

# 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	24APR2011 06:55:32
Data source version	SCIA/7.04-U
Processing scope for products	13APR2011 00:00:00 to 14APR2011 00:00:00
Start time of first product within scope	12APR2011 23:26:41
Stop time of last product within scope	14APR2011 00:00:23
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	13APR2011 00:00:46.318	13APR2011 23:32:07.884
1	NADIR	07	09	N/A	13APR2011 00:00:46.318	13APR2011 23:32:07.884
2	NADIR	07	15	N/A	13APR2011 00:00:46.318	13APR2011 23:32:07.884
3	NADIR	07	24	N/A	13APR2011 00:00:46.318	13APR2011 23:32:07.884
4	NADIR	07	55	N/A	13APR2011 00:00:46.318	13APR2011 23:32:07.884
5	LIMB	32	09	~19 km	13APR2011 00:01:54.877	13APR2011 23:35:19.185
6	LIMB	32	09	~22 km	13APR2011 00:01:54.877	13APR2011 23:35:19.185
7	LIMB	32	09	~25 km	13APR2011 00:01:54.877	13APR2011 23:35:19.185
8	LIMB	32	15	~22 km	13APR2011 00:01:54.877	13APR2011 23:35:19.185
9	LIMB	32	15	~25 km	13APR2011 00:01:54.877	13APR2011 23:35:19.185
10	LIMB	32	15	~35 km	13APR2011 00:01:54.877	13APR2011 23:35:19.185

#### 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	#noproc	#cmlpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110412_231846_000060413101_00246_47674_0134.N1</a>	12APR2011 23:26:41	13APR2011 00:37:39	0	32	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110413_005931_000059783101_00247_47675_0135.N1</a>	13APR2011 01:06:54	13APR2011 02:17:46	0	32	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110413_023913_000060413101_00248_47676_0138.N1</a>	13APR2011 02:47:08	13APR2011 03:57:53	0	32	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110413_041958_000059783101_00249_47677_0117.N1</a>	13APR2011 04:27:21	13APR2011 05:38:00	0	32	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110413_055940_000060413101_00250_47678_0119.N1</a>	13APR2011 06:07:35	13APR2011 07:18:07	0	32	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110413_074025_000059783101_00251_47679_0122.N1</a>	13APR2011 07:47:49	13APR2011 08:58:13	0	32	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110413_092007_000060413101_00252_47680_0141.N1	13APR2011 09:28:02	13APR2011 10:38:20	0	32	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110413_110052_000059783101_00253_47681_0142.N1	13APR2011 11:08:16	13APR2011 12:18:27	0	31	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110413_124034_000060413101_00254_47682_0144.N1	13APR2011 12:48:29	13APR2011 13:59:42	0	32	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110413_142119_000059783101_00255_47683_0145.N1	13APR2011 14:28:43	13APR2011 15:39:49	0	32	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110413_160101_000060413101_00256_47684_0148.N1	13APR2011 16:08:57	13APR2011 17:19:56	0	32	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110413_174146_000059783101_00257_47685_0149.N1	13APR2011 17:49:10	13APR2011 18:59:13	0	32	31	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110413_192128_000060413101_00258_47686_0153.N1	13APR2011 19:29:24	13APR2011 20:40:09	0	32	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110413_210213_000059783101_00259_47687_0154.N1	13APR2011 21:09:38	13APR2011 22:20:16	0	32	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110413_224155_000060413101_00260_47688_0151.N1	13APR2011 22:49:51	14APR2011 00:00:23	0	32	31	0	0	1	0	0	

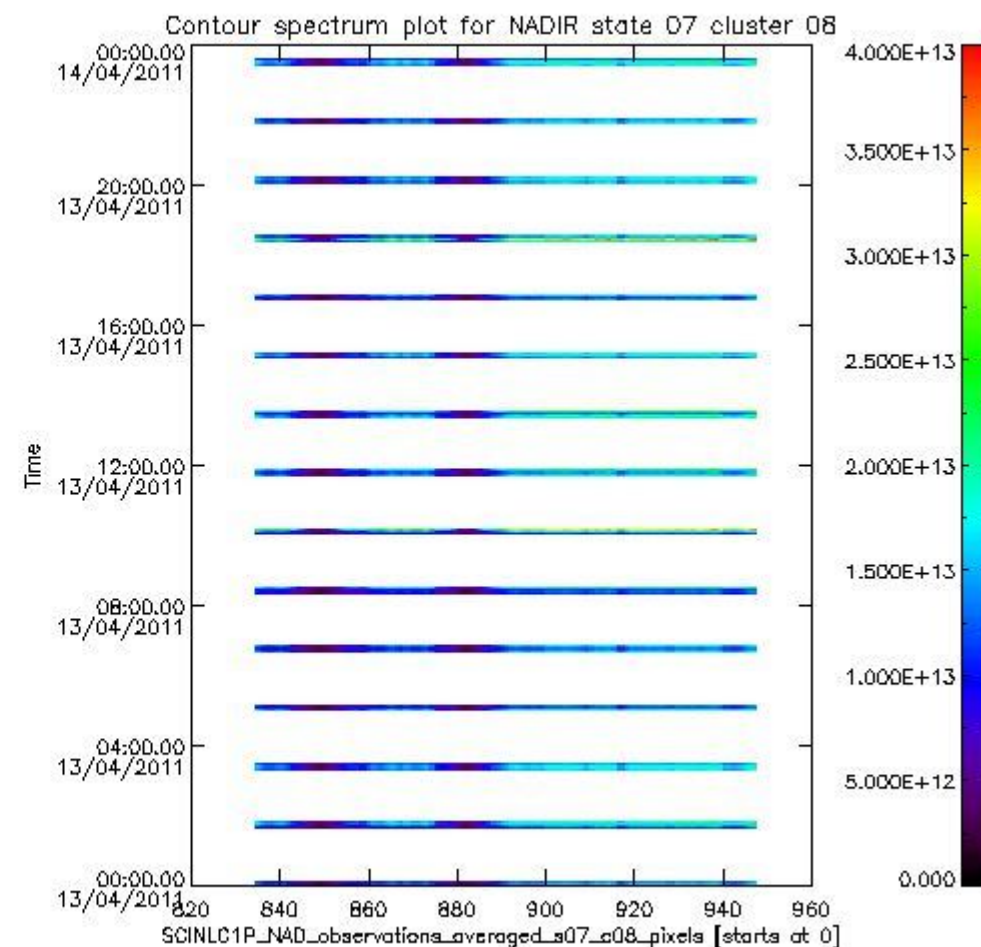
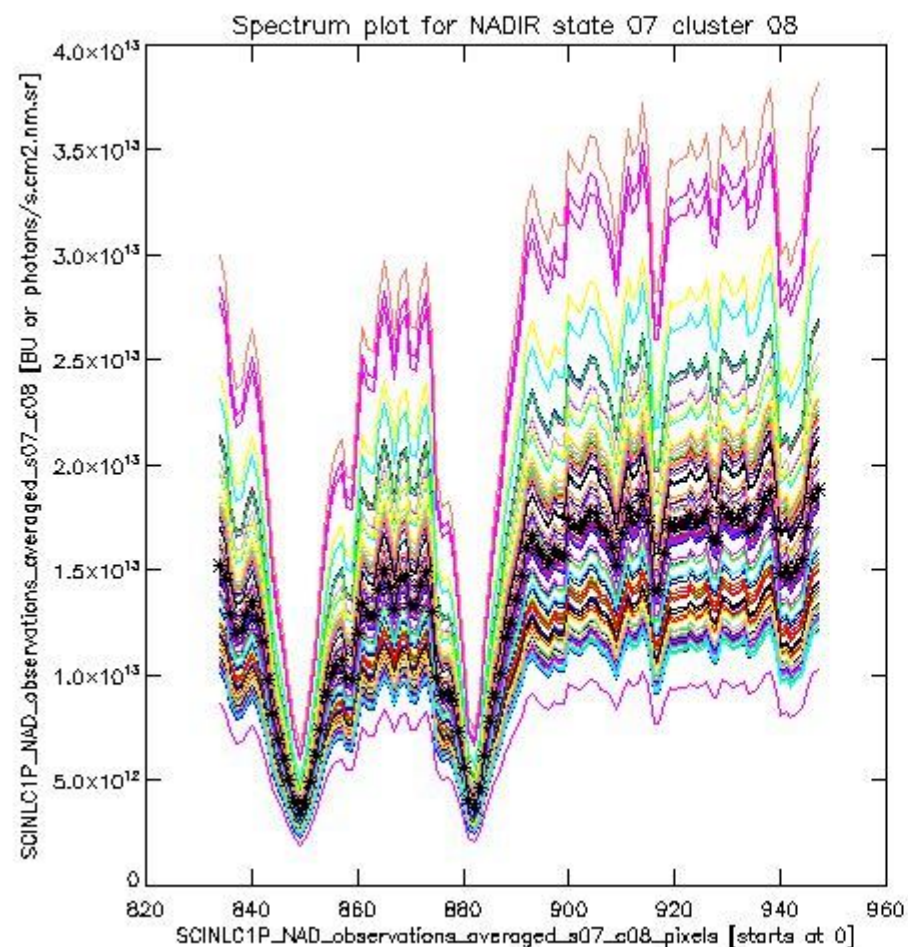
## 1.2 Source packet monitoring

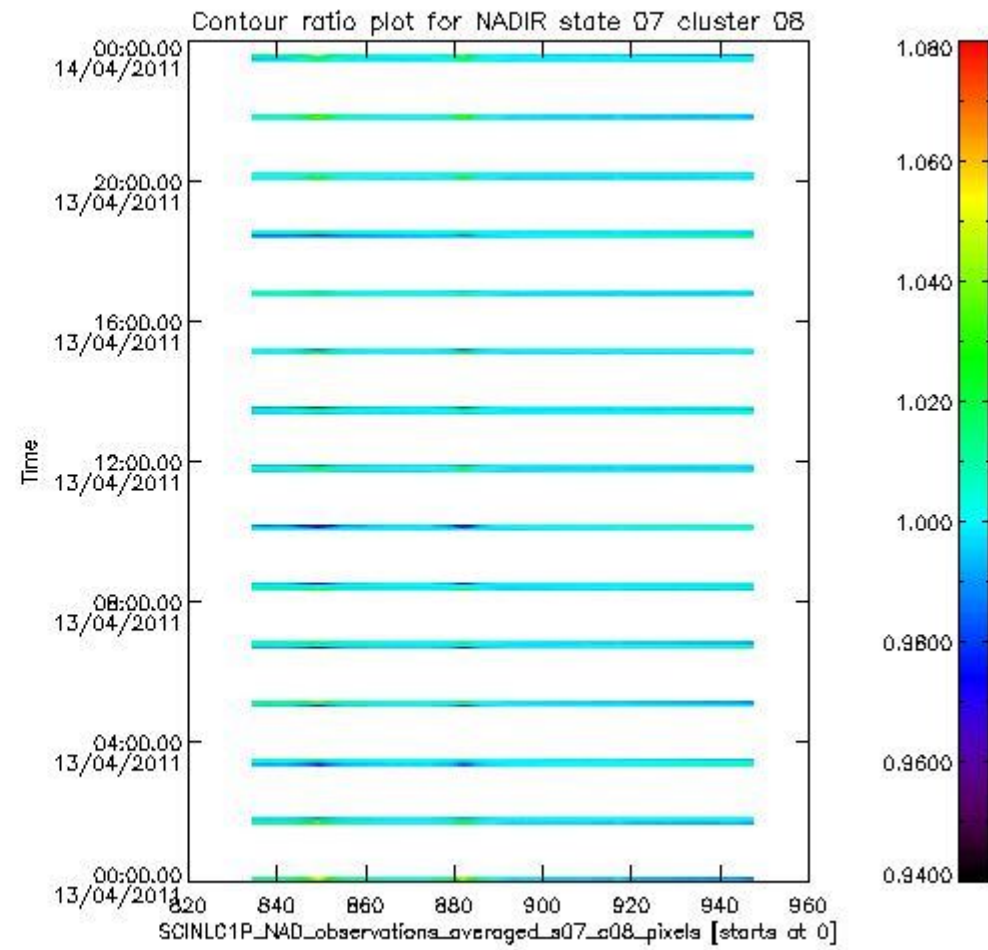
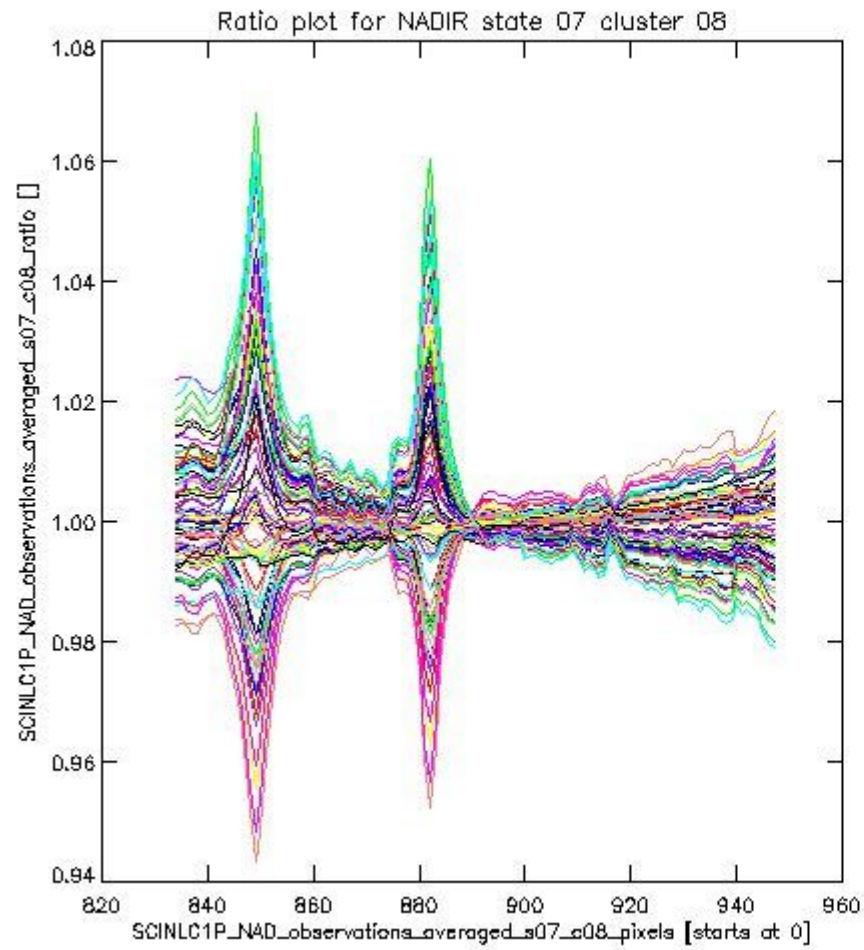
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

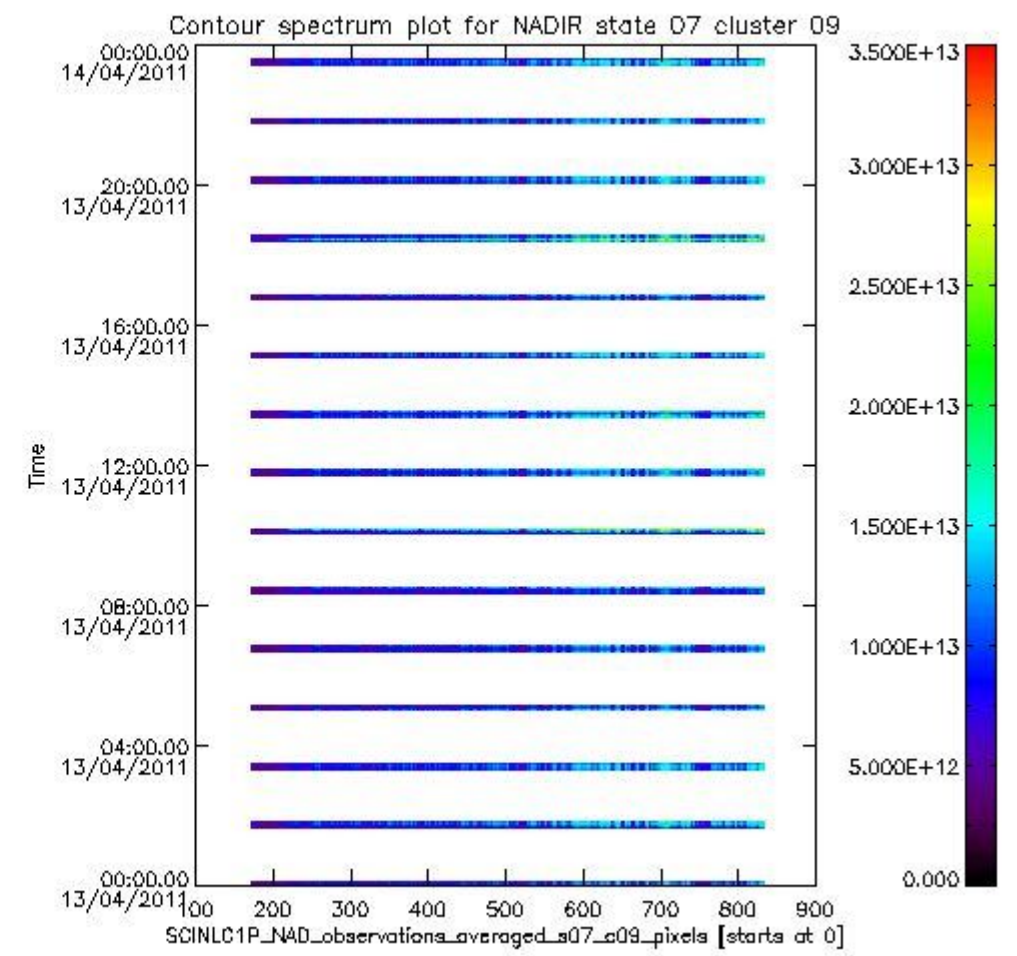
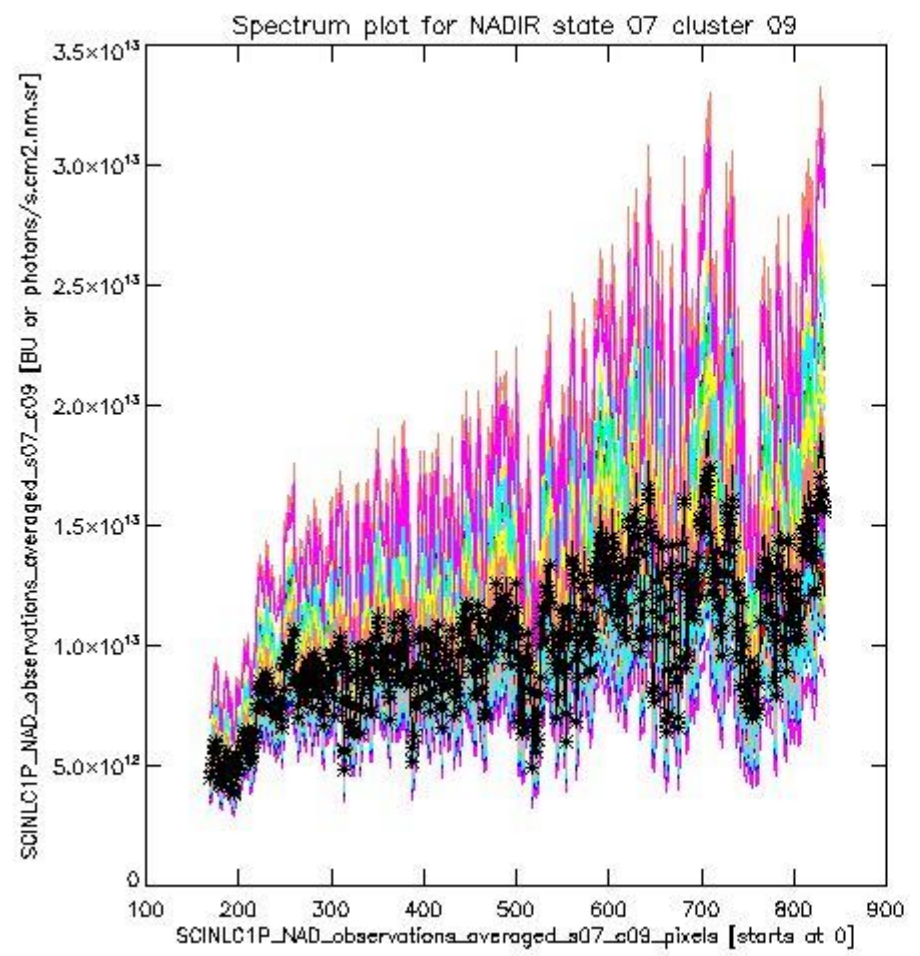
Item	Value
Start time of first sample	13APR2011 00:00:46.318
Start time of last sample	13APR2011 23:32:07.884
Reference period start time	14MAR2011 03:21:41.844
Reference period stop time	12APR2011 23:58:43.576
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



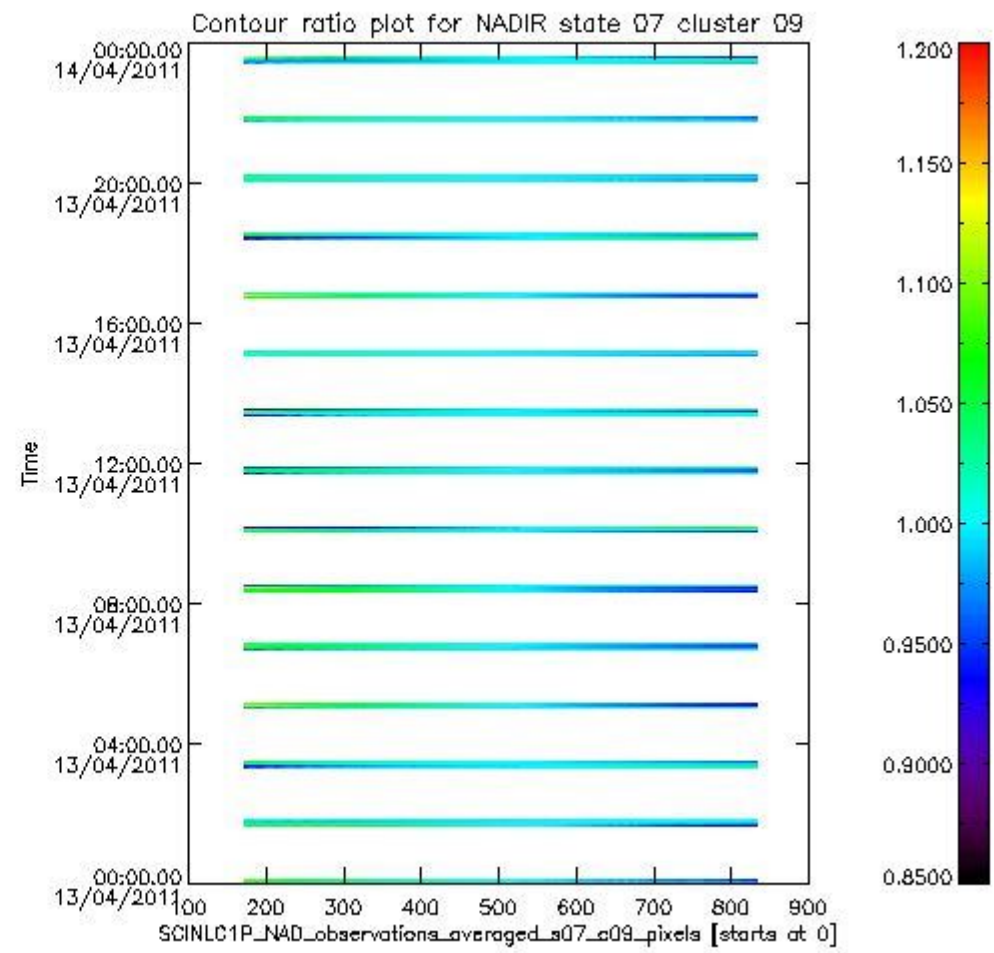
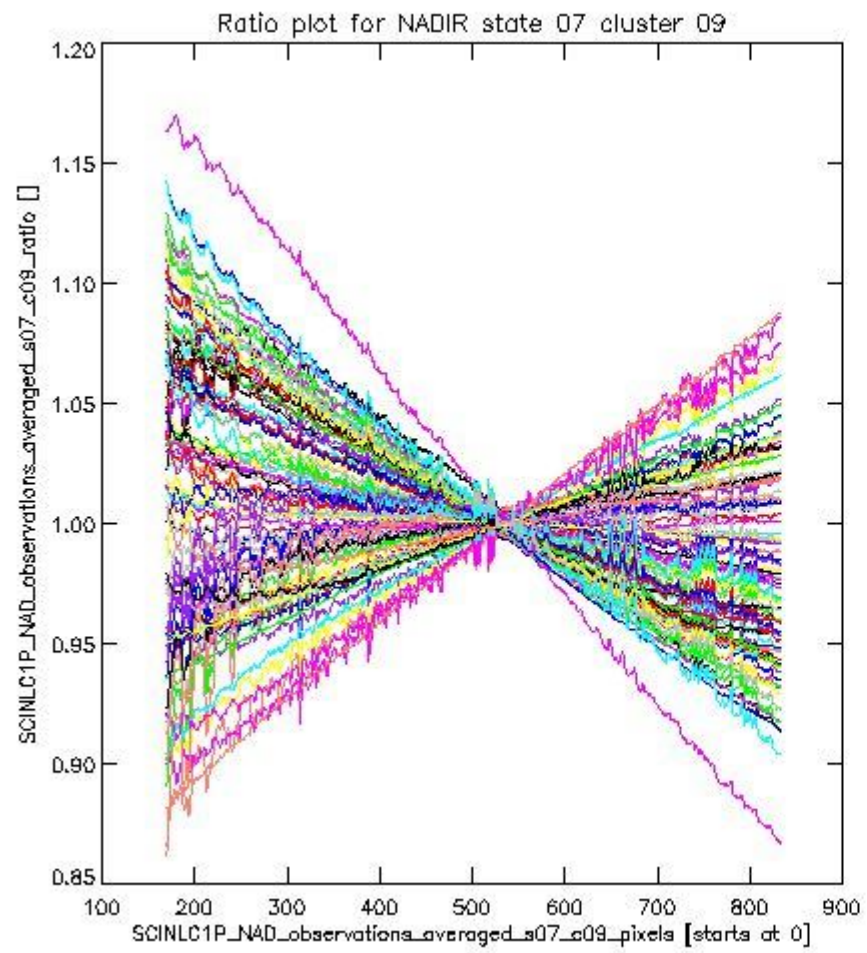


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	13APR2011 00:00:46.318
Start time of last sample	13APR2011 23:32:07.884
Reference period start time	14MAR2011 03:21:41.844
Reference period stop time	12APR2011 23:58:43.576
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



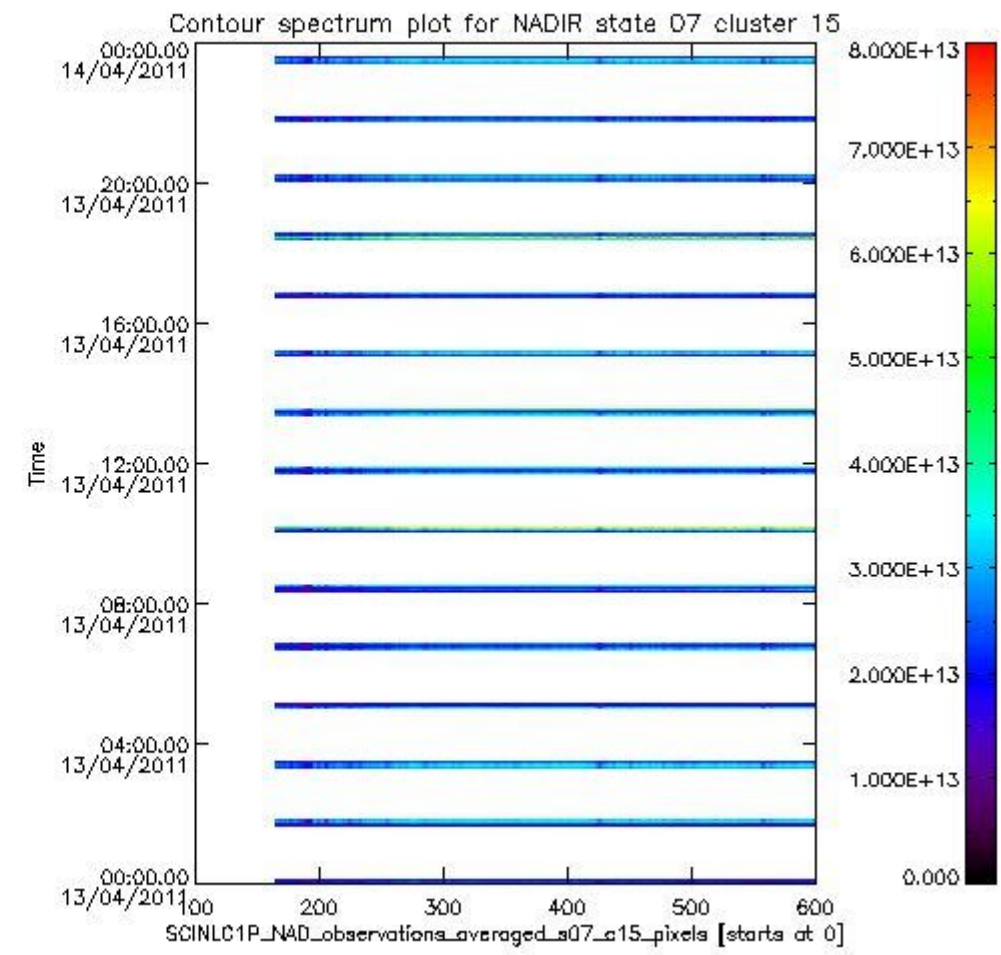
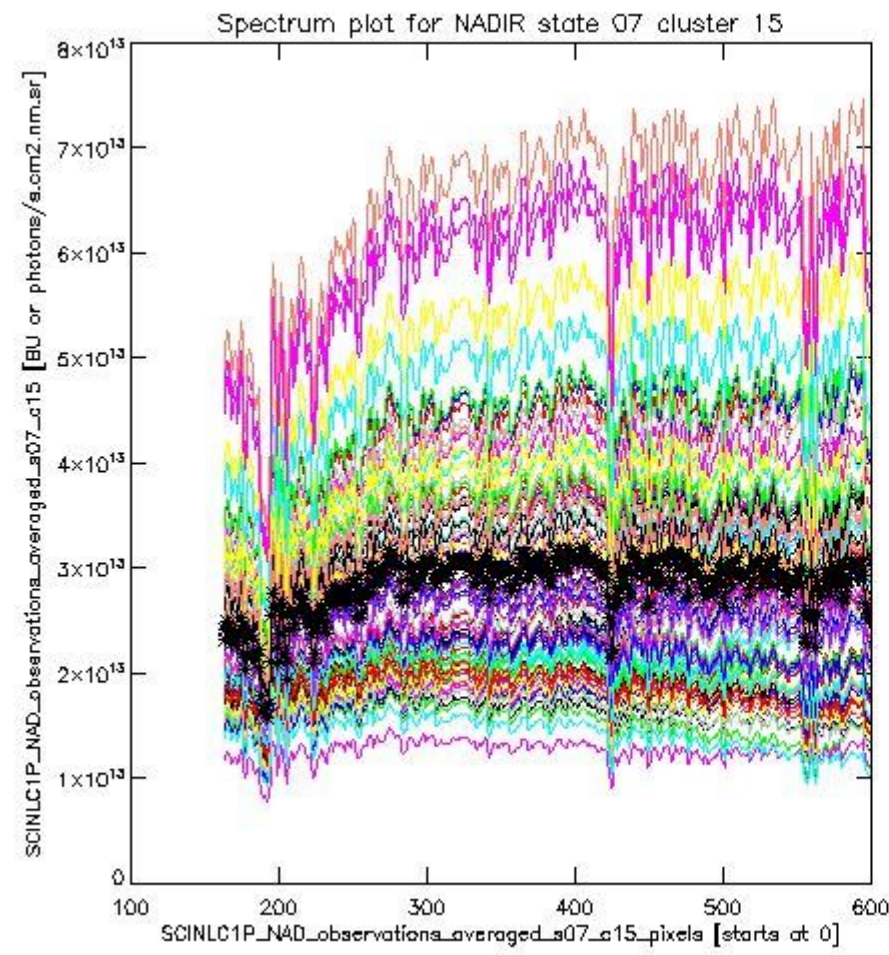
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_2.PNG



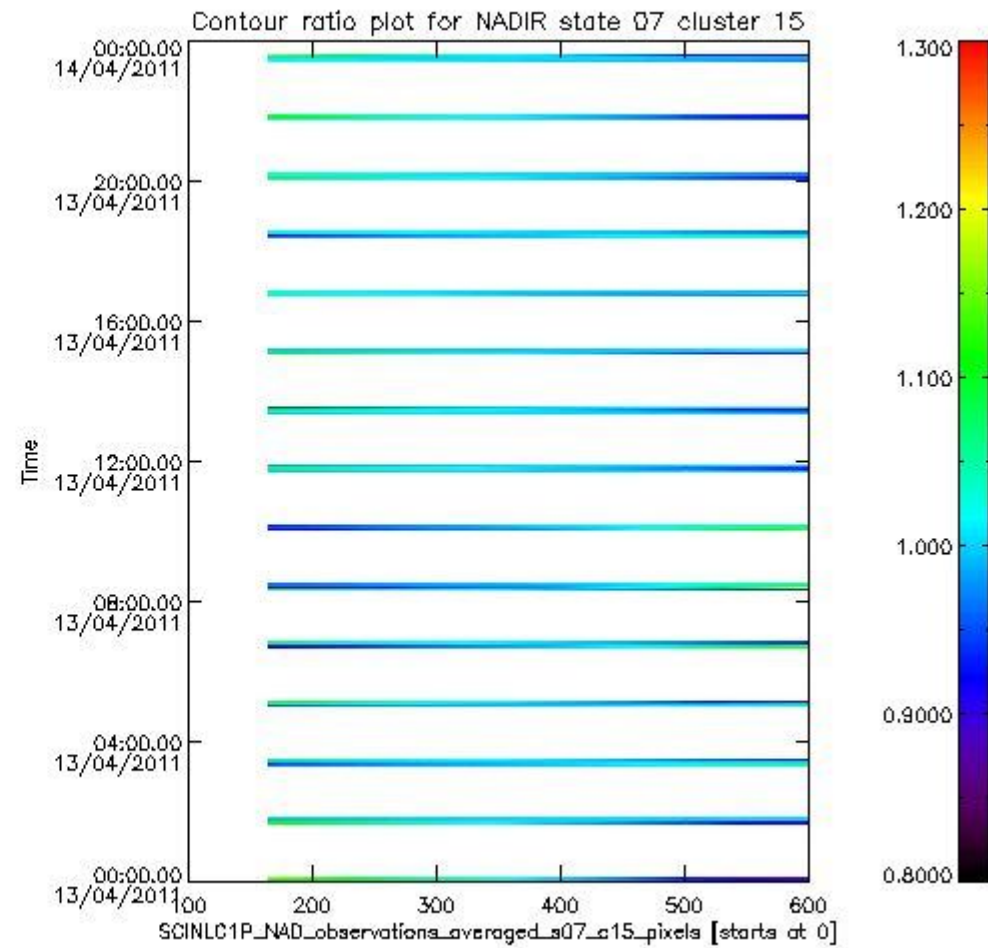
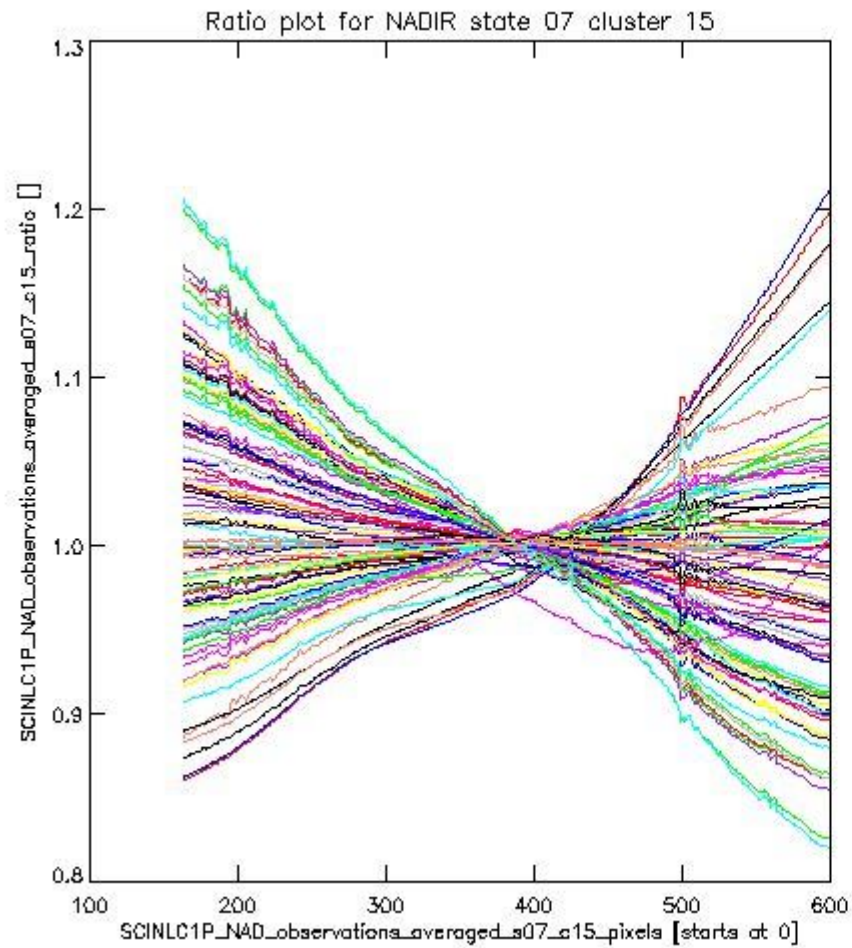
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_3.PNG

**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	13APR2011 00:00:46.318
Start time of last sample	13APR2011 23:32:07.884
Reference period start time	14MAR2011 03:21:41.844
Reference period stop time	12APR2011 23:58:43.576
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



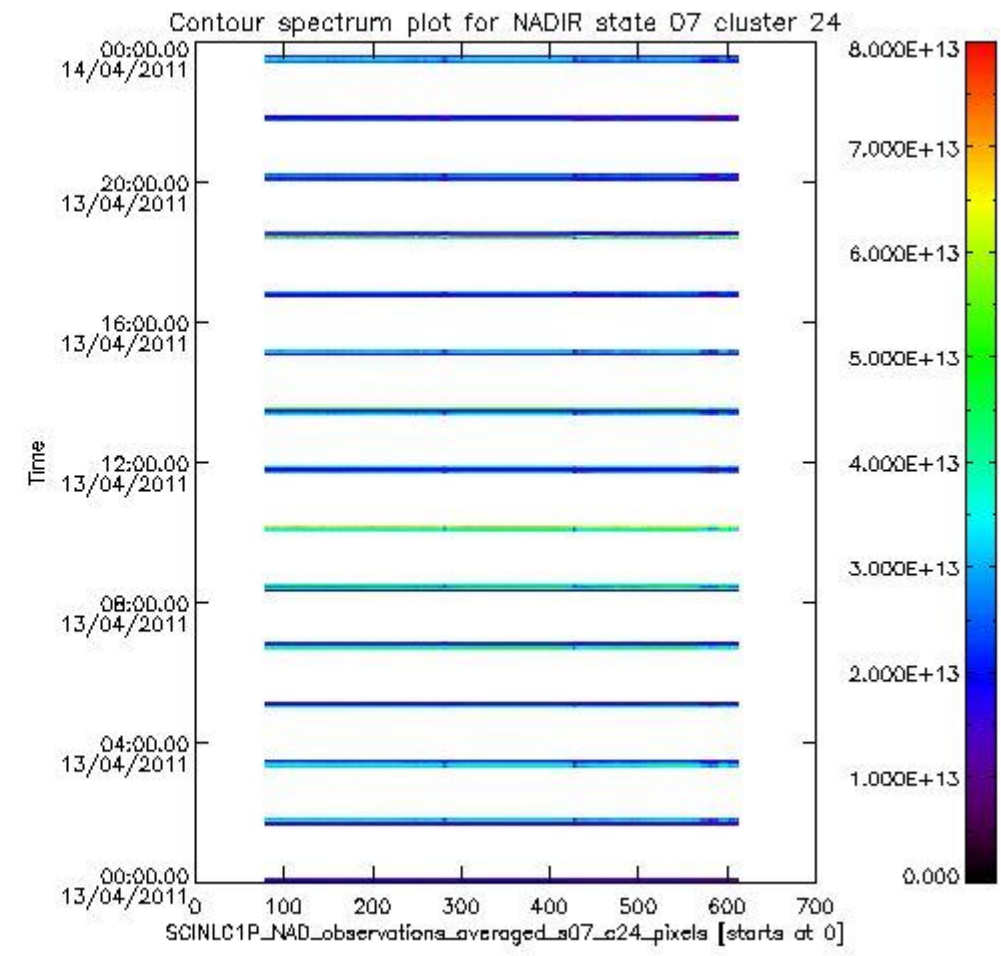
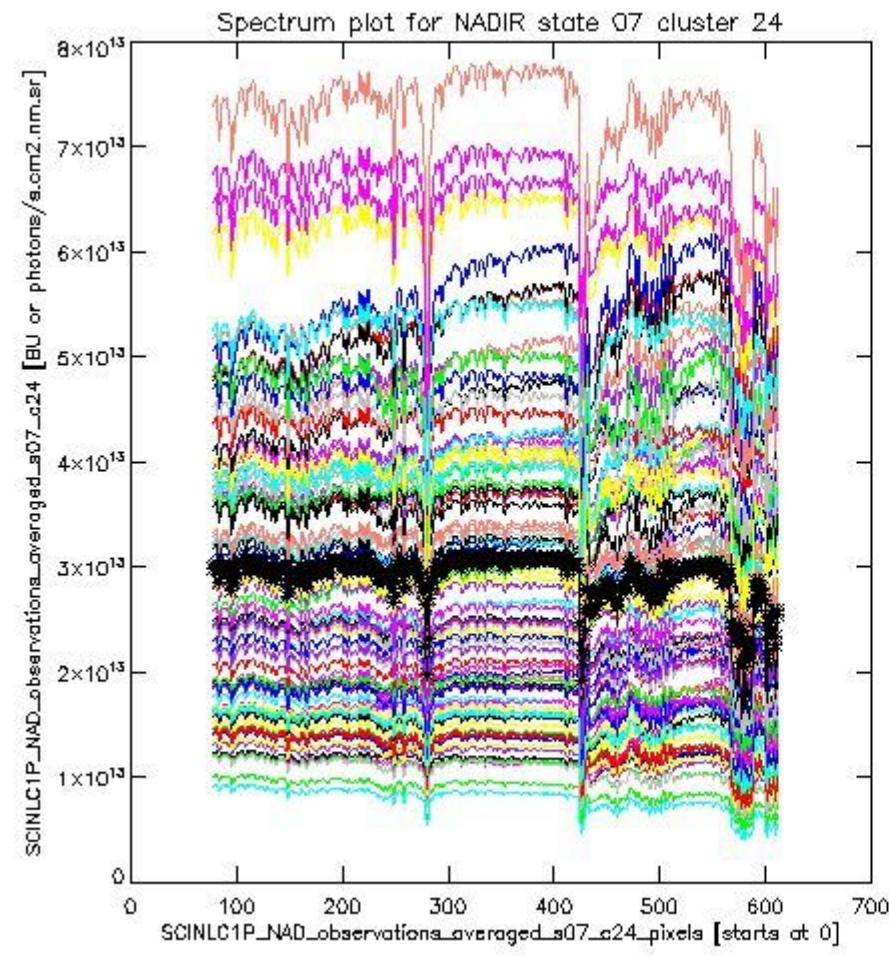
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_5.PNG

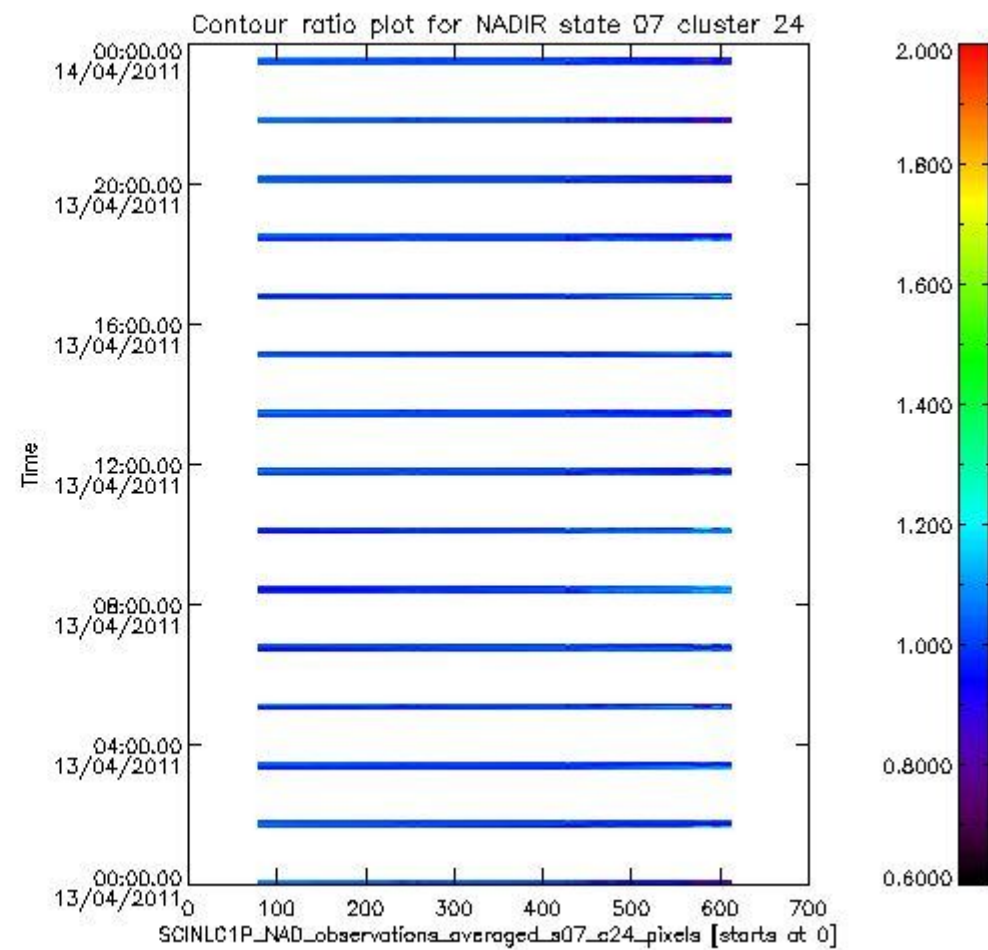
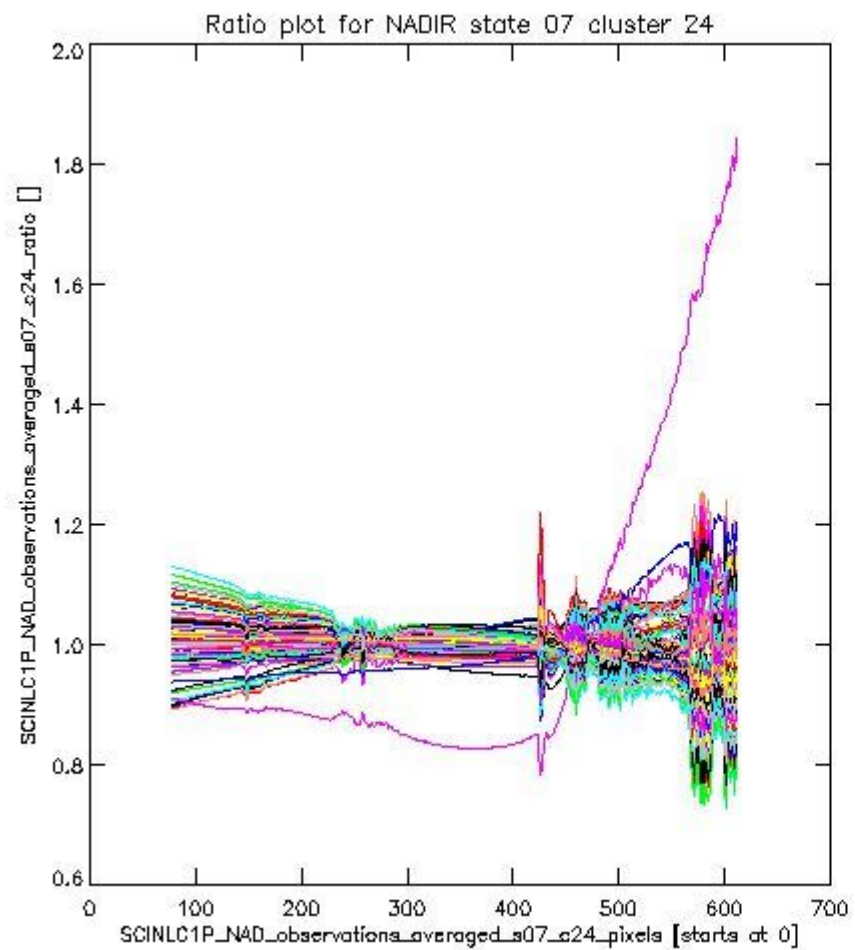
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	13APR2011 00:00:46.318
Start time of last sample	13APR2011 23:32:07.884
Reference period start time	14MAR2011 03:21:41.844
Reference period stop time	12APR2011 23:58:43.576
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\_20110413\_6.PNG

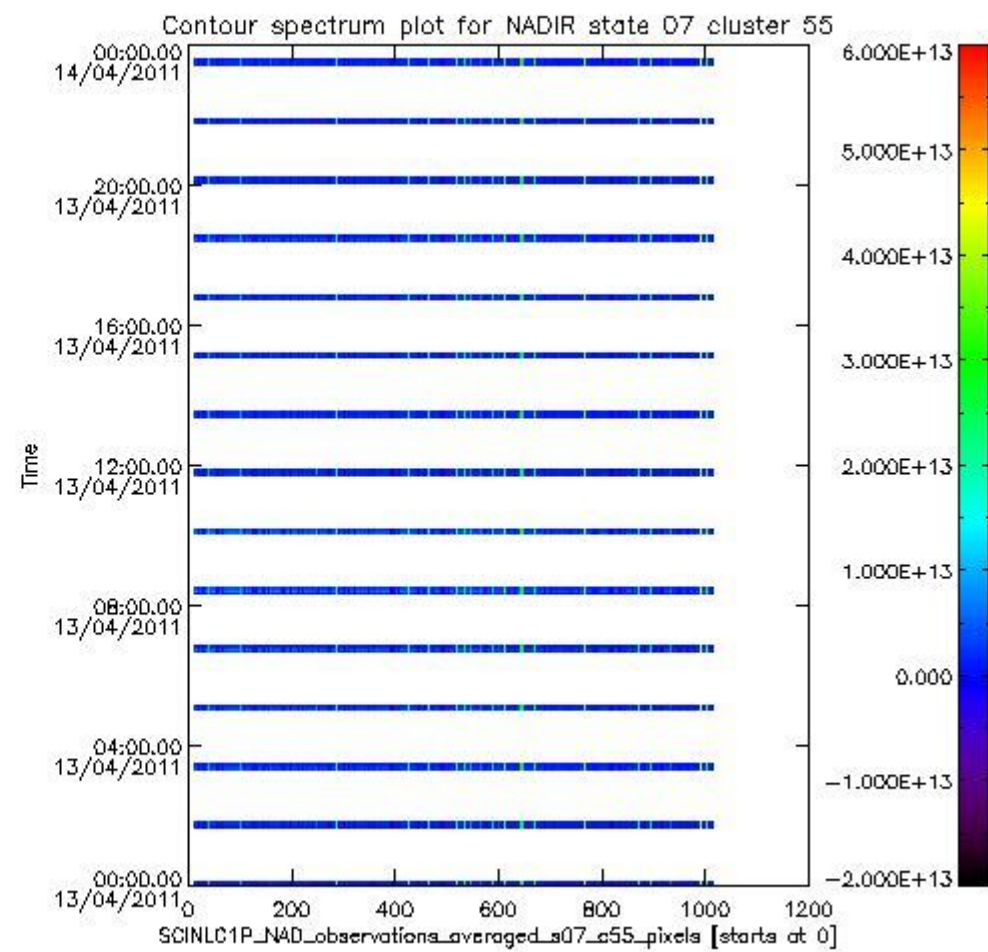
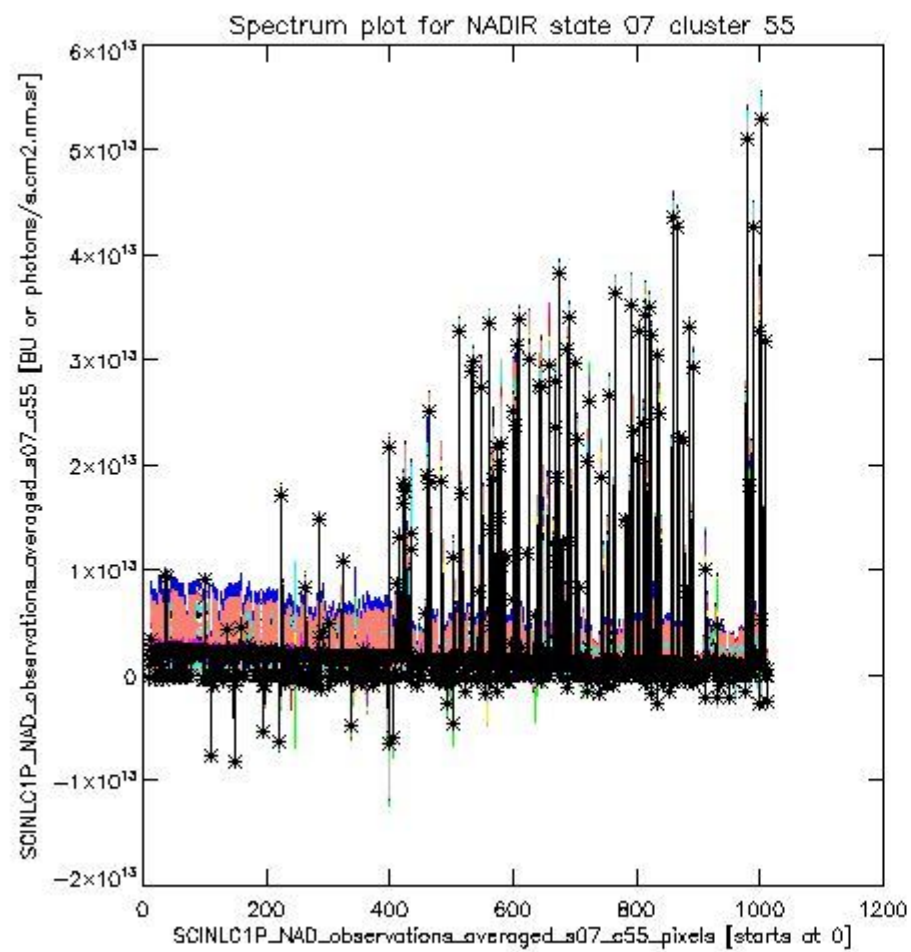




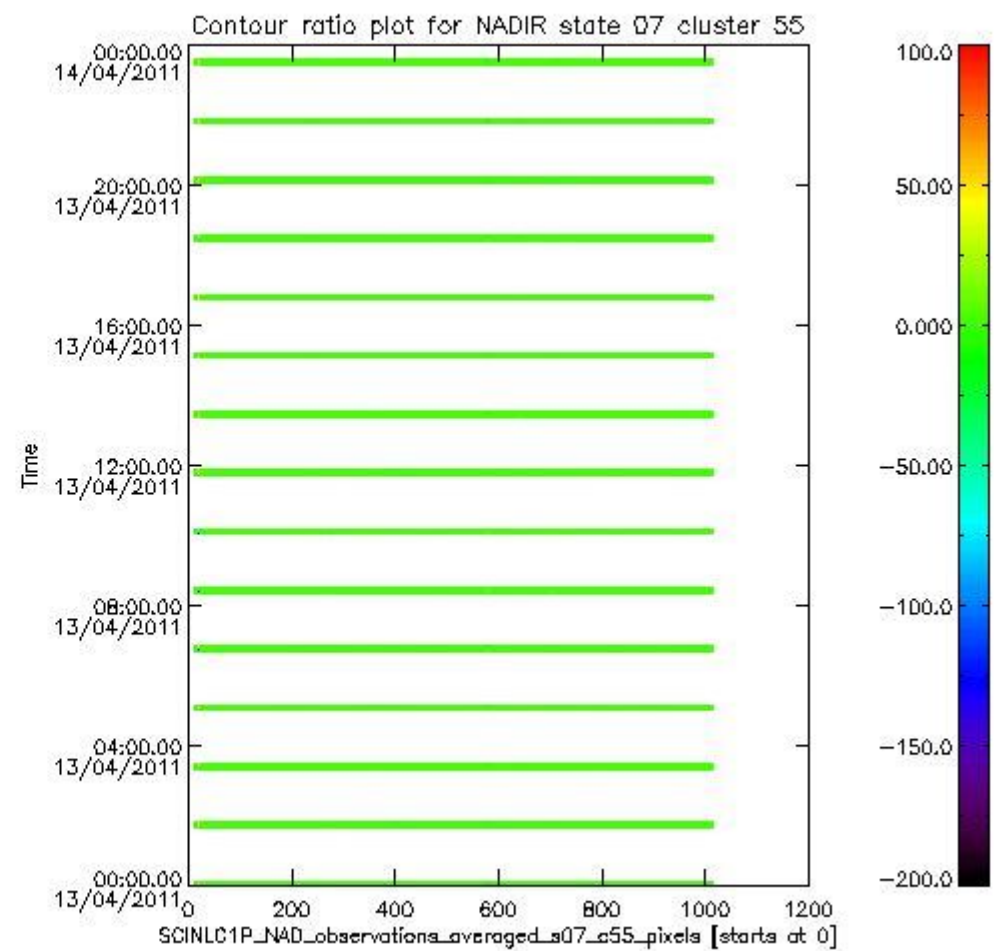
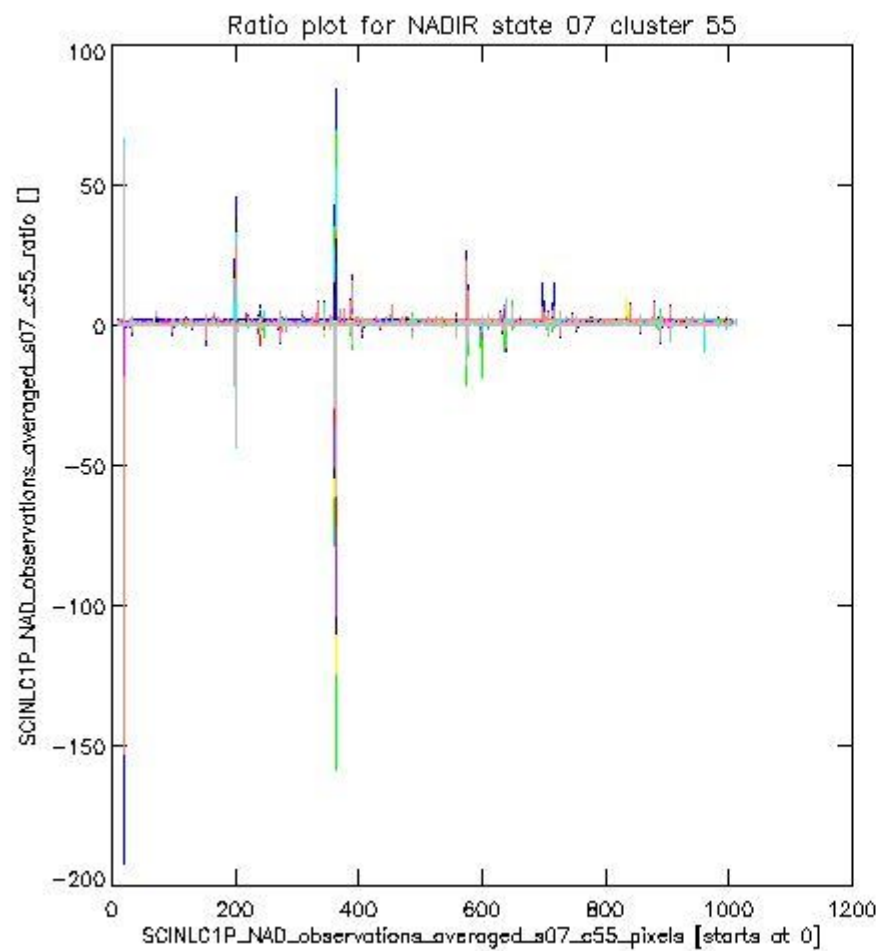
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_7.PNG

**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	13APR2011 00:00:46.318
Start time of last sample	13APR2011 23:32:07.884
Reference period start time	14MAR2011 03:21:41.844
Reference period stop time	12APR2011 23:58:43.576
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



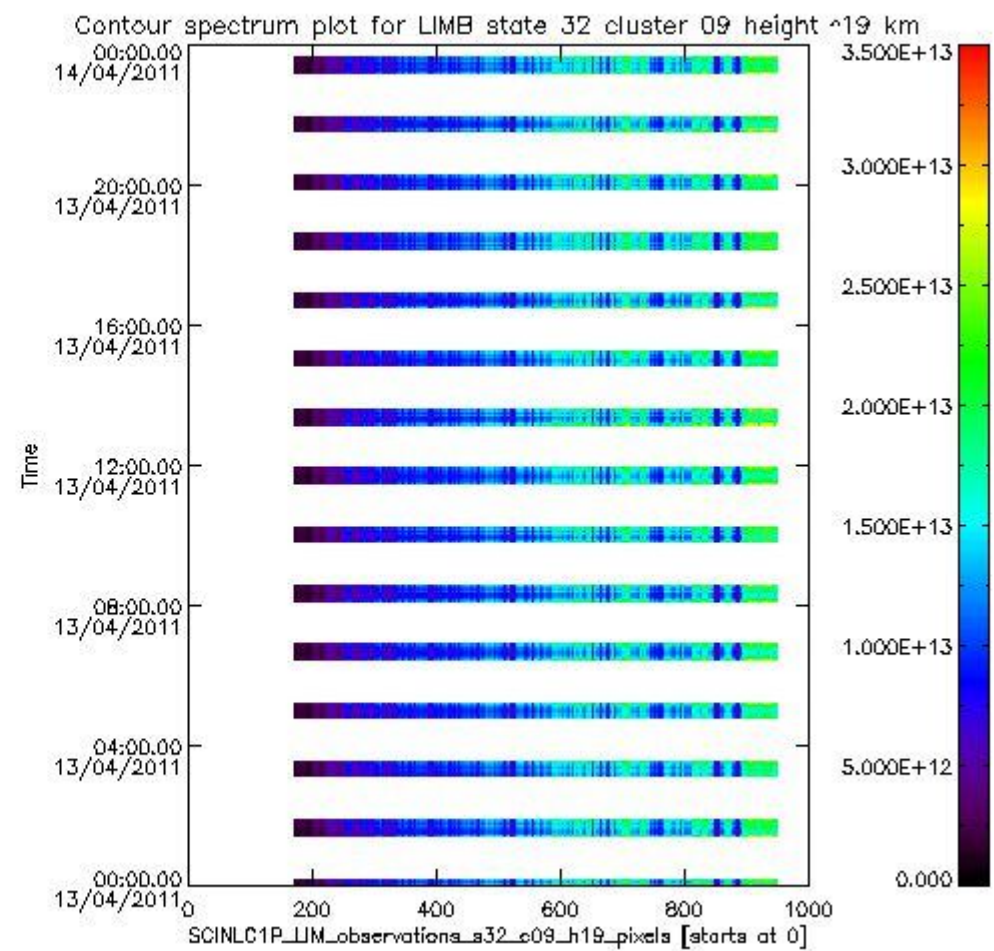
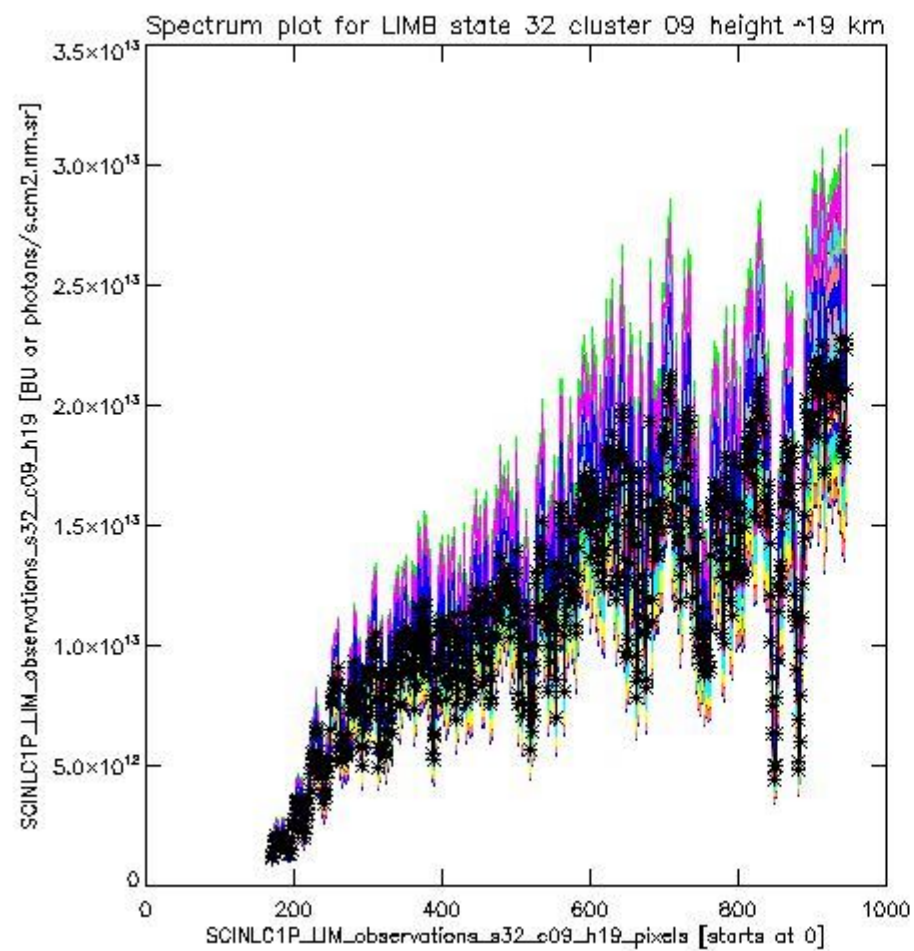
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_8.PNG



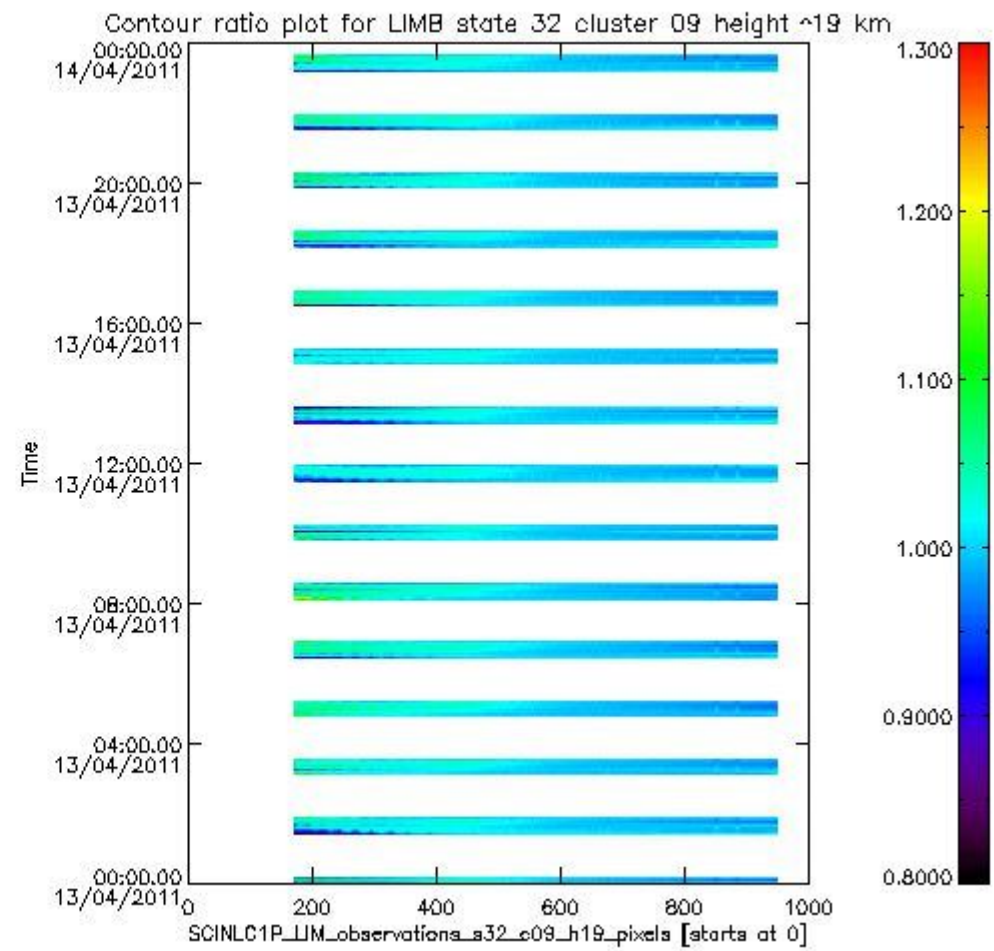
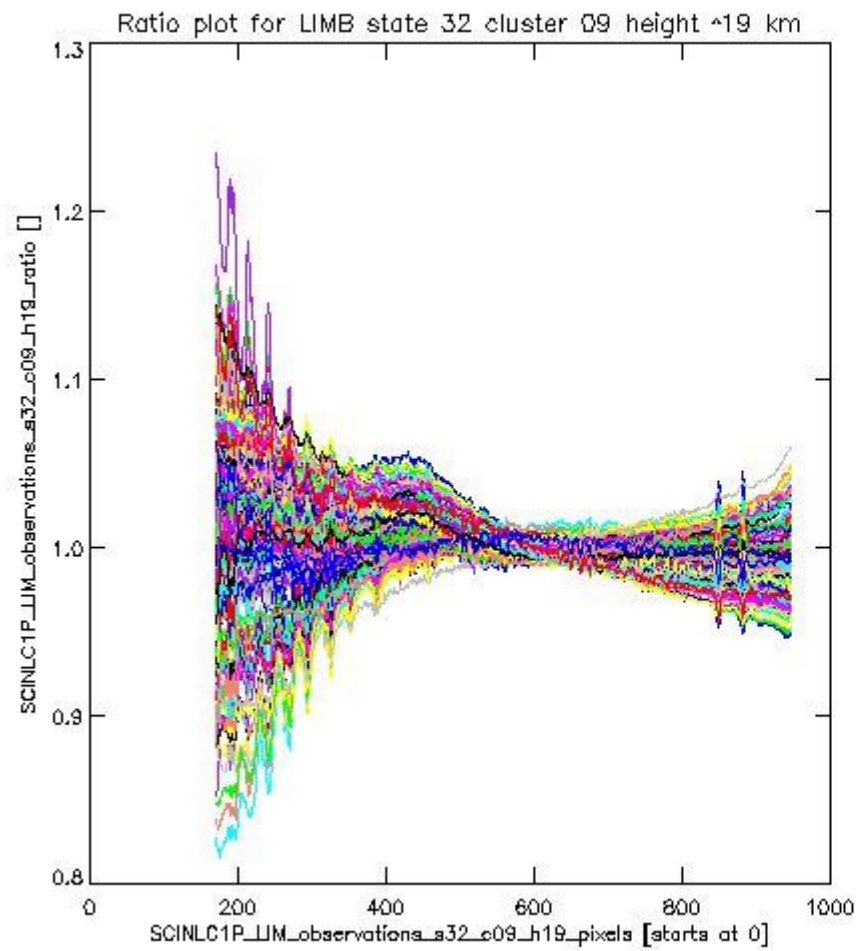
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_9.PNG

**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	13APR2011 00:01:54.877
Start time of last sample	13APR2011 23:35:19.185
Reference period start time	14MAR2011 03:08:31.208
Reference period stop time	12APR2011 23:59:52.135
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



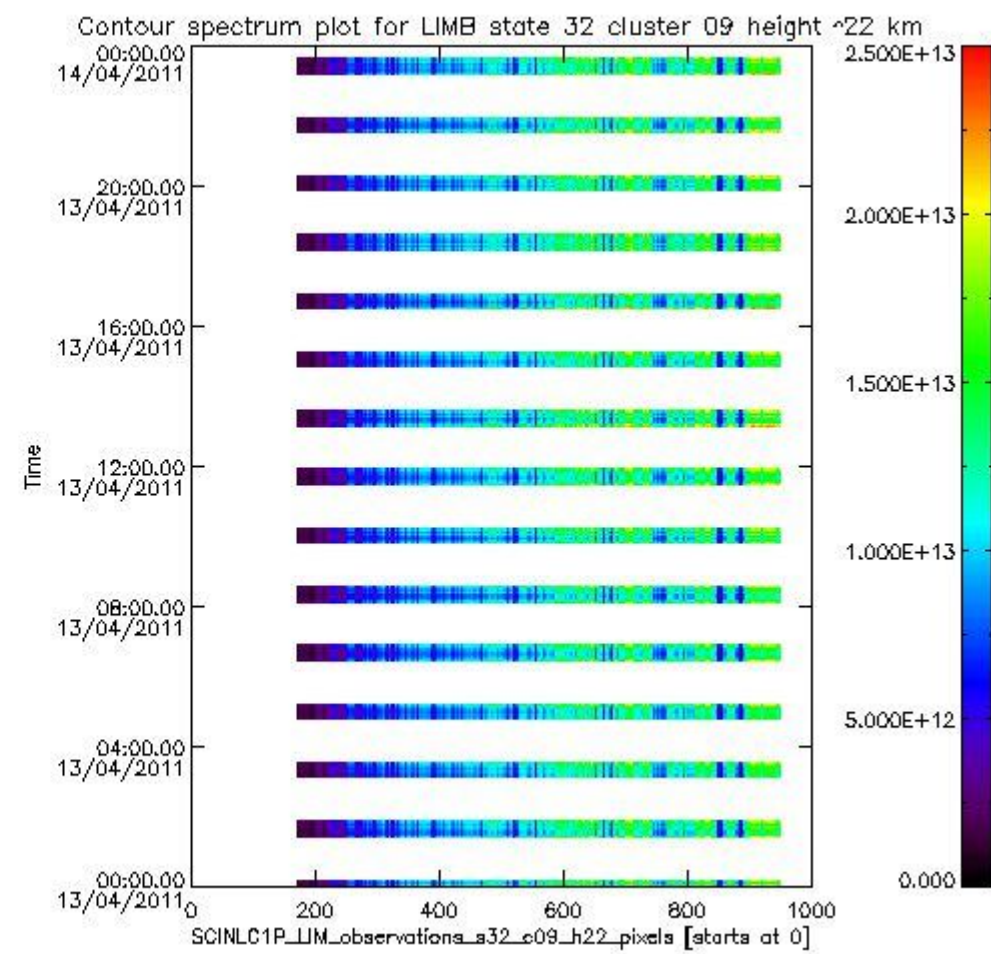
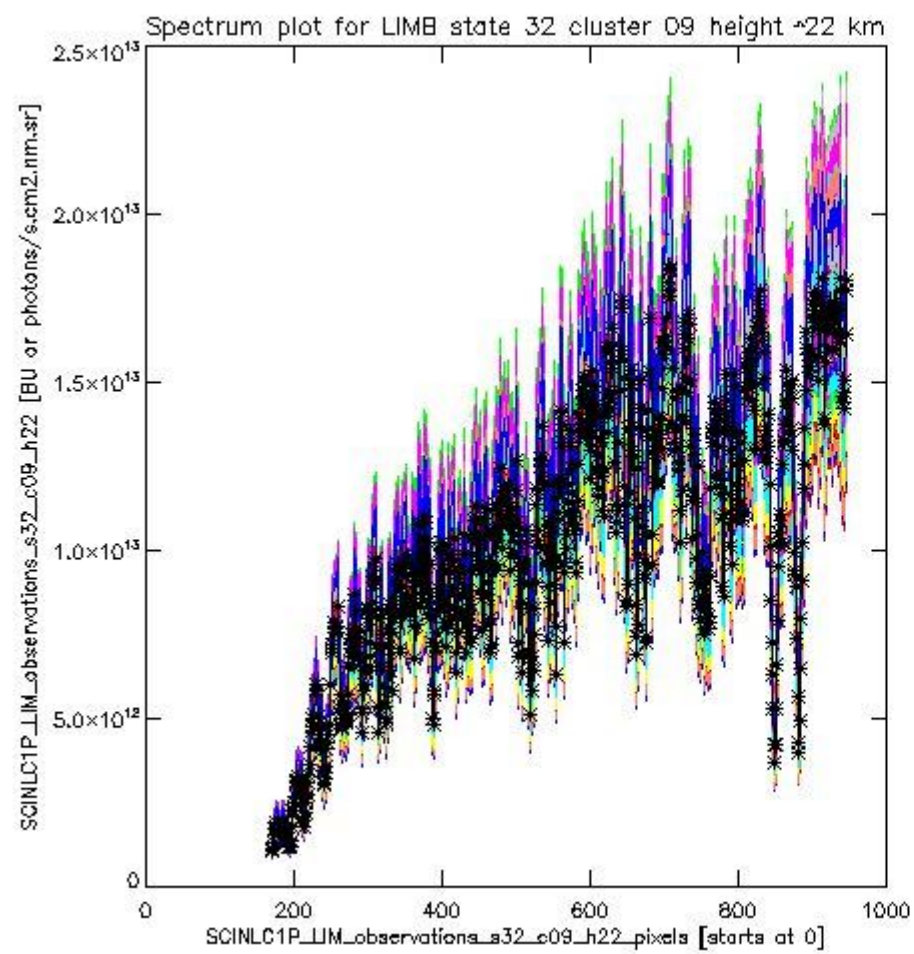
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_10.PNG

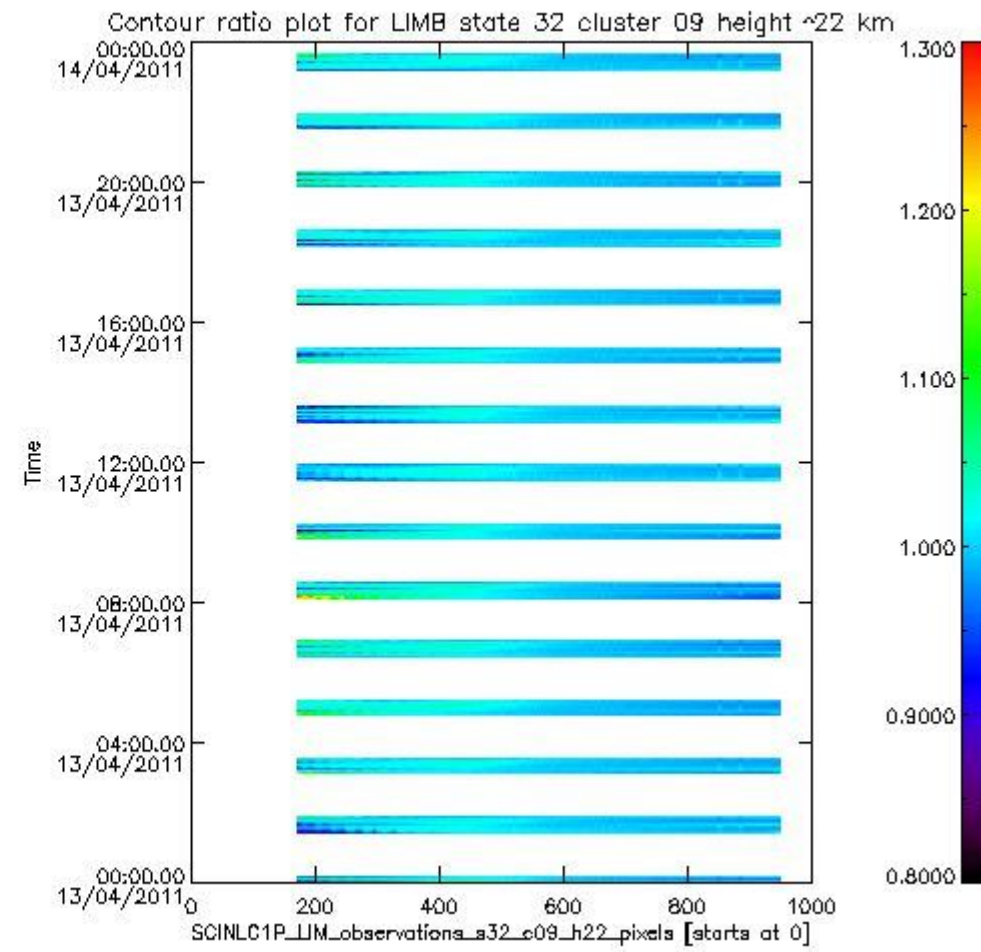
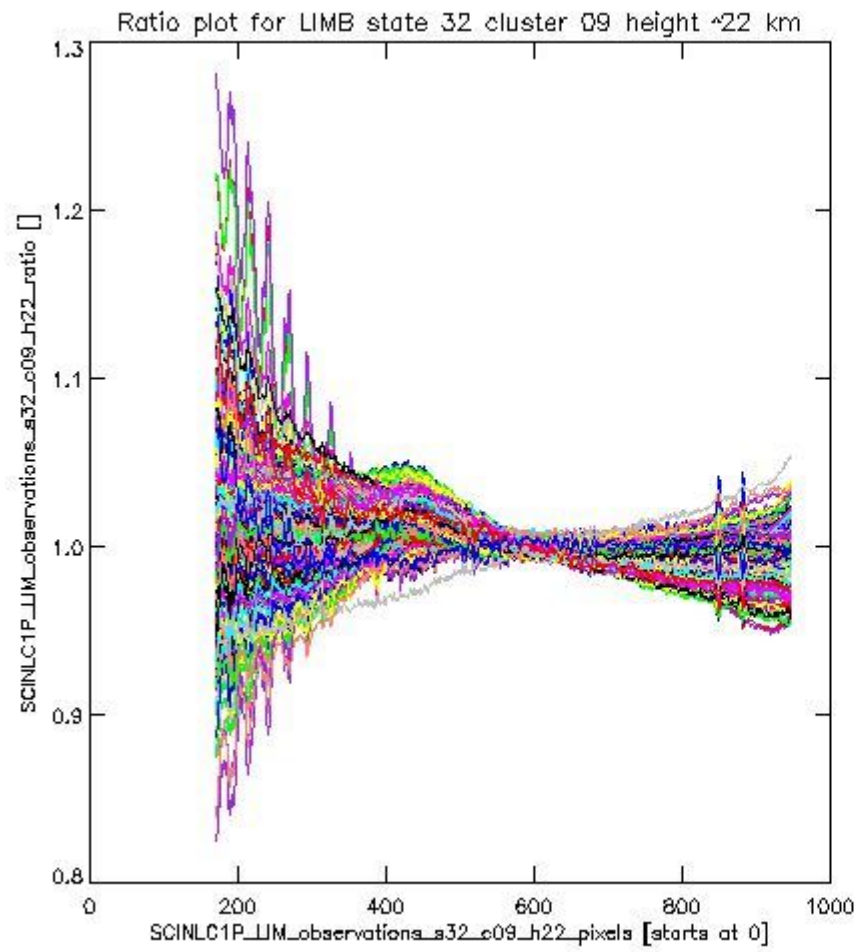


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_11.PNG

**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	13APR2011 00:01:54.877
Start time of last sample	13APR2011 23:35:19.185
Reference period start time	14MAR2011 03:08:31.208
Reference period stop time	12APR2011 23:59:52.135
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947

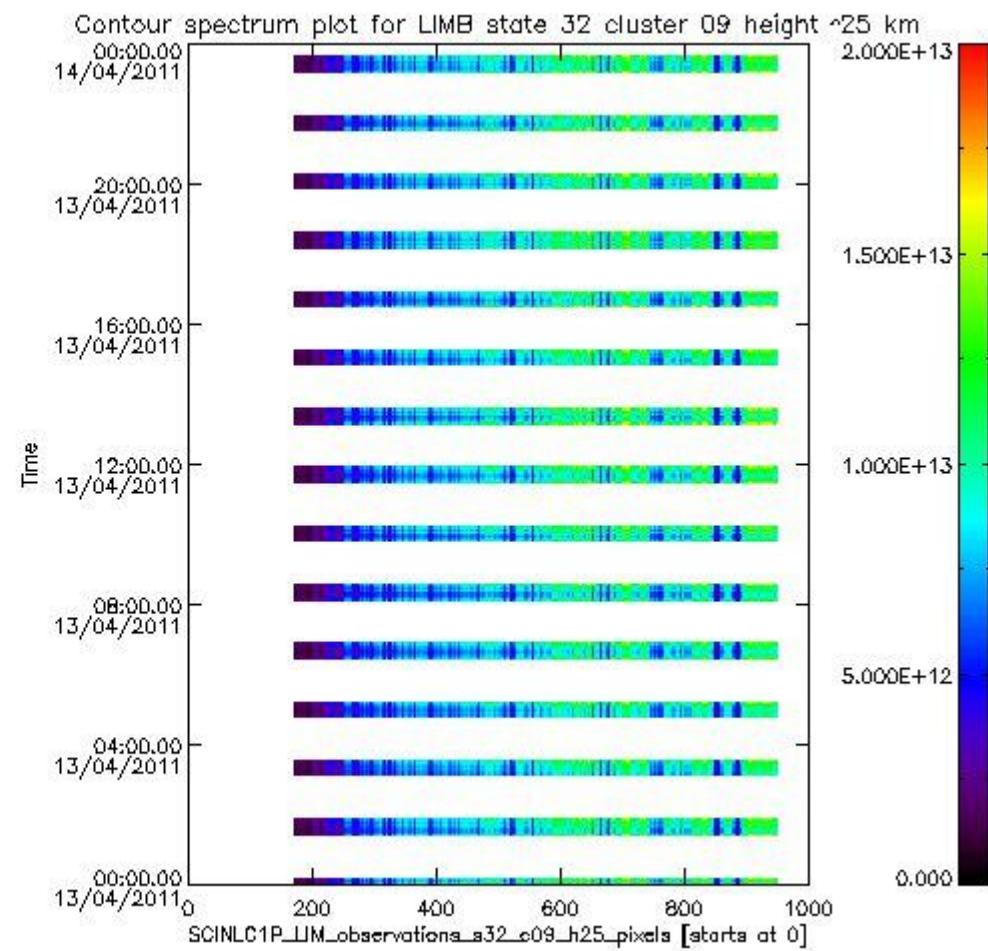
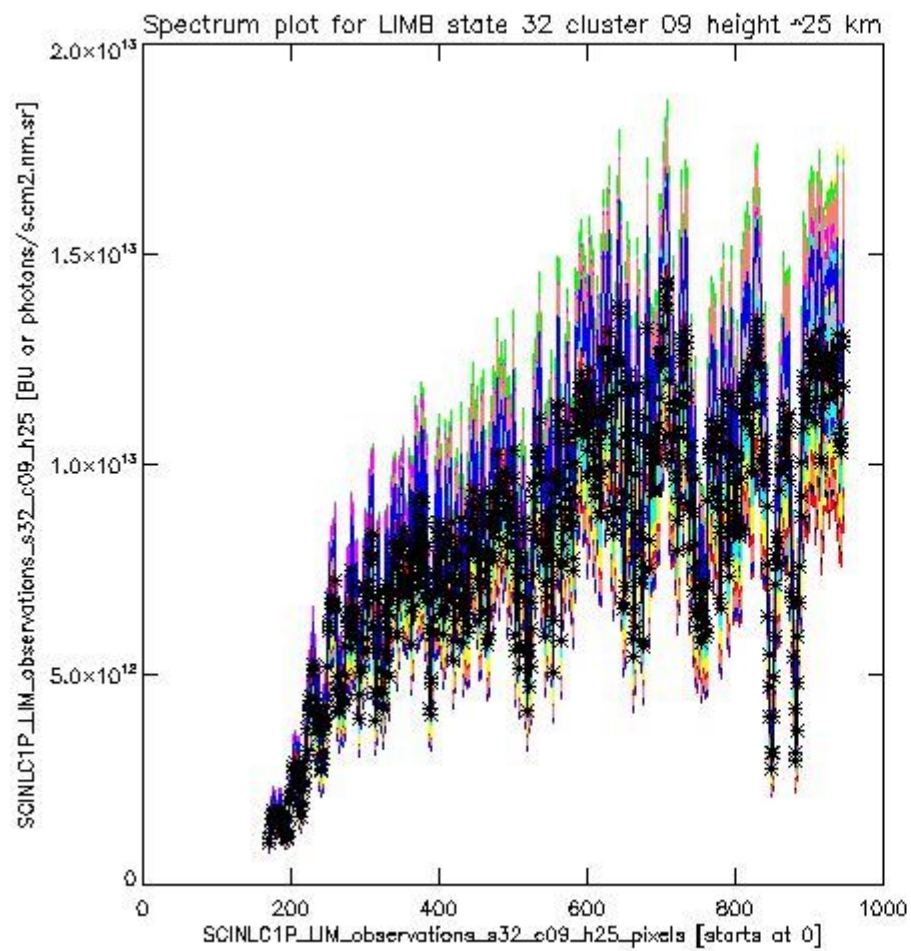




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_13.PNG

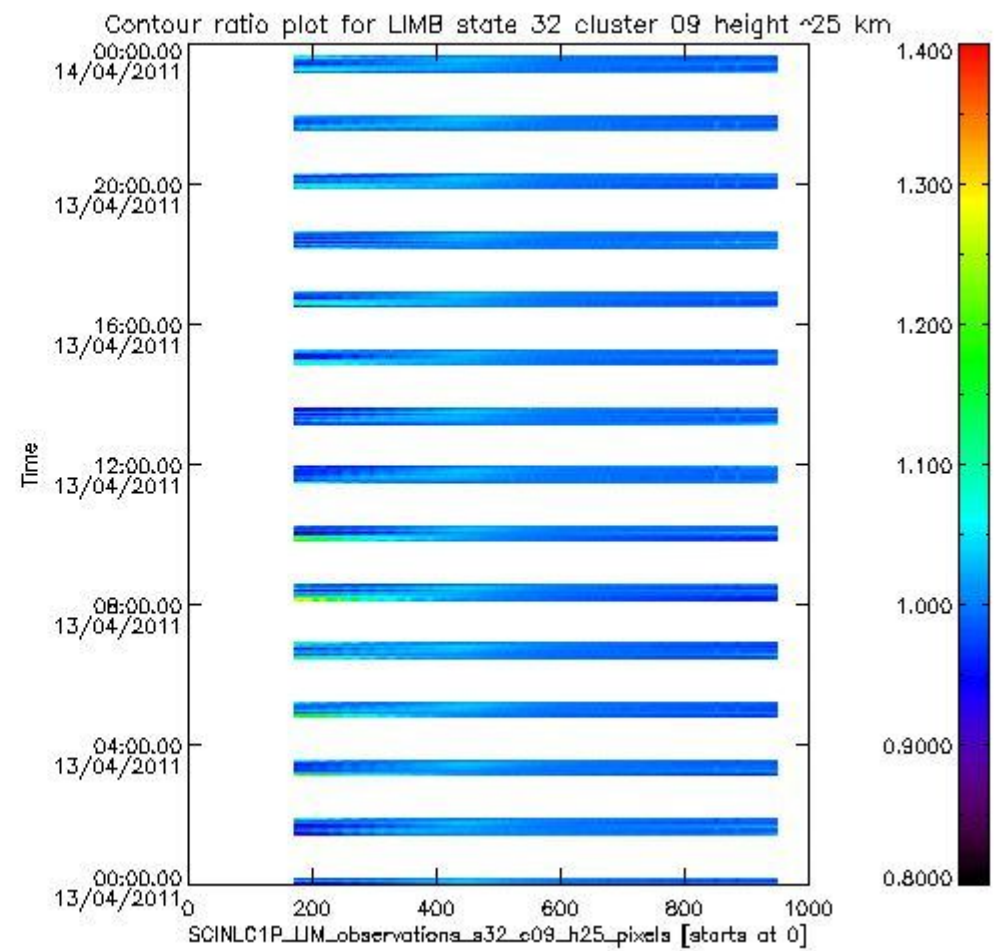
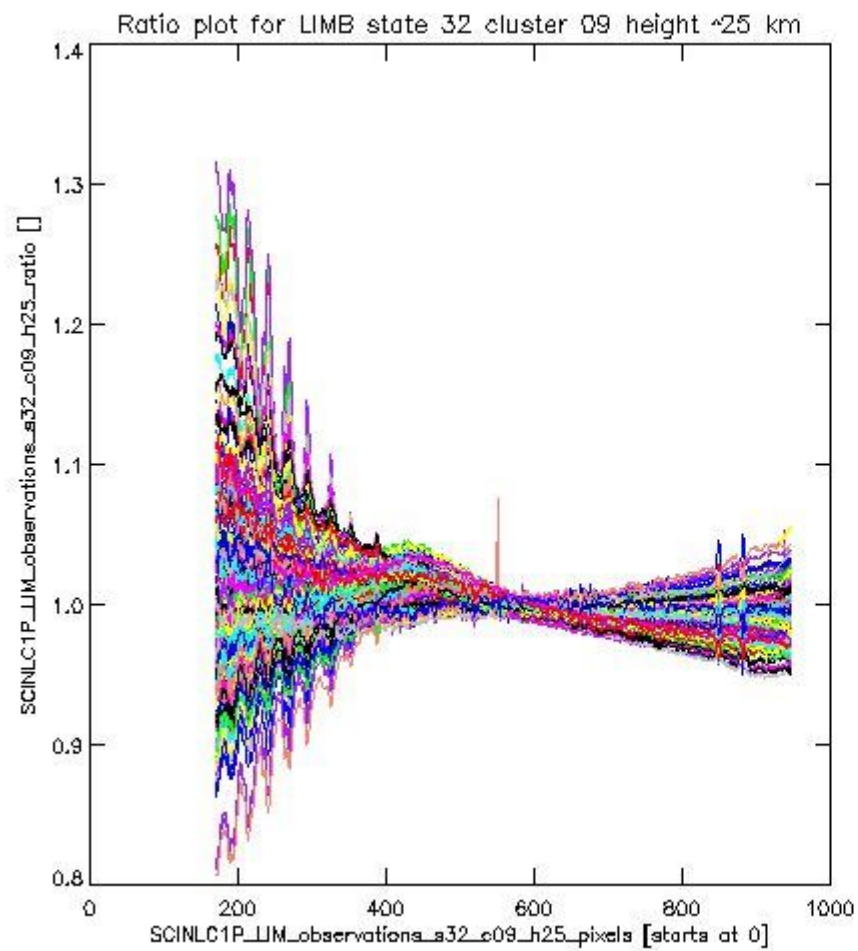
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	13APR2011 00:01:54.877
Start time of last sample	13APR2011 23:35:19.185
Reference period start time	14MAR2011 03:08:31.208
Reference period stop time	12APR2011 23:59:52.135
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\_20110413\_14.PNG

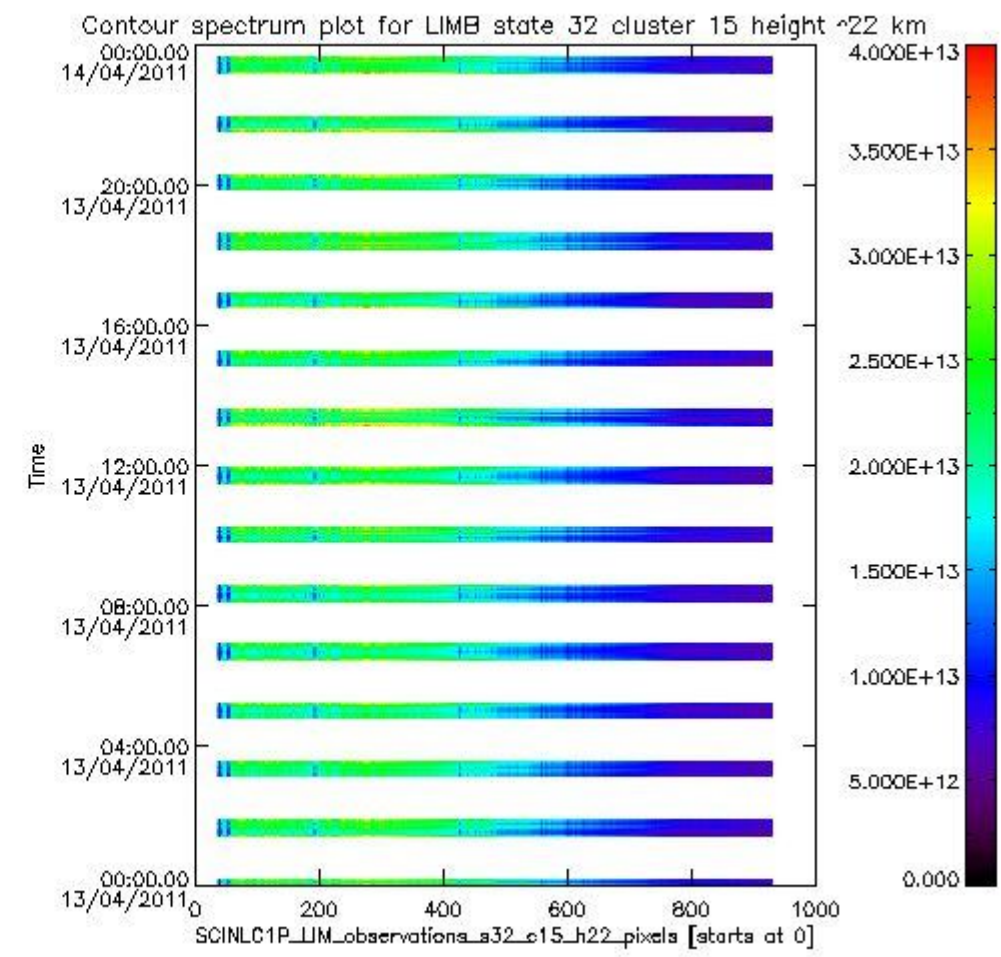
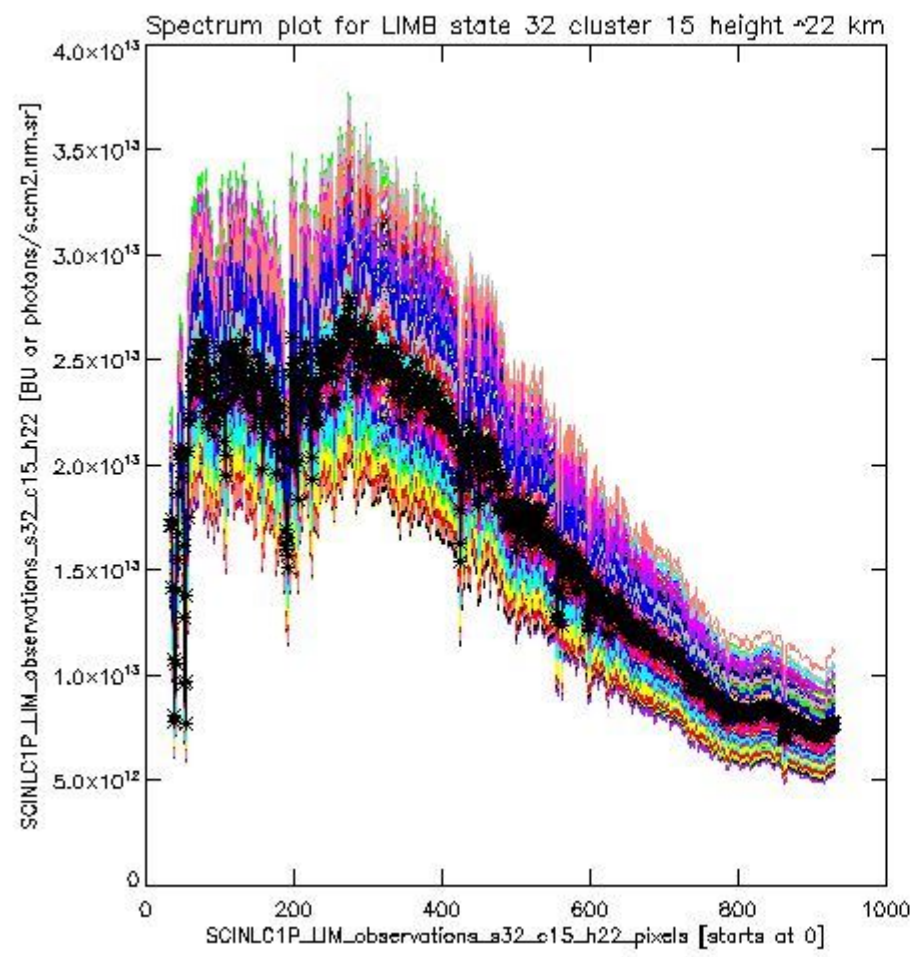




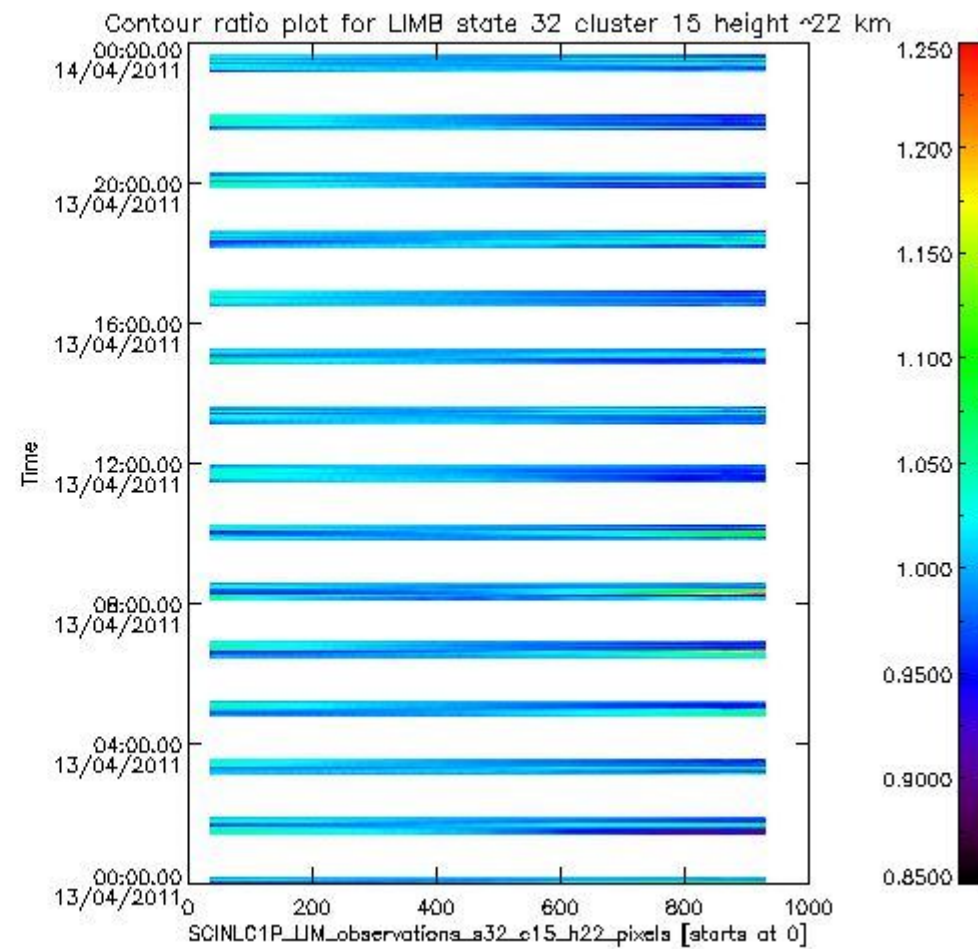
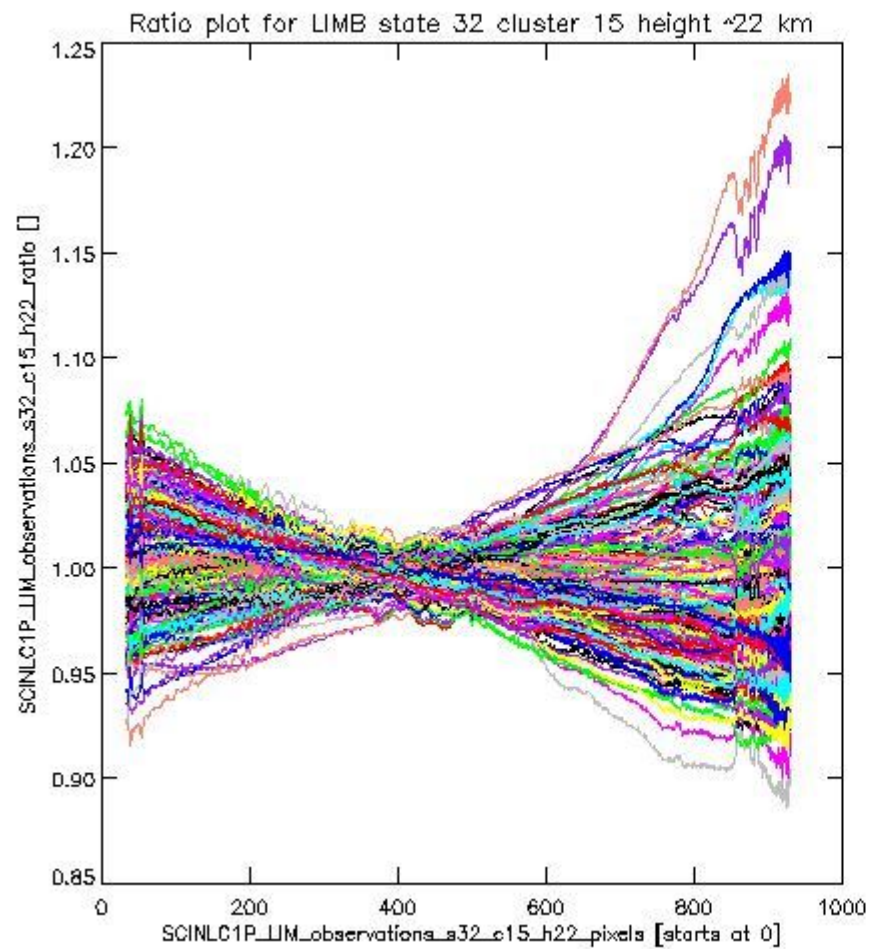
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_15.PNG

**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	13APR2011 00:01:54.877
Start time of last sample	13APR2011 23:35:19.185
Reference period start time	14MAR2011 03:08:31.208
Reference period stop time	12APR2011 23:59:52.135
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



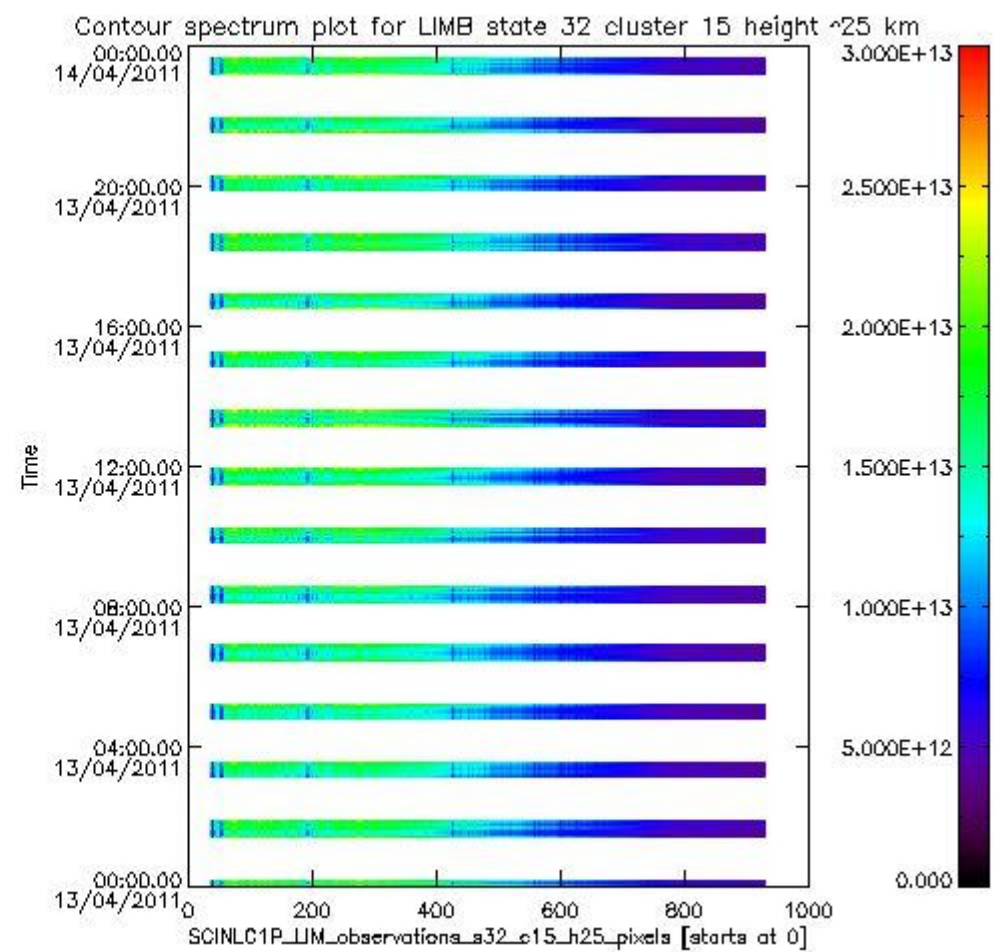
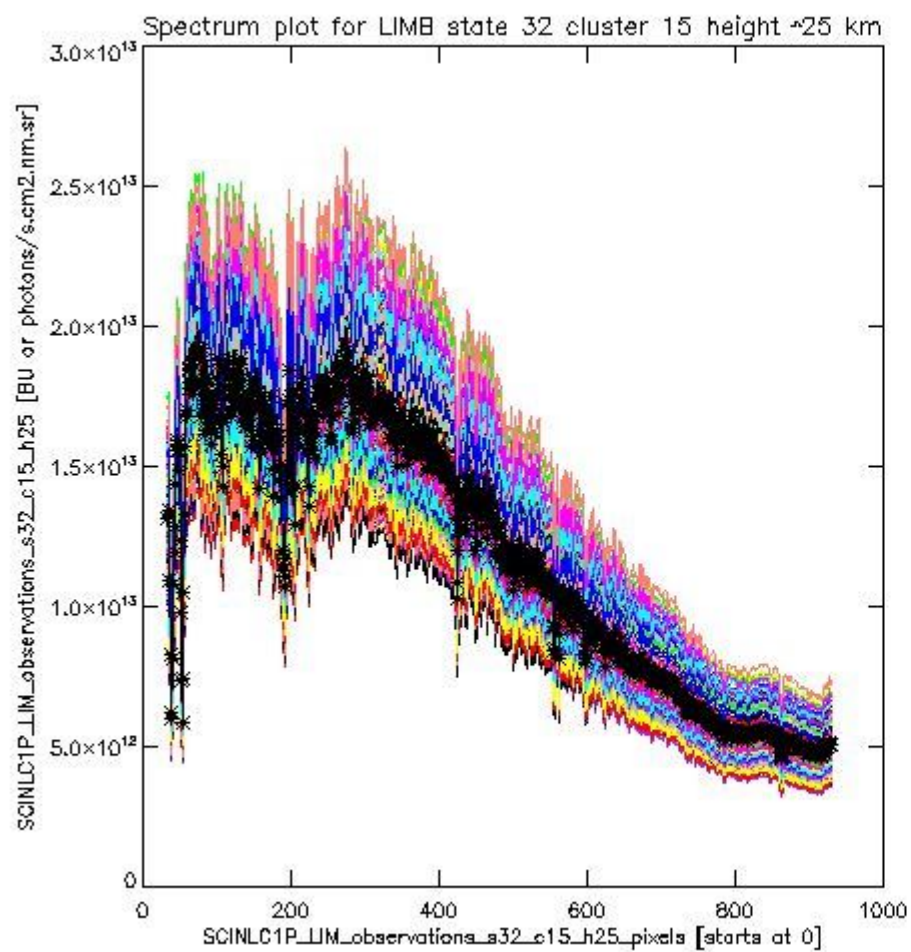
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_16.PNG



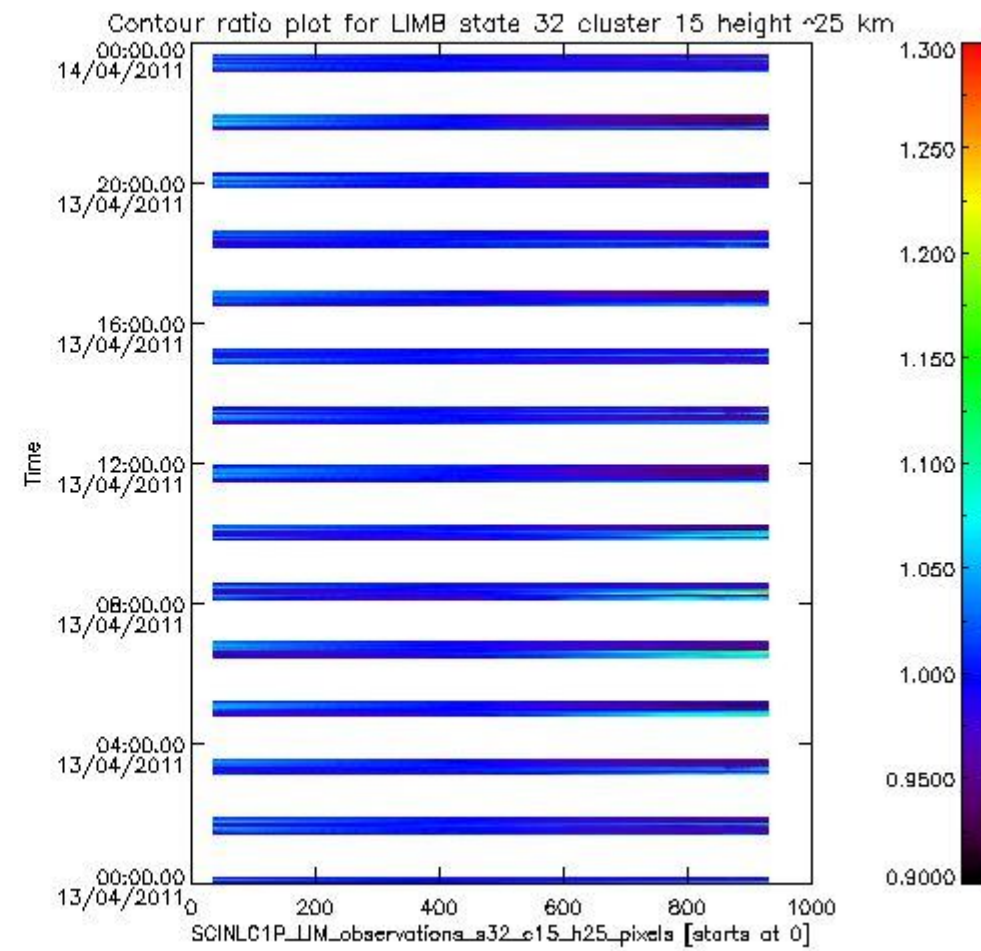
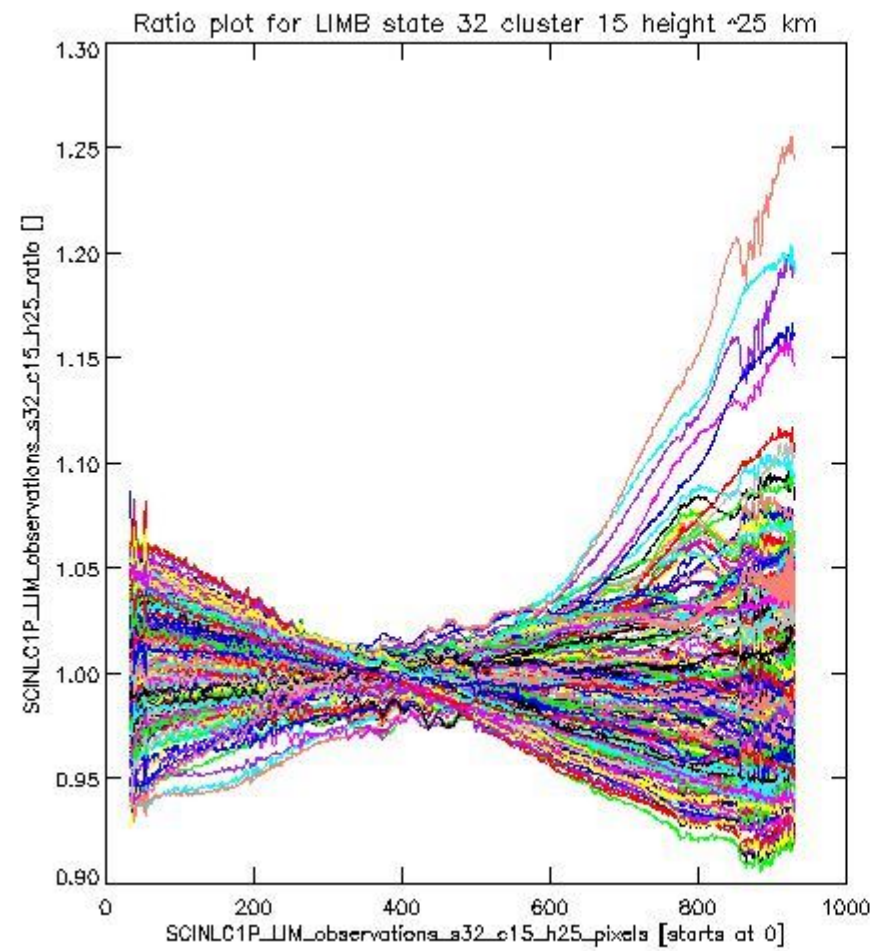
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_17.PNG

**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	13APR2011 00:01:54.877
Start time of last sample	13APR2011 23:35:19.185
Reference period start time	14MAR2011 03:08:31.208
Reference period stop time	12APR2011 23:59:52.135
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



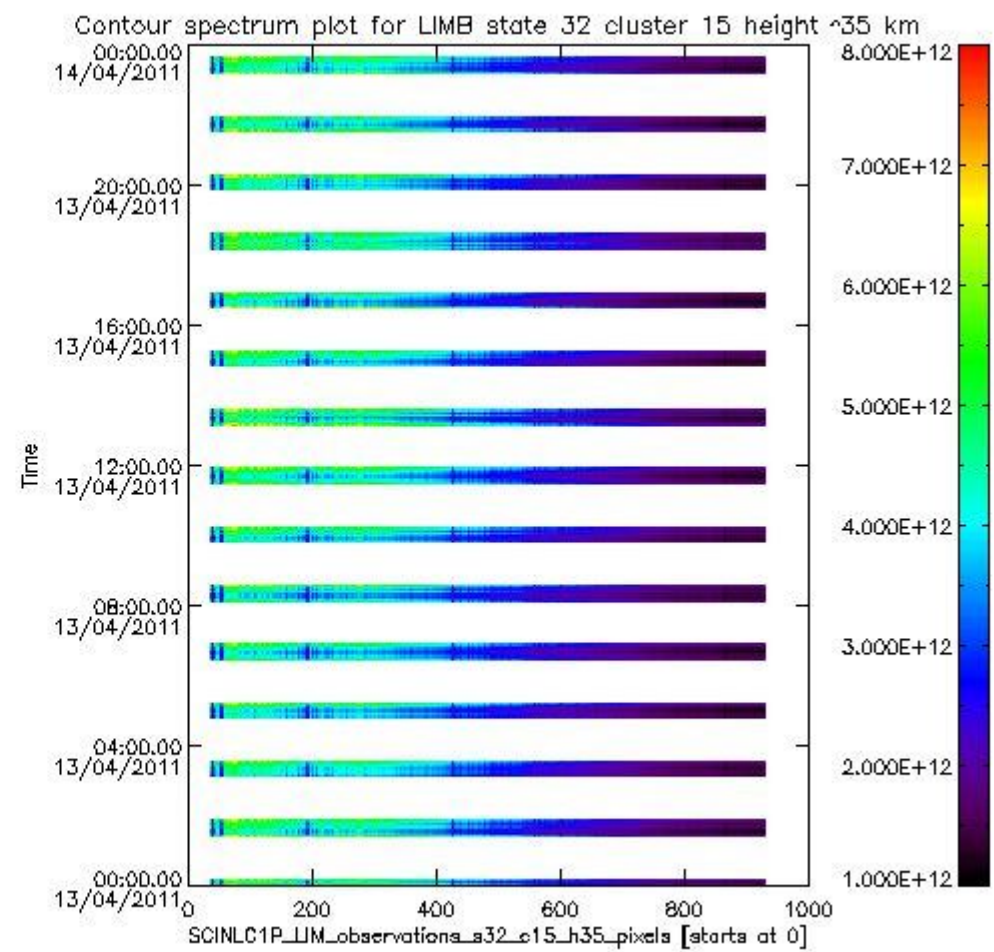
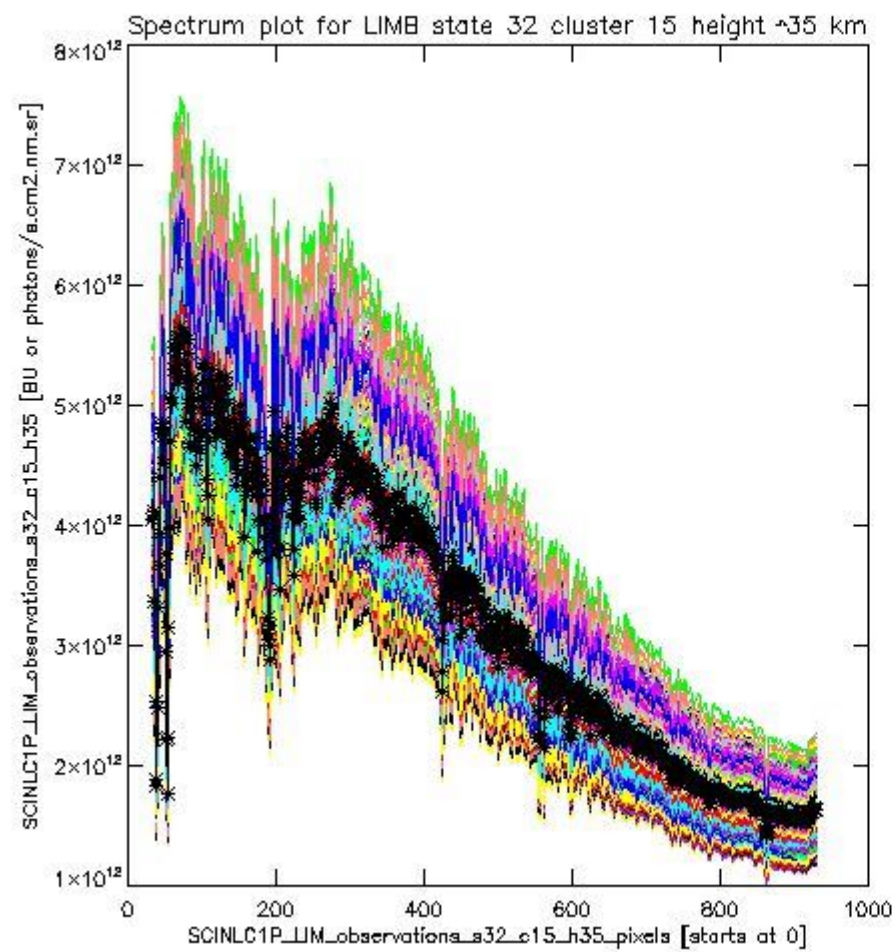
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_18.PNG

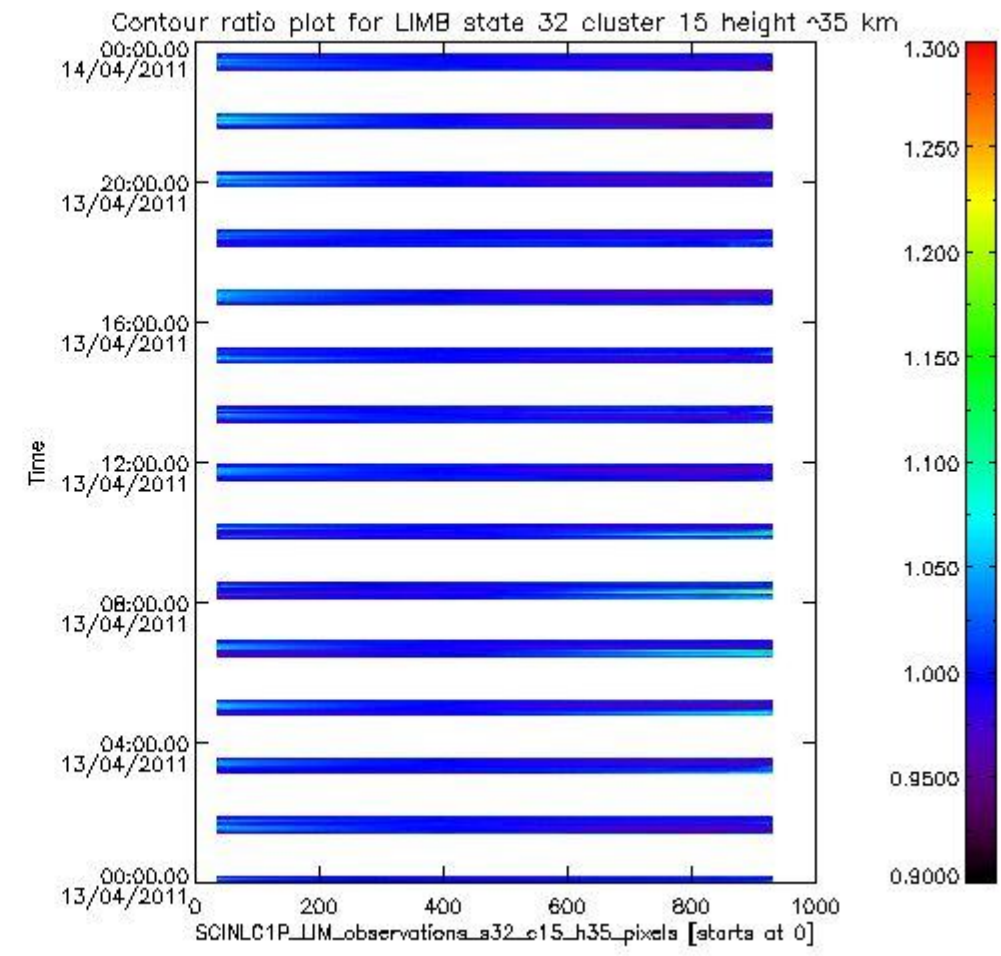
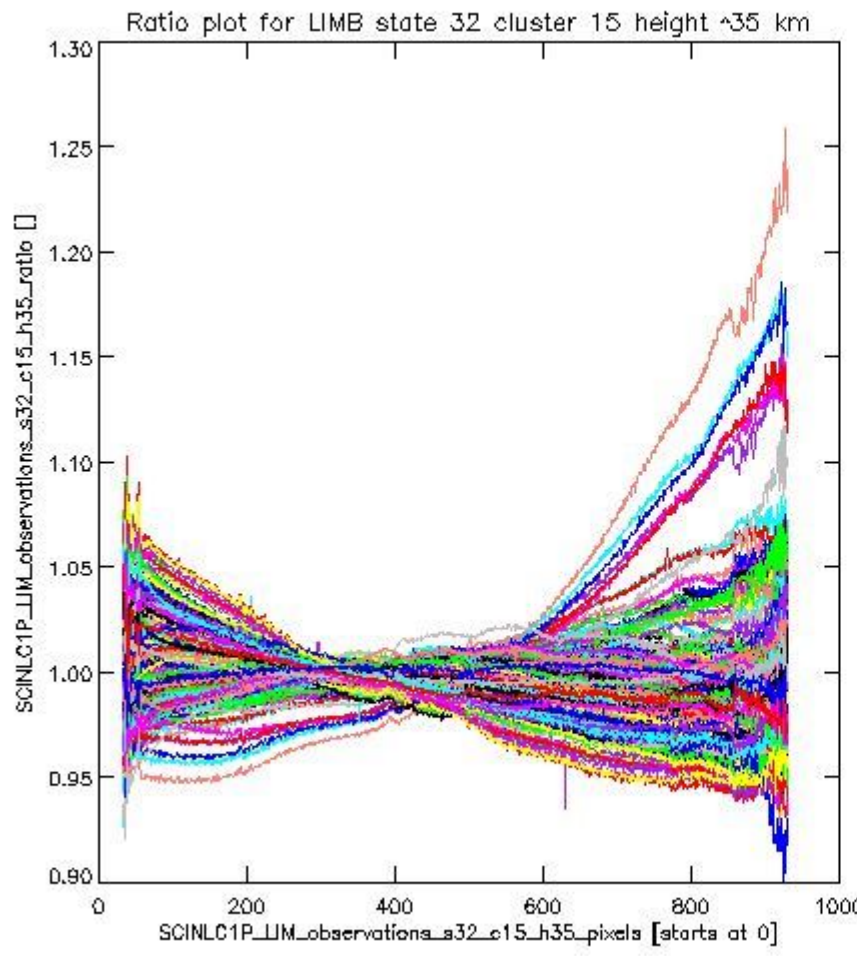


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110413\_19.PNG

**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	13APR2011 00:01:54.877
Start time of last sample	13APR2011 23:35:19.185
Reference period start time	14MAR2011 03:08:31.208
Reference period stop time	12APR2011 23:59:52.135
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\_20110413\_21.PNG

