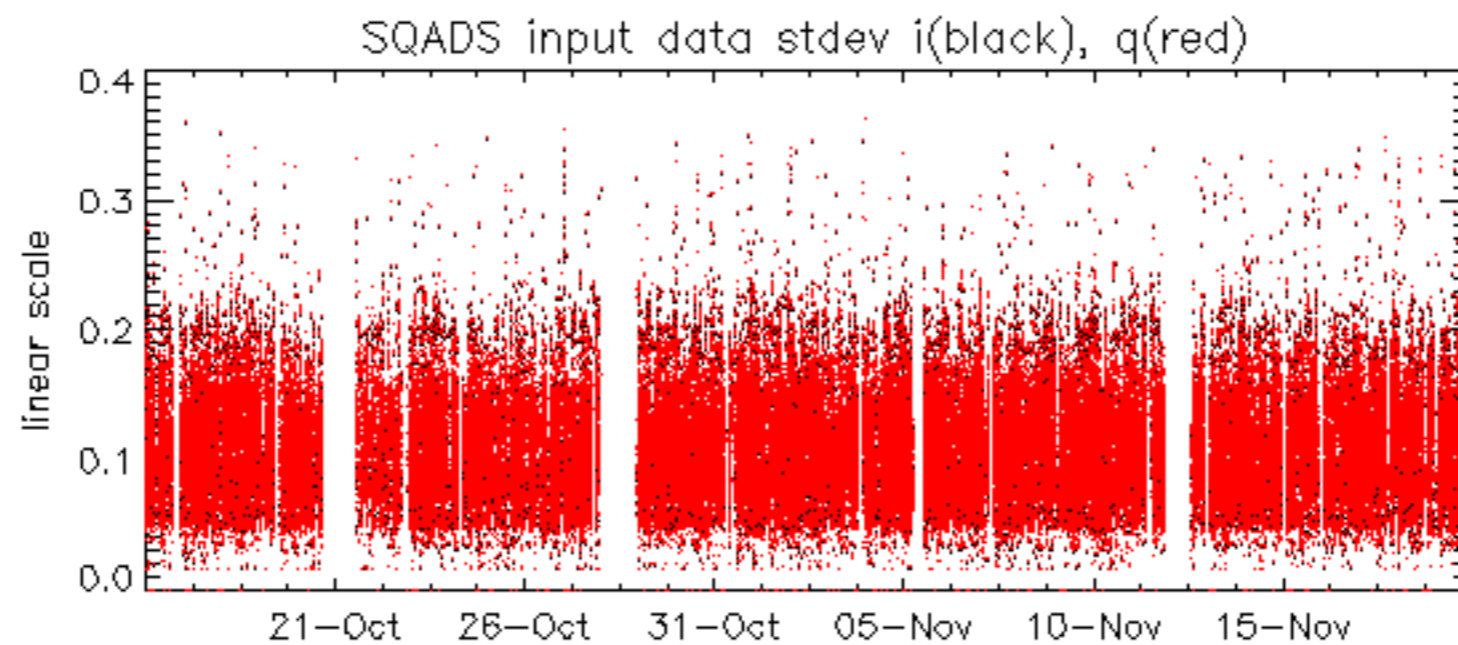
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No anomalies observed.







No unavailabilities during the reported period.