

REPORT OF 040209

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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 for the reported period.

2.2 - Browse Visual Inspection

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 last MS available products (06 Feb 2004).

Polarisation	Start Time
V	20040206 193354
H	20040206 193234

MSM in V/V polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

MSM in H/H polarisation

Pre-launch Reference	DDS-B (2003-06-12) reference
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.65458	-22.4267	-8.14074
	stdev	0.00593554	0.0594158	0.00242130
24	mean	-5.09456	-21.0737	-8.14074

stdev	0.0137816	0.0537929	0.00242130
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4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.67673	-22.4685	-8.14583
	stdev	0.00690448	0.0715492	0.00305593
24	mean	-5.19130	-21.1111	-8.14583
	stdev	0.371891	0.0662687	0.00305593



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	0.000427910
	stdev	2.87905e-07
MEAN Q	mean	0.000352225
	stdev	3.32851e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.118690
	stdev	0.00138339
STDEV Q	mean	0.118924

stdev 0.00139843



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

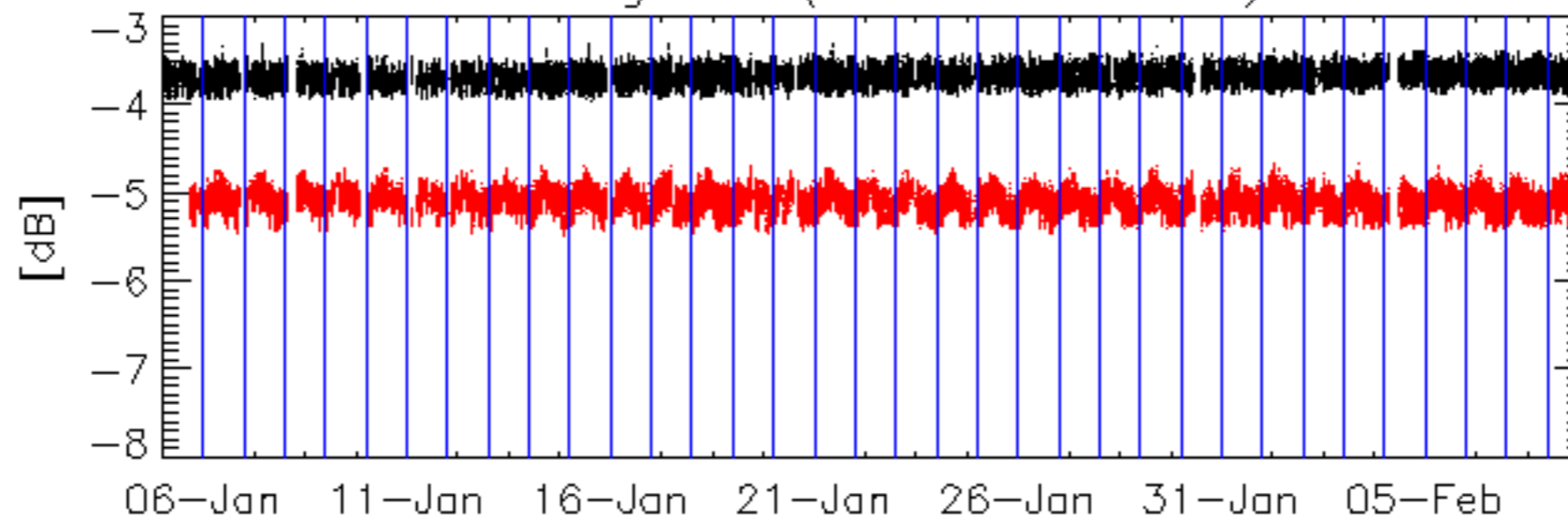
Descending

6.3 - Doppler evolution versus ANX

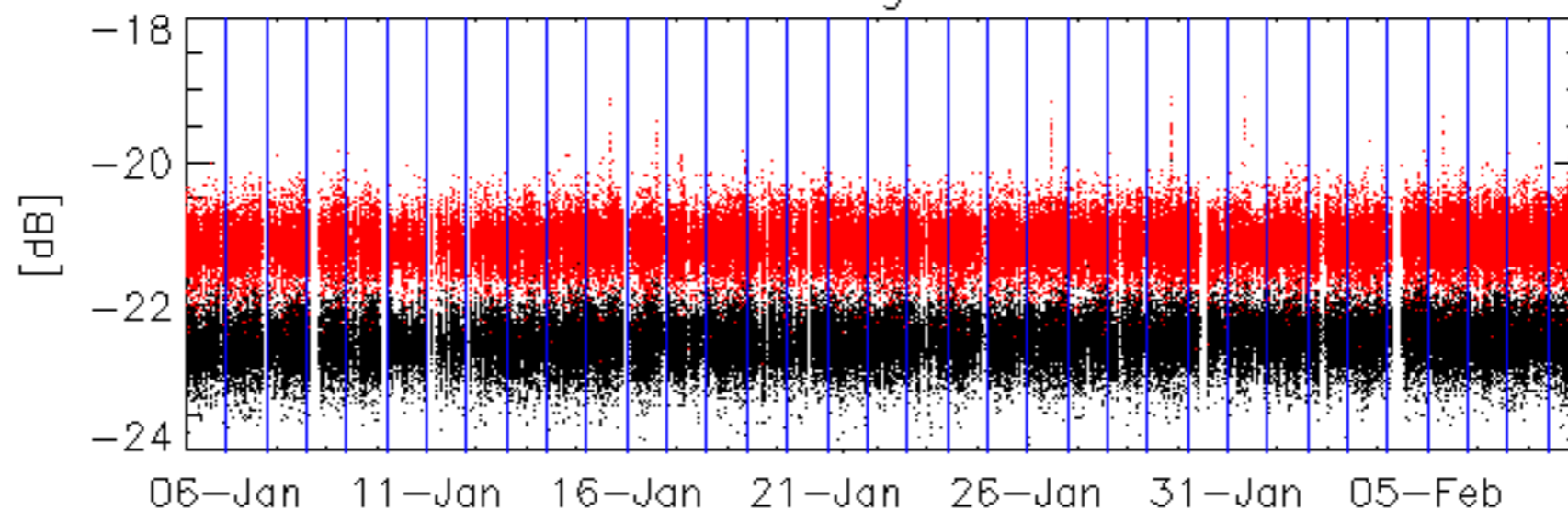
Evolution Doppler error versus ANX



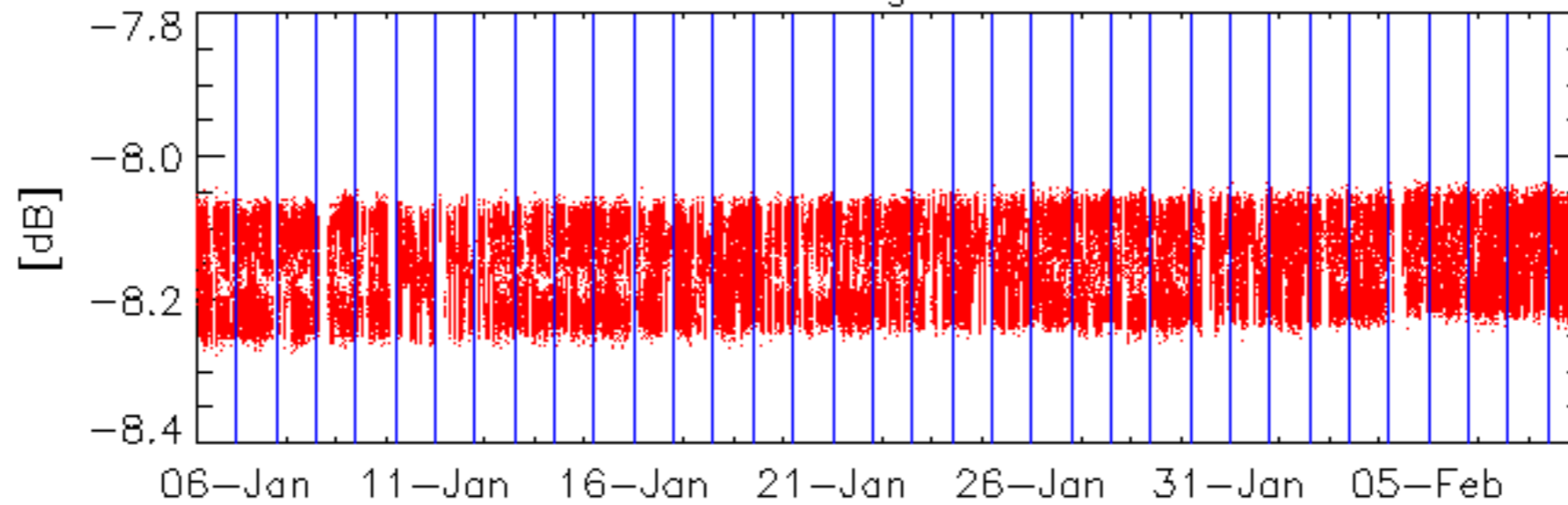
Average P1 (row 3 & row 24)



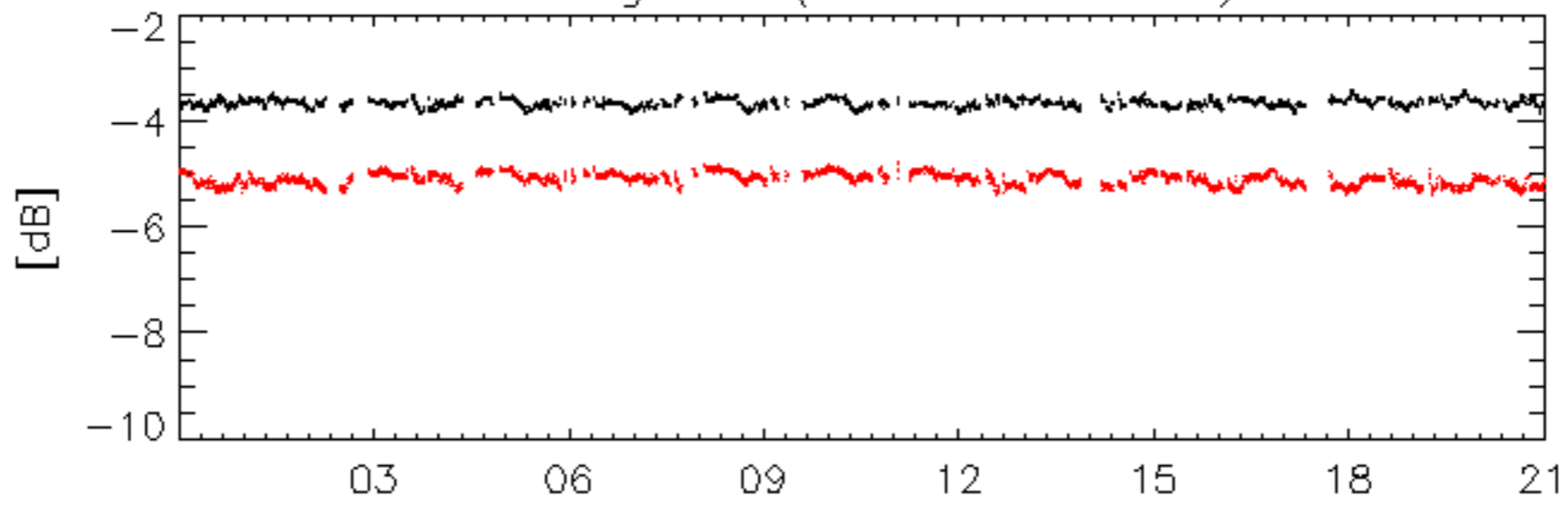
Average P2



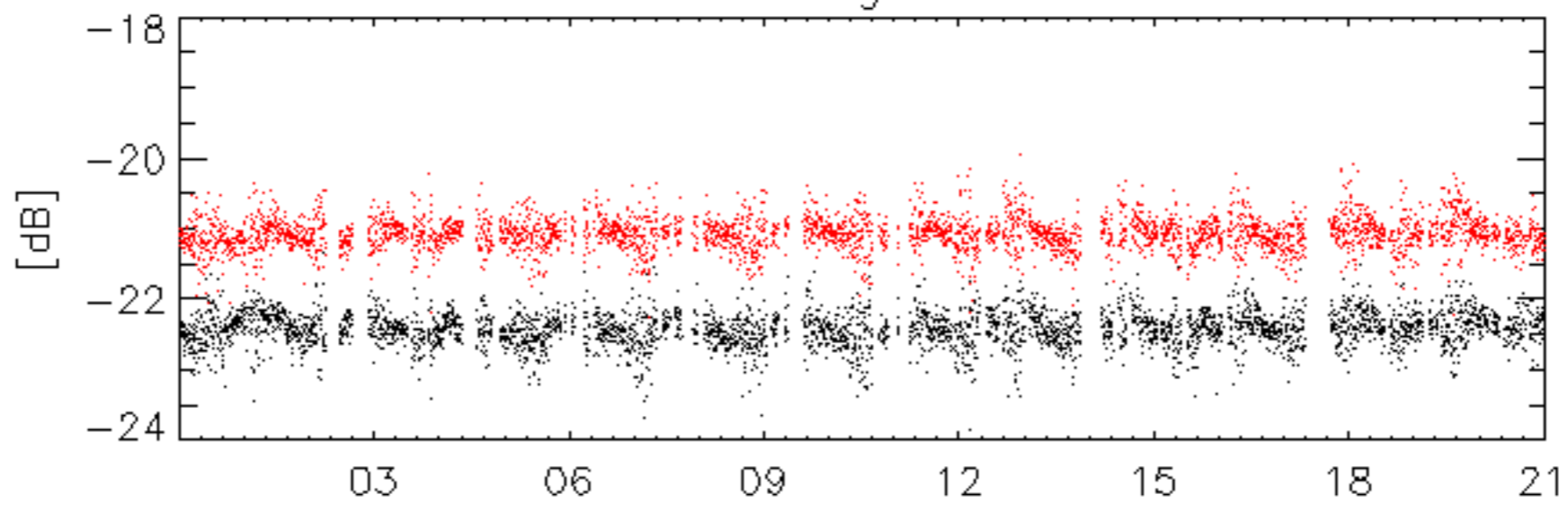
Average P3



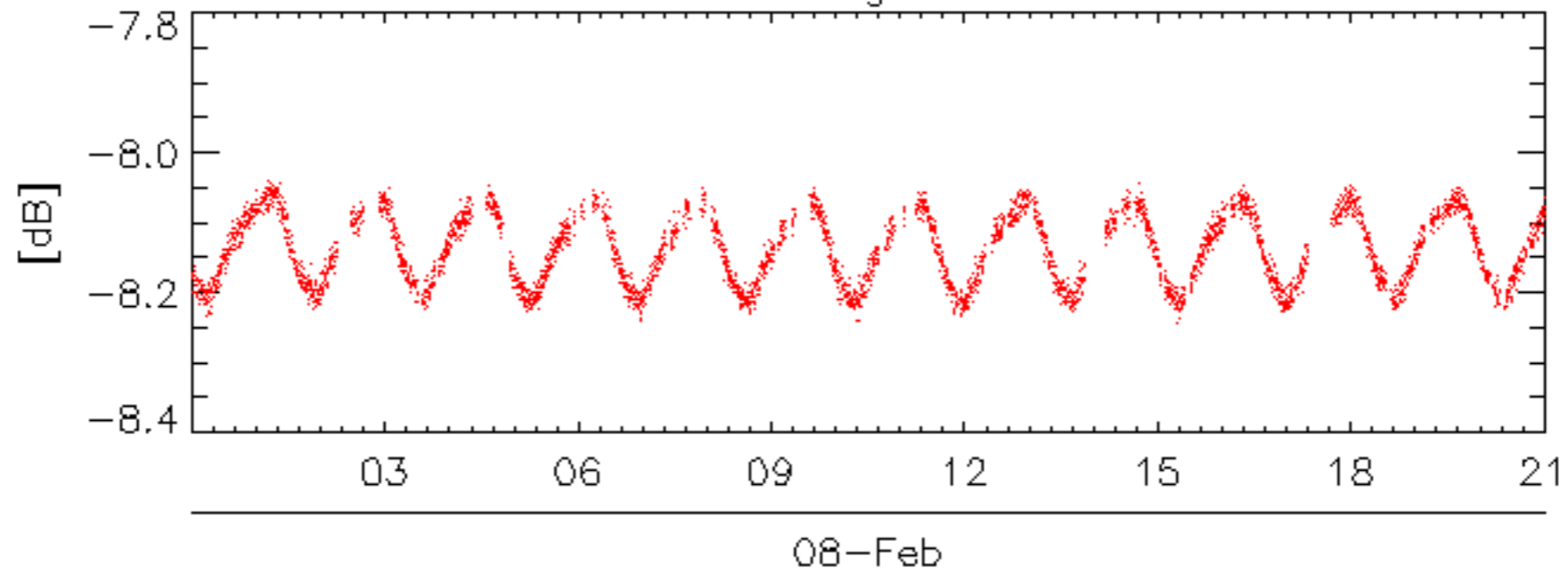
Average P1 (row 3 & row 24)



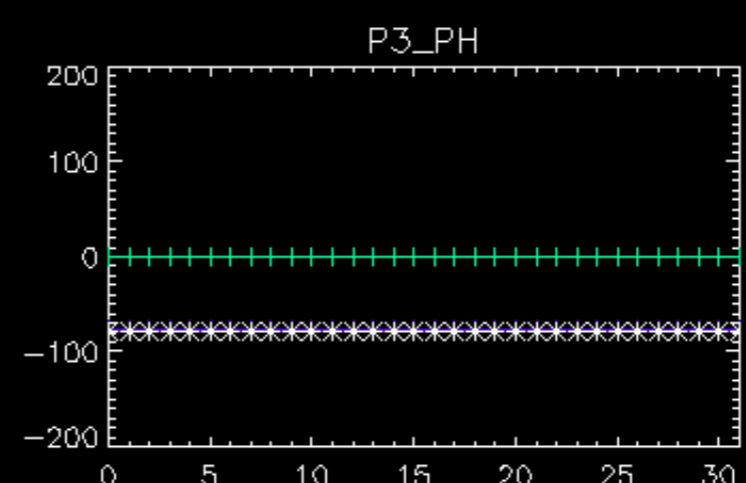
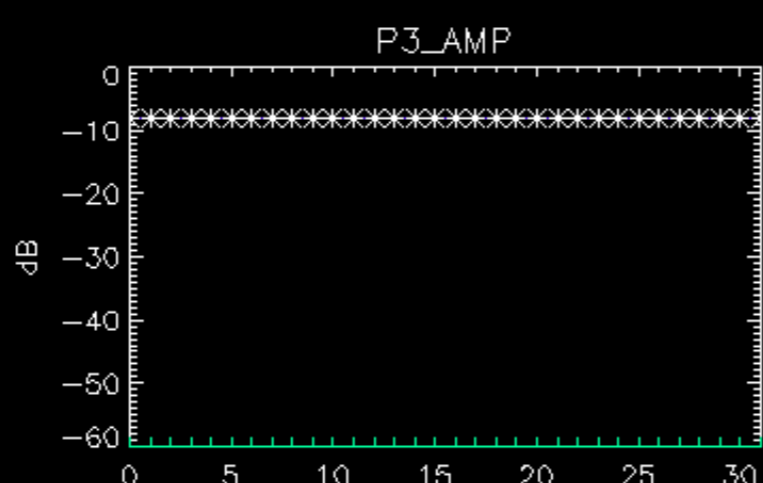
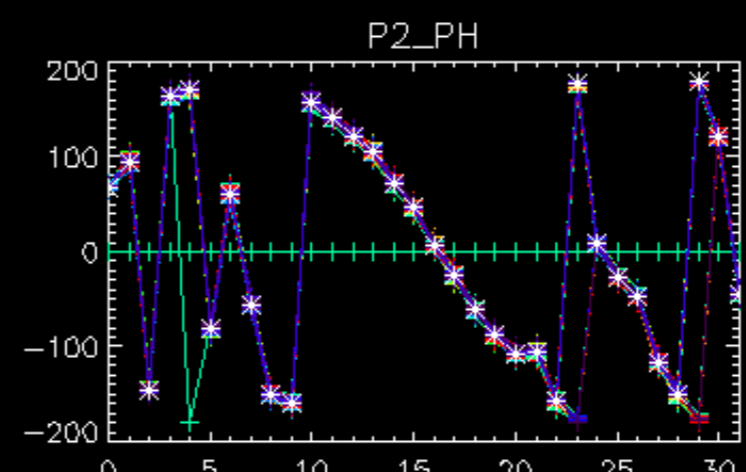
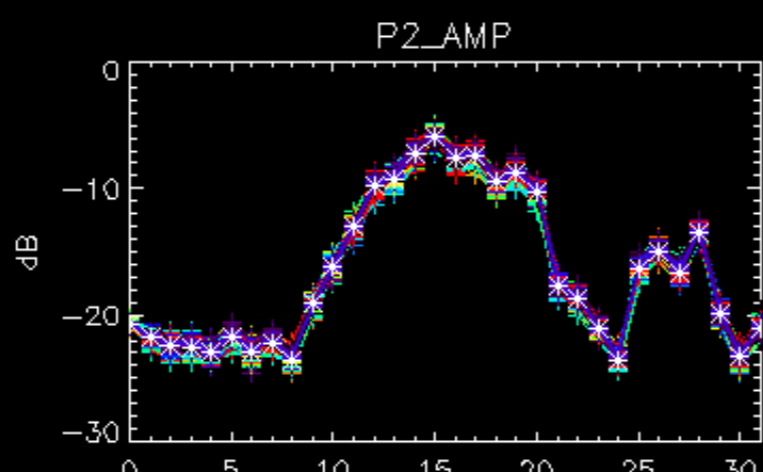
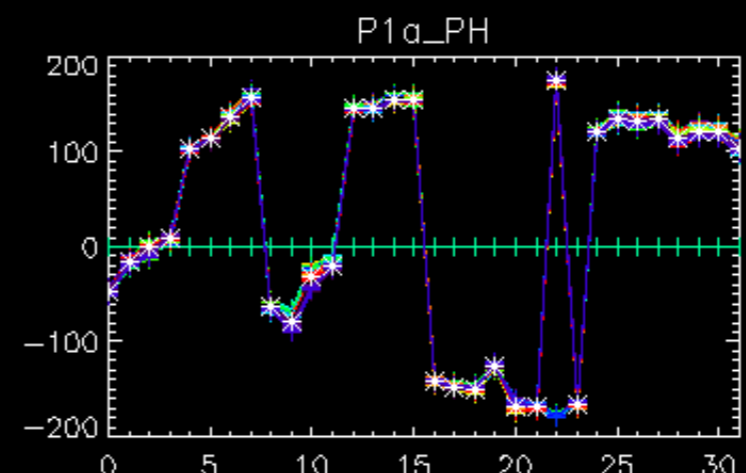
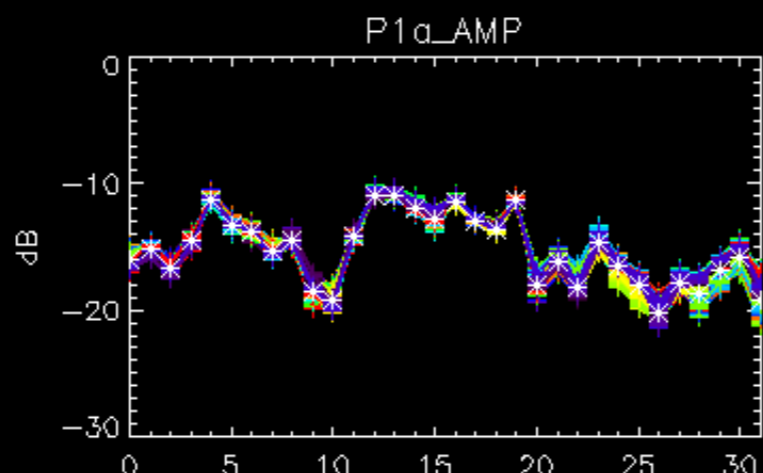
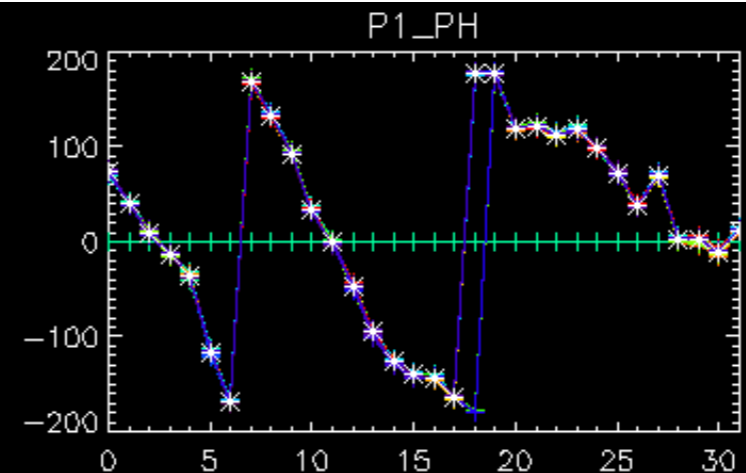
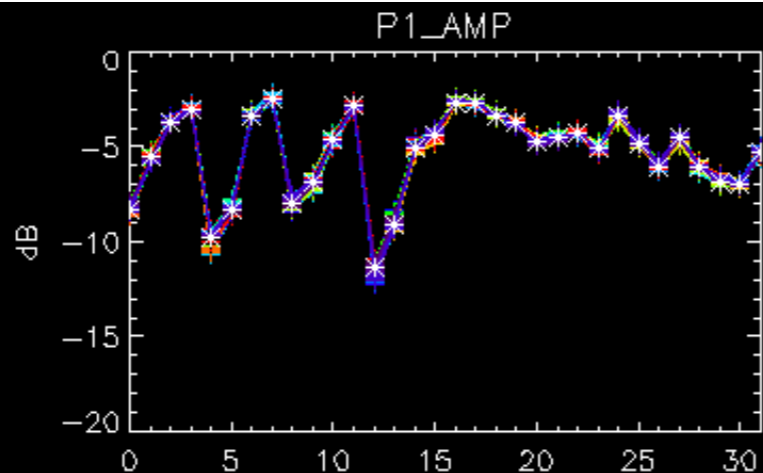
08-Feb
Average P2



08-Feb
Average P3



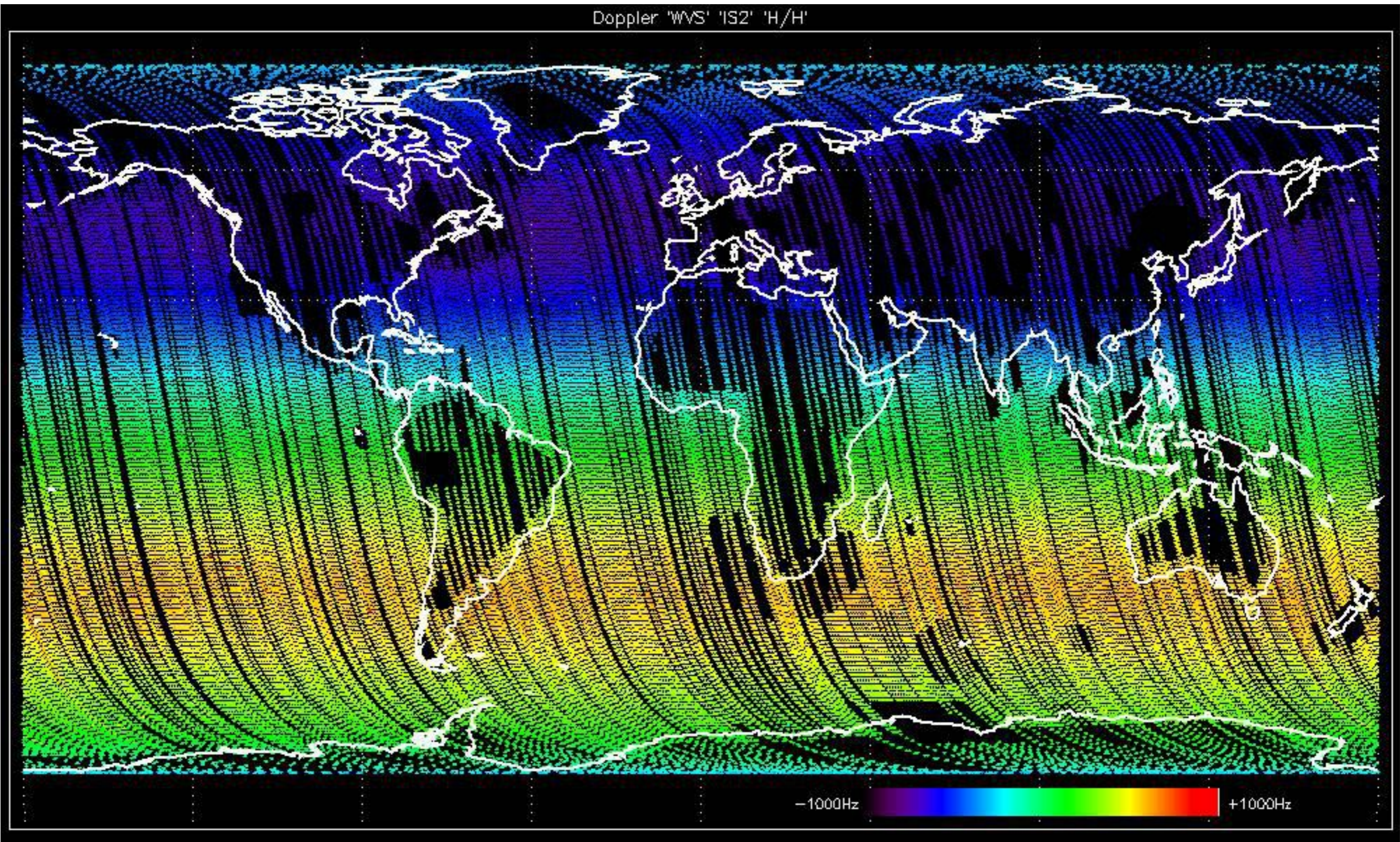
No anomalies observed.



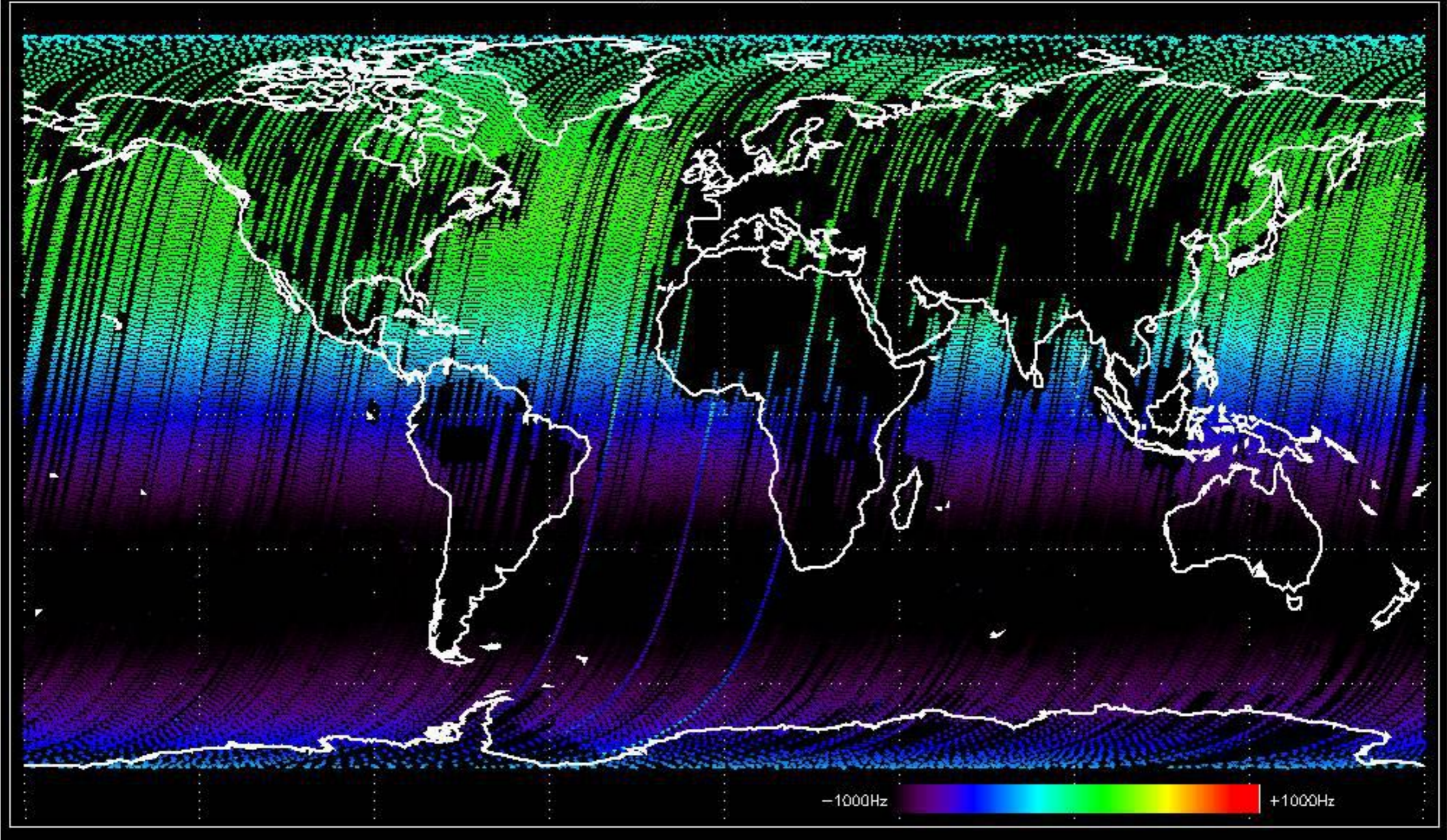
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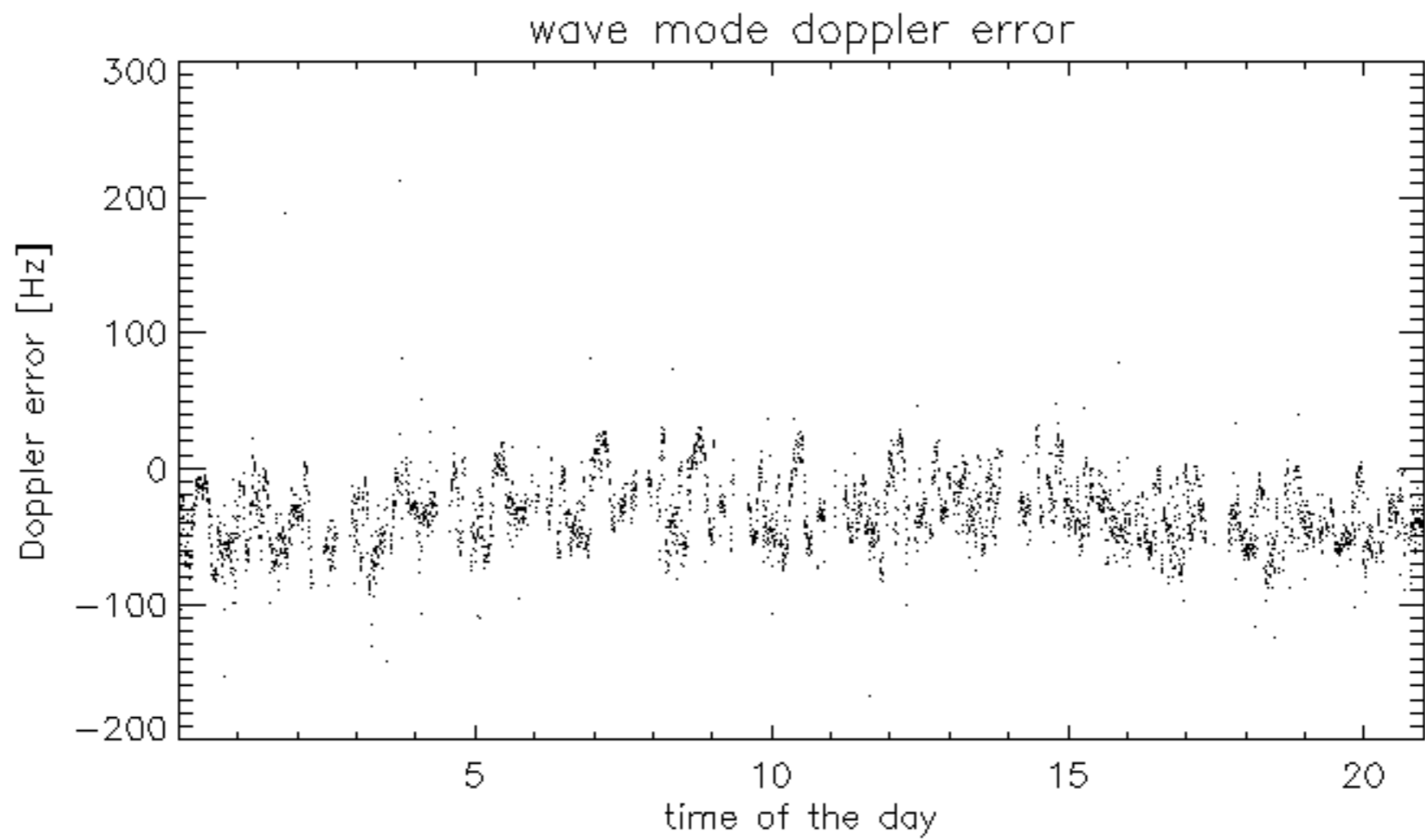
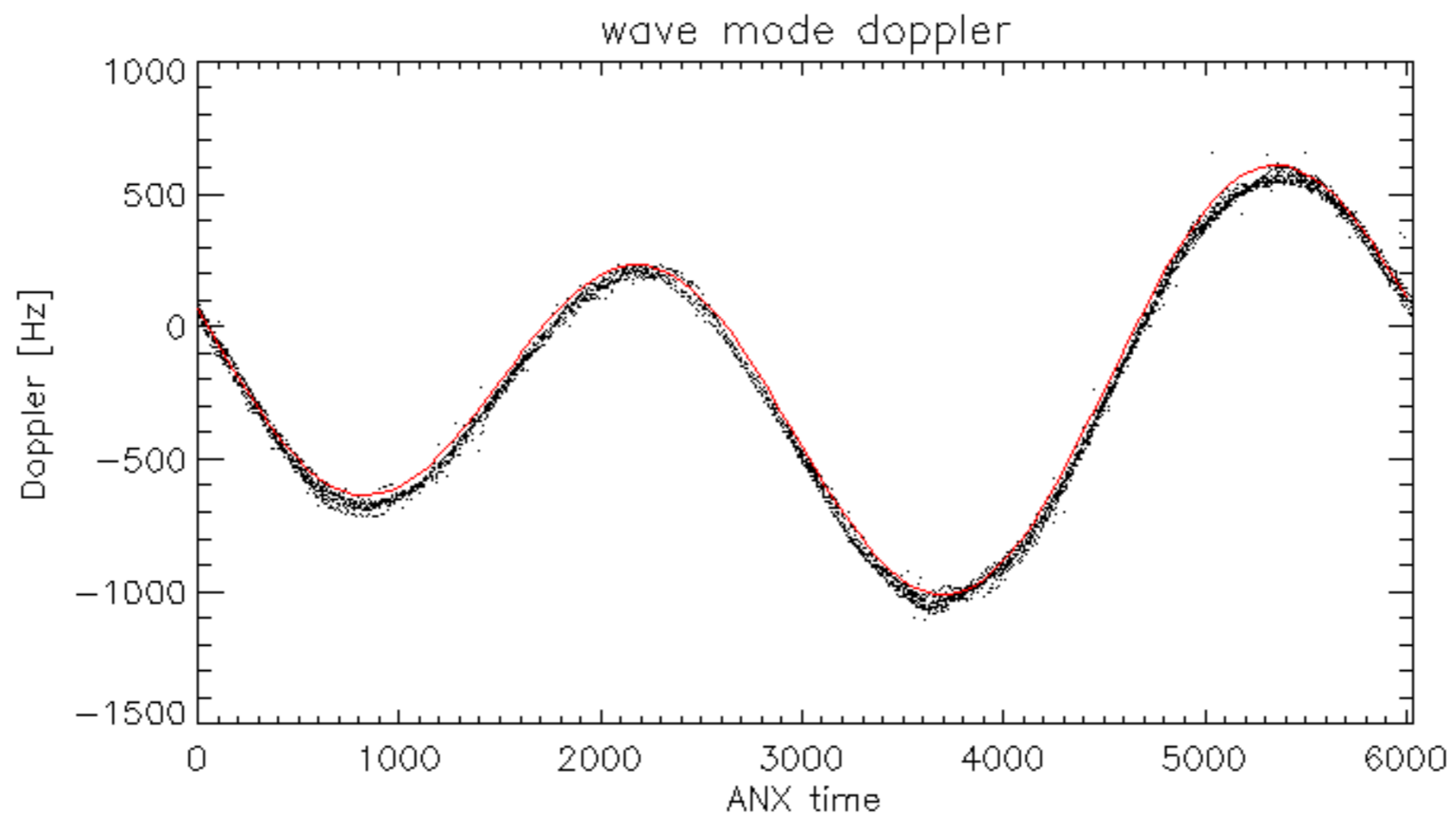
No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 35 days.

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

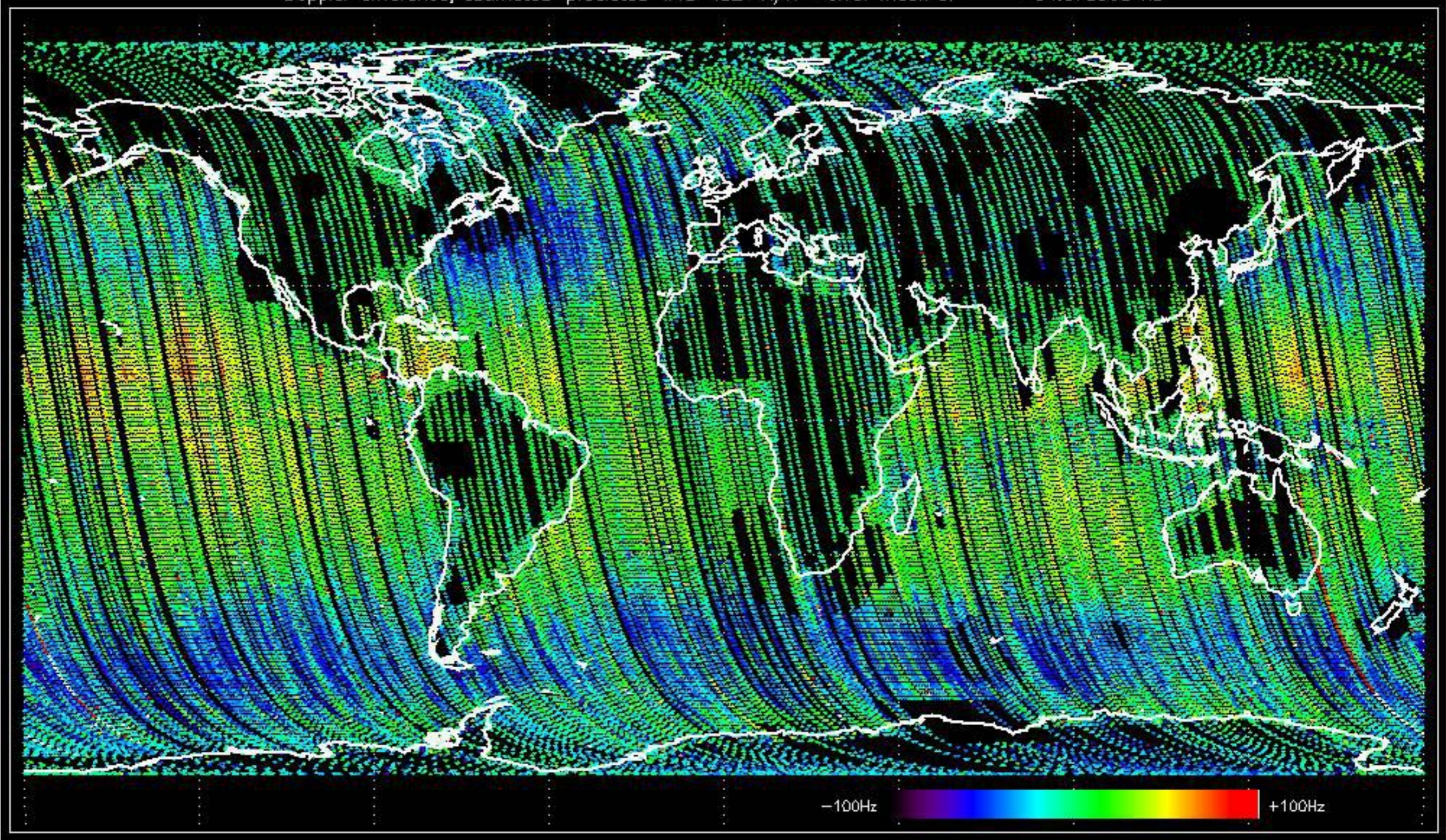


Doppler 'WVS' 'IS2' 'V/V'

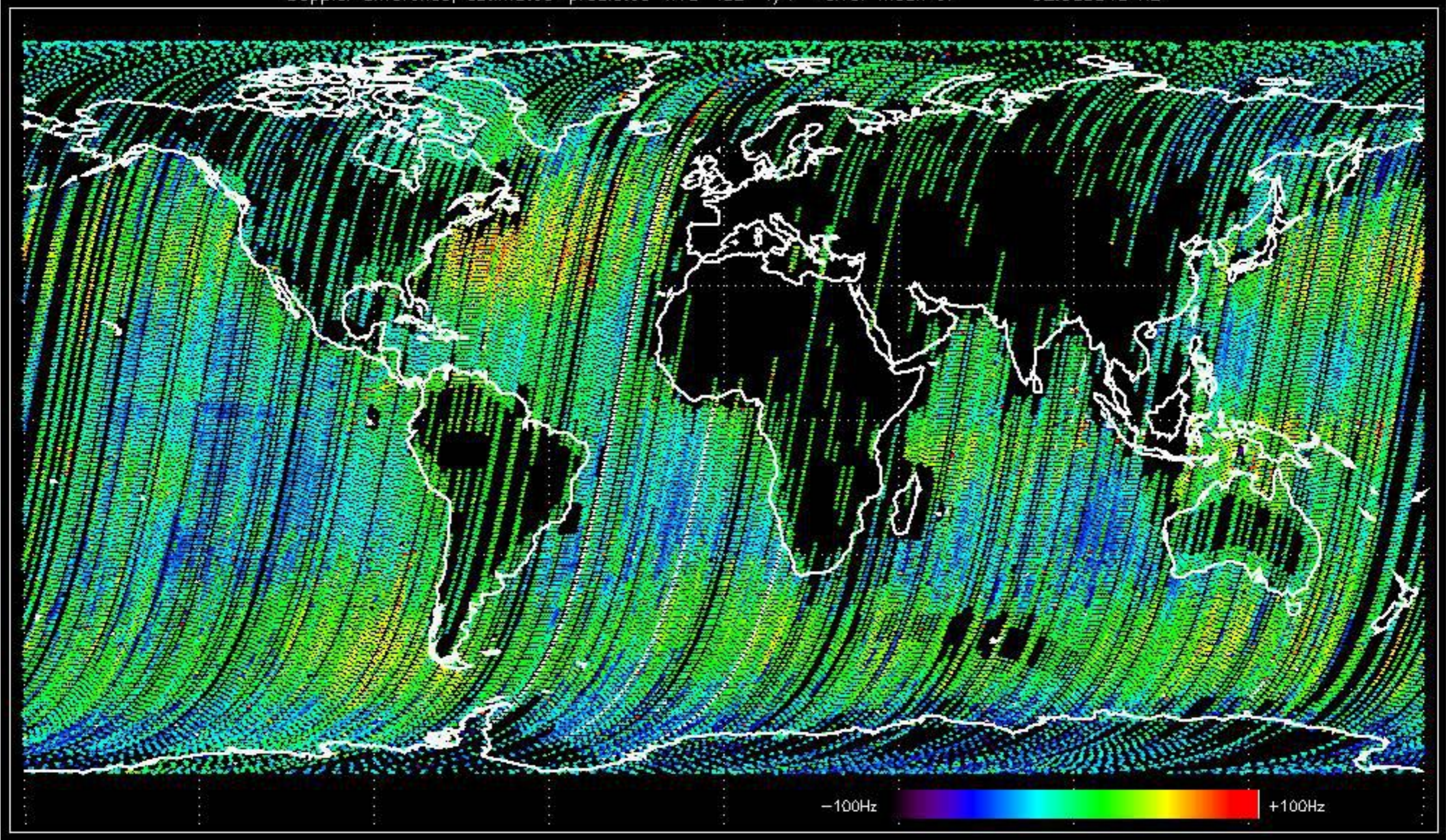




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -34.073368 Hz

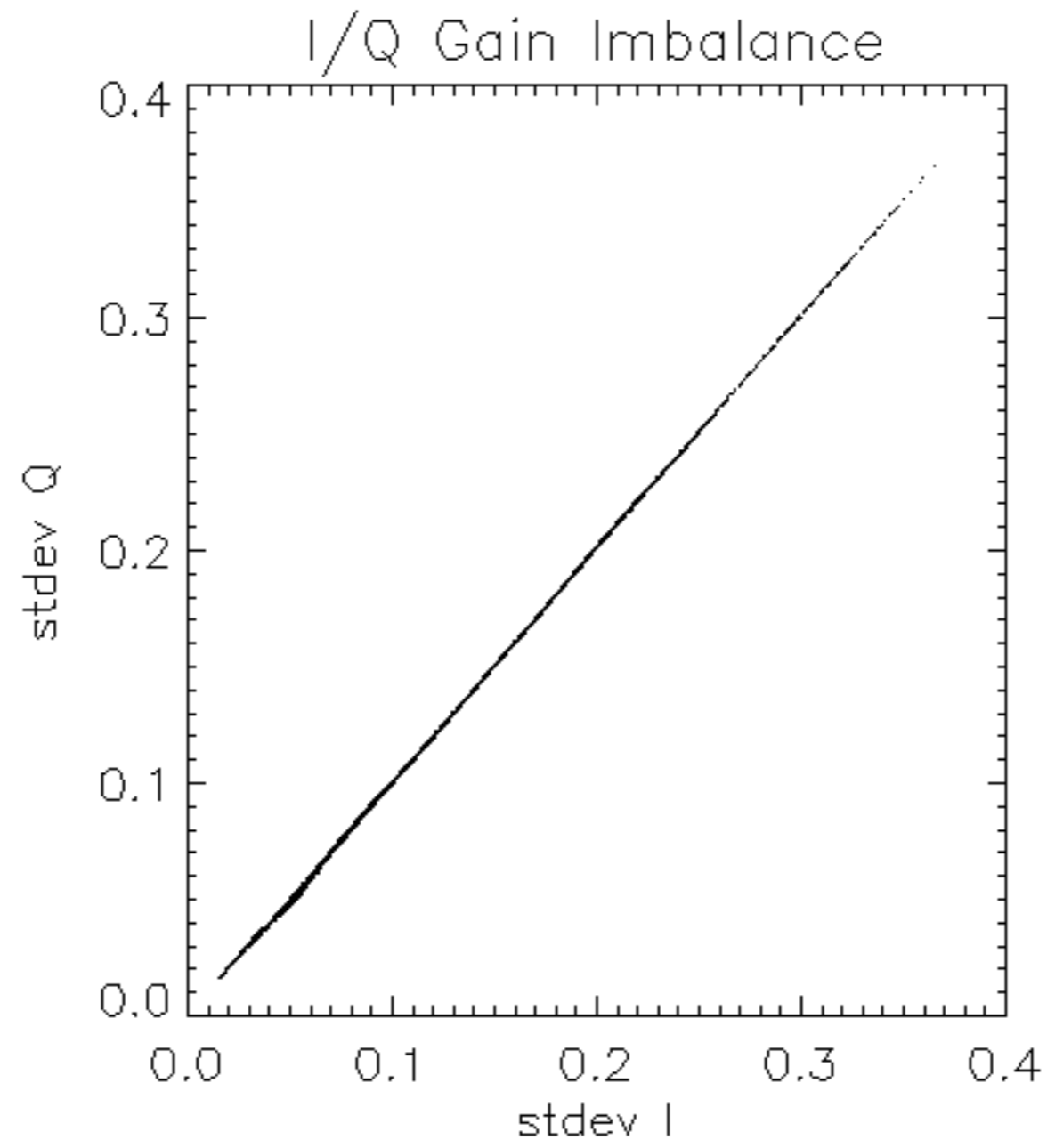


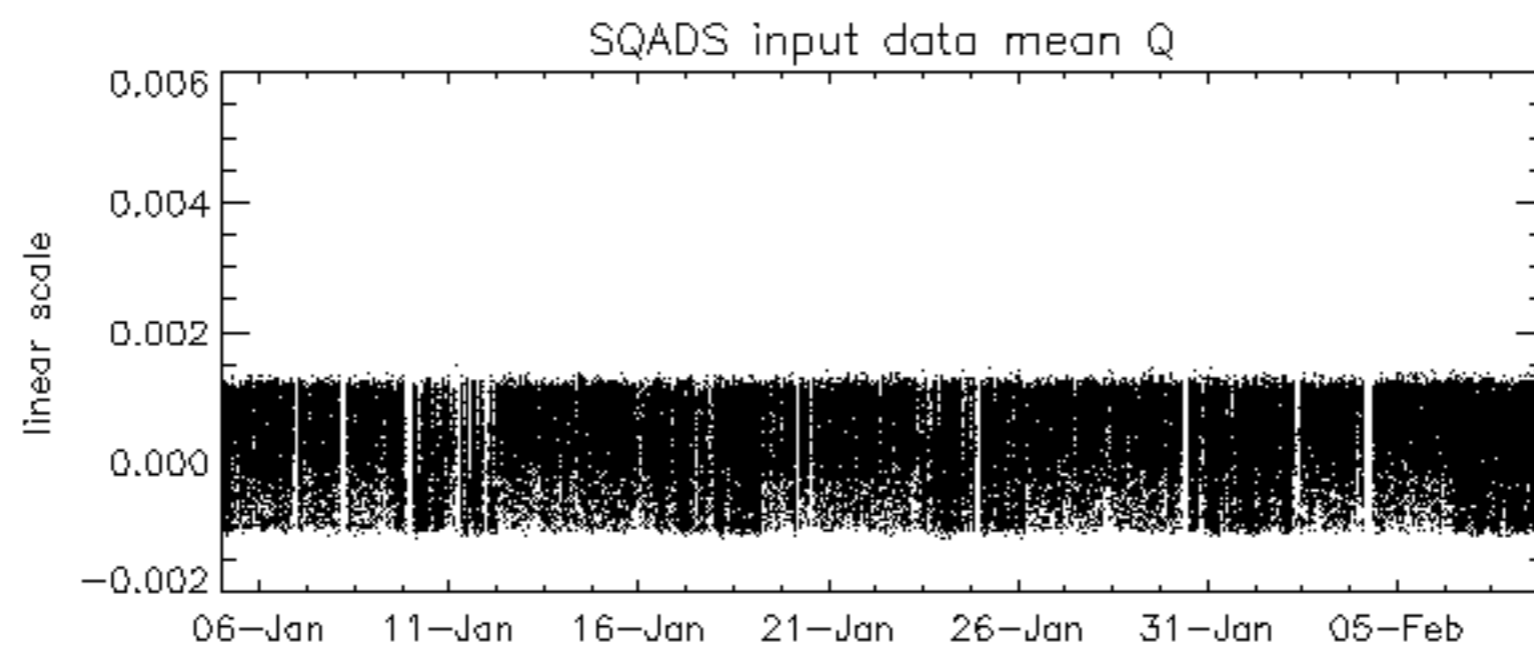
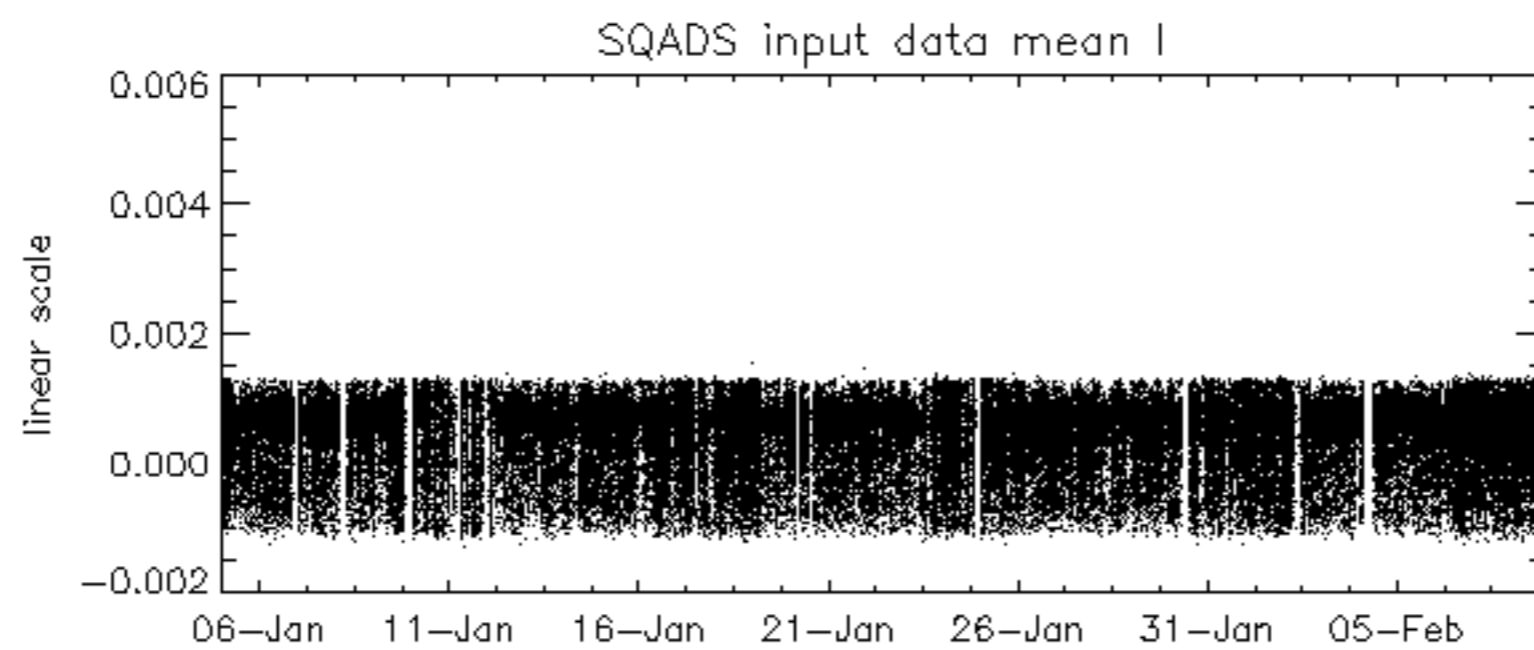
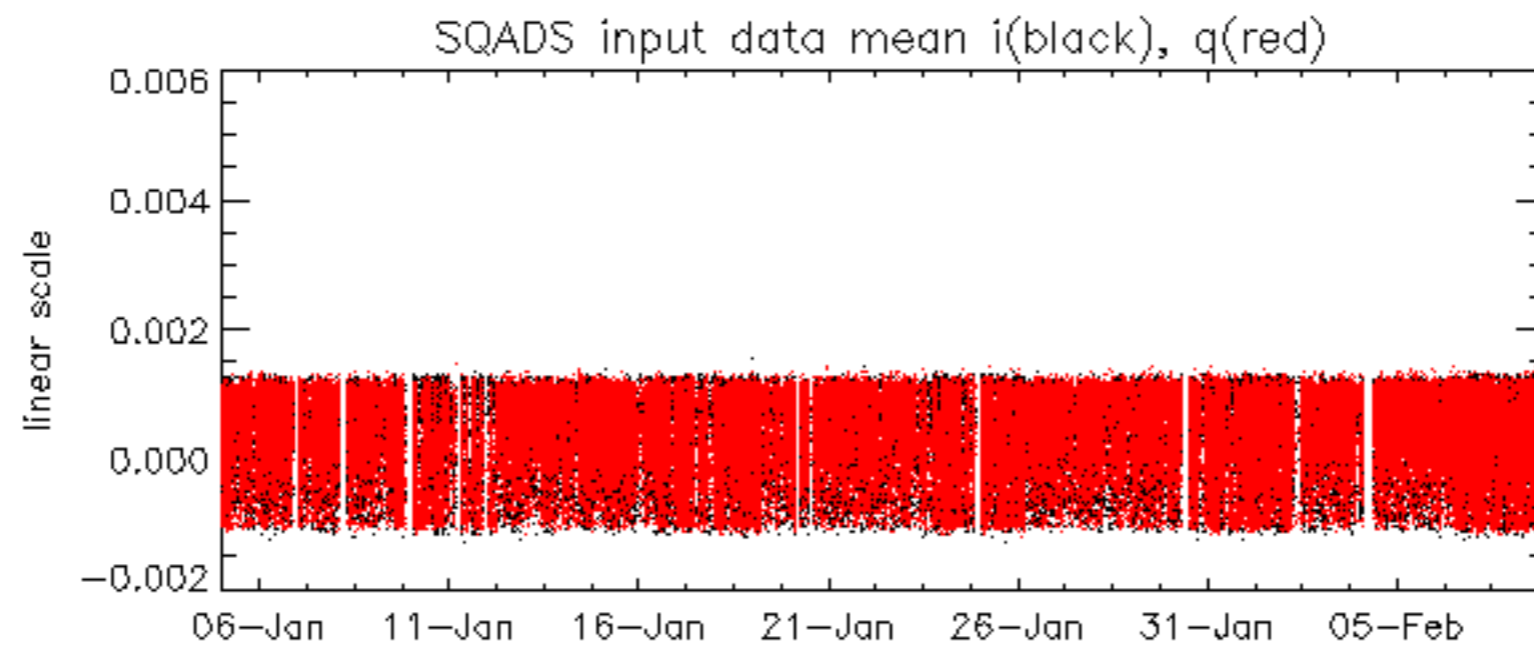
Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -32.085948 Hz

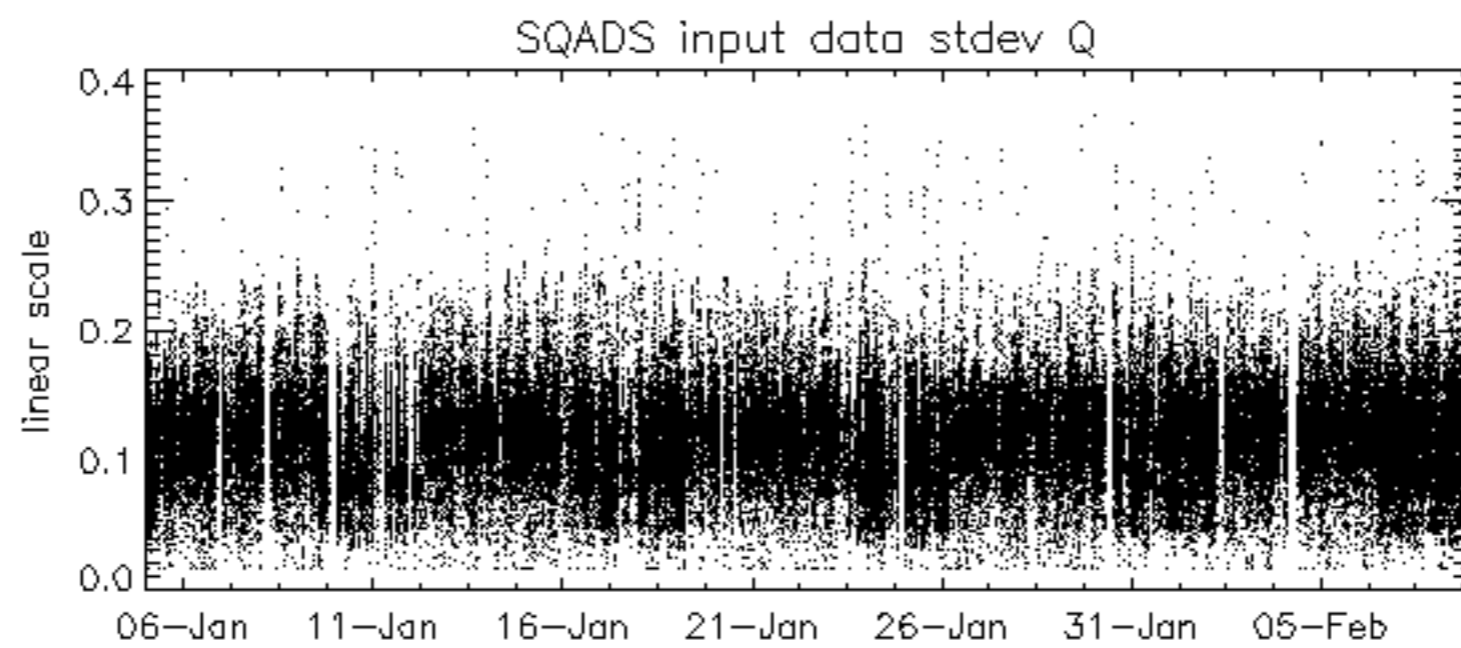
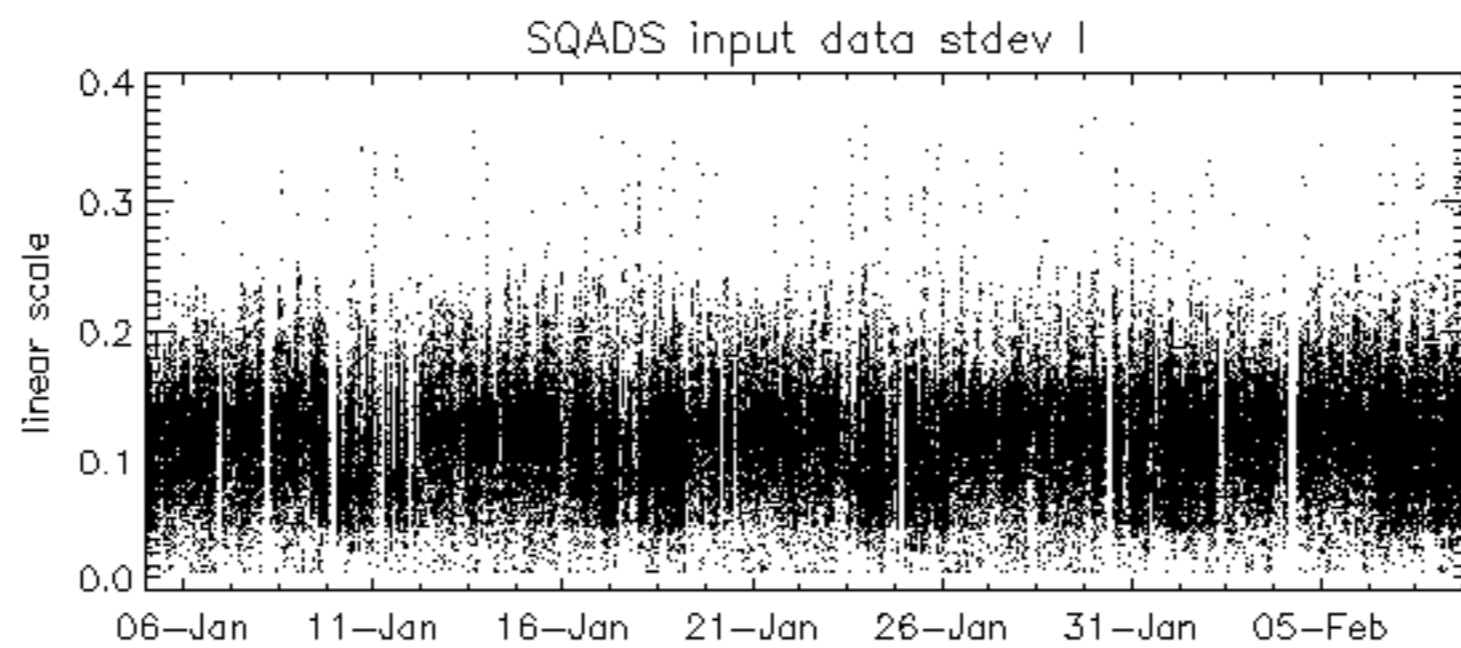
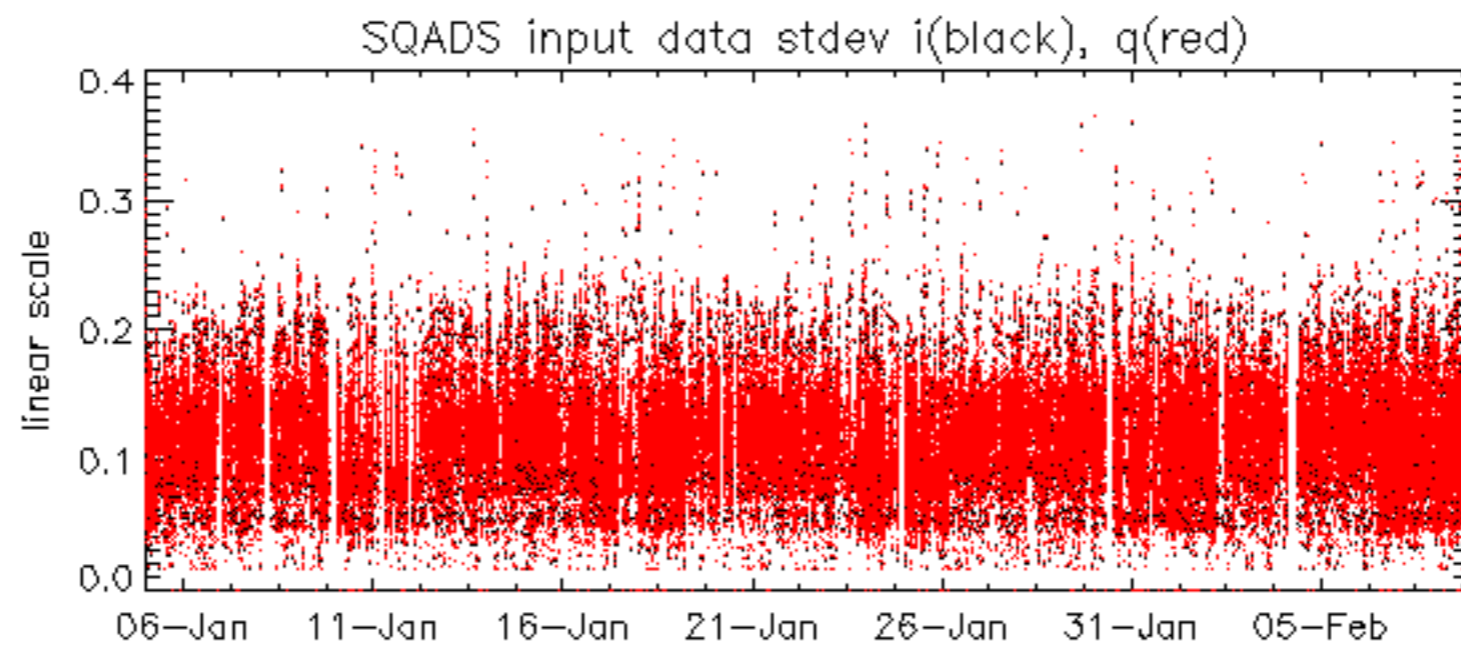


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to identify modules for which calibration offsets are to be applied.
No anomalies observed on last MS available products (06 Feb 2004).

No anomalies observed.







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