

REPORT OF 040316

last update on Tue Mar 16 16:58:35 GMT 2004

1. [Introduction](#)
2. [Summary](#)
 - [Instrument Unavailability](#)
 - [Browse Visual Inspection](#)
 - [Module Stepping Results](#)
 - [Data Analysis](#)
3. [Module Stepping](#)
4. [Internal Calibration pulses](#)
 - [Daily statistics](#)
 - [Cyclic statistics](#)
 - [cal pulses monitoring \(all rows\)](#)
5. [Raw Data Statistics](#)
 - [raw data mean I and Q](#)
 - [raw data stdev I and Q](#)
 - [raw gain imbalance](#)
6. [Wave Doppler analysis](#)
 - [Unbiased Doppler Error](#)
 - [Absolute Doppler](#)
 - [Doppler evolution versus ANX](#)

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	20040315 193942
H	20040315 193822

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

⊗

4.2 - Cyclic statistics



P1 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-3.618638	0.006054	0.043134
7	P1	-3.330682	0.012463	0.068014
11	P1	-4.794363	0.264733	0.282261
15	P1	-4.994521	0.048221	-0.077269
19	P1	-3.345564	0.072938	-0.099380
22	P1	-4.541096	0.070963	-0.096511
24	P1	-5.106865	0.090767	-0.063985
28	P1	-4.571655	0.076926	-0.123061

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.381599	0.081870	-0.018977
7	P2	-22.906309	0.130442	-0.012220
11	P2	-16.040379	0.158660	0.038467
15	P2	-7.180830	0.090093	0.024055
19	P2	-9.475629	0.164353	0.007743
22	P2	-17.685104	0.102983	0.056390
24	P2	-21.038586	0.111343	-0.029003
28	P2	-16.599443	0.087774	0.005469

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.128298	0.003014	0.002134
7	P3	-8.128289	0.003015	0.002123
11	P3	-8.128294	0.003014	0.002162
15	P3	-8.128304	0.003012	0.002228
19	P3	-8.128312	0.003012	0.002285
22	P3	-8.128311	0.003012	0.002263
24	P3	-8.128302	0.003012	0.002210

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	0.000470196
	stdev	2.35031e-07
MEAN Q	mean	0.000495770
	stdev	2.59645e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127306
	stdev	0.00110828
STDEV Q	mean	0.127535
	stdev	0.00112086



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

6.1 - Unbiased Doppler Error

Evolution of unbiased Doppler error (Real - Expected)
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Ascending

Descending

6.2 - Absolute Doppler

Evolution of Absolute Doppler

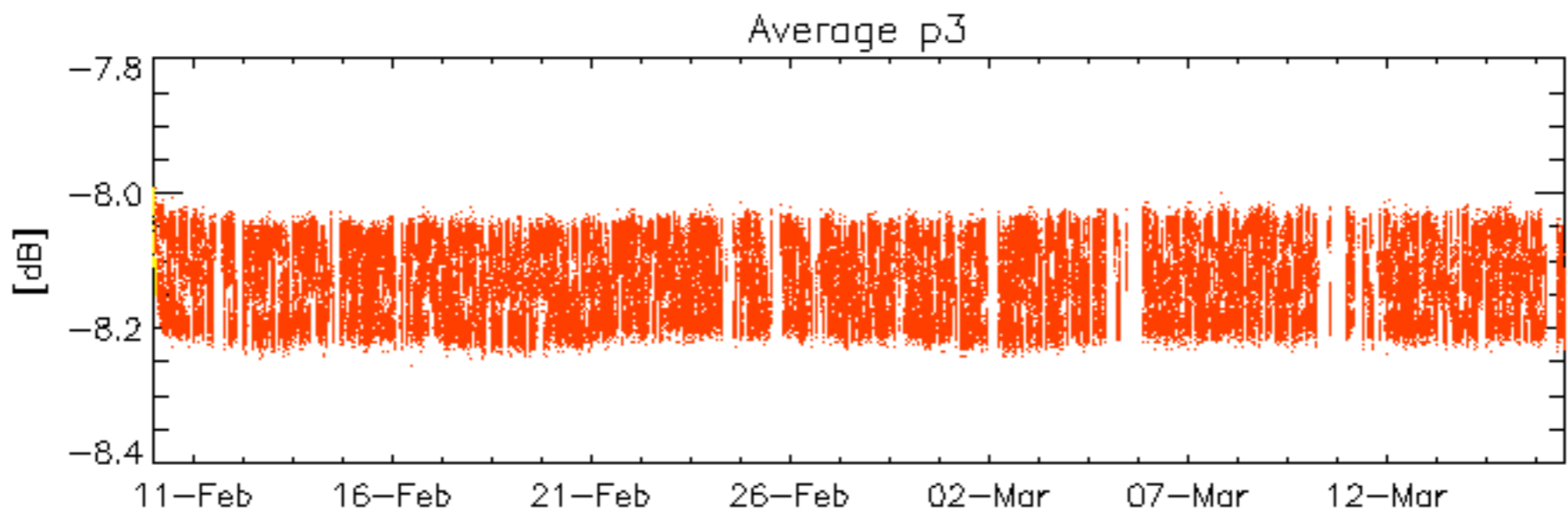
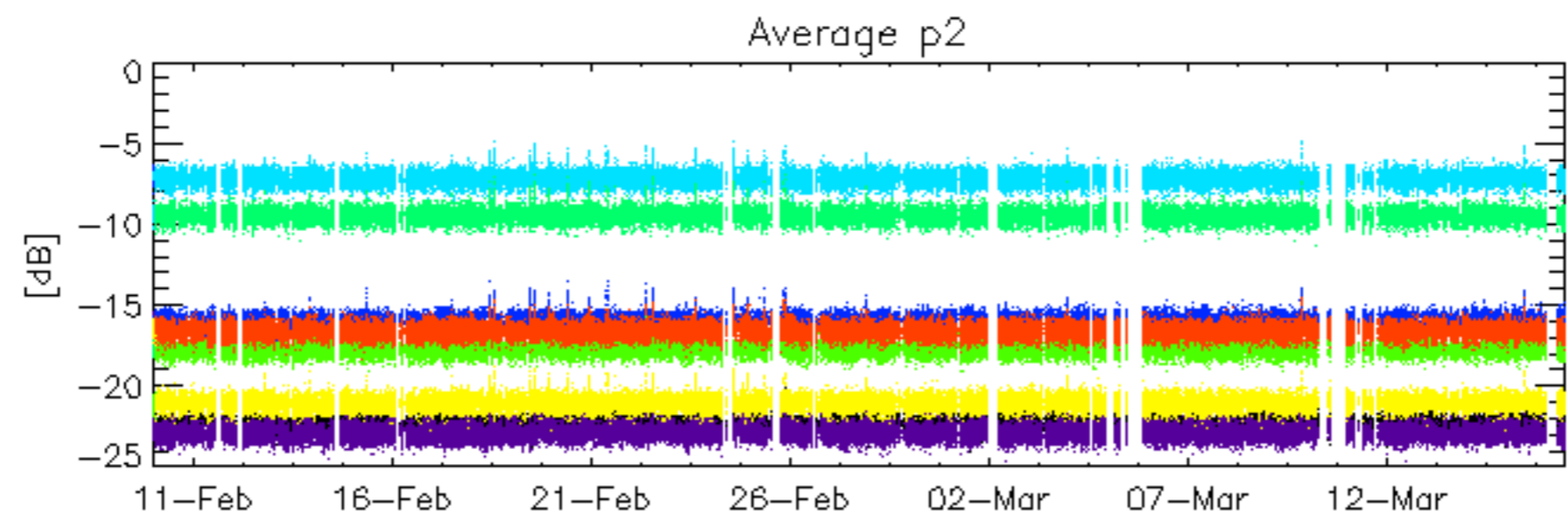
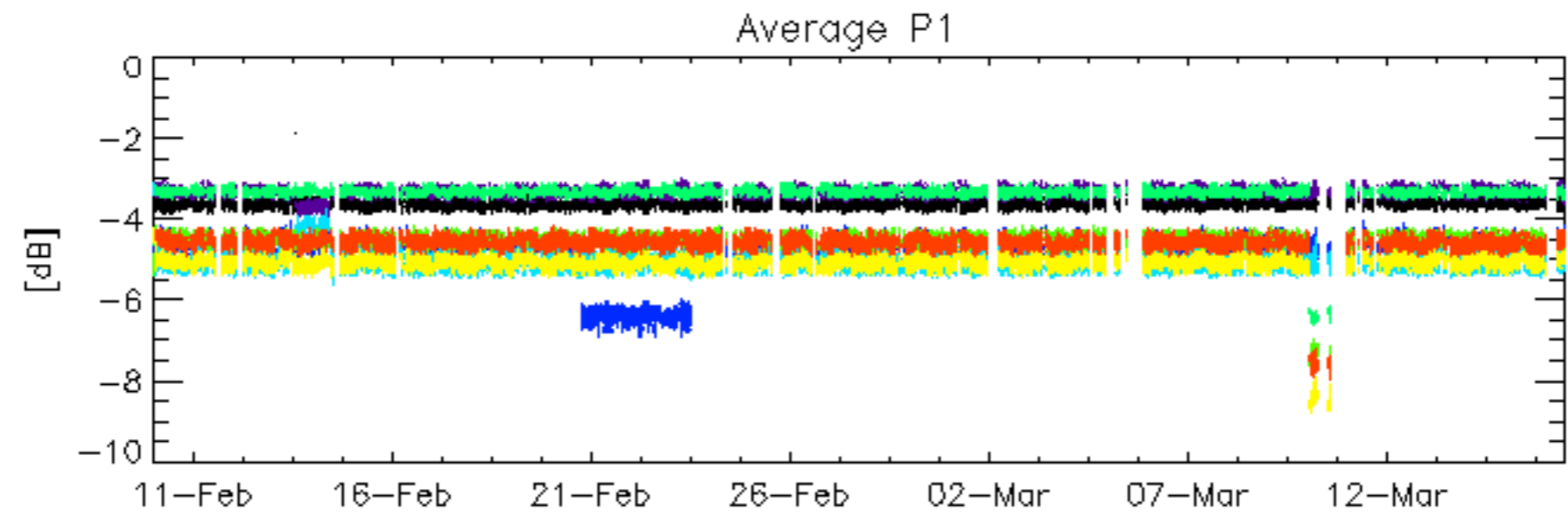
Ascending

Descending

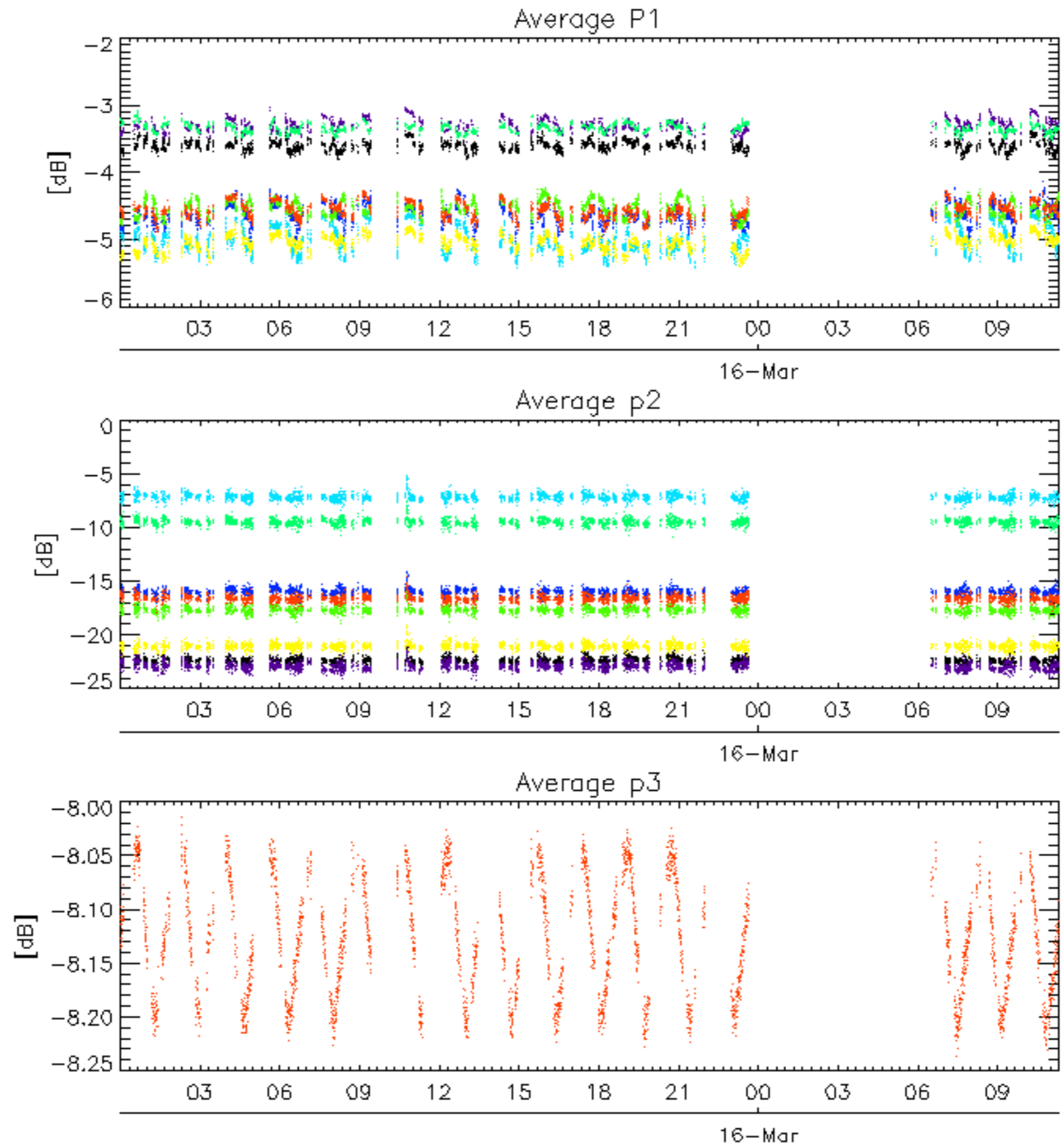
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX





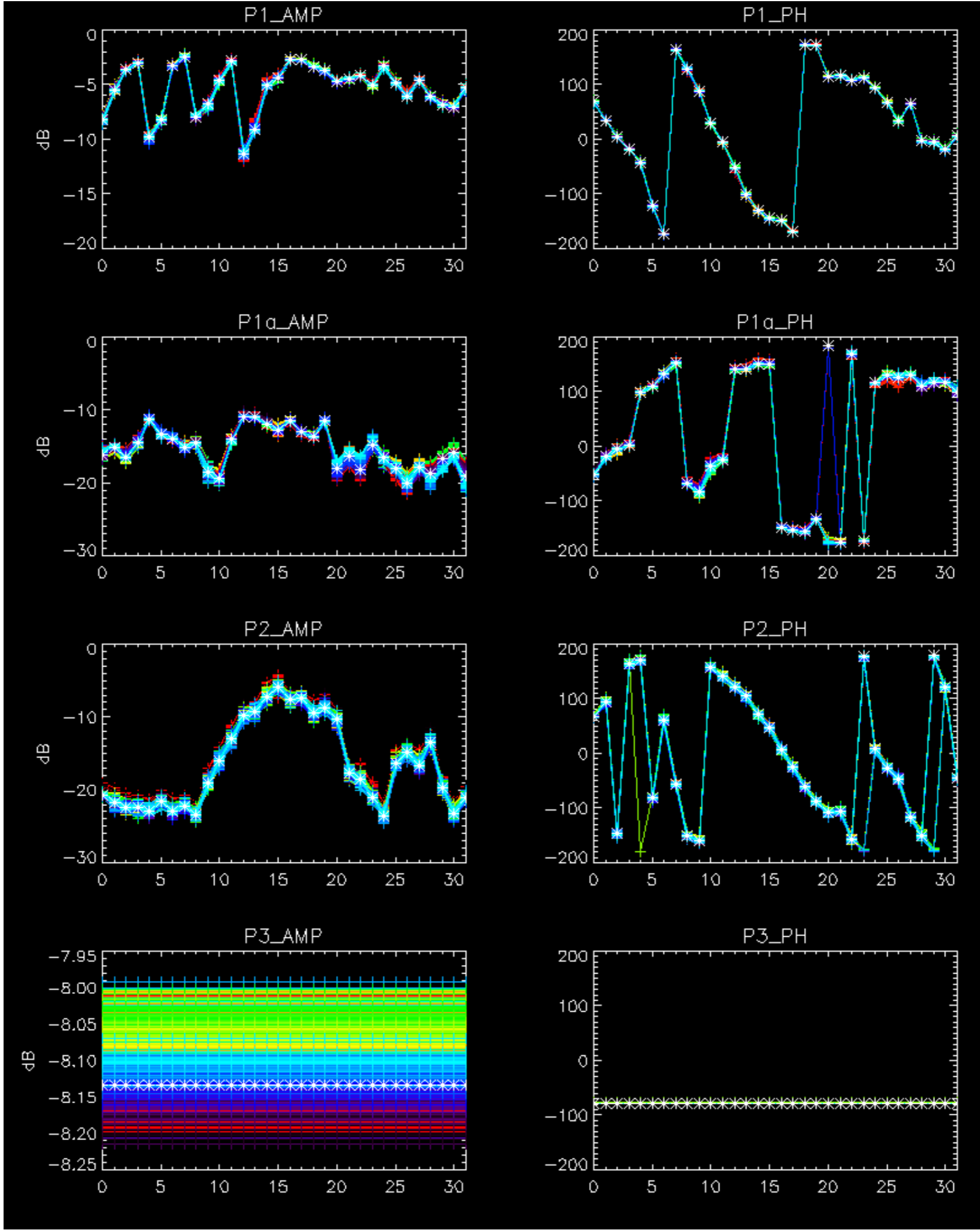
rows: 3 7 11 15 19 22 24 28



rows: **3** **7** **11** **15** **19** **22** **24** **28**

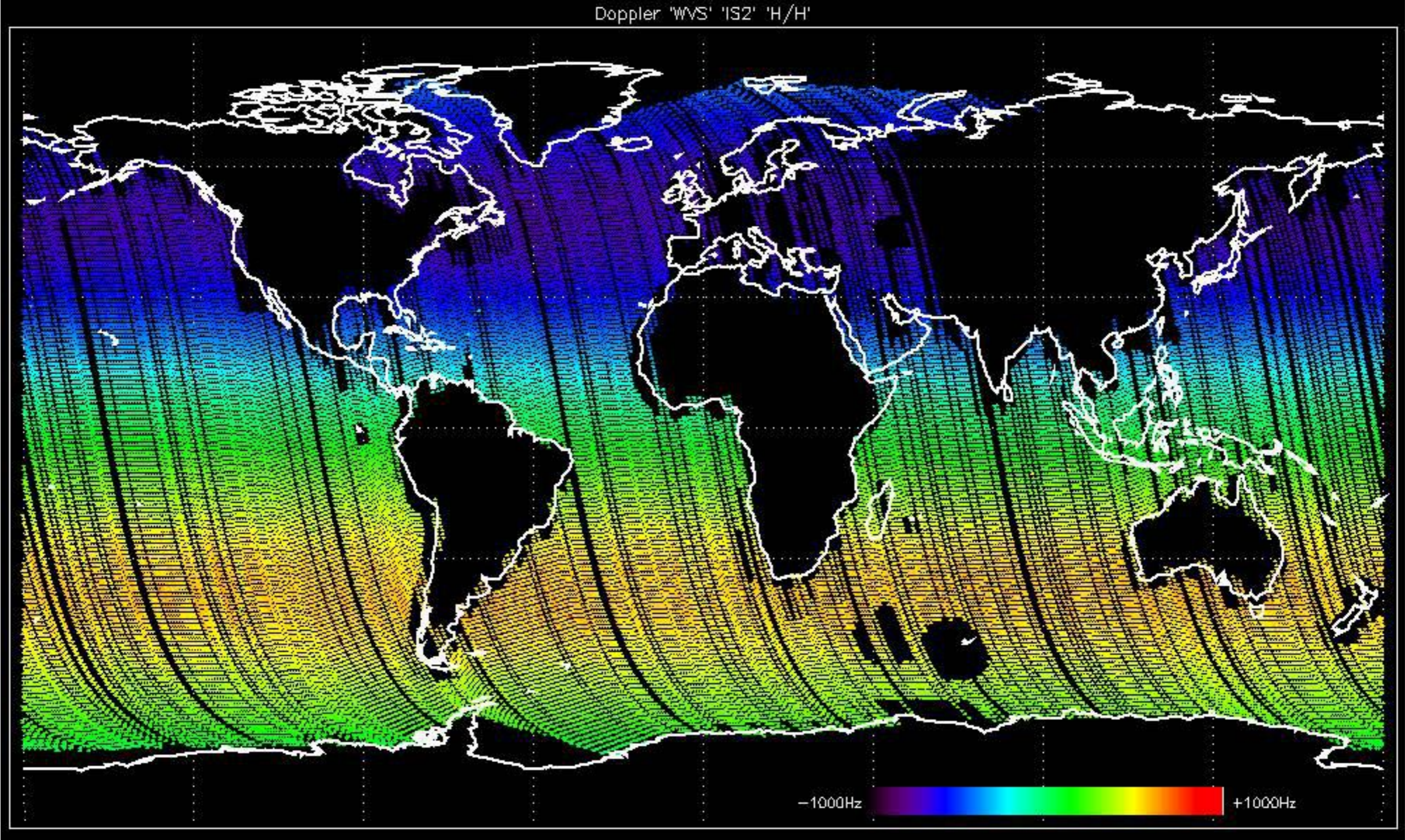
No anomalies observed on available browse products

No anomalies observed.

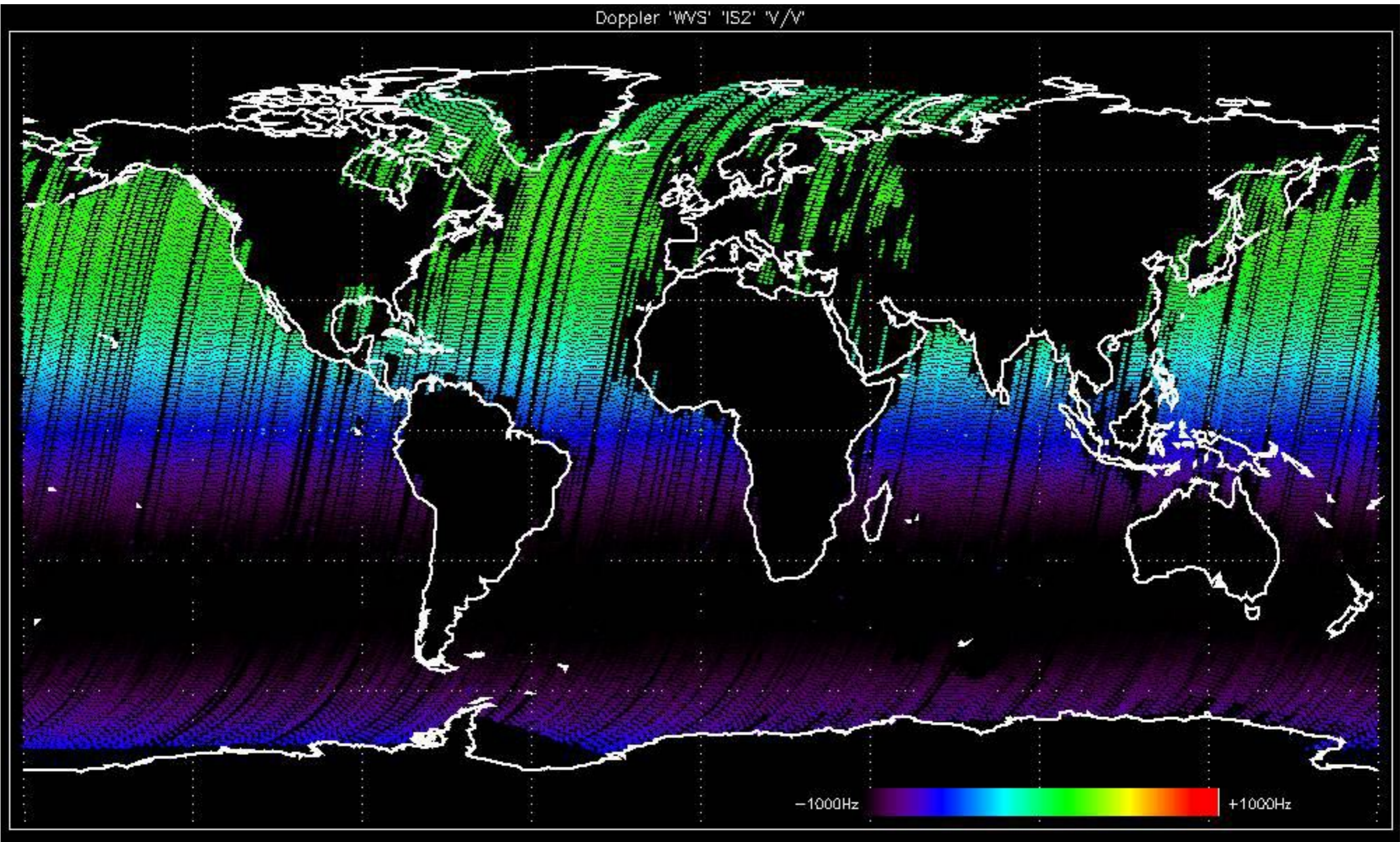


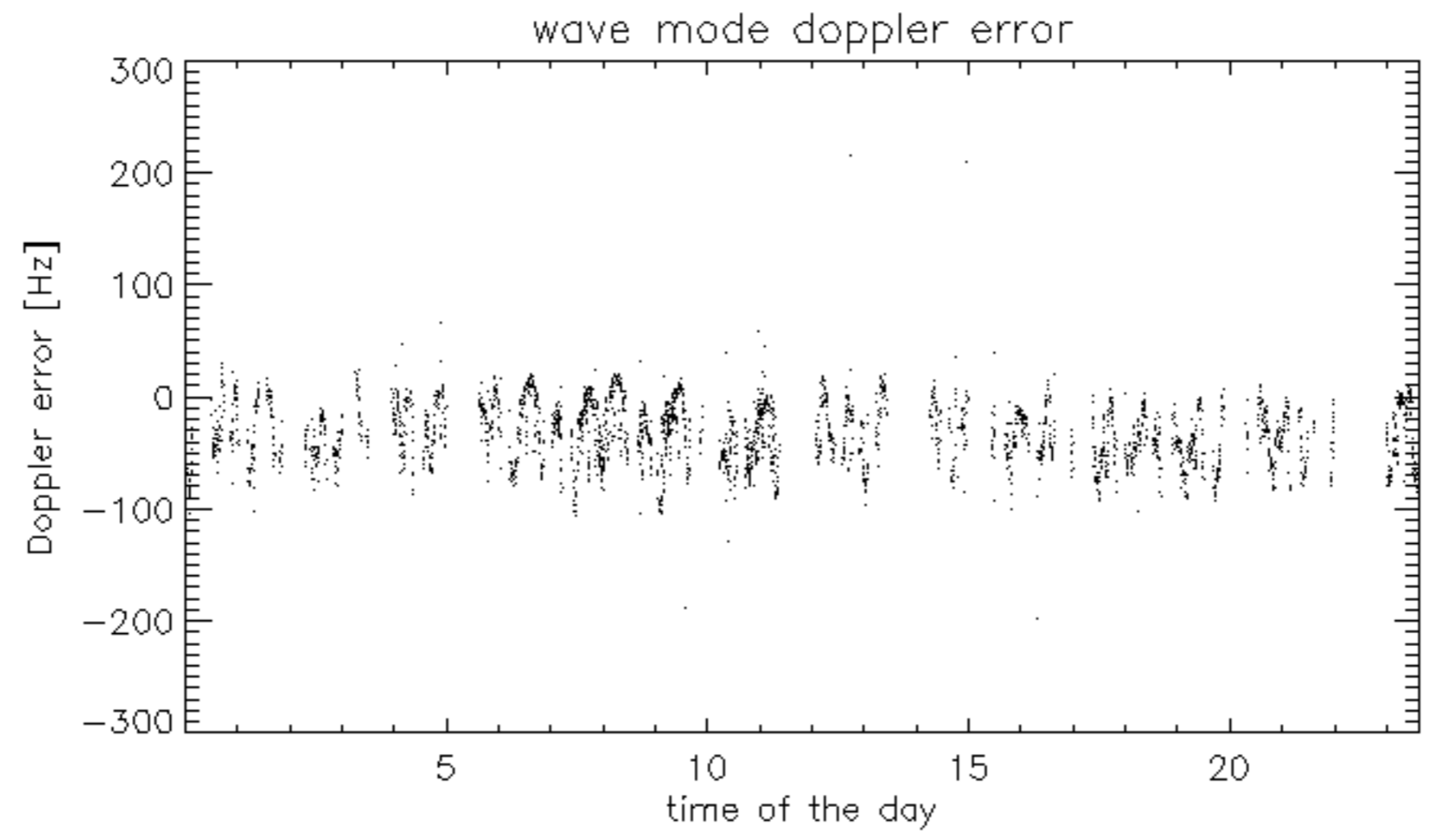
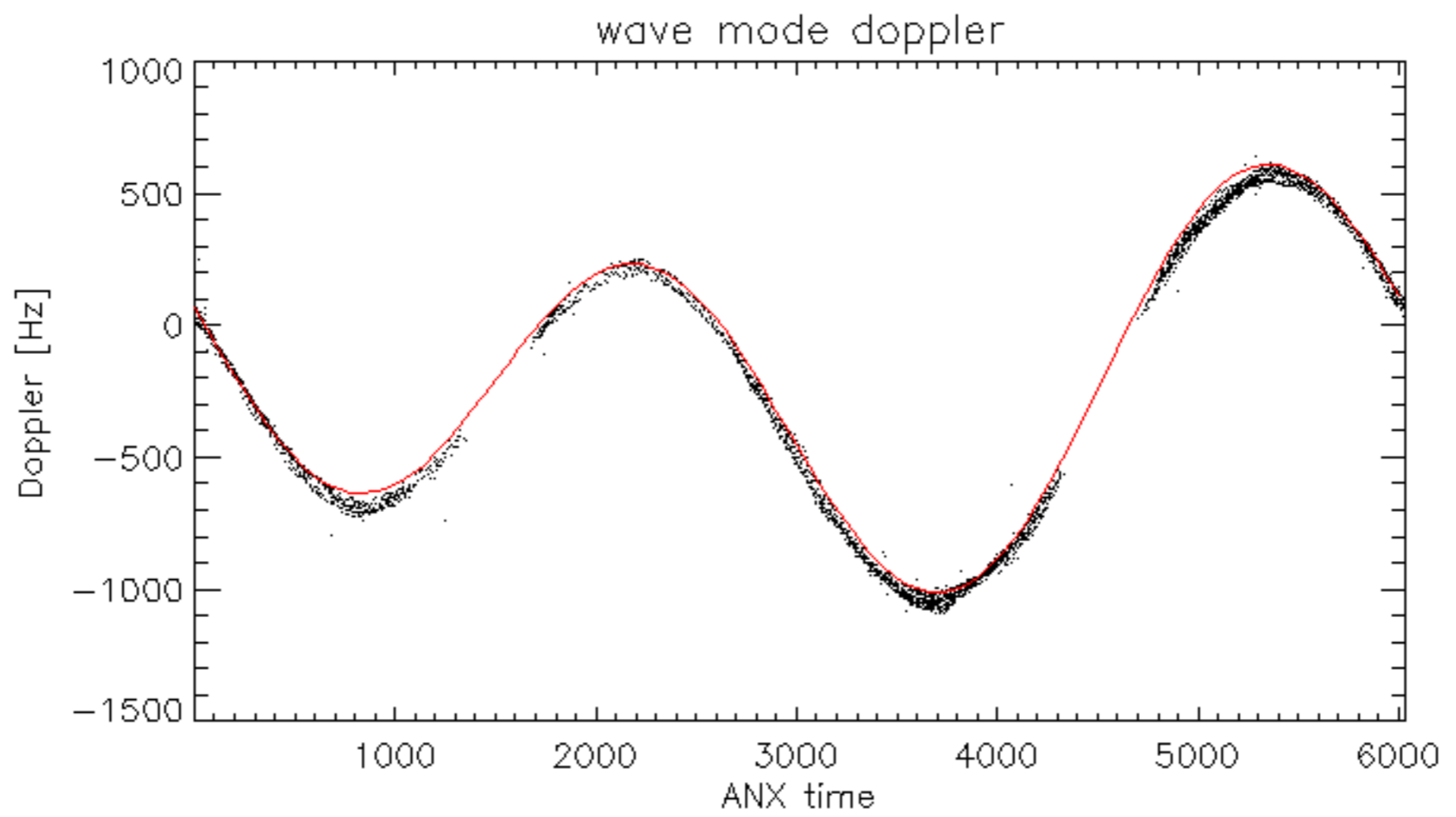
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Doppler 'WVS' 'IS2' 'H/H'

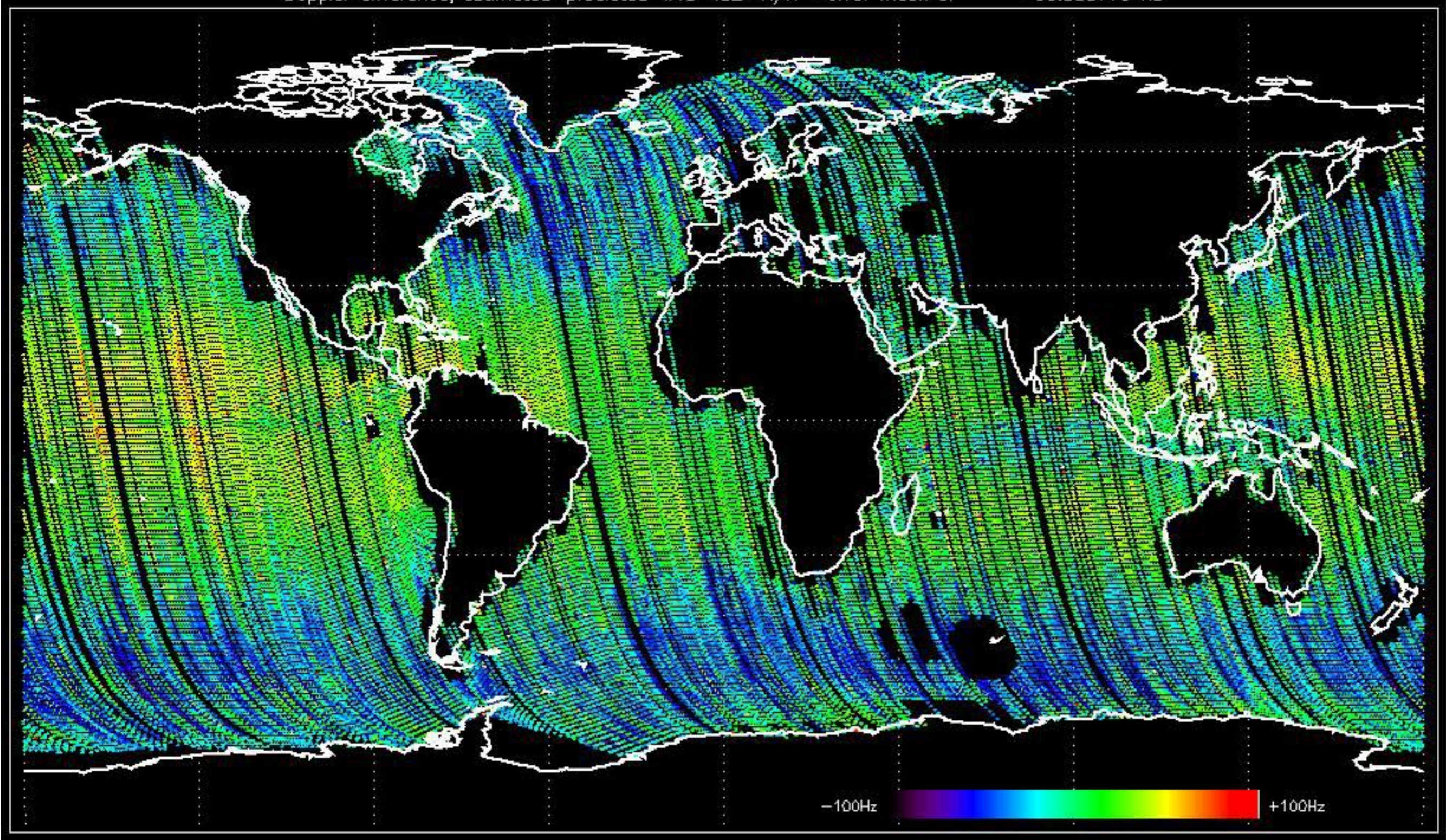


Doppler 'WVS' 'IS2' 'V/V'

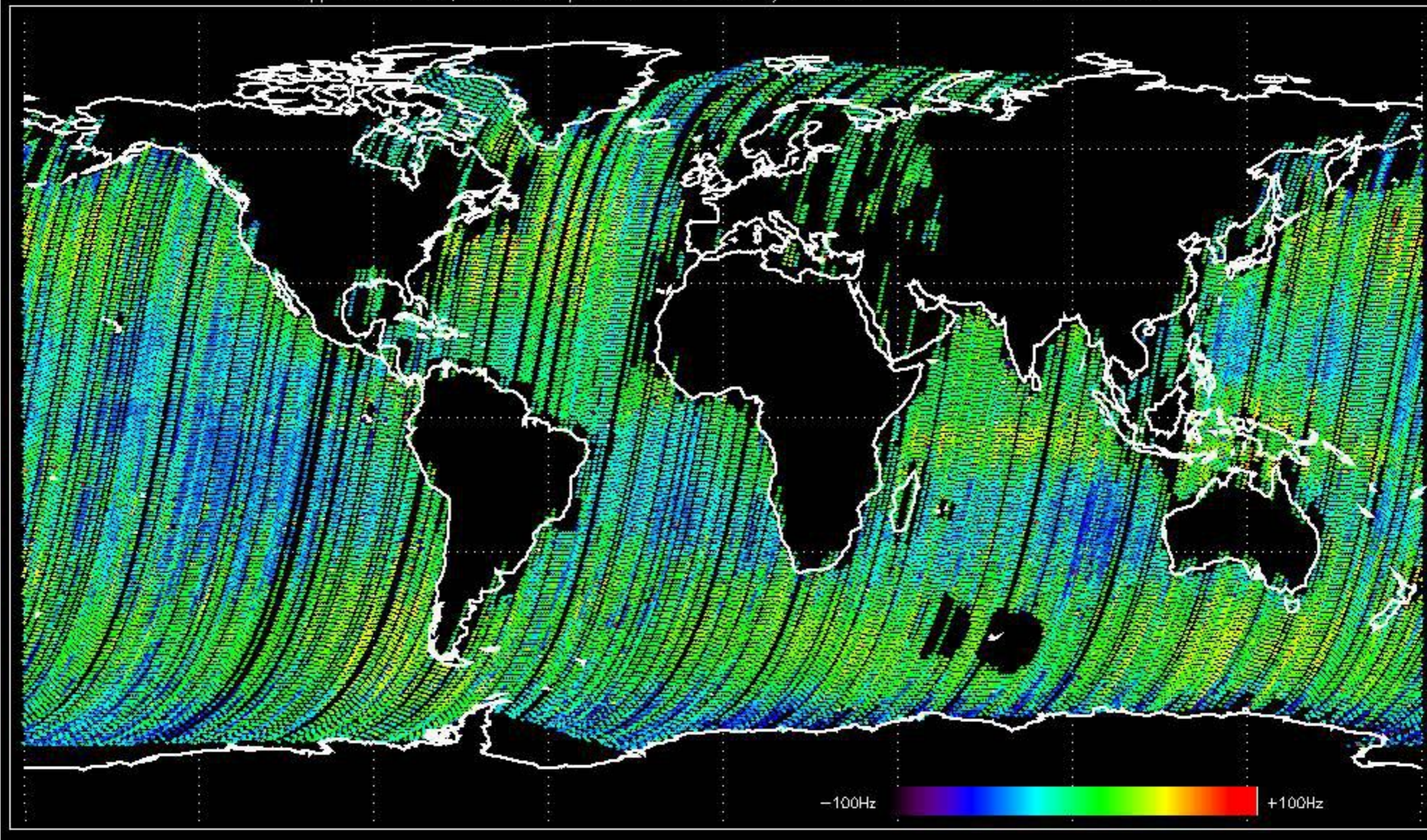




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -30.553775 Hz

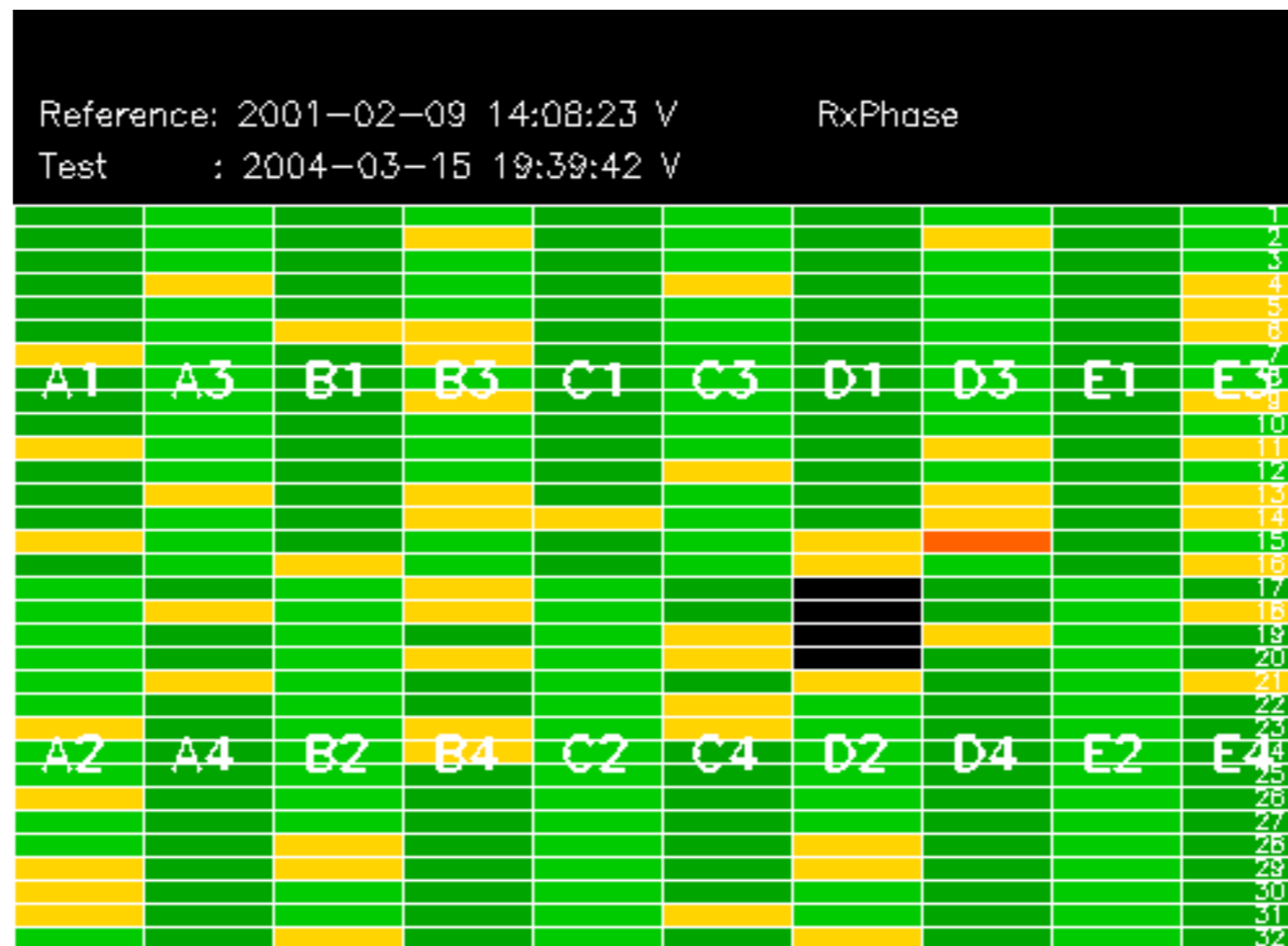


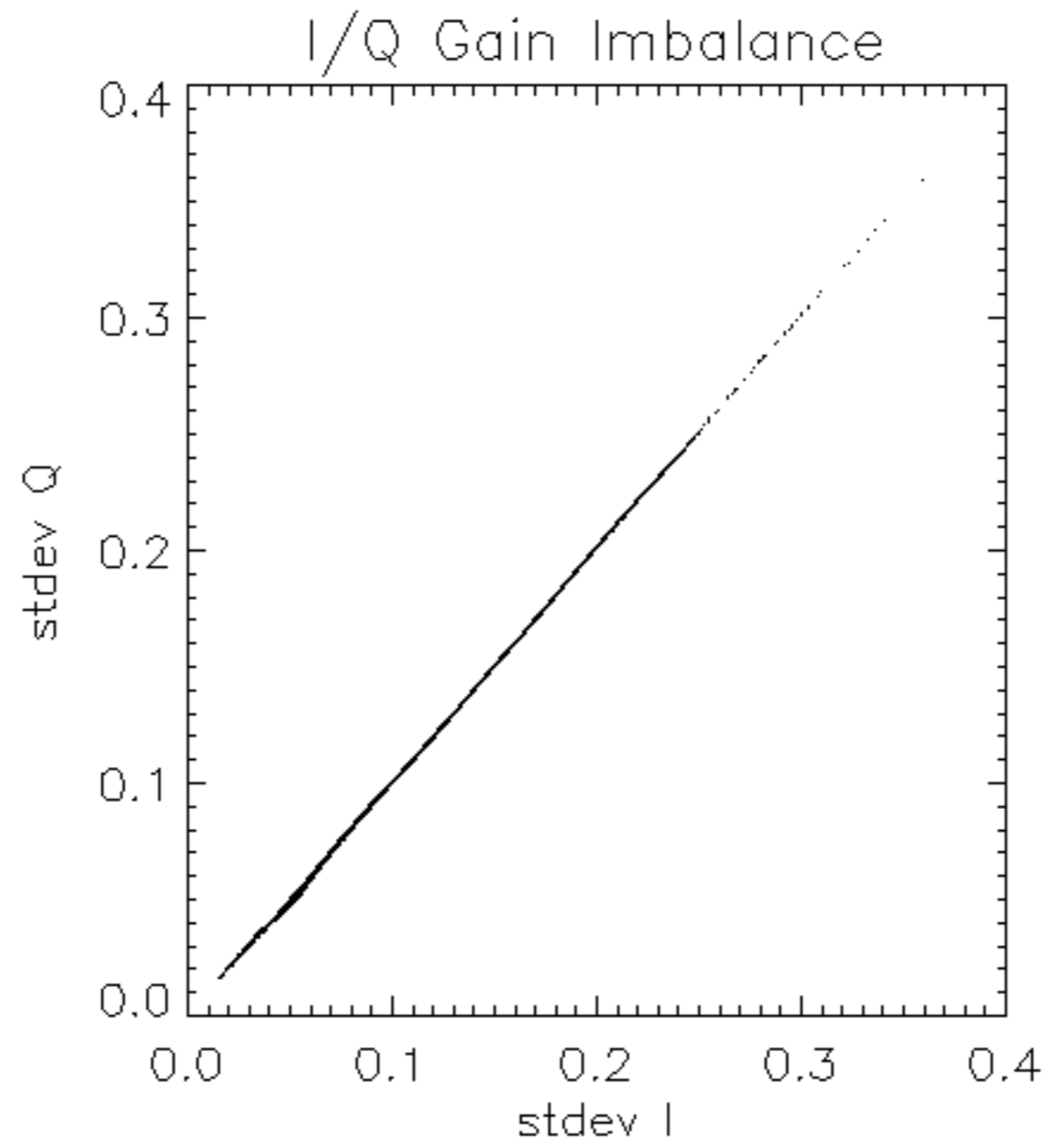
Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -28.039497 Hz

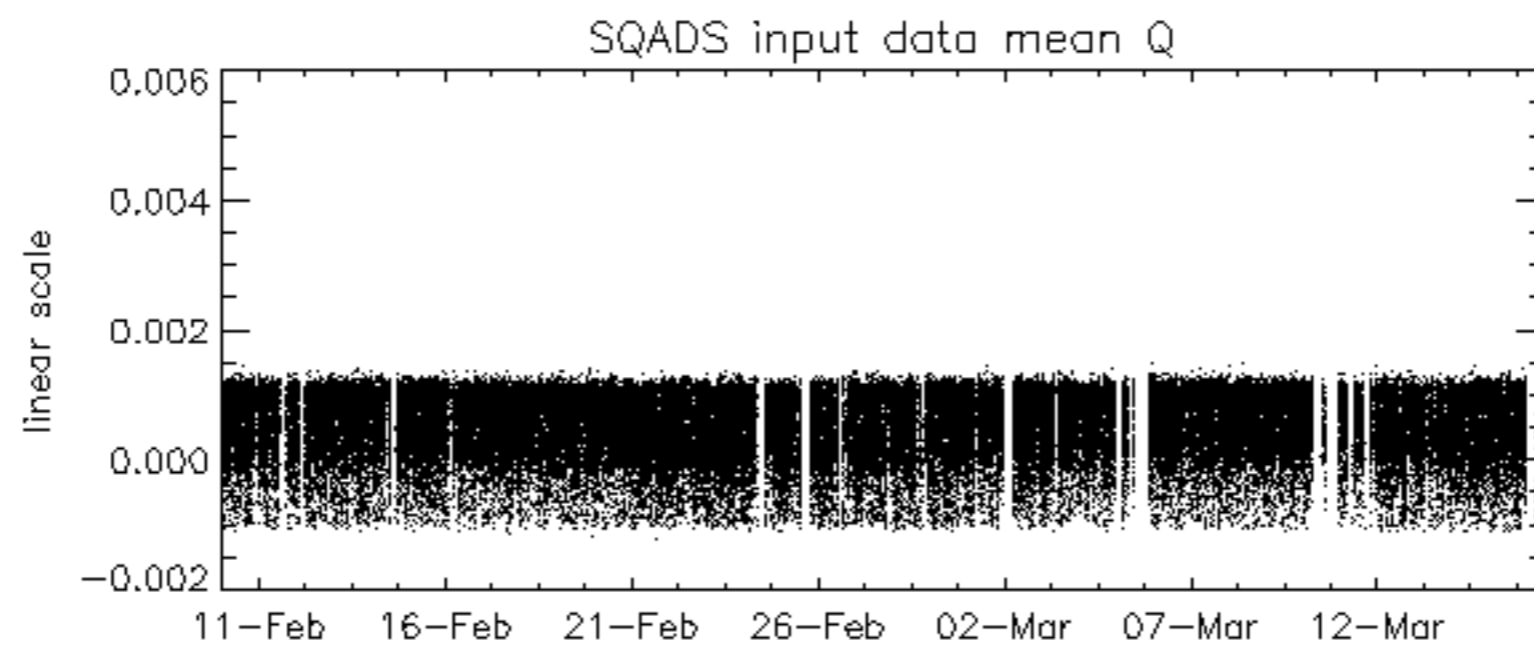
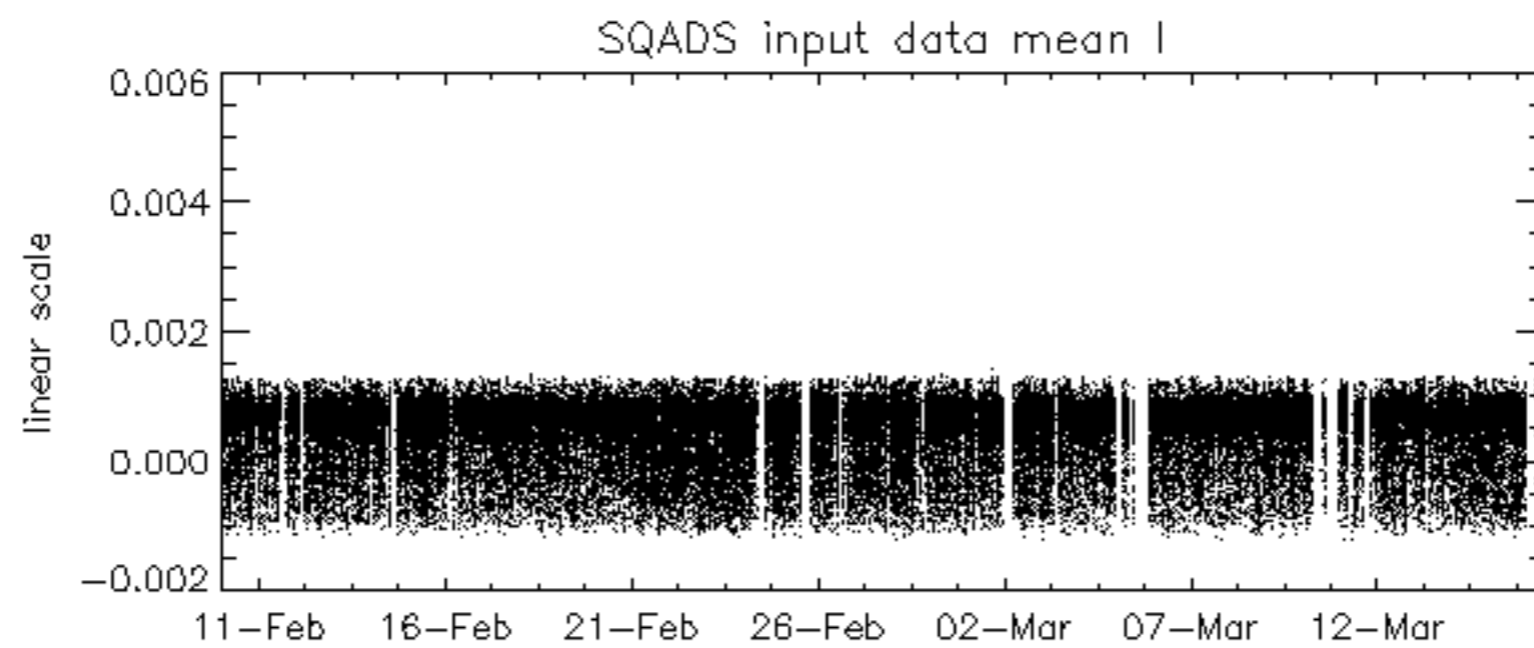
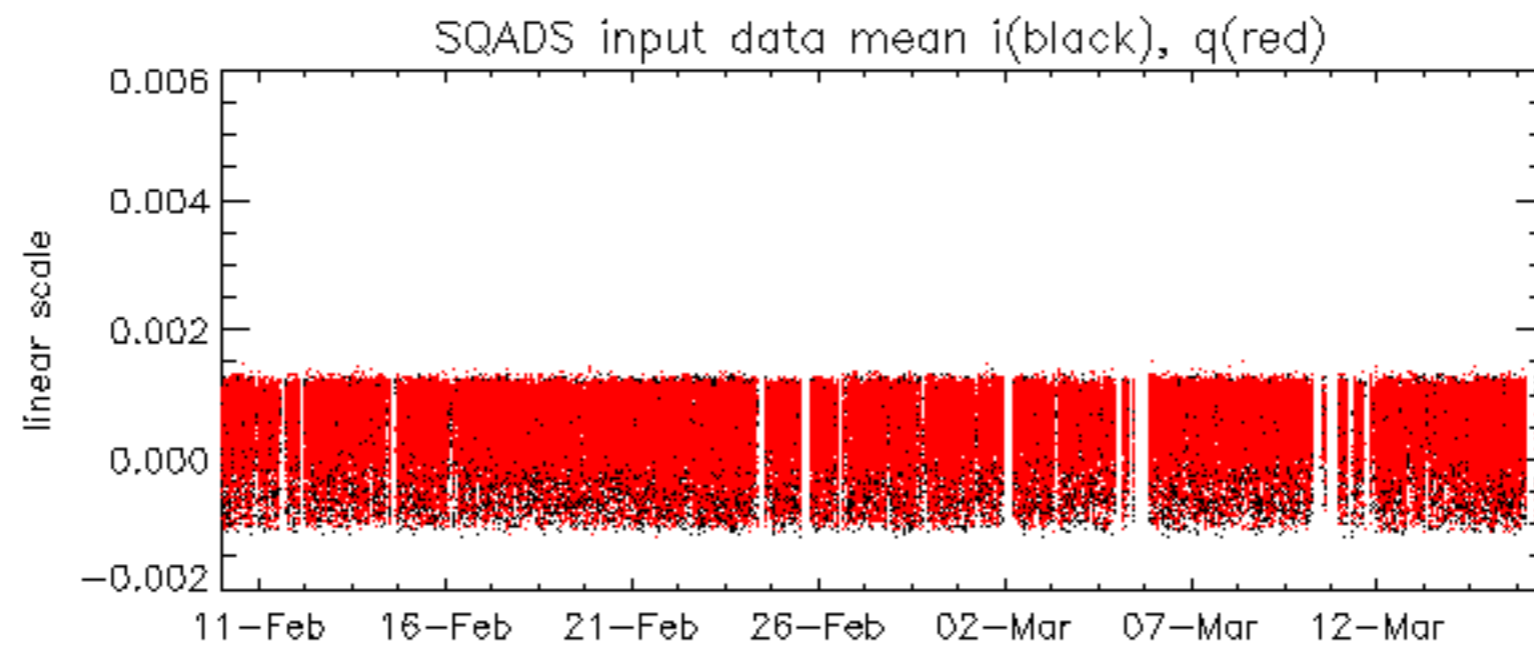


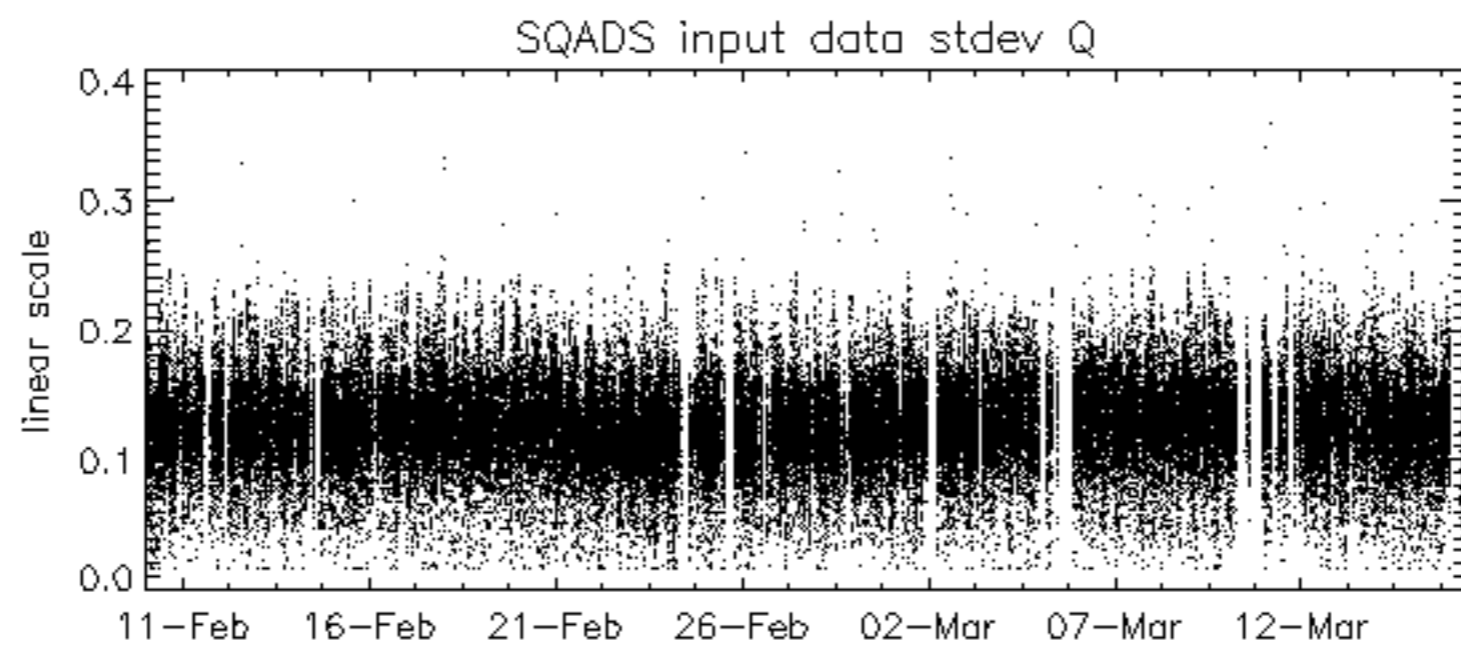
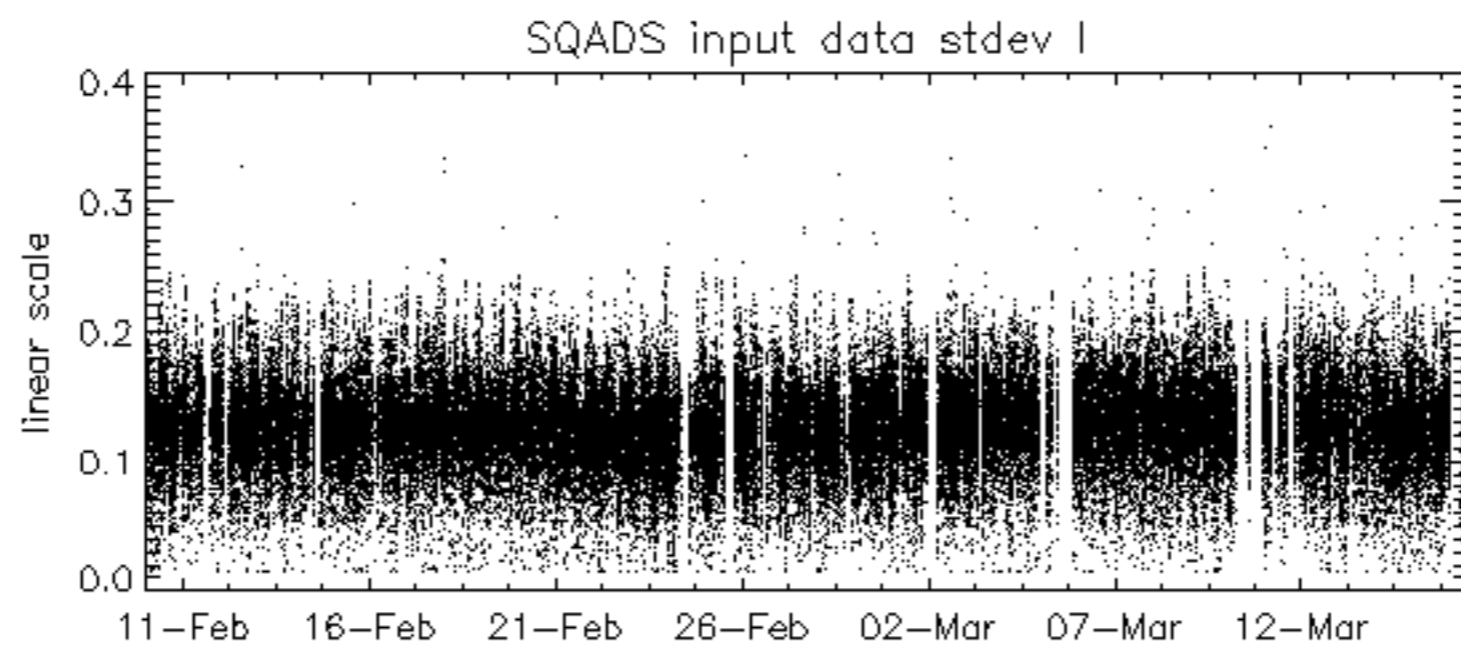
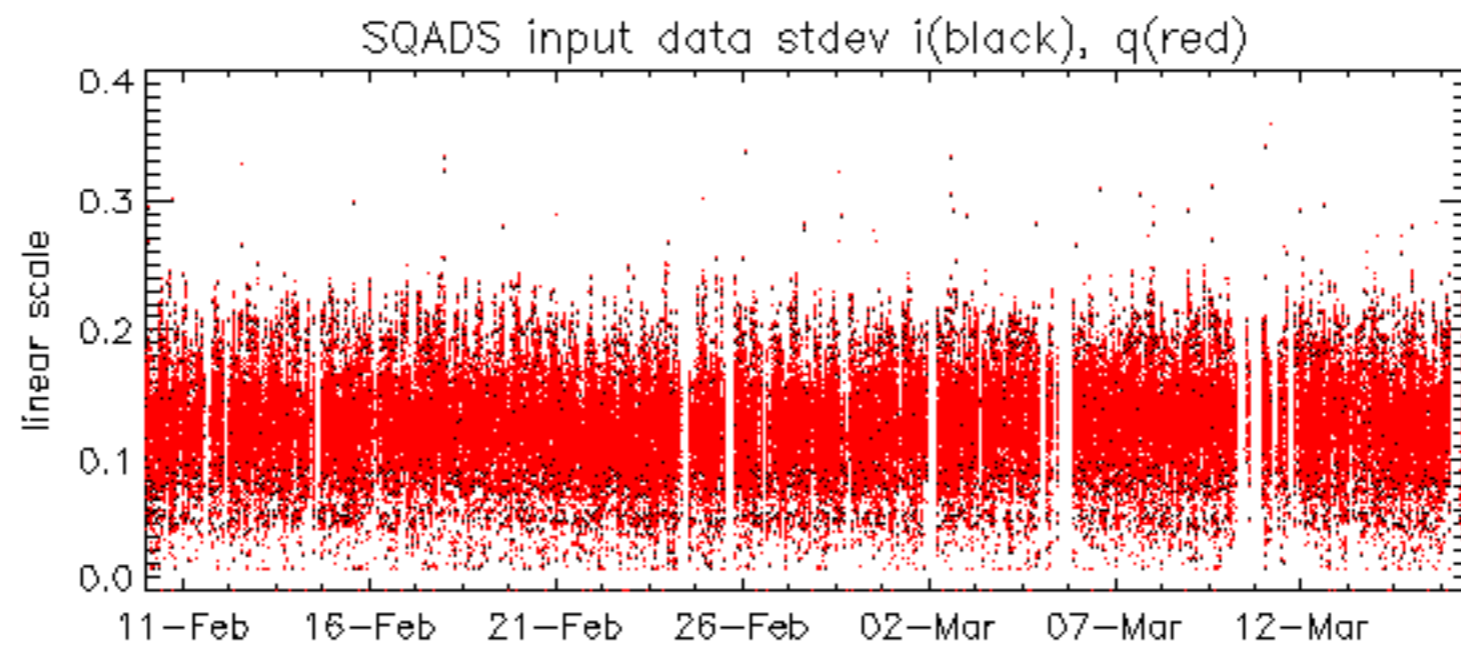
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