

REPORT OF 031209

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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:

Polarisation	Start Time
V	20031208 191934
H	20031208 191814

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	-3.67438	-22.4827	-8.06907
	stdev	0.00806774	0.0770456	0.00410977

24	mean	-5.03688	-21.1287	-8.06907
	stdev	0.0127404	0.0669305	0.00410977



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.75300	-22.5616	-8.15251
	stdev	0.00739655	0.0693939	0.00453387
24	mean	-5.11902	-21.2427	-8.15251
	stdev	0.0138573	0.0630285	0.00453387



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	0.000331798
	stdev	1.08593e-05
MEAN Q	mean	0.000163521
	stdev	1.08562e-05



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.113698
	stdev	0.00154567

STDEV Q	mean	0.113952
	stdev	0.00156170



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

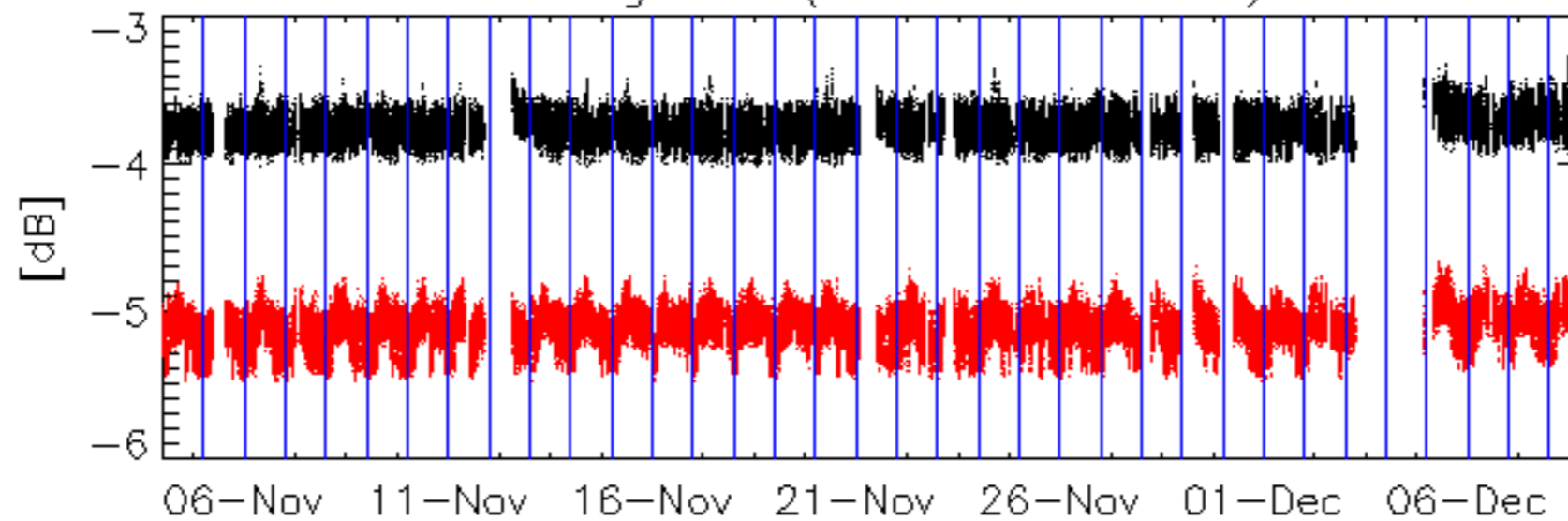
Ascending
Descending

6.3 - Doppler evolution versus ANX

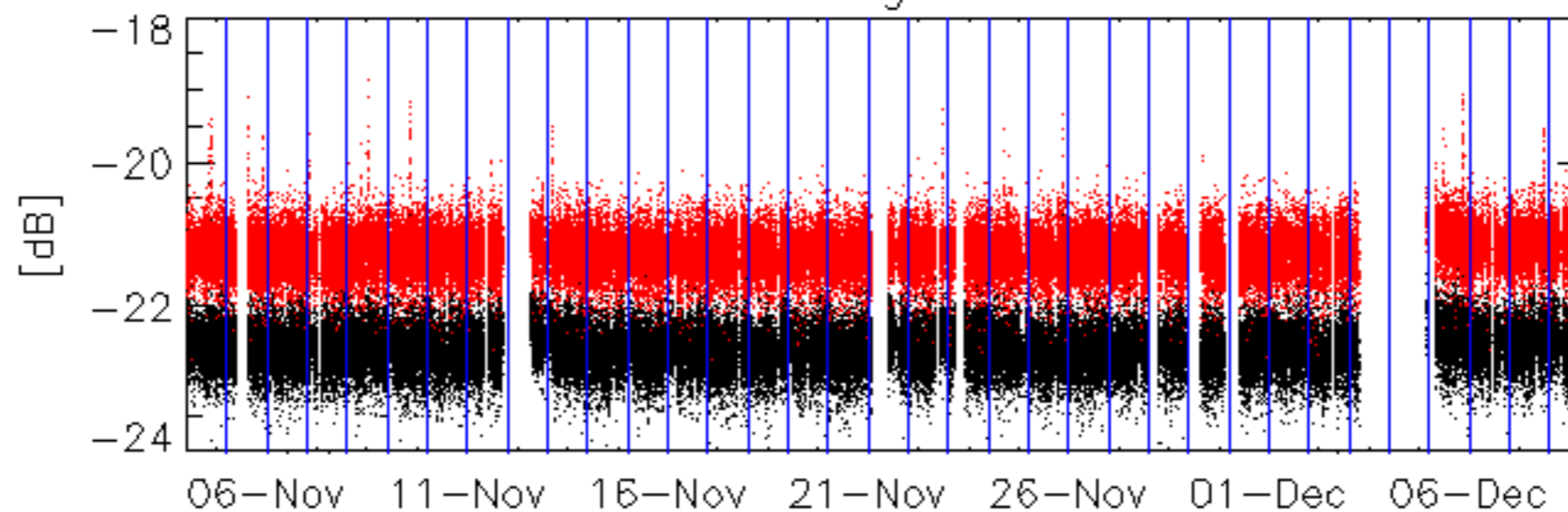
Evolution Doppler error versus ANX



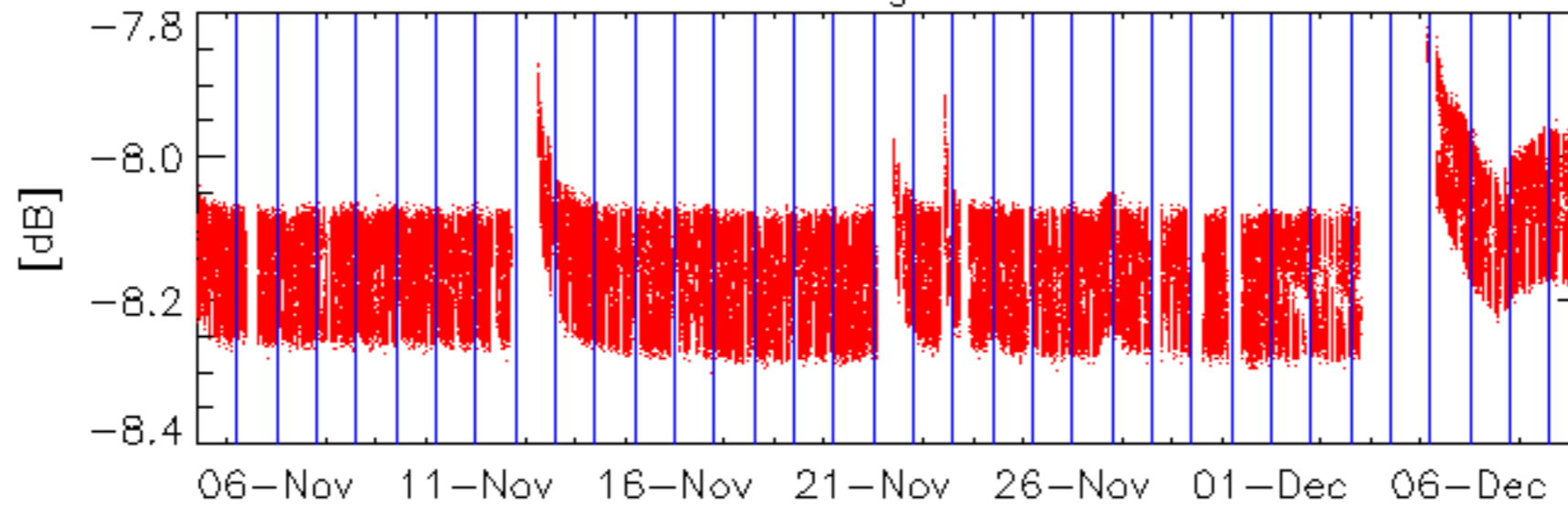
Average P1 (row 3 & row 24)



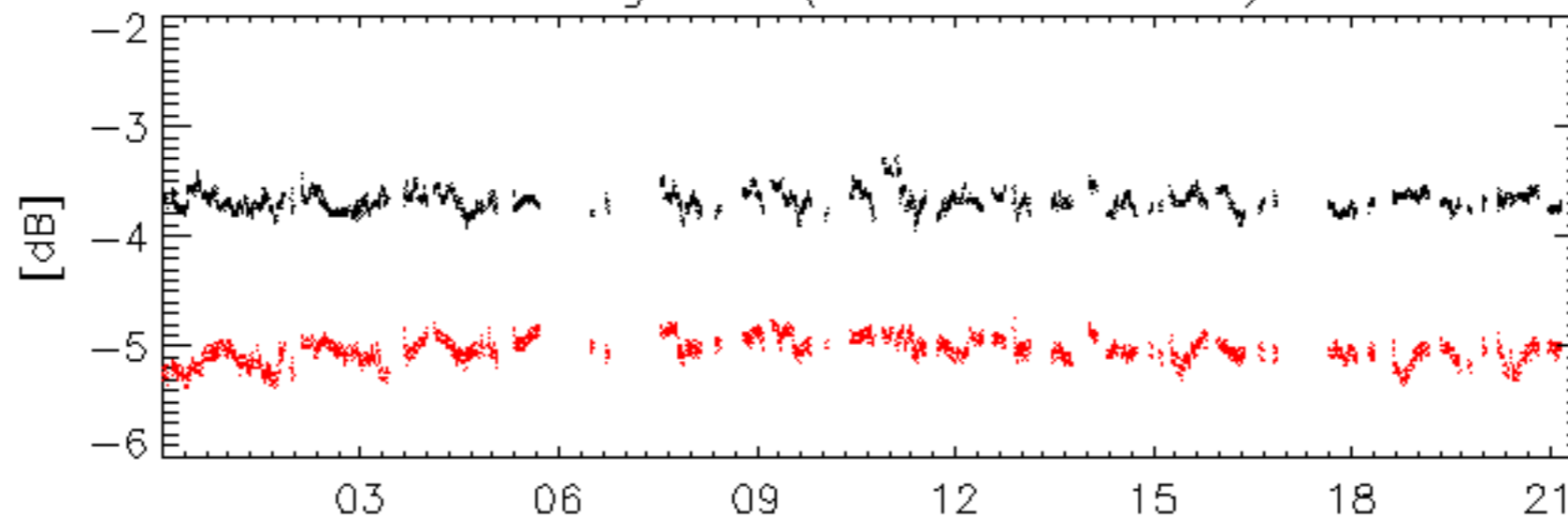
Average P2



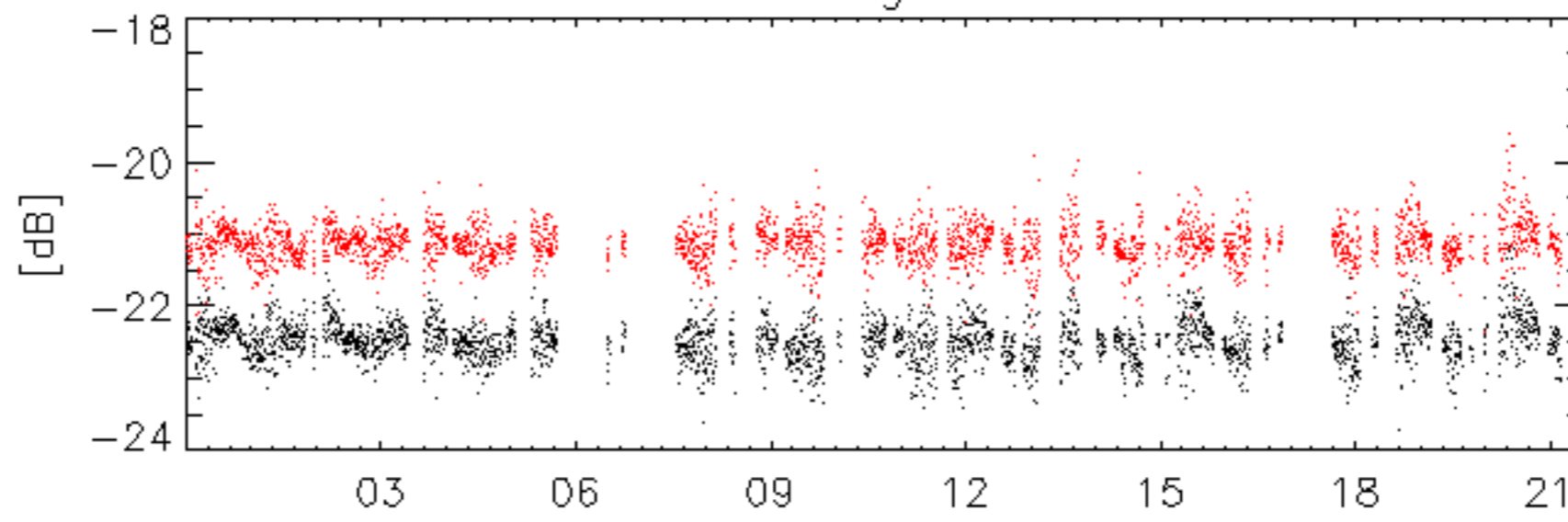
Average P3



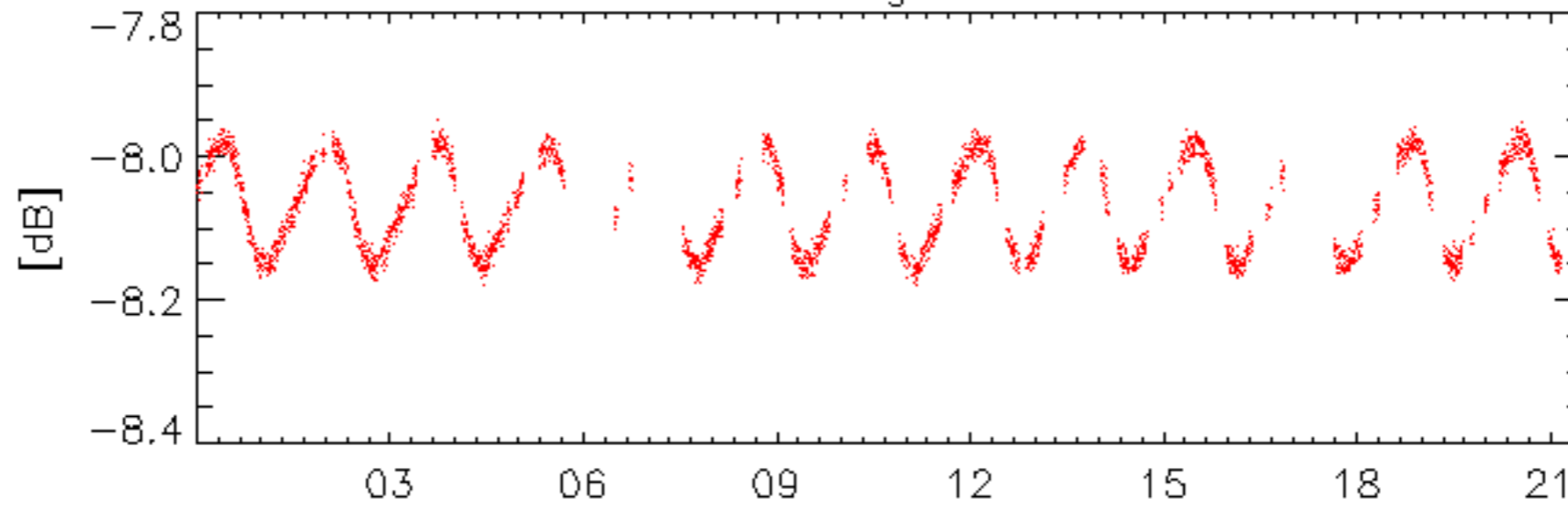
Average P1 (row 3 & row 24)



08-Dec
Average P2



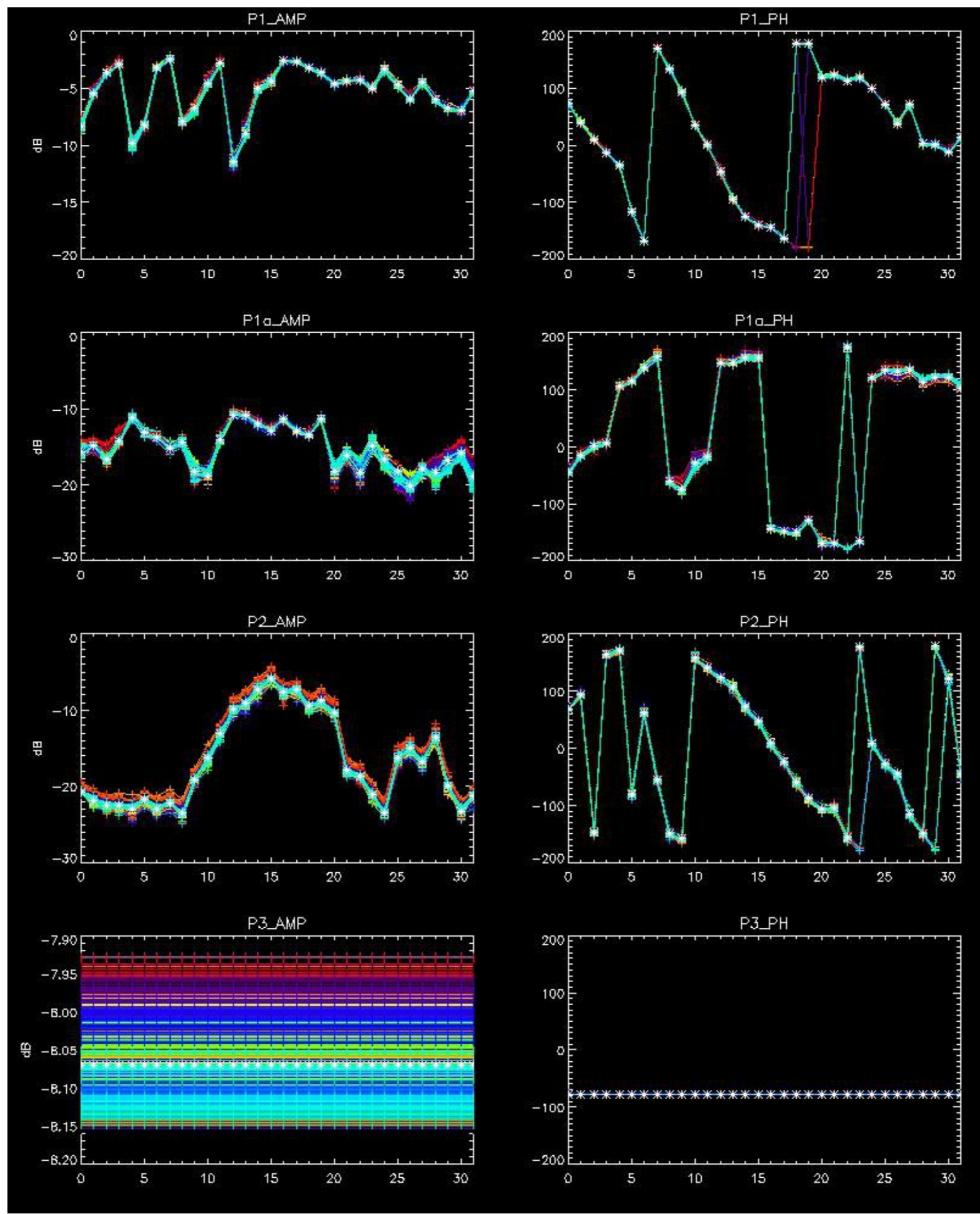
08-Dec
Average P3



08-Dec

No anomalies observed on available browse products

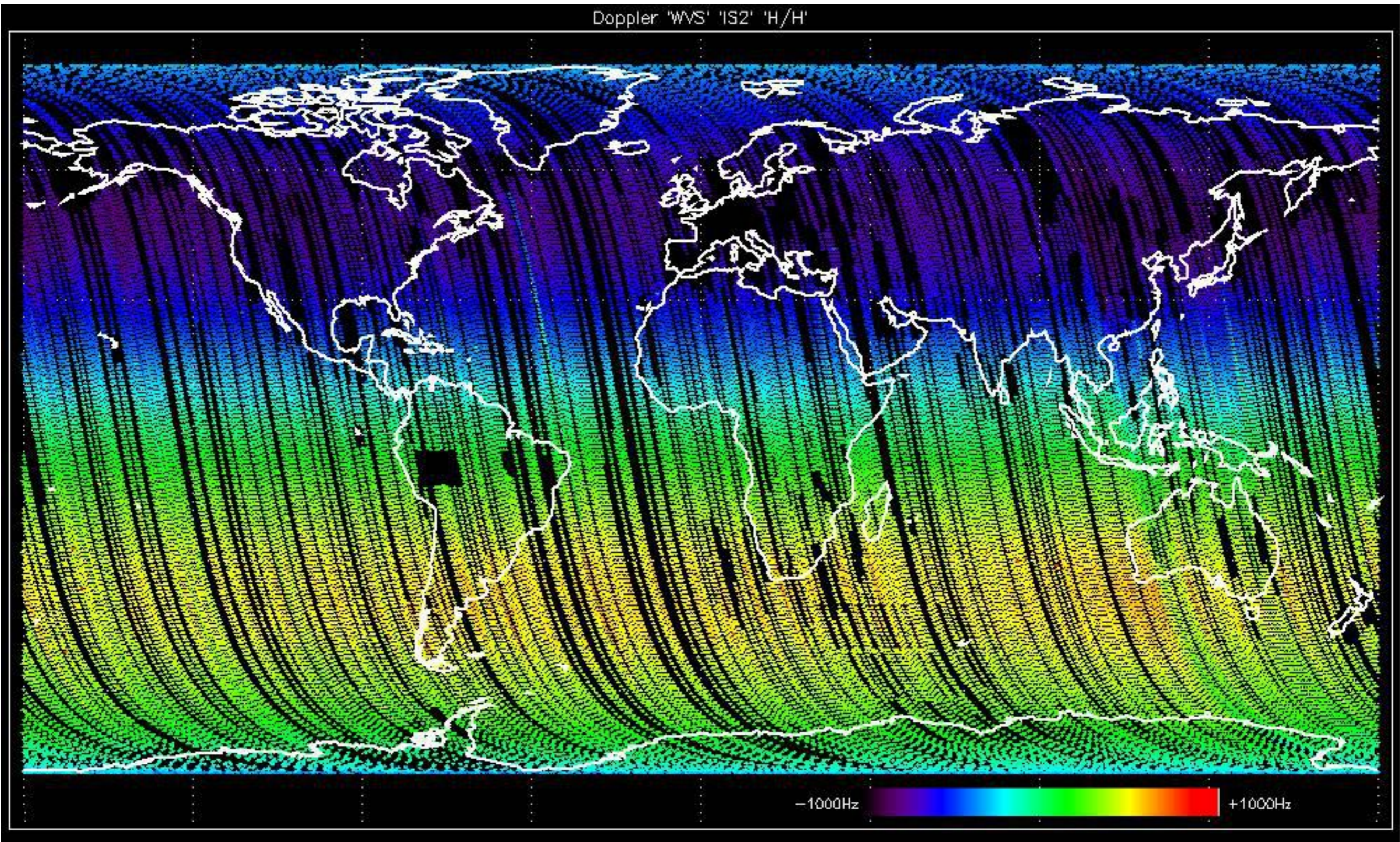
No anomalies observed.



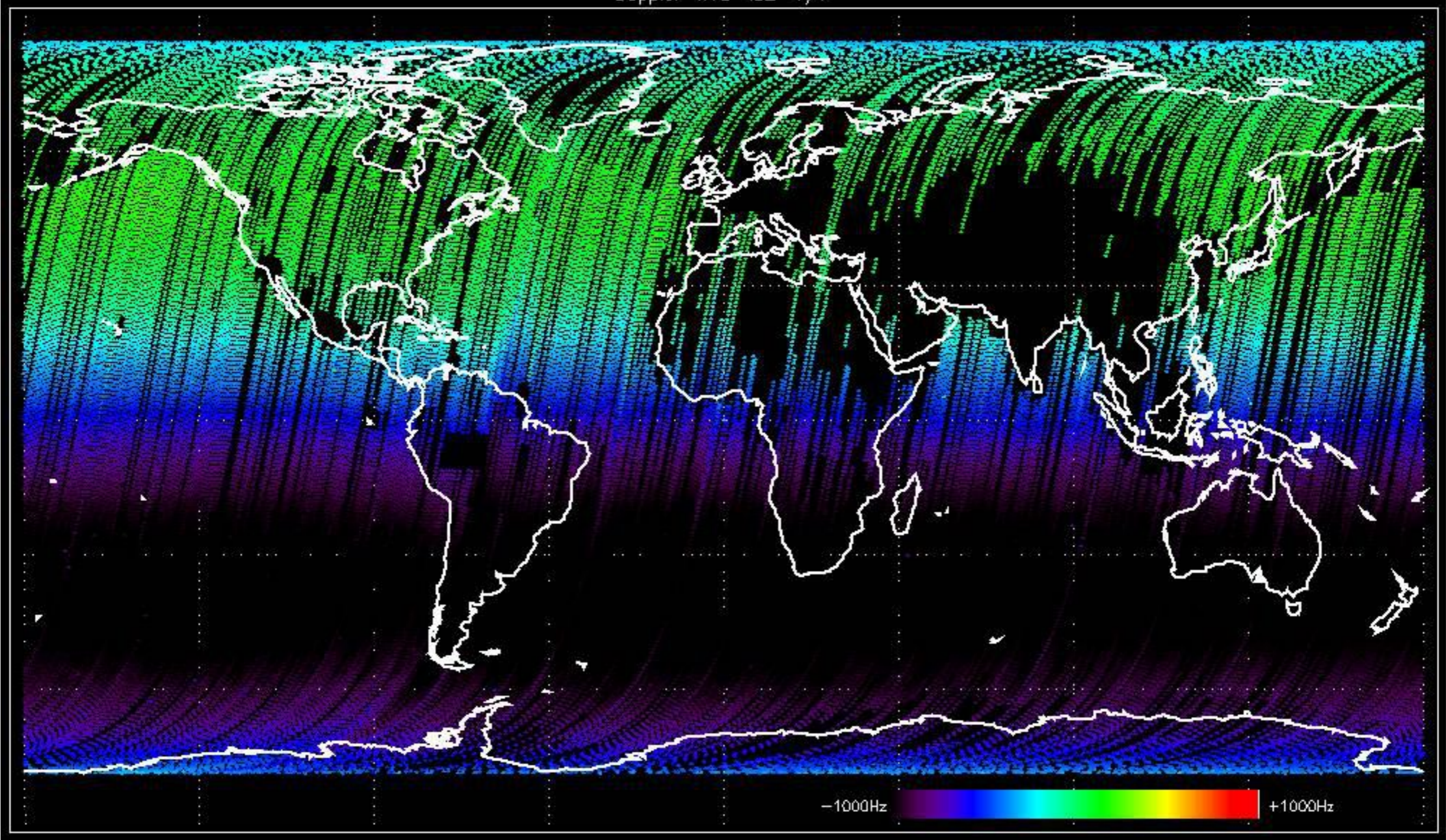
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

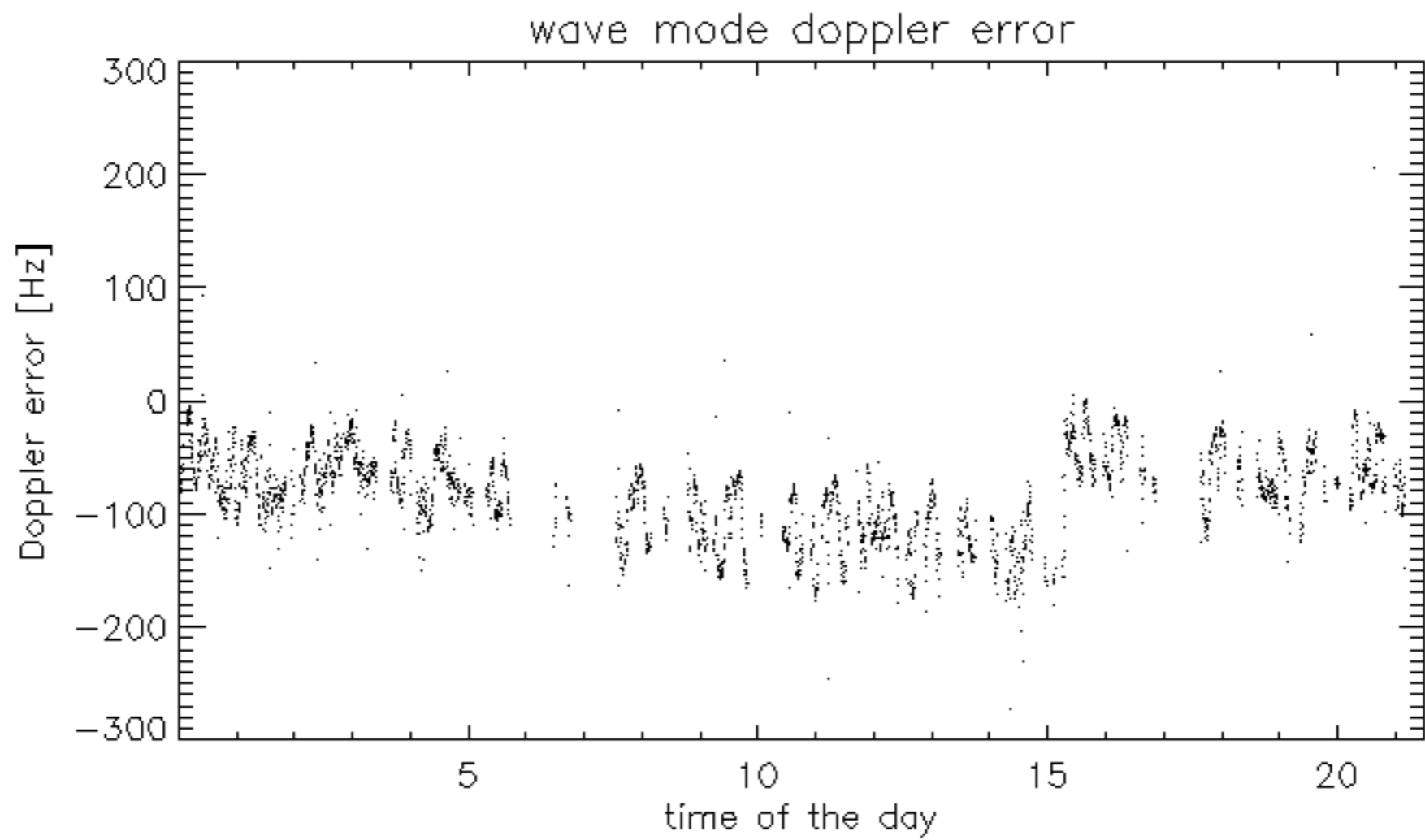
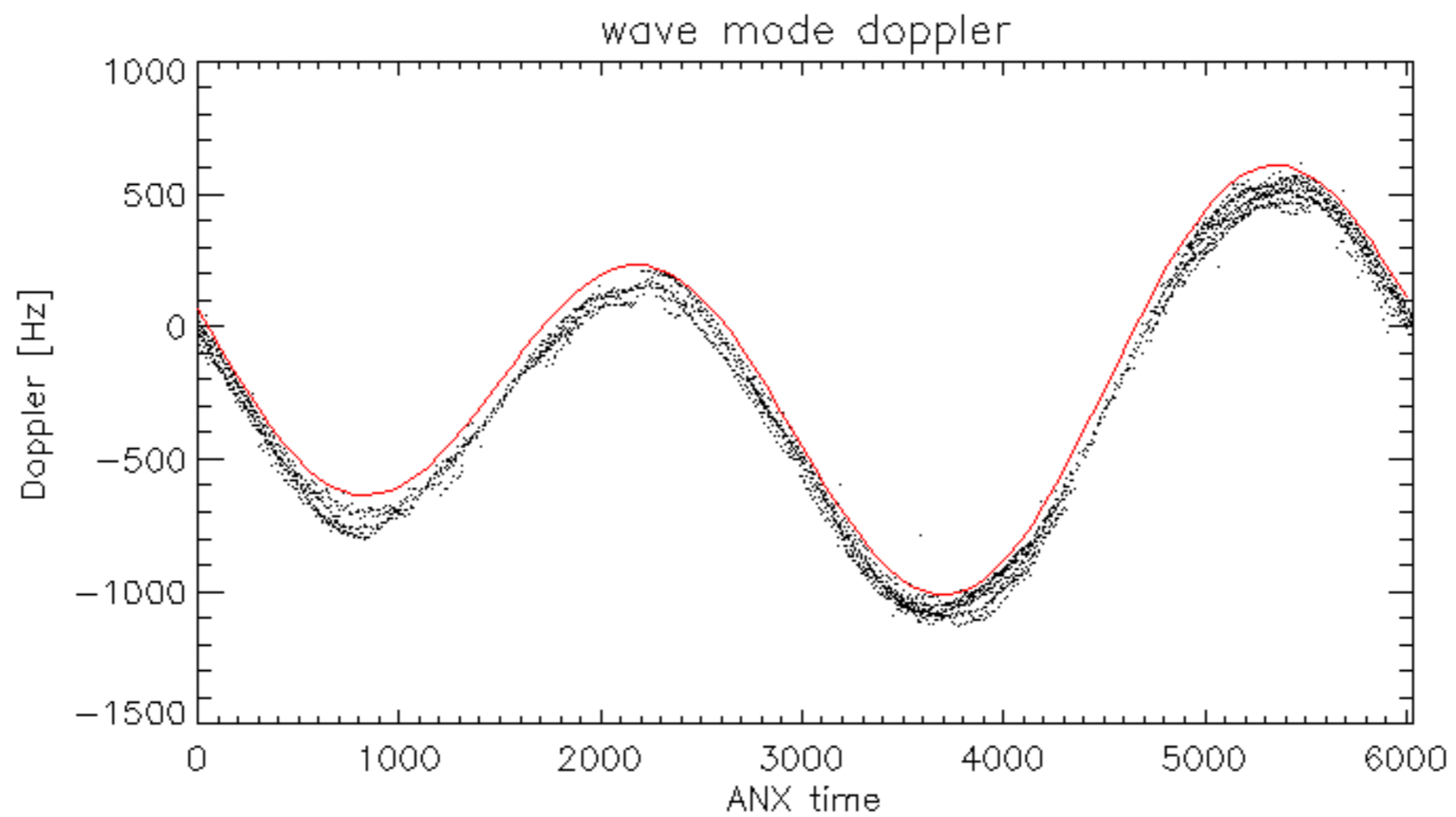
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Doppler analysis performed over the last 35 days

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

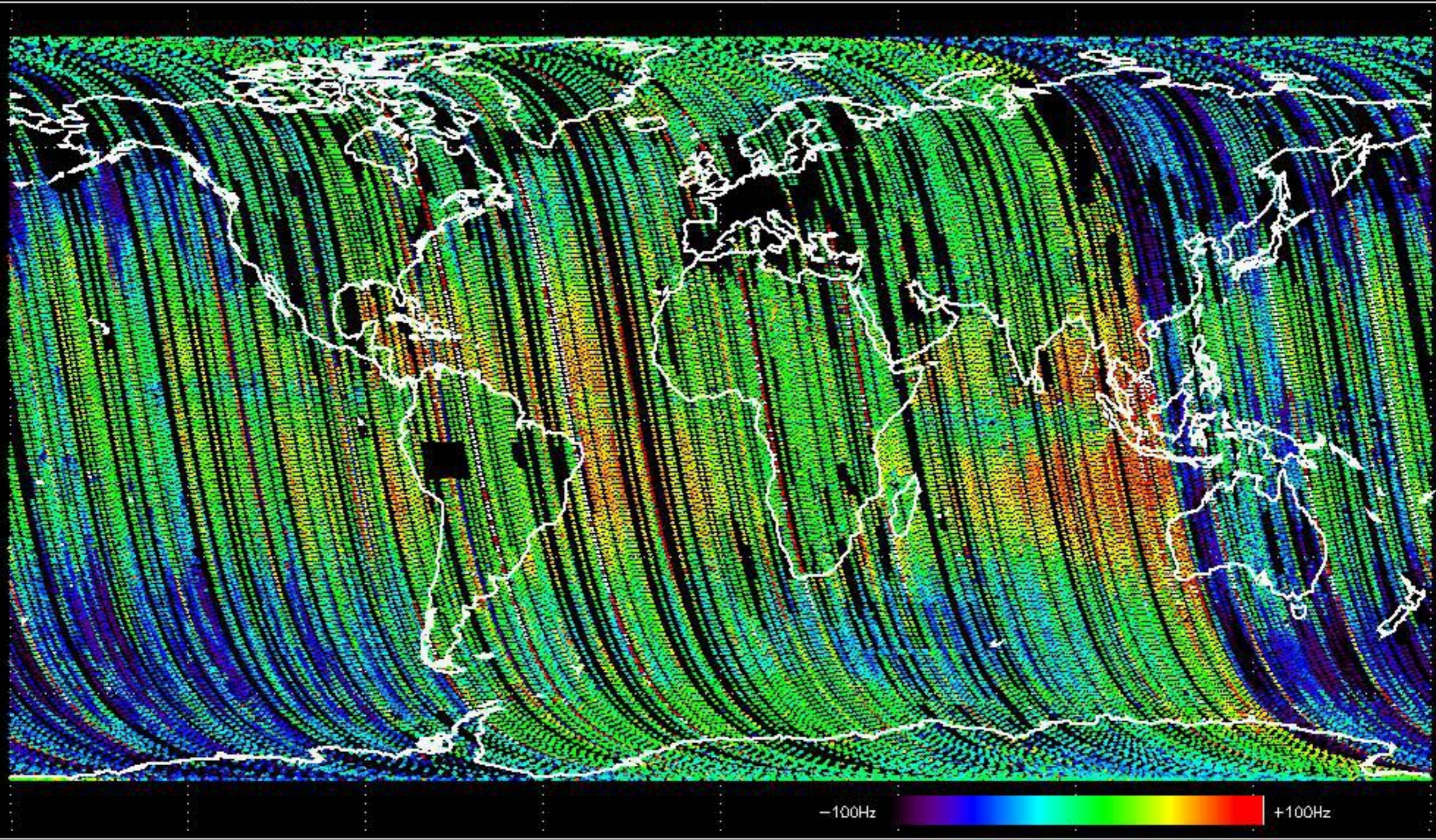


Doppler 'WVS' 'IS2' 'V/V'



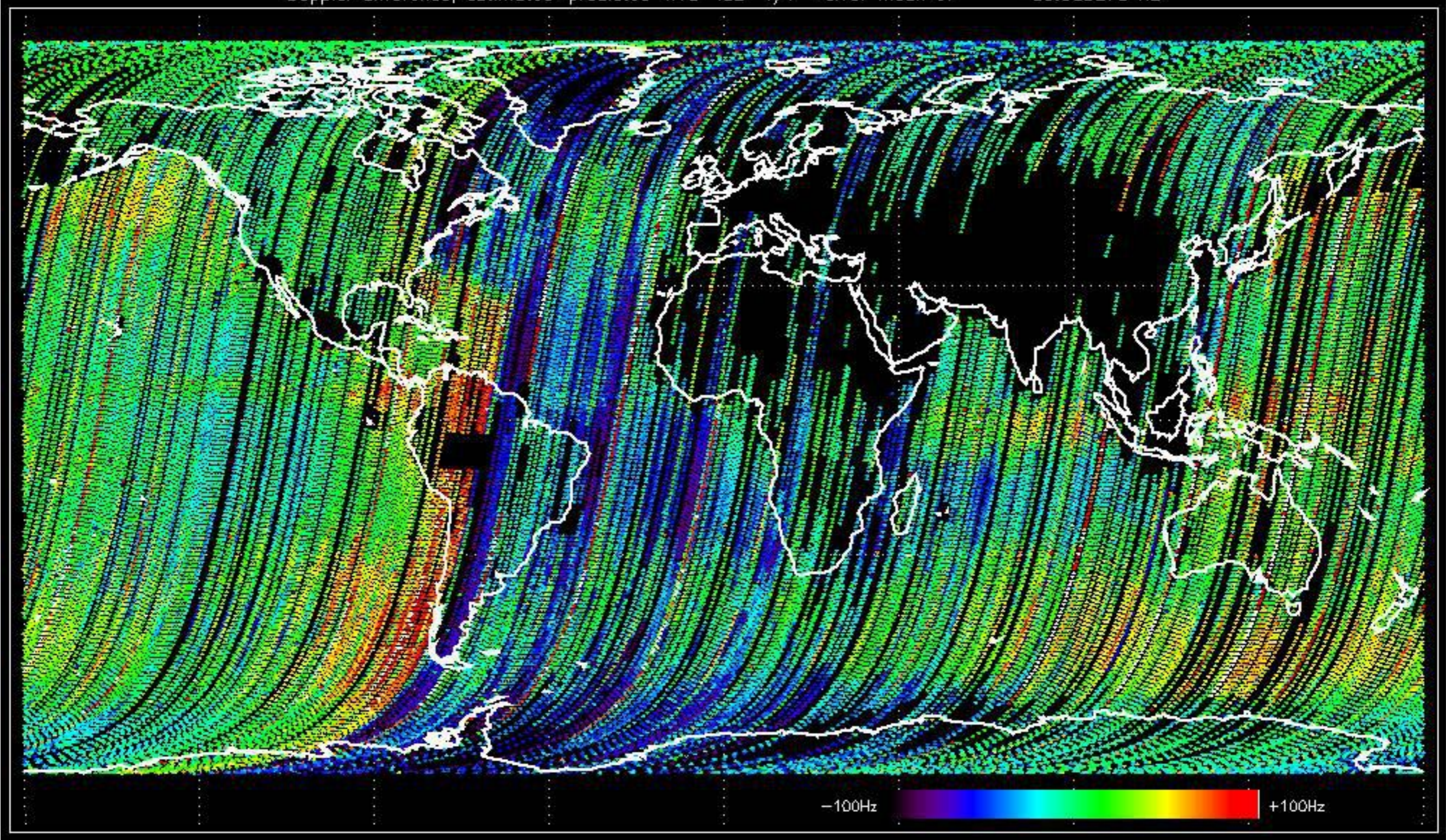


Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -85.923721 Hz



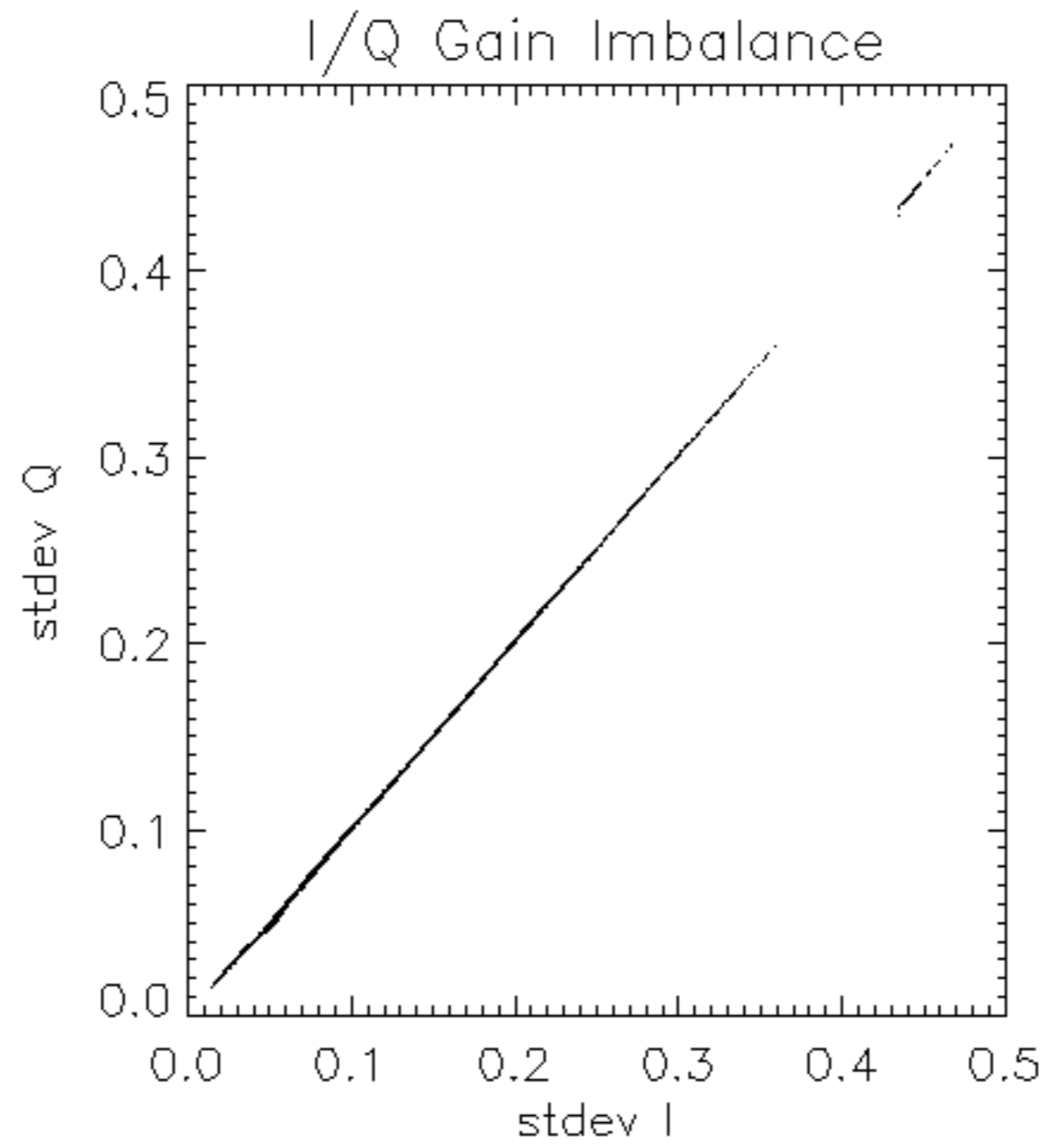
-100Hz +100Hz

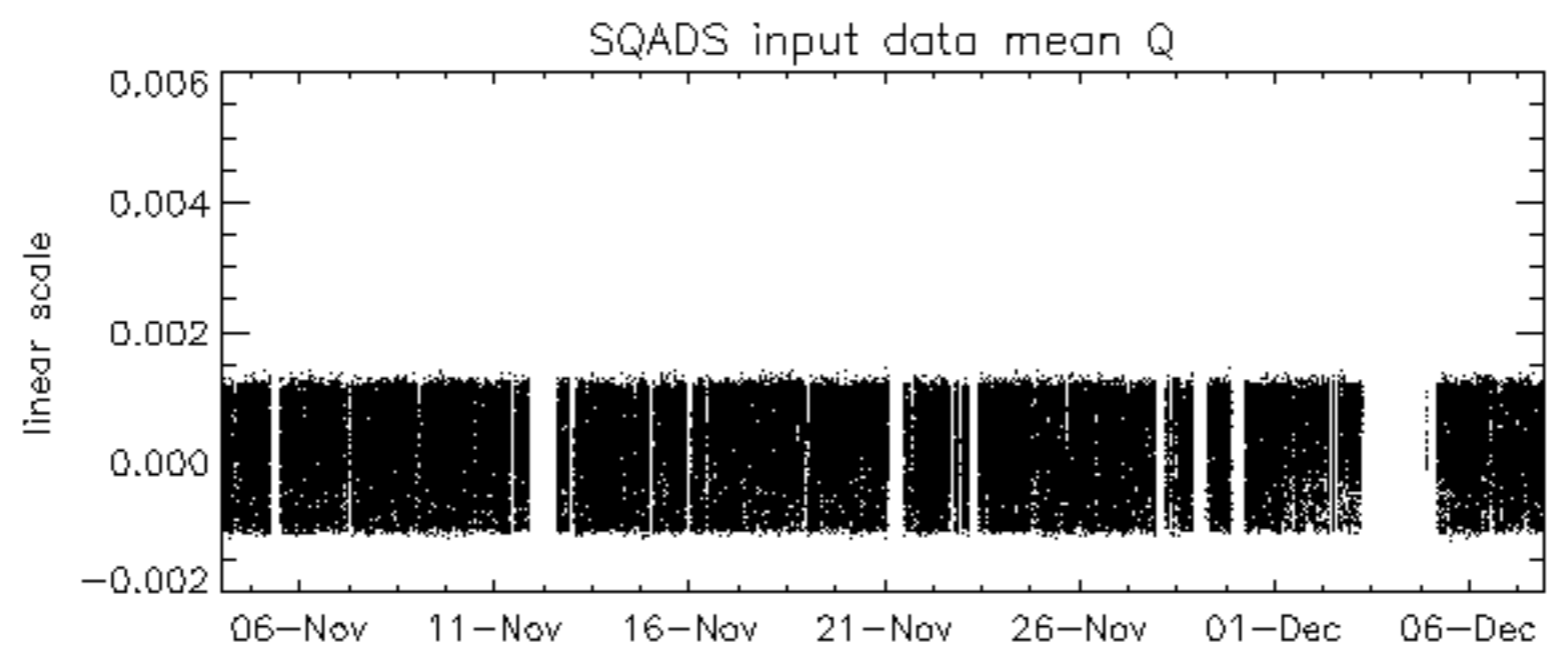
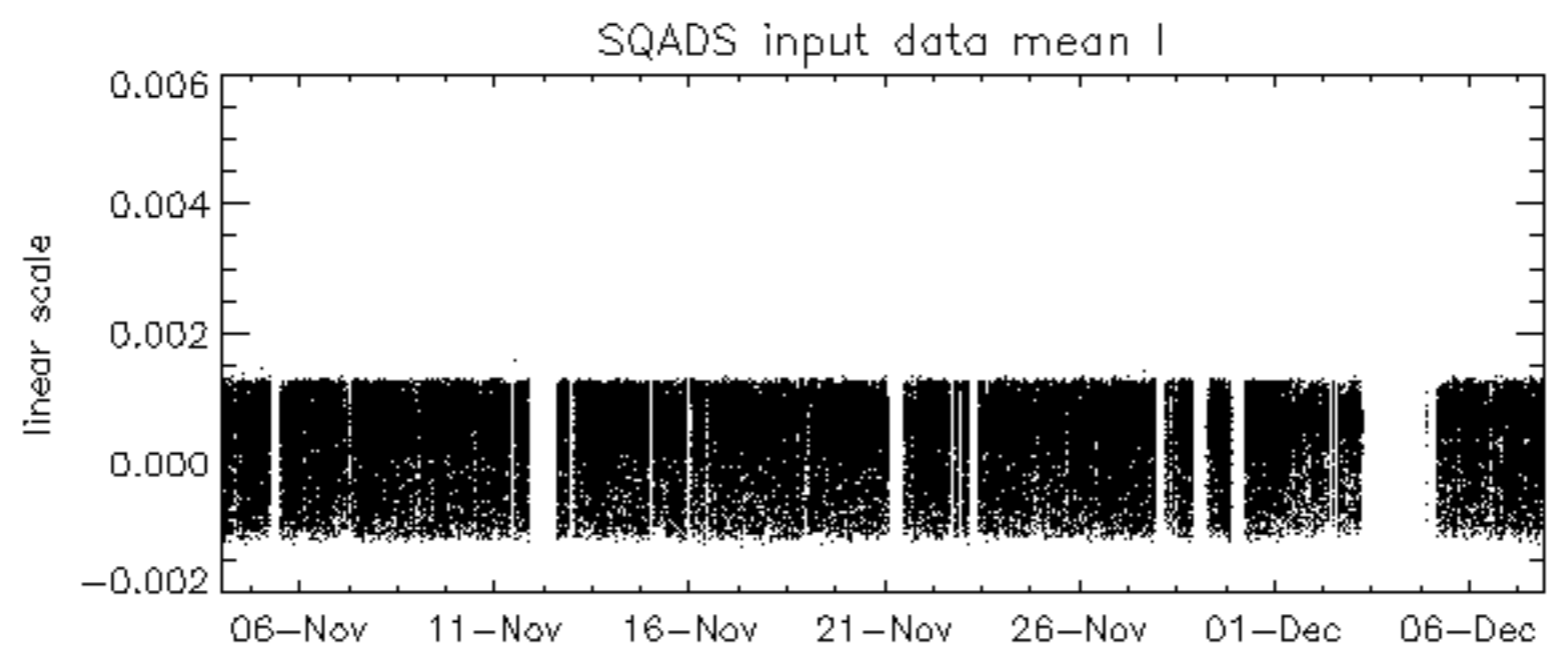
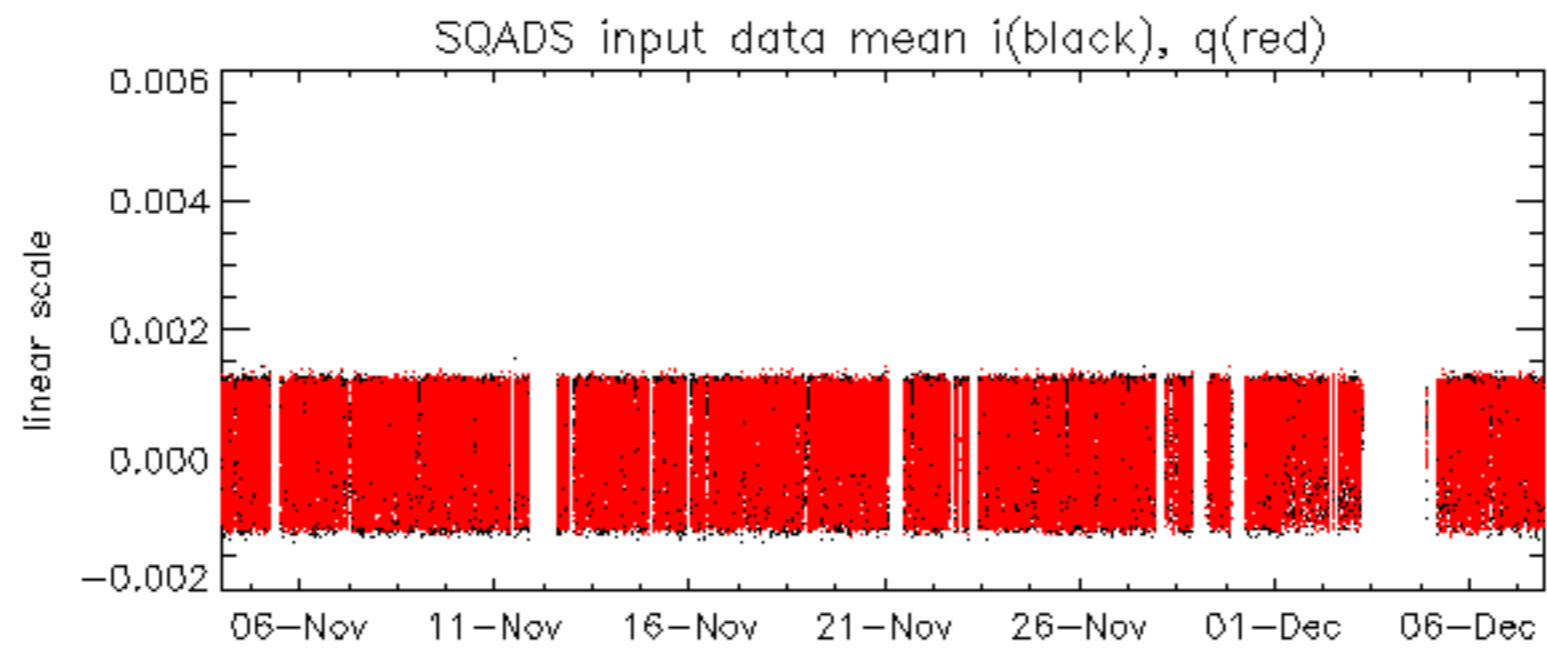
Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -80.085273 Hz

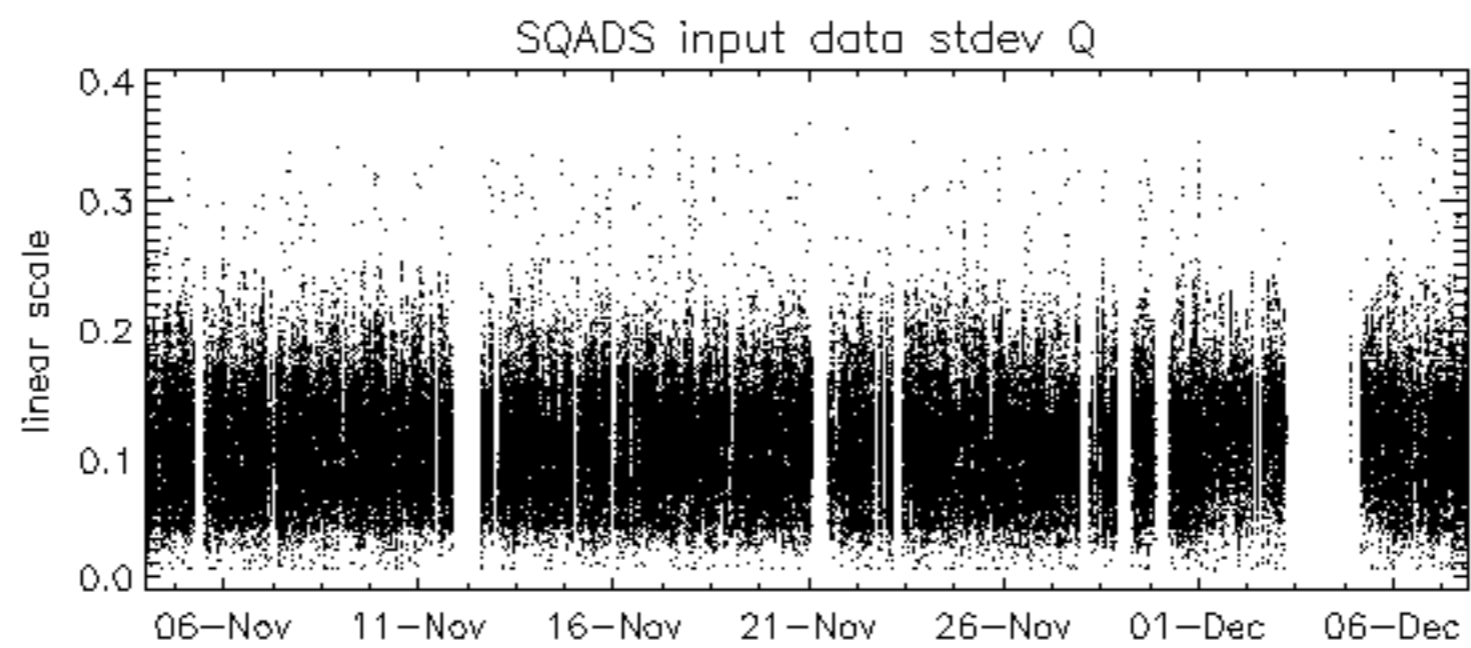
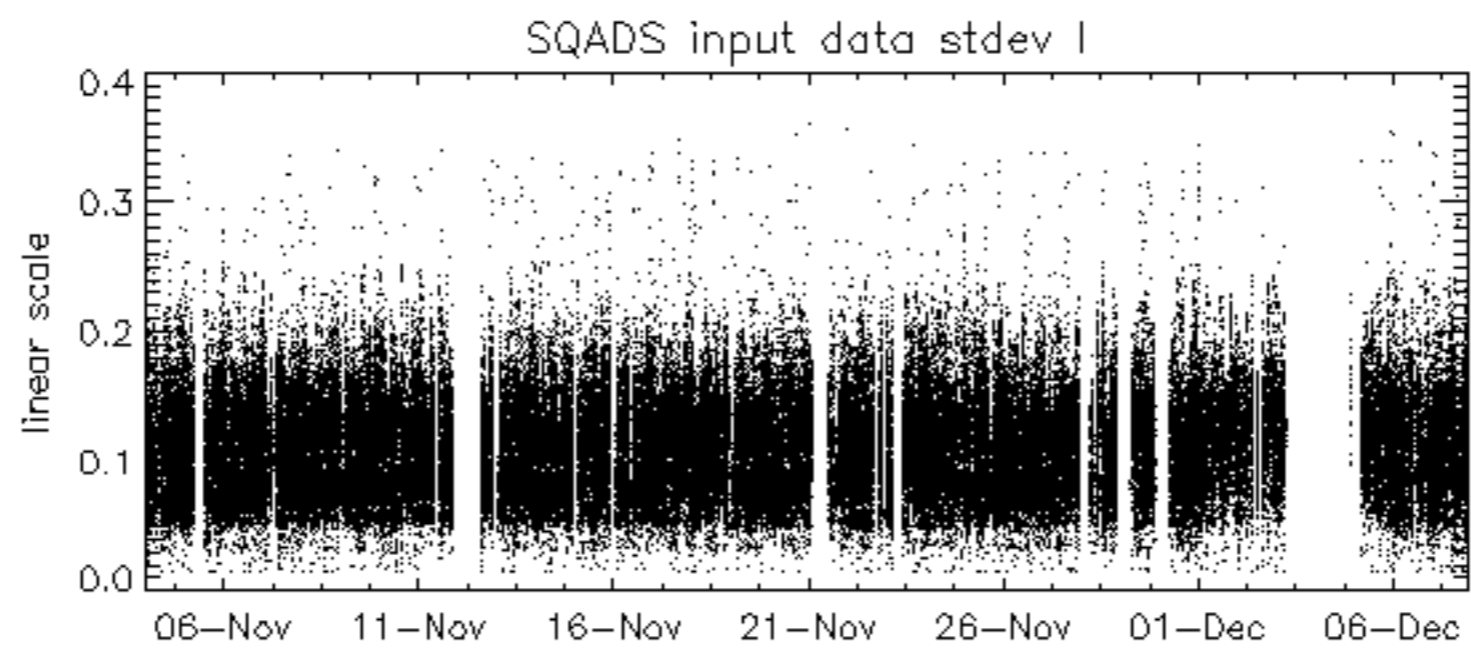
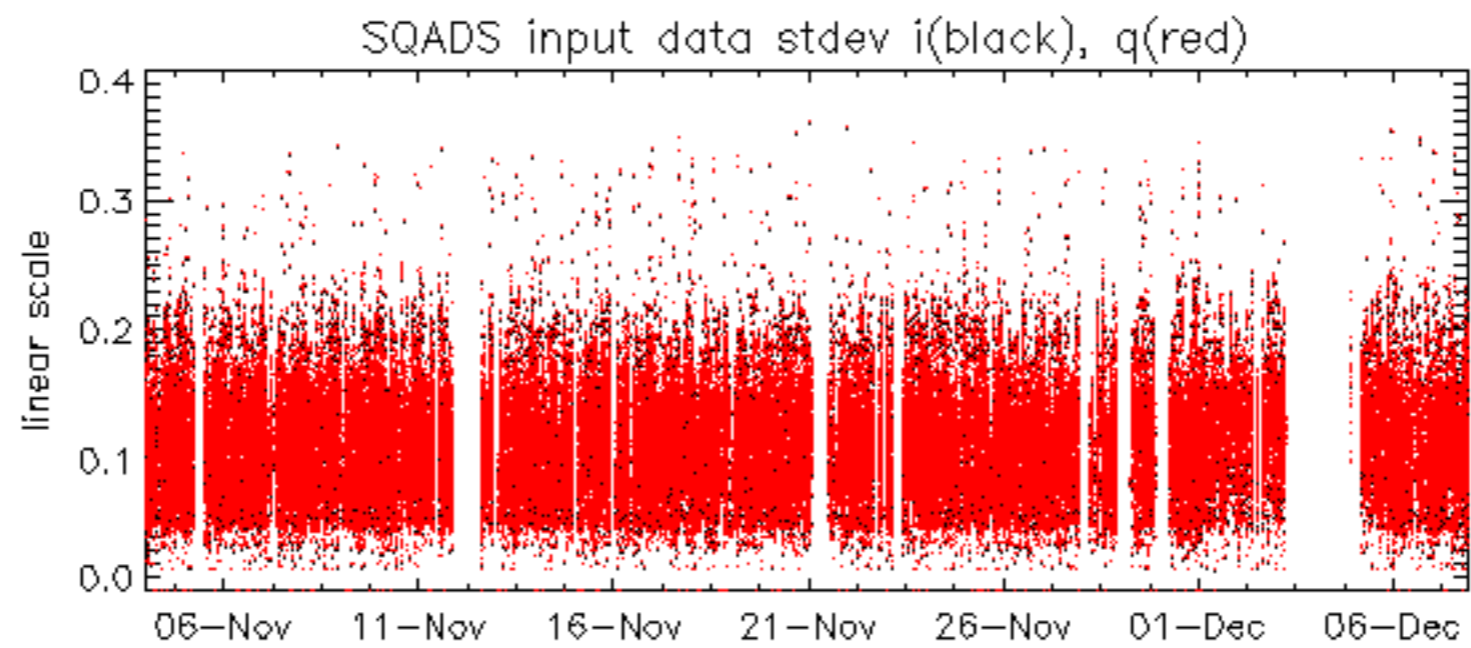


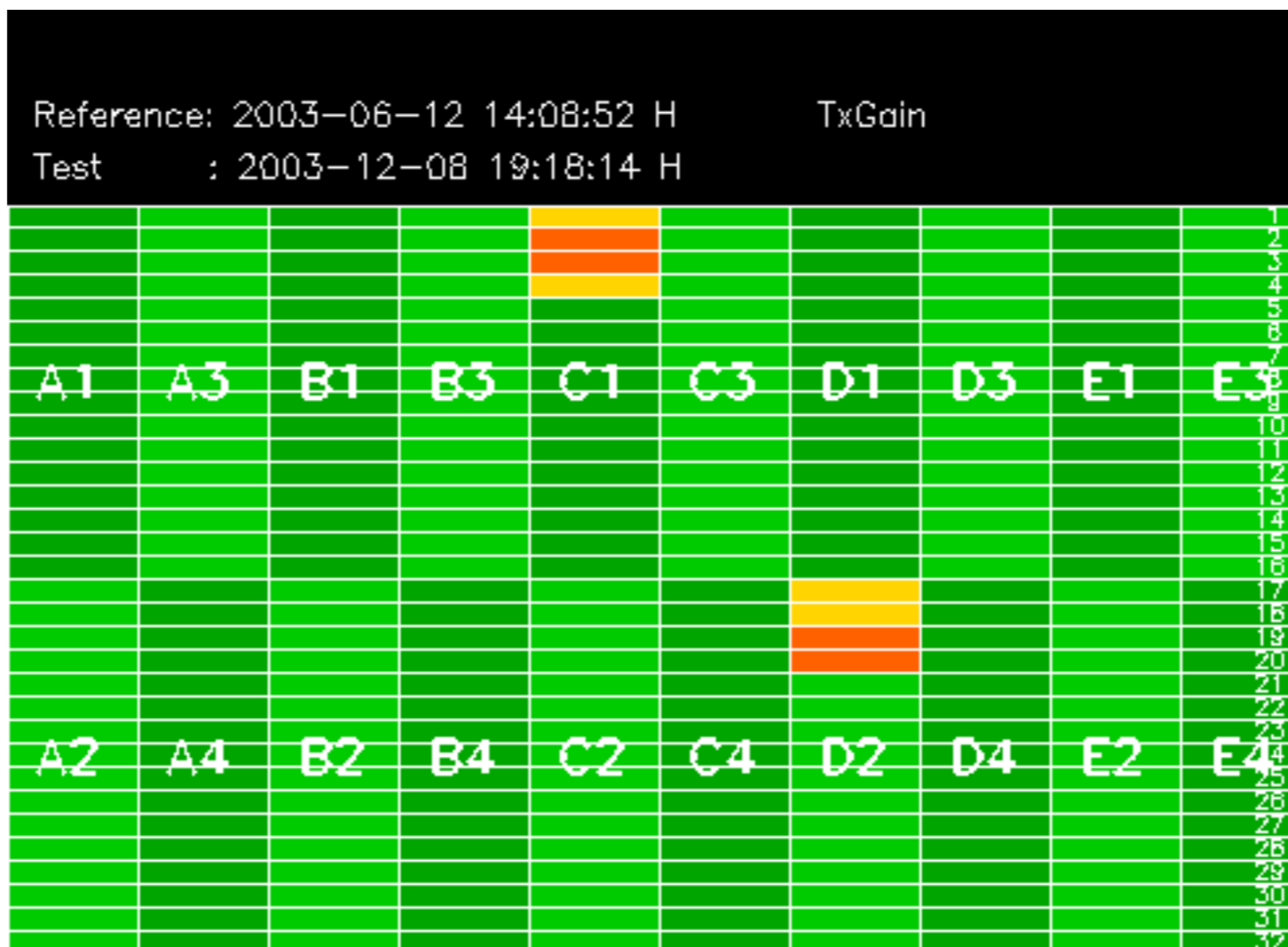
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