

1. SCIAMACHY Level 1B source packet monitoring report

[1.1. General Info](#)

[1.2 Source packet monitoring](#)

1.1 General Info

This report contains results of the analysis on source packets 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	1.1 (07-01-2010)
Time of report generation	07MAR2011 06:55:34
Data source version	SCIA/7.04-U
Processing scope for products	24FEB2011 00:00:00 to 25FEB2011 00:00:00
Start time of first product within scope	23FEB2011 22:50:48
Stop time of last product within scope	25FEB2011 01:04:25
Total number of level 1 products	16
Number of level 1 products with errors	0
SCIAL1C executable used in processing	scial1c-2.1.73-i686-pc-linux-gnu-gcc-3.3.6
SCIAL1C parameters used in processing	-allcal -type all -cat 1,2,8,10,11,16,19,23 -nadircluster 8,9,15,24,55 -limbcluster 9,15

1.1.2 Source packet summary

The table below shows which source packets have been included into the report.

Item	Mode	State	Cluster	Height	First start time	Last start time
0	NADIR	07	08	N/A	24FEB2011 01:03:04.461	24FEB2011 22:55:19.940
1	NADIR	07	09	N/A	24FEB2011 01:03:04.461	24FEB2011 22:55:19.940
2	NADIR	07	15	N/A	24FEB2011 01:03:04.461	24FEB2011 22:55:19.940
3	NADIR	07	24	N/A	24FEB2011 01:03:04.461	24FEB2011 22:55:19.940
4	NADIR	07	55	N/A	24FEB2011 01:03:04.461	24FEB2011 22:55:19.940
5	LIMB	32	09	~19 km	24FEB2011 00:49:53.820	24FEB2011 23:00:33.983
6	LIMB	32	09	~22 km	24FEB2011 00:49:53.820	24FEB2011 23:00:33.983
7	LIMB	32	09	~25 km	24FEB2011 00:49:53.820	24FEB2011 23:00:33.983
8	LIMB	32	15	~22 km	24FEB2011 00:49:53.820	24FEB2011 23:00:33.983
9	LIMB	32	15	~25 km	24FEB2011 00:49:53.820	24FEB2011 23:00:33.983
10	LIMB	32	15	~35 km	24FEB2011 00:49:53.820	24FEB2011 23:00:33.983

1.1.3 Summary per product

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

Products are linked to a corresponding server directory for view/download. Note: Link access may be restricted by security settings of your internet browser or firewall.

#	Product name	Start time	Stop time	ProdErr	#nadir	#limb	#occ	#mon	#noprocc	#cmpl_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110223_223739_000060083099_00418_46984_4872.N1	23FEB2011 22:50:48	24FEB2011 00:01:17	0	36	30	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110224_001751_000060113099_00419_46985_4875.N1	24FEB2011 00:31:01	24FEB2011 01:41:16	0	35	31	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110224_015806_000060083099_00420_46986_4878.N1	24FEB2011 02:11:15	24FEB2011 03:21:44	0	36	30	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110224_033818_000060113099_00421_46987_4879.N1	24FEB2011 03:51:28	24FEB2011 05:01:43	0	35	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110224_051833_000060083099_00422_46988_4881.N1	24FEB2011 05:31:42	24FEB2011 06:42:11	0	36	30	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110224_065845_000054323099_00423_46989_4884.N1	24FEB2011 07:11:56	24FEB2011 08:22:10	0	35	31	0	0	2	0	0	

6	SCI_NLC_1CUDPA20110224_085209_000052193099_00424_46990_4886.N1	24FEB2011 08:52:09	24FEB2011 10:02:38	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110224_101912_000060113099_00425_46991_4887.N1	24FEB2011 10:32:23	24FEB2011 11:42:37	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110224_115927_000060083099_00426_46992_4891.N1	24FEB2011 12:12:36	24FEB2011 13:23:05	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110224_133939_000060113099_00427_46993_4894.N1	24FEB2011 13:52:50	24FEB2011 15:03:04	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110224_151954_000060083099_00428_46994_4896.N1	24FEB2011 15:33:03	24FEB2011 16:43:32	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110224_170006_000060113099_00429_46995_4898.N1	24FEB2011 17:13:17	24FEB2011 18:23:04	0	34	29	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110224_184021_000060083099_00430_46996_4903.N1	24FEB2011 18:53:30	24FEB2011 20:04:20	0	36	30	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110224_202033_000060113099_00431_46997_4917.N1	24FEB2011 20:33:44	24FEB2011 21:43:58	0	35	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110224_220048_000060083100_00001_46998_4907.N1	24FEB2011 22:13:57	24FEB2011 23:24:26	0	36	30	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110224_234100_000060113100_00002_46999_4908.N1	24FEB2011 23:54:11	25FEB2011 01:04:25	0	35	31	0	0	1	0	0	

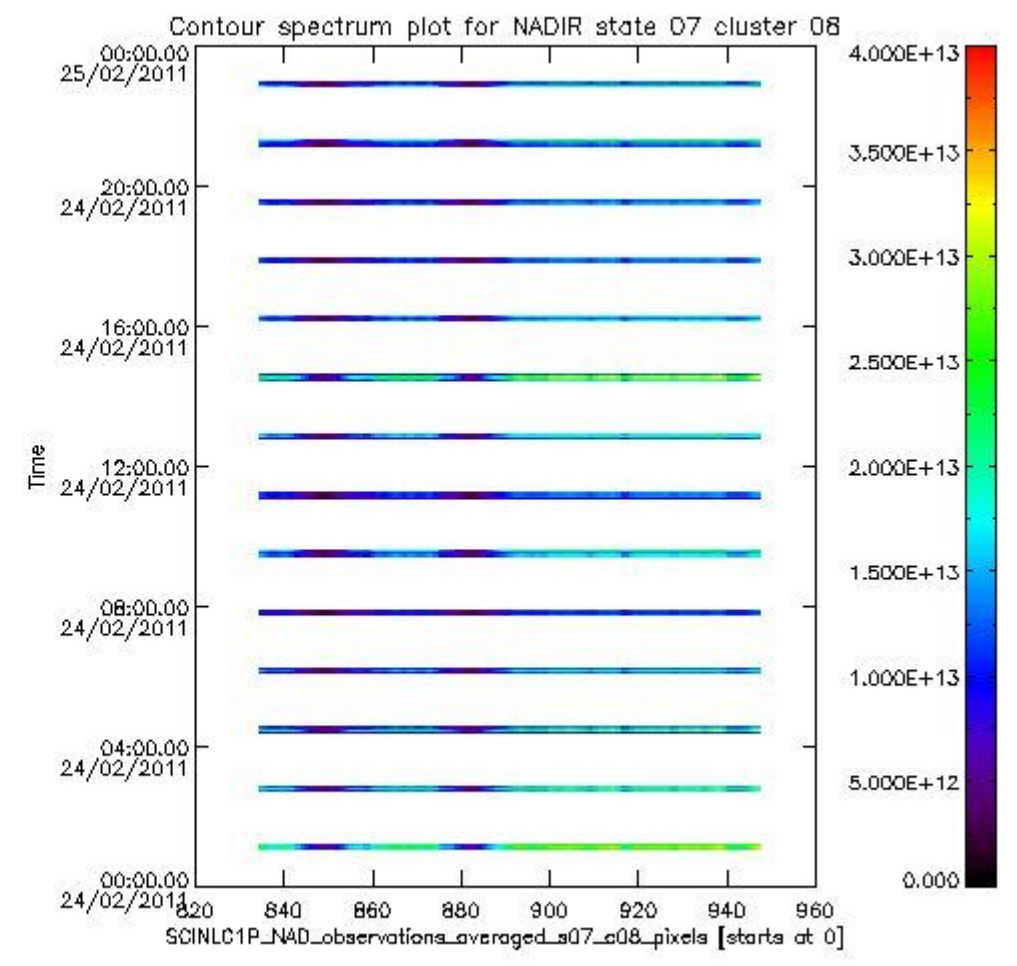
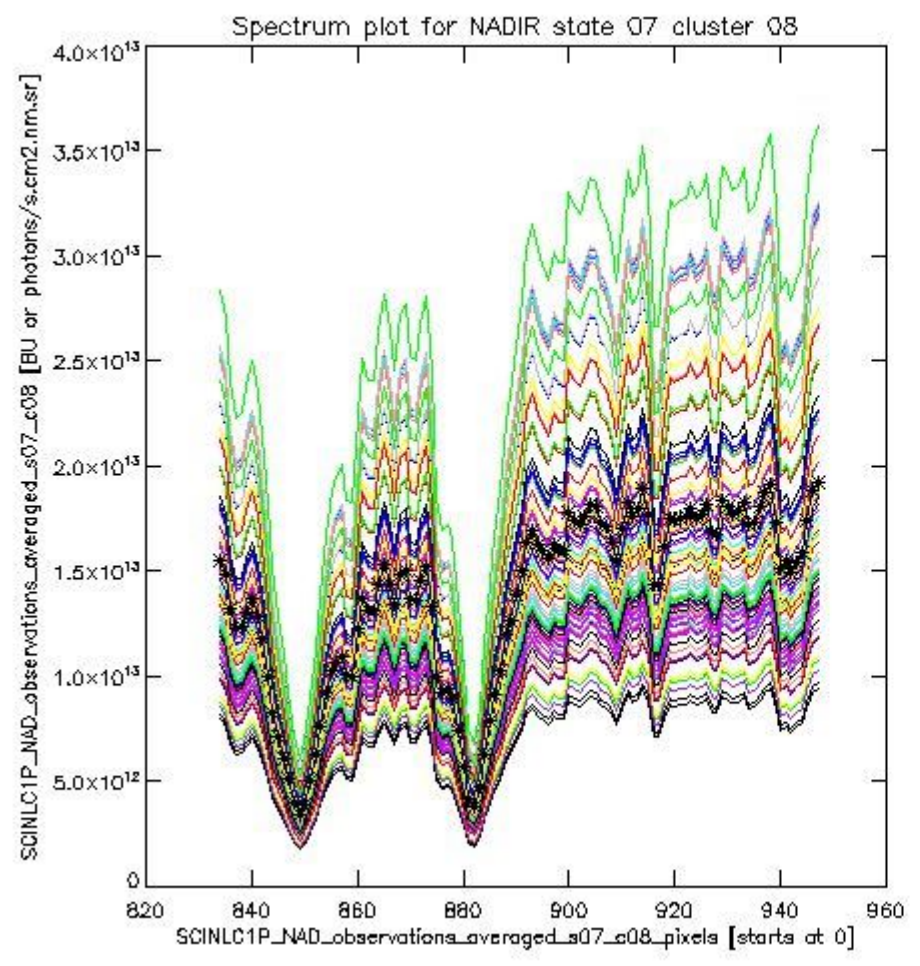
1.2 Source packet monitoring

This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

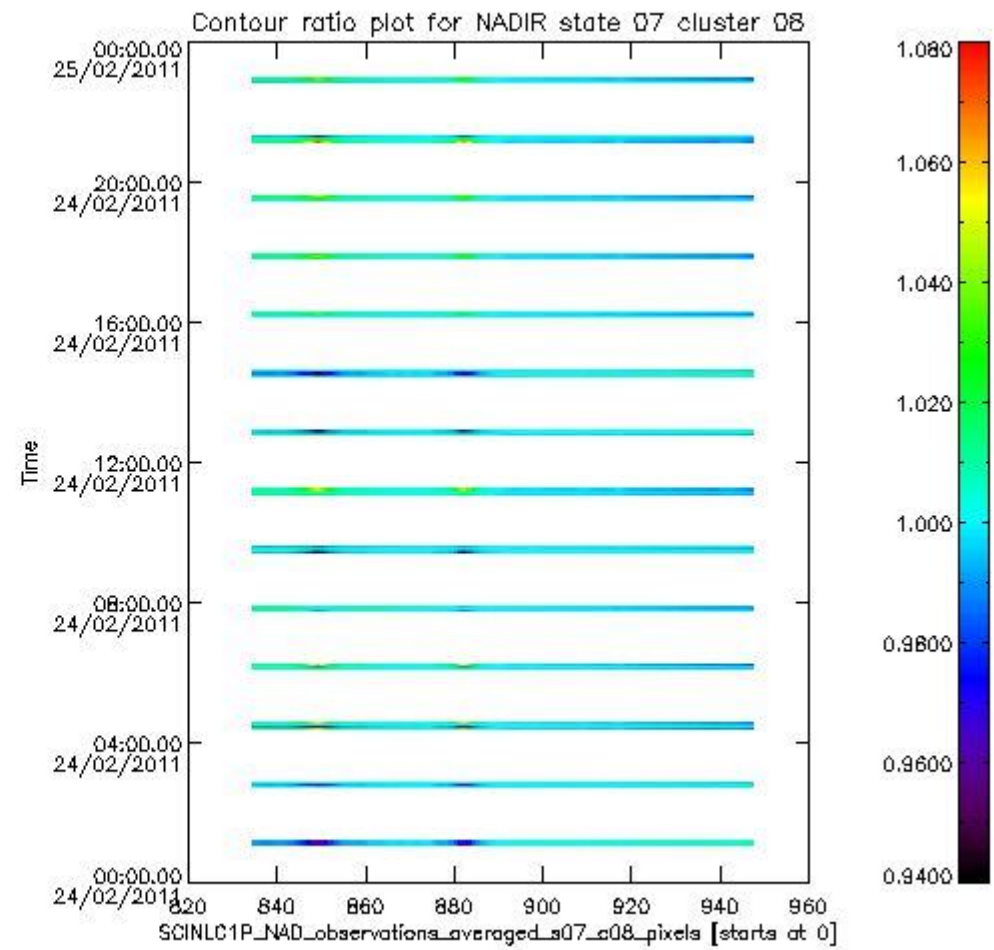
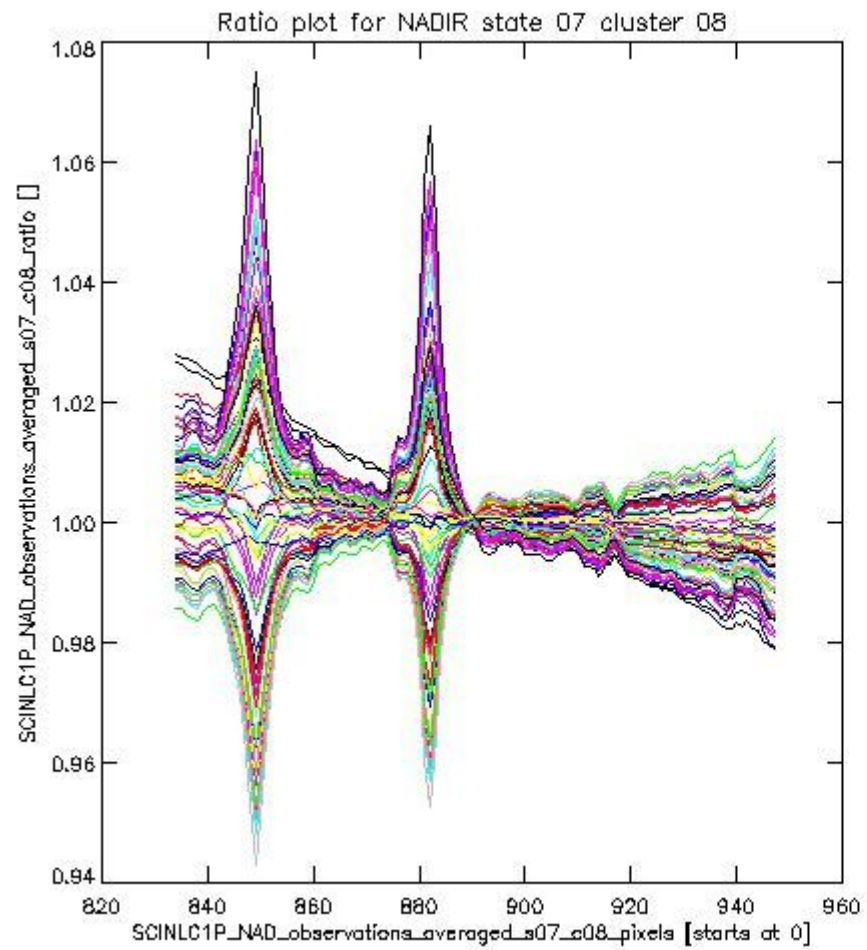
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a black line with * markers.
- A plot that shows all calibrated averaged spectra vs. pixel number and time using a coloured contour plot. The colours indicate the intensity.
- A plot that shows ratios of all calibrated averaged spectra and the reference spectrum vs. pixel number. Each line is the ratio of a calibrated averaged spectrum and the reference spectrum, where both spectra have been intensity corrected (the spectrum has been divided by the average pixel intensity) prior to division.
- A plot that shows ratios of all calibrated averaged spectra and the reference spectrum vs. pixel number and time using a coloured contour plot.

1.2.1 NADIR state 07 cluster 08 The data for the analysis of NADIR state 07 cluster 08 have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 01:03:04.461
Start time of last sample	24FEB2011 22:55:19.940
Reference period start time	25JAN2011 01:05:35.048
Reference period stop time	23FEB2011 23:32:10.511
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



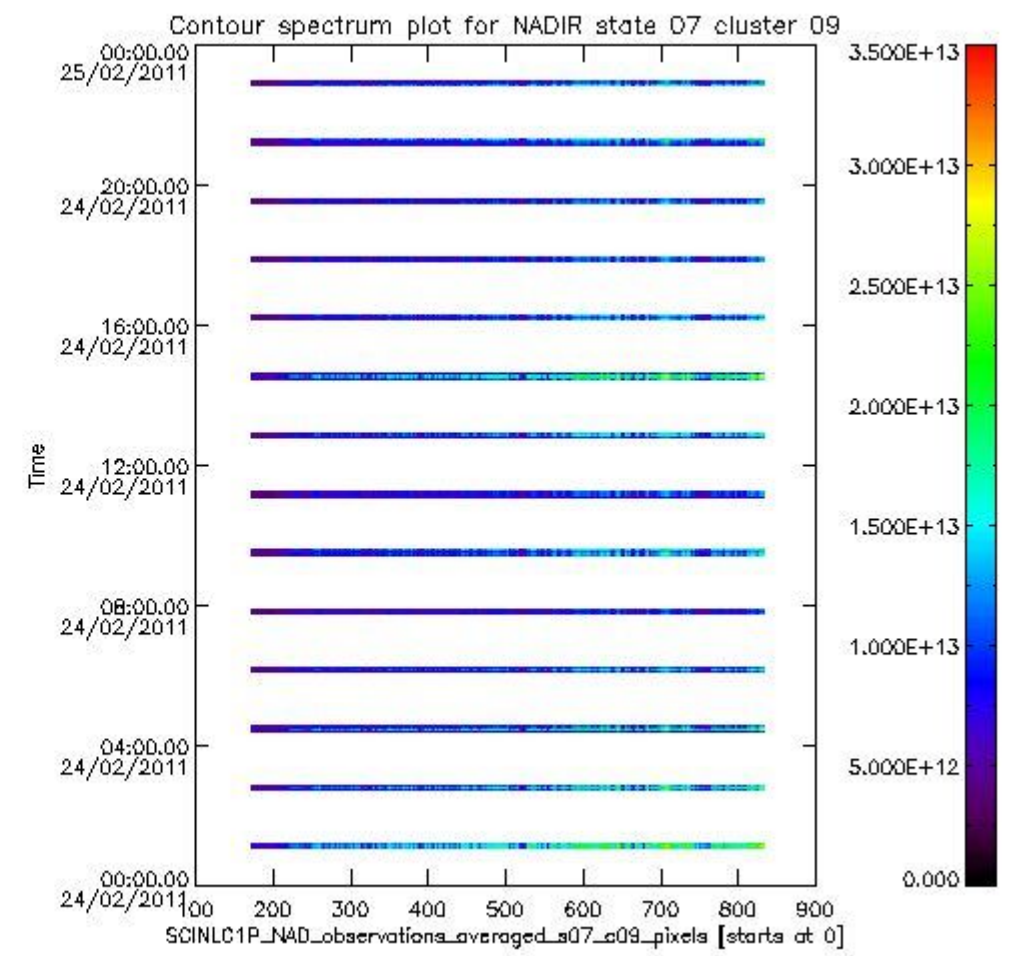
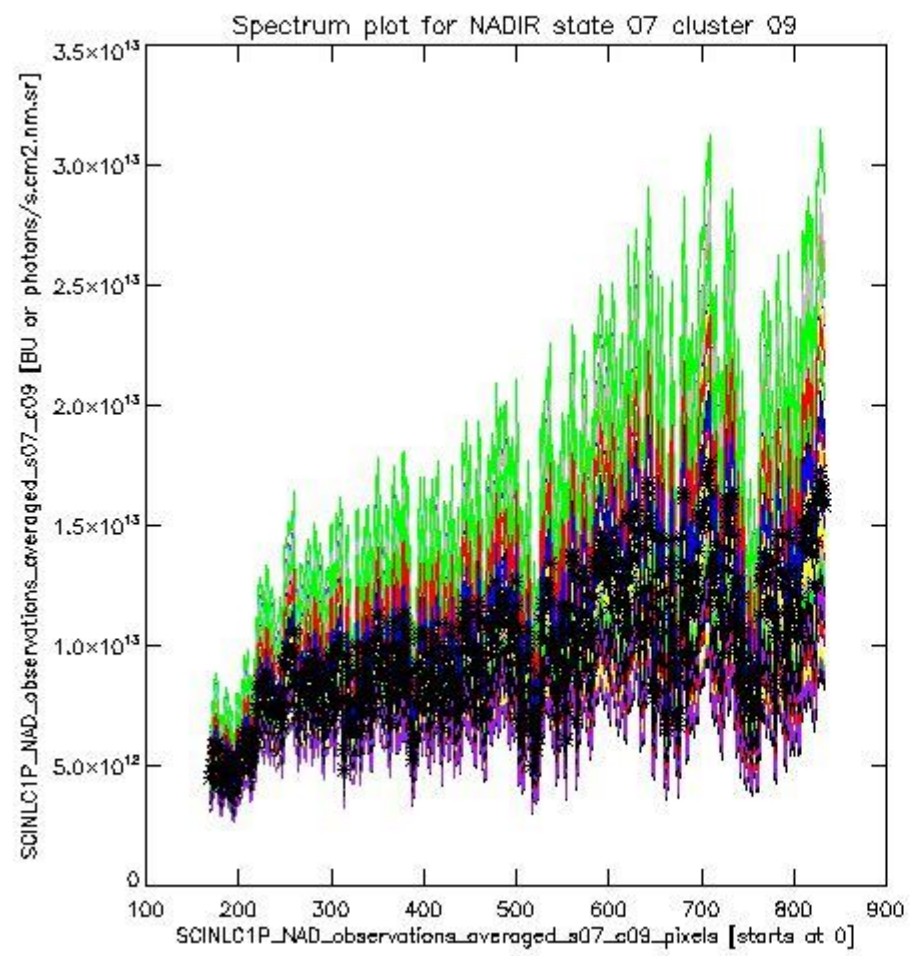
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_0.PNG



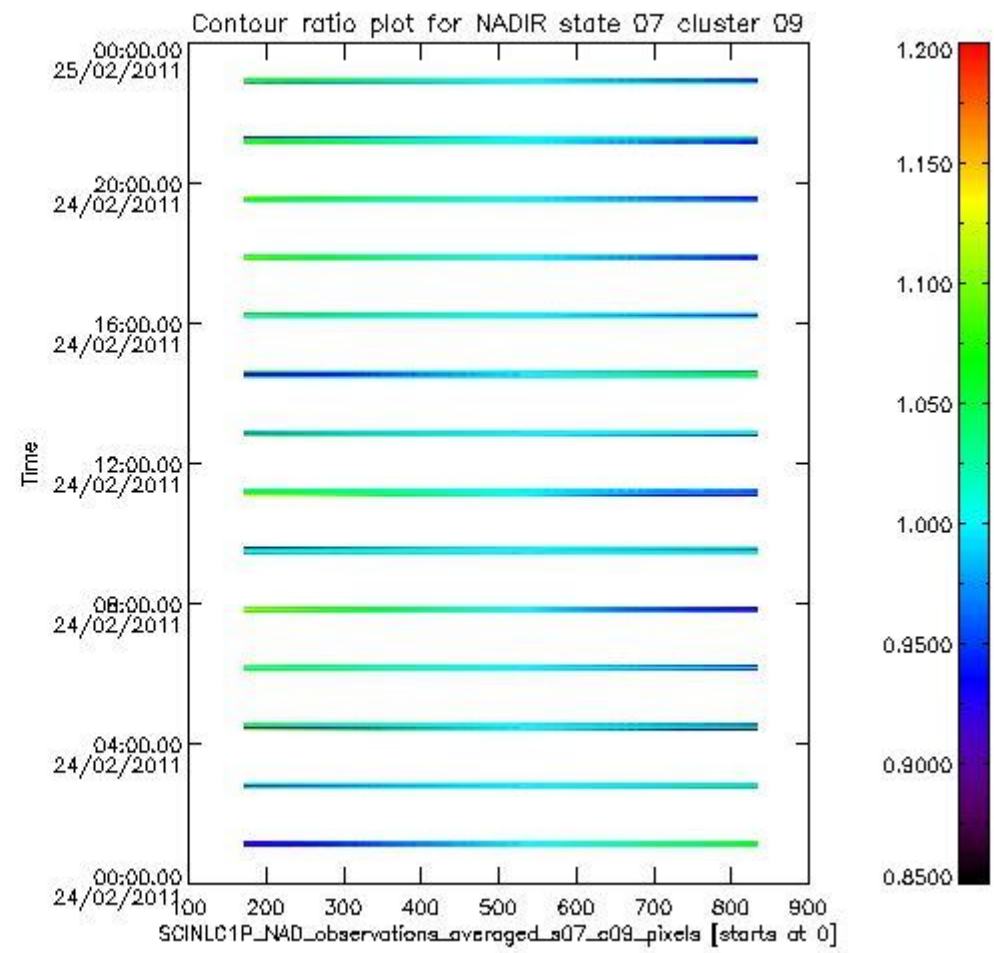
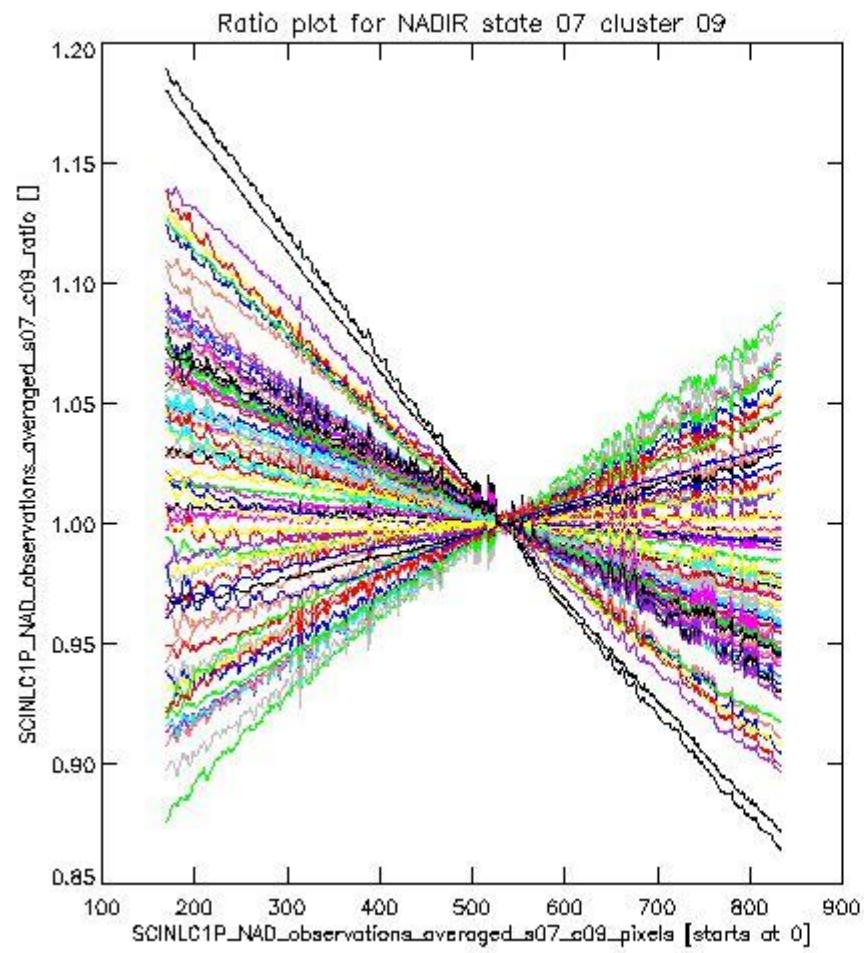
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_1.PNG

1.2.2 NADIR state 07 cluster 09 The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 01:03:04.461
Start time of last sample	24FEB2011 22:55:19.940
Reference period start time	25JAN2011 01:05:35.048
Reference period stop time	23FEB2011 23:32:10.511
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



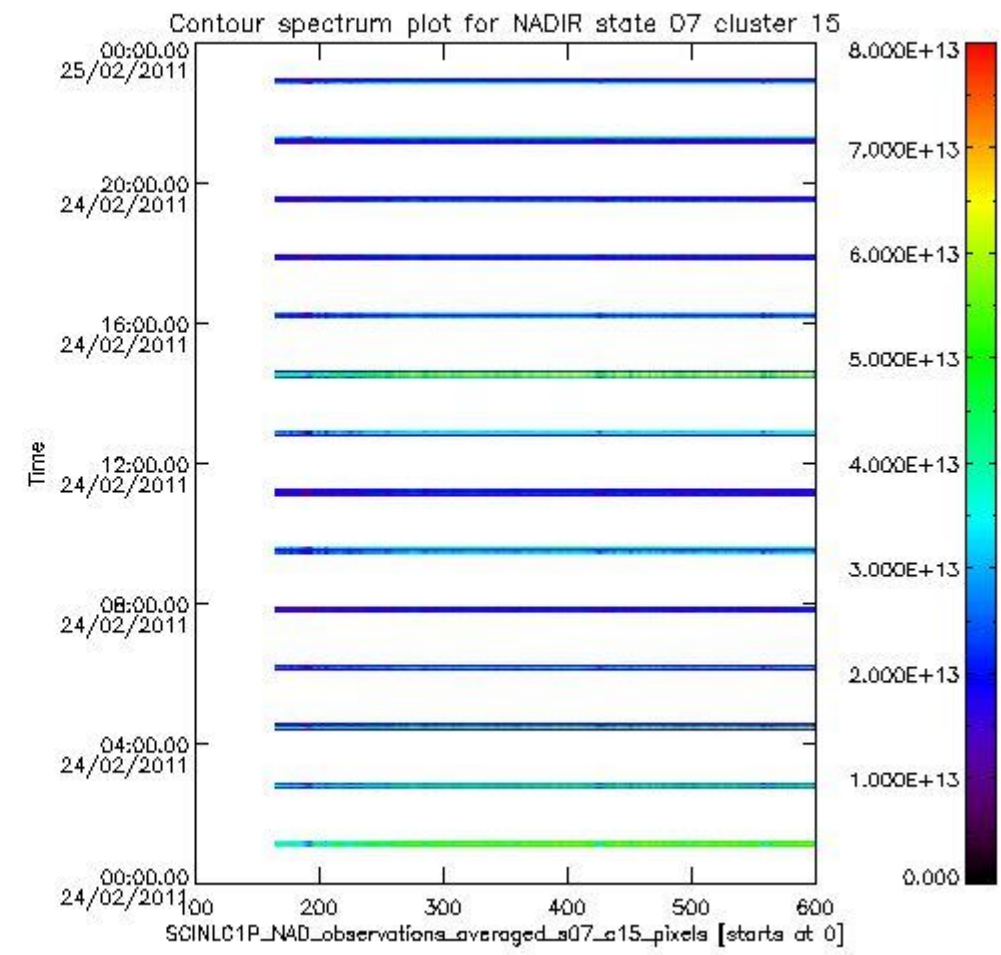
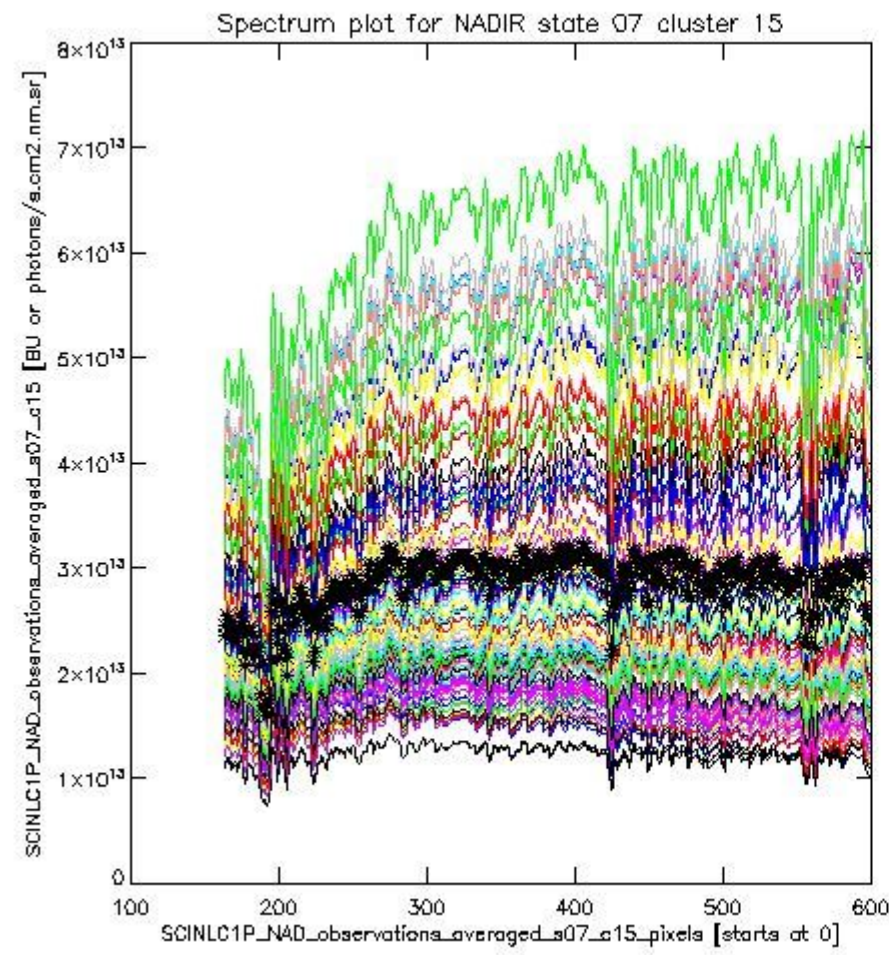
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_2.PNG



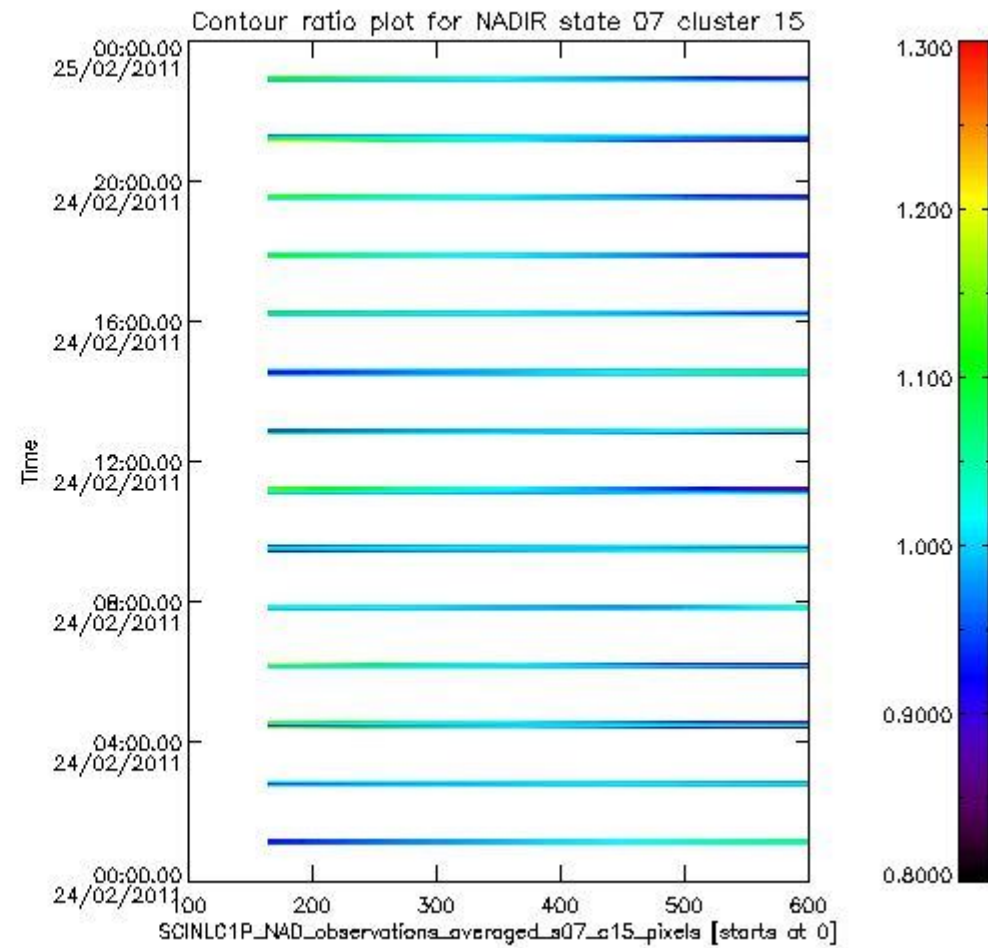
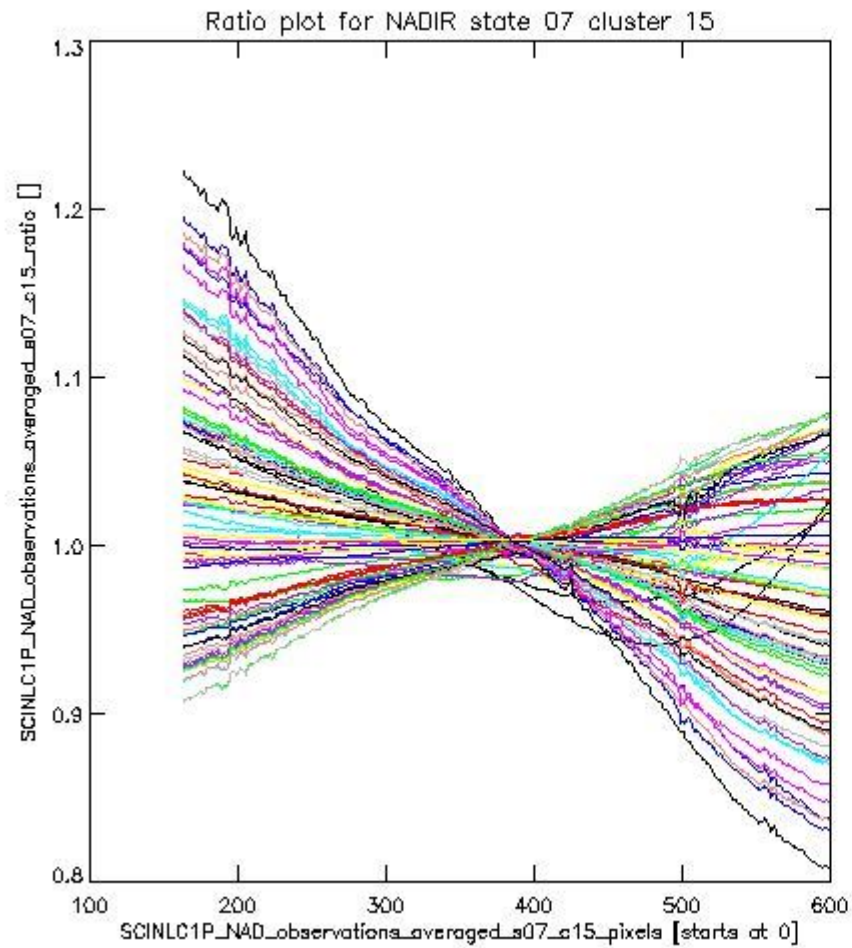
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_3.PNG

1.2.3 NADIR state 07 cluster 15 The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 01:03:04.461
Start time of last sample	24FEB2011 22:55:19.940
Reference period start time	25JAN2011 01:05:35.048
Reference period stop time	23FEB2011 23:32:10.511
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



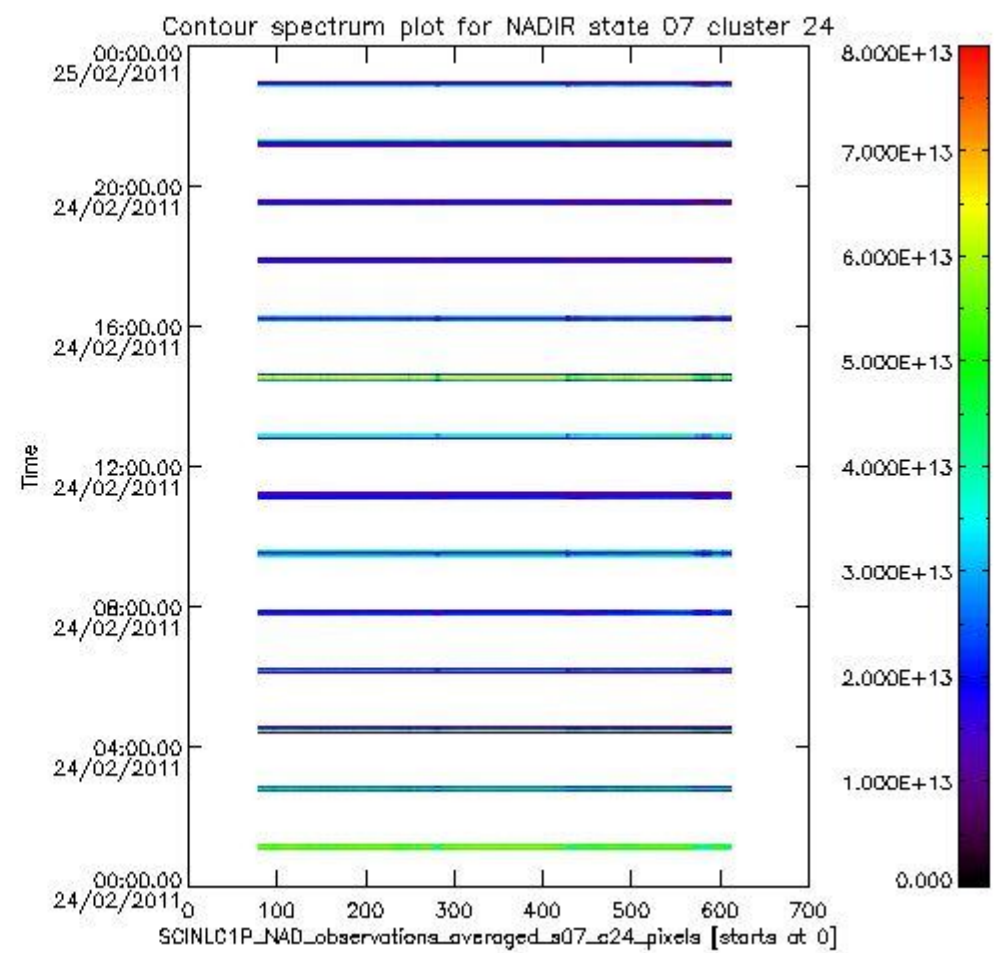
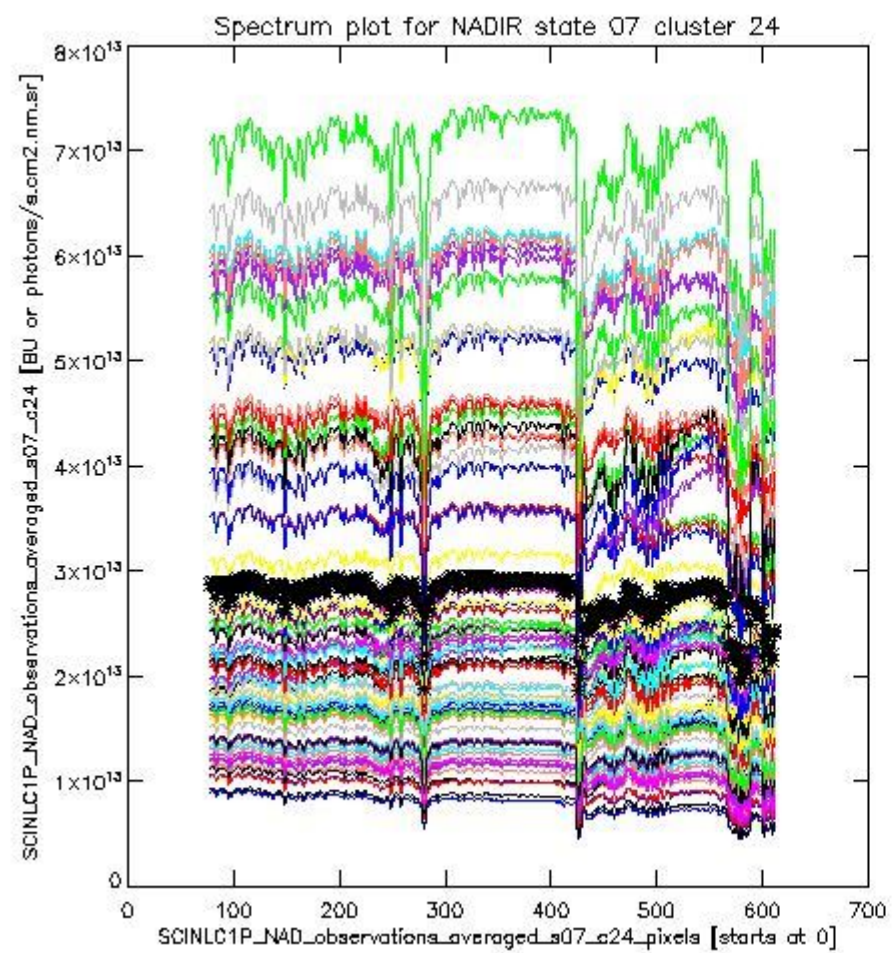
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_4.PNG



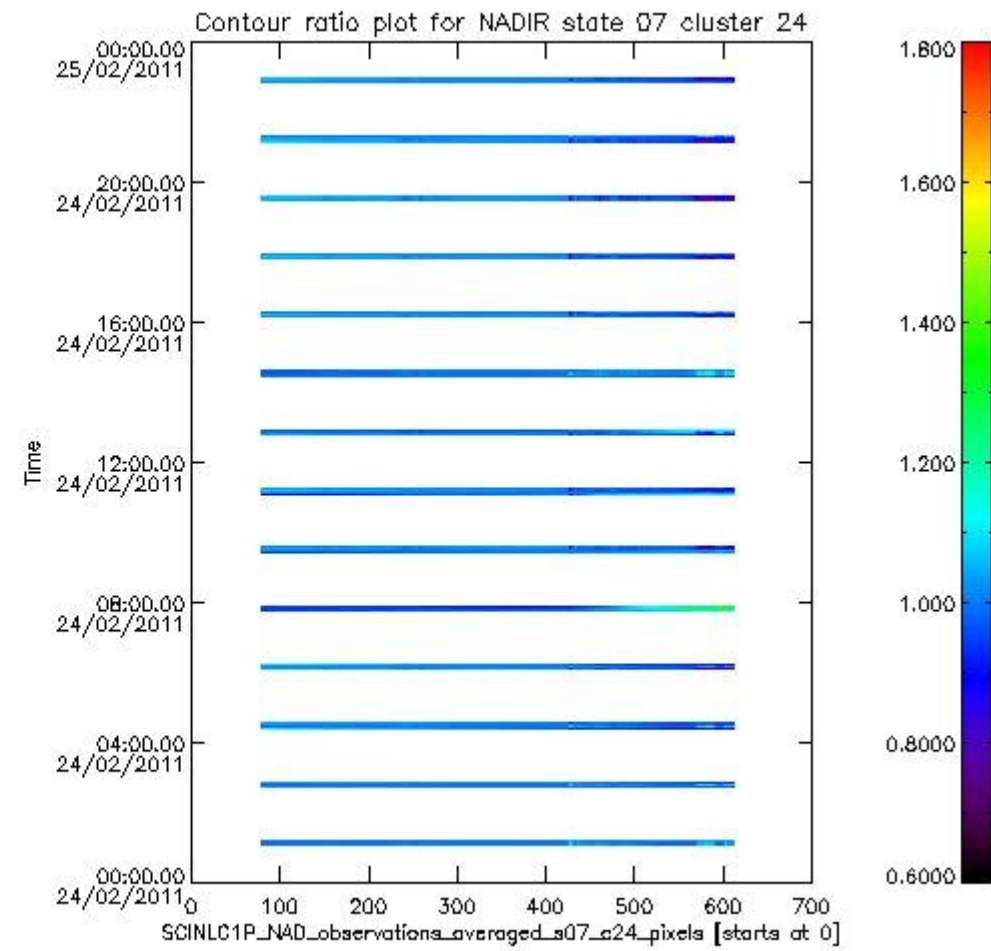
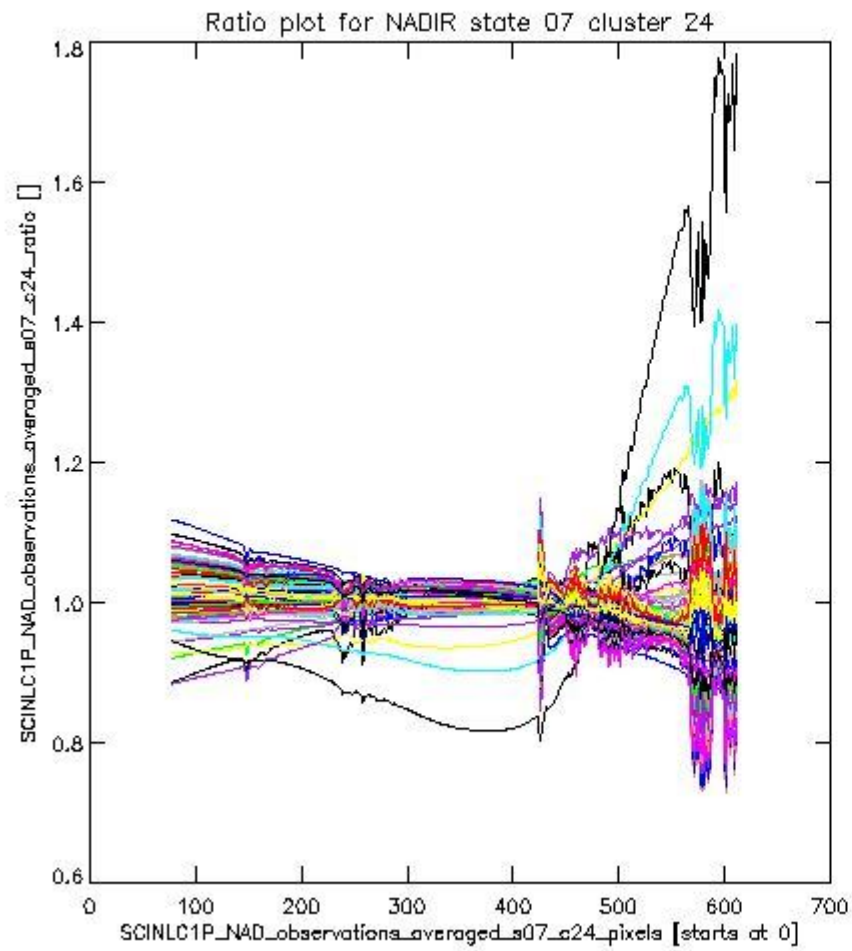
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_5.PNG

1.2.4 NADIR state 07 cluster 24 The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 01:03:04.461
Start time of last sample	24FEB2011 22:55:19.940
Reference period start time	25JAN2011 01:05:35.048
Reference period stop time	23FEB2011 23:32:10.511
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



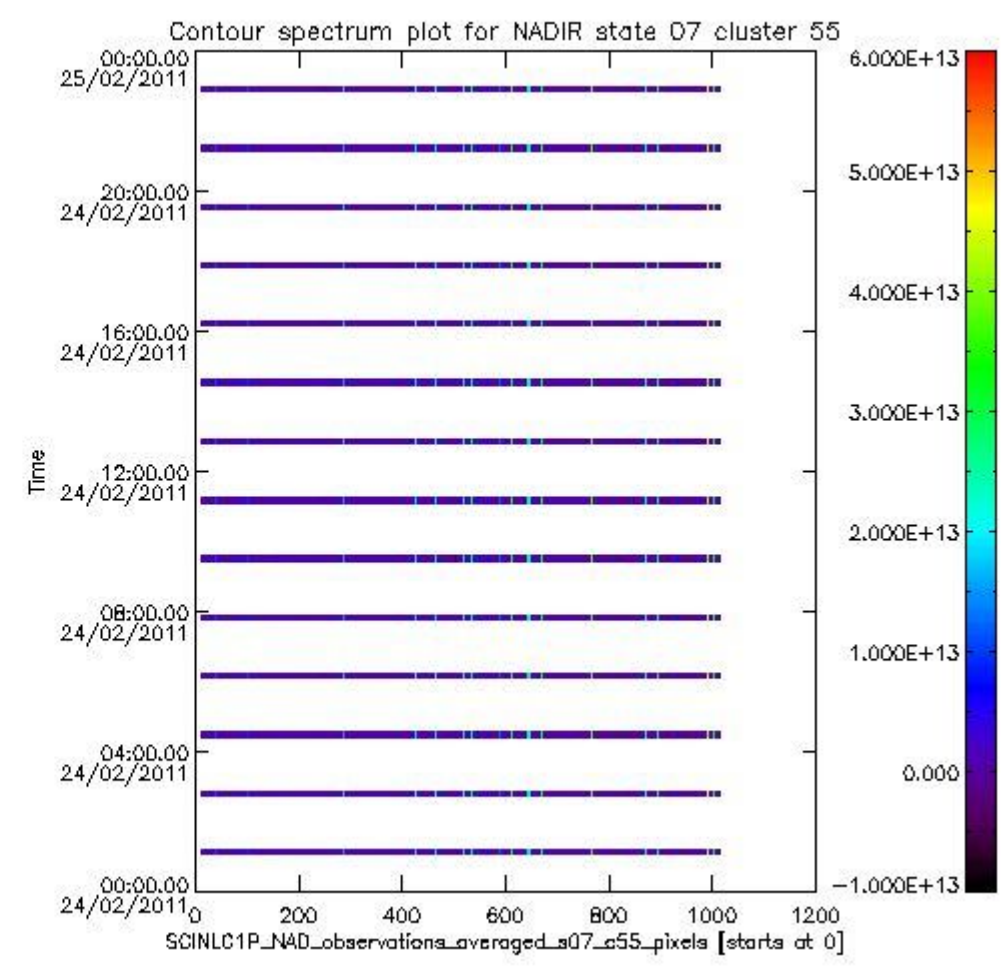
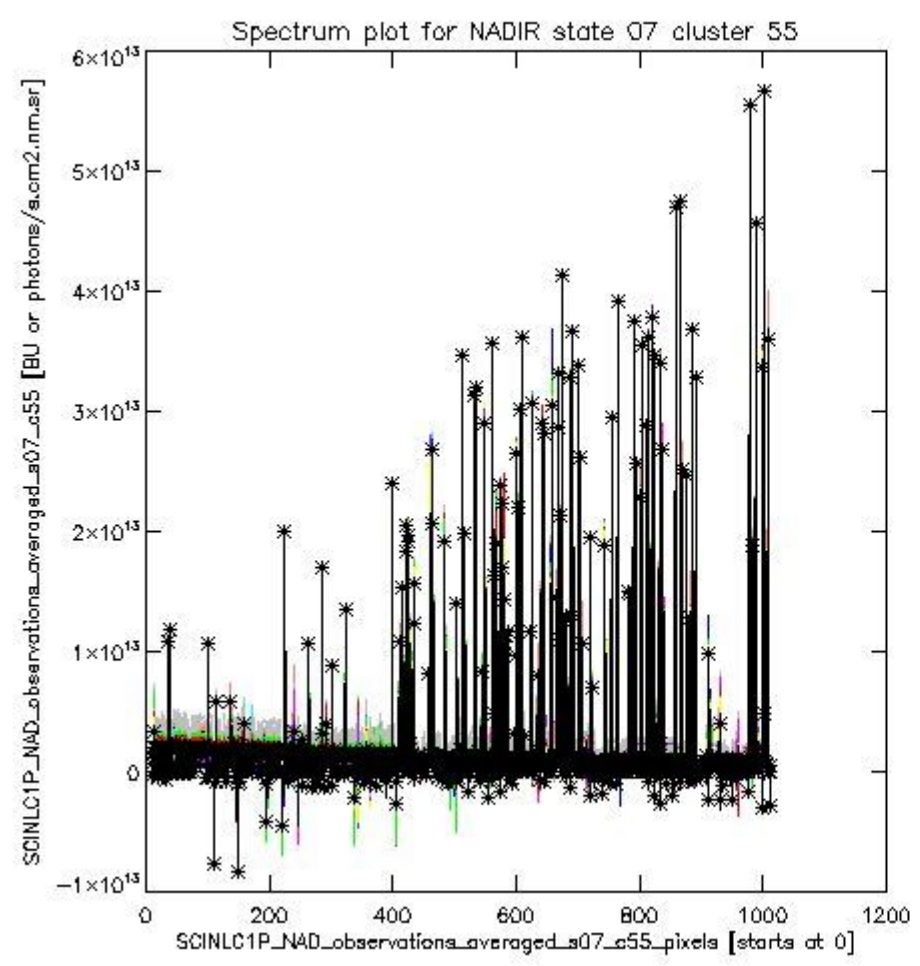
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_6.PNG



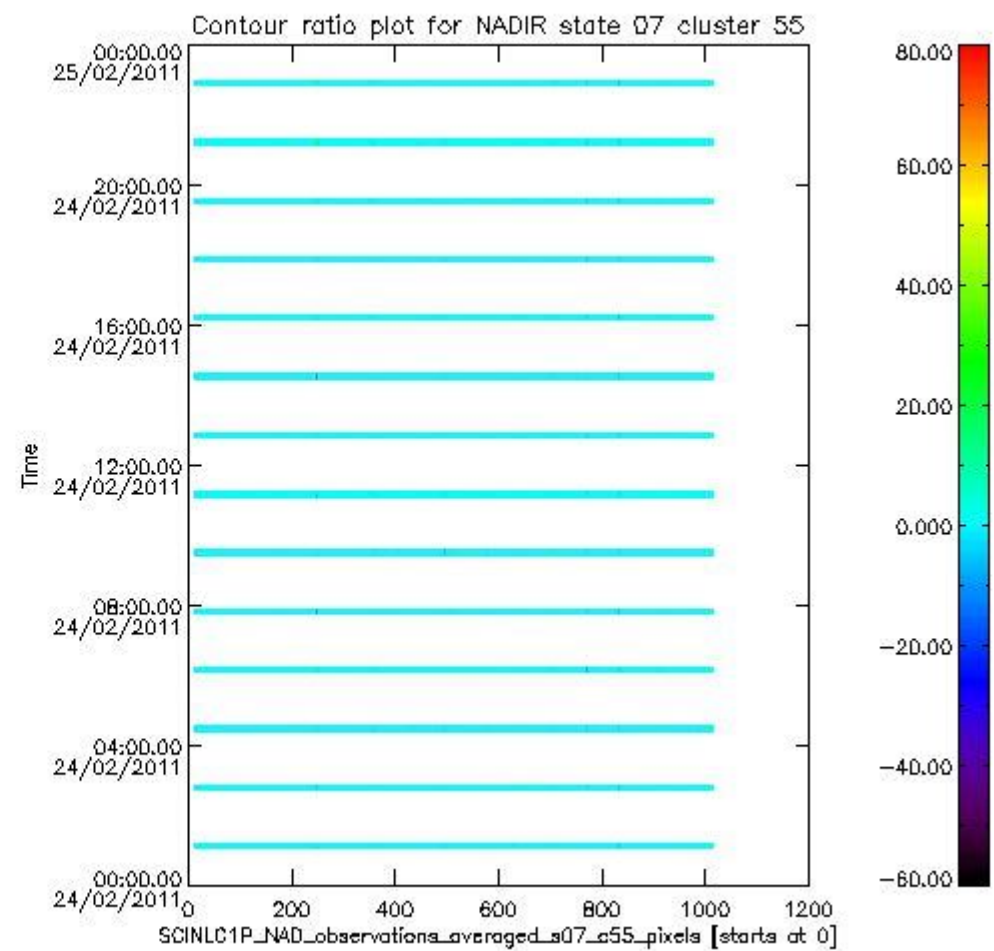
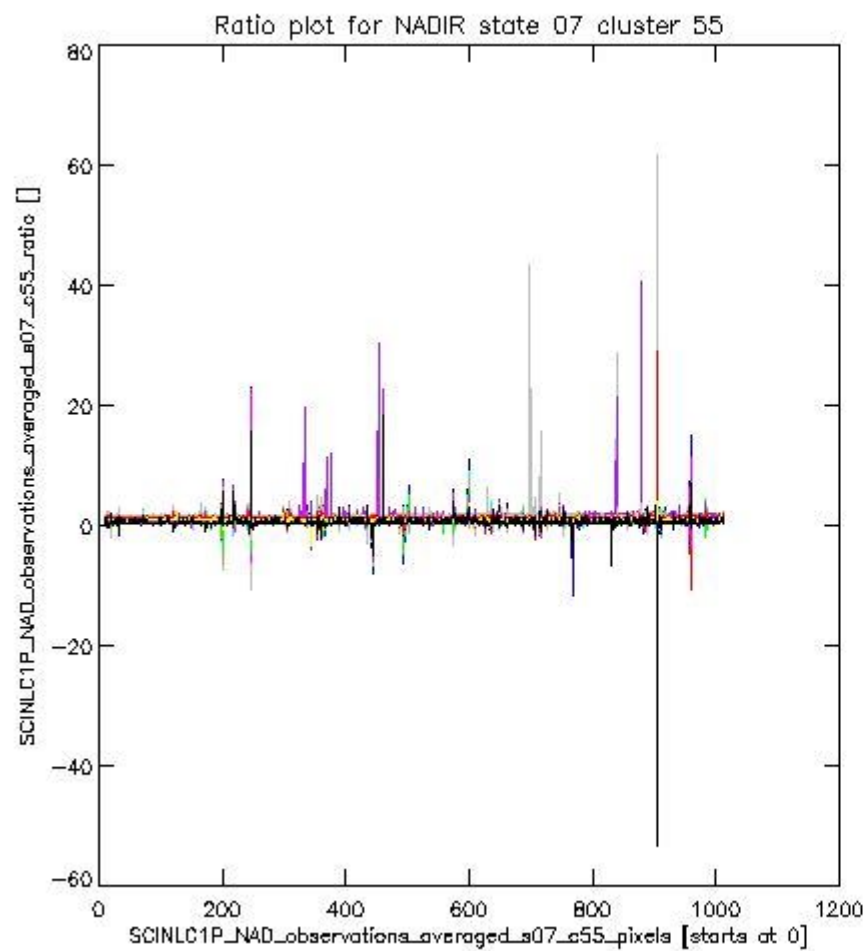
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_7.PNG

1.2.5 NADIR state 07 cluster 55 The data for the analysis of NADIR state 07 cluster 55 have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 01:03:04.461
Start time of last sample	24FEB2011 22:55:19.940
Reference period start time	25JAN2011 01:05:35.048
Reference period stop time	23FEB2011 23:32:10.511
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



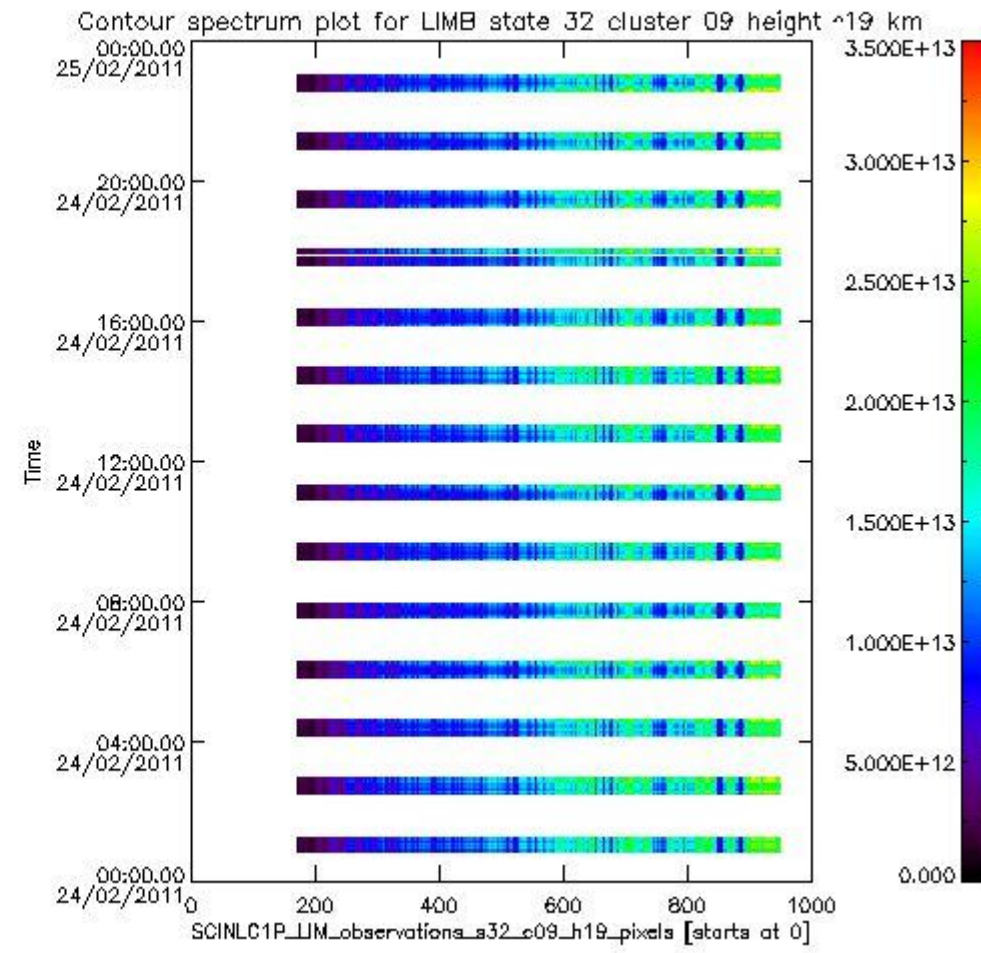
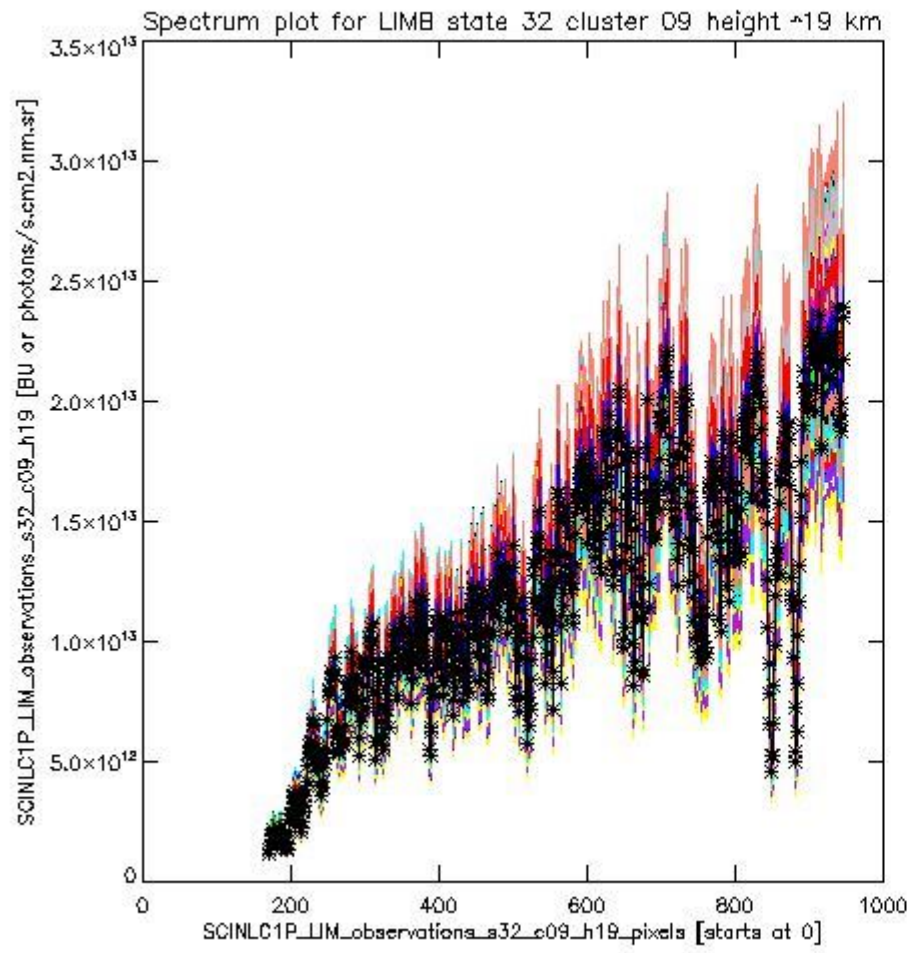
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_8.PNG



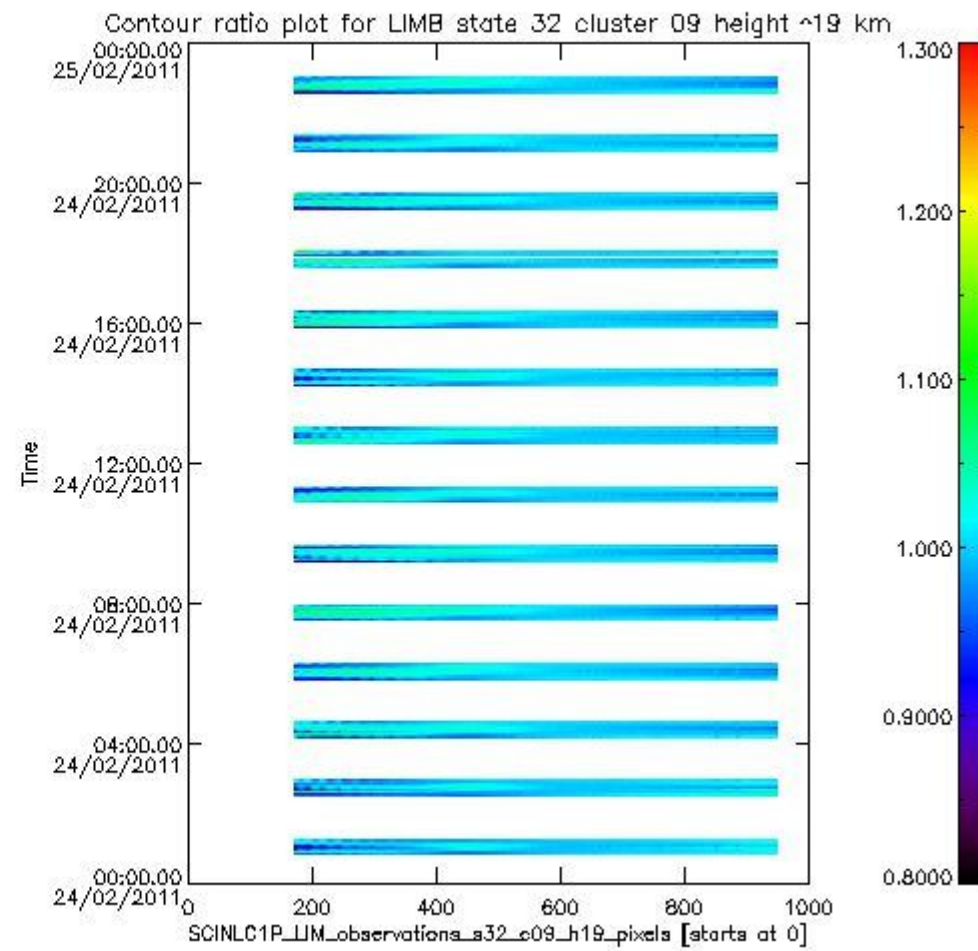
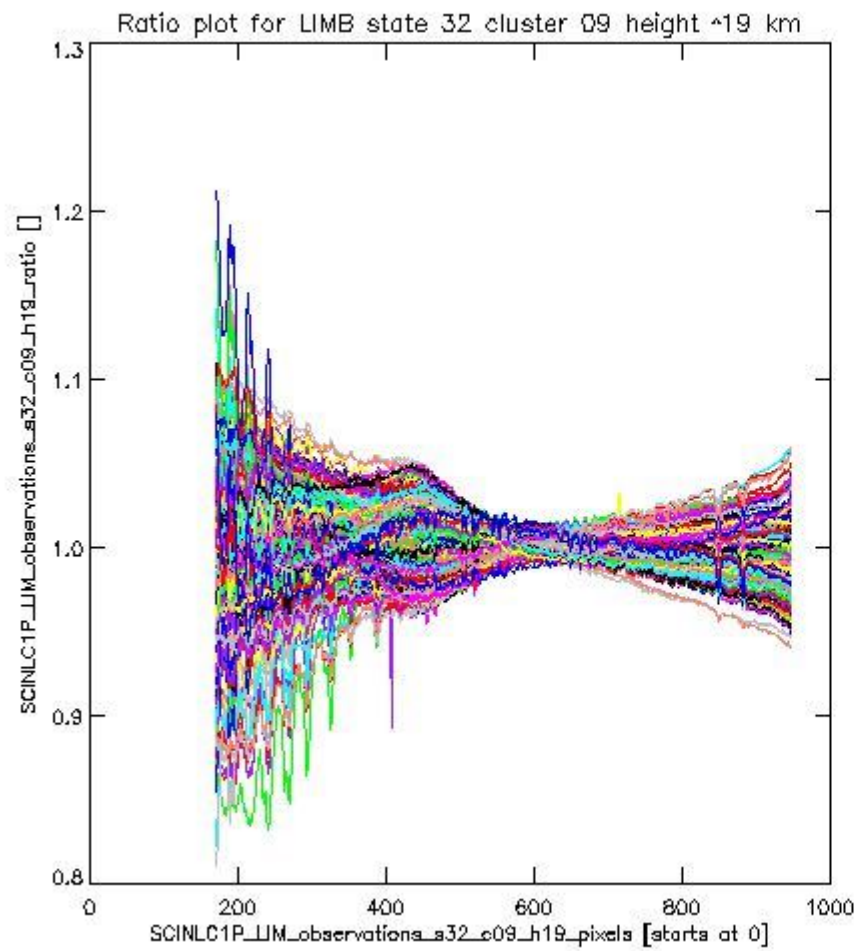
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_9.PNG

1.2.6 LIMB state 32 cluster 09 height ~19 km The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 00:49:53.820
Start time of last sample	24FEB2011 23:00:33.983
Reference period start time	25JAN2011 00:52:24.415
Reference period stop time	23FEB2011 23:37:24.554
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



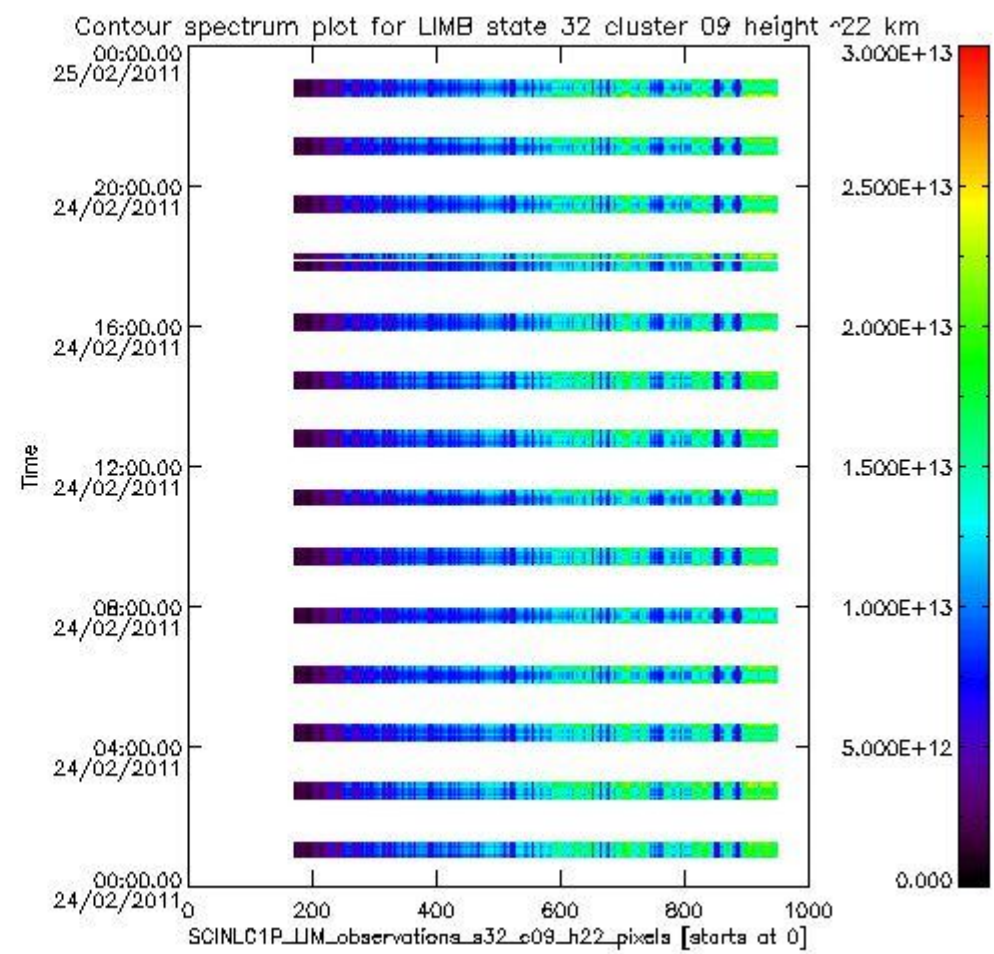
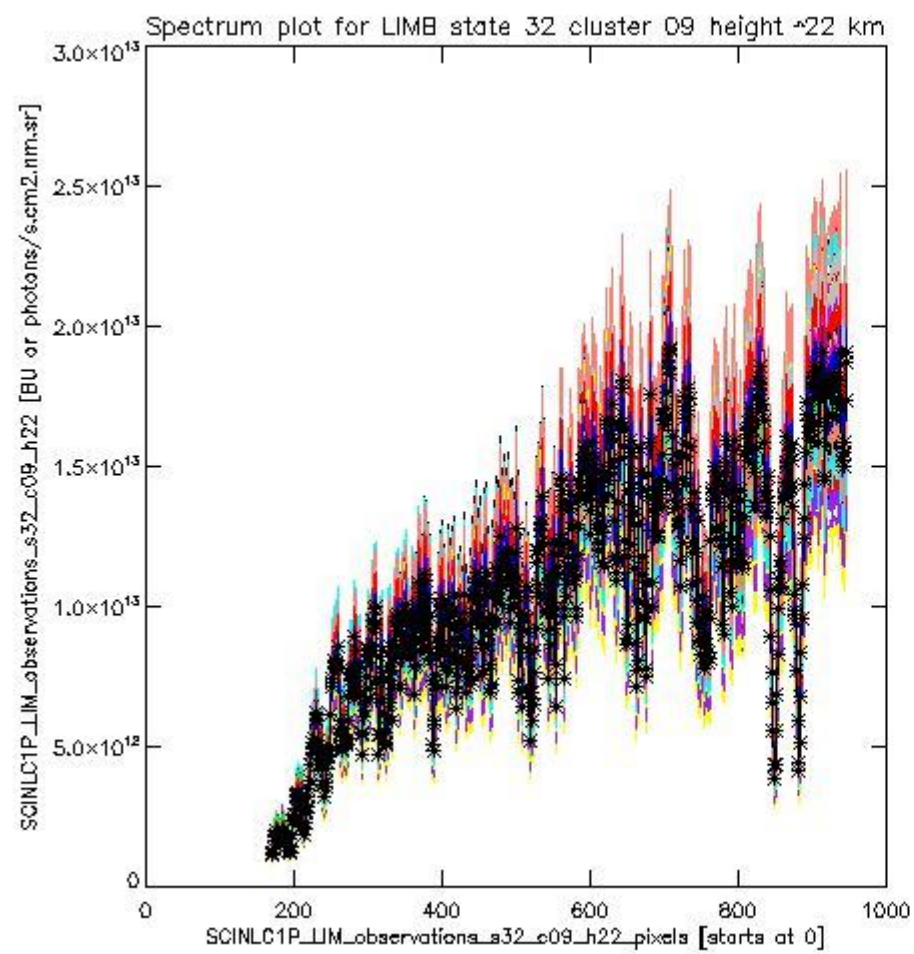
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_10.PNG



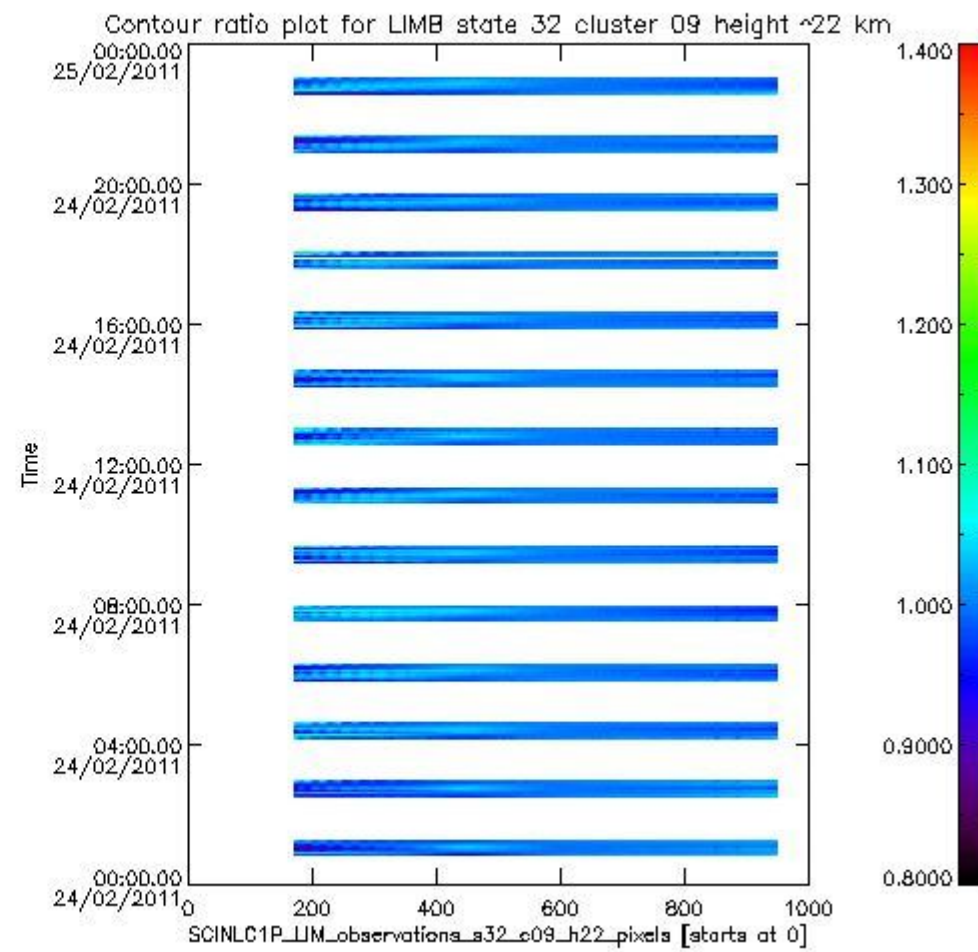
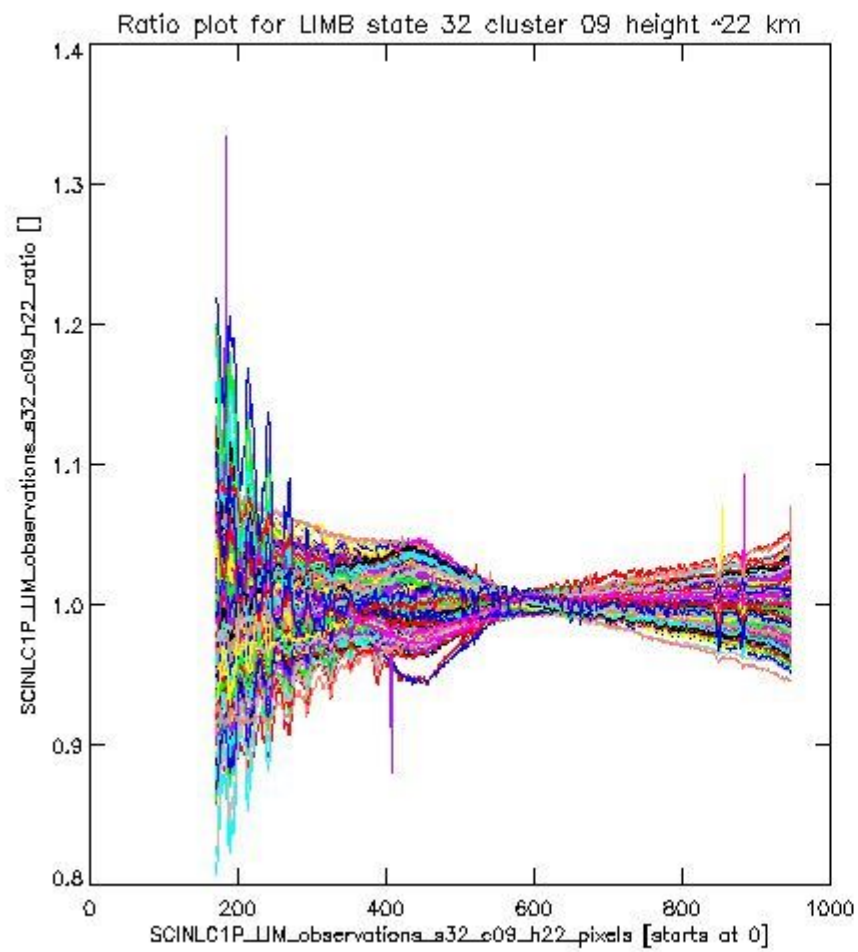
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_11.PNG

1.2.7 LIMB state 32 cluster 09 height ~22 km The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 00:49:53.820
Start time of last sample	24FEB2011 23:00:33.983
Reference period start time	25JAN2011 00:52:24.415
Reference period stop time	23FEB2011 23:37:24.554
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



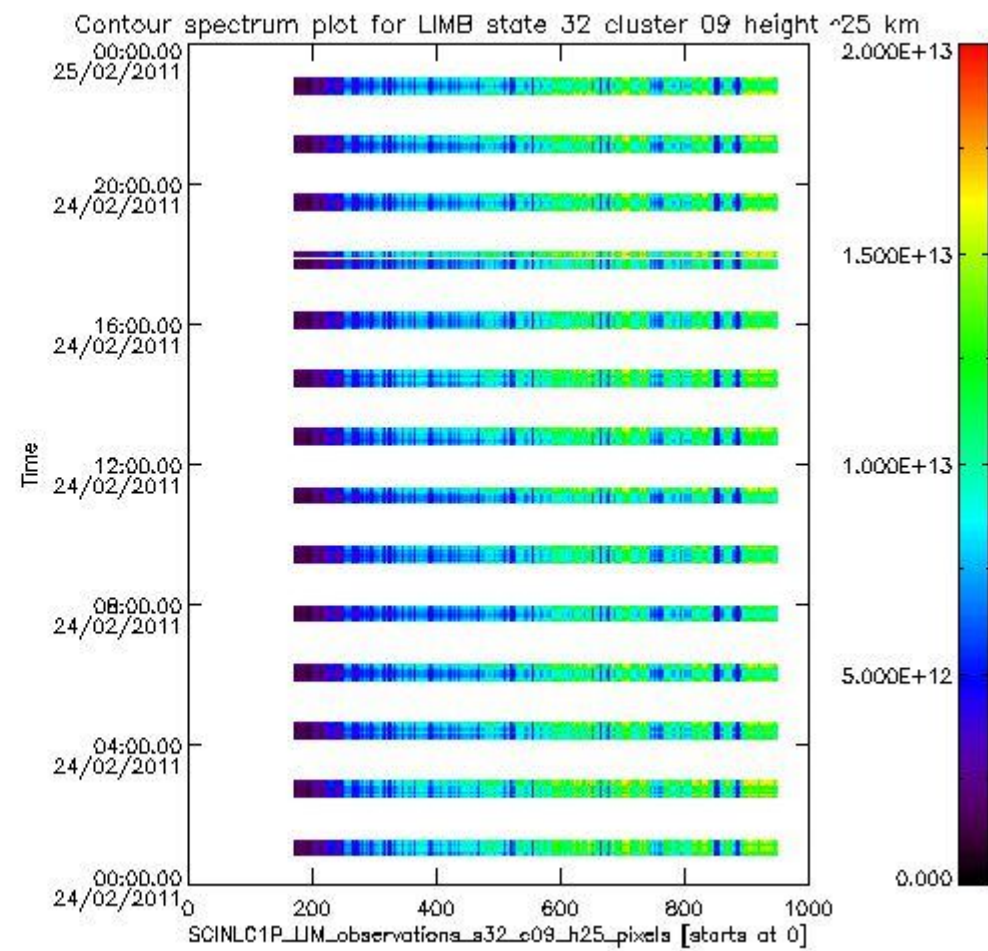
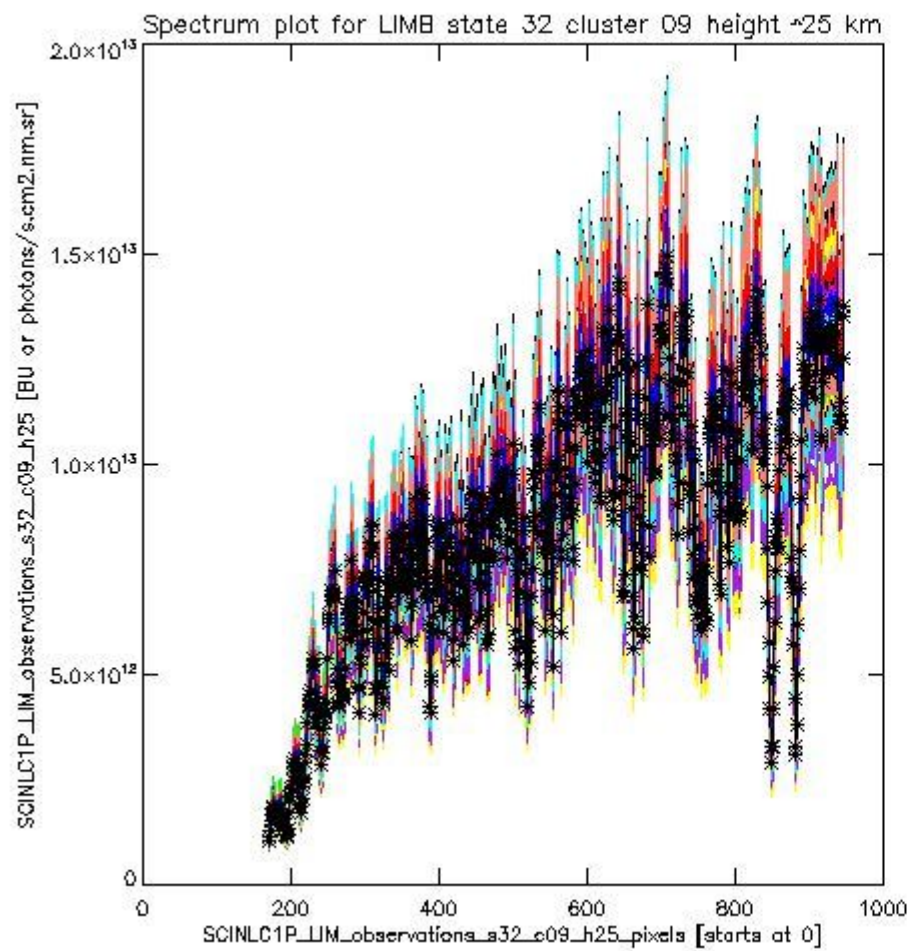
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_12.PNG



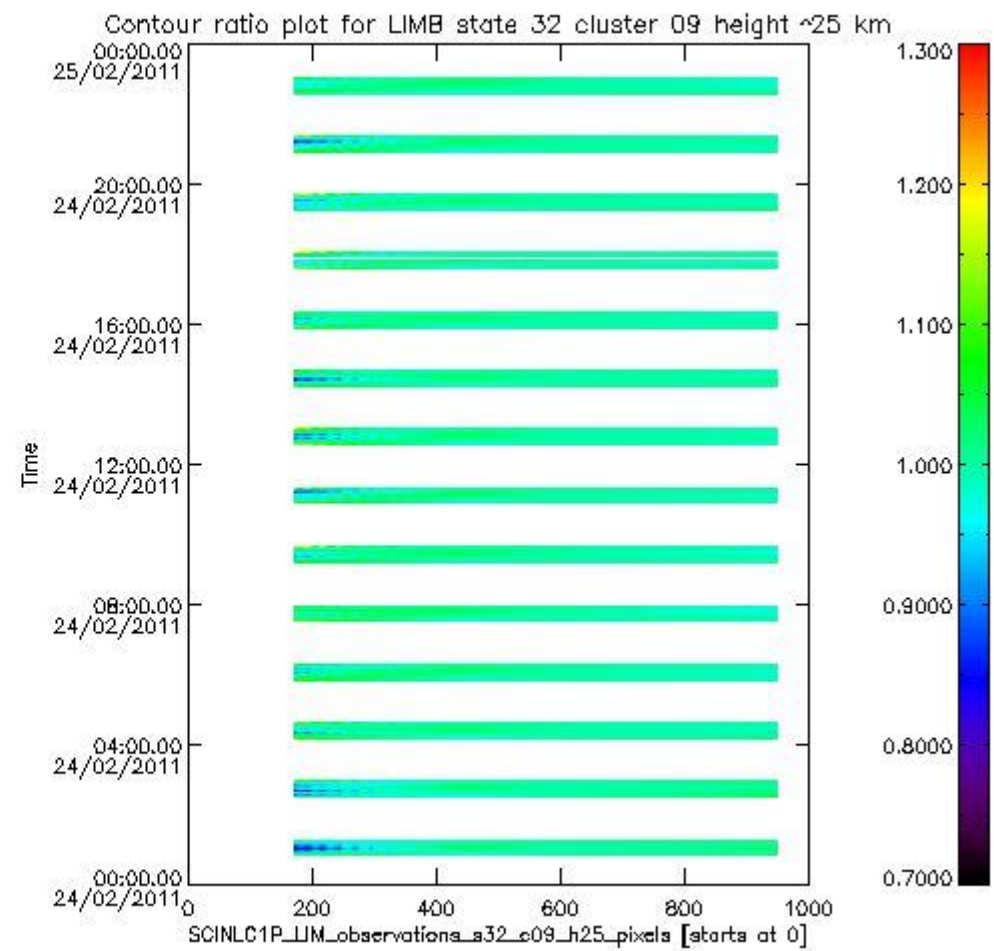
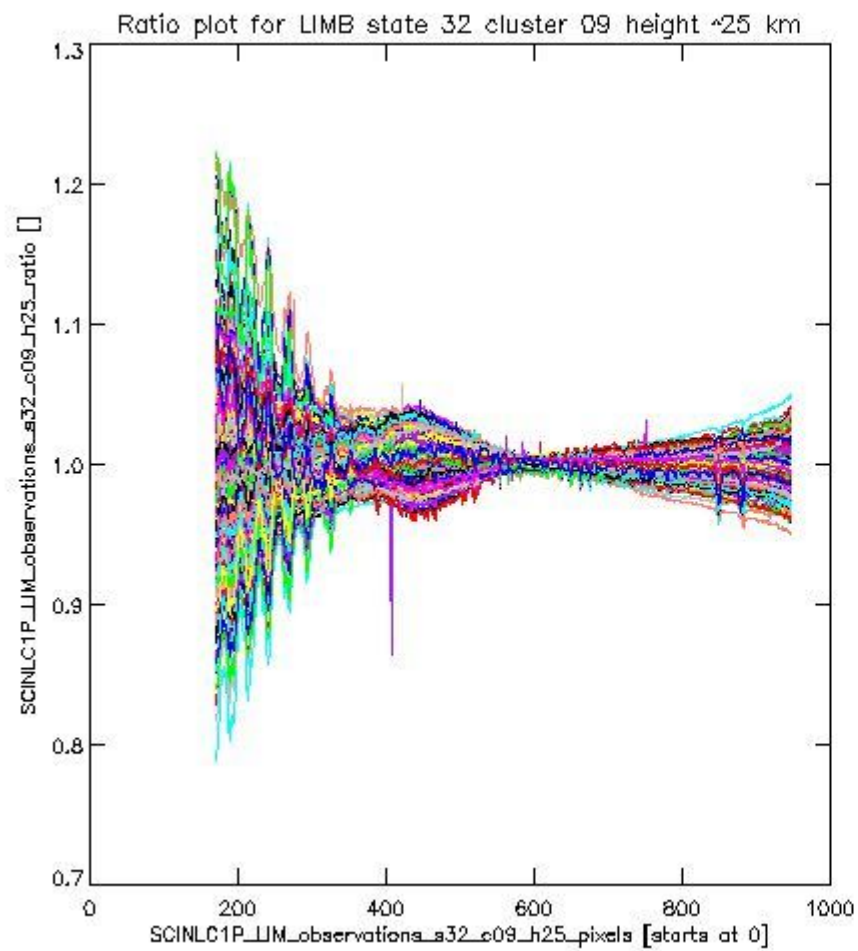
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_13.PNG

1.2.8 LIMB state 32 cluster 09 height ~25 km The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 00:49:53.820
Start time of last sample	24FEB2011 23:00:33.983
Reference period start time	25JAN2011 00:52:24.415
Reference period stop time	23FEB2011 23:37:24.554
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



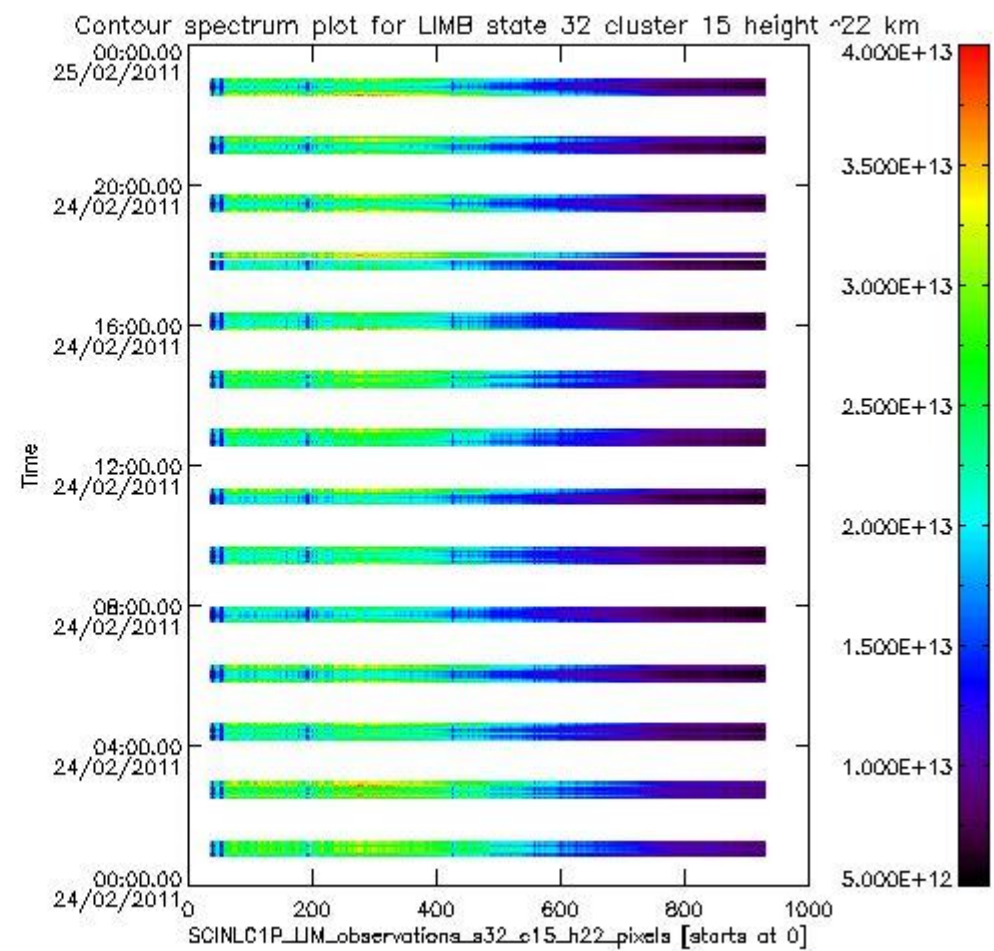
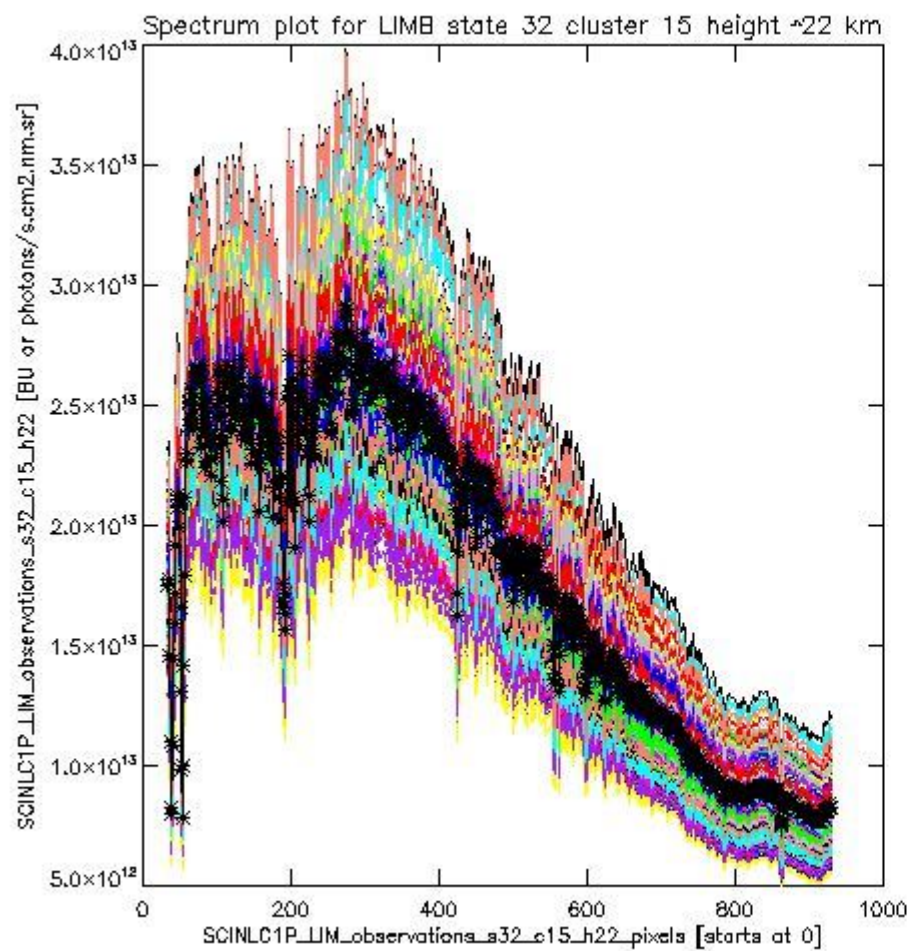
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_14.PNG



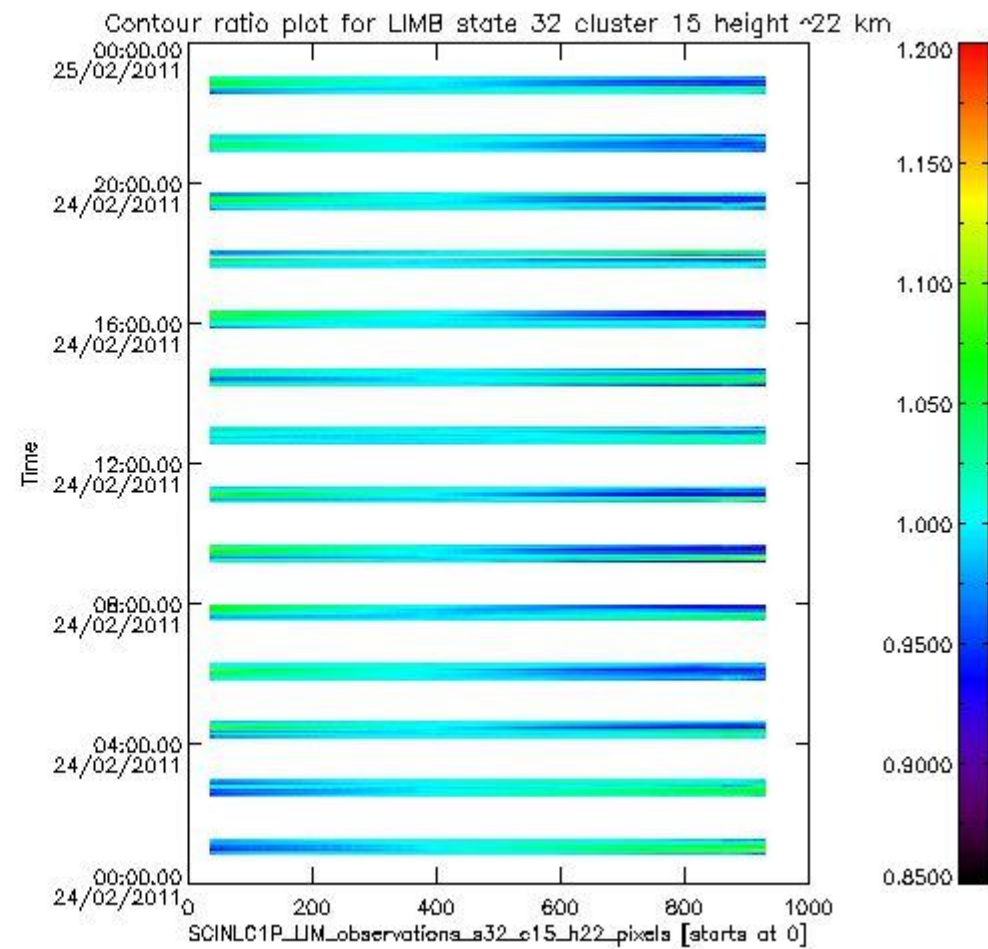
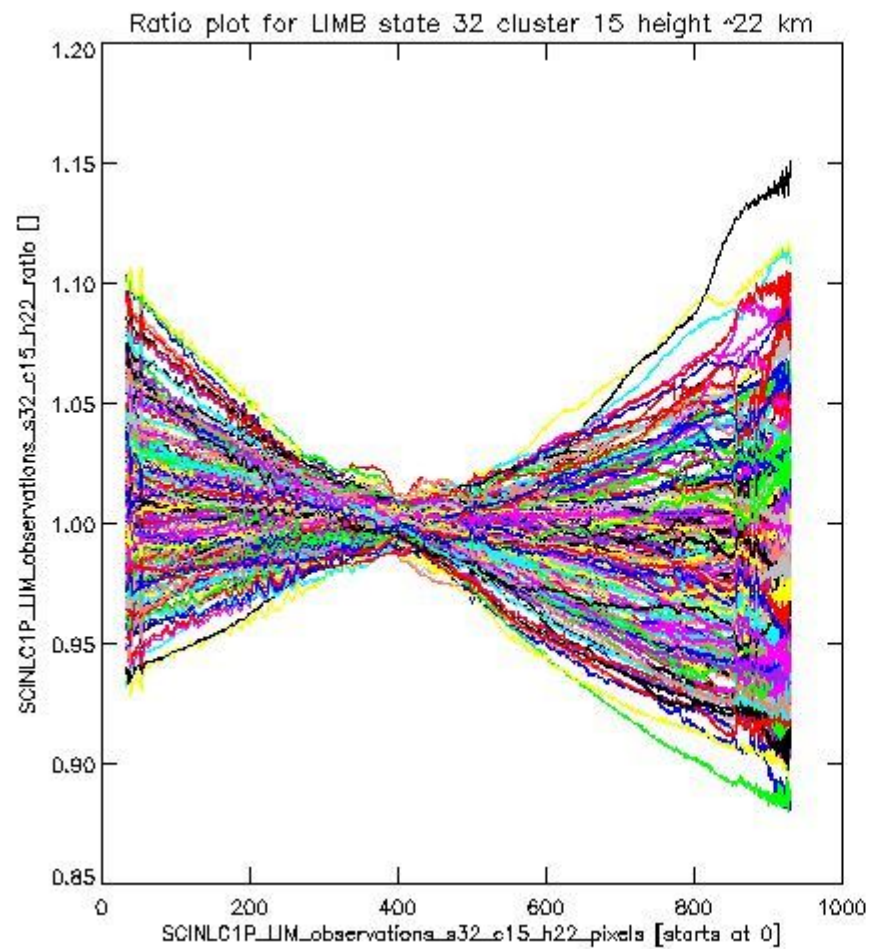
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_15.PNG

1.2.9 LIMB state 32 cluster 15 height ~22 km The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 00:49:53.820
Start time of last sample	24FEB2011 23:00:33.983
Reference period start time	25JAN2011 00:52:24.415
Reference period stop time	23FEB2011 23:37:24.554
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



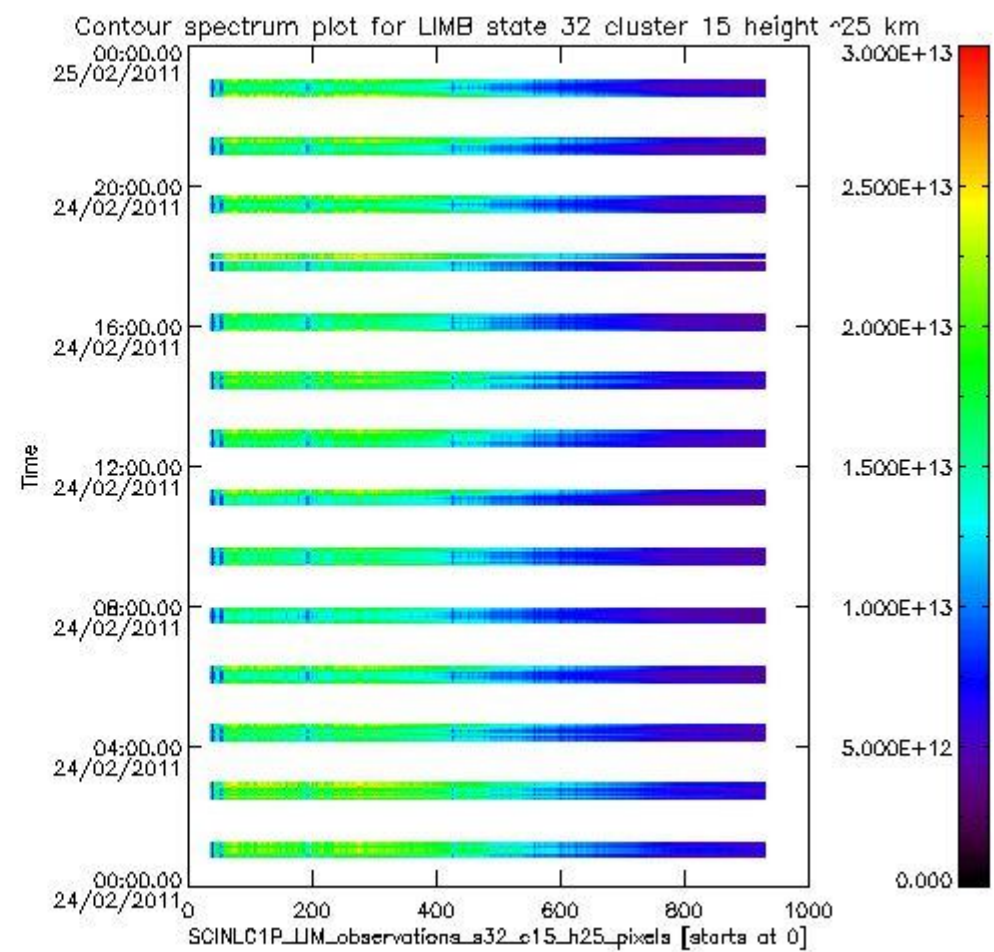
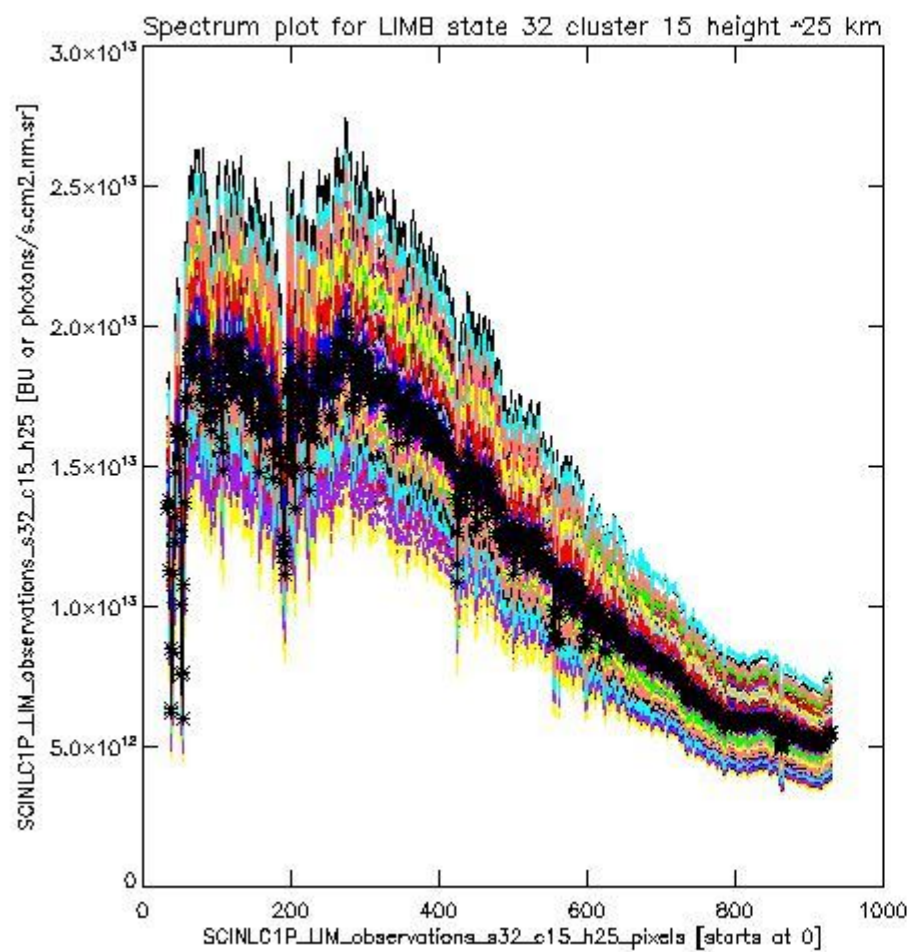
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_16.PNG



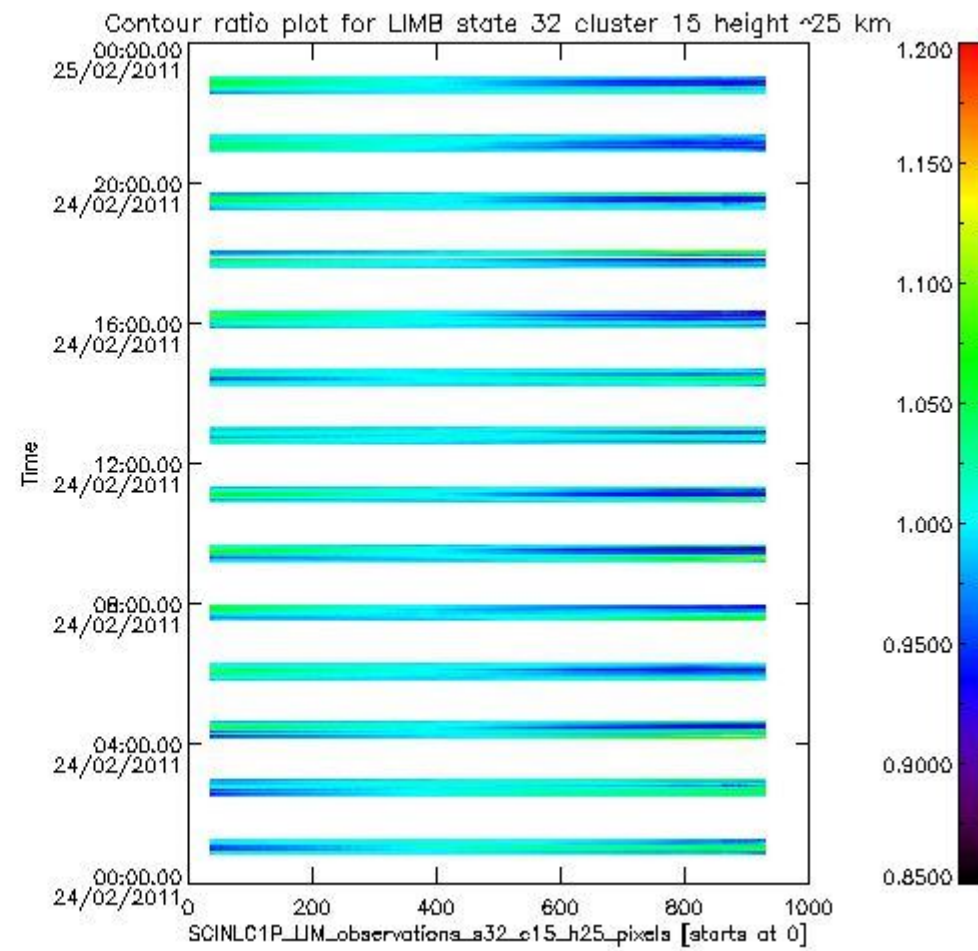
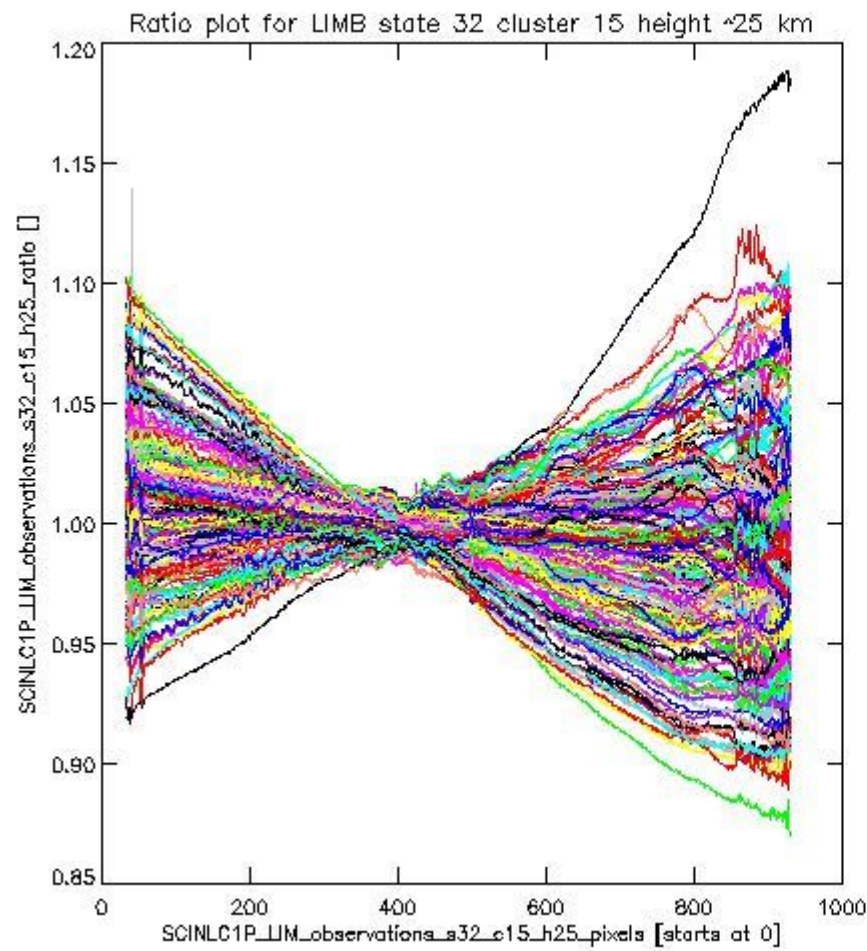
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110224_17.PNG

1.2.10 LIMB state 32 cluster 15 height ~25 km The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	24FEB2011 00:49:53.820
Start time of last sample	24FEB2011 23:00:33.983
Reference period start time	25JAN2011 00:52:24.415
Reference period stop time	23FEB2011 23:37:24.554
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



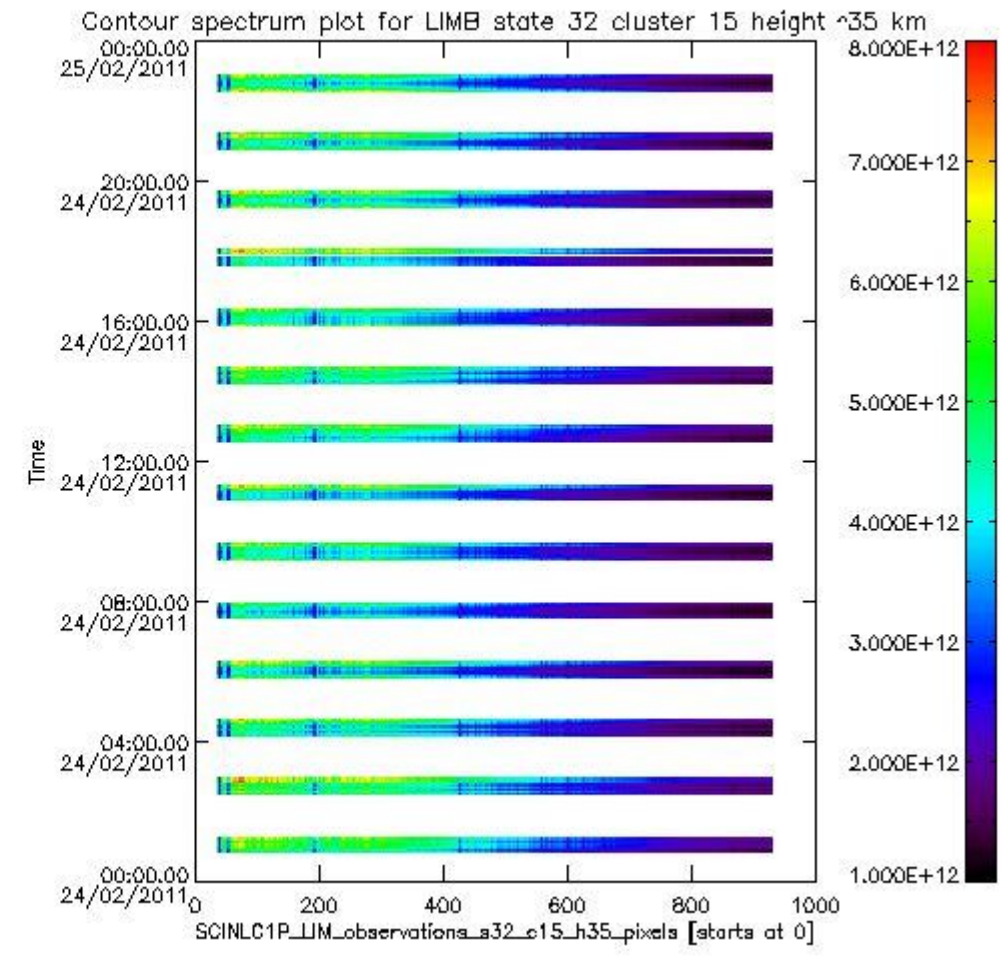
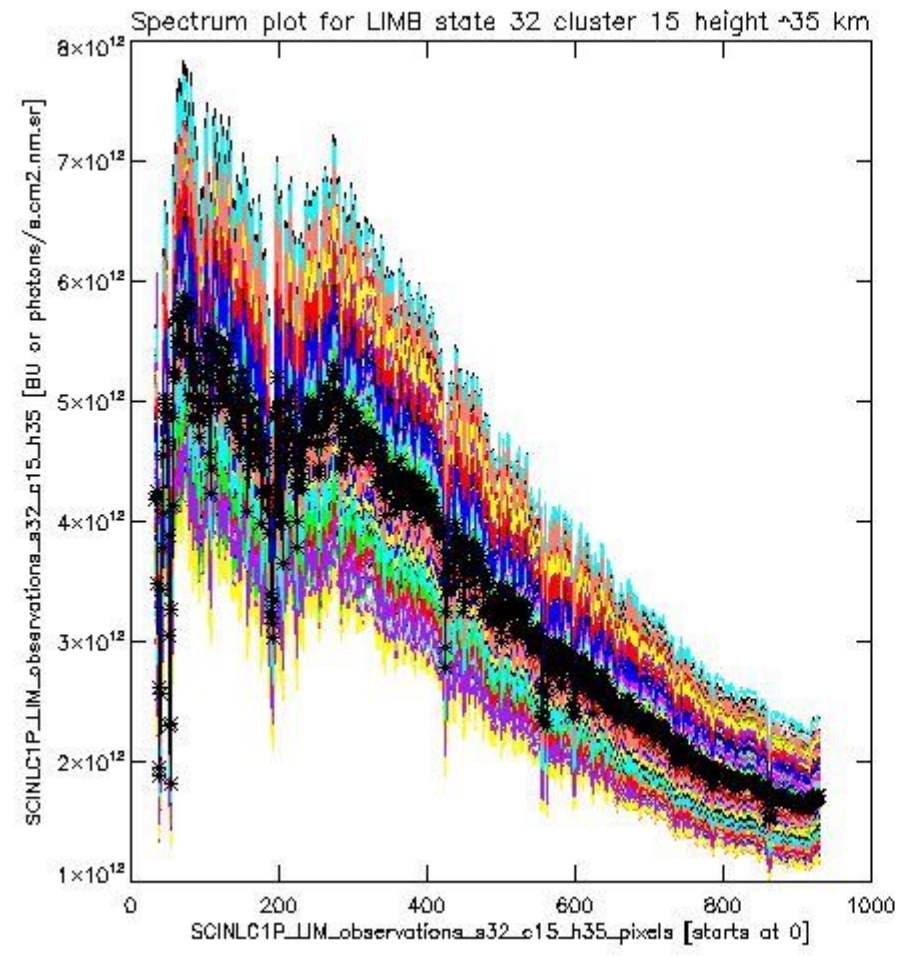
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110224_18.PNG



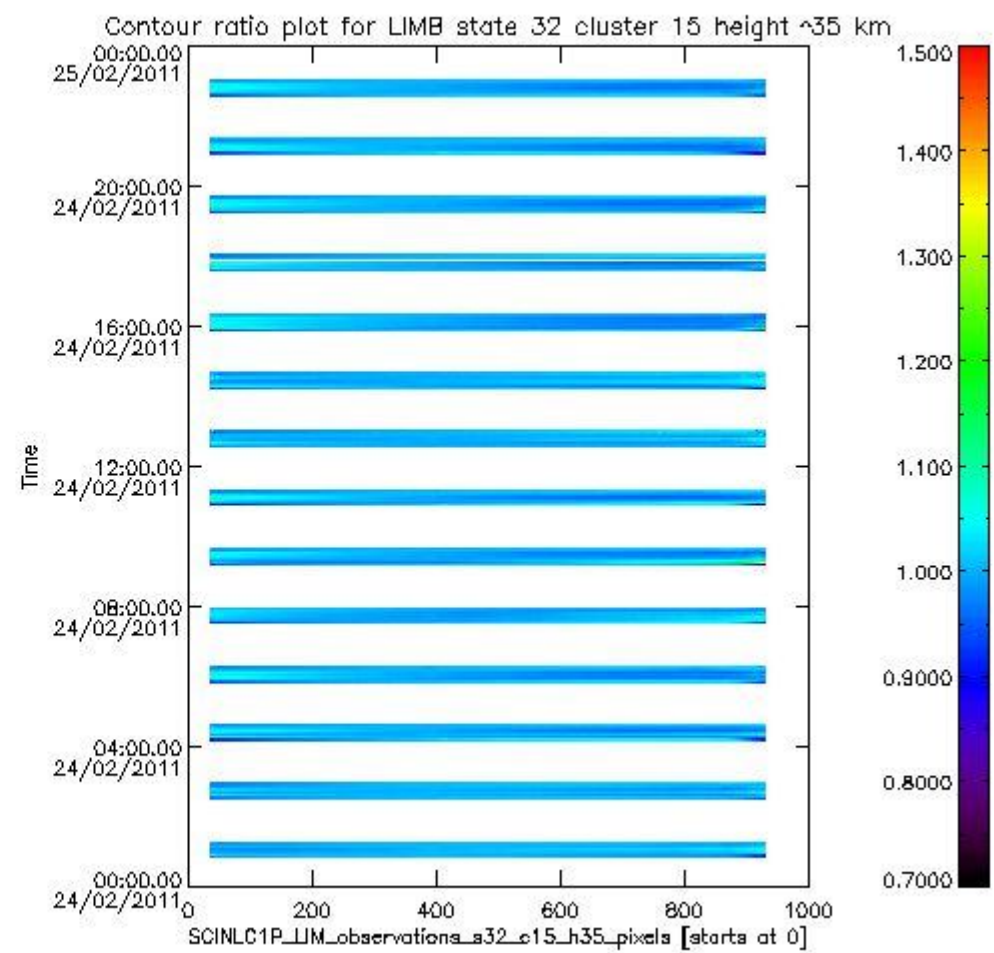
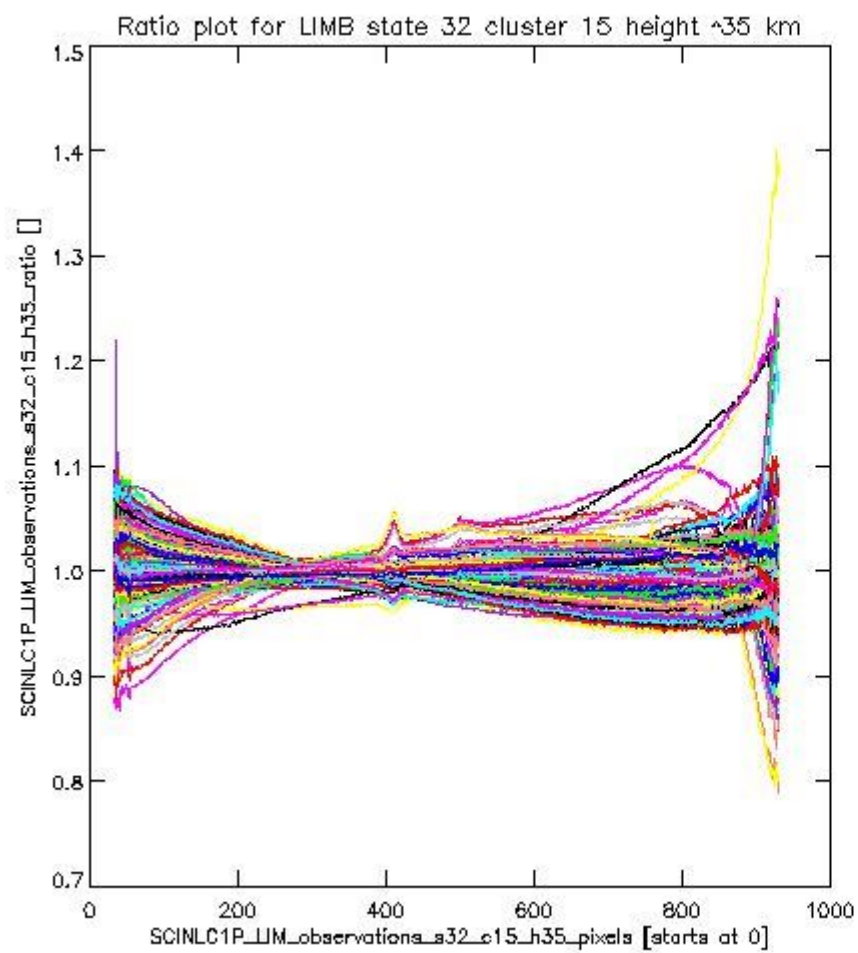
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110224_19.PNG

1.2.11 LIMB state 32 cluster 15 height ~35 km The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

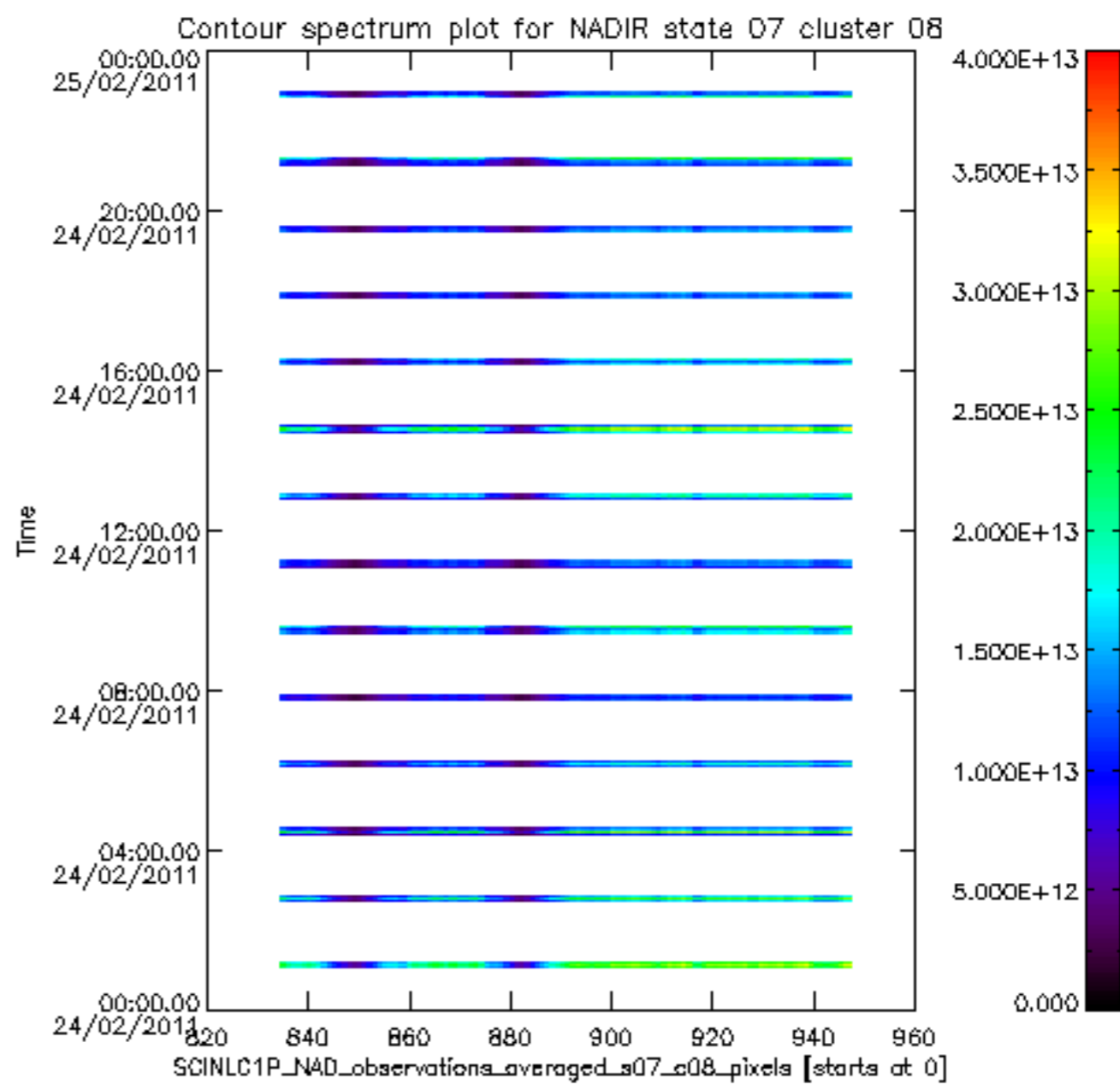
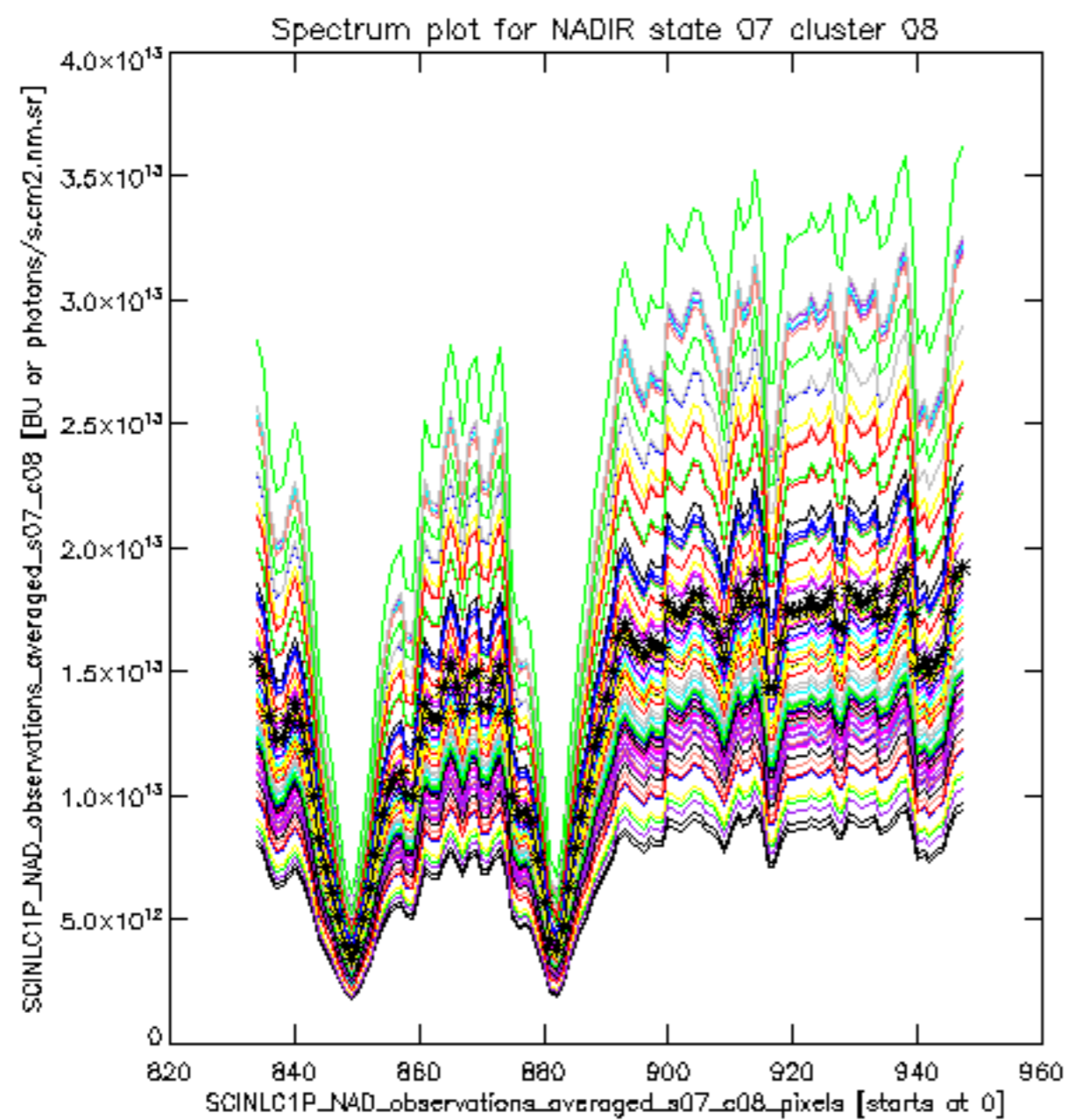
Item	Value
Start time of first sample	24FEB2011 00:49:53.820
Start time of last sample	24FEB2011 23:00:33.983
Reference period start time	25JAN2011 00:52:24.415
Reference period stop time	23FEB2011 23:37:24.554
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

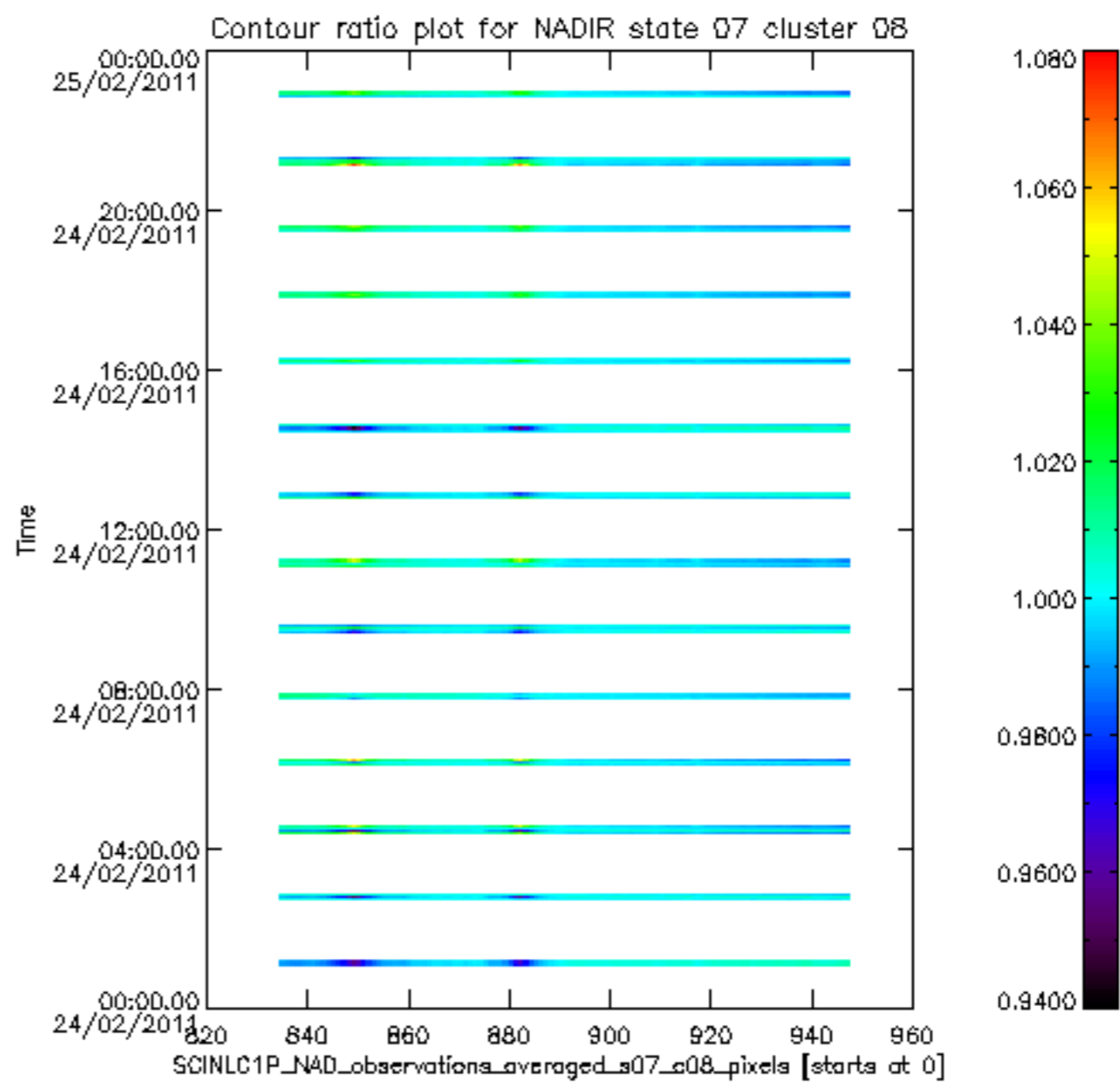
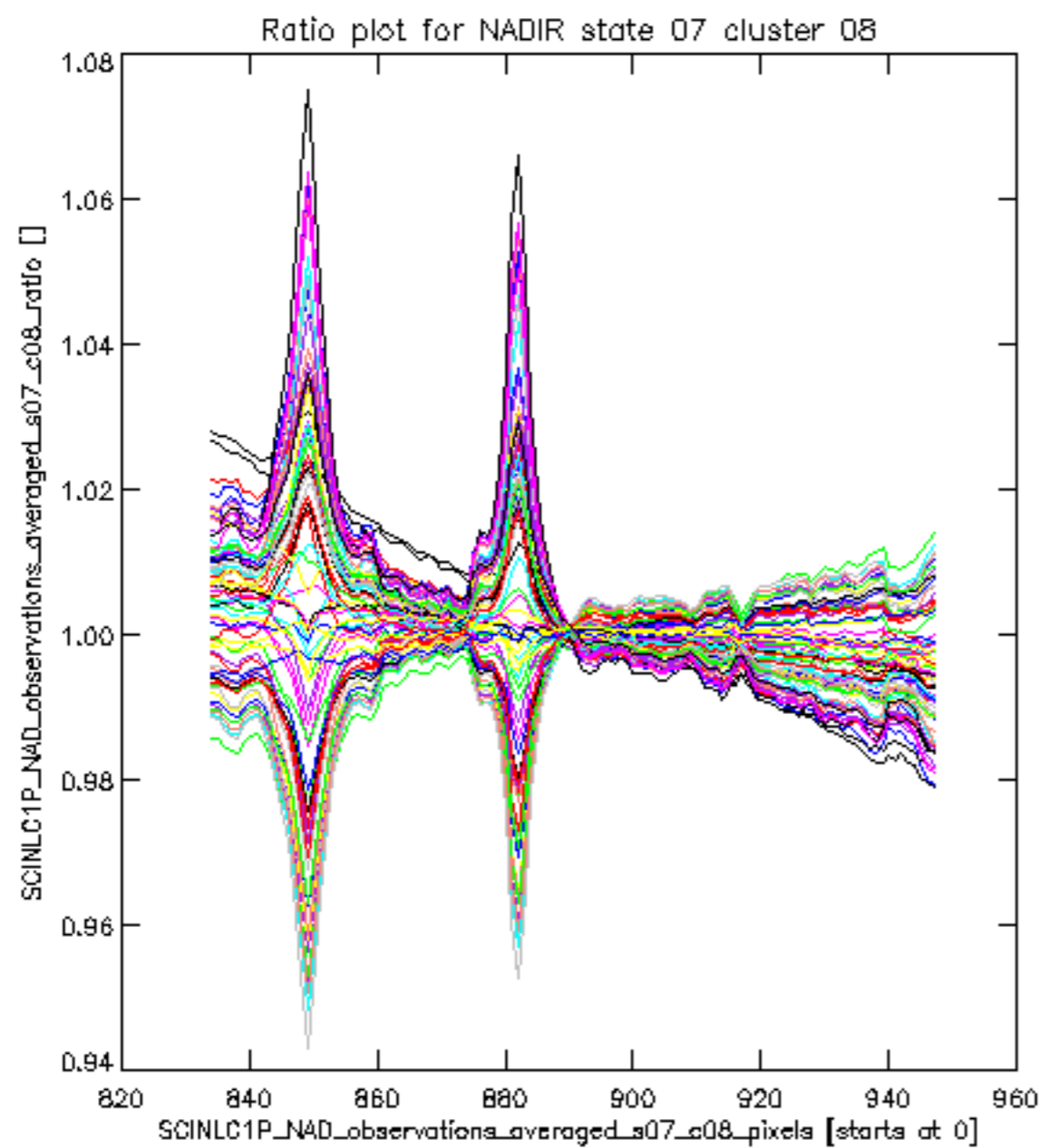


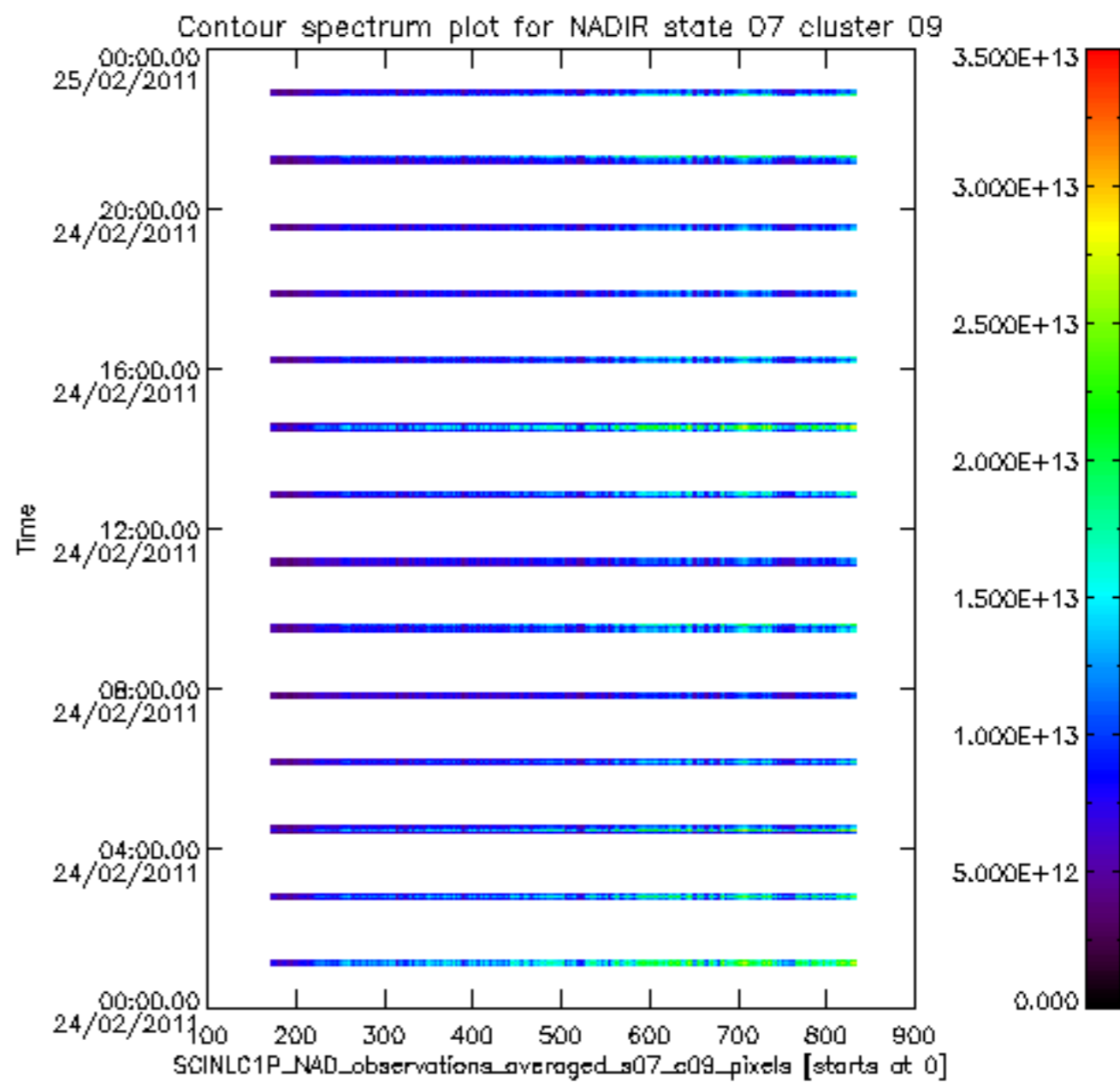
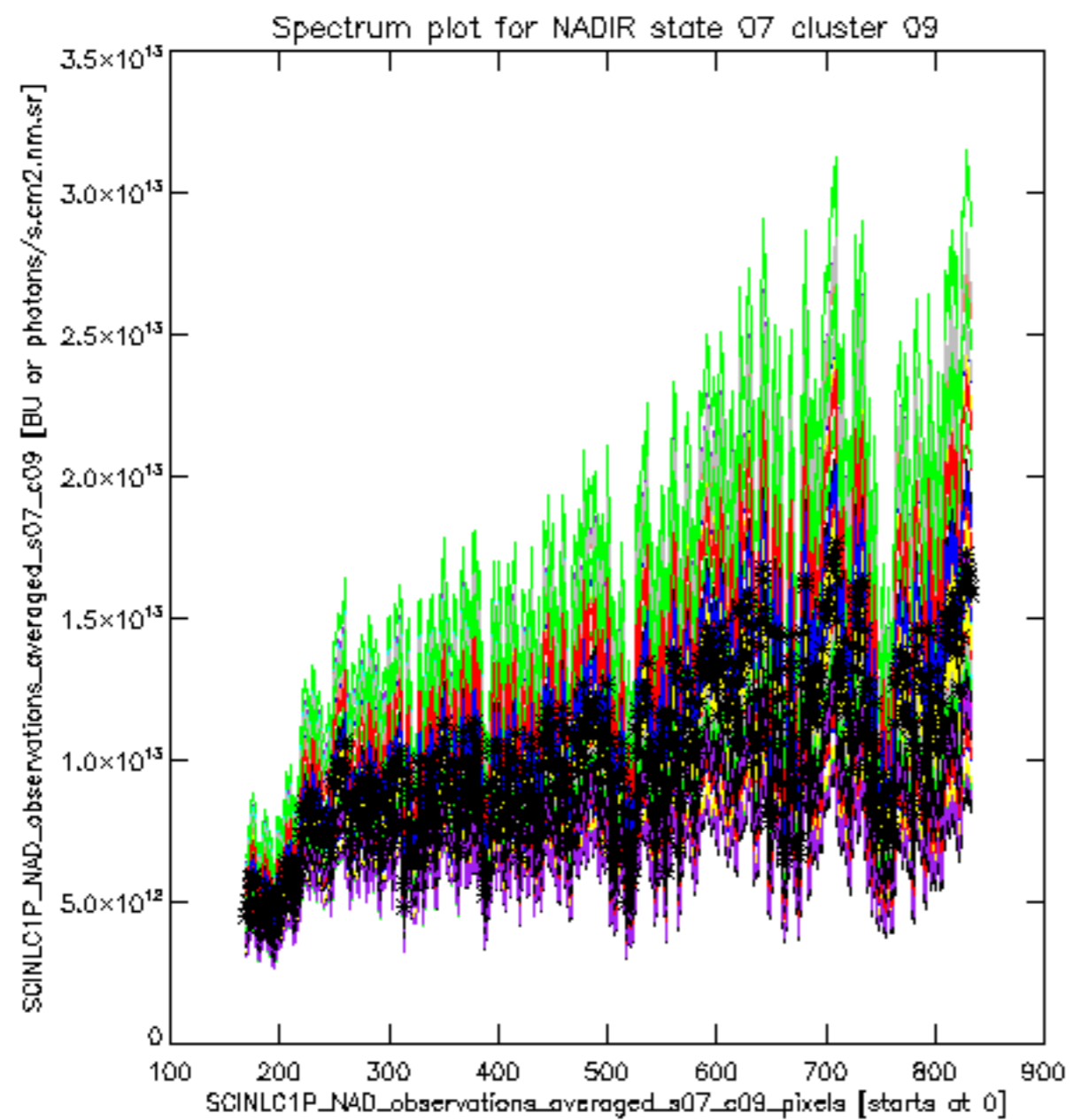
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110224_20.PNG

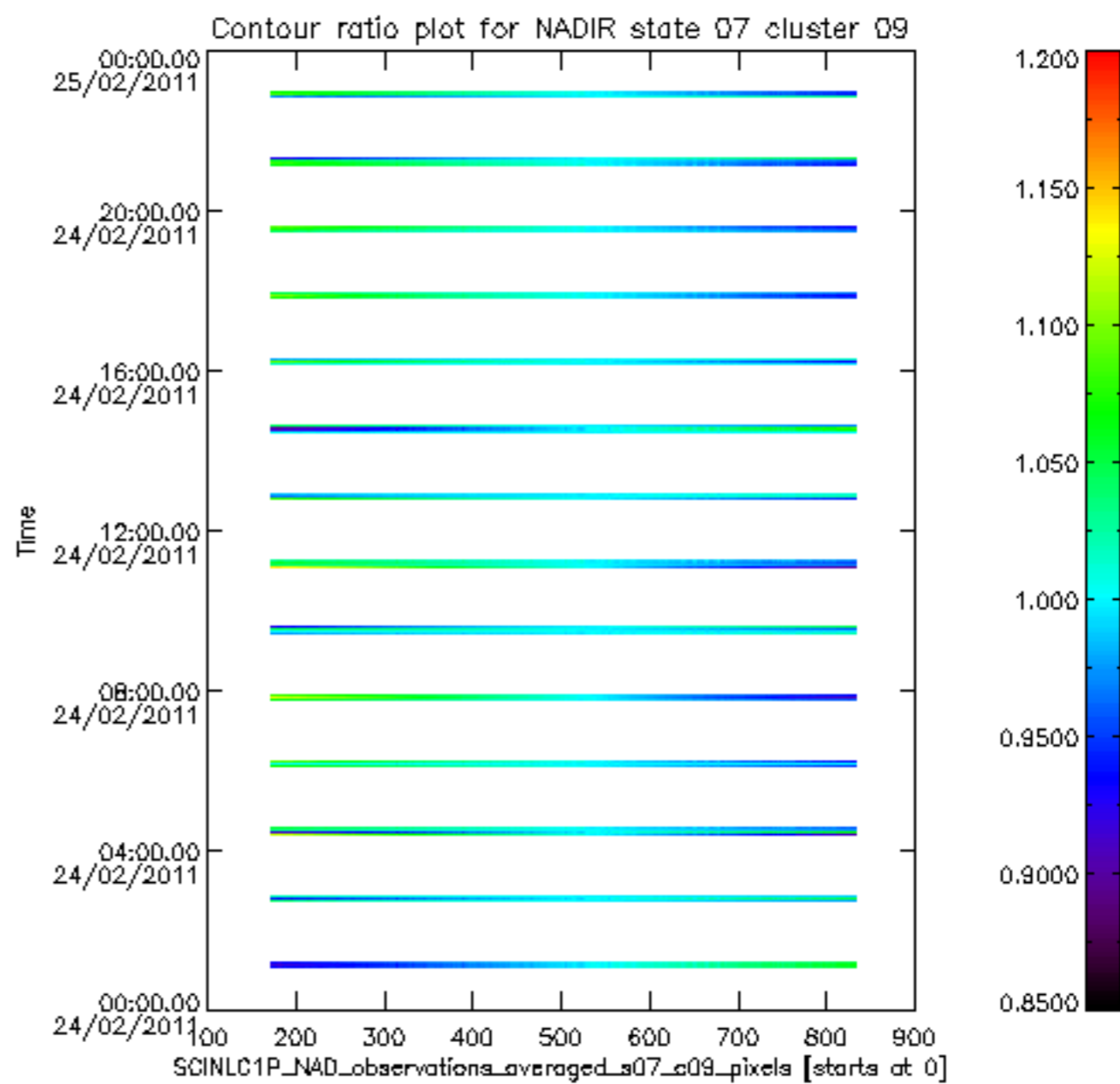
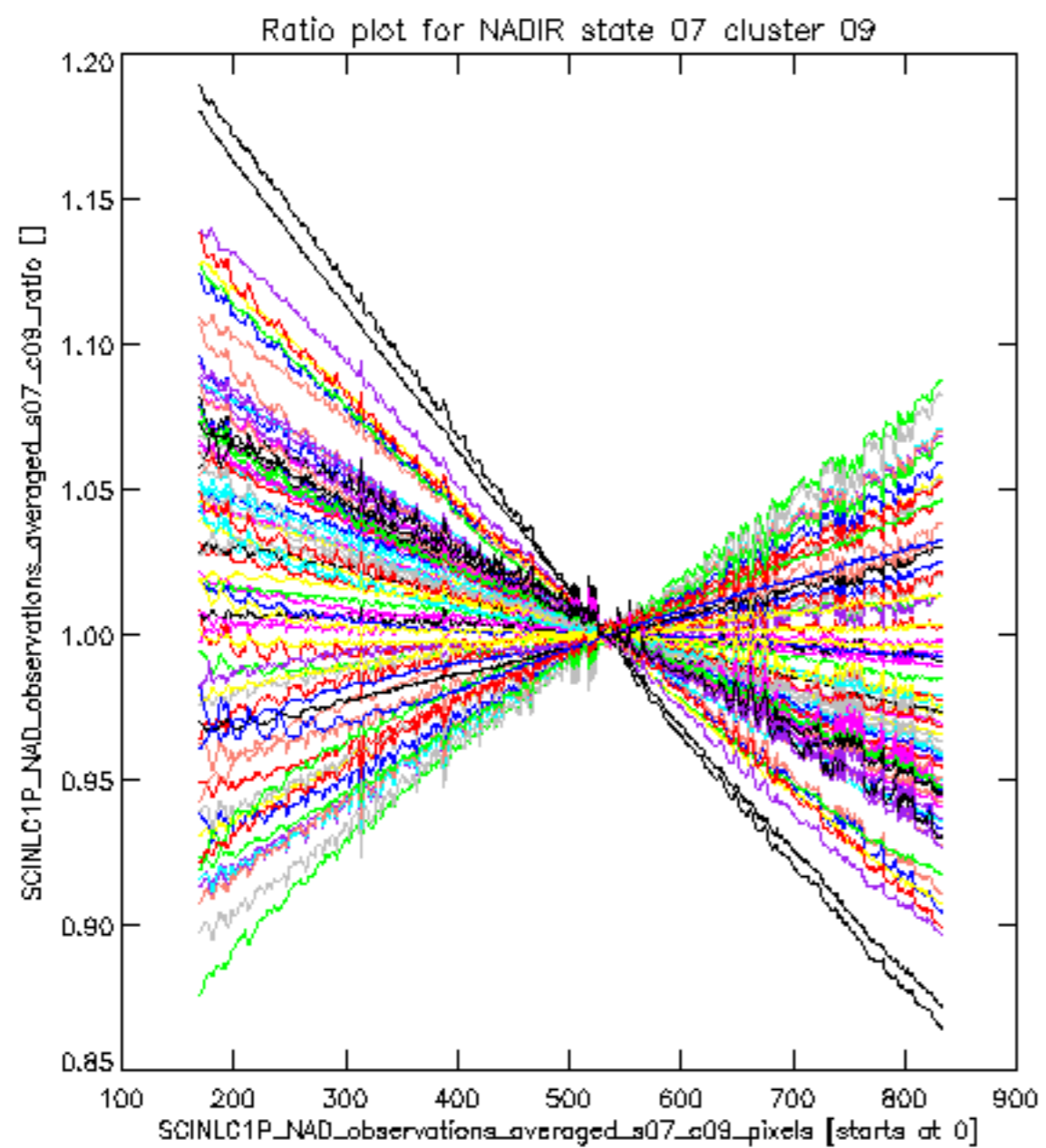


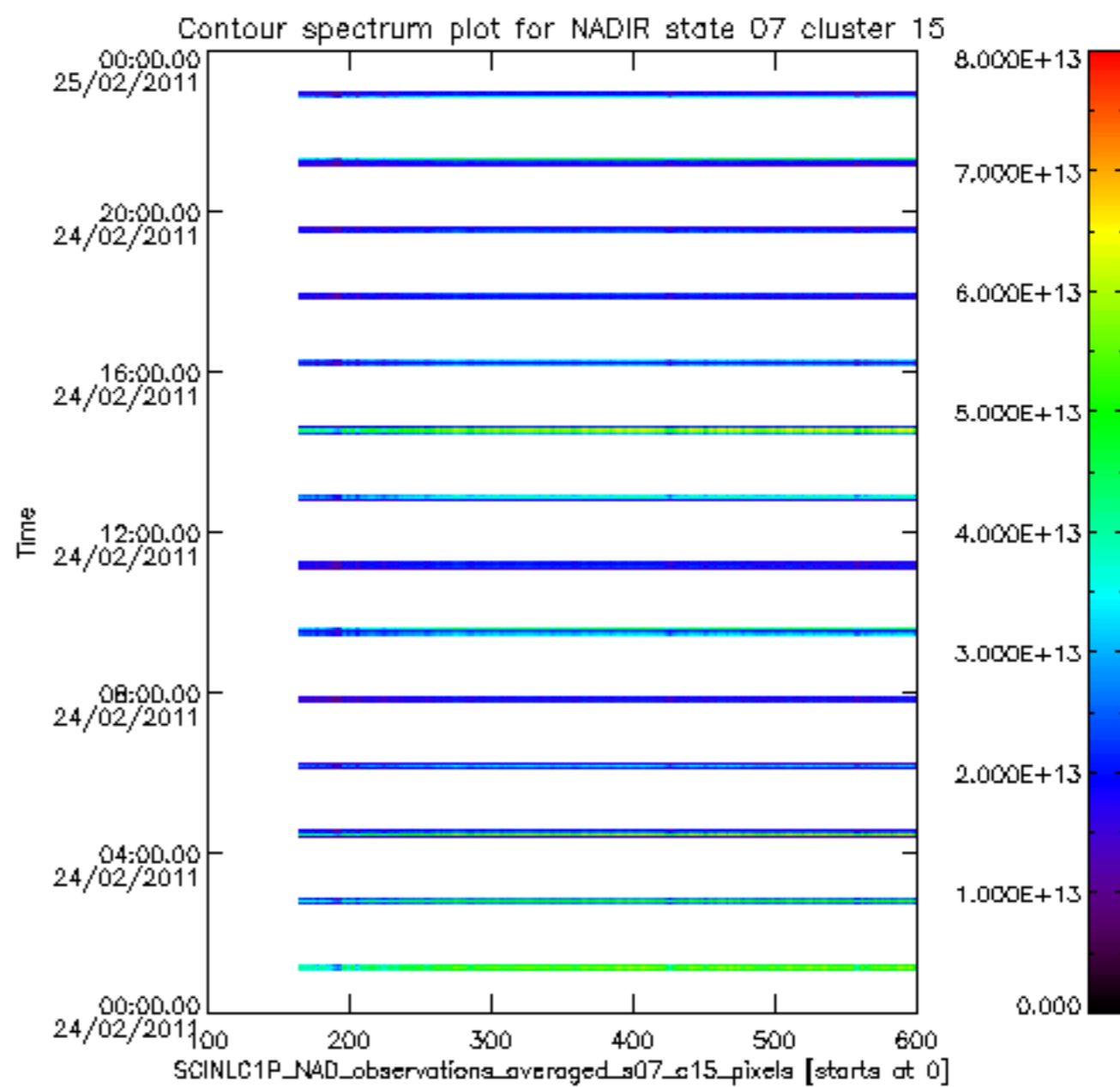
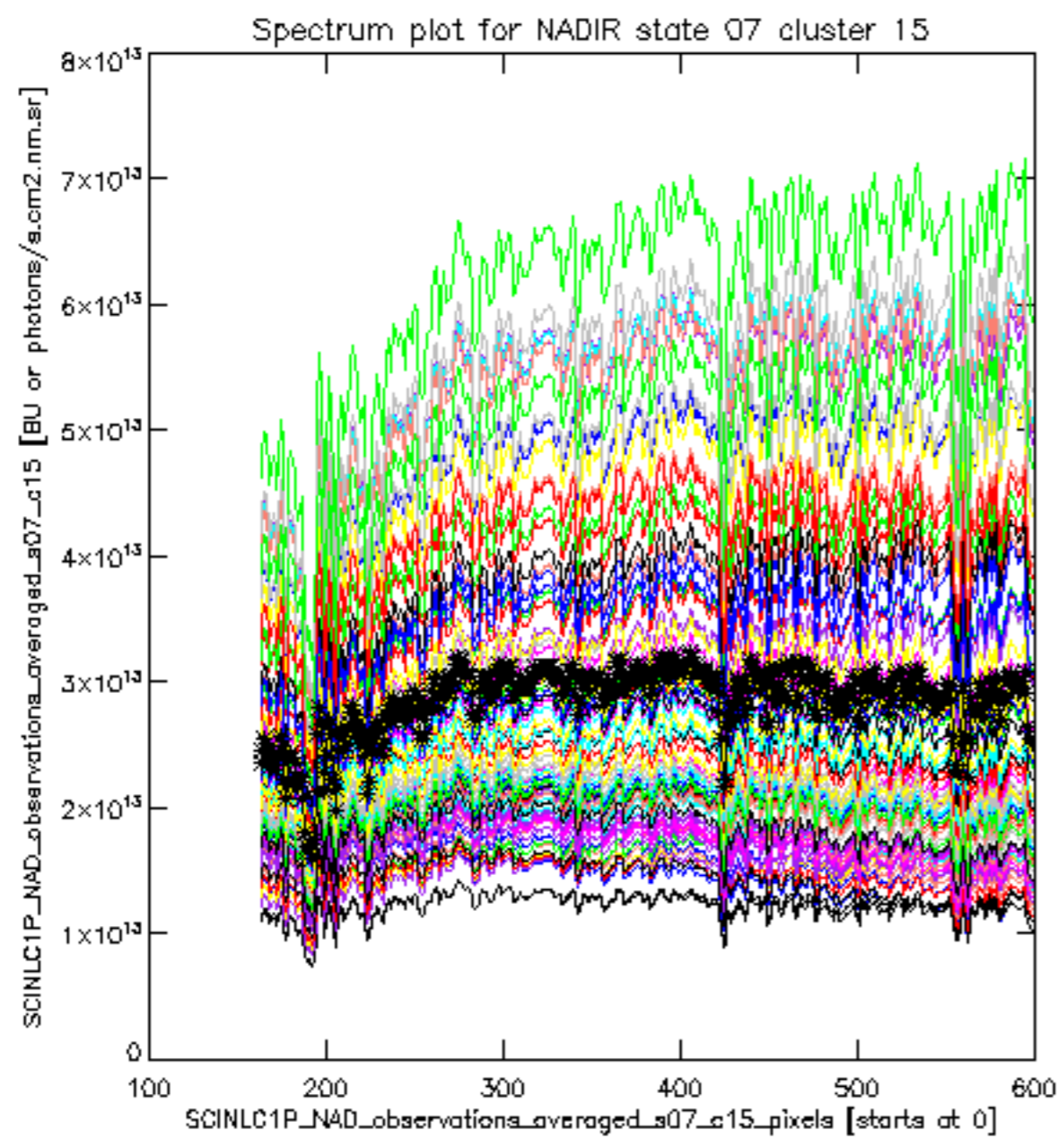
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110224_21.PNG

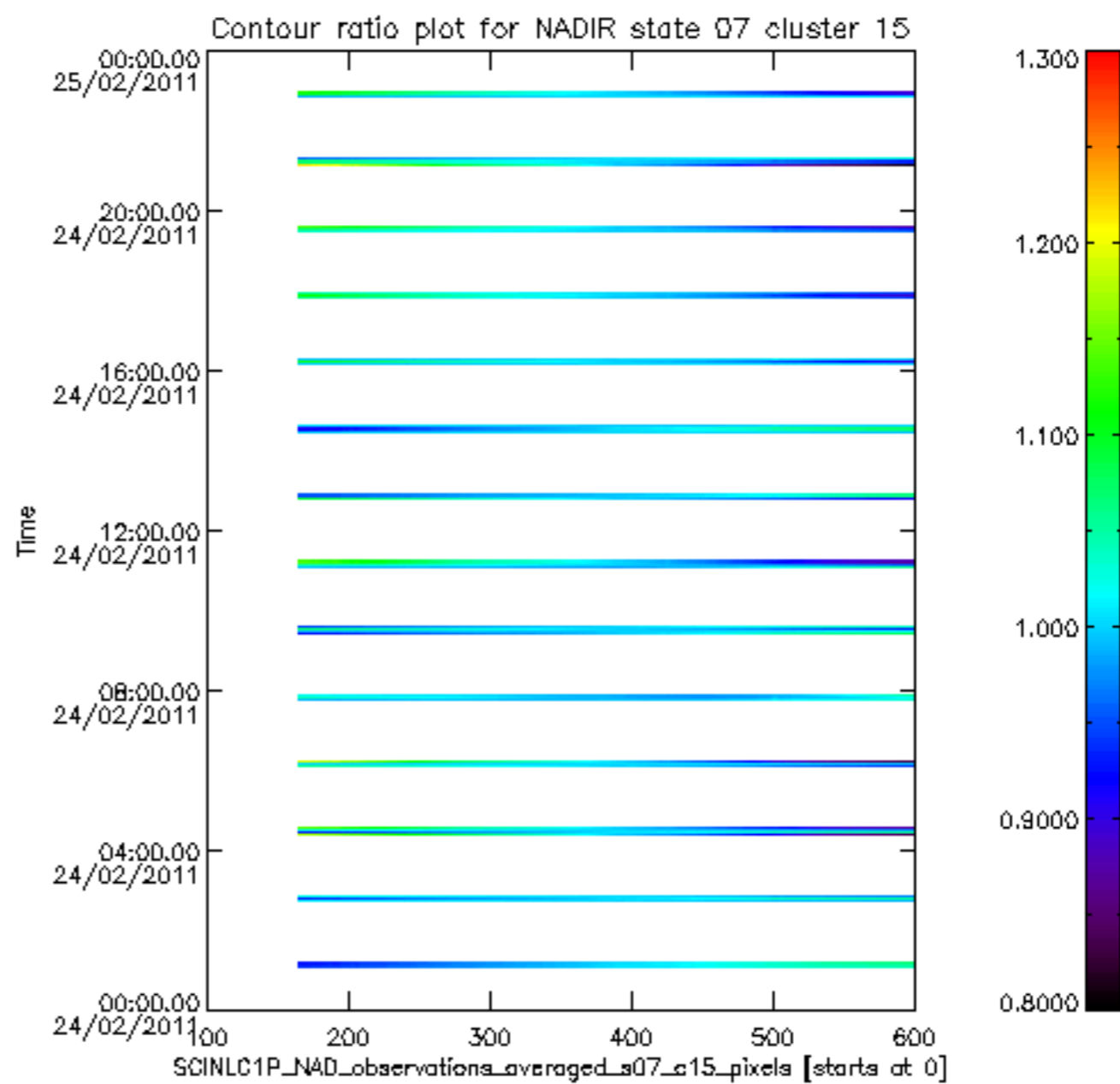
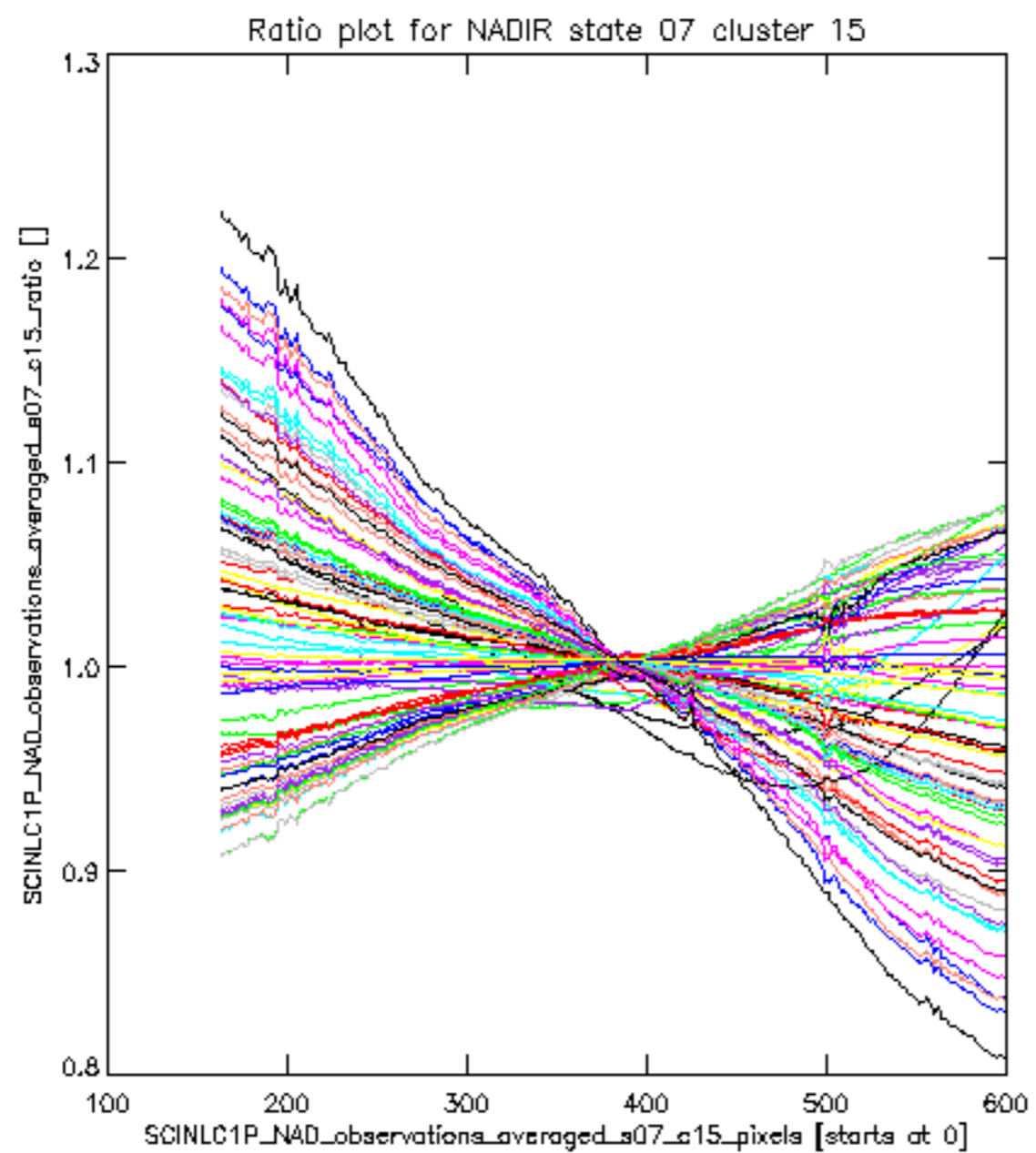


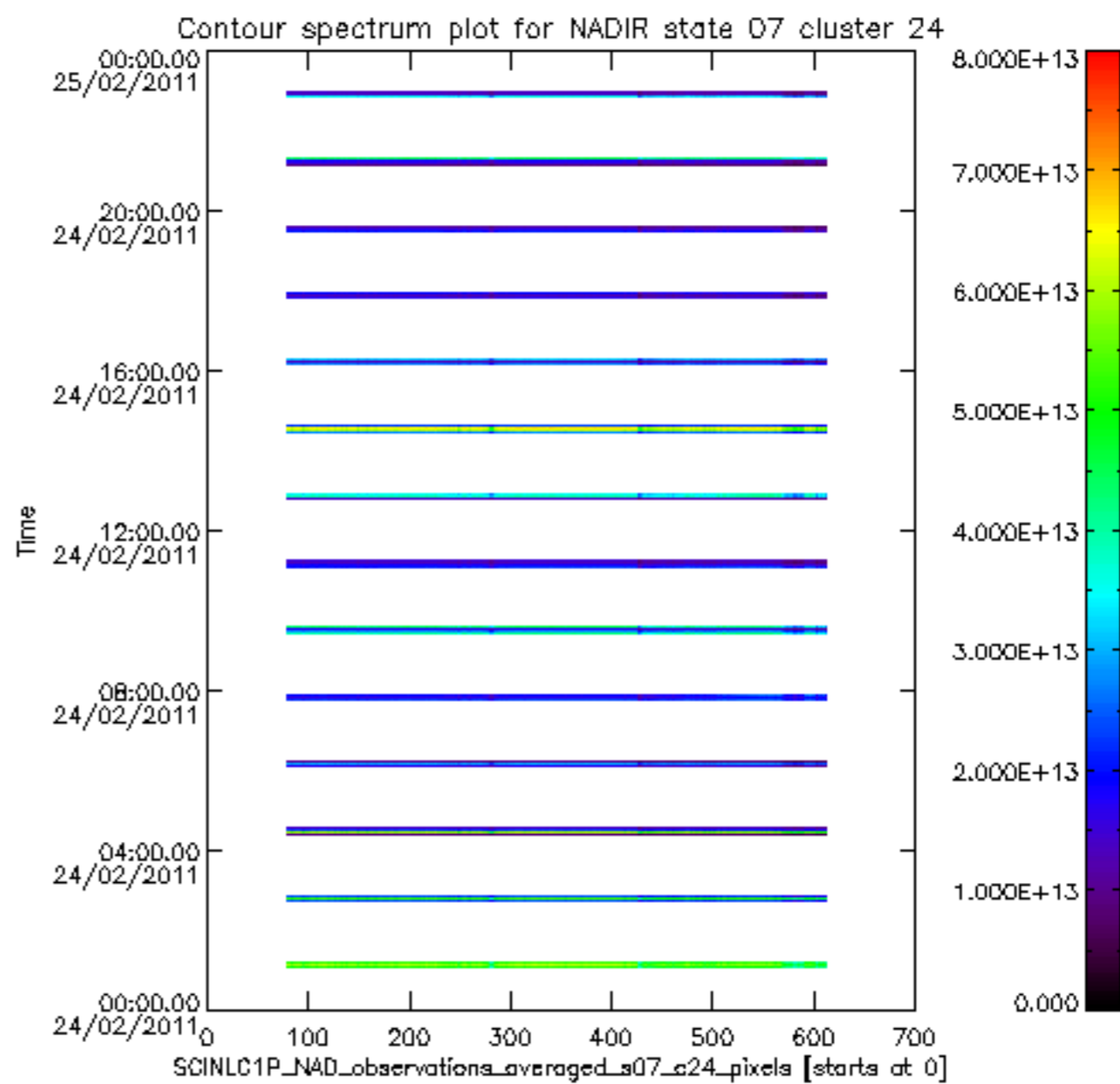
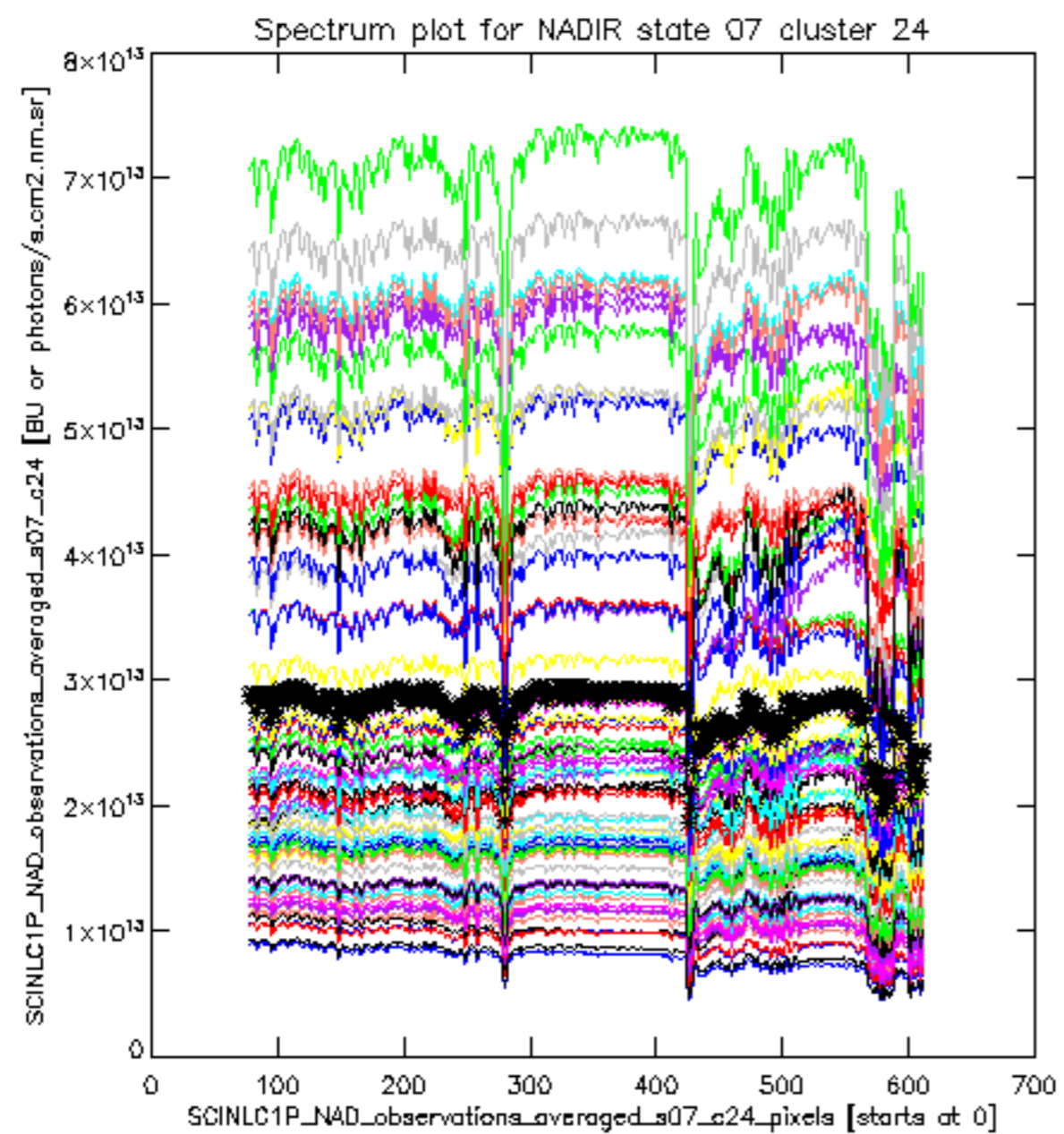


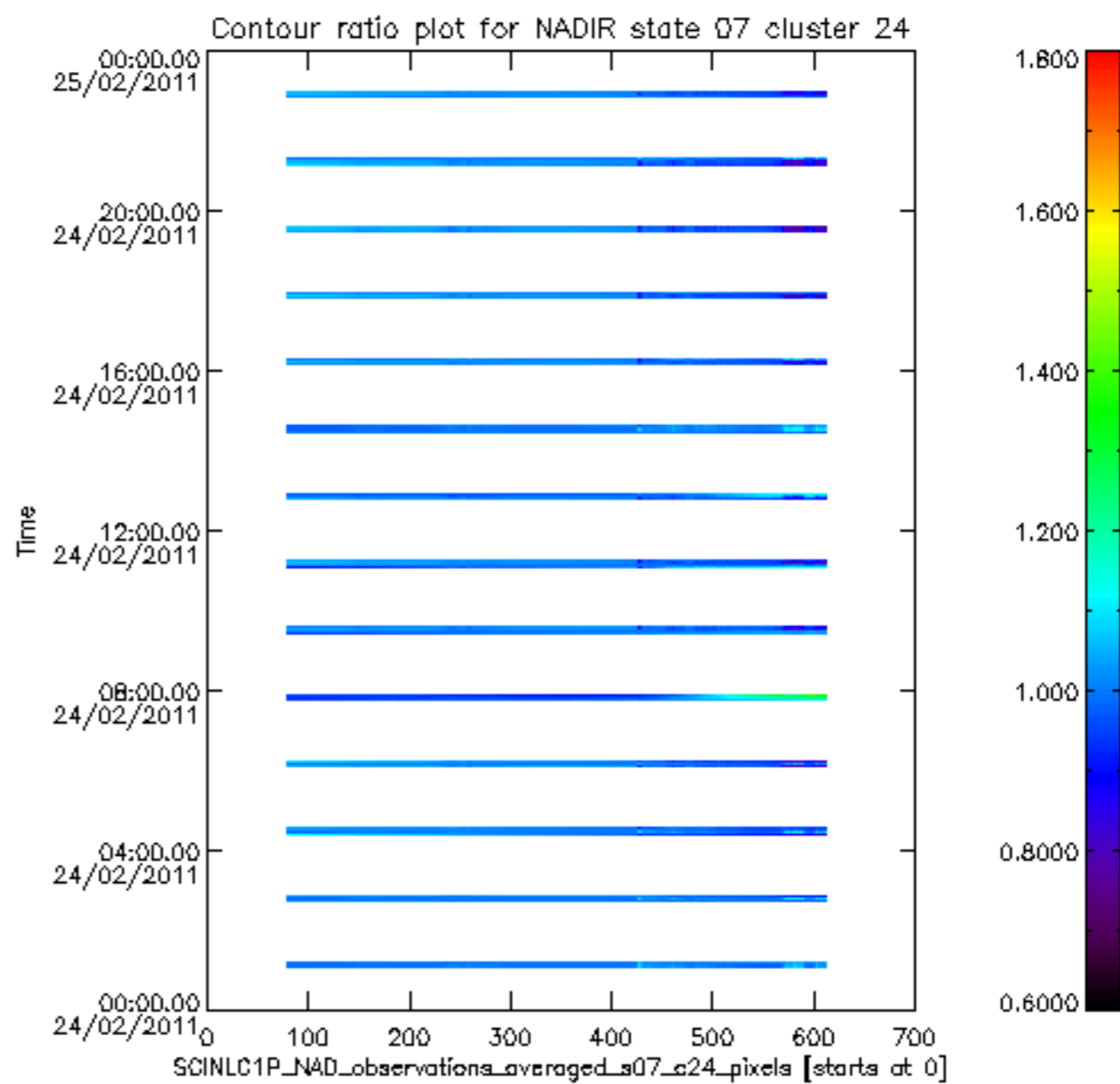
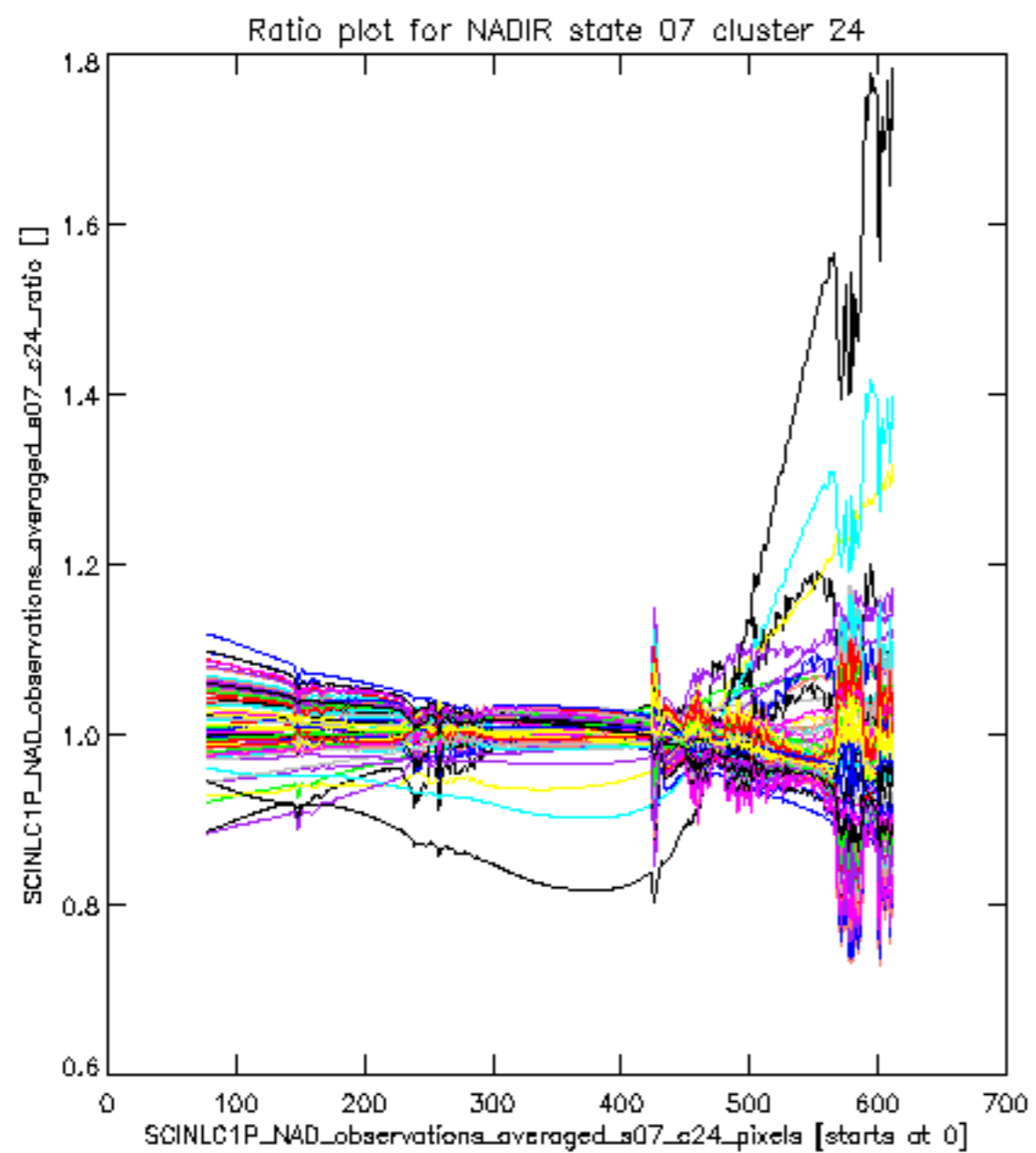




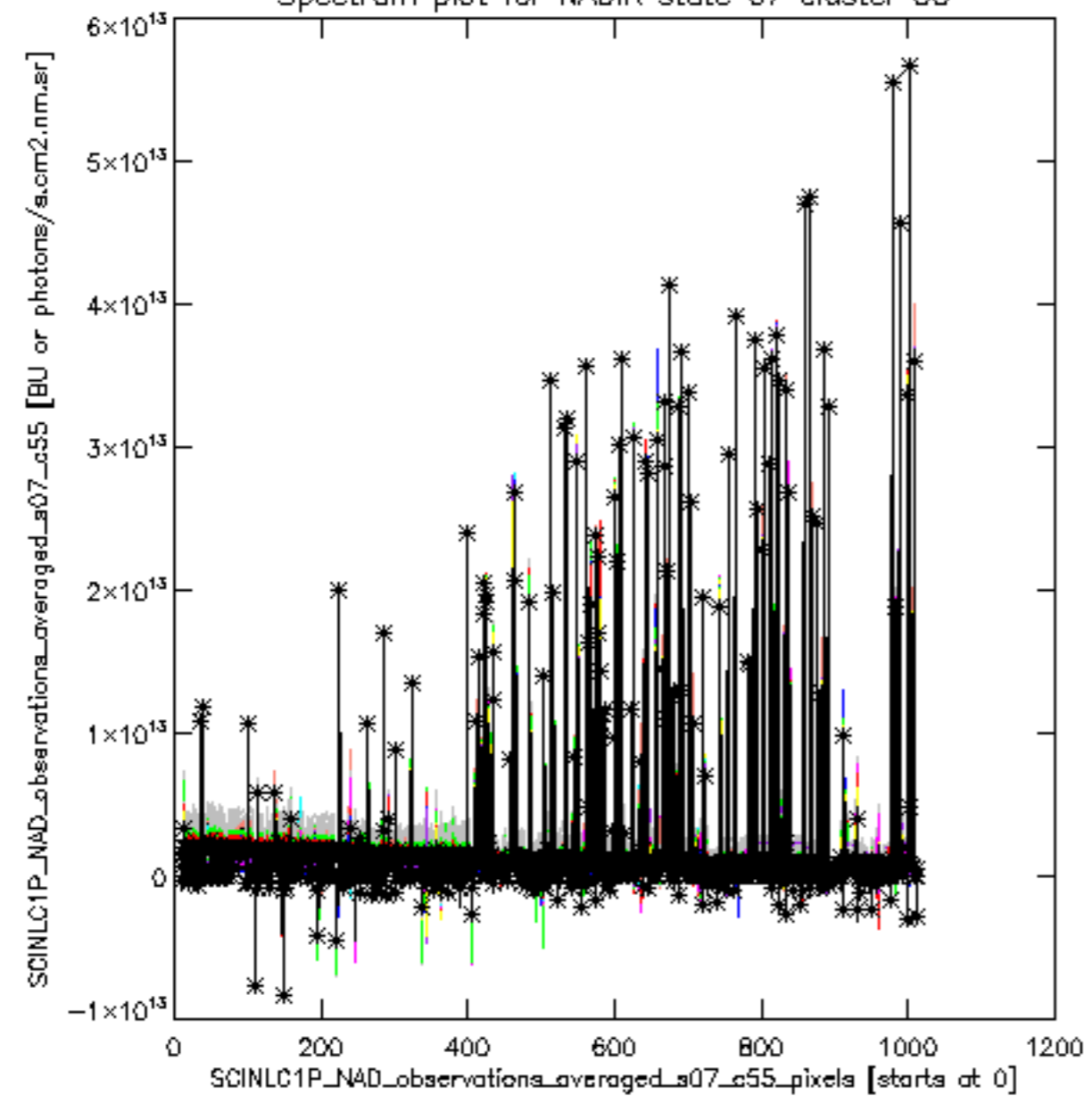








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

