

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	30MAY2011 06:55:41
Data source version	SCIA/7.04-U
Processing scope for products	17MAY2011 00:00:00 to 18MAY2011 00:00:00
Start time of first product within scope	16MAY2011 22:37:50
Stop time of last product within scope	18MAY2011 00:51:31
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	17MAY2011 02:31:29.087	17MAY2011 22:42:25.049
1	NADIR	07	09	N/A	17MAY2011 02:31:29.087	17MAY2011 22:42:25.049
2	NADIR	07	15	N/A	17MAY2011 02:31:29.087	17MAY2011 22:42:25.049
3	NADIR	07	24	N/A	17MAY2011 02:31:29.087	17MAY2011 22:42:25.049
4	NADIR	07	55	N/A	17MAY2011 02:31:29.087	17MAY2011 22:42:25.049
5	LIMB	32	09	~19 km	17MAY2011 02:16:15.708	17MAY2011 22:47:39.089
6	LIMB	32	09	~22 km	17MAY2011 02:16:15.708	17MAY2011 22:47:39.089
7	LIMB	32	09	~25 km	17MAY2011 02:16:15.708	17MAY2011 22:47:39.089
8	LIMB	32	15	~22 km	17MAY2011 02:16:15.708	17MAY2011 22:47:39.089
9	LIMB	32	15	~25 km	17MAY2011 02:16:15.708	17MAY2011 22:47:39.089
10	LIMB	32	15	~35 km	17MAY2011 02:16:15.708	17MAY2011 22:47:39.089

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	#cmlp_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110516_223220_000060333102_00303_48162_1464.N1	16MAY2011 22:37:50	16MAY2011 22:41:23	0	0	4	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110517_001257_000060543102_00304_48163_1475.N1	17MAY2011 00:12:57	17MAY2011 01:53:51	0	0	0	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110517_015817_000057033102_00305_48164_1471.N1	17MAY2011 01:58:17	17MAY2011 03:08:46	0	36	30	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110517_033324_000060543102_00306_48165_1479.N1	17MAY2011 03:38:31	17MAY2011 04:48:46	0	35	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110517_051845_000057033102_00307_48166_1477.N1	17MAY2011 05:18:45	17MAY2011 06:29:14	0	36	30	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110517_065352_000060543102_00308_48167_1478.N1	17MAY2011 06:58:59	17MAY2011 08:09:13	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110517_083913_000057023102_00309_48168_1480.N1	17MAY2011 08:39:13	17MAY2011 09:49:42	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110517_101419_000060543102_00310_48169_1467.N1	17MAY2011 10:19:26	17MAY2011 11:29:41	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110517_115940_000057023102_00311_48170_1531.N1	17MAY2011 11:59:40	17MAY2011 13:10:09	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110517_133446_000060543102_00312_48171_1462.N1	17MAY2011 13:39:54	17MAY2011 14:50:08	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110517_152007_000057023102_00313_48172_1465.N1	17MAY2011 15:20:07	17MAY2011 16:30:36	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110517_165514_000060543102_00314_48173_1483.N1	17MAY2011 17:00:21	17MAY2011 18:10:58	0	35	28	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110517_184035_000057023102_00315_48174_1484.N1	17MAY2011 18:40:35	17MAY2011 19:50:59	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110517_201541_000060543102_00316_48175_1472.N1	17MAY2011 20:20:49	17MAY2011 21:31:03	0	35	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110517_220102_000057023102_00317_48176_1473.N1	17MAY2011 22:01:02	17MAY2011 23:11:31	0	36	30	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110517_233609_000060543102_00318_48177_1470.N1	17MAY2011 23:41:16	18MAY2011 00:51:31	0	35	31	0	0	1	0	0	

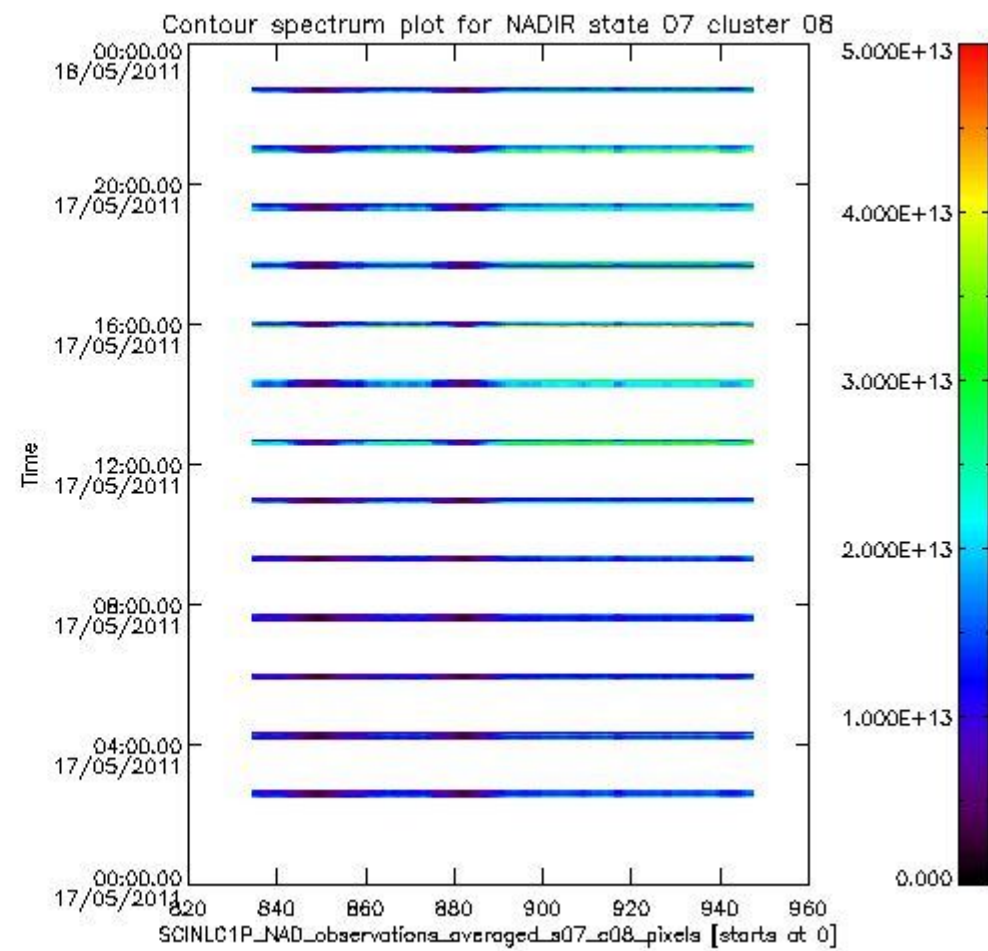
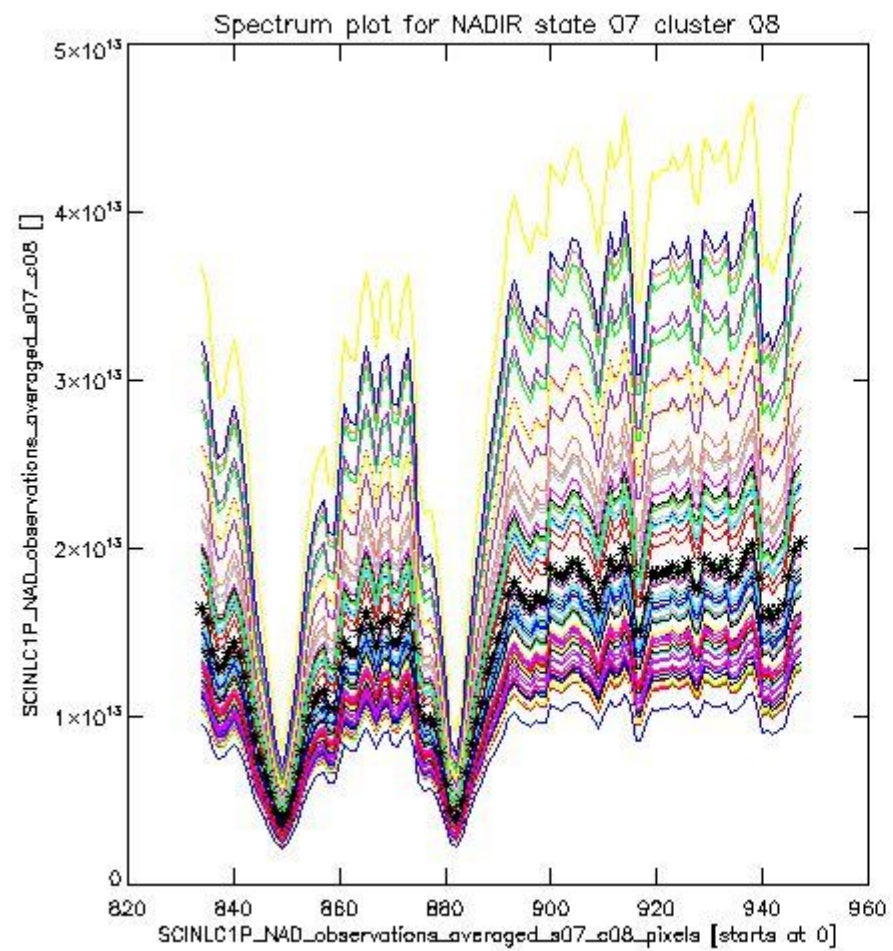
1.2 Source packet monitoring

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:

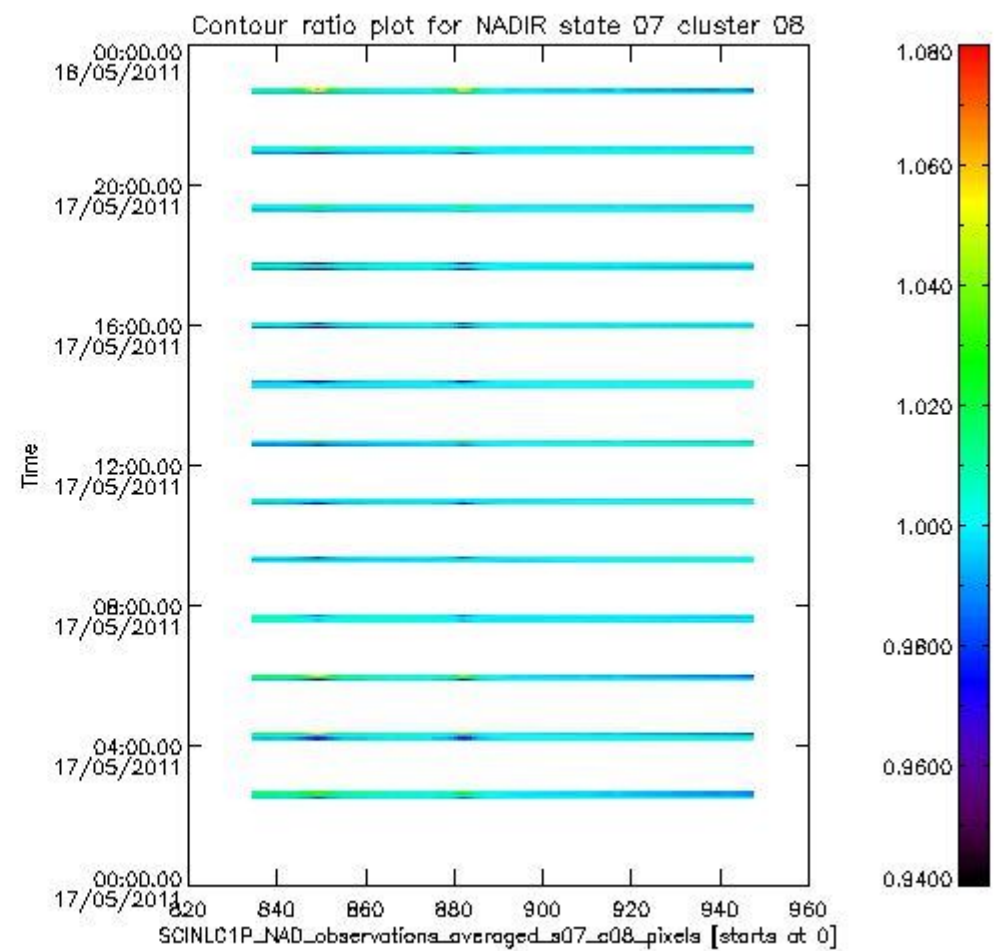
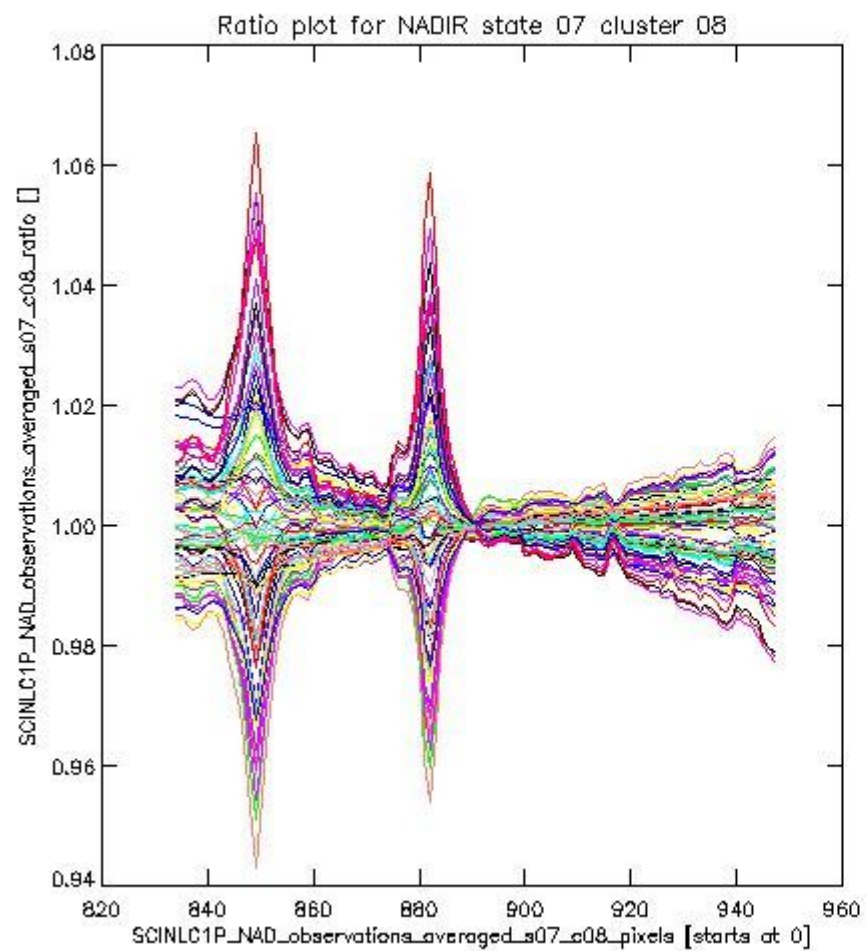
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	17MAY2011 02:31:29.087
Start time of last sample	17MAY2011 22:42:25.049
Reference period start time	17APR2011 02:32:06.739
Reference period stop time	16MAY2011 18:17:15.048
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



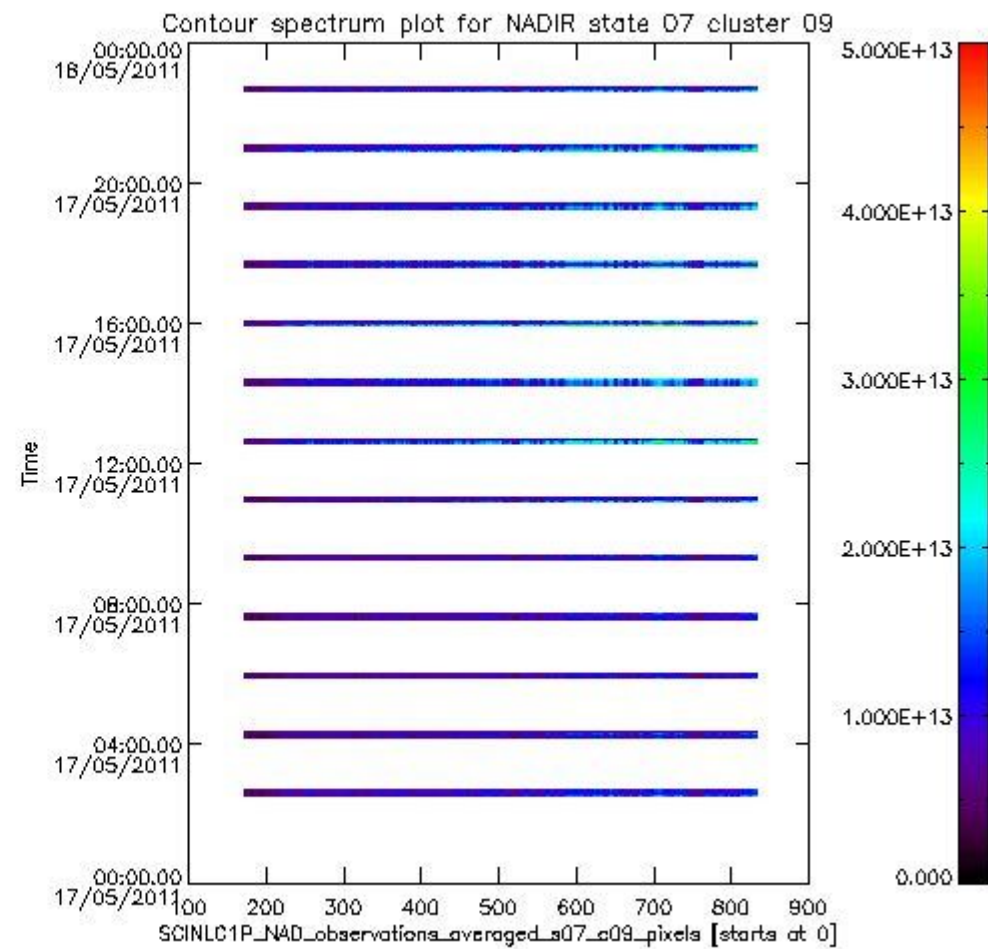
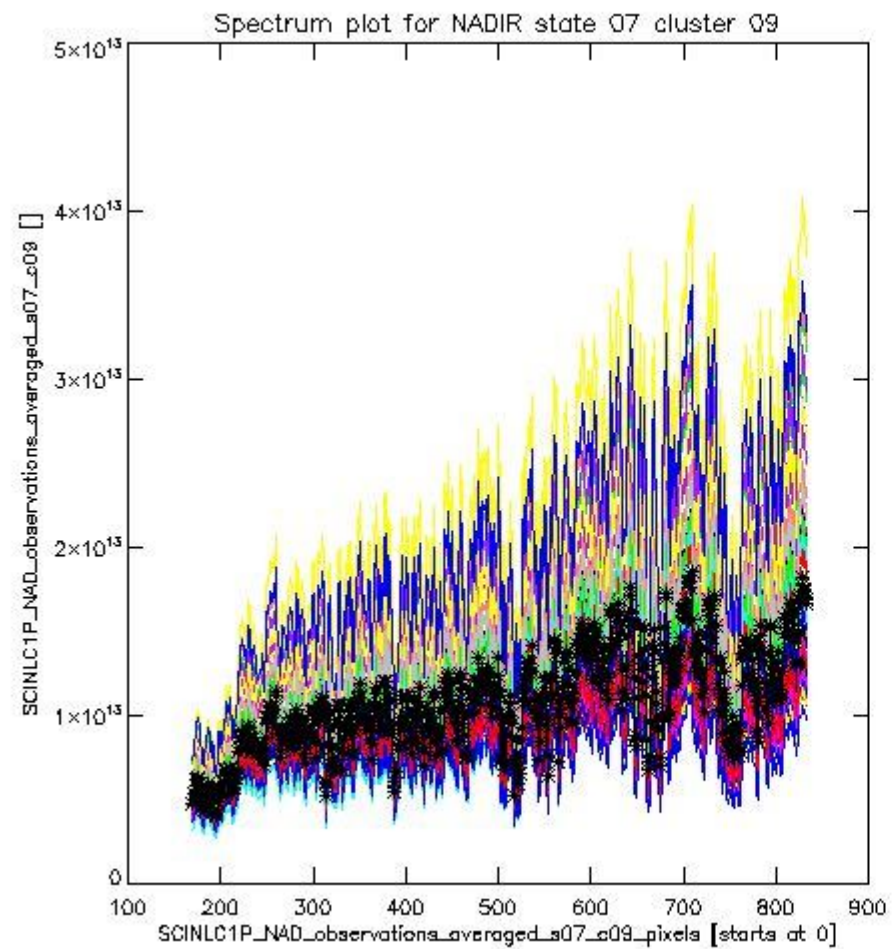
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_0.PNG



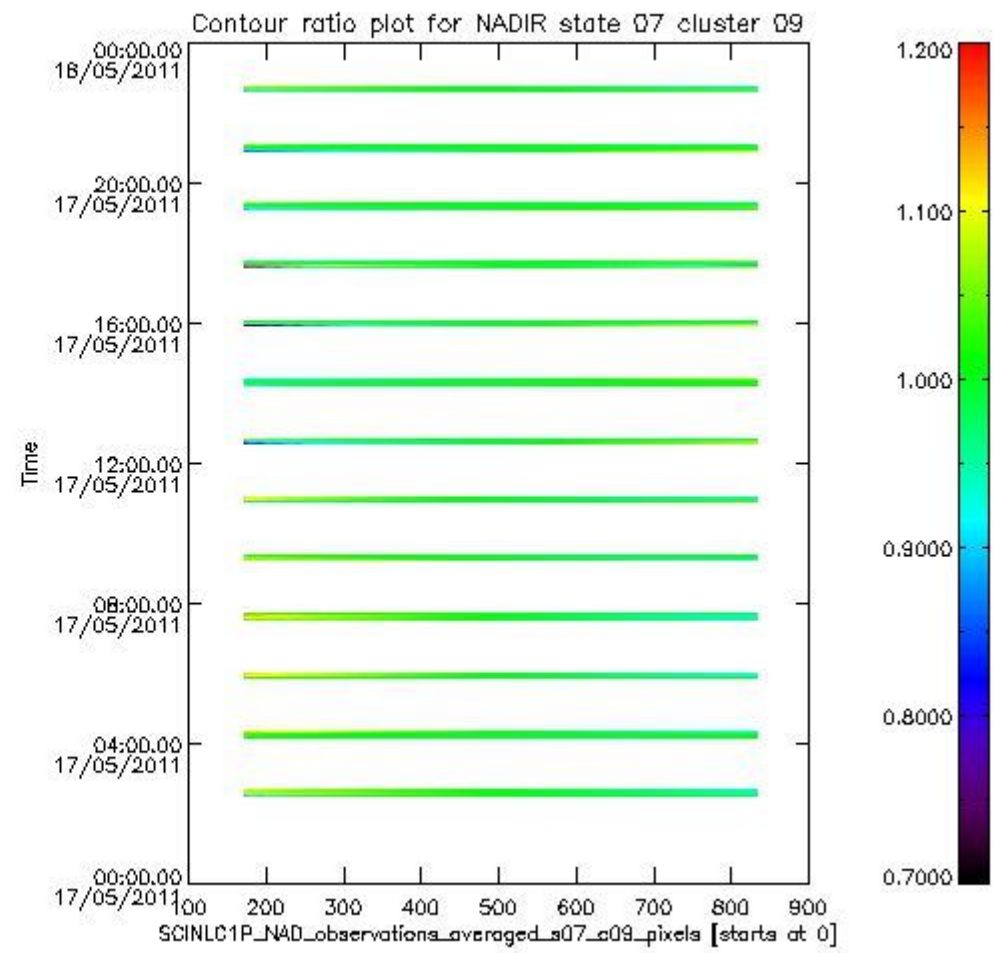
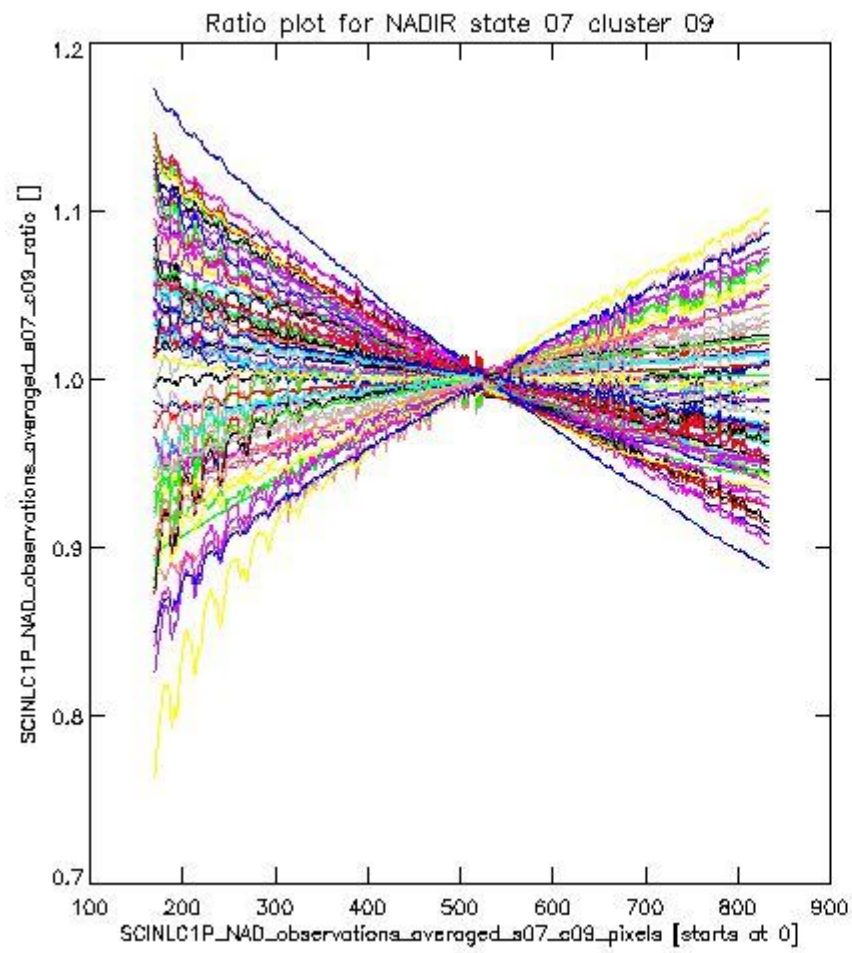
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_1.PNG

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	17MAY2011 02:31:29.087
Start time of last sample	17MAY2011 22:42:25.049
Reference period start time	17APR2011 02:32:06.739
Reference period stop time	16MAY2011 18:17:15.048
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



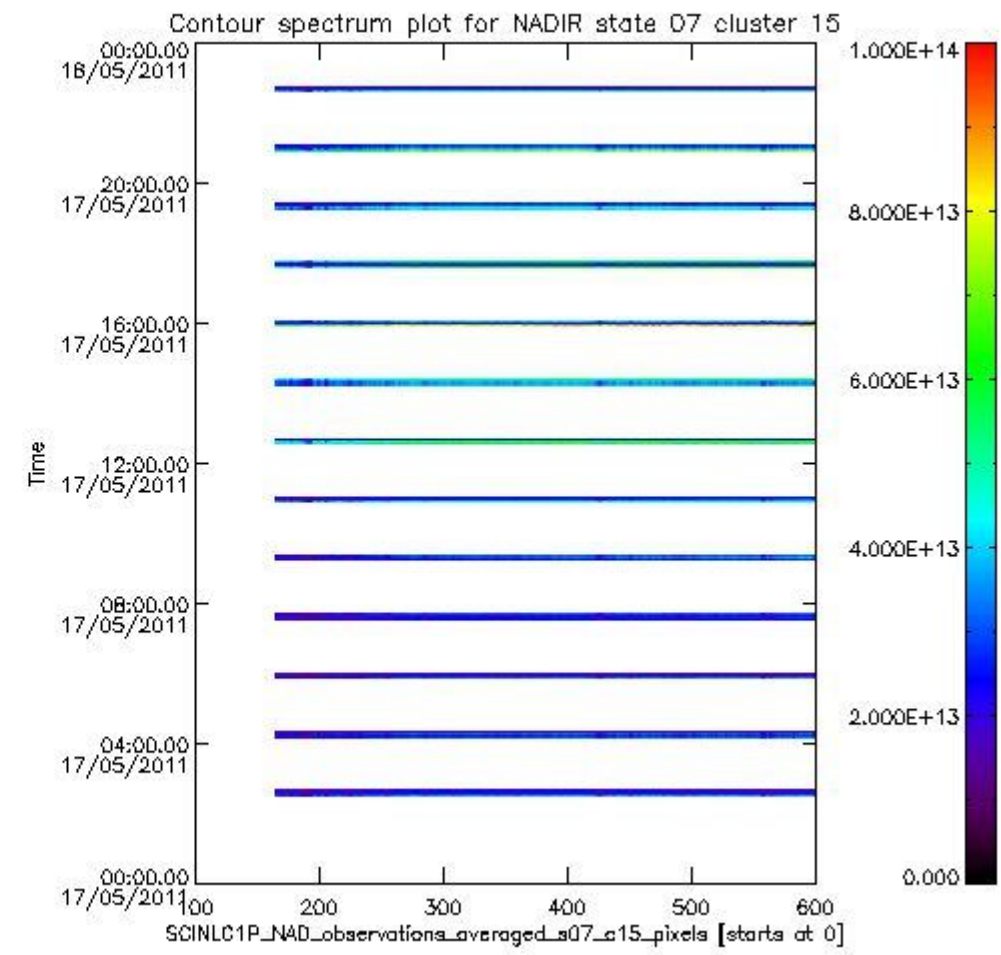
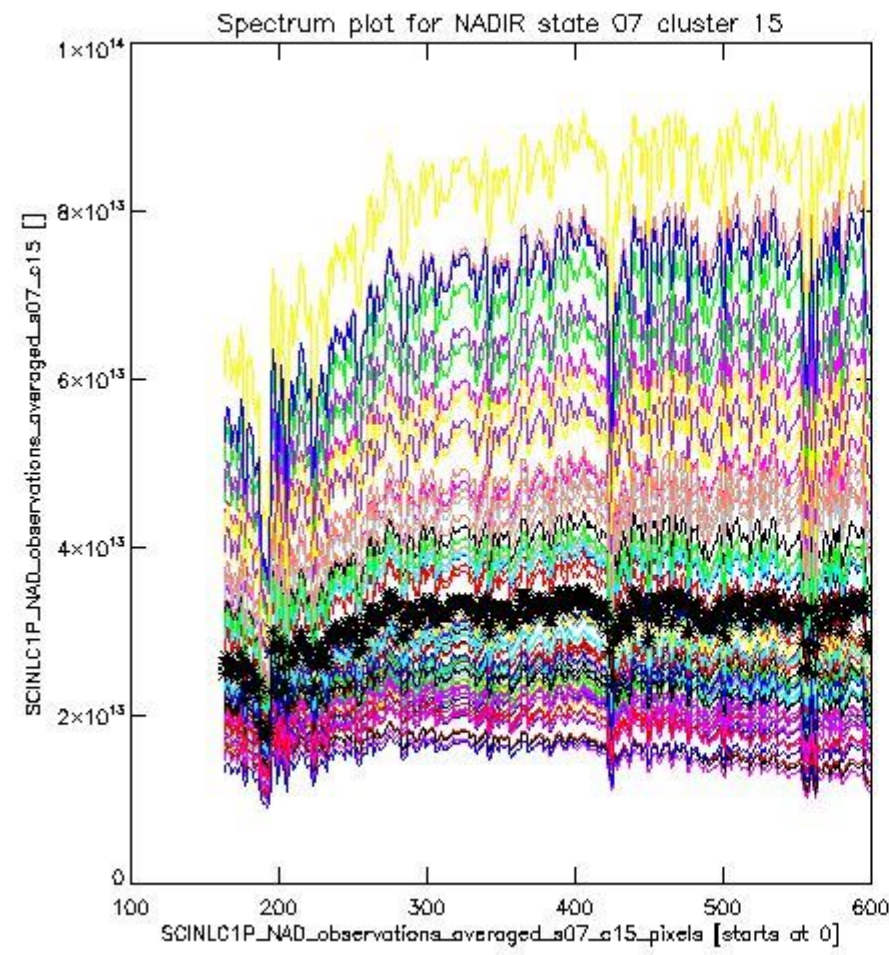
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_2.PNG



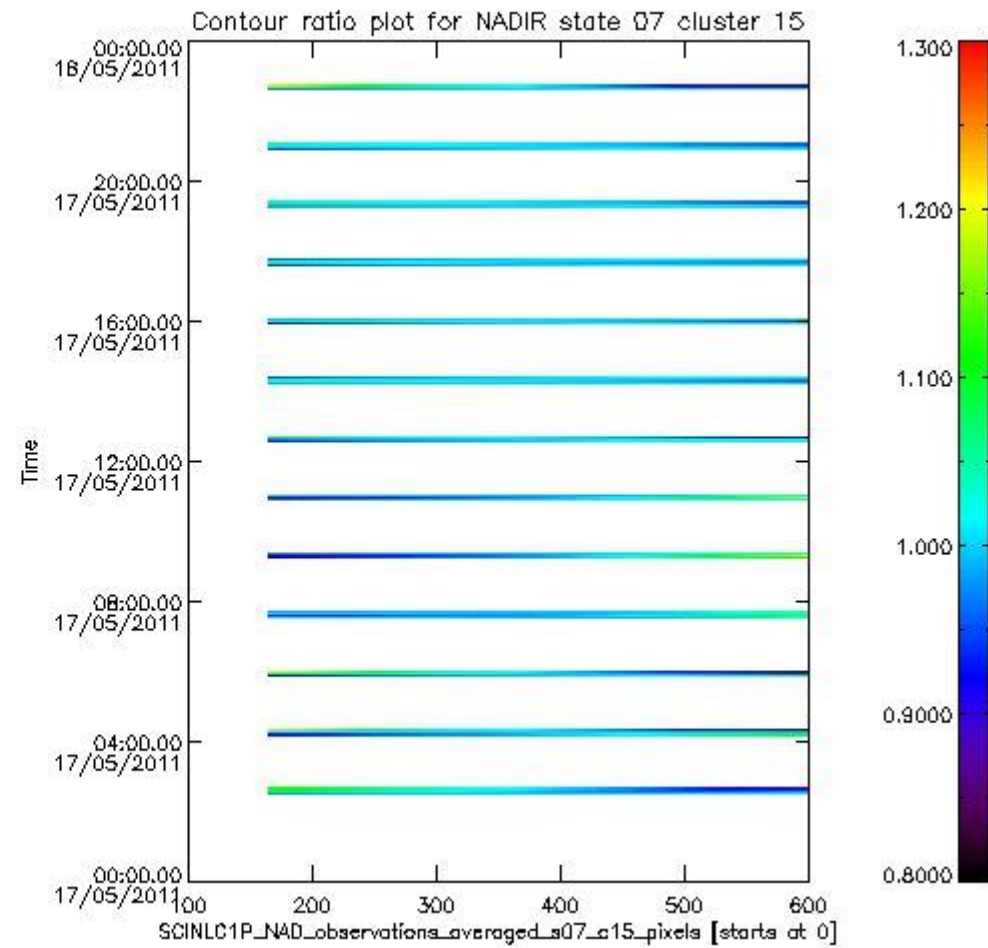
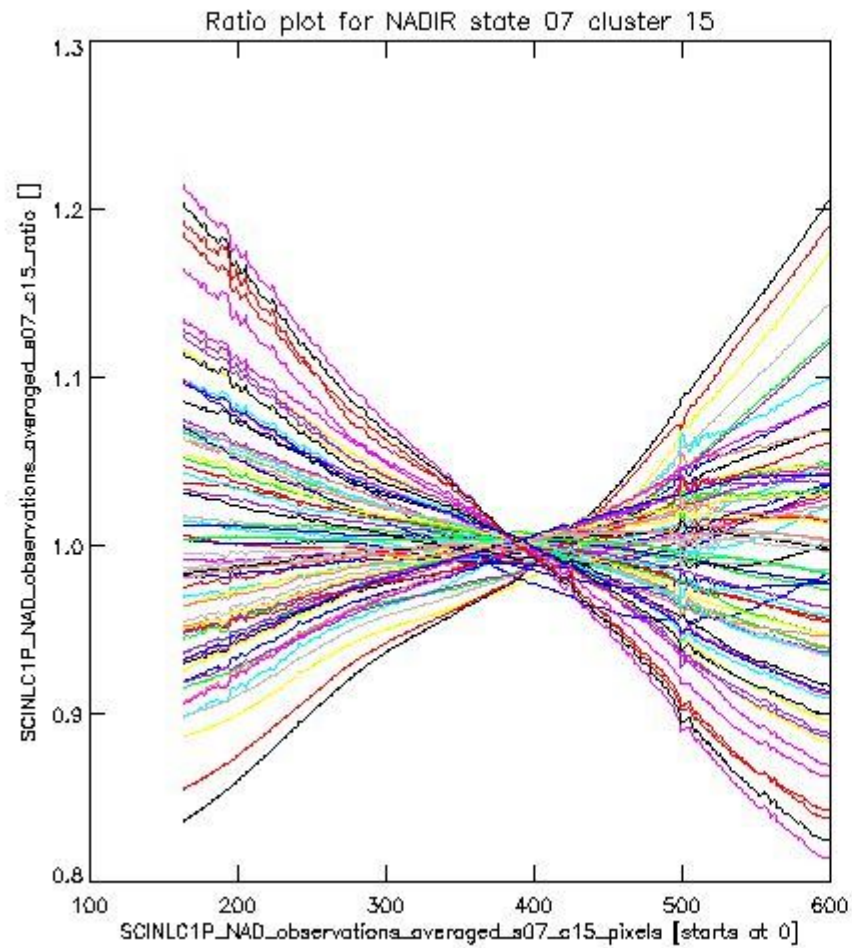
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_3.PNG

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	17MAY2011 02:31:29.087
Start time of last sample	17MAY2011 22:42:25.049
Reference period start time	17APR2011 02:32:06.739
Reference period stop time	16MAY2011 18:17:15.048
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



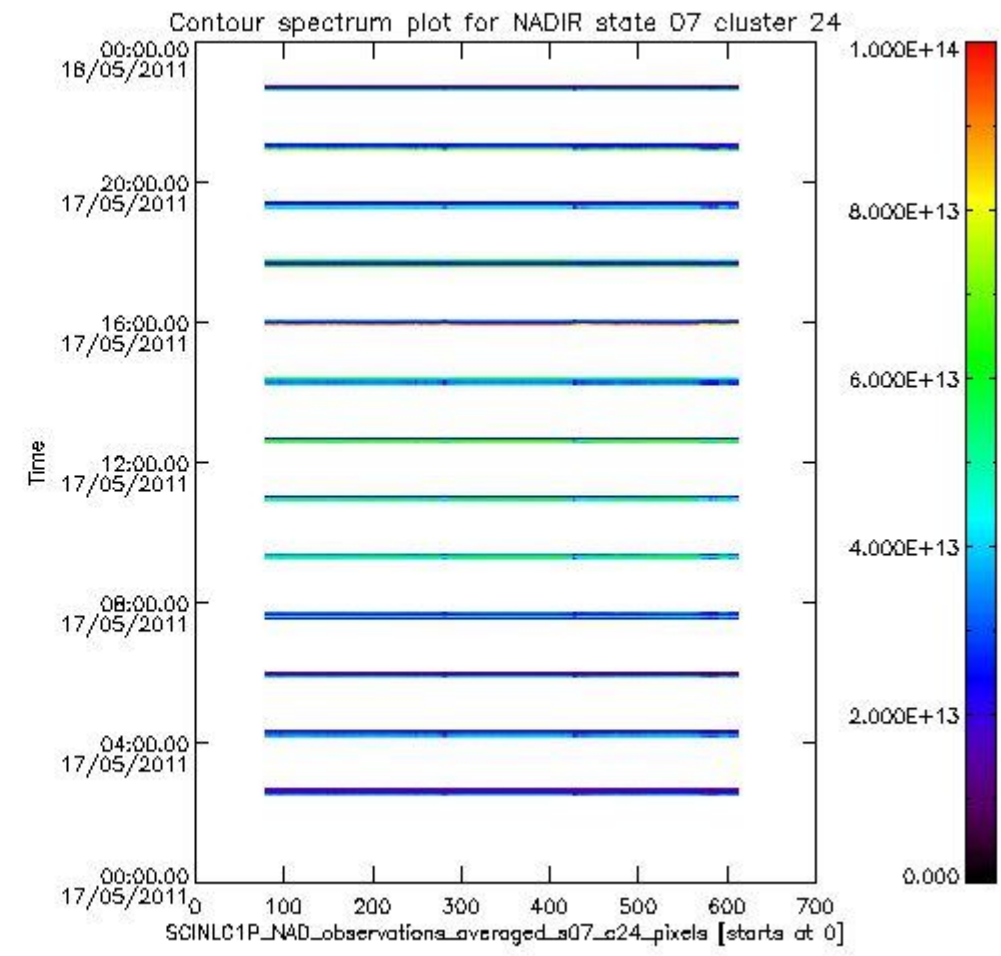
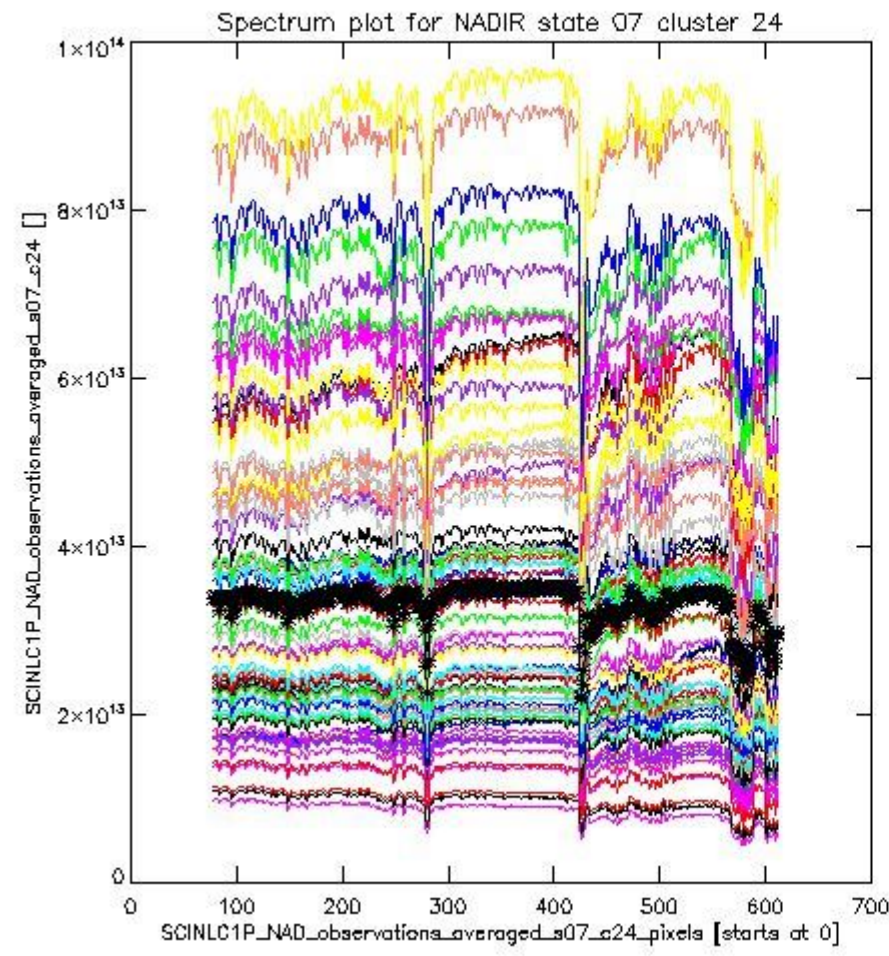
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_4.PNG



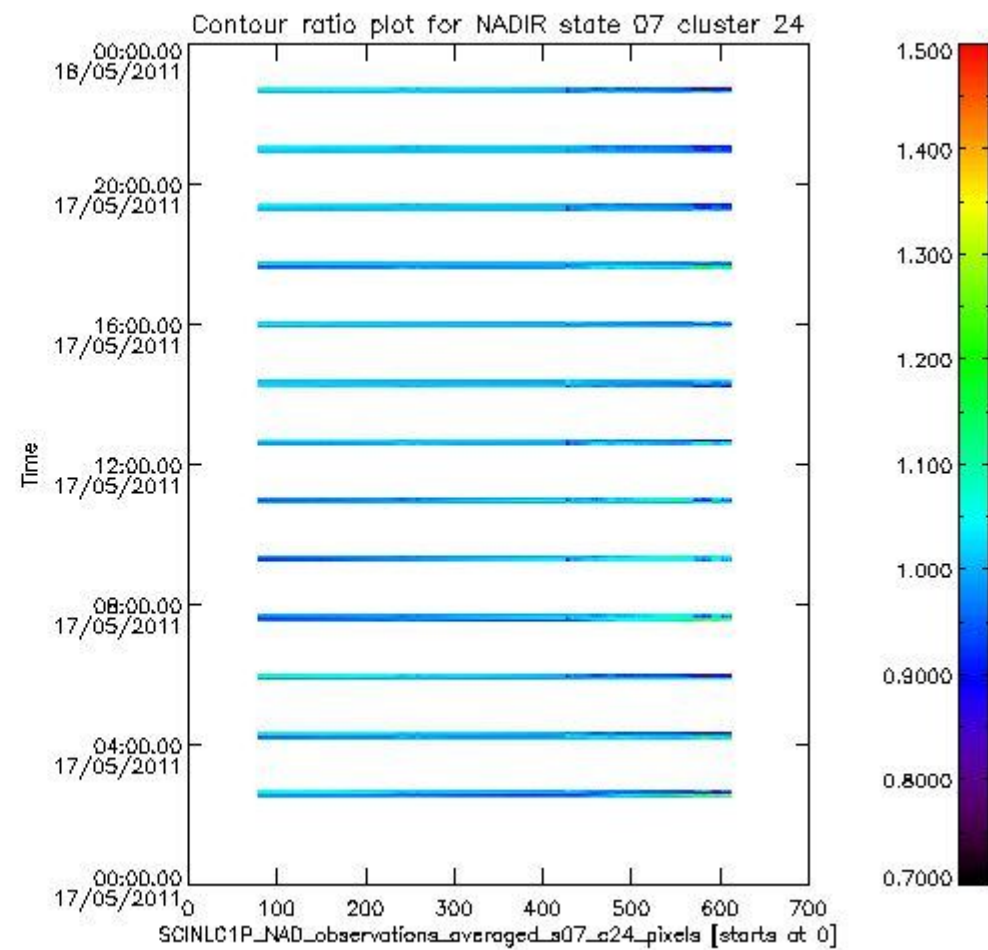
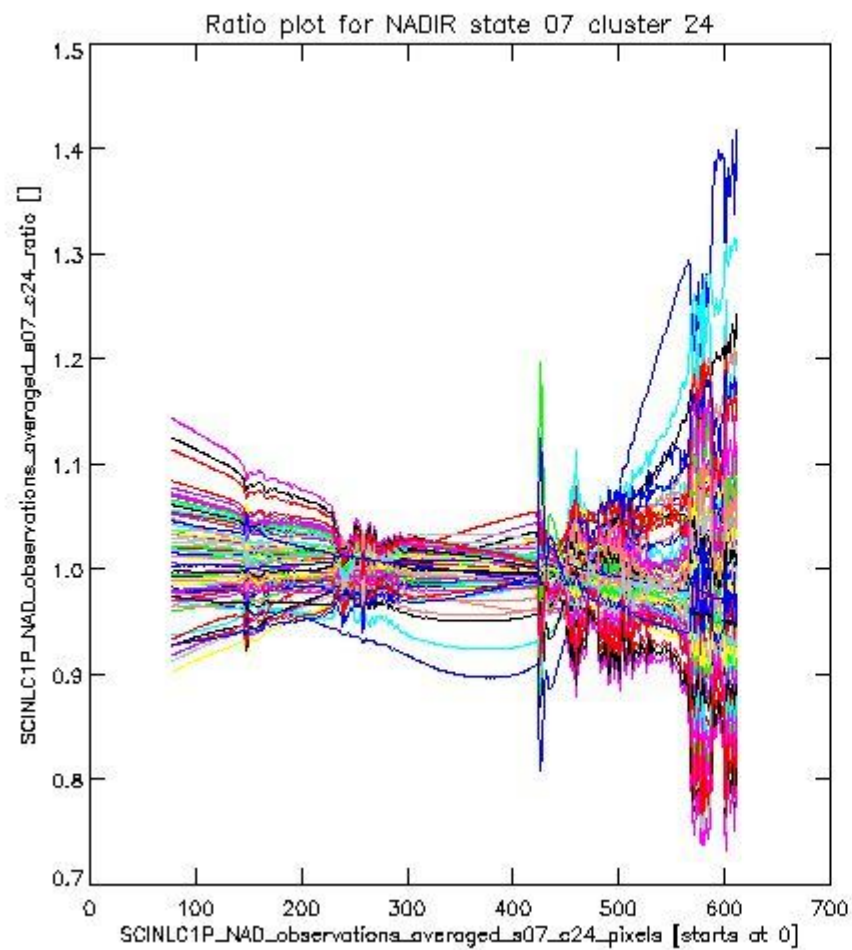
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_5.PNG

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	17MAY2011 02:31:29.087
Start time of last sample	17MAY2011 22:42:25.049
Reference period start time	17APR2011 02:32:06.739
Reference period stop time	16MAY2011 18:17:15.048
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



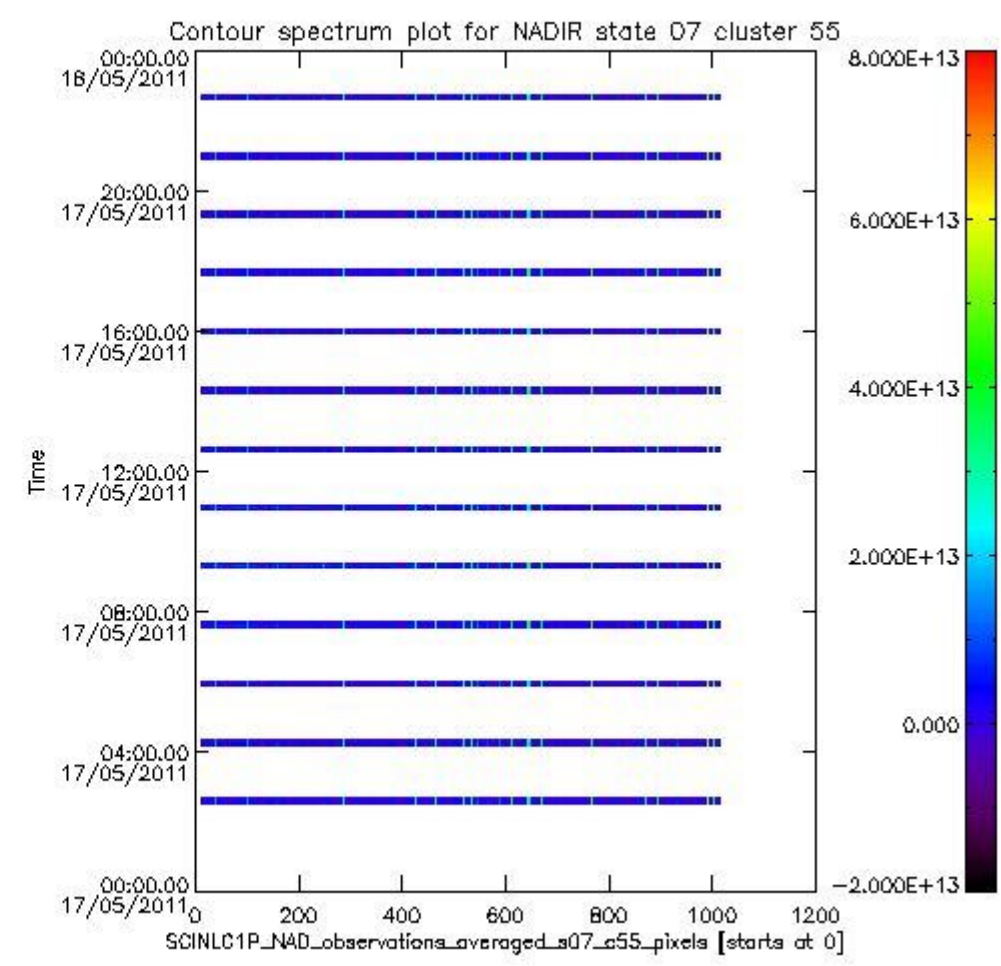
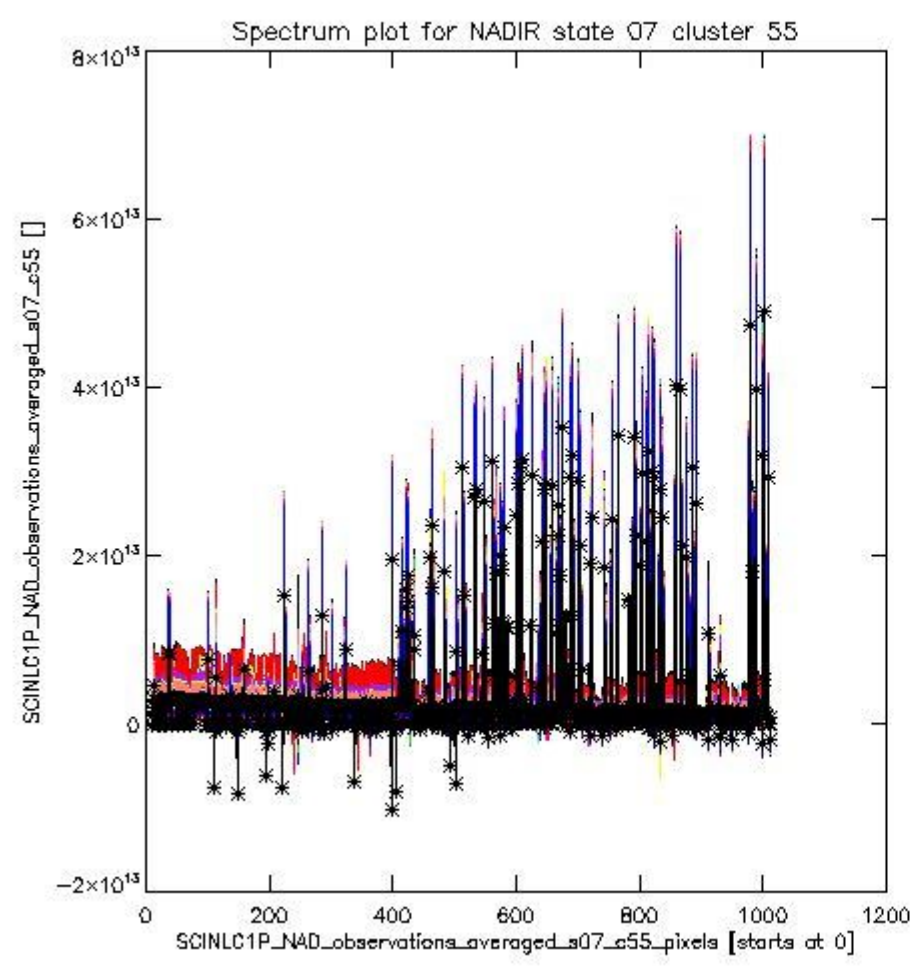
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_6.PNG



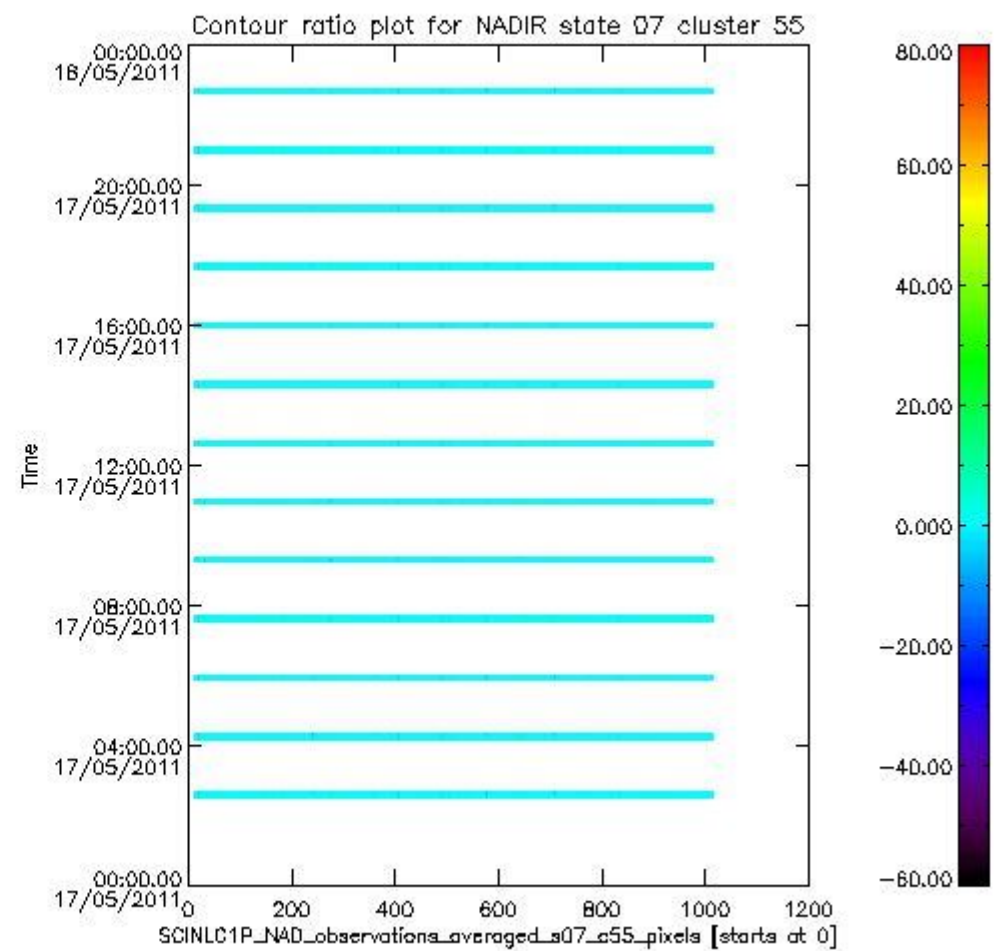
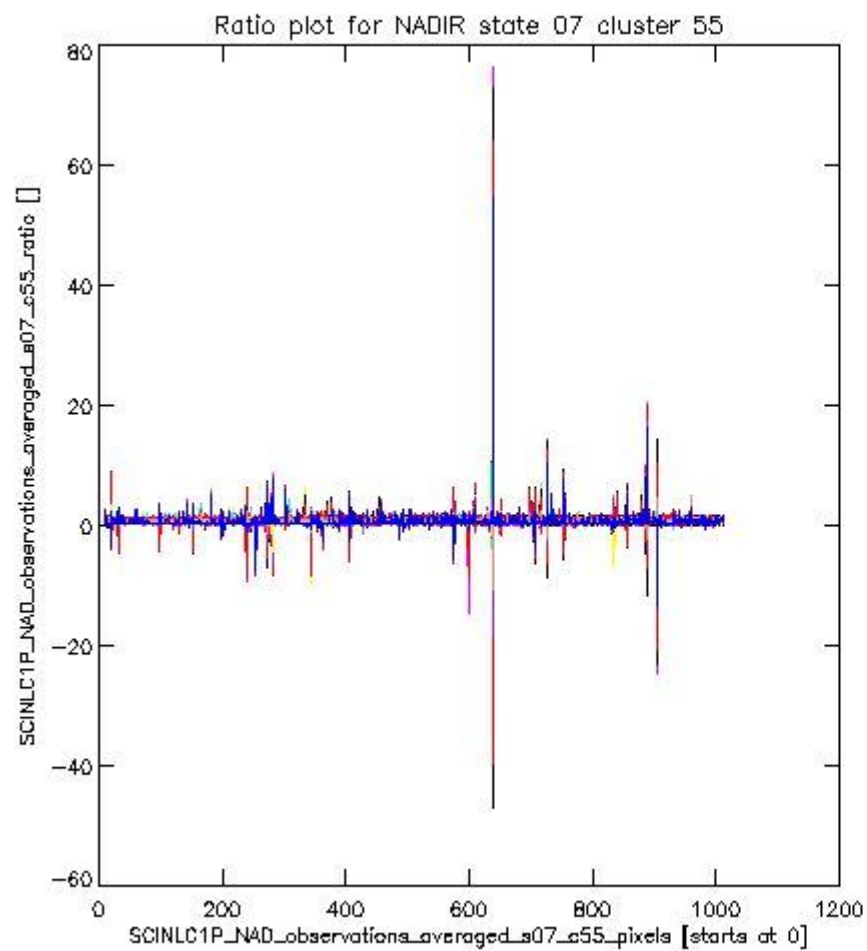
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_7.PNG

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	17MAY2011 02:31:29.087
Start time of last sample	17MAY2011 22:42:25.049
Reference period start time	17APR2011 02:32:06.739
Reference period stop time	16MAY2011 18:17:15.048
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



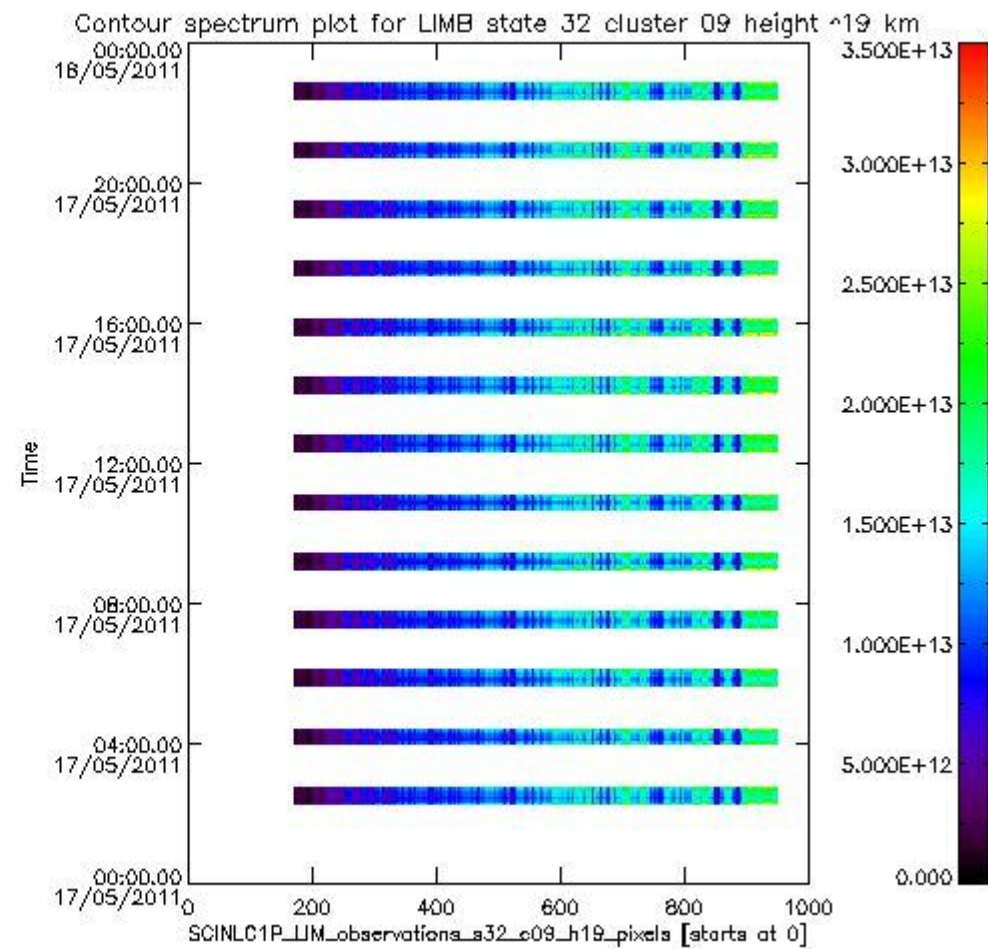
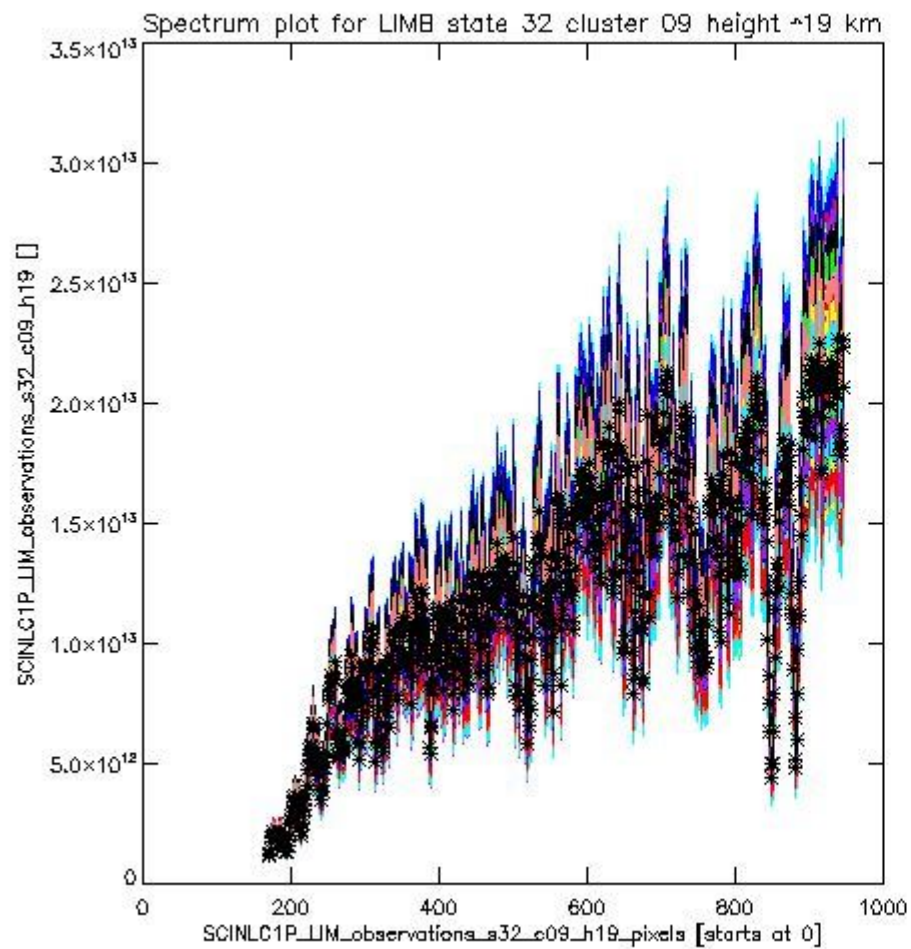
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_8.PNG



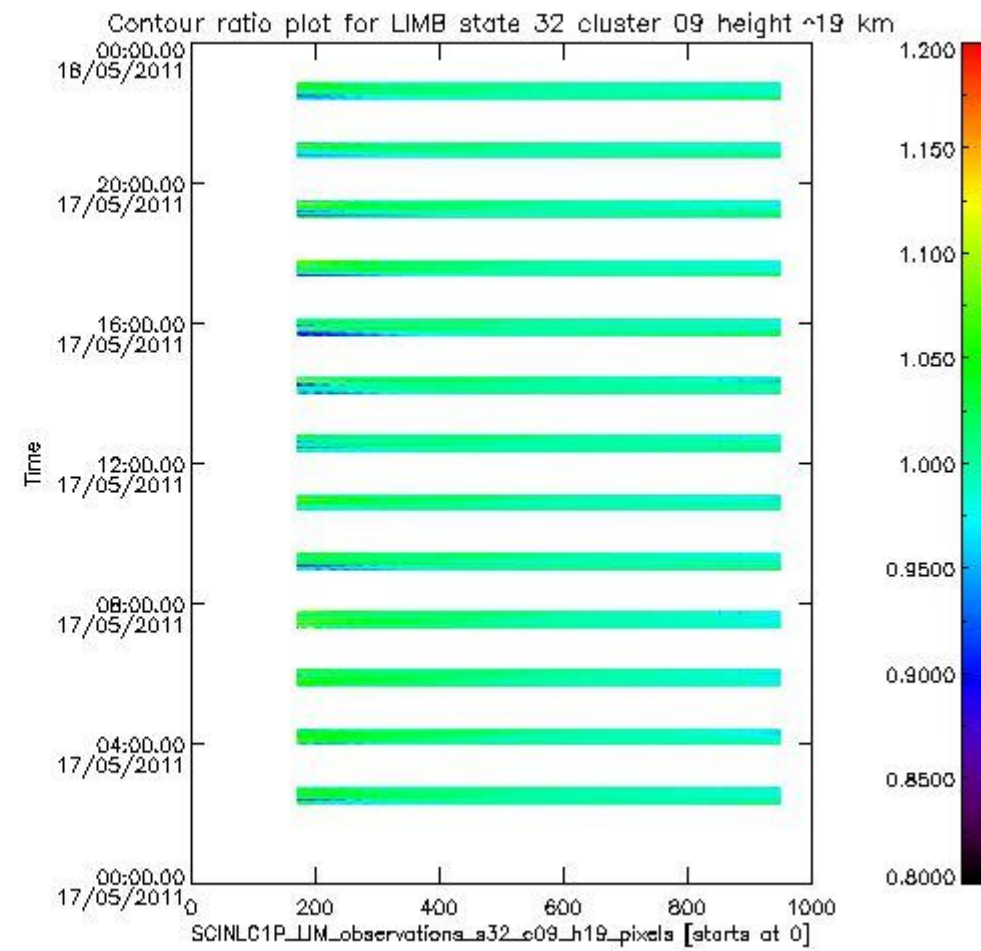
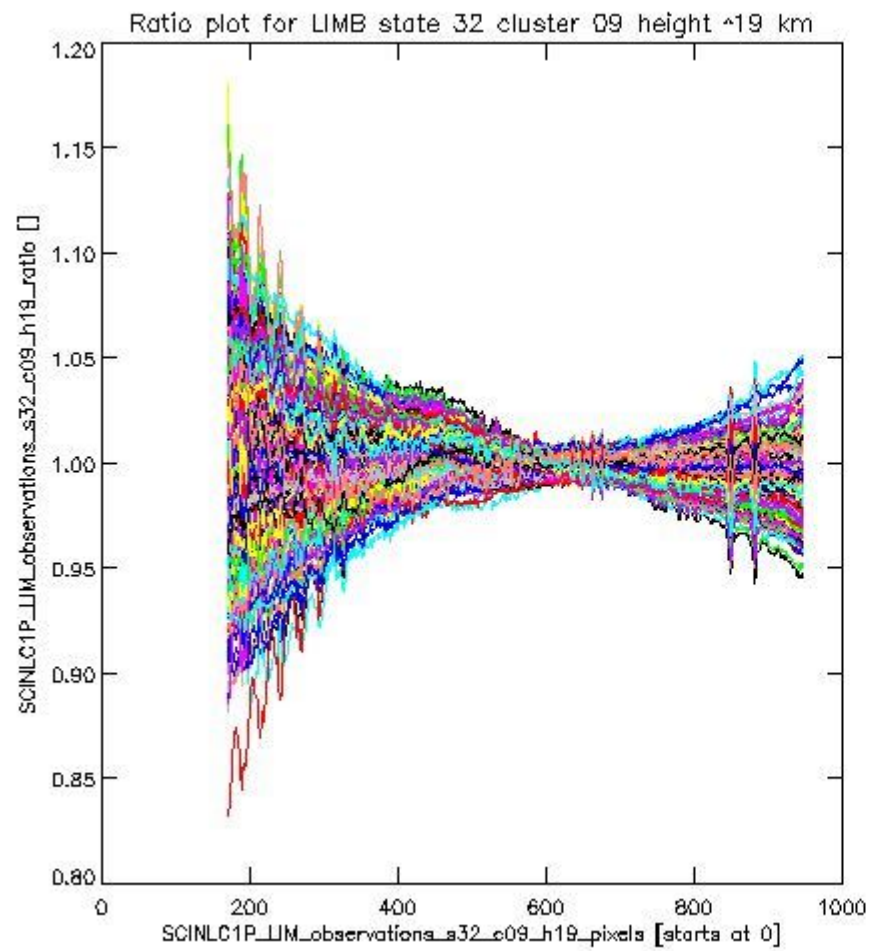
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_9.PNG

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	17MAY2011 02:16:15.708
Start time of last sample	17MAY2011 22:47:39.089
Reference period start time	17APR2011 02:18:56.102
Reference period stop time	16MAY2011 18:22:50.665
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



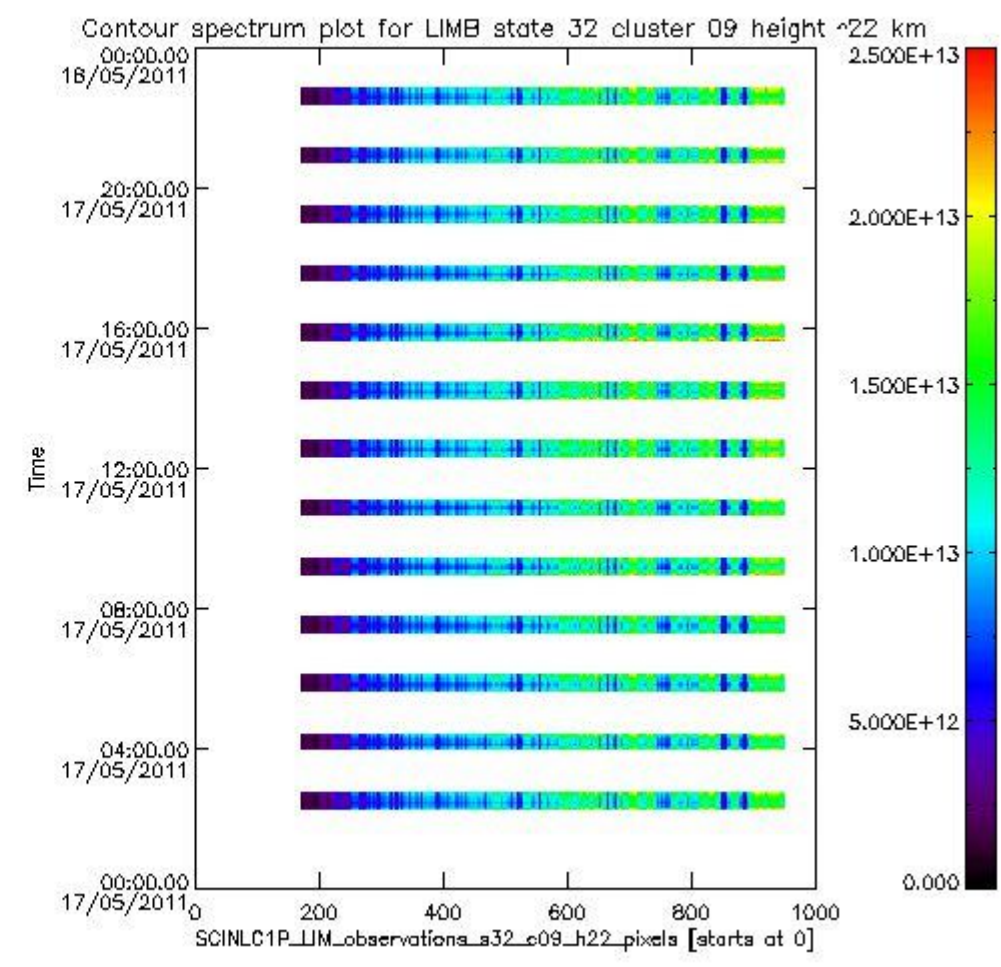
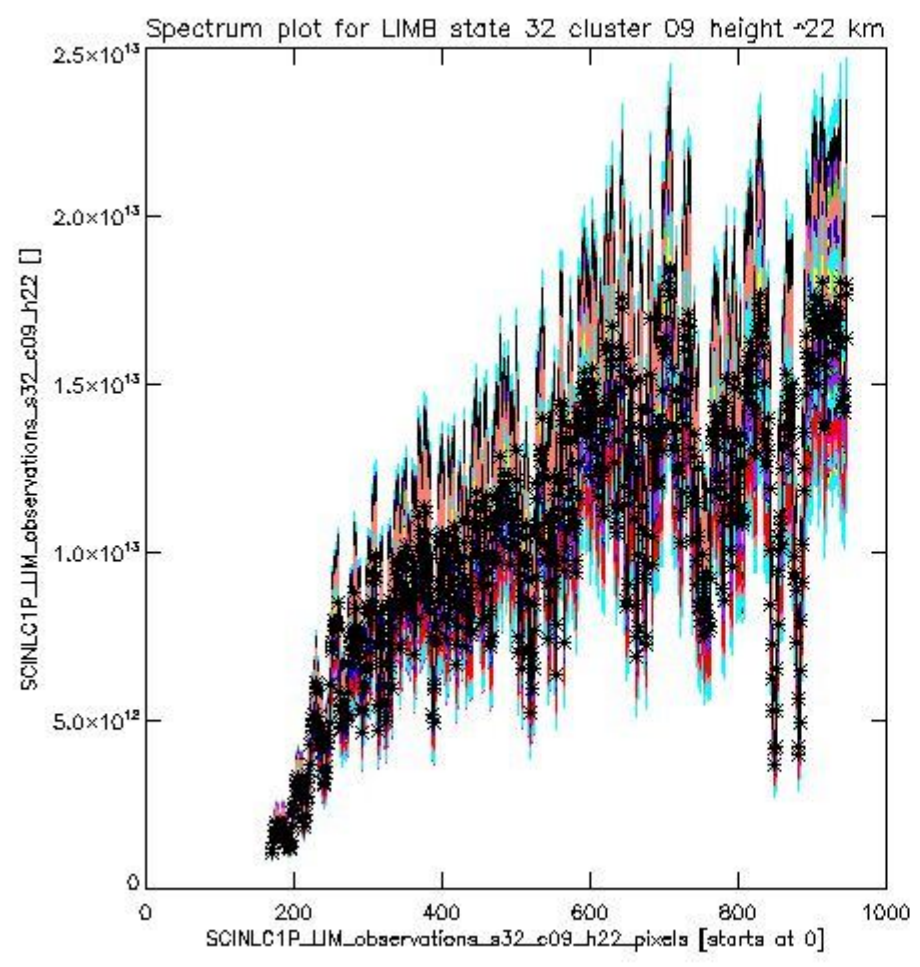
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_10.PNG



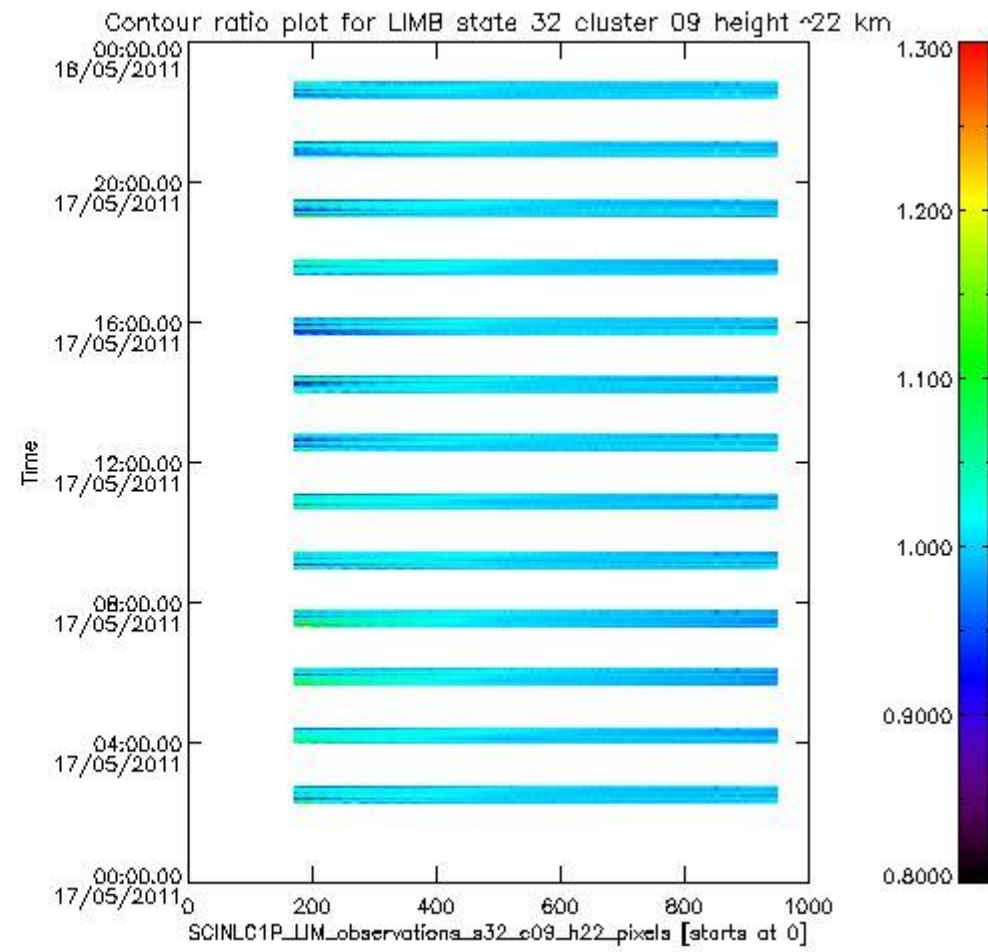
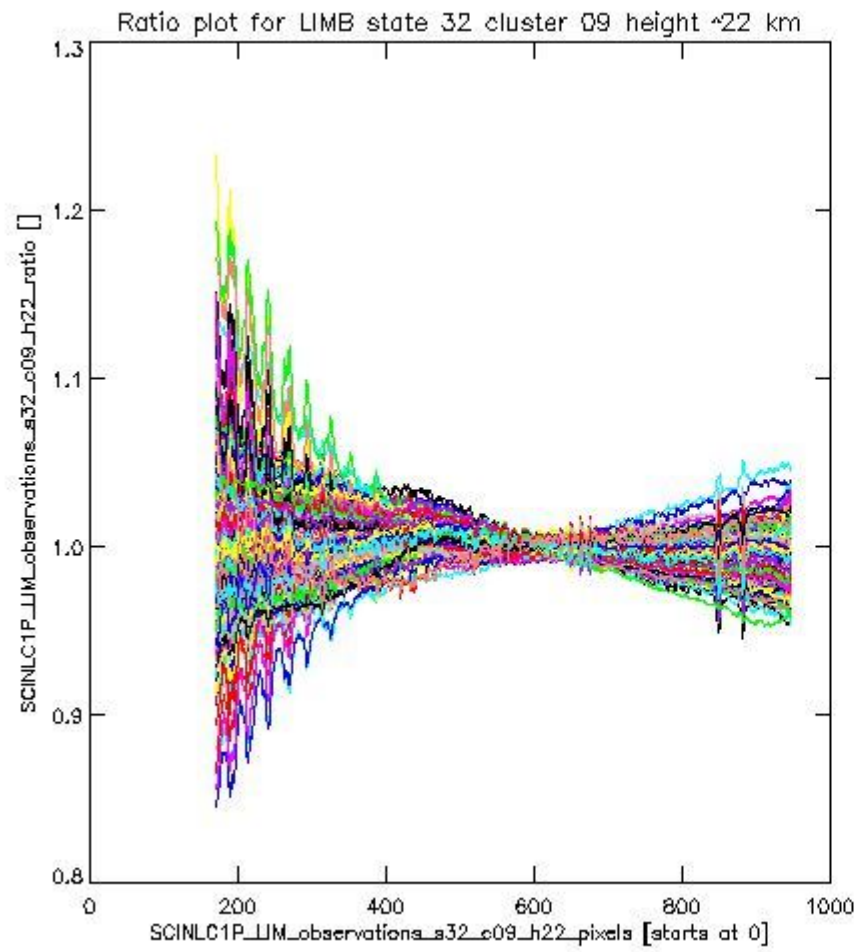
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_11.PNG

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	17MAY2011 02:16:15.708
Start time of last sample	17MAY2011 22:47:39.089
Reference period start time	17APR2011 02:18:56.102
Reference period stop time	16MAY2011 18:22:50.665
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



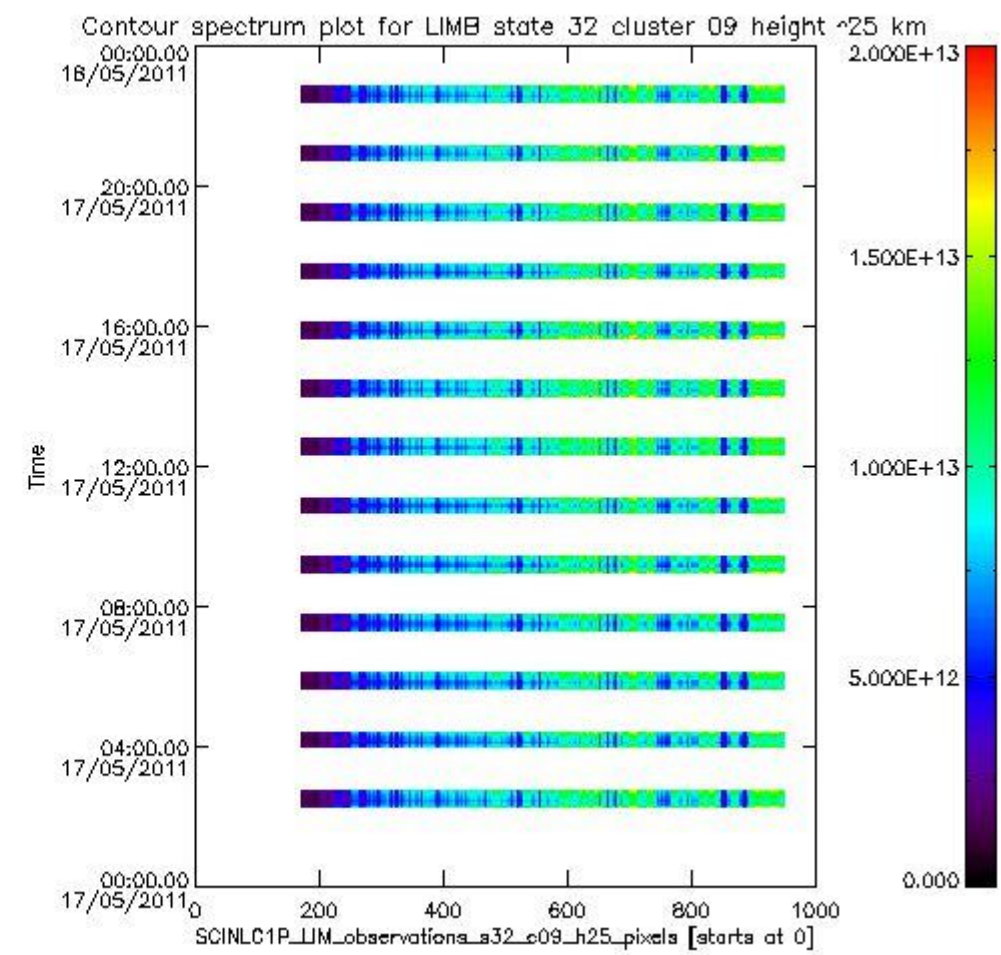
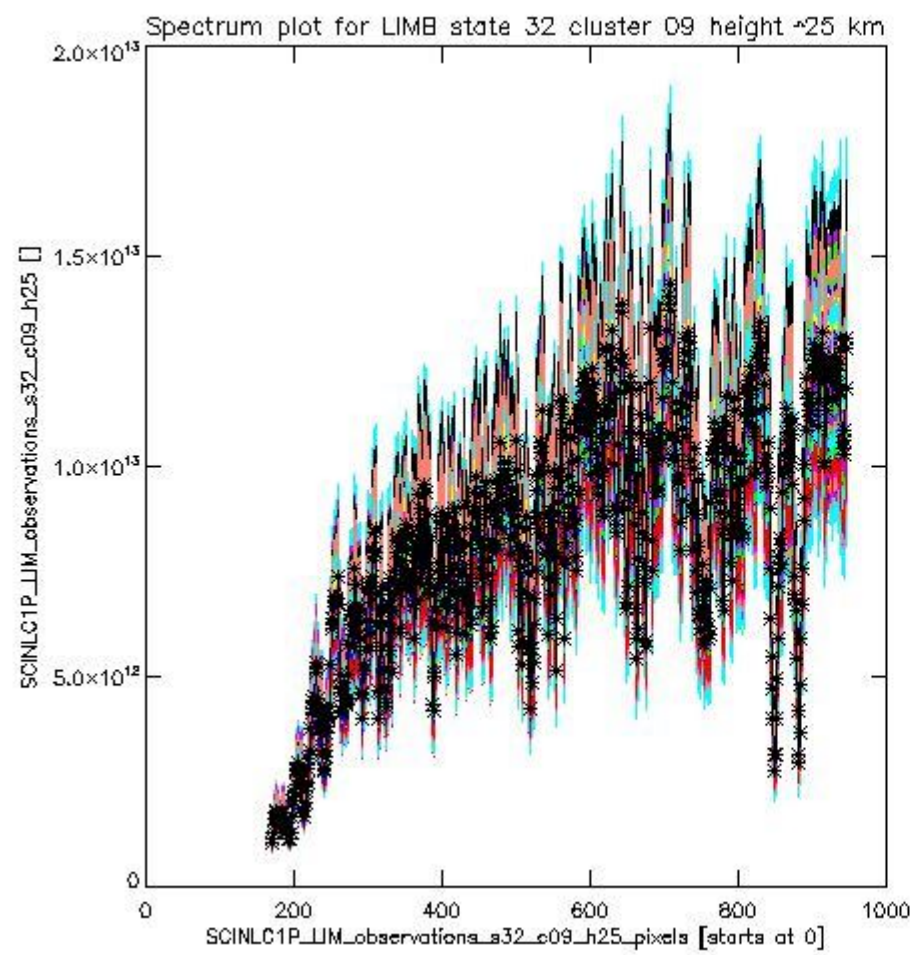
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_12.PNG



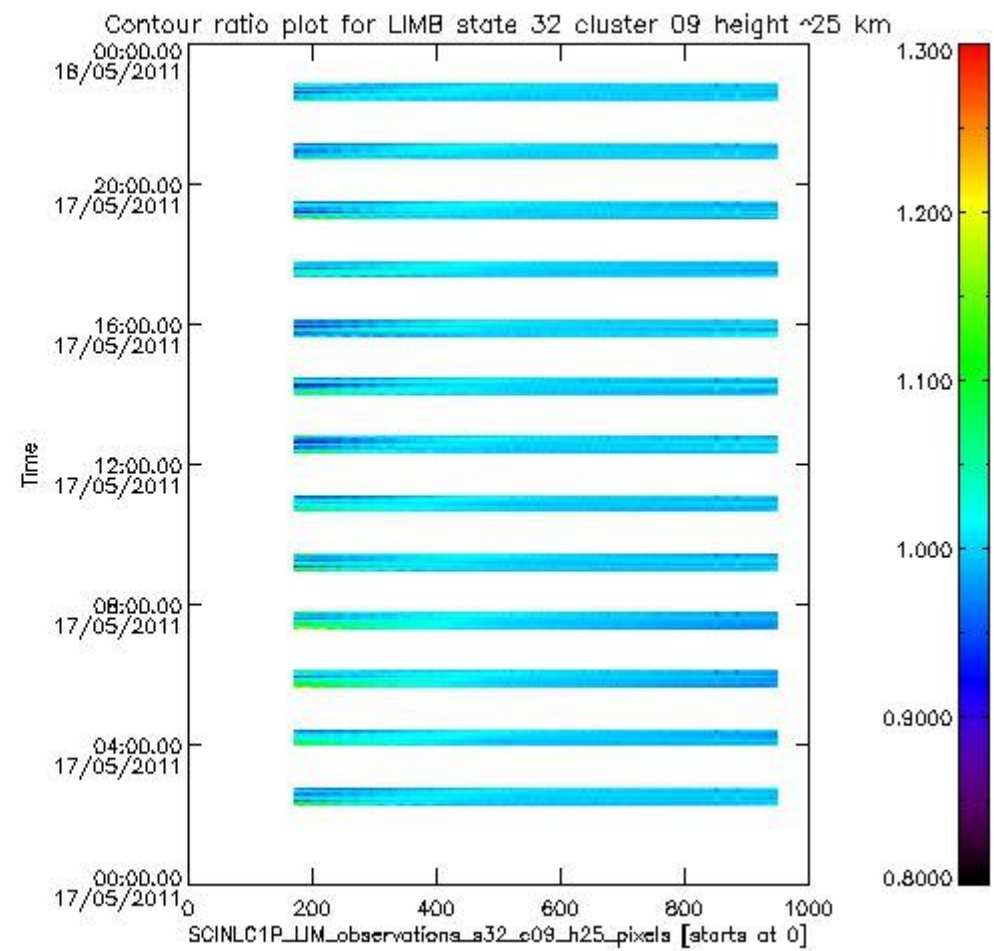
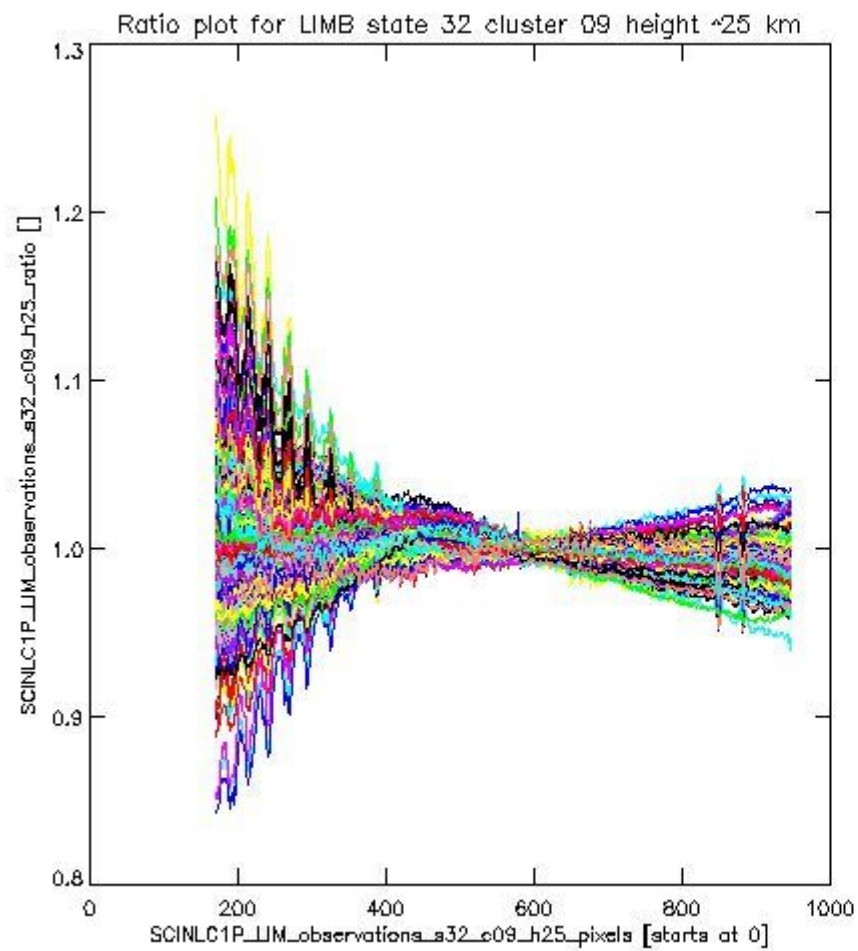
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_13.PNG

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	17MAY2011 02:16:15.708
Start time of last sample	17MAY2011 22:47:39.089
Reference period start time	17APR2011 02:18:56.102
Reference period stop time	16MAY2011 18:22:50.665
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



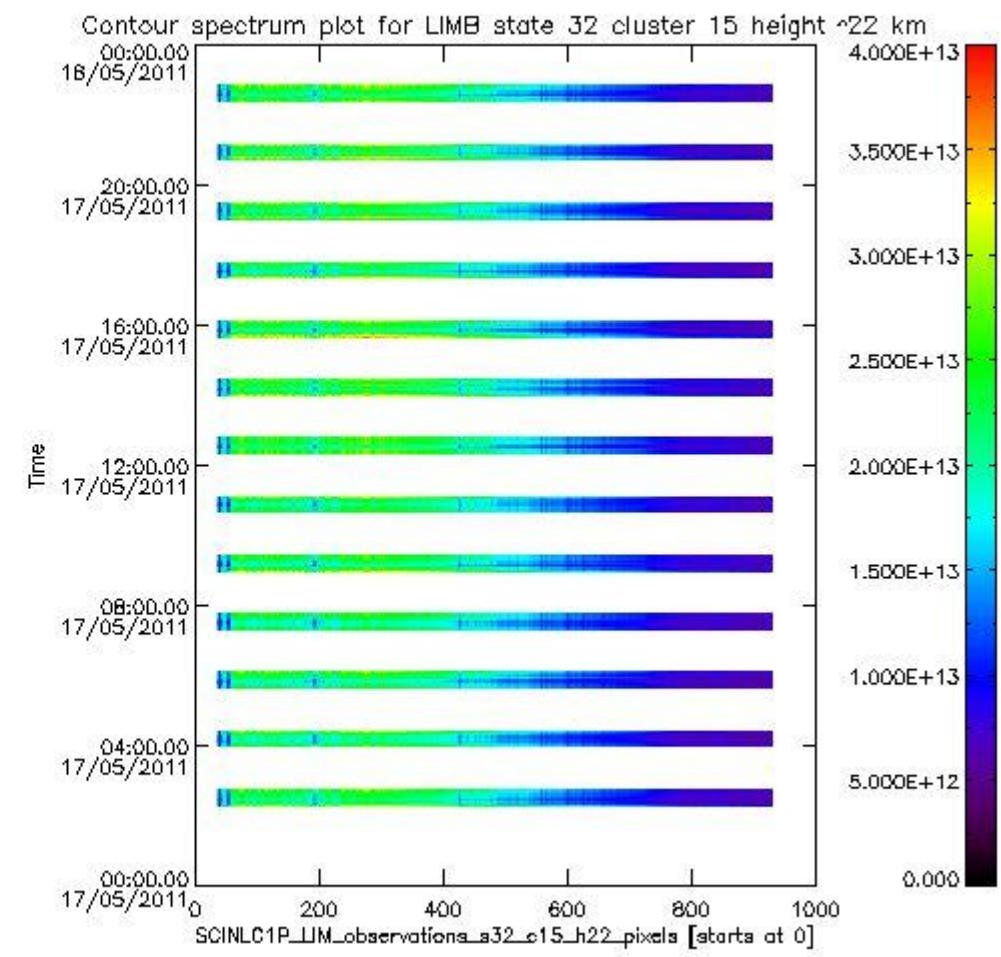
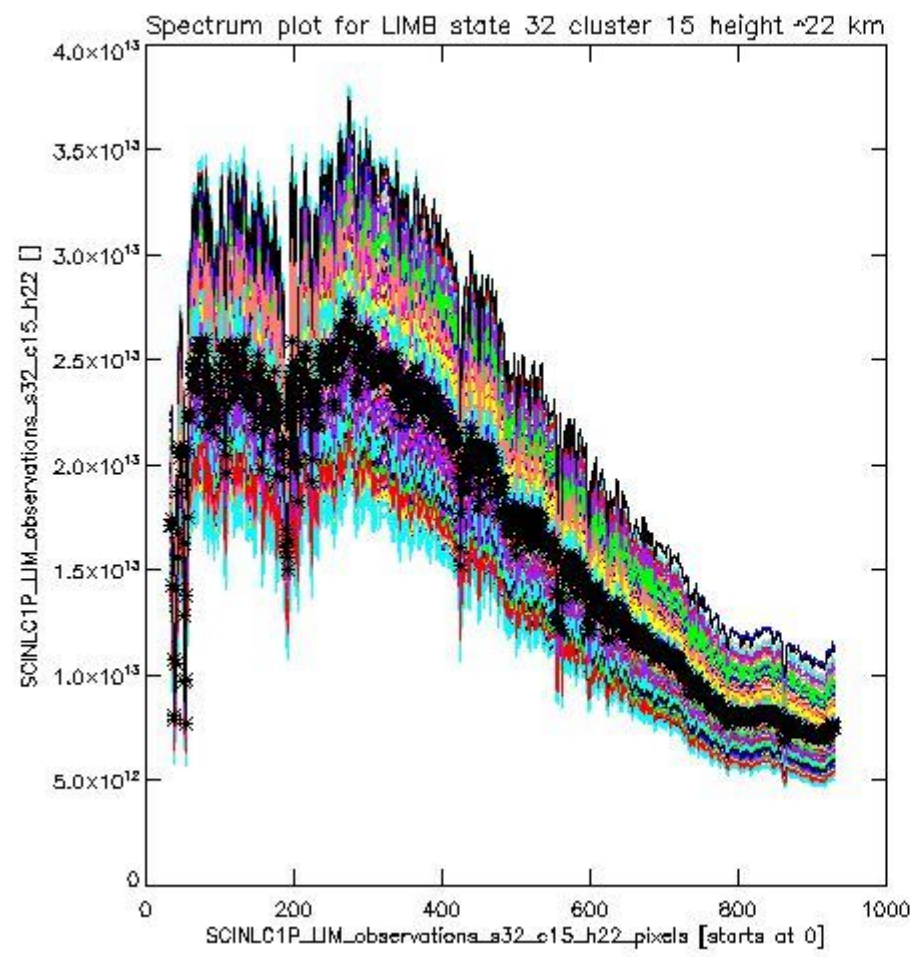
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_14.PNG



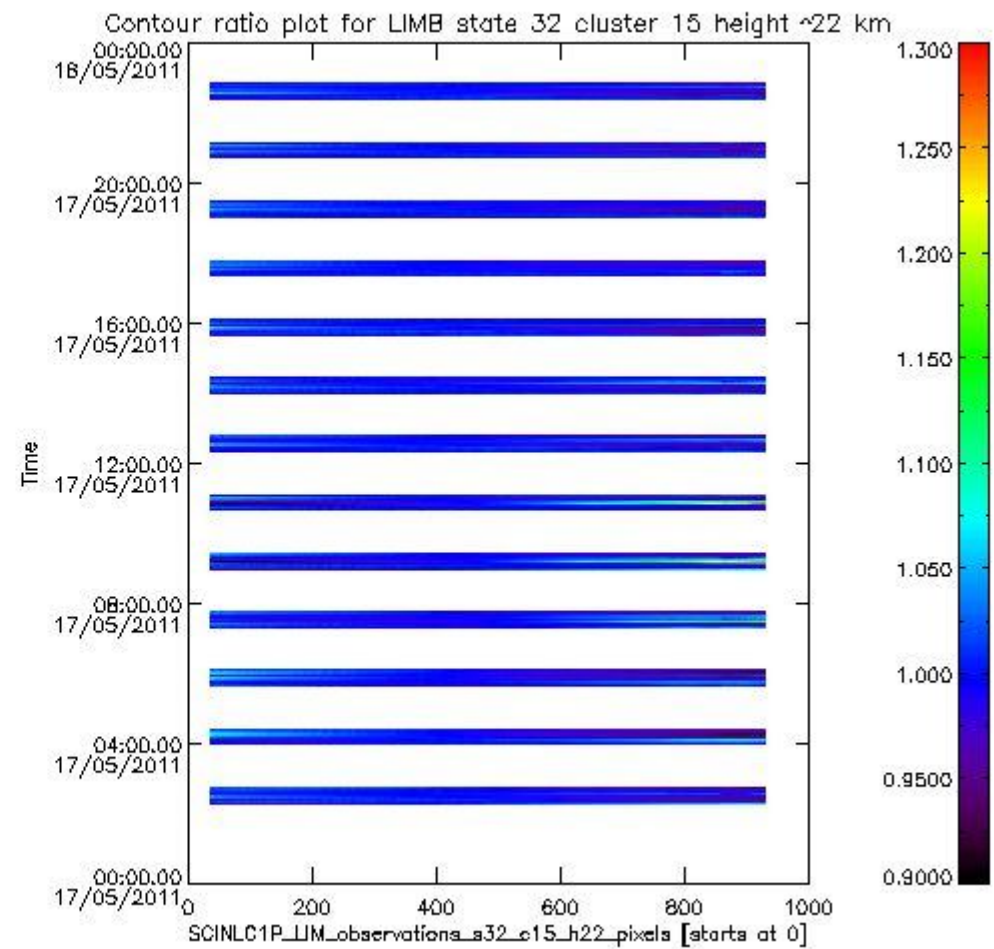
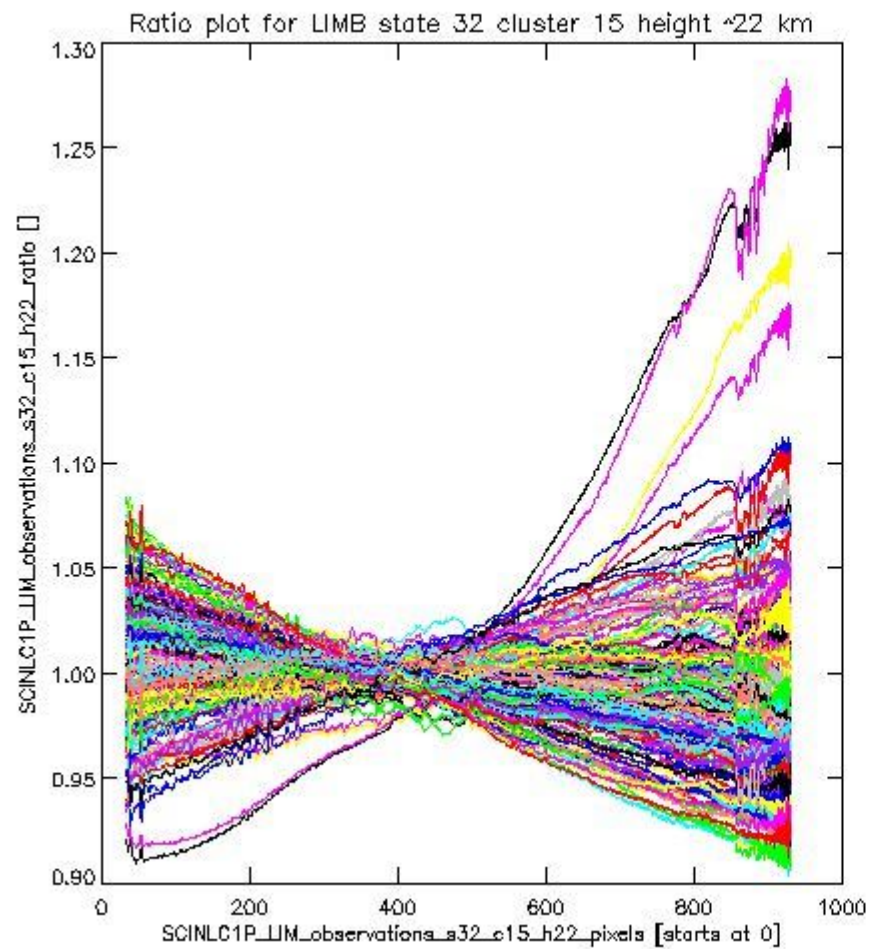
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_15.PNG

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	17MAY2011 02:16:15.708
Start time of last sample	17MAY2011 22:47:39.089
Reference period start time	17APR2011 02:18:56.102
Reference period stop time	16MAY2011 18:22:50.665
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



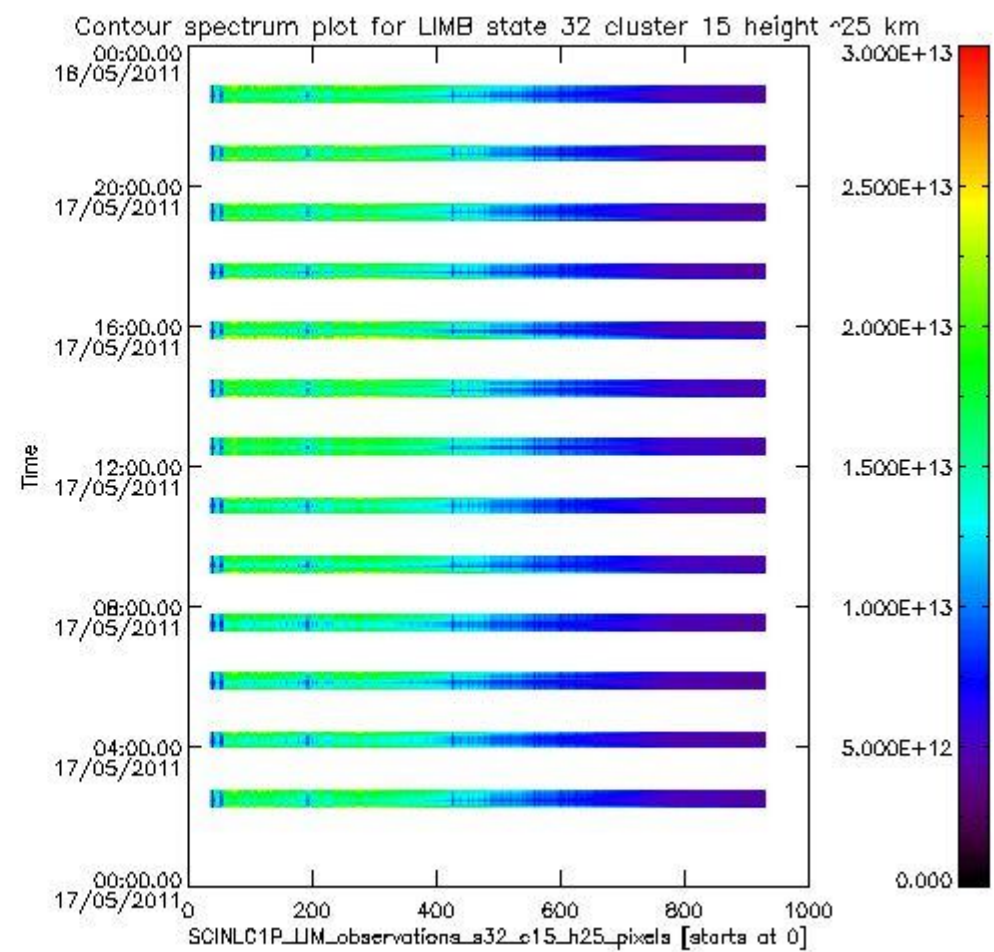
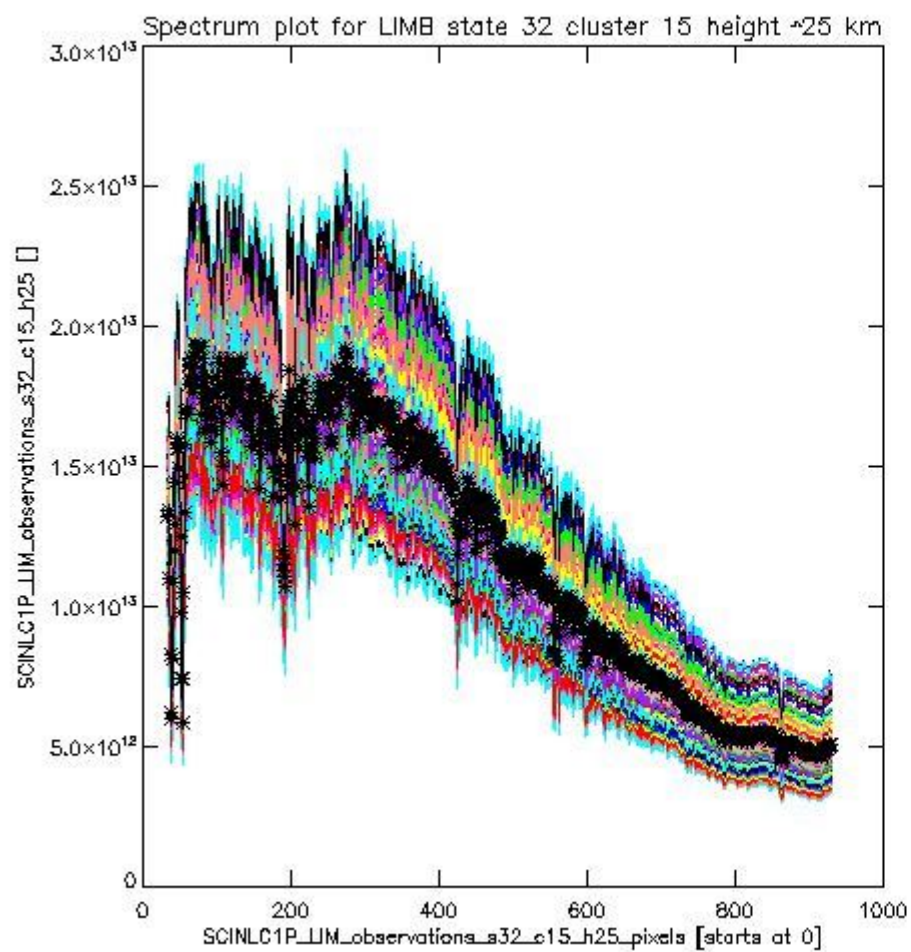
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110517_16.PNG

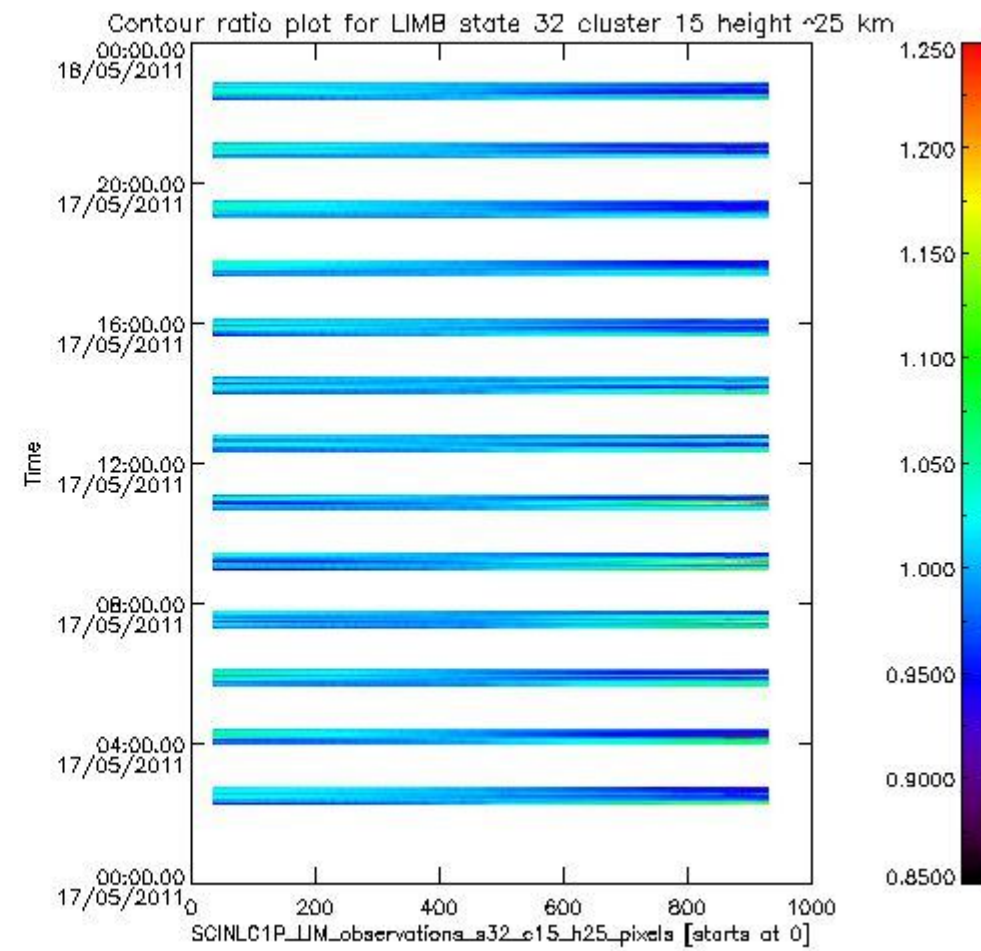
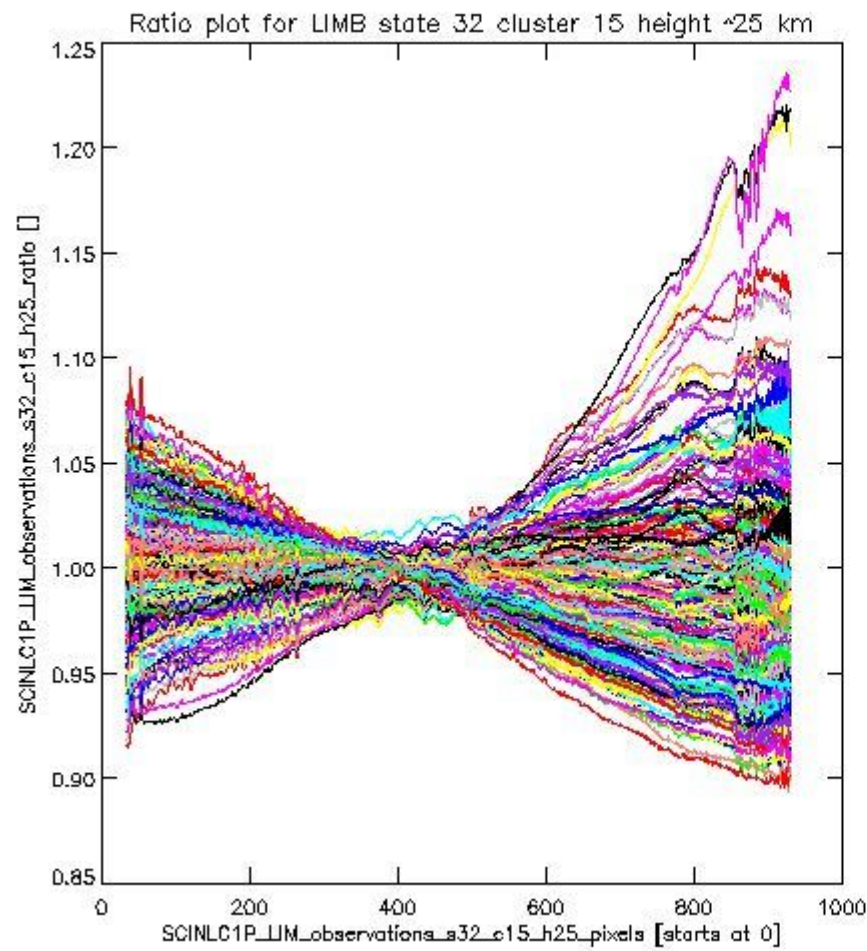


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110517_17.PNG

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	17MAY2011 02:16:15.708
Start time of last sample	17MAY2011 22:47:39.089
Reference period start time	17APR2011 02:18:56.102
Reference period stop time	16MAY2011 18:22:50.665
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

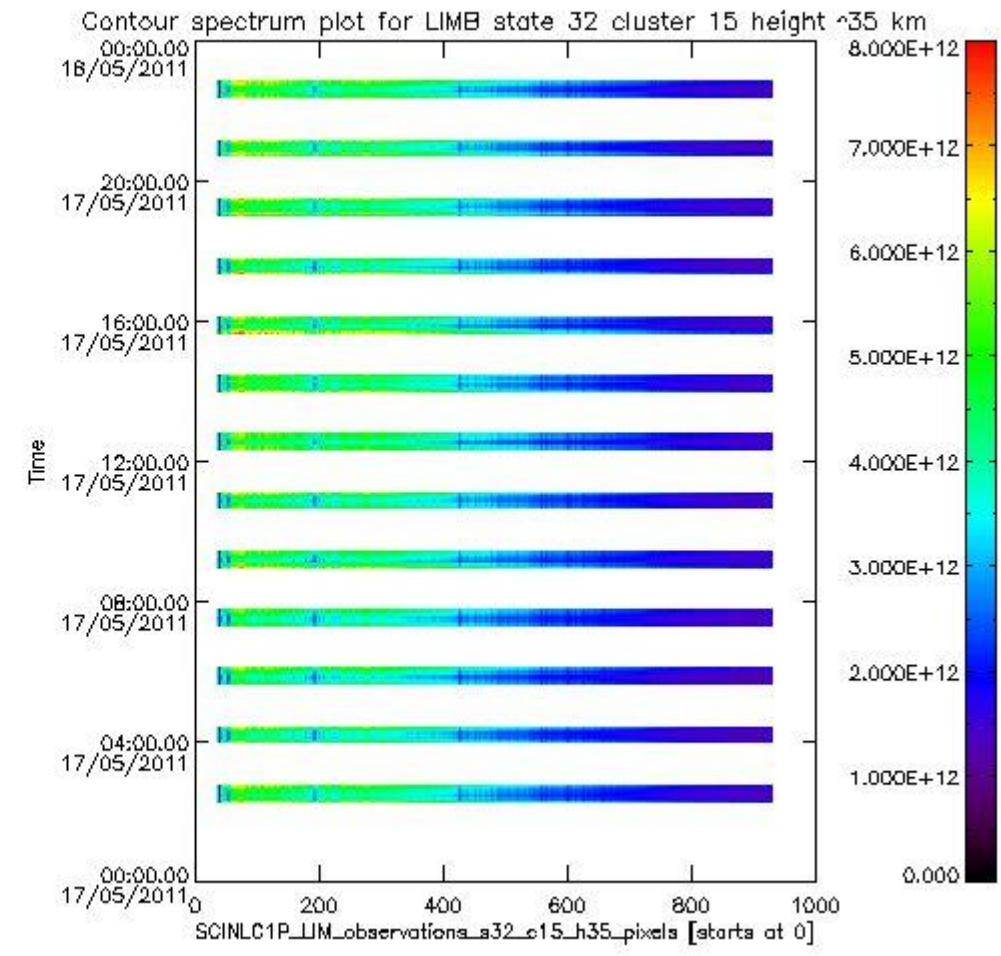
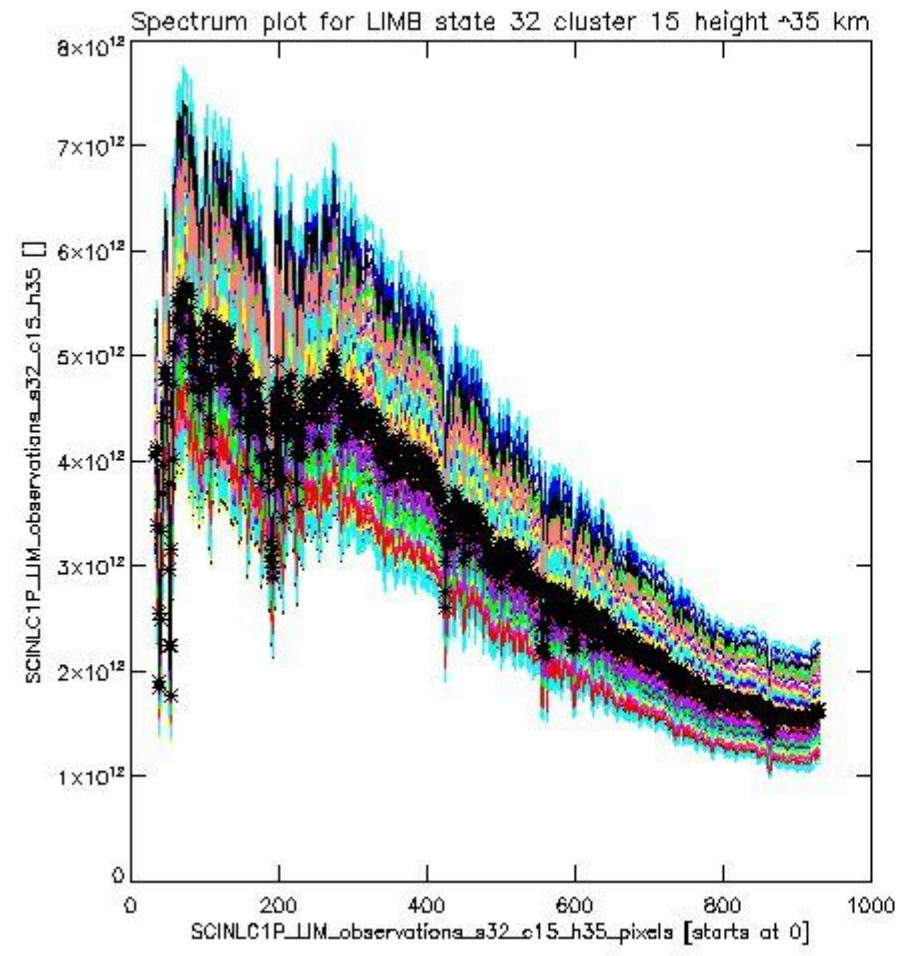




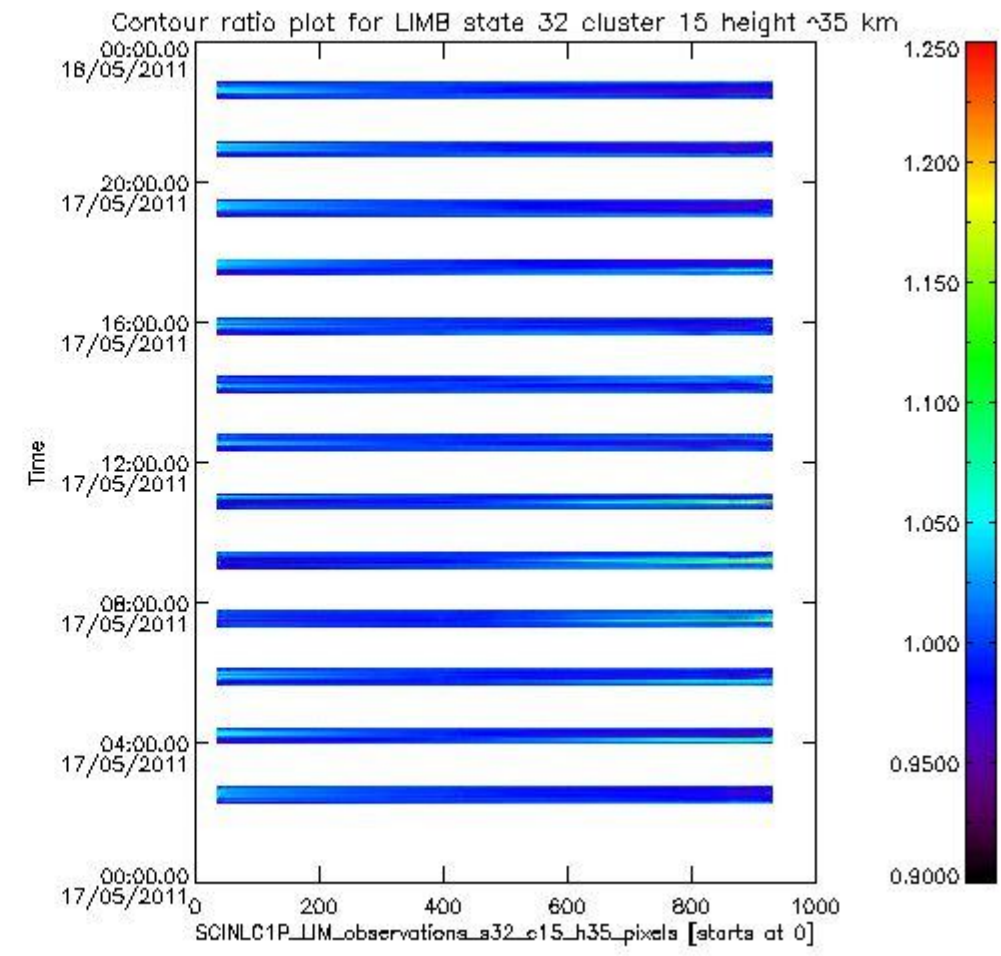
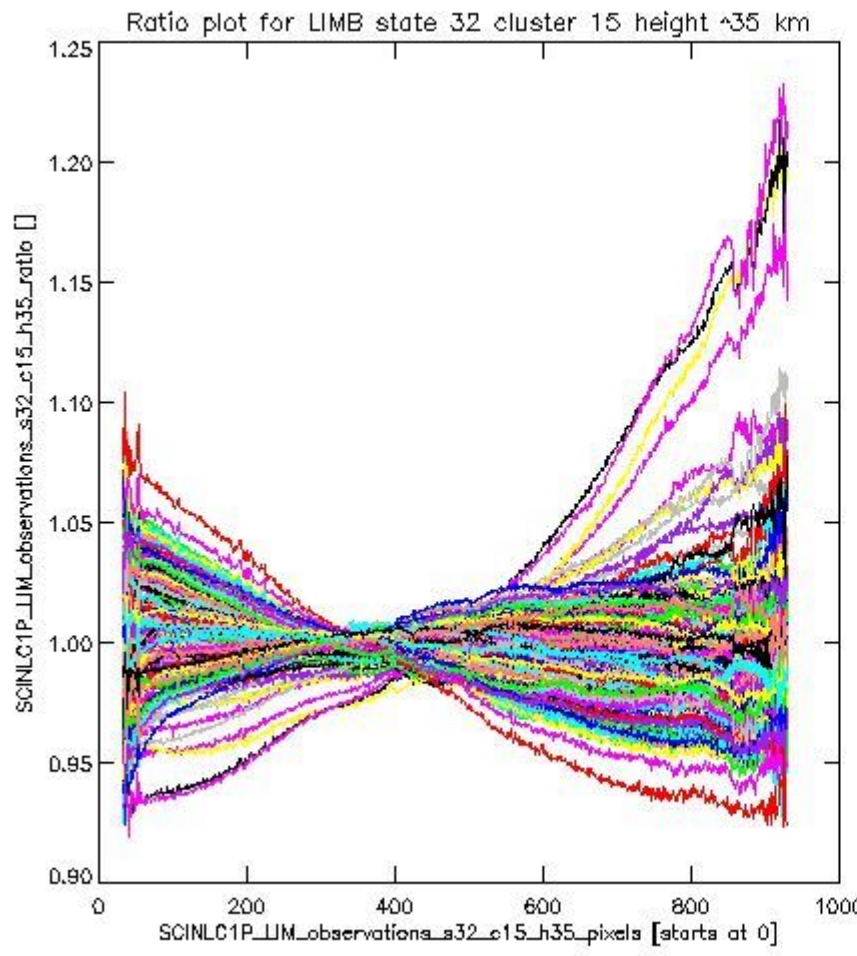
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110517_19.PNG

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	17MAY2011 02:16:15.708
Start time of last sample	17MAY2011 22:47:39.089
Reference period start time	17APR2011 02:18:56.102
Reference period stop time	16MAY2011 18:22:50.665
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_20110517_20.PNG



sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110517_21.PNG

