

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	27MAR2011 06:55:34
Data source version	SCIA/7.04-U
Processing scope for products	16MAR2011 00:00:00 to 17MAR2011 00:00:00
Start time of first product within scope	16MAR2011 01:35:58
Stop time of last product within scope	16MAR2011 14:28:48
Total number of level 1 products	8
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	16MAR2011 02:08:00.749	16MAR2011 13:59:49.184
1	NADIR	07	09	N/A	16MAR2011 02:08:00.749	16MAR2011 13:59:49.184
2	NADIR	07	15	N/A	16MAR2011 02:08:00.749	16MAR2011 13:59:49.184
3	NADIR	07	24	N/A	16MAR2011 02:08:00.749	16MAR2011 13:59:49.184
4	NADIR	07	55	N/A	16MAR2011 02:08:00.749	16MAR2011 13:59:49.184
5	LIMB	32	09	~19 km	16MAR2011 01:54:50.116	16MAR2011 14:03:00.485
6	LIMB	32	09	~22 km	16MAR2011 01:54:50.116	16MAR2011 14:03:00.485
7	LIMB	32	09	~25 km	16MAR2011 01:54:50.116	16MAR2011 14:03:00.485
8	LIMB	32	15	~22 km	16MAR2011 01:54:50.116	16MAR2011 14:03:00.485
9	LIMB	32	15	~25 km	16MAR2011 01:54:50.116	16MAR2011 14:03:00.485
10	LIMB	32	15	~35 km	16MAR2011 01:54:50.116	16MAR2011 14:03:00.485

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_1CUDPA20110316_012515_000060093100_00276_47273_5483.N1	16MAR2011 01:35:58	16MAR2011 02:48:01	0	33	31	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110316_030528_000060093100_00277_47274_5485.N1	16MAR2011 03:16:11	16MAR2011 04:28:08	0	33	31	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110316_044541_000060093100_00278_47275_5487.N1	16MAR2011 04:56:25	16MAR2011 06:08:15	0	33	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110316_062555_000060093100_00279_47276_5489.N1	16MAR2011 06:36:38	16MAR2011 07:48:22	0	33	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110316_080608_000060093100_00280_47277_5491.N1	16MAR2011 08:16:52	16MAR2011 09:28:29	0	33	31	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110316_094622_000060093100_00281_47278_5494.N1	16MAR2011 09:57:05	16MAR2011 11:08:35	0	33	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110316_112635_000060093100_00282_47279_5501.N1	16MAR2011 11:37:19	16MAR2011 12:48:42	0	32	31	0	0	1	0	0
7	SCI_NLC_1CUDPA20110316_130648_000060093100_00283_47280_5500.N1	16MAR2011 13:17:32	16MAR2011 14:28:48	0	32	31	0	0	2	0	0

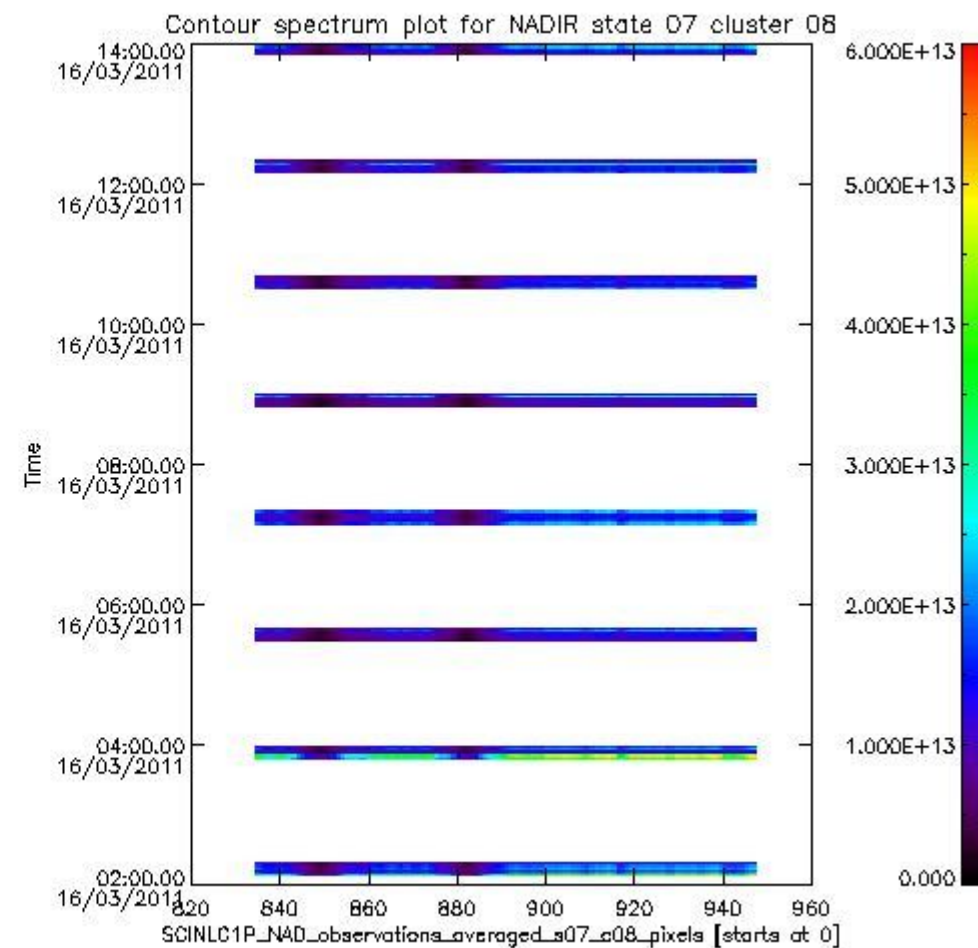
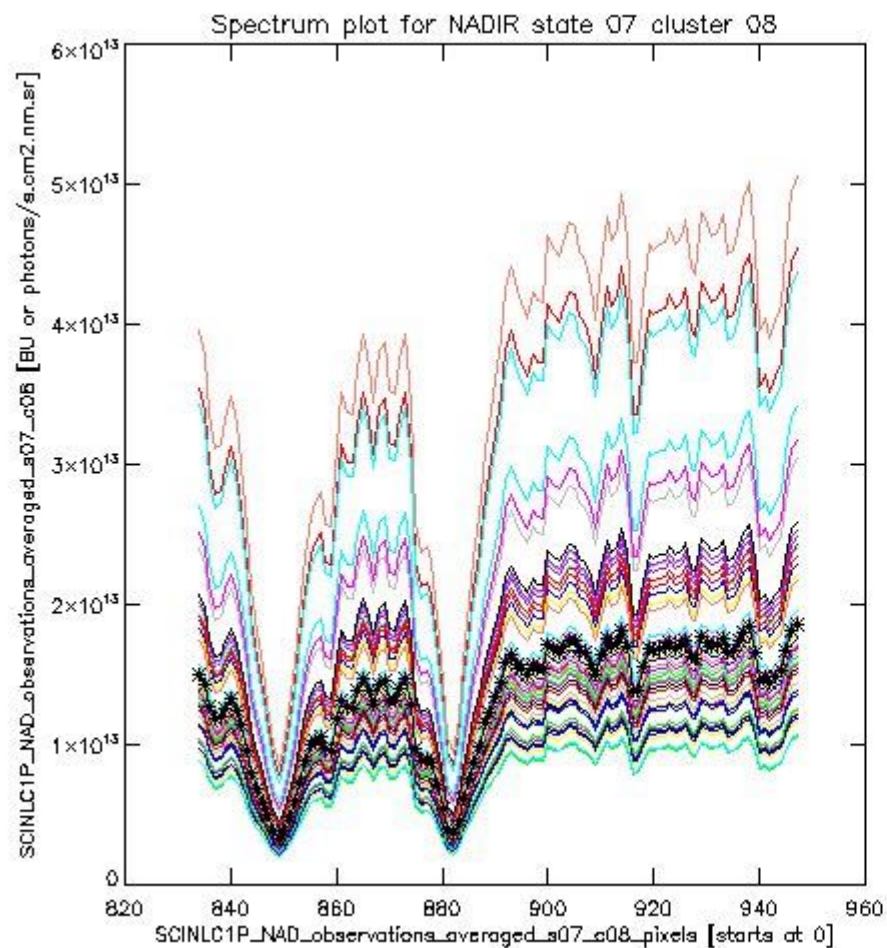
1.2 Source packet monitoring

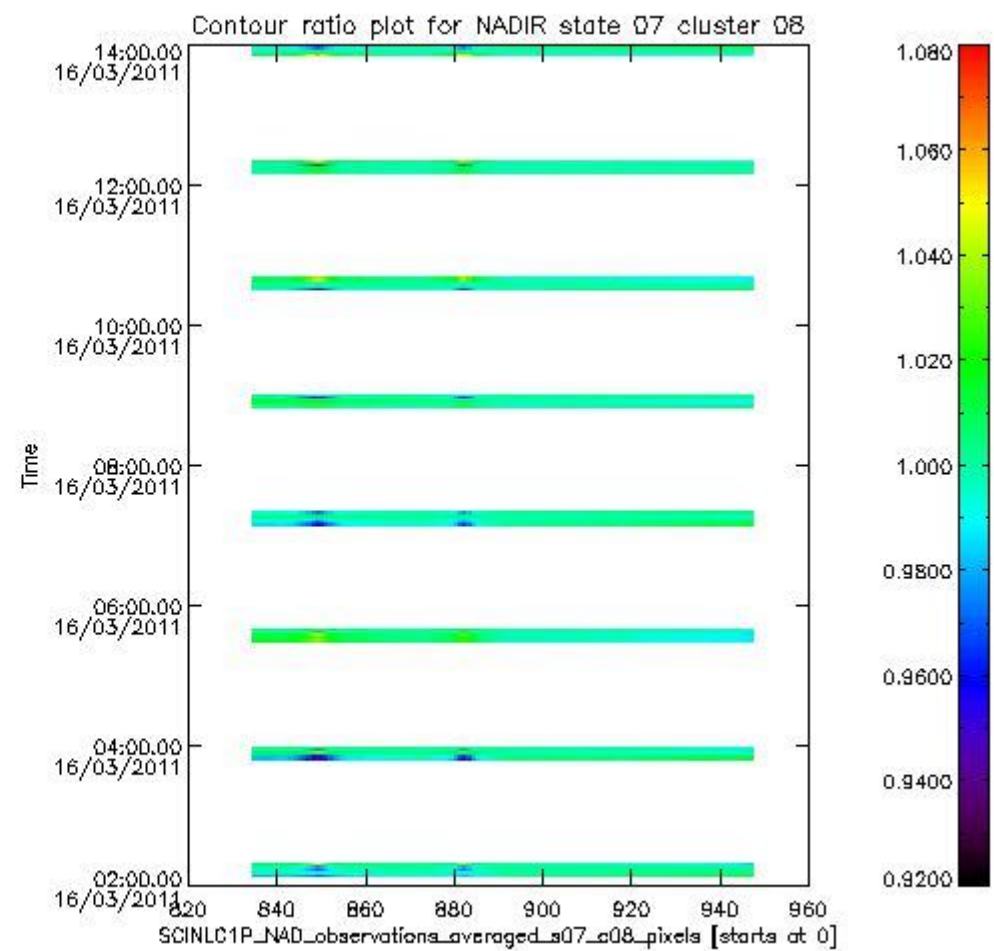
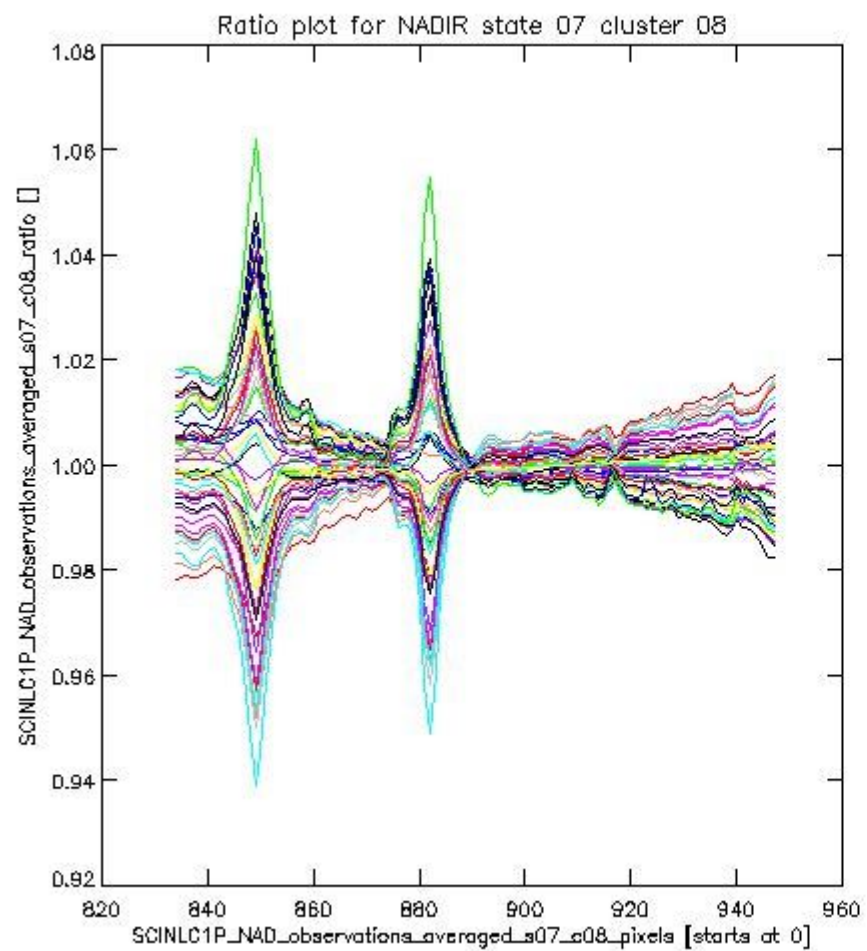
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	16MAR2011 02:08:00.749
Start time of last sample	16MAR2011 13:59:49.184
Reference period start time	14FEB2011 00:30:35.198
Reference period stop time	15MAR2011 11:16:12.714
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

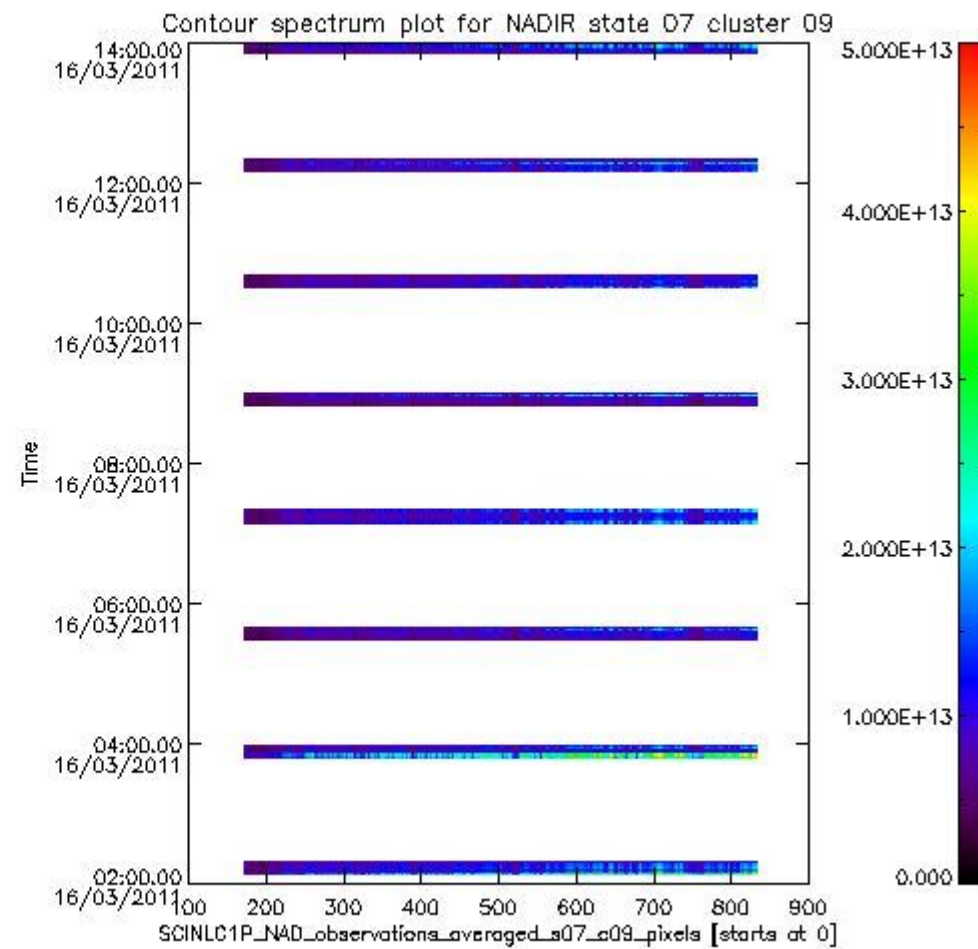
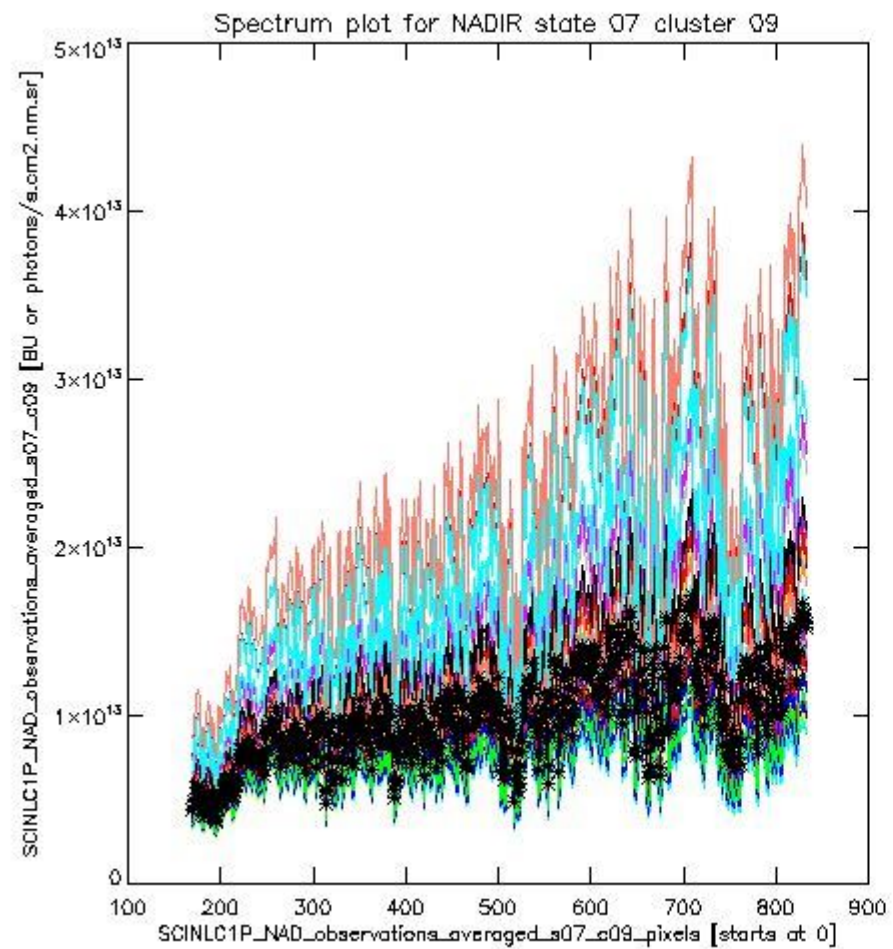




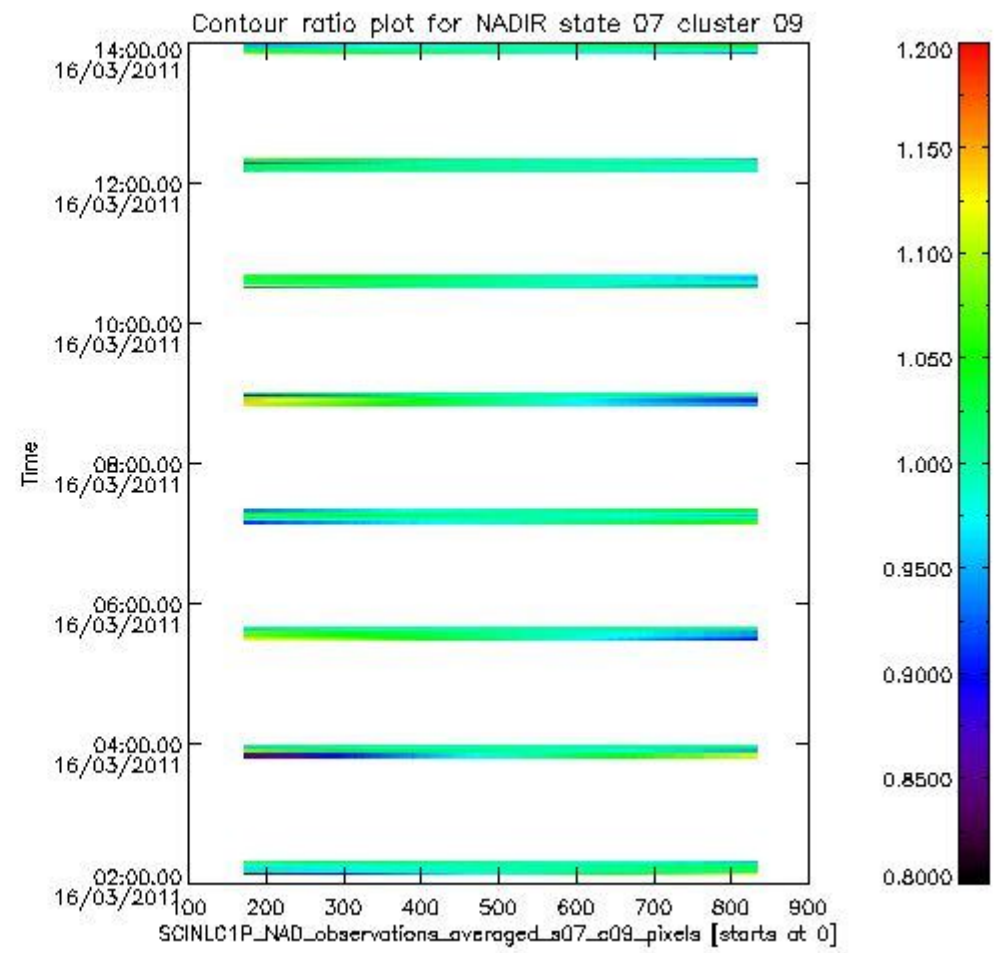
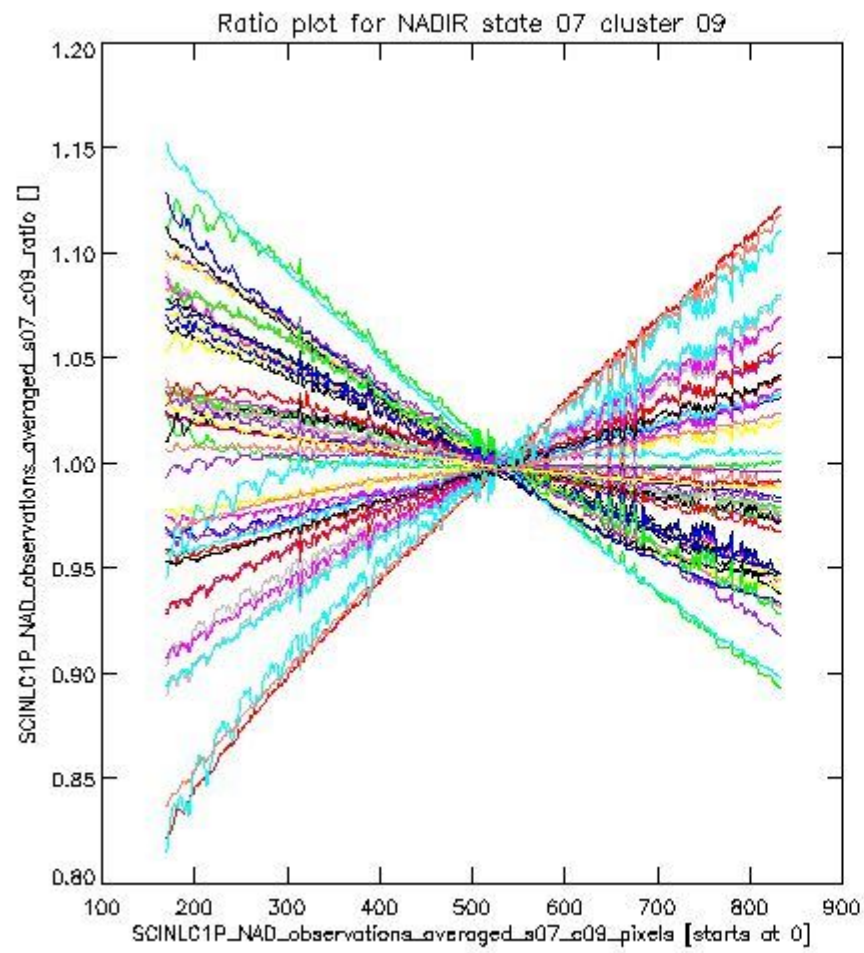
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_1.PNG

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	16MAR2011 02:08:00.749
Start time of last sample	16MAR2011 13:59:49.184
Reference period start time	14FEB2011 00:30:35.198
Reference period stop time	15MAR2011 11:16:12.714
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



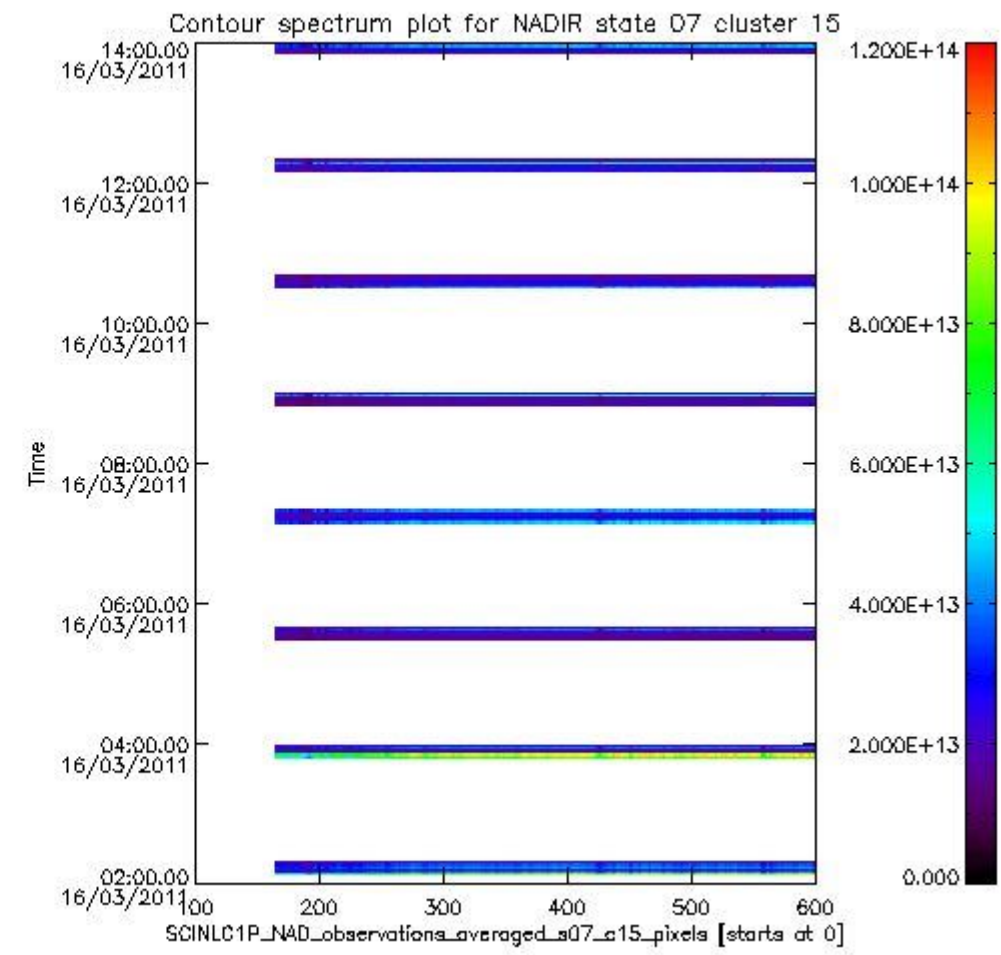
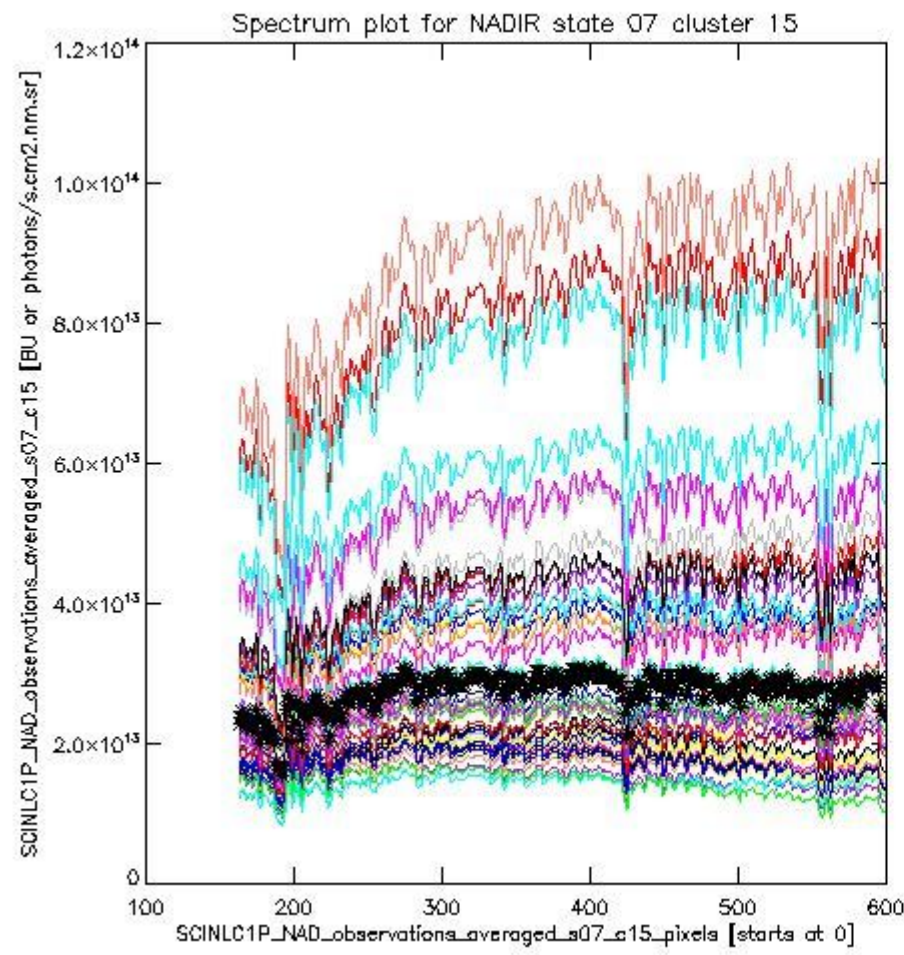
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_2.PNG



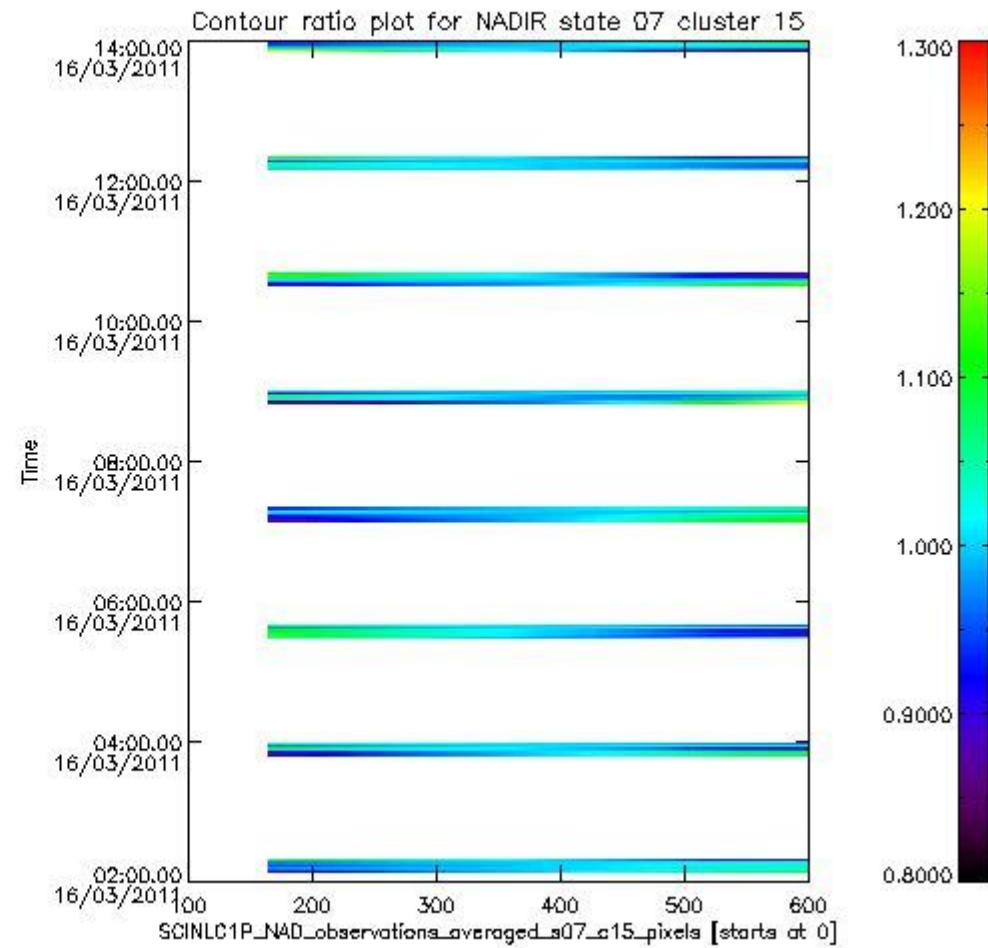
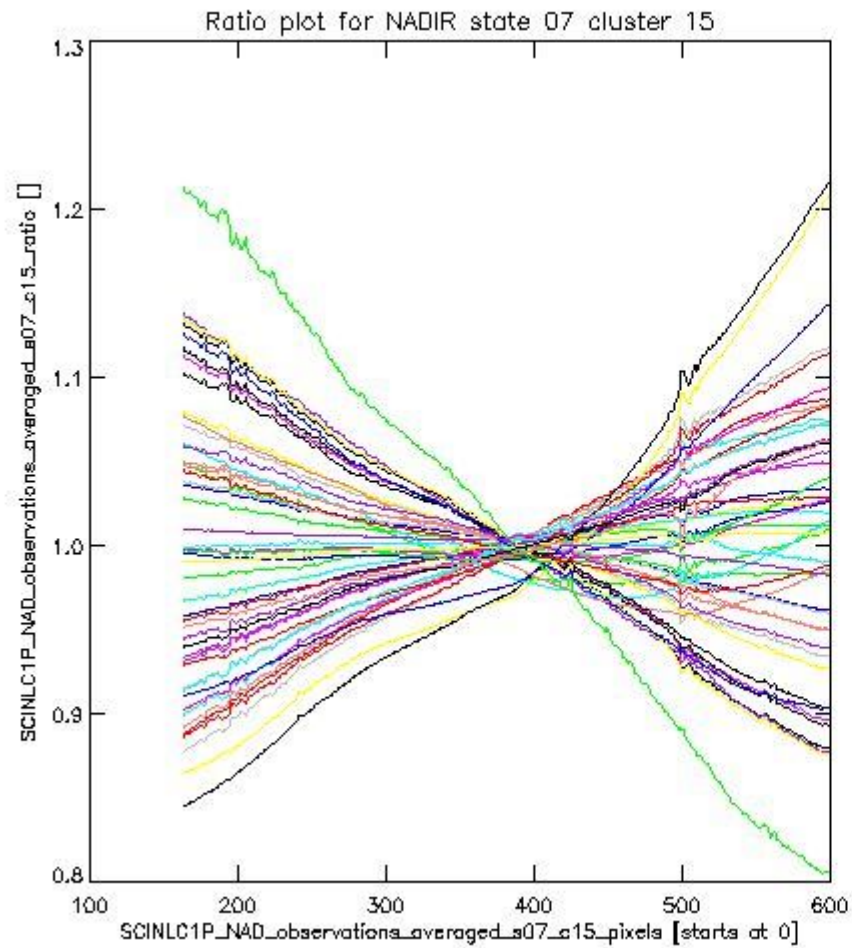
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_3.PNG

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	16MAR2011 02:08:00.749
Start time of last sample	16MAR2011 13:59:49.184
Reference period start time	14FEB2011 00:30:35.198
Reference period stop time	15MAR2011 11:16:12.714
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



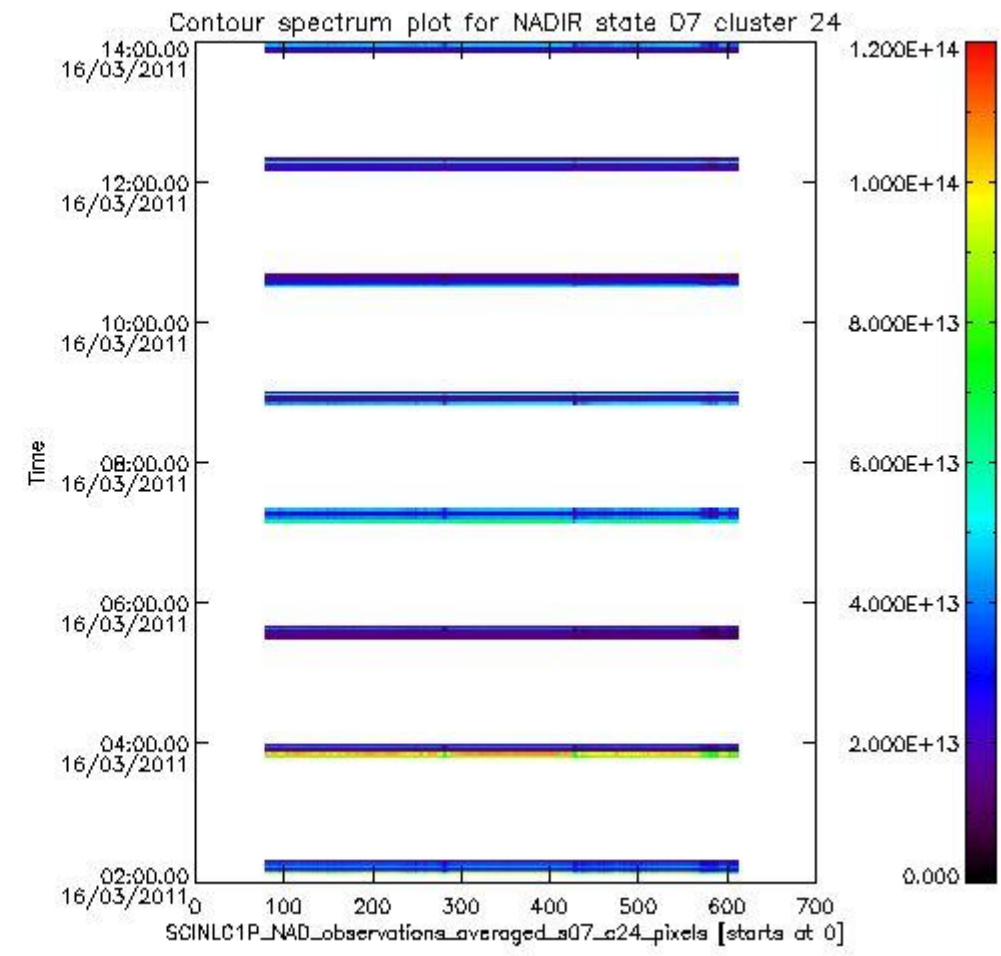
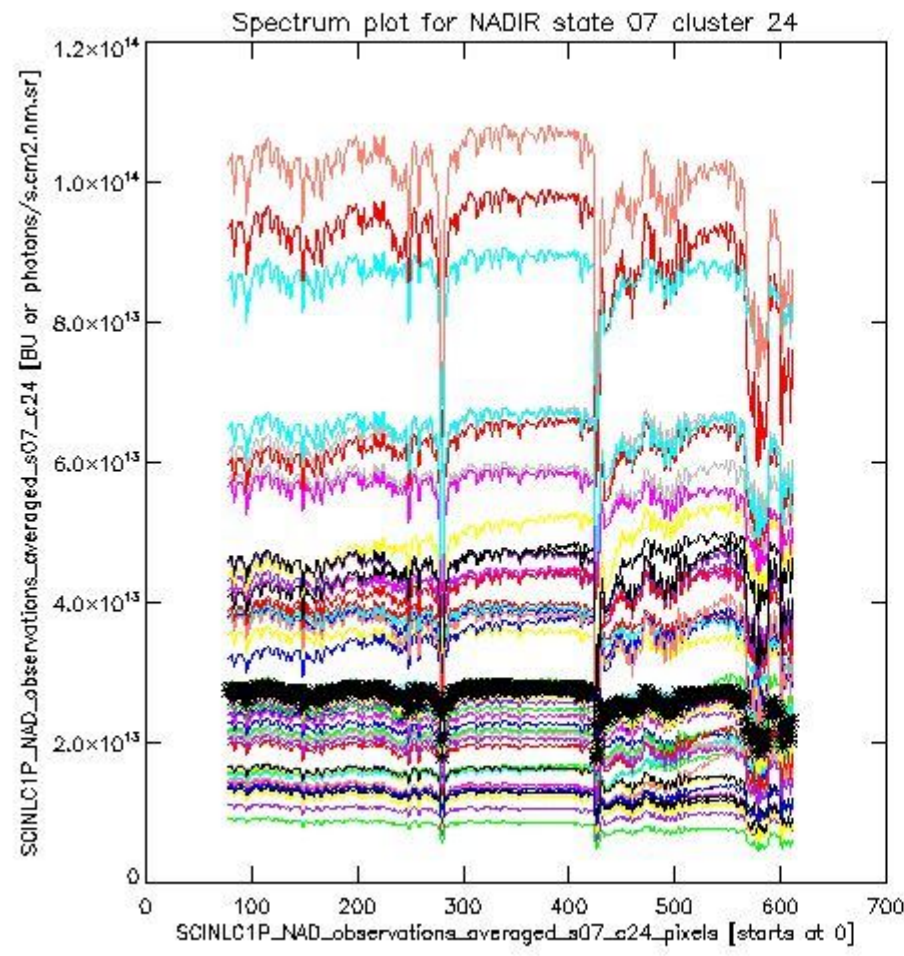
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_4.PNG



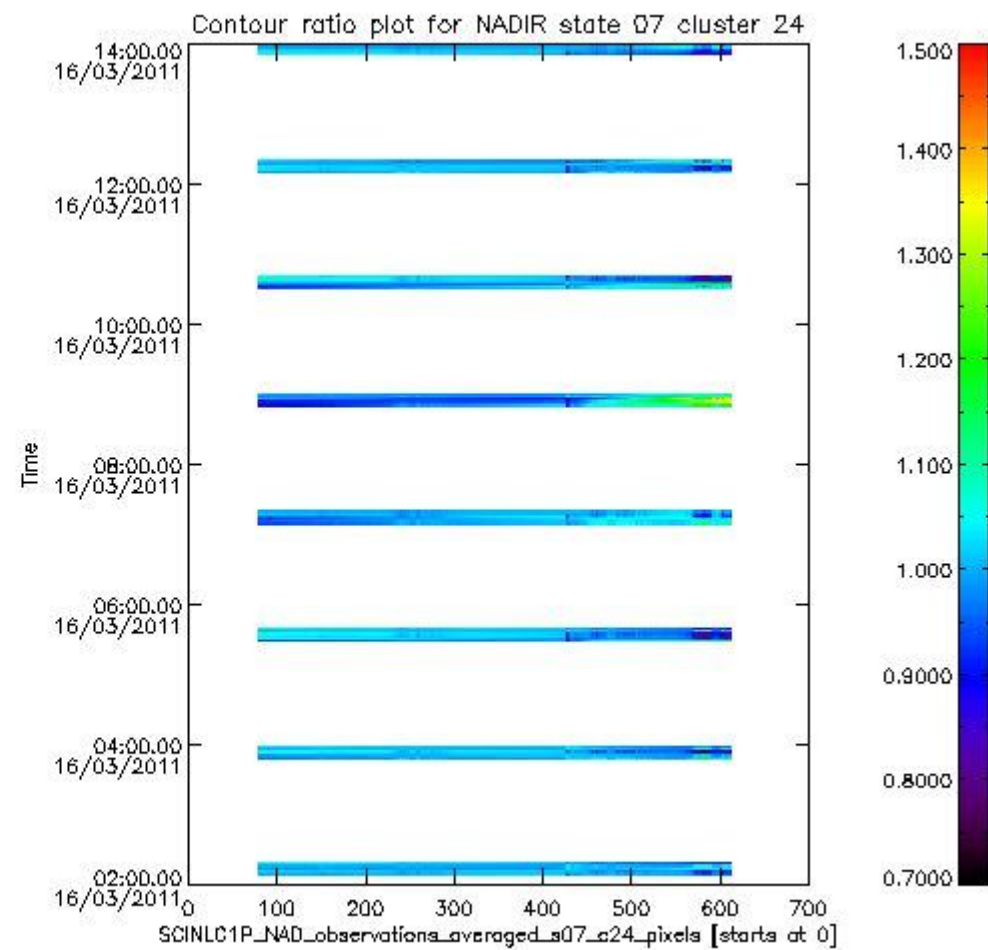
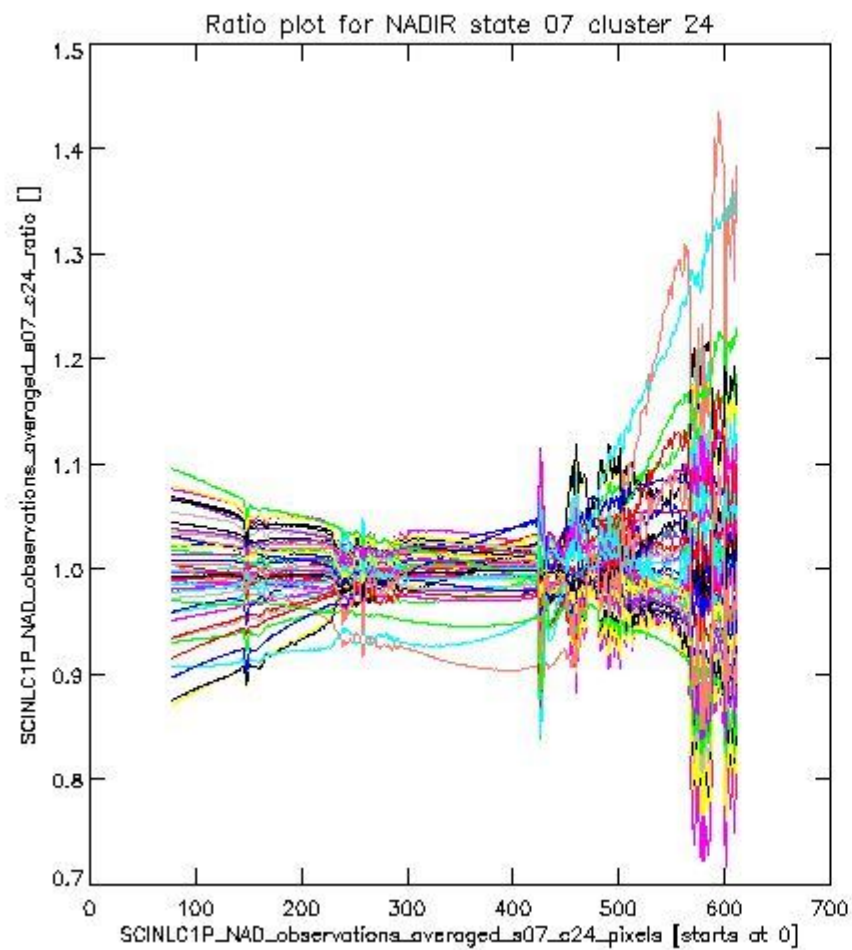
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_5.PNG

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	16MAR2011 02:08:00.749
Start time of last sample	16MAR2011 13:59:49.184
Reference period start time	14FEB2011 00:30:35.198
Reference period stop time	15MAR2011 11:16:12.714
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



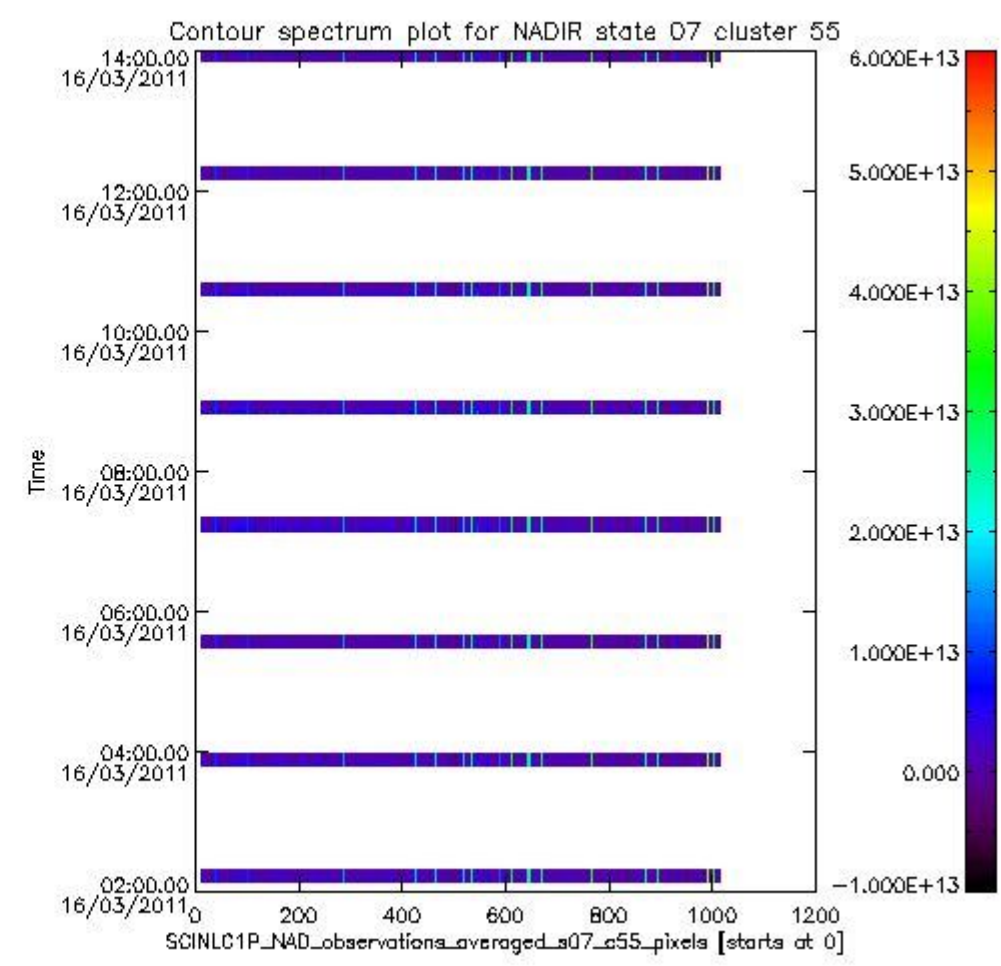
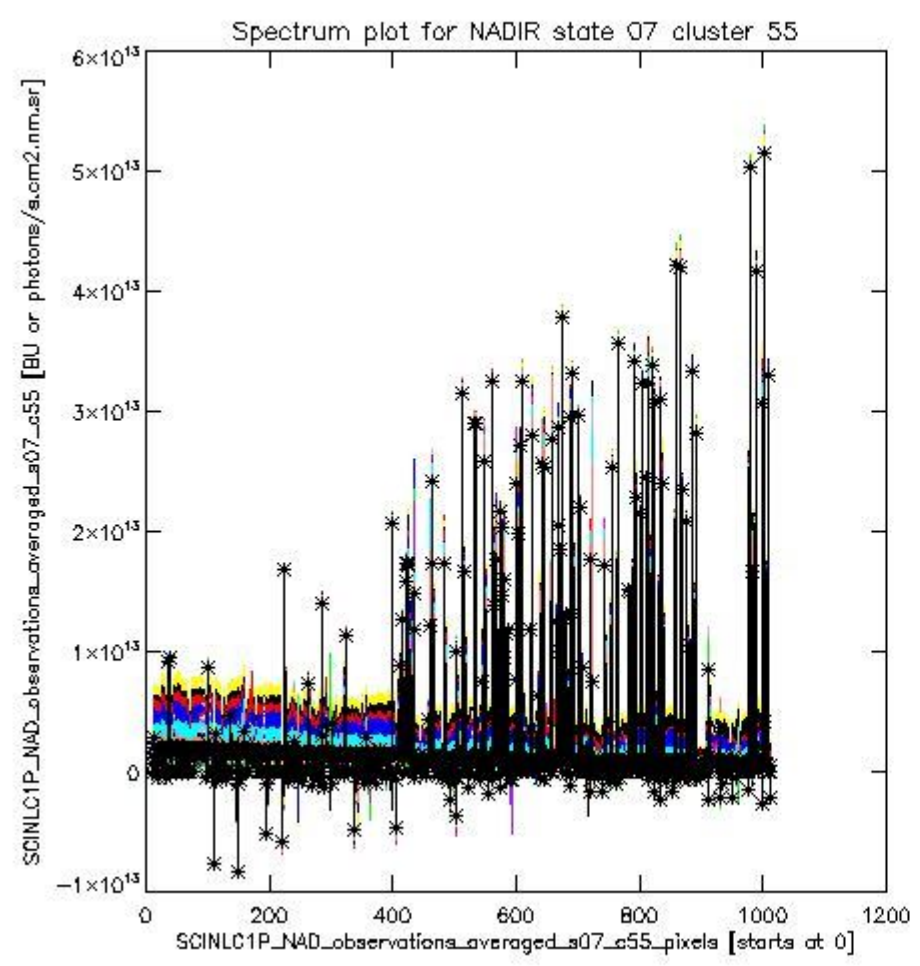
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_6.PNG



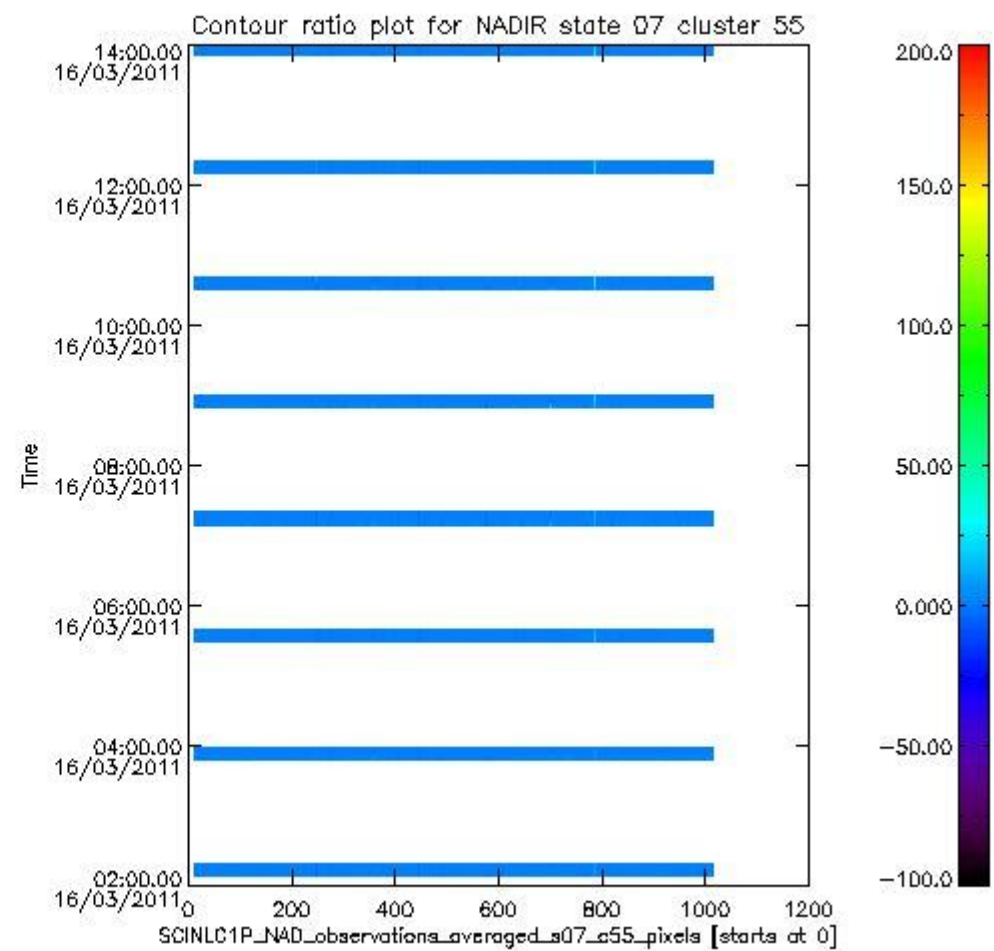
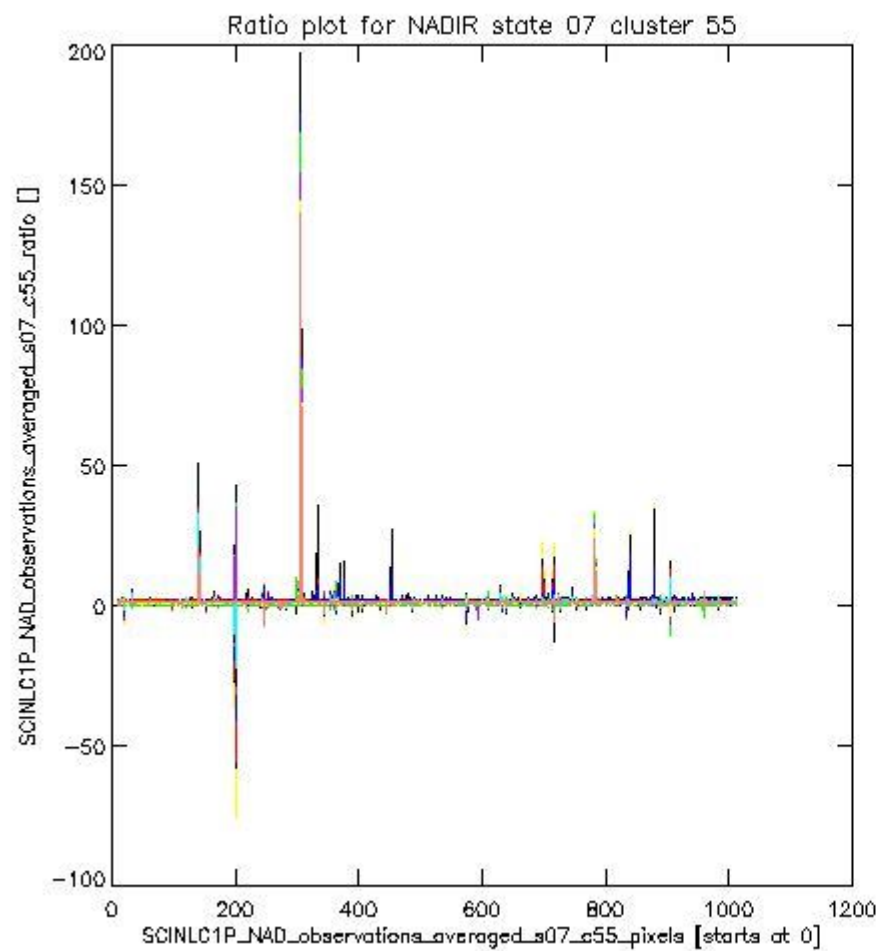
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_7.PNG

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	16MAR2011 02:08:00.749
Start time of last sample	16MAR2011 13:59:49.184
Reference period start time	14FEB2011 00:30:35.198
Reference period stop time	15MAR2011 11:16:12.714
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



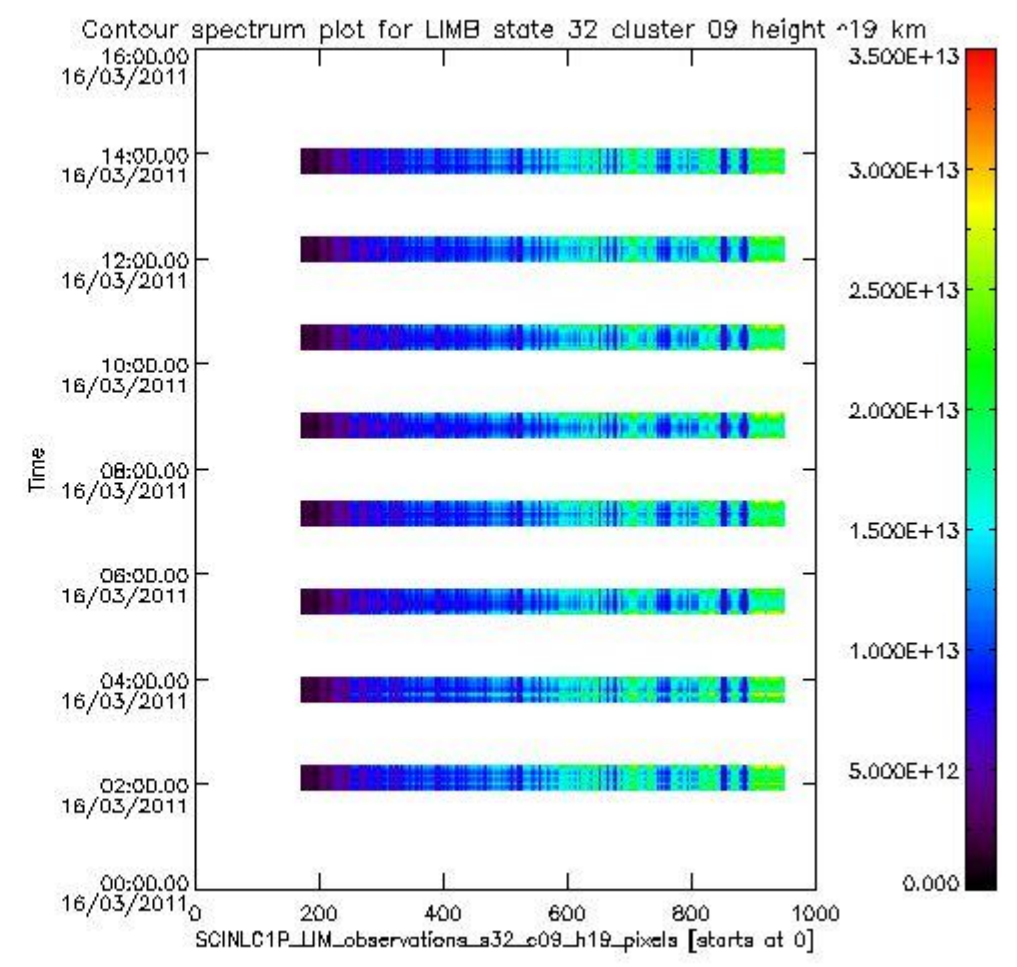
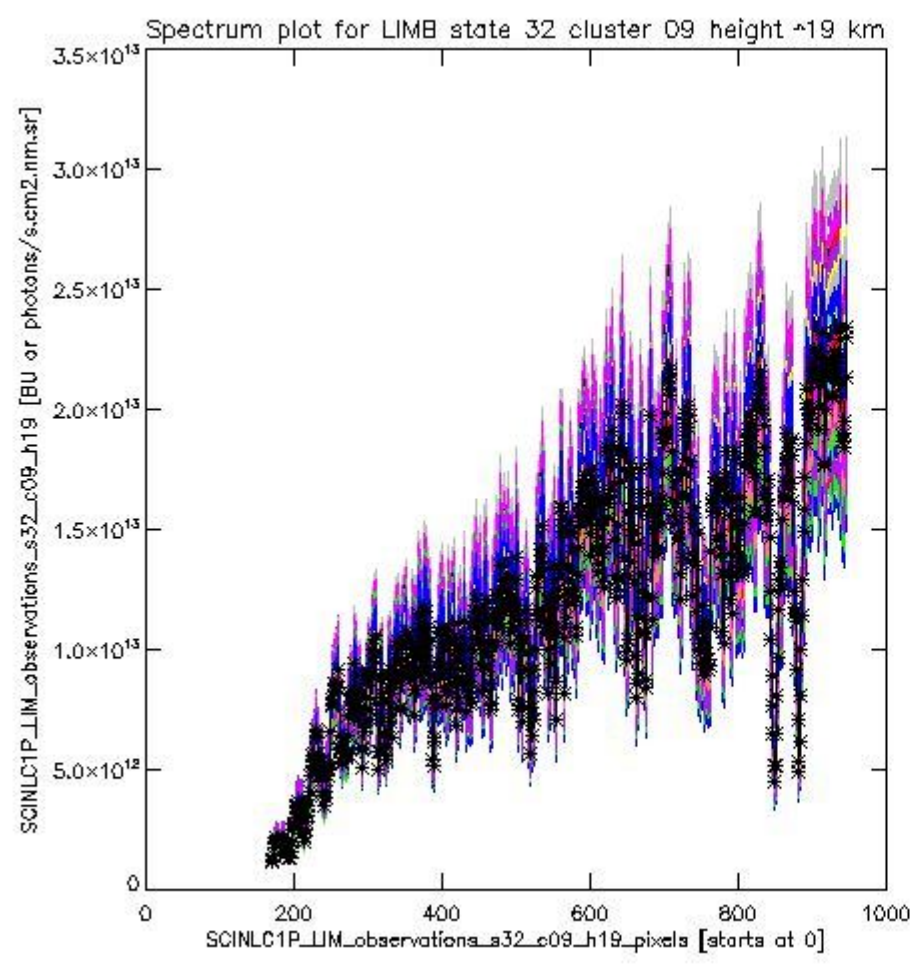
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_8.PNG



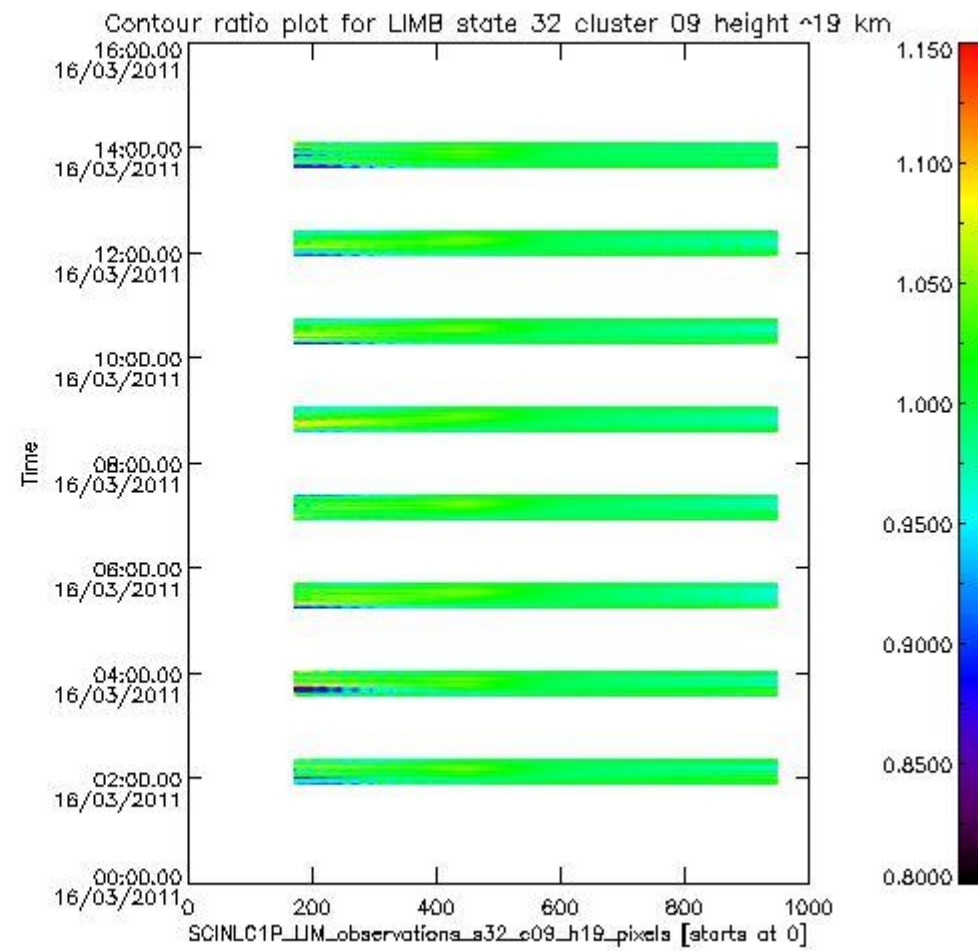
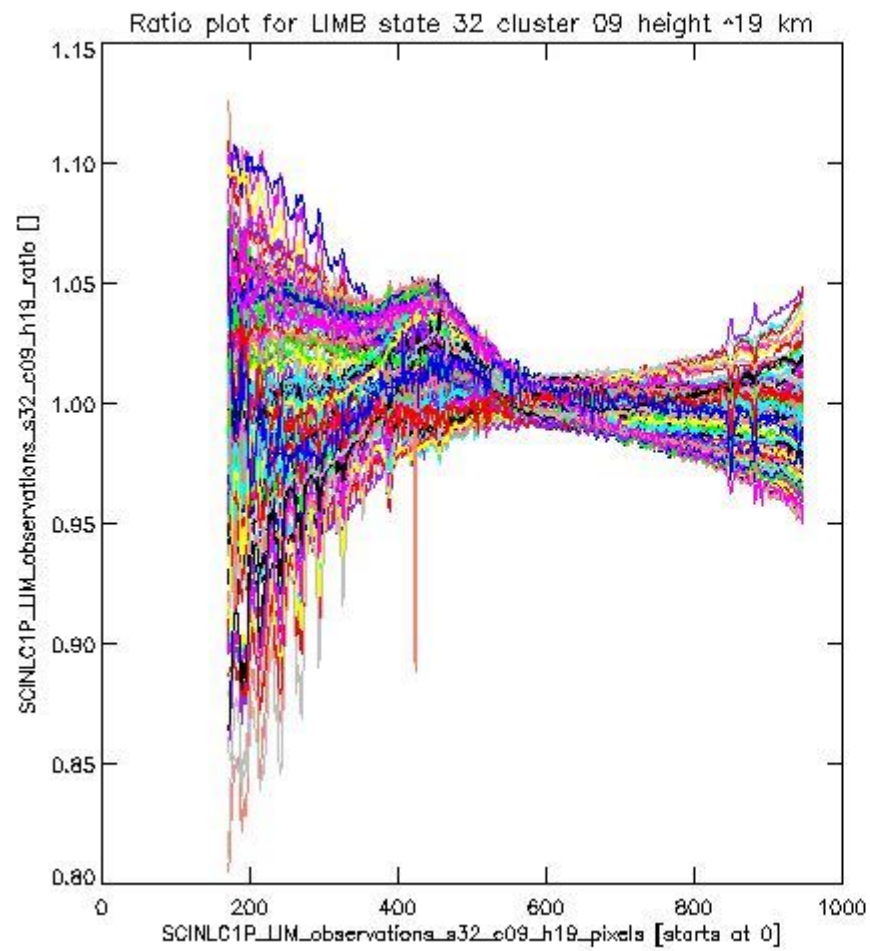
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_9.PNG

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	16MAR2011 01:54:50.116
Start time of last sample	16MAR2011 14:03:00.485
Reference period start time	14FEB2011 00:17:24.565
Reference period stop time	15MAR2011 11:19:24.015
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



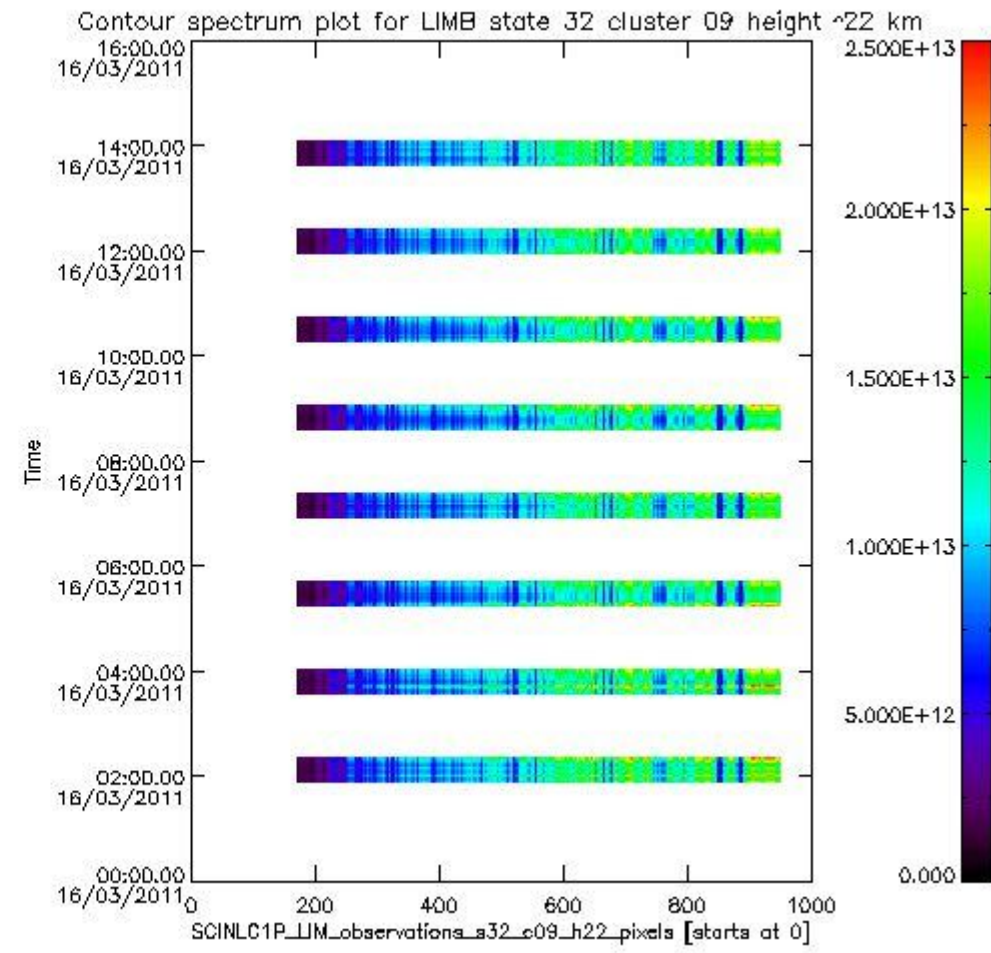
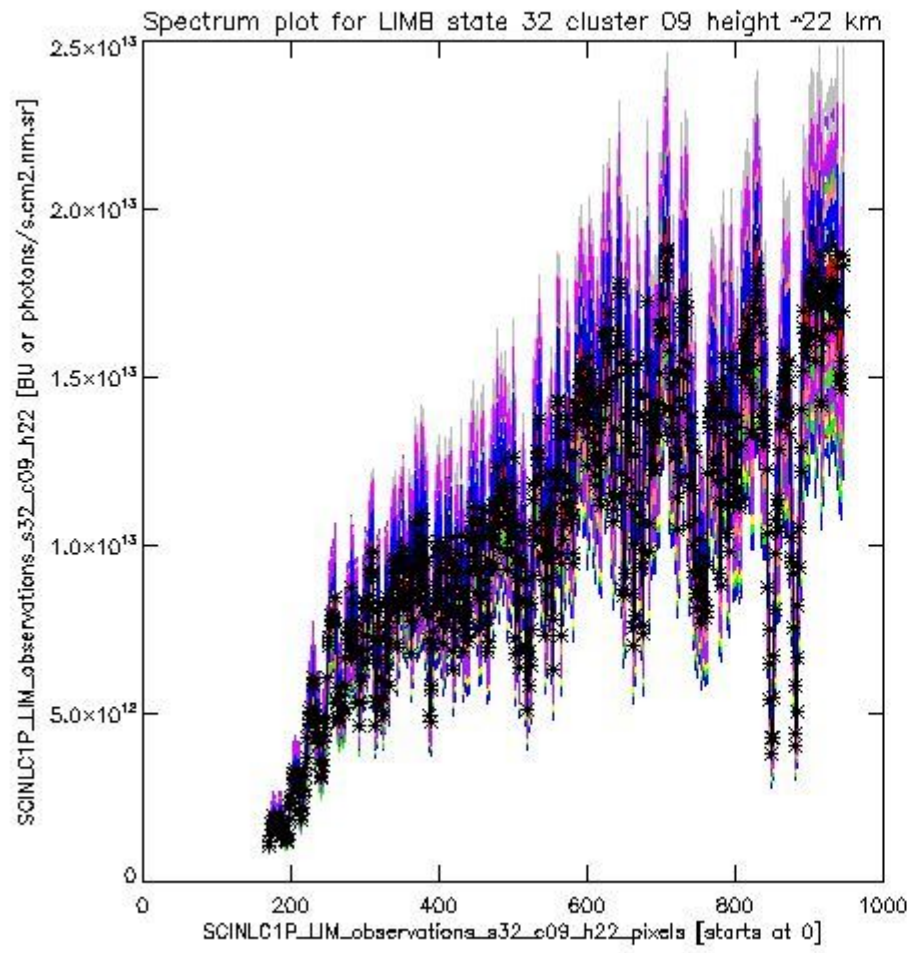
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_10.PNG

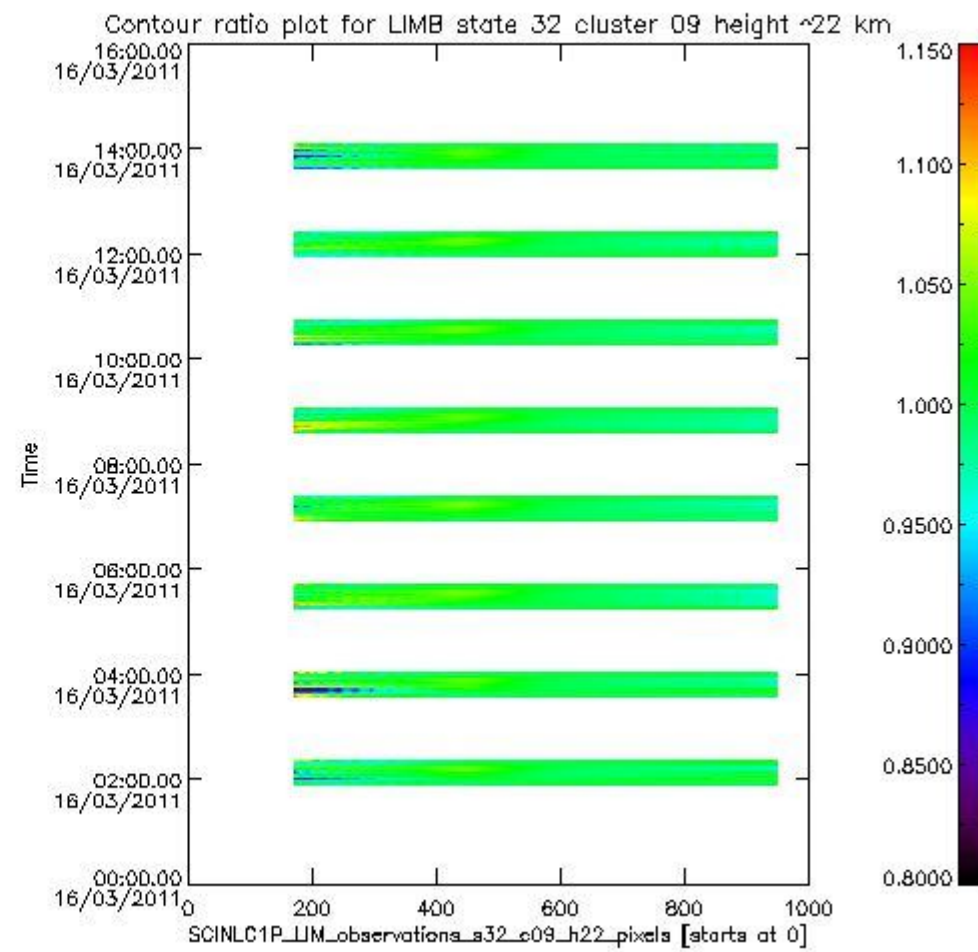
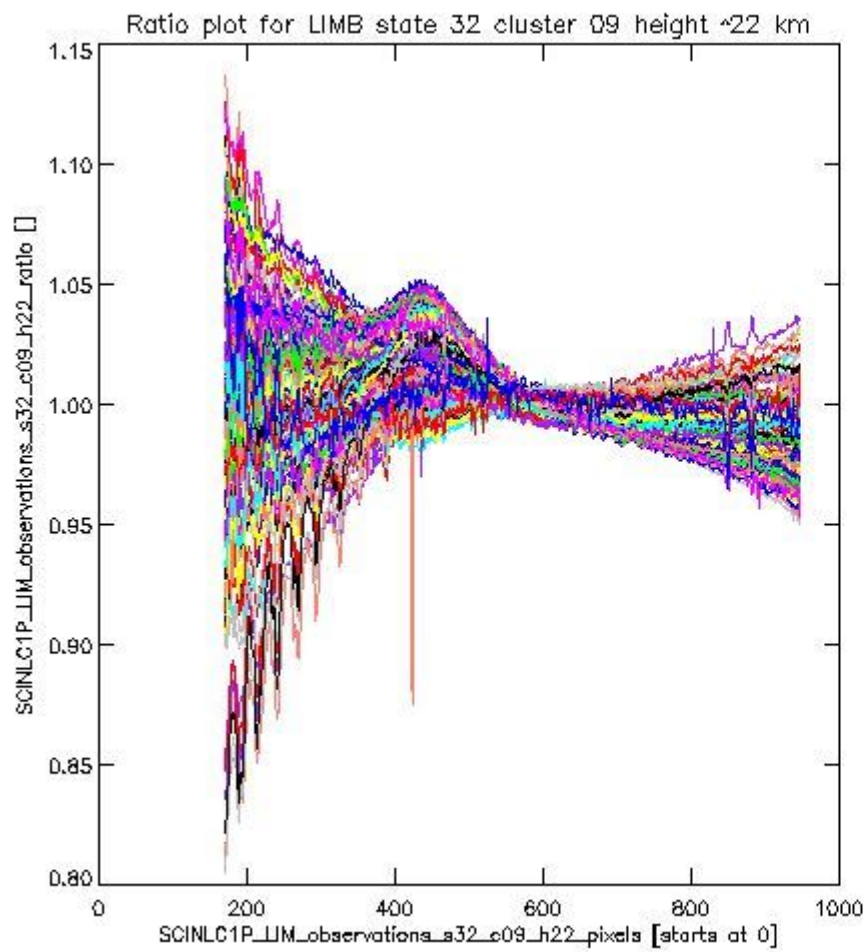


sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_11.PNG

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	16MAR2011 01:54:50.116
Start time of last sample	16MAR2011 14:03:00.485
Reference period start time	14FEB2011 00:17:24.565
Reference period stop time	15MAR2011 11:19:24.015
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947

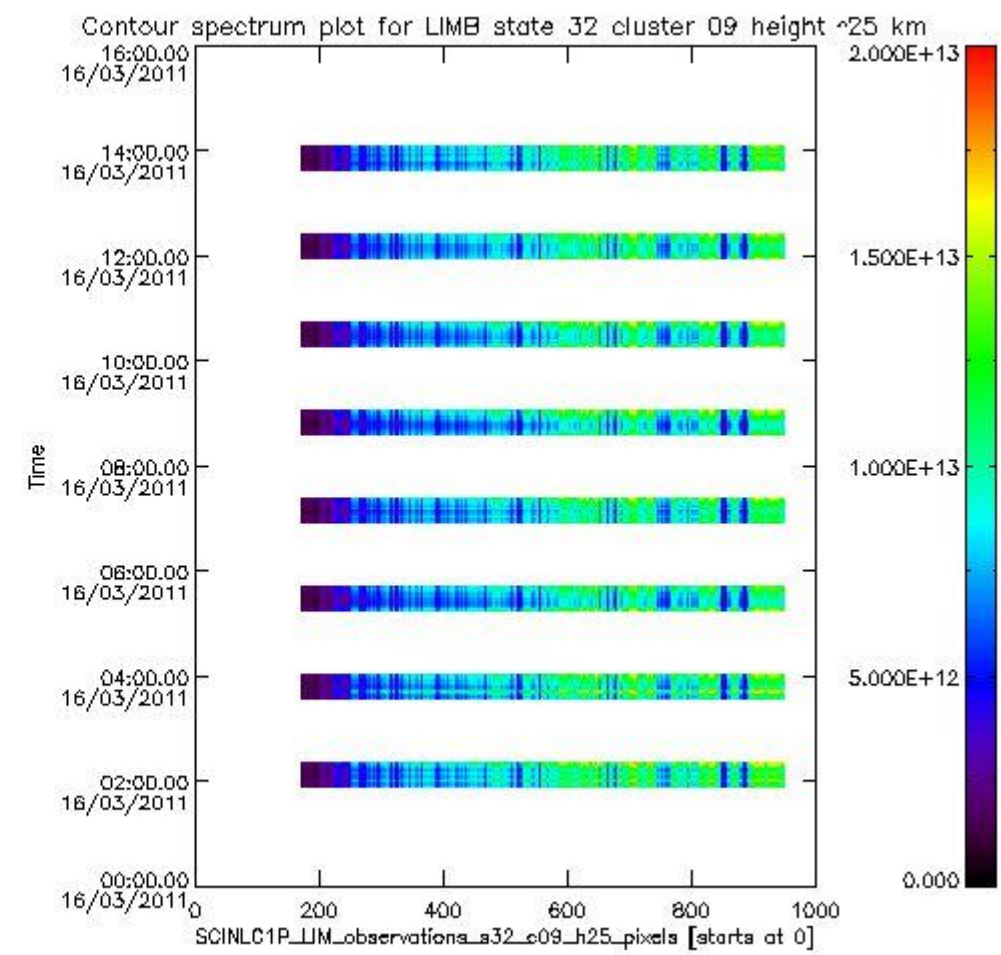
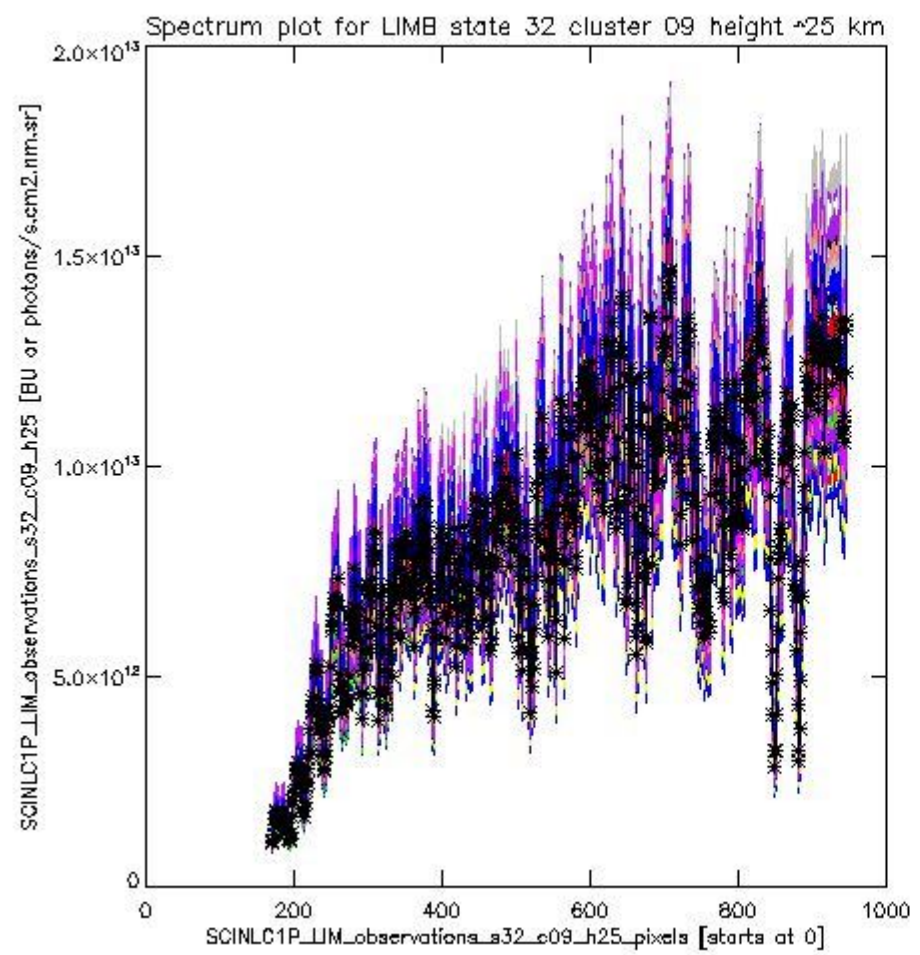




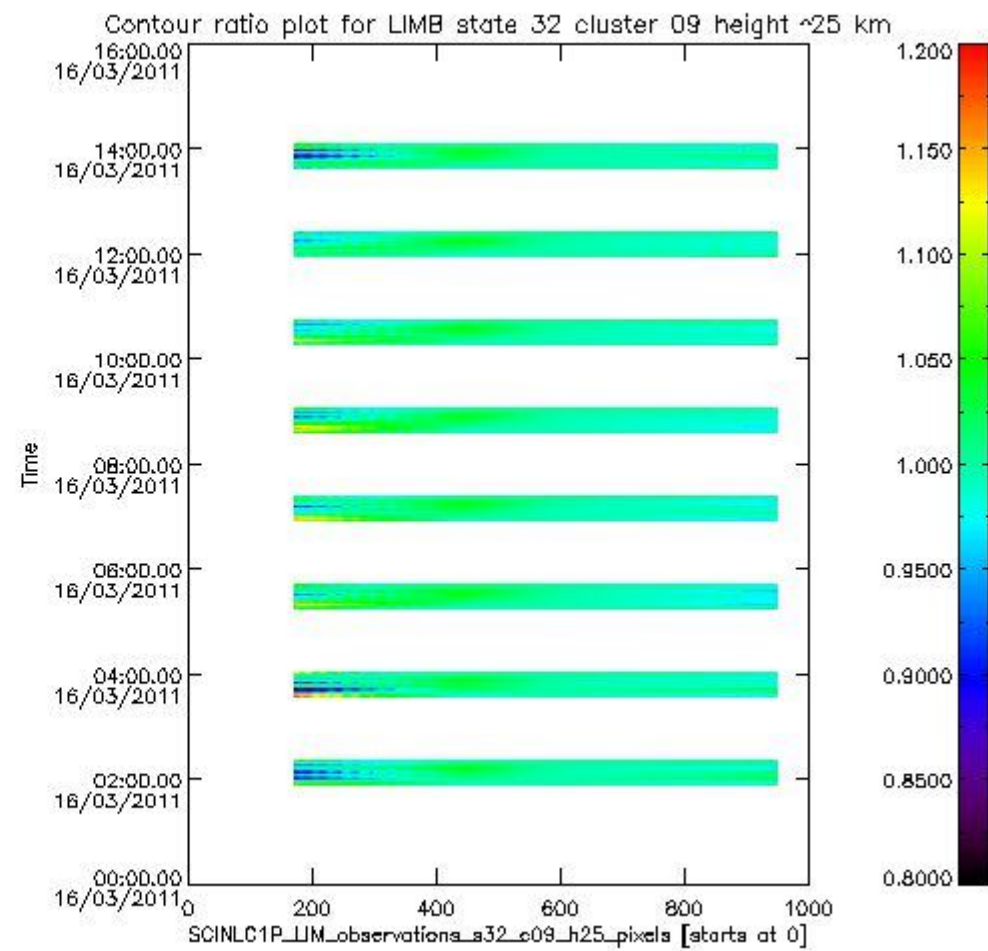
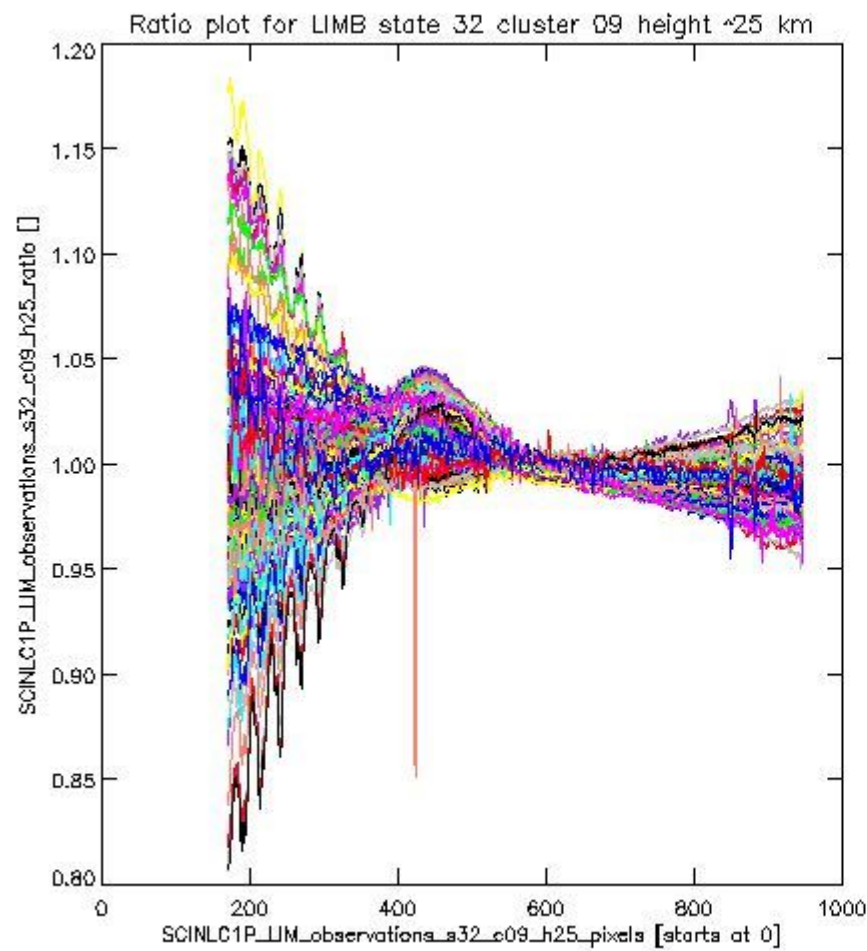
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_13.PNG

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	16MAR2011 01:54:50.116
Start time of last sample	16MAR2011 14:03:00.485
Reference period start time	14FEB2011 00:17:24.565
Reference period stop time	15MAR2011 11:19:24.015
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



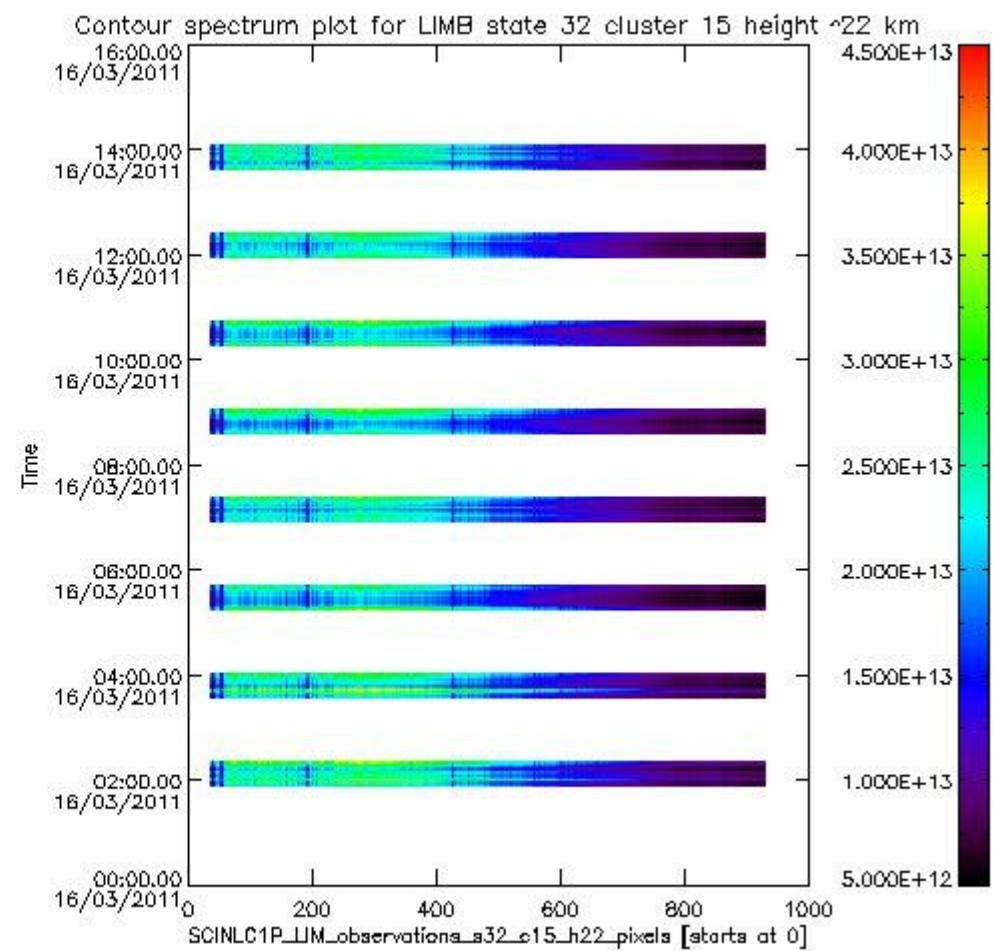
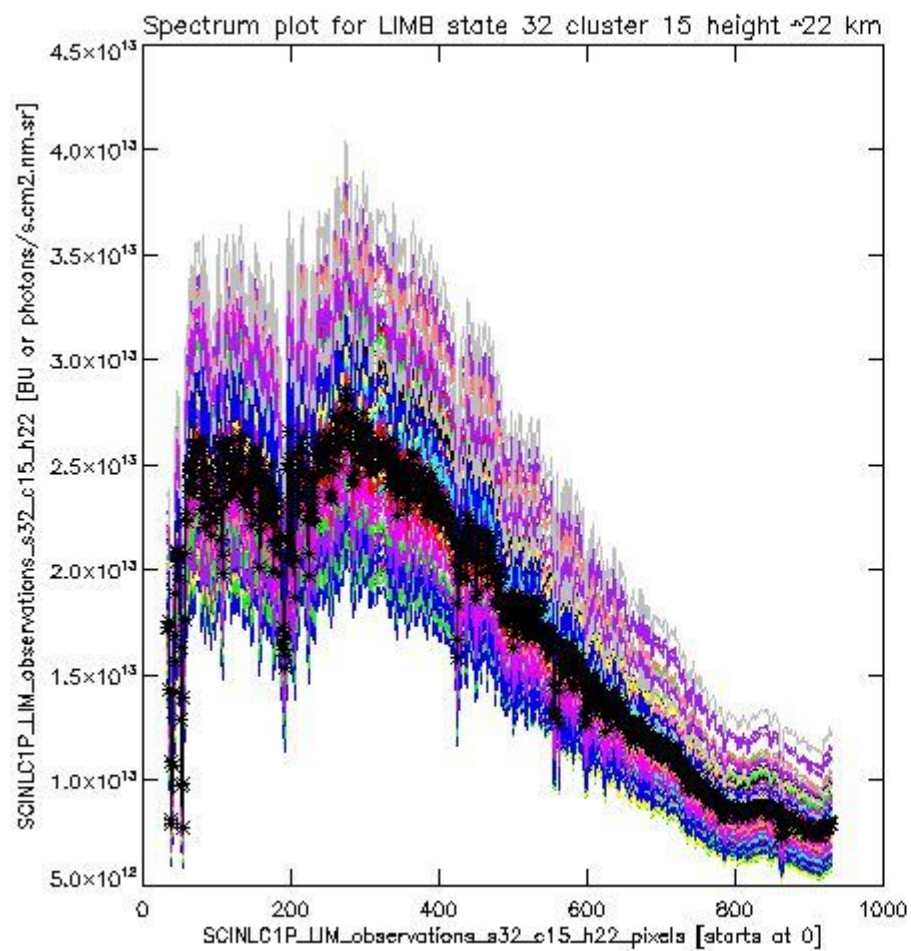
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_14.PNG



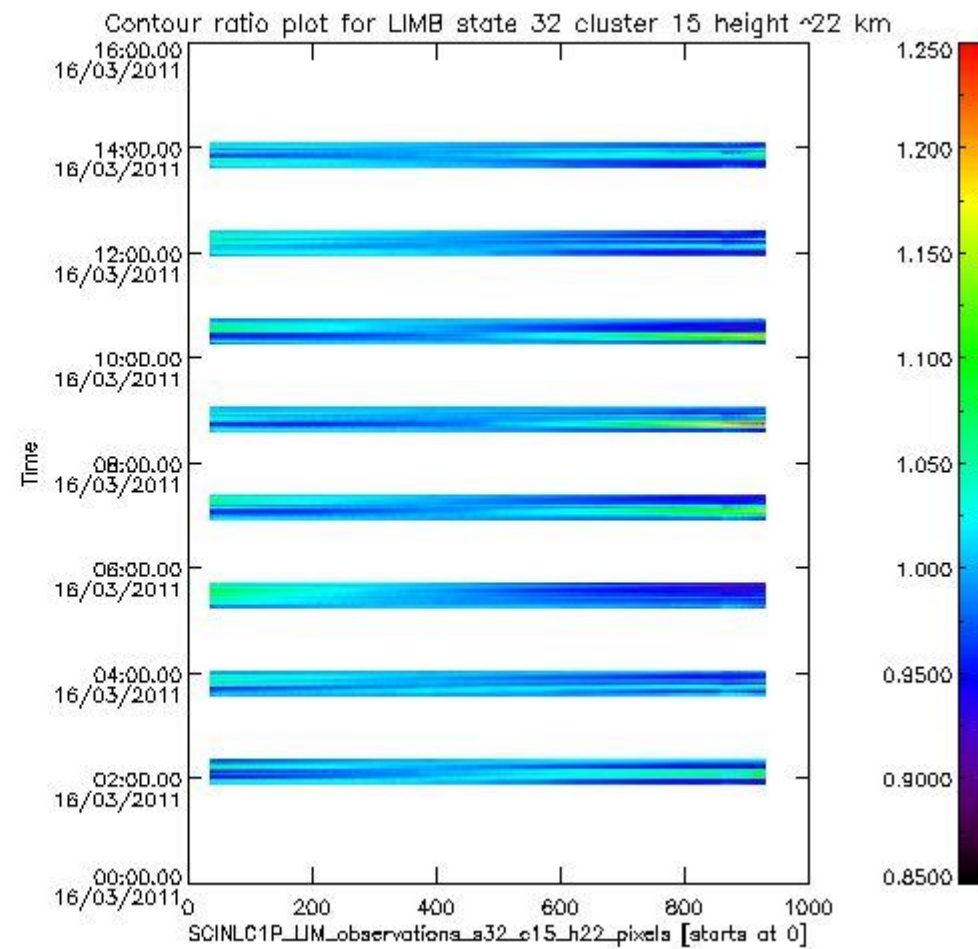
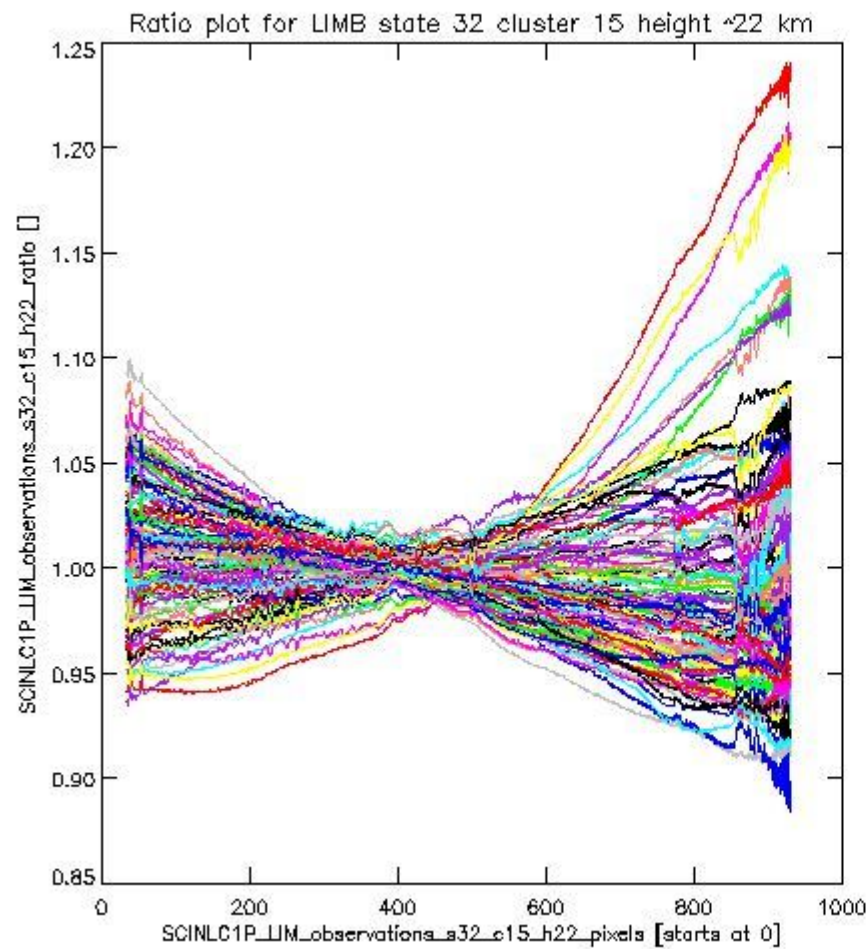
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_15.PNG

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	16MAR2011 01:54:50.116
Start time of last sample	16MAR2011 14:03:00.485
Reference period start time	14FEB2011 00:17:24.565
Reference period stop time	15MAR2011 11:19:24.015
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



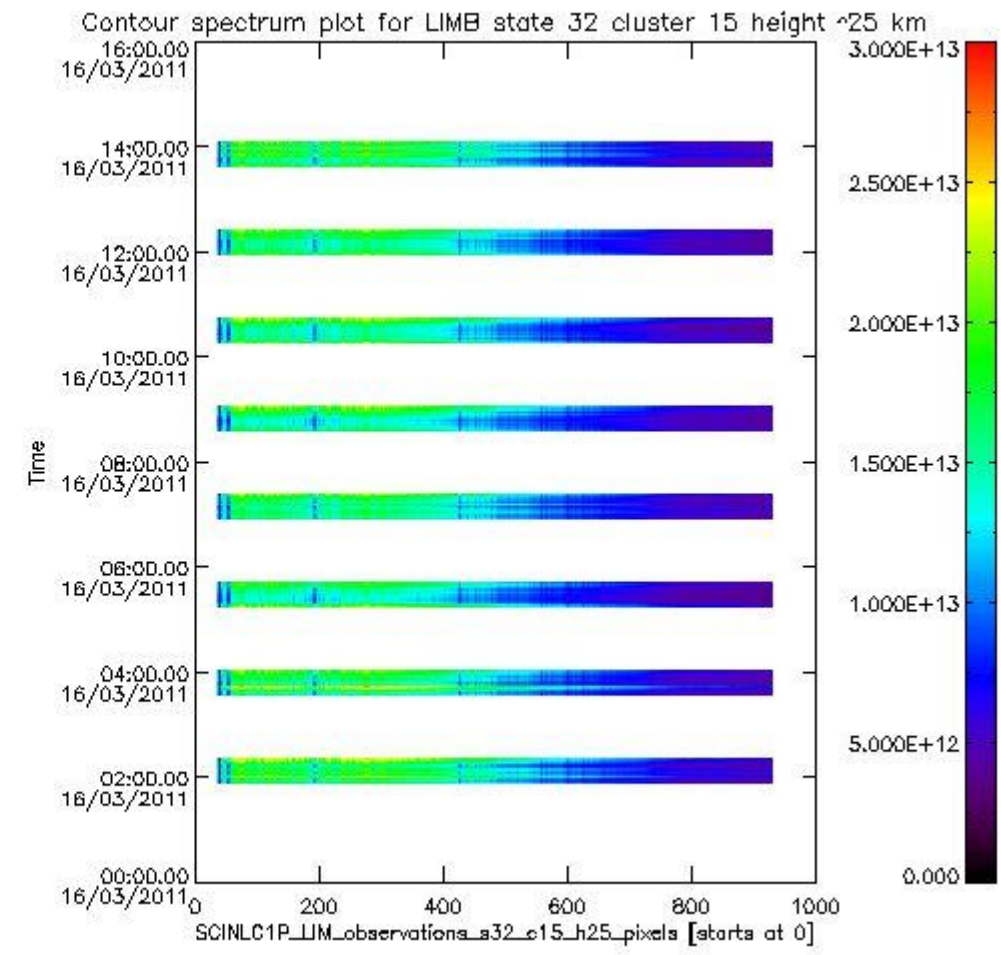
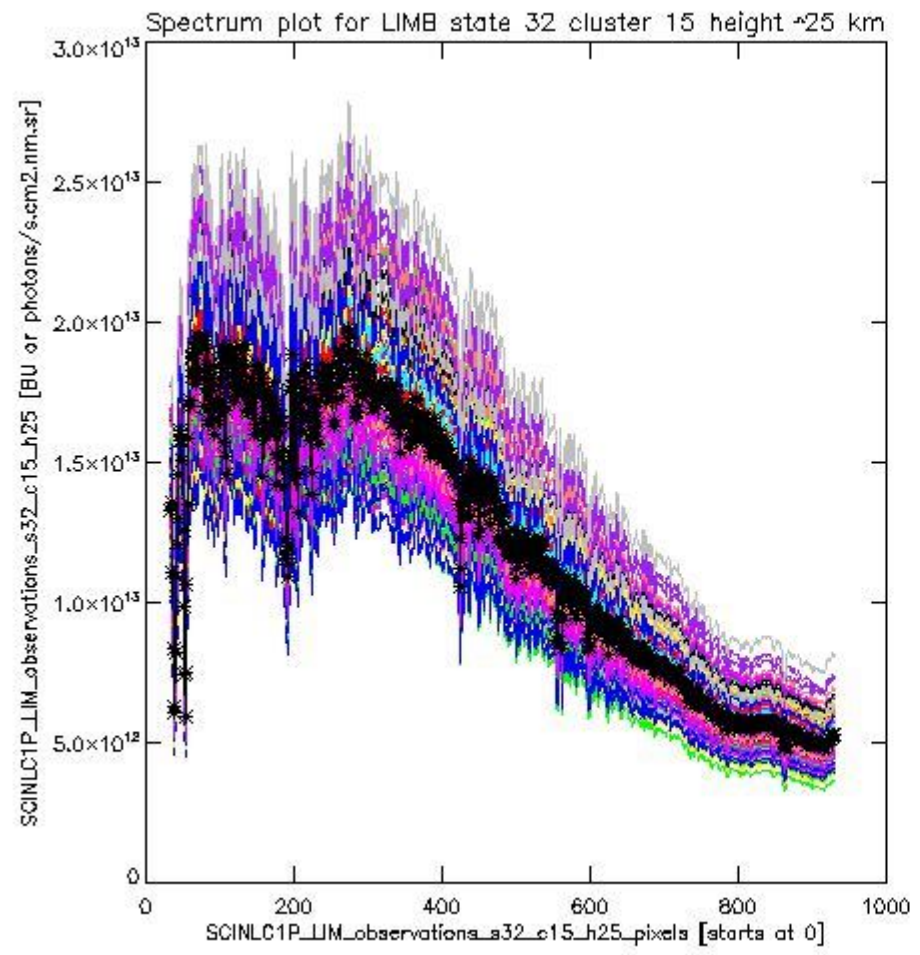
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110316_16.PNG



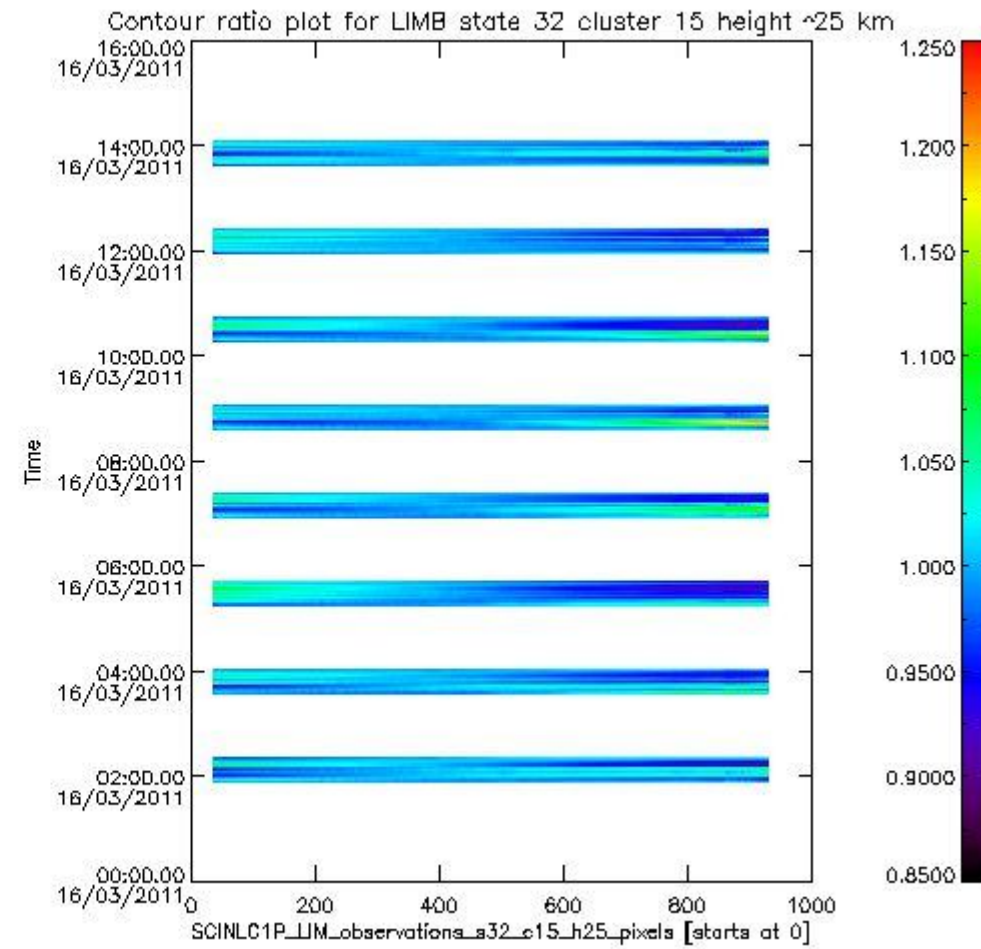
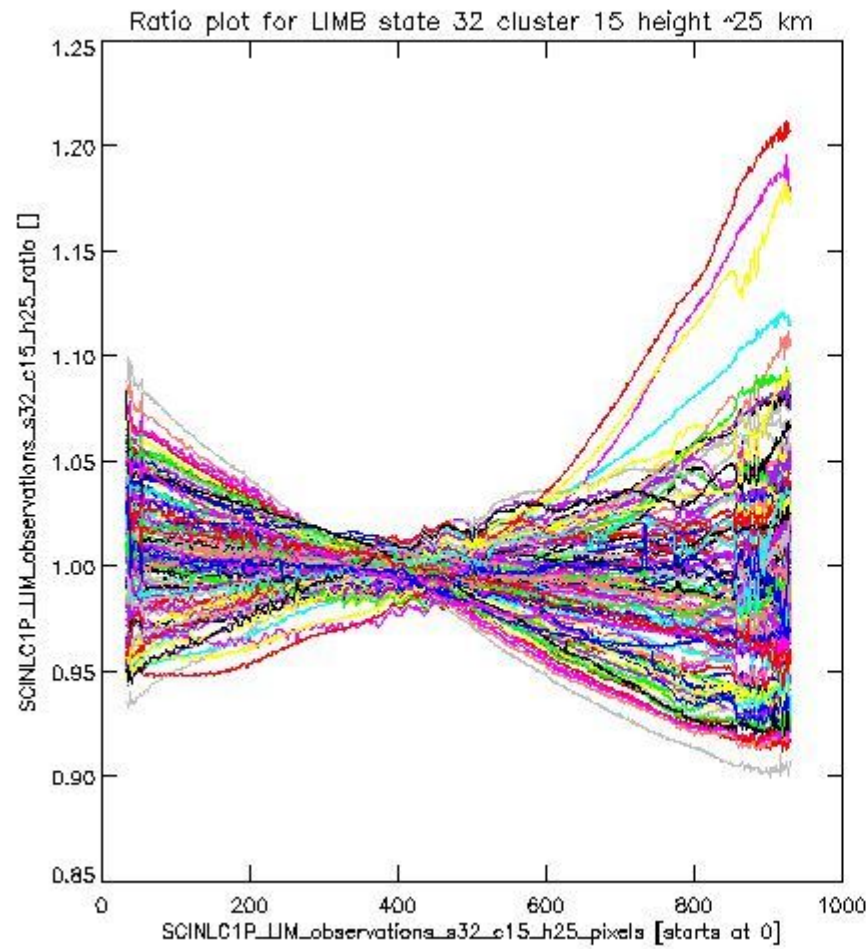
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110316_17.PNG

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	16MAR2011 01:54:50.116
Start time of last sample	16MAR2011 14:03:00.485
Reference period start time	14FEB2011 00:17:24.565
Reference period stop time	15MAR2011 11:19:24.015
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



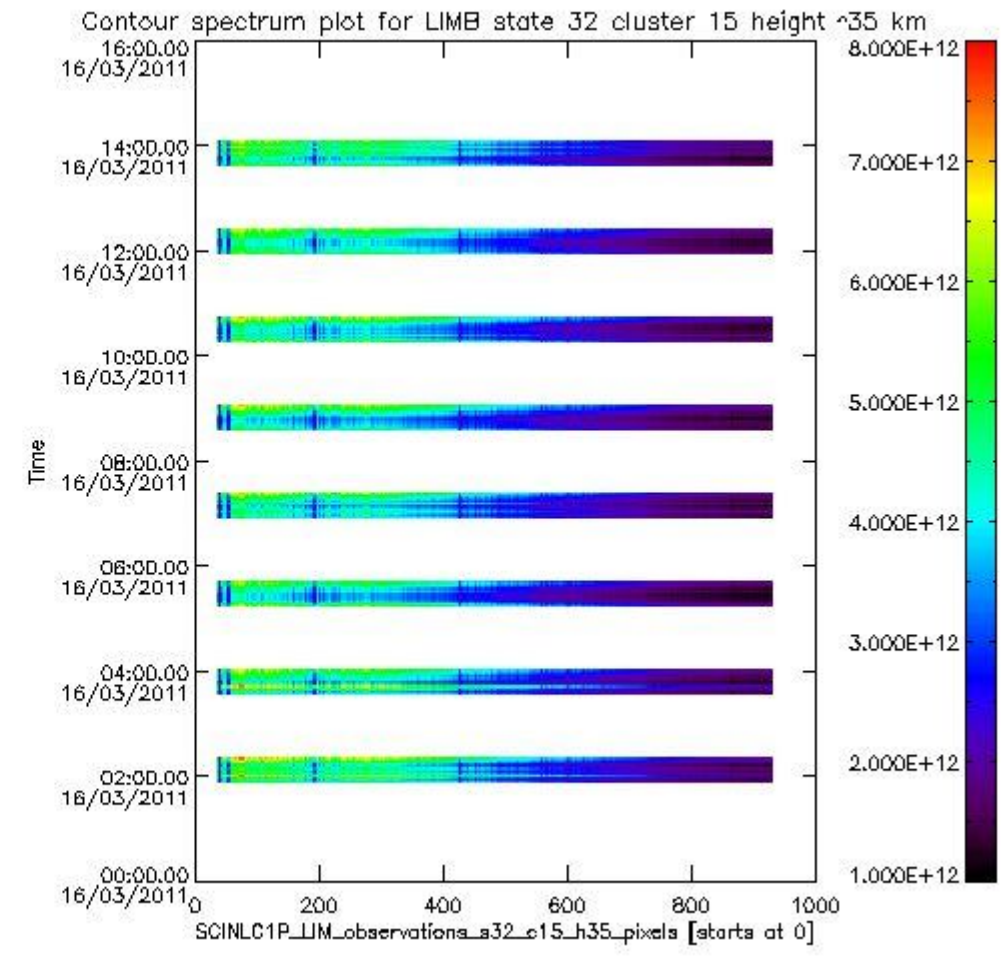
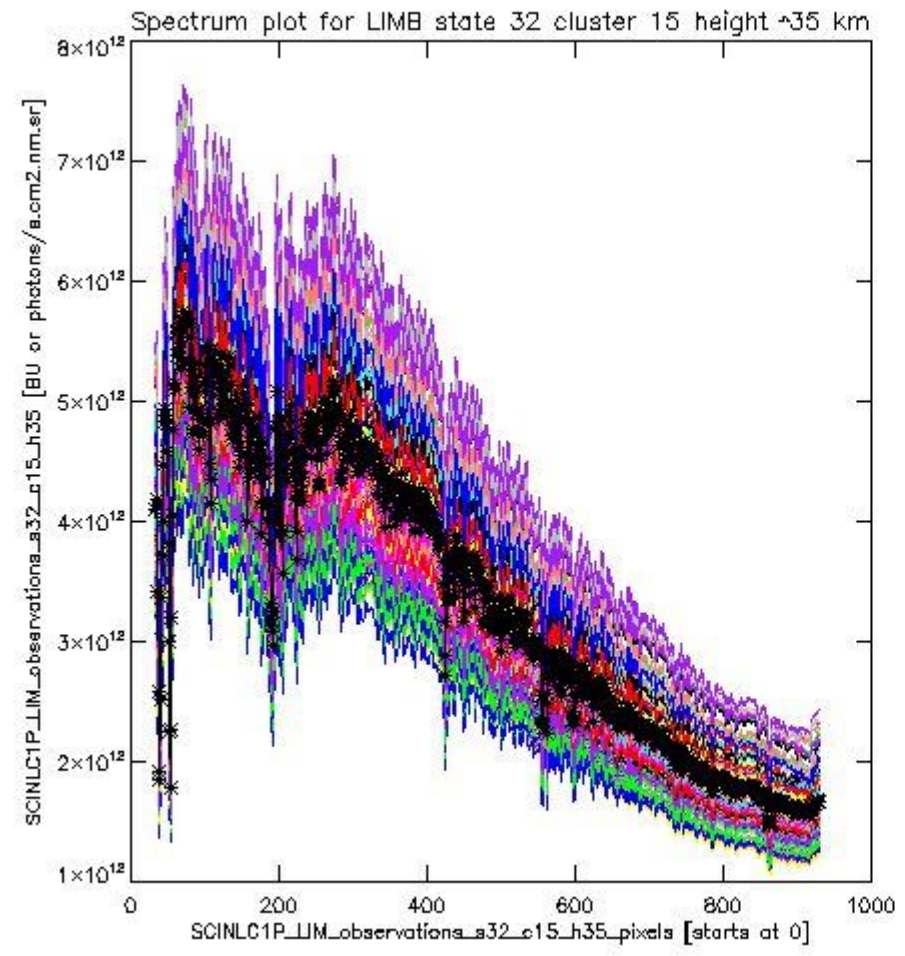
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110316_18.PNG

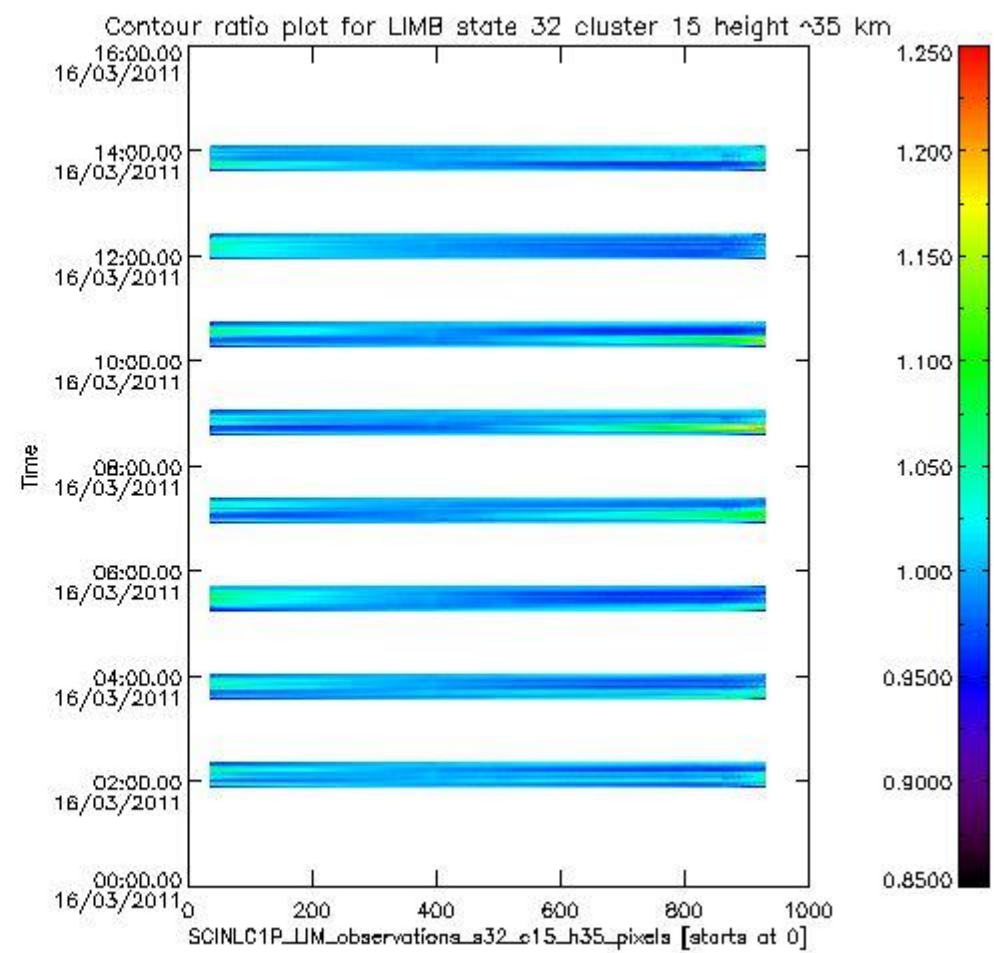
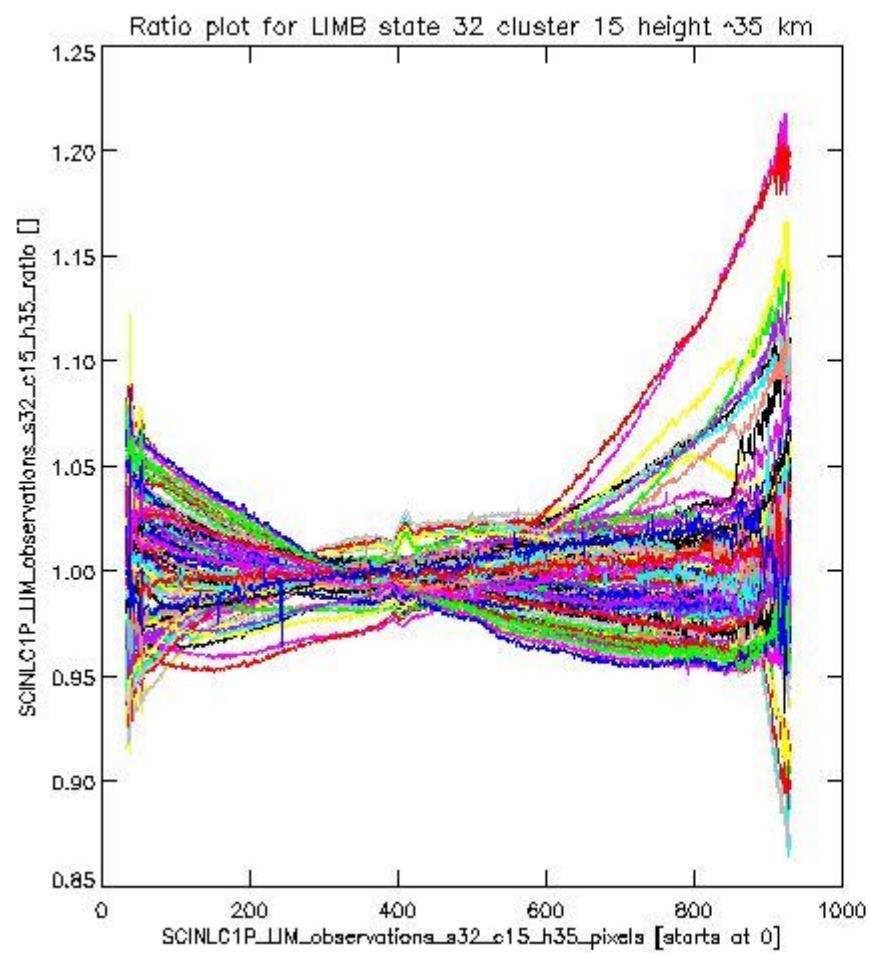


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110316_19.PNG

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	16MAR2011 01:54:50.116
Start time of last sample	16MAR2011 14:03:00.485
Reference period start time	14FEB2011 00:17:24.565
Reference period stop time	15MAR2011 11:19:24.015
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_20110316_21.PNG

