

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	16APR2011 06:55:28
Data source version	SCIA/7.04-U
Processing scope for products	05APR2011 00:00:00 to 06APR2011 00:00:00
Start time of first product within scope	05APR2011 12:55:27
Stop time of last product within scope	05APR2011 23:54:02
Total number of level 1 products	7
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	05APR2011 14:55:50.791	05APR2011 23:26:03.979
1	NADIR	07	09	N/A	05APR2011 14:55:50.791	05APR2011 23:26:03.979
2	NADIR	07	15	N/A	05APR2011 14:55:50.791	05APR2011 23:26:03.979
3	NADIR	07	24	N/A	05APR2011 14:55:50.791	05APR2011 23:26:03.979
4	NADIR	07	55	N/A	05APR2011 14:55:50.791	05APR2011 23:26:03.979
5	LIMB	32	09	~19 km	05APR2011 14:40:37.412	05APR2011 23:29:15.284
6	LIMB	32	09	~22 km	05APR2011 14:40:37.412	05APR2011 23:29:15.284
7	LIMB	32	09	~25 km	05APR2011 14:40:37.412	05APR2011 23:29:15.284
8	LIMB	32	15	~22 km	05APR2011 14:40:37.412	05APR2011 23:29:15.284
9	LIMB	32	15	~25 km	05APR2011 14:40:37.412	05APR2011 23:29:15.284
10	LIMB	32	15	~35 km	05APR2011 14:40:37.412	05APR2011 23:29:15.284

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	#nopro	#cmlp_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110405_125527_000047223101_00139_47567_6002.N1	05APR2011 12:55:27	05APR2011 14:14:10	0	0	0	0	0	2	0	0	
1	SCI_NLC_1CUDPA20110405_141413_000060023101_00140_47568_6006.N1	05APR2011 14:22:39	05APR2011 15:33:08	0	36	30	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110405_155419_000060173101_00141_47569_6007.N1	05APR2011 16:02:53	05APR2011 17:13:07	0	35	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110405_173441_000060023101_00142_47570_6008.N1	05APR2011 17:43:06	05APR2011 18:53:50	0	36	30	0	1	1	0	0	
4	SCI_NLC_1CUDPA20110405_191446_000060173101_00143_47571_6009.N1	05APR2011 19:23:20	05APR2011 20:33:49	0	35	31	0	1	1	0	0	
5	SCI_NLC_1CUDPA20110405_205507_000060013101_00144_47572_6010.N1	05APR2011 21:03:34	05APR2011 22:14:03	0	36	30	0	0	1	0	0	

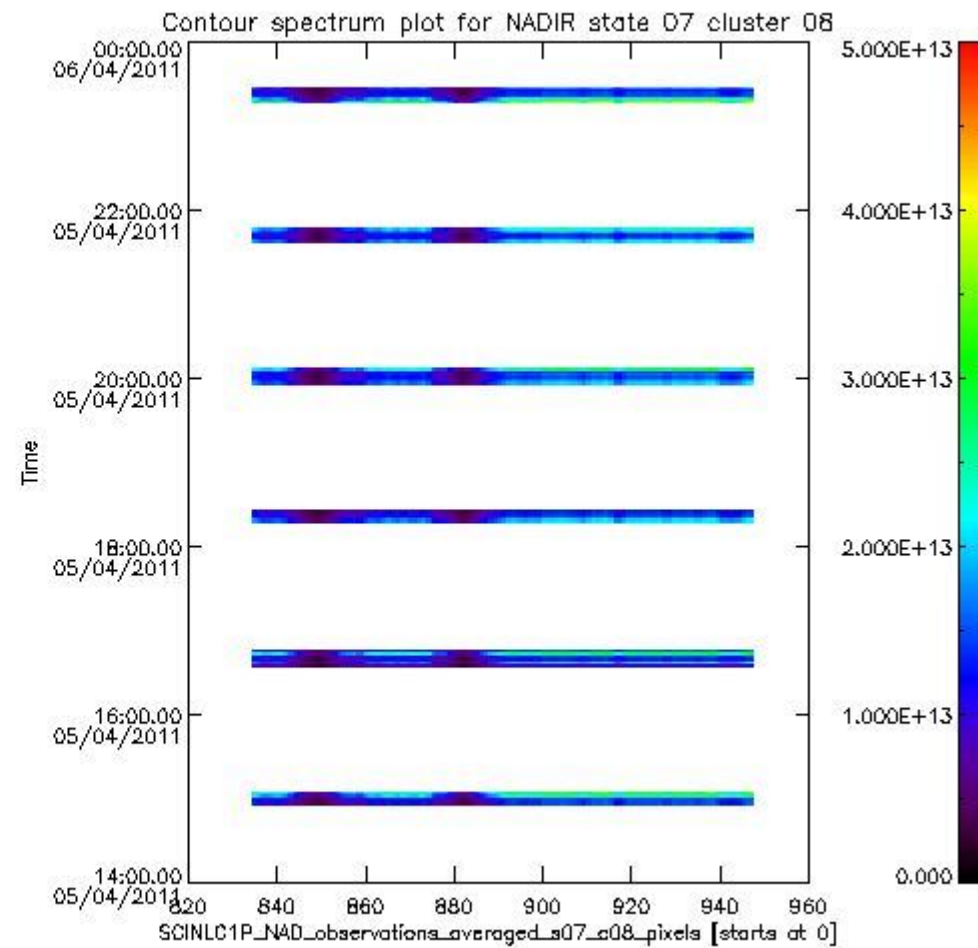
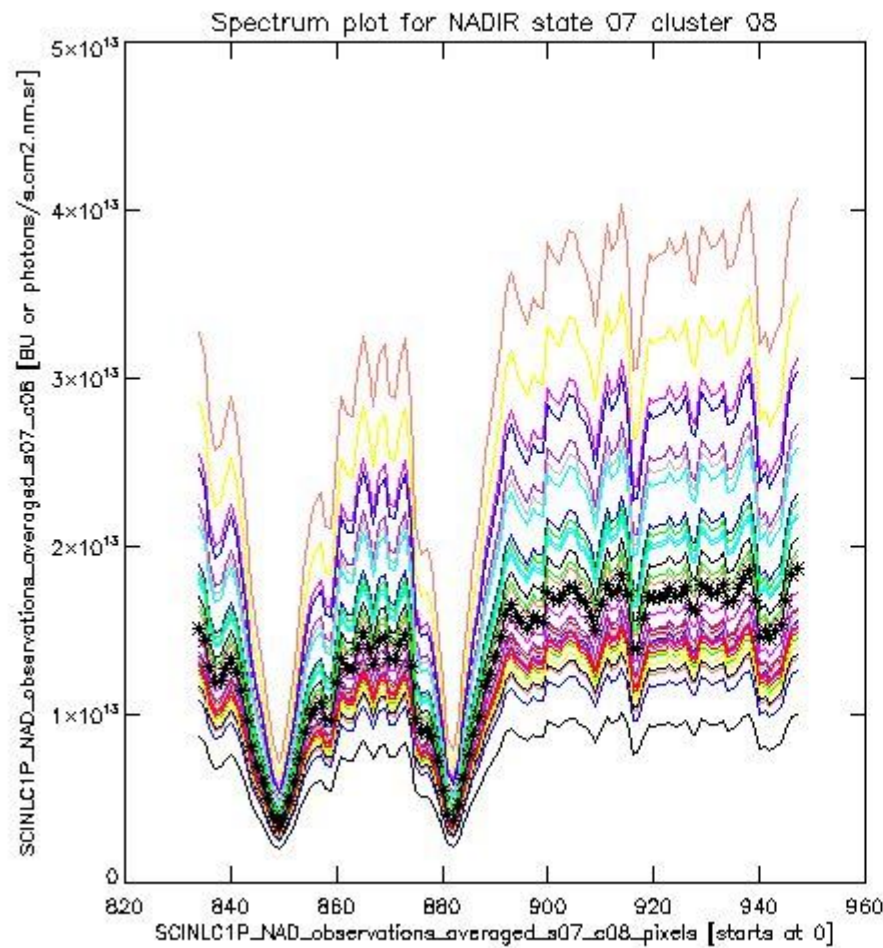
1.2 Source packet monitoring

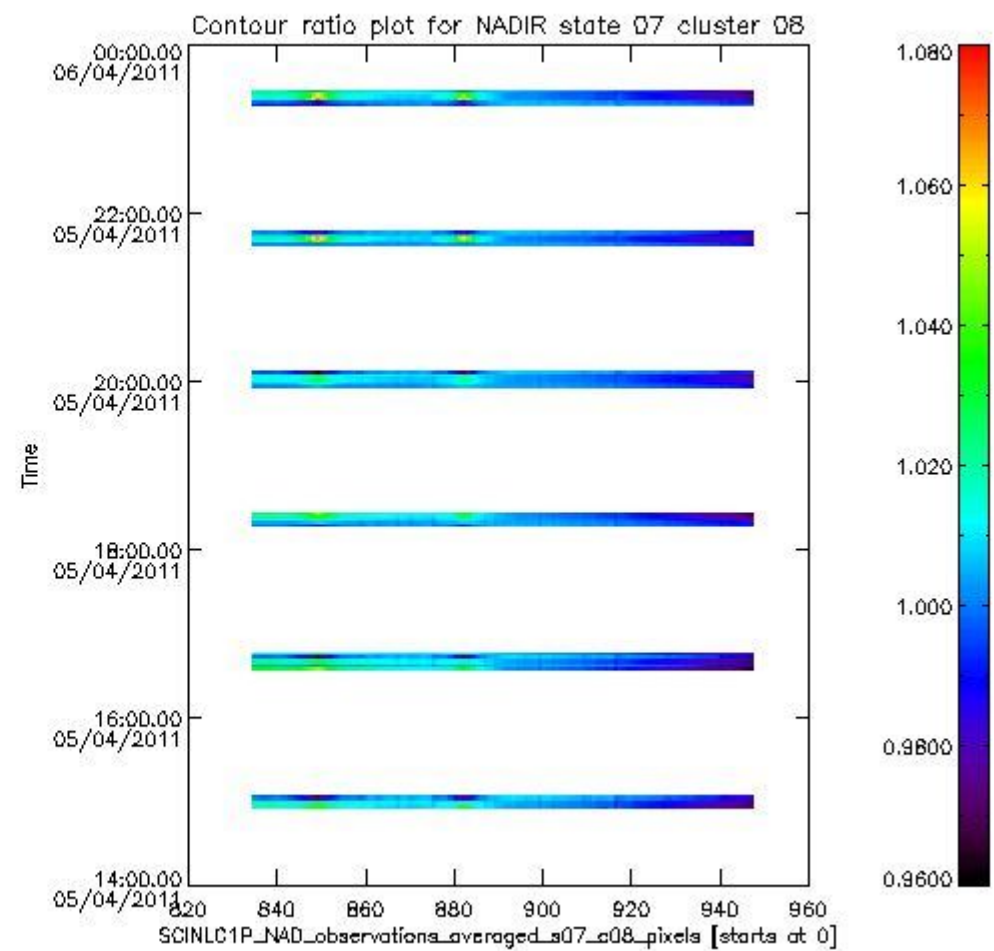
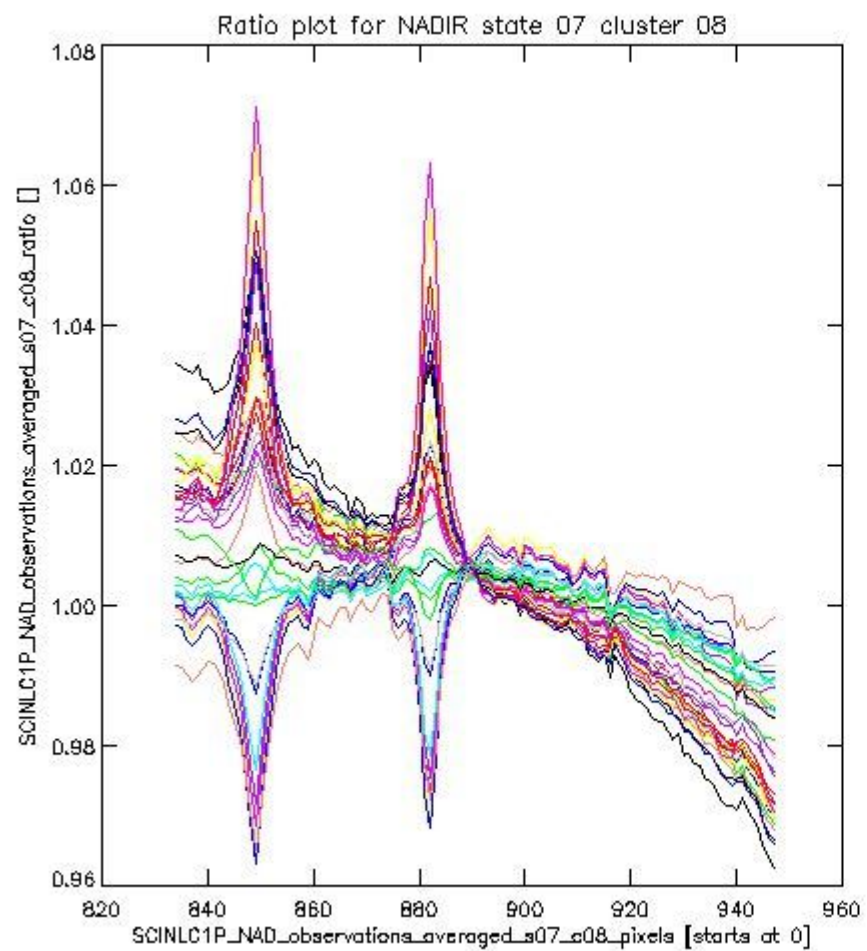
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	05APR2011 14:55:50.791
Start time of last sample	05APR2011 23:26:03.979
Reference period start time	06MAR2011 00:00:33.125
Reference period stop time	03APR2011 14:38:22.196
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

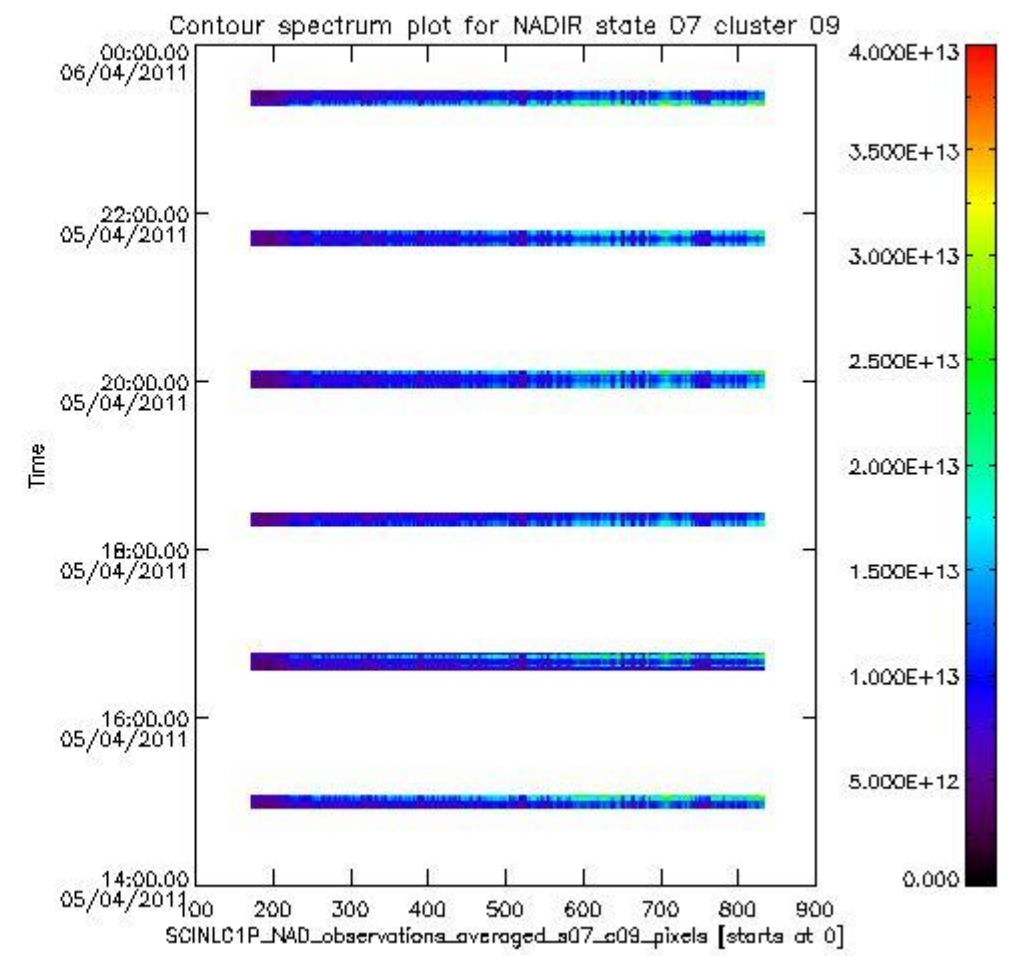
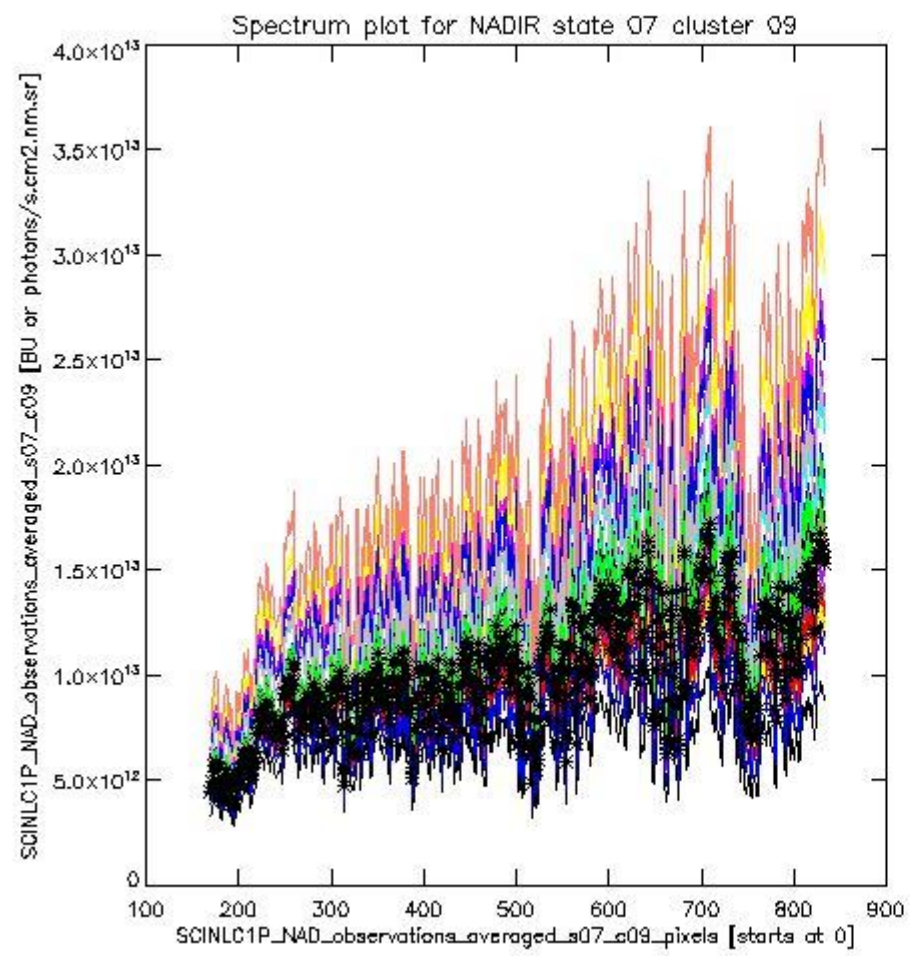




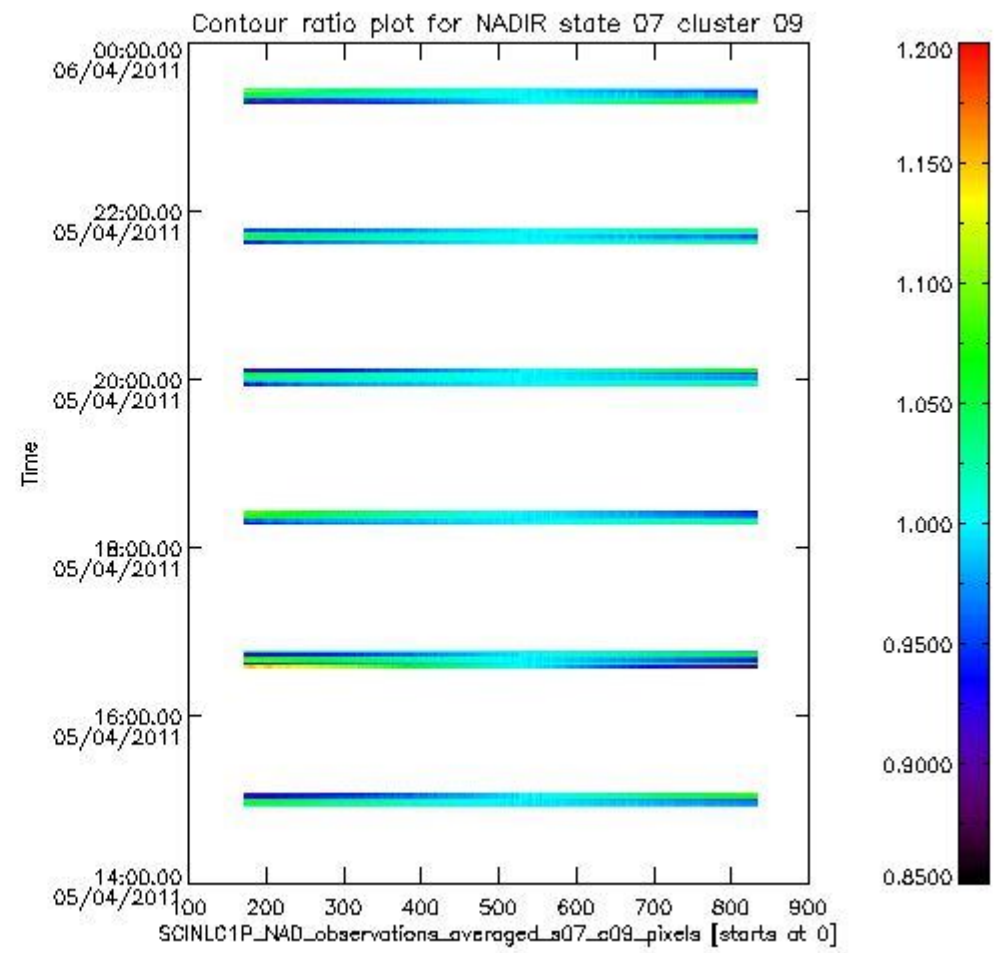
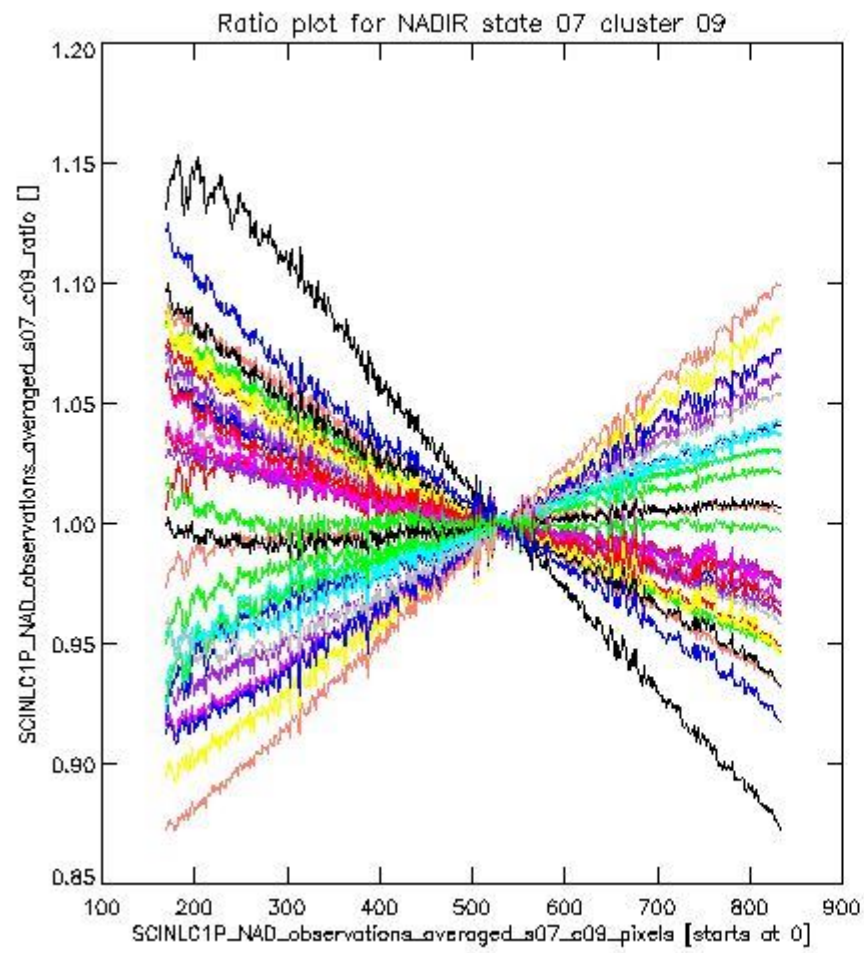
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_1.PNG

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	05APR2011 14:55:50.791
Start time of last sample	05APR2011 23:26:03.979
Reference period start time	06MAR2011 00:00:33.125
Reference period stop time	03APR2011 14:38:22.196
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



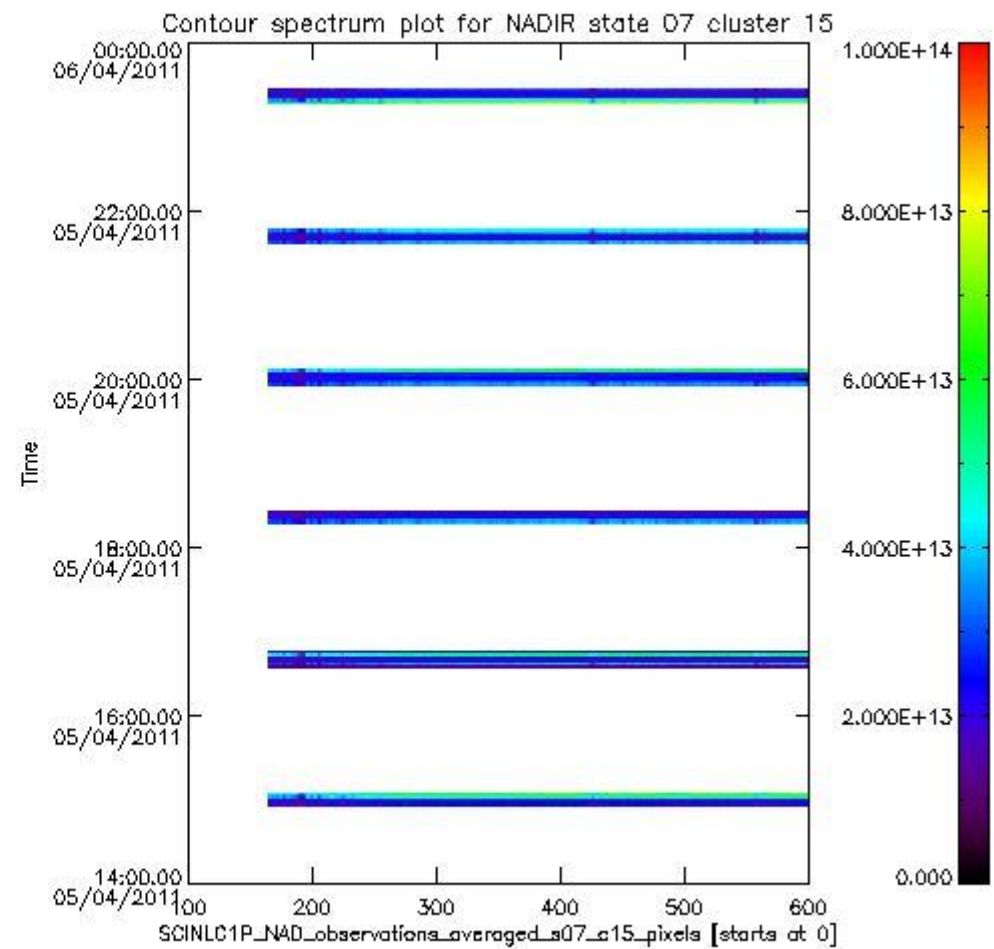
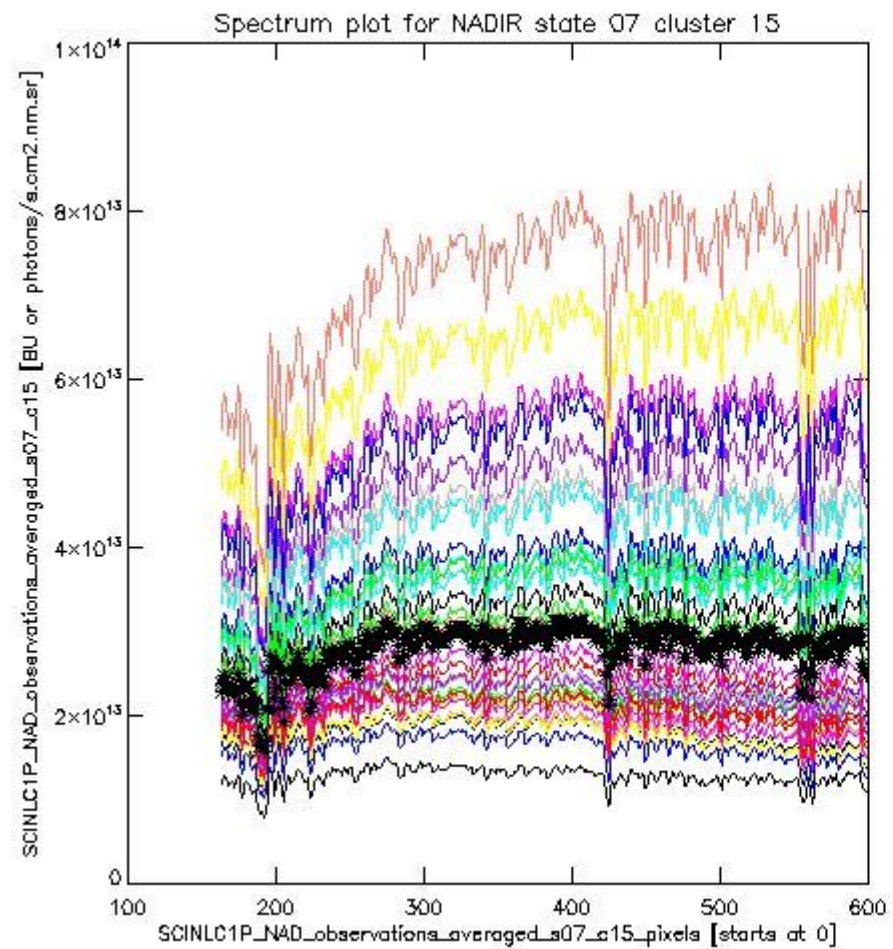
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_2.PNG



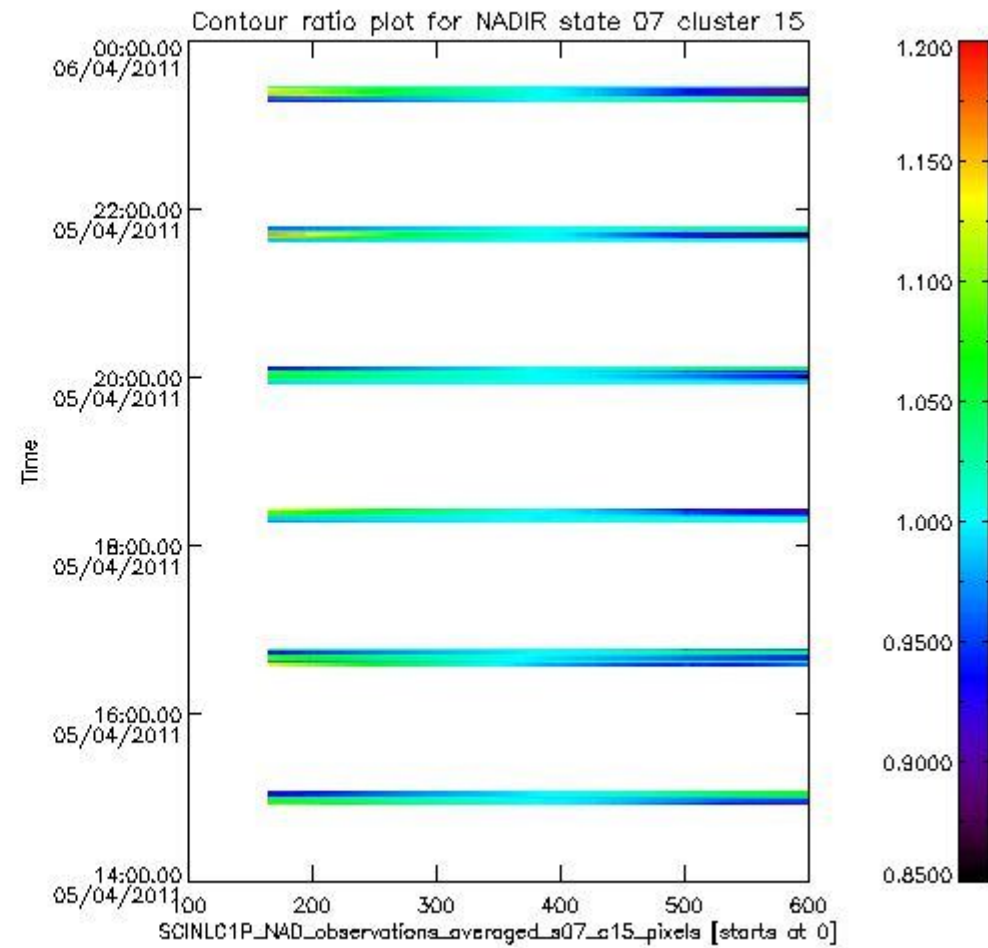
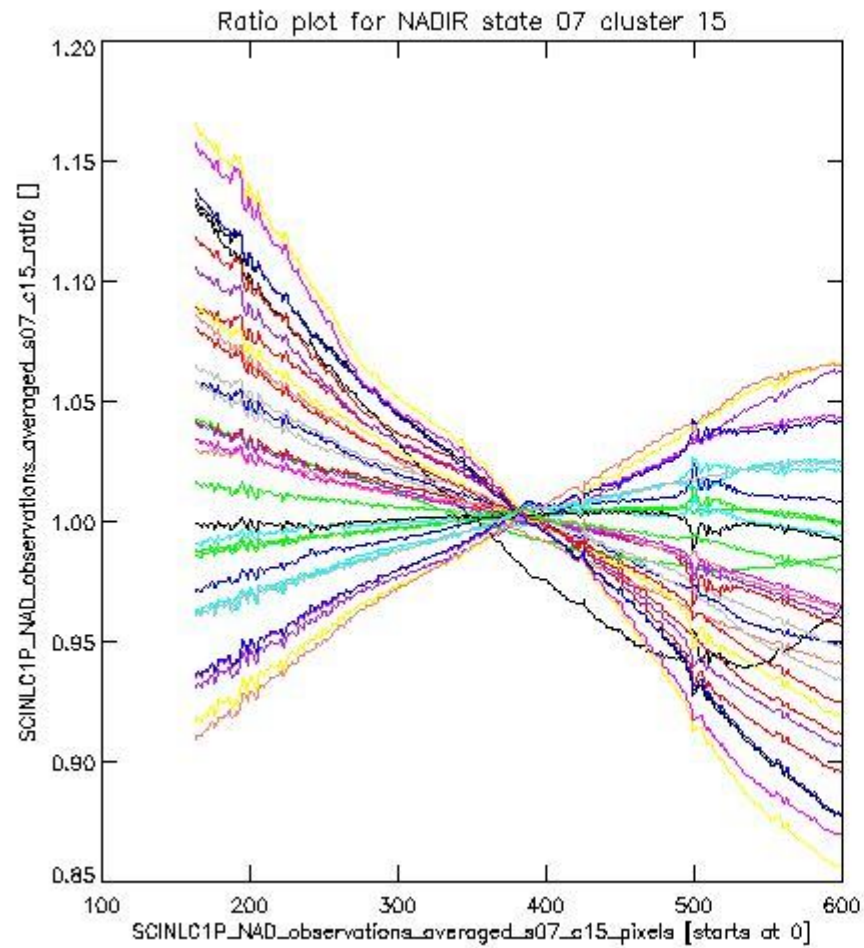
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_3.PNG

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	05APR2011 14:55:50.791
Start time of last sample	05APR2011 23:26:03.979
Reference period start time	06MAR2011 00:00:33.125
Reference period stop time	03APR2011 14:38:22.196
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



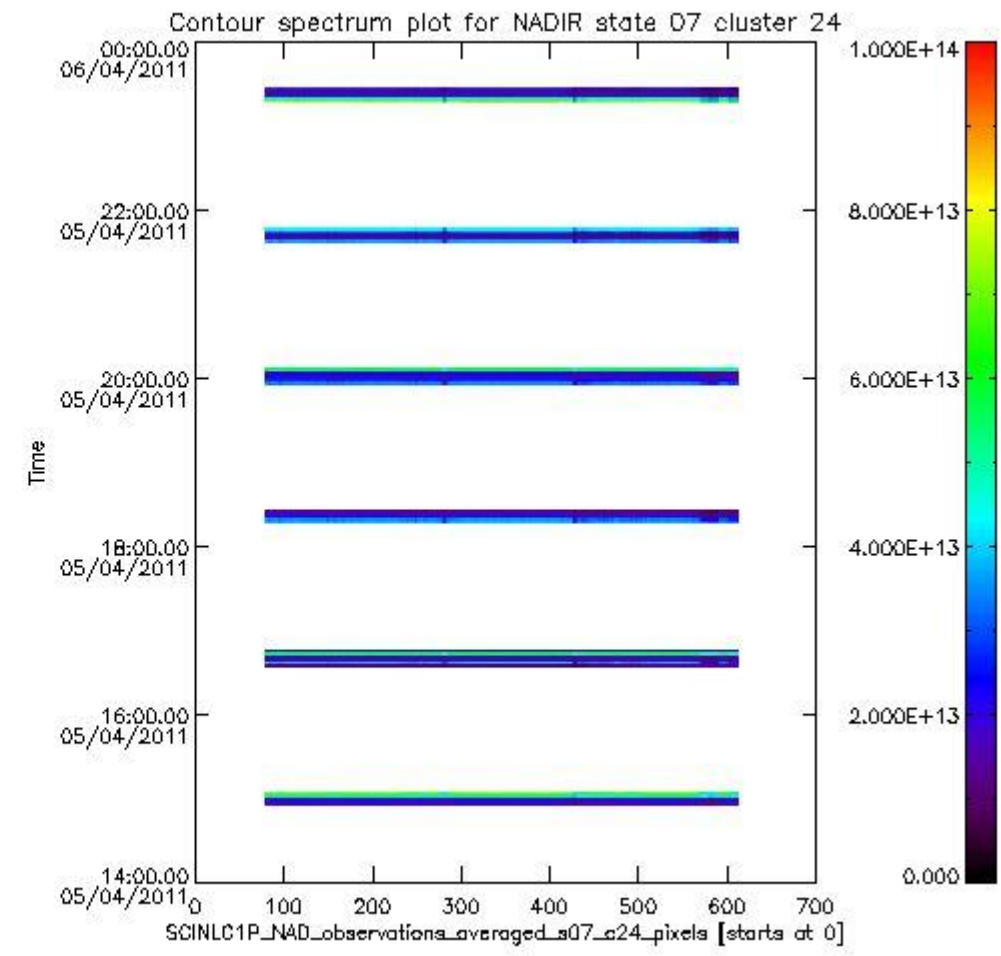
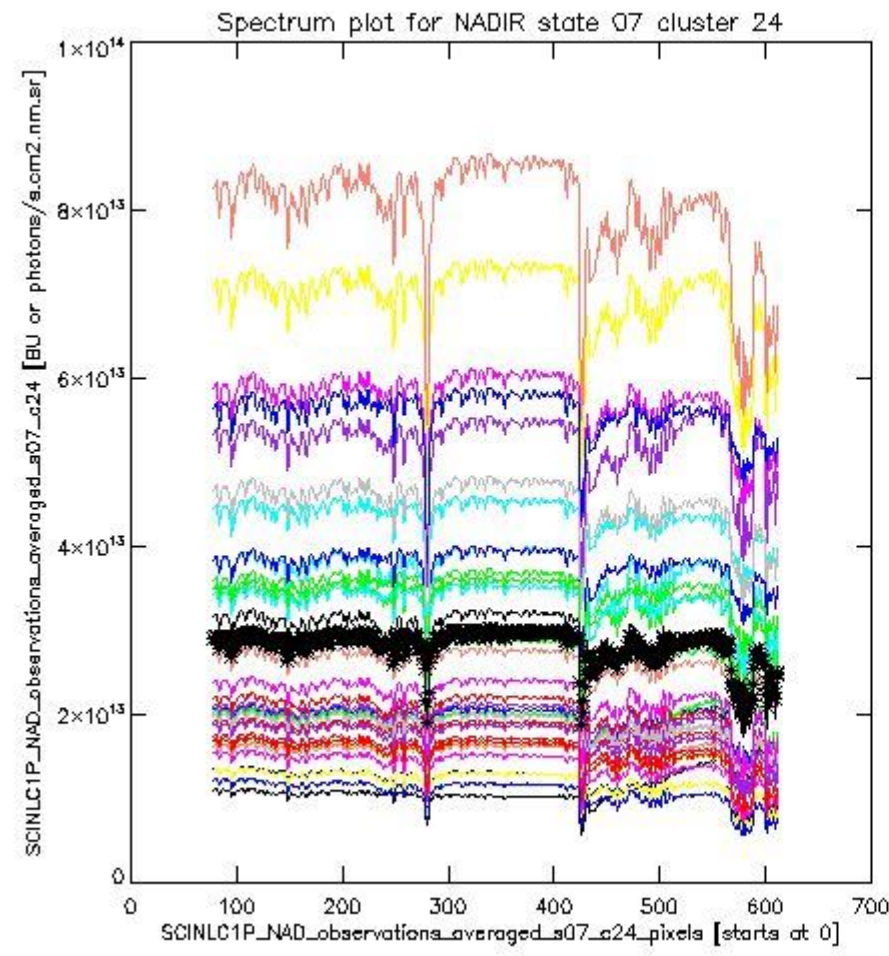
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_4.PNG



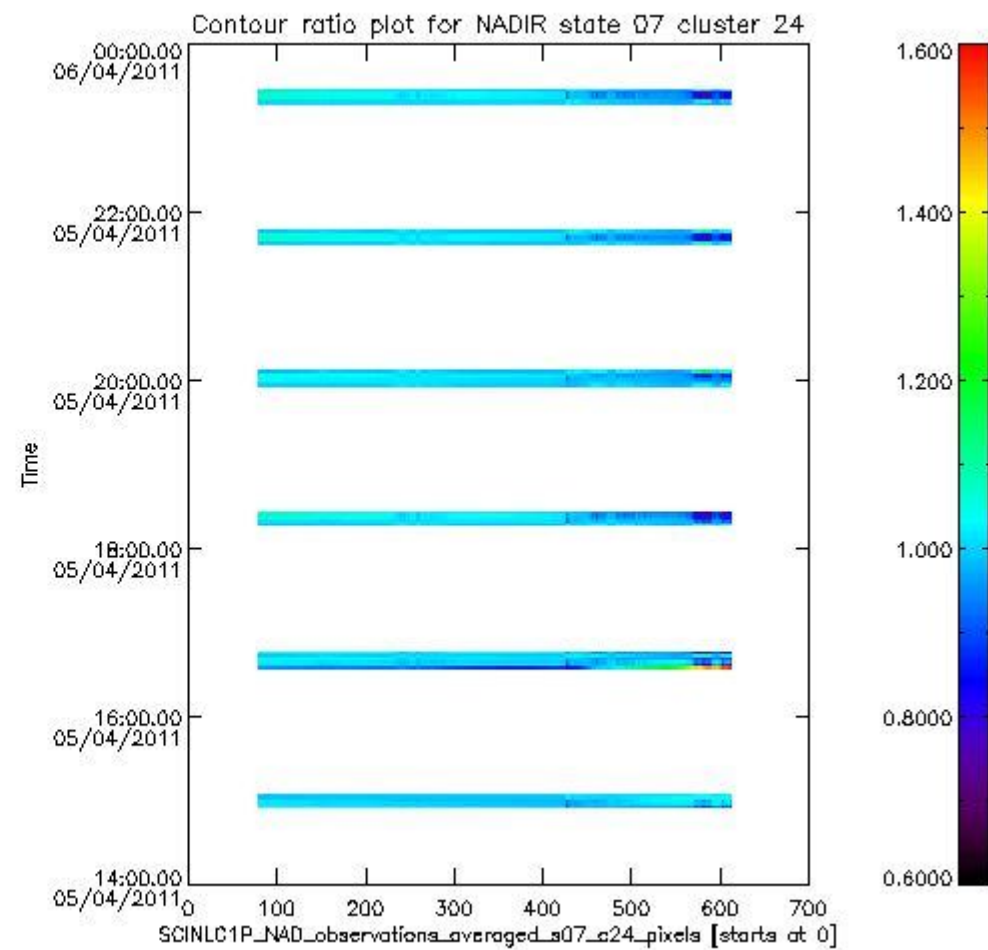
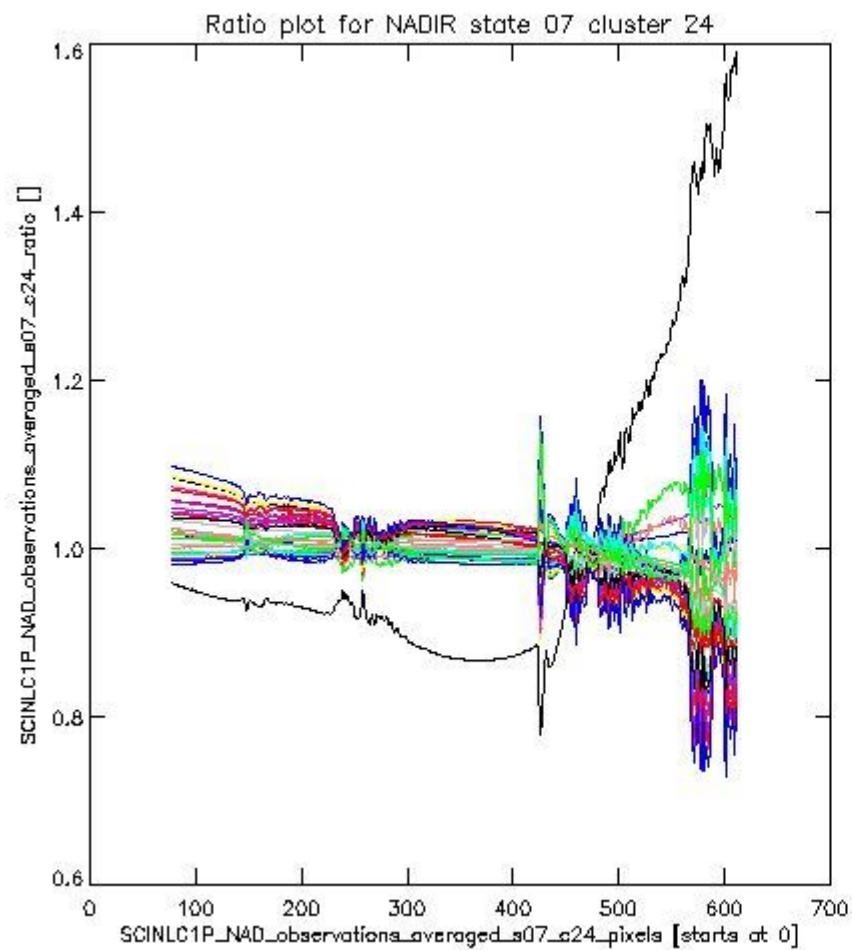
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_5.PNG

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	05APR2011 14:55:50.791
Start time of last sample	05APR2011 23:26:03.979
Reference period start time	06MAR2011 00:00:33.125
Reference period stop time	03APR2011 14:38:22.196
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



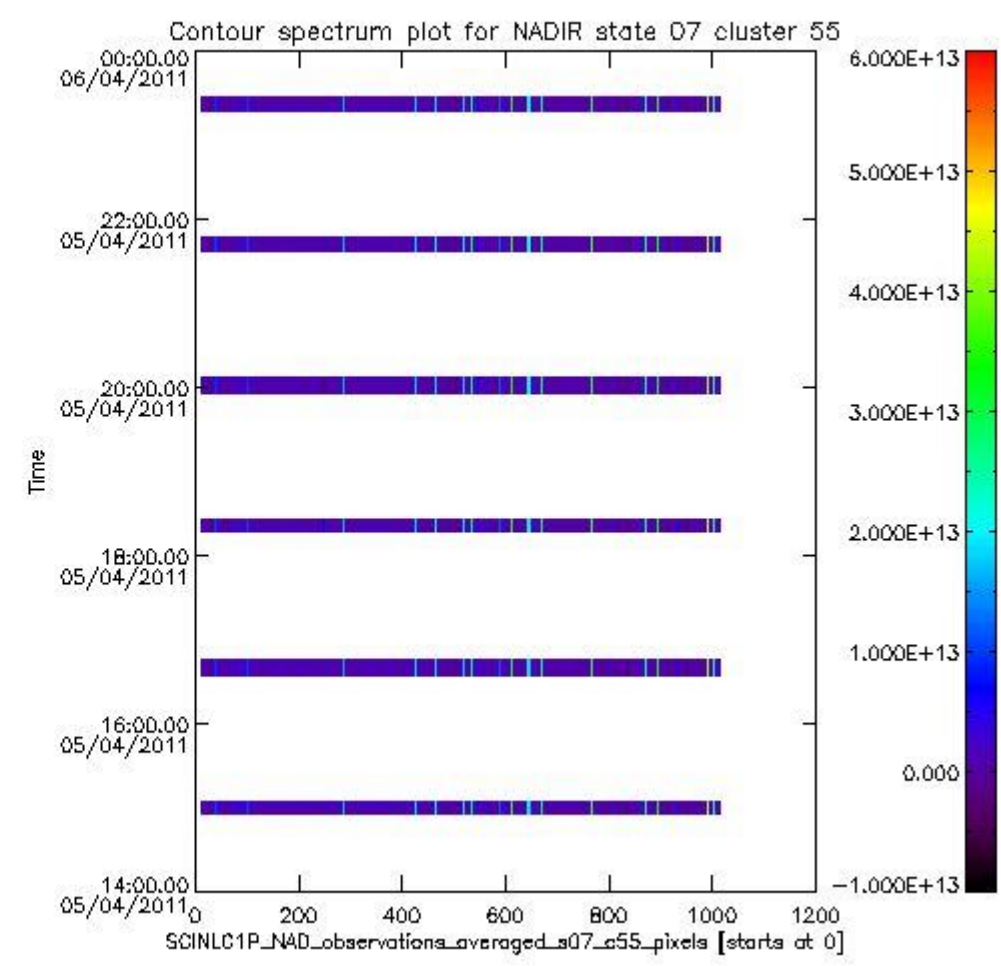
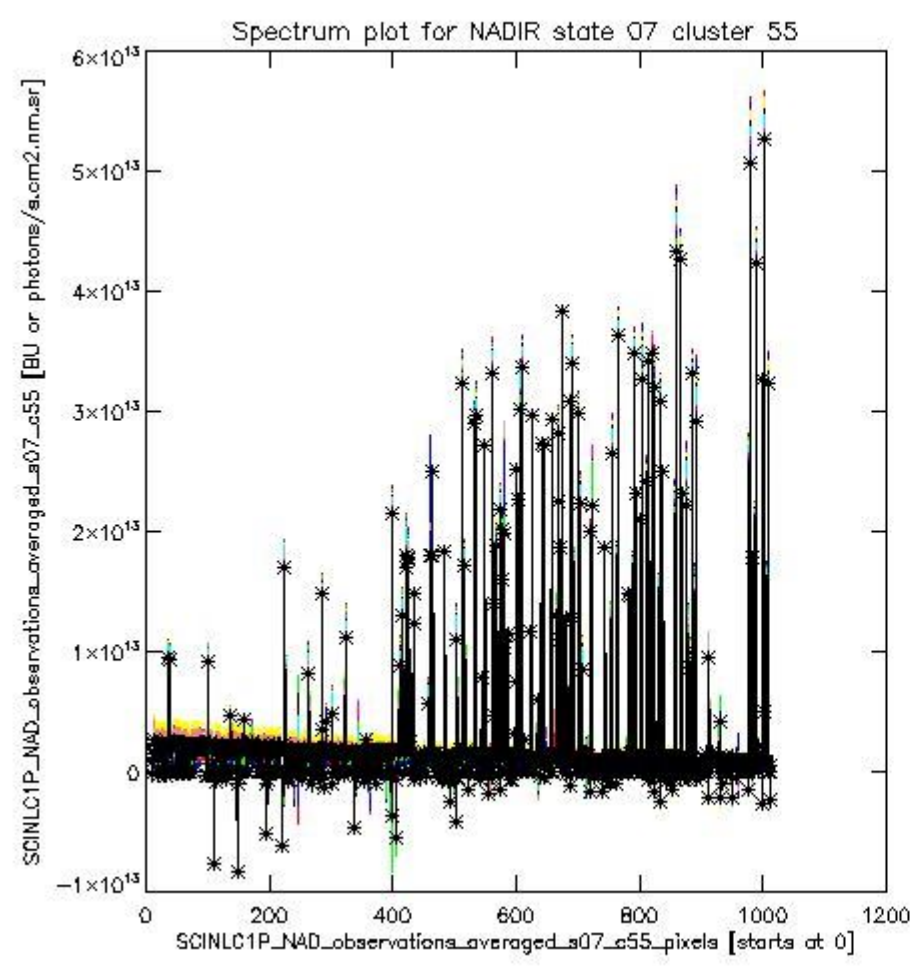
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_6.PNG



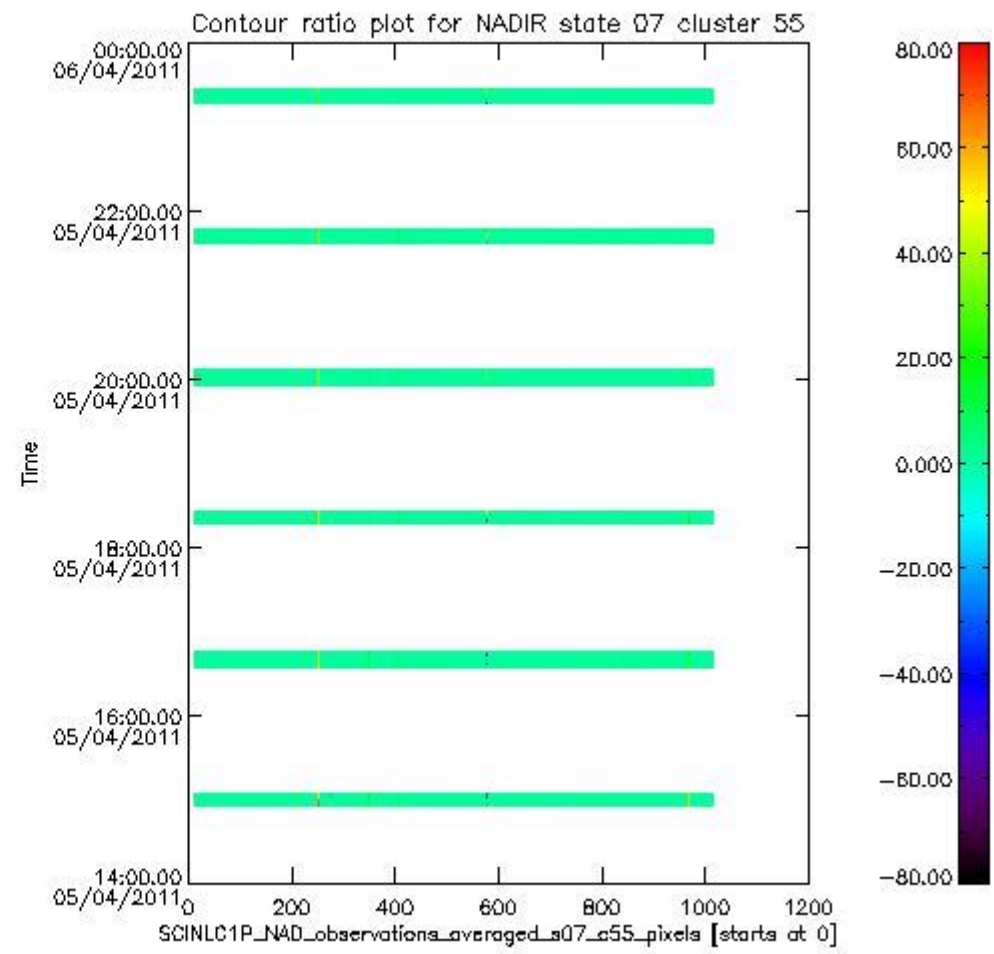
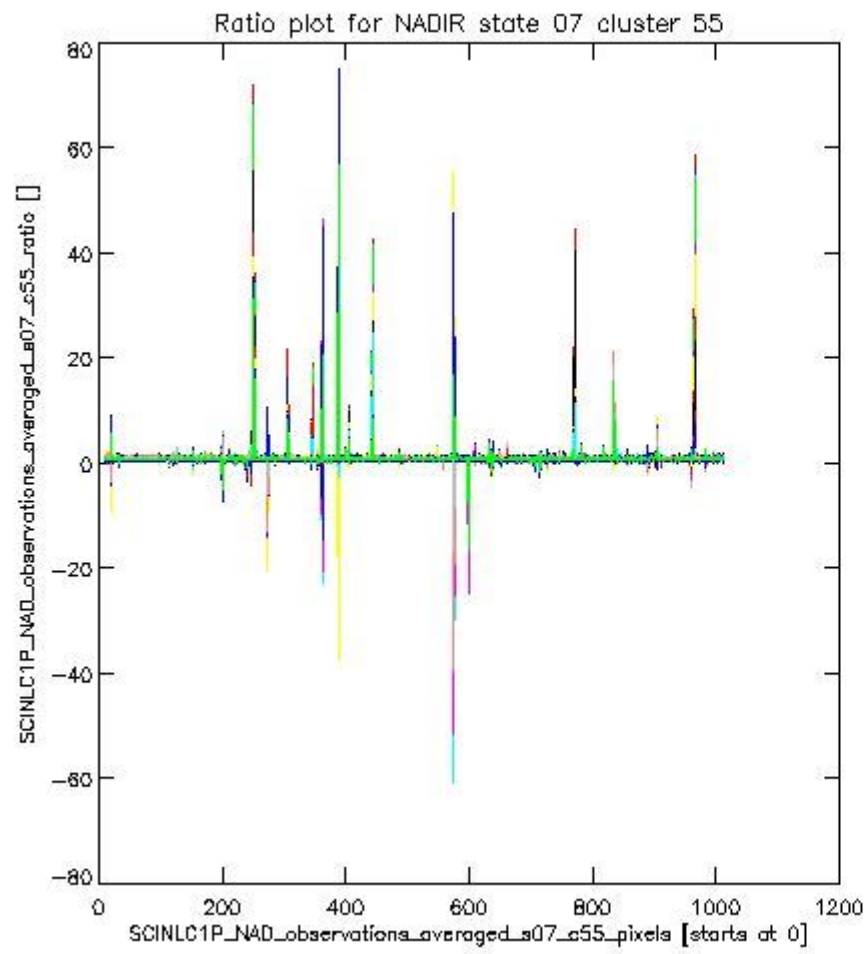
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_7.PNG

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	05APR2011 14:55:50.791
Start time of last sample	05APR2011 23:26:03.979
Reference period start time	06MAR2011 00:00:33.125
Reference period stop time	03APR2011 14:38:22.196
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



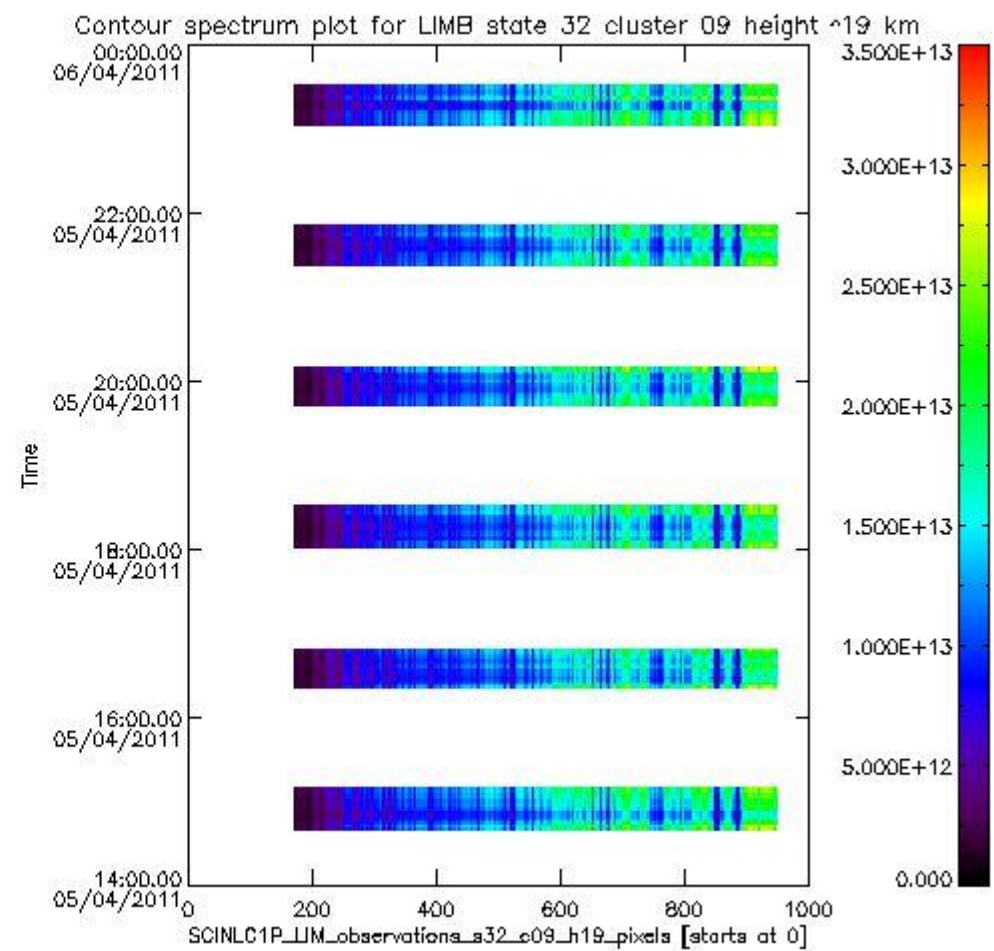
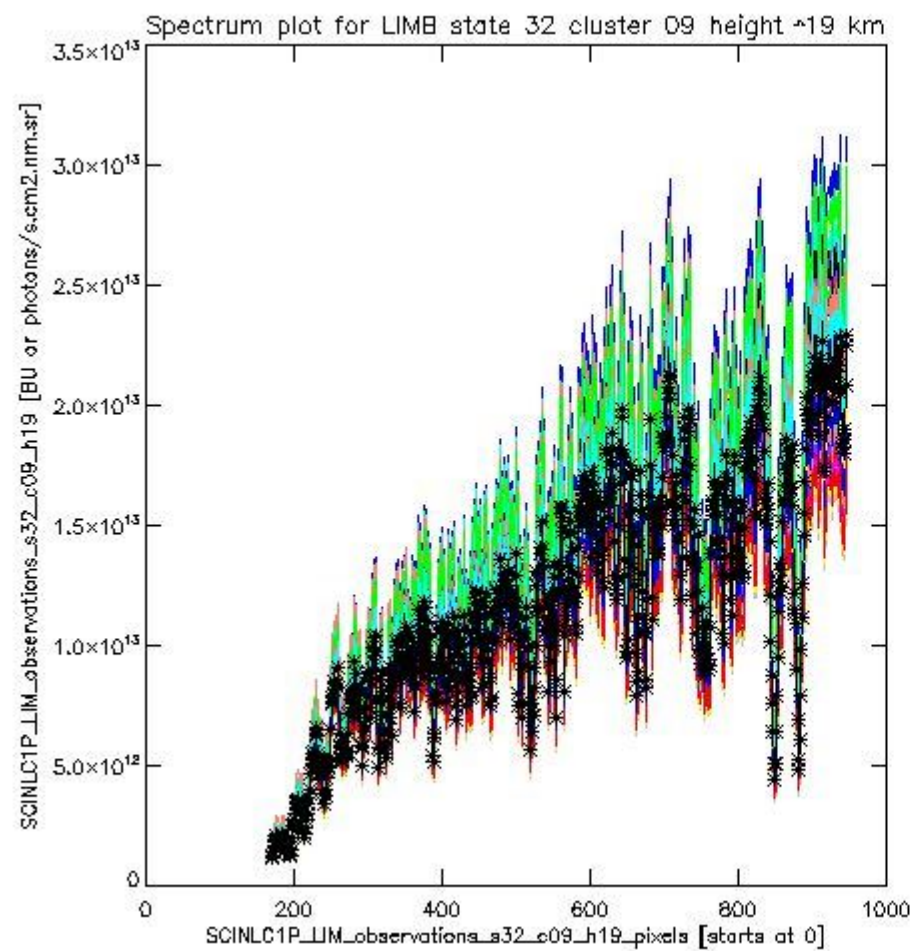
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_8.PNG



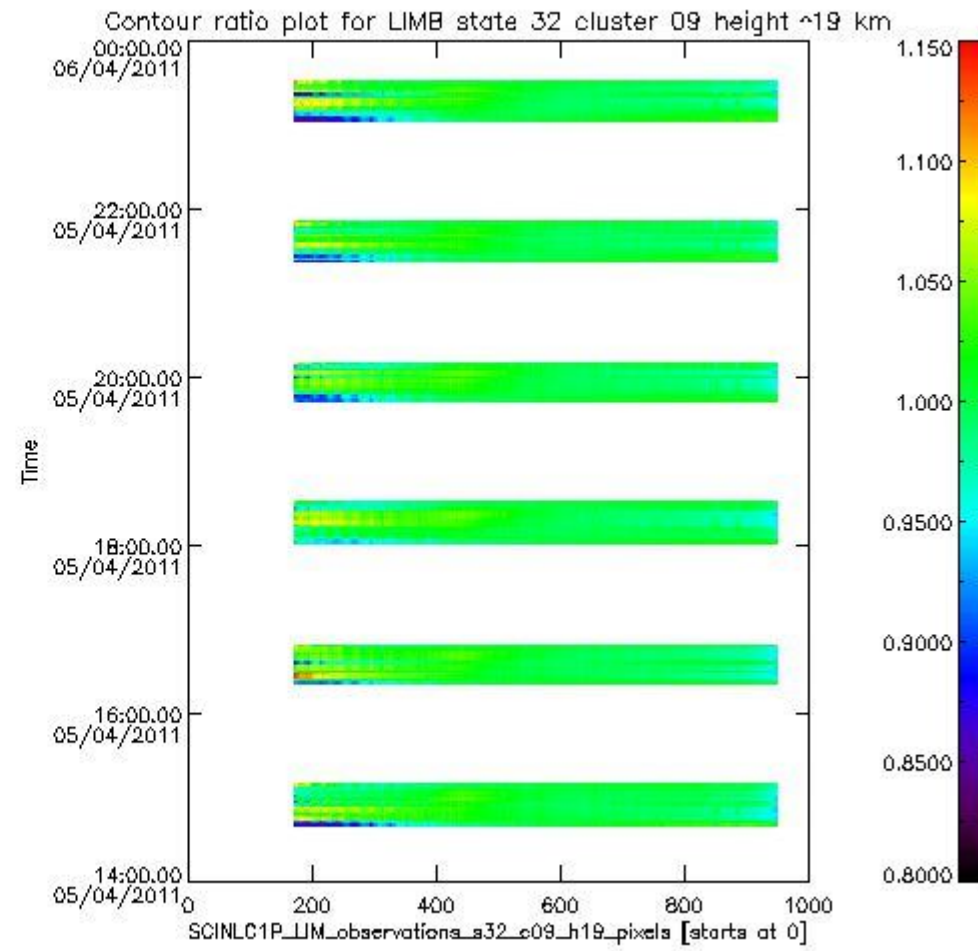
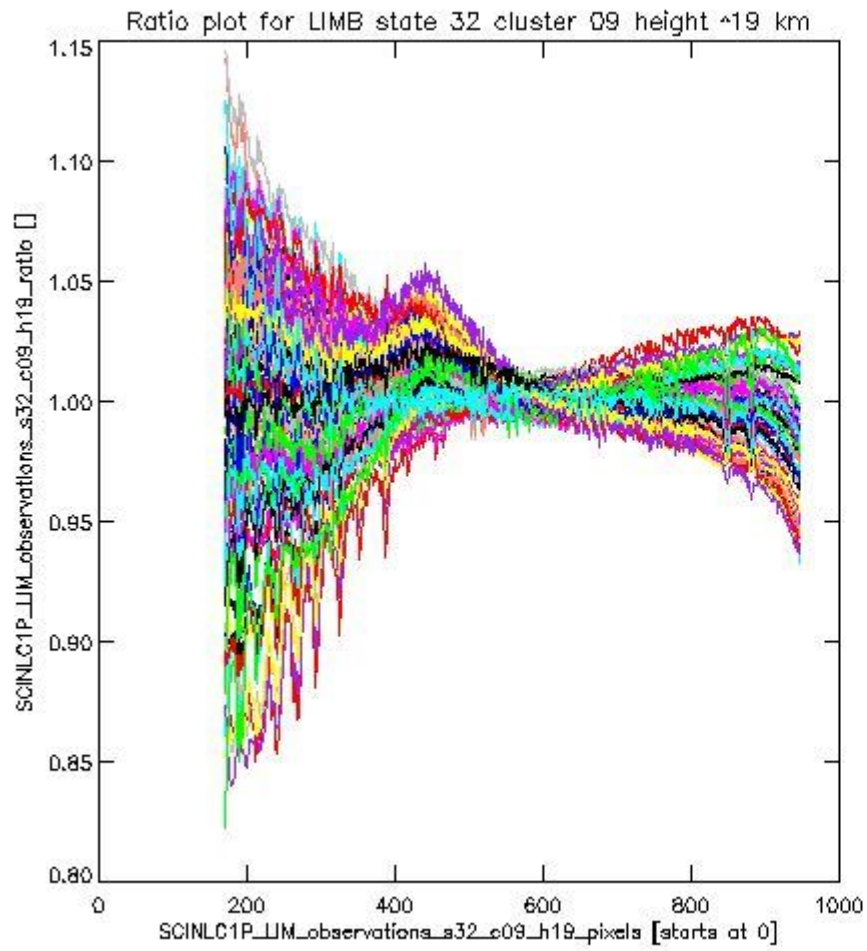
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_9.PNG

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	05APR2011 14:40:37.412
Start time of last sample	05APR2011 23:29:15.284
Reference period start time	06MAR2011 00:01:41.688
Reference period stop time	03APR2011 14:41:33.497
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



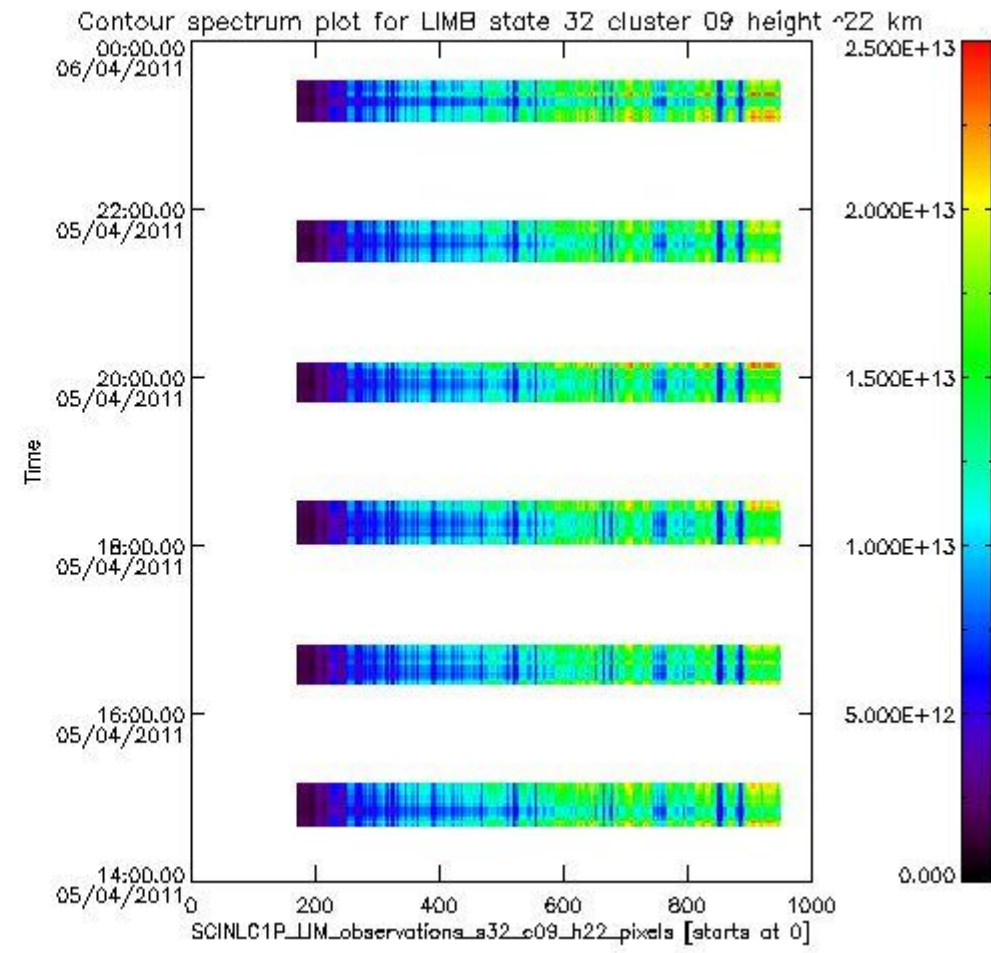
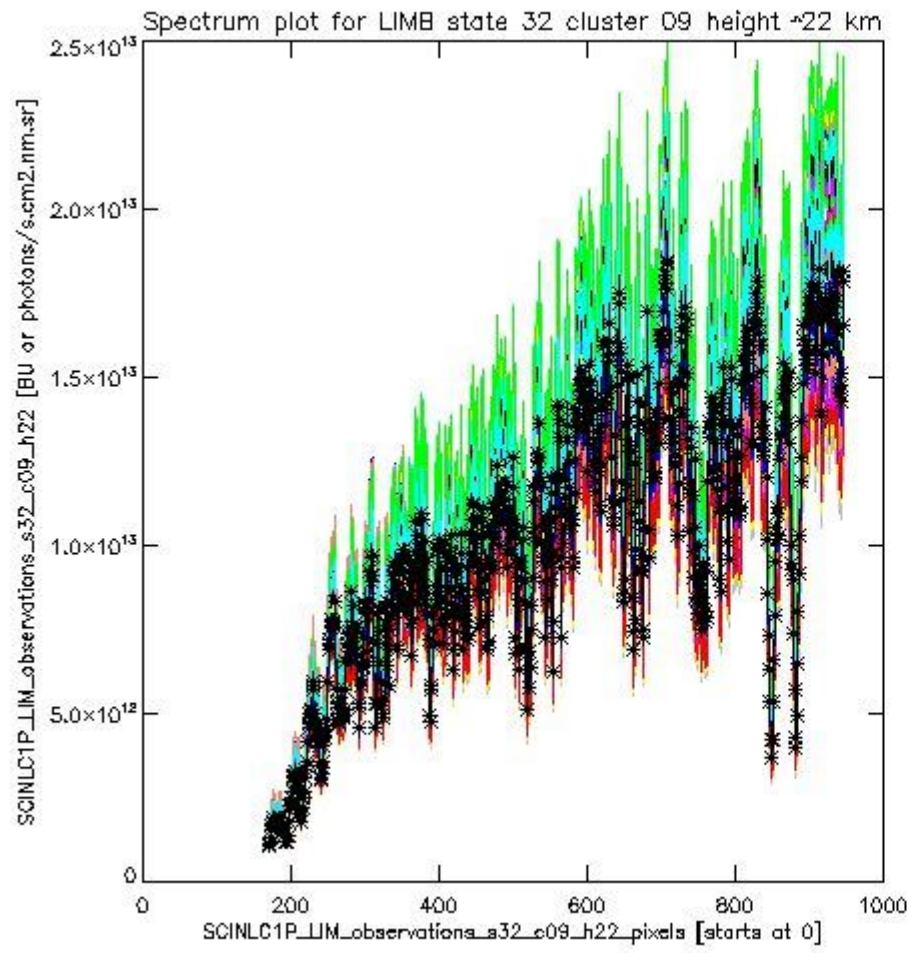
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_10.PNG



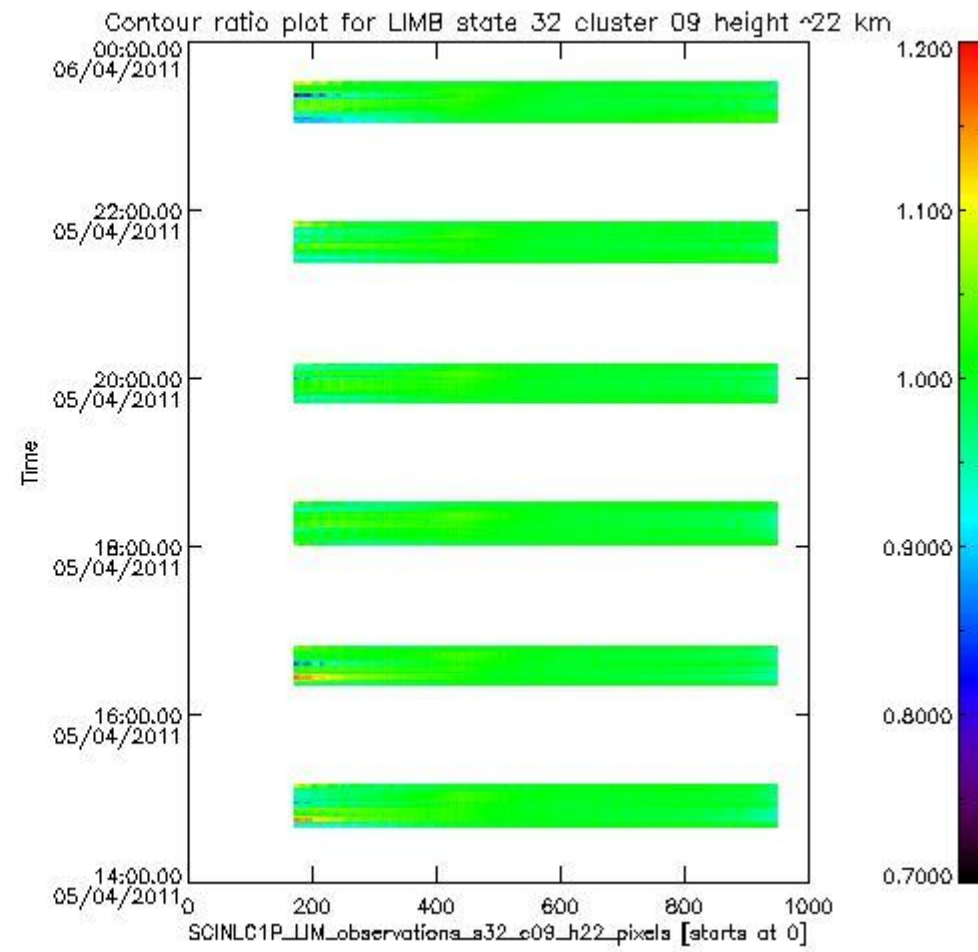
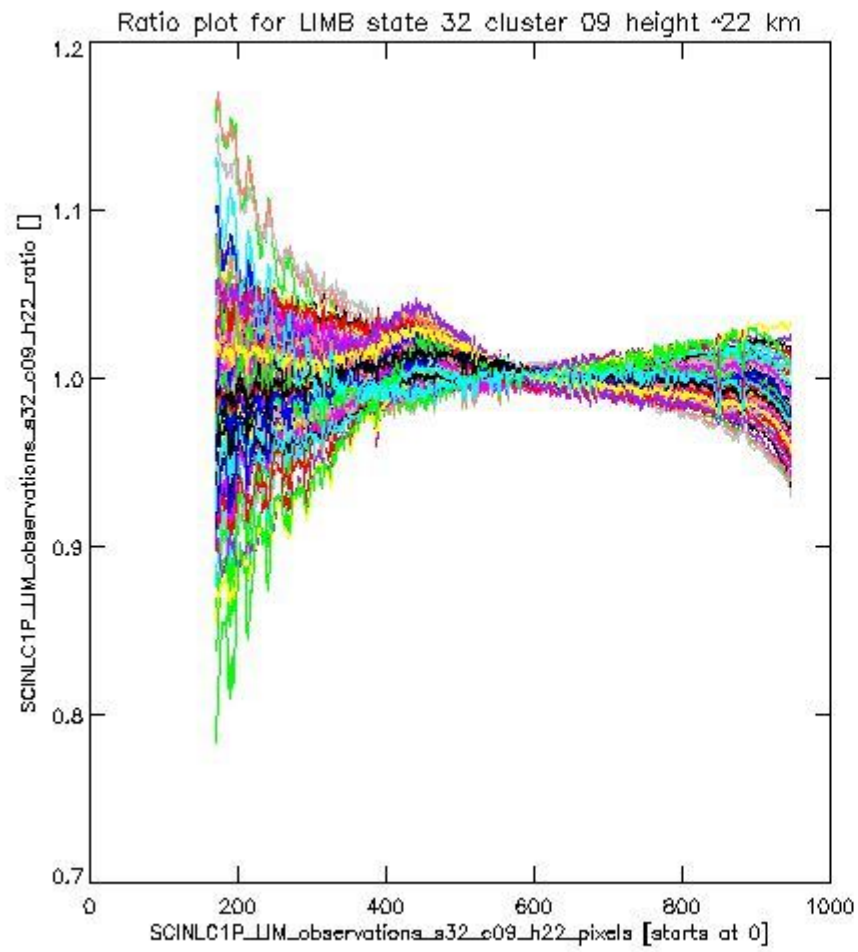
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_11.PNG

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	05APR2011 14:40:37.412
Start time of last sample	05APR2011 23:29:15.284
Reference period start time	06MAR2011 01:22:21.907
Reference period stop time	03APR2011 14:41:33.497
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



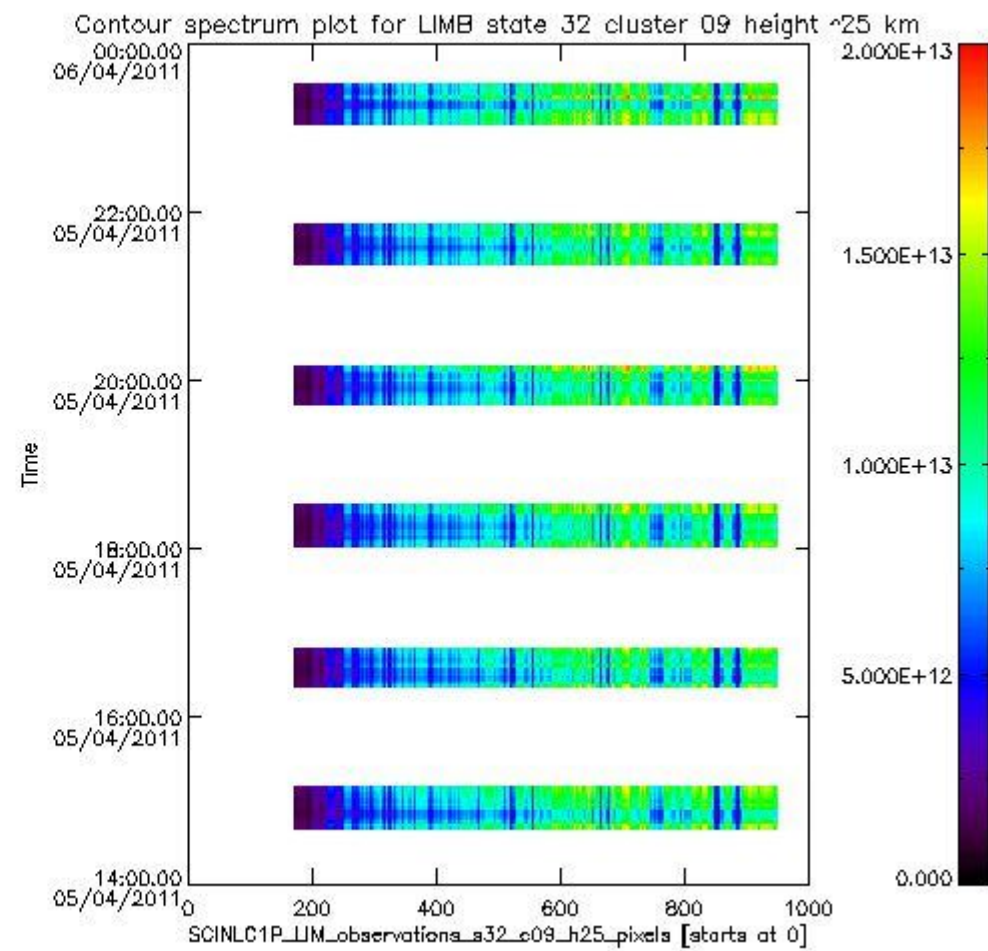
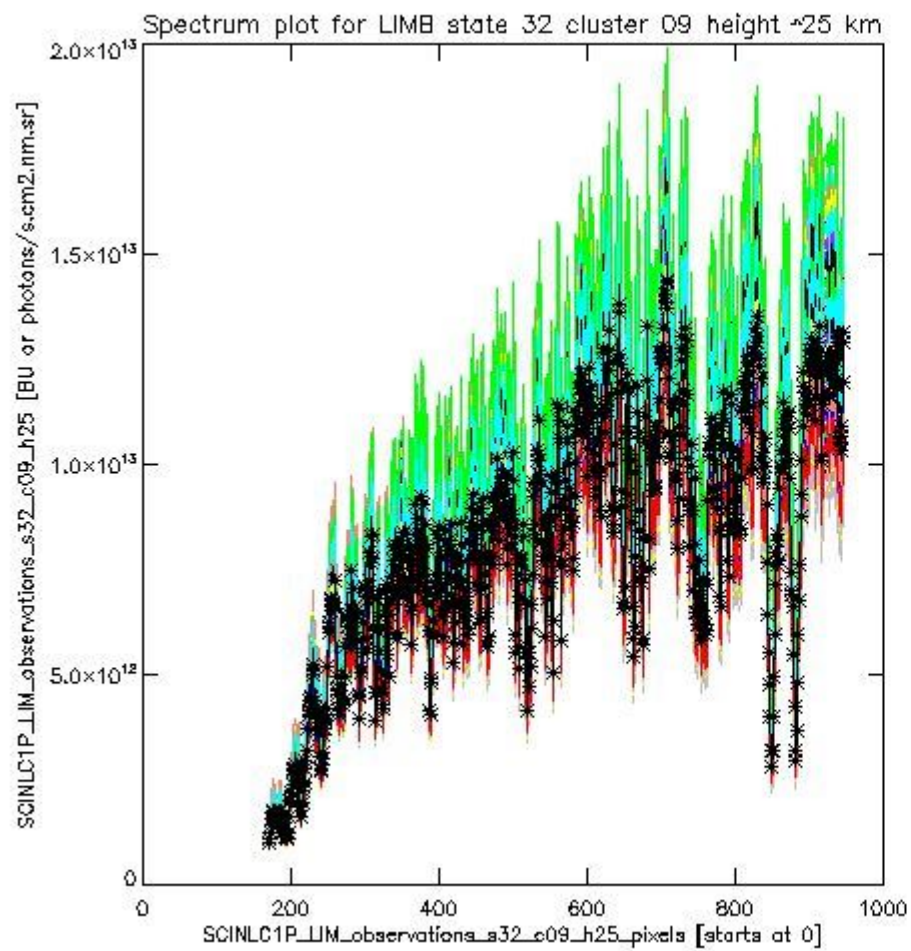
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_12.PNG



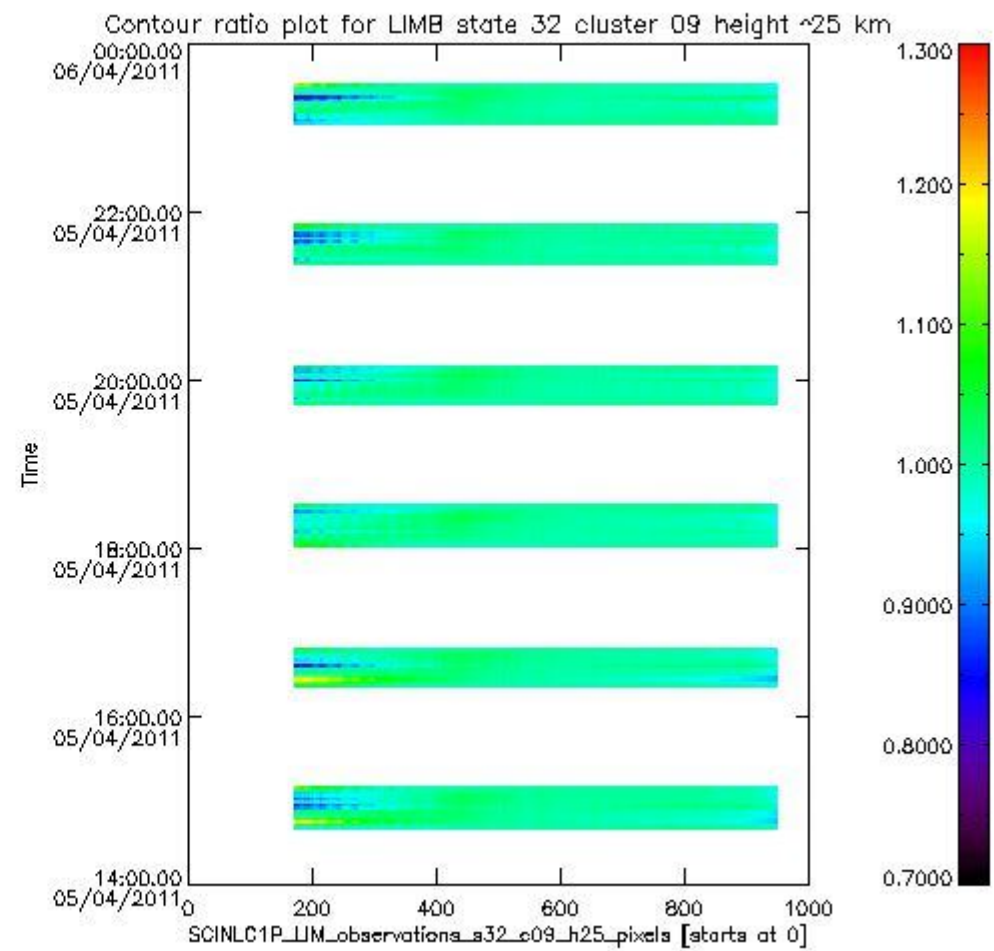
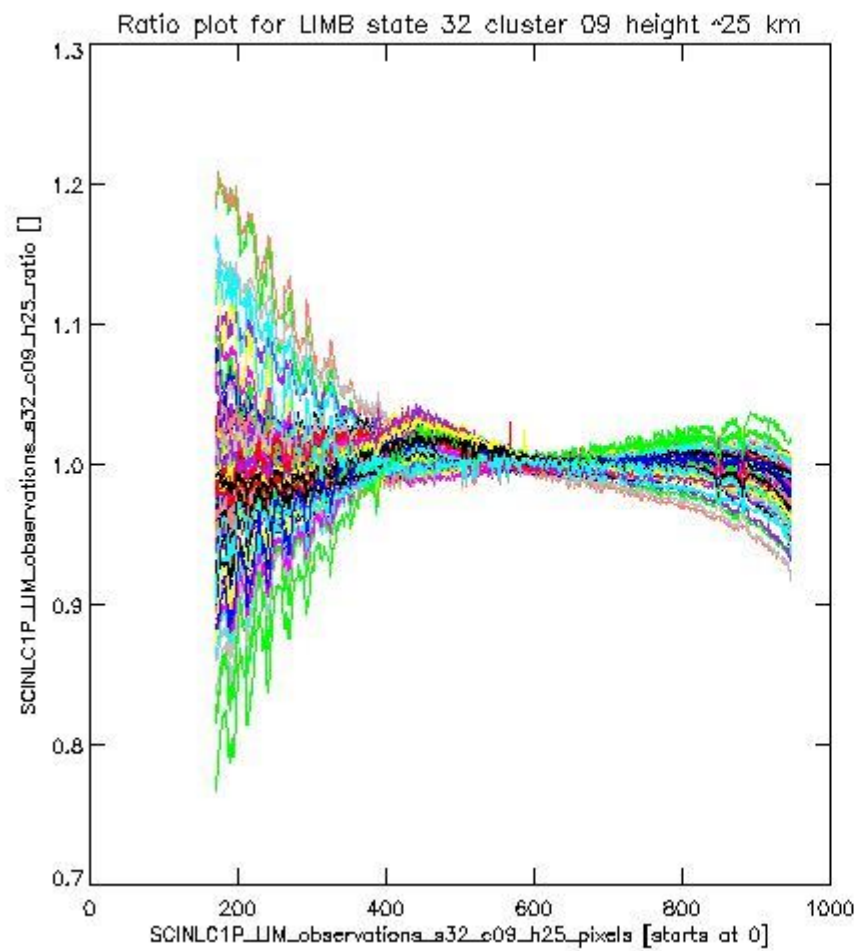
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_13.PNG

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	05APR2011 14:40:37.412
Start time of last sample	05APR2011 23:29:15.284
Reference period start time	06MAR2011 00:01:41.688
Reference period stop time	03APR2011 14:41:33.497
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



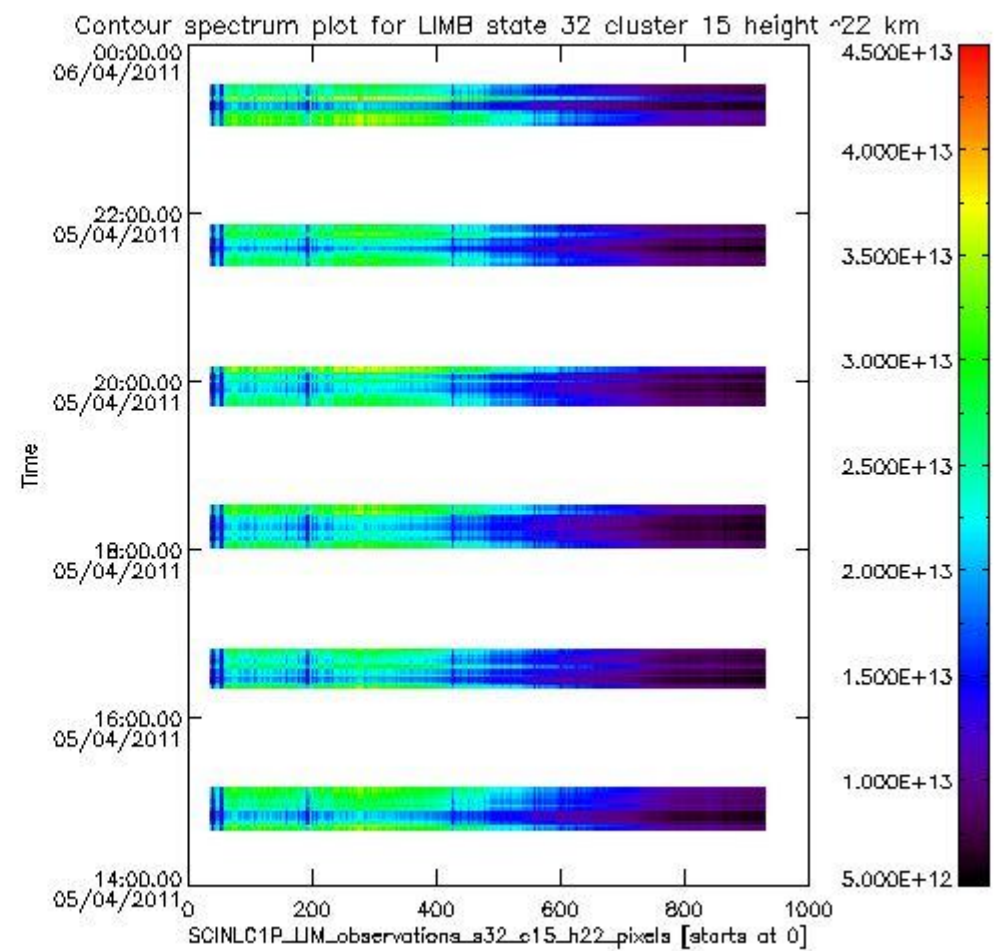
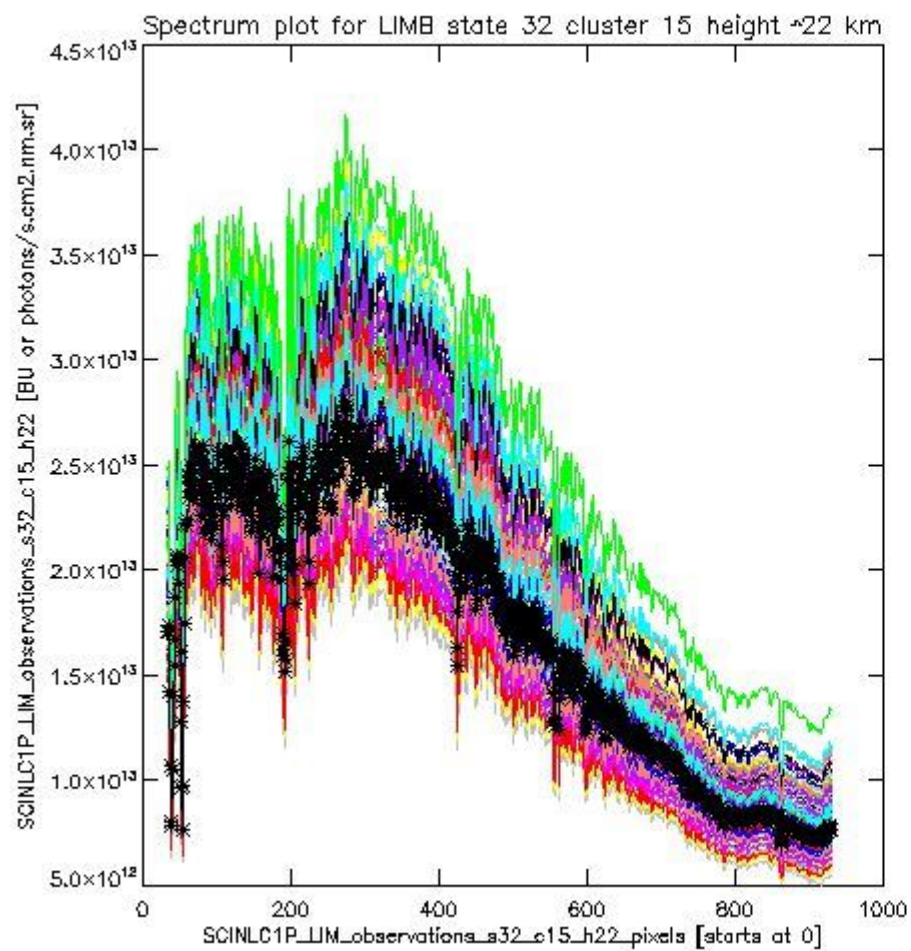
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_14.PNG



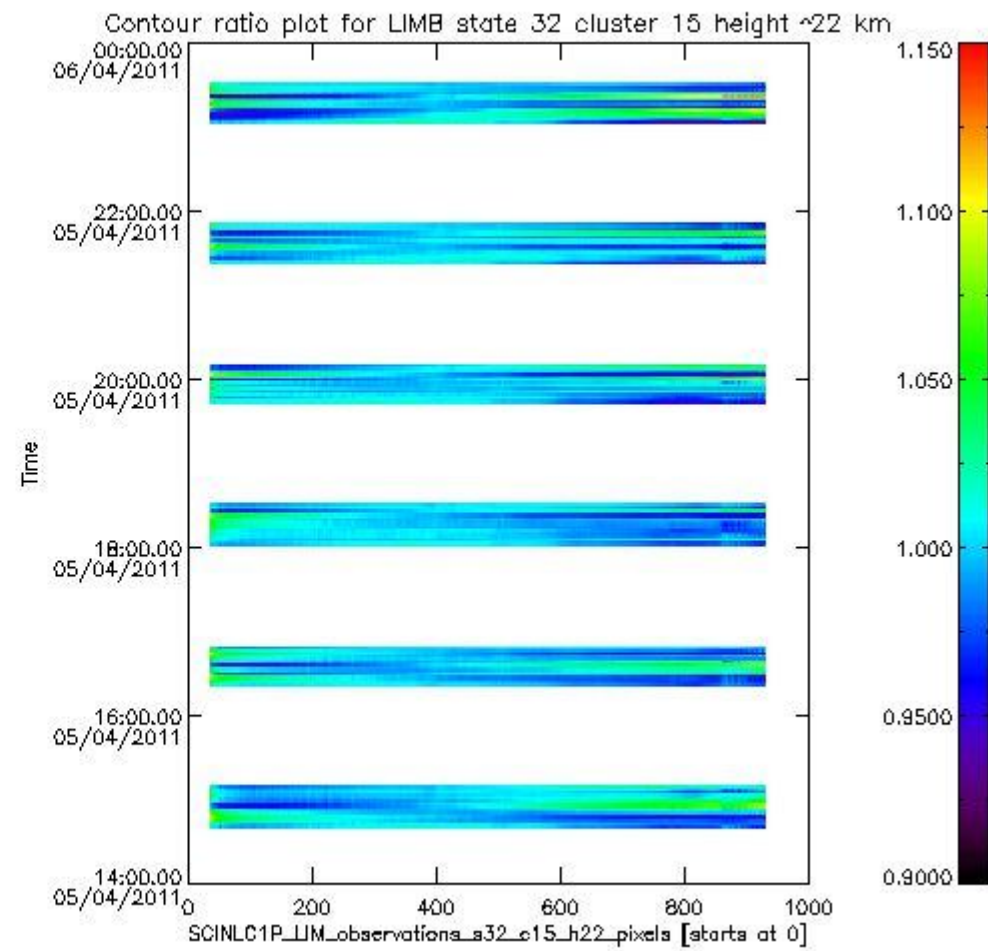
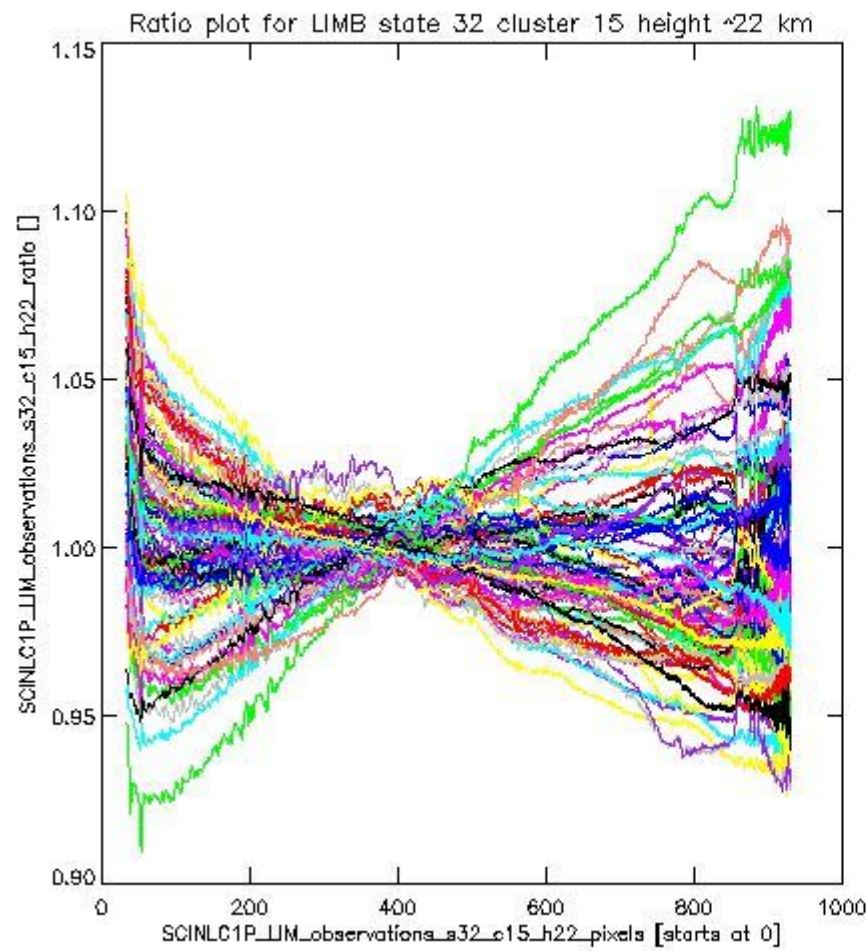
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_15.PNG

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	05APR2011 14:40:37.412
Start time of last sample	05APR2011 23:29:15.284
Reference period start time	06MAR2011 01:22:21.907
Reference period stop time	03APR2011 14:41:33.497
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



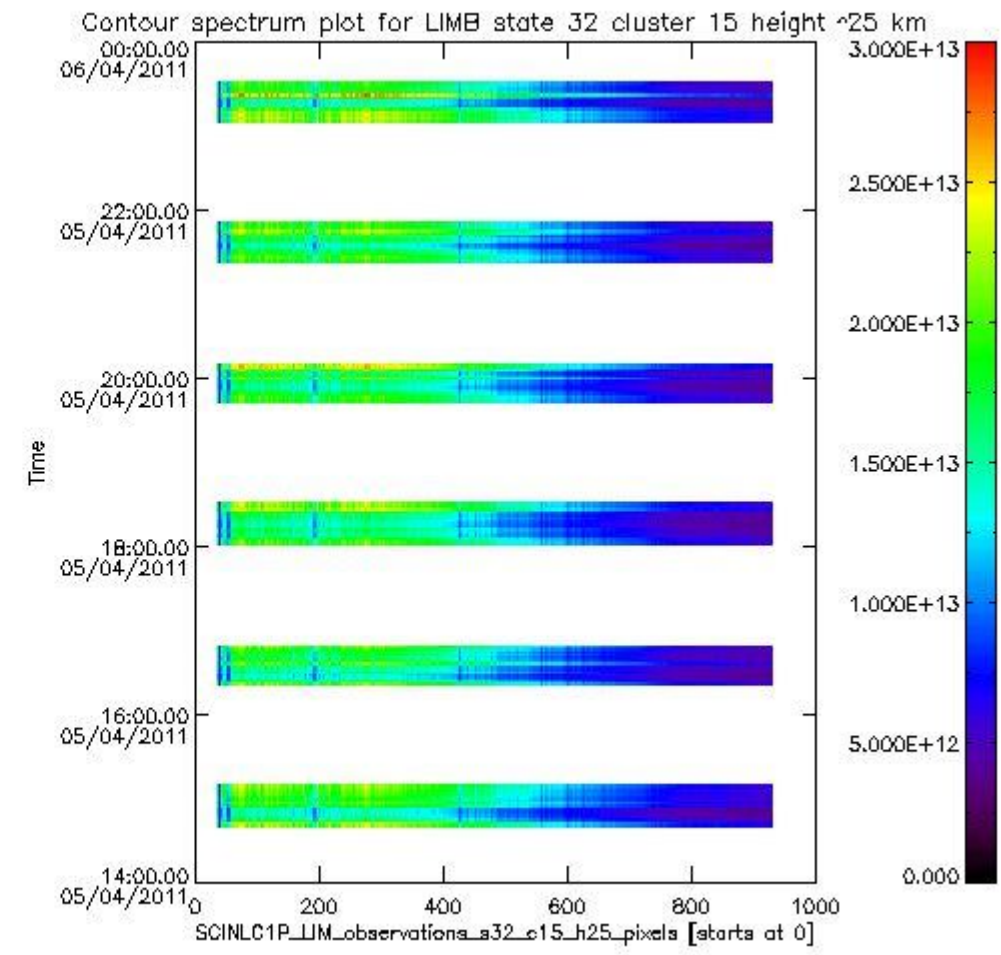
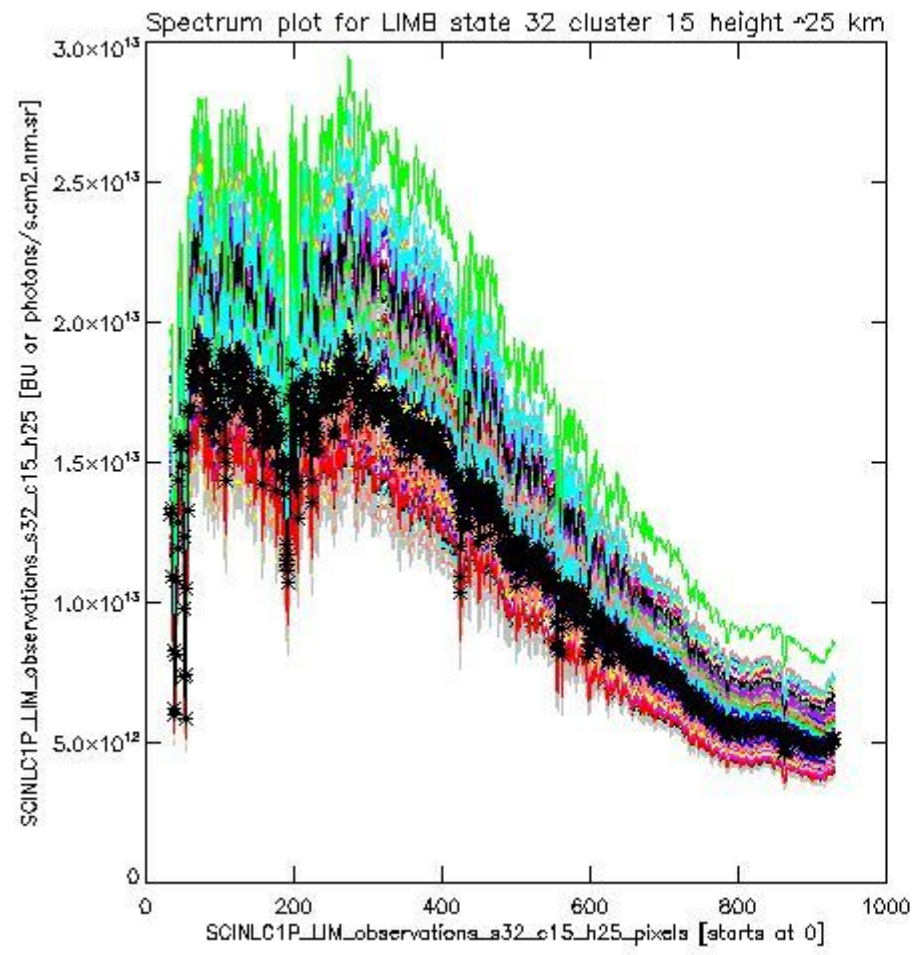
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110405_16.PNG



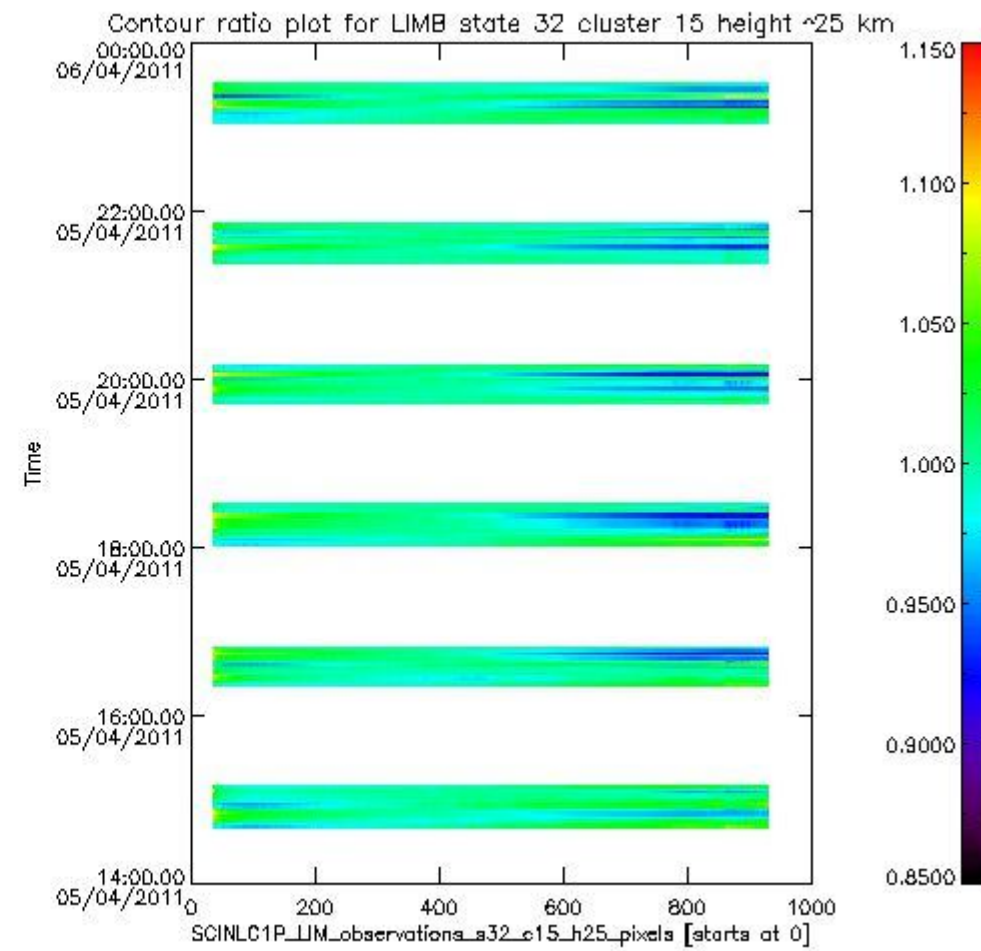
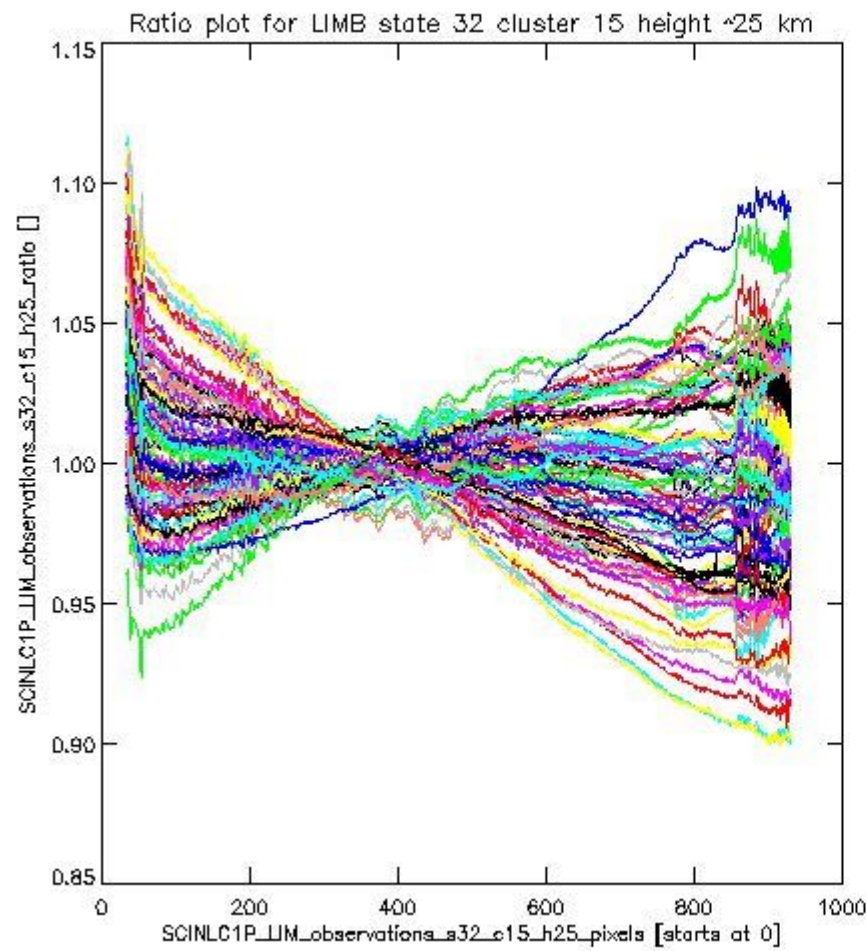
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110405_17.PNG

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	05APR2011 14:40:37.412
Start time of last sample	05APR2011 23:29:15.284
Reference period start time	06MAR2011 00:01:41.688
Reference period stop time	03APR2011 14:41:33.497
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



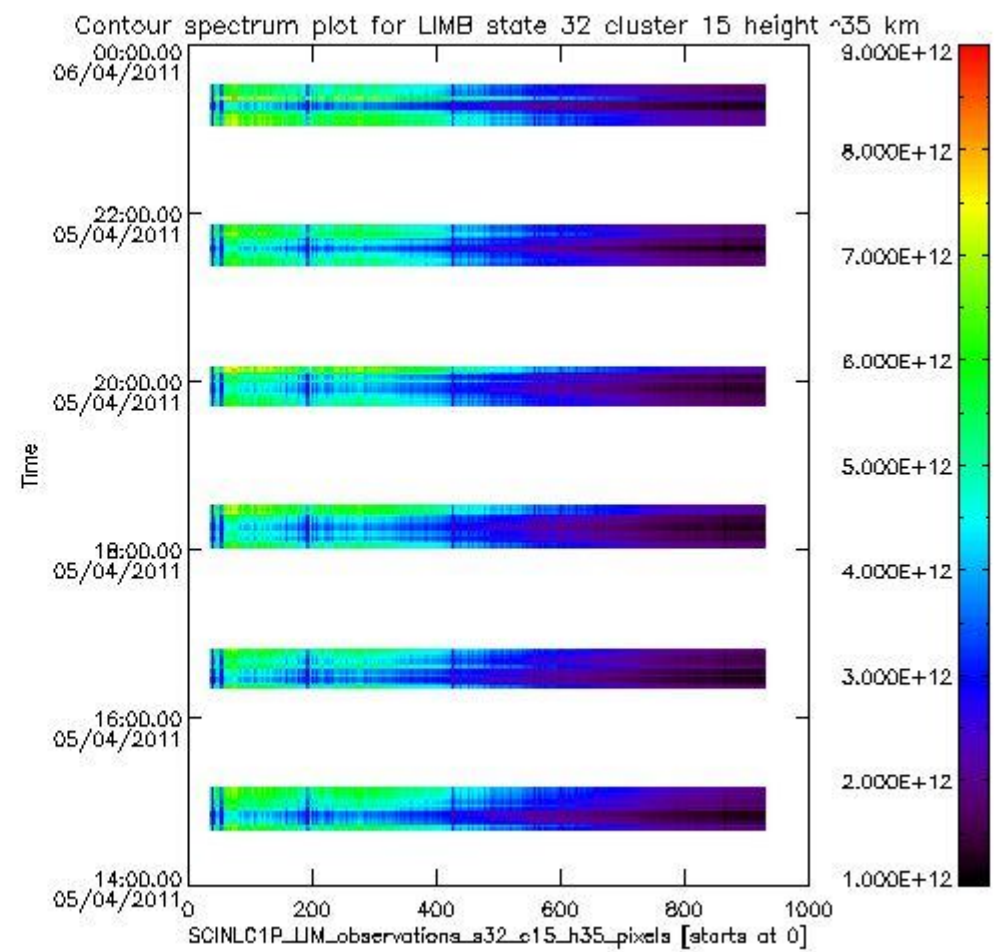
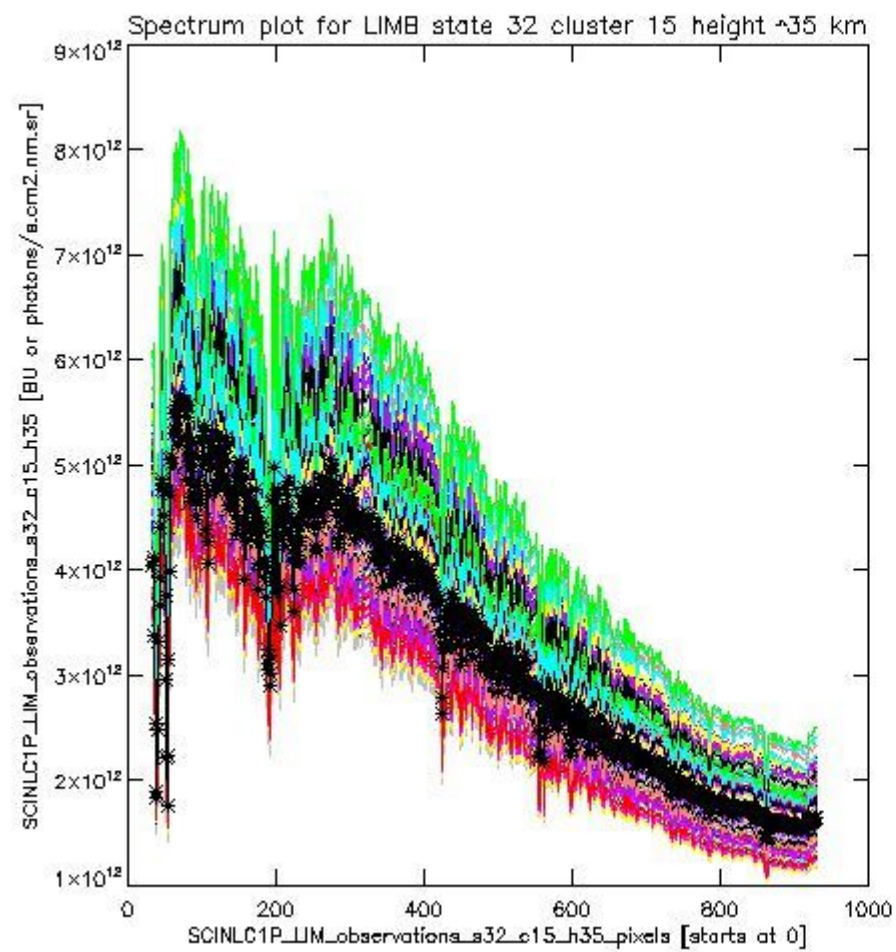
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110405_18.PNG



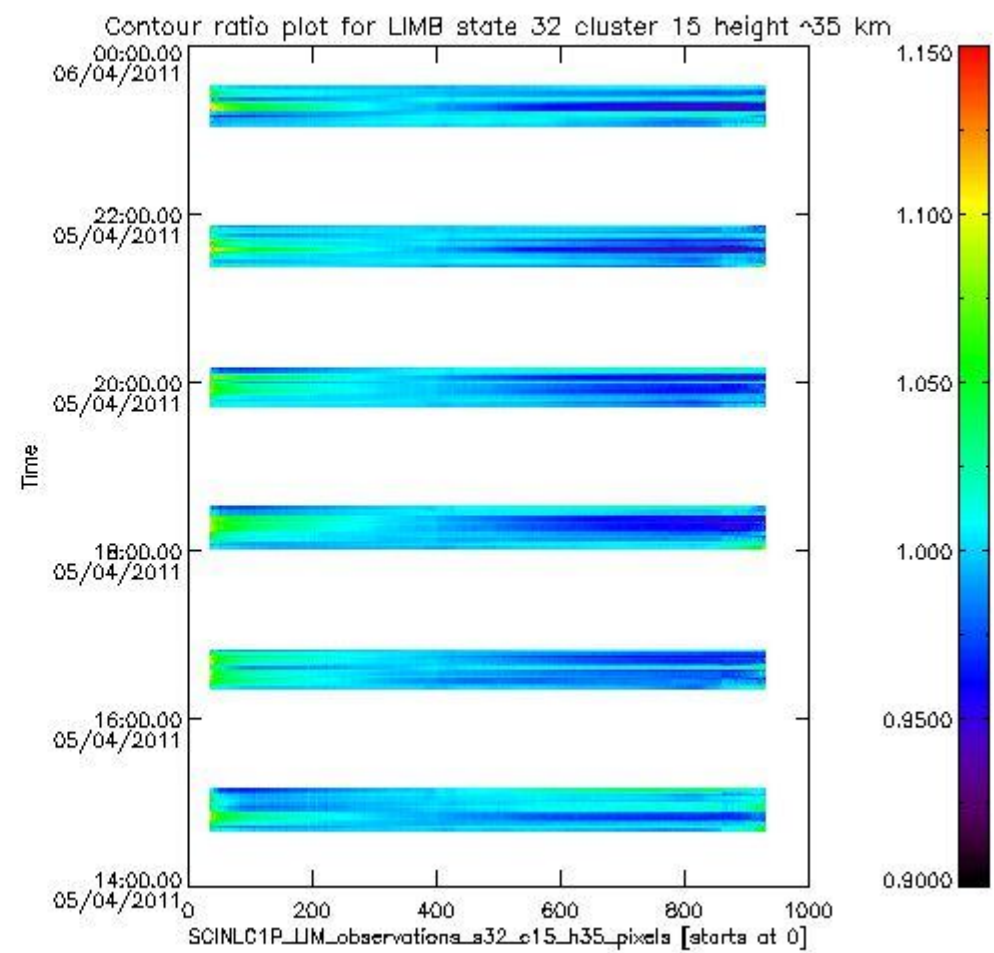
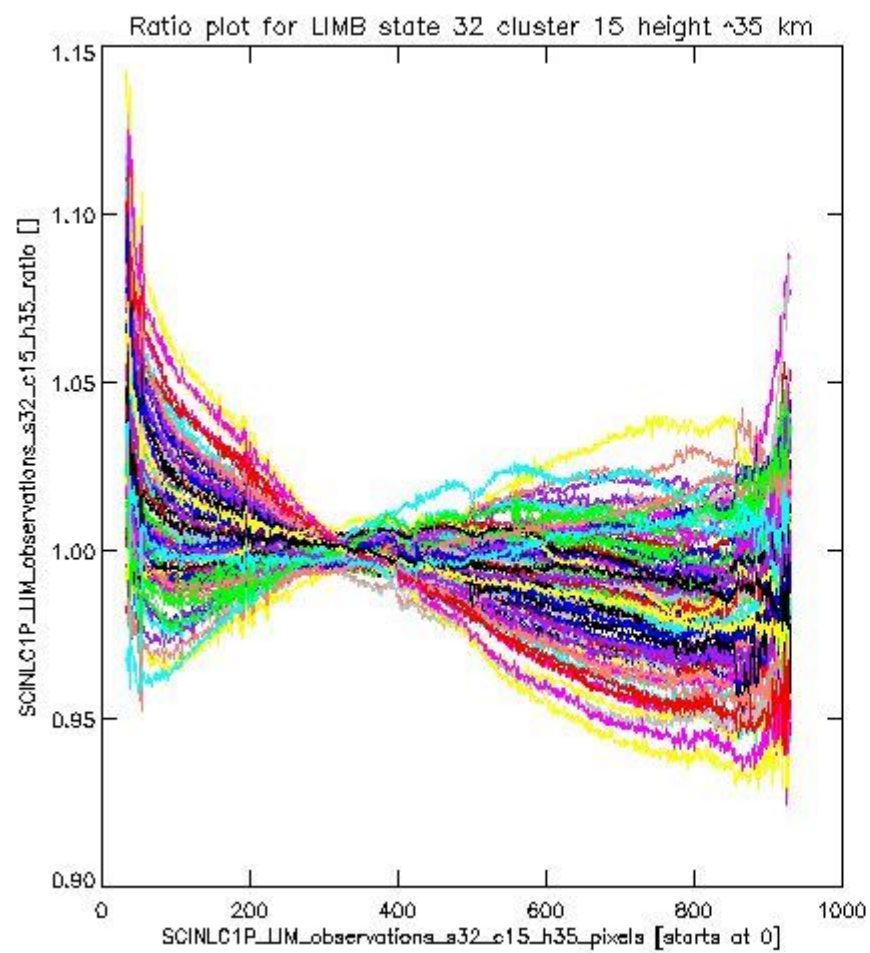
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110405_19.PNG

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:

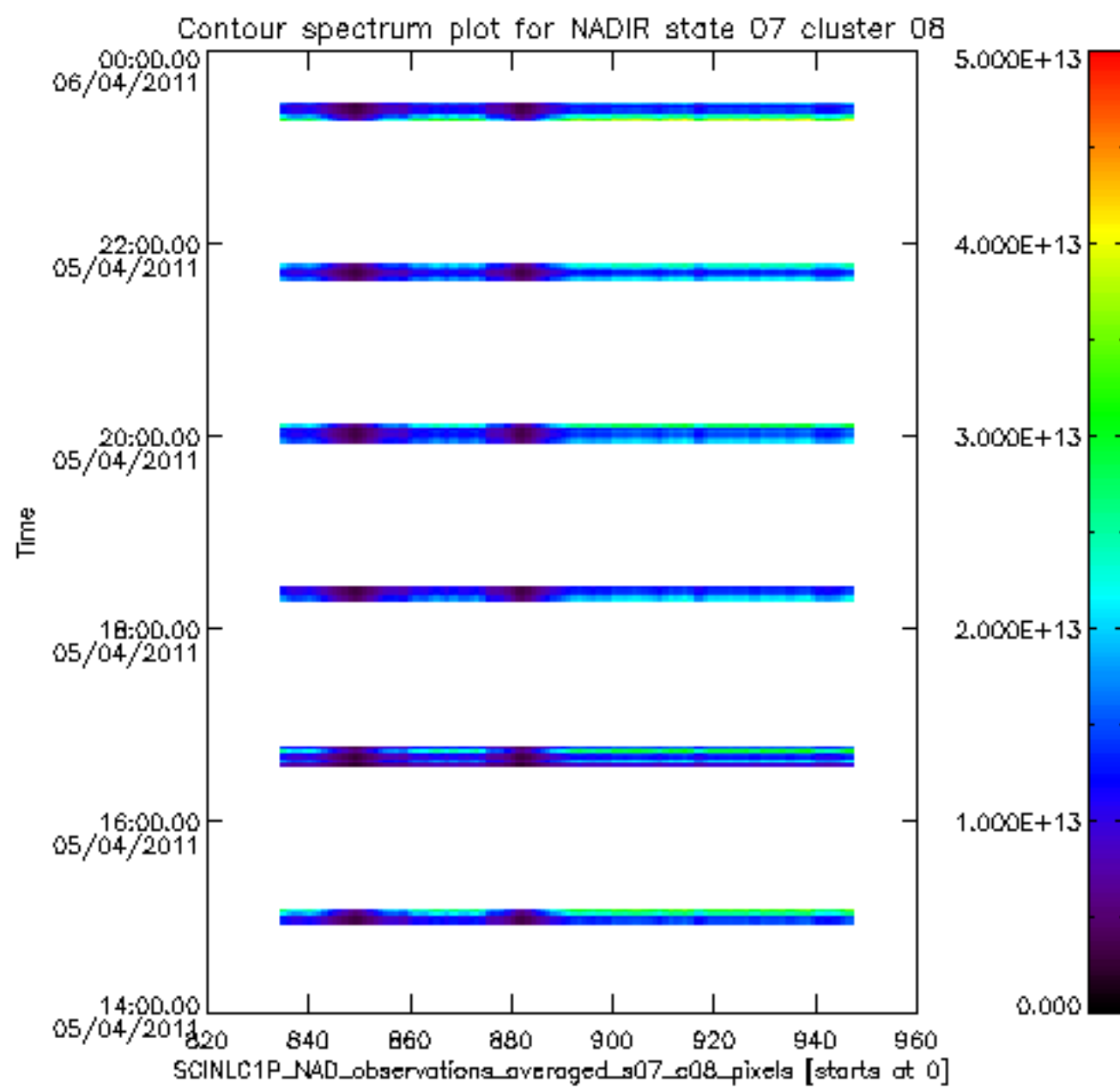
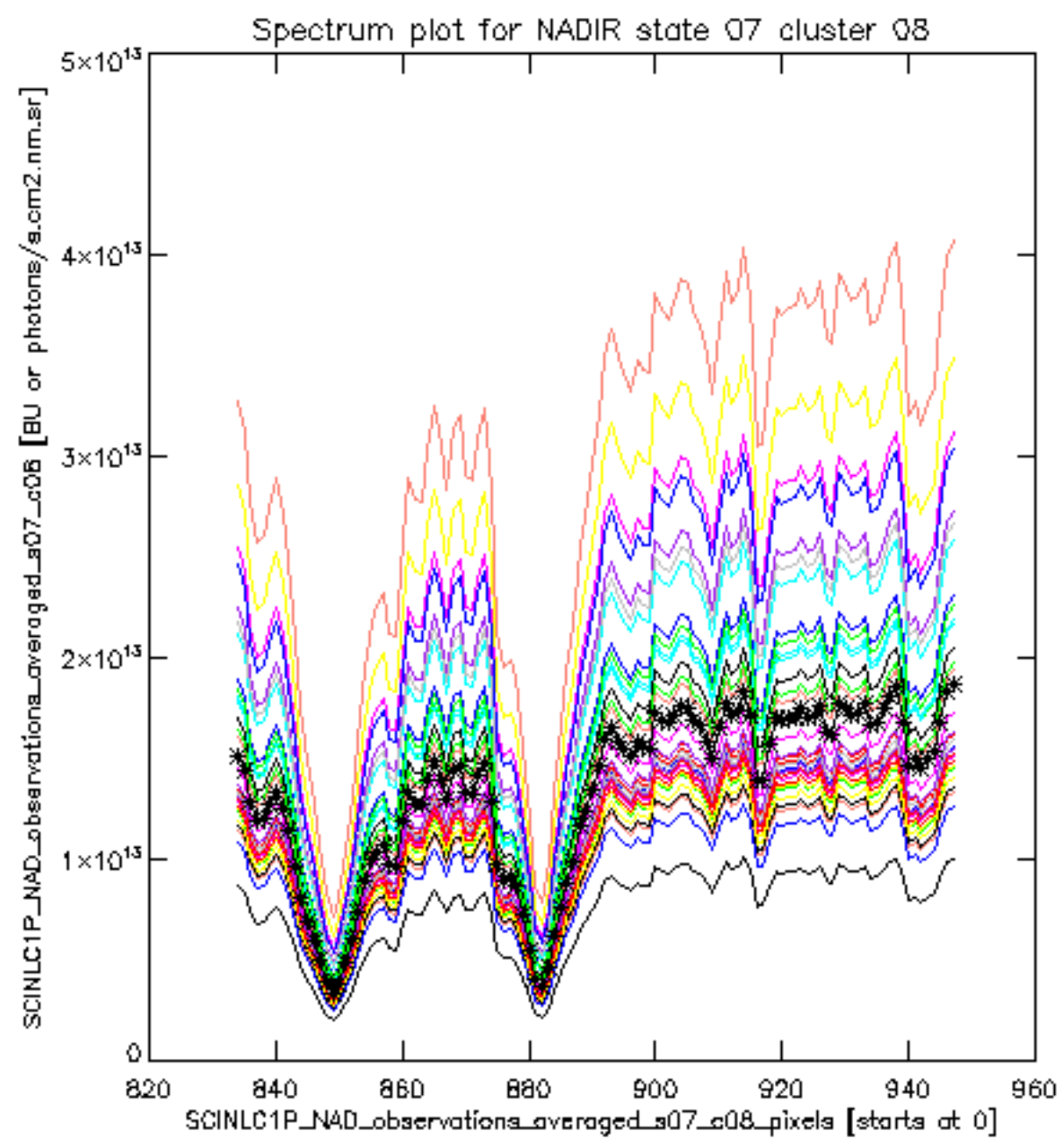
Item	Value
Start time of first sample	05APR2011 14:40:37.412
Start time of last sample	05APR2011 23:29:15.284
Reference period start time	06MAR2011 16:23:29.477
Reference period stop time	03APR2011 14:41:33.497
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

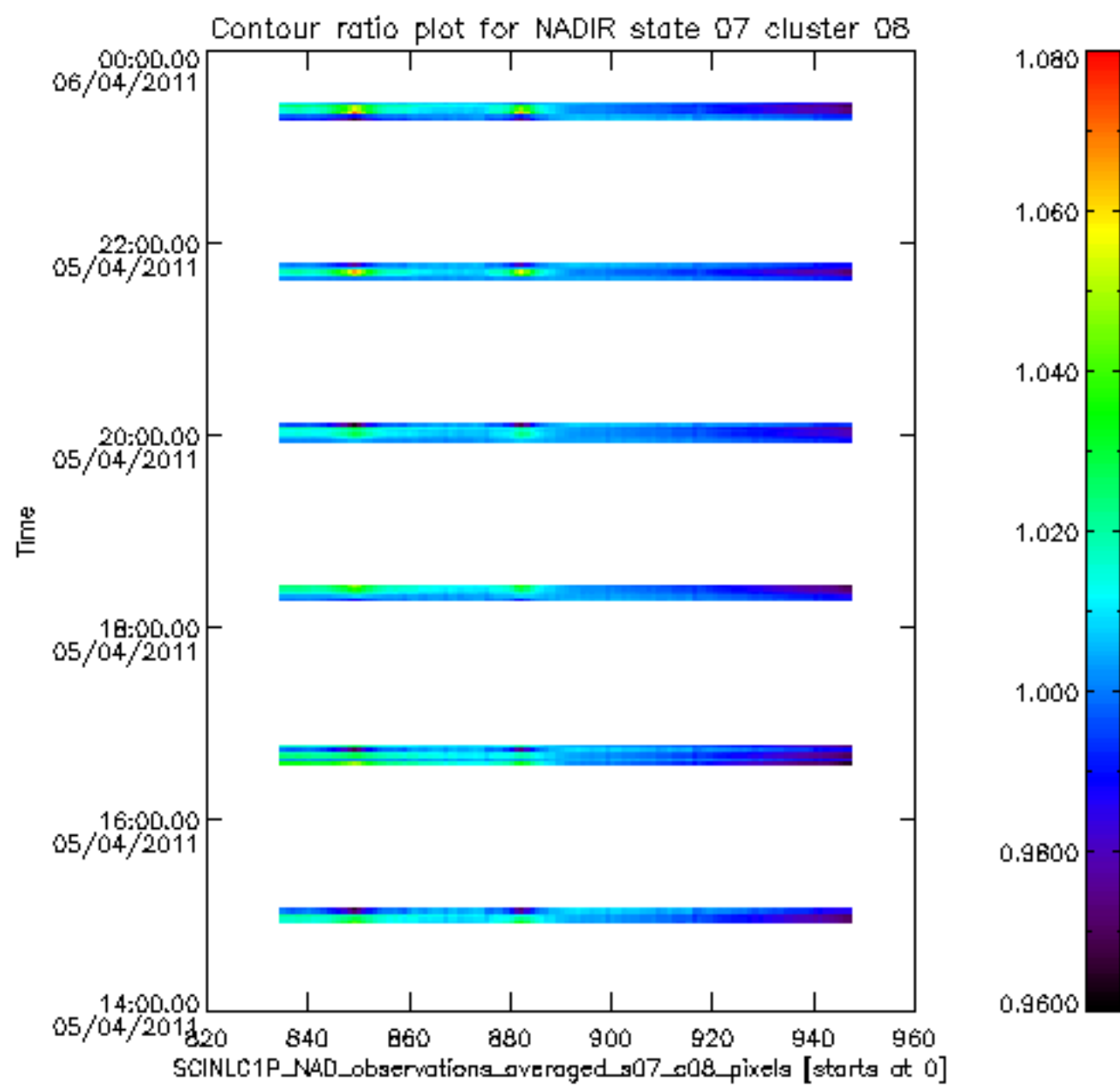
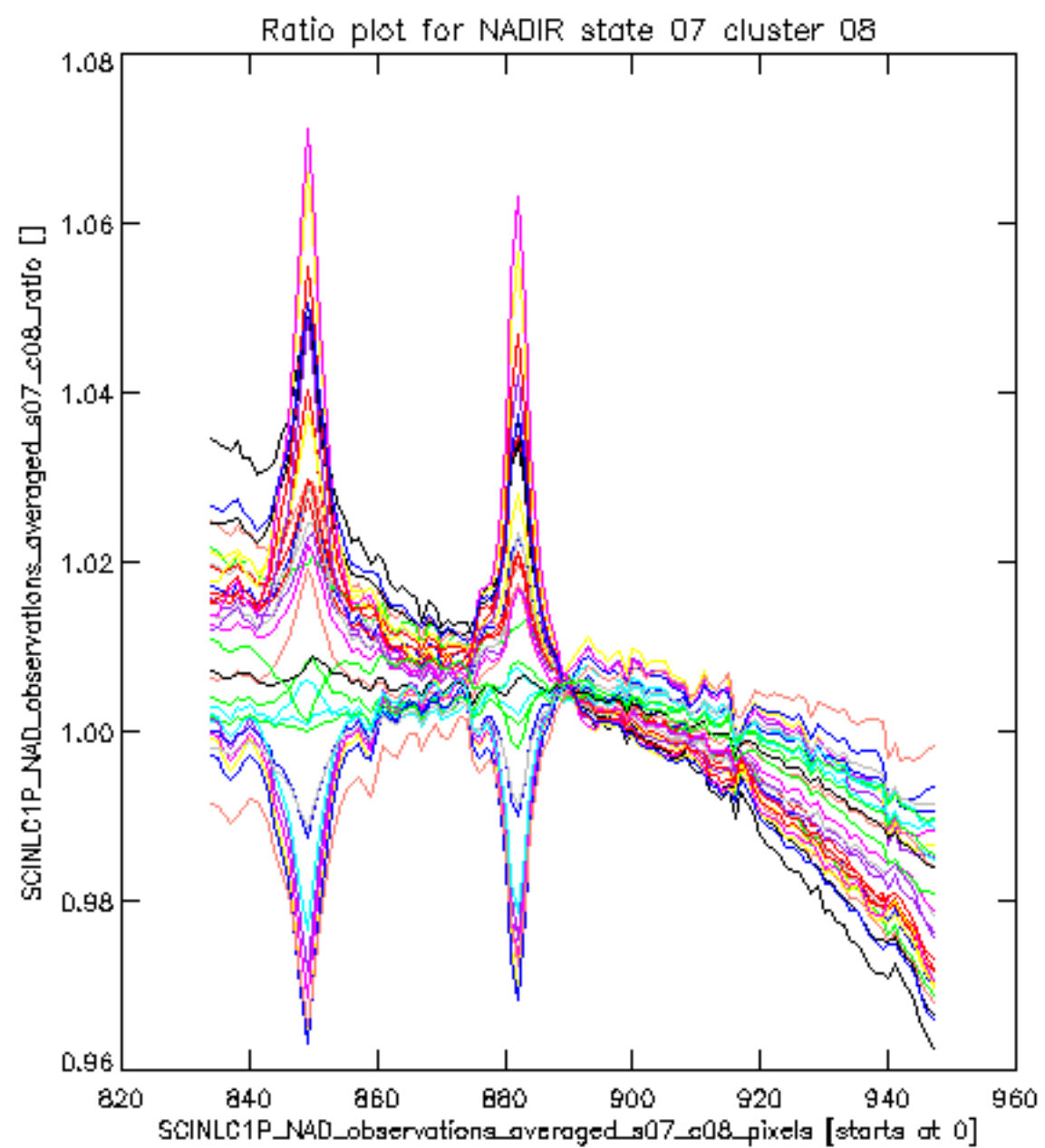


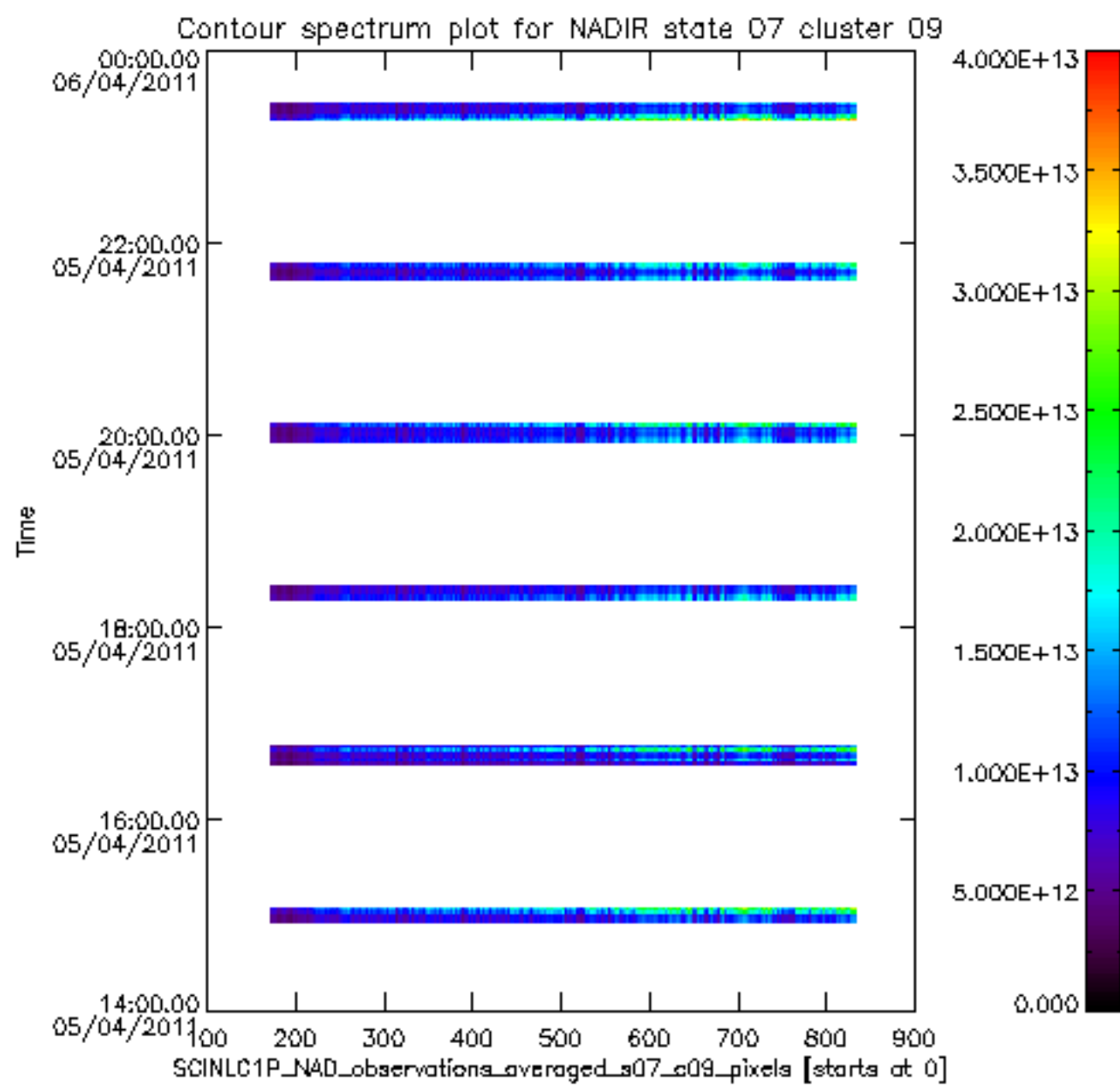
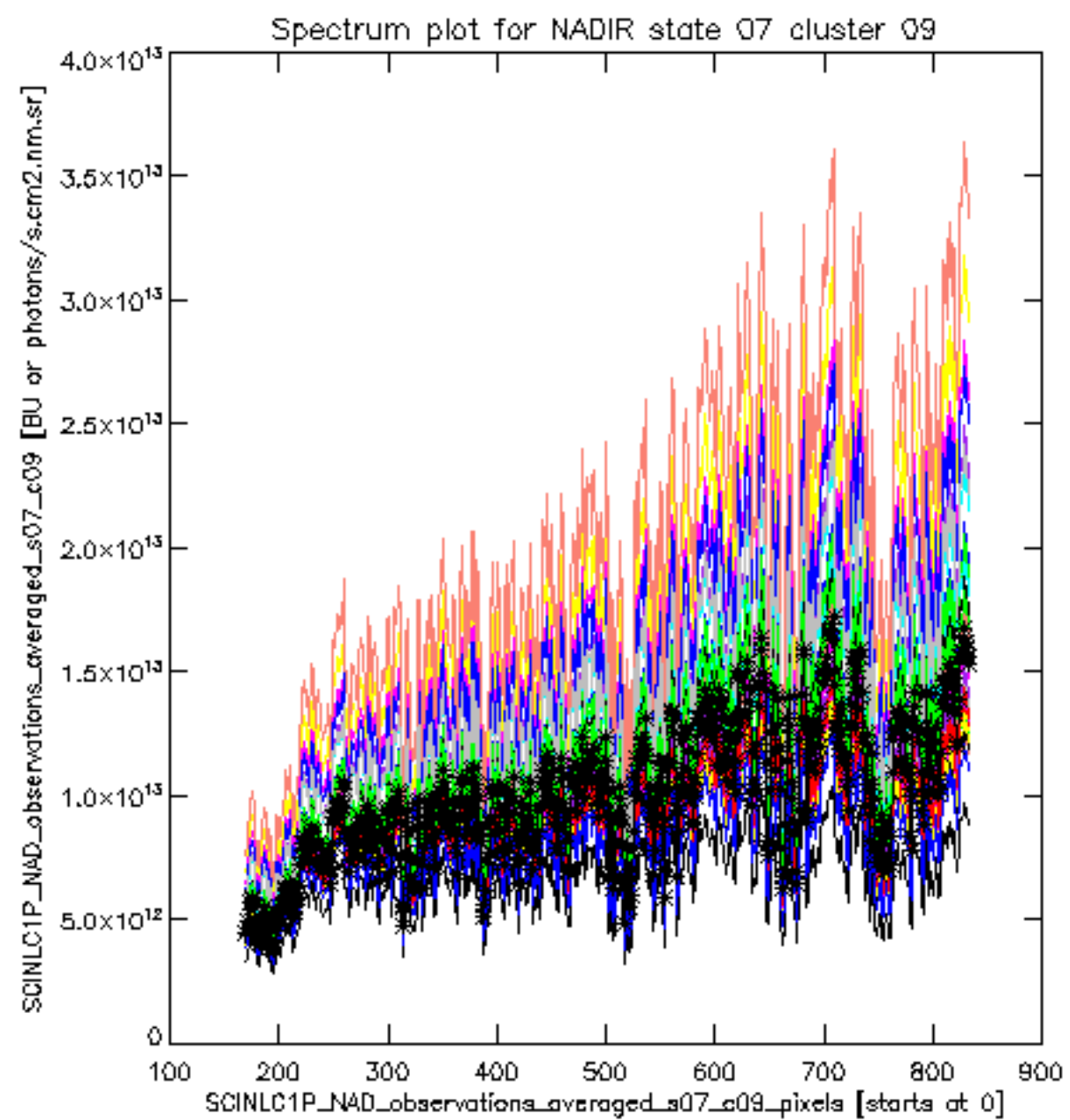
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110405_20.PNG

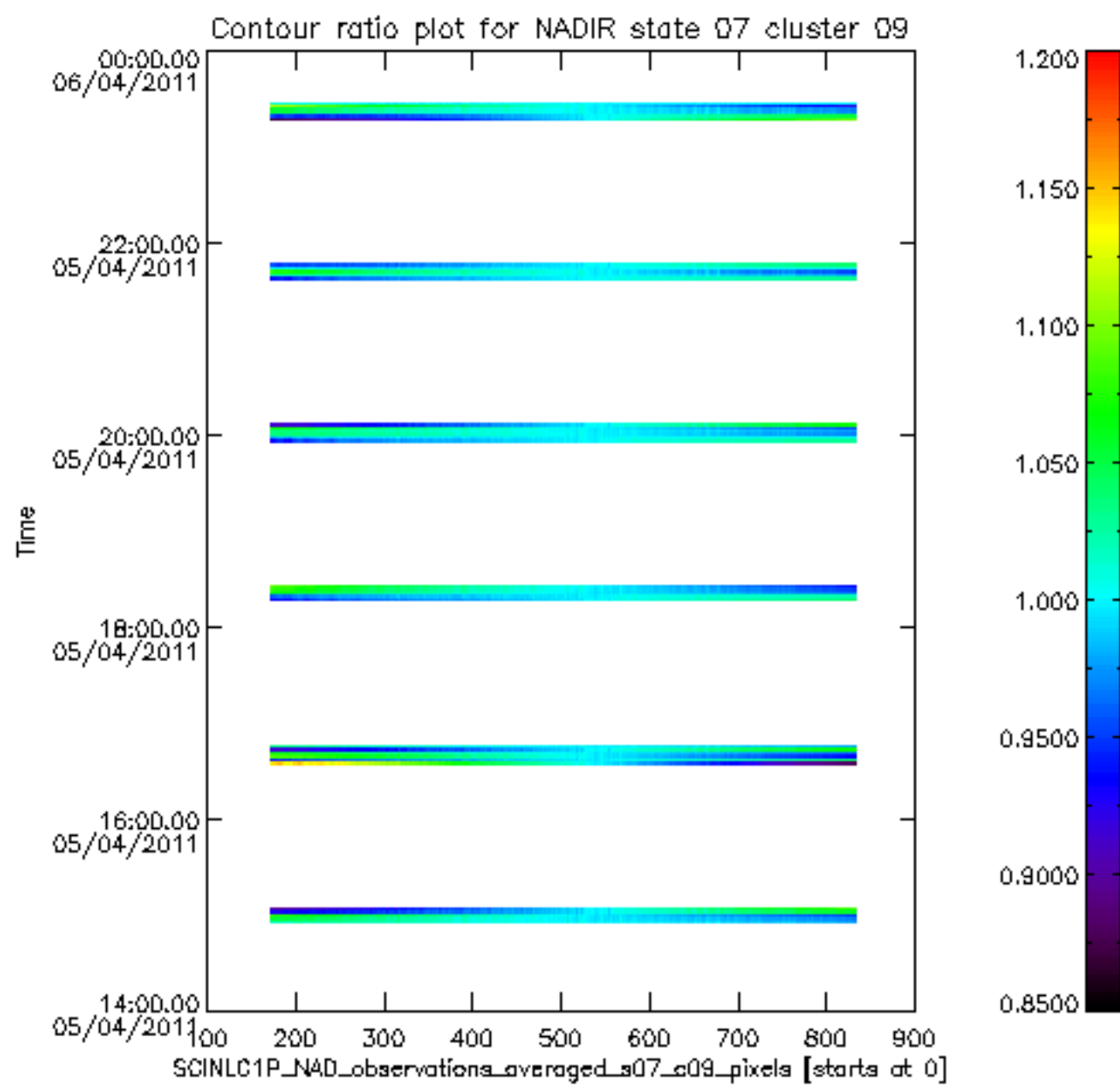
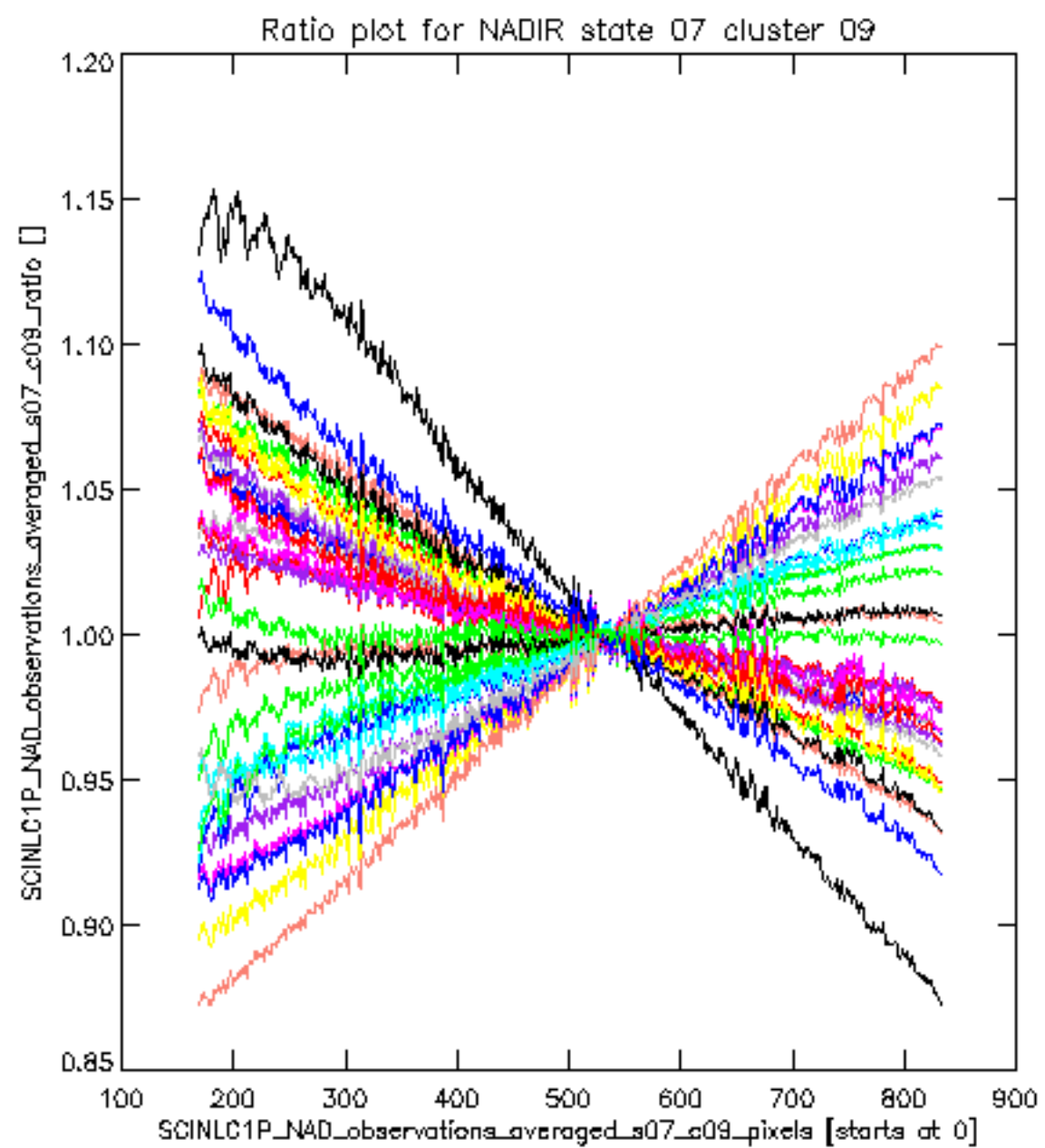


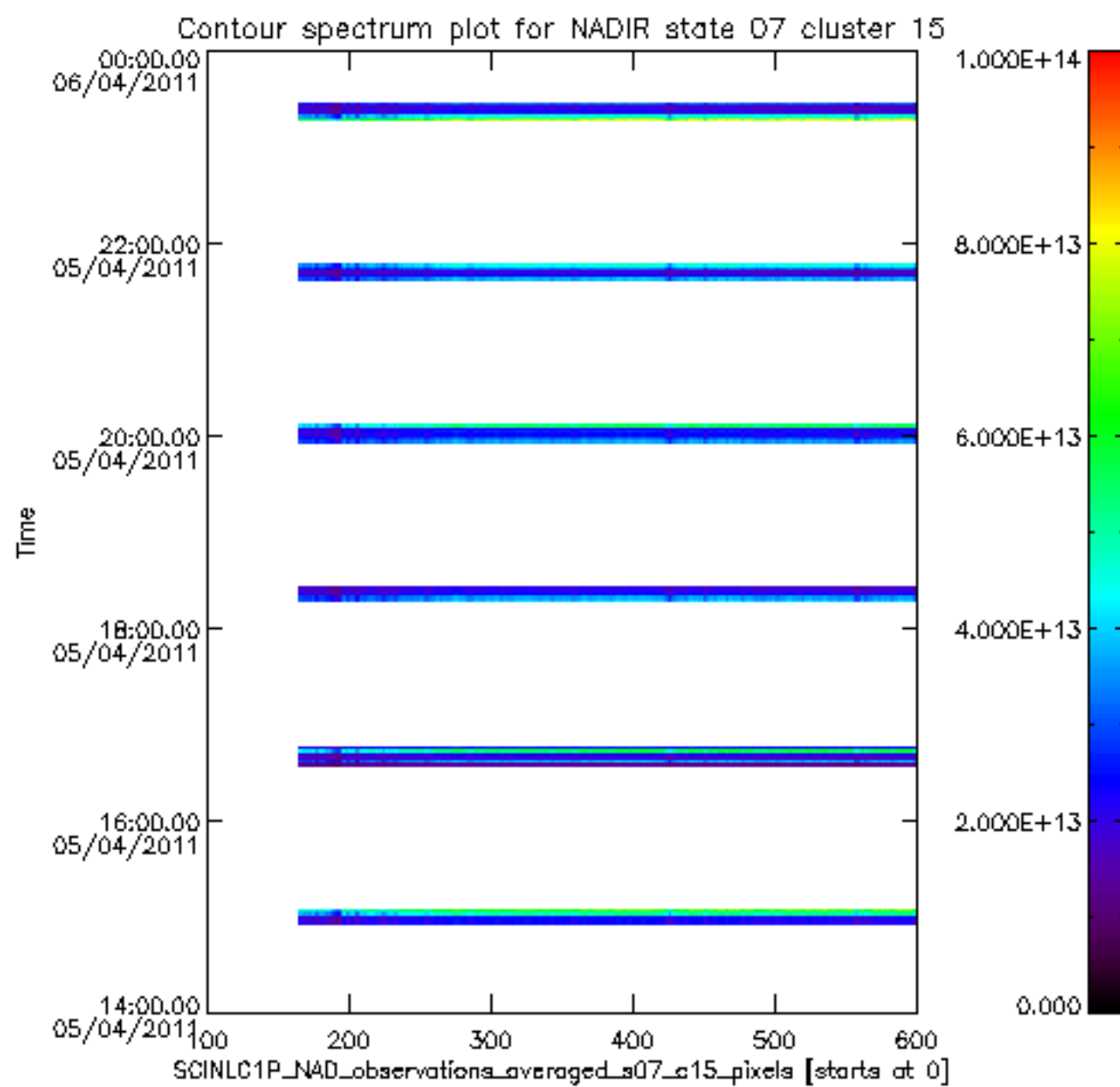
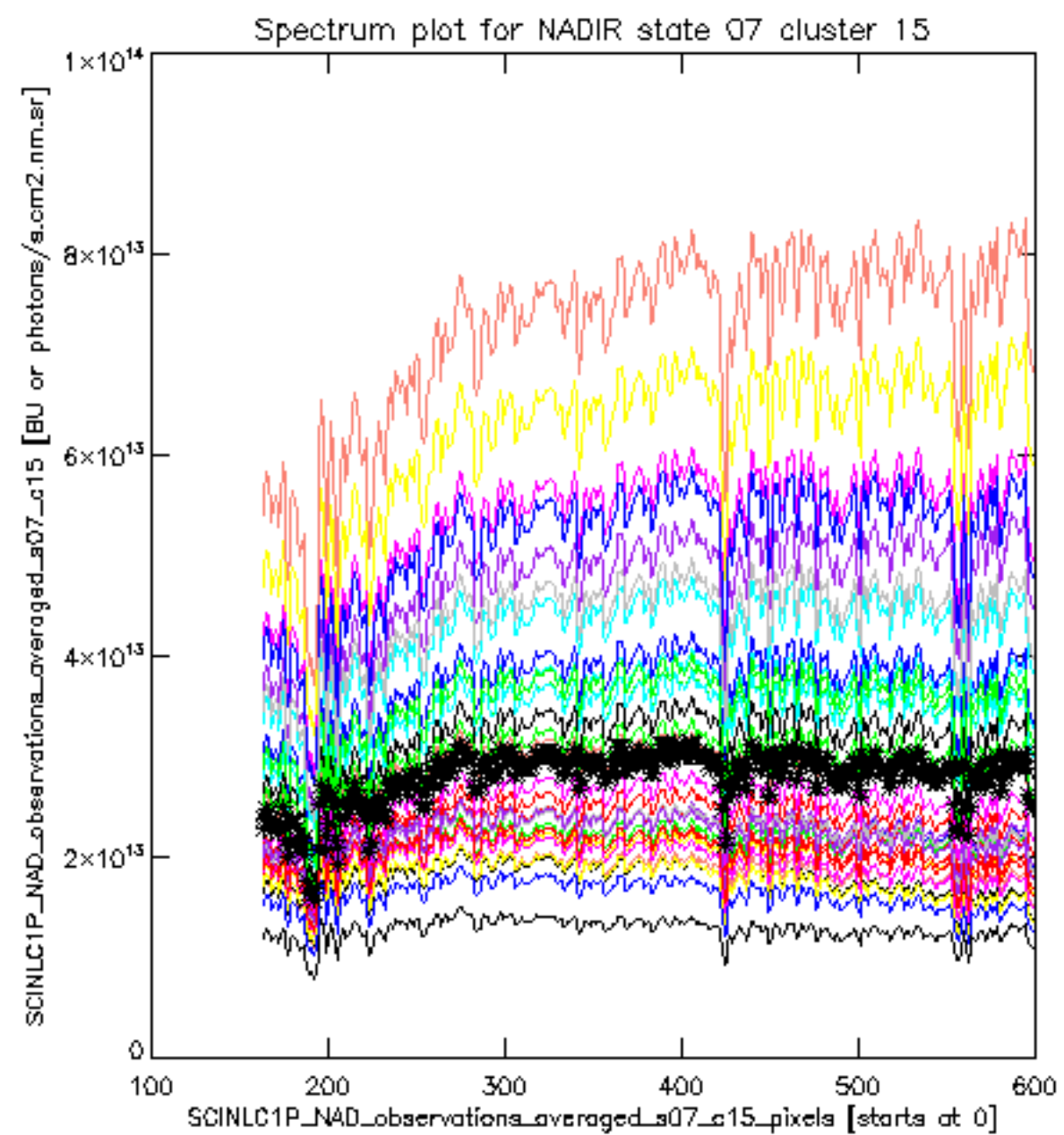
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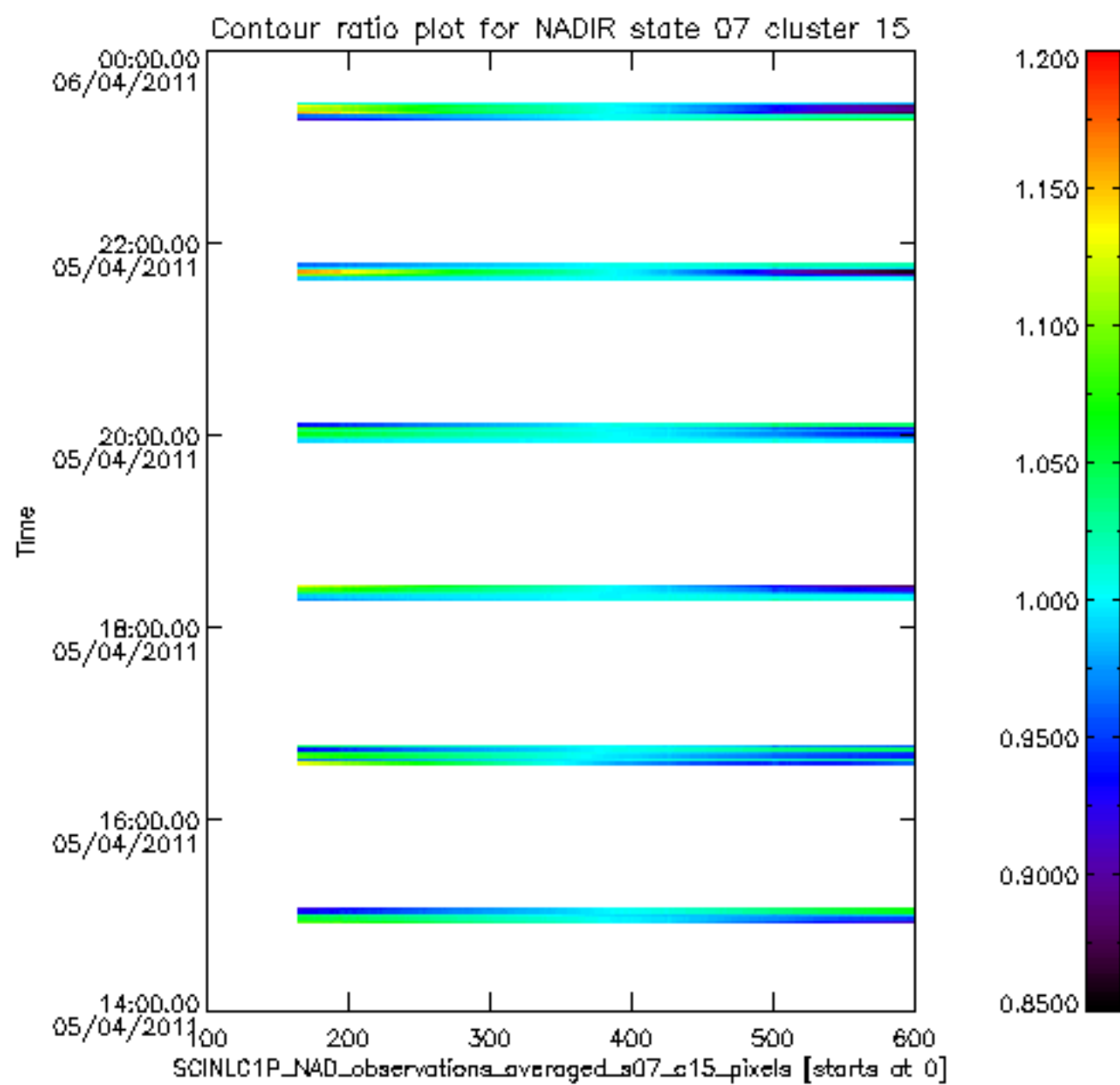
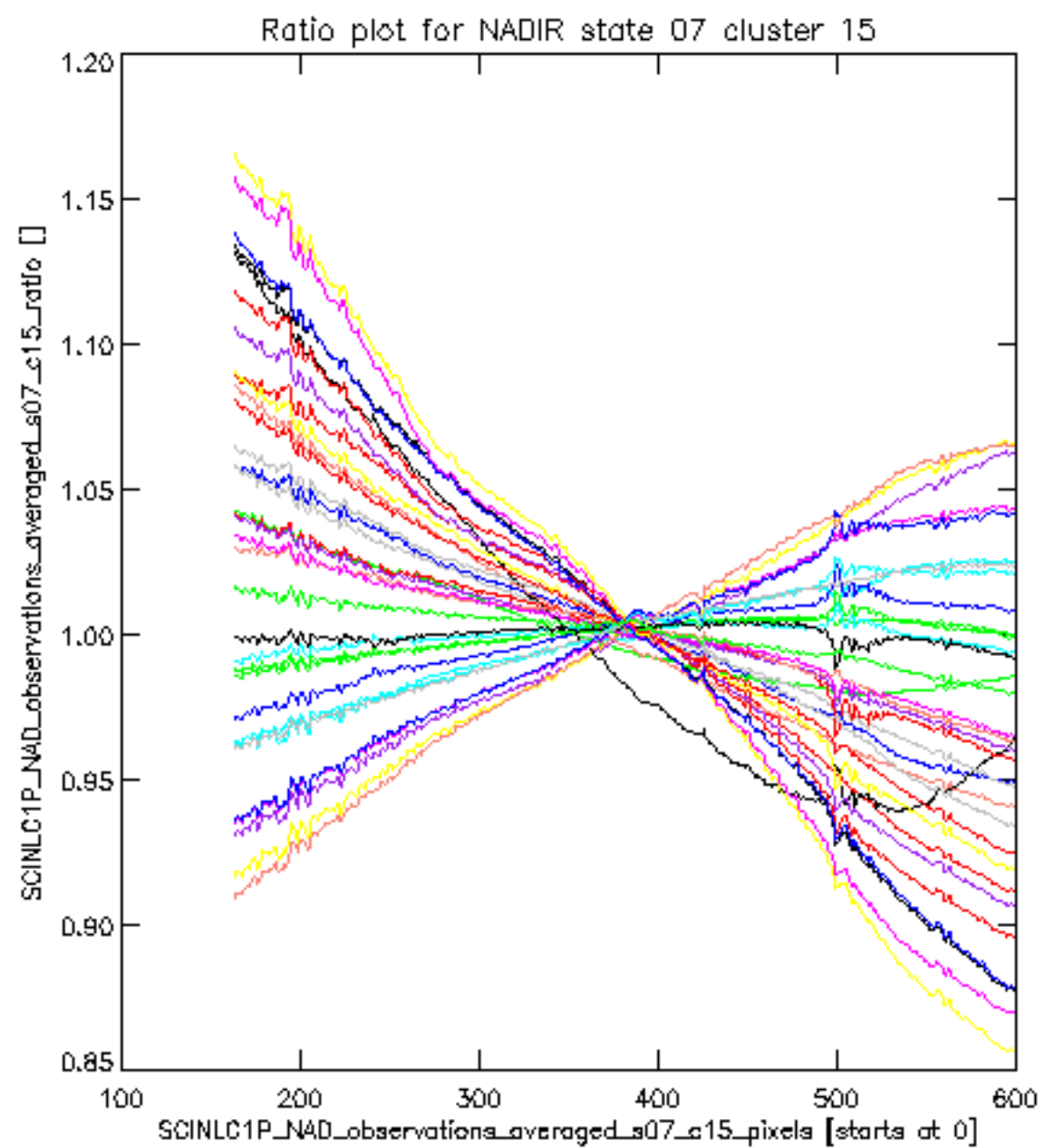


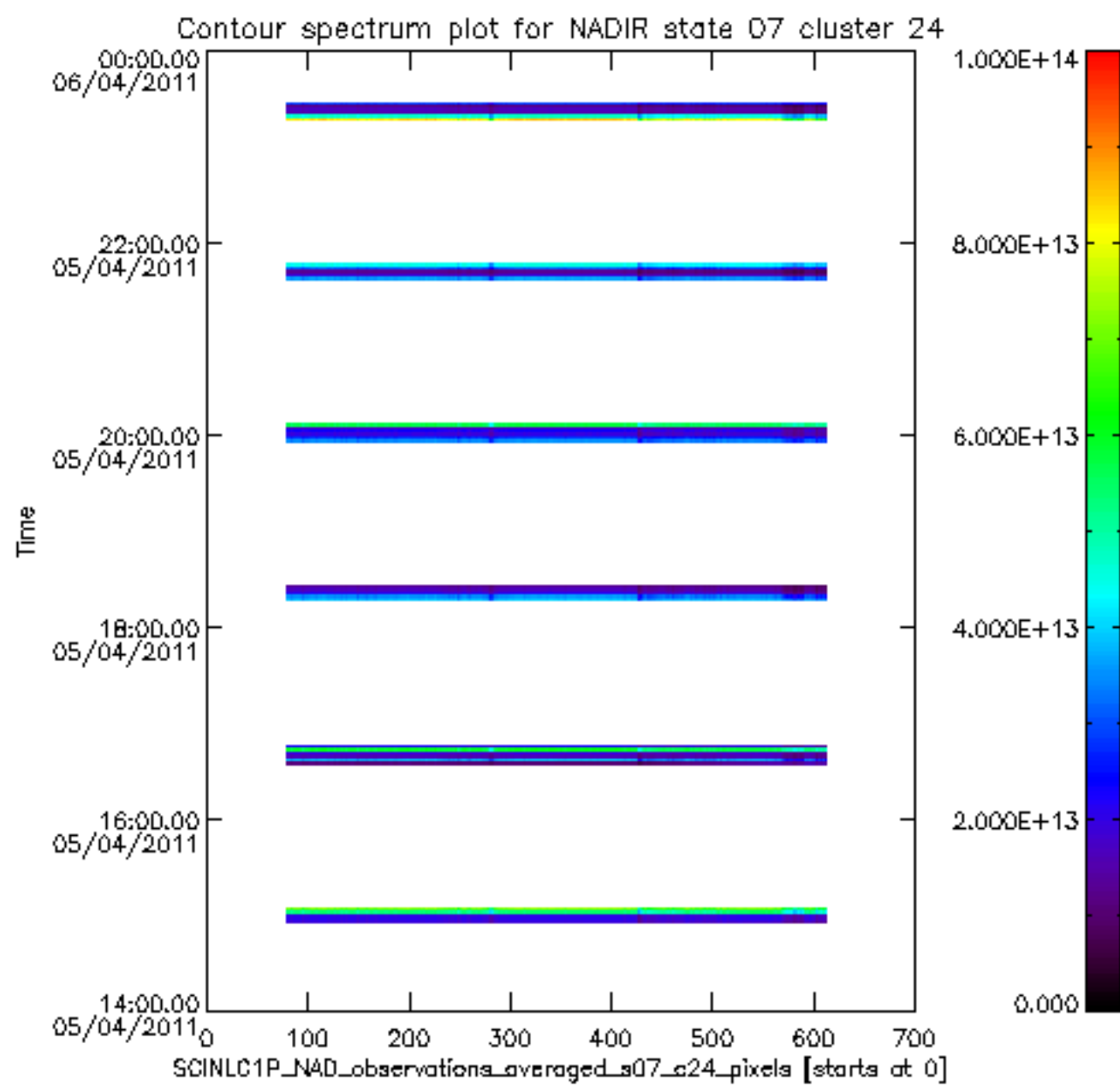
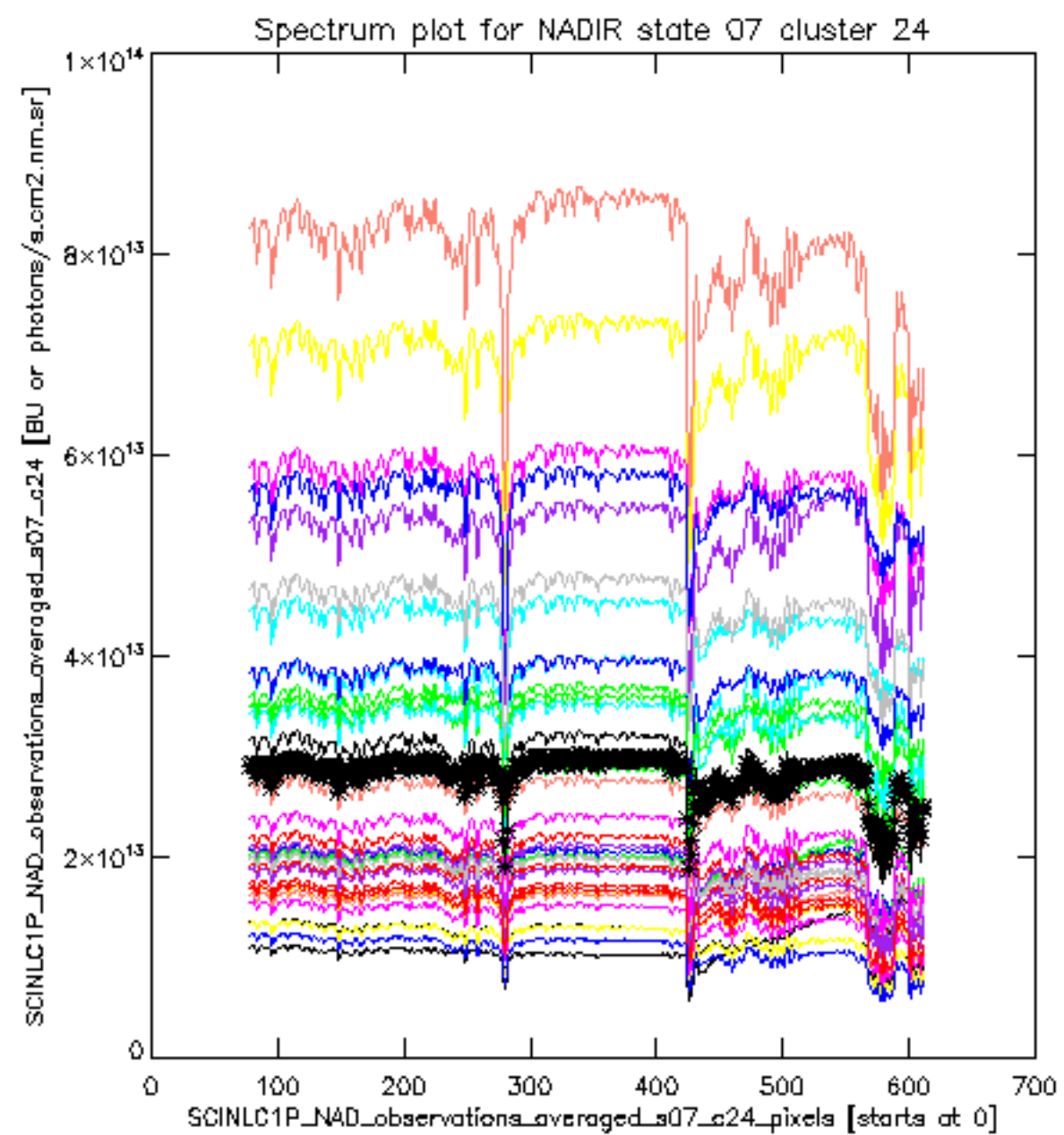


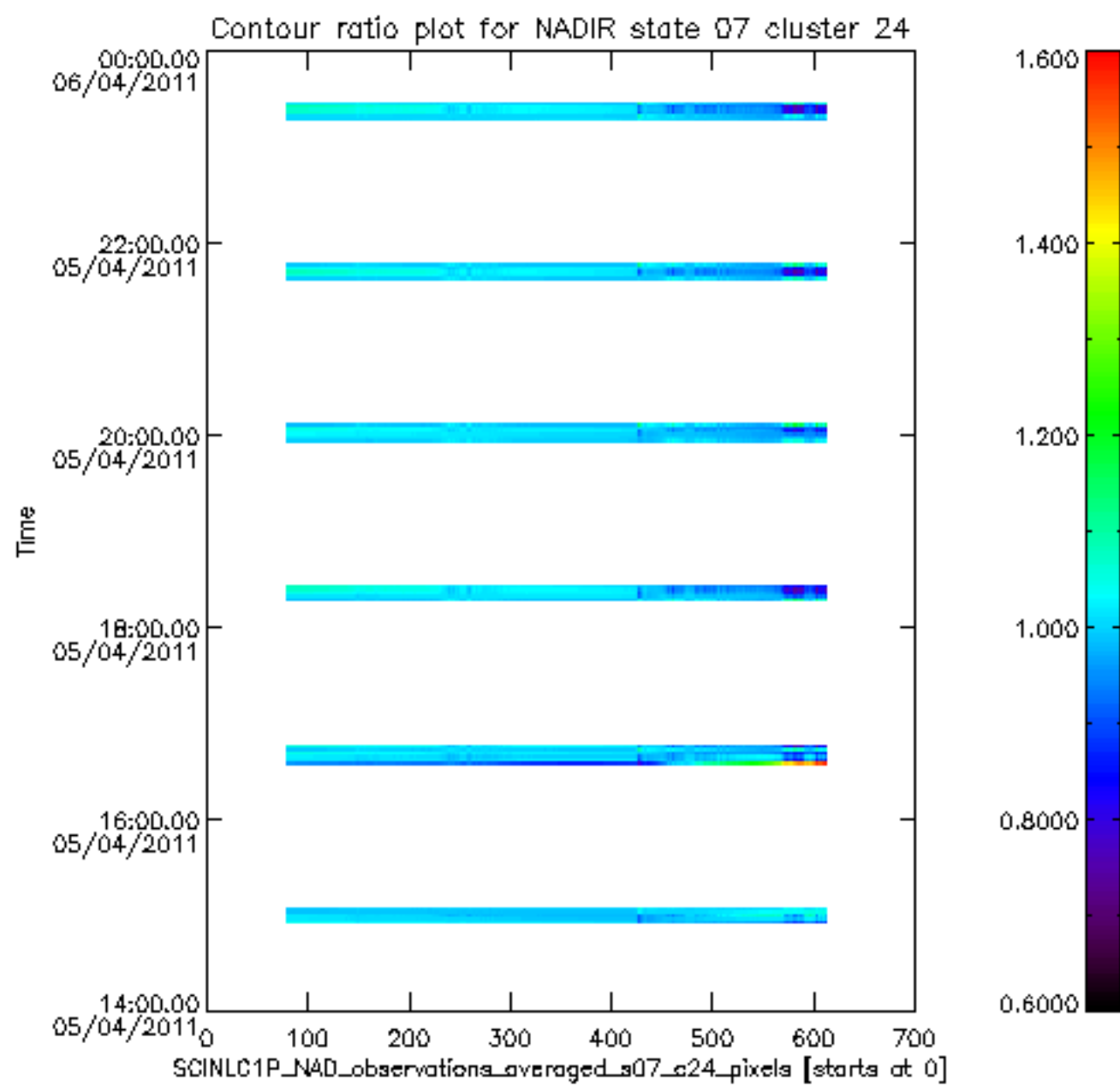
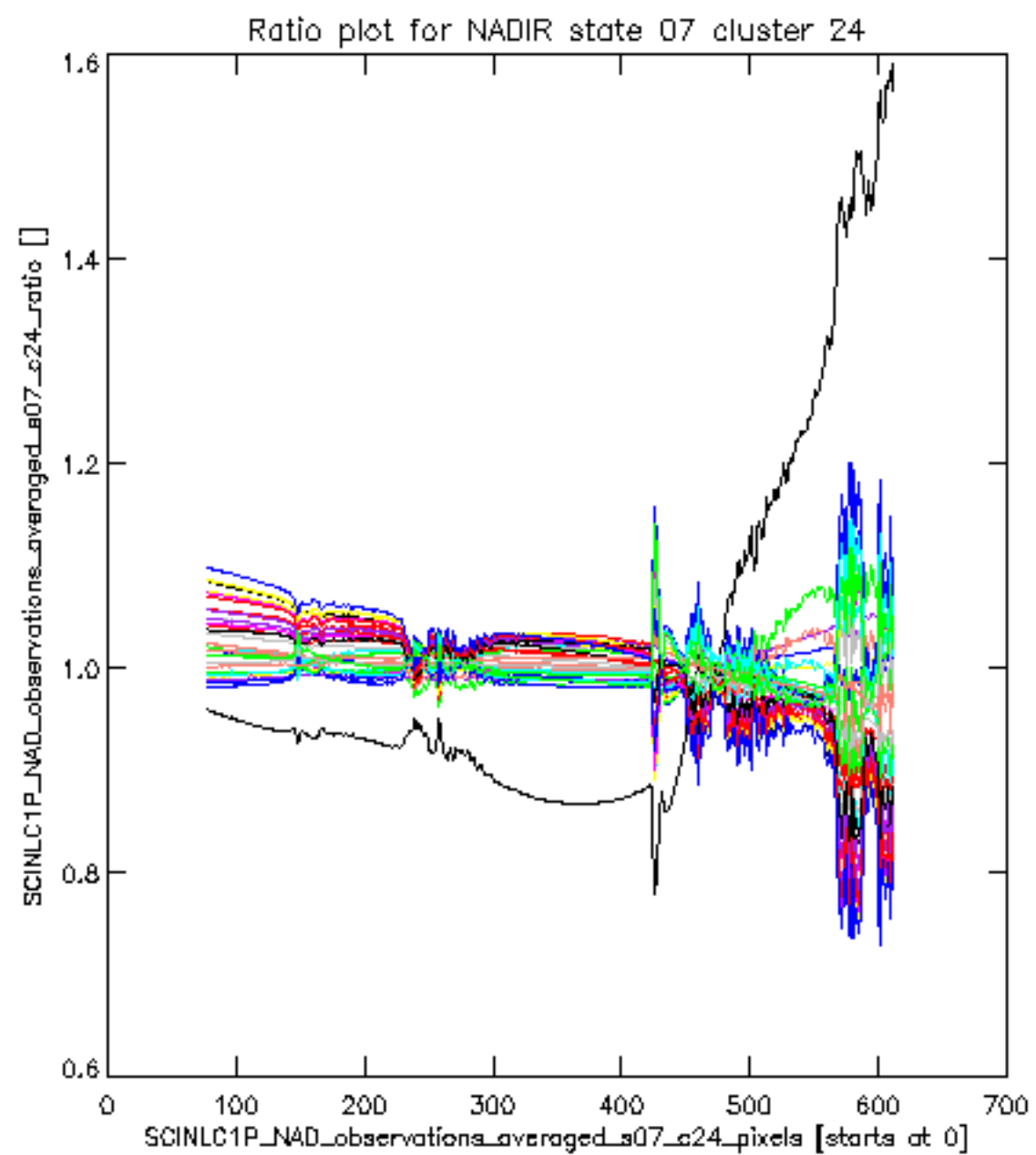




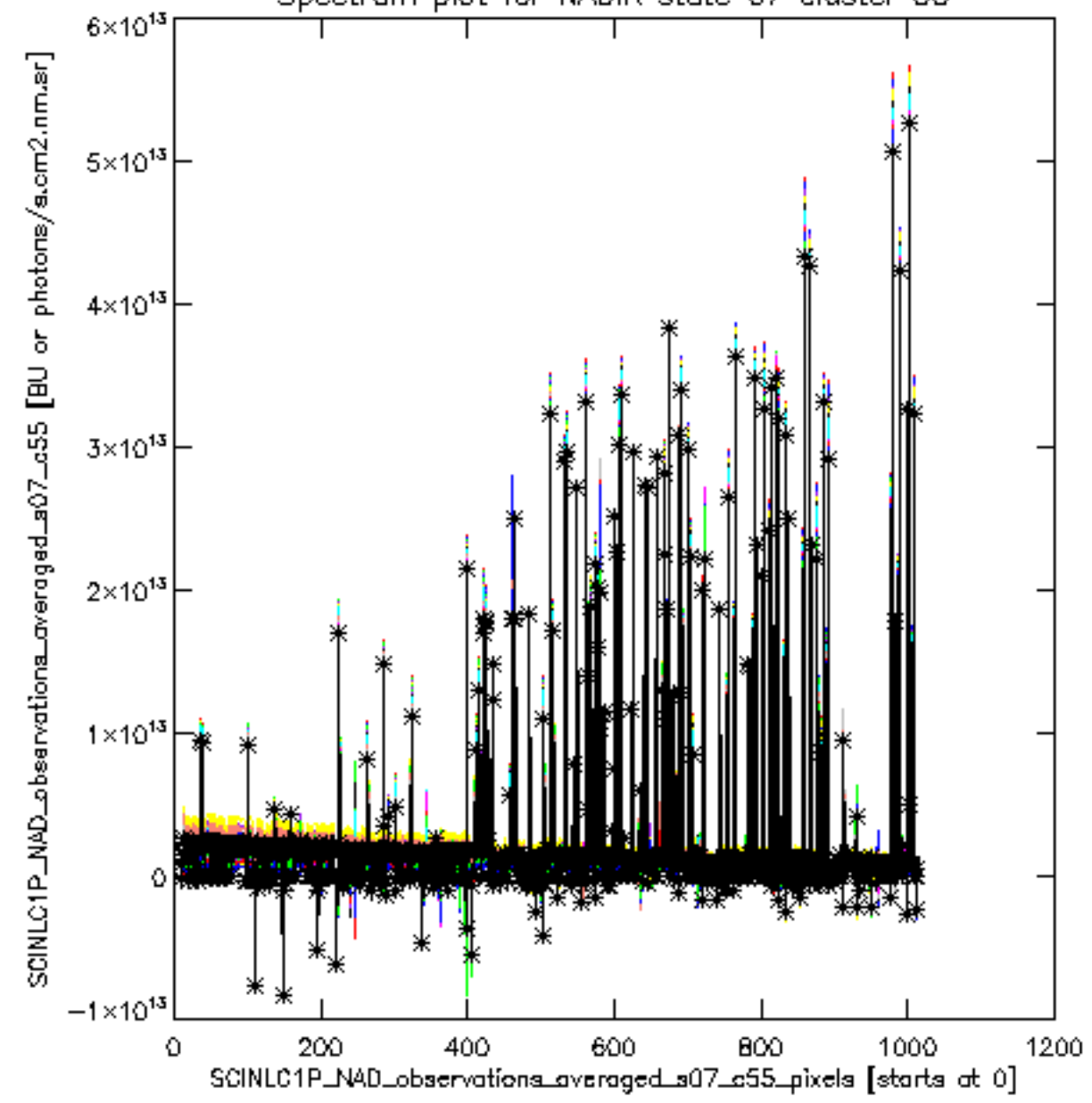








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

