

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	27MAY2011 06:55:40
Data source version	SCIA/7.04-U
Processing scope for products	14MAY2011 00:00:00 to 15MAY2011 00:00:00
Start time of first product within scope	13MAY2011 22:48:00
Stop time of last product within scope	15MAY2011 01:01:33
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	14MAY2011 01:00:16.436	14MAY2011 22:53:28.669
1	NADIR	07	09	N/A	14MAY2011 01:00:16.436	14MAY2011 22:53:28.669
2	NADIR	07	15	N/A	14MAY2011 01:00:16.436	14MAY2011 22:53:28.669
3	NADIR	07	24	N/A	14MAY2011 01:00:16.436	14MAY2011 22:53:28.669
4	NADIR	07	55	N/A	14MAY2011 01:00:16.436	14MAY2011 22:53:28.669
5	LIMB	32	09	~19 km	14MAY2011 00:47:05.799	14MAY2011 22:56:39.969
6	LIMB	32	09	~22 km	14MAY2011 00:47:05.799	14MAY2011 22:56:39.969
7	LIMB	32	09	~25 km	14MAY2011 00:47:05.799	14MAY2011 22:56:39.969
8	LIMB	32	15	~22 km	14MAY2011 00:47:05.799	14MAY2011 22:56:39.969
9	LIMB	32	15	~25 km	14MAY2011 00:47:05.799	14MAY2011 22:56:39.969
10	LIMB	32	15	~35 km	14MAY2011 00:47:05.799	14MAY2011 22:56:39.969

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	#cmlprk	#incmpl_rk	Decont
0	SCI_NLC_1CUDPA20110513_224211_000060143102_00260_48119_1379.N1	13MAY2011 22:48:00	13MAY2011 23:58:30	0	32	31	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110514_002229_000060053102_00261_48120_1389.N1	14MAY2011 00:28:13	14MAY2011 01:38:38	0	32	31	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110514_020238_000060143102_00262_48121_1397.N1	14MAY2011 02:08:27	14MAY2011 03:18:46	0	32	31	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110514_034256_000060053102_00263_48122_1398.N1	14MAY2011 03:48:41	14MAY2011 04:58:54	0	32	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110514_052306_000060143102_00264_48123_1392.N1	14MAY2011 05:28:55	14MAY2011 06:39:02	0	32	31	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110514_070324_000060053102_00265_48124_1390.N1	14MAY2011 07:09:08	14MAY2011 08:19:10	0	31	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110514_084333_000060143102_00266_48125_1408.N1	14MAY2011 08:49:22	14MAY2011 09:59:17	0	31	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110514_102351_000060053102_00267_48126_1400.N1	14MAY2011 10:29:36	14MAY2011 11:39:25	0	31	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110514_120400_000060143102_00268_48127_1405.N1	14MAY2011 12:09:49	14MAY2011 13:20:41	0	32	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110514_134418_000060053102_00269_48128_1401.N1	14MAY2011 13:50:03	14MAY2011 15:00:49	0	32	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110514_152427_000060143102_00270_48129_1404.N1	14MAY2011 15:30:17	14MAY2011 16:40:56	0	32	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110514_170446_000060053102_00271_48130_1417.N1	14MAY2011 17:10:31	14MAY2011 18:36:21	0	31	30	0	3	1	0	0	
12	SCI_NLC_1CUDPA20110514_184455_000060143102_00272_48131_1416.N1	14MAY2011 18:50:44	14MAY2011 20:01:12	0	32	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110514_202513_000060053102_00273_48132_1412.N1	14MAY2011 20:30:58	14MAY2011 21:41:19	0	32	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110514_220522_000060143102_00274_48133_1422.N1	14MAY2011 22:11:12	14MAY2011 23:21:26	0	32	31	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110514_234540_000060053102_00275_48134_1409.N1	14MAY2011 23:51:26	15MAY2011 01:01:33	0	32	31	0	0	1	0	0	

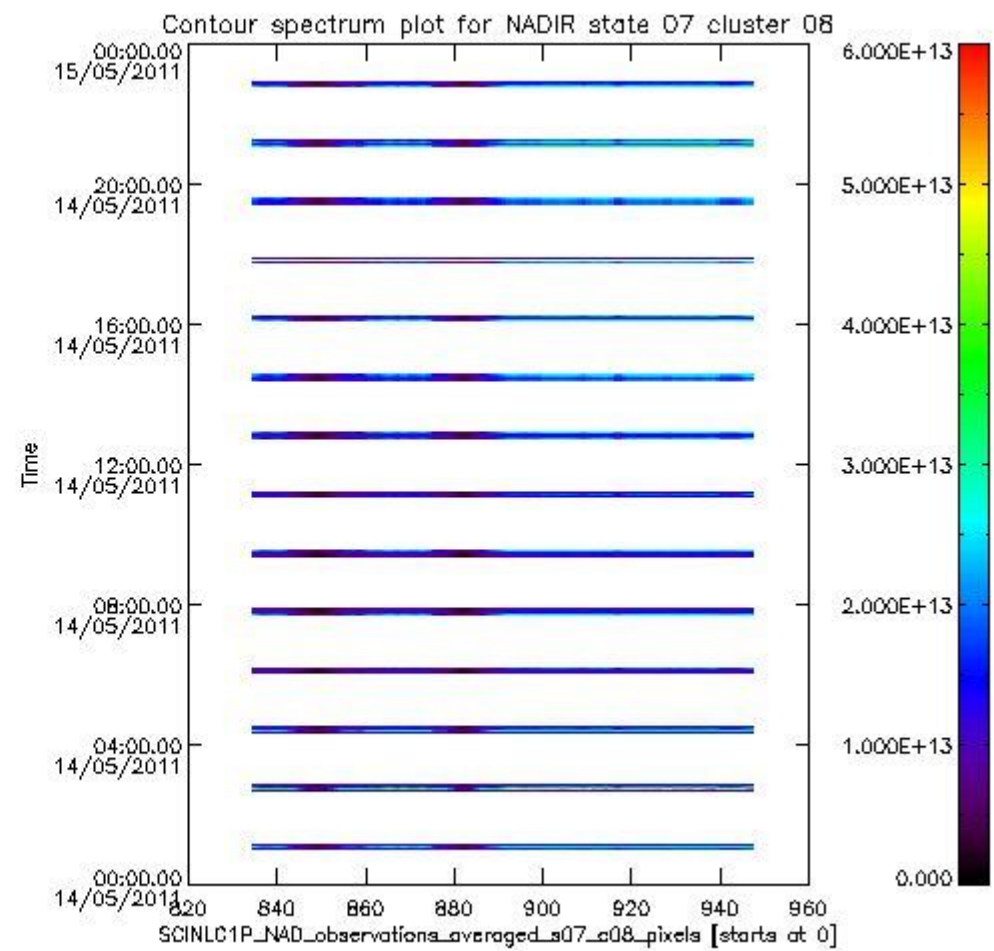
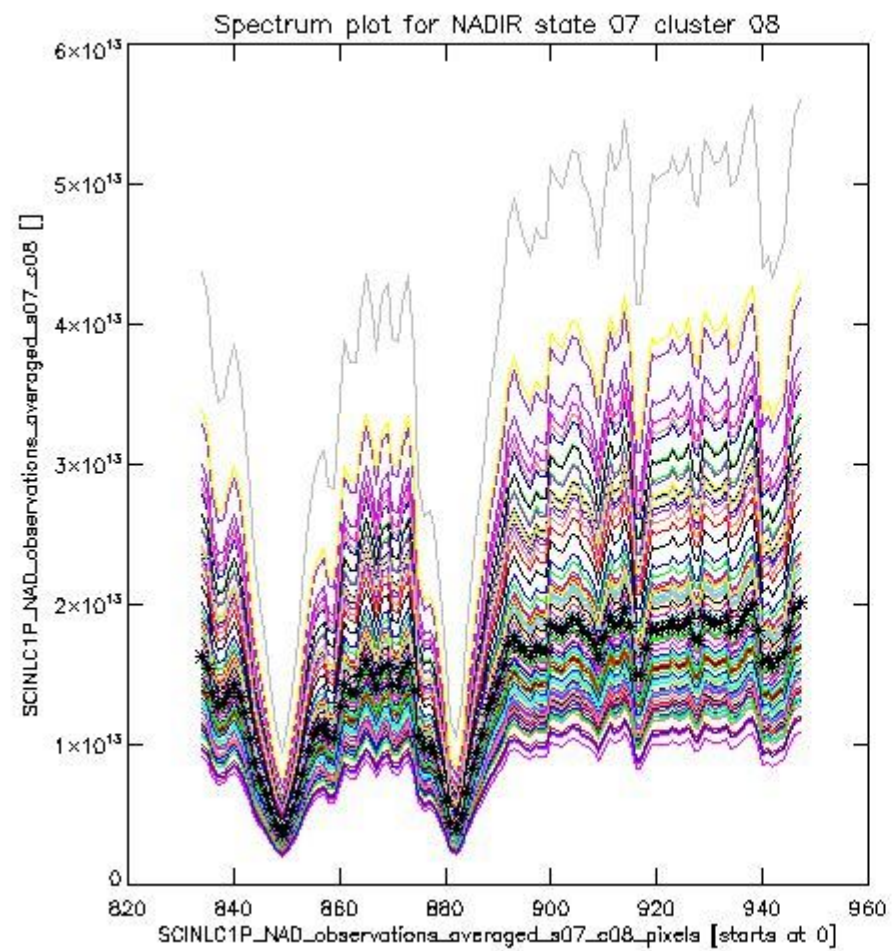
1.2 Source packet monitoring

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:

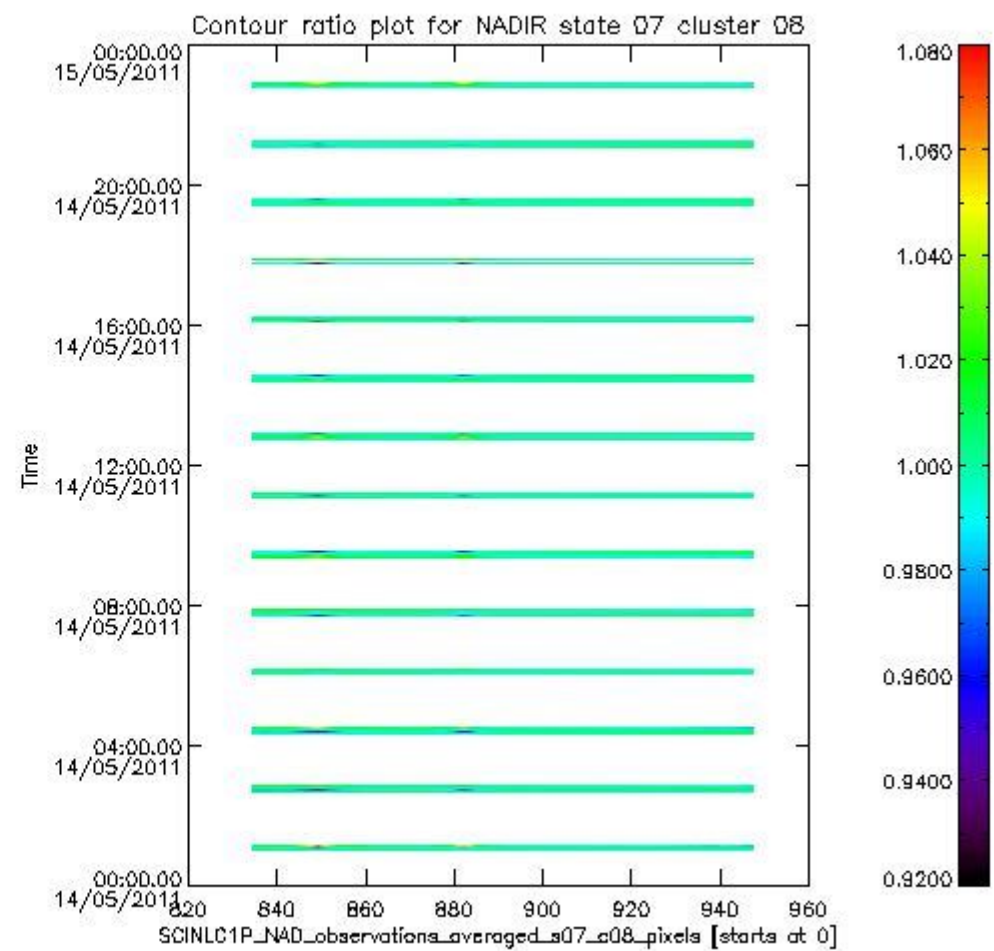
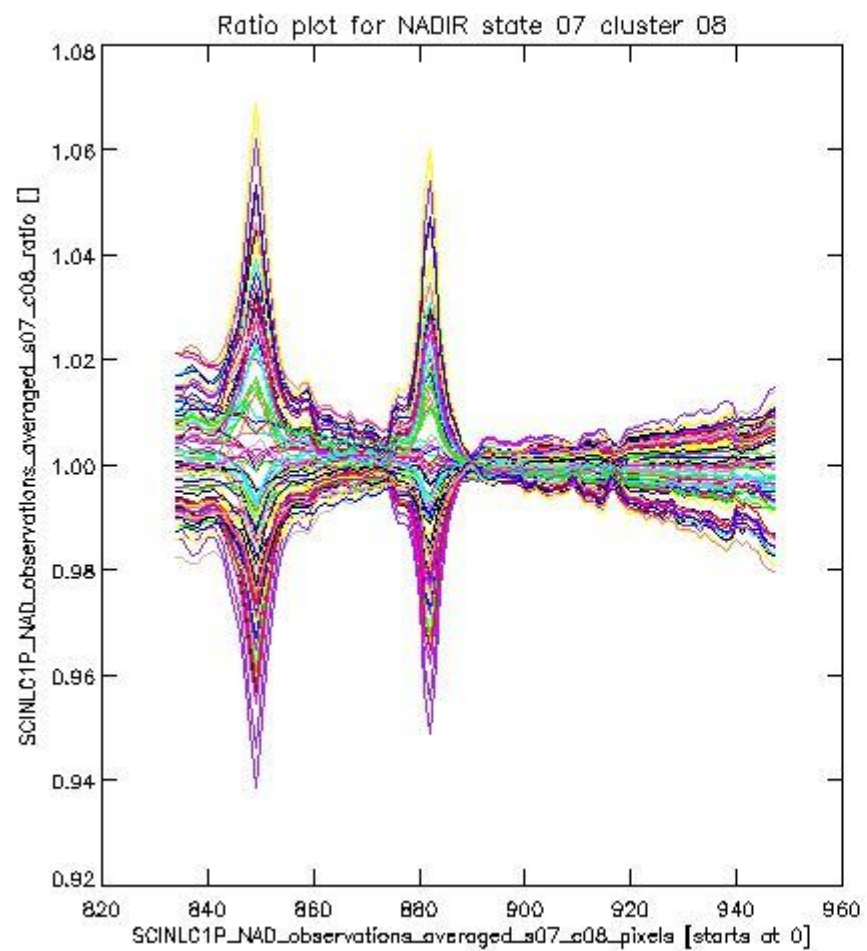
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	14MAY2011 01:00:16.436
Start time of last sample	14MAY2011 22:53:28.669
Reference period start time	14APR2011 01:02:07.709
Reference period stop time	13MAY2011 23:30:16.490
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



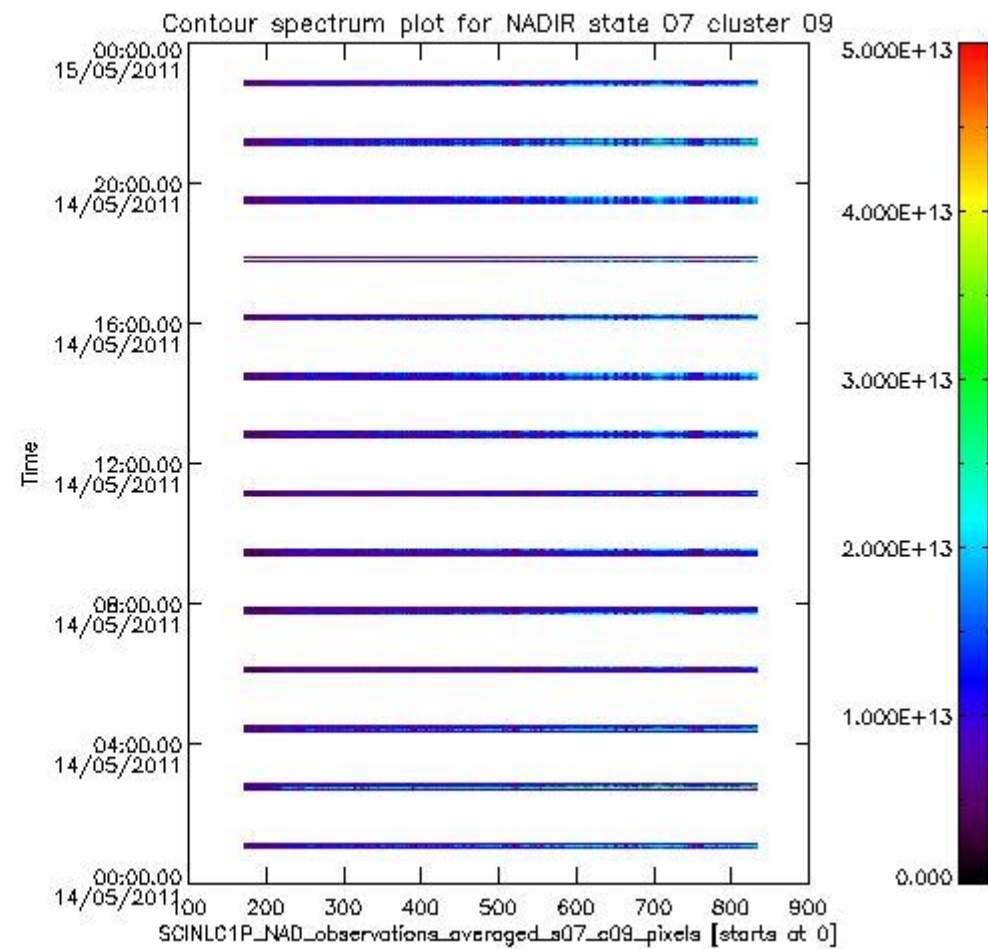
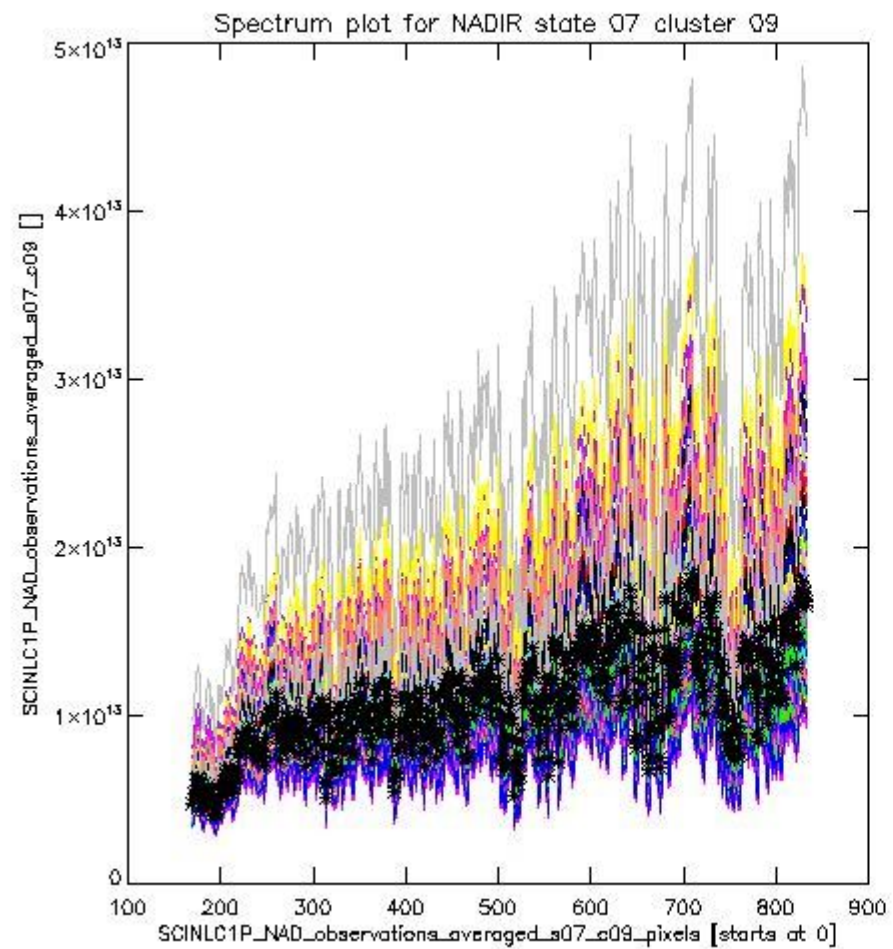
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_0.PNG



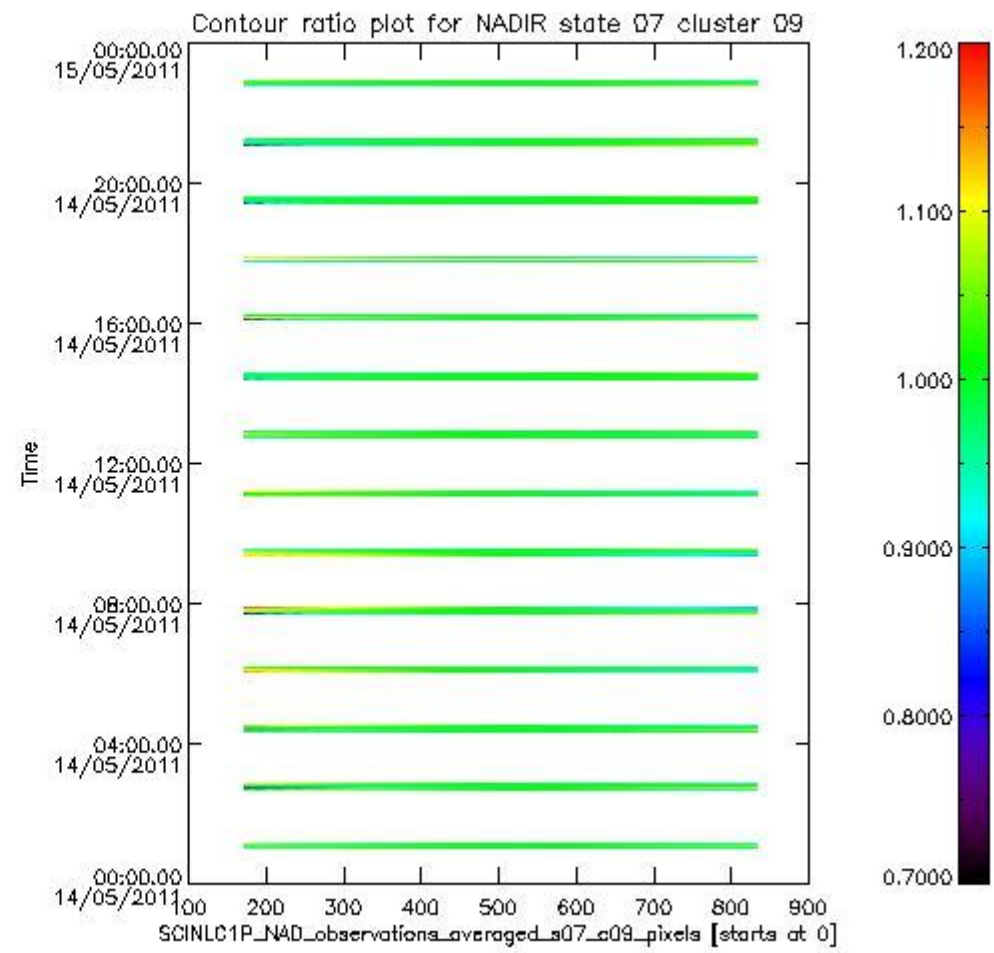
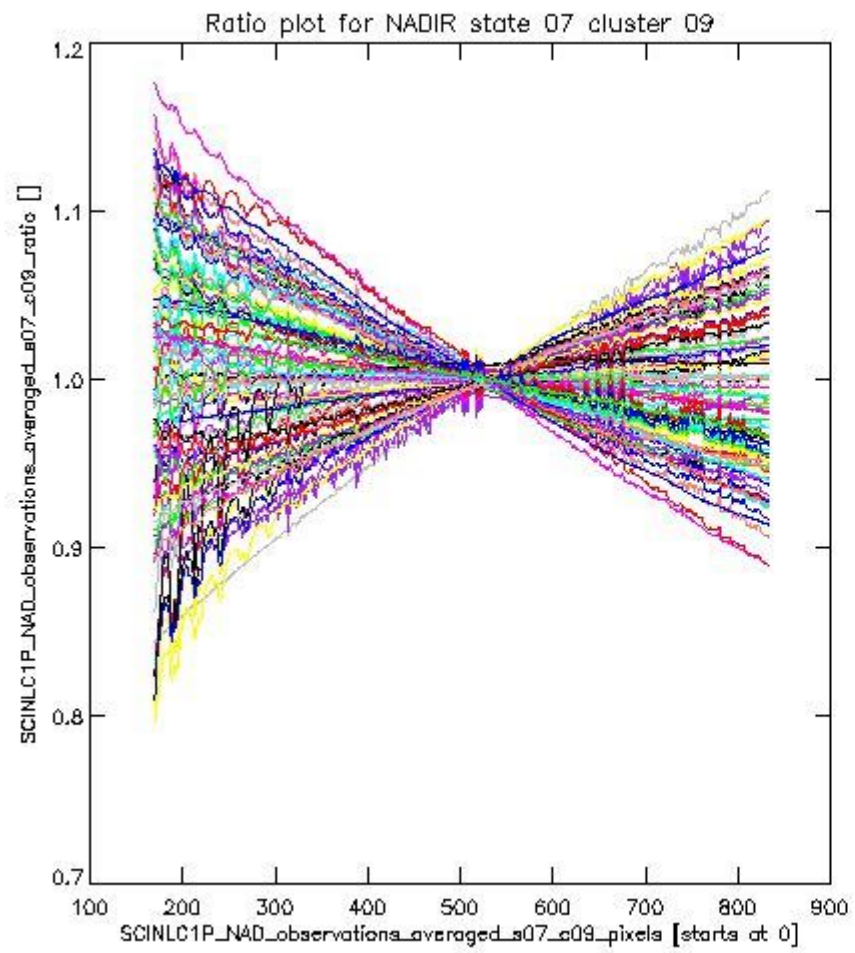
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_1.PNG

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	14MAY2011 01:00:16.436
Start time of last sample	14MAY2011 22:53:28.669
Reference period start time	14APR2011 01:02:07.709
Reference period stop time	13MAY2011 23:30:16.490
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



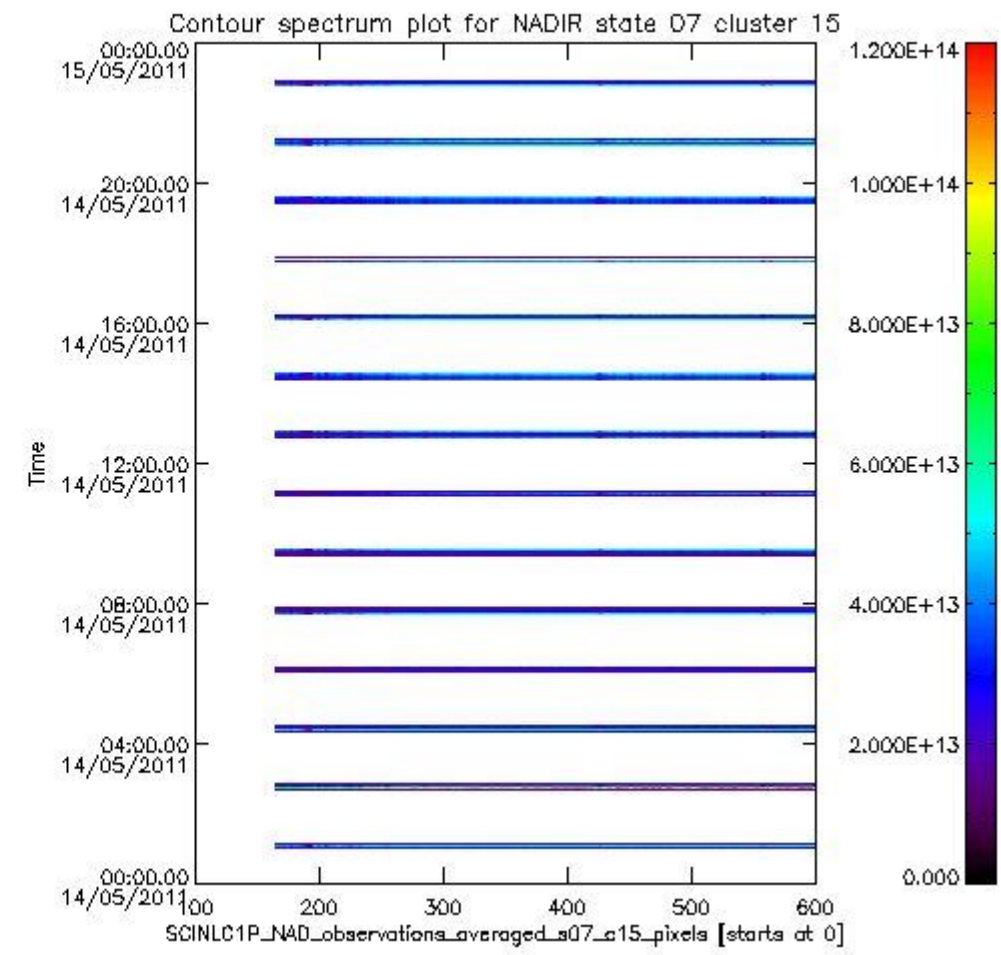
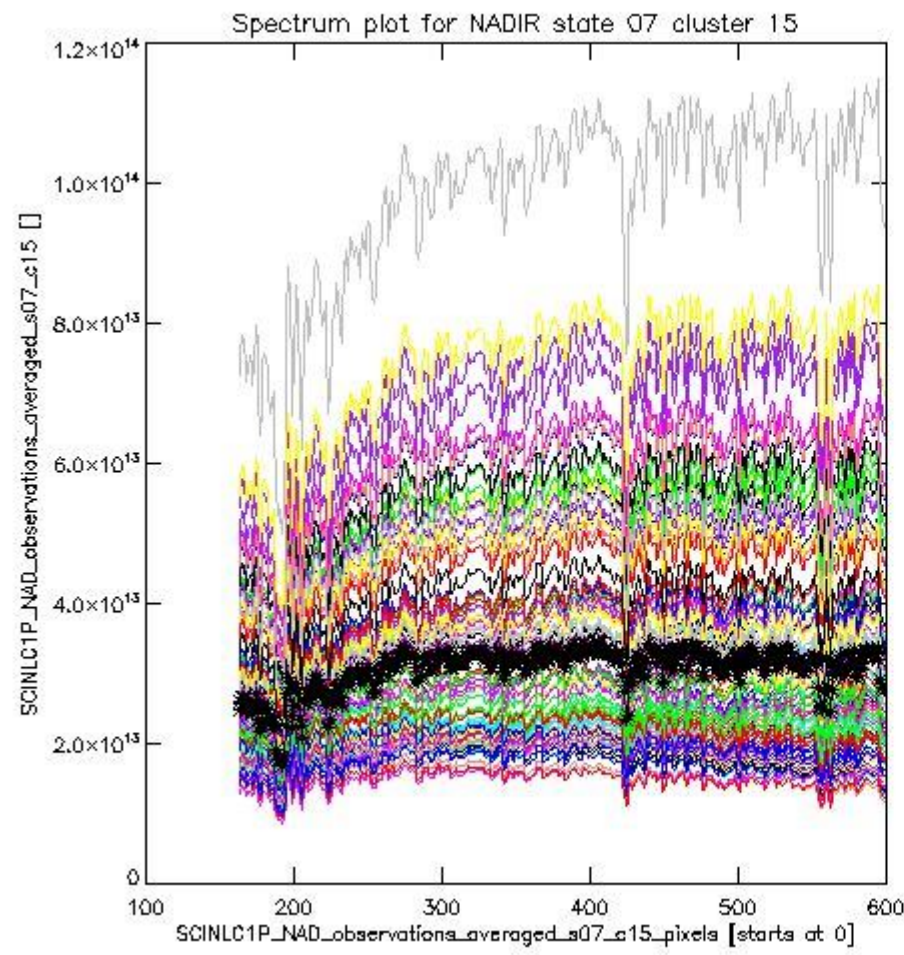
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_2.PNG



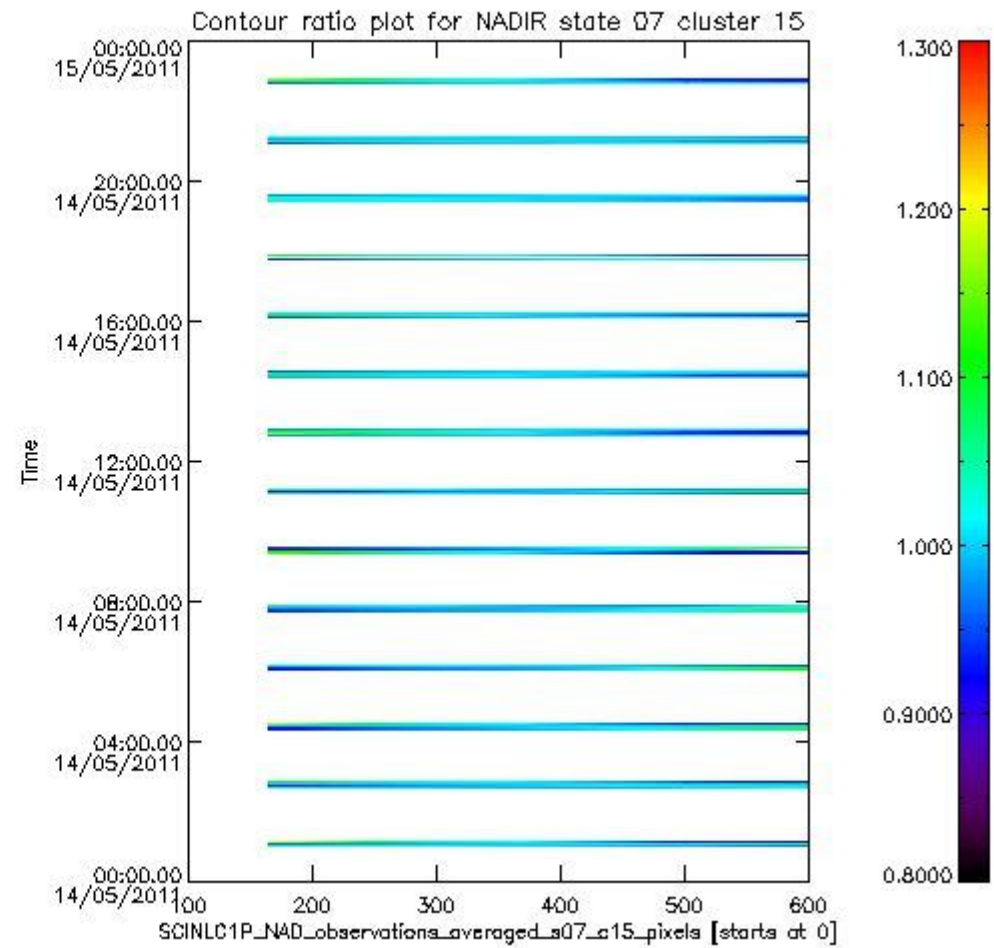
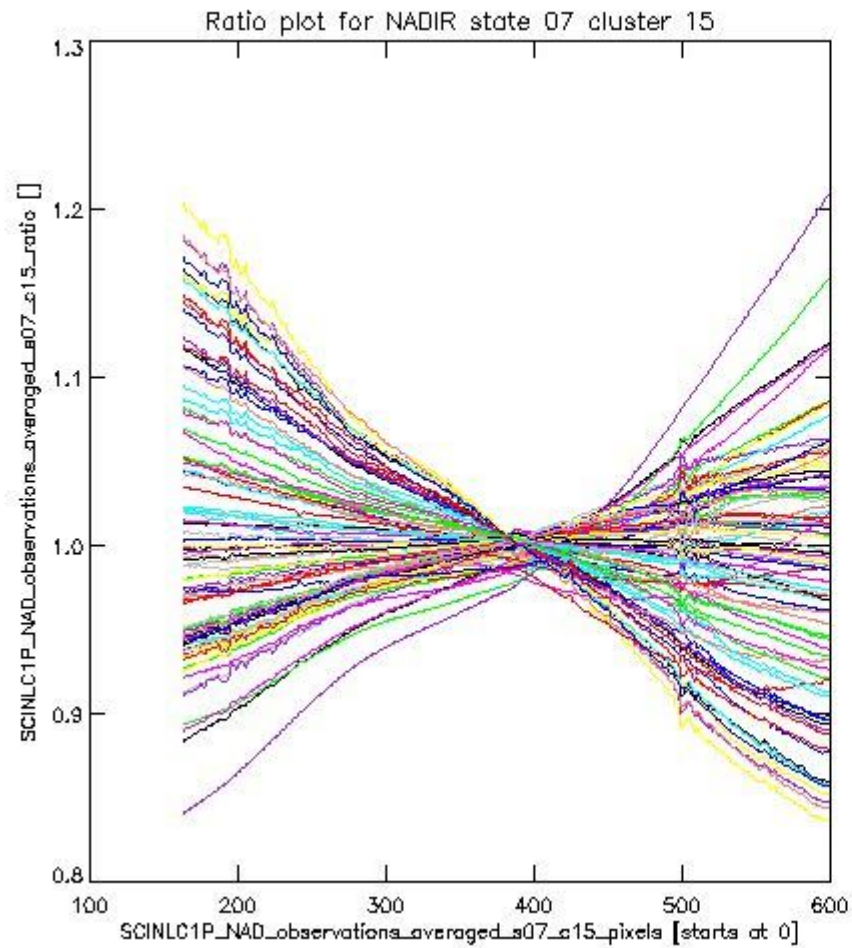
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_3.PNG

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	14MAY2011 01:00:16.436
Start time of last sample	14MAY2011 22:53:28.669
Reference period start time	14APR2011 01:02:07.709
Reference period stop time	13MAY2011 23:30:16.490
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



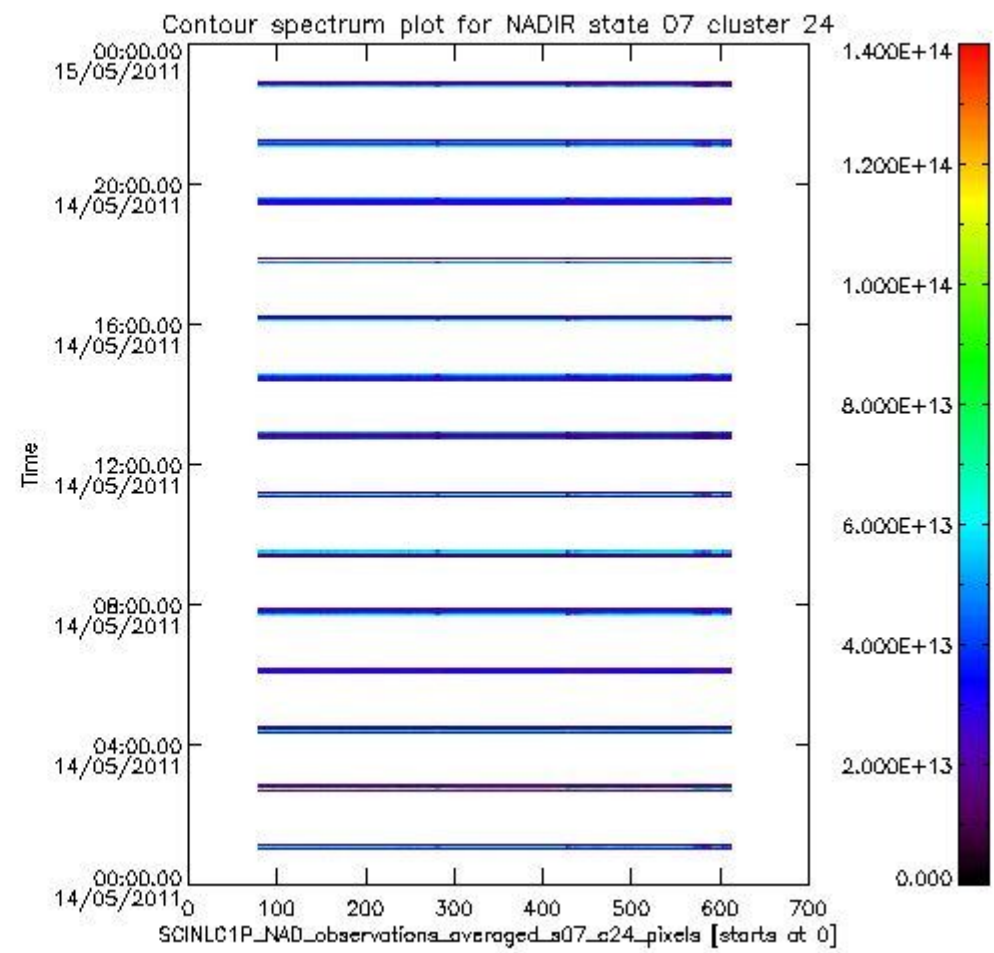
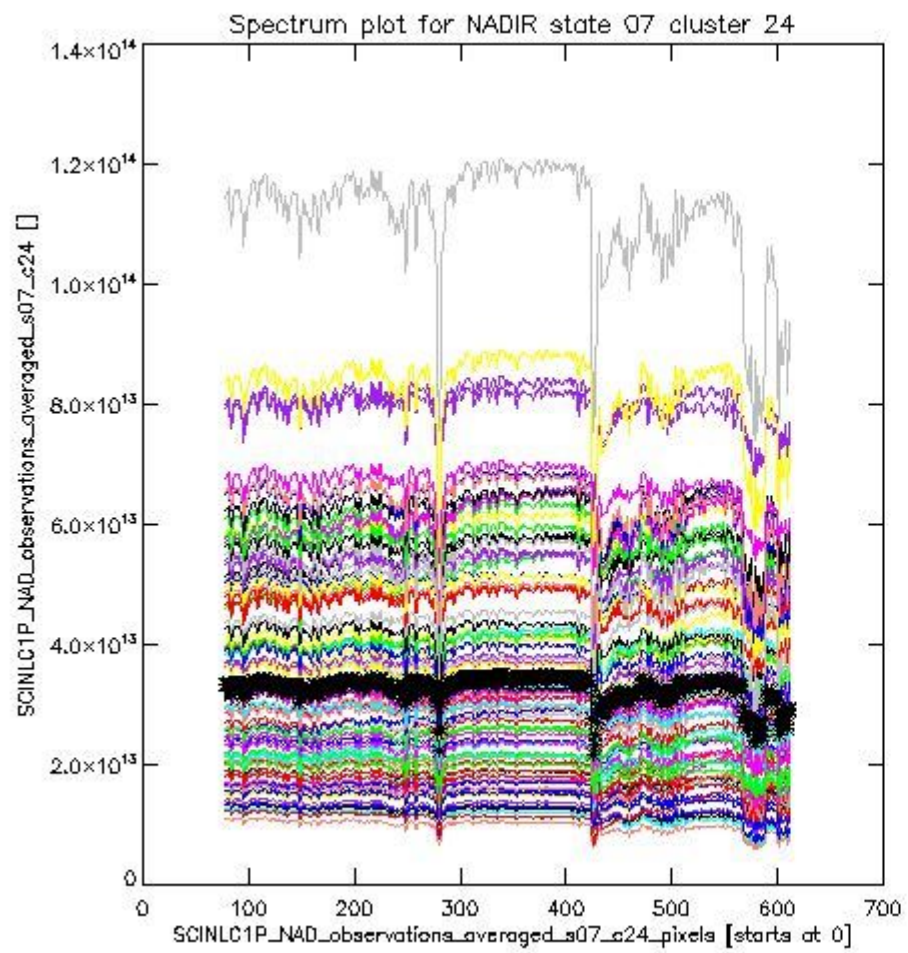
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_4.PNG



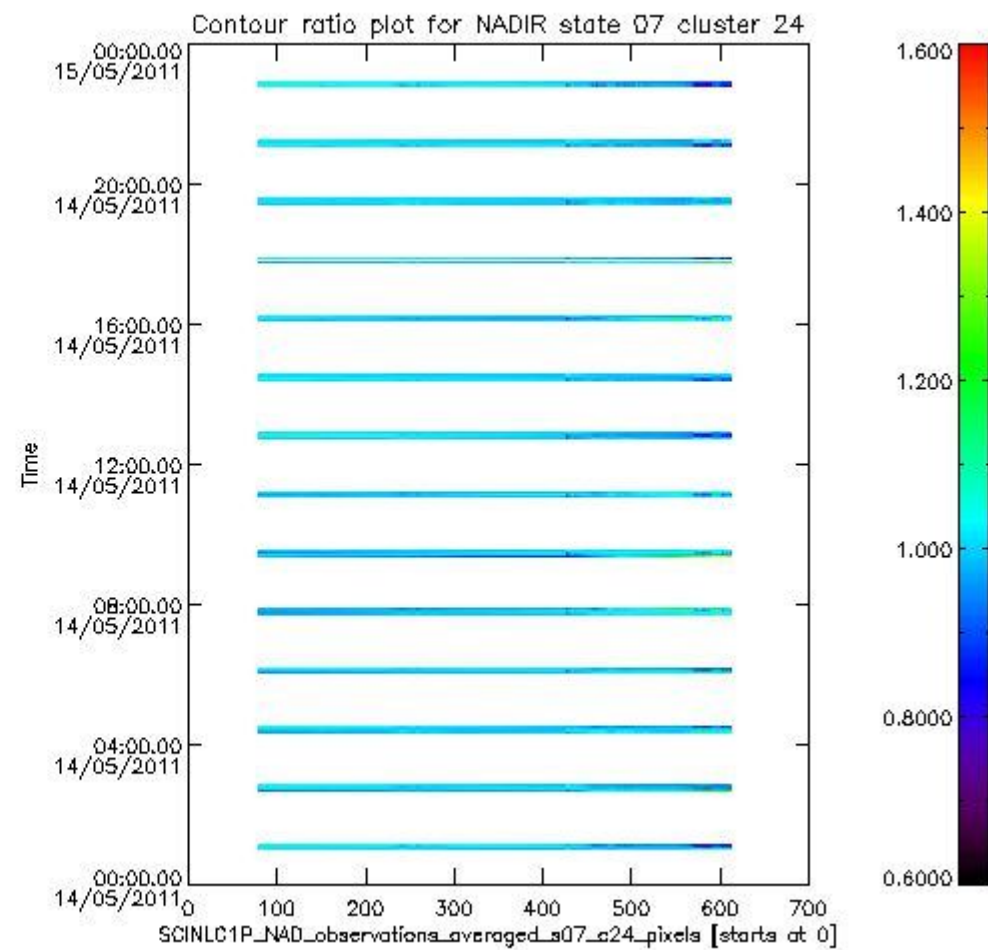
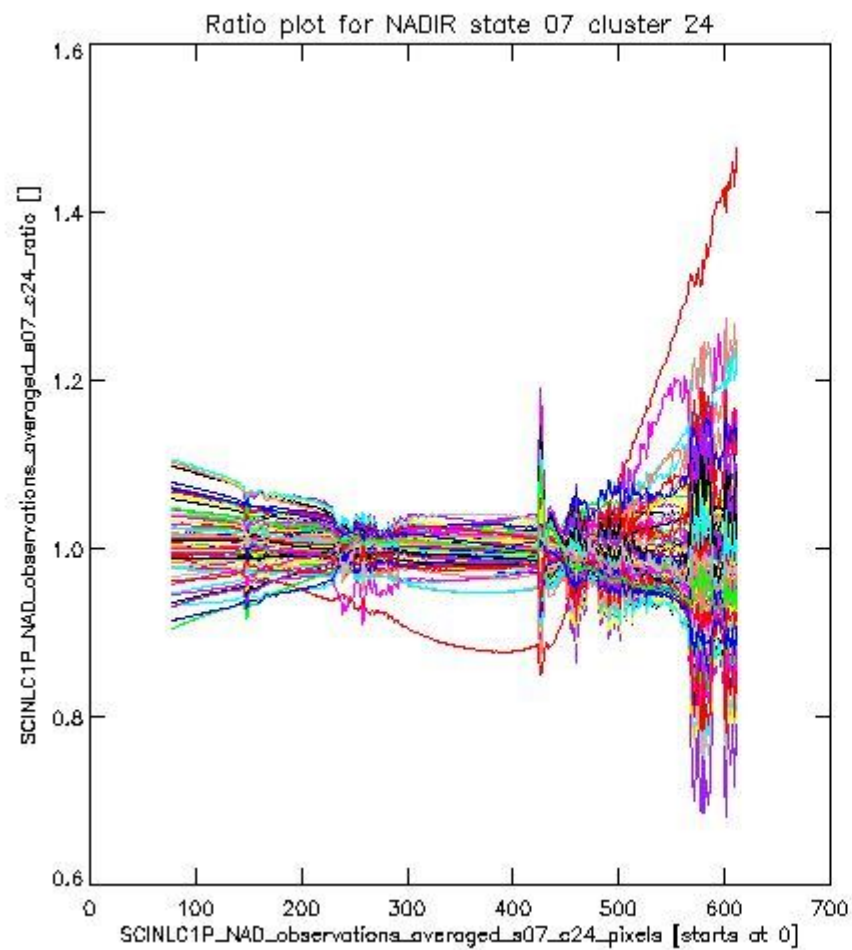
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110514_5.PNG

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	14MAY2011 01:00:16.436
Start time of last sample	14MAY2011 22:53:28.669
Reference period start time	14APR2011 01:02:07.709
Reference period stop time	13MAY2011 23:30:16.490
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



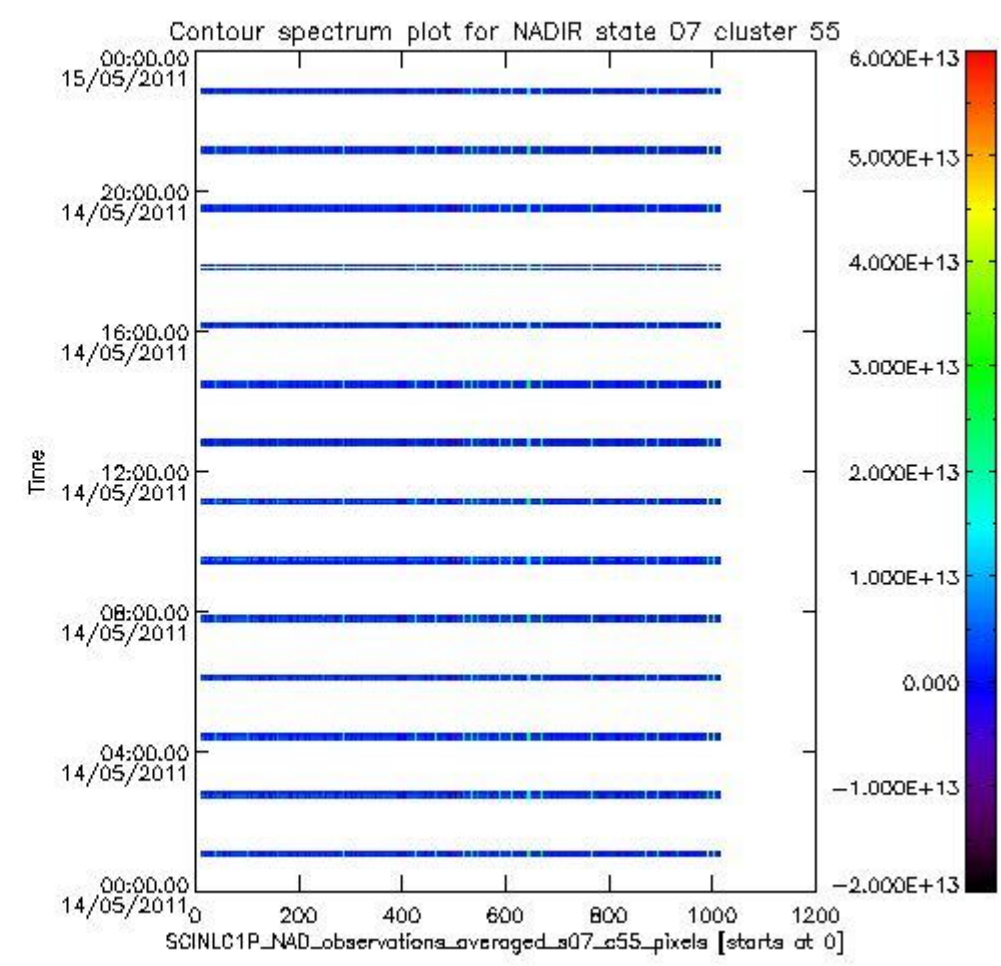
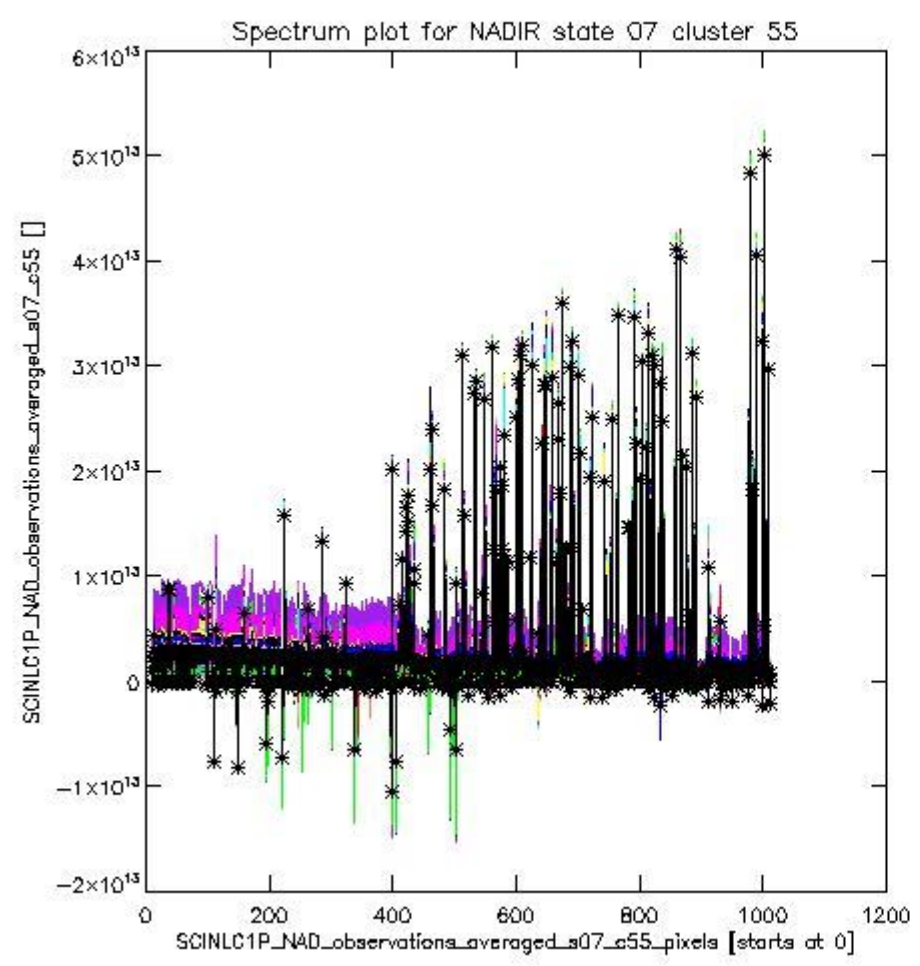
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_6.PNG



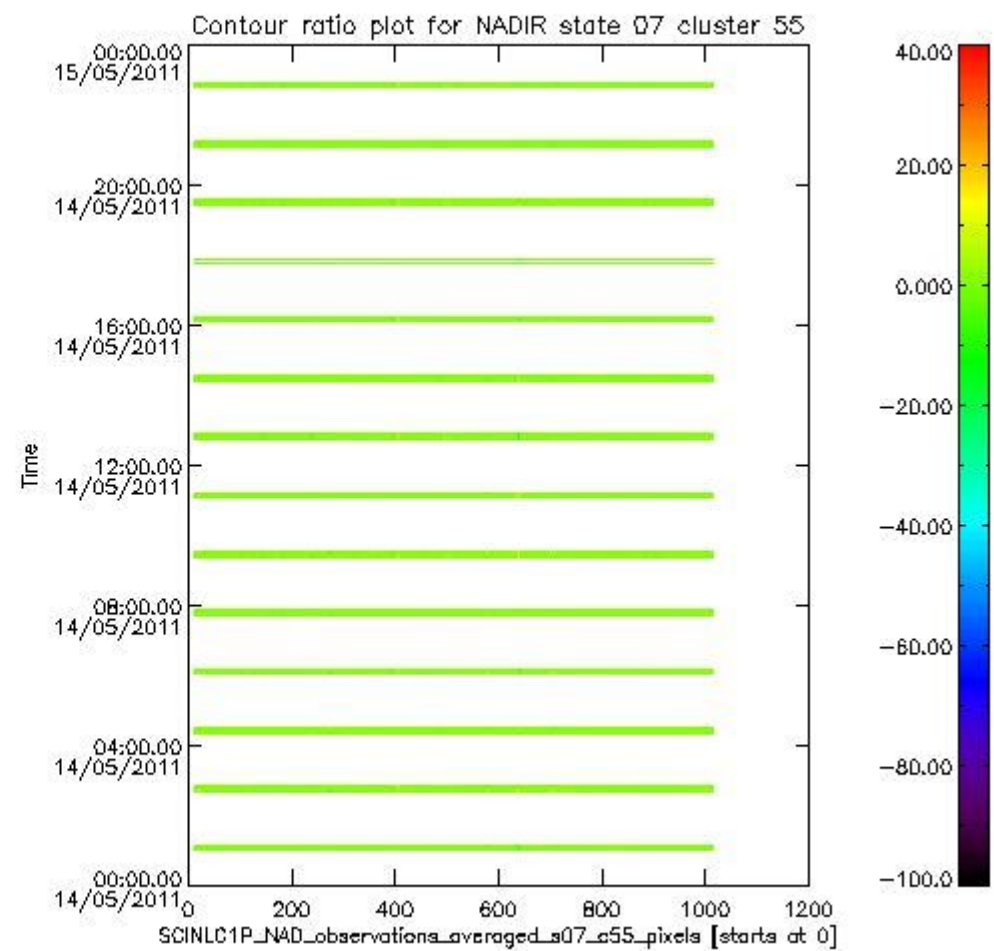
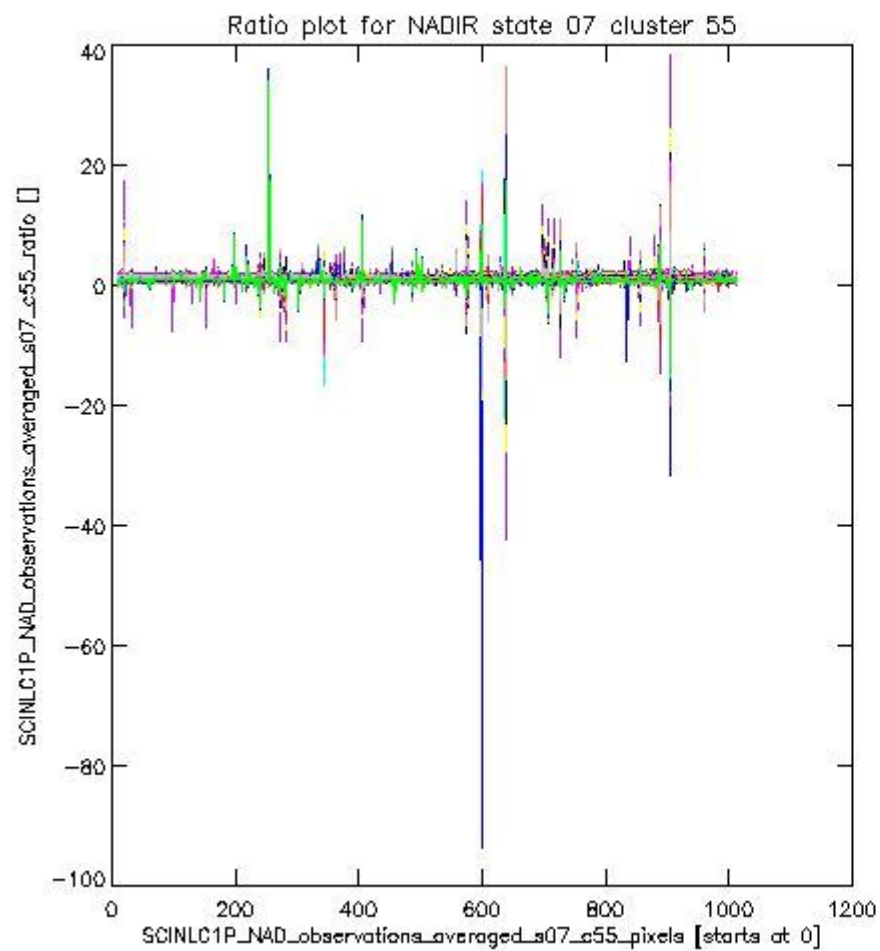
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110514_7.PNG

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	14MAY2011 01:00:16.436
Start time of last sample	14MAY2011 22:53:28.669
Reference period start time	14APR2011 01:02:07.709
Reference period stop time	13MAY2011 23:30:16.490
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



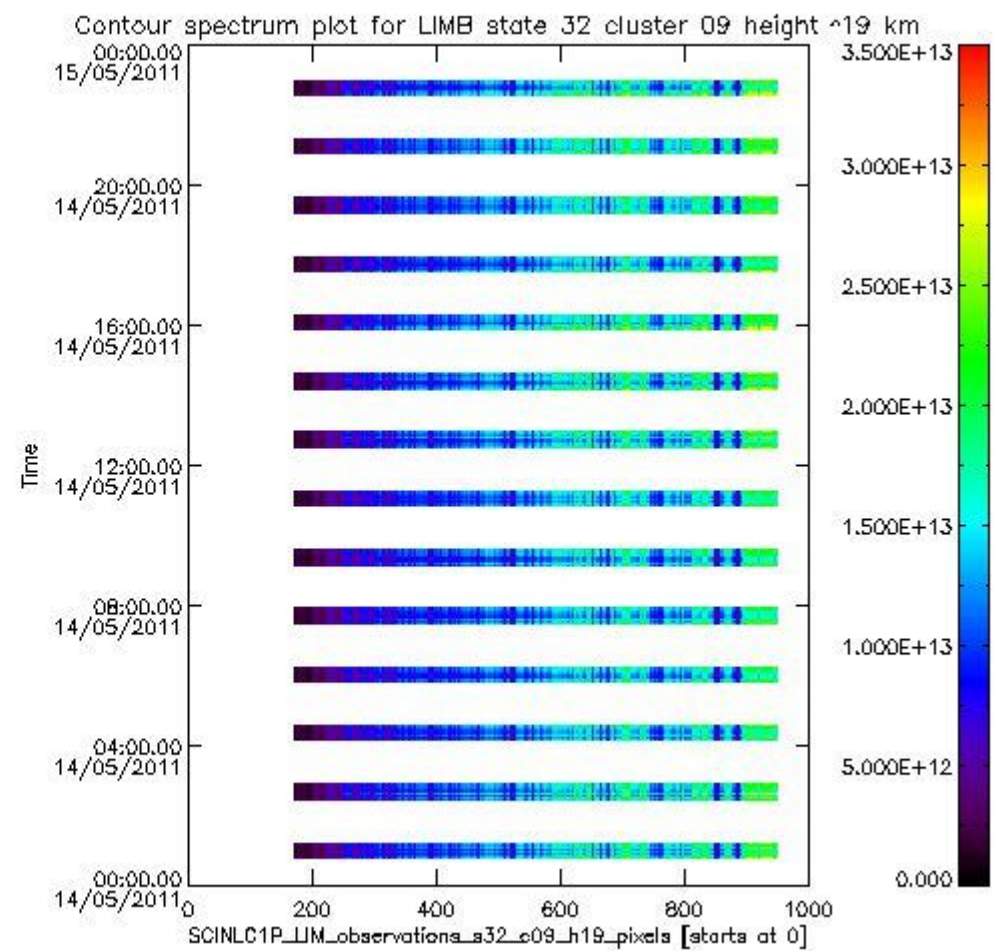
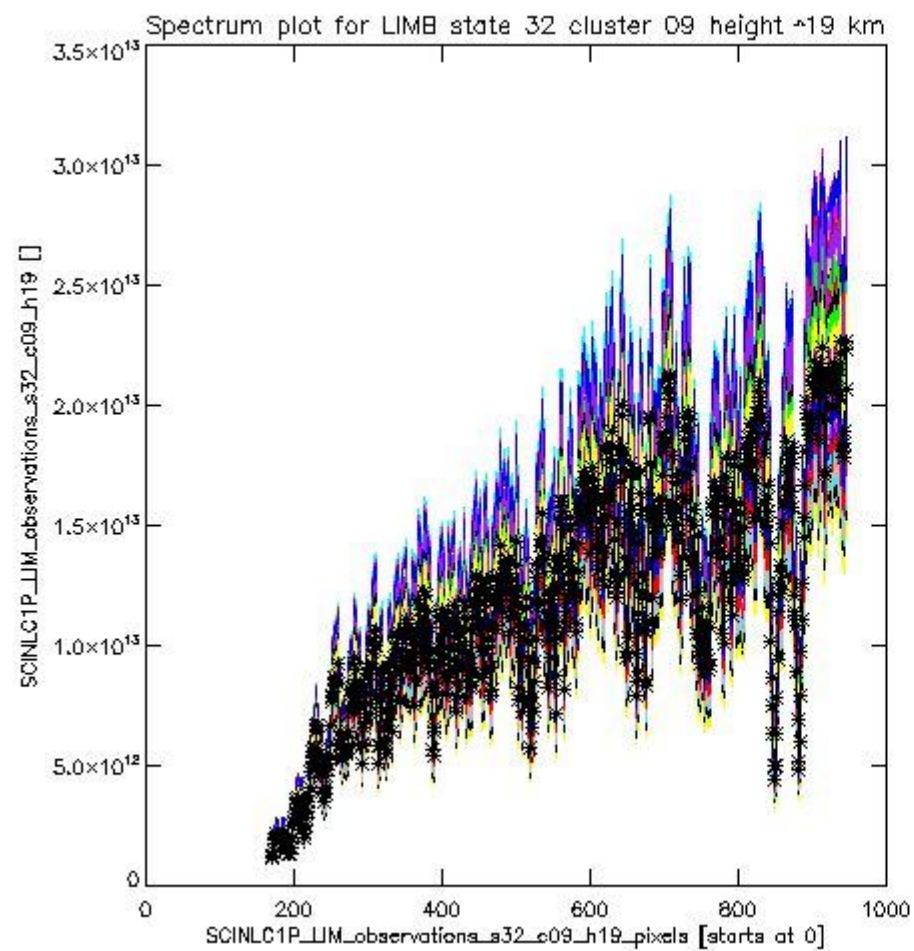
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_8.PNG



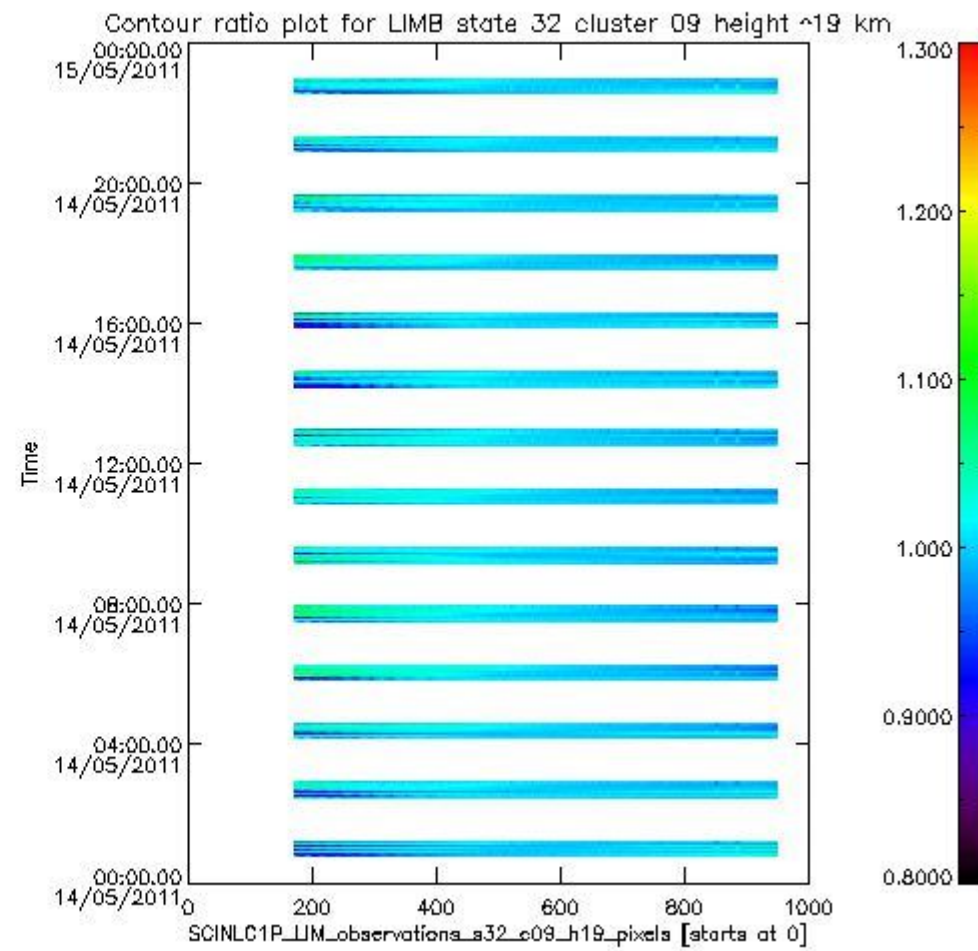
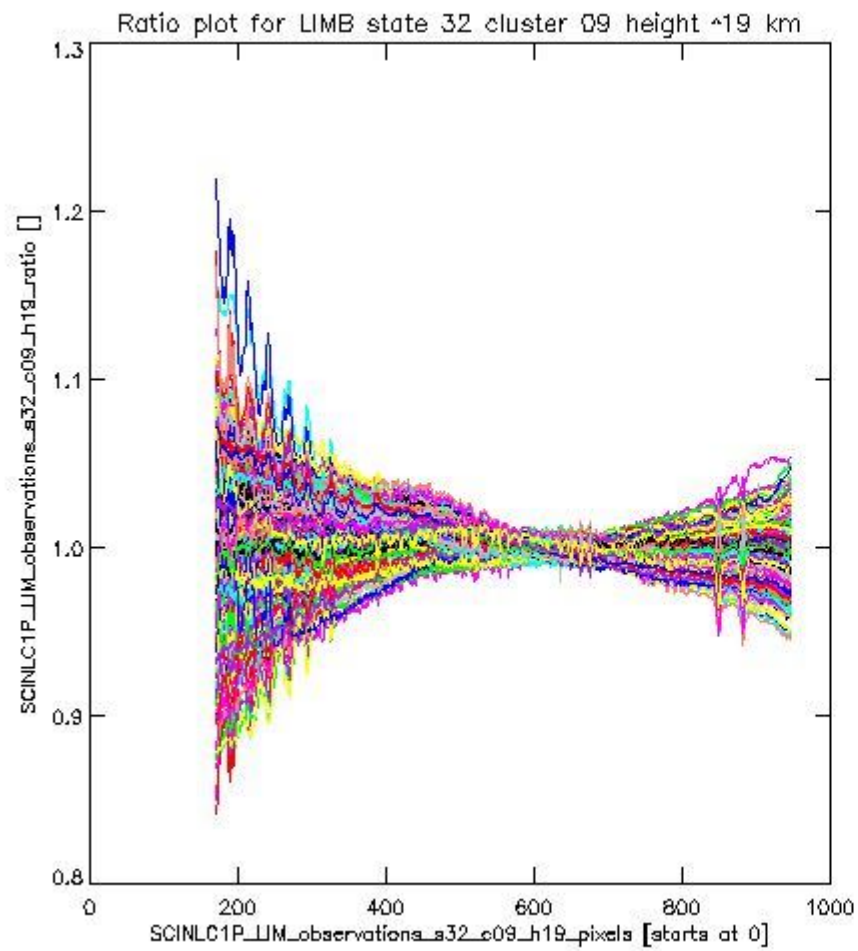
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110514_9.PNG

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	14MAY2011 00:47:05.799
Start time of last sample	14MAY2011 22:56:39.969
Reference period start time	14APR2011 00:48:57.068
Reference period stop time	13MAY2011 23:33:27.787
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



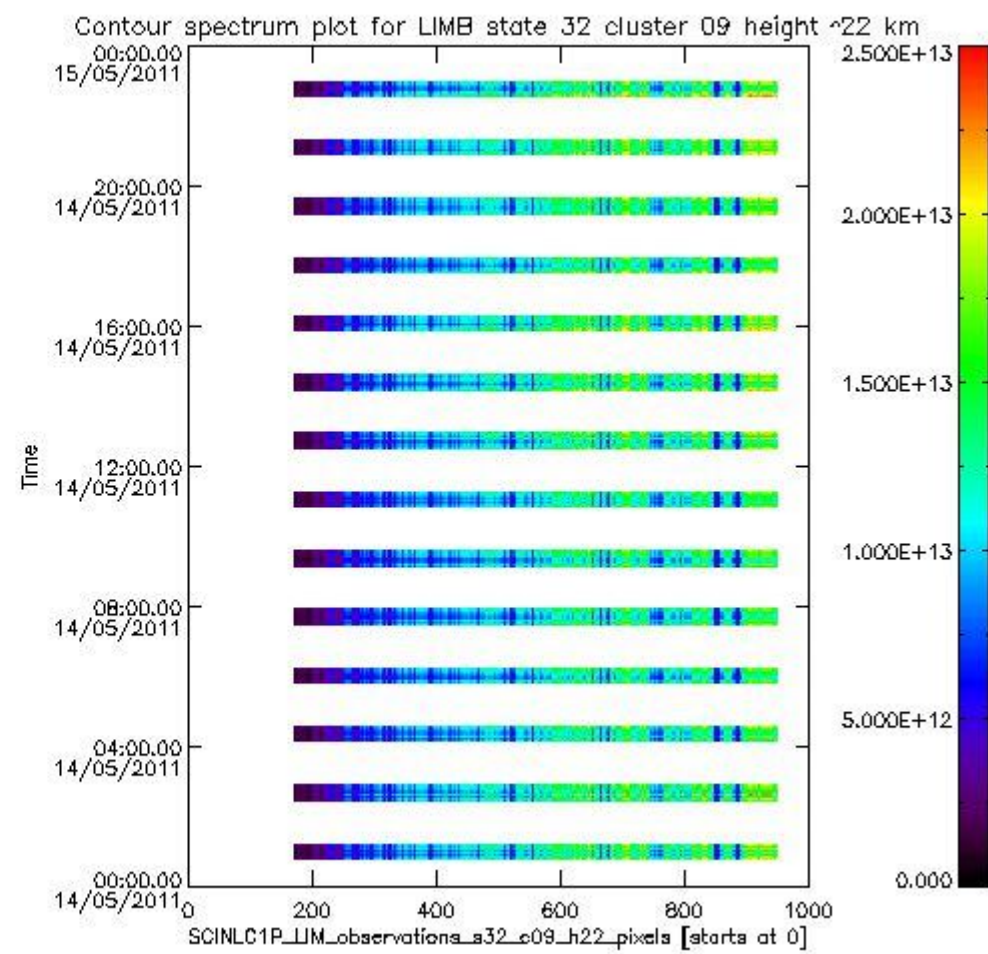
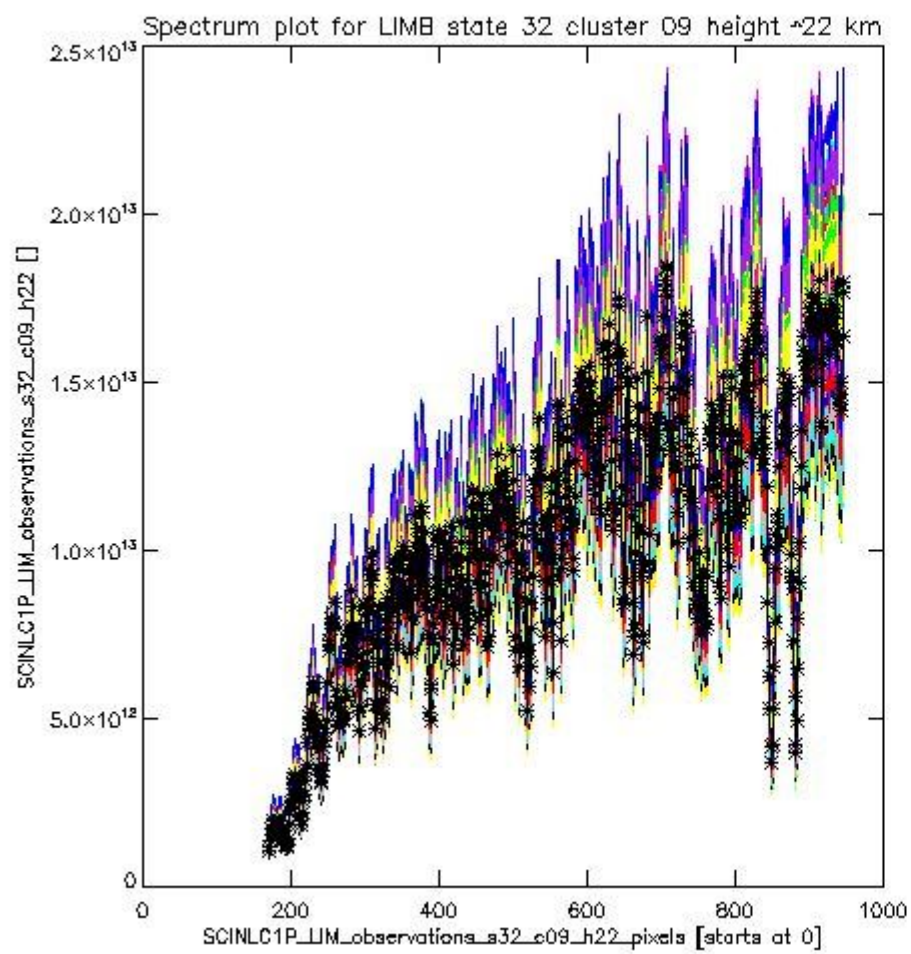
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_10.PNG



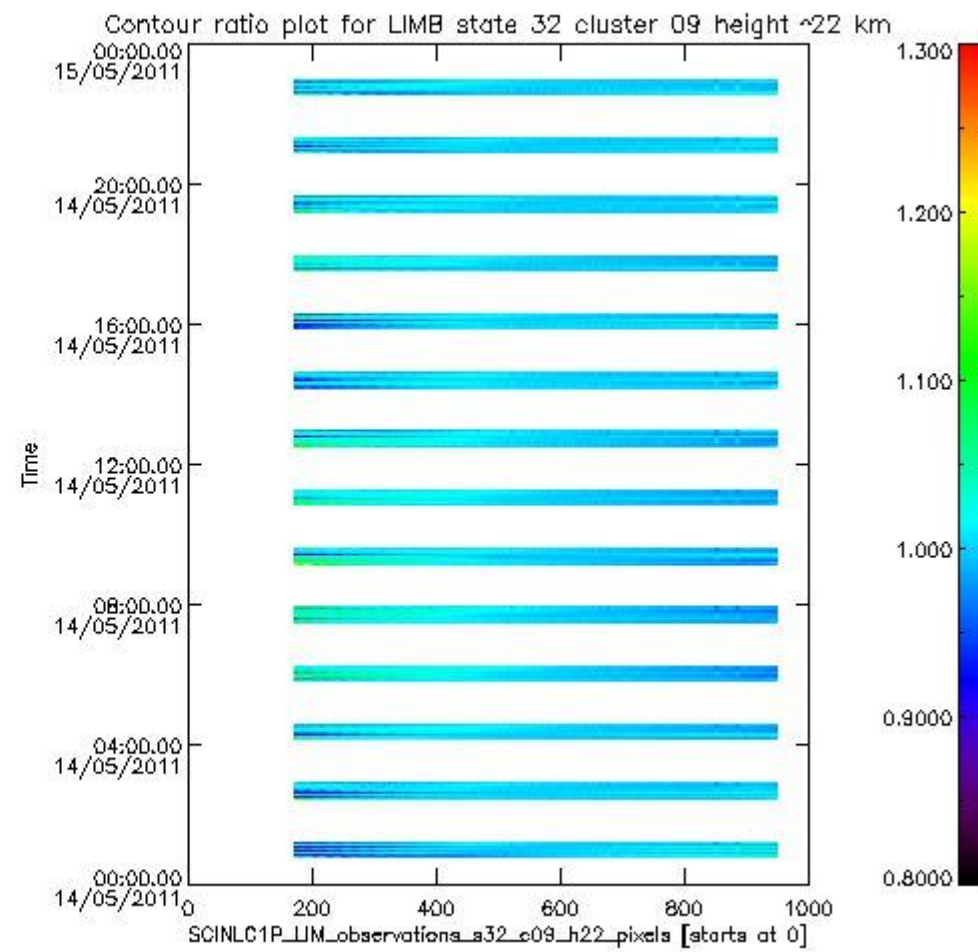
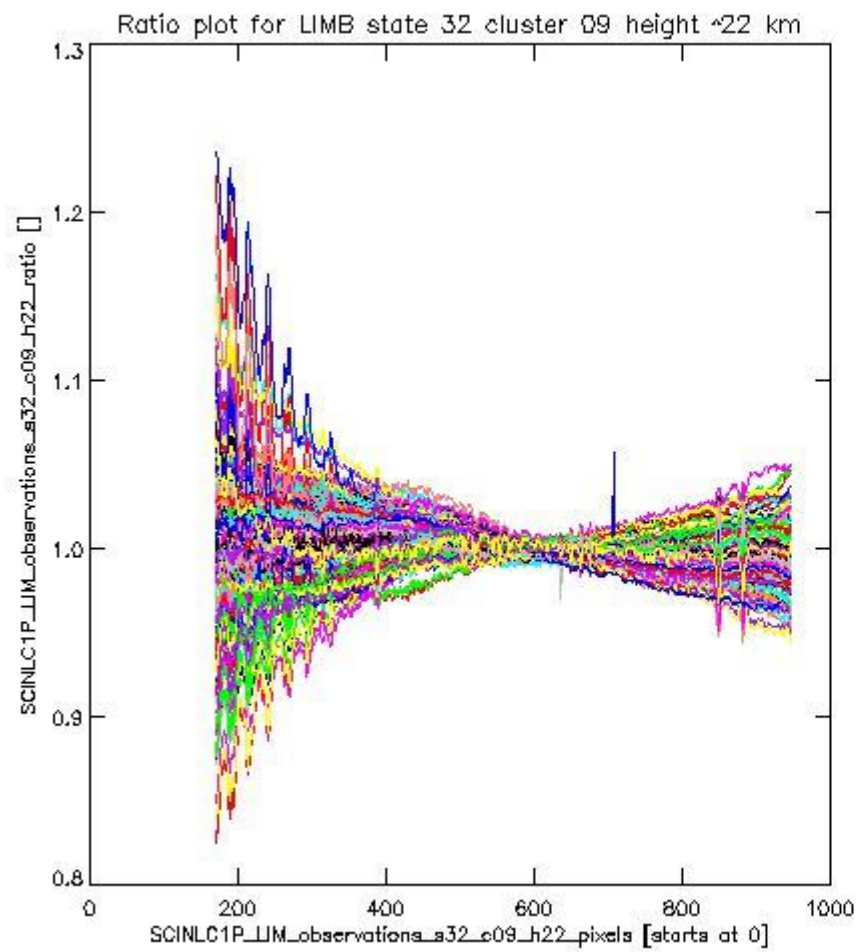
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_11.PNG

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	14MAY2011 00:47:05.799
Start time of last sample	14MAY2011 22:56:39.969
Reference period start time	14APR2011 00:48:57.068
Reference period stop time	13MAY2011 23:33:27.787
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



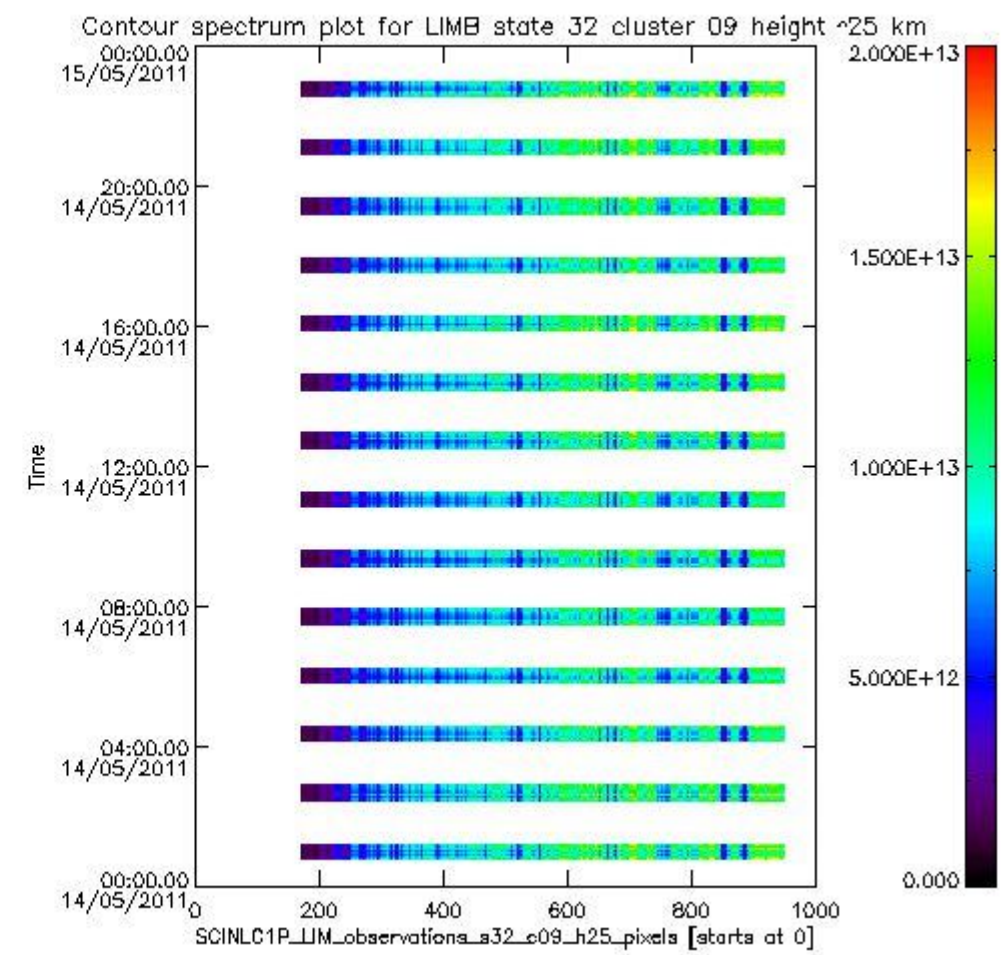
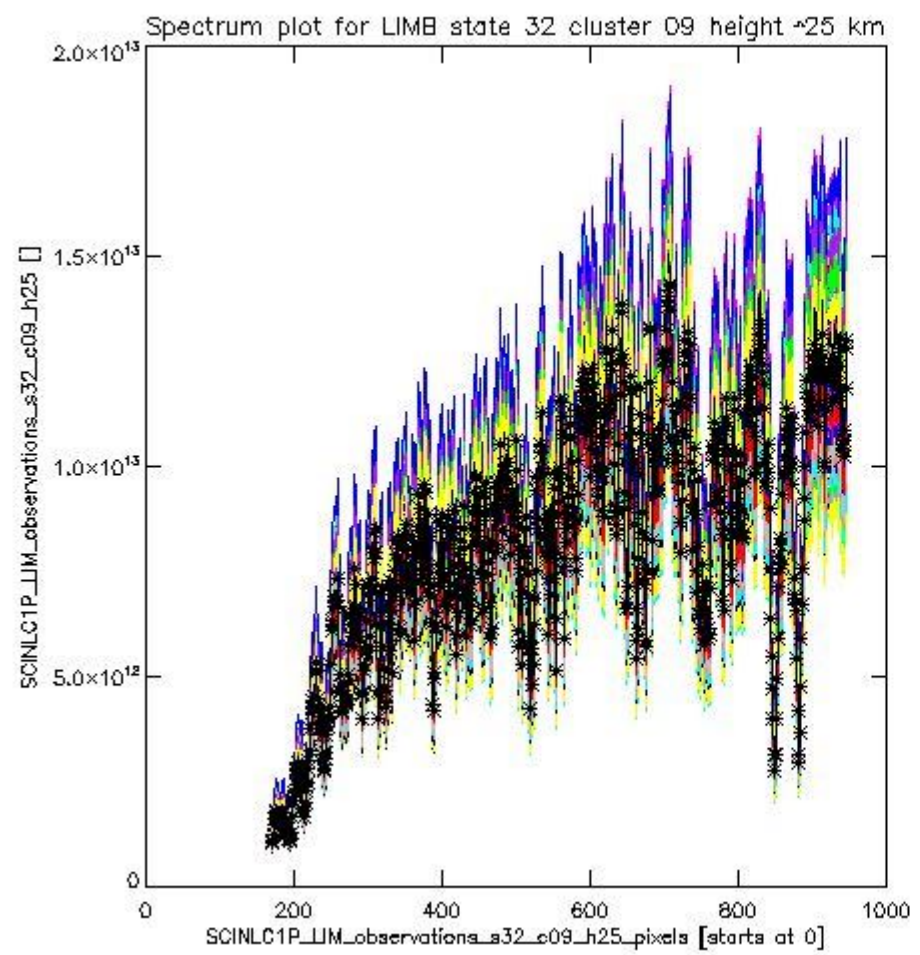
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_12.PNG



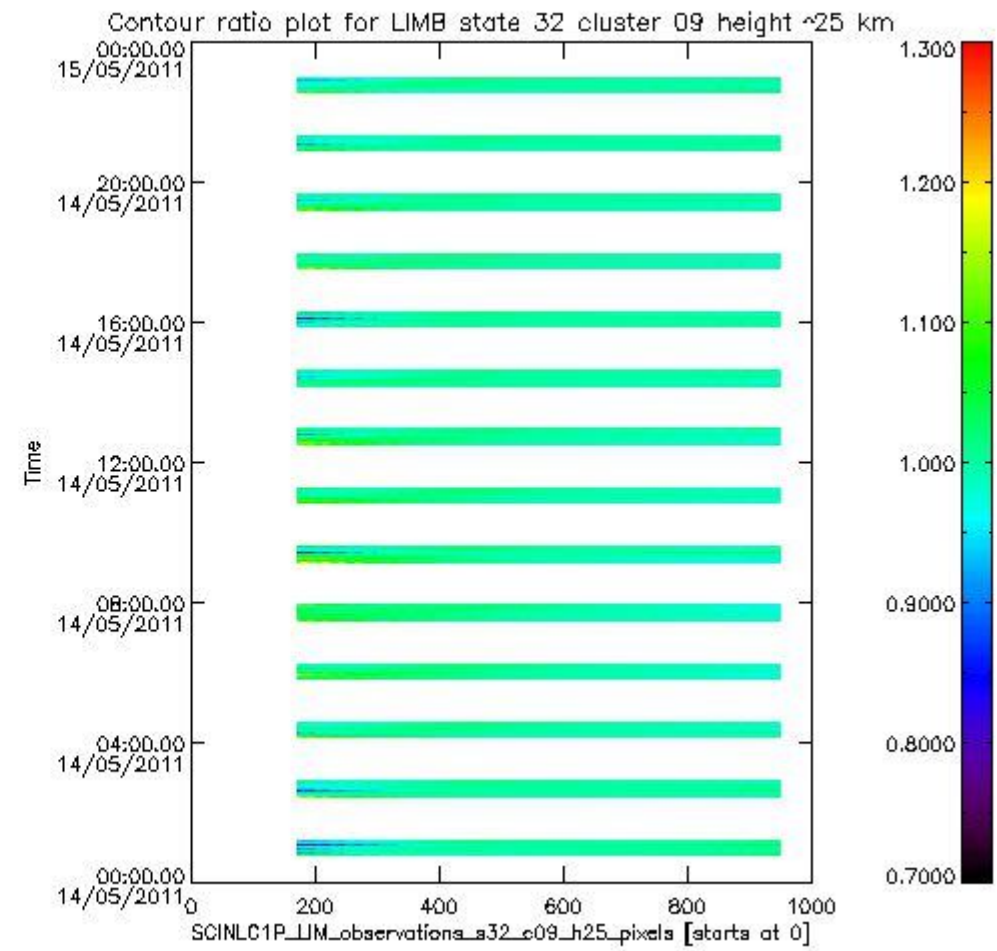
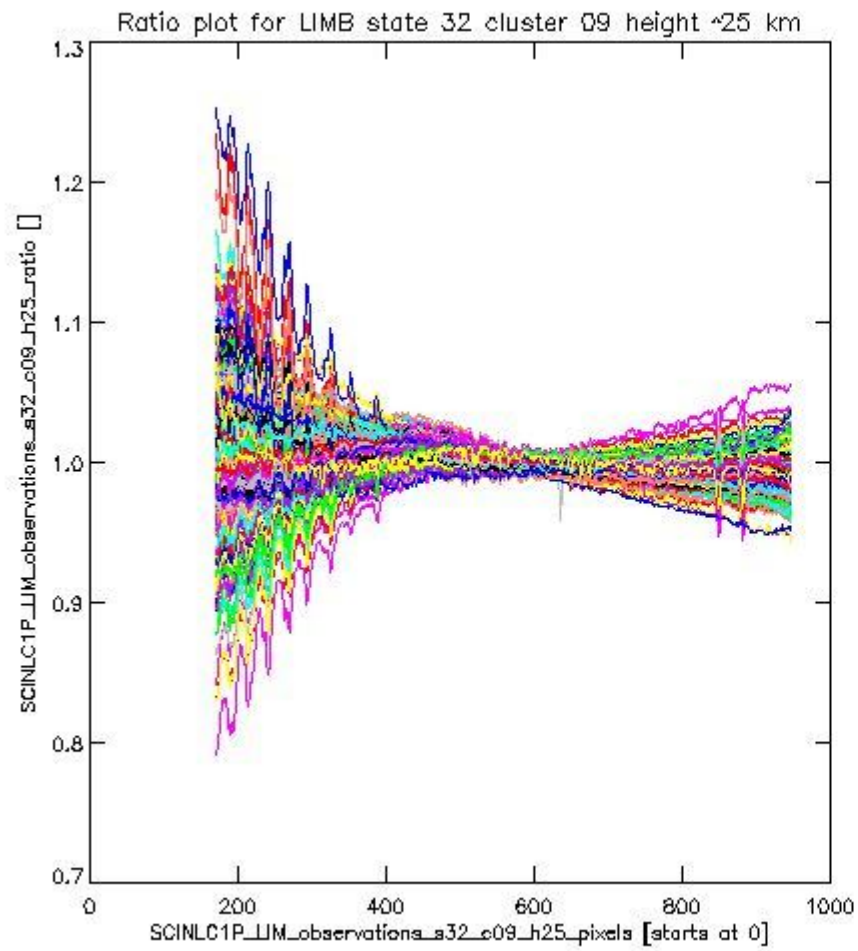
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110514_13.PNG

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	14MAY2011 00:47:05.799
Start time of last sample	14MAY2011 22:56:39.969
Reference period start time	14APR2011 00:48:57.068
Reference period stop time	13MAY2011 23:33:27.787
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



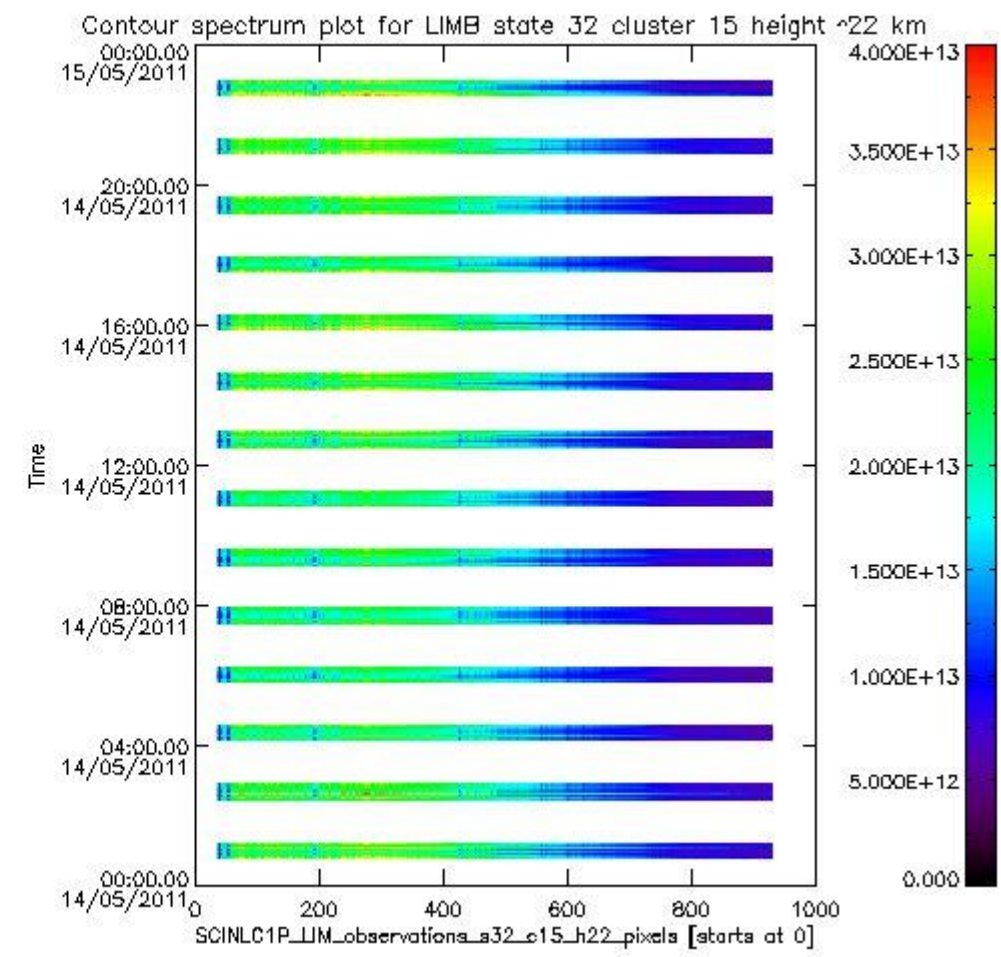
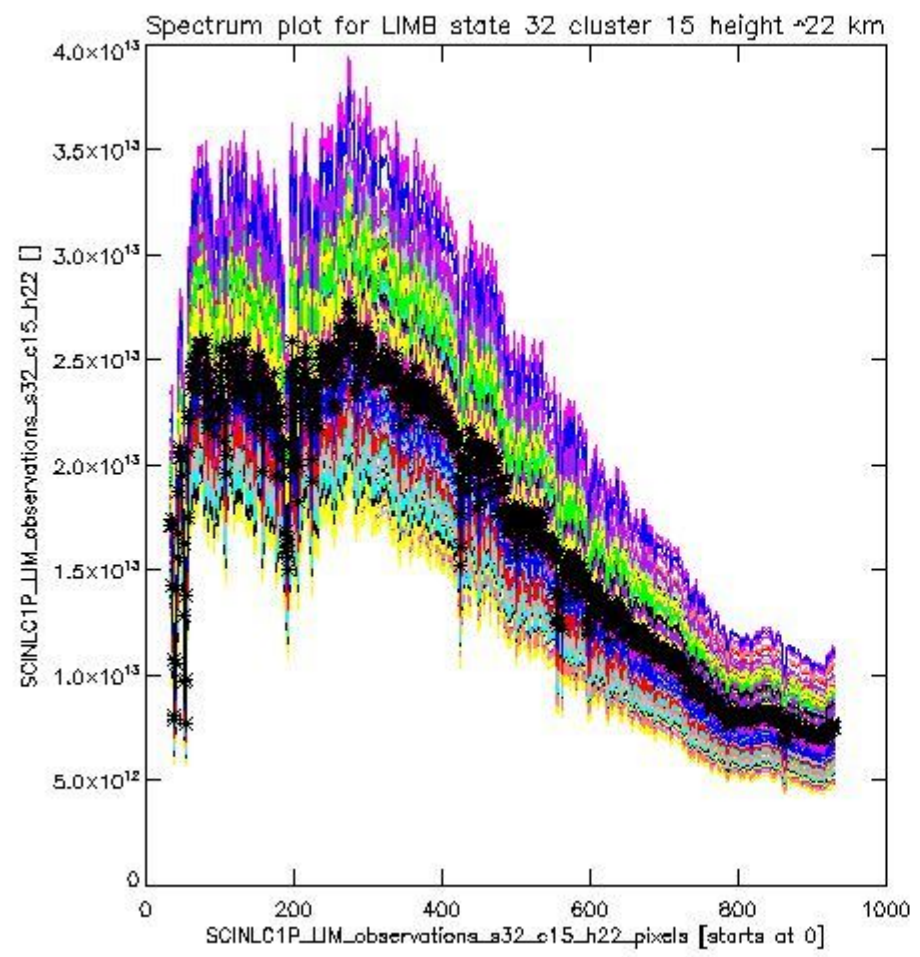
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110514_14.PNG



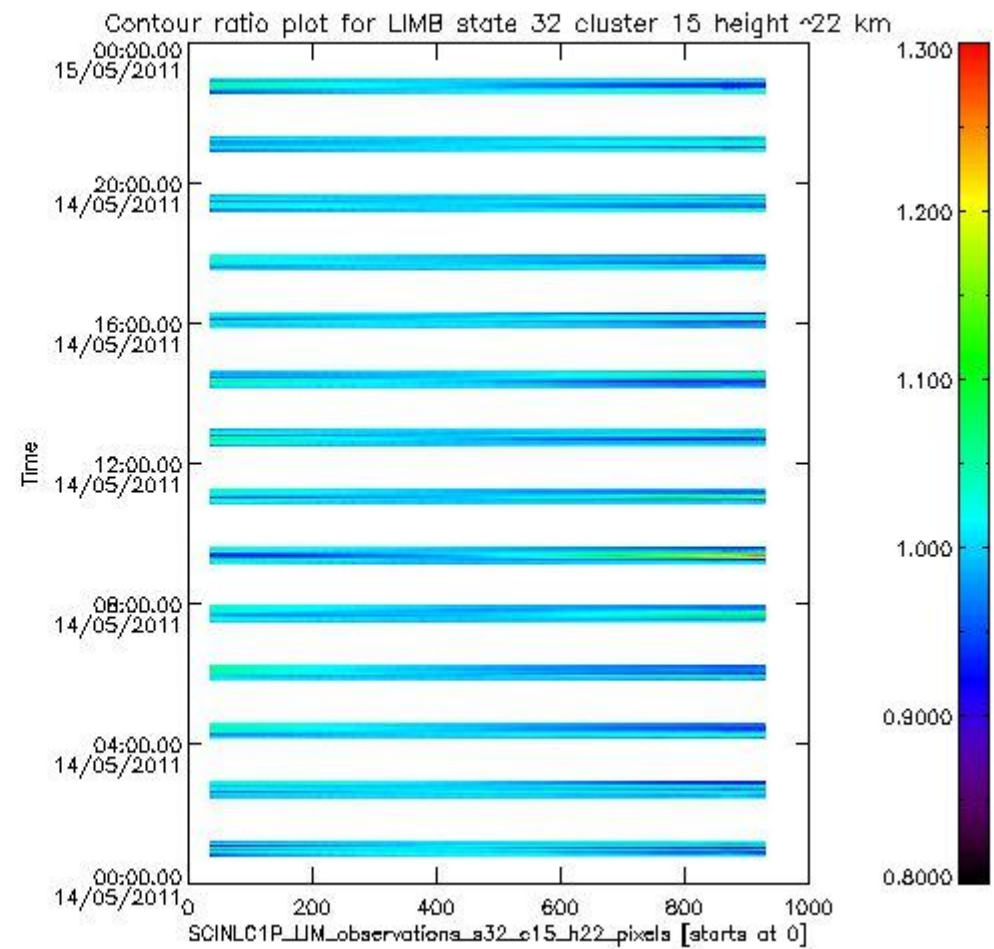
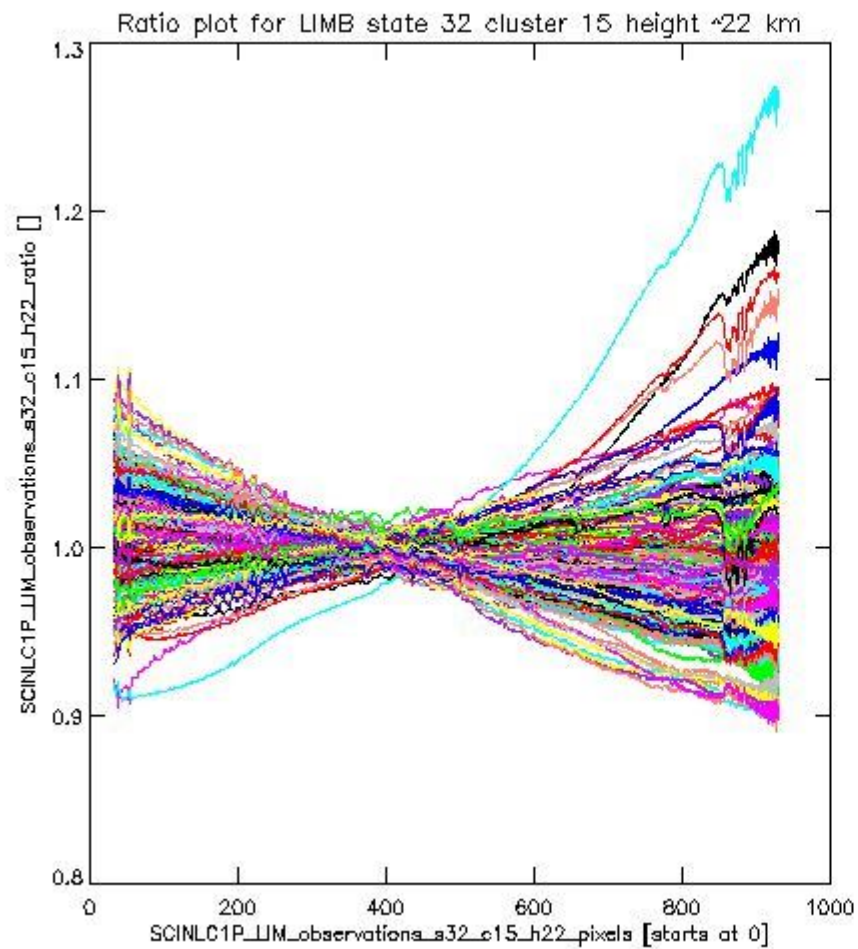
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110514_15.PNG

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	14MAY2011 00:47:05.799
Start time of last sample	14MAY2011 22:56:39.969
Reference period start time	14APR2011 00:48:57.068
Reference period stop time	13MAY2011 23:33:27.787
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



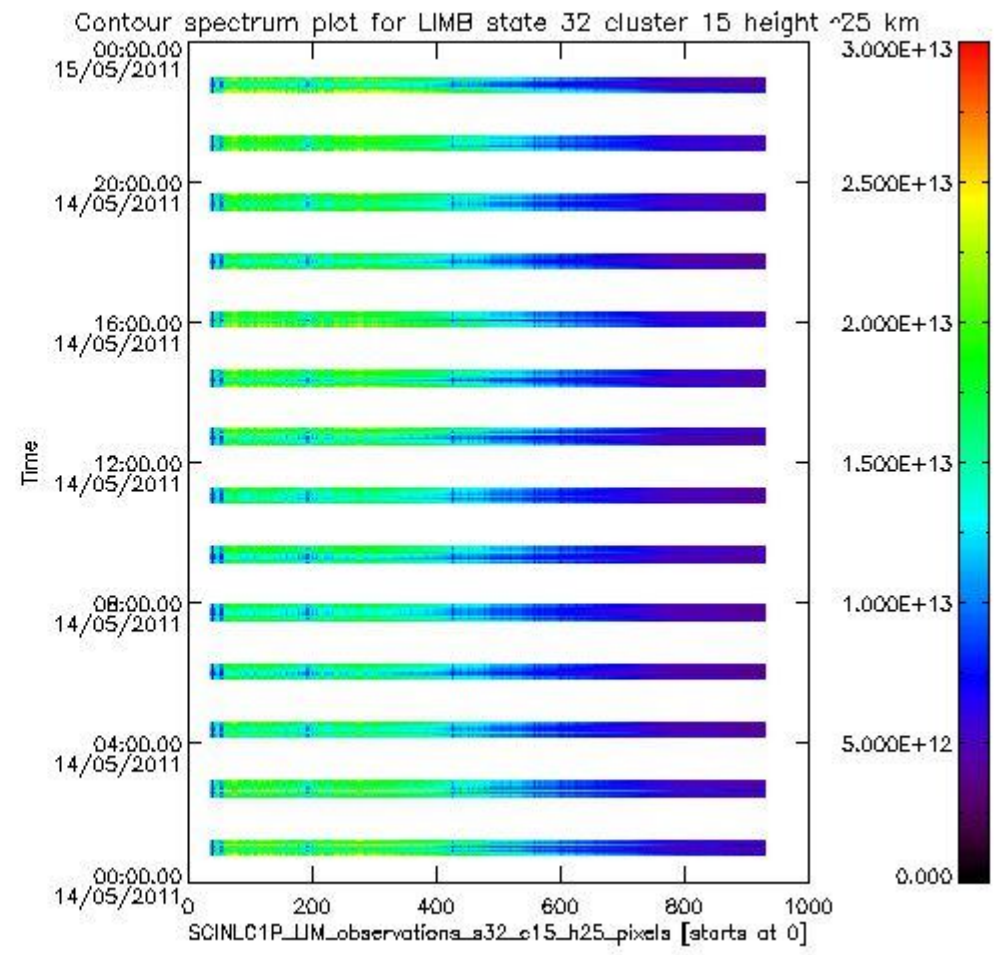
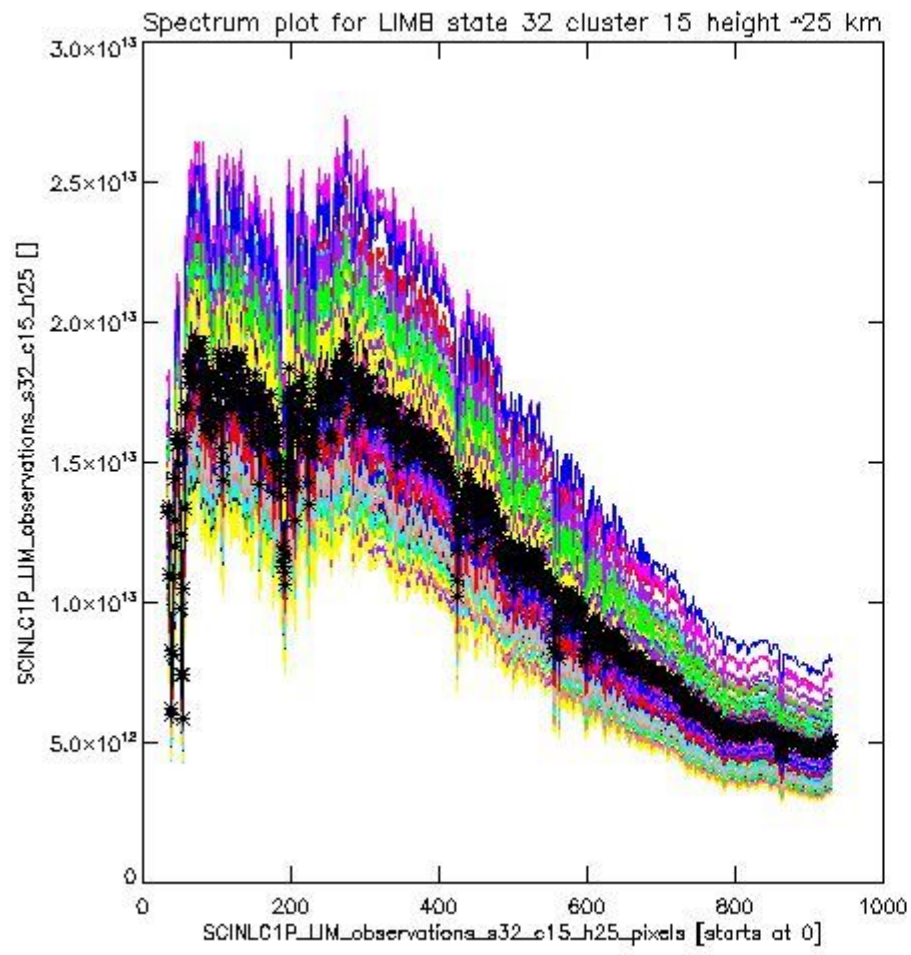
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_16.PNG

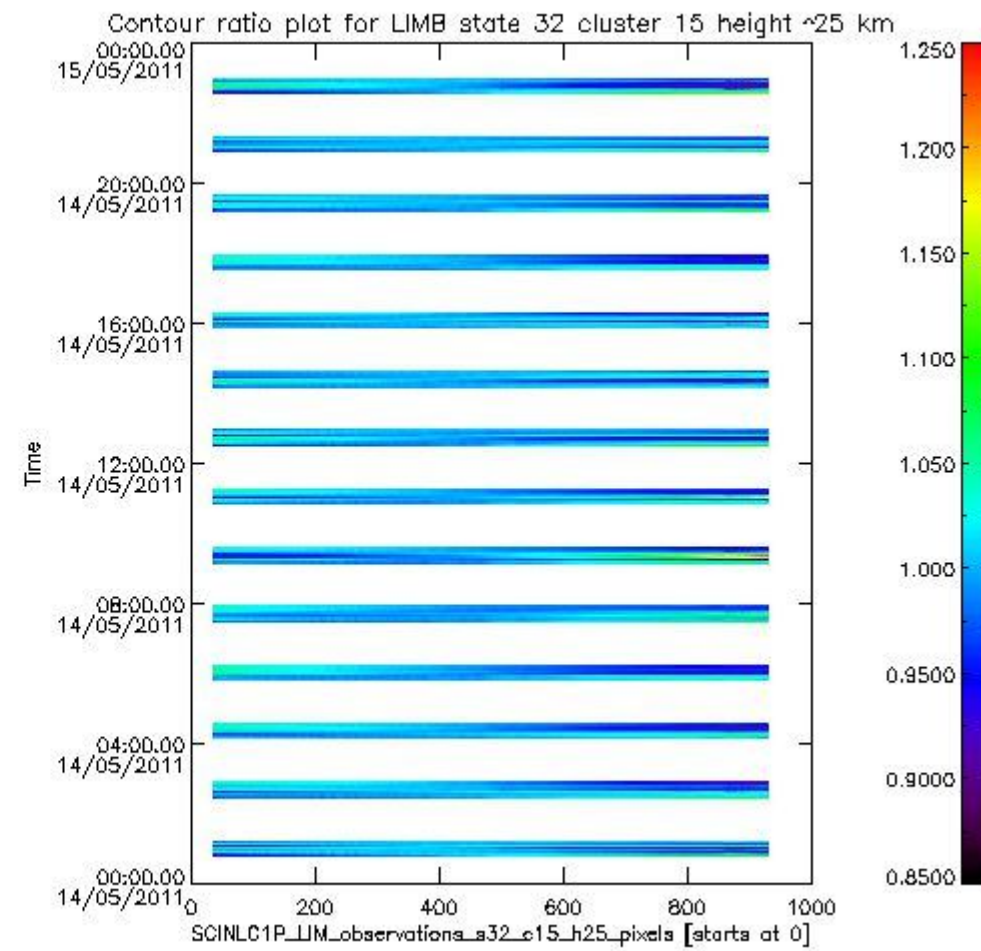
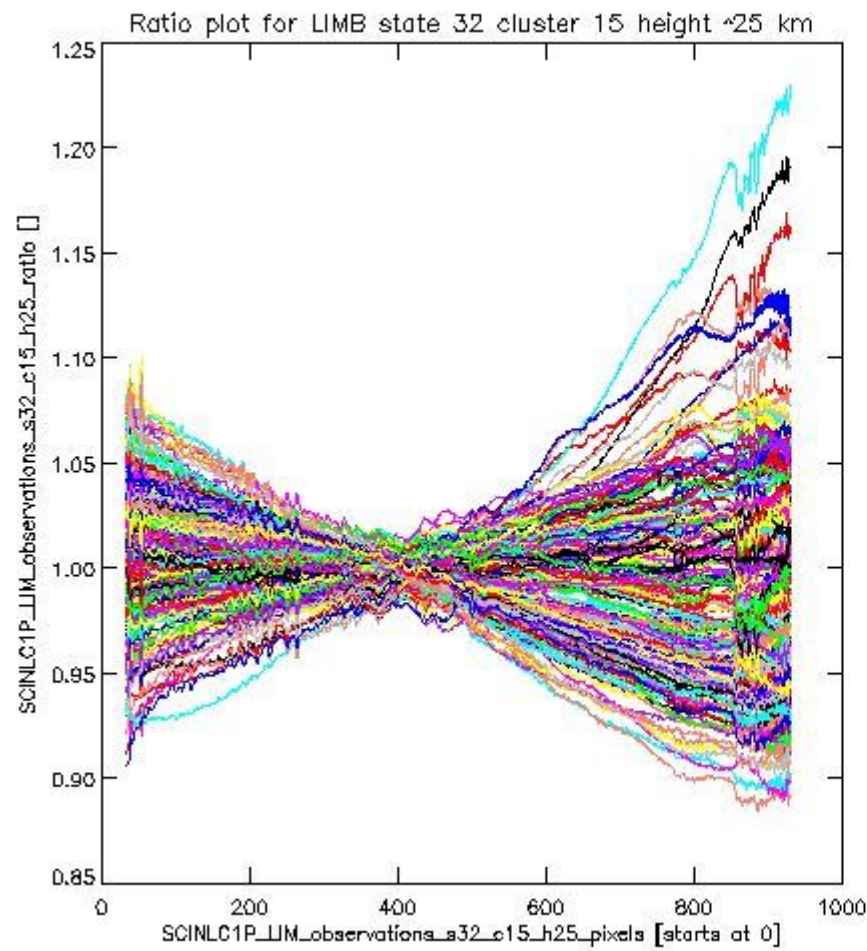


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110514_17.PNG

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	14MAY2011 00:47:05.799
Start time of last sample	14MAY2011 22:56:39.969
Reference period start time	14APR2011 00:48:57.068
Reference period stop time	13MAY2011 23:33:27.787
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

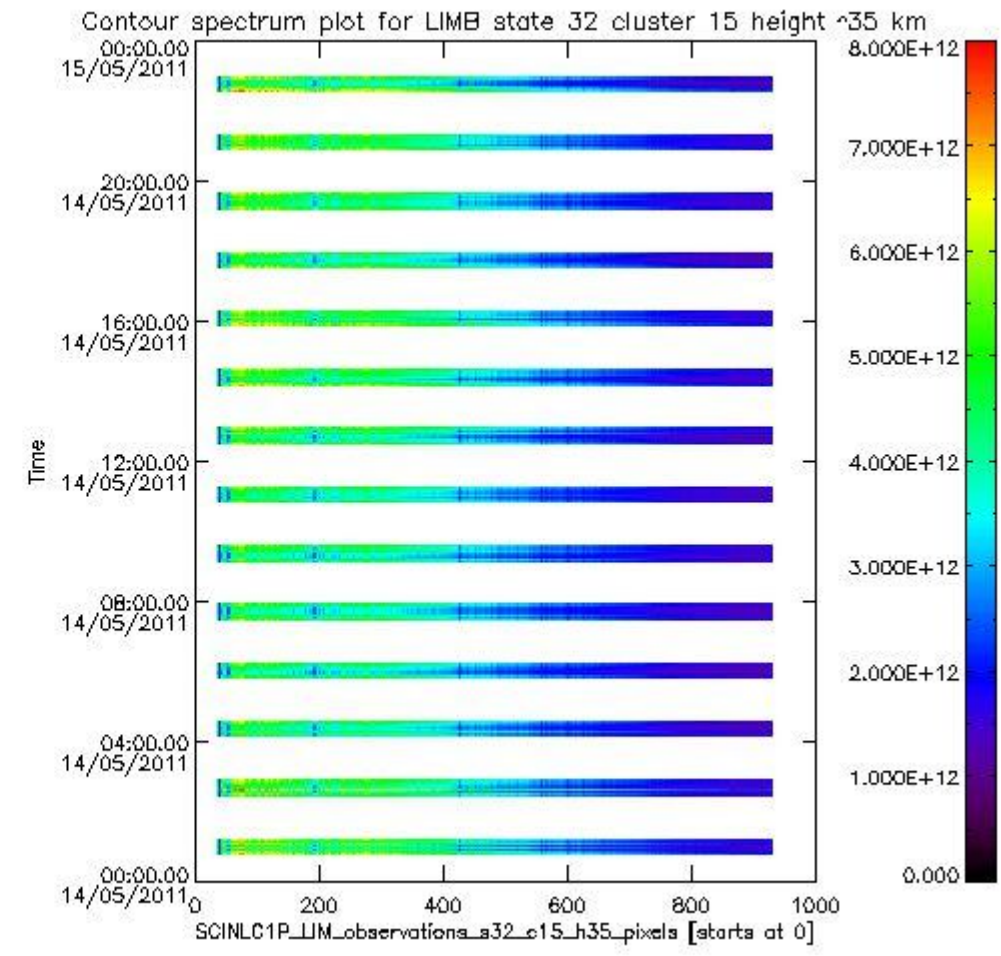
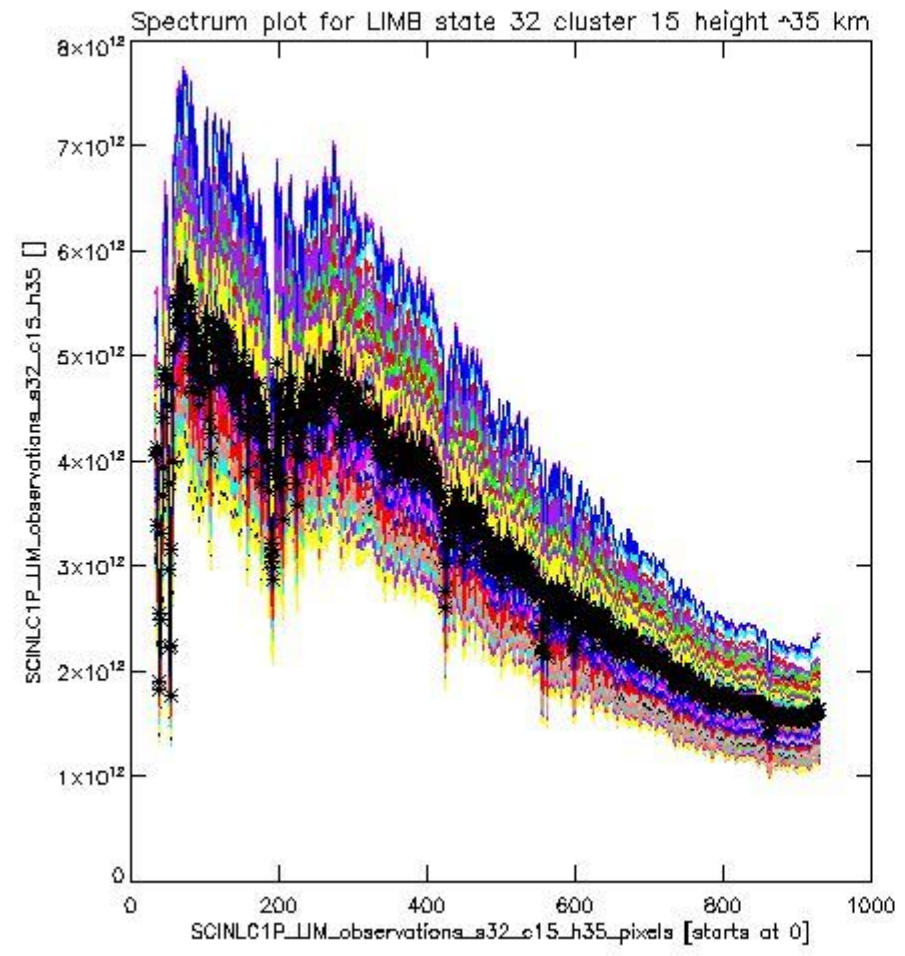




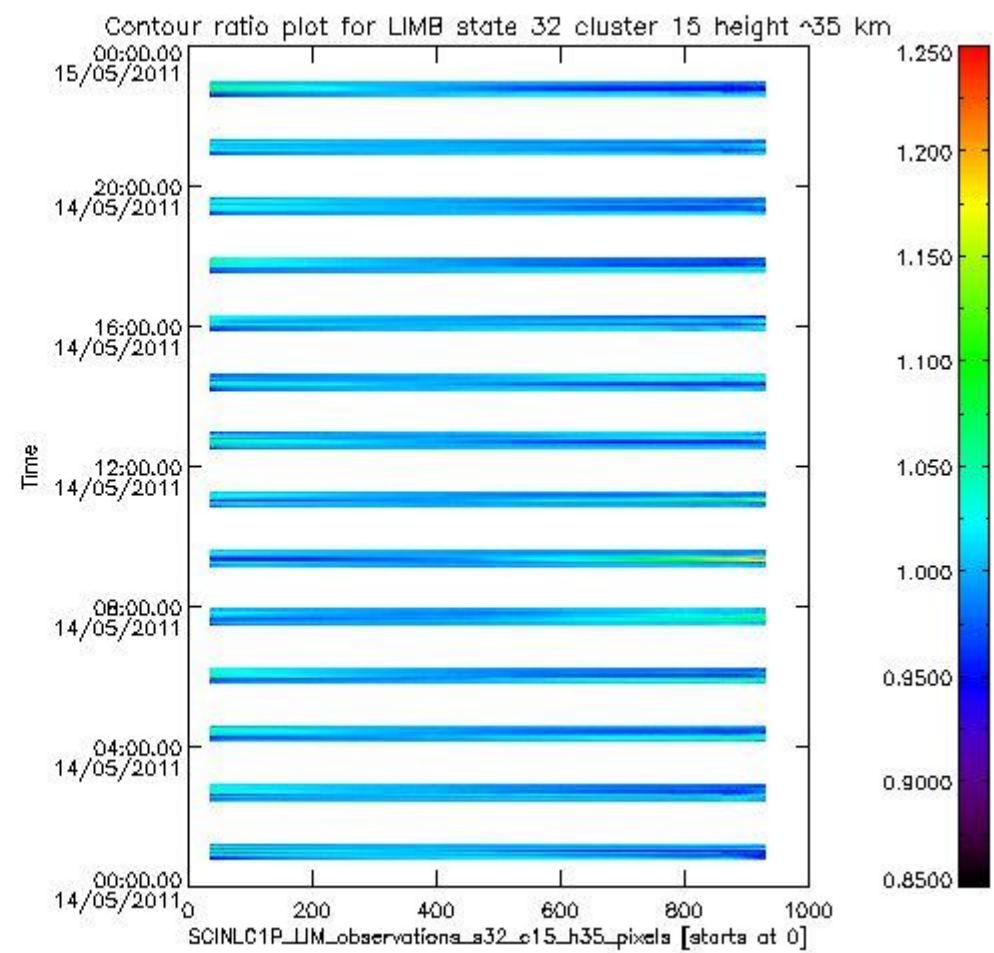
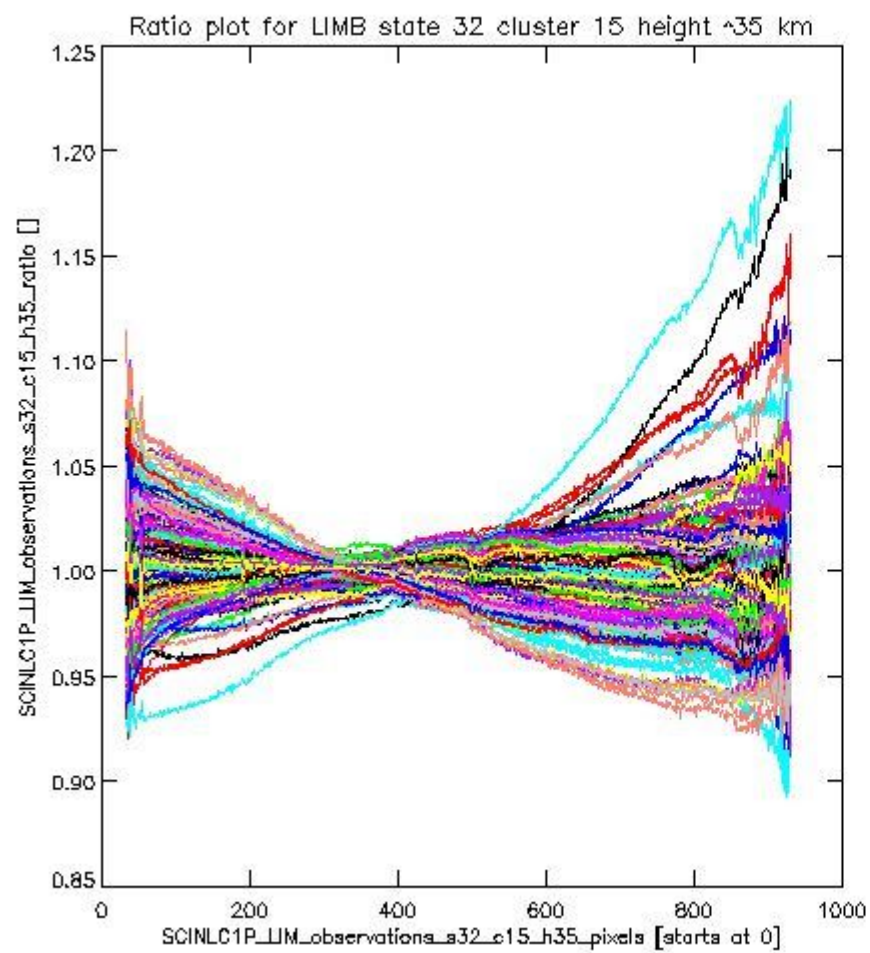
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110514_19.PNG

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	14MAY2011 00:47:05.799
Start time of last sample	14MAY2011 22:56:39.969
Reference period start time	14APR2011 00:48:57.068
Reference period stop time	13MAY2011 23:33:27.787
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_20110514_20.PNG



sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110514_21.PNG

