

REPORT OF 031205

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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

ASAR was back to operations on 04-DEC-2003 04:29:03

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:

Polarisation	Start Time
V	20031201 193942
H	20031202 204721

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	-3.60116	-22.4127	-7.99797
	stdev	0.0107546	0.0787590	0.00424975

24	mean	-4.92837	-21.0209	-7.99797
	stdev	0.00902534	0.0768765	0.00424975



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.76331	-22.5688	-8.16015
	stdev	0.00664622	0.0677285	0.00364273
24	mean	-5.12900	-21.2523	-8.16015
	stdev	0.0133232	0.0610294	0.00364273



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	0.000333629
	stdev	1.03569e-05
MEAN Q	mean	0.000165314
	stdev	1.03537e-05



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.113520
	stdev	0.00154550

STDEV Q	mean	0.113774
	stdev	0.00156185



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

No anomalies observed 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

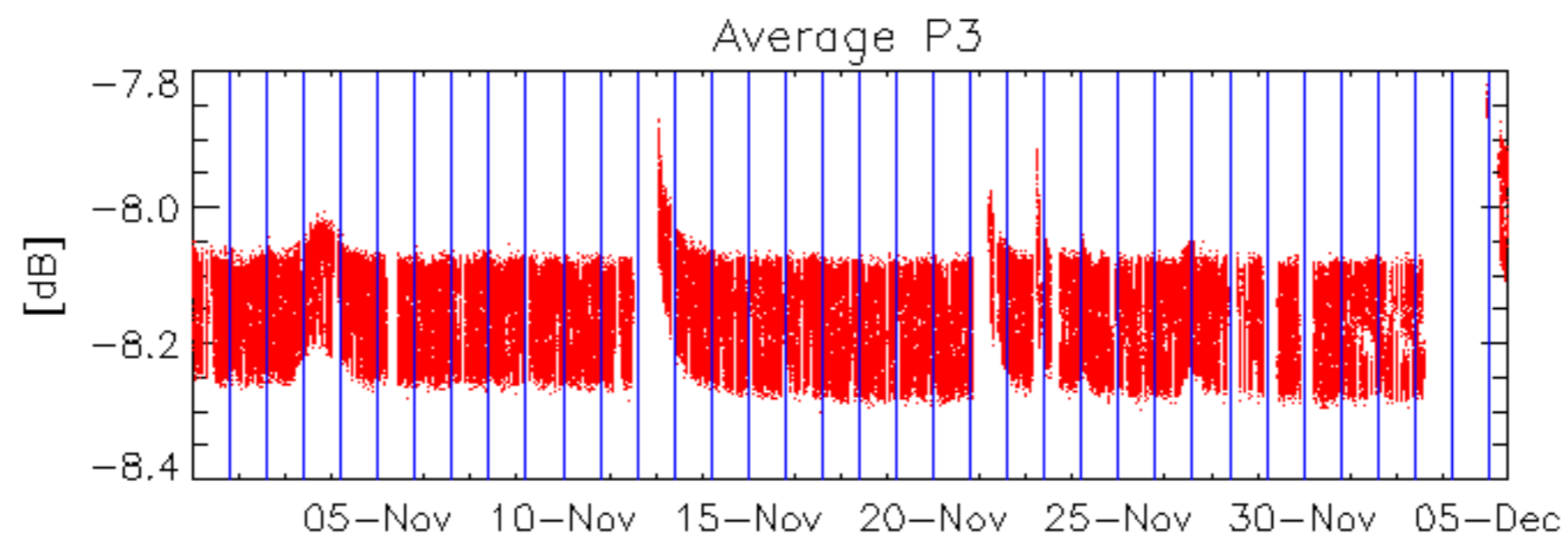
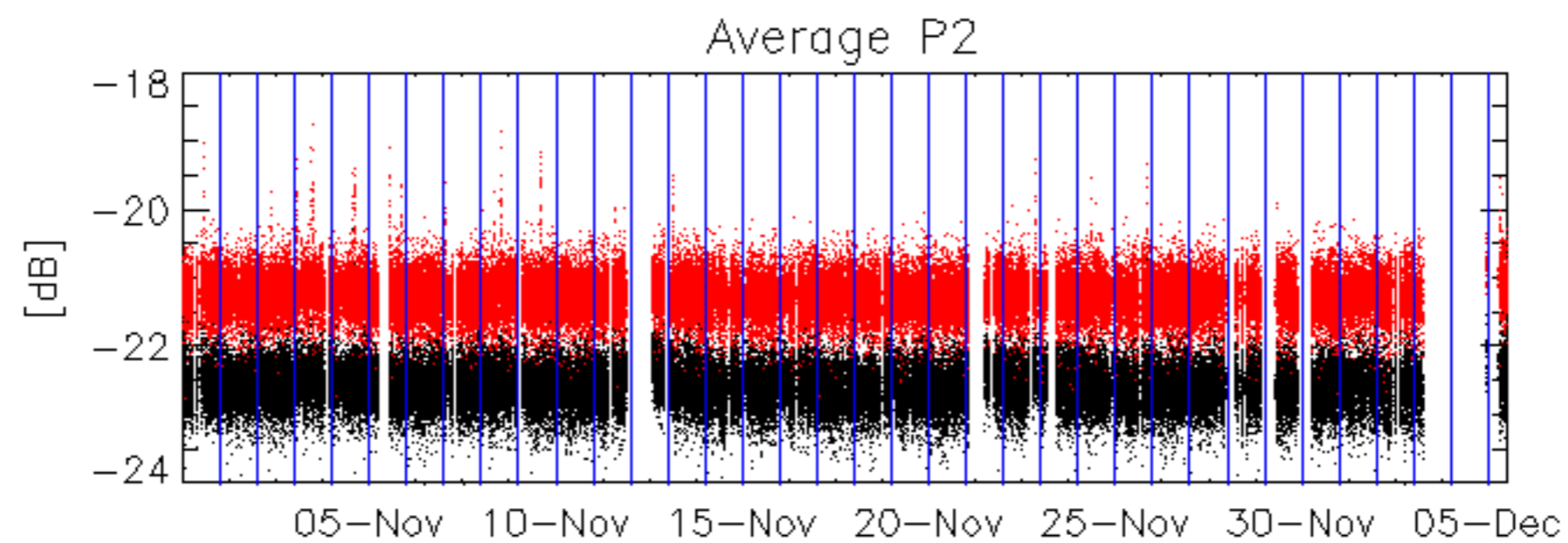
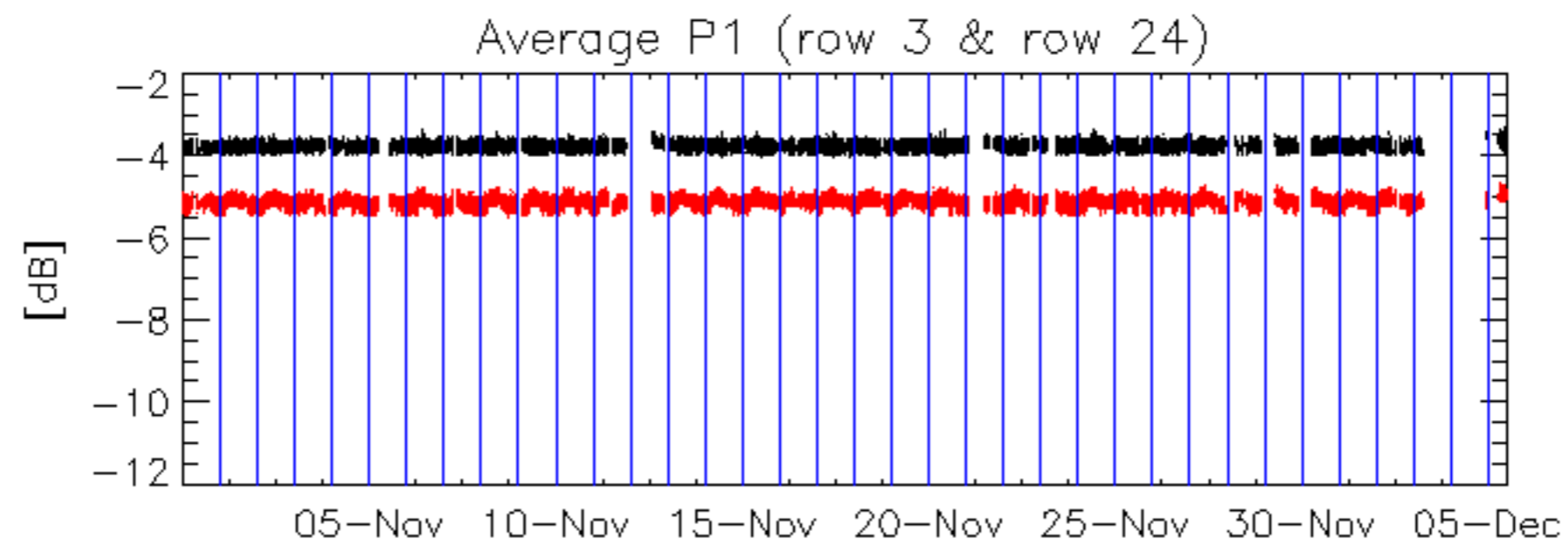
Evolution of Absolute Doppler

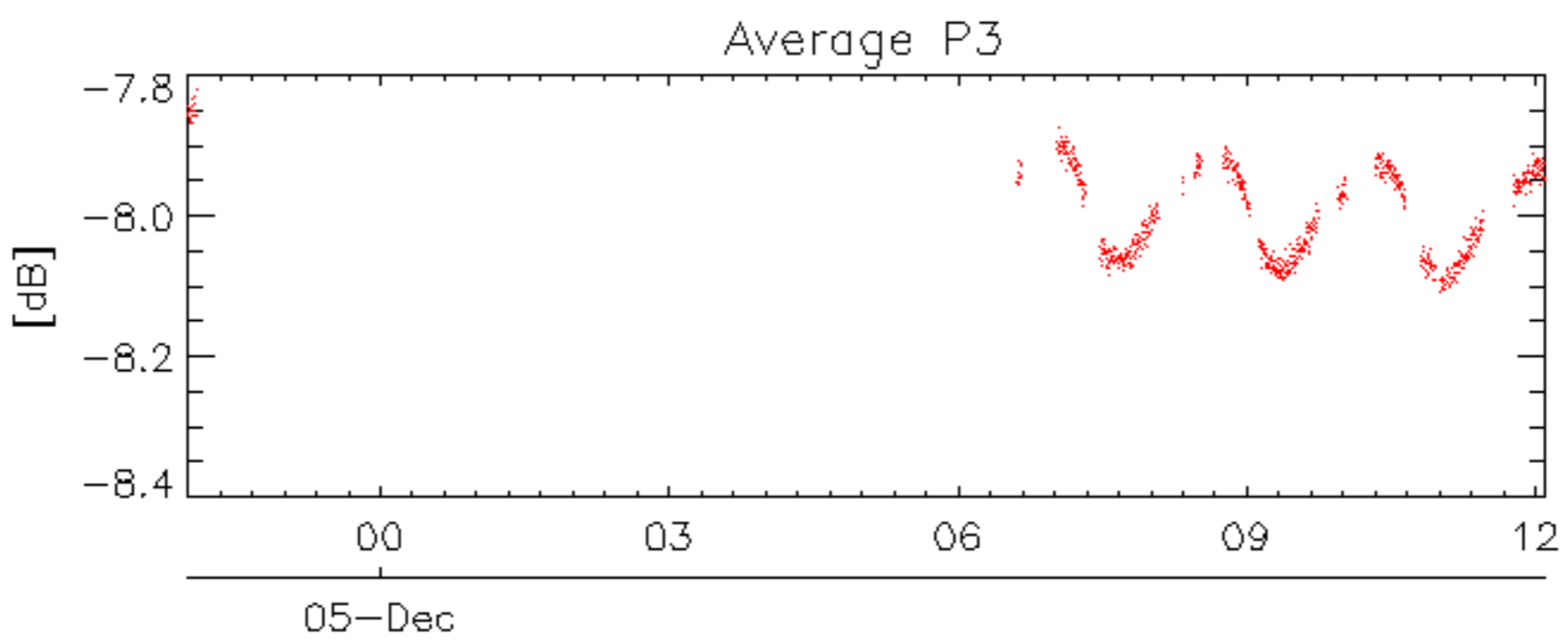
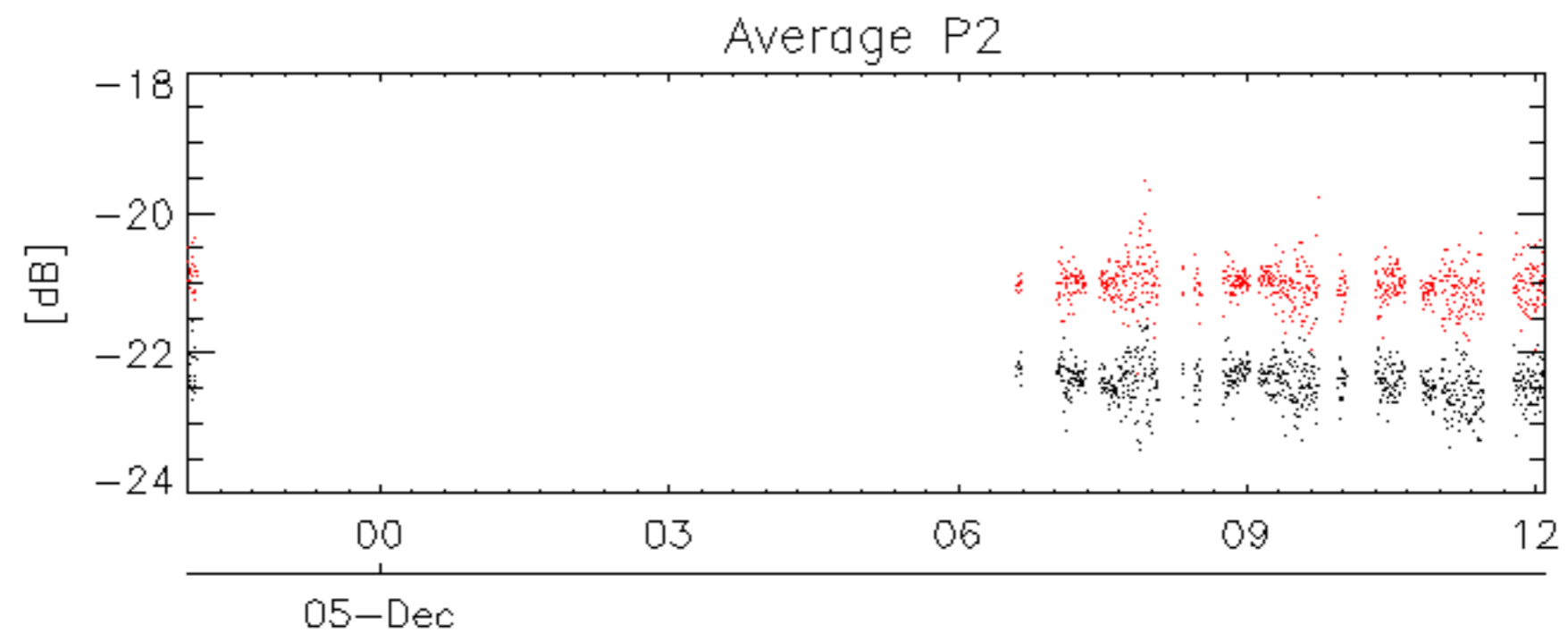
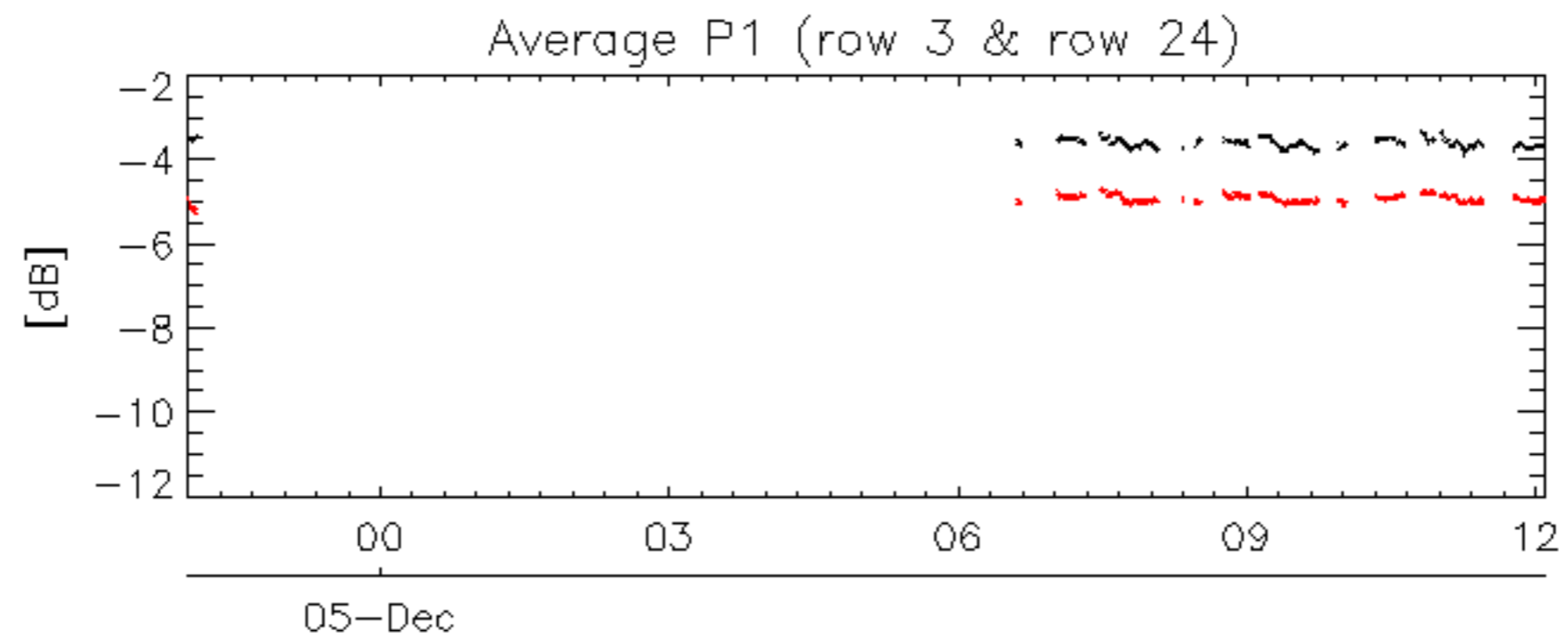
Ascending
Descending

6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

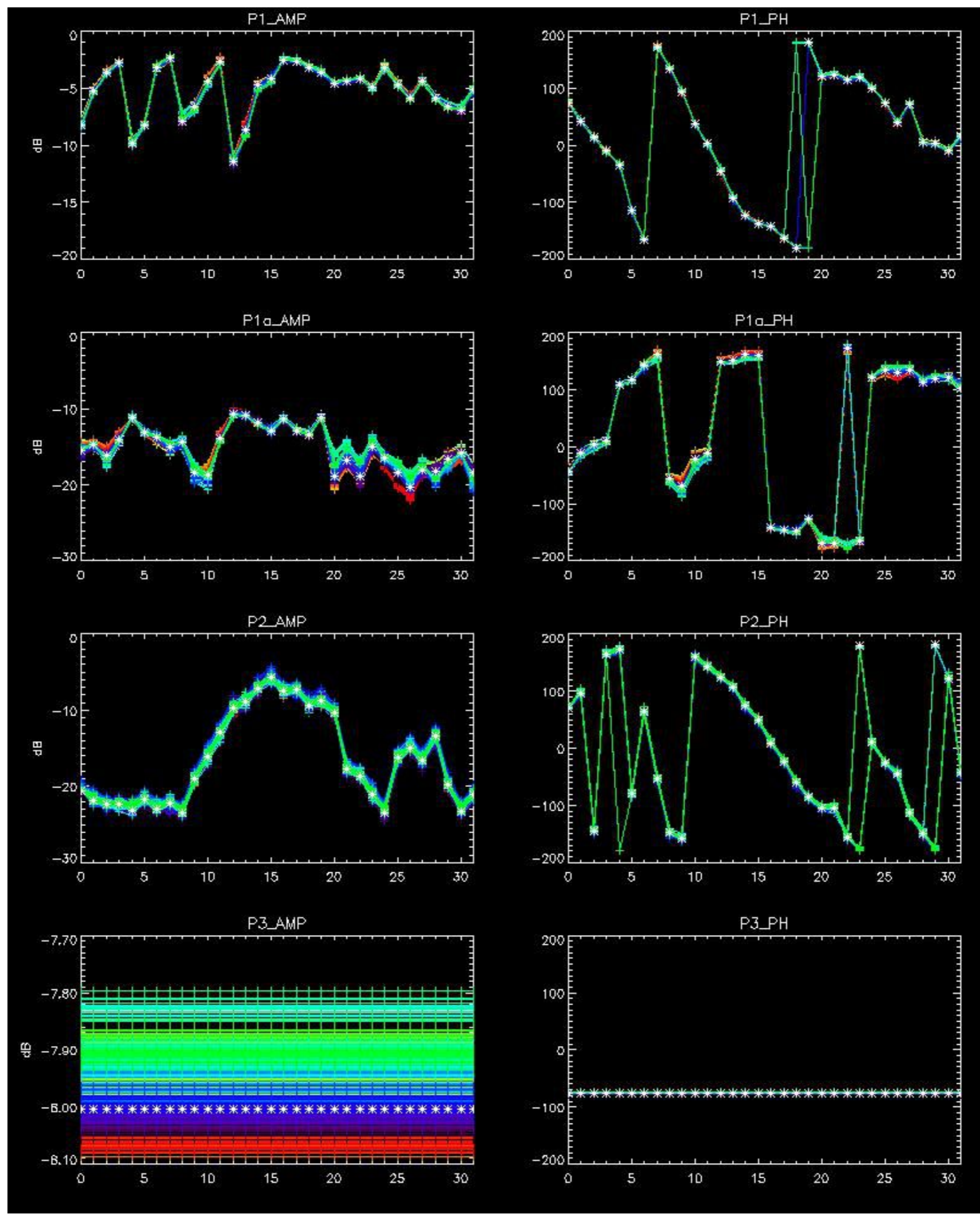






No anomalies observed on available browse products

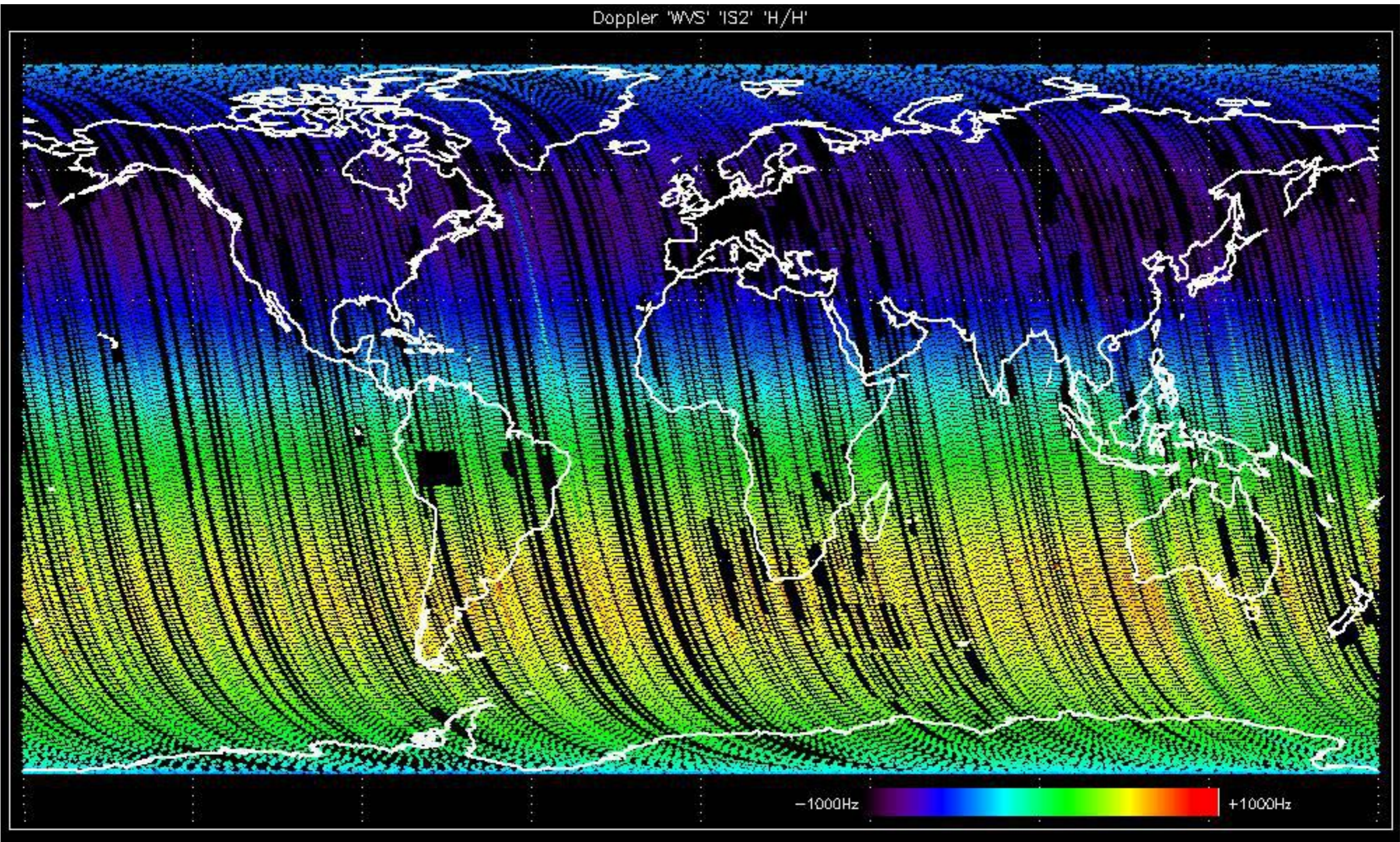
No anomalies observed.



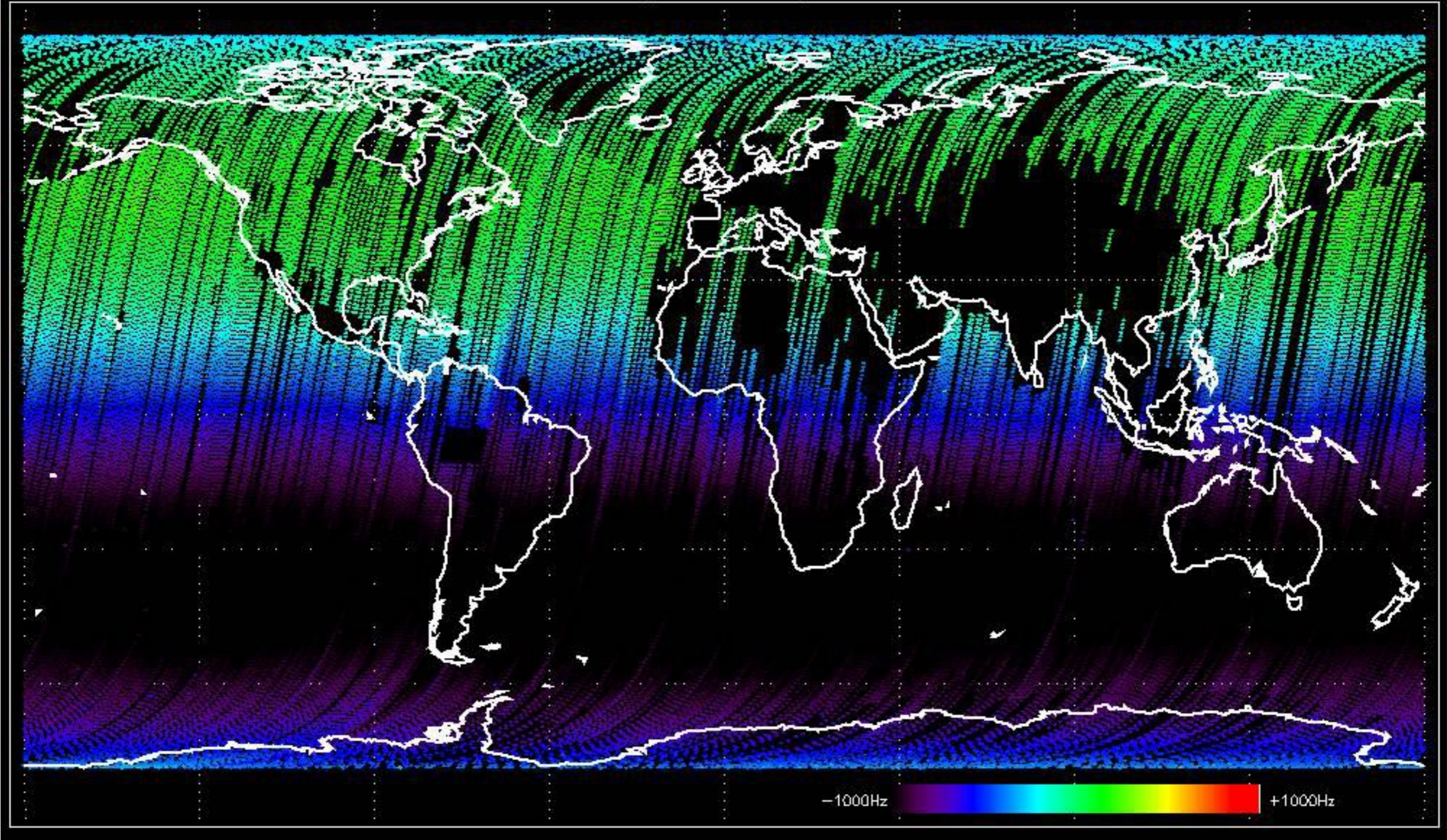
- Stable wave internal calibration pulses gain and phase.
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- Nominal Doppler behavior.

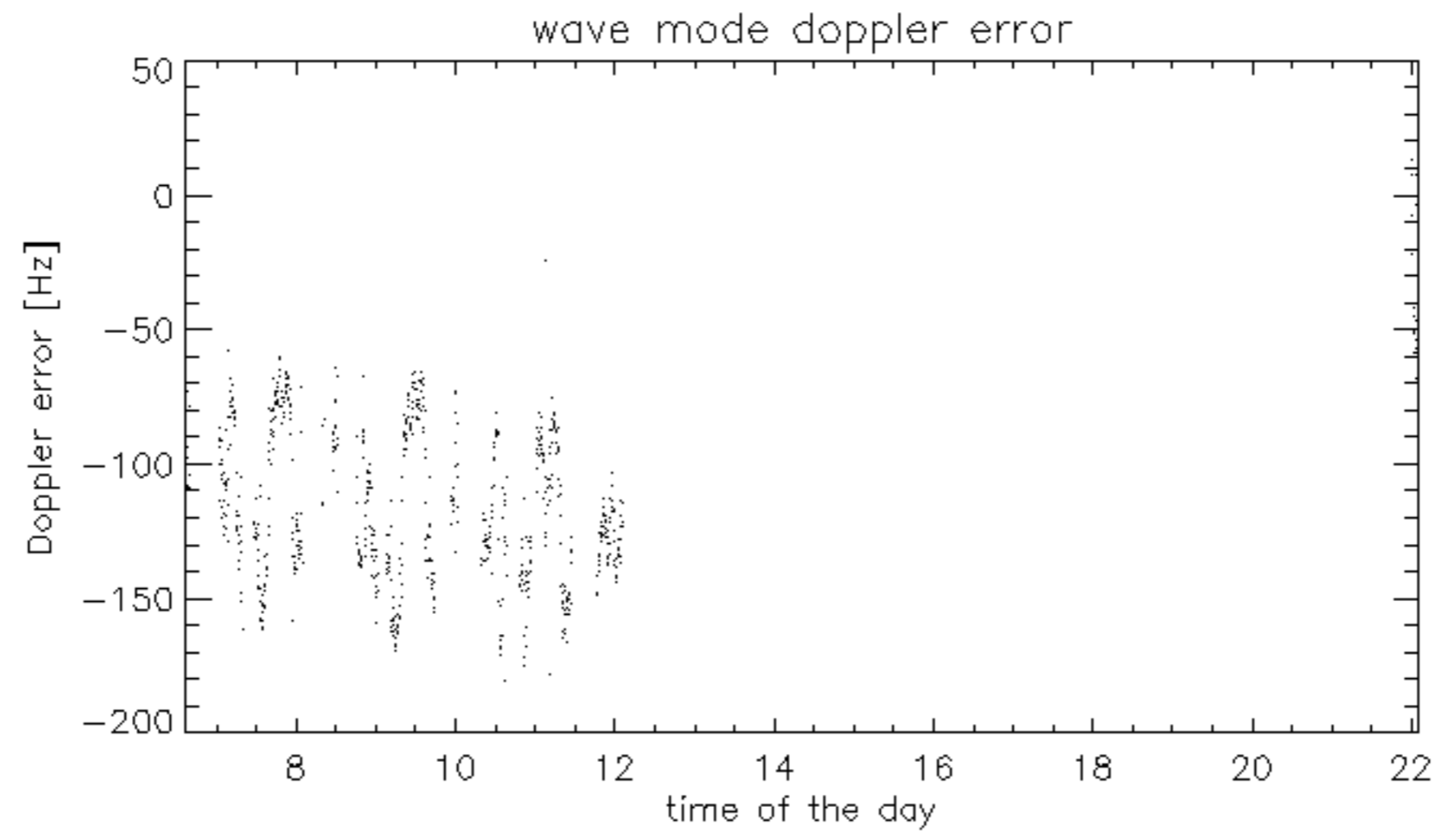
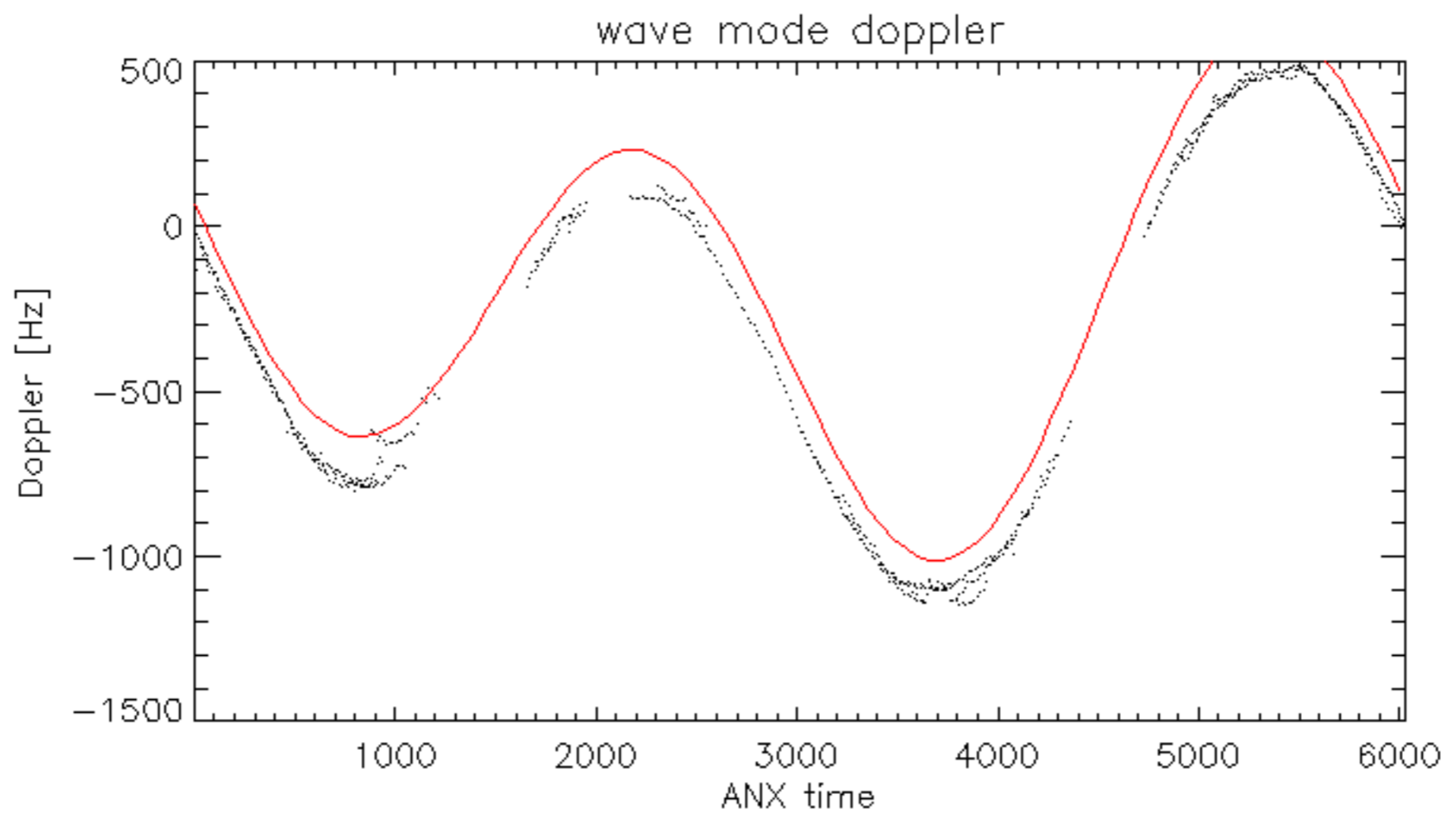
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 35 days

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

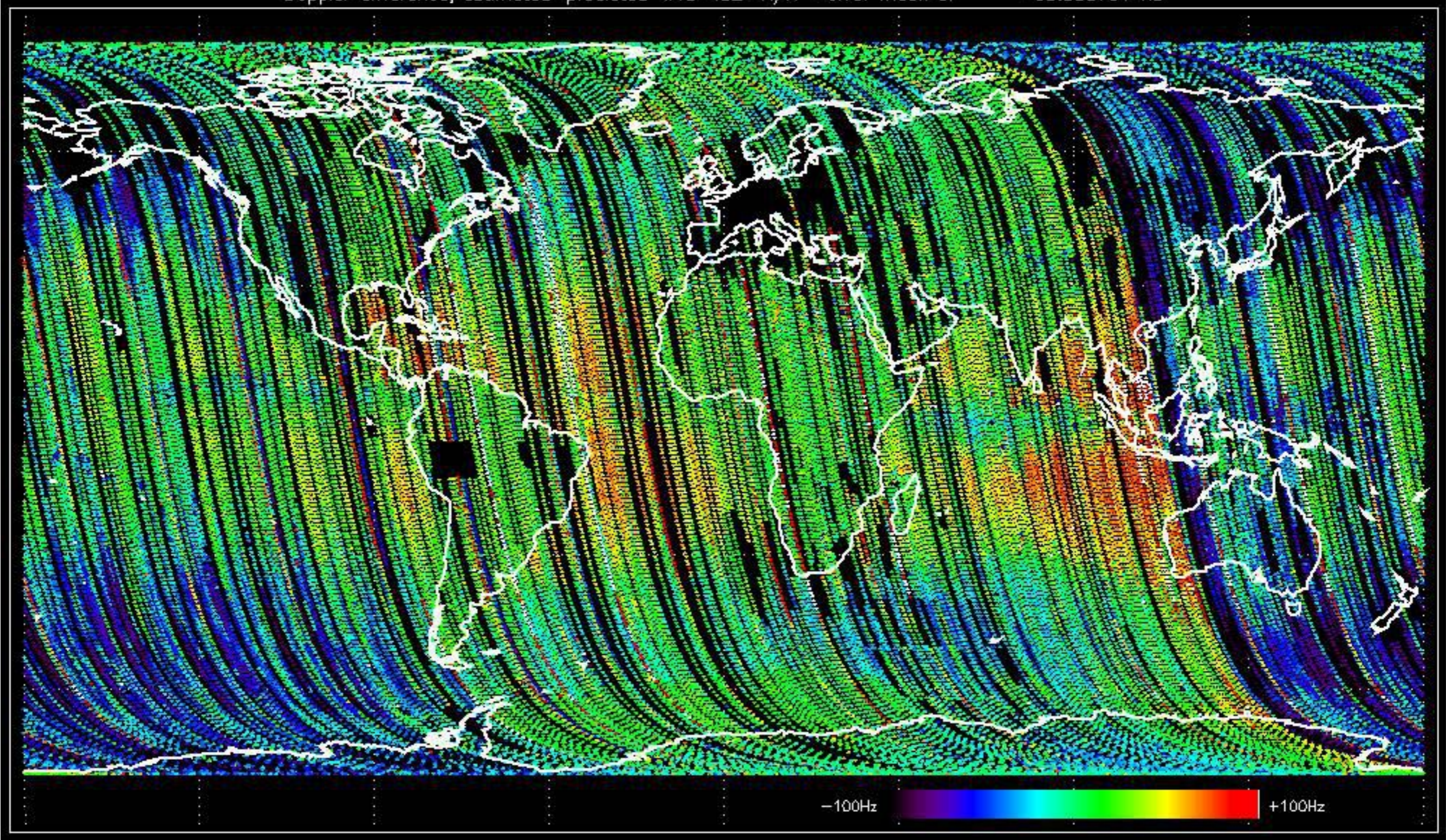


Doppler 'WVS' 'IS2' 'V/V'

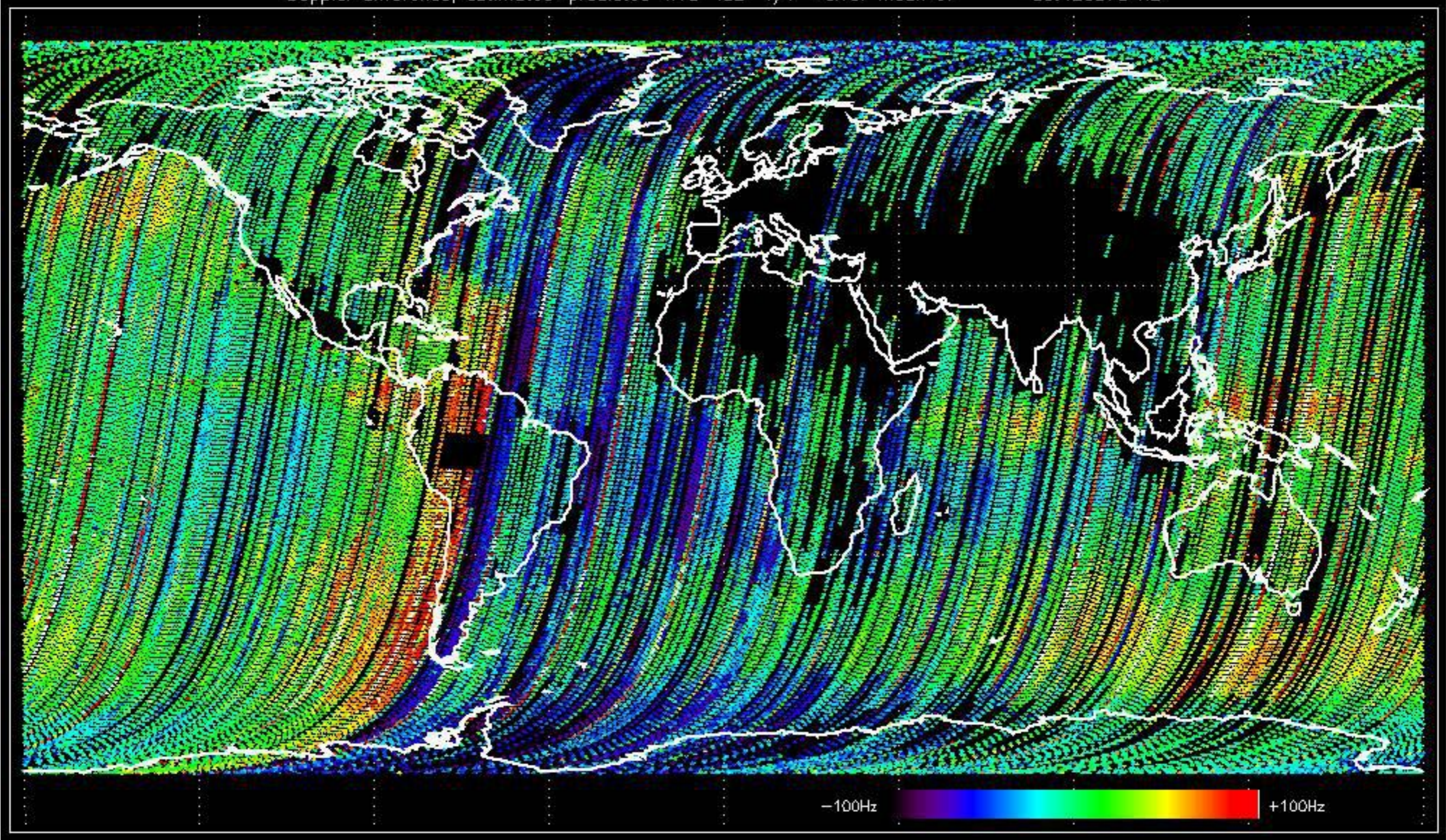




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -88.833751 Hz

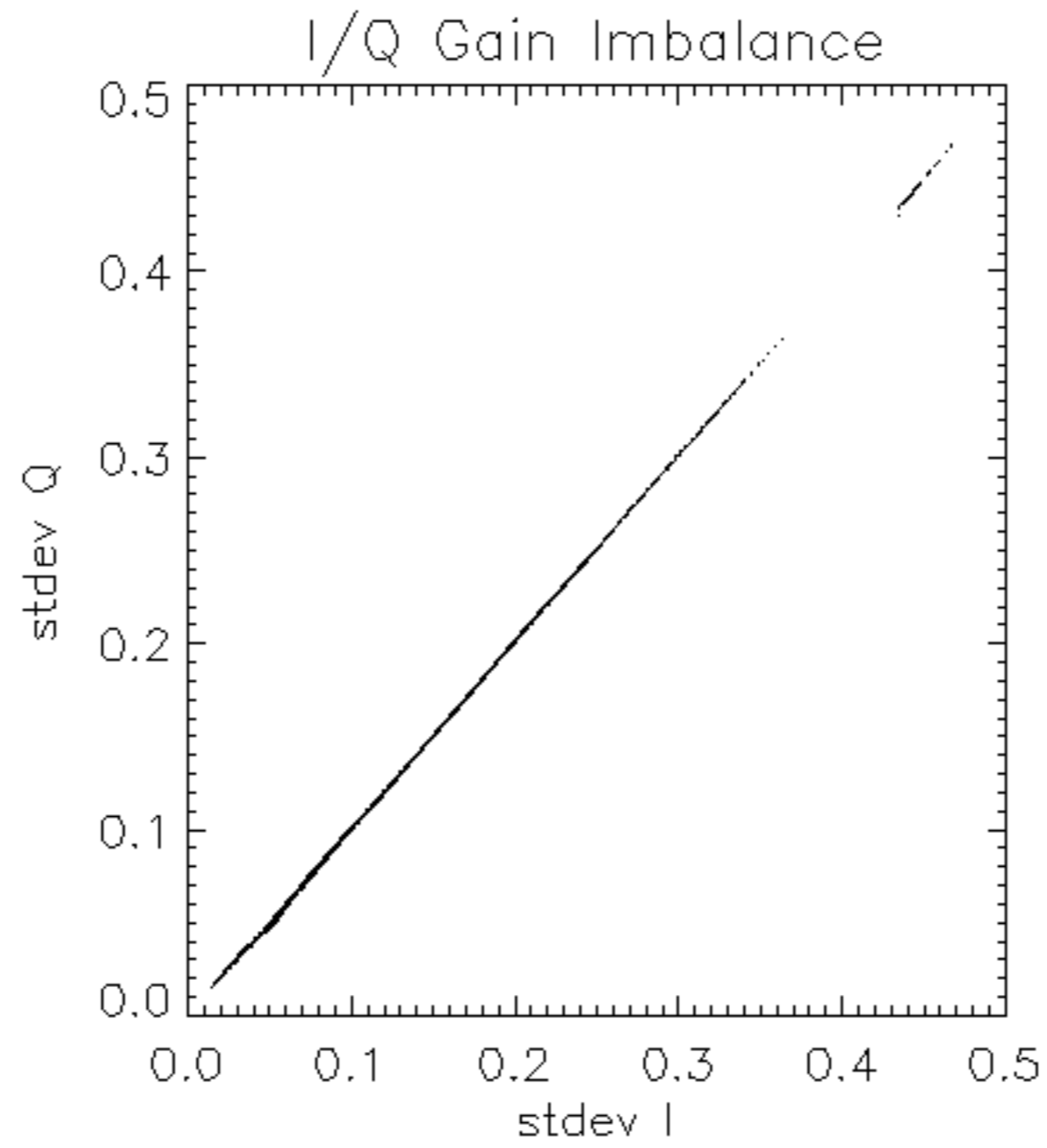


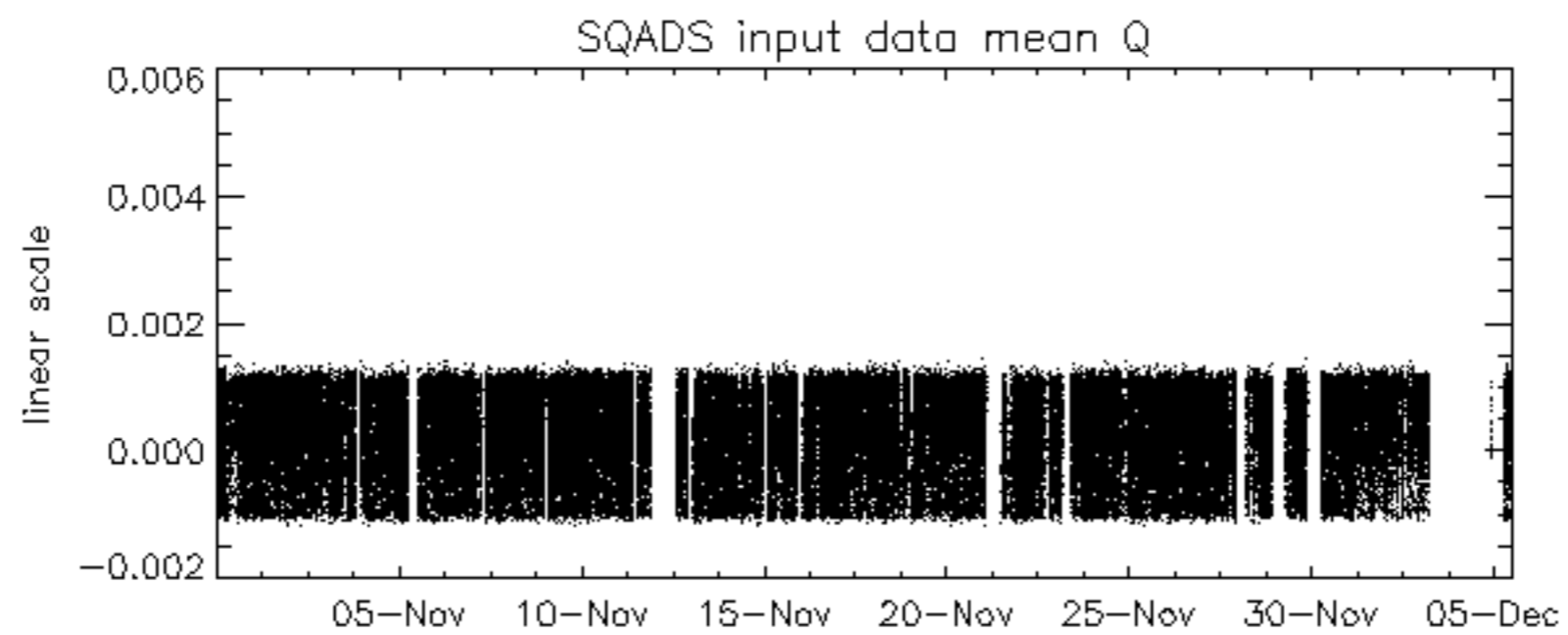
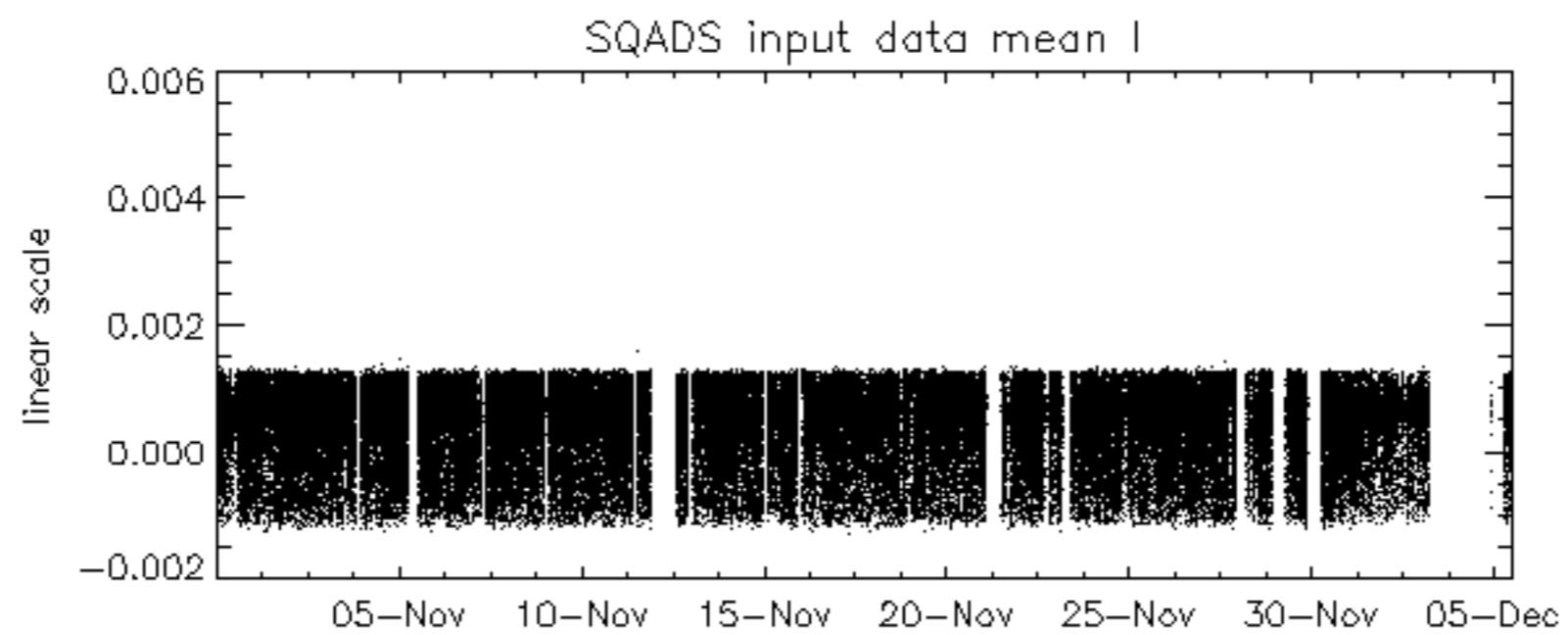
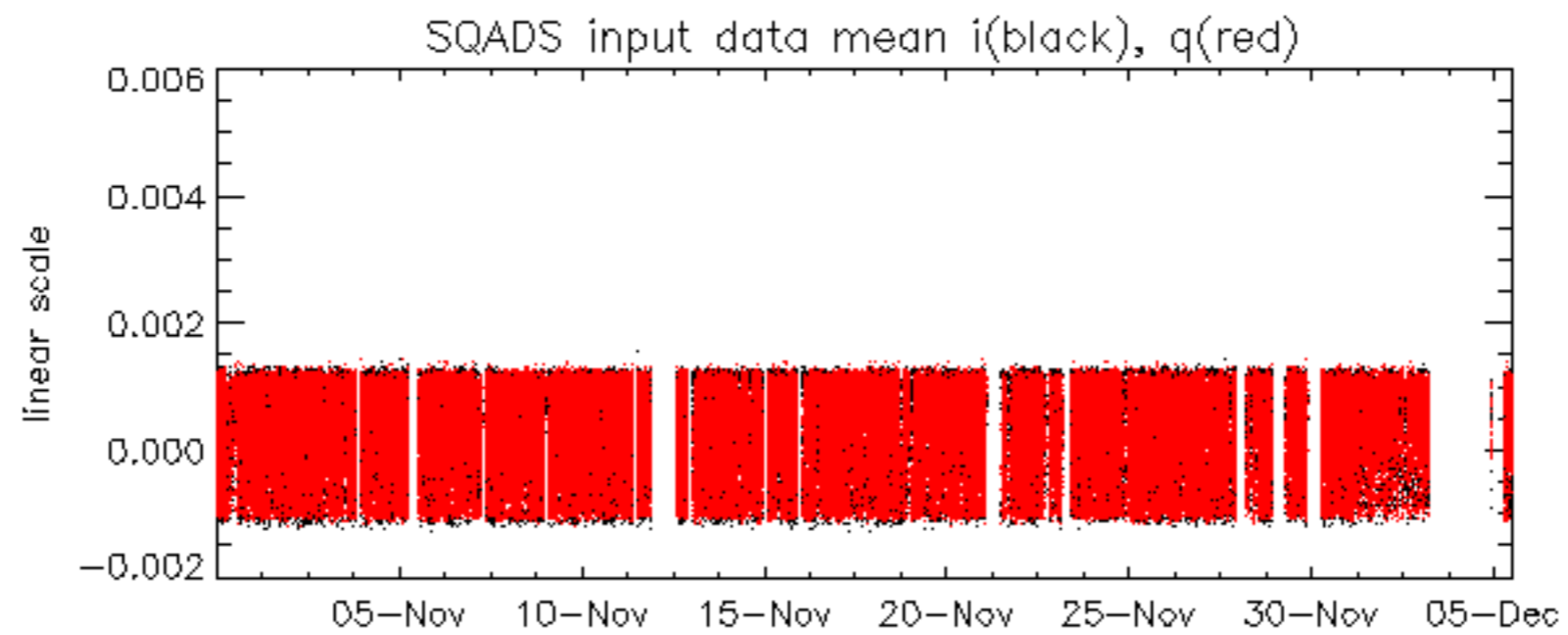
Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -83.420978 Hz

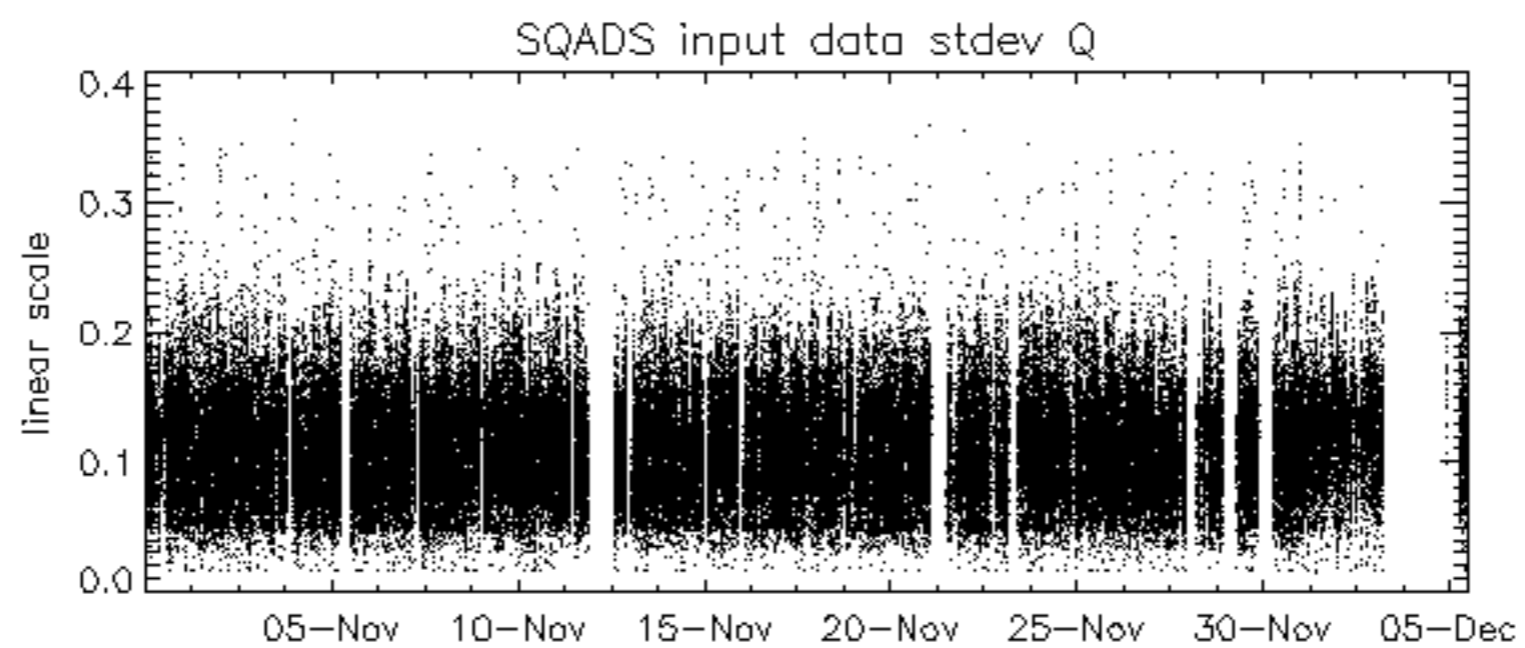
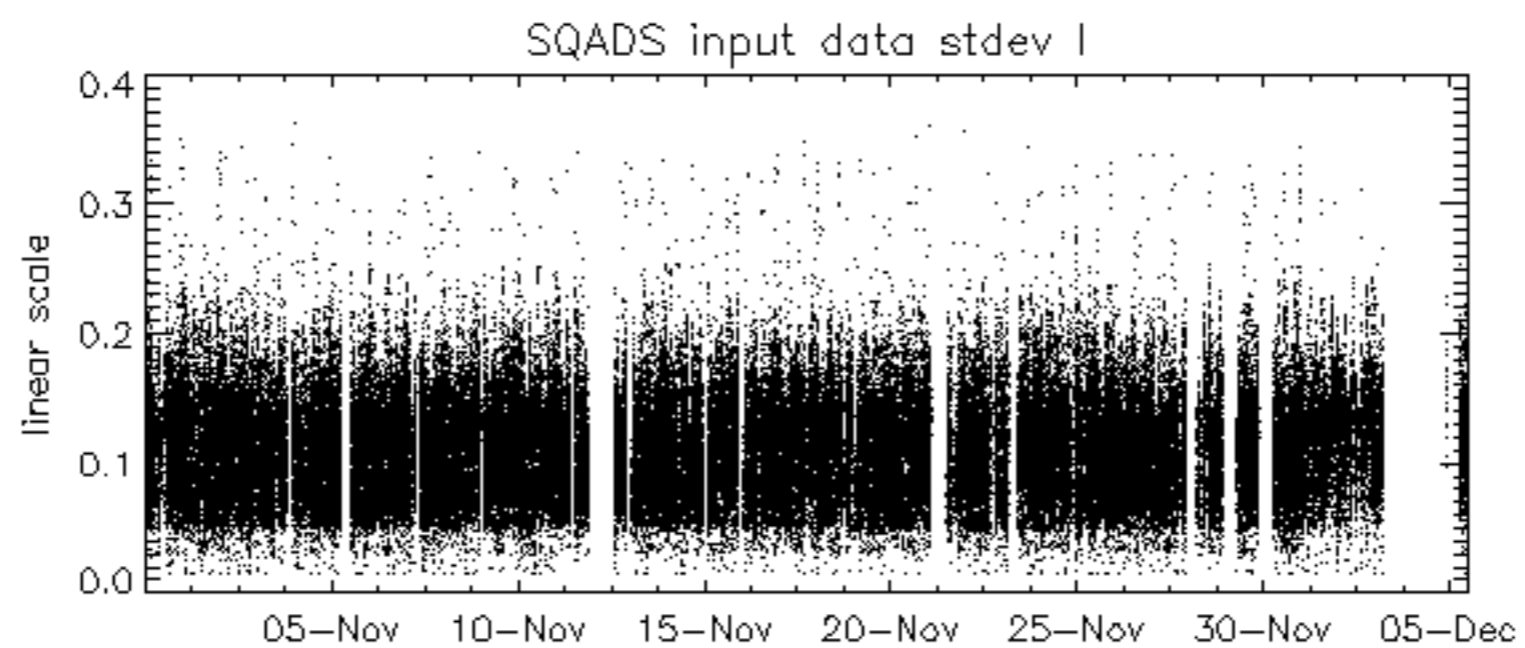
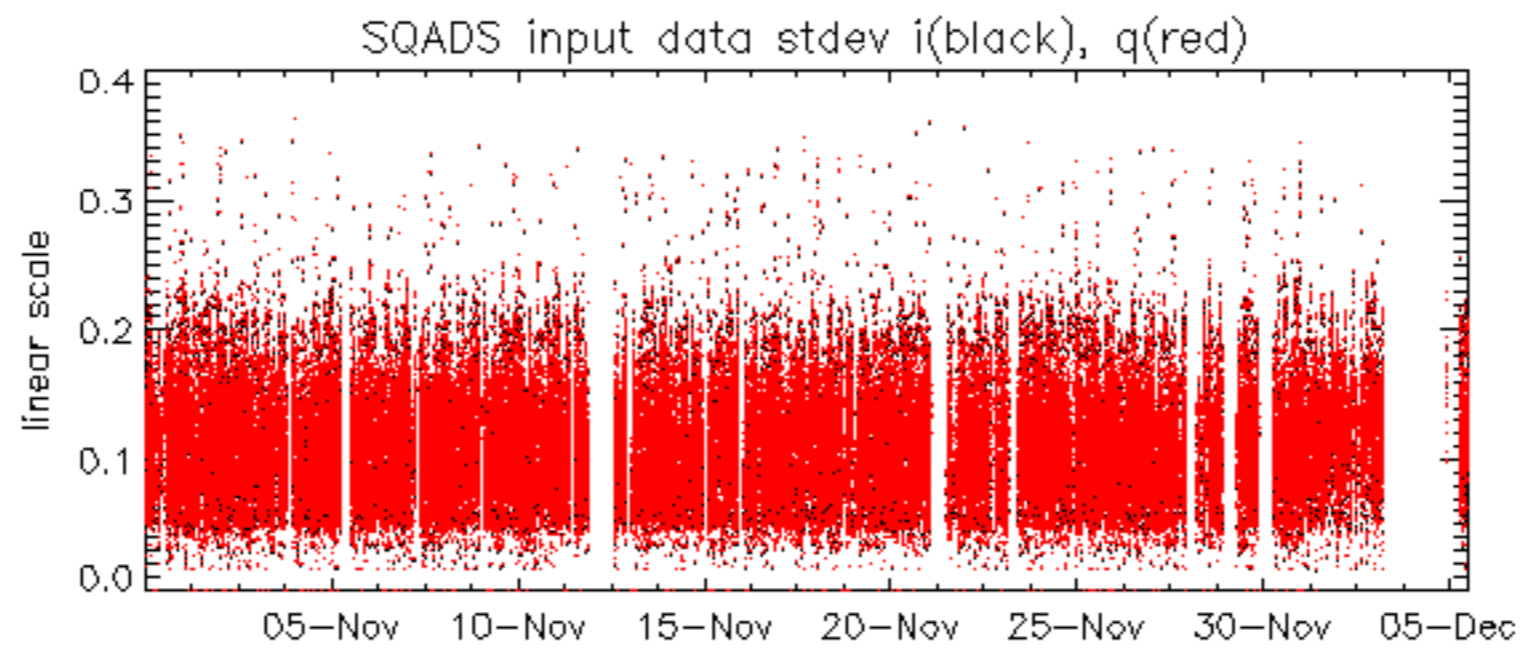


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