

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	20MAY2011 06:55:37
Data source version	SCIA/7.04-U
Processing scope for products	07MAY2011 00:00:00 to 08MAY2011 00:00:00
Start time of first product within scope	06MAY2011 23:45:08
Stop time of last product within scope	08MAY2011 00:18:35
Total number of level 1 products	10
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	07MAY2011 00:17:11.424	07MAY2011 23:50:37.099
1	NADIR	07	09	N/A	07MAY2011 00:17:11.424	07MAY2011 23:50:37.099
2	NADIR	07	15	N/A	07MAY2011 00:17:11.424	07MAY2011 23:50:37.099
3	NADIR	07	24	N/A	07MAY2011 00:17:11.424	07MAY2011 23:50:37.099
4	NADIR	07	55	N/A	07MAY2011 00:17:11.424	07MAY2011 23:50:37.099
5	LIMB	32	09	~19 km	07MAY2011 00:04:00.784	07MAY2011 23:53:48.404
6	LIMB	32	09	~22 km	07MAY2011 00:04:00.784	07MAY2011 23:53:48.404
7	LIMB	32	09	~25 km	07MAY2011 00:04:00.784	07MAY2011 23:53:48.404
8	LIMB	32	15	~22 km	07MAY2011 00:04:00.784	07MAY2011 23:53:48.404
9	LIMB	32	15	~25 km	07MAY2011 00:04:00.784	07MAY2011 23:53:48.404
10	LIMB	32	15	~35 km	07MAY2011 00:04:00.784	07MAY2011 23:53:48.404

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	#cml_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110506_233925_000059673102_00160_48019_1171.N1	06MAY2011 23:45:08	07MAY2011 00:55:23	0	35	31	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110507_011910_000060393102_00161_48020_1168.N1	07MAY2011 01:25:22	07MAY2011 02:35:51	0	36	30	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110507_025953_000059813102_00162_48021_1172.N1	07MAY2011 03:05:36	07MAY2011 04:15:50	0	35	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110507_062020_000059813102_00164_48023_1176.N1	07MAY2011 06:26:03	07MAY2011 07:36:18	0	35	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110507_130114_000059813102_00168_48027_1177.N1	07MAY2011 13:06:58	07MAY2011 14:17:13	0	35	31	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110507_162142_000059813102_00170_48029_1178.N1	07MAY2011 16:27:25	07MAY2011 17:37:40	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110507_180126_000060253102_00171_48030_1181.N1	07MAY2011 18:07:39	07MAY2011 19:33:35	0	36	30	0	3	1	0	0	
7	SCI_NLC_1CUDPA20110507_194155_000059943102_00172_48031_1194.N1	07MAY2011 19:47:53	07MAY2011 20:58:18	0	35	31	0	1	1	0	0	
8	SCI_NLC_1CUDPA20110507_212154_000060383102_00173_48032_1196.N1	07MAY2011 21:28:07	07MAY2011 22:38:36	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110507_230236_000059813102_00174_48033_1198.N1	07MAY2011 23:08:20	08MAY2011 00:18:35	0	35	31	0	0	1	0	0	

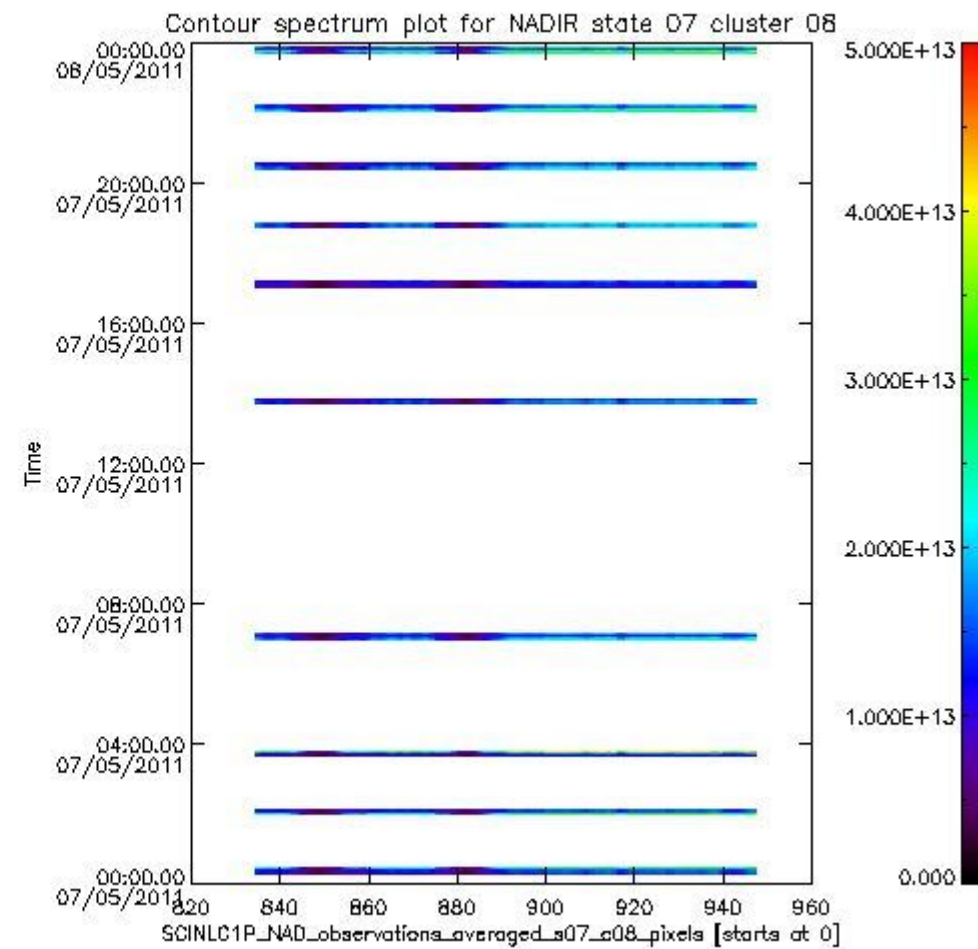
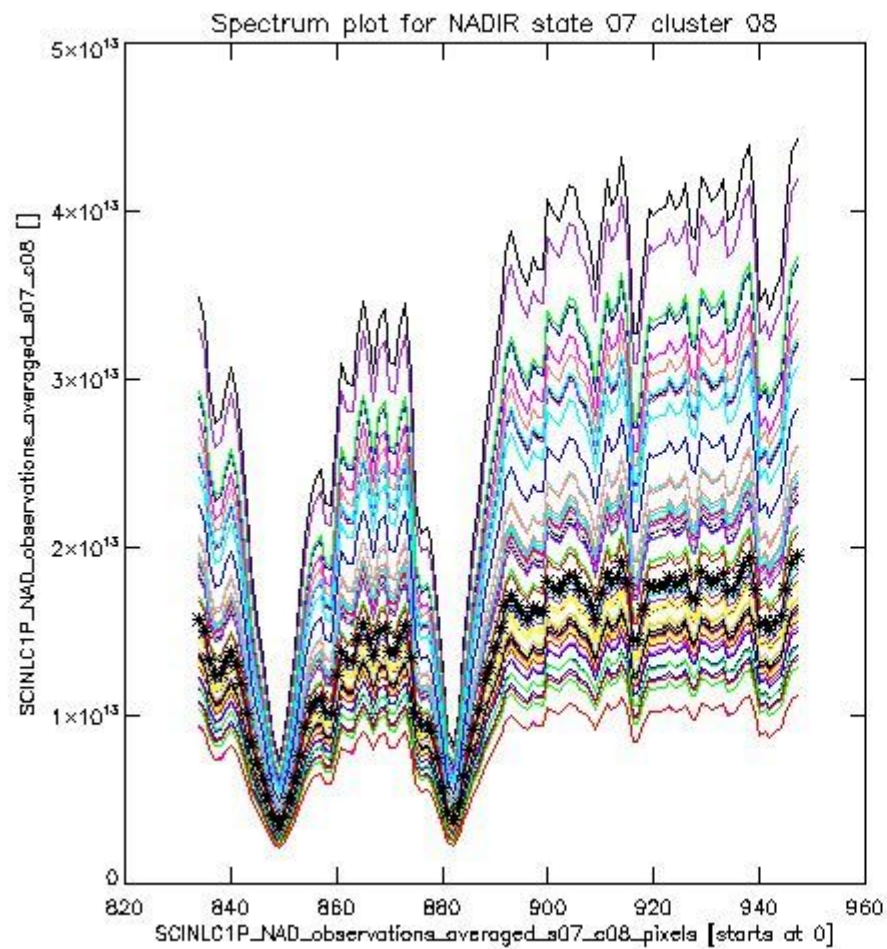
1.2 Source packet monitoring

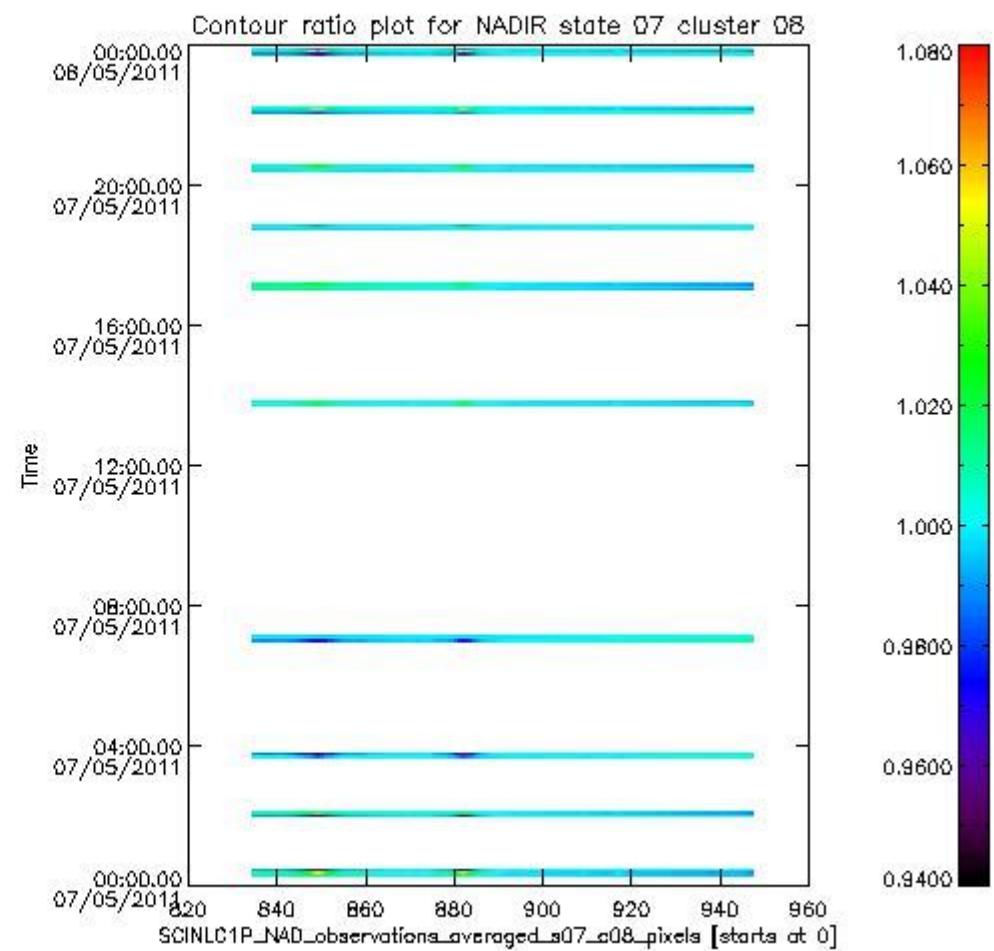
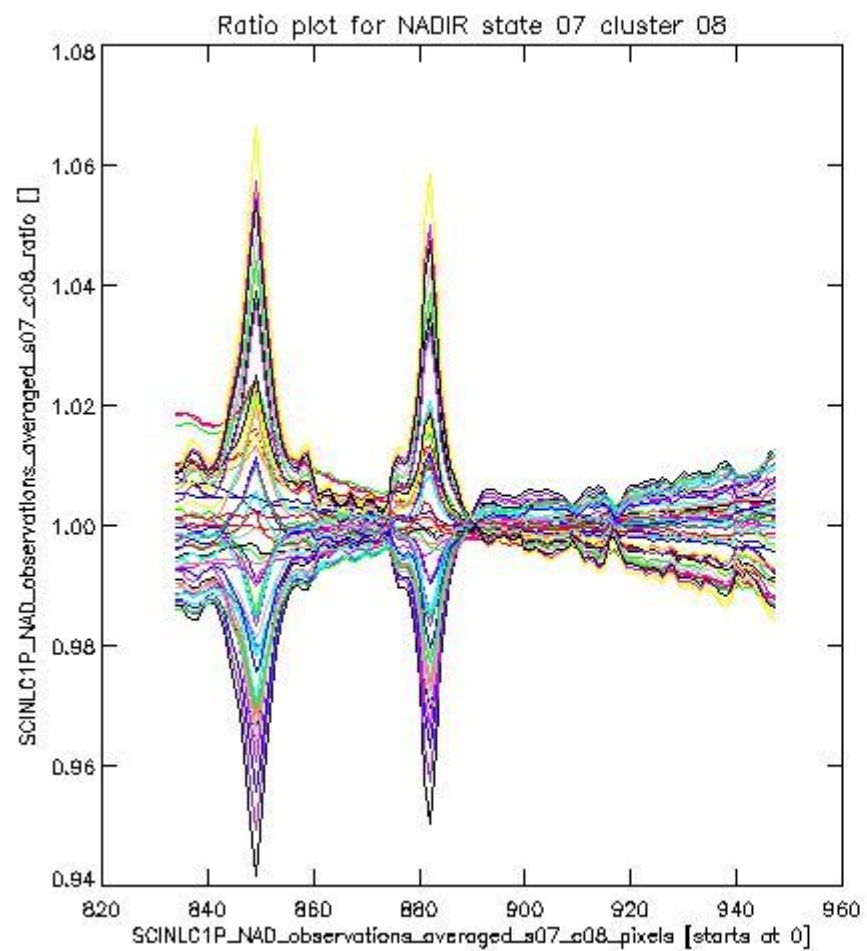
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	07MAY2011 00:17:11.424
Start time of last sample	07MAY2011 23:50:37.099
Reference period start time	07APR2011 00:20:22.471
Reference period stop time	06MAY2011 22:46:17.306
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

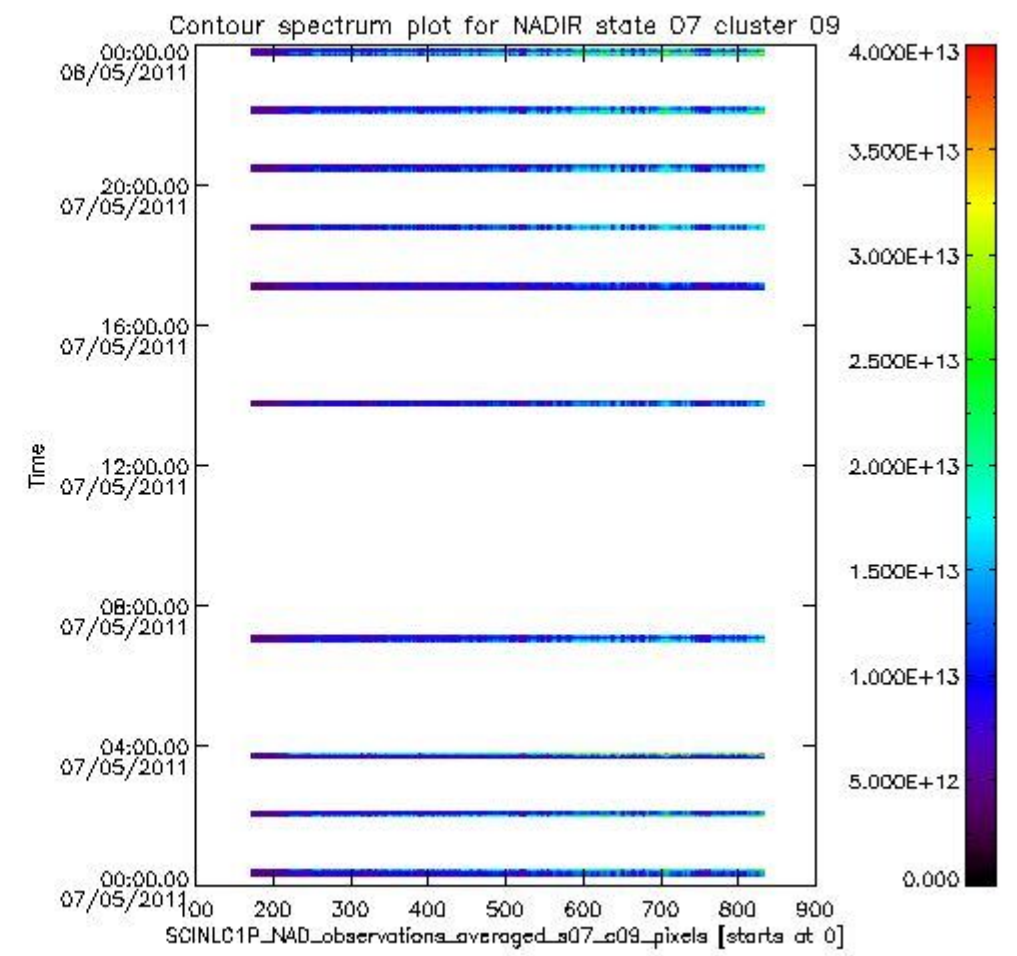
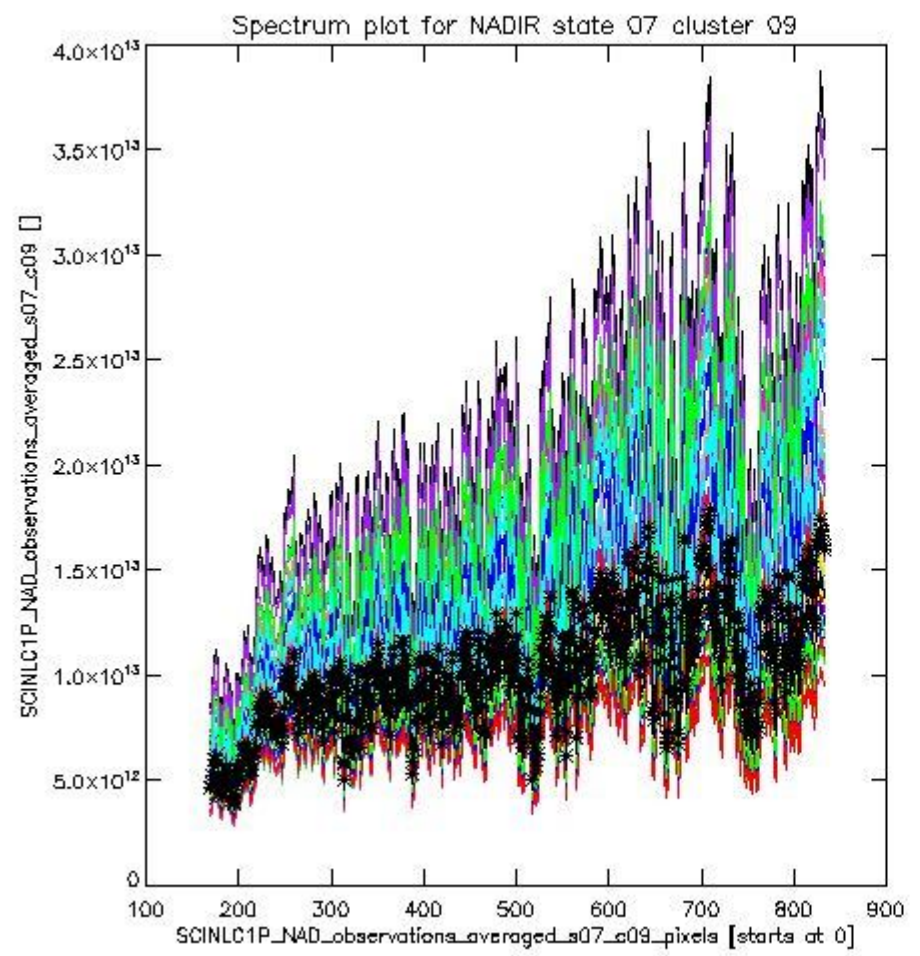




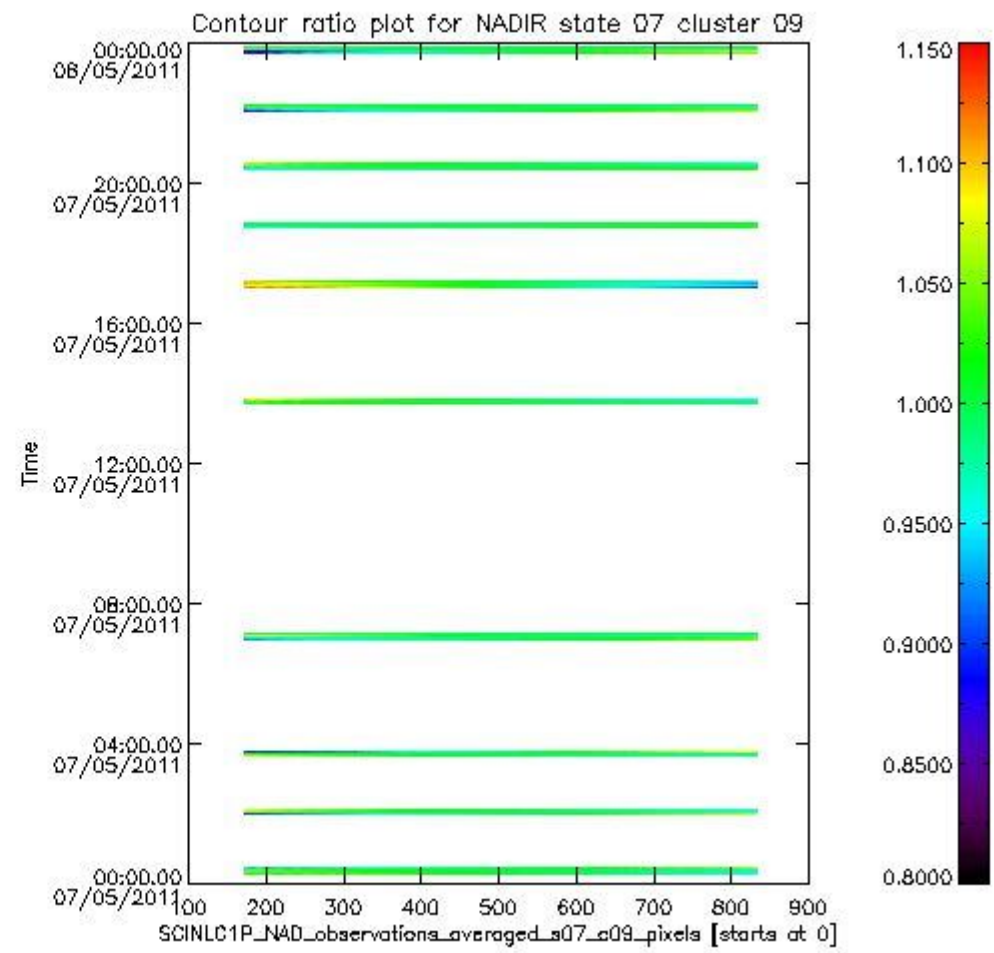
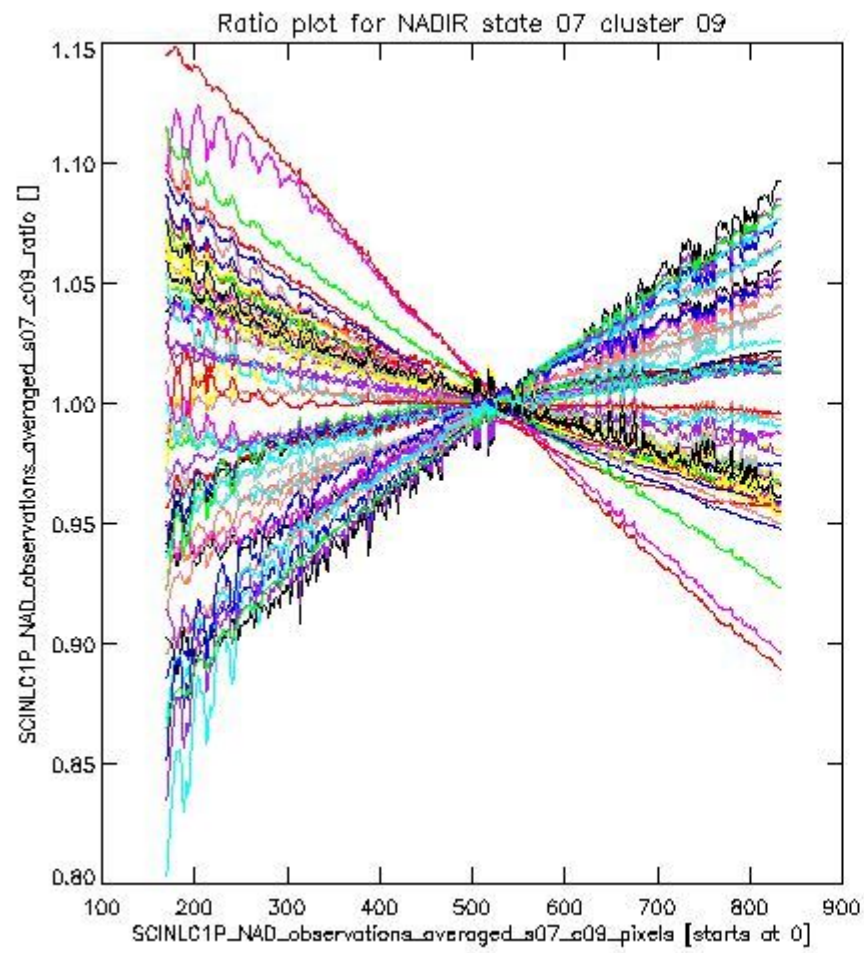
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110507_1.PNG

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	07MAY2011 00:17:11.424
Start time of last sample	07MAY2011 23:50:37.099
Reference period start time	07APR2011 00:20:22.471
Reference period stop time	06MAY2011 22:46:17.306
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



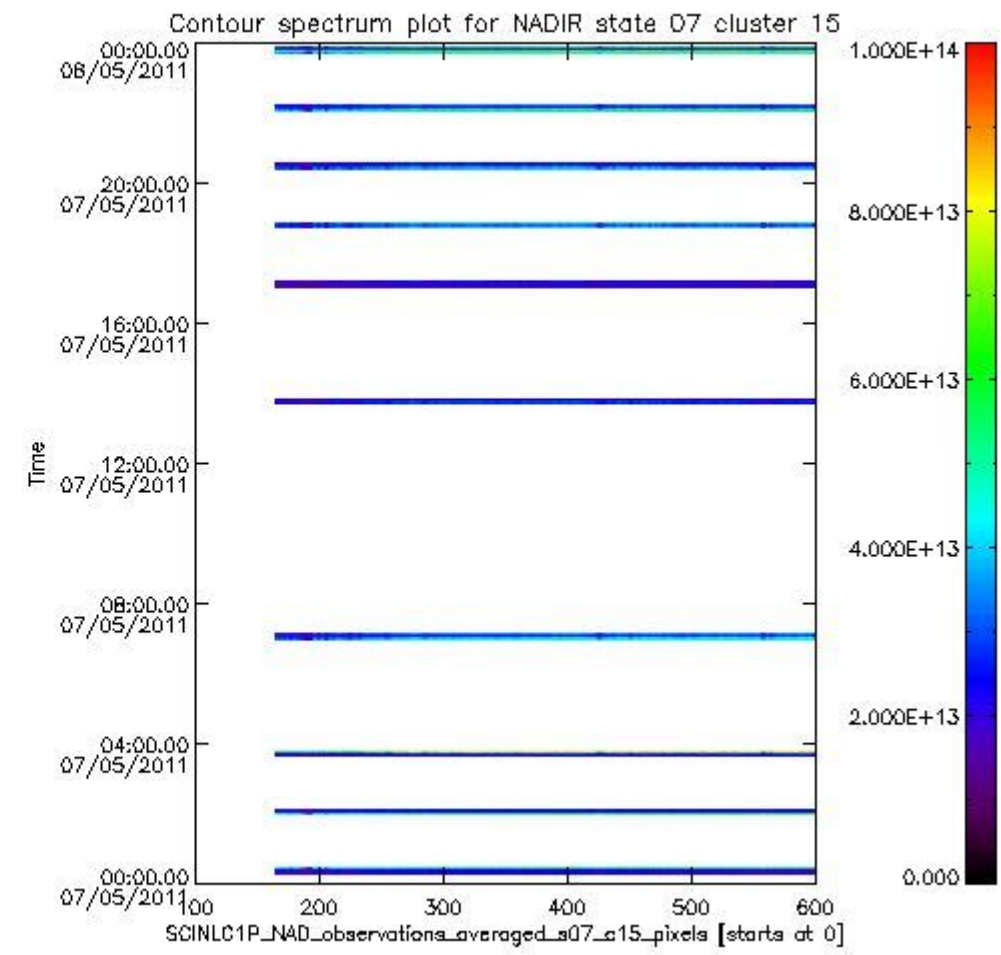
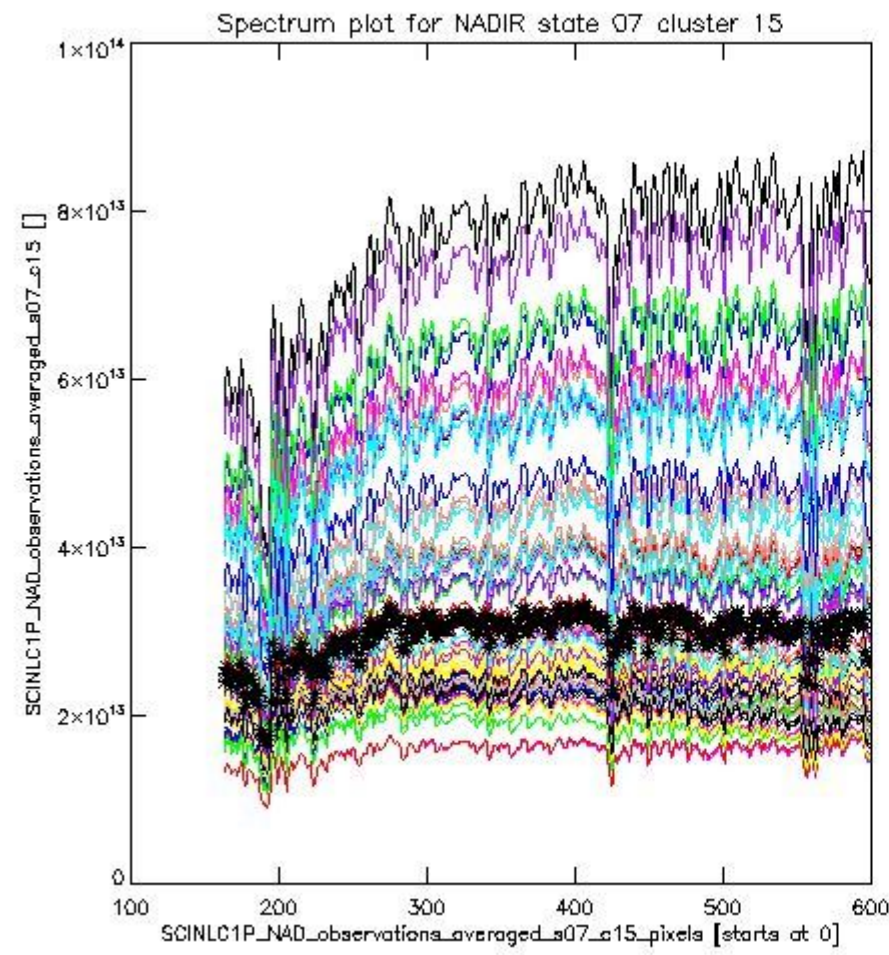
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110507_2.PNG



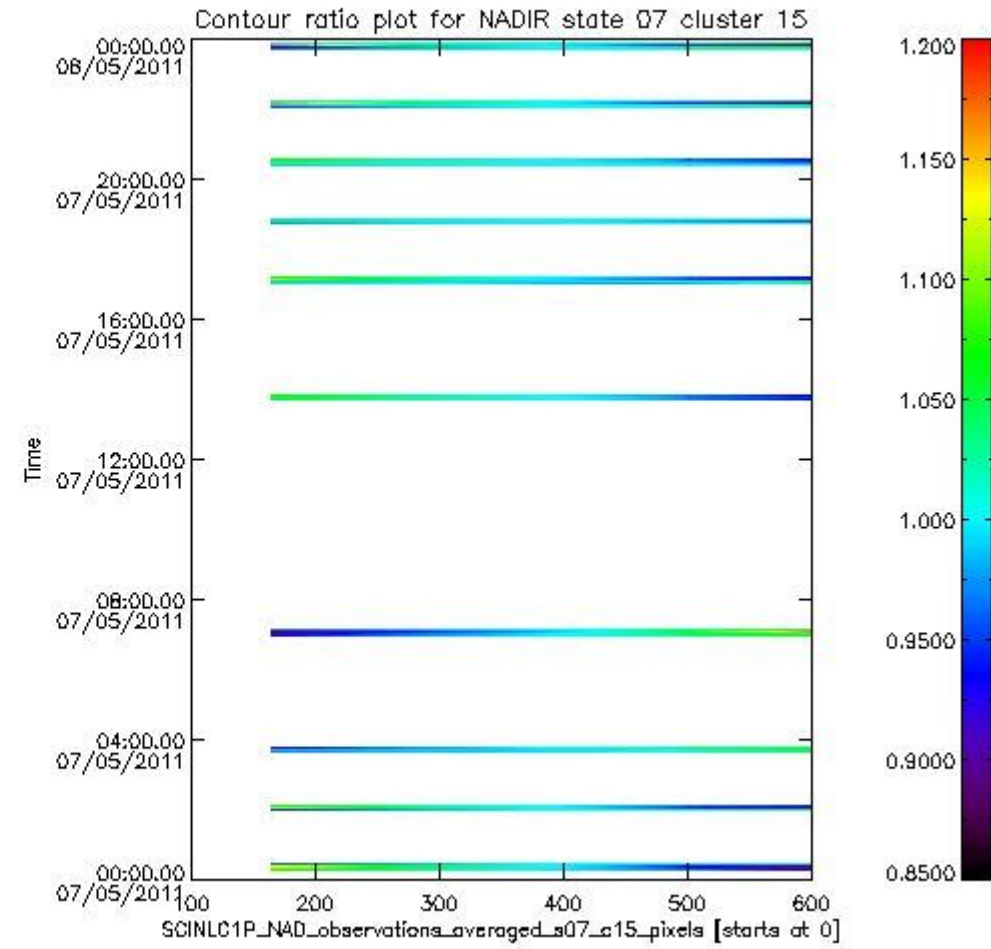
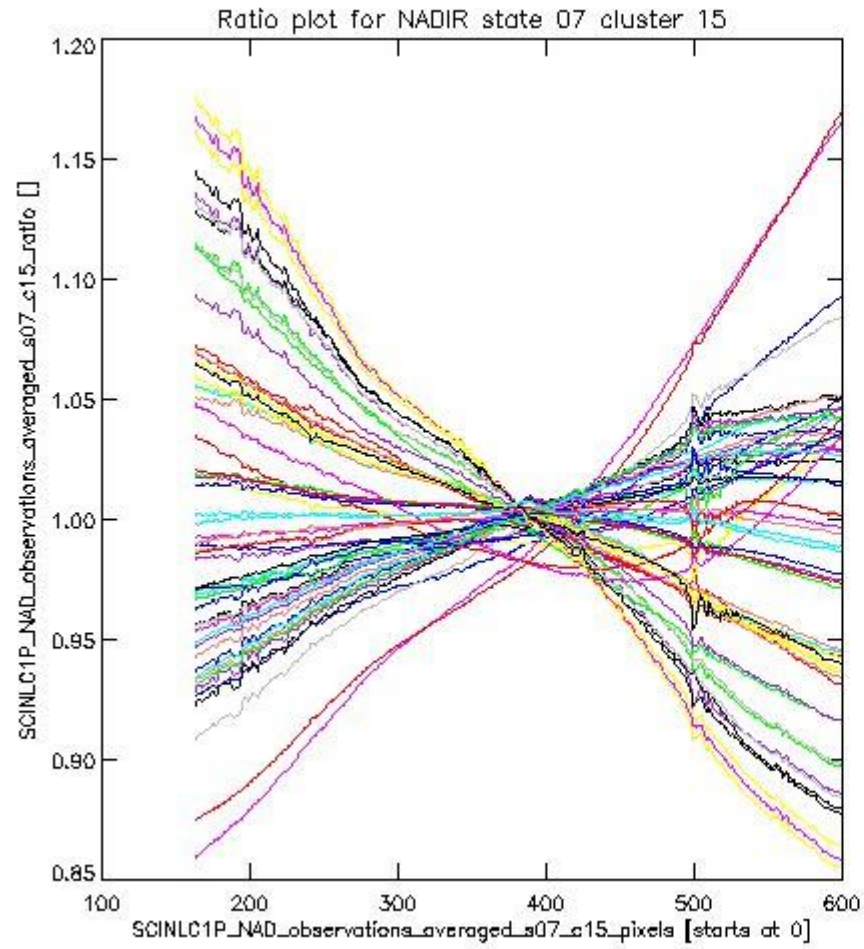
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110507_3.PNG

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	07MAY2011 00:17:11.424
Start time of last sample	07MAY2011 23:50:37.099
Reference period start time	07APR2011 00:20:22.471
Reference period stop time	06MAY2011 22:46:17.306
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



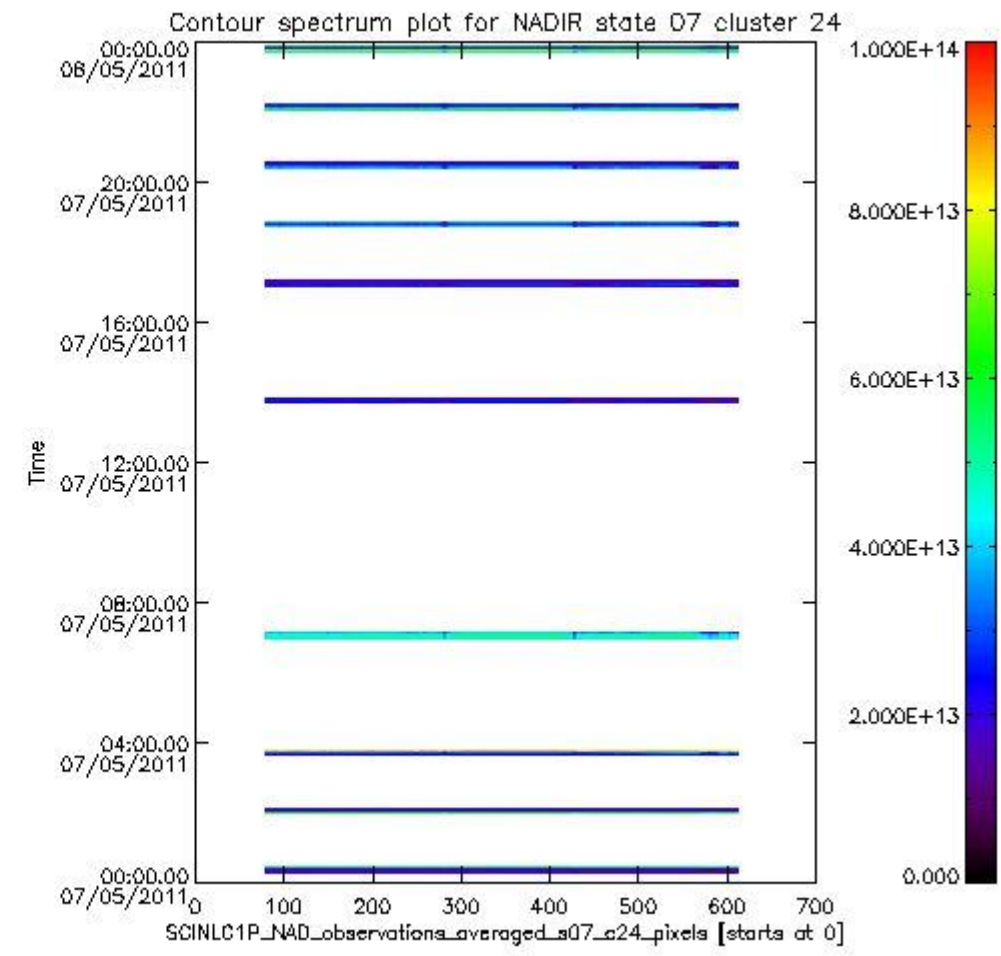
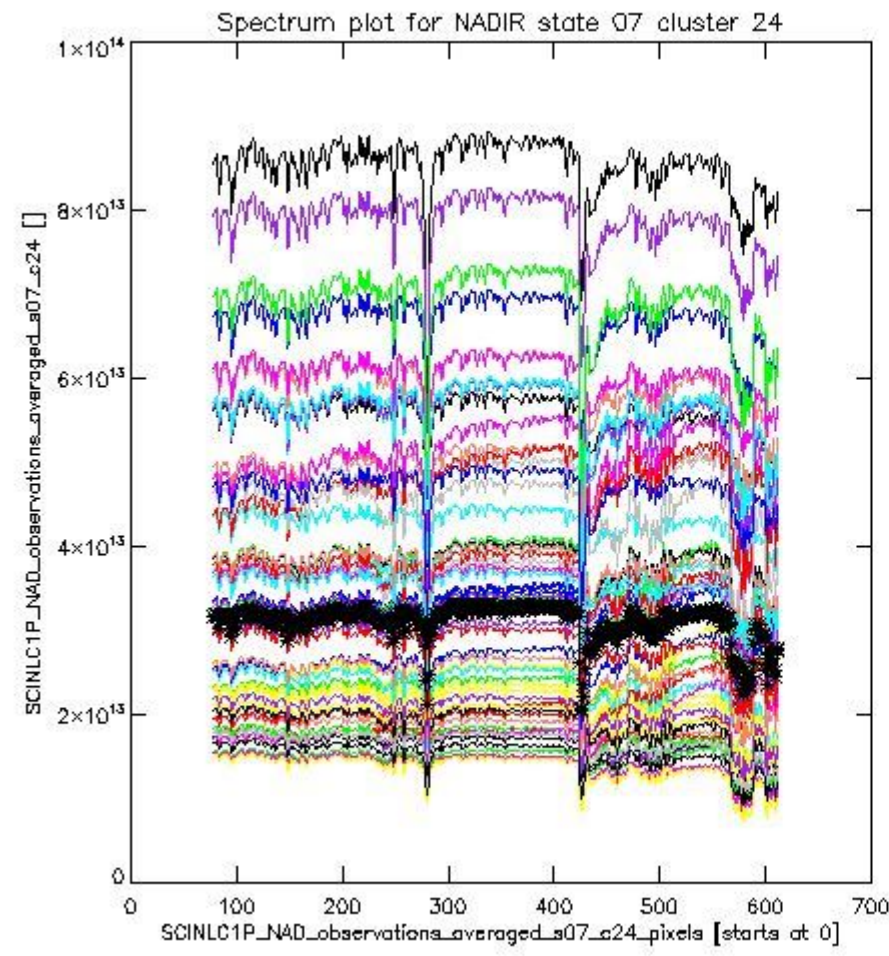
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110507_4.PNG



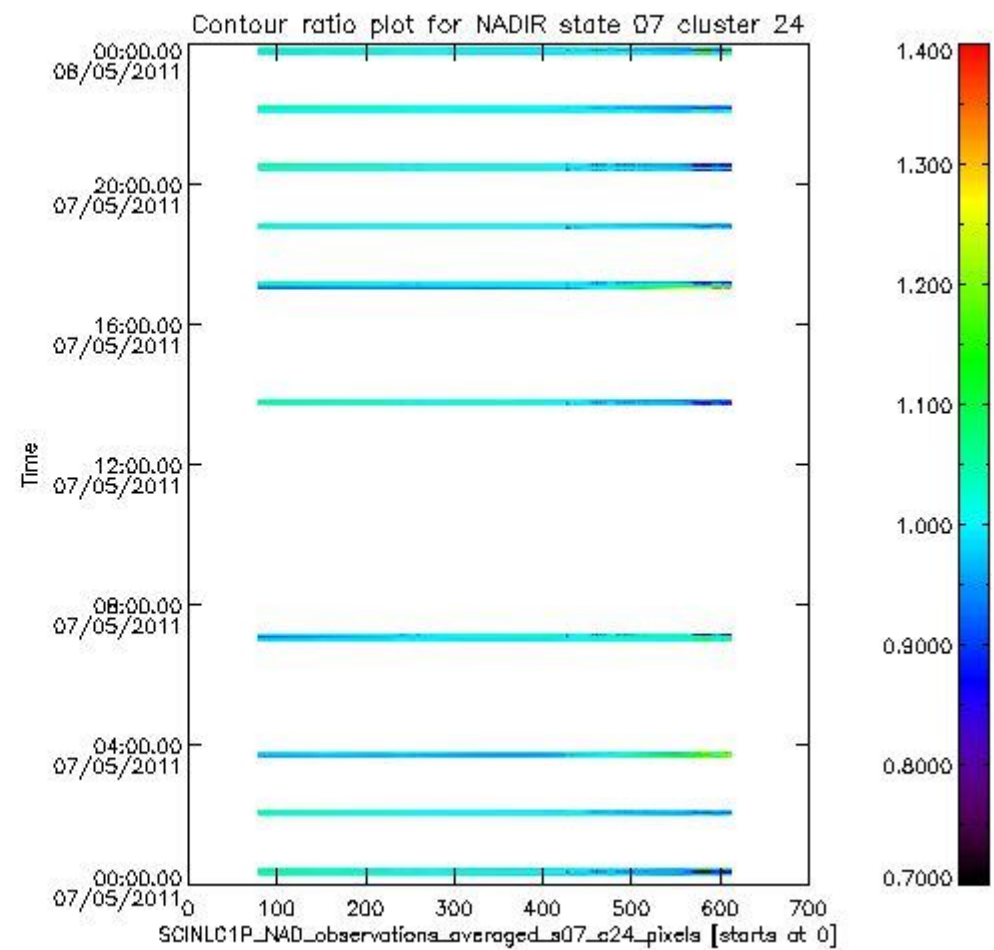
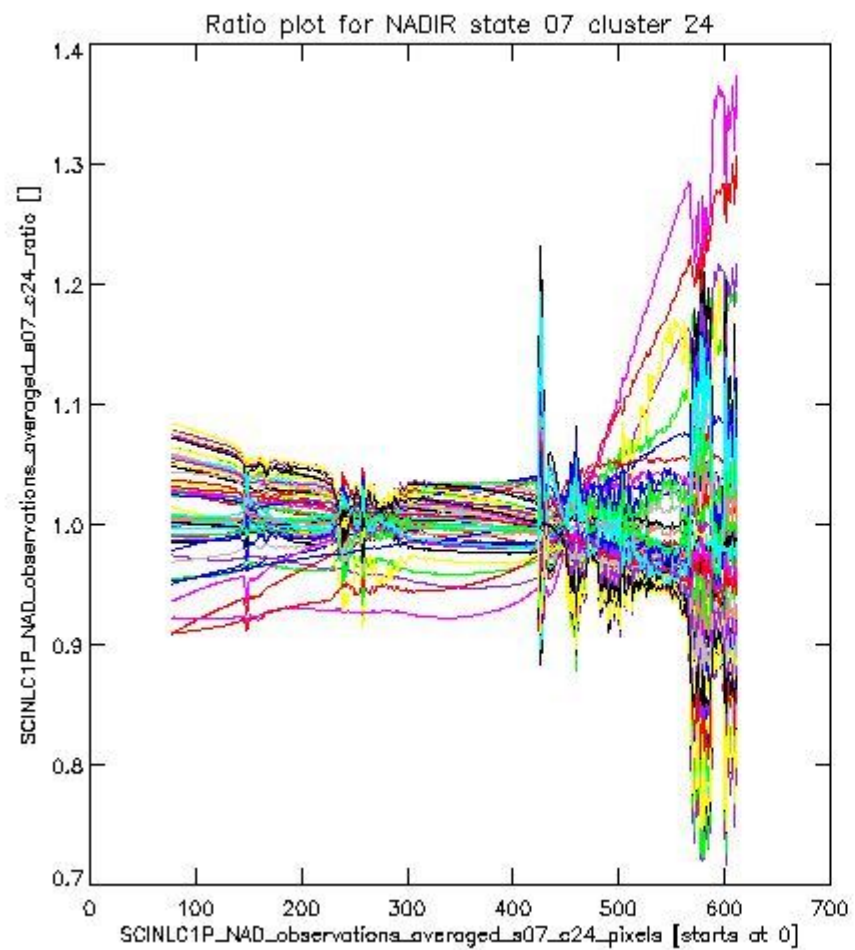
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_5.PNG

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	07MAY2011 00:17:11.424
Start time of last sample	07MAY2011 23:50:37.099
Reference period start time	07APR2011 00:20:22.471
Reference period stop time	06MAY2011 22:46:17.306
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



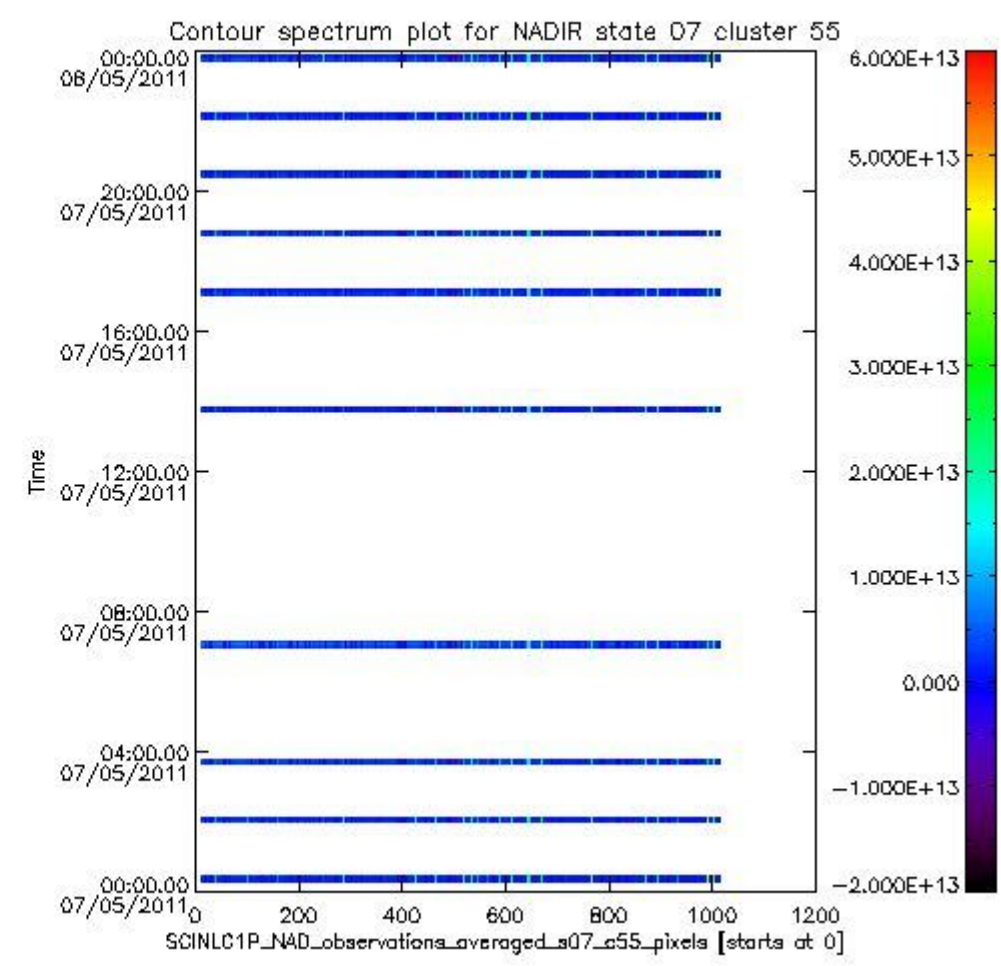
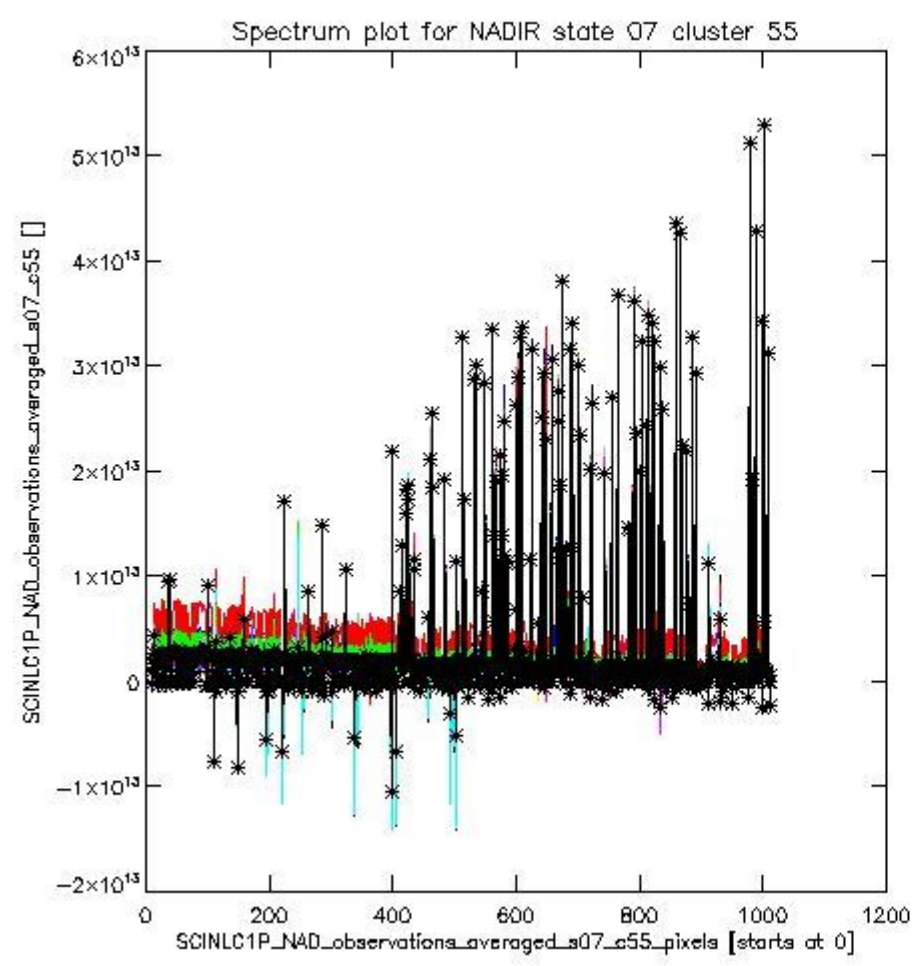
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110507_6.PNG



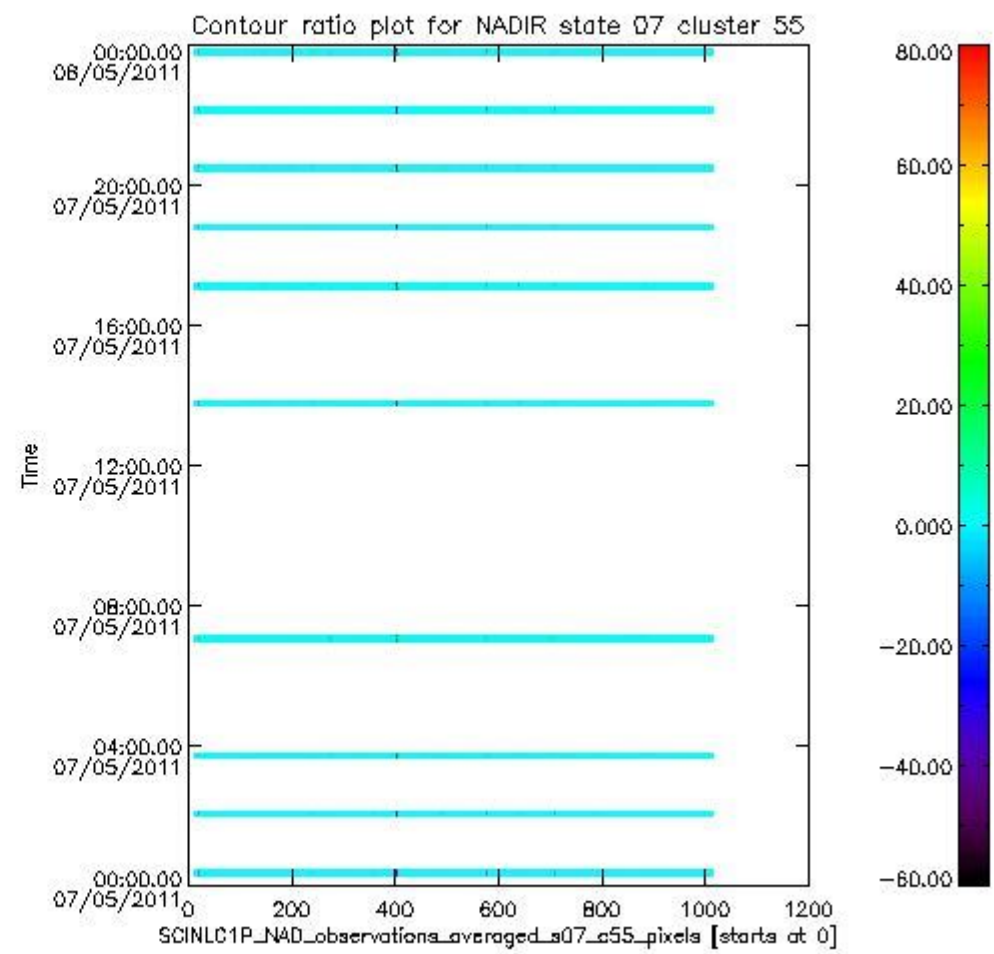
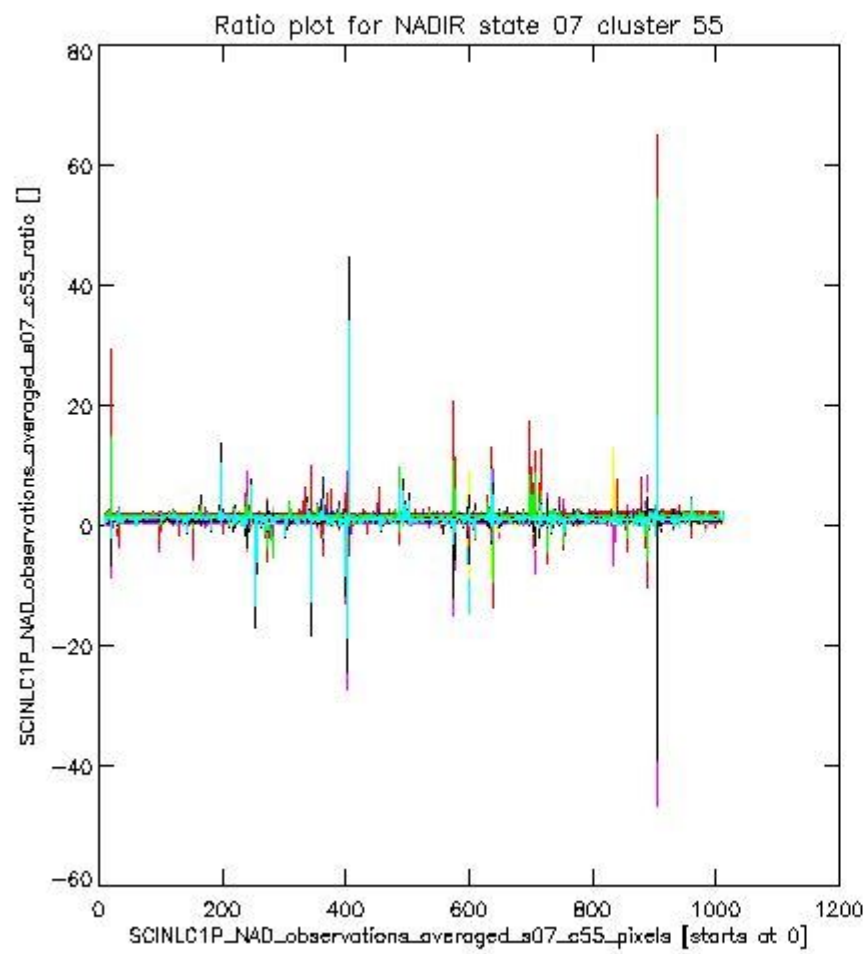
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_7.PNG

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	07MAY2011 00:17:11.424
Start time of last sample	07MAY2011 23:50:37.099
Reference period start time	07APR2011 00:20:22.471
Reference period stop time	06MAY2011 22:46:17.306
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



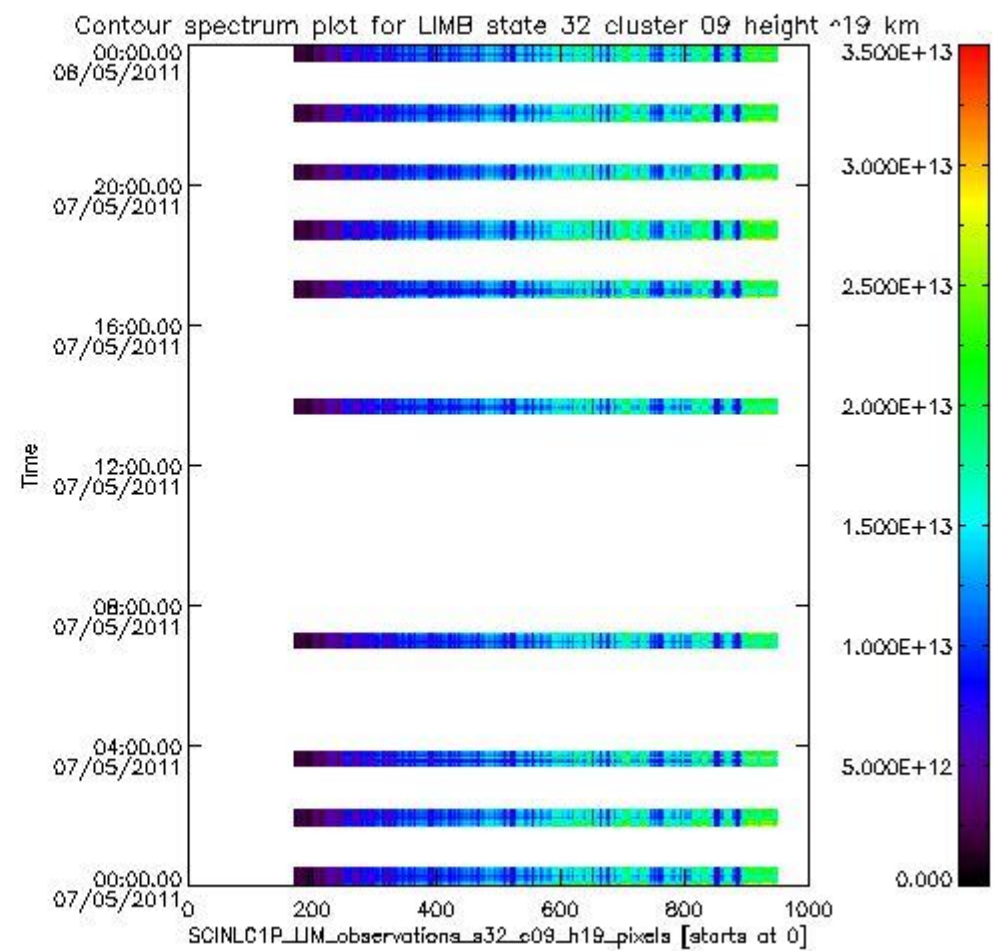
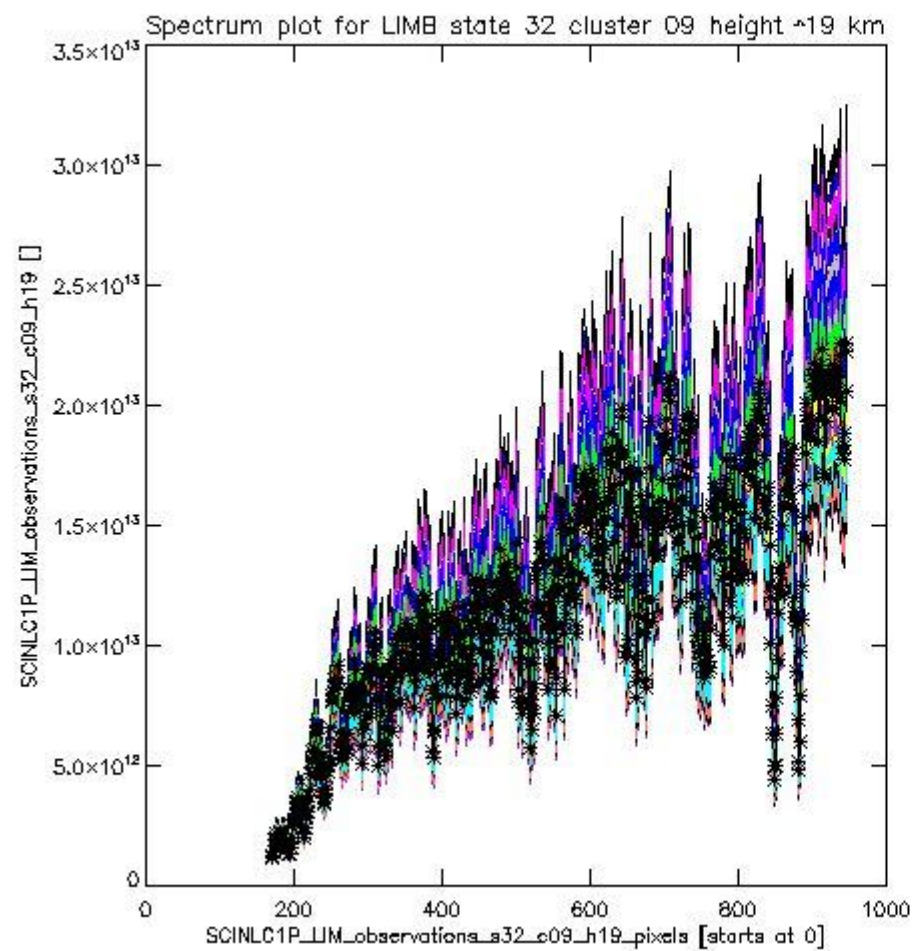
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_8.PNG



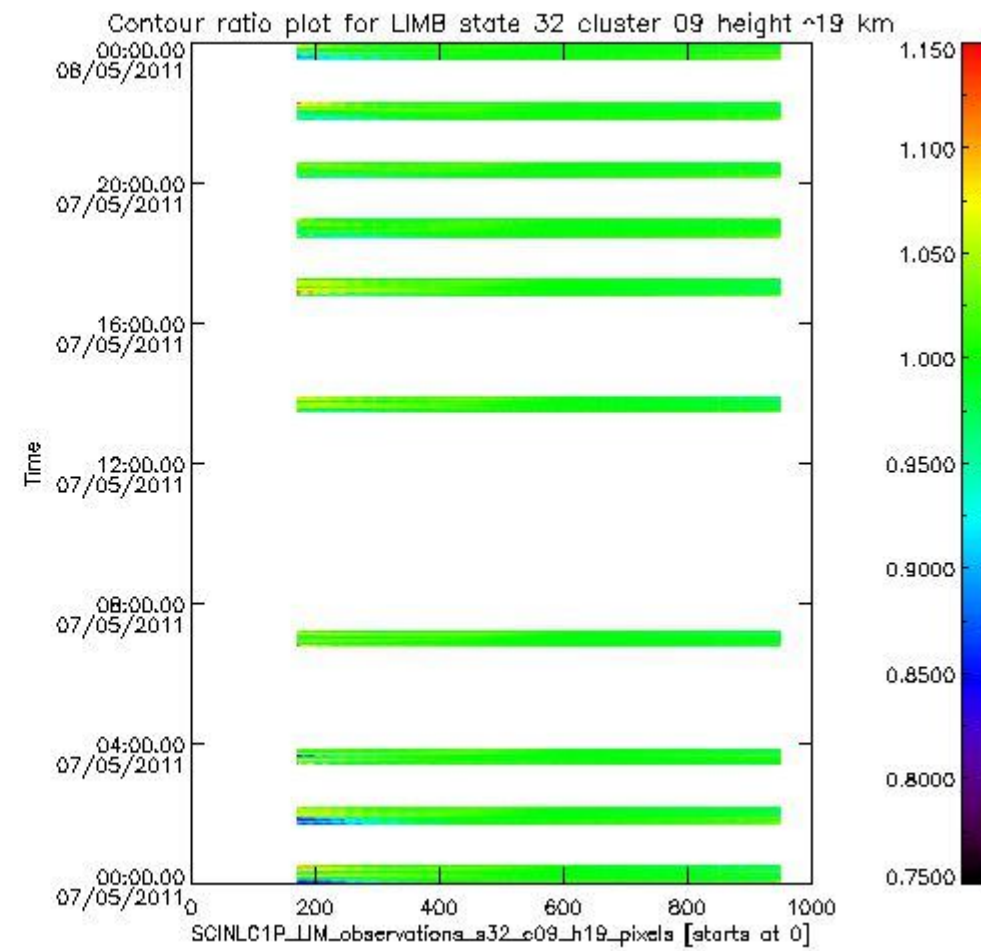
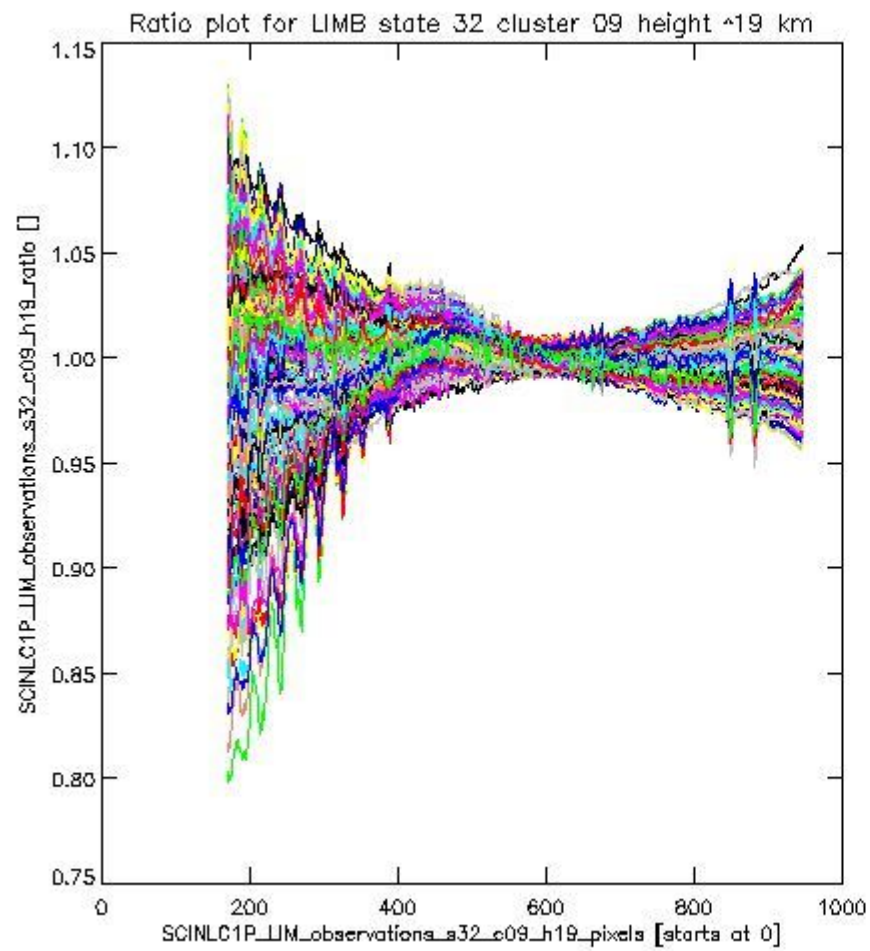
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_9.PNG

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	07MAY2011 00:04:00.784
Start time of last sample	07MAY2011 23:53:48.404
Reference period start time	07APR2011 00:05:09.092
Reference period stop time	06MAY2011 22:51:31.345
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



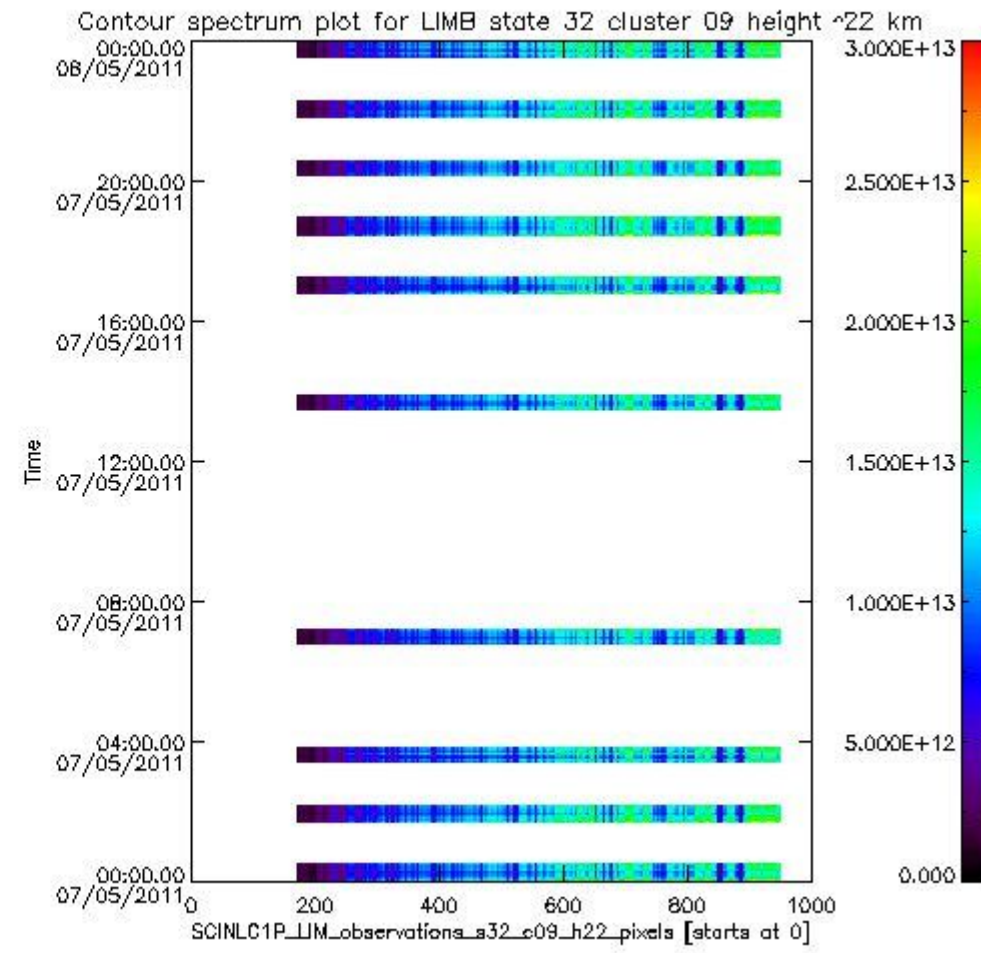
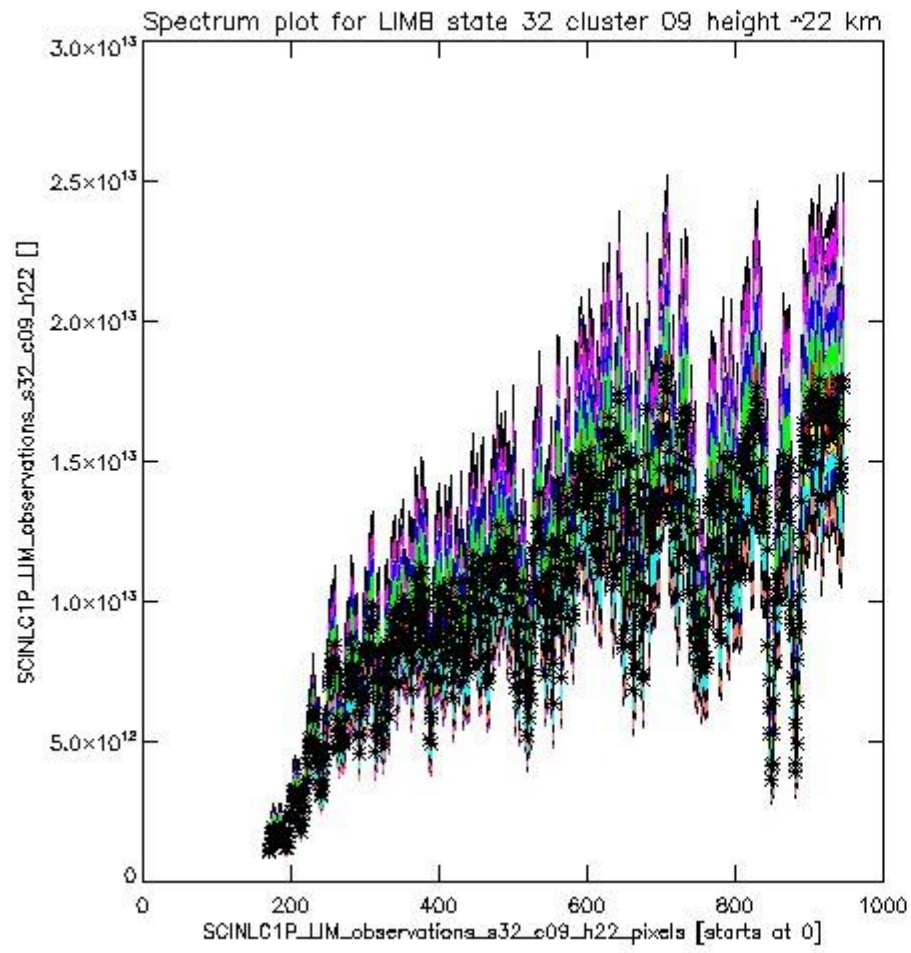
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_10.PNG



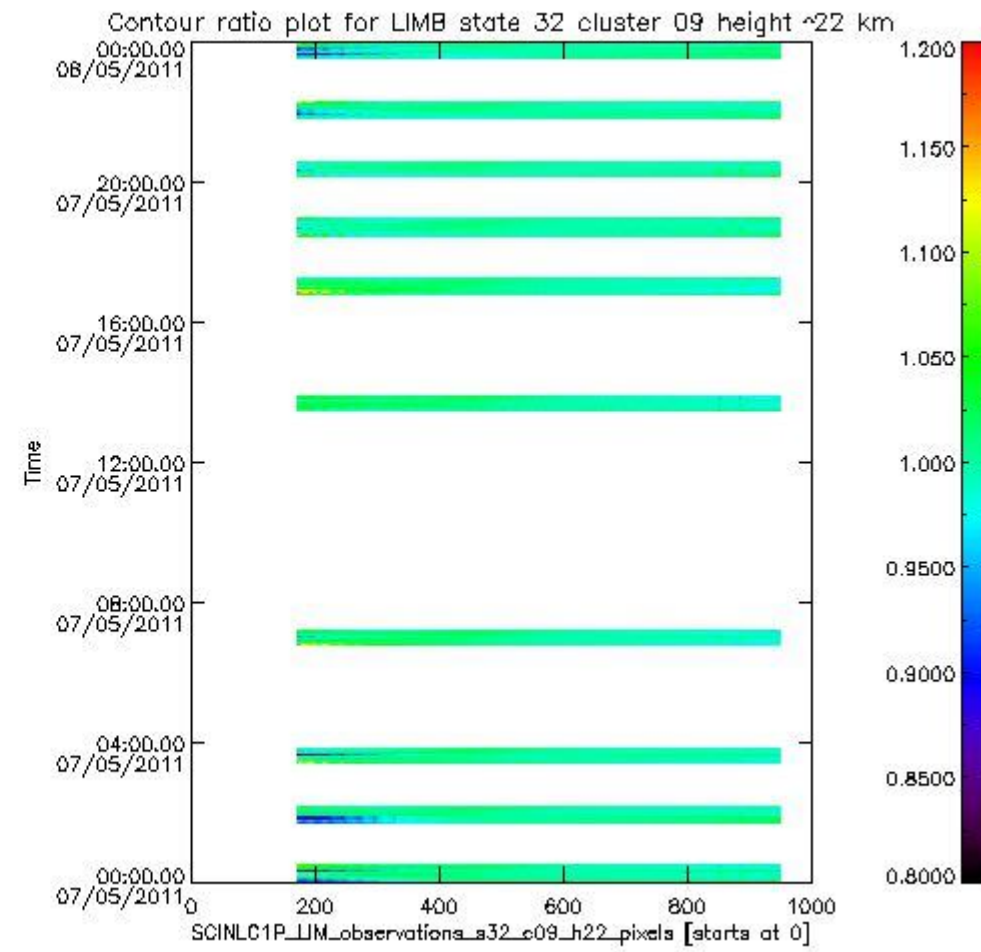
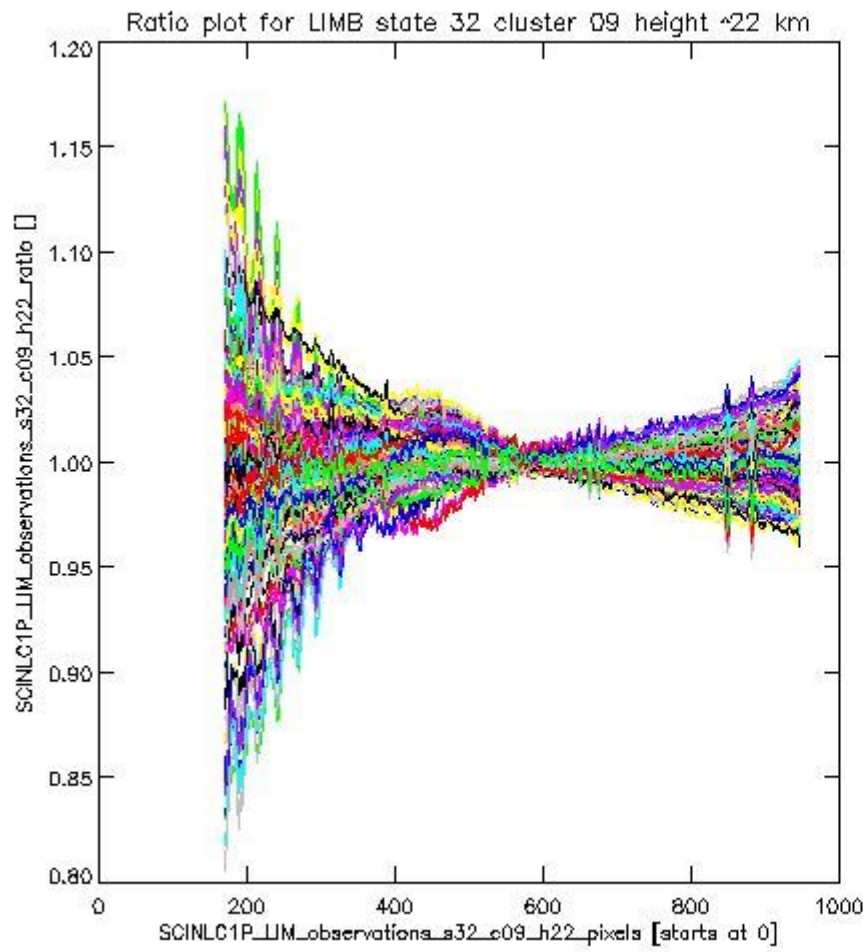
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_11.PNG

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	07MAY2011 00:04:00.784
Start time of last sample	07MAY2011 23:53:48.404
Reference period start time	07APR2011 00:05:09.092
Reference period stop time	06MAY2011 22:51:31.345
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



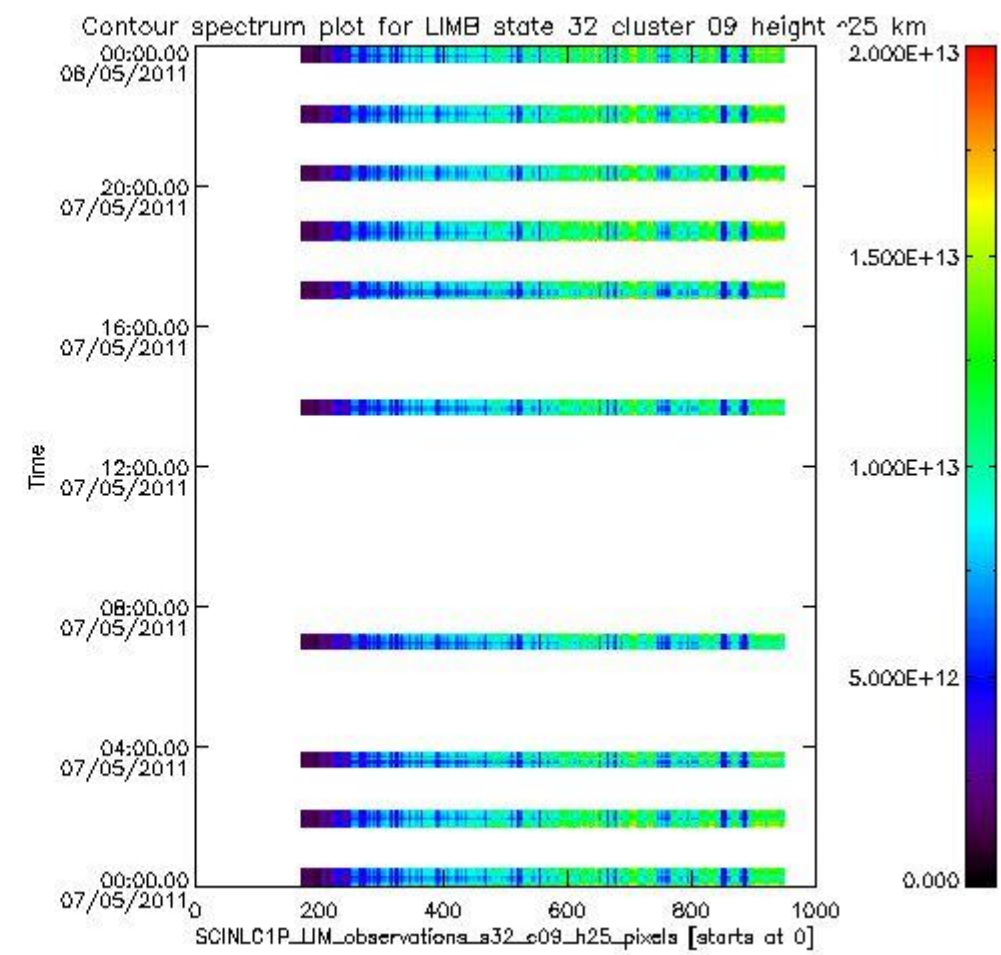
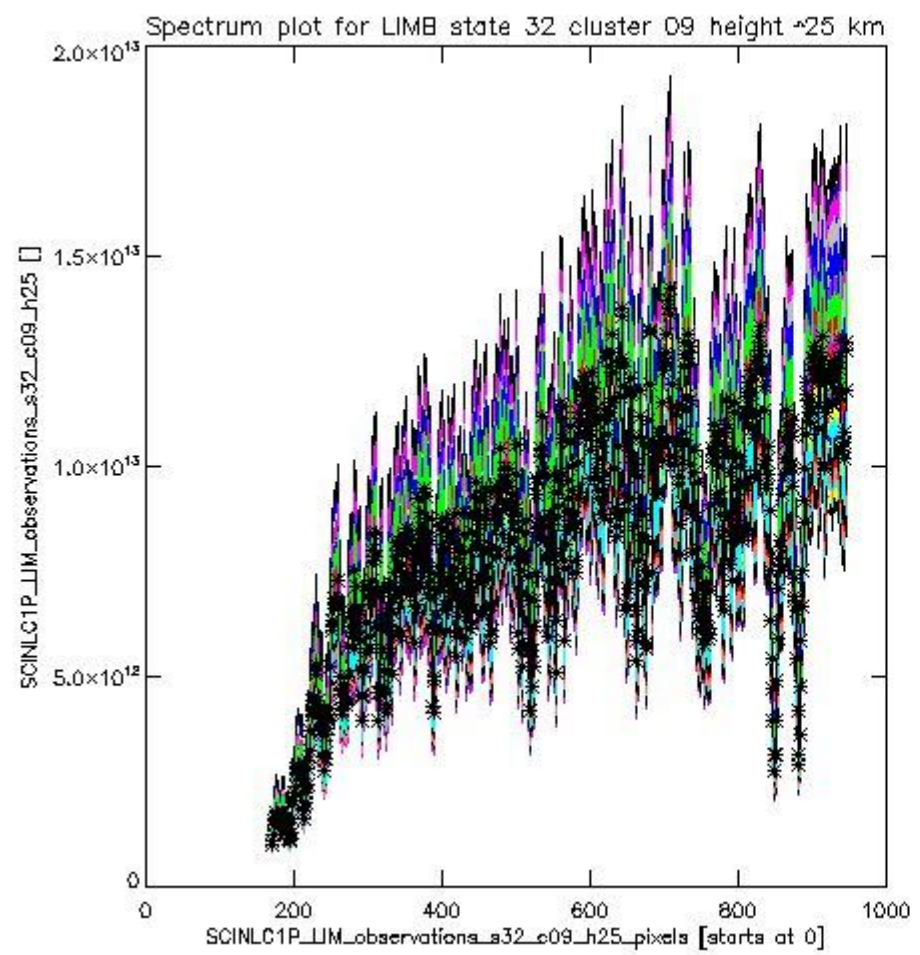
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110507_12.PNG



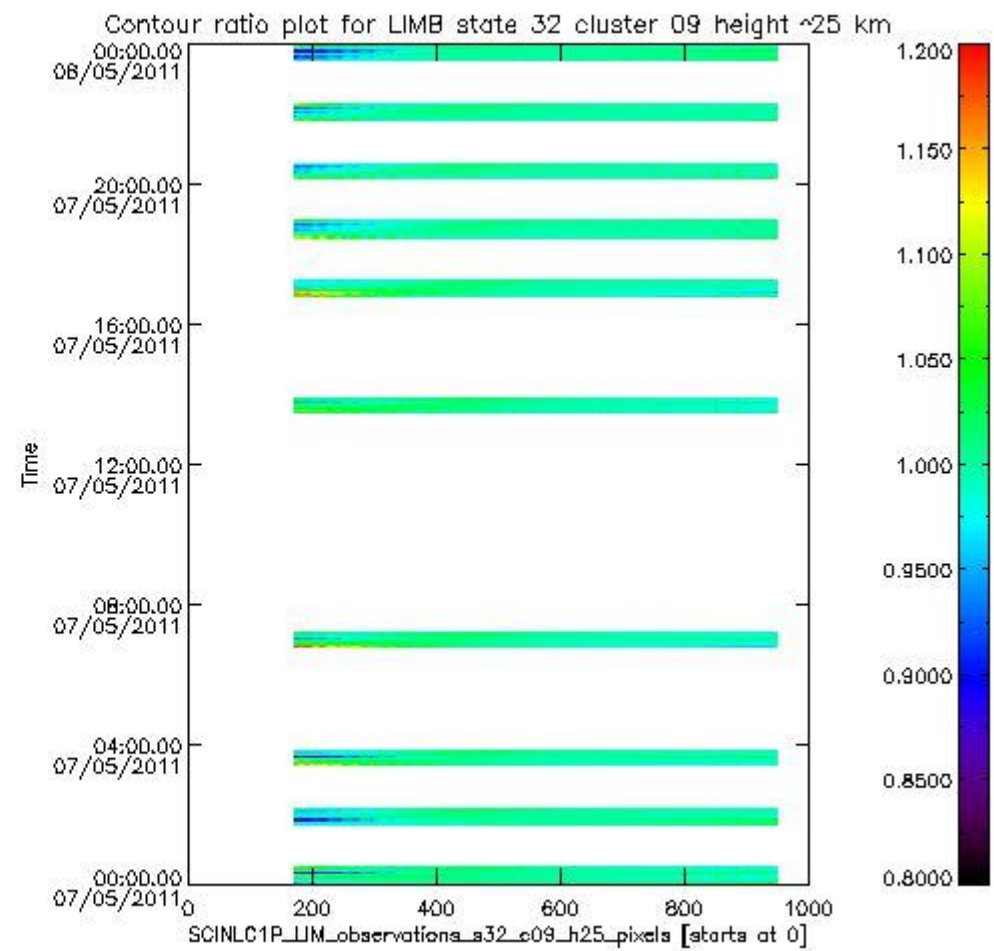
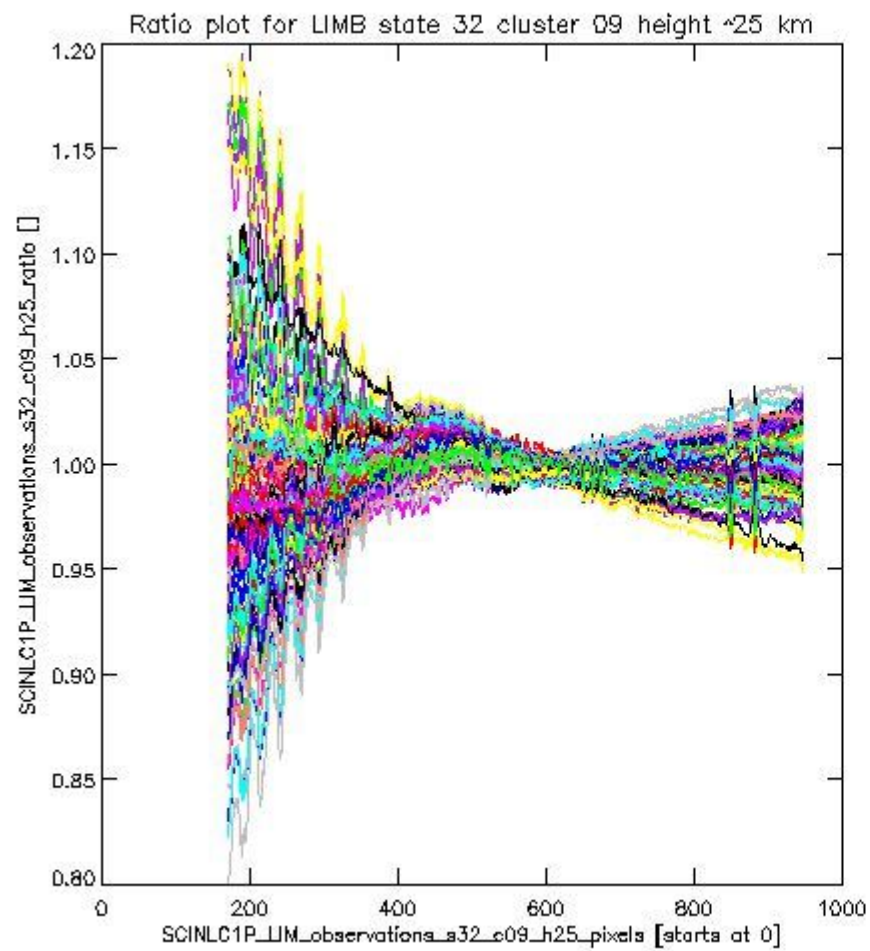
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_13.PNG

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	07MAY2011 00:04:00.784
Start time of last sample	07MAY2011 23:53:48.404
Reference period start time	07APR2011 00:05:09.092
Reference period stop time	06MAY2011 22:51:31.345
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



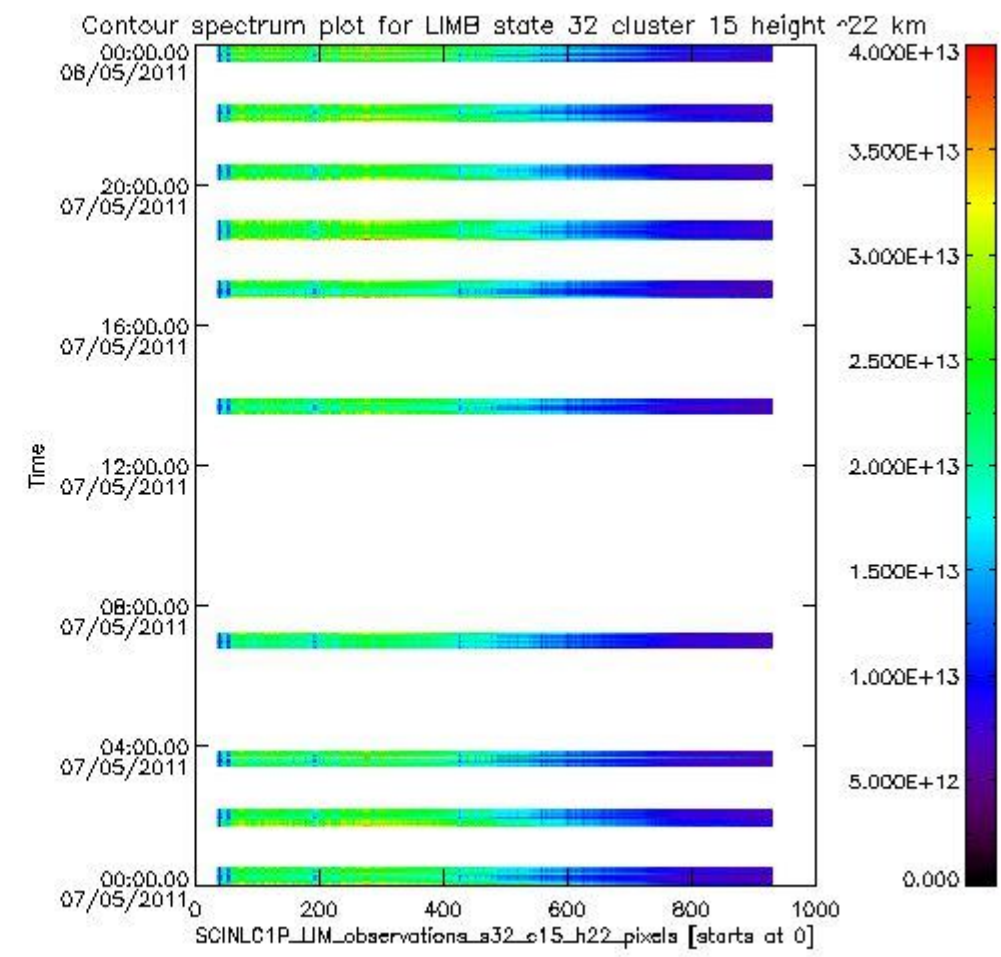
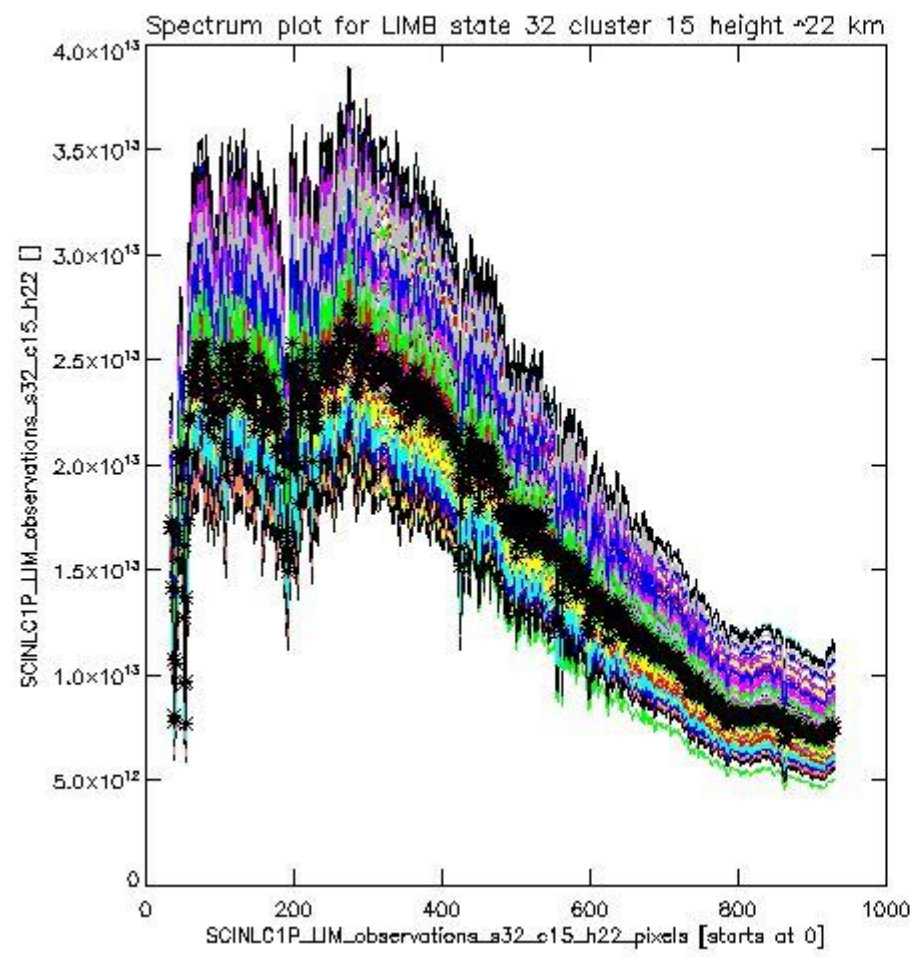
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_14.PNG



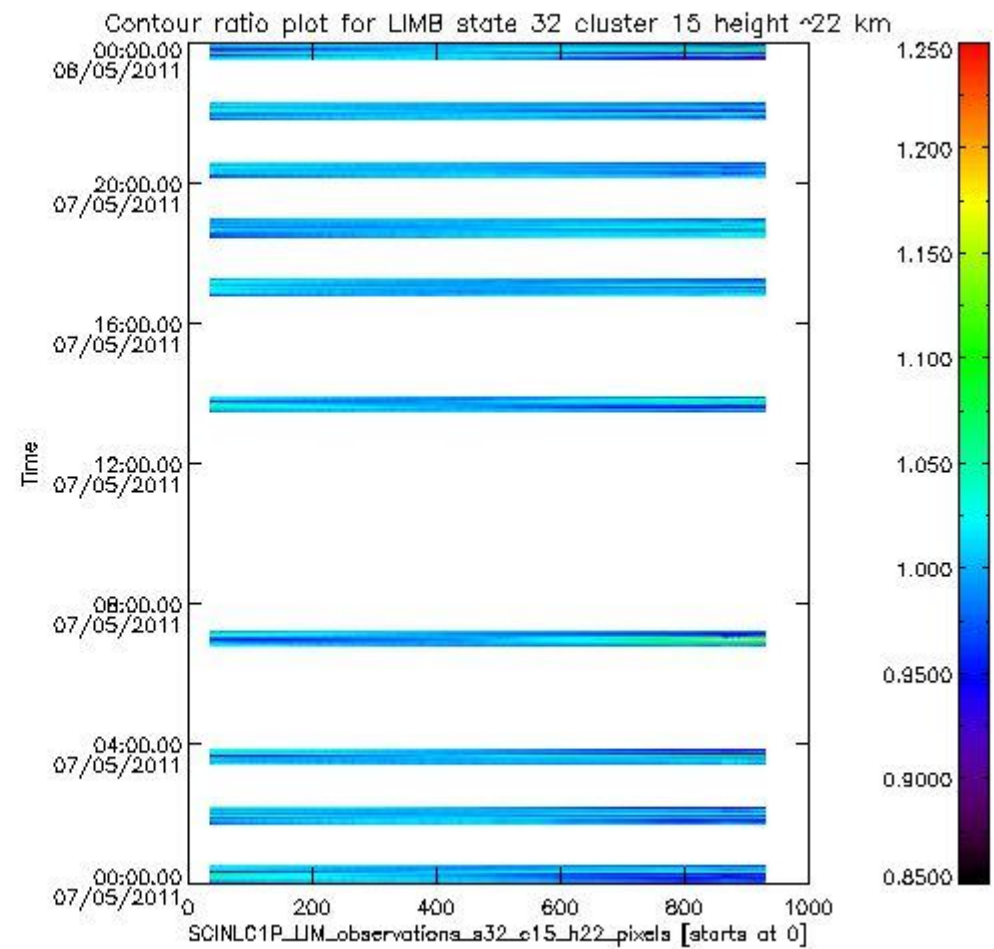
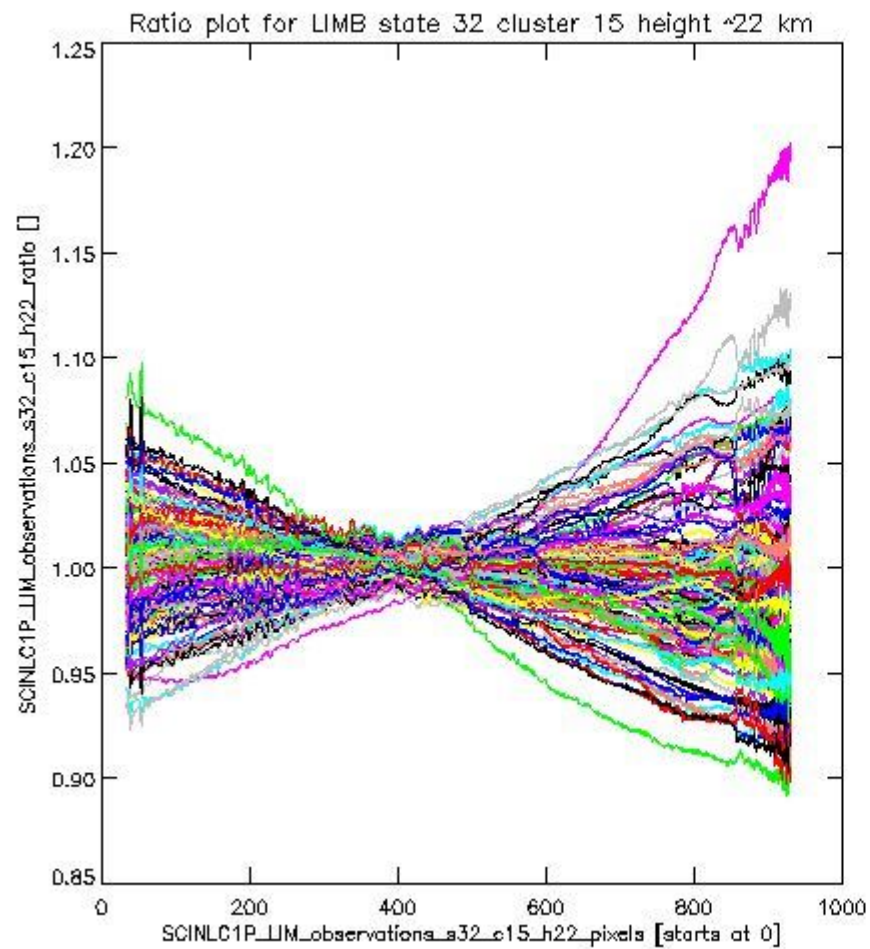
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_15.PNG

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	07MAY2011 00:04:00.784
Start time of last sample	07MAY2011 23:53:48.404
Reference period start time	07APR2011 00:05:09.092
Reference period stop time	06MAY2011 22:51:31.345
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



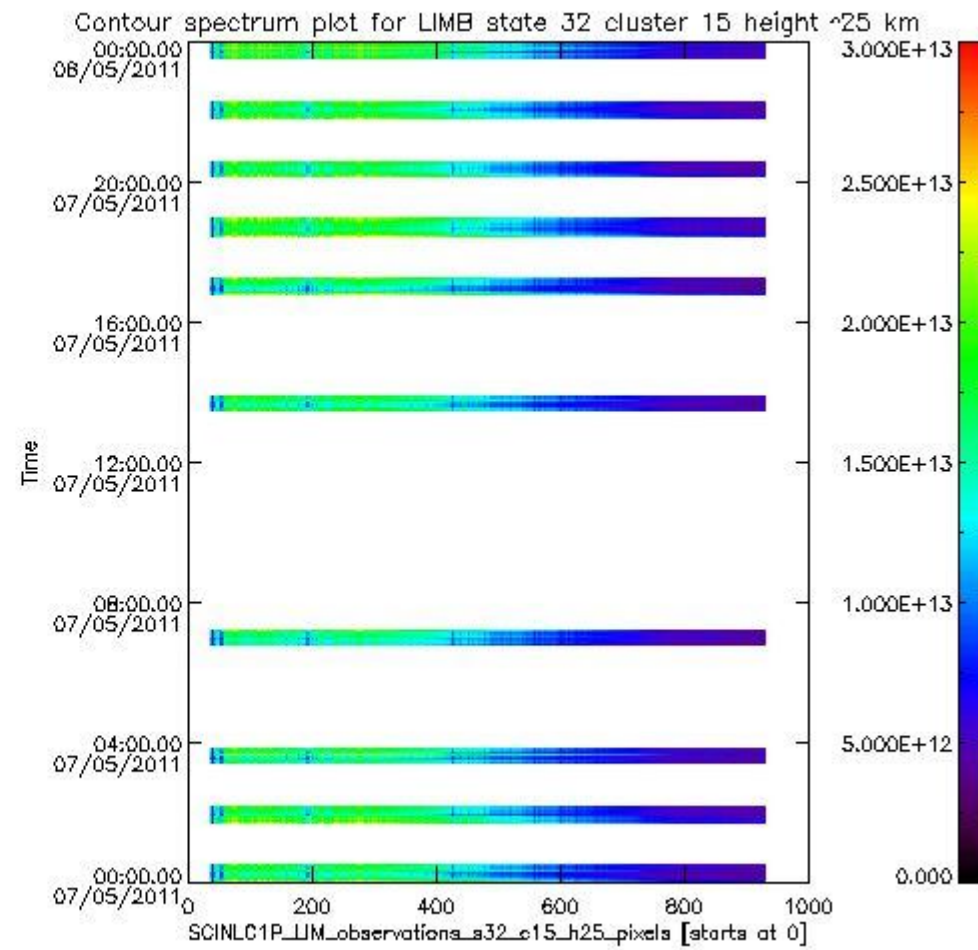
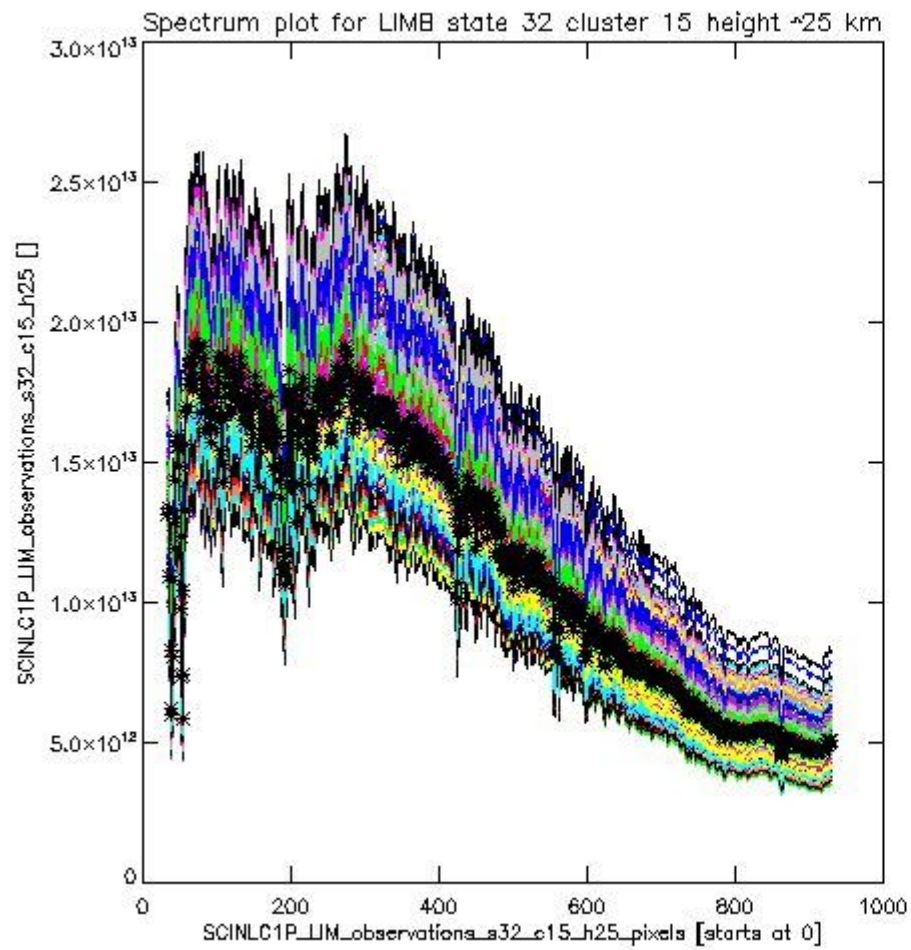
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110507_16.PNG

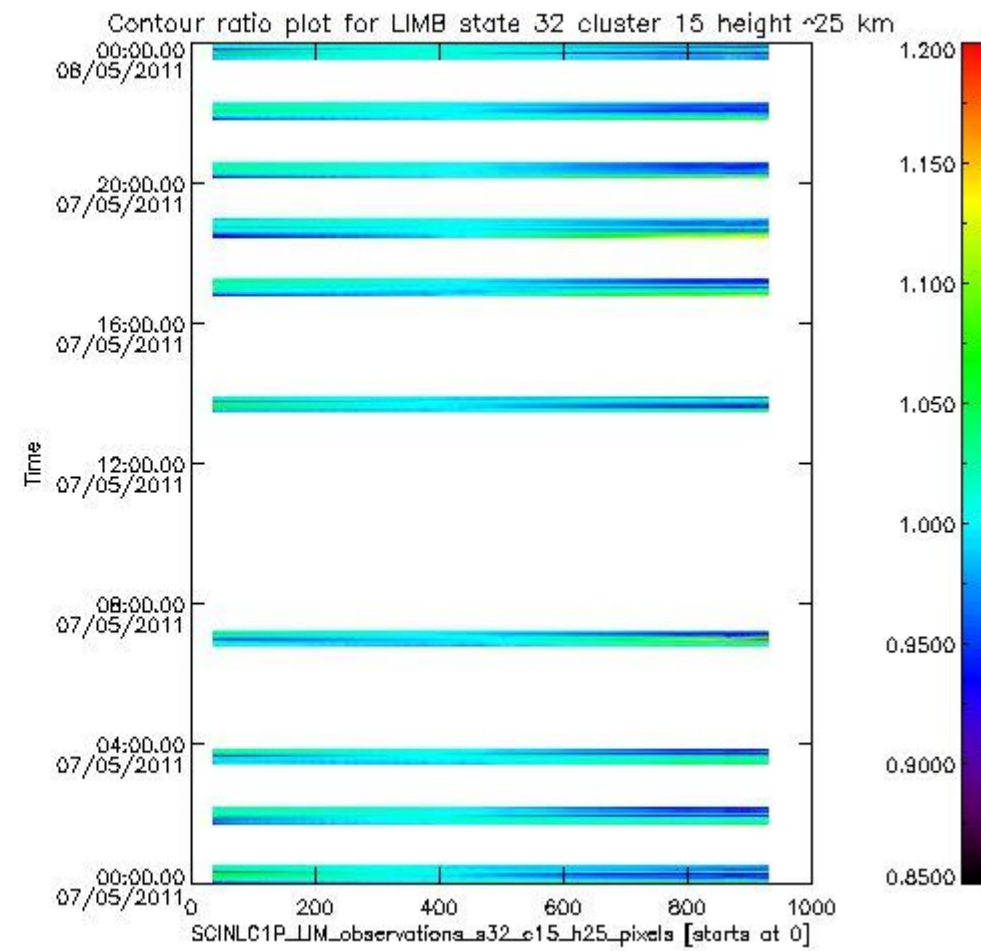
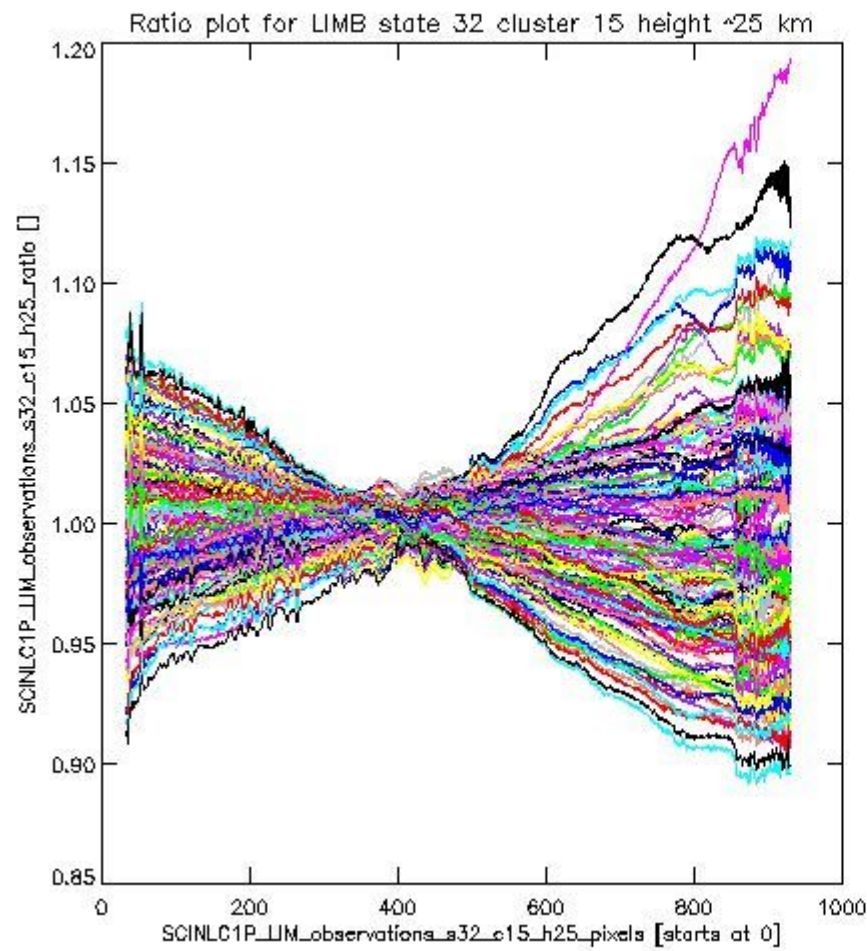


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110507_17.PNG

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	07MAY2011 00:04:00.784
Start time of last sample	07MAY2011 23:53:48.404
Reference period start time	07APR2011 00:05:09.092
Reference period stop time	06MAY2011 22:51:31.345
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

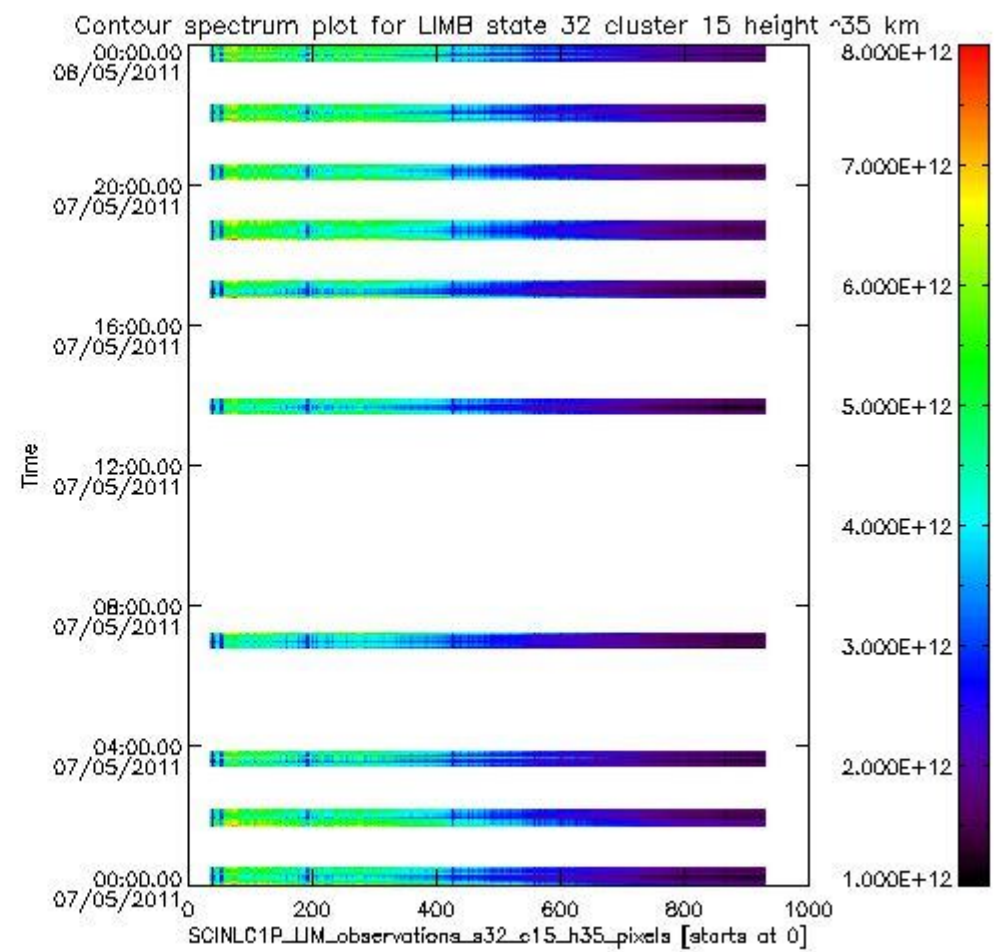
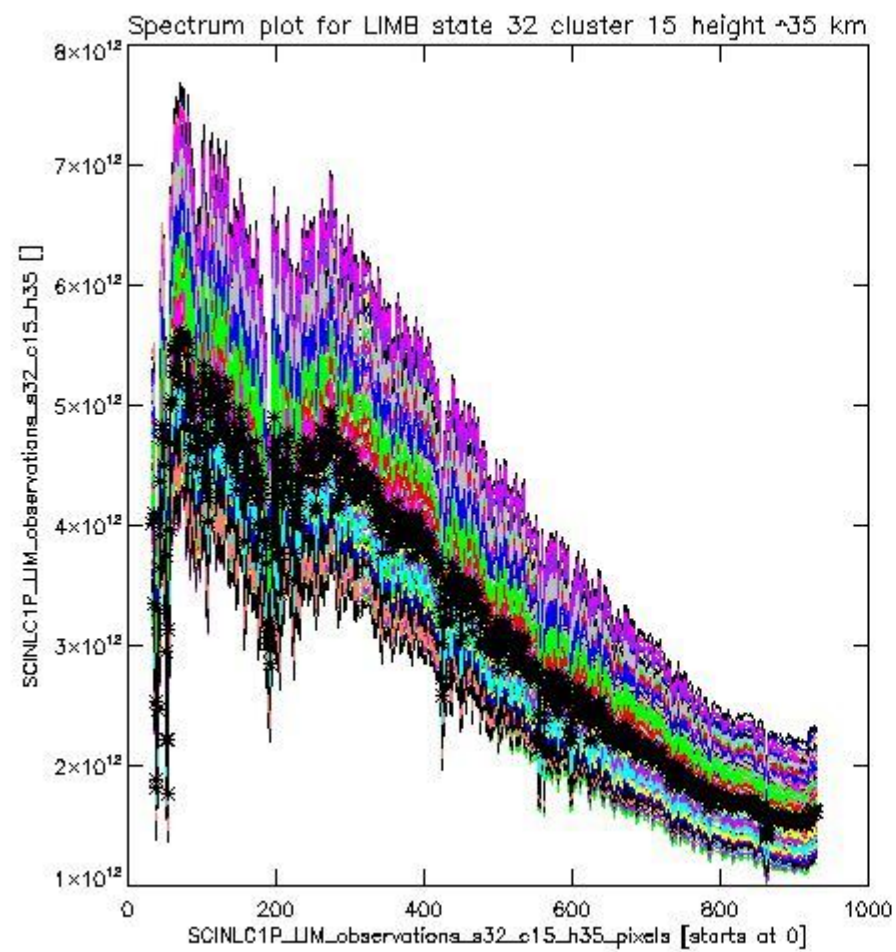


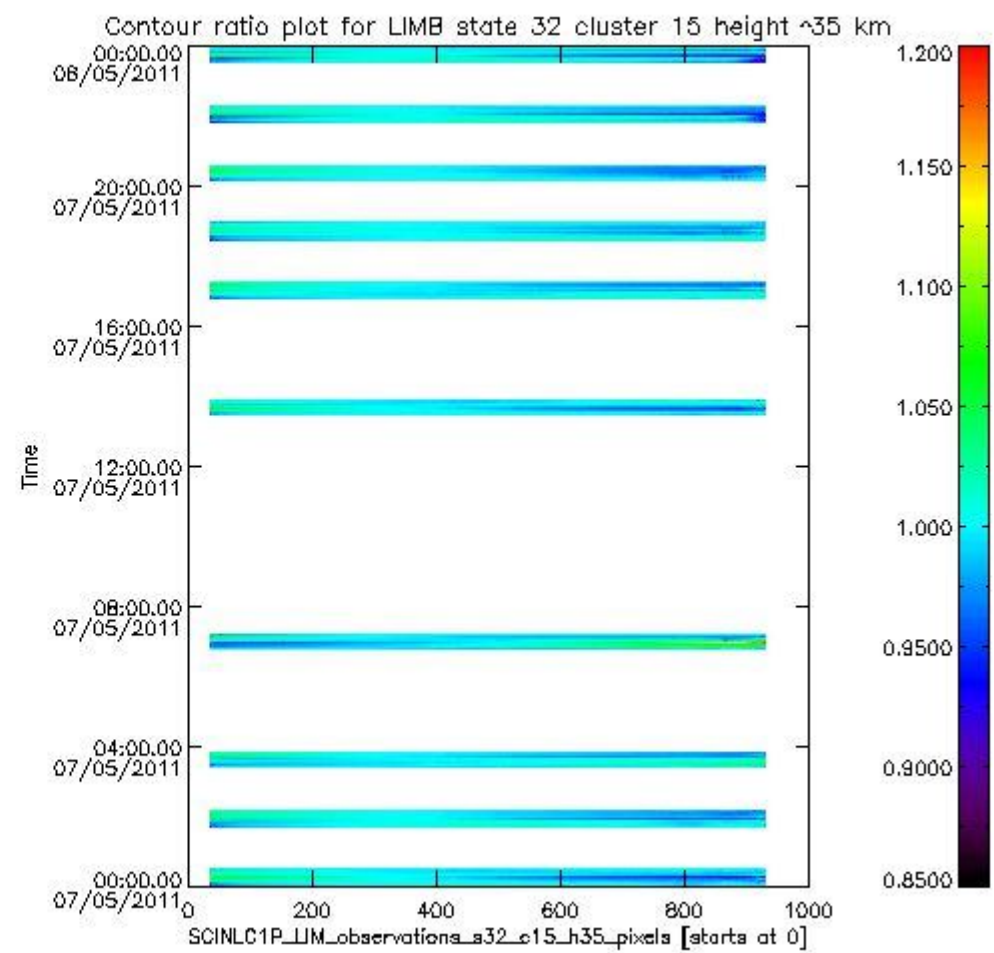
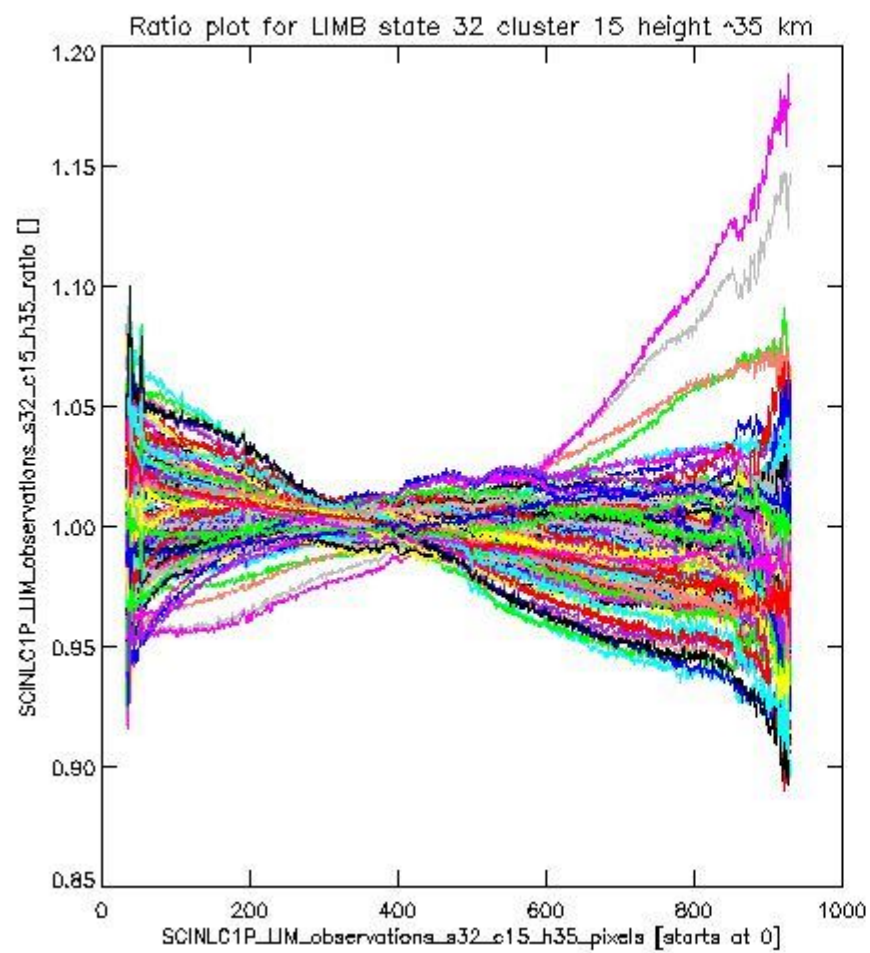


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110507_19.PNG

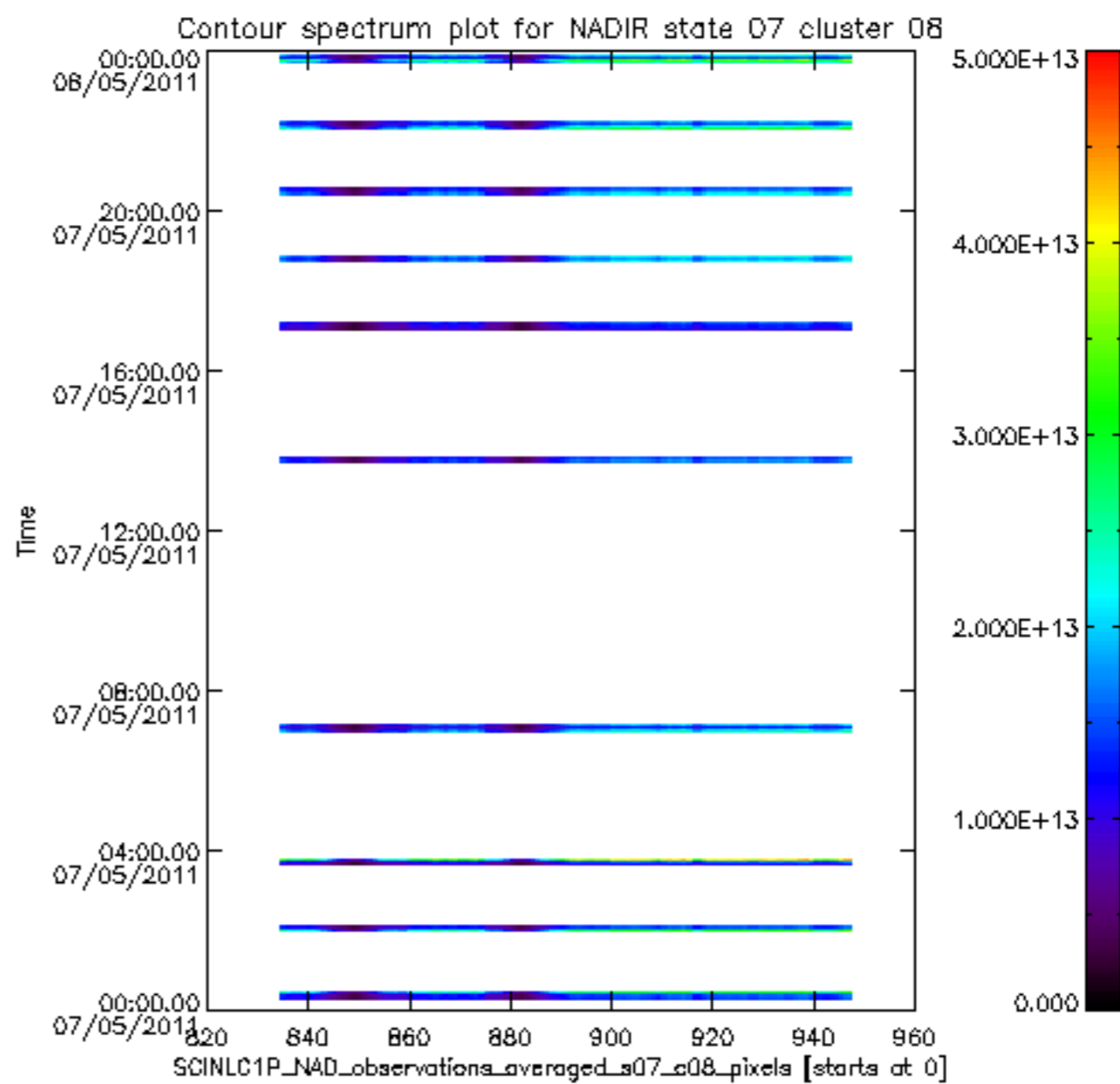
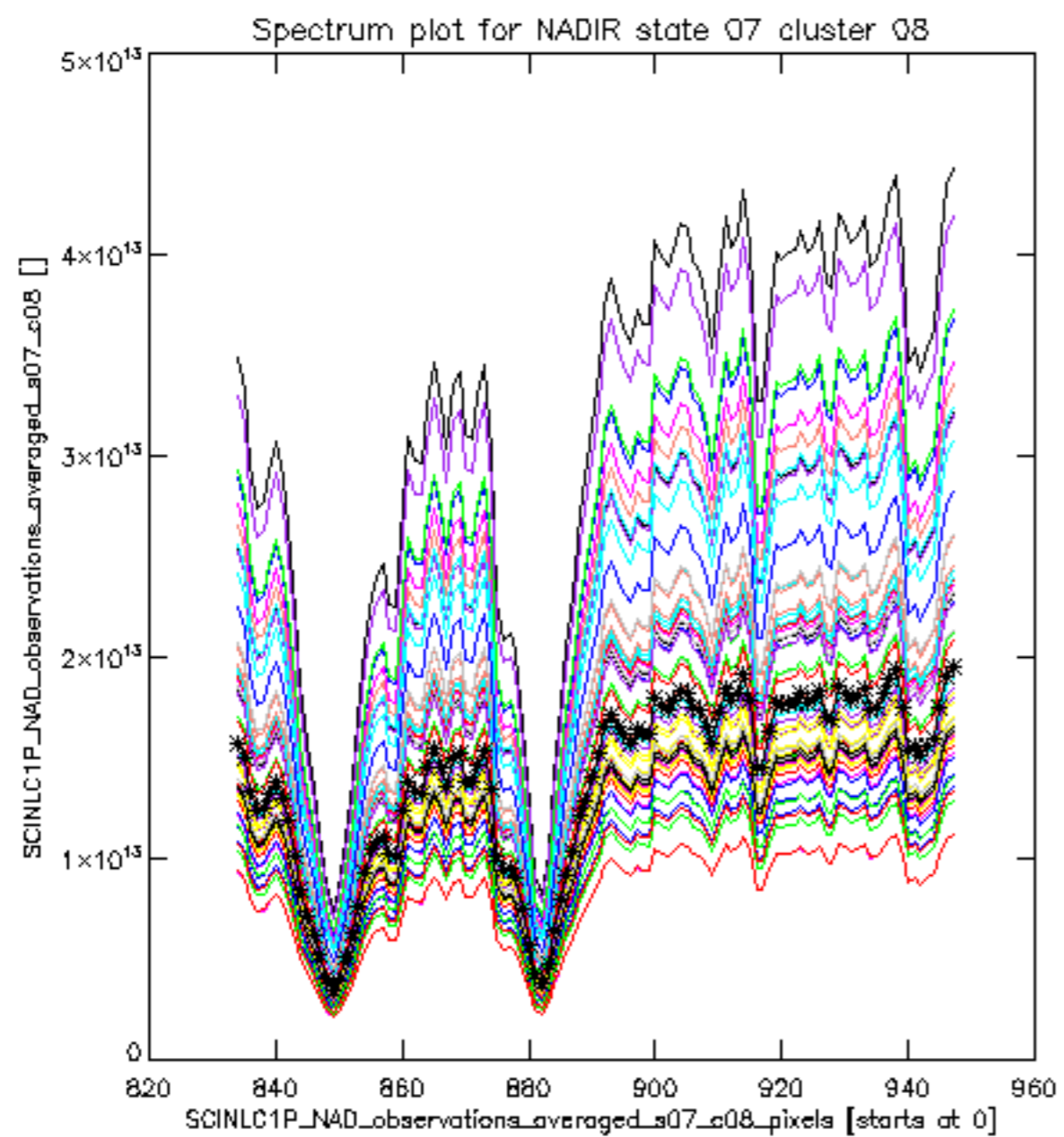
1.2.11 LIMB state 32 cluster 15 height ~35 km The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

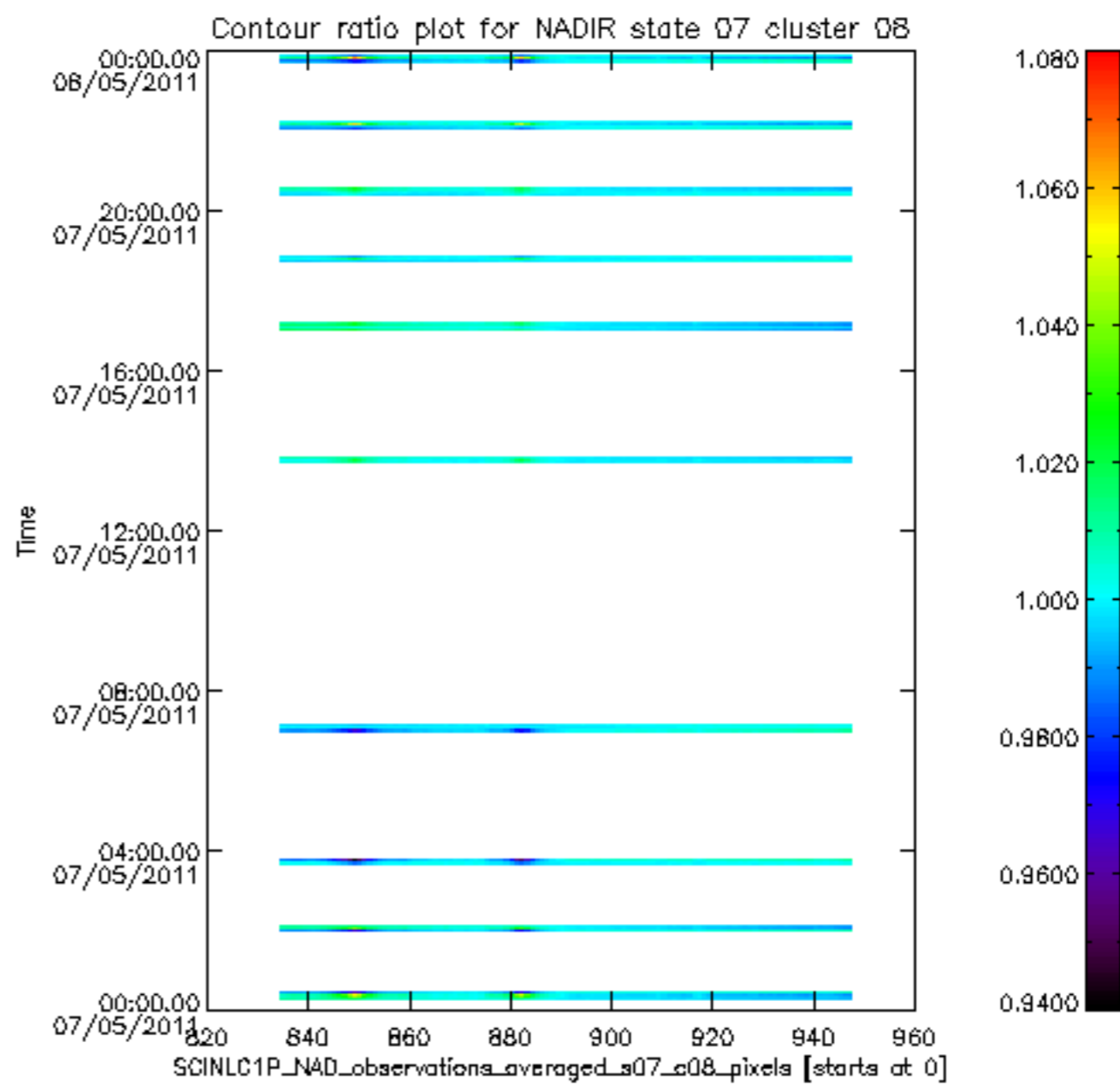
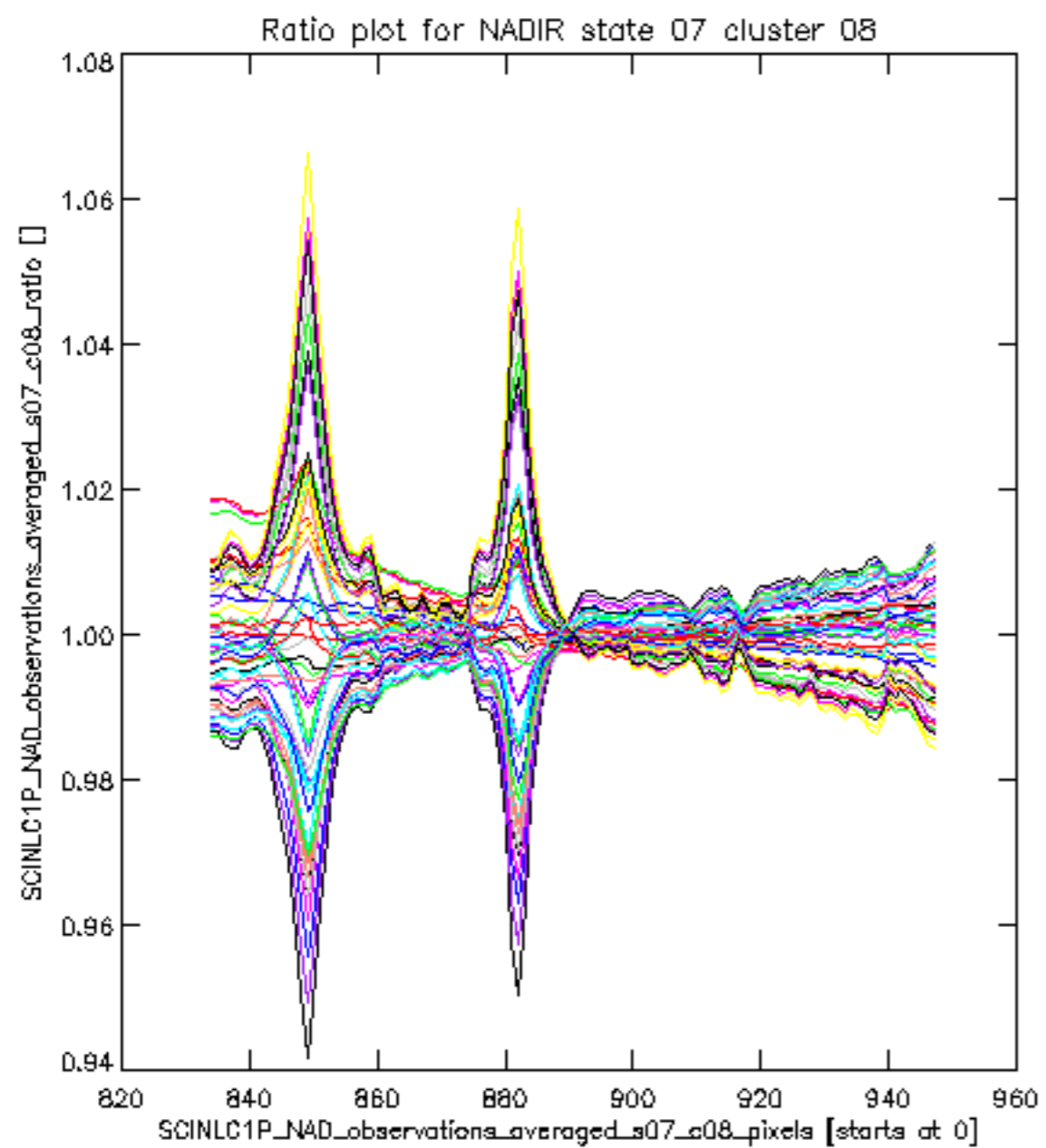
Item	Value
Start time of first sample	07MAY2011 00:04:00.784
Start time of last sample	07MAY2011 23:53:48.404
Reference period start time	07APR2011 00:05:09.092
Reference period stop time	06MAY2011 22:51:31.345
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

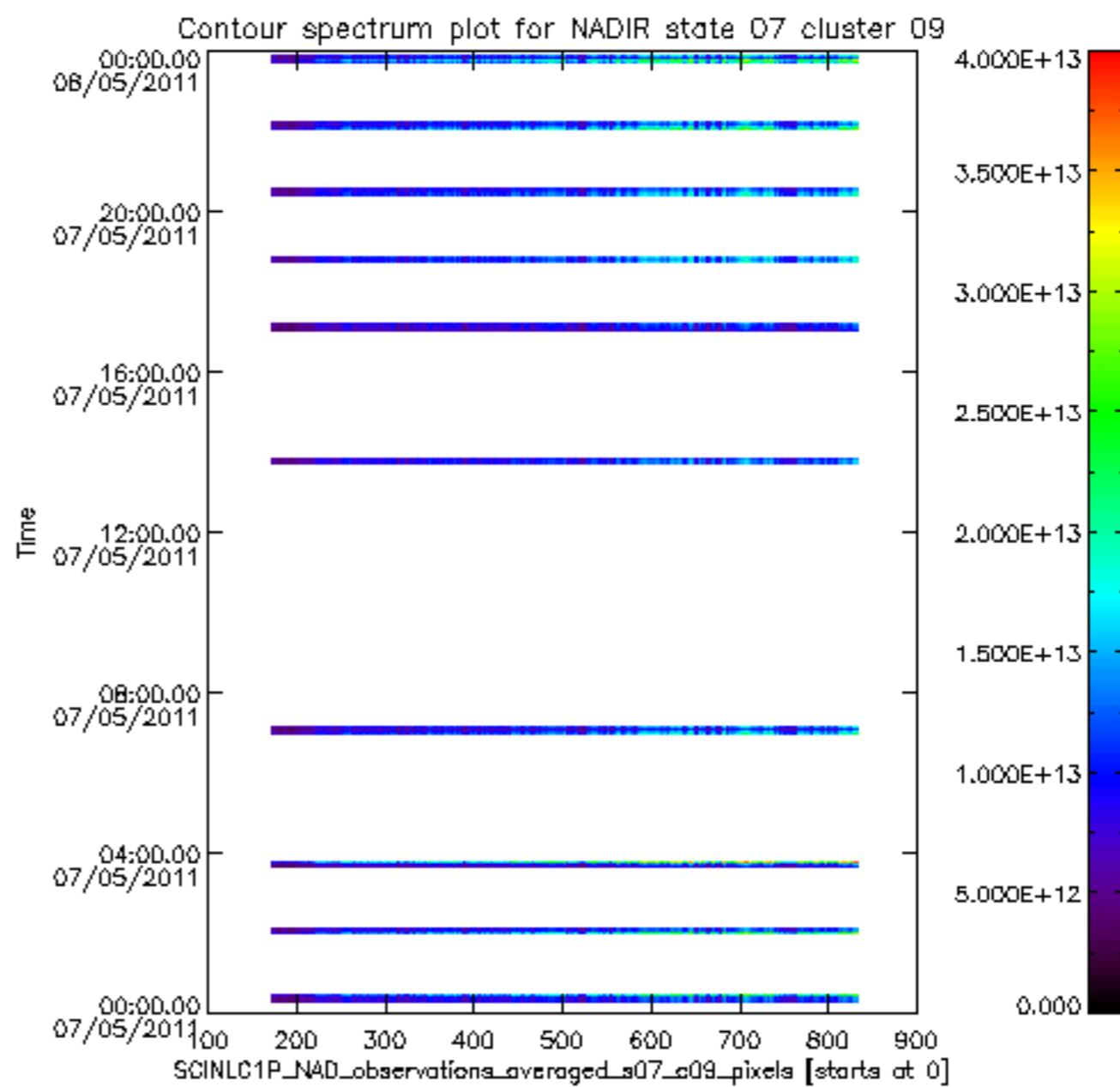
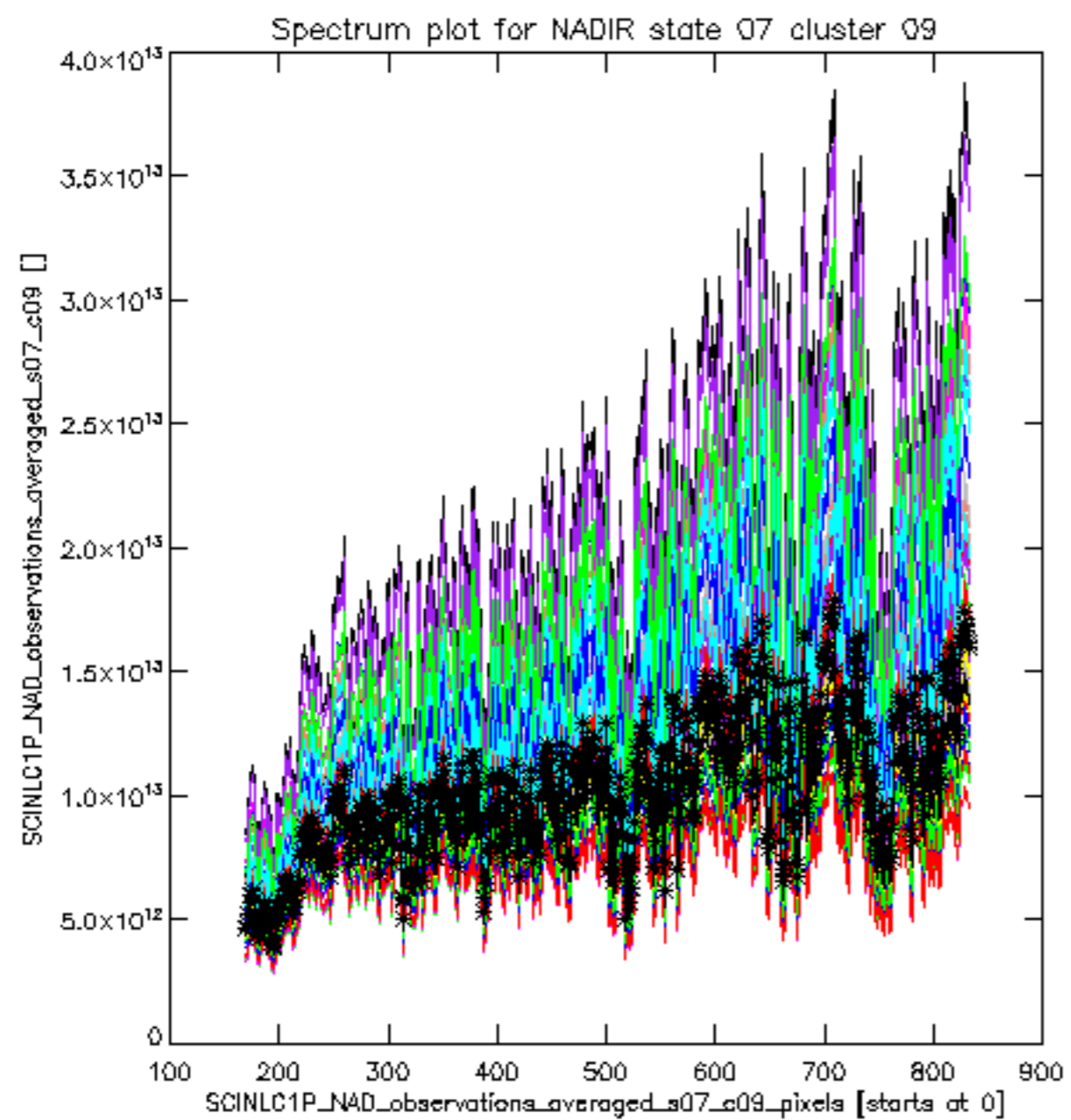


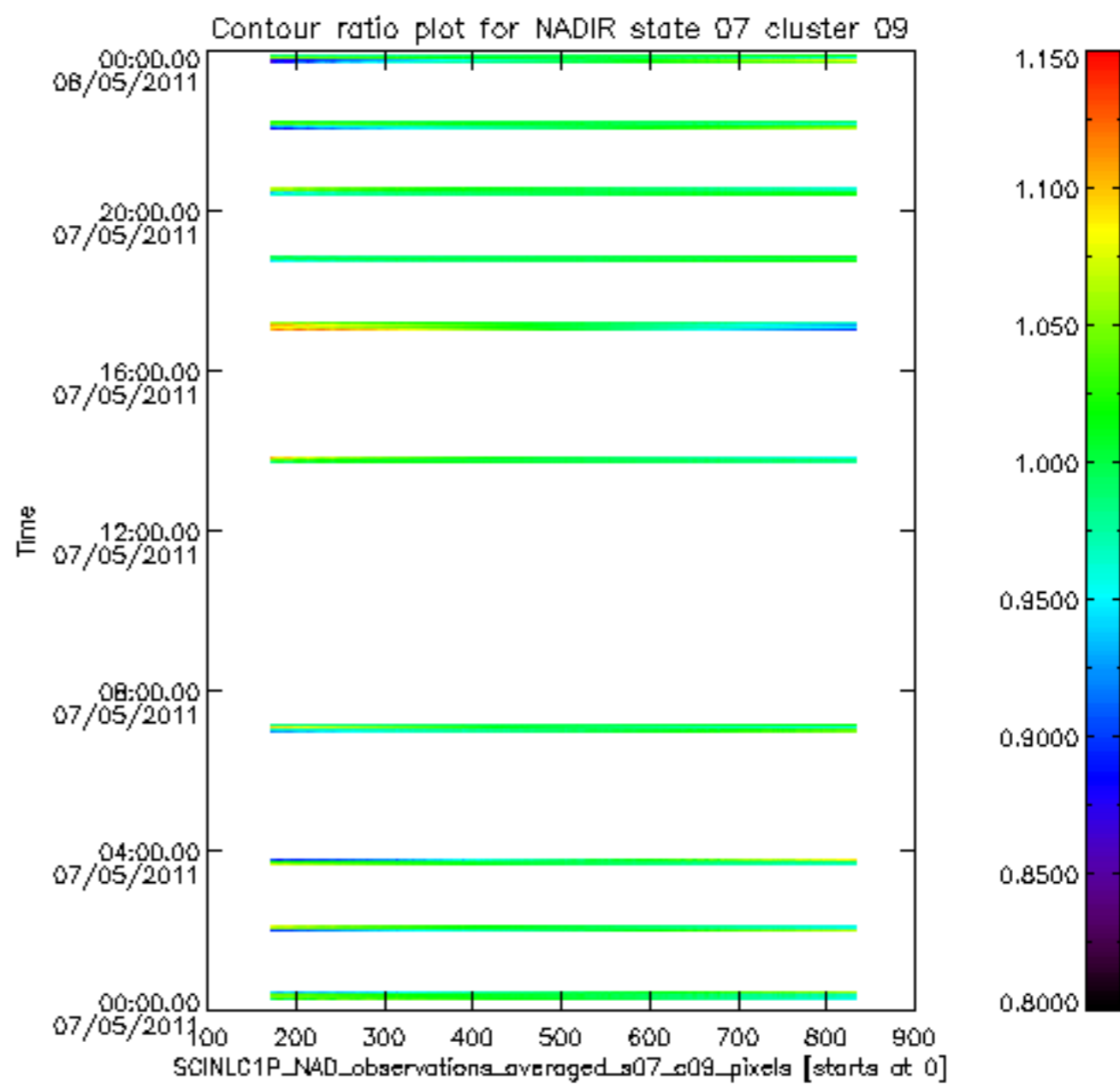
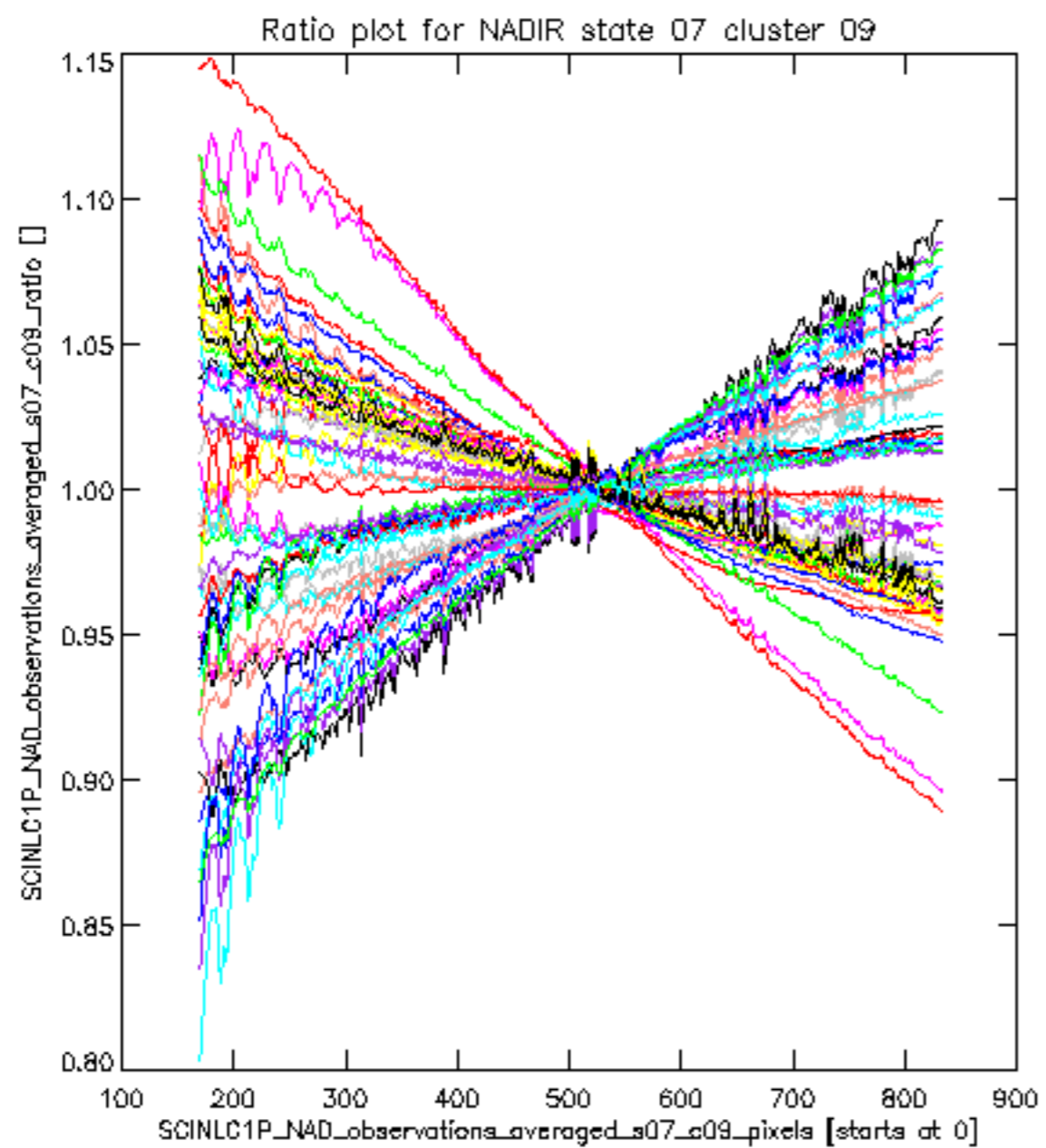


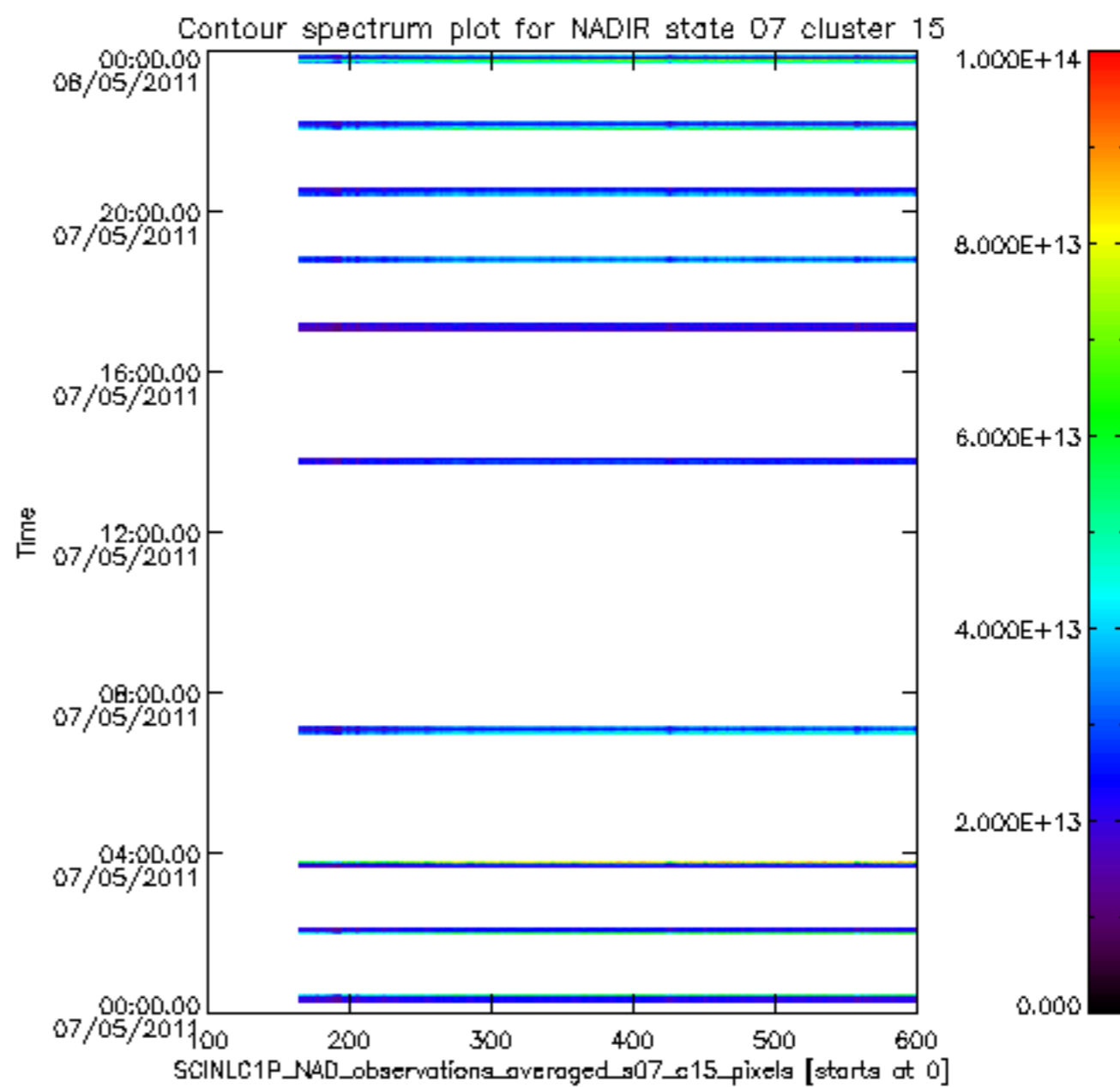
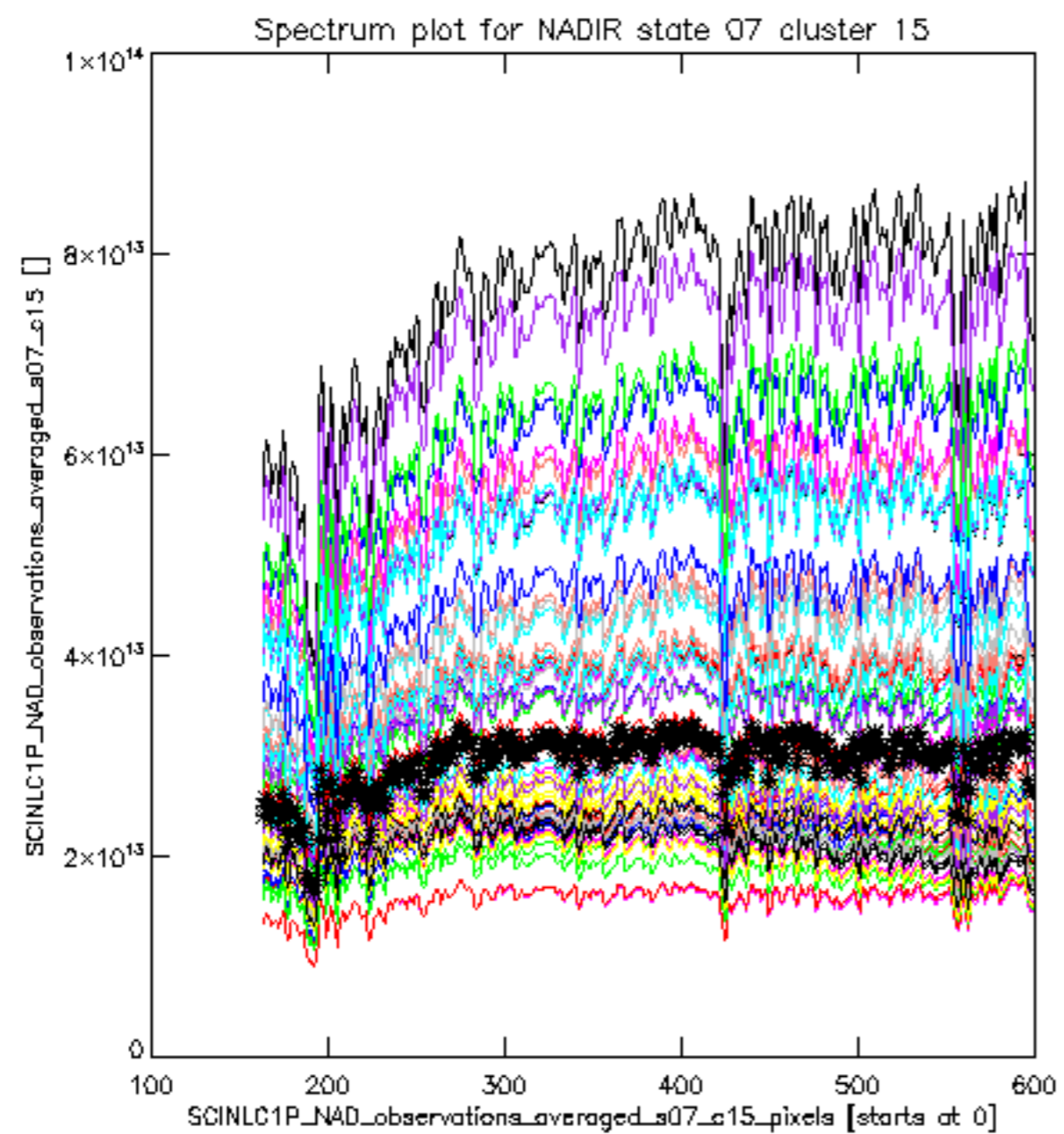
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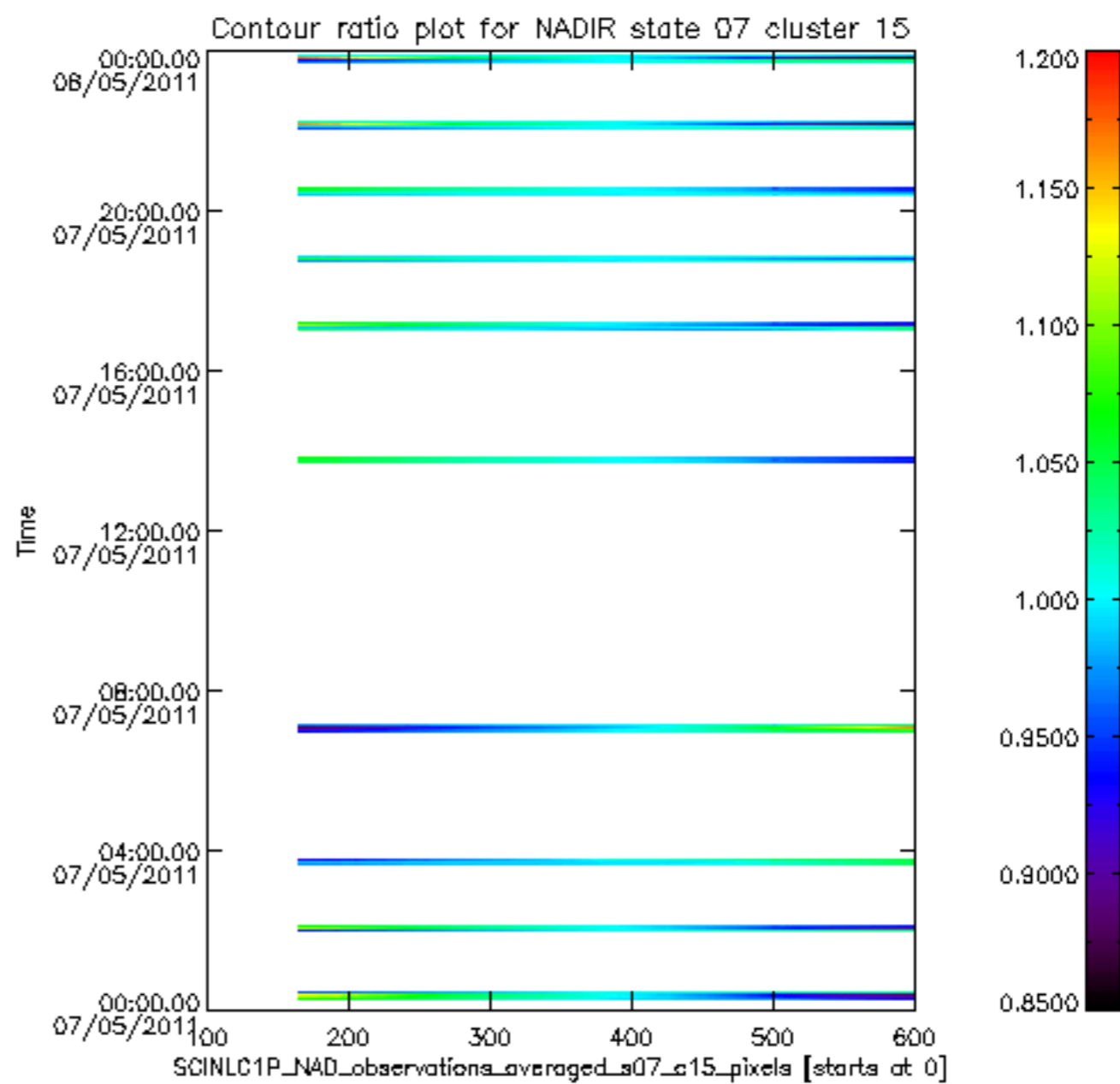
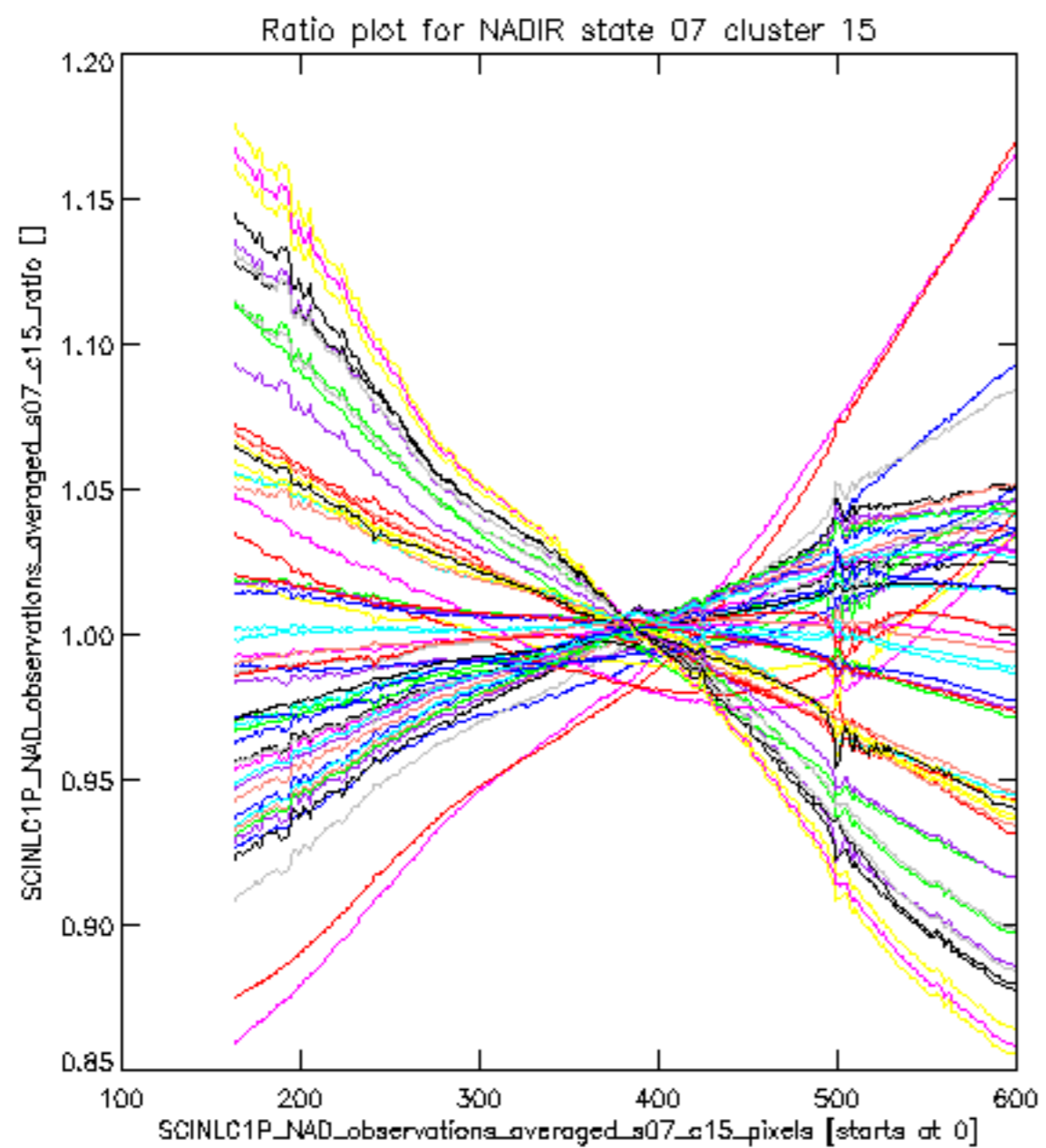


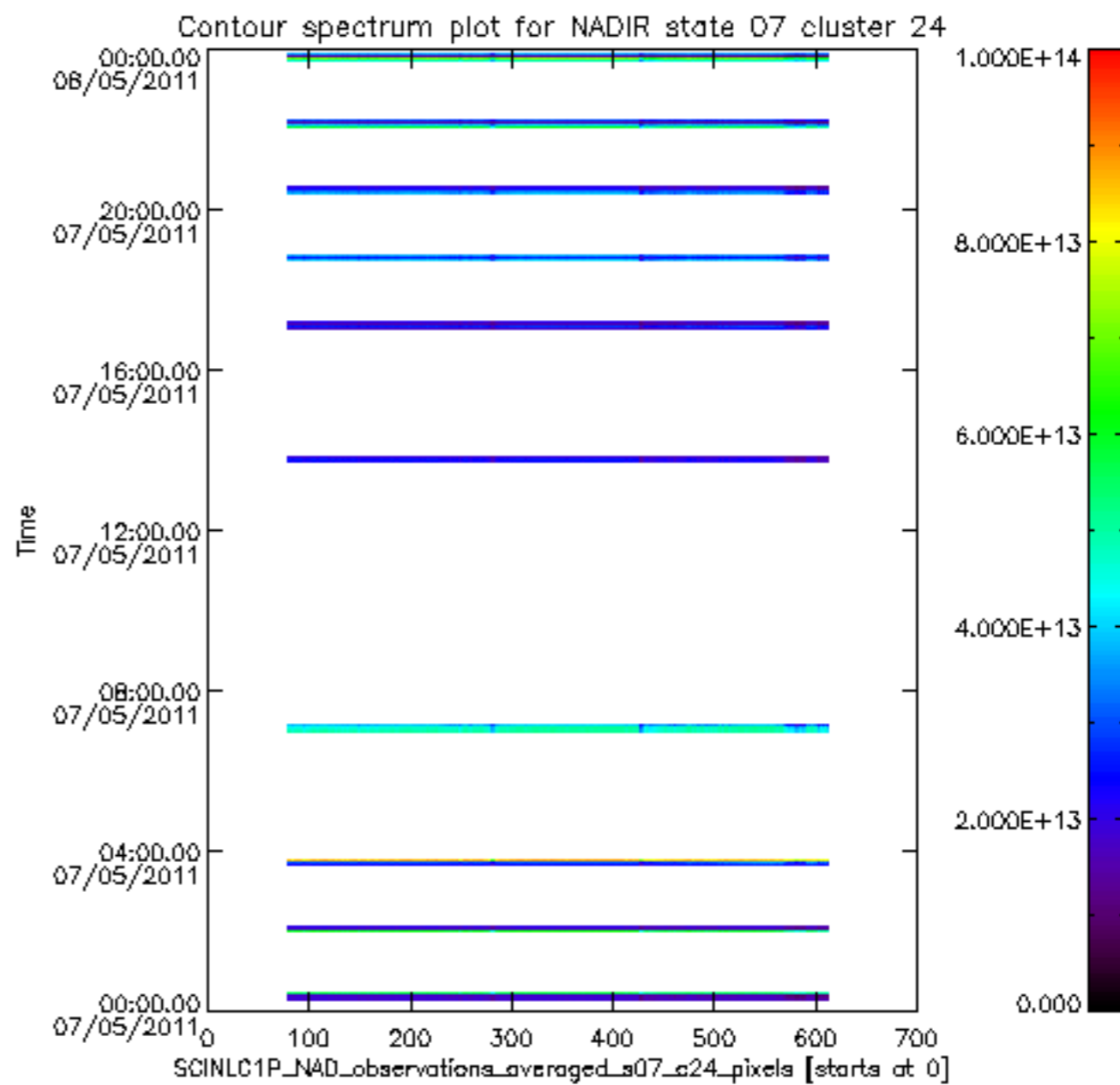
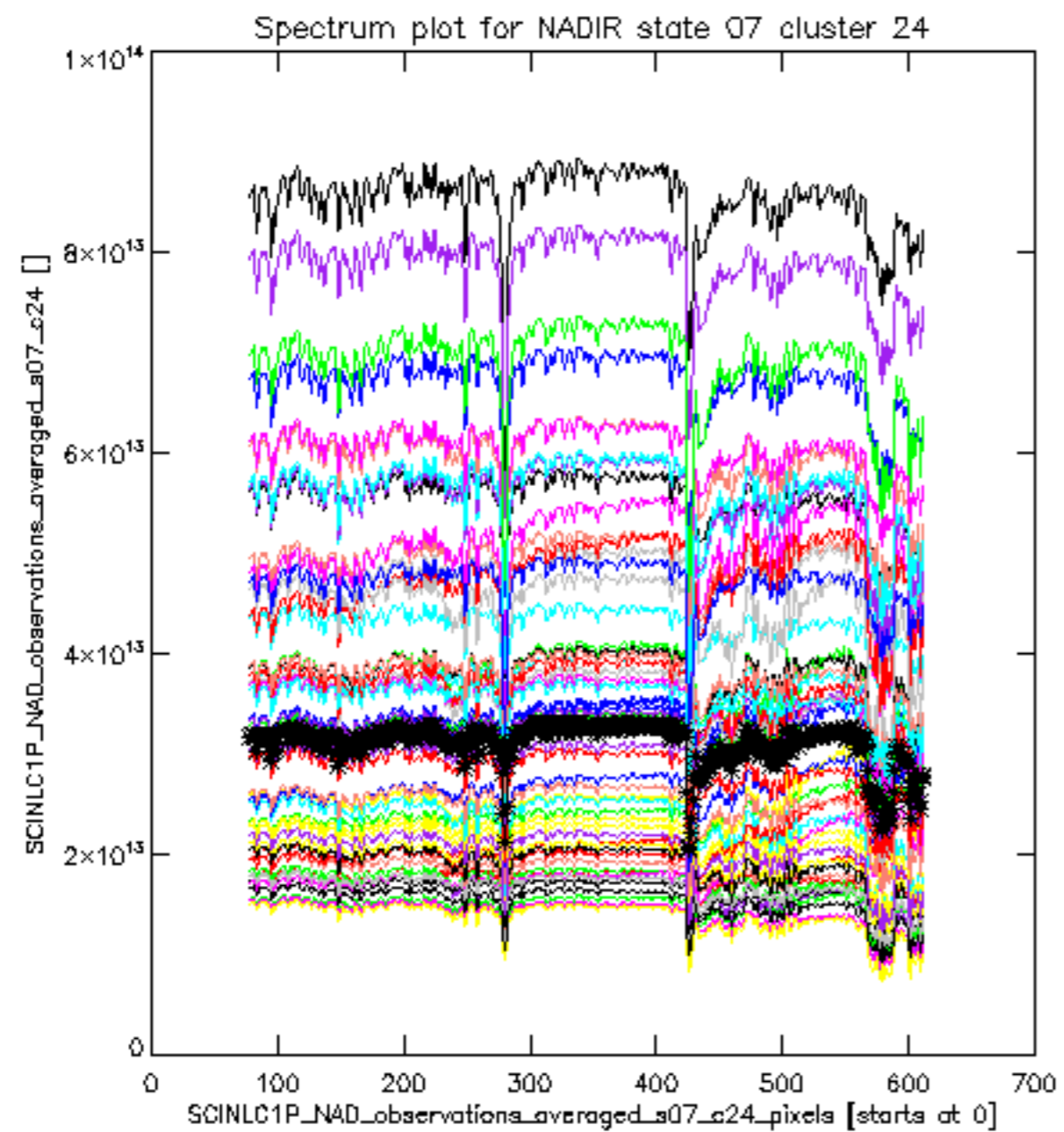


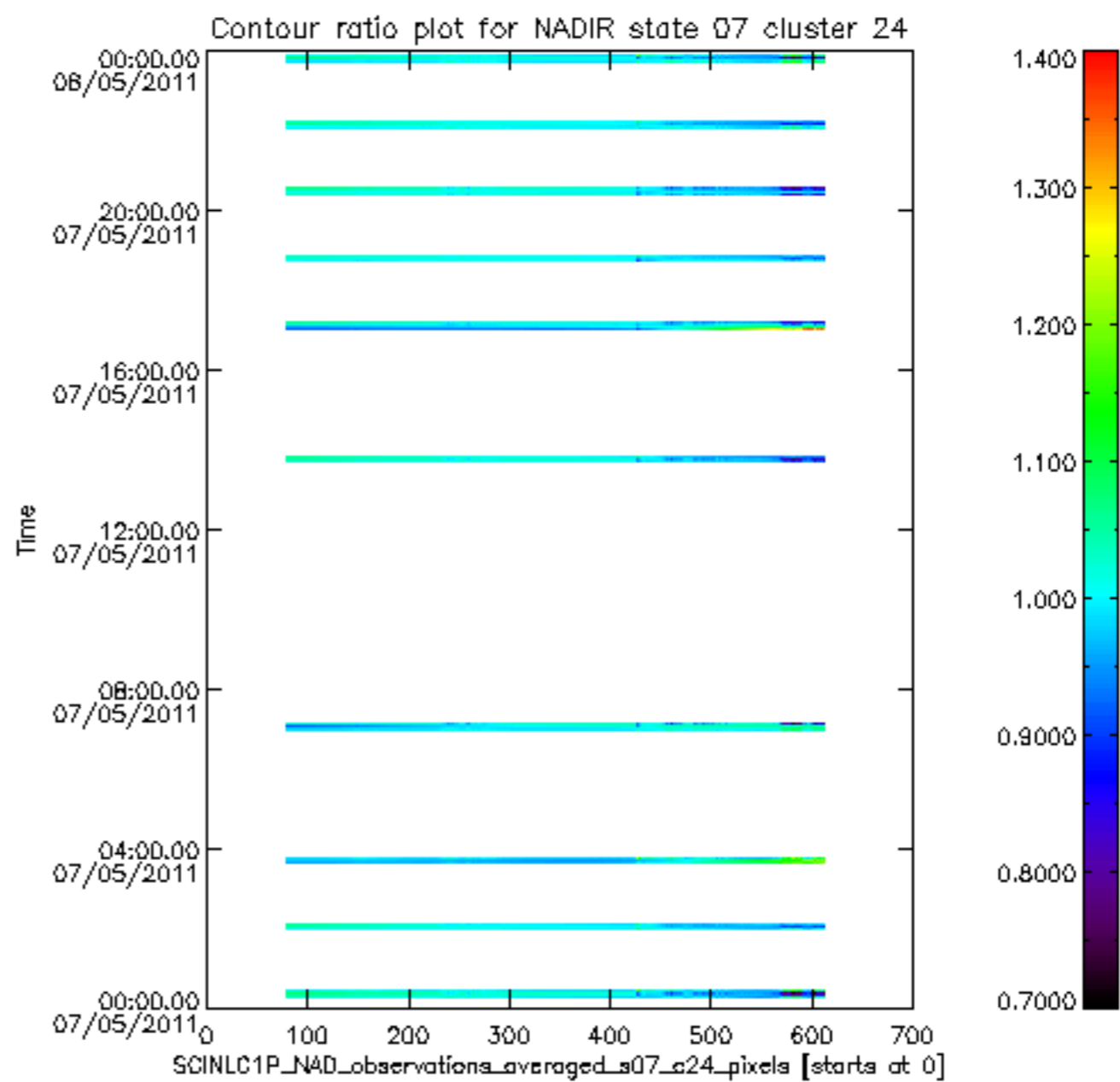
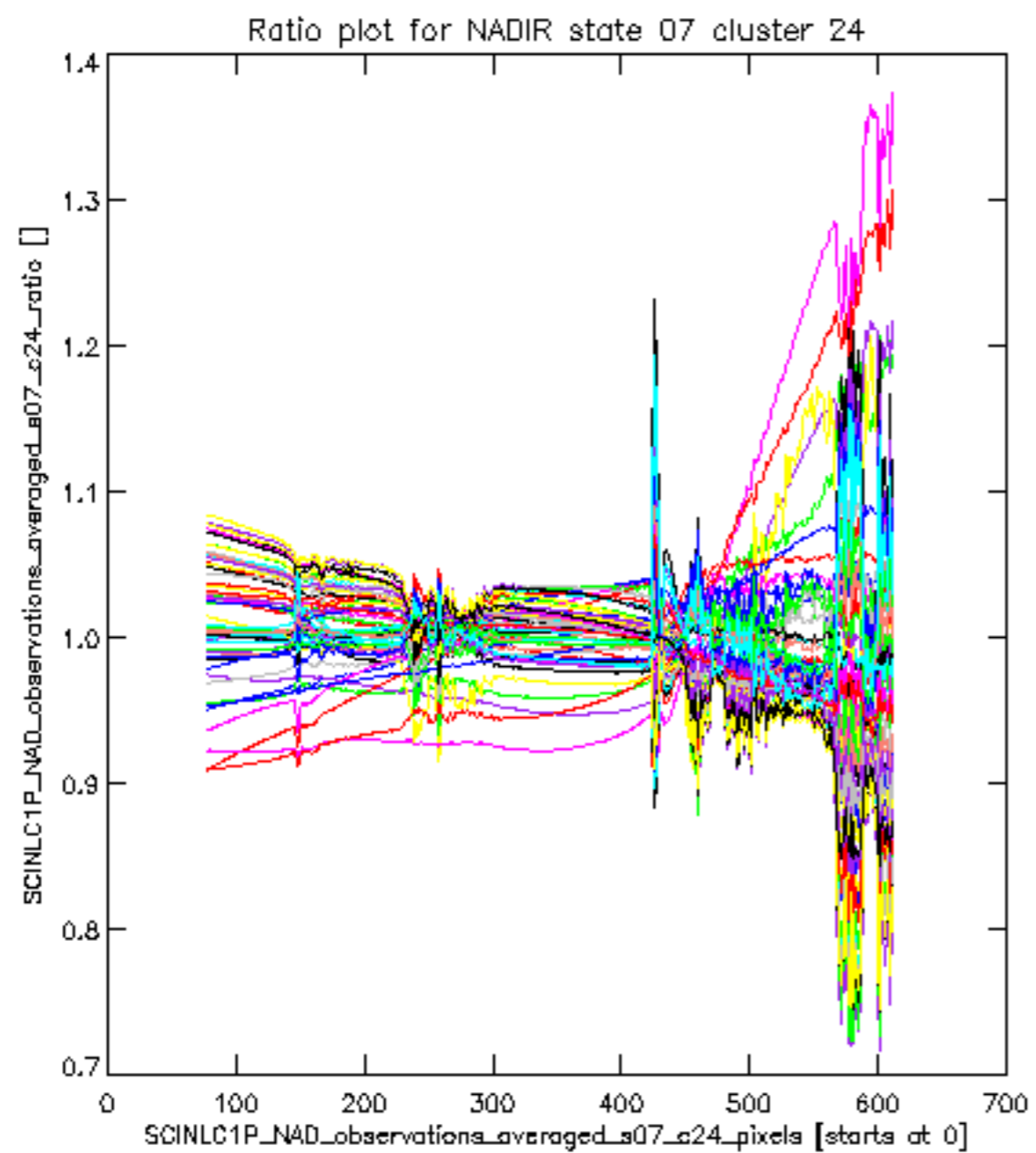




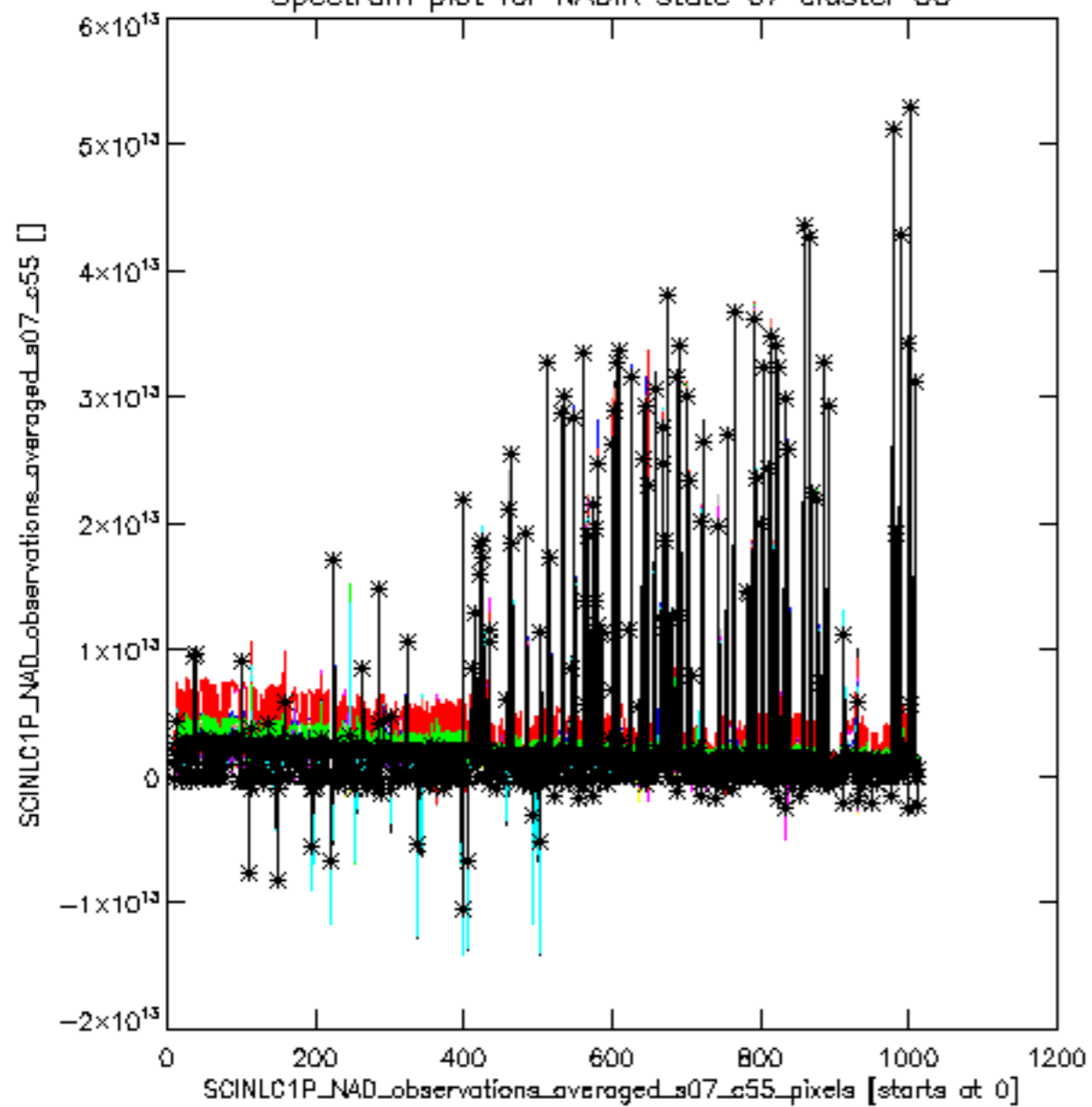








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

