

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	02APR2011 06:55:34
Data source version	SCIA/7.04-U
Processing scope for products	22MAR2011 00:00:00 to 23MAR2011 00:00:00
Start time of first product within scope	22MAR2011 01:15:23
Stop time of last product within scope	22MAR2011 20:26:45
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	22MAR2011 01:47:26.202	22MAR2011 20:19:31.839
1	NADIR	07	09	N/A	22MAR2011 01:47:26.202	22MAR2011 20:19:31.839
2	NADIR	07	15	N/A	22MAR2011 01:47:26.202	22MAR2011 20:19:31.839
3	NADIR	07	24	N/A	22MAR2011 01:47:26.202	22MAR2011 20:19:31.839
4	NADIR	07	55	N/A	22MAR2011 01:47:26.202	22MAR2011 20:19:31.839
5	LIMB	32	09	~19 km	22MAR2011 01:34:15.565	22MAR2011 20:24:45.882
6	LIMB	32	09	~22 km	22MAR2011 01:34:15.565	22MAR2011 20:24:45.882
7	LIMB	32	09	~25 km	22MAR2011 01:34:15.565	22MAR2011 20:24:45.882
8	LIMB	32	15	~22 km	22MAR2011 01:34:15.565	22MAR2011 20:24:45.882
9	LIMB	32	15	~25 km	22MAR2011 01:34:15.565	22MAR2011 20:24:45.882
10	LIMB	32	15	~35 km	22MAR2011 01:34:15.565	22MAR2011 20:24:45.882

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	#cpl_drk	#incpl_drk	Decont
0	SCI_NLC_1CUDPA20110322_010513_000046073100_00362_47359_5654.N1	22MAR2011 01:15:23	22MAR2011 02:21:04	0	31	31	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110322_070537_000024263100_00365_47362_5656.N1	22MAR2011 07:06:46	22MAR2011 07:26:33	0	15	3	0	0	2	0	0	
2	SCI_NLC_1CUDPA20110322_074607_000060093100_00366_47363_5658.N1	22MAR2011 07:56:18	22MAR2011 09:06:32	0	35	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110322_092620_000060093100_00367_47364_5661.N1	22MAR2011 09:36:31	22MAR2011 10:47:00	0	36	30	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110322_110634_000060093100_00368_47365_5662.N1	22MAR2011 11:16:45	22MAR2011 12:26:59	0	35	31	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110322_124647_000060093100_00369_47366_5664.N1	22MAR2011 12:56:58	22MAR2011 14:07:27	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110322_142700_000060093100_00370_47367_5666.N1	22MAR2011 14:37:12	22MAR2011 15:47:26	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110322_160714_000060093100_00371_47368_5669.N1	22MAR2011 16:17:25	22MAR2011 17:27:54	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110322_174727_000060093100_00372_47369_5670.N1	22MAR2011 17:57:39	22MAR2011 19:07:13	0	34	29	0	1	1	0	0	
9	SCI_NLC_1CUDPA20110322_192741_000035853100_00373_47370_5671.N1	22MAR2011 19:37:52	22MAR2011 20:26:45	0	20	26	0	1	1	0	0	

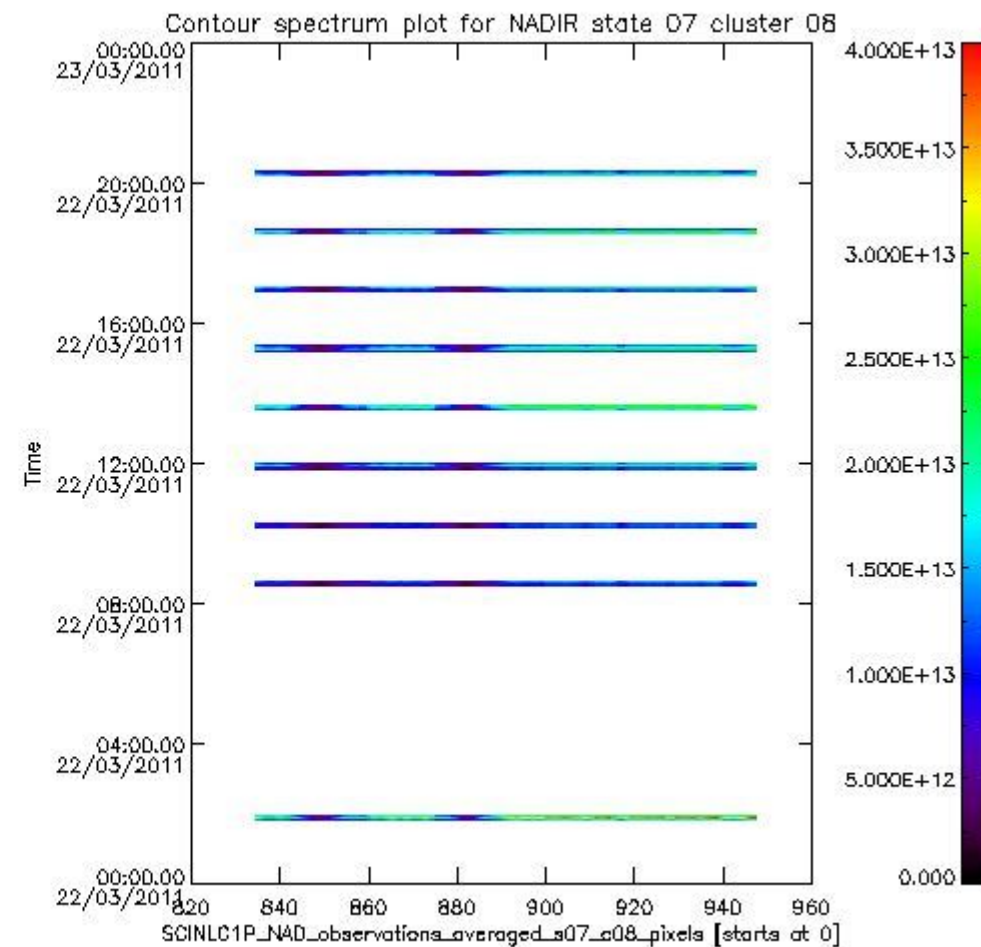
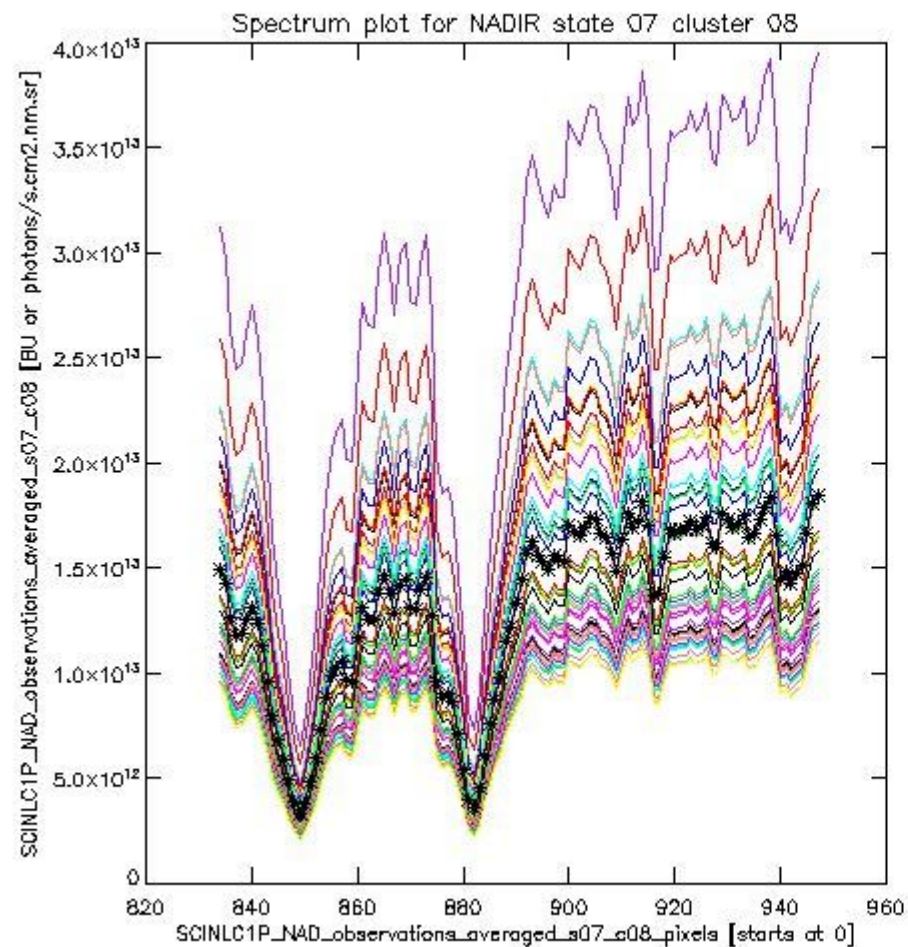
1.2 Source packet monitoring

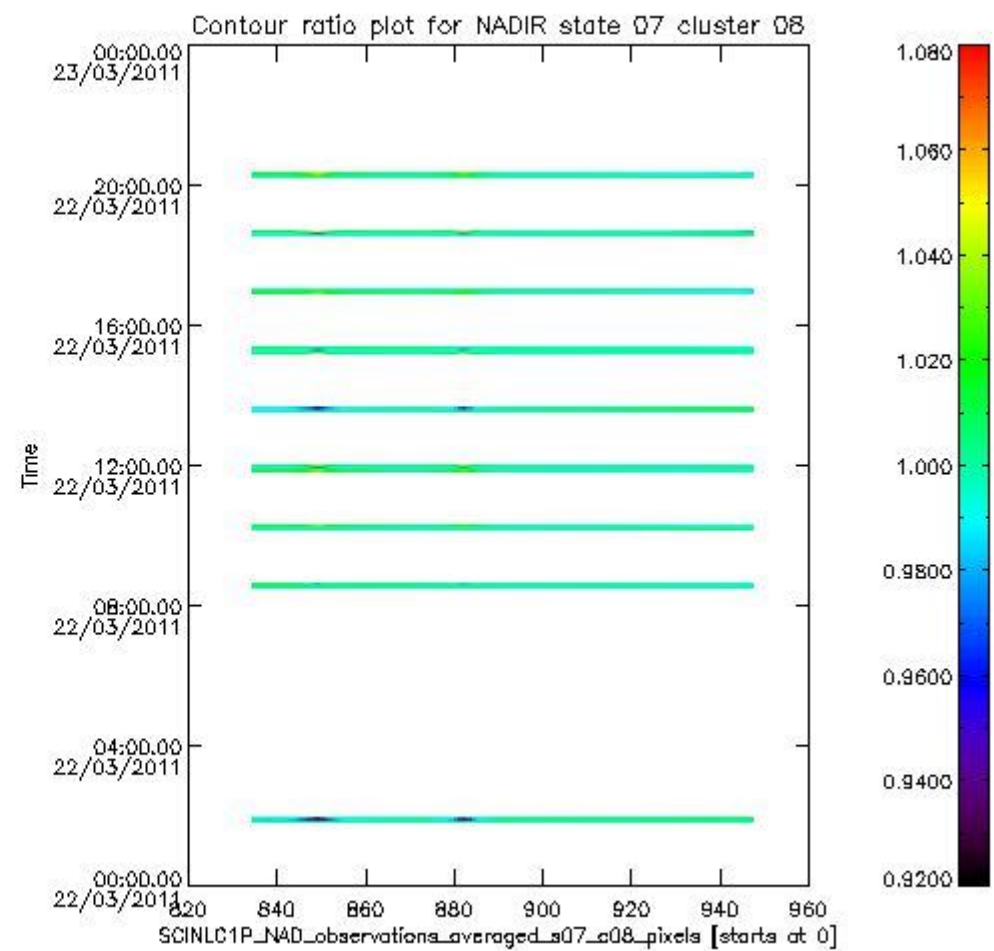
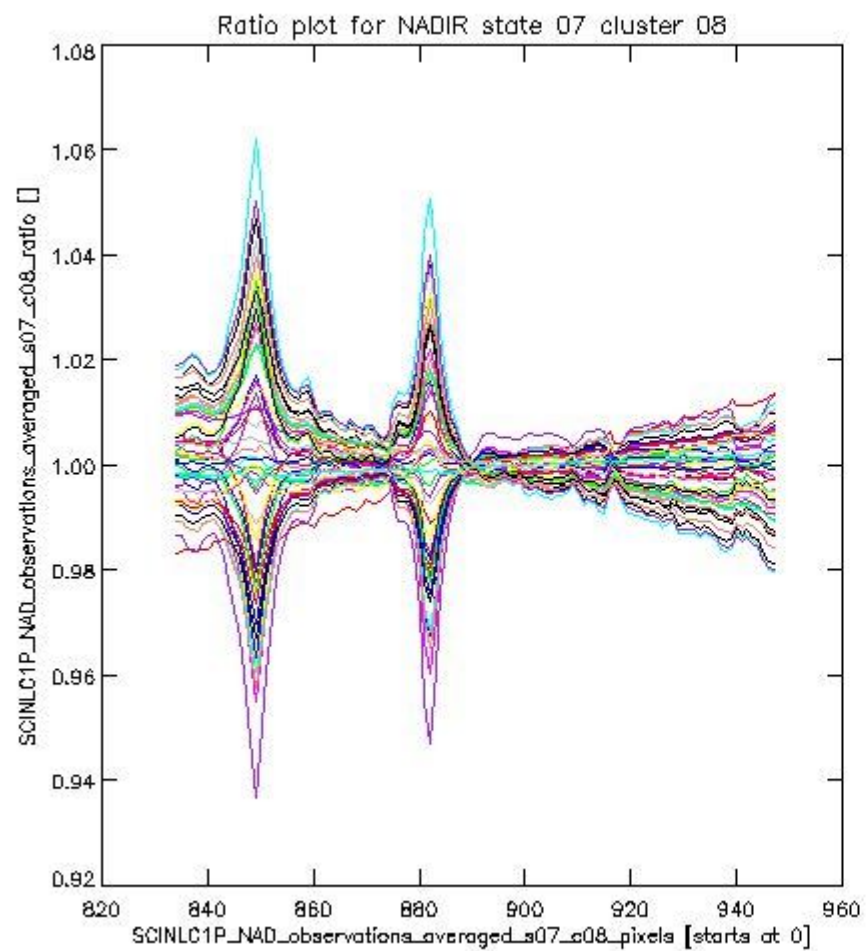
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	22MAR2011 01:47:26.202
Start time of last sample	22MAR2011 20:19:31.839
Reference period start time	20FEB2011 00:10:24.846
Reference period stop time	21MAR2011 07:34:16.756
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

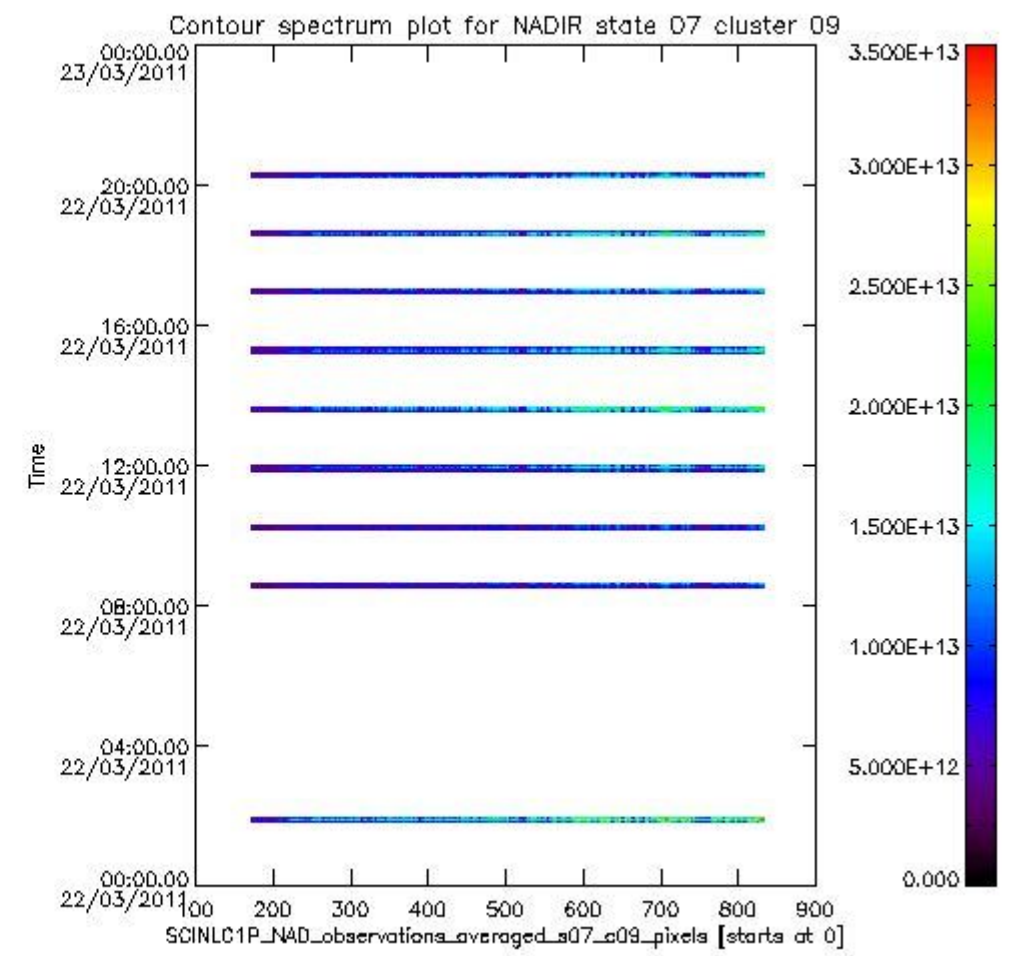
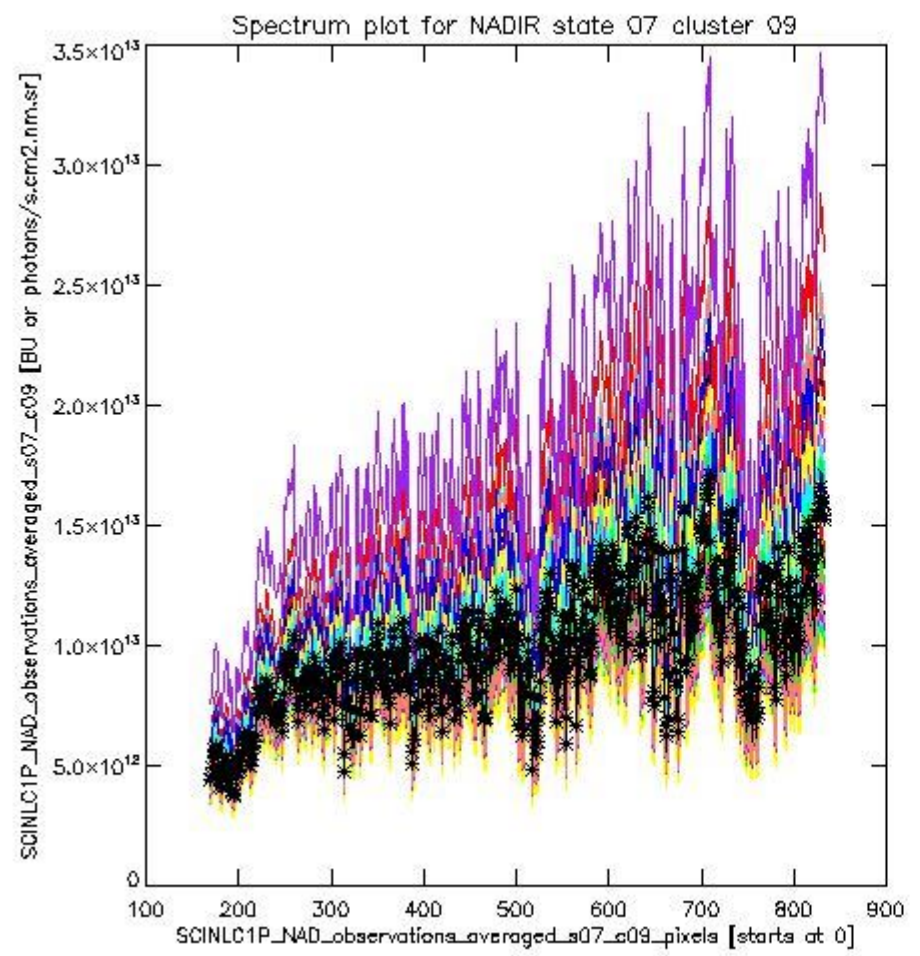




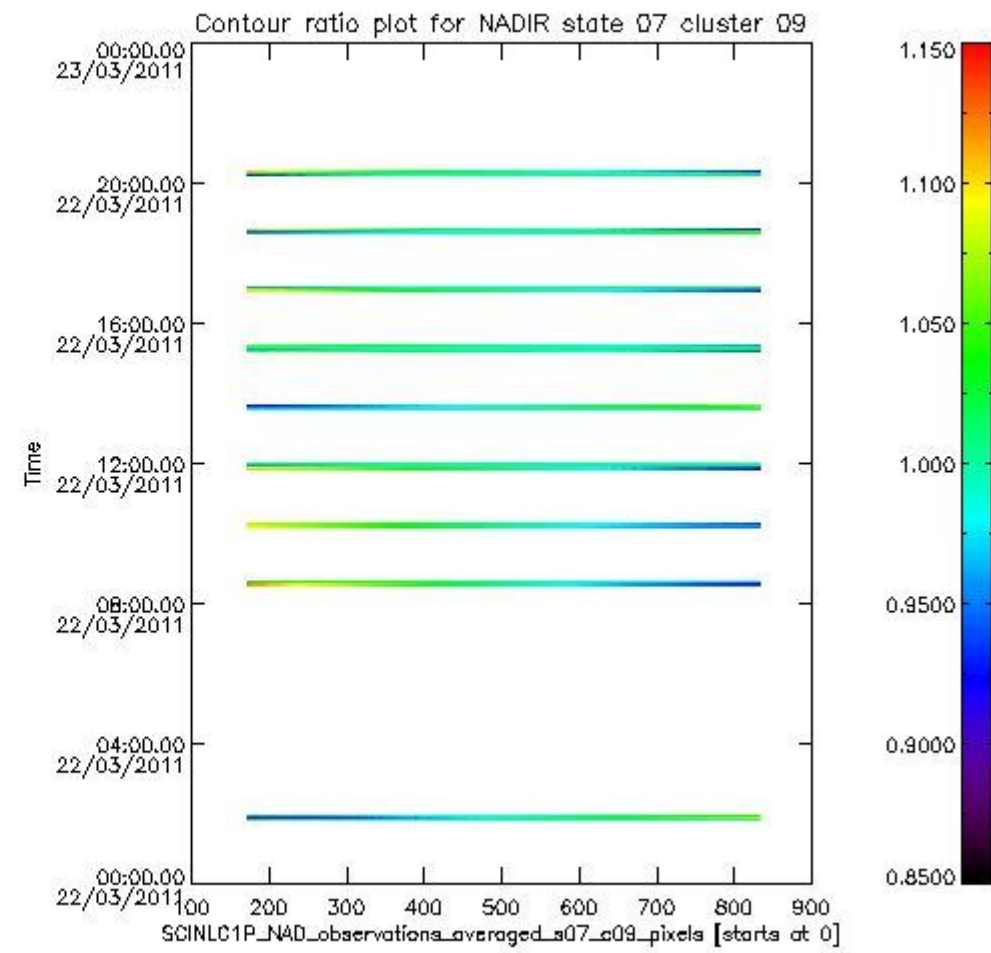
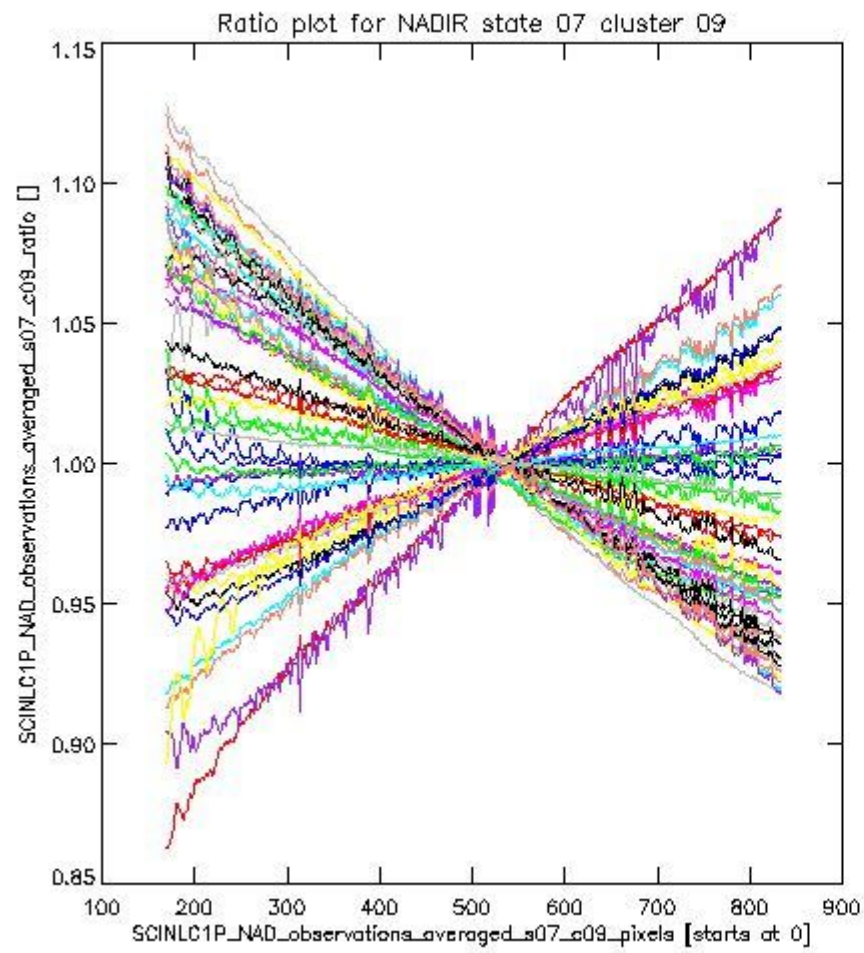
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_1.PNG

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	22MAR2011 01:47:26.202
Start time of last sample	22MAR2011 20:19:31.839
Reference period start time	20FEB2011 00:10:24.846
Reference period stop time	21MAR2011 07:34:16.756
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



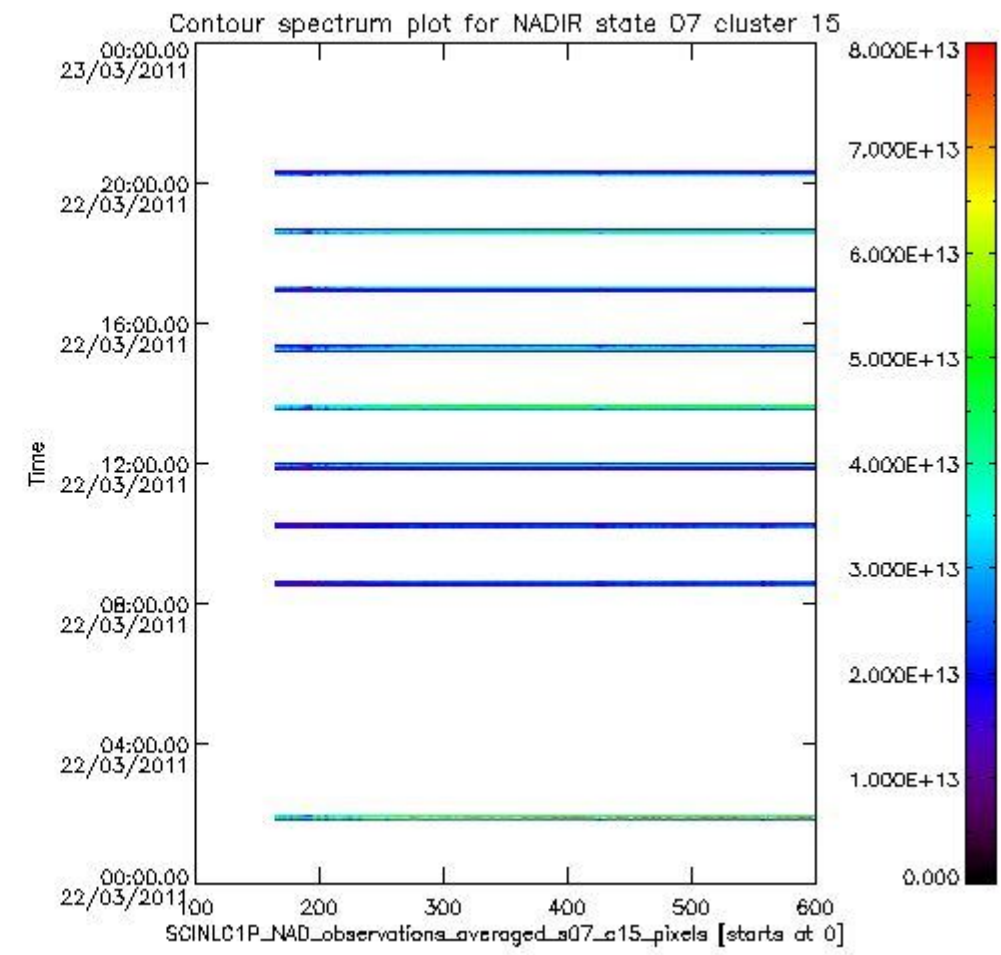
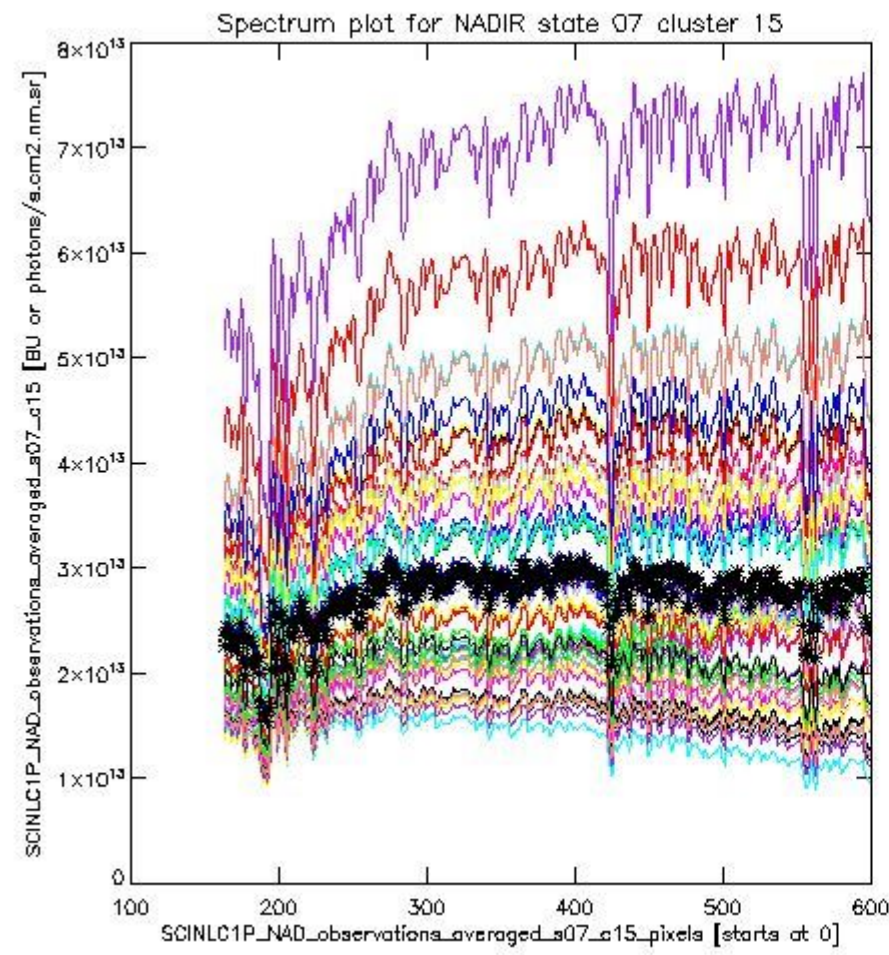
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_2.PNG



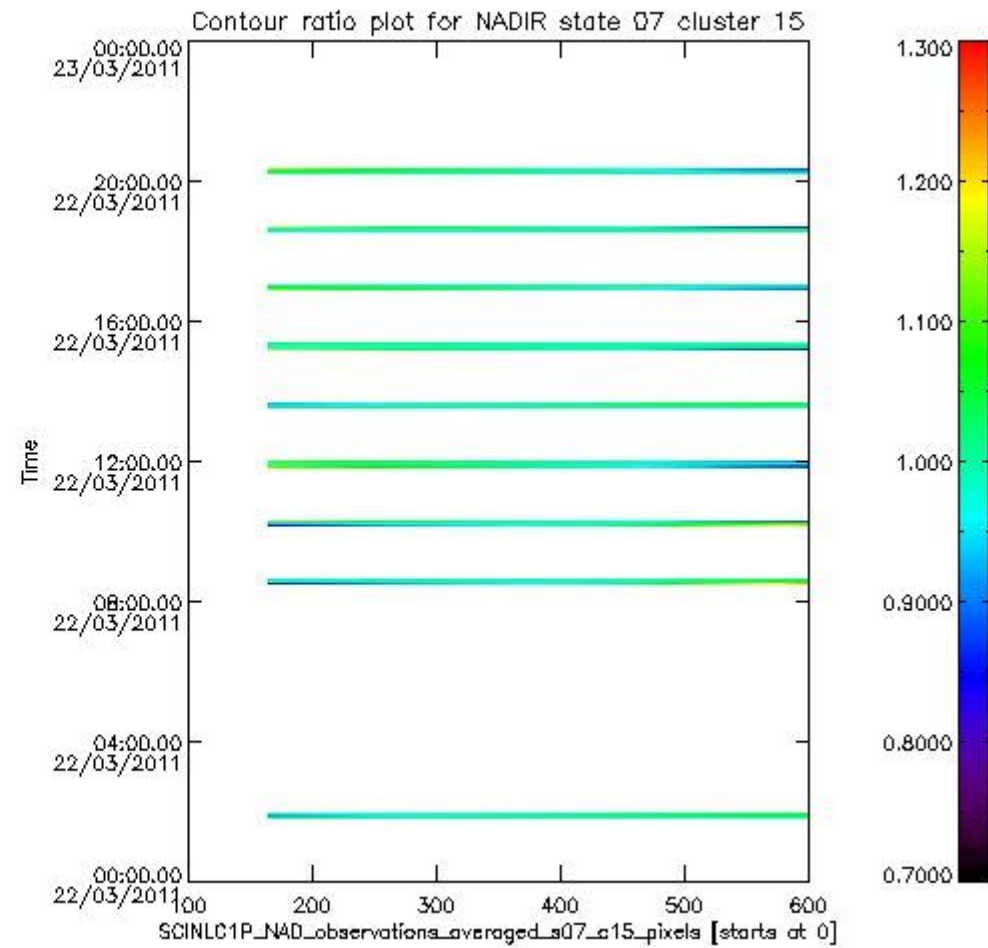
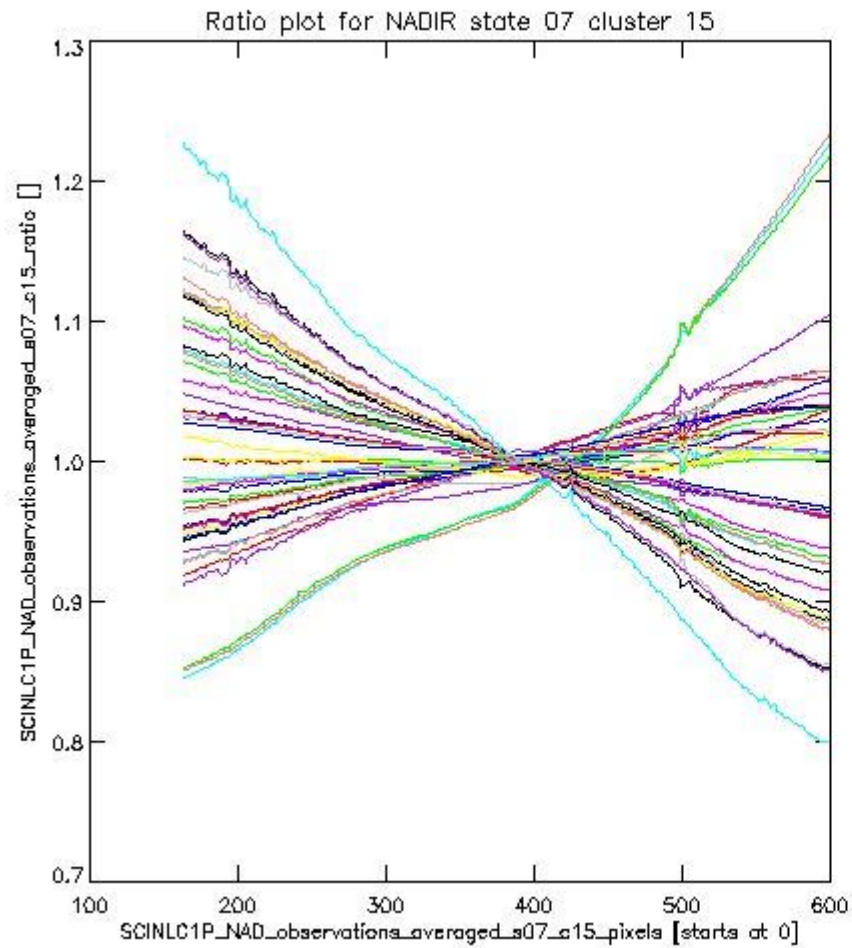
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_3.PNG

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	22MAR2011 01:47:26.202
Start time of last sample	22MAR2011 20:19:31.839
Reference period start time	20FEB2011 00:10:24.846
Reference period stop time	21MAR2011 07:34:16.756
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



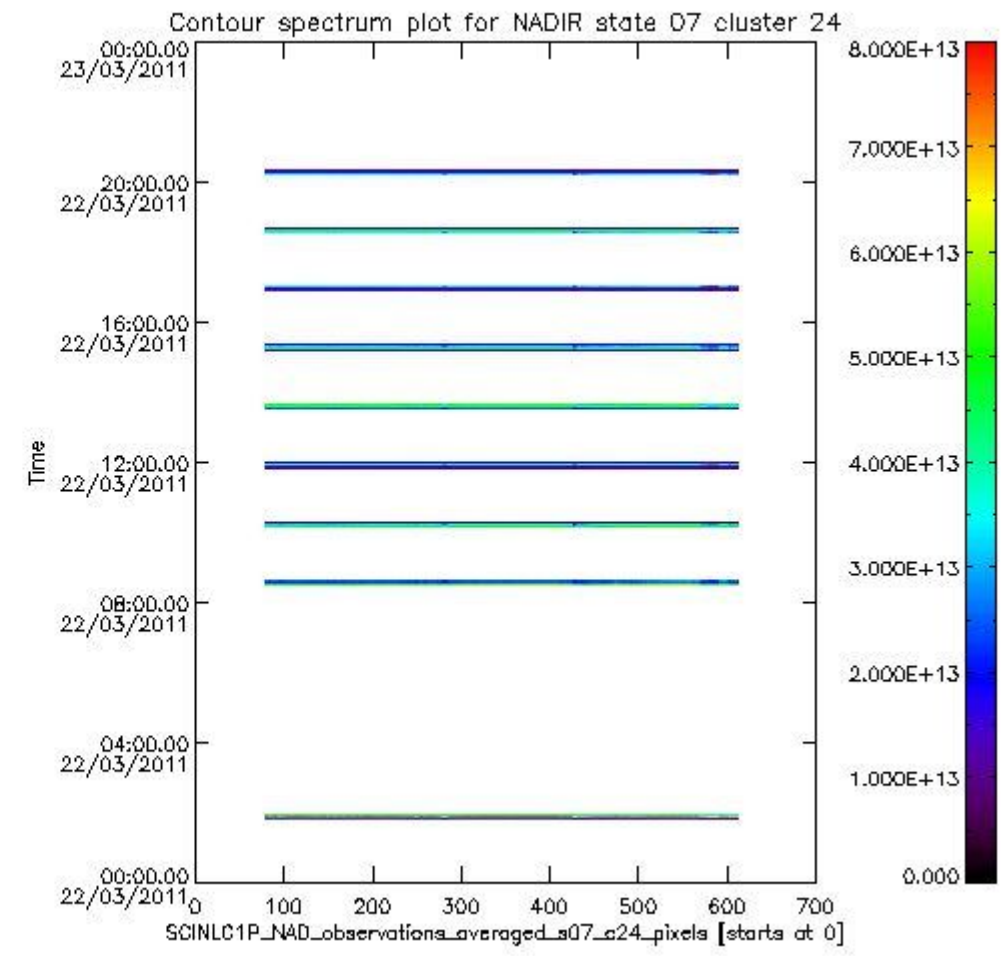
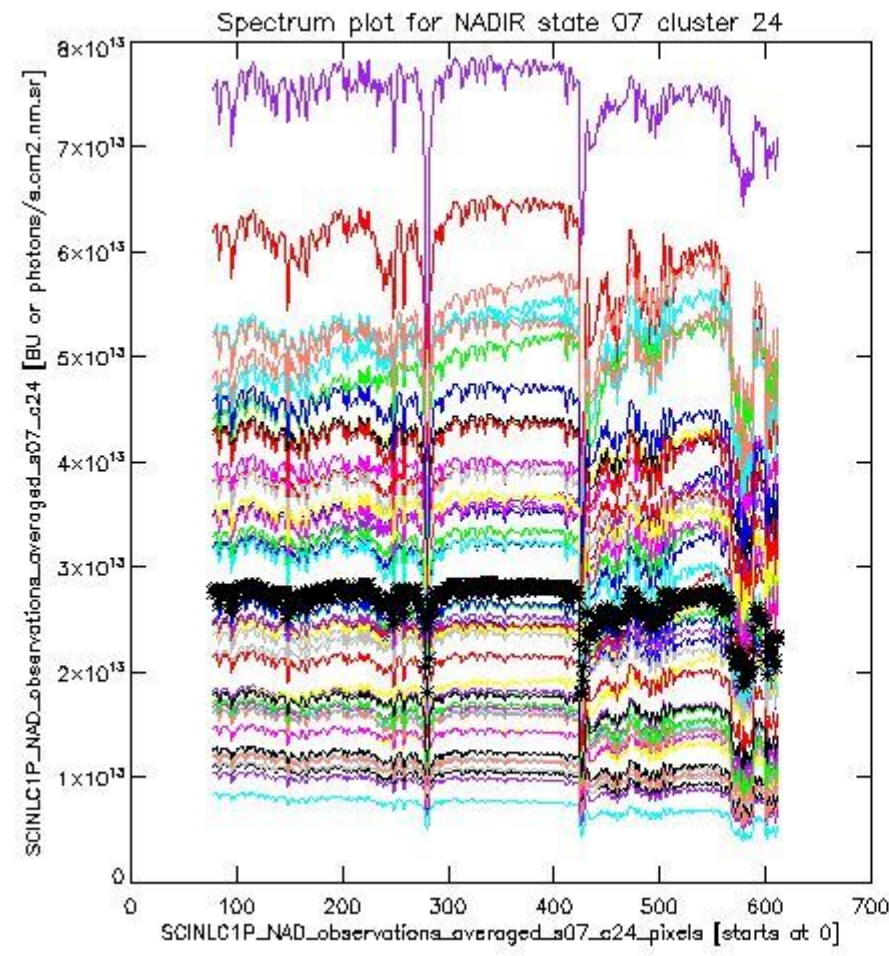
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_4.PNG



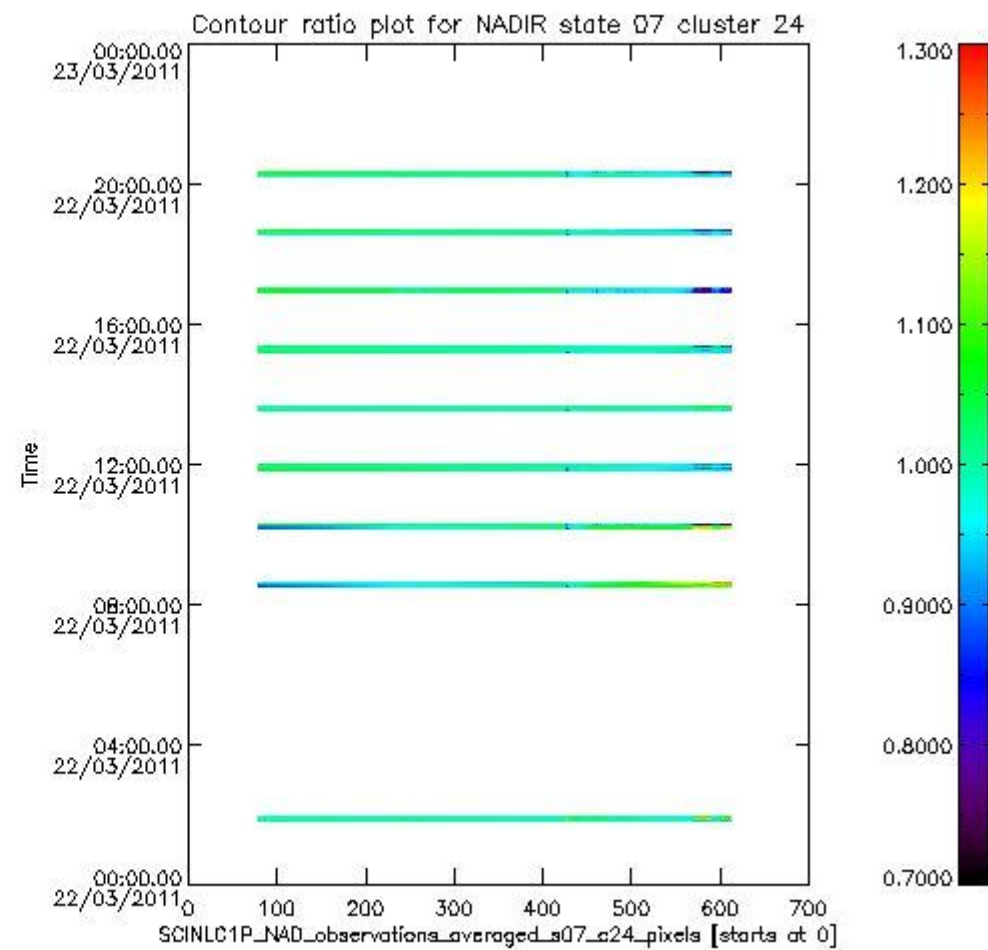
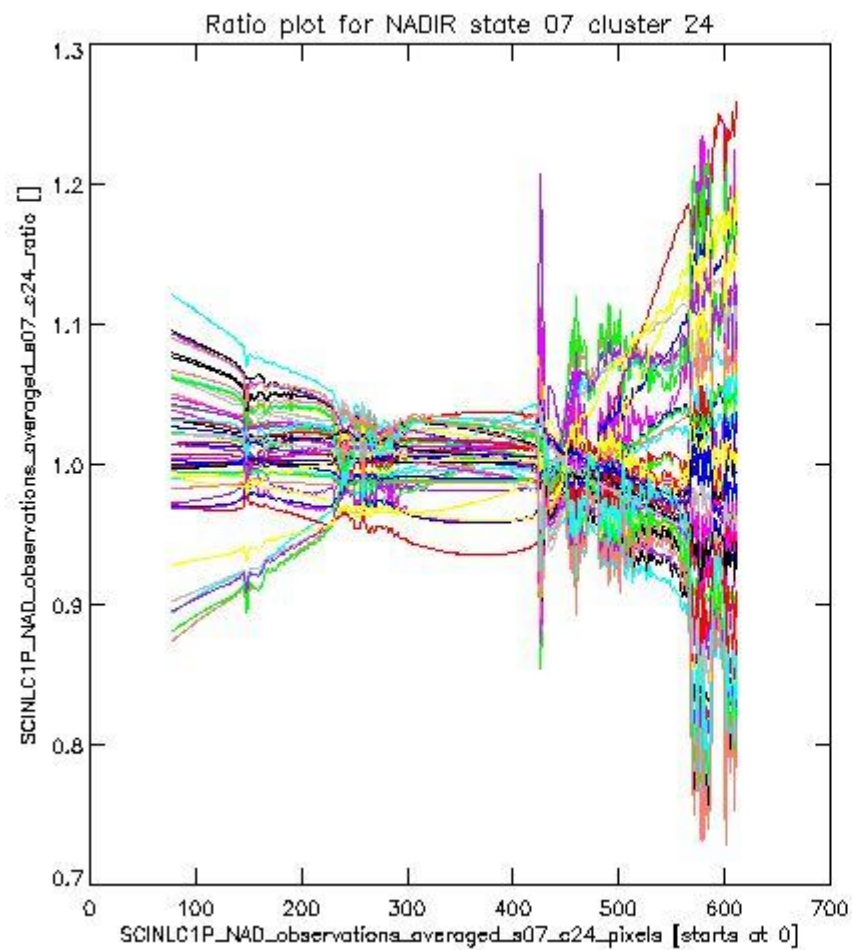
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110322_5.PNG

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	22MAR2011 01:47:26.202
Start time of last sample	22MAR2011 20:19:31.839
Reference period start time	20FEB2011 00:10:24.846
Reference period stop time	21MAR2011 07:34:16.756
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



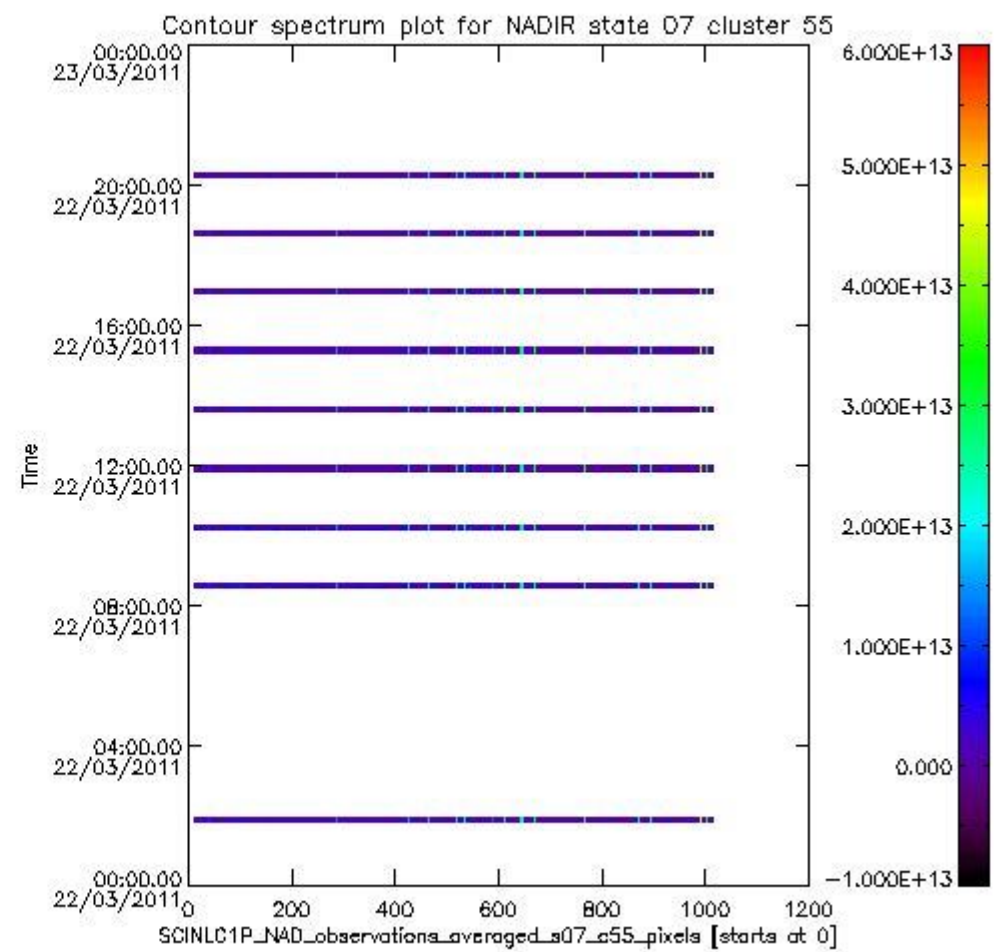
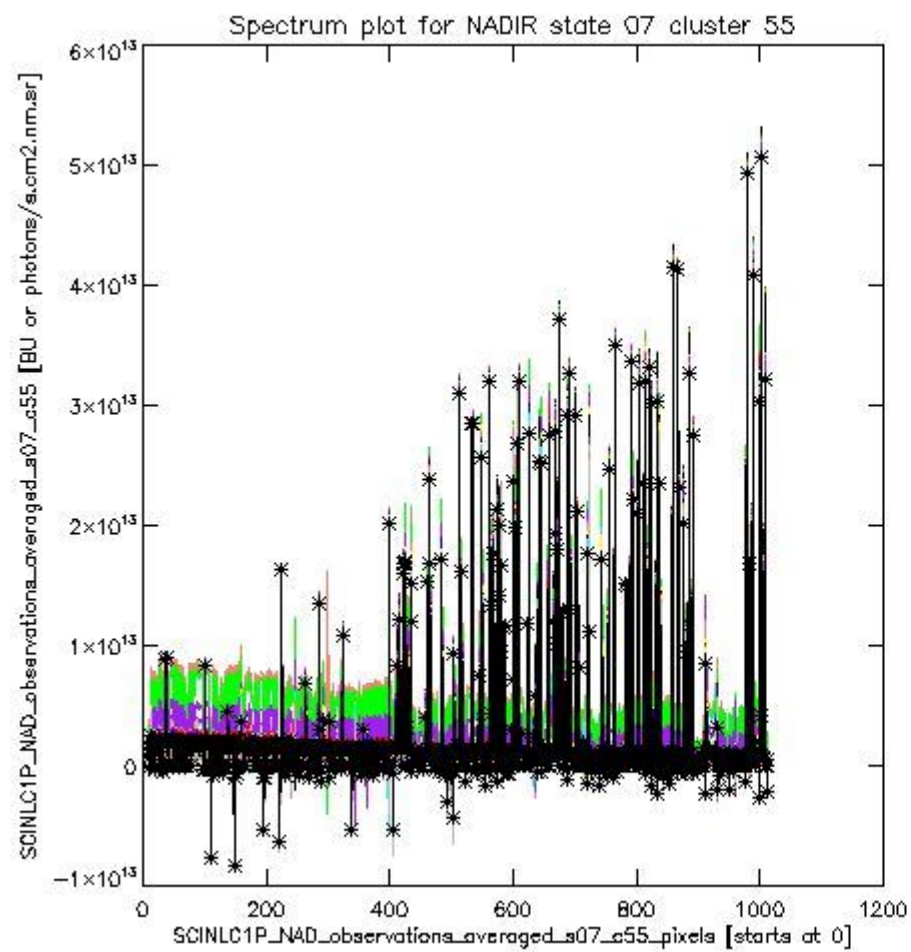
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_6.PNG



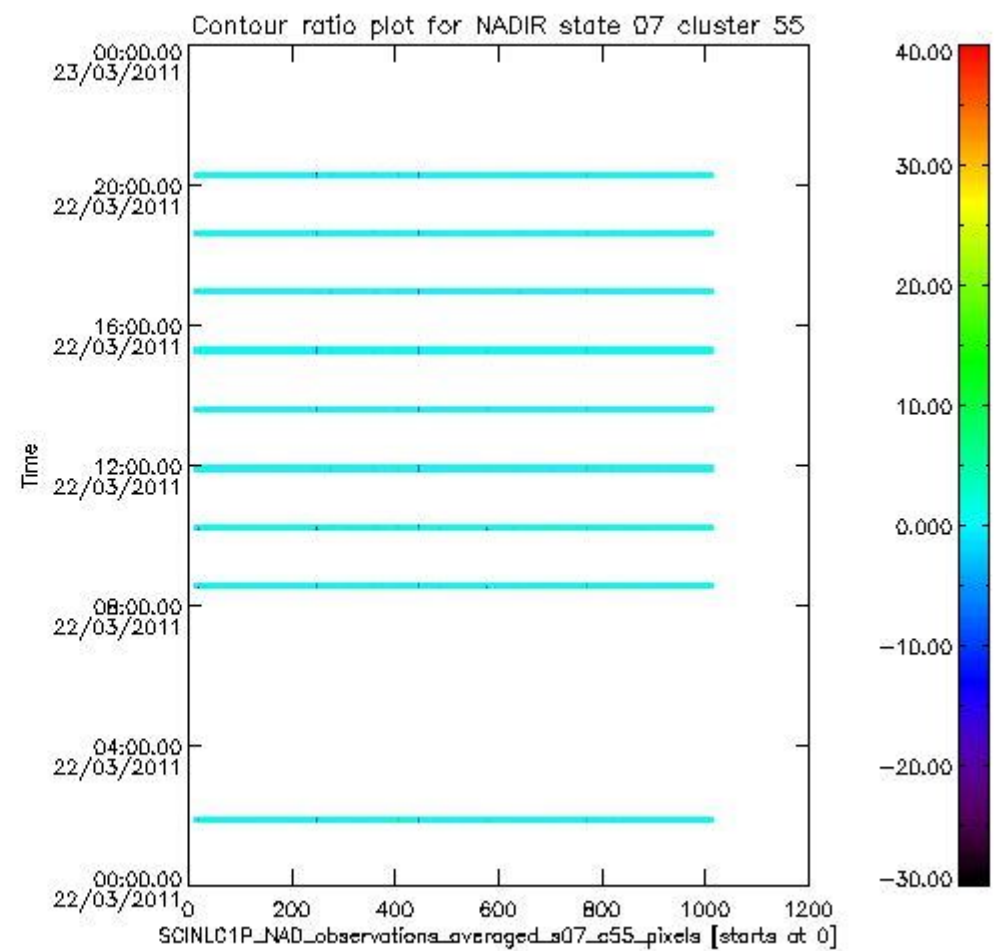
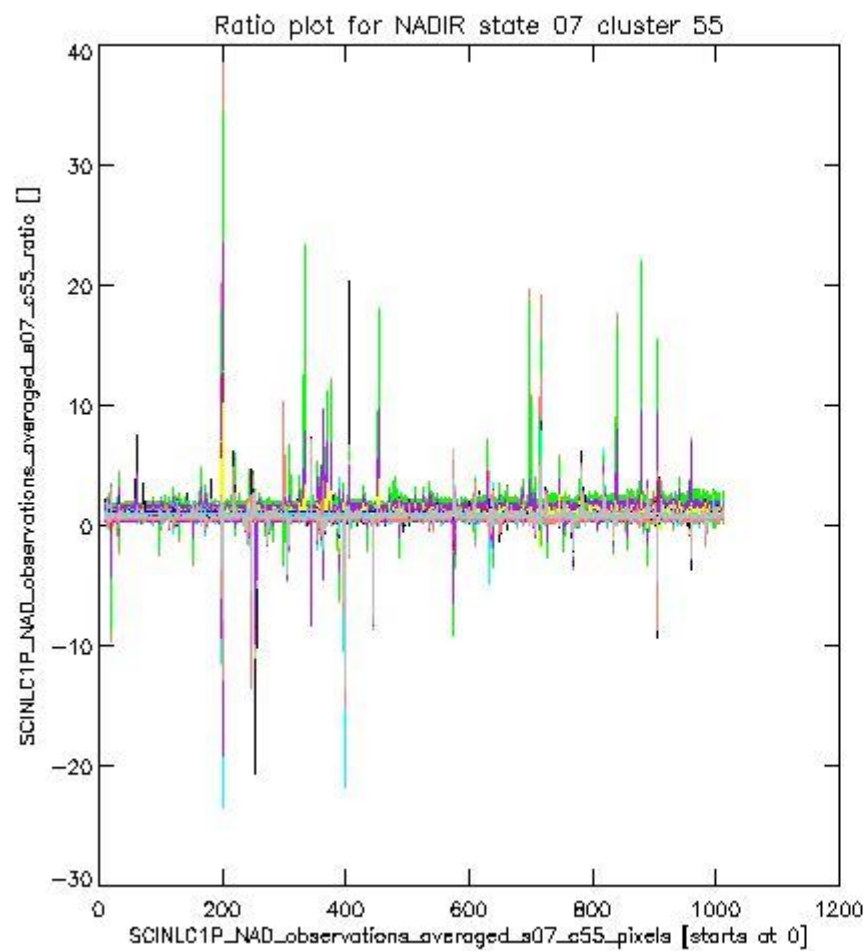
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110322_7.PNG

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	22MAR2011 01:47:26.202
Start time of last sample	22MAR2011 20:19:31.839
Reference period start time	20FEB2011 00:10:24.846
Reference period stop time	21MAR2011 07:34:16.756
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



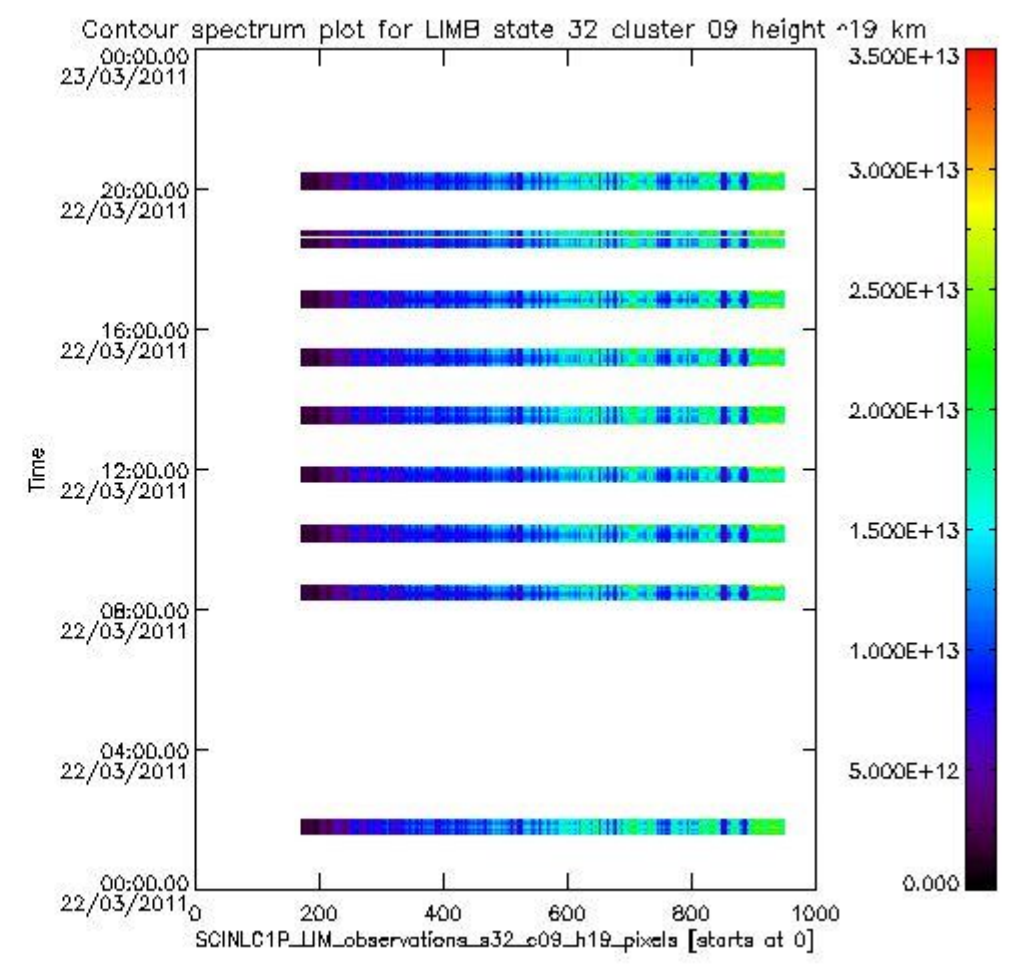
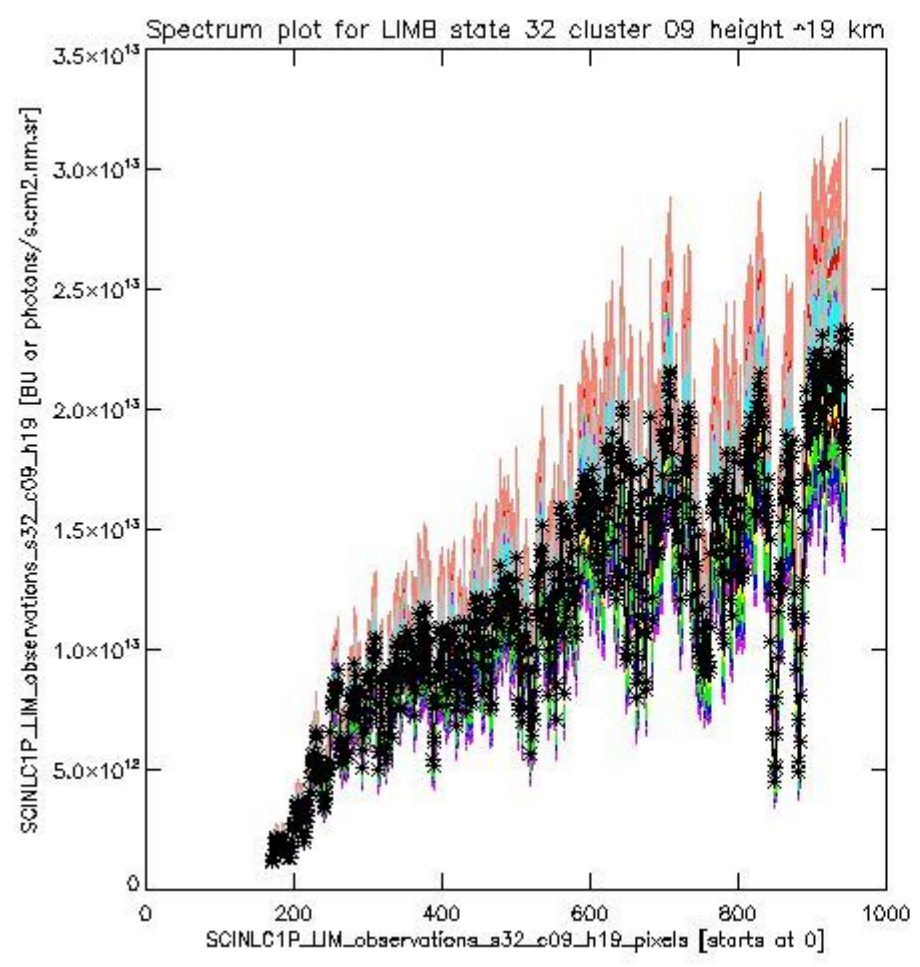
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_8.PNG



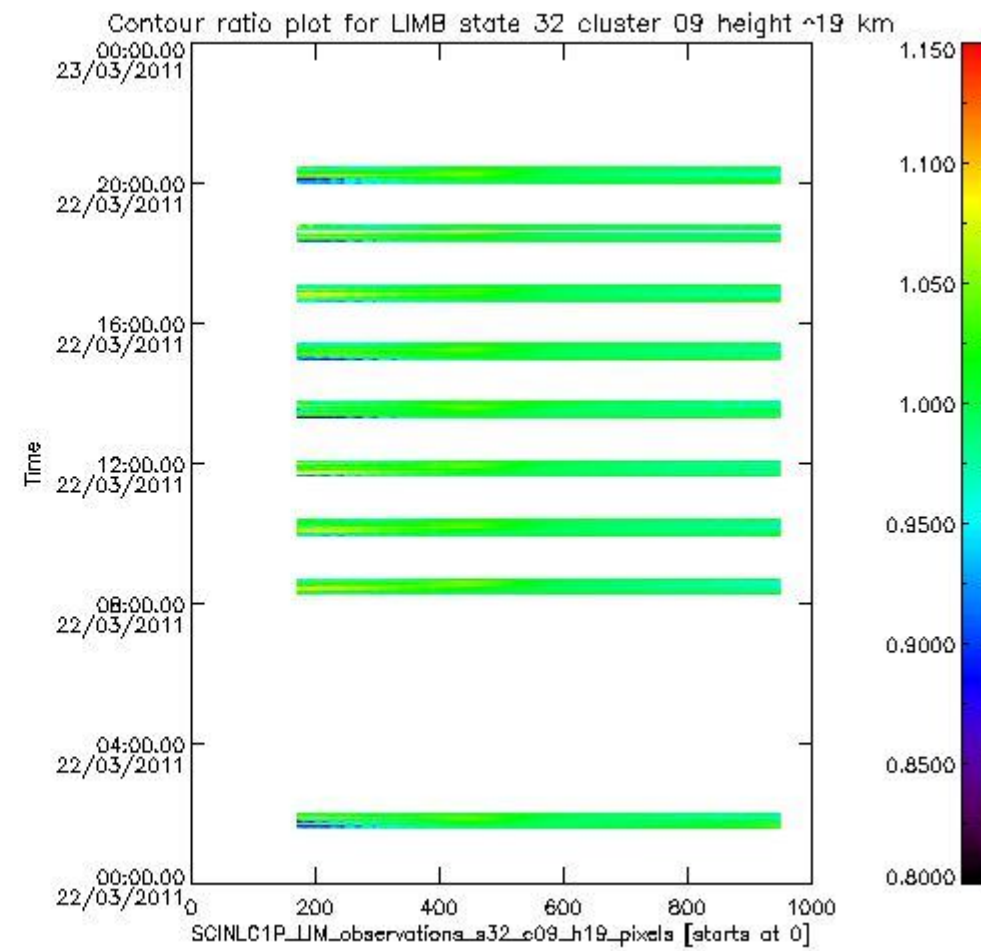
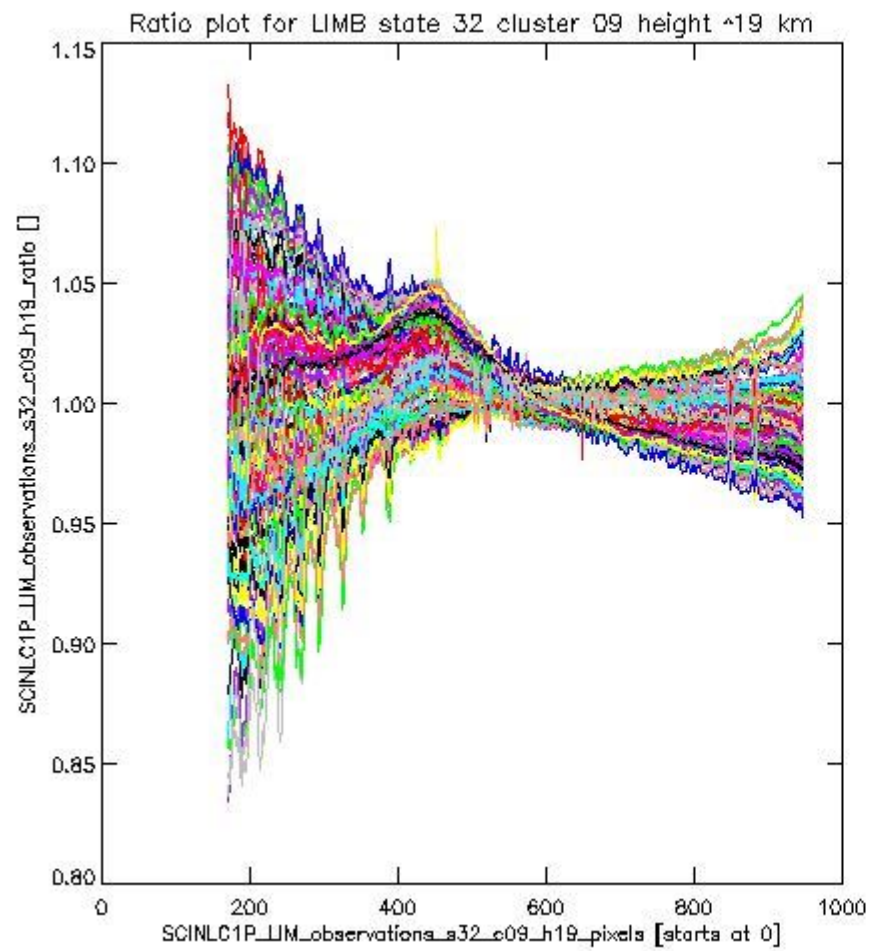
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110322_9.PNG

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	22MAR2011 01:34:15.565
Start time of last sample	22MAR2011 20:24:45.882
Reference period start time	20FEB2011 01:36:08.179
Reference period stop time	21MAR2011 07:39:30.795
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



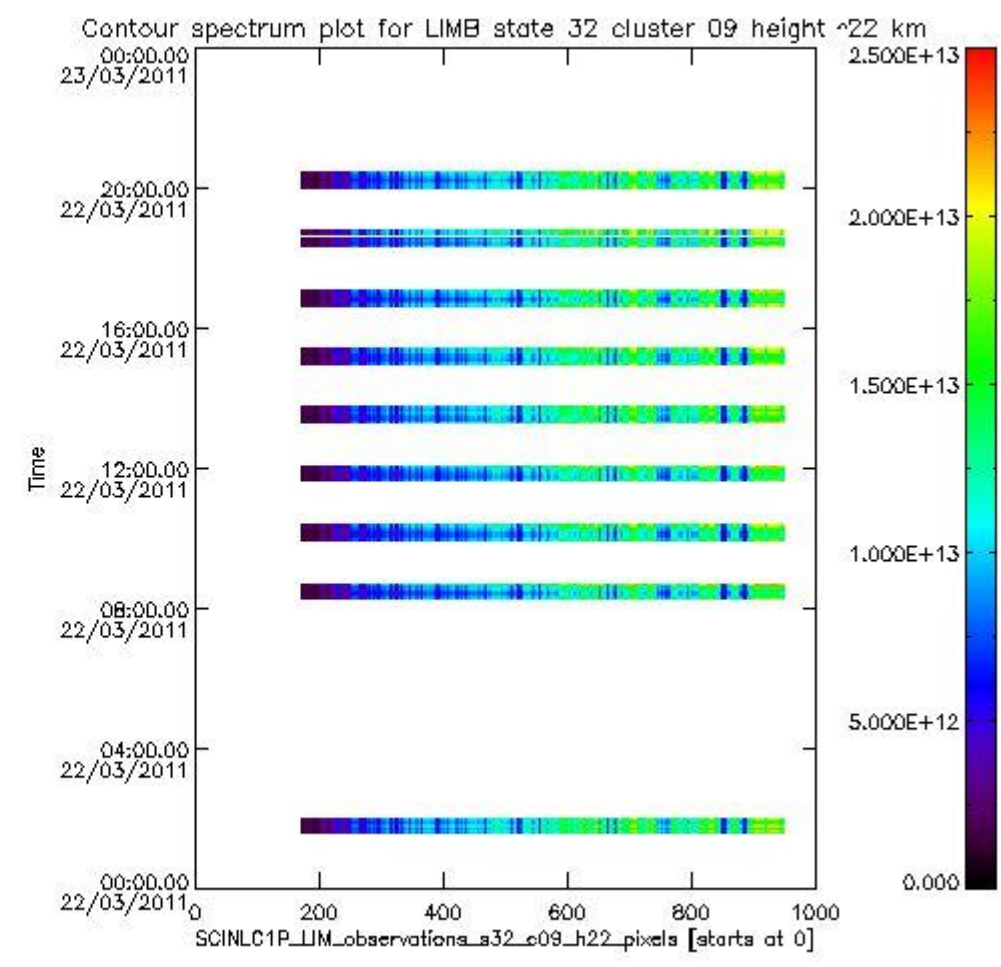
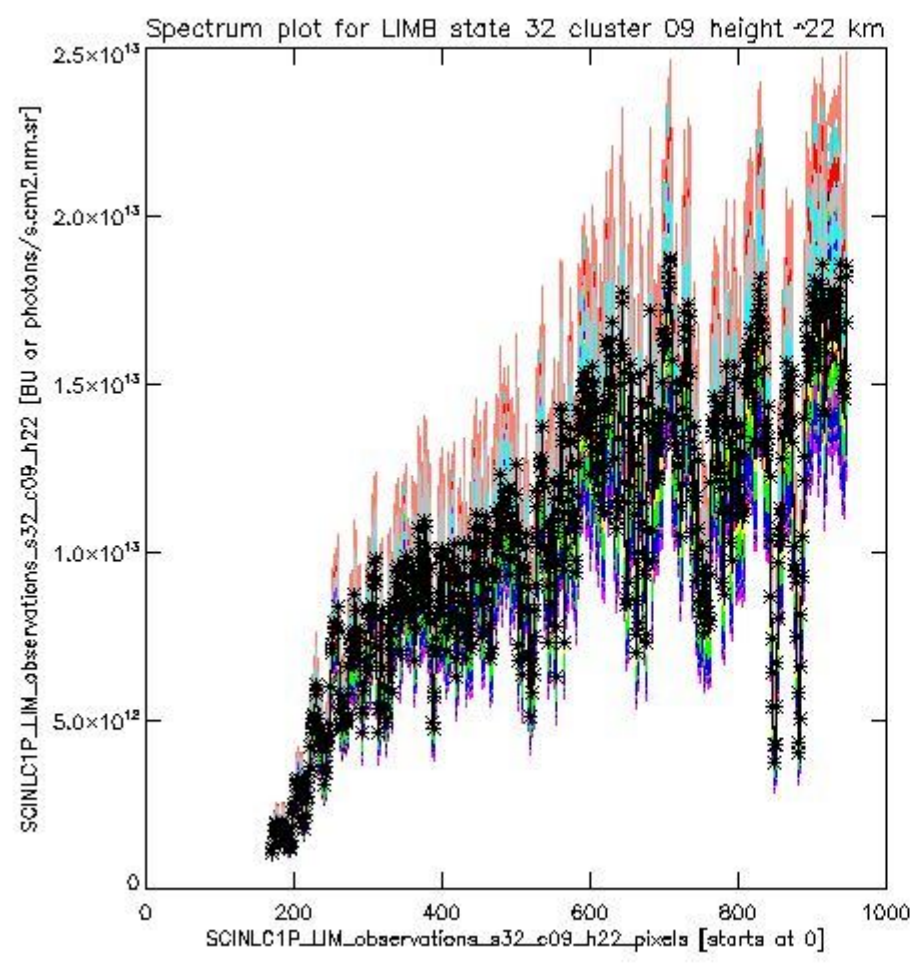
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_10.PNG



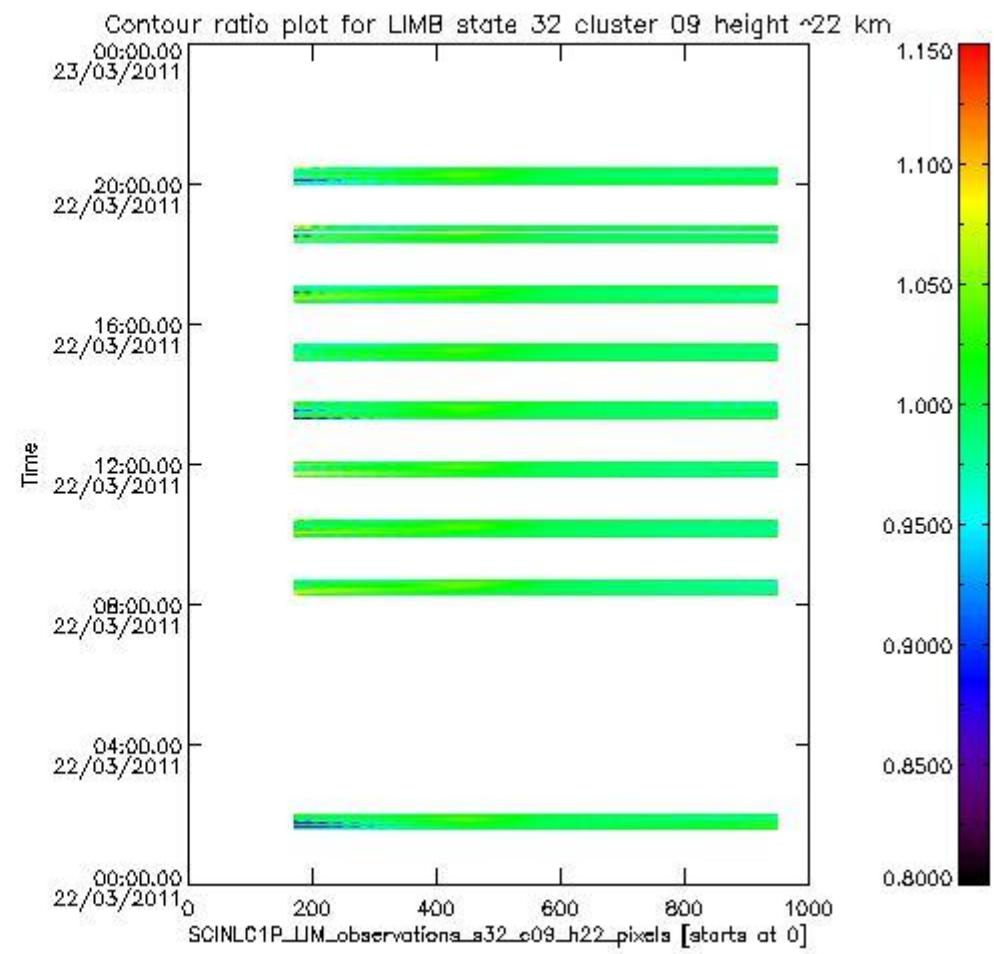
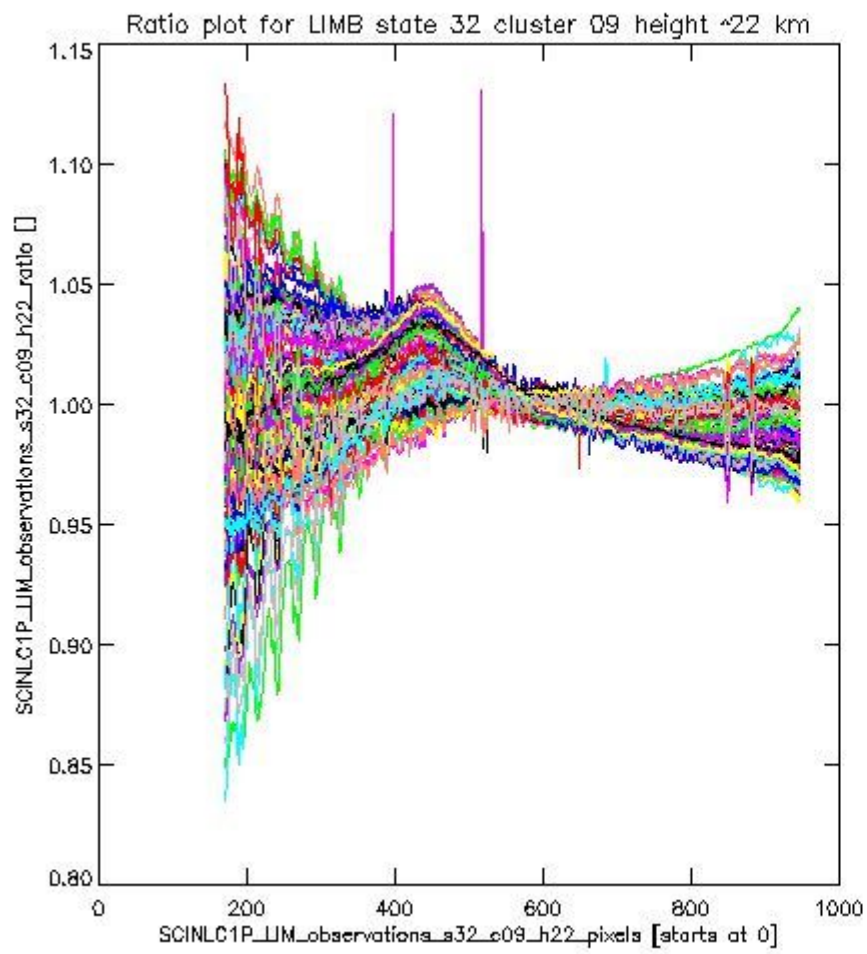
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110322_11.PNG

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	22MAR2011 01:34:15.565
Start time of last sample	22MAR2011 20:24:45.882
Reference period start time	20FEB2011 01:36:08.179
Reference period stop time	21MAR2011 07:39:30.795
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



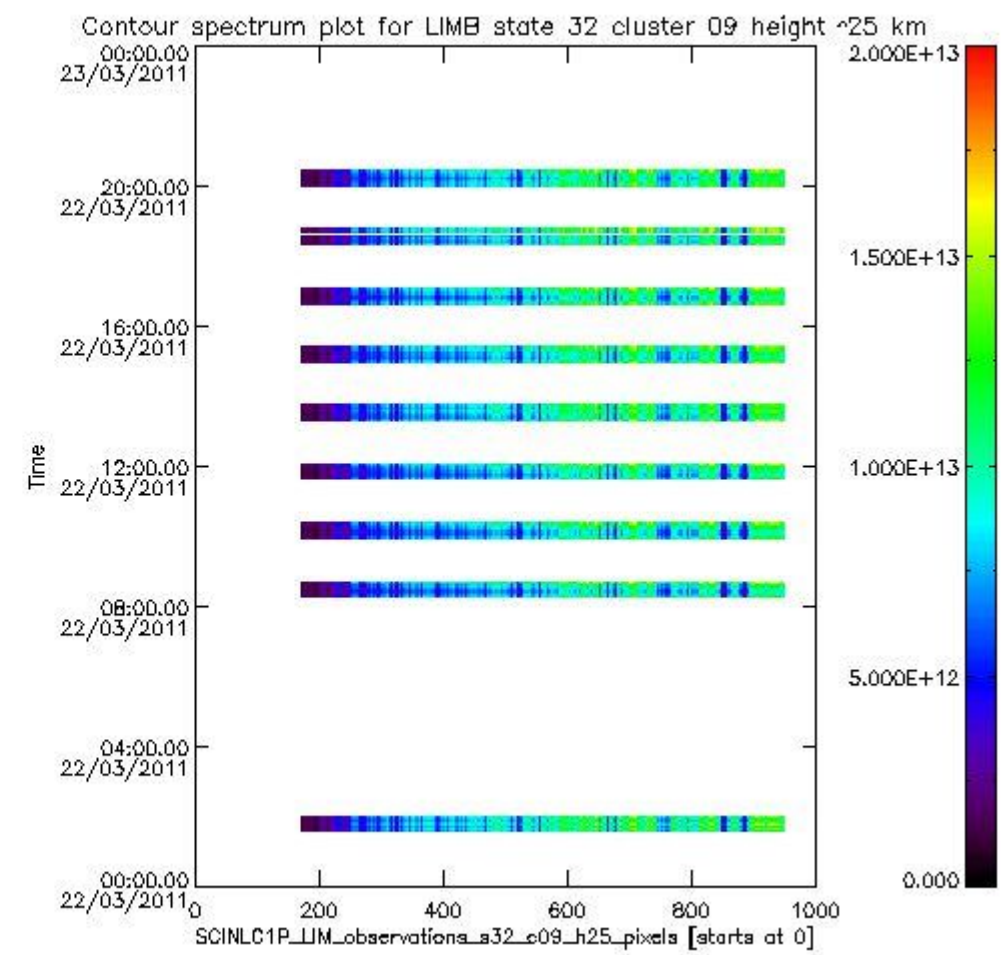
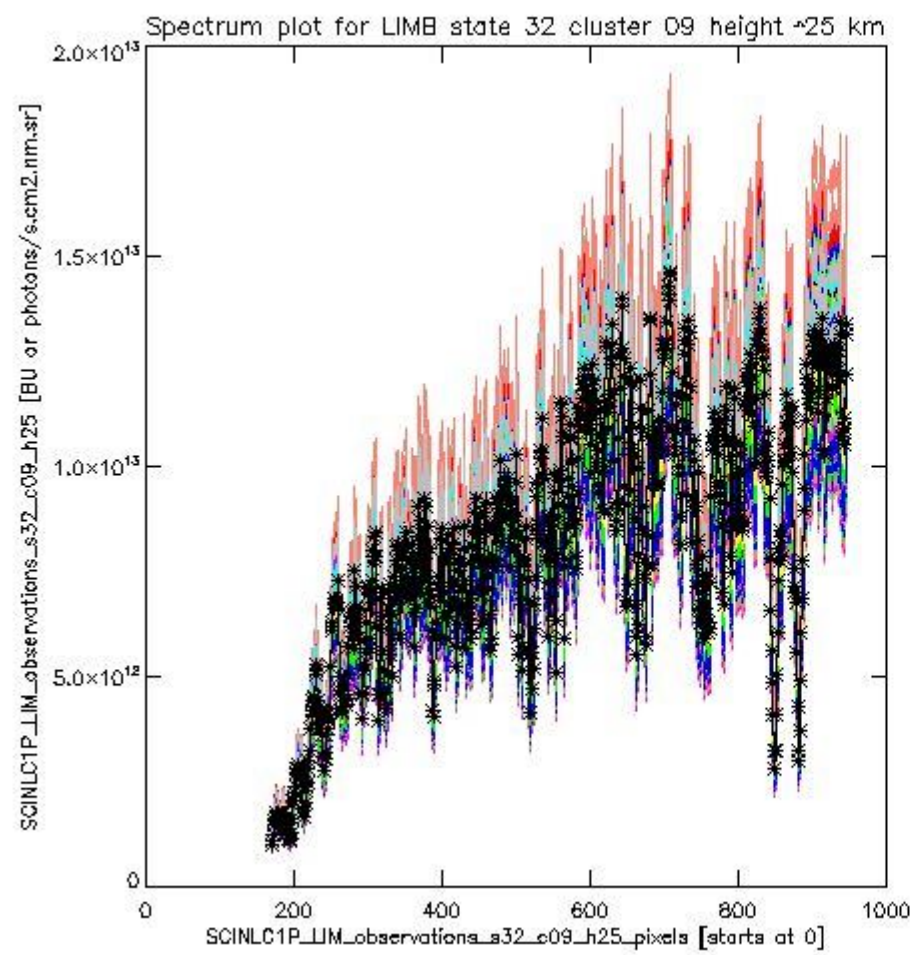
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_12.PNG



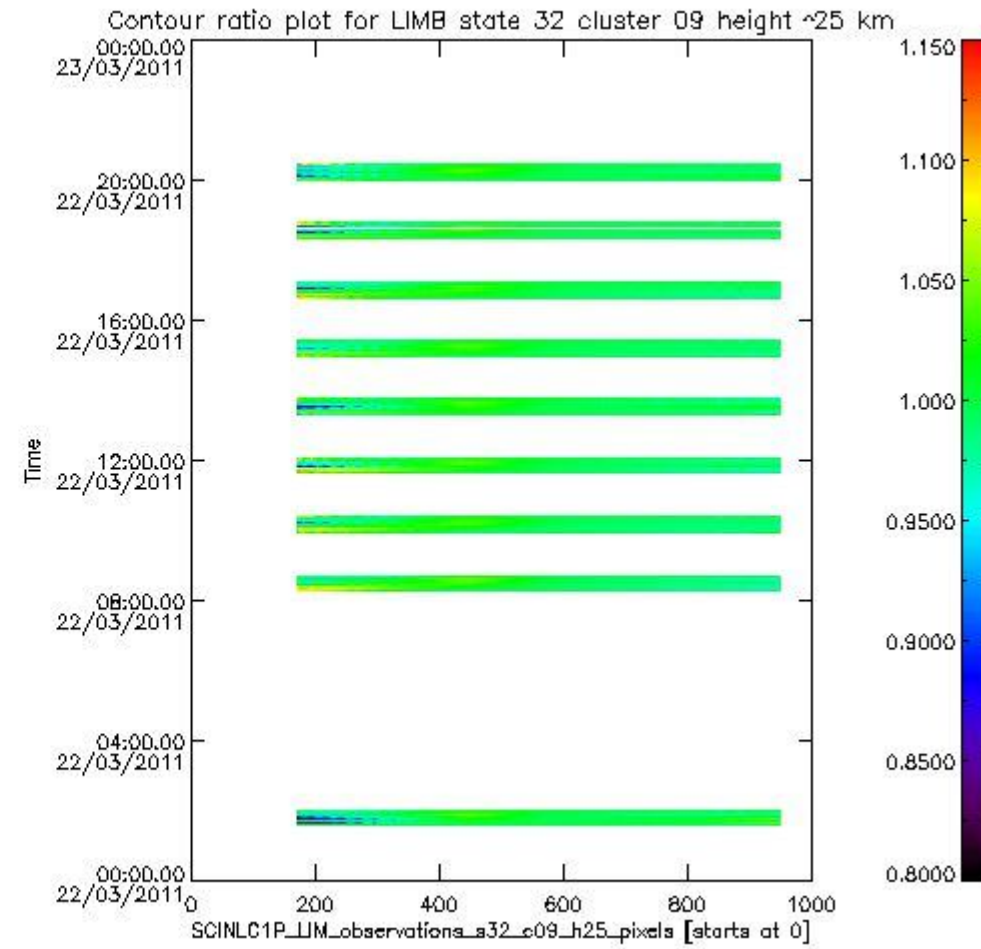
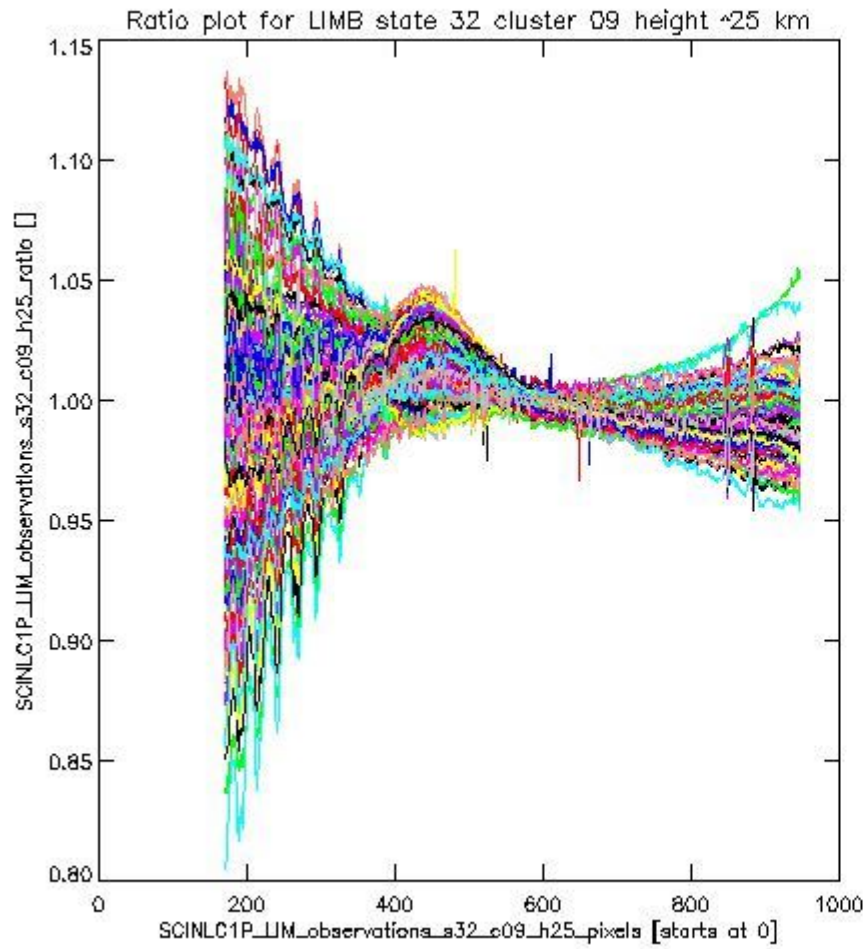
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110322_13.PNG

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	22MAR2011 01:34:15.565
Start time of last sample	22MAR2011 20:24:45.882
Reference period start time	20FEB2011 01:36:08.179
Reference period stop time	21MAR2011 07:39:30.795
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



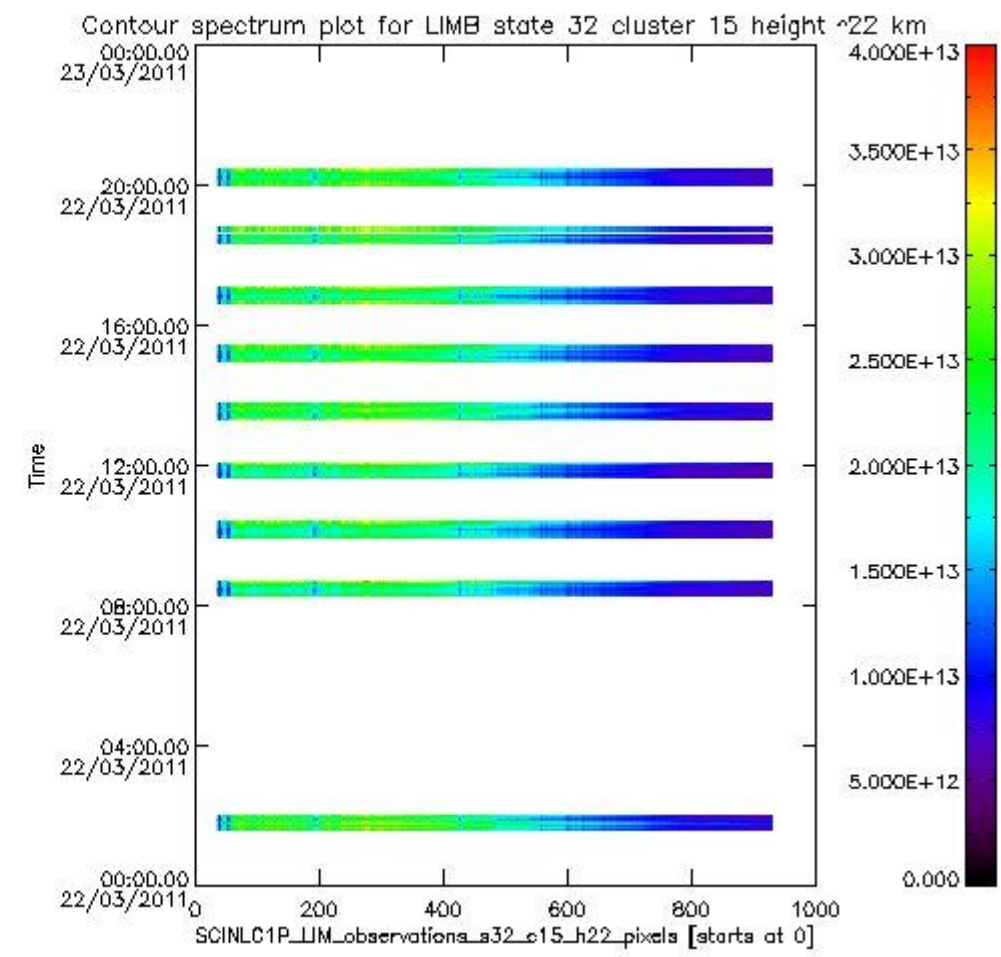
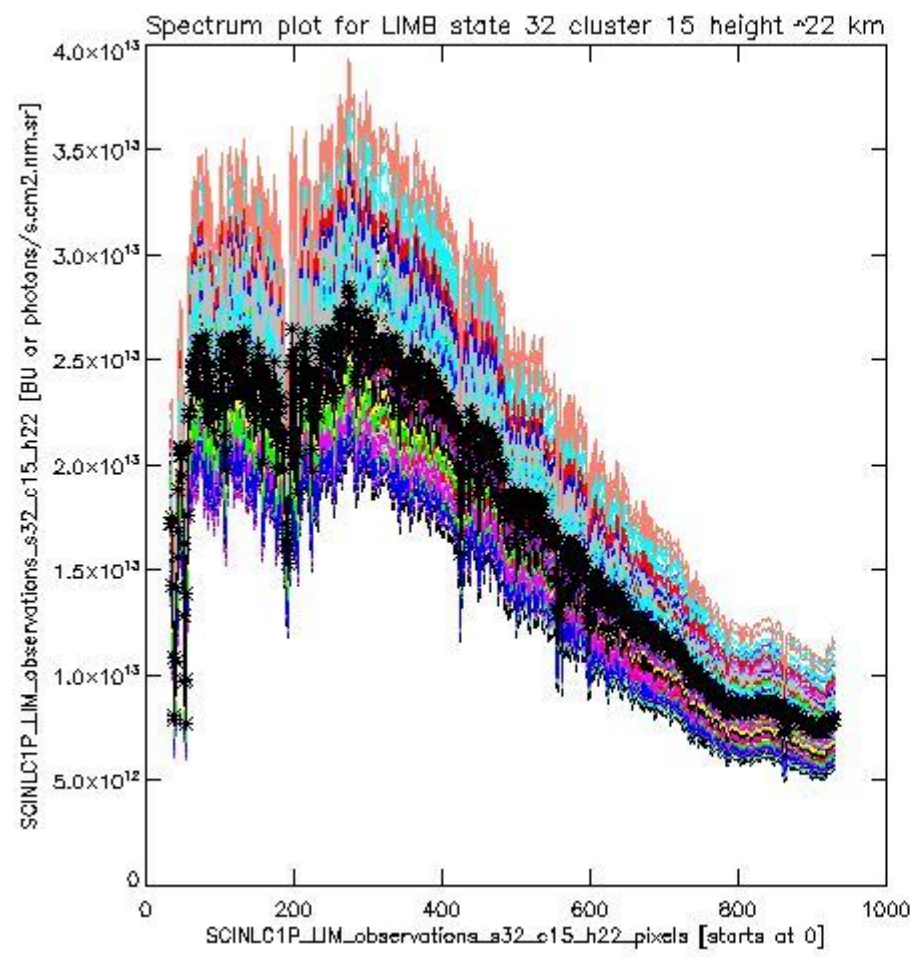
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110322_14.PNG



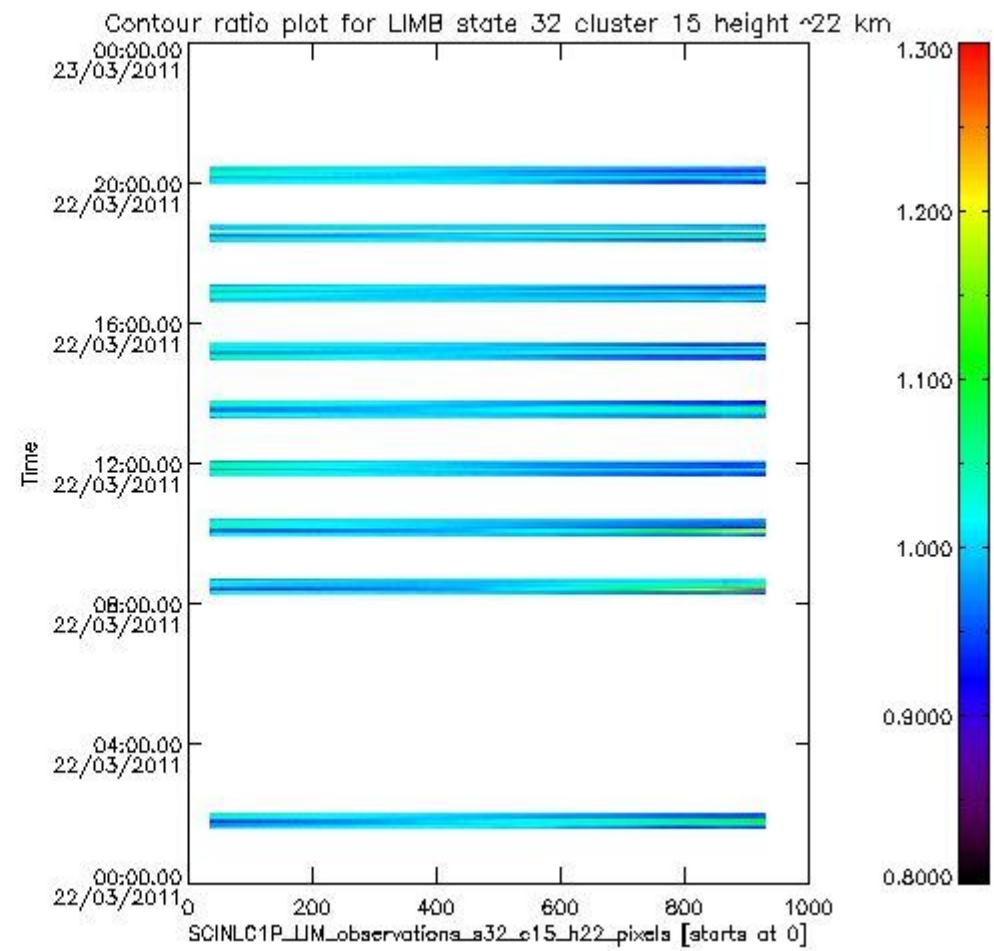
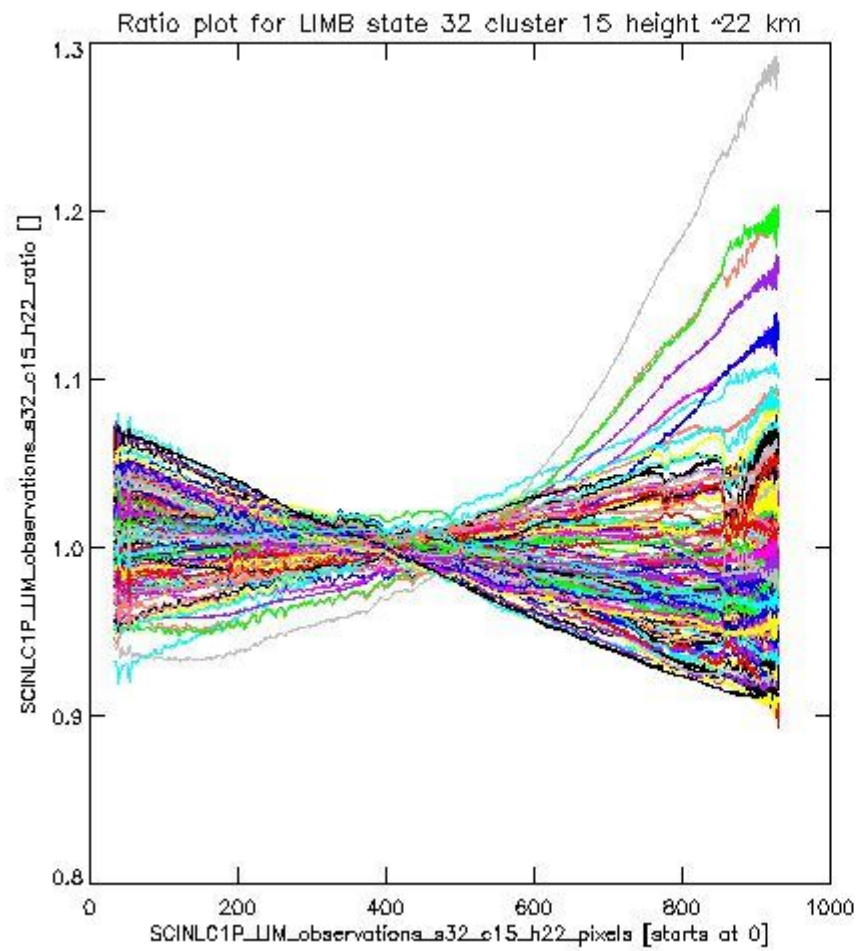
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110322_15.PNG

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	22MAR2011 01:34:15.565
Start time of last sample	22MAR2011 20:24:45.882
Reference period start time	20FEB2011 01:36:08.179
Reference period stop time	21MAR2011 07:39:30.795
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



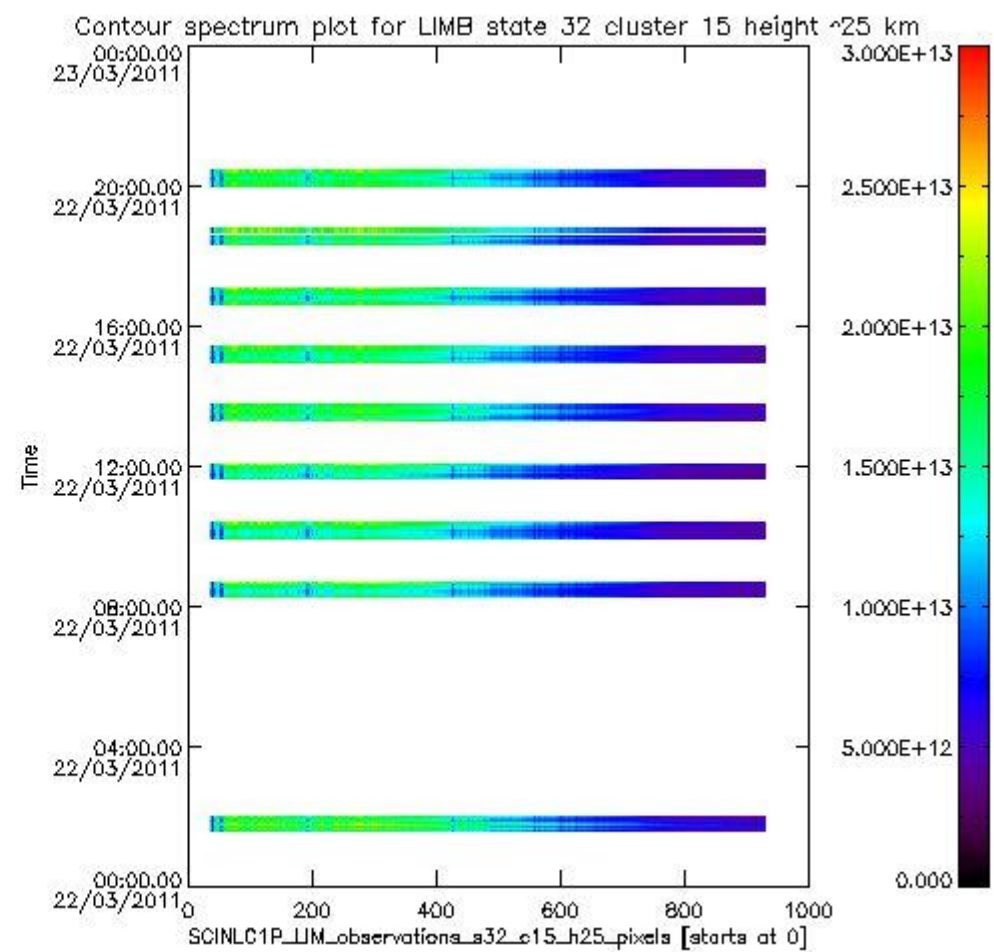
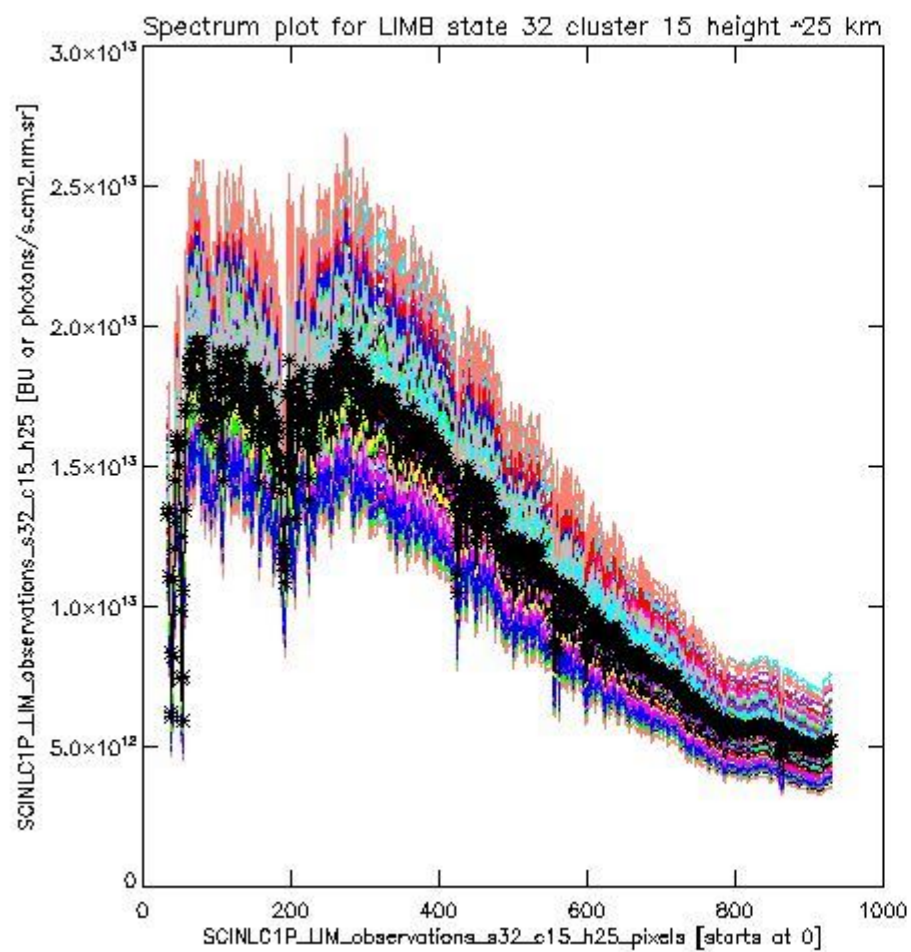
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110322_16.PNG

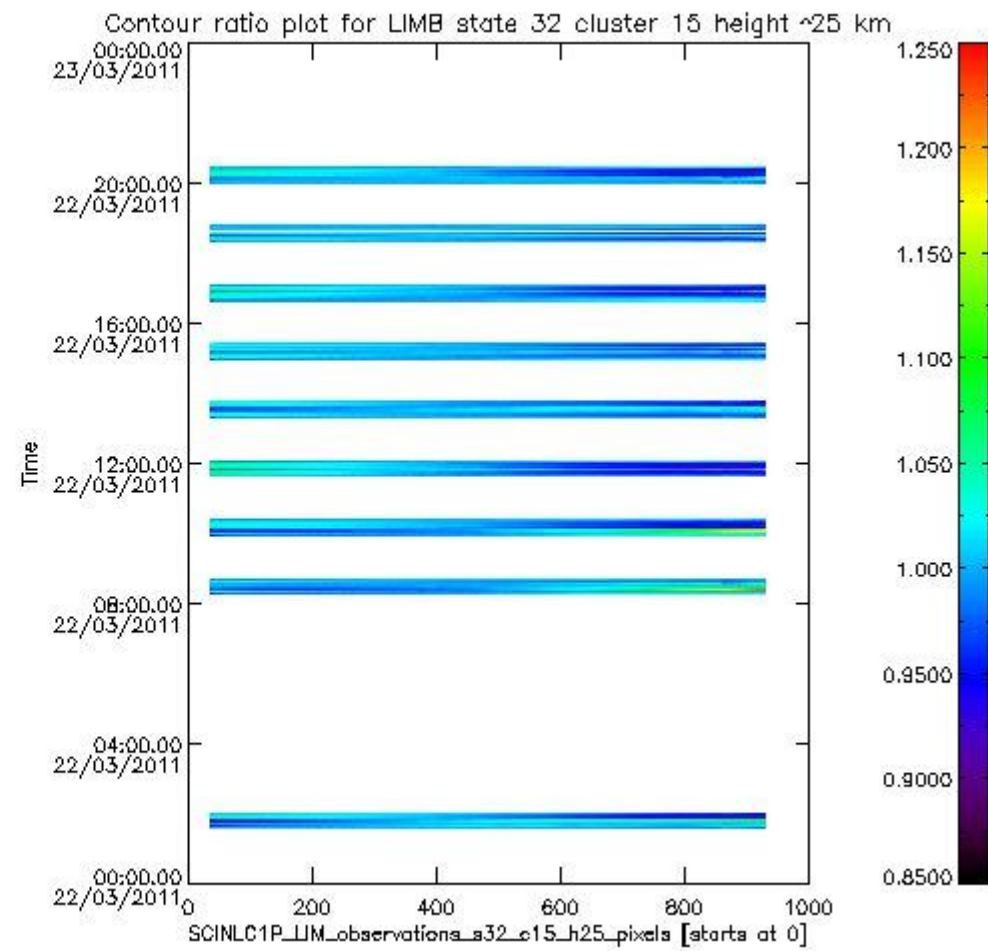
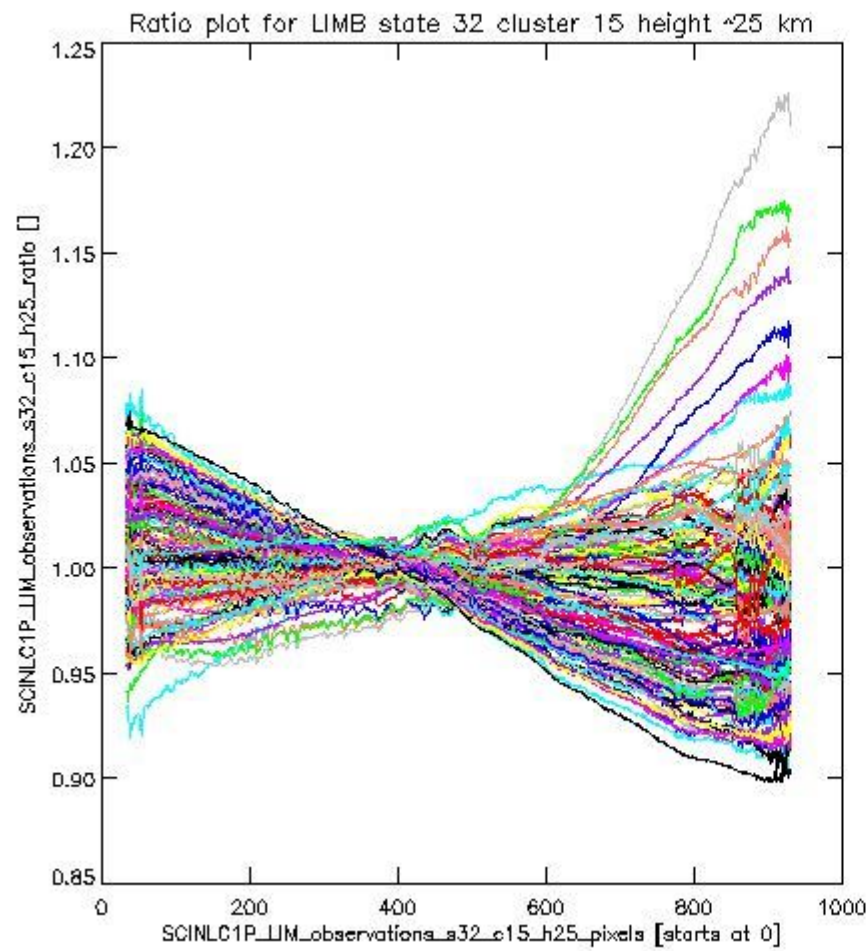


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110322_17.PNG

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	22MAR2011 01:34:15.565
Start time of last sample	22MAR2011 20:24:45.882
Reference period start time	20FEB2011 01:36:08.179
Reference period stop time	21MAR2011 07:39:30.795
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

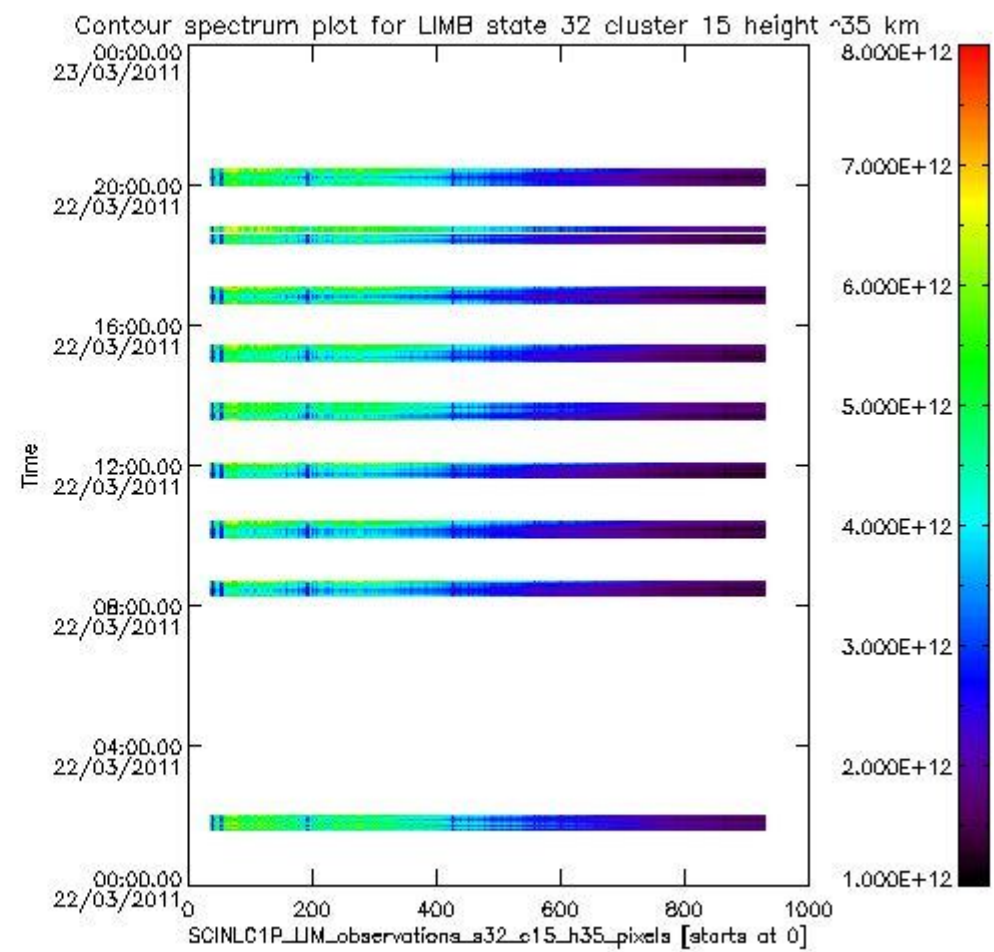
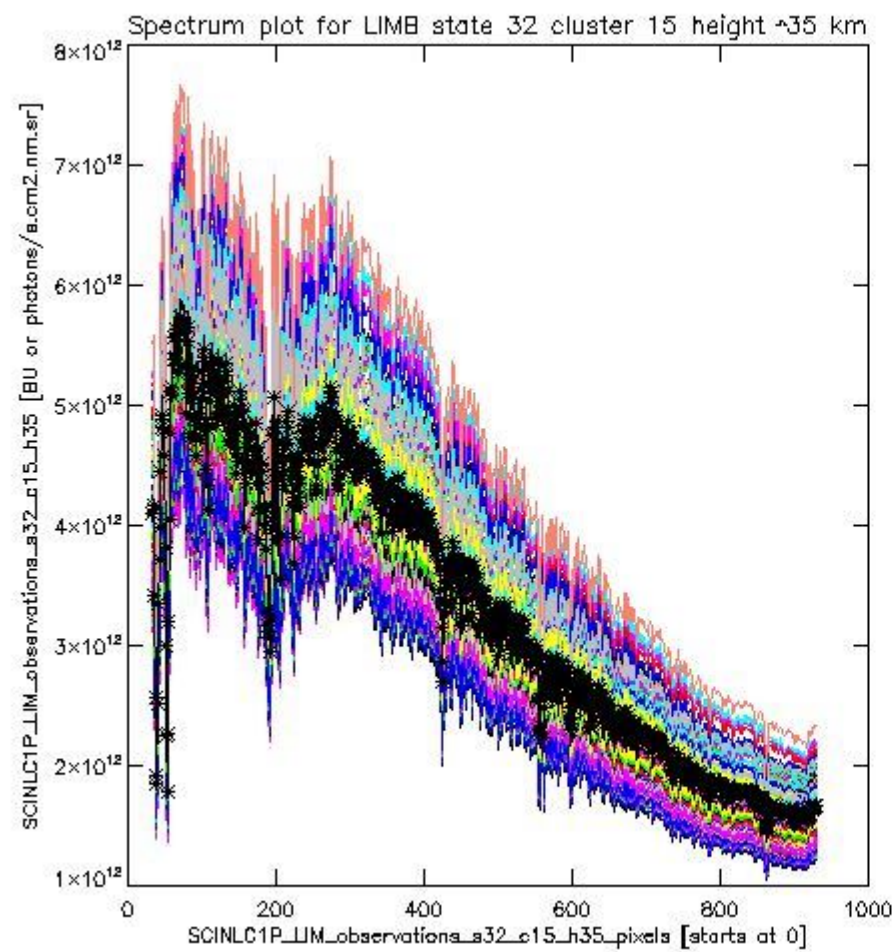


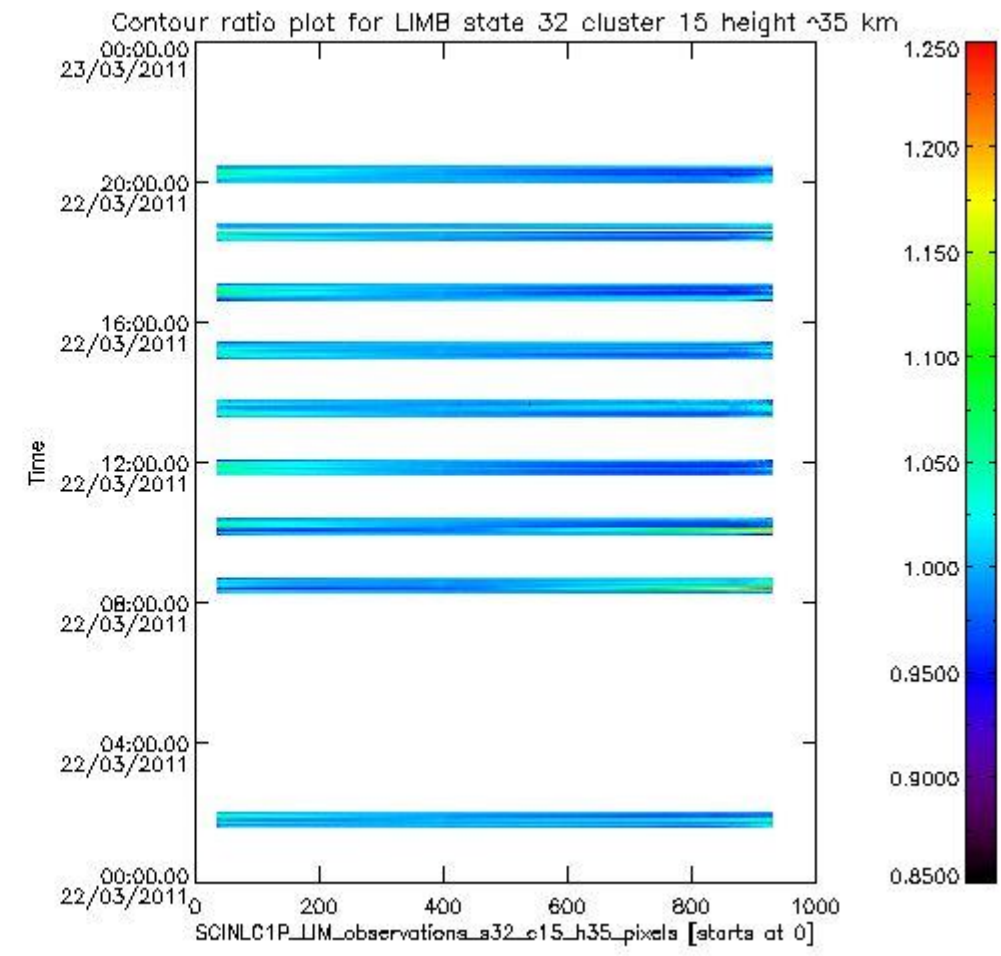
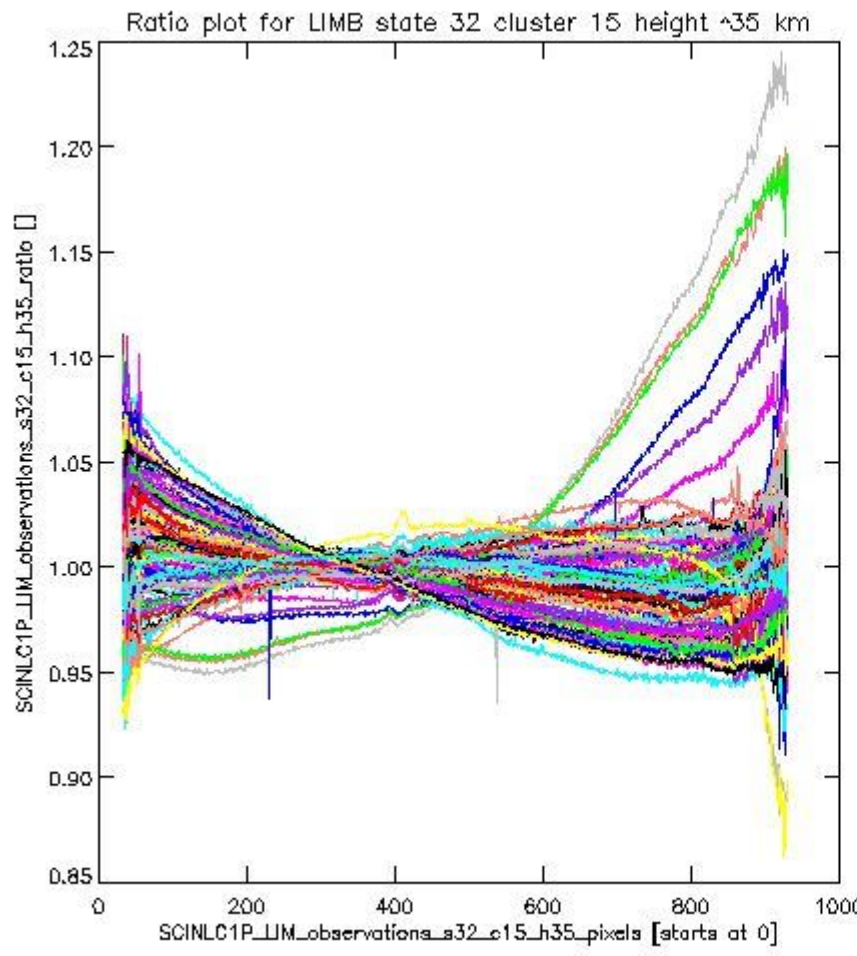


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110322_19.PNG

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	22MAR2011 01:34:15.565
Start time of last sample	22MAR2011 20:24:45.882
Reference period start time	20FEB2011 01:36:08.179
Reference period stop time	21MAR2011 07:39:30.795
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_20110322_21.PNG

