

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	04MAR2011 06:55:37
Data source version	SCIA/7.04-U
Processing scope for products	21FEB2011 00:00:00 to 22FEB2011 00:00:00
Start time of first product within scope	21FEB2011 06:29:30
Stop time of last product within scope	22FEB2011 01:14:58
Total number of level 1 products	12
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	21FEB2011 07:55:25.341	21FEB2011 23:06:32.278
1	NADIR	07	09	N/A	21FEB2011 07:55:25.341	21FEB2011 23:06:32.278
2	NADIR	07	15	N/A	21FEB2011 07:55:25.341	21FEB2011 23:06:32.278
3	NADIR	07	24	N/A	21FEB2011 07:55:25.341	21FEB2011 23:06:32.278
4	NADIR	07	55	N/A	21FEB2011 07:55:25.341	21FEB2011 23:06:32.278
5	LIMB	32	09	~19 km	21FEB2011 07:40:11.962	21FEB2011 23:09:43.579
6	LIMB	32	09	~22 km	21FEB2011 07:40:11.962	21FEB2011 23:09:43.579
7	LIMB	32	09	~25 km	21FEB2011 07:40:11.962	21FEB2011 23:09:43.579
8	LIMB	32	15	~22 km	21FEB2011 07:40:11.962	21FEB2011 23:09:43.579
9	LIMB	32	15	~25 km	21FEB2011 07:40:11.962	21FEB2011 23:09:43.579
10	LIMB	32	15	~35 km	21FEB2011 07:40:11.962	21FEB2011 23:09:43.579

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_1CUDPA20110221_062822_000024083099_00379_46945_4798.N1	21FEB2011 06:29:30	21FEB2011 06:52:15	0	16	5	0	0	2	0	0	
1	SCI_NLC_1CUDPA20110221_070834_000060413099_00380_46946_4814.N1	21FEB2011 07:22:14	21FEB2011 08:32:43	0	36	30	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110221_084920_000059773099_00381_46947_4815.N1	21FEB2011 09:02:27	21FEB2011 10:12:42	0	35	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110221_102901_000060413099_00382_46948_4817.N1	21FEB2011 10:42:41	21FEB2011 11:53:10	0	36	30	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110221_120946_000059773099_00383_46949_4816.N1	21FEB2011 12:22:54	21FEB2011 13:33:09	0	35	31	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110221_134928_000060413099_00384_46950_4818.N1	21FEB2011 14:03:08	21FEB2011 15:13:37	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110221_153013_000059773099_00385_46951_4821.N1	21FEB2011 15:43:21	21FEB2011 16:53:36	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110221_170955_000060413099_00386_46952_4819.N1	21FEB2011 17:23:35	21FEB2011 18:34:25	0	36	30	0	1	1	0	0	
8	SCI_NLC_1CUDPA20110221_185041_000059773099_00387_46953_4820.N1	21FEB2011 19:03:48	21FEB2011 20:14:24	0	35	31	0	1	1	0	0	
9	SCI_NLC_1CUDPA20110221_203022_000060413099_00388_46954_4822.N1	21FEB2011 20:44:02	21FEB2011 21:54:31	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110221_221107_000059773099_00389_46955_4823.N1	21FEB2011 22:24:15	21FEB2011 23:34:30	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110221_235049_000060413099_00390_46956_4824.N1	22FEB2011 00:04:29	22FEB2011 01:14:58	0	36	30	0	0	1	0	0	

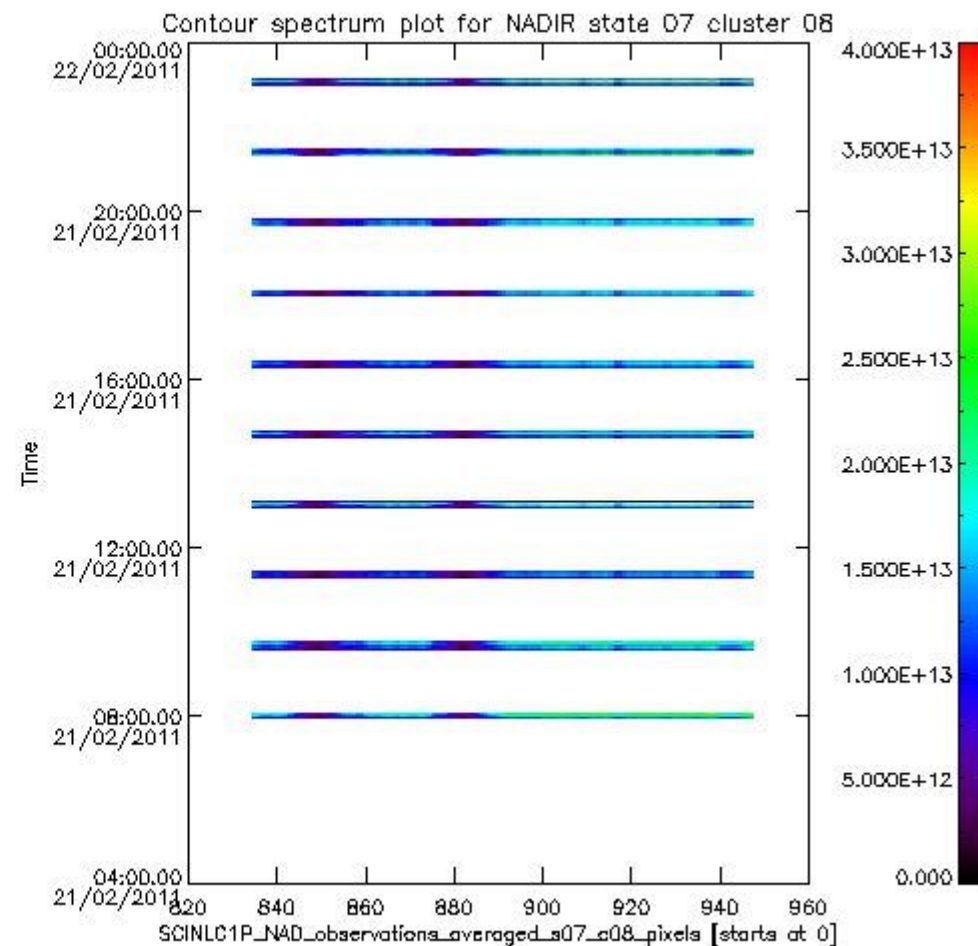
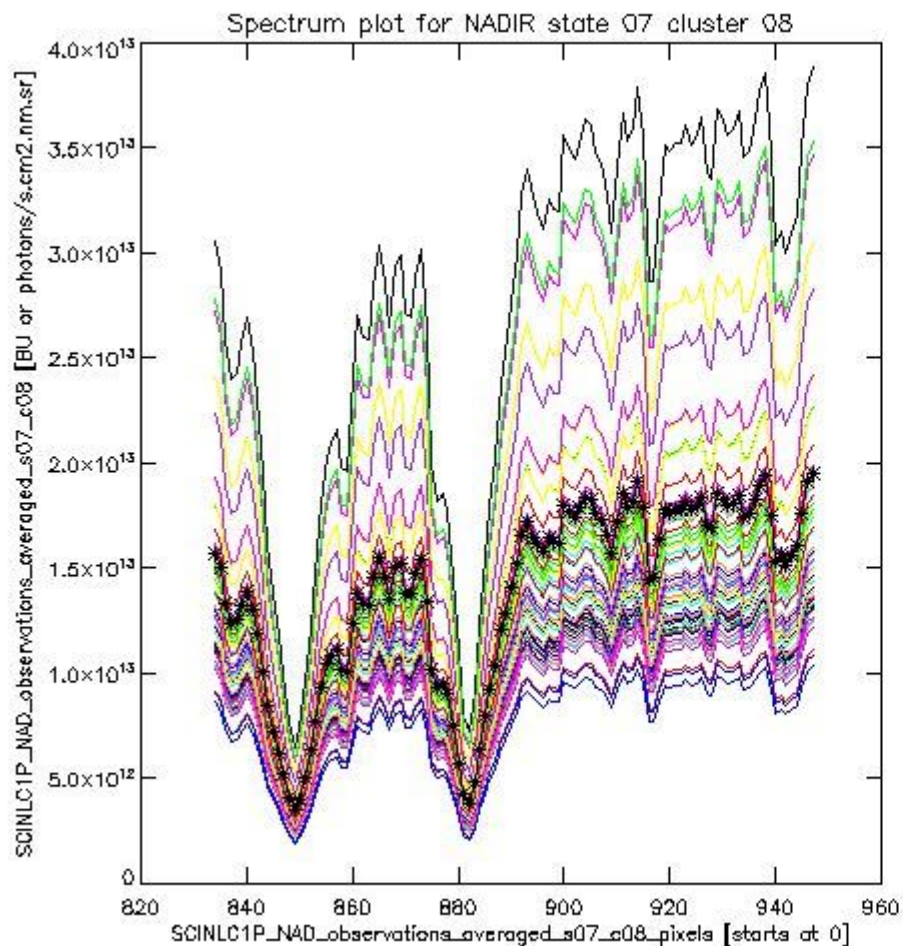
1.2 Source packet monitoring

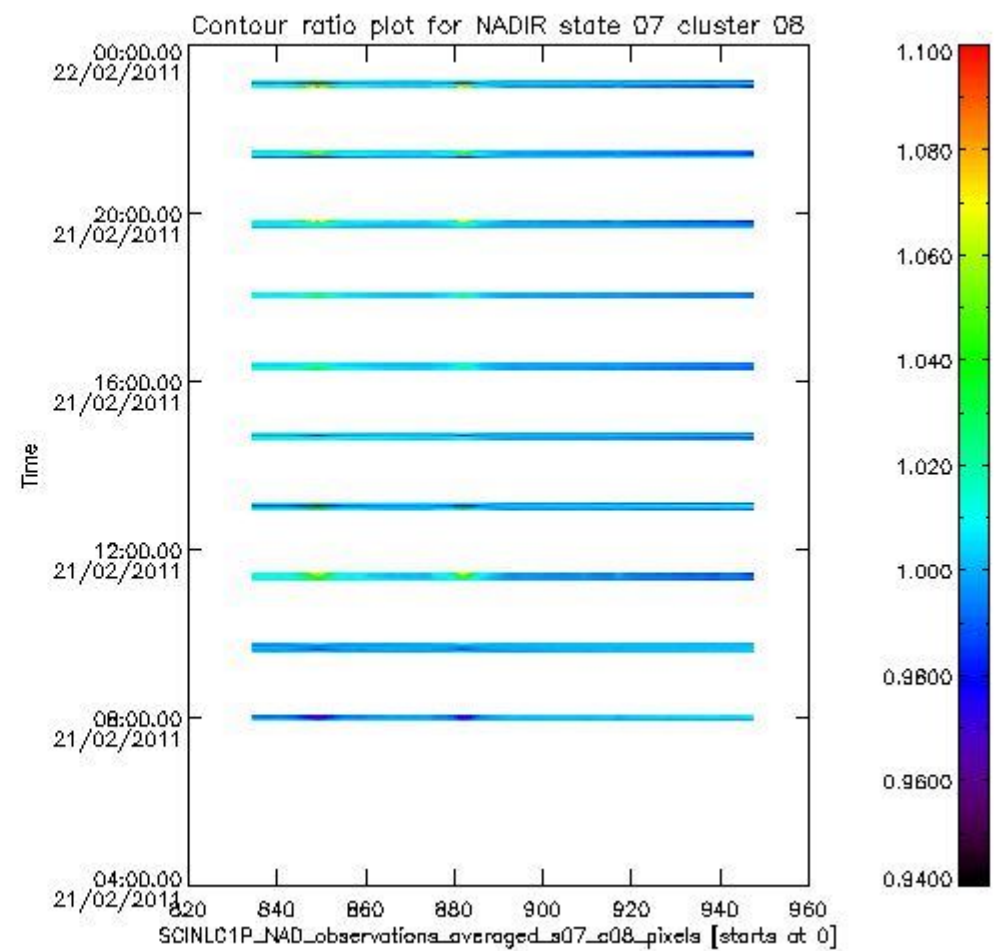
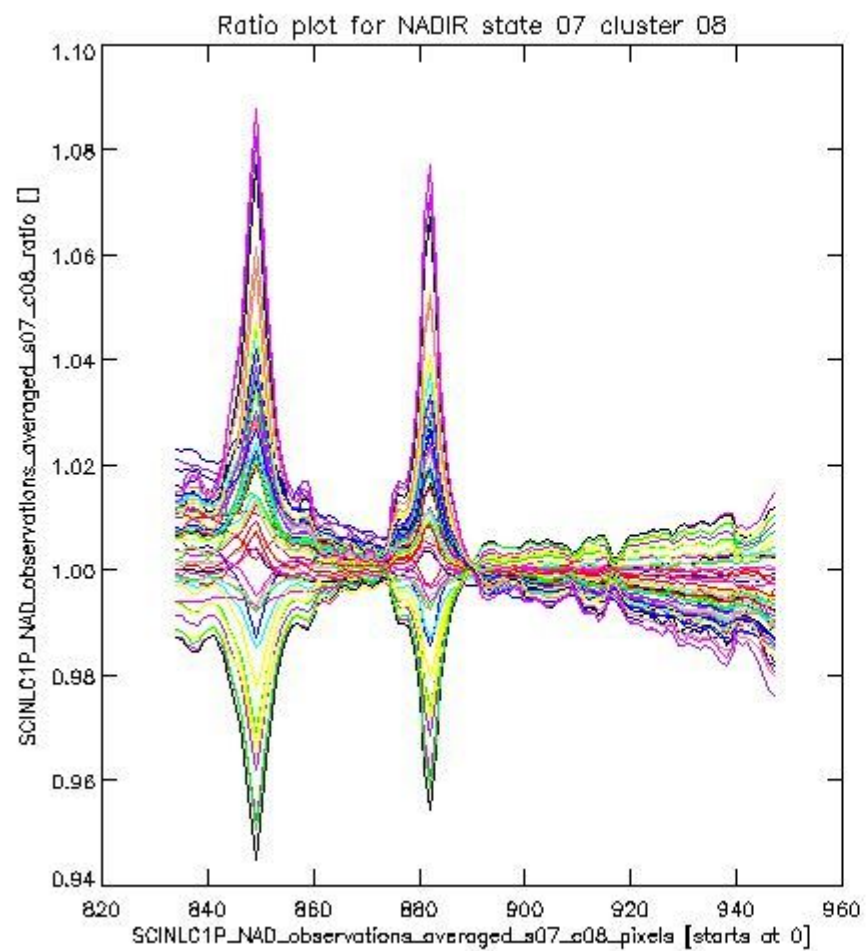
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	21FEB2011 07:55:25.341
Start time of last sample	21FEB2011 23:06:32.278
Reference period start time	22JAN2011 01:16:56.140
Reference period stop time	20FEB2011 22:02:15.118
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

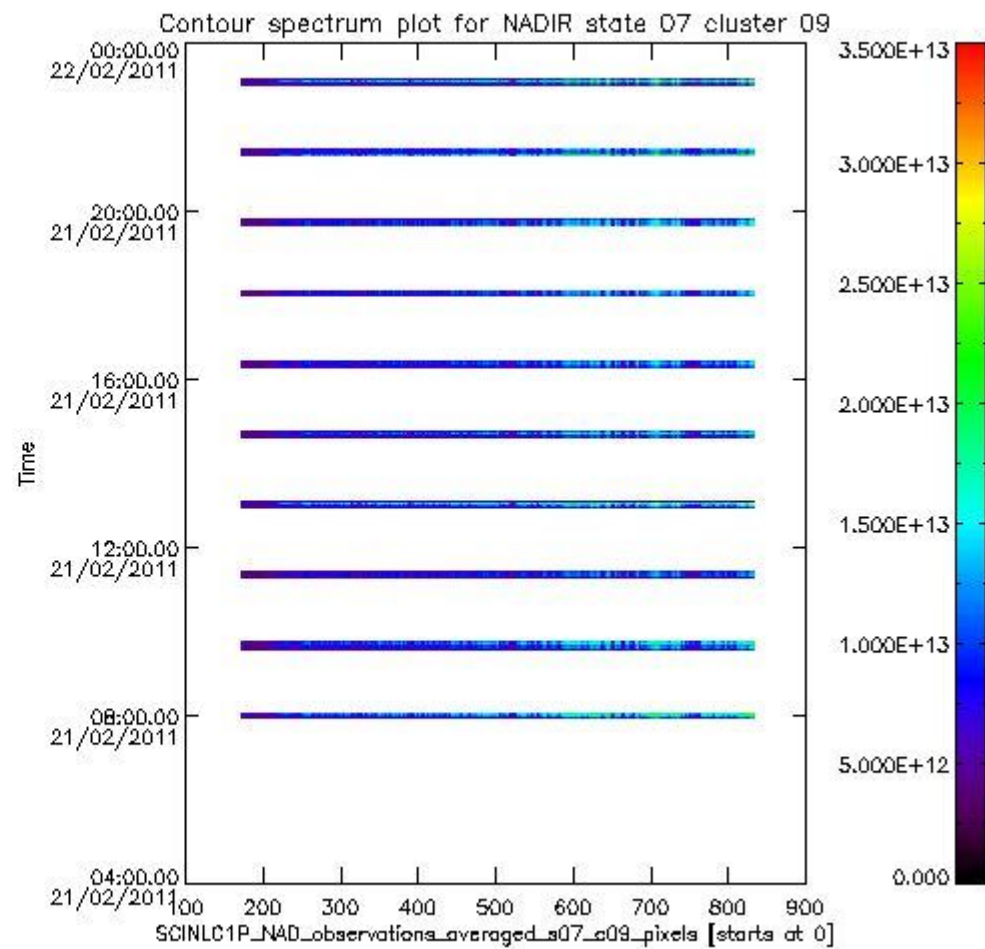
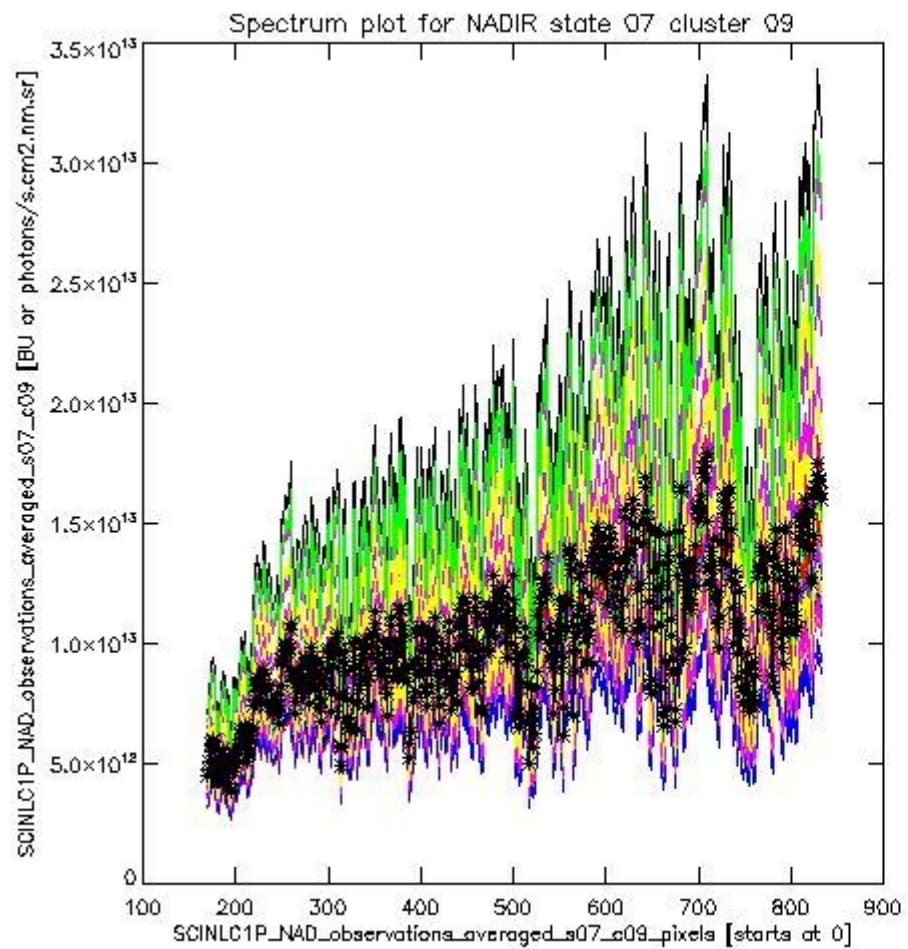




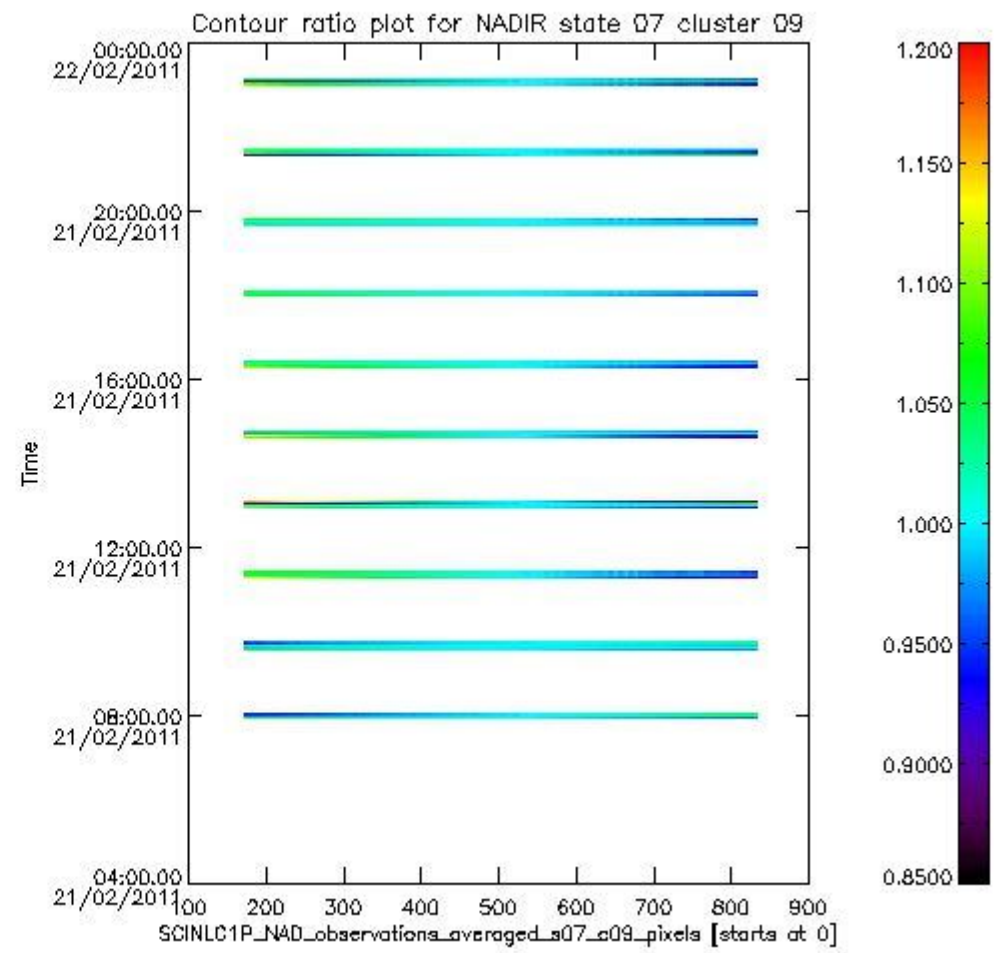
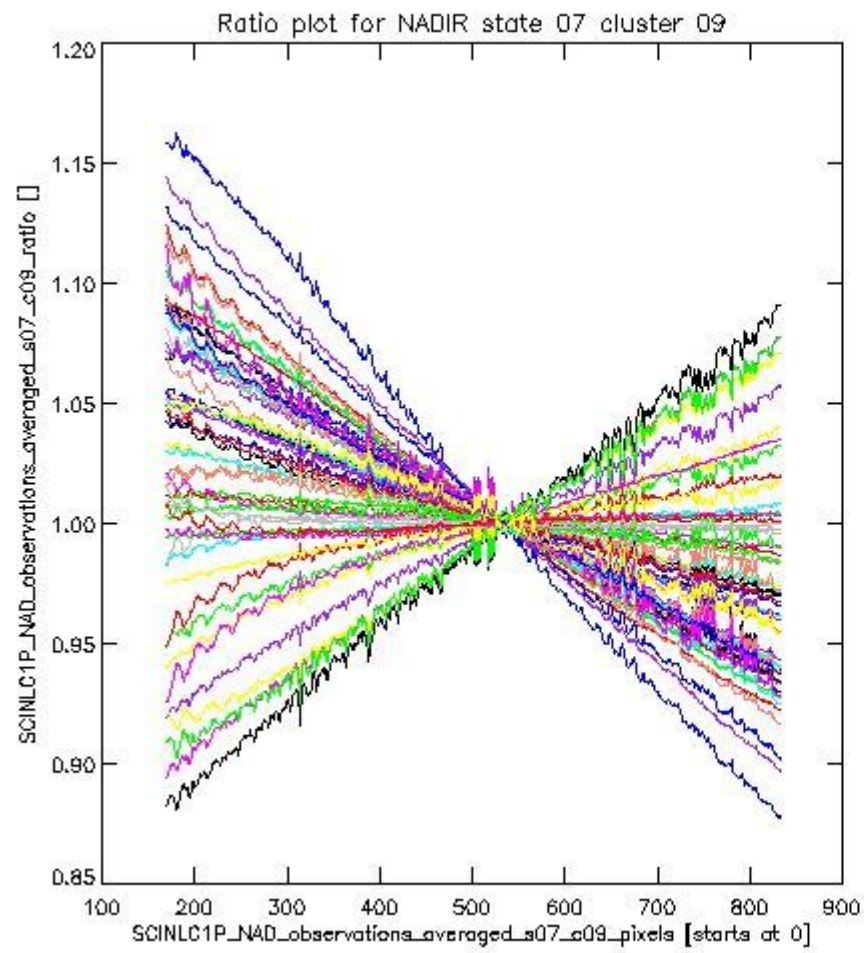
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_1.PNG

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	21FEB2011 07:55:25.341
Start time of last sample	21FEB2011 23:06:32.278
Reference period start time	22JAN2011 01:16:56.140
Reference period stop time	20FEB2011 22:02:15.118
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



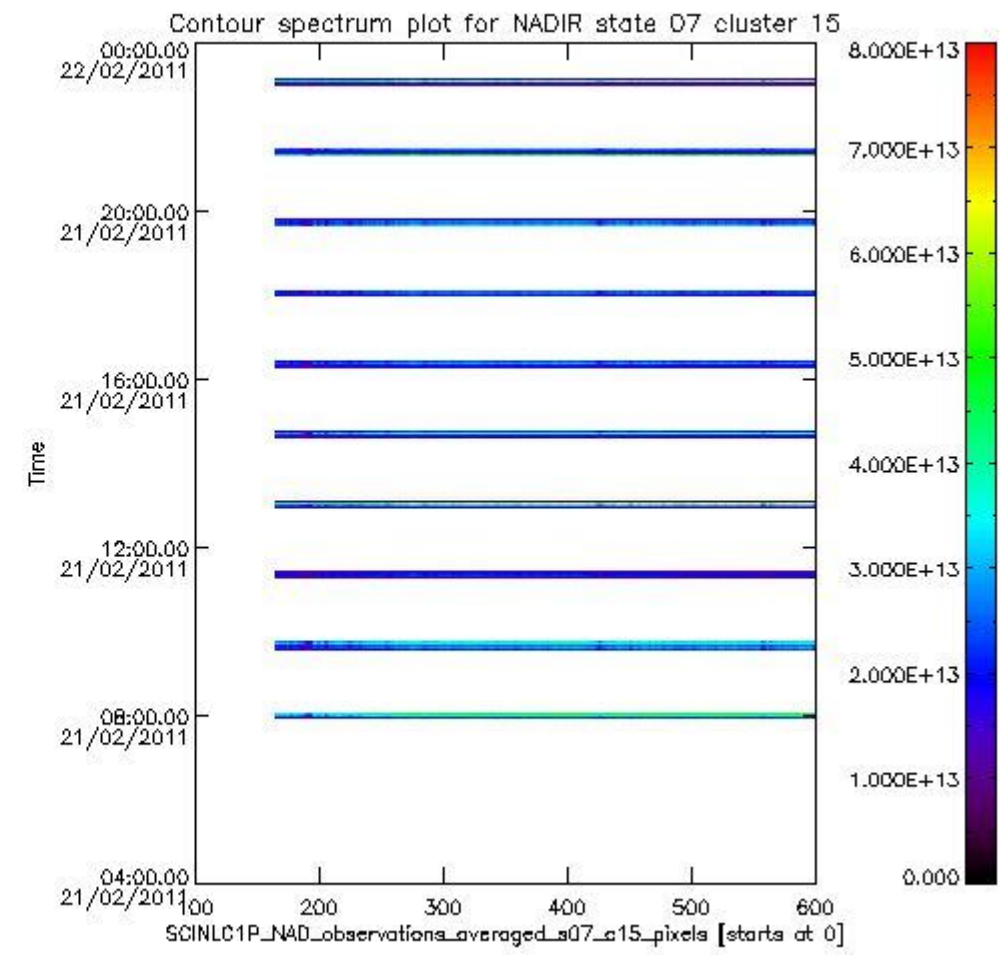
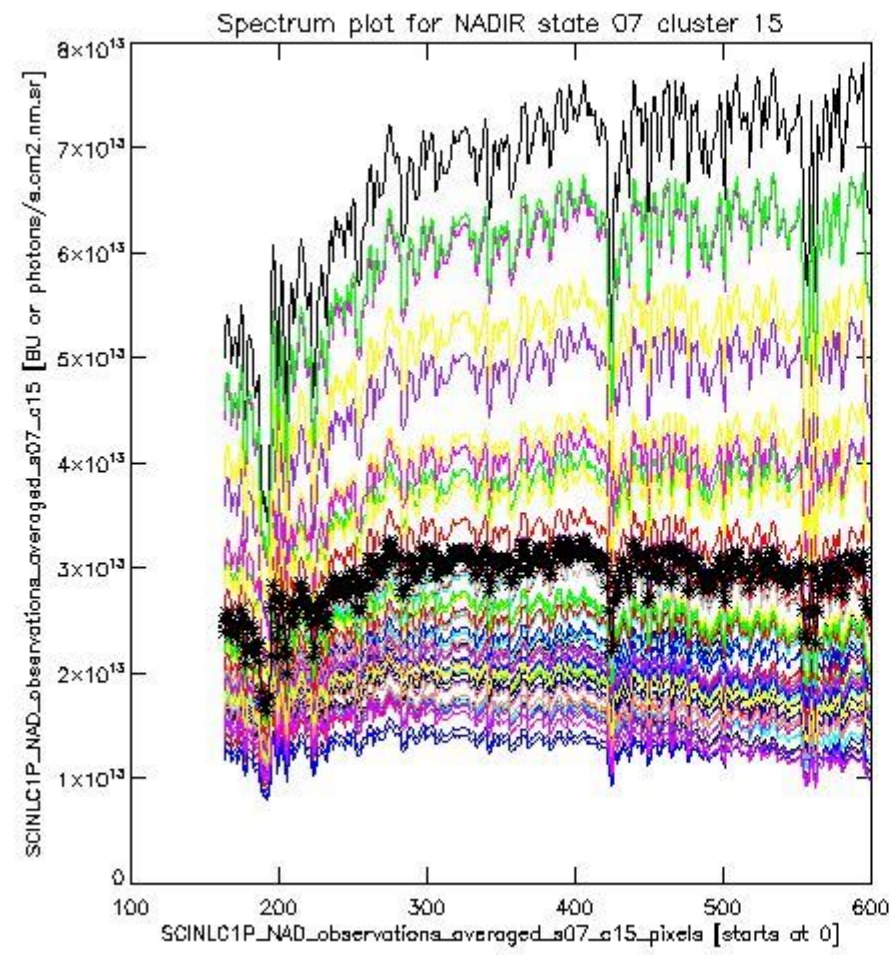
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_2.PNG



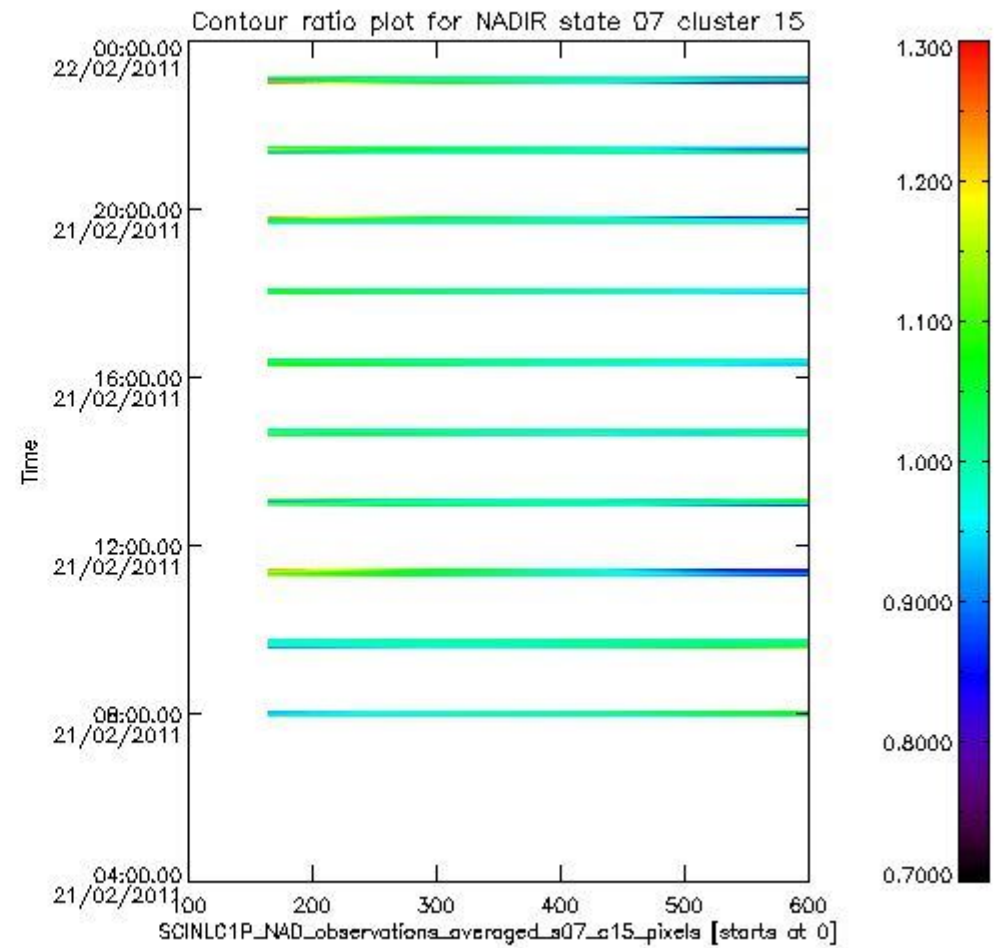
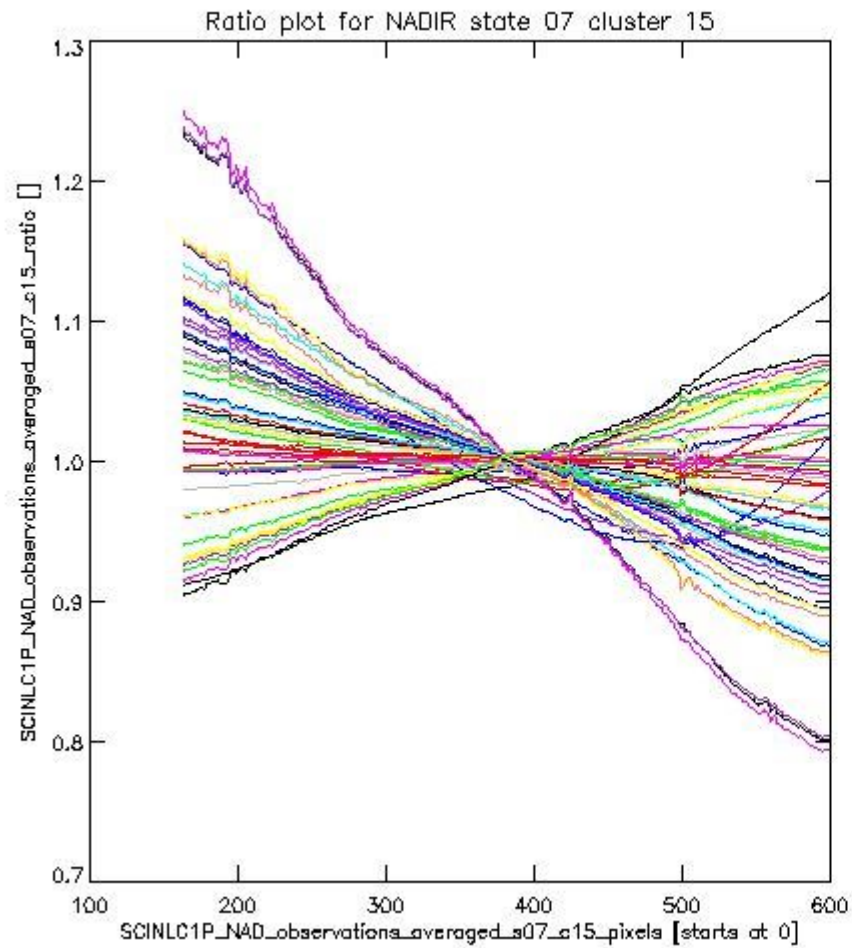
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_3.PNG

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	21FEB2011 07:55:25.341
Start time of last sample	21FEB2011 23:06:32.278
Reference period start time	22JAN2011 01:16:56.140
Reference period stop time	20FEB2011 22:02:15.118
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



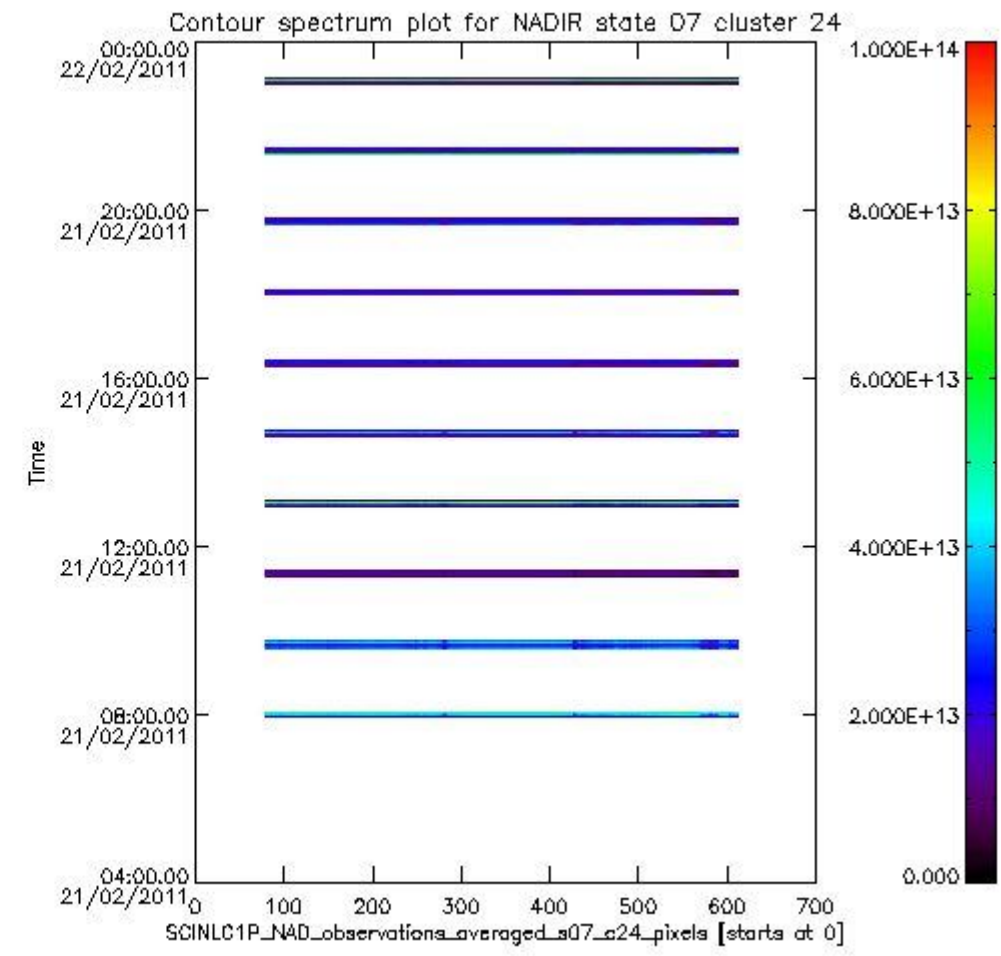
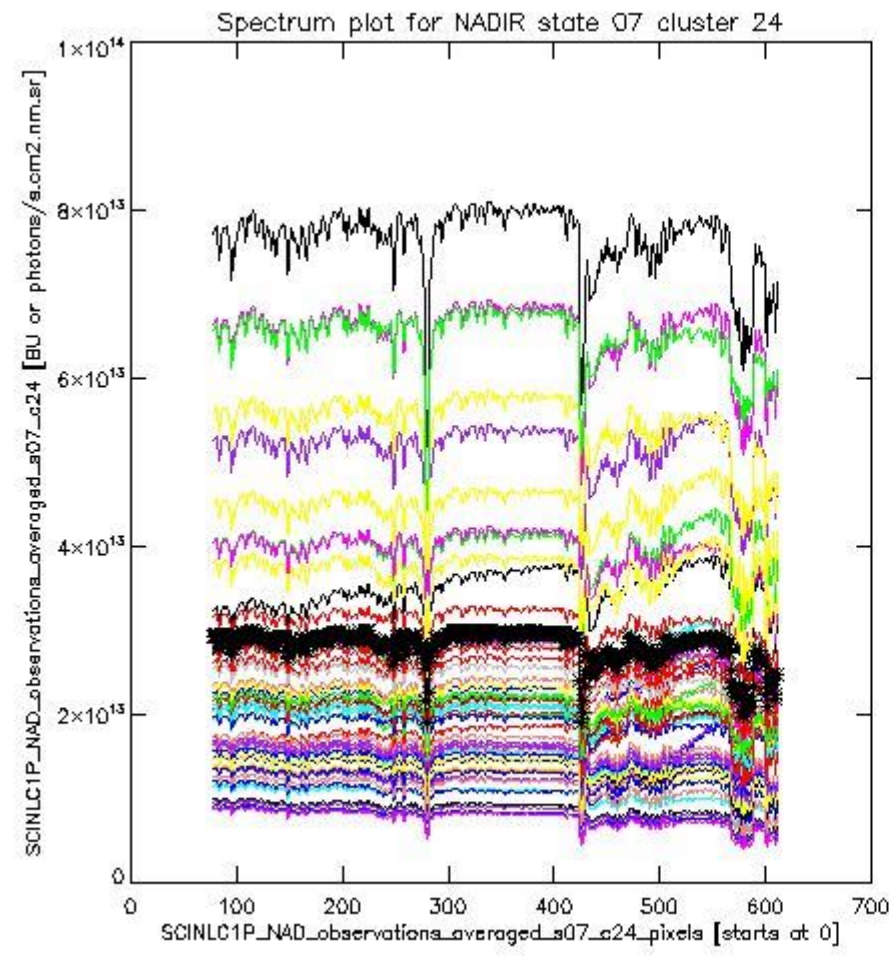
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_4.PNG



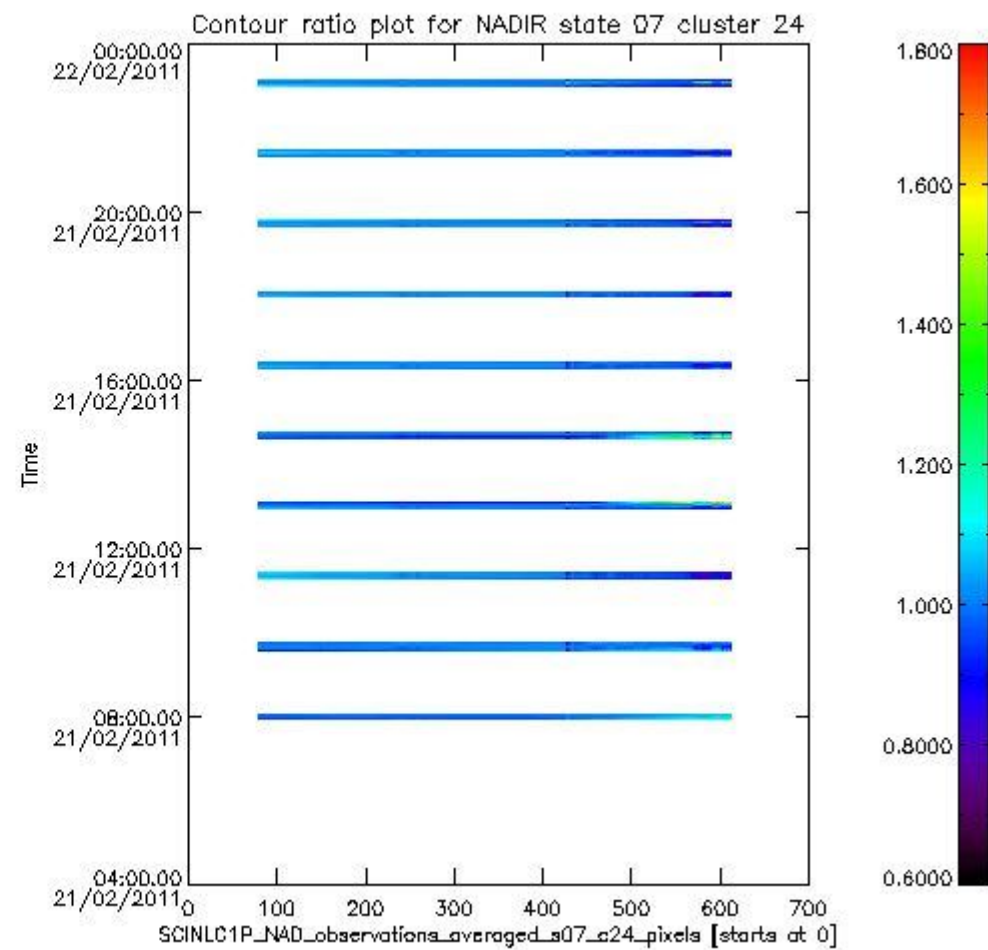
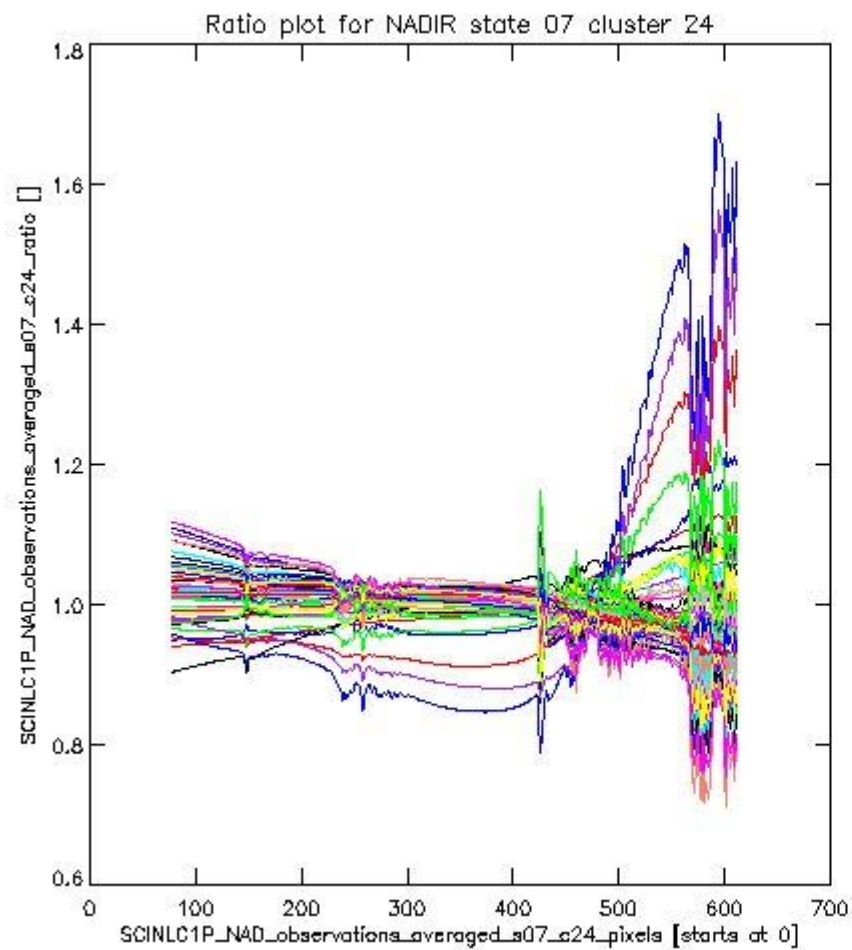
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_5.PNG

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	21FEB2011 07:55:25.341
Start time of last sample	21FEB2011 23:06:32.278
Reference period start time	22JAN2011 01:16:56.140
Reference period stop time	20FEB2011 22:02:15.118
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



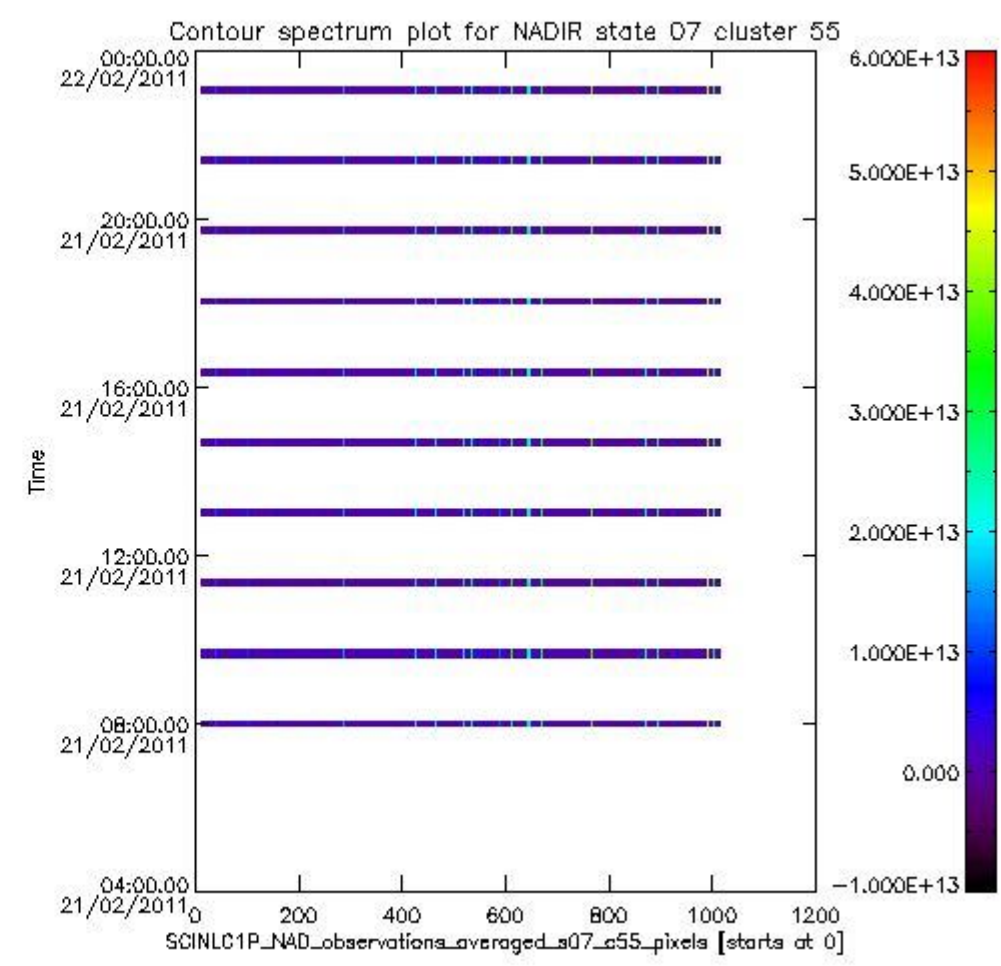
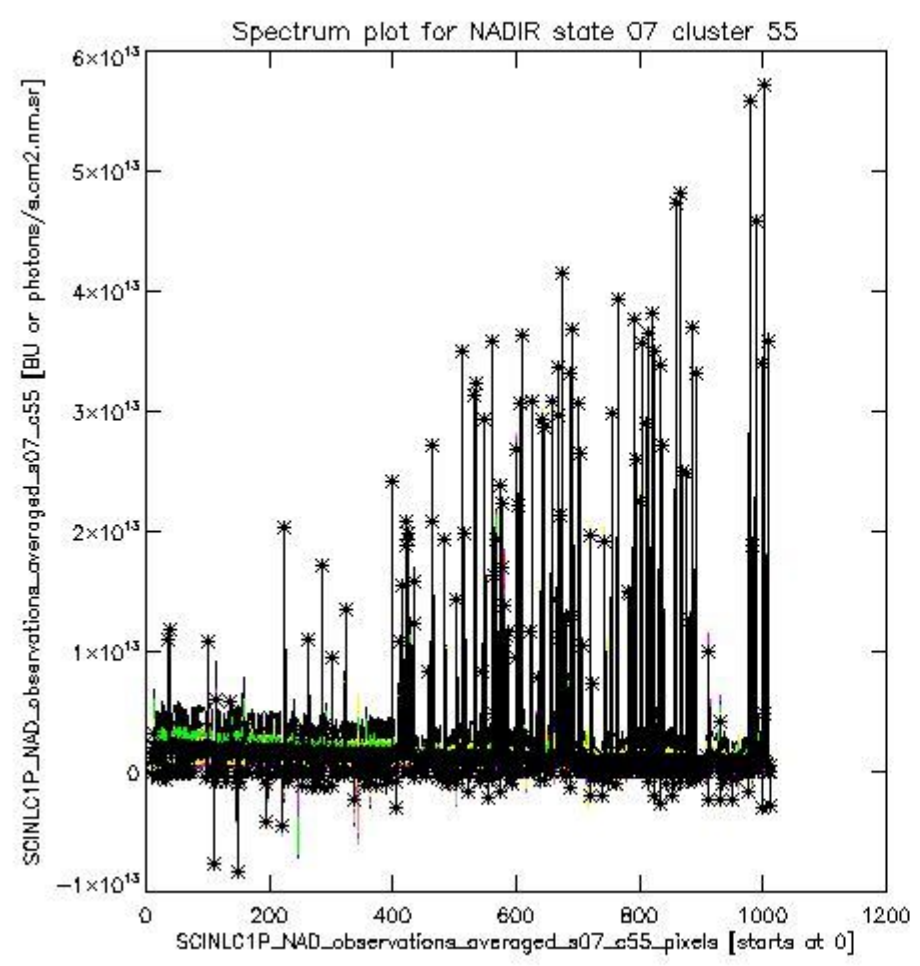
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_6.PNG



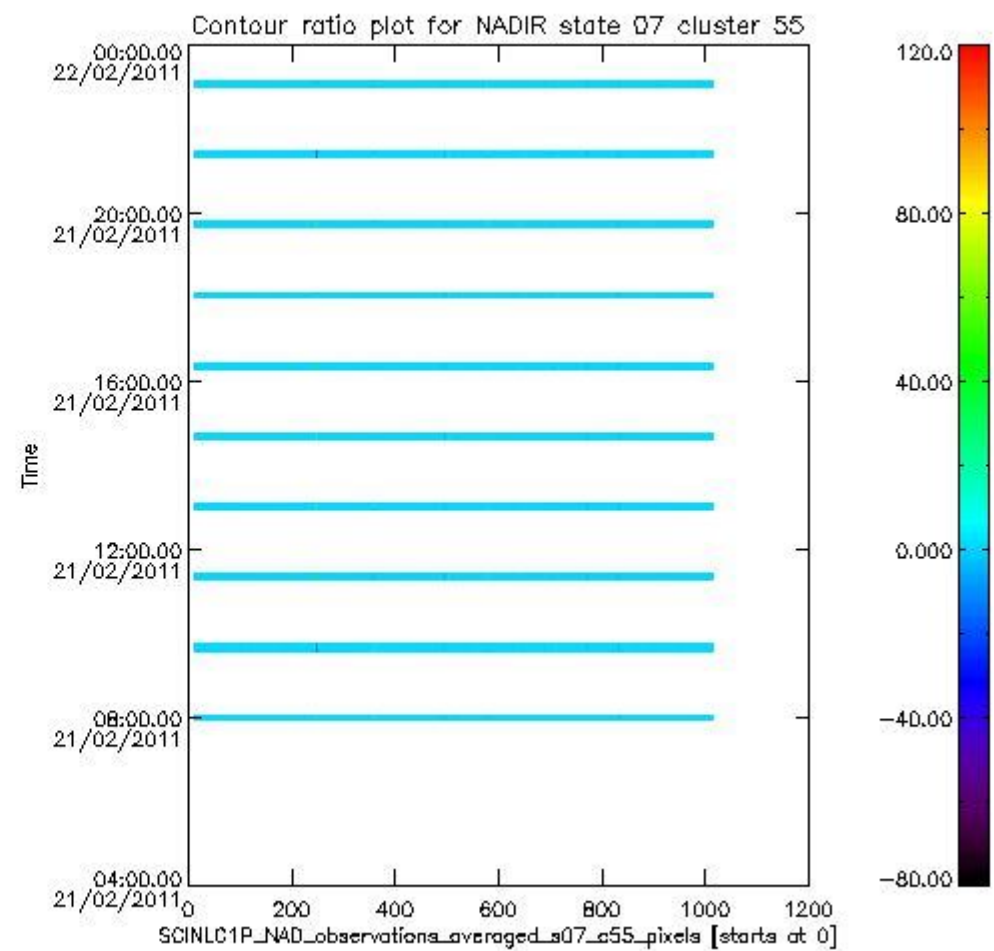
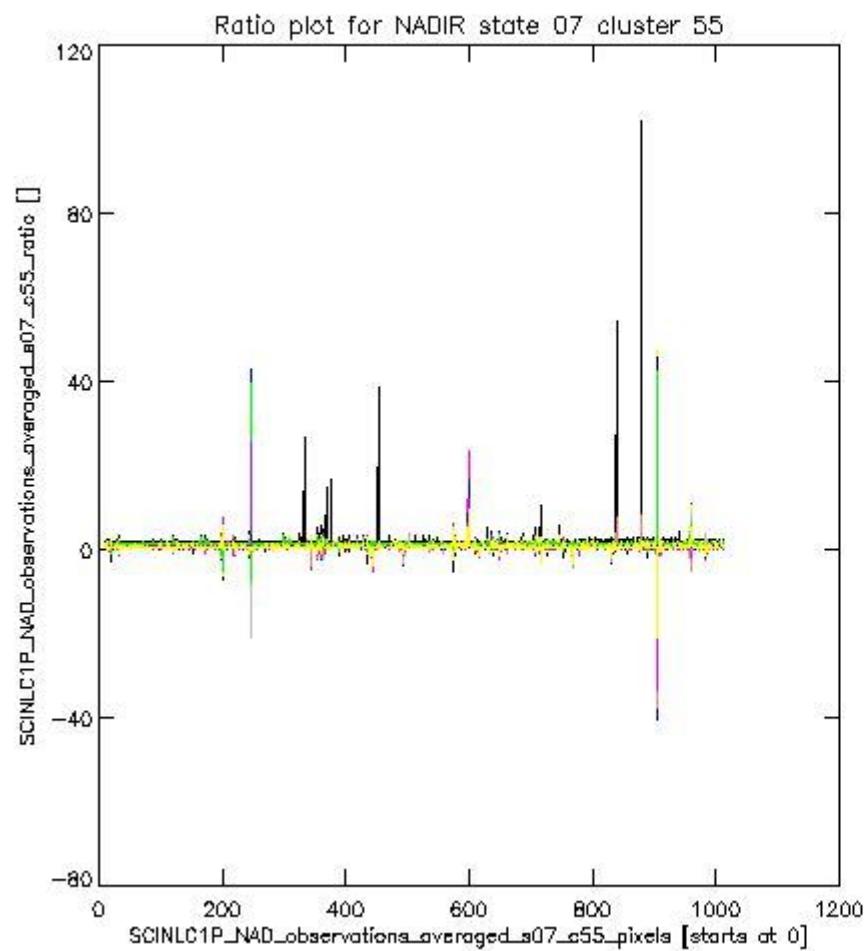
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_7.PNG

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	21FEB2011 07:55:25.341
Start time of last sample	21FEB2011 23:06:32.278
Reference period start time	22JAN2011 01:16:56.140
Reference period stop time	20FEB2011 22:02:15.118
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



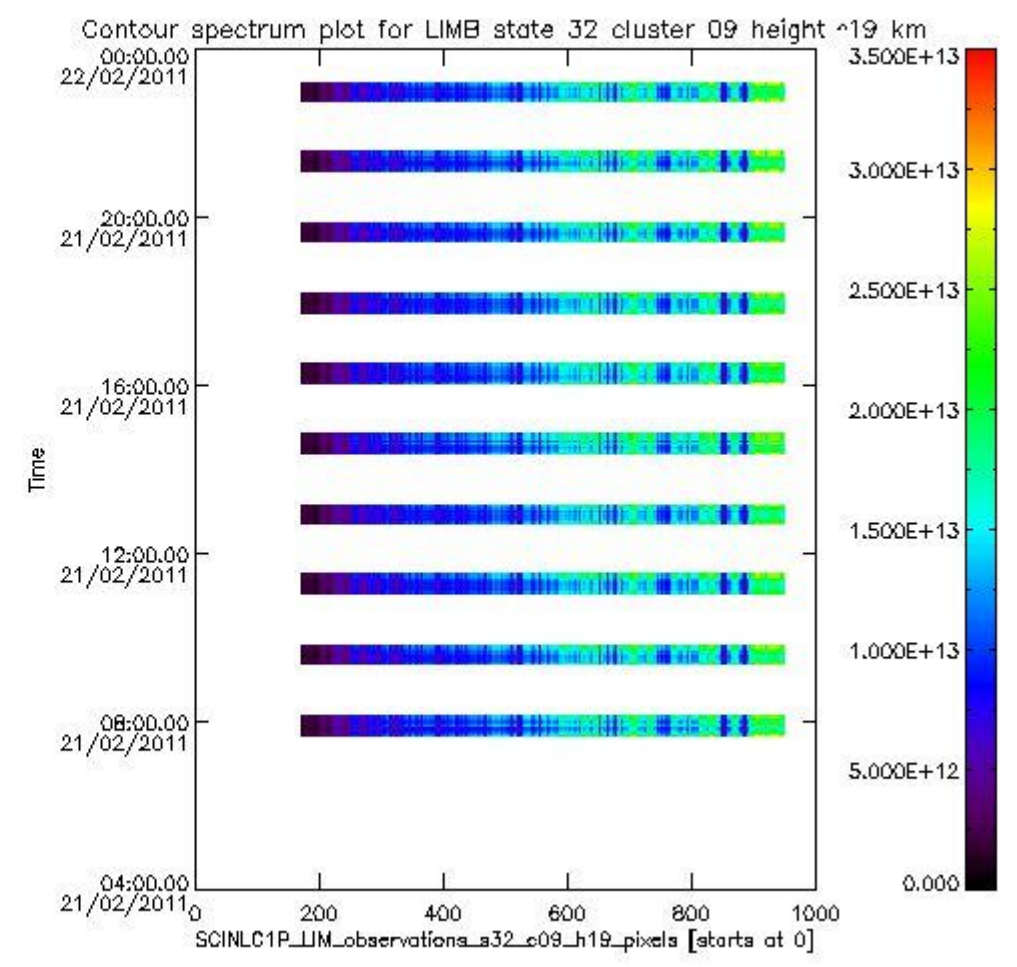
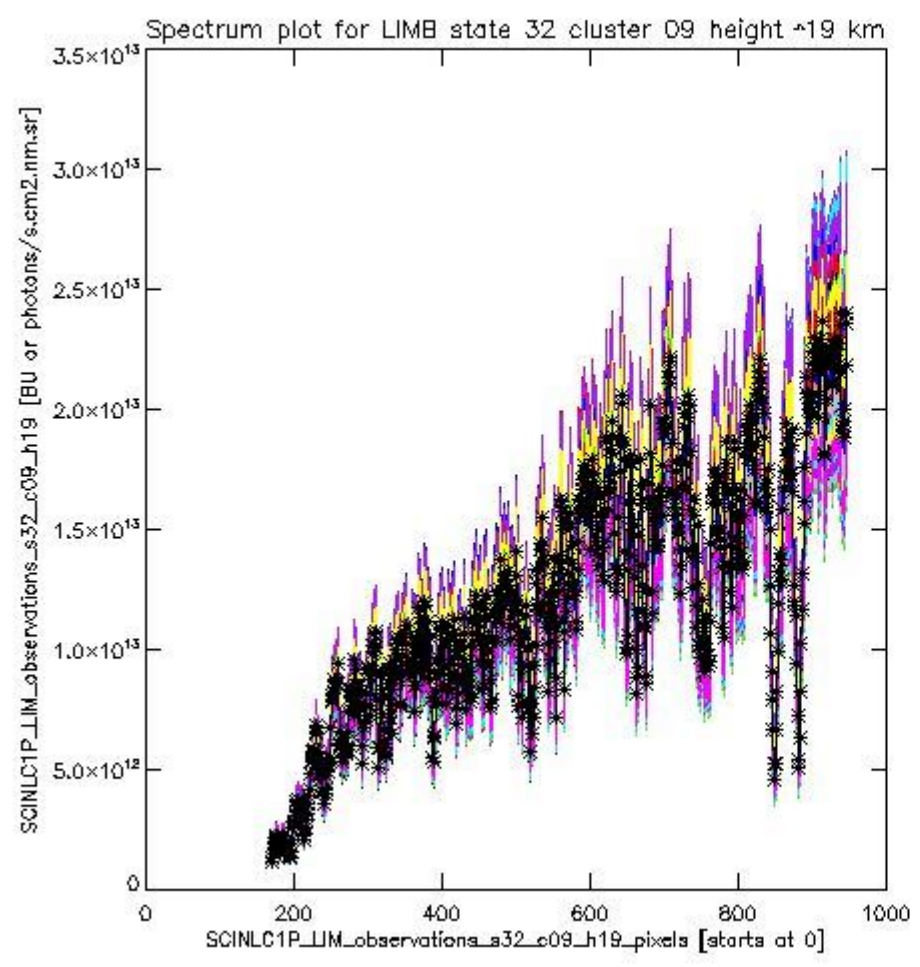
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_8.PNG



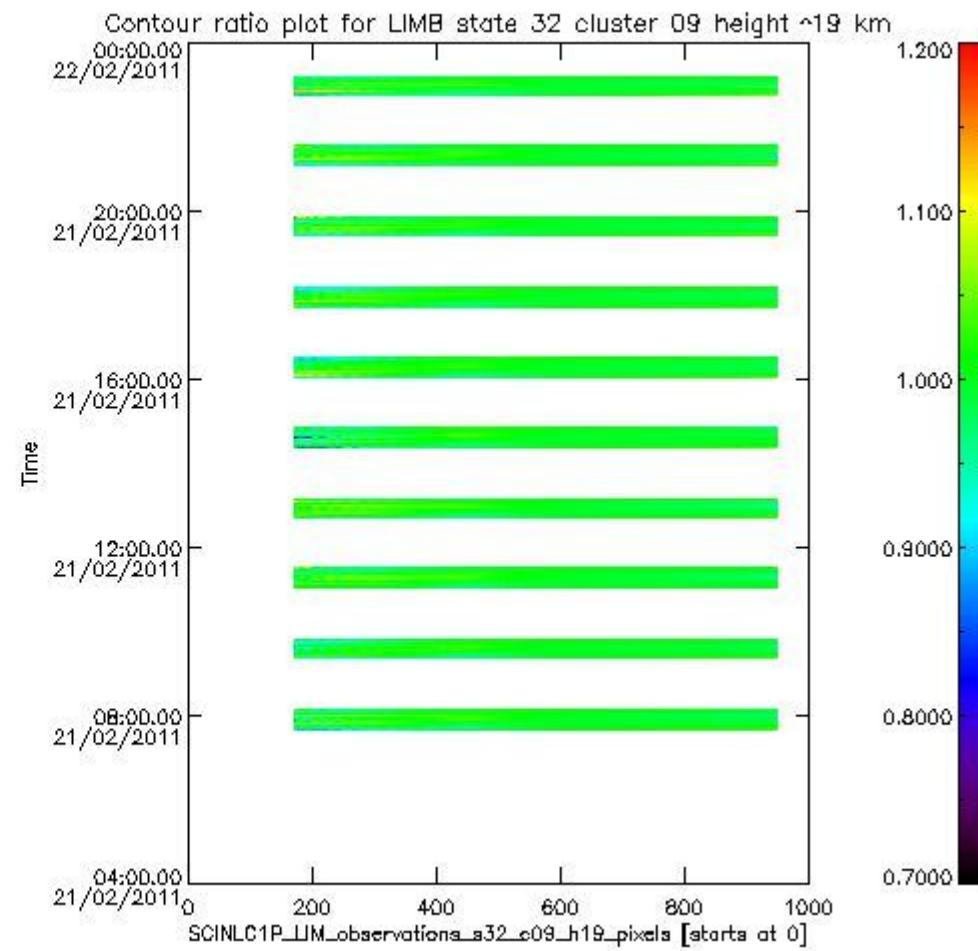
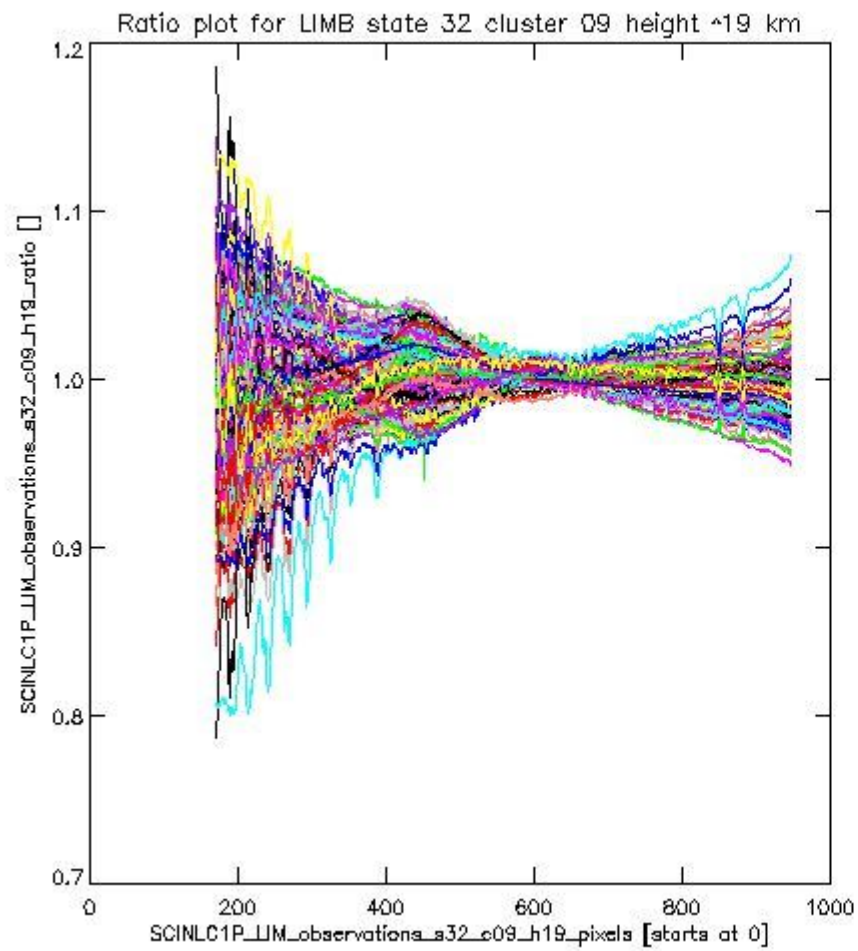
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_9.PNG

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	21FEB2011 07:40:11.962
Start time of last sample	21FEB2011 23:09:43.579
Reference period start time	22JAN2011 01:01:42.761
Reference period stop time	20FEB2011 22:07:29.161
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



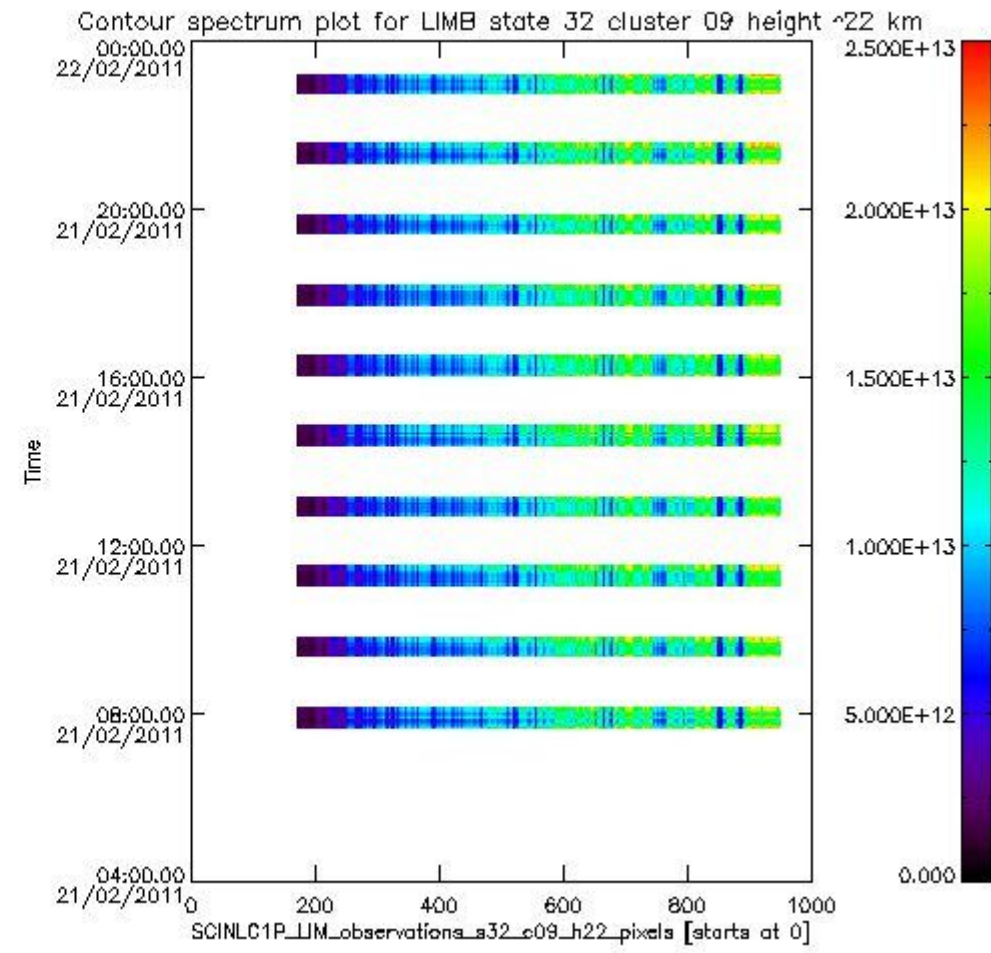
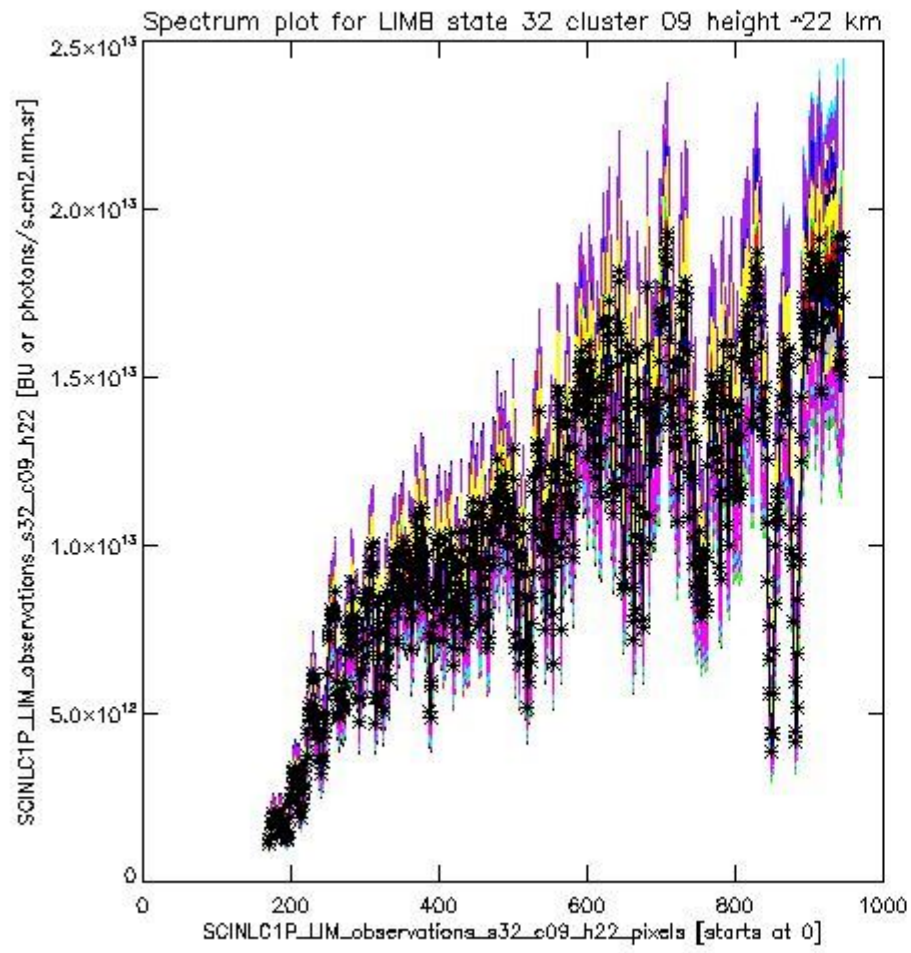
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_10.PNG



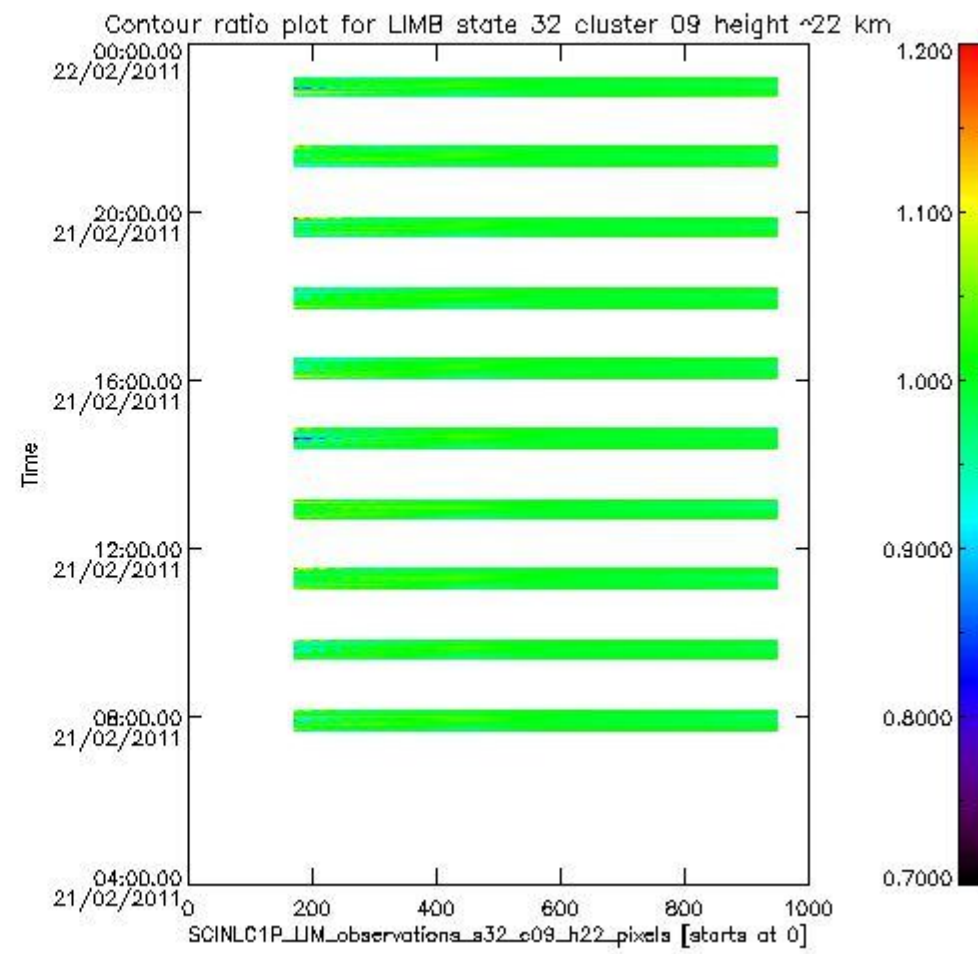
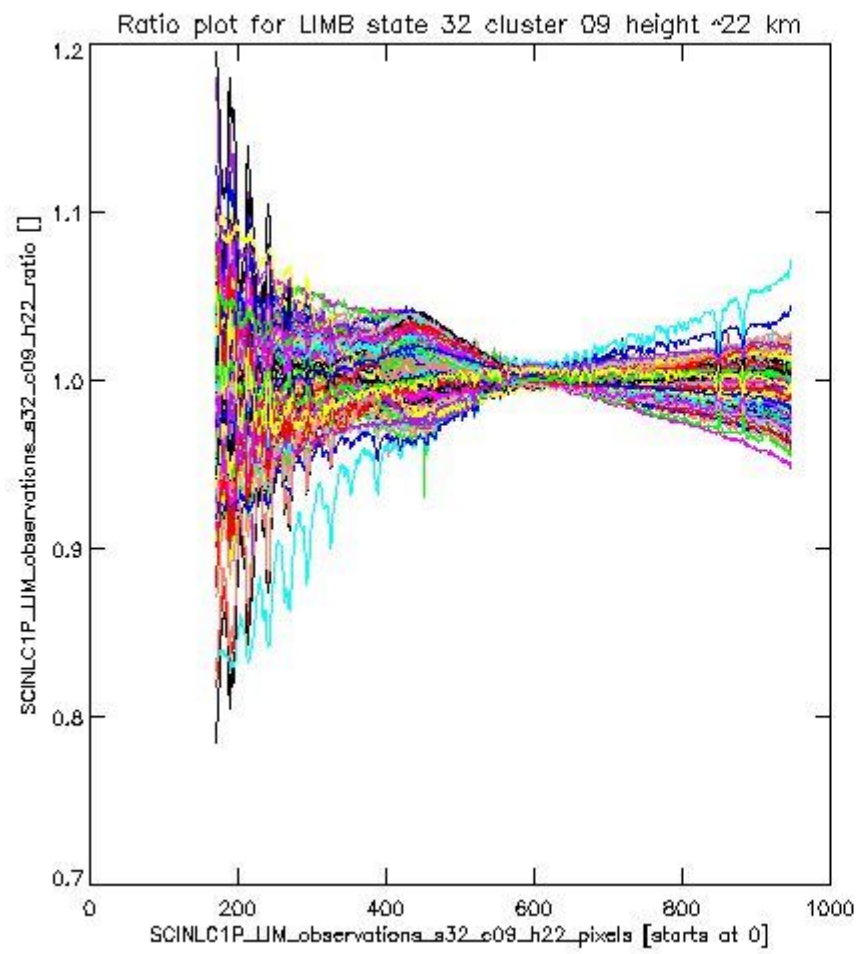
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_11.PNG

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	21FEB2011 07:40:11.962
Start time of last sample	21FEB2011 23:09:43.579
Reference period start time	22JAN2011 01:01:42.761
Reference period stop time	20FEB2011 22:07:29.161
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



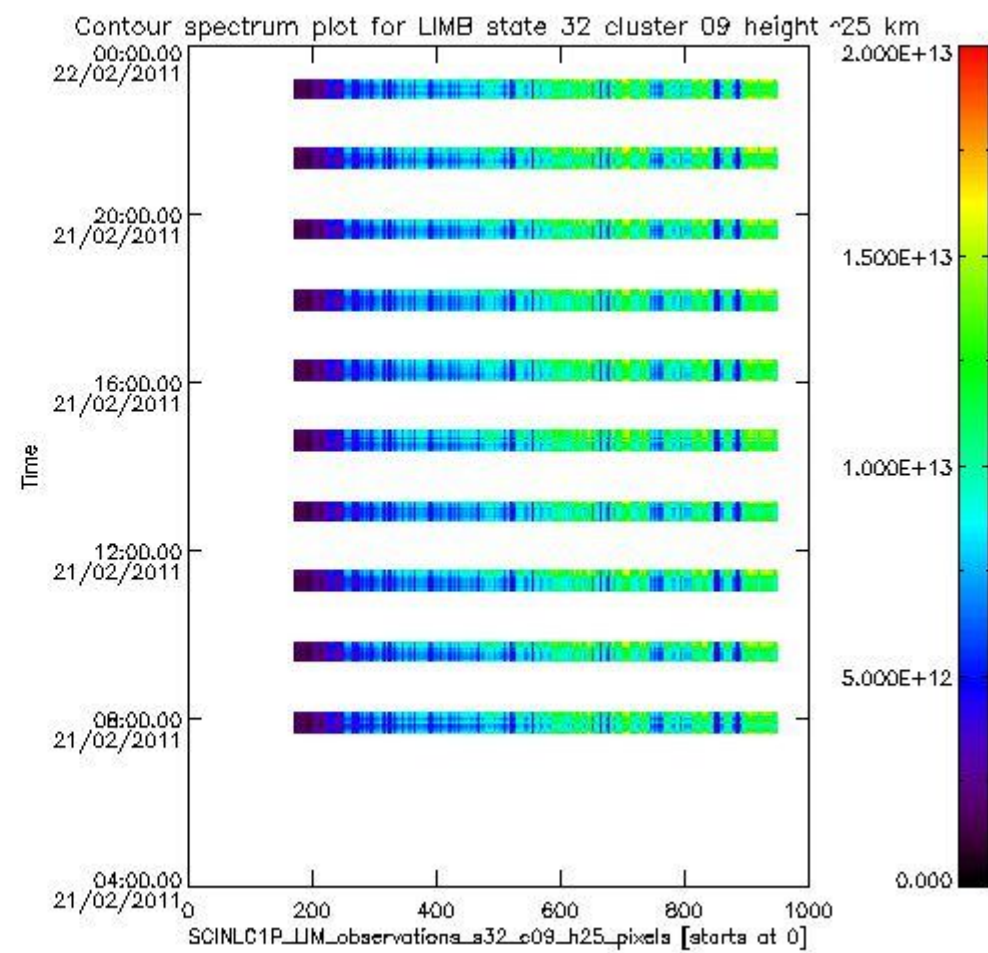
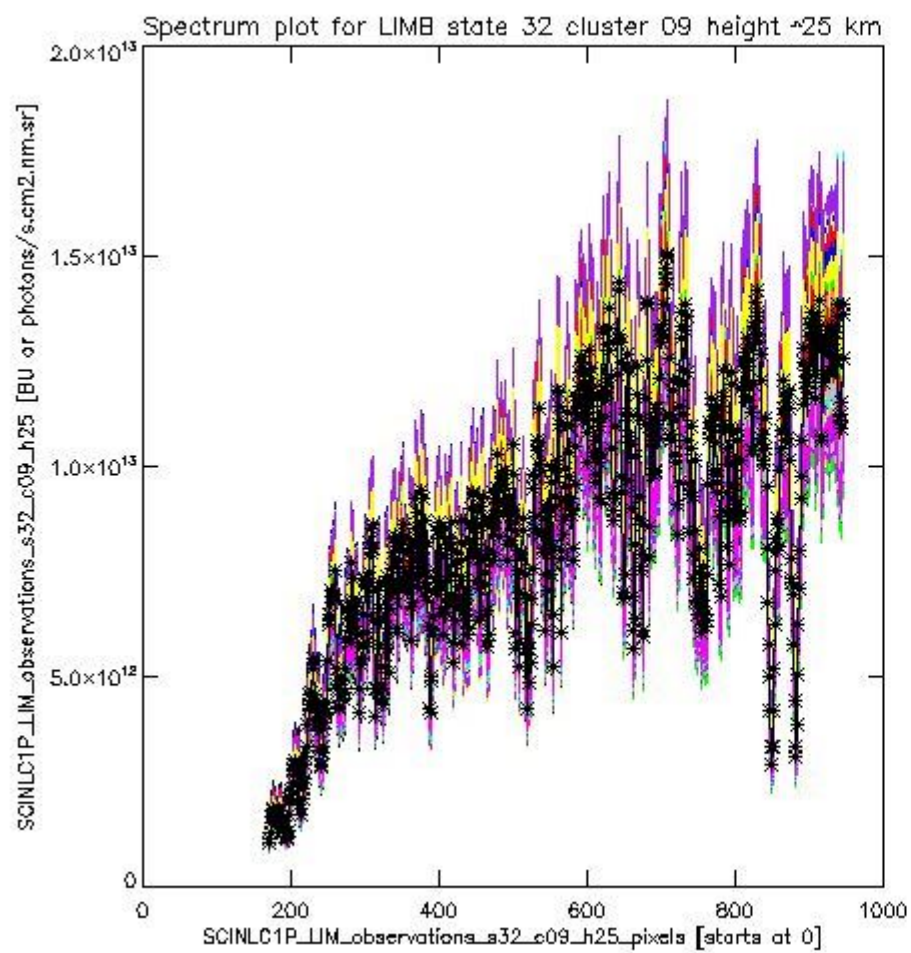
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_12.PNG



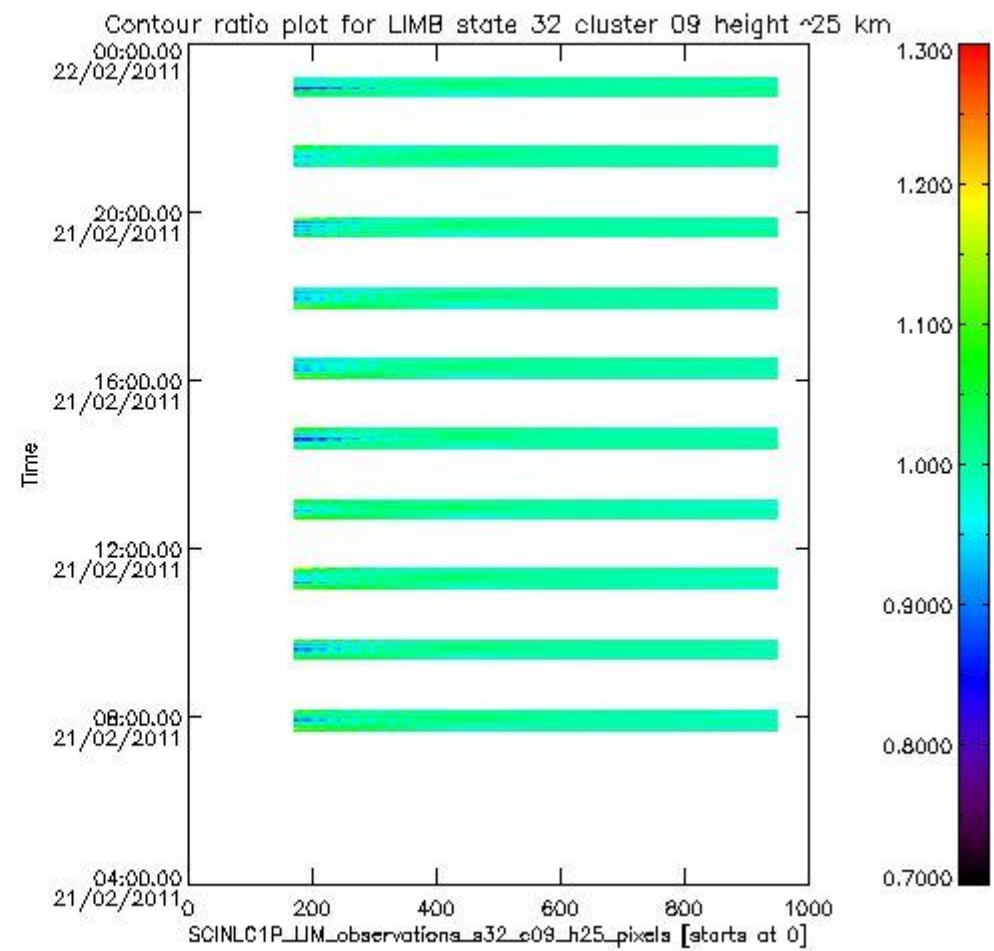
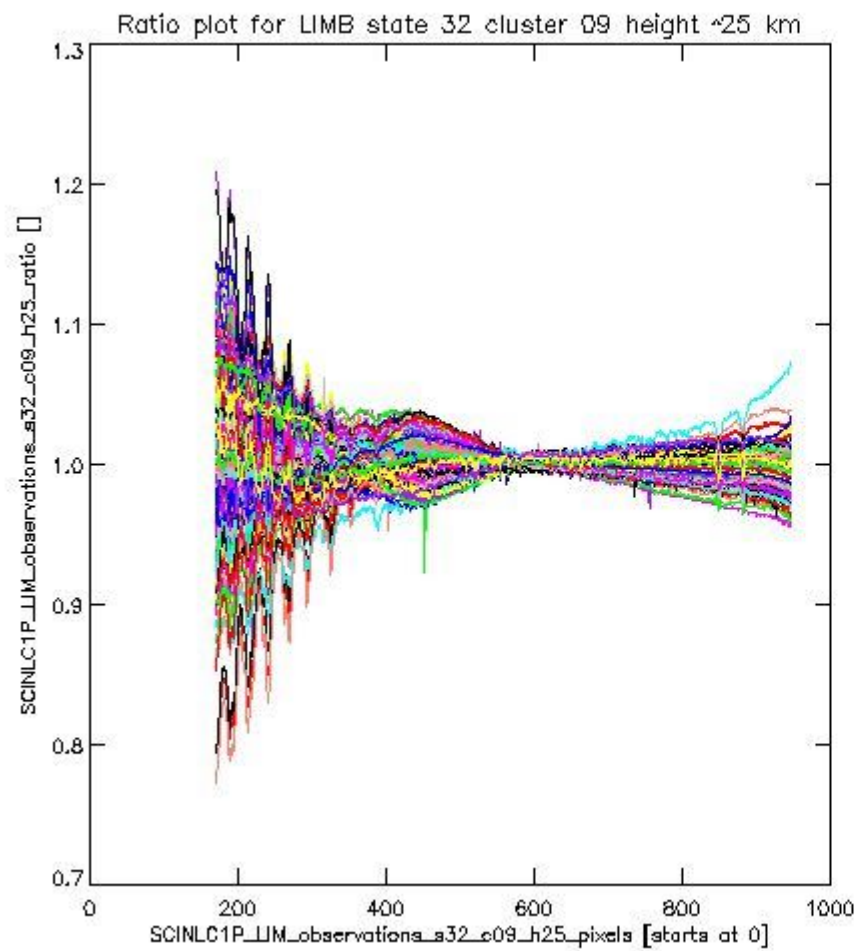
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_13.PNG

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	21FEB2011 07:40:11.962
Start time of last sample	21FEB2011 23:09:43.579
Reference period start time	22JAN2011 01:01:42.761
Reference period stop time	20FEB2011 22:07:29.161
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



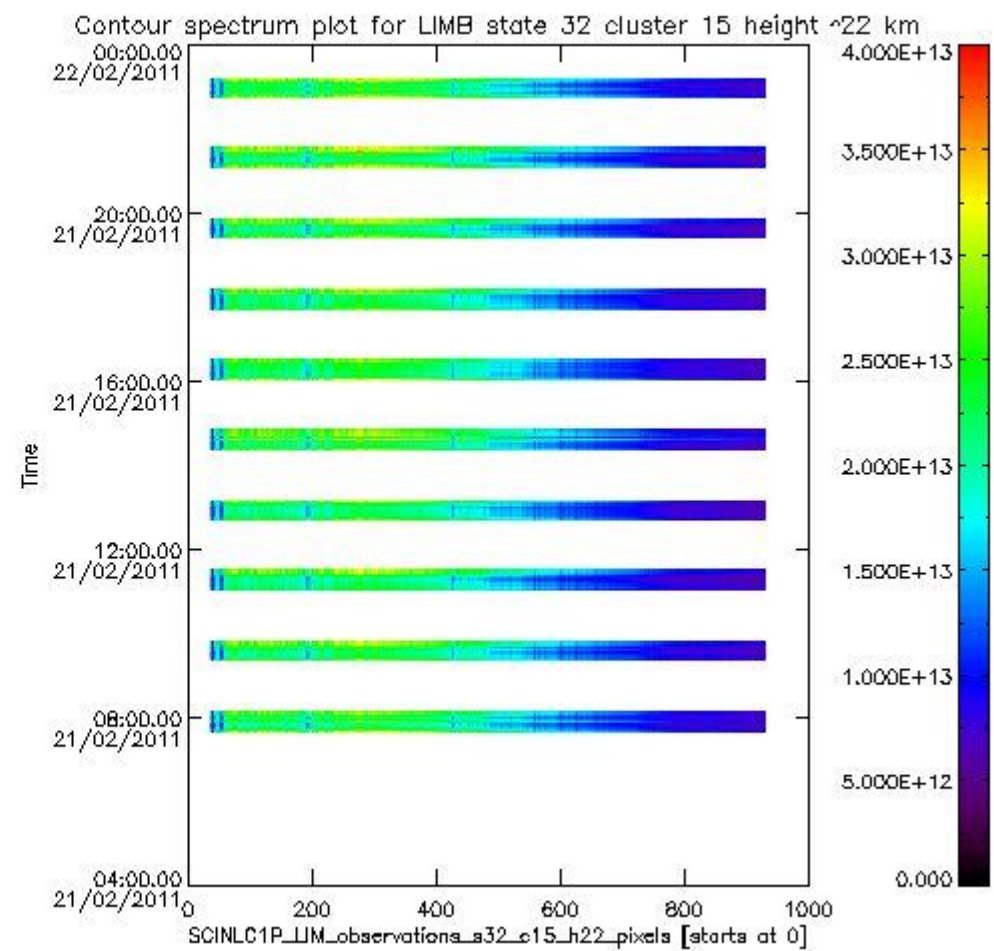
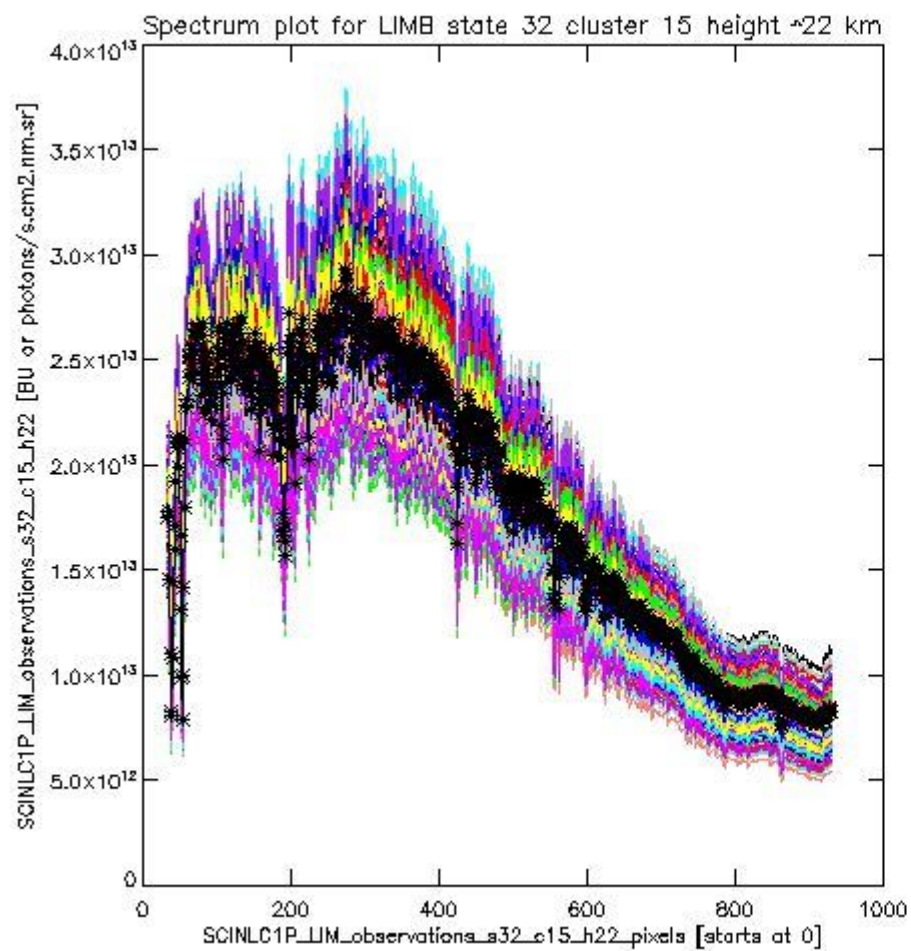
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_14.PNG



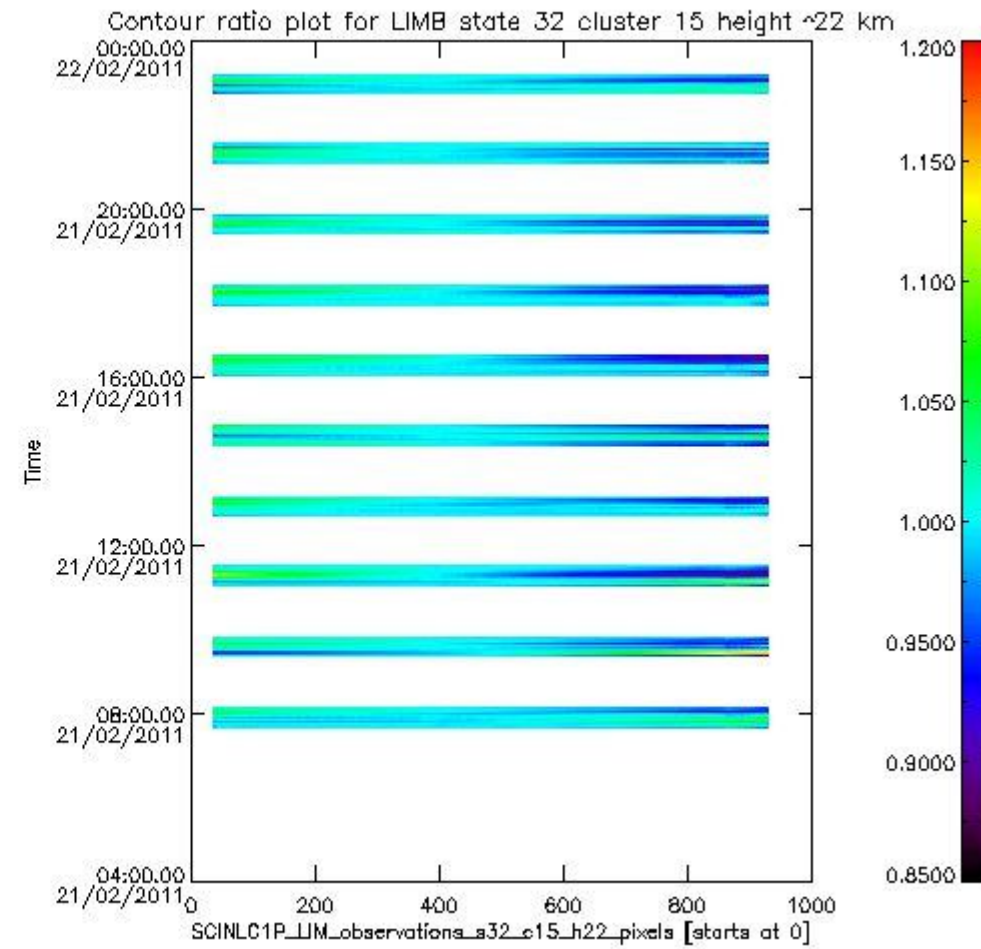
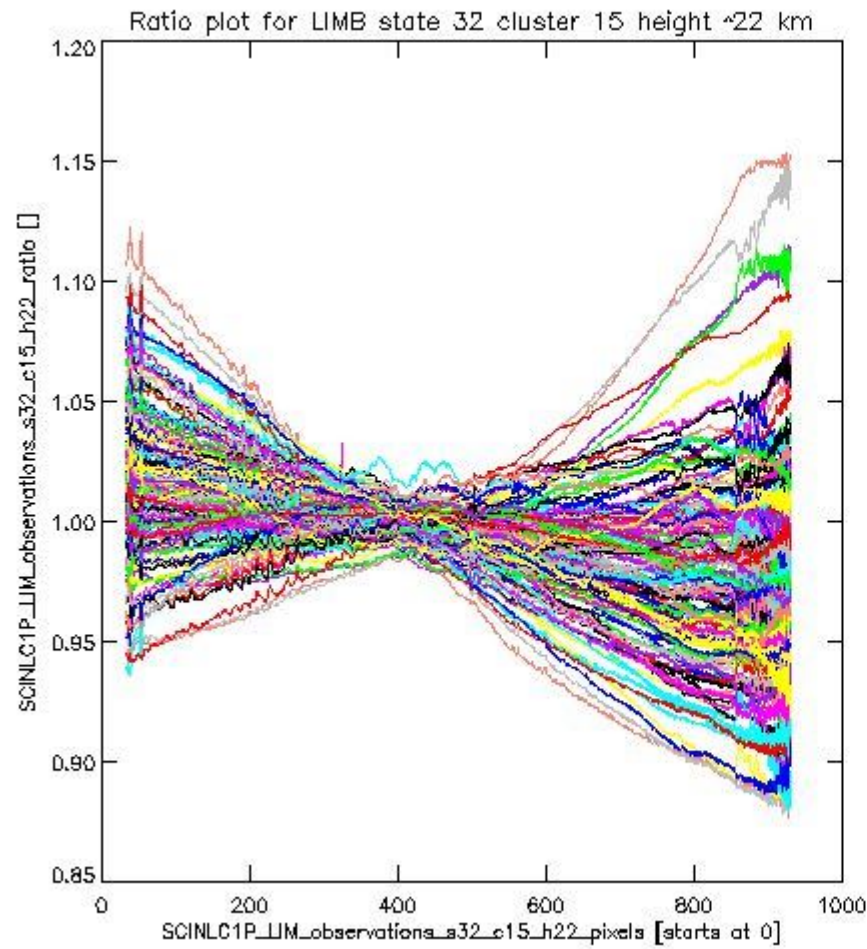
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_15.PNG

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	21FEB2011 07:40:11.962
Start time of last sample	21FEB2011 23:09:43.579
Reference period start time	22JAN2011 01:01:42.761
Reference period stop time	20FEB2011 22:07:29.161
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



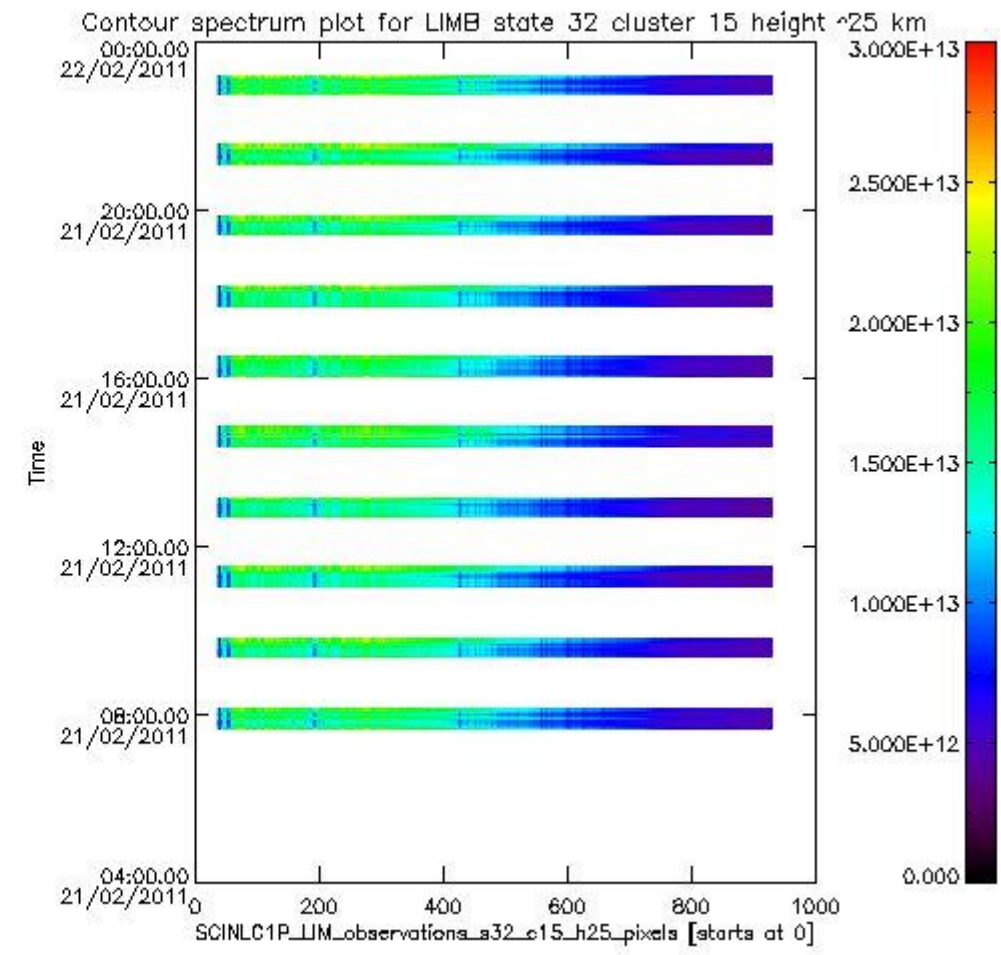
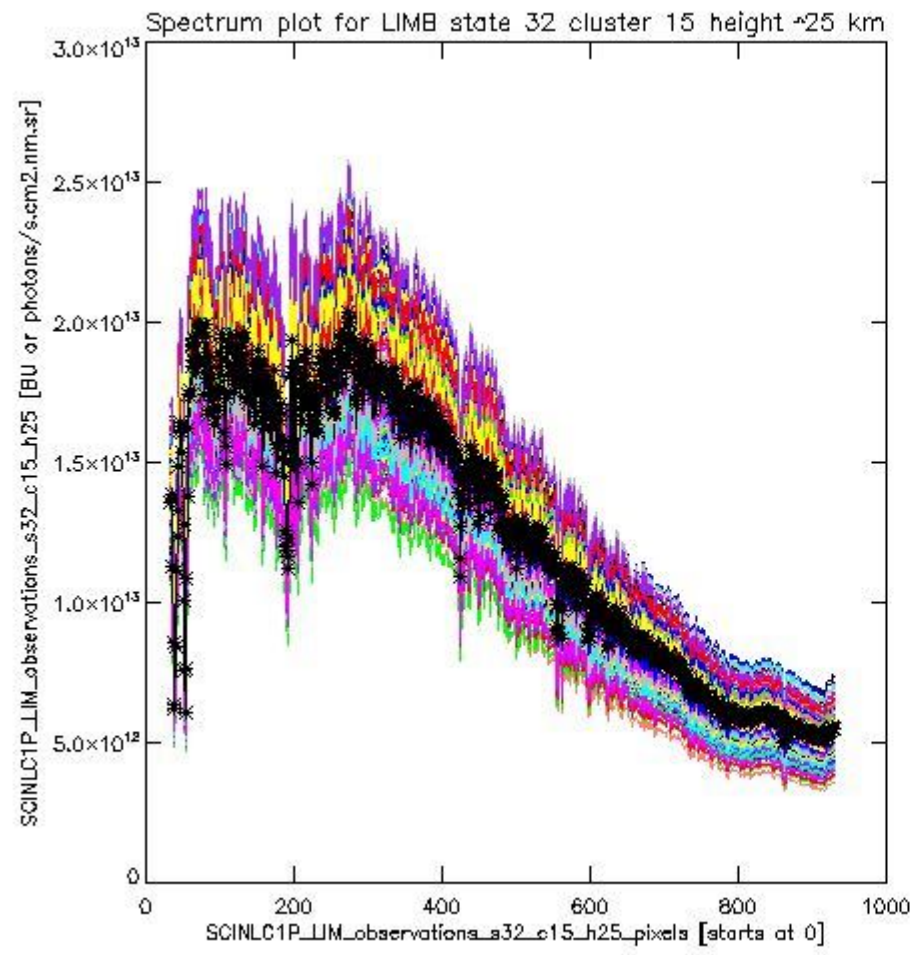
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_16.PNG



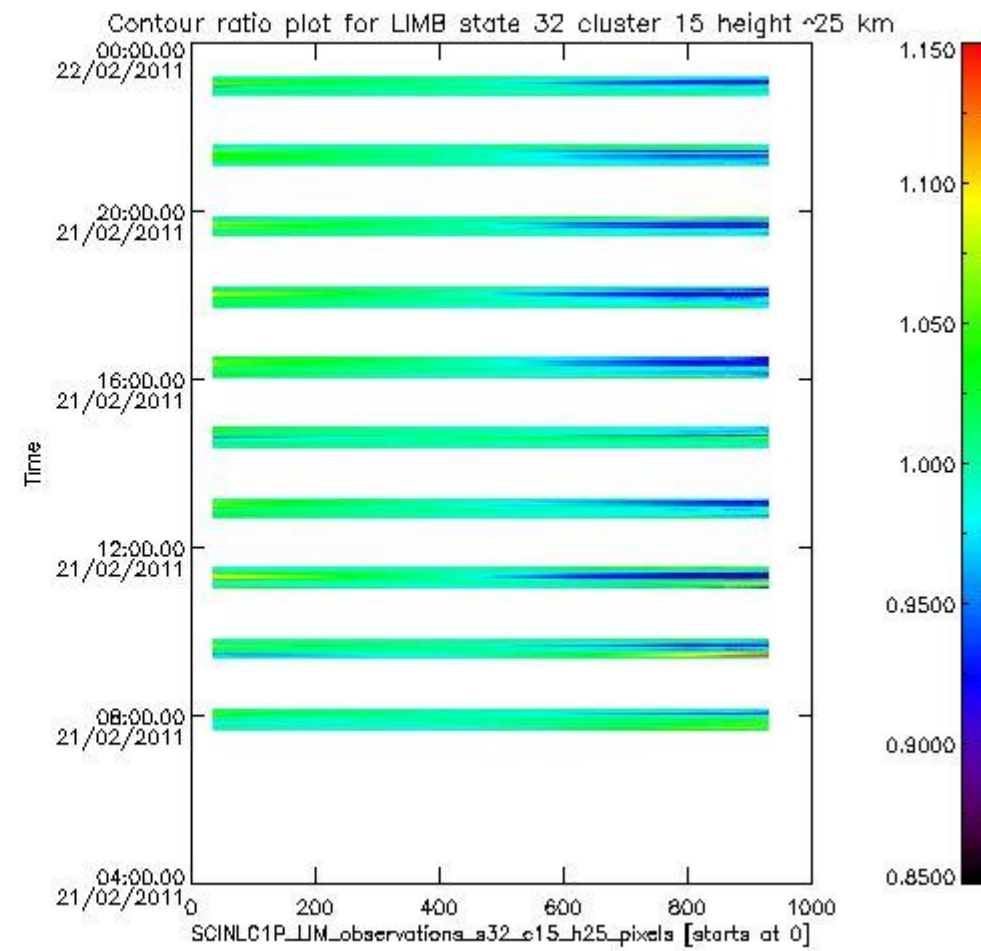
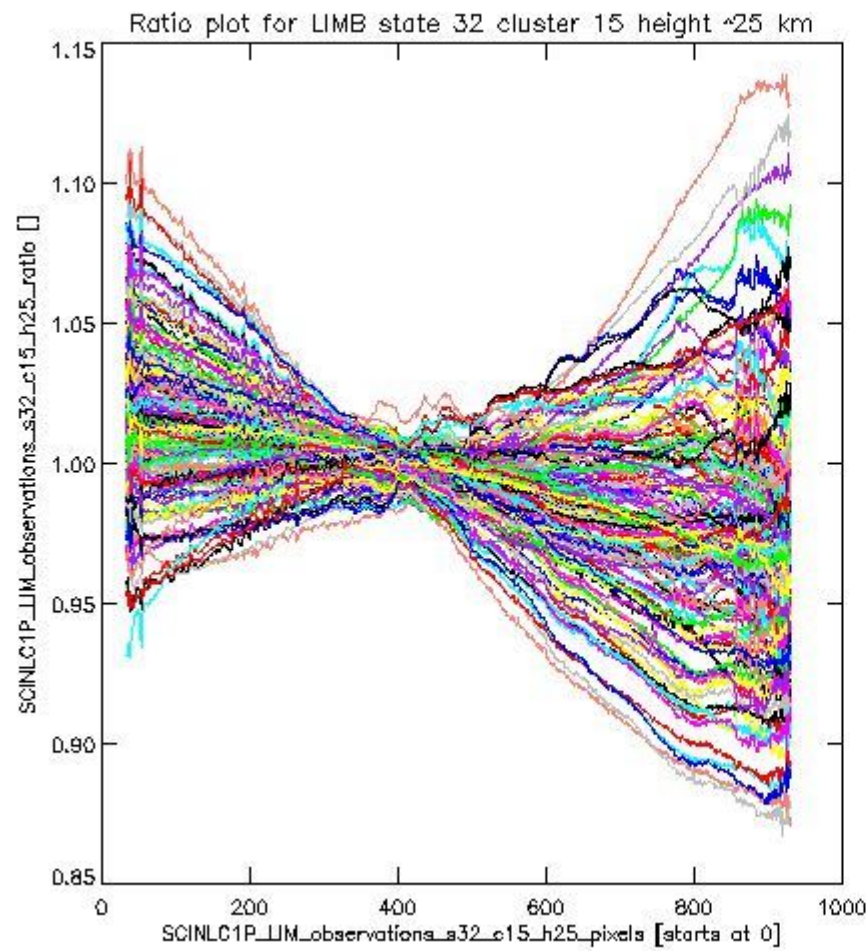
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110221_17.PNG

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	21FEB2011 07:40:11.962
Start time of last sample	21FEB2011 23:09:43.579
Reference period start time	22JAN2011 01:01:42.761
Reference period stop time	20FEB2011 22:07:29.161
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



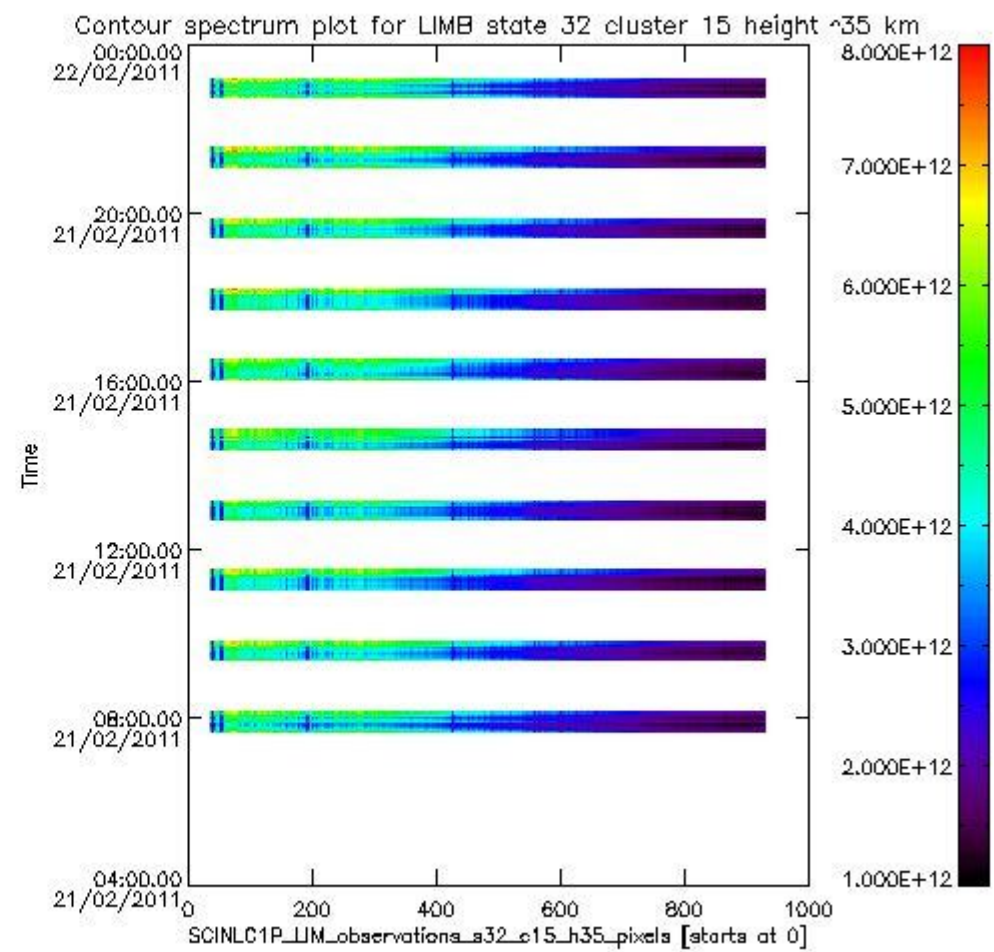
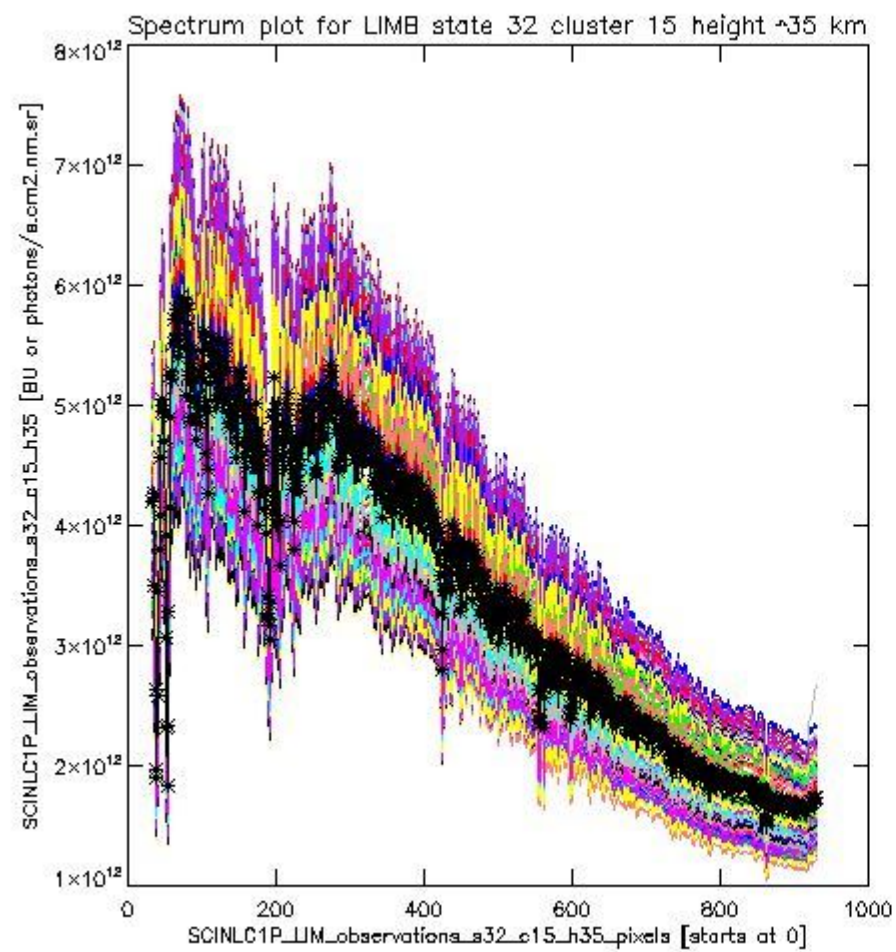
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110221_18.PNG

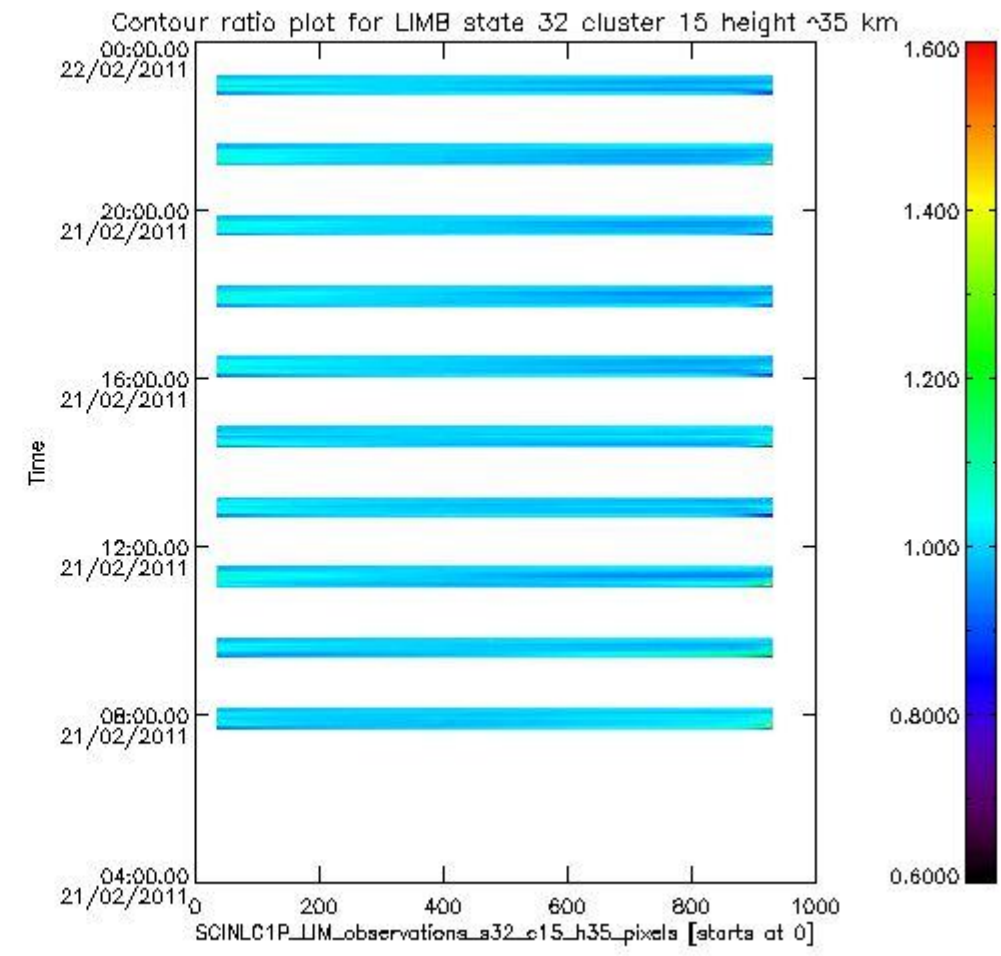
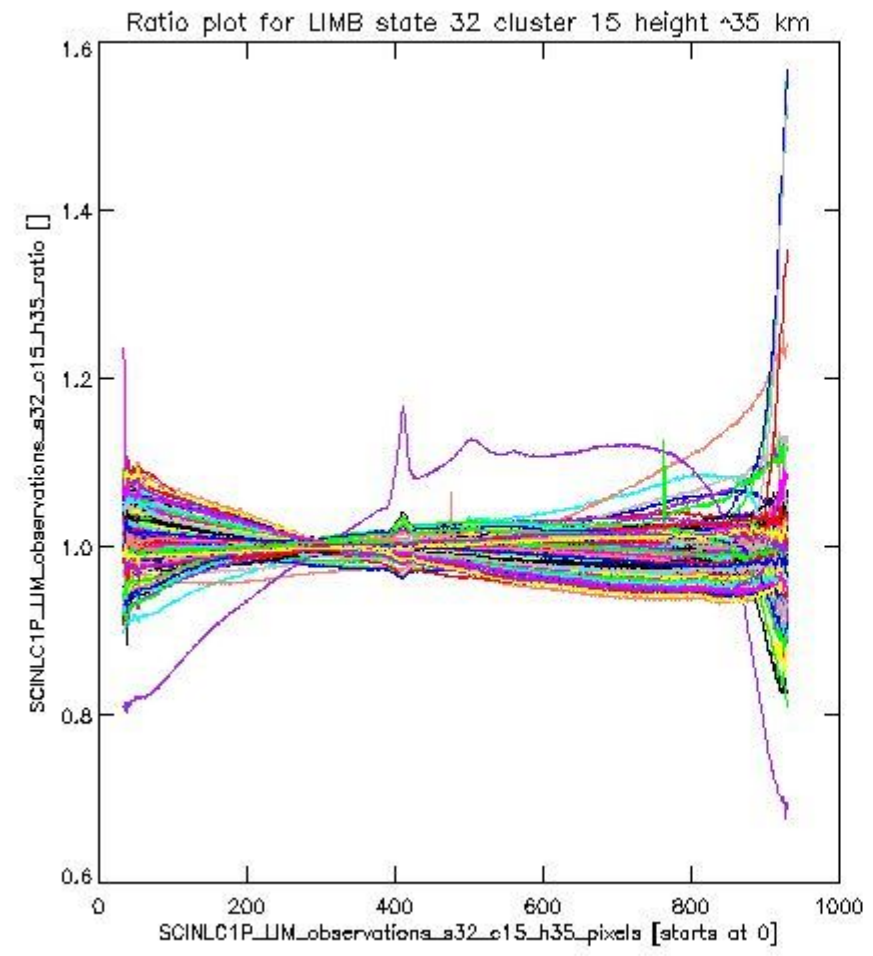


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110221_19.PNG

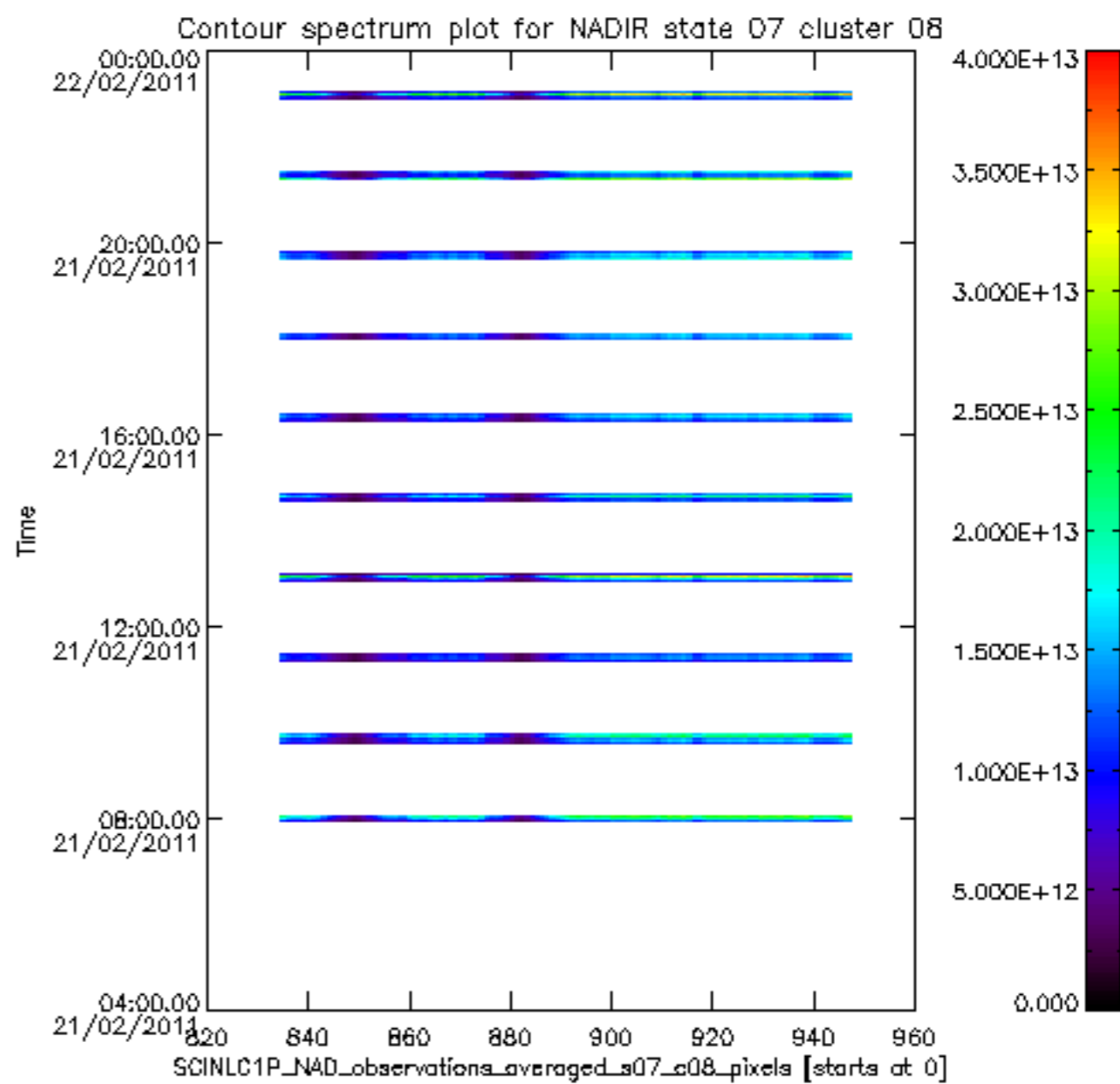
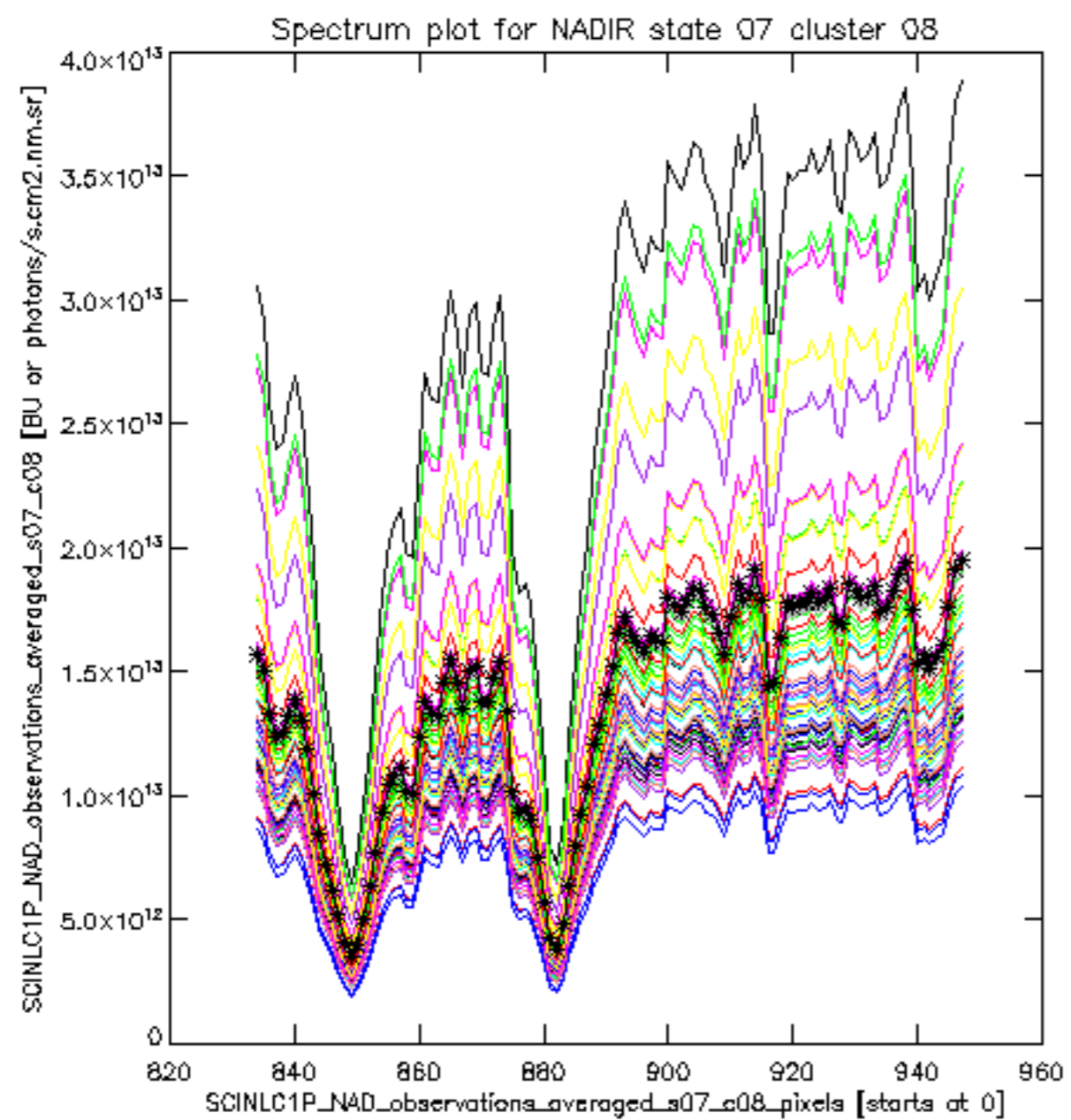
1.2.11 LIMB state 32 cluster 15 height ~35 km The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

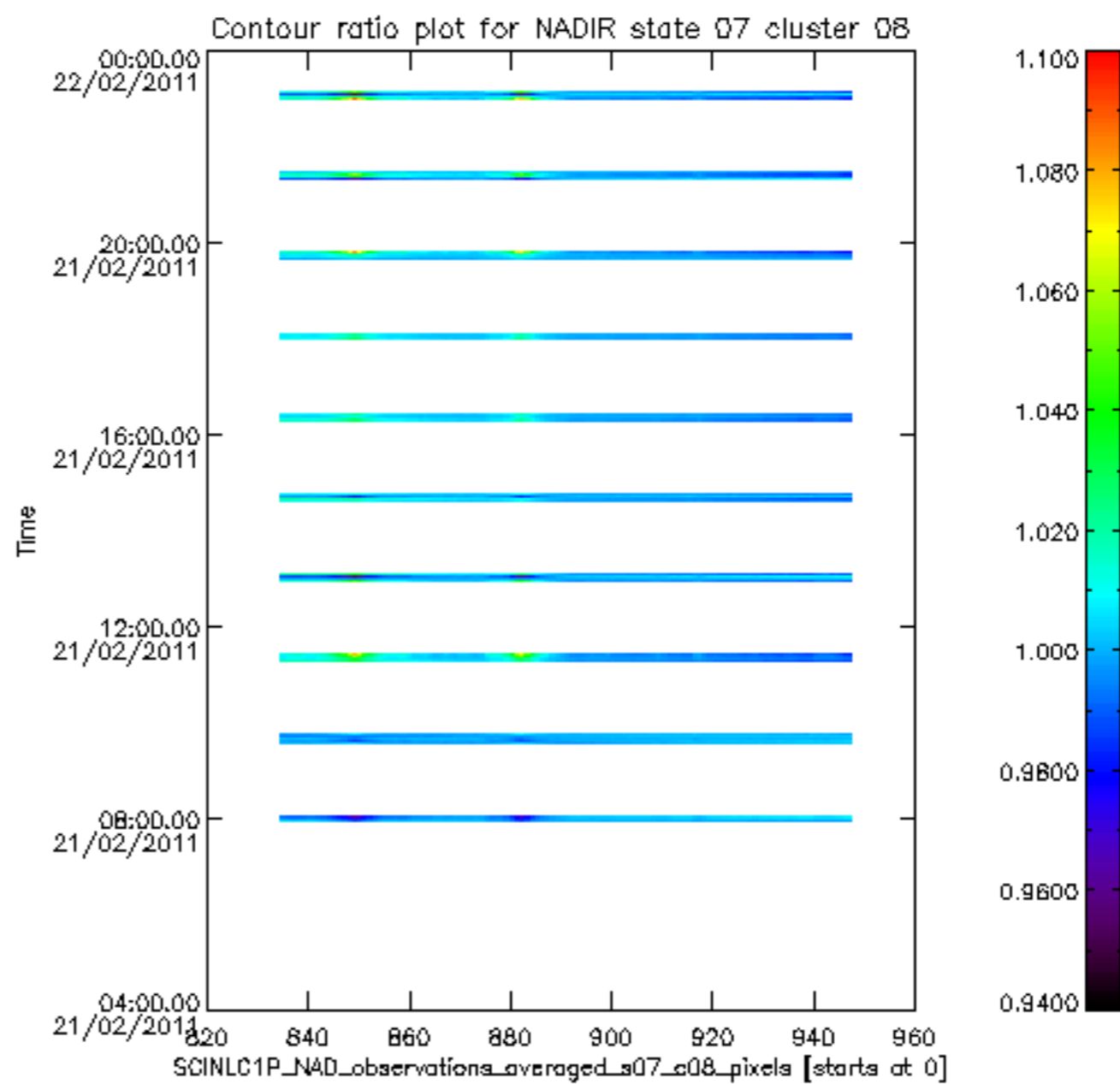
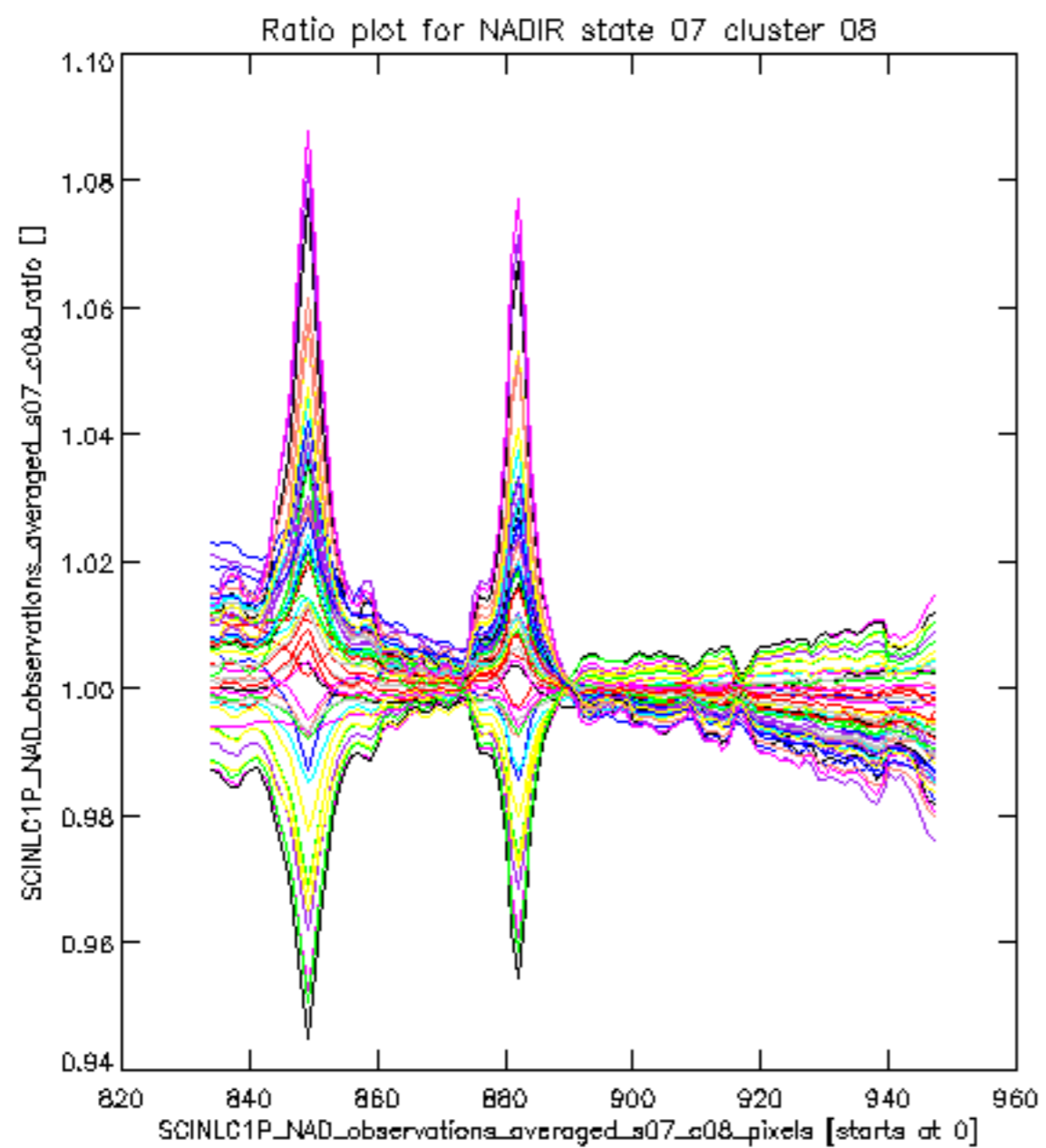
Item	Value
Start time of first sample	21FEB2011 07:40:11.962
Start time of last sample	21FEB2011 23:09:43.579
Reference period start time	22JAN2011 01:01:42.761
Reference period stop time	20FEB2011 22:07:29.161
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

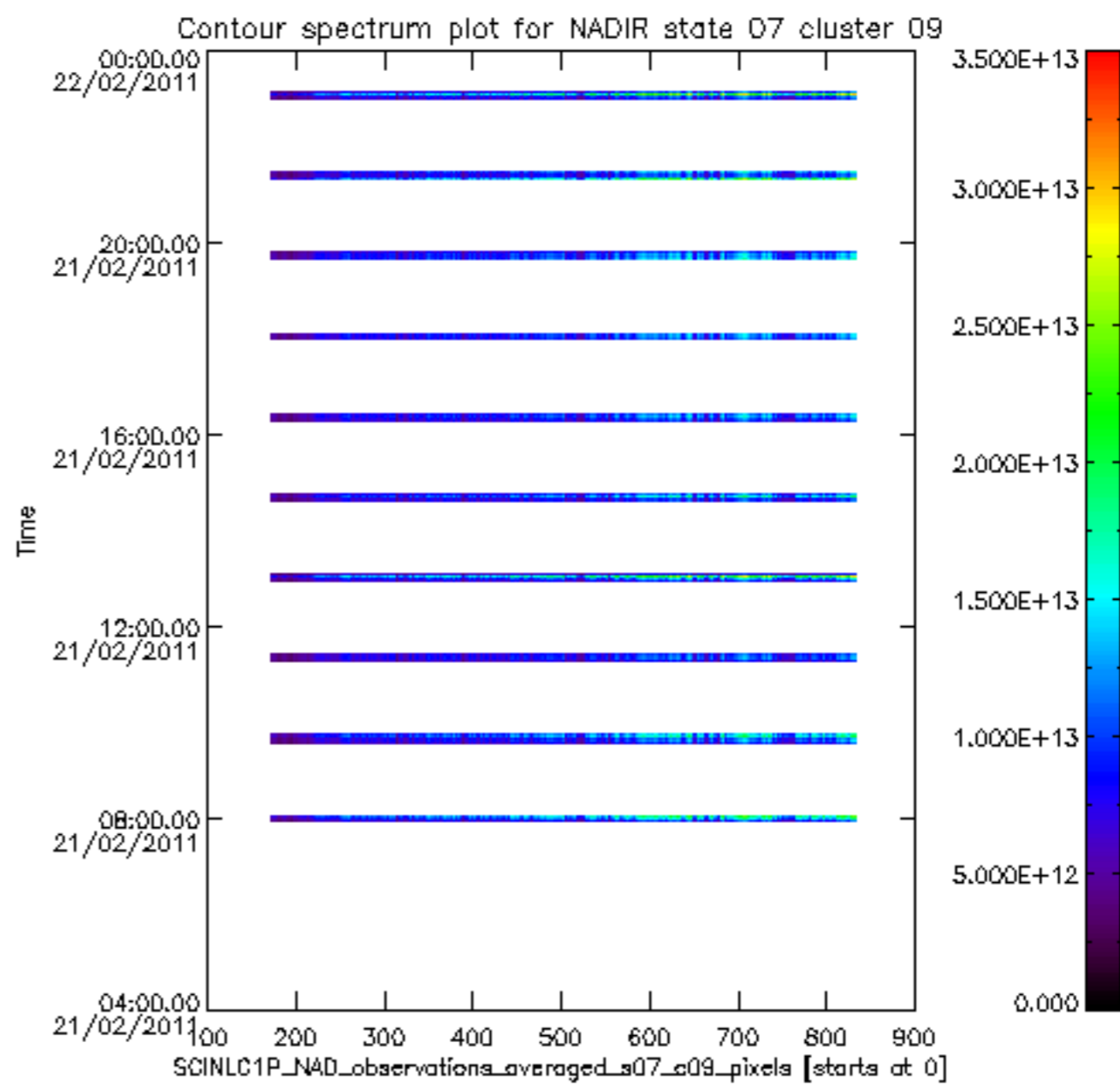
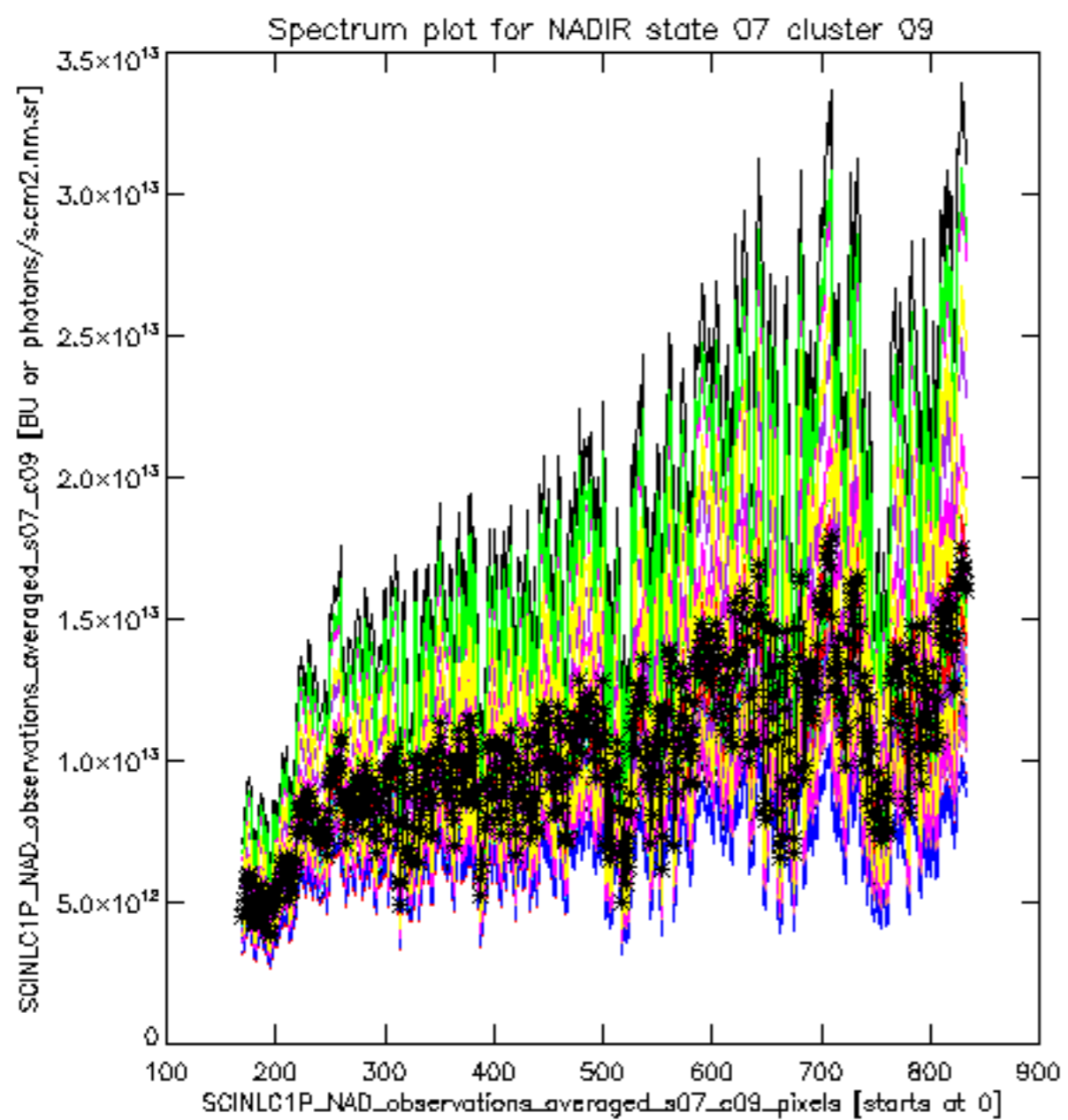


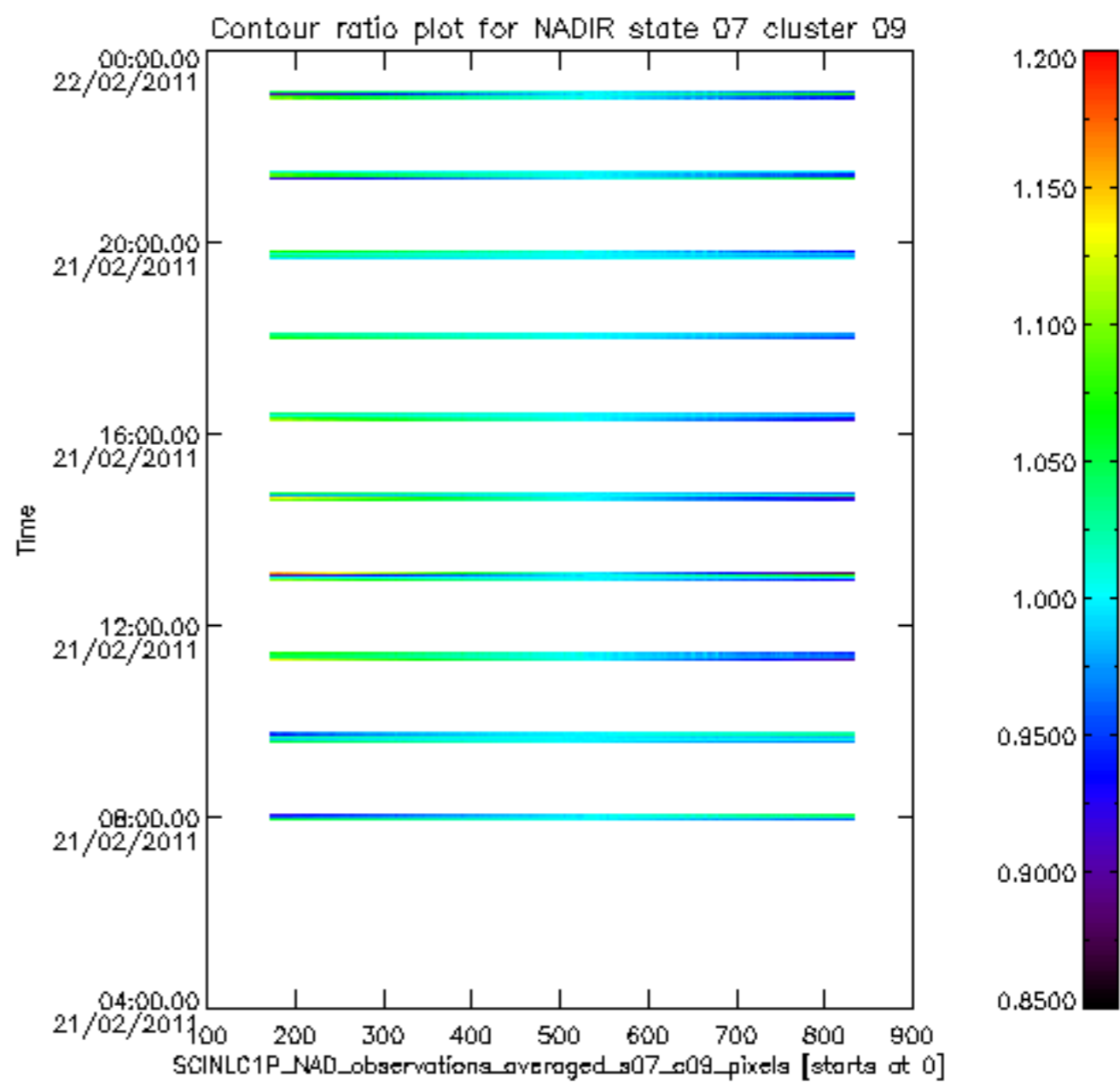
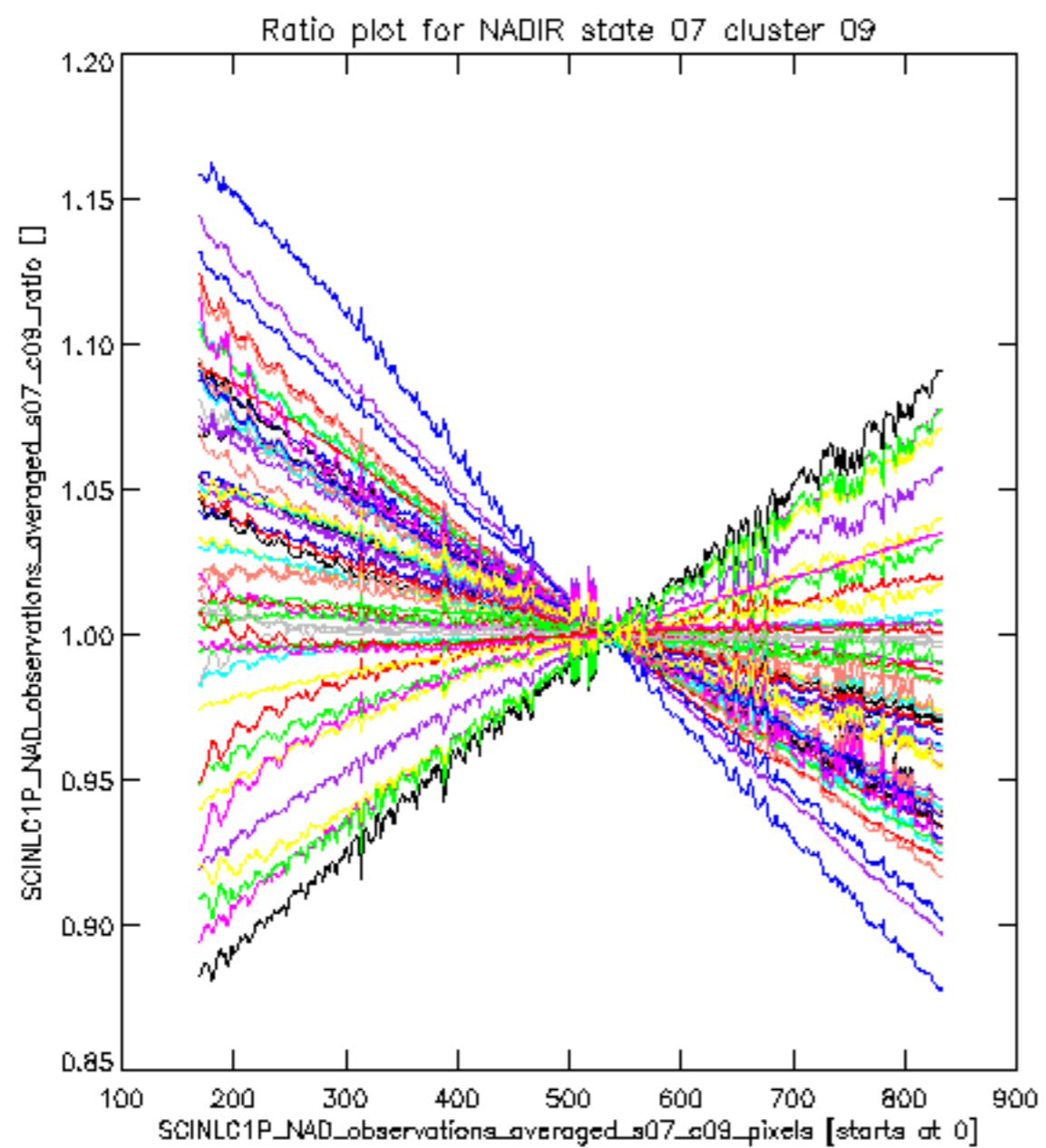


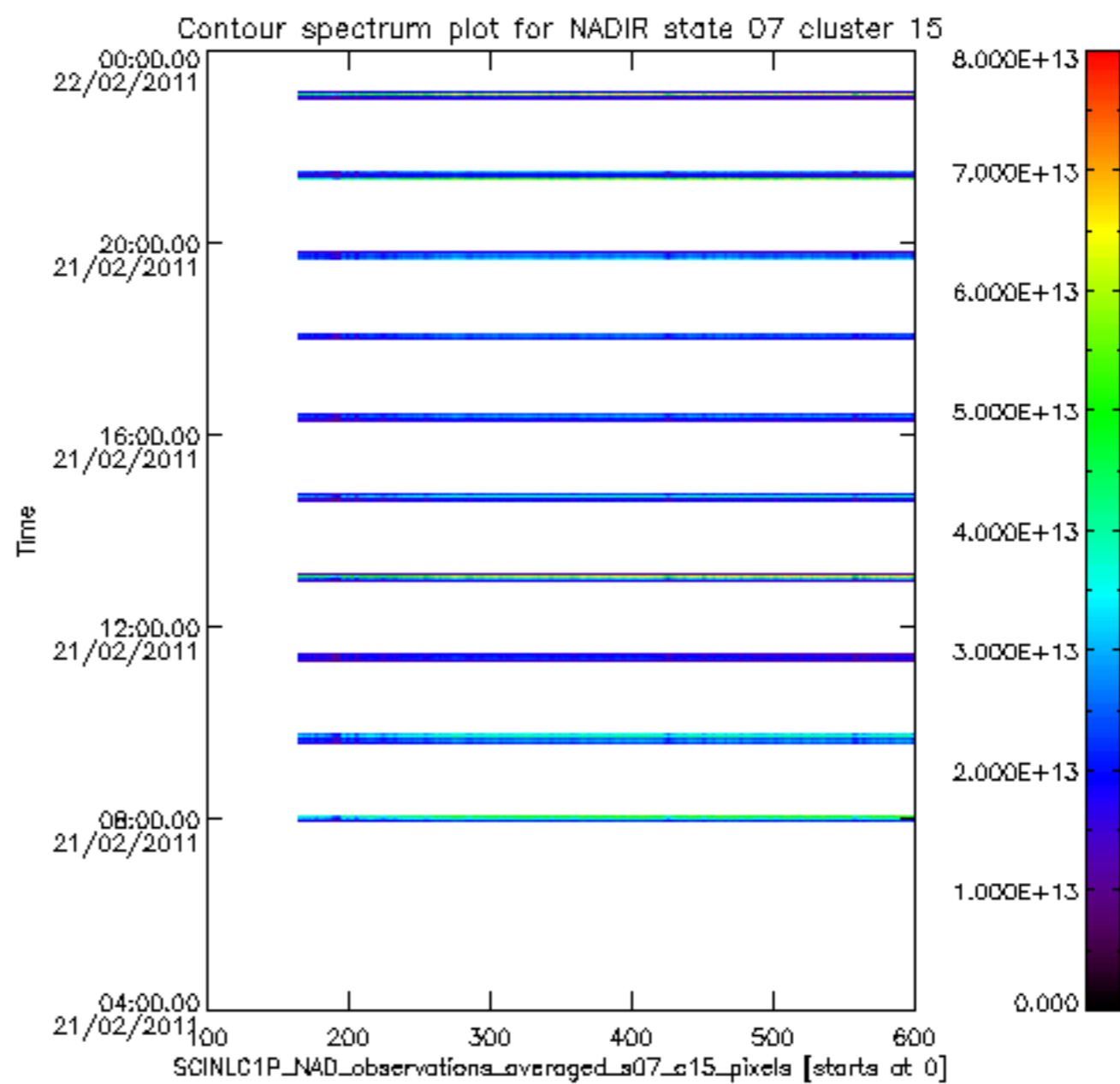
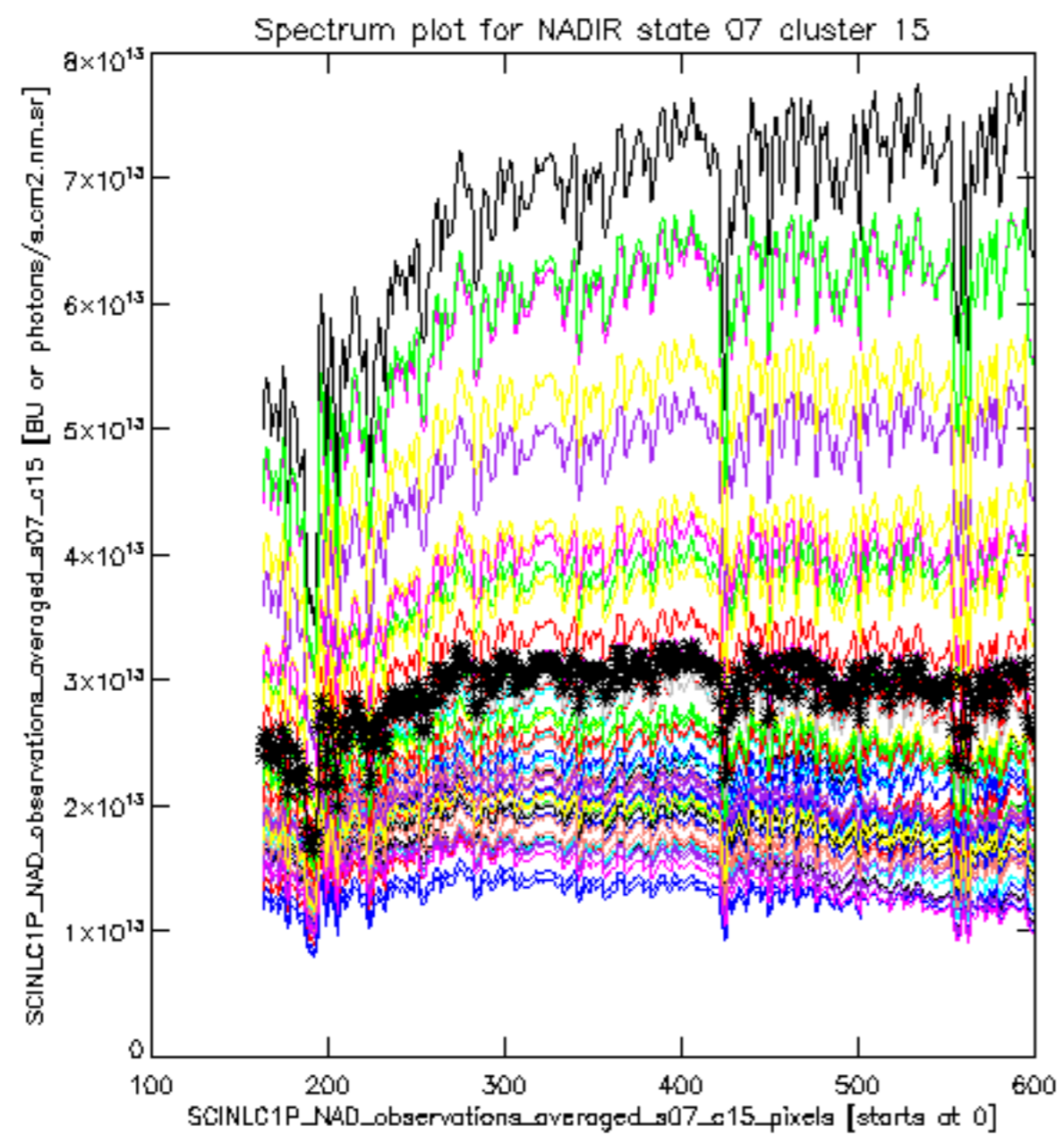
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110221_21.PNG

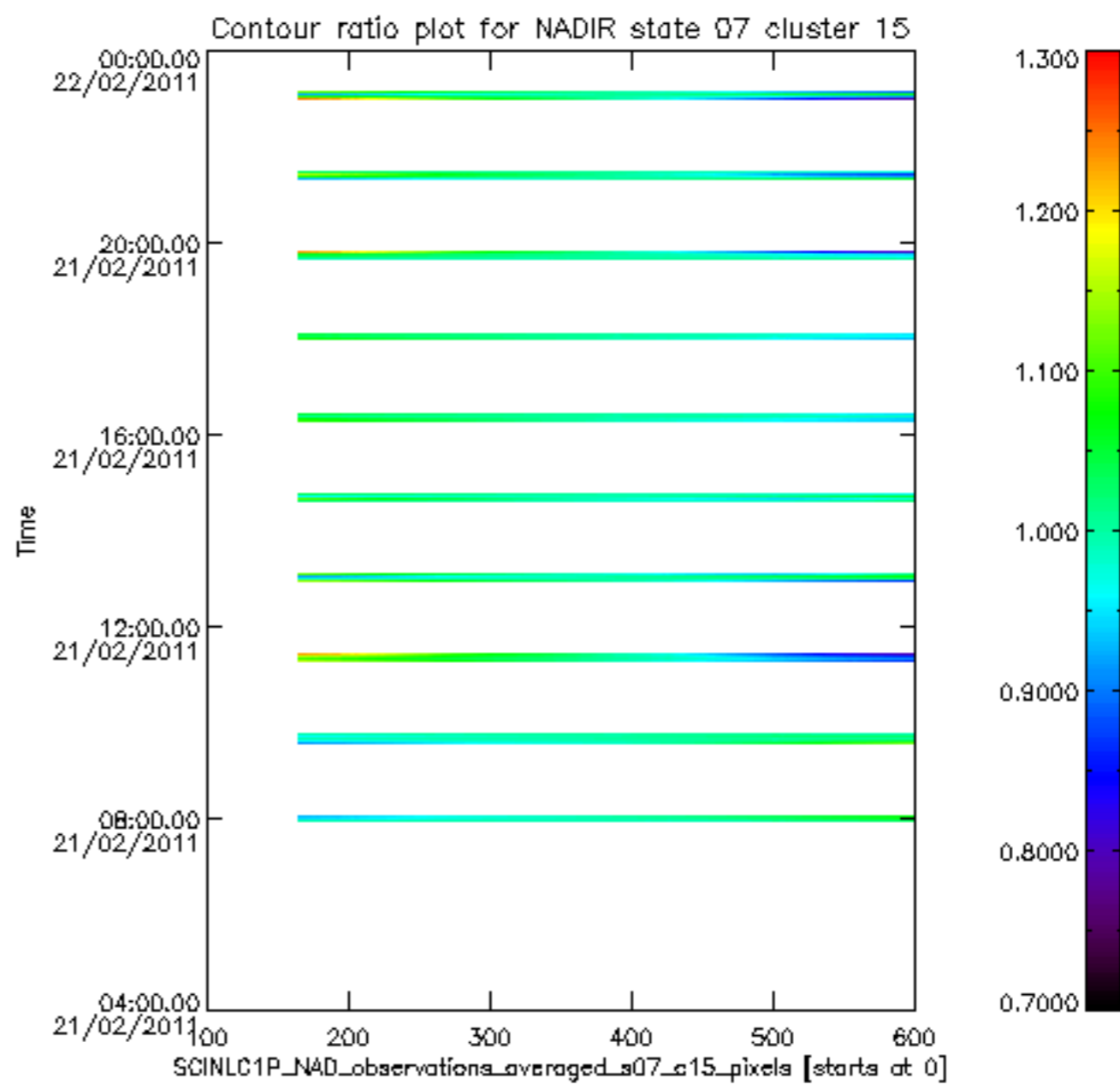
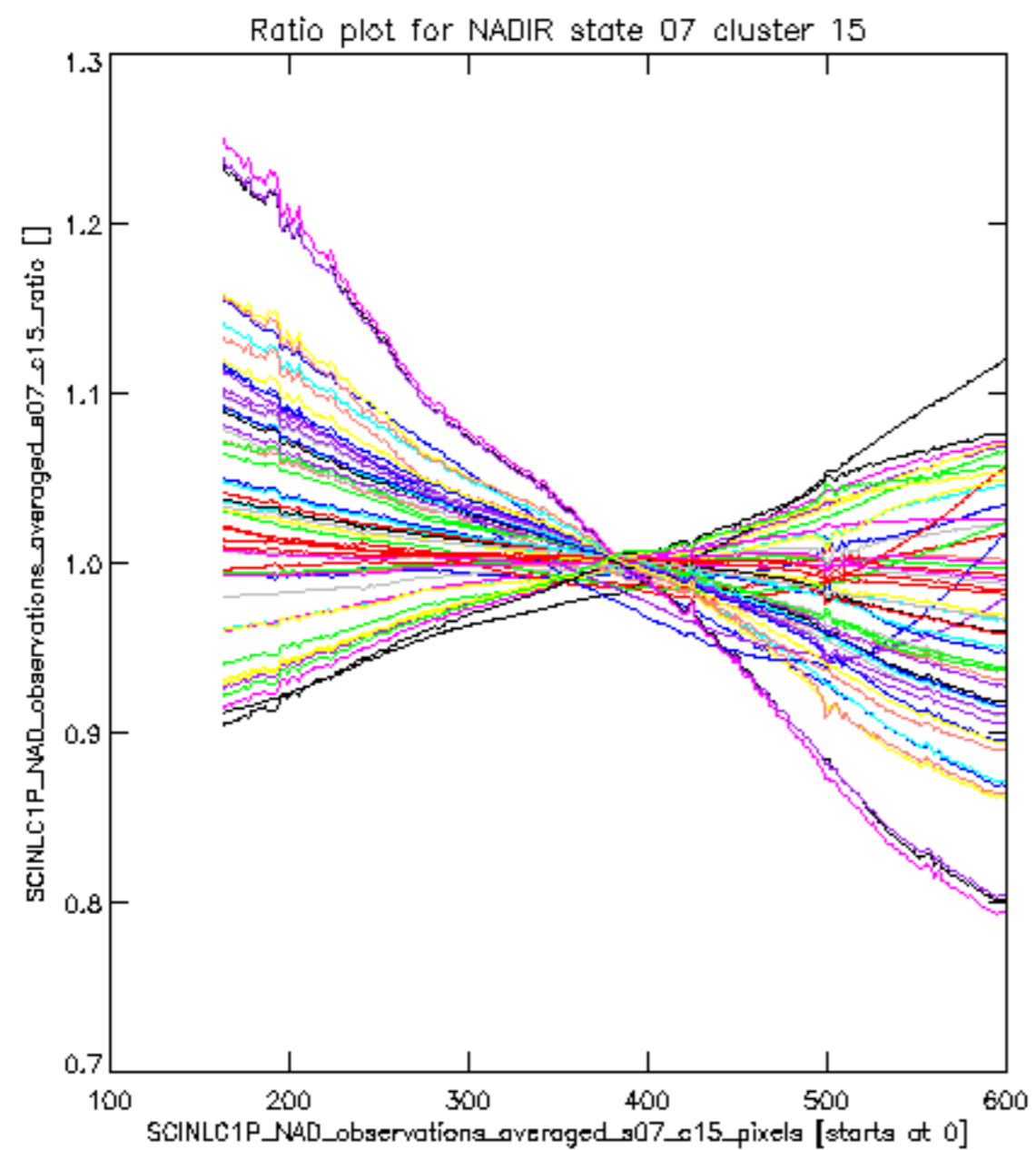


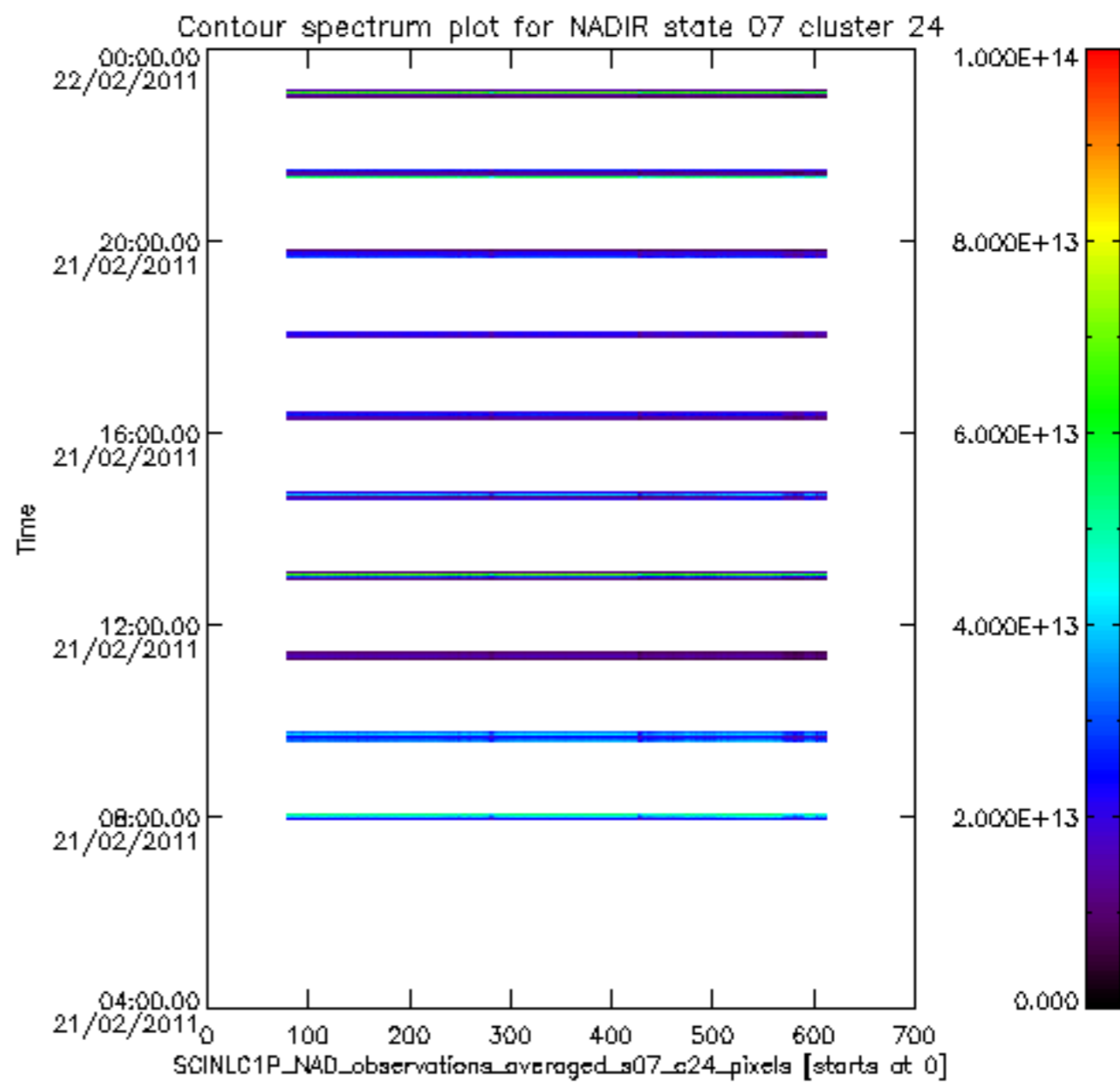
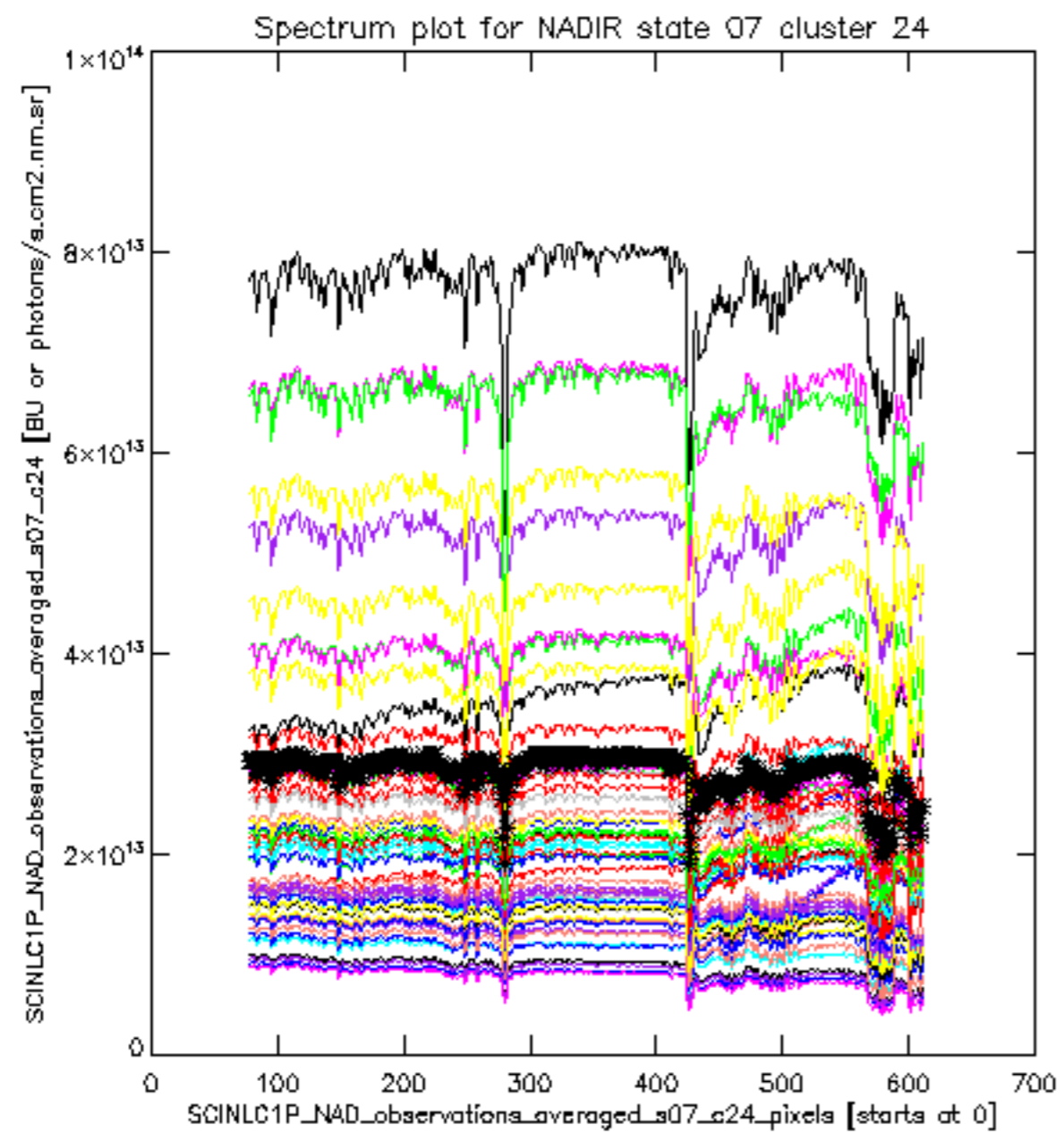


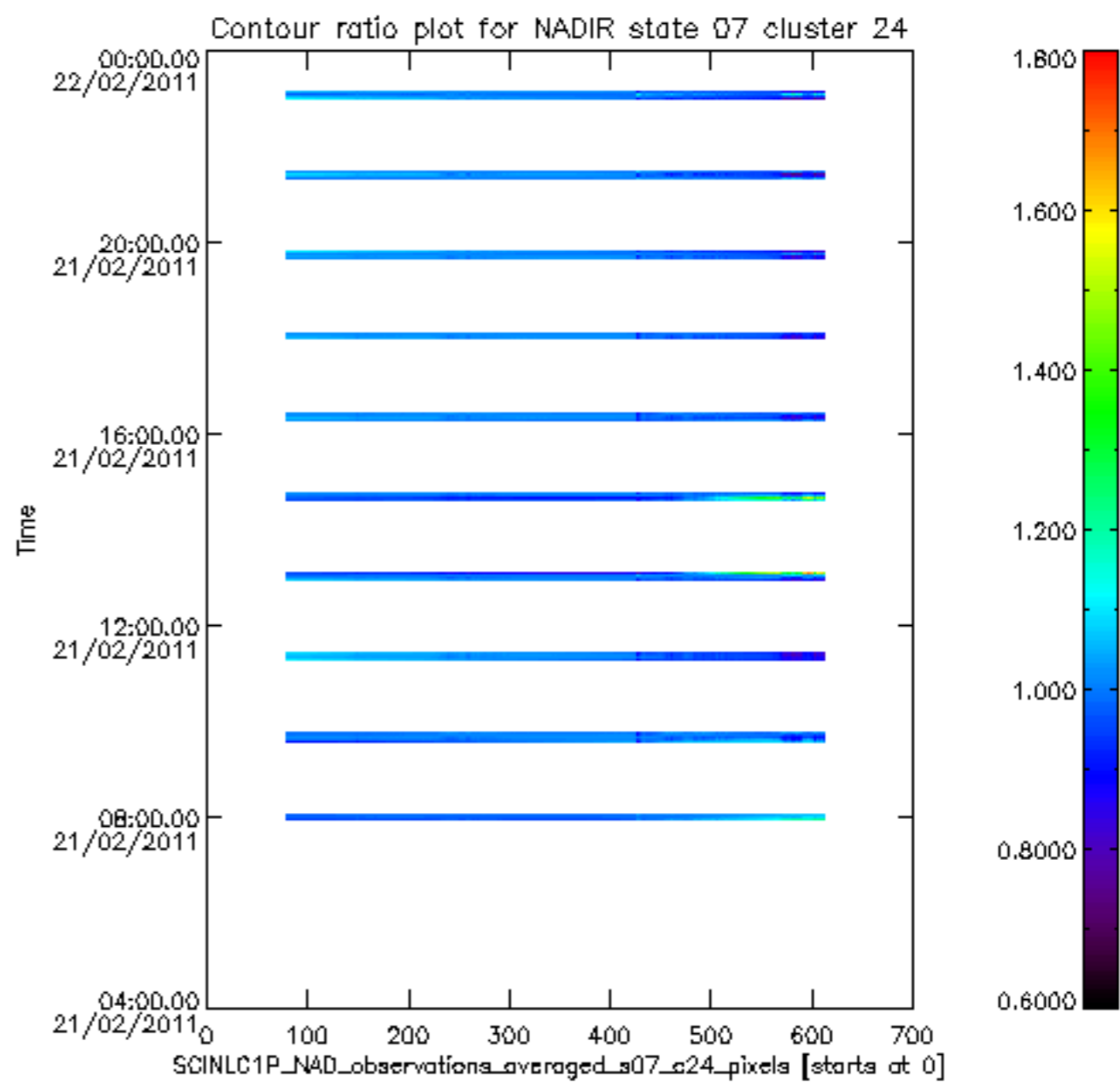
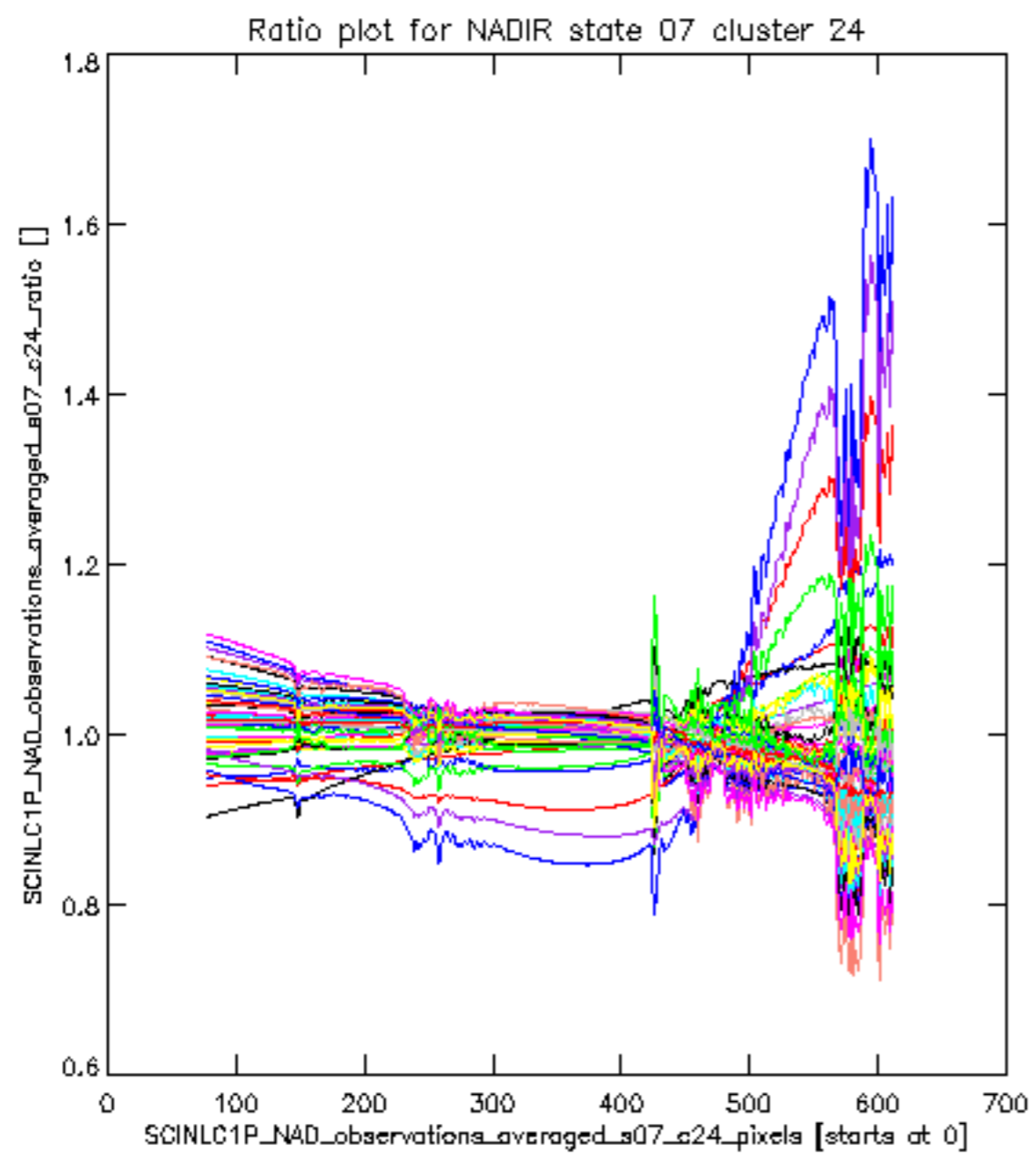




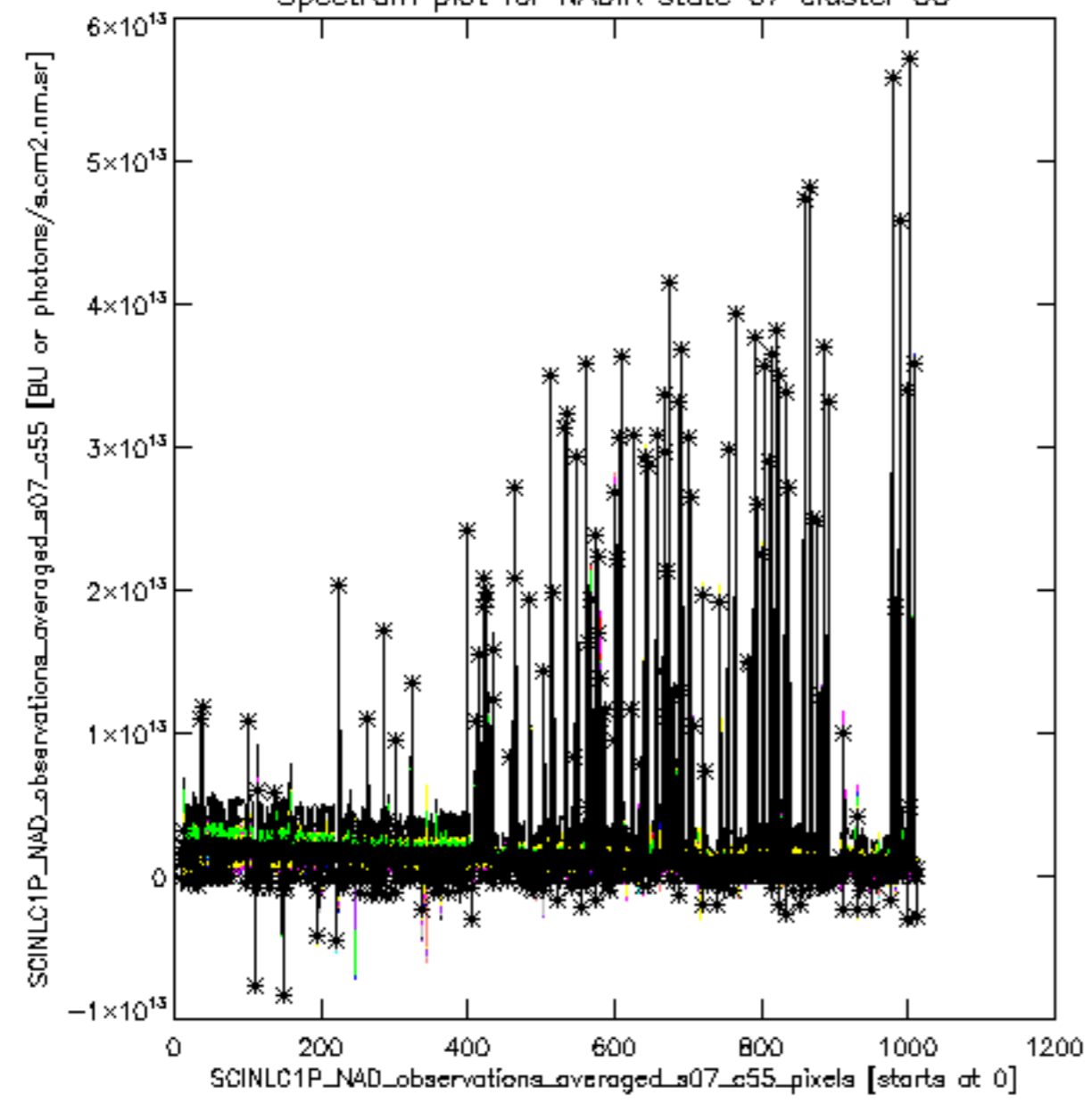








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

