# PRELIMINARY REPORT OF 050822

### last update on Mon Aug 22 10:50:01 GMT 2005


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## 1 - Introduction

This report is based on the analysis of wave mode level-1 cross spectra (ASA_WVS_1P), global monitoring products (ASA_GM1_1P), which are the available few hours after the acquisition, on the browse (BP) products and
on the Module Stepping (MS) product.

## 2 - Summary

### 2.1 - Instrument Unavailability

No unavailabilities during the reported period.

### 2.2 - Auxiliary files

**Summary of the auxiliary files used from 2005-08-21 00:00:00 to 2005-08-22 10:50:01**

| PDHS-K | | | | | |
|---|---|---|---|---|---|
| **AUXILIARY FILE** | **WVS** | **GM1** | **IMM** | **APM** | **WSM** |

| PDHS-E | | | | | |
|---|---|---|---|---|---|
| **AUXILIARY FILE** | **WVS** | **GM1** | **IMM** | **APM** | **WSM** |

### 2.3 - Browse Visual Inspection

### 2.4 - Data Analysis

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

## 3 - Module Stepping Mode

No anomalies observed on available MS products:

| **Polarisation** | **Start Time** |
|---|---|

**MSM in V/V polarisation**

**MSM in H/H polarisation**

## 4 - Internal calibration Results

No anomalies observed.

### 4.1 - Daily statistics

#### 4.1.1 - Evolution for WVS

**Evolution of cal pulses for WVS**

#### 4.1.2 - Evolution for GM1

**Evolution of cal pulses for GM1**

### 4.2 - Cyclic statistics

#### 4.2.1 - Evolution for WVS

**Evolution of cal pulses for WVS**

**P1a Cyclic statistics**

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

**P1 Cyclic statistics**

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

**P2 Cyclic statistics**

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

**P3 Cyclic statistics**

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

#### 4.2.2 - Evolution for GM1

| Evolution of cal pulses for GM1 |
|---|

#### P1a Cyclic statistics

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

#### P1 Cyclic statistics

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

#### P2 Cyclic statistics

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

#### P3 Cyclic statistics

| row | pulse | mean (dB) | stdev (dB) | slope(dB/cycle) |
|---|---|---|---|---|

### 4.3 - cal pulses monitoring (all rows)

#### 4.3.1 - Evolution for WVS

#### 4.3.2 - Evolution for GM1

## 5 - RAW data statistics

No anomalies observed.

### 5.1 - Input mean I/Q

| channel | stat | DSS-B |
|---|---|---|

| | | |
|---|---|---|
| MEAN I | mean | |
| | stdev | |
| MEAN Q | mean | |
| | stdev | |



### 5.2 - Input stdev I/Q

| channel | stat | DSS-B |
|---|---|---|
| STDEV I | mean | |
| | stdev | |
| STDEV Q | mean | |
| | stdev | |



### 5.3 - Gain imbalance I/Q



## 6 - Telemetry analysis

Summary of analysis for the last 3 days 2005082[012]
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

| Filename | num_gaps | num_missing_lines |
|---|---|---|

## 7 - Doppler Analysis

Preliminary report.The data is not yet controled

### 7.1 - Unbiased Doppler Error for WVS

| Evolution of unbiased Doppler error (Real - Expected) |
|---|
| |
| Acsending |

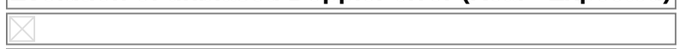
Descending

## 7.2 - Absolute Doppler for WVS

| Evolution of Absolute Doppler |
|---|
| |
| Acsending |
| |
| Descending |

## 7.3 - Doppler evolution versus ANX for WVS

## 7.4 - Unbiased Doppler Error for GM1

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

## 7.5 - Absolute Doppler for GM1

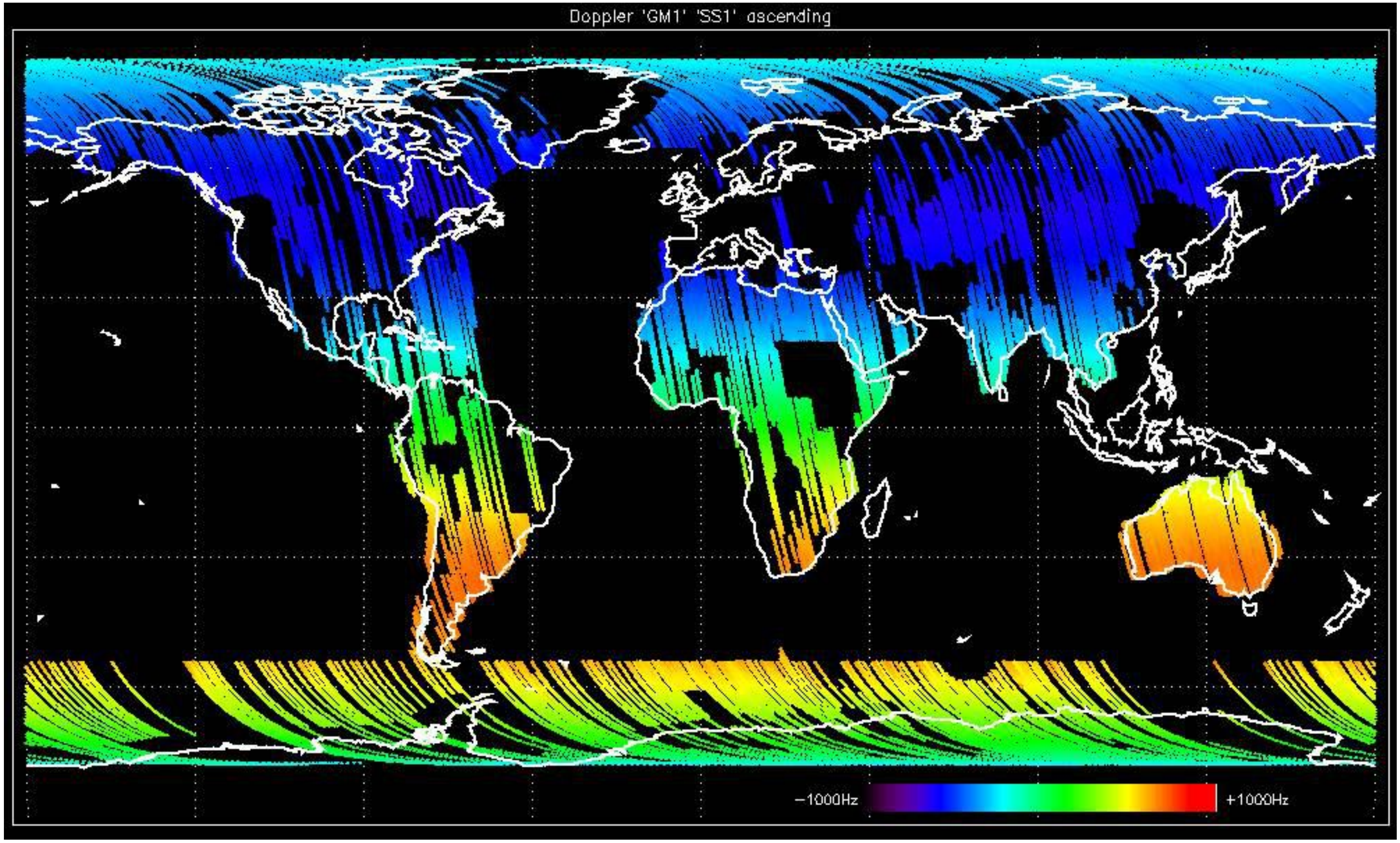
| Evolution of Absolute Doppler |
|---|
| |
| Acsending |
| |
| Descending |

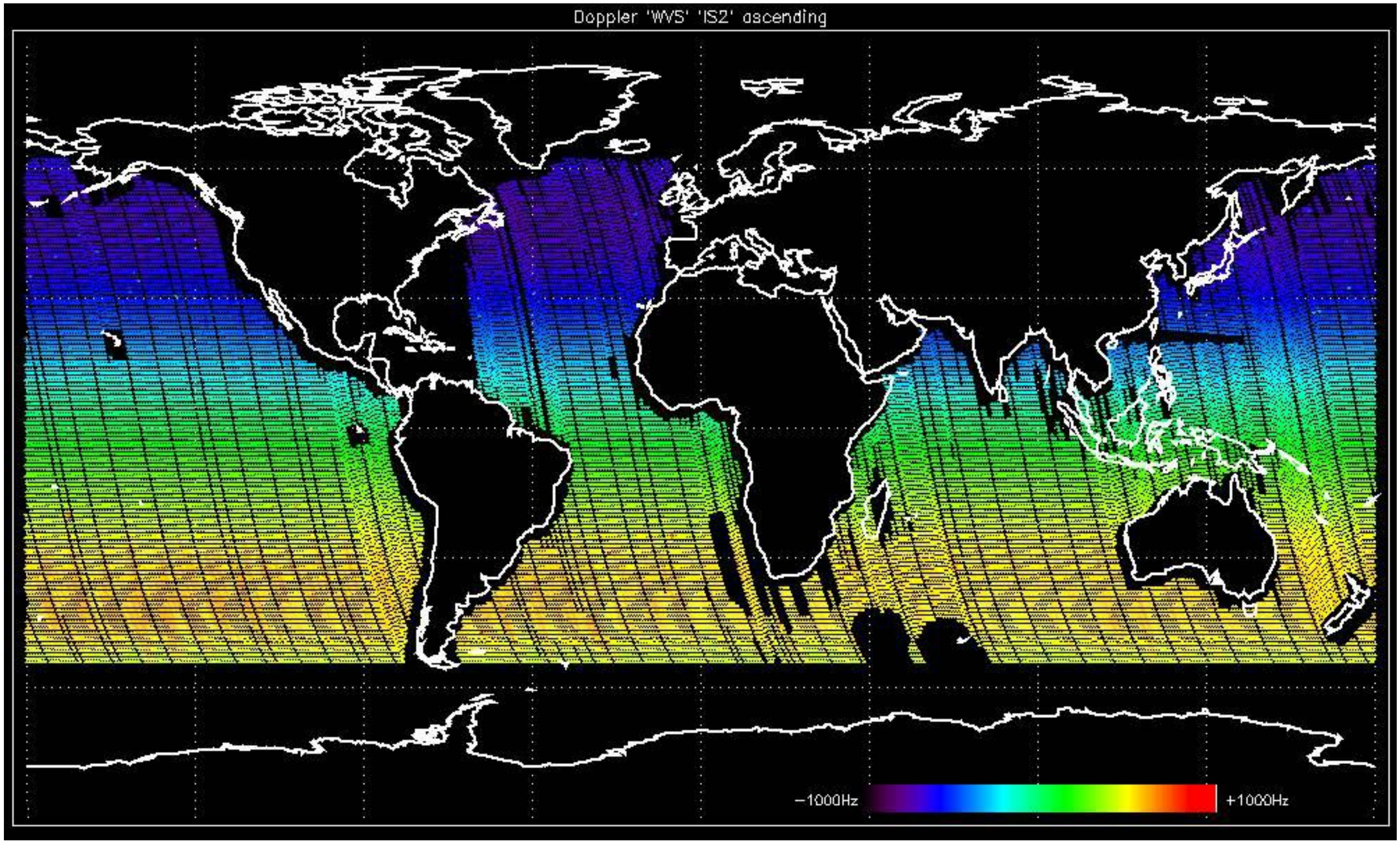
## 7.6 - Doppler evolution versus ANX for GM1

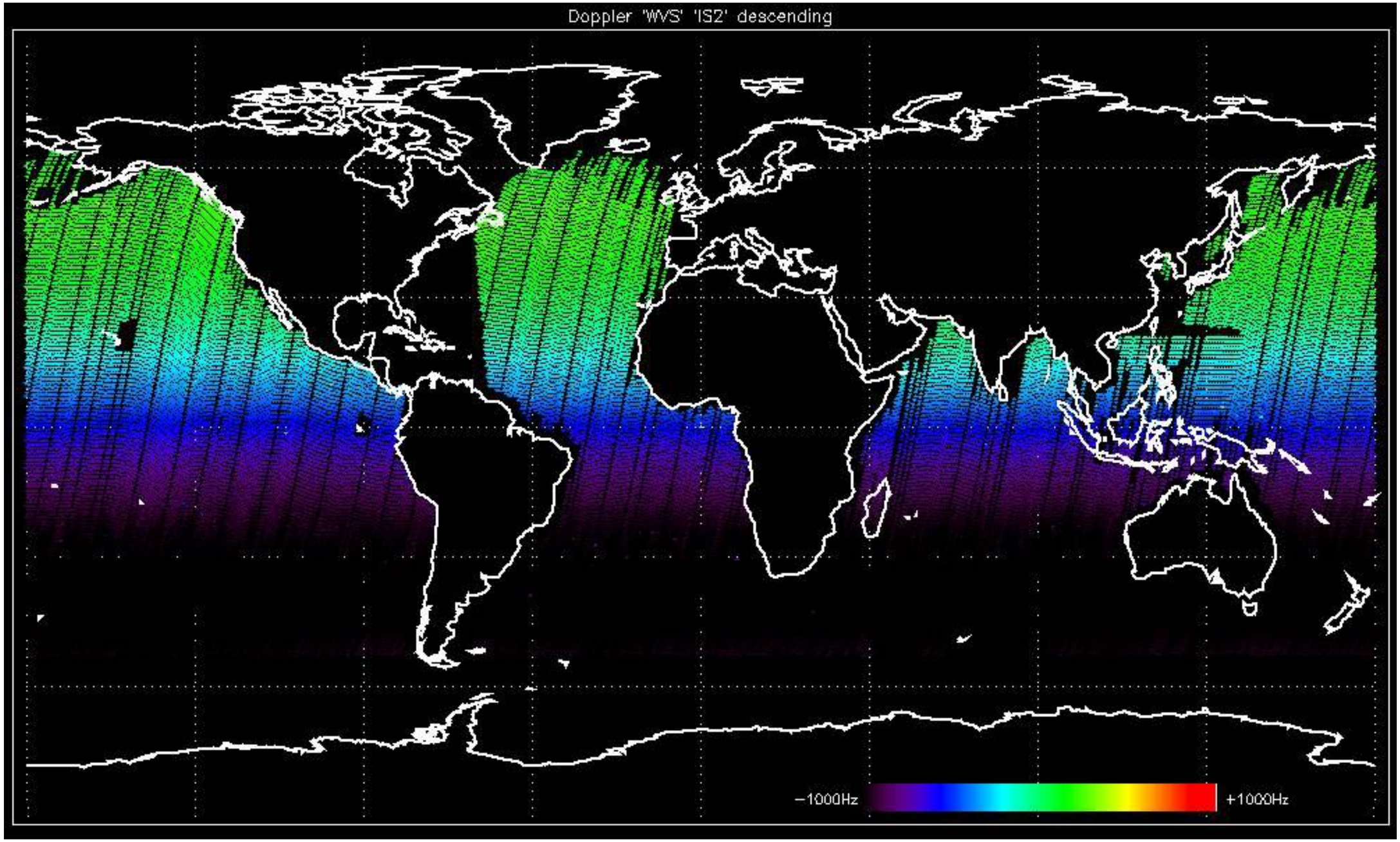
No anomalies observed.

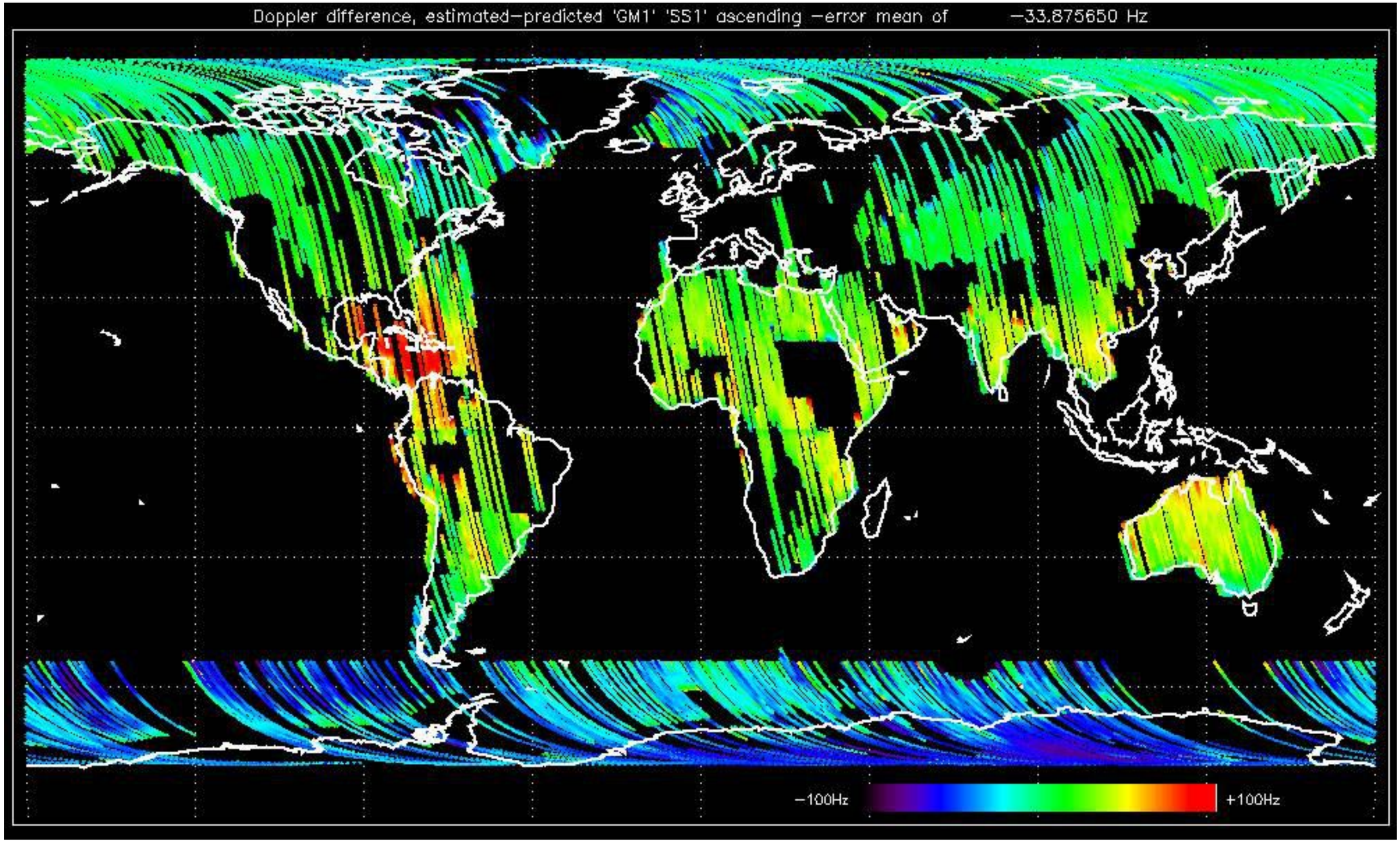
-Stable wave internal calibration pulses gain and phase.
-Stable raw data statistics.
-Nominal Doppler behavior.

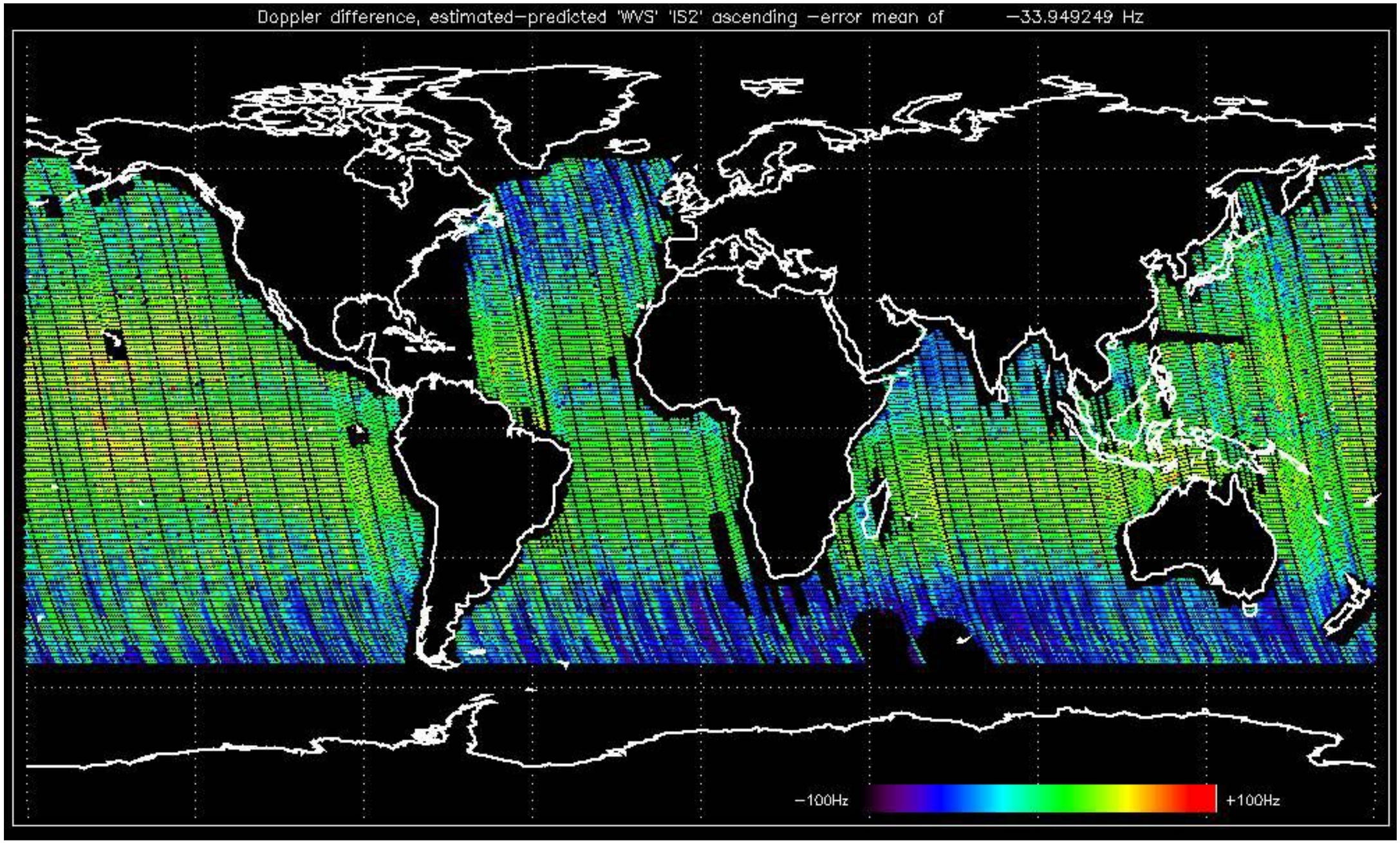
Preliminary report.The data is not yet controled

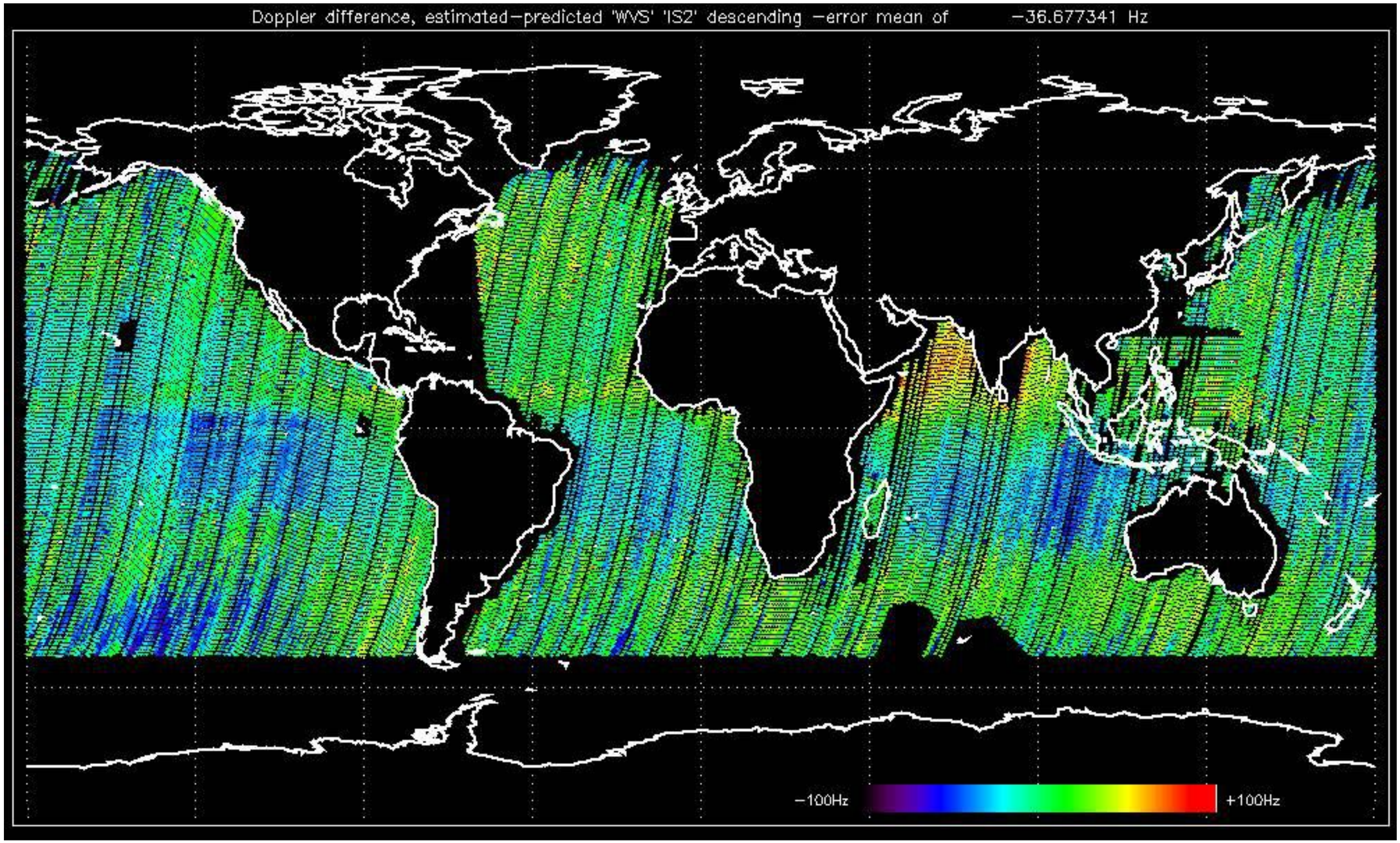

Doppler 'GM1' 'SS1' ascending
−1000Hz
+1000Hz


Doppler 'WVS' 'IS2' ascending
−1000Hz
+1000Hz


Doppler 'WVS' 'IS2' descending
−1000Hz
+1000Hz


Doppler difference, estimated−predicted 'GM1' 'SS1' ascending −error mean of −33.875650 Hz
−100Hz
+100Hz


Doppler difference, estimated−predicted 'WVS' 'IS2' ascending −error mean of −33.949249 Hz
−100Hz
+100Hz


Doppler difference, estimated−predicted 'WVS' 'IS2' descending −error mean of −36.677341 Hz
−100Hz
+100Hz

No anomalies observed on available MS products:

No anomalies observed.

Summary of analysis for the last 3 days 2005082[012]
The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems
<table border=1>
<tr> <th>Filename </th><th>  num_gaps</th><th>num_missing_lines</th></tr>
</table><br><br><br>

No unavailabilities during the reported period.