

1. SCIAMACHY Daily Report for level 1 products

[1.1. General Info](#)

[1.2 Product Quality Indicators](#)

[1.3 ADF monitoring](#)

[1.4 DMOP execution monitoring](#)

1.1 General Info

This report contains a daily analysis on parameters extracted from SCIAMACHY level 1 data (The SCI_NL__1P product).

1.1.1 Report summary

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

Item	Value
Report version	1.5 (28-07-2008)
Time of report generation	28DEC2009 14:07:51
Data source version	SCIA/06.05L01-N
Processing scope for products	12DEC2009 00:00:00 to 13DEC2009 00:00:00
Start time of first product within scope	11DEC2009 23:06:57
Stop time of last product within scope	12DEC2009 00:42:25
Total number of level 1 products	1
Number of level 1 products with errors	0

1.1.2 Summary per product

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

#	Product name	Start time	Stop time	ProdErr	#nadir	#limb	#occ	#mon	#noproc	#cmlpl_drk	#incmpl_drk	Decont
0	SCI_NL__1PNPDE20091211_230657_000057282085_00058_40693_8512.N1	11DEC2009 23:06:57	12DEC2009 00:42:25	0	35	45	1	0	1	15	0	nnnnnnnn

1.2 Product Quality Indicators

This section shows information about product quality, in particular the quality of retrieved species.

The following data items are currently included into this section:

1. Polarisation check (if available)
2. Leakage FPN measurements (if available)
3. Dark measurements (if available)
4. New leakage current parameters (if available)
5. New spectral calibration parameters (if available)
6. New sun reference spectrum (if available)
7. New PPG/Etalon parameters (if available)

1.2.1 Polarisation check

The following table summarizes measured polarisation fractions for each of the detectors in nadir and limb mode. Note: this section is currently in a testing phase.

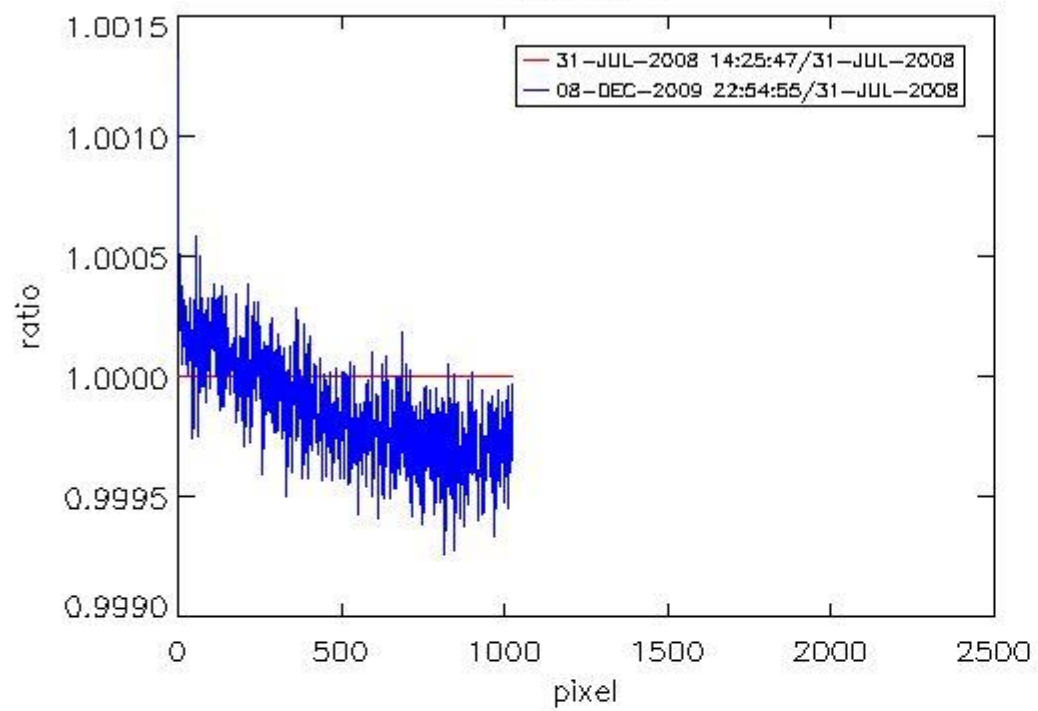
PMD ID	#Q=0	#U=0
NADIR PMD1	0 out of 18550 (0.00000 %)	0 out of 18550 (0.00000 %)
NADIR PMD2	10602 out of 18550 (57.1536 %)	11070 out of 18550 (59.6766 %)

NADIR PMD3	5680 out of 18550 (30.6199 %)	6015 out of 18550 (32.4259 %)
NADIR PMD4	1829 out of 18550 (9.85984 %)	2463 out of 18550 (13.2776 %)
NADIR PMD5	7721 out of 18550 (41.6226 %)	8112 out of 18550 (43.7305 %)
NADIR PMD6	16938 out of 18550 (91.3100 %)	17064 out of 18550 (91.9892 %)
NADIR OVERLAP1	15663 out of 18550 (84.4367 %)	16032 out of 18550 (86.4259 %)
NADIR OVERLAP2	10341 out of 18550 (55.7466 %)	13121 out of 18550 (70.7332 %)
NADIR OVERLAP3	16846 out of 18550 (90.8140 %)	17376 out of 18550 (93.6712 %)
NADIR OVERLAP4	16935 out of 18550 (91.2938 %)	16989 out of 18550 (91.5849 %)
NADIR OVERLAP5	16917 out of 18550 (91.1968 %)	16994 out of 18550 (91.6119 %)
NADIR MODEL300NM	11747 out of 18550 (63.3261 %)	12184 out of 18550 (65.6819 %)
LIMB PMD1	0 out of 2914 (0.00000 %)	0 out of 2914 (0.00000 %)
LIMB PMD2	62 out of 2914 (2.12766 %)	62 out of 2914 (2.12766 %)
LIMB PMD3	0 out of 2914 (0.00000 %)	146 out of 2914 (5.01030 %)
LIMB PMD4	0 out of 2914 (0.00000 %)	68 out of 2914 (2.33356 %)
LIMB PMD5	62 out of 2914 (2.12766 %)	74 out of 2914 (2.53946 %)
LIMB PMD6	62 out of 2914 (2.12766 %)	198 out of 2914 (6.79478 %)
LIMB OVERLAP1	356 out of 2914 (12.2169 %)	2389 out of 2914 (81.9835 %)
LIMB OVERLAP2	1705 out of 2914 (58.5106 %)	1973 out of 2914 (67.7076 %)
LIMB OVERLAP3	186 out of 2914 (6.38298 %)	852 out of 2914 (29.2382 %)
LIMB OVERLAP4	111 out of 2914 (3.80920 %)	295 out of 2914 (10.1235 %)
LIMB OVERLAP5	97 out of 2914 (3.32876 %)	601 out of 2914 (20.6246 %)
LIMB MODEL300NM	195 out of 2914 (6.69183 %)	1267 out of 2914 (43.4798 %)

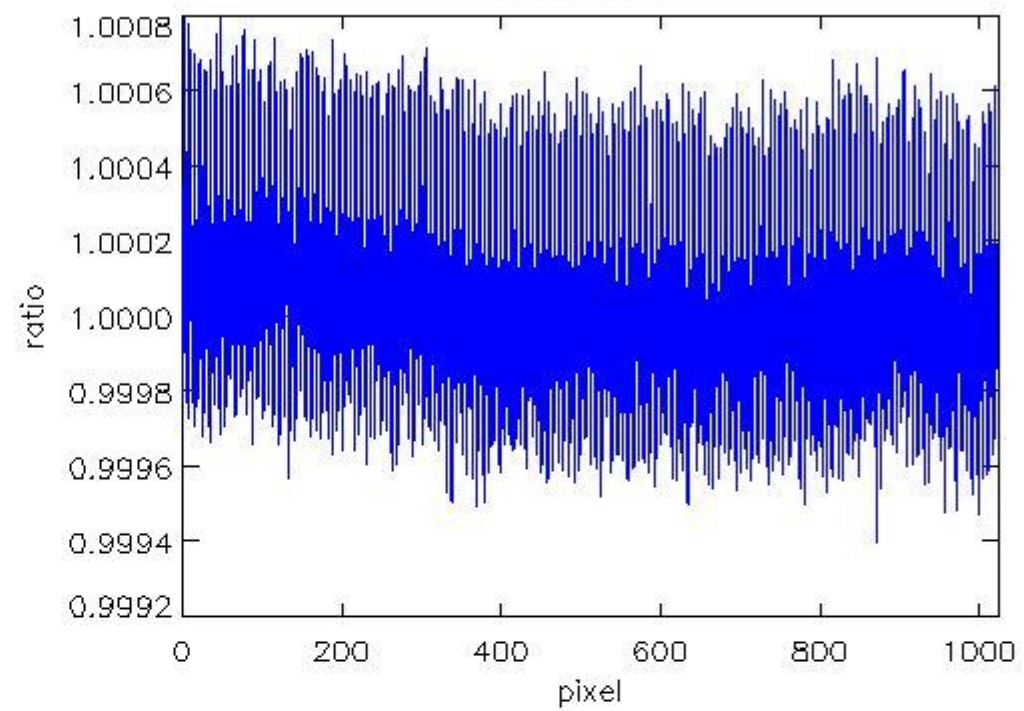
1.2.2 Fixed pattern noise information from SCI_LK1_AX files in product references

The following plots show ratios of fixed pattern noise of SCI_LK1_AX files that are referred to by the products listed in Section 1.1.2. Note: this section is currently in a testing phase.

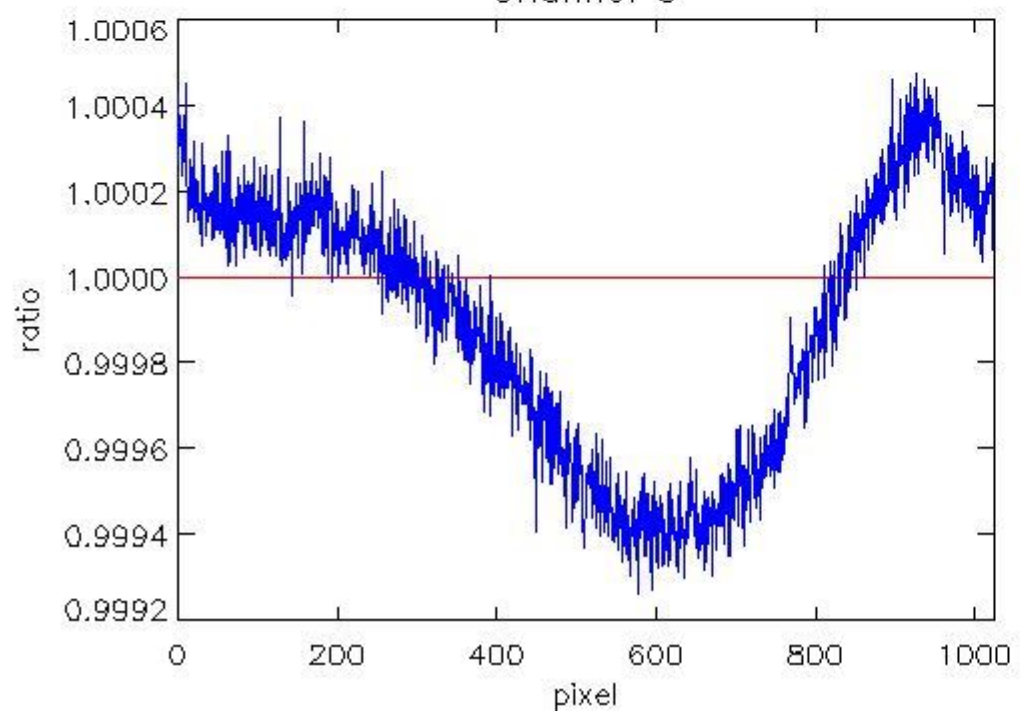
Channel 1



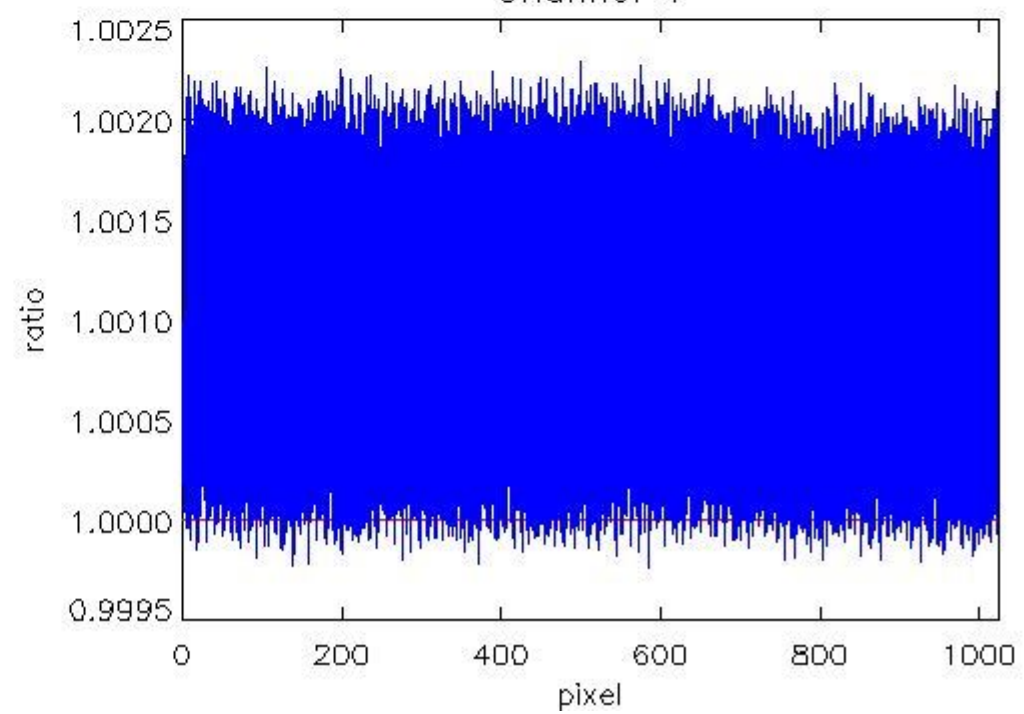
Channel 2

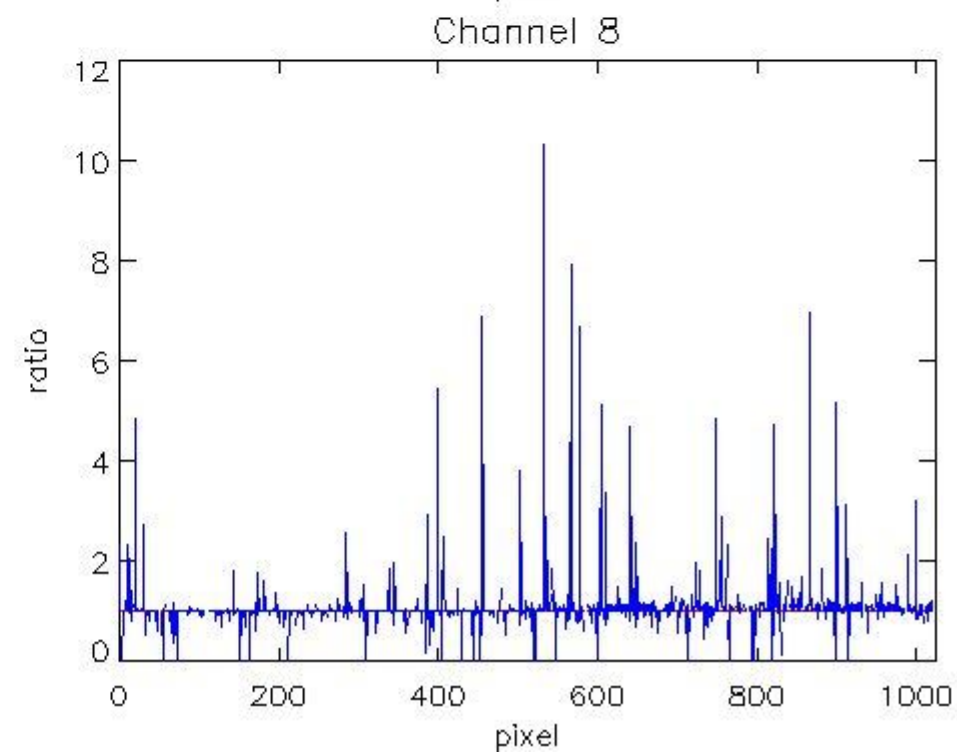
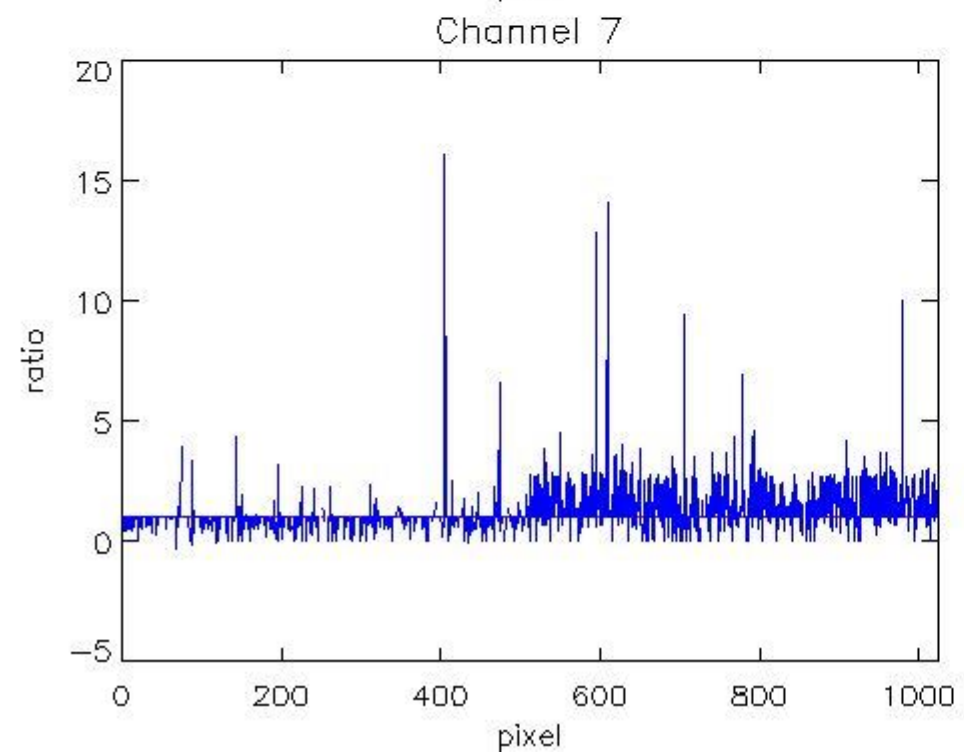
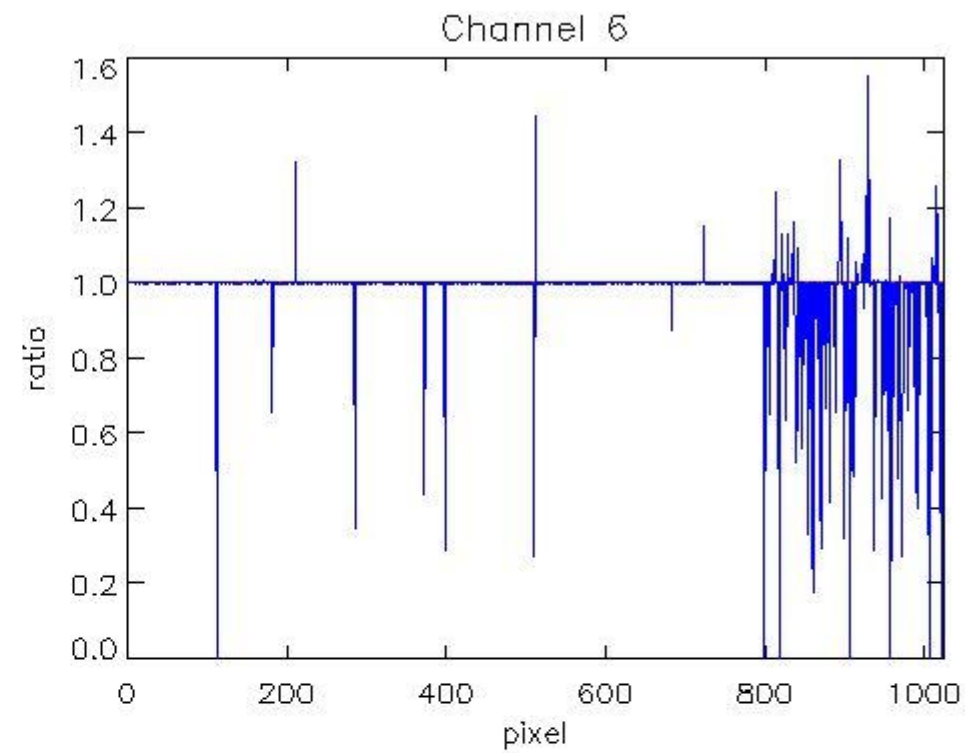
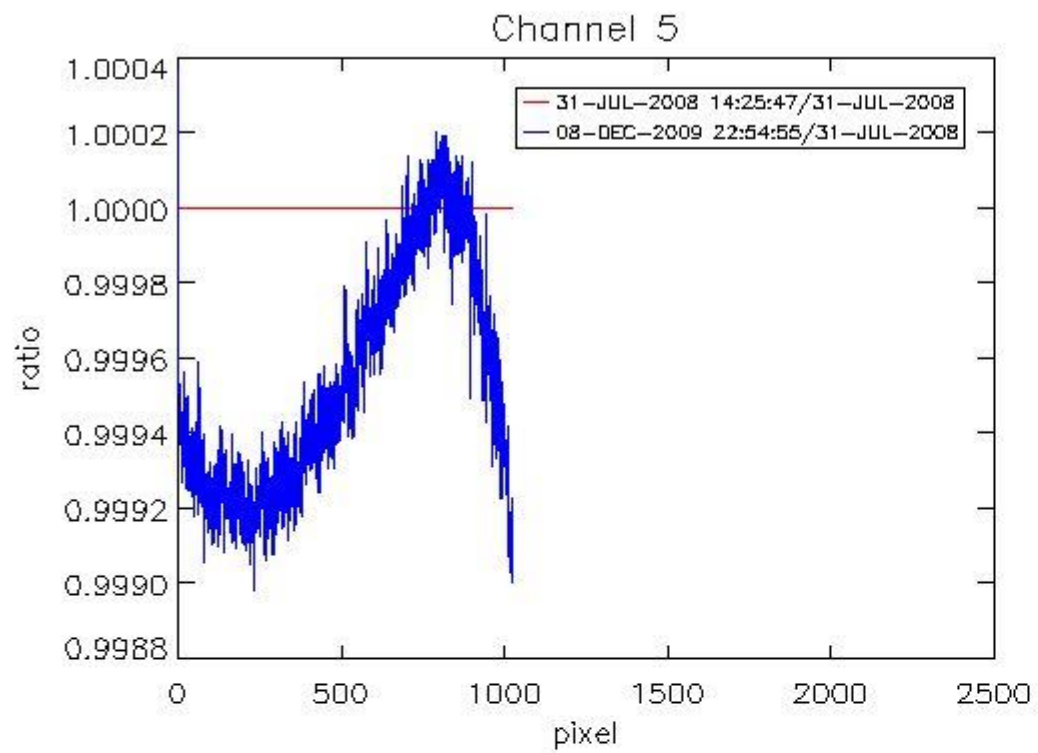


Channel 3



Channel 4





1.2.3 Dark measurements overview

(No dark measurements available for this processing scope)

1.2.4 New leakage current parameters

(No new leakage current data available for this processing scope)

1.2.5 Spectral calibration parameters

(No new spectral calibration data available for this processing scope)

1.2.6 Sun reference spectrum parameters

(No new sunref data available for this processing scope)

1.2.7 PPG and Etalon parameters

(No PPG and Etalon data available for this processing scope)

1.3 ADF monitoring

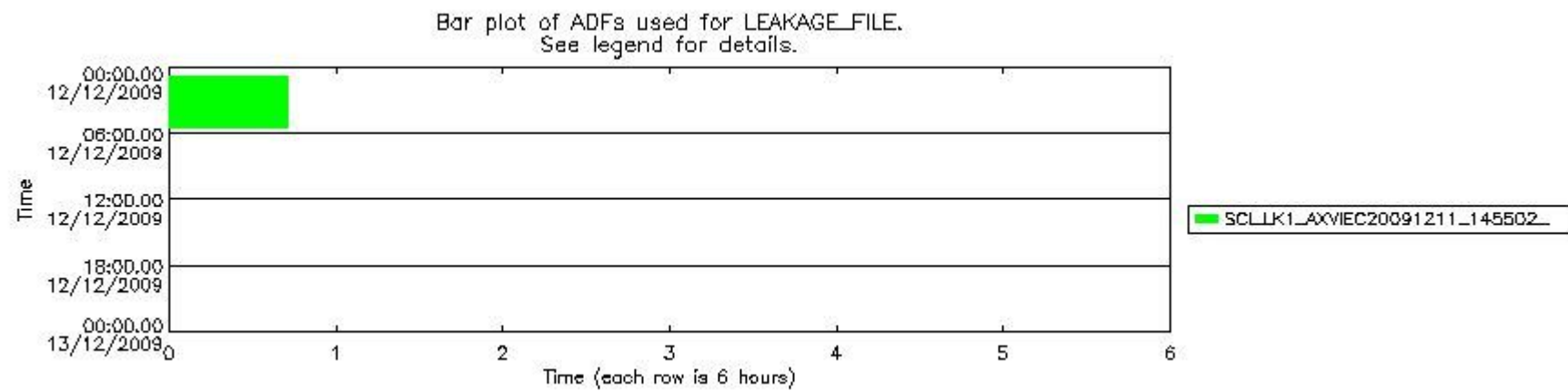
This section shows the (variation in) ADFs used for each of the products. It consists of:

- A table showing which ADFs having a start validity of the current time scope are currently available (if present).
- A table showing which ADFs were used for processing (red values indicate that multiple ADFs of the same type were used)
- Various time line plots, one for each ADF, which show when which ADF was used.

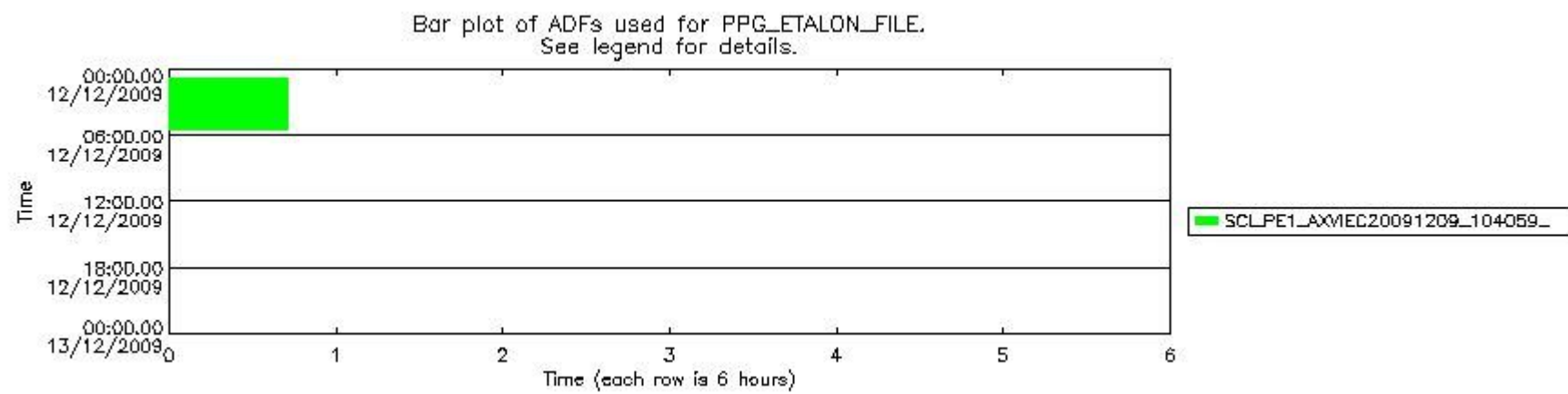
Number	ADF name
0	SCI_SU1_AXVD-P20091213_234710_20091212_193454_20091227_204529
1	SCI_SU1_AXVIEC20091216_031255_20091212_193454_20091227_204529
2	SCI_LK1_AXVD-P20091212_061945_20091212_004120_20100101_021926
3	SCI_LK1_AXVIEC20091214_145812_20091212_004120_20100101_021926
4	SCI_LK1_AXVD-P20091212_063515_20091212_021817_20100101_033431
5	SCI_LK1_AXVIEC20091214_150518_20091212_021817_20100101_033431
6	SCI_LK1_AXVD-P20091212_095346_20091212_033322_20100101_051658
7	SCI_LK1_AXVIEC20091214_150238_20091212_033322_20100101_051658
8	SCI_LK1_AXVD-P20091212_100922_20091212_051602_20100101_065747
9	SCI_LK1_AXVIEC20091214_150541_20091212_051602_20100101_065747
10	SCI_LK1_AXVD-P20091212_103224_20091212_065747_20100101_080404
11	SCI_LK1_AXVIEC20091214_150606_20091212_065747_20100101_080404
12	SCI_LK1_AXVD-P20091212_105532_20091212_080308_20100101_094644
13	SCI_LK1_AXVIEC20091214_150441_20091212_080308_20100101_094644
14	SCI_LK1_AXVD-P20091212_185445_20091212_094440_20100101_112420
15	SCI_LK1_AXVIEC20091215_032903_20091212_094440_20100101_112420
16	SCI_LK1_AXVD-P20091212_191807_20091212_112324_20100101_130552
17	SCI_LK1_AXVIEC20091215_033013_20091212_112324_20100101_130552
18	SCI_LK1_AXVD-P20091212_194129_20091212_130456_20100101_144340
19	SCI_LK1_AXVIEC20091215_033420_20091212_130456_20100101_144340
20	SCI_LK1_AXVD-P20091212_200439_20091212_144122_20100101_162101
21	SCI_LK1_AXVIEC20091215_034727_20091212_144122_20100101_162101
22	SCI_LK1_AXVD-P20091212_202744_20091212_161909_20100101_175946
23	SCI_LK1_AXVIEC20091215_034816_20091212_161909_20100101_175946
24	SCI_LK1_AXVD-P20091213_000037_20091212_175850_20100101_193454
25	SCI_LK1_AXVIEC20091215_034005_20091212_175850_20100101_193454
26	SCI_LK1_AXVD-P20091214_000306_20091212_204529_20100101_222855
27	SCI_LK1_AXVIEC20091216_030837_20091212_204529_20100101_222855
28	SCI_LK1_AXVD-P20091214_001838_20091212_222855_20100102_000944
29	SCI_LK1_AXVIEC20091216_055039_20091212_222855_20100102_000944

Number	ADF
	LK1 (LEAKAGE_FILE)
0	SCI_LK1_AXVIEC20091211_145502_20091208_225455_20091229_003518
	PE1 (PPG_ETALON_FILE)
1	SCI_PE1_AXVIEC20091209_104059_20091206_174712_20990101_000000
	SP1 (SPECTRAL_FILE)
2	SCI_SP1_AXVIEC20091209_105055_20091206_192748_20100204_210425
	SU1 (SUN_REF_FILE)

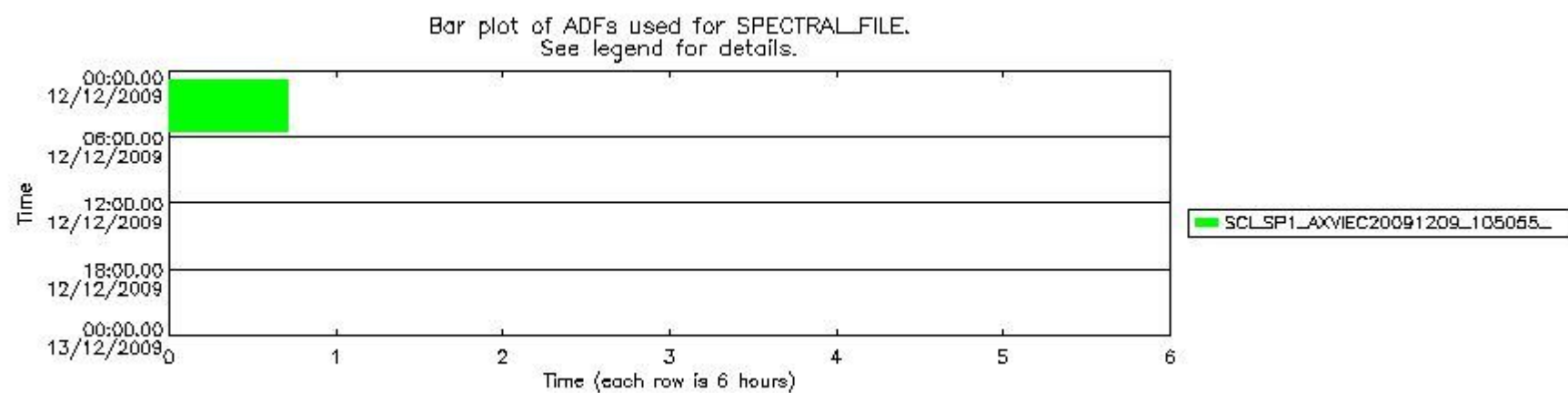
3	SCI_SU1_AXVIEC20091210_062924_20091207_185135_20091222_203250
	KD1 (KEY_DATA_FILE)
4	SCI_KD1_AXVIEC20060523_182626_20020301_000000_20991231_235959
	MF1 (M_FACTOR_FILE)
5	SCI_MF1_AXVIEC20020809_094925_20020206_173831_20991231_235959
	LI1 (INIT_FILE)
6	SCI_LI1_AXVIEC20070628_134108_20020701_000000_20991231_235959
	FRO (ORBIT_FILE)
7	DOR_NAV_0PNPDE20091211_230044_000057382085_00058_40693_9339.N1
	ATT (ATTITUDE_FILE)
8	NOT USED



sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_2.PNG

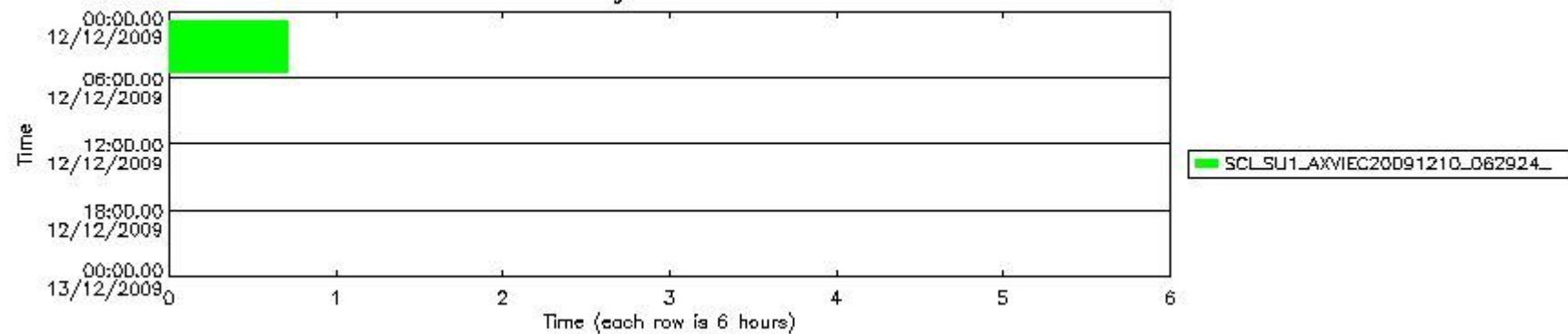


sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_3.PNG



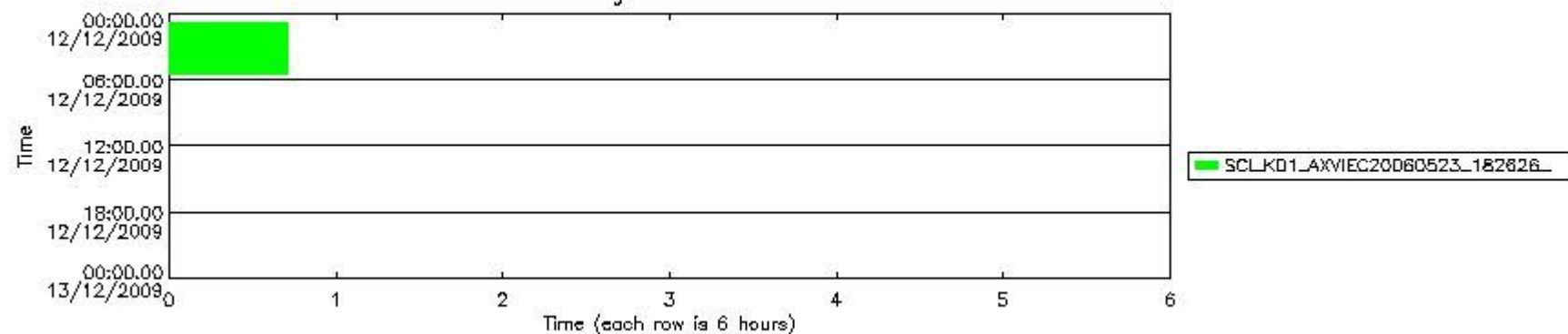
sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_4.PNG

Bar plot of ADFs used for SUN_REF_FILE.
See legend for details.



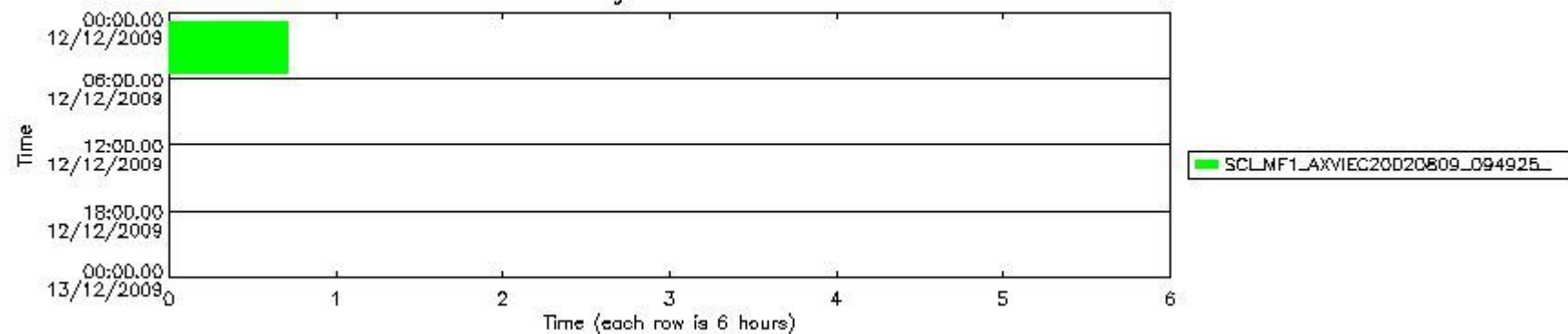
sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_5.PNG

Bar plot of ADFs used for KEY_DATA_FILE.
See legend for details.



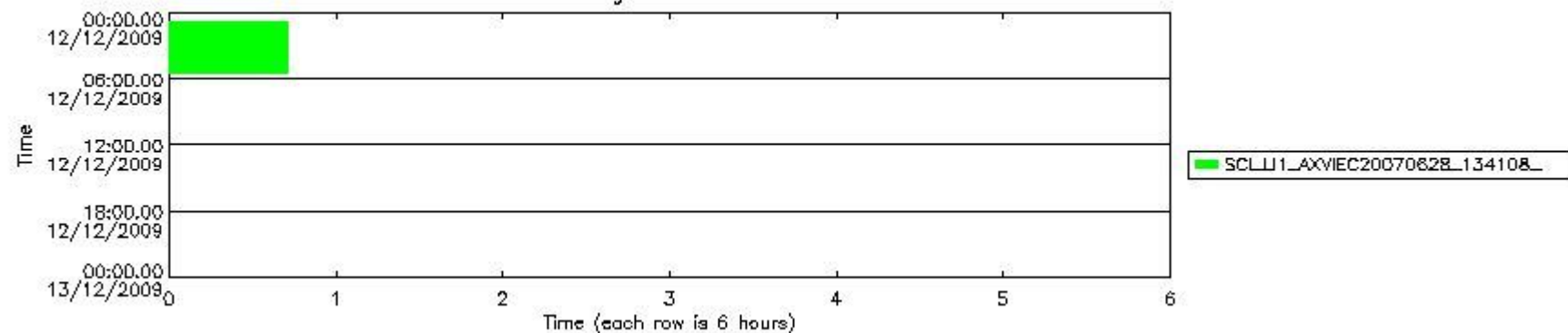
sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_6.PNG

Bar plot of ADFs used for M_FACTOR_FILE.
See legend for details.

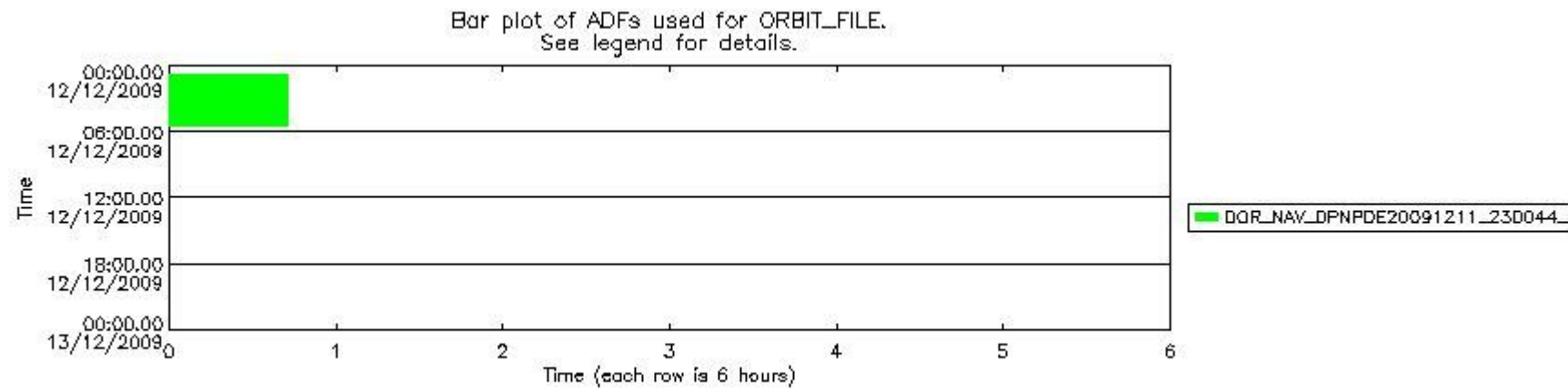


sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_7.PNG

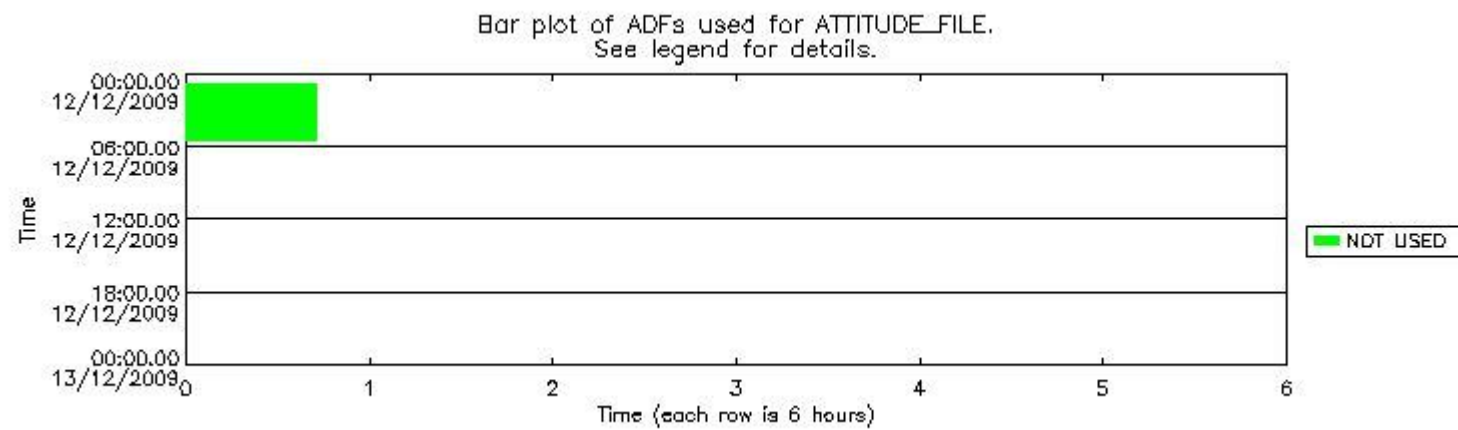
Bar plot of ADFs used for INIT_FILE.
See legend for details.



sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_8.PNG



sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_9.PNG



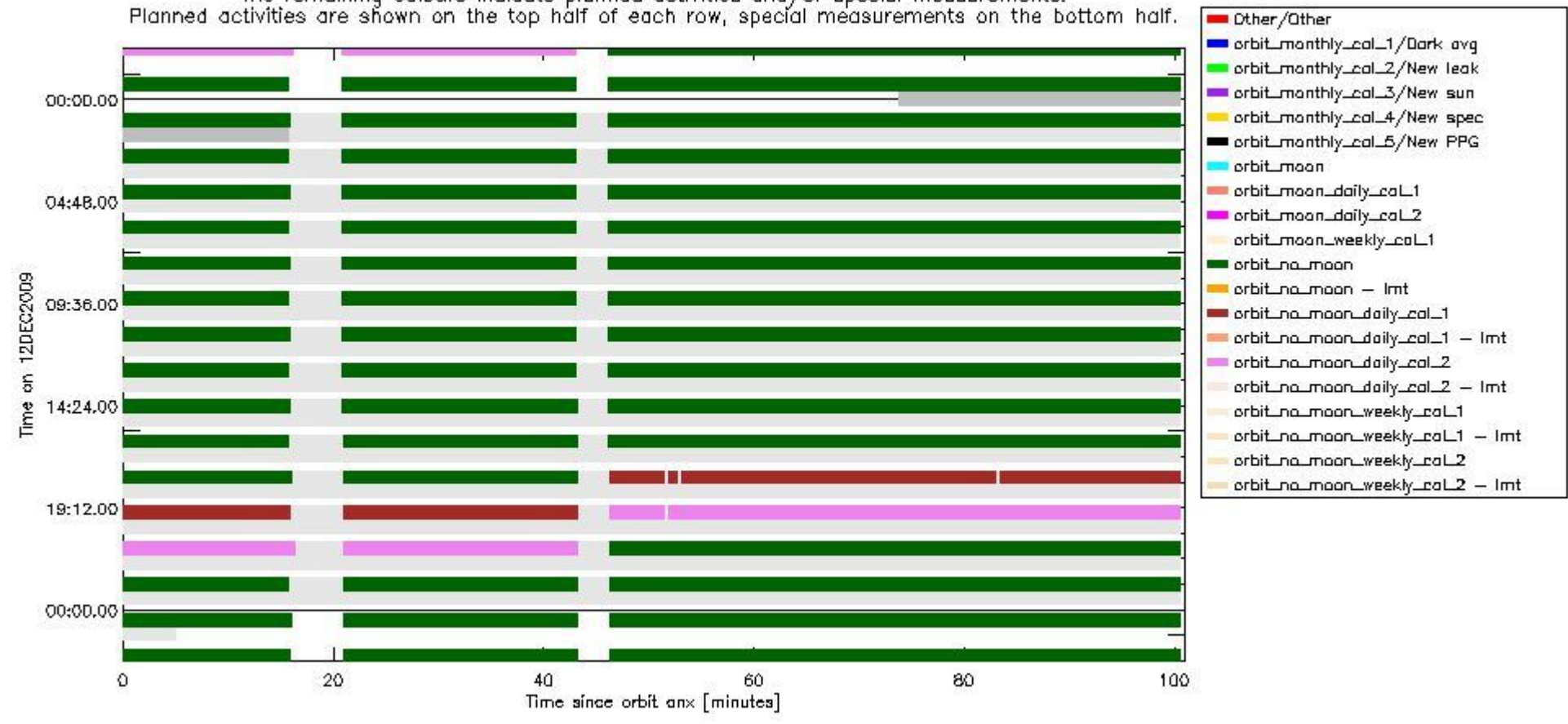
sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_10.PNG

1.4 DMOP execution monitoring

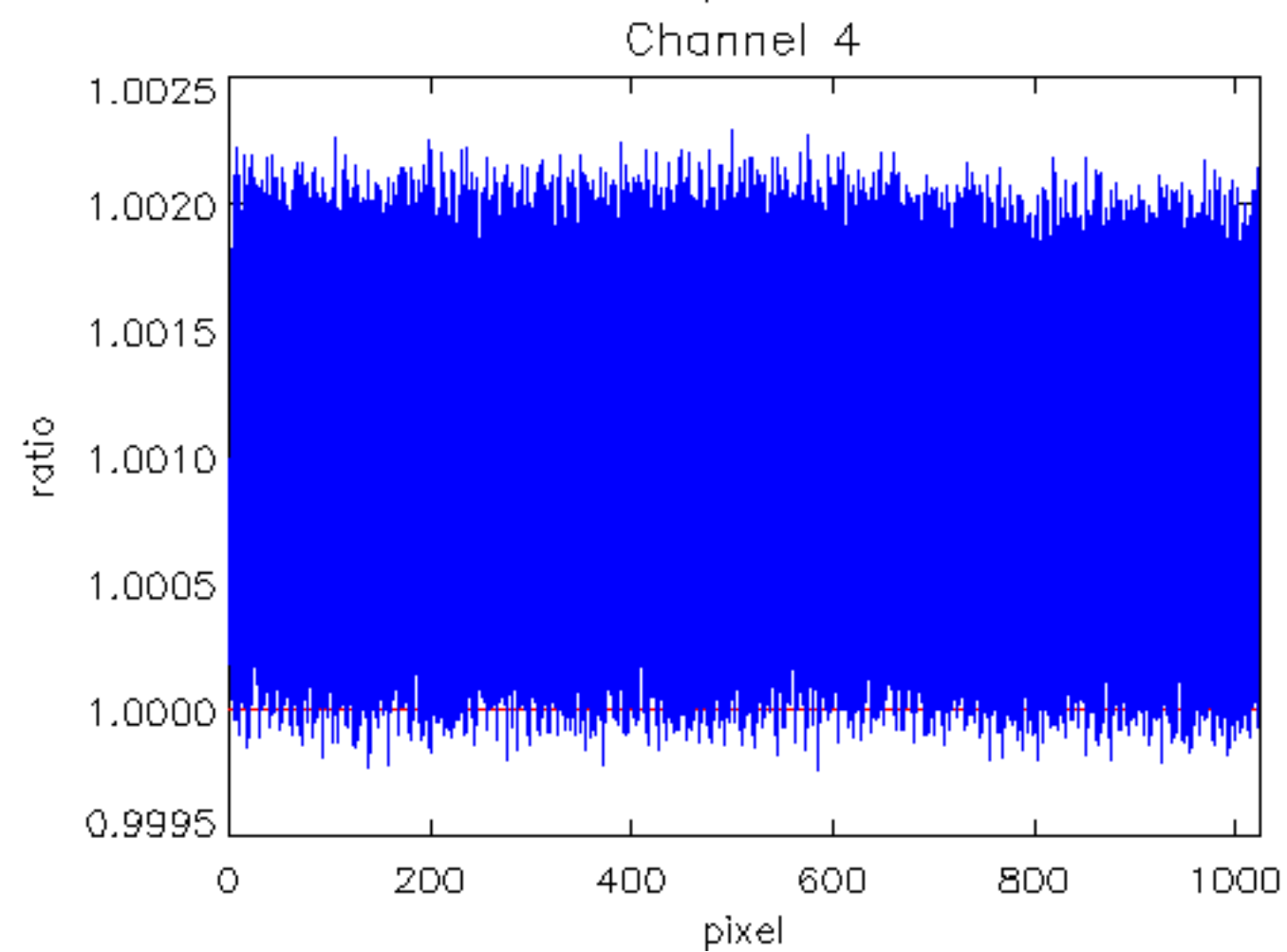
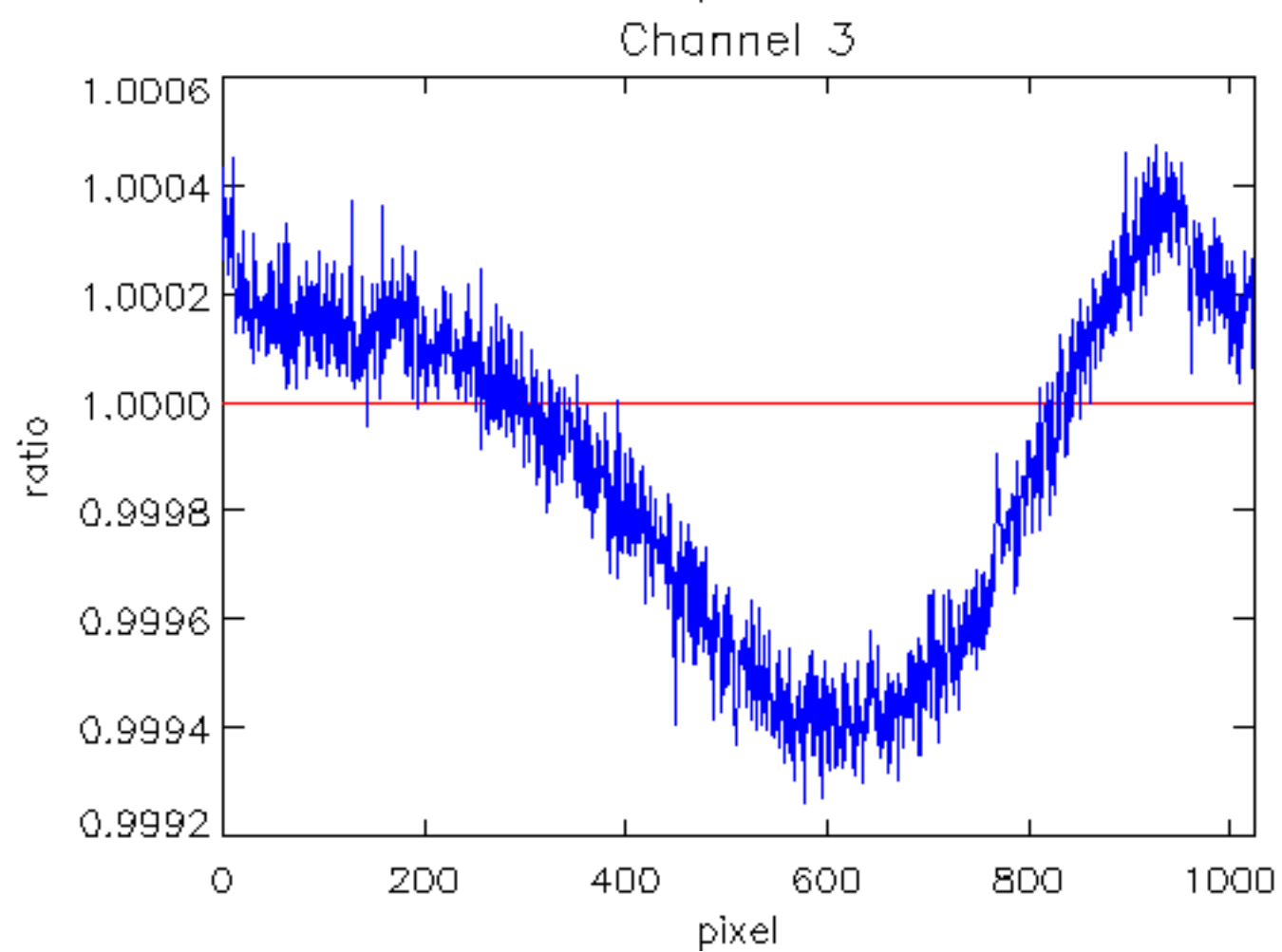
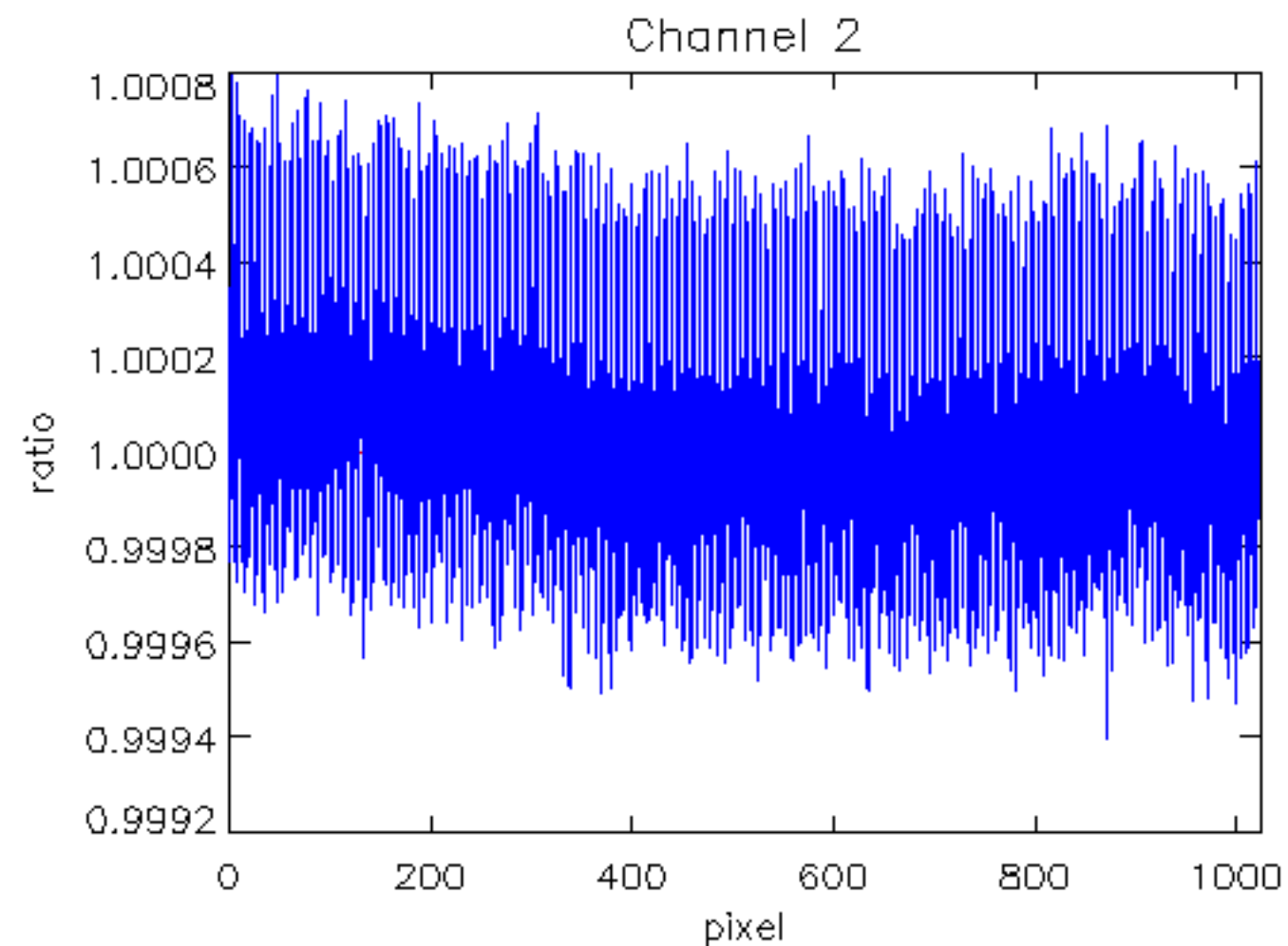
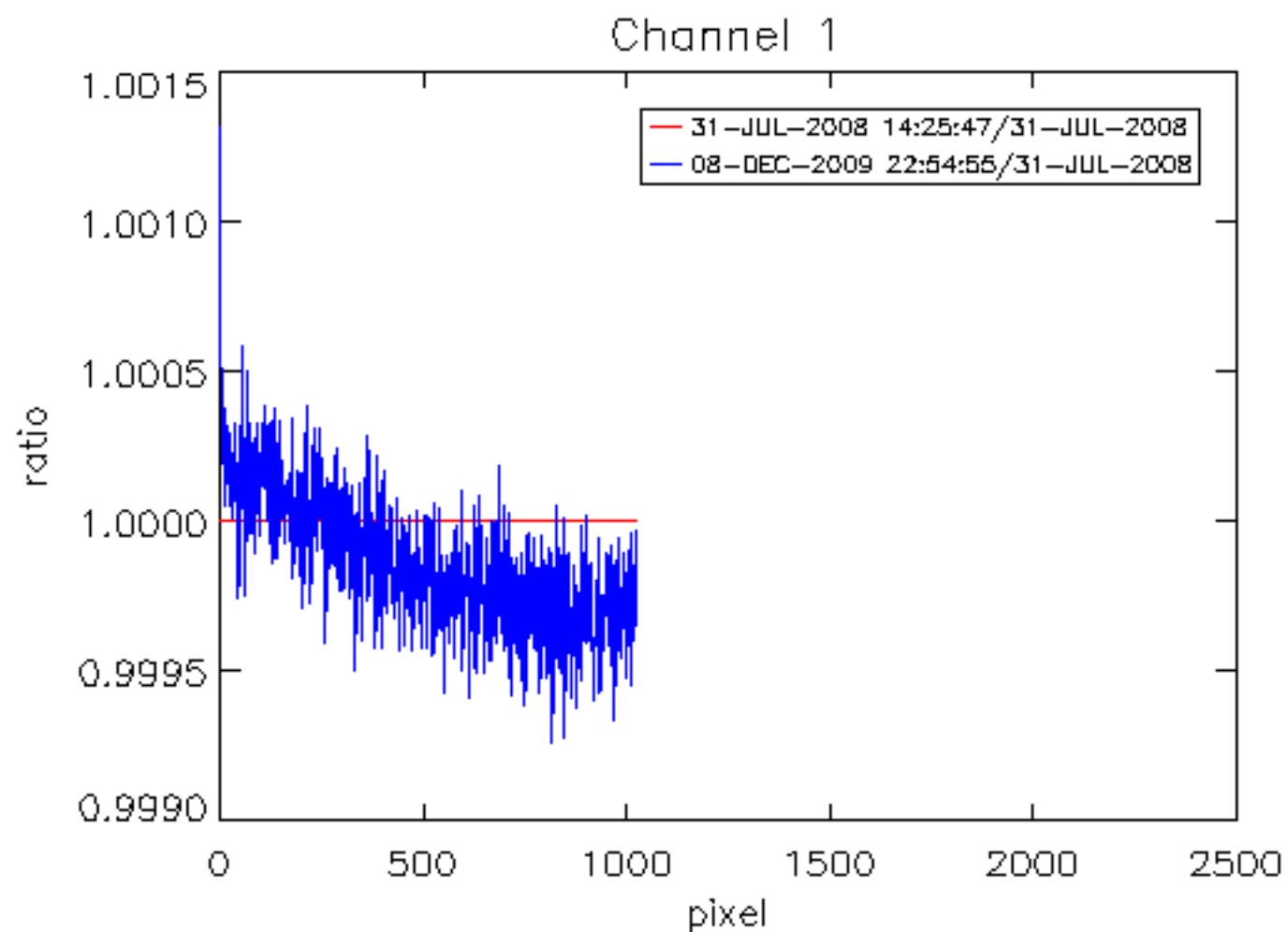
This section gives an analysis of the DMOP execution. The execution is monitored by assigning various activities to timeline sequences found in the DMOP file, and by checking where "NEW" datasets are available in SCI_NL__1P products.

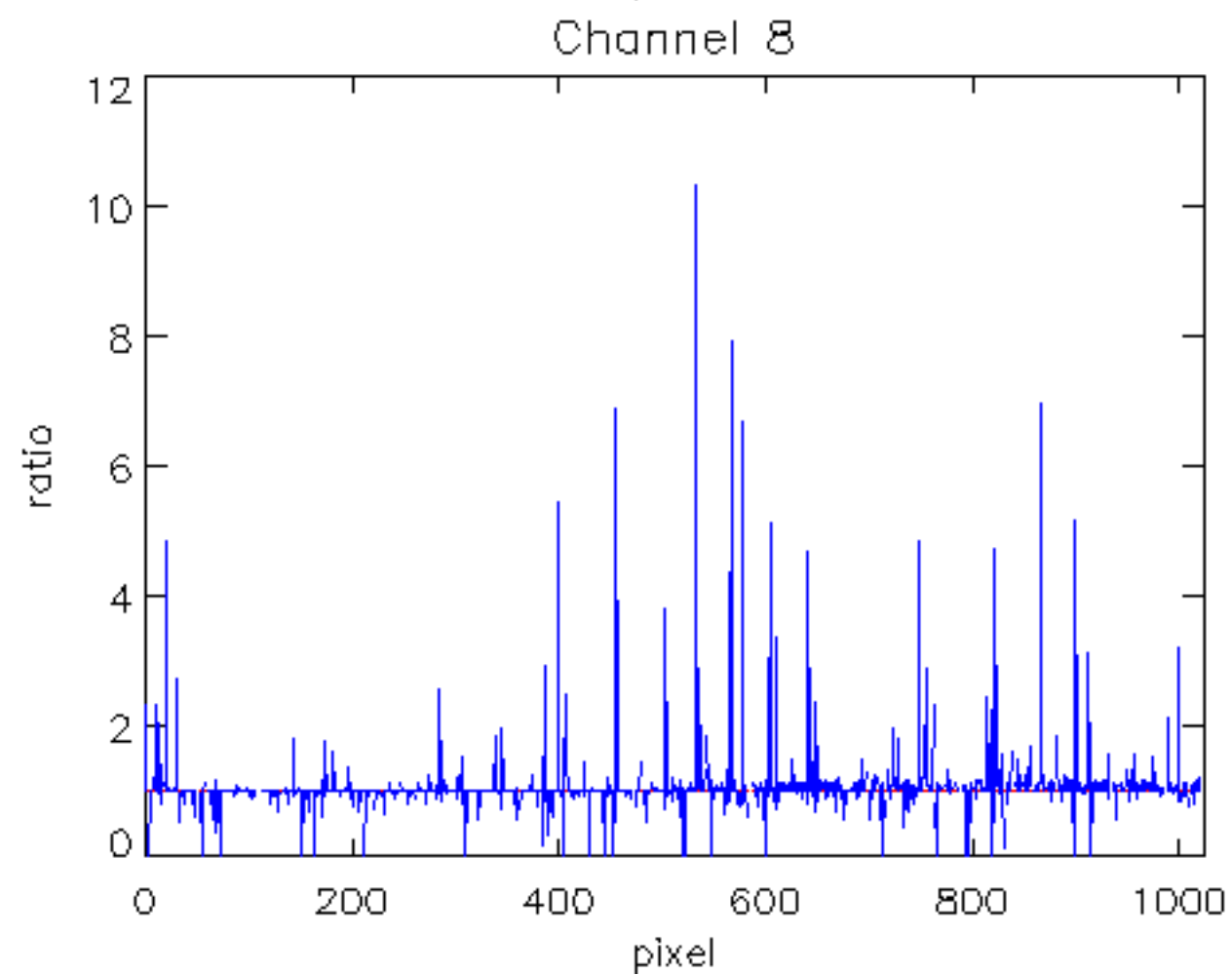
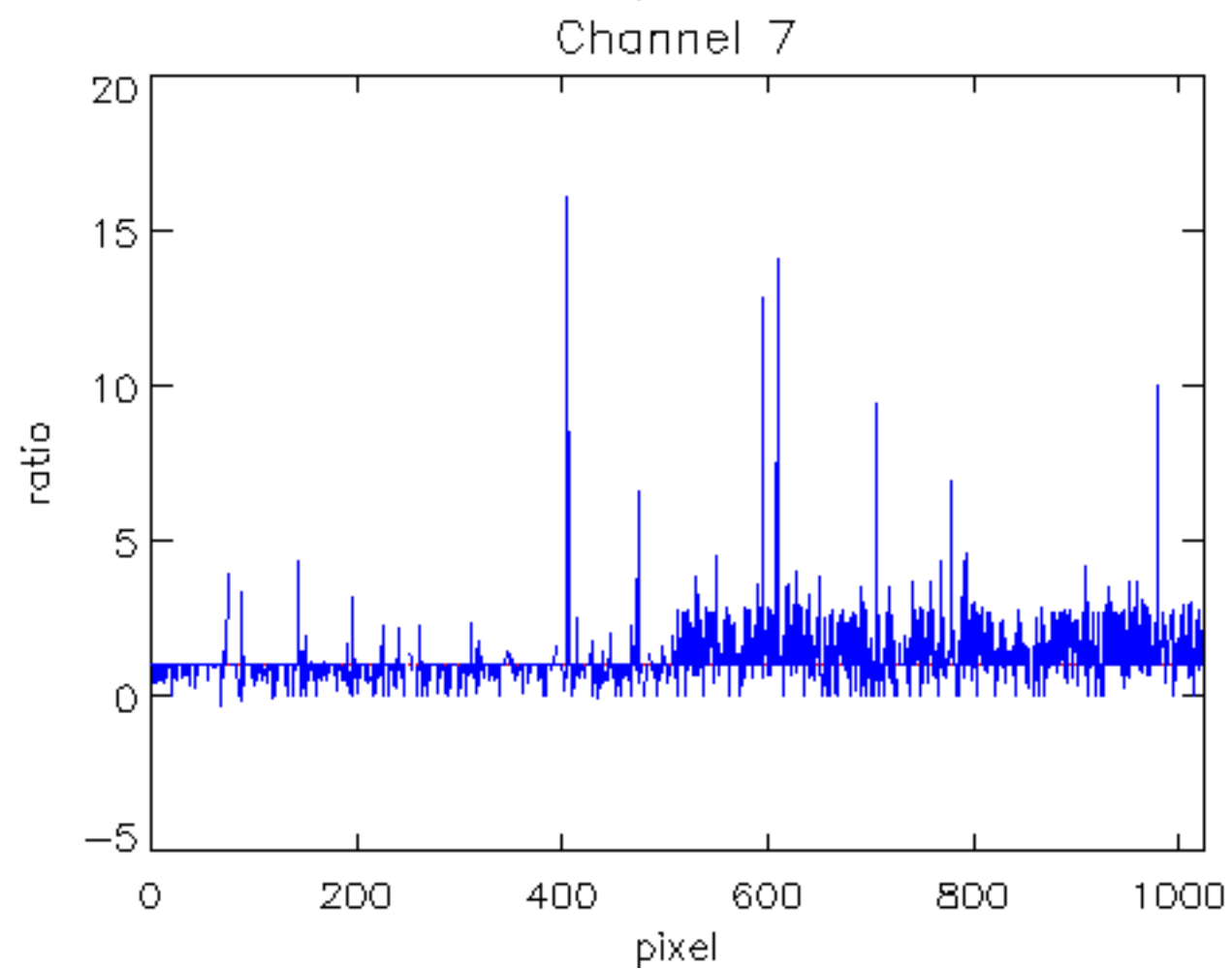
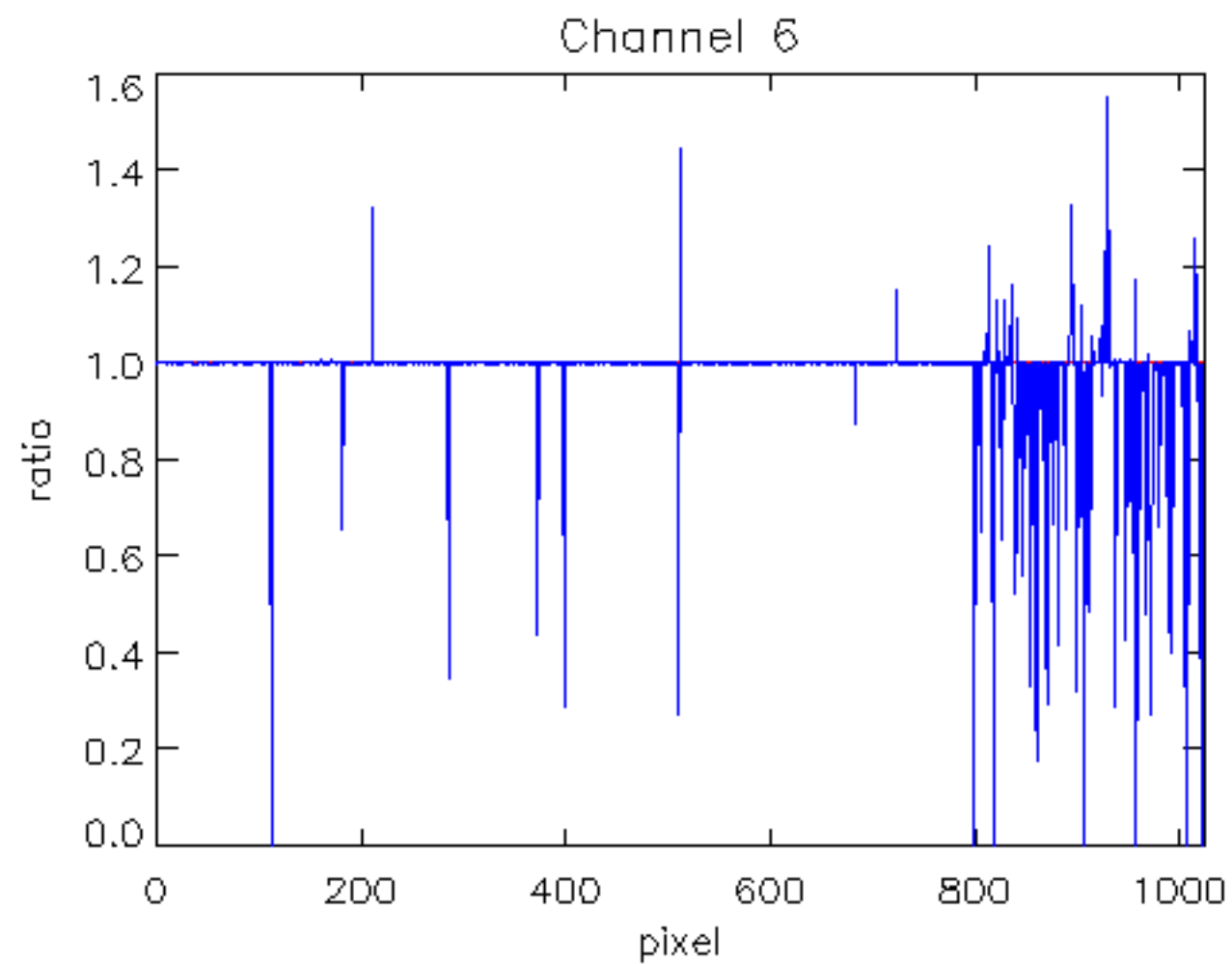
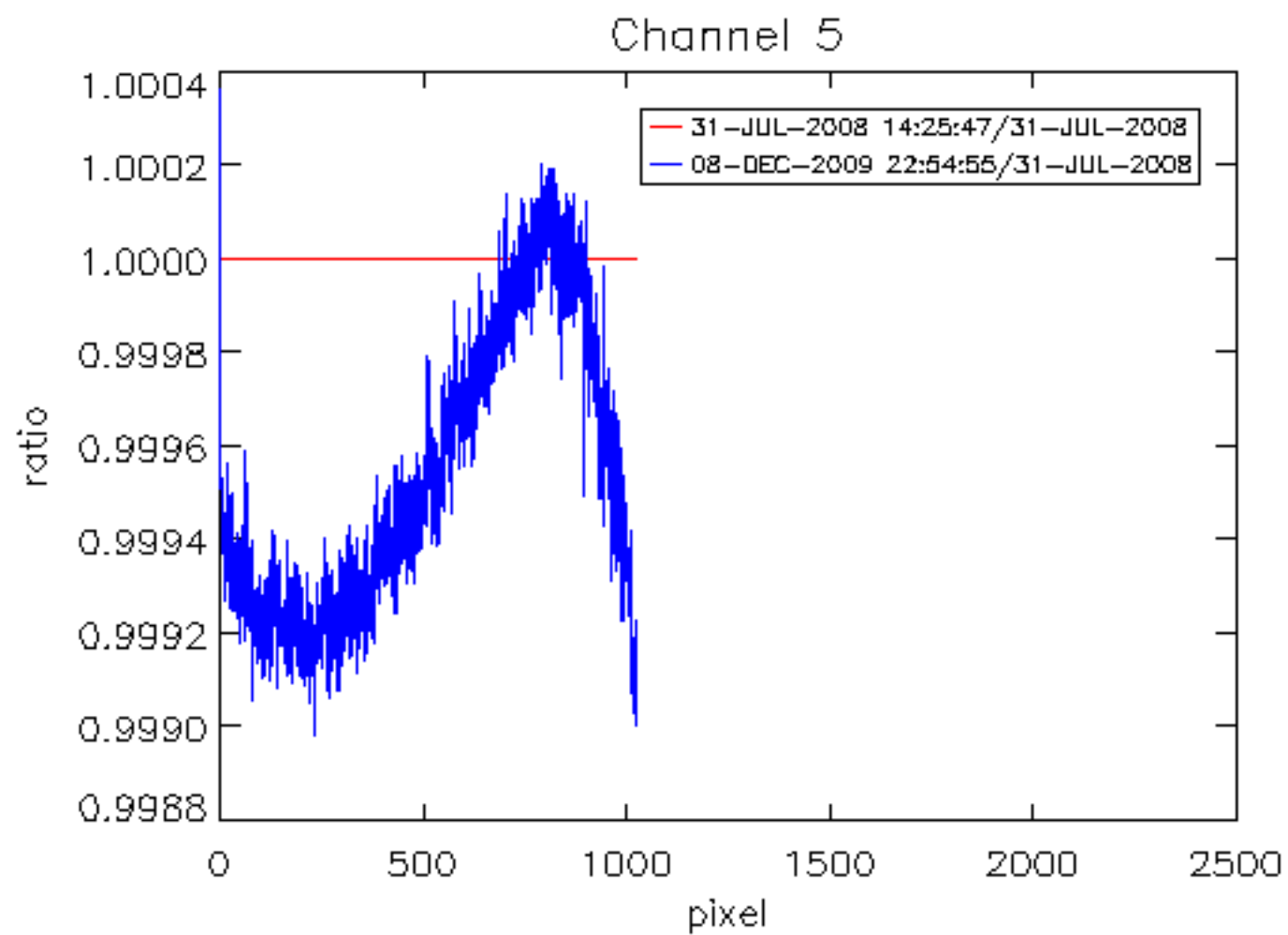
The following plot gives an overview of planned activities and actual special measurements in the Level 1 products. The planning is taken from the DMOP files, and interpreted using information from OSDF files.

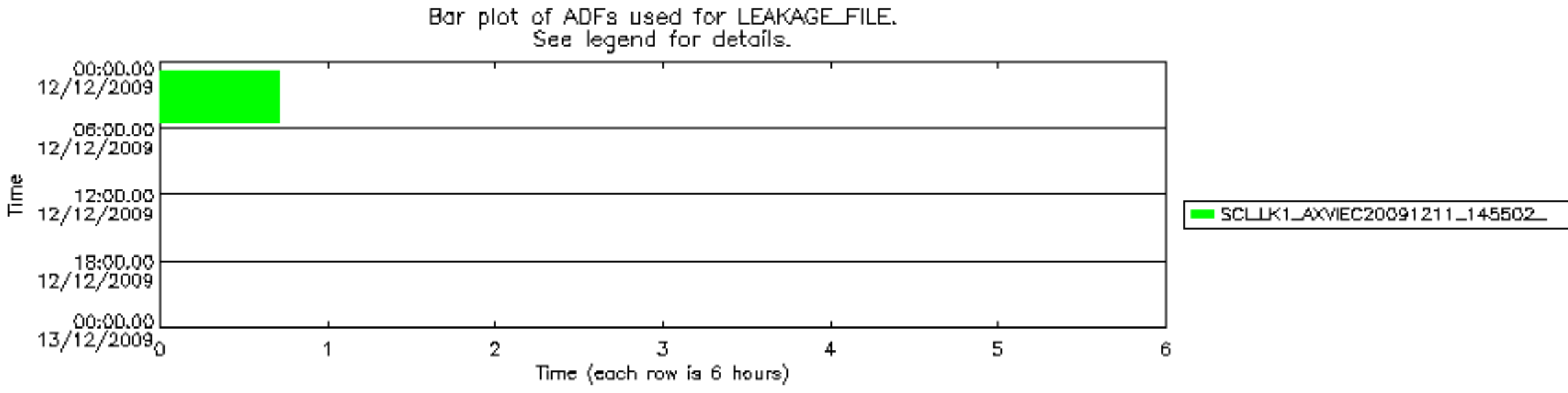
Bar plot of planned DMOP activities and new calibration data for SCIAMACHY.
 Each row indicates an orbit. A light gray colour indicates the time span of 12DEC2009.
 A medium gray color indicates the time span of available SCI_NL_1P products for this day.
 The remaining colours indicate planned activities and/or special measurements.
 Planned activities are shown on the top half of each row, special measurements on the bottom half.

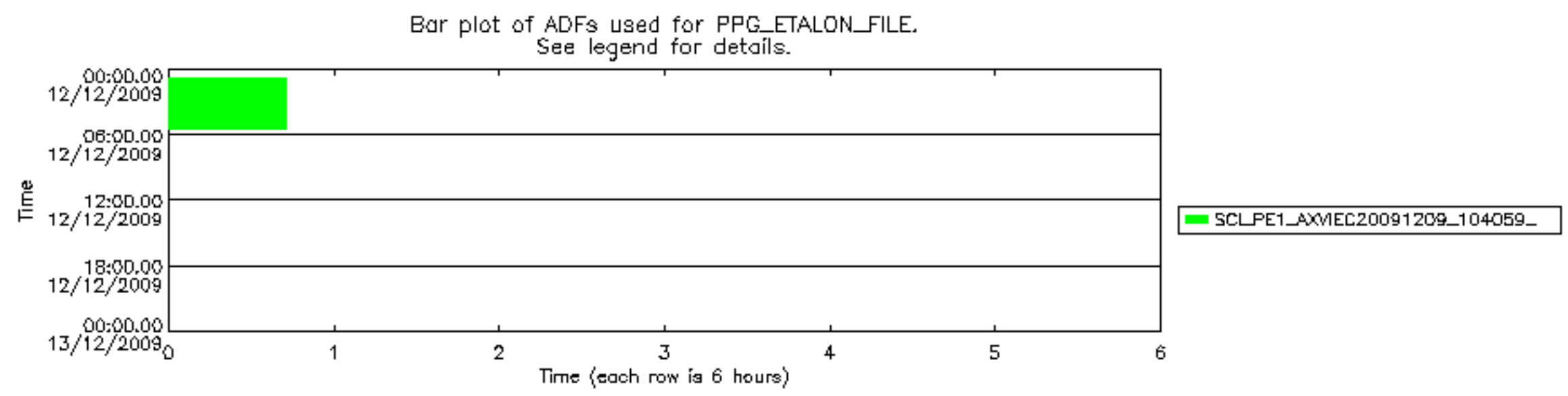


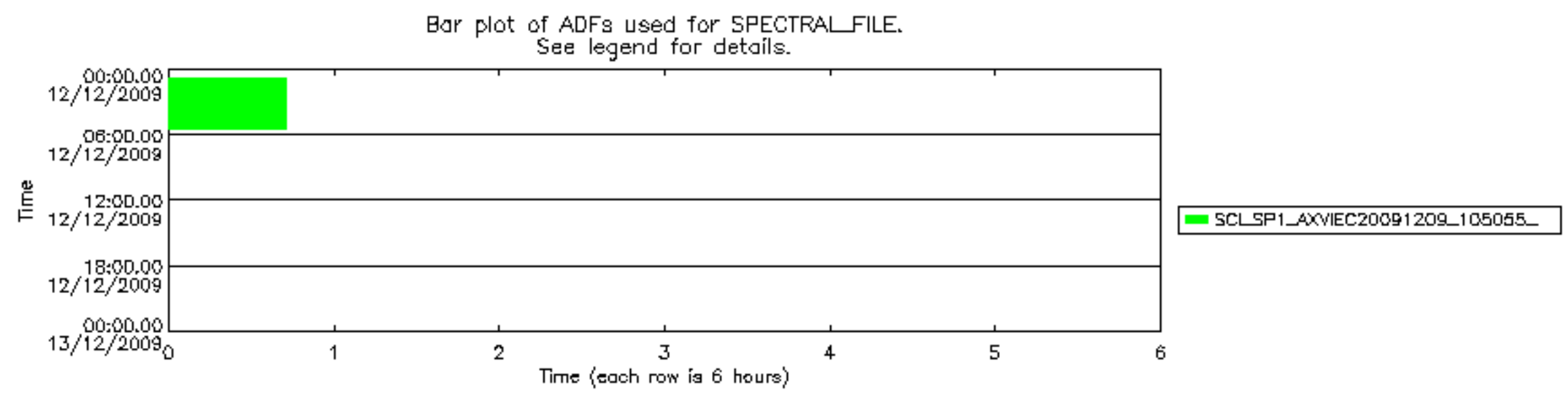
sciamachy_daily_report_level1_SCIA_06_05L01_N_20091212_11.PNG

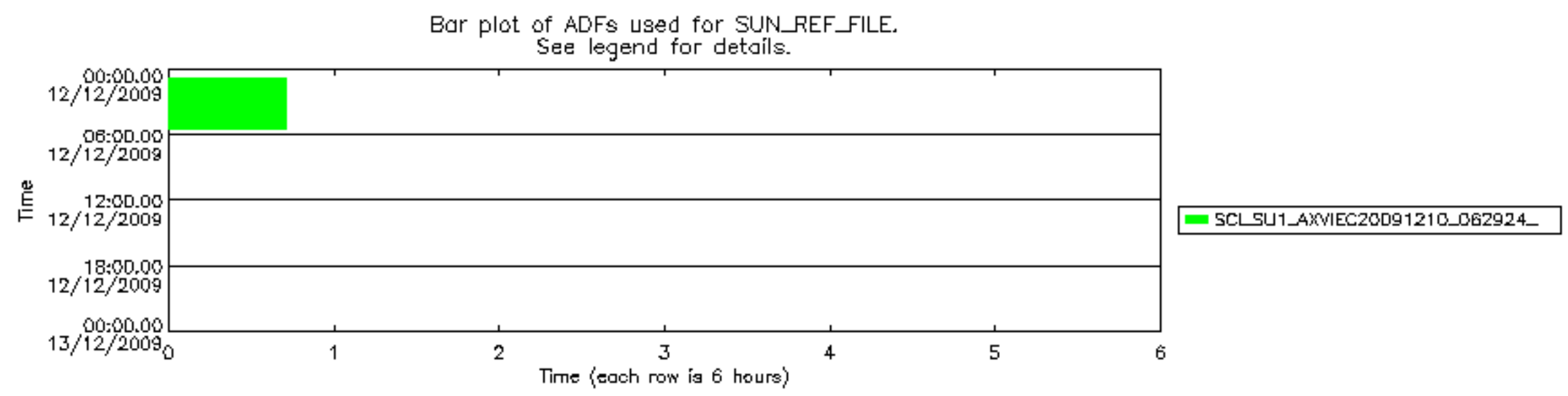


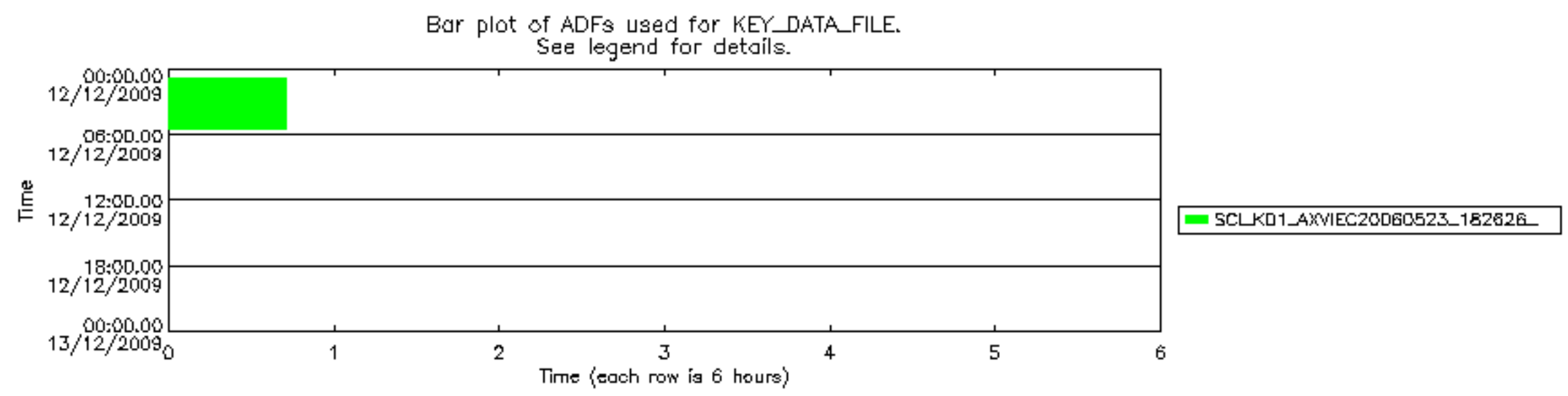


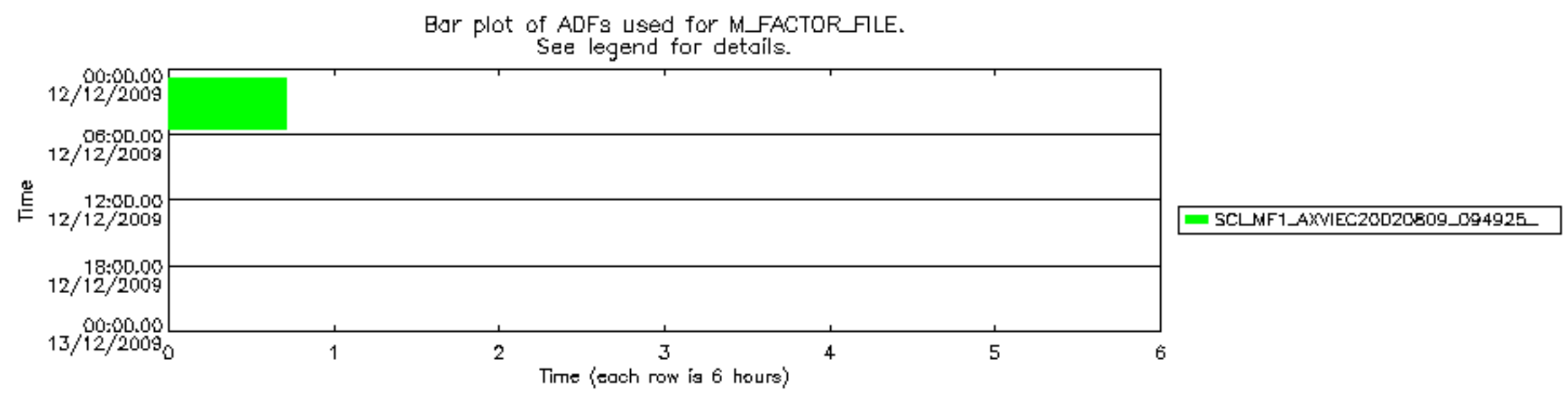


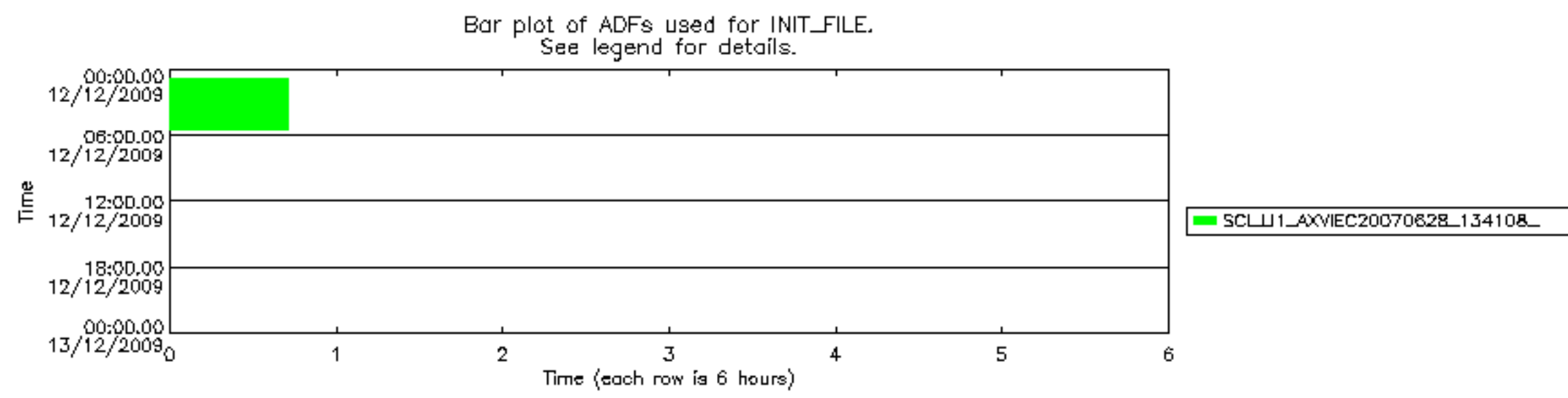


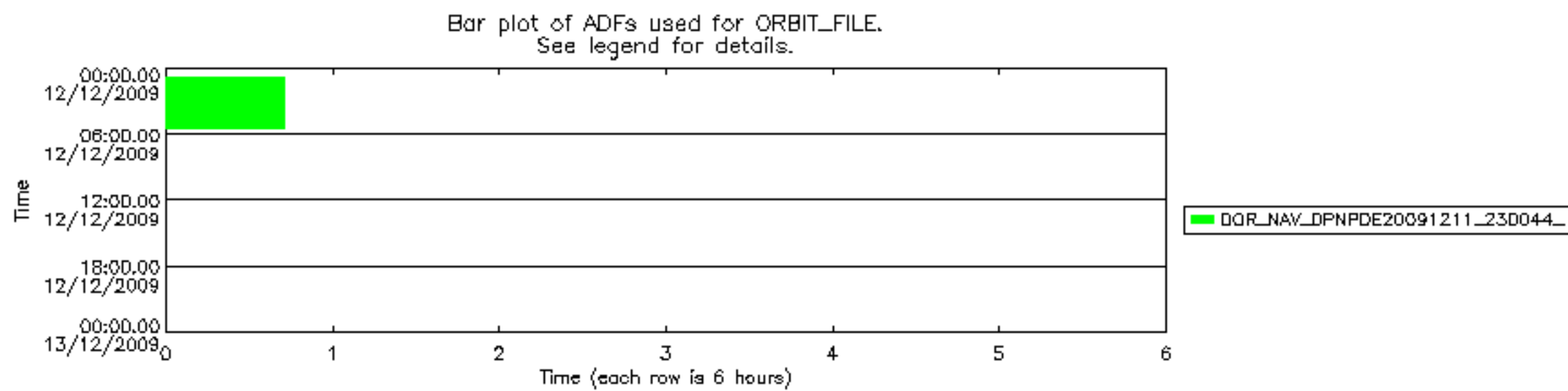


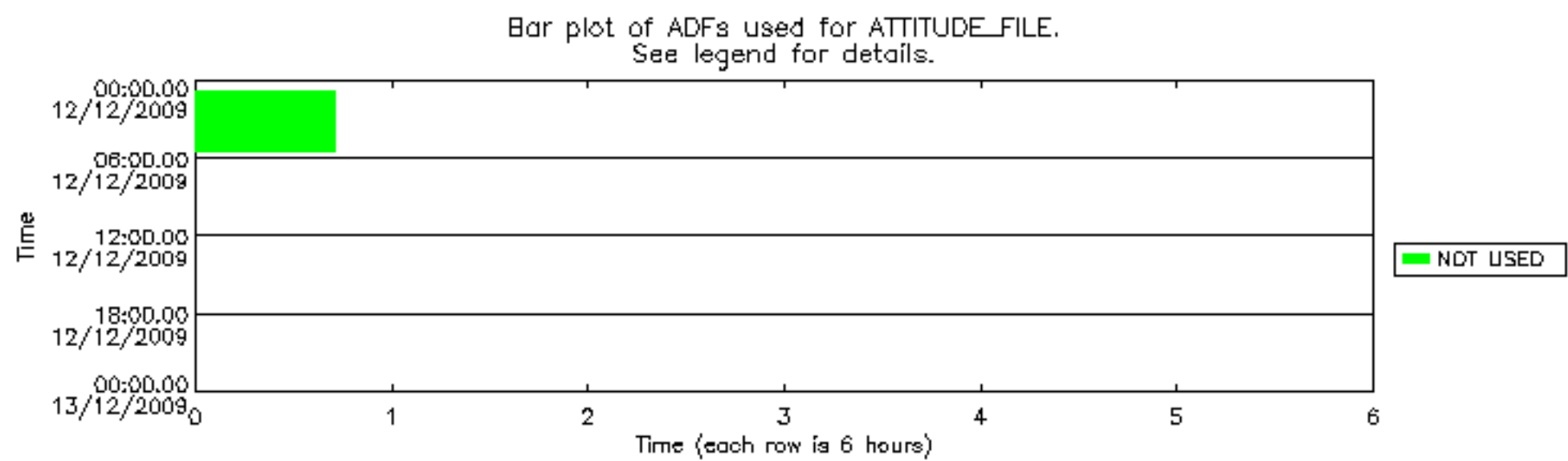












Bar plot of planned DMOP activities and new calibration data for SCIAMACHY.
 Each row indicates an orbit. A light gray colour indicates the time span of 12DEC2009.
 A medium gray color indicates the time span of available SCINL_1P products for this day.
 The remaining colours indicate planned activities and/or special measurements.
 Planned activities are shown on the top half of each row, special measurements on the bottom half.

