

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	27APR2011 06:55:29
Data source version	SCIA/7.04-U
Processing scope for products	16APR2011 00:00:00 to 17APR2011 00:00:00
Start time of first product within scope	15APR2011 23:16:26
Stop time of last product within scope	16APR2011 22:43:10
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	16APR2011 03:08:56.083	16APR2011 16:40:58.781
1	NADIR	07	09	N/A	16APR2011 03:08:56.083	16APR2011 16:40:58.781
2	NADIR	07	15	N/A	16APR2011 03:08:56.083	16APR2011 16:40:58.781
3	NADIR	07	24	N/A	16APR2011 03:08:56.083	16APR2011 16:40:58.781
4	NADIR	07	55	N/A	16APR2011 03:08:56.083	16APR2011 16:40:58.781
5	LIMB	32	09	~19 km	16APR2011 00:01:53.980	16APR2011 16:44:10.078
6	LIMB	32	09	~22 km	16APR2011 00:01:53.980	16APR2011 16:44:10.078
7	LIMB	32	09	~25 km	16APR2011 00:01:53.980	16APR2011 16:44:10.078
8	LIMB	32	15	~22 km	16APR2011 00:01:53.980	16APR2011 16:44:10.078
9	LIMB	32	15	~25 km	16APR2011 00:01:53.980	16APR2011 16:44:10.078
10	LIMB	32	15	~35 km	16APR2011 02:55:45.447	16APR2011 16:44:10.078

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	#noproc	#cmlpl_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110415_230858_000059783101_00289_47717_0164.N1	15APR2011 23:16:26	16APR2011 00:27:53	0	33	31	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110416_022925_000059783101_00291_47719_0165.N1	16APR2011 02:36:53	16APR2011 03:48:03	0	32	31	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110416_040907_000060413101_00292_47720_0166.N1	16APR2011 04:17:07	16APR2011 05:28:08	0	32	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110416_072934_000060413101_00294_47722_0177.N1	16APR2011 07:37:34	16APR2011 08:48:17	0	32	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110416_091019_000059783101_00295_47723_0178.N1	16APR2011 09:17:48	16APR2011 10:28:22	0	32	31	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110416_105001_000060413101_00296_47724_0179.N1	16APR2011 10:58:01	16APR2011 12:08:26	0	32	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110416_123046_000059783101_00297_47725_0180.N1	16APR2011 12:38:15	16APR2011 13:49:39	0	33	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110416_141028_000060413101_00298_47726_0181.N1	16APR2011 14:18:28	16APR2011 15:29:43	0	33	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110416_155113_000059783101_00299_47727_0182.N1	16APR2011 15:58:42	16APR2011 17:09:47	0	33	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110416_191221_000059463101_00301_47729_0183.N1	16APR2011 19:19:09	16APR2011 20:50:08	0	0	4	0	4	1	0	0	
10	SCI_NLC_1CUDPA20110416_205131_000060203101_00302_47730_0184.N1	16APR2011 20:59:23	16APR2011 22:19:14	0	0	4	0	2	1	0	0	
11	SCI_NLC_1CUDPA20110416_223155_000059893101_00303_47731_0198.N1	16APR2011 22:39:37	16APR2011 22:43:10	0	0	4	0	0	1	0	0	

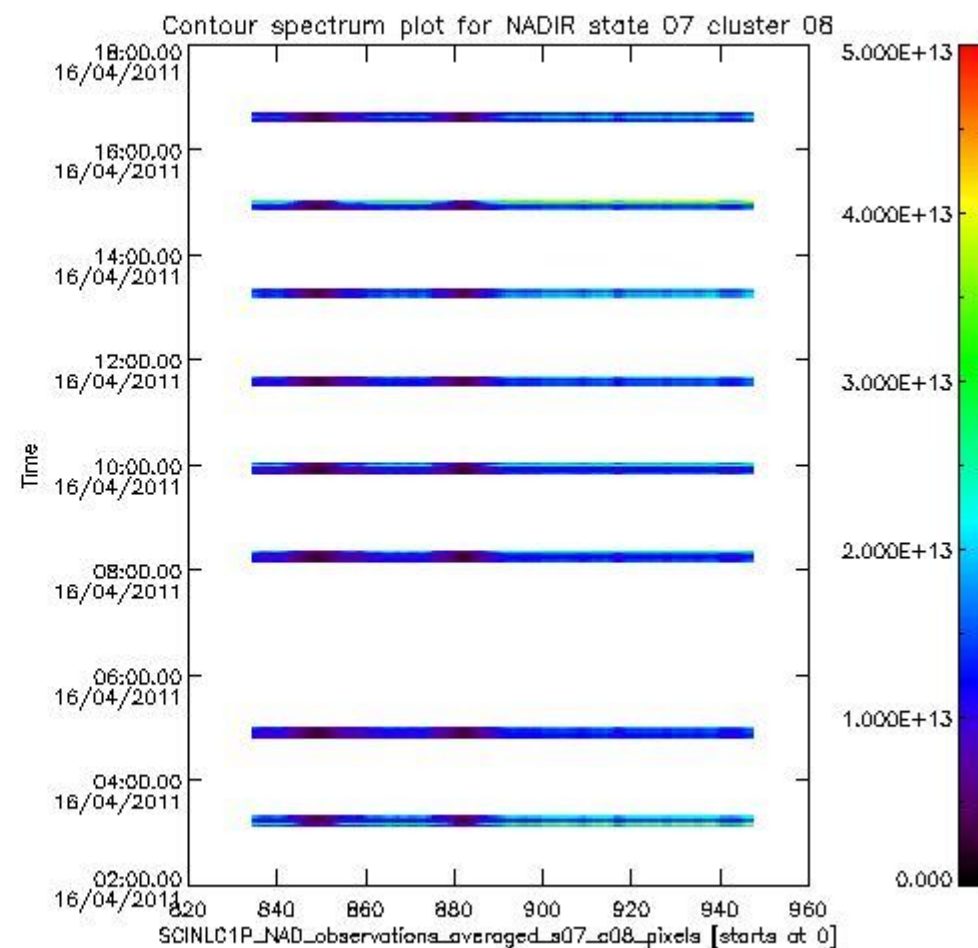
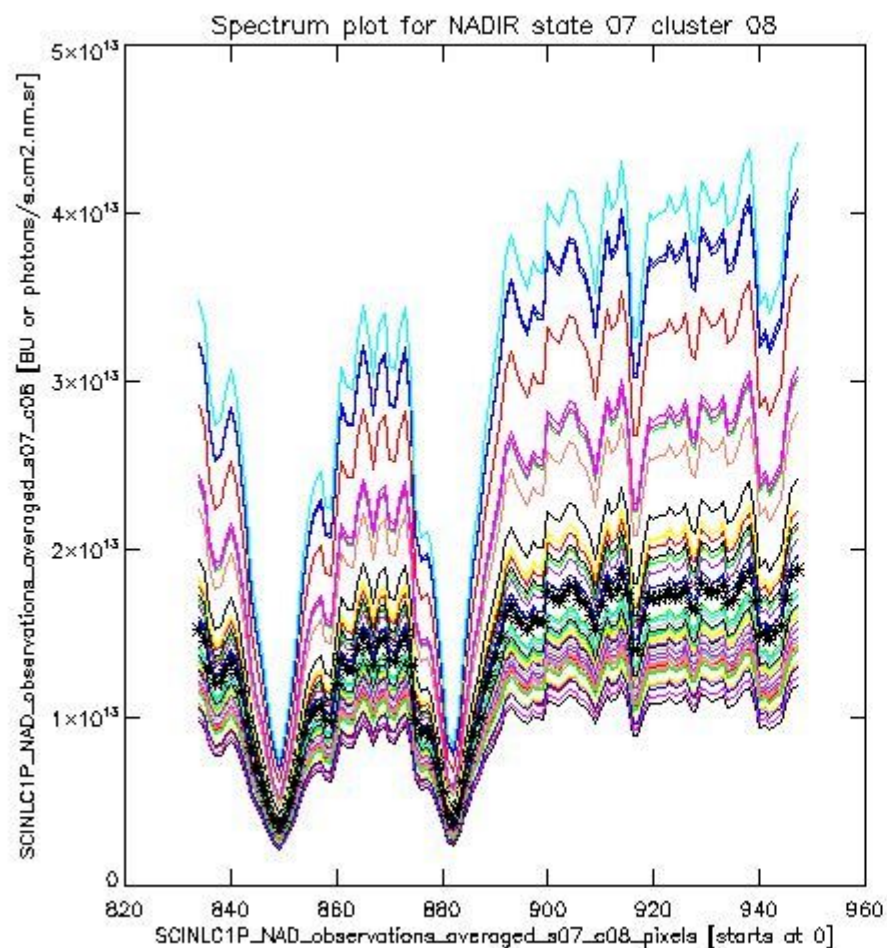
1.2 Source packet monitoring

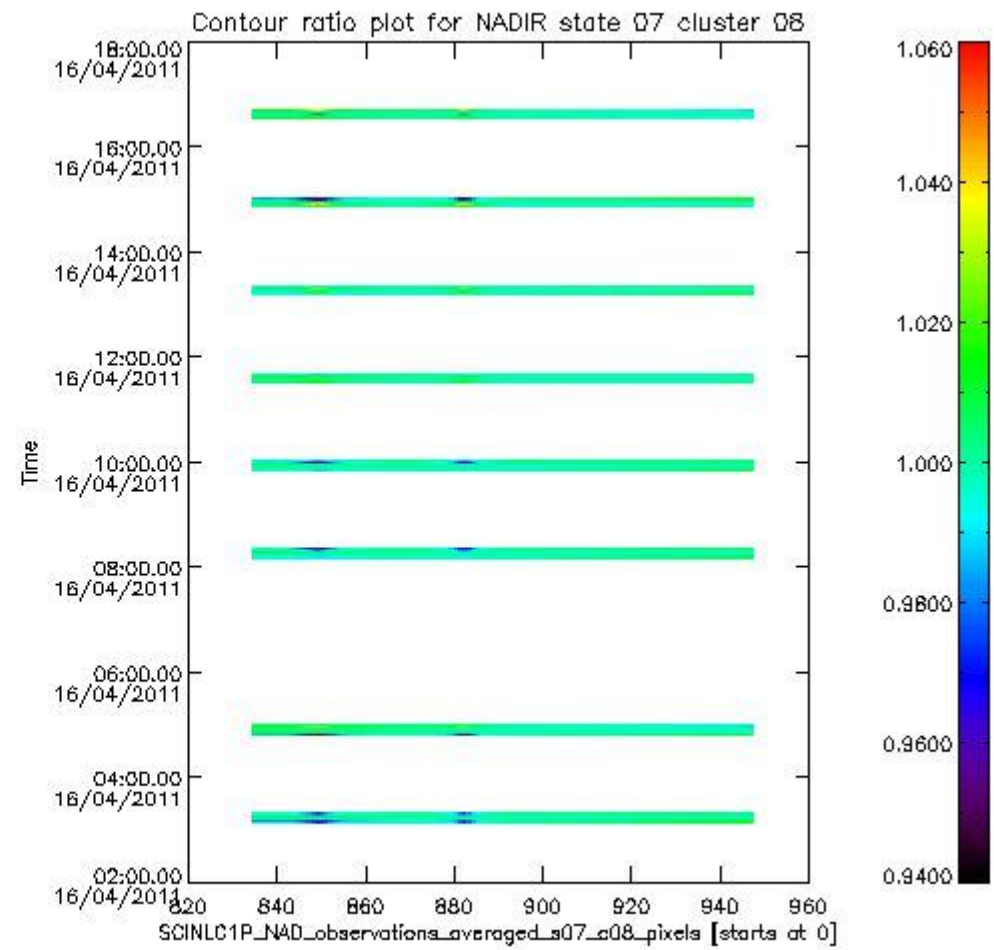
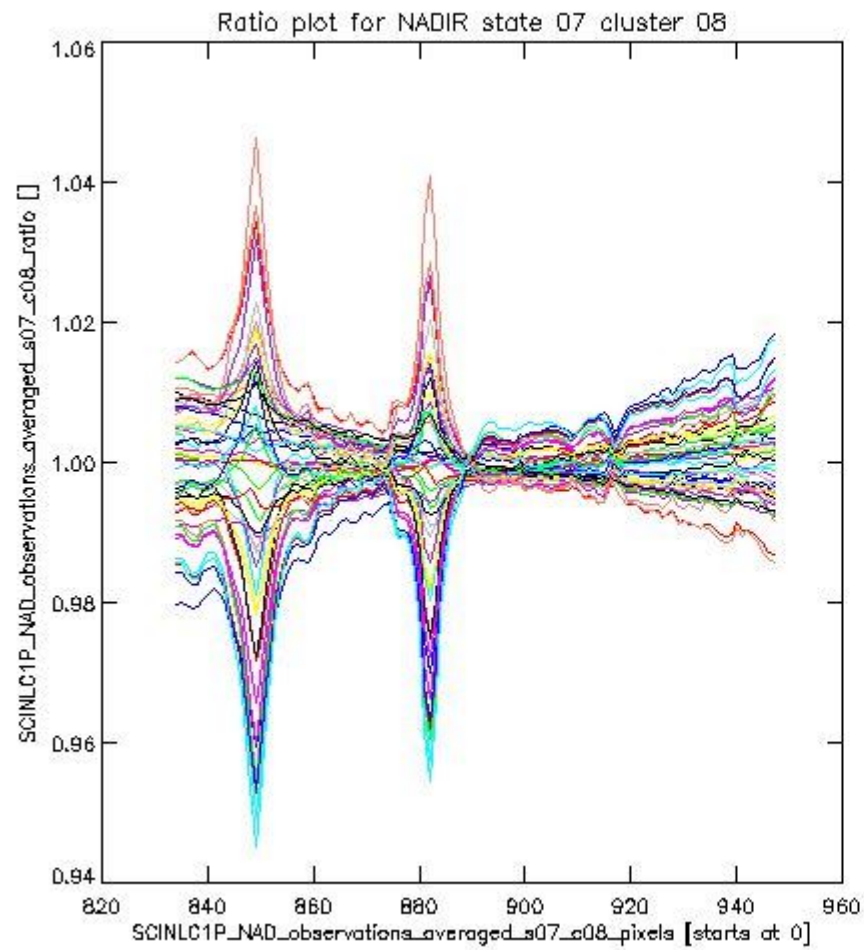
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	16APR2011 03:08:56.083
Start time of last sample	16APR2011 16:40:58.781
Reference period start time	17MAR2011 01:31:10.283
Reference period stop time	15APR2011 23:58:42.680
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

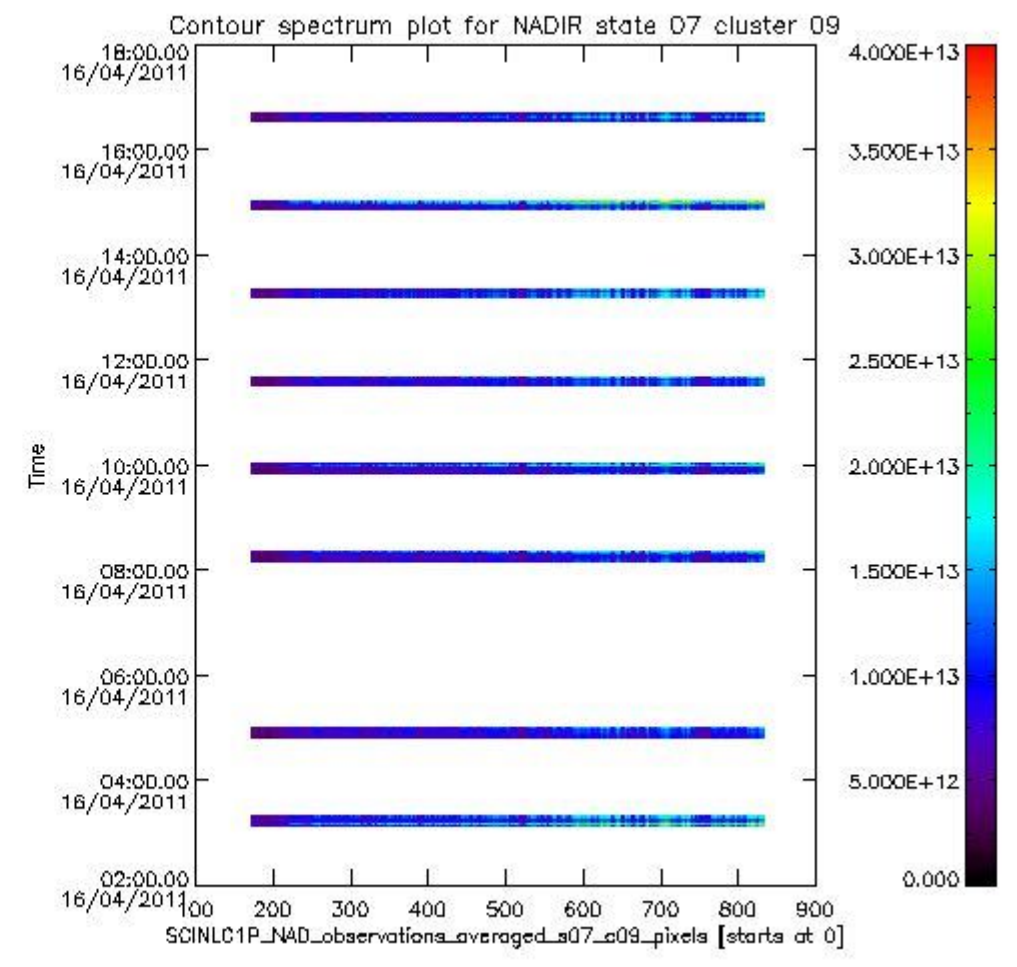
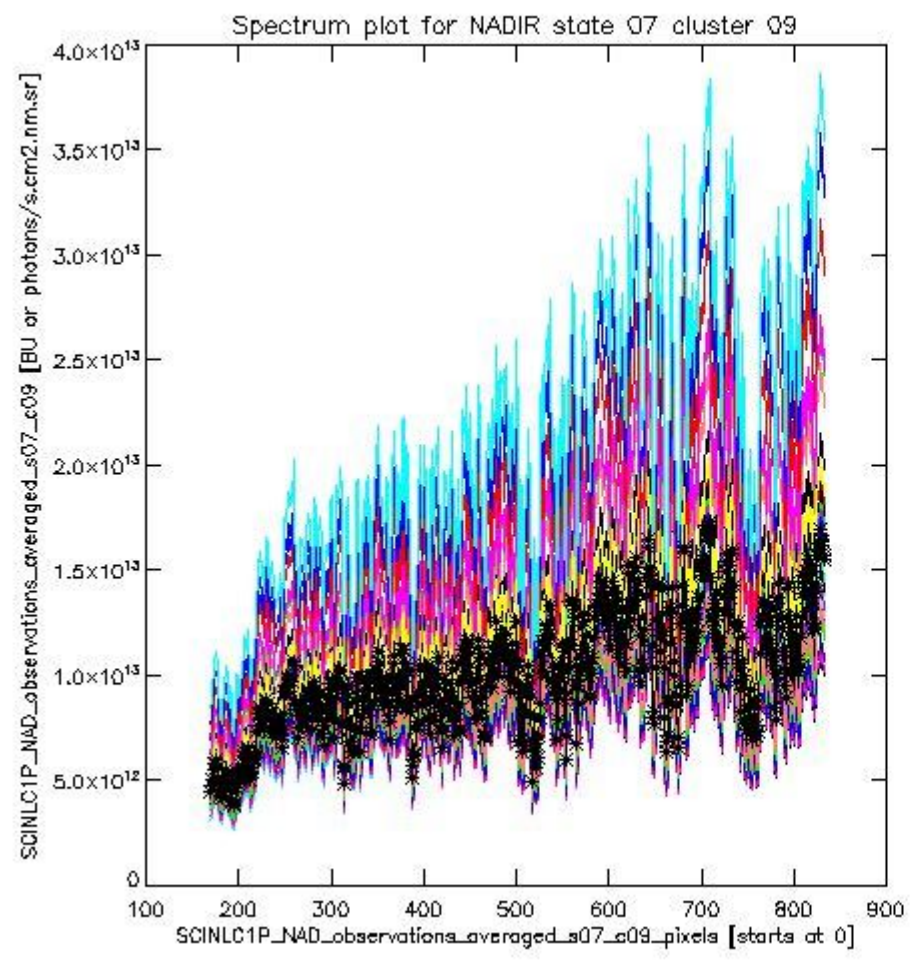




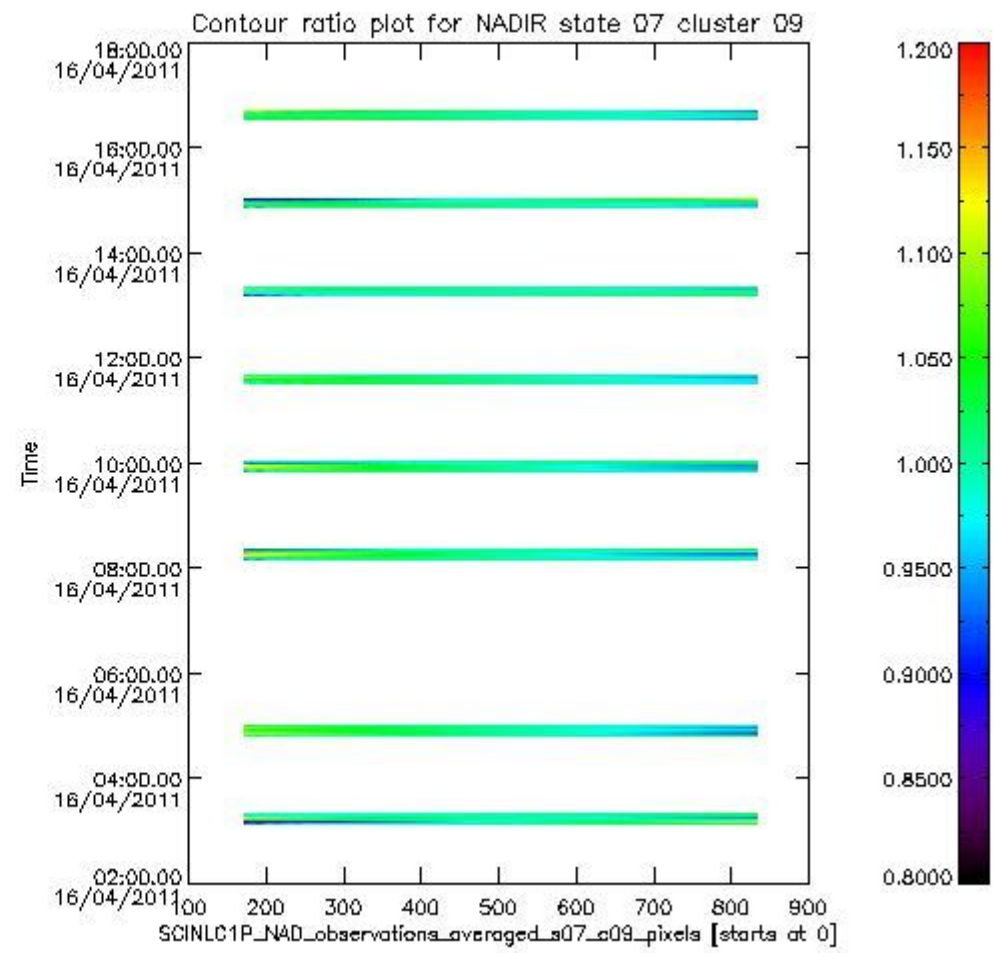
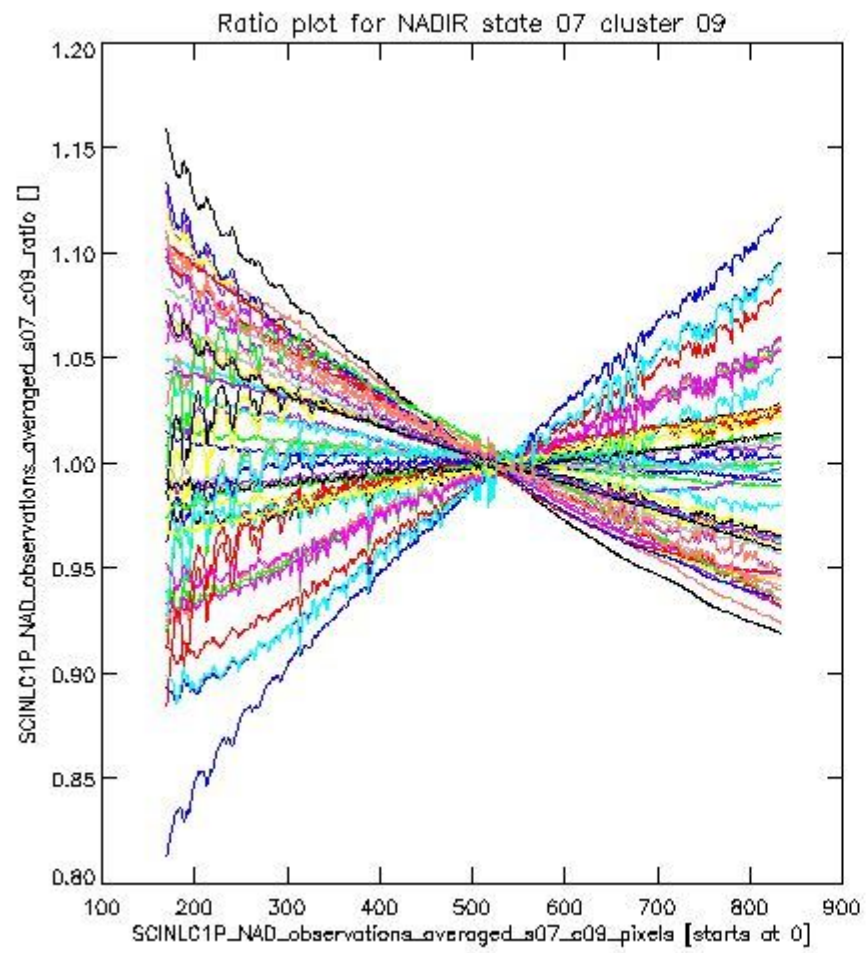
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_1.PNG

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	16APR2011 03:08:56.083
Start time of last sample	16APR2011 16:40:58.781
Reference period start time	17MAR2011 01:31:10.283
Reference period stop time	15APR2011 23:58:42.680
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



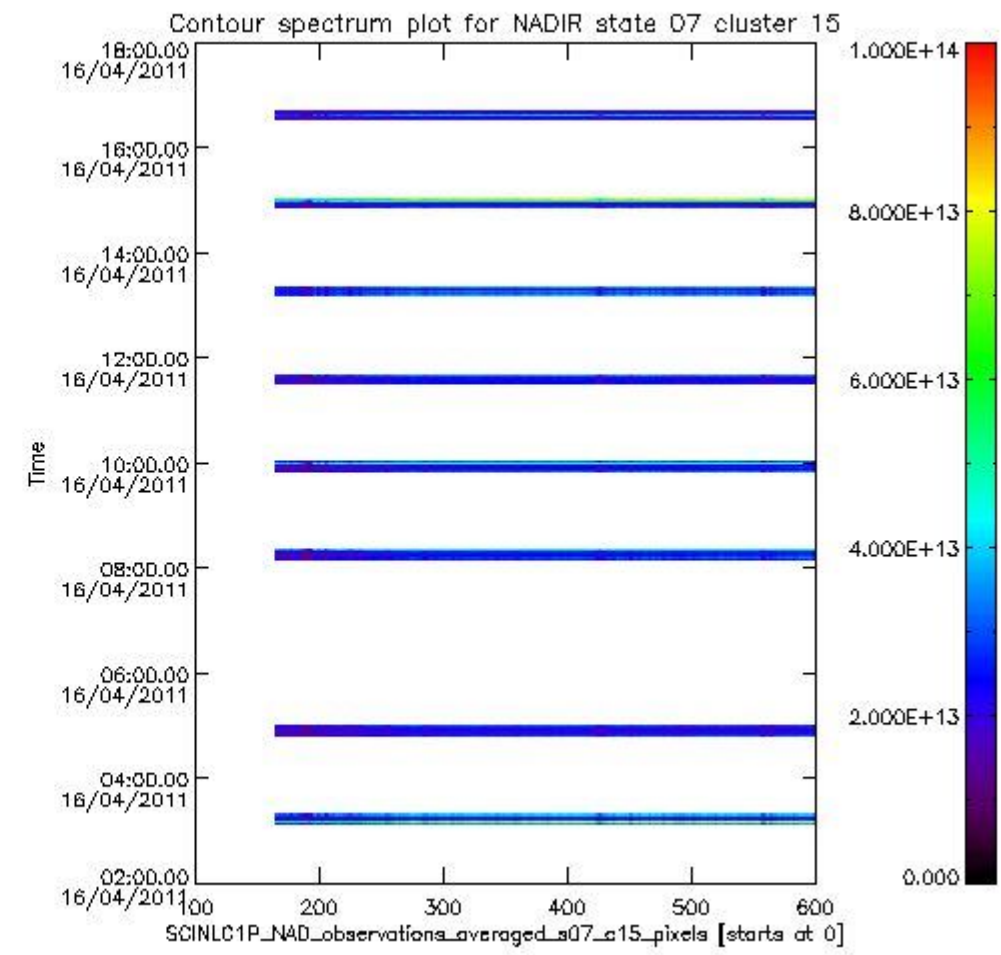
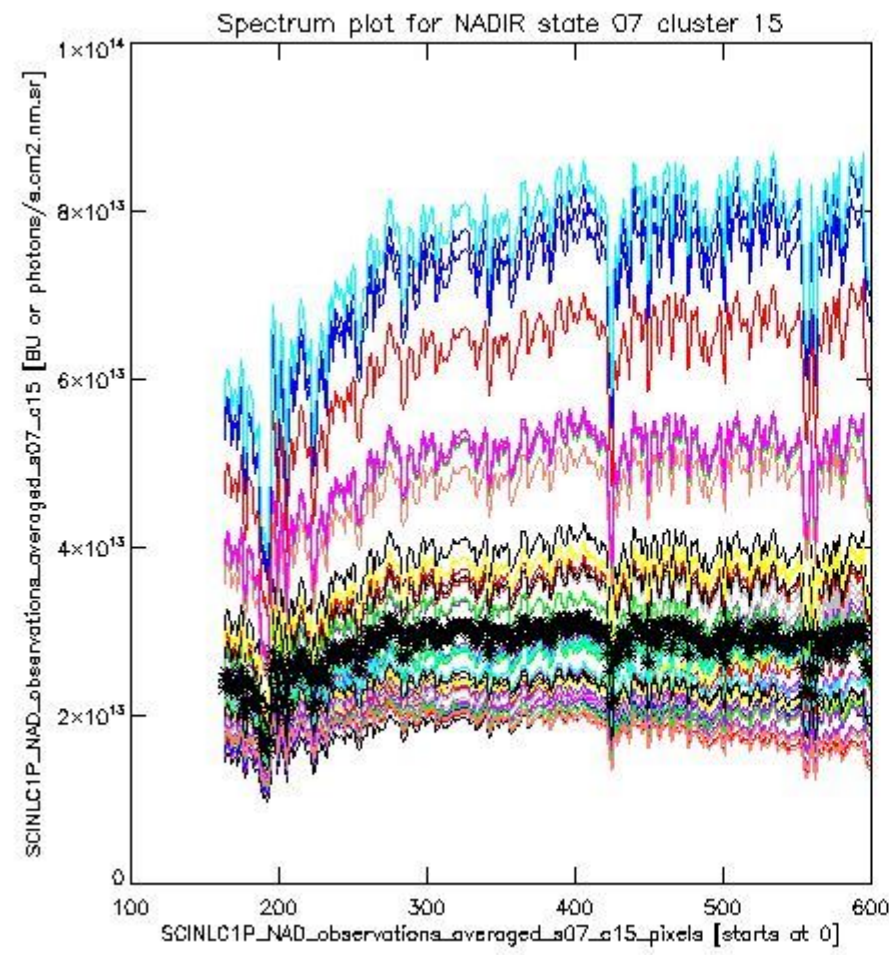
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_2.PNG



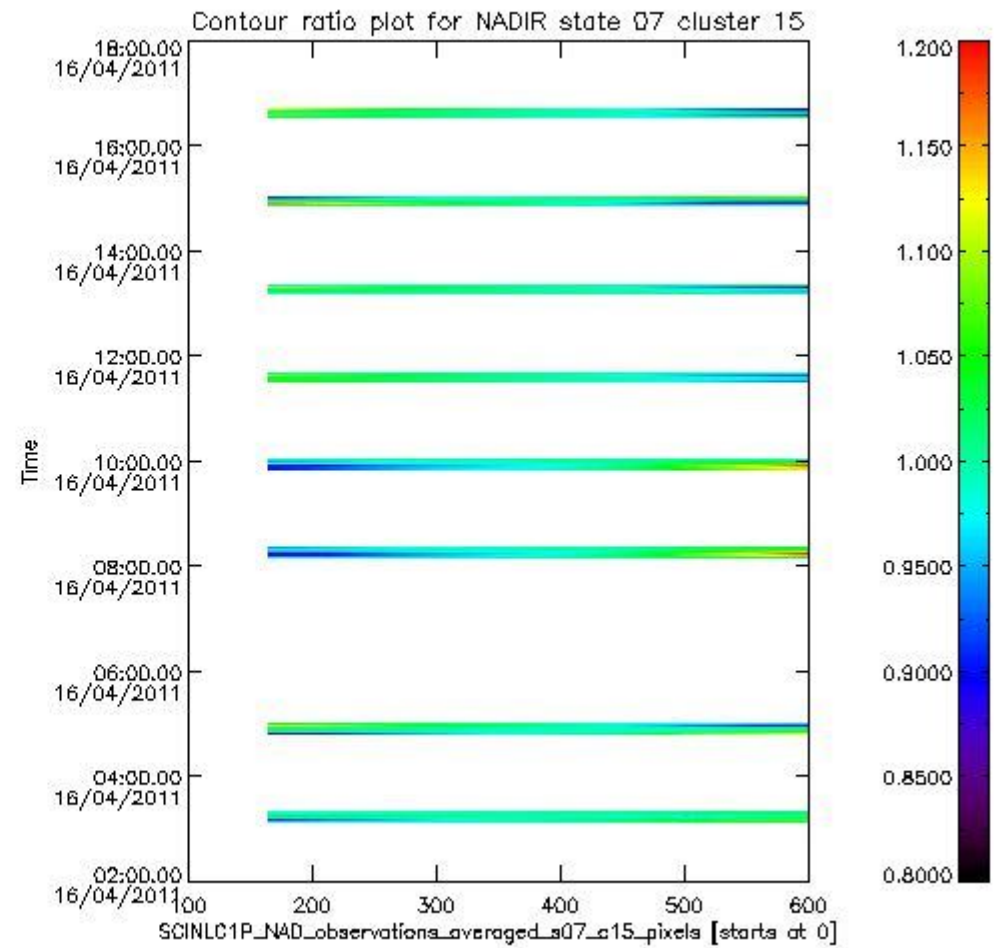
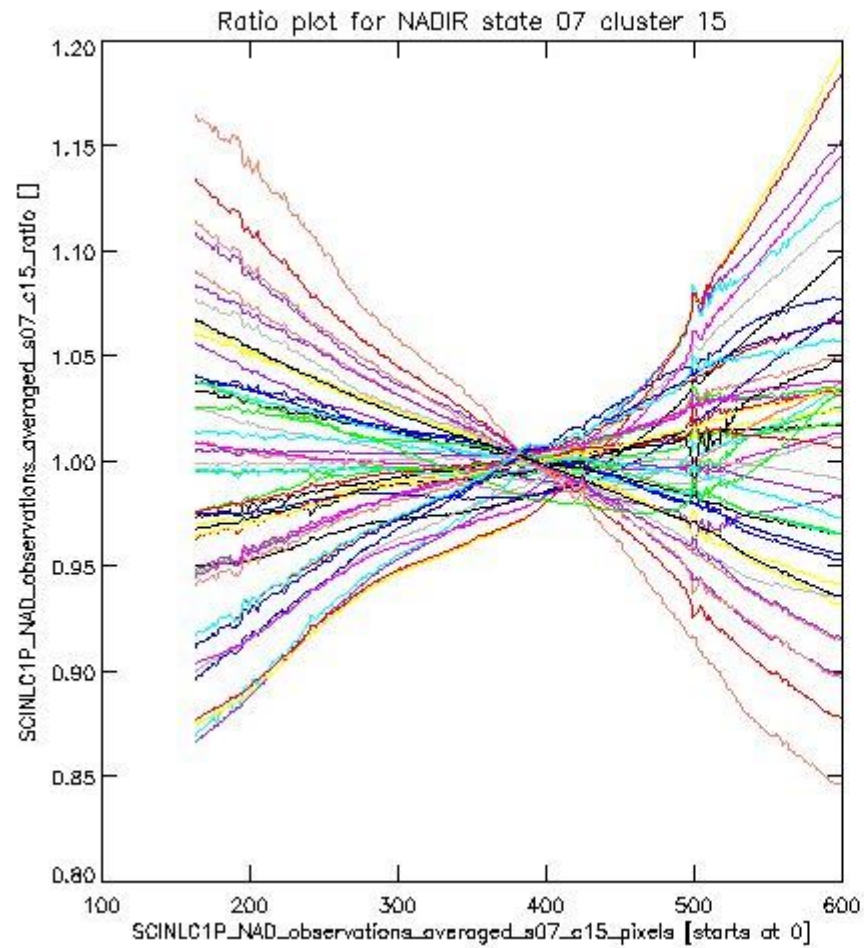
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_3.PNG

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	16APR2011 03:08:56.083
Start time of last sample	16APR2011 16:40:58.781
Reference period start time	17MAR2011 01:31:10.283
Reference period stop time	15APR2011 23:58:42.680
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



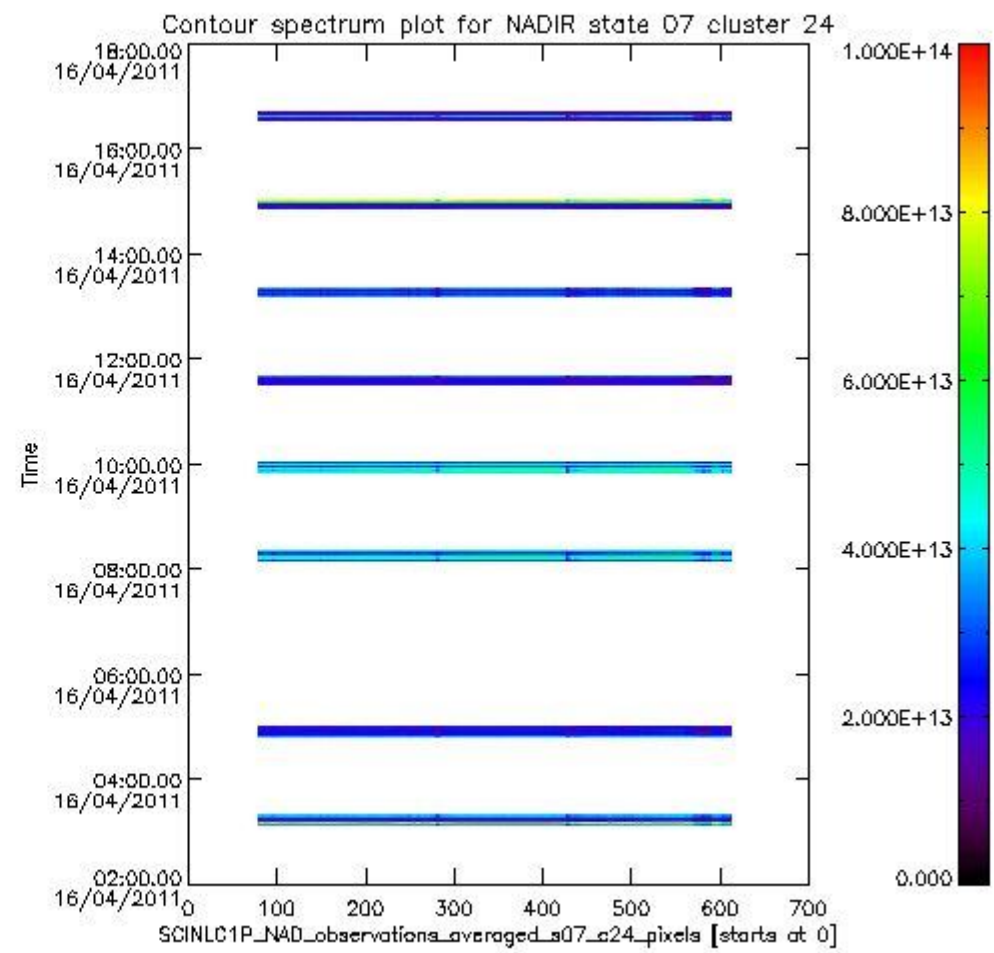
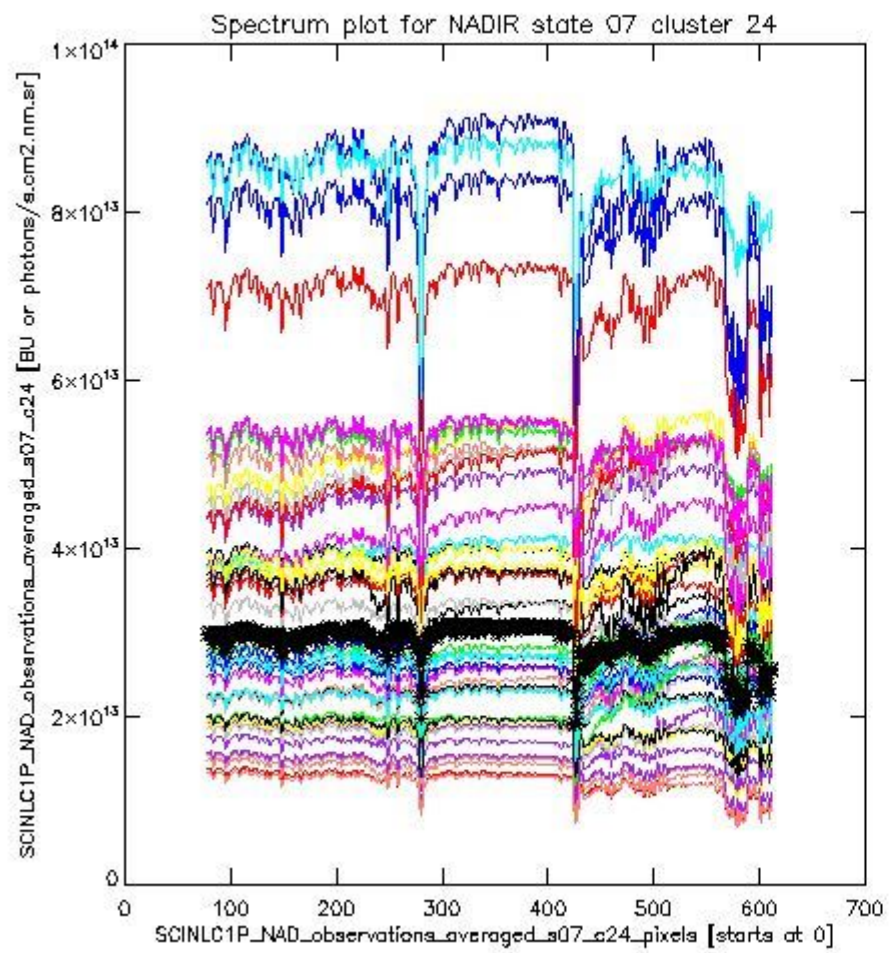
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_4.PNG



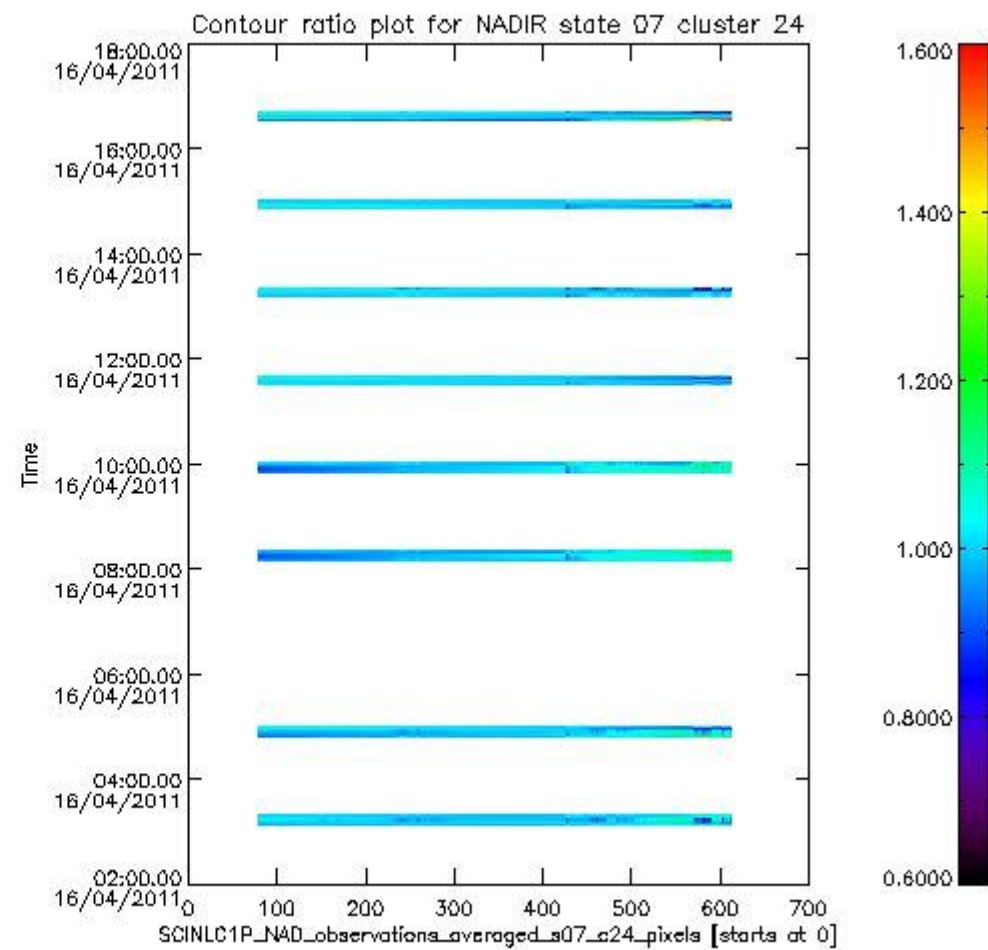
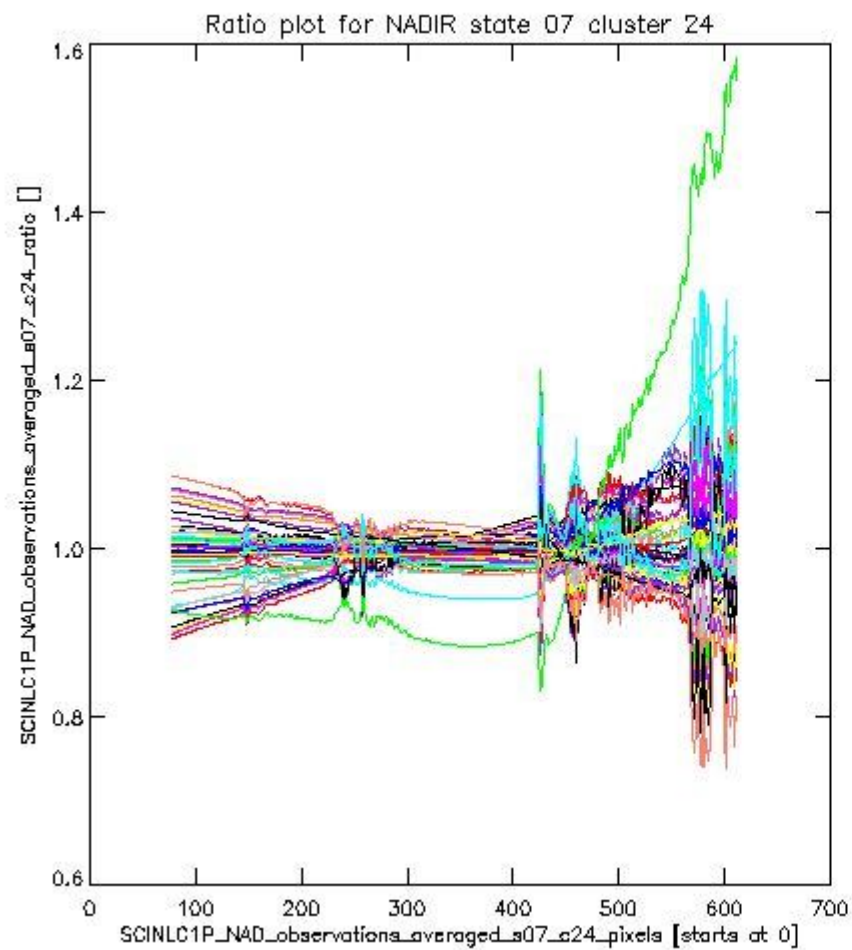
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110416_5.PNG

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	16APR2011 03:08:56.083
Start time of last sample	16APR2011 16:40:58.781
Reference period start time	17MAR2011 01:31:10.283
Reference period stop time	15APR2011 23:58:42.680
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



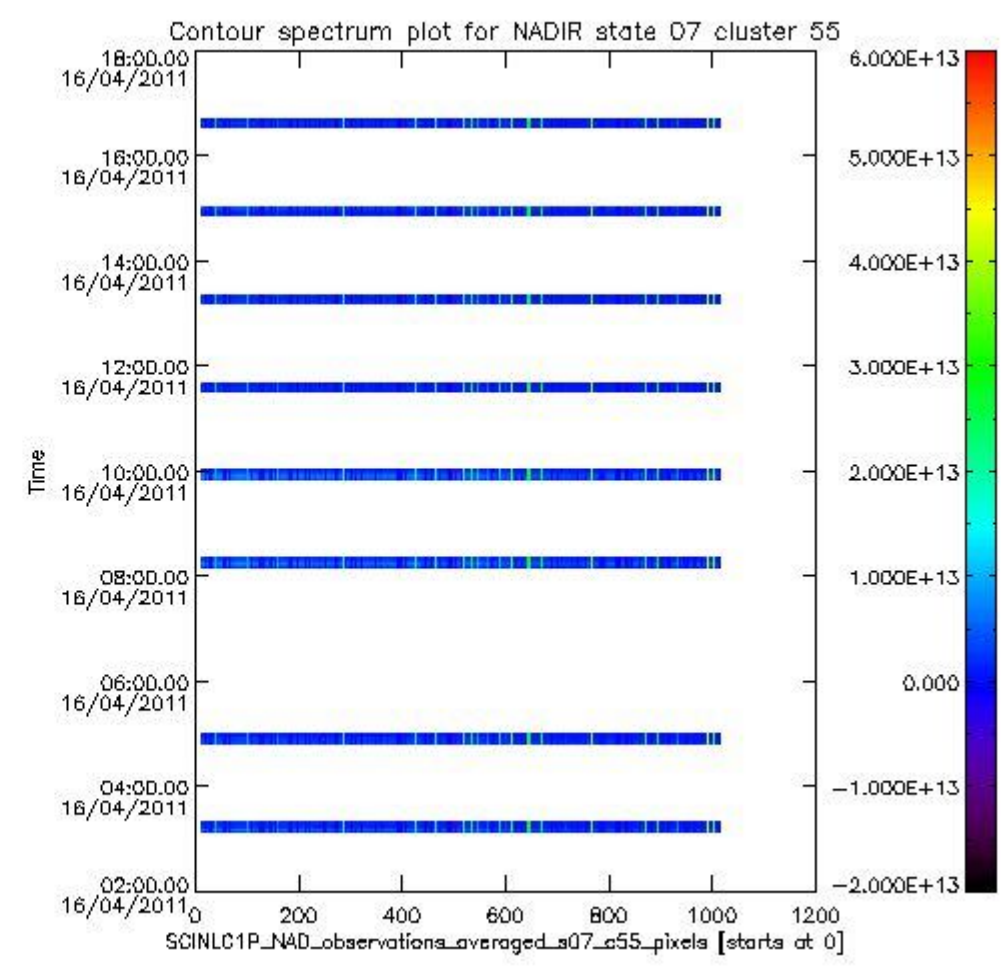
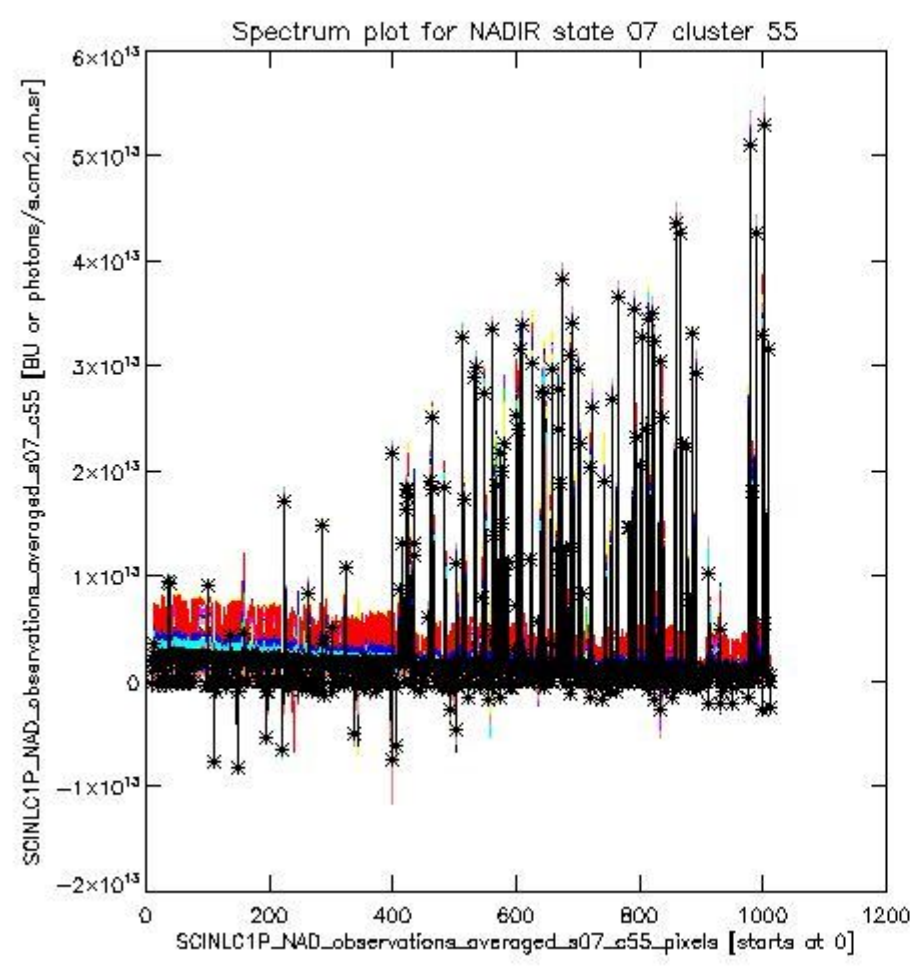
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_6.PNG



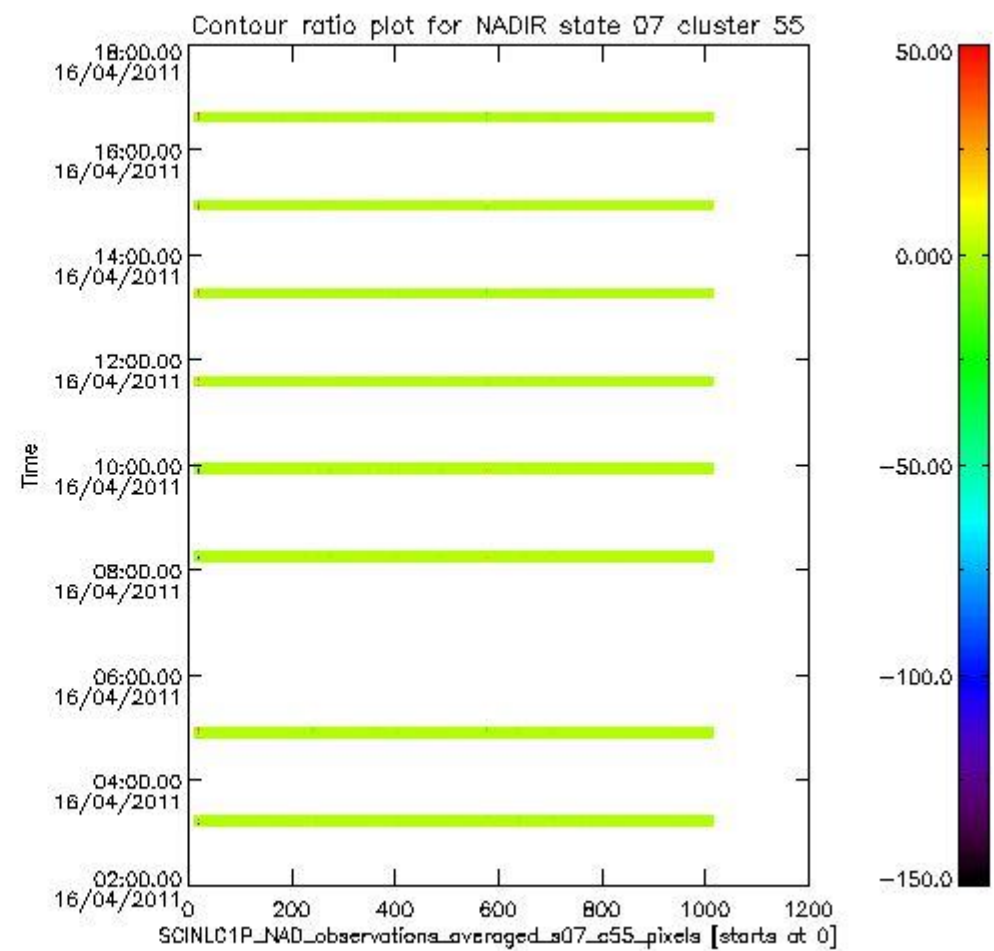
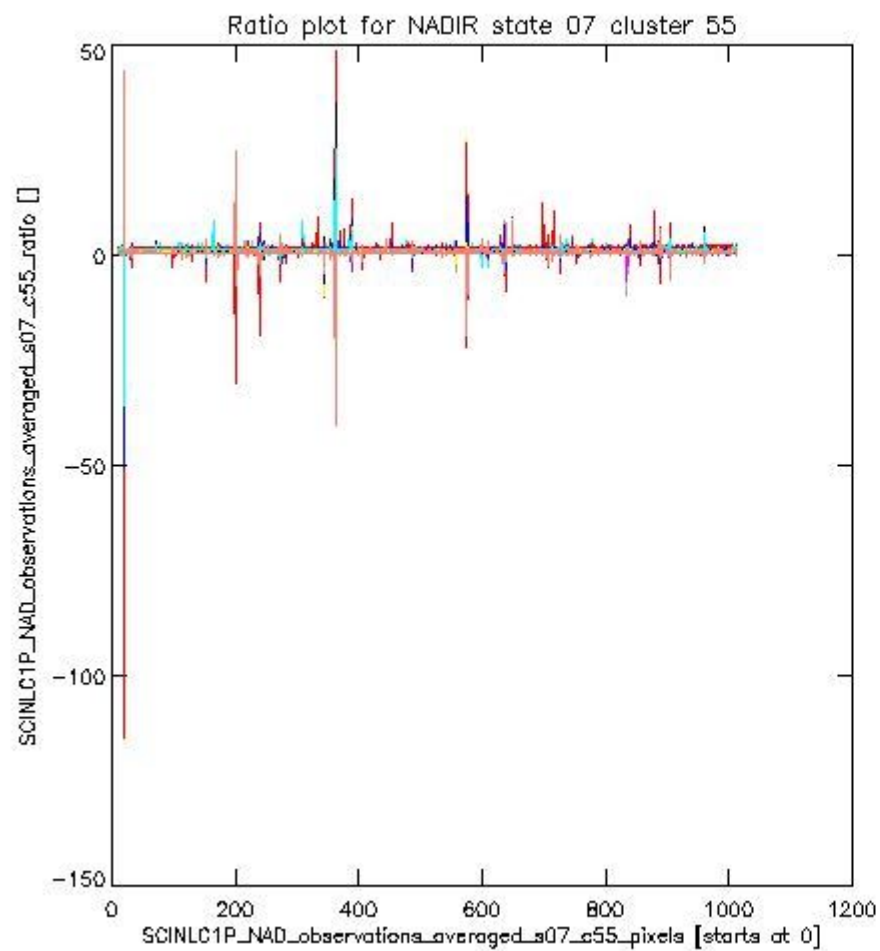
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110416_7.PNG

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	16APR2011 03:08:56.083
Start time of last sample	16APR2011 16:40:58.781
Reference period start time	17MAR2011 01:31:10.283
Reference period stop time	15APR2011 23:58:42.680
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



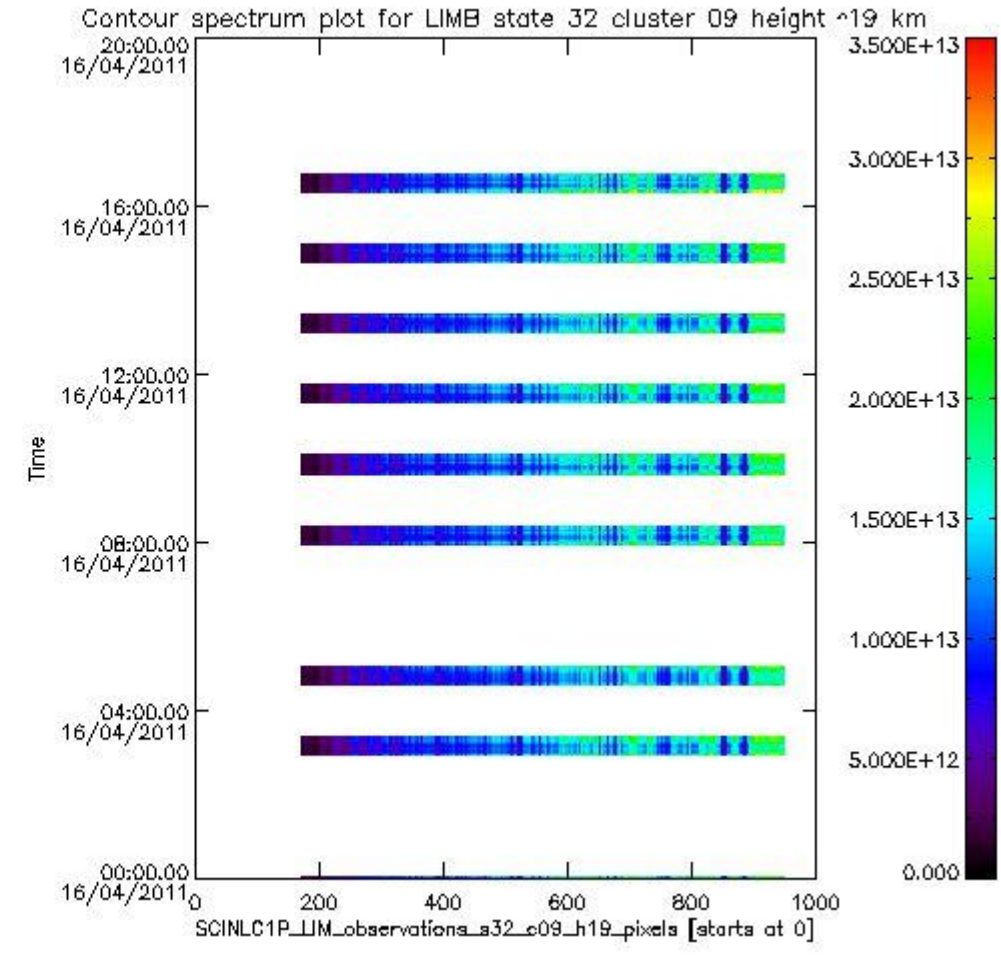
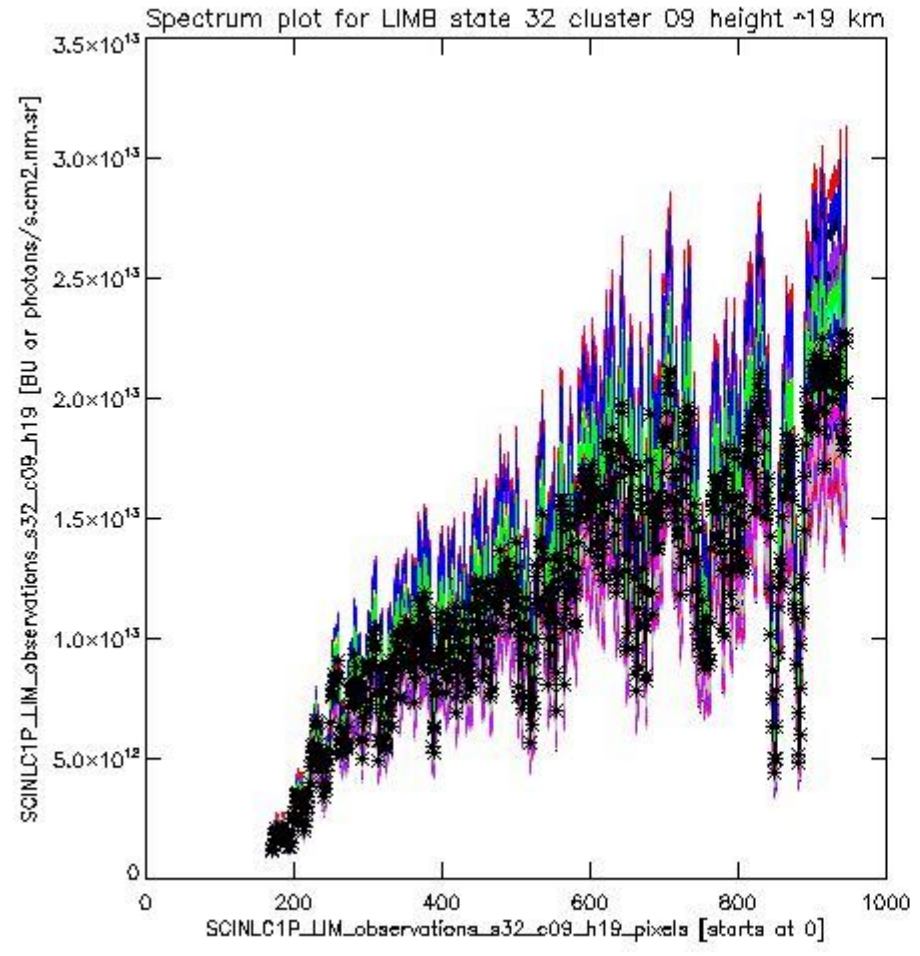
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_8.PNG



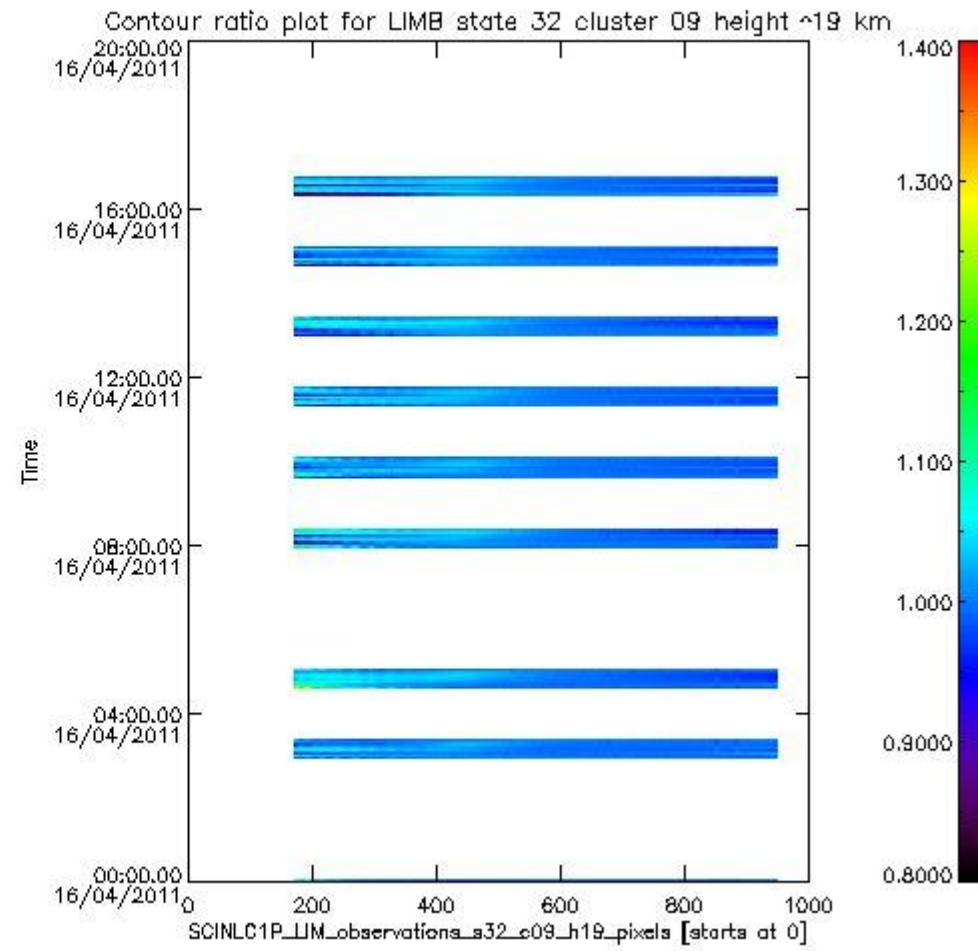
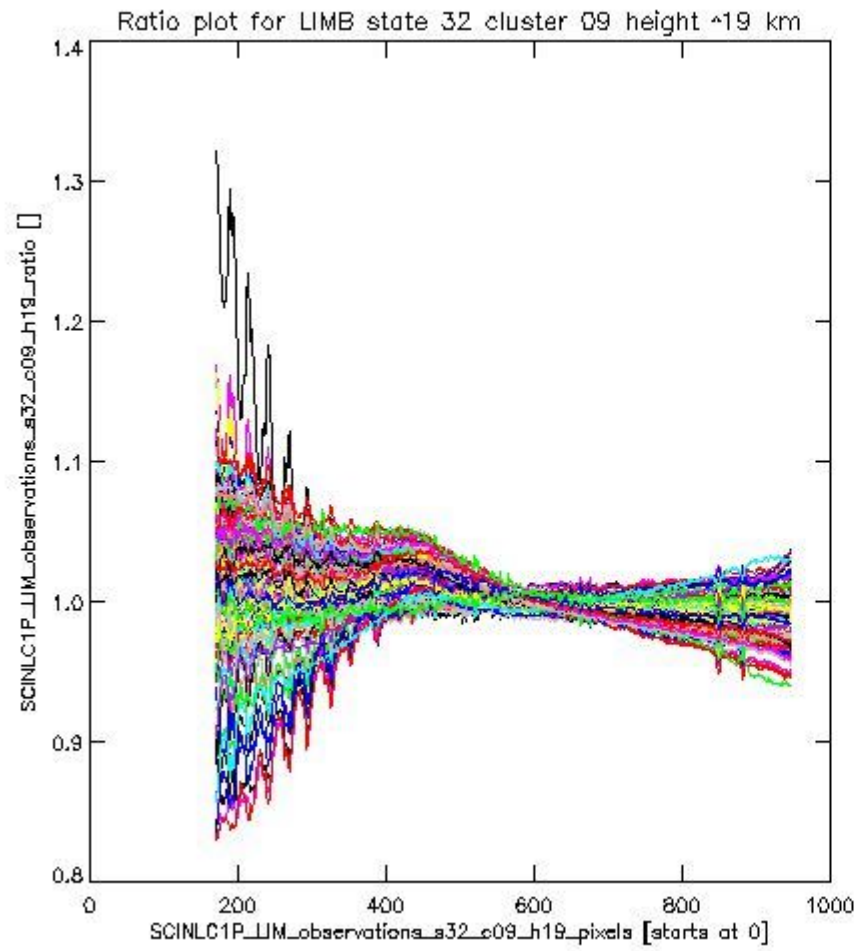
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110416_9.PNG

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	16APR2011 00:01:53.980
Start time of last sample	16APR2011 16:44:10.078
Reference period start time	17MAR2011 01:17:59.646
Reference period stop time	15APR2011 23:59:51.242
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



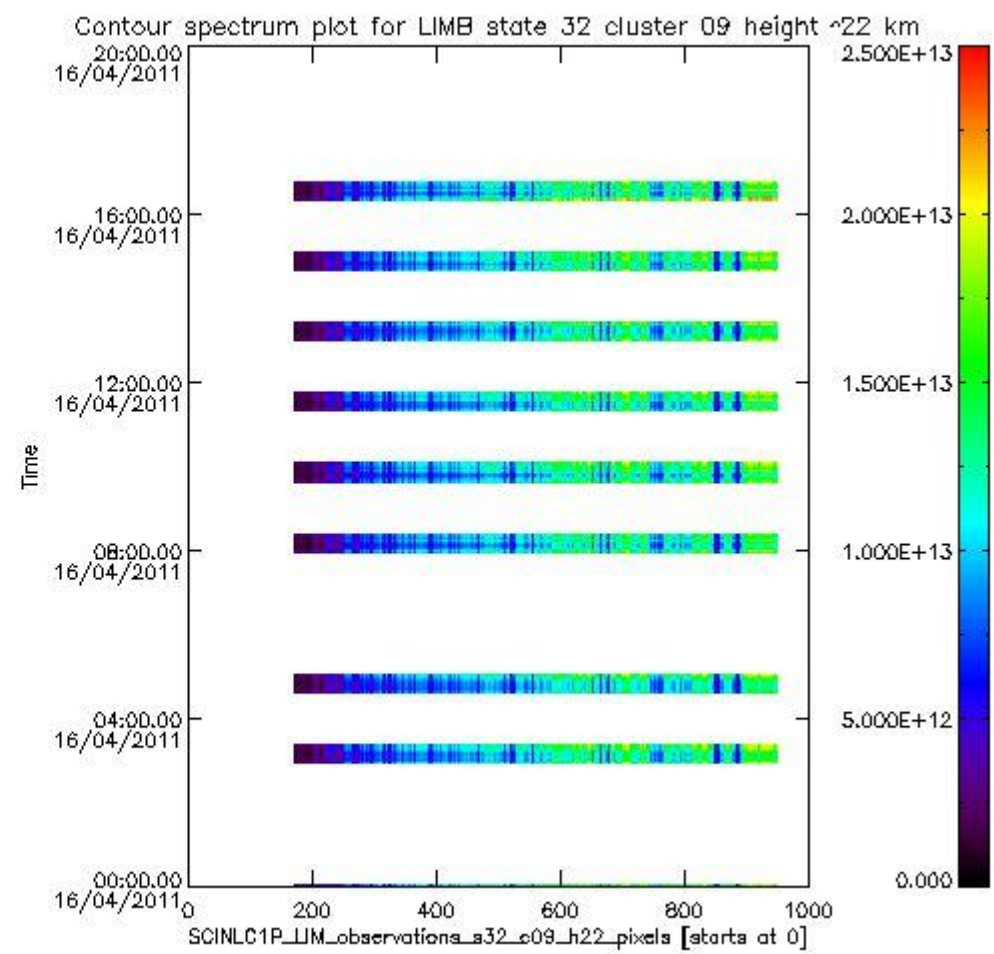
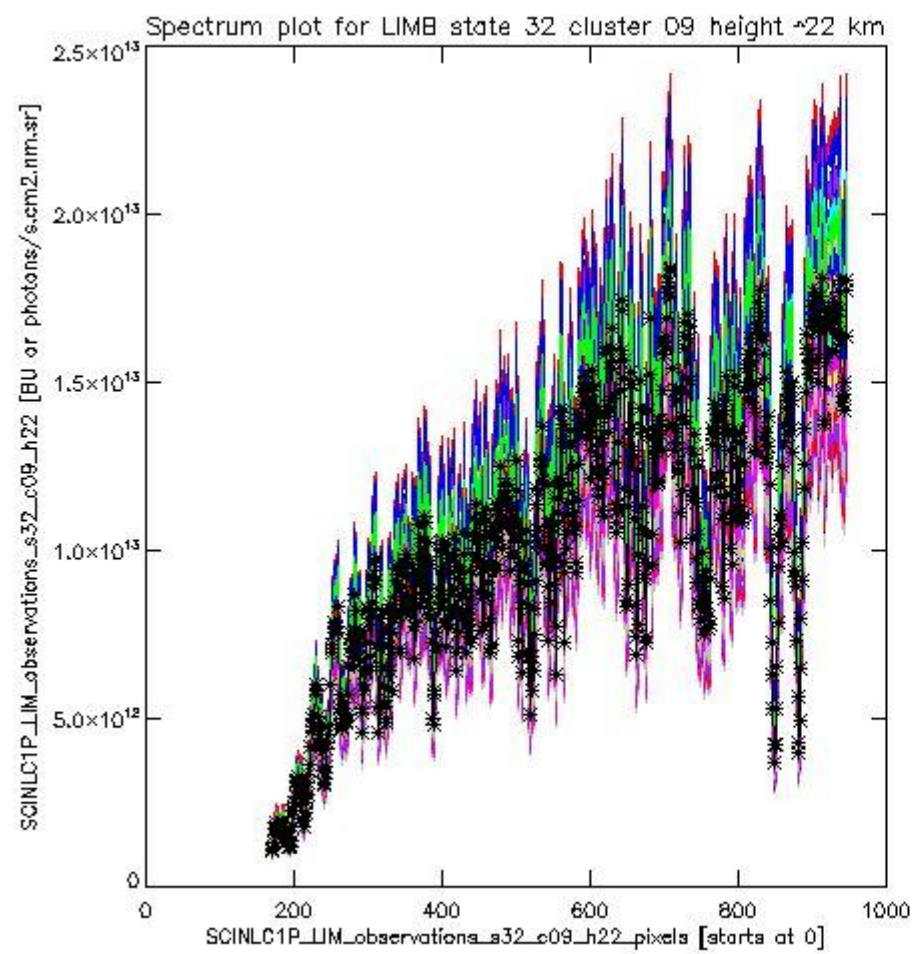
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_10.PNG



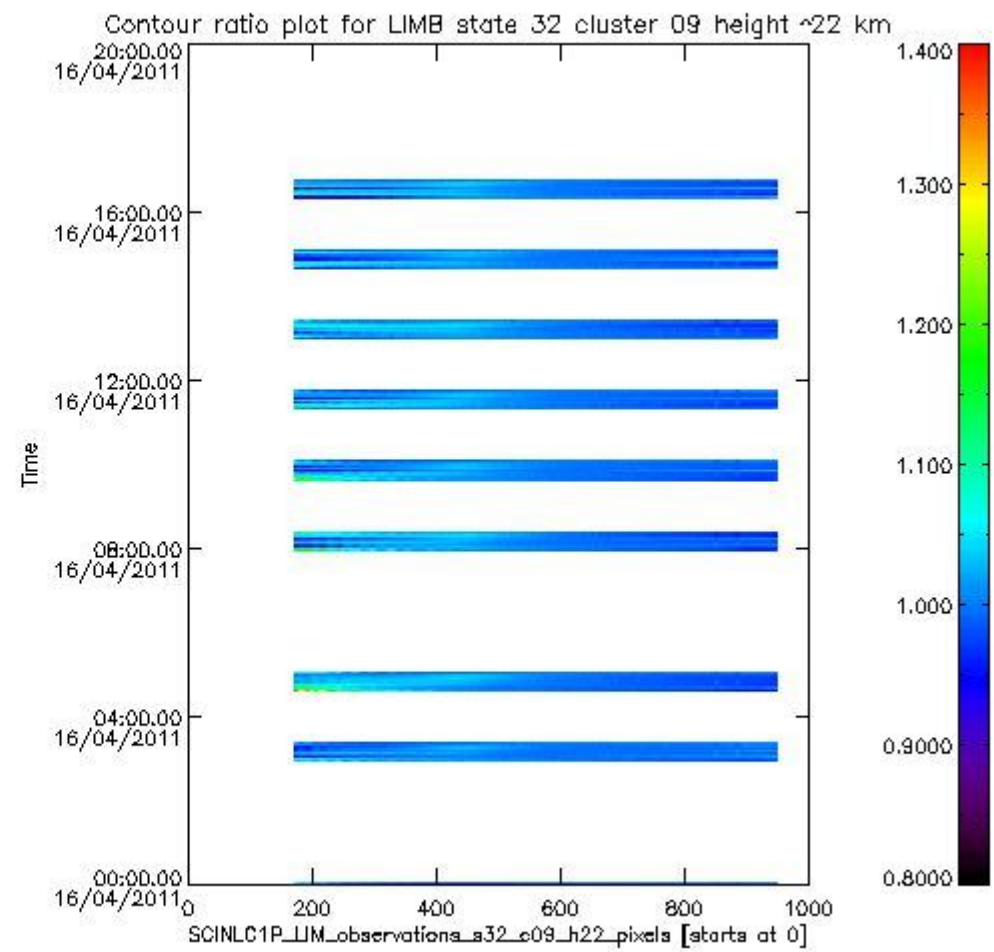
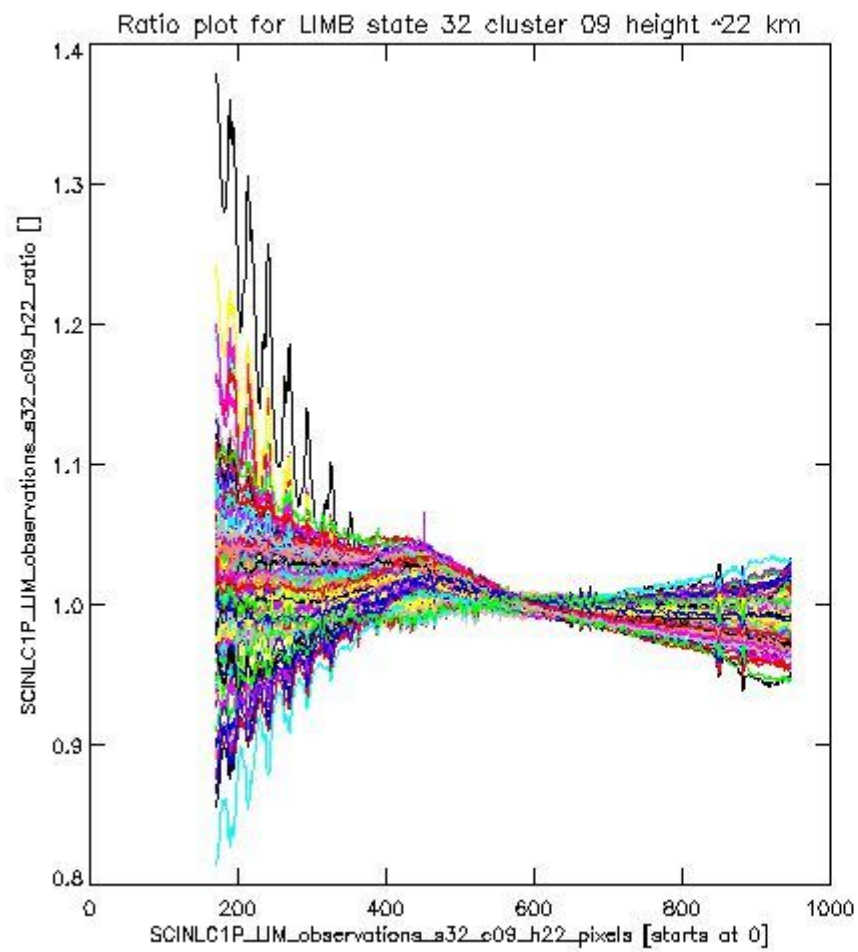
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_11.PNG

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	16APR2011 00:01:53.980
Start time of last sample	16APR2011 16:44:10.078
Reference period start time	17MAR2011 01:17:59.646
Reference period stop time	15APR2011 23:59:51.242
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



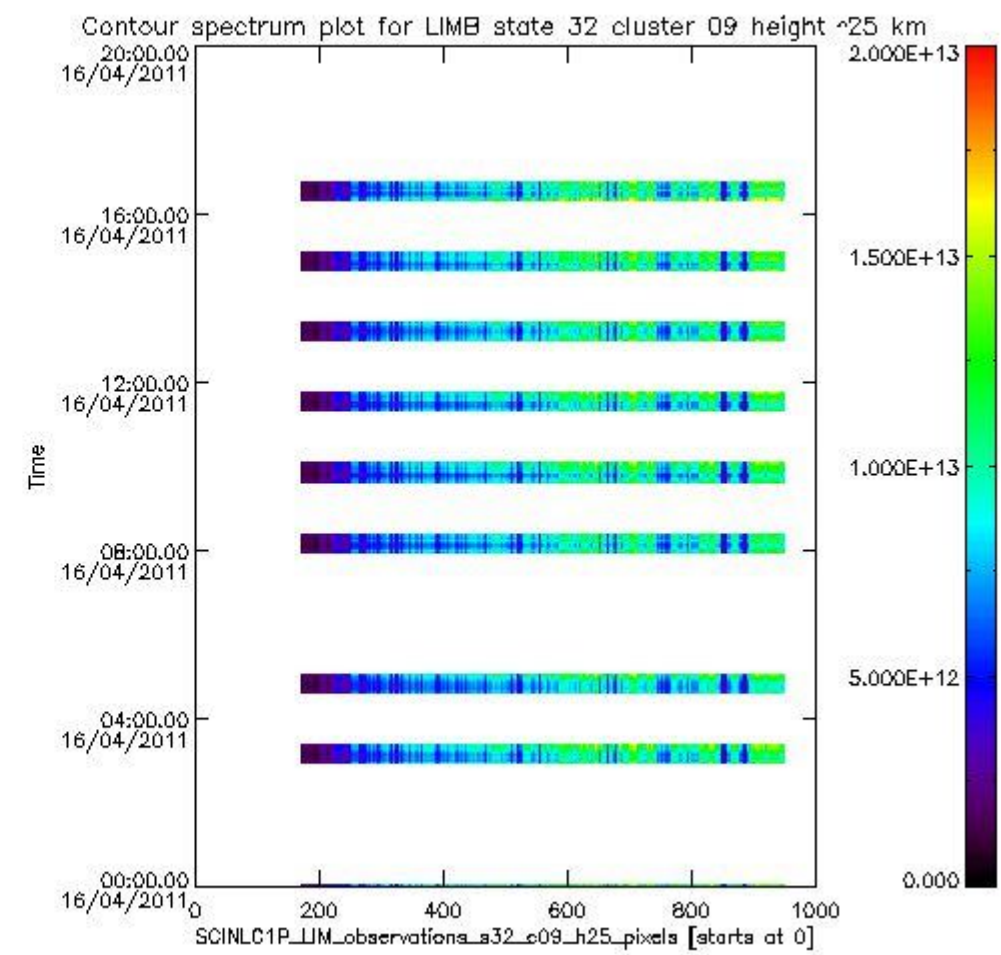
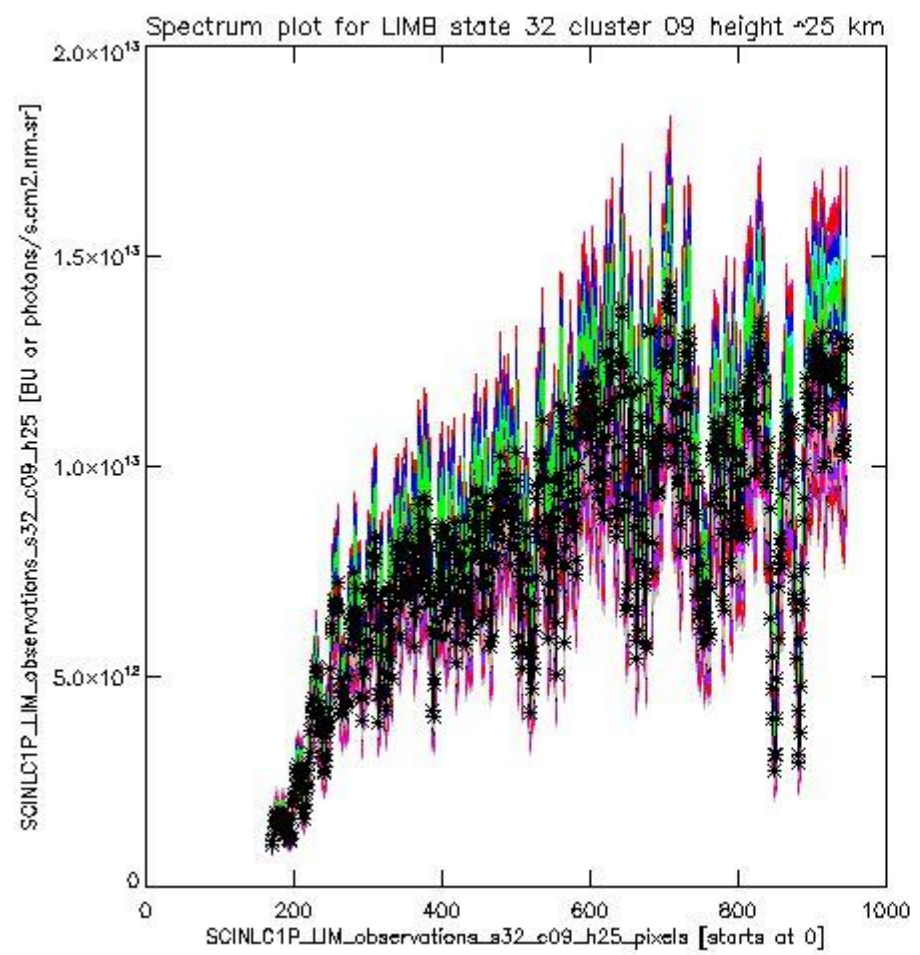
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_12.PNG



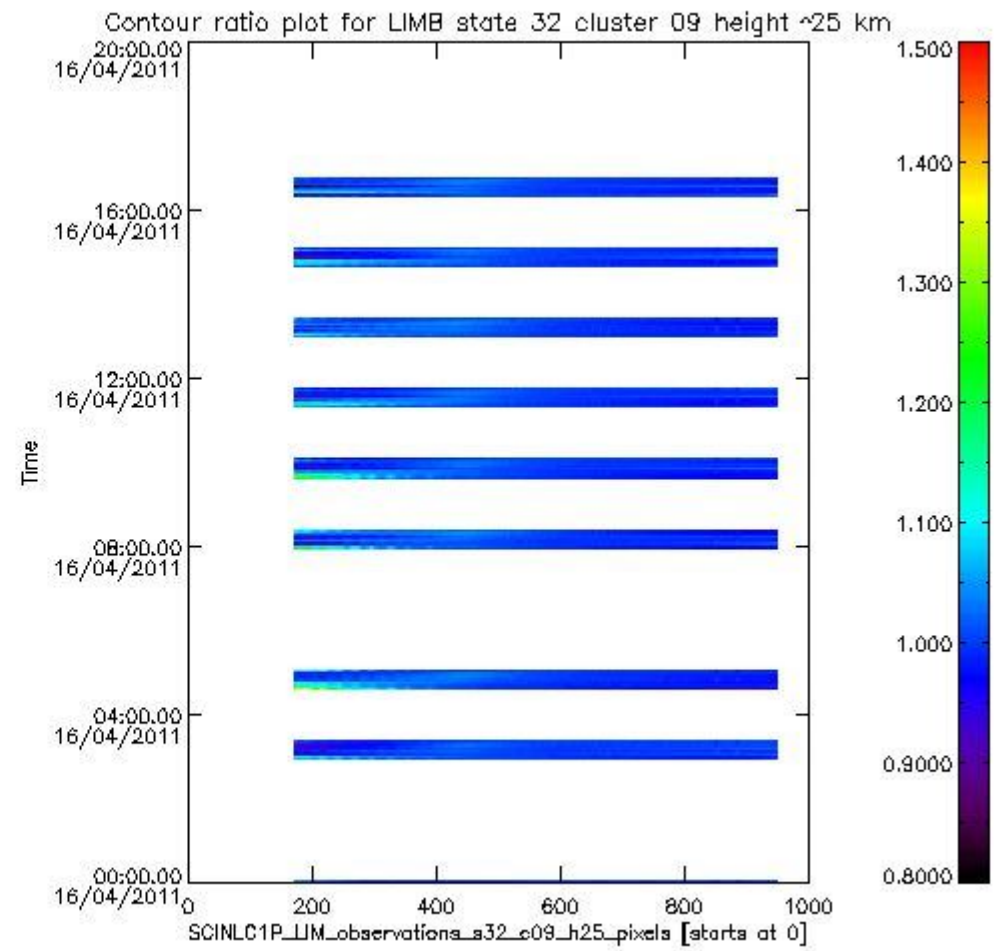
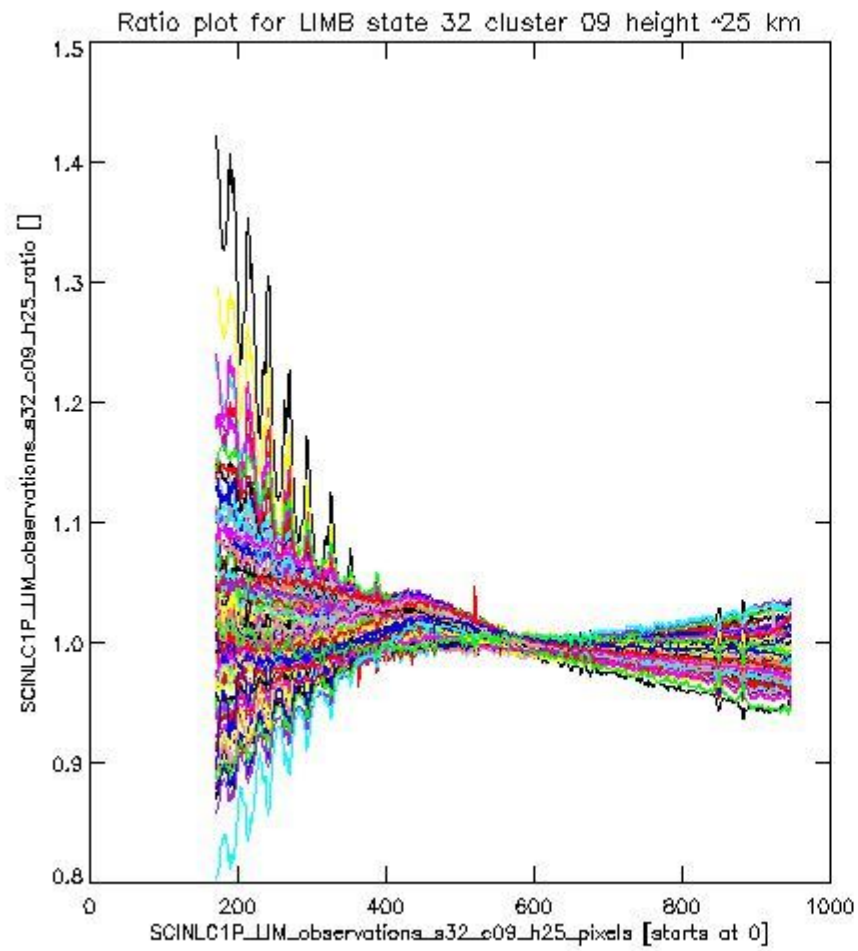
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110416_13.PNG

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	16APR2011 00:01:53.980
Start time of last sample	16APR2011 16:44:10.078
Reference period start time	17MAR2011 01:17:59.646
Reference period stop time	15APR2011 23:59:51.242
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



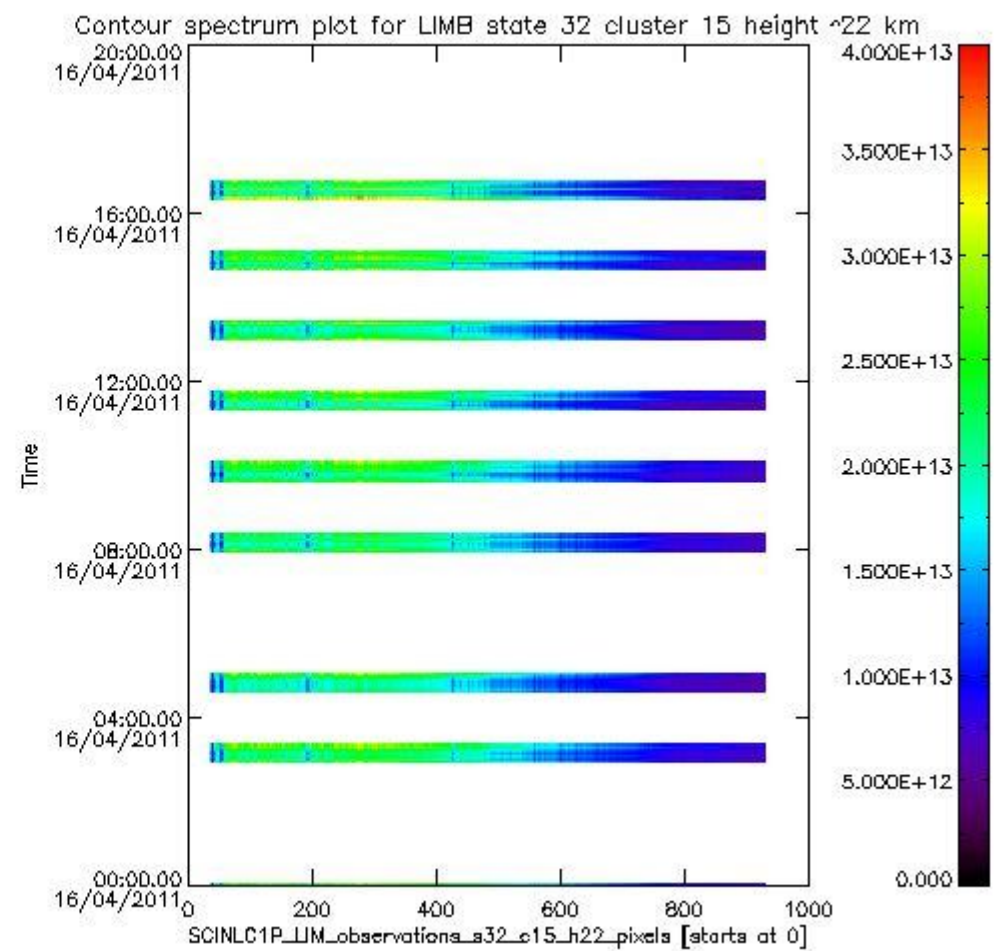
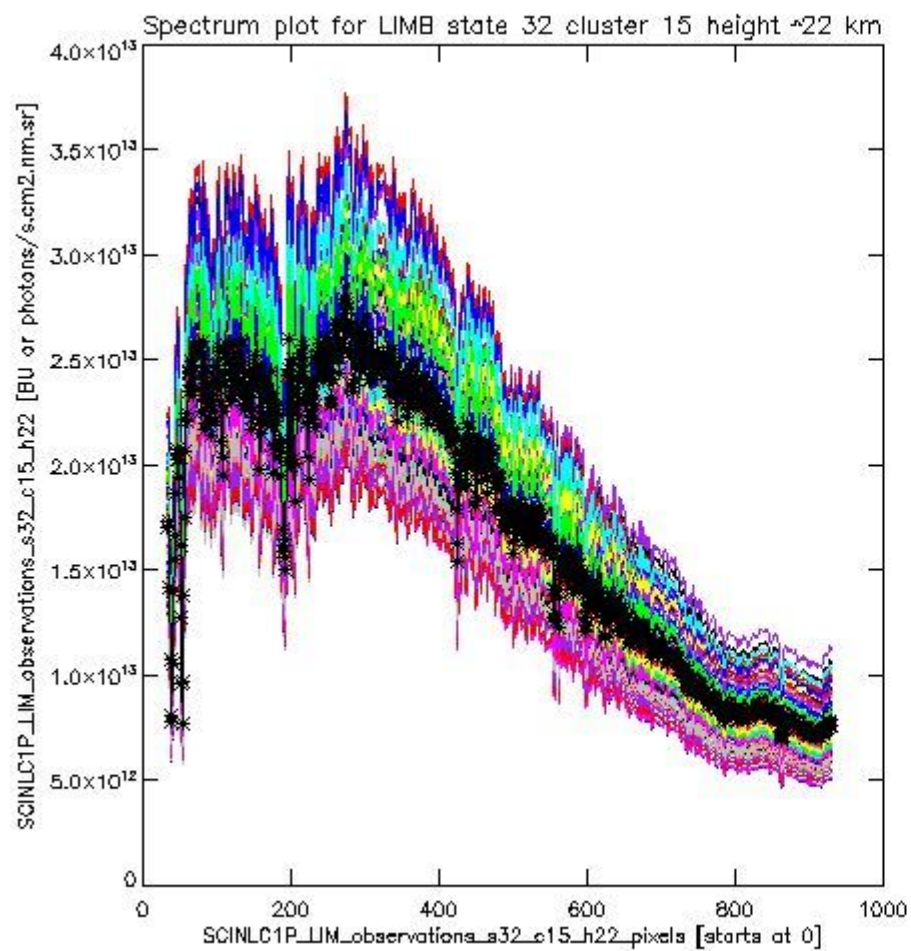
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110416_14.PNG



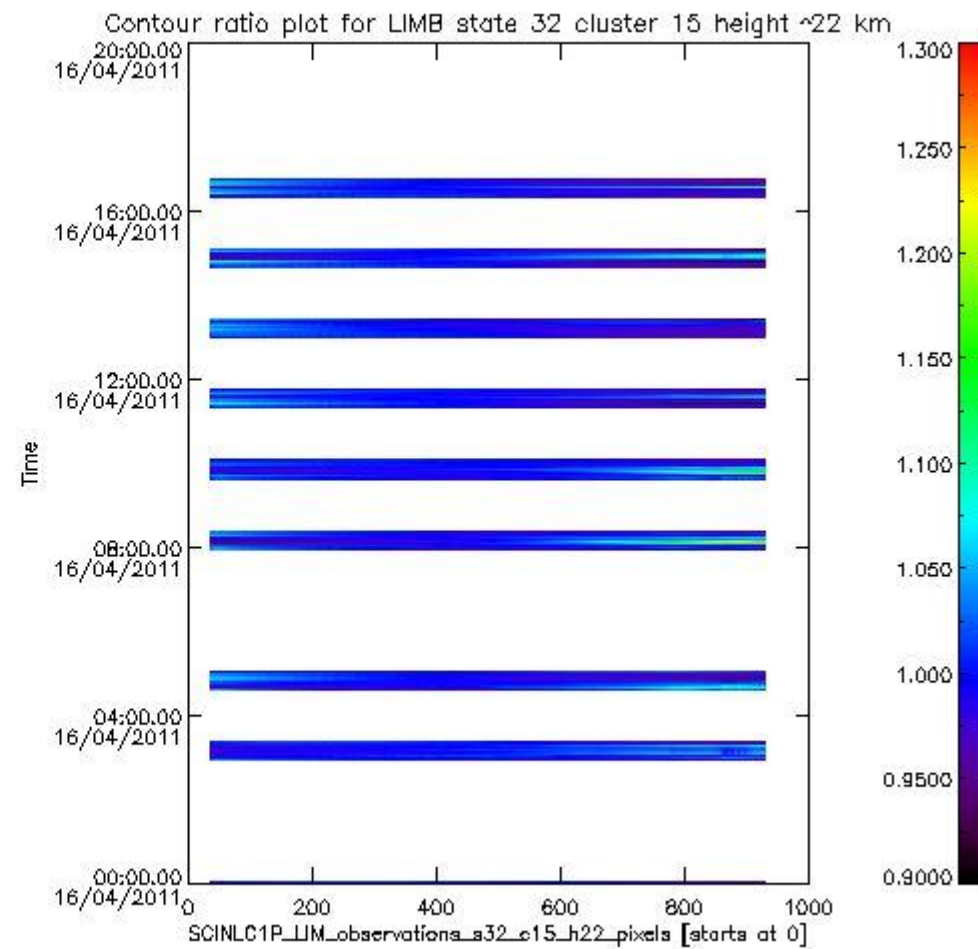
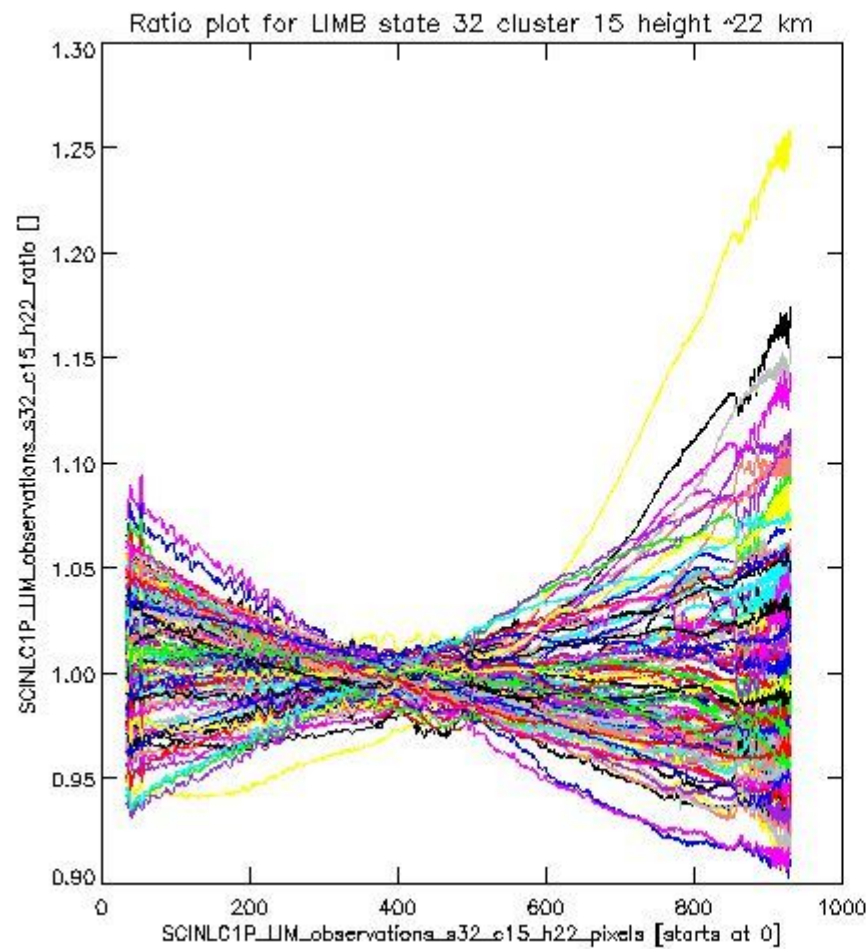
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110416_15.PNG

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	16APR2011 00:01:53.980
Start time of last sample	16APR2011 16:44:10.078
Reference period start time	17MAR2011 01:17:59.646
Reference period stop time	15APR2011 23:59:51.242
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



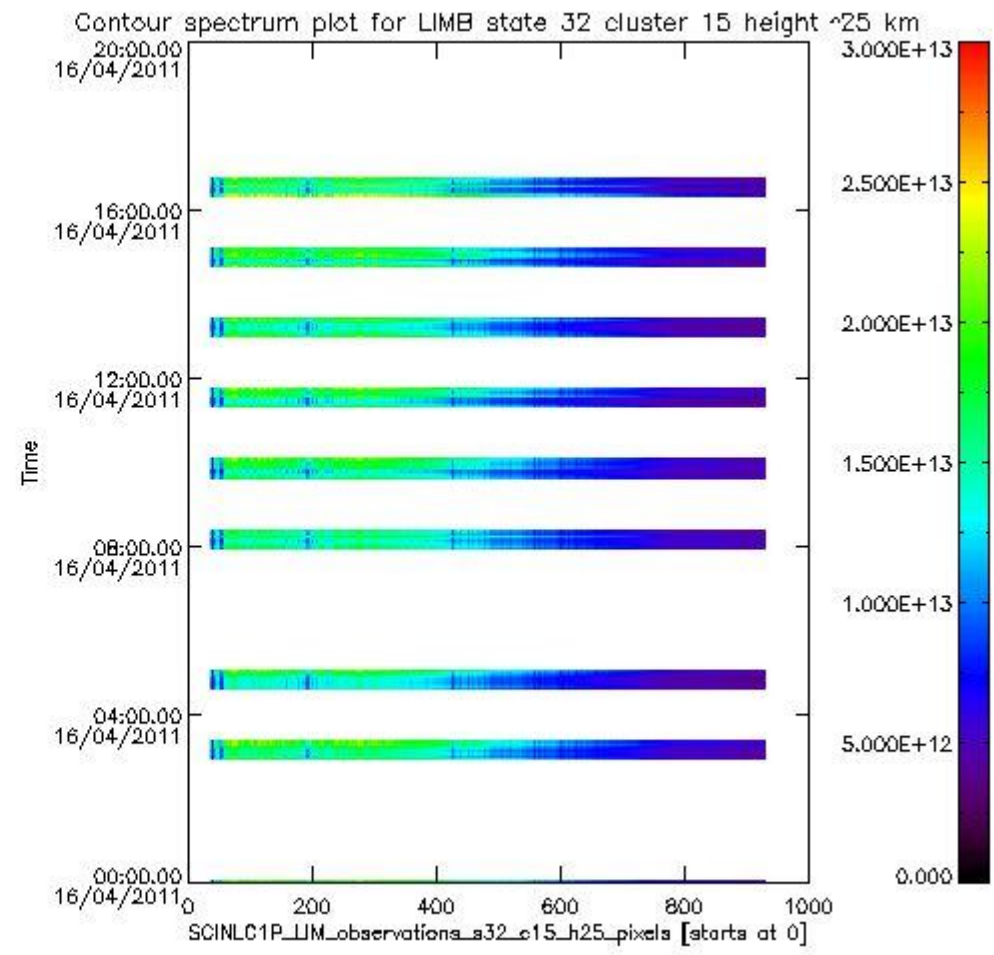
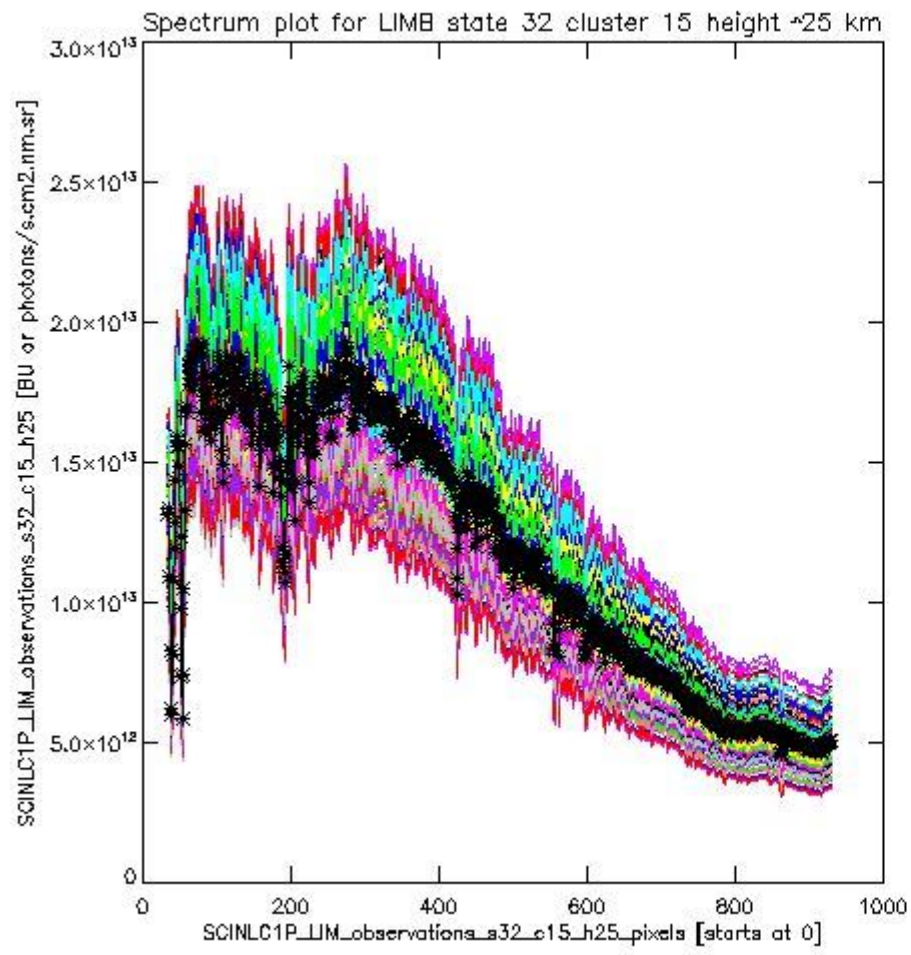
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110416_16.PNG



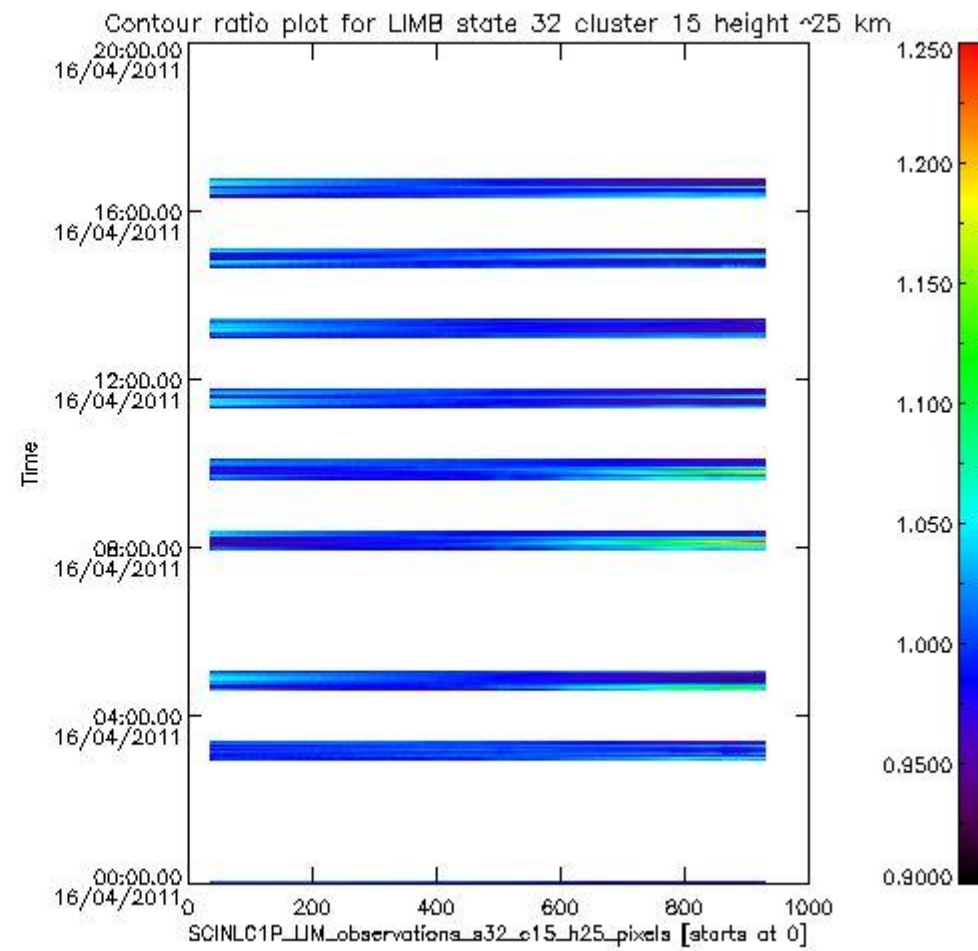
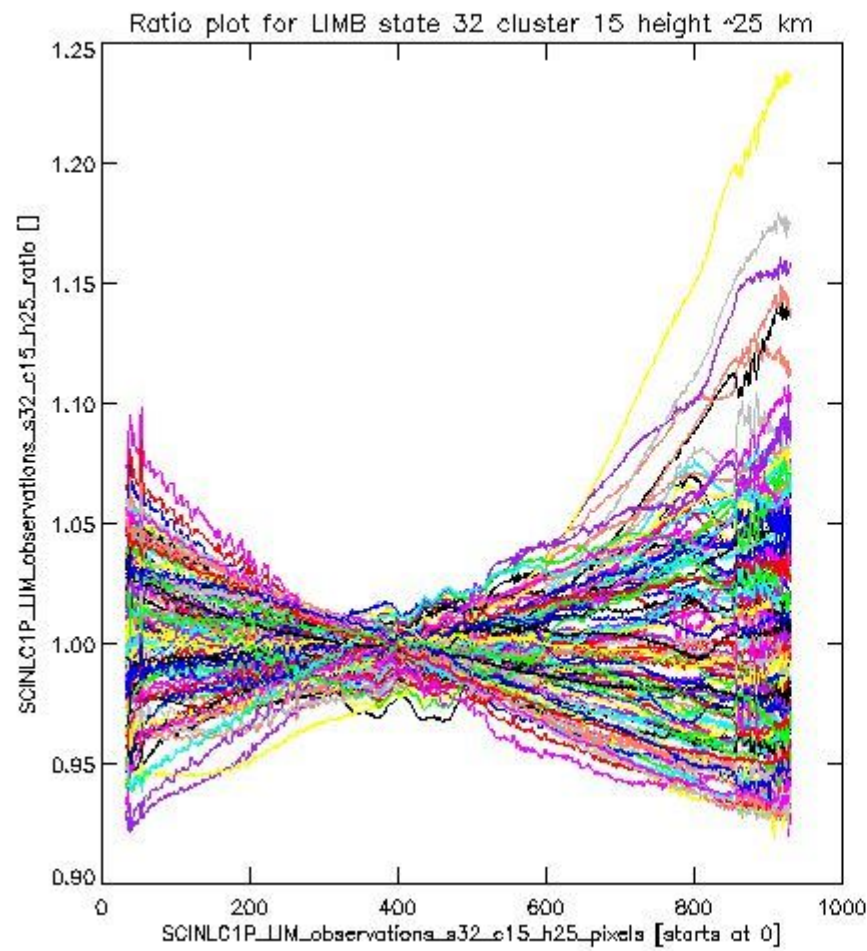
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110416_17.PNG

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	16APR2011 00:01:53.980
Start time of last sample	16APR2011 16:44:10.078
Reference period start time	17MAR2011 01:17:59.646
Reference period stop time	15APR2011 23:59:51.242
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



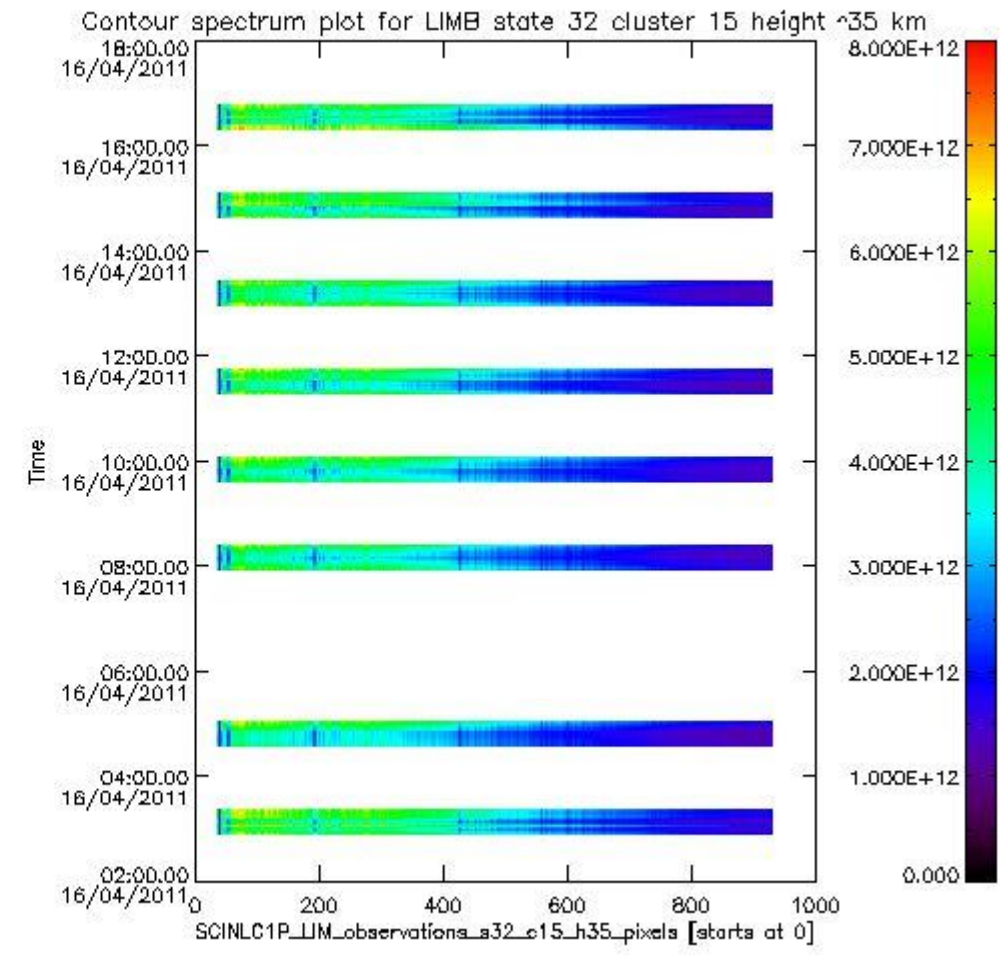
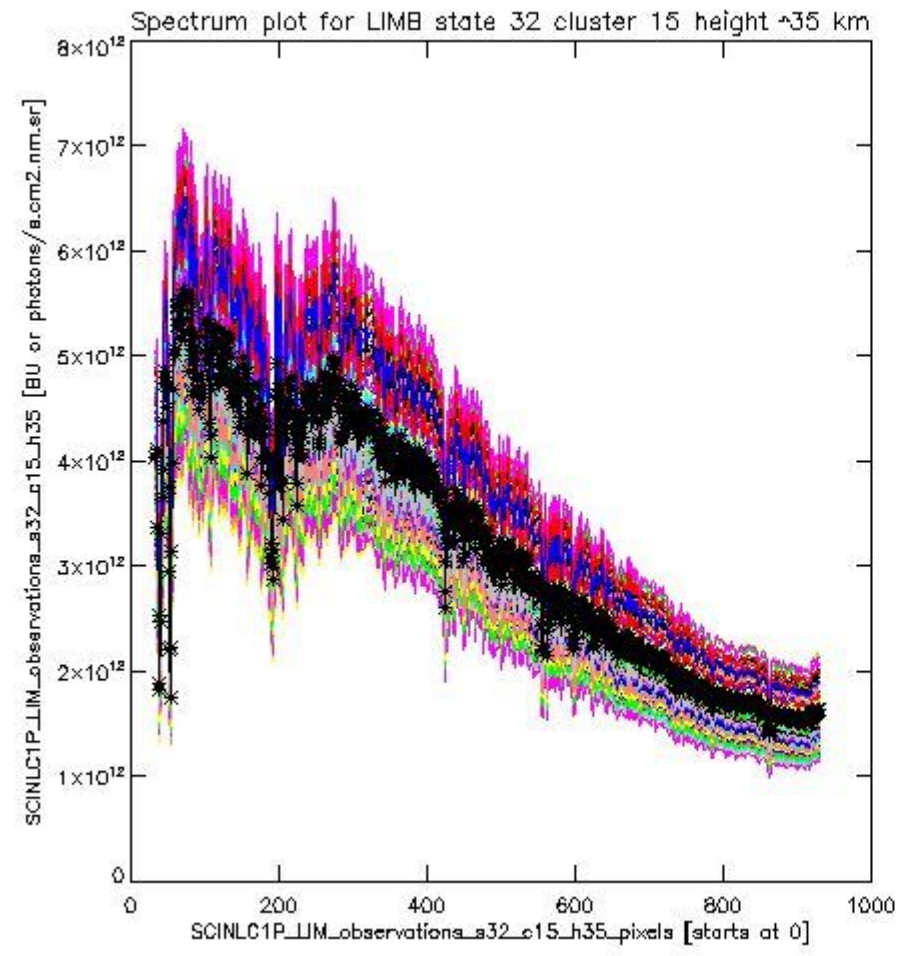
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110416_18.PNG



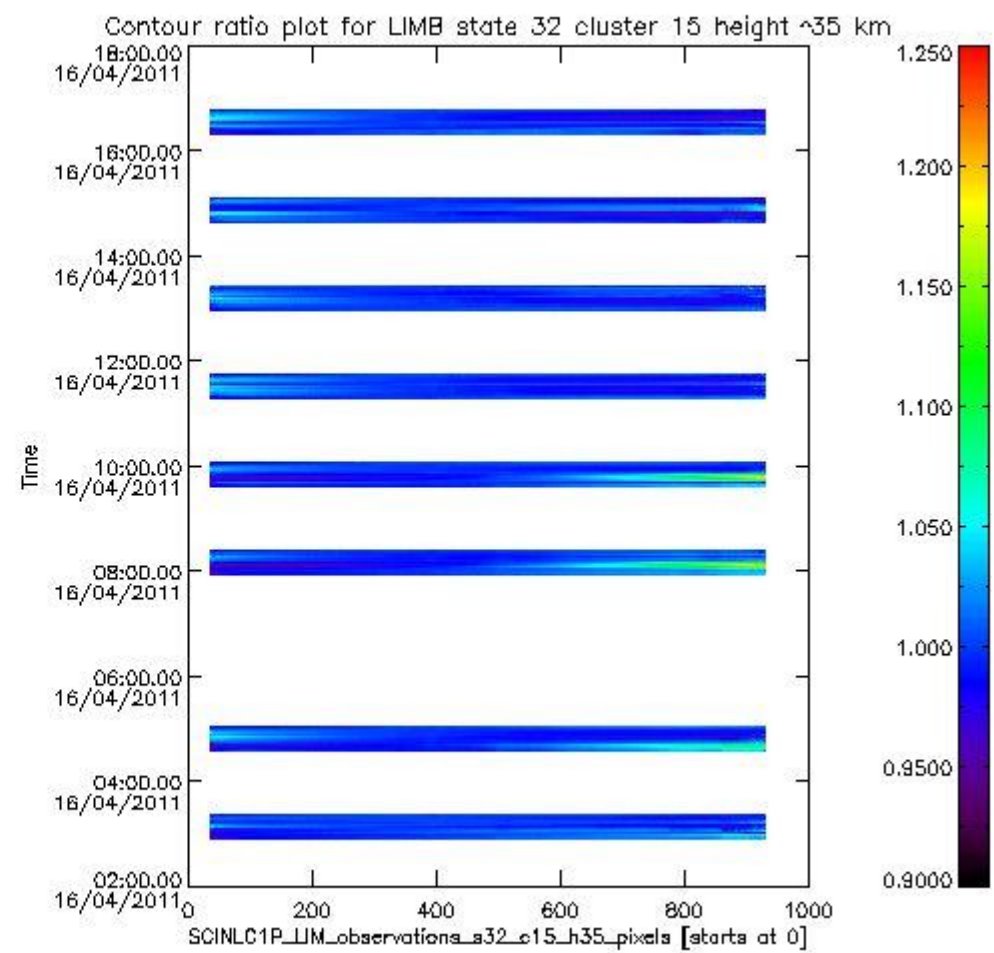
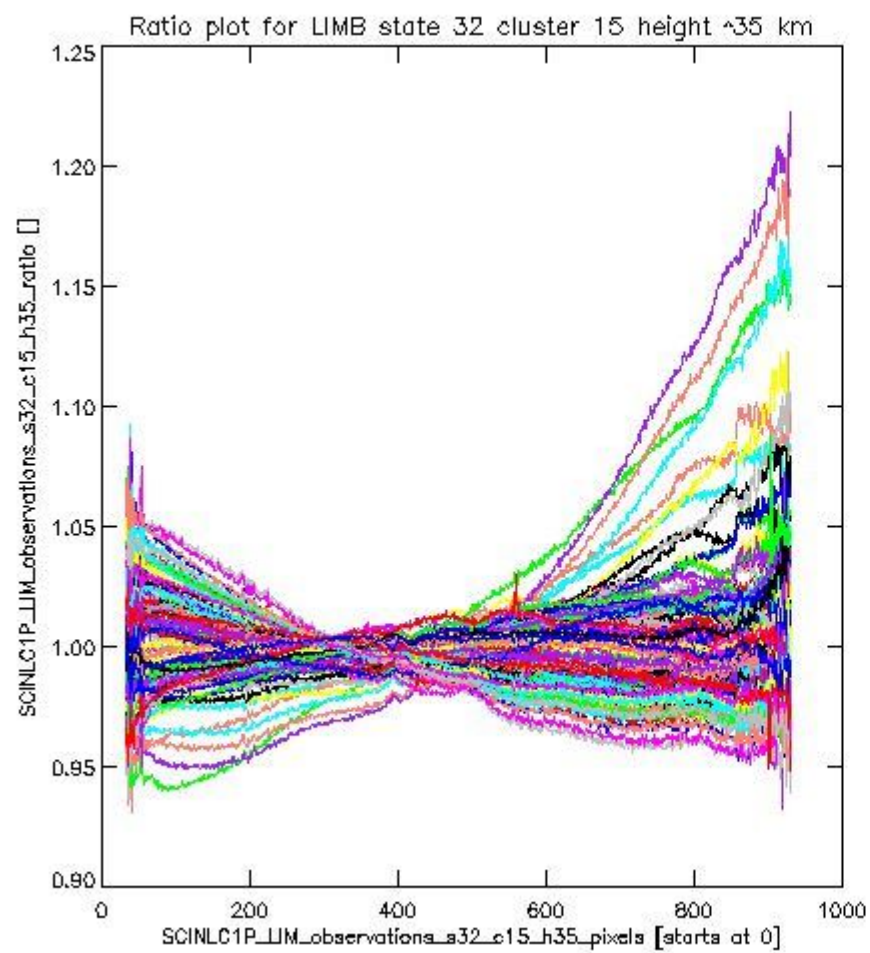
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110416_19.PNG

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:

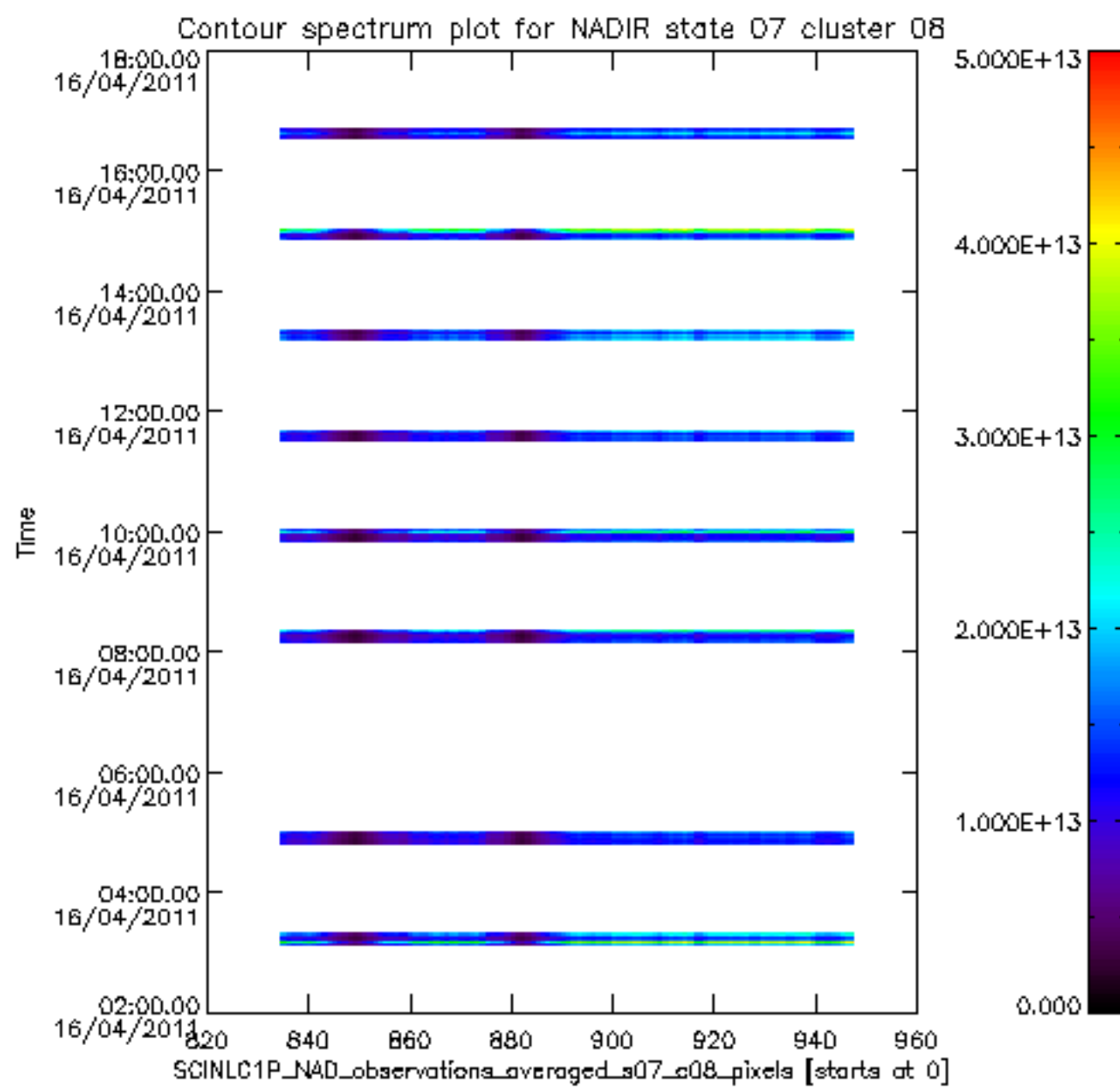
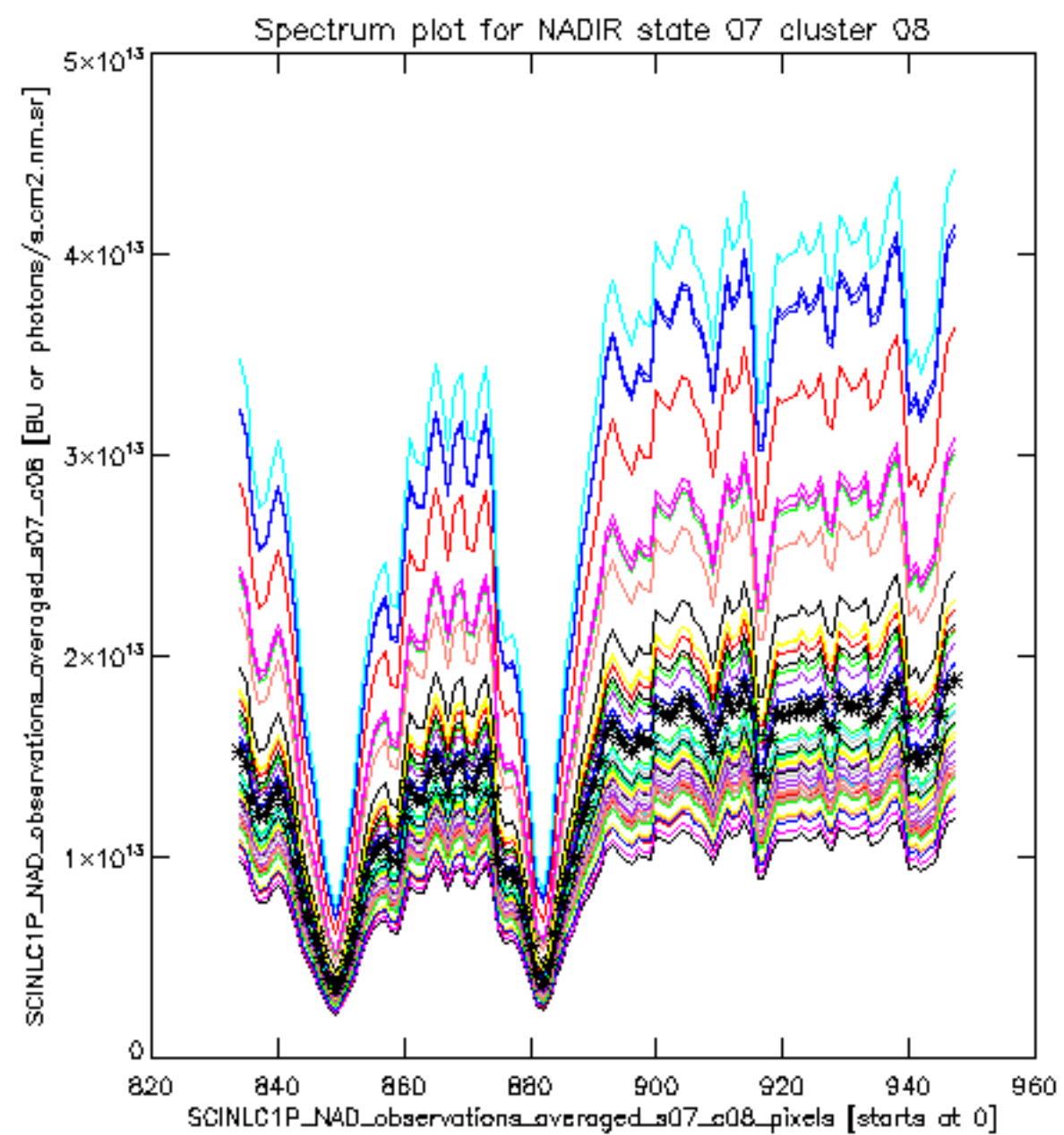
Item	Value
Start time of first sample	16APR2011 02:55:45.447
Start time of last sample	16APR2011 16:44:10.078
Reference period start time	17MAR2011 01:17:59.646
Reference period stop time	15APR2011 15:40:45.793
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

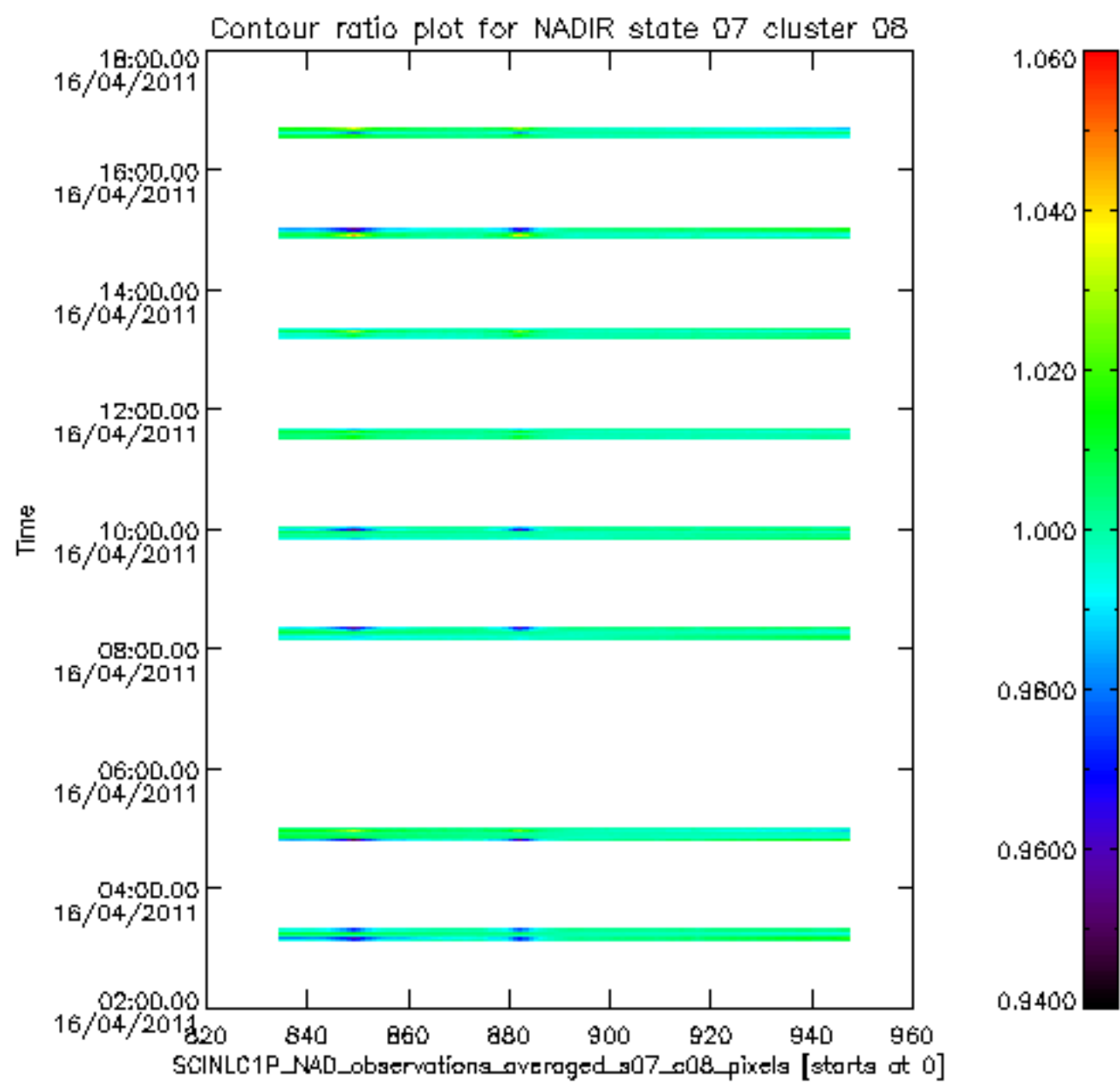
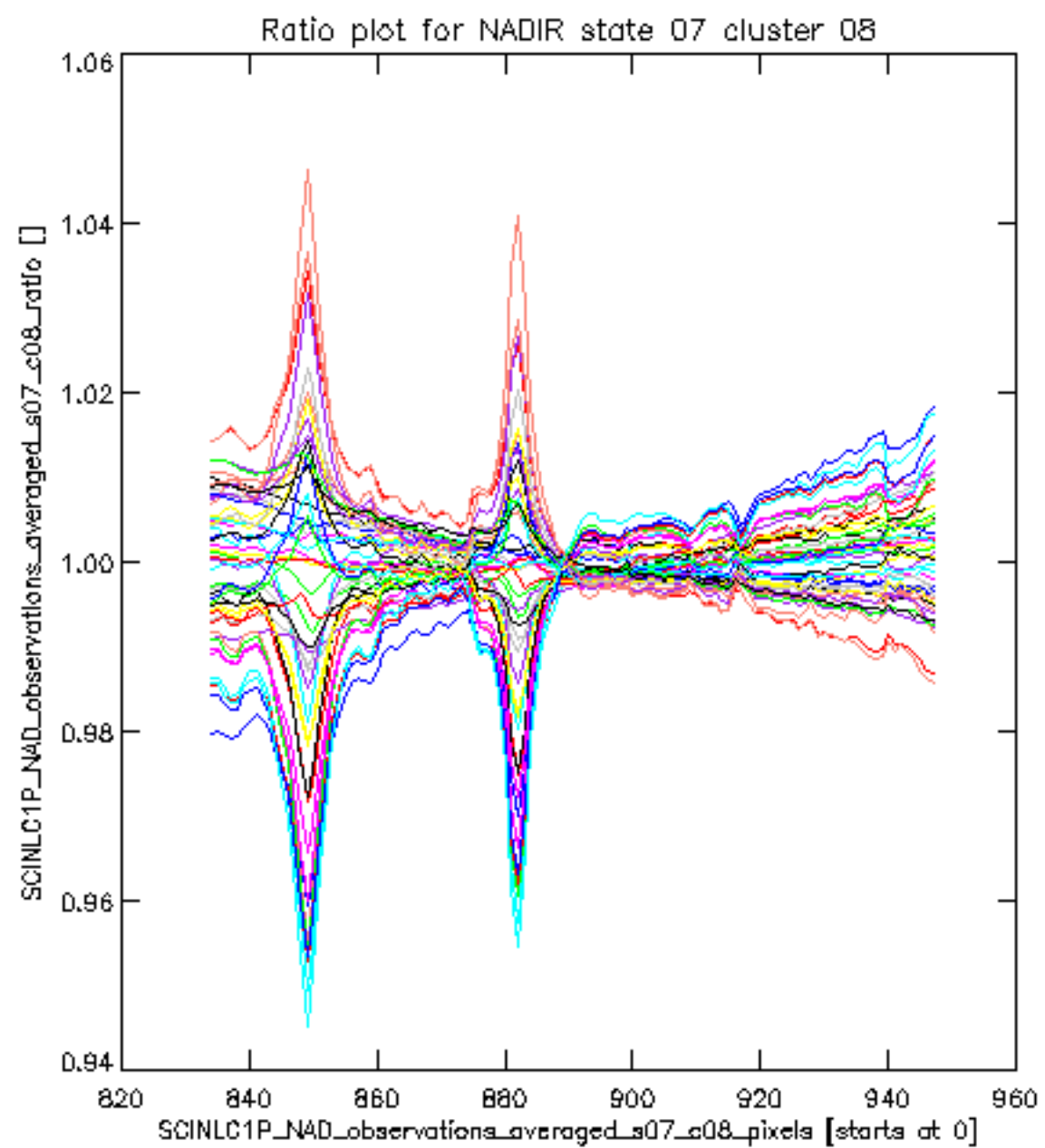


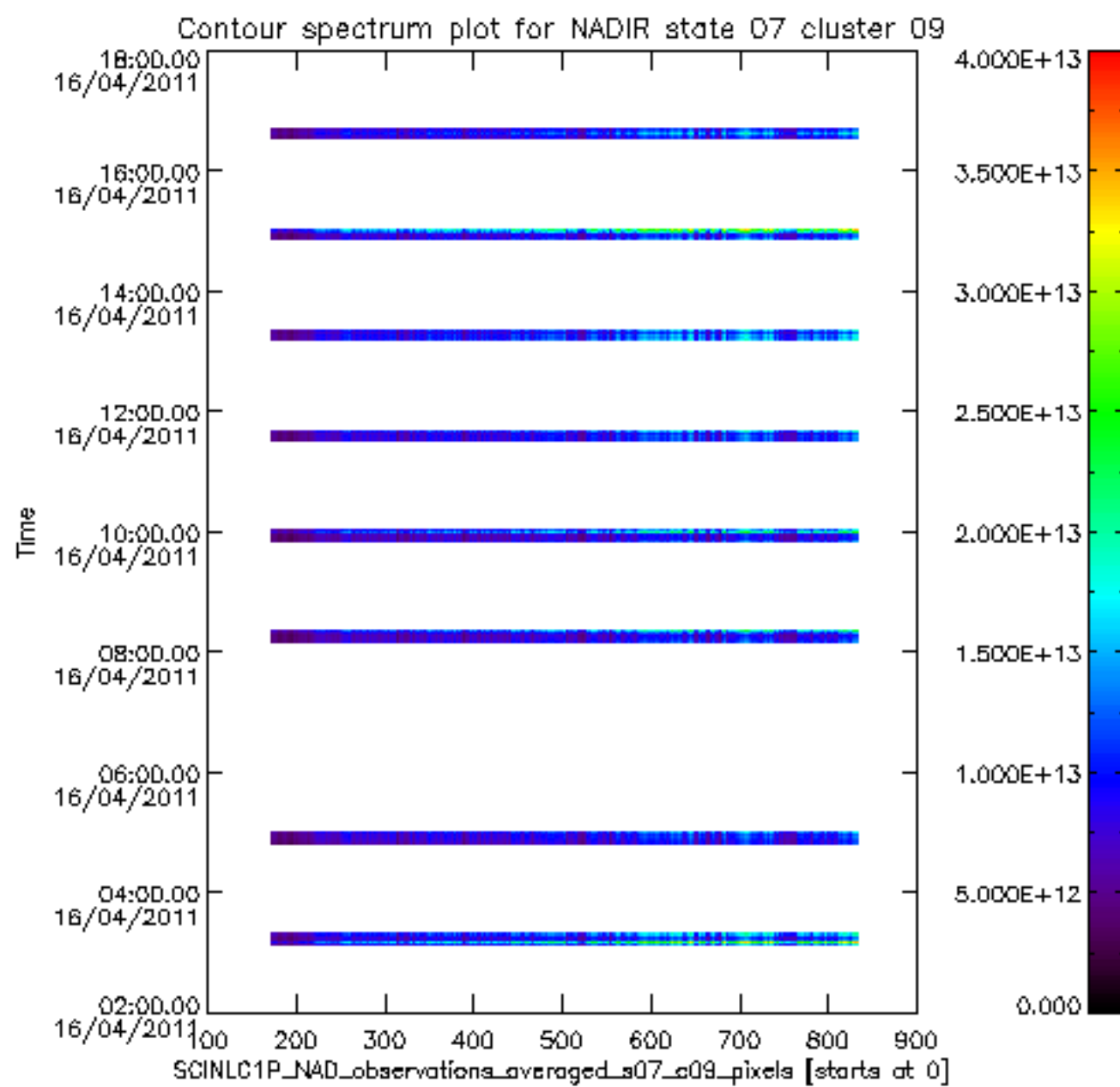
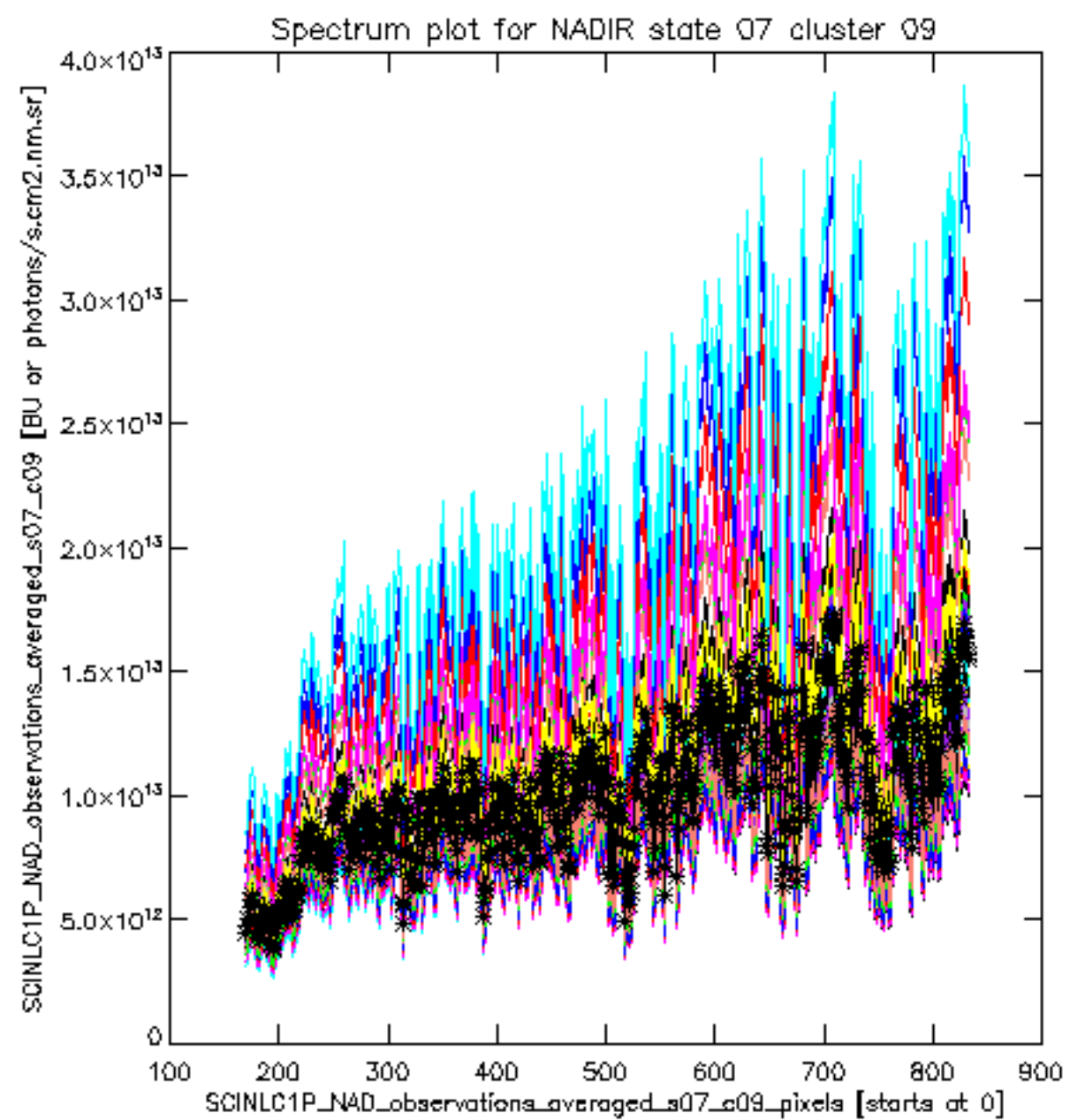
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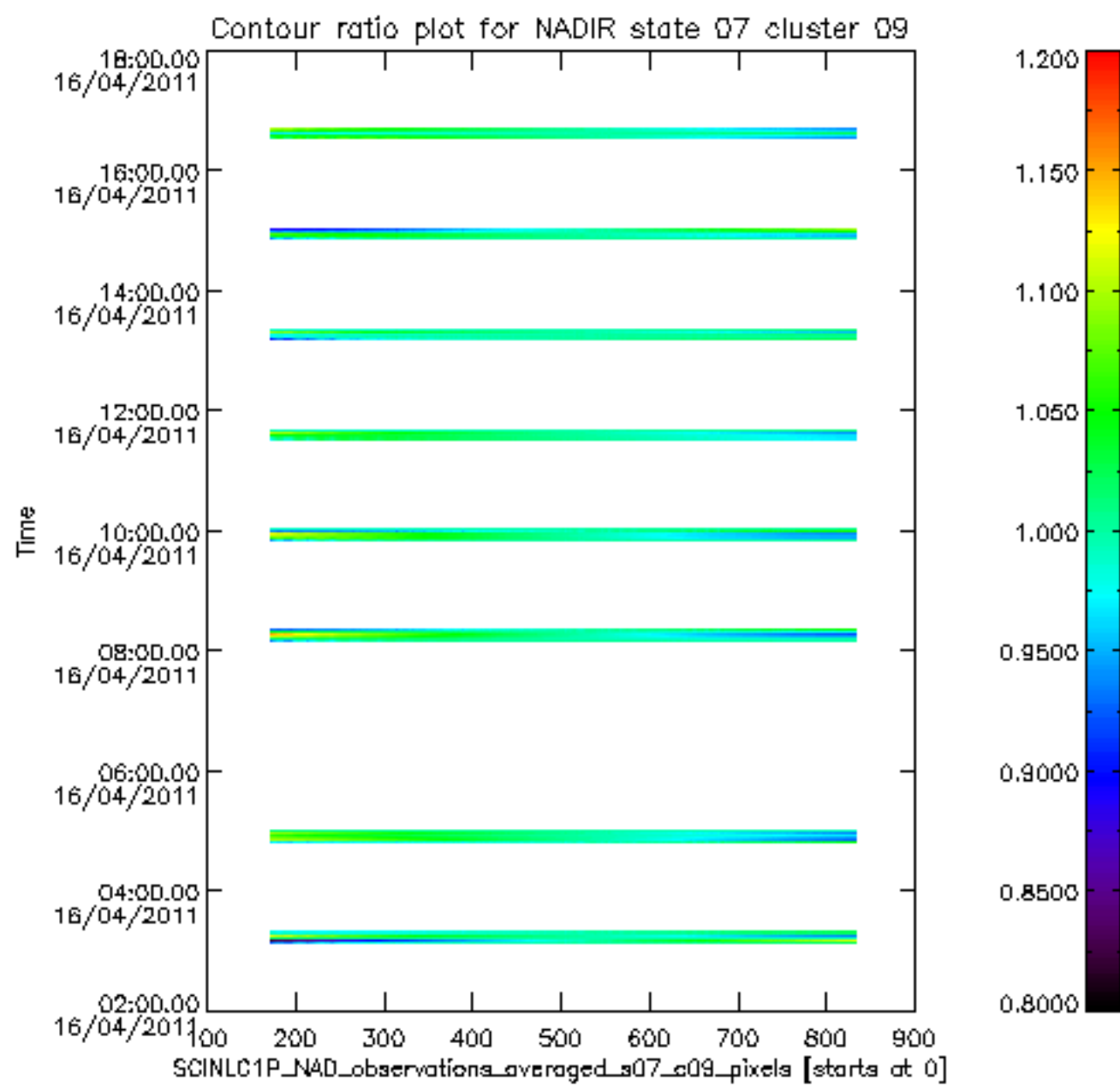
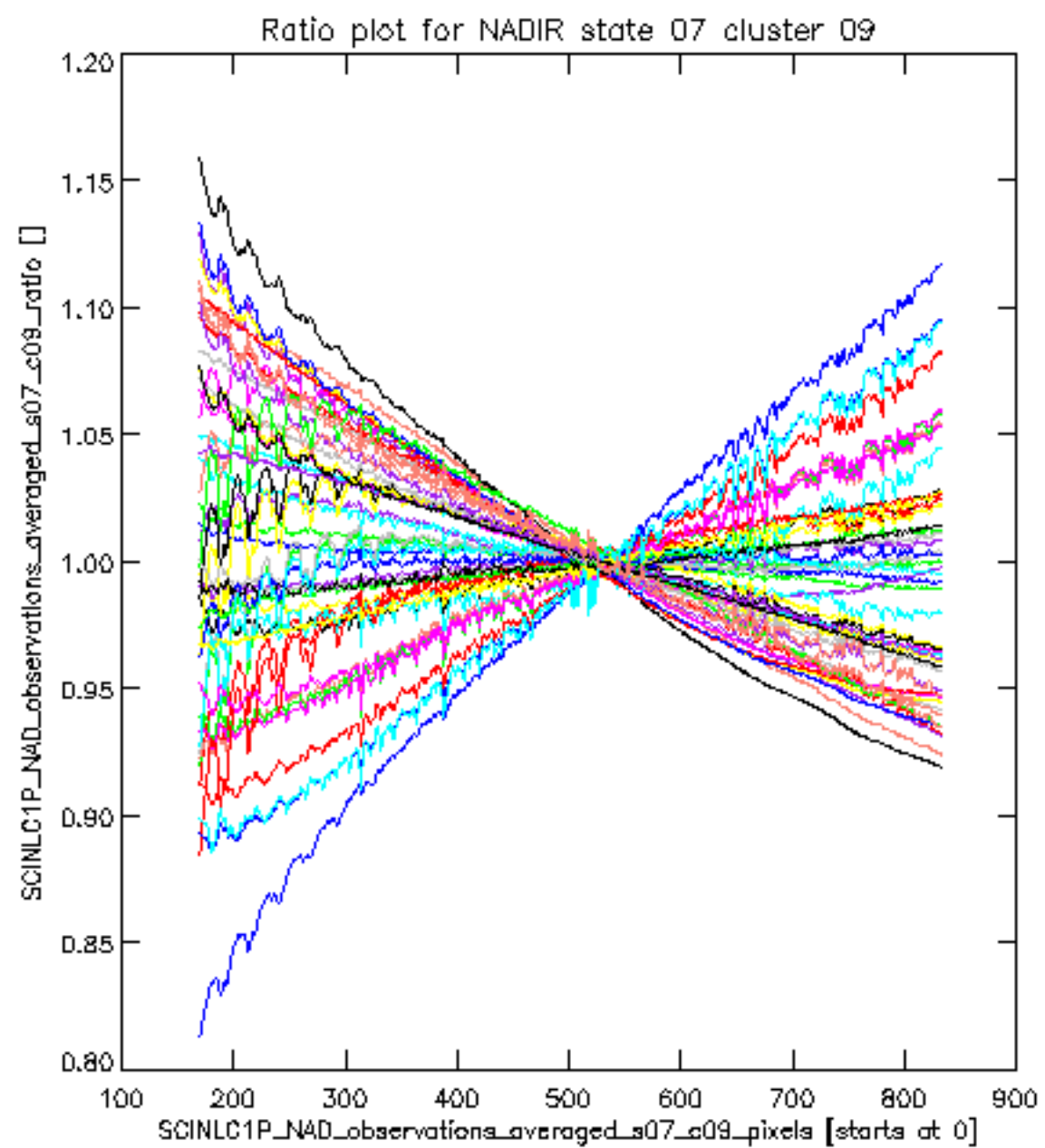


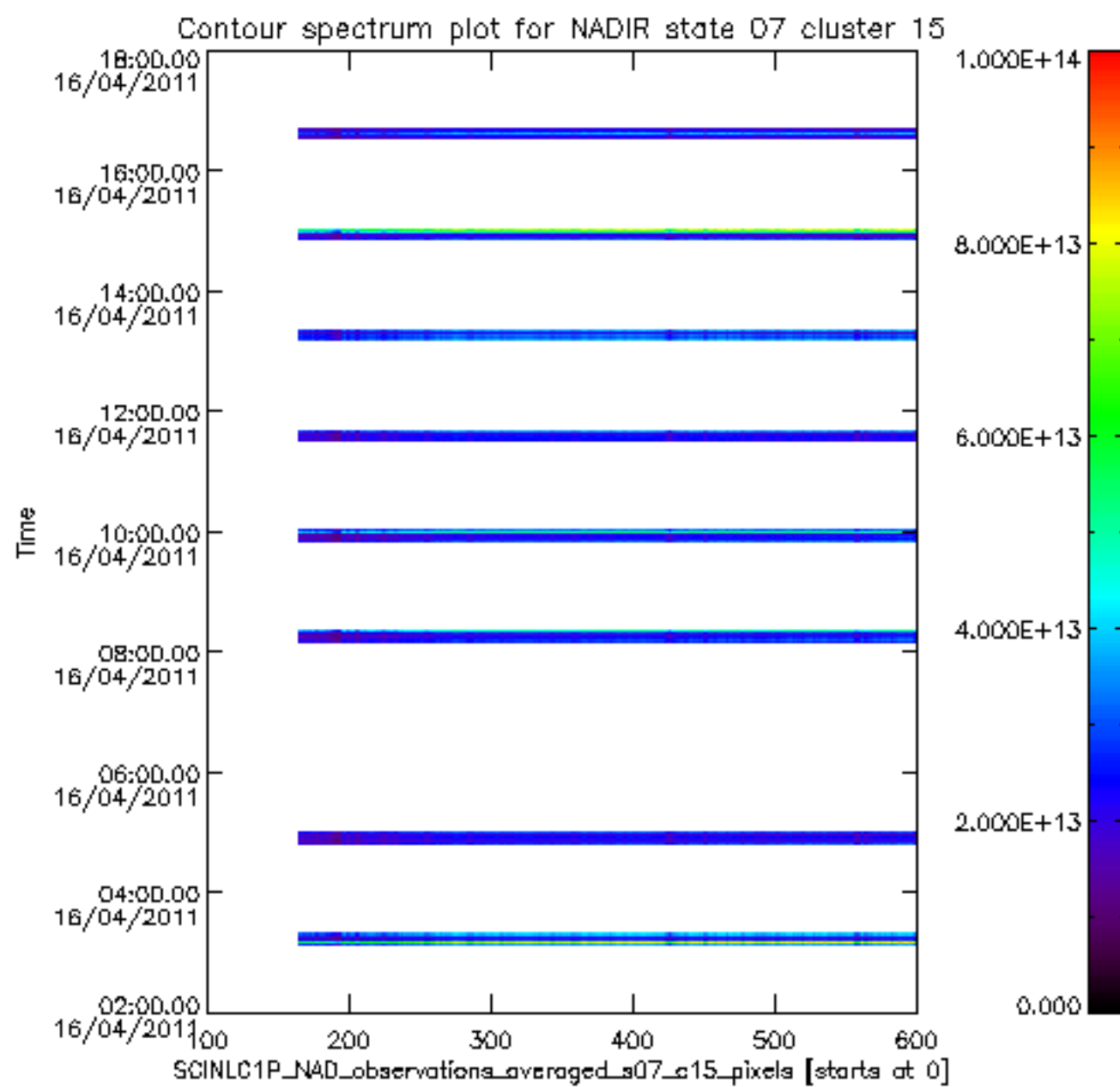
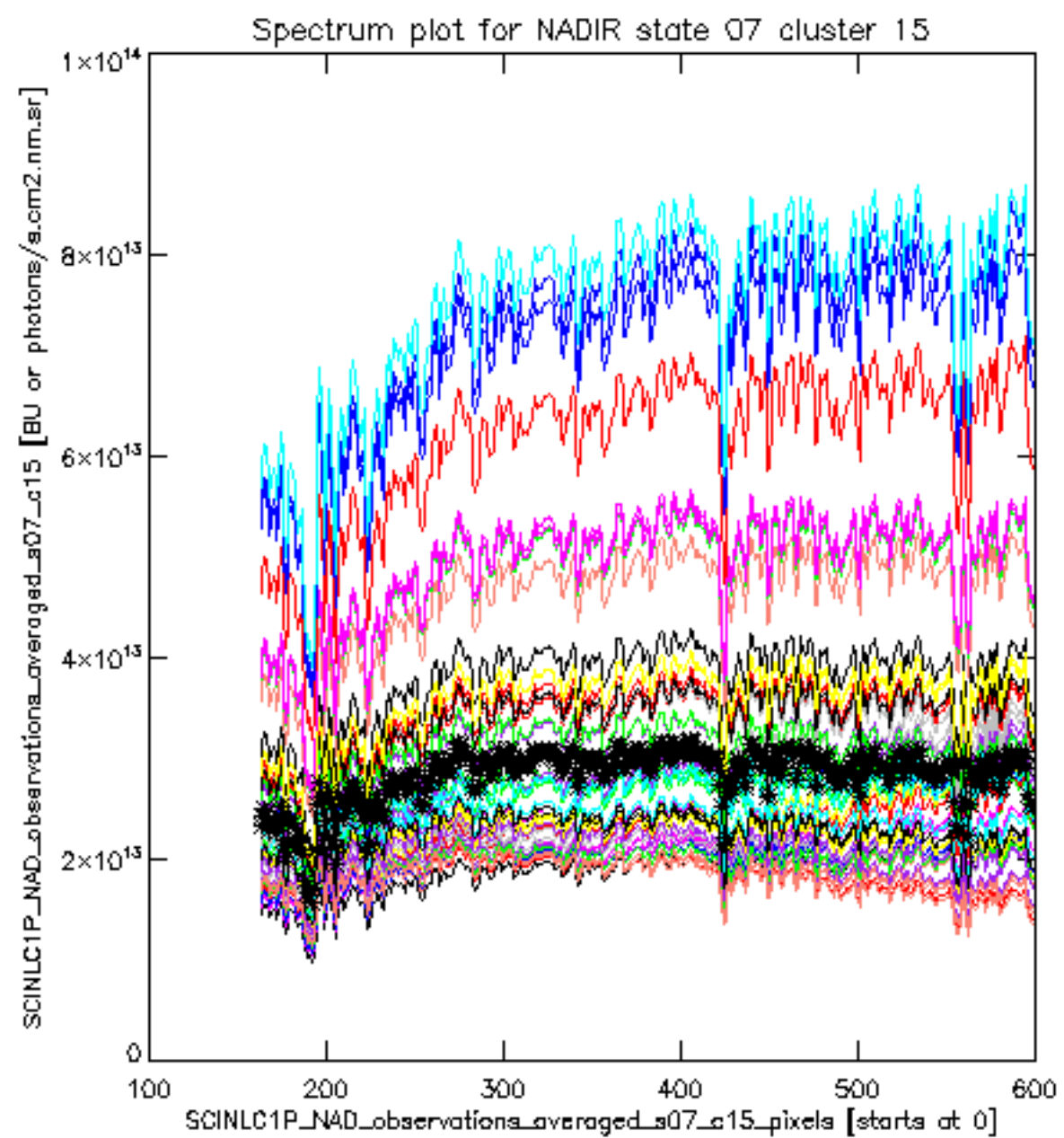
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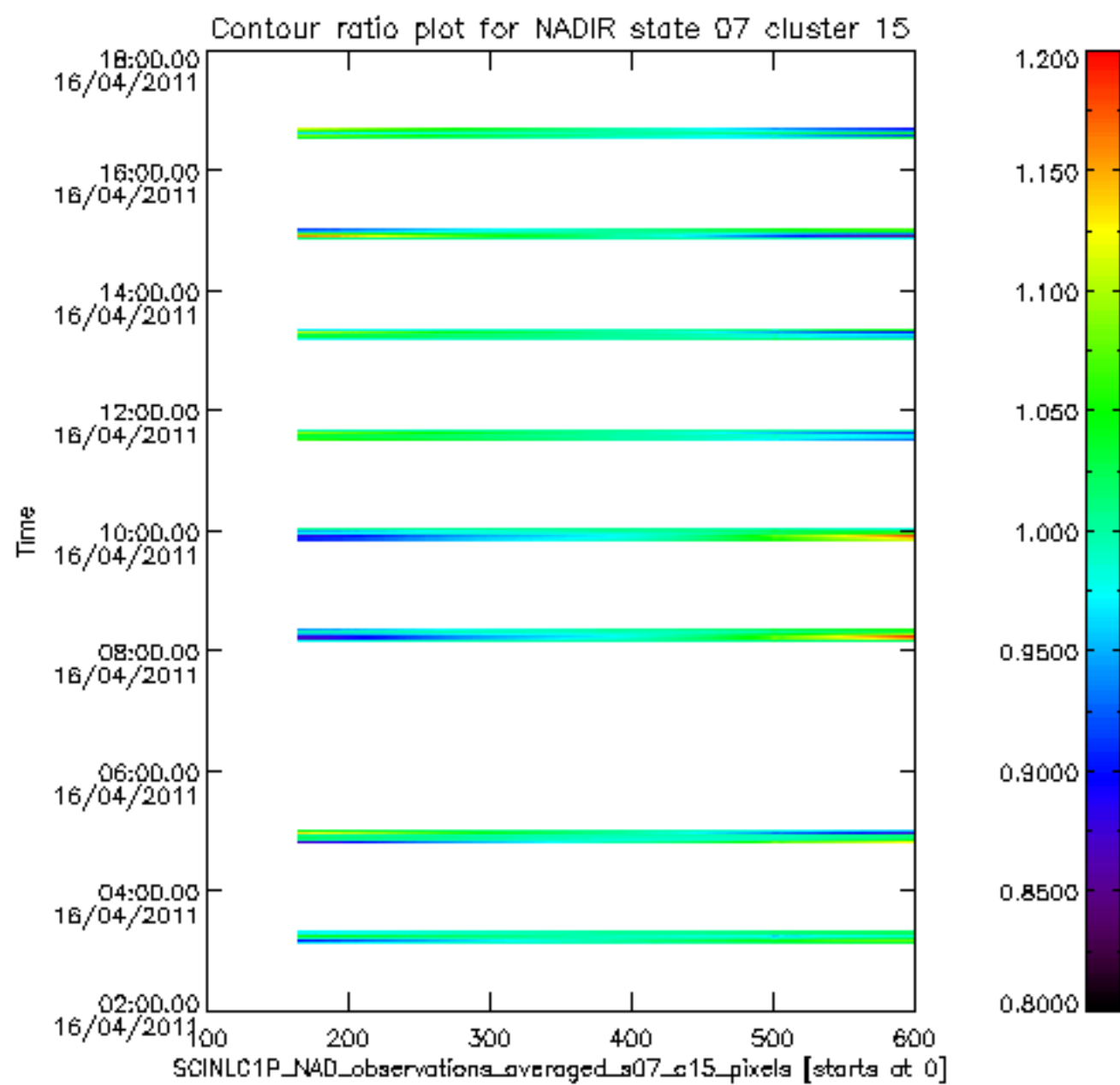
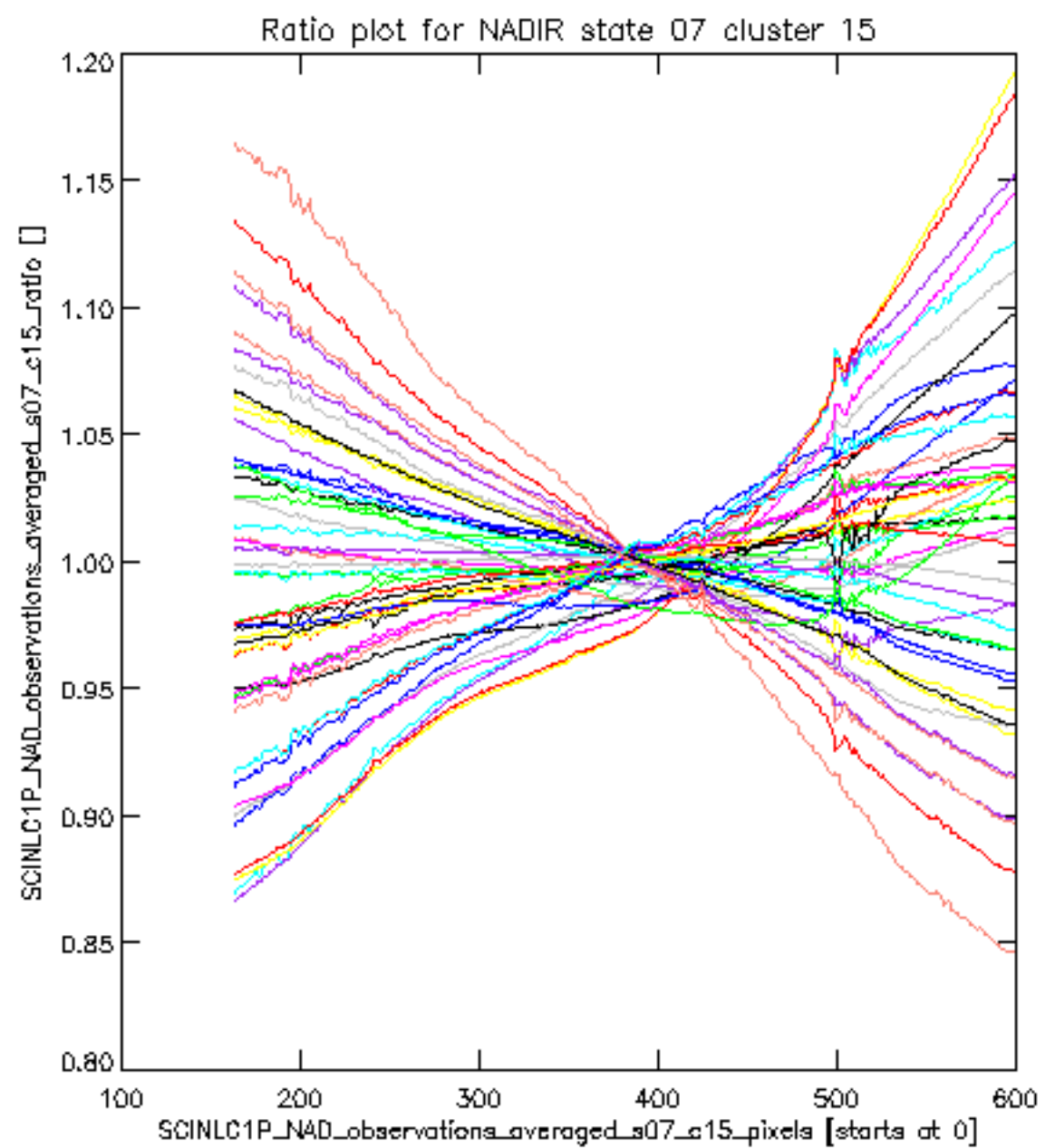


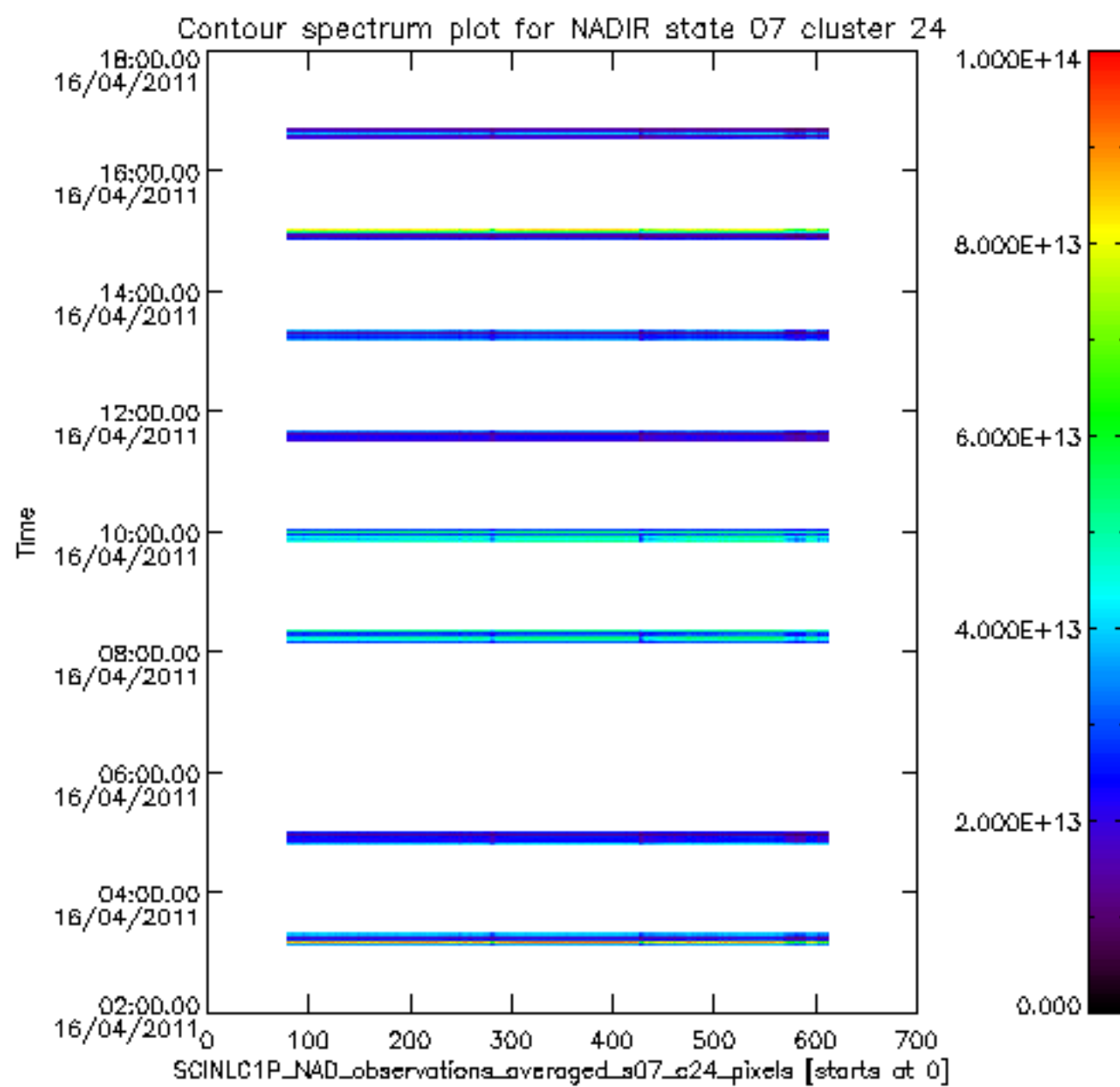
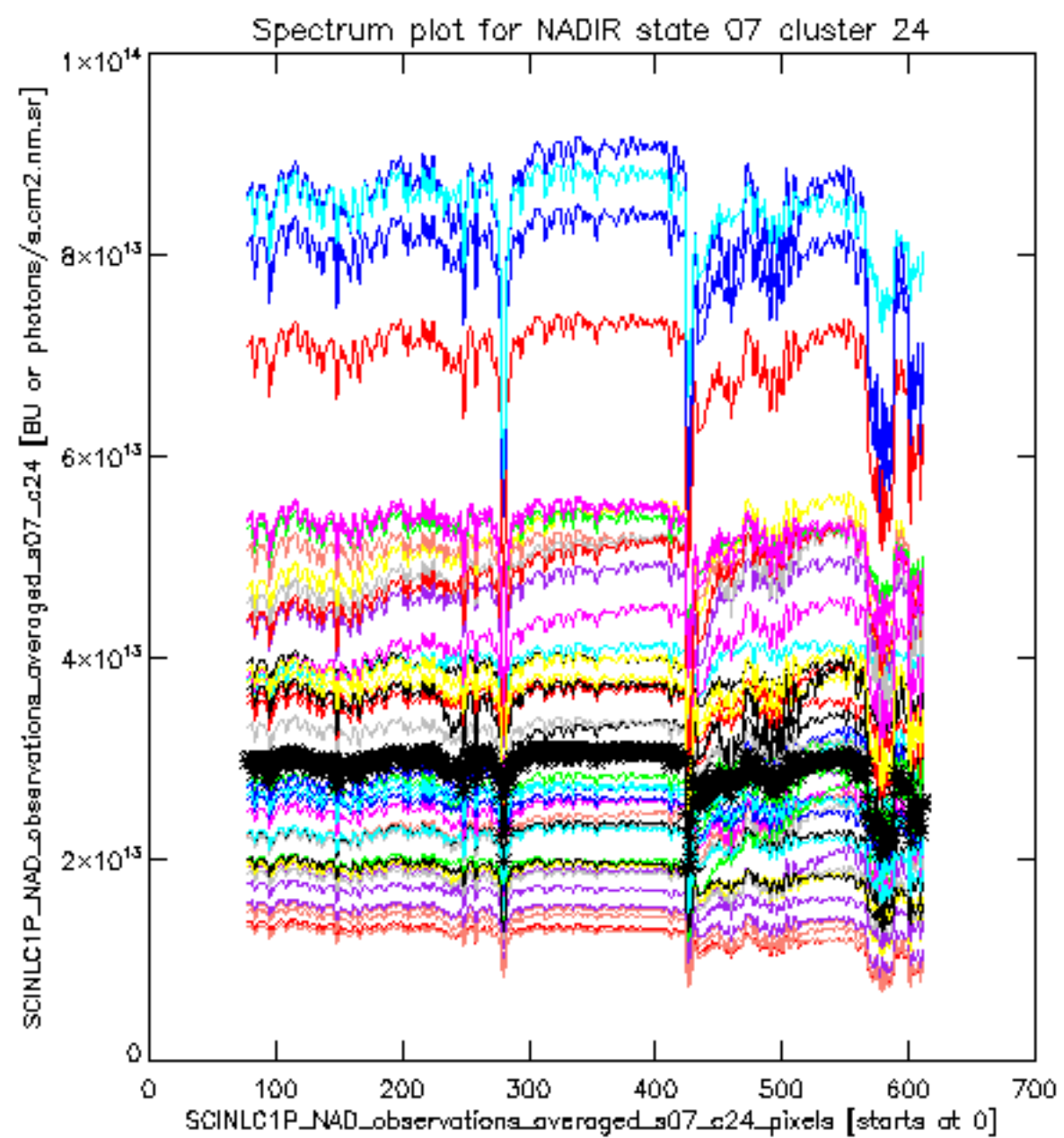


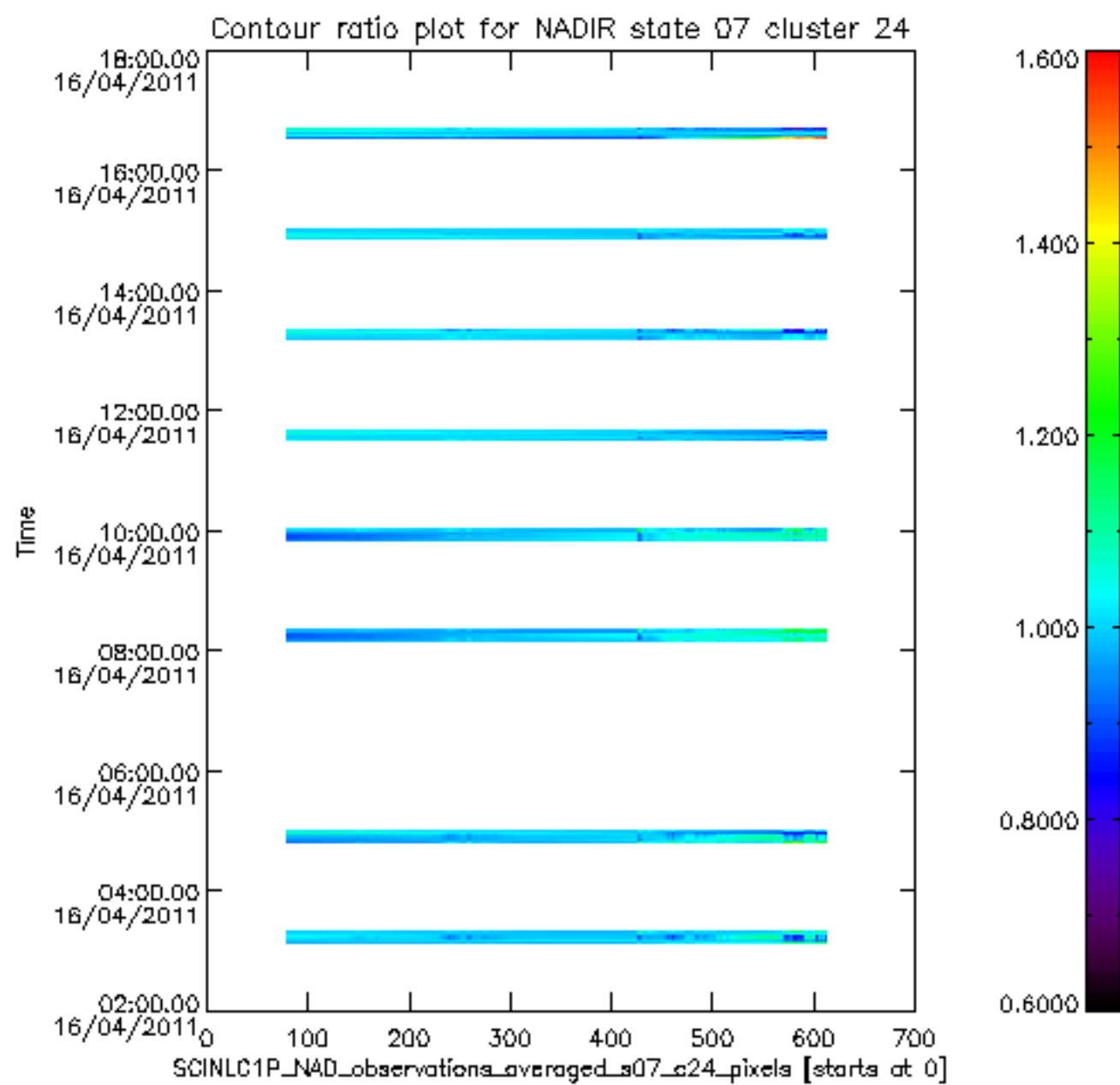
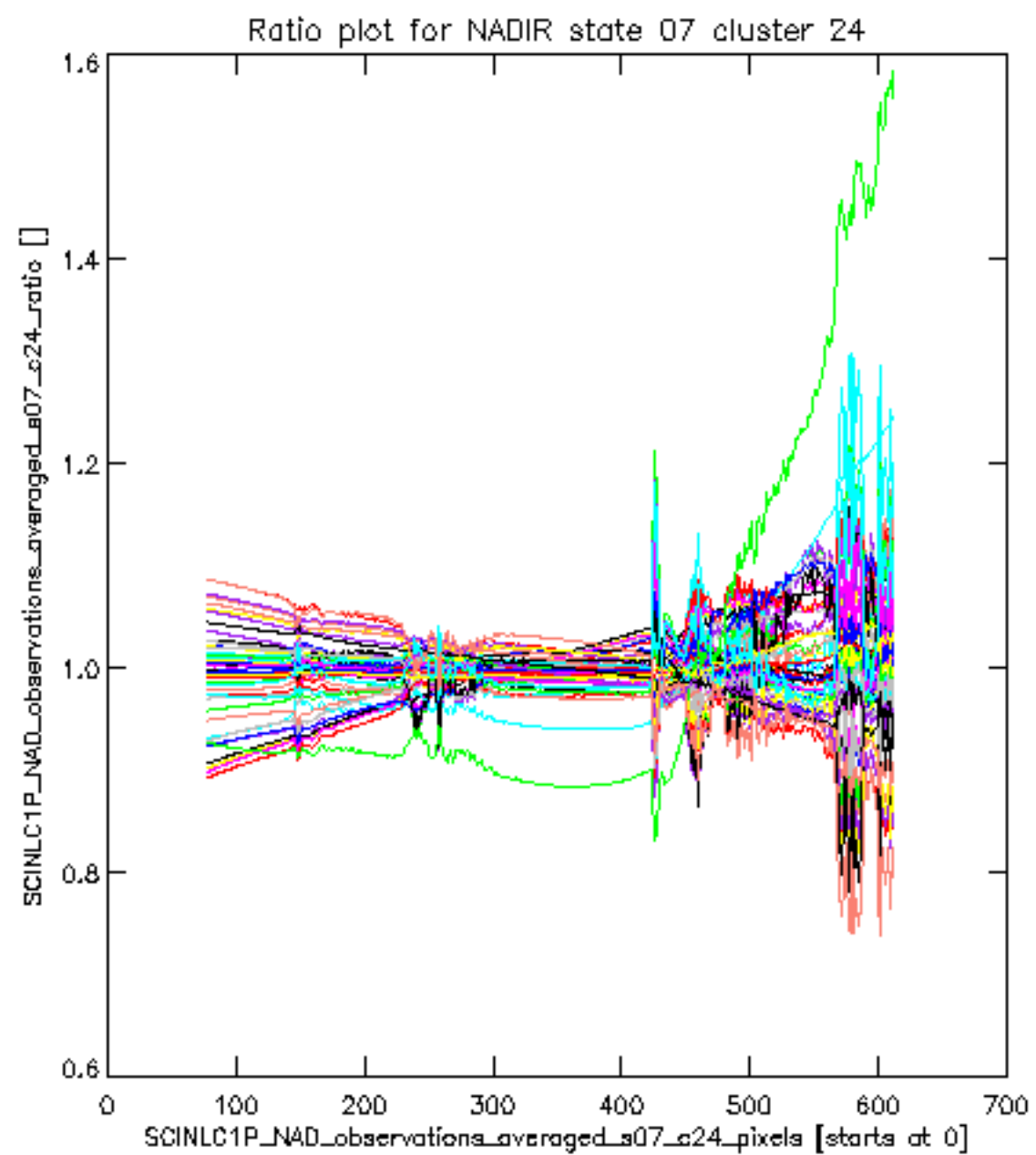




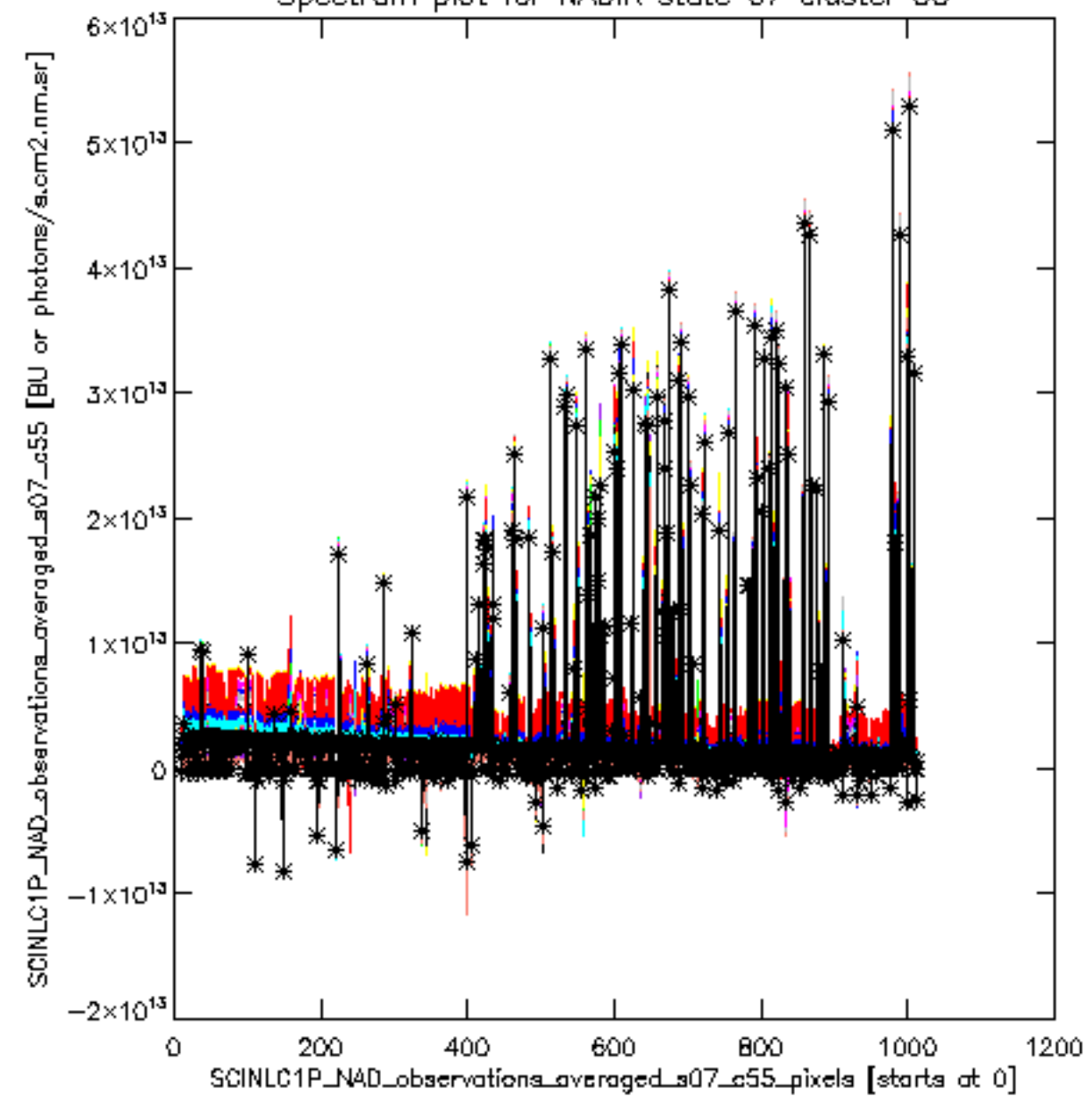








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

