

REPORT OF 030916

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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

No anomalies observed on last available MS products:

- ASA_MS__OPNPDK20030915_201152_000000152019_00500_08069_0066.N1
- ASA_MS__OPNPDK20030915_201012_000000152019_00500_08069_0065.N1

The drift in phase for TR module 3 on Tile B3 has decreased to a stable configuration as shown in the figure below



Polarisation	Start Time
V	20030915 201152
H	20030915 201012

MSM in V/V polarisation

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

MSM in H/H polarisation

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

4 - Internal calibration Results

No anomalies observed.

4.1 - Daily statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.79214	-22.5317	-8.11487
	stdev	0.00572444	0.0668263	0.00246664
10	mean	-6.90199	-19.3105	-8.11487
	stdev	0.0313716	0.0649020	0.00246664



4.2 - Cyclic statistics

row	stat	AveP1	AveP2	AveP3
3	mean	-3.80143	-22.5278	-8.10983
	stdev	0.00586389	0.0611192	0.00253152
10	mean	-6.89511	-19.3227	-8.10983
	stdev	0.0267832	0.0601360	0.00253152



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	0.000398037
	stdev	3.37156e-07

MEAN Q	mean	0.000302027
	stdev	3.20406e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.115328
	stdev	0.00145222
STDEV Q	mean	0.115535
	stdev	0.00147153



5.3 - Gain imbalance I/Q



6 - Wave Doppler Analysis

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

6.1 - Unbiased Doppler Error

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

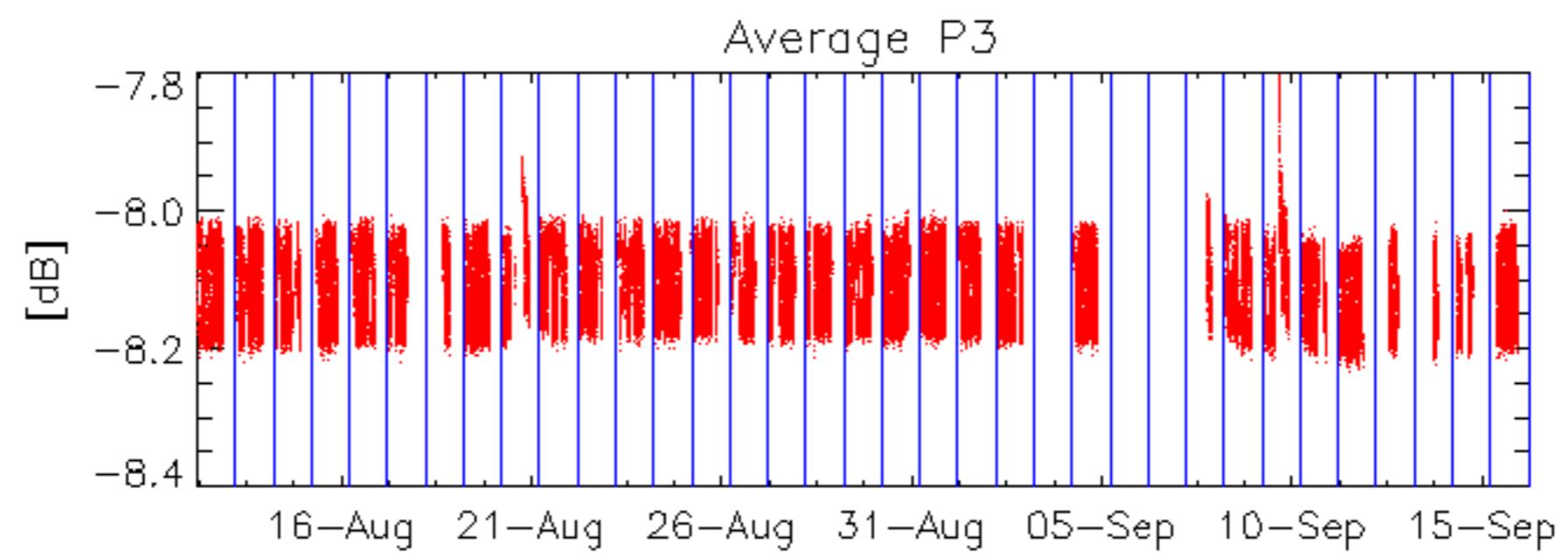
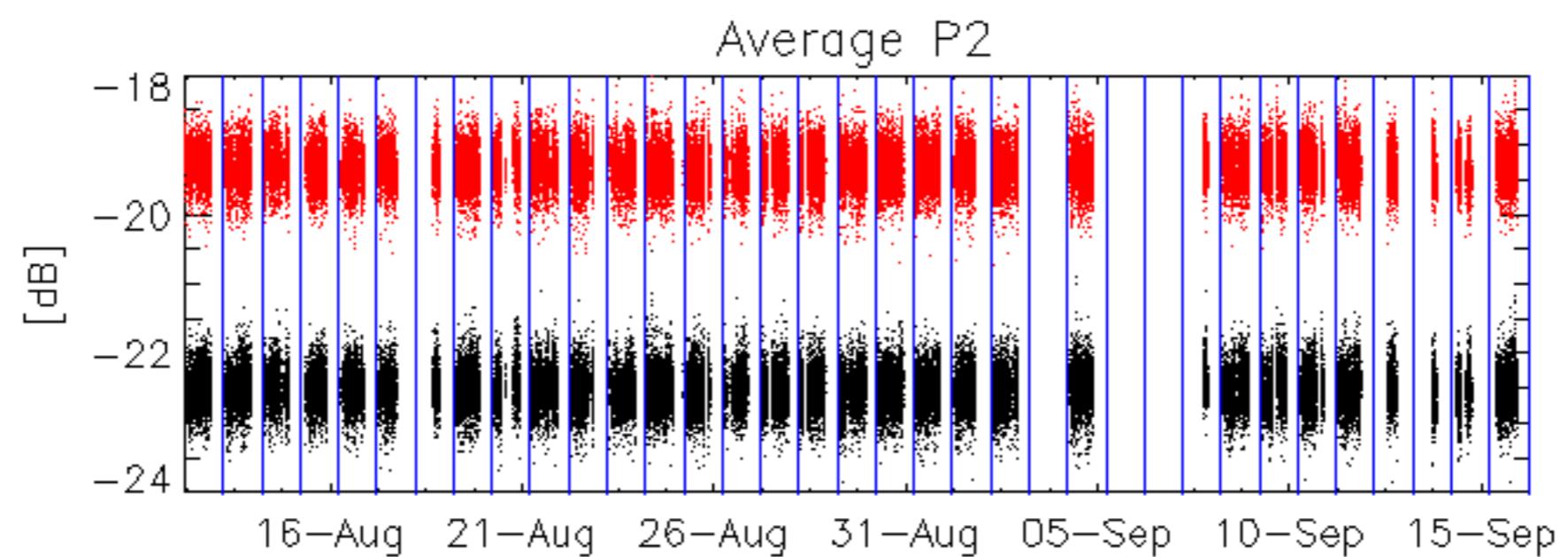
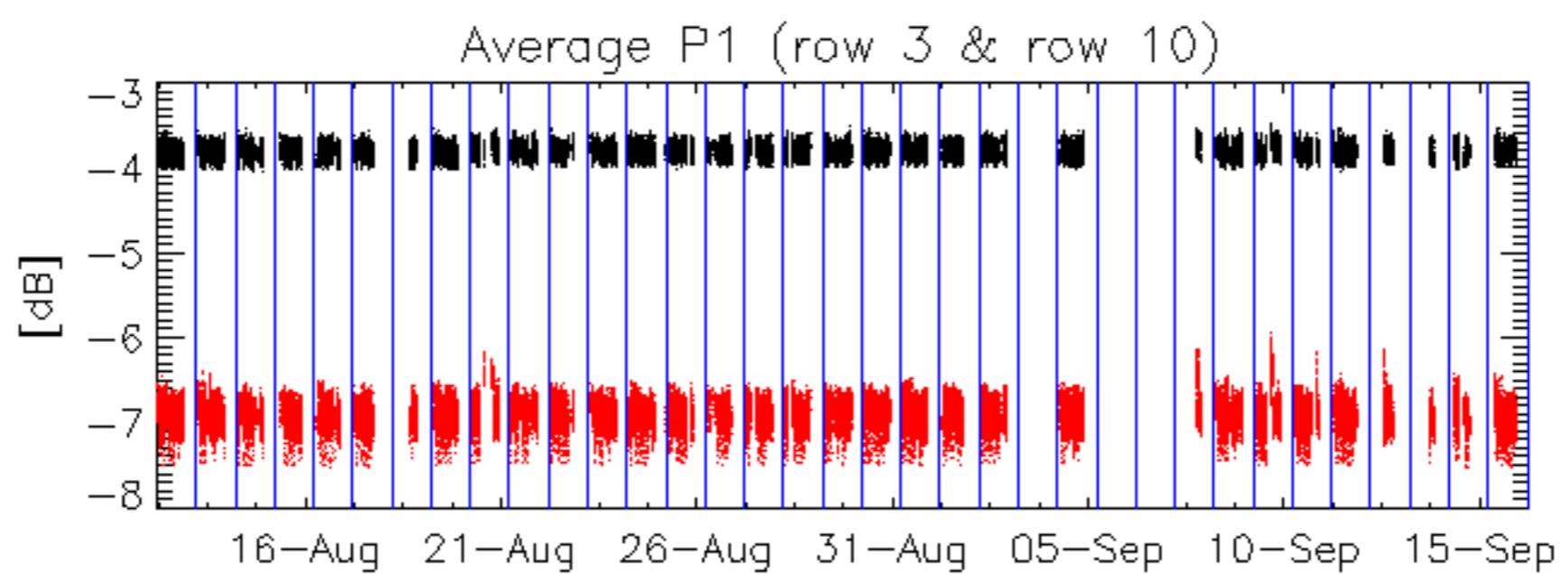
6.2 - Absolute Doppler

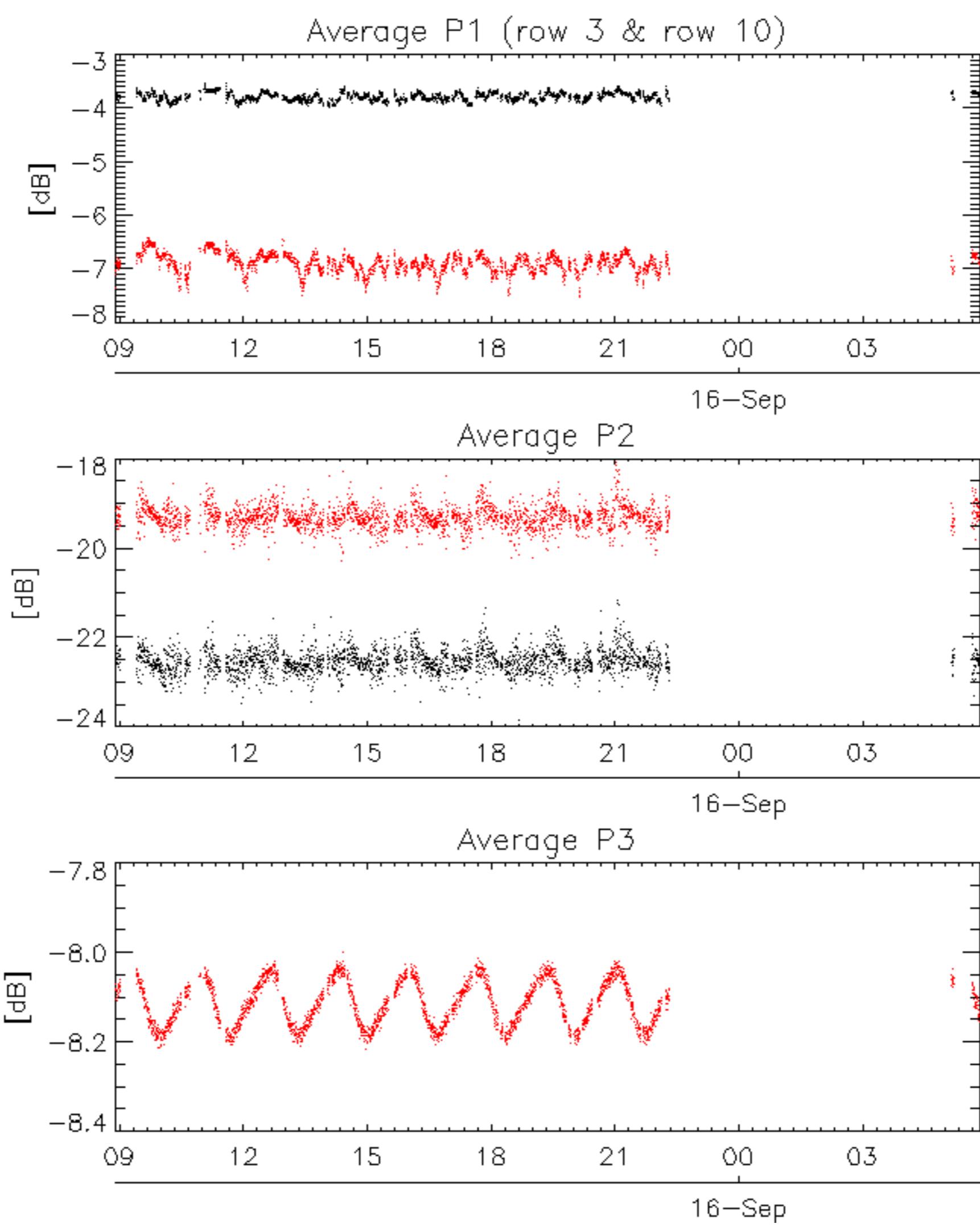
Evolution of Absolute Doppler	
	Ascending
	Descending

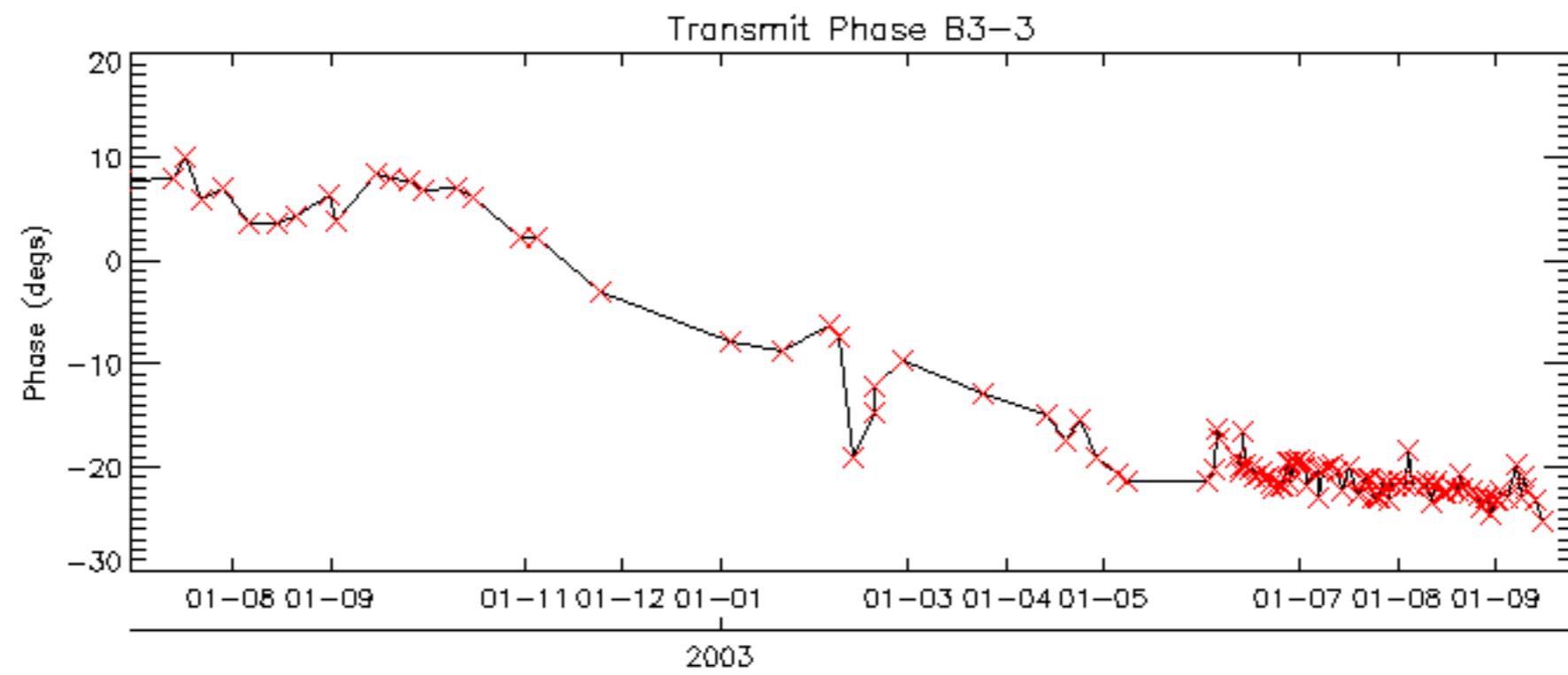
6.3 - Doppler evolution versus ANX

Evolution Doppler error versus ANX







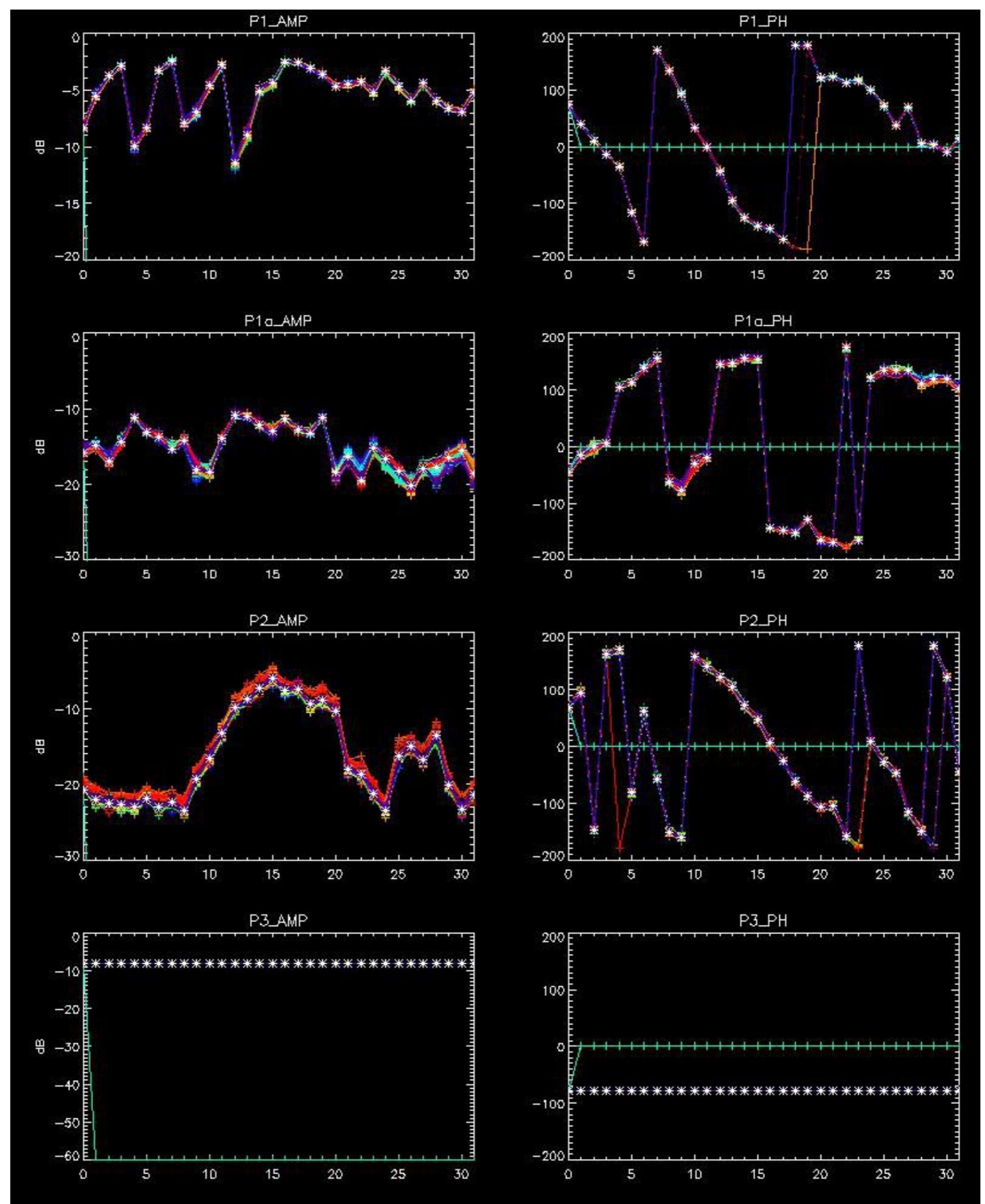


No anomalies observed on available browse products



No anomalies observed.



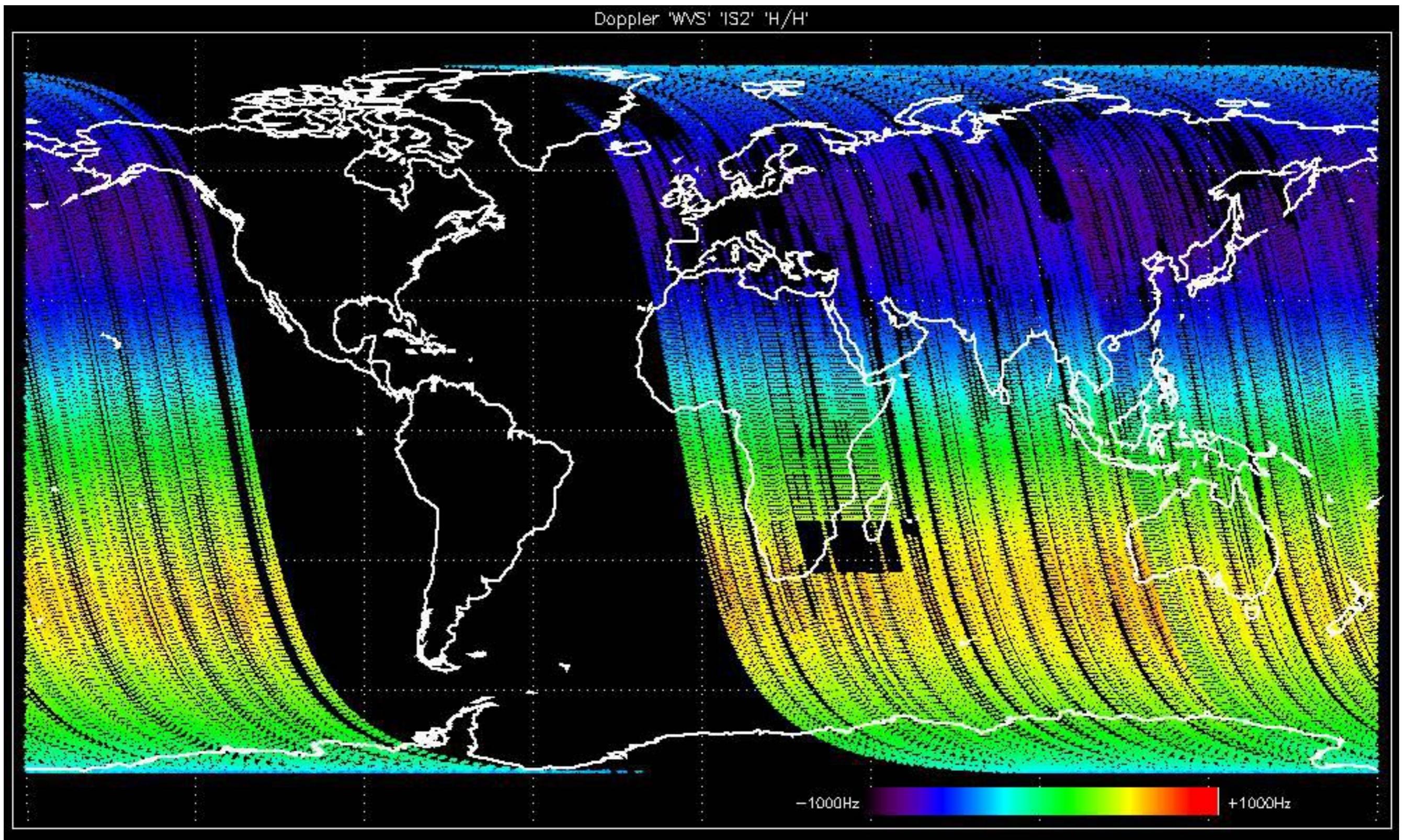


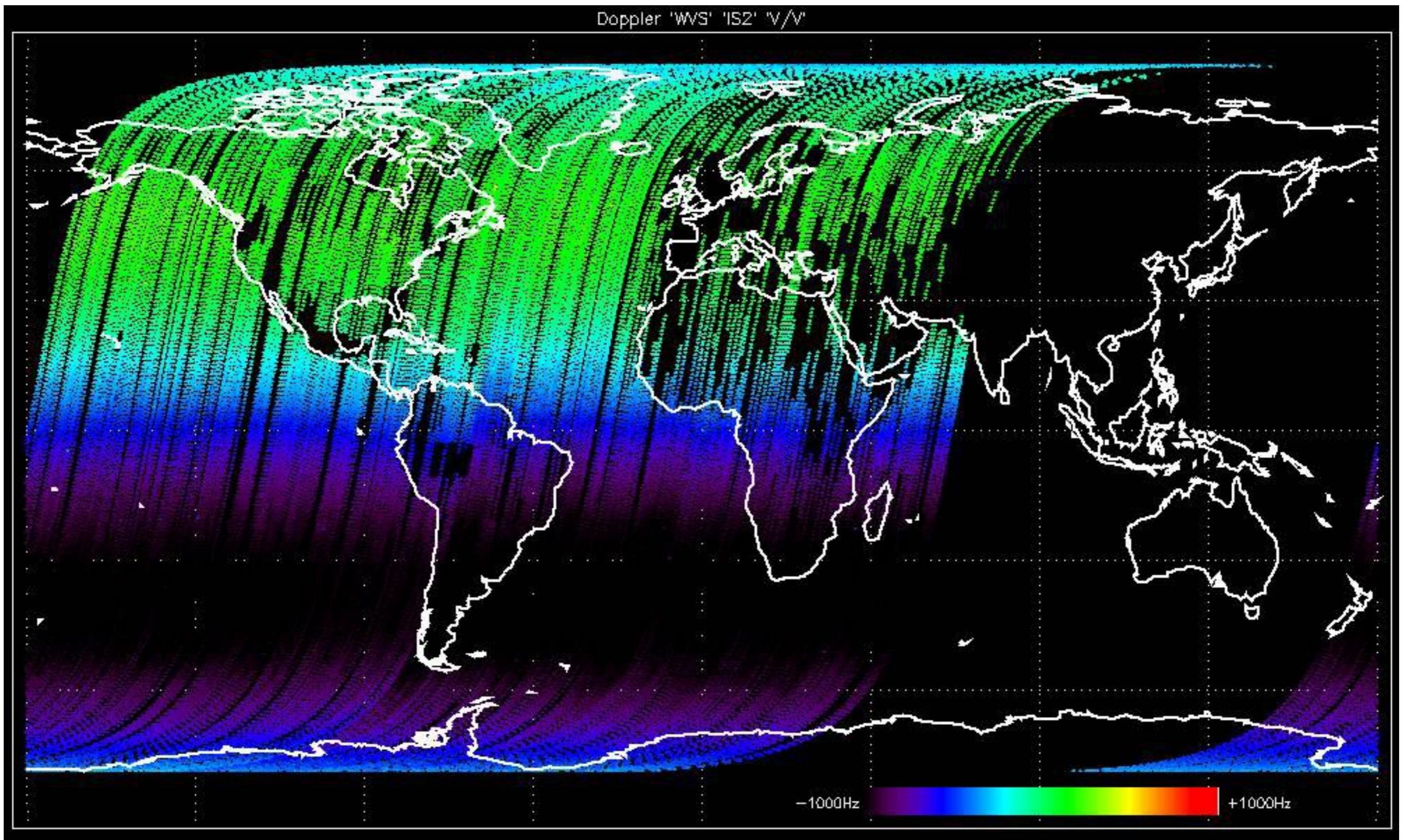
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

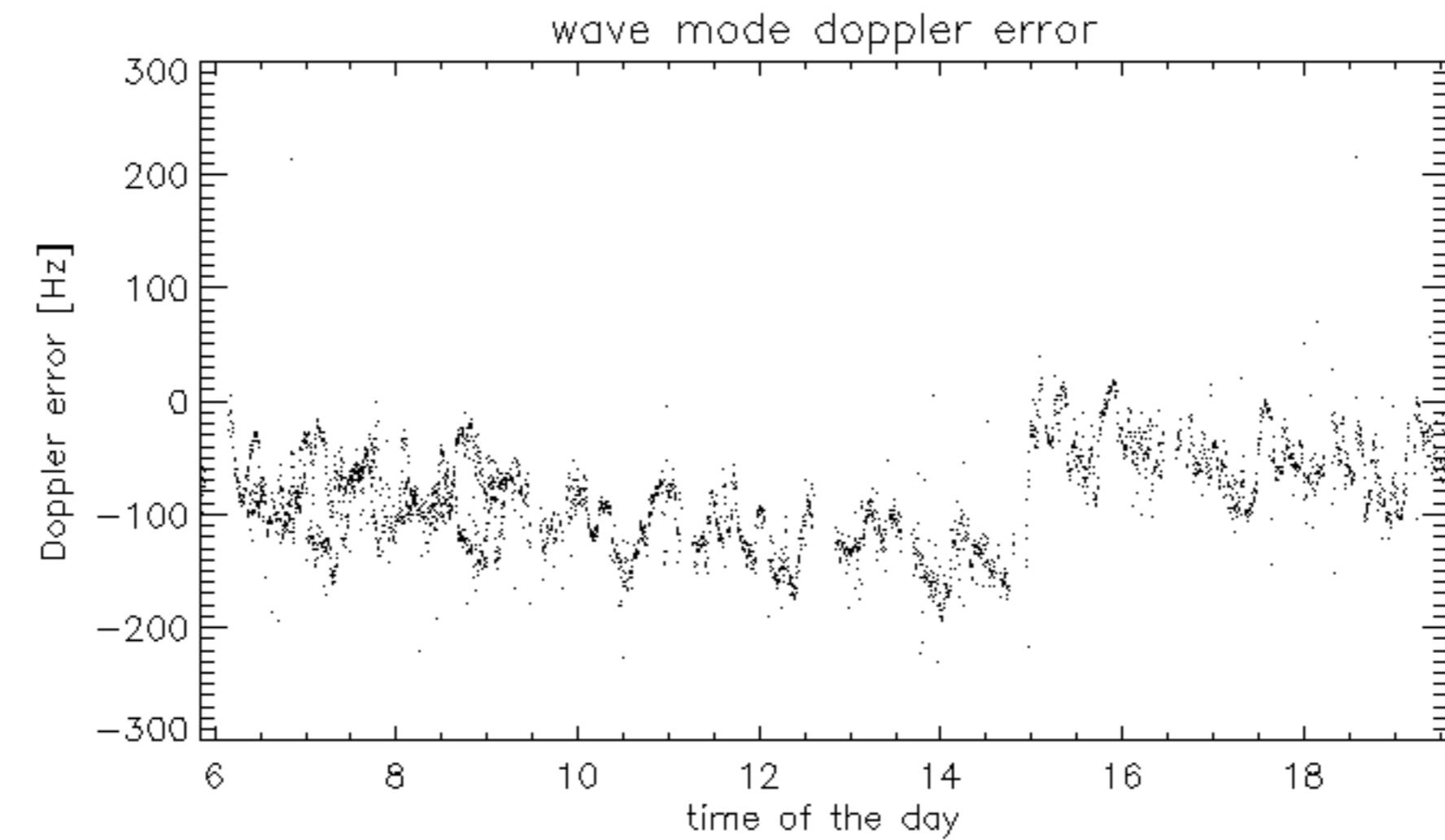
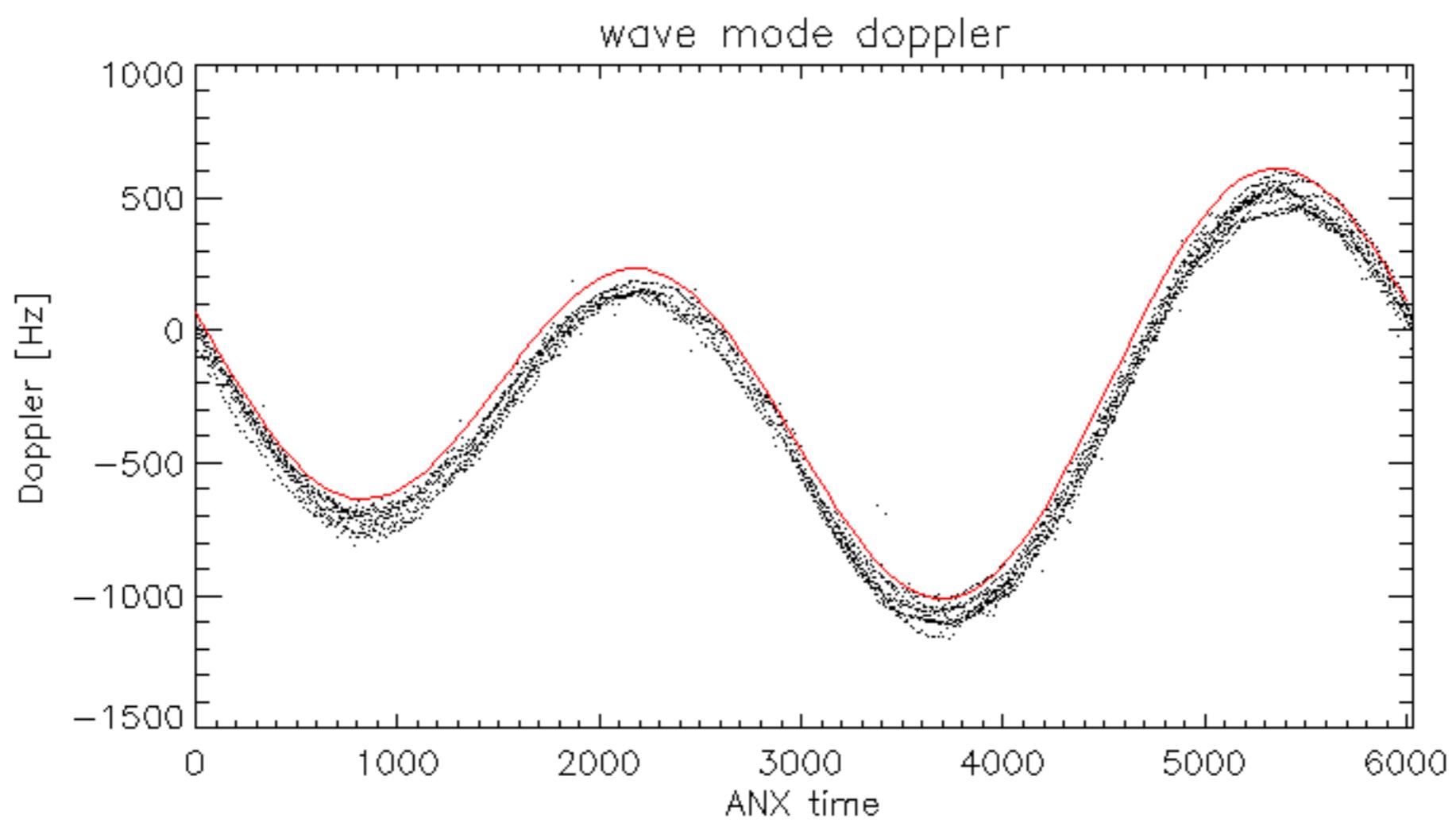


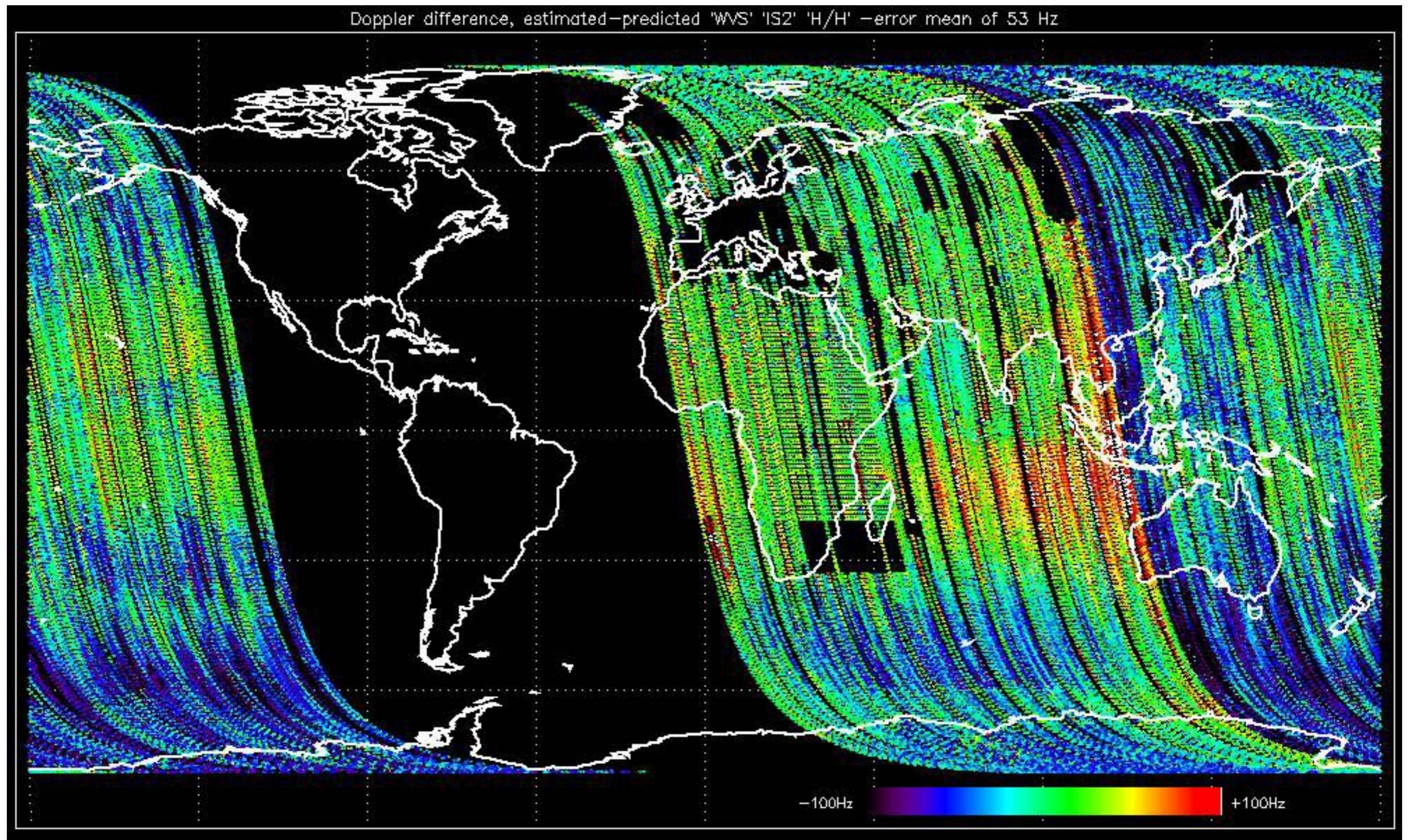
No anomalies observed Doppler evolution.
Doppler analysis performed over the last 60 days

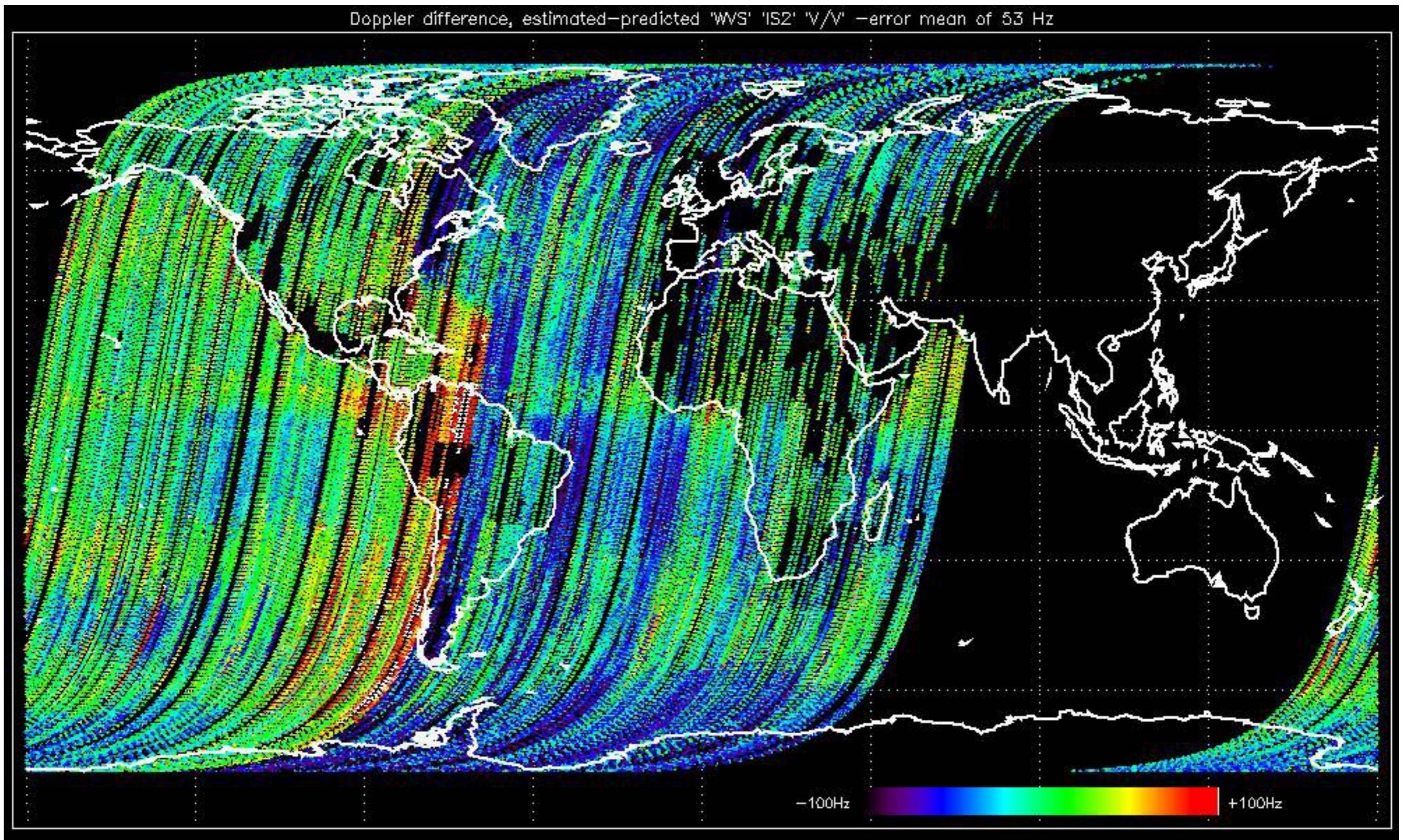












No anomalies observed on last available MS products:

- ASA_MS__0PNPDK20030915_201152_00000152019_00500_08069_0066.N1
- ASA_MS__0PNPDK20030915_201012_00000152019_00500_08069_0065.N1

The drift in phase for TR module 3 on Tile B3 has decreased to a stable configuration as shown in the figure below

No anomalies observed.



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

Test : 2003-09-13 19:32:51 H

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

Test : 2003-09-13 19:32:51 H

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

Test : 2003-09-15 20:10:12 H

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

Test : 2003-09-15 20:10:12 H

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

Test : 2003-09-13 19:34:31 V

Reference: 2001-02-09 14:08:23 V RxGain

Test : 2003-09-15 20:11:52 V

<img alt="A 10x32 grid of colored cells representing a signal matrix. The columns are labeled A1 through E3 and the rows are numbered 1 through 32. Yellow cells are located at various positions, including (A1, 1), (A3, 1), (B1, 1), (B3, 1), (C1, 1), (C3, 1), (D1, 1), (D3, 1), (E1, 1), (E3, 1), (A1, 2), (A3, 2), (B1, 2), (B3, 2), (C1, 2), (C3, 2), (D1, 2), (D3, 2), (E1, 2), (E3, 2), (A1, 3), (A3, 3), (B1, 3), (B3, 3), (C1, 3), (C3, 3), (D1, 3), (D3, 3), (E1, 3), (E3, 3), (A1, 4), (A3, 4), (B1, 4), (B3, 4), (C1, 4), (C3, 4), (D1, 4), (D3, 4), (E1, 4), (E3, 4), (A1, 5), (A3, 5), (B1, 5), (B3, 5), (C1, 5), (C3, 5), (D1, 5), (D3, 5), (E1, 5), (E3, 5), (A1, 6), (A3, 6), (B1, 6), (B3, 6), (C1, 6), (C3, 6), (D1, 6), (D3, 6), (E1, 6), (E3, 6), (A1, 7), (A3, 7), (B1, 7), (B3, 7), (C1, 7), (C3, 7), (D1, 7), (D3, 7), (E1, 7), (E3, 7), (A1, 8), (A3, 8), (B1, 8), (B3, 8), (C1, 8), (C3, 8), (D1, 8), (D3, 8), (E1, 8), (E3, 8), (A1, 9), (A3, 9), (B1, 9), (B3, 9), (C1, 9), (C3, 9), (D1, 9), (D3, 9), (E1, 9), (E3, 9), (A1, 10), (A3, 10), (B1, 10), (B3, 10), (C1, 10), (C3, 10), (D1, 10), (D3, 10), (E1, 10), (E3, 10), (A1, 11), (A3, 11), (B1, 11), (B3, 11), (C1, 11), (C3, 11), (D1, 11), (D3, 11), (E1, 11), (E3, 11), (A1, 12), (A3, 12), (B1, 12), (B3, 12), (C1, 12), (C3, 12), (D1, 12), (D3, 12), (E1, 12), (E3, 12), (A1, 13), (A3, 13), (B1, 13), (B3, 13), (C1, 13), (C3, 13), (D1, 13), (D3, 13), (E1, 13), (E3, 13), (A1, 14), (A3, 14), (B1, 14), (B3, 14), (C1, 14), (C3, 14), (D1, 14), (D3, 14), (E1, 14), (E3, 14), (A1, 15), (A3, 15), (B1, 15), (B3, 15), (C1, 15), (C3, 15), (D1, 15), (D3, 15), (E1, 15), (E3, 15), (A1, 16), (A3, 16), (B1, 16), (B3, 16), (C1, 16), (C3, 16), (D1, 16), (D3, 16), (E1, 16), (E3, 16), (A1, 17), (A3, 17), (B1, 17), (B3, 17), (C1, 17), (C3, 17), (D1, 17), (D3, 17), (E1, 17), (E3, 17), (A1, 18), (A3, 18), (B1, 18), (B3, 18), (C1, 18), (C3, 18), (D1, 18), (D3, 18), (E1, 18), (E3, 18), (A1, 19), (A3, 19), (B1, 19), (B3, 19), (C1, 19), (C3, 19), (D1, 19), (D3, 19), (E1, 19), (E3, 19), (A1, 20), (A3, 20), (B1, 20), (B3, 20), (C1, 20), (C3, 20), (D1, 20), (D3, 20), (E1, 20), (E3, 20), (A1, 21), (A3, 21), (B1, 21), (B3, 21), (C1, 21), (C3, 21), (D1, 21), (D3, 21), (E1, 21), (E3, 21), (A1, 22), (A3, 22), (B1, 22), (B3, 22), (C1, 22), (C3, 22), (D1, 22), (D3, 22), (E1, 22), (E3, 22), (A1, 23), (A3, 23), (B1, 23), (B3, 23), (C1, 23), (C3, 23), (D1, 23), (D3, 23), (E1, 23), (E3, 23), (A1, 24), (A3, 24), (B1, 24), (B3, 24), (C1, 24), (C3, 24), (D1, 24), (D3, 24), (E1, 24), (E3, 24), (A1, 25), (A3, 25), (B1, 25), (B3, 25), (C1, 25), (C3, 25), (D1, 25), (D3, 25), (E1, 25), (E3, 25), (A1, 26), (A3, 26), (B1, 26), (B3, 26), (C1, 26), (C3, 26), (D1, 26), (D3, 26), (E1, 26), (E3, 26), (A1, 27), (A3, 27), (B1, 27), (B3, 27), (C1, 27), (C3, 27), (D1, 27), (D3, 27), (E1, 27), (E3, 27), (A1, 28), (A3, 28), (B1, 28), (B3, 28), (C1, 28), (C3, 28), (D1, 28), (D3, 28), (E1, 28), (E3, 28), (A1, 29), (A3, 29), (B1, 29), (B3, 29), (C1, 29), (C3, 29), (D1, 29), (D3, 29), (E1, 29), (E3, 29), (A1, 30), (A3, 30), (B1, 30), (B3, 30), (C1, 30), (C3, 30), (D1, 30), (D3, 30), (E1, 30), (E3, 30), (A1, 31), (A3, 31), (B1, 31), (B3, 31), (C1, 31), (C3, 31), (D1, 31), (D3, 31), (E1, 31), (E3, 31), (A1, 32), (A3, 32), (B1, 32), (B3, 32), (C1, 32), (C3, 32), (D1, 32), (D3, 32), (E1, 32), (E3, 32)</p>

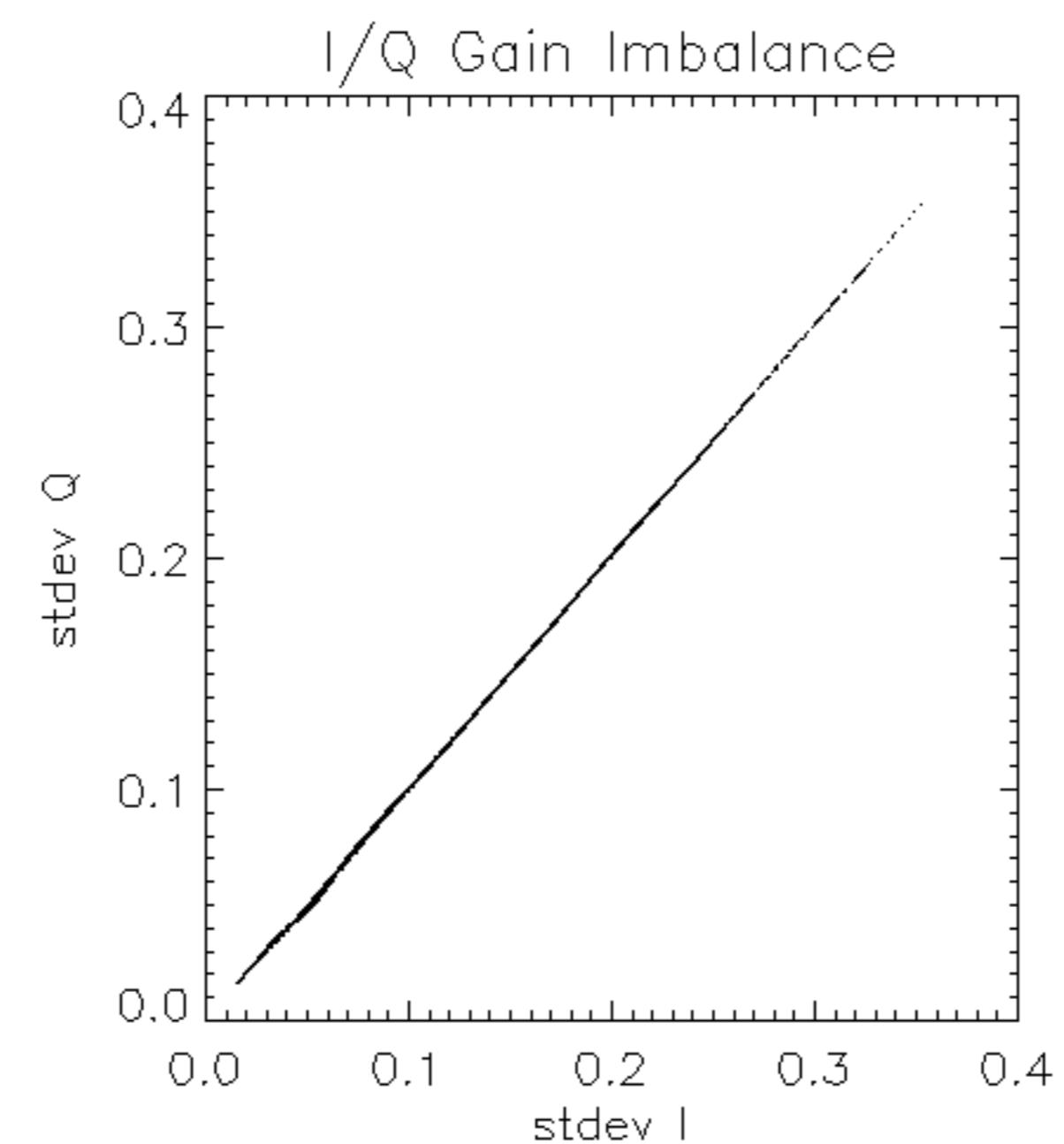
RxGain									
Reference: 2003-06-12 14:10:32 V									
Test : 2003-09-15 20:11:52 V									
A1	A3	B1	B3	C1	C3	D1	D3	E1	E3
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32								
A2	A4	B2	B4	C2	C4	D2	D4	E2	E4

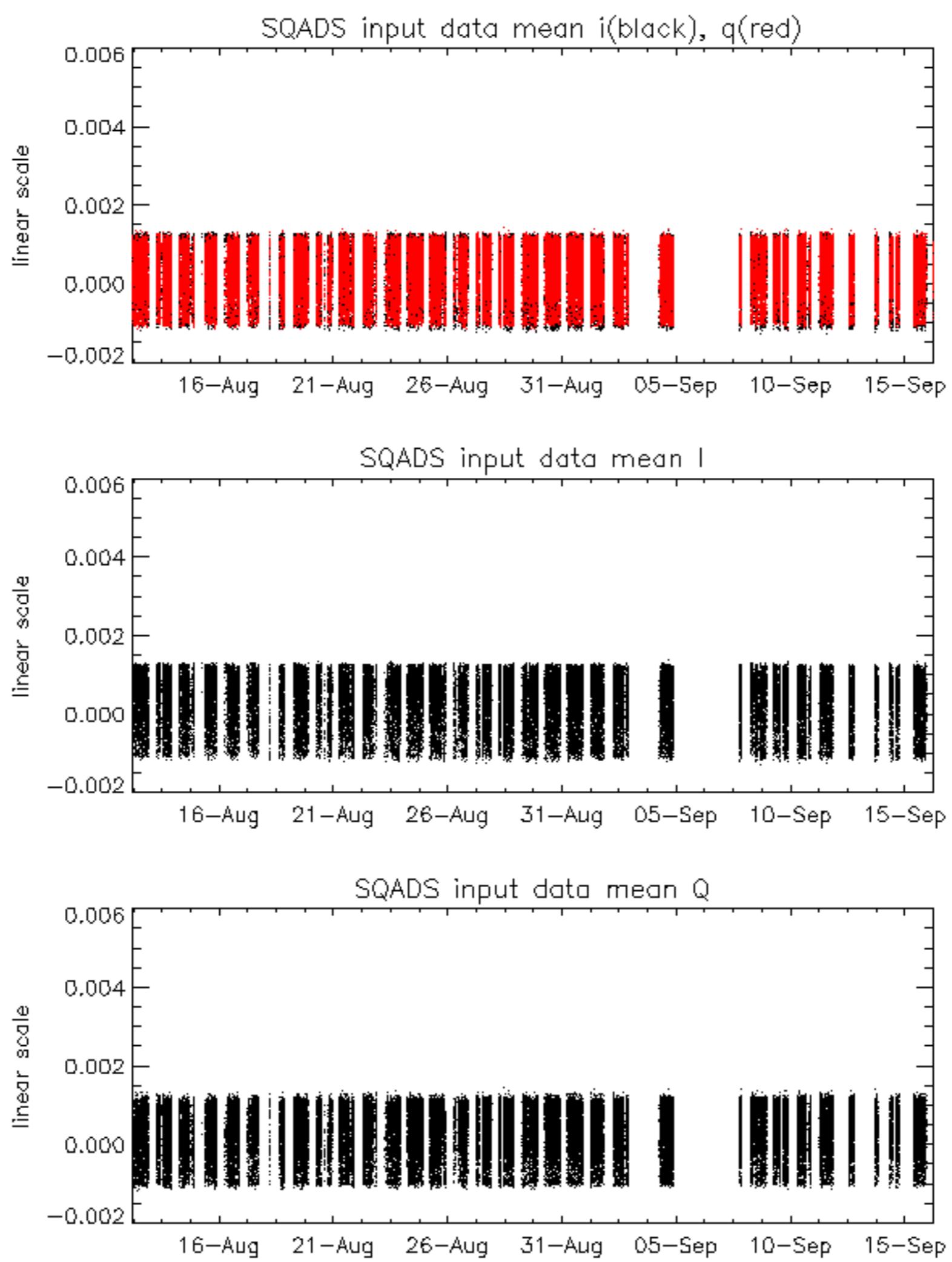
RxPhase									
Reference: 2001-02-09 13:50:42 H									
Test : 2003-09-13 19:32:51 H									
							1		
							2		
							3		
							4		
							5		
							6		
							7		
A1	A3	B1	B3	C1	C3	D1	D3	E1	E3
							8		
							9		
							10		
							11		
							12		
							13		
							14		
							15		
							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		

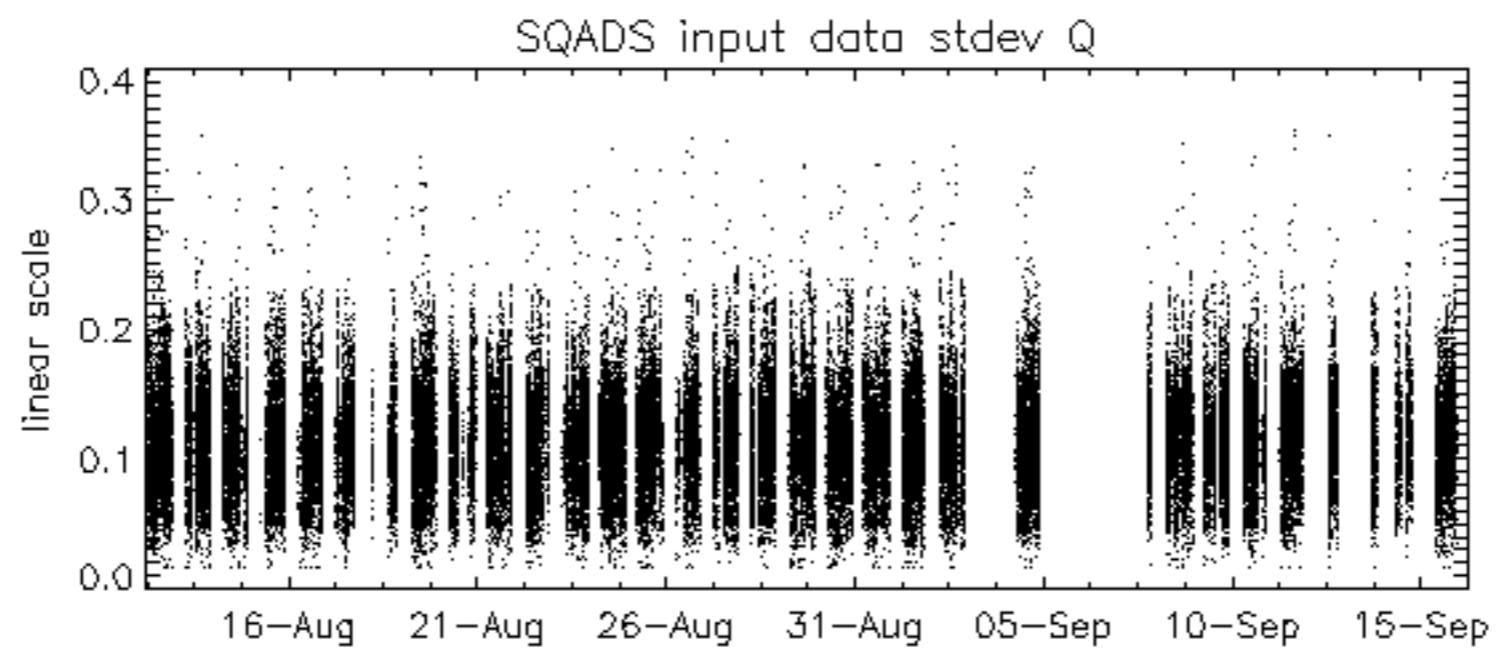
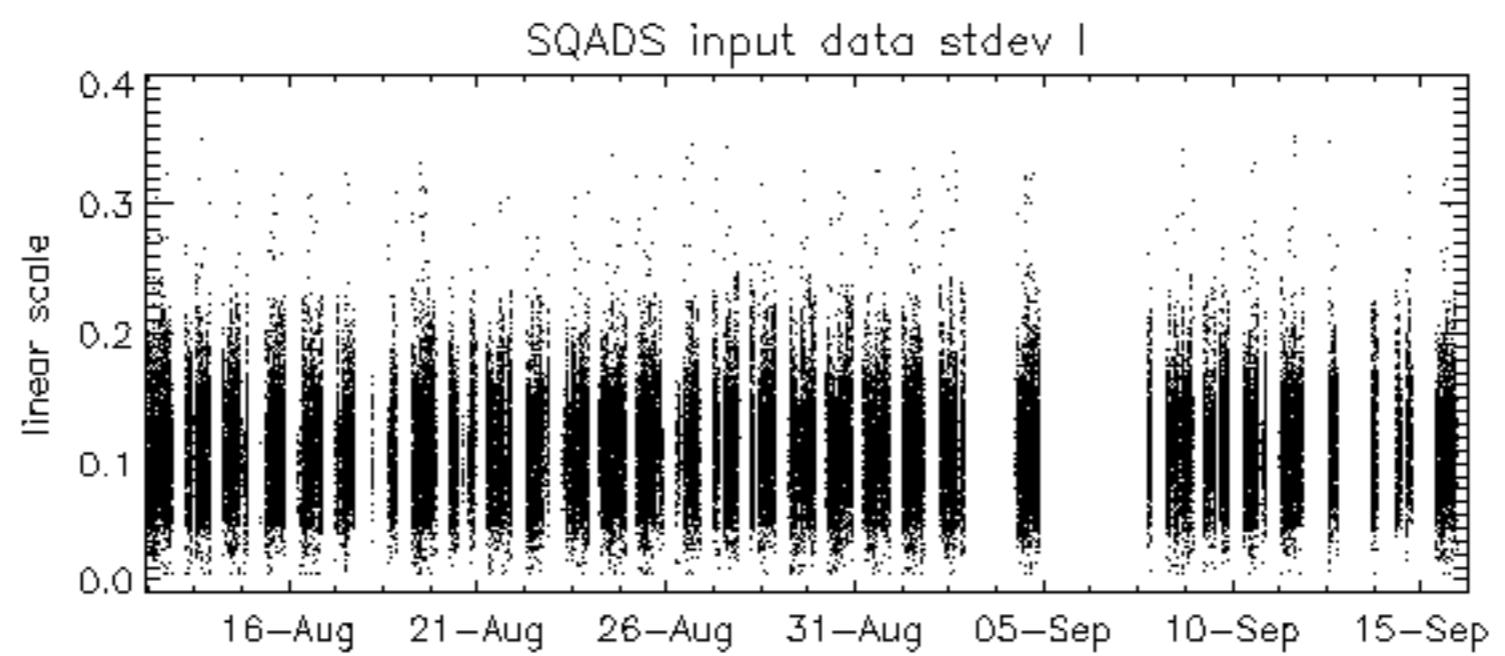
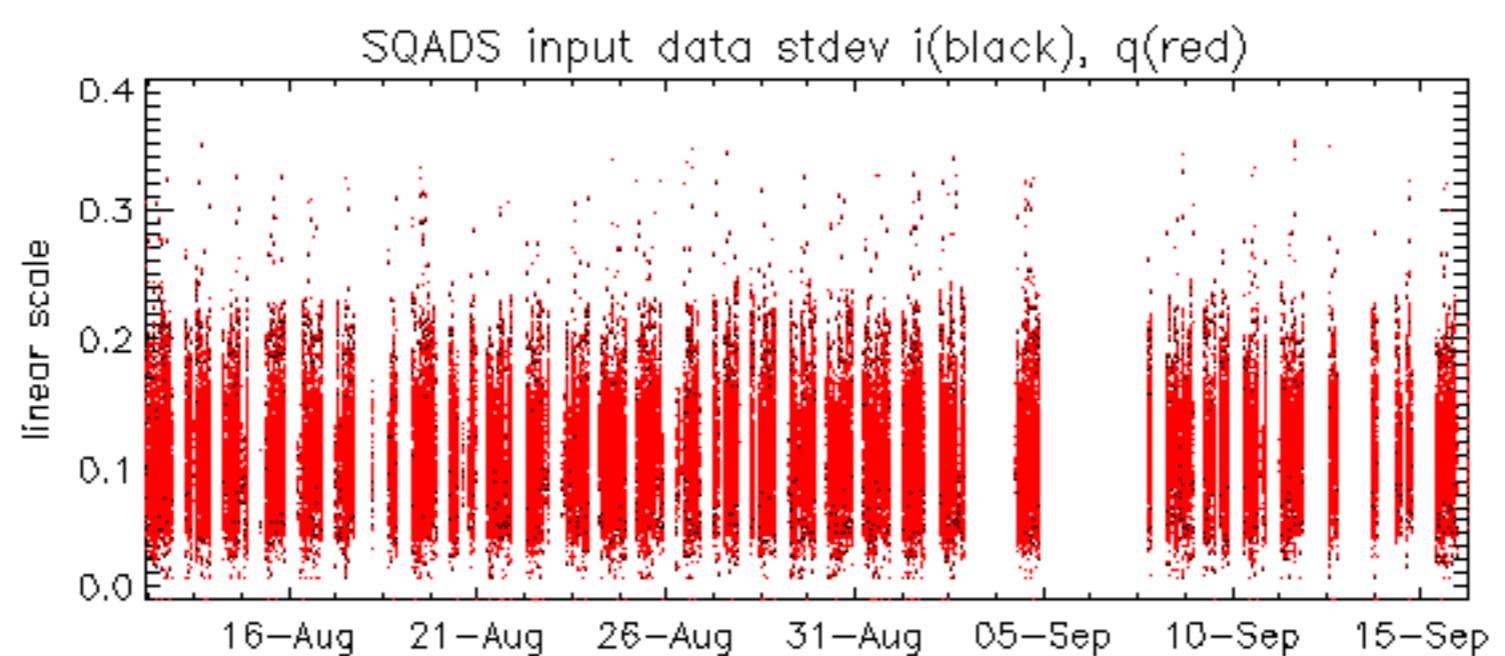
Reference:	2003-06-12 14:08:52 H	RxPhase							
Test	: 2003-09-13 19:32:51 H								
A1	A3	B1	B3	C1	C3	D1	D3	E1	E3
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32								

RxPhase									
Reference: 2003-06-12 14:10:32 V									
Test : 2003-09-13 19:34:31 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		
A2	A4	B2	B4	C2	C4	D2	D4	E2	E4
							23		
							24		
							25		
							26		
							27		
							28		
							29		
							30		
							31		
							32		

Reference:	2003-06-12 14:10:32 V	RxPhase
Test	: 2003-09-15 20:11:52 V	
		1
		2
		3
		4
		5
		8
		7
A1	A3	B1
B3	C1	C3
D1	D3	E1
		E3
		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:	2003-06-12 14:08:52 H	TxGain
Test	: 2003-09-13 19:32:51 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 14:08:52 H	TxGain
Test	: 2003-09-15 20:10:12 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	:	2003-09-13 19:34:31	V
A1	A3	B1	B3
C1	C3	D1	D3
E1	E3		
A2	A4	B2	B4
C2	C4	D2	D4
E2	E4		

Reference: 2001-02-09 14:08:23 V TxGain

Test : 2003-09-15 20:11:52 V

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

Test : 2003-09-15 20:11:52 V

Reference:	2003-06-12 14:08:52 H	TxPhase							
Test	: 2003-09-13 19:32:51 H								
A1	A3	B1	B3	C1	C3	D1	D3	E1	E3
A2	A4	B2	B4	C2	C4	D2	D4	E2	E4

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

Test : 2003-09-15 20:10:12 H

Reference:	2001-02-09 14:08:23 V	TxPhase							
Test	: 2003-09-13 19:34:31 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	: 2003-09-13 19:34:31 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

No unavailabilities during the reported period.

