0. MIPAS Daily Report for level 0 products

0.1 General Info
0.2 Instrument Operational Performance Parameters
0.3 ADF monitoring

0.1 General Info

This report contains a daily analysis on parameters extracted from MIPAS level 0 data (The MIP_NL__0P product).

0.1.1 Report summary

The table below shows general characteristics of the data that are included into this report.

Item	Value
Report version	v1.6 08-11-2010
Time of report generation	06MAR2011 05:24:19
Data source version	KSPT_L0/4504-N
Processing scope for products	01MAR2011 00:00:00 to 02MAR2011 00:00:00
Start time of first product within scope	01MAR2011 00:23:17
Stop time of last product within scope	02MAR2011 01:26:39
Total number of level 0 products	17
Number of level 0 products with errors	0

0.1.2 Product Quality Indicators per product

The following table shows a summary for each product used in this report.

#	Product name	Start time	Stop time	Prod err	ISP err sign	ISP miss sign	ISP disc sign	rs sign
0	MIP_NL__0PNPDE20110301_002317_000058363100_00059_47056_3012.N1	01MAR2011 00:23:17	01MAR2011 02:00:33	0	0	0	0	0
1	MIP_NL__0PNPDE20110301_004204_000047083100_00060_47057_6635.N1	01MAR2011 00:42:04	01MAR2011 02:00:33	0	0	0	0	0
2	MIP_NL__0PNPDE20110301_015930_000045083100_00060_47057_6633.N1	01MAR2011 01:59:30	01MAR2011 03:14:38	0	0	0	0	0
3	MIP_NL__0PNPDE20110301_031405_000061173100_00061_47058_3014.N1	01MAR2011 03:14:05	01MAR2011 04:56:01	0	0	0	0	0
4	MIP_NL__0PNPDE20110301_045526_000060863100_00062_47059_3015.N1	01MAR2011 04:55:26	01MAR2011 06:36:52	0	0	0	0	0
5	MIP_NL__0PNPDK20110301_063619_000040323100_00063_47060_4435.N1	01MAR2011 06:36:19	01MAR2011 07:43:31	0	0	0	0	0
6	MIP_NL__0PNPDK20110301_074234_000061563100_00064_47061_4436.N1	01MAR2011 07:42:34	01MAR2011 09:25:11	0	0	0	0	0
7	MIP_NL__0PNPDK20110301_092404_000059163100_00065_47062_4437.N1	01MAR2011 09:24:04	01MAR2011 11:02:40	0	0	0	0	0
8	MIP_NL__0PNPDK20110301_110102_000061293100_00066_47063_4438.N1	01MAR2011 11:01:02	01MAR2011 12:43:11	0	0	0	0	0
9	MIP_NL__0PNPDK20110301_124215_000059373100_00067_47064_4439.N1	01MAR2011 12:42:15	01MAR2011 14:21:12	0	0	0	0	0
10	MIP_NL__0PNPDK20110301_142013_000059623100_00068_47065_4440.N1	01MAR2011 14:20:13	01MAR2011 15:59:35	0	0	0	0	0
11	MIP_NL__0PNPDK20110301_155839_000058143100_00069_47066_4441.N1	01MAR2011 15:58:39	01MAR2011 17:35:33	0	0	0	0	0
12	MIP_NL__0PNPDK20110301_173447_000060393100_00070_47067_4442.N1	01MAR2011 17:34:47	01MAR2011 19:15:26	0	0	0	0	0
13	MIP_NL__0PNPDK20110301_191405_000060833100_00071_47068_4443.N1	01MAR2011 19:14:05	01MAR2011 20:55:28	0	0	0	0	0
14	MIP_NL__0PNPDE20110301_205450_000042473100_00072_47069_3016.N1	01MAR2011 20:54:50	01MAR2011 22:05:37	0	0	0	0	0
15	MIP_NL__0PNPDE20110301_220430_000060983100_00072_47069_3017.N1	01MAR2011 22:04:30	01MAR2011 23:46:08	0	0	0	0	0
16	MIP_NL__0PNPDE20110301_234506_000060943100_00073_47070_3018.N1	01MAR2011 23:45:06	02MAR2011 01:26:39	0	0	0	0	0

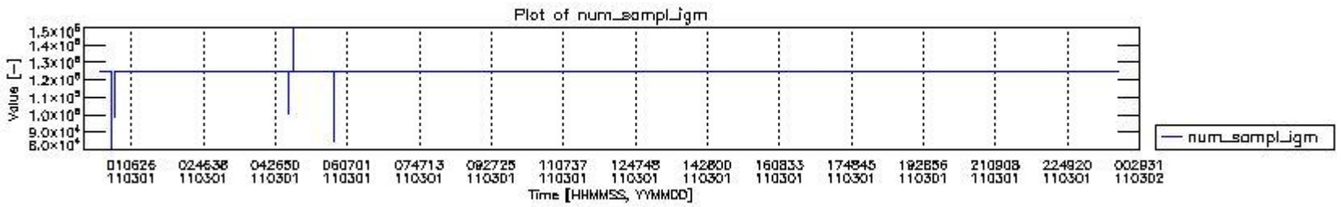
0.2 Instrument Operational Performance Parameters

The following plots give an overview of various instrument parameters for this day. The instrument parameters are part of the auxiliary data field within the source packets of the MIP_NL__0P product. The auxiliary data is normally included twice per interferogram. Note that only the first packet is currently included in monitoring.

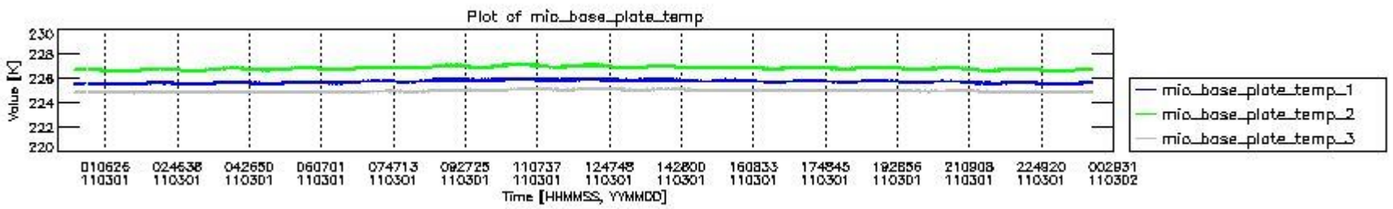
The following table shows the counts of various interferogram number of samples

Number of igm samples	Count [#]	Count [%]
80662	1	0.0024495995

84230	1	0.0024495995
92665	1	0.0024495995
94449	1	0.0024495995
98847	1	0.0024495995
100436	1	0.0024495995
102552	1	0.0024495995
112797	1	0.0024495995
114581	1	0.0024495995
122684	1	0.0024495995
123398	1	0.0024495995
124099	1	0.0024495995
124800	37914	92.874115
124803	2894	7.0891409
127159	1	0.0024495995
147291	1	0.0024495995
149650	1	0.0024495995



mipas_daily_report_level0_KSPT_L0_4504_N_20110301_0.PNG



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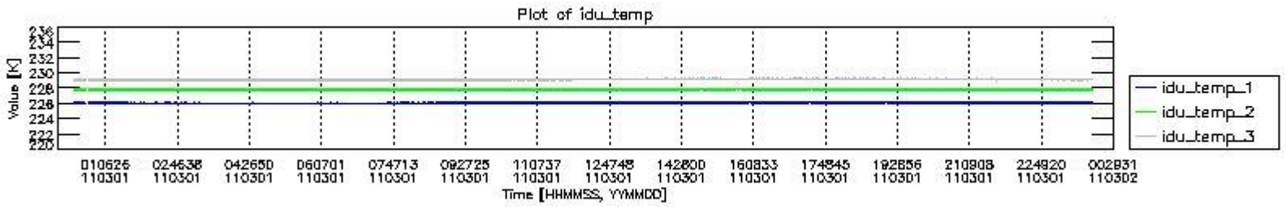
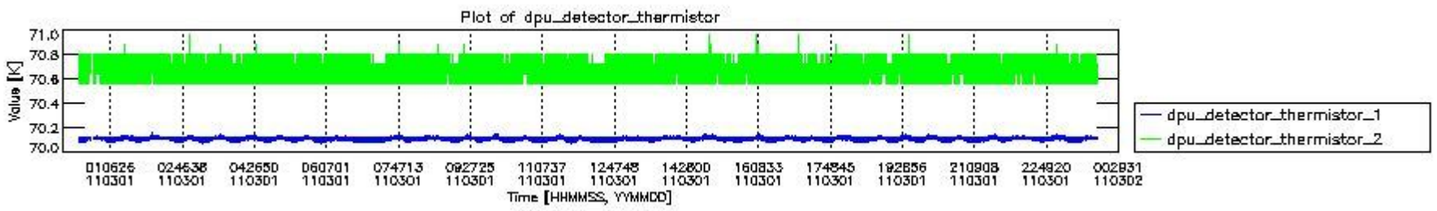
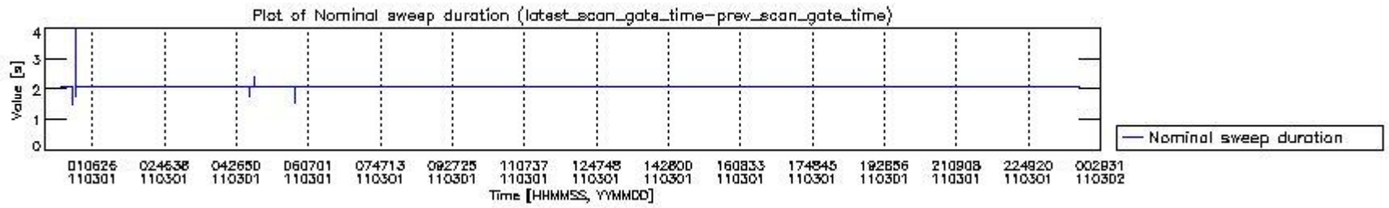


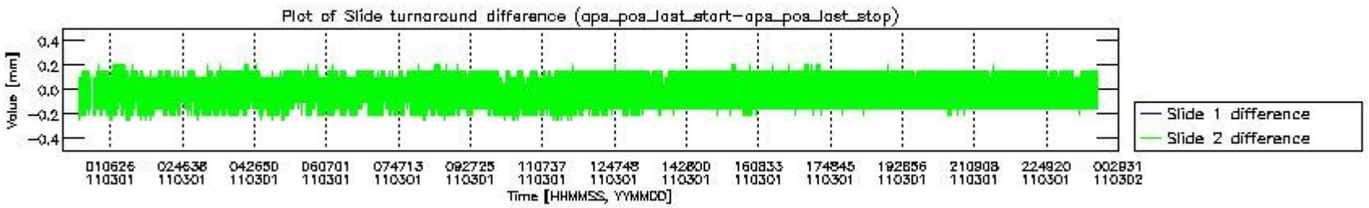
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_2.PNG



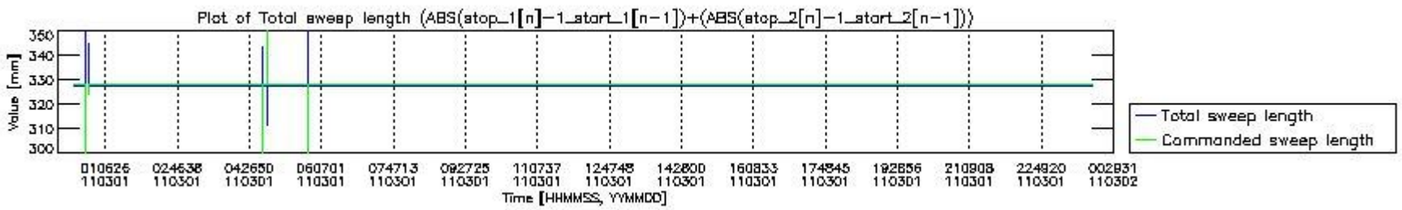
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_3.PNG



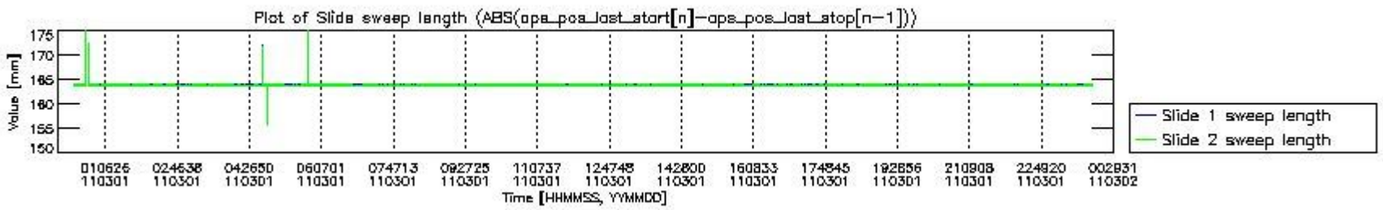
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_4.PNG



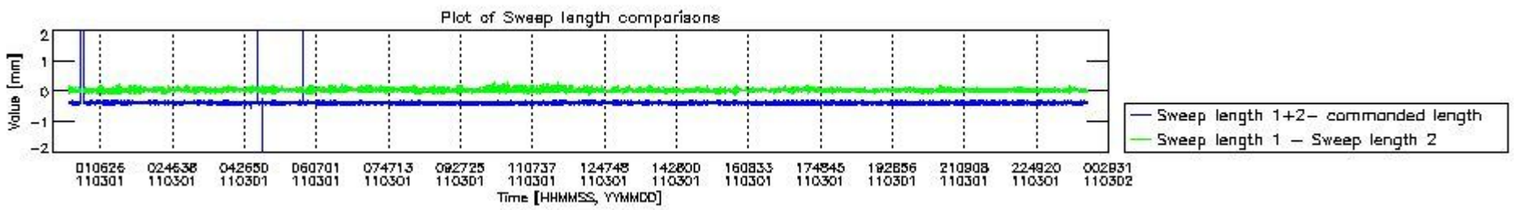
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_5.PNG



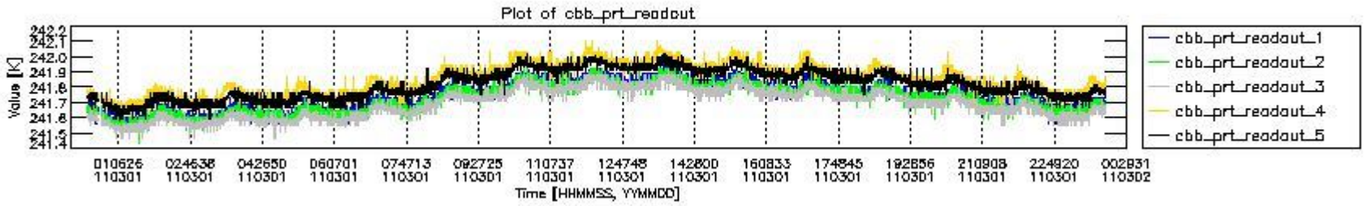
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_6.PNG



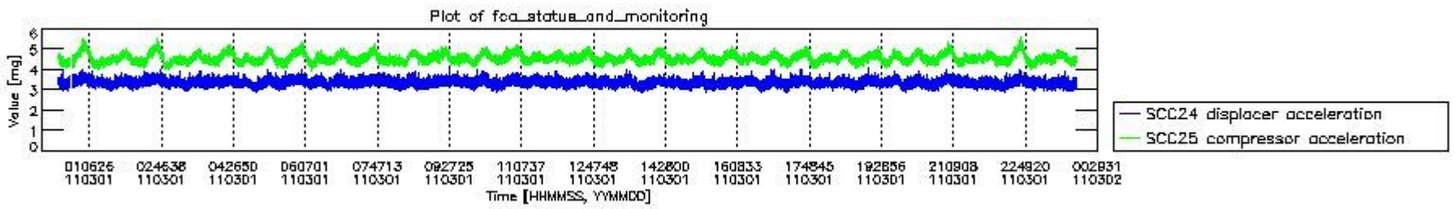
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_7.PNG



mipas_daily_report_level0_KSPT_L0_4504_N_20110301_8.PNG



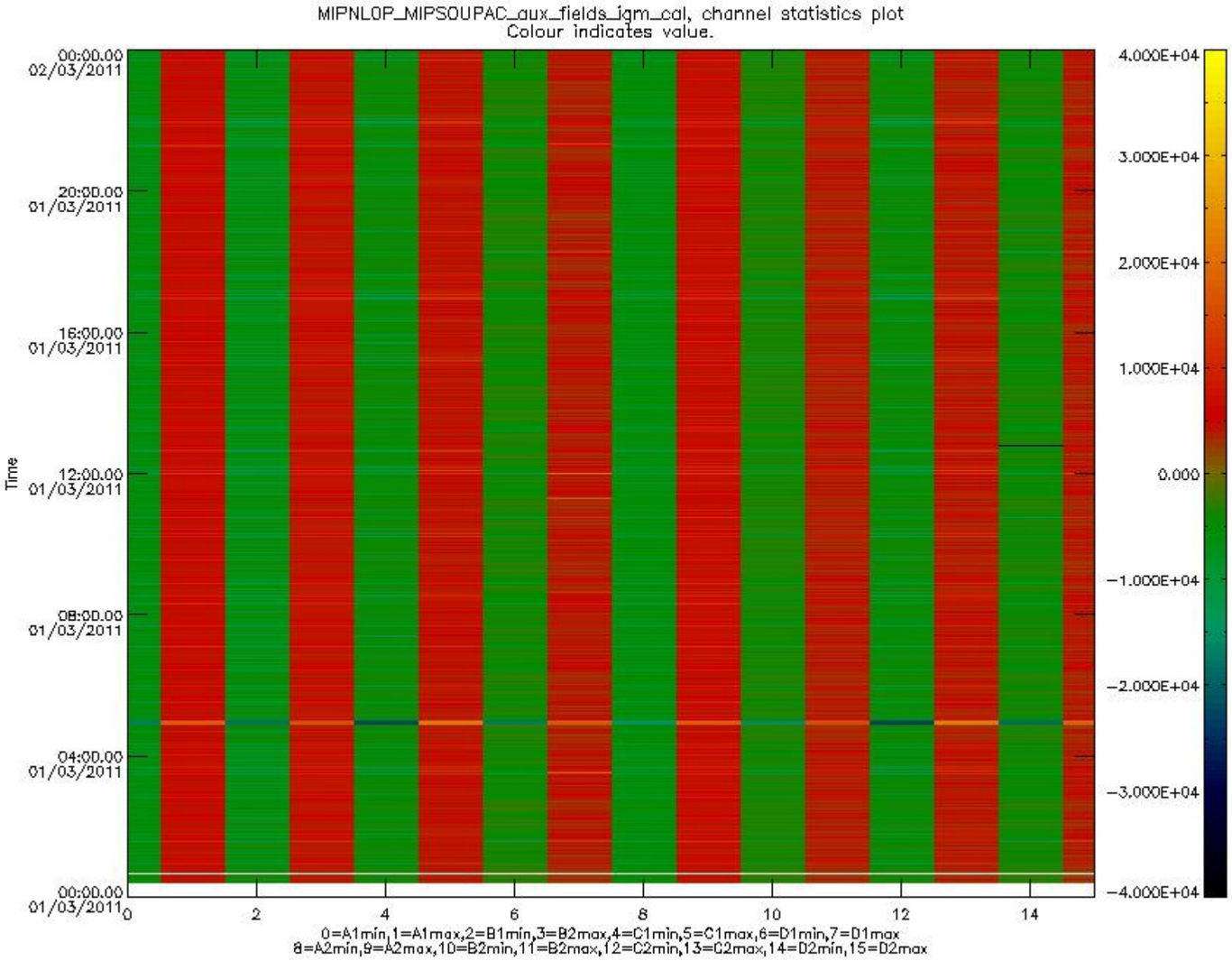
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_9.PNG



mipas_daily_report_level0_KSPT_L0_4504_N_20110301_10.PNG

The following table shows channel statistics for all channels for this day.

Channel	Min	Max	ADC
A1	-17431	18427	16bit
B1	-18889	16429	16bit
C1	-23951	21955	16bit
D1	-24325	31891	16bit
A2	-15142	18567	16bit
B2	-16997	16734	16bit
C2	-23011	22556	16bit
D2	-32768	28554	16bit



mipas_daily_report_level0_KSPT_L0_4504_N_20110301_11.PNG

0.3 ADF monitoring

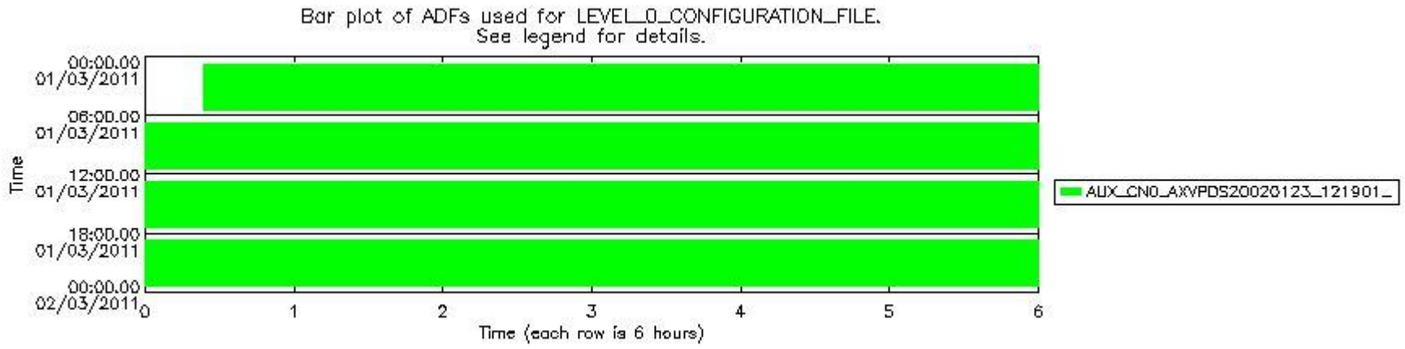
The use of ADFs is shown in two ways:

1. By means of two tables that can be used to find the ADF used for a specific product.
2. By means of plots that show changes in ADF using colours.

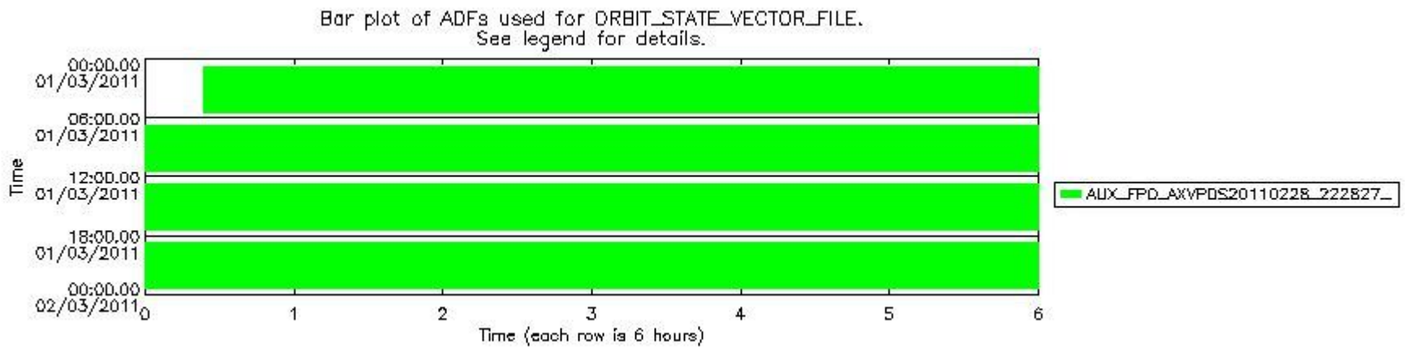
Number	ADF
0	AUX_CN0_AXVPDS20020123_121901_20020101_000000_20200101_000000
1	AUX_FPO_AXVPDS20110228_222827_20110228_193338_20110310_200714

Number	Product name	#CN0	#FPO
0	MIP_NL__0PNPDE20110301_002317_000058363100_00059_47056_3012.N1	0	1

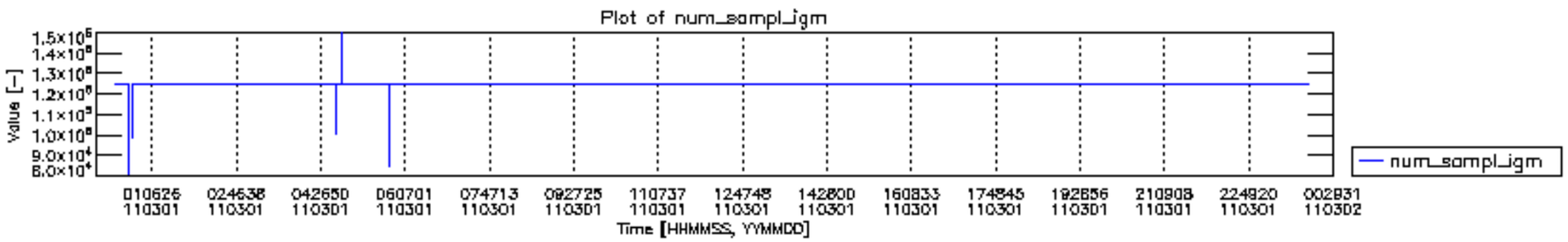
1	MIP_NL__0PNPDE20110301_004204_000047083100_00060_47057_6635.N1	0	1
2	MIP_NL__0PNPDE20110301_015930_000045083100_00060_47057_6633.N1	0	1
3	MIP_NL__0PNPDE20110301_031405_000061173100_00061_47058_3014.N1	0	1
4	MIP_NL__0PNPDE20110301_045526_000060863100_00062_47059_3015.N1	0	1
5	MIP_NL__0PNPDK20110301_063619_000040323100_00063_47060_4435.N1	0	1
6	MIP_NL__0PNPDK20110301_074234_000061563100_00064_47061_4436.N1	0	1
7	MIP_NL__0PNPDK20110301_092404_000059163100_00065_47062_4437.N1	0	1
8	MIP_NL__0PNPDK20110301_110102_000061293100_00066_47063_4438.N1	0	1
9	MIP_NL__0PNPDK20110301_124215_000059373100_00067_47064_4439.N1	0	1
10	MIP_NL__0PNPDK20110301_142013_000059623100_00068_47065_4440.N1	0	1
11	MIP_NL__0PNPDK20110301_155839_000058143100_00069_47066_4441.N1	0	1
12	MIP_NL__0PNPDK20110301_173447_000060393100_00070_47067_4442.N1	0	1
13	MIP_NL__0PNPDK20110301_191405_000060833100_00071_47068_4443.N1	0	1
14	MIP_NL__0PNPDE20110301_205450_000042473100_00072_47069_3016.N1	0	1
15	MIP_NL__0PNPDE20110301_220430_000060983100_00072_47069_3017.N1	0	1
16	MIP_NL__0PNPDE20110301_234506_000060943100_00073_47070_3018.N1	0	1

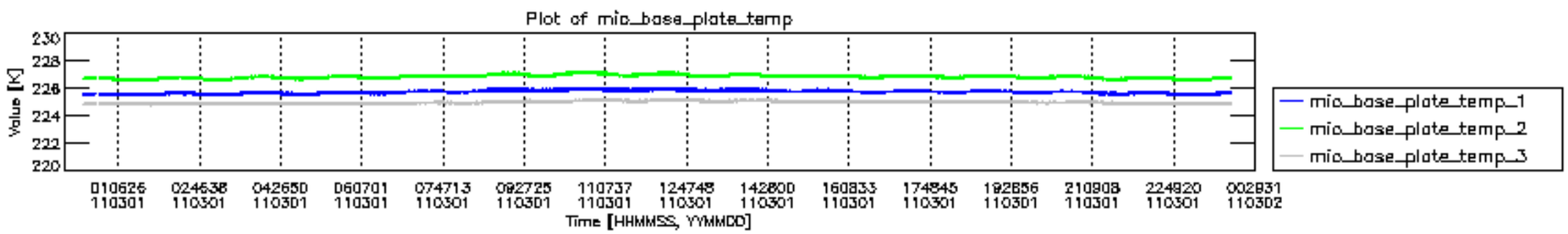


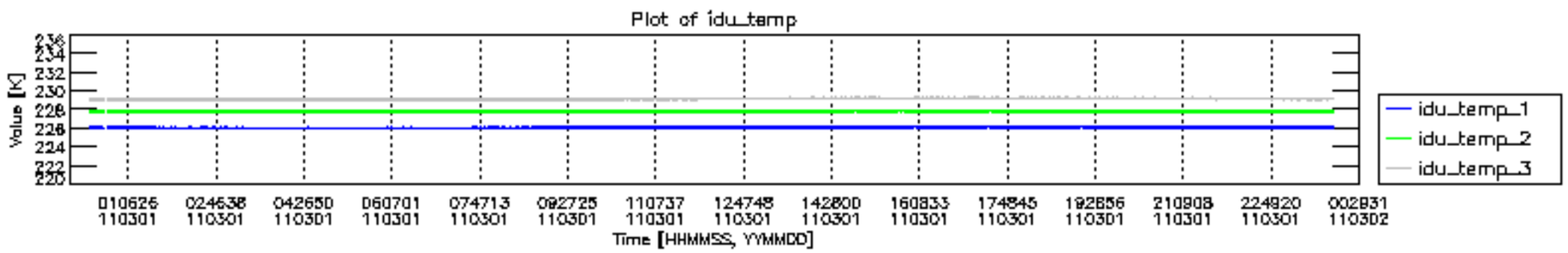
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_12.PNG

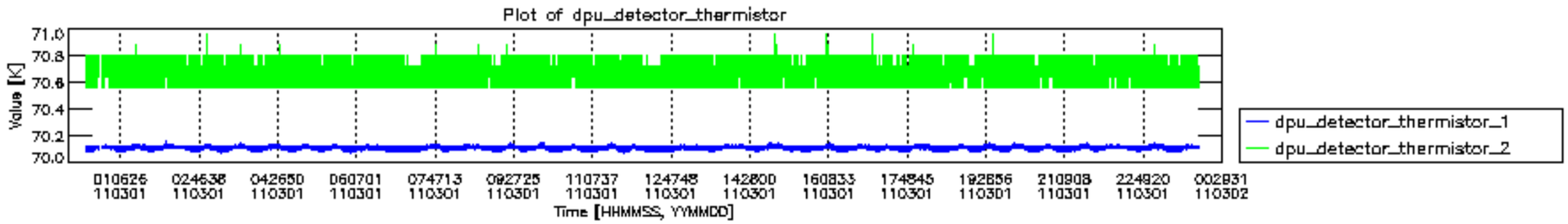


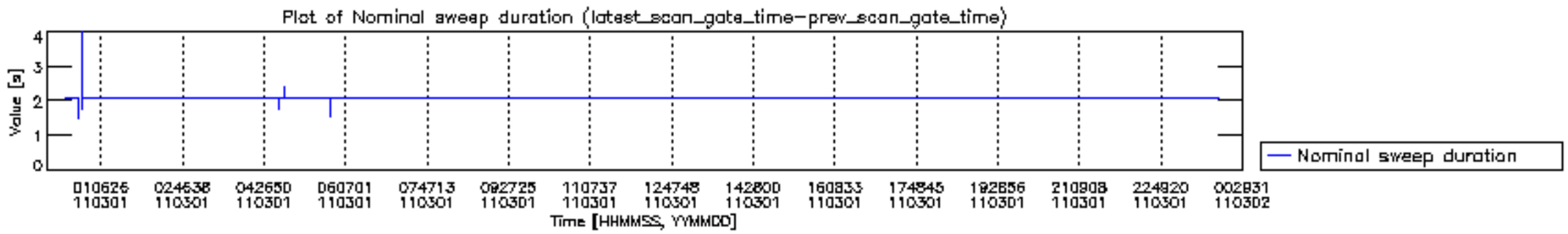
mipas_daily_report_level0_KSPT_L0_4504_N_20110301_13.PNG

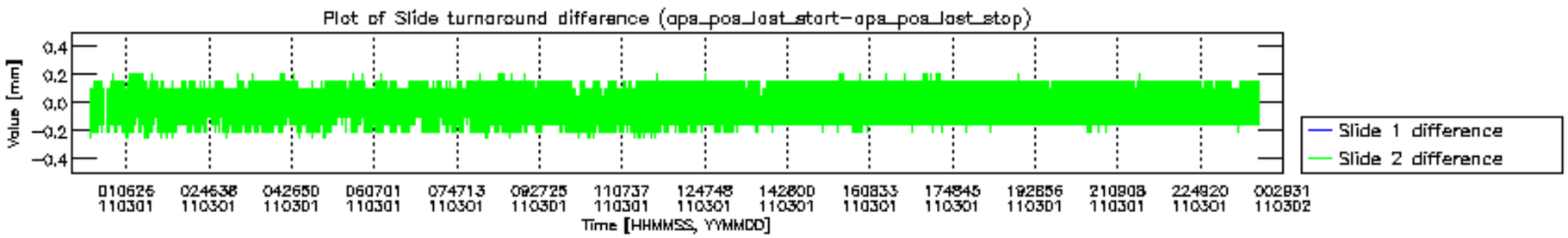

Plot of num_sampl_igm
1.5×10^5
1.4×10^5
1.3×10^5
1.2×10^5
1.1×10^5
1.0×10^5
9.0×10^4
8.0×10^4
Value [–]
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
num_sampl_igm

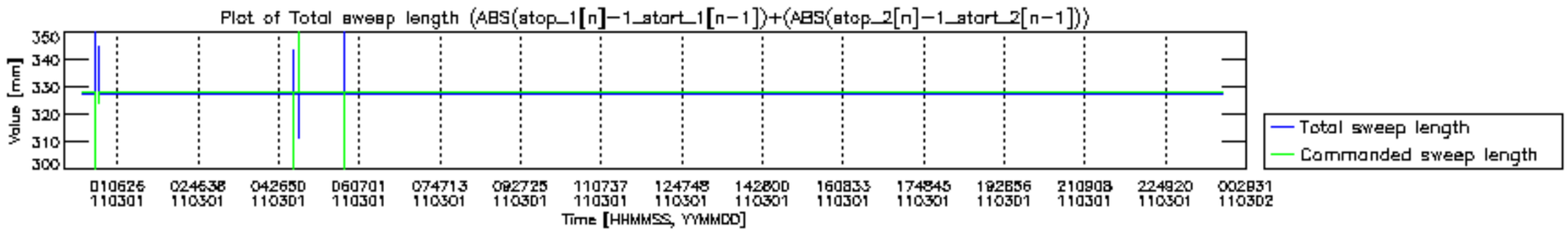

Plot of mic_base_plate_temp
Value [K]
230
228
226
224
222
220
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
mic_base_plate_temp_1
mic_base_plate_temp_2
mic_base_plate_temp_3

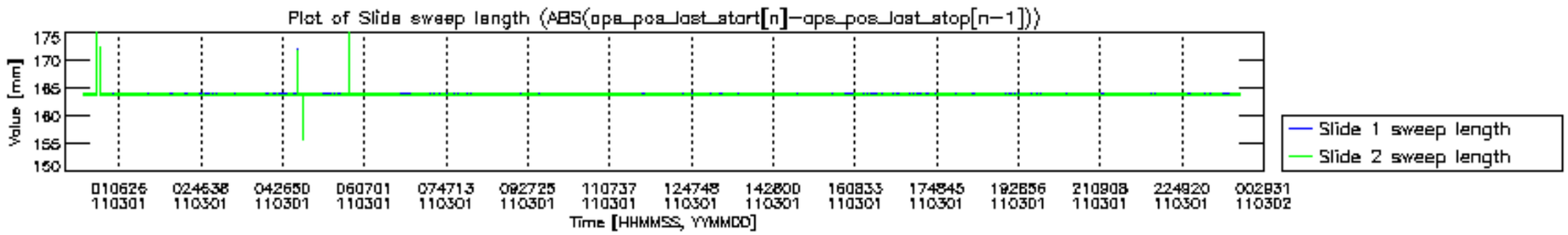

Plot of idu_temp
Value [K]
236
234
232
230
228
226
224
222
220
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
idu_temp_1
idu_temp_2
idu_temp_3

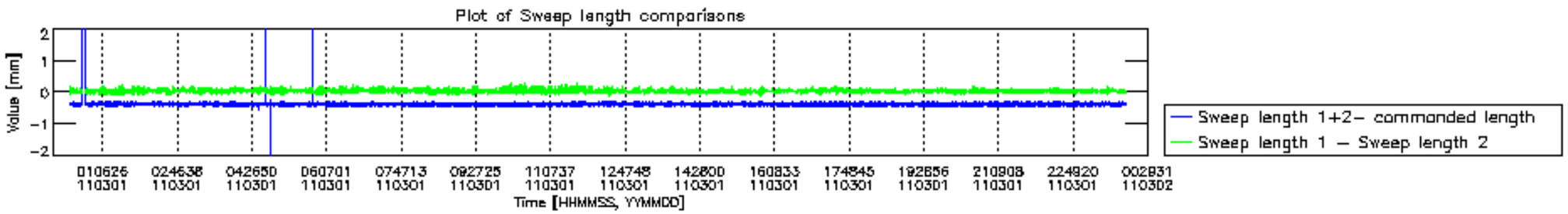

Plot of dpu_detector_thermistor
Value [K]
71.0
70.8
70.6
70.4
70.2
70.0
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
dpu_detector_thermistor_1
dpu_detector_thermistor_2

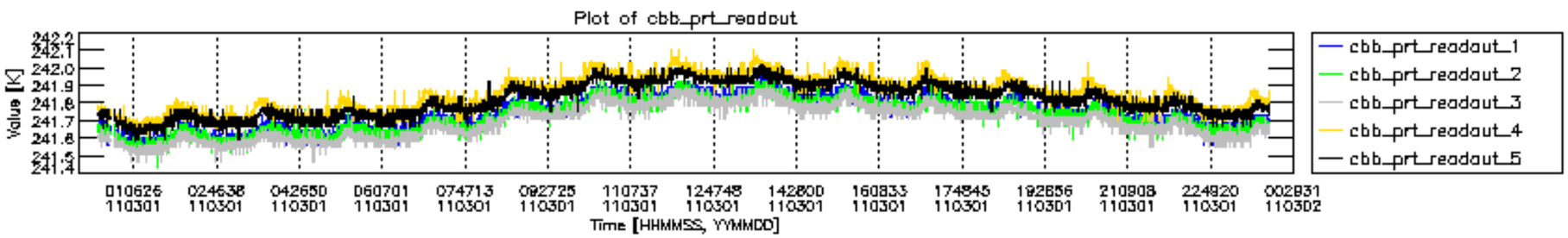

Plot of Nominal sweep duration (latest_scan_gate_time-prev_scan_gate_time)
Value [s]
4
3
2
1
0
010625 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
Nominal sweep duration

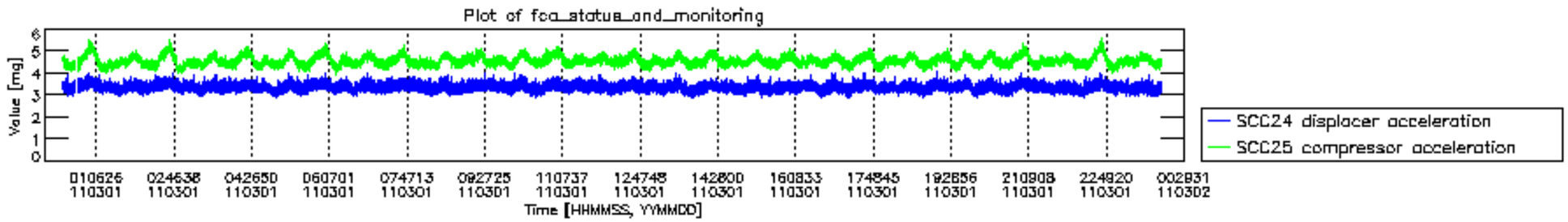

Plot of Slide turnaround difference (opa_pos_last_start-opa_pos_last_stop)
Value [mm]
0.4
0.2
0.0
−0.2
−0.4
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
Slide 1 difference
Slide 2 difference

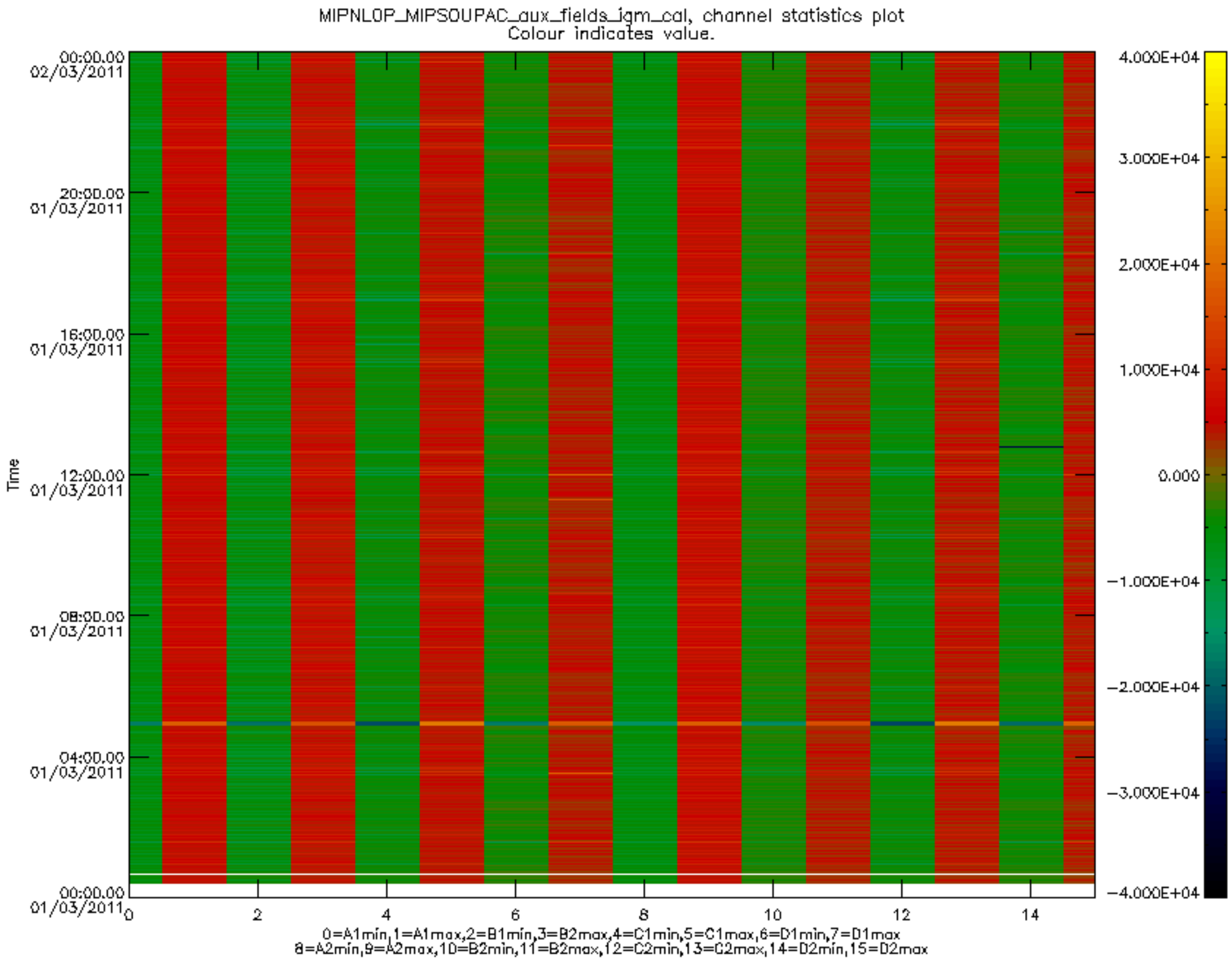

Plot of Total sweep length (ABS(stop_1[n]-1_start_1[n-1])+(ABS(stop_2[n]-1_start_2[n-1]))
Value [mm]
350
340
330
320
310
300
010625 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
Total sweep length
Commanded sweep length

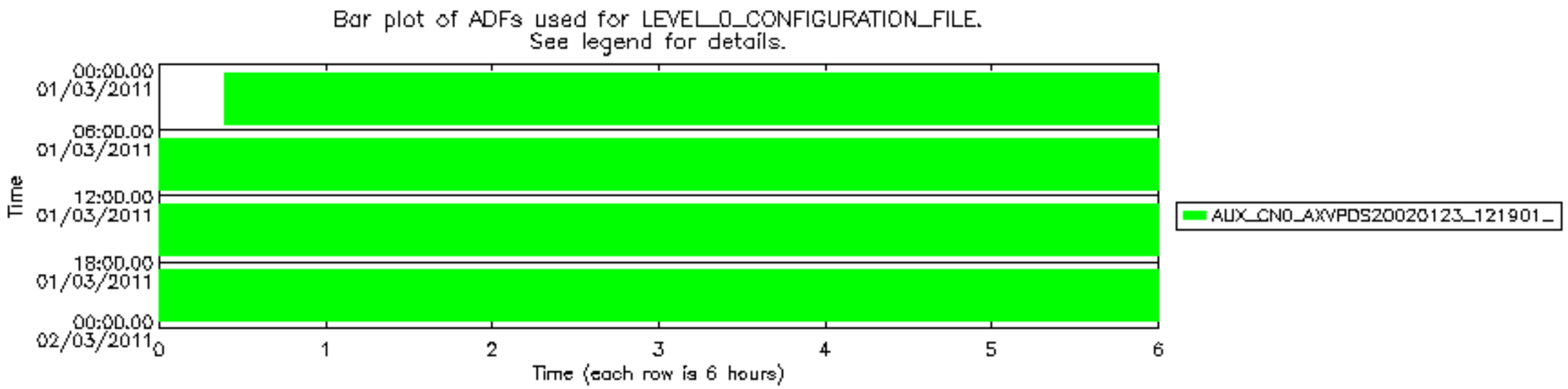

Plot of Slide sweep length (ABS(ops_pos_last_start[n]-ops_pos_last_stop[n-1]))
Value [mm]
175
170
165
160
155
150
010625 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
Slide 1 sweep length
Slide 2 sweep length

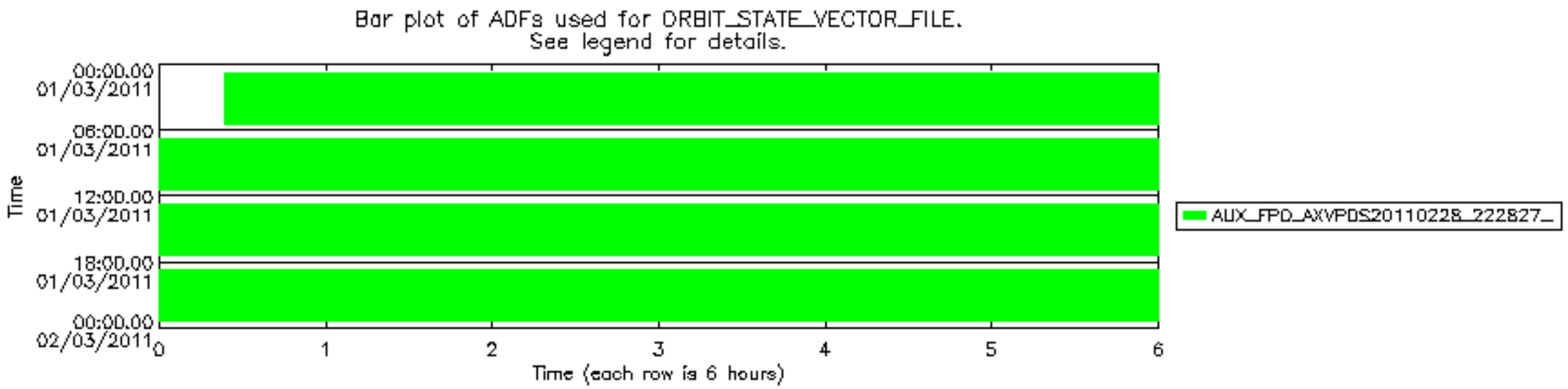

Plot of Sweep length comparisons
Value [mm]
2
1
0
−1
−2
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
Sweep length 1+2− commonded length
Sweep length 1 − Sweep length 2


Plot of cbb_prt_readout
Value [K]
242.2
242.1
242.0
241.9
241.8
241.7
241.6
241.5
241.4
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
cbb_prt_readout_1
cbb_prt_readout_2
cbb_prt_readout_3
cbb_prt_readout_4
cbb_prt_readout_5


Plot of fca_status_and_monitoring
Value [mg]
0
1
2
3
4
5
6
010626 110301
024638 110301
042650 110301
060701 110301
074713 110301
092725 110301
110737 110301
124748 110301
142800 110301
160833 110301
174845 110301
192856 110301
210908 110301
224920 110301
002931 110302
Time [HHMMSS, YYMMDD]
SCC24 displacer acceleration
SCC25 compressor acceleration


MIPNLOP_MIPSOUPAC_aux_fields_igm_cal, channel statistics plot
Colour indicates value.
Time
00:00.00 02/03/2011
20:00.00 01/03/2011
16:00.00 01/03/2011
12:00.00 01/03/2011
08:00.00 01/03/2011
04:00.00 01/03/2011
00:00.00 01/03/2011
0
2
4
6
8
10
12
14
4.000E+04
3.000E+04
2.000E+04
1.000E+04
0.000
−1.000E+04
−2.000E+04
−3.000E+04
−4.000E+04
0=A1min,1=A1max,2=B1min,3=B2max,4=C1min,5=C1max,6=D1min,7=D1max
8=A2min,9=A2max,10=B2min,11=B2max,12=C2min,13=C2max,14=D2min,15=D2max


Bar plot of ADFs used for LEVEL_0_CONFIGURATION_FILE.
See legend for details.
Time
00:00.00
01/03/2011
06:00.00
01/03/2011
12:00.00
01/03/2011
18:00.00
01/03/2011
00:00.00
02/03/2011
0
1
2
3
4
5
6
Time (each row is 6 hours)
AUX_CN0_AXVPDS20020123_121901_


Bar plot of ADFs used for ORBIT_STATE_VECTOR_FILE.
See legend for details.
Time
00:00.00
01/03/2011
06:00.00
01/03/2011
12:00.00
01/03/2011
18:00.00
01/03/2011
00:00.00
02/03/2011
0
1
2
3
4
5
6
Time (each row is 6 hours)
AUX_FPD_AXVPOS20110228_222827_