

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	02JUN2011 06:55:44
Data source version	SCIA/7.04-U
Processing scope for products	20MAY2011 00:00:00 to 21MAY2011 00:00:00
Start time of first product within scope	19MAY2011 22:37:20
Stop time of last product within scope	21MAY2011 00:41:36
Total number of level 1 products	16
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	20MAY2011 00:41:31.662	20MAY2011 22:33:10.317
1	NADIR	07	09	N/A	20MAY2011 00:41:31.662	20MAY2011 22:33:10.317
2	NADIR	07	15	N/A	20MAY2011 00:41:31.662	20MAY2011 22:33:10.317
3	NADIR	07	24	N/A	20MAY2011 00:41:31.662	20MAY2011 22:33:10.317
4	NADIR	07	55	N/A	20MAY2011 00:41:31.662	20MAY2011 22:33:10.317
5	LIMB	32	09	~19 km	20MAY2011 02:07:00.823	20MAY2011 23:59:19.193
6	LIMB	32	09	~22 km	20MAY2011 02:07:00.823	20MAY2011 23:59:19.193
7	LIMB	32	09	~25 km	20MAY2011 02:07:00.823	20MAY2011 23:59:19.193
8	LIMB	32	15	~22 km	20MAY2011 02:07:00.823	20MAY2011 23:59:19.193
9	LIMB	32	15	~25 km	20MAY2011 02:07:00.823	20MAY2011 23:59:19.193
10	LIMB	32	15	~35 km	20MAY2011 02:07:00.823	20MAY2011 23:59:19.193

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	#cmlpl_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110519_222232_000060543102_00346_48205_1553.N1	19MAY2011 22:37:20	19MAY2011 23:37:33	0	34	0	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110520_000748_000057083102_00347_48206_1554.N1	20MAY2011 00:16:38	20MAY2011 01:17:59	0	35	0	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110520_014300_000060543102_00348_48207_1555.N1	20MAY2011 01:48:08	20MAY2011 02:58:23	0	35	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110520_032822_000057013102_00349_48208_1556.N1	20MAY2011 03:28:22	20MAY2011 04:38:51	0	36	30	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110520_050327_000060543102_00350_48209_1559.N1	20MAY2011 05:08:36	20MAY2011 06:18:51	0	35	31	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110520_064850_000057013102_00351_48210_1560.N1	20MAY2011 06:48:50	20MAY2011 07:59:19	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110520_082355_000060543102_00352_48211_1561.N1	20MAY2011 08:29:04	20MAY2011 09:39:18	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110520_100917_000057013102_00353_48212_1562.N1	20MAY2011 10:09:17	20MAY2011 11:19:46	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110520_114422_000060543102_00354_48213_1563.N1	20MAY2011 11:49:31	20MAY2011 12:59:46	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110520_132945_000057013102_00355_48214_1564.N1	20MAY2011 13:29:45	20MAY2011 14:40:14	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110520_150449_000060543102_00356_48215_1565.N1	20MAY2011 15:09:58	20MAY2011 16:20:13	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110520_165012_000057013102_00357_48216_1568.N1	20MAY2011 16:50:12	20MAY2011 18:00:41	0	36	30	0	0	1	0	0	
12	SCI_NLC_1CUDPA20110520_182517_000060543102_00358_48217_1566.N1	20MAY2011 18:30:26	20MAY2011 19:39:38	0	34	29	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110520_201040_000057003102_00359_48218_1567.N1	20MAY2011 20:10:40	20MAY2011 21:21:18	0	36	30	0	1	1	0	0	
14	SCI_NLC_1CUDPA20110520_214544_000060543102_00360_48219_1569.N1	20MAY2011 21:50:54	20MAY2011 23:01:08	0	35	31	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110520_233107_000057003102_00361_48220_1570.N1	20MAY2011 23:31:07	21MAY2011 00:41:36	0	36	30	0	0	1	0	0	

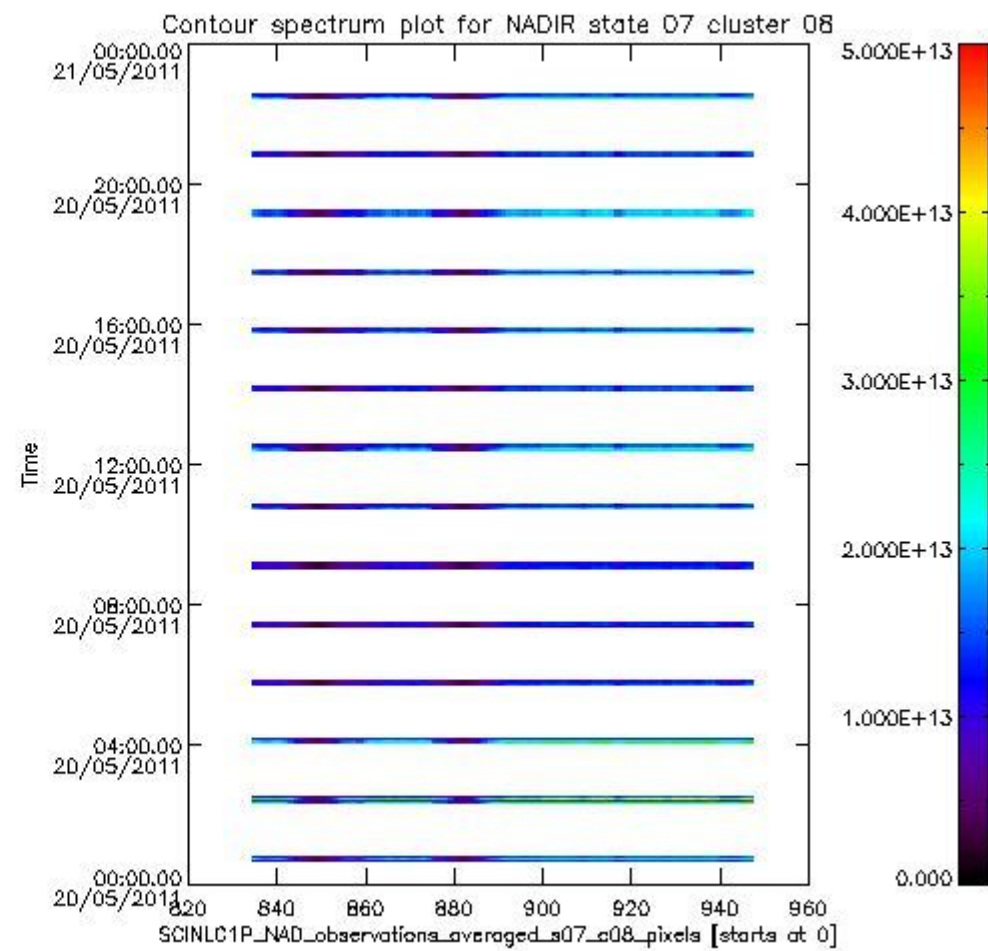
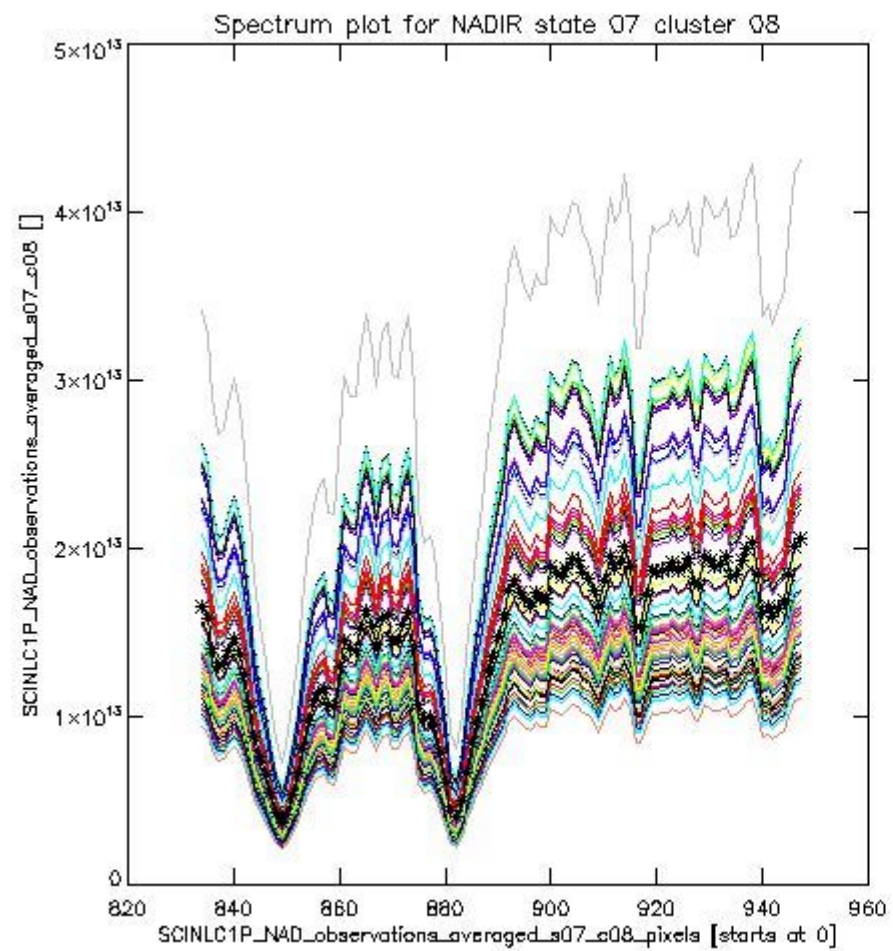
1.2 Source packet monitoring

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

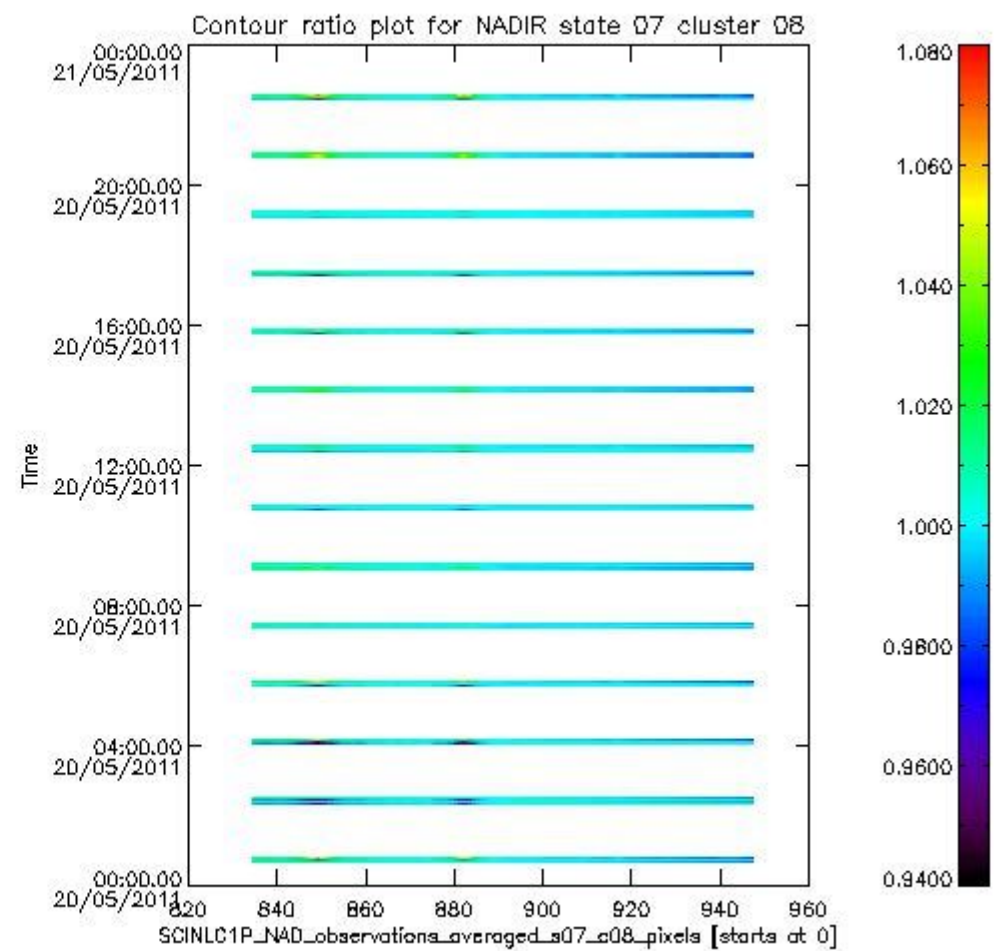
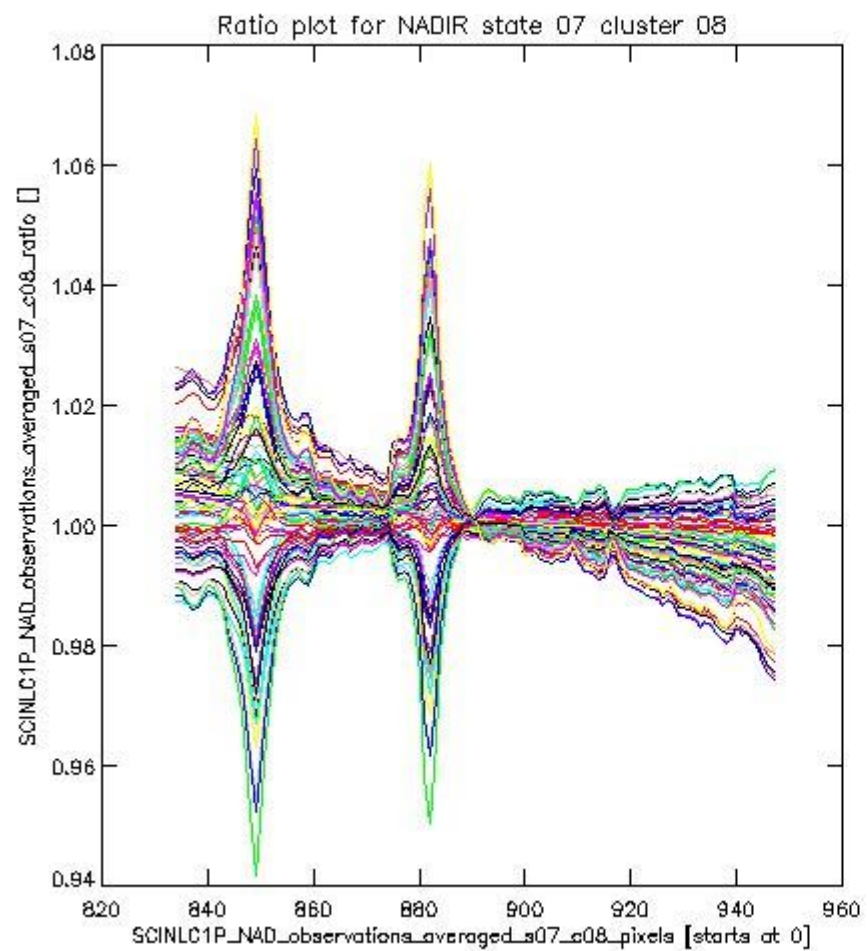
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a black line with * markers.
- A plot that shows all calibrated averaged spectra vs. pixel number and time using a coloured contour plot. The colours indicate the intensity.
- A plot that shows ratios of all calibrated averaged spectra and the reference spectrum vs. pixel number. Each line is the ratio of a calibrated averaged spectrum and the reference spectrum, where both spectra have been intensity corrected (the spectrum has been divided by the average pixel intensity) prior to division.
- A plot that shows ratios of all calibrated averaged spectra and the reference spectrum vs. pixel number and time using a coloured contour plot.

1.2.1 NADIR state 07 cluster 08 The data for the analysis of NADIR state 07 cluster 08 have the following characteristics:

Item	Value
Start time of first sample	20MAY2011 00:41:31.662
Start time of last sample	20MAY2011 22:33:10.317
Reference period start time	20APR2011 00:42:04.701
Reference period stop time	19MAY2011 23:10:31.556
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



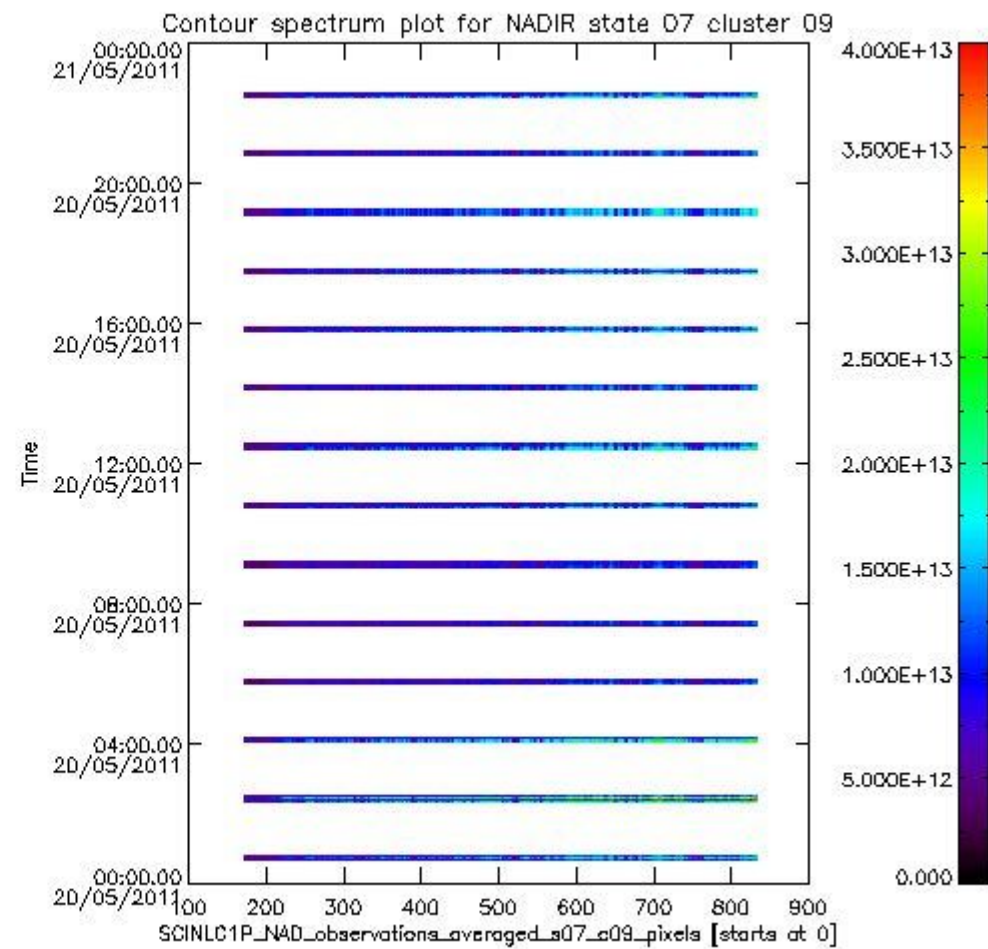
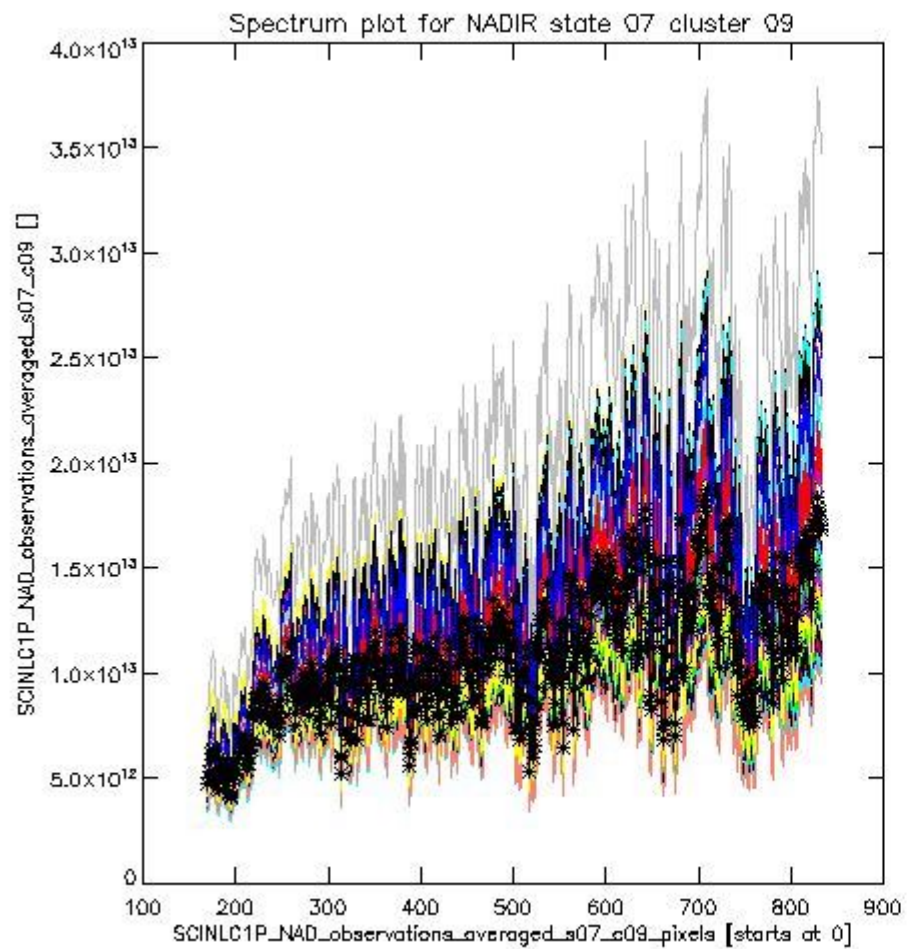
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_0.PNG



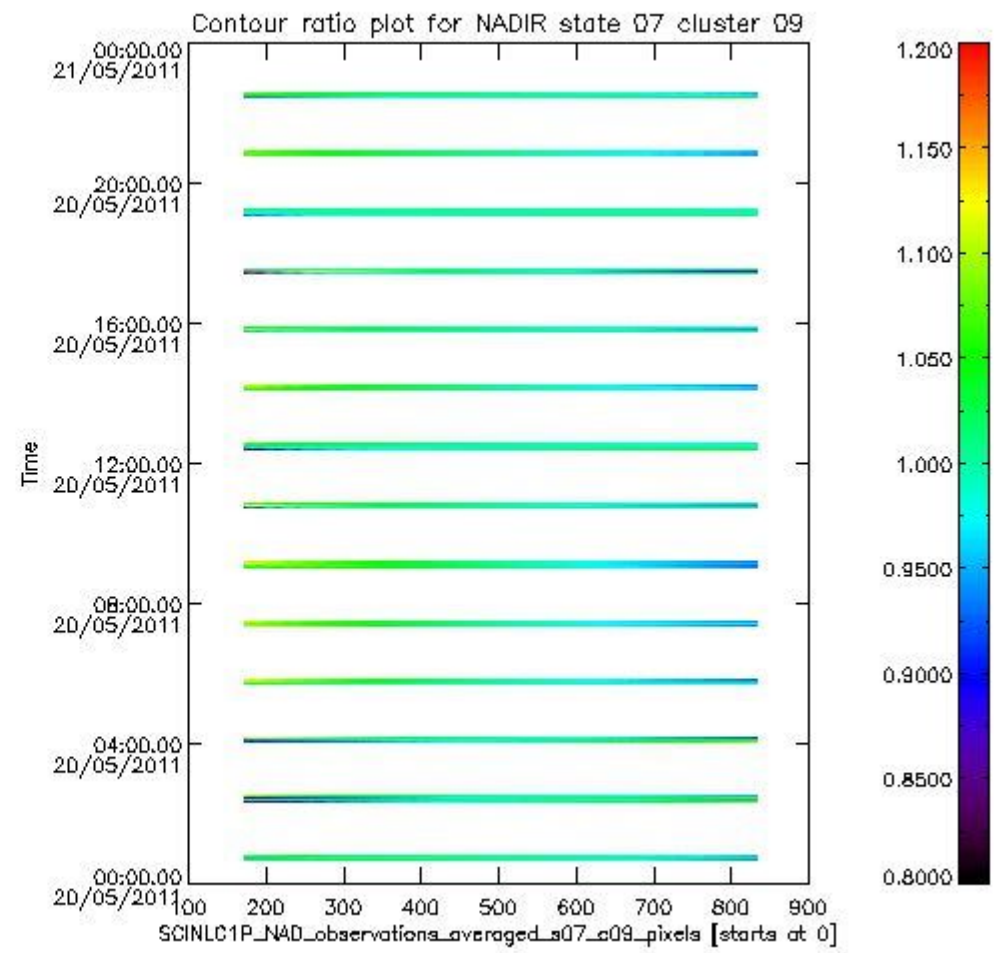
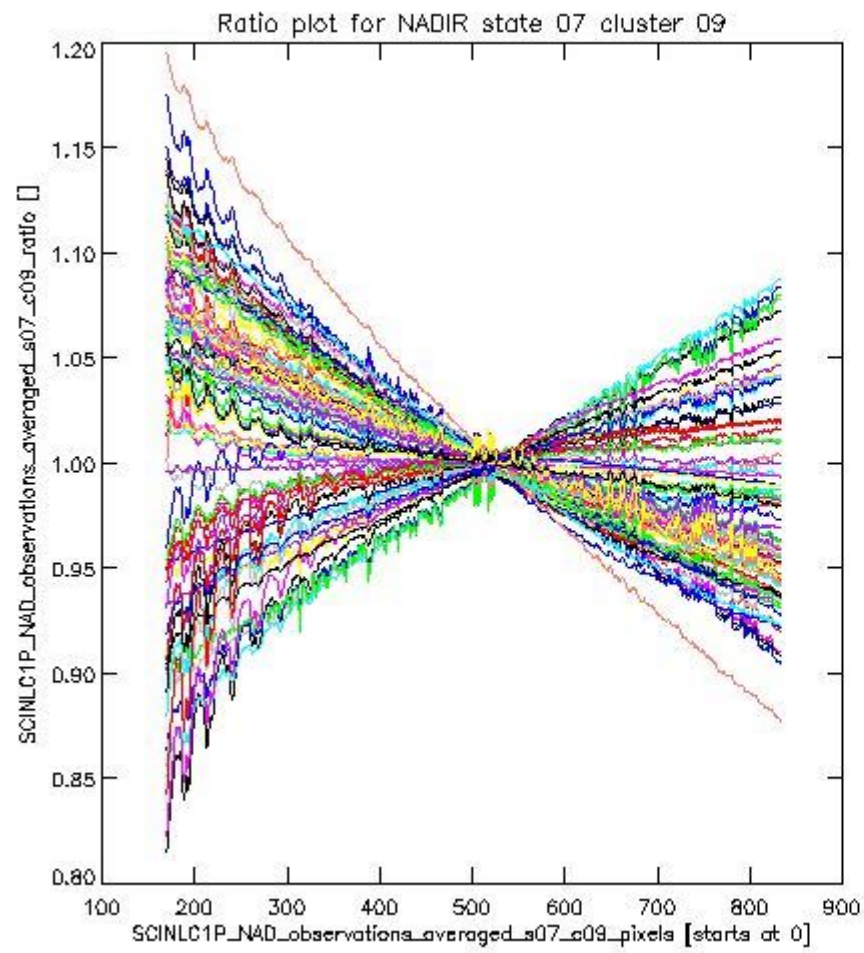
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_1.PNG

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	20MAY2011 00:41:31.662
Start time of last sample	20MAY2011 22:33:10.317
Reference period start time	20APR2011 00:42:04.701
Reference period stop time	19MAY2011 23:10:31.556
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



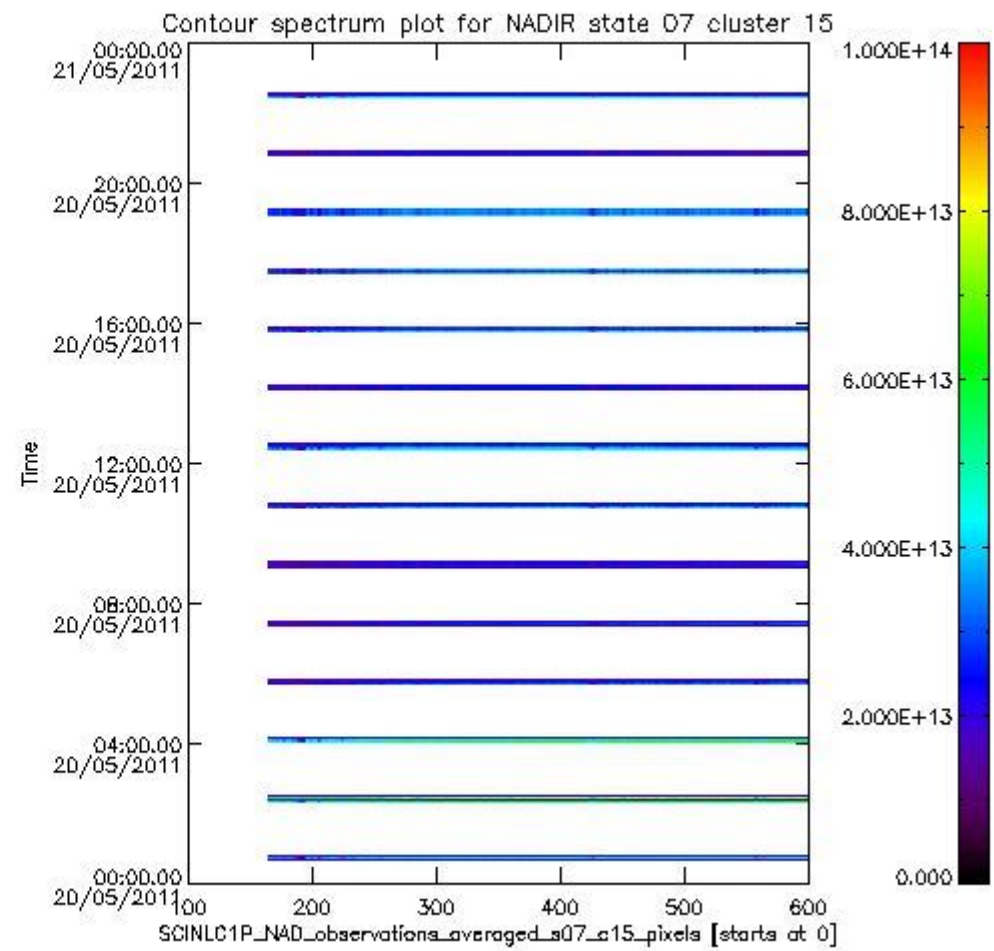
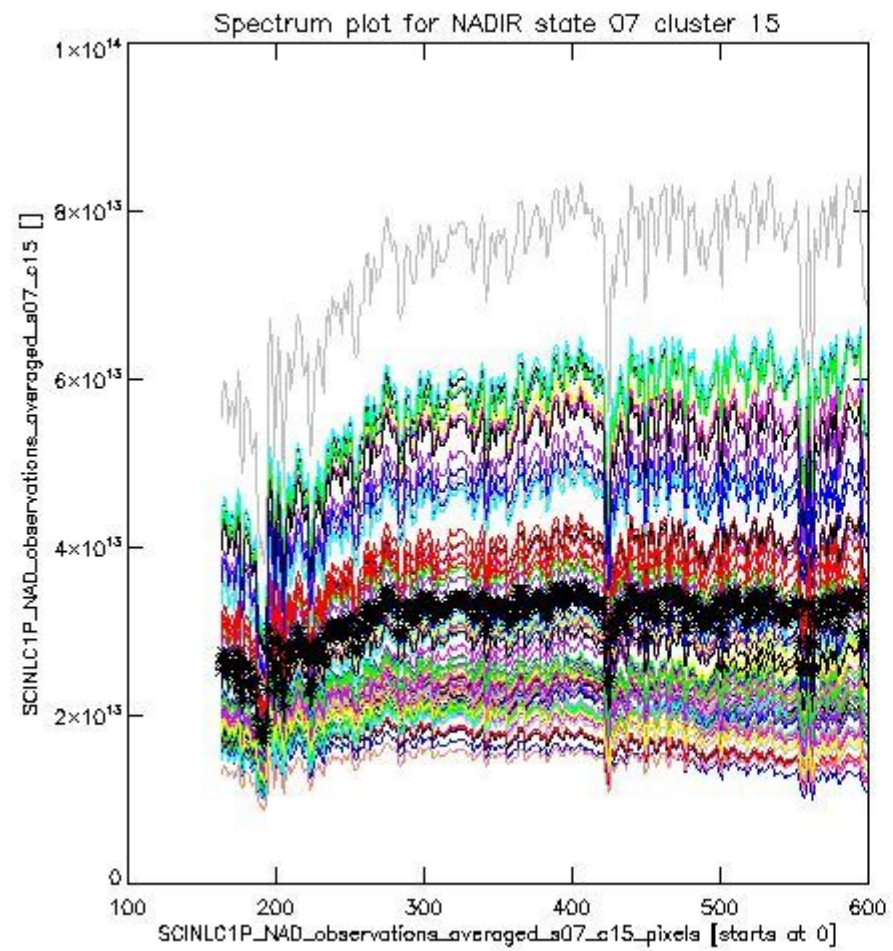
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_2.PNG



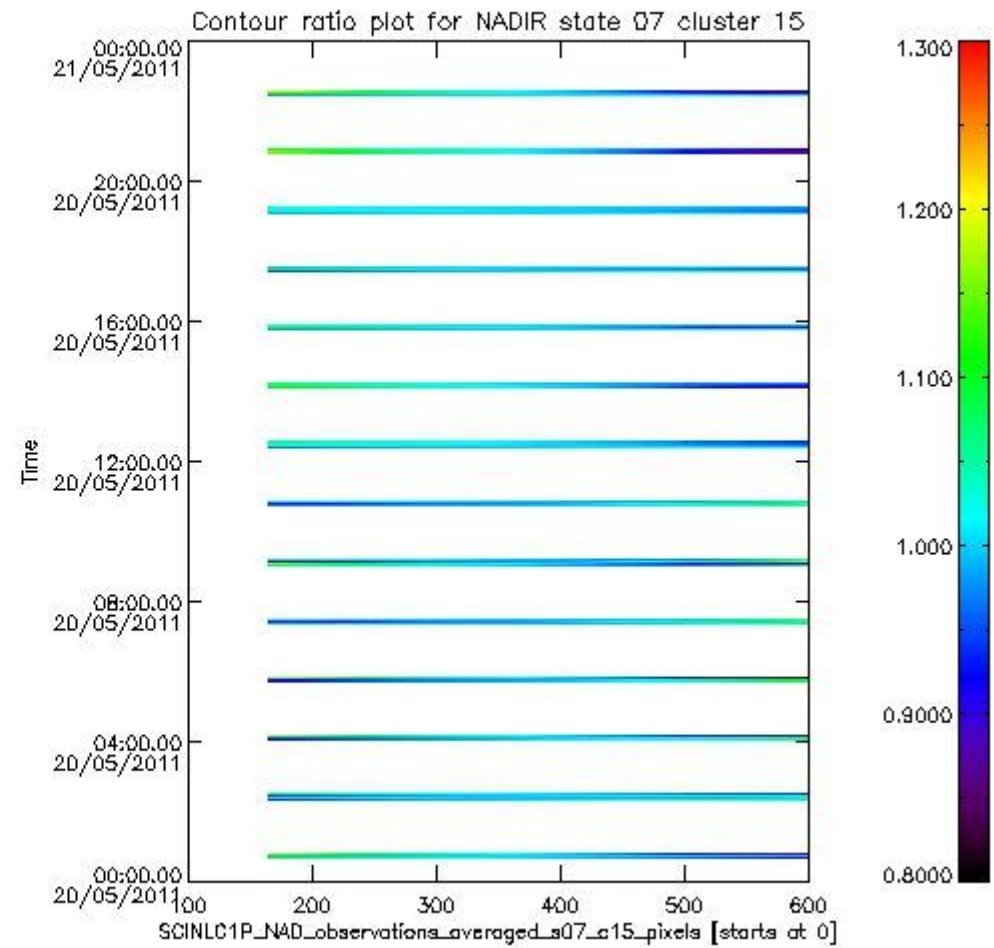
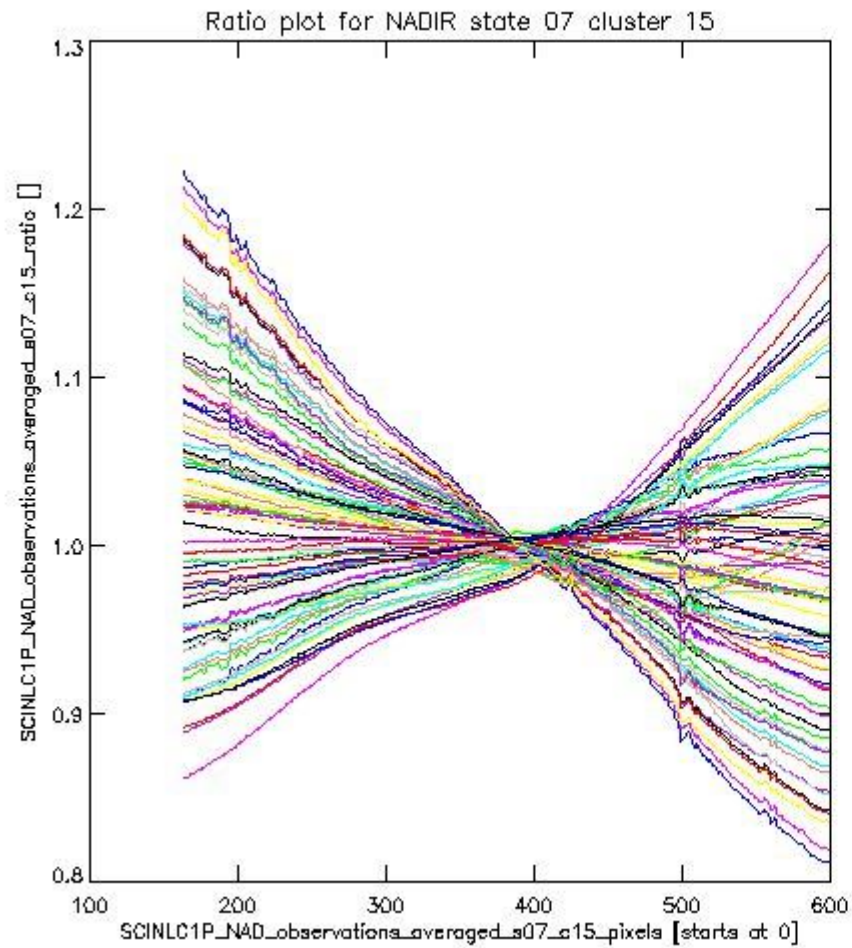
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_3.PNG

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	20MAY2011 00:41:31.662
Start time of last sample	20MAY2011 22:33:10.317
Reference period start time	20APR2011 00:42:04.701
Reference period stop time	19MAY2011 23:10:31.556
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



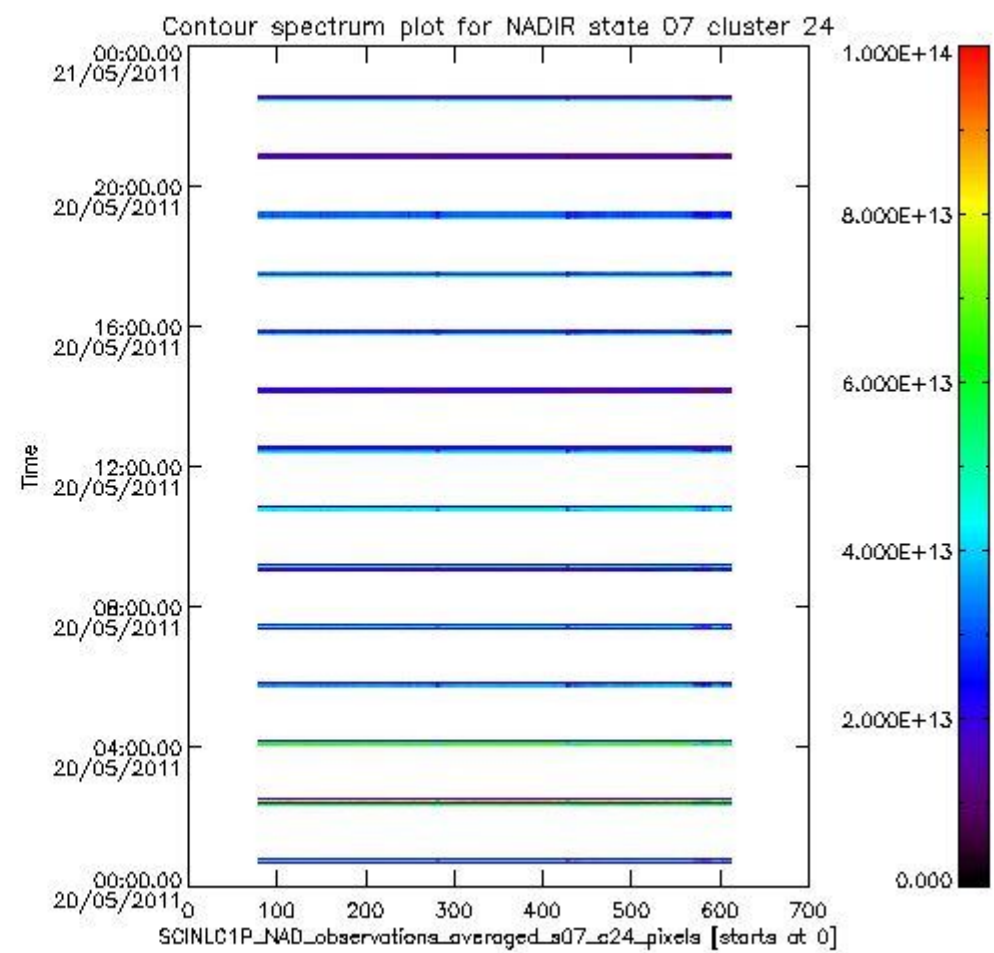
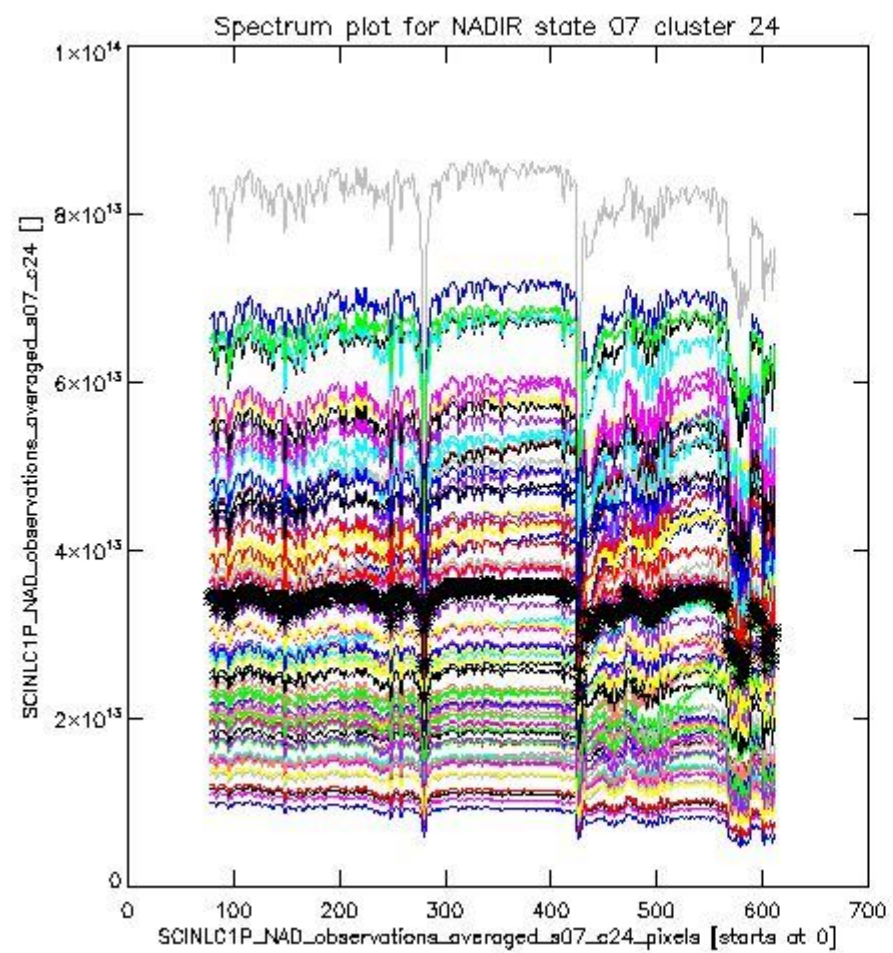
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_4.PNG



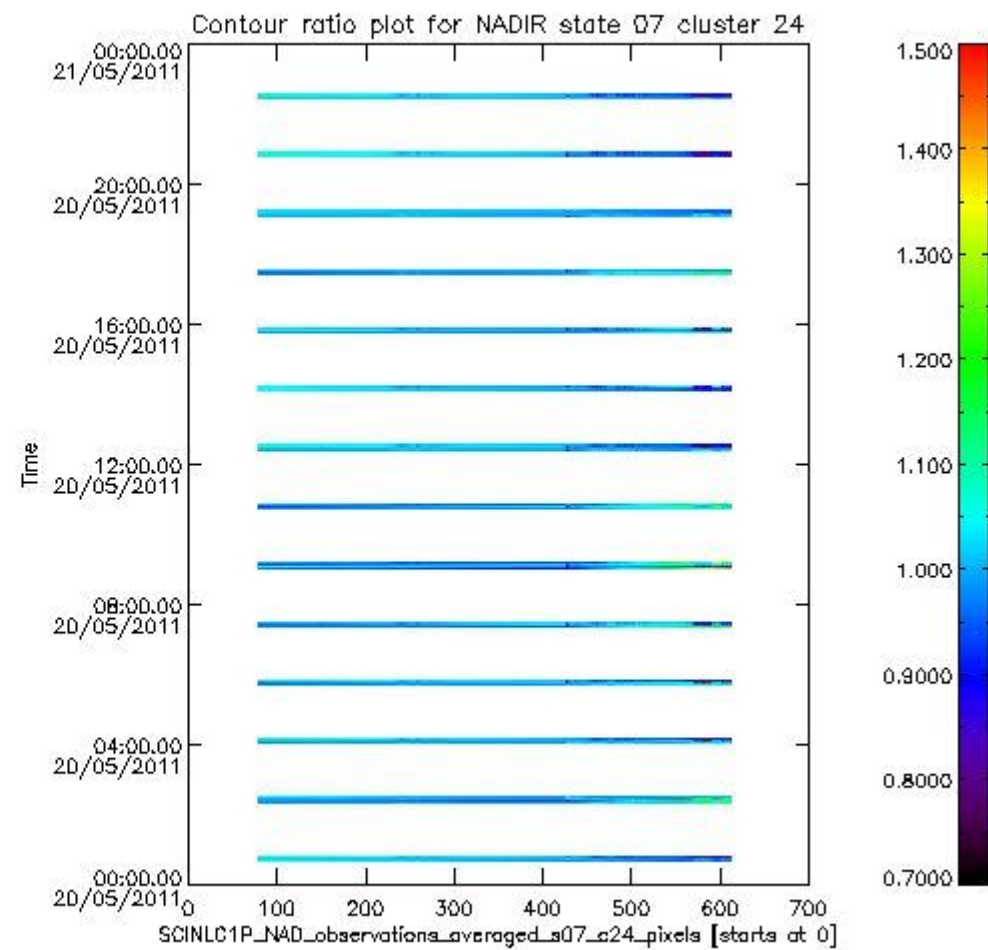
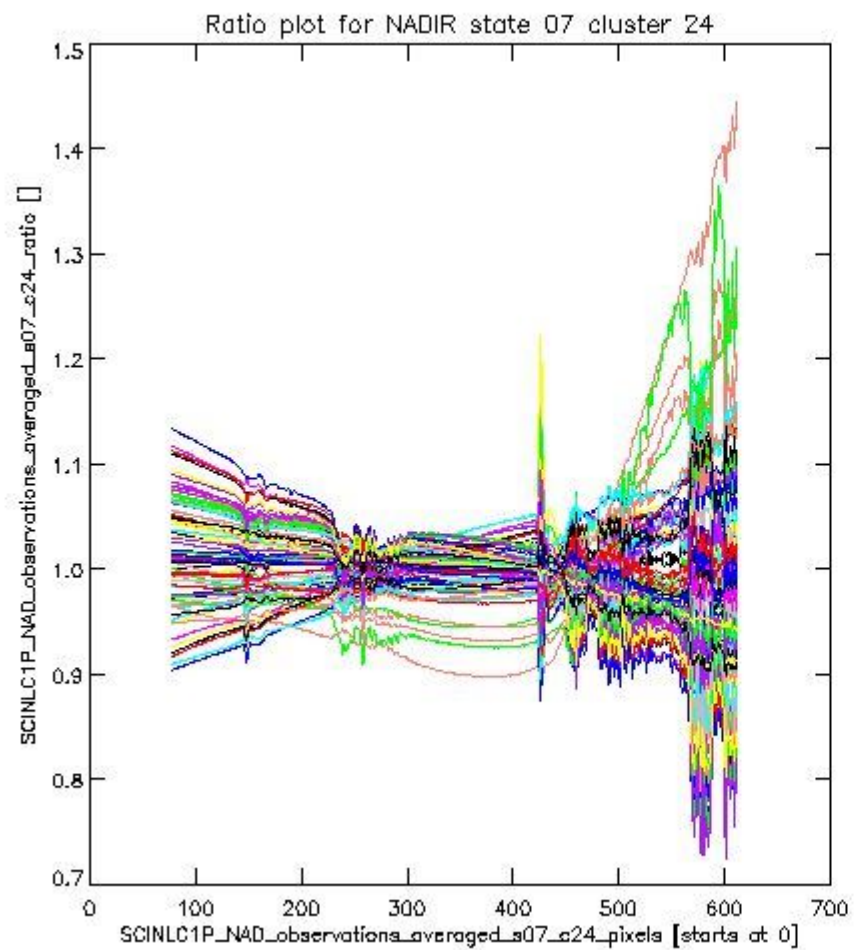
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110520_5.PNG

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	20MAY2011 00:41:31.662
Start time of last sample	20MAY2011 22:33:10.317
Reference period start time	20APR2011 00:42:04.701
Reference period stop time	19MAY2011 23:10:31.556
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



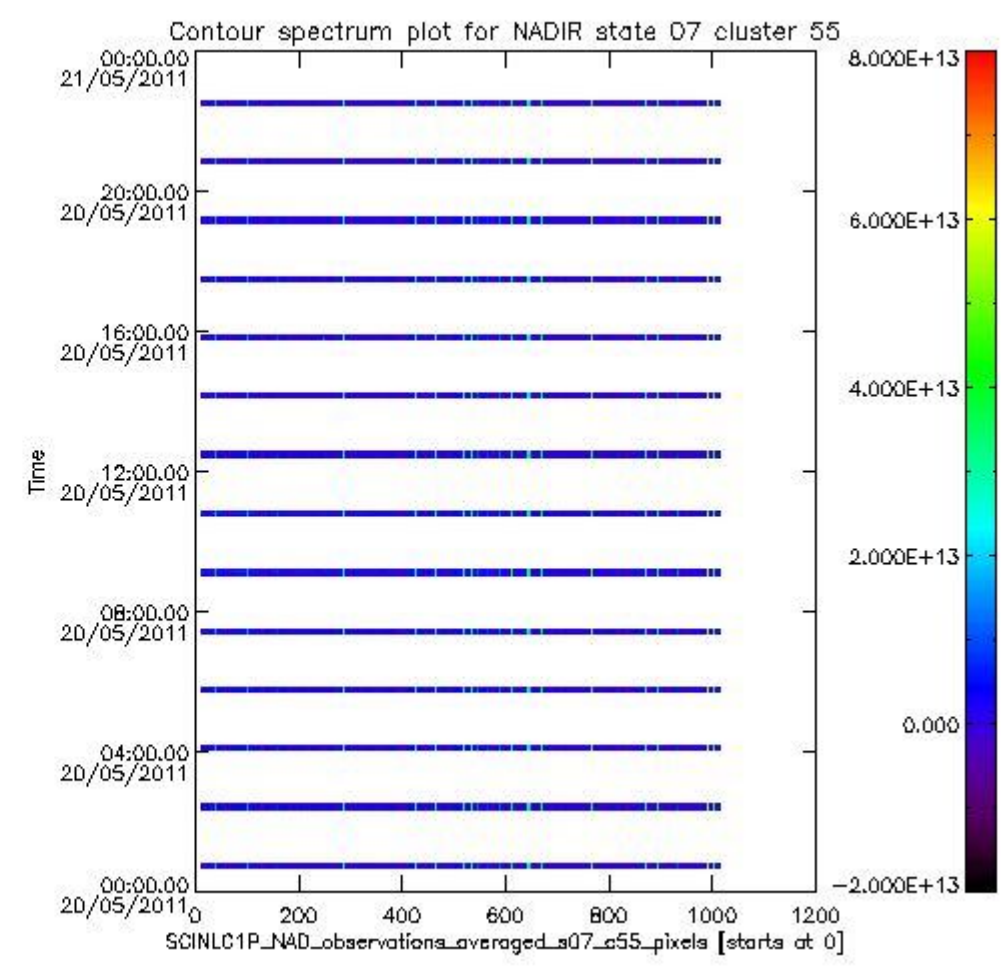
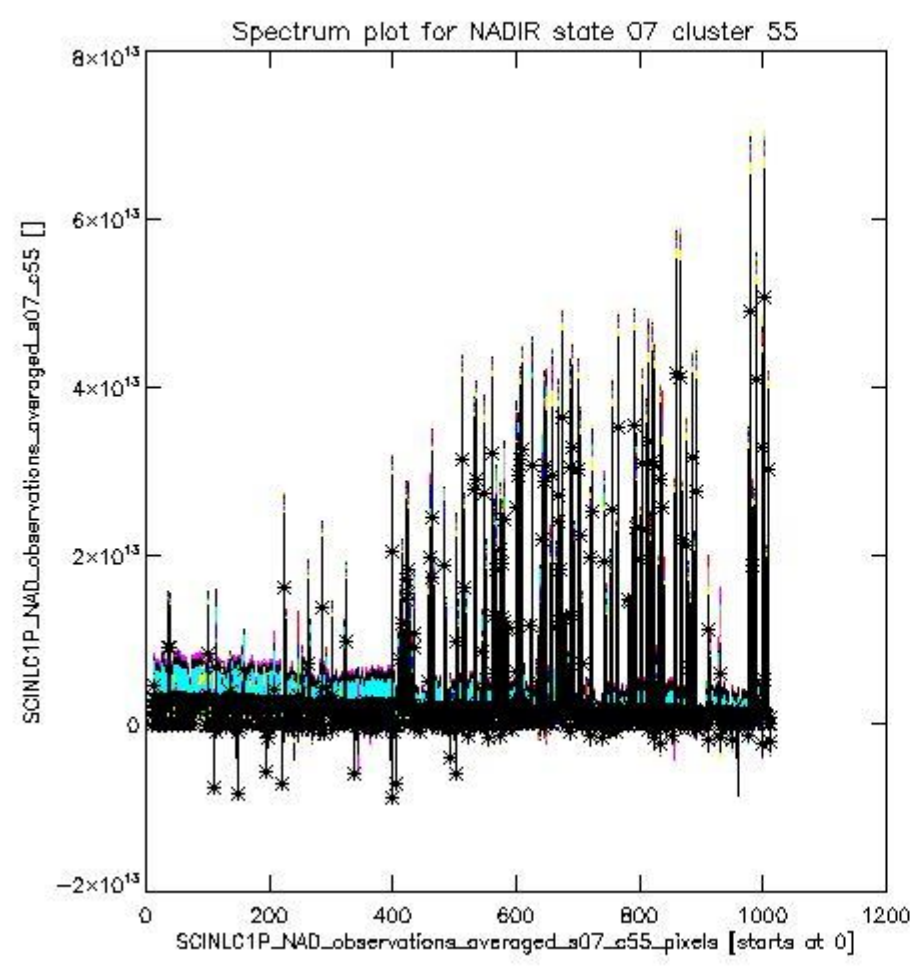
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_6.PNG



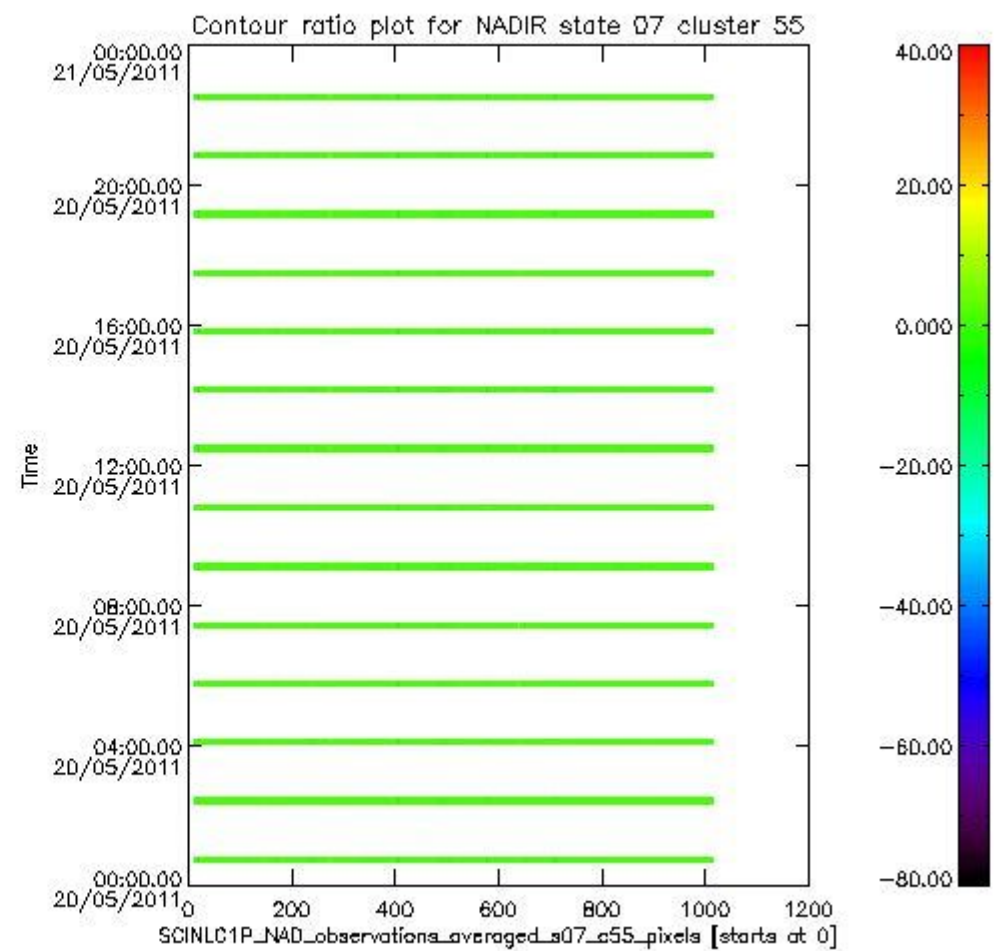
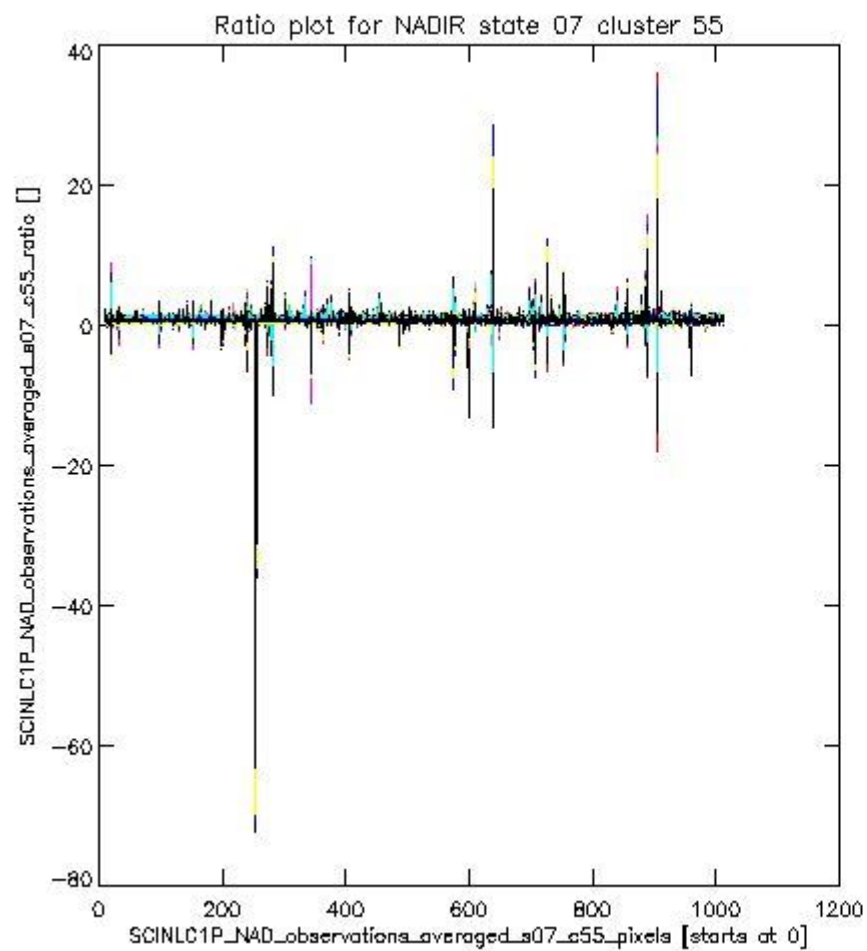
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110520_7.PNG

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	20MAY2011 00:41:31.662
Start time of last sample	20MAY2011 22:33:10.317
Reference period start time	20APR2011 00:42:04.701
Reference period stop time	19MAY2011 23:10:31.556
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



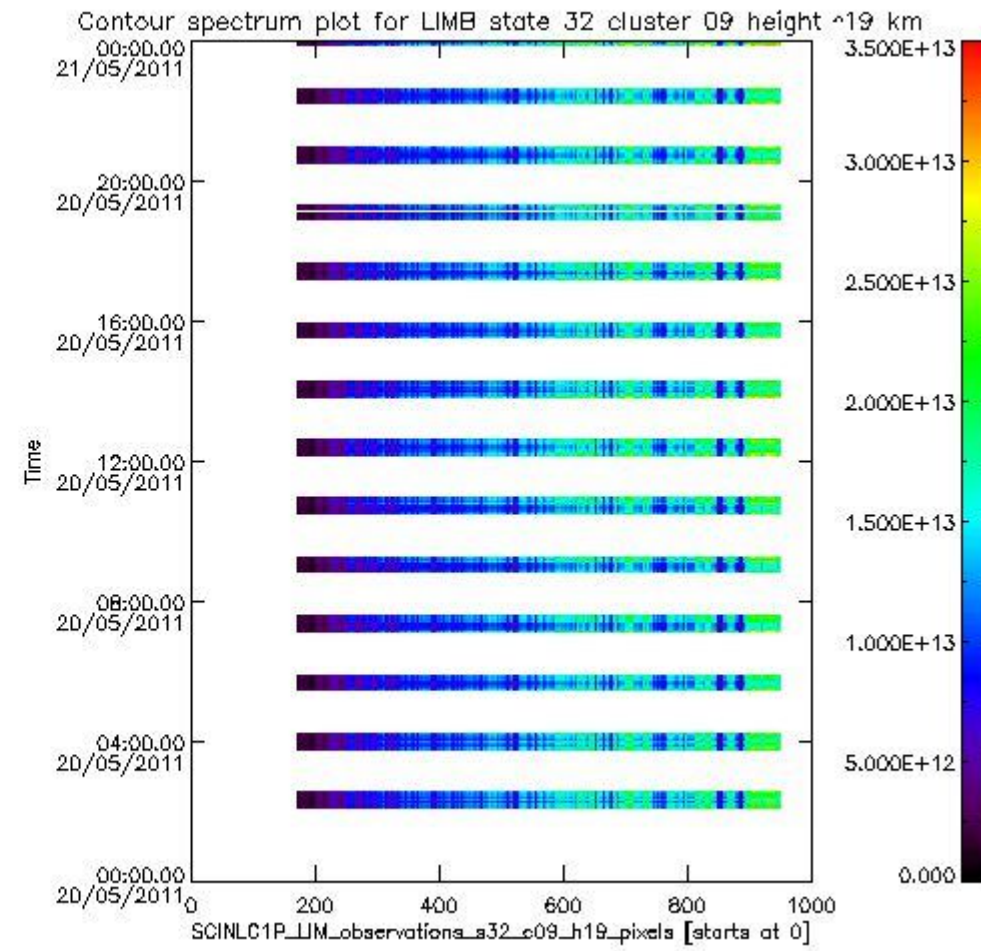
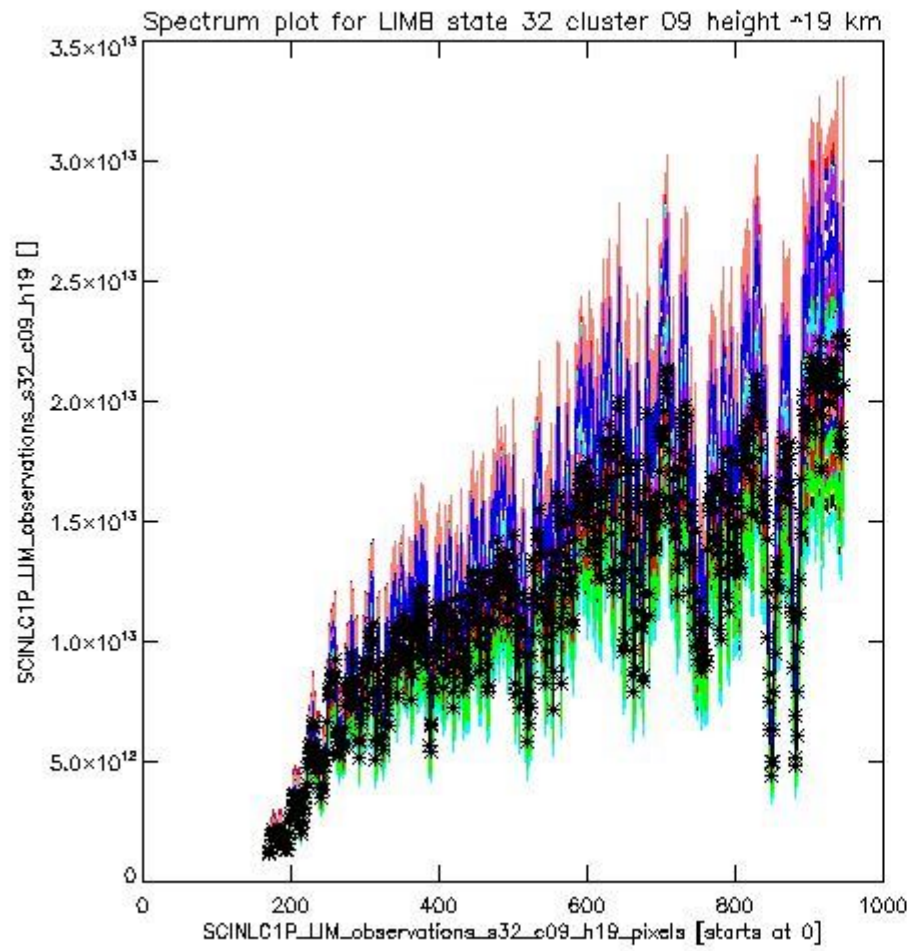
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_8.PNG



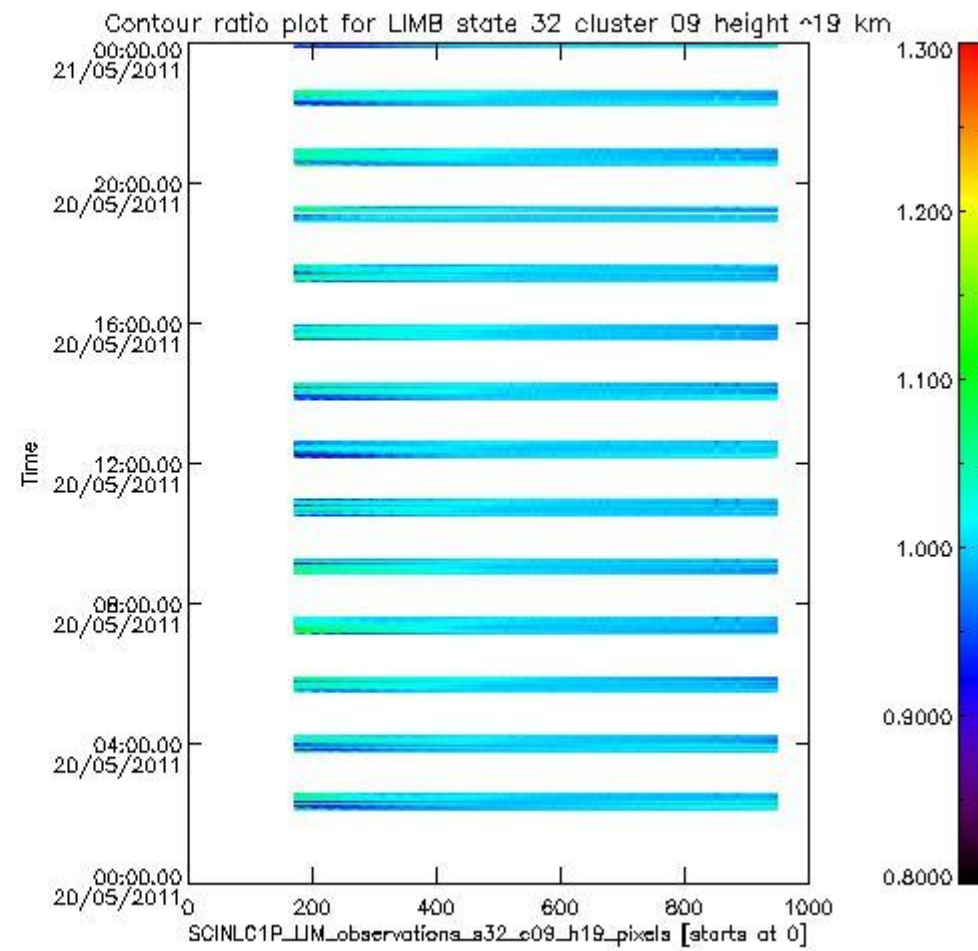
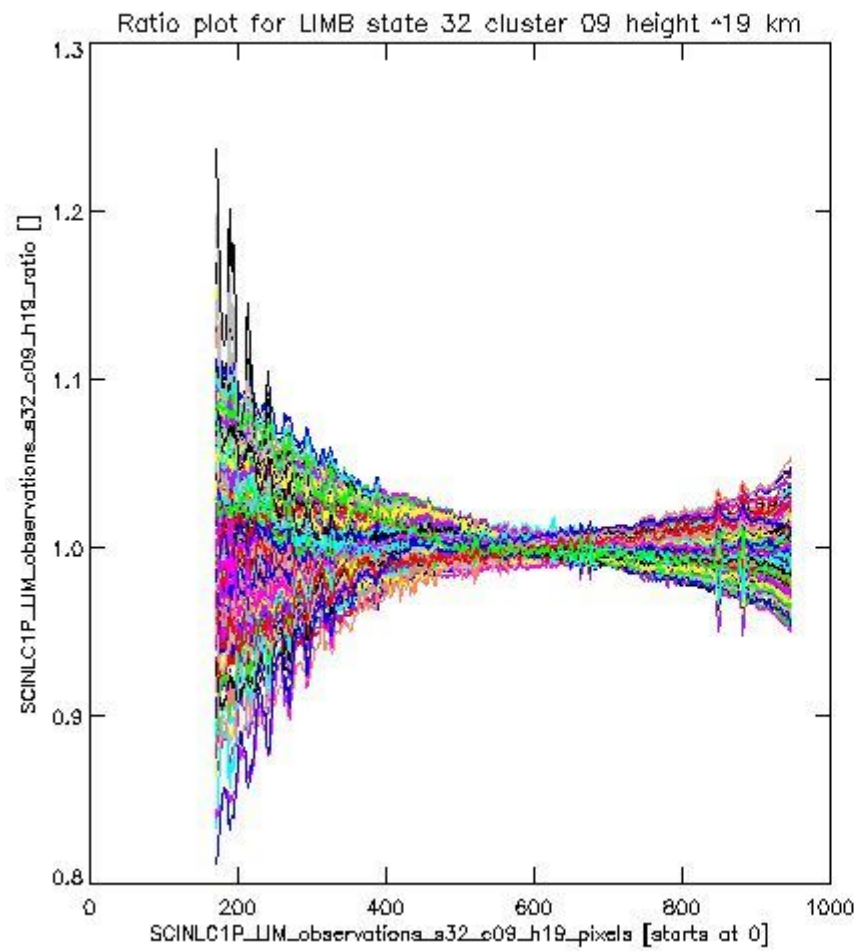
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110520_9.PNG

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	20MAY2011 02:07:00.823
Start time of last sample	20MAY2011 23:59:19.193
Reference period start time	20APR2011 02:07:48.123
Reference period stop time	18MAY2011 23:49:56.635
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



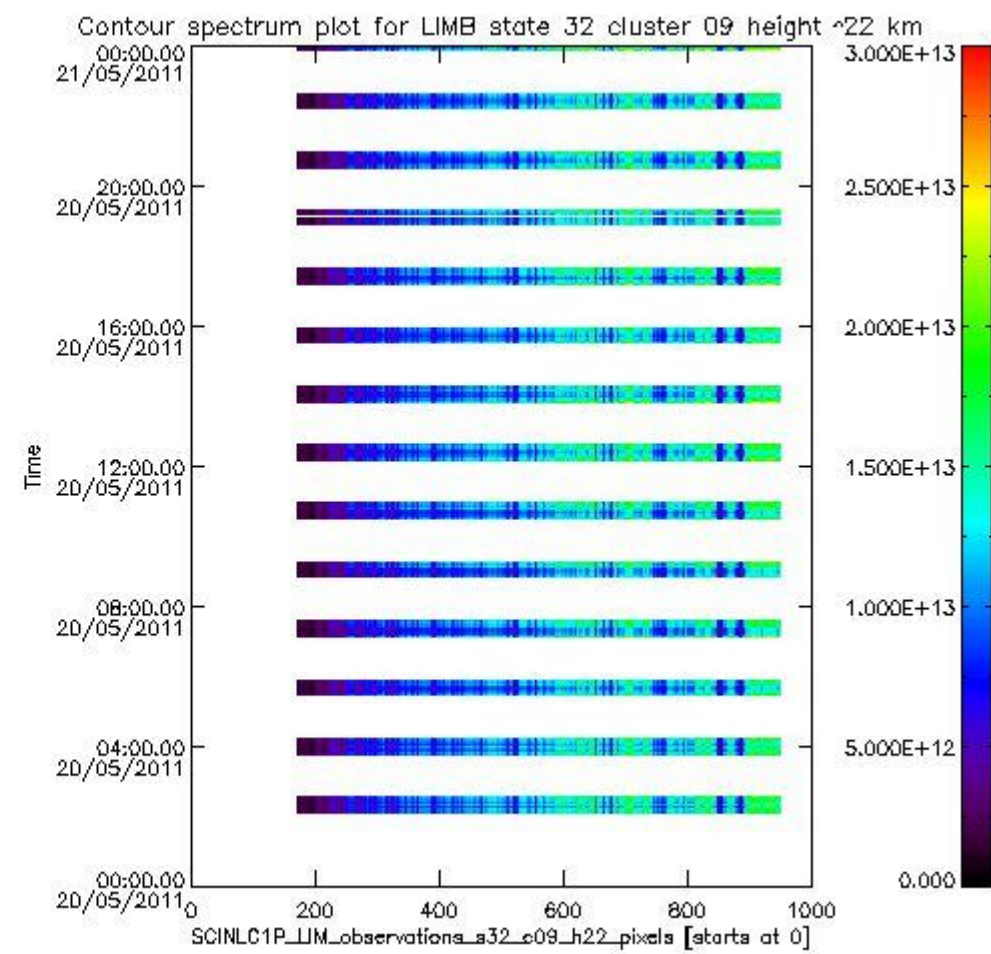
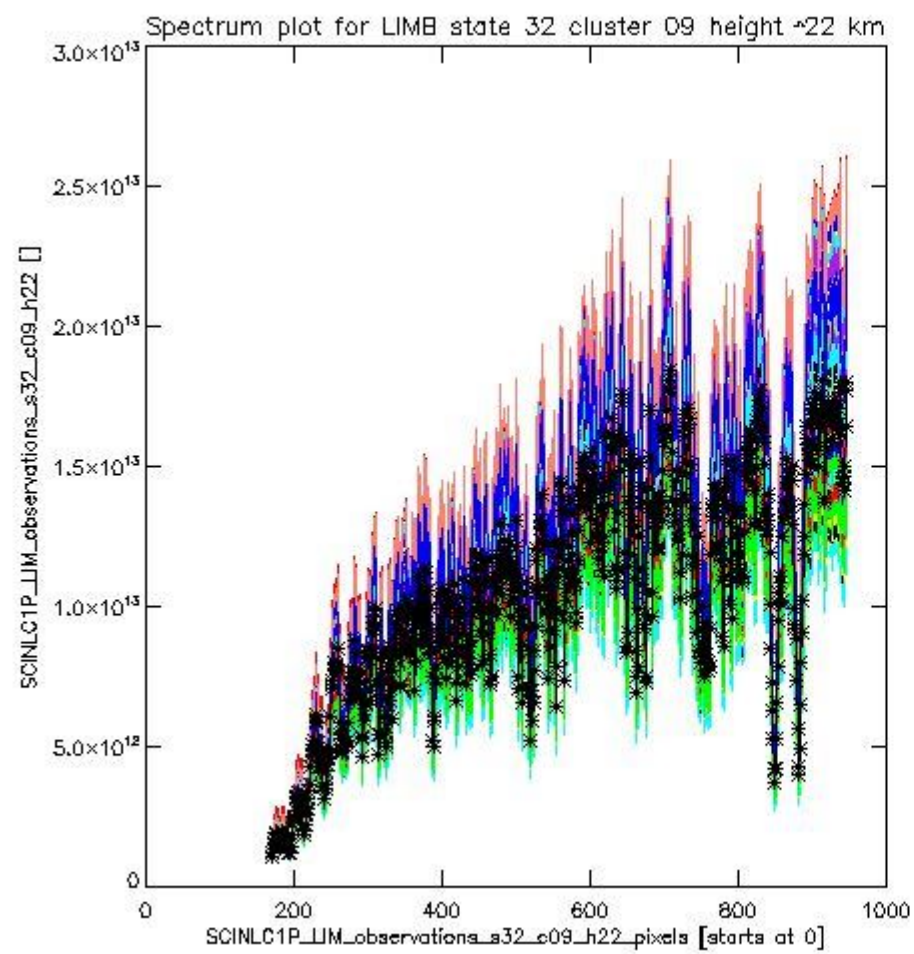
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_10.PNG

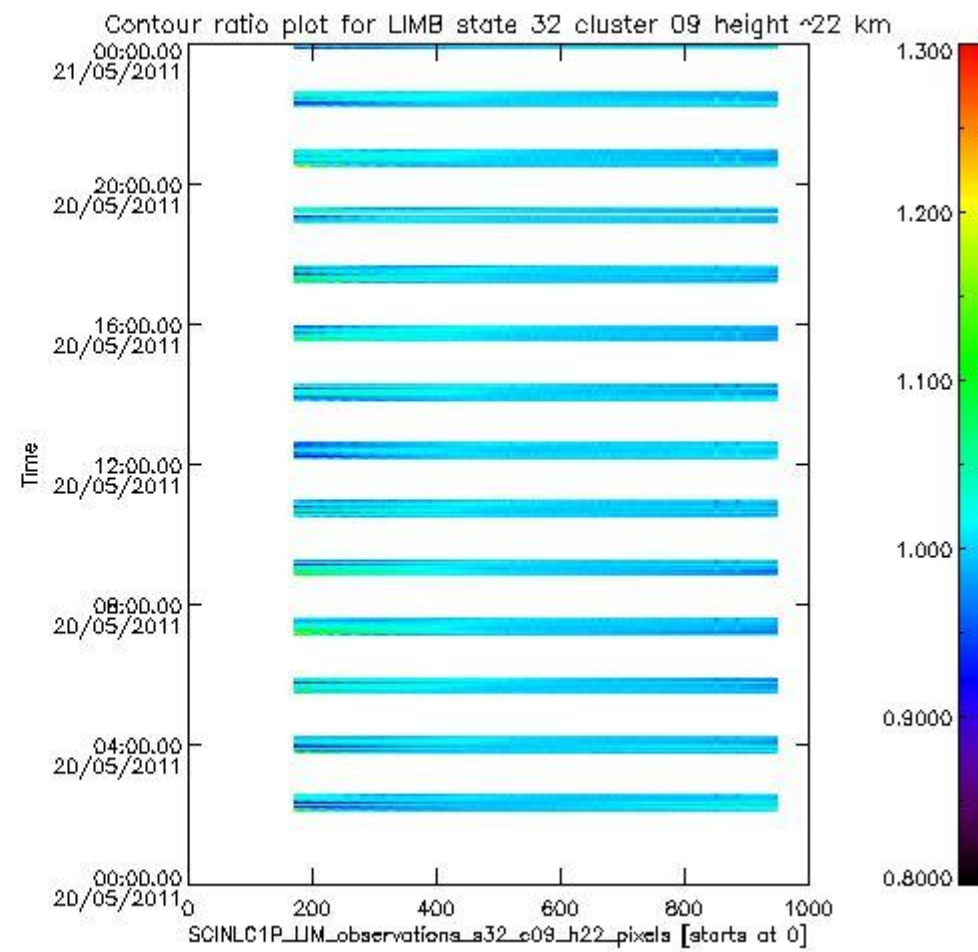
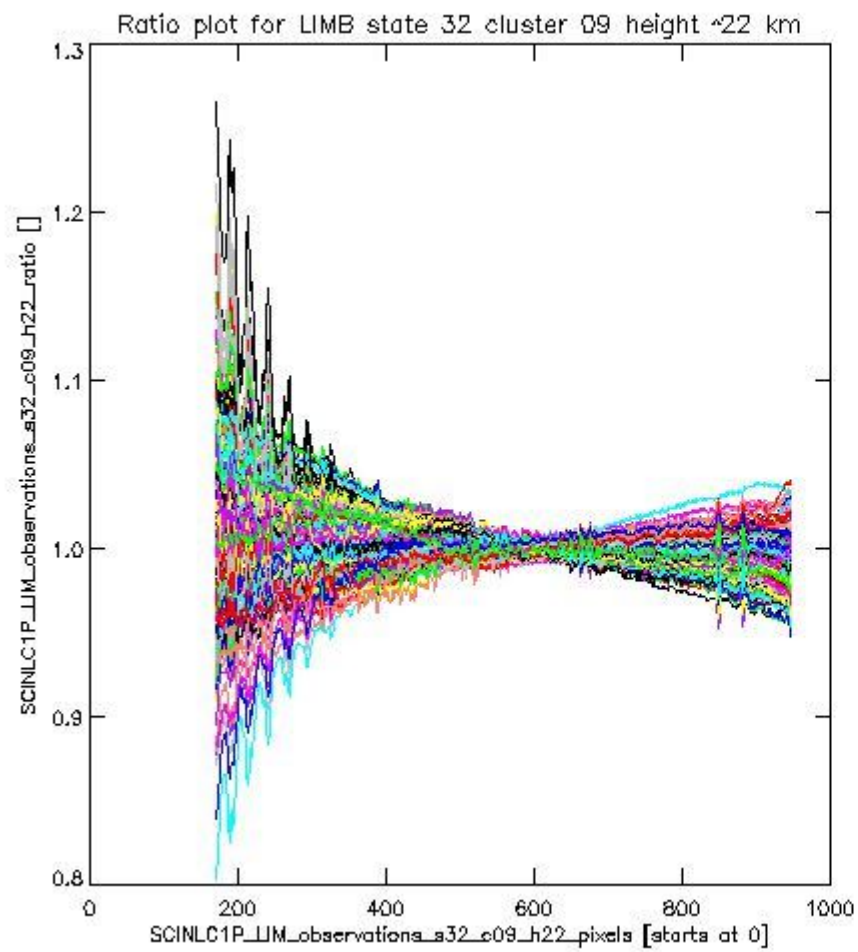


sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_11.PNG

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	20MAY2011 02:07:00.823
Start time of last sample	20MAY2011 23:59:19.193
Reference period start time	20APR2011 02:07:48.123
Reference period stop time	18MAY2011 23:49:56.635
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947

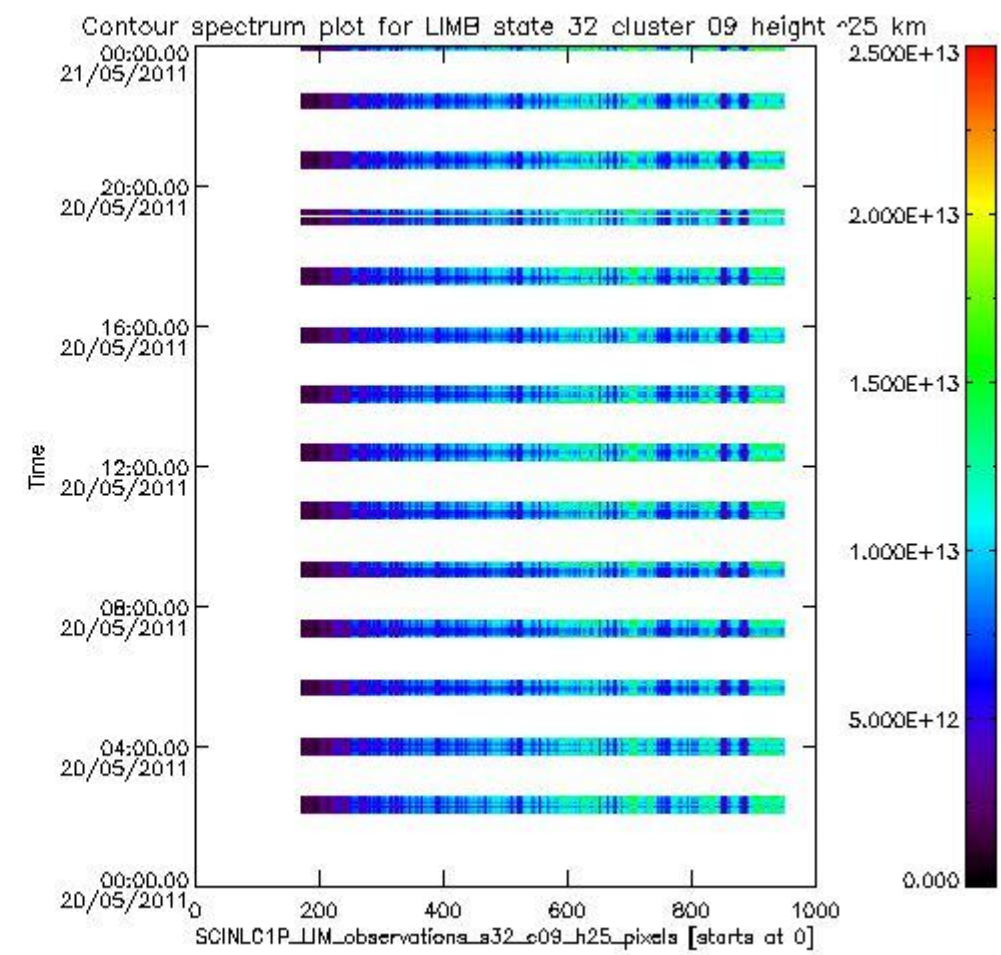
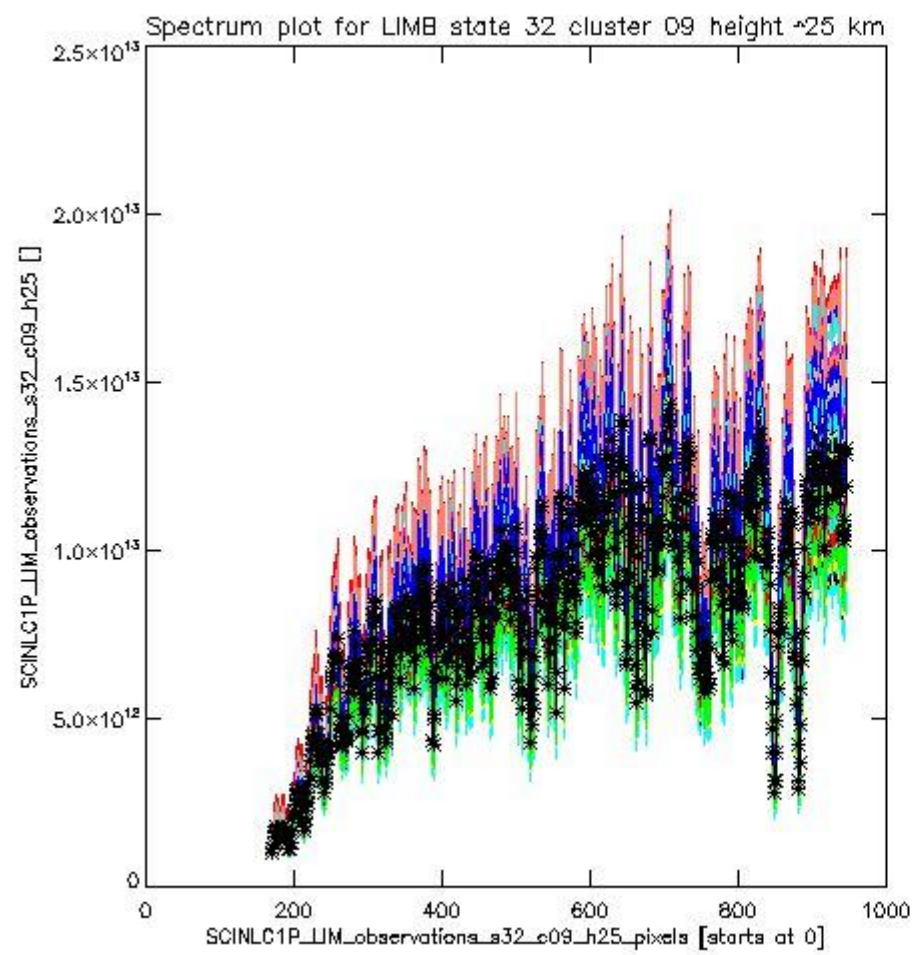




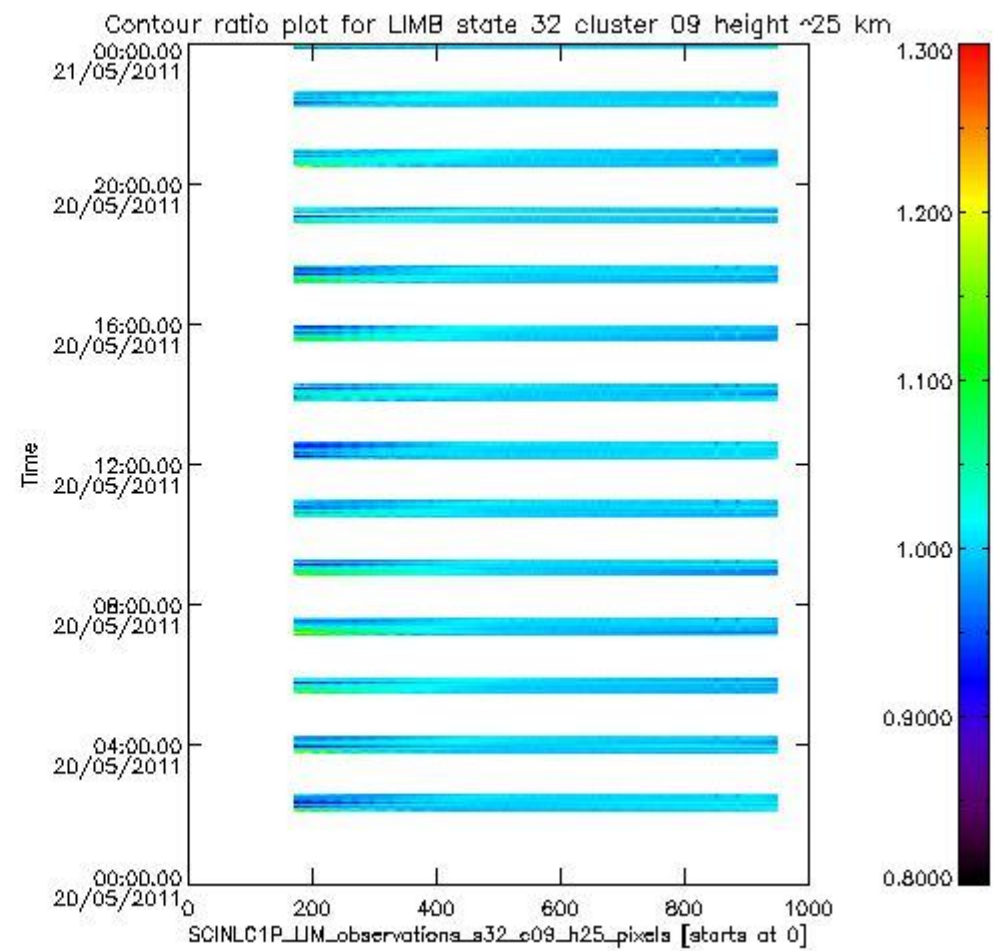
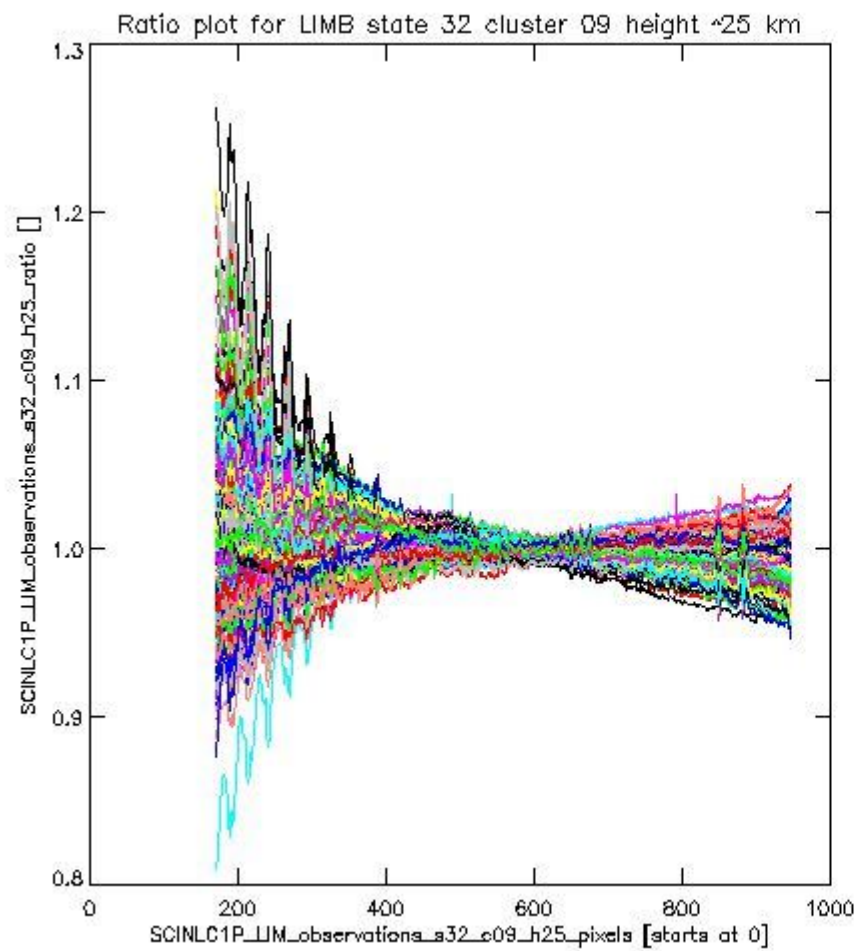
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110520_13.PNG

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	20MAY2011 02:07:00.823
Start time of last sample	20MAY2011 23:59:19.193
Reference period start time	20APR2011 02:07:48.123
Reference period stop time	18MAY2011 23:49:56.635
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



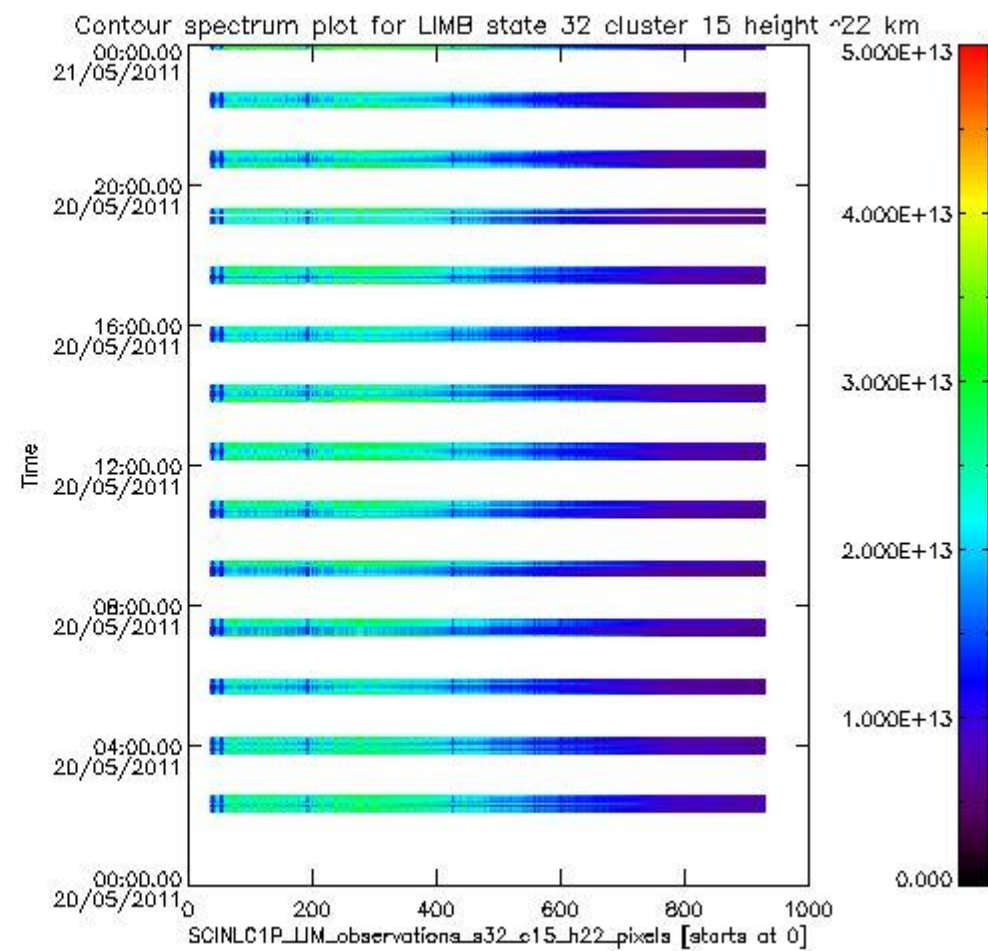
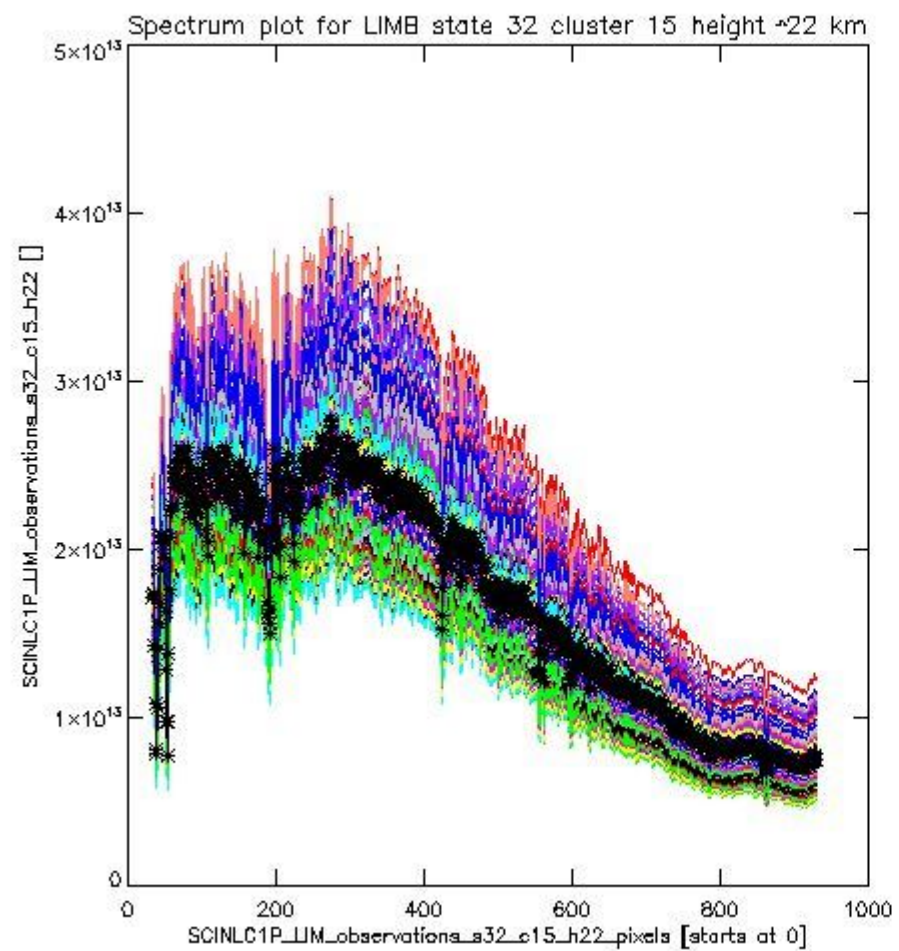
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_14.PNG



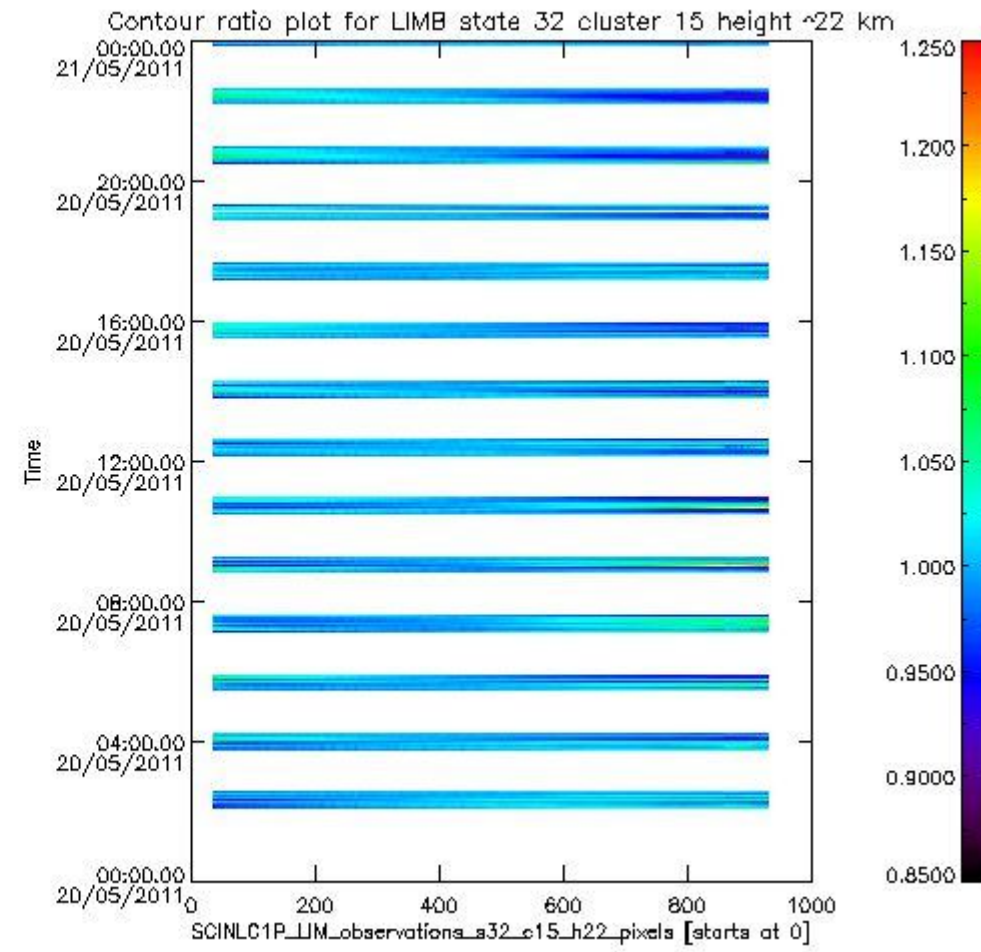
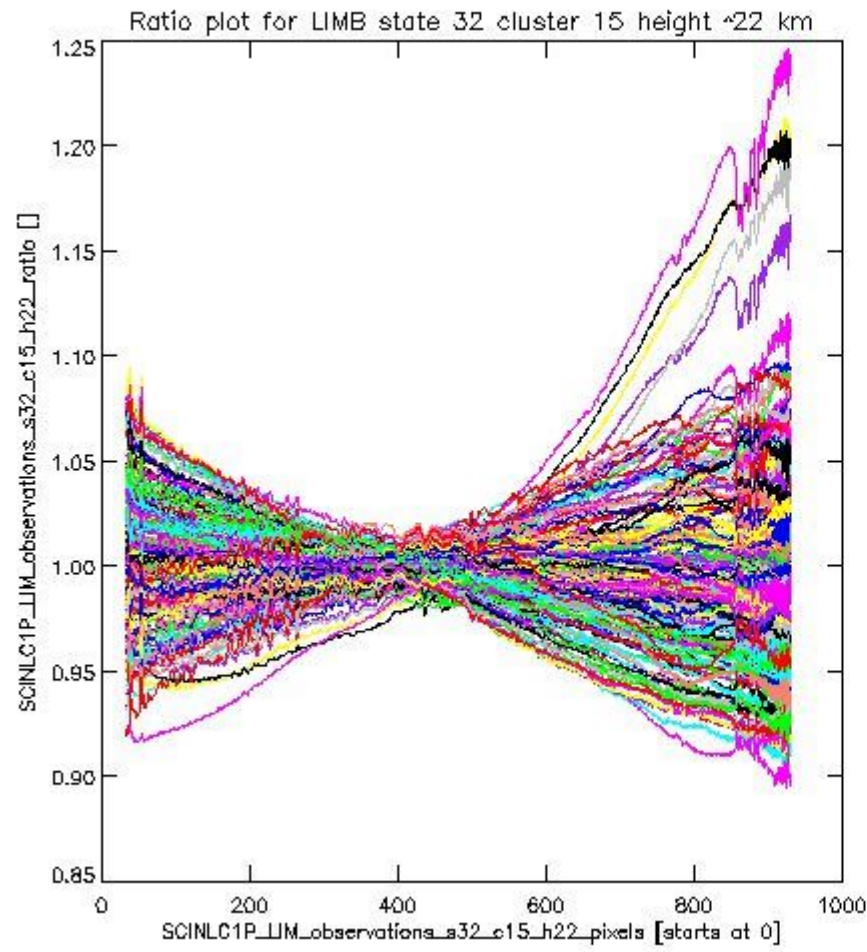
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110520_15.PNG

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	20MAY2011 02:07:00.823
Start time of last sample	20MAY2011 23:59:19.193
Reference period start time	20APR2011 02:07:48.123
Reference period stop time	18MAY2011 23:49:56.635
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



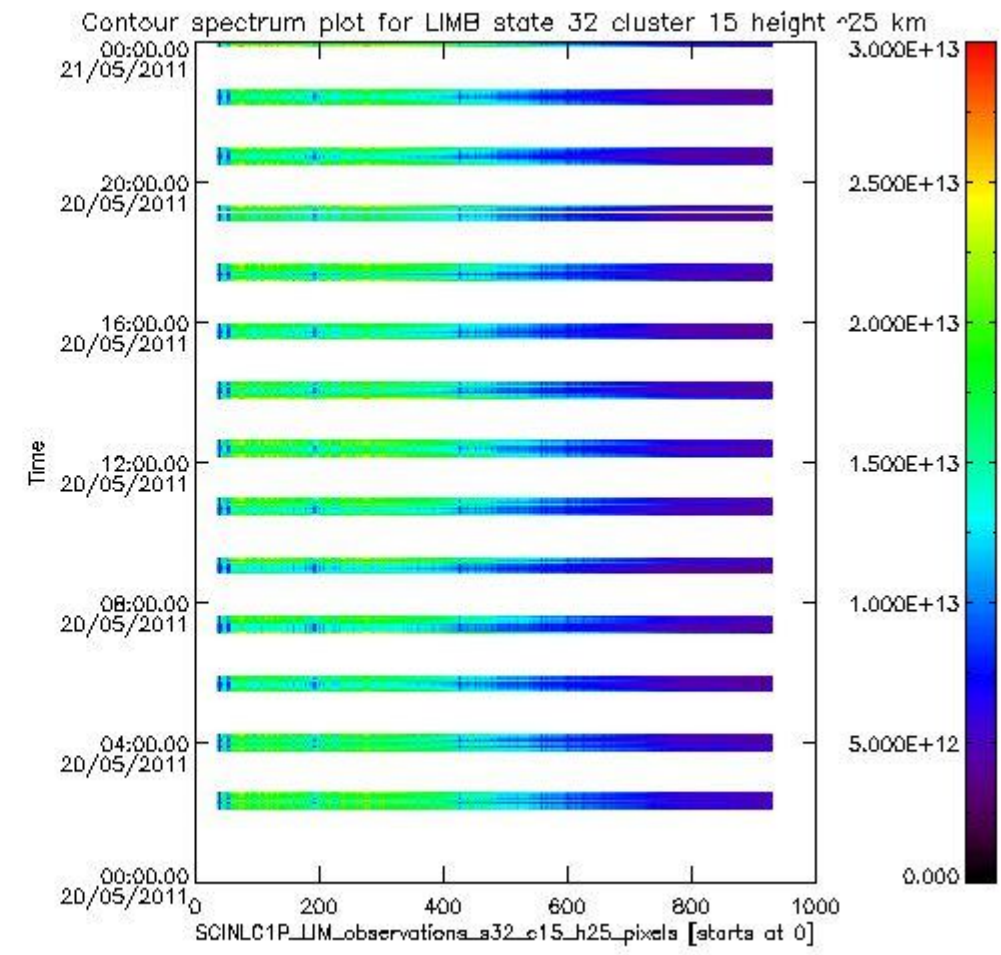
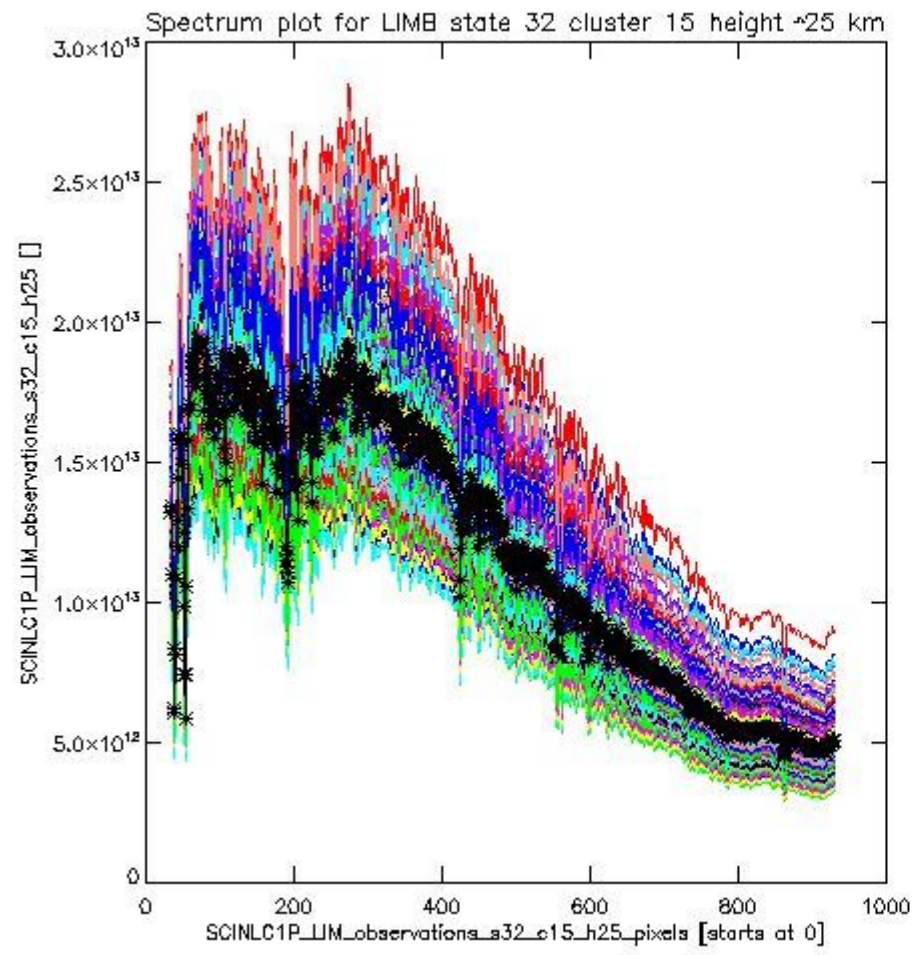
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110520_16.PNG



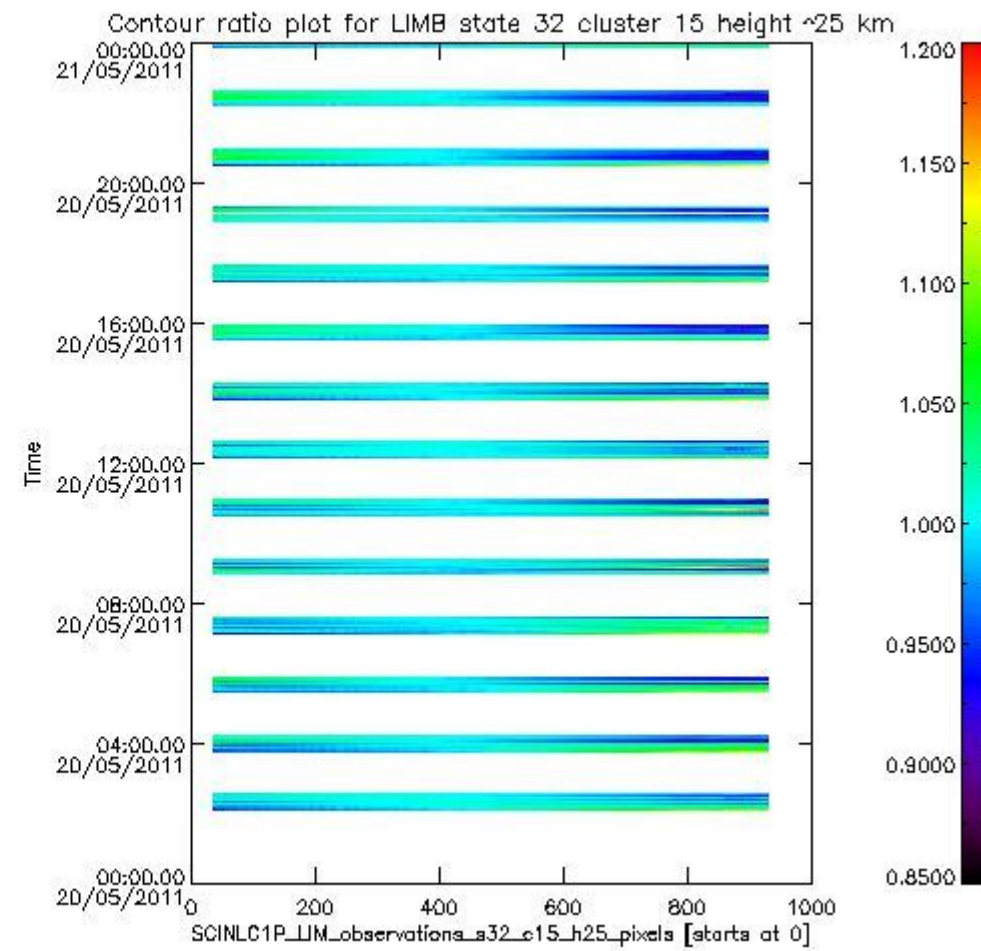
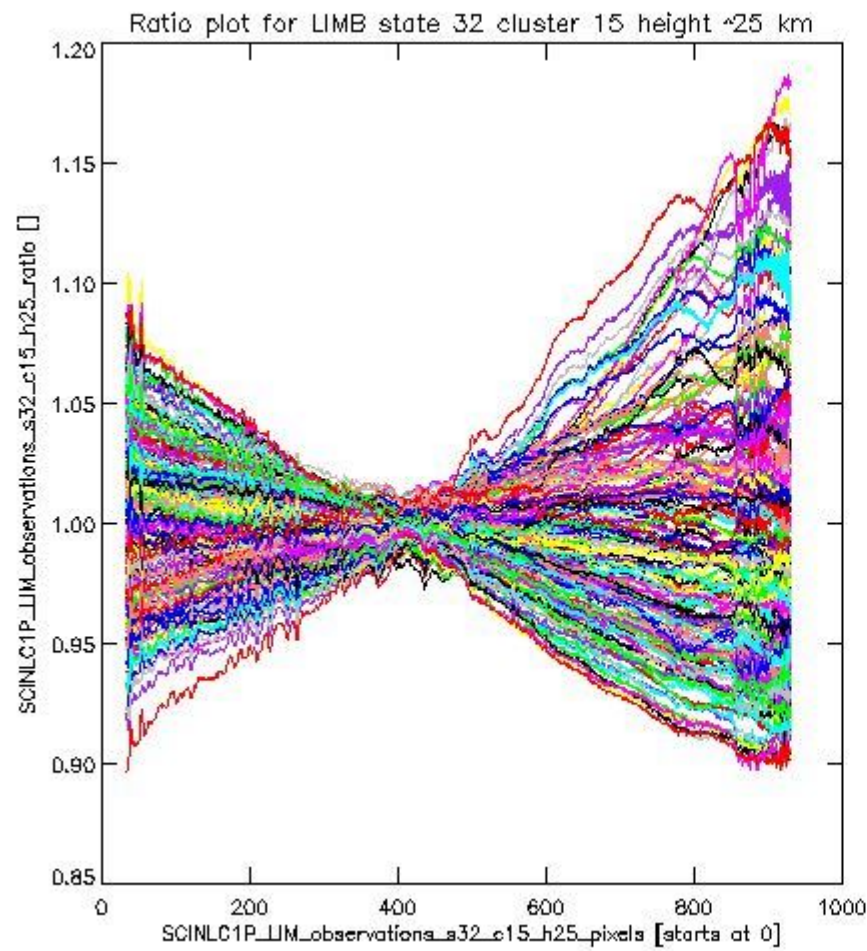
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110520_17.PNG

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	20MAY2011 02:07:00.823
Start time of last sample	20MAY2011 23:59:19.193
Reference period start time	20APR2011 02:07:48.123
Reference period stop time	18MAY2011 23:49:56.635
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



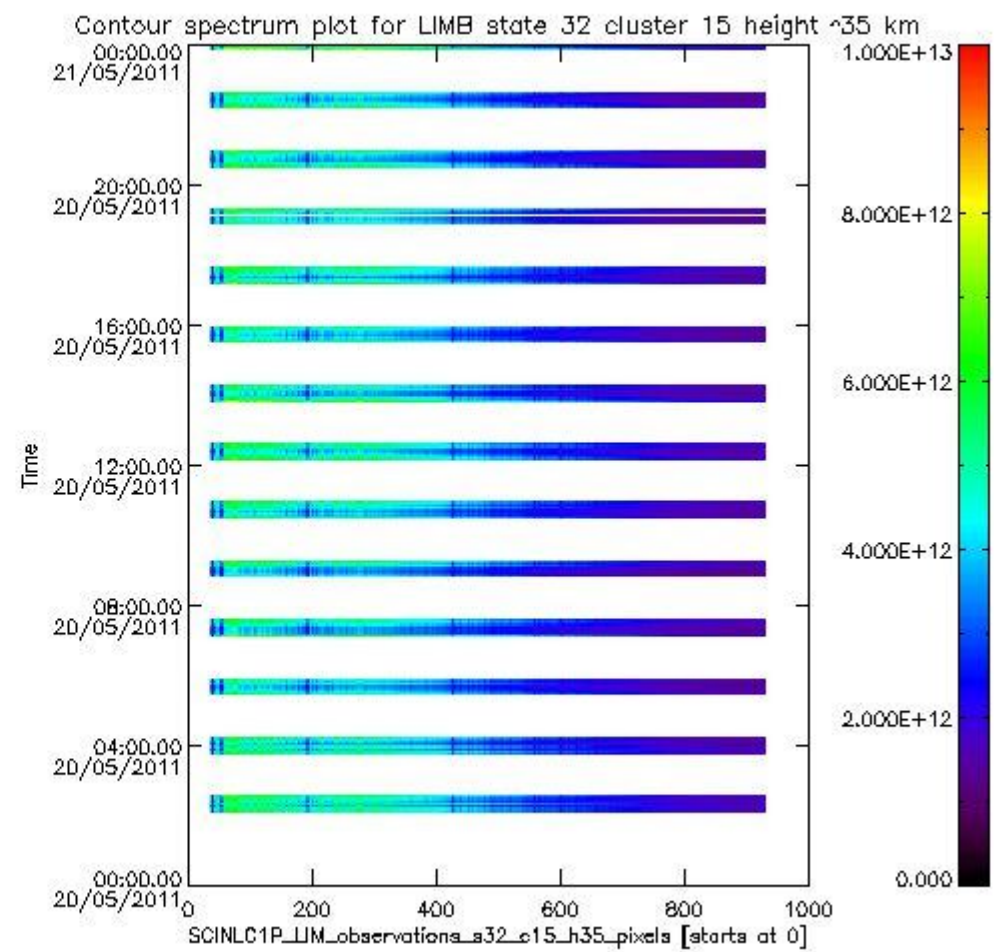
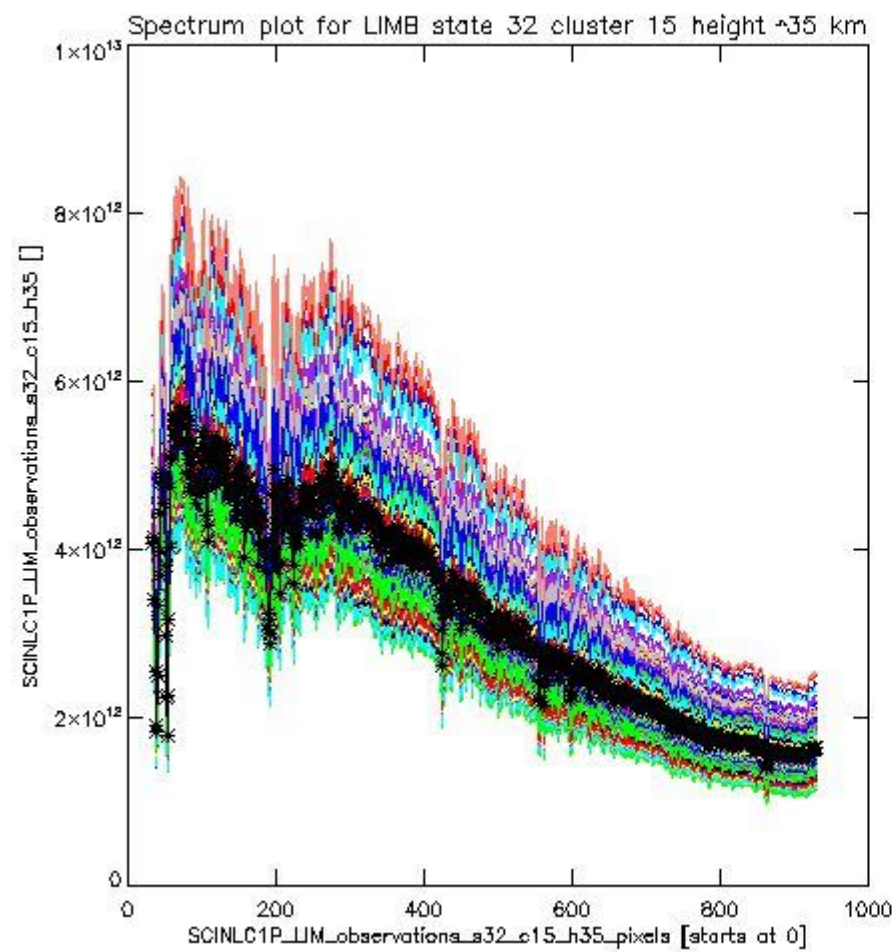
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110520_18.PNG

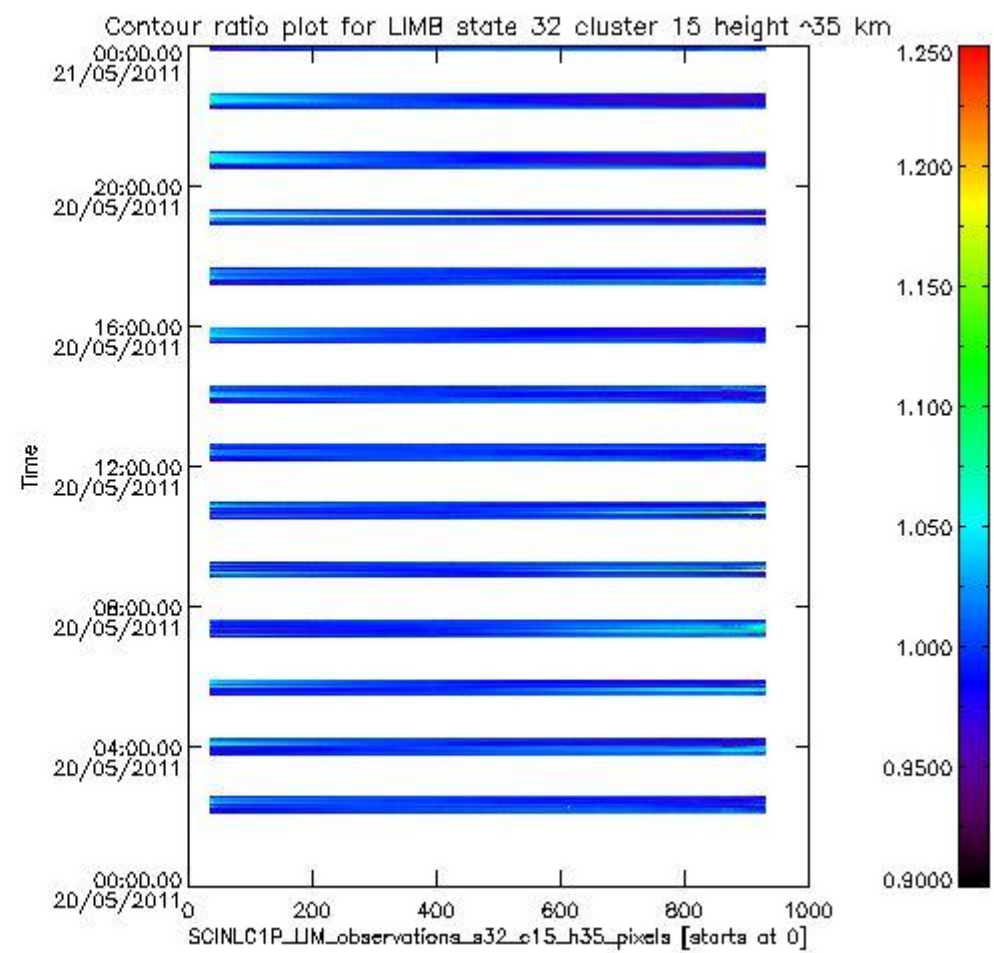
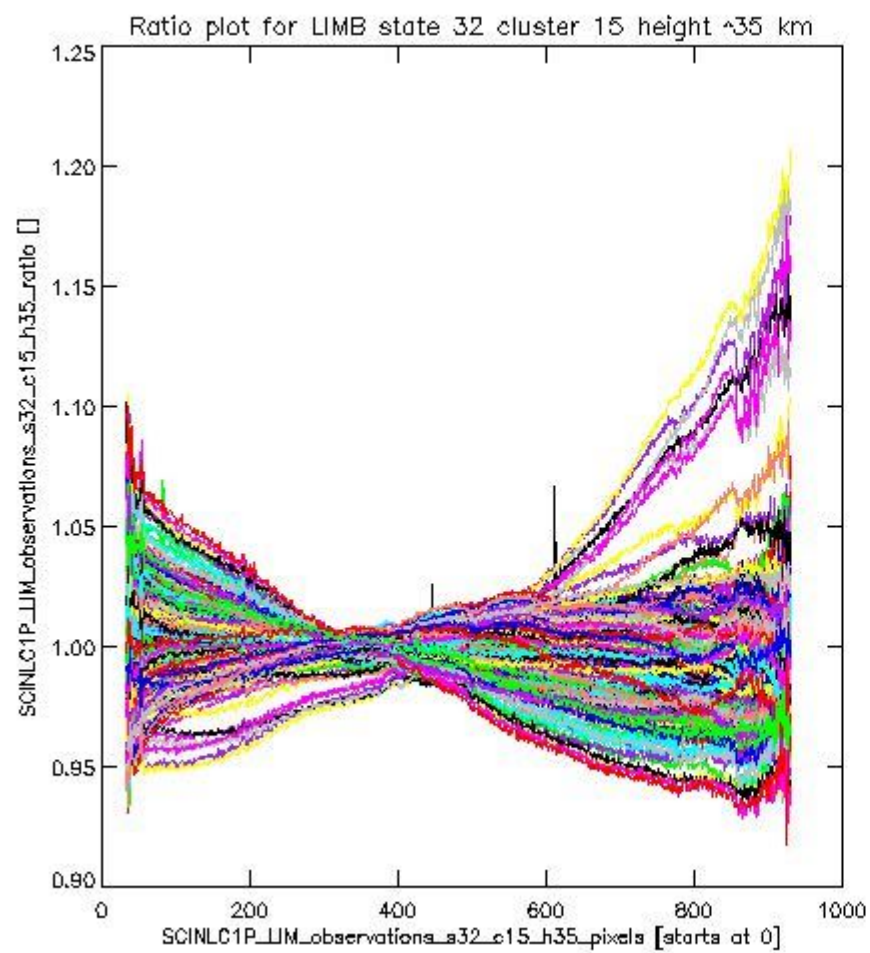


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110520_19.PNG

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	20MAY2011 02:07:00.823
Start time of last sample	20MAY2011 23:59:19.193
Reference period start time	20APR2011 02:07:48.123
Reference period stop time	18MAY2011 23:49:56.635
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_20110520_21.PNG

