

REPORT OF 040326

last update on Fri Mar 26 18:16:12 GMT 2004

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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	20040323 202833
H	20040323 202713

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	-3.605981	0.005878	0.048100
7	P1	-3.314821	0.009505	0.054359
11	P1	-4.795335	0.263759	0.815643
15	P1	-5.005870	0.034430	0.023016
19	P1	-3.349133	0.073132	-0.016601
22	P1	-4.544301	0.070973	0.010229
24	P1	-5.096722	0.091275	0.050794
28	P1	-4.581196	0.076163	-0.039246

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.384266	0.080770	-0.027880
7	P2	-22.891384	0.128867	-0.018461
11	P2	-16.010830	0.161841	0.075547
15	P2	-7.174356	0.090633	0.019122
19	P2	-9.487789	0.177070	0.007394
22	P2	-17.674072	0.102469	0.043459
24	P2	-21.032505	0.114005	-0.025048
28	P2	-16.594141	0.086325	-0.015517

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.127232	0.002981	0.005255
7	P3	-8.127244	0.002982	0.005336
11	P3	-8.127251	0.002983	0.005389
15	P3	-8.127250	0.002983	0.005396
19	P3	-8.127242	0.002982	0.005351
22	P3	-8.127229	0.002981	0.005310
24	P3	-8.127218	0.002981	0.005281

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	0.000469092
	stdev	2.38187e-07
MEAN Q	mean	0.000486950
	stdev	2.63193e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.127143
	stdev	0.00113517
STDEV Q	mean	0.127377
	stdev	0.00114789



5.3 - Gain imbalance I/Q



6 - 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

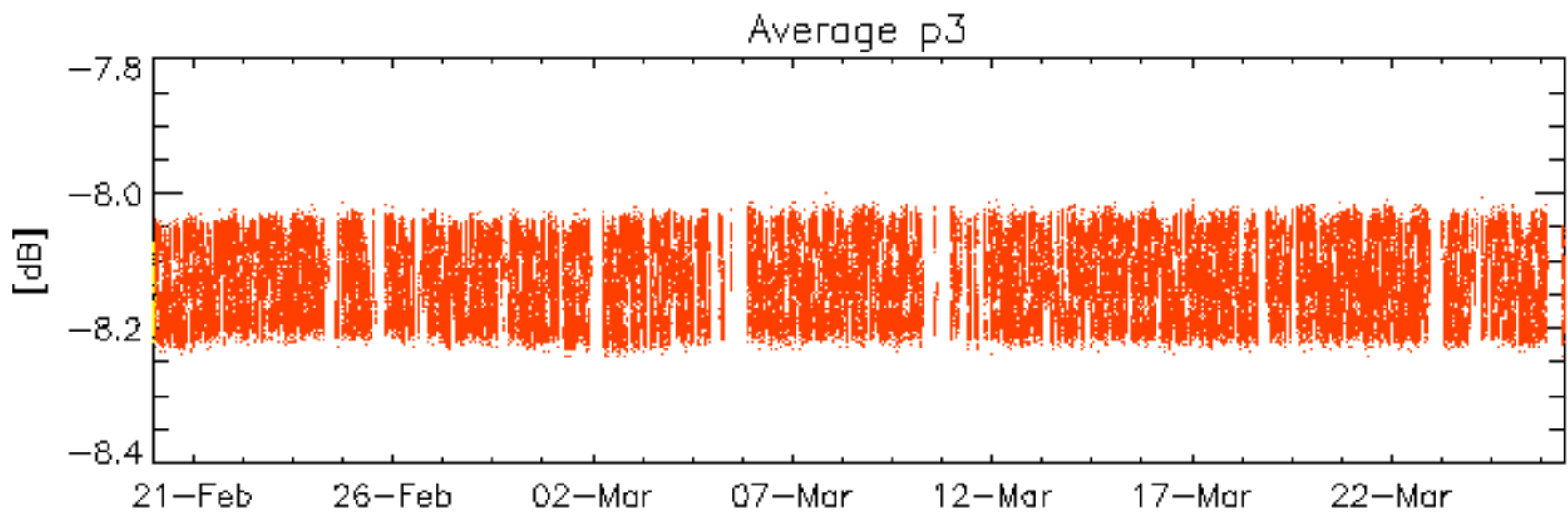
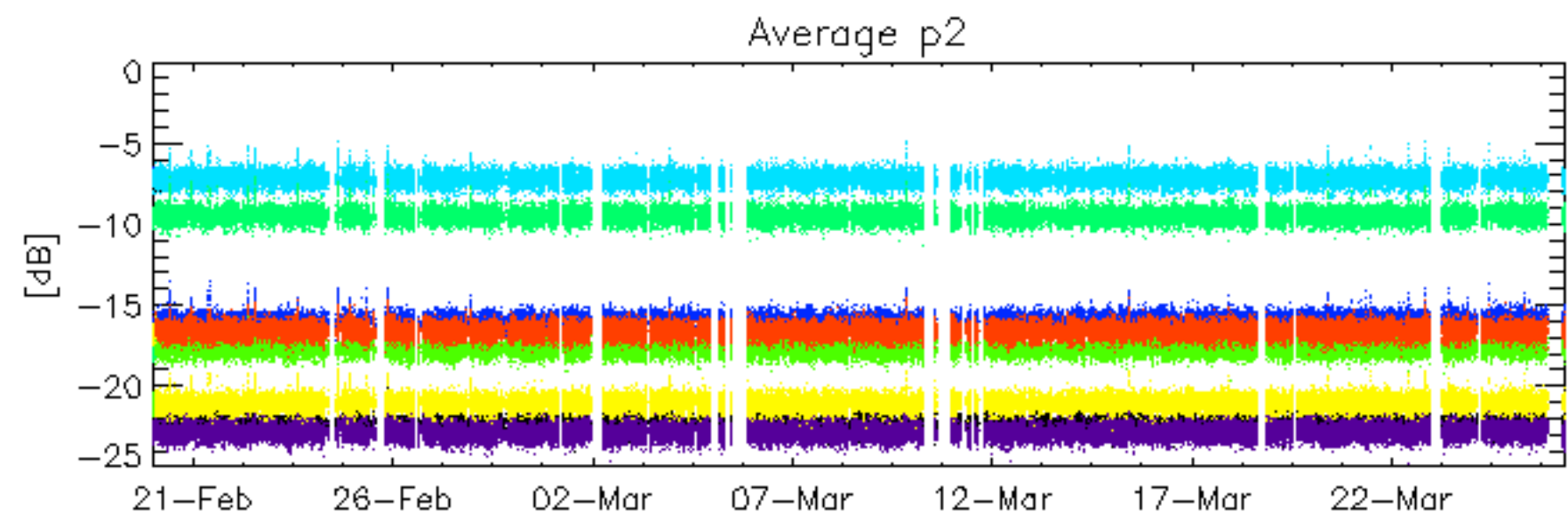
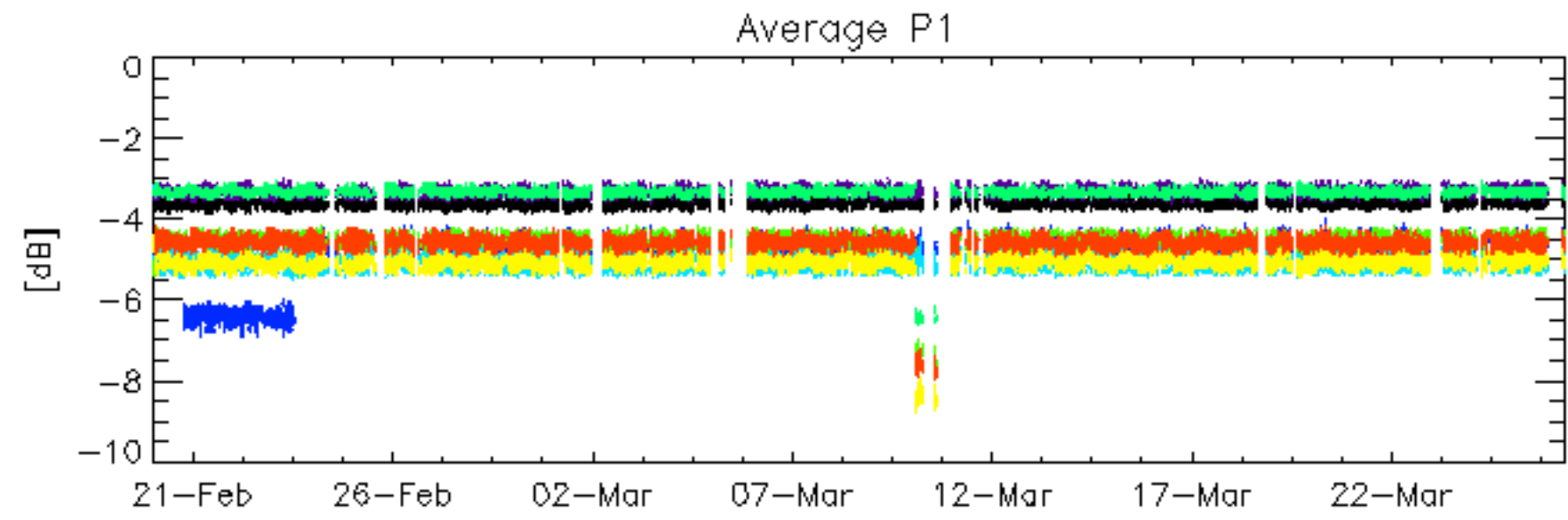
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

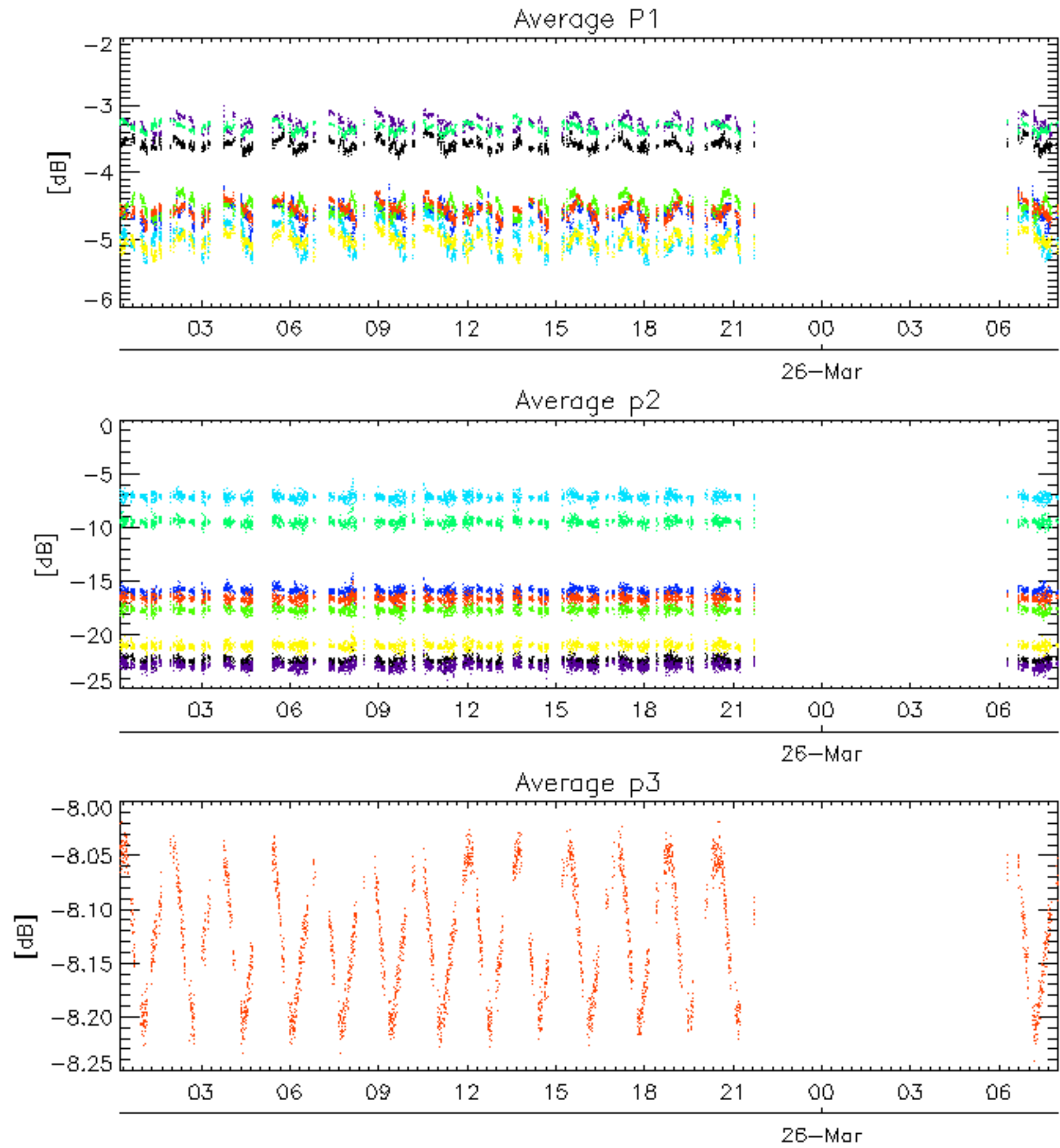
⊗

Evolution Doppler error versus ANX

⊗



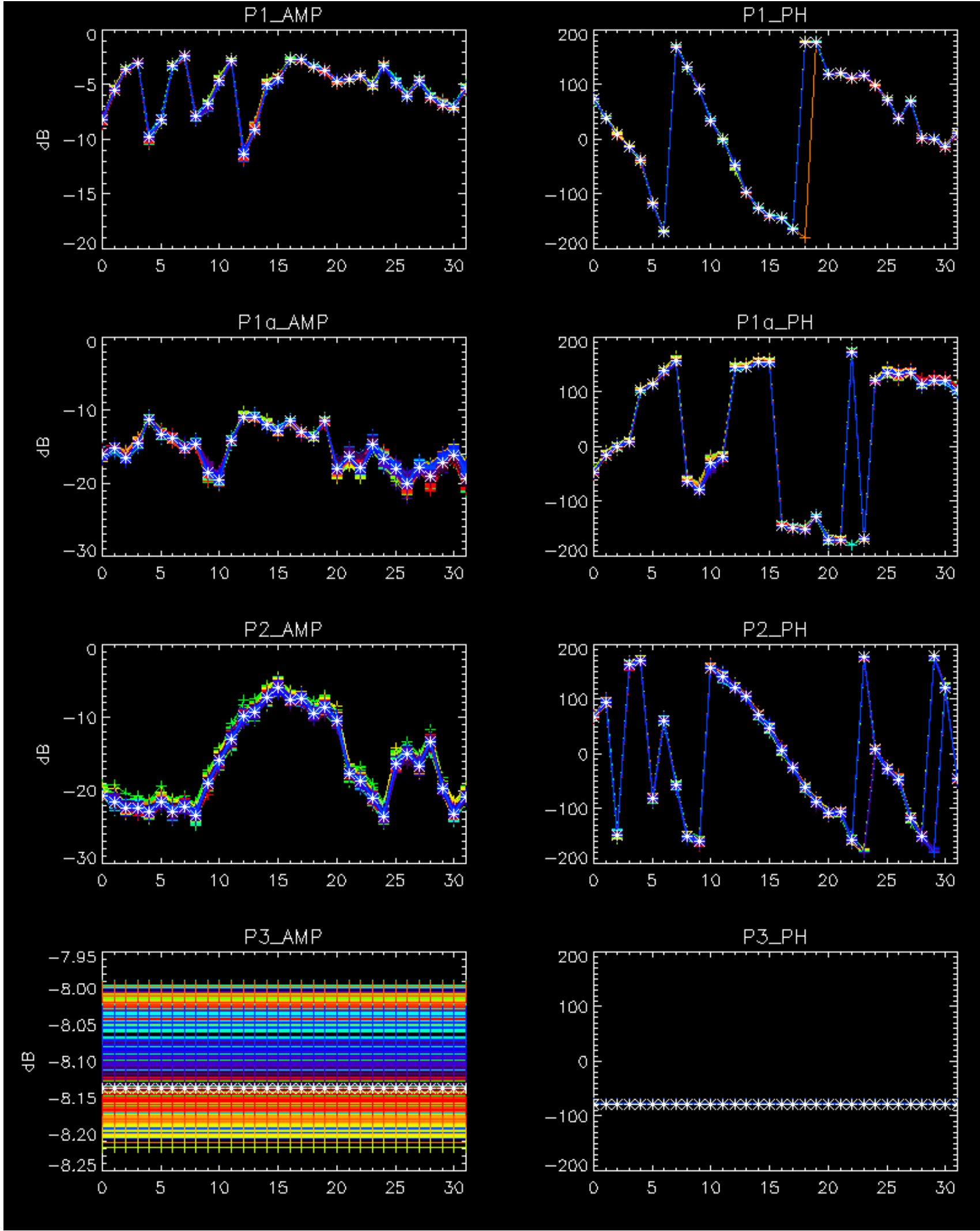
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 24 _ 28



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

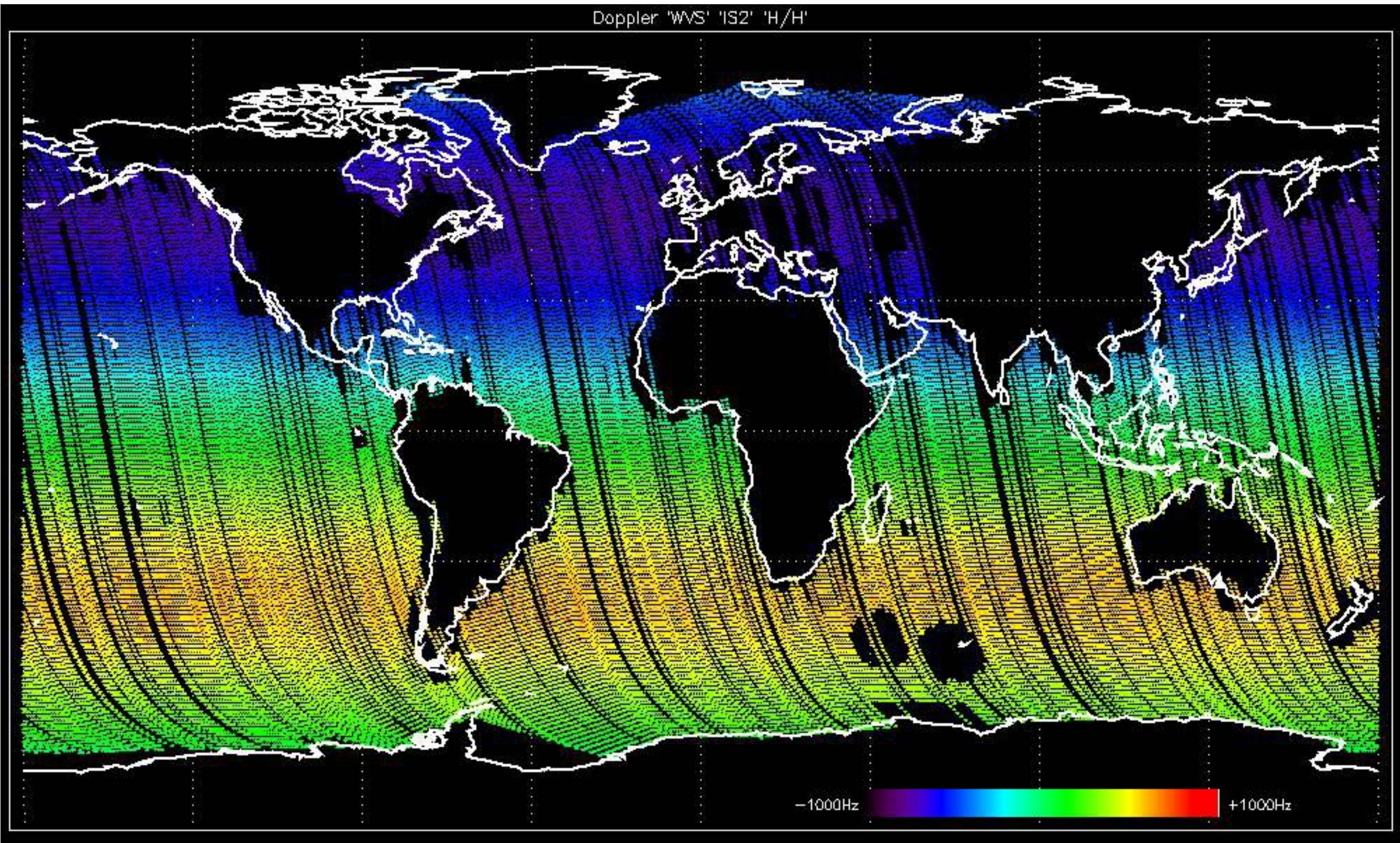
No anomalies observed on available browse products

No anomalies observed.

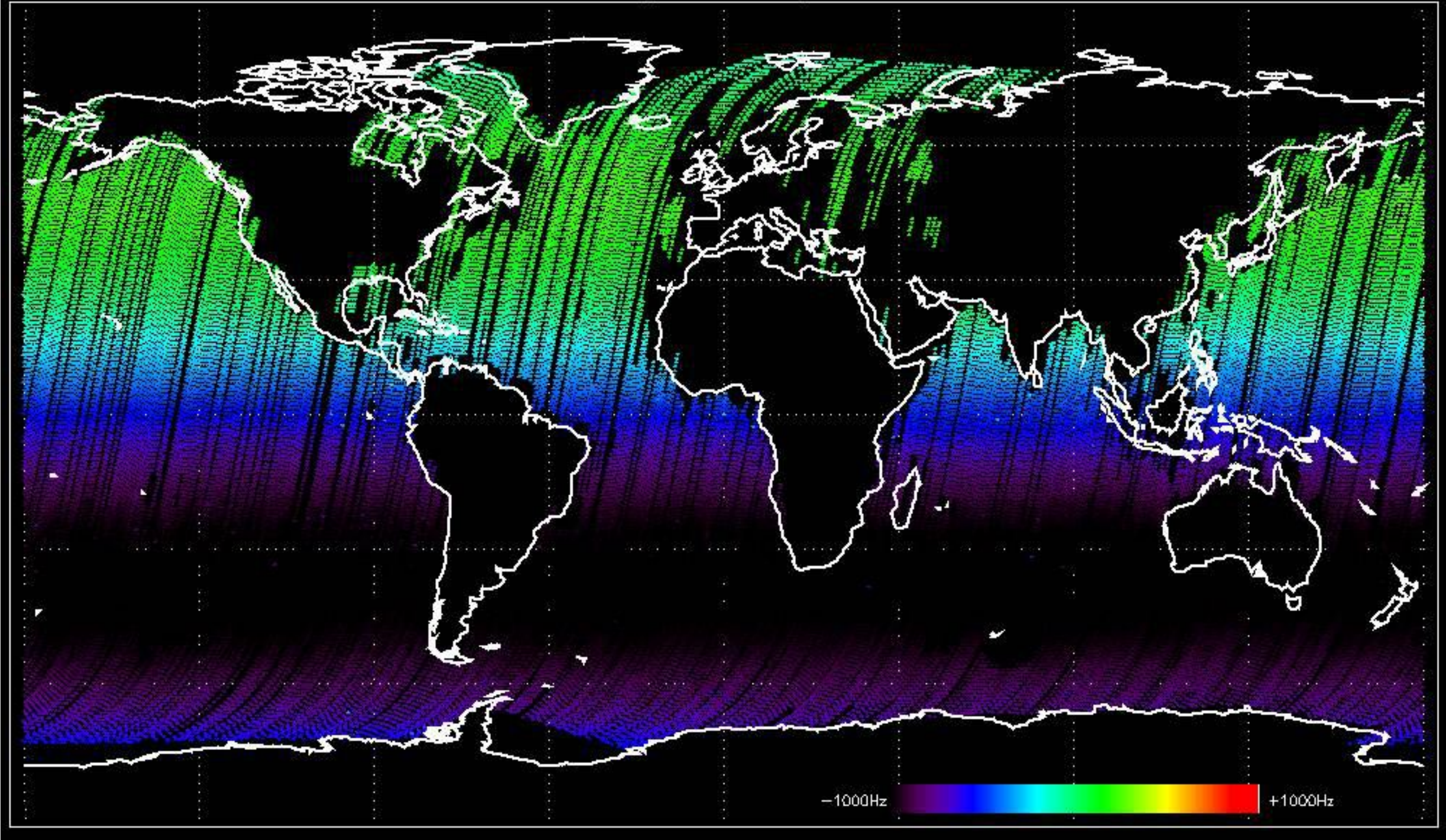


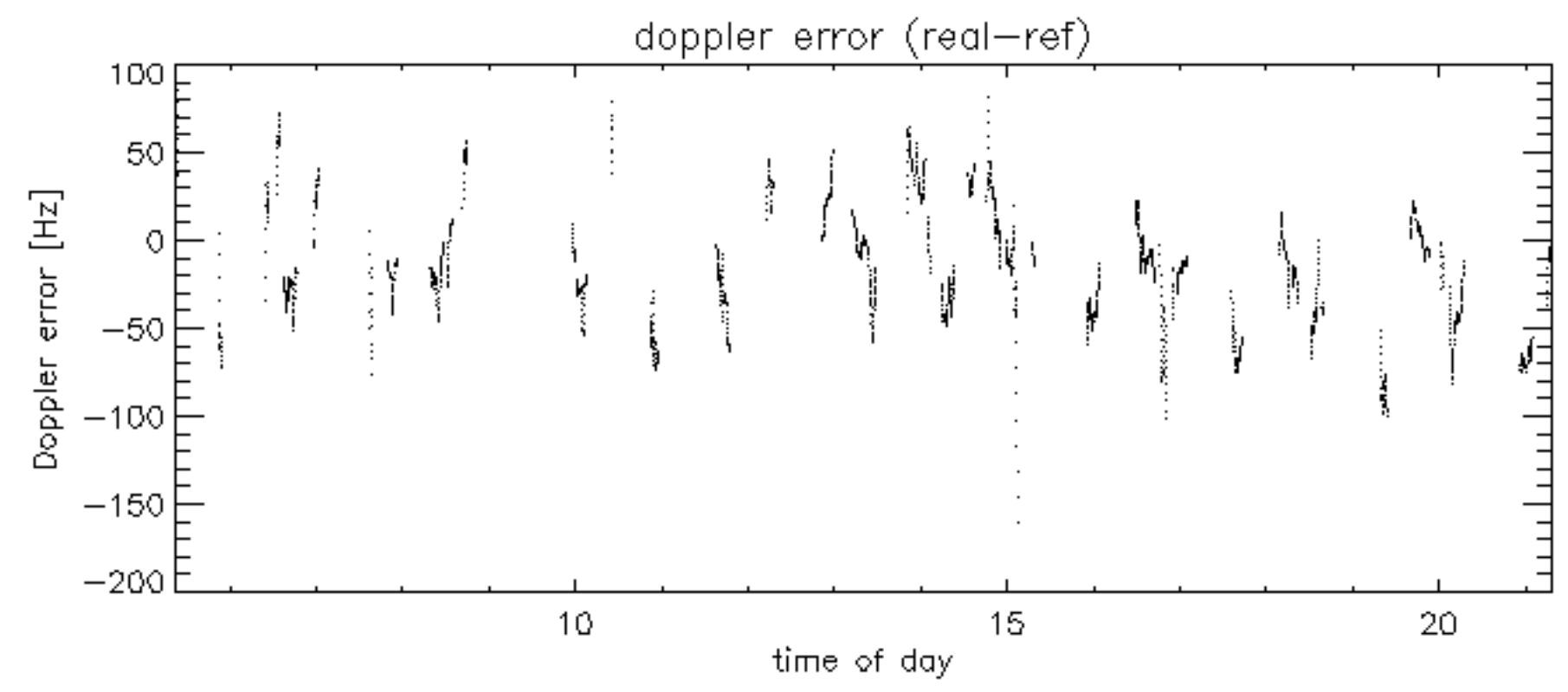
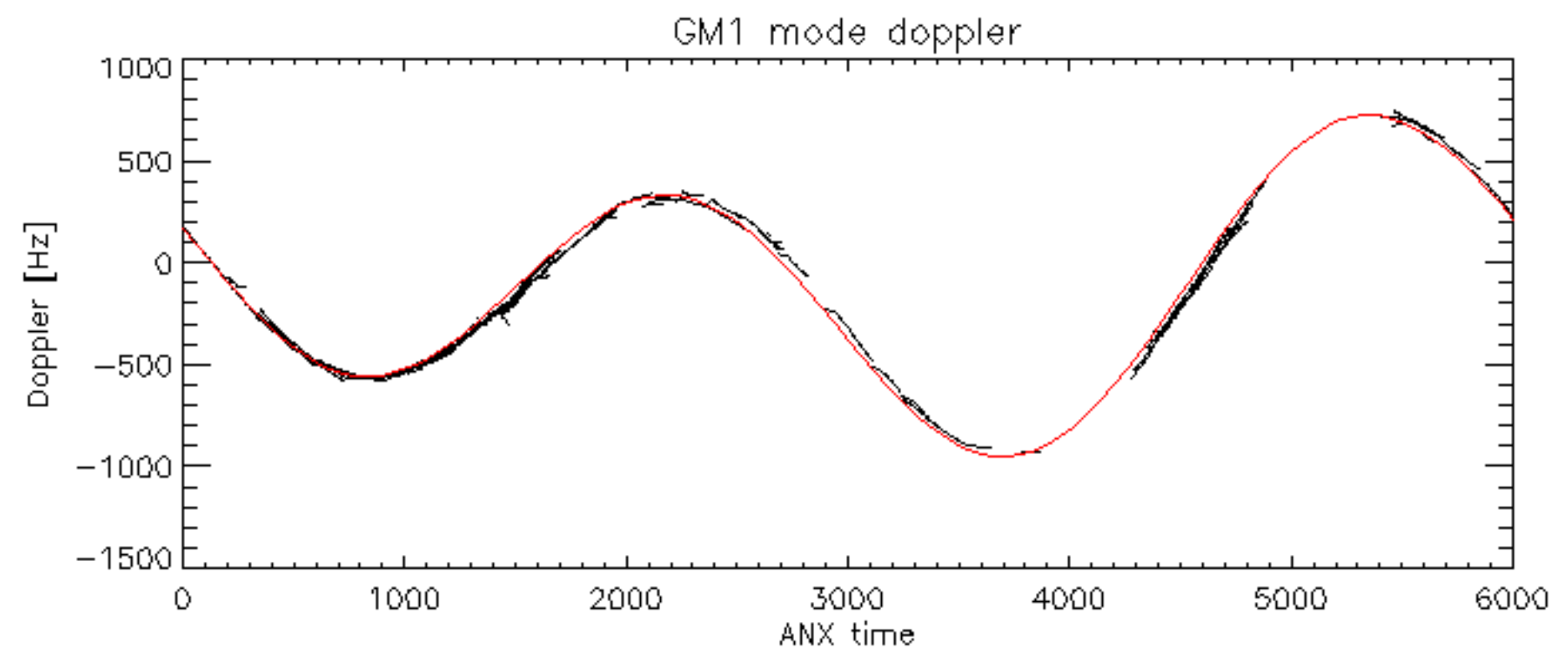
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

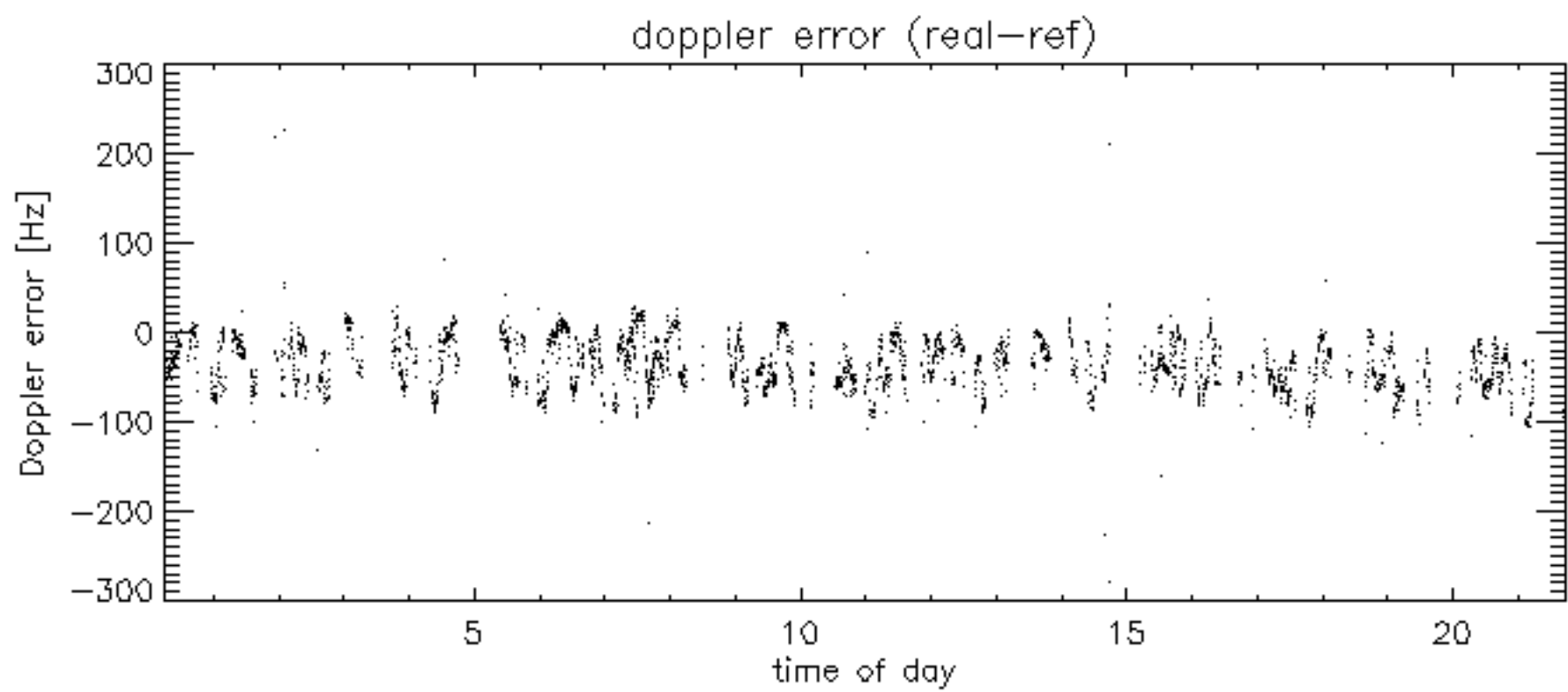
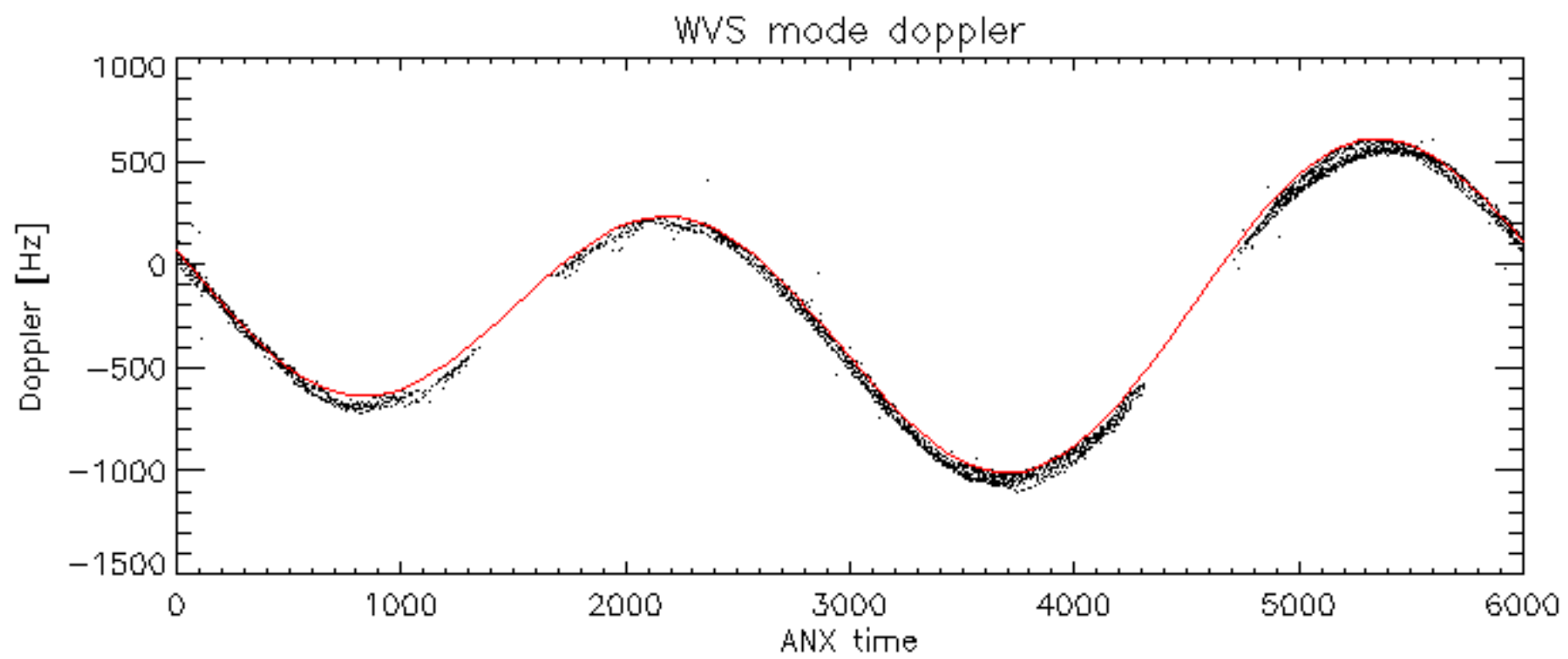
Doppler 'WVS' 'IS2' 'H/H'

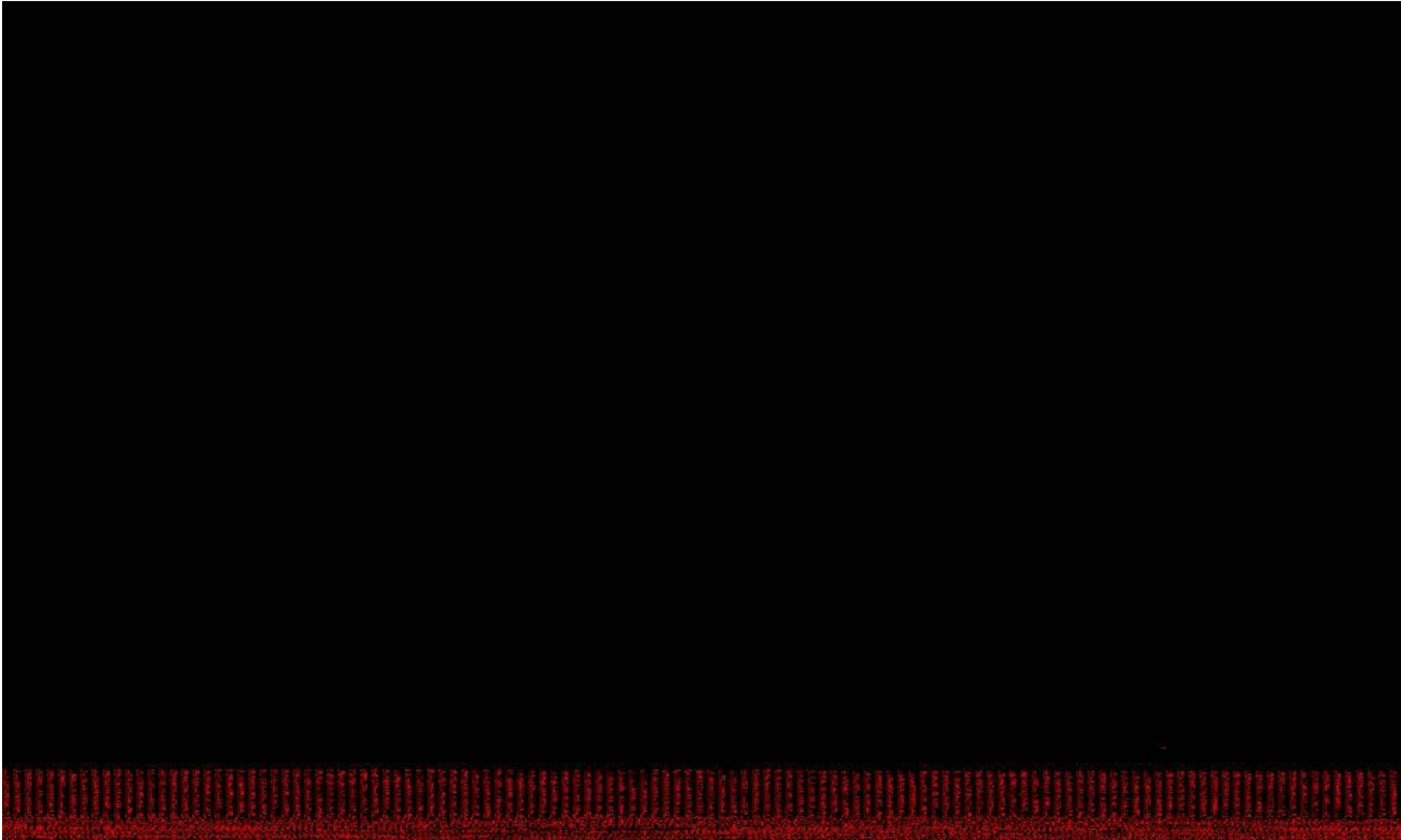


Doppler 'WVS' 'ISZ' 'V/V'

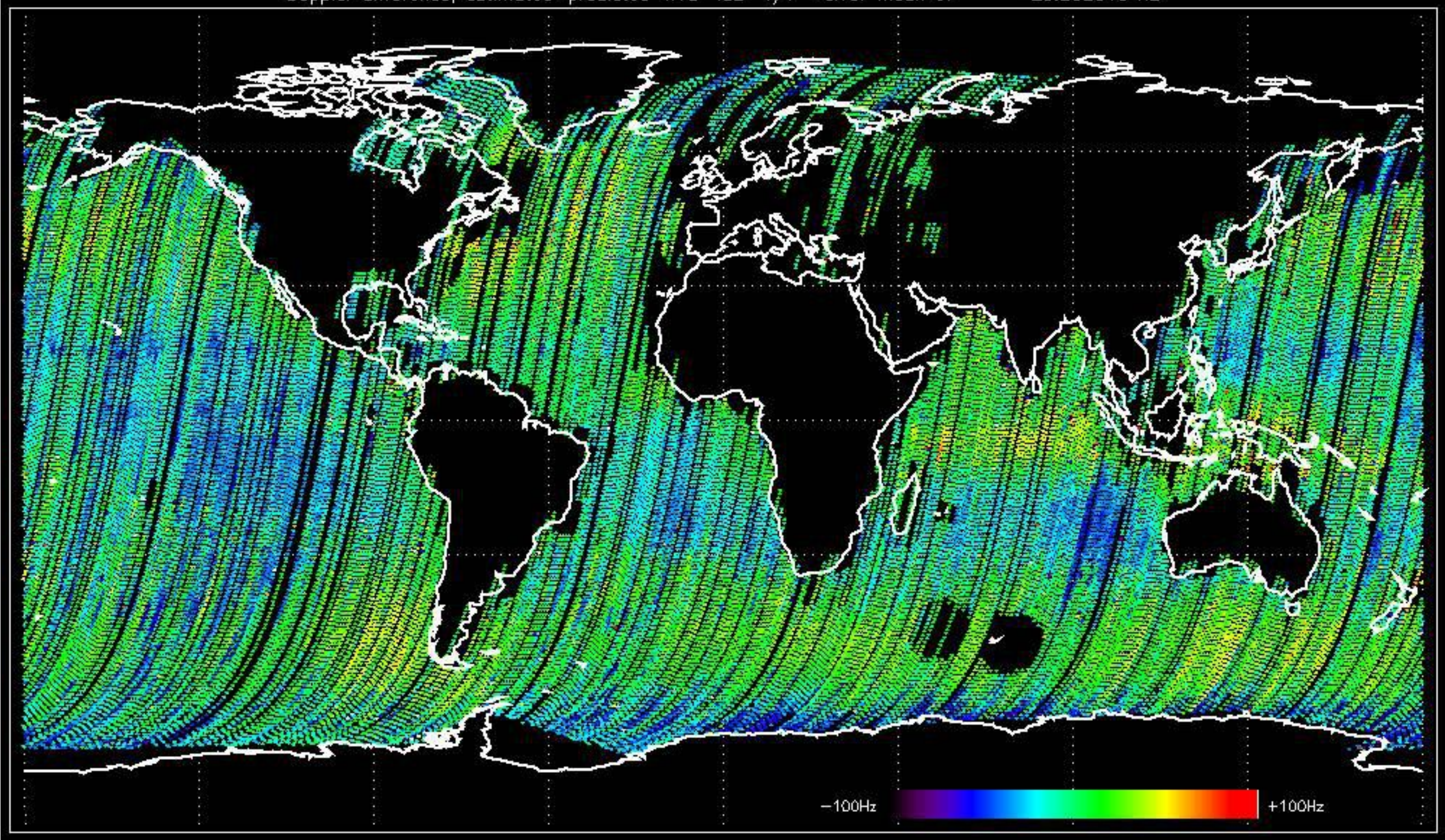






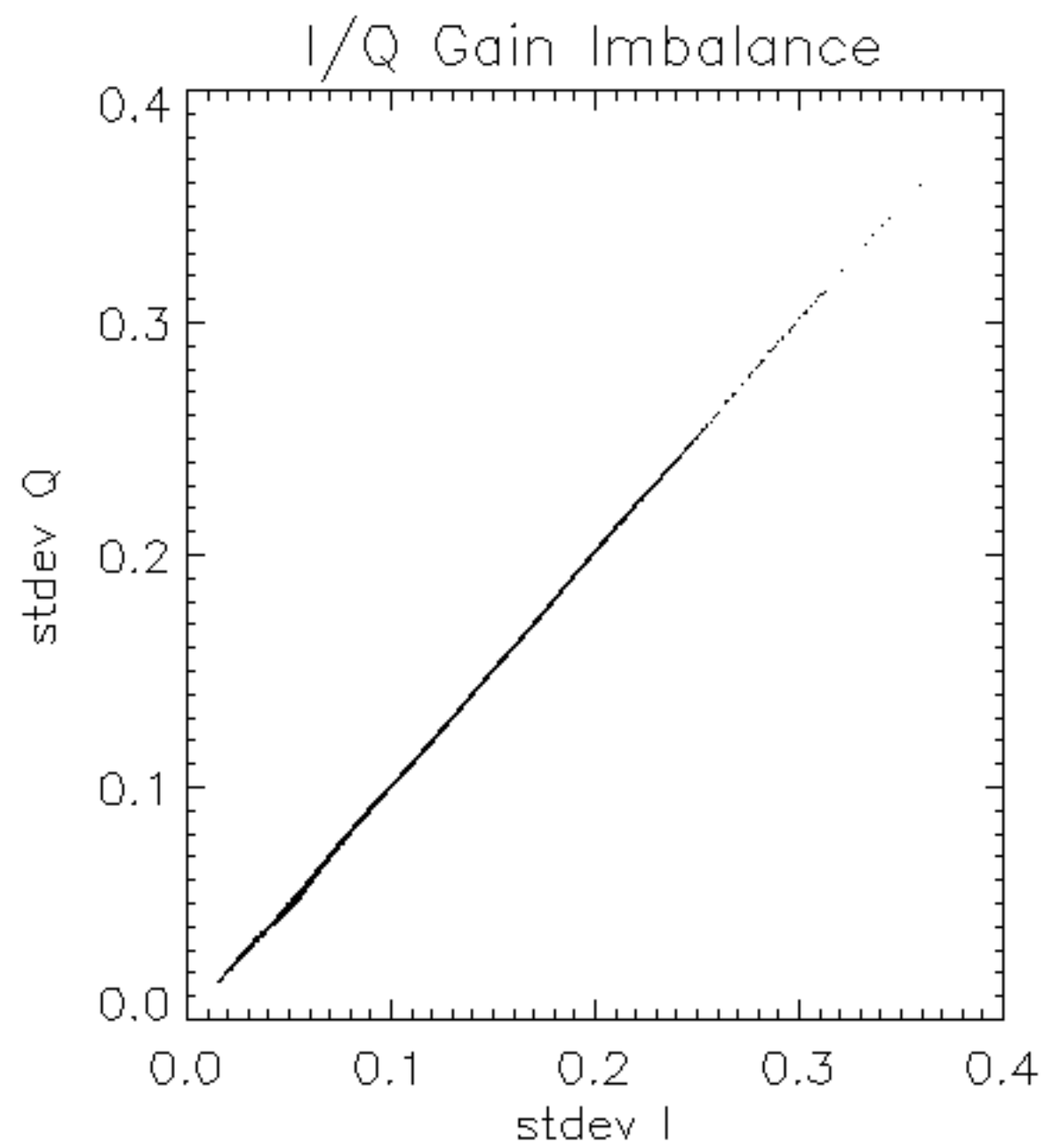


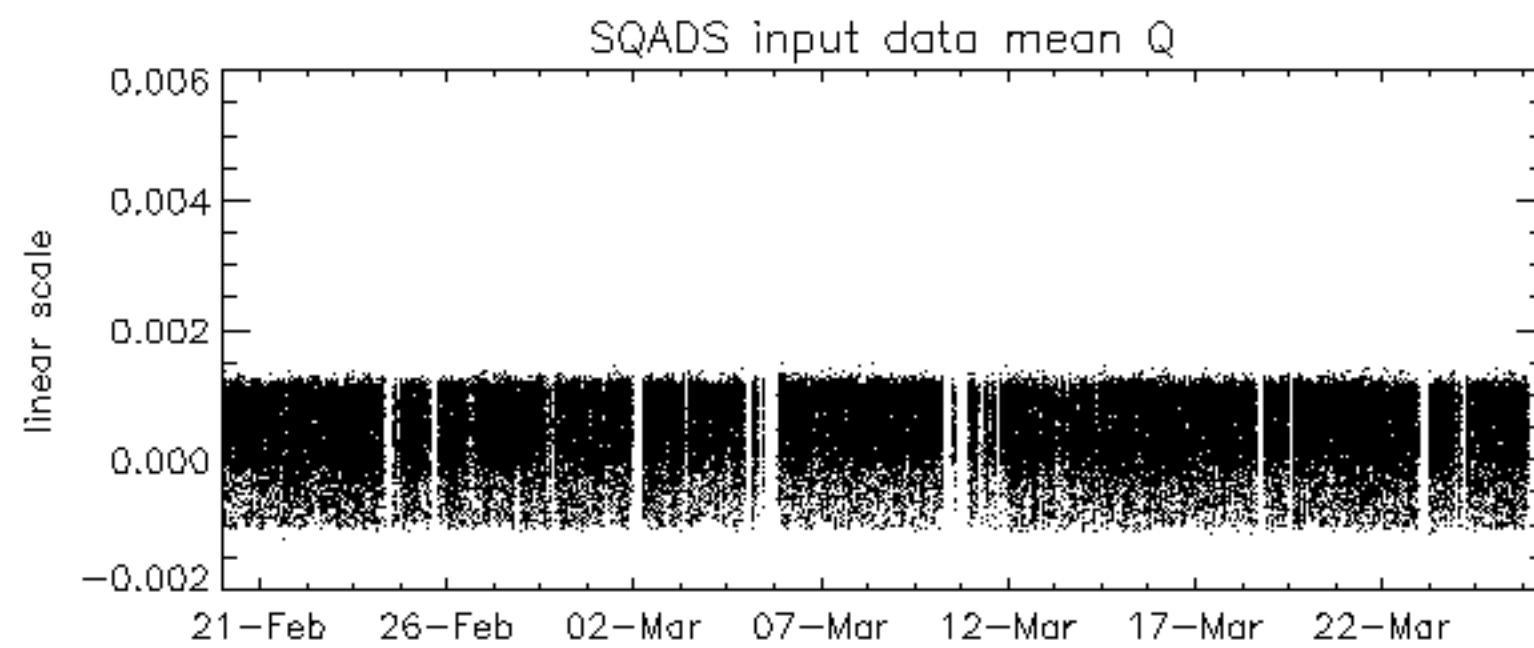
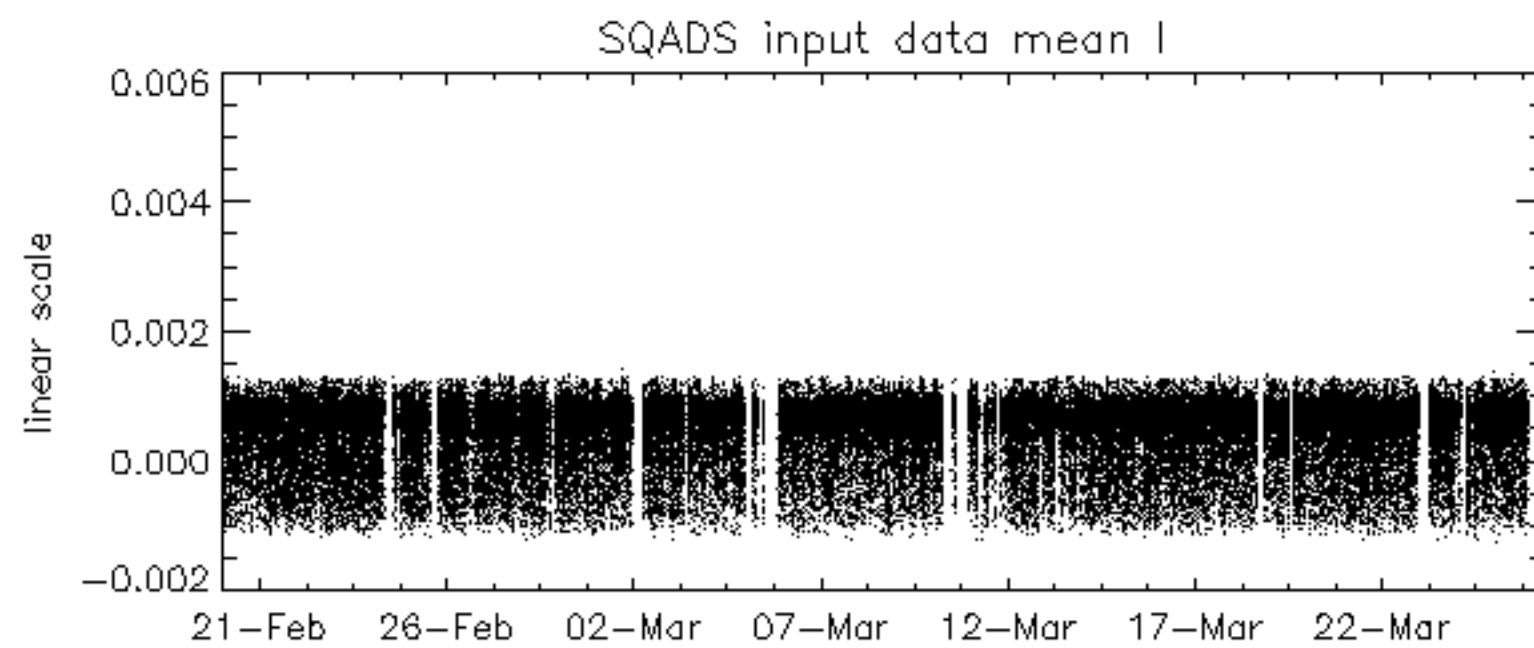
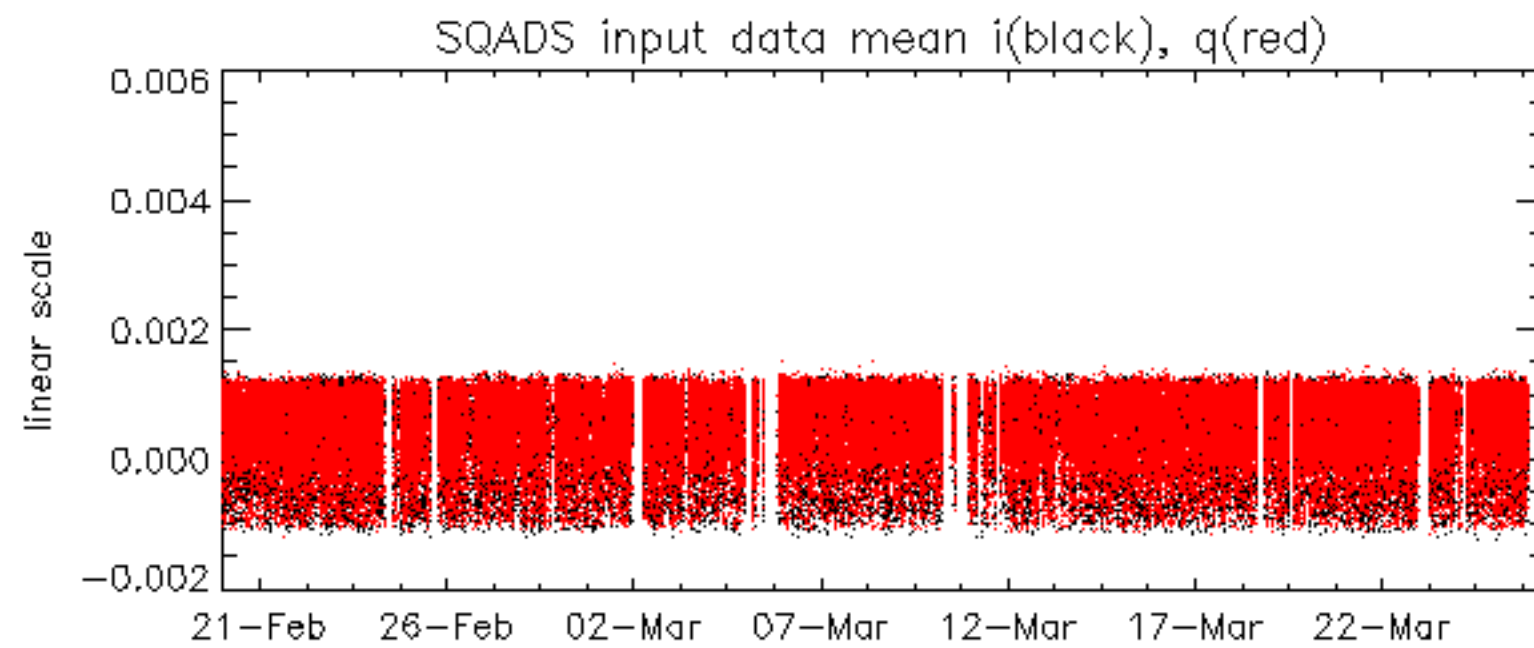
Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -29.232016 Hz

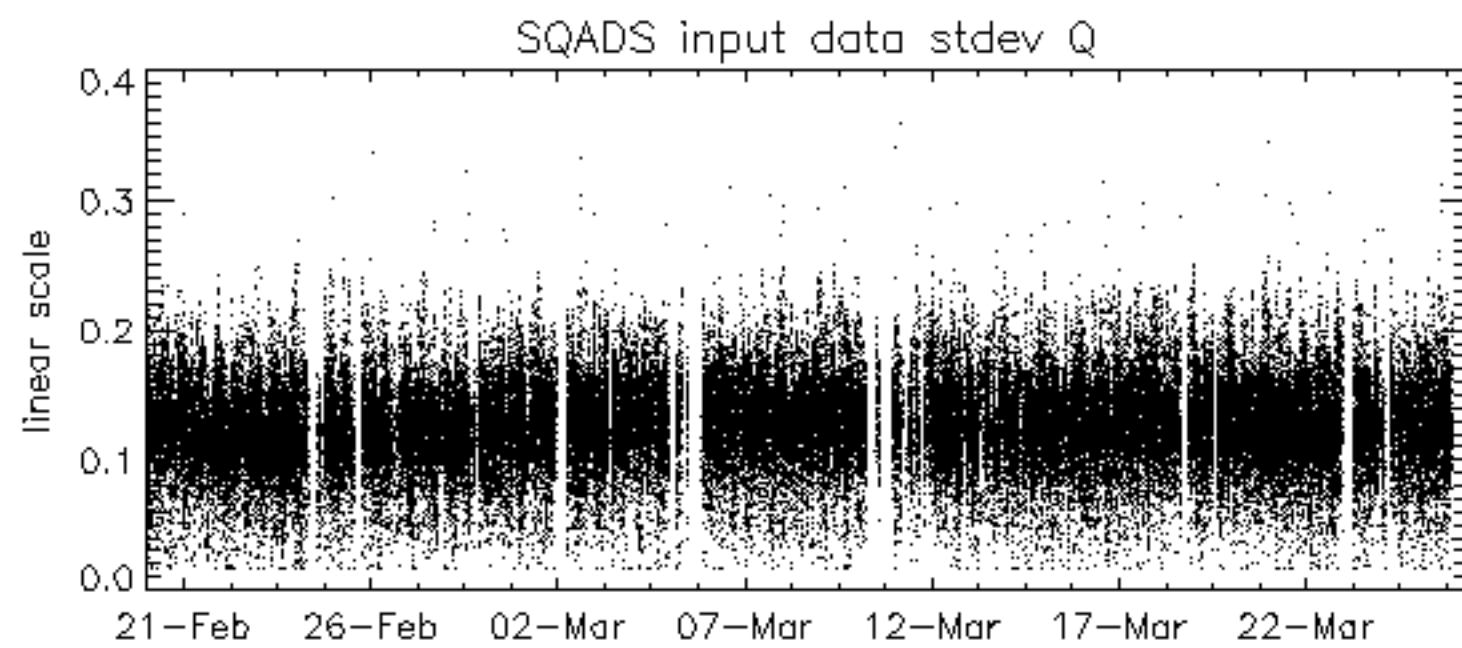
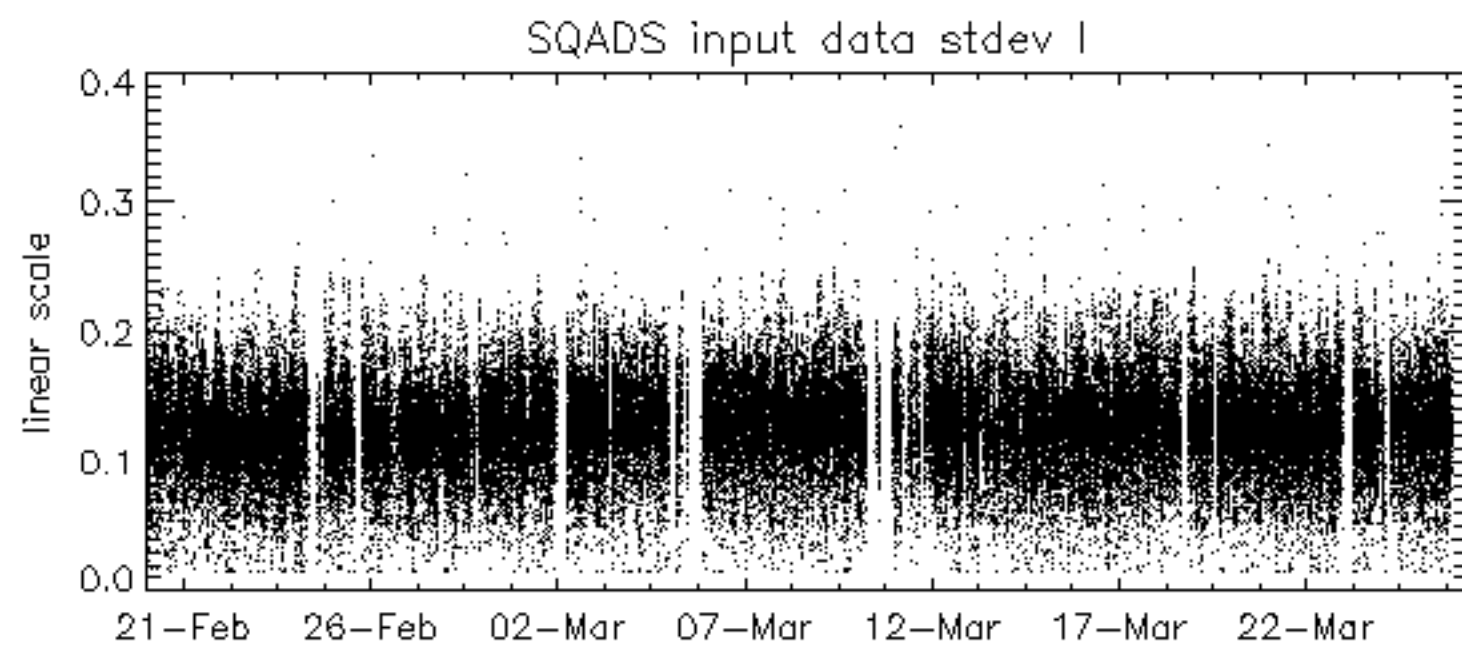
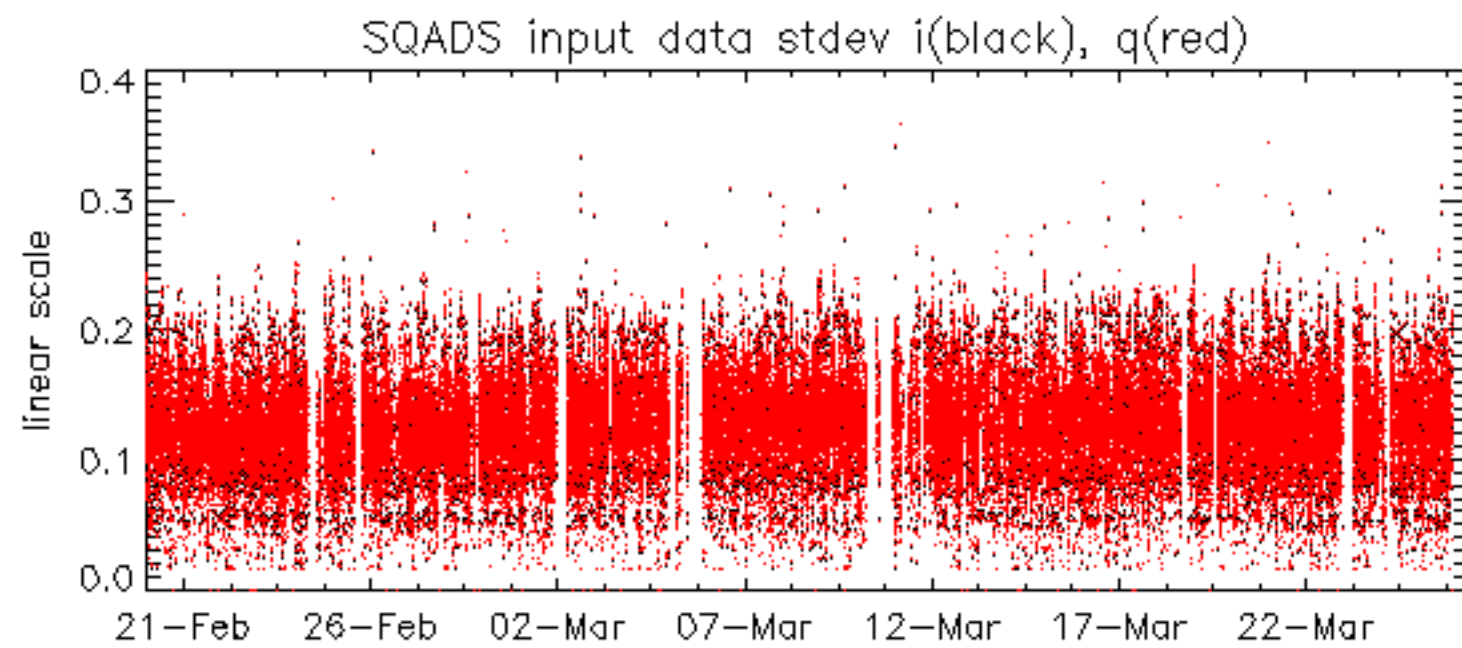


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