

REPORT OF 031007

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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.

| Sub-system | Start | Stop | Planned |
|------------|---------------------|---------------------|---------|
| ASAR | YYYY-MM-DD hh:mm:ss | YYYY-MM-DD hh:mm:ss | --- |

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

Two MS products (V and H polarization polarization) available on 06-OCT-2003:

- ASA_MS__OPNPDK20031006_191128_000000152020_00299_08369_0114.N1
- ASA_MS__OPNPDK20031006_190948_000000152020_00299_08369_0113.N1

No anomalies observed.



| Polarisation | Start Time |
|--------------|-----------------|
| V | 20031006 191128 |
| H | 20031006 190948 |

MSM in V/V polarisation

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

MSM in H/H polarisation

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

4 - Internal calibration Results

No anomalies observed from wave mode data available on 06-OCT-2003.

4.1 - Daily statistics

| row | stat | AveP1 | AveP2 | AveP3 |
|-----|-------|------------|-----------|------------|
| 3 | mean | -3.79276 | -22.5477 | -8.13963 |
| | stdev | 0.00512587 | 0.0614812 | 0.00240475 |
| 10 | mean | -6.89896 | -19.3125 | -8.13963 |
| | stdev | 0.0252823 | 0.0596265 | 0.00240475 |



4.2 - Cyclic statistics

| row | stat | AveP1 | AveP2 | AveP3 |
|-----|-------|------------|-----------|------------|
| 3 | mean | -3.79901 | -22.5264 | -8.12760 |
| | stdev | 0.00560944 | 0.0627919 | 0.00256025 |
| 10 | mean | -6.89582 | -19.3159 | -8.12760 |
| | stdev | 0.0273269 | 0.0610944 | 0.00256025 |



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 | 0.000362239 |
| | stdev | 3.60107e-07 |
| MEAN Q | mean | 0.000300414 |

stdev | 3.22355e-07



5.2 - Input stdev I/Q

| channel | stat | DSS-B |
|---------|-------|------------|
| STDEV I | mean | 0.115269 |
| | stdev | 0.00142409 |
| STDEV Q | mean | 0.115506 |
| | stdev | 0.00144201 |



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 60 days

6.1 - Unbiased Doppler Error

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

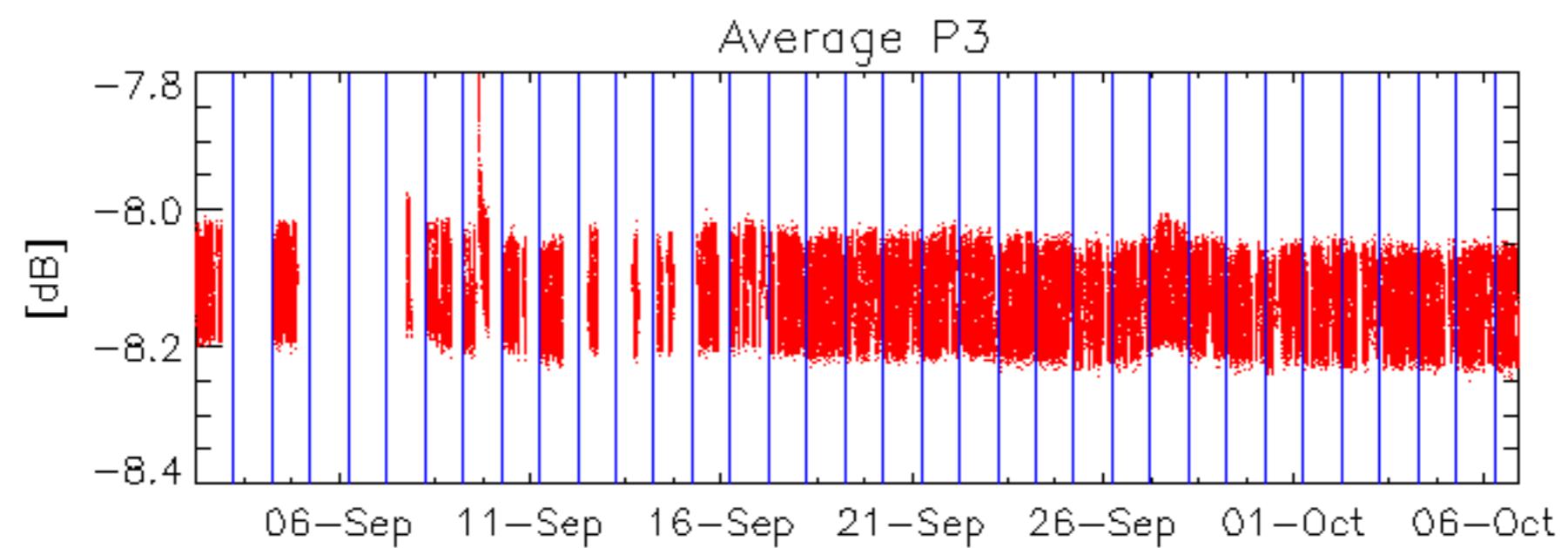
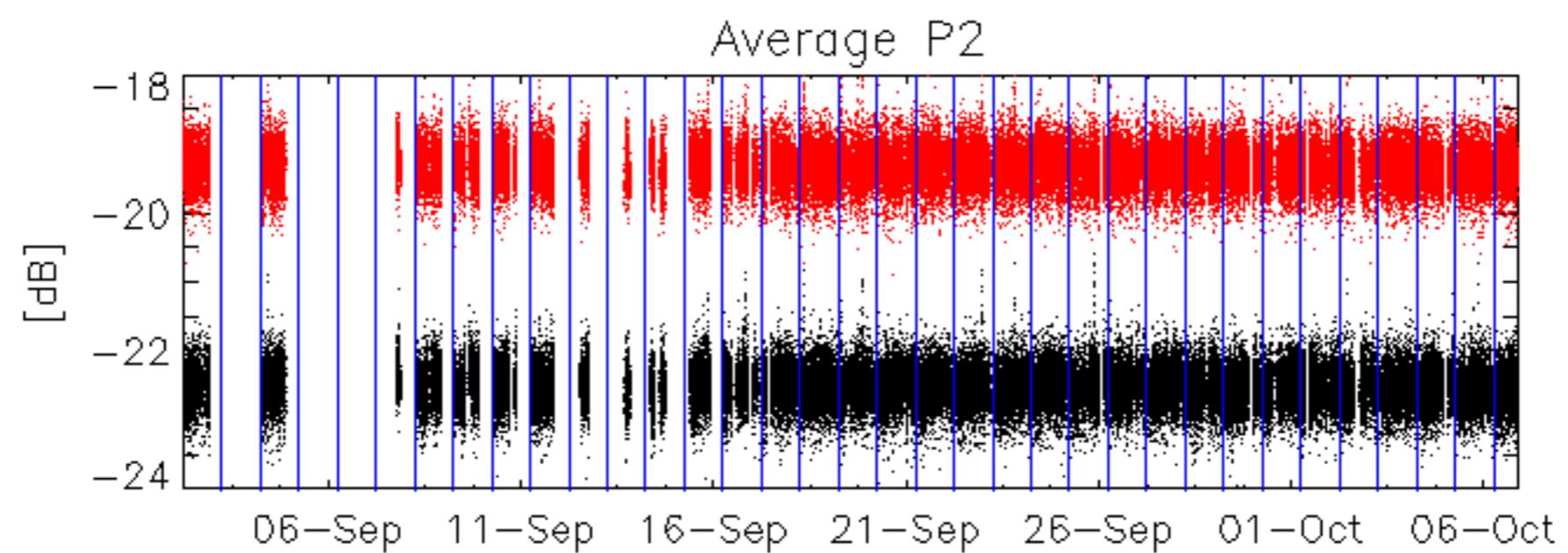
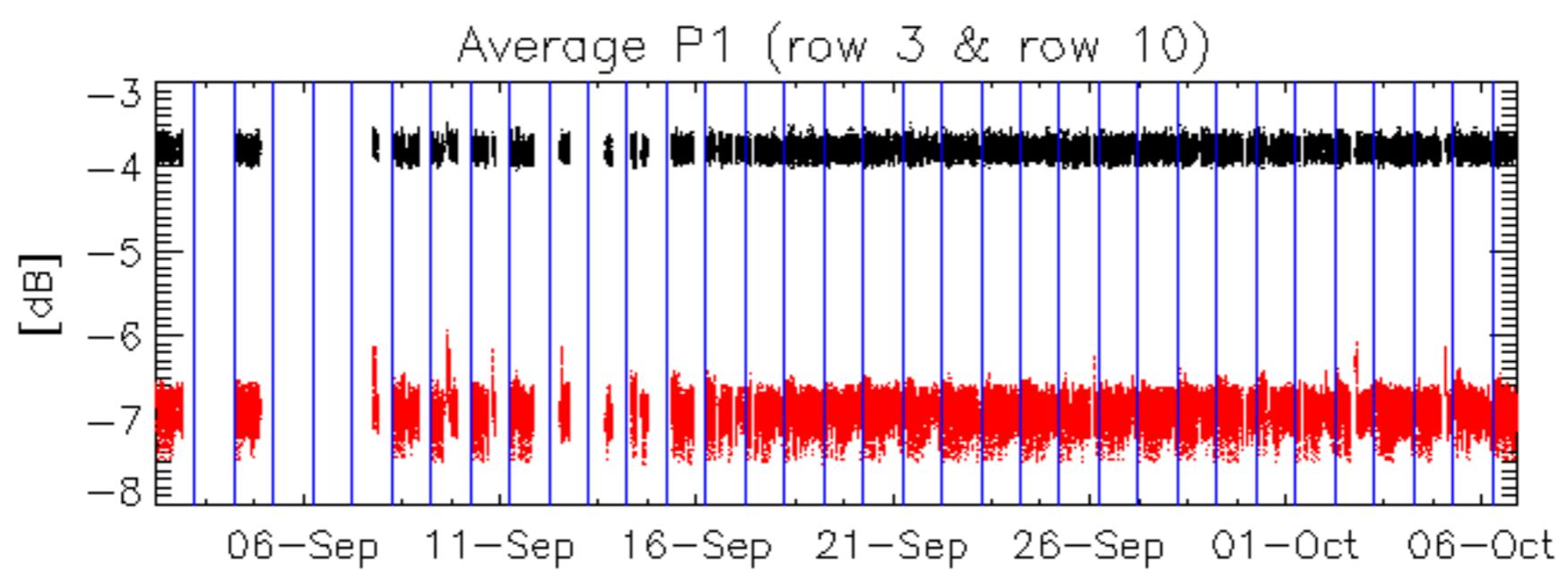
6.2 - Absolute Doppler

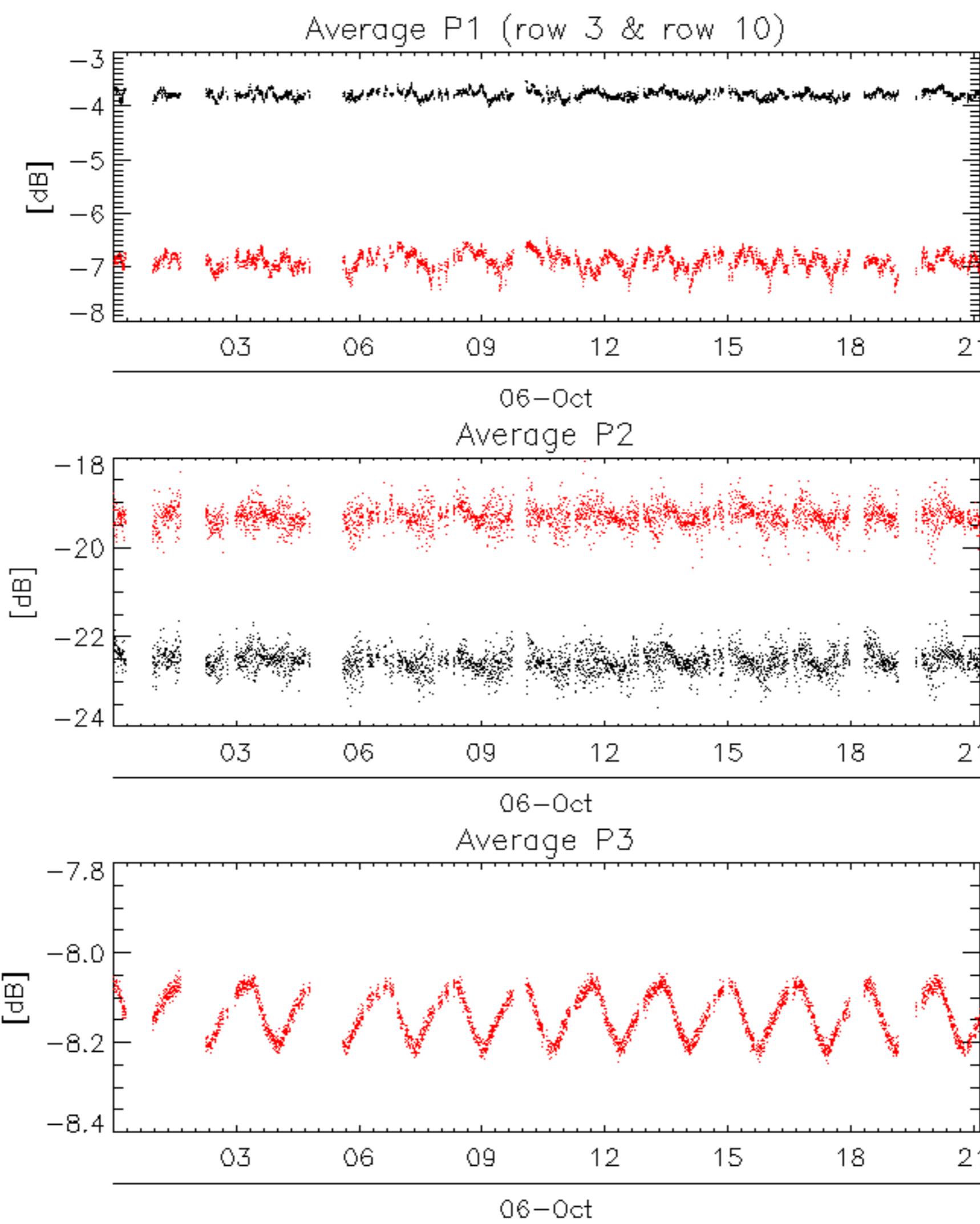
| Evolution of Absolute Doppler |
|-------------------------------|
| Ascending |
| Descending |

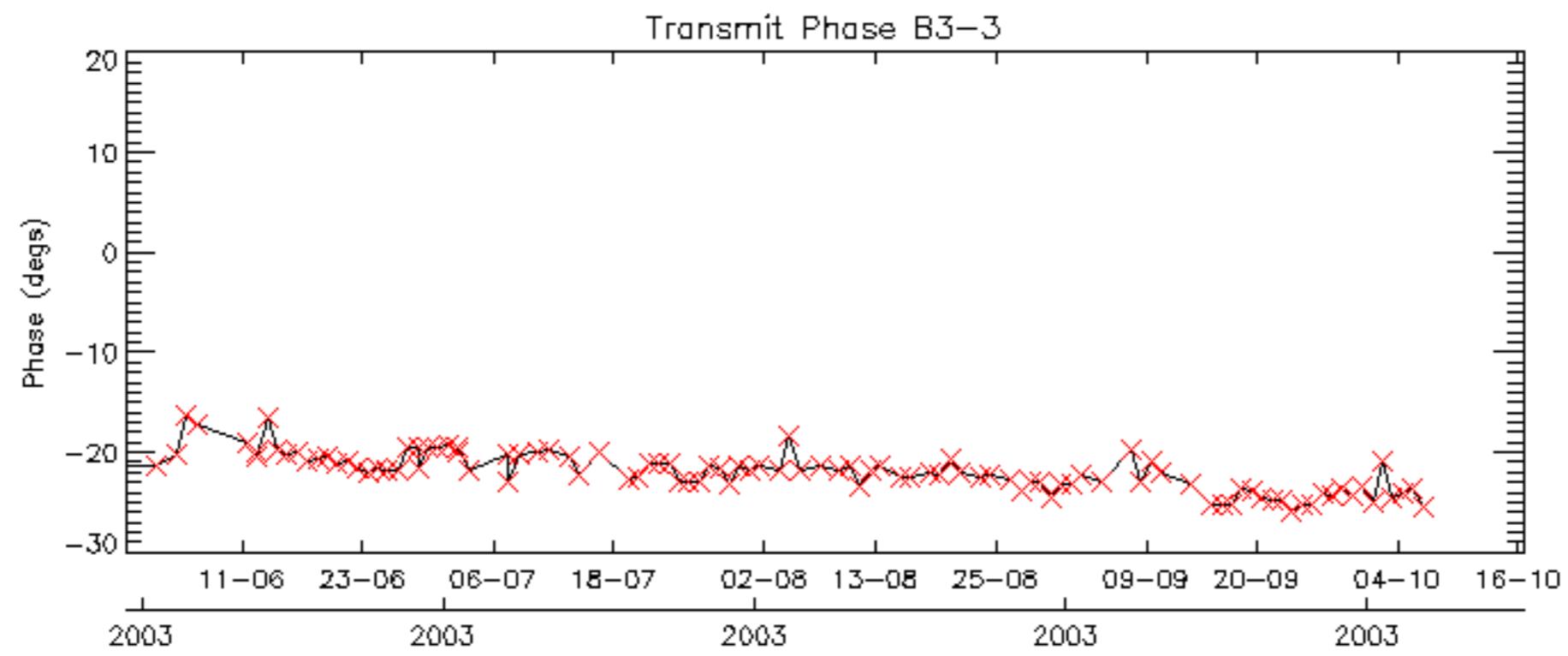
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX







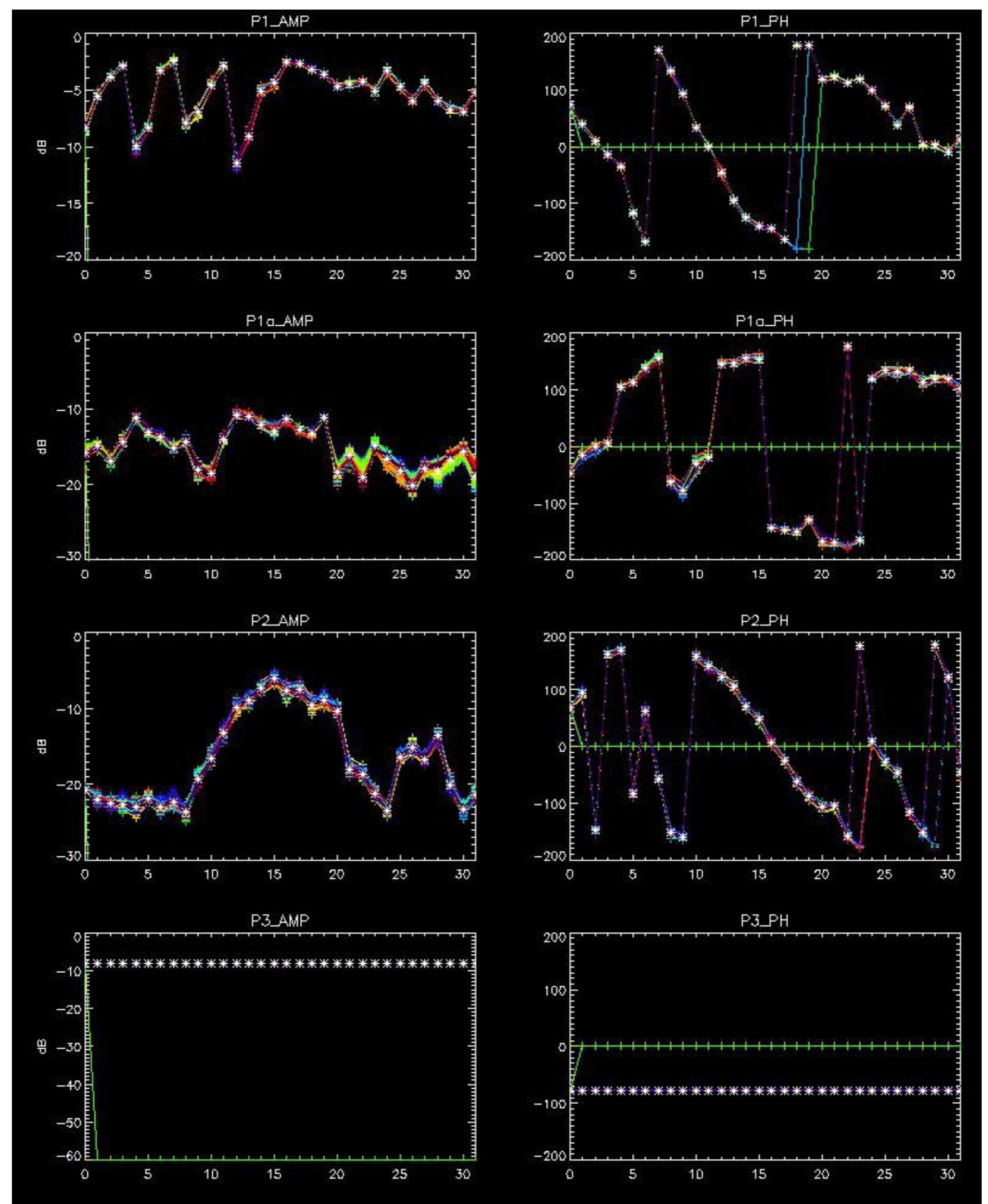


No anomalies observed on available browse products.



No anomalies observed from wave mode data available on 06-OCT-2003.



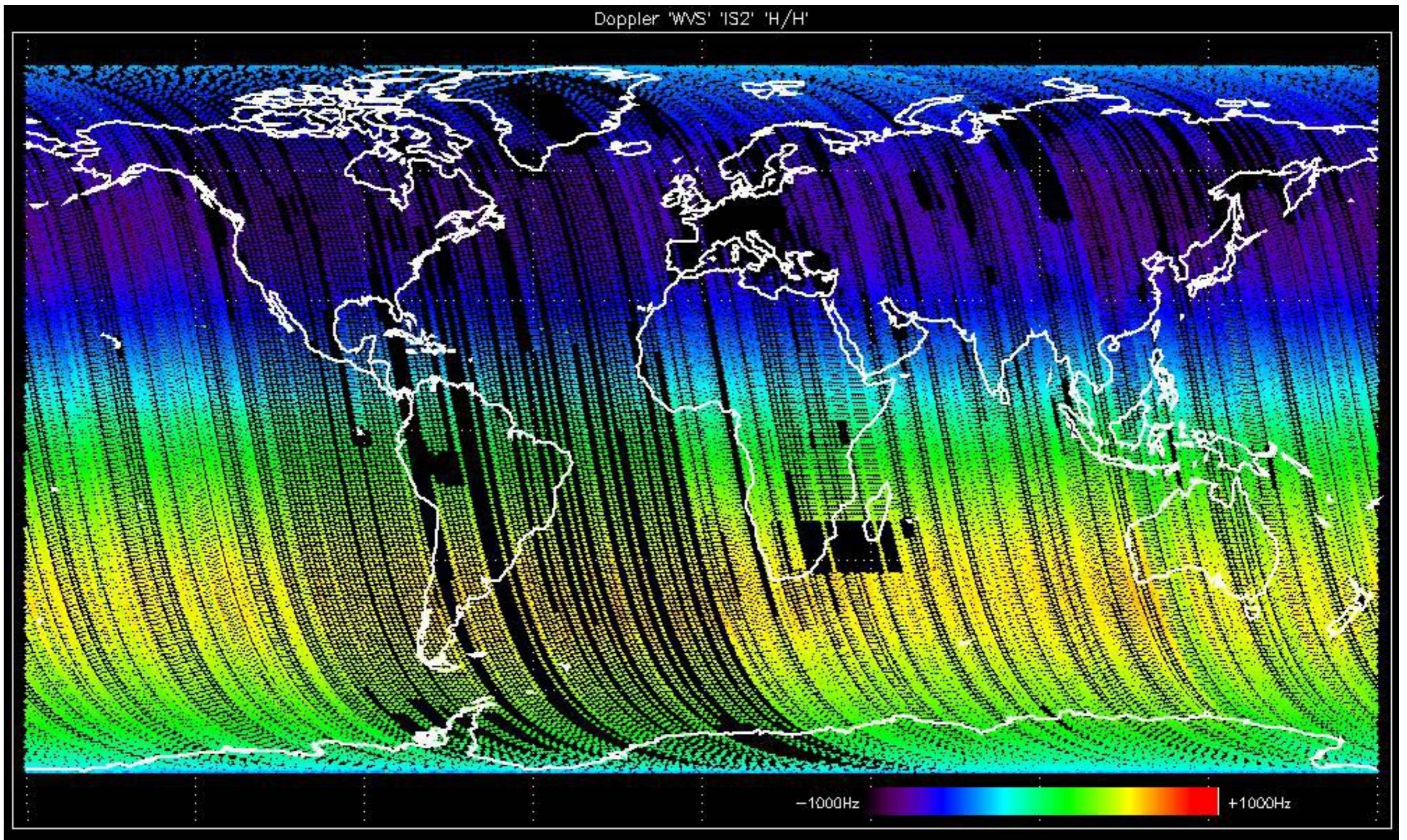


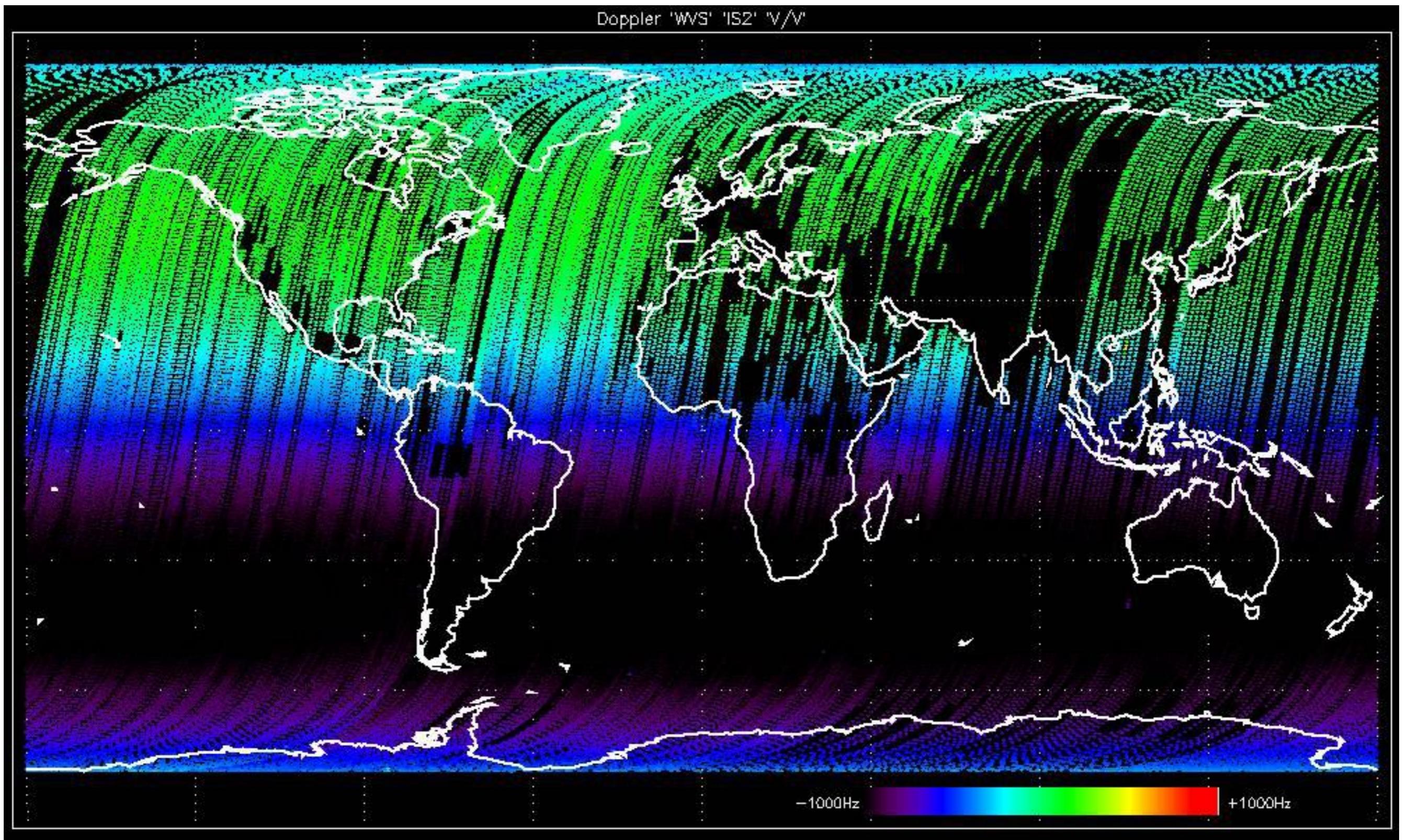
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

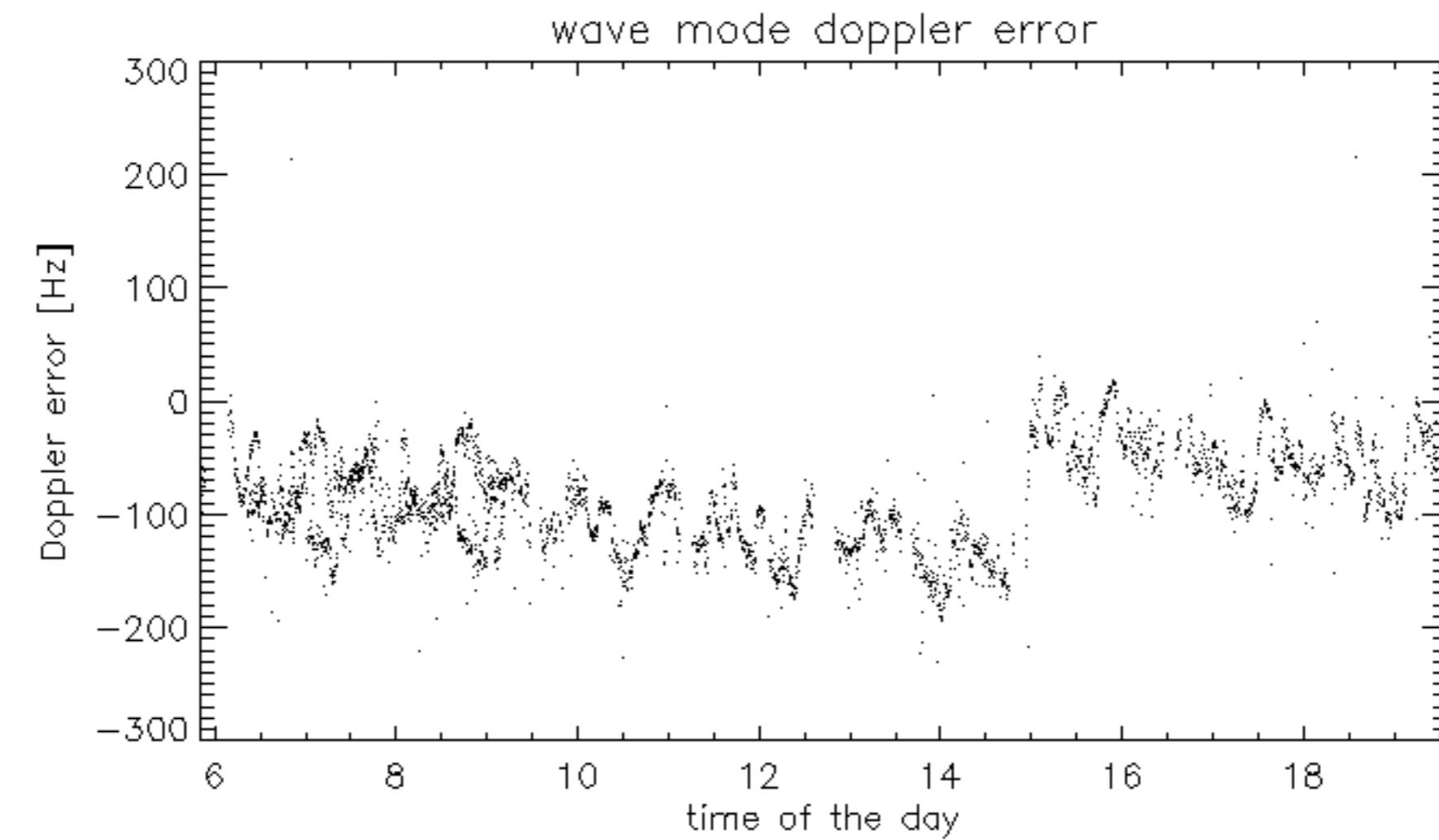
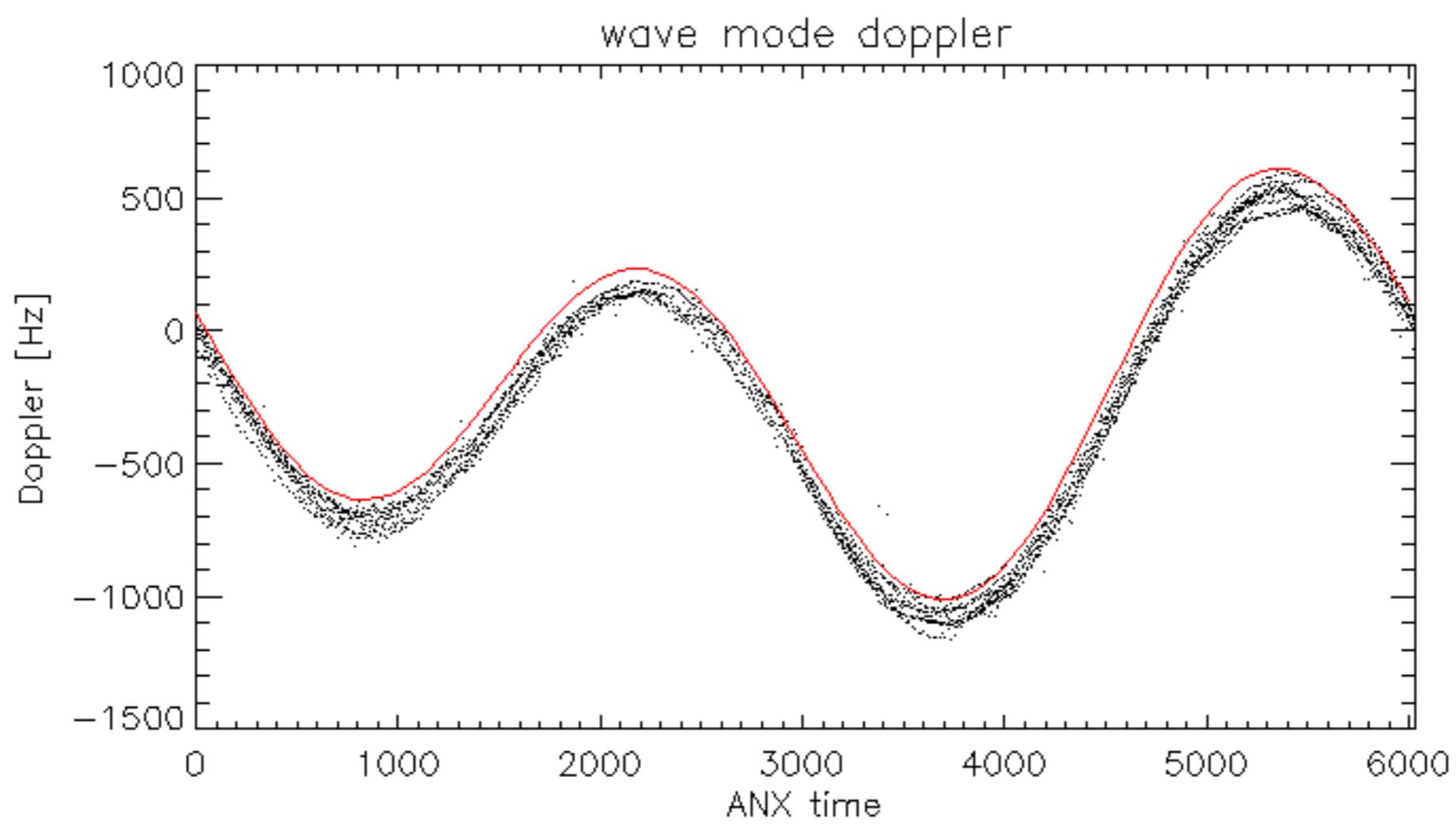


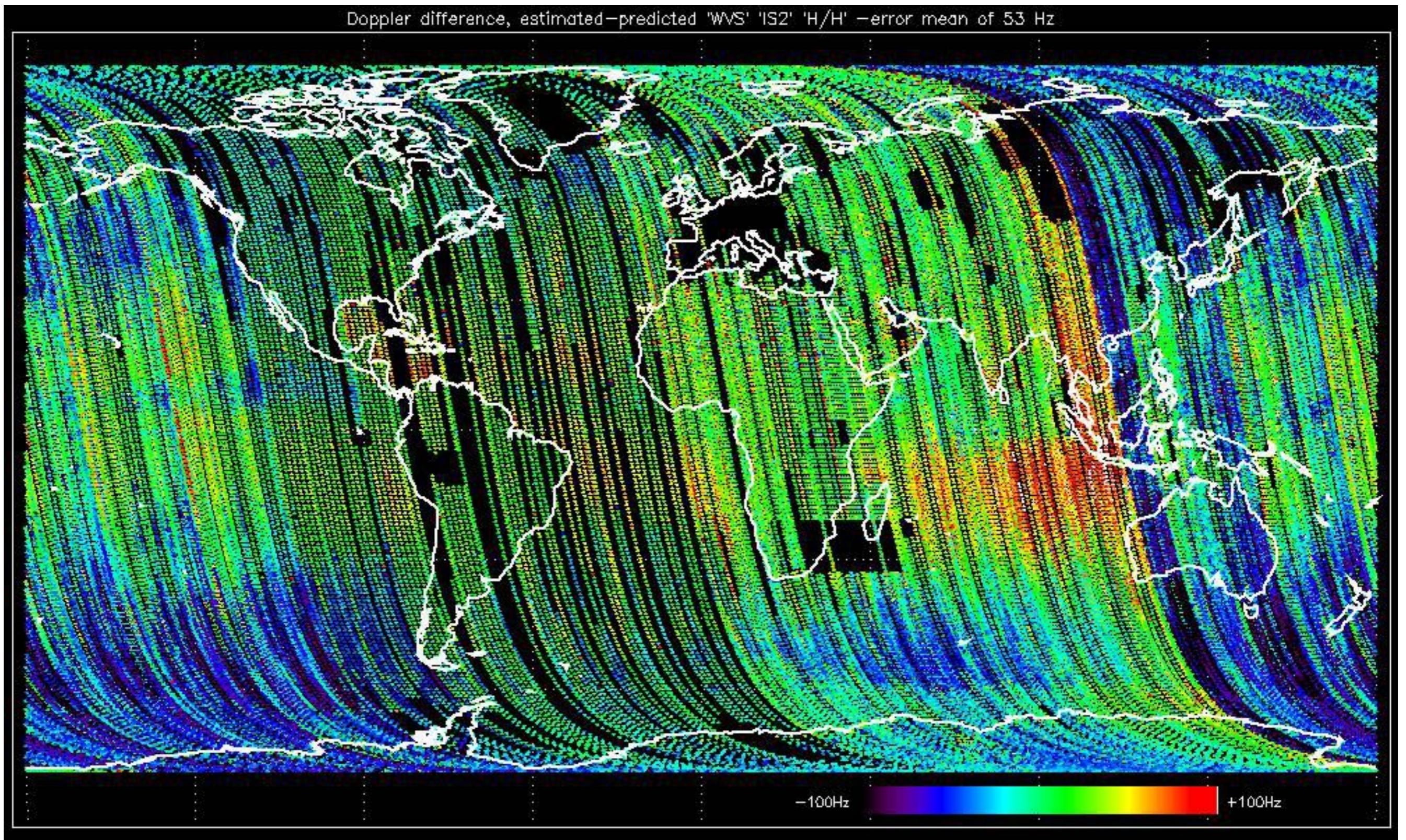
No anomalies observed in Doppler evolution.
Doppler analysis performed over the last 60 days

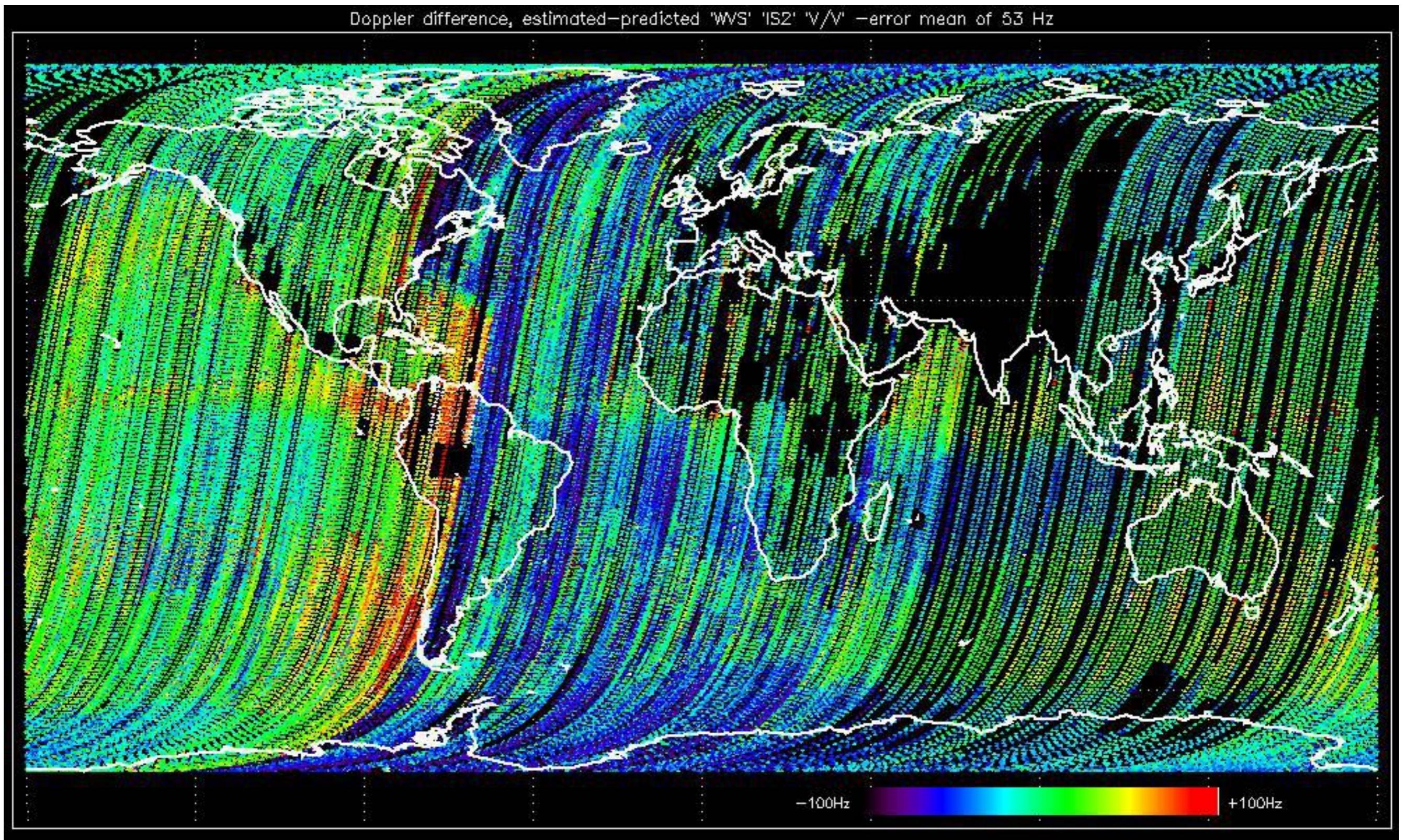












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- ASA_MS__0PNPDK20031006_190948_00000152020_00299_08369_0113.N1

No anomalies observed.

No anomalies observed.

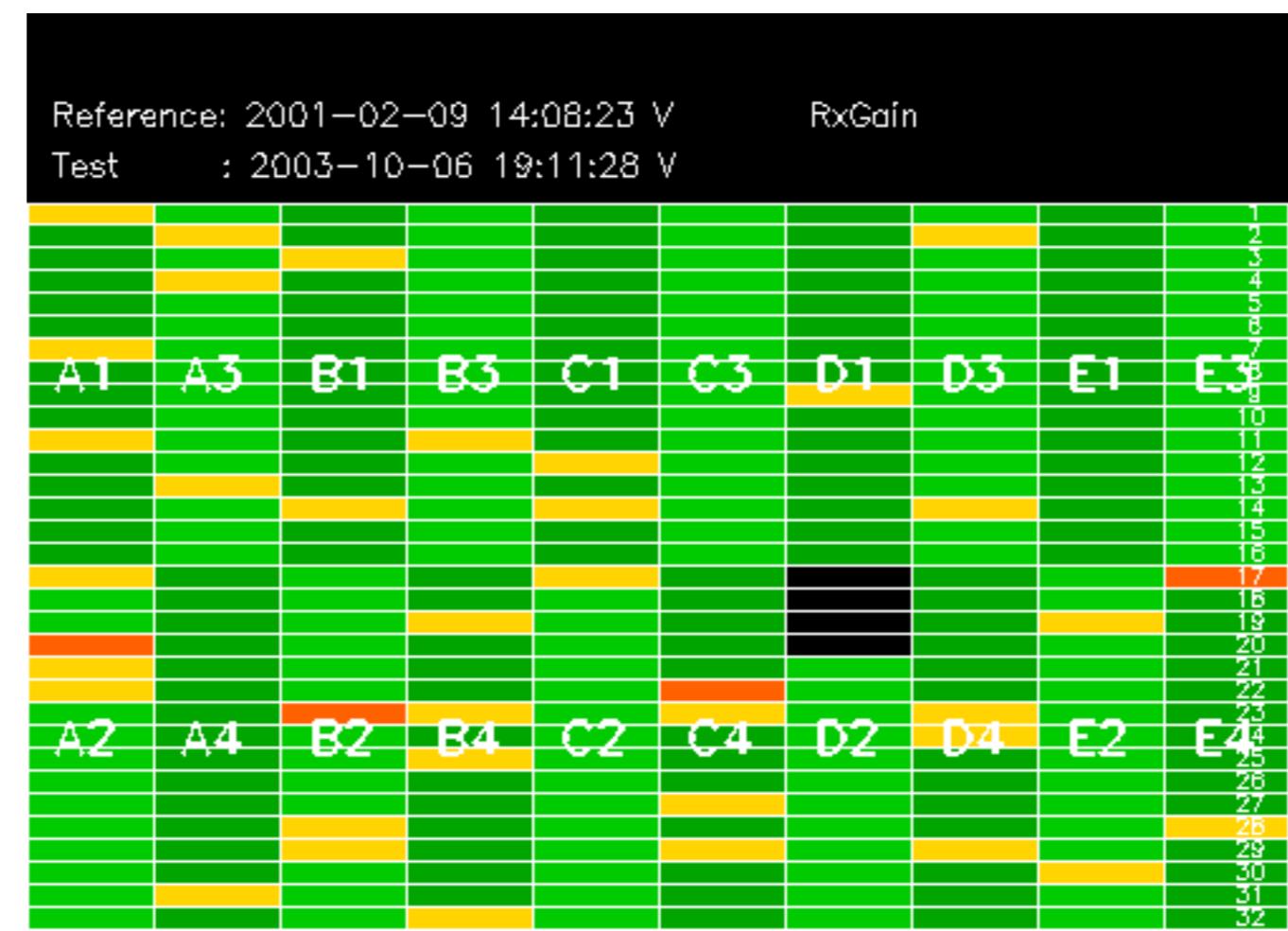


Reference: 2001-02-09 13:50:42 H RxGain

Test : 2003-10-06 19:09:48 H

Reference: 2003-06-12 14:08:52 H RxGain

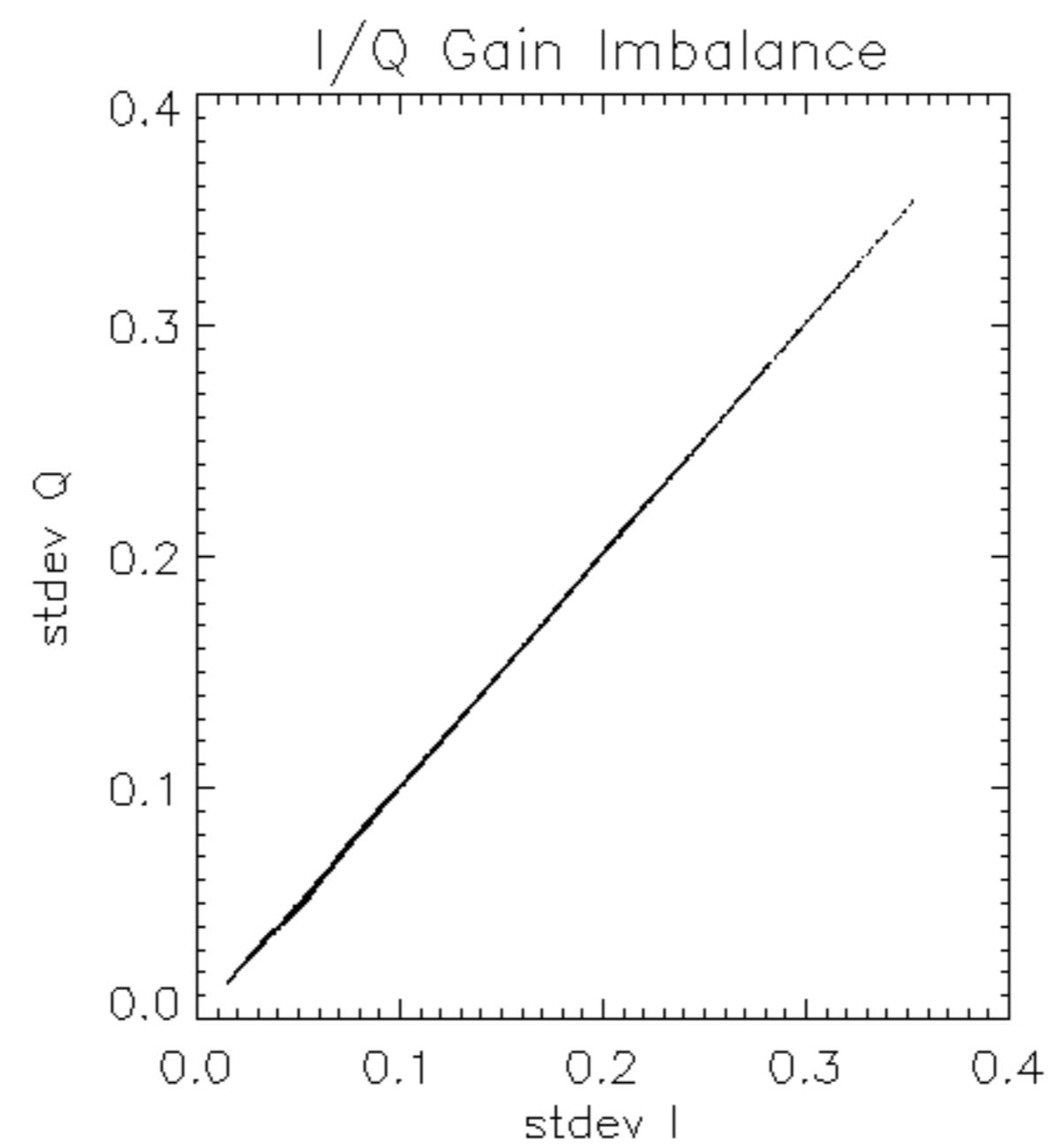
Test : 2003-10-06 19:09:48 H

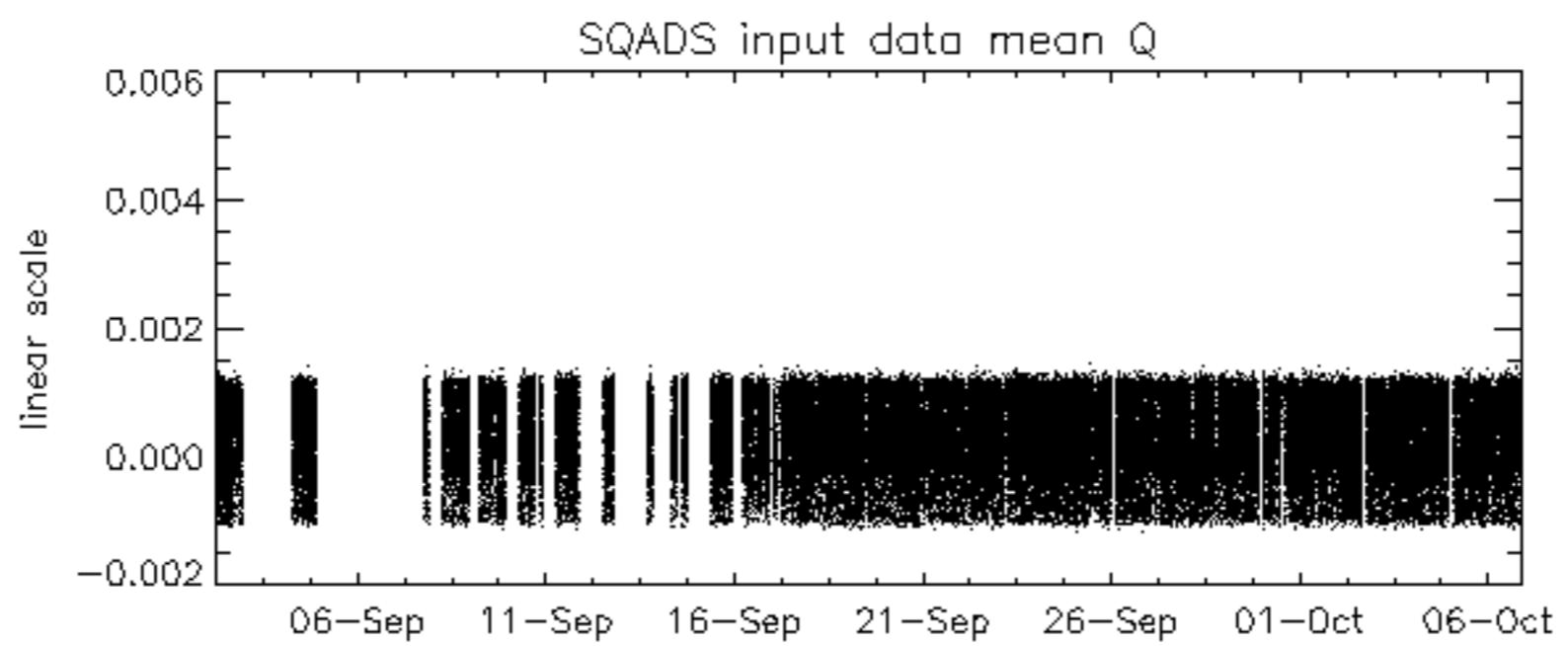
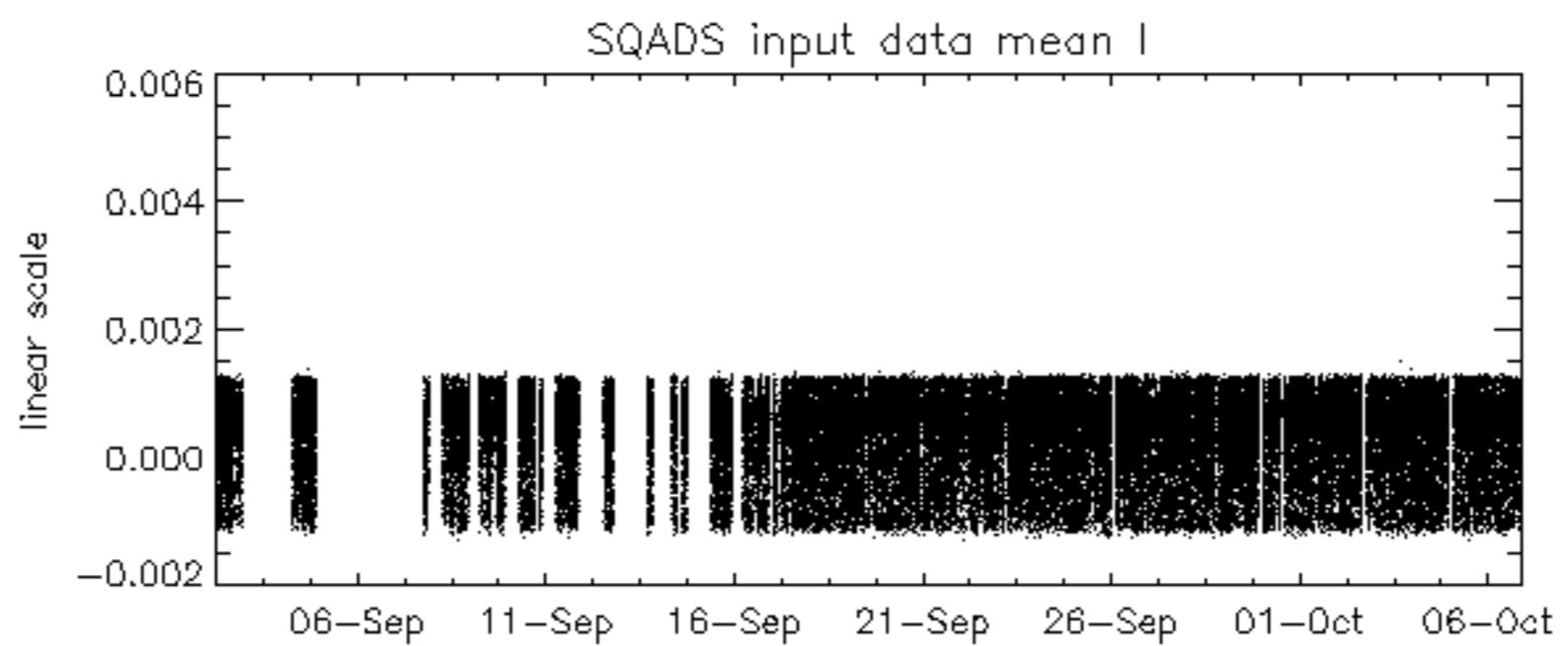
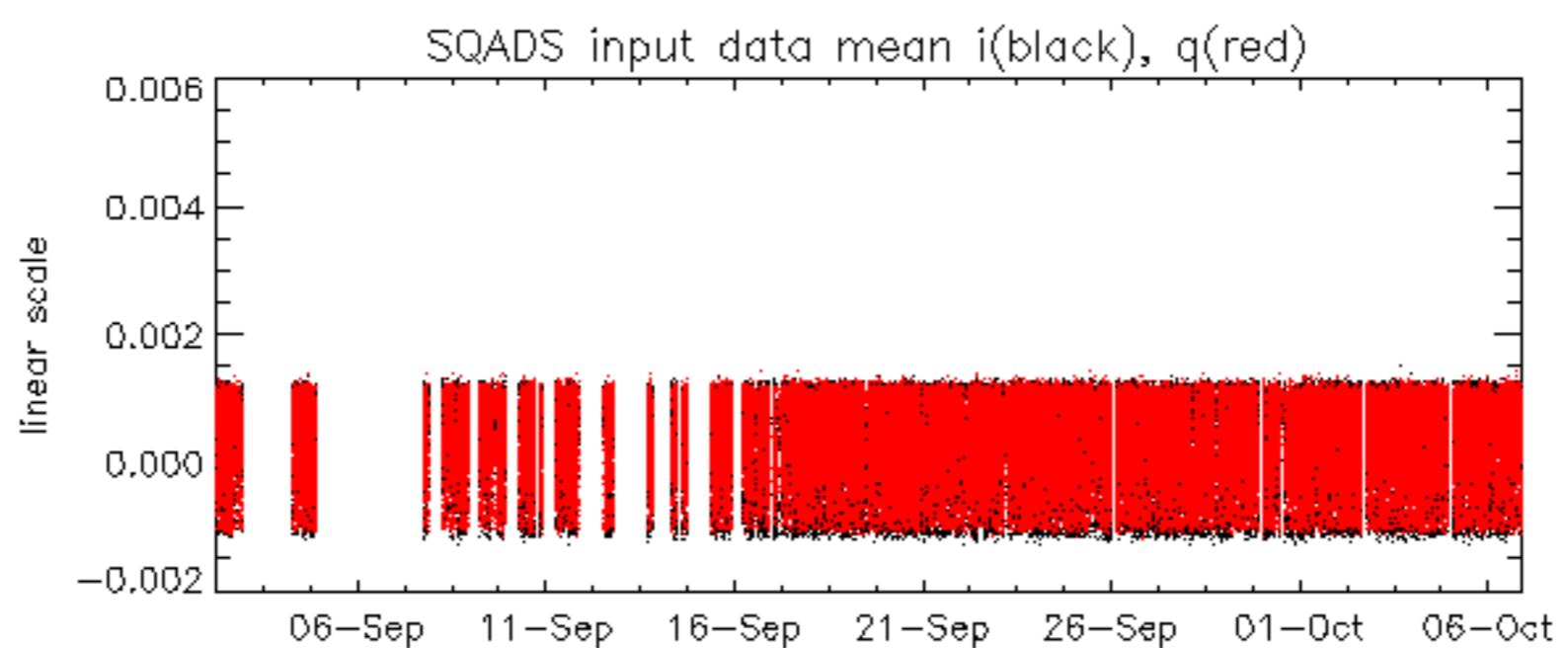


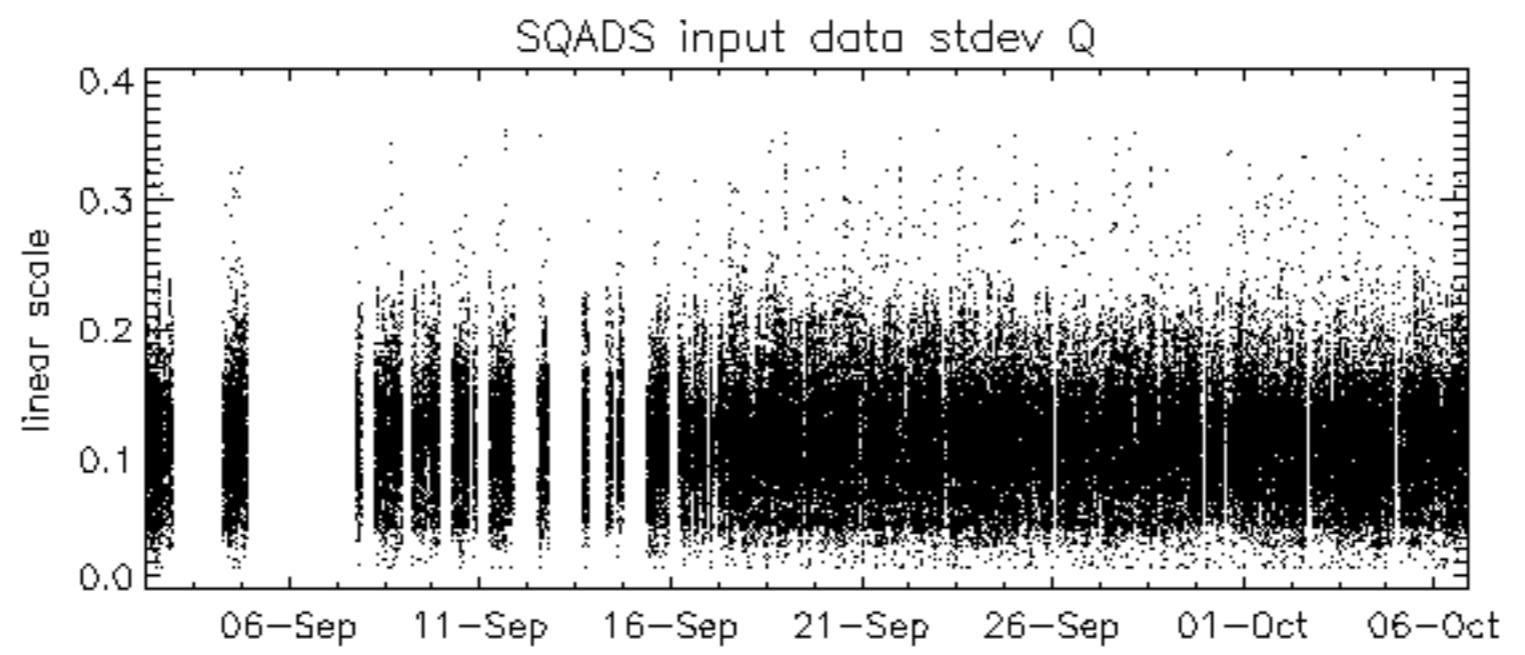
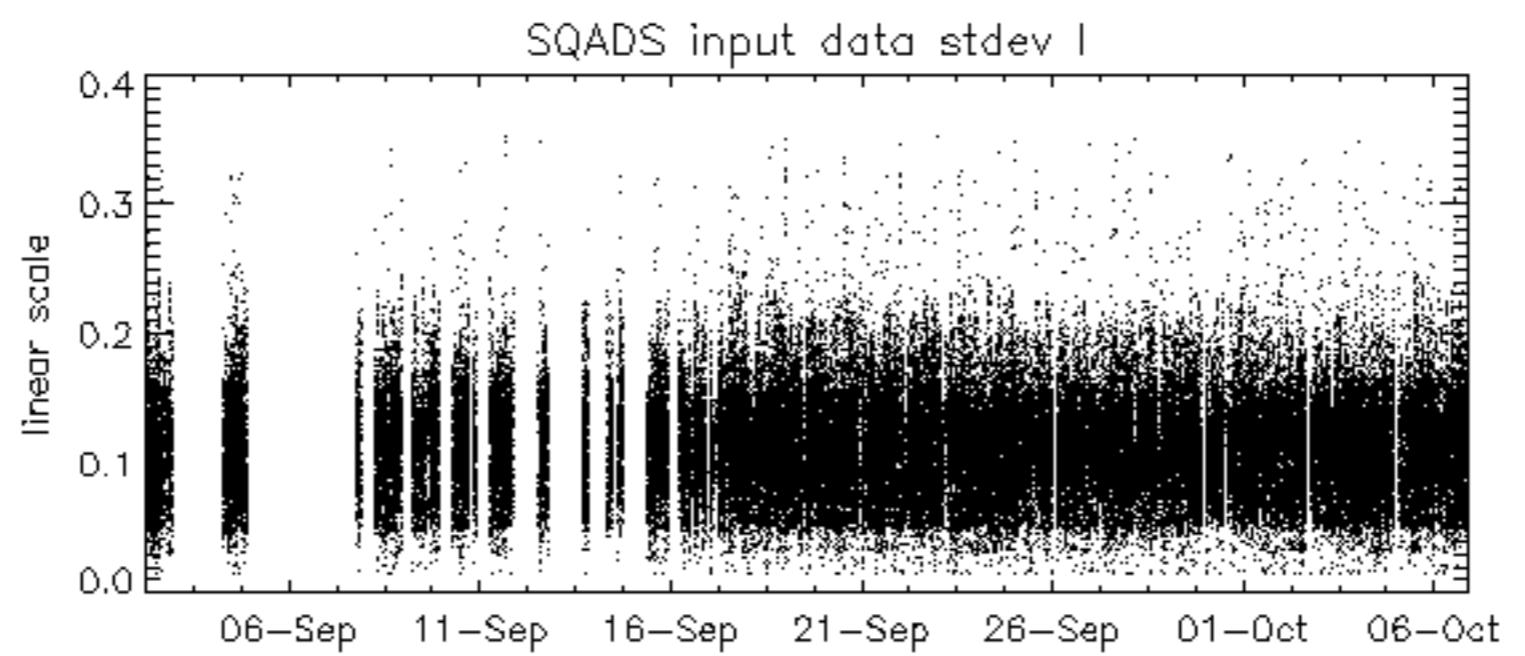
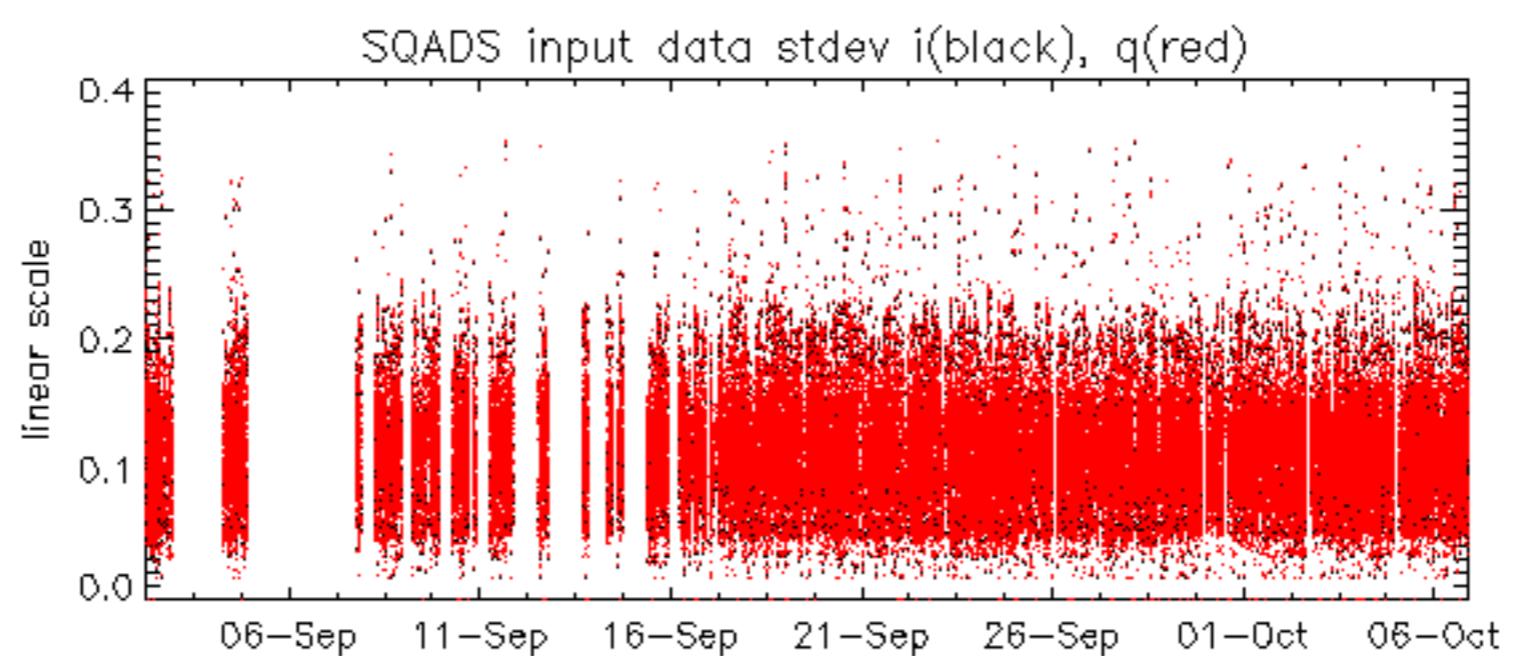
Reference: 2003-06-12 14:10:32 V

Test : 2003-10-06 19:11:28 V

| | | |
|------------|-------------------------|---------|
| Reference: | 2003-06-12 14:10:32 V | RxPhase |
| Test | : 2003-10-06 19:11:28 V | |
| | | 1 |
| | | 2 |
| | | 3 |
| | | 4 |
| | | 5 |
| | | 6 |
| | | 7 |
| A1 | A3 | B1 |
| B3 | C1 | C3 |
| D1 | D3 | E1 |
| | | E3 |
| | | 8 |
| | | 9 |
| | | 10 |
| | | 11 |
| | | 12 |
| | | 13 |
| | | 14 |
| | | 15 |
| | | 16 |
| | | 17 |
| | | 18 |
| | | 19 |
| | | 20 |
| | | 21 |
| | | 22 |
| | | 23 |
| A2 | A4 | B2 |
| B4 | C2 | C4 |
| D2 | D4 | E2 |
| | | E4 |
| | | 24 |
| | | 25 |
| | | 26 |
| | | 27 |
| | | 28 |
| | | 29 |
| | | 30 |
| | | 31 |
| | | 32 |







Reference: 2001-02-09 13:50:42 H

TxGain

Test : 2003-10-06 19:09:48 H

| | | |
|------------|-------------------------|--------|
| Reference: | 2003-06-12 14:08:52 H | TxGain |
| Test | : 2003-10-06 19:09:48 H | |
| A1 | A3 | B1 |
| B3 | C1 | C3 |
| D1 | D3 | E1 |
| E3 | | |
| A2 | A4 | B2 |
| B4 | C2 | C4 |
| D2 | D4 | E2 |
| E4 | | |

| | | | |
|------------|---------------------|---------------------|--------|
| Reference: | 2003-06-12 14:10:32 | V | TxGain |
| Test | : | 2003-10-06 19:11:28 | V |
| A1 | A3 | B1 | B3 |
| C1 | C3 | D1 | D3 |
| E1 | E3 | | |
| A2 | A4 | B2 | B4 |
| C2 | C4 | D2 | D4 |
| E2 | E4 | | |

| | | |
|------------|-------------------------|---------|
| Reference: | 2003-06-12 14:10:32 V | TxPhase |
| Test | : 2003-10-06 19:11:28 V | |
| A1 | A3 | B1 |
| B3 | C1 | C3 |
| D1 | D3 | E1 |
| E3 | | |
| A2 | A4 | B2 |
| B4 | C2 | C4 |
| D2 | D4 | E2 |
| E4 | | |

No unavailabilities during the reported period.

