

REPORT OF 040215

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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

Antenna reset on 14-FEB-204 09:24:34 to 11:06:01 causes ASAR instrument to be unavailable. After reset ASAR was back to nominal operations.

2.2 - Browse Visual Inspection

No anomaly seen after Antenna reset.

2.3 - Data Analysis

-Internal pulses P1 and P1a are back to nominal gain after antenna reset.

- Stable raw data statistics.
- Nominal Doppler behavior.

3 - Module Stepping Mode

MS products of 14-FEB-2004 are missing.

Polarisation	Start Time
V	20040213 191347
H	20040213 191227

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

P1 and P1a pulses are back to nominal.

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.61334	-22.3769	-8.13106
	stdev	0.00548732	0.0751998	0.00296274
24	mean	-5.10194	-21.0600	-8.13106
	stdev	0.0147520	0.0717338	0.00296274



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.66561	-22.4461	-8.14080
	stdev	0.00707938	0.0727897	0.00314949
24	mean	-5.10552	-21.0986	-8.14080
	stdev	0.0150723	0.0678977	0.00314949



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	0.000435821
	stdev	2.80543e-07
MEAN Q	mean	0.000372351
	stdev	3.26328e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.120019
	stdev	0.00136310
STDEV Q	mean	0.120252
	stdev	0.00137808



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

Preliminary report. The data is not yet controlled

6.1 - Unbiased Doppler Error

Evolution of unbiased Doppler error (Real - Expected)
Ascending
Descending

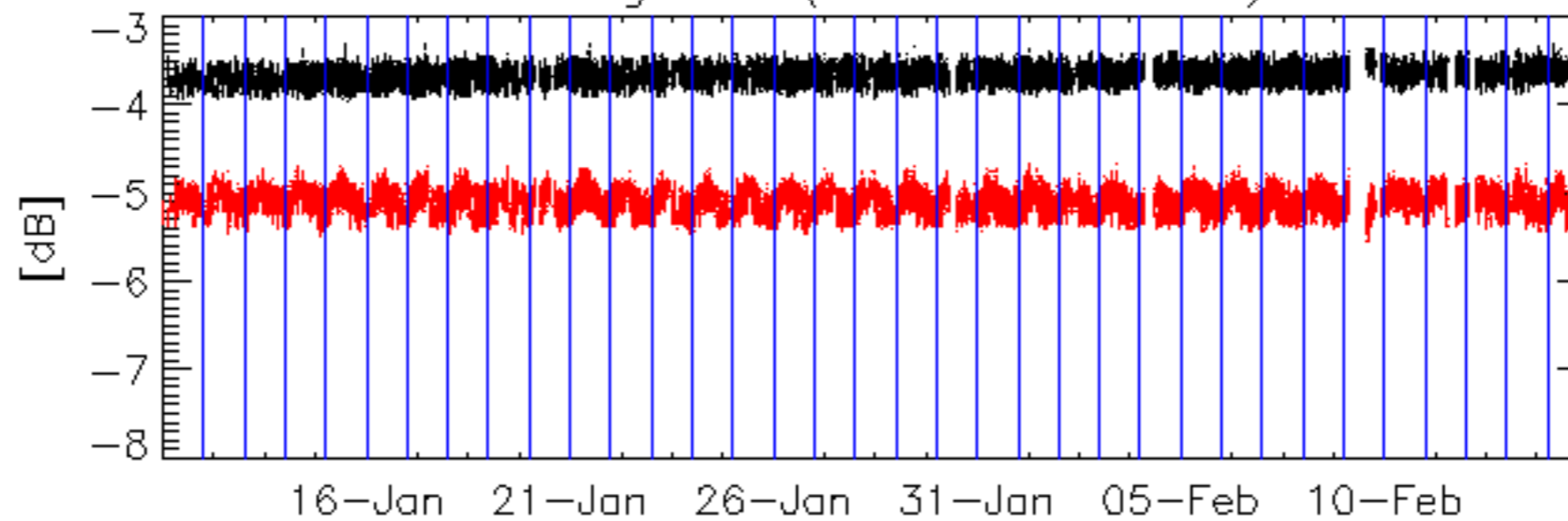
6.2 - Absolute Doppler

Evolution of Absolute Doppler
Ascending
Descending

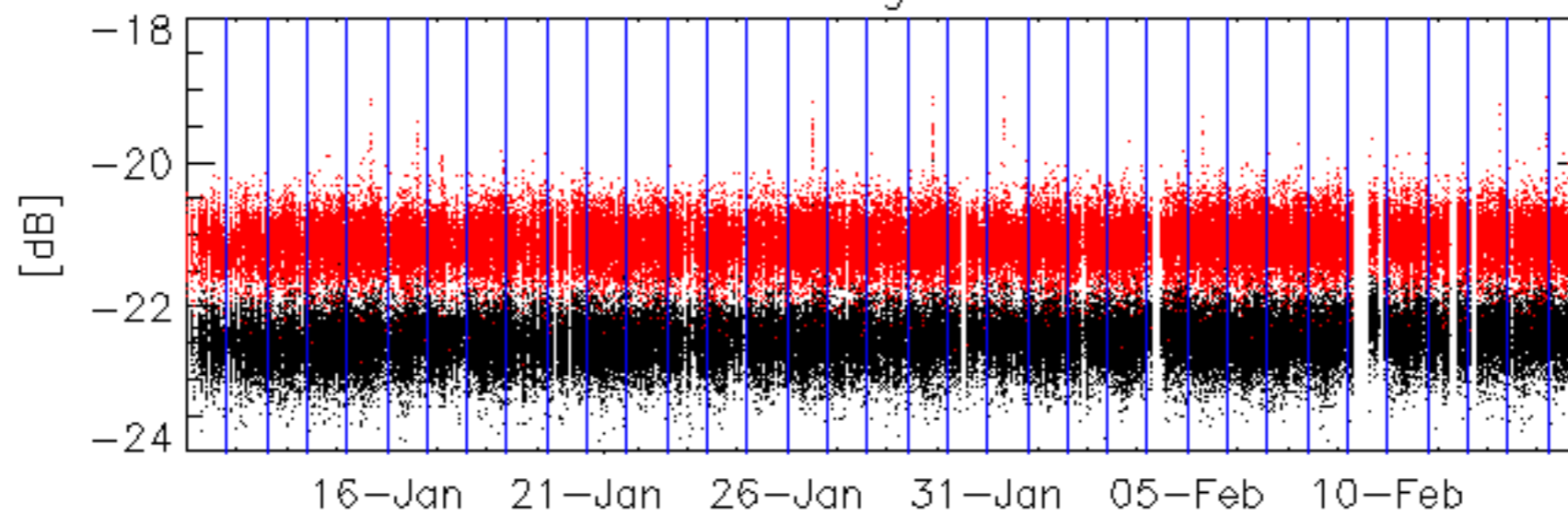
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX

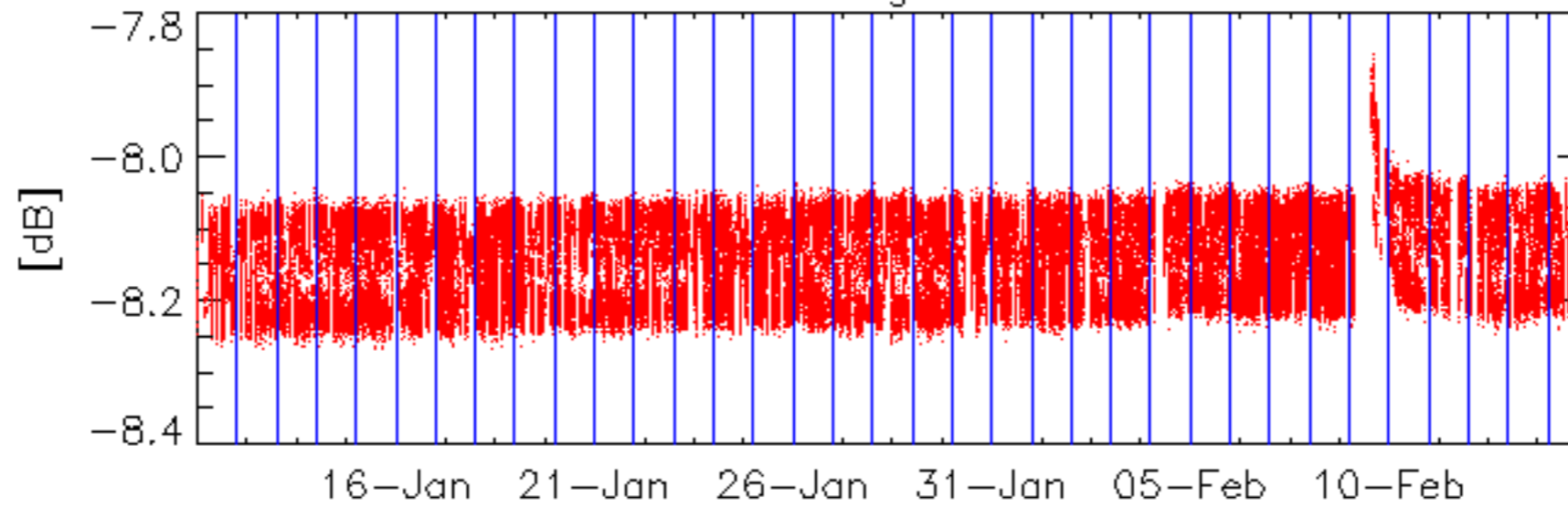

Average P1 (row 3 & row 24)



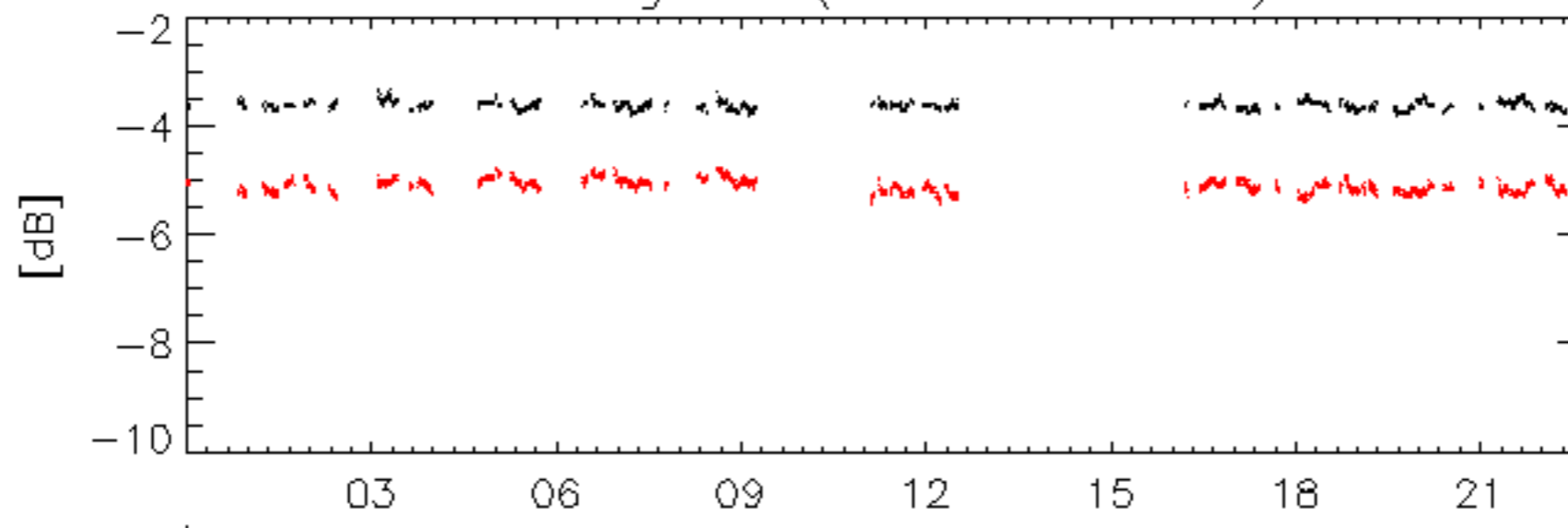
Average P2



Average P3

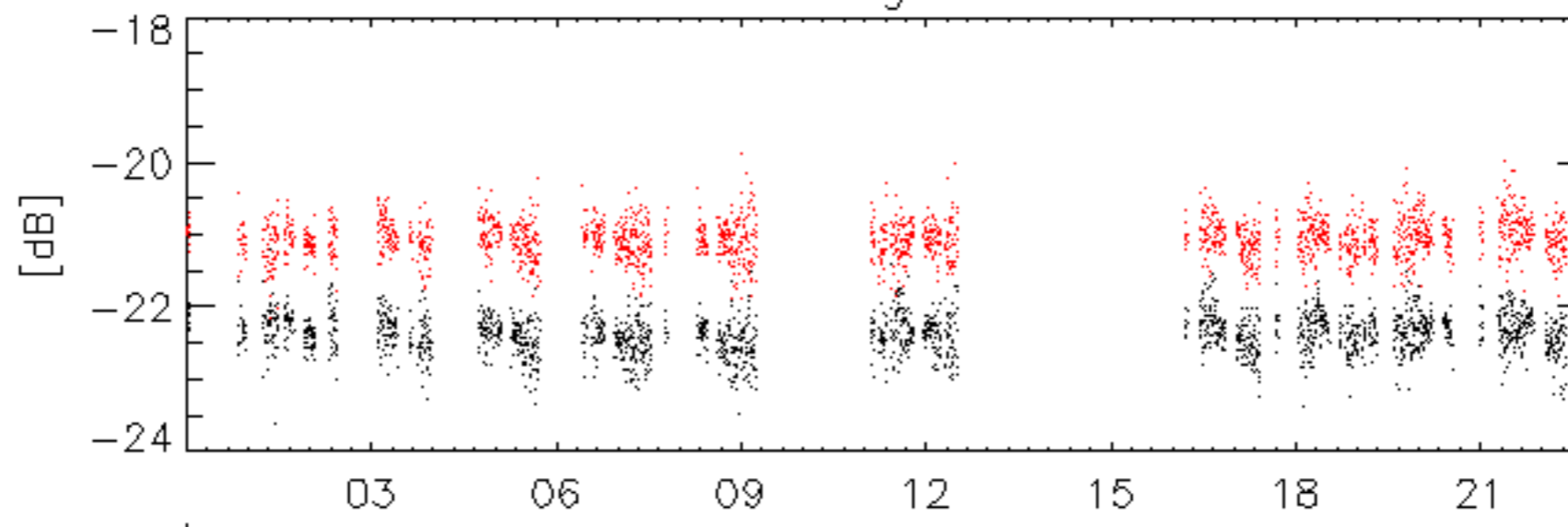


Average P1 (row 3 & row 24)



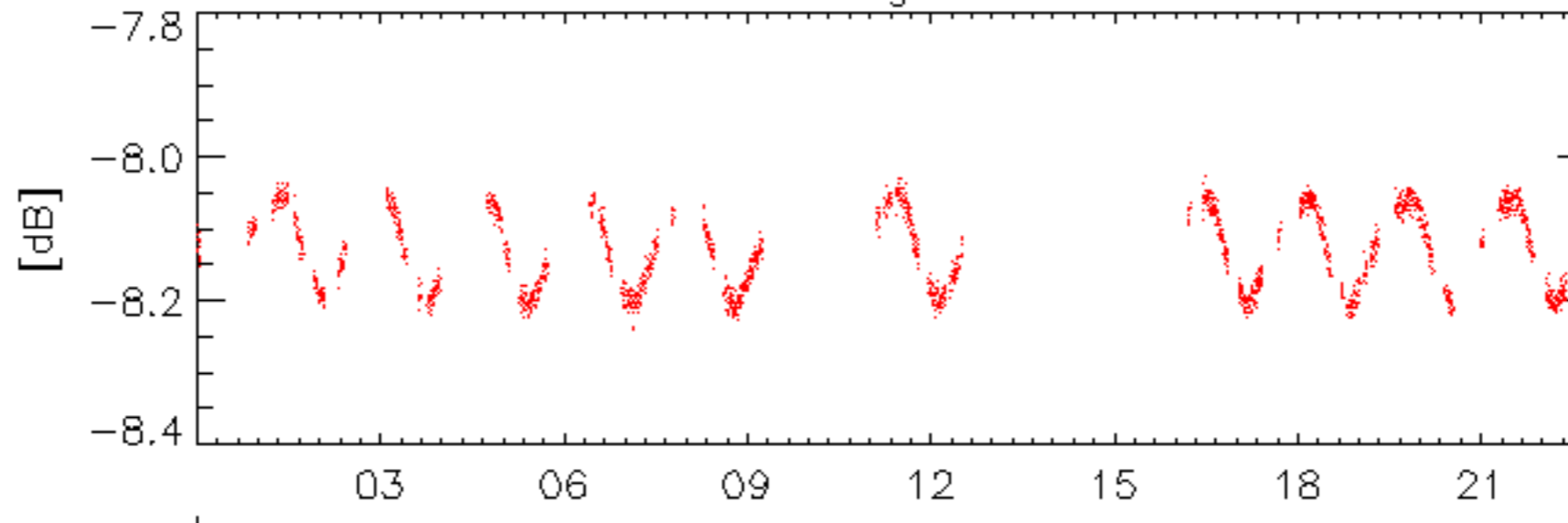
14-Feb

Average P2

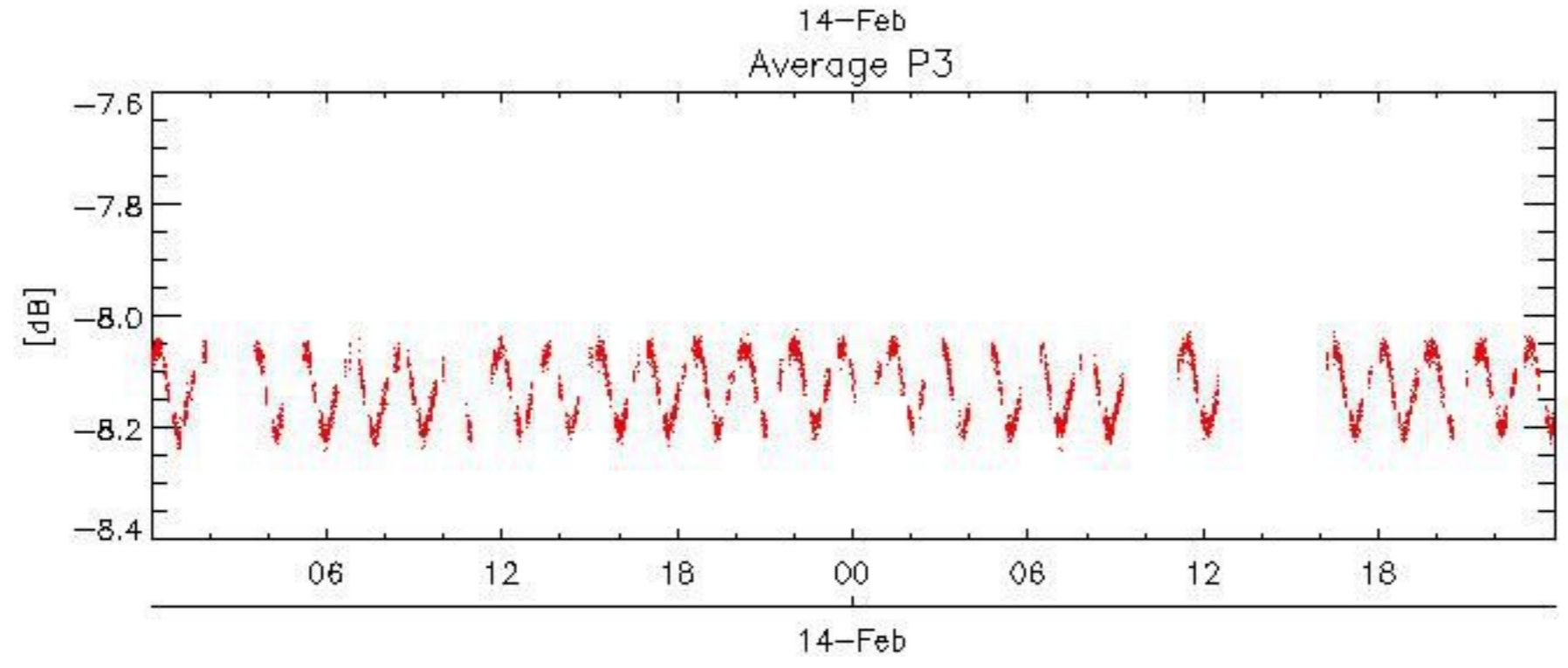
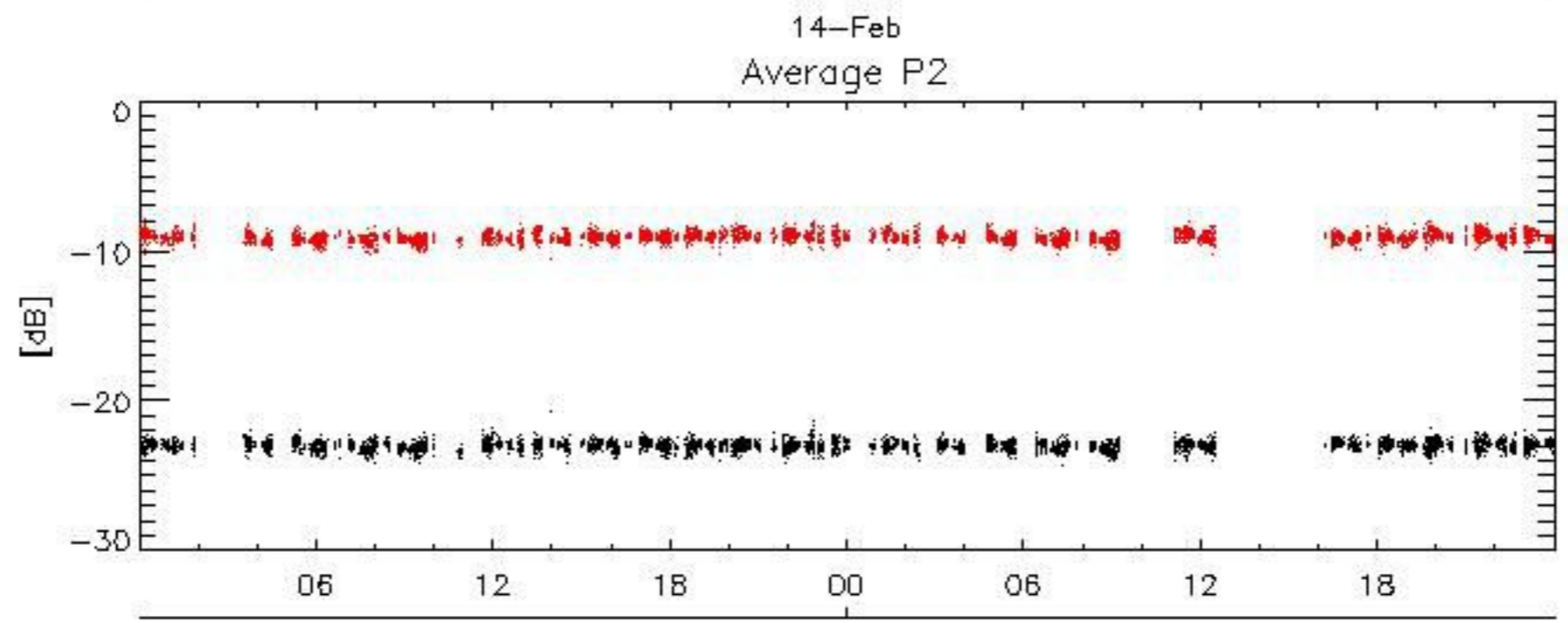
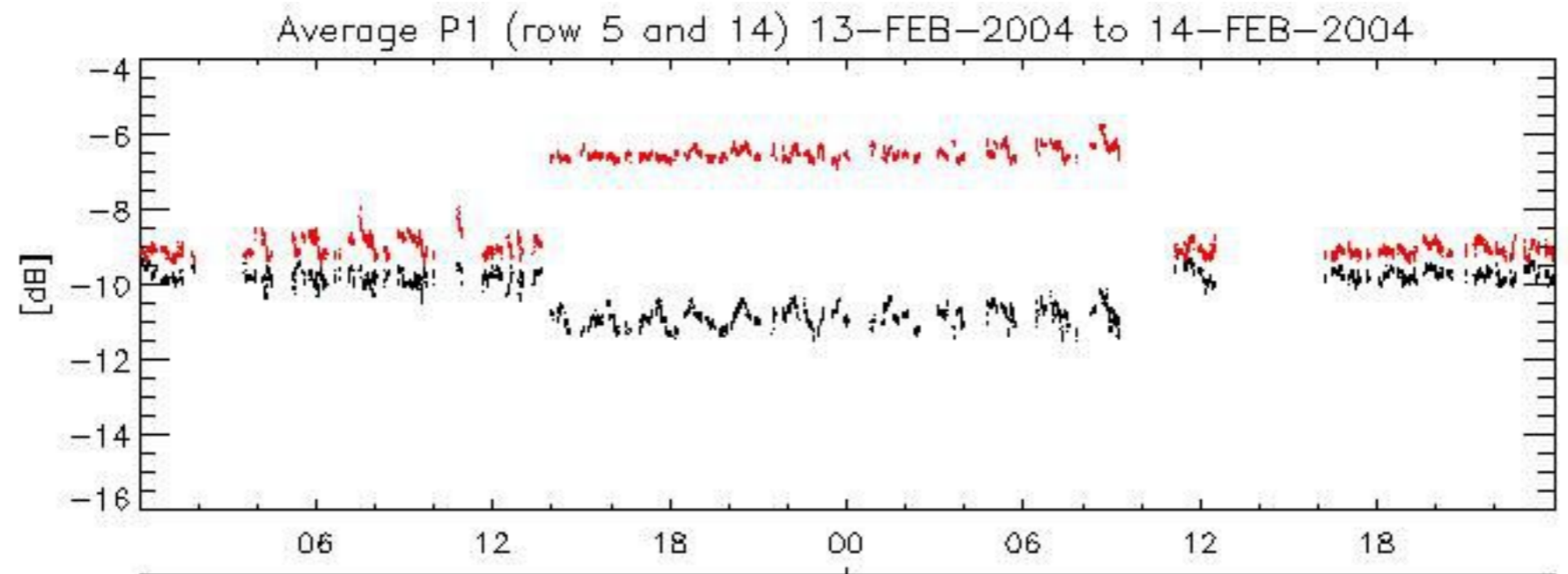


14-Feb

Average P3

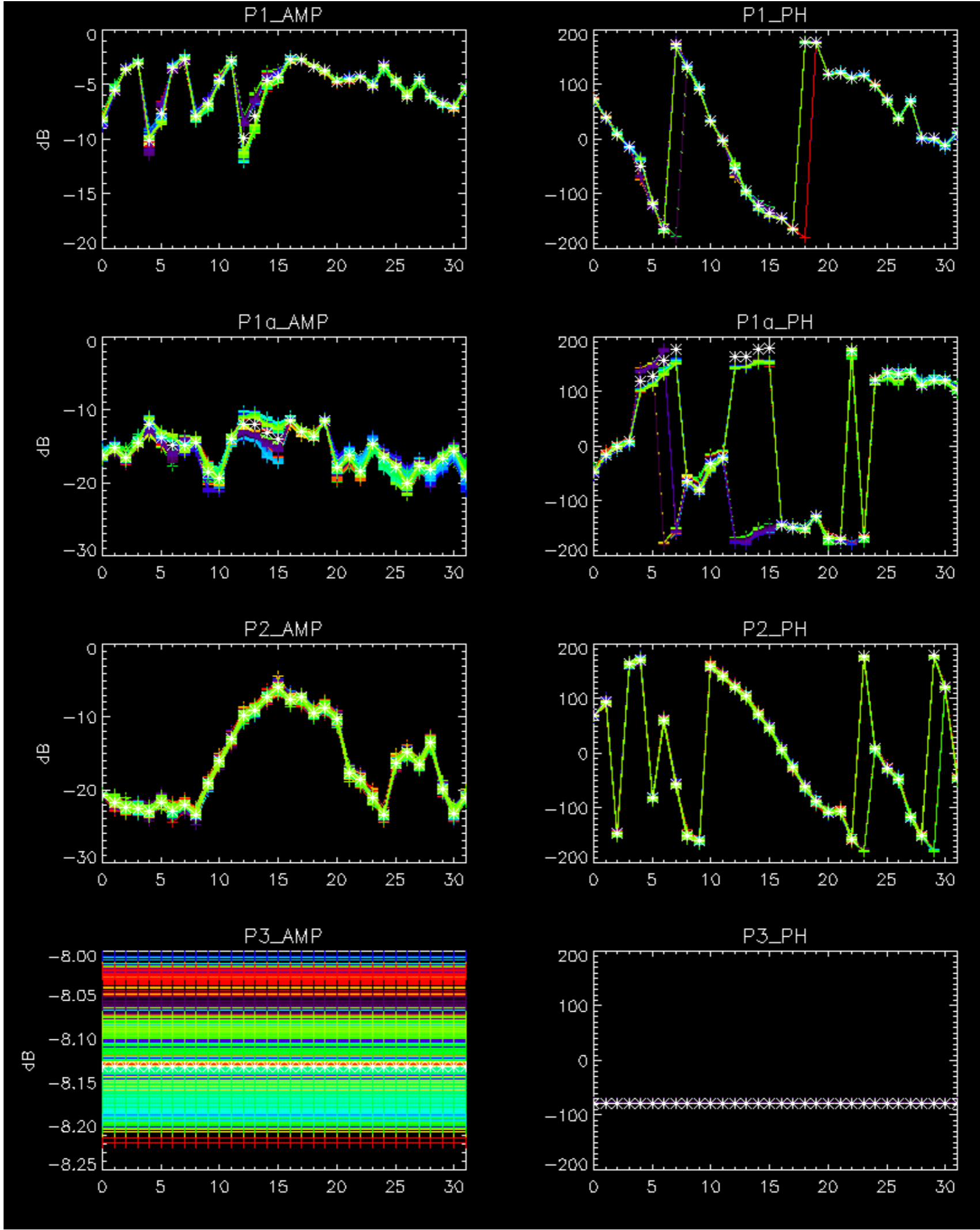


14-Feb



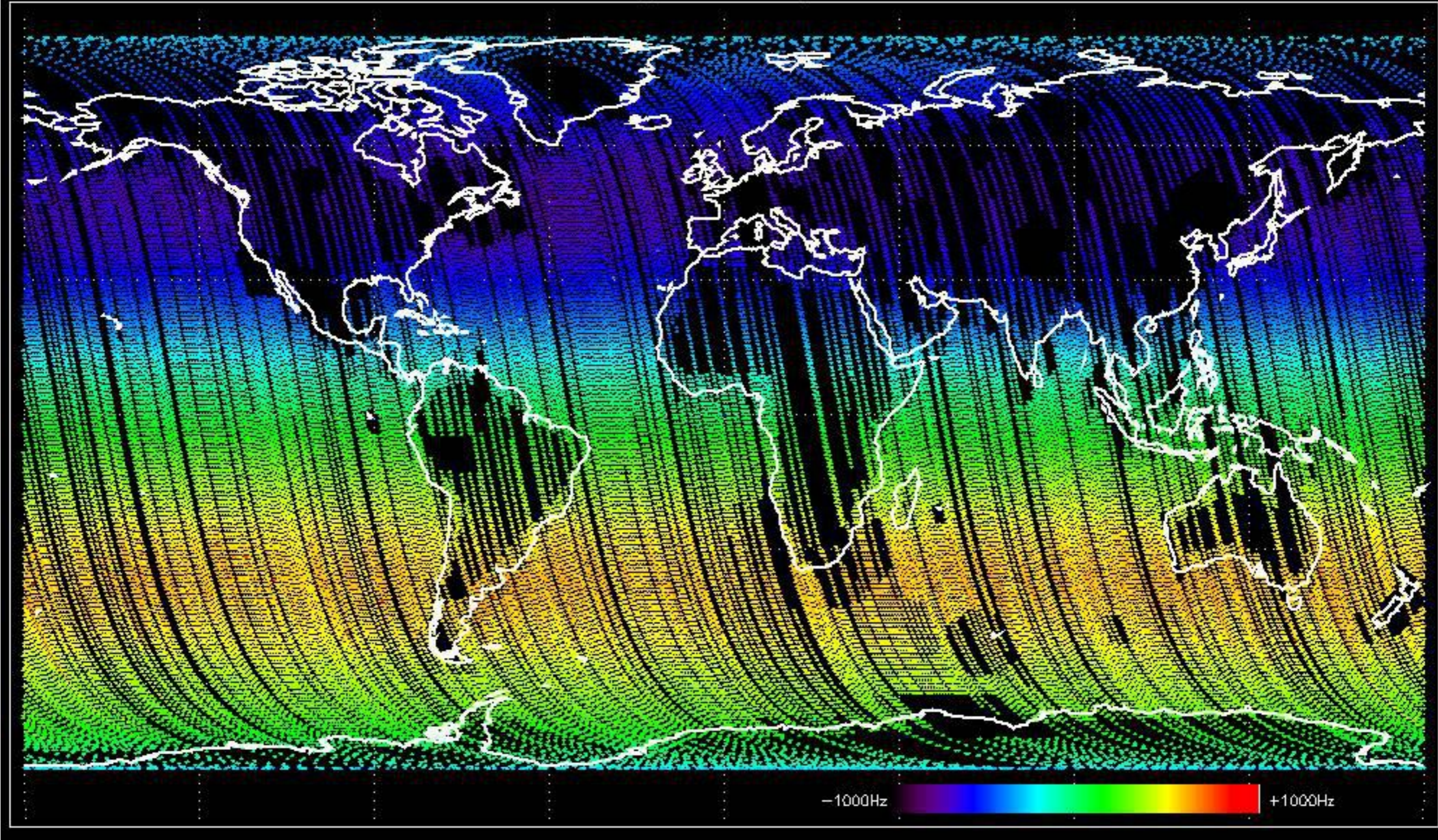
No anomaly seen after Antenna reset.

P1 and P1a pulses are back to nominal.

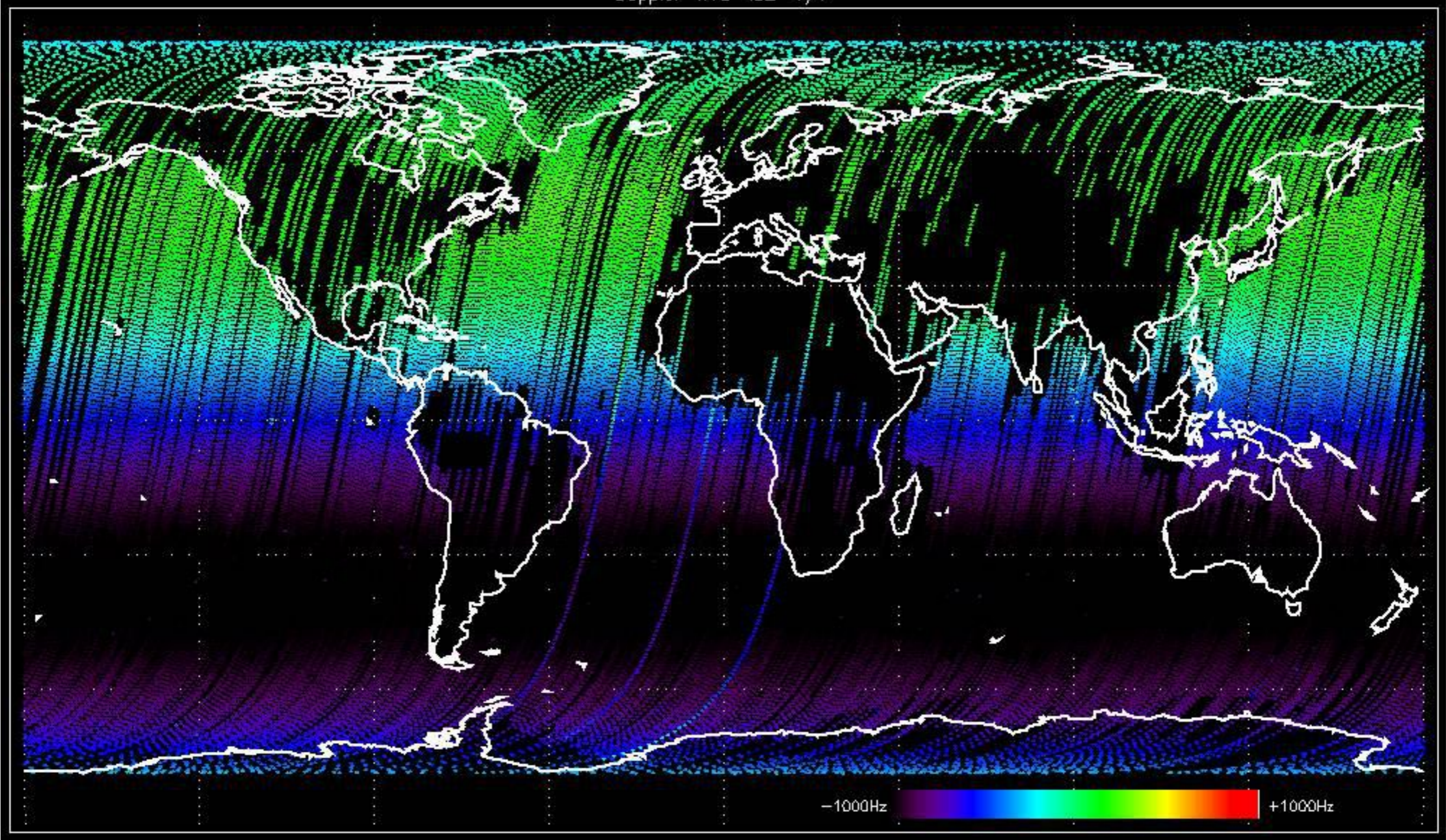


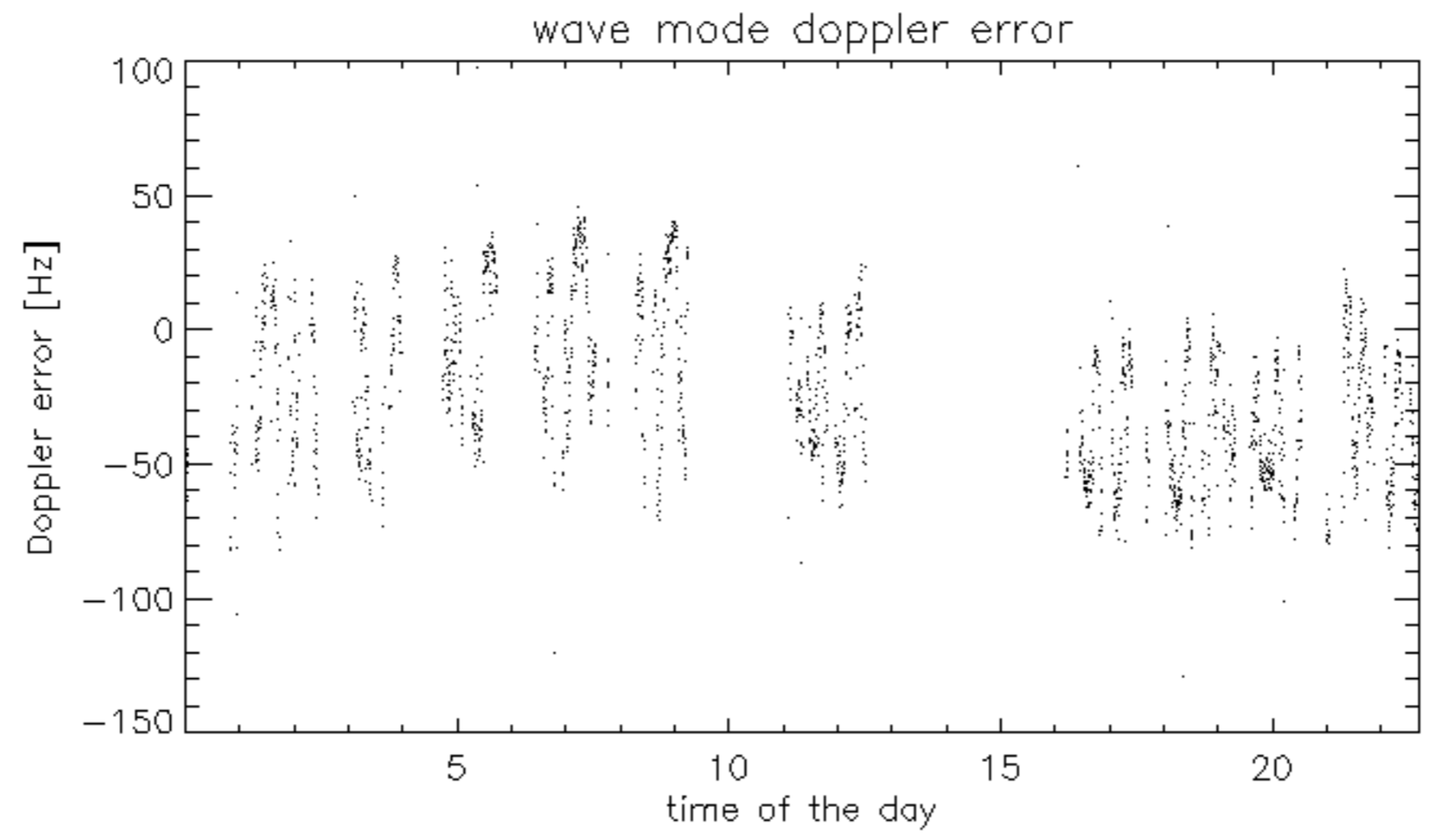
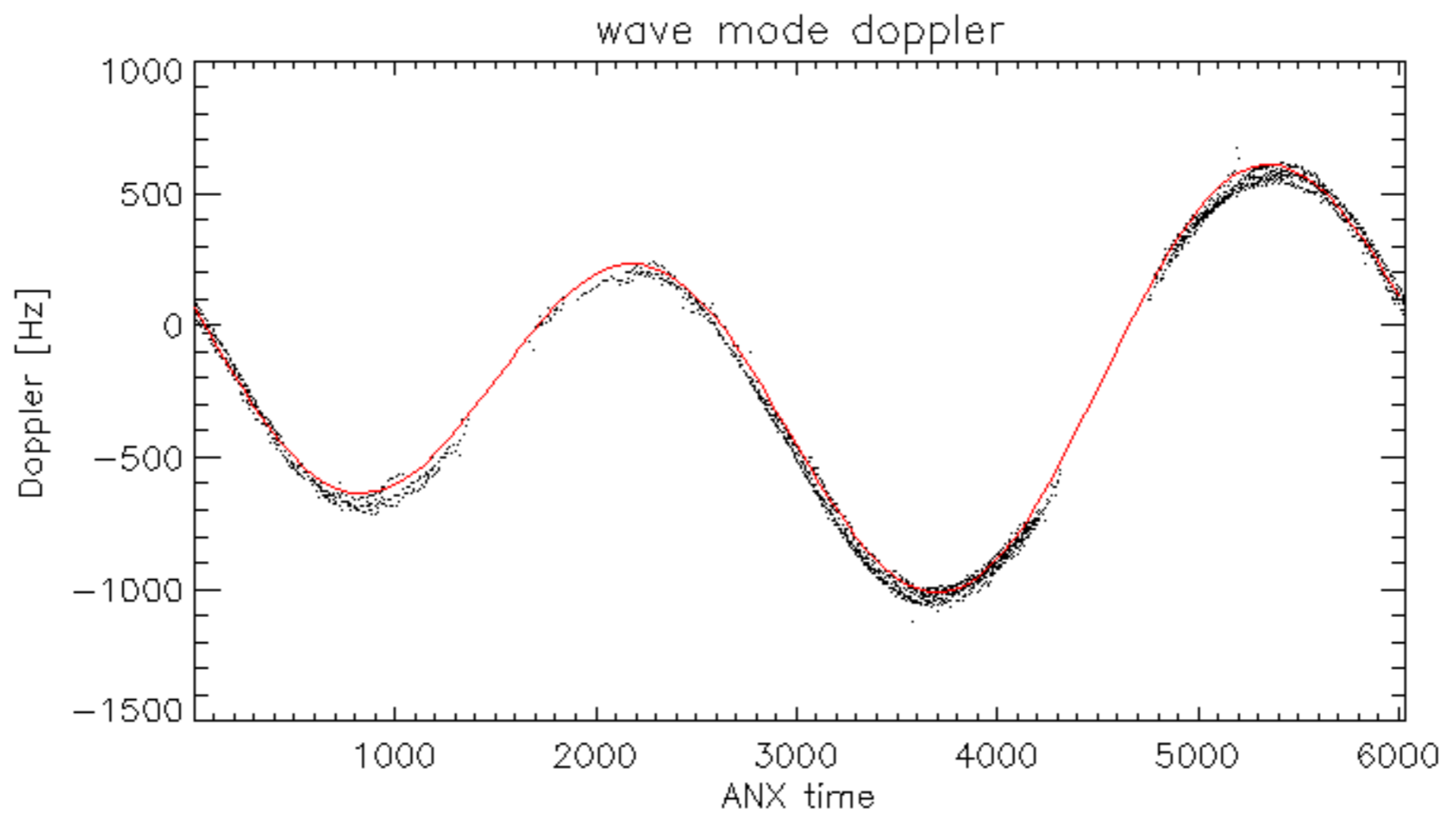
- Internal pulses P1 and P1a are back to nominal gain after antenna reset.
- Stable raw data statistics.
- Nominal Doppler behavior.

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

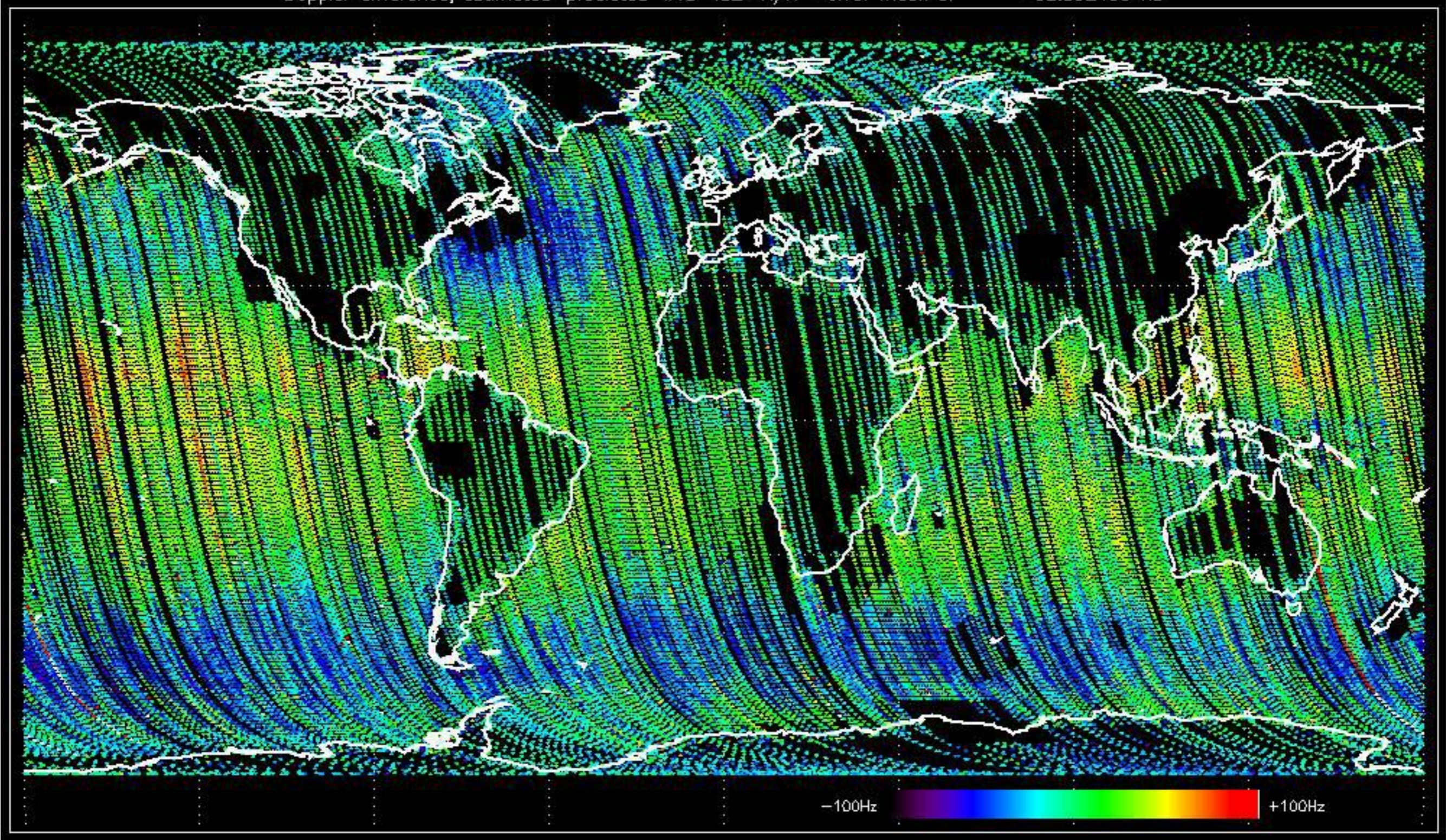


Doppler 'WVS' 'IS2' 'V/V'

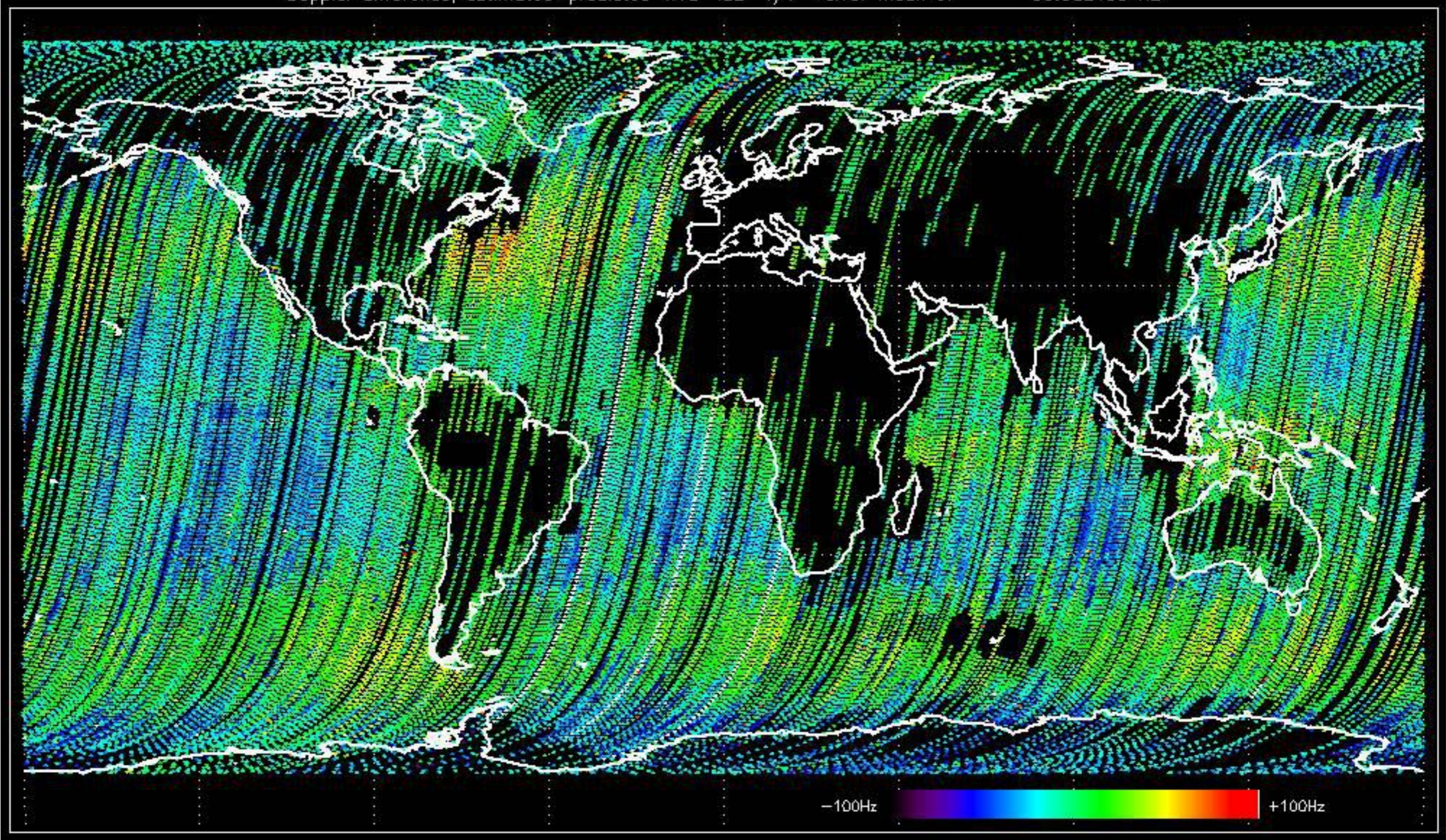




Doppler difference, estimated-predicted 'WVS' 'IS2' 'H/H' -error mean of -32.592409 Hz

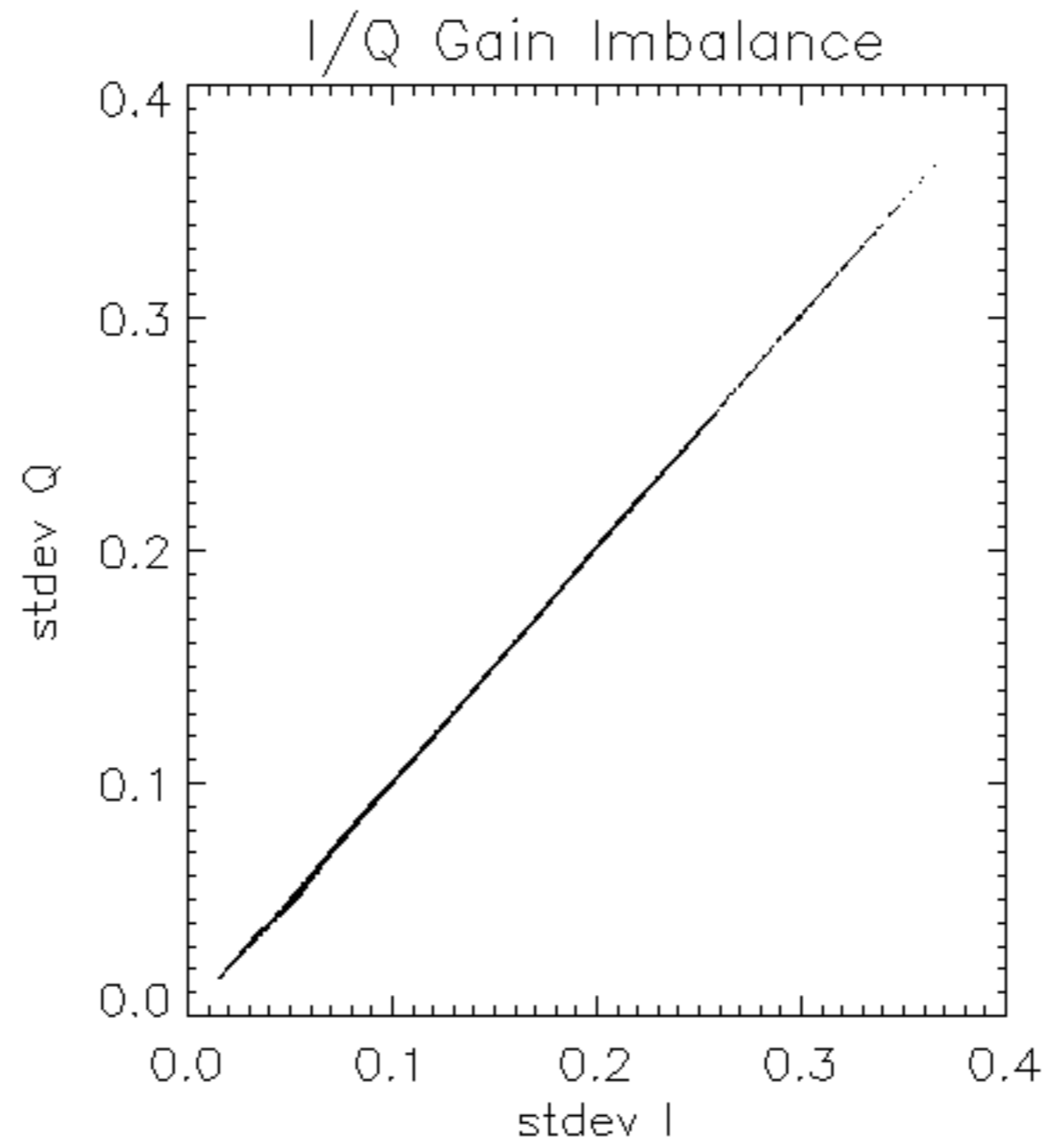


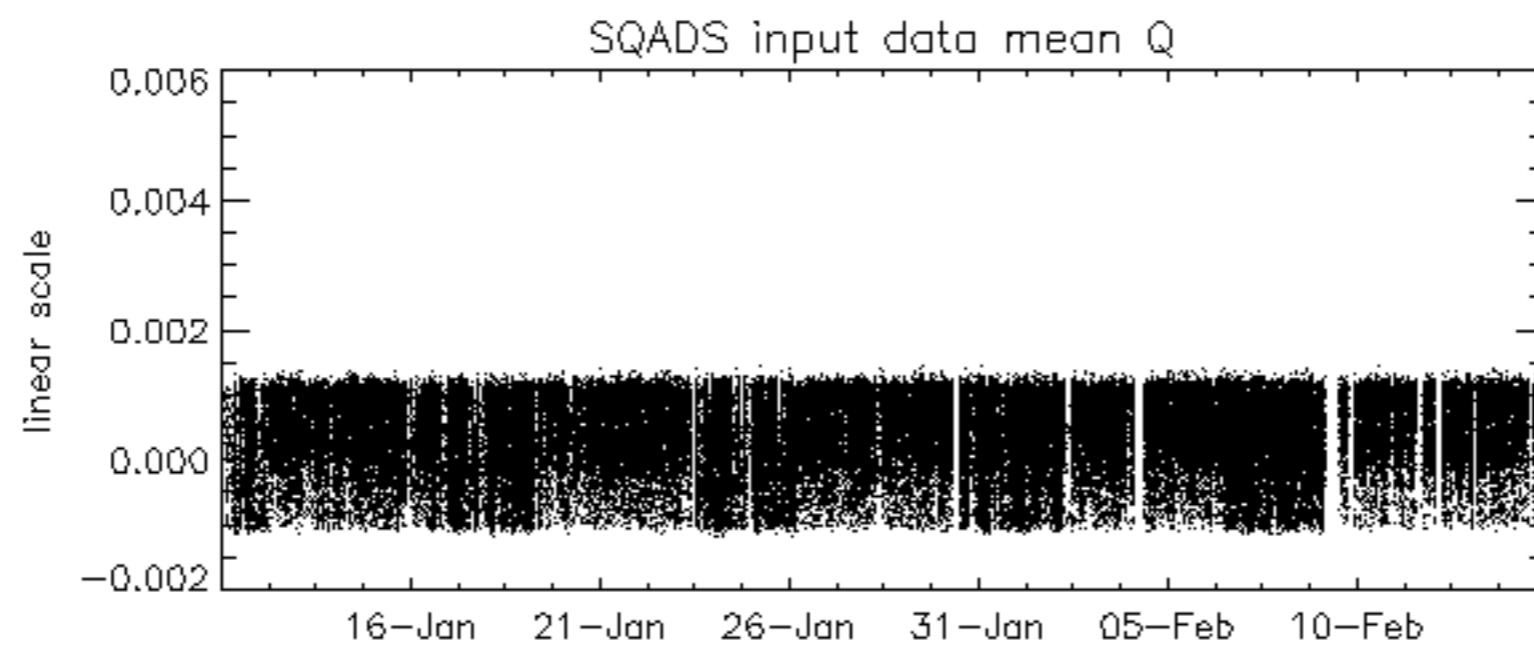
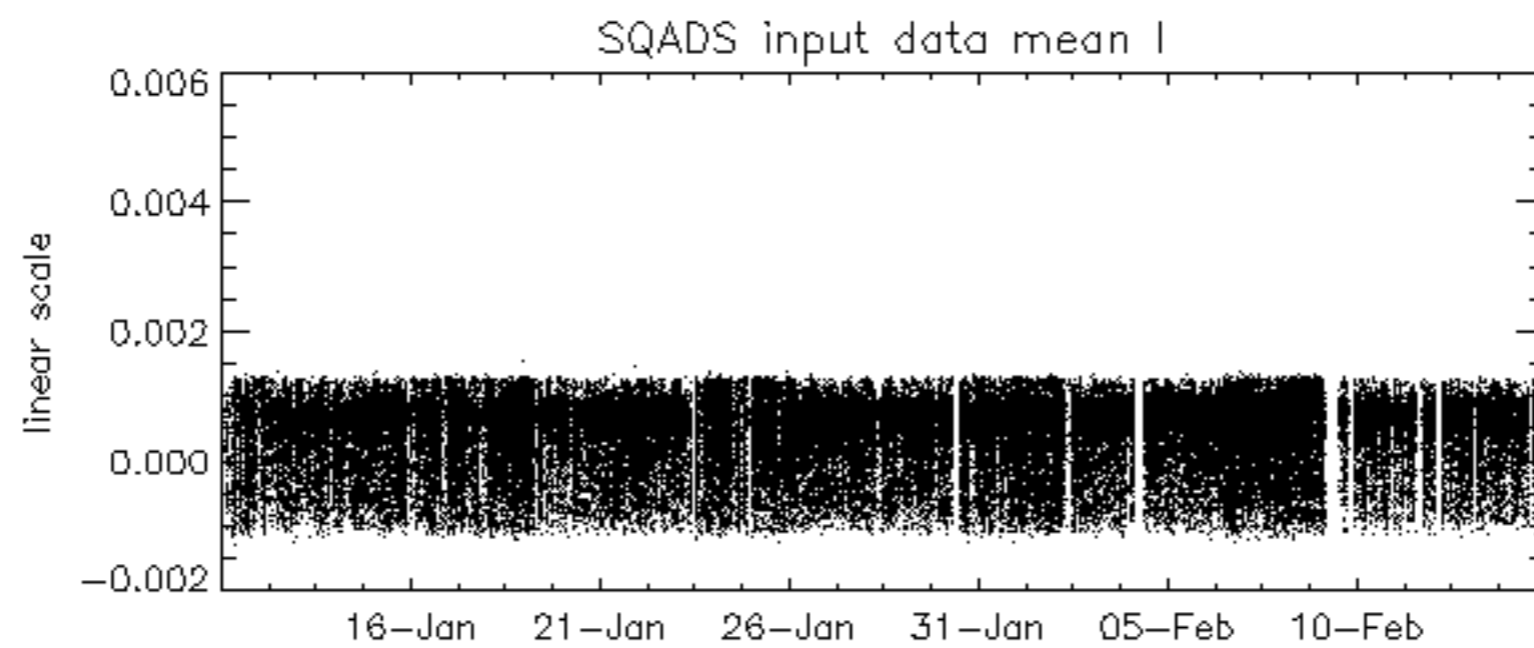
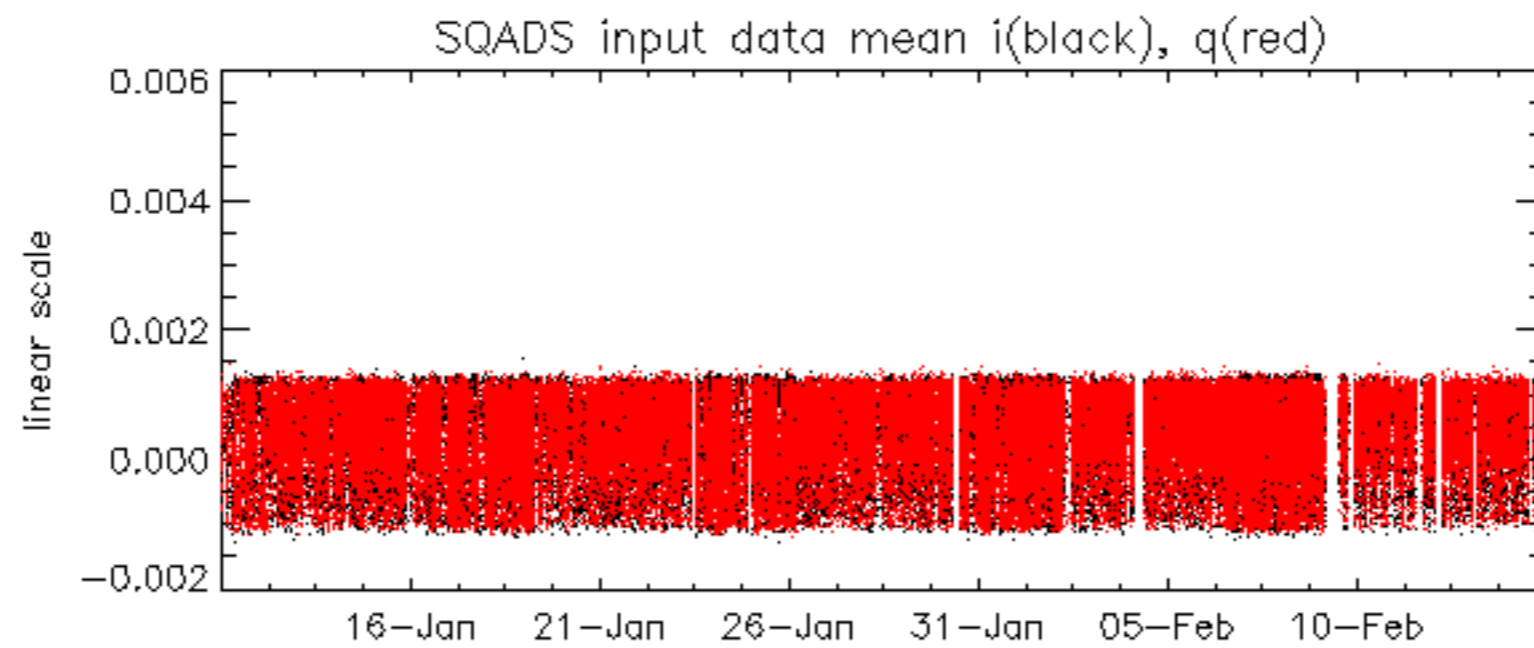
Doppler difference, estimated-predicted 'WVS' 'IS2' 'V/V' -error mean of -30.982199 Hz

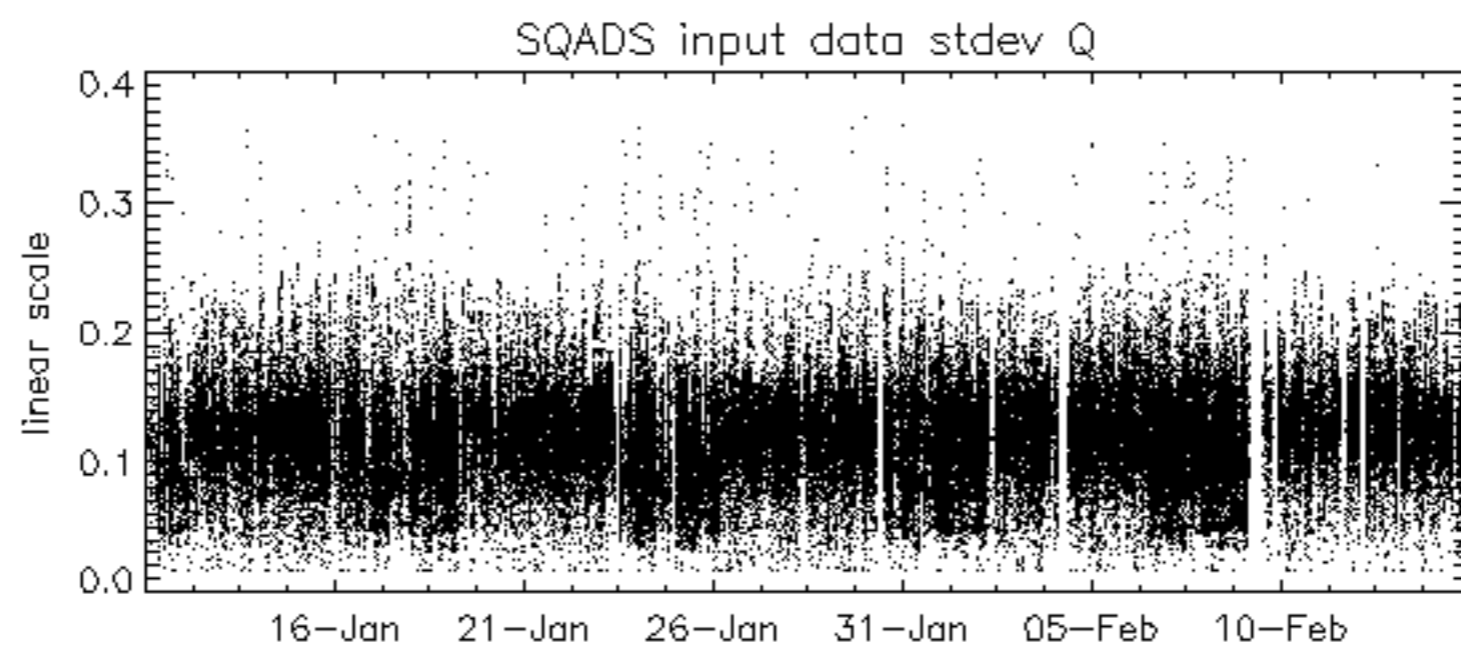
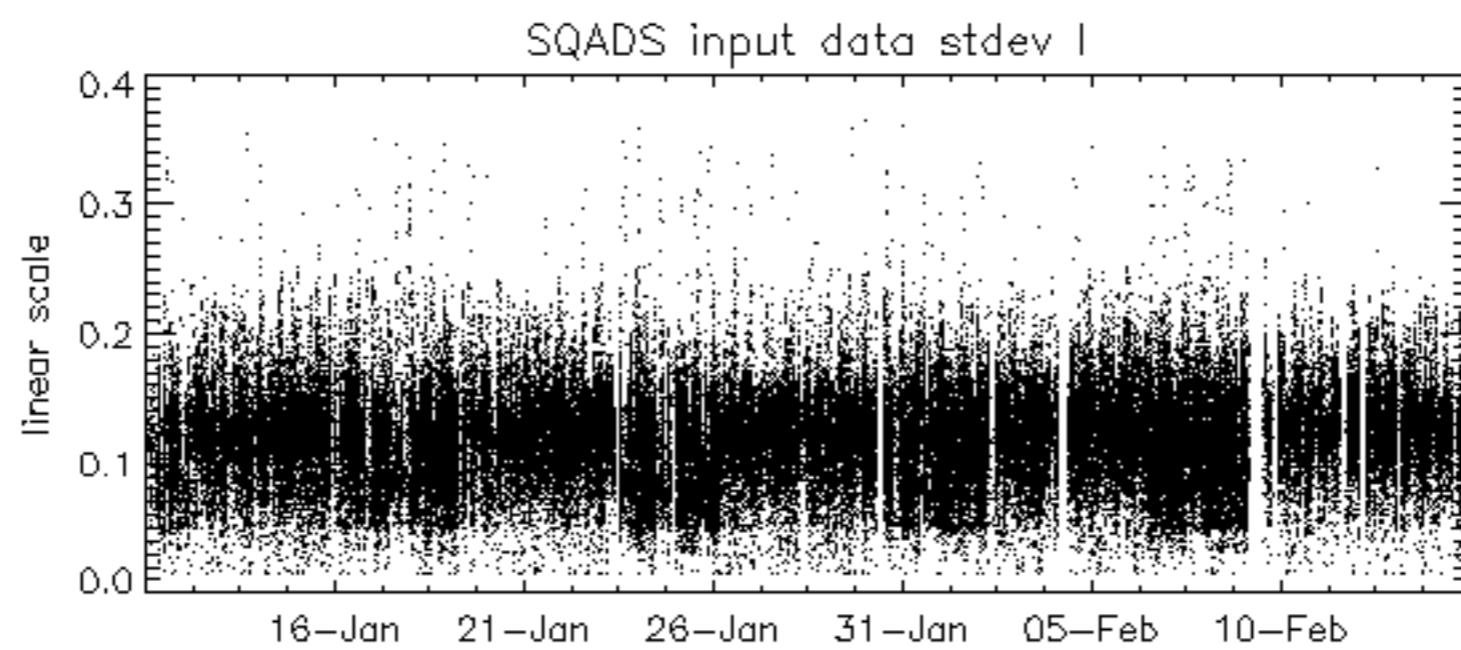
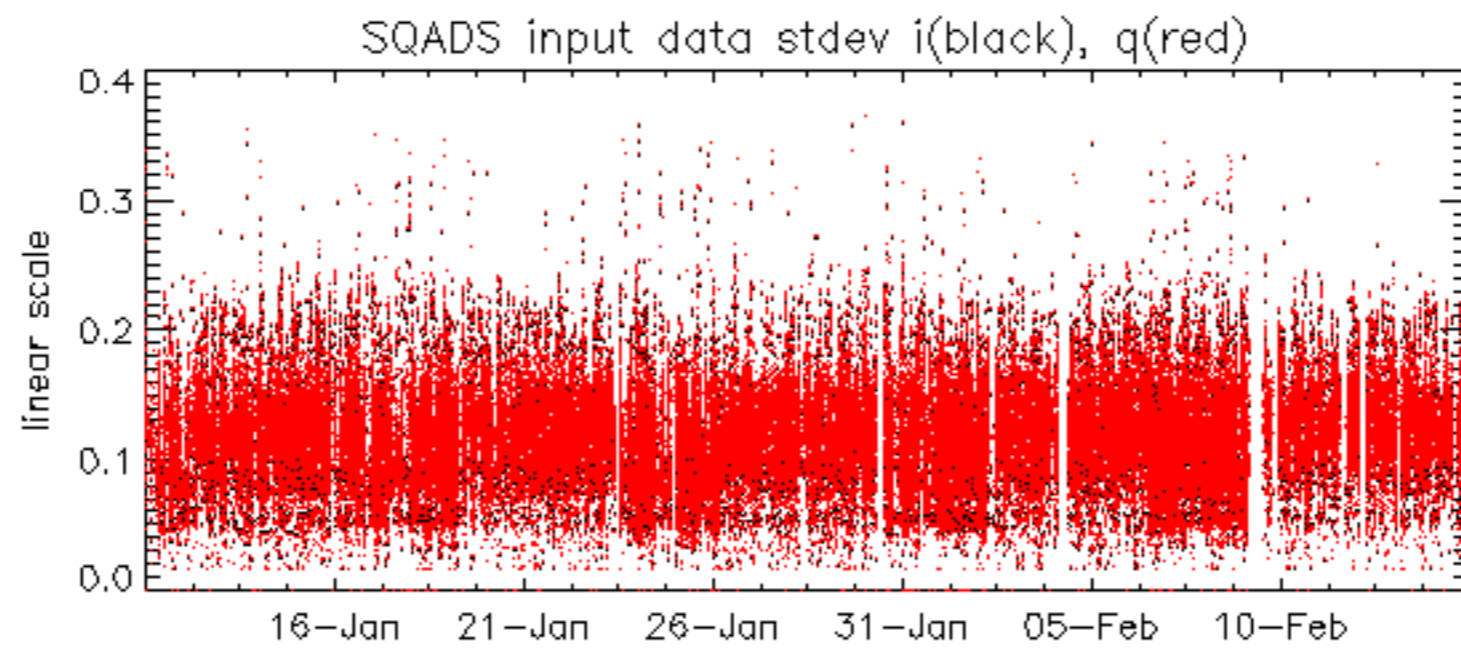


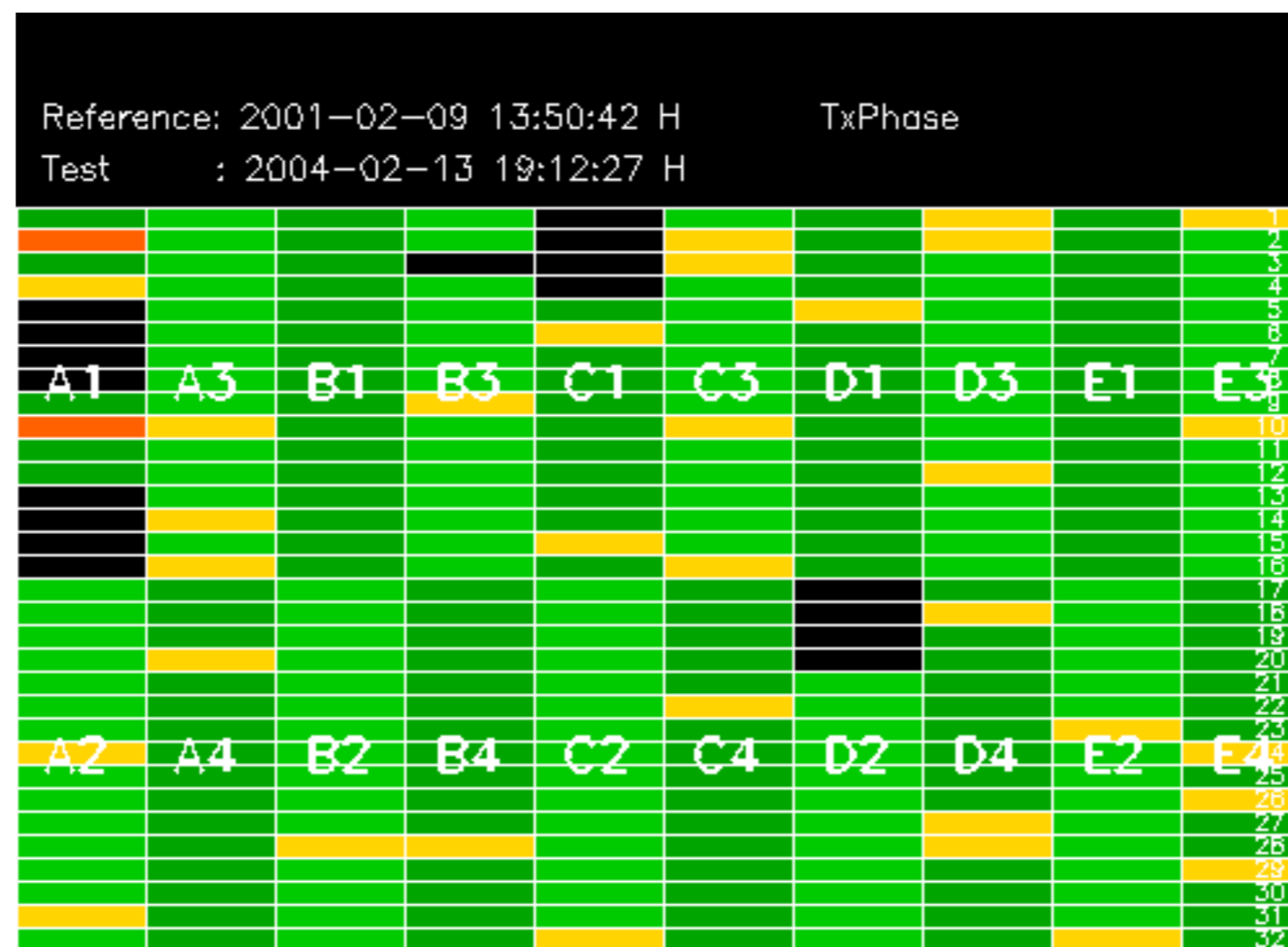
MS products of 14-FEB-2004 are missing.

No anomalies observed.









Antenna reset on 14-FEB-204 09:24:34 to 11:06:01 causes ASAR instrument to be unavailable.
After reset ASAR was back to nominal operations.