

PRELIMINARY REPORT OF 050129

ATTENTION: This report is automatically generated no comments are provided on data analysis

last update on Sat Jan 29 11:01:02 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 2005-01-28 00:00:00 to 2005-01-29 11:01:02

PDHS-K					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	26	37	3	1	2
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	26	37	3	1	2
ASA_CON_AXVIEC20041215_175442_20030601_000000_20051231_000000	26	37	3	1	2
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	26	37	3	1	2

PDHS-E					
AUXILIARY FILE	WVS	GM1	IMM	APM	WSM
ASA_INS_AXVIEC20041215_180208_20030211_000000_20051231_000000	0	0	3	5	4
ASA_XCA_AXVIEC20041027_164238_20040412_000000_20051231_000000	0	0	3	5	4
ASA_CON_AXVIEC20041215_175442_20030601_000000_20051231_000000	0	0	3	5	4
ASA_XCH_AXVIEC20041215_180350_20020301_000000_20051231_000000	0	0	3	5	4

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

The MS mode provides an internal health check on an individual module basis. The purpose of this mode is to identify any malfunctioning modules and to identify modules for which calibration offsets are to be applied. No anomalies observed on available MS products:

Polarisation	Start Time
V	20050127 074718
H	20050128 071541

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

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	-3.410335	0.008286	0.031787
7	P1	-3.086459	0.016889	0.040955
11	P1	-4.659106	0.024365	-0.000801
15	P1	-5.637197	0.061005	-0.081027
19	P1	-3.670115	0.011875	0.033916
22	P1	-4.565228	0.016721	0.041577
26	P1	-4.962757	0.069404	0.134080
30	P1	-7.140518	0.015910	-0.050926
3	P1	-15.917301	0.104428	0.052612
7	P1	-15.525429	0.164434	0.106614
11	P1	-20.778168	0.661642	-0.343678
15	P1	-11.632604	0.108249	0.101748
19	P1	-14.192692	0.059239	0.079787
22	P1	-15.964294	0.435675	0.293871
26	P1	-17.648787	0.230647	0.134096
30	P1	-17.888449	0.334890	-0.194677

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-22.264023	0.086683	0.126179
7	P2	-22.429033	0.317552	-0.010153
11	P2	-14.672322	0.406191	0.015191
15	P2	-7.132429	0.146557	0.157463
19	P2	-9.764734	0.572368	0.391265
22	P2	-17.062805	0.099817	0.095852
26	P2	-16.529587	0.167416	0.201717

30	P2	-18.930990	0.081088	0.024369
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P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.191122	0.006669	0.016882
7	P3	-8.191157	0.006673	0.017089
11	P3	-8.191186	0.006674	0.017262
15	P3	-8.191183	0.006673	0.017266
19	P3	-8.191220	0.006671	0.017456
22	P3	-8.191206	0.006672	0.017396
26	P3	-8.191224	0.006681	0.017653
30	P3	-8.191486	0.006652	0.008181

4.2.2 - Evolution for GM1

Evolution of cal pulses for GM1
<input type="checkbox"/>

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	-2.808890	0.019054	0.045316
7	P1	-2.961058	0.068338	-0.020465
11	P1	-3.950674	0.030599	-0.015036
15	P1	-3.518355	0.030473	-0.039412
19	P1	-3.603724	0.013875	0.027908
22	P1	-5.662616	0.067207	-0.070490
26	P1	-6.787500	0.163917	-1.049841
30	P1	-6.286391	0.045944	0.013297
3	P1	-10.773709	0.086131	0.042342
7	P1	-10.150684	0.185029	-0.022862
11	P1	-12.527528	0.130790	-0.081784

15	P1	-11.757883	0.076560	-0.030064
19	P1	-15.615987	0.054723	0.100027
22	P1	-24.077646	1.745103	0.028781
26	P1	-15.097301	0.459979	-0.997009
30	P1	-20.039265	0.869667	0.137702

P2 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P2	-17.961828	0.049678	0.098584
7	P2	-22.505724	0.119539	0.157992
11	P2	-10.509703	0.051208	0.227529
15	P2	-5.027102	0.023985	0.050184
19	P2	-6.913032	0.036073	0.064561
22	P2	-7.234192	0.049098	0.086207
26	P2	-23.919533	0.087105	0.086297
30	P2	-21.966650	0.054196	0.052351

P3 Cyclic statistics

row	pulse	mean (dB)	stdev (dB)	slope(dB/cycle)
3	P3	-8.027065	0.002876	0.018704
7	P3	-8.027091	0.002876	0.018697
11	P3	-8.027103	0.002872	0.018527
15	P3	-8.027230	0.002873	0.019103
19	P3	-8.027081	0.002881	0.018185
22	P3	-8.027156	0.002862	0.018558
26	P3	-8.027070	0.002881	0.018593
30	P3	-8.027137	0.002877	0.018649

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	0.000467594
	stdev	2.18288e-07
MEAN Q	mean	0.000540573
	stdev	2.32040e-07



5.2 - Input stdev I/Q

channel	stat	DSS-B
STDEV I	mean	0.128651
	stdev	0.000971350
STDEV Q	mean	0.128886
	stdev	0.000982425



5.3 - Gain imbalance I/Q



6 - Telemetry analysis

Summary of analysis for the last 3 days 2005012[789]

The assumption 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_IMM_1PNPDE20050127_000702_000000372034_00131_15215_1155.N1	1	0
ASA_IMM_1PNPDE20050127_050539_000001122034_00134_15218_1181.N1	1	0
ASA_IMM_1PNPDE20050128_010032_000000622034_00145_15229_1250.N1	0	117
ASA_IMM_1PNPDK20050127_184123_000001612034_00142_15226_8130.N1	0	20

ASA_WVS_1PNPDE20050127_000800_000003302034_00131_15215_6176.N1	0	56
ASA_WVS_1PNPDE20050127_003142_000003152034_00131_15215_6177.N1	0	56
ASA_WVS_1PNPDE20050127_003834_000001642034_00131_15215_6179.N1	0	24
ASA_WVS_1PNPDE20050127_004216_000002842034_00131_15215_6178.N1	0	8
ASA_WVS_1PNPDE20050127_005803_000004652034_00131_15215_6174.N1	0	80
ASA_WVS_1PNPDE20050127_011944_000003002034_00131_15215_6175.N1	0	64
ASA_WVS_1PNPDE20050127_012459_000003302034_00131_15215_6198.N1	0	360
ASA_WVS_1PNPDE20050127_013955_000005692034_00132_15216_6181.N1	0	408
ASA_WVS_1PNPDE20050127_022254_000002992034_00132_15216_6183.N1	0	496
ASA_WVS_1PNPDE20050127_023120_000003592034_00132_15216_6182.N1	0	384
ASA_WVS_1PNPDE20050127_030020_000003002034_00132_15216_6186.N1	2	1640
ASA_WVS_1PNPDE20050127_032139_000001342034_00133_15217_6187.N1	4	1568
ASA_WVS_1PNPDE20050127_040343_000009442034_00133_15217_6184.N1	1	1736
ASA_WVS_1PNPDE20050127_042444_000001352034_00133_15217_6189.N1	4	1632
ASA_WVS_1PNPDE20050127_044056_000013492034_00133_15217_6188.N1	5	1360
ASA_WVS_1PNPDE20050127_054350_000009292034_00134_15218_6190.N1	2	1800
ASA_GM1_1PNPDE20050127_001420_000000842034_00131_15215_7907.N1	0	202
ASA_GM1_1PNPDE20050127_005120_000003862034_00131_15215_7912.N1	0	1322
ASA_GM1_1PNPDE20050127_010632_000004342034_00131_15215_7911.N1	0	1657
ASA_GM1_1PNPDE20050127_011648_000001572034_00131_15215_7913.N1	0	391
ASA_GM1_1PNPDE20050127_013114_000000722034_00131_15215_7926.N1	0	1602
ASA_GM1_1PNPDE20050127_013651_000001692034_00131_15215_7924.N1	0	5054
ASA_GM1_1PNPDE20050127_015239_000002412034_00132_15216_7921.N1	0	7371
ASA_GM1_1PNPDE20050127_021759_000001872034_00132_15216_7922.N1	0	5609
ASA_GM1_1PNPDE20050127_024708_000005252034_00132_15216_7934.N1	0	93885
ASA_GM1_1PNPDE20050127_025646_000001992034_00132_15216_7945.N1	0	33978
ASA_GM1_1PNPDE20050127_030608_000001632034_00132_15216_7951.N1	0	27628
ASA_GM1_1PNPDE20050127_030900_000002772034_00132_15216_7944.N1	0	48179
ASA_GM1_1PNPDE20050127_031429_000004102034_00132_15216_7937.N1	1	73131
ASA_GM1_1PNPDE20050127_032725_000001872034_00133_15217_7947.N1	0	32409
ASA_GM1_1PNPDE20050127_033212_000004042034_00133_15217_7938.N1	0	74868
ASA_GM1_1PNPDE20050127_034030_000003802034_00133_15217_7940.N1	1	71222
ASA_GM1_1PNPDE20050127_035603_000001812034_00133_15217_7950.N1	1	32931
ASA_GM1_1PNPDE20050127_040125_000001202034_00133_15217_7952.N1	0	22518
ASA_GM1_1PNPDE20050127_042744_000007732034_00133_15217_7959.N1	1	158445
ASA_GM1_1PNPDE20050127_050412_000000842034_00134_15218_7967.N1	0	16473
ASA_GM1_1PNPDE20050127_050747_000006162034_00134_15218_7960.N1	3	130060
ASA_GM1_1PNPDE20050127_052106_000003082034_00134_15218_7965.N1	5	62861
ASA_GM1_1PNPDE20050127_052921_000003622034_00134_15218_7962.N1	2	75002
ASA_WSM_1PNPDE20050128_065653_000000672034_00149_15233_2102.N1	0	357
ASA_APM_1PNPDE20050128_014243_000000622034_00146_15230_6459.N1	0	42
ASA_APM_1PNPDE20050128_045507_000000622034_00148_15232_6470.N1	0	15



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)

<input type="checkbox"/>
Acsending
<input type="checkbox"/>
Descending

7.2 - Absolute Doppler for WVS

Evolution of Absolute Doppler

<input type="checkbox"/>
Acsending
<input type="checkbox"/>
Descending

7.3 - Doppler evolution versus ANX for WVS

Evolution Doppler error versus ANX

<input type="checkbox"/>

7.4 - Unbiased Doppler Error for GM1

Evolution of unbiased Doppler error (Real - Expected)

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

7.5 - Absolute Doppler for GM1

Evolution of Absolute Doppler

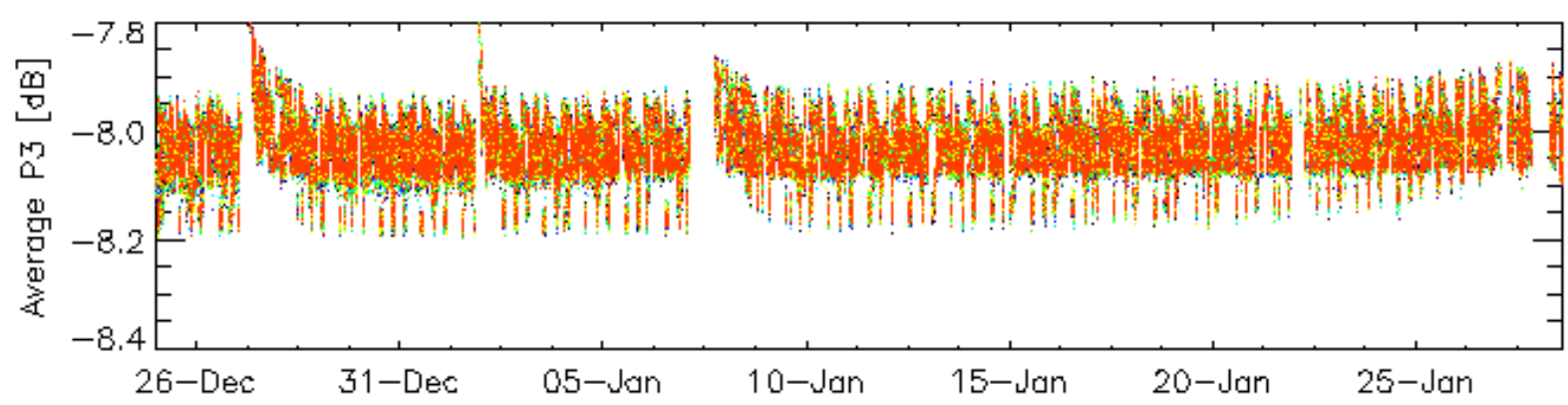
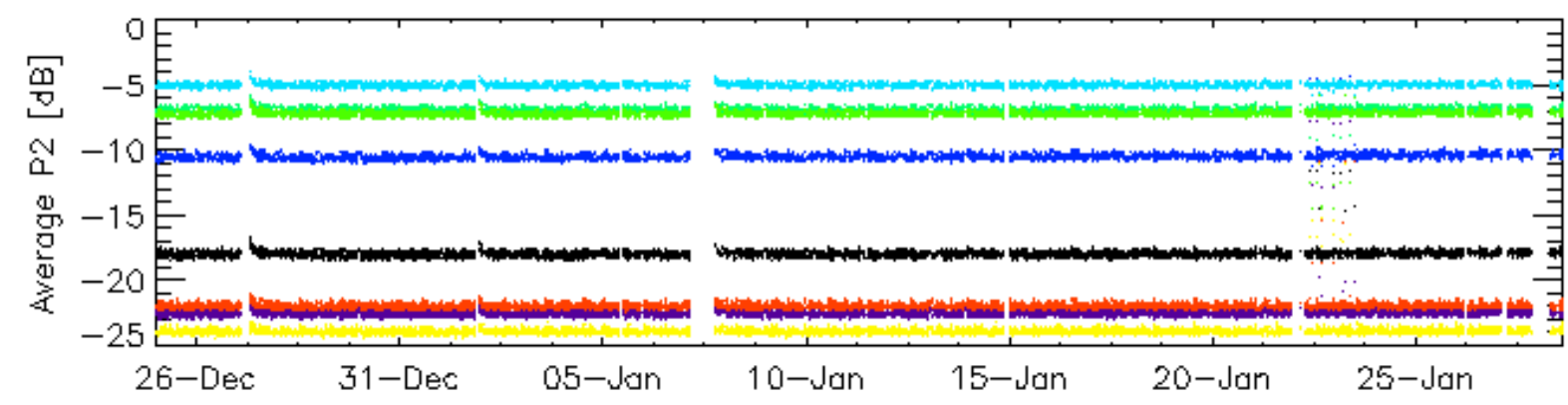
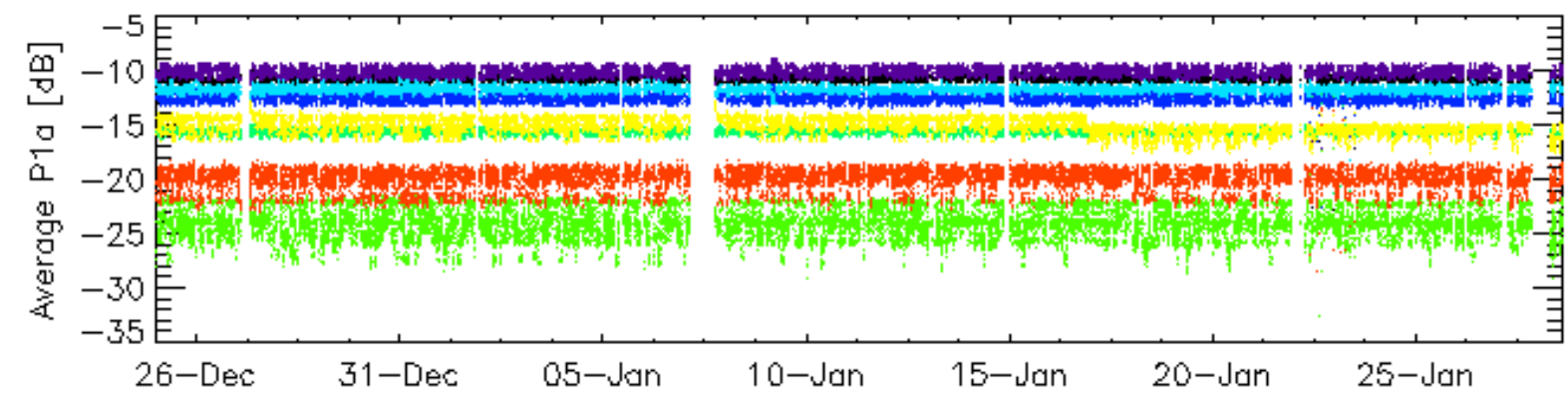
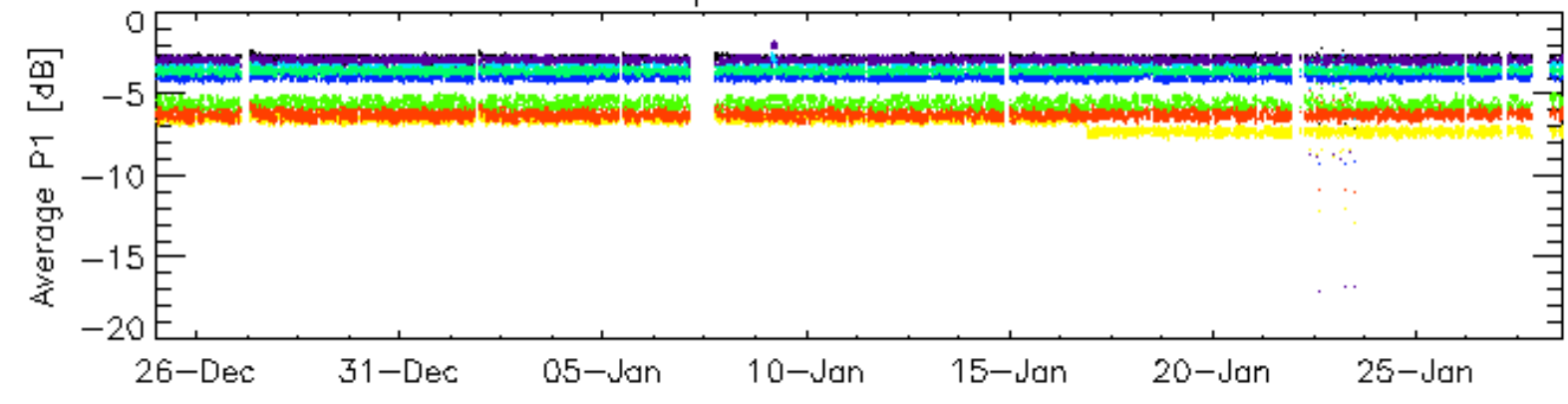
<input type="checkbox"/>	
	Ascending
<input type="checkbox"/>	
	Descending

7.6 - Doppler evolution versus ANX for GM1

Evolution Doppler error versus ANX

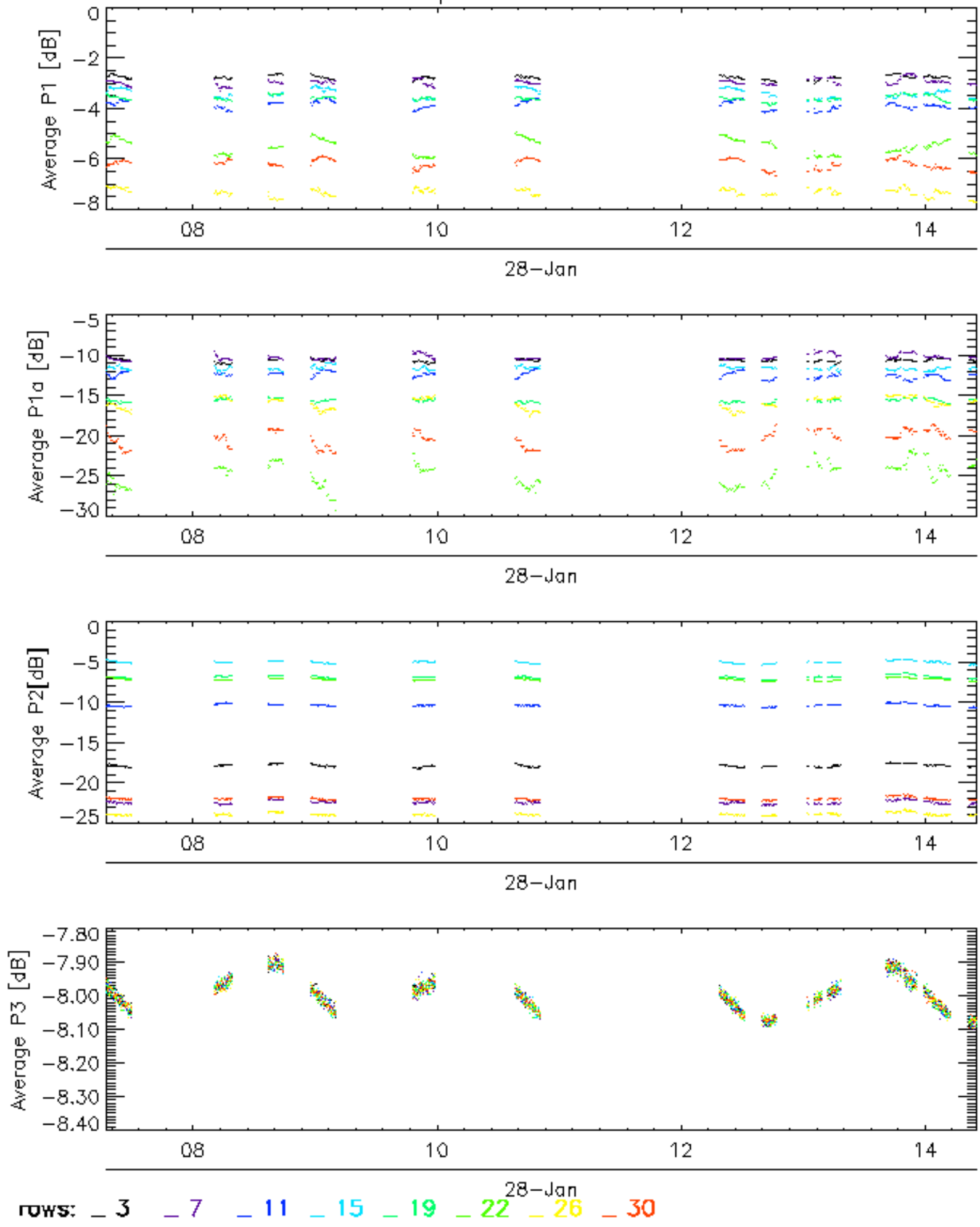
<input type="checkbox"/>	
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Cal pulses for GM1 SS3

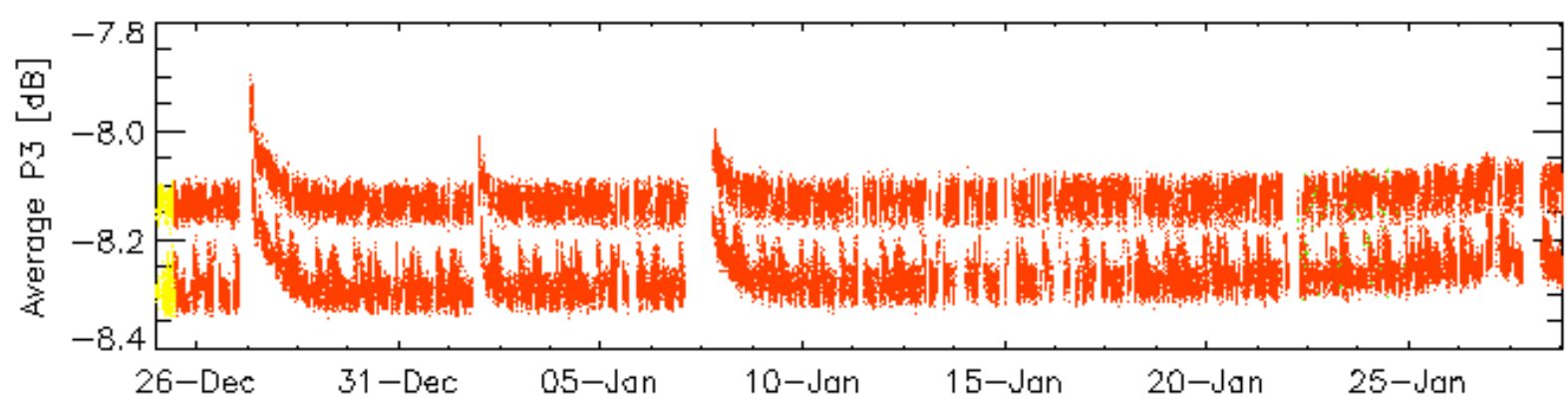
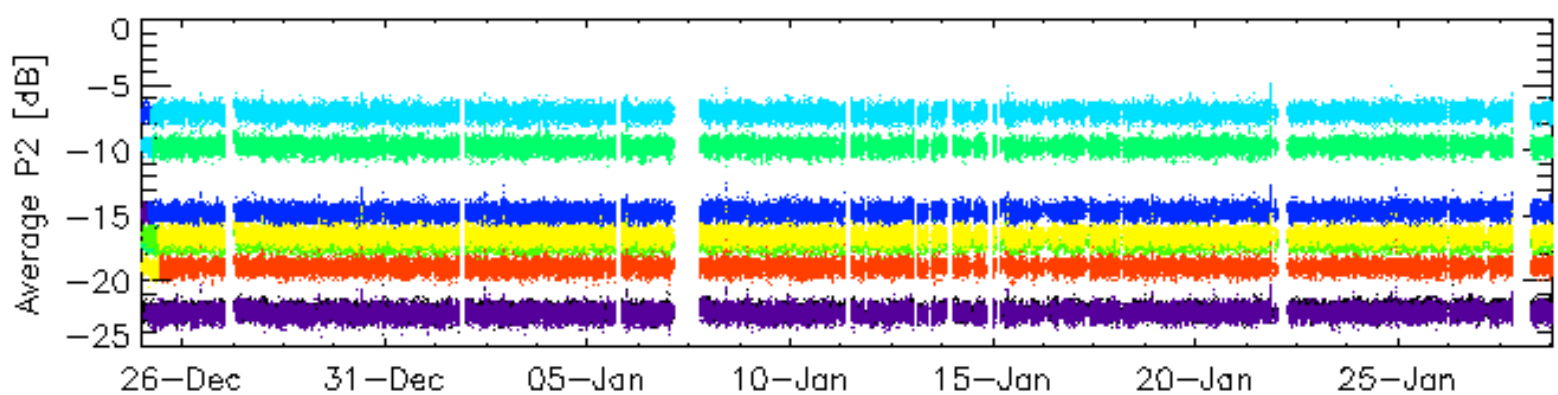
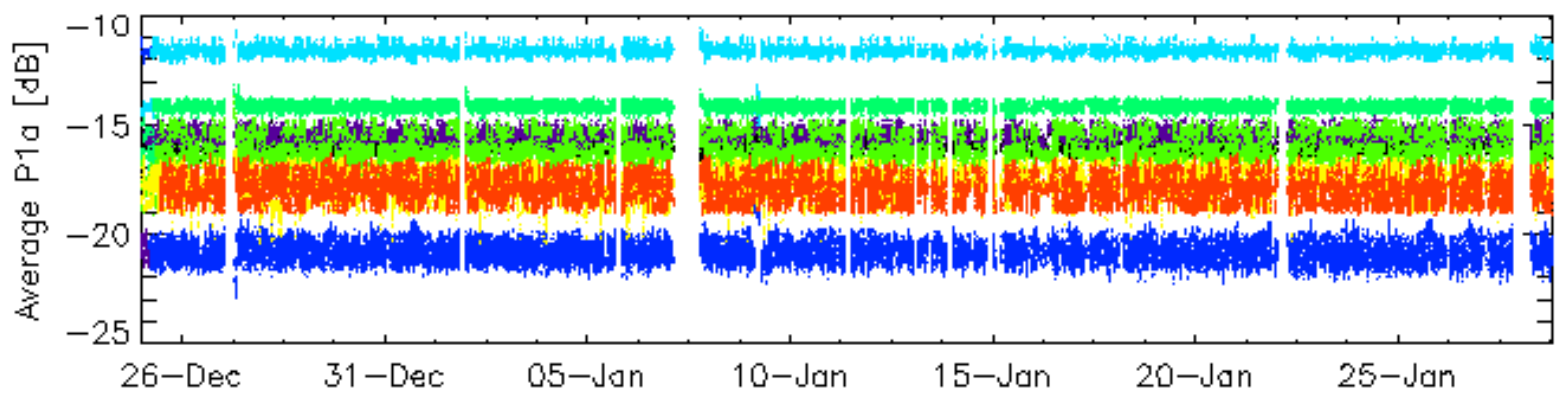
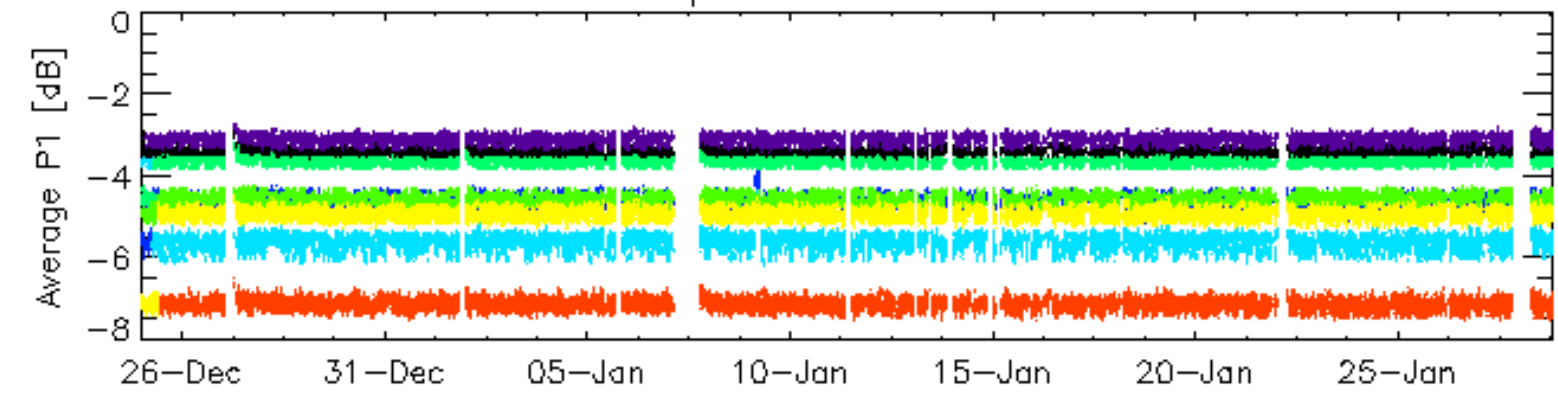


rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for GM1 SS3

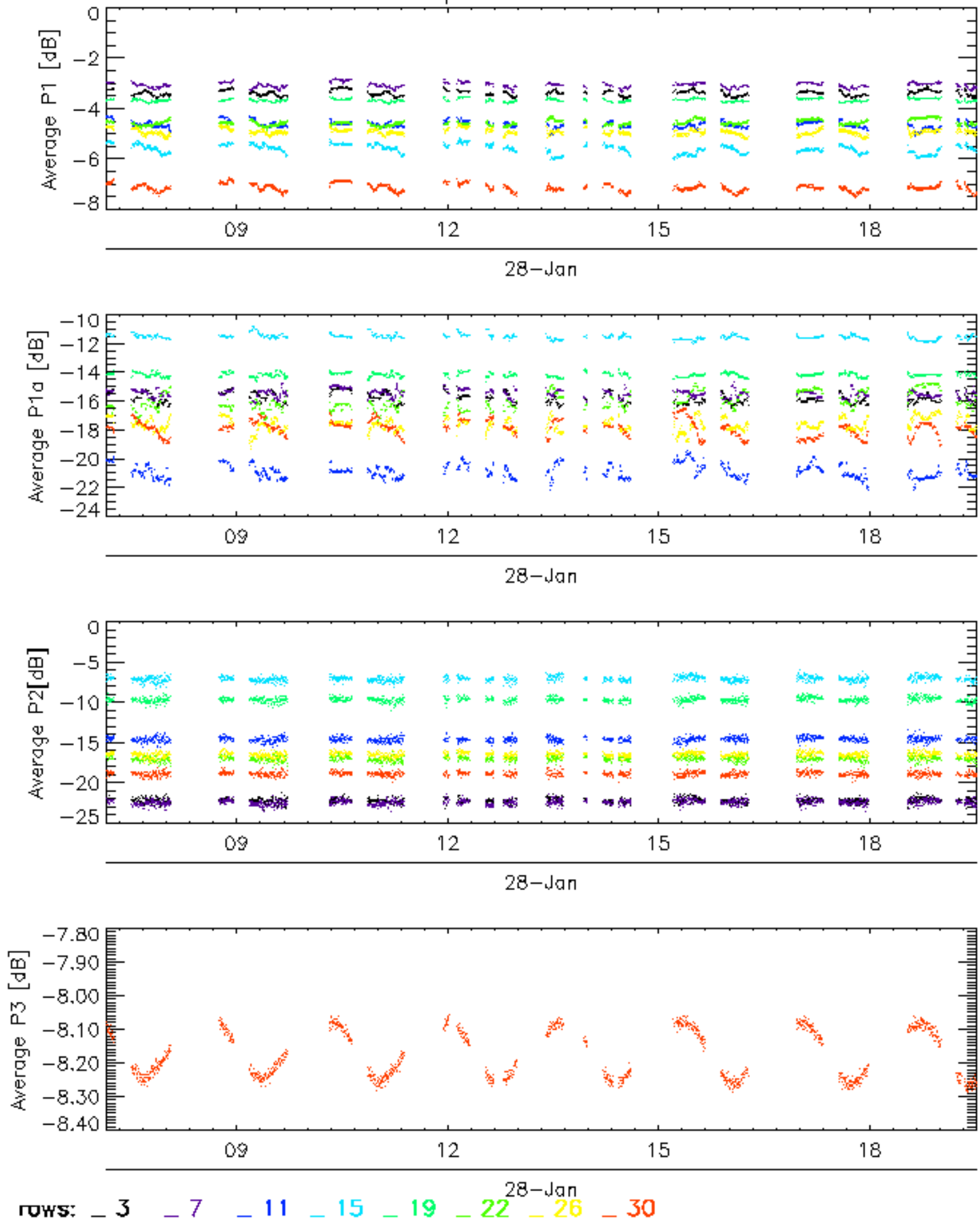


Cal pulses for WVS IS2

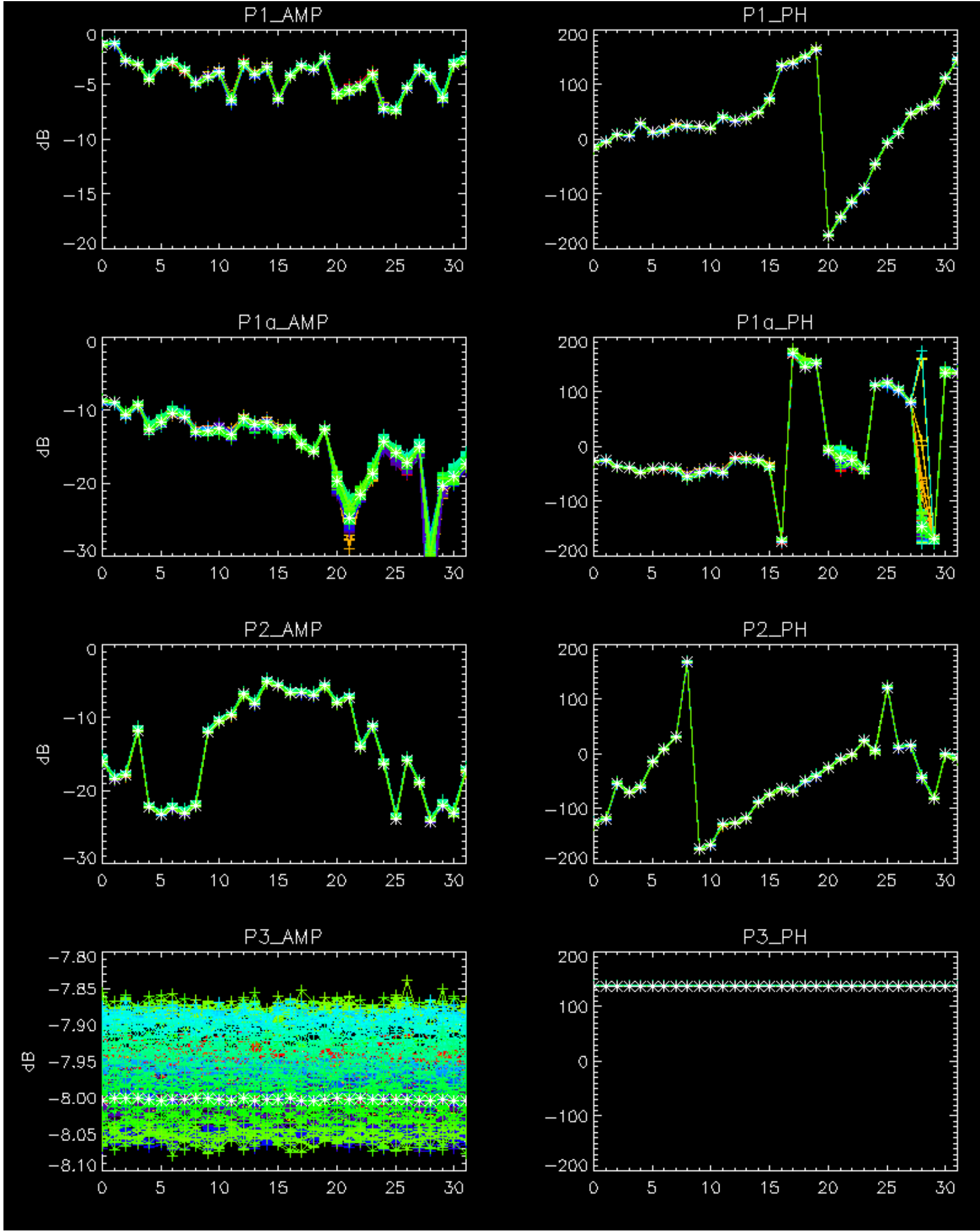


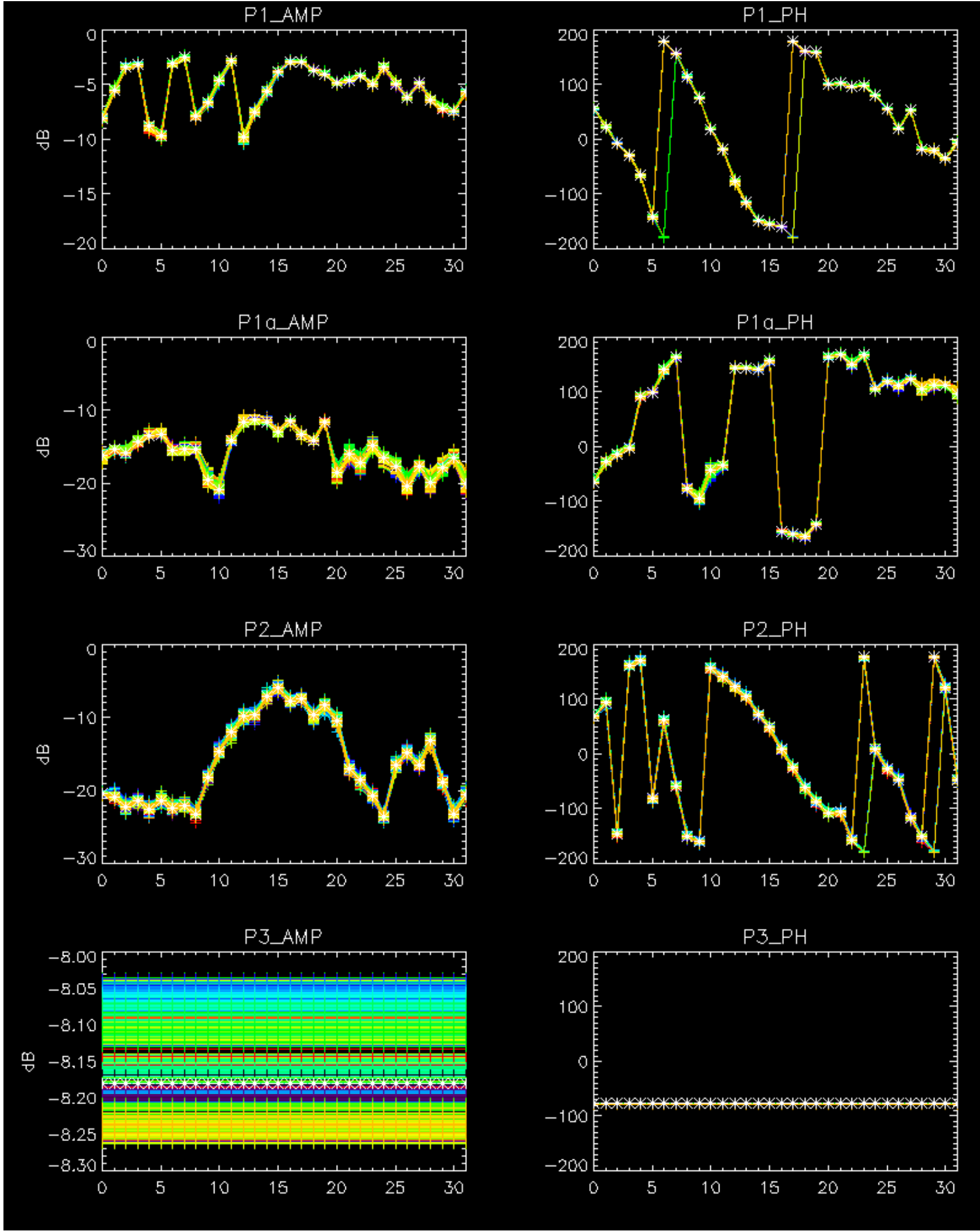
rows: _ 3 _ 7 _ 11 _ 15 _ 19 _ 22 _ 26 _ 30

Cal pulses for WVS IS2



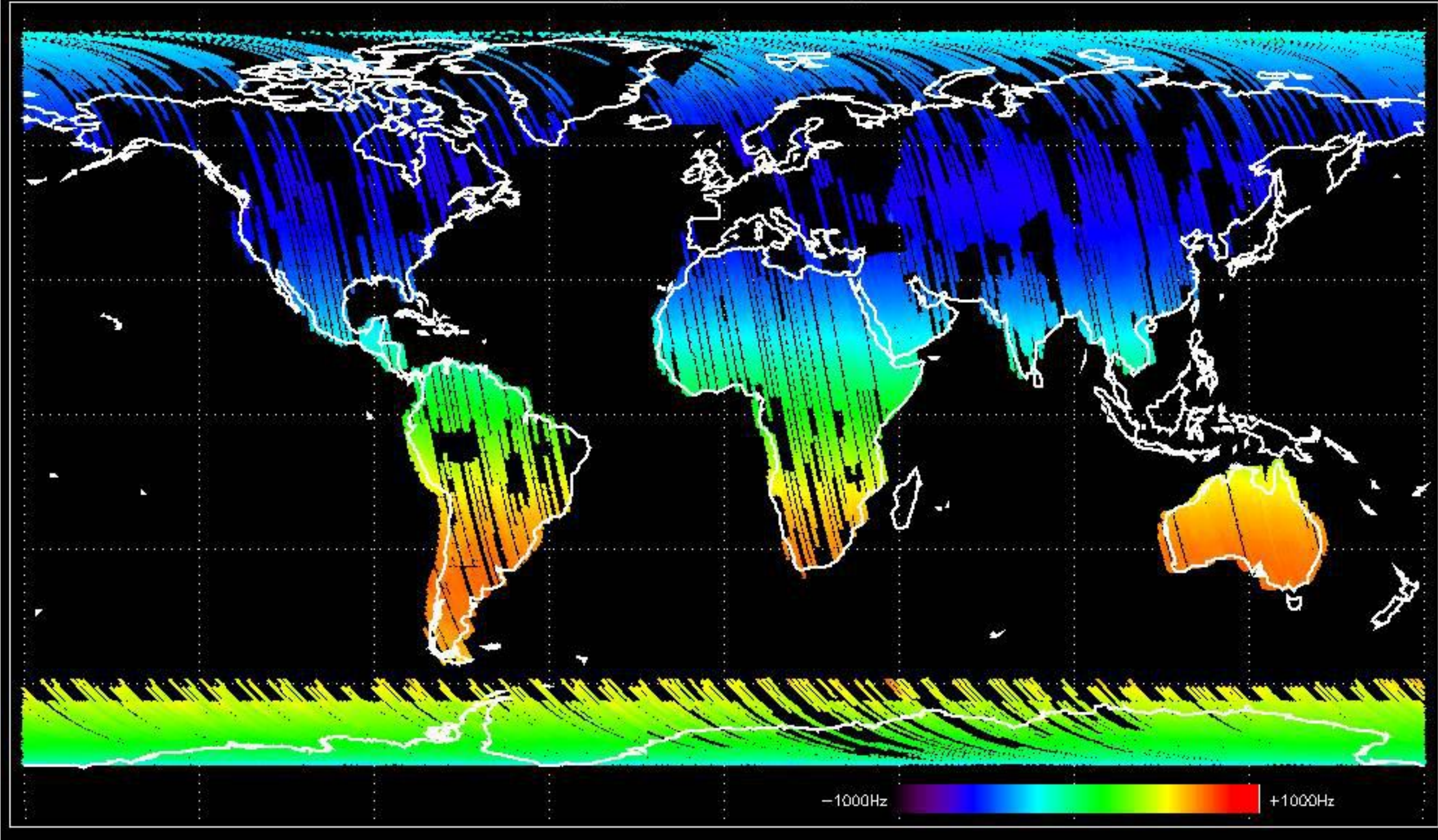
No anomalies observed.



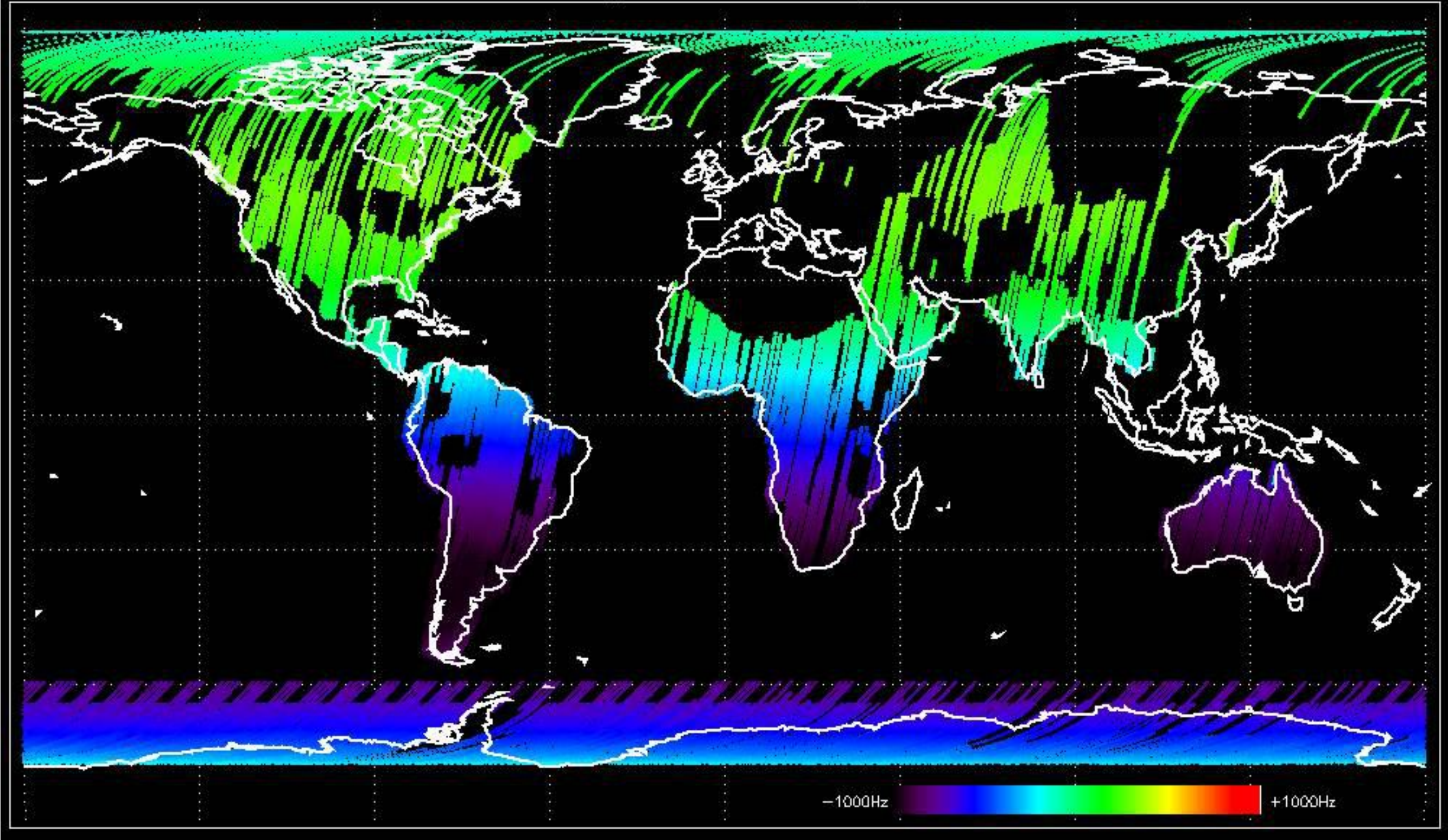


- Stable wave internal calibration pulses gain and phase.
- Stable raw data statistics.
- Nominal Doppler behavior.

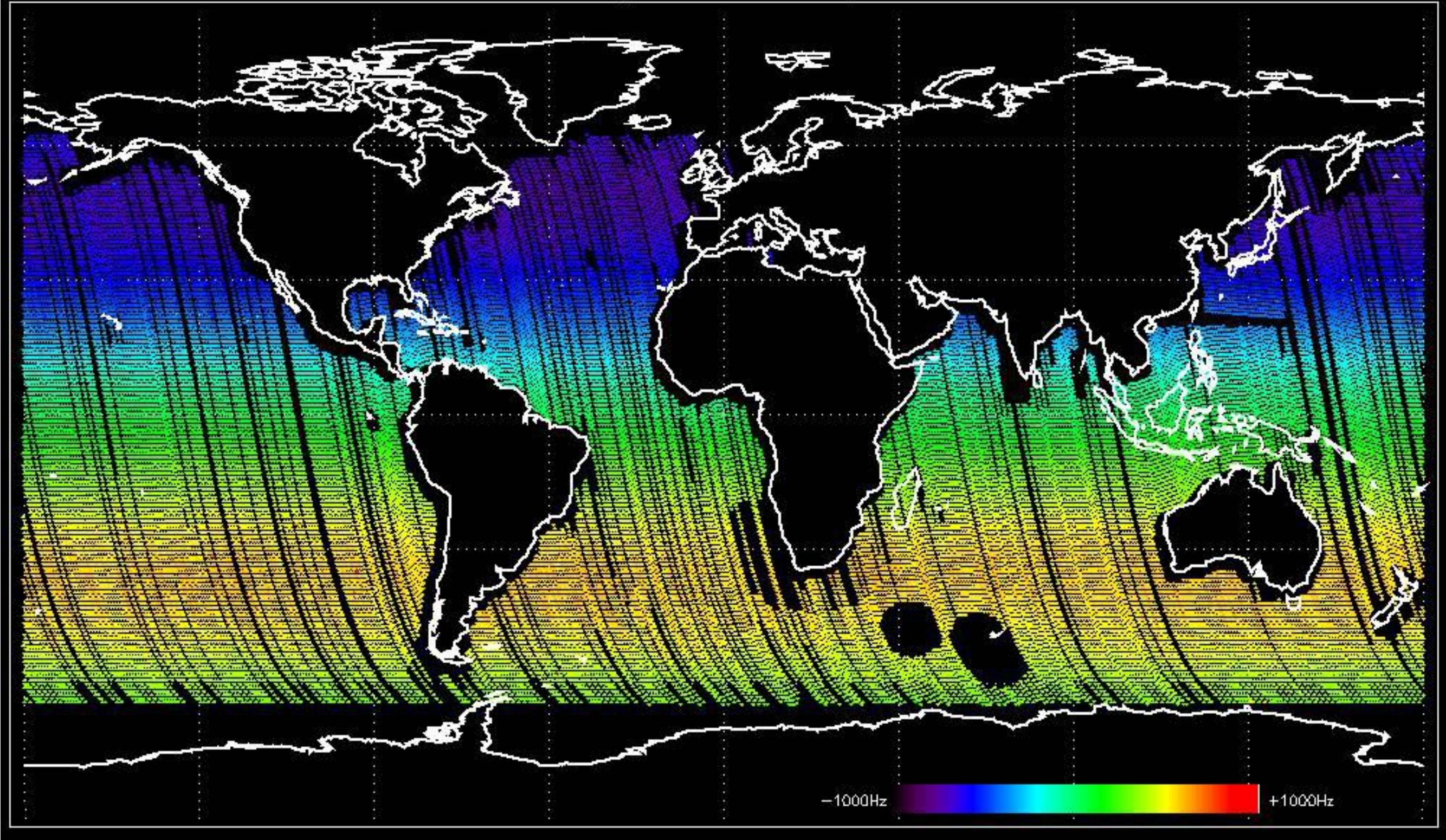
Doppler 'GM1' 'SS1' ascending



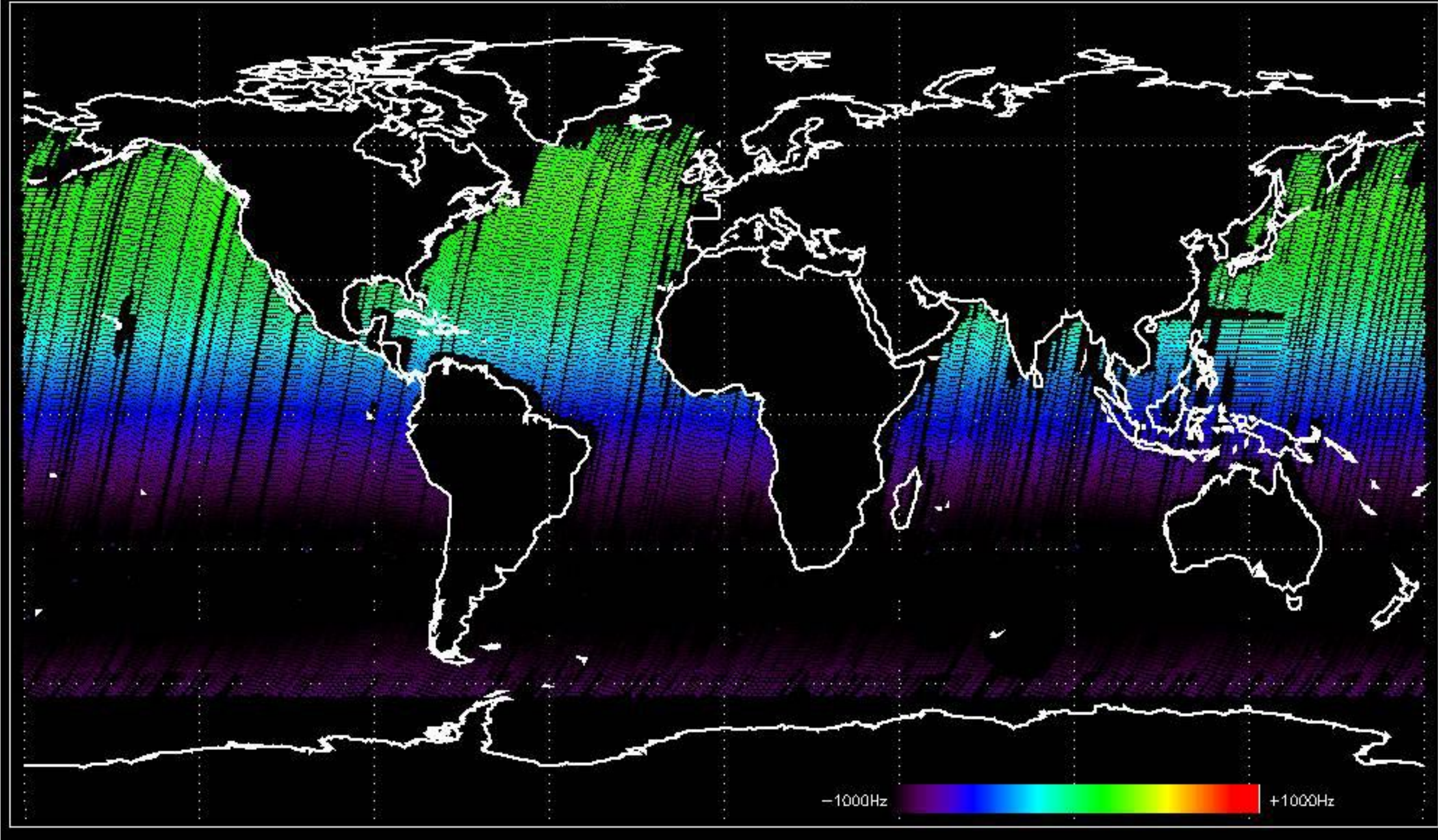
Doppler 'GM1' 'SS1' descending



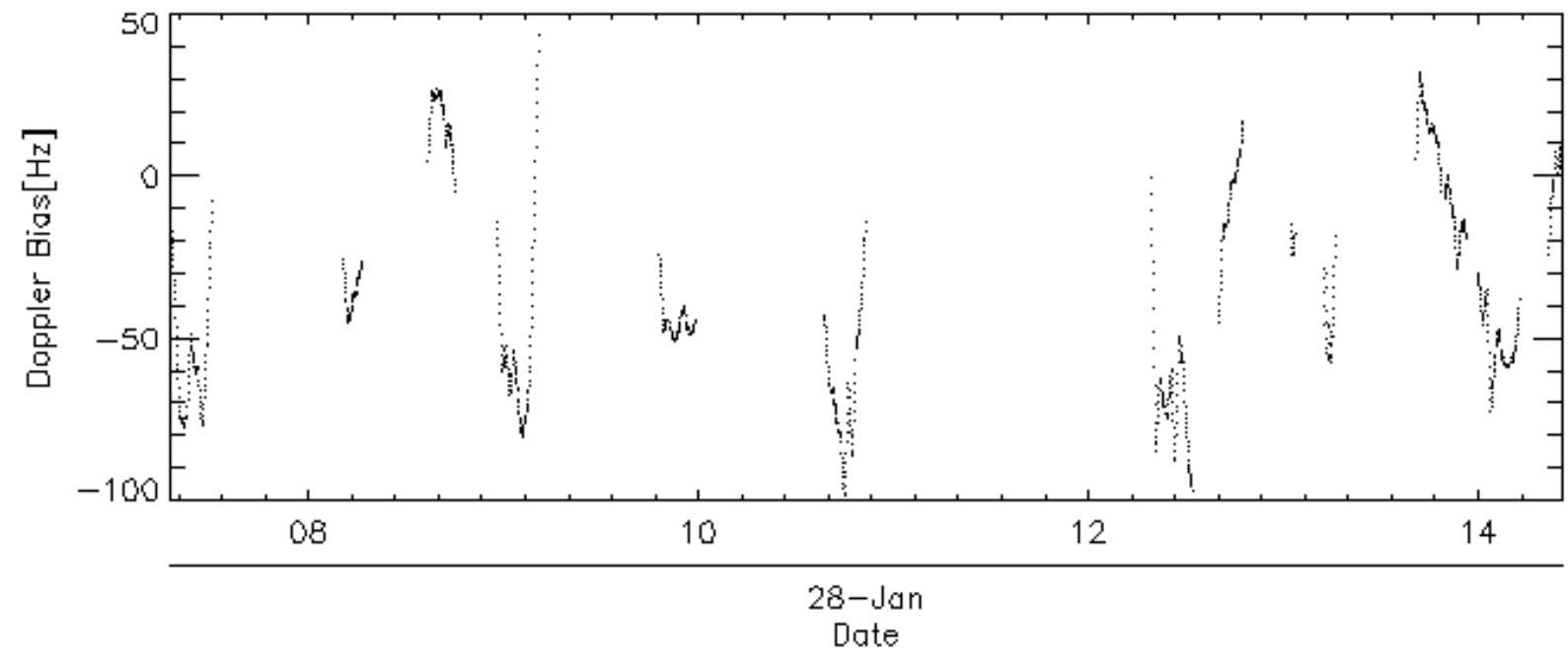
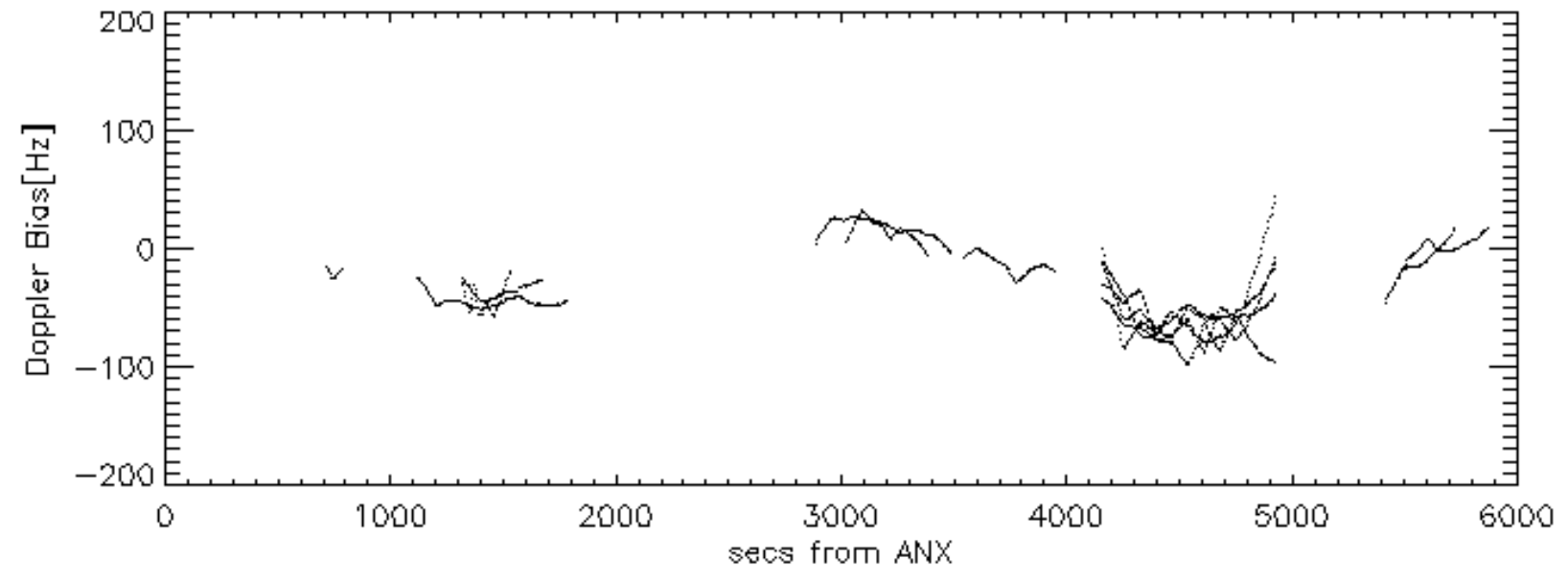
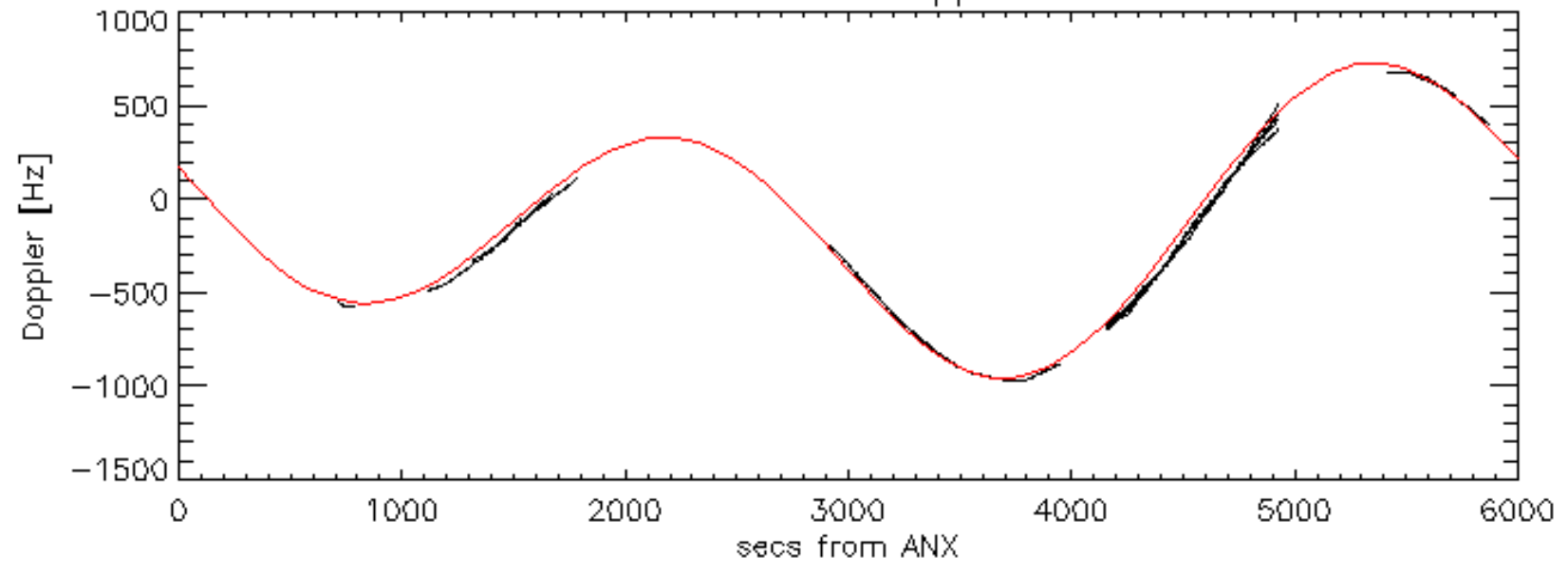
Doppler 'WVS' 'IS2' ascending

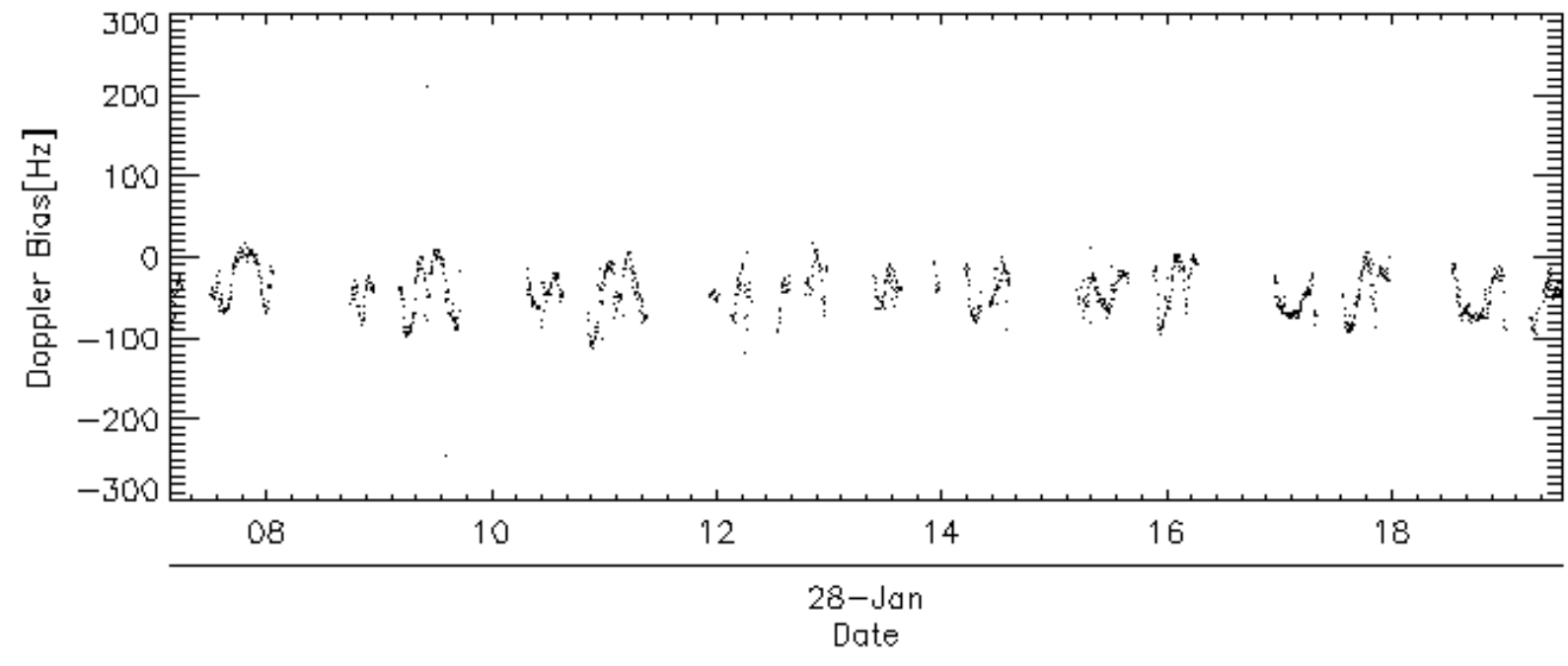
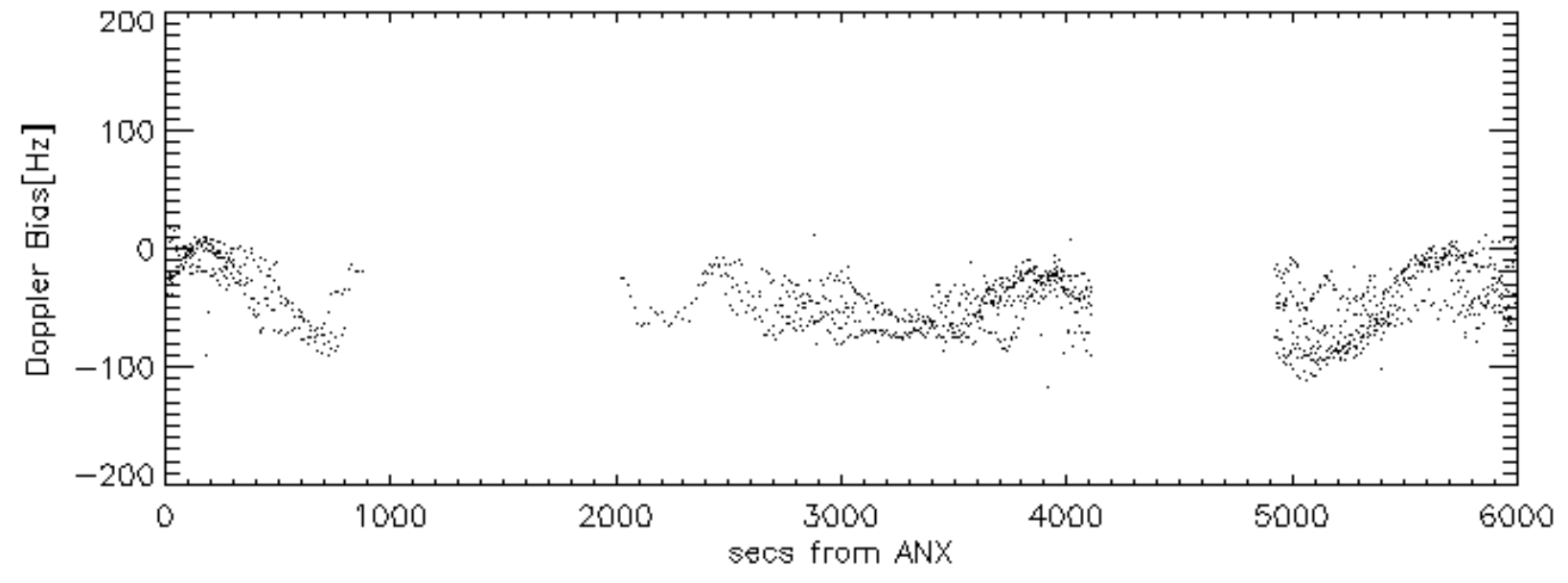
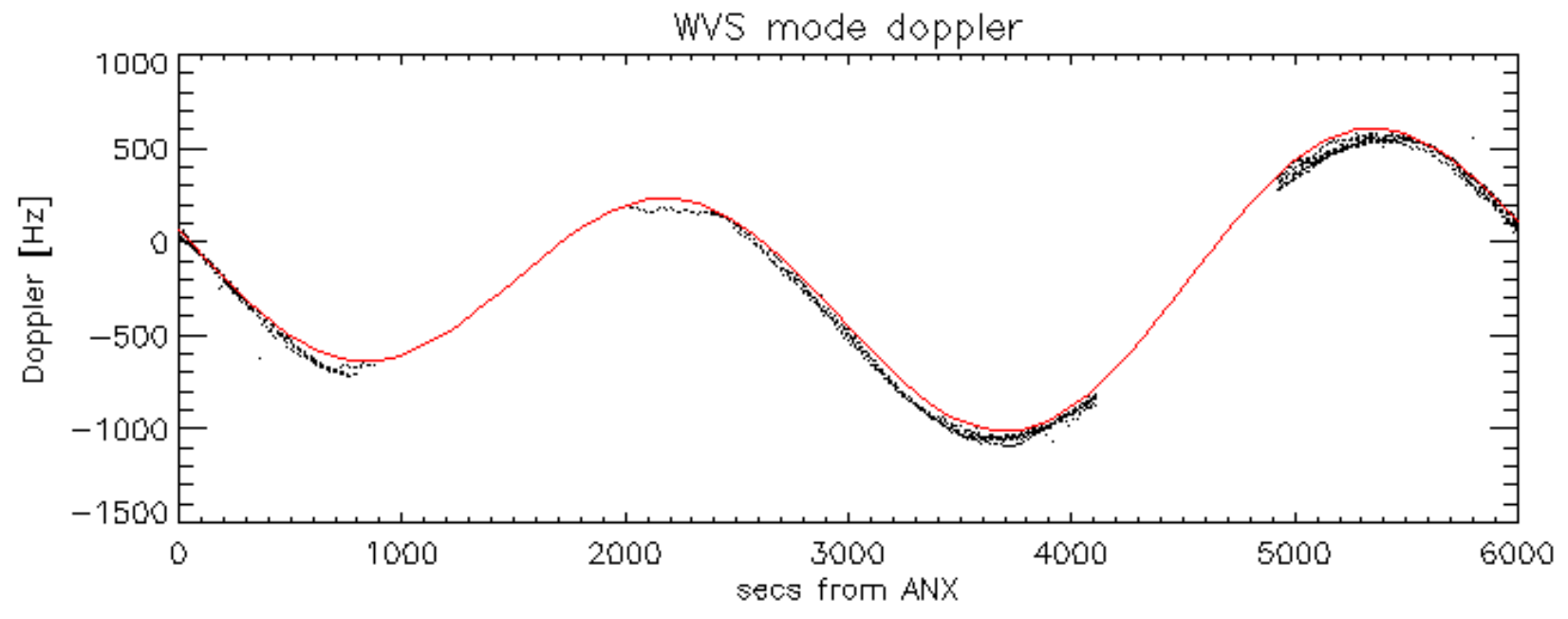


Doppler 'WVS' 'IS2' descending

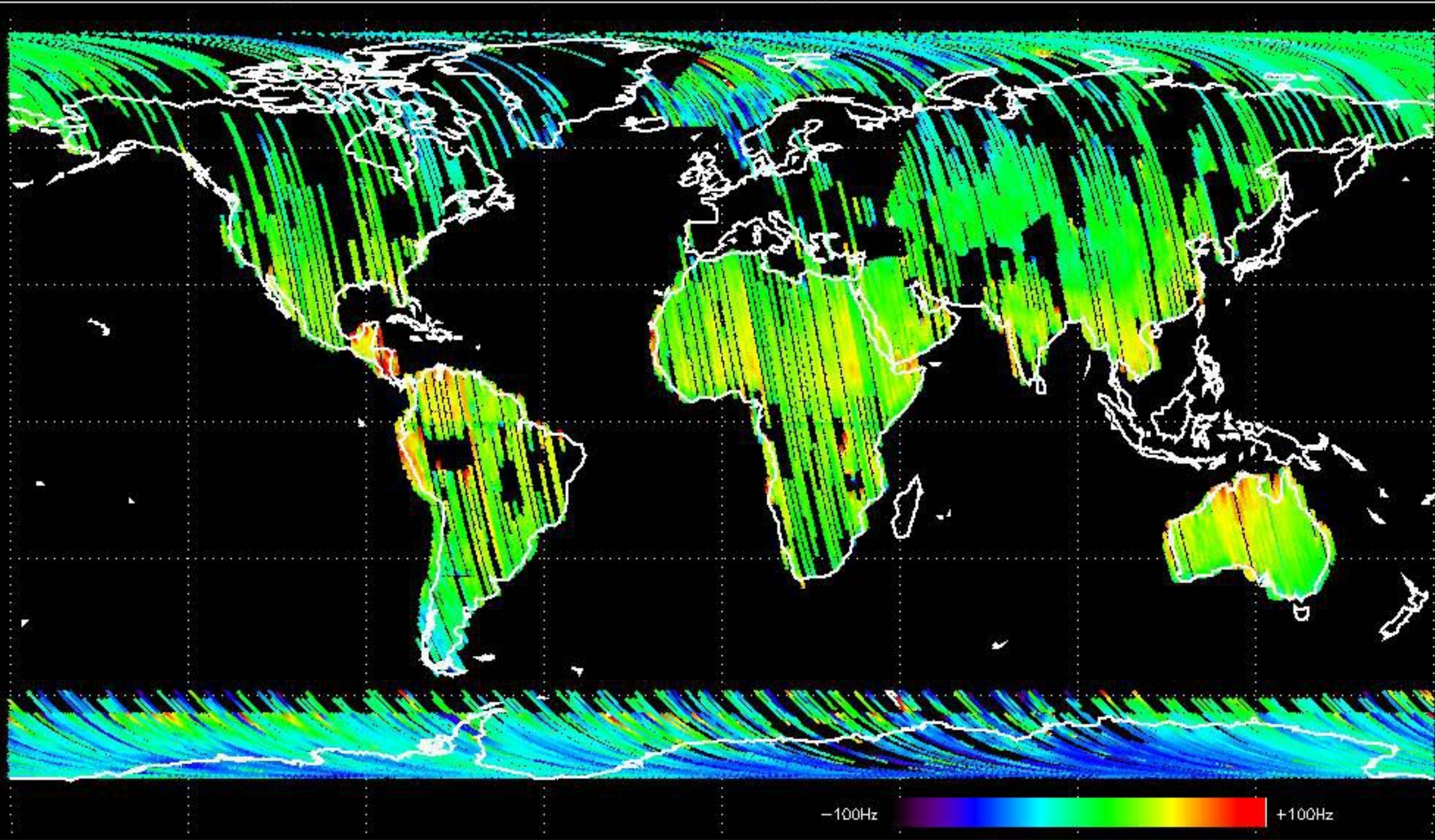


GM1 mode doppler

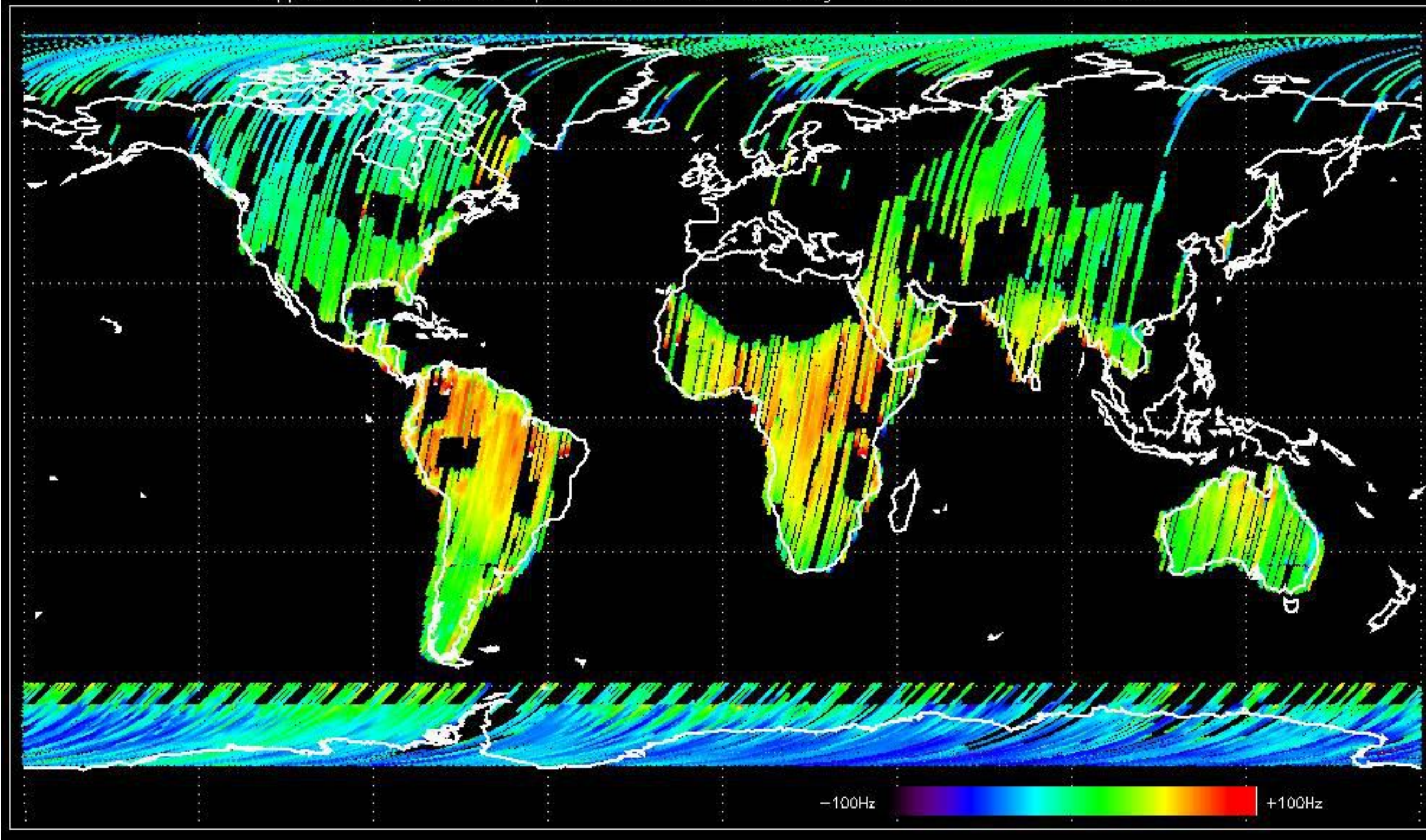




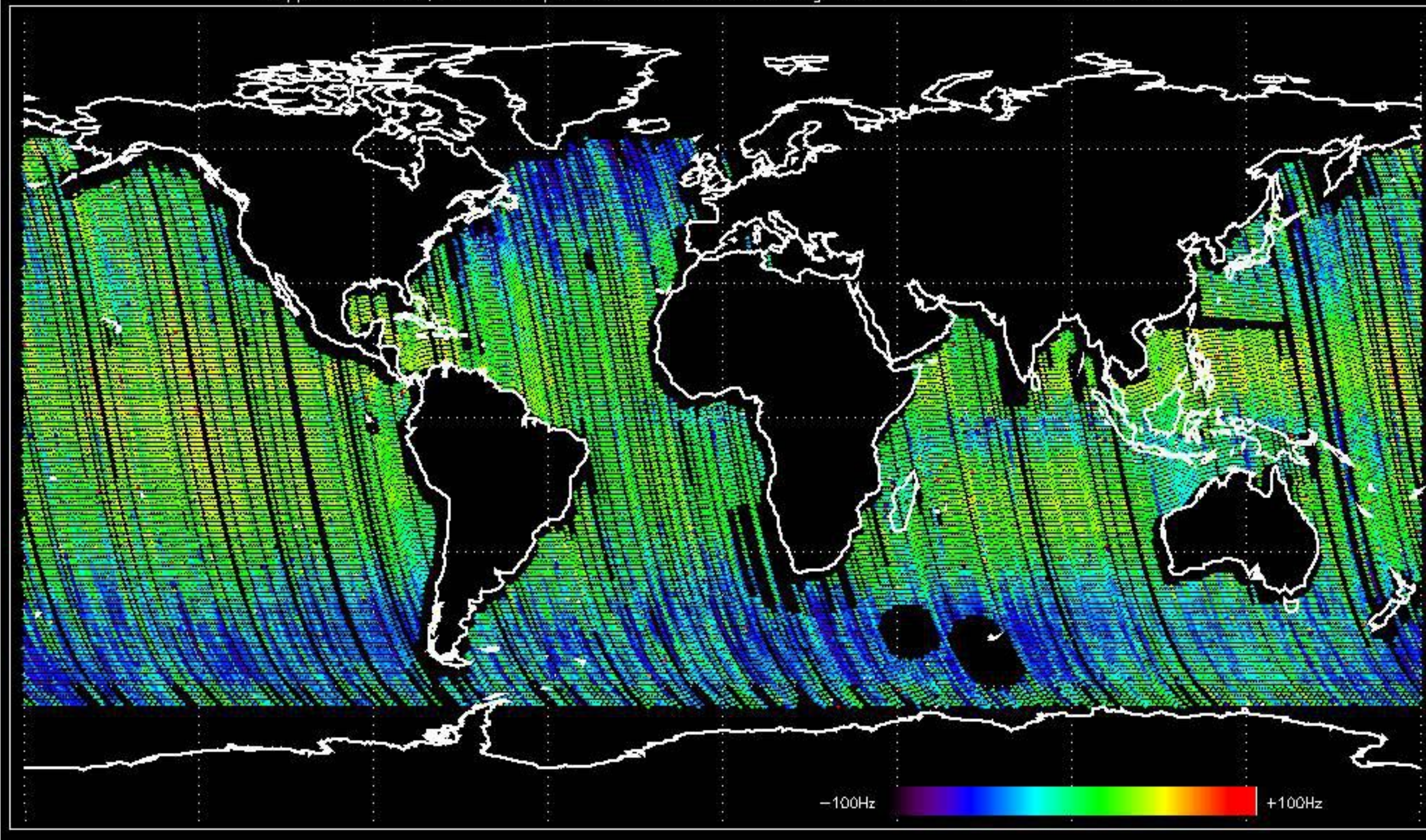
Doppler difference, estimated-predicted 'GM1' 'SS1' ascending -error mean of -32.827300 Hz



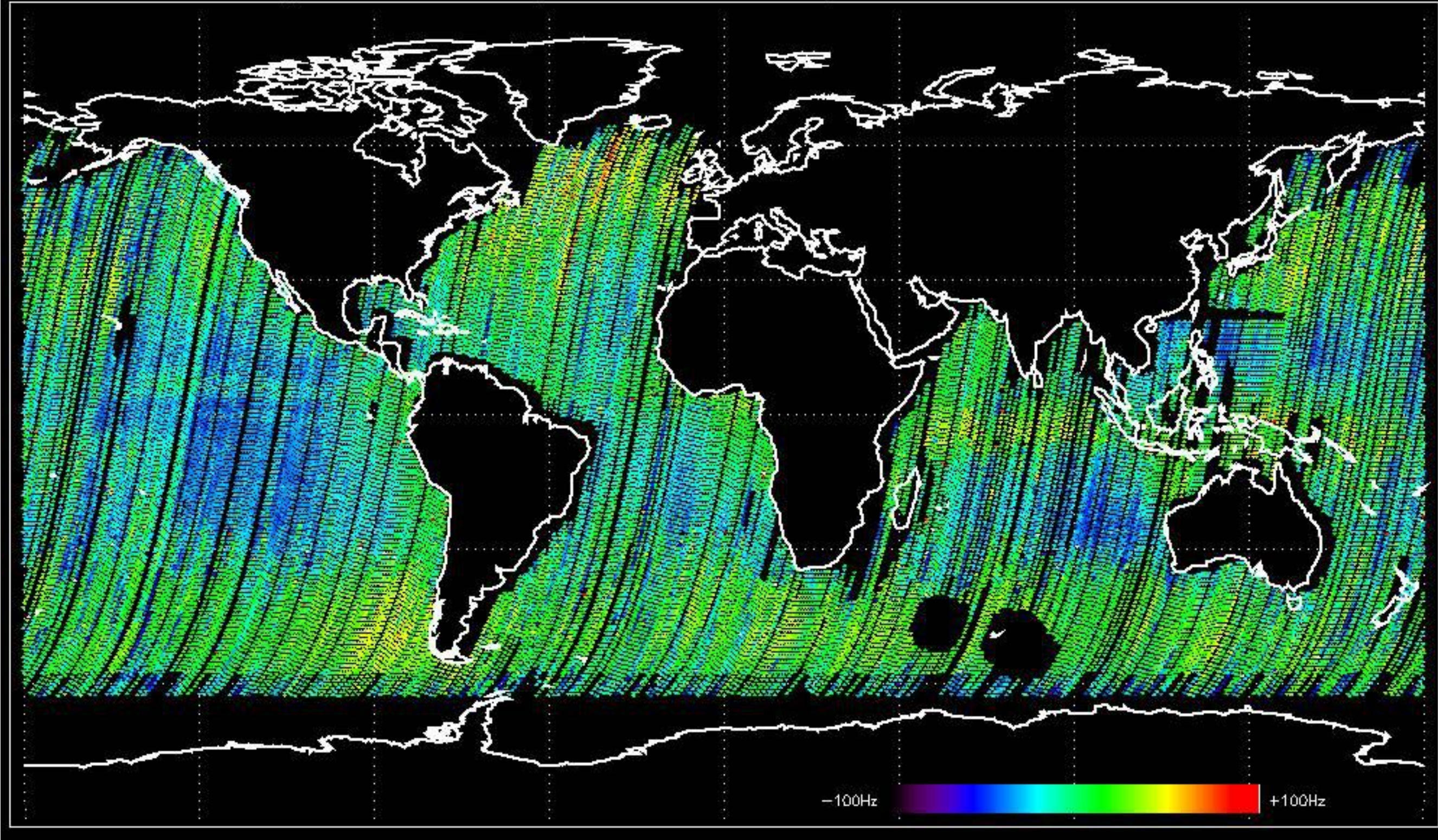
Doppler difference, estimated-predicted 'GM1' 'SS1' descending -error mean of -28.398575 Hz



Doppler difference, estimated-predicted 'WVS' 'IS2' ascending -error mean of -35.583955 Hz

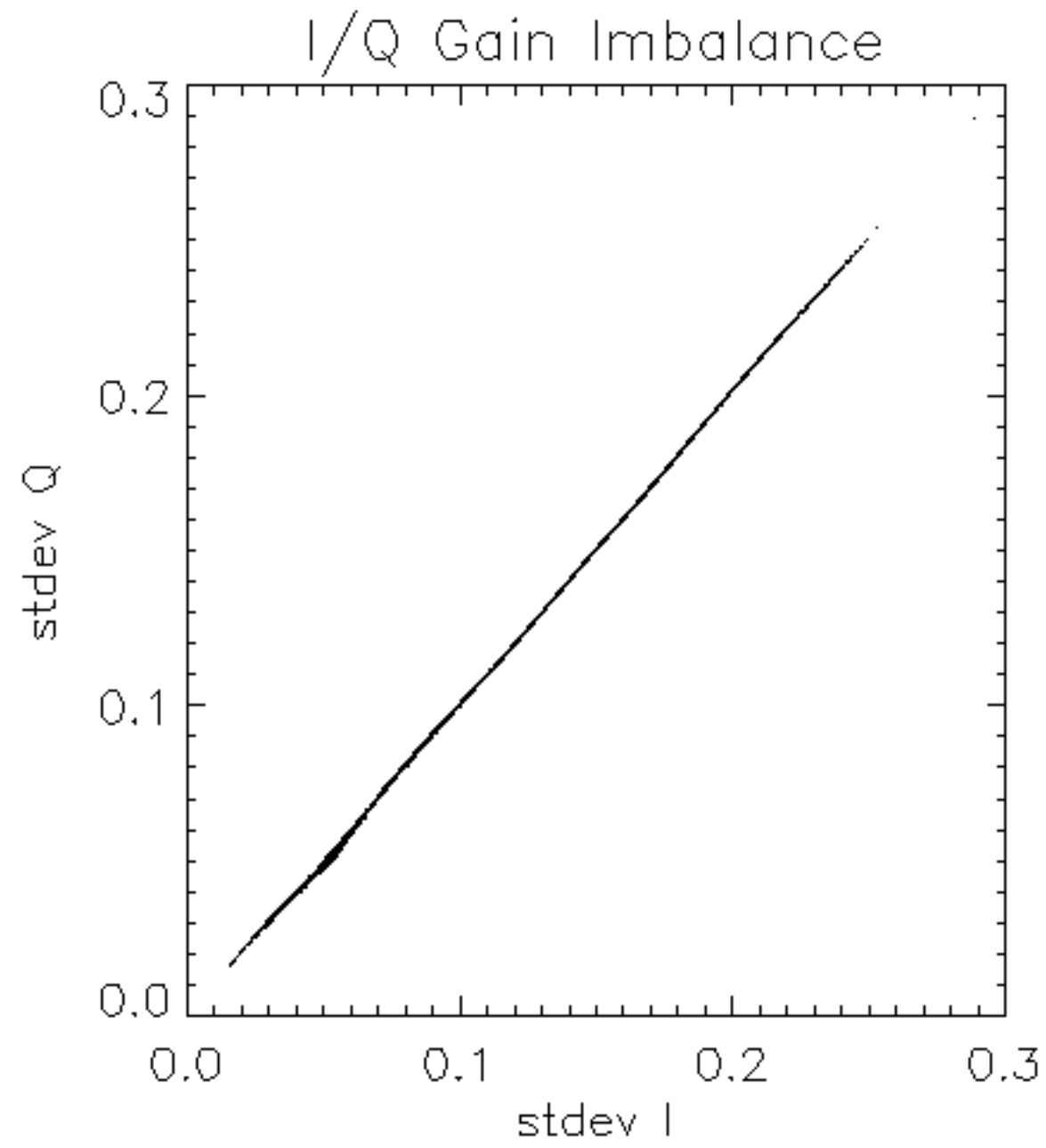


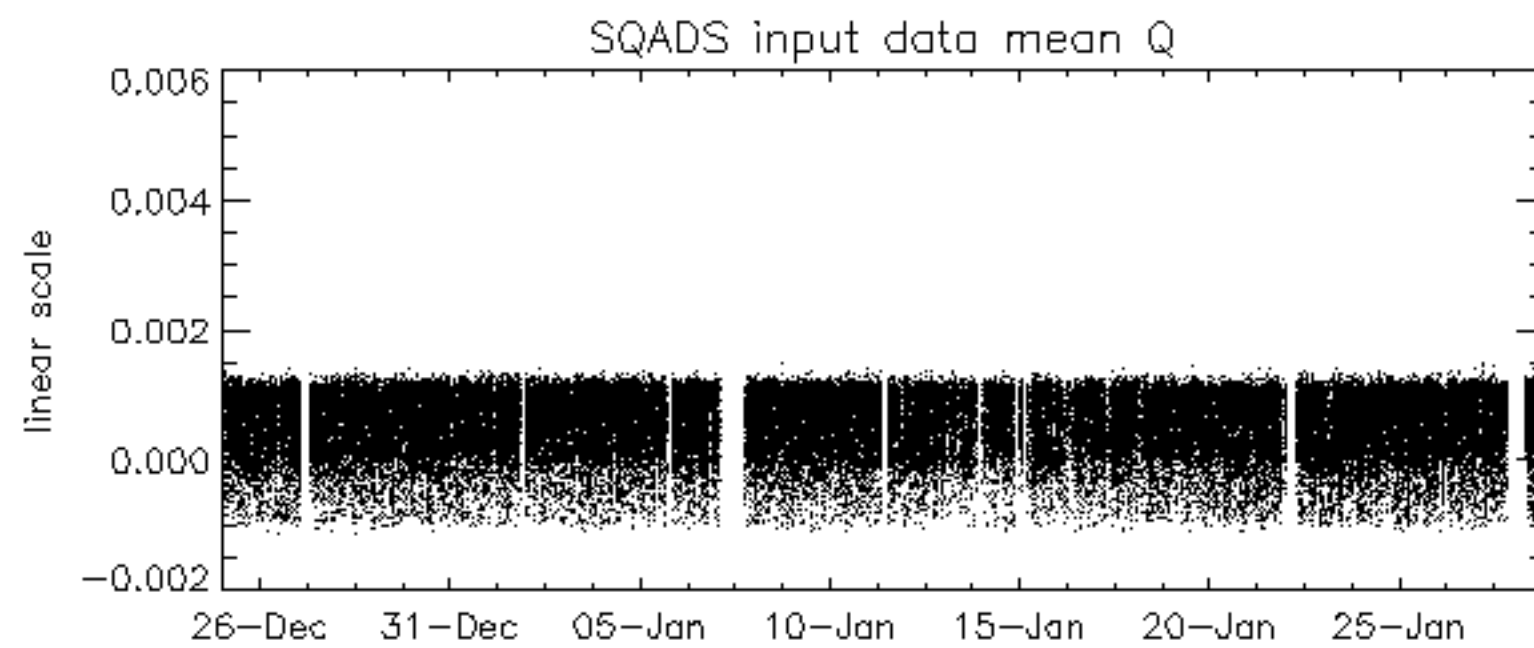
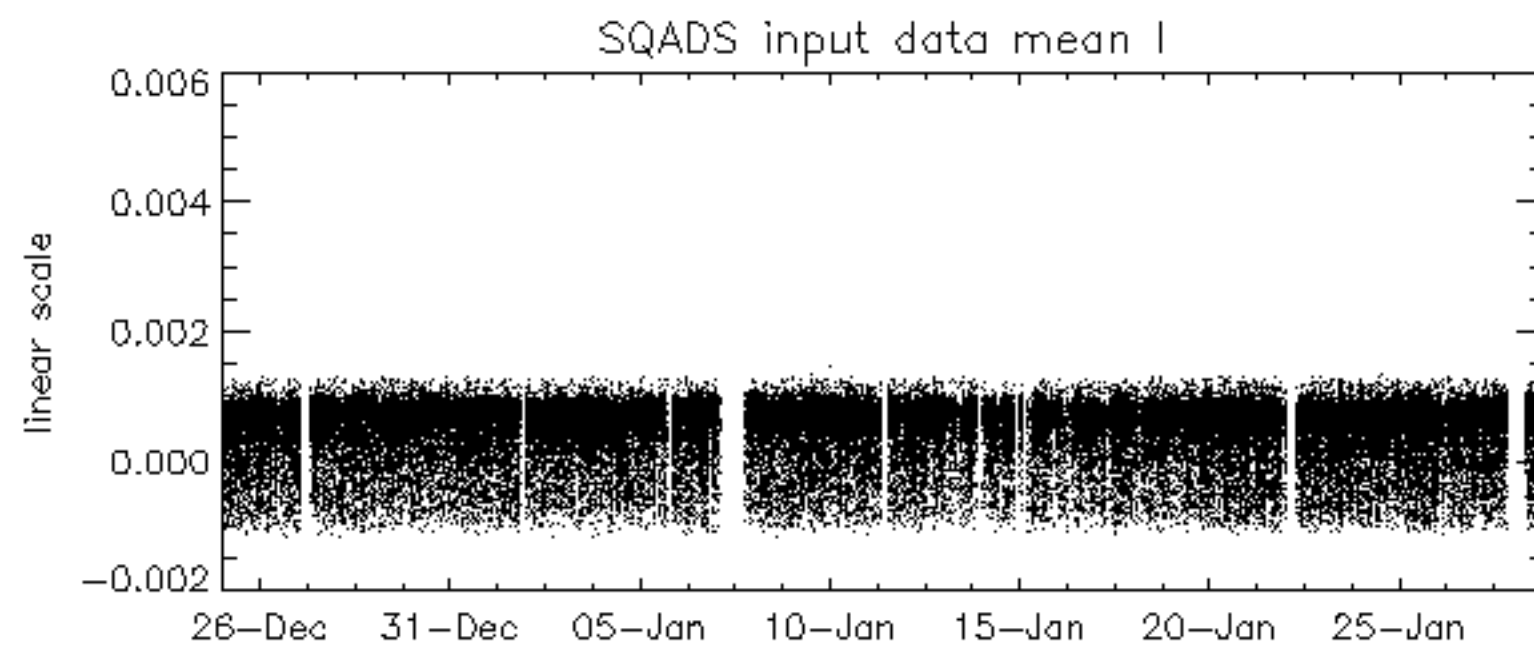
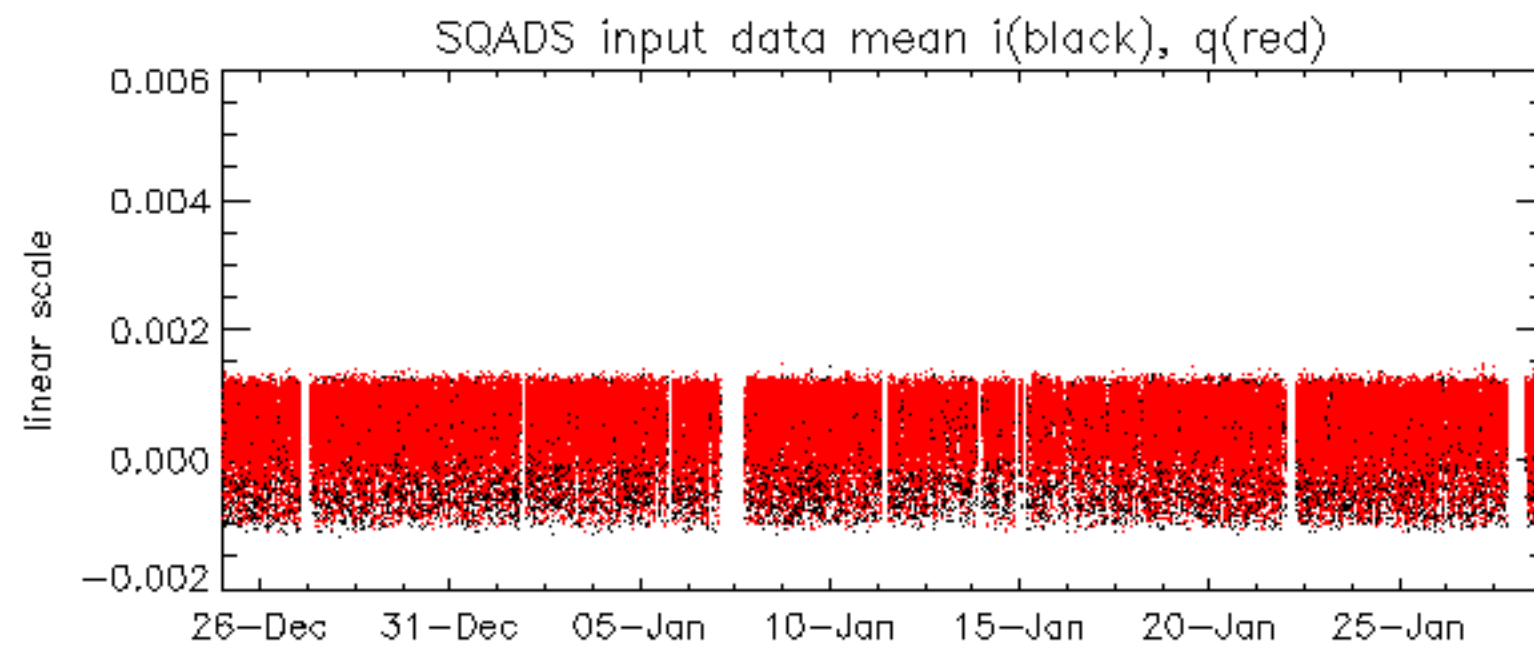
Doppler difference, estimated-predicted 'WVS' 'IS2' descending -error mean of -37.095624 Hz

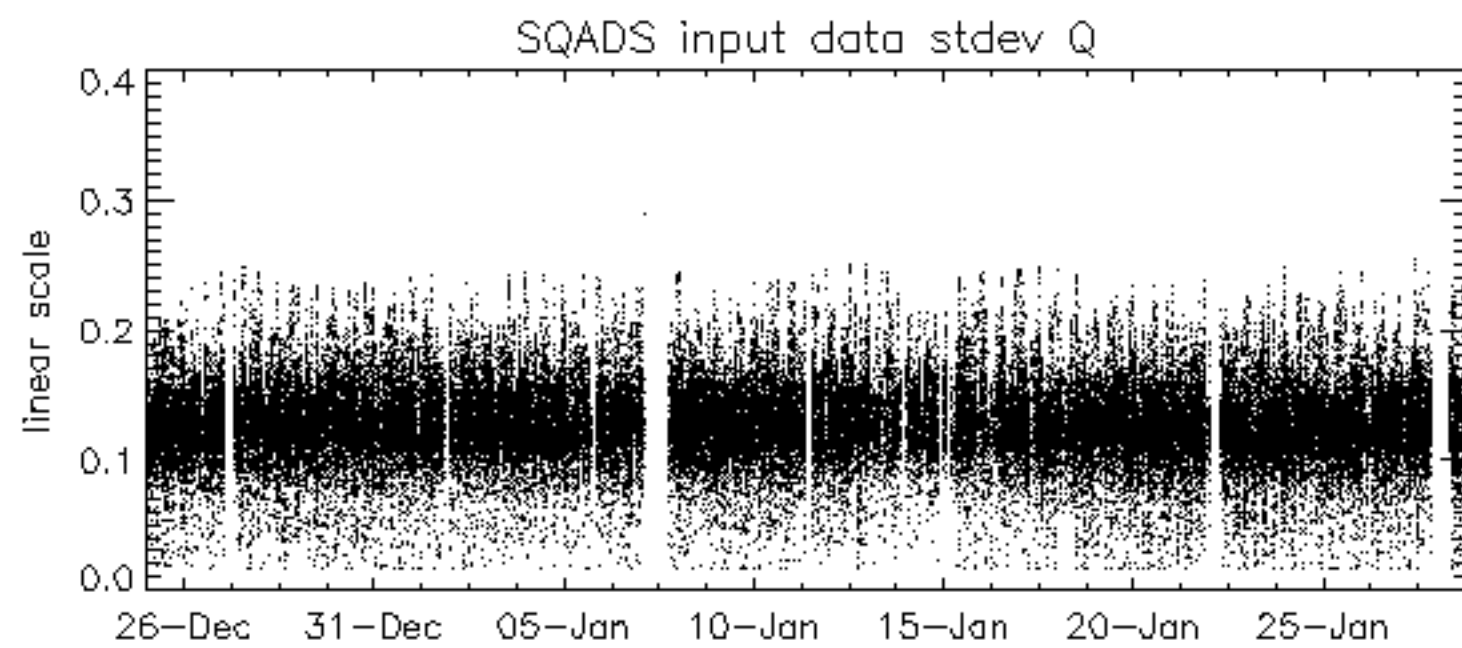
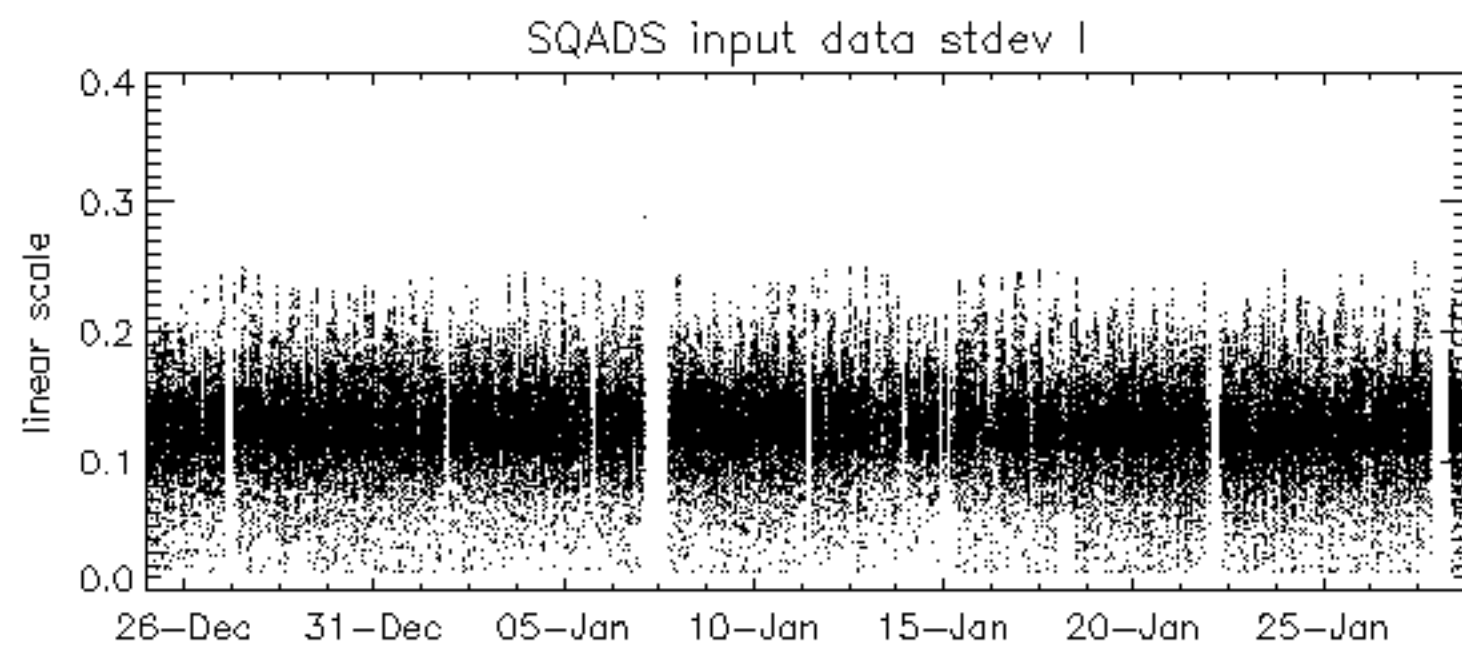
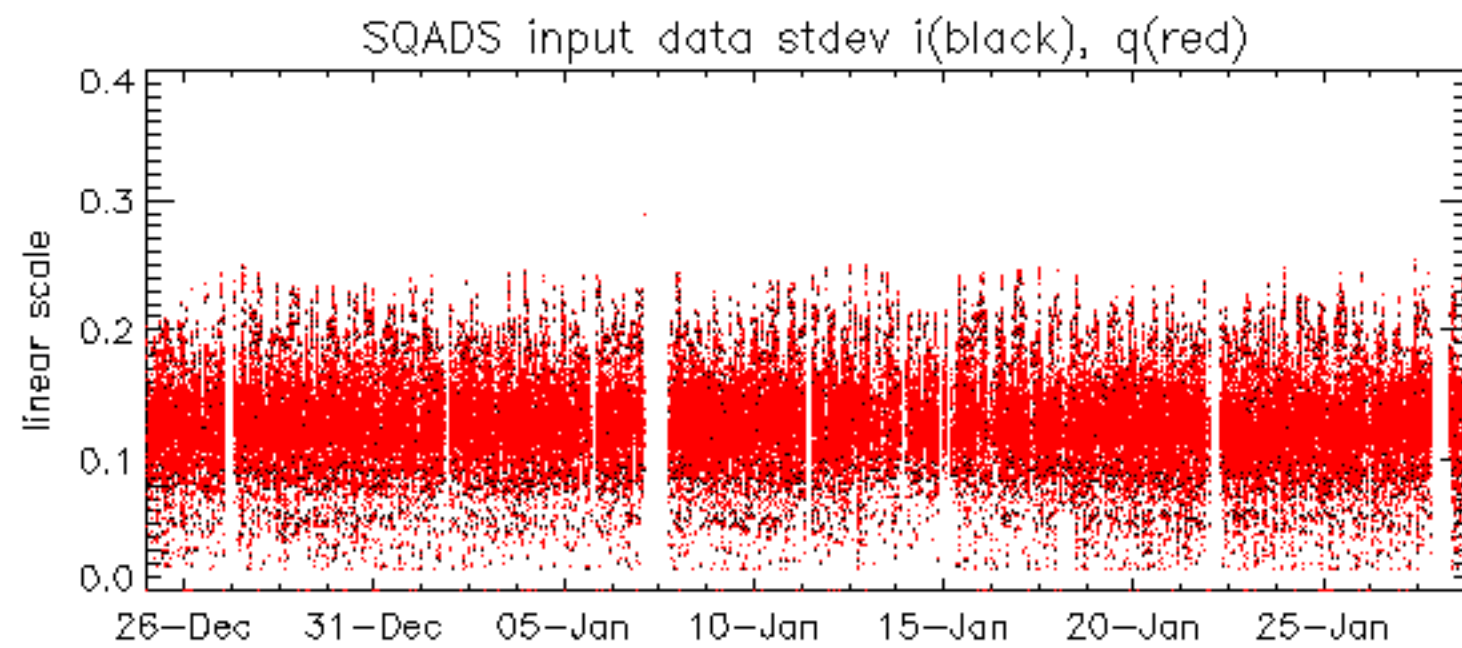


The MS mode provides an internal health check on an individual module basis.
The purpose of this mode is to identify to identify any malfunctioning modules and
to identify modules for which calibration offsets are to be applied.
No anomalies observed on available MS products:

No anomalies observed.



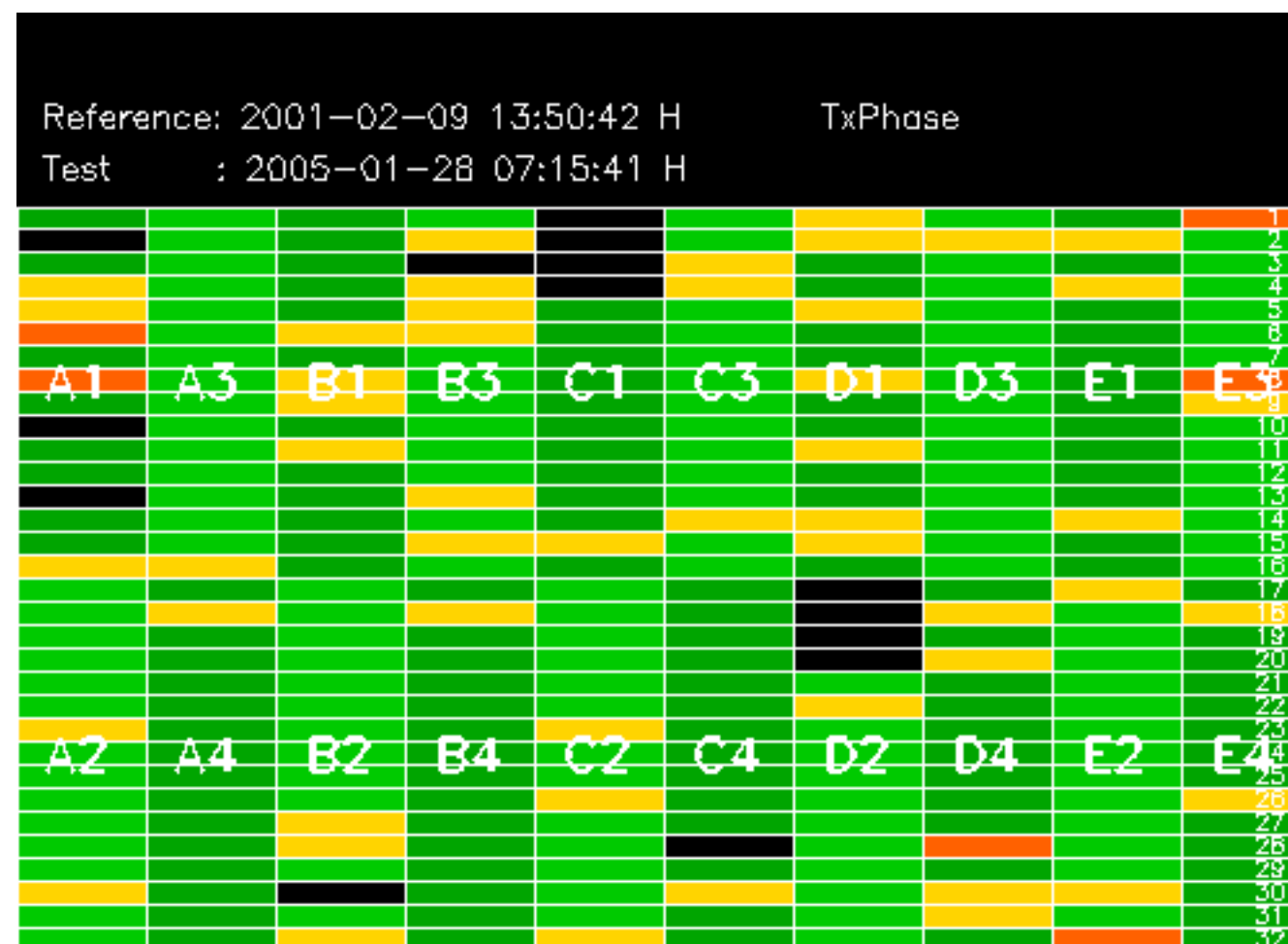


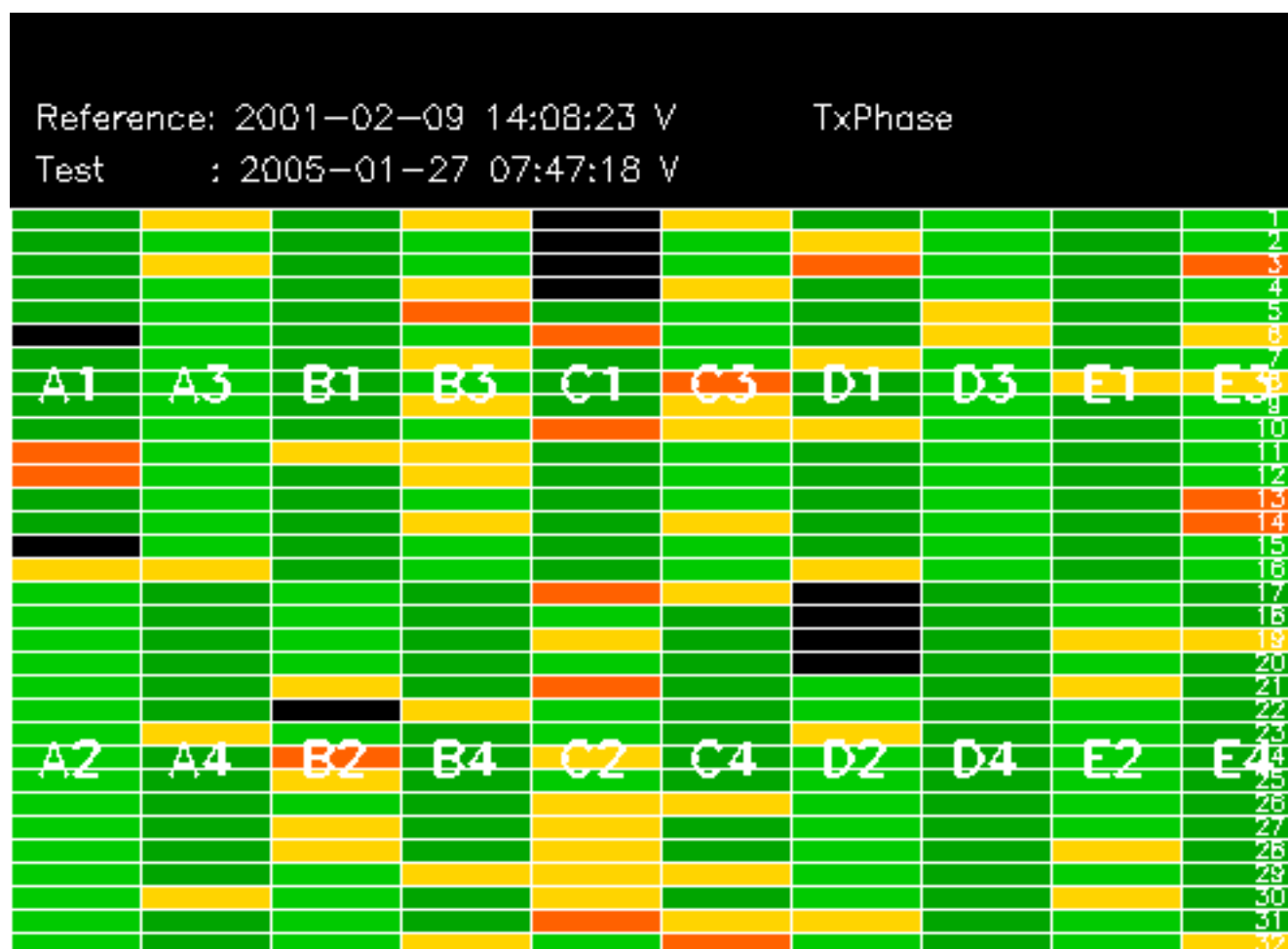


Summary of analysis for the last 3 days 2005012[789]

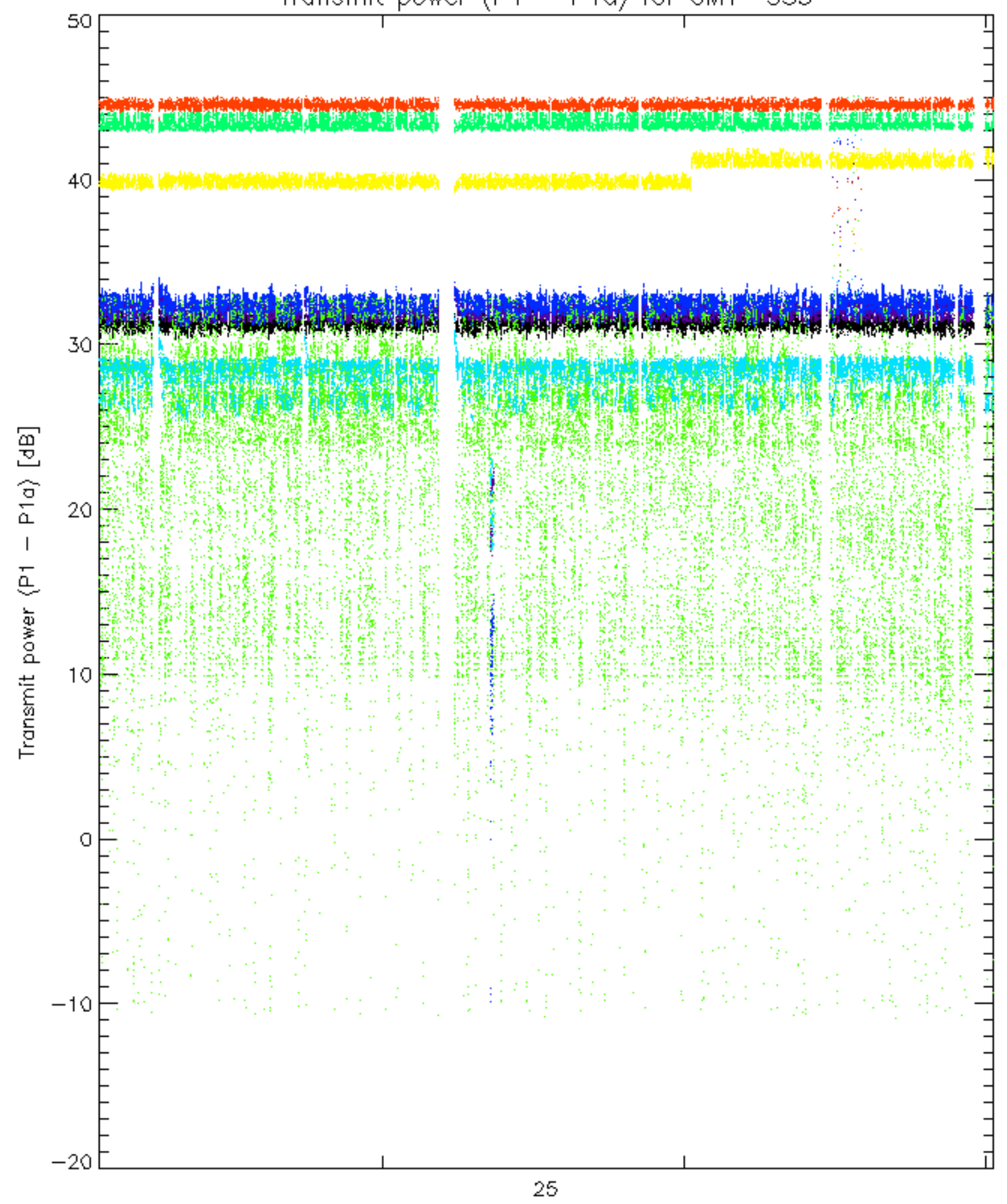
The assumption is taken that the SQUADS num_gaps and num_missing_lines fields are reliable indicators of telemetry problems

Filename	num_gaps	num_missing_lines
ASA_IMM_1PNPDE20050127_000702_00000372034_00131_15215_1155.N1	1	0
ASA_IMM_1PNPDE20050127_050539_000001122034_00134_15218_1181.N1	1	0
ASA_IMM_1PNPDE20050128_010032_000000622034_00145_15229_1250.N1	0	117
ASA_IMM_1PNPDK20050127_184123_000001612034_00142_15226_8130.N1	0	20
ASA_WVS_1PNPDE20050127_000800_000003302034_00131_15215_6176.N1	0	56
ASA_WVS_1PNPDE20050127_003142_000003152034_00131_15215_6177.N1	0	56
ASA_WVS_1PNPDE20050127_003834_000001642034_00131_15215_6179.N1	0	24
ASA_WVS_1PNPDE20050127_004216_000002842034_00131_15215_6178.N1	0	8
ASA_WVS_1PNPDE20050127_005803_000004652034_00131_15215_6174.N1	0	80
ASA_WVS_1PNPDE20050127_011944_000003002034_00131_15215_6175.N1	0	64
ASA_WVS_1PNPDE20050127_012459_000003302034_00131_15215_6198.N1	0	360
ASA_WVS_1PNPDE20050127_013955_000005692034_00132_15216_6181.N1	0	408
ASA_WVS_1PNPDE20050127_022254_000002992034_00132_15216_6183.N1	0	496
ASA_WVS_1PNPDE20050127_023120_000003592034_00132_15216_6182.N1	0	384
ASA_WVS_1PNPDE20050127_030020_000003002034_00132_15216_6186.N1	2	1640
ASA_WVS_1PNPDE20050127_032139_000001342034_00133_15217_6187.N1	4	1568
ASA_WVS_1PNPDE20050127_040343_000009442034_00133_15217_6184.N1	1	1736
ASA_WVS_1PNPDE20050127_042444_000001352034_00133_15217_6189.N1	4	1632
ASA_WVS_1PNPDE20050127_044056_000013492034_00133_15217_6188.N1	5	1360
ASA_WVS_1PNPDE20050127_054350_000009292034_00134_15218_6190.N1	2	1800
ASA_GM1_1PNPDE20050127_001420_000000842034_00131_15215_7907.N1	0	202
ASA_GM1_1PNPDE20050127_005120_000003862034_00131_15215_7912.N1	0	1322
ASA_GM1_1PNPDE20050127_010632_000004342034_00131_15215_7911.N1	0	1657
ASA_GM1_1PNPDE20050127_011648_000001572034_00131_15215_7913.N1	0	391
ASA_GM1_1PNPDE20050127_013114_000000722034_00131_15215_7926.N1	0	1602
ASA_GM1_1PNPDE20050127_013651_000001692034_00131_15215_7924.N1	0	5054
ASA_GM1_1PNPDE20050127_015239_000002412034_00132_15216_7921.N1	0	7371
ASA_GM1_1PNPDE20050127_021759_000001872034_00132_15216_7922.N1	0	5609
ASA_GM1_1PNPDE20050127_024708_000005252034_00132_15216_7934.N1	0	93885
ASA_GM1_1PNPDE20050127_025646_000001992034_00132_15216_7945.N1	0	33978
ASA_GM1_1PNPDE20050127_030608_000001632034_00132_15216_7951.N1	0	27628
ASA_GM1_1PNPDE20050127_030900_000002772034_00132_15216_7944.N1	0	48179
ASA_GM1_1PNPDE20050127_031429_000004102034_00132_15216_7937.N1	1	73131
ASA_GM1_1PNPDE20050127_032725_000001872034_00133_15217_7947.N1	0	32409
ASA_GM1_1PNPDE20050127_033212_000004042034_00133_15217_7938.N1	0	74868
ASA_GM1_1PNPDE20050127_034030_000003802034_00133_15217_7940.N1	1	71222
ASA_GM1_1PNPDE20050127_035603_000001812034_00133_15217_7950.N1	1	32931
ASA_GM1_1PNPDE20050127_040125_000001202034_00133_15217_7952.N1	0	22518
ASA_GM1_1PNPDE20050127_042744_000007732034_00133_15217_7959.N1	1	158445
ASA_GM1_1PNPDE20050127_050412_000000842034_00134_15218_7967.N1	0	16473
ASA_GM1_1PNPDE20050127_050747_000006162034_00134_15218_7960.N1	3	130060
ASA_GM1_1PNPDE20050127_052106_000003082034_00134_15218_7965.N1	5	62861
ASA_GM1_1PNPDE20050127_052921_000003622034_00134_15218_7962.N1	2	75002
ASA_WSM_1PNPDE20050128_065653_000000672034_00149_15233_2102.N1	0	357
ASA_APM_1PNPDE20050128_014243_000000622034_00146_15230_6459.N1	0	42
ASA_APM_1PNPDE20050128_045507_000000622034_00148_15232_6470.N1	0	15
ASA_APM_1PNPDE20050128_045908_000000602034_00148_15232_6471.N1	0	5

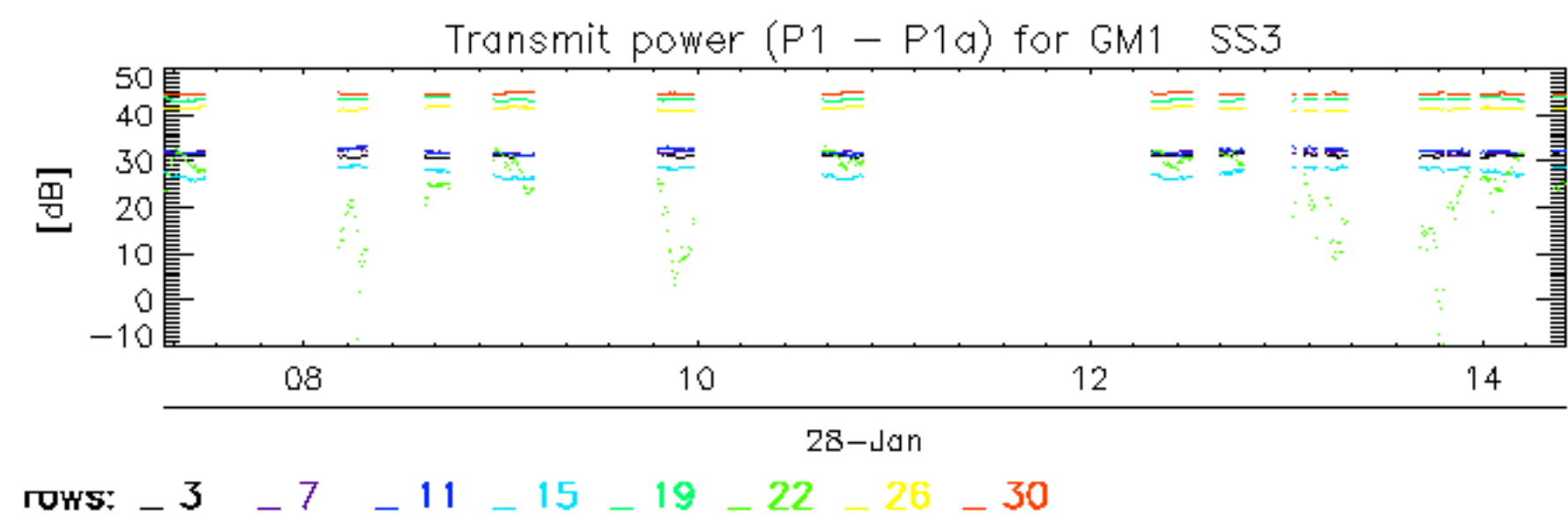


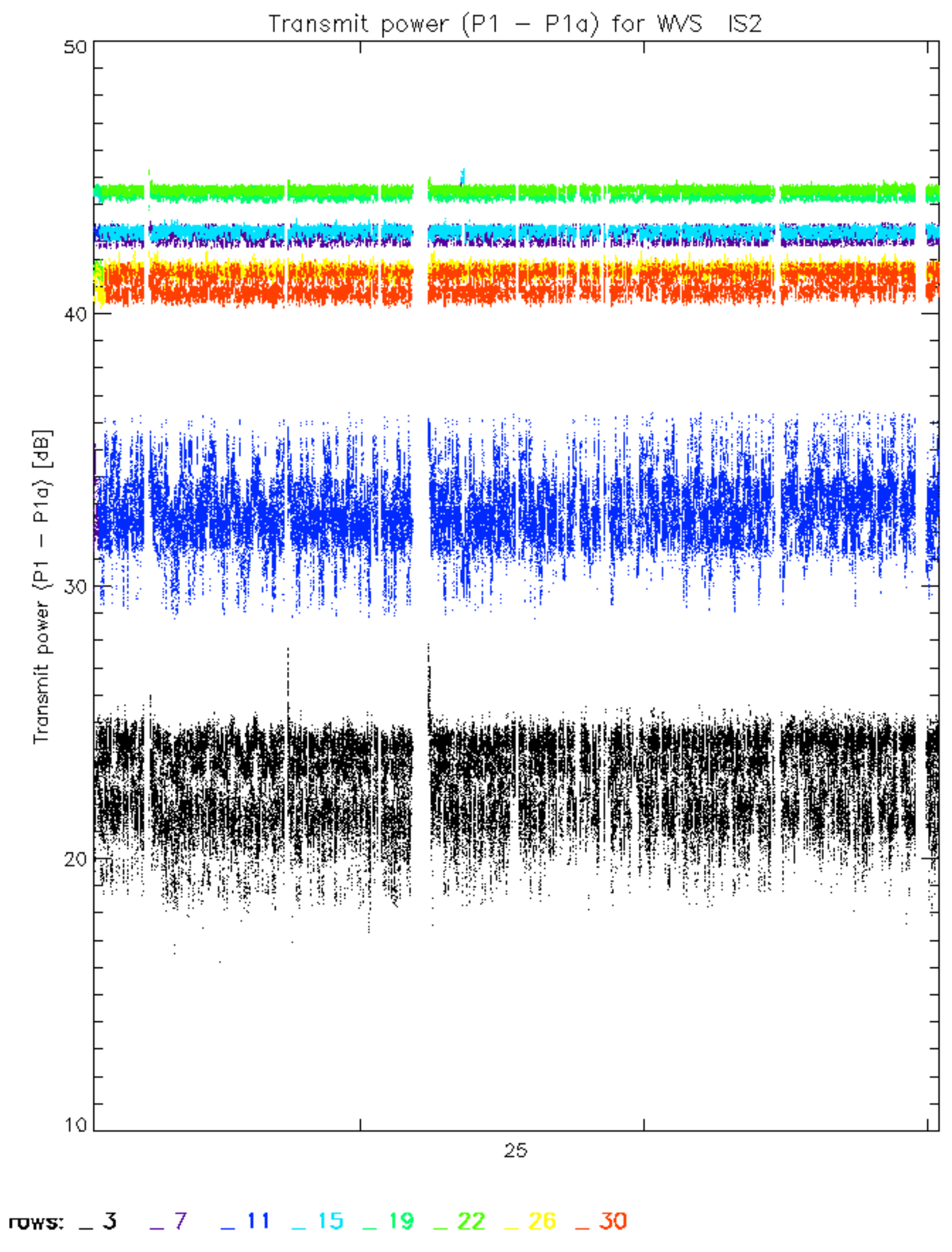


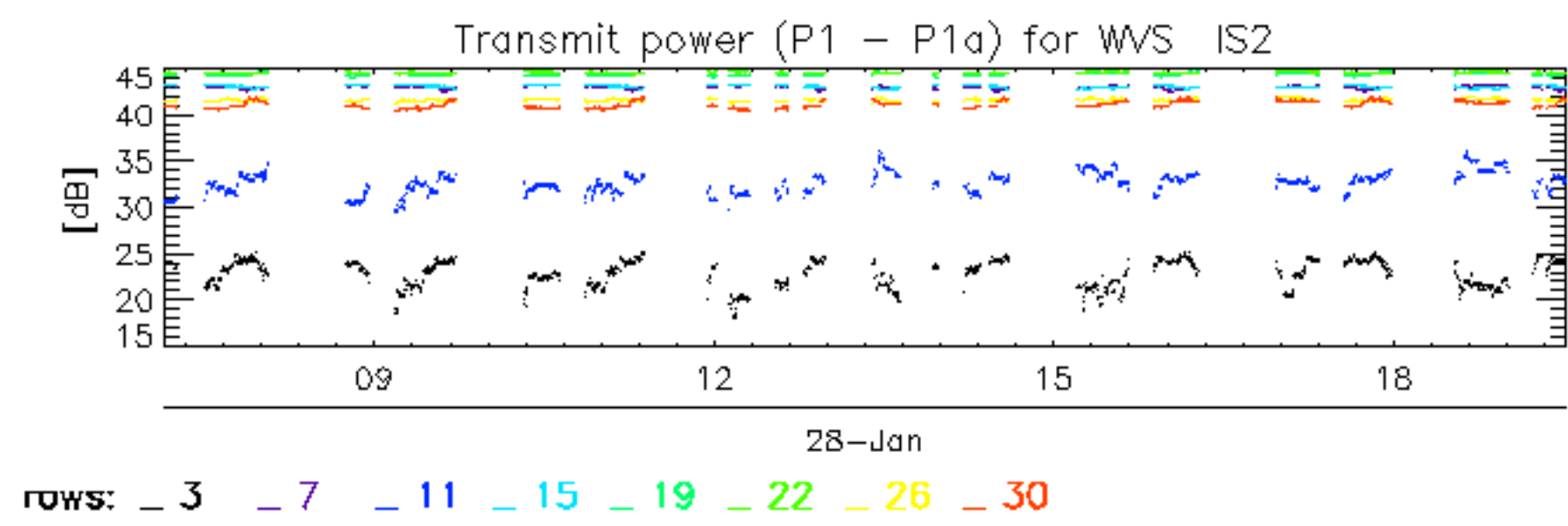
Transmit power (P1 - P1a) for GM1 SS3



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







No unavailabilities during the reported period.