

REPORT OF 031218

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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 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

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__0PNPDK20031217_193528_000000152022_00328_09400_0080.N1
- ASA_MS__0PNPDK20031217_193648_000000152022_00328_09400_0081.N1

Polarisation	Start Time
V	20031217 193648
H	20031217 193528

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	-3.72196	-22.5836	-8.16966
	stdev	0.00741013	0.0812351	0.00443374
24	mean	-5.05894	-21.2022	-8.16966
	stdev	0.0121121	0.0688916	0.00443374



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.76961	-22.5622	-8.14868
	stdev	0.0778617	0.0715517	0.00516533
24	mean	-5.09685	-21.2250	-8.14868
	stdev	0.0136239	0.0649302	0.00516533



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	0.000341990
	stdev	1.10798e-05
MEAN Q	mean	0.000194881
	stdev	1.10885e-05



5.2 - Input stdev I/Q

channel	stat	DSS-B
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STDEV I	mean	0.115460
	stdev	0.00153501
STDEV Q	mean	0.115708
	stdev	0.00155069



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

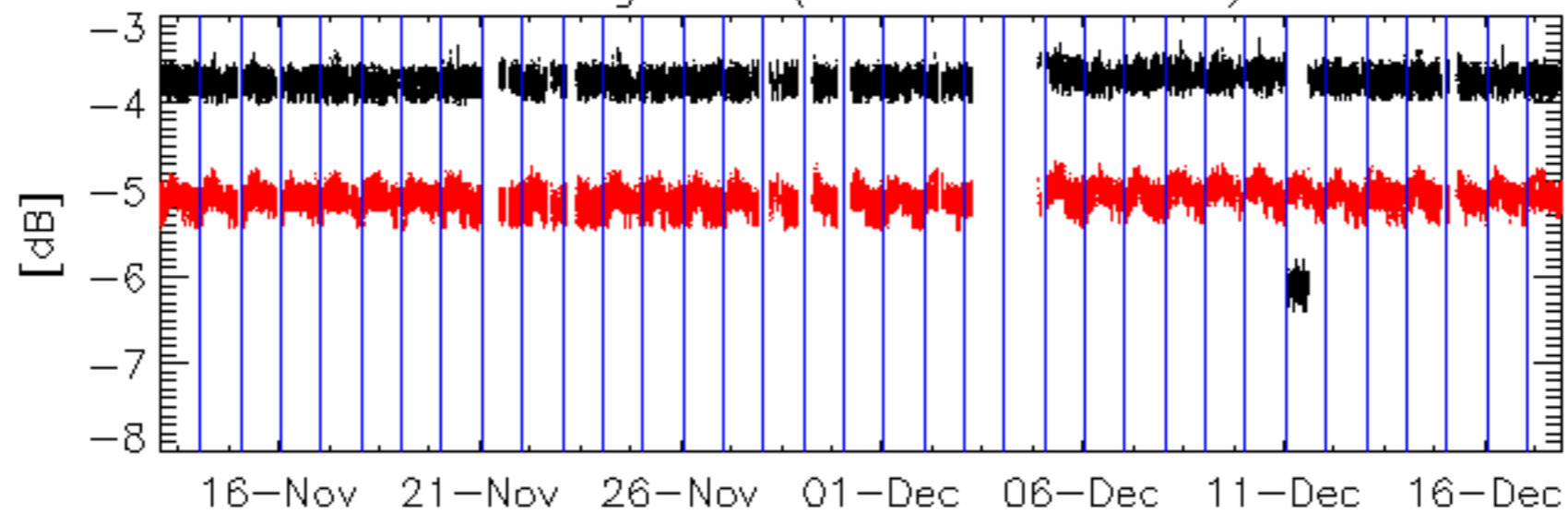
6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

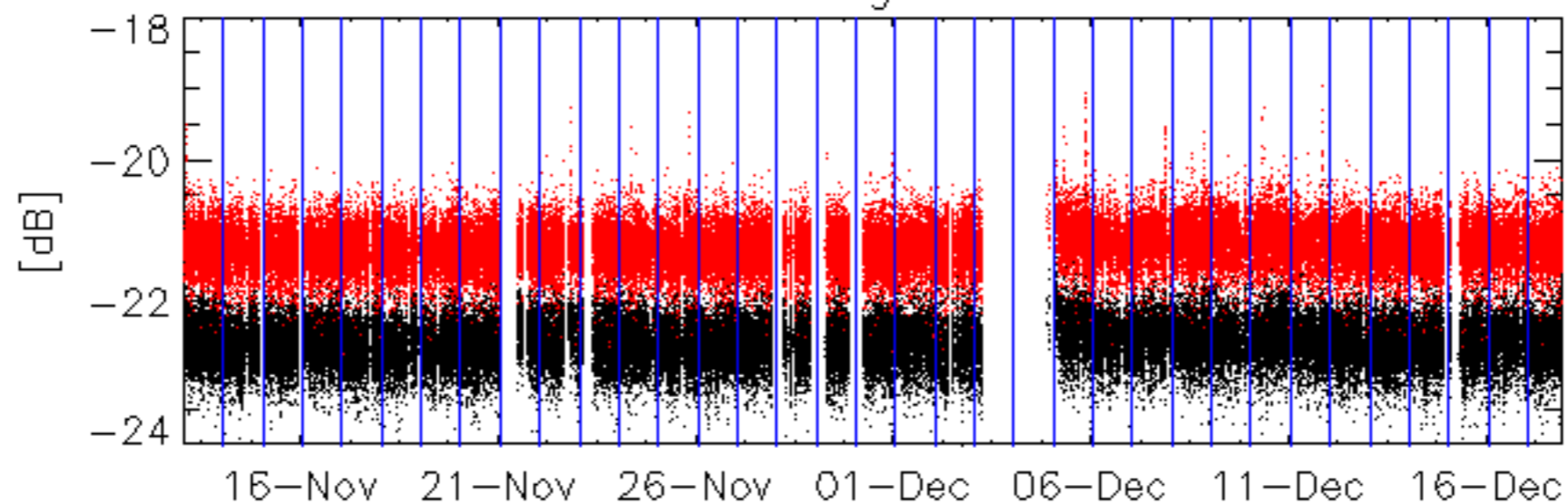
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

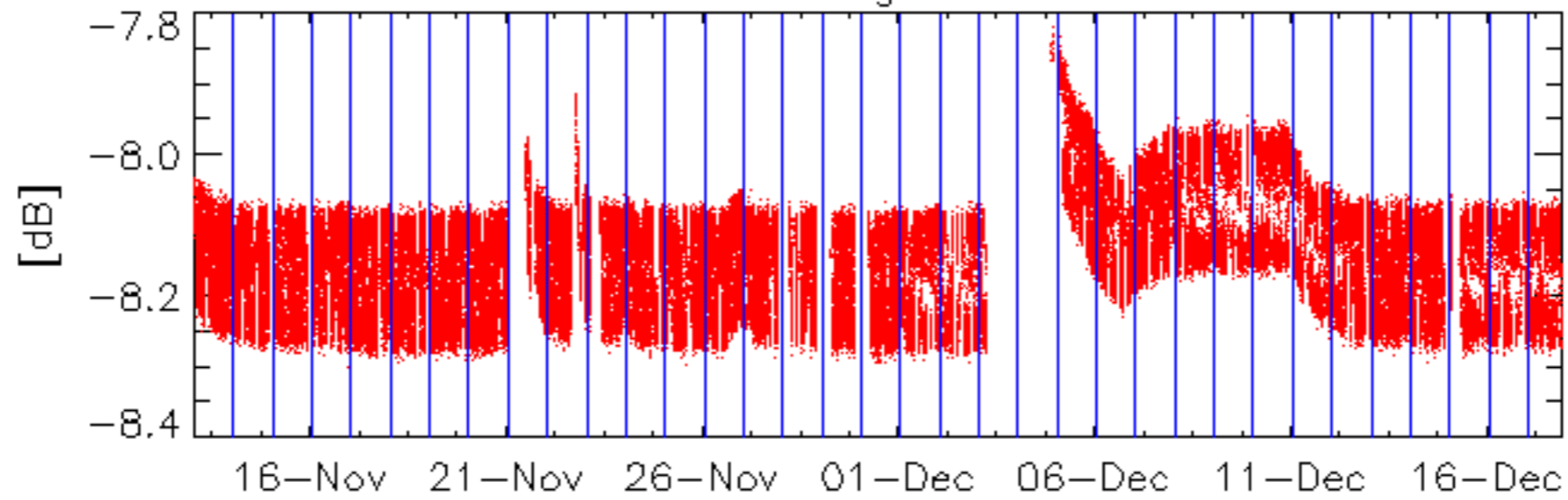

Average P1 (row 3 & row 24)



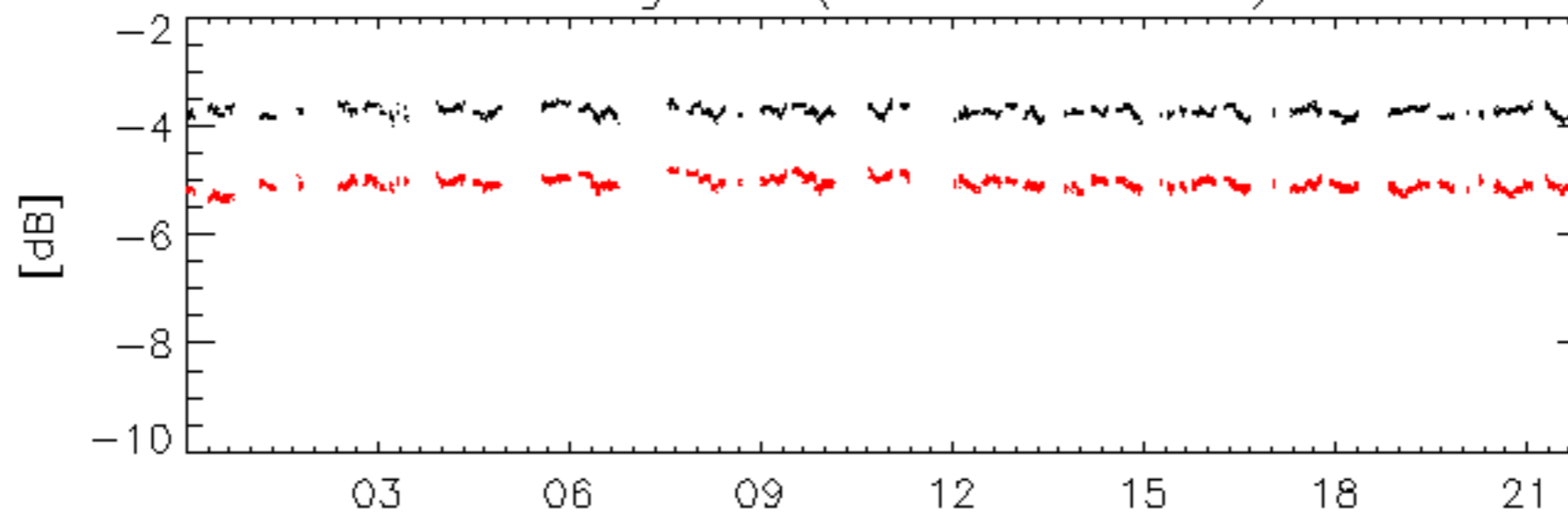
Average P2



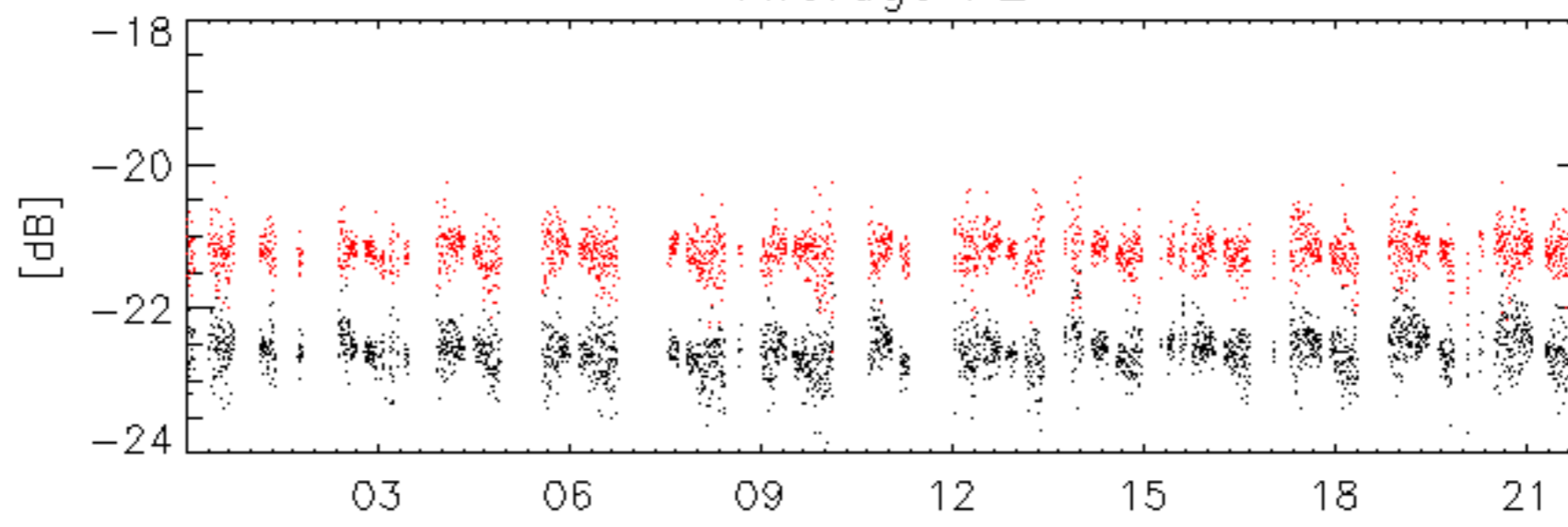
Average P3



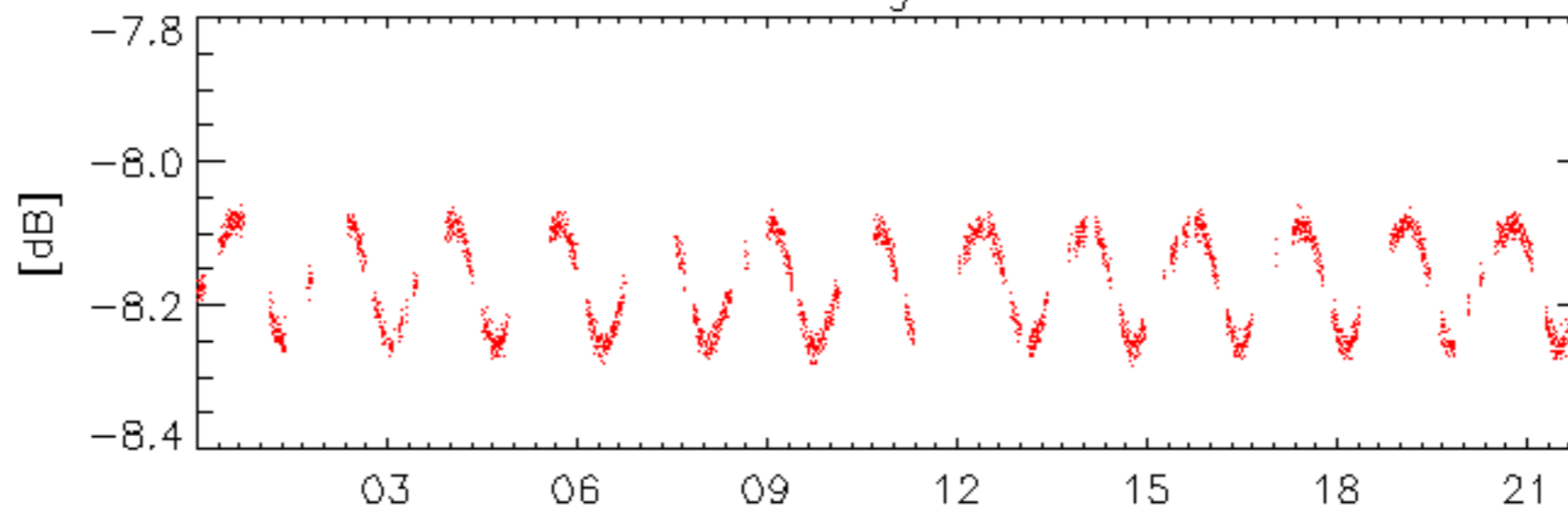
Average P1 (row 3 & row 24)



17-Dec
Average P2



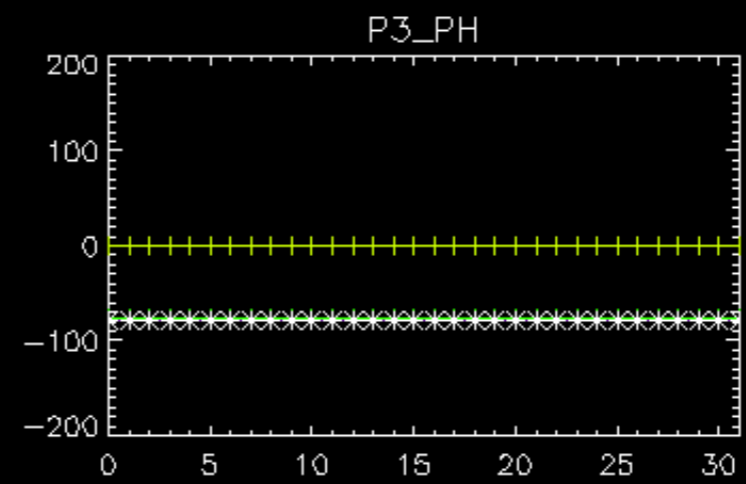
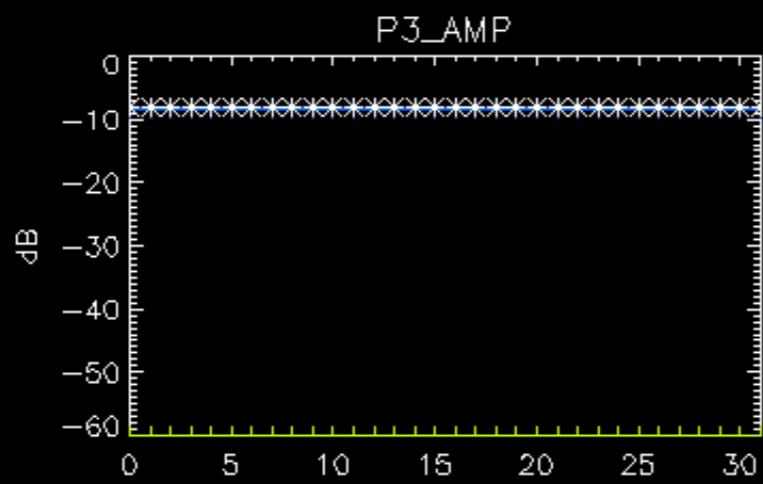
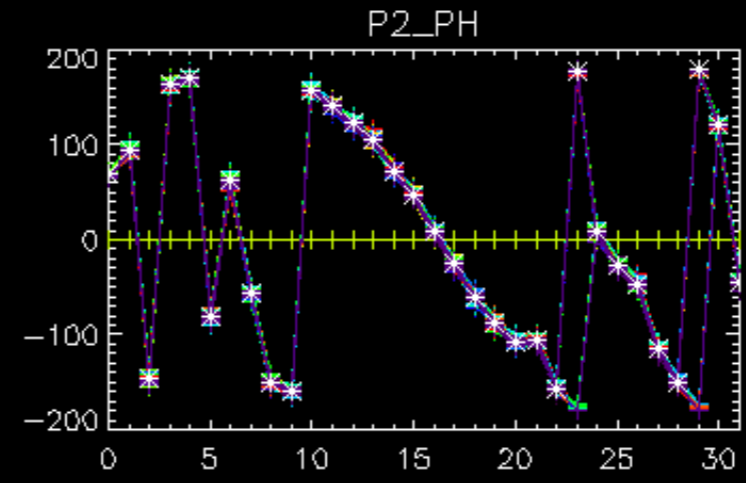
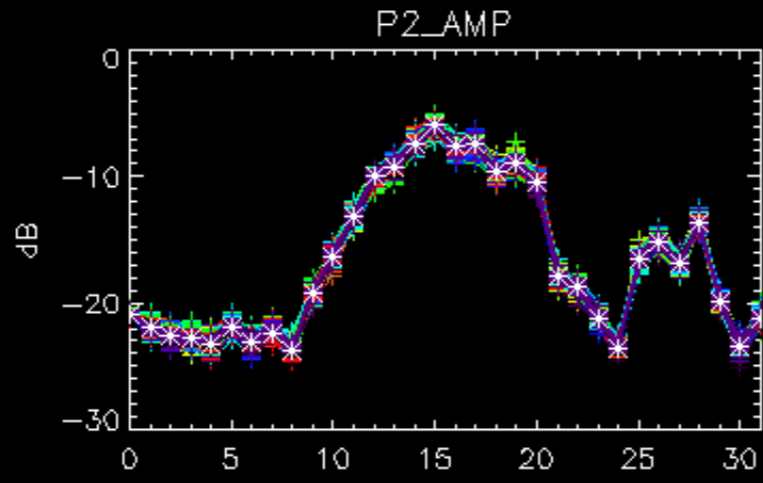
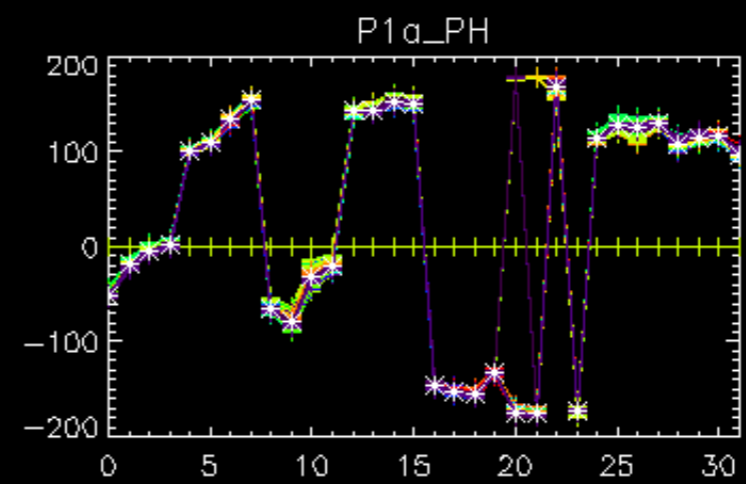
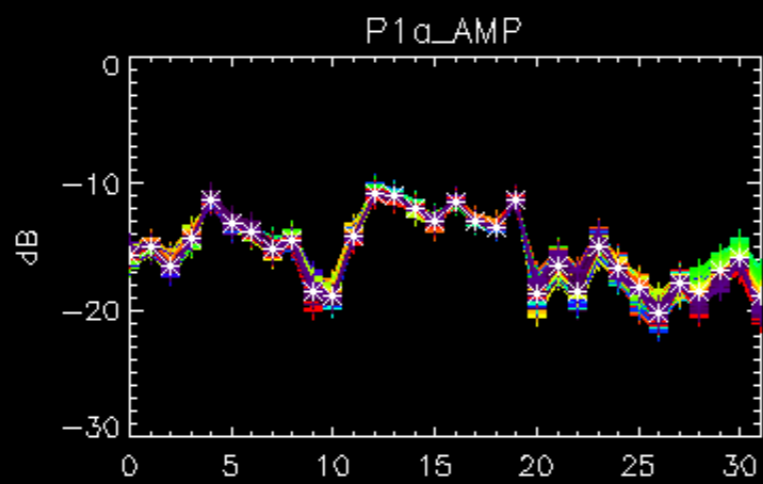
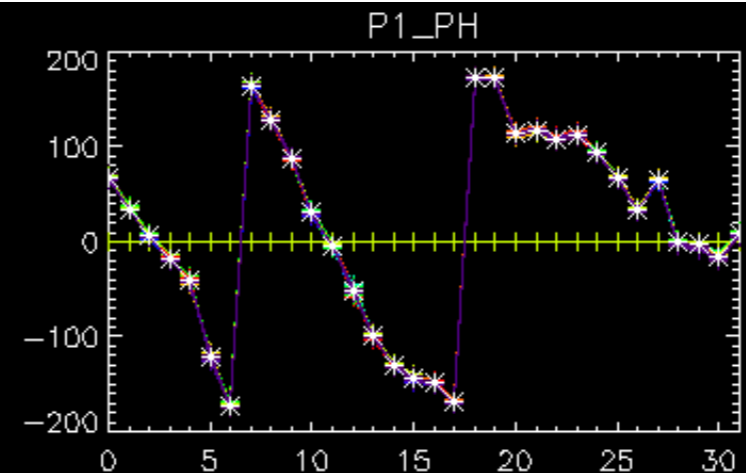
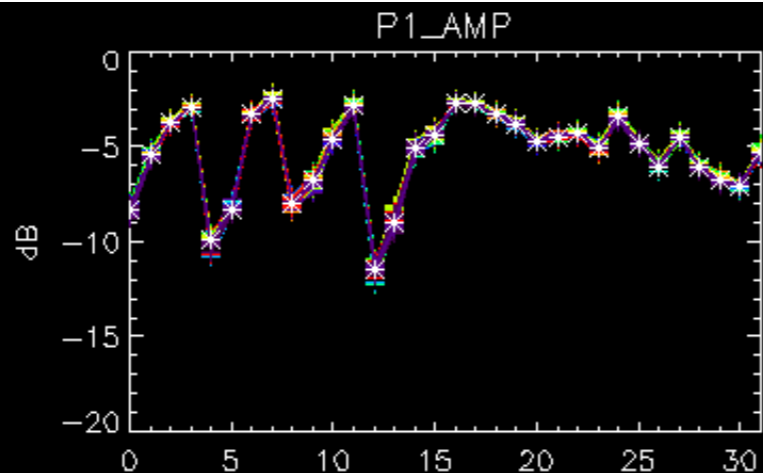
17-Dec
Average P3



17-Dec

No anomalies observed on available browse products

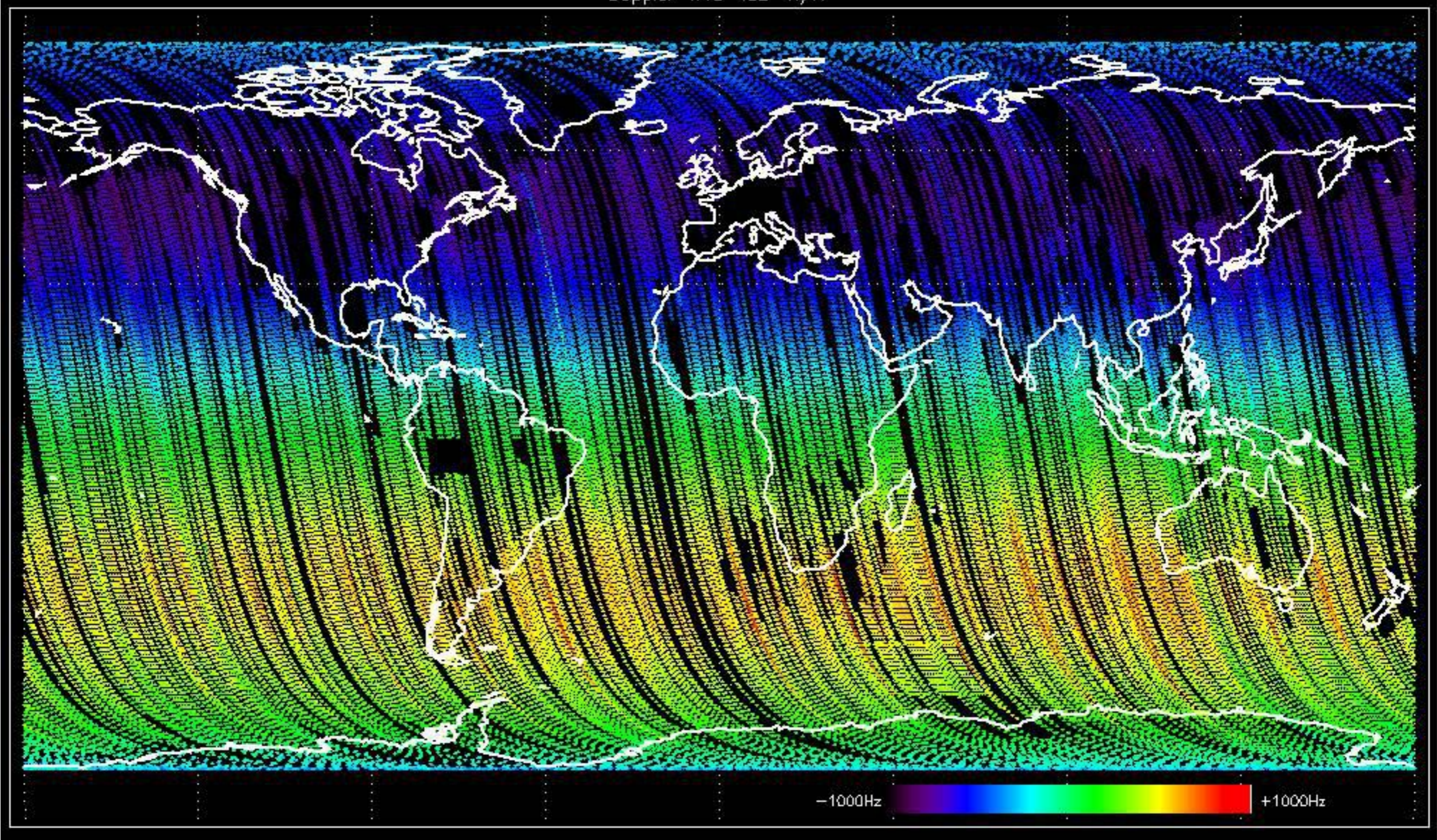
No anomalies observed.



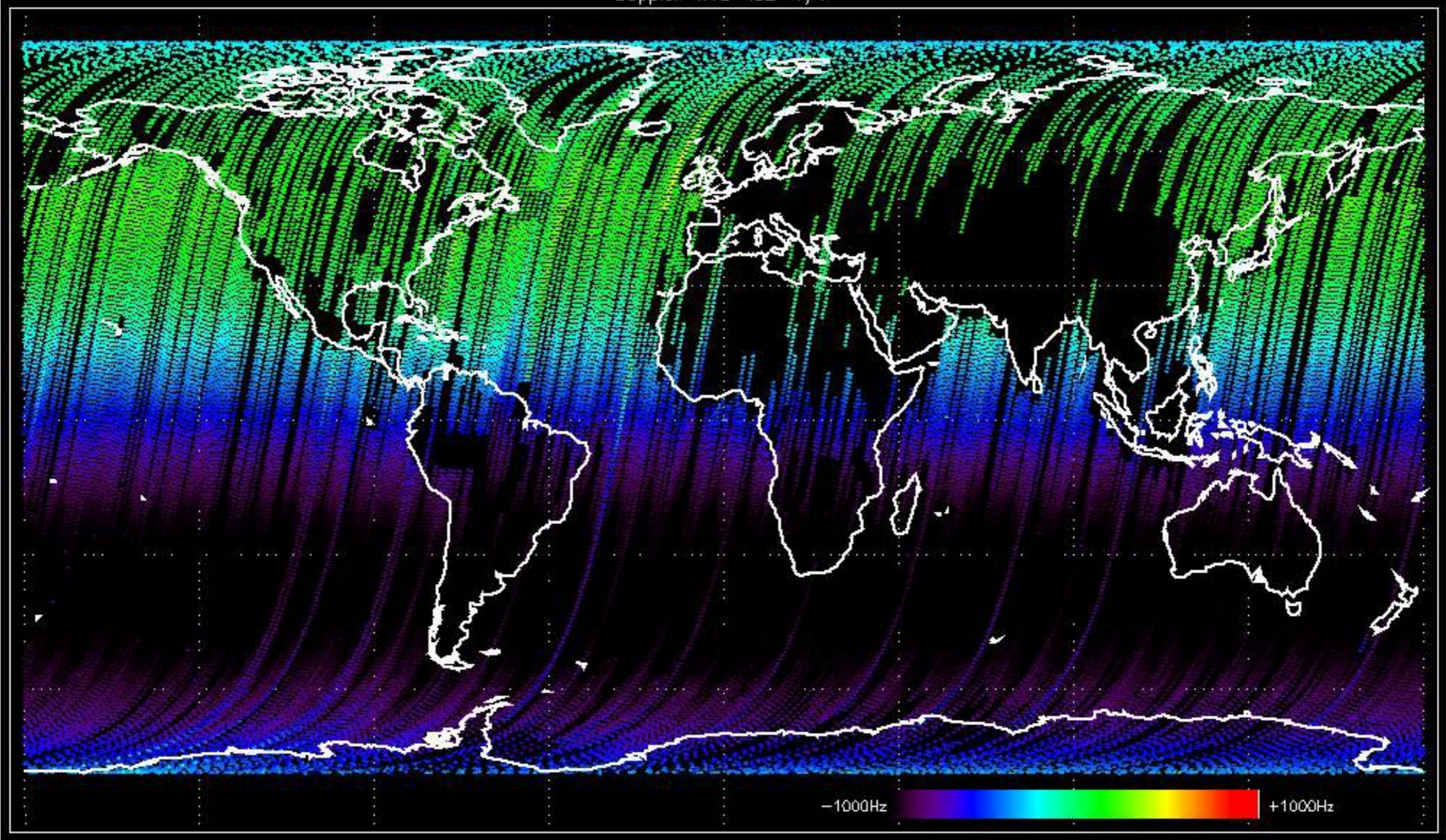
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- Stable raw data statistics.
- Nominal Doppler behavior.

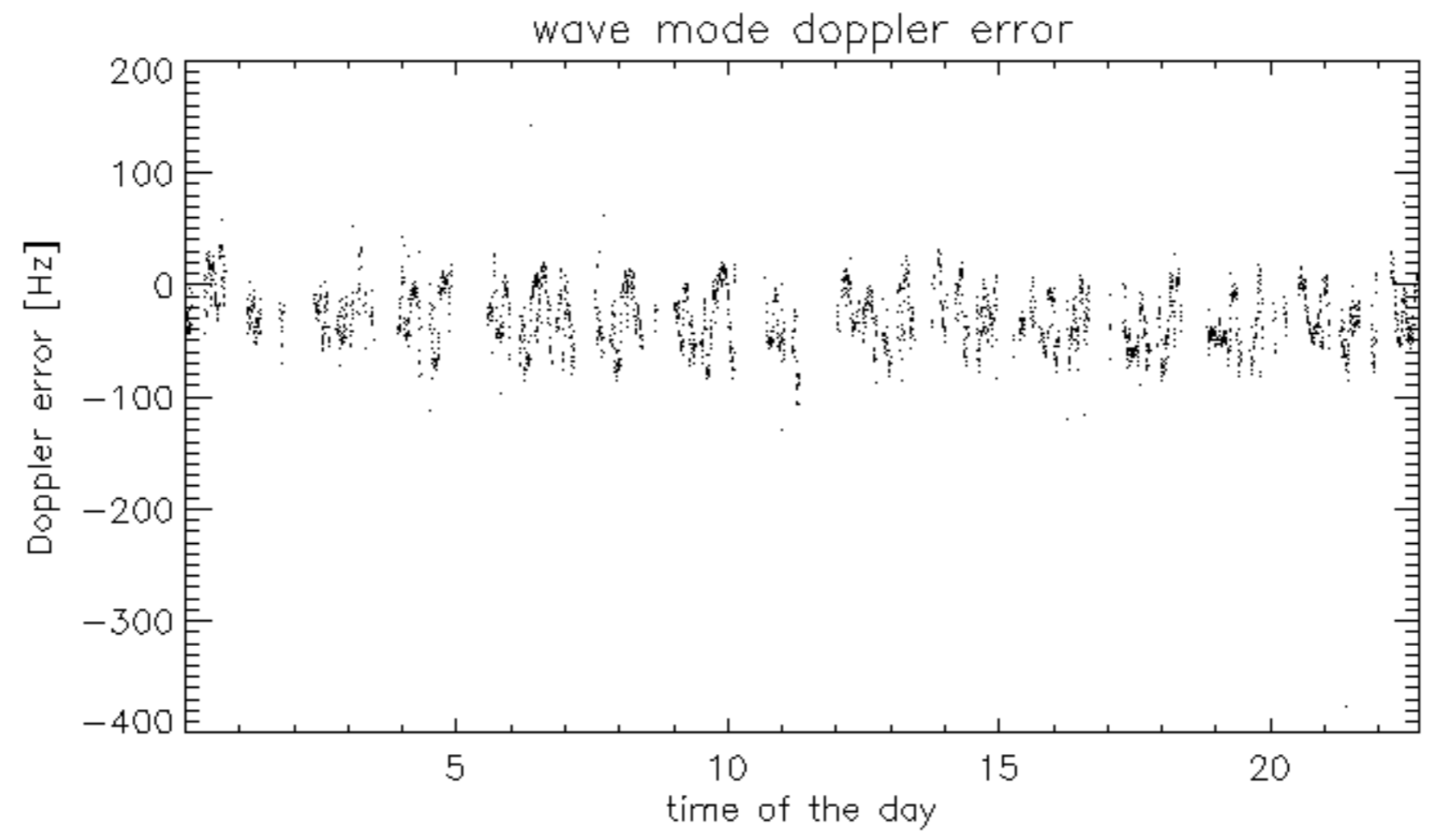
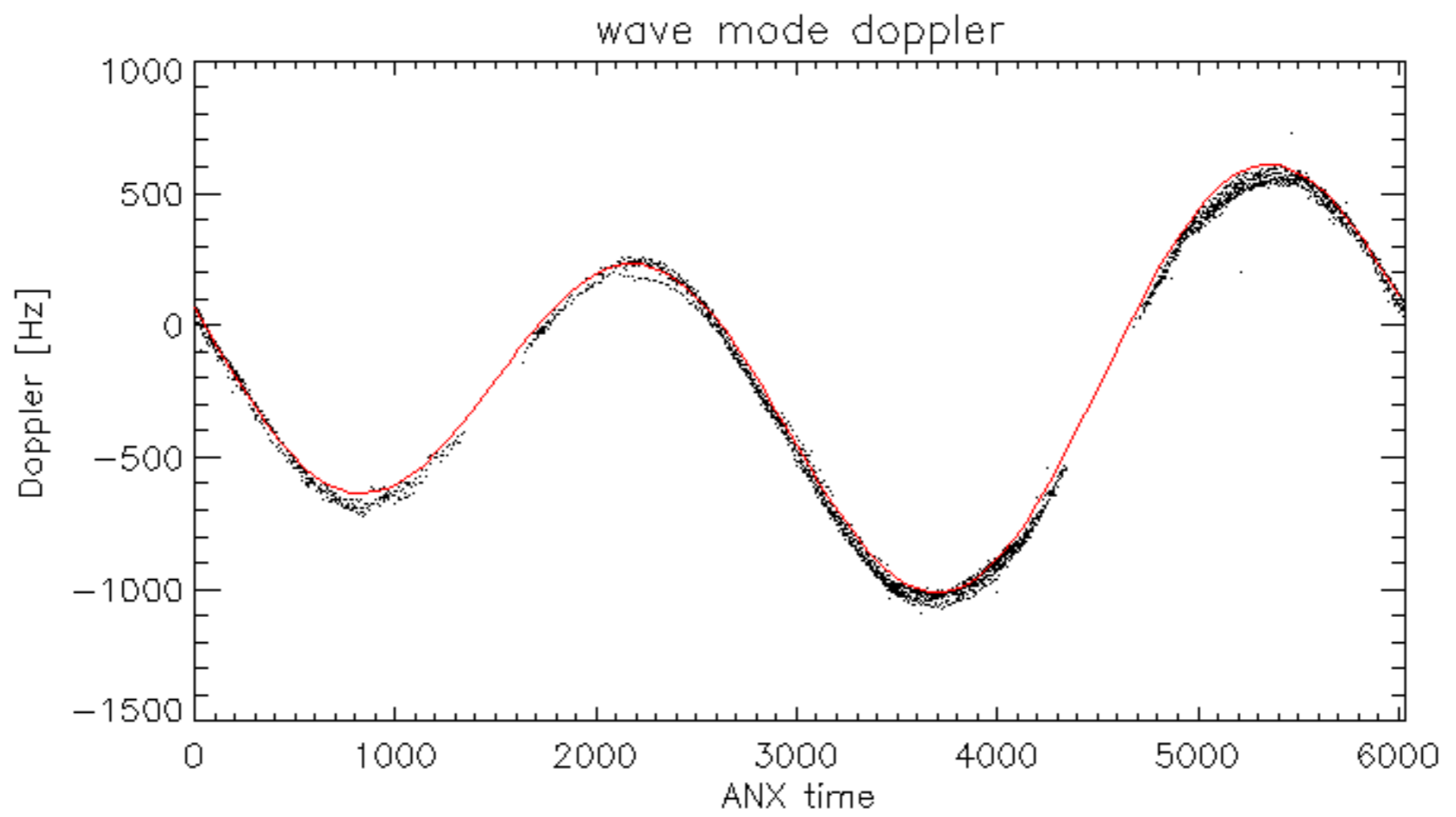
No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 35 days.

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

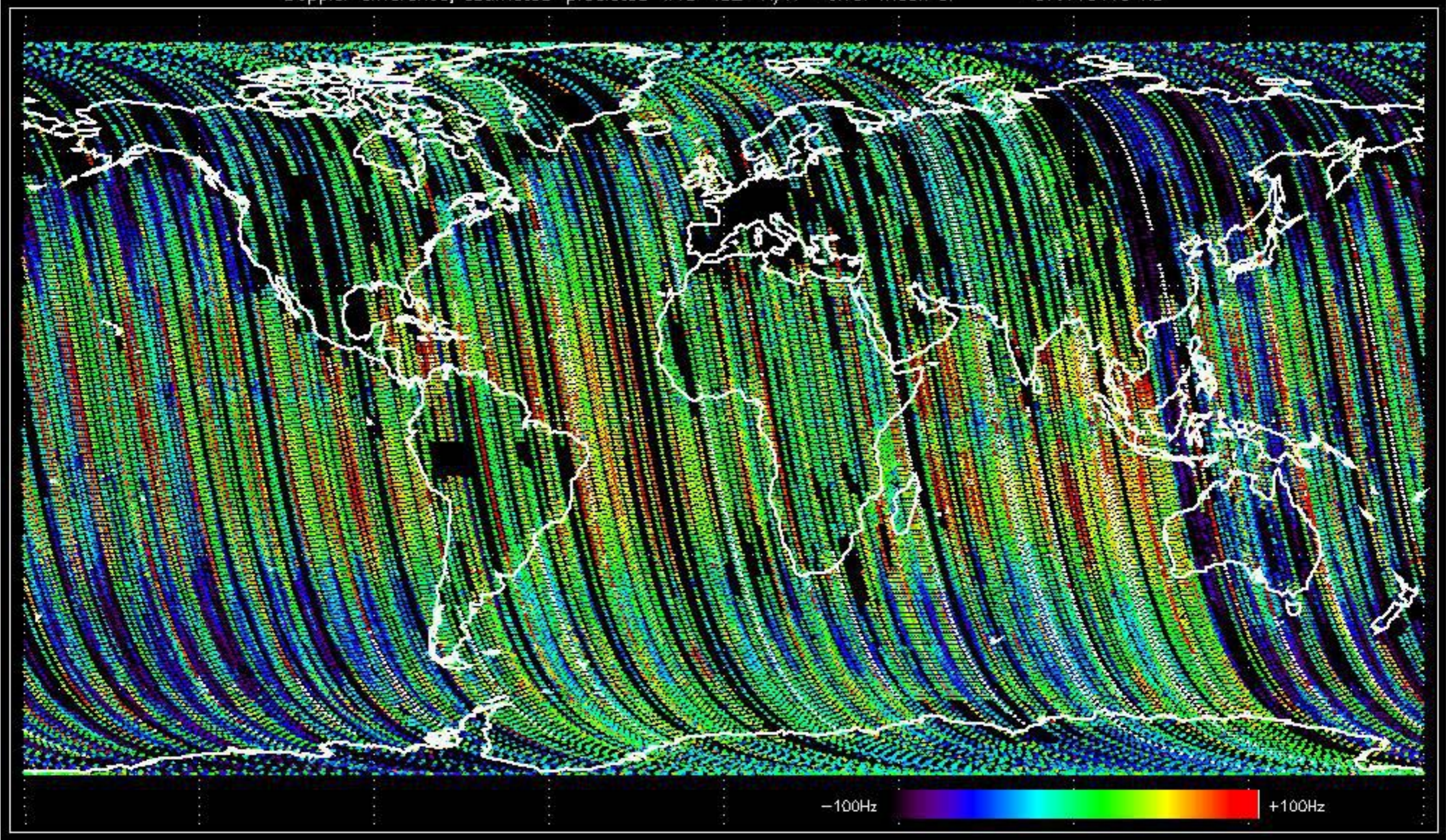


Doppler 'WS' 'IS2' 'V/V'

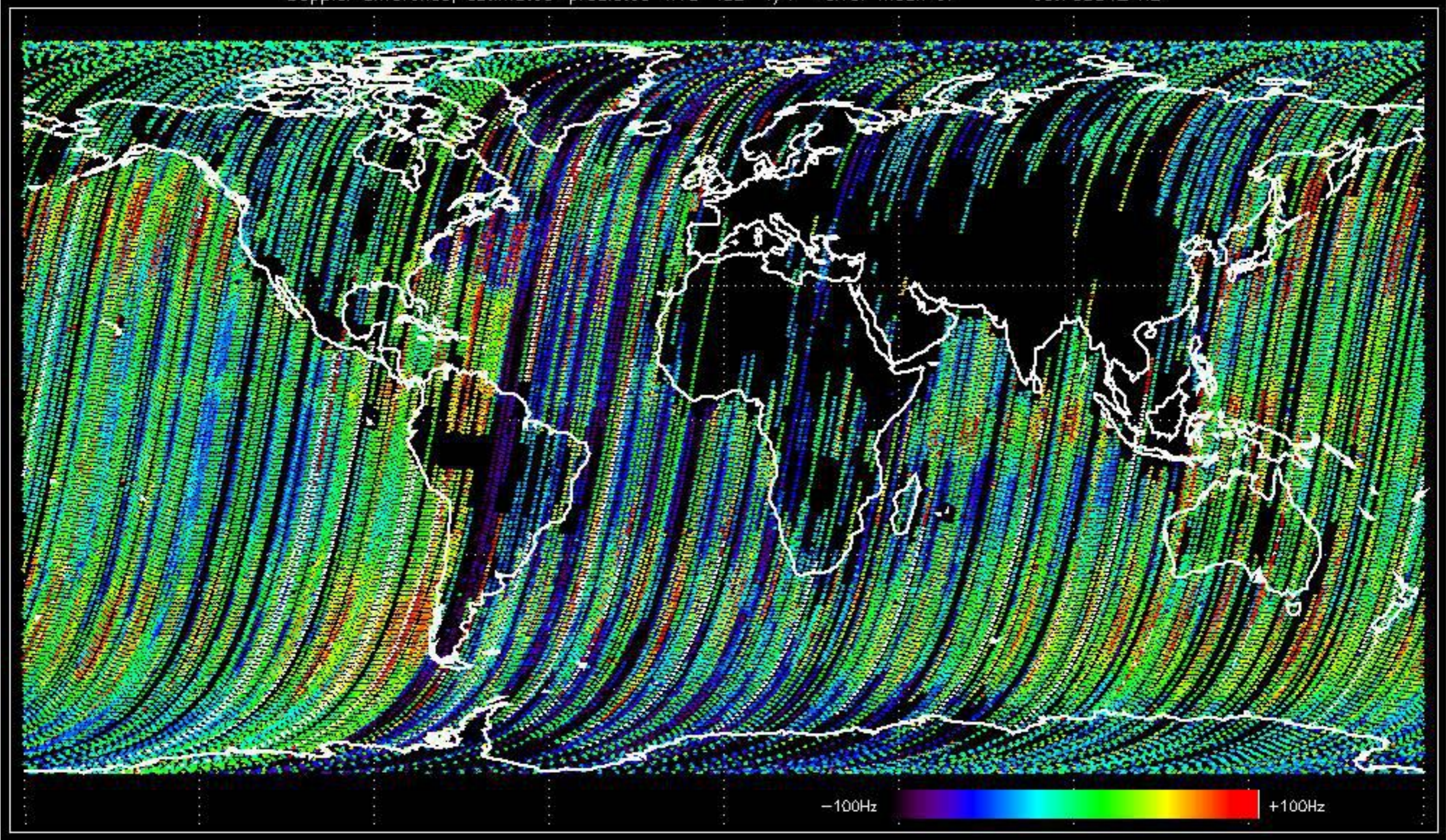




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -67.416415 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -60.735342 Hz

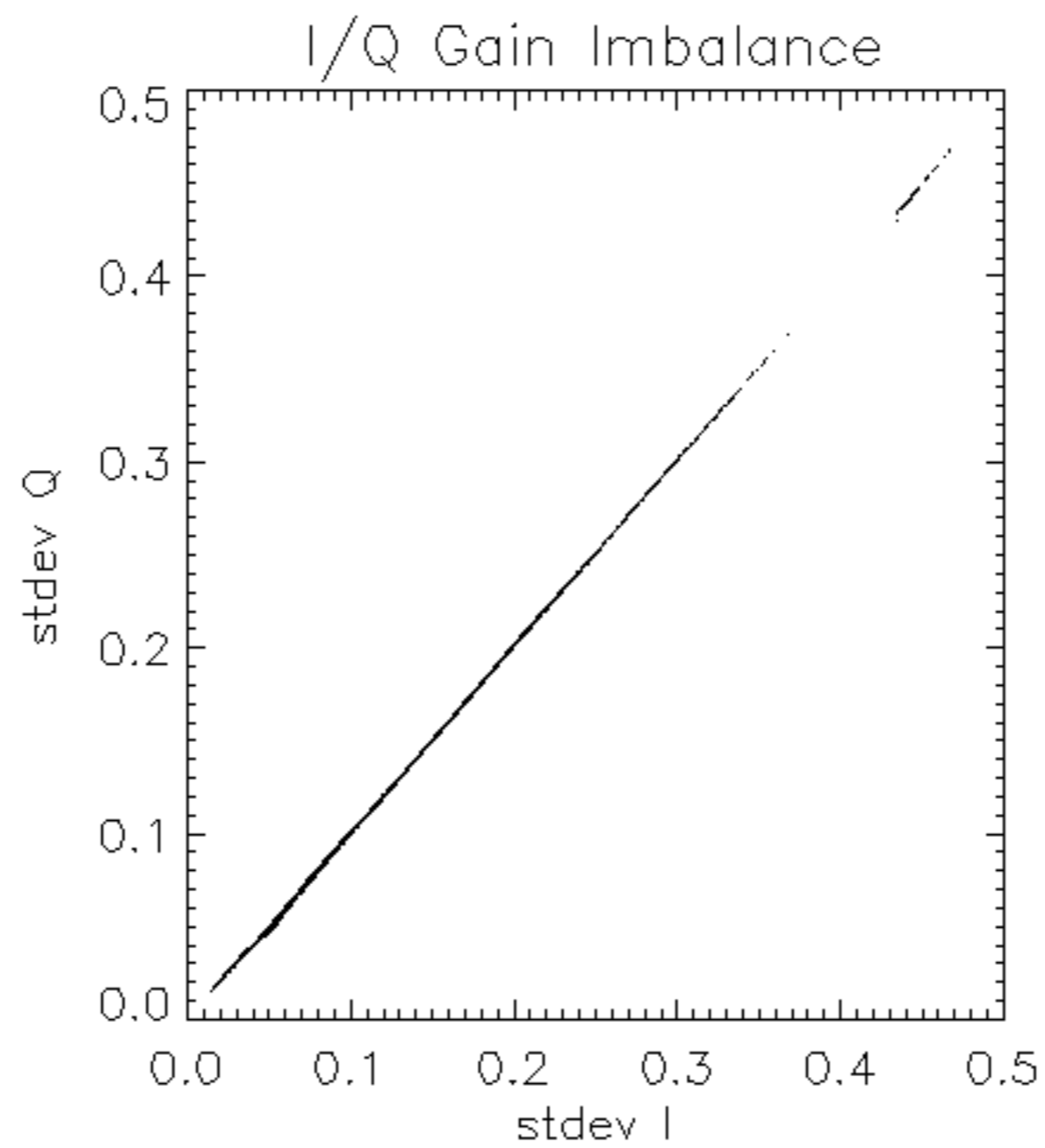


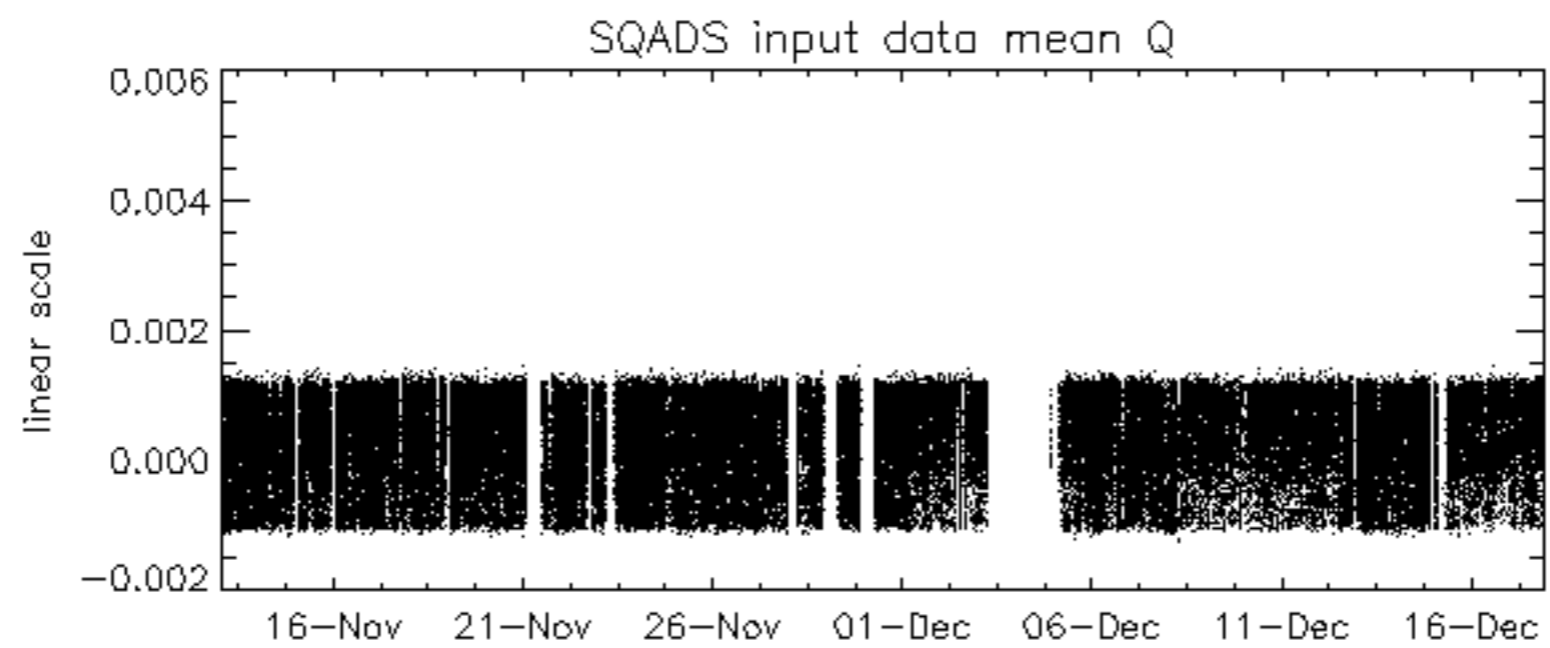
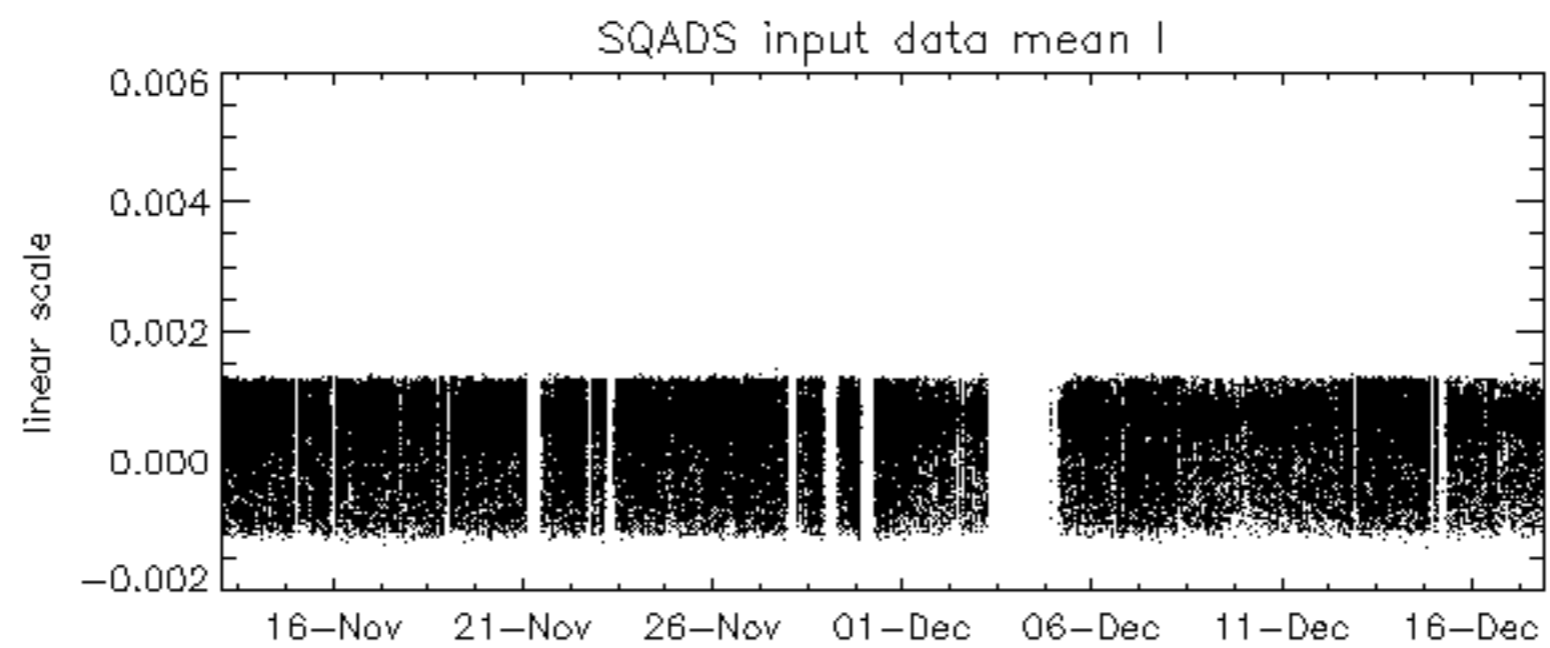
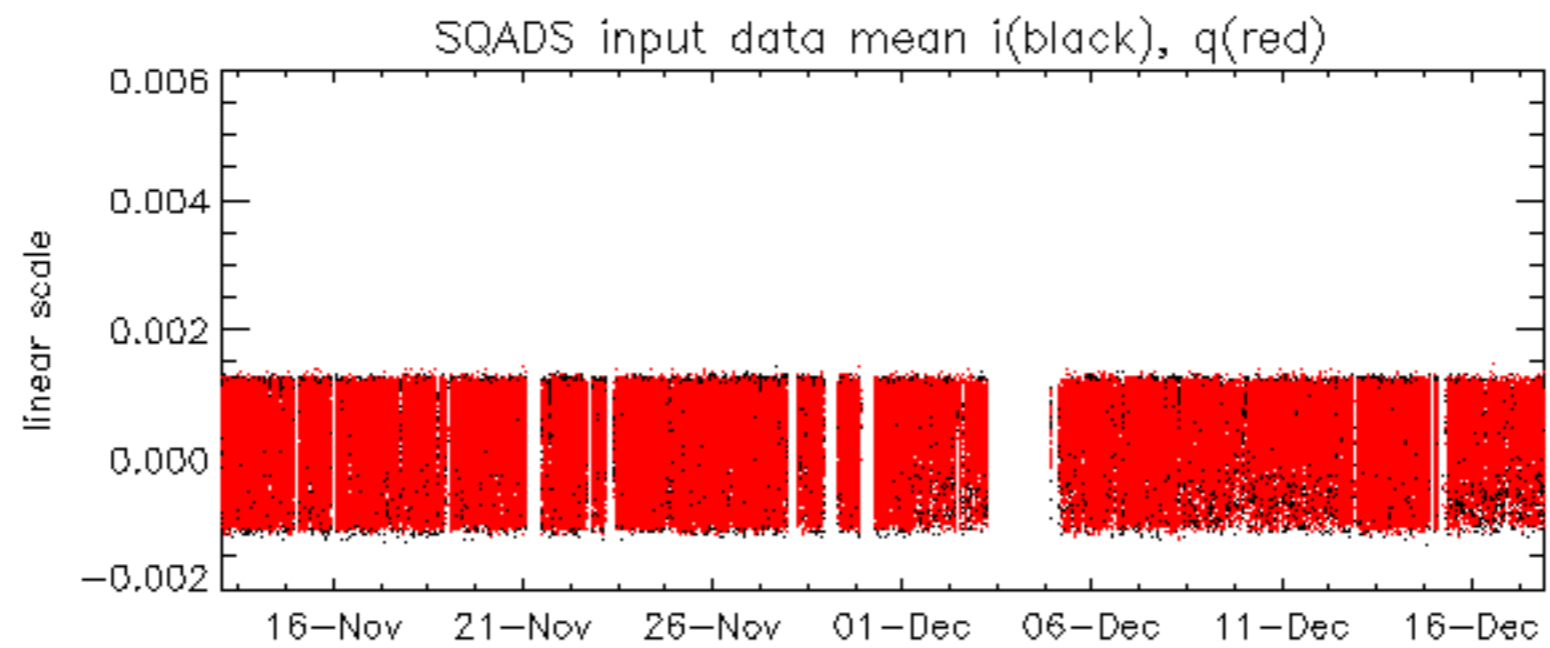
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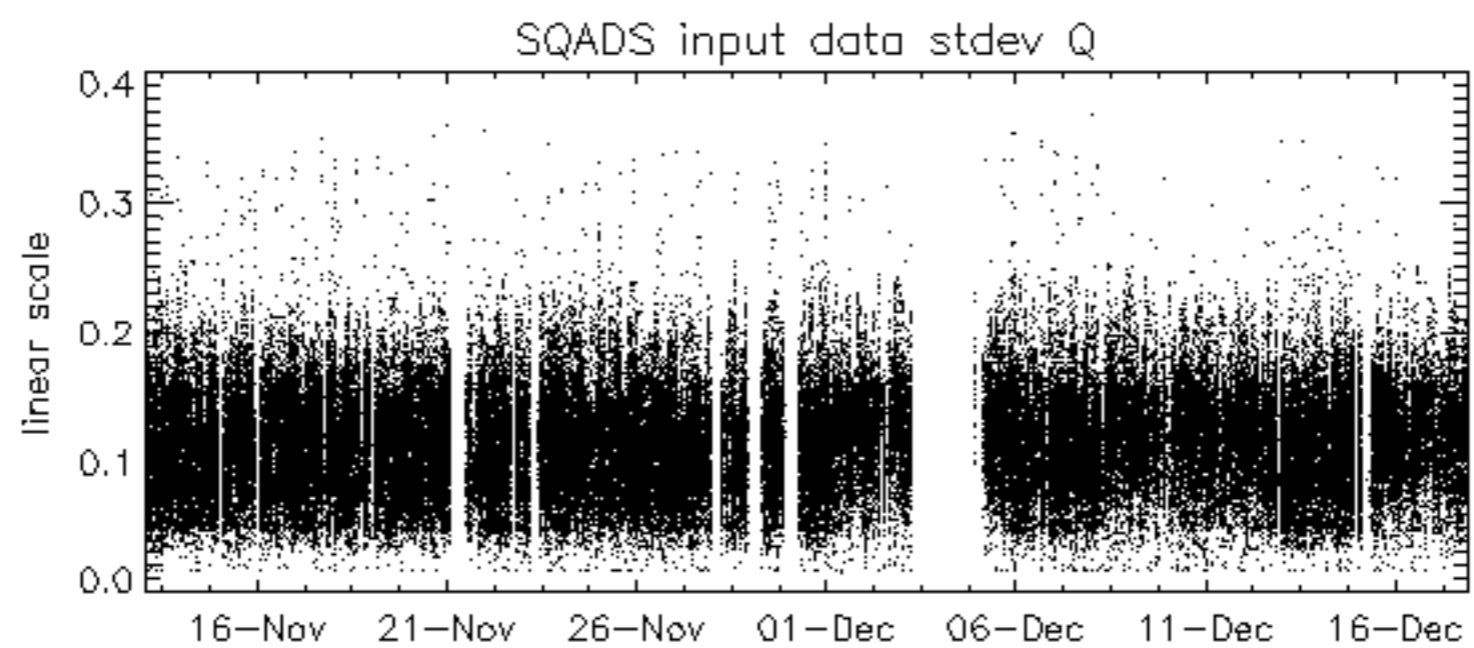
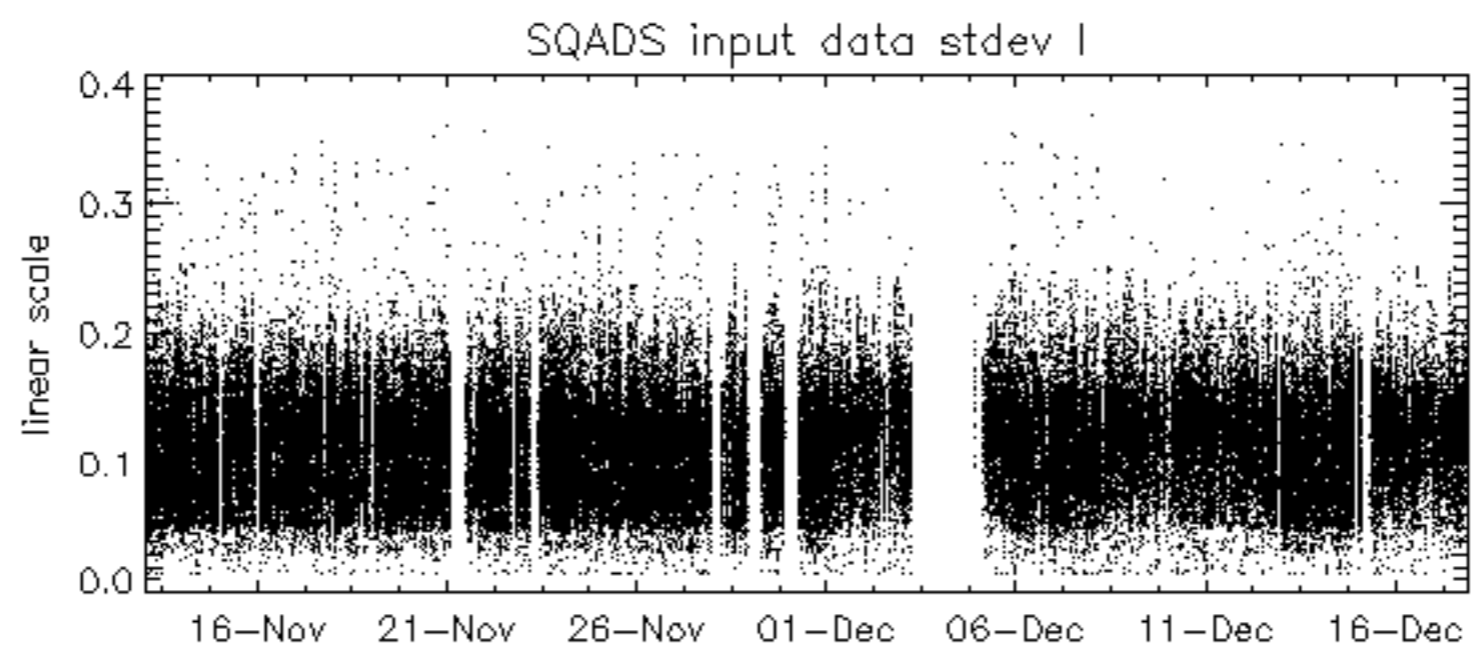
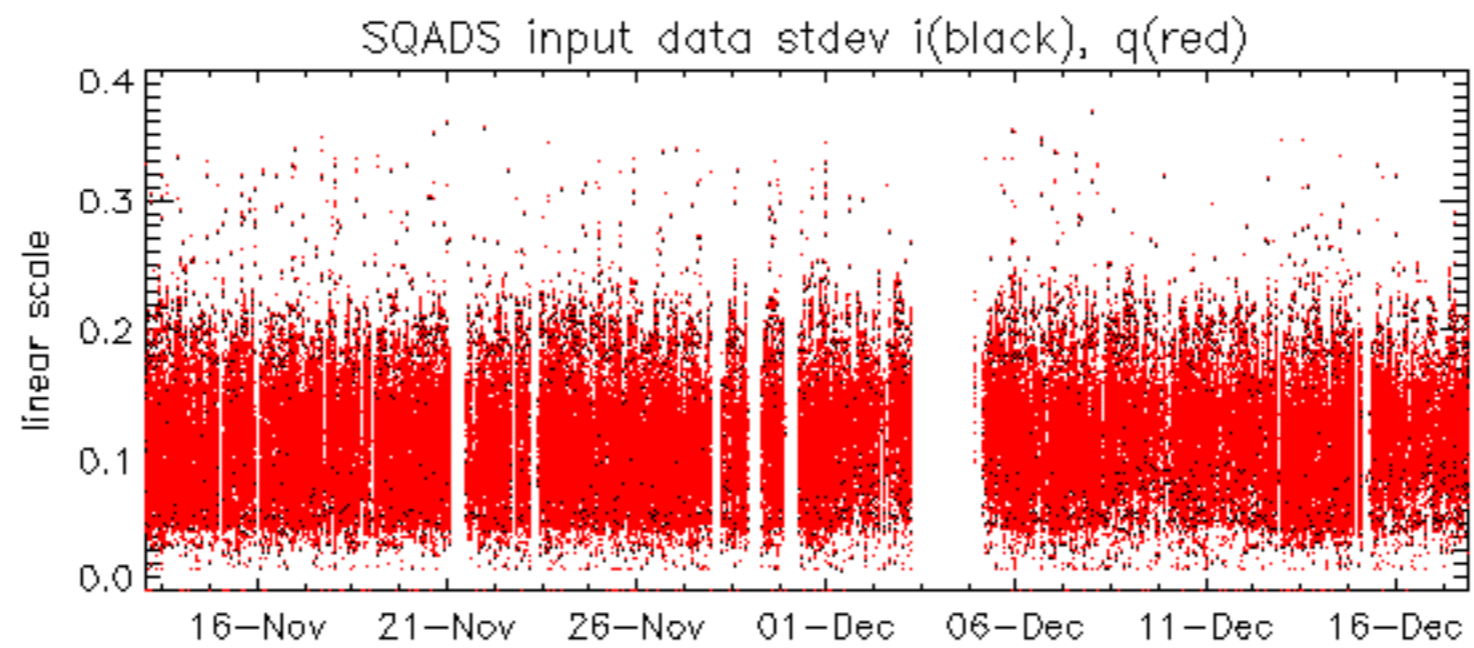
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- ASA_MS__0PNPDK20031217_193648_000000152022_00328_09400_0081.N1

No anomalies observed.







No unavailabilities during the reported period.