

PRELIMINARY REPORT OF 050924

last update on Sat Sep 24 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 2005-09-23 00:00:00 to 2005-09-24 10:50:01

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM

ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	28	8	3	2	0
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	28	8	3	2	0
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	28	8	3	2	0
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	28	8	3	2	0

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_CON_AXVIEC20050324_172815_20030601_000000_20051231_000000	37	49	23	10	57
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	37	49	23	10	57
ASA_XCA_AXVIEC20050803_152145_20040412_000000_20051231_000000	37	49	23	10	57
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	37	49	23	10	57

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
V	20050923 055514
H	20050922 062651

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
☒	☒
☒	☒
☒	☒
☒	☒

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)
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P1 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-3.429533	0.087177	-0.485325
7	P1	-3.113672	0.033236	0.274281
11	P1	-4.576913	0.132957	0.666541
15	P1	-5.757023	0.068251	-0.486526
19	P1	-3.522043	0.238014	1.021235
22	P1	-4.577028	0.021914	0.178618
26	P1	-4.713988	0.091468	0.491367
30	P1	-6.715889	0.653500	2.032206
3	P1	-15.904746	1.860321	-0.901636
7	P1	-16.428238	5.459565	-2.425414
11	P1	-20.822729	10.805448	4.679125
15	P1	-12.841530	11.543560	-4.575734
19	P1	-14.158954	0.339512	1.318761
22	P1	-17.043242	25.419146	-4.301311
26	P1	-18.274405	21.893700	-2.414861
30	P1	-18.285070	8.635999	-0.429507

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-21.756521	0.099056	-0.206138
7	P2	-22.158123	0.318439	-1.173401
11	P2	-14.569857	2.977720	-4.346707
15	P2	-7.123092	0.124294	-0.292026
19	P2	-9.358424	0.236697	0.694438
22	P2	-17.038910	0.245294	-0.971617
26	P2	-16.385794	0.136966	0.444597
30	P2	-19.101839	0.271807	-1.080578

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.161328	0.004512	-0.028282
7	P3	-8.161328	0.004512	-0.028282
11	P3	-8.161328	0.004512	-0.028282
15	P3	-8.161328	0.004512	-0.028282
19	P3	-8.161328	0.004512	-0.028282
22	P3	-8.161328	0.004512	-0.028282
26	P3	-8.161325	0.004512	-0.028300
30	P3	-8.161325	0.004512	-0.028300

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1

P1a Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-2.929466	0.218624	-0.741863
7	P1	-2.991230	0.083280	-0.101580
11	P1	-3.734426	0.288070	1.256249
15	P1	-3.576146	0.036192	0.230253
19	P1	-3.475789	0.089520	0.533215
22	P1	-5.437442	0.252489	0.983084
26	P1	-6.683999	1.033718	2.415531
30	P1	-5.809271	0.591705	1.698458
3	P1	-11.308592	0.569008	-1.088894
7	P1	-11.774600	21.288504	-3.297226
11	P1	-13.851588	38.324215	-2.240849
15	P1	-13.226664	35.440804	-3.812370
19	P1	-15.320614	0.223157	0.349748
22	P1	-23.933556	6.130473	5.584808
26	P1	-16.413099	6.867671	-4.200578
30	P1	-20.039049	2.062617	0.411952

P1 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P1	-2.929466	0.218624	-0.741863
7	P1	-2.991230	0.083280	-0.101580
11	P1	-3.734426	0.288070	1.256249
15	P1	-3.576146	0.036192	0.230253
19	P1	-3.475789	0.089520	0.533215
22	P1	-5.437442	0.252489	0.983084
26	P1	-6.683999	1.033718	2.415531
30	P1	-5.809271	0.591705	1.698458
3	P1	-11.308592	0.569008	-1.088894
7	P1	-11.774600	21.288504	-3.297226
11	P1	-13.851588	38.324215	-2.240849
15	P1	-13.226664	35.440804	-3.812370
19	P1	-15.320614	0.223157	0.349748
22	P1	-23.933556	6.130473	5.584808
26	P1	-16.413099	6.867671	-4.200578
30	P1	-20.039049	2.062617	0.411952

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.487001	0.064354	-0.341736
7	P2	-22.338955	0.341317	-1.426196
11	P2	-10.201365	1.244209	-2.943826
15	P2	-5.021262	0.049826	0.198961
19	P2	-6.752930	0.125860	0.194156
22	P2	-7.297603	0.244192	-1.172974
26	P2	-23.924812	0.040175	0.091895
30	P2	-22.017128	0.076152	-0.305019

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.005774	0.003561	-0.017182
7	P3	-8.005751	0.003564	-0.016707
11	P3	-8.005701	0.003561	-0.016395
15	P3	-8.005681	0.003568	-0.016888
19	P3	-8.005863	0.003554	-0.017214
22	P3	-8.005667	0.003554	-0.016727
26	P3	-8.005746	0.003558	-0.017015
30	P3	-8.005638	0.003579	-0.017338

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	0.000484791
	stdev	2.05993e-07
MEAN Q	mean	0.000505249
	stdev	2.24011e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.130838
	stdev	0.00100041
STDEV Q	mean	0.131110
	stdev	0.00101217



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2005092[234]

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
ASA_GM1_1PNPDK20050922_104238_000006162041_00037_18628_6169.N1	0	58
ASA_GM1_1PNPDK20050922_113749_000005012041_00037_18628_6240.N1	0	29
ASA_WSM_1PNPDE20050922_170449_000002442041_00041_18632_9995.N1	0	22
ASA_WSM_1PNPDE20050922_184757_000003042041_00042_18633_0010.N1	0	13
ASA_WSM_1PNPDE20050922_191352_000000672041_00042_18633_0013.N1	0	601
ASA_WSM_1PNPDE20050923_163431_000001522041_00055_18646_0167.N1	0	2
ASA_WSM_1PNPDE20050923_181716_000000672041_00056_18647_0174.N1	0	32



7 - Doppler Analysis

Preliminary report. The data is not yet controlled

7.1 - Unbiased Doppler Error for WVS

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

7.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler
Ascending
Descending

7.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX

7.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)

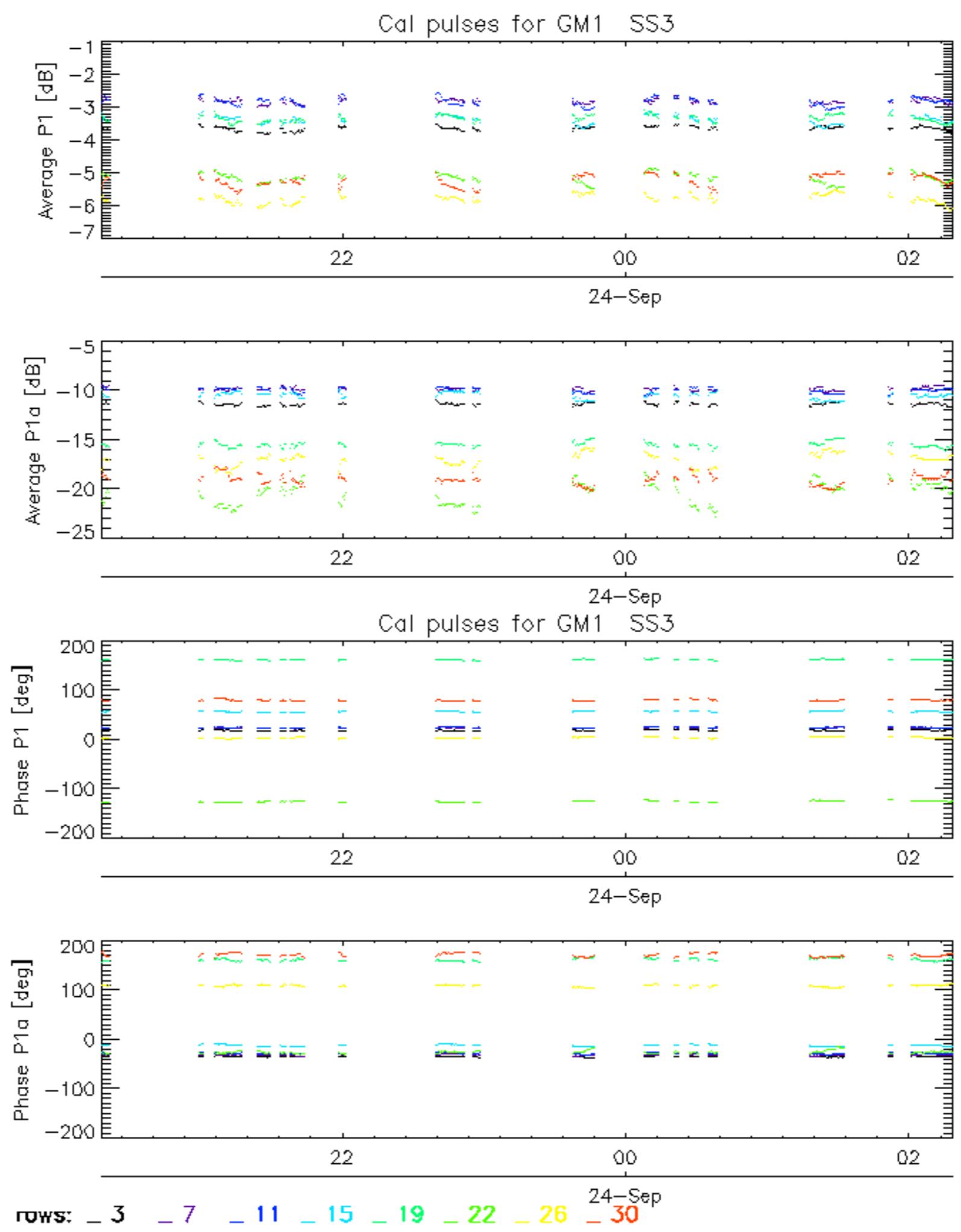
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Ascending
<input checked="" type="checkbox"/>
Descending

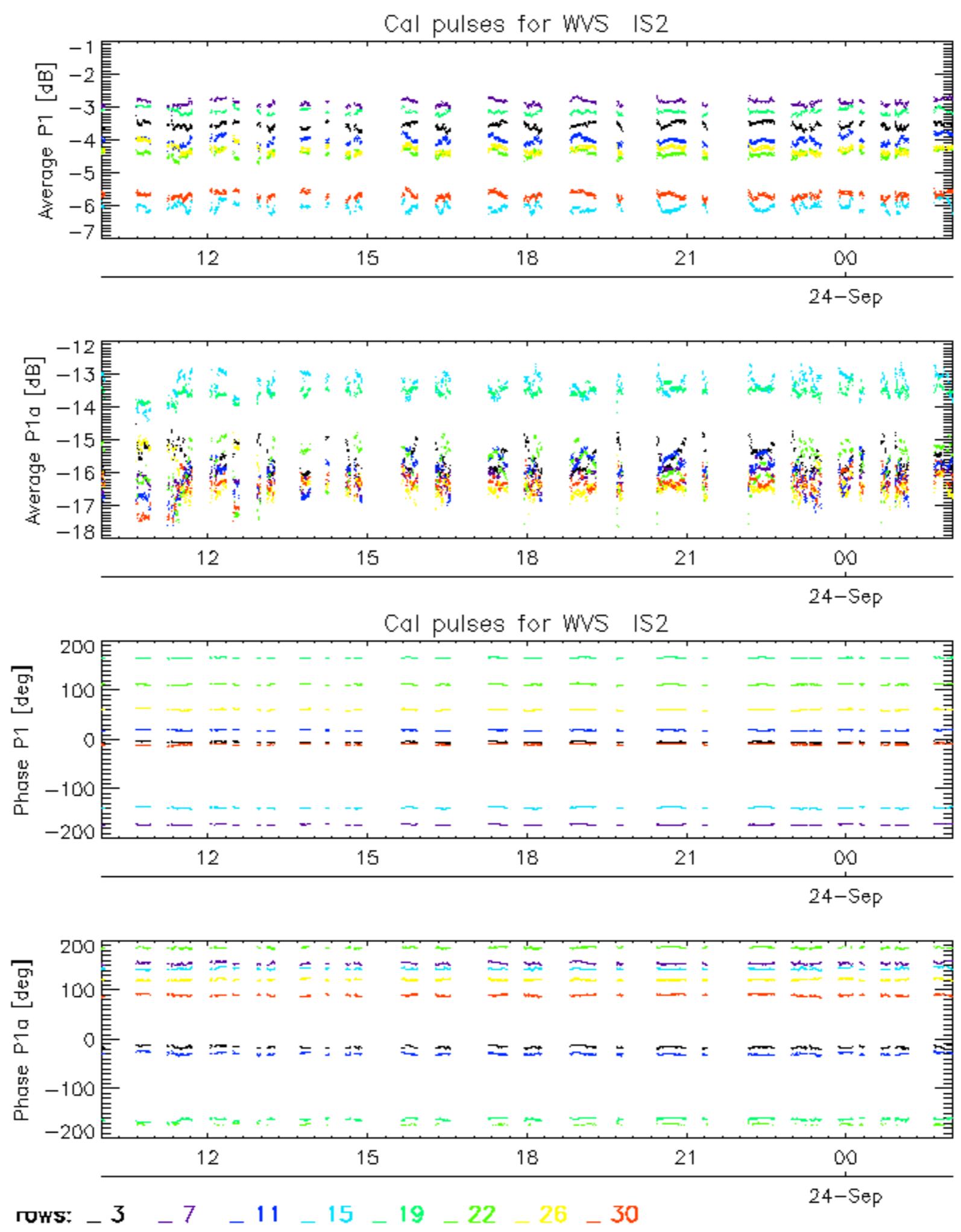
7.5 - Absolute Doppler for GM1**Evolution of Absolute Doppler**

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Ascending
<input checked="" type="checkbox"/>
Descending

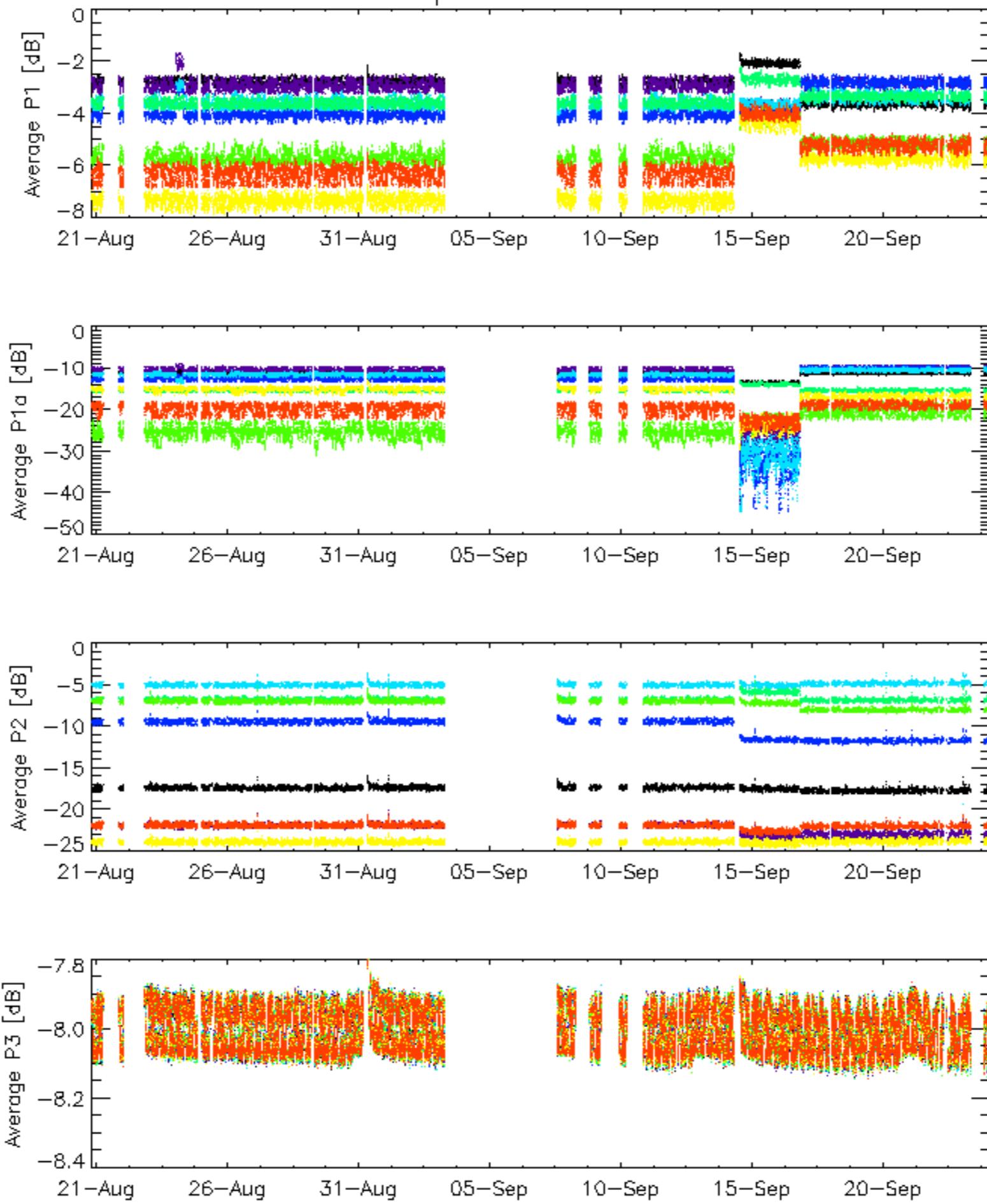
7.6 - Doppler evolution versus ANX for GM1**Evolution Doppler error versus ANX**

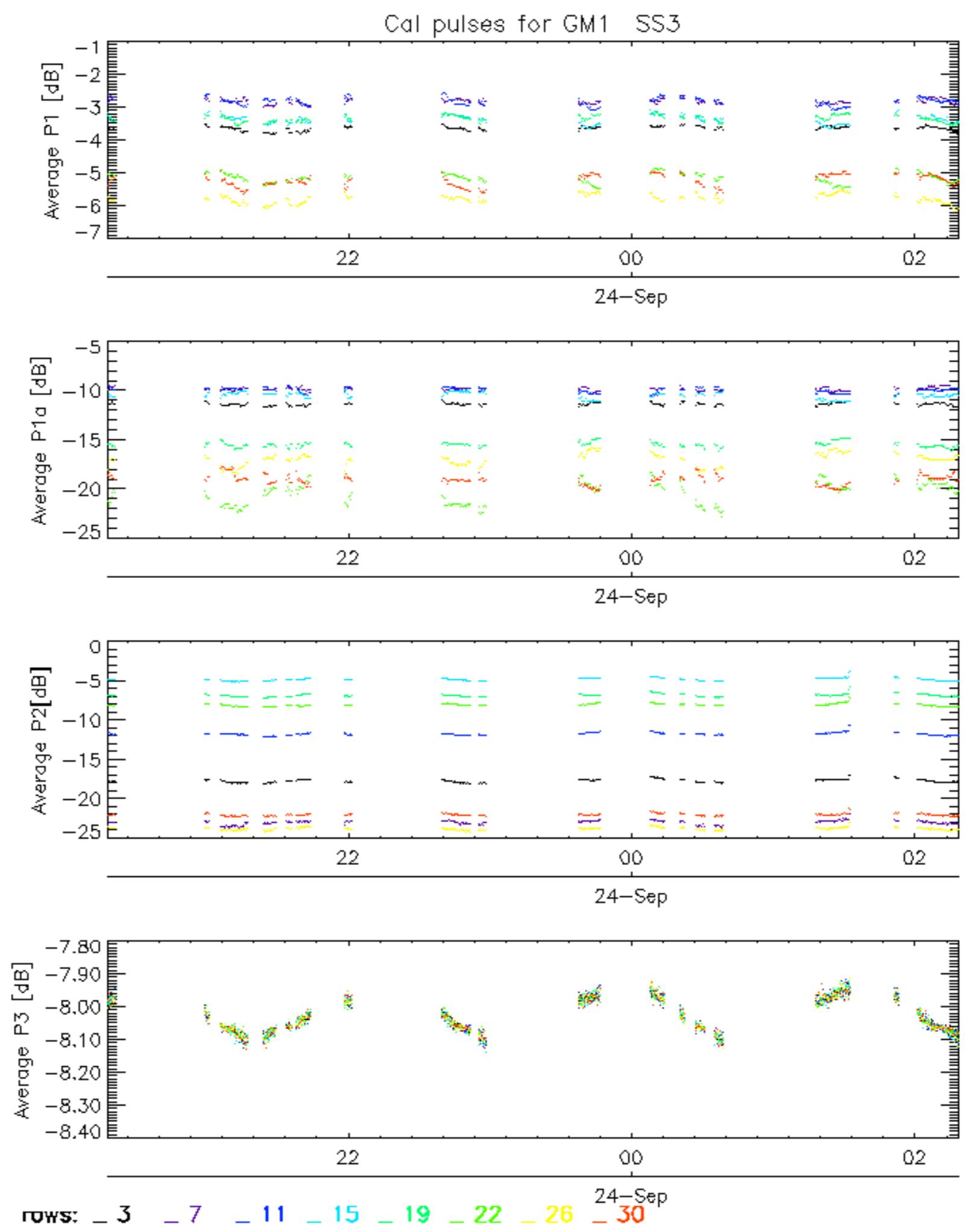
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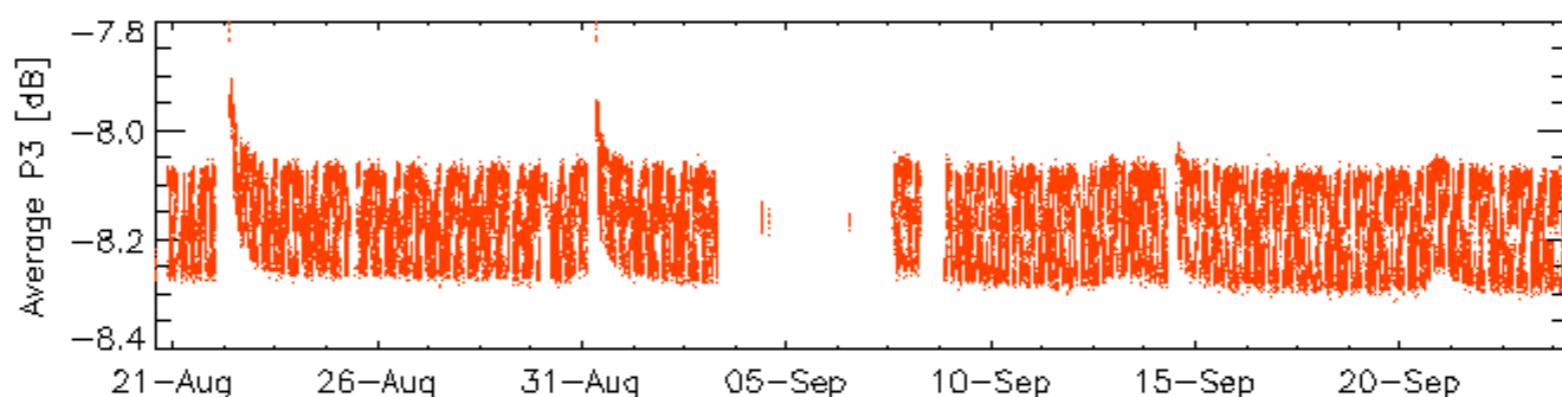
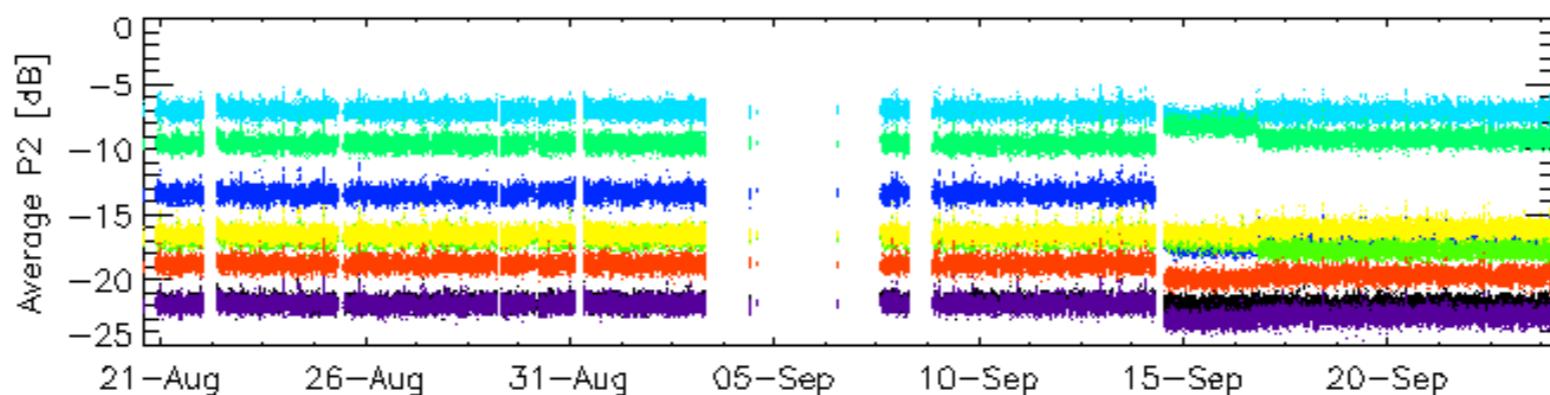
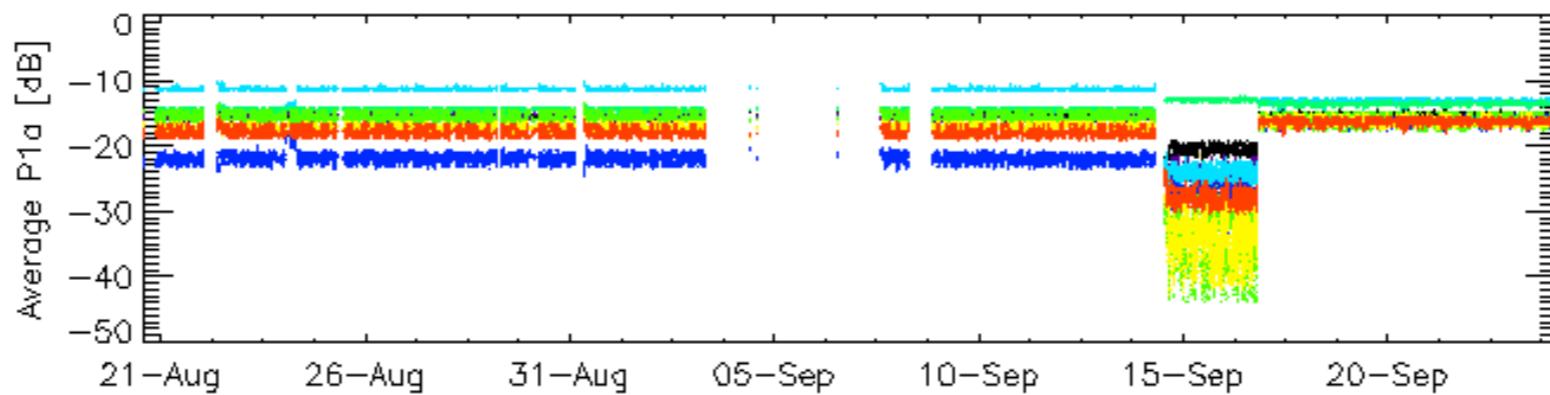
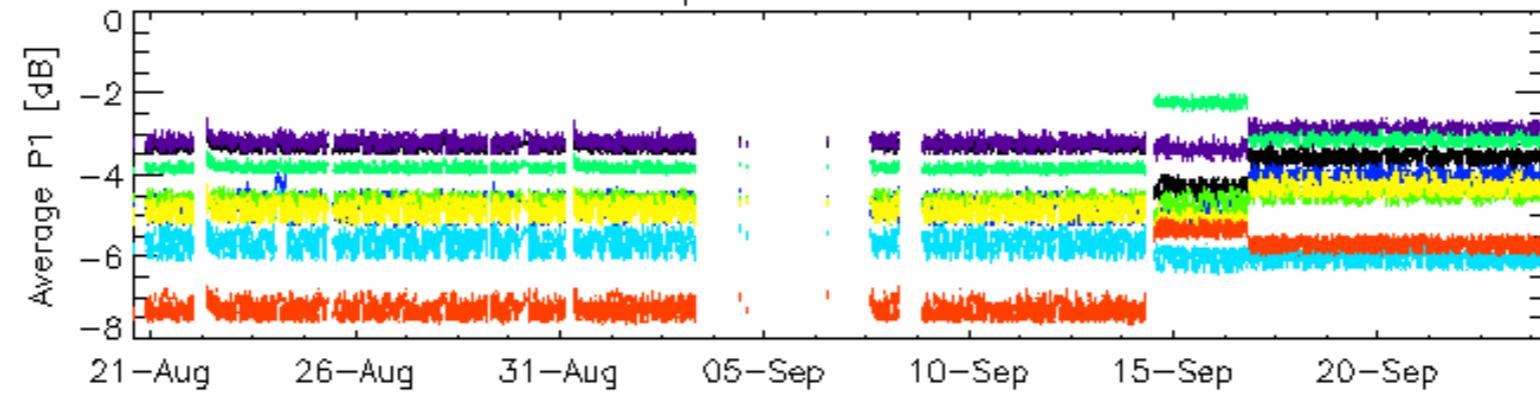


Cal pulses for GM1 SS3

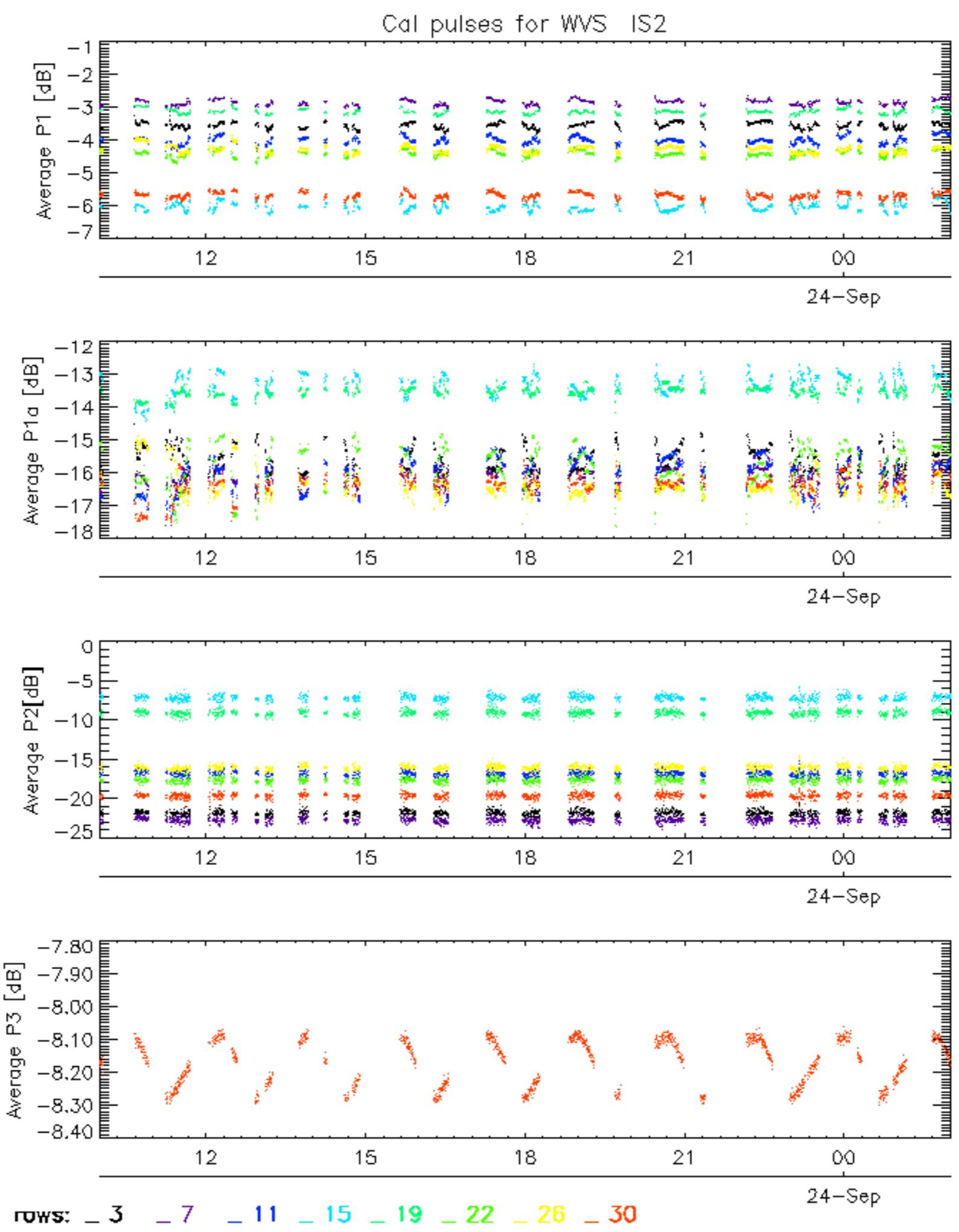




Cal pulses for WVS IS2

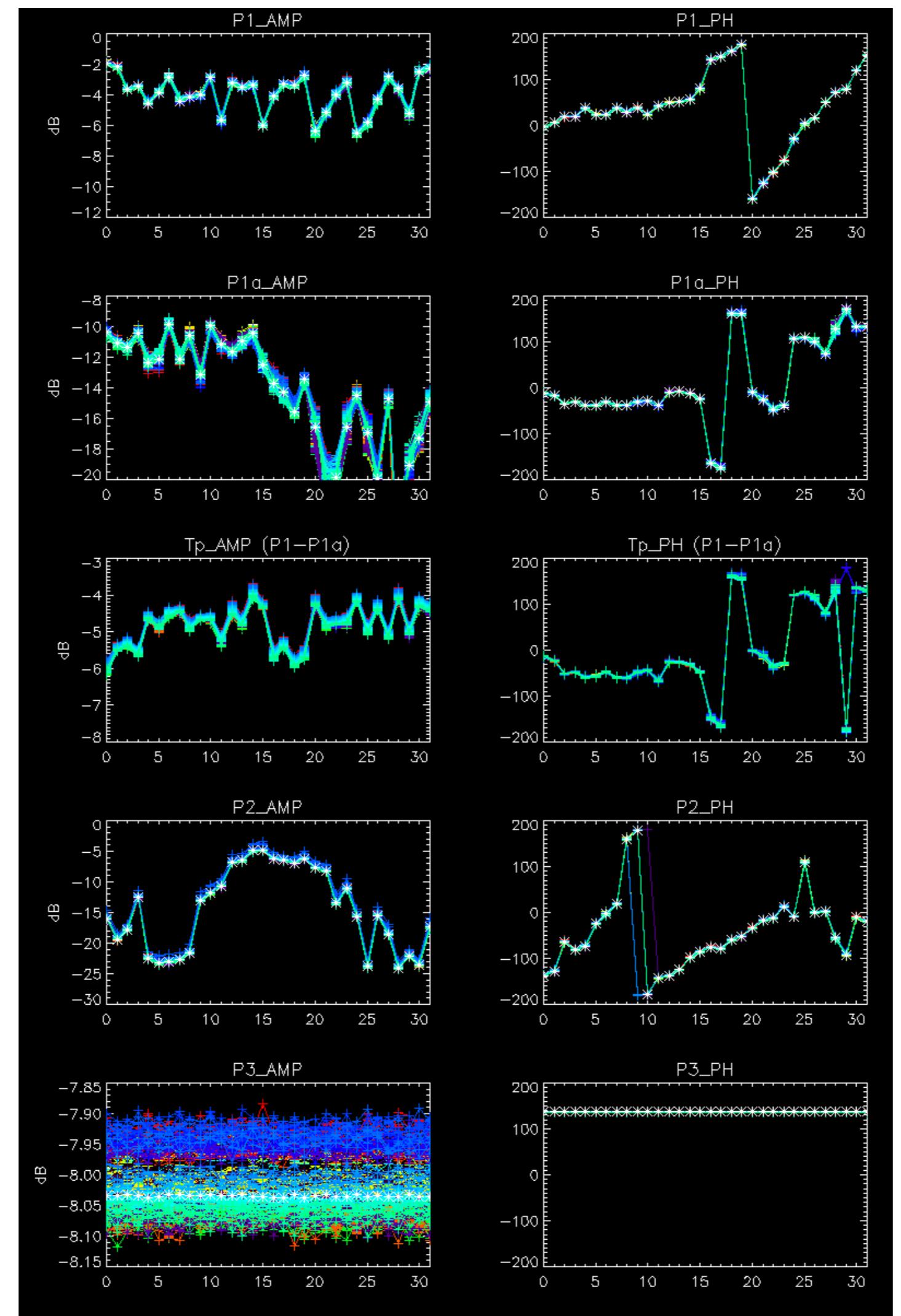


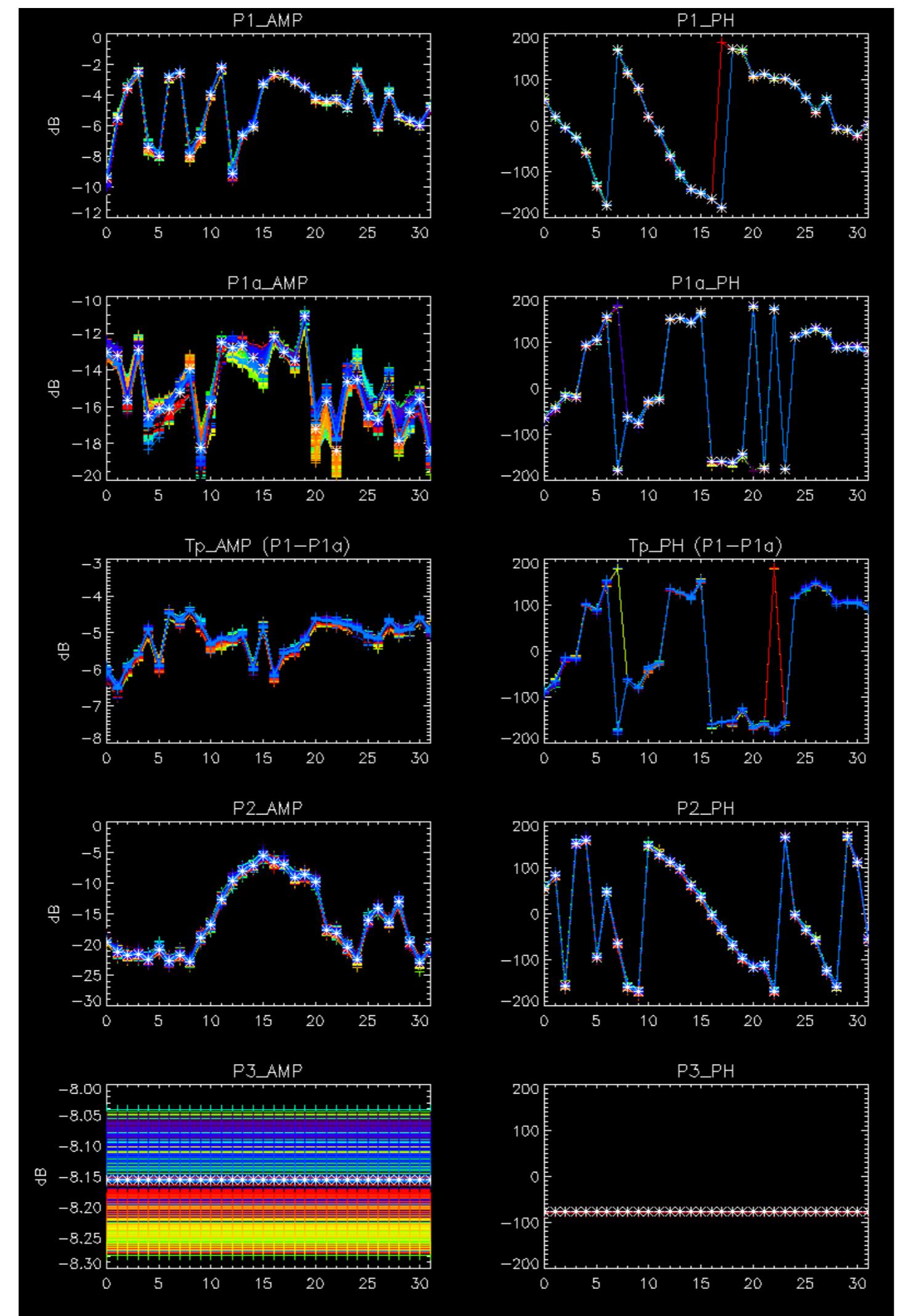
ROWS: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30



No anomalies observed.

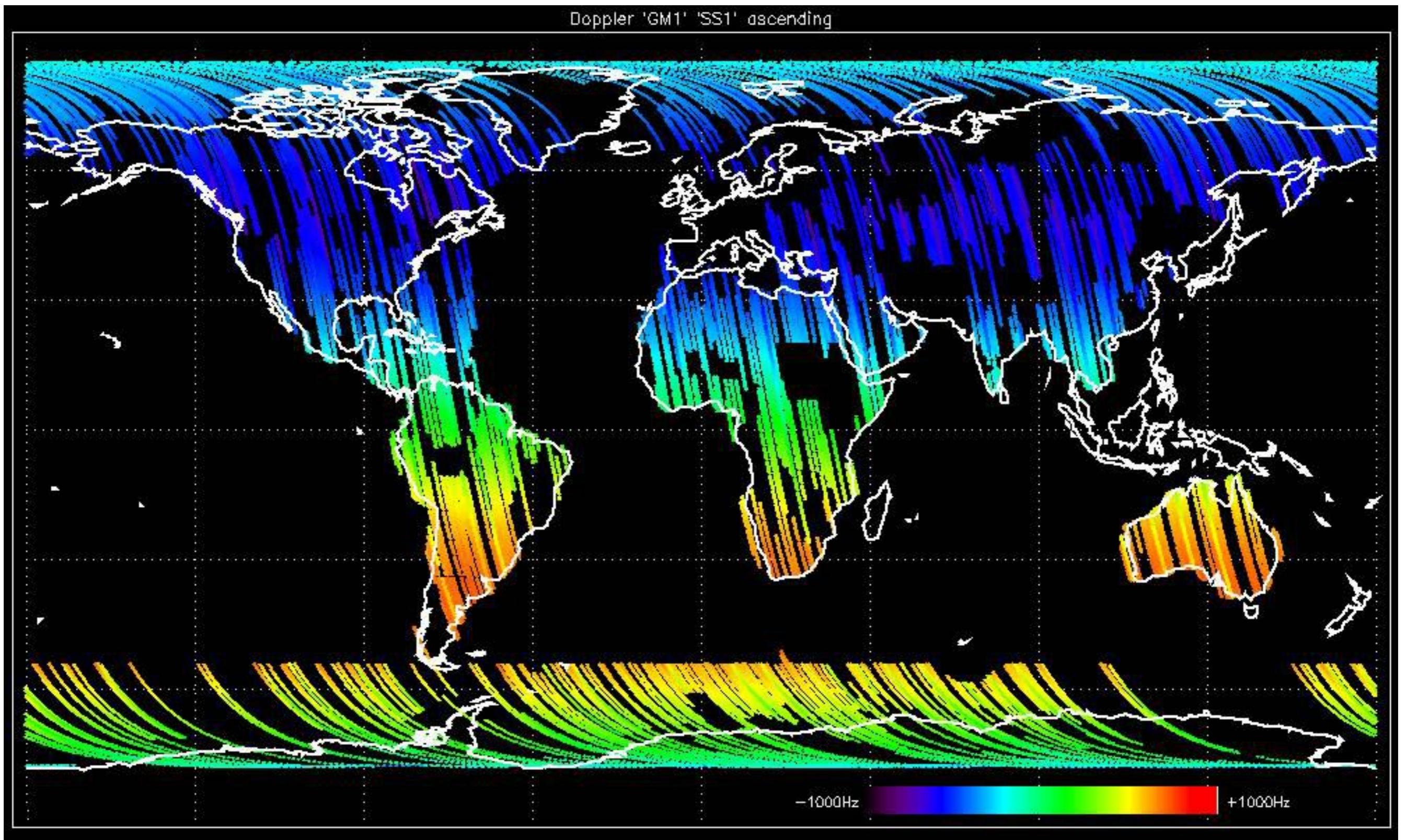


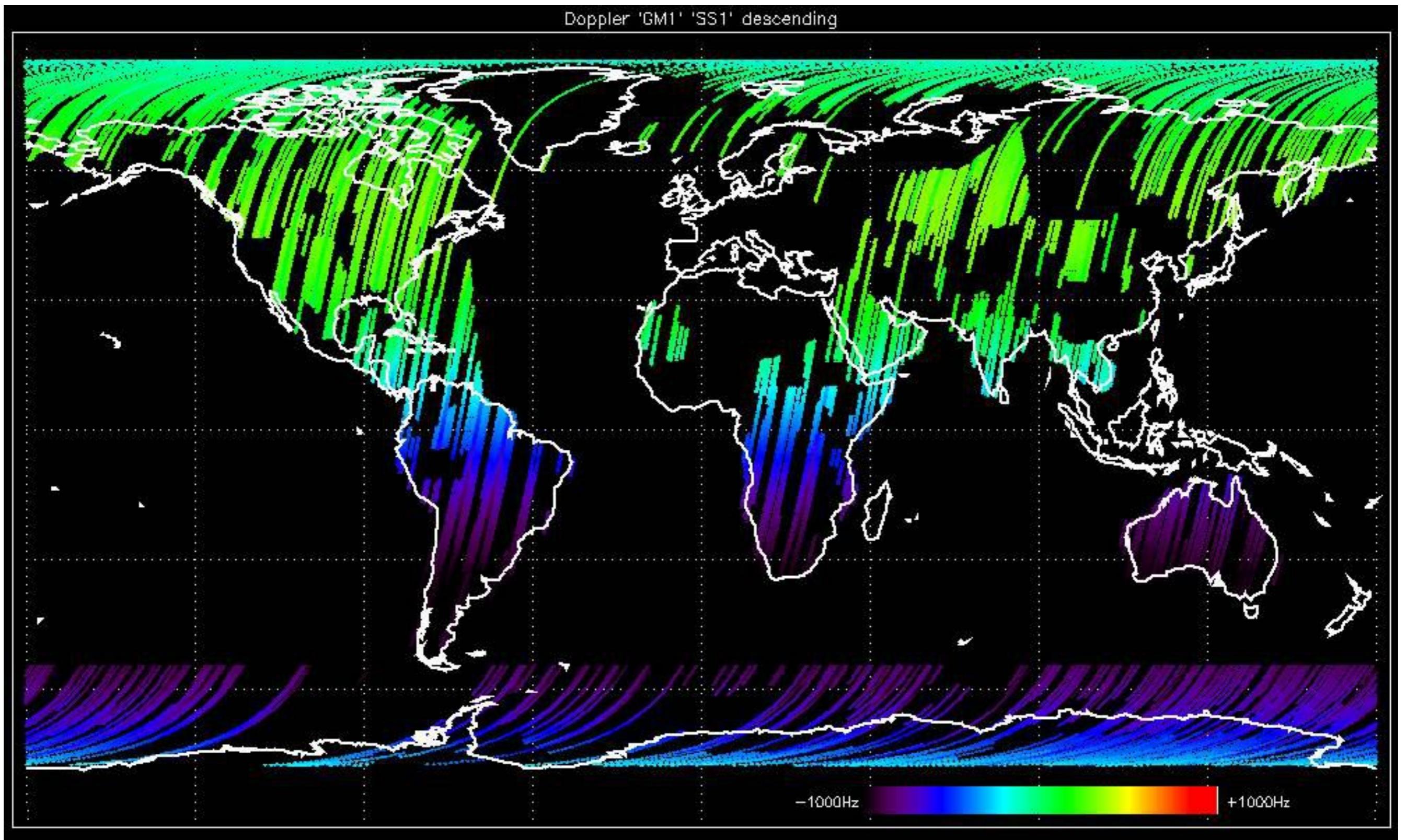


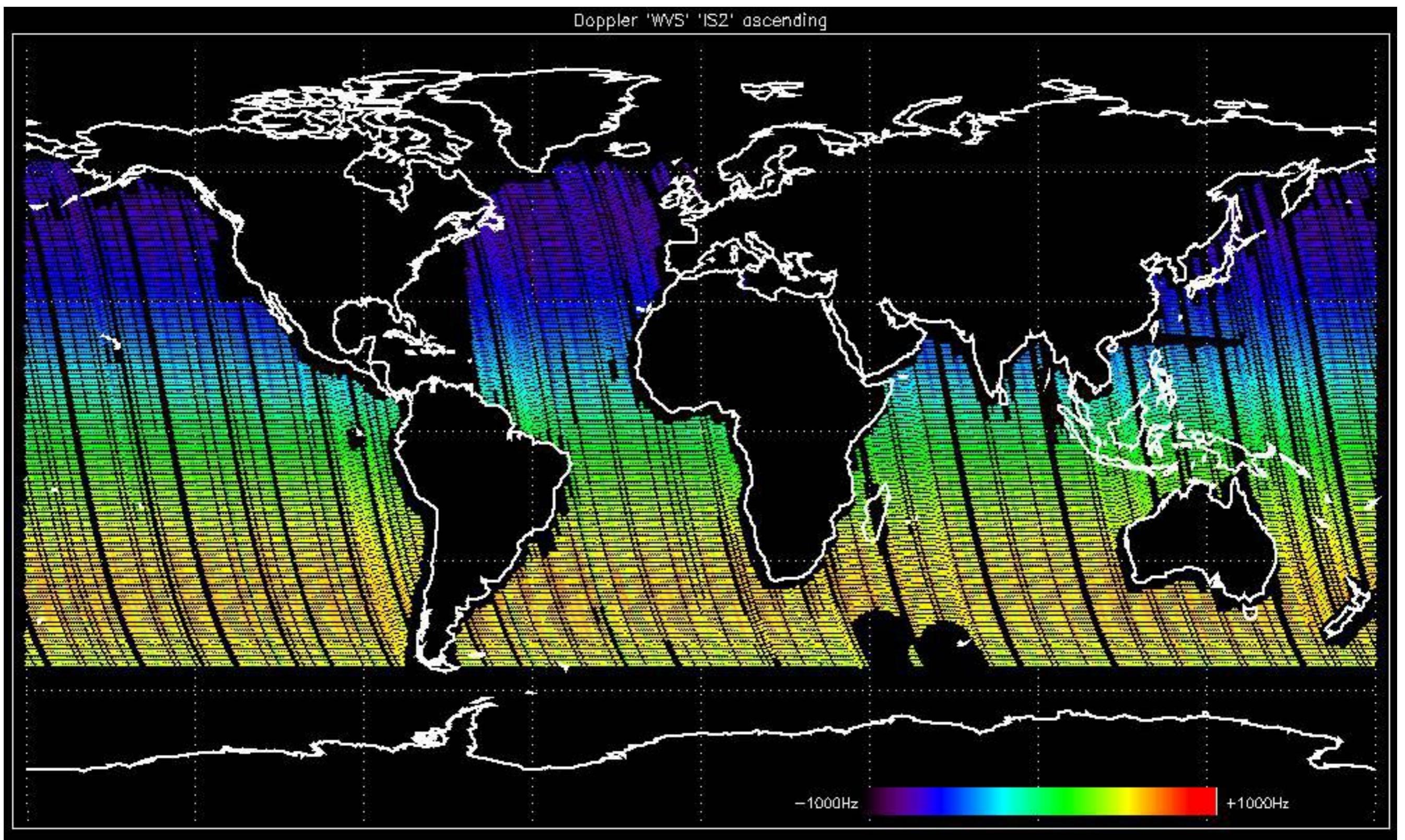


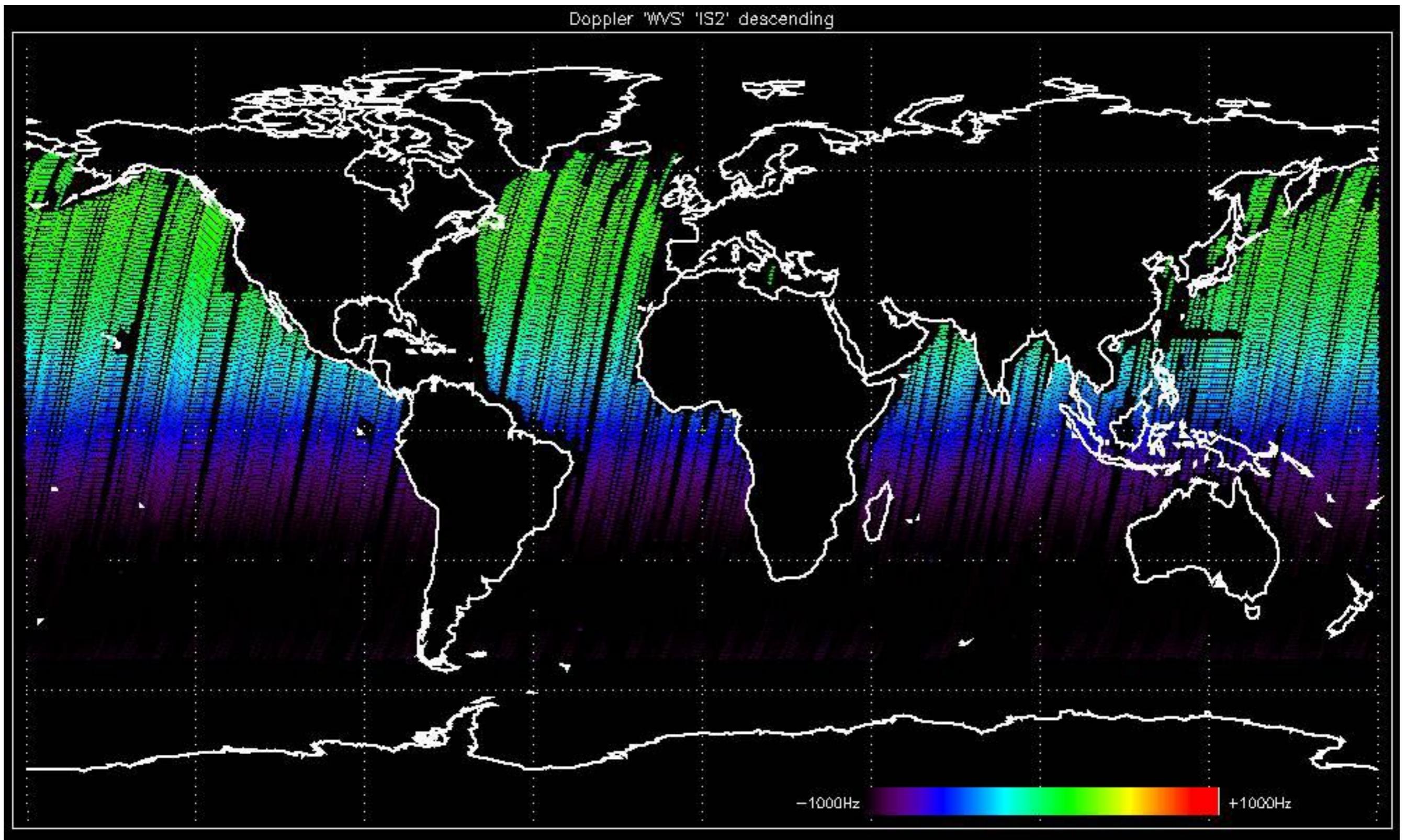
- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

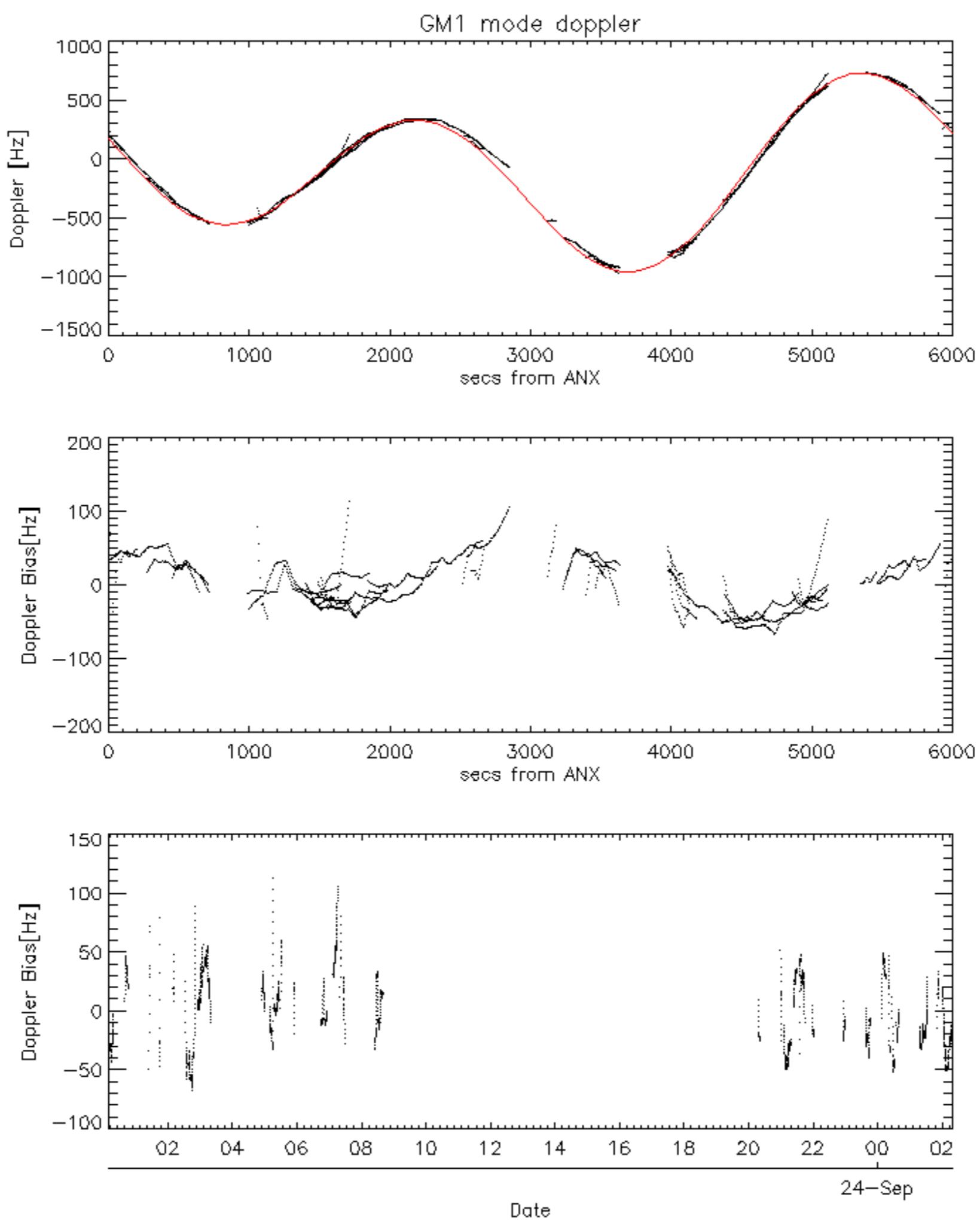


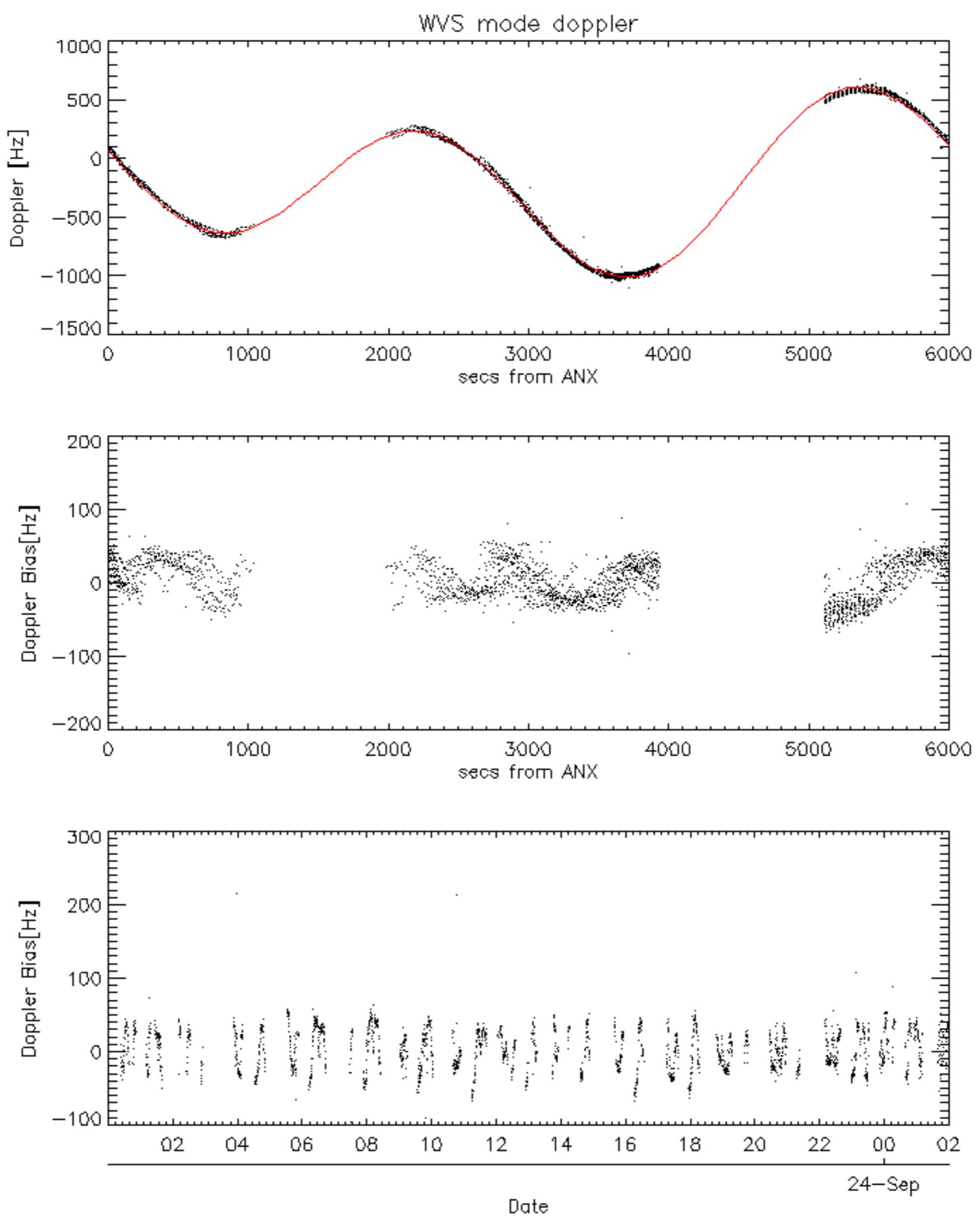


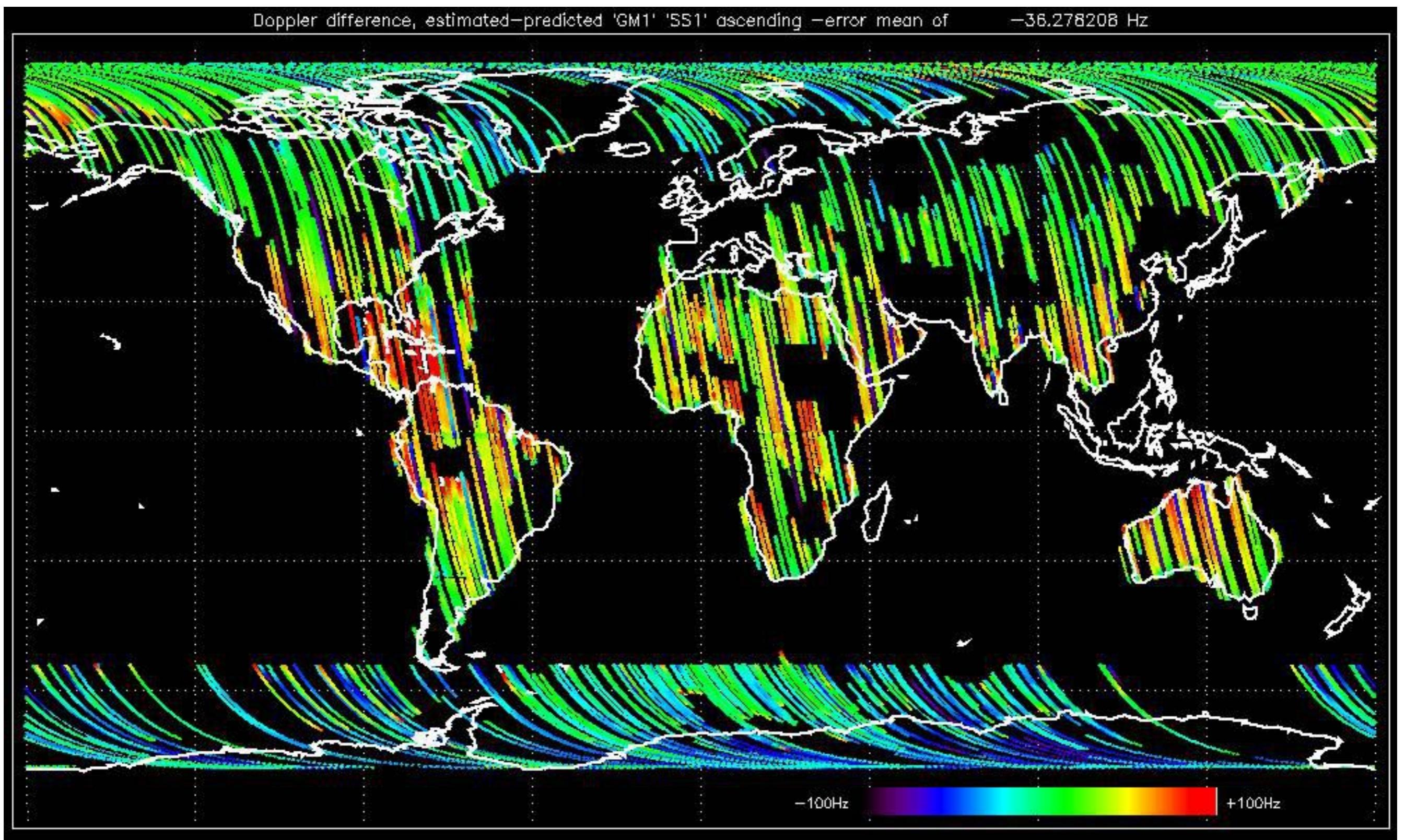


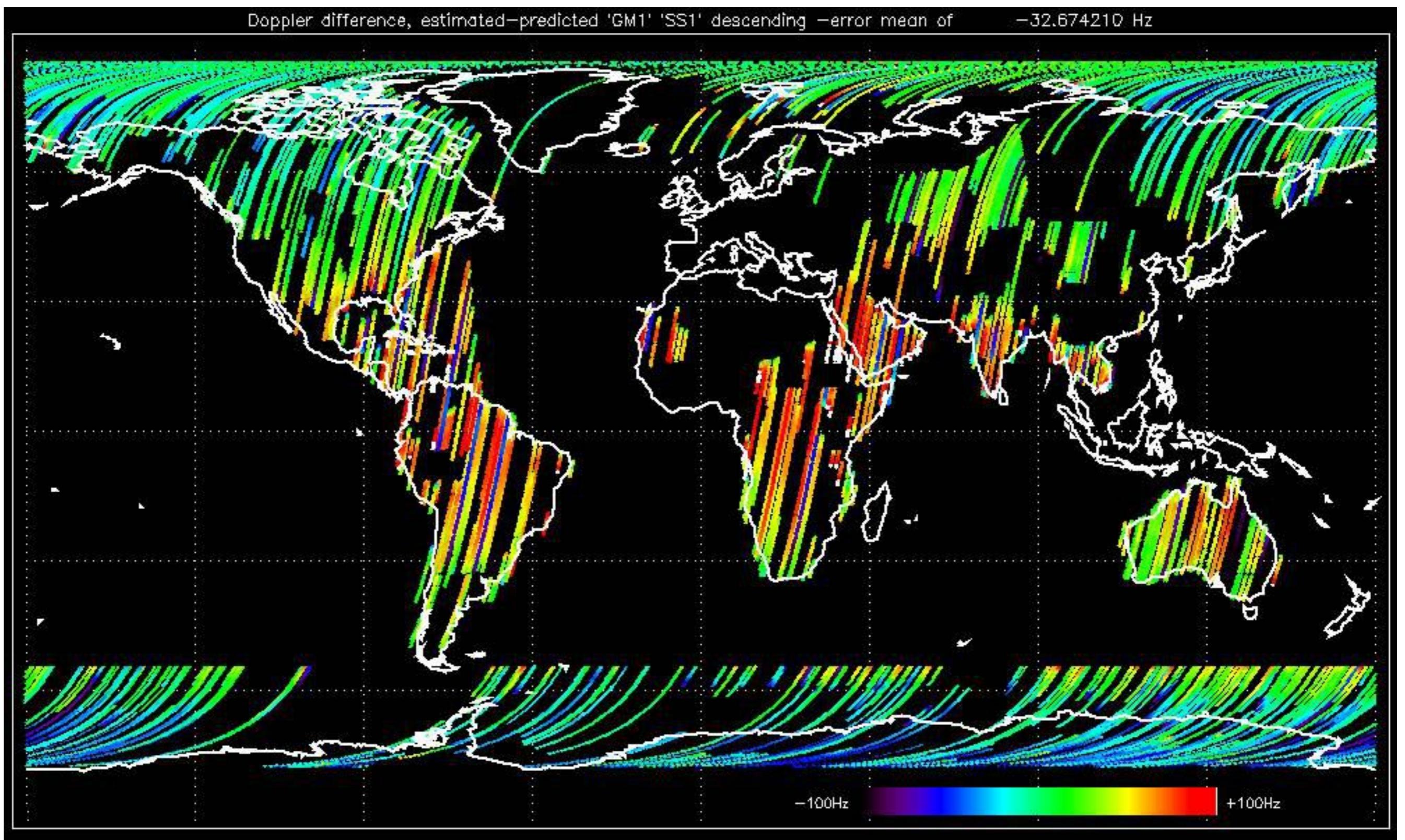


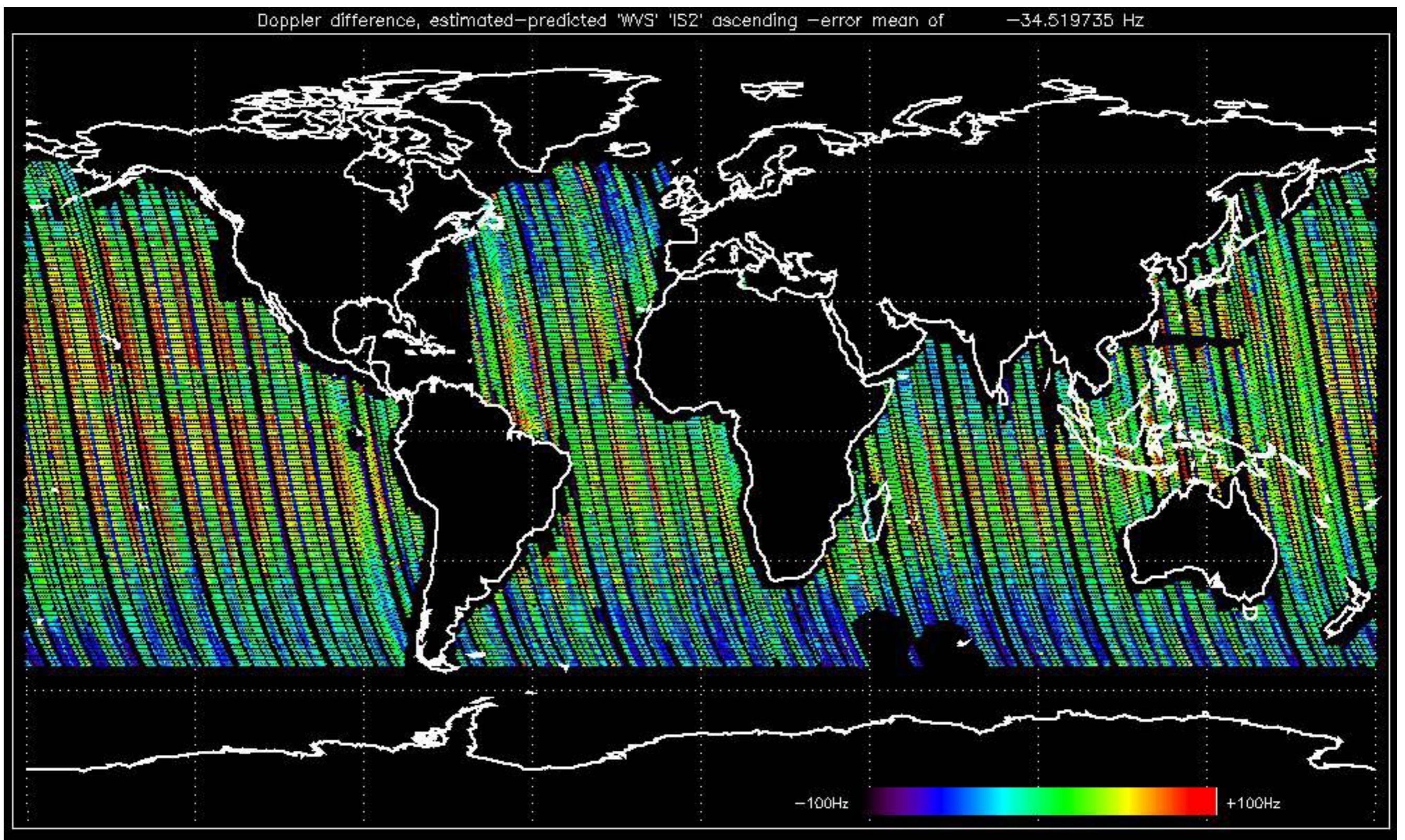


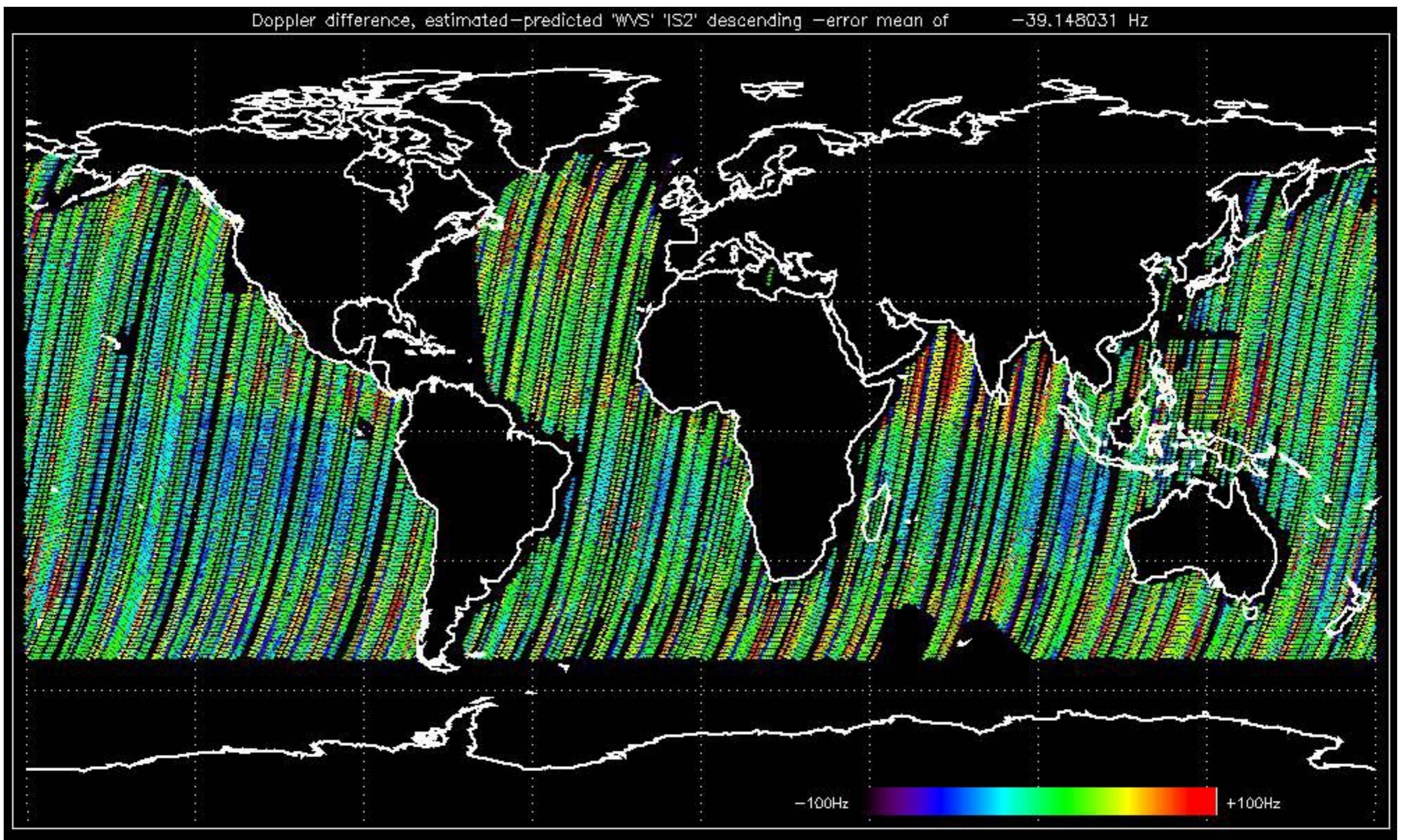












No anomalies observed on available MS products:

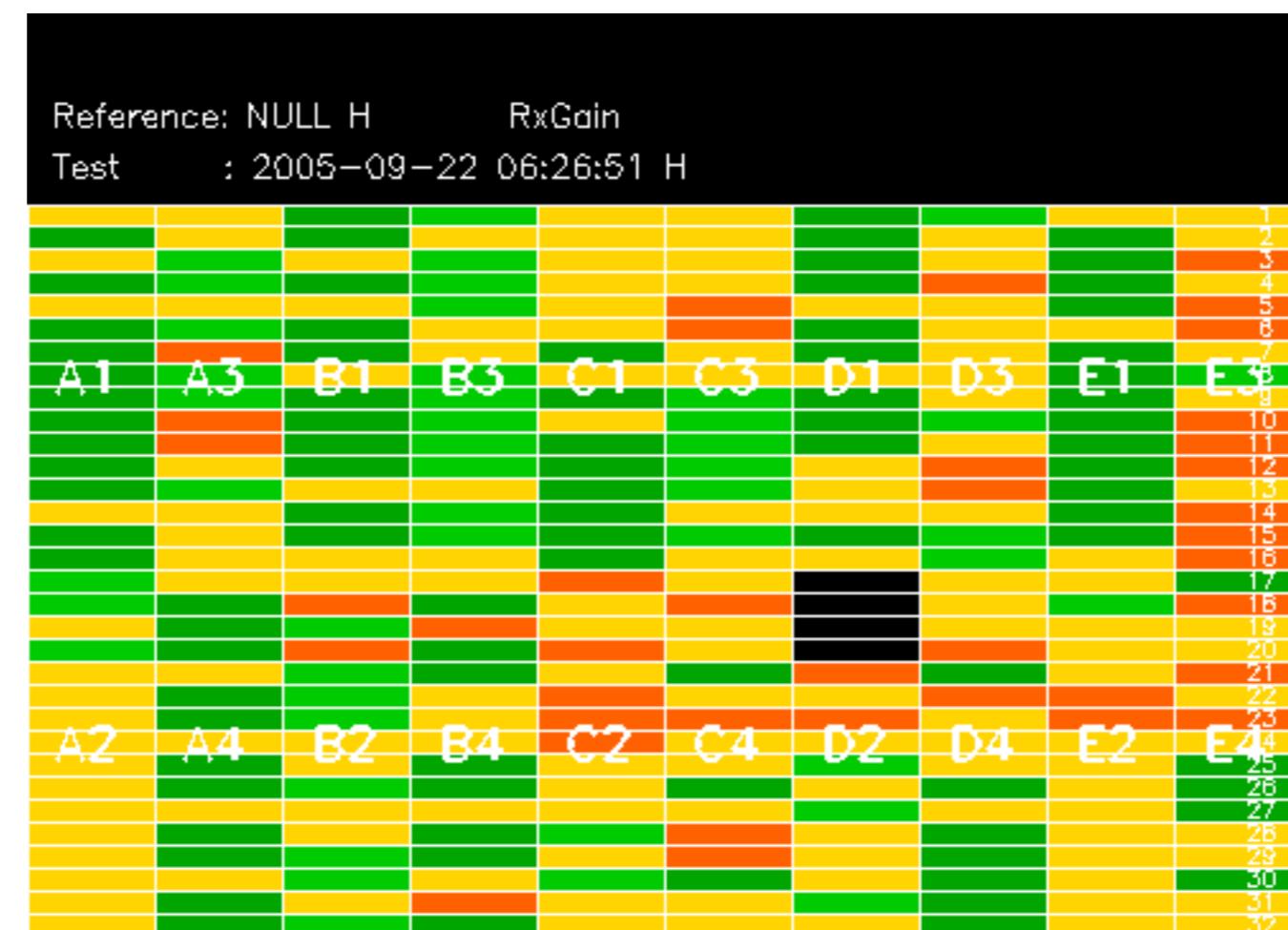


No anomalies observed.



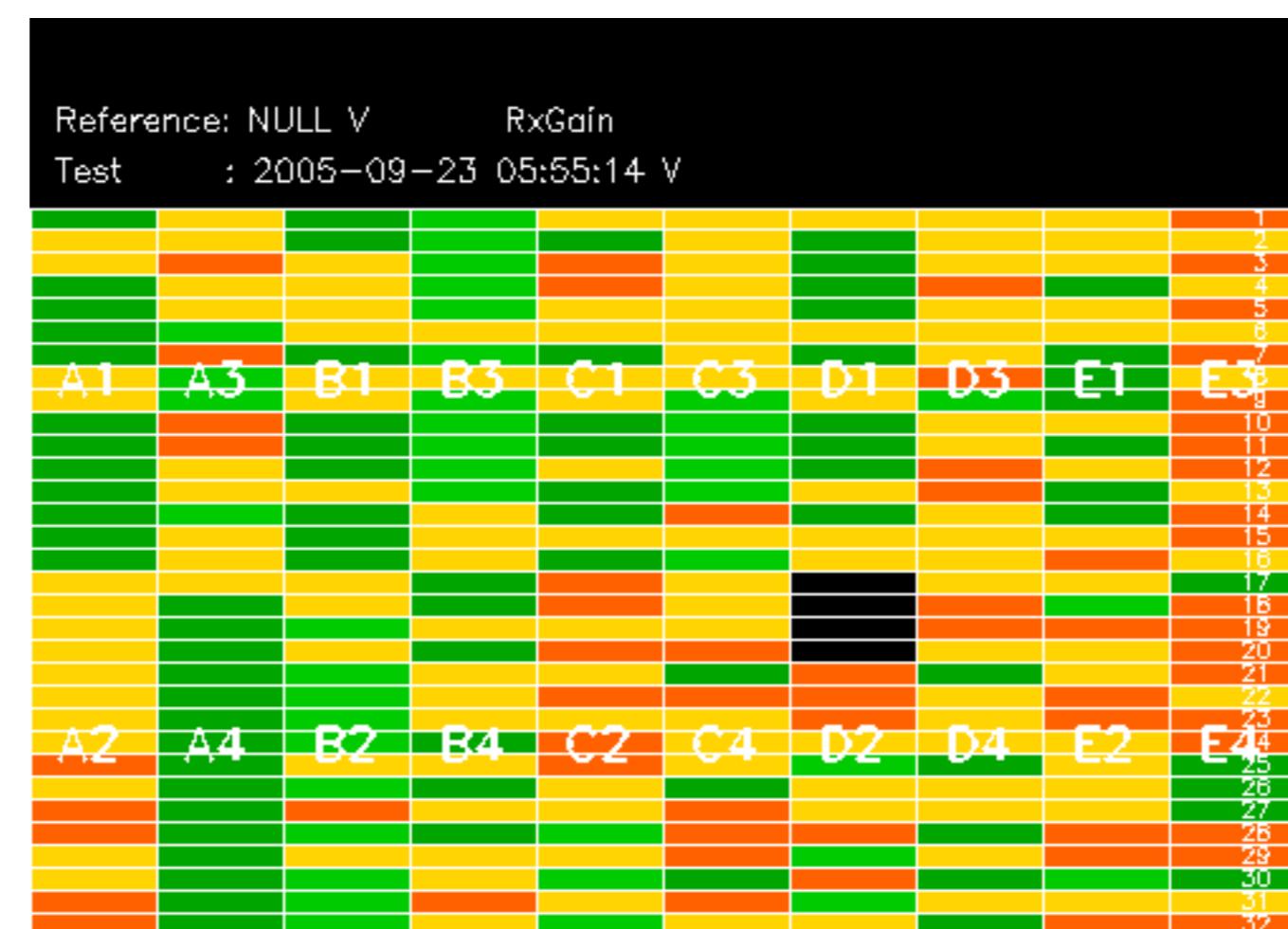
Reference: 2001-02-09 13:50:42 H RxGain

Test : 2005-09-22 06:26:51 H



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

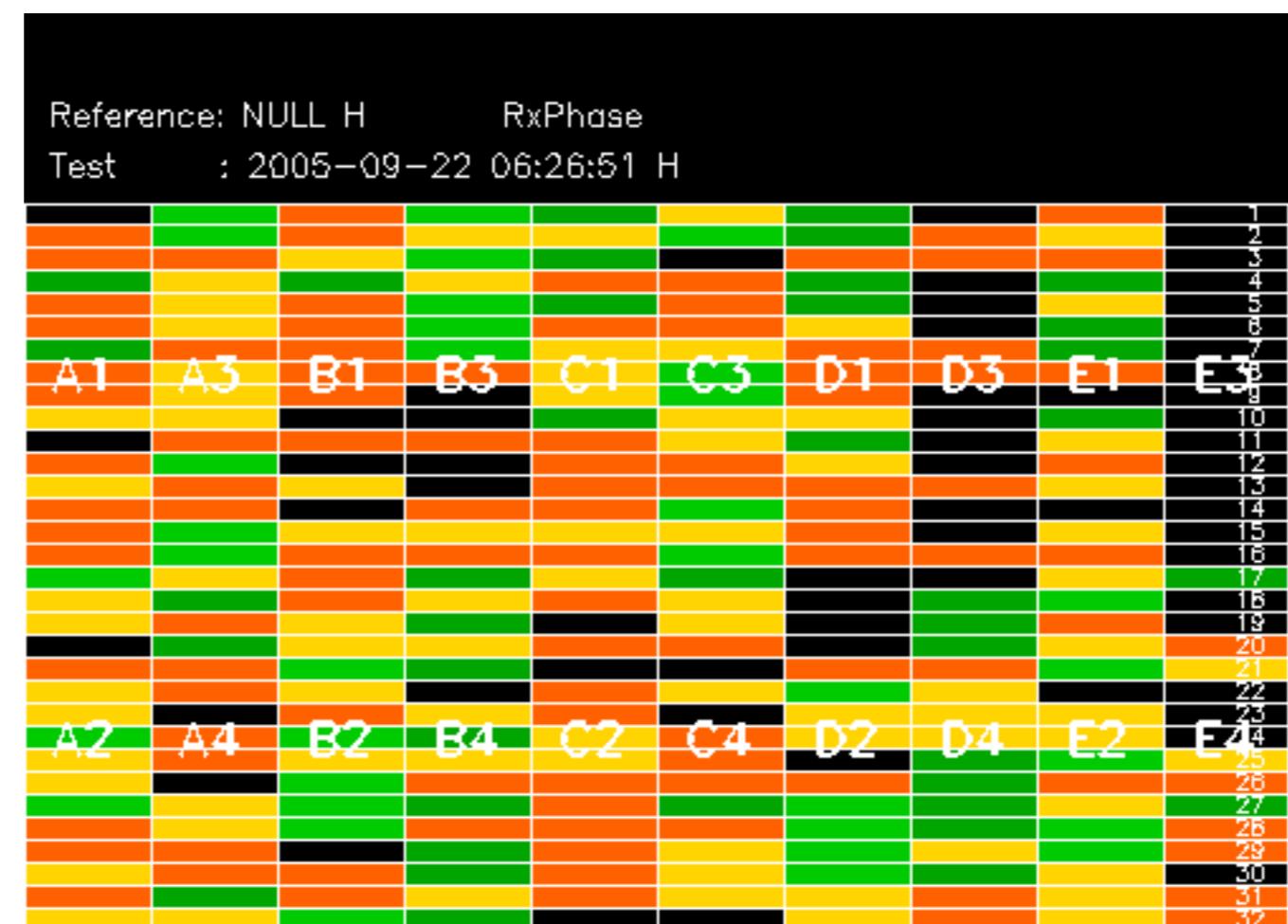
Test : 2005-09-23 05:55:14 V

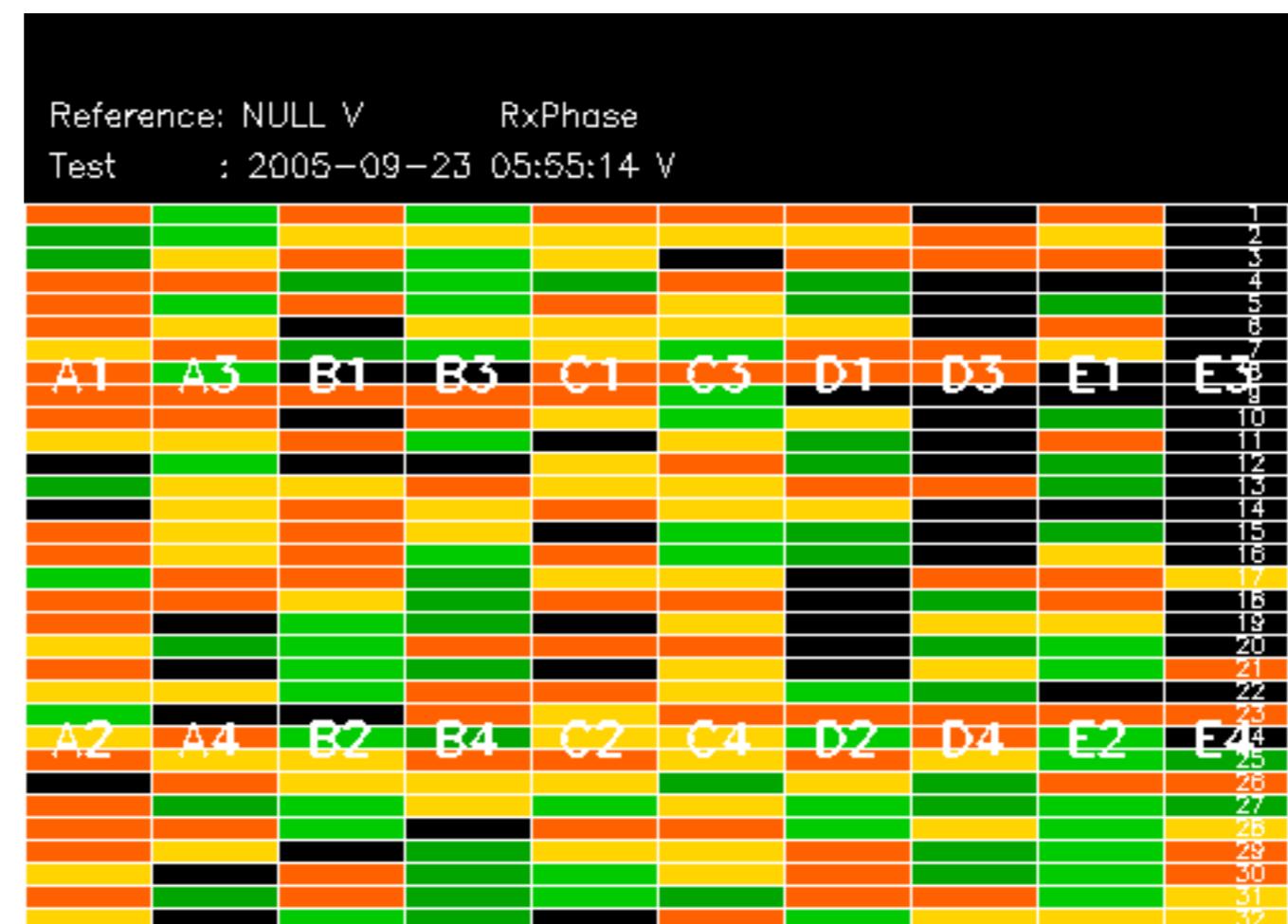


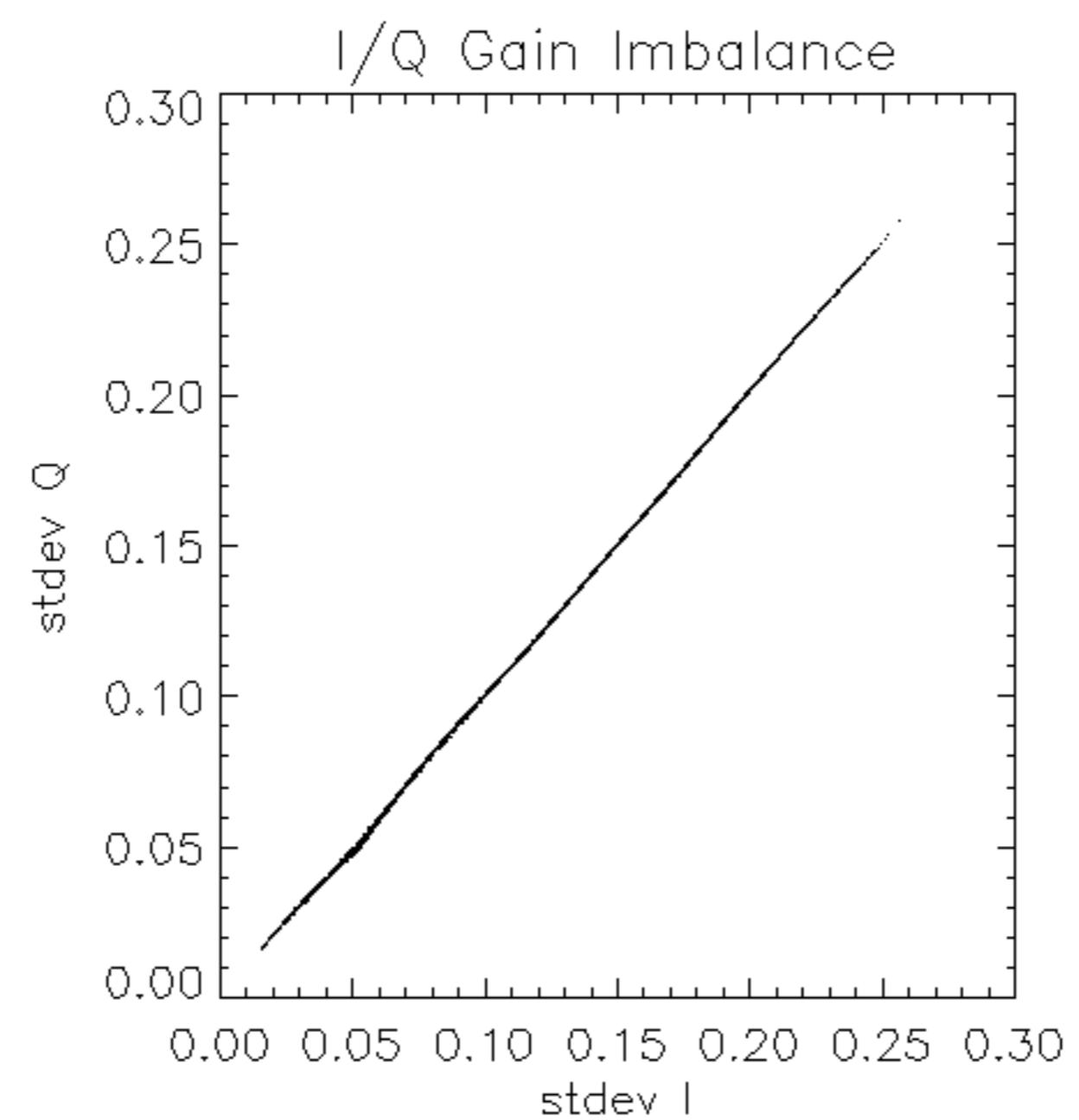
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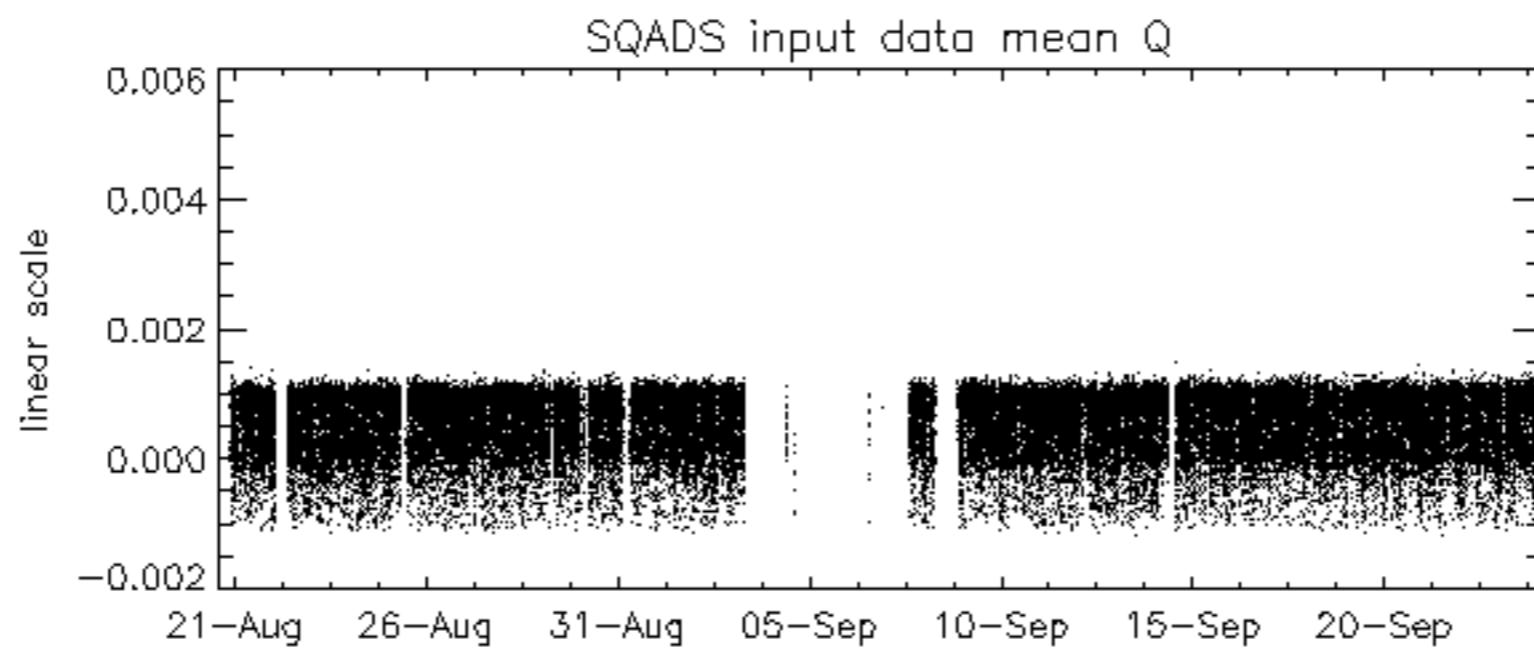
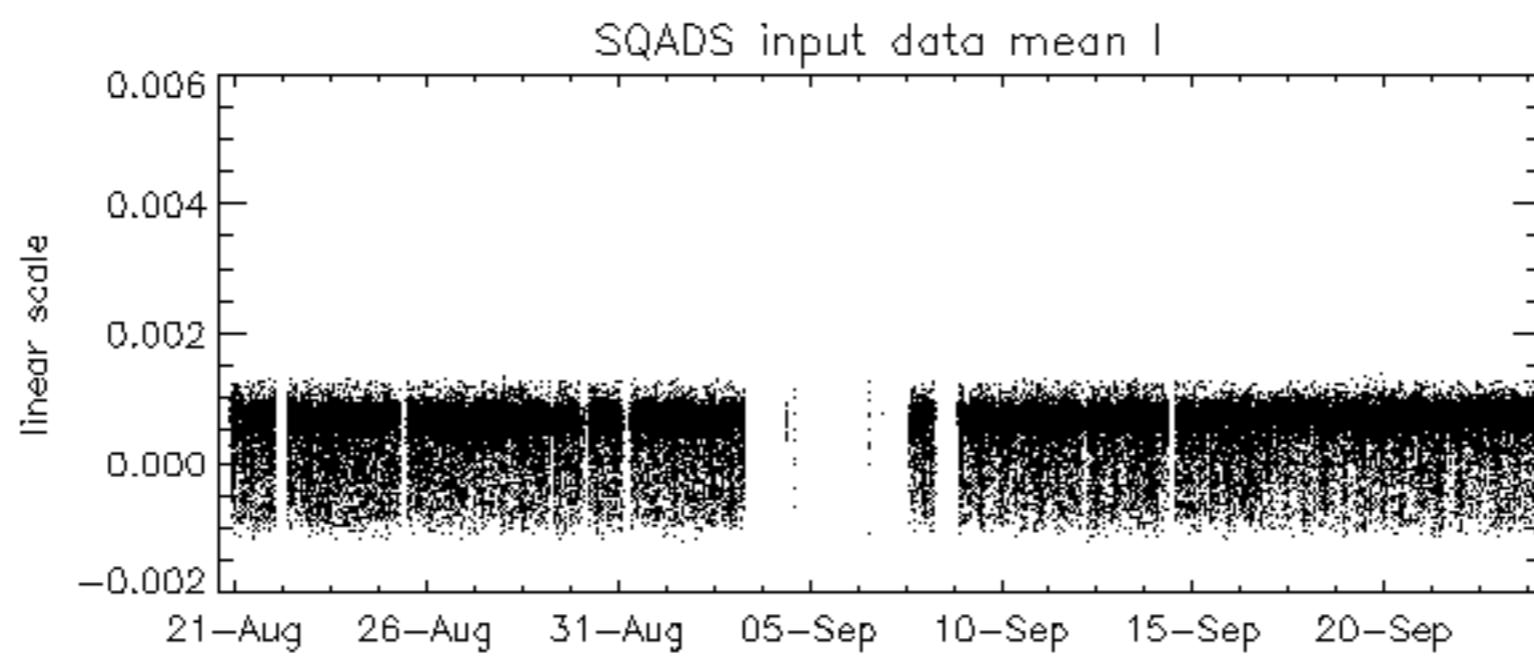
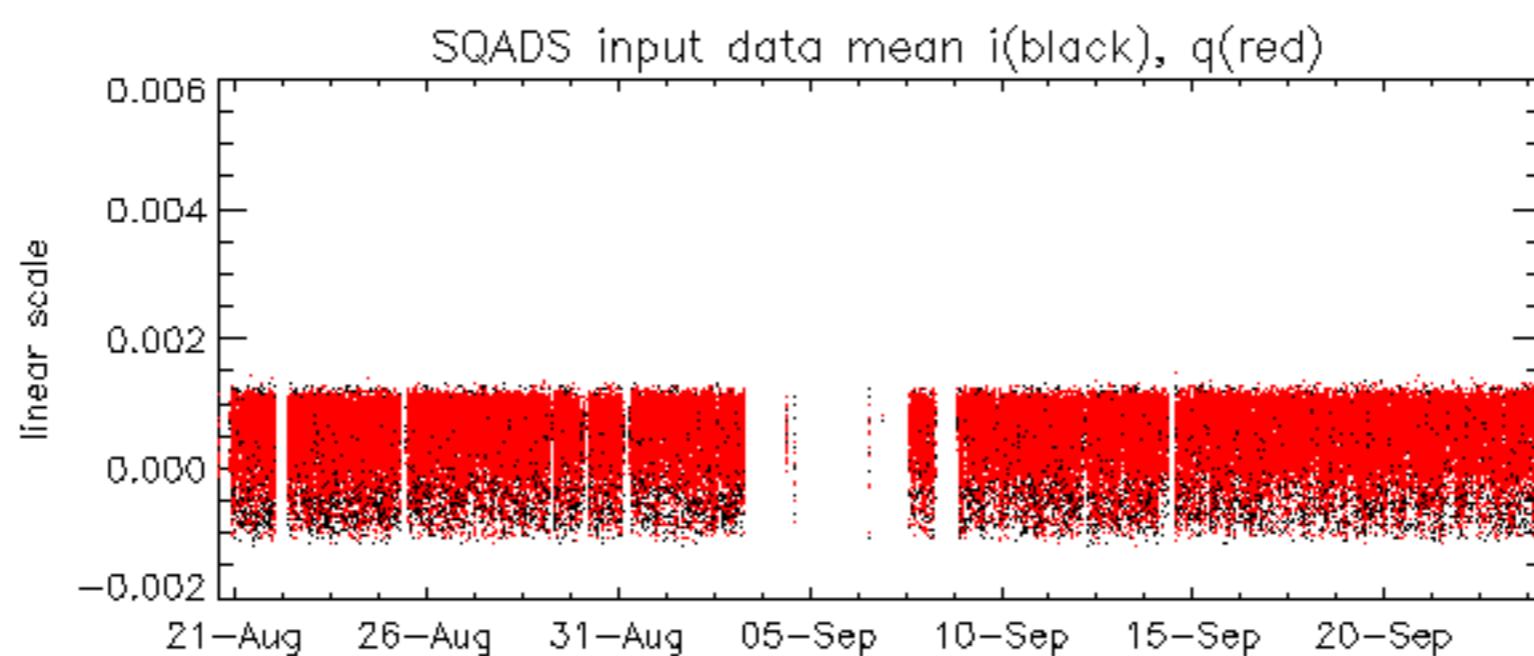
Test : 2005-09-22 06:26:51 H

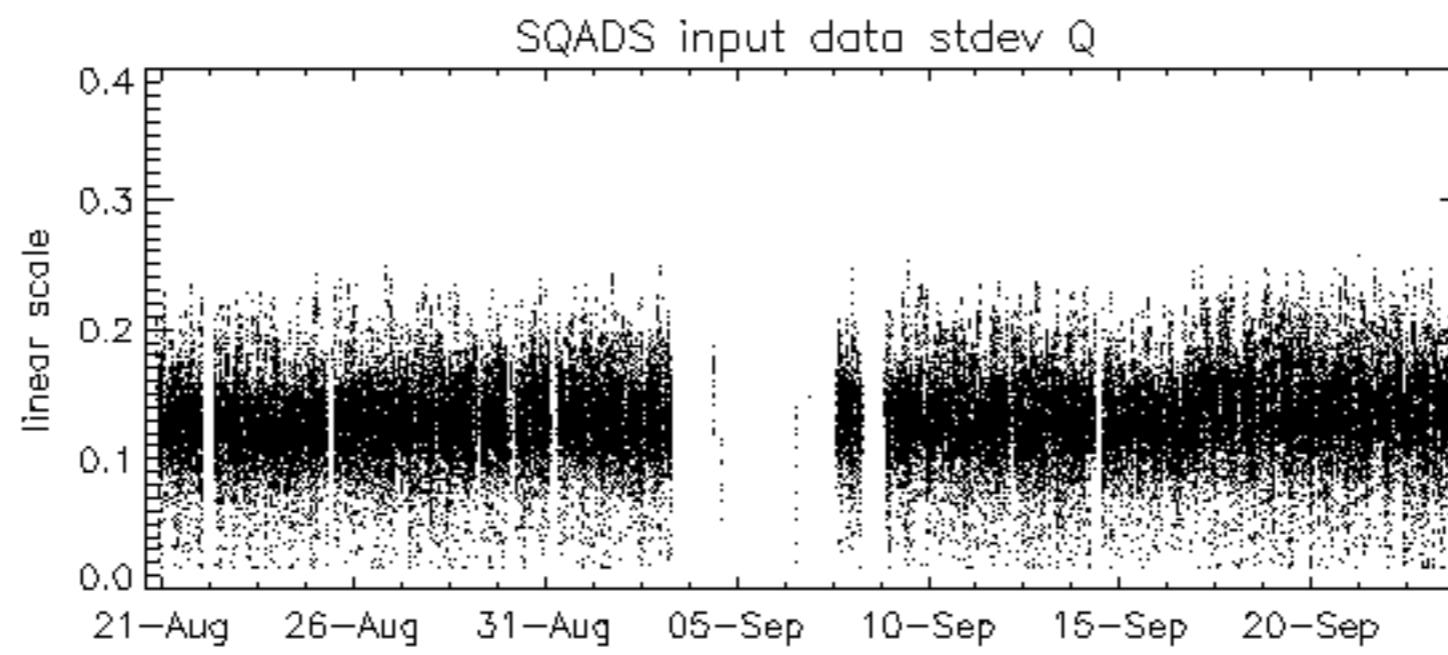
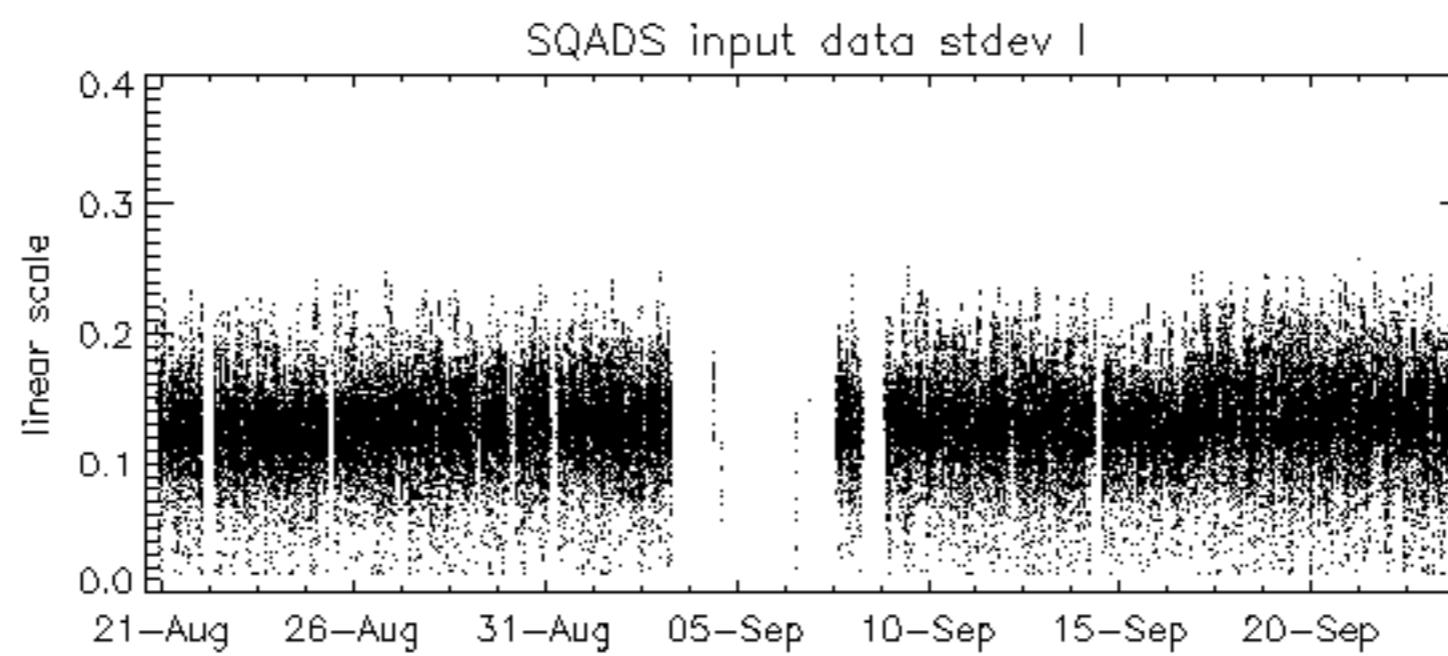
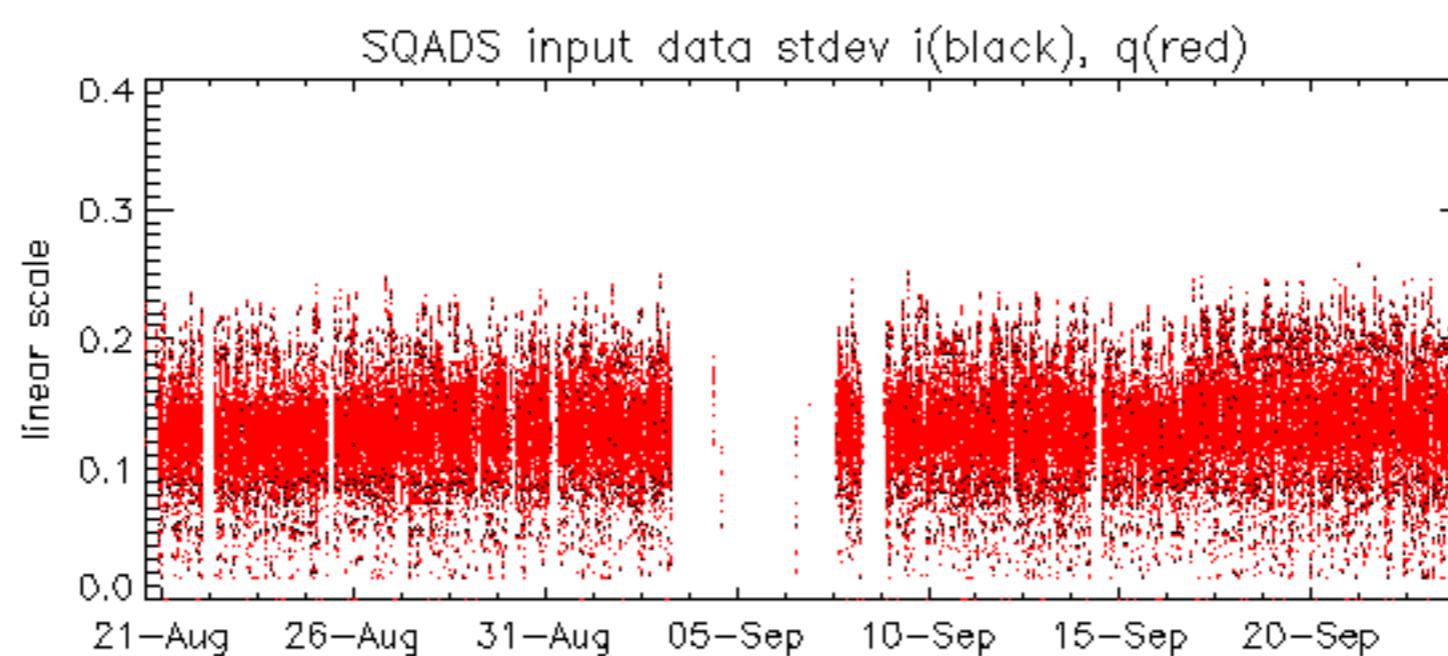
<img alt="A 10x30 grid of colored cells representing a matrix. The columns are labeled A1 through E3 and the rows are labeled 1 through 32. Yellow cells are located at various positions, including (A1, 1), (A3, 1), (B1, 1), (B3, 1), (C1, 1), (C3, 1), (D1, 1), (D3, 1), (E1, 1), (E3, 1), (A1, 2), (A3, 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>







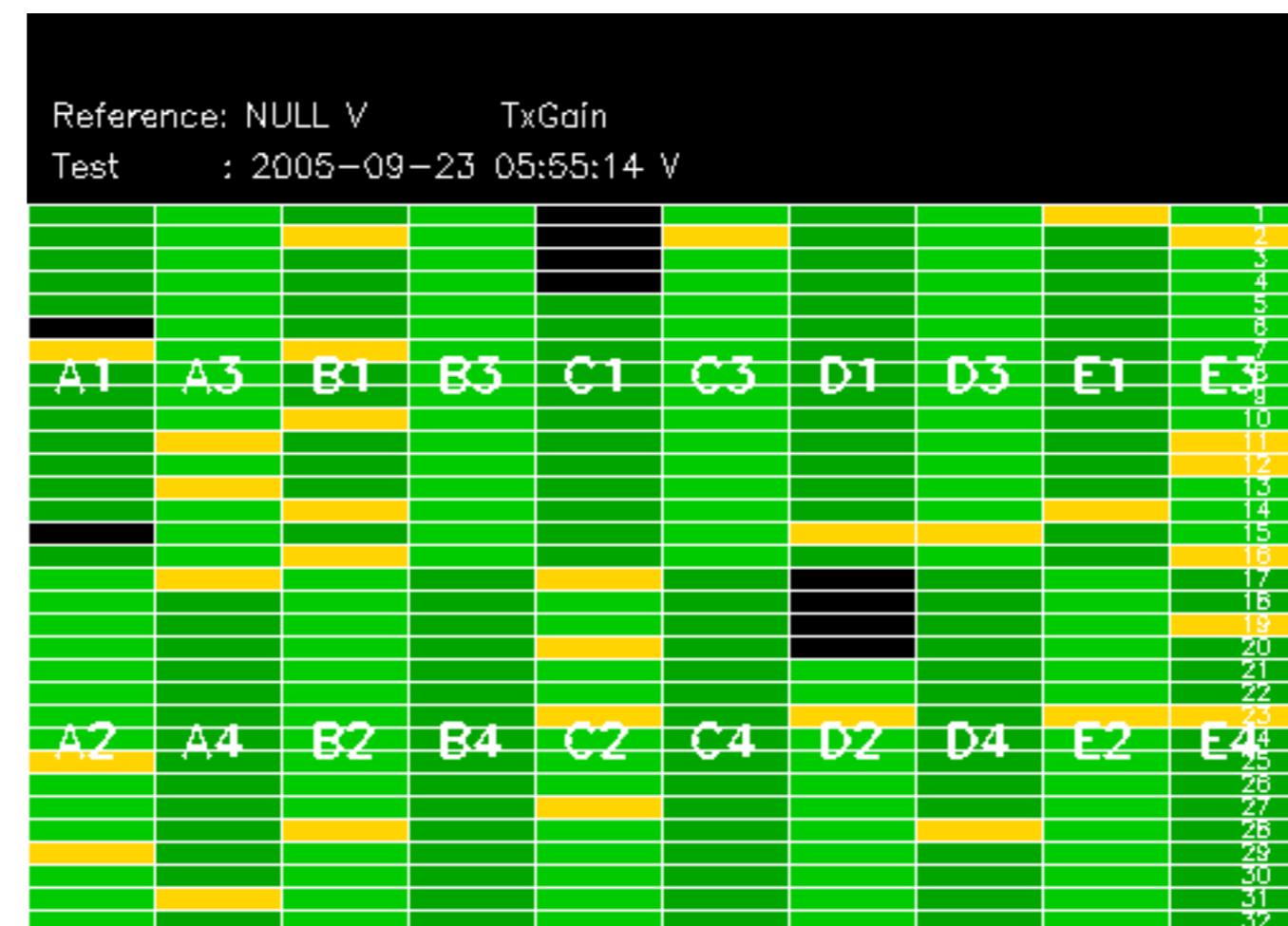




Reference: 2001-02-09 13:50:42 H

Test : 2005-09-22 06:26:51 H

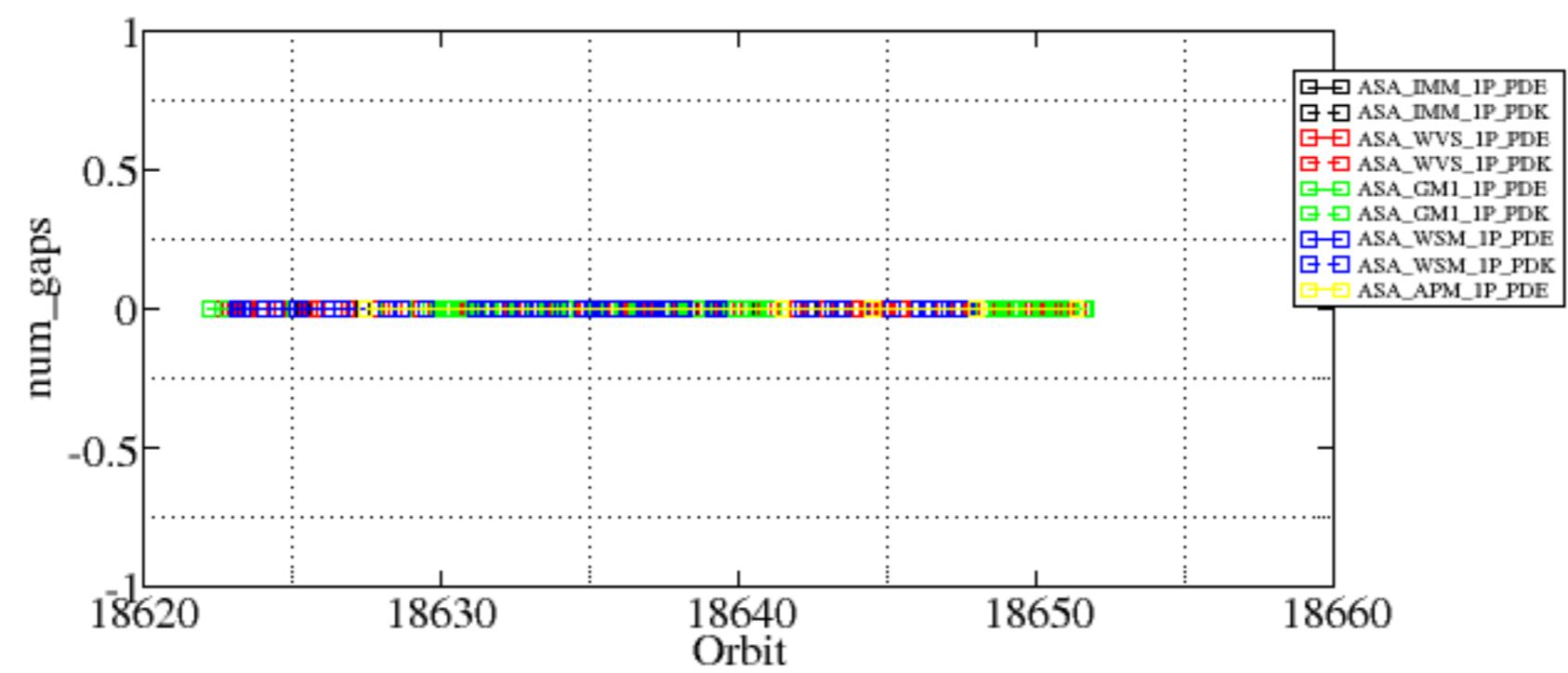
Reference:	2001-02-09 14:08:23 V	TxGain
Test	: 2005-09-23 05:55:14 V	
		1
		2
		3
		4
		5
		6
		7
A1	A3	B1
B3	C1	C3
D1	D3	E1
		E3
		8
		9
		10
		11
		12
		13
		14
		15
		16
		17
		18
		19
		20
		21
		22
		23
A2	A4	B2
B4	C2	C4
D2	D4	E2
		E4
		24
		25
		26
		27
		28
		29
		30
		31
		32

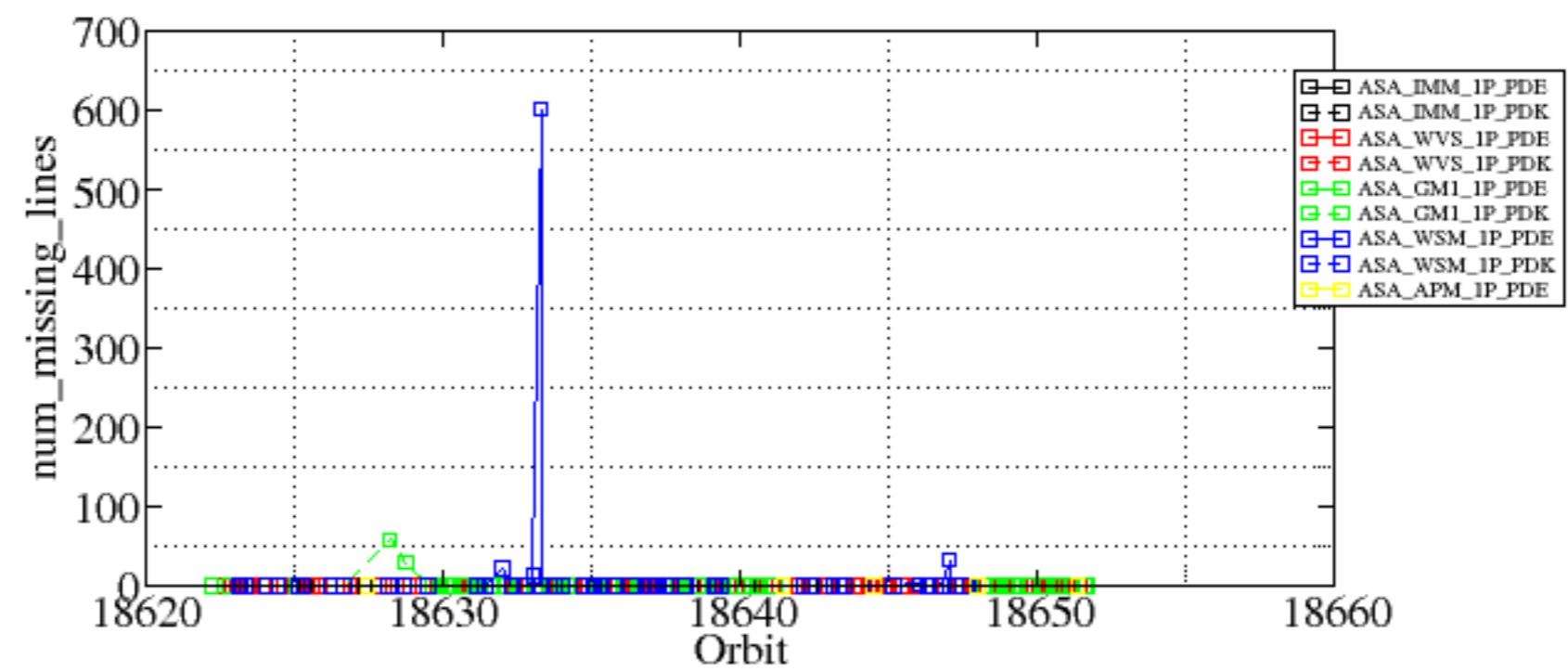


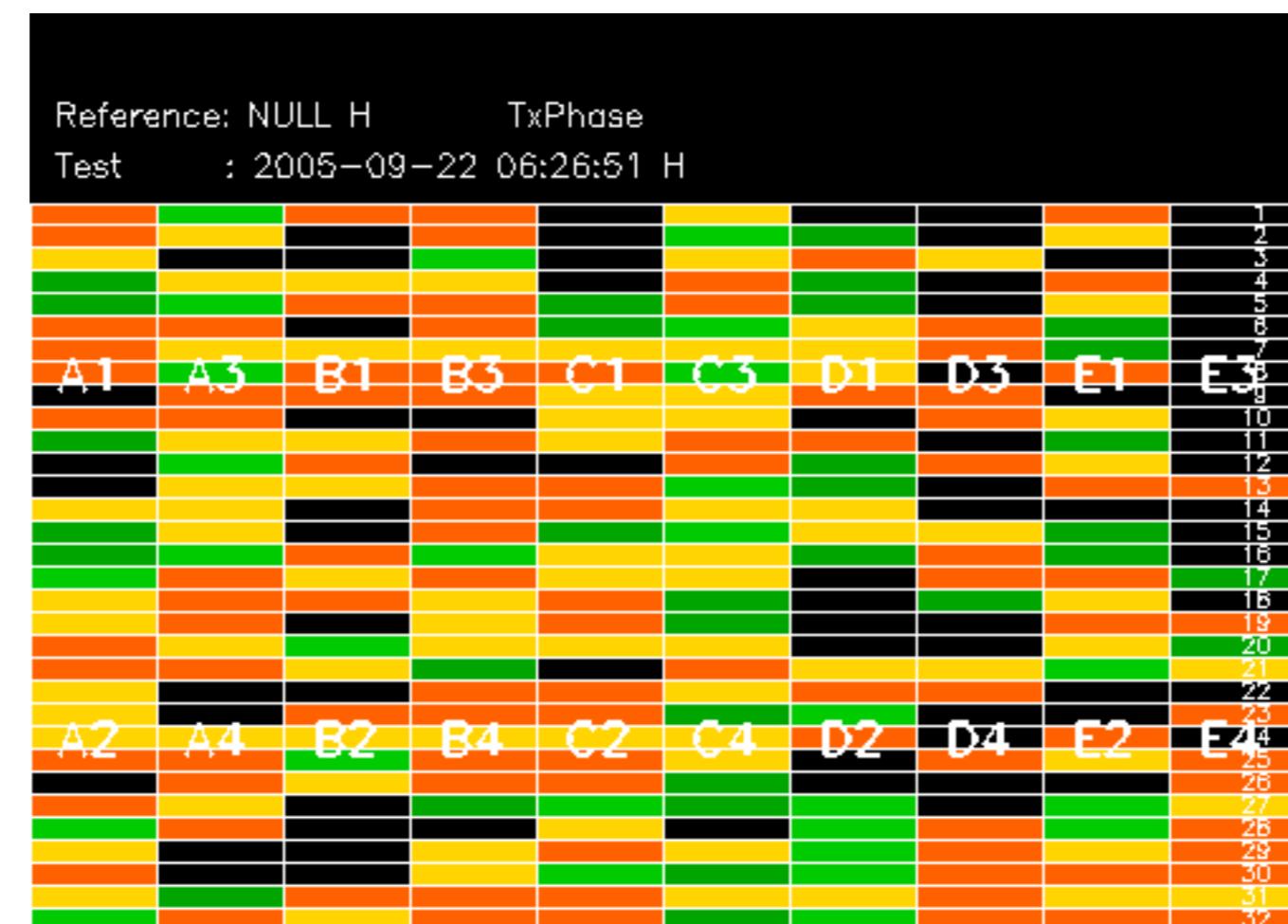
Summary of analysis for the last 3 days 2005092[234]

The assumptions is taken that the SQADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

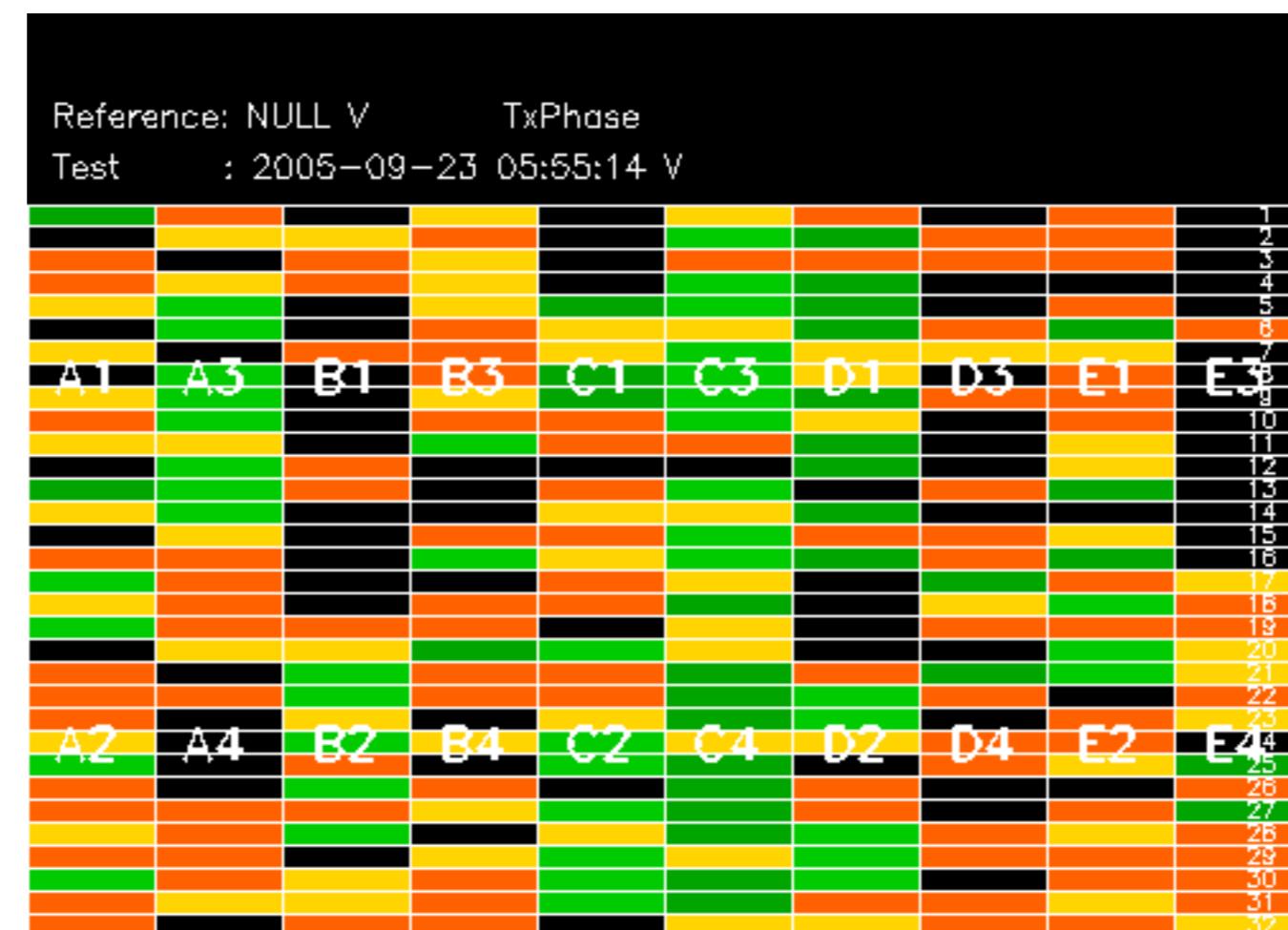
Filename	num_gaps	num_missing_lines
ASA_GM1_1PNPDK20050922_104238_00006162041_00037_18628_6169.N1	0	58
ASA_GM1_1PNPDK20050922_113749_00005012041_00037_18628_6240.N1	0	29
ASA_WSM_1PNPDE20050922_170449_000002442041_00041_18632_9995.N1	0	22
ASA_WSM_1PNPDE20050922_184757_000003042041_00042_18633_0010.N1	0	13
ASA_WSM_1PNPDE20050922_191352_000000672041_00042_18633_0013.N1	0	601
ASA_WSM_1PNPDE20050923_163431_000001522041_00055_18646_0167.N1	0	2
ASA_WSM_1PNPDE20050923_181716_000000672041_00056_18647_0174.N1	0	32

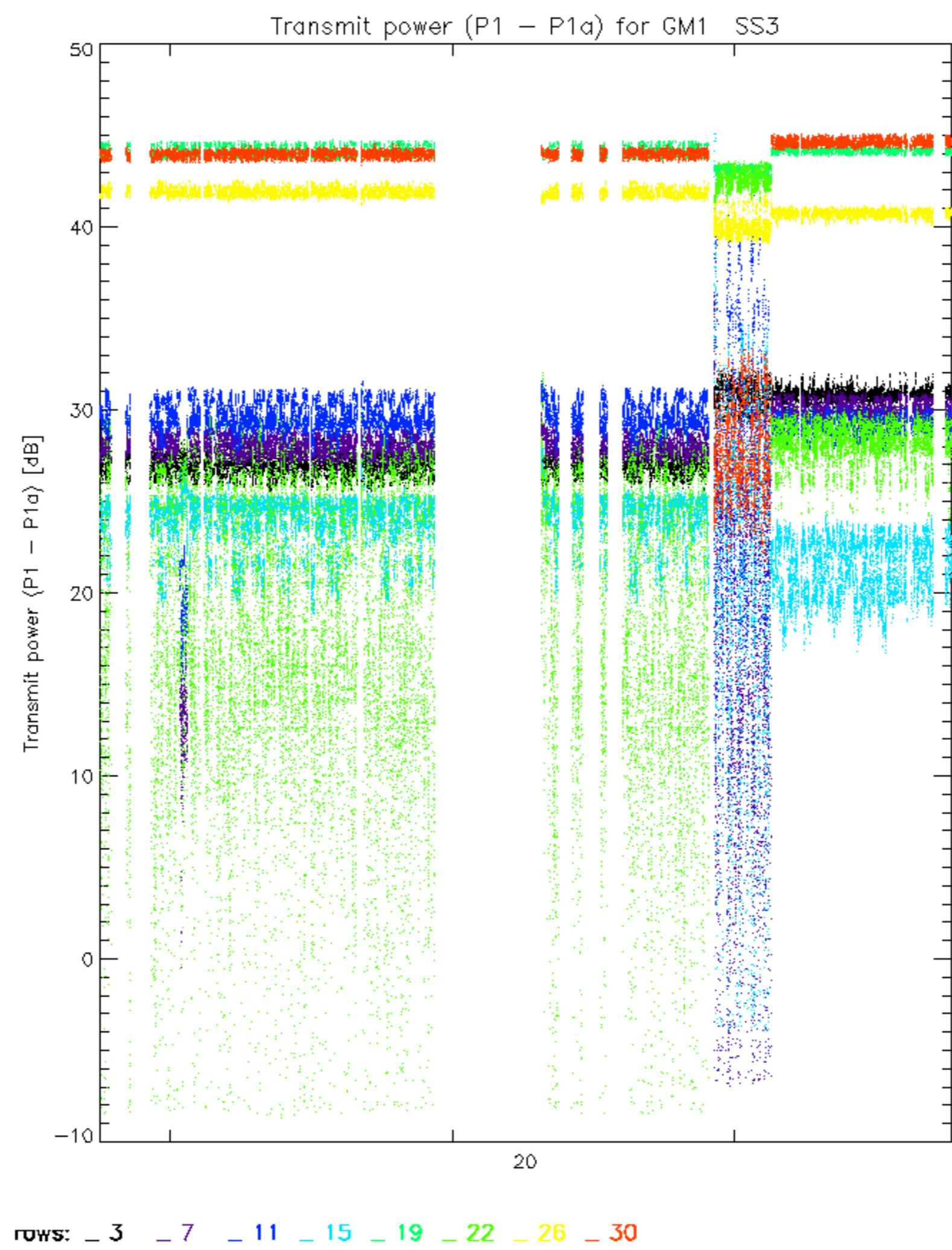


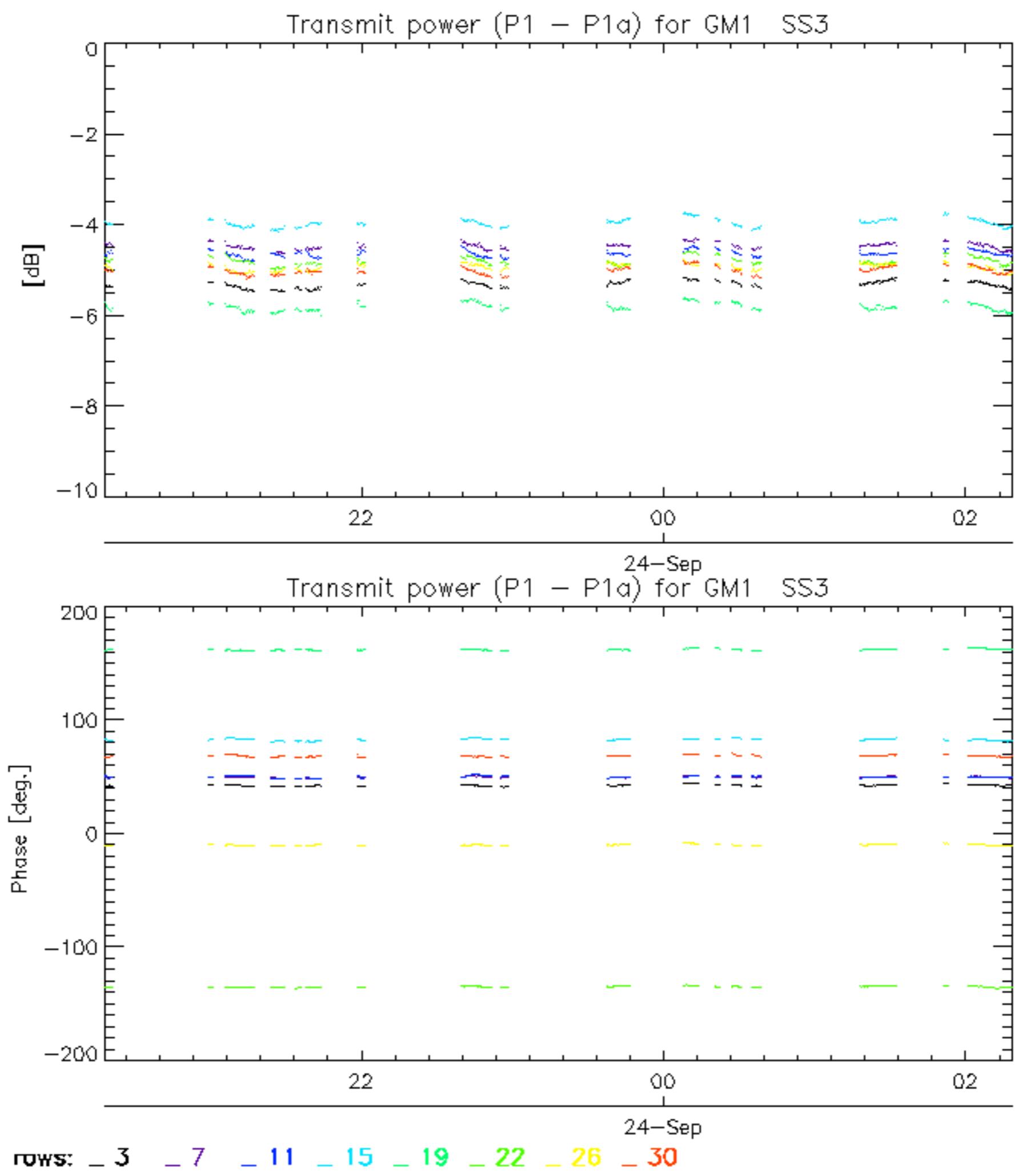


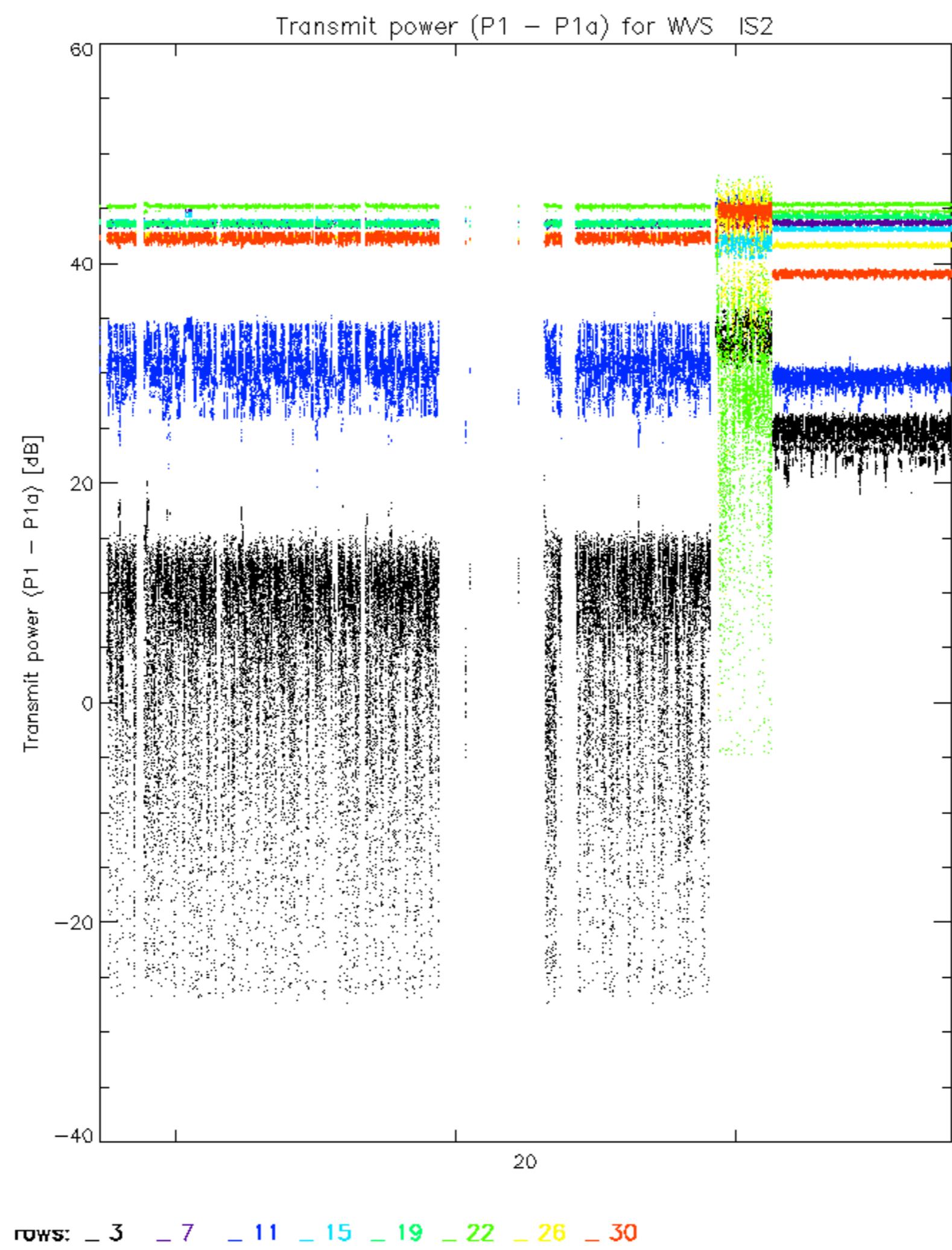


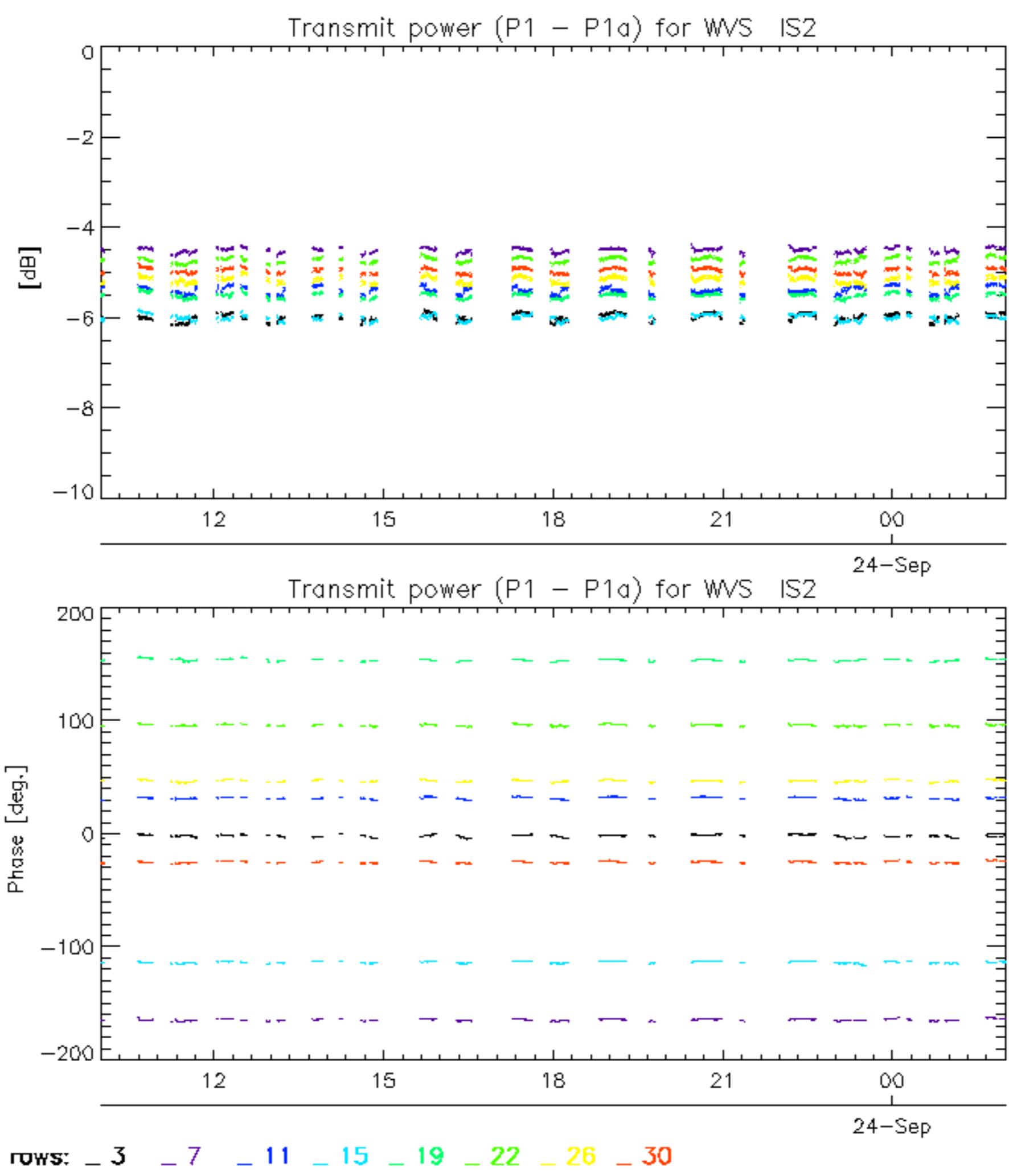
Reference:	2001-02-09 14:08:23	V	TxPhase
Test	: 2005-09-23 05:55:14	V	
			1
			2
			3
			4
			5
			6
			7
A1	A3	B1	B3
C1	C3	D1	D3
E1	E3		8
			9
			10
			11
			12
			13
			14
			15
			16
			17
			18
			19
			20
			21
			22
A2	A4	B2	B4
C2	C4	D2	D4
E2	E4		23
			24
			25
			26
			27
			28
			29
			30
			31
			32











No unavailabilities during the reported period.

