

# 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	05FEB2011 06:55:35
Data source version	SCIA/7.04-U
Processing scope for products	25JAN2011 00:00:00 to 26JAN2011 00:00:00
Start time of first product within scope	24JAN2011 22:53:18
Stop time of last product within scope	25JAN2011 18:39:28
Total number of level 1 products	12
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	25JAN2011 01:05:35.048	25JAN2011 17:58:26.982
1	NADIR	07	09	N/A	25JAN2011 01:05:35.048	25JAN2011 17:58:26.982
2	NADIR	07	15	N/A	25JAN2011 01:05:35.048	25JAN2011 17:58:26.982
3	NADIR	07	24	N/A	25JAN2011 01:05:35.048	25JAN2011 17:58:26.982
4	NADIR	07	55	N/A	25JAN2011 01:05:35.048	25JAN2011 17:58:26.982
5	LIMB	32	09	~19 km	25JAN2011 00:52:24.415	25JAN2011 18:01:38.282
6	LIMB	32	09	~22 km	25JAN2011 00:52:24.415	25JAN2011 18:01:38.282
7	LIMB	32	09	~25 km	25JAN2011 00:52:24.415	25JAN2011 18:01:38.282
8	LIMB	32	15	~22 km	25JAN2011 00:52:24.415	25JAN2011 18:01:38.282
9	LIMB	32	15	~25 km	25JAN2011 00:52:24.415	25JAN2011 18:01:38.282
10	LIMB	32	15	~35 km	25JAN2011 00:52:24.415	25JAN2011 18:01:38.282

#### 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	#noprocc	#cmpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110124_223725_000059683098_00418_46553_3937.N1</a>	24JAN2011 22:53:18	25JAN2011 00:03:47	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110125_001657_000060073098_00419_46554_3938.N1</a>	25JAN2011 00:33:32	25JAN2011 01:43:47	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110125_015752_000059683098_00420_46555_3939.N1</a>	25JAN2011 02:13:46	25JAN2011 03:24:15	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110125_033724_000060513098_00421_46556_3940.N1</a>	25JAN2011 03:53:59	25JAN2011 05:04:14	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110125_051820_000059683098_00422_46557_3943.N1</a>	25JAN2011 05:34:13	25JAN2011 06:44:42	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110125_065752_000060513098_00423_46558_3944.N1</a>	25JAN2011 07:14:27	25JAN2011 08:24:41	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110125_083847_000059683098_00424_46559_3946.N1	25JAN2011 08:54:40	25JAN2011 10:05:09	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110125_101819_000060513098_00425_46560_3949.N1	25JAN2011 10:34:54	25JAN2011 11:45:08	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110125_115914_000059683098_00426_46561_3950.N1	25JAN2011 12:15:07	25JAN2011 13:25:36	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110125_133920_000060183098_00427_46562_3953.N1	25JAN2011 13:55:21	25JAN2011 15:05:36	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110125_151942_000060023098_00428_46563_3954.N1	25JAN2011 15:35:35	25JAN2011 16:46:04	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110125_165948_000059803098_00429_46564_3957.N1	25JAN2011 17:15:48	25JAN2011 18:39:28	0	35	31	0	2	1	0	0	

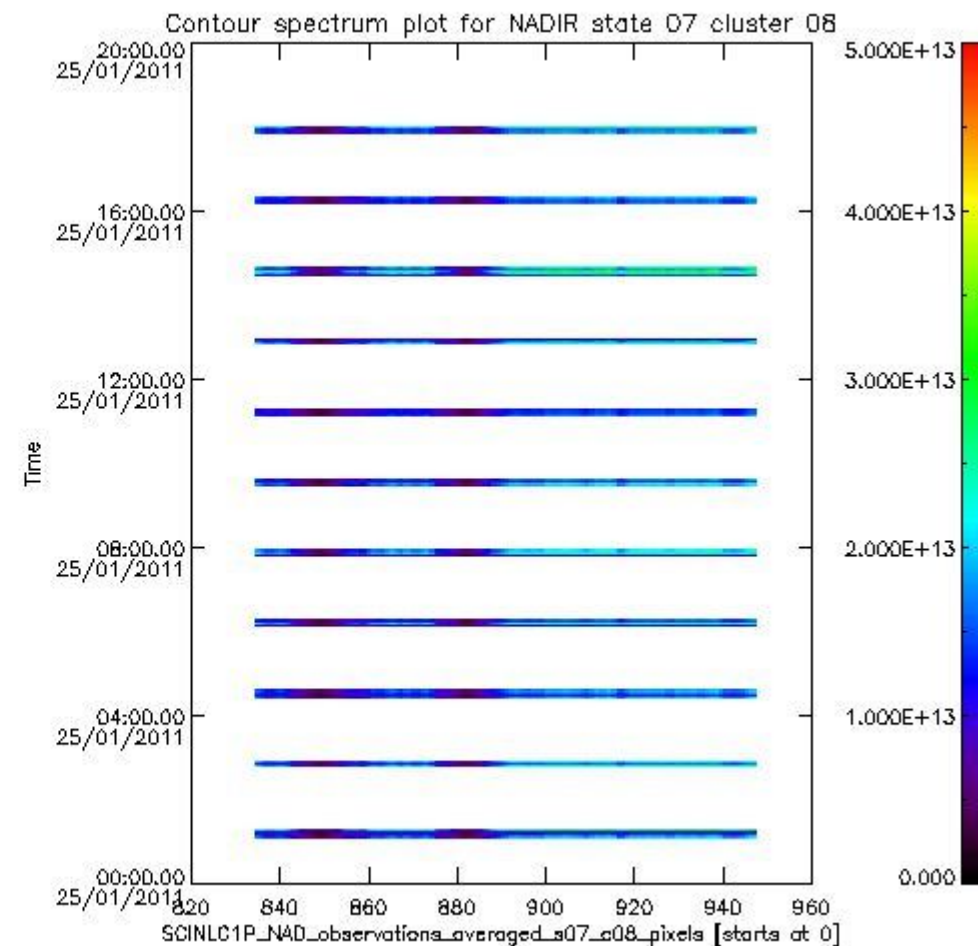
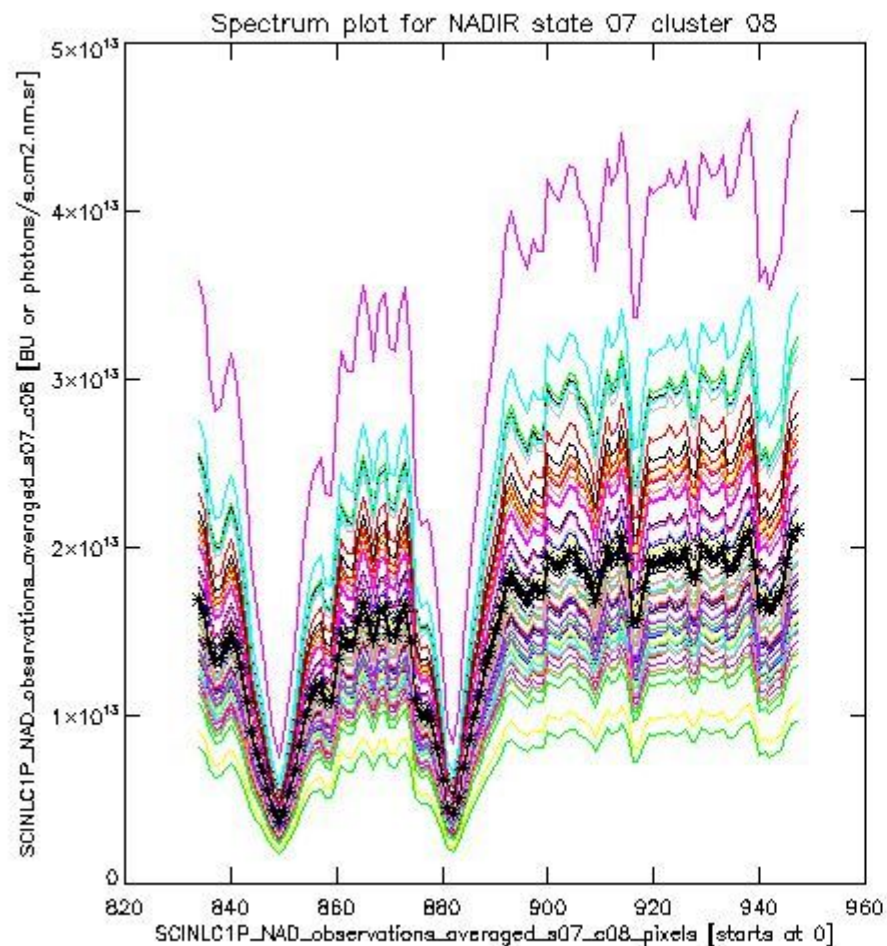
## 1.2 Source packet monitoring

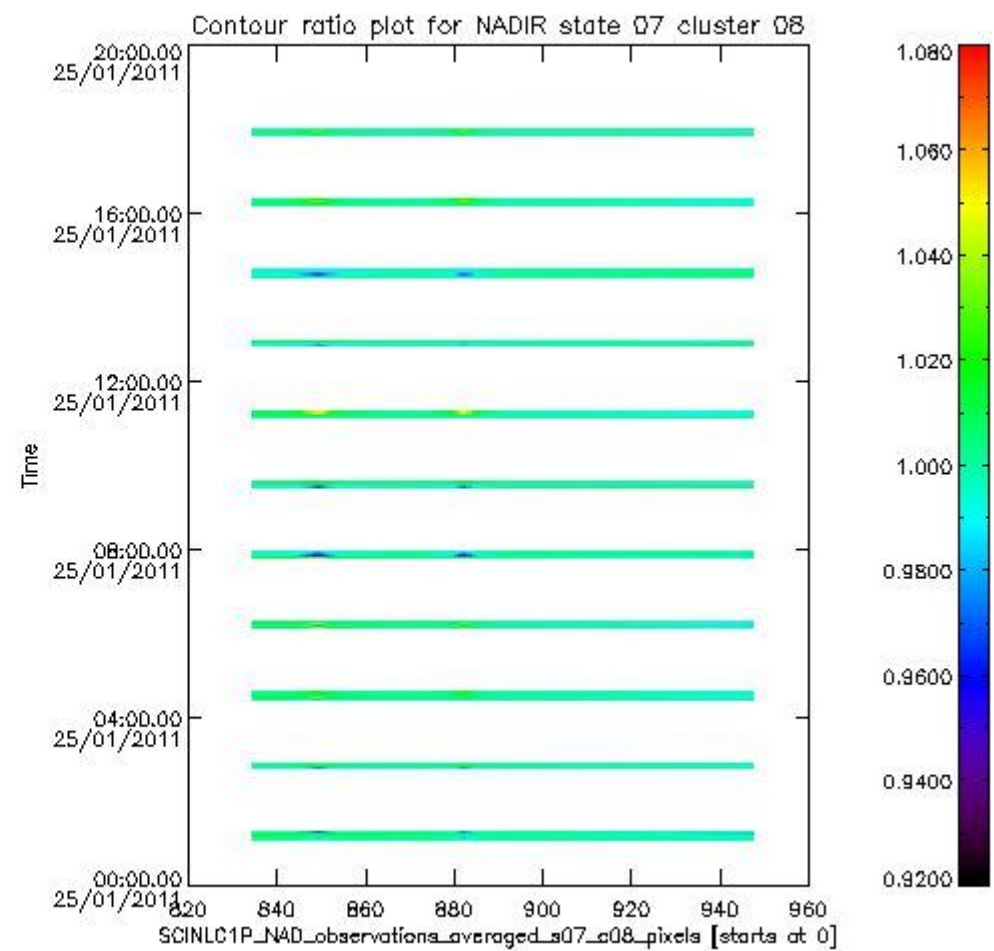
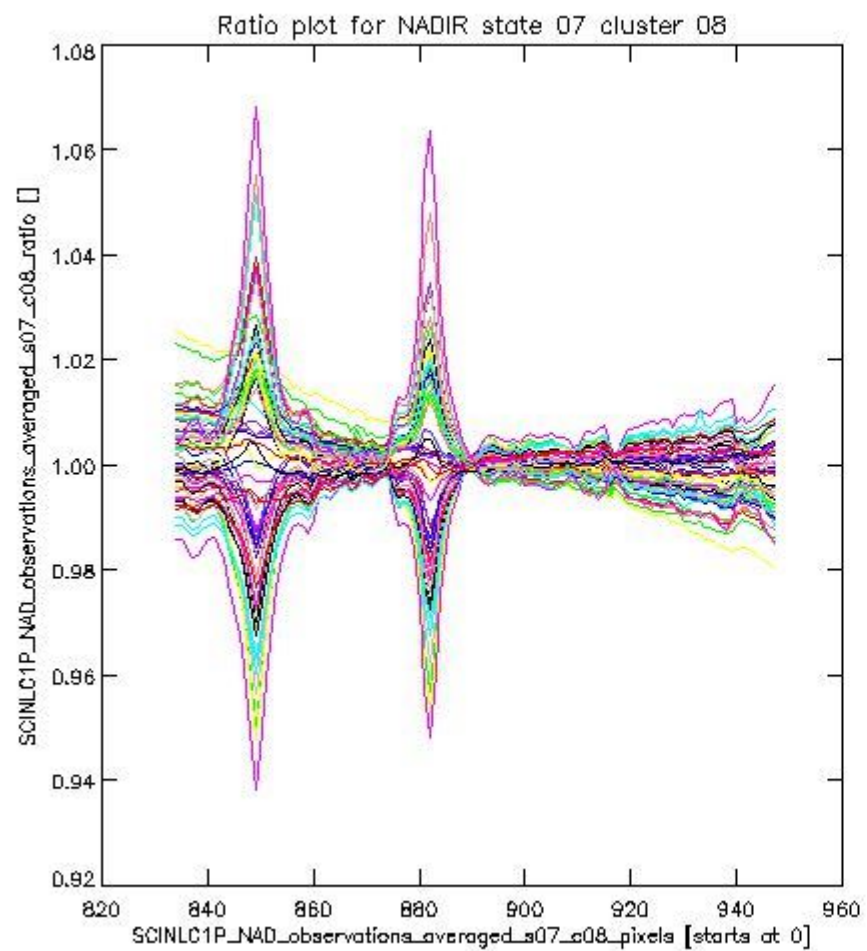
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	25JAN2011 01:05:35.048
Start time of last sample	25JAN2011 17:58:26.982
Reference period start time	26DEC2010 01:07:41.148
Reference period stop time	24JAN2011 23:34:40.981
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



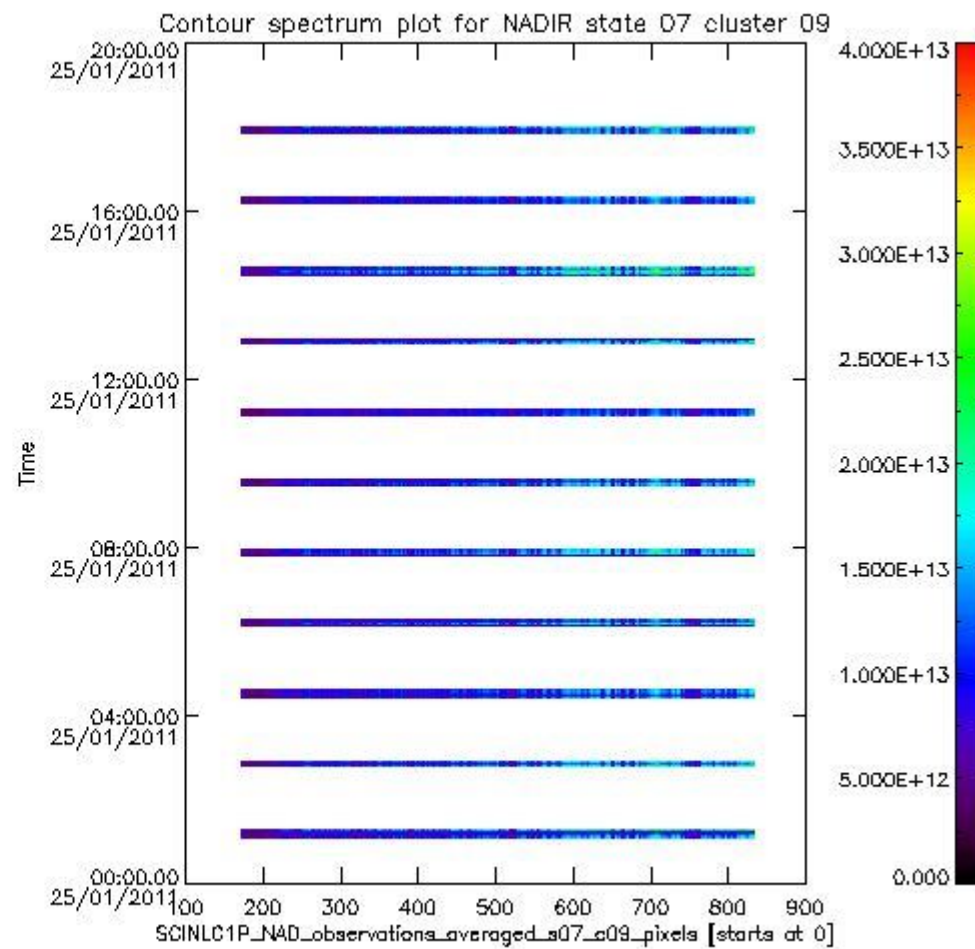
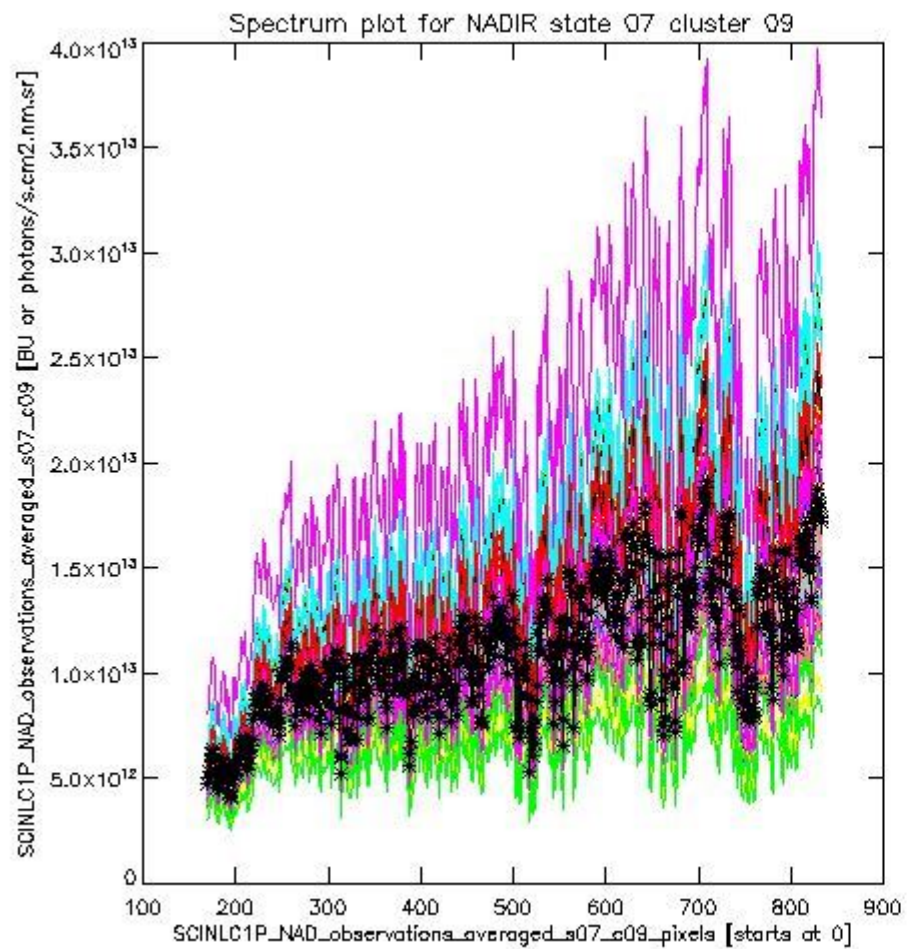


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_1.PNG

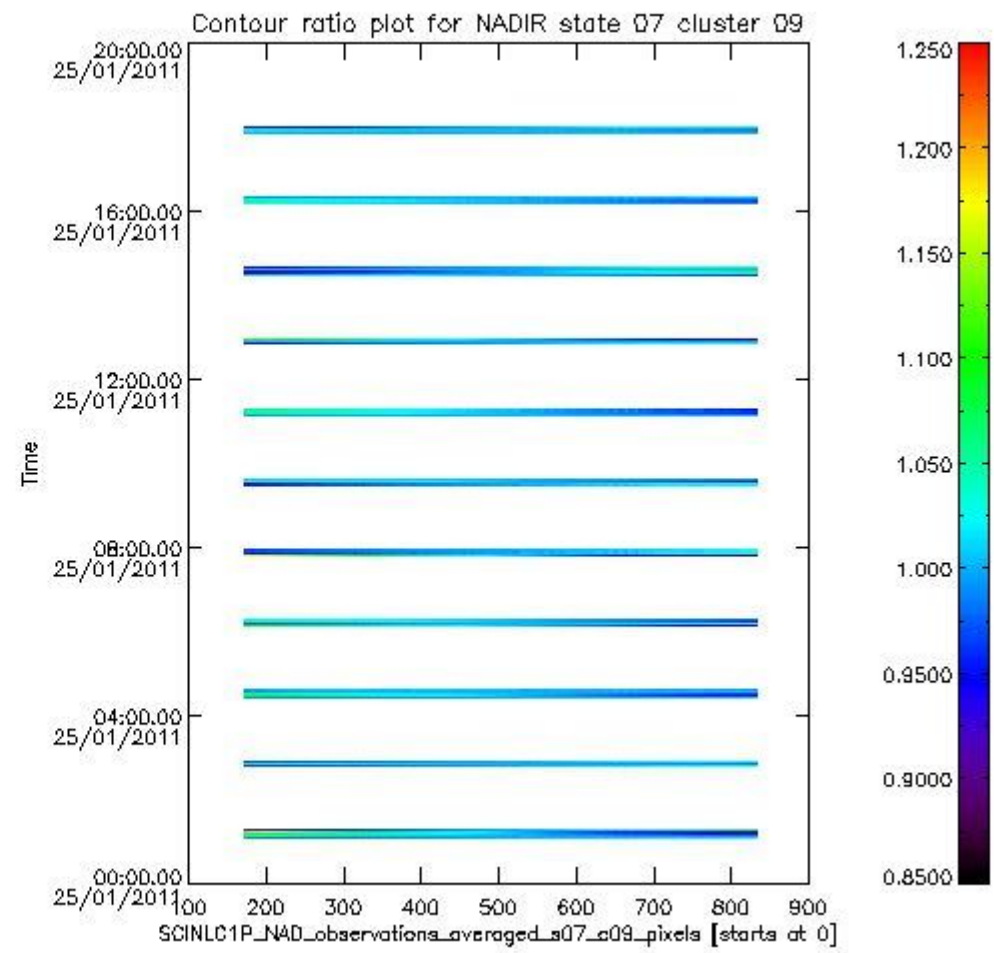
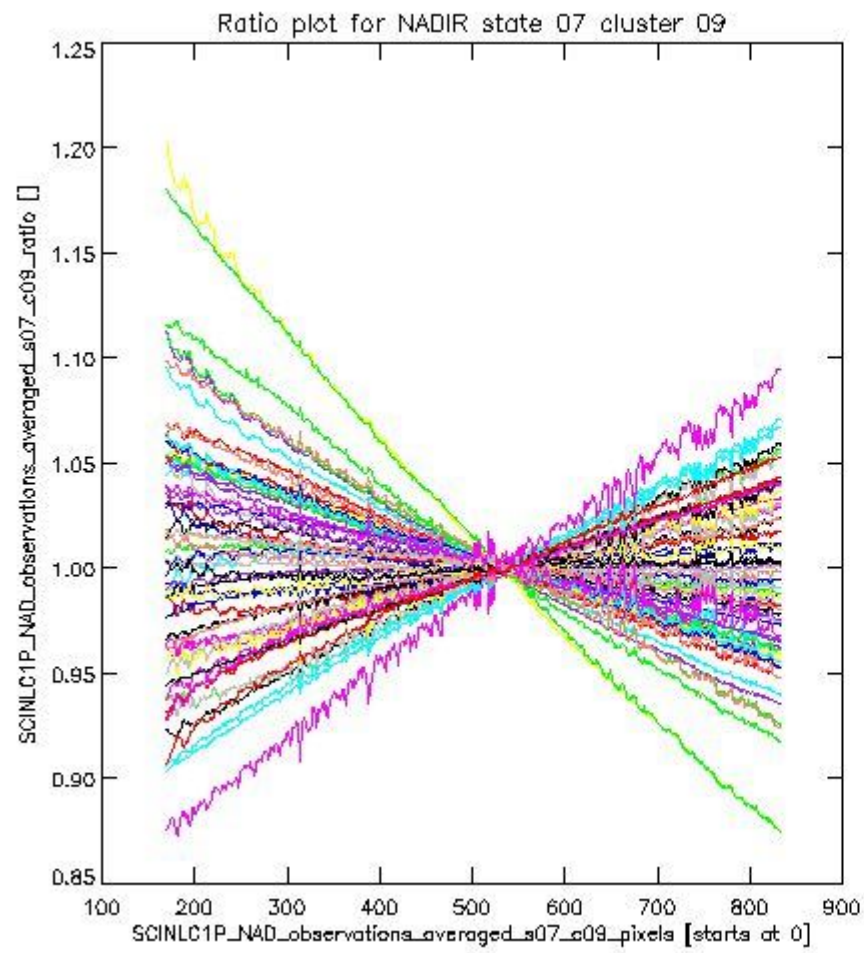
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	25JAN2011 01:05:35.048
Start time of last sample	25JAN2011 17:58:26.982
Reference period start time	26DEC2010 01:07:41.148
Reference period stop time	24JAN2011 23:34:40.981
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





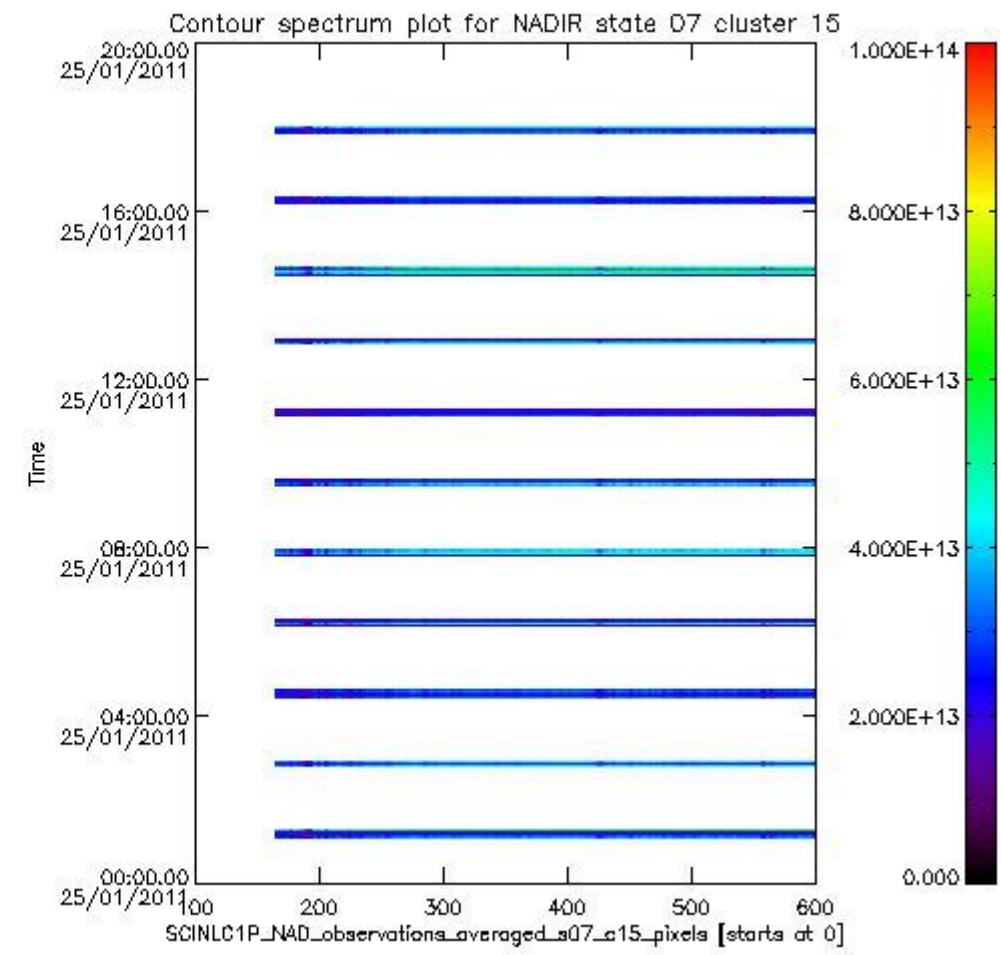
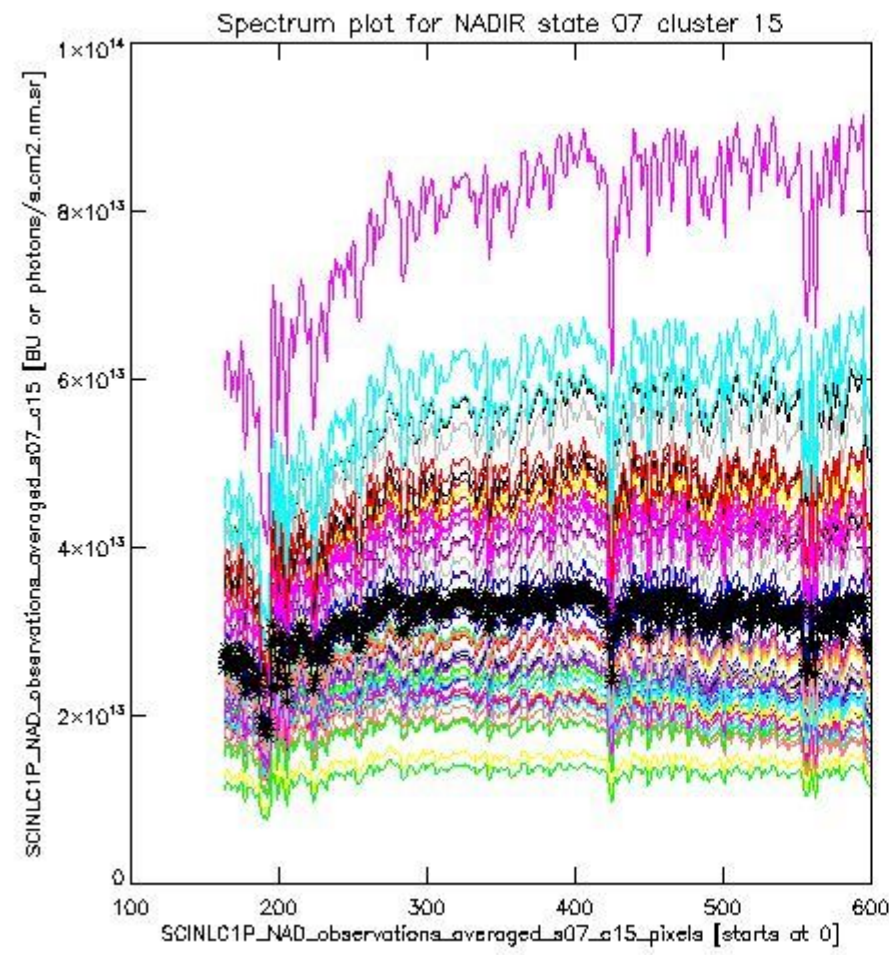
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_3.PNG

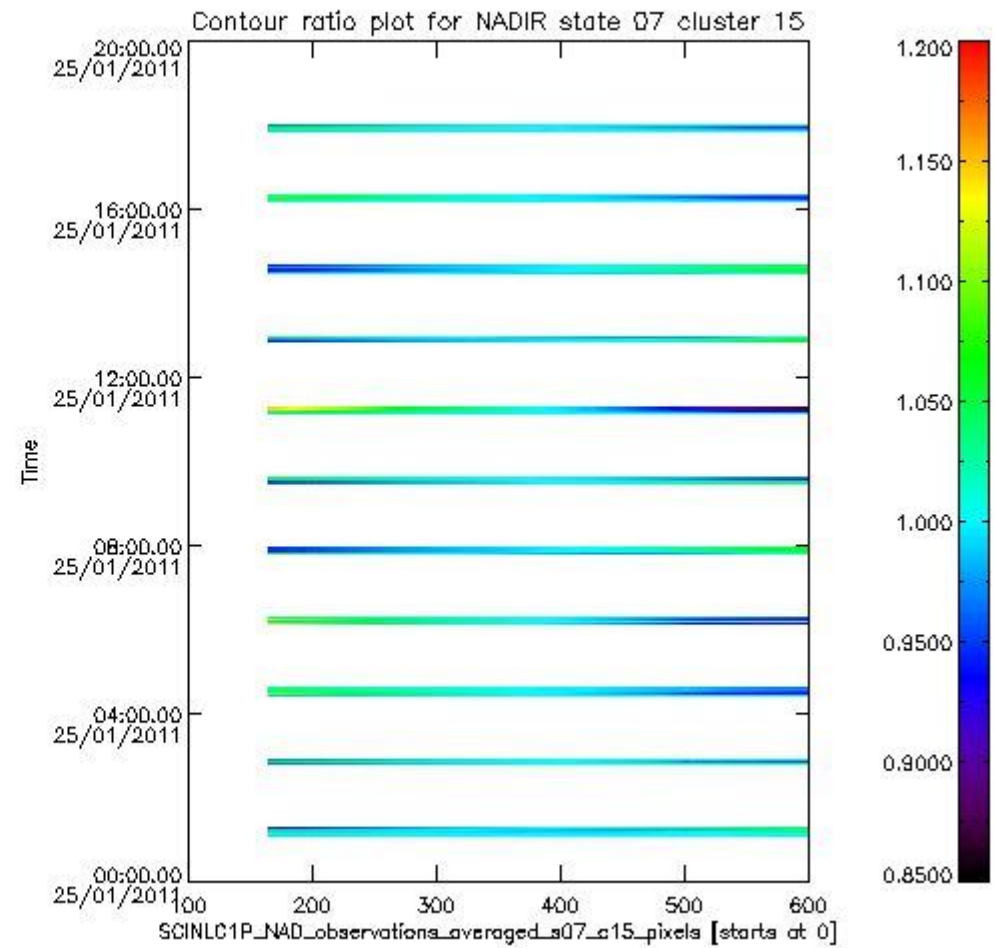
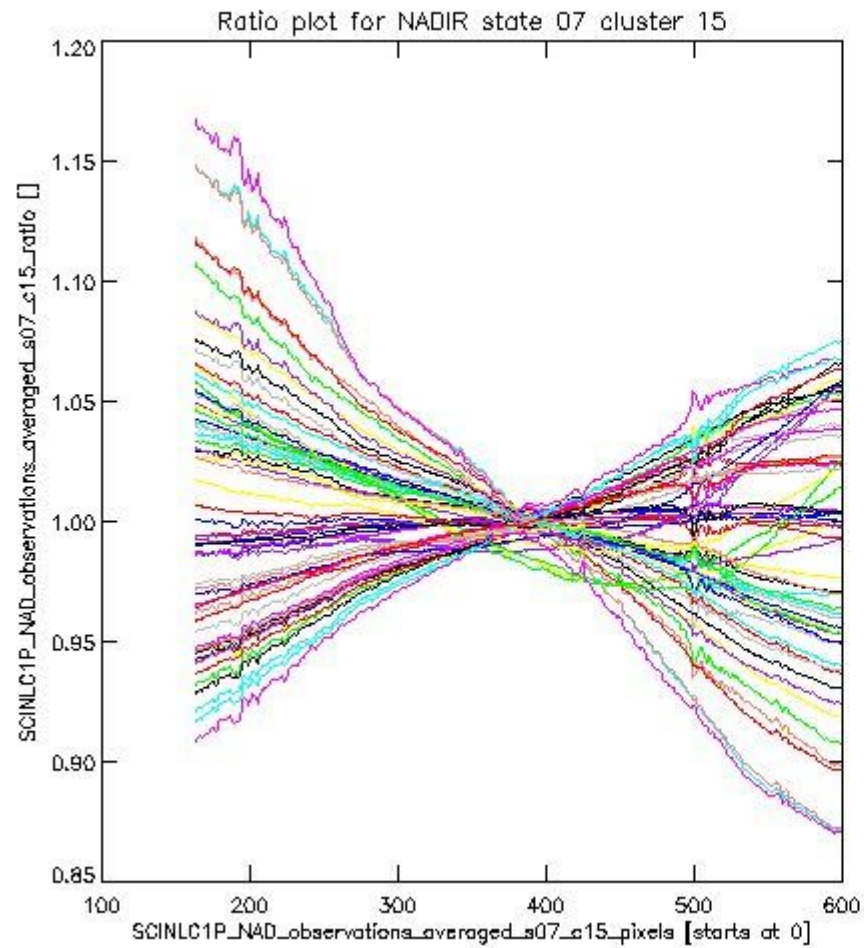
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	25JAN2011 01:05:35.048
Start time of last sample	25JAN2011 17:58:26.982
Reference period start time	26DEC2010 01:07:41.148
Reference period stop time	24JAN2011 23:34:40.981
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\_20110125\_4.PNG

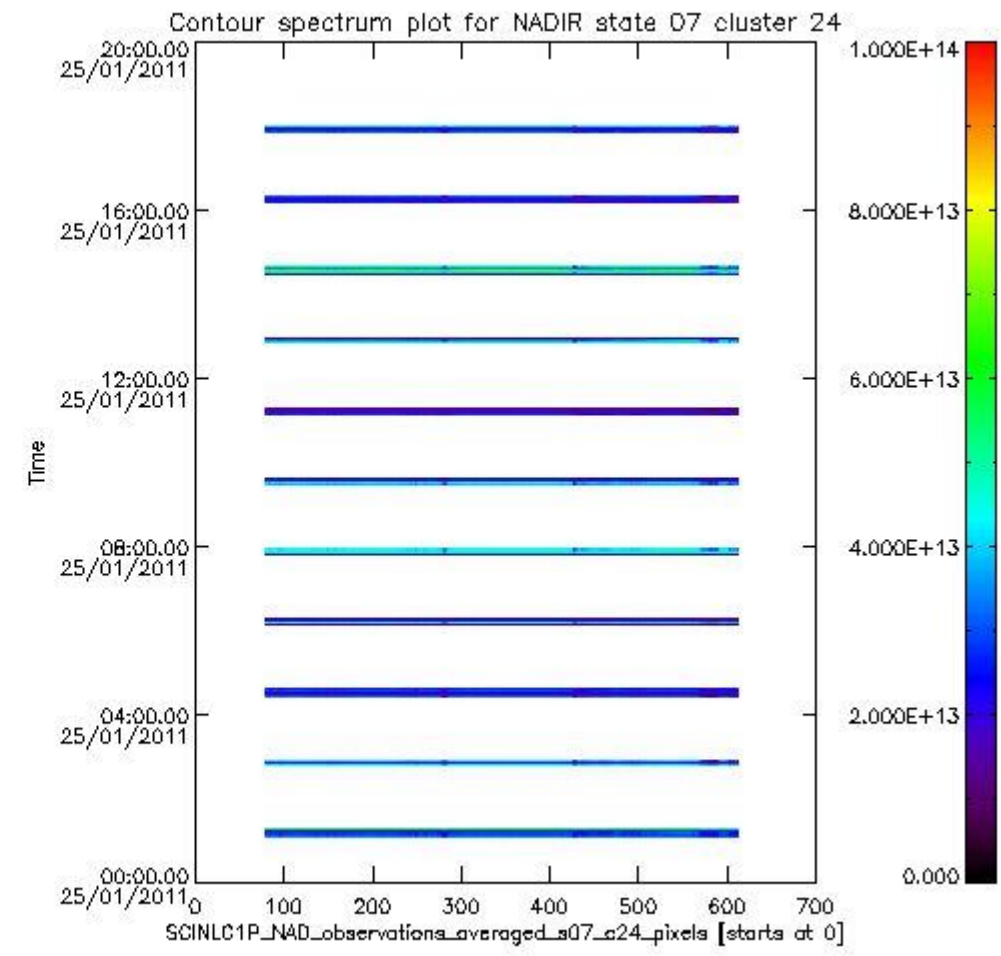
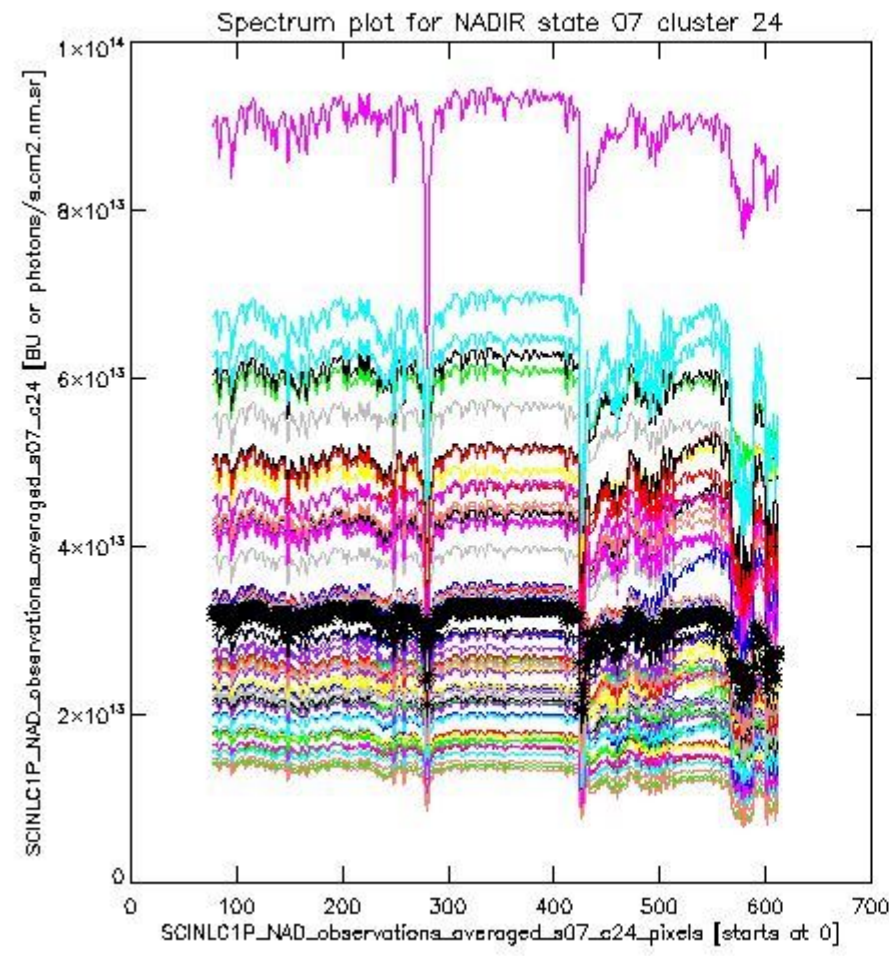




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_5.PNG

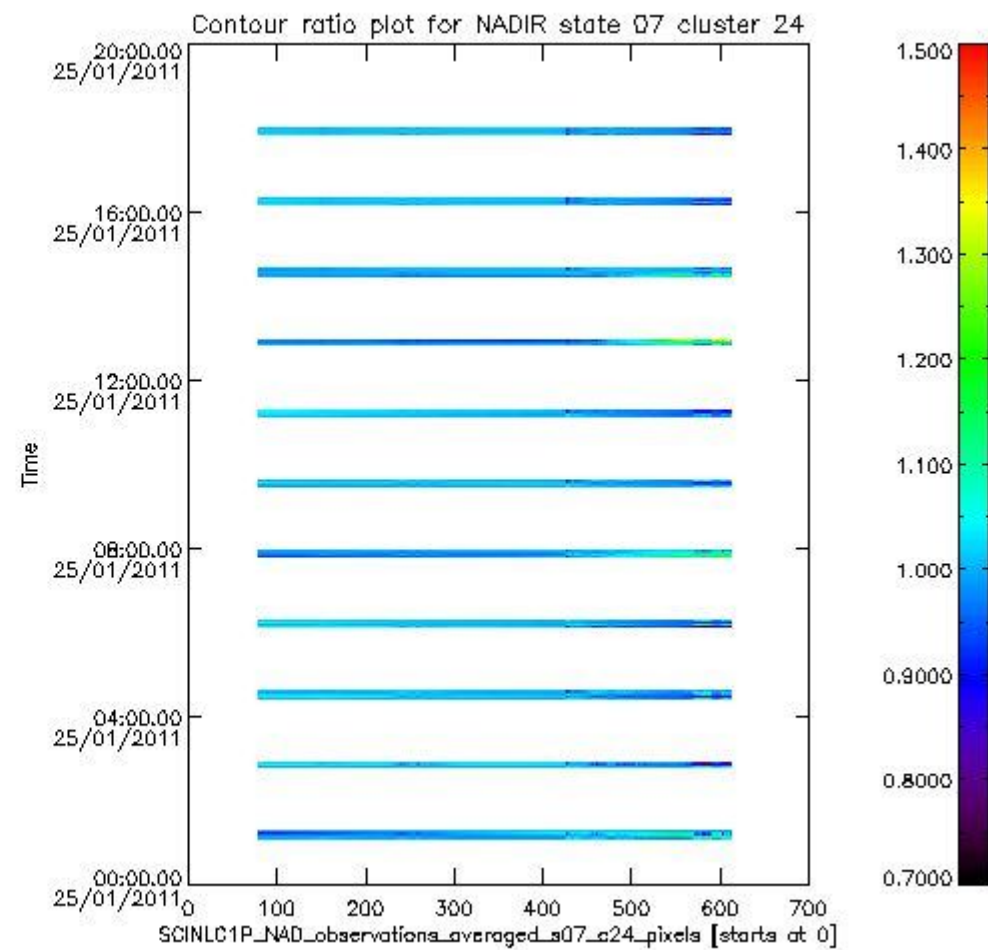
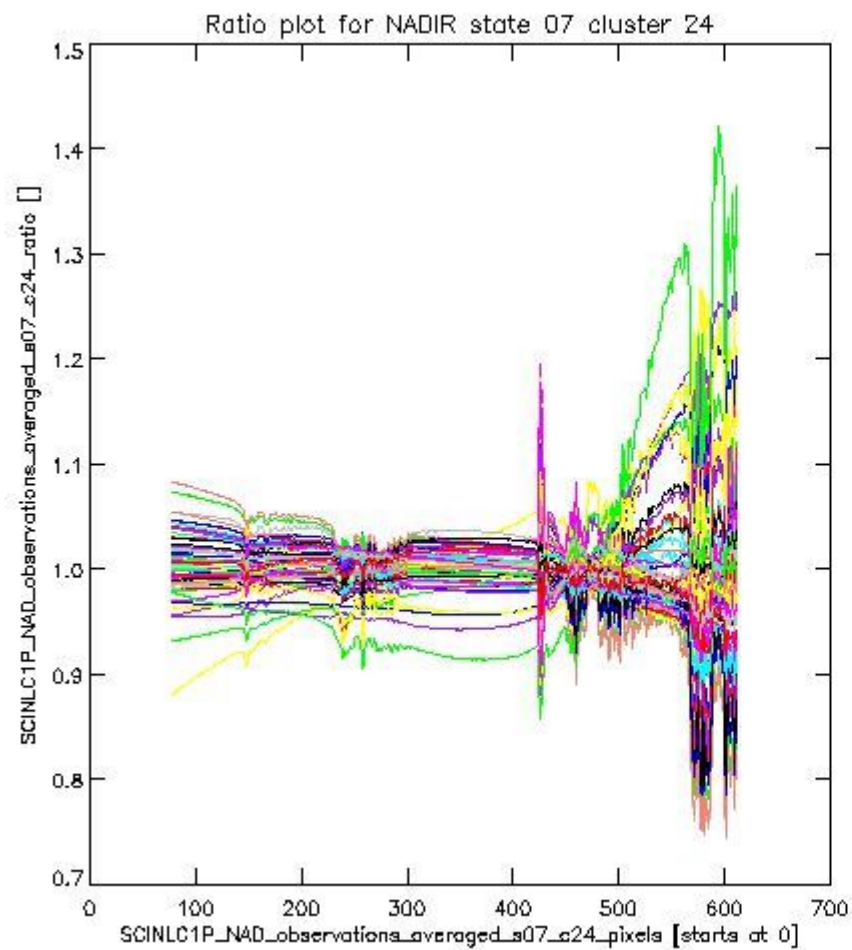
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	25JAN2011 01:05:35.048
Start time of last sample	25JAN2011 17:58:26.982
Reference period start time	26DEC2010 01:07:41.148
Reference period stop time	24JAN2011 23:34:40.981
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\_20110125\_6.PNG

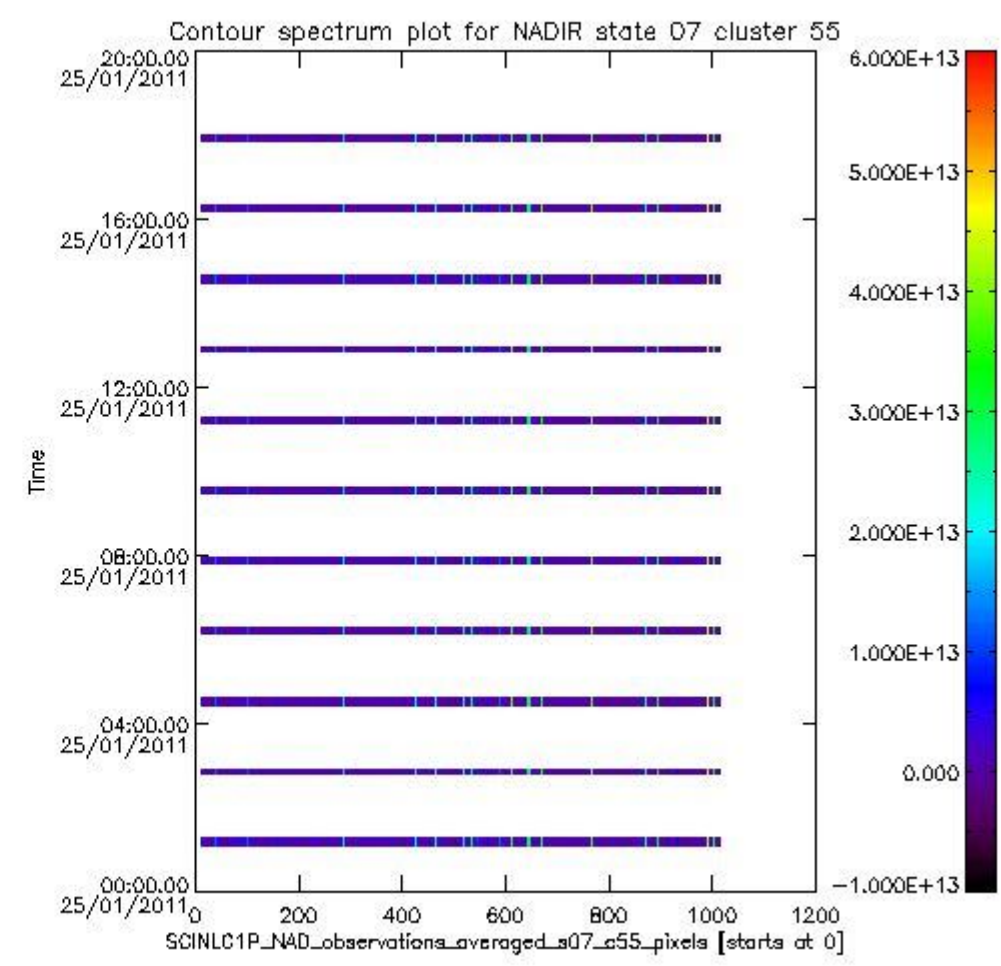
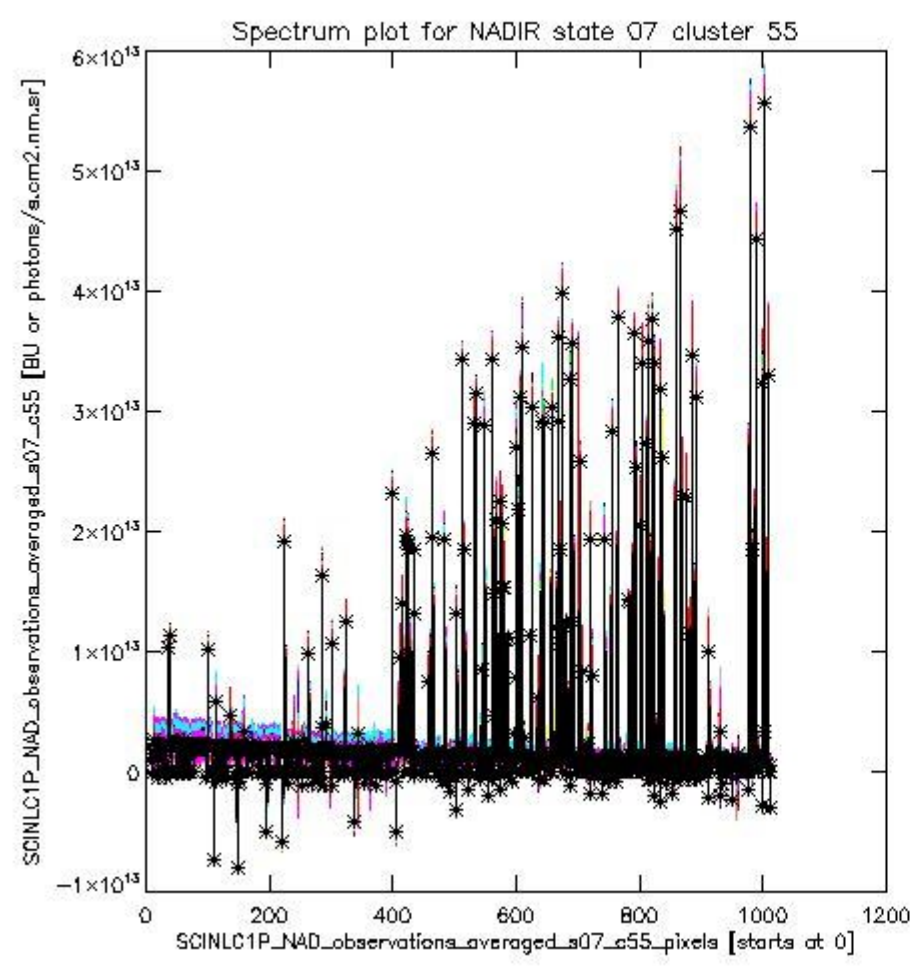




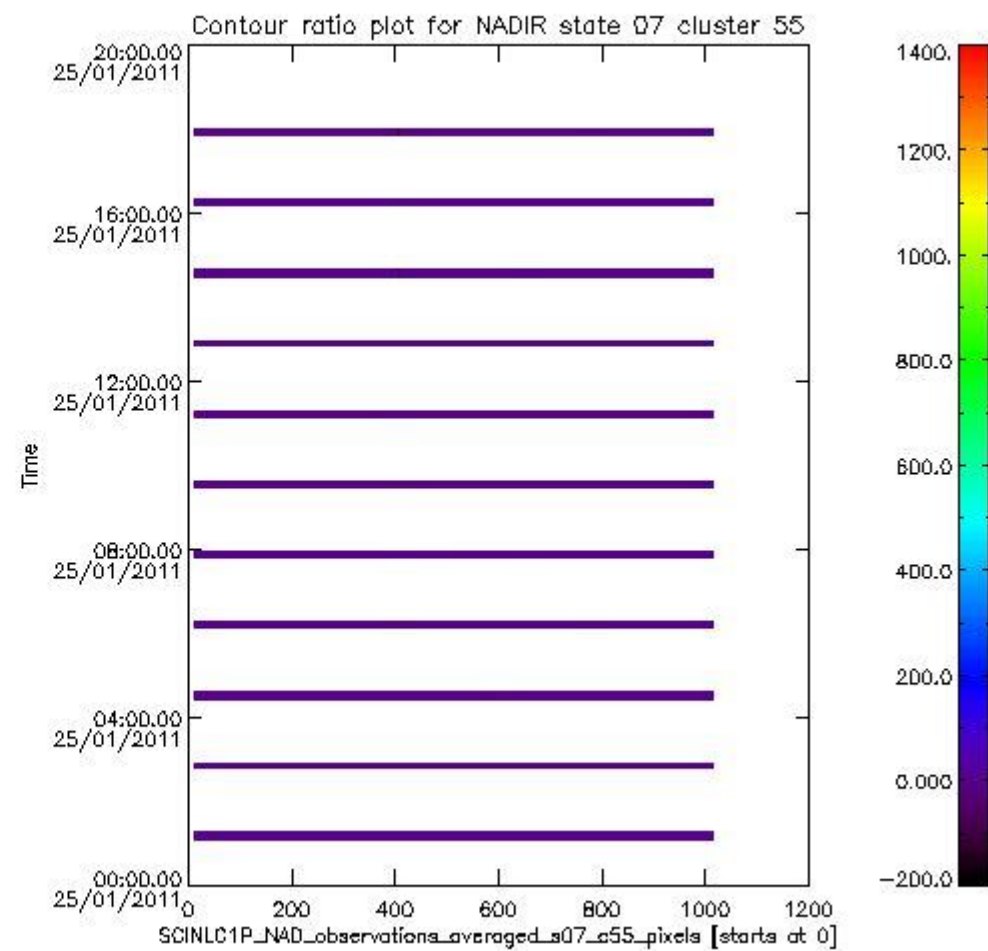
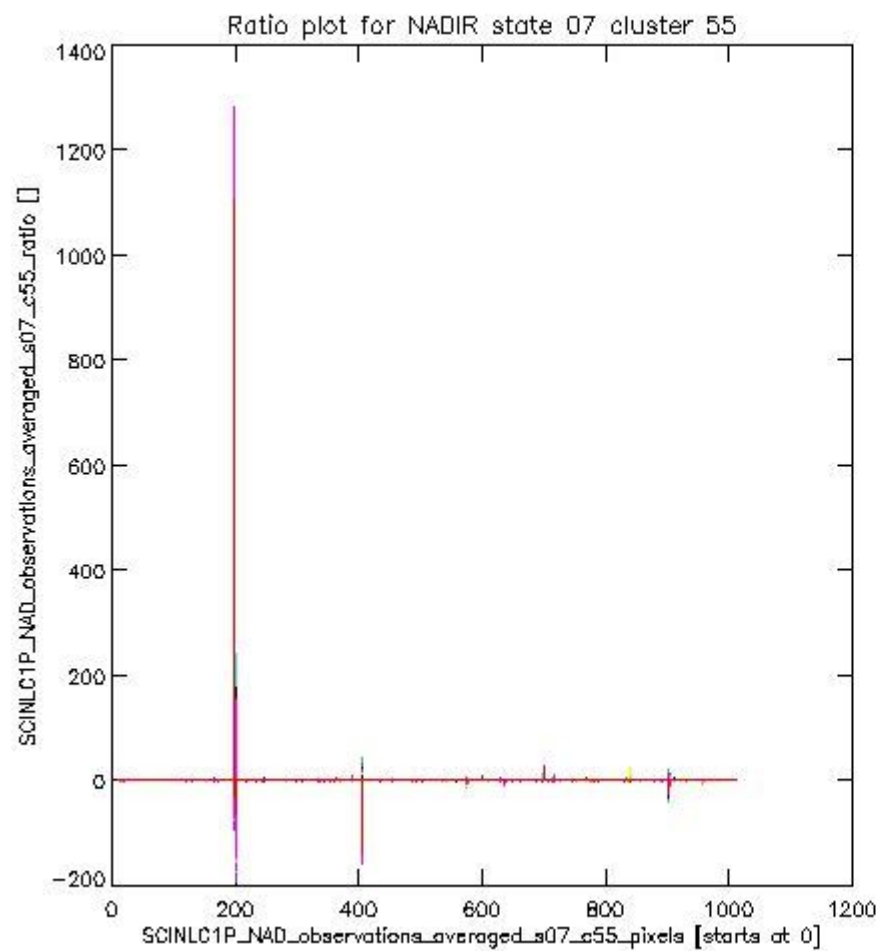
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_7.PNG

**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	25JAN2011 01:05:35.048
Start time of last sample	25JAN2011 17:58:26.982
Reference period start time	26DEC2010 01:07:41.148
Reference period stop time	24JAN2011 23:34:40.981
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\_20110125\_8.PNG

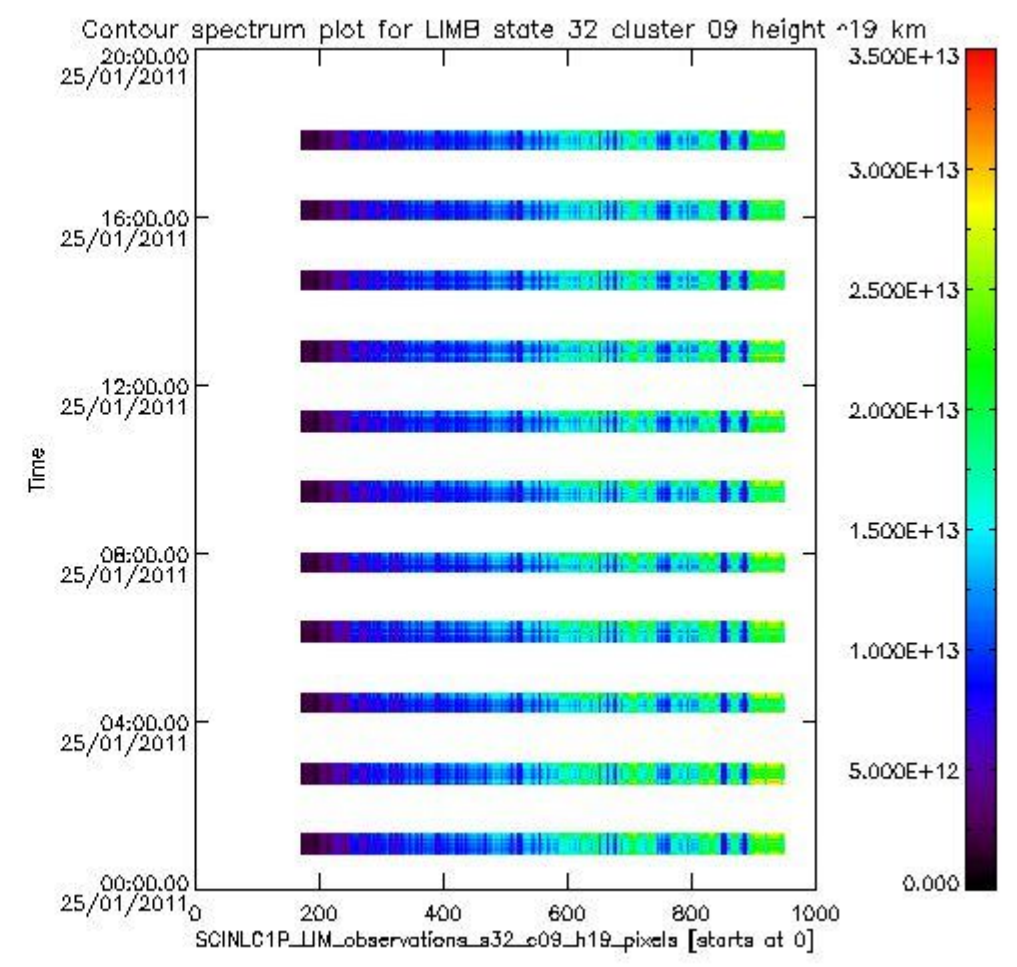
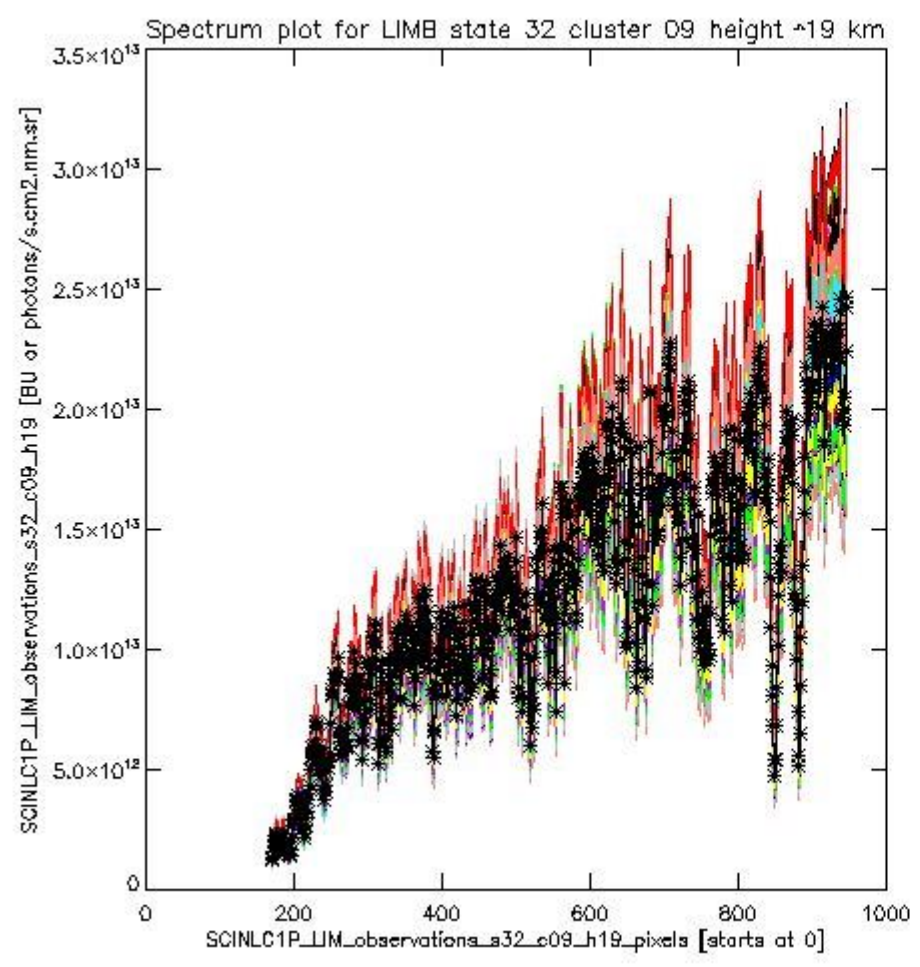


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_9.PNG

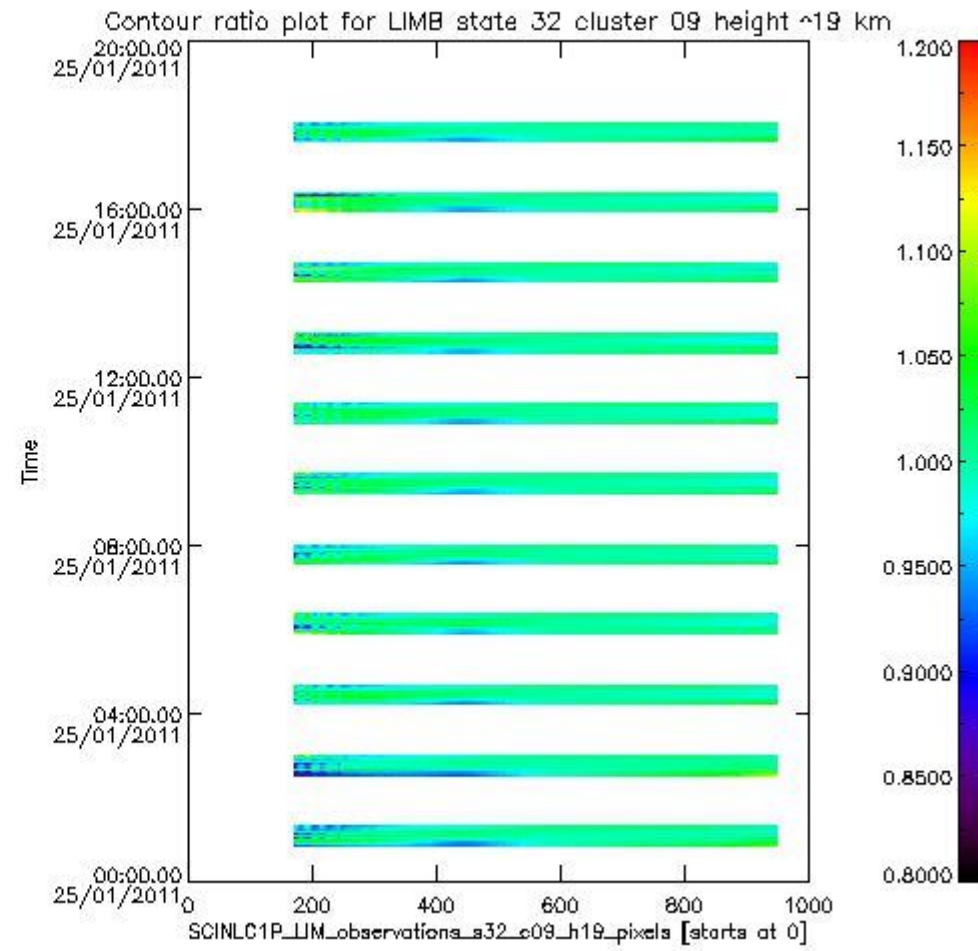
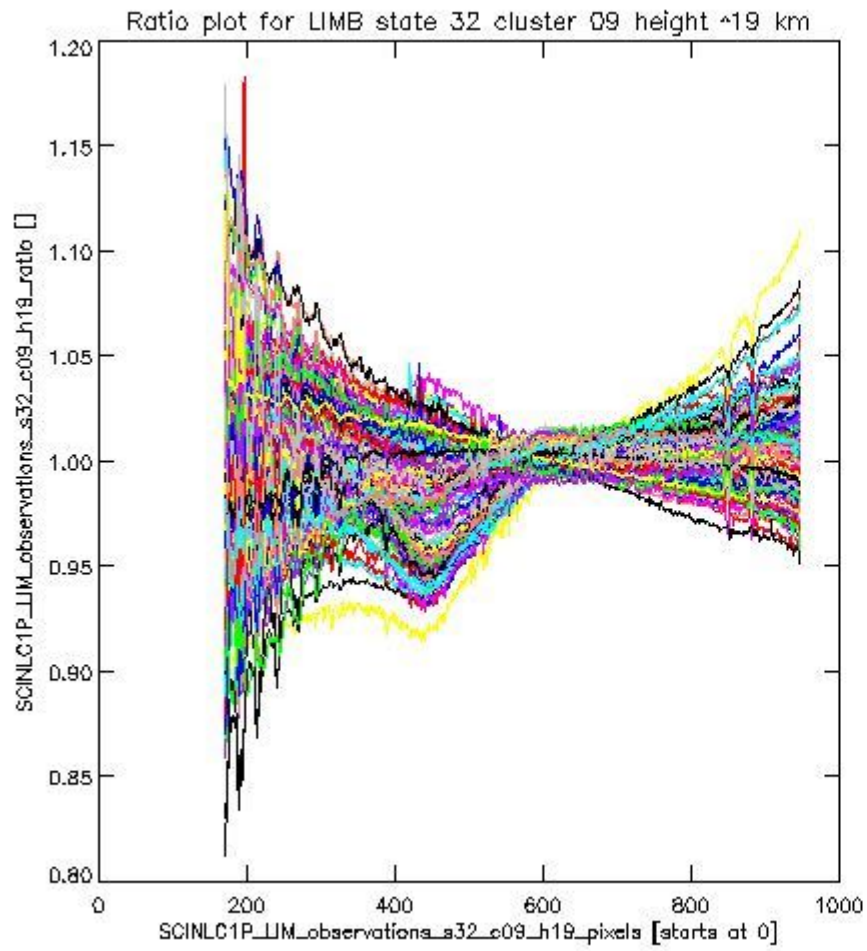
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	25JAN2011 00:52:24.415
Start time of last sample	25JAN2011 18:01:38.282
Reference period start time	26DEC2010 00:52:27.765
Reference period stop time	24JAN2011 23:39:55.024
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





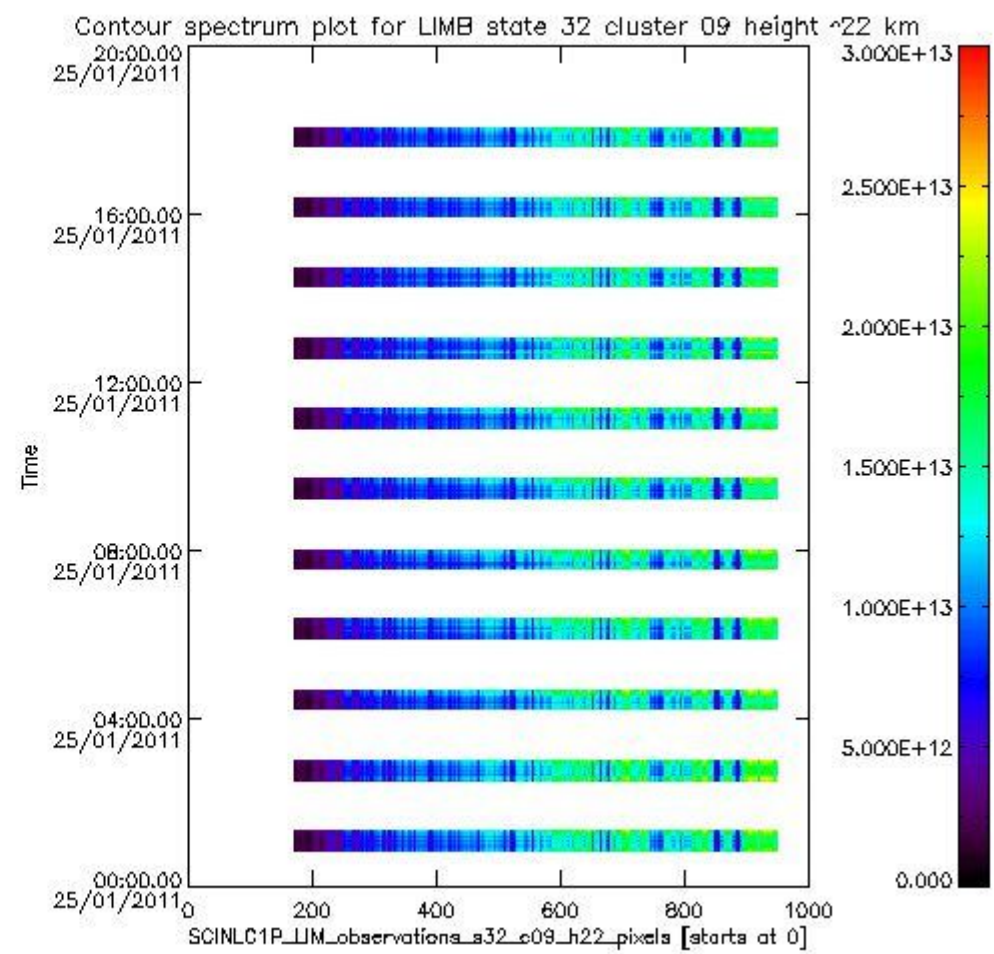
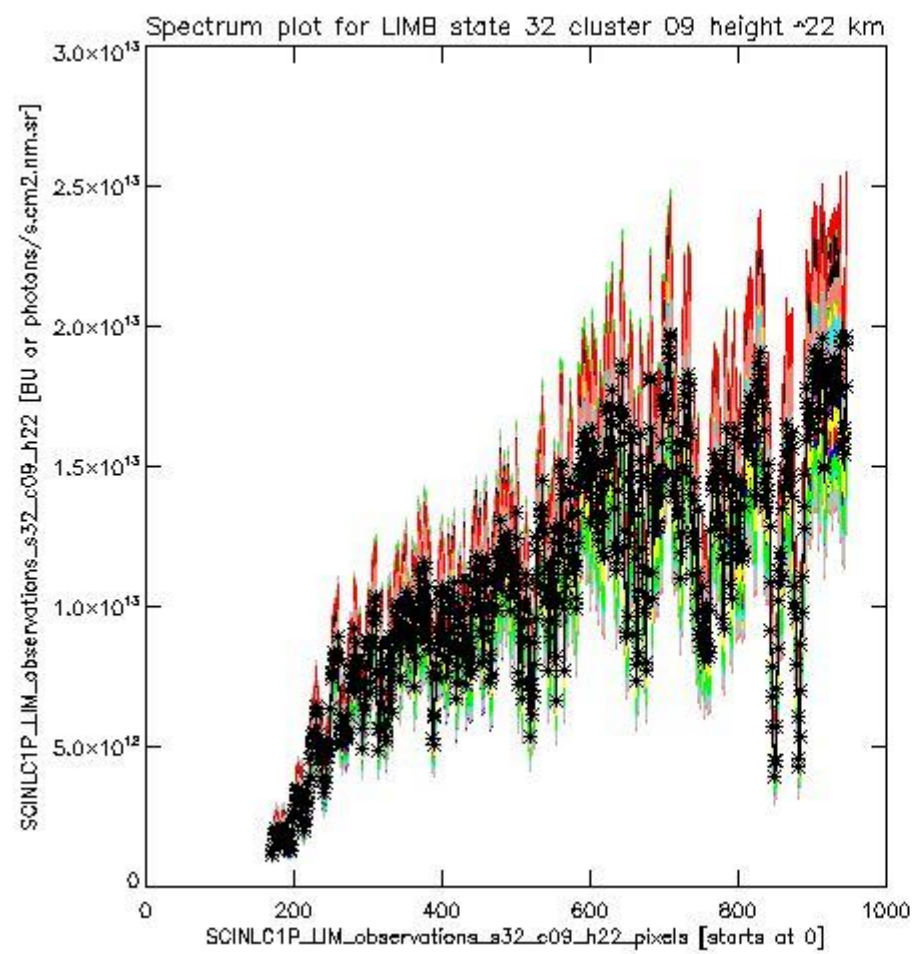
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_10.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_11.PNG

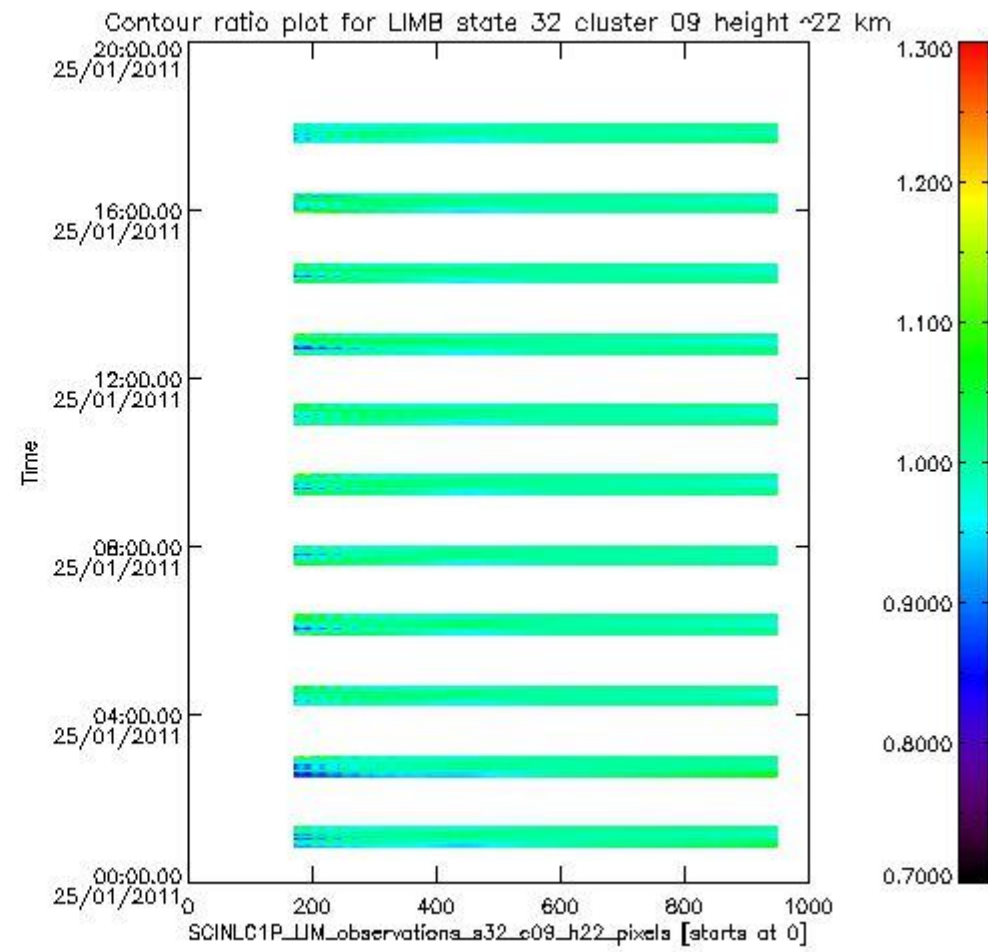
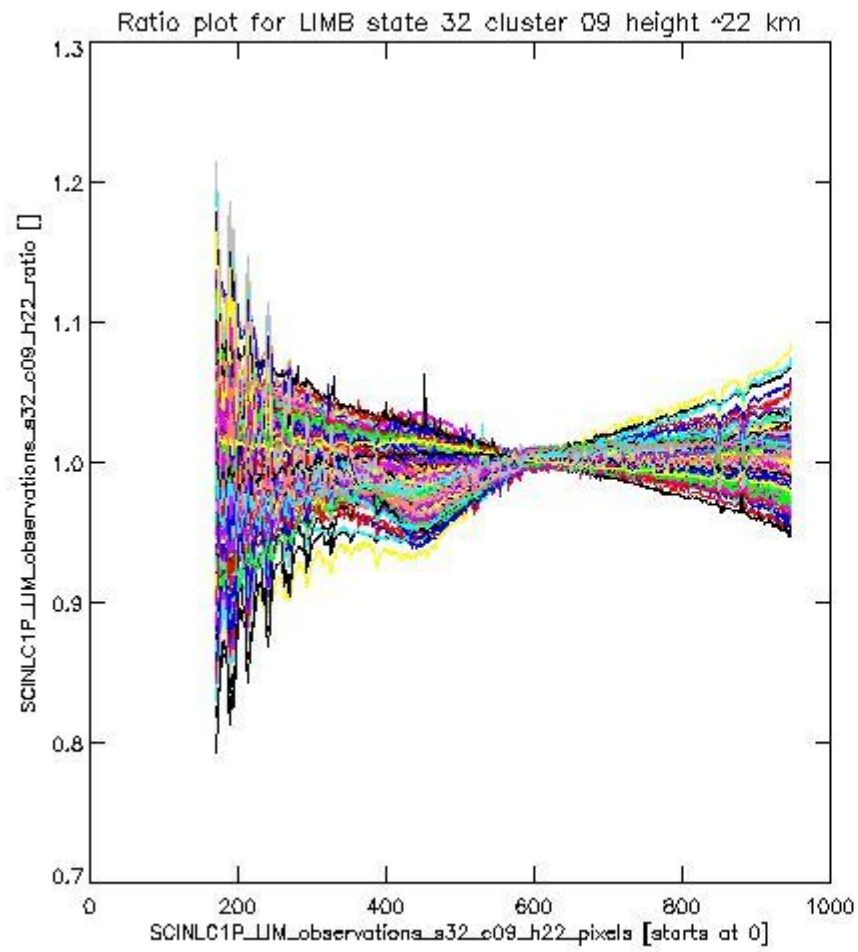
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	25JAN2011 00:52:24.415
Start time of last sample	25JAN2011 18:01:38.282
Reference period start time	26DEC2010 00:52:27.765
Reference period stop time	24JAN2011 23:39:55.024
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\_20110125\_12.PNG

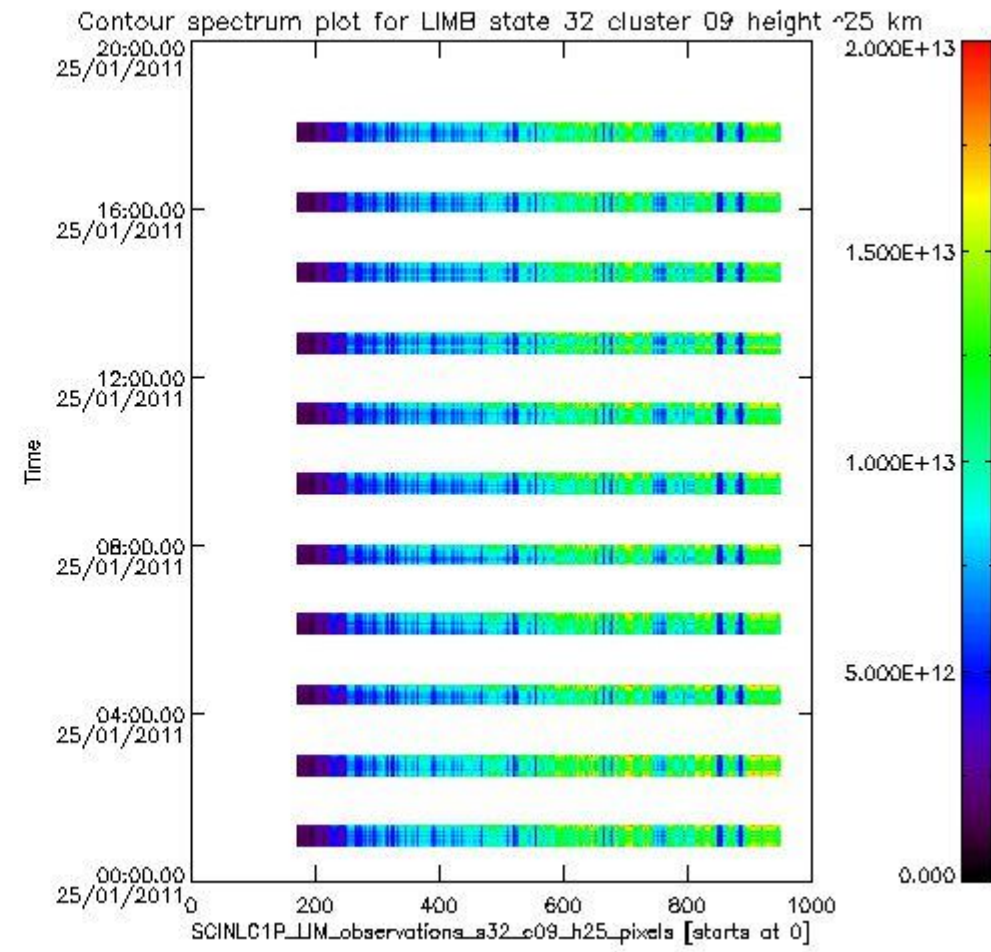
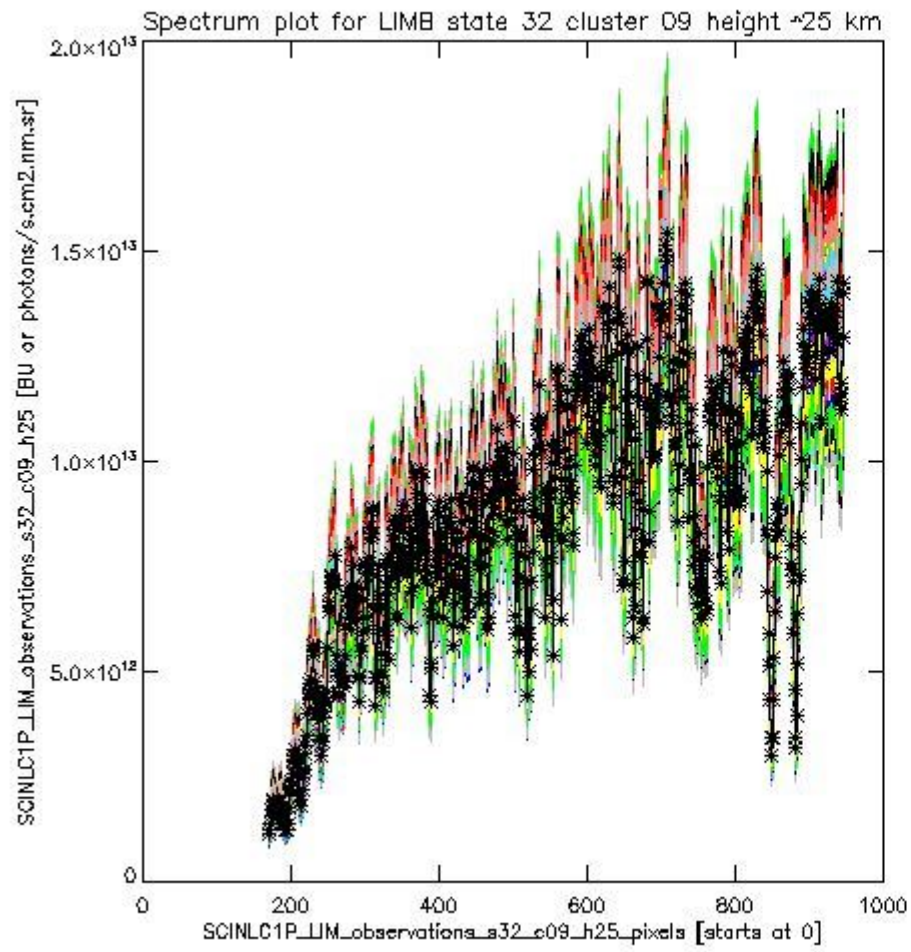




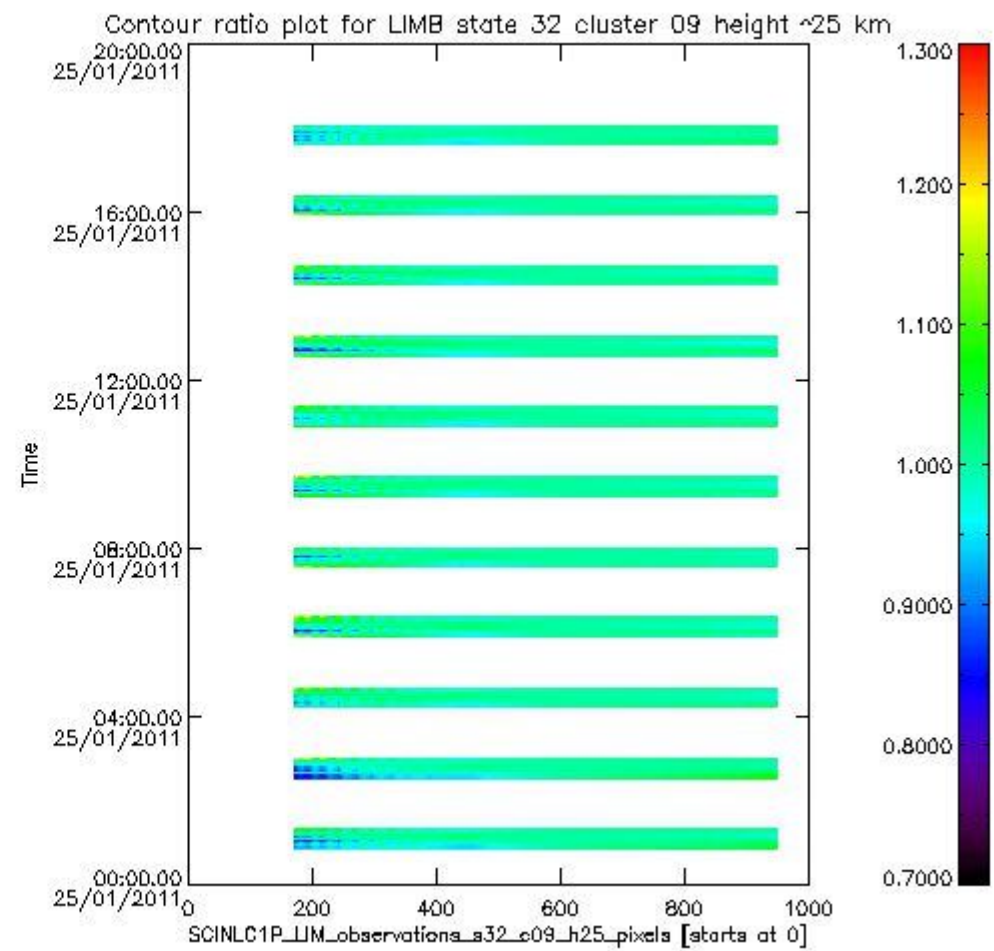
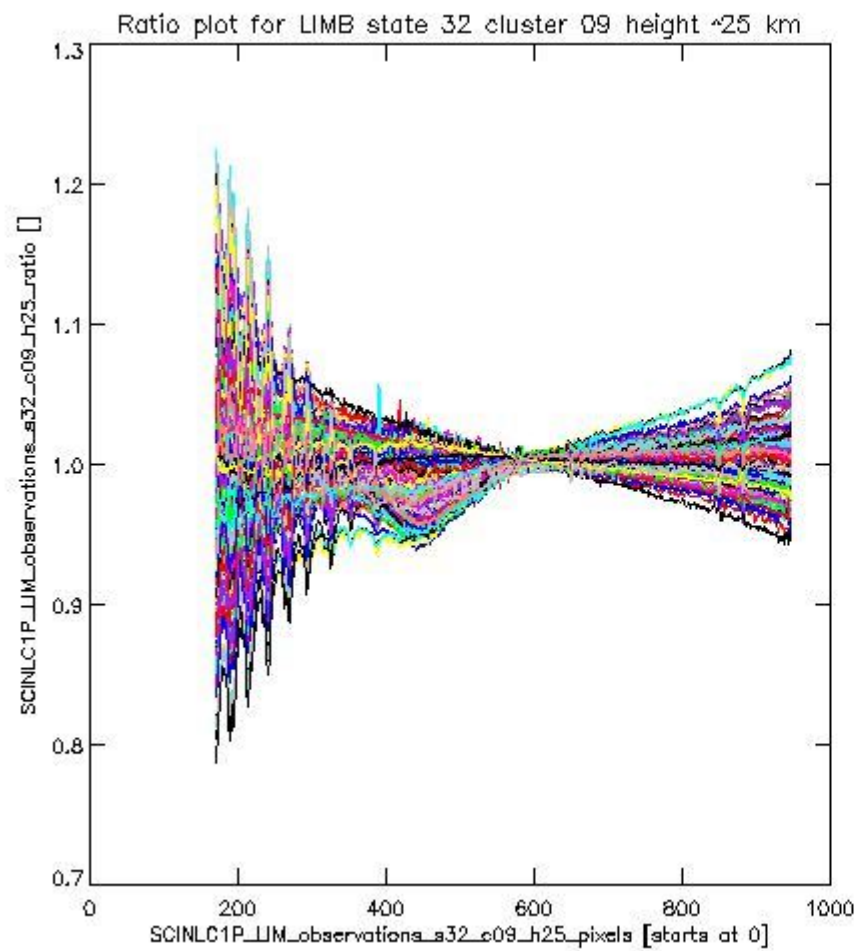
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_13.PNG

**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	25JAN2011 00:52:24.415
Start time of last sample	25JAN2011 18:01:38.282
Reference period start time	26DEC2010 00:52:27.765
Reference period stop time	24JAN2011 23:39:55.024
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\_20110125\_14.PNG

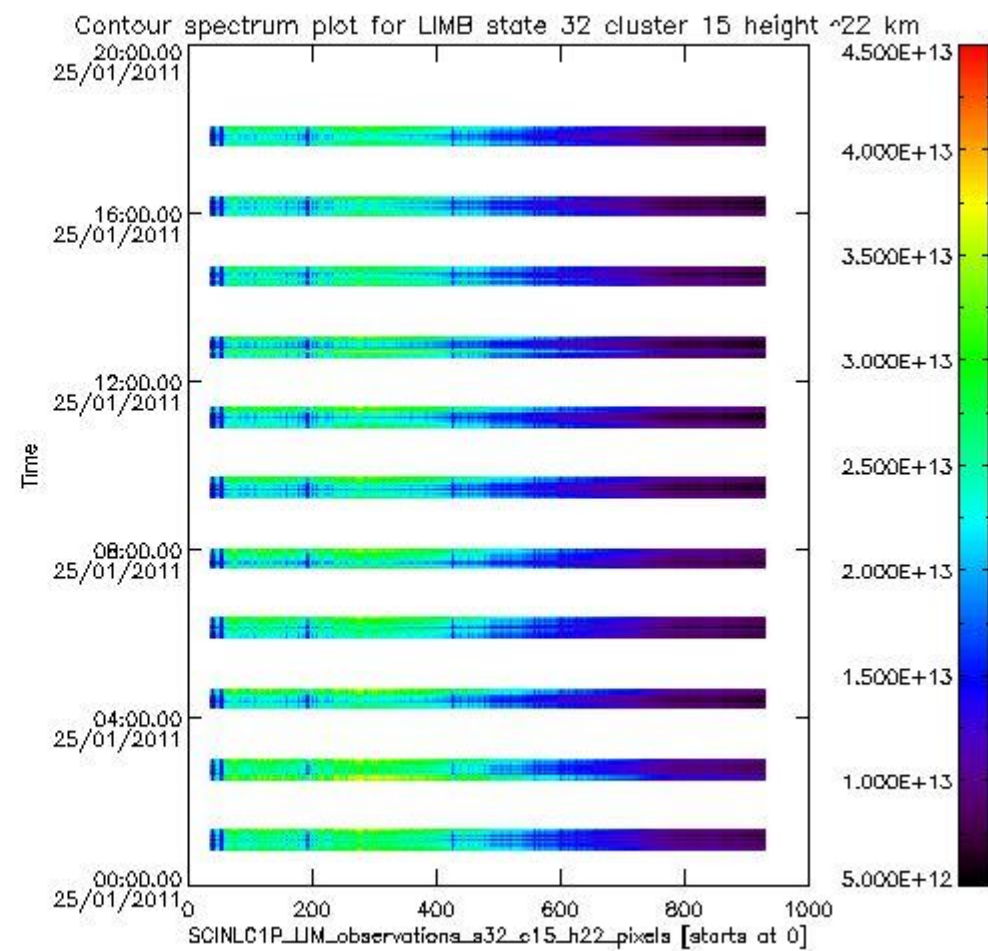
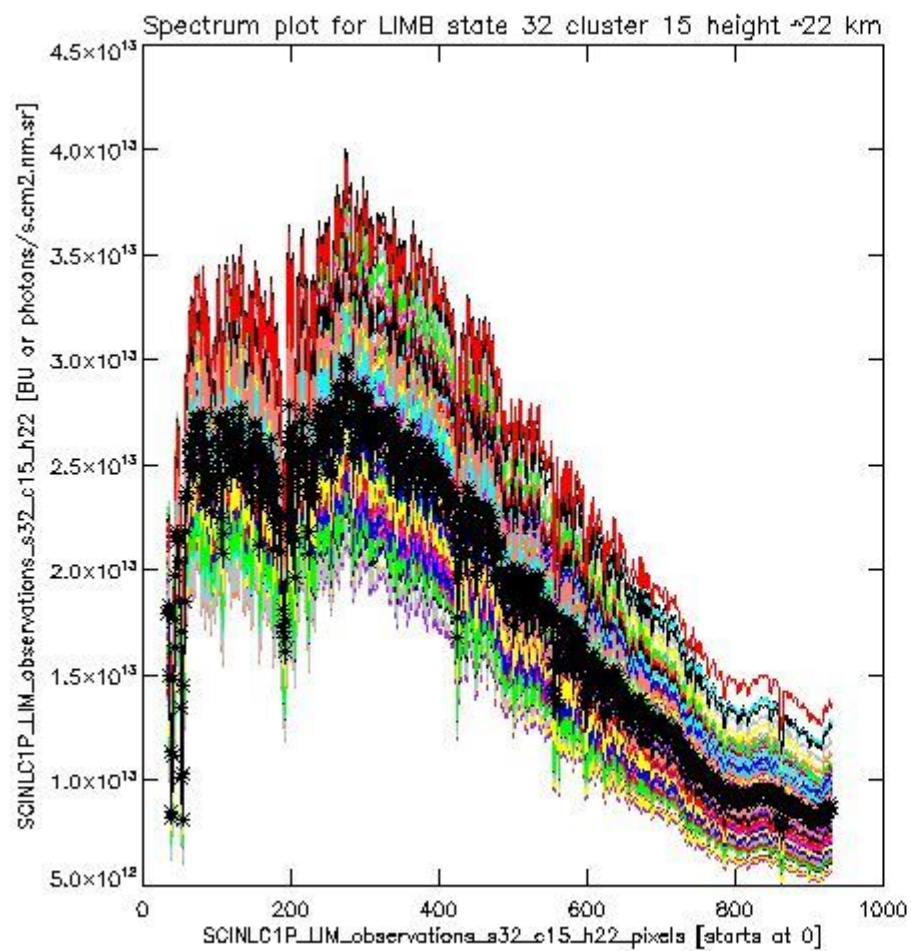


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_15.PNG

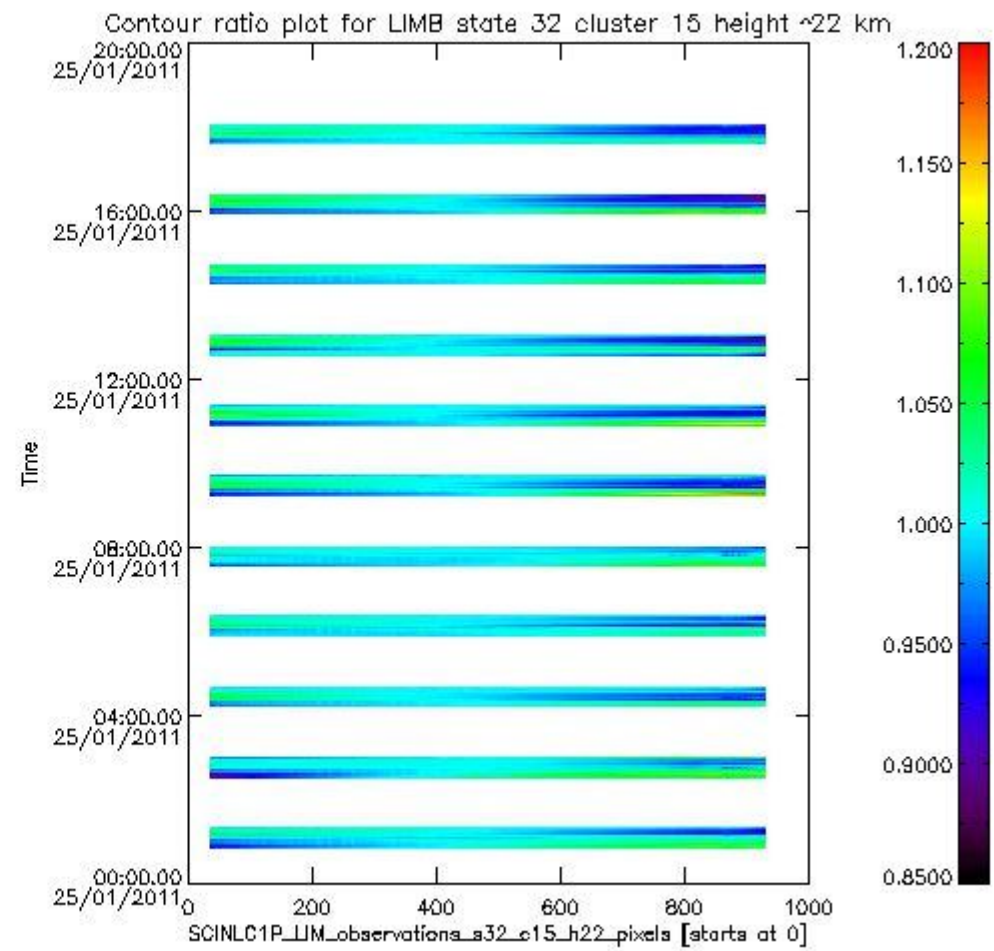
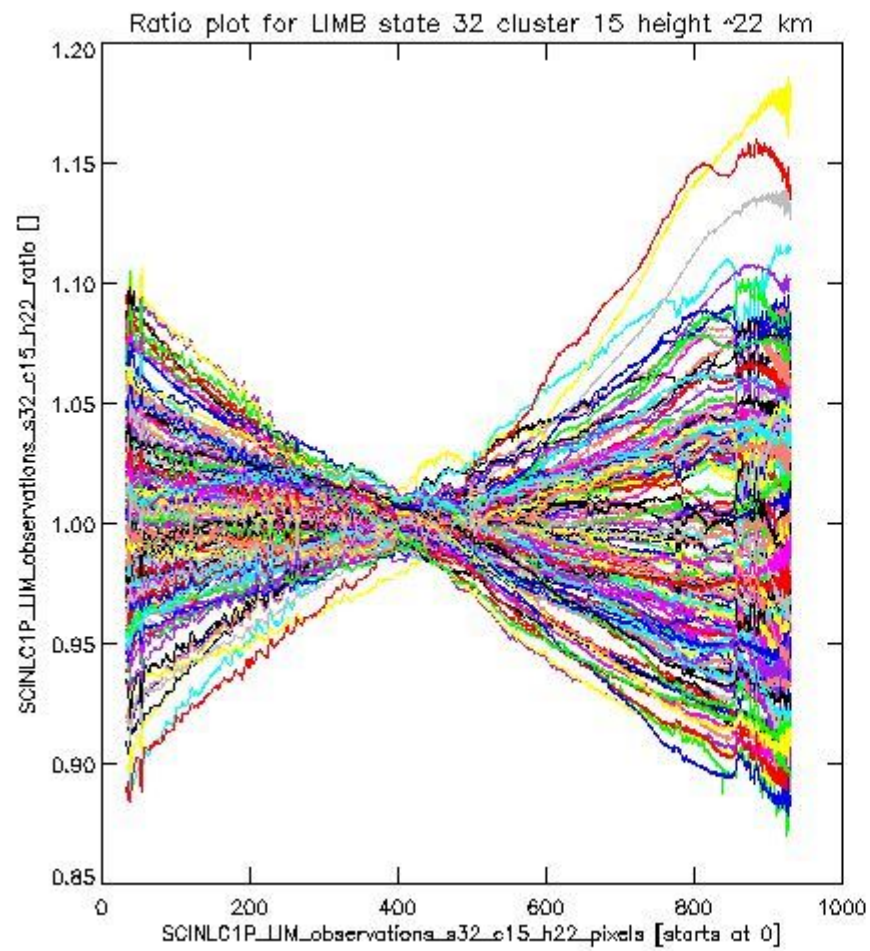
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	25JAN2011 00:52:24.415
Start time of last sample	25JAN2011 18:01:38.282
Reference period start time	26DEC2010 00:52:27.765
Reference period stop time	24JAN2011 23:39:55.024
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





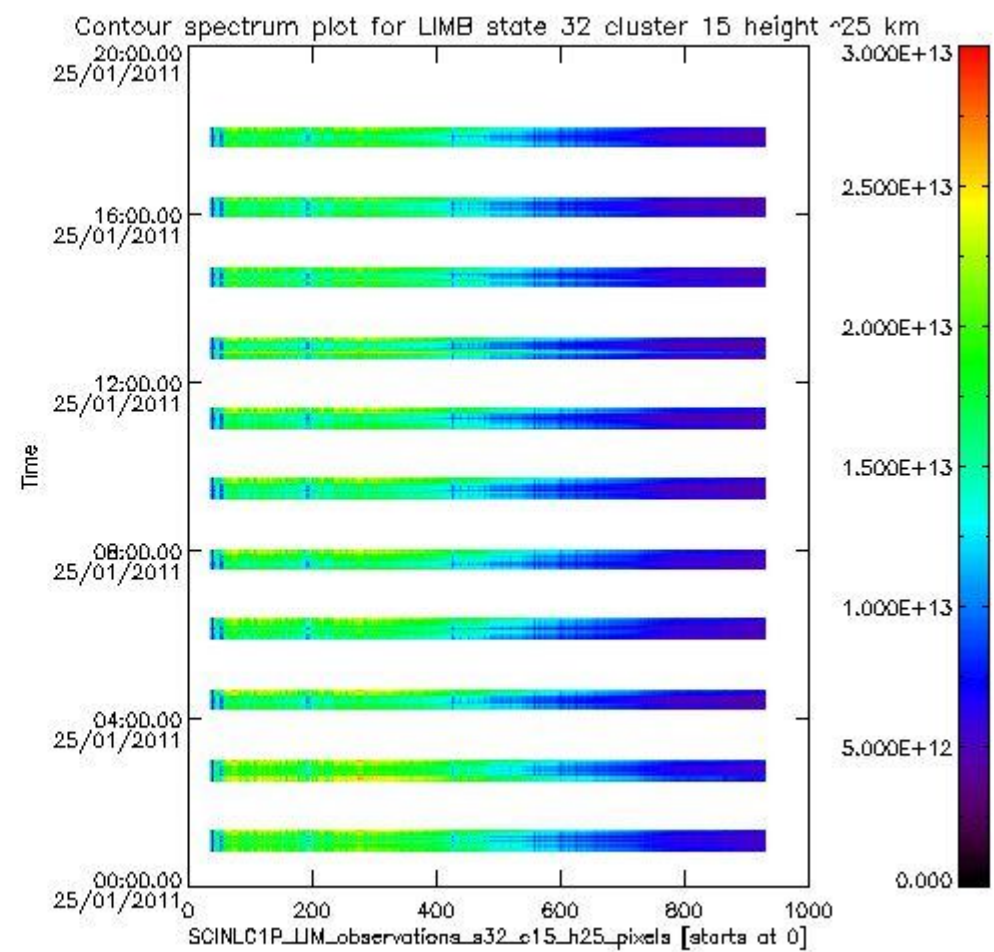
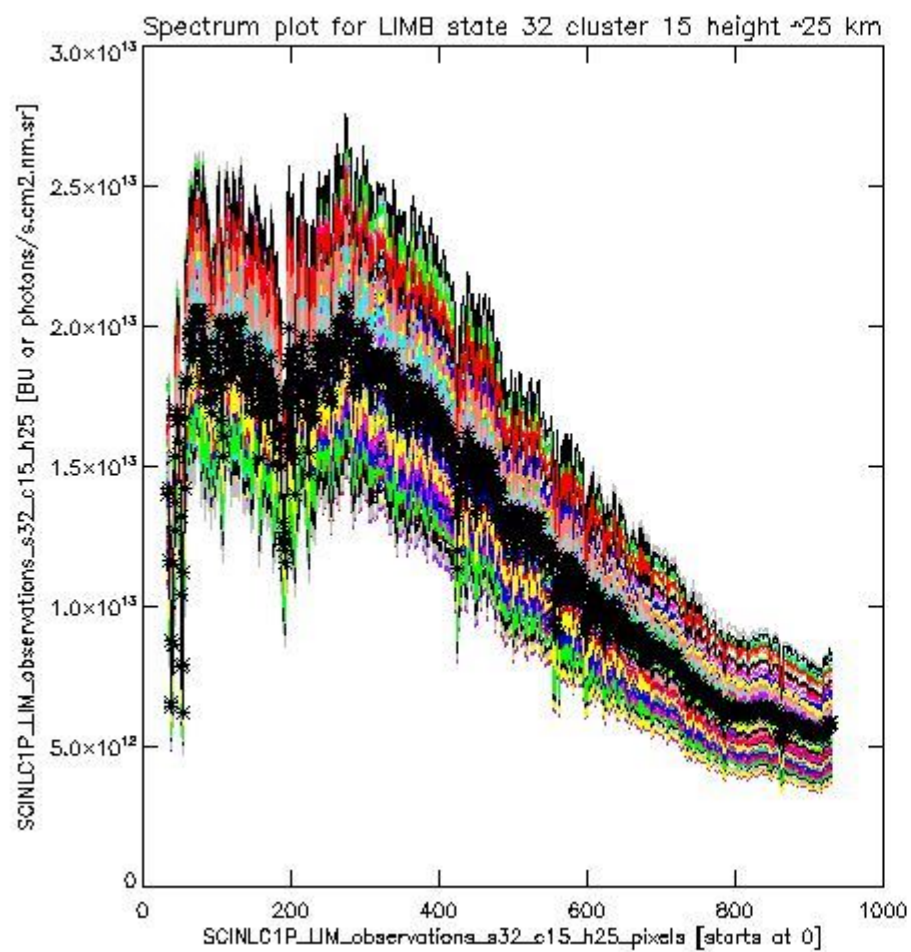
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_17.PNG

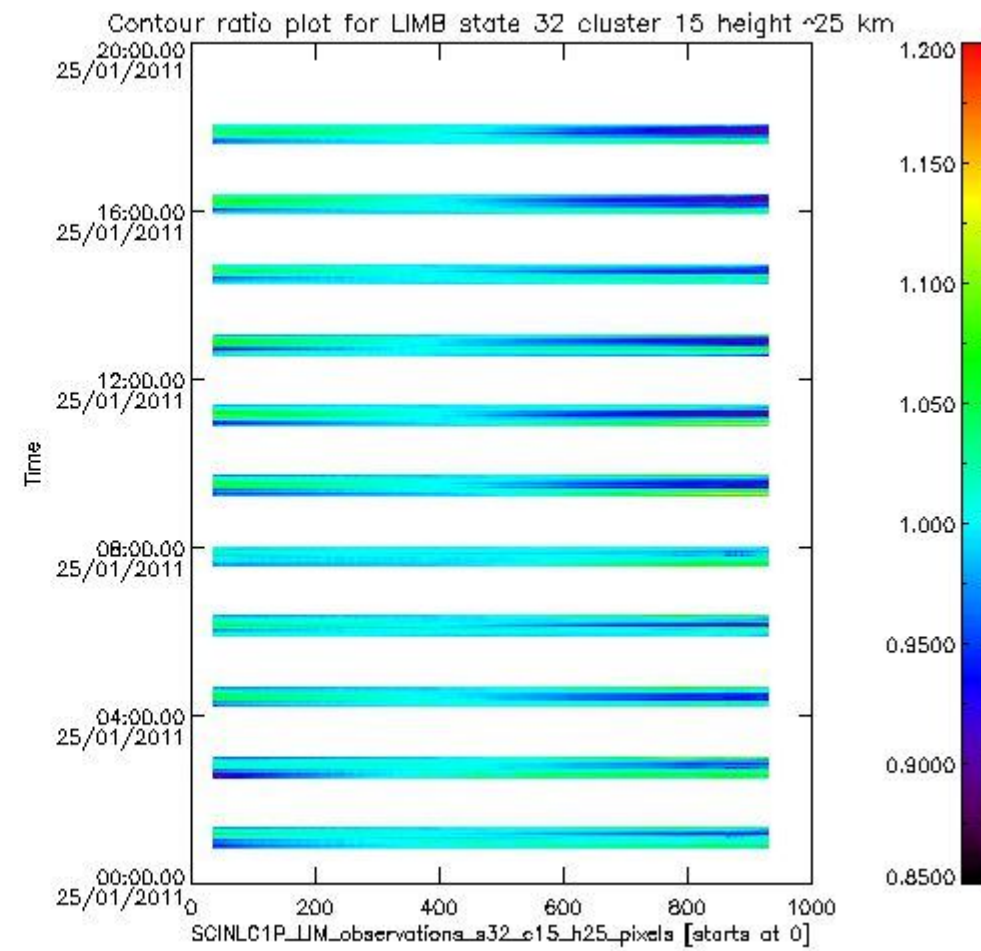
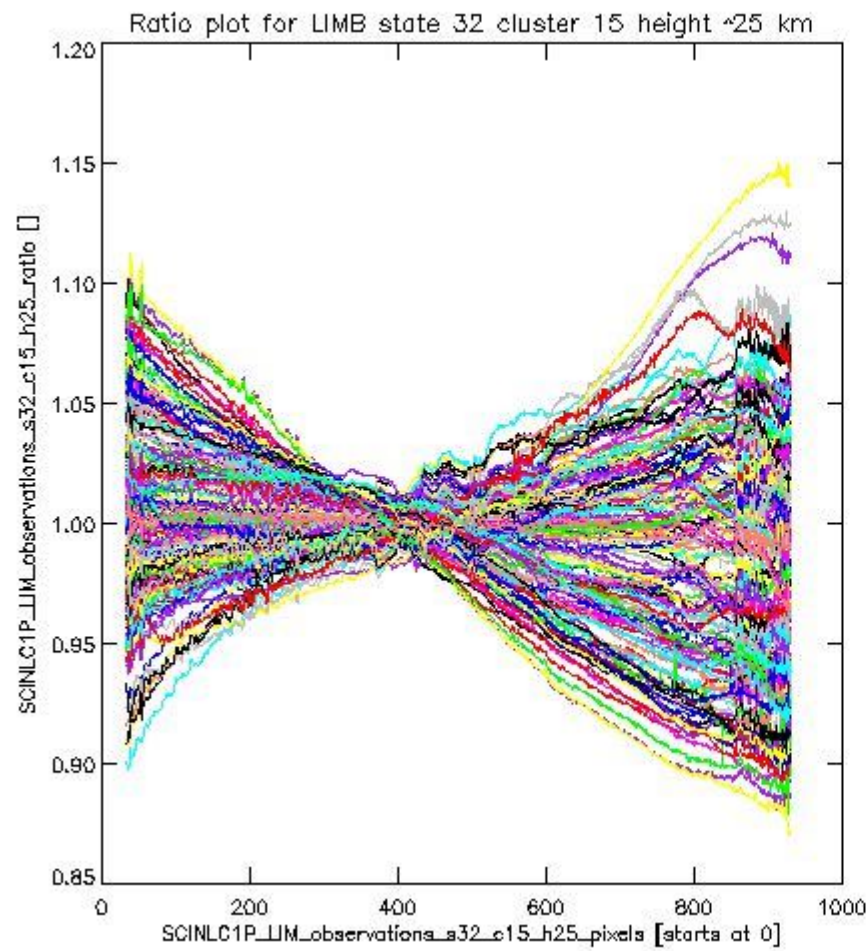
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	25JAN2011 00:52:24.415
Start time of last sample	25JAN2011 18:01:38.282
Reference period start time	26DEC2010 00:52:27.765
Reference period stop time	24JAN2011 23:39:55.024
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\_20110125\_18.PNG

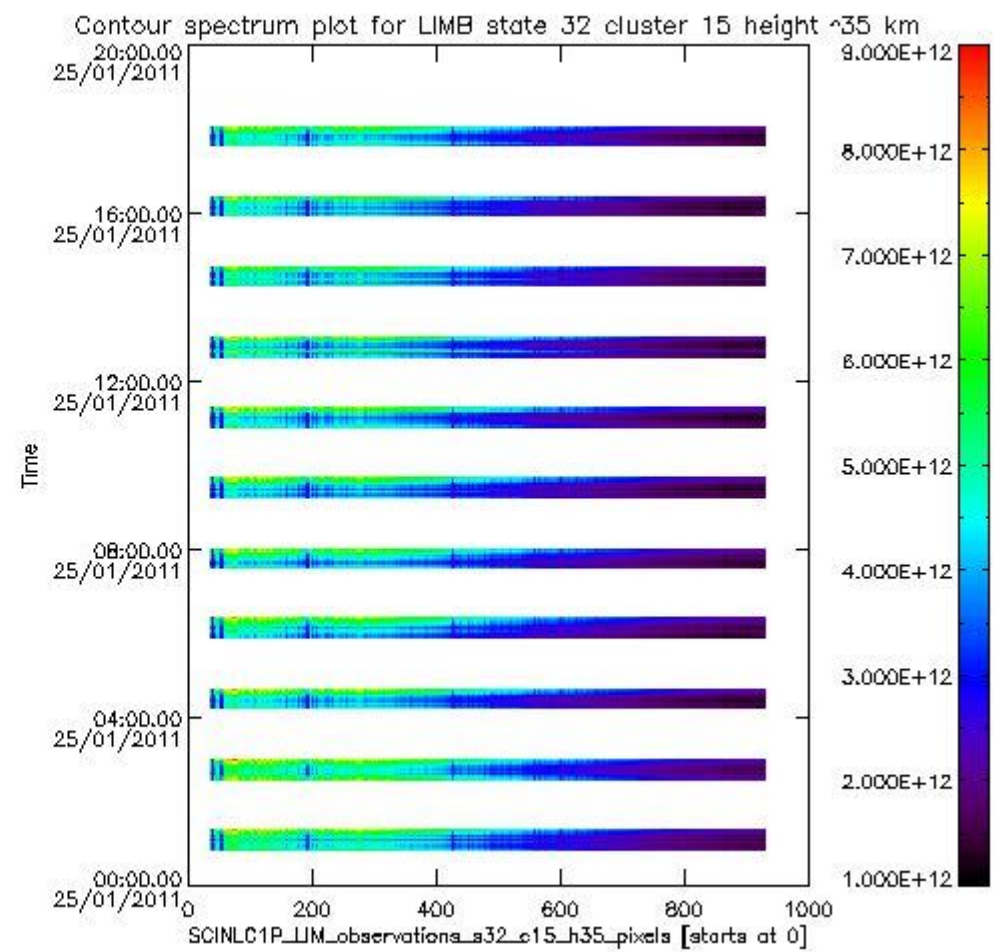
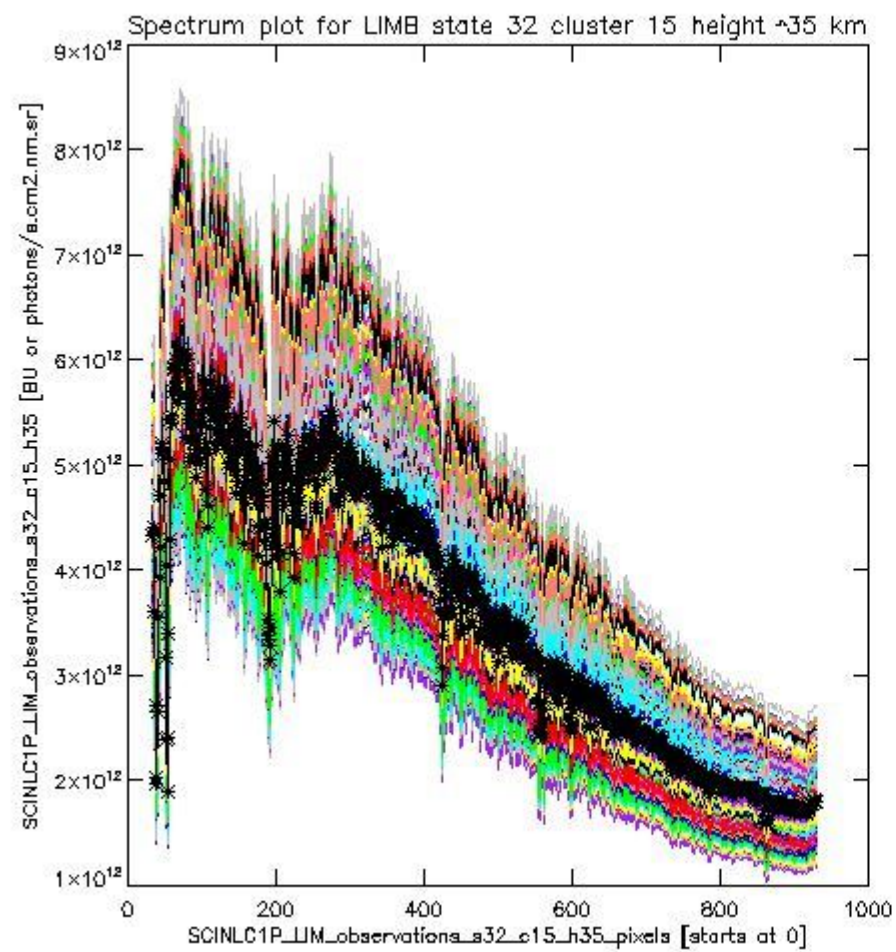




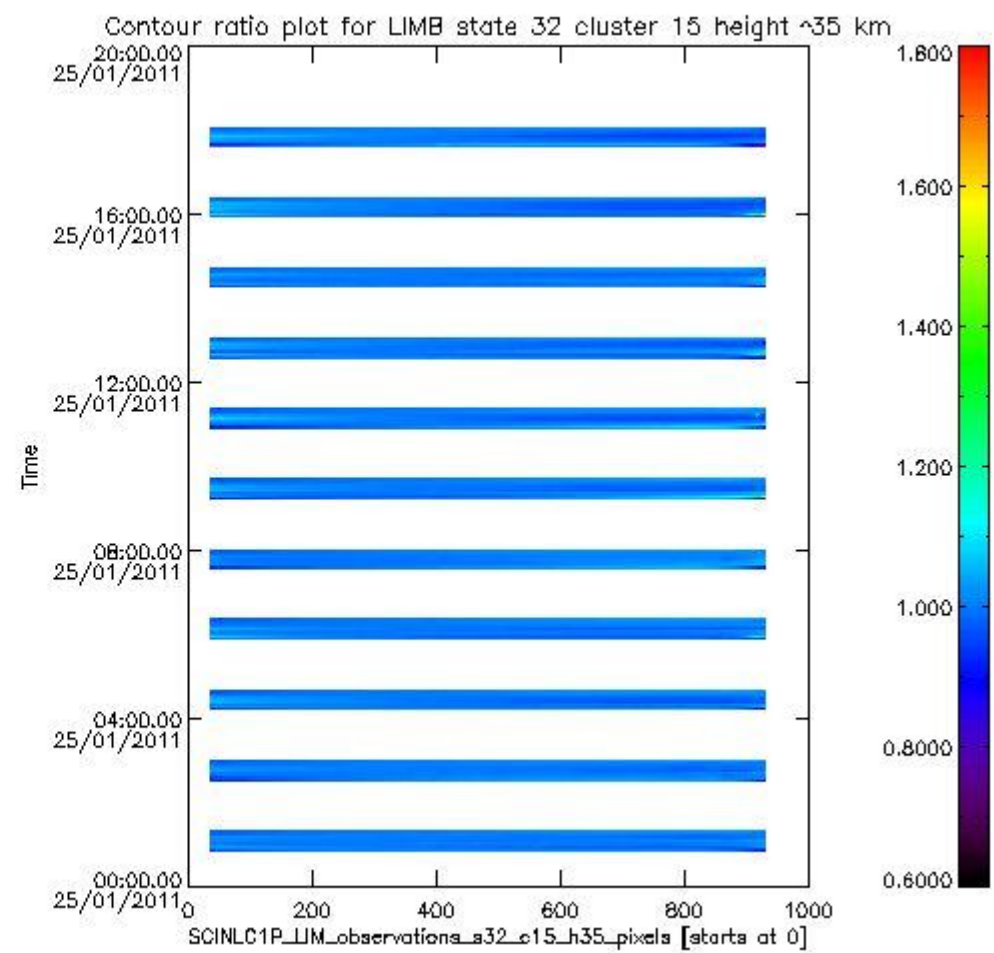
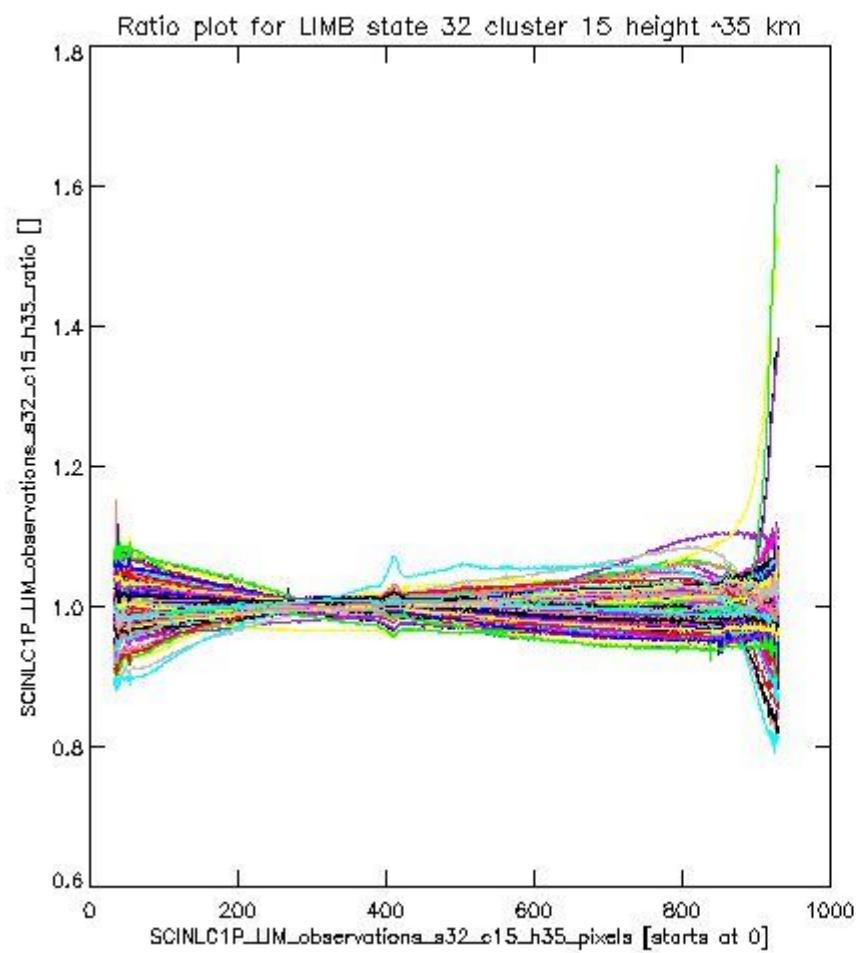
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_19.PNG

**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	25JAN2011 00:52:24.415
Start time of last sample	25JAN2011 18:01:38.282
Reference period start time	26DEC2010 00:52:27.765
Reference period stop time	24JAN2011 23:39:55.024
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\_20110125\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110125\_21.PNG



