

1. MIPAS Daily Report for level 1 products

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- [1.2 Product Quality Indicators](#)
- [1.3 Physical Quality Indicators](#)
- [1.4 ADF monitoring](#)

1.1 General Info

This report contains a daily analysis on parameters extracted from MIPAS level 1 data (The MIP_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	v1.42 15-10-2013
Time of report generation	31AUG2015 12:38:27
Data source version	MIPAS/7.11-W
Processing scope for products	15FEB2009 00:00:00 to 16FEB2009 00:00:00
Start time of first product within scope	14FEB2009 23:43:31
Stop time of last product within scope	16FEB2009 00:52:53
Total number of level 1 products	15
Number of level 1 products with errors	0

1.1.2 Summary per product

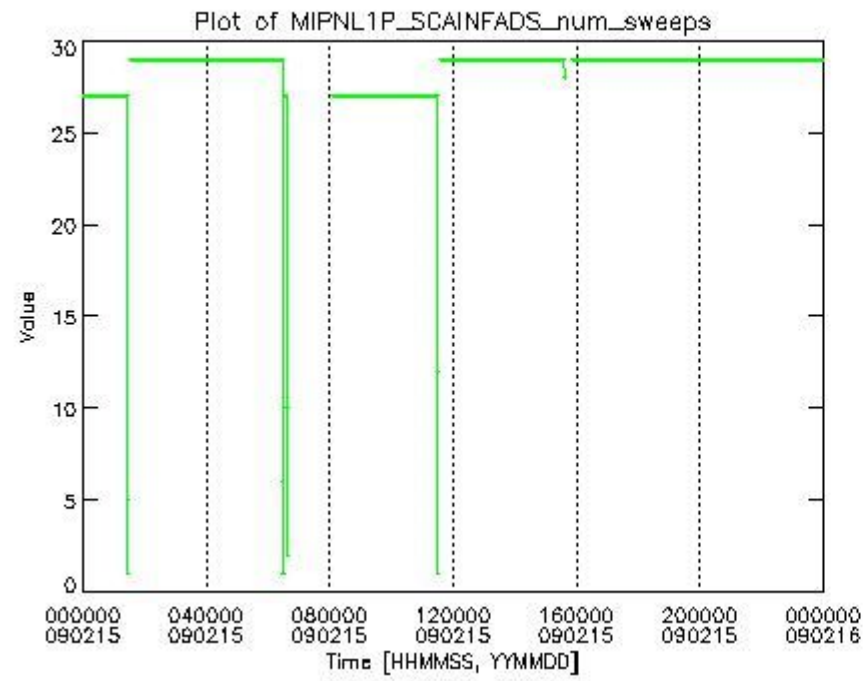
The following table shows a summary for each product used in this report.

#	Product name	Start time	Stop time	Prod err	Slice position (prod/tot)	#sweeps SPH
0	MIP_NL__1PWDSI20090214_234331_000060152076_00274_36400_0000.N1	14FEB2009 23:43:31	15FEB2009 01:23:46	0	0/0	27
1	MIP_NL__1PWDSI20090215_012352_000060262076_00275_36401_0000.N1	15FEB2009 01:23:52	15FEB2009 03:04:17	0	0/0	29
2	MIP_NL__1PWDSI20090215_030424_000060572076_00276_36402_0000.N1	15FEB2009 03:04:24	15FEB2009 04:45:20	0	0/0	29
3	MIP_NL__1PWDSI20090215_044526_000060282076_00277_36403_0000.N1	15FEB2009 04:45:26	15FEB2009 06:25:54	0	0/0	29
4	MIP_NL__1PWDSI20090215_062600_000007012076_00278_36404_0000.N1	15FEB2009 06:26:00	15FEB2009 06:37:41	0	0/0	29
5	MIP_NL__1PWDSI20090215_080601_000060762076_00279_36405_0000.N1	15FEB2009 08:06:01	15FEB2009 09:47:17	0	0/0	27
6	MIP_NL__1PWDSI20090215_094723_000059842076_00280_36406_0000.N1	15FEB2009 09:47:23	15FEB2009 11:27:07	0	0/0	27
7	MIP_NL__1PWDSI20090215_112713_000060412076_00281_36407_0000.N1	15FEB2009 11:27:13	15FEB2009 13:07:53	0	0/0	29
8	MIP_NL__1PWDSI20090215_130800_000060572076_00282_36408_0000.N1	15FEB2009 13:08:00	15FEB2009 14:48:56	0	0/0	29
9	MIP_NL__1PWDSI20090215_144903_000060392076_00283_36409_0000.N1	15FEB2009 14:49:03	15FEB2009 16:29:41	0	0/0	29
10	MIP_NL__1PWDSI20090215_162947_000059932076_00284_36410_0000.N1	15FEB2009 16:29:47	15FEB2009 18:09:40	0	0/0	29
11	MIP_NL__1PWDSI20090215_180946_000060282076_00285_36411_0000.N1	15FEB2009 18:09:46	15FEB2009 19:50:13	0	0/0	29
12	MIP_NL__1PWDSI20090215_195020_000060572076_00286_36412_0000.N1	15FEB2009 19:50:20	15FEB2009 21:31:16	0	0/0	29
13	MIP_NL__1PWDSI20090215_213123_000060282076_00287_36413_0000.N1	15FEB2009 21:31:23	15FEB2009 23:11:50	0	0/0	29
14	MIP_NL__1PWDSI20090215_231156_000060572076_00288_36414_0000.N1	15FEB2009 23:11:56	16FEB2009 00:52:53	0	0/0	29

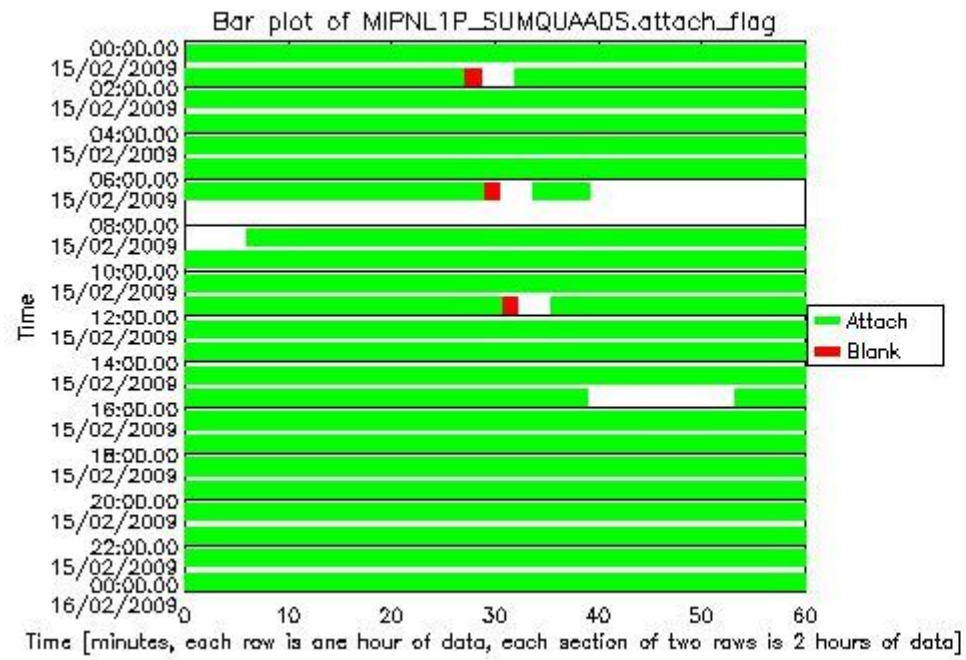
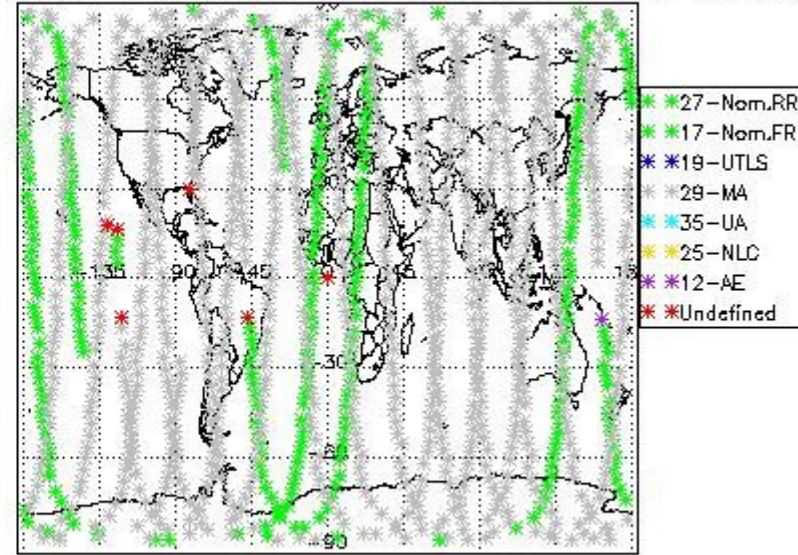
1.2 Product Quality Indicators

This report contains an analysis on product quality related parameters within the MIP_NL__1P product.

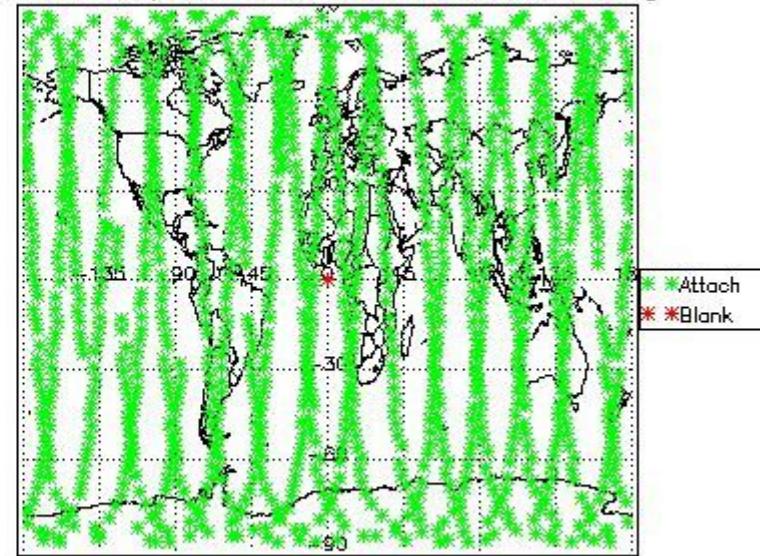
1.2.1 Trends and geolocation of Summary Quality and Scan Information ADS

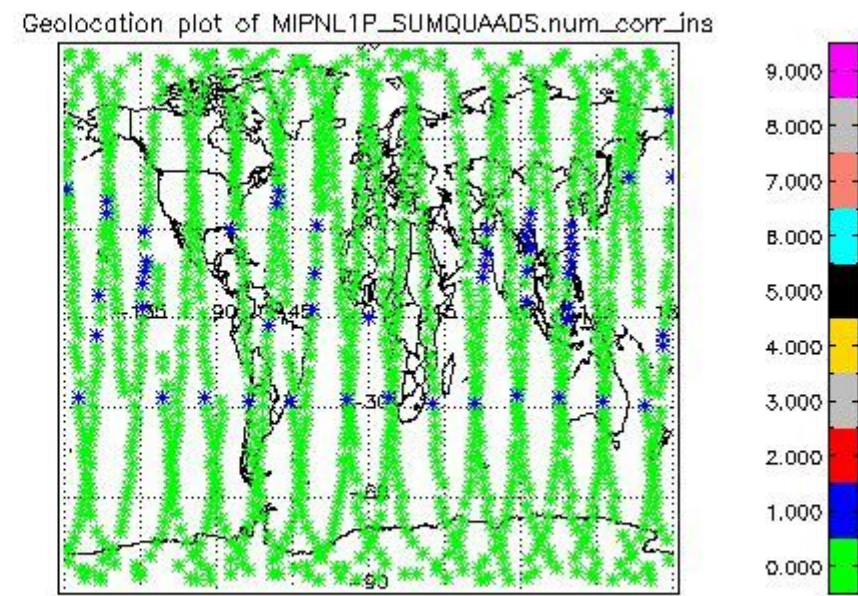
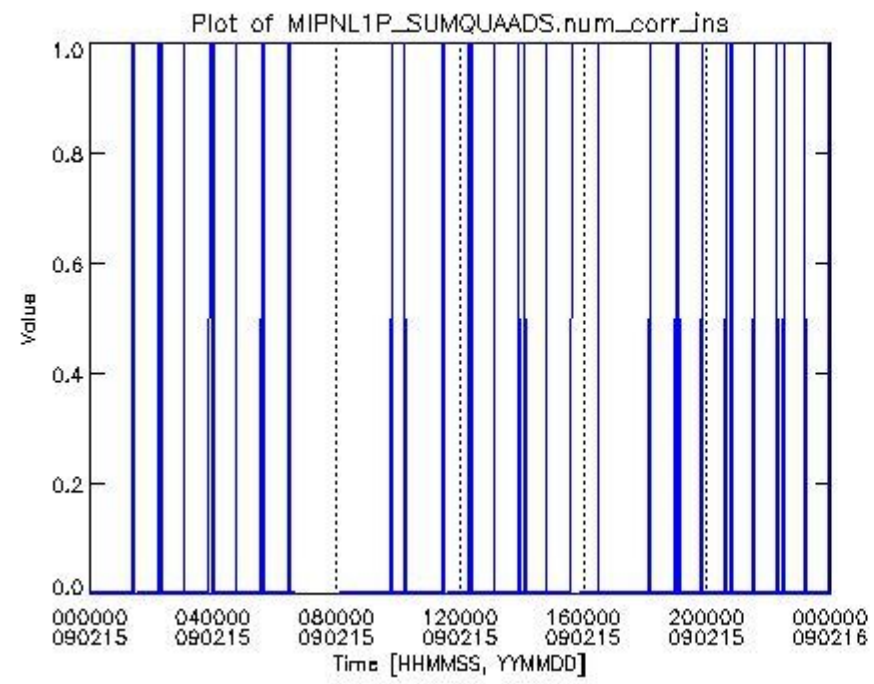
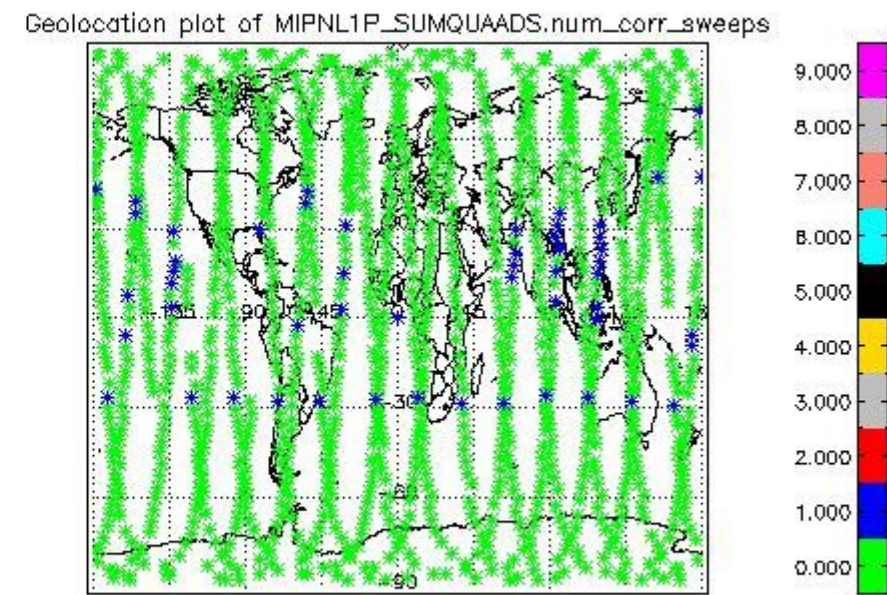
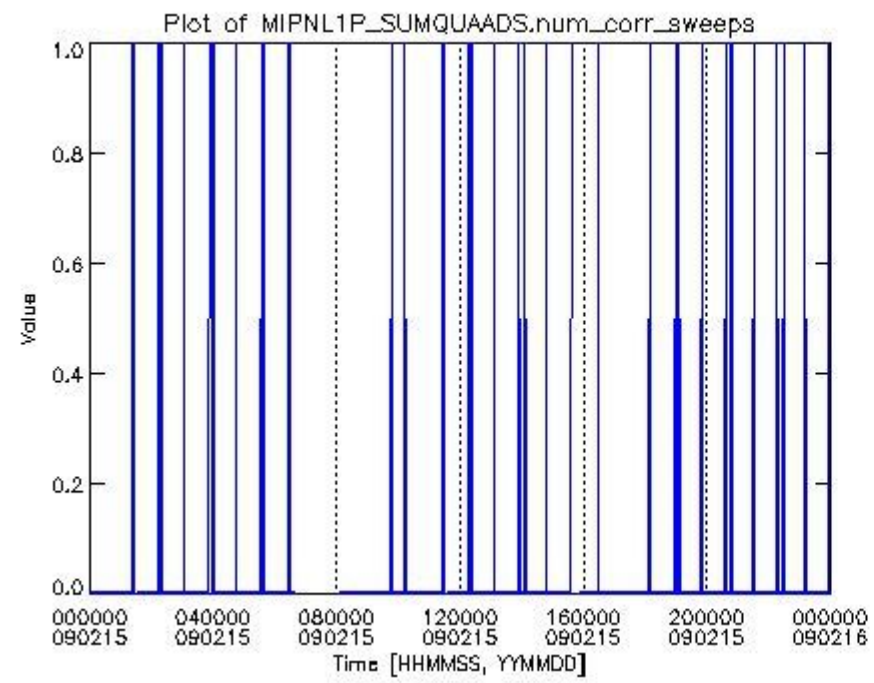


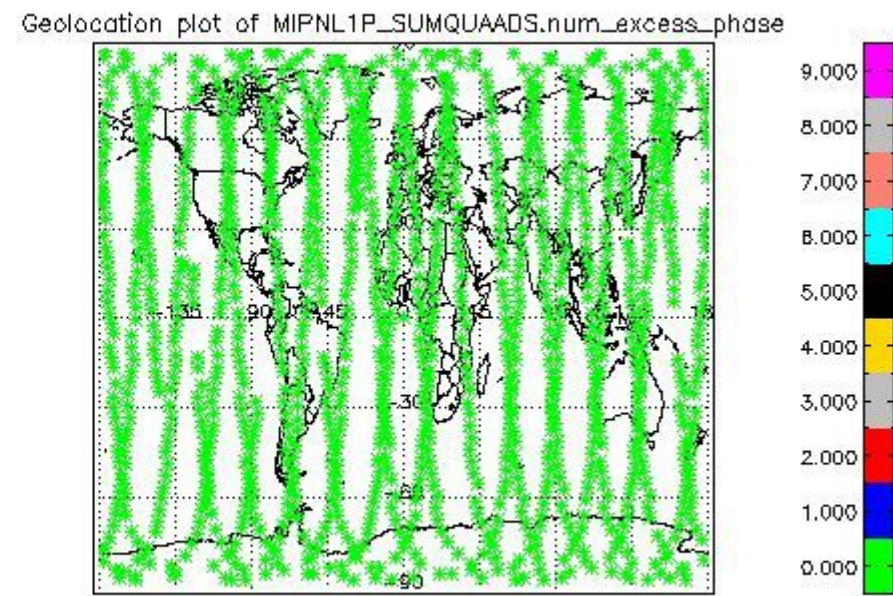
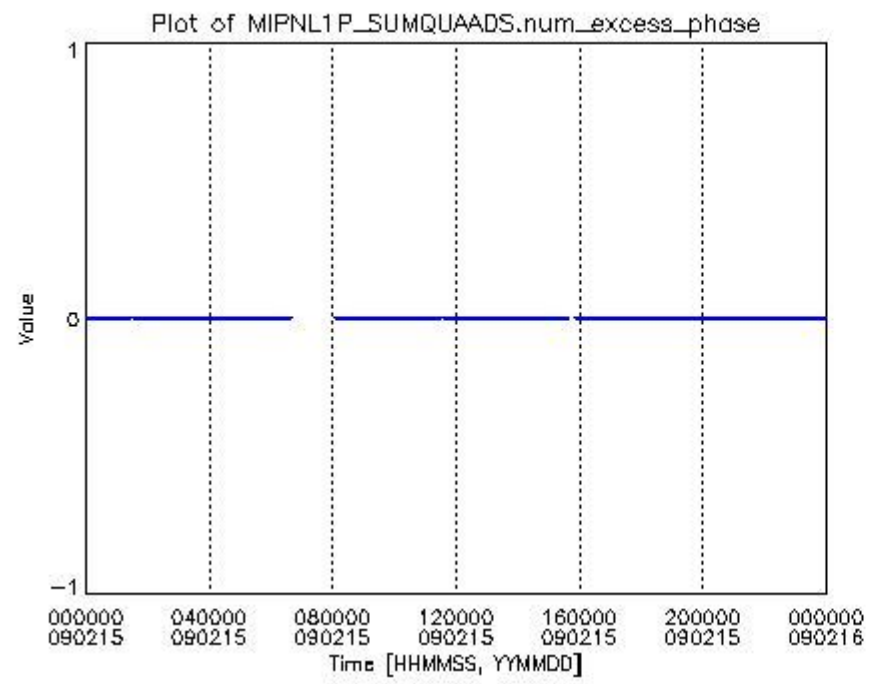
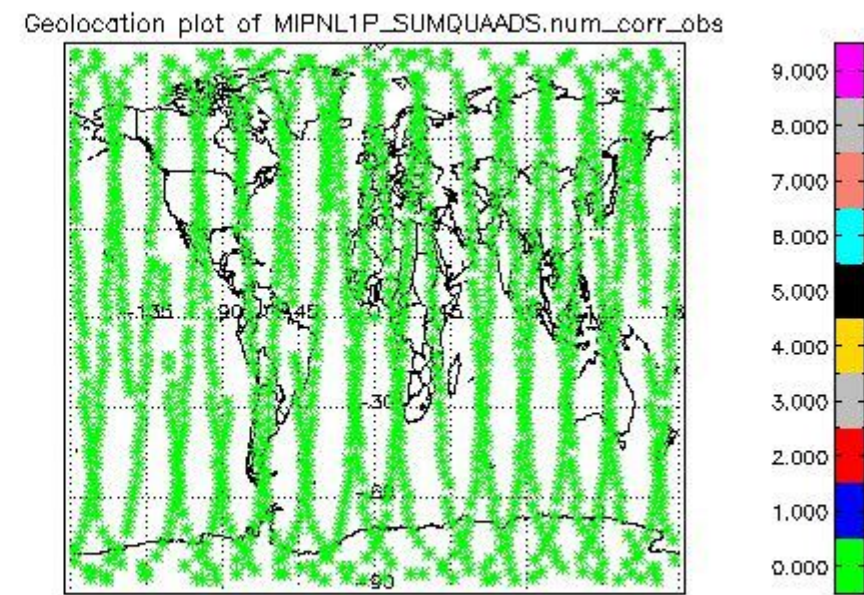
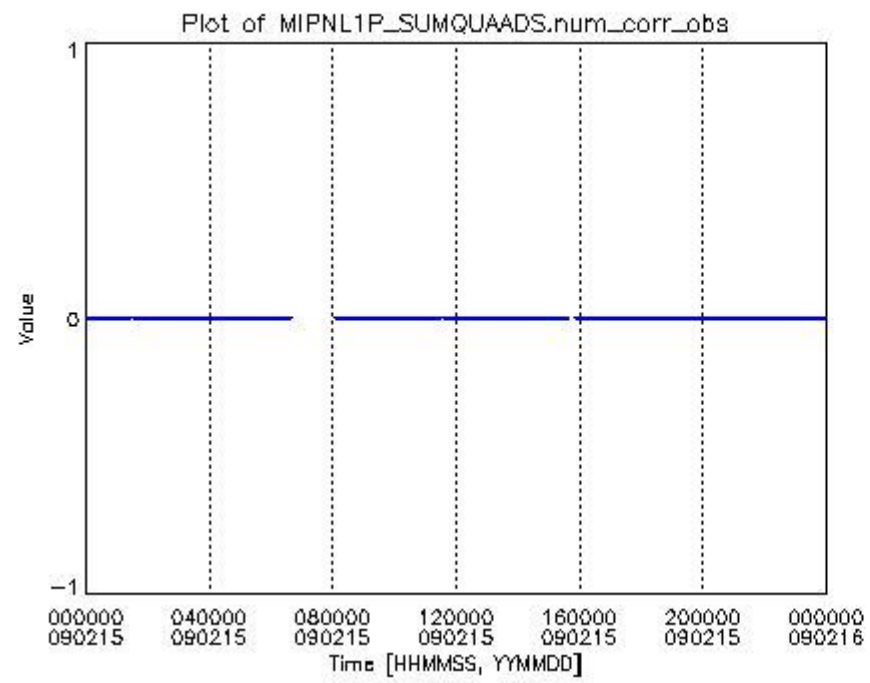
Geolocation plot of MIPNL1P_SCAINFADS_num_sweeps(green color=0 errors)

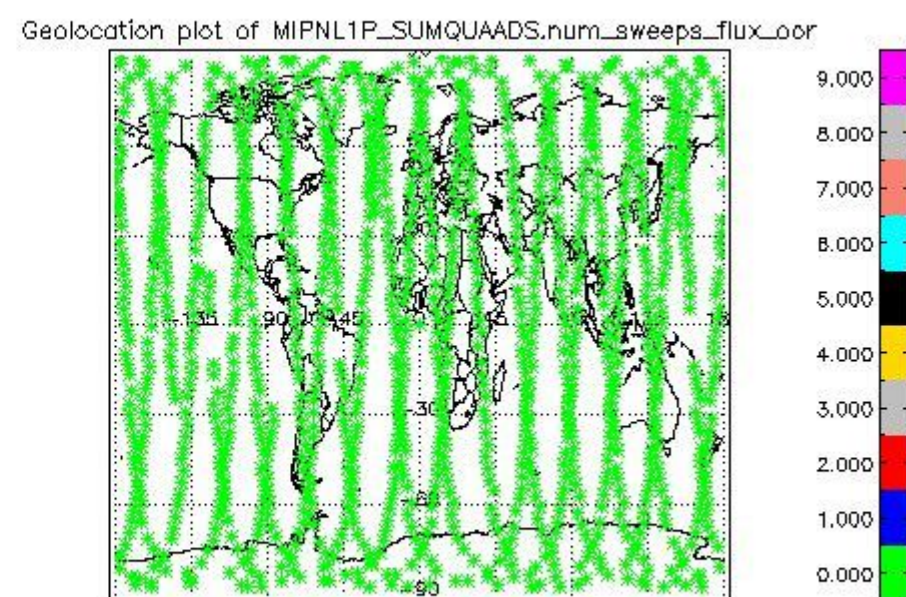
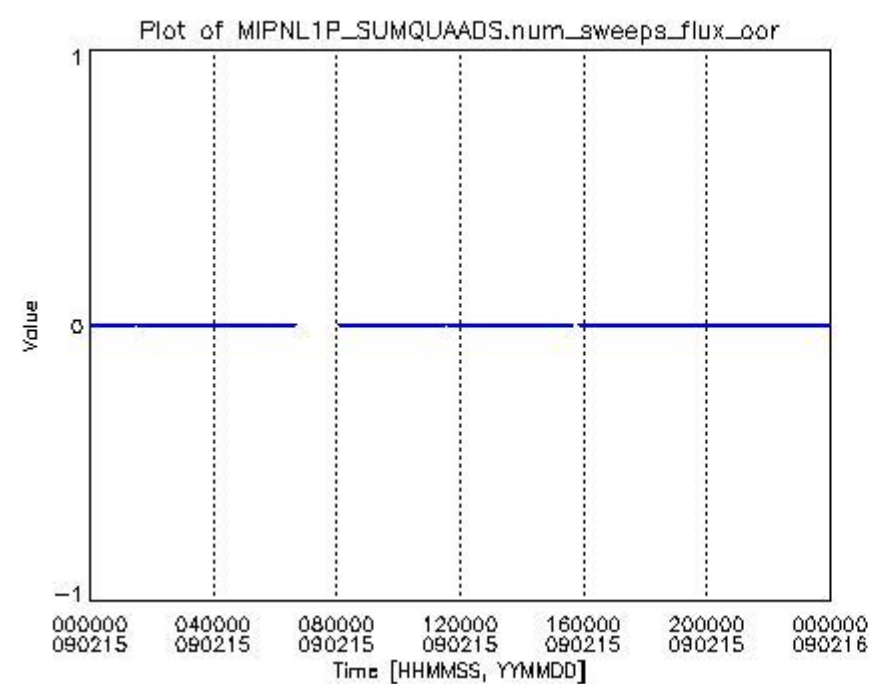
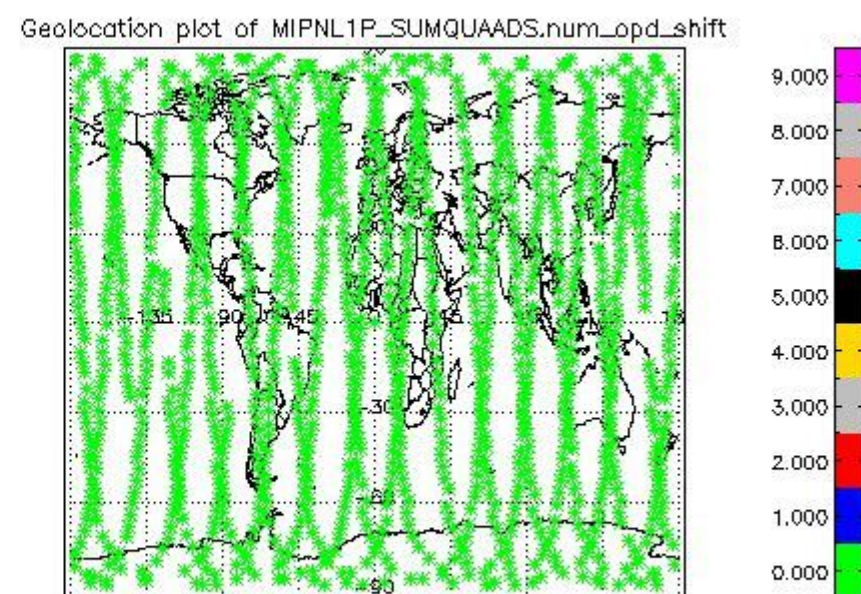
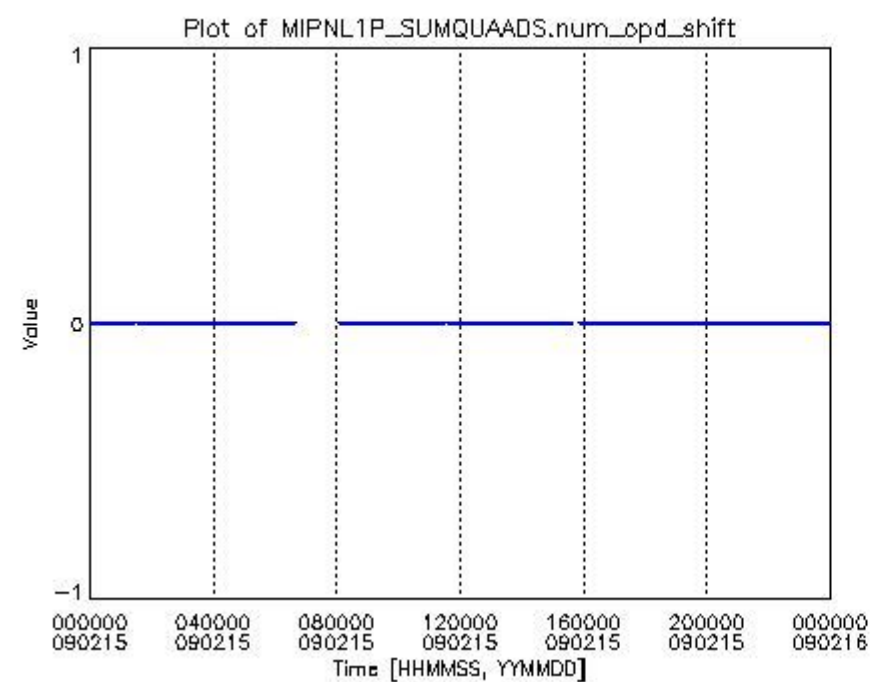


Geolocation plot of MIPNL1P_SUMQUAADS.attach_flag

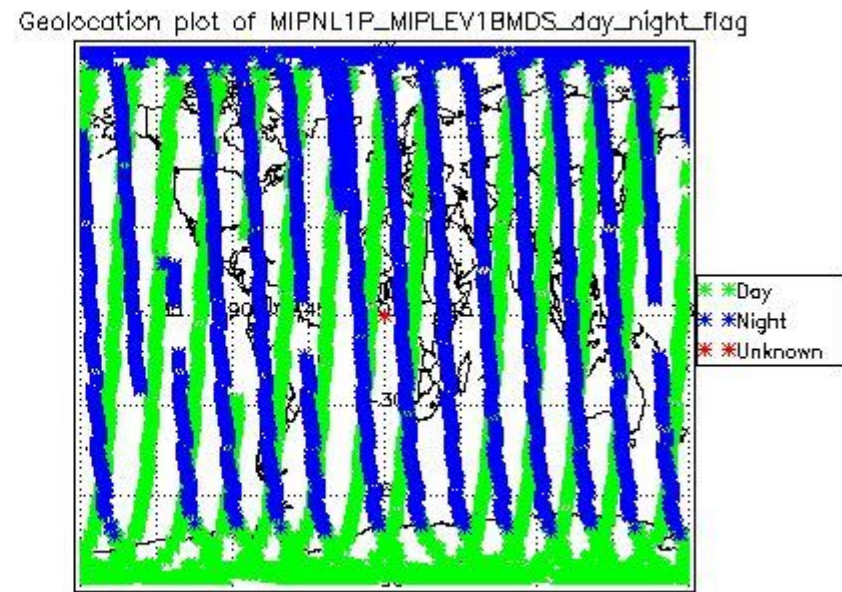
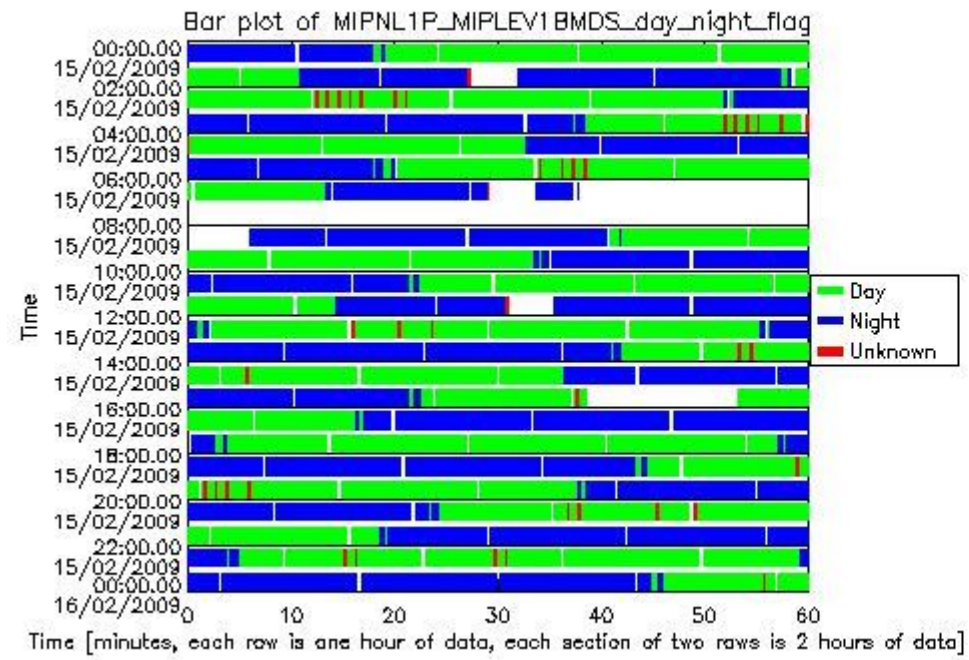
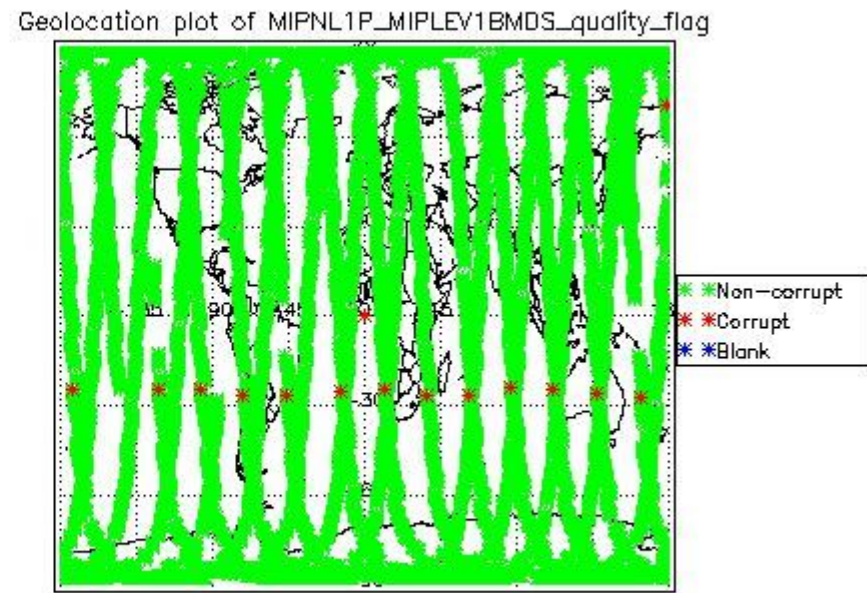
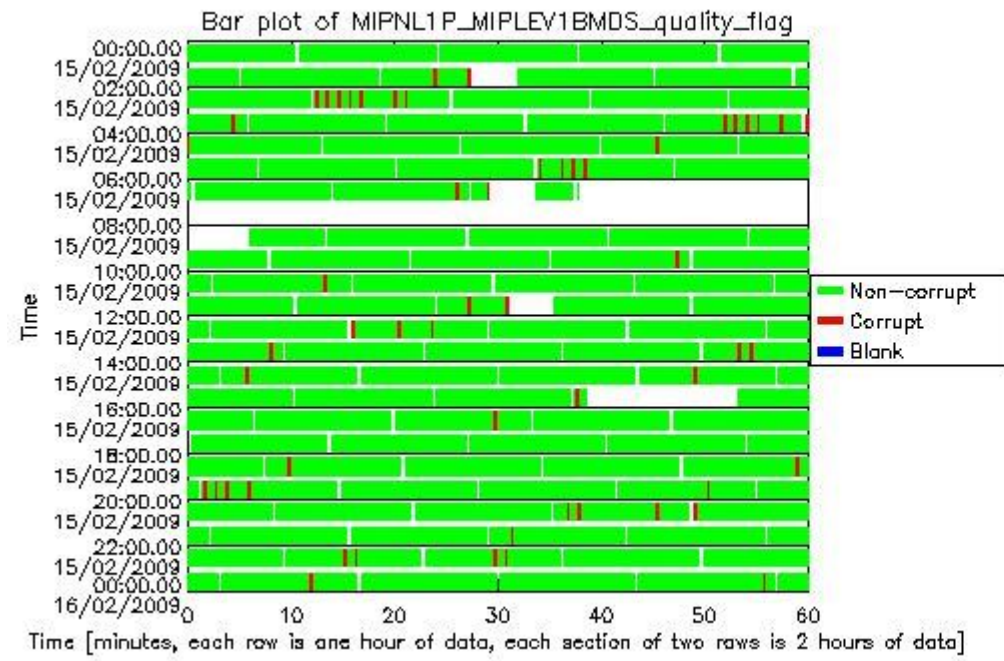


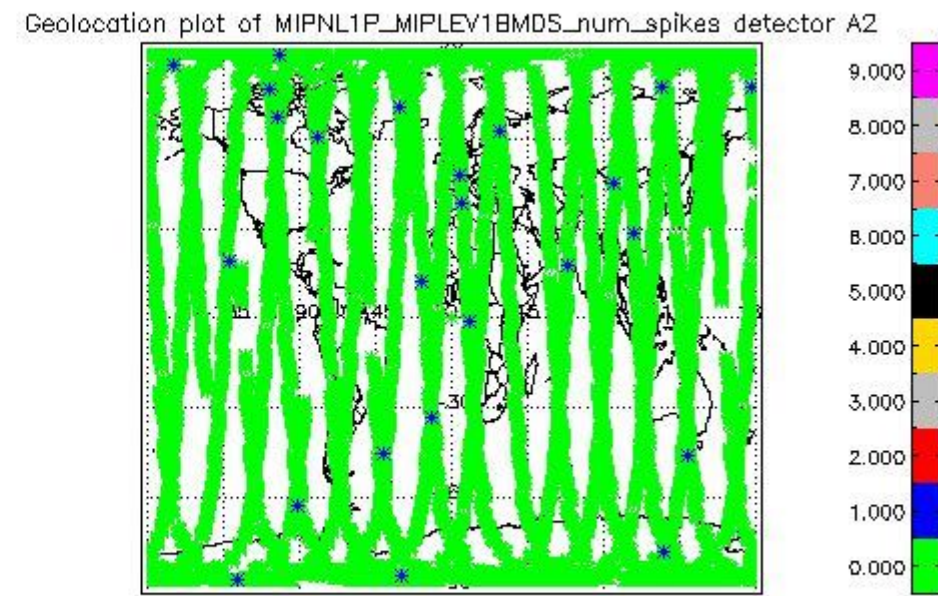
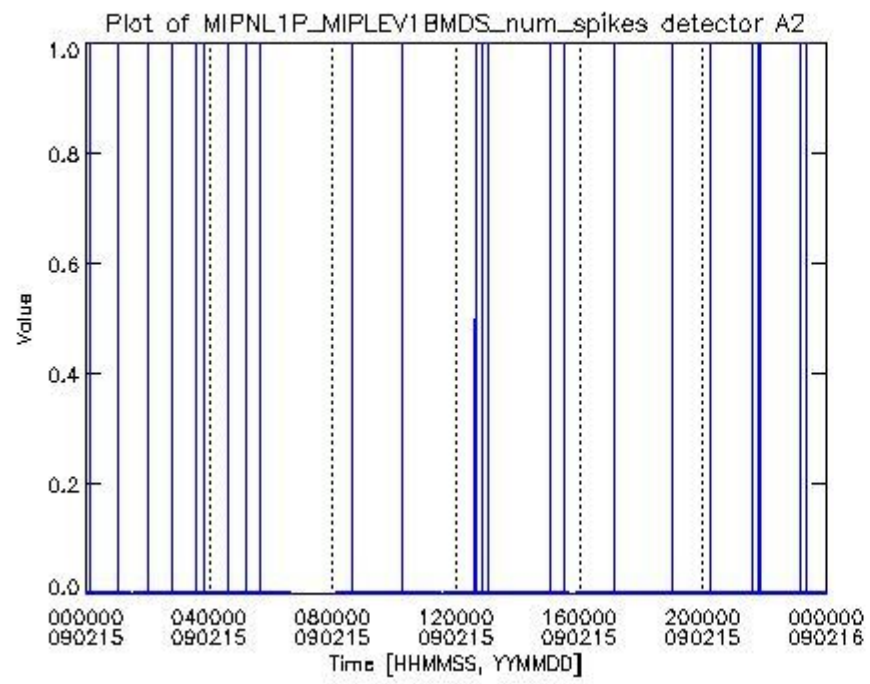
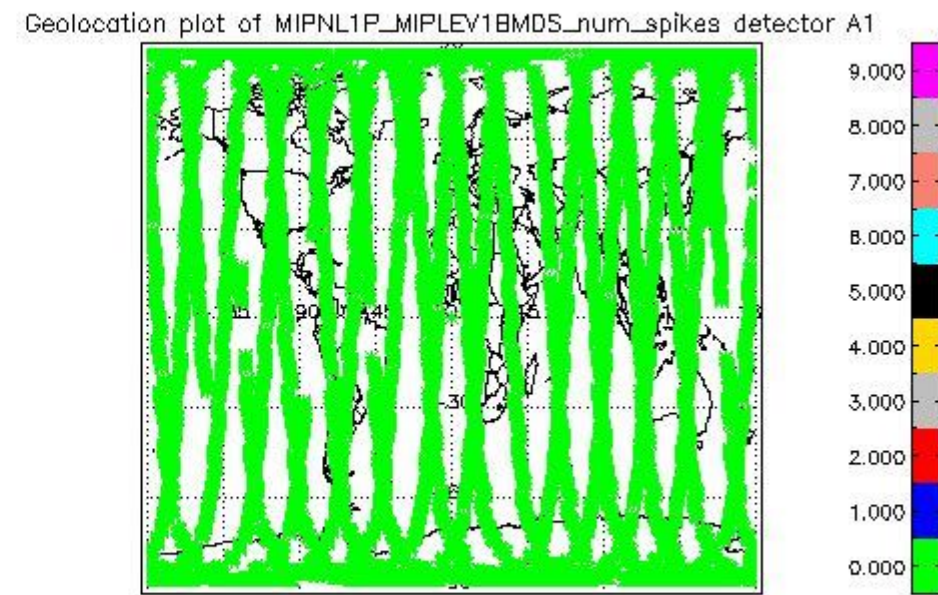
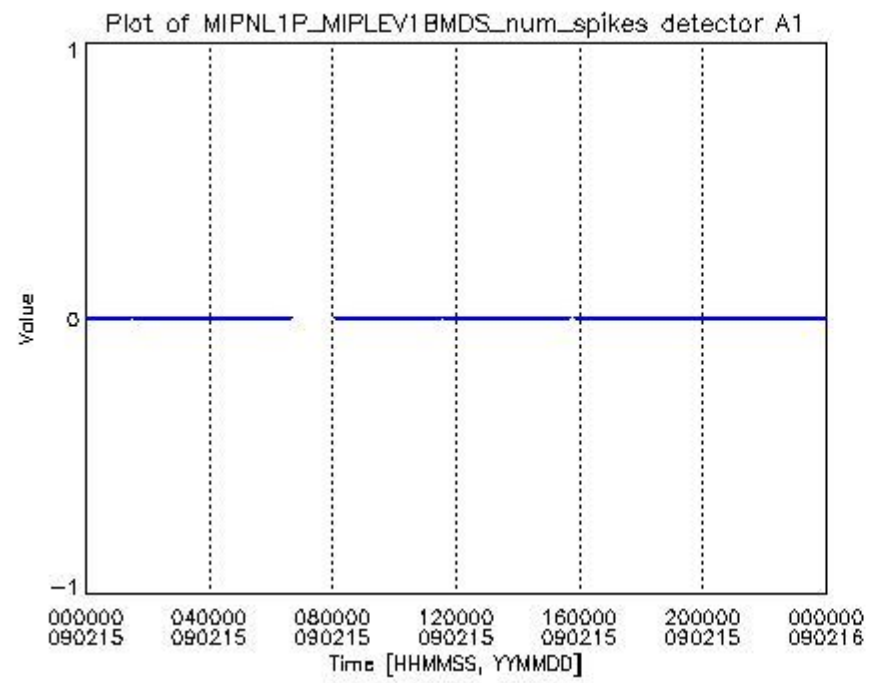


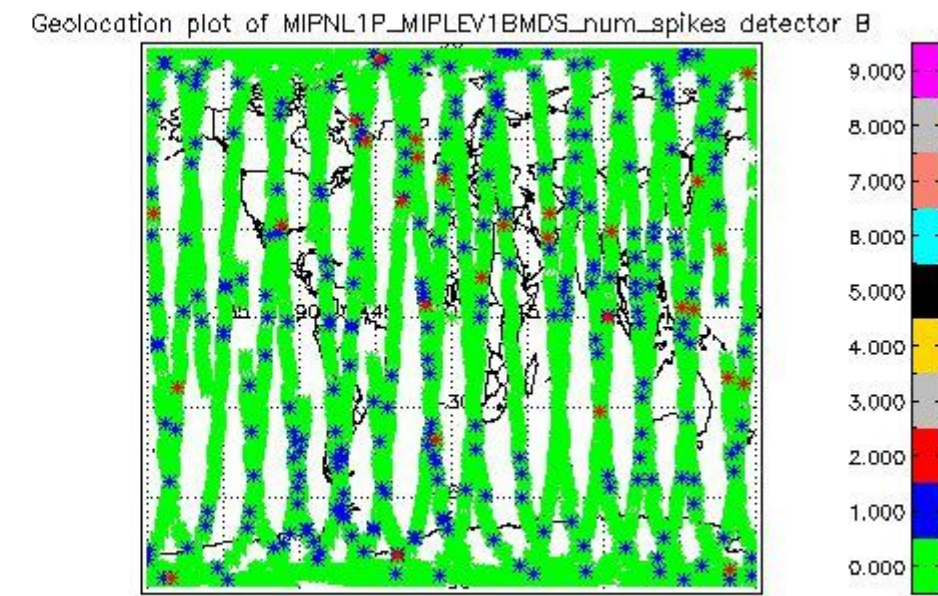
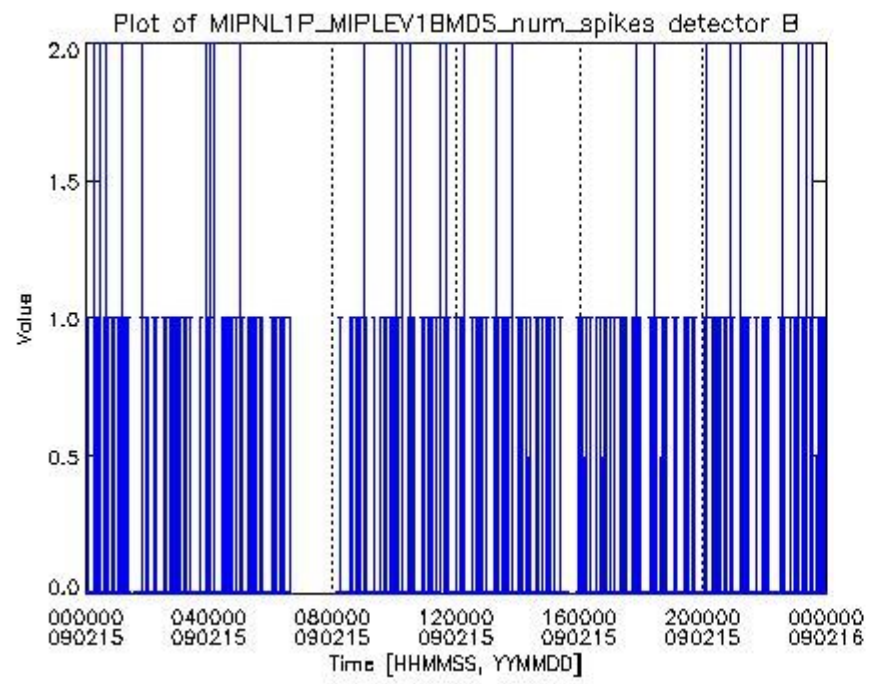
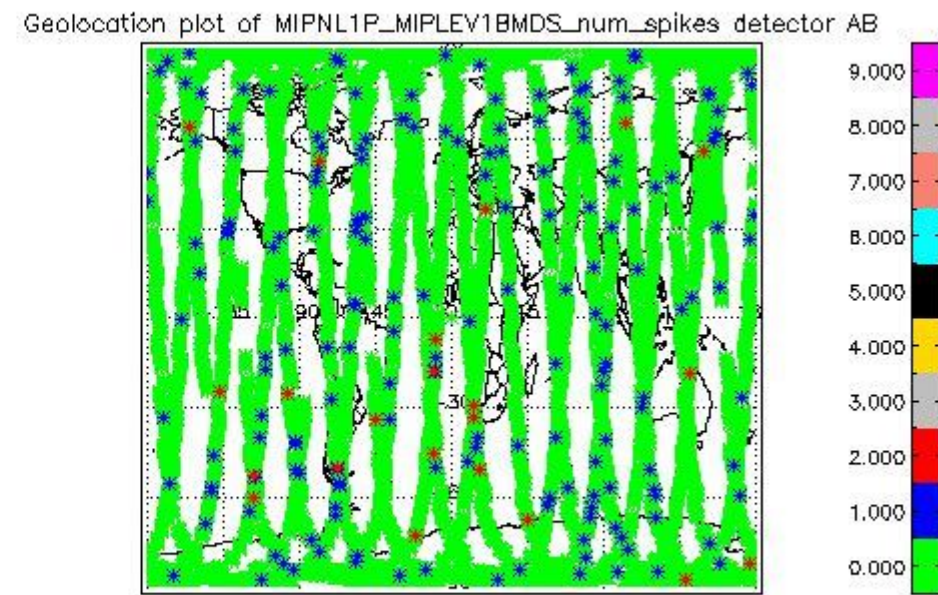
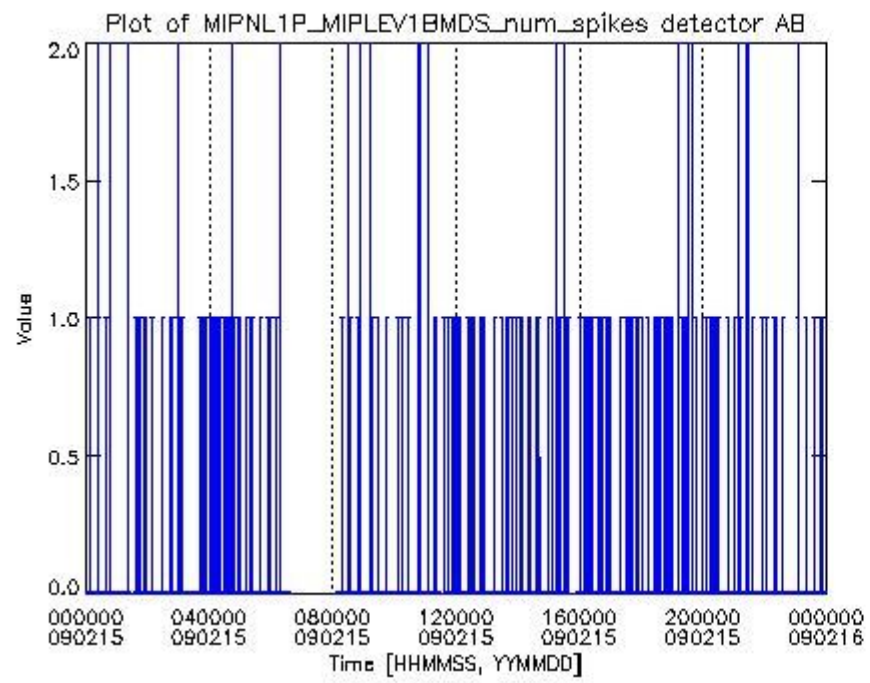


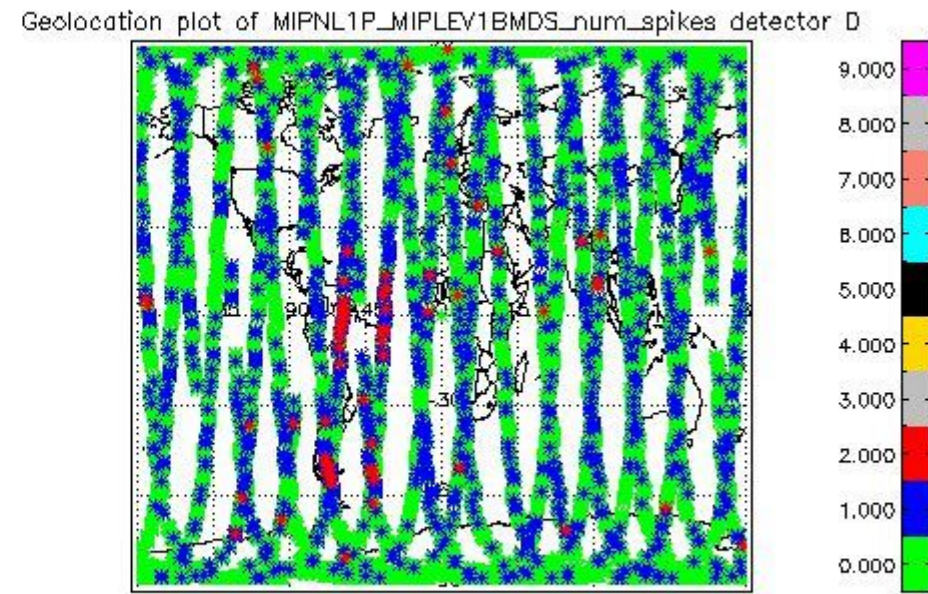
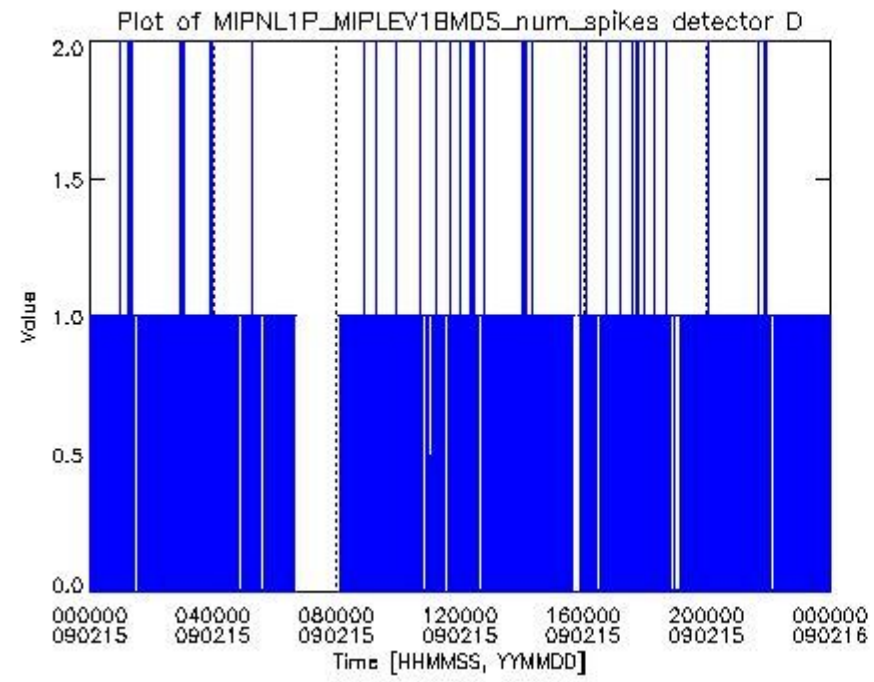
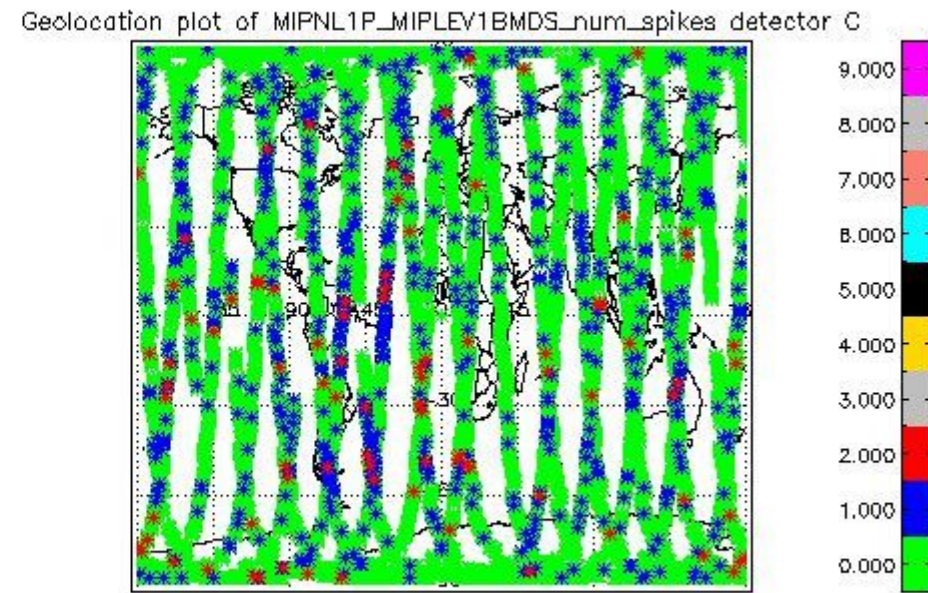
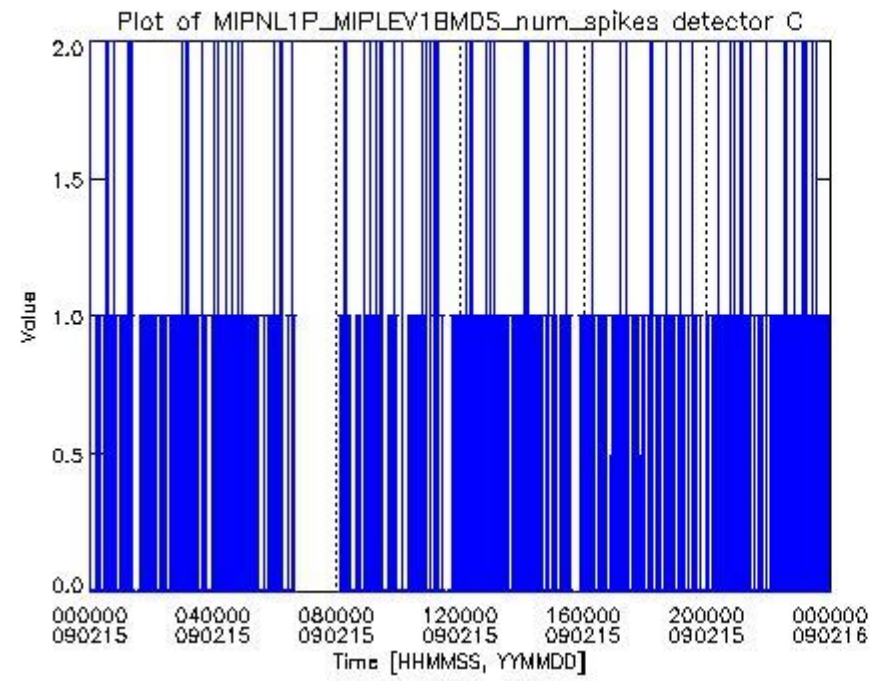


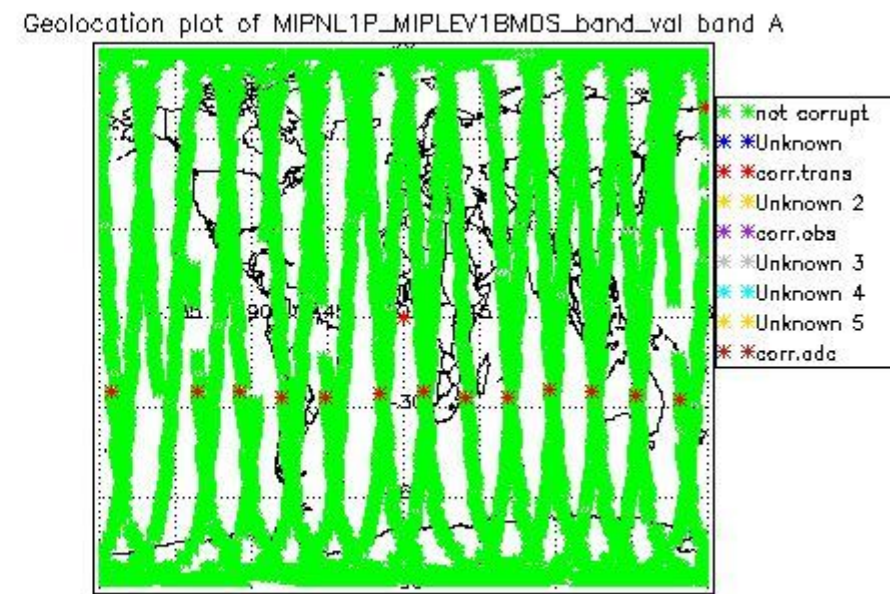
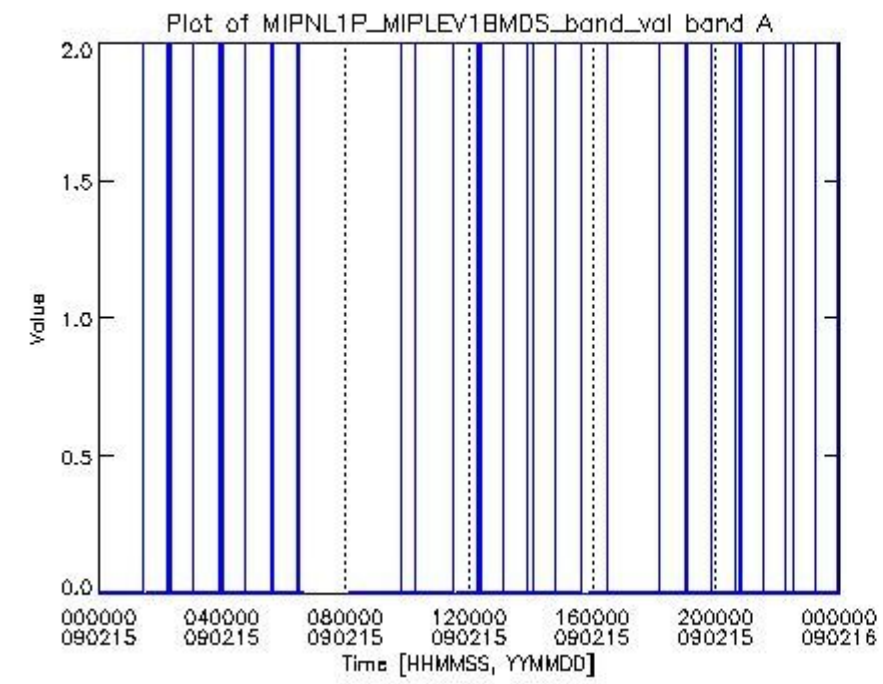
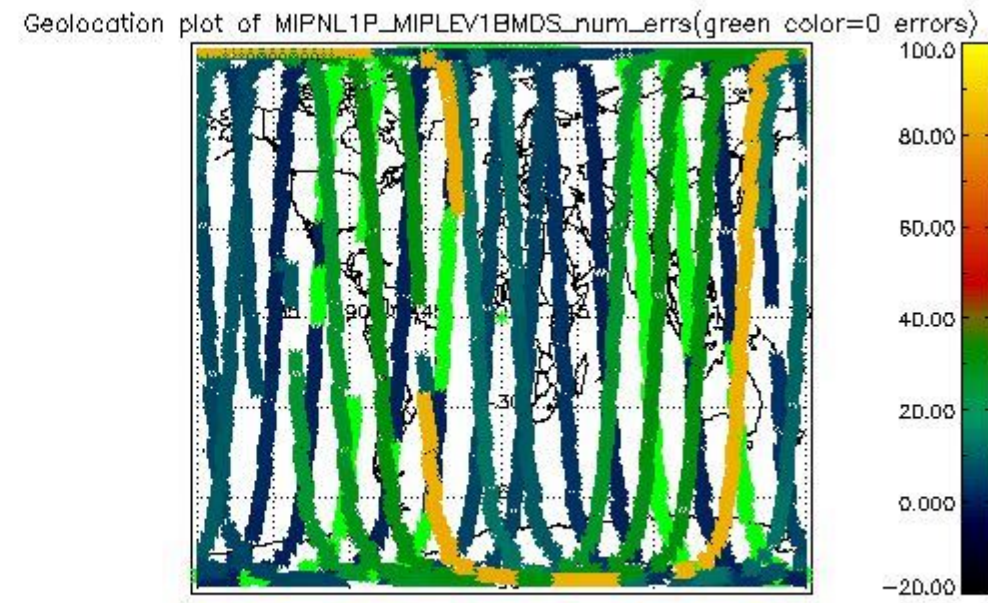
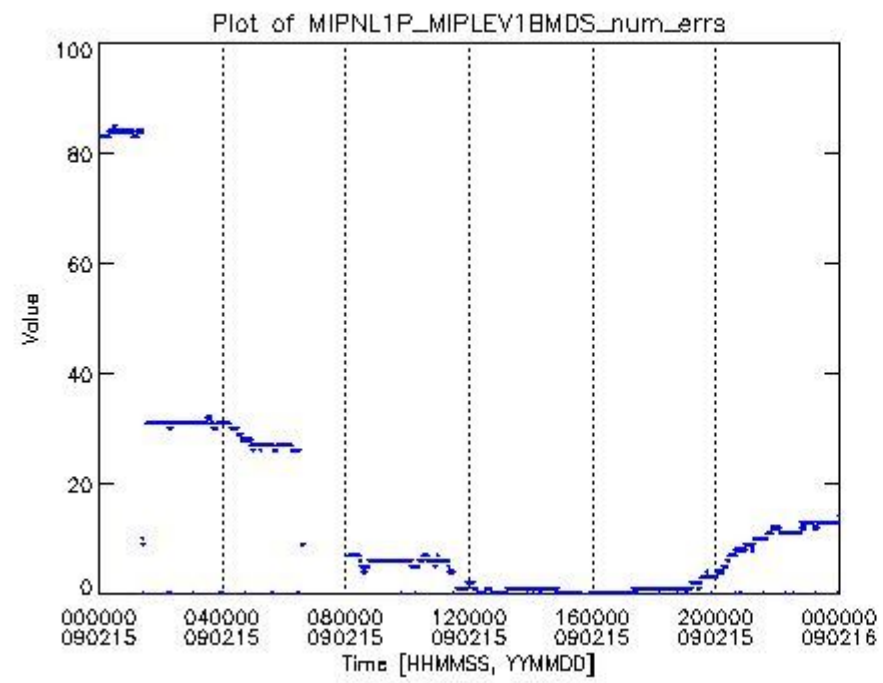
1.2.2 Trends and geolocation of MIPAS LEVEL 1 MDS

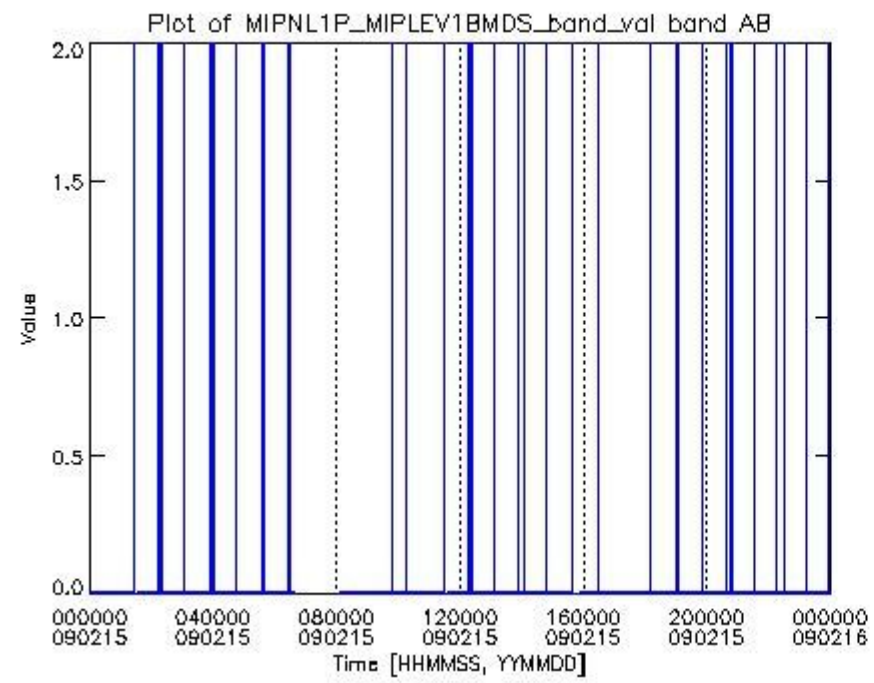




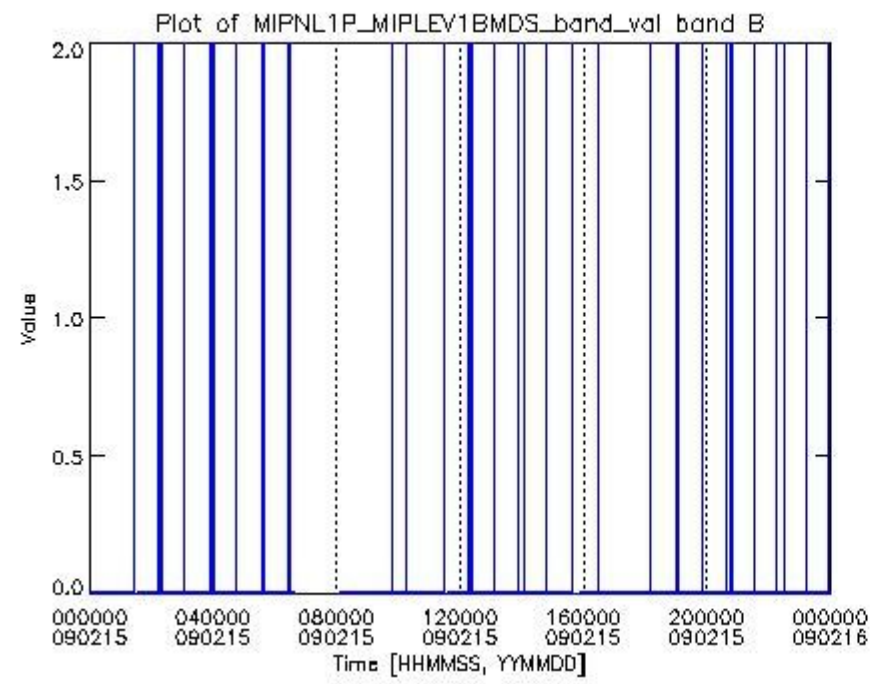
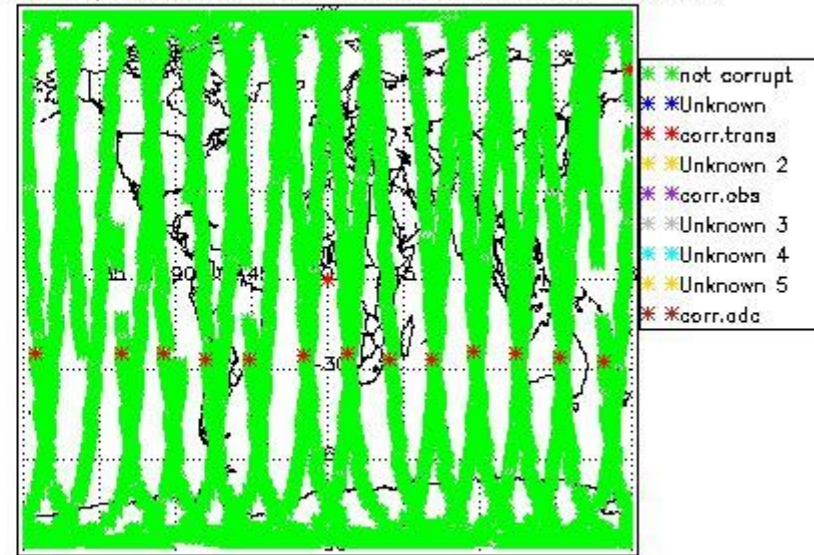




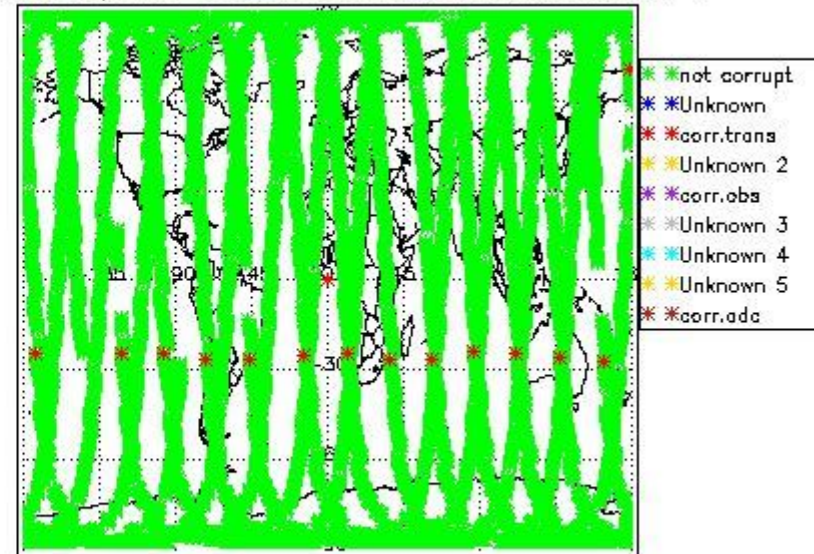


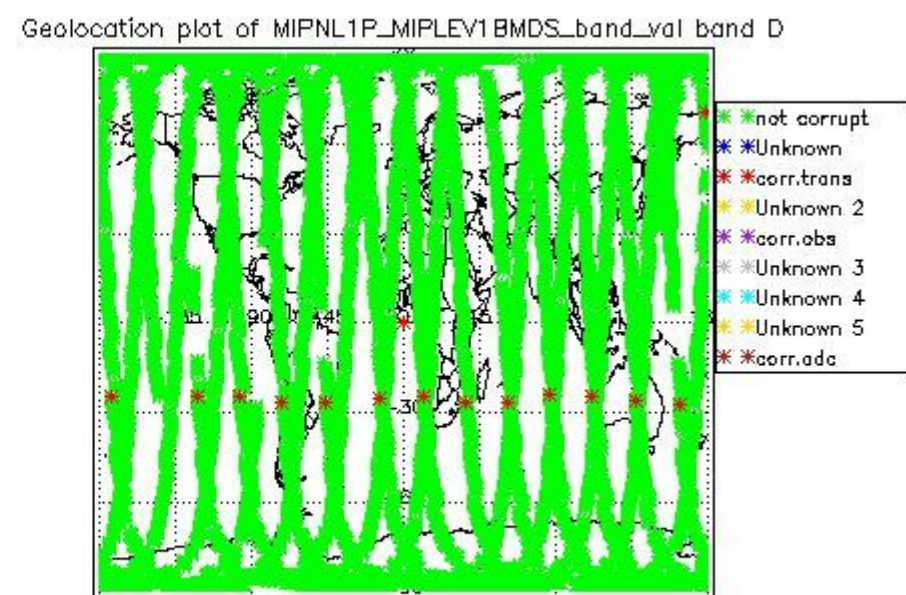
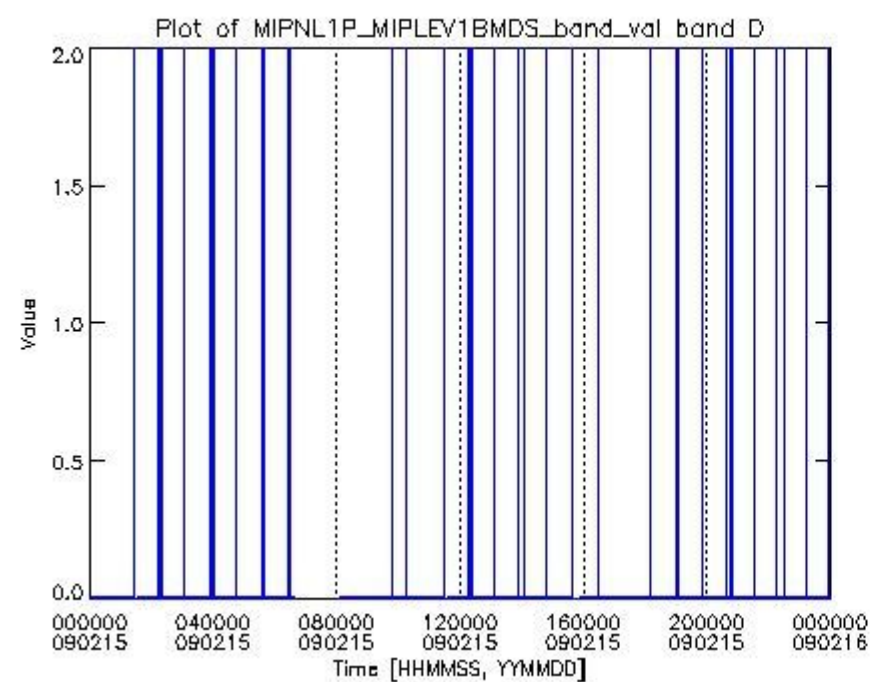
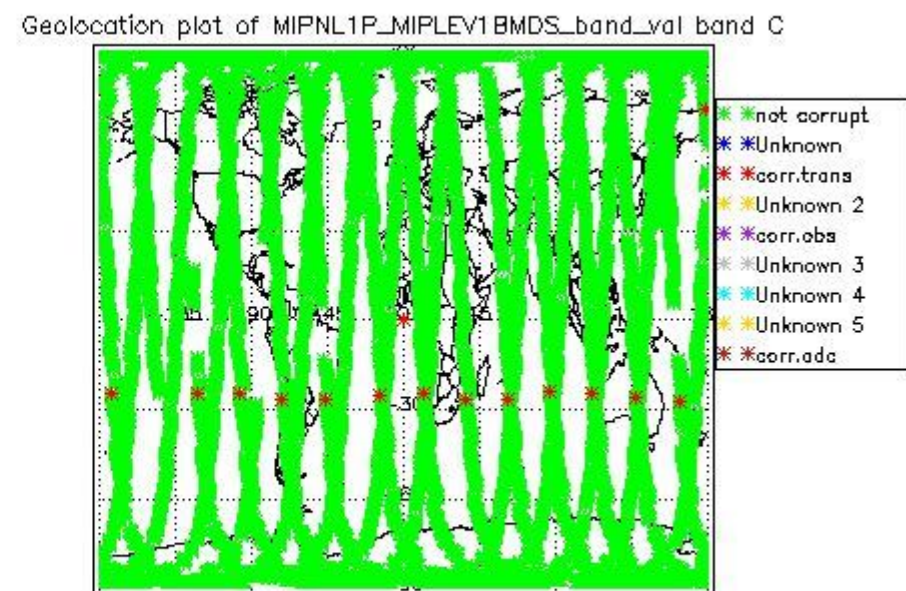
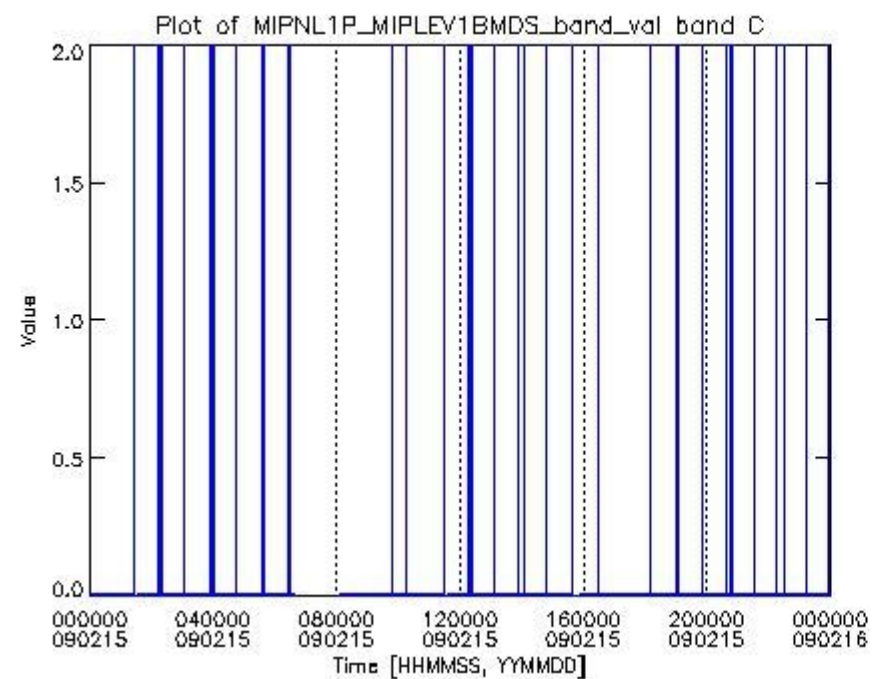


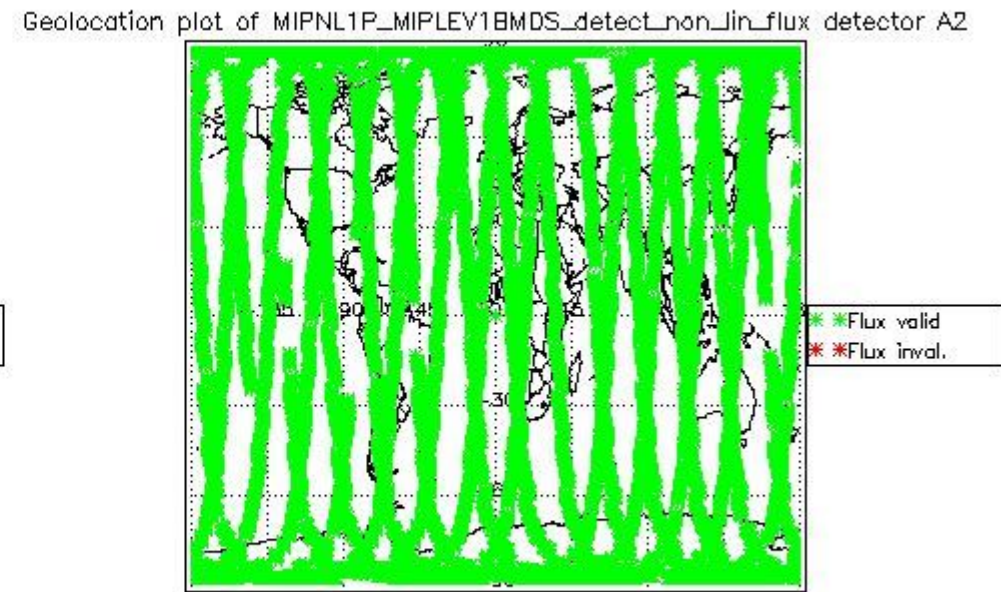
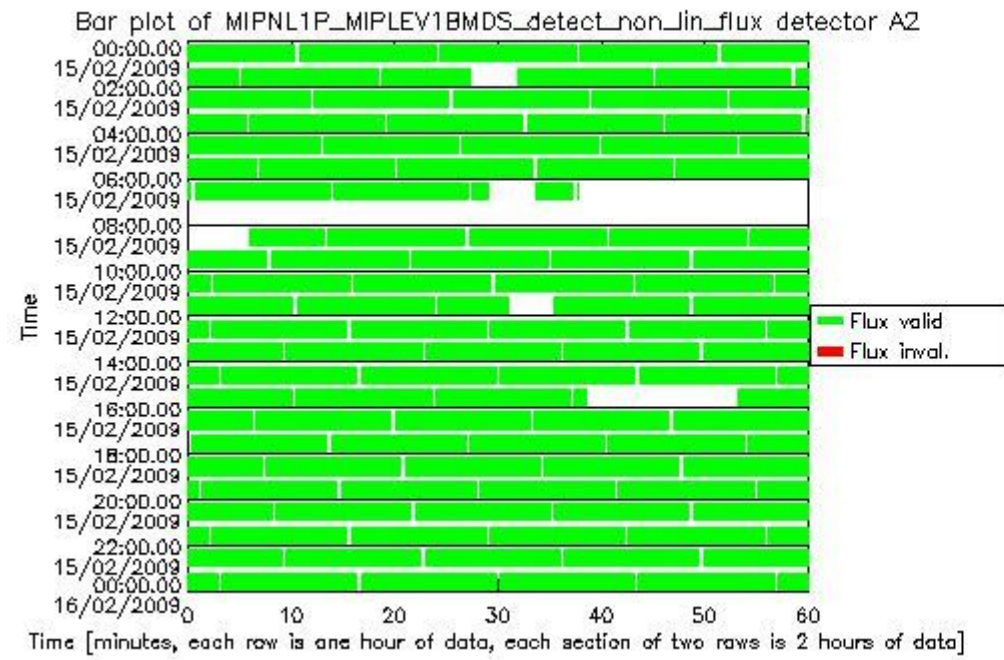
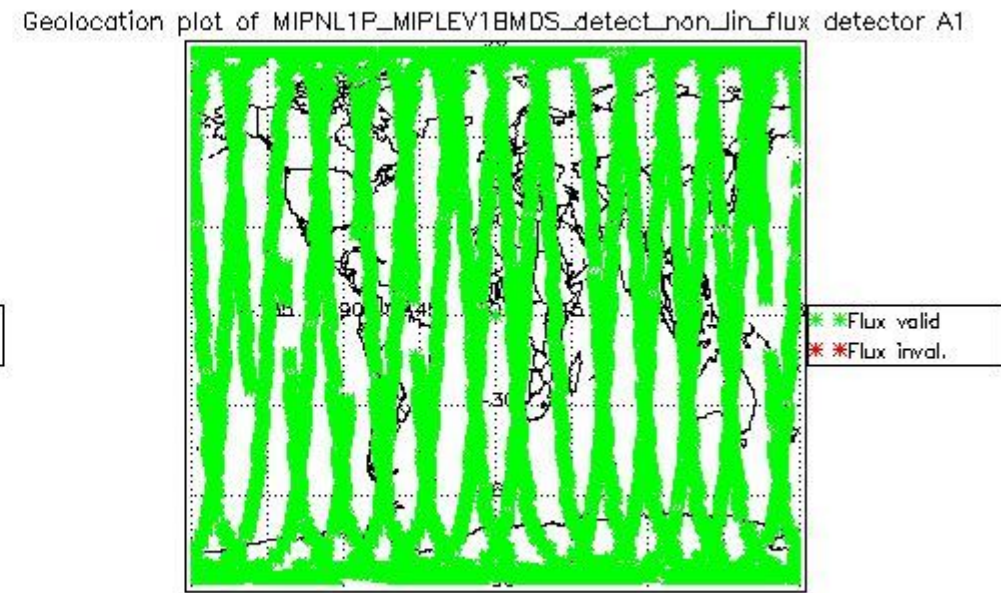
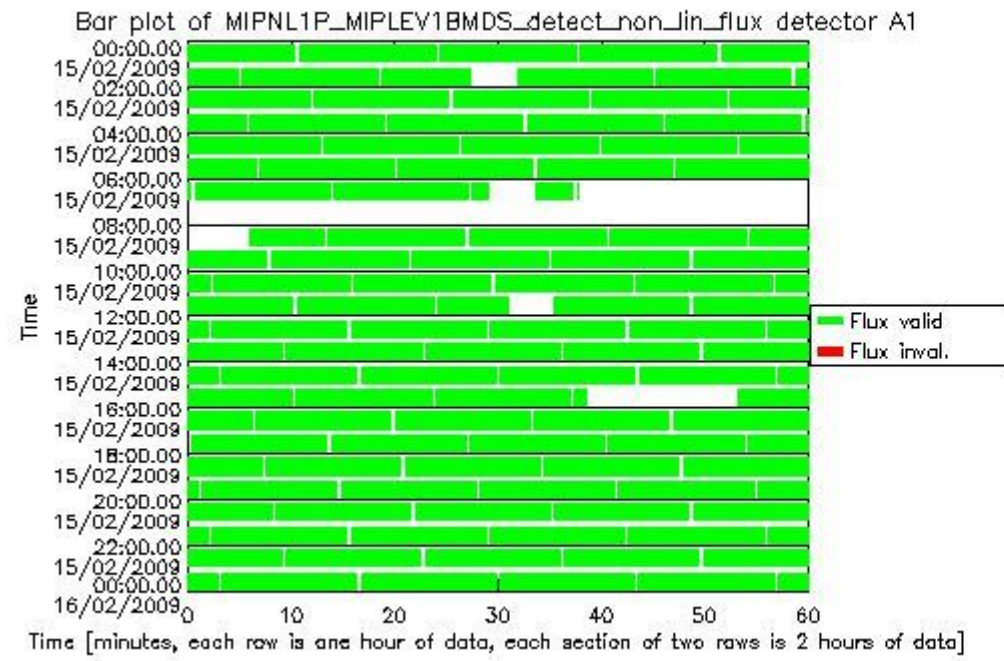
Geolocation plot of MIPNL1P_MIPLEV1BMDS_band_val band AB

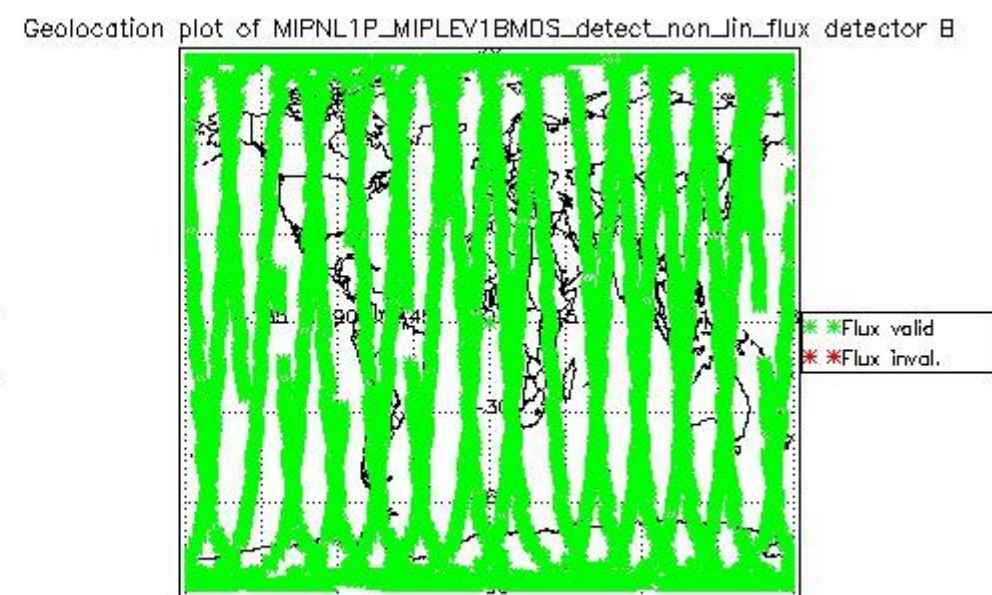
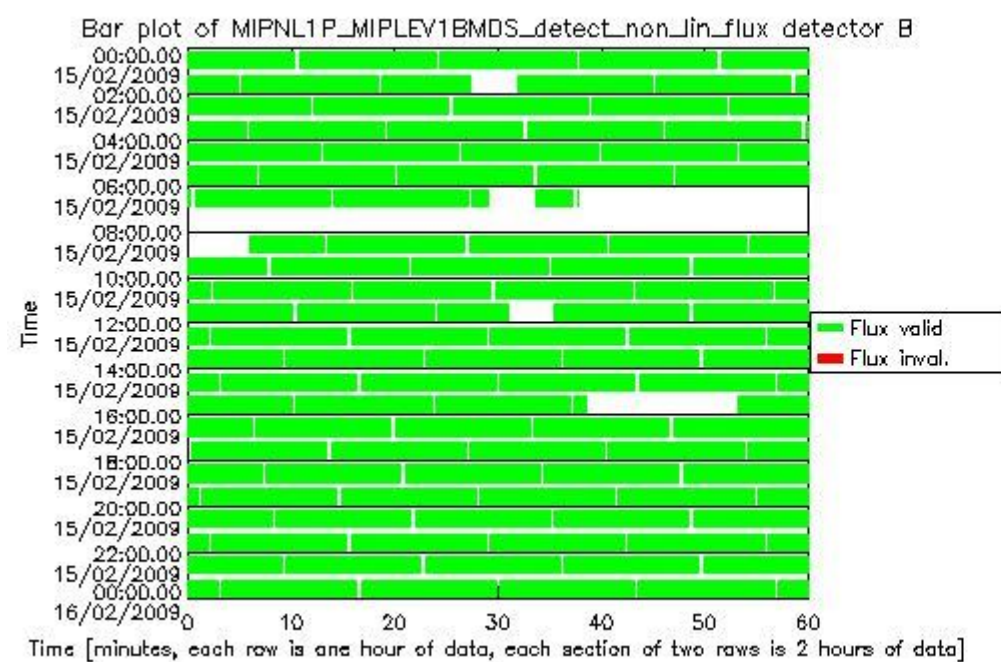
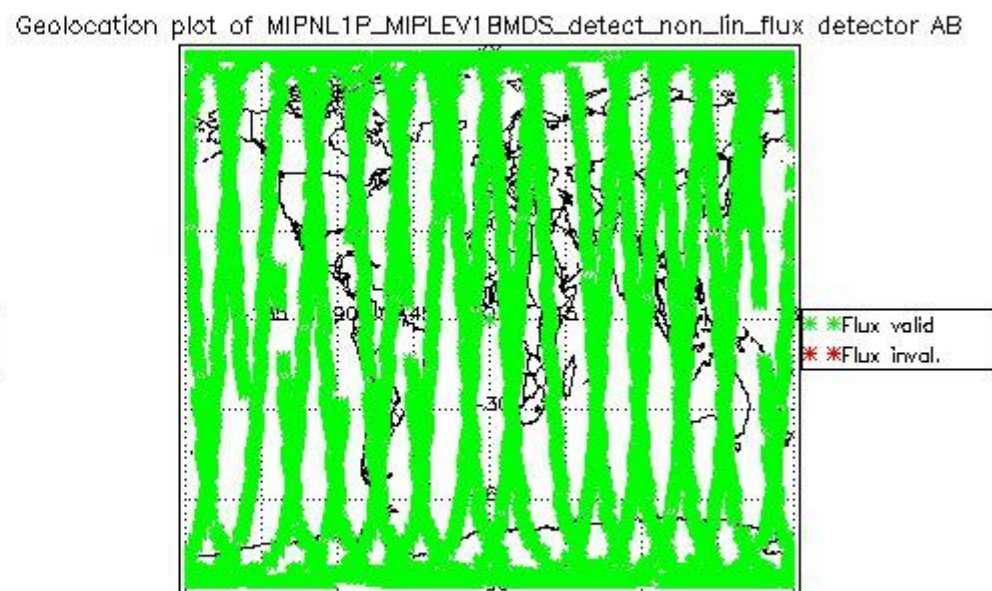
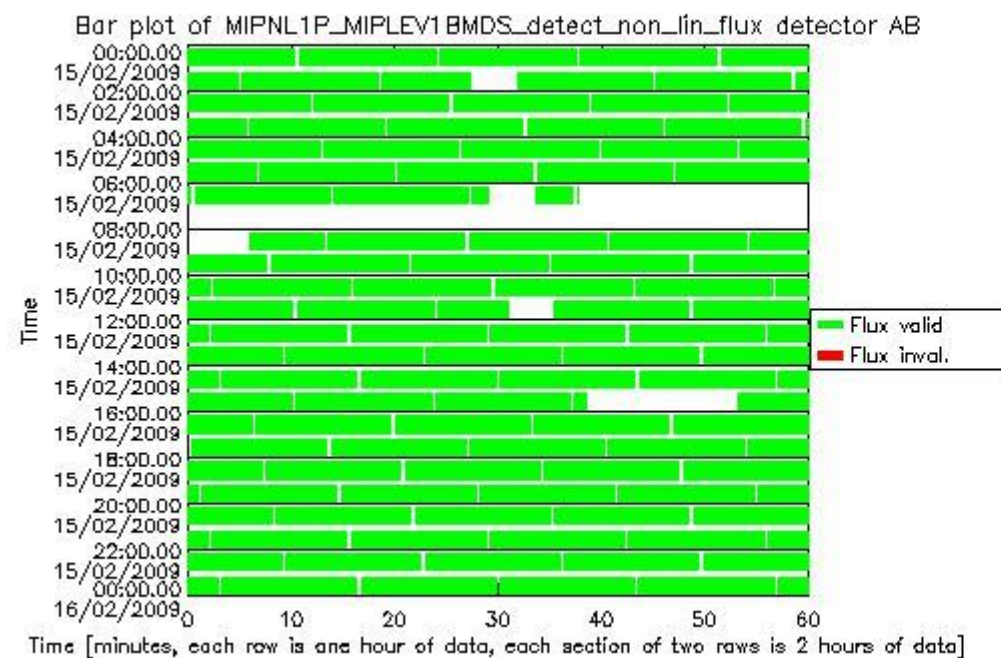


Geolocation plot of MIPNL1P_MIPLEV1BMDS_band_val band B









1.2.3 Scan information ADS

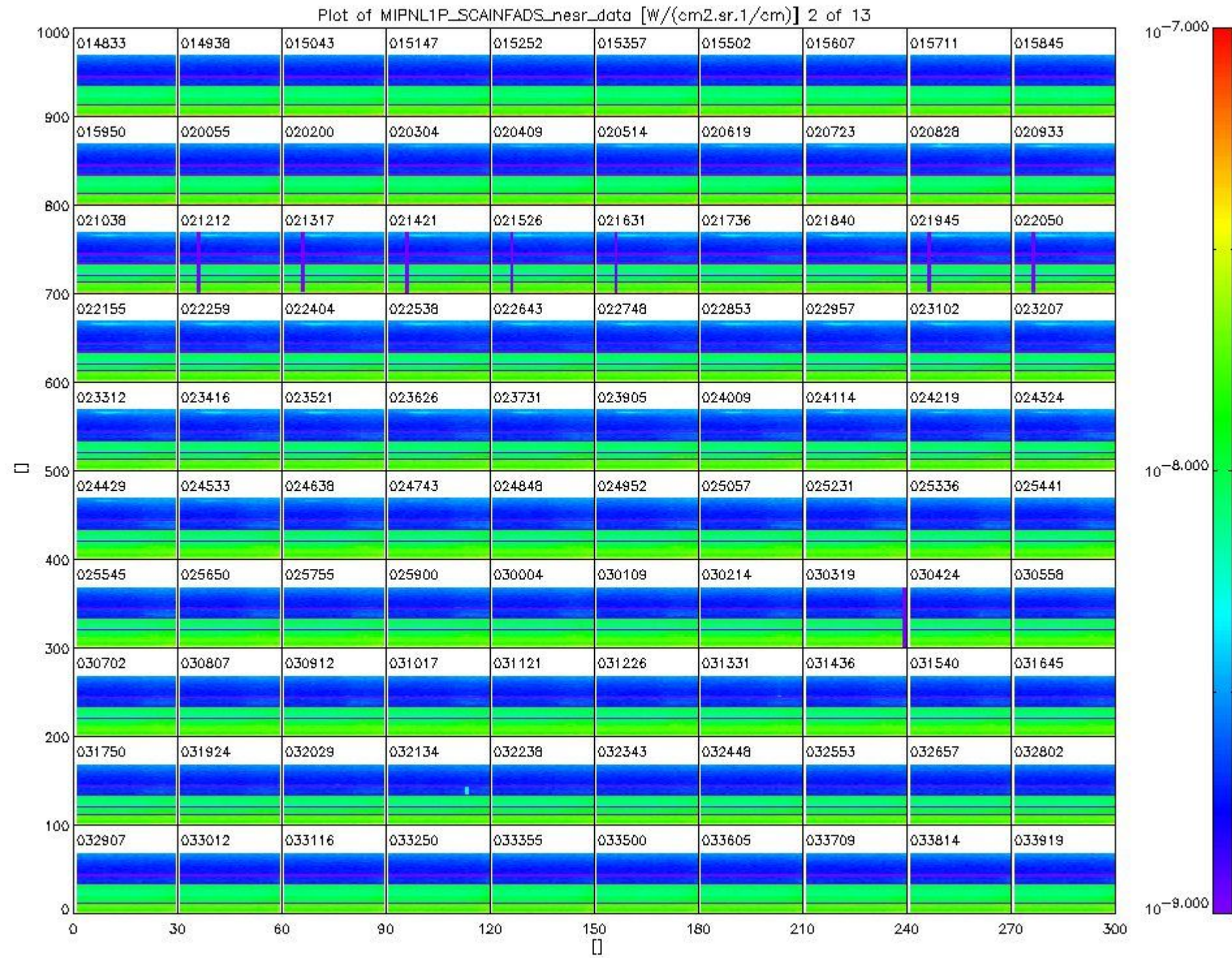
The following plots each contain 100 squares. Each square contains one NESR-scan (from MIPNL1P_SCAINFADS_nesr_data).

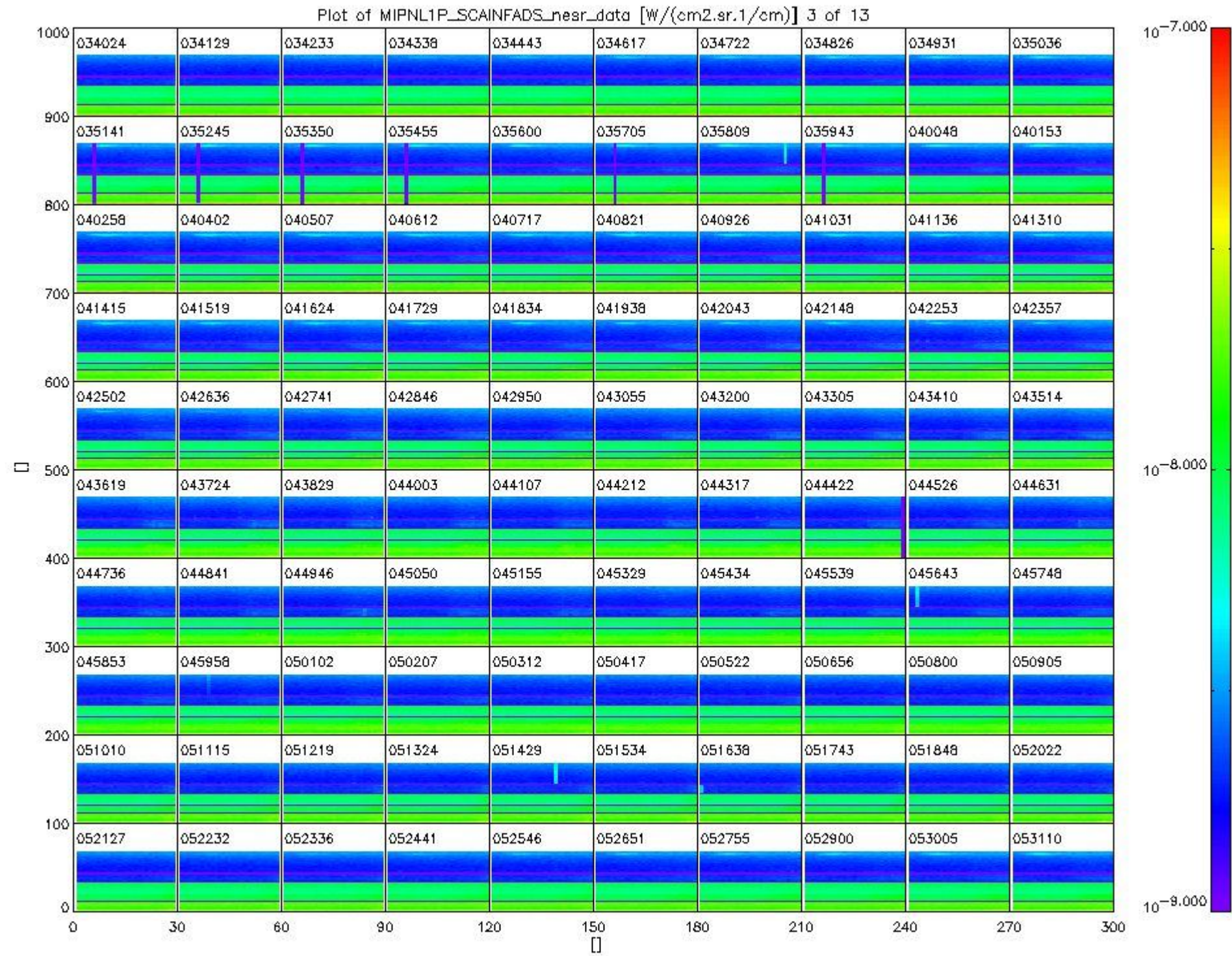
The horizontal axis represents the sweep ID (starts at 1).

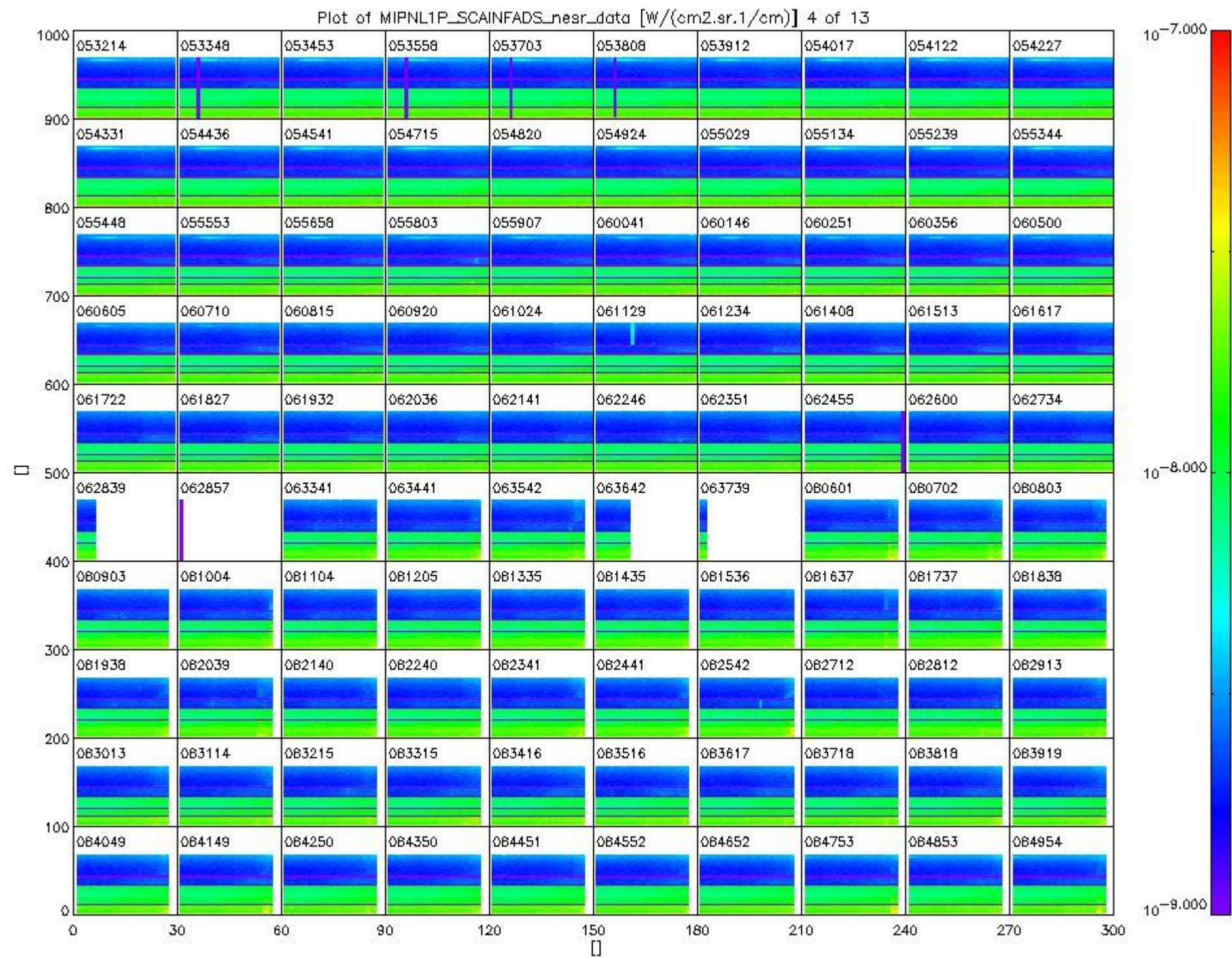
The vertical axis shows the NESR data point index (starts at 0), which relates to wavenumber.

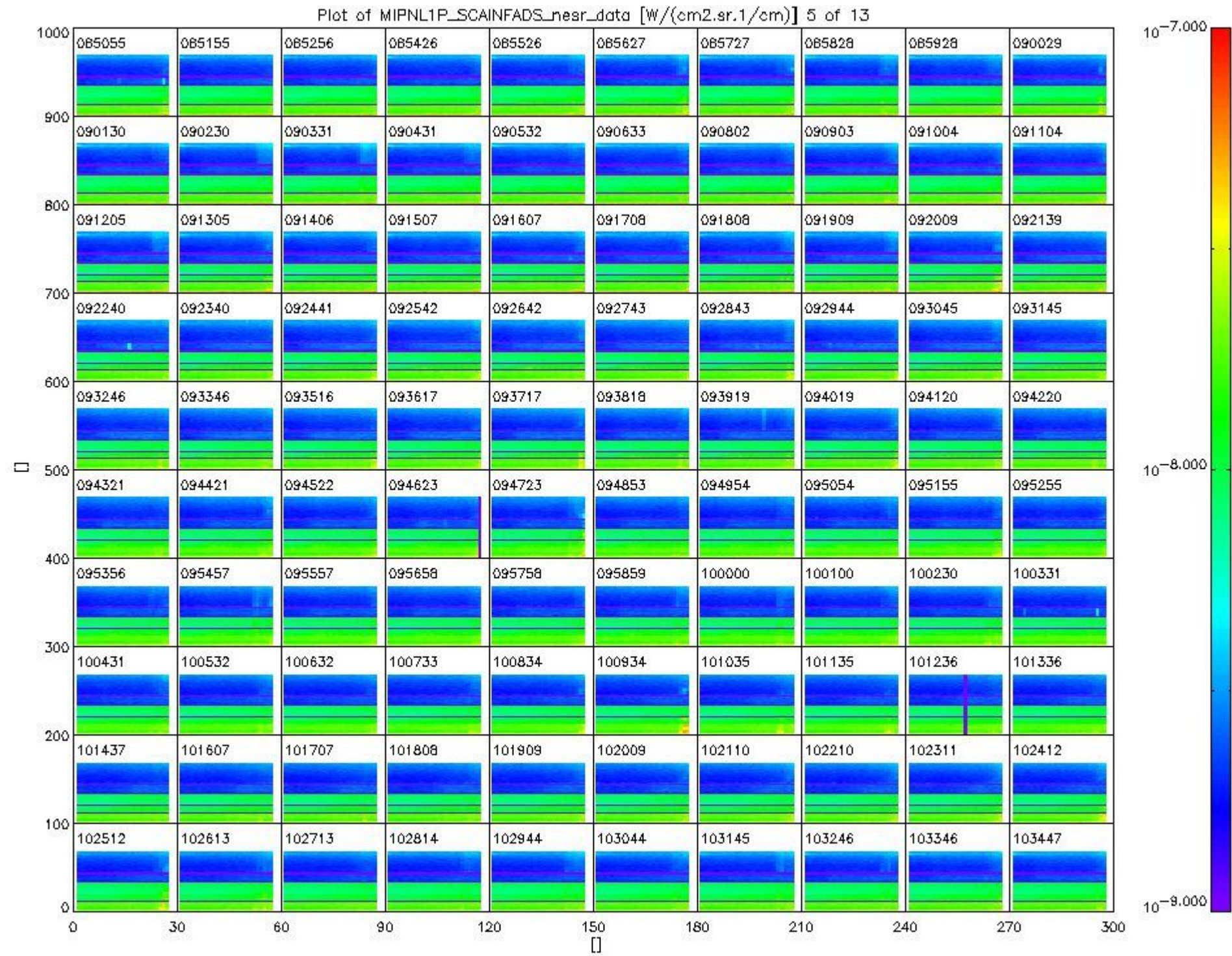
The data values themselves are indicated by colours (as indicated on the right of the plot). Please refer to the plot header for data units.

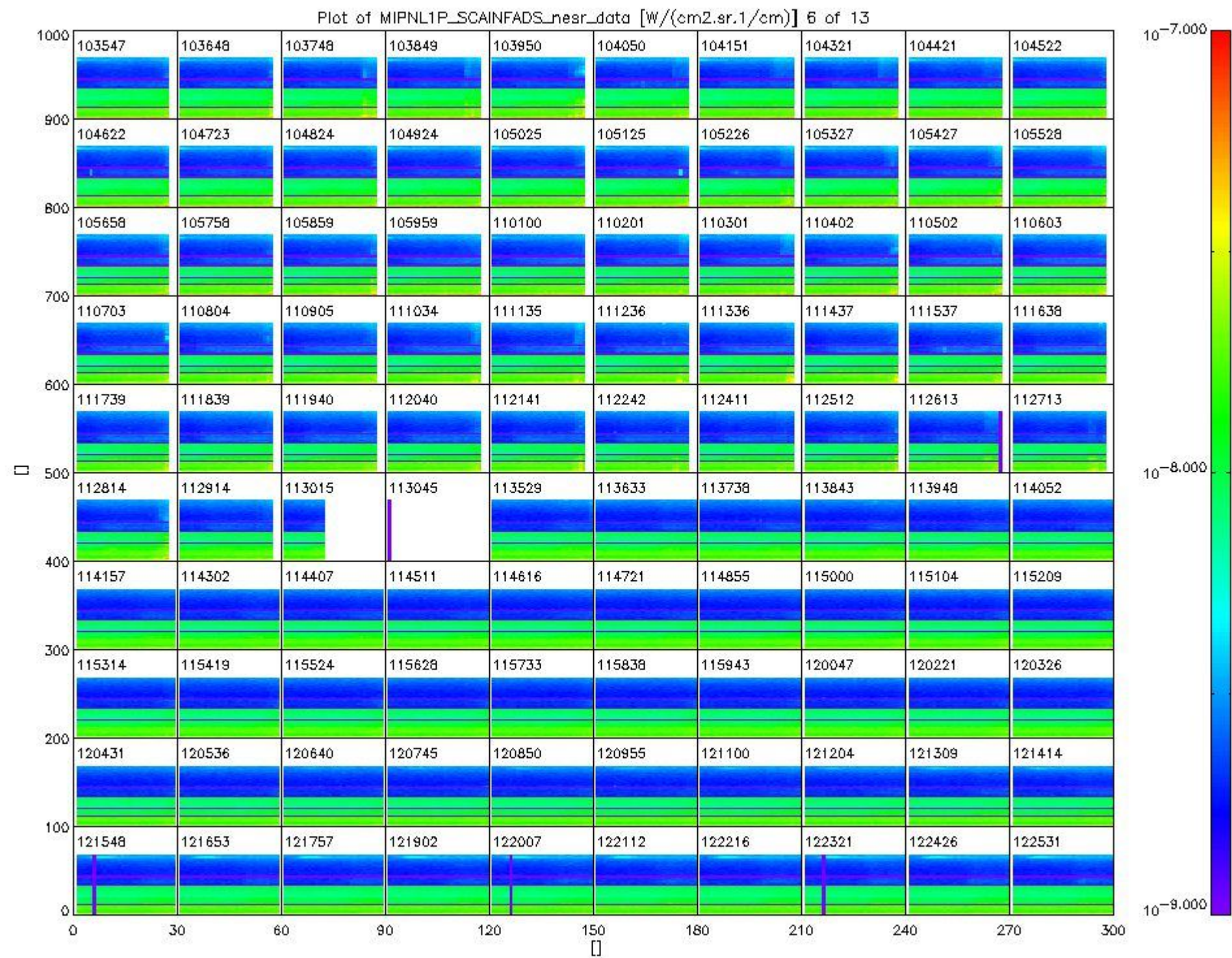


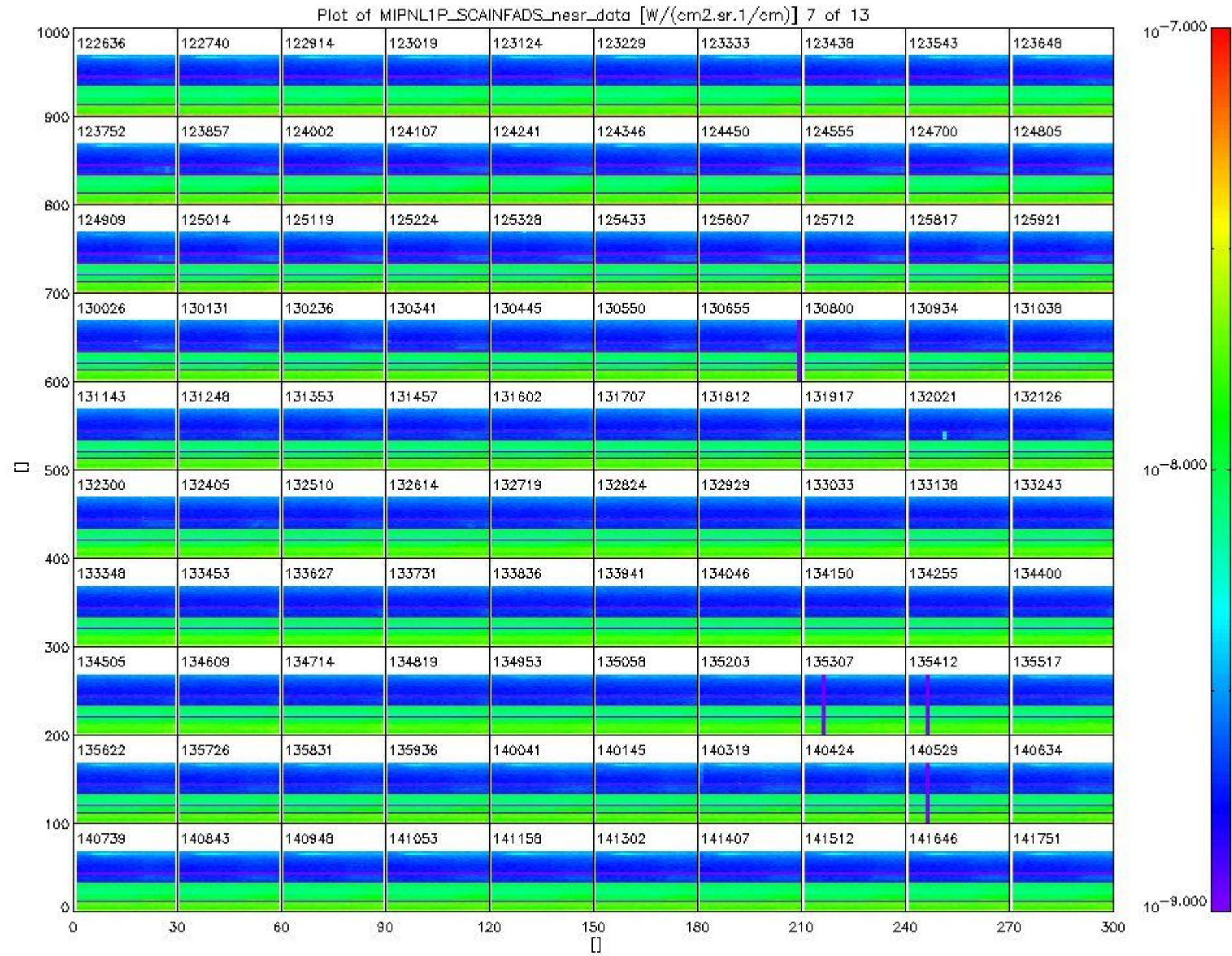


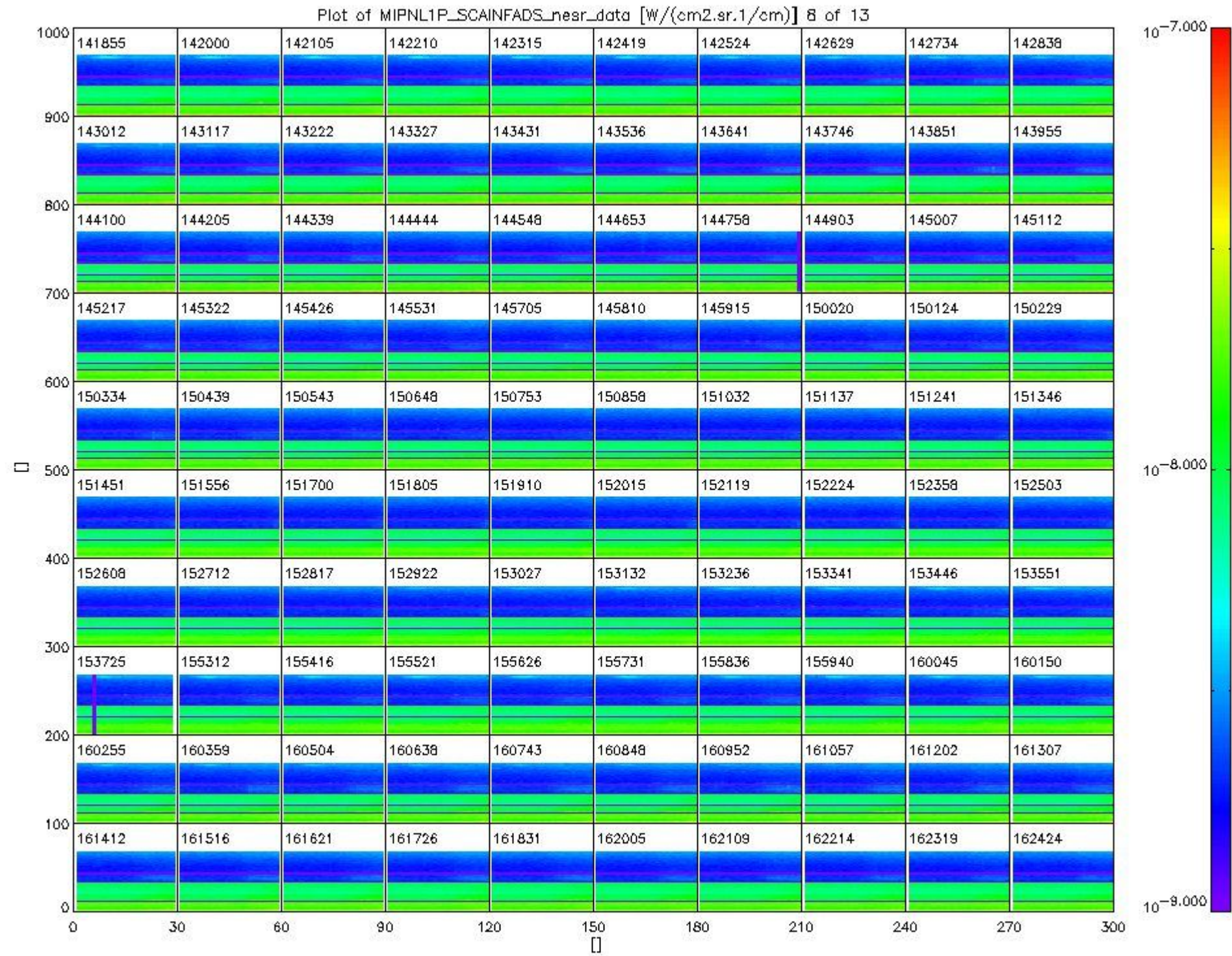


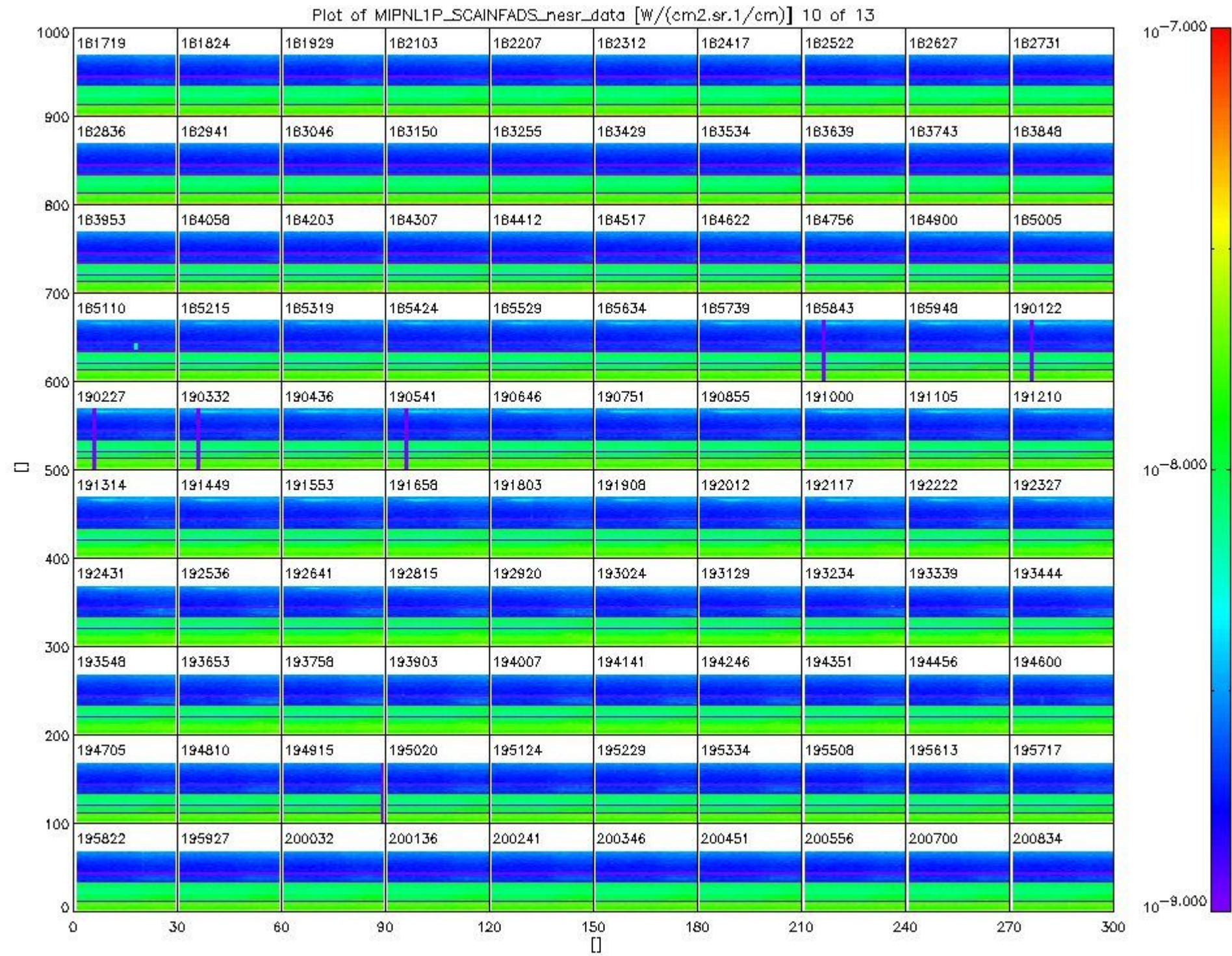


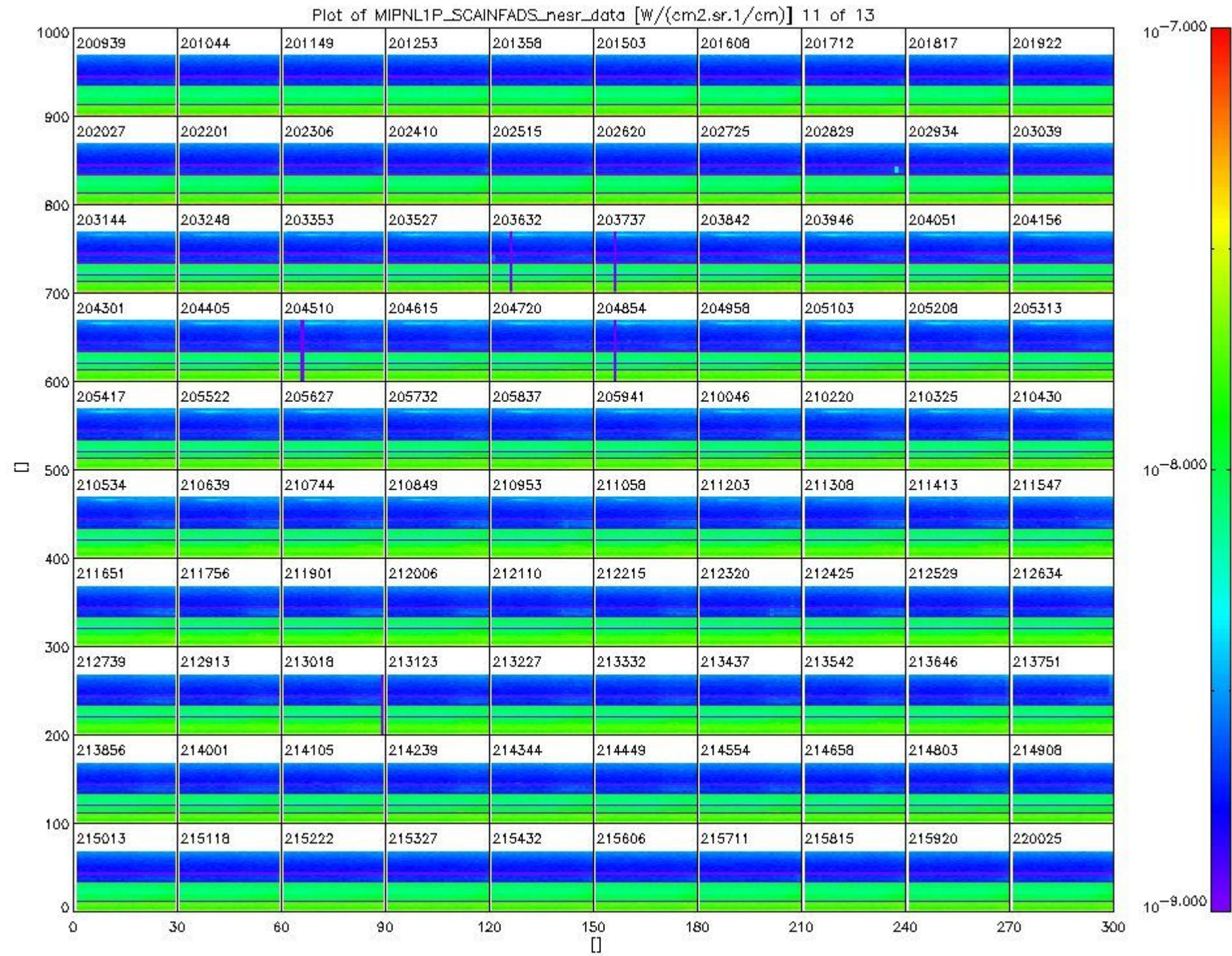


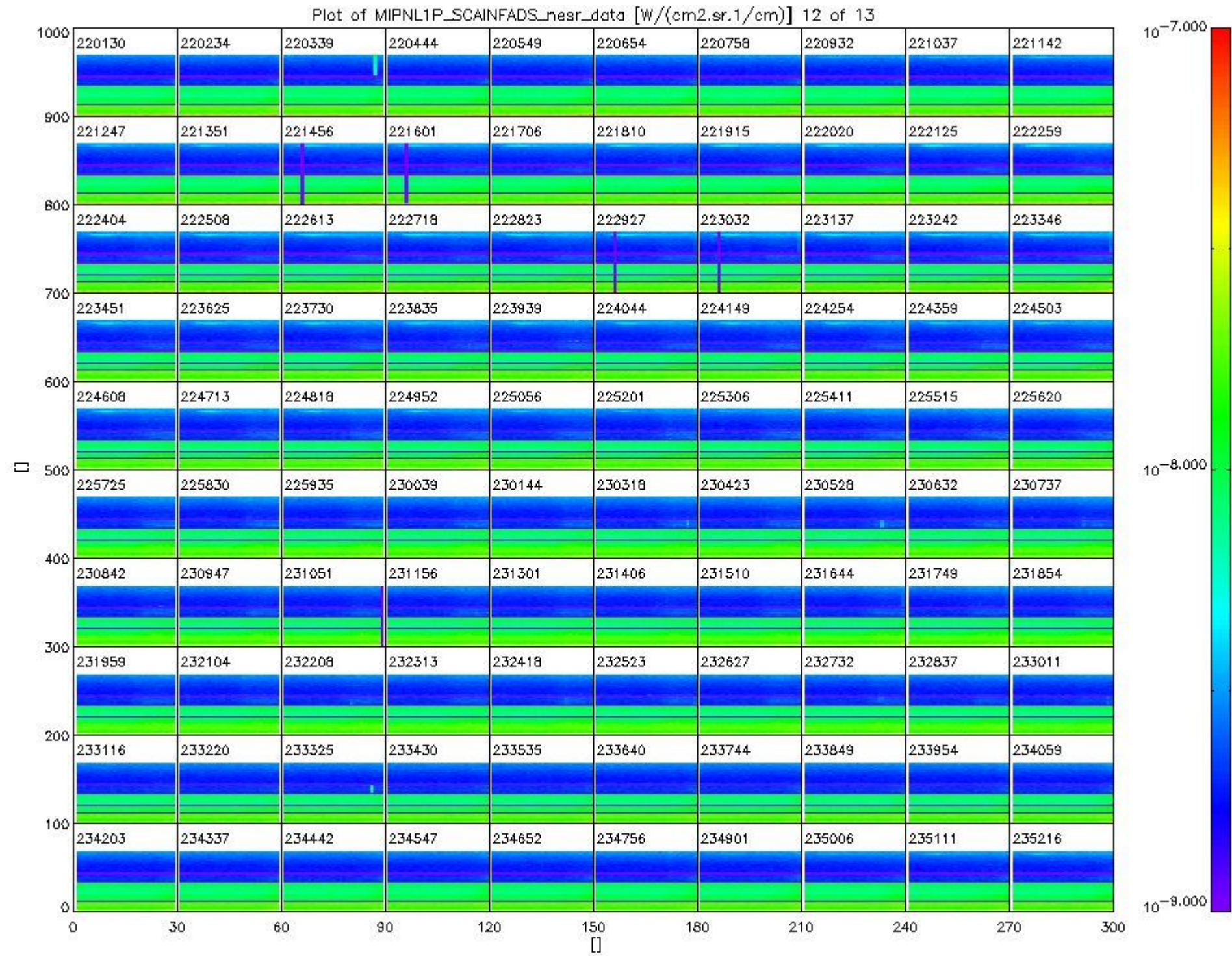


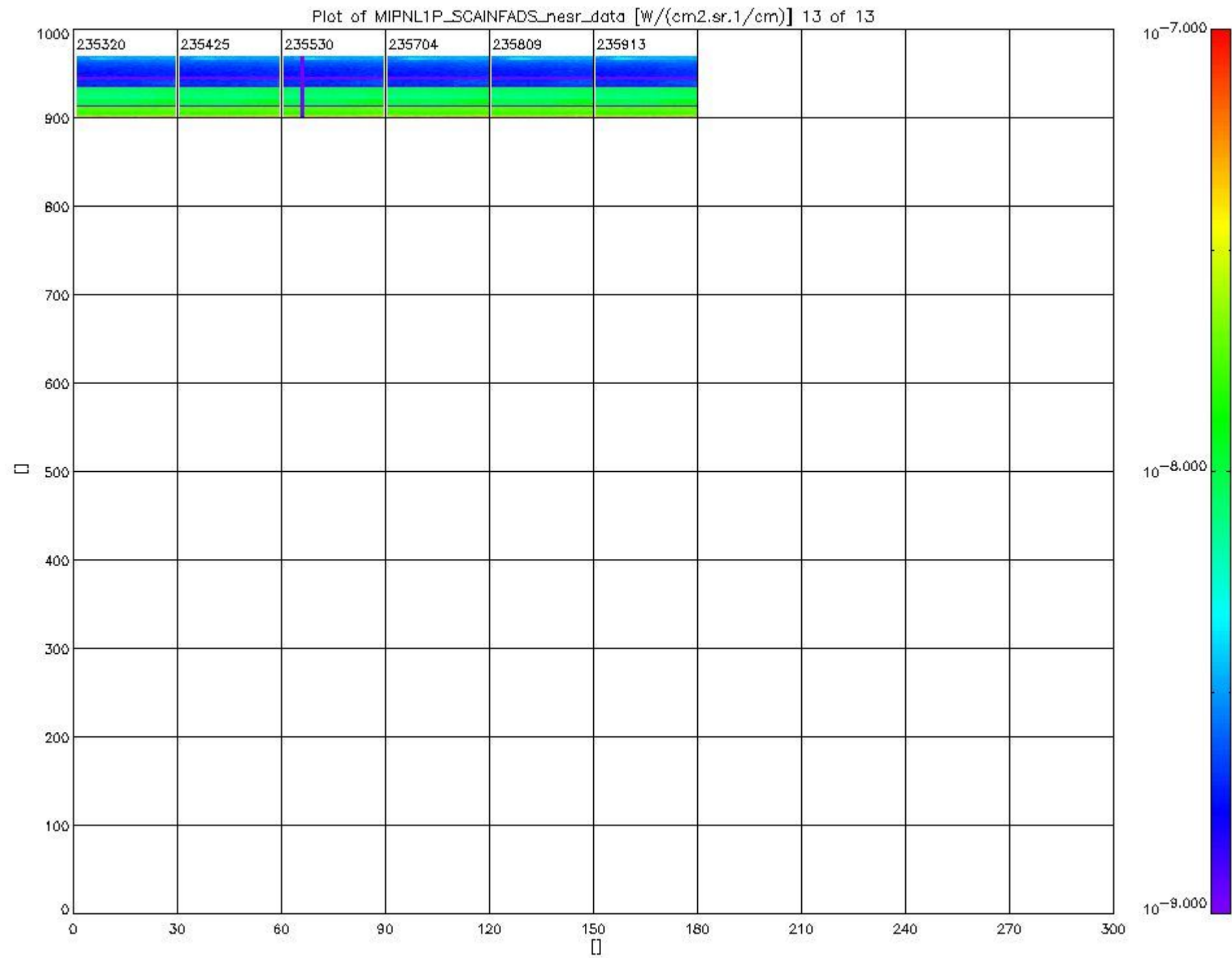








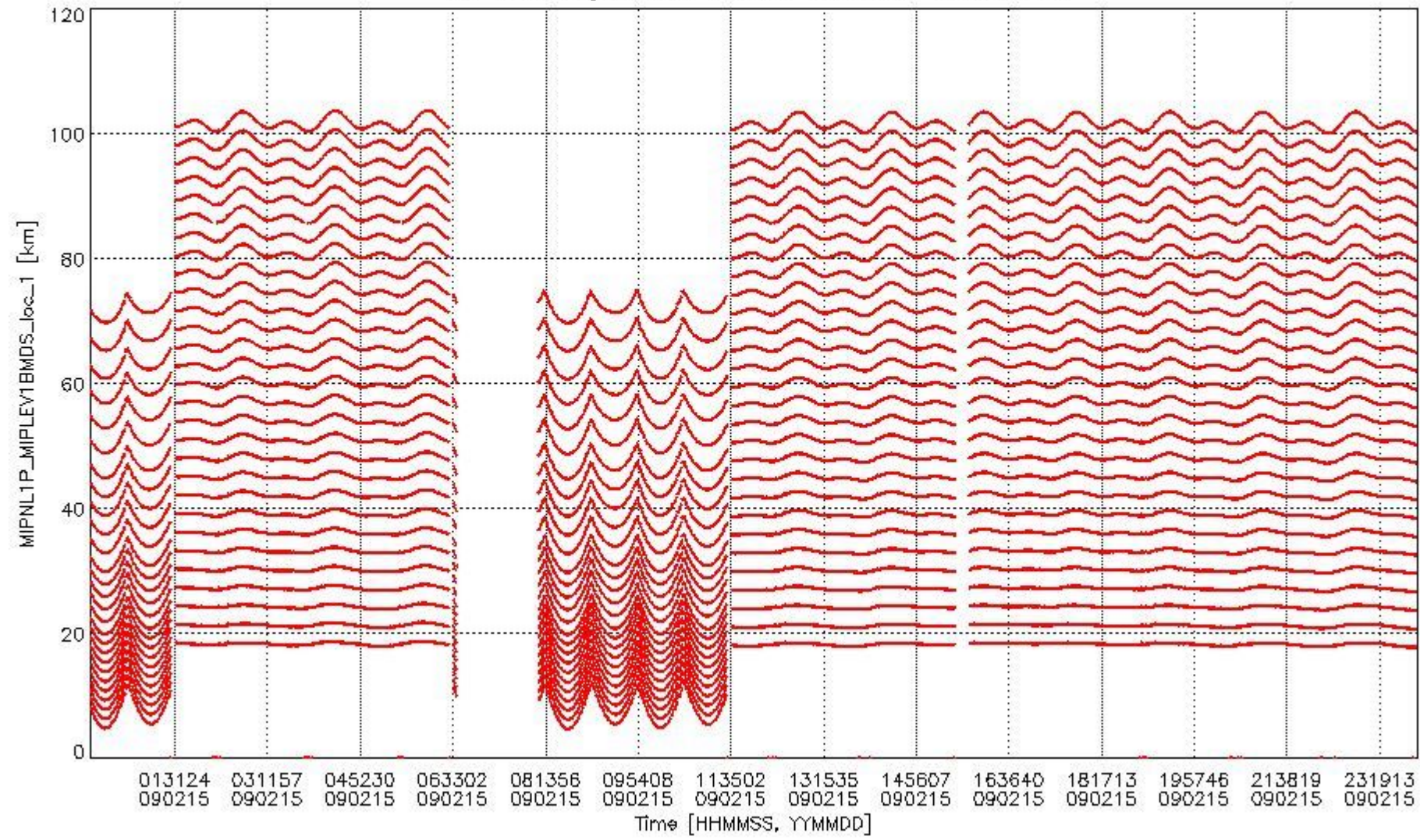




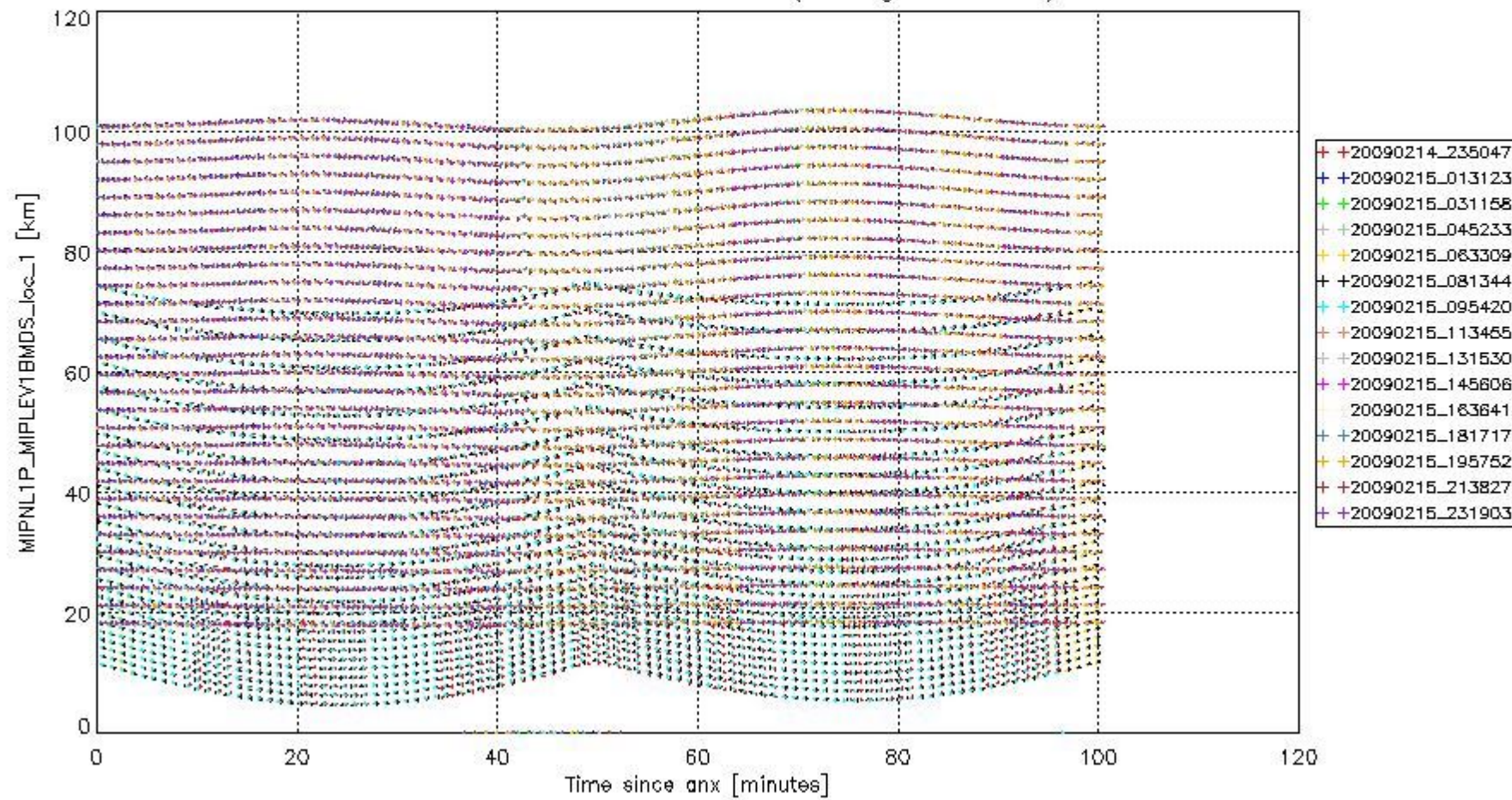
1.3 Physical Quality Indicators

1.3.1 Tangent altitude

Plot of MIPNL1P_MIPLEV1BMDS_loc_1 against time.
The vertical grid lines indicate estimated anx events.



Plot of MIPNL1P_MIPLEV1BMD5_Joc_1 against relative time within orbit.
The colours indicate distinct orbits (see legend for anx).



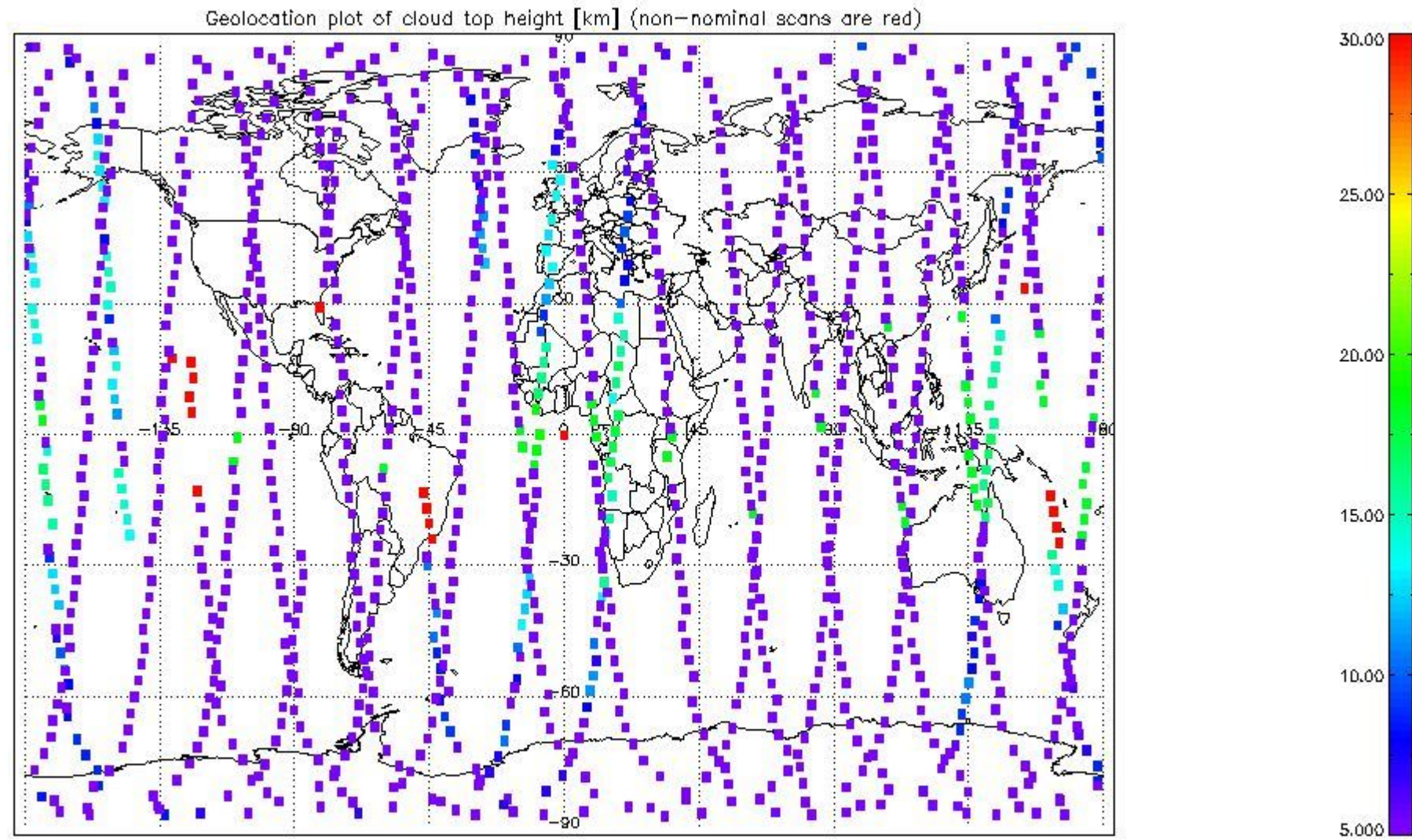
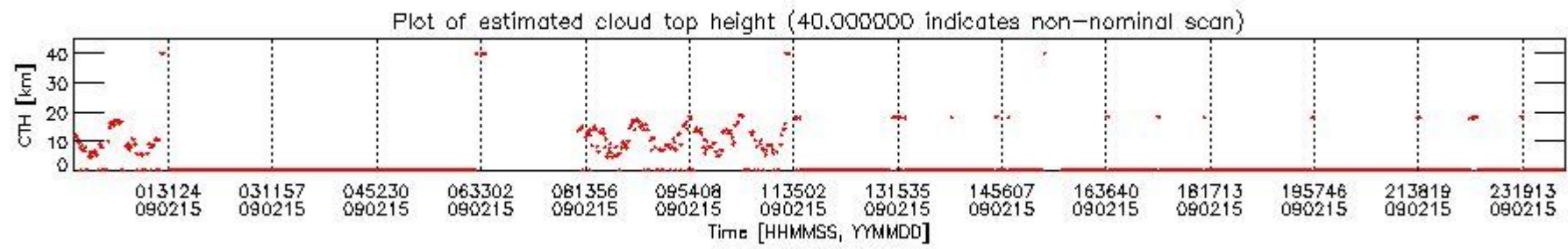
1.3.2 Cloud top height

The following plots show an estimation of cloud top height, based on the ratio of two microwindows. Reference: R. Spang, J.J. Remedios and M.P. Barkley, "Colour indices for the detection and differentiation of cloud types in infra-red limb emission spectra", Adv Space Res, 33:1041-1047, (2004)

The non-nominal scans mentioned in the plots are scans that are rejected by the cloud top height algorithm for several reasons:

- Unconsidered instrument mode. The algorithm only considers nominal (39169) and special event (39172) instrument modes.
- Incomplete scan (missing sweeps)
- Special measurement modes that do not include the troposphere.

Item	Value
Microwindow 1 description	Average of band A pixels for cloud top detection 1
Microwindow 2 description	Average of band A pixels cloud top detection 2
cloud index threshold (mw1/mw2)	1.8000000
Tangent height limit	40.000000

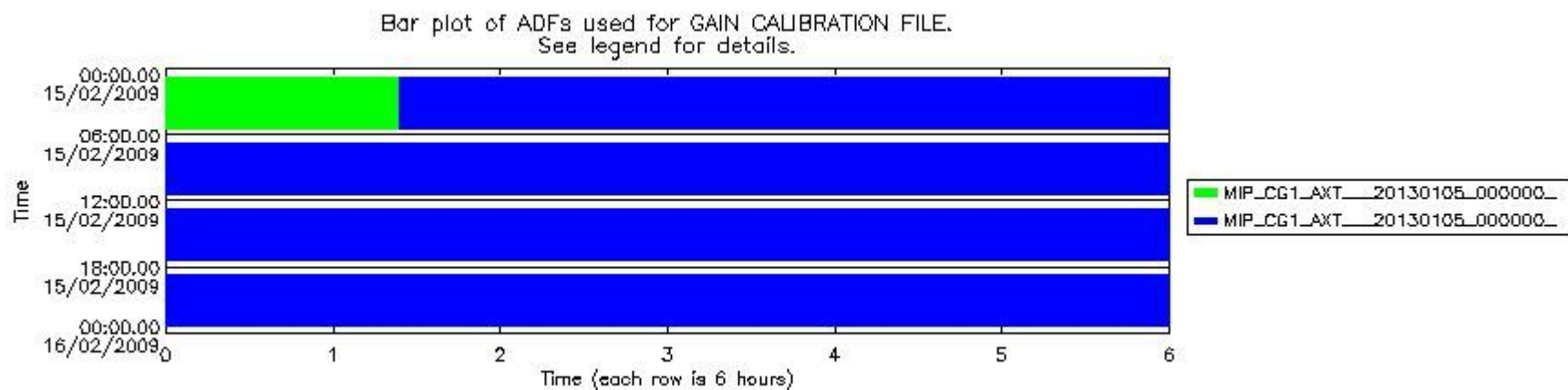
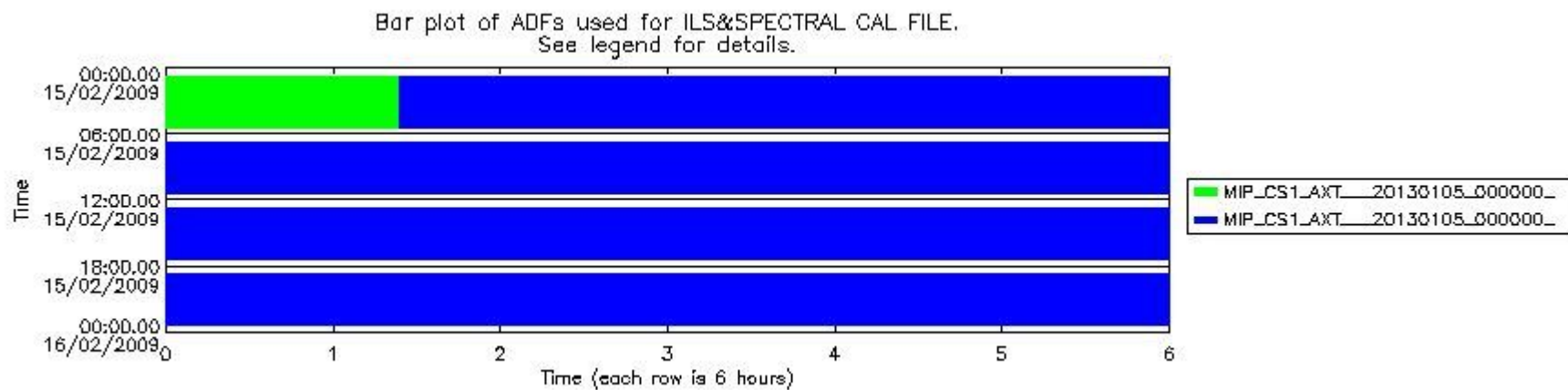


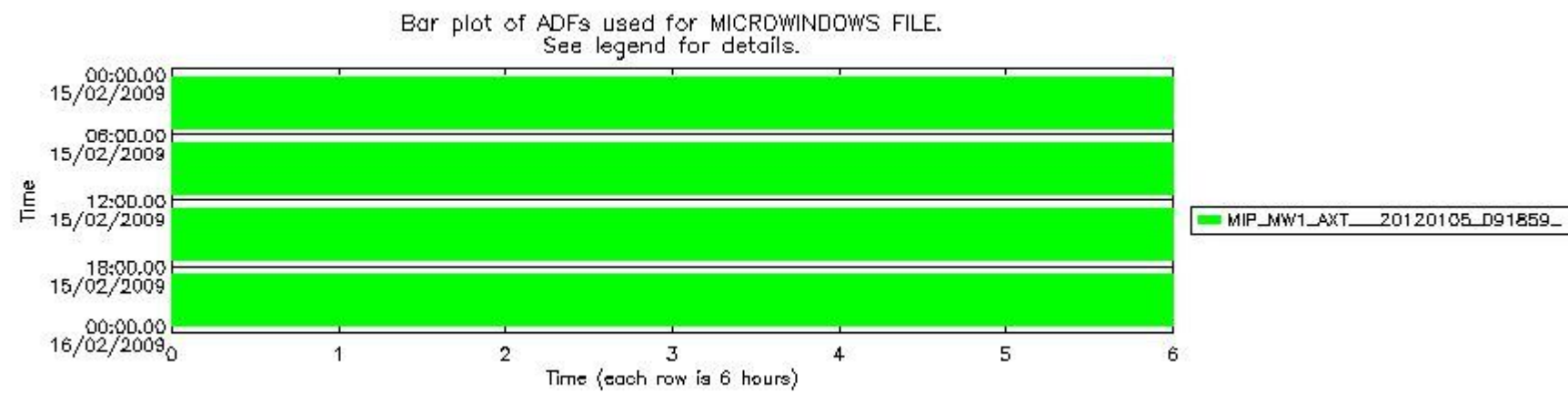
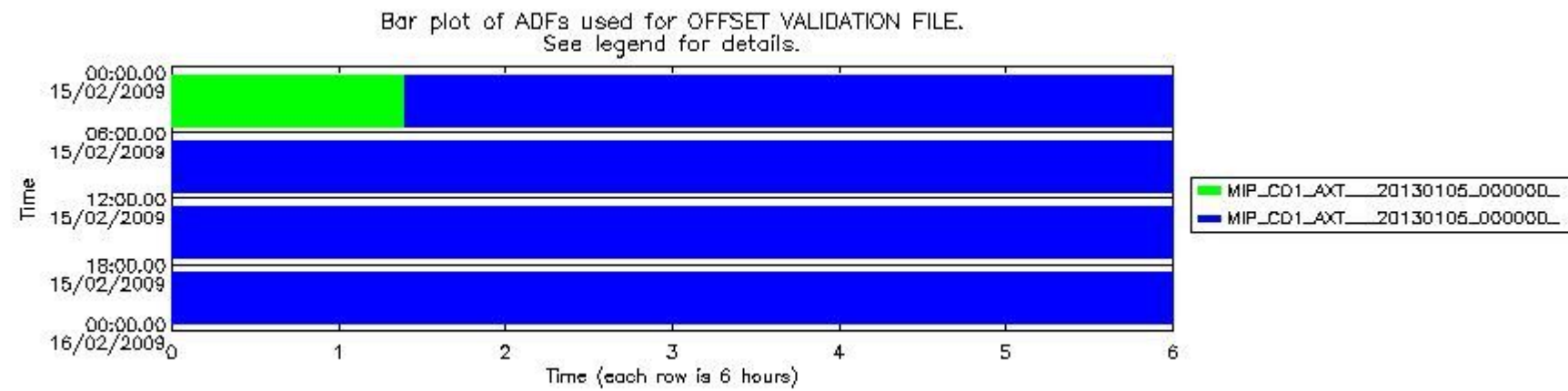
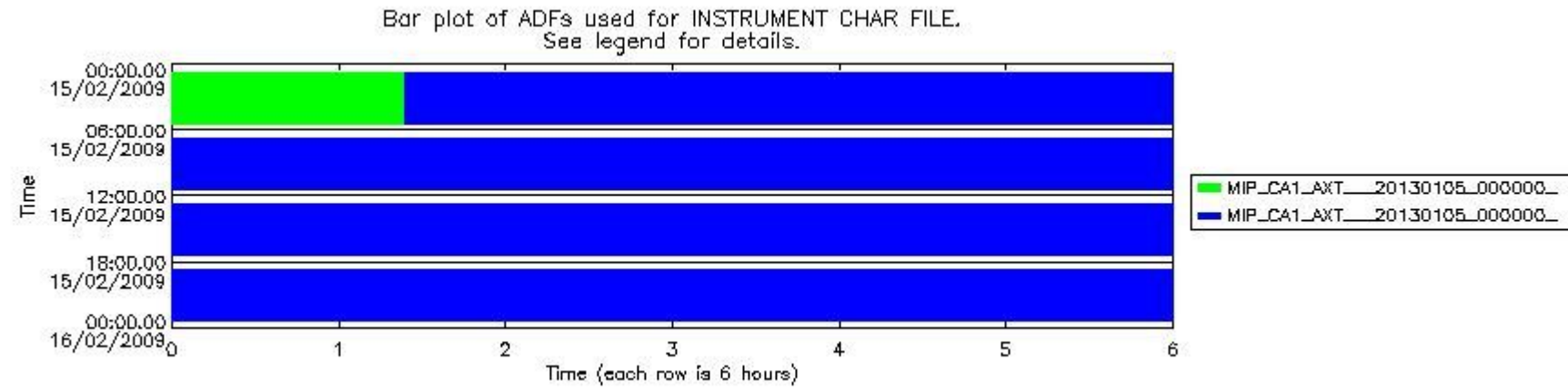
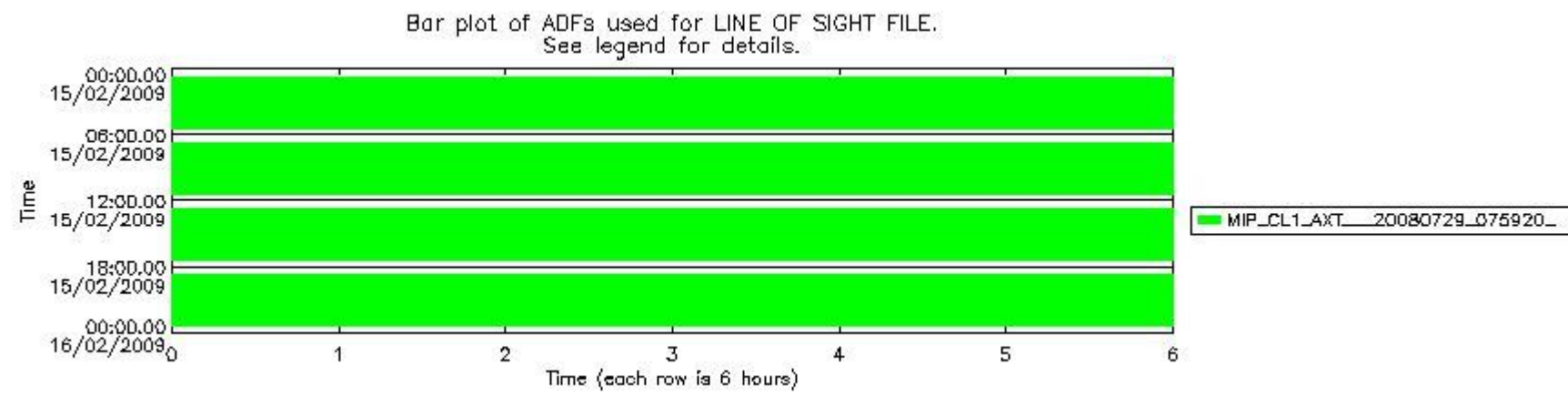
1.4 ADF monitoring

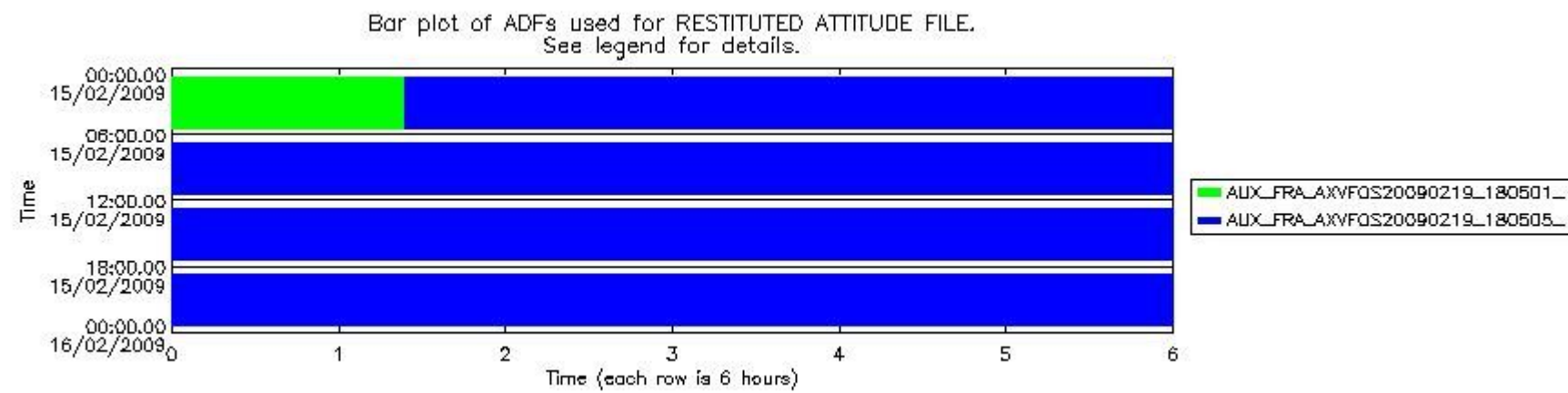
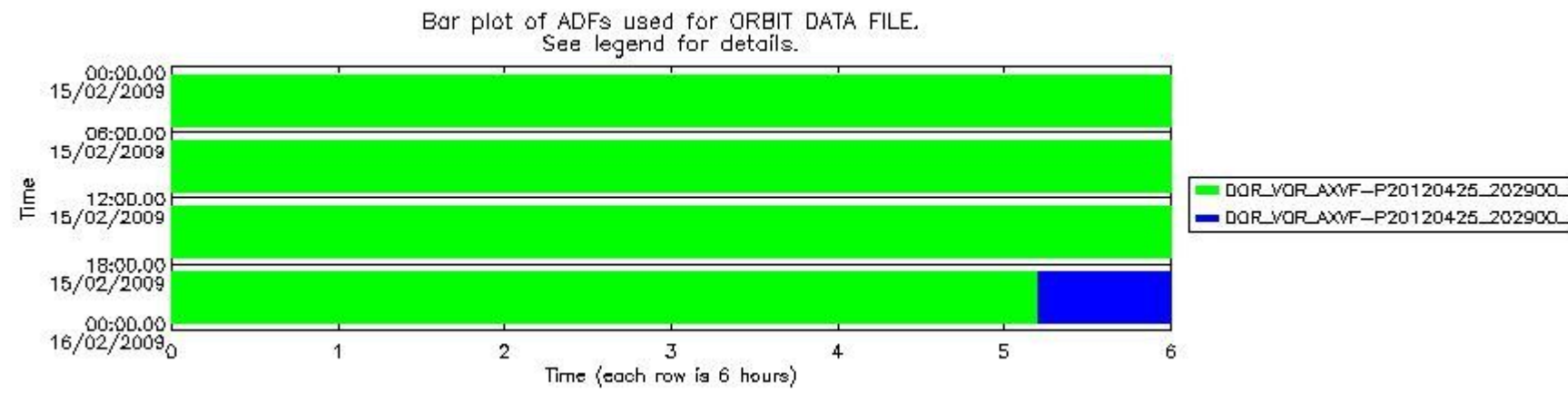
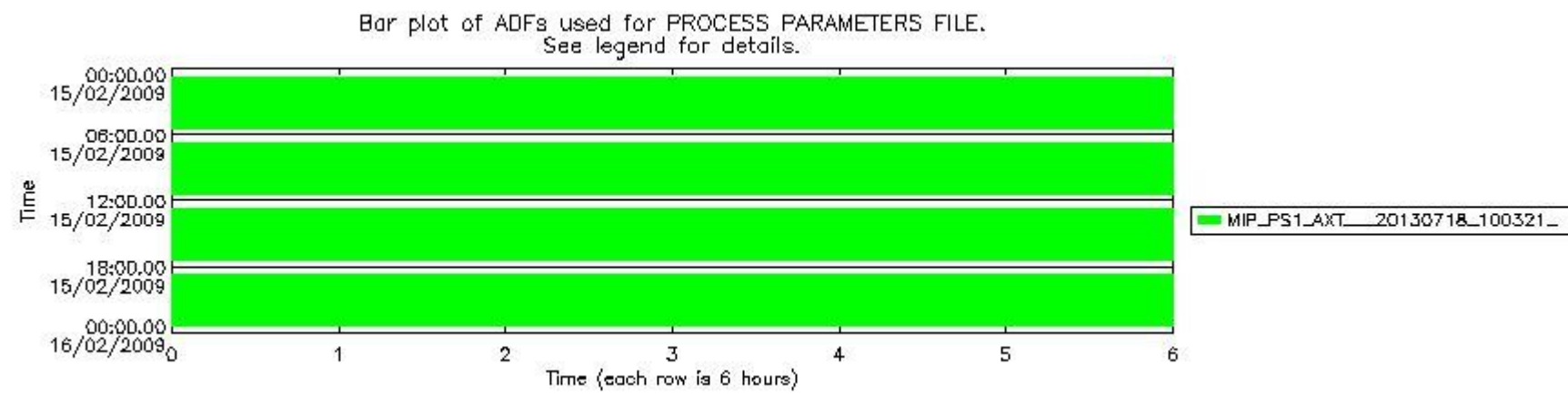
Number	ADF
0	AUX_FRA_AXVFOS20090219_180501_20090214_000000_20090216_000000
1	AUX_FRA_AXVFOS20090219_180505_20090215_000000_20090217_000000
2	DOR_VOR_AXVF-P20120425_202900_20090214_215526_20090216_002326
3	DOR_VOR_AXVF-P20120425_202900_20090215_215526_20090217_002326
4	MIP_CA1_AXT_20130105_000000_20090208_000000_20090308_000000
5	MIP_CA1_AXT_20130105_000000_20090215_000000_20090315_000000
6	MIP_CG1_AXT_20130105_000000_20090208_000000_20090308_000000
7	MIP_CG1_AXT_20130105_000000_20090215_000000_20090315_000000
8	MIP_CL1_AXT_20080729_075920_20020401_000000_20161214_000000
9	MIP_CO1_AXT_20130105_000000_20090208_000000_20090308_000000
10	MIP_CO1_AXT_20130105_000000_20090215_000000_20090315_000000

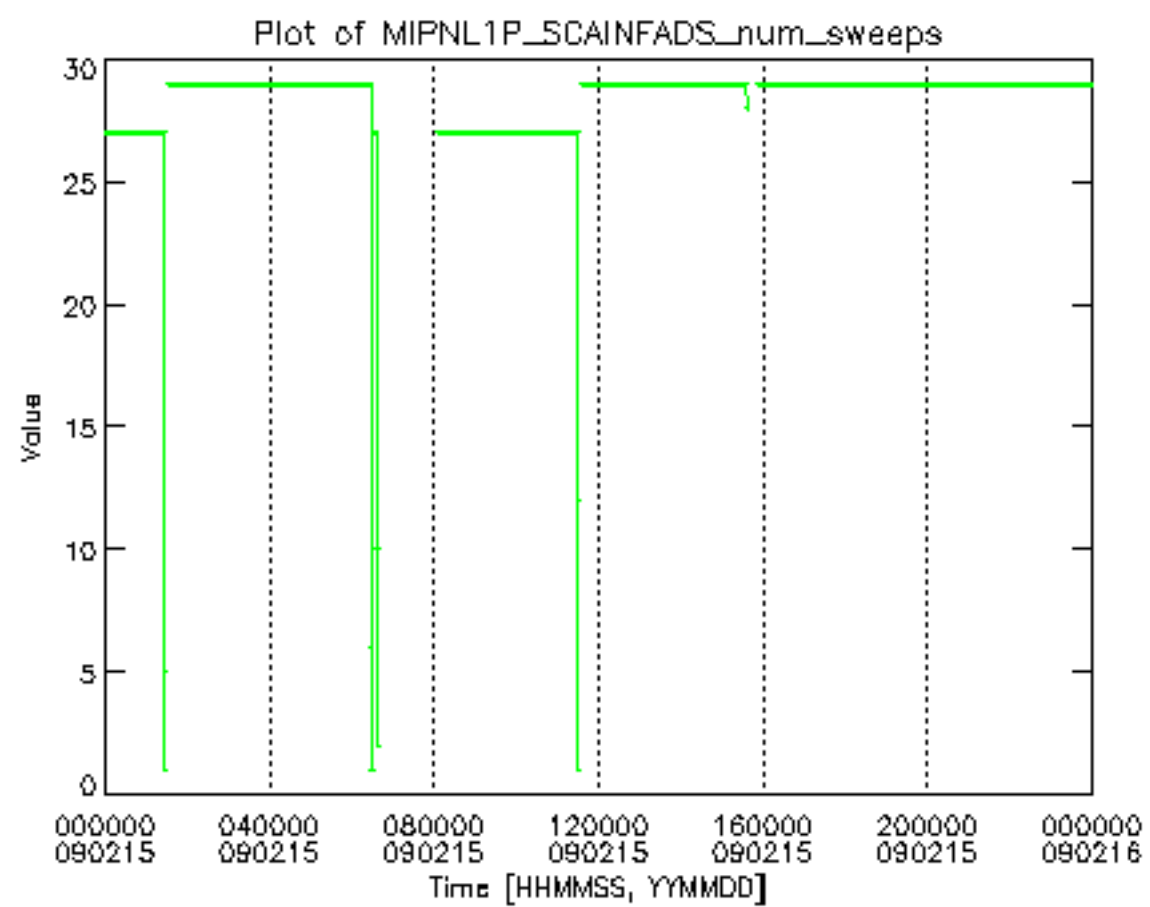
11	MIP_CS1_AXT___20130105_000000_20090208_000000_20090308_000000
12	MIP_CS1_AXT___20130105_000000_20090215_000000_20090315_000000
13	MIP_MW1_AXT___20120105_091859_20020401_000000_20161214_000000
14	MIP_PS1_AXT___20130718_100321_20040809_000000_20161214_000000

Number	Product name	#CS1	#CG1	#CL1	#CA1	#CO1	#MW1	#PS1	#FPO	#FRA
0	MIP_NL__1PWDSI20090214_234331_000060152076_00274_36400_0000.N1	11	6	8	4	9	13	14	2	0
1	MIP_NL__1PWDSI20090215_012352_000060262076_00275_36401_0000.N1	12	7	8	5	10	13	14	2	1
2	MIP_NL__1PWDSI20090215_030424_000060572076_00276_36402_0000.N1	12	7	8	5	10	13	14	2	1
3	MIP_NL__1PWDSI20090215_044526_000060282076_00277_36403_0000.N1	12	7	8	5	10	13	14	2	1
4	MIP_NL__1PWDSI20090215_062600_000007012076_00278_36404_0000.N1	12	7	8	5	10	13	14	2	1
5	MIP_NL__1PWDSI20090215_080601_000060762076_00279_36405_0000.N1	12	7	8	5	10	13	14	2	1
6	MIP_NL__1PWDSI20090215_094723_000059842076_00280_36406_0000.N1	12	7	8	5	10	13	14	2	1
7	MIP_NL__1PWDSI20090215_112713_000060412076_00281_36407_0000.N1	12	7	8	5	10	13	14	2	1
8	MIP_NL__1PWDSI20090215_130800_000060572076_00282_36408_0000.N1	12	7	8	5	10	13	14	2	1
9	MIP_NL__1PWDSI20090215_144903_000060392076_00283_36409_0000.N1	12	7	8	5	10	13	14	2	1
10	MIP_NL__1PWDSI20090215_162947_000059932076_00284_36410_0000.N1	12	7	8	5	10	13	14	2	1
11	MIP_NL__1PWDSI20090215_180946_000060282076_00285_36411_0000.N1	12	7	8	5	10	13	14	2	1
12	MIP_NL__1PWDSI20090215_195020_000060572076_00286_36412_0000.N1	12	7	8	5	10	13	14	2	1
13	MIP_NL__1PWDSI20090215_213123_000060282076_00287_36413_0000.N1	12	7	8	5	10	13	14	2	1
14	MIP_NL__1PWDSI20090215_231156_000060572076_00288_36414_0000.N1	12	7	8	5	10	13	14	3	1

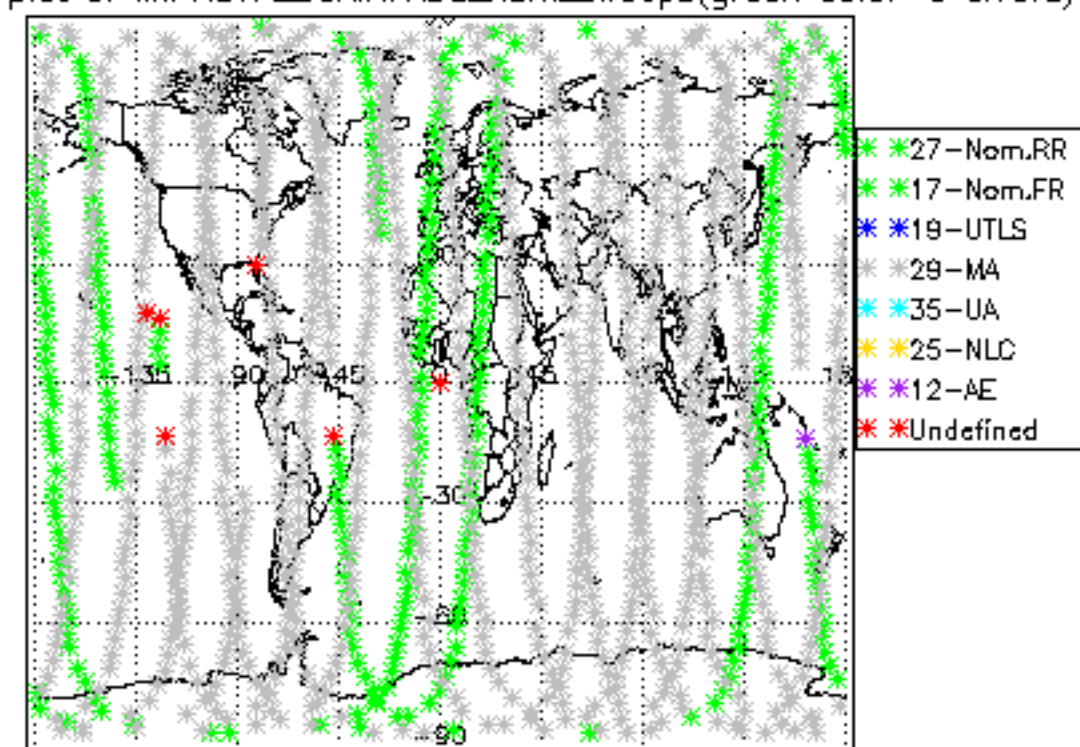


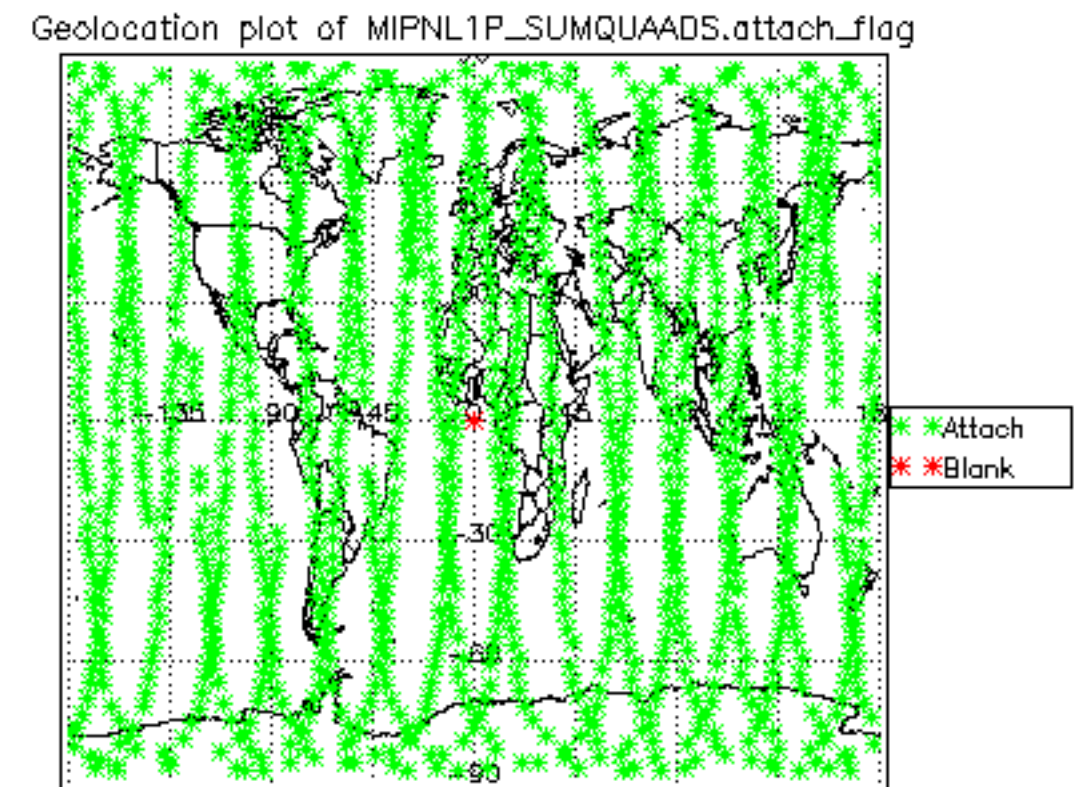
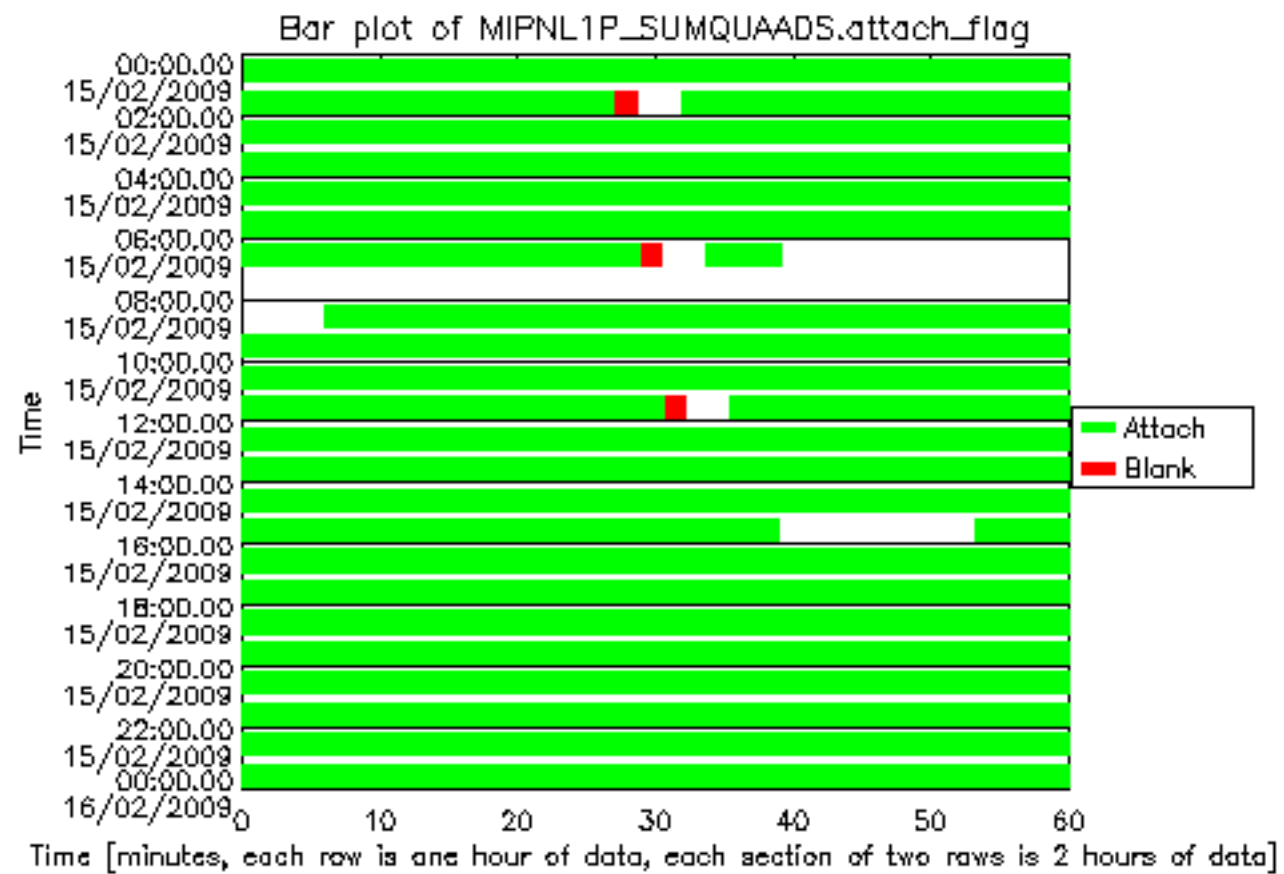


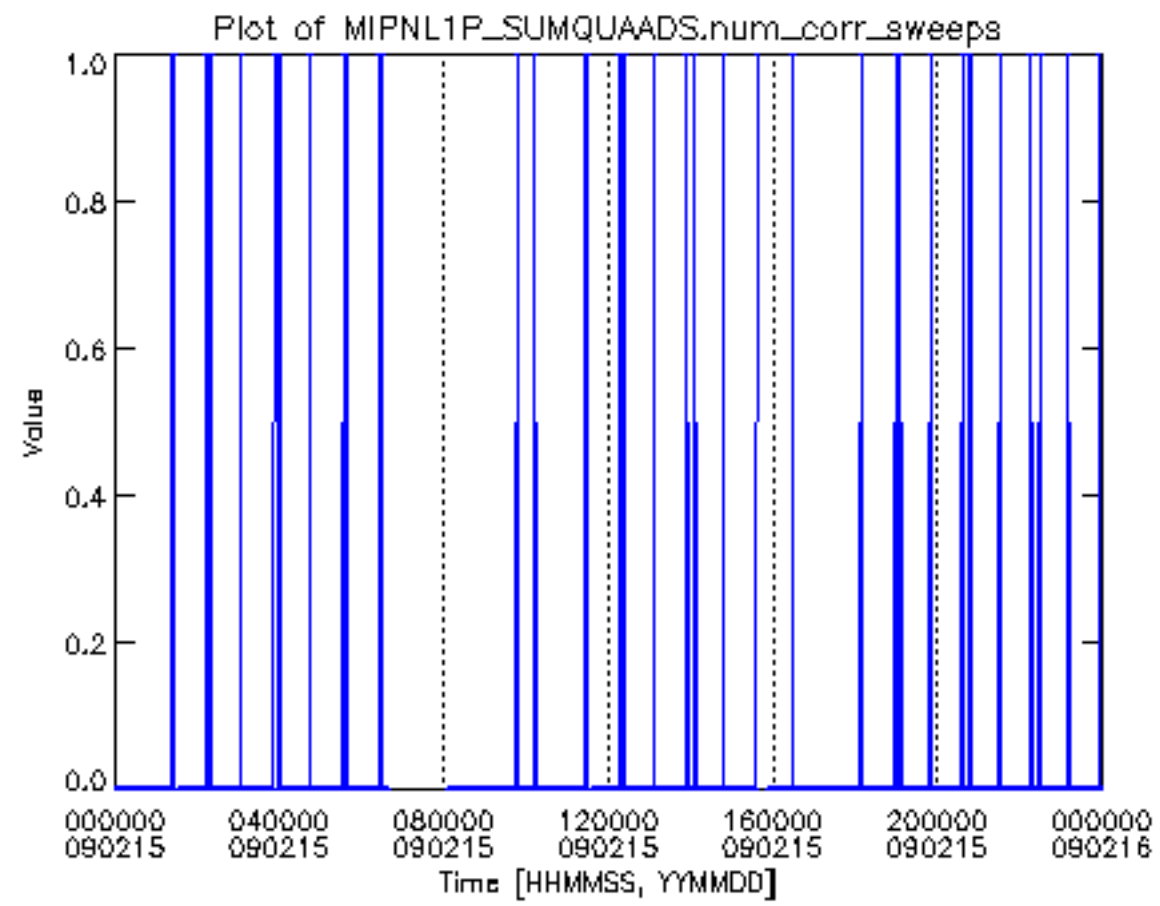




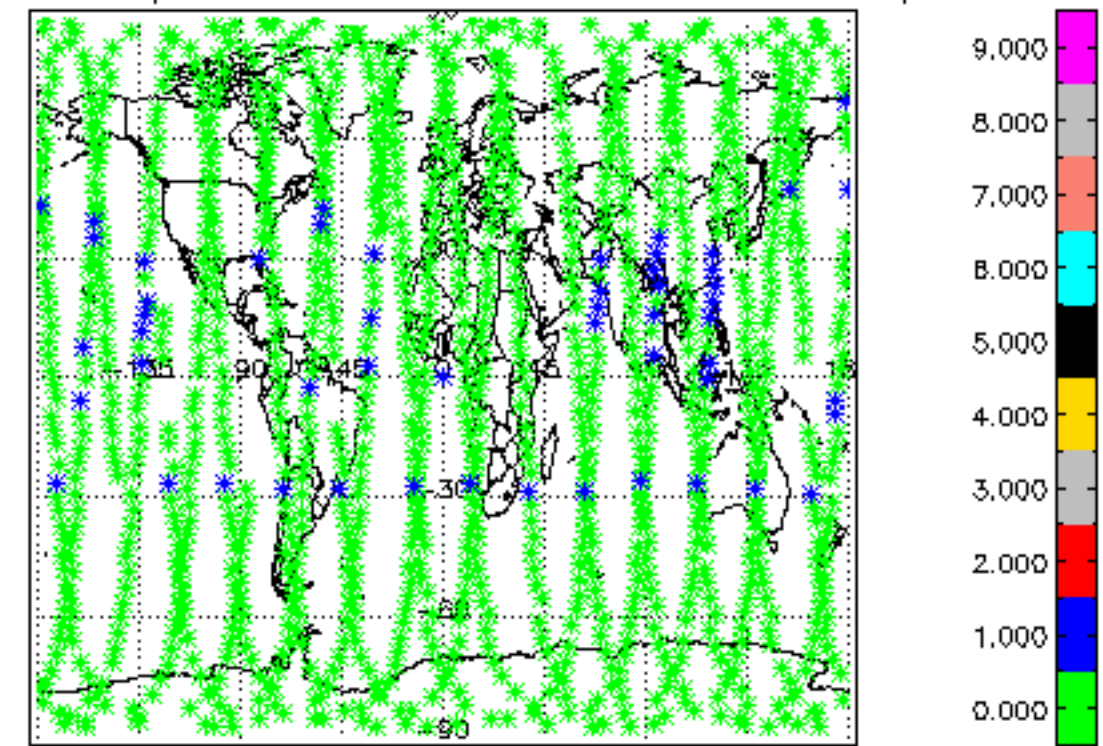
Geolocation plot of MIPNL1P_SCAINFADS_num_sweeps(green color=0 errors)

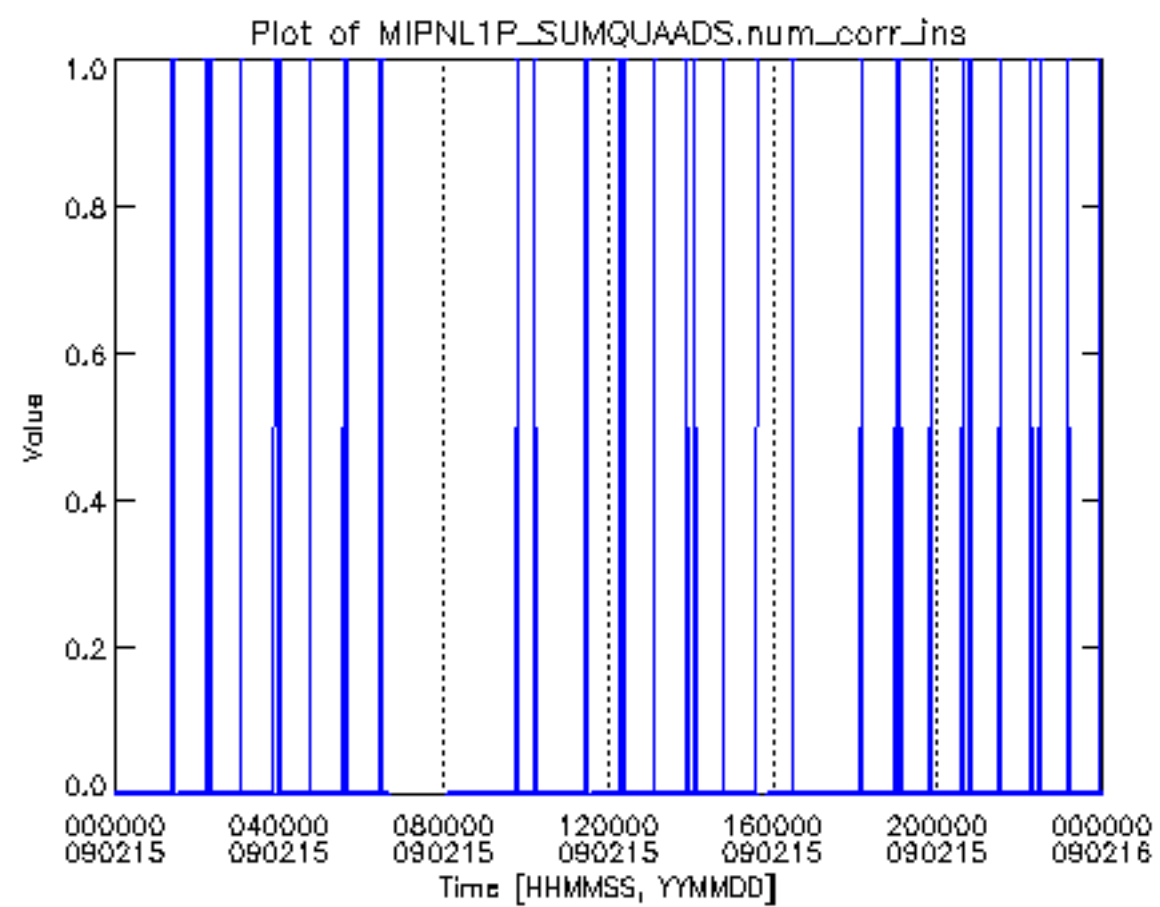




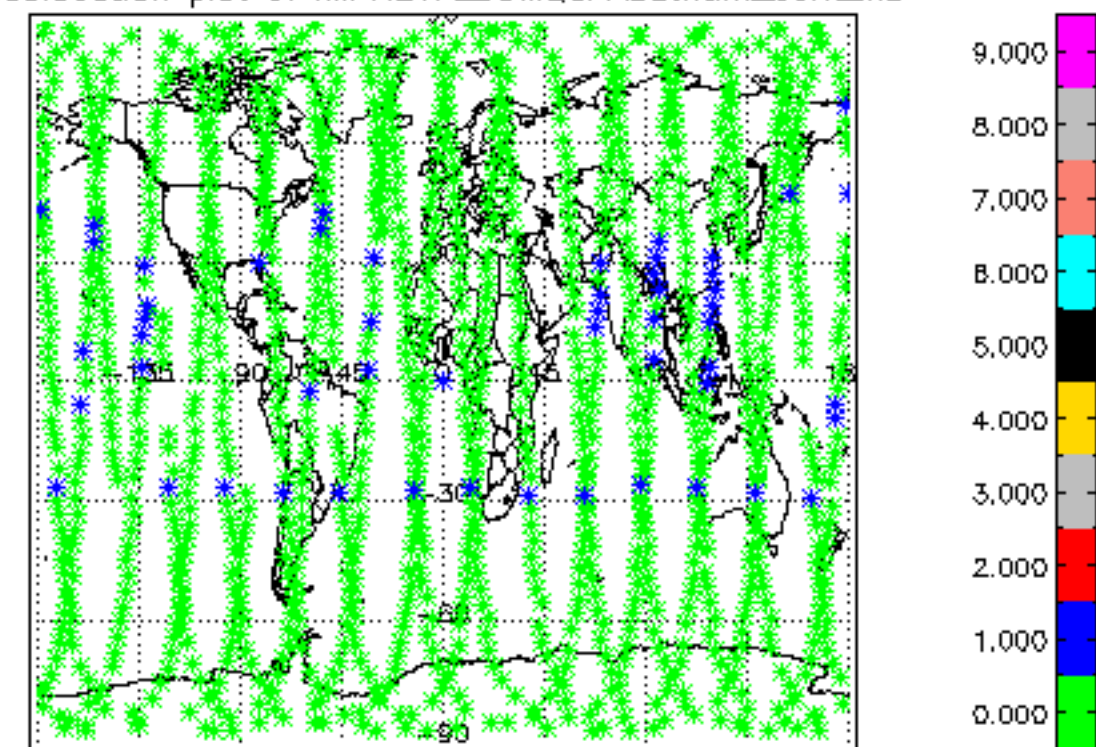


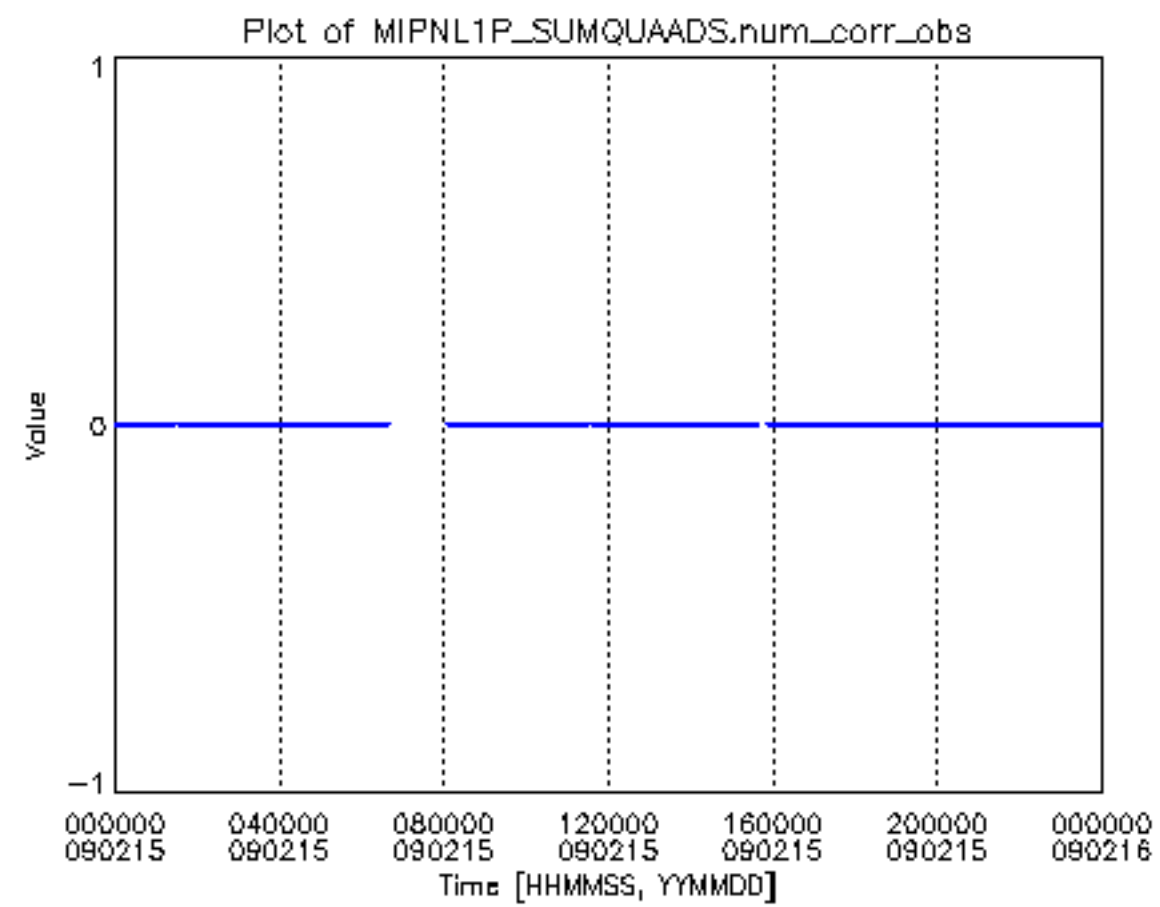
Geolocation plot of MIPNL1P_SUMQUAADS.num_corr_sweeps



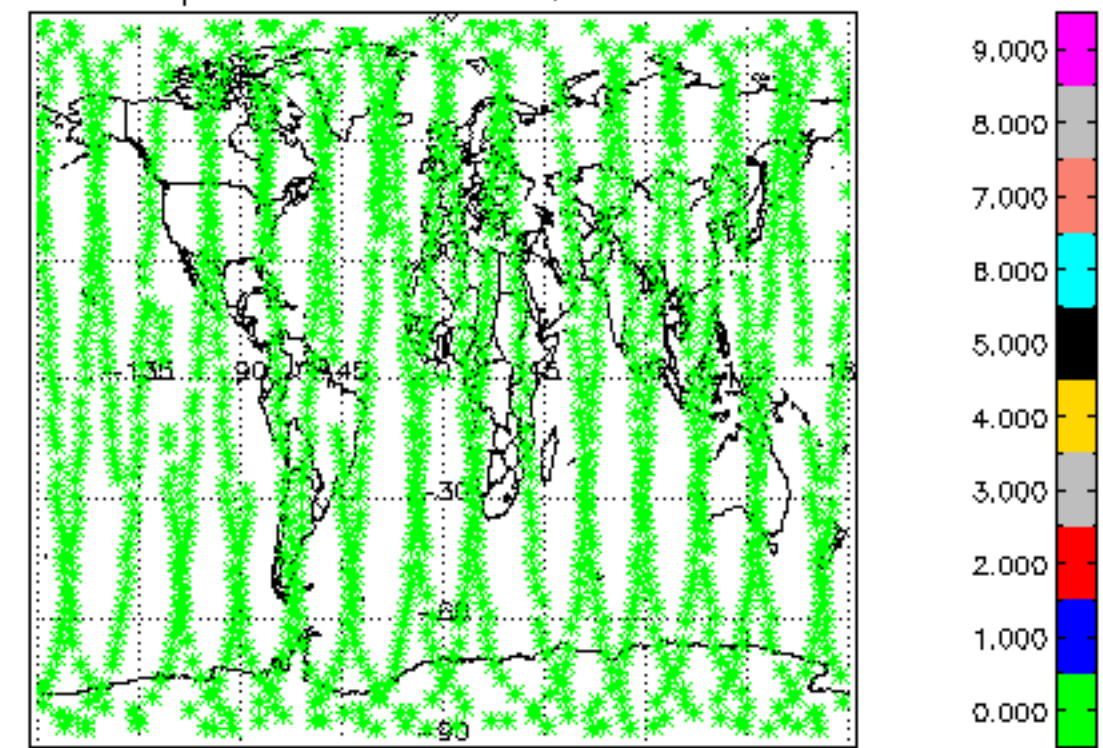


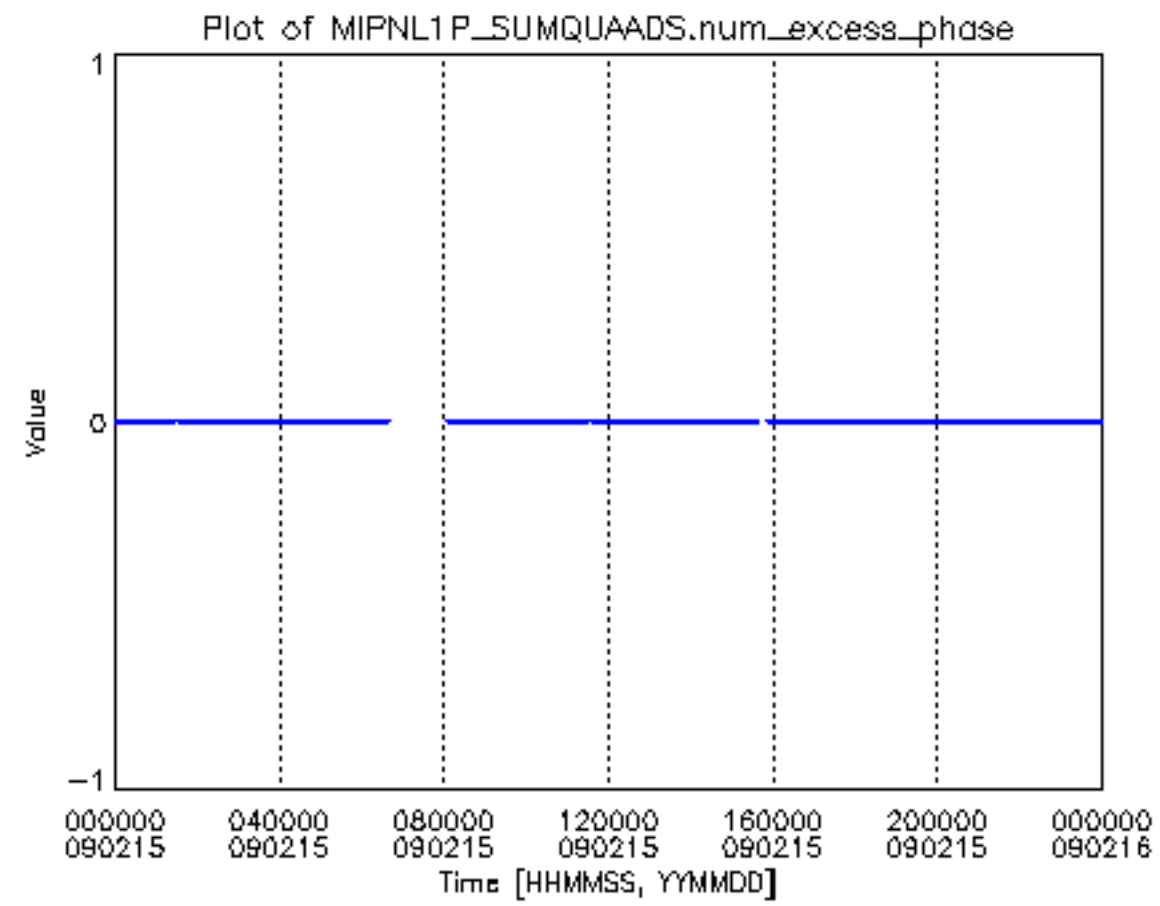
Geolocation plot of MIPNL1P_SUMQUAADS.num_corr_ins



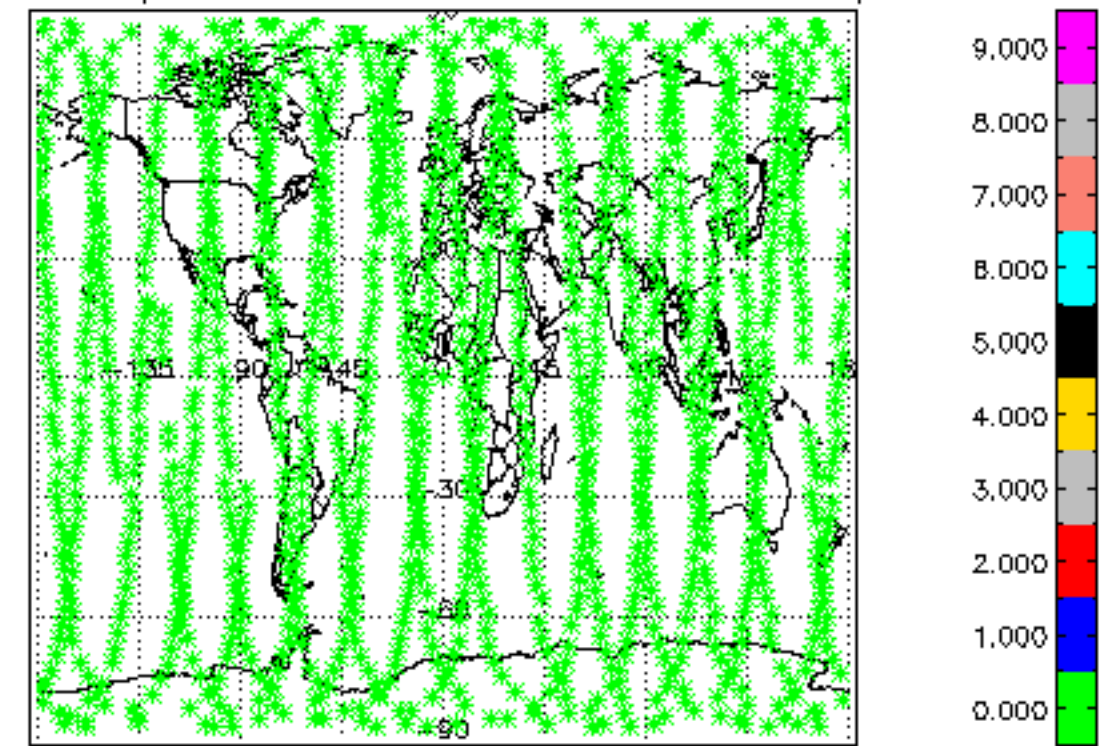


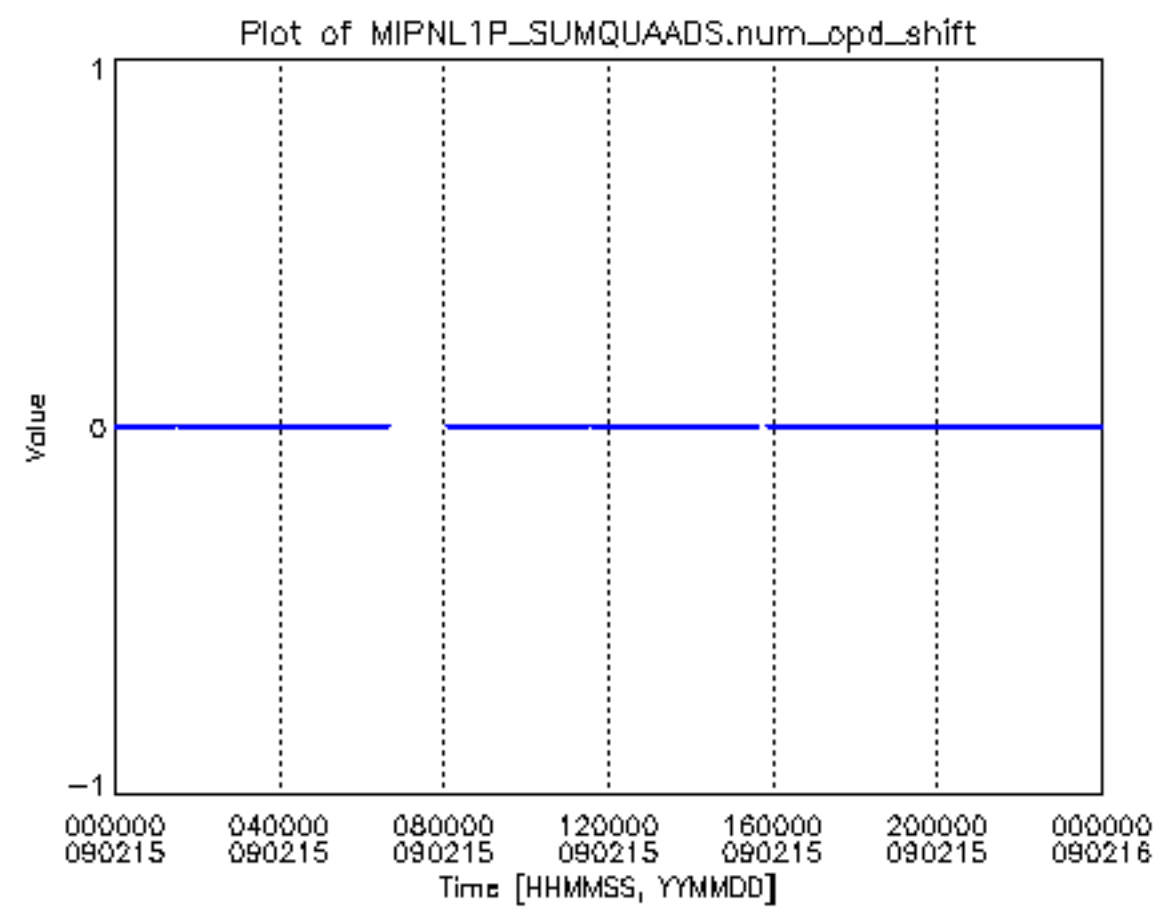
Geolocation plot of MIPNL1P_SUMQUAADS.num_corr_obs



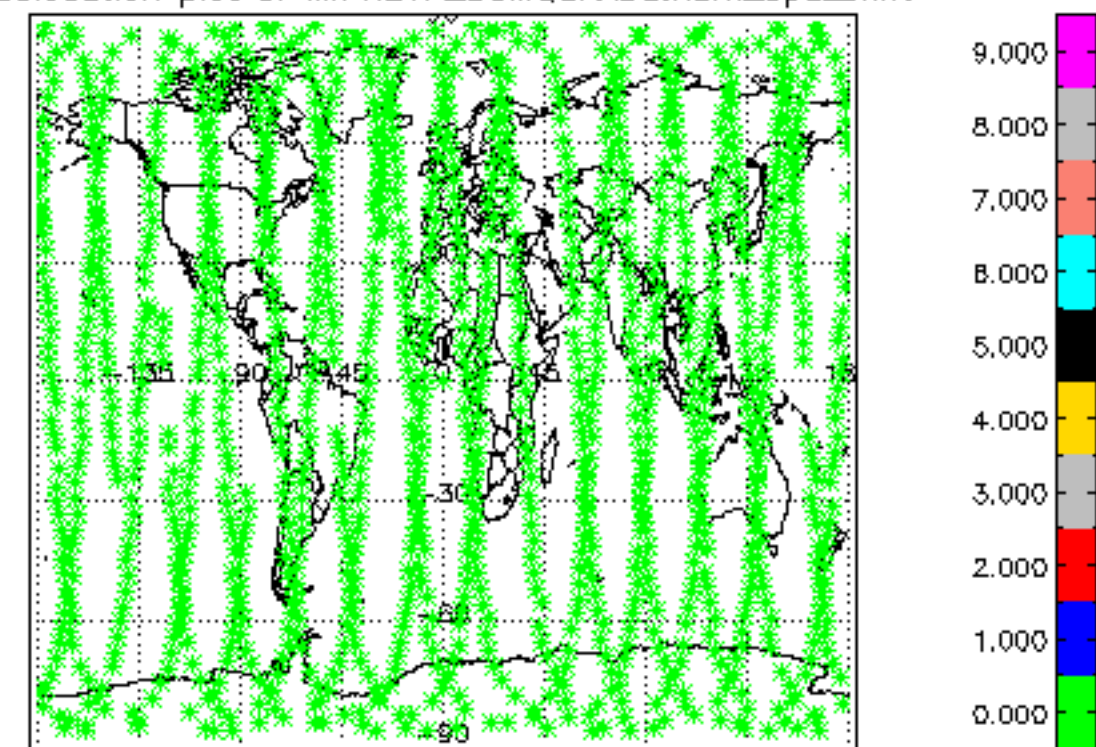


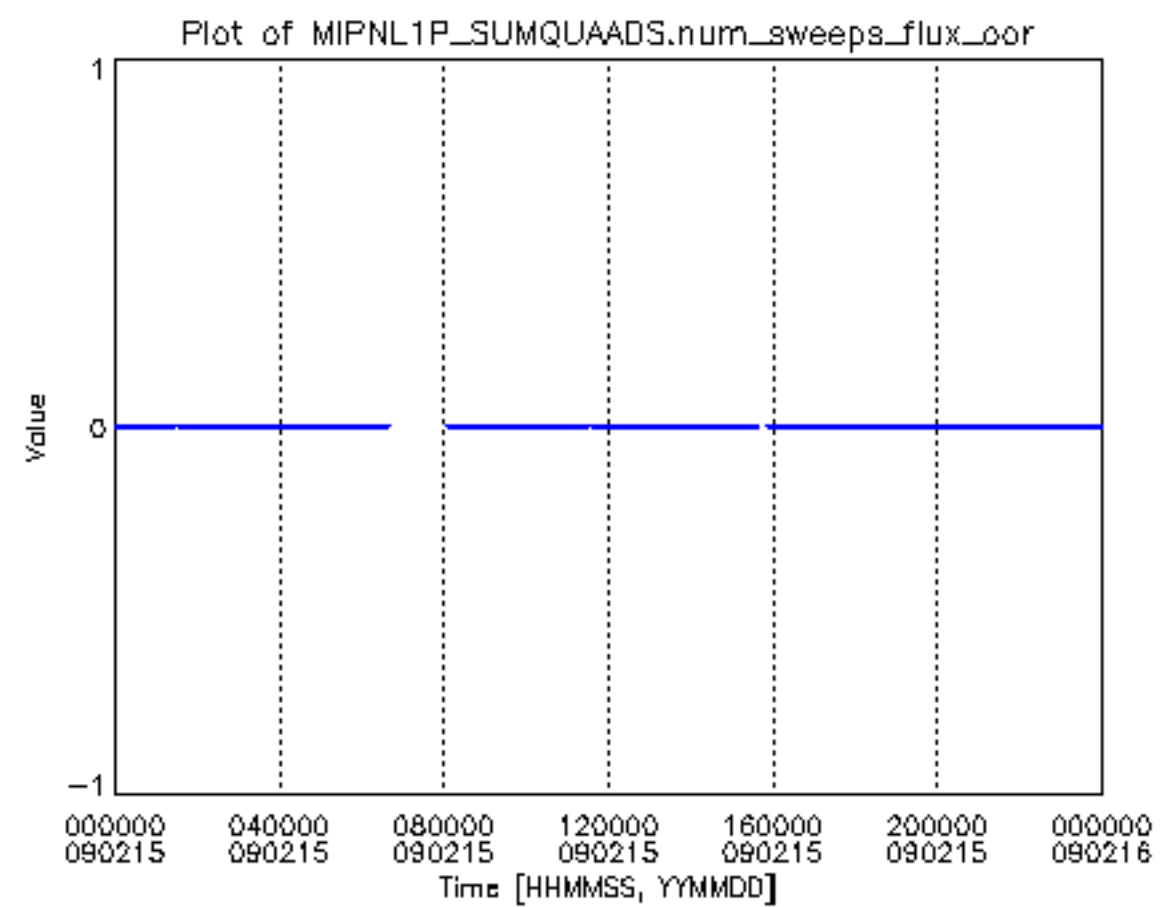
Geolocation plot of MIPNL1P_SUMQUAADS.num_excess_phase



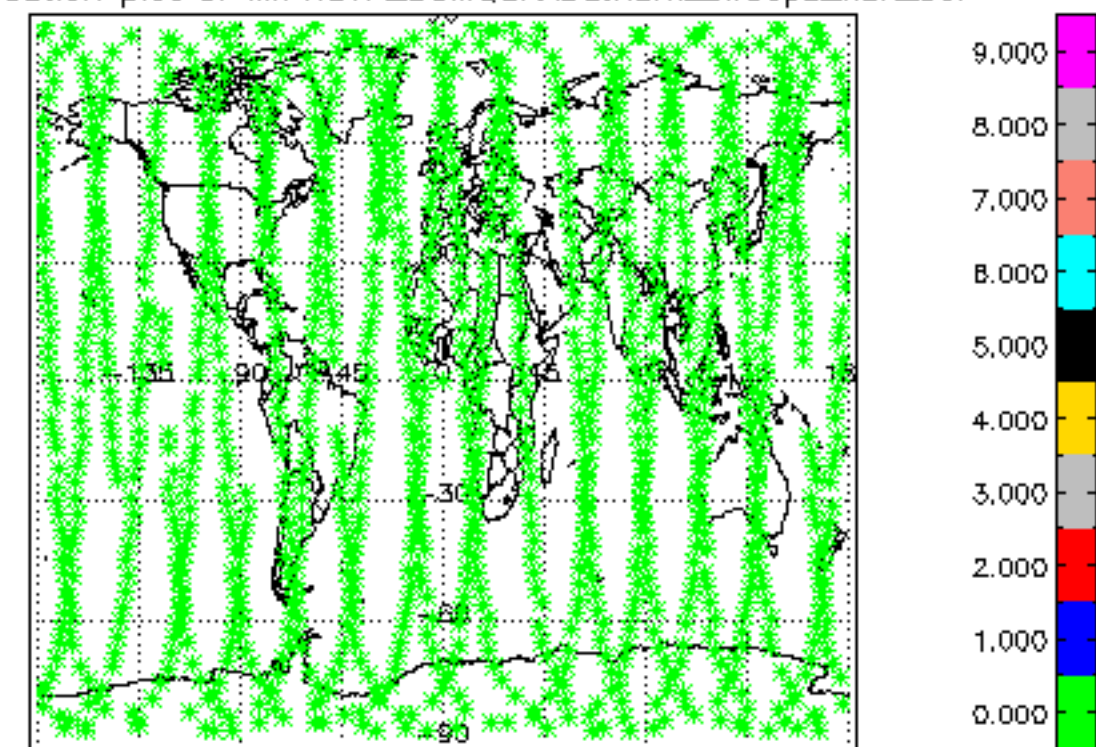


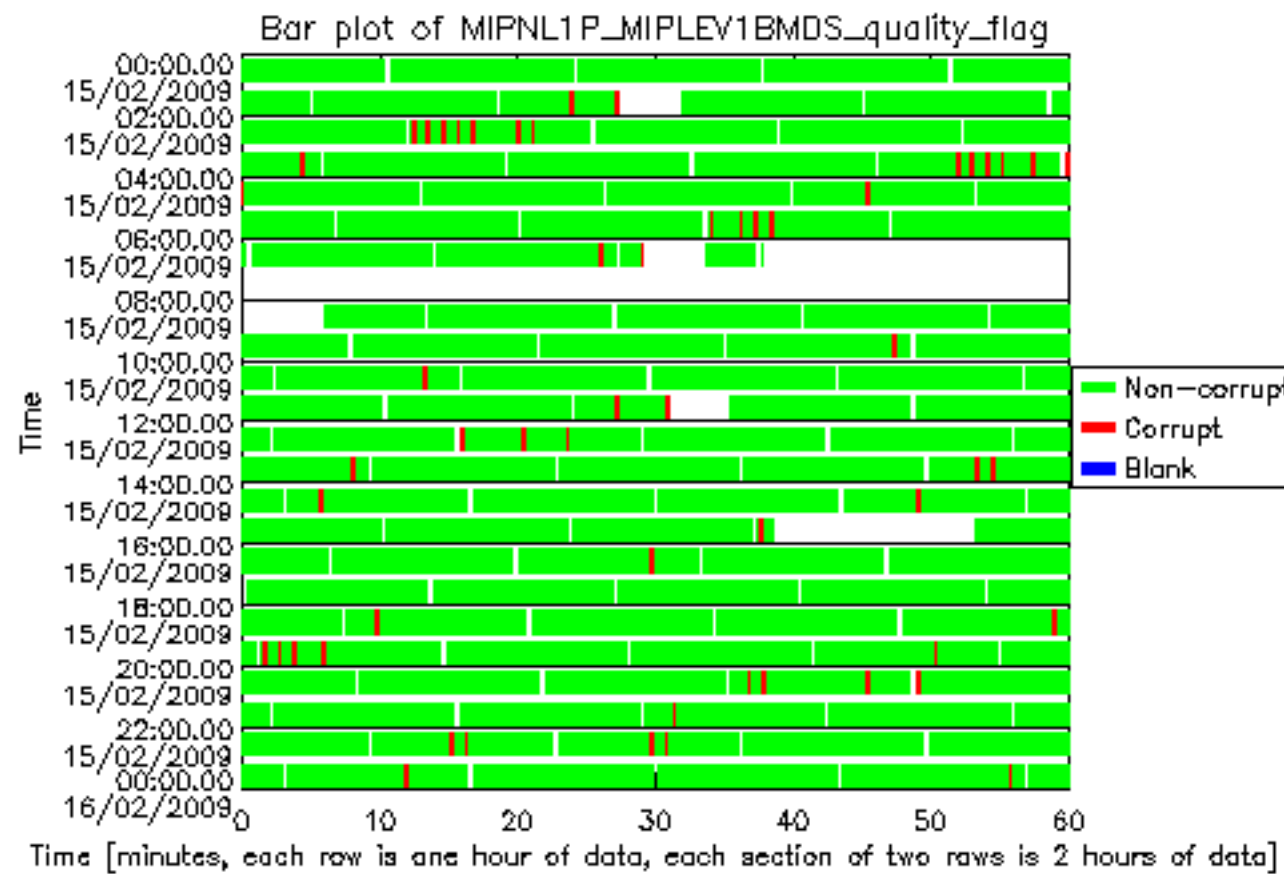
Geolocation plot of MIPNL1P_SUMQUAADS.num_opd_shift



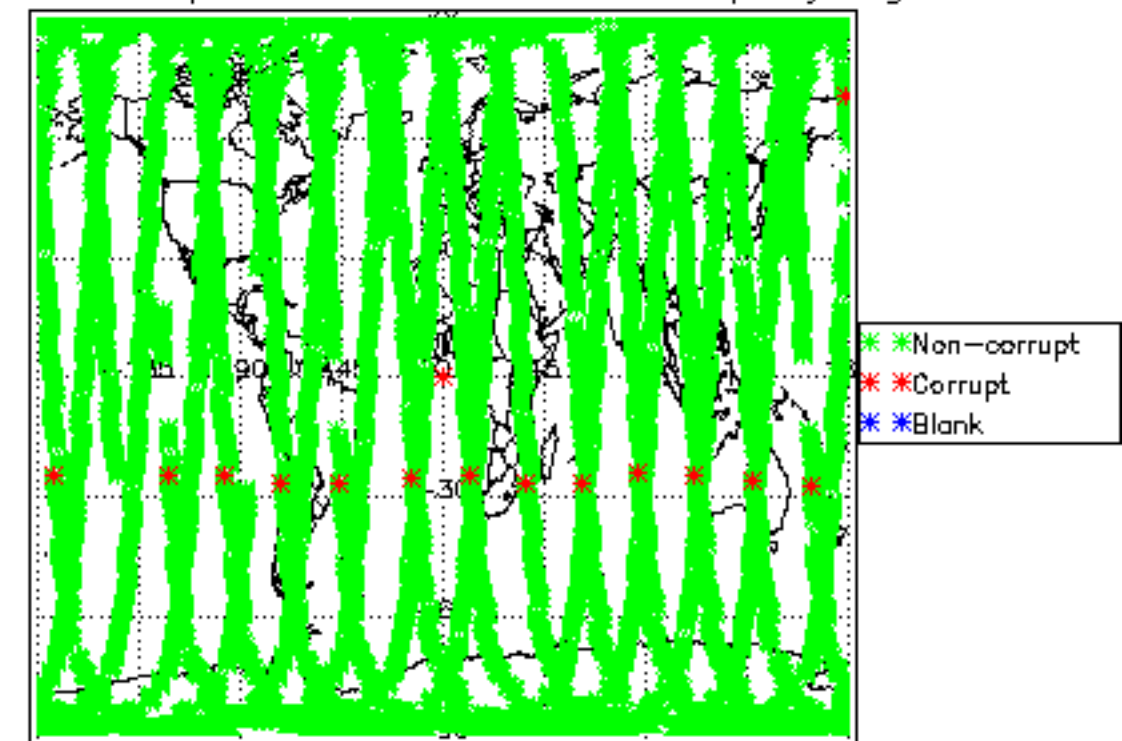


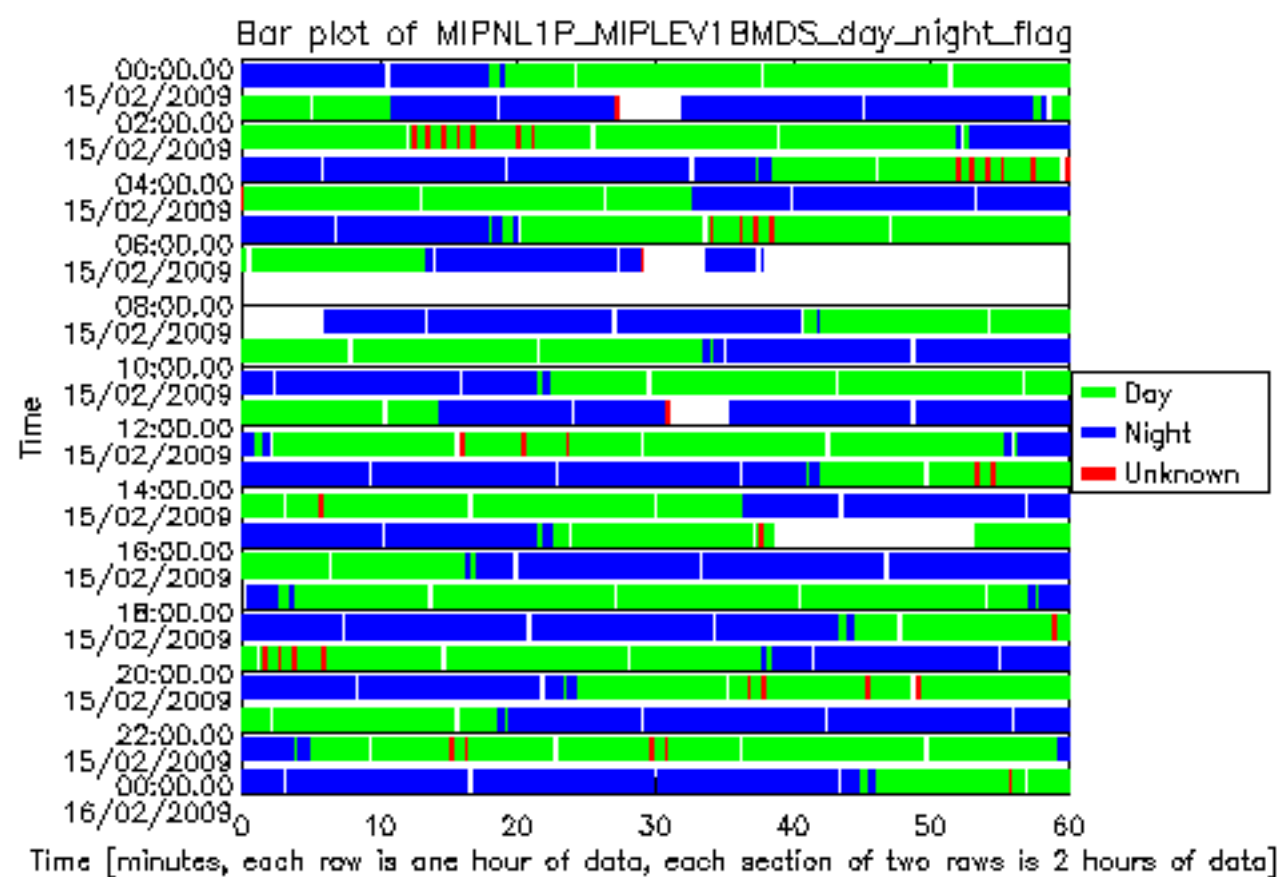
Geolocation plot of MIPNL1P_SUMQUAADS.num_sweeps_flux_oor



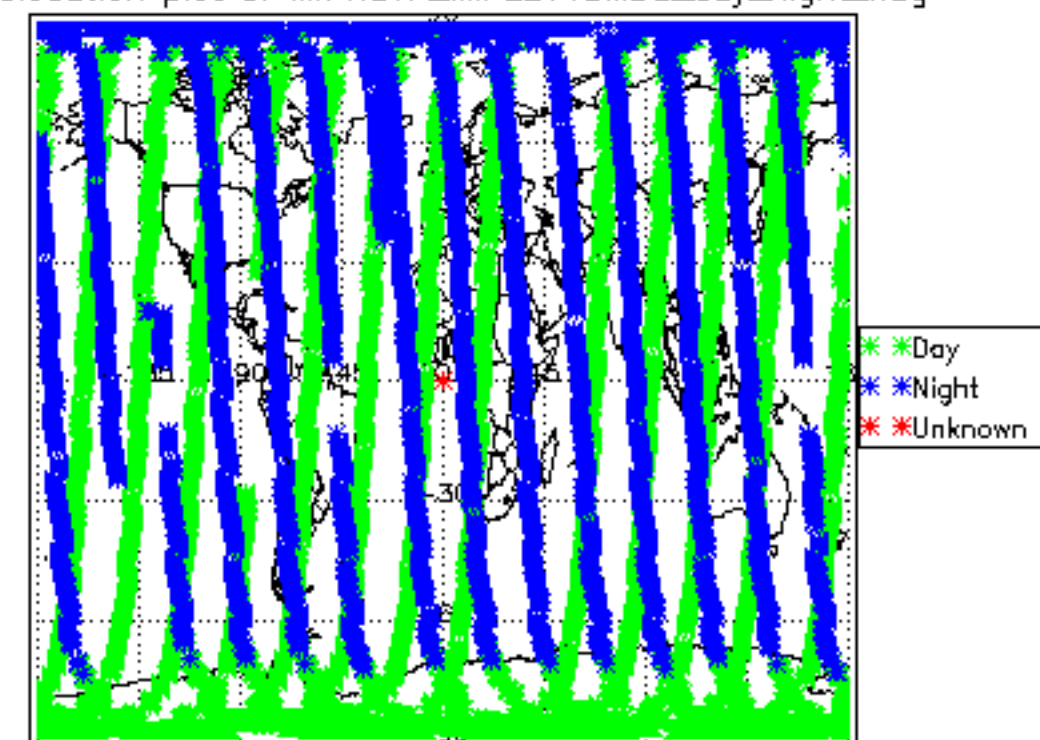


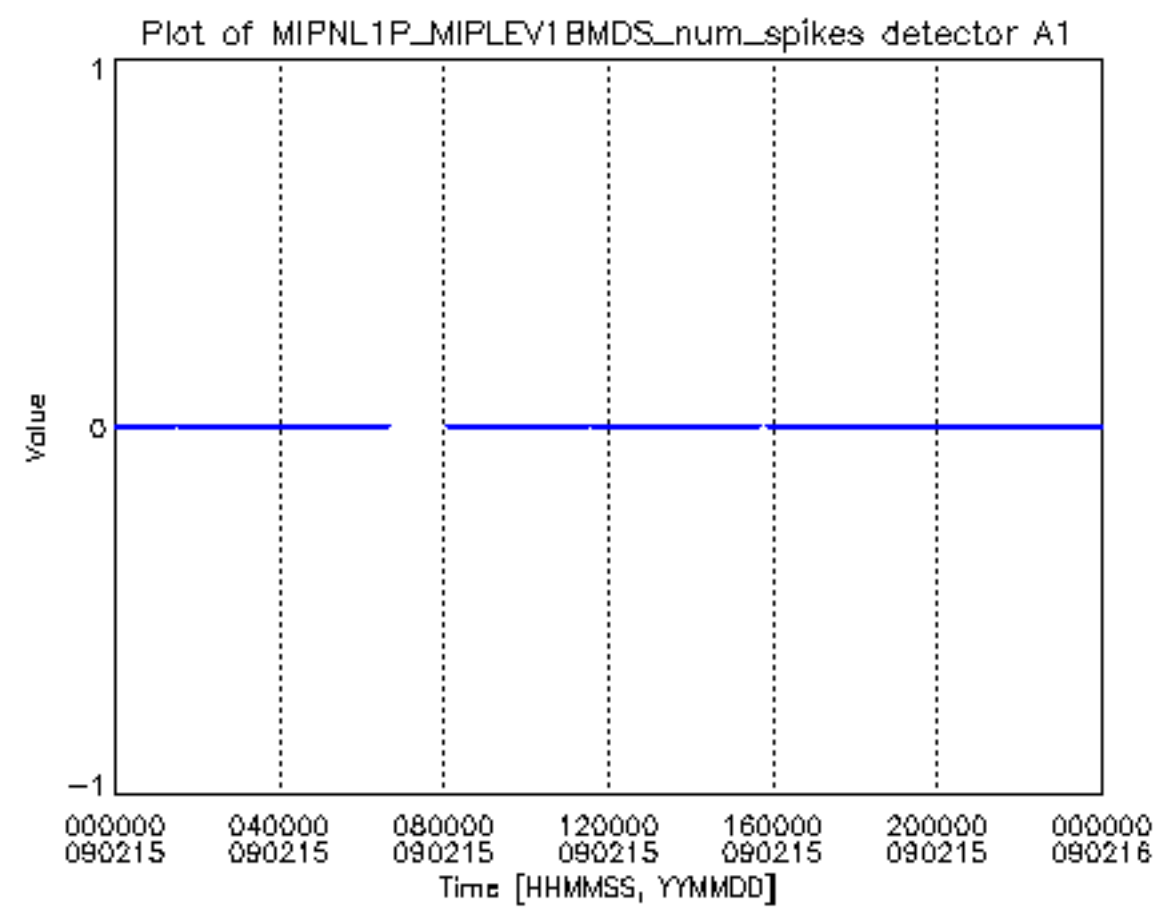
Geolocation plot of MIPNL1P_MIPLEV1BMDS_quality_flag



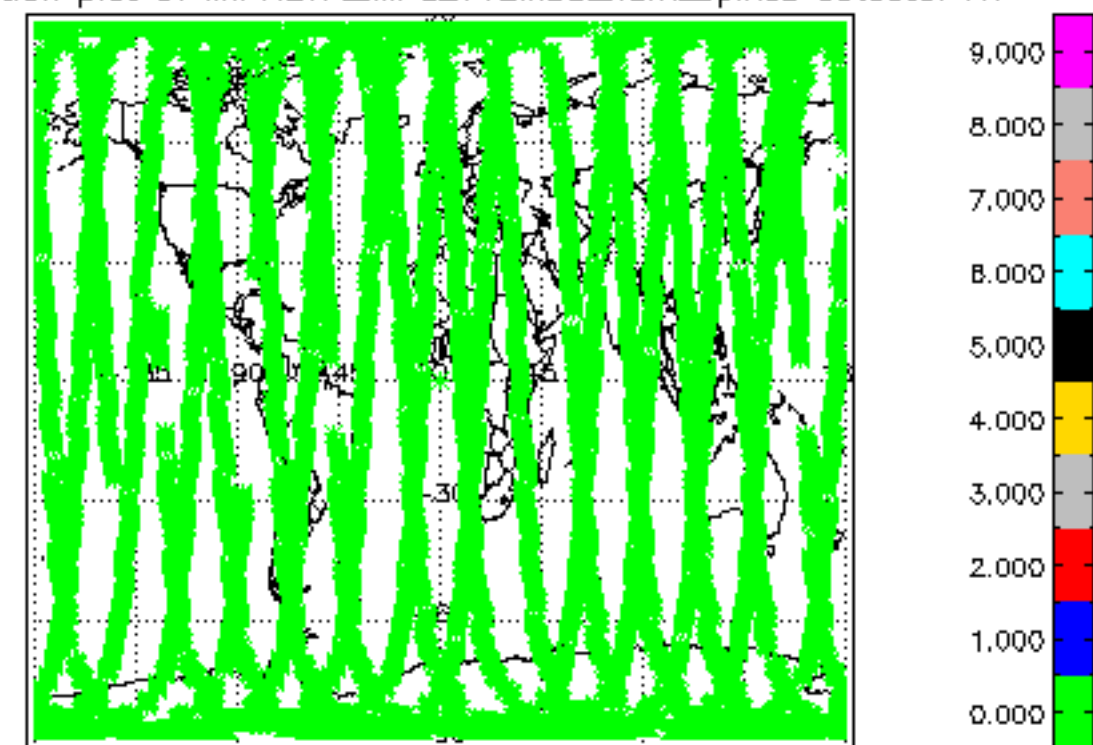


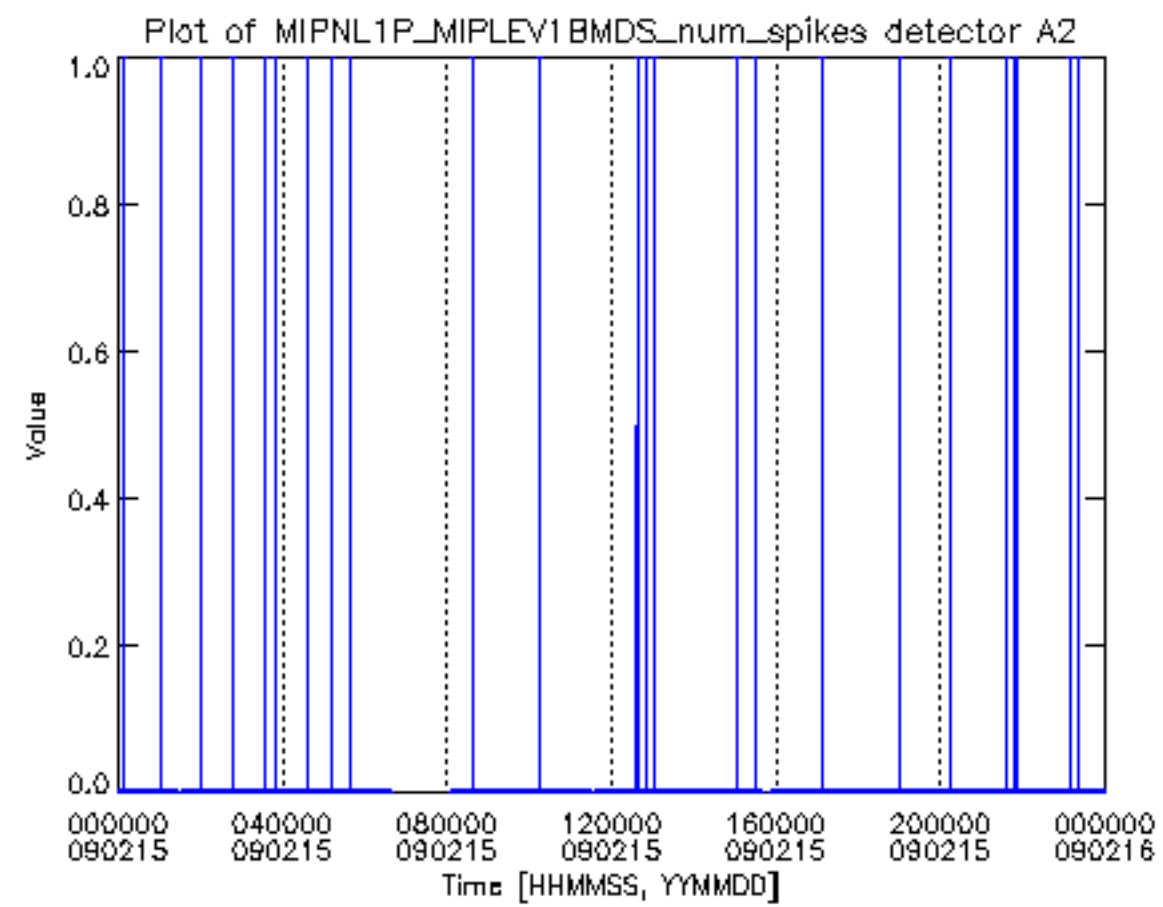
Geolocation plot of MIPNL1P_MIPLEV1BMDS_day_night_flag



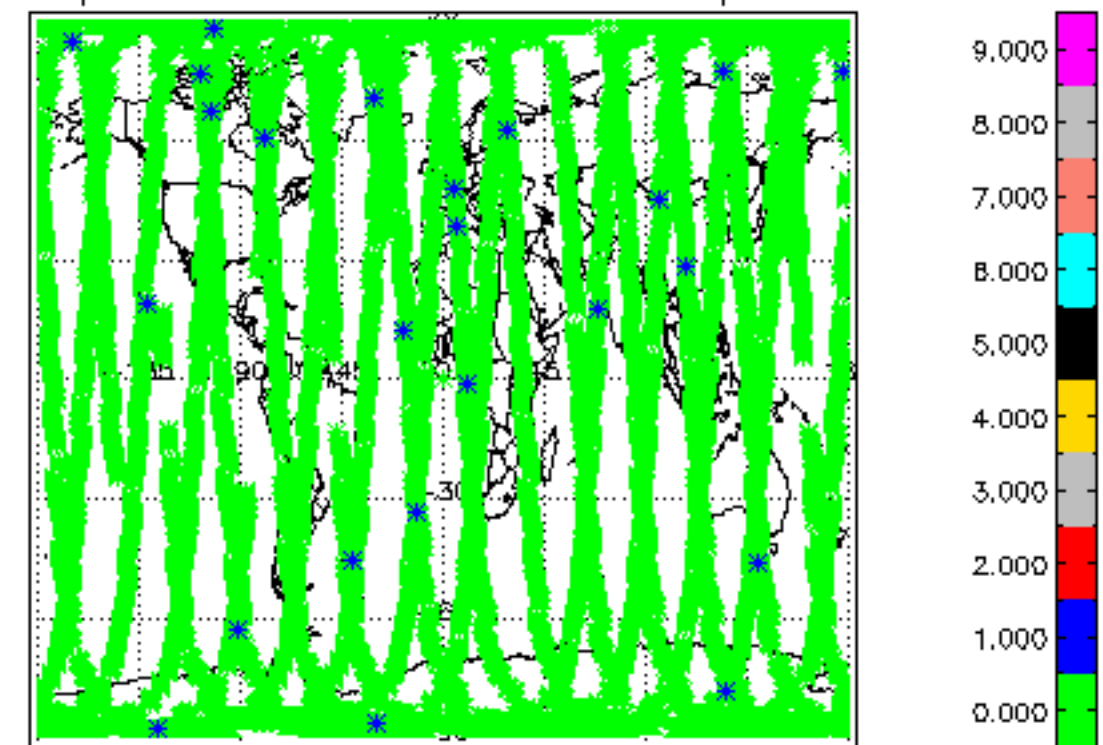


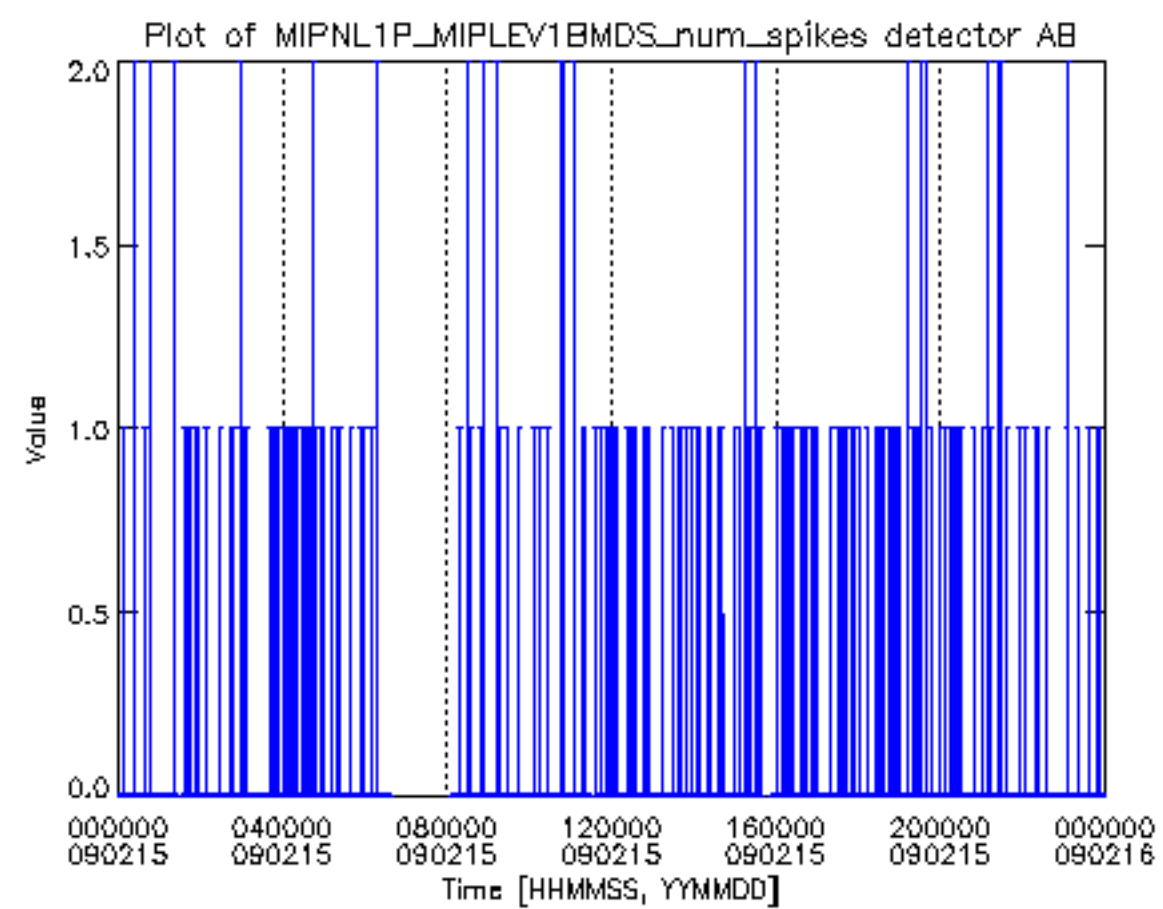
Geolocation plot of MIPNL1P_MIPLEV1BMDS_num_spikes detector A1



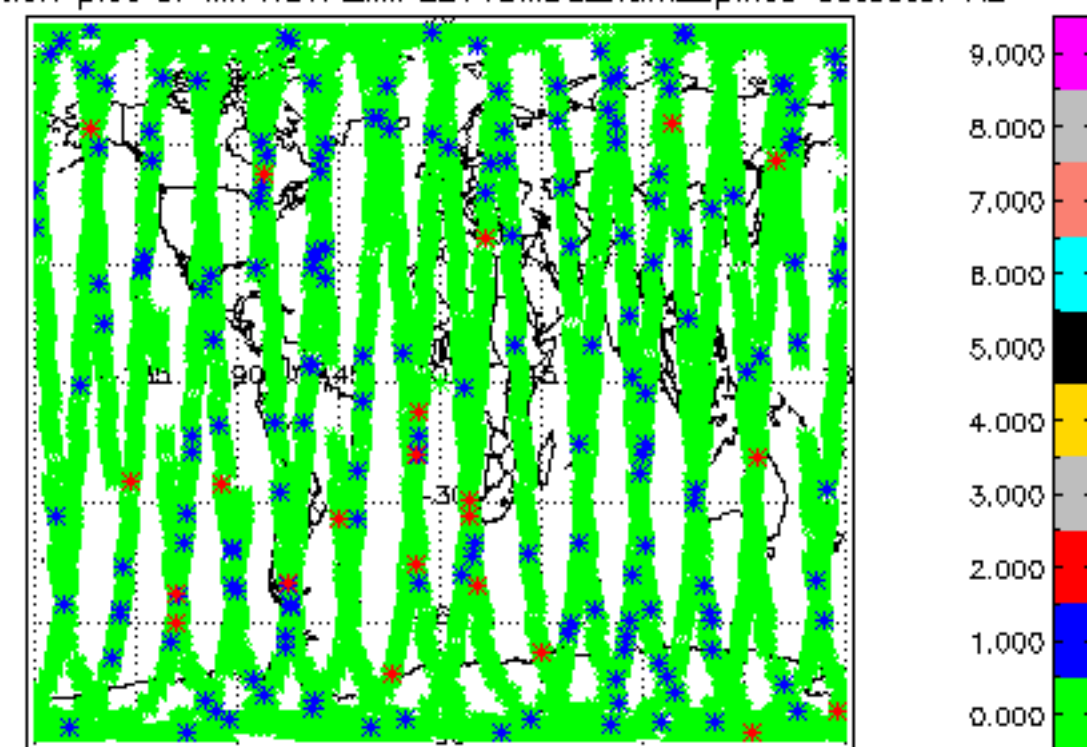


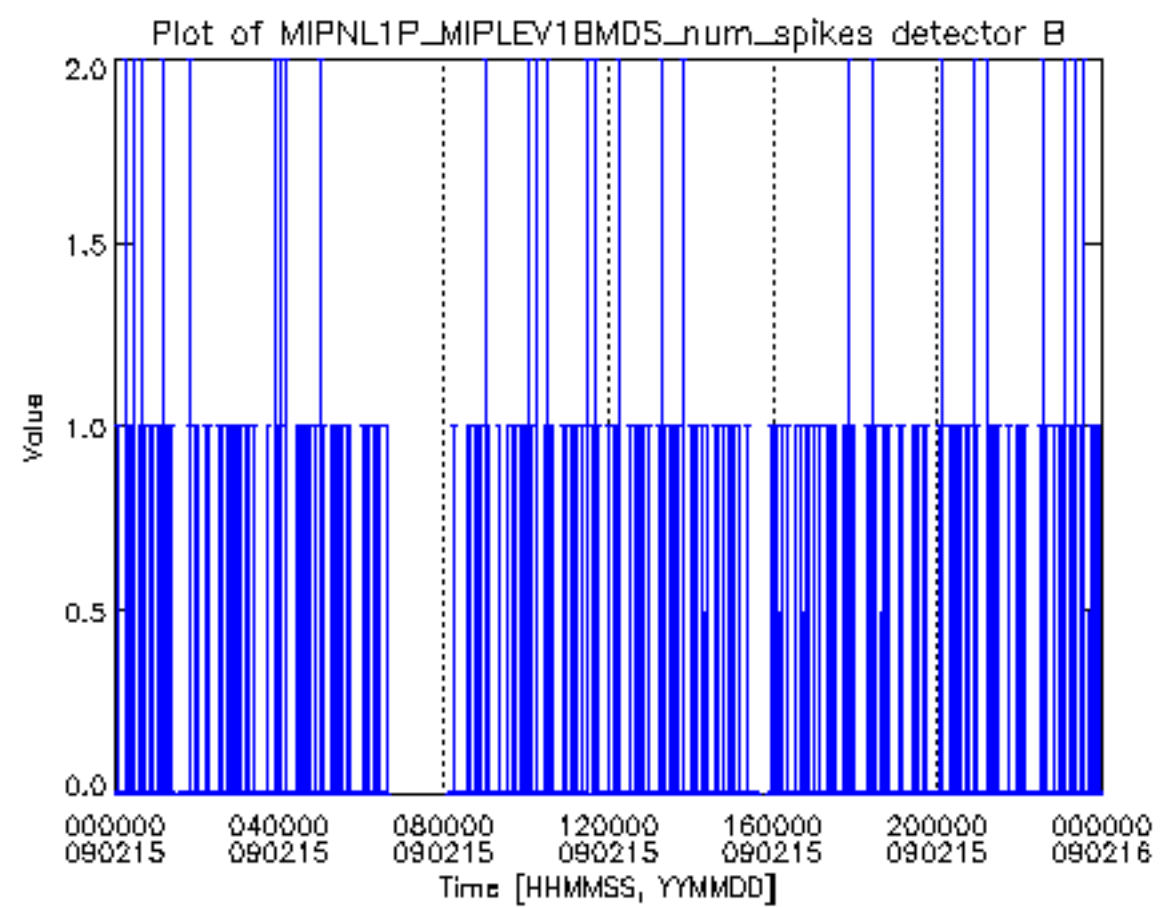
Geolocation plot of MIPNL1P_MIPLEV1BMDS_num_spikes detector A2



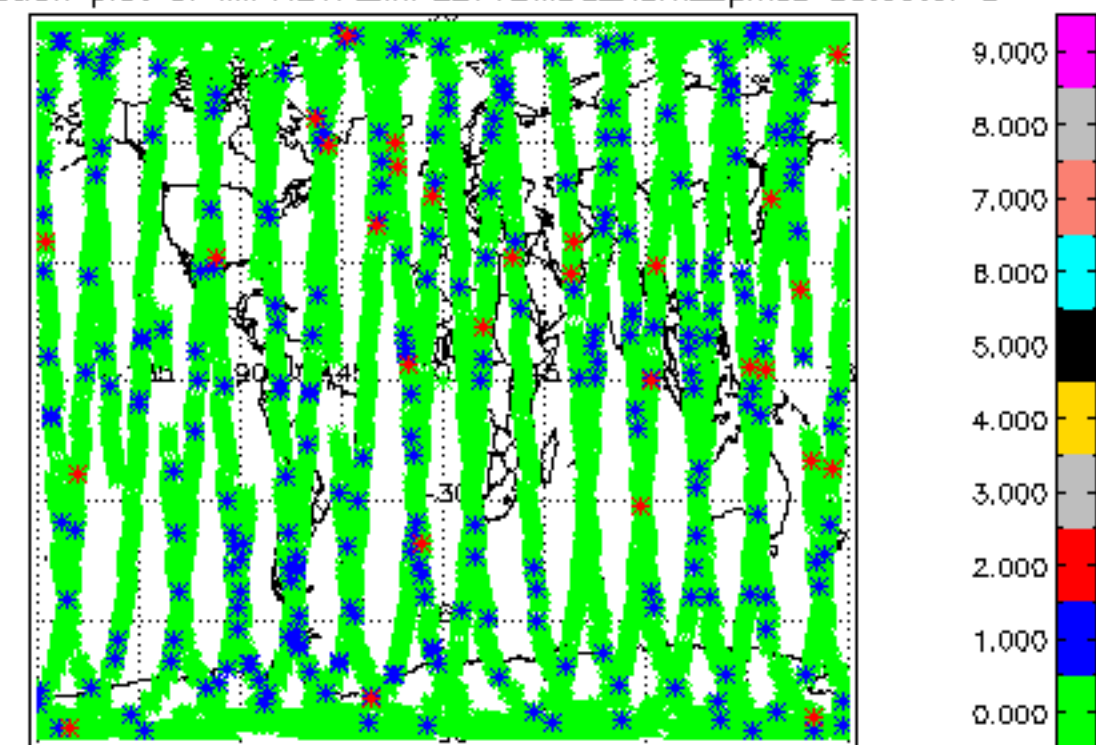


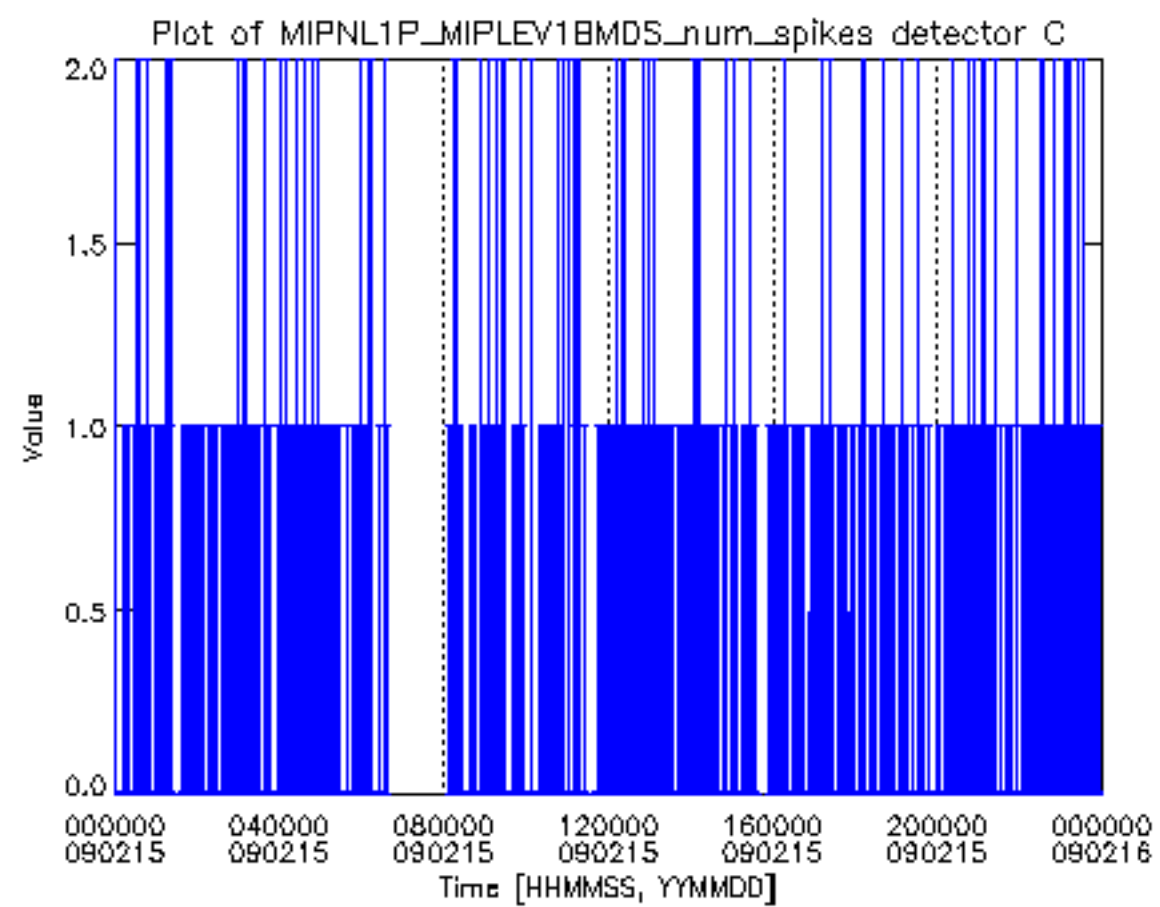
Geolocation plot of MIPNL1P_MIPLEV1BMDS_num_spikes detector AB



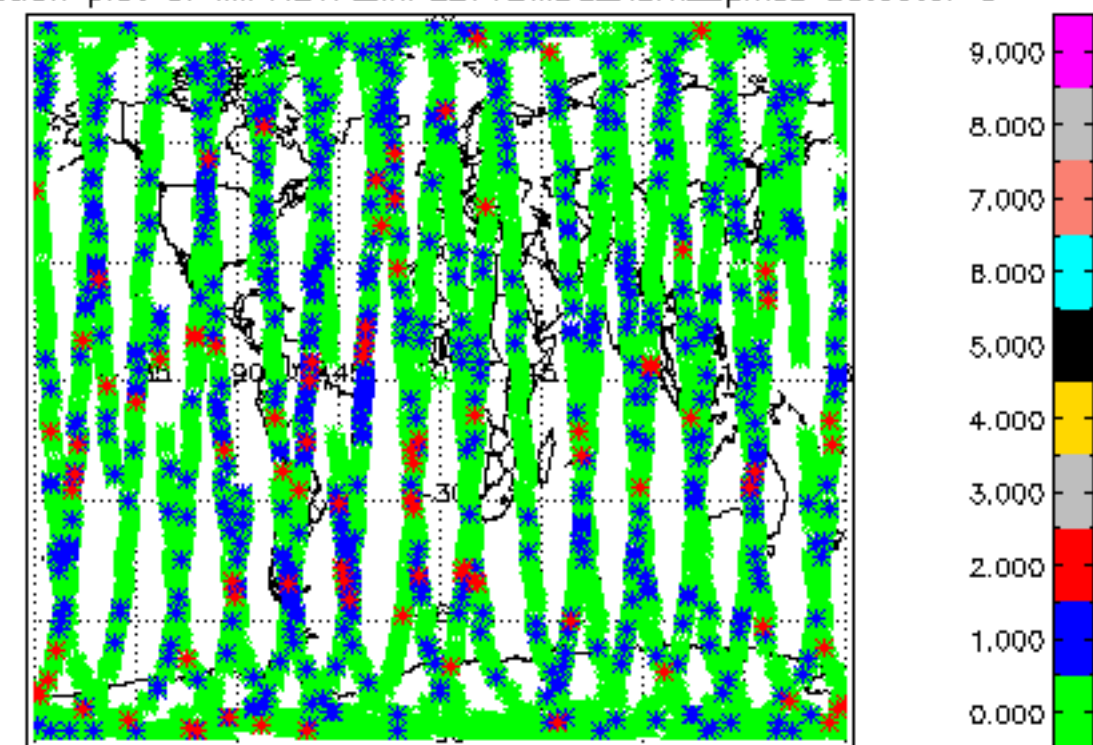


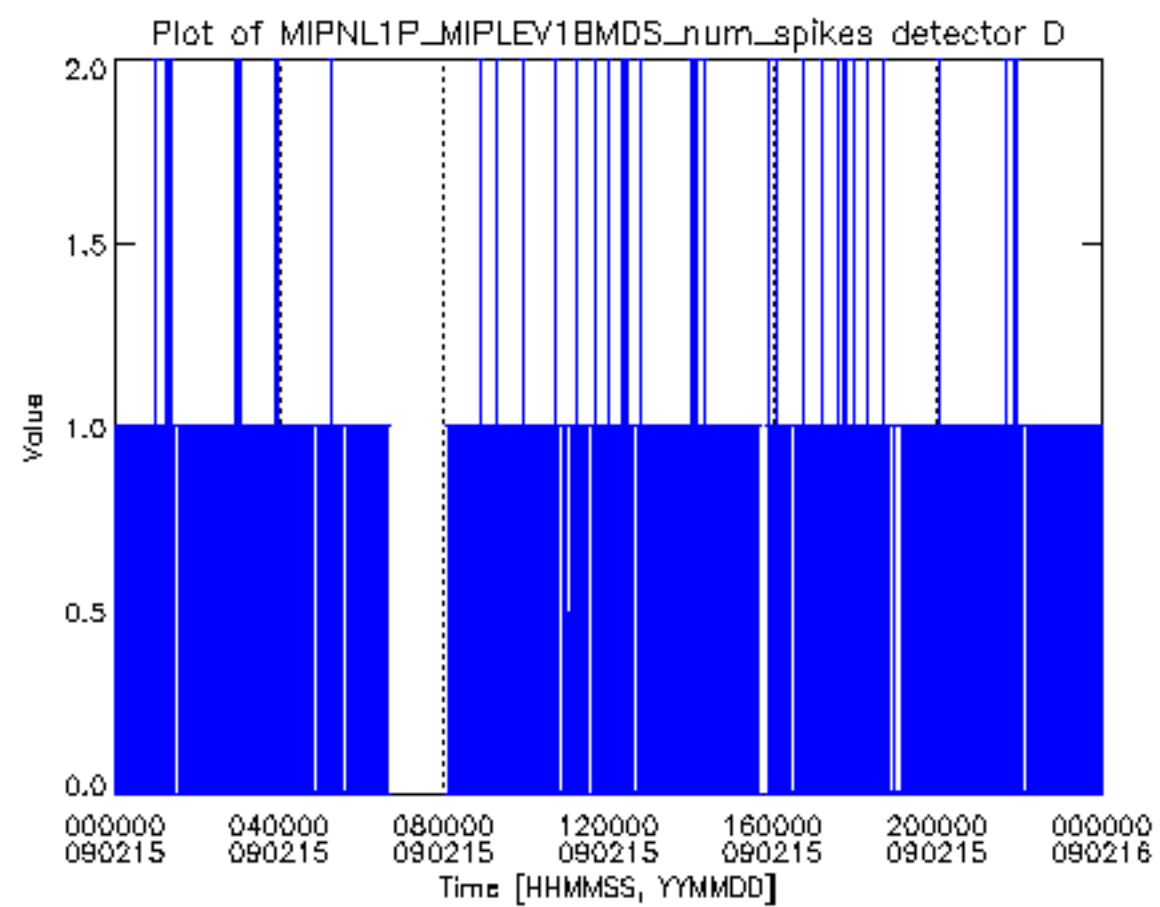
Geolocation plot of MIPNL1P_MIPLEV1BMDS_num_spikes detector B



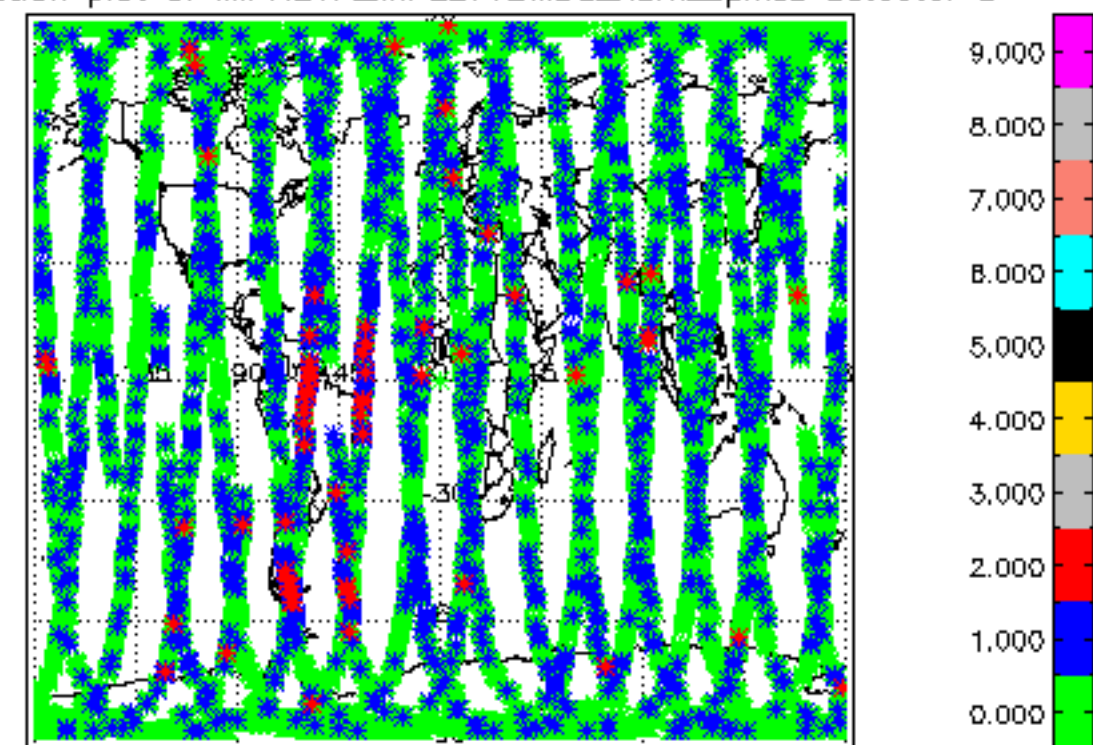


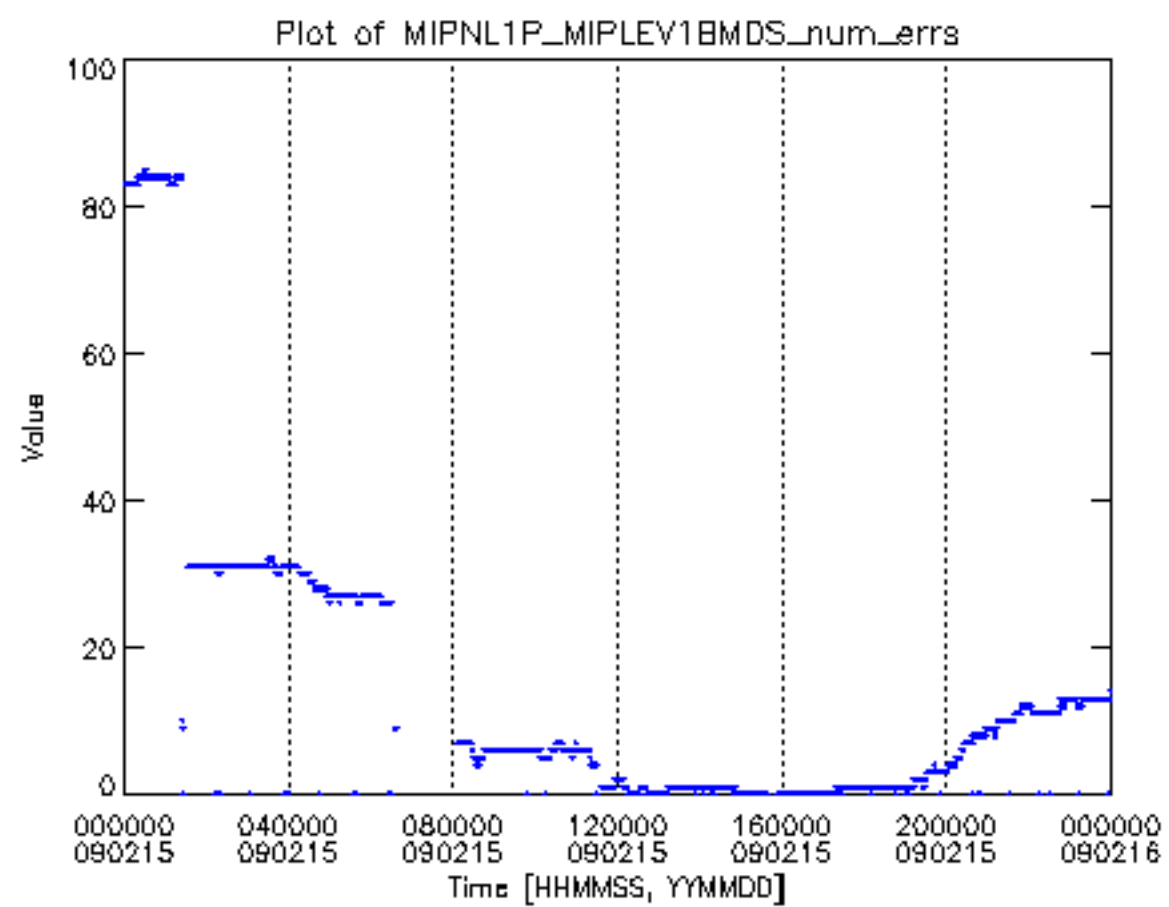
Geolocation plot of MIPNL1P_MIPLEV1BMDS_num_spikes detector C



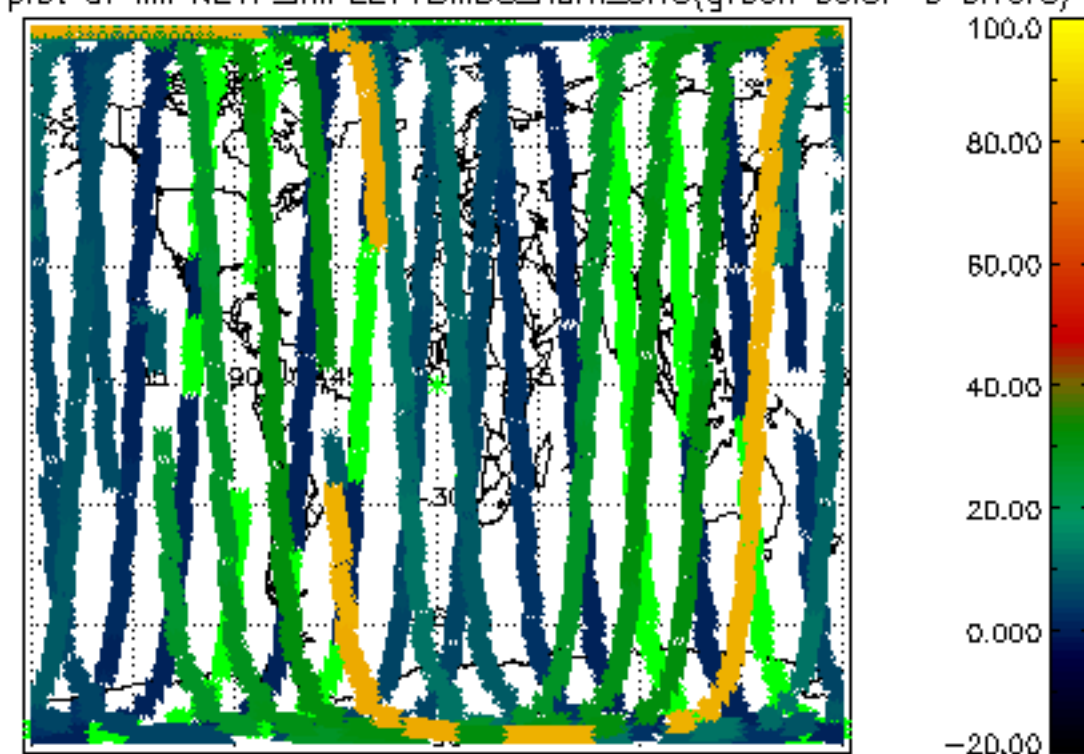


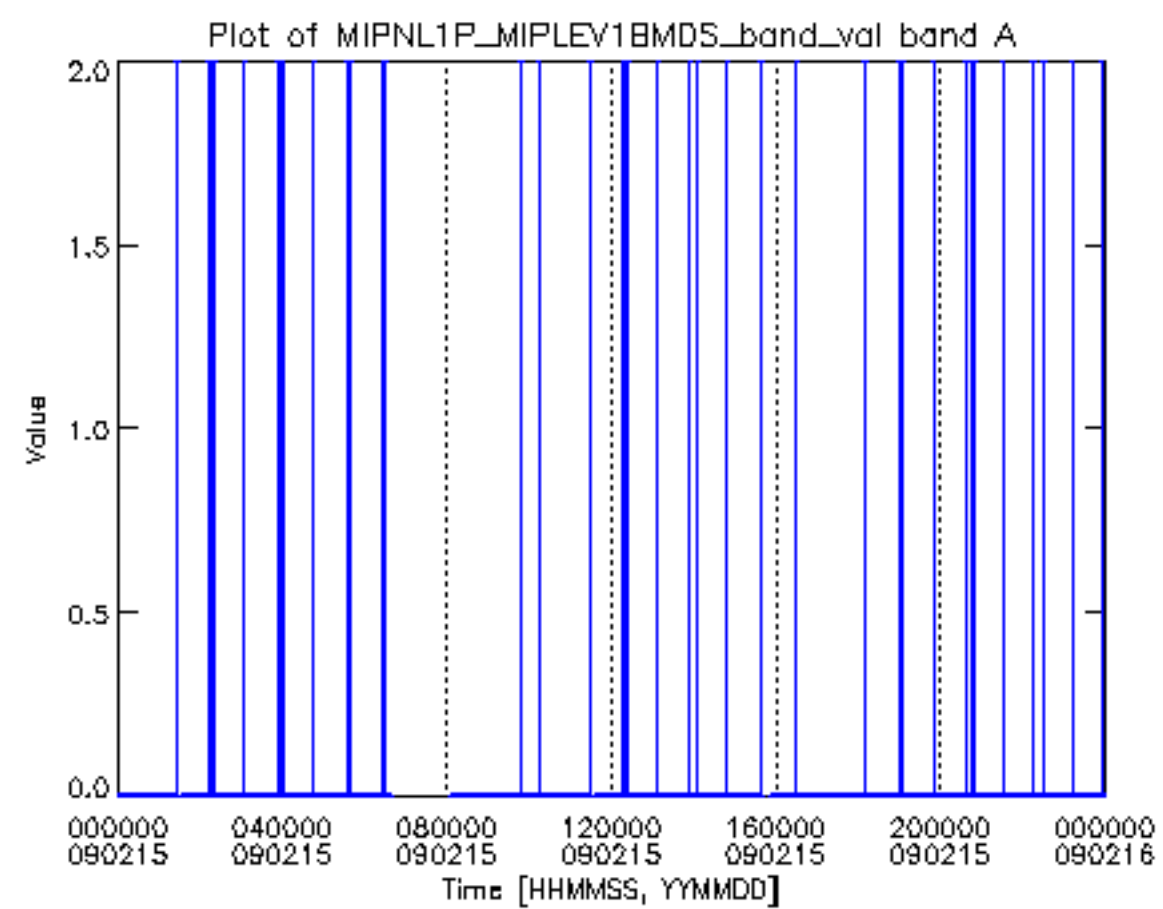
Geolocation plot of MIPNL1P_MIPLEV1BMDS_num_spikes detector D



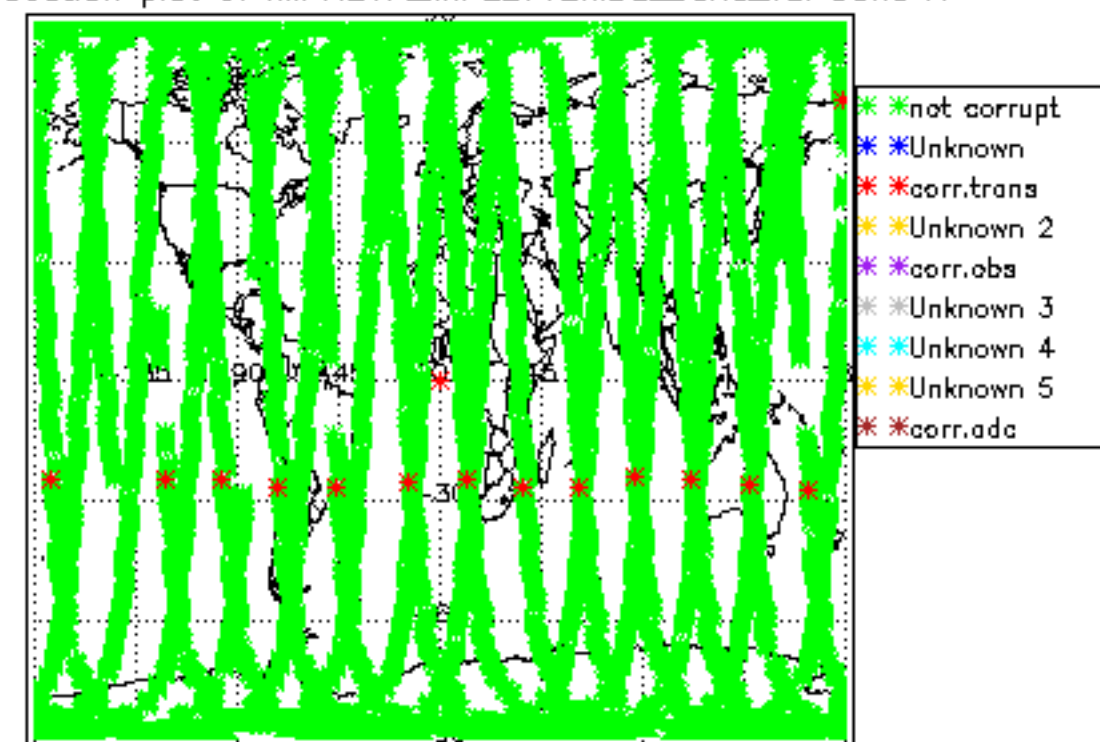


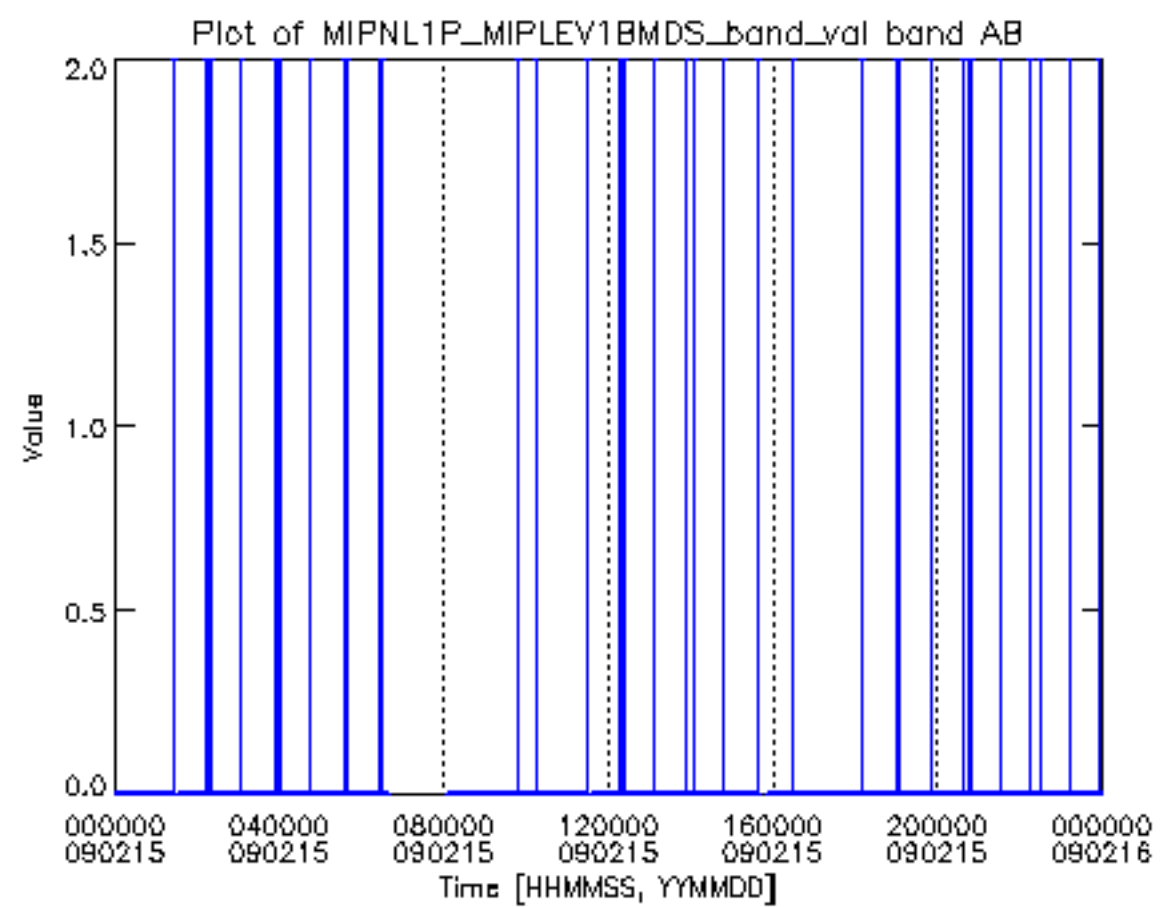
Geolocation plot of MIPNL1P_MIPLEV1BMDS_num_errs(green color=0 errors)



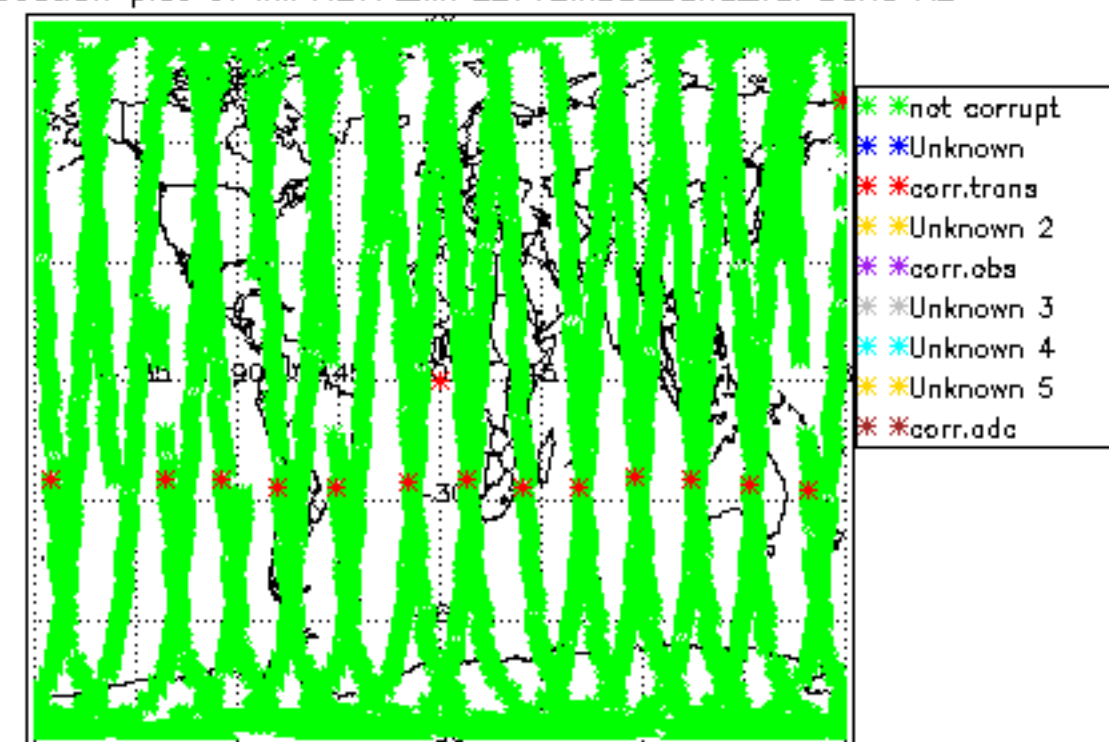


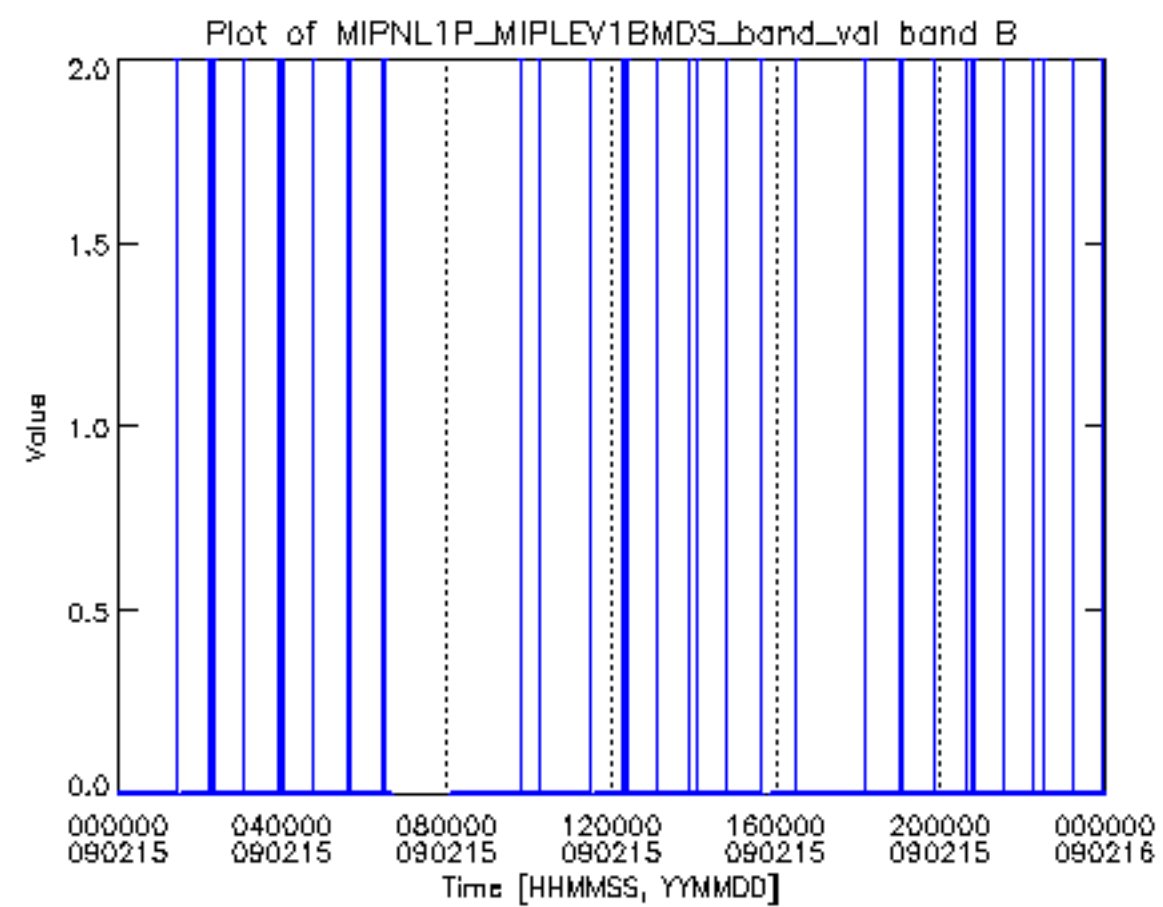
Geolocation plot of MIPNL1P_MIPLEV1BMDS_band_val band A



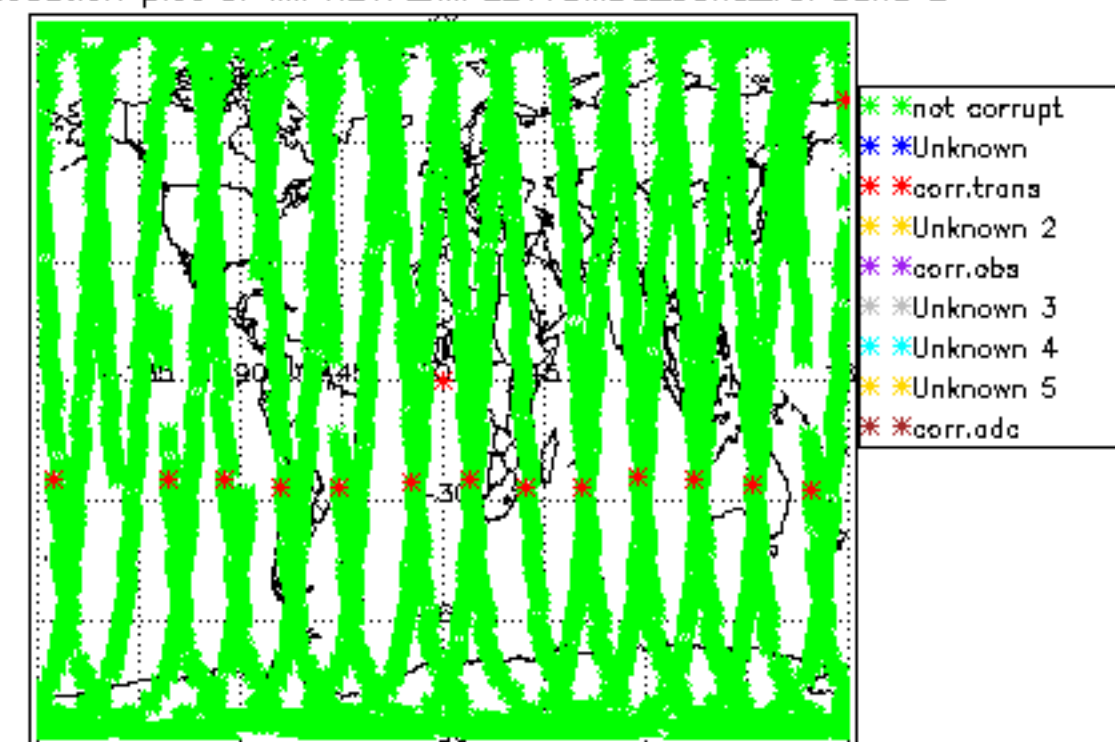


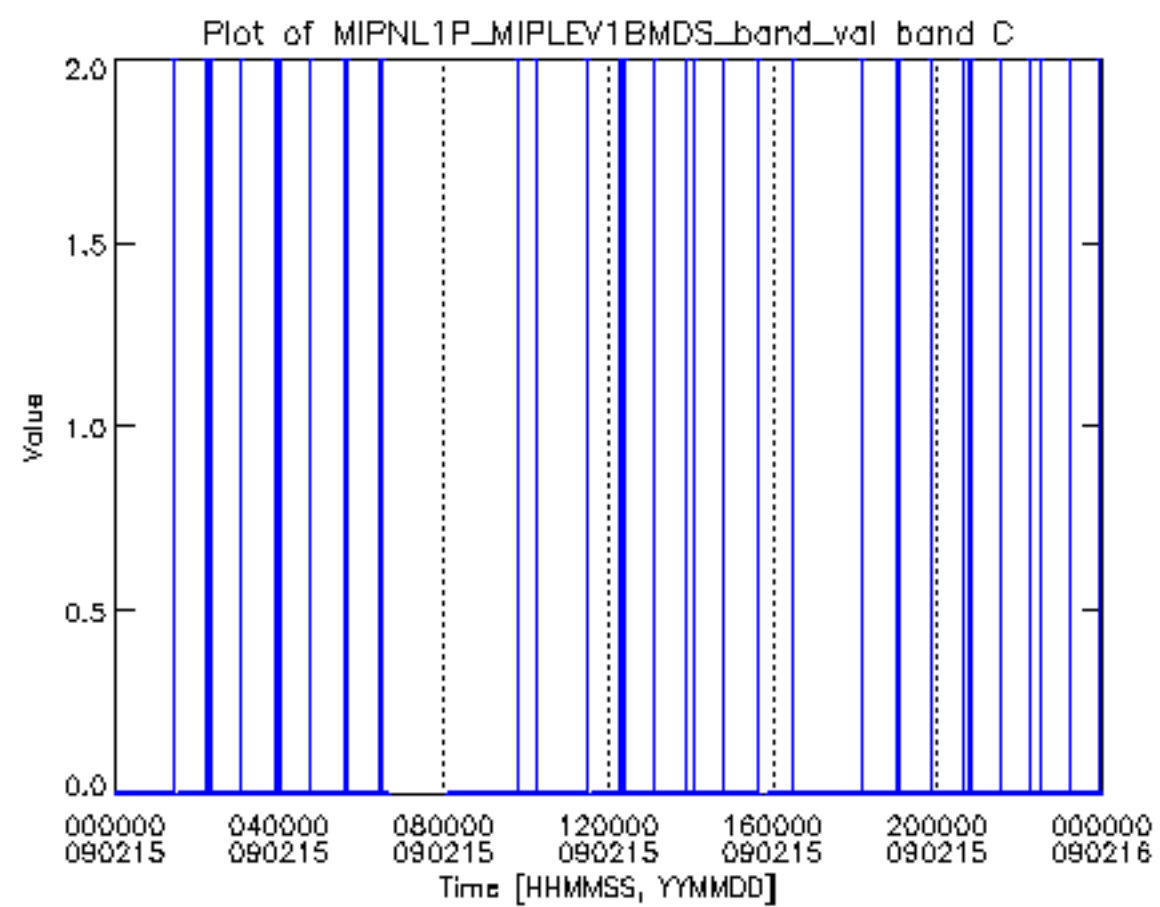
Geolocation plot of MIPNL1P_MIPLEV1BMDS_band_val band AB



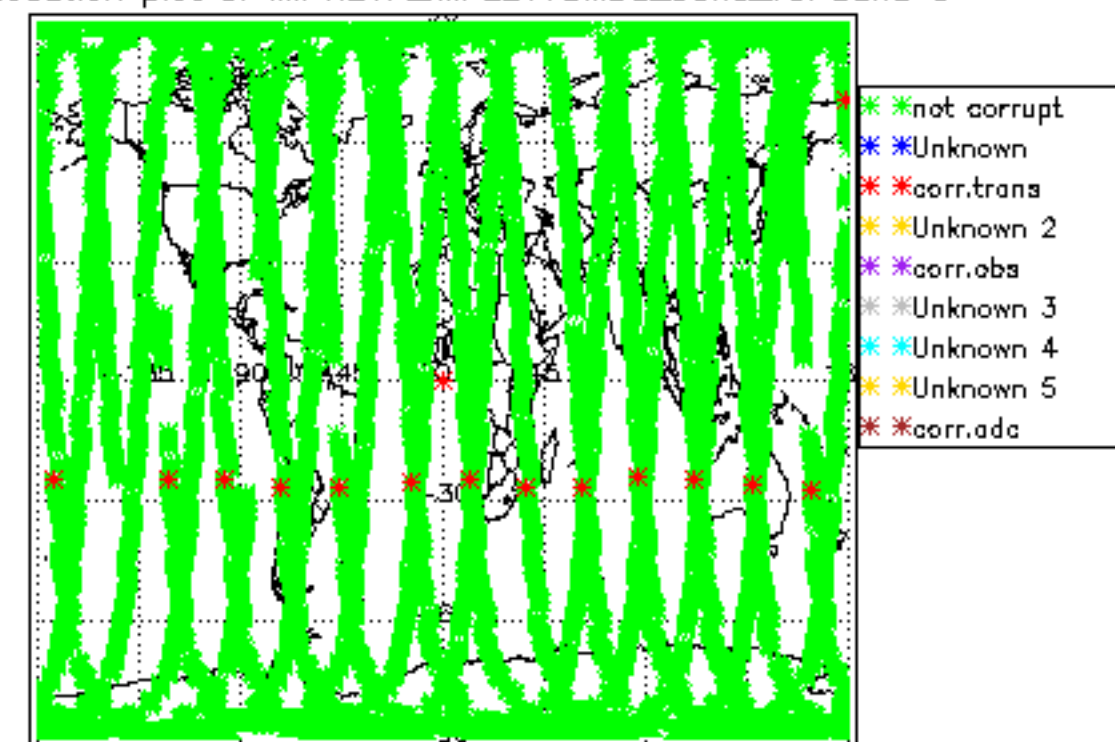


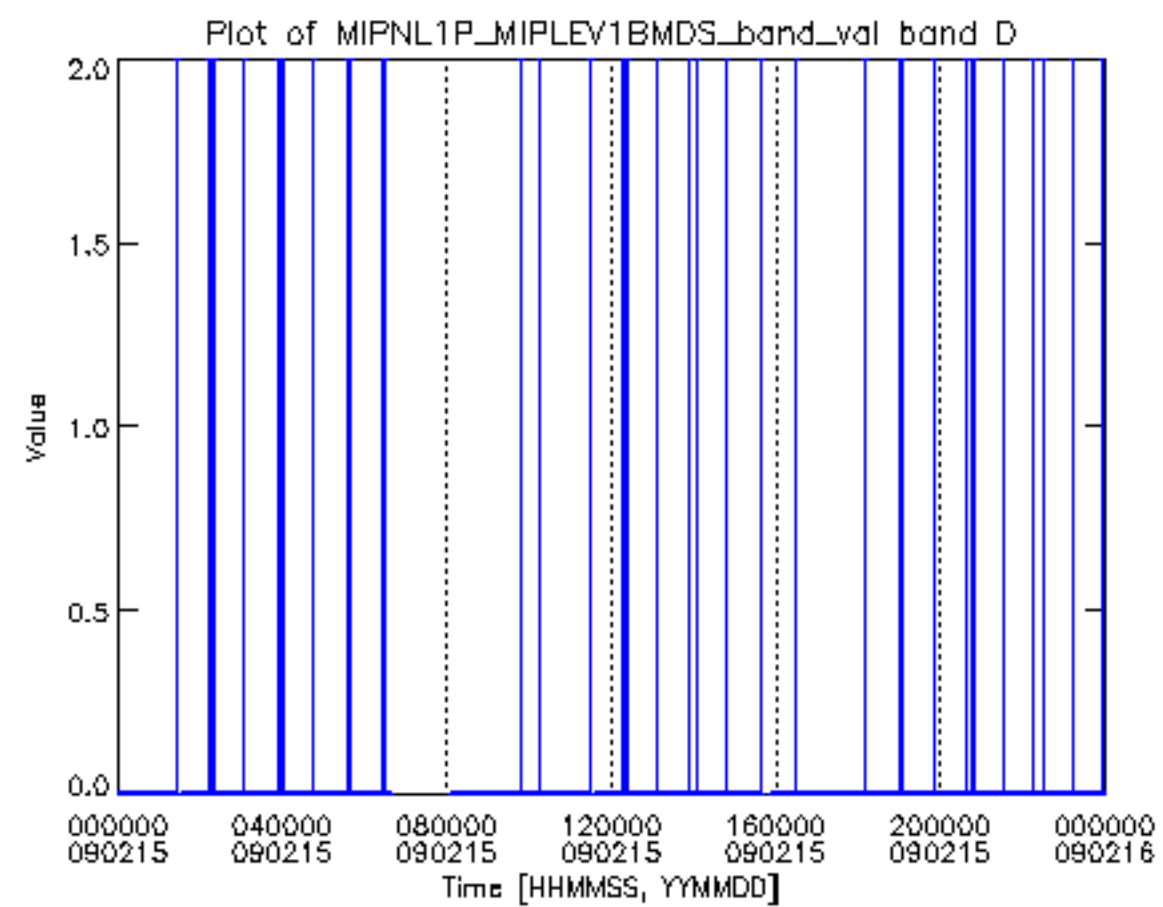
Geolocation plot of MIPNL1P_MIPLEV1BMDS_band_val band B



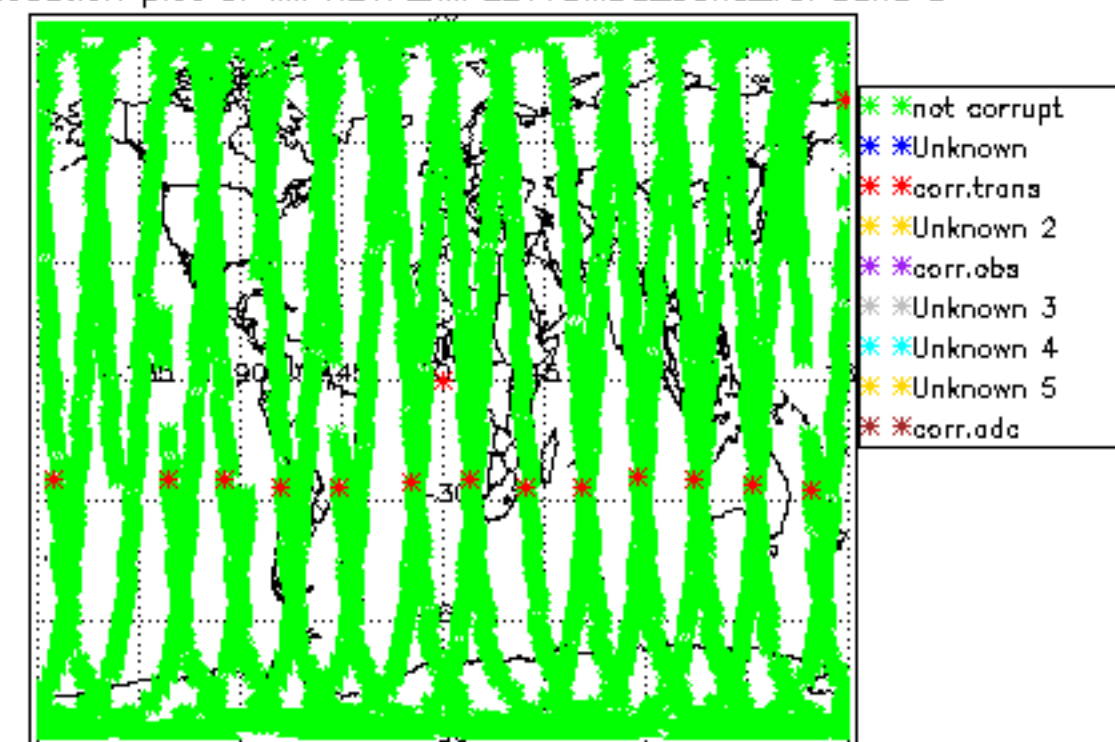


Geolocation plot of MIPNL1P_MIPLEV1BMDS_band_val band C

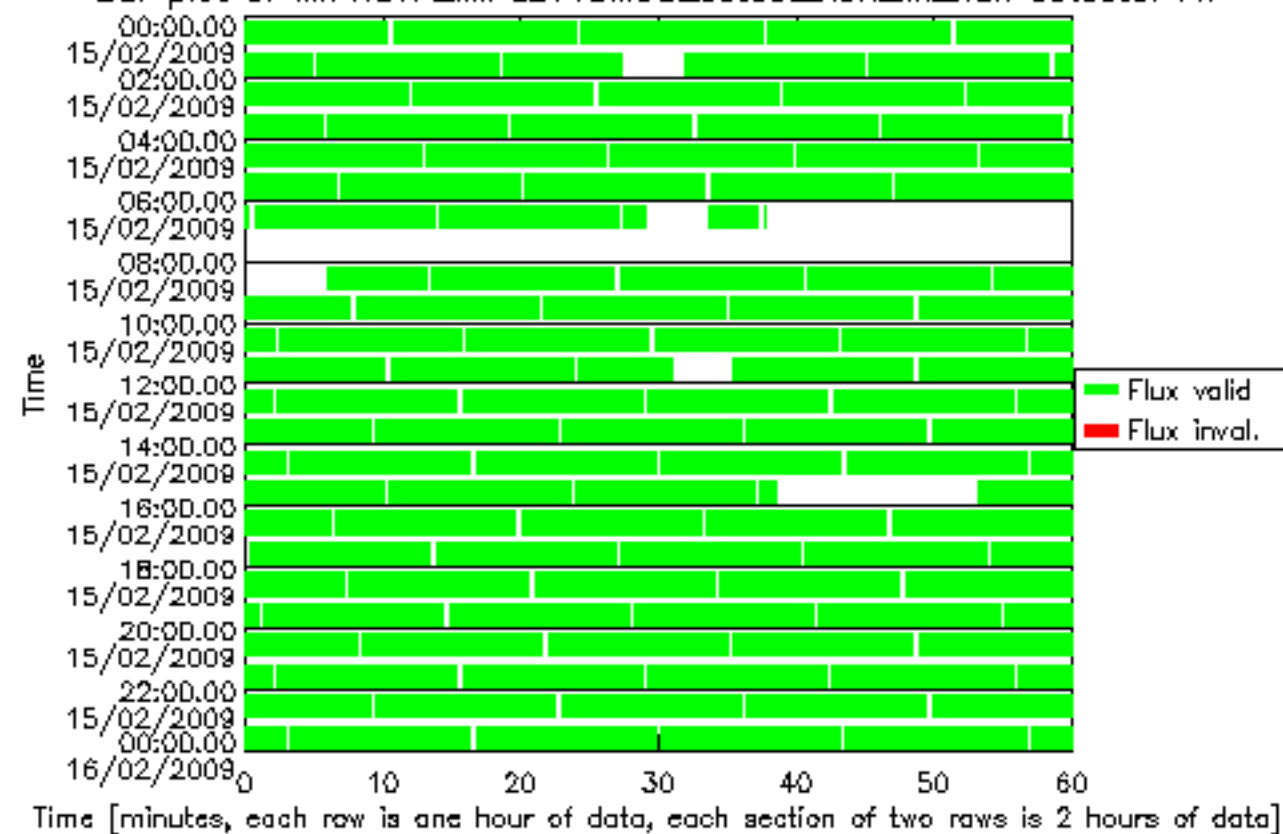




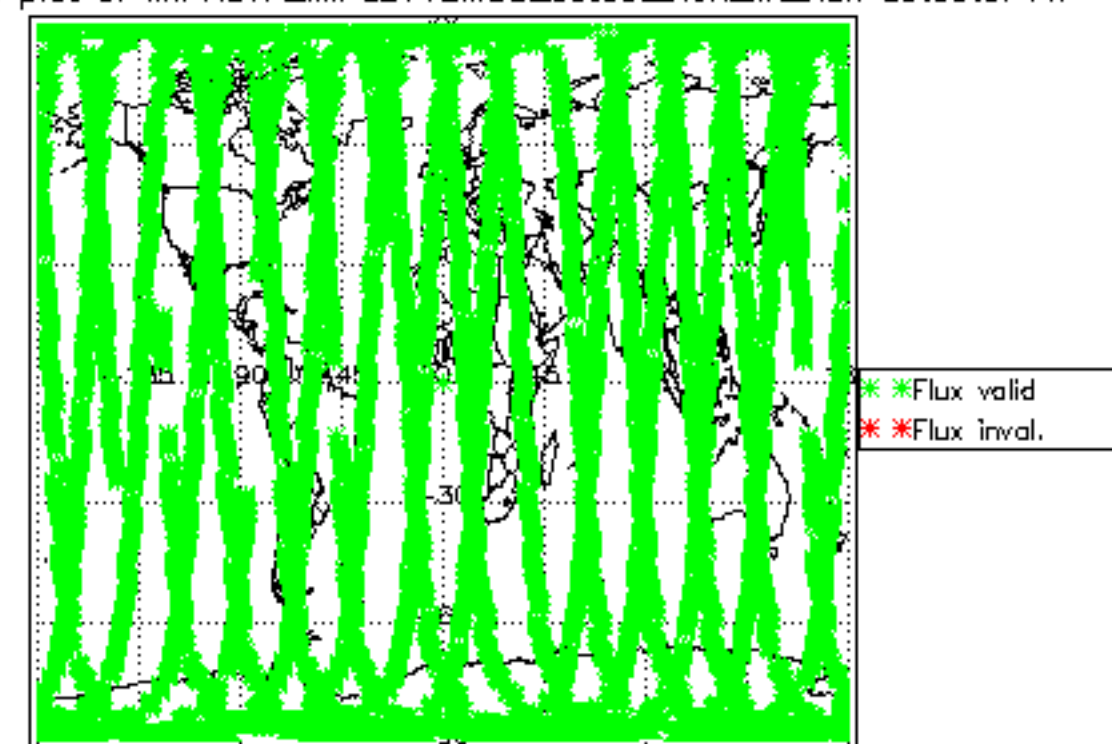
Geolocation plot of MIPNL1P_MIPLEV1BMDS_band_val band D



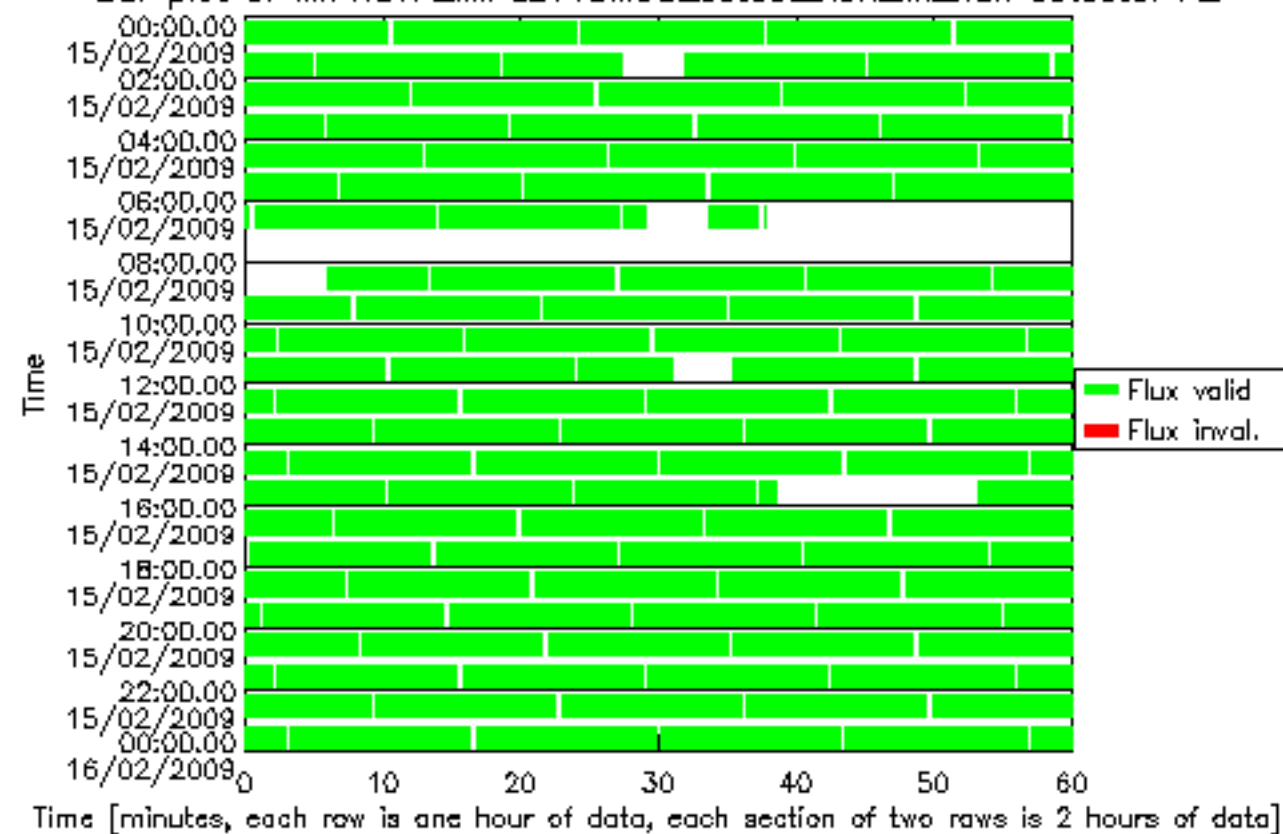
Bar plot of MIPNL1P_MIPLEV1BMDS_detect_non_lin_flux detector A1



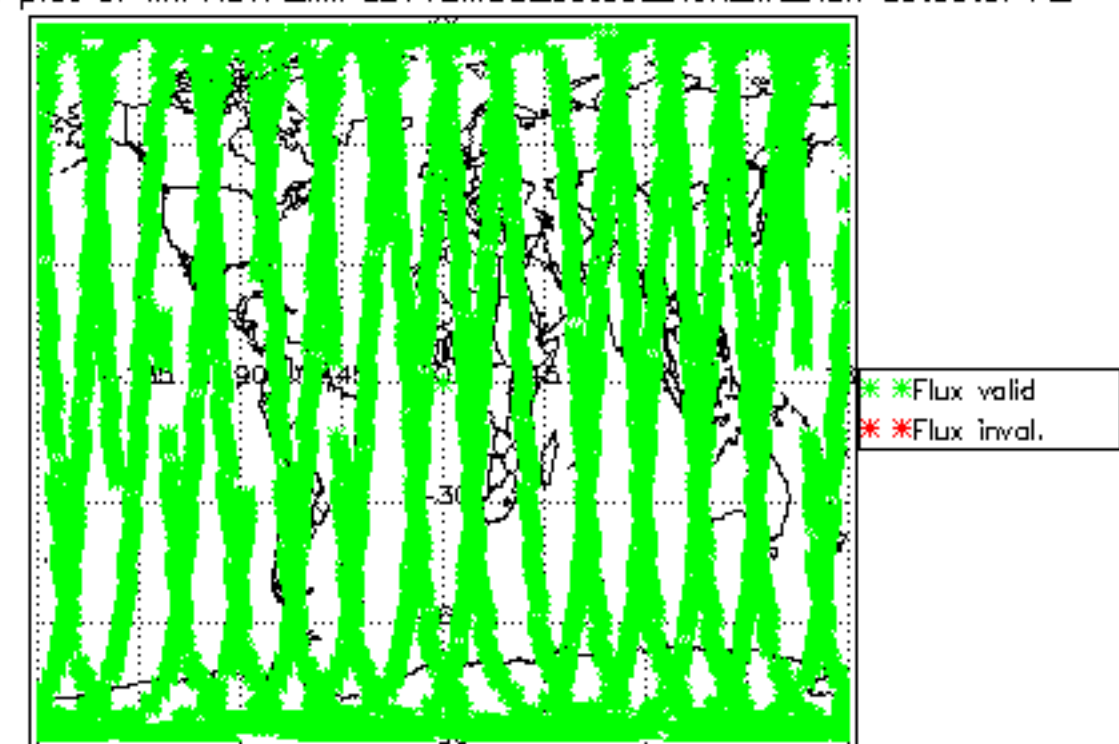
Geolocation plot of MIPNL1P_MIPLEV1BMDS_detect_non_lin_flux detector A1



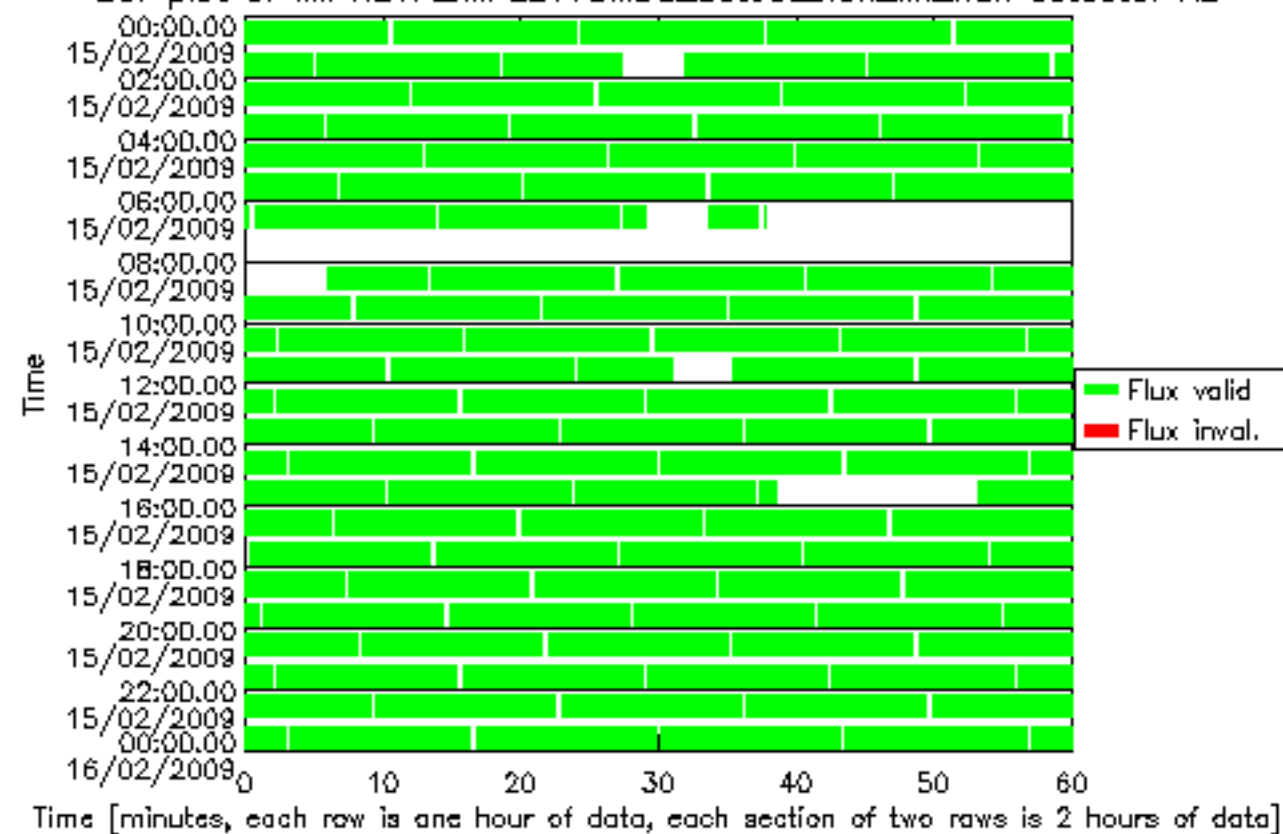
Bar plot of MIPNL1P_MIPLEV1BMDS_detect_non_lin_flux detector A2



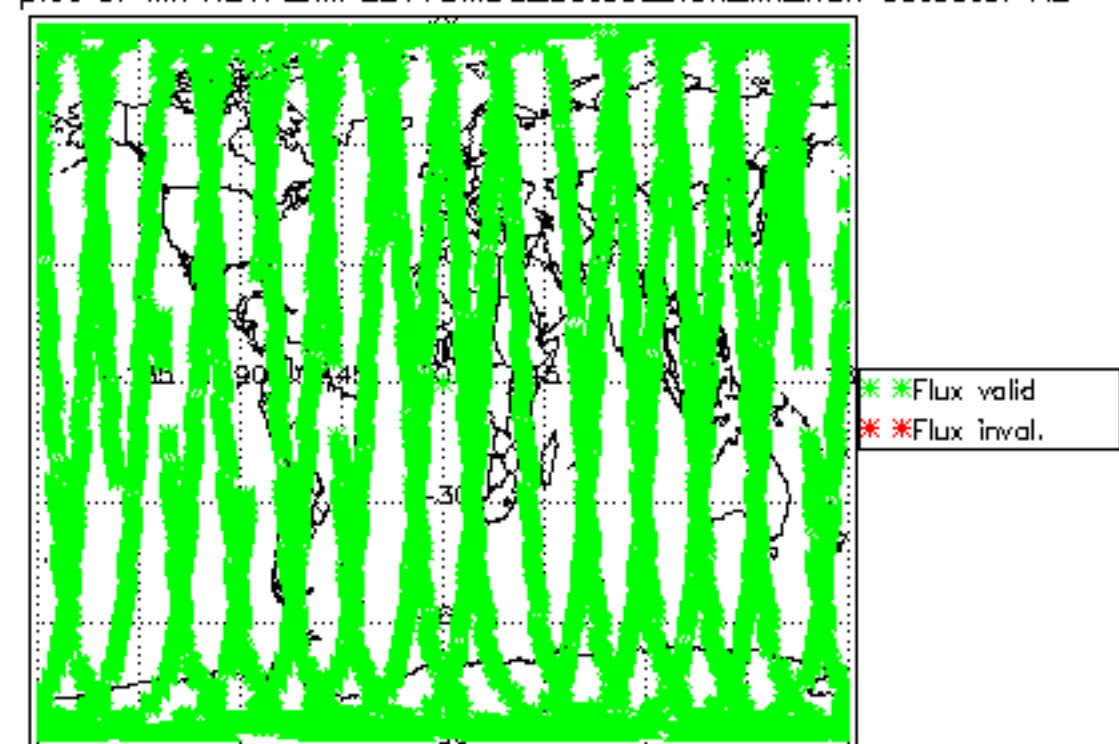
Geolocation plot of MIPNL1P_MIPLEV1BMDS_detect_non_lin_flux detector A2

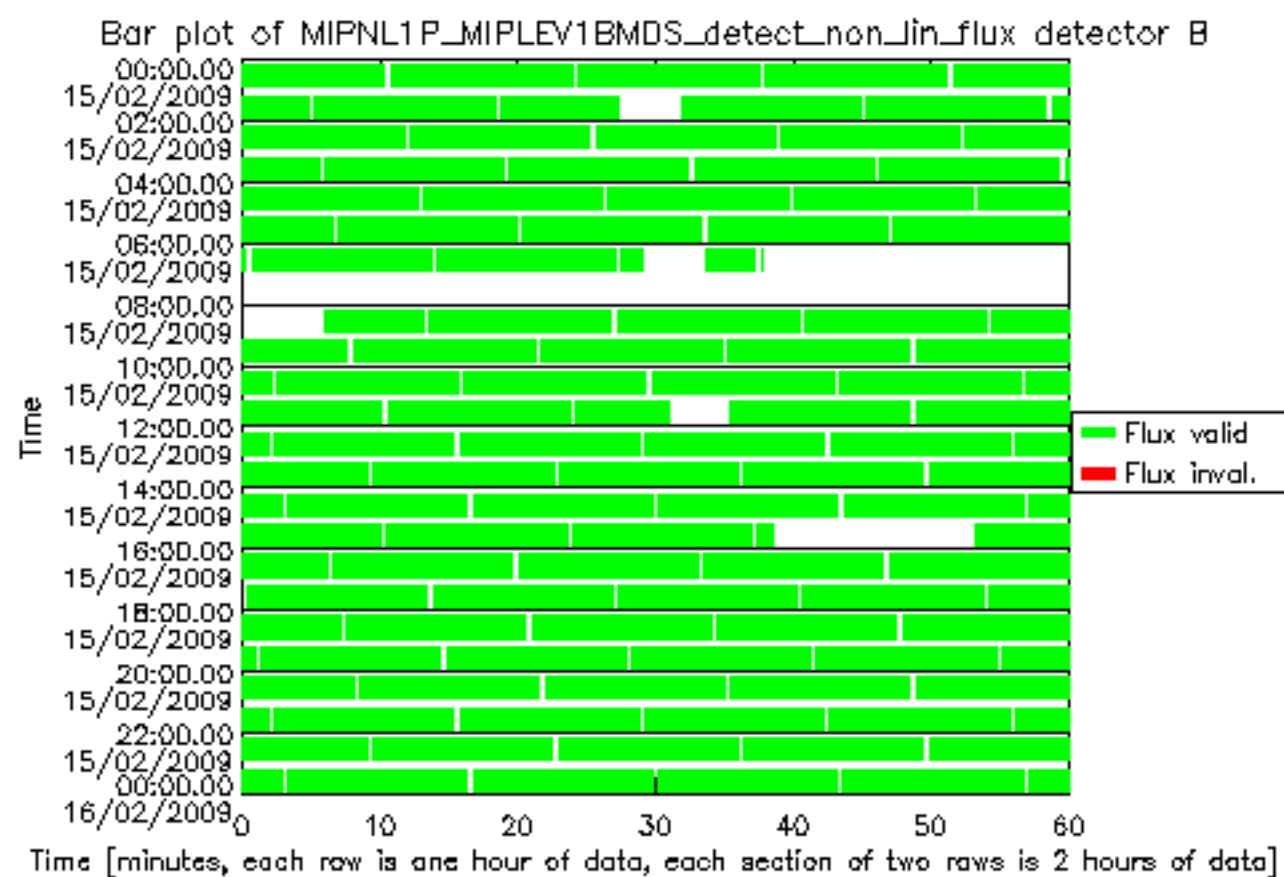


Bar plot of MIPNL1P_MIPLEV1BMDS_detect_non_lin_flux detector AB

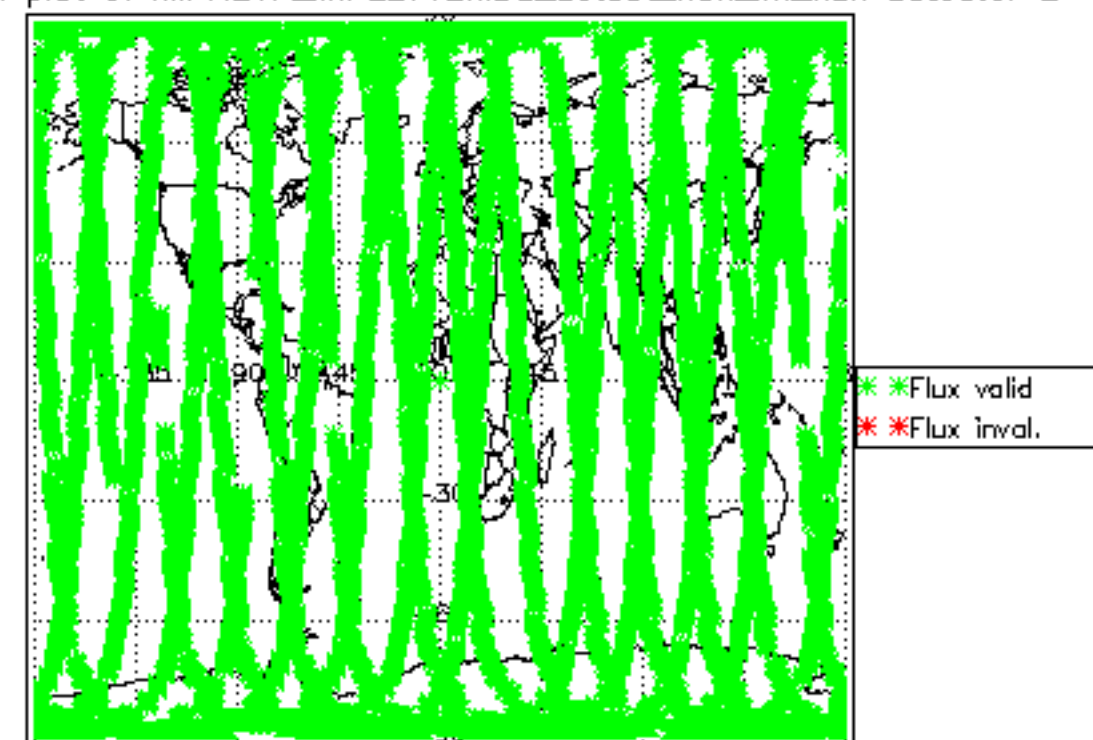


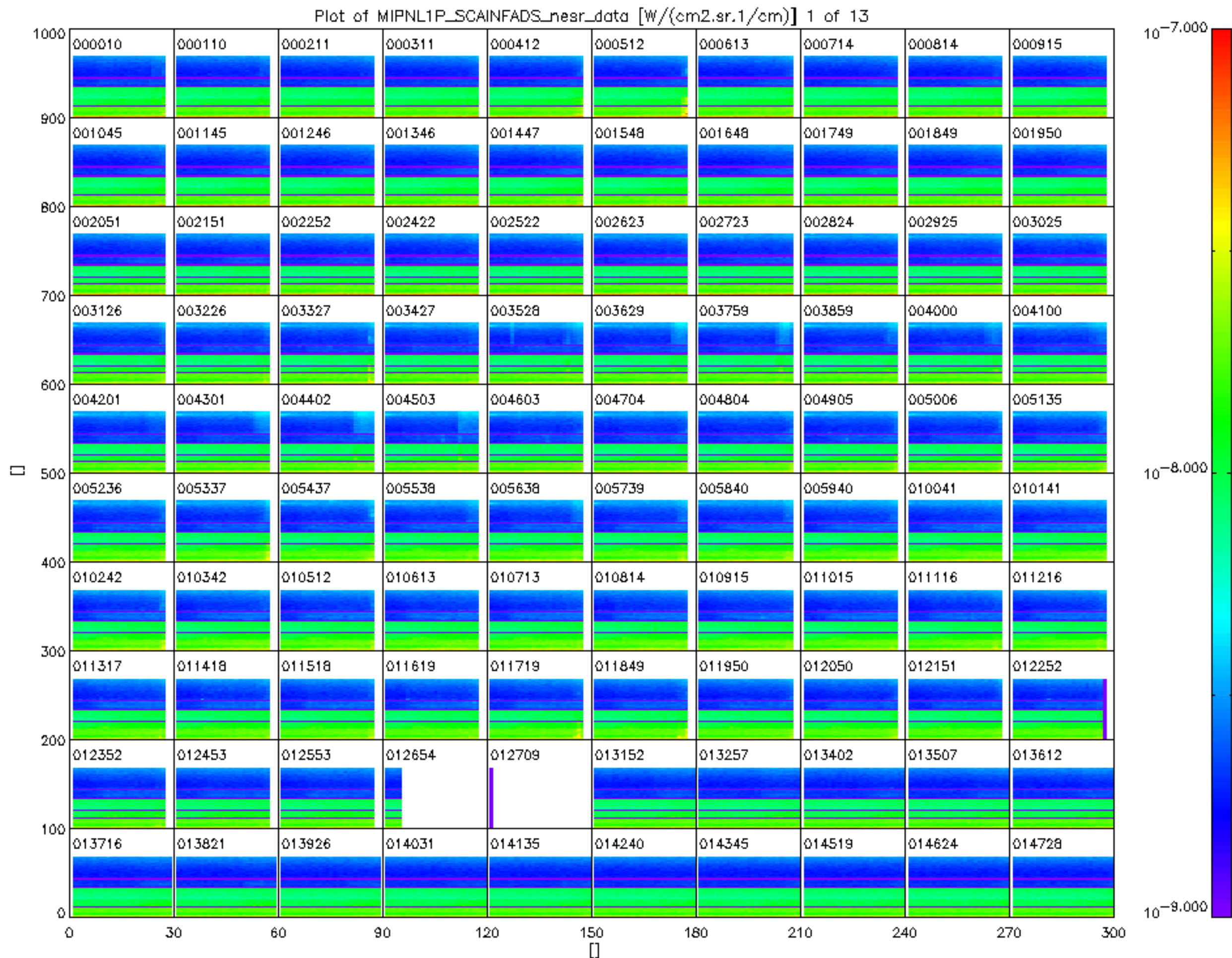
Geolocation plot of MIPNL1P_MIPLEV1BMDS_detect_non_lin_flux detector AB

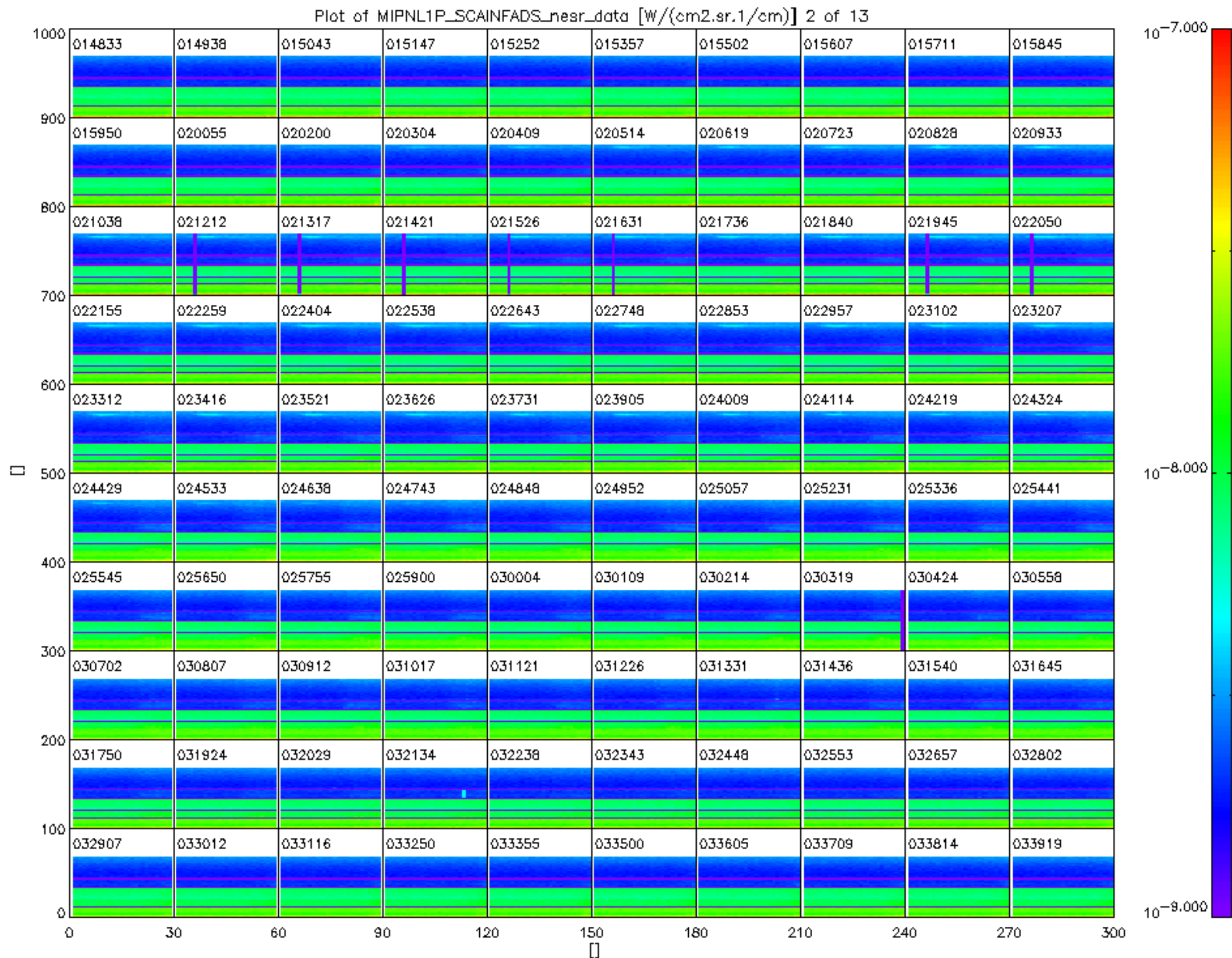


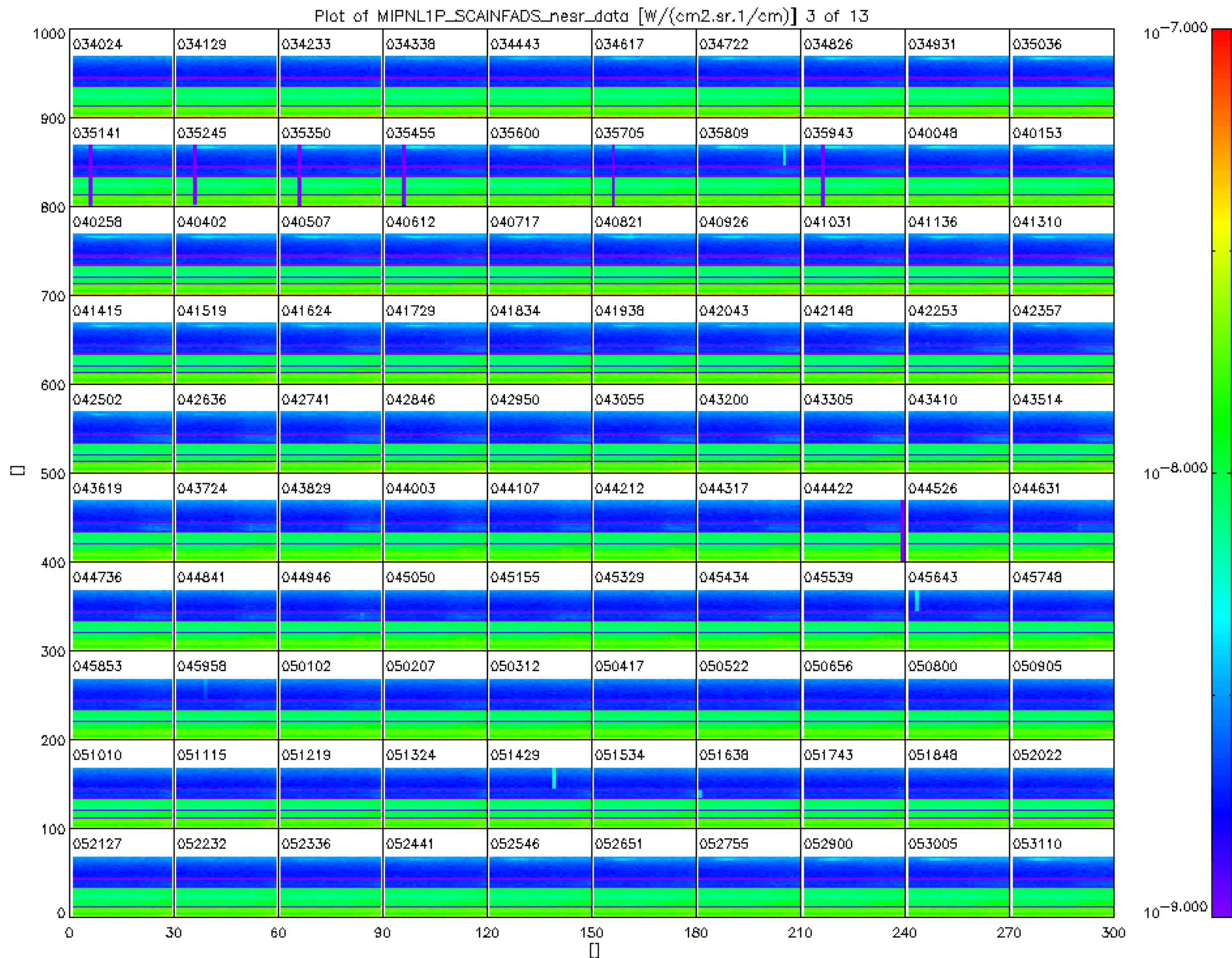


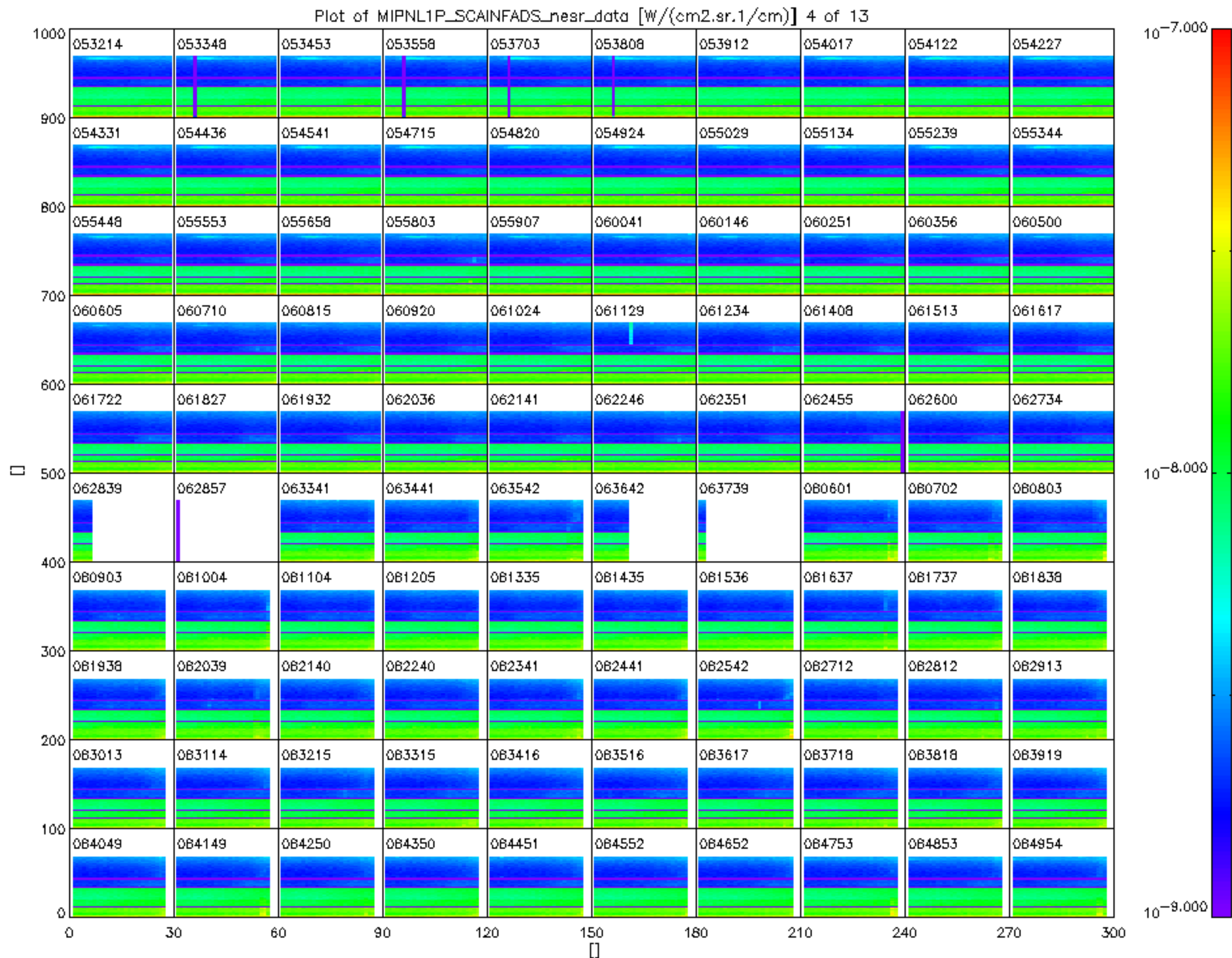
Geolocation plot of MIPNL1P_MIPLEV1BMDS_detect_non_lin_flux detector B

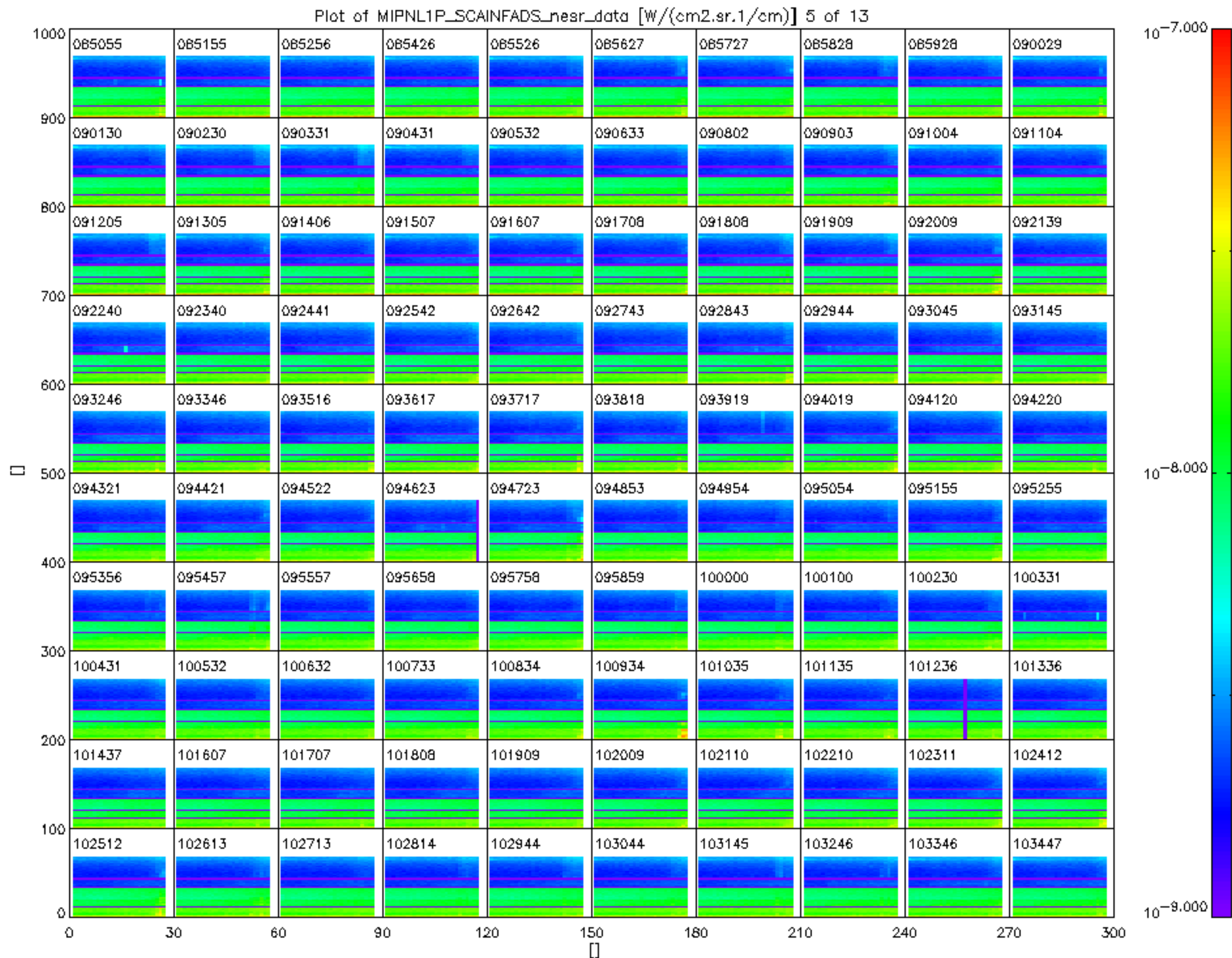


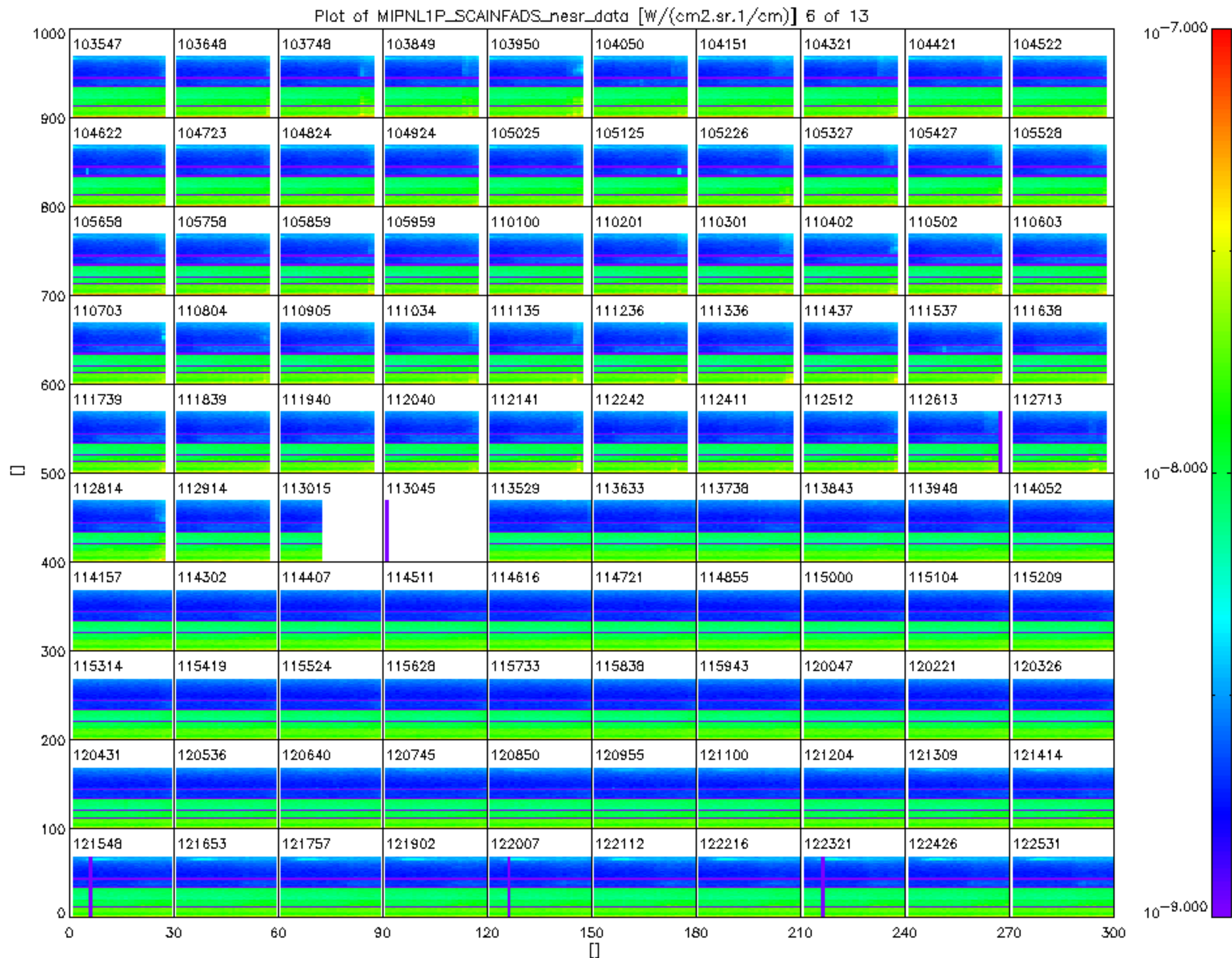


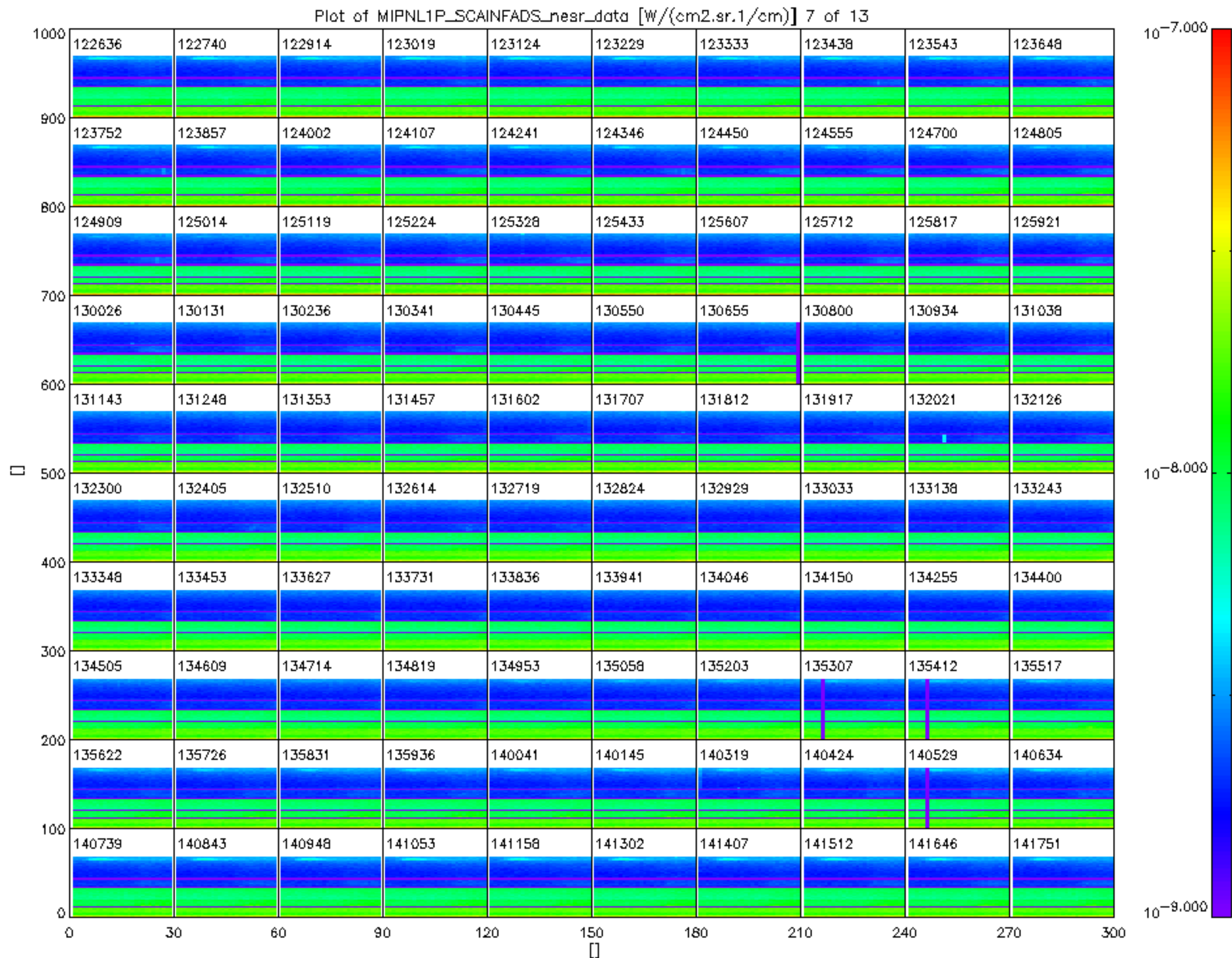


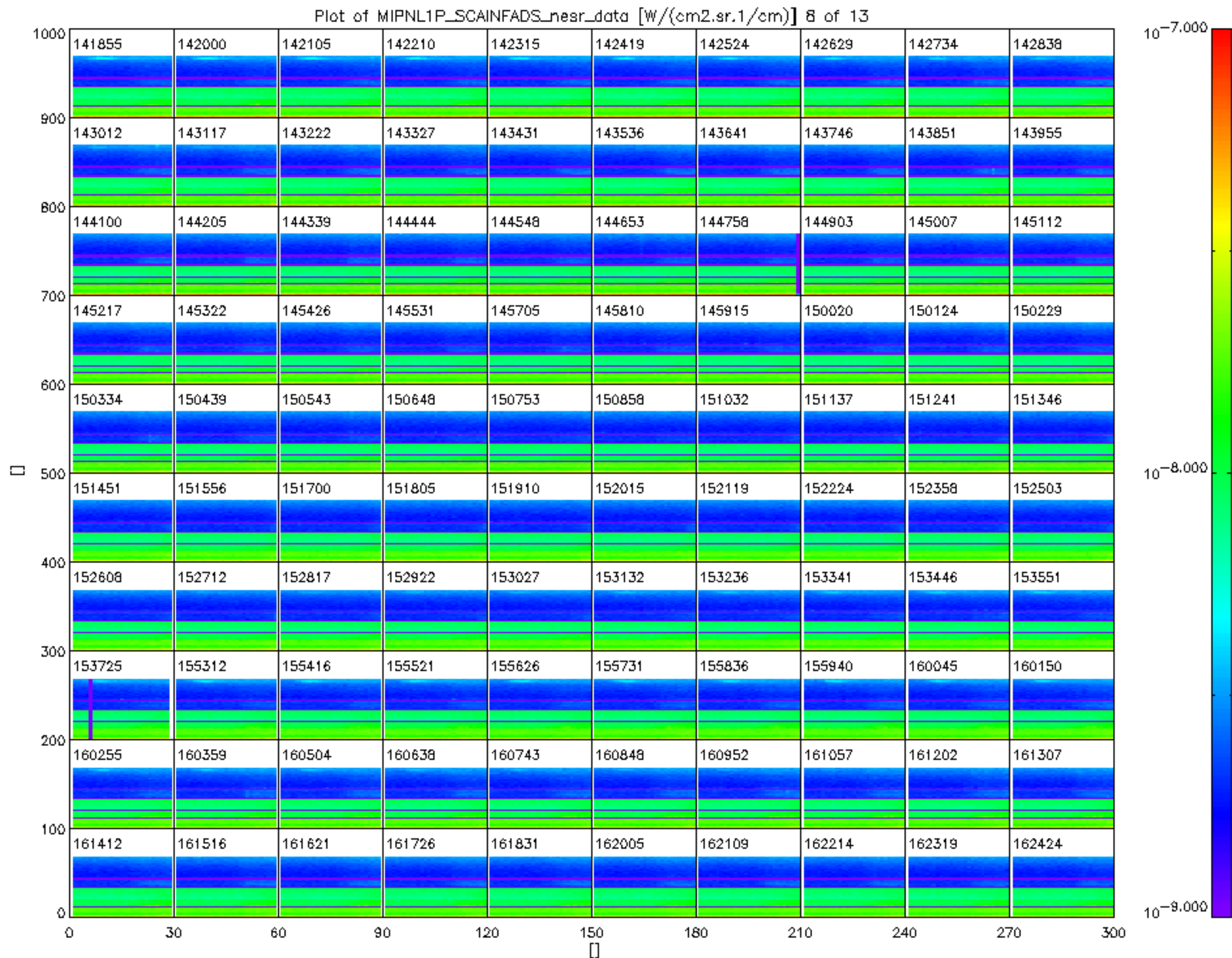


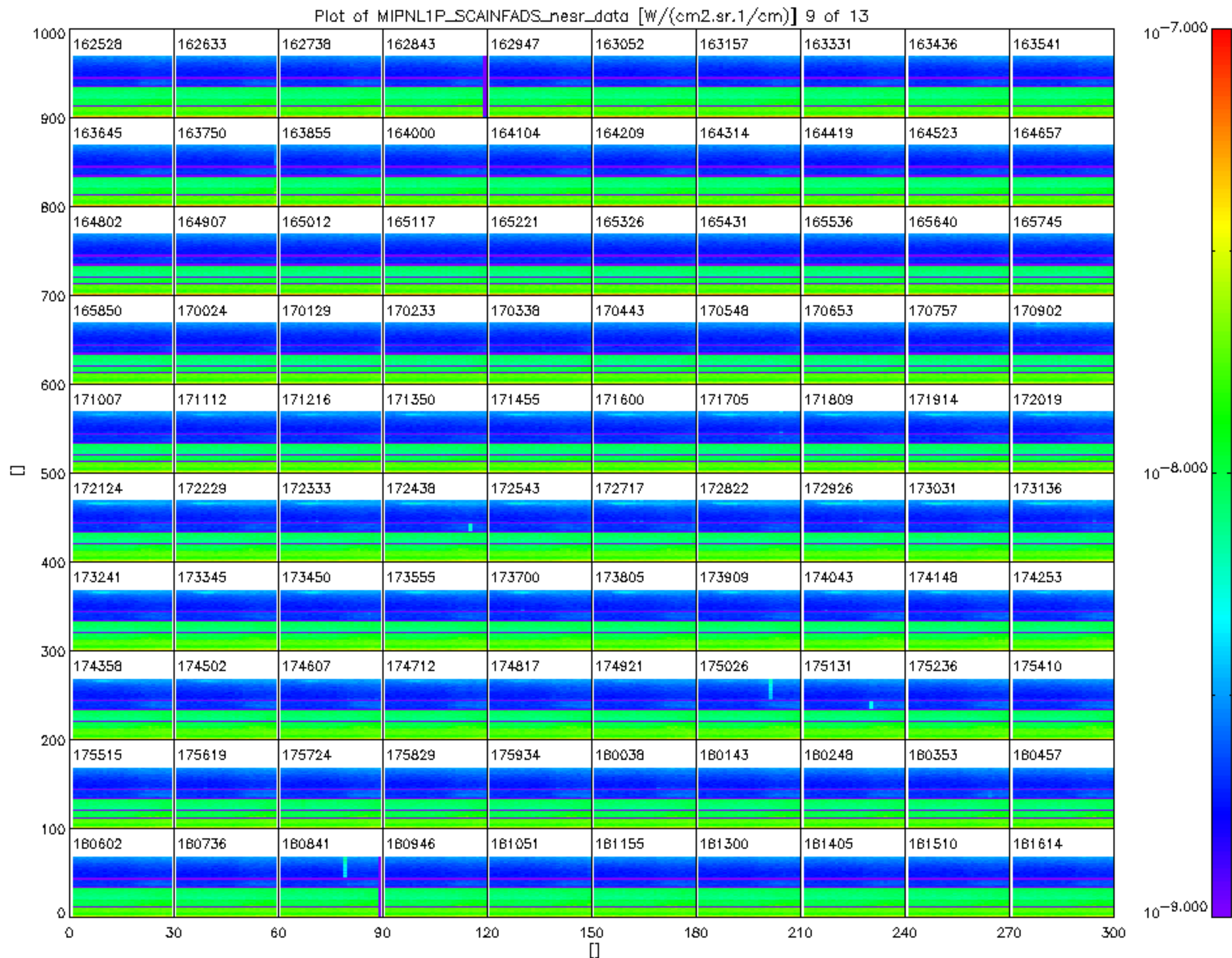


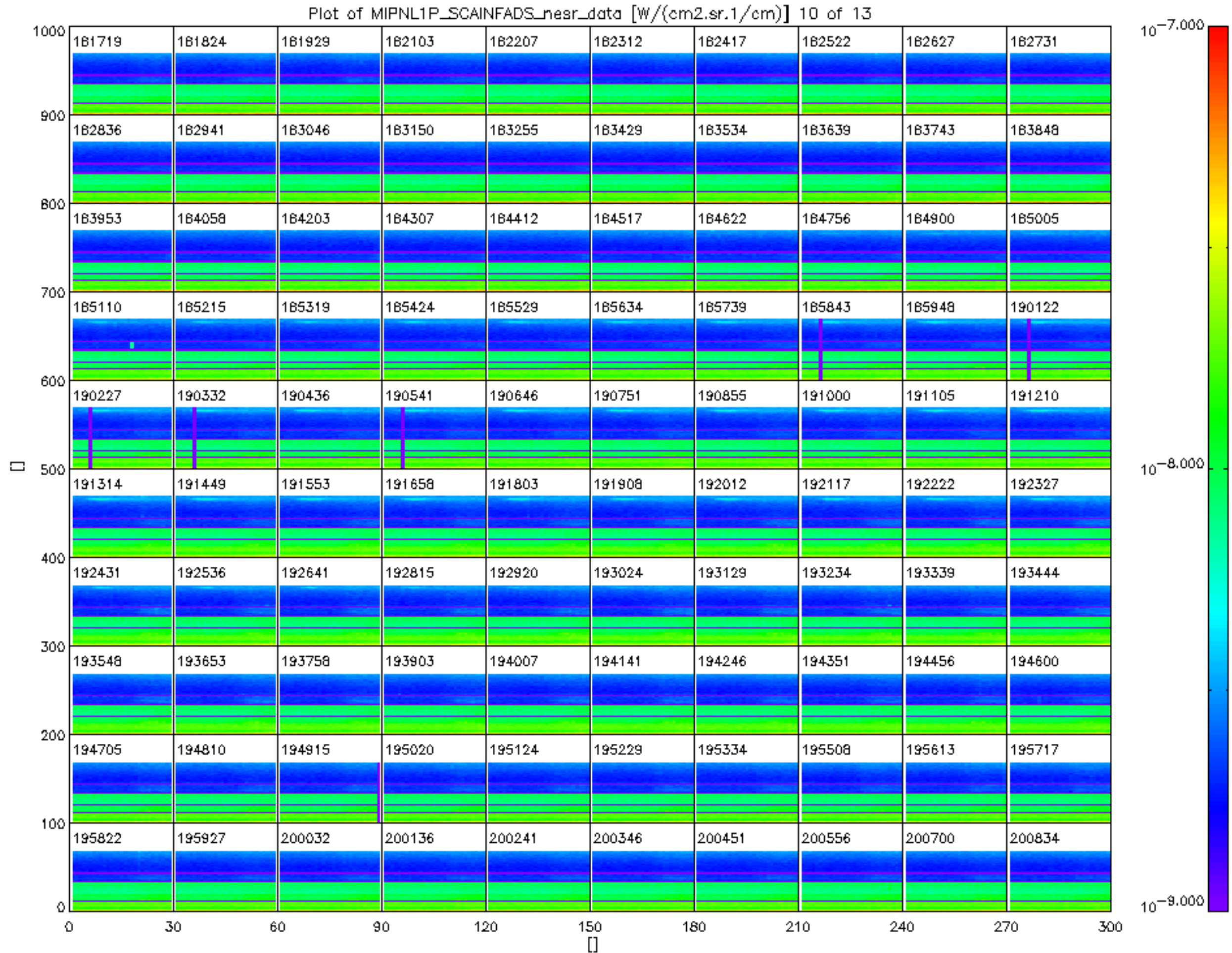


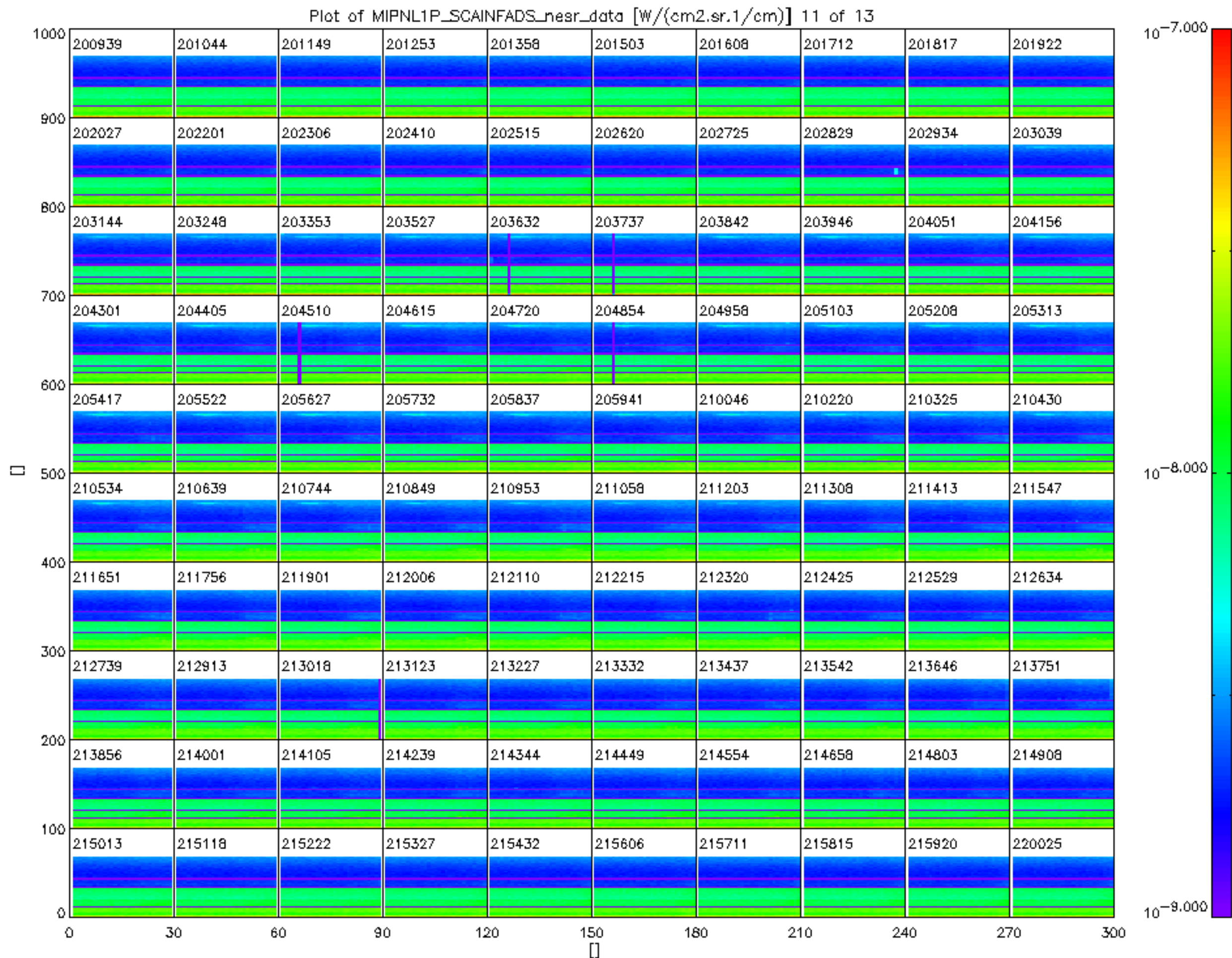


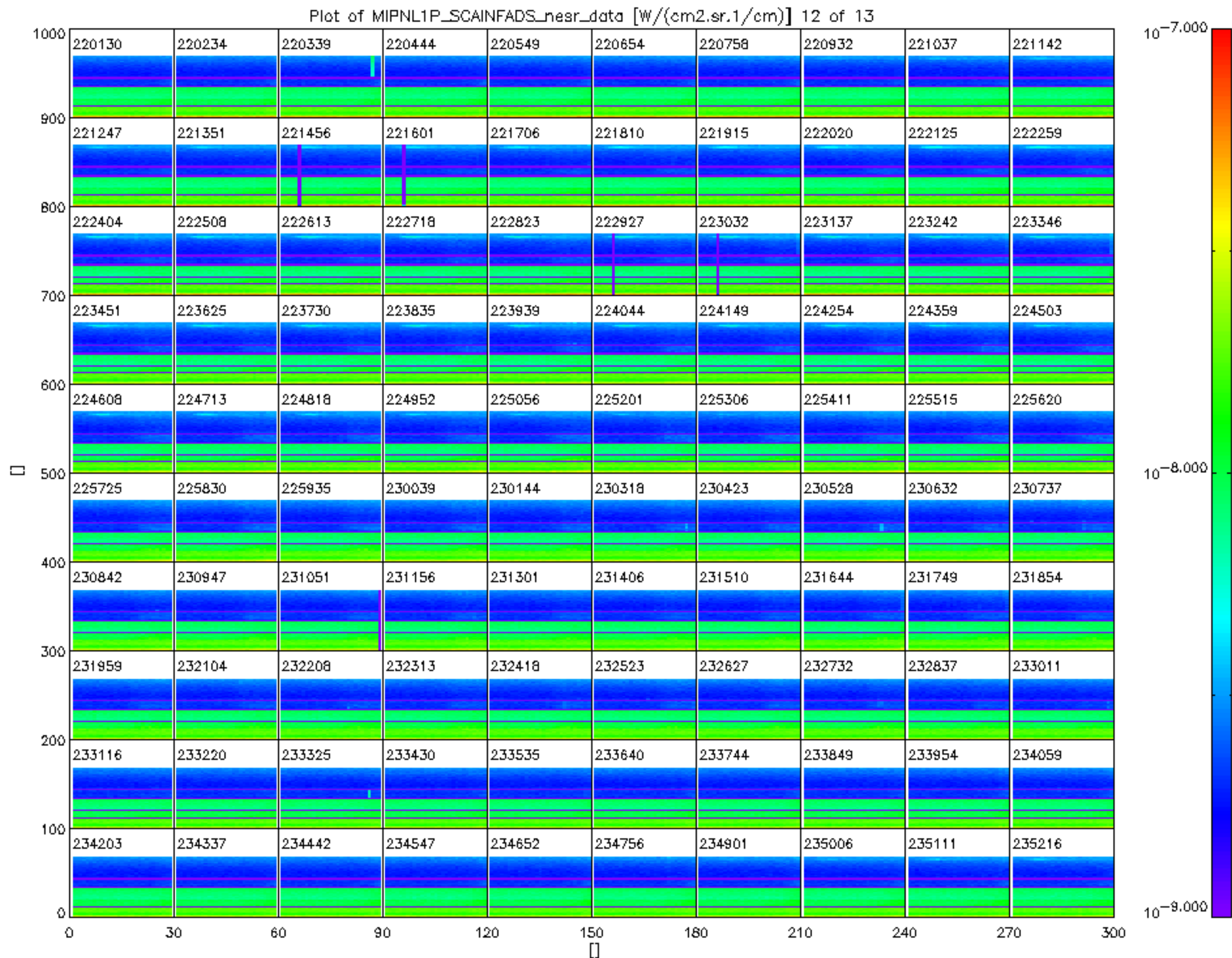


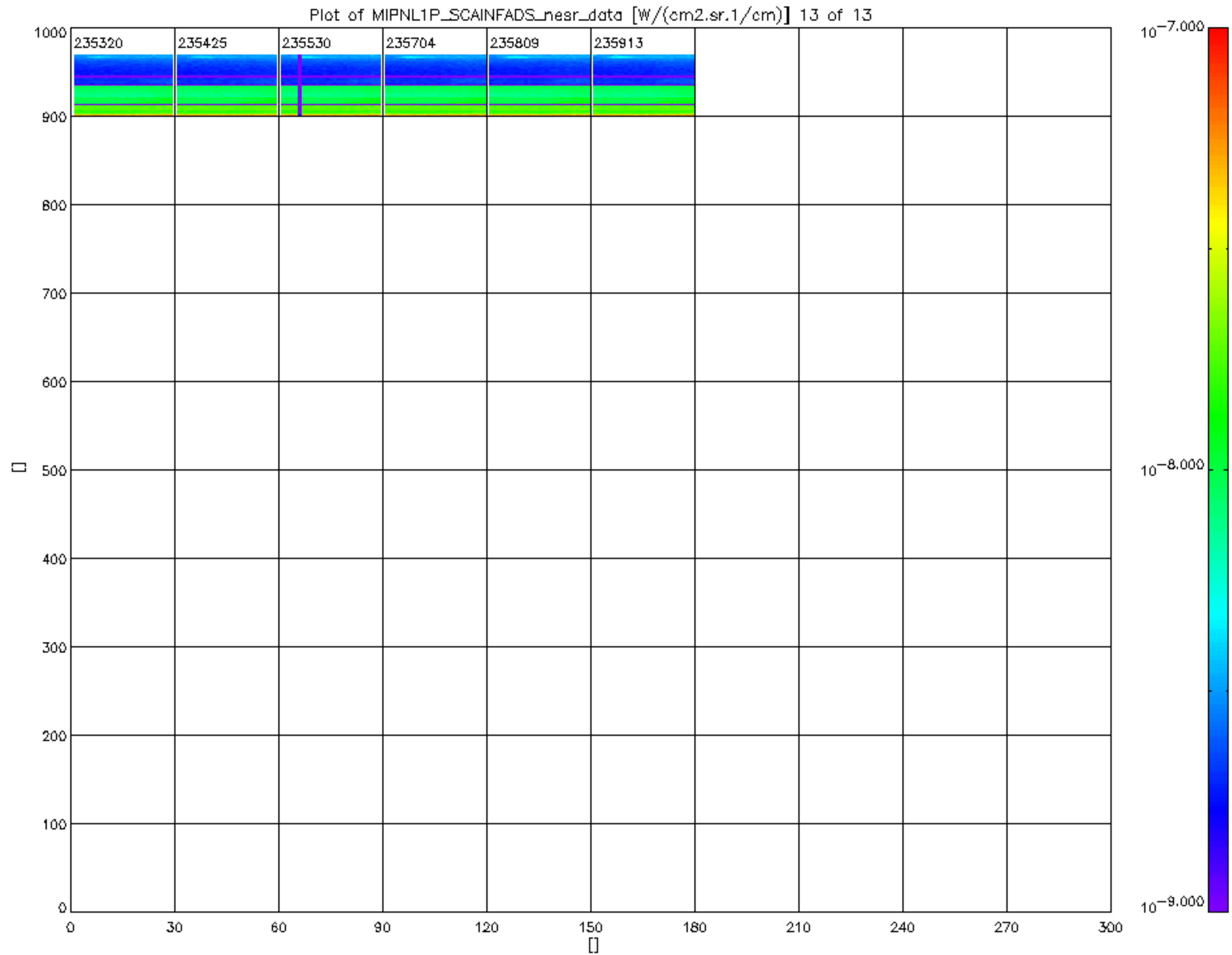




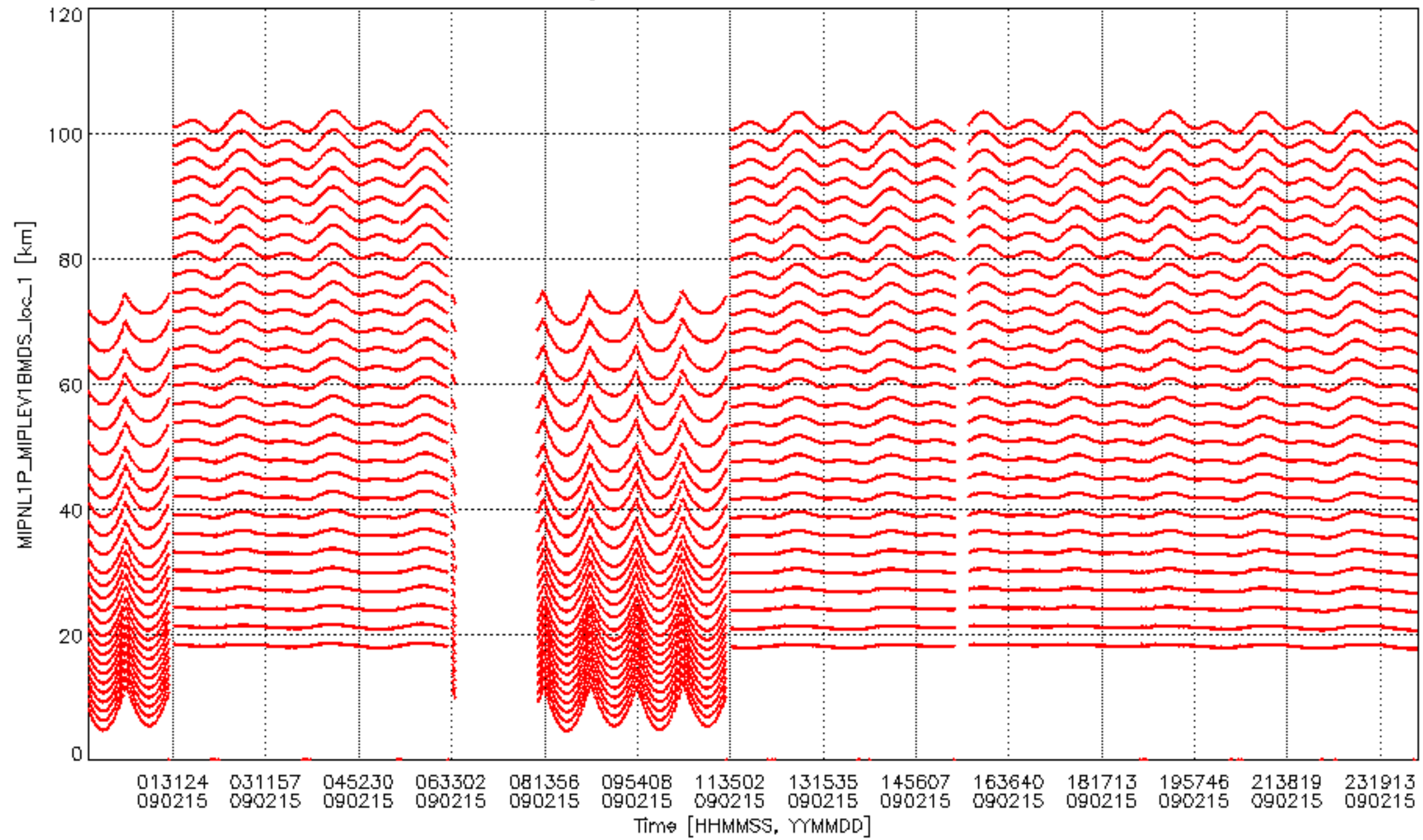








Plot of MIPNL1P_MIPLEV1BMDS_loc_1 against time.
The vertical grid lines indicate estimated anx events.



Plot of MIPNL1P_MIPLEV1BMD5_loc_1 against relative time within orbit.
The colours indicate distinct orbits (see legend for anx).

