

# 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	20MAR2011 06:55:36
Data source version	SCIA/7.04-U
Processing scope for products	09MAR2011 00:00:00 to 10MAR2011 00:00:00
Start time of first product within scope	08MAR2011 23:12:58
Stop time of last product within scope	09MAR2011 23:46:22
Total number of level 1 products	15
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	09MAR2011 01:26:22.831	09MAR2011 23:18:23.943
1	NADIR	07	09	N/A	09MAR2011 01:26:22.831	09MAR2011 23:18:23.943
2	NADIR	07	15	N/A	09MAR2011 01:26:22.831	09MAR2011 23:18:23.943
3	NADIR	07	24	N/A	09MAR2011 01:26:22.831	09MAR2011 23:18:23.943
4	NADIR	07	55	N/A	09MAR2011 01:26:22.831	09MAR2011 23:18:23.943
5	LIMB	32	09	~19 km	09MAR2011 01:11:09.452	09MAR2011 23:21:35.240
6	LIMB	32	09	~22 km	09MAR2011 01:11:09.452	09MAR2011 23:21:35.240
7	LIMB	32	09	~25 km	09MAR2011 01:11:09.452	09MAR2011 23:21:35.240
8	LIMB	32	15	~22 km	09MAR2011 01:11:09.452	09MAR2011 23:21:35.240
9	LIMB	32	15	~25 km	09MAR2011 01:11:09.452	09MAR2011 23:21:35.240
10	LIMB	32	15	~35 km	09MAR2011 09:33:11.347	09MAR2011 23:21:35.240

#### 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	#noprocs	#cpl_drk	#incpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110308_230059_000060533100_00174_47171_5260.N1</a>	08MAR2011 23:12:58	09MAR2011 00:23:12	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110309_004156_000059653100_00175_47172_5261.N1</a>	09MAR2011 00:53:11	09MAR2011 02:03:40	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110309_022126_000060533100_00176_47173_5263.N1</a>	09MAR2011 02:33:25	09MAR2011 03:43:39	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110309_040223_000060093100_00177_47174_5266.N1</a>	09MAR2011 04:13:38	09MAR2011 05:24:07	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110309_054237_000060093100_00178_47175_5267.N1</a>	09MAR2011 05:53:52	09MAR2011 07:04:07	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110309_072250_000060093100_00179_47176_5271.N1</a>	09MAR2011 07:34:05	09MAR2011 08:44:34	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110309_090303_000060093100_00180_47177_5275.N1	09MAR2011 09:14:19	09MAR2011 10:24:34	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110309_104317_000060093100_00181_47178_5276.N1	09MAR2011 10:54:32	09MAR2011 12:05:01	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110309_122330_000060093100_00182_47179_5277.N1	09MAR2011 12:34:46	09MAR2011 13:45:00	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110309_140343_000060093100_00183_47180_5279.N1	09MAR2011 14:14:59	09MAR2011 15:25:28	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110309_154357_000060093100_00184_47181_5286.N1	09MAR2011 15:55:13	09MAR2011 17:05:28	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110309_172410_000059743100_00185_47182_5287.N1	09MAR2011 17:35:27	09MAR2011 19:02:58	0	36	30	0	3	1	0	0	
12	SCI_NLC_1CUDPA20110309_190349_000060443100_00186_47183_5282.N1	09MAR2011 19:15:40	09MAR2011 20:26:14	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110309_204437_000060093100_00187_47184_5288.N1	09MAR2011 20:55:54	09MAR2011 22:06:23	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110309_222451_000060093100_00188_47185_5289.N1	09MAR2011 22:36:07	09MAR2011 23:46:22	0	35	31	0	0	1	0	0	

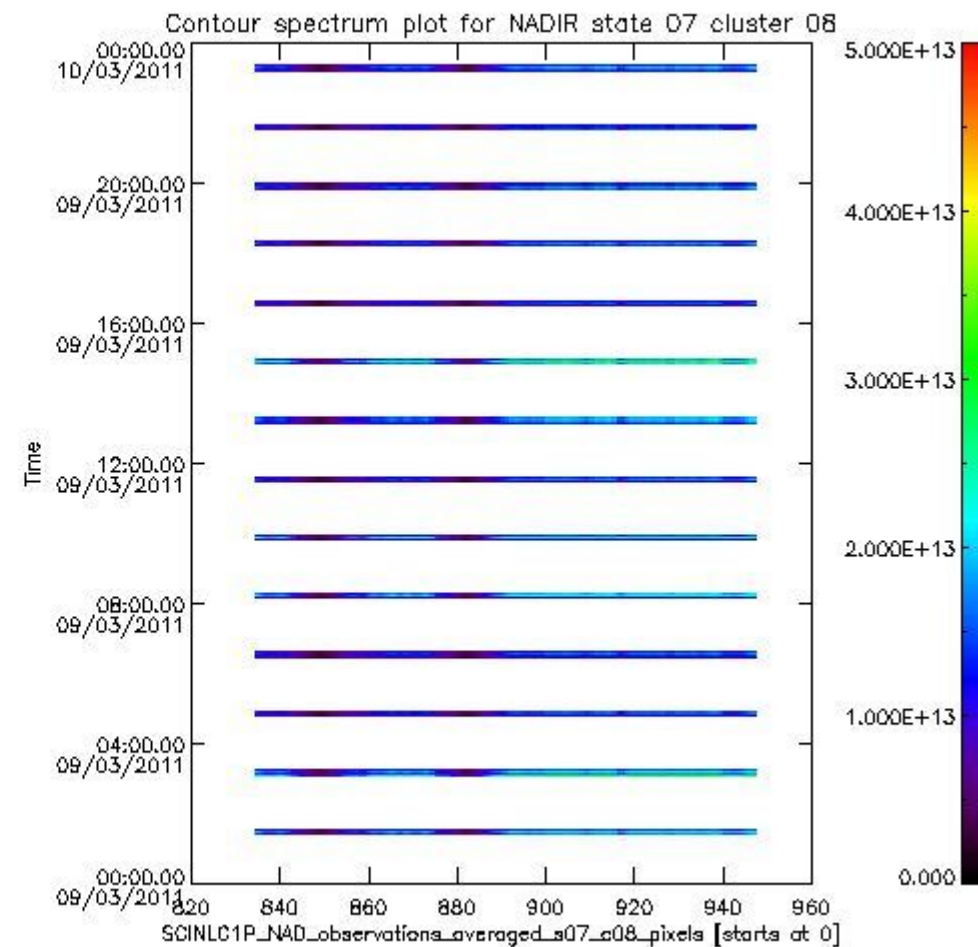
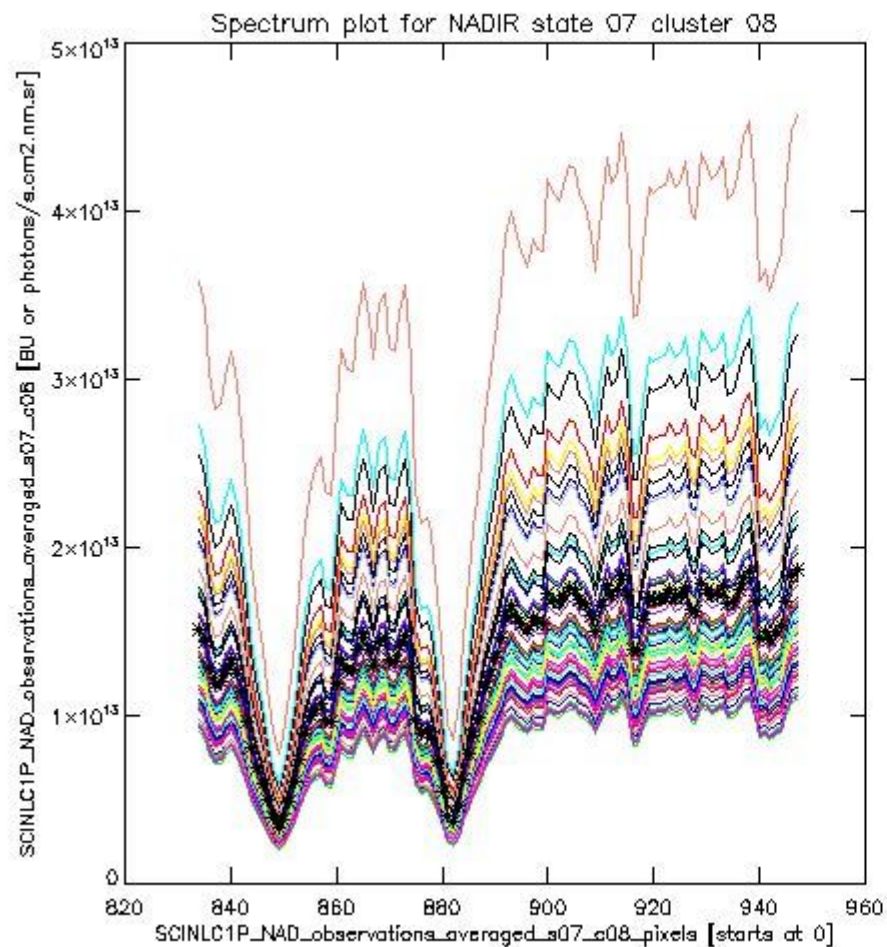
## 1.2 Source packet monitoring

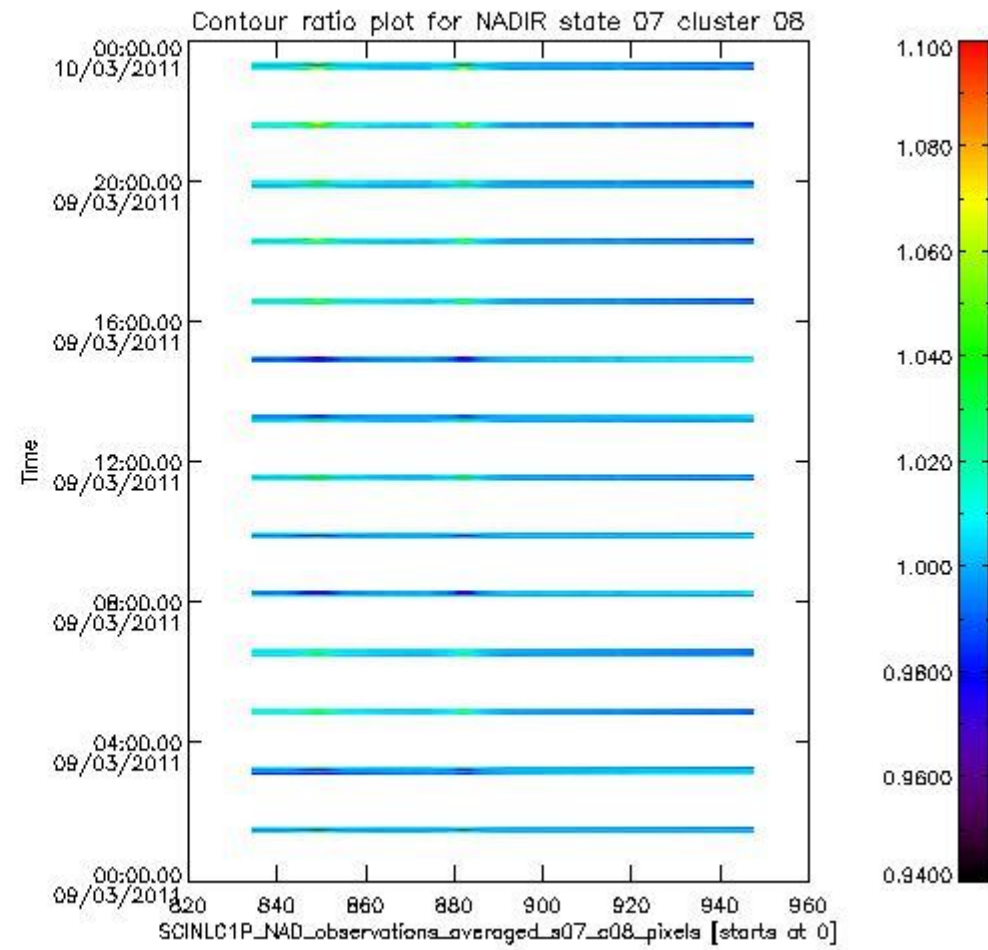
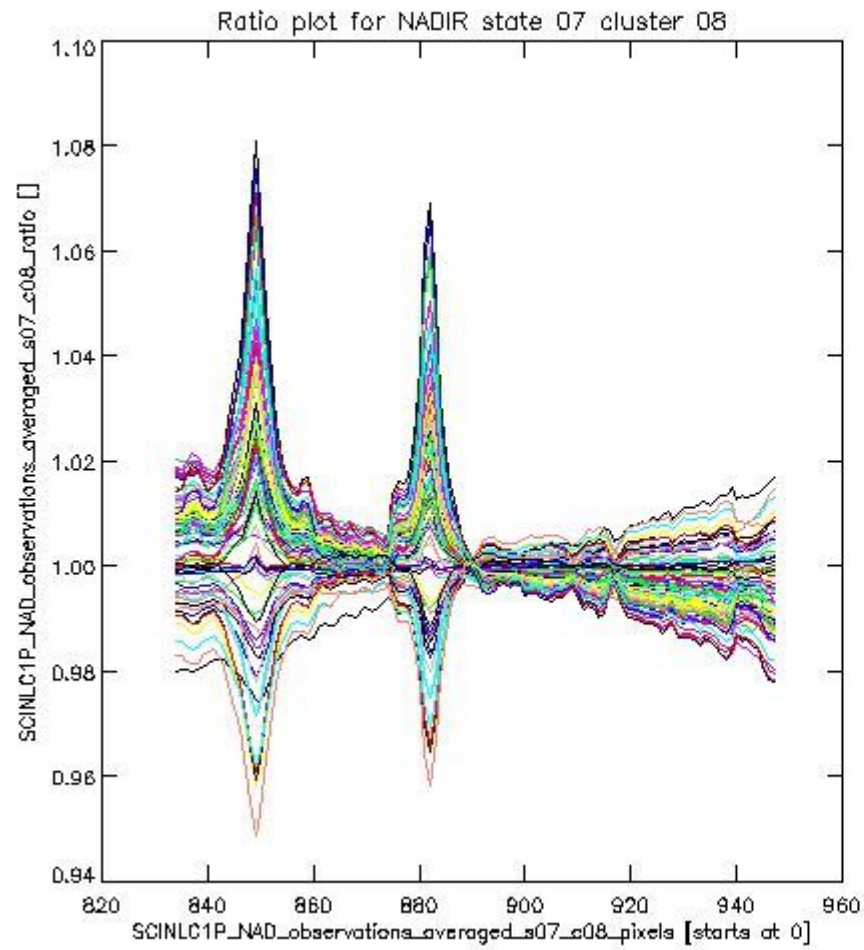
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	09MAR2011 01:26:22.831
Start time of last sample	09MAR2011 23:18:23.943
Reference period start time	07FEB2011 01:29:08.113
Reference period stop time	08MAR2011 23:55:14.518
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

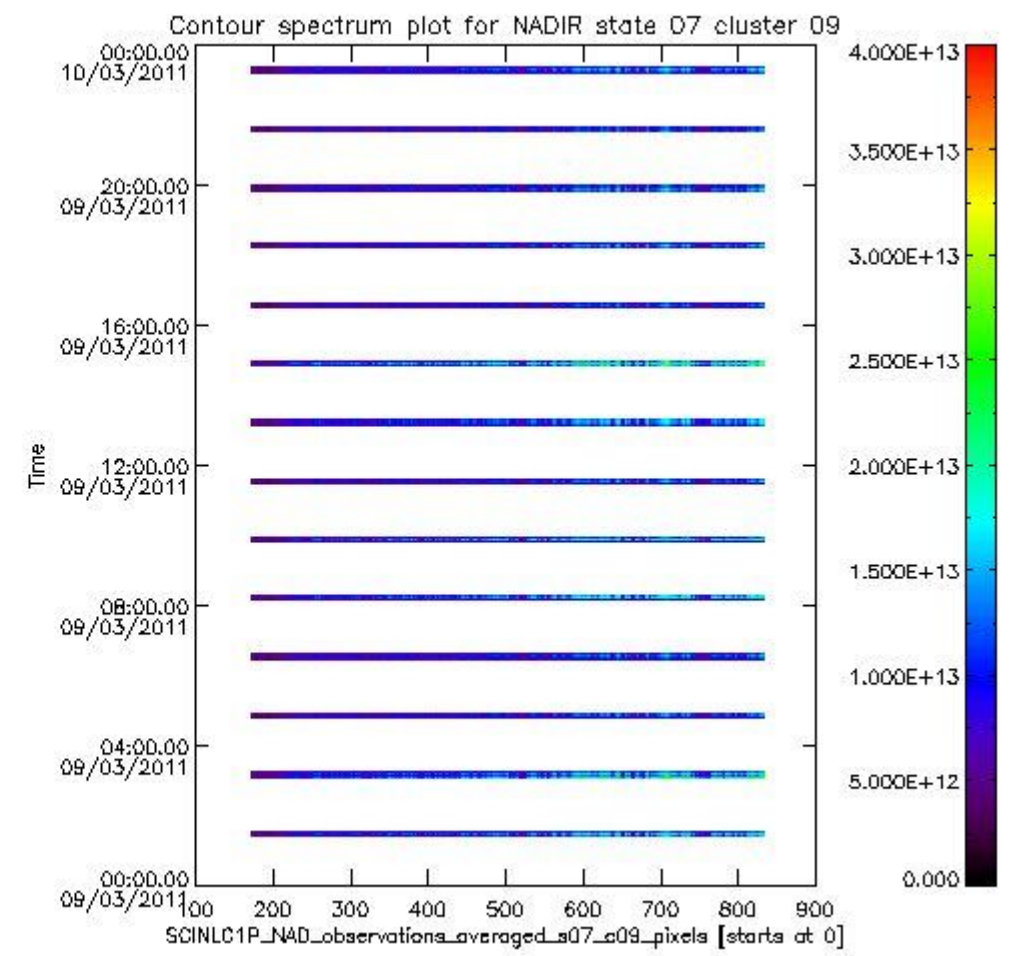
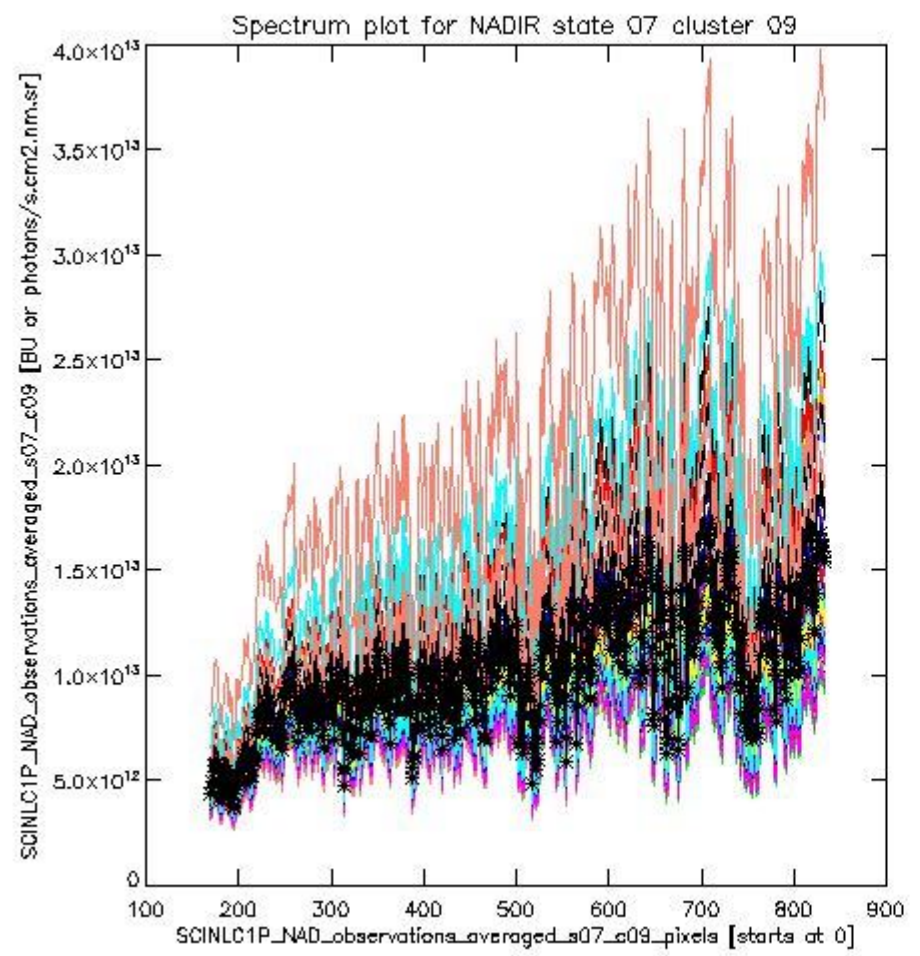




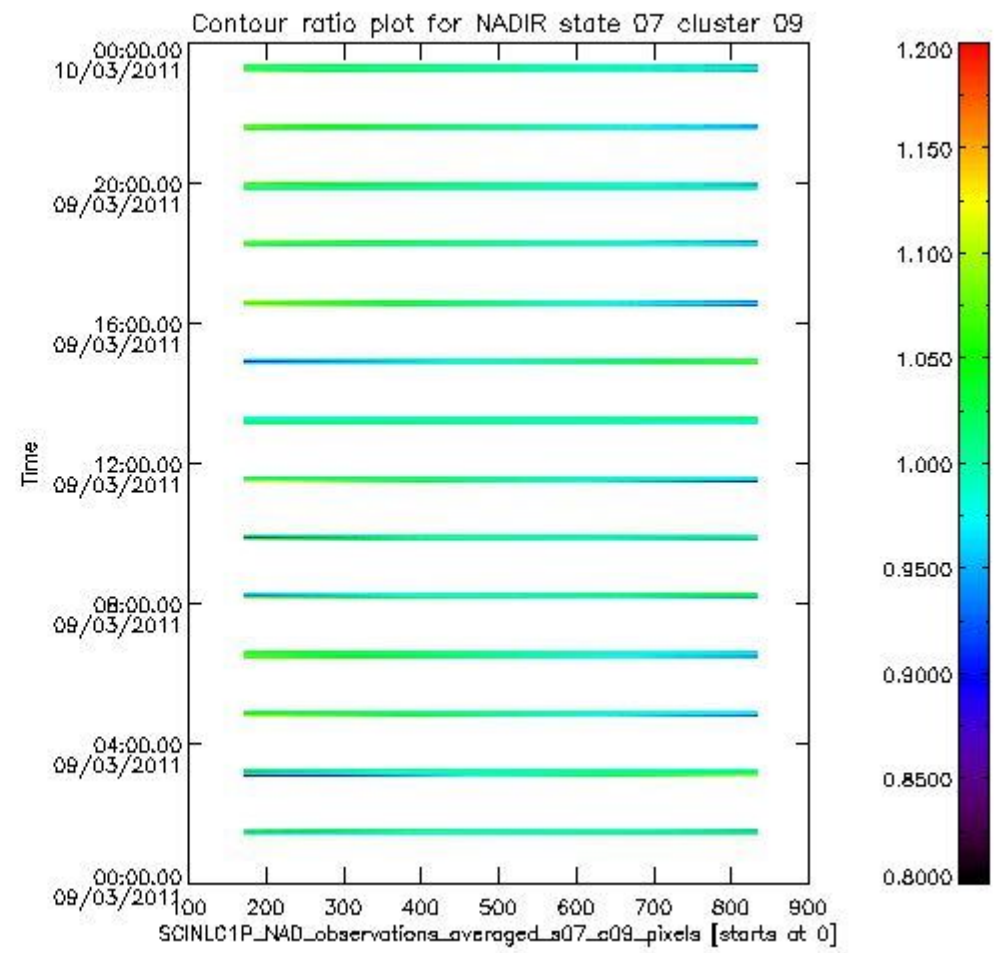
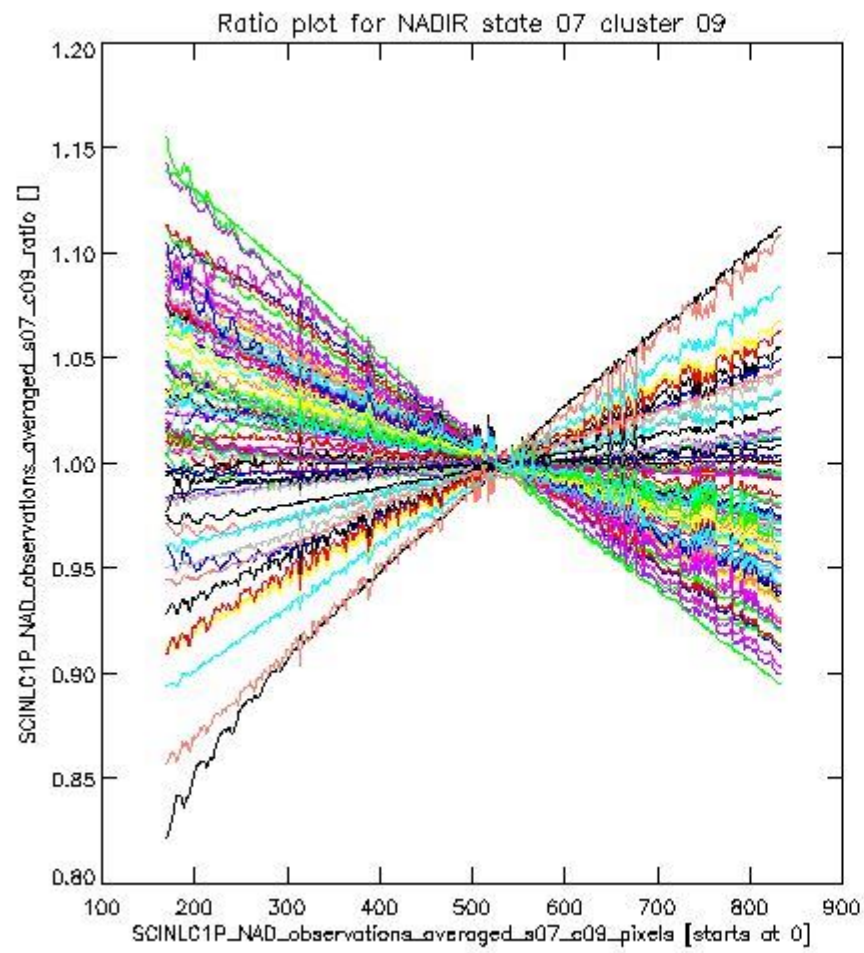
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	09MAR2011 01:26:22.831
Start time of last sample	09MAR2011 23:18:23.943
Reference period start time	07FEB2011 01:29:08.113
Reference period stop time	08MAR2011 23:55:14.518
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





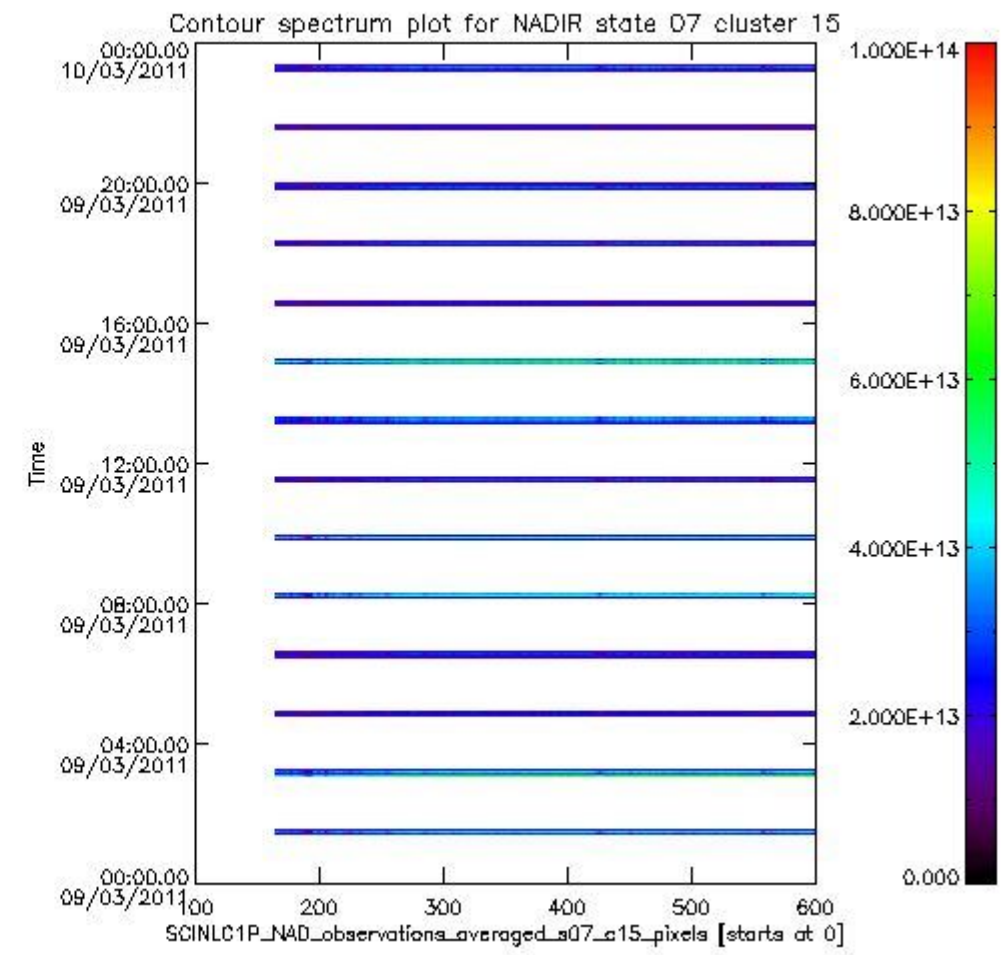
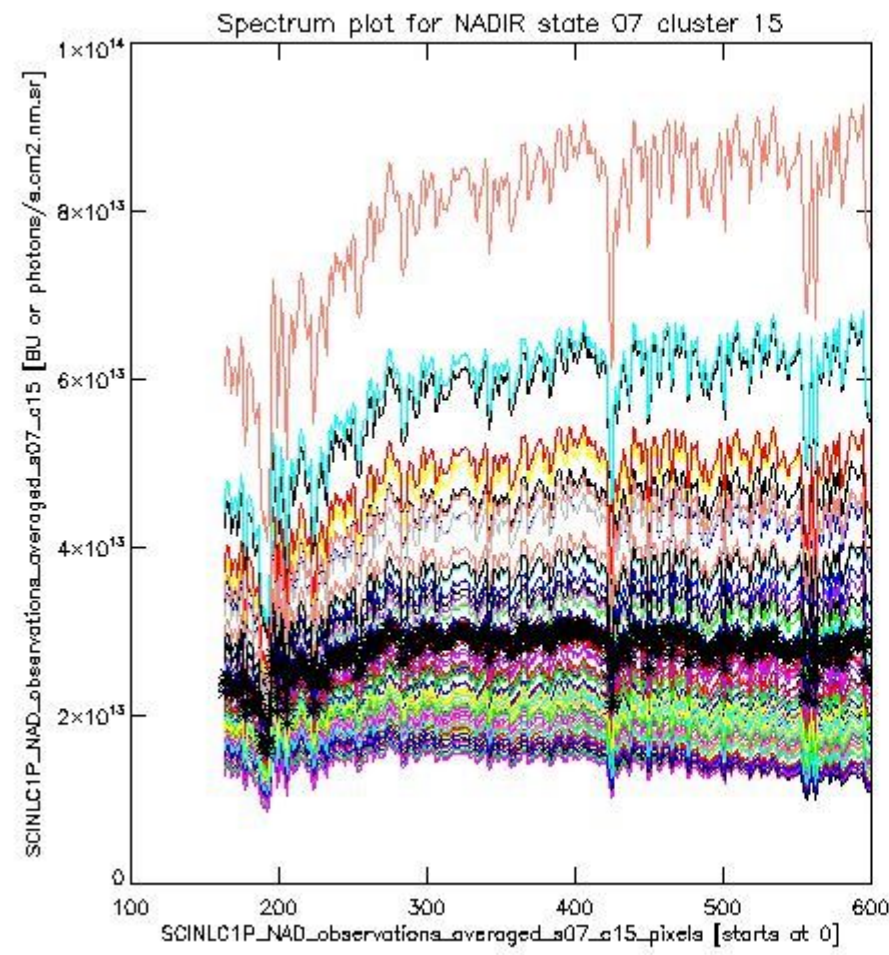
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_3.PNG

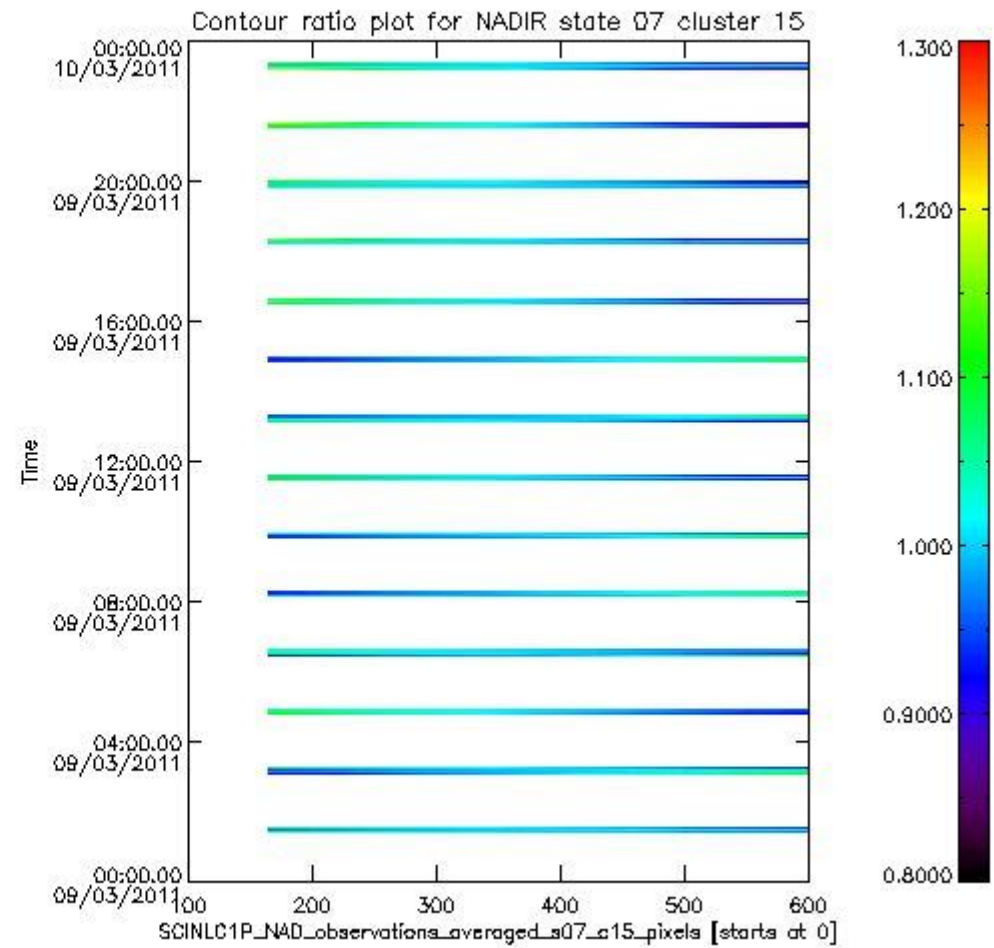
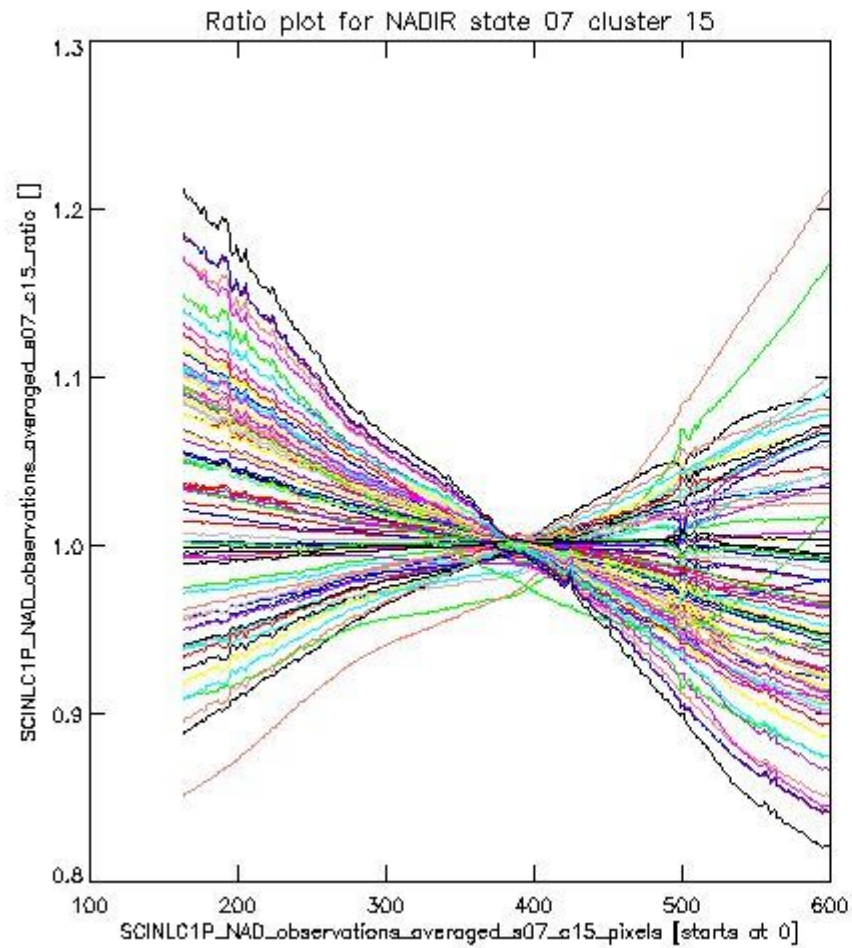
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	09MAR2011 01:26:22.831
Start time of last sample	09MAR2011 23:18:23.943
Reference period start time	07FEB2011 01:29:08.113
Reference period stop time	08MAR2011 23:55:14.518
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\_20110309\_4.PNG

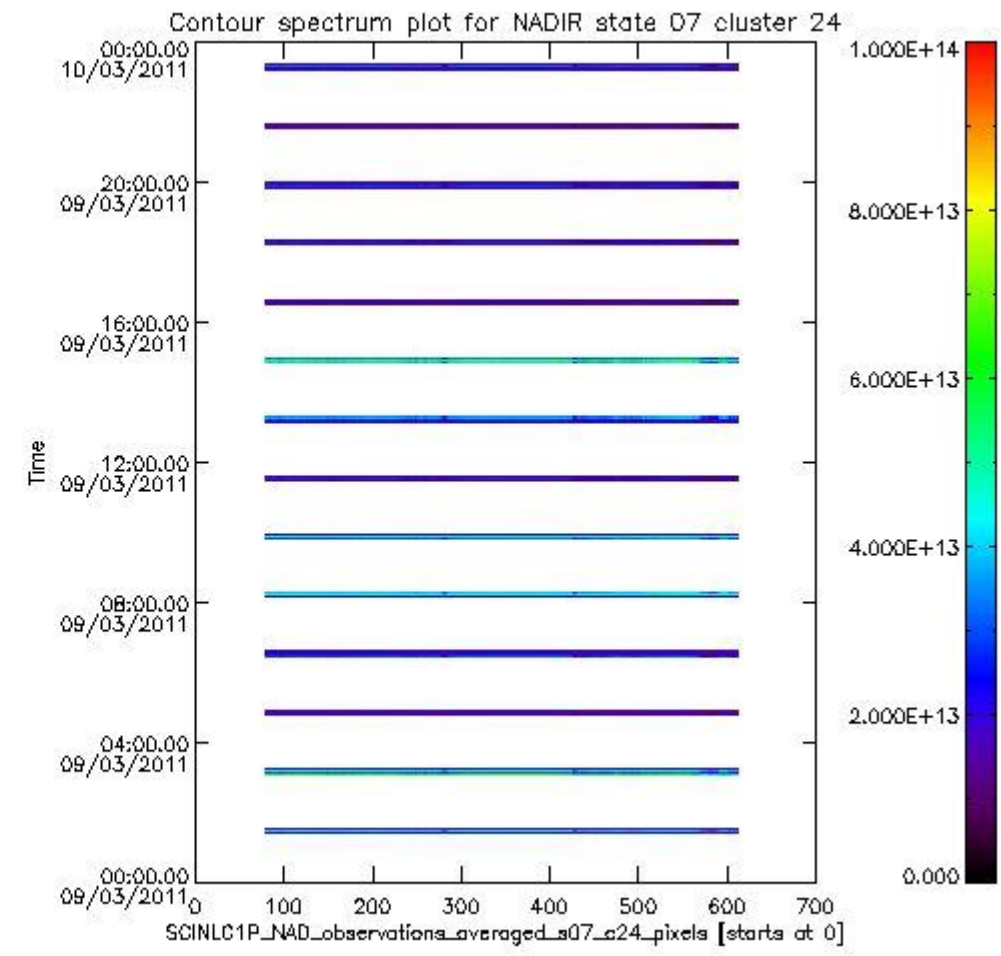
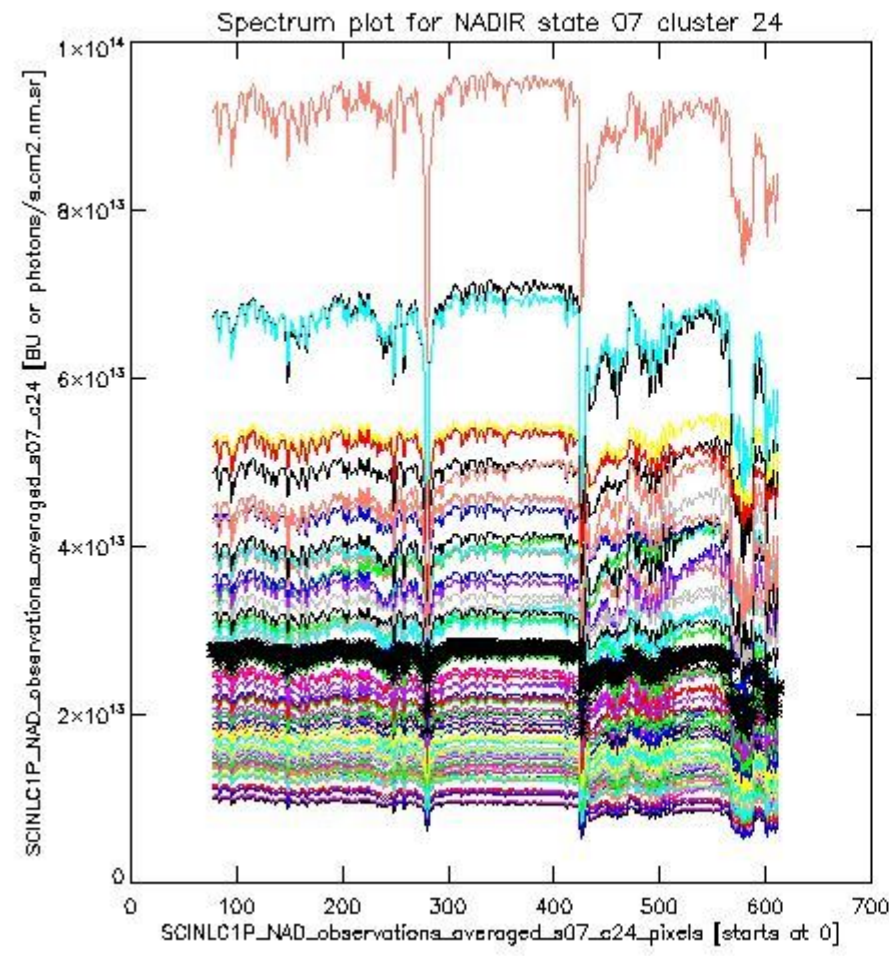




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_5.PNG

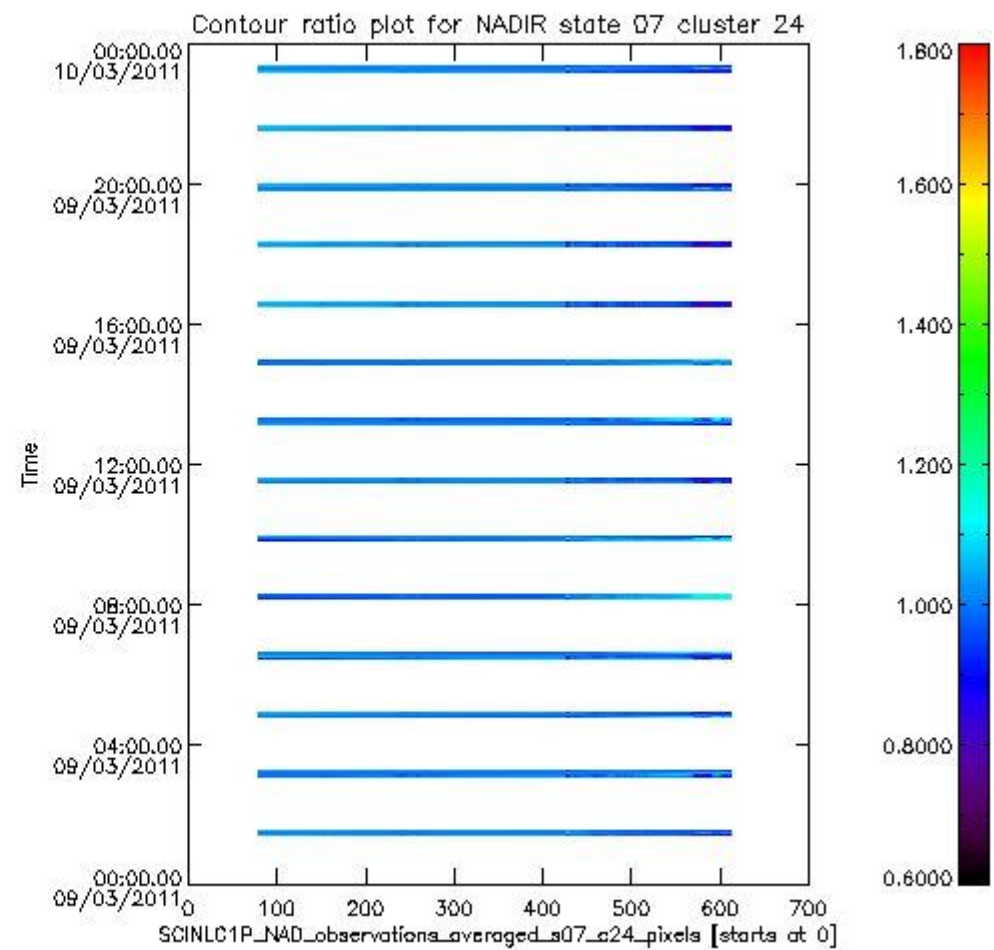
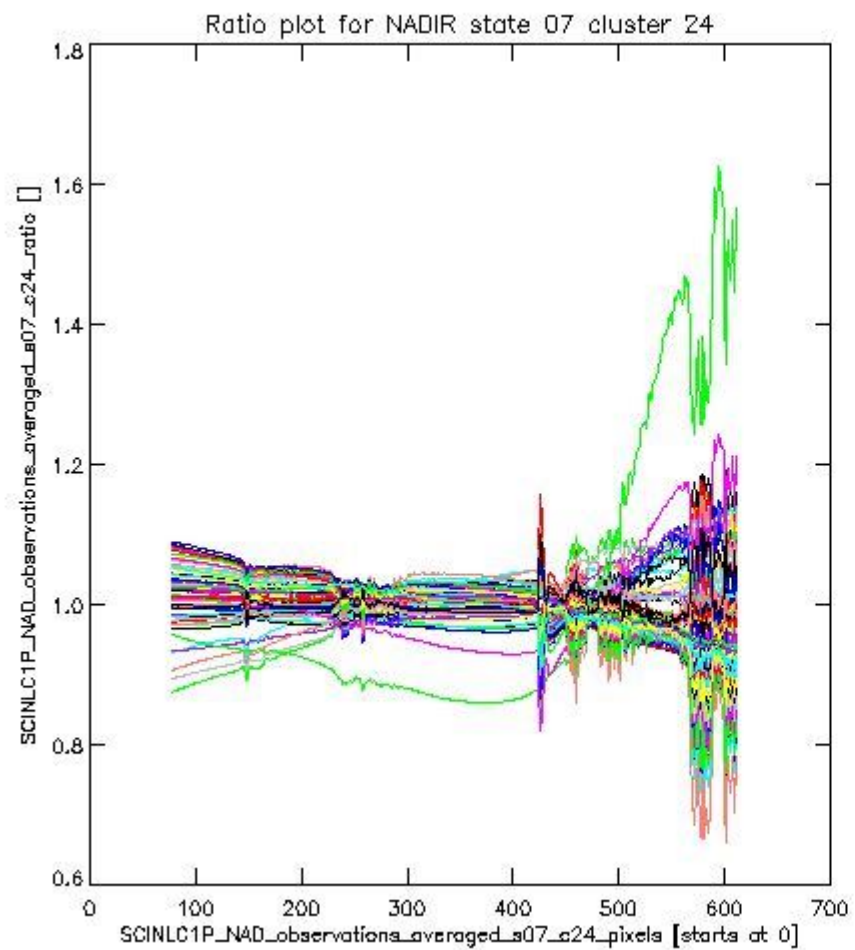
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	09MAR2011 01:26:22.831
Start time of last sample	09MAR2011 23:18:23.943
Reference period start time	07FEB2011 01:29:08.113
Reference period stop time	08MAR2011 23:55:14.518
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\_20110309\_6.PNG

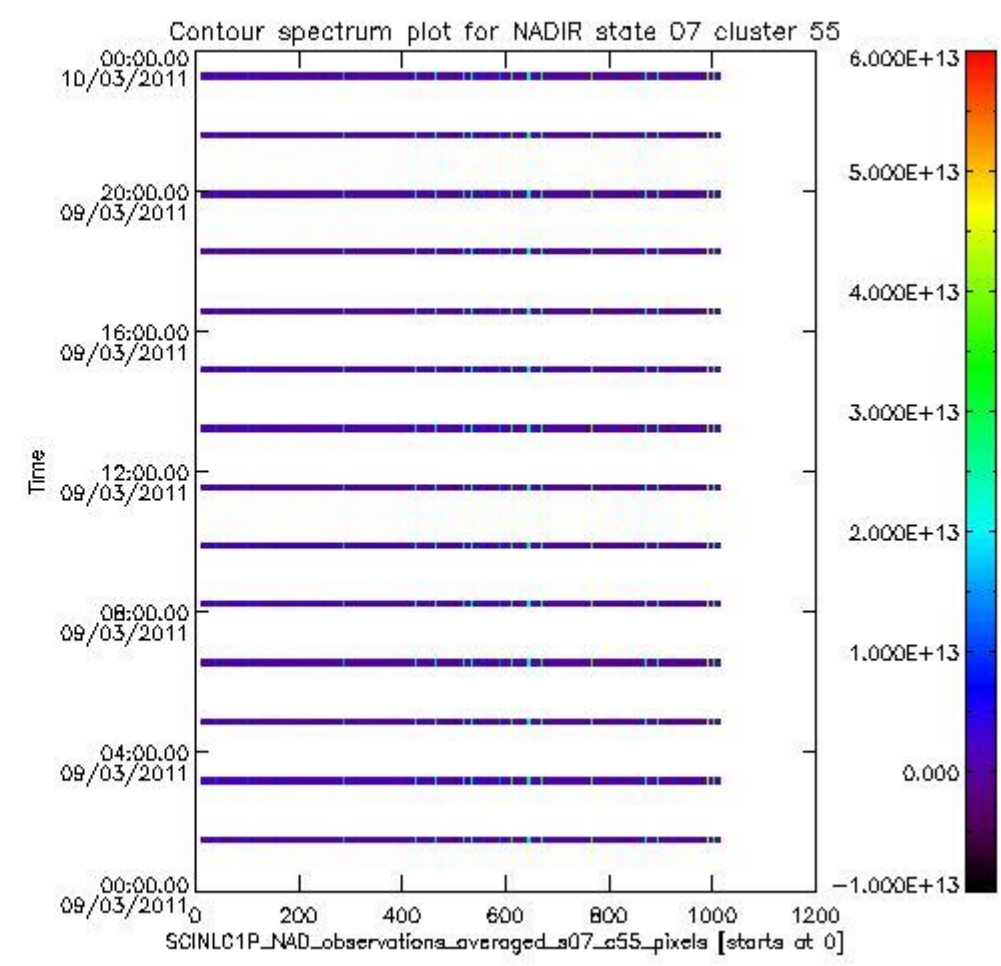
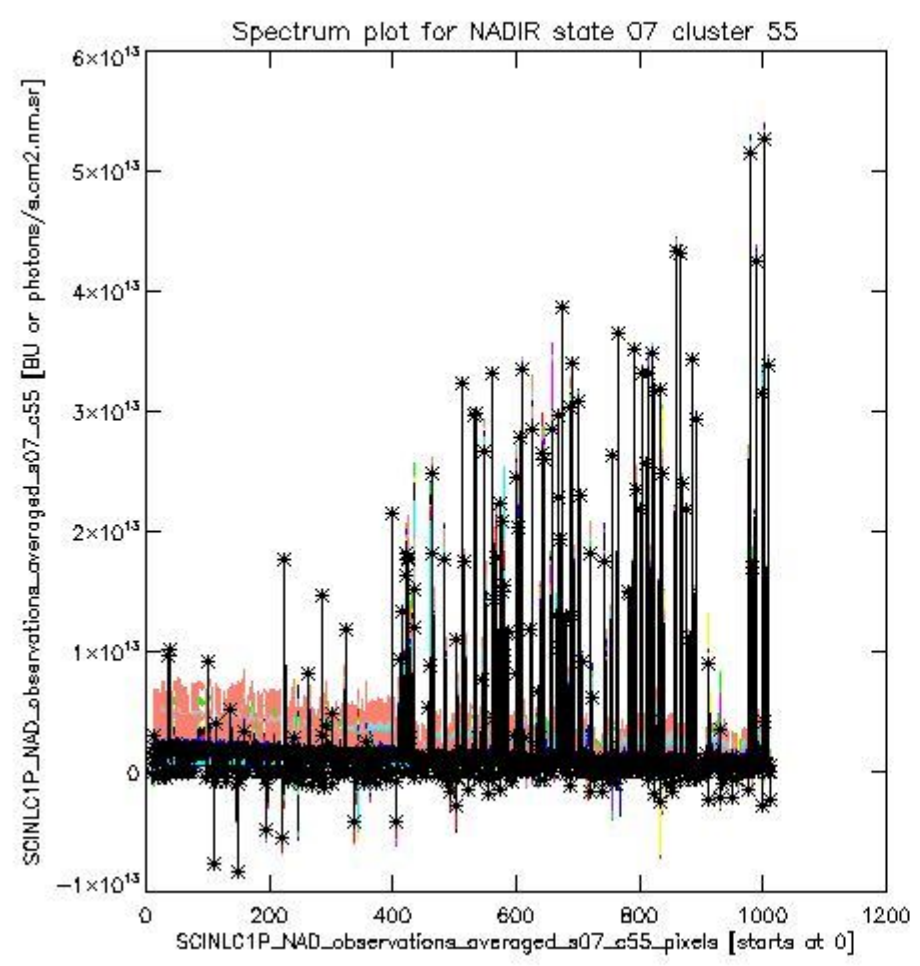




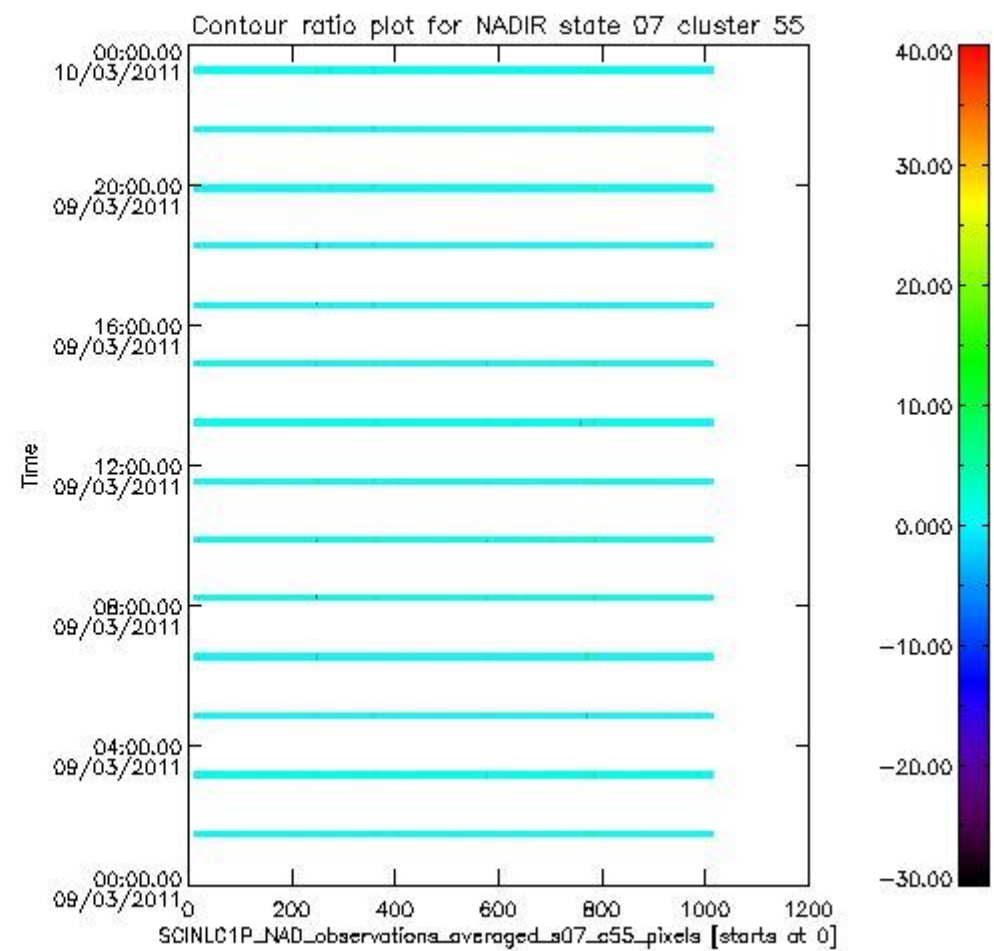
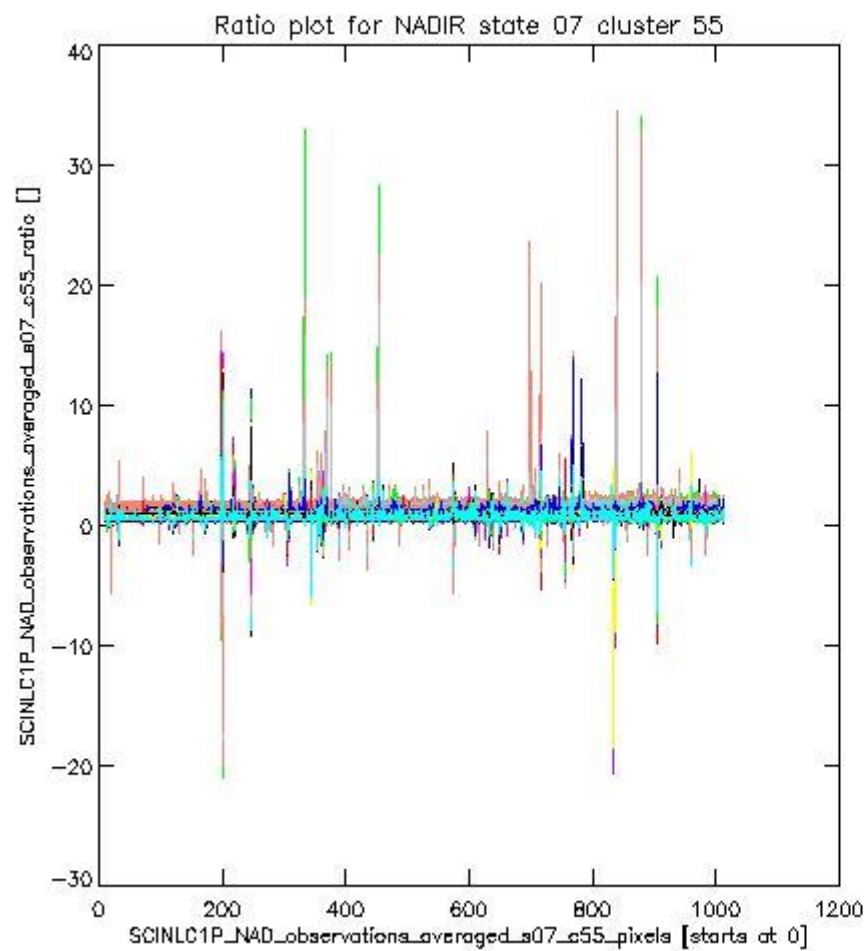
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_7.PNG

**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	09MAR2011 01:26:22.831
Start time of last sample	09MAR2011 23:18:23.943
Reference period start time	07FEB2011 01:29:08.113
Reference period stop time	08MAR2011 23:55:14.518
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_8.PNG

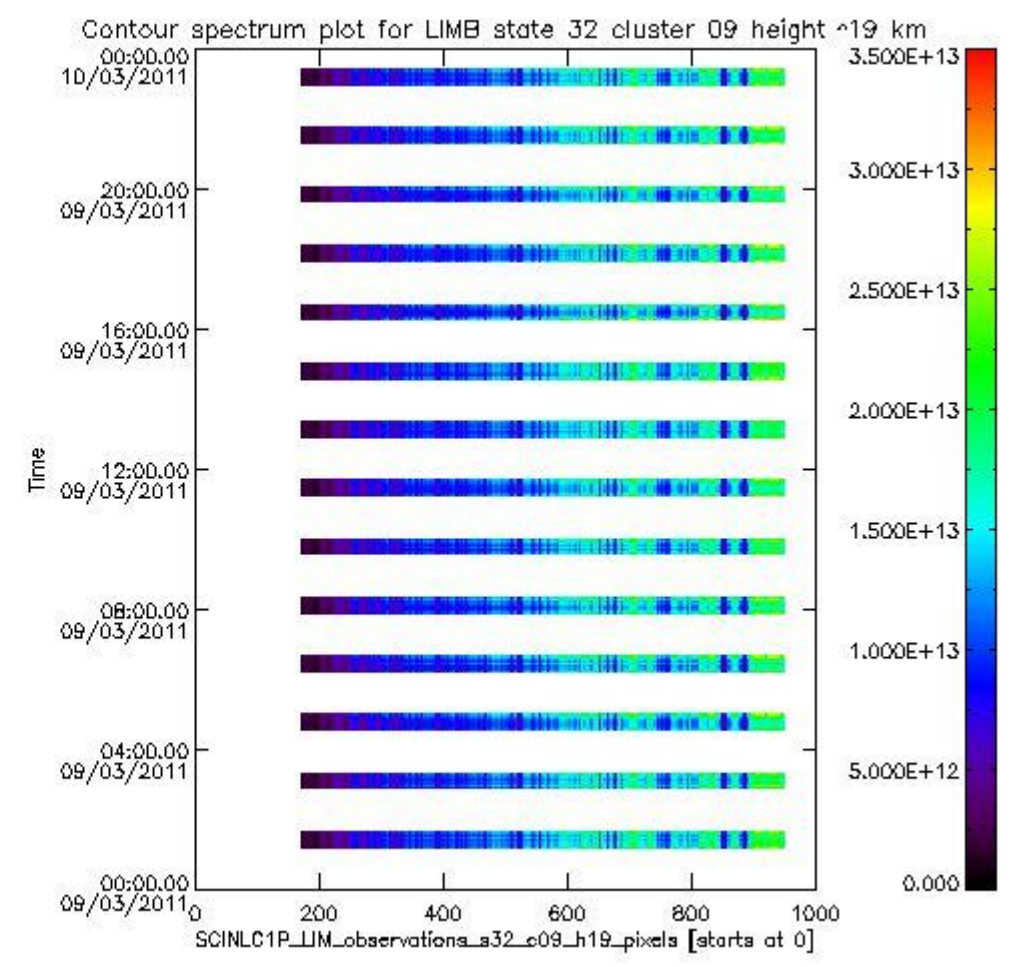
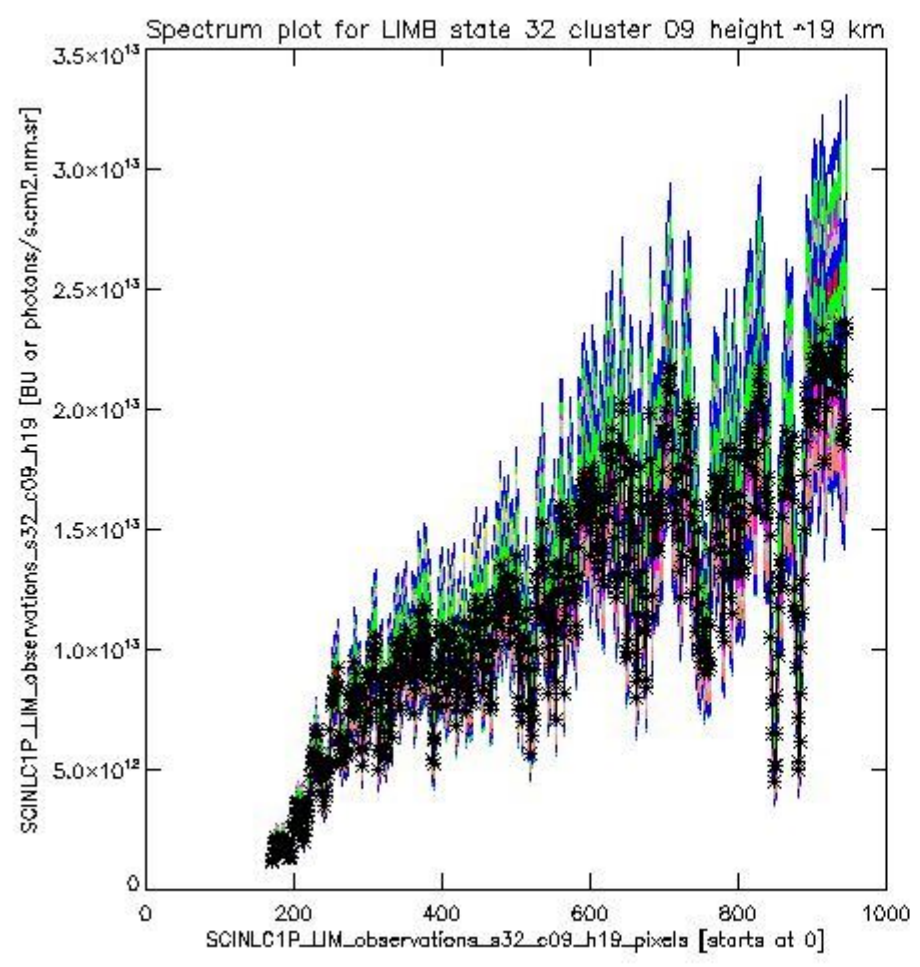


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_9.PNG

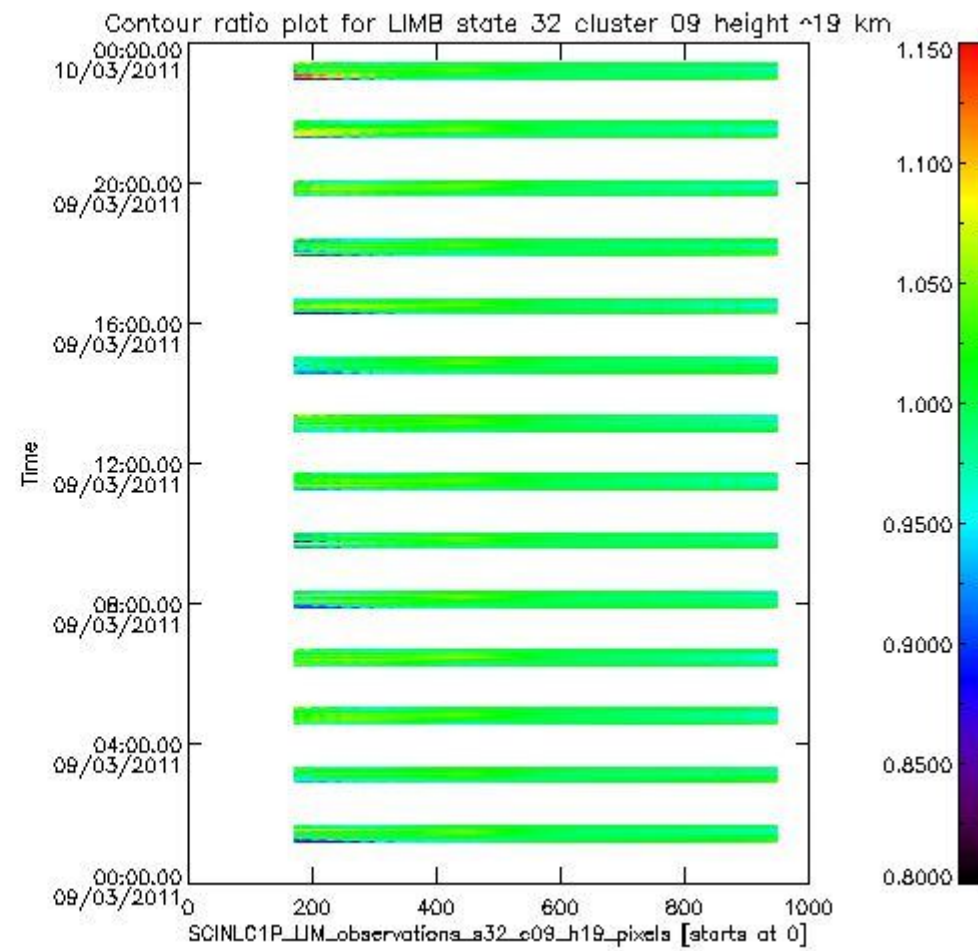
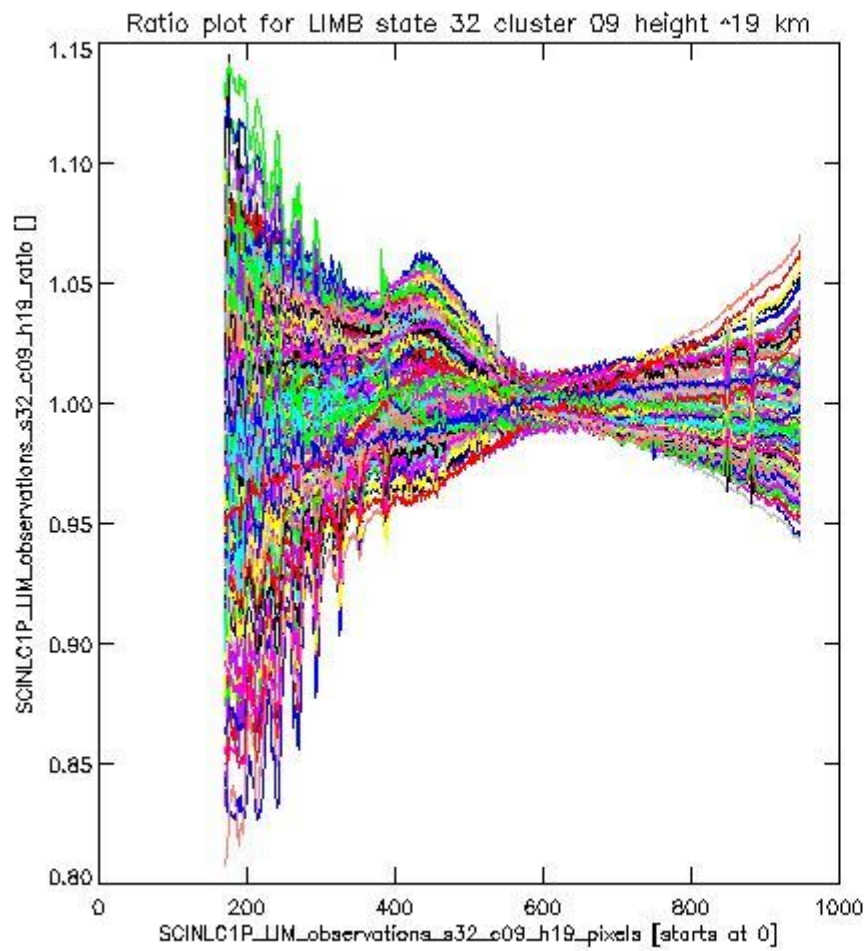
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	09MAR2011 01:11:09.452
Start time of last sample	09MAR2011 23:21:35.240
Reference period start time	07FEB2011 00:01:11.058
Reference period stop time	08MAR2011 23:58:25.823
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





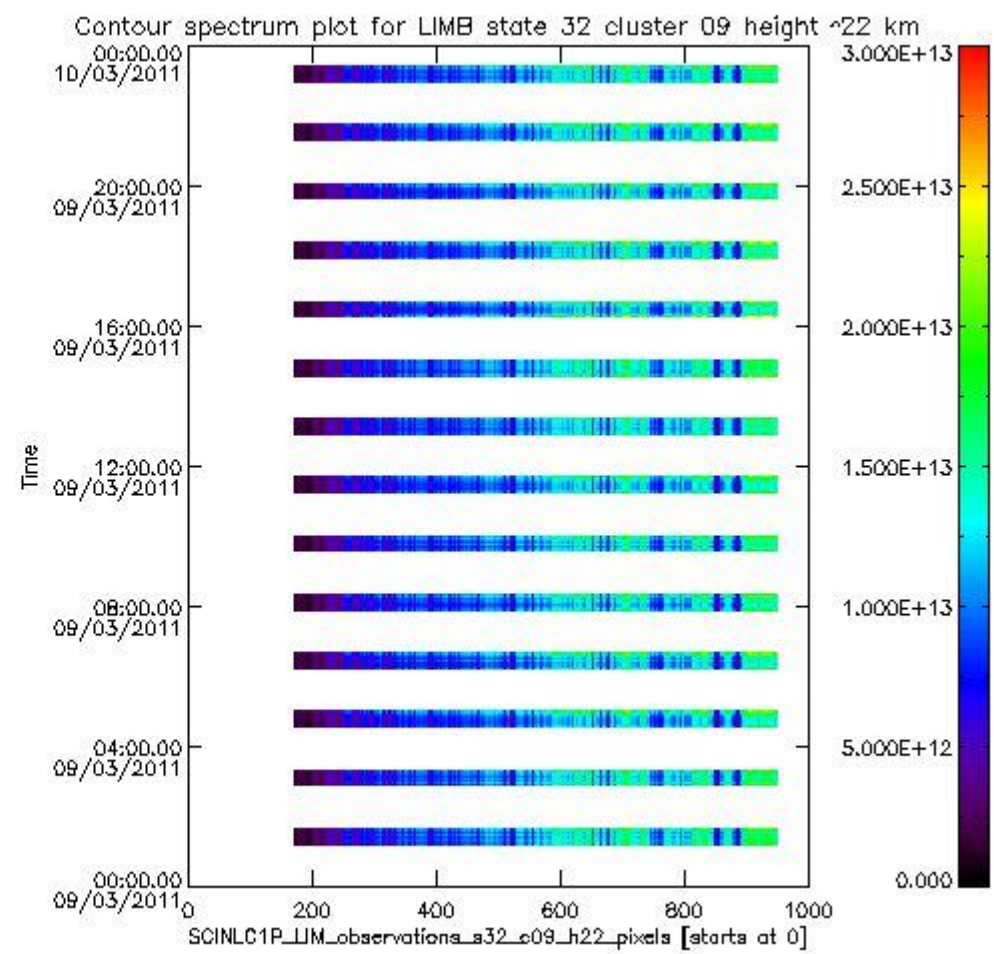
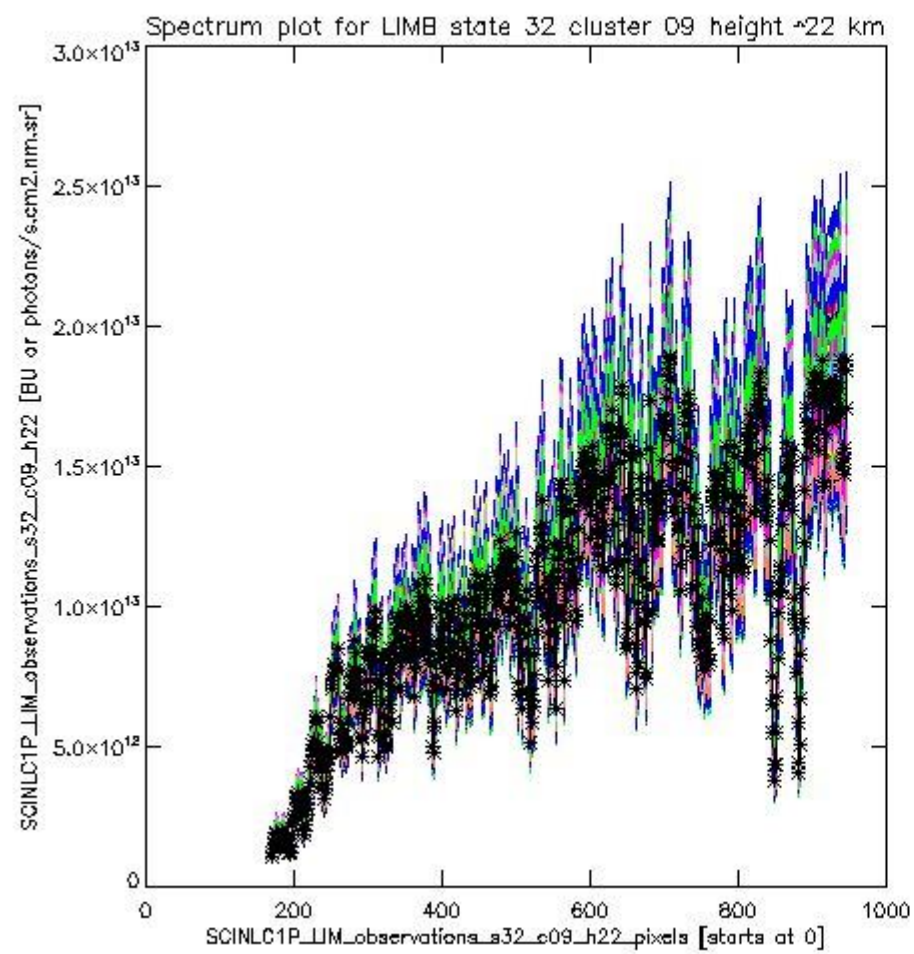
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_11.PNG

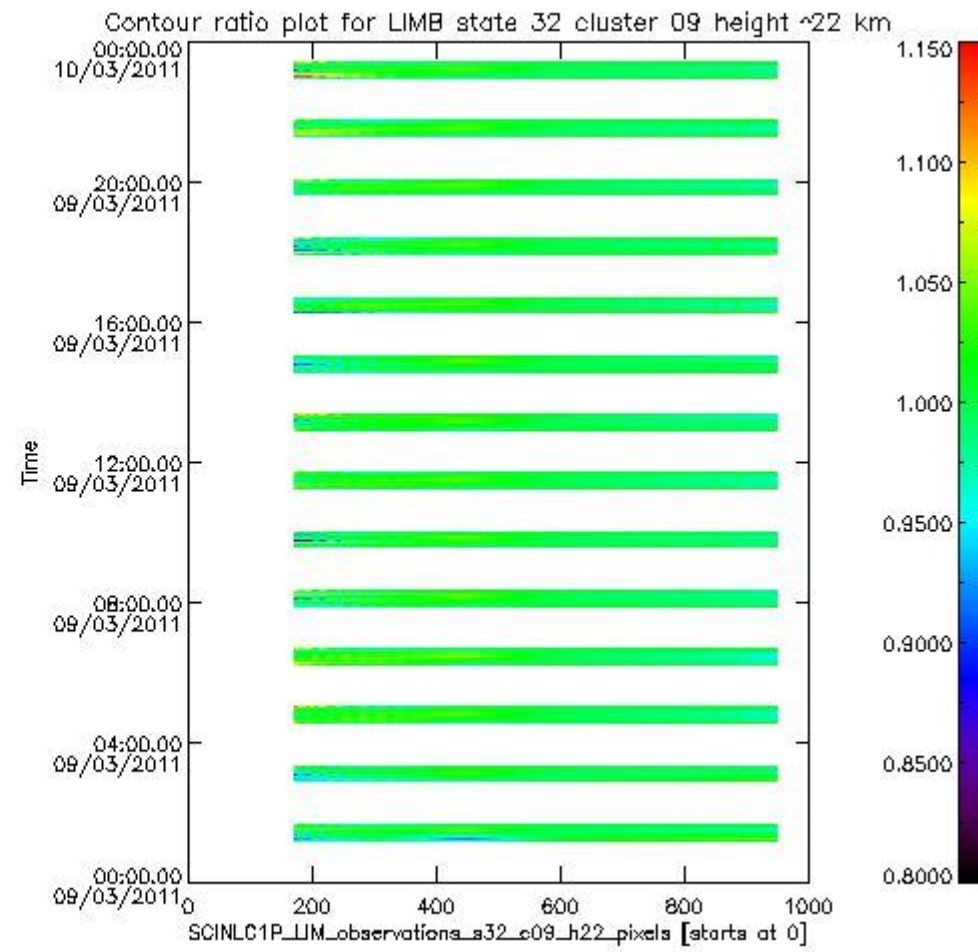
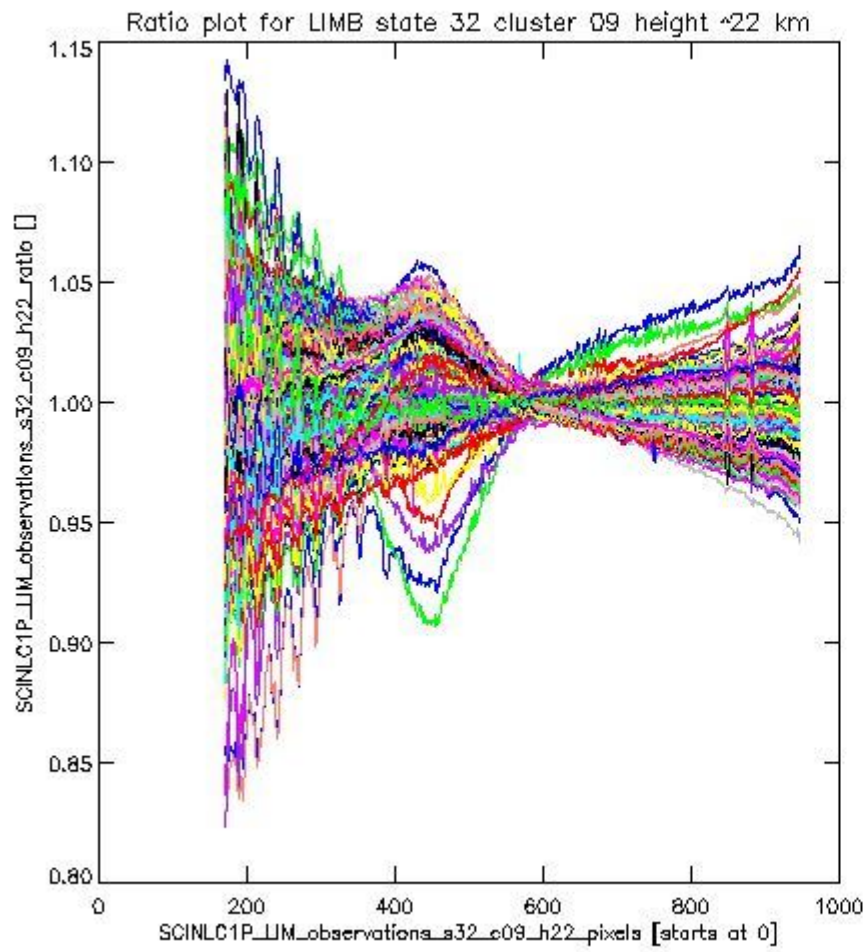
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	09MAR2011 01:11:09.452
Start time of last sample	09MAR2011 23:21:35.240
Reference period start time	07FEB2011 00:01:11.058
Reference period stop time	08MAR2011 23:58:25.823
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\_20110309\_12.PNG

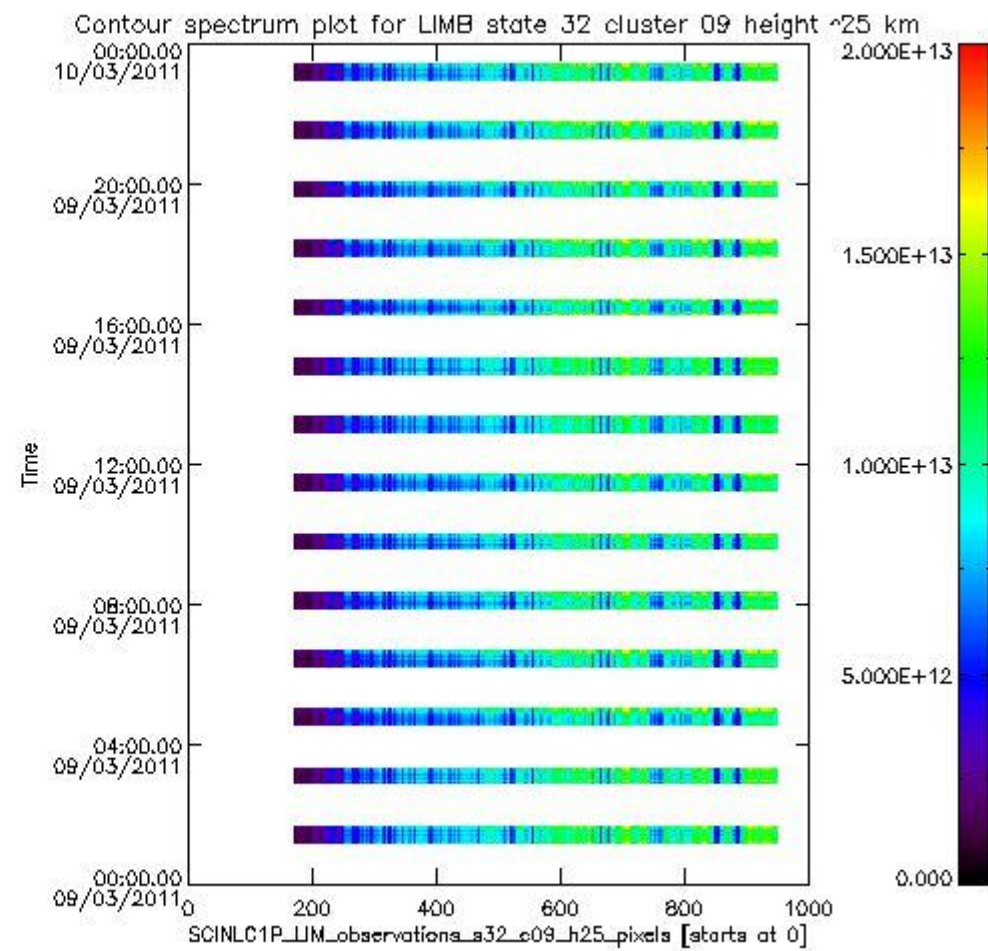
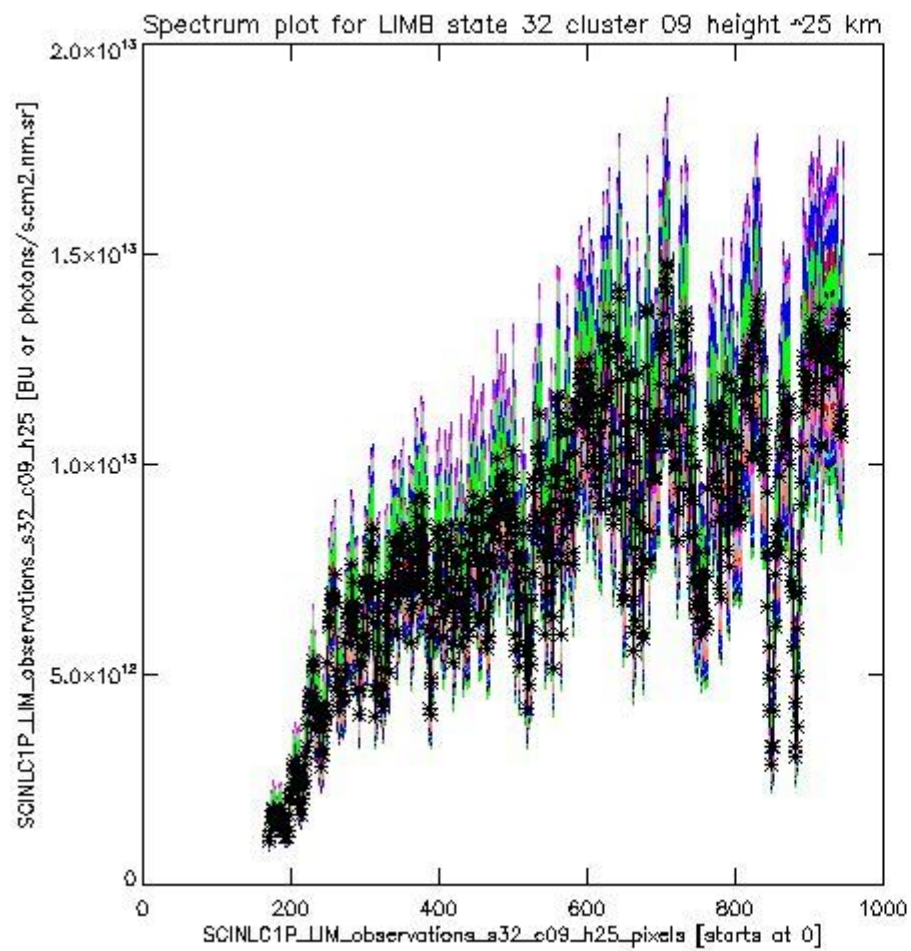




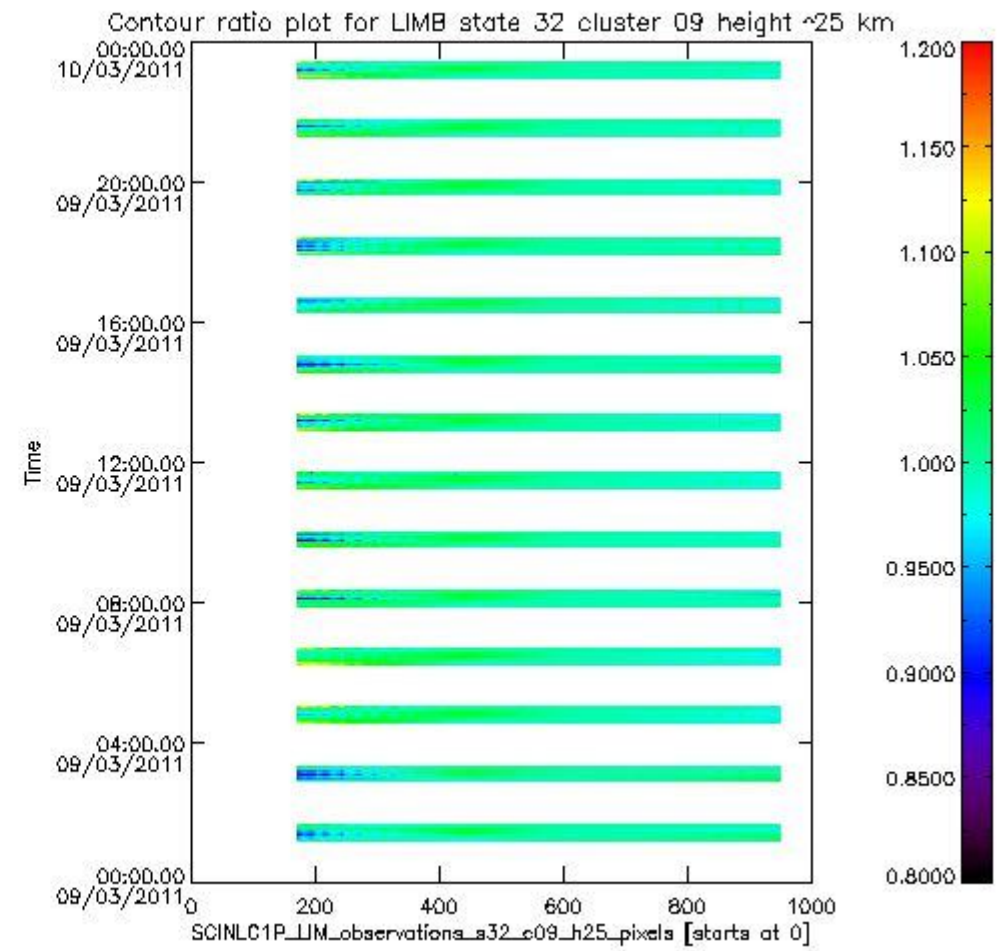
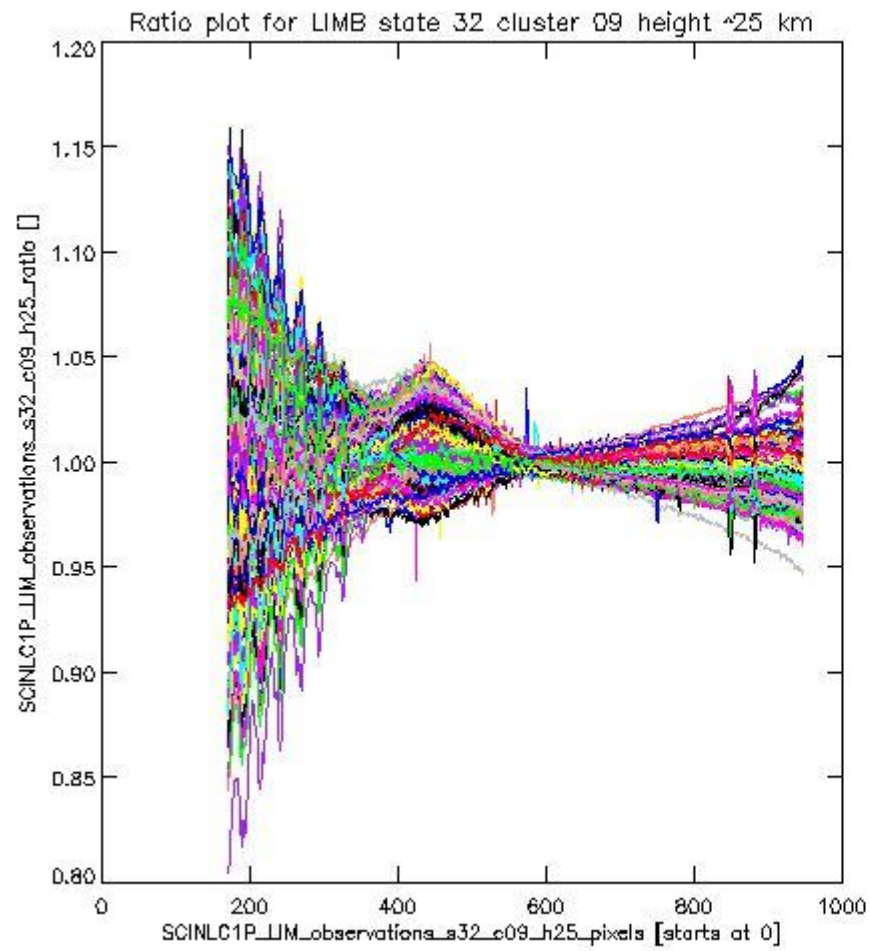
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_13.PNG

**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	09MAR2011 01:11:09.452
Start time of last sample	09MAR2011 23:21:35.240
Reference period start time	07FEB2011 00:01:11.058
Reference period stop time	08MAR2011 23:58:25.823
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\_20110309\_14.PNG

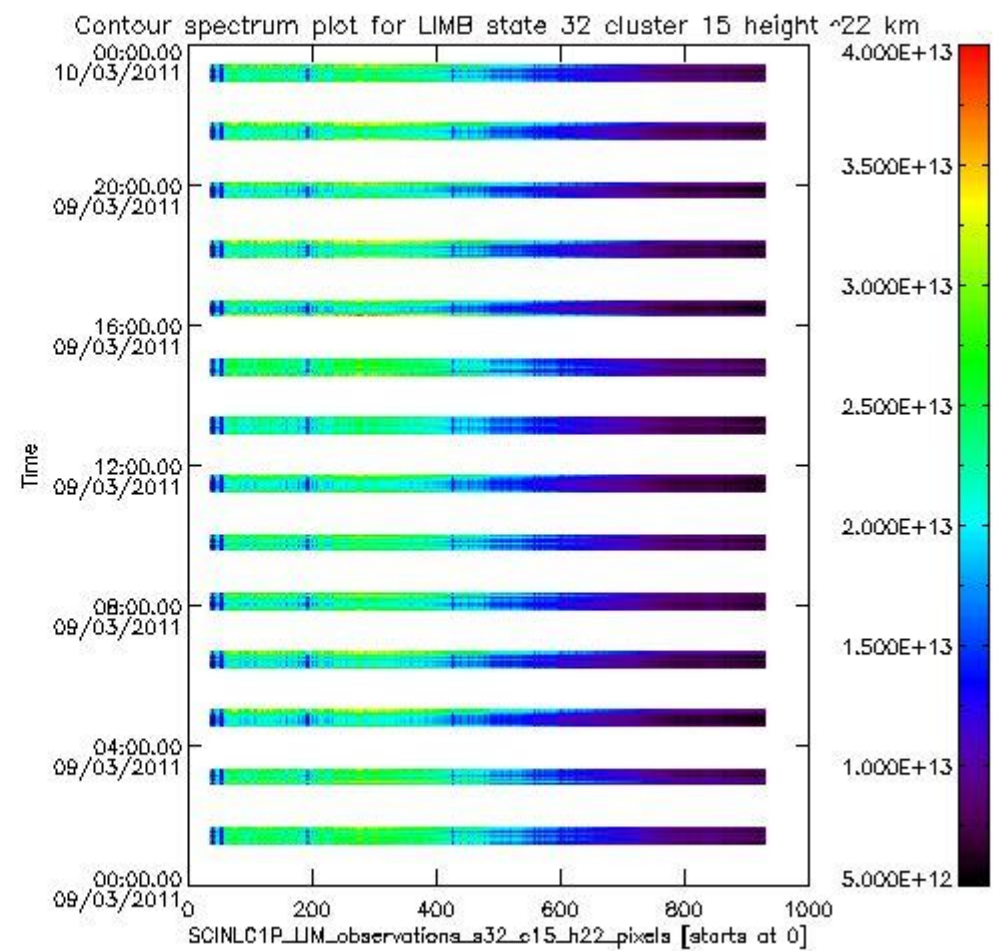
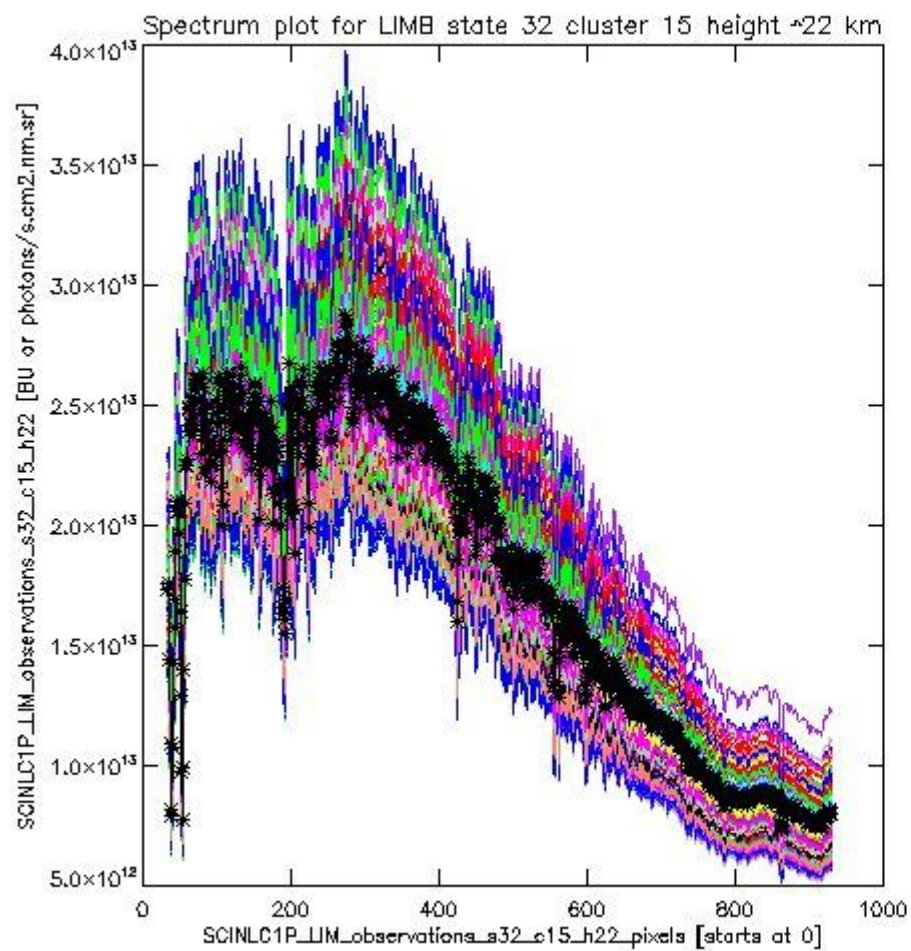


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_15.PNG

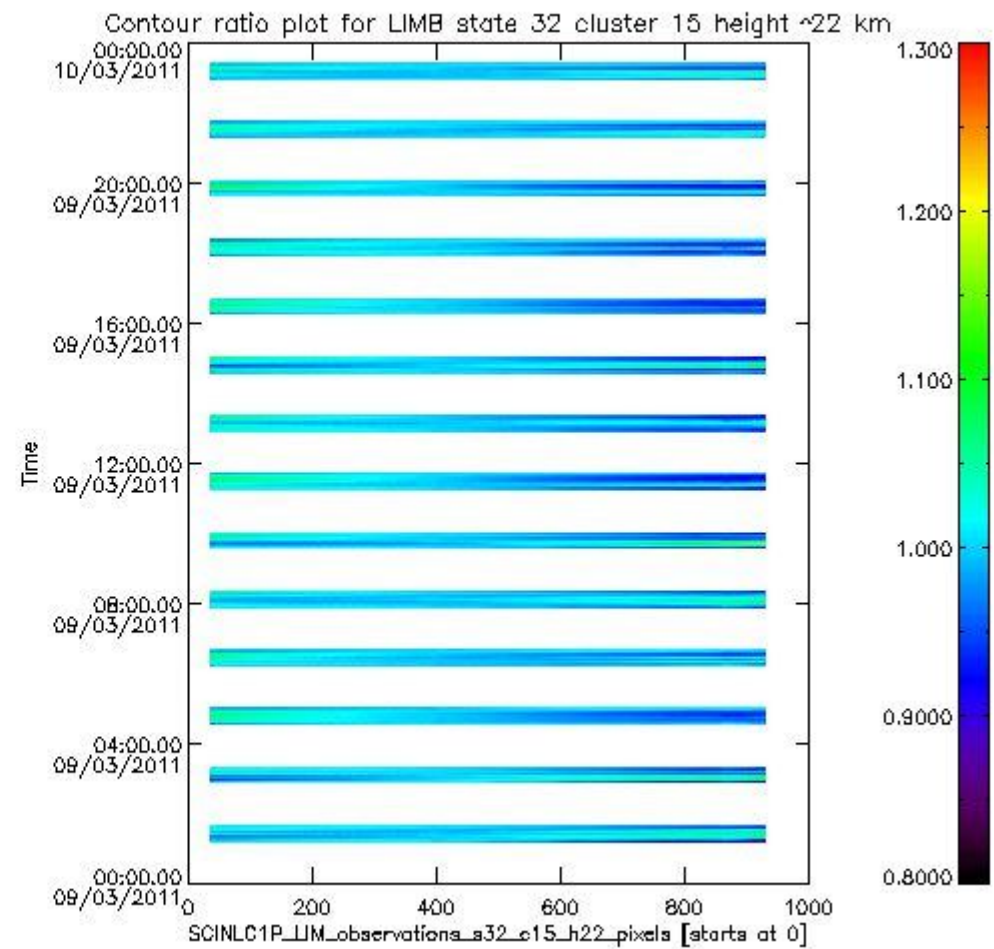
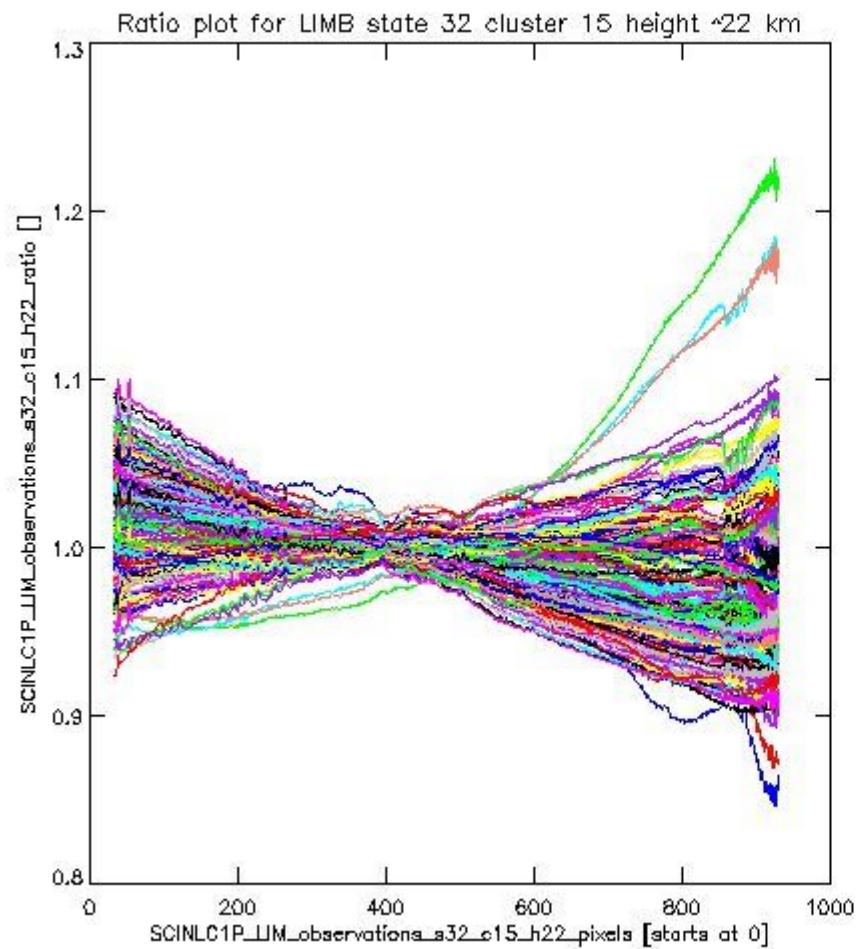
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	09MAR2011 01:11:09.452
Start time of last sample	09MAR2011 23:21:35.240
Reference period start time	07FEB2011 00:01:11.058
Reference period stop time	08MAR2011 23:58:25.823
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





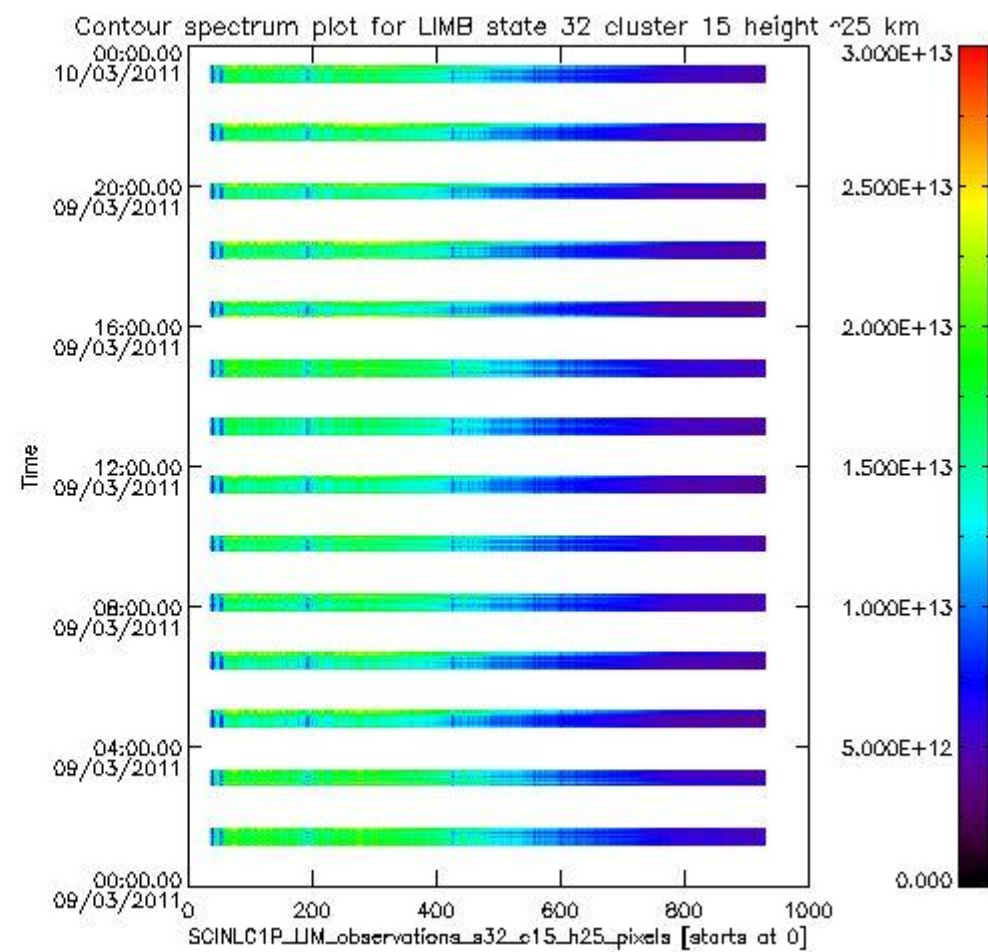
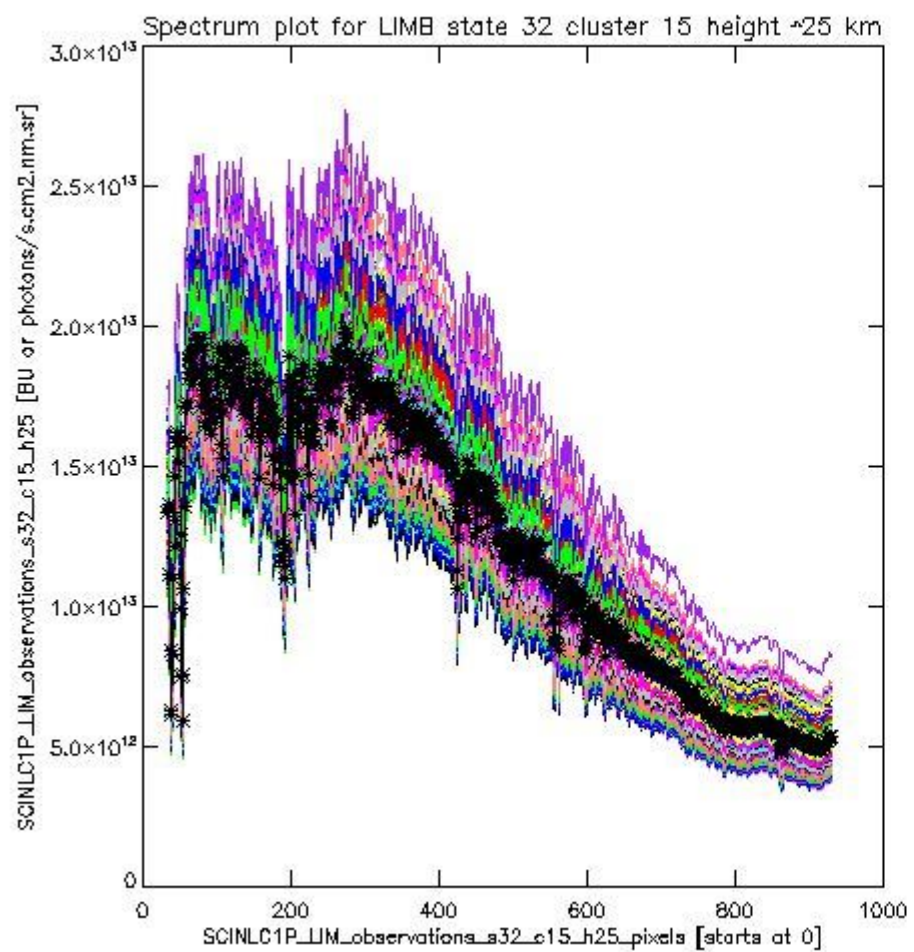
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_17.PNG

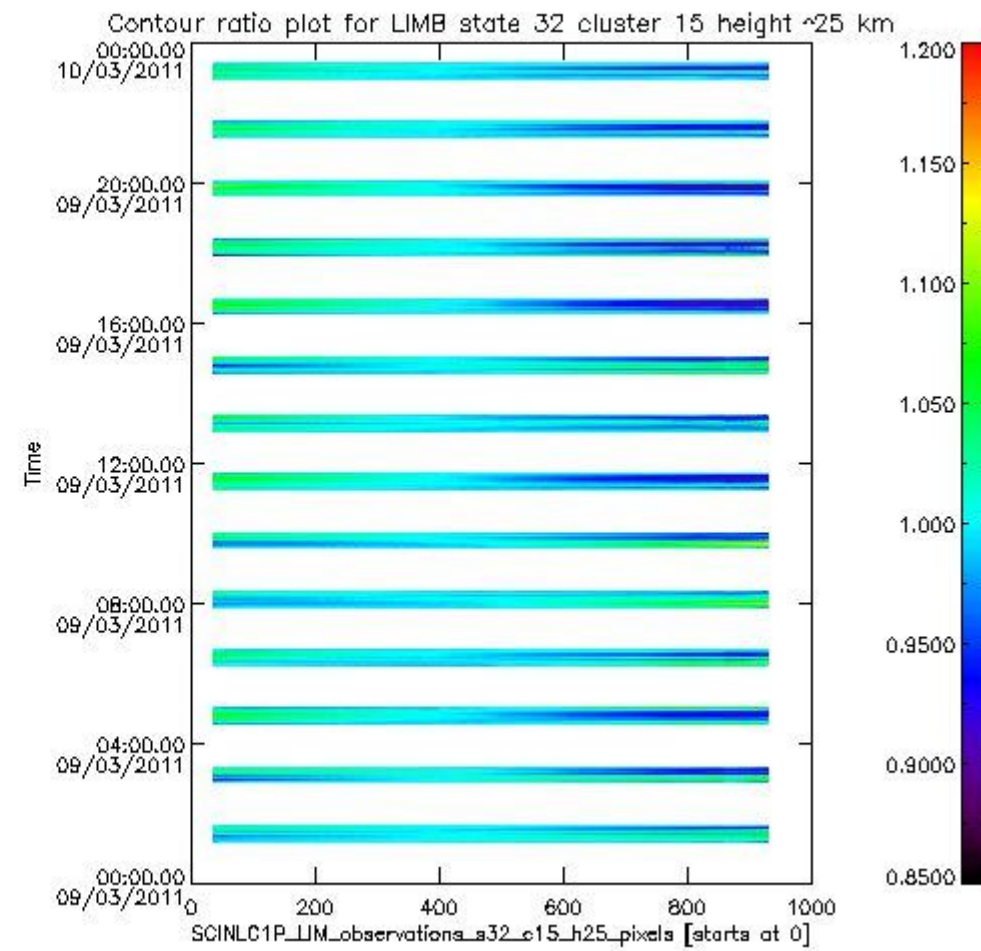
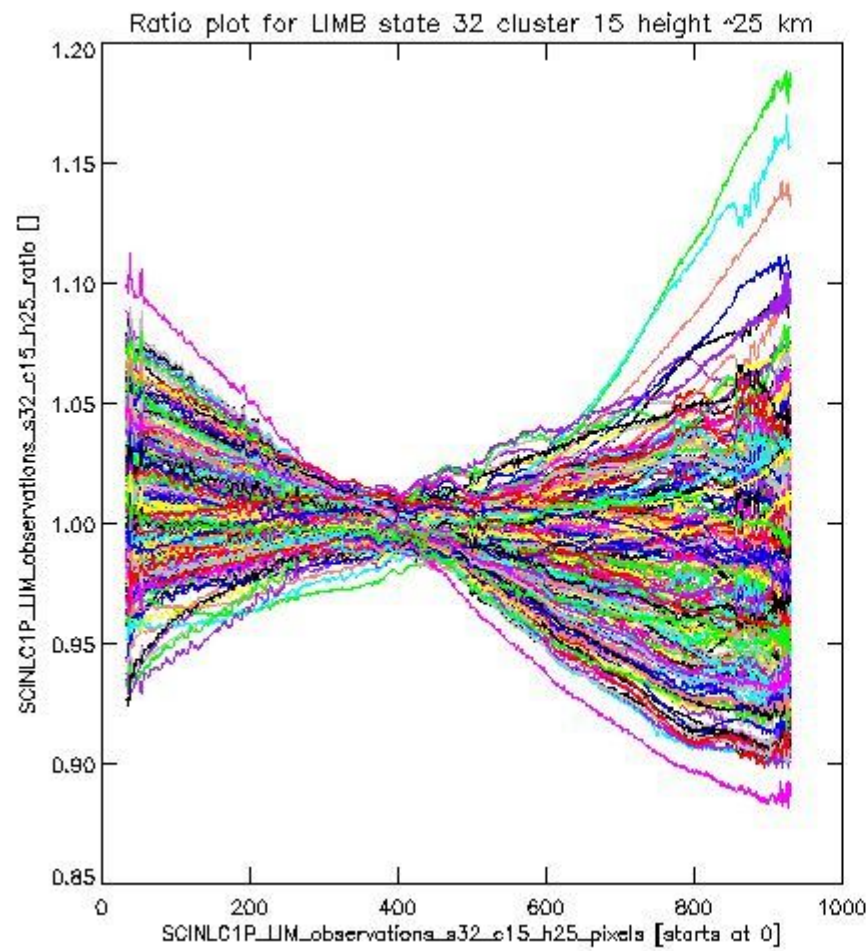
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	09MAR2011 01:11:09.452
Start time of last sample	09MAR2011 23:21:35.240
Reference period start time	07FEB2011 00:01:11.058
Reference period stop time	08MAR2011 23:58:25.823
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\_20110309\_18.PNG

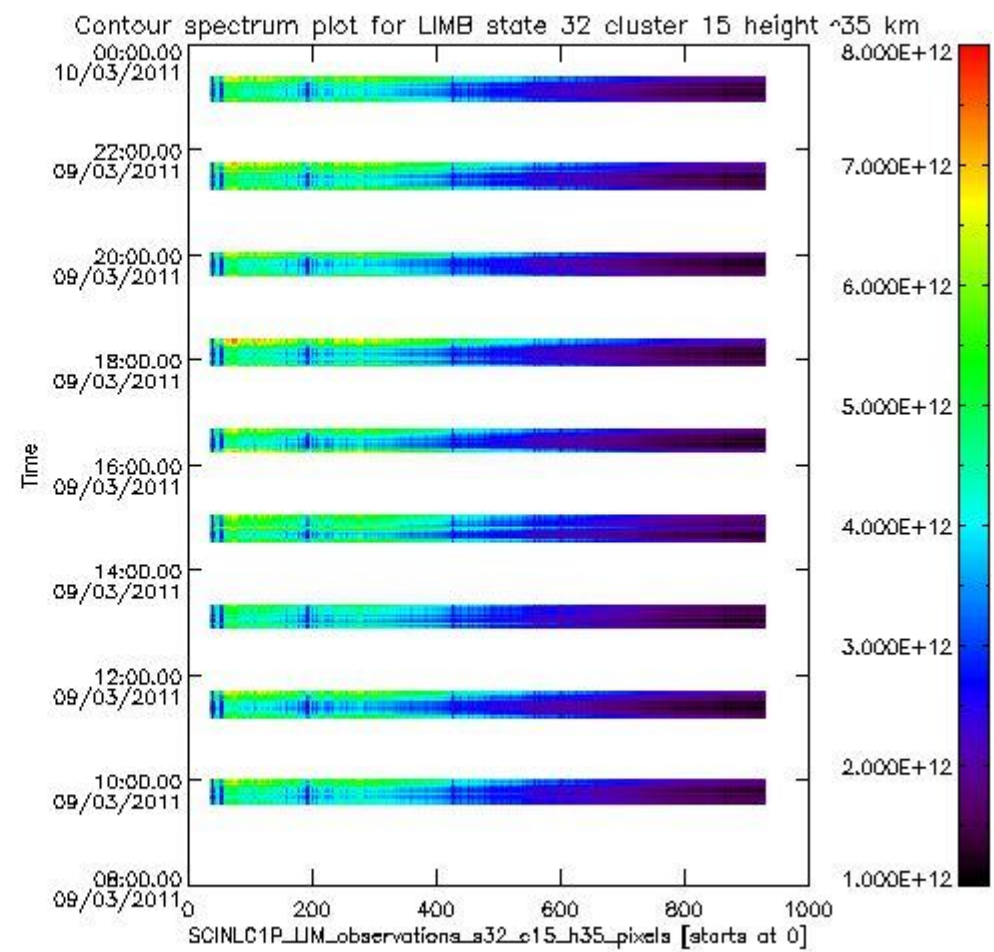
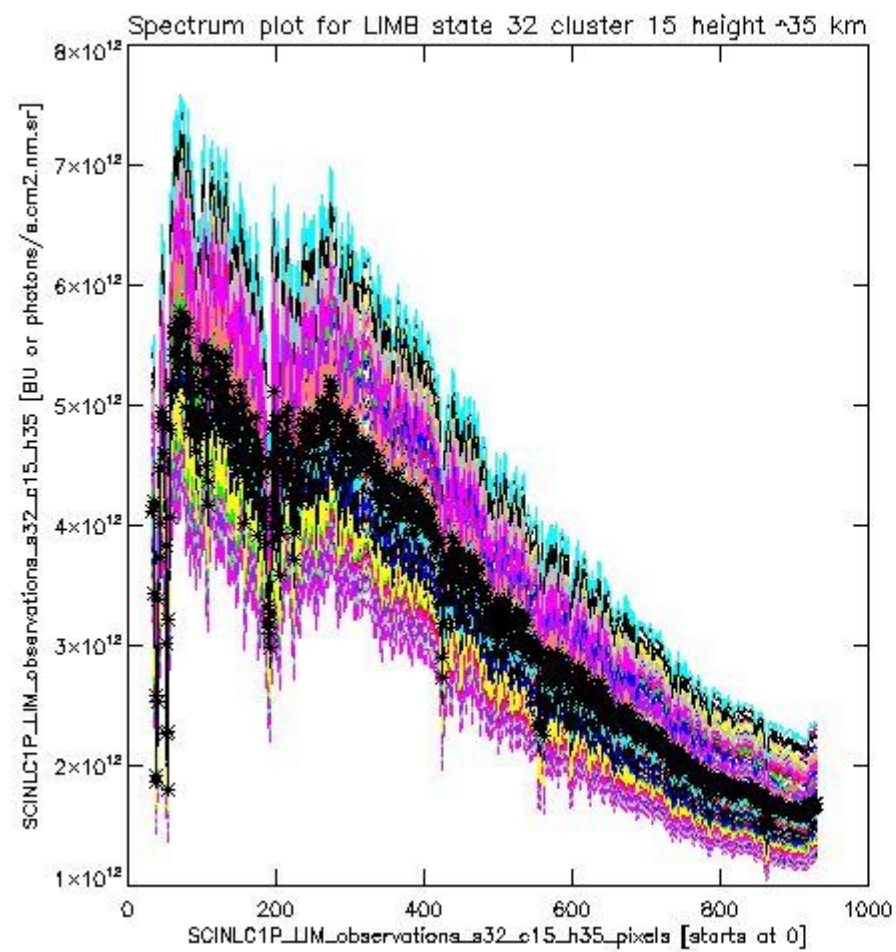


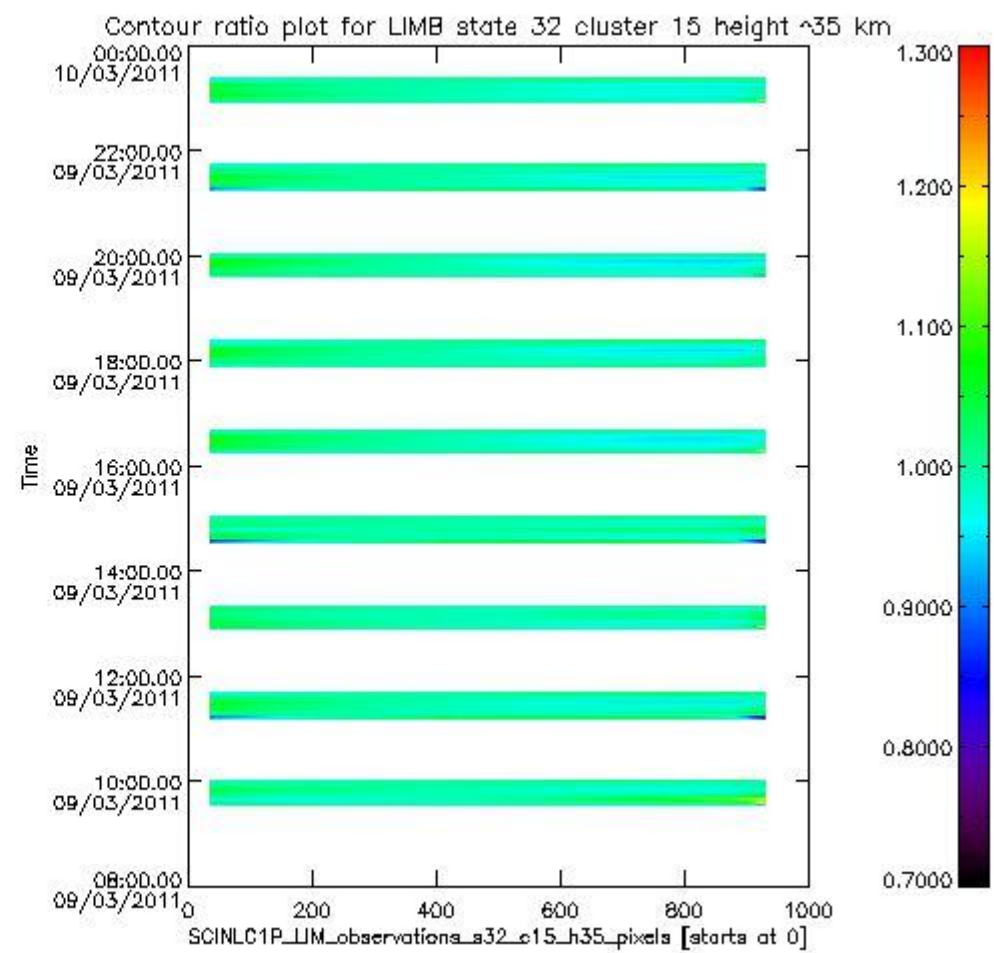
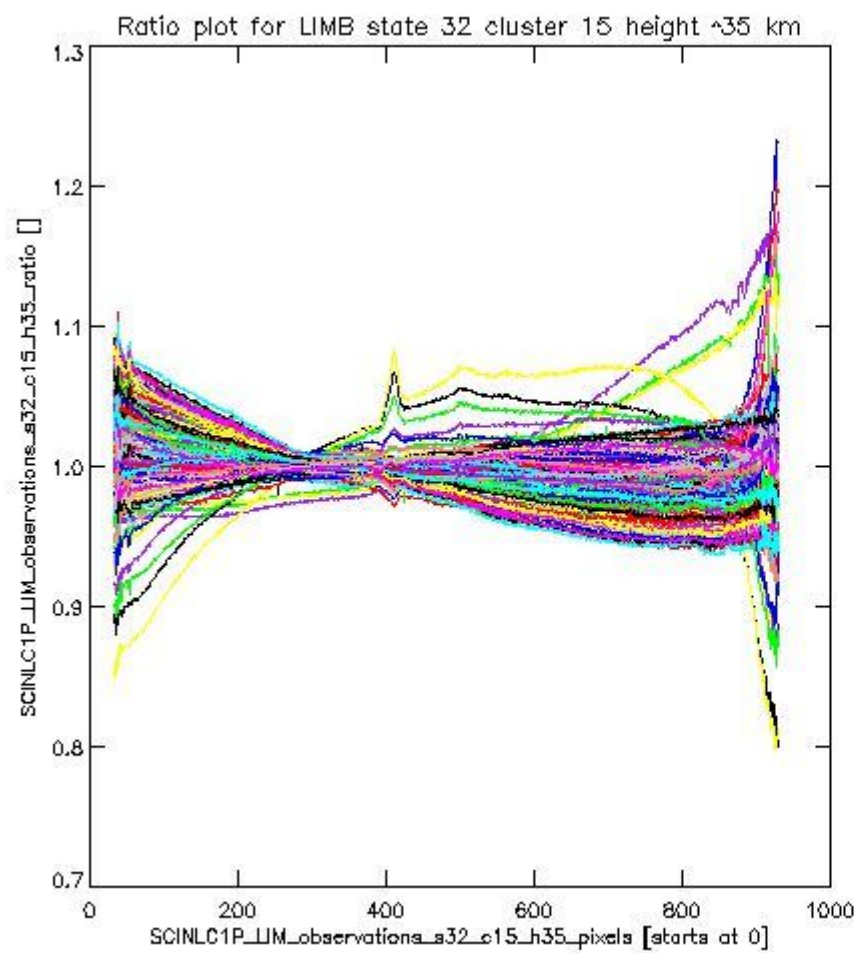


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110309\_19.PNG

**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	09MAR2011 09:33:11.347
Start time of last sample	09MAR2011 23:21:35.240
Reference period start time	08FEB2011 00:37:04.706
Reference period stop time	08MAR2011 23:58:25.823
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\_20110309\_21.PNG



