

# 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	19APR2011 06:55:32
Data source version	SCIA/7.04-U
Processing scope for products	08APR2011 00:00:00 to 09APR2011 00:00:00
Start time of first product within scope	07APR2011 23:10:21
Stop time of last product within scope	08APR2011 23:44:00
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	08APR2011 01:22:37.592	08APR2011 23:14:53.887
1	NADIR	07	09	N/A	08APR2011 01:22:37.592	08APR2011 23:14:53.887
2	NADIR	07	15	N/A	08APR2011 01:22:37.592	08APR2011 23:14:53.887
3	NADIR	07	24	N/A	08APR2011 01:22:37.592	08APR2011 23:14:53.887
4	NADIR	07	55	N/A	08APR2011 01:22:37.592	08APR2011 23:14:53.887
5	LIMB	32	09	~19 km	08APR2011 01:09:26.951	08APR2011 23:20:07.934
6	LIMB	32	09	~22 km	08APR2011 01:09:26.951	08APR2011 23:20:07.934
7	LIMB	32	09	~25 km	08APR2011 01:09:26.951	08APR2011 23:20:07.934
8	LIMB	32	15	~22 km	08APR2011 01:09:26.951	08APR2011 23:20:07.934
9	LIMB	32	15	~25 km	08APR2011 01:09:26.951	08APR2011 23:20:07.934
10	LIMB	32	15	~35 km	08APR2011 01:09:26.951	08APR2011 23:20:07.934

#### 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_1CUDPA20110407_230151_000060013101_00174_47602_0015.N1</a>	07APR2011 23:10:21	08APR2011 00:20:50	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110408_004156_000060173101_00175_47603_0016.N1</a>	08APR2011 00:50:35	08APR2011 02:00:49	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110408_022218_000060023101_00176_47604_0017.N1</a>	08APR2011 02:30:48	08APR2011 03:41:17	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110408_040223_000060173101_00177_47605_0018.N1</a>	08APR2011 04:11:02	08APR2011 05:21:16	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110408_054245_000060023101_00178_47606_0019.N1</a>	08APR2011 05:51:15	08APR2011 07:01:44	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110408_072250_000060173101_00179_47607_6107.N1</a>	08APR2011 07:31:29	08APR2011 08:41:44	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110408_090312_000060013101_00180_47608_6103.N1	08APR2011 09:11:43	08APR2011 10:22:12	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110408_104317_000060173101_00181_47609_6109.N1	08APR2011 10:51:56	08APR2011 12:02:11	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110408_122339_000060013101_00182_47610_6111.N1	08APR2011 12:32:10	08APR2011 13:42:39	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110408_140344_000060173101_00183_47611_0036.N1	08APR2011 14:12:23	08APR2011 15:22:38	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110408_154406_000060023101_00184_47612_0005.N1	08APR2011 15:52:37	08APR2011 17:03:06	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110408_172411_000060043101_00185_47613_0006.N1	08APR2011 17:32:50	08APR2011 18:59:27	0	35	31	0	3	1	0	0	
12	SCI_NLC_1CUDPA20110408_190419_000060153101_00186_47614_0008.N1	08APR2011 19:13:04	08APR2011 20:23:47	0	36	30	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110408_204438_000060173101_00187_47615_0010.N1	08APR2011 20:53:18	08APR2011 22:03:32	0	35	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110408_222500_000060013101_00188_47616_0012.N1	08APR2011 22:33:31	08APR2011 23:44:00	0	36	30	0	0	1	0	0	

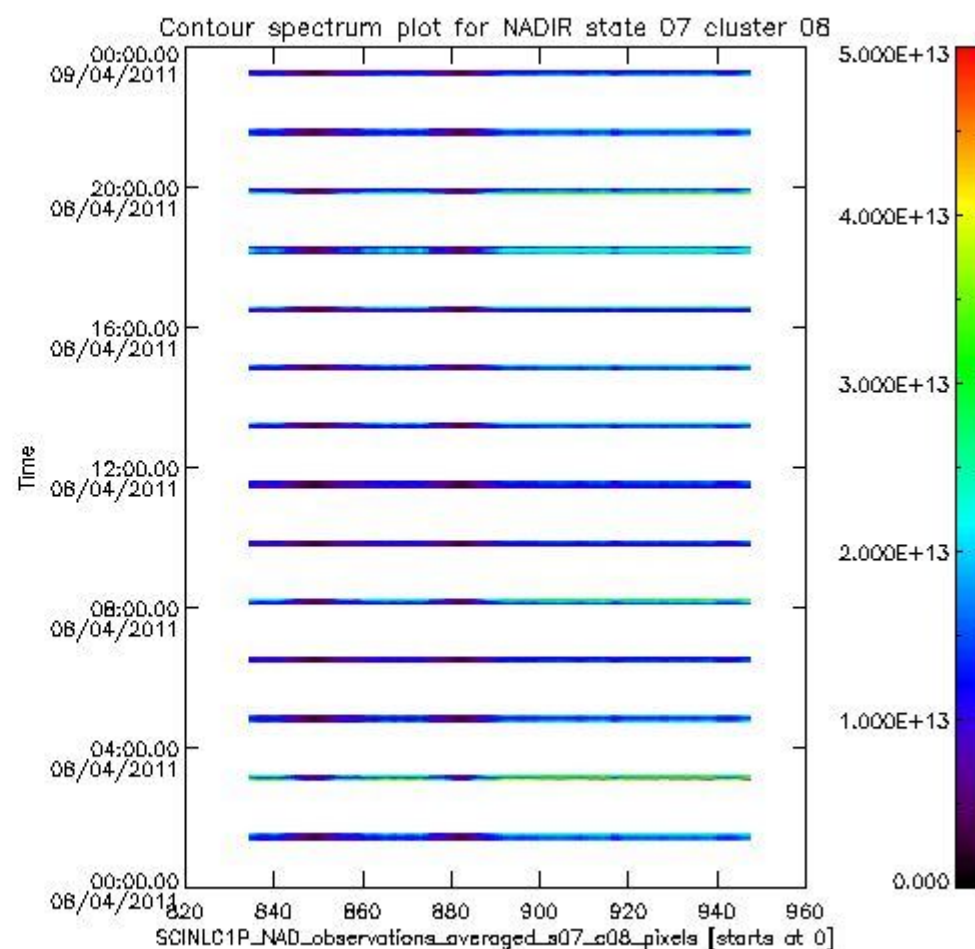
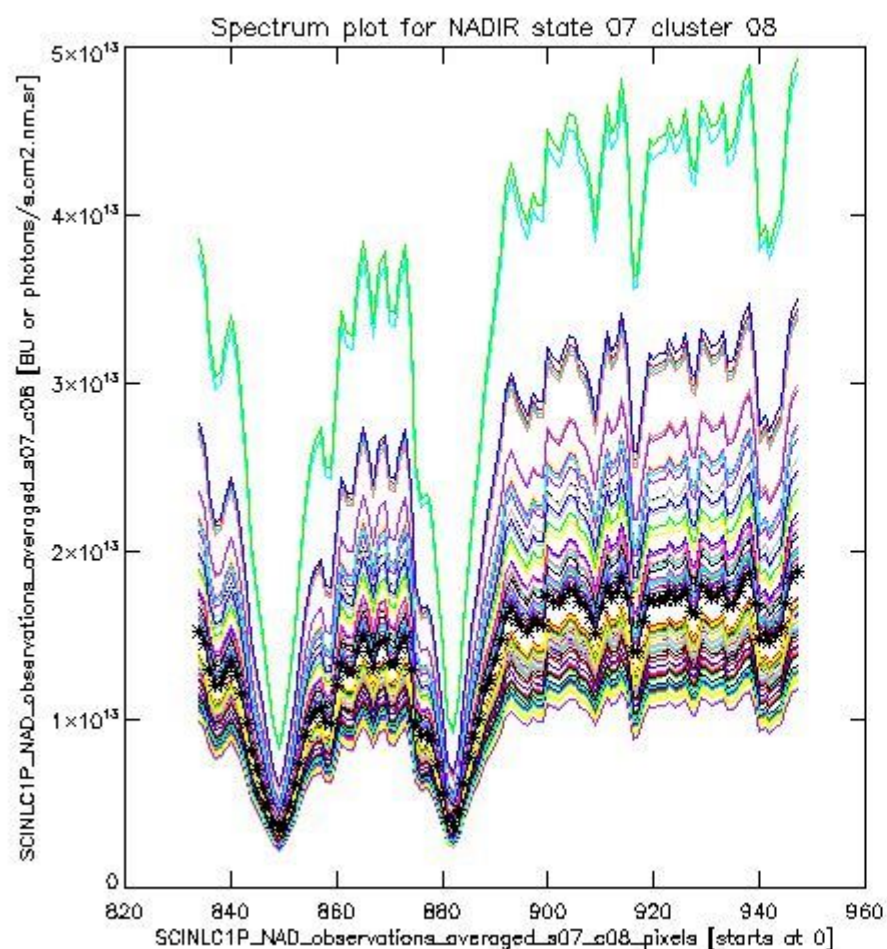
## 1.2 Source packet monitoring

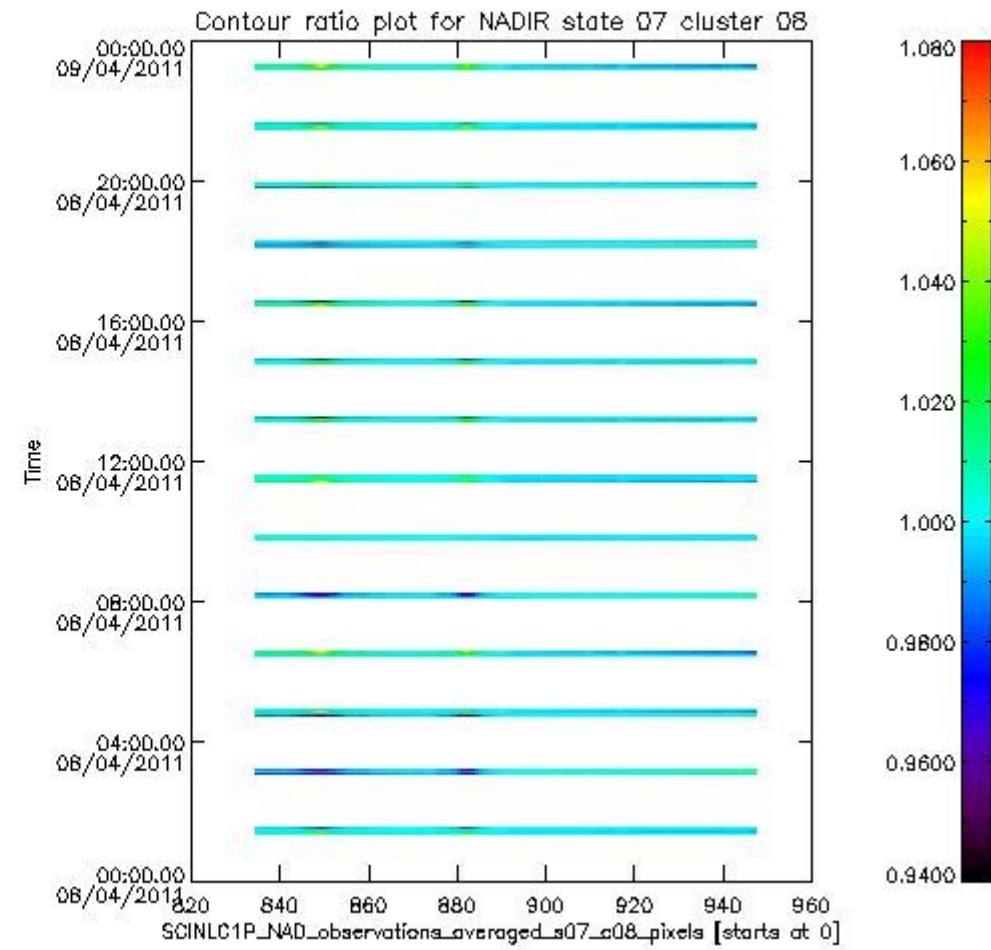
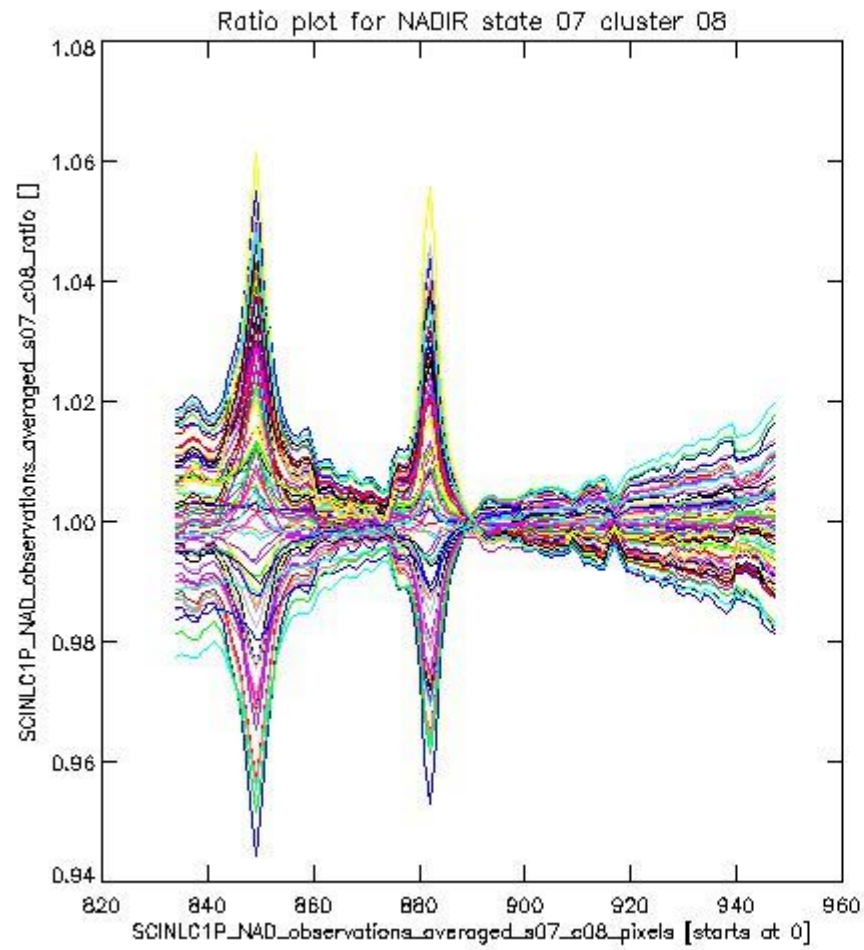
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	08APR2011 01:22:37.592
Start time of last sample	08APR2011 23:14:53.887
Reference period start time	09MAR2011 01:26:22.831
Reference period stop time	07APR2011 23:51:43.607
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

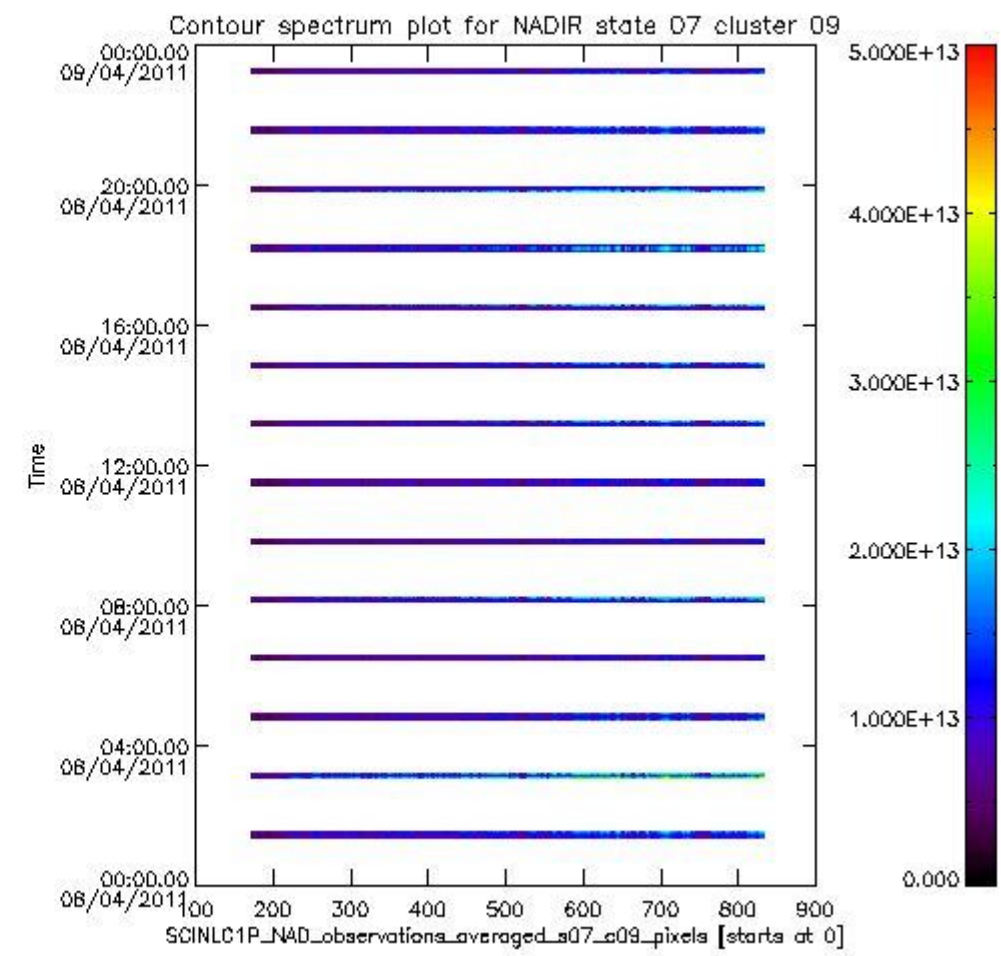
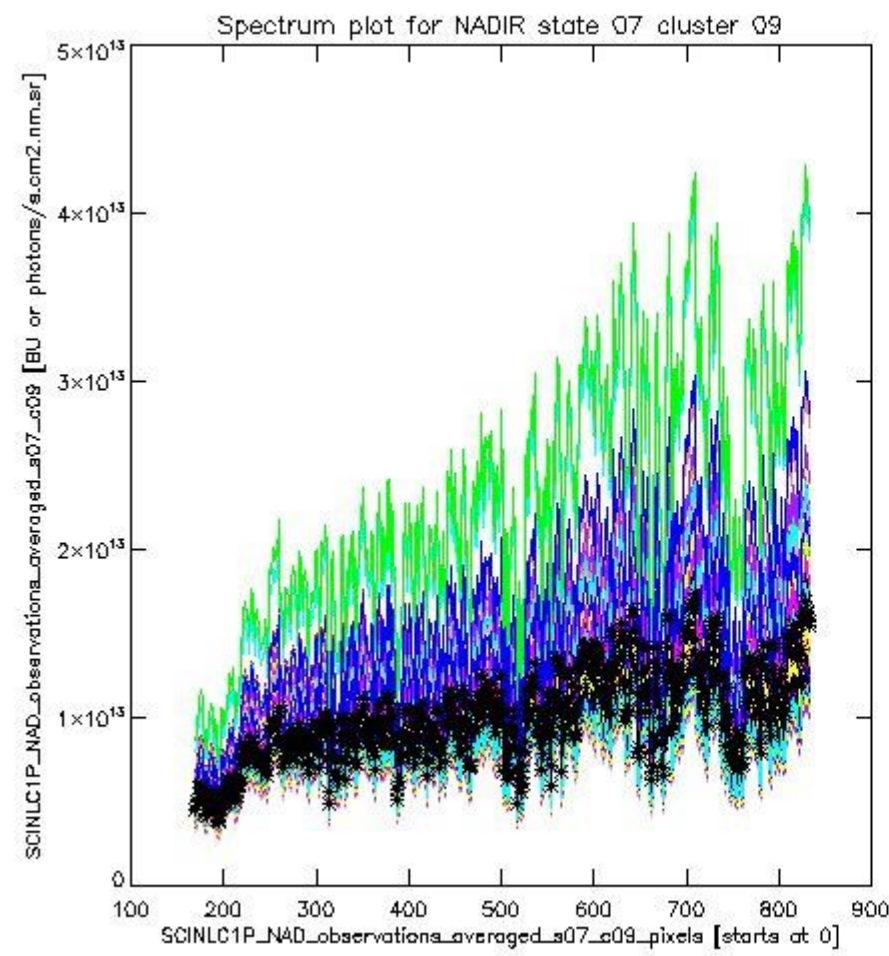




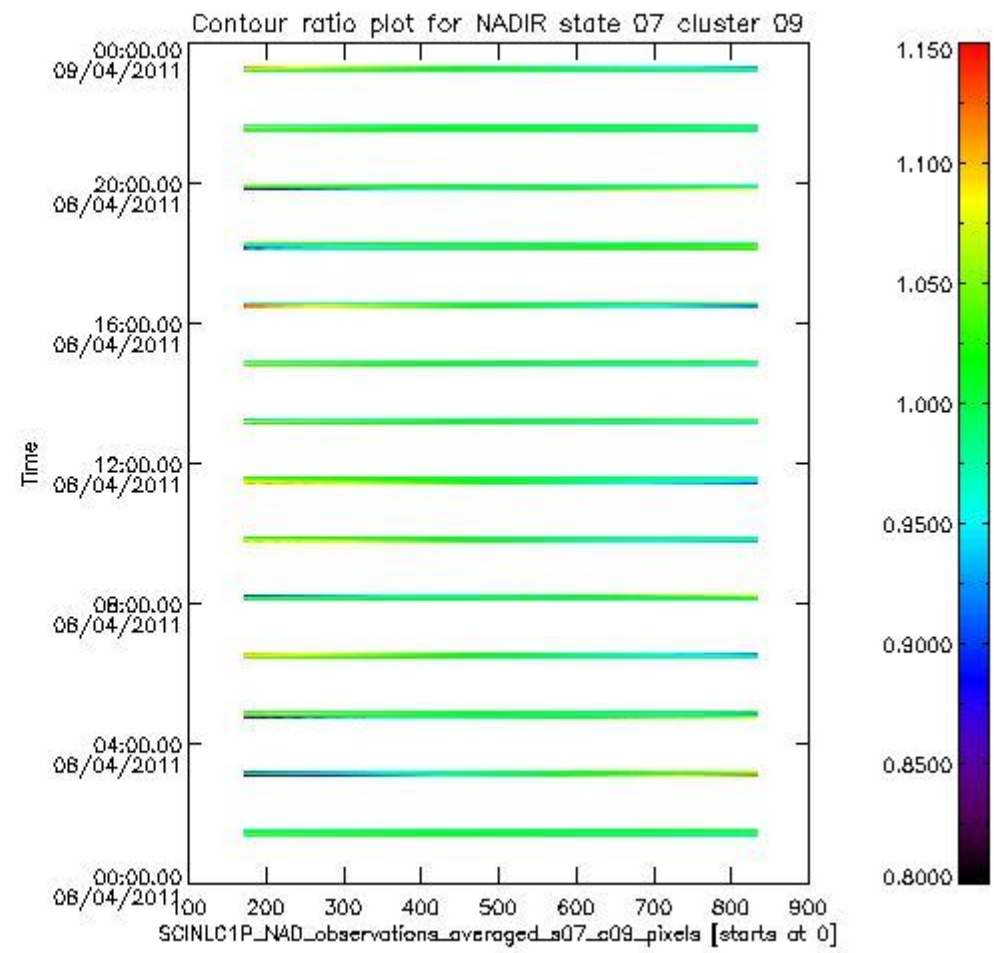
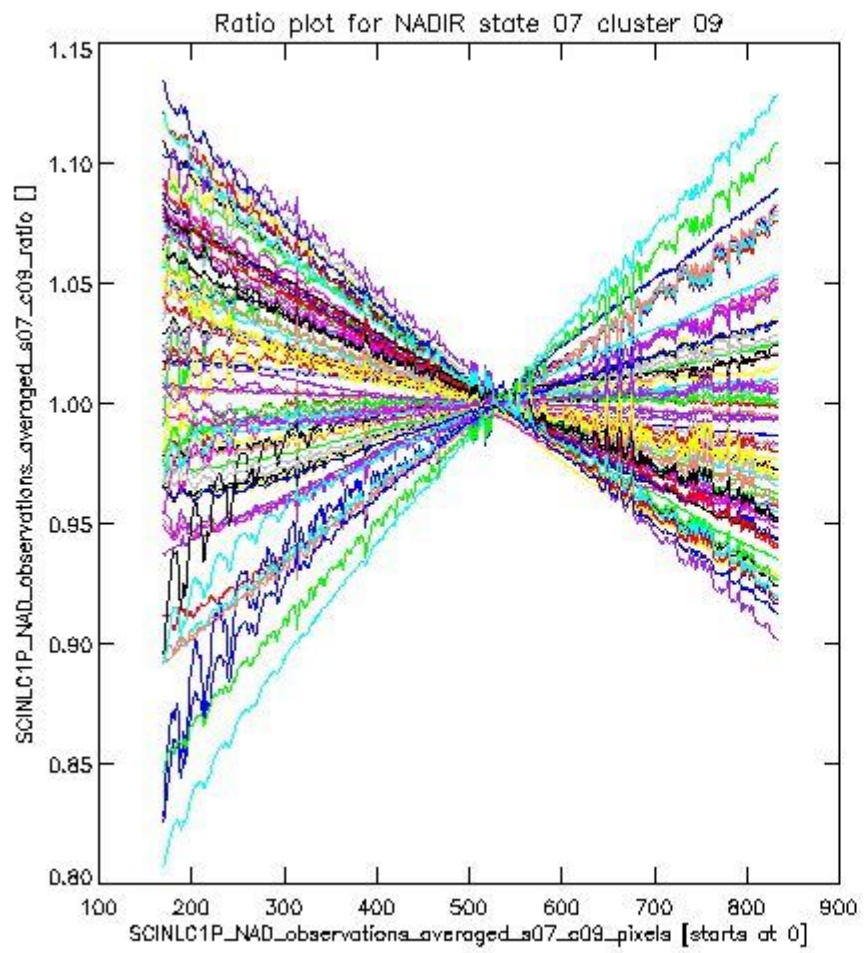
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	08APR2011 01:22:37.592
Start time of last sample	08APR2011 23:14:53.887
Reference period start time	09MAR2011 01:26:22.831
Reference period stop time	07APR2011 23:51:43.607
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





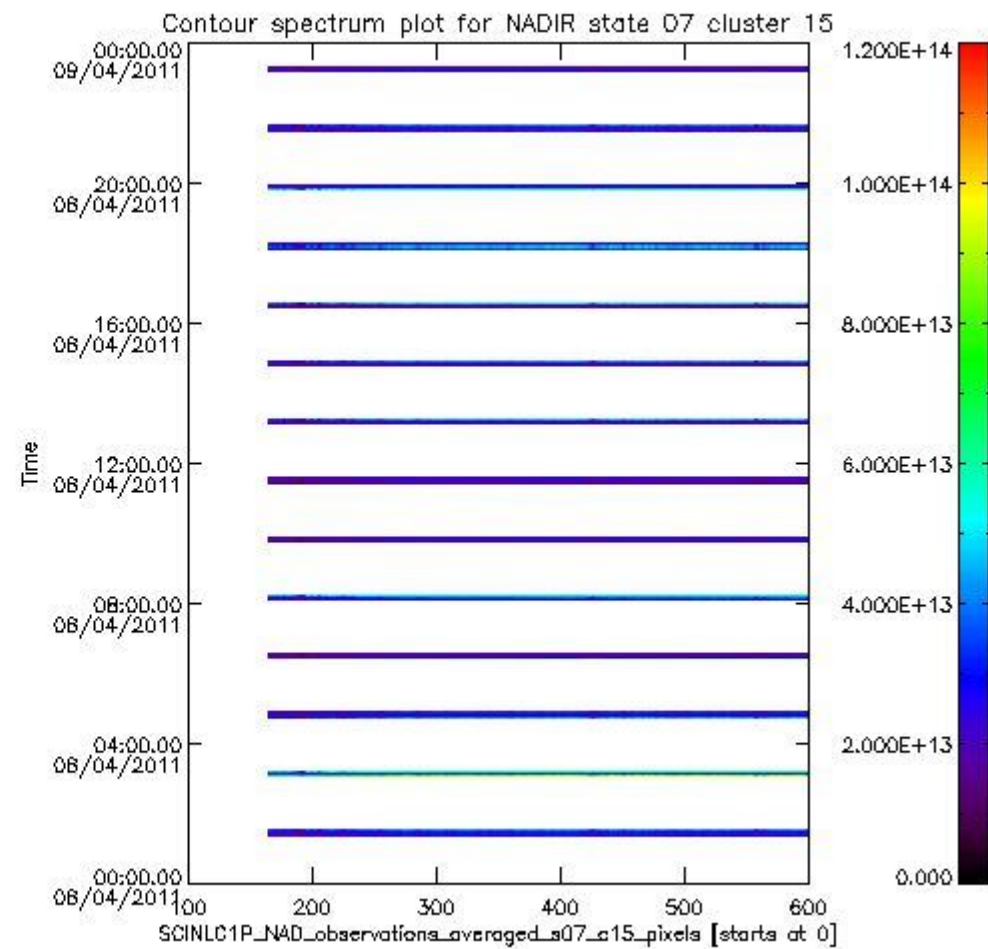
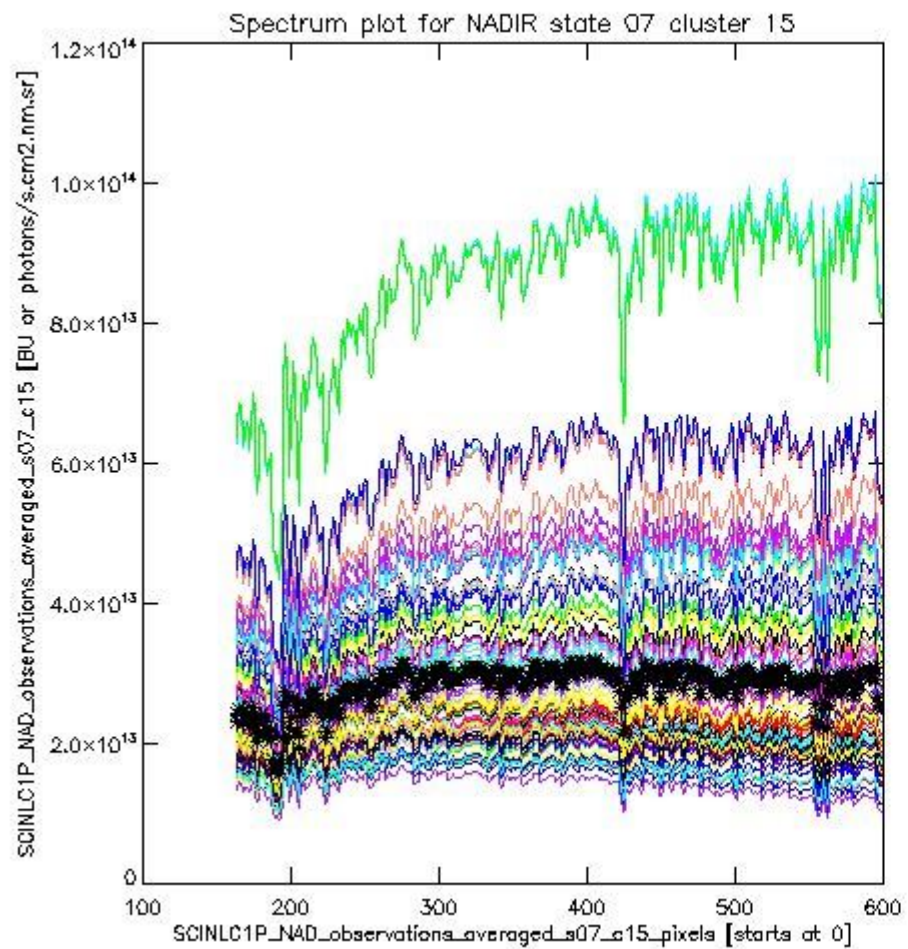
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_3.PNG

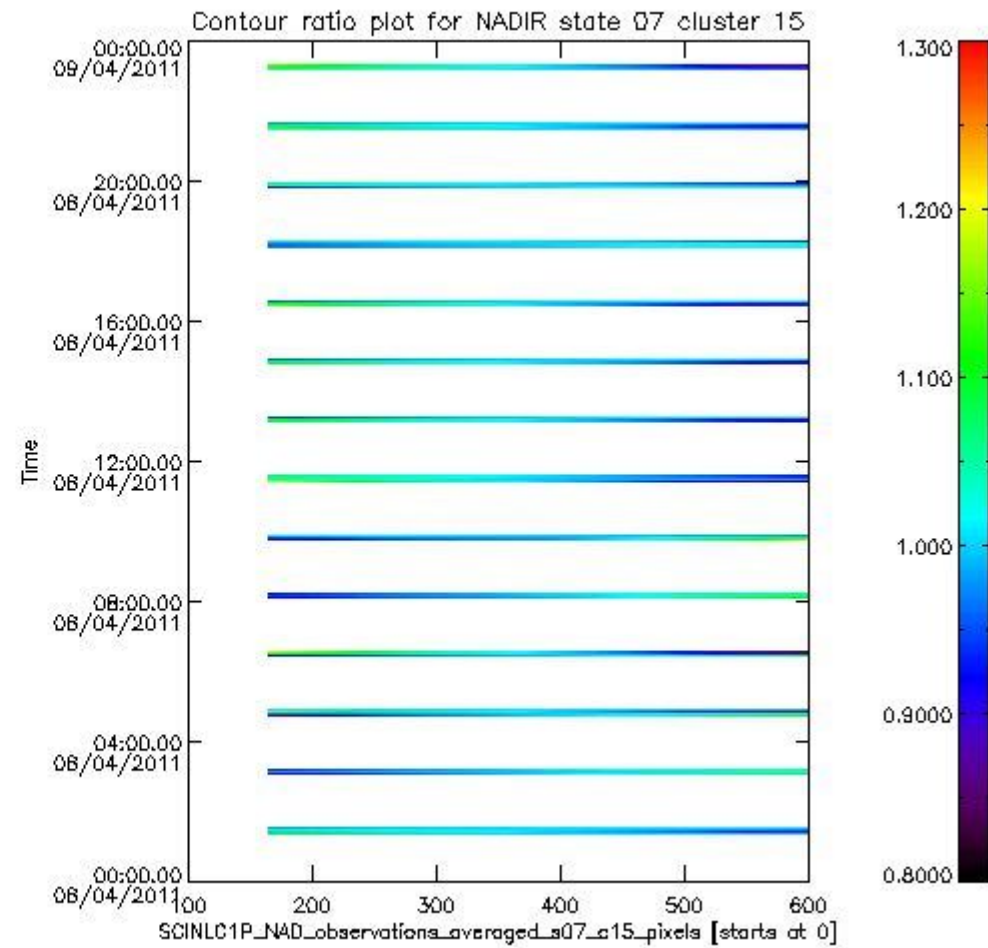
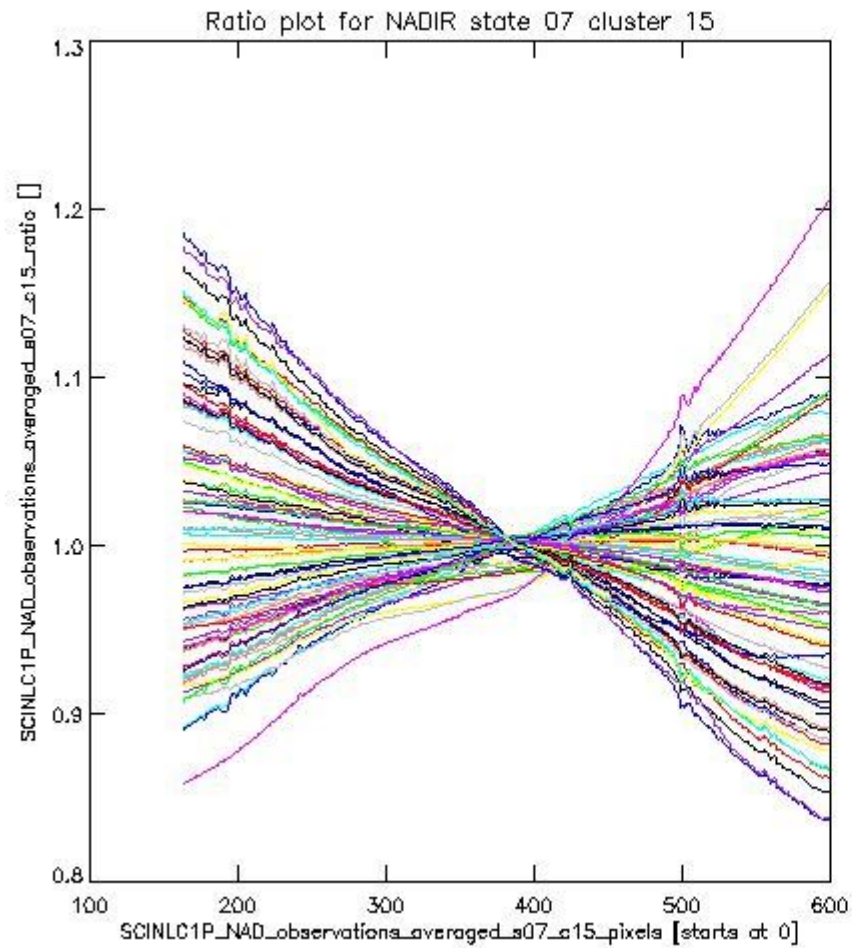
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	08APR2011 01:22:37.592
Start time of last sample	08APR2011 23:14:53.887
Reference period start time	09MAR2011 01:26:22.831
Reference period stop time	07APR2011 23:51:43.607
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\_20110408\_4.PNG

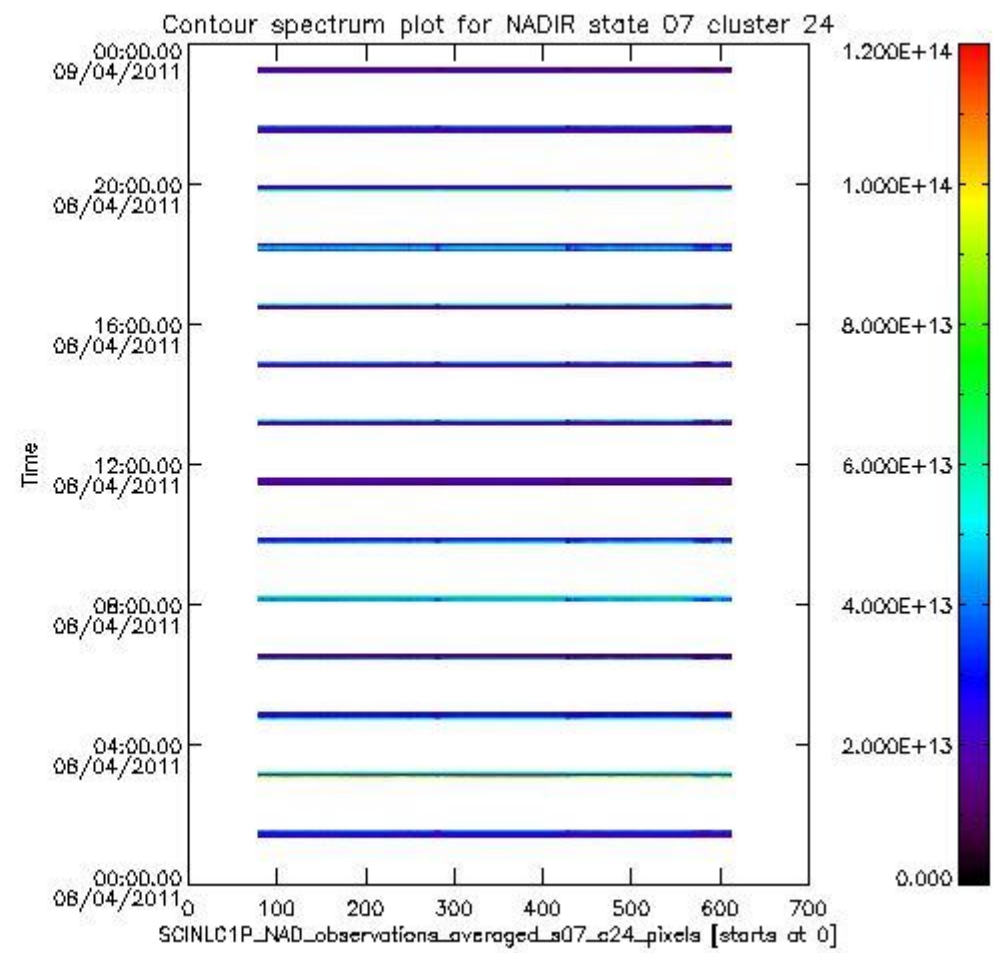
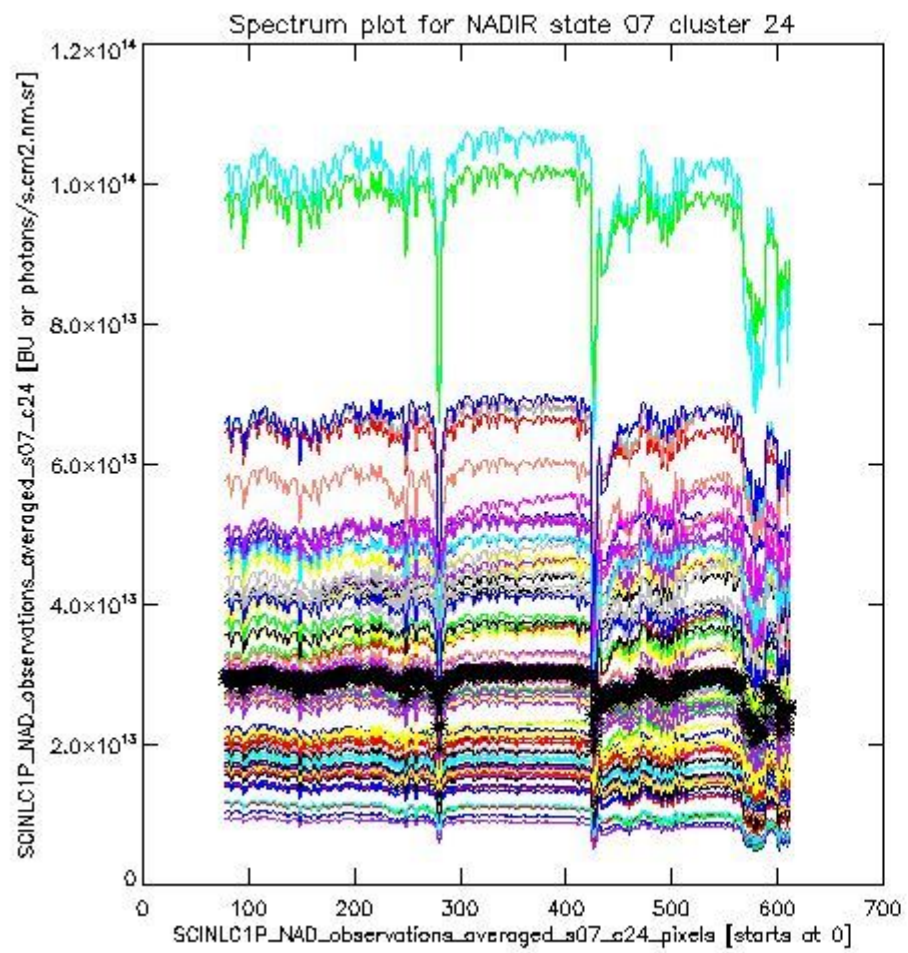




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_5.PNG

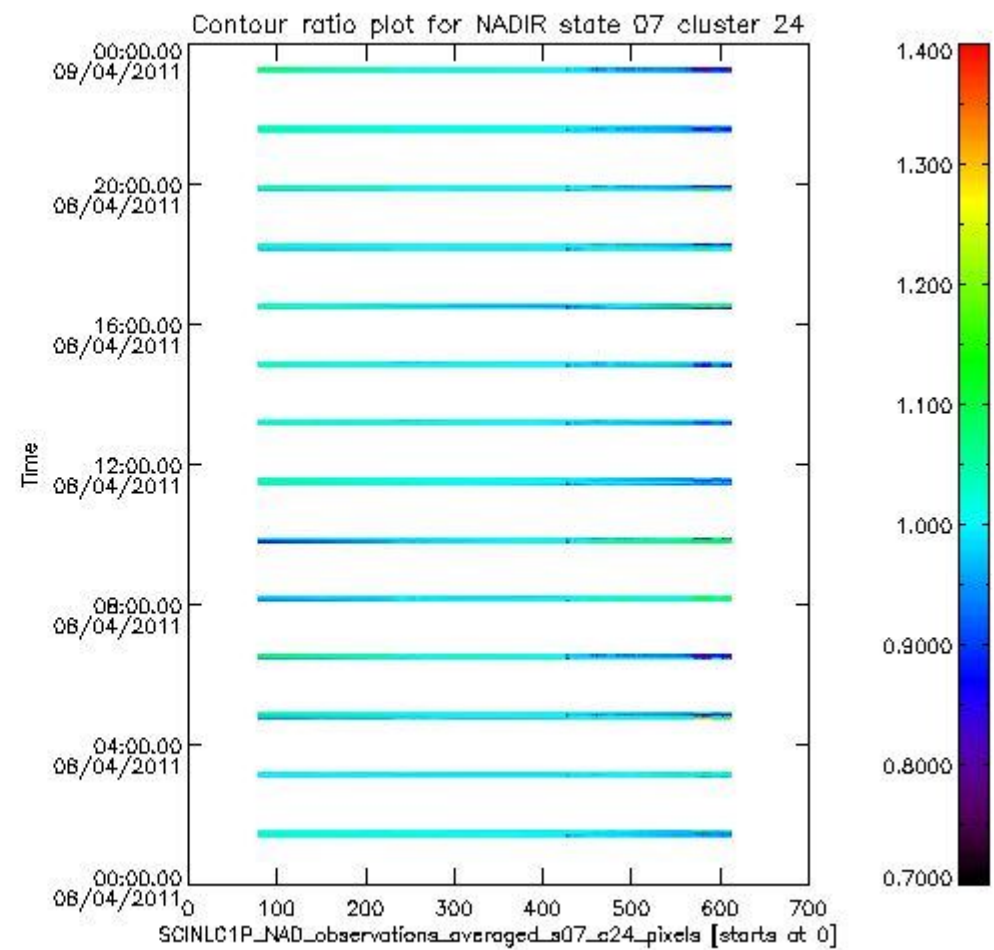
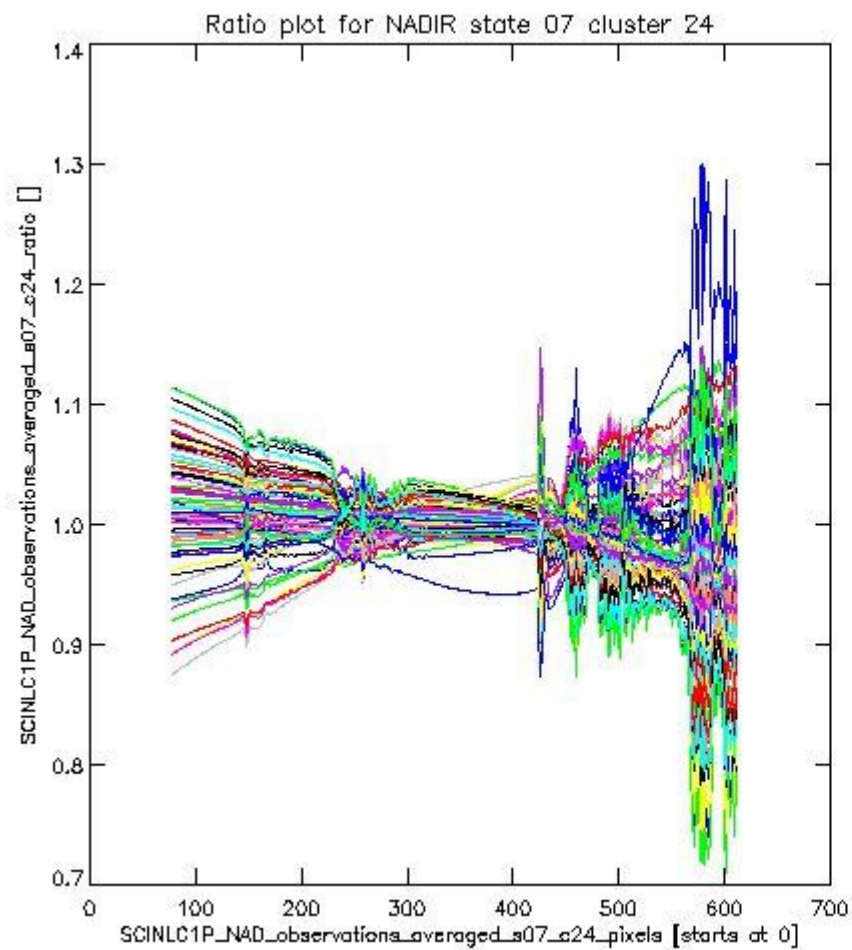
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	08APR2011 01:22:37.592
Start time of last sample	08APR2011 23:14:53.887
Reference period start time	09MAR2011 01:26:22.831
Reference period stop time	07APR2011 23:51:43.607
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\_20110408\_6.PNG

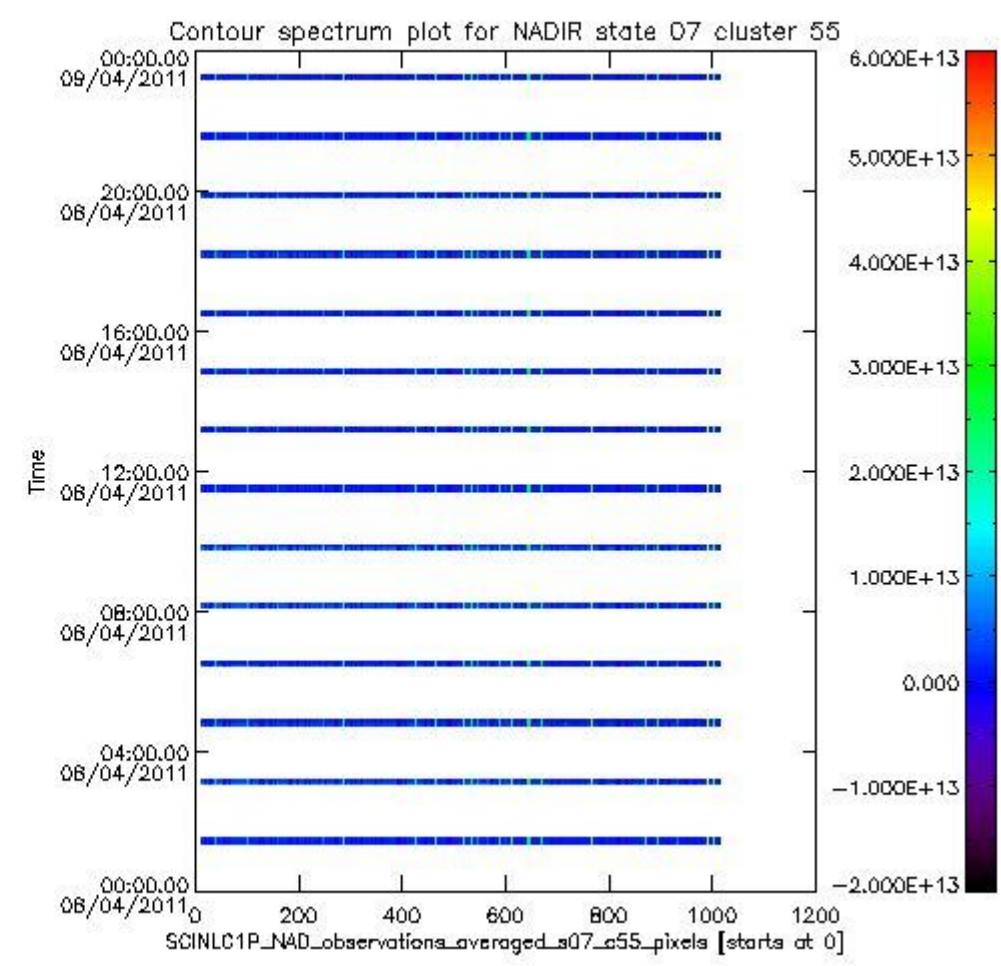
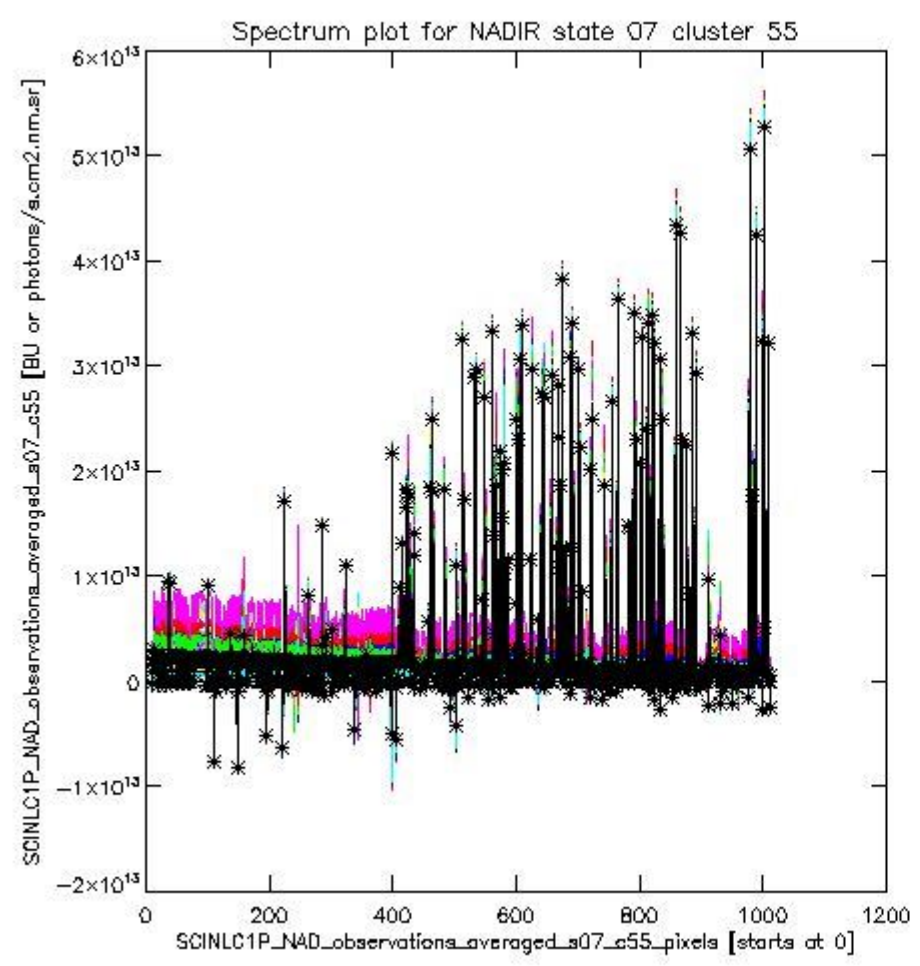




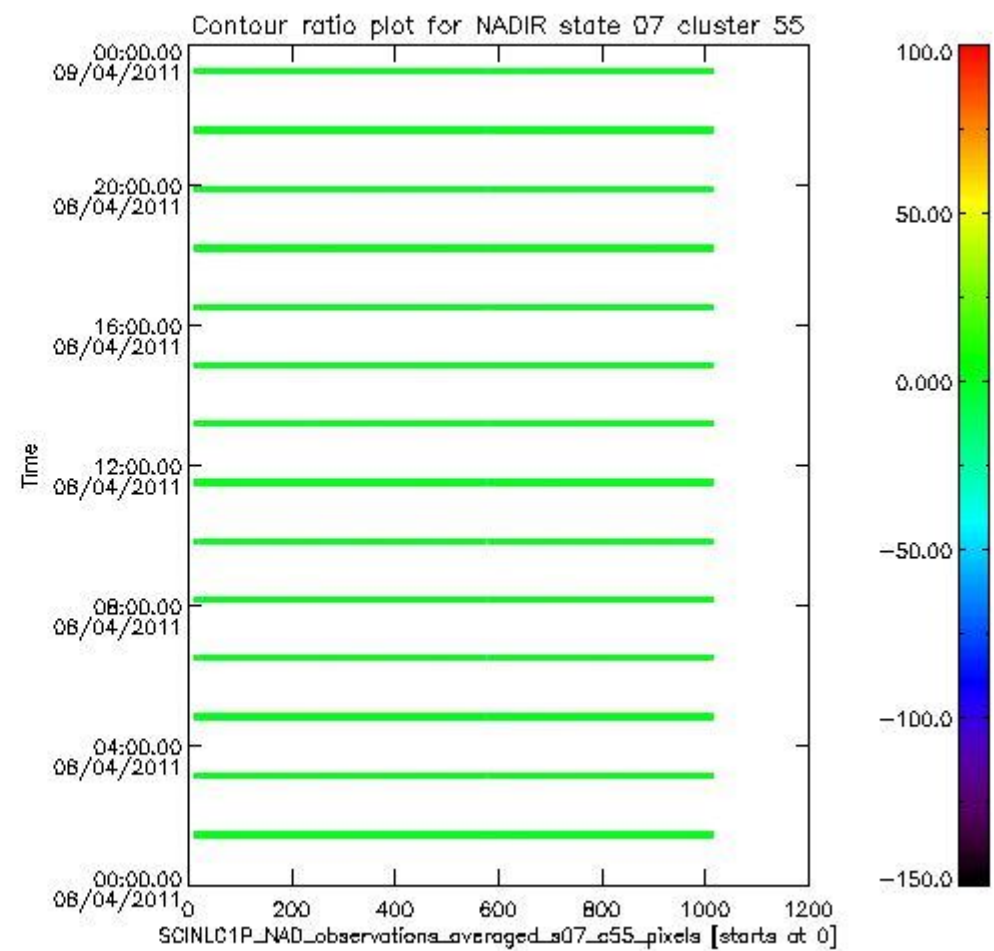
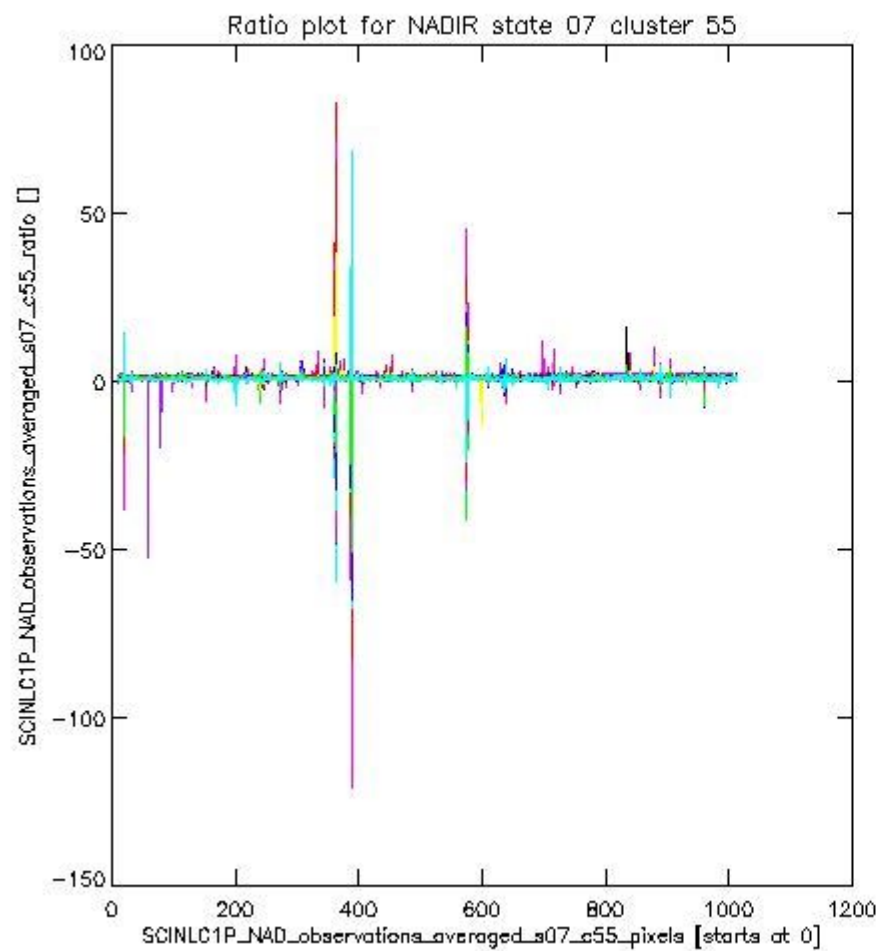
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_7.PNG

**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	08APR2011 01:22:37.592
Start time of last sample	08APR2011 23:14:53.887
Reference period start time	09MAR2011 01:26:22.831
Reference period stop time	07APR2011 23:49:40.861
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\_20110408\_8.PNG

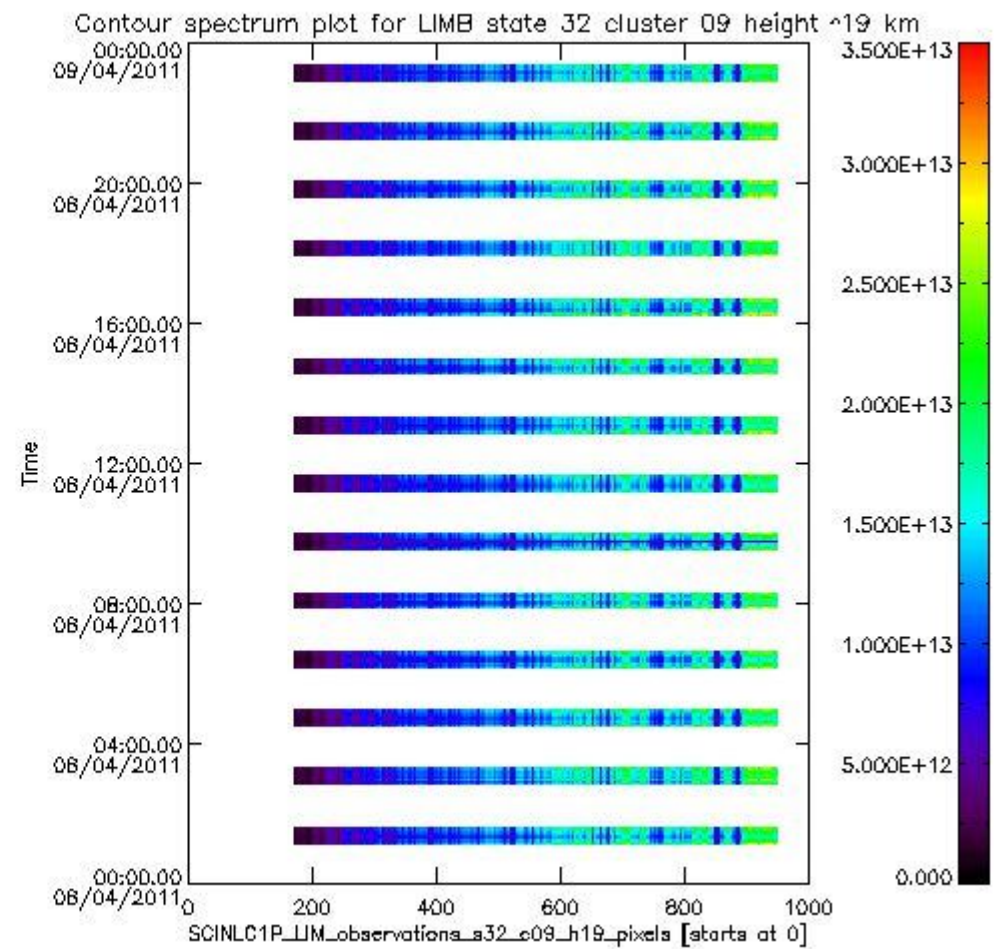
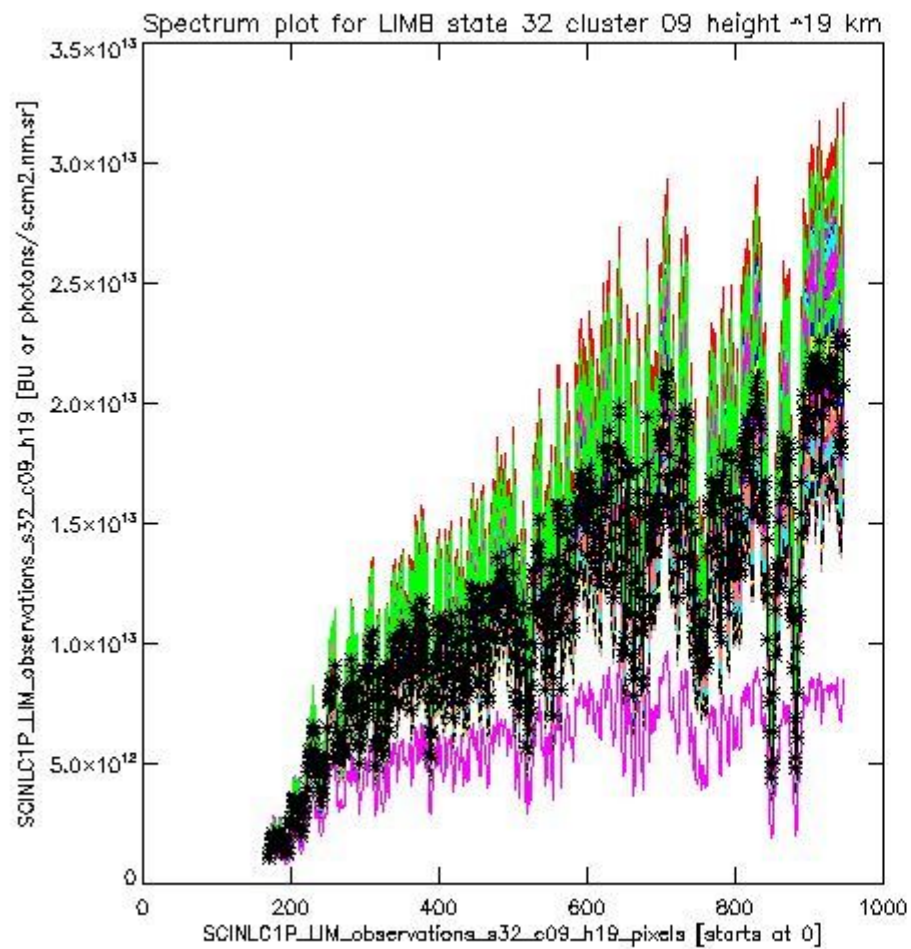


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_9.PNG

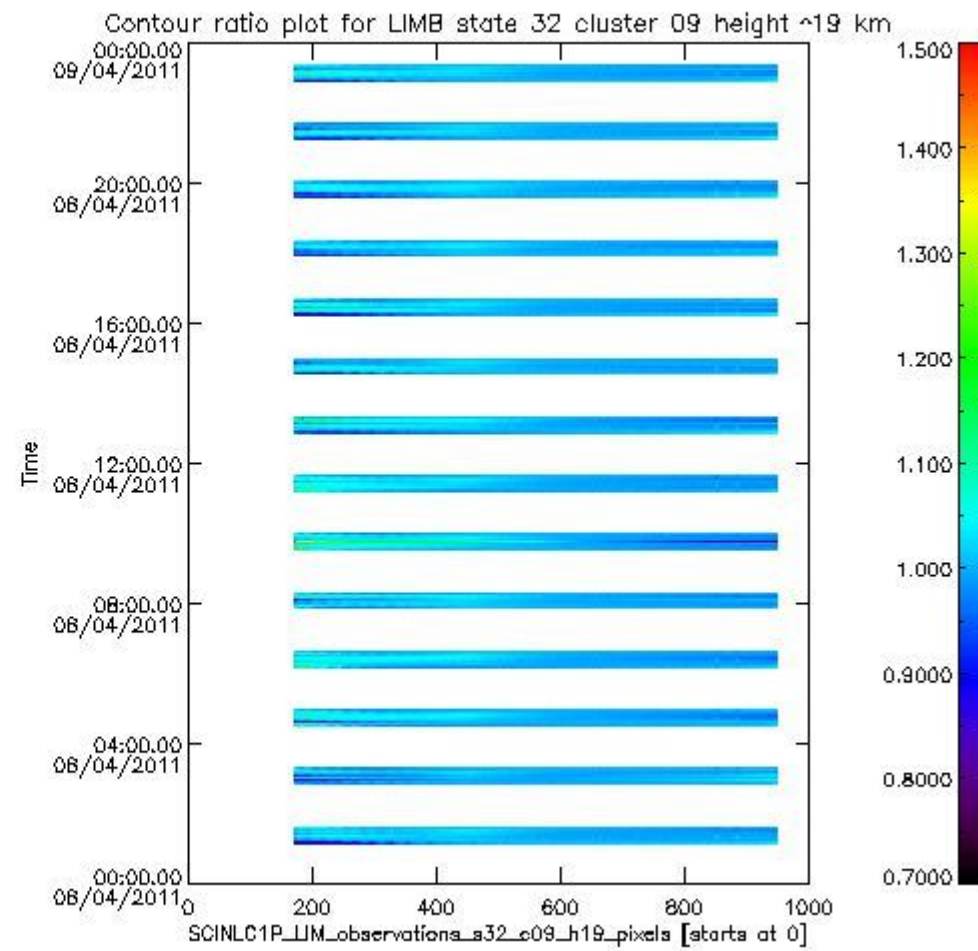
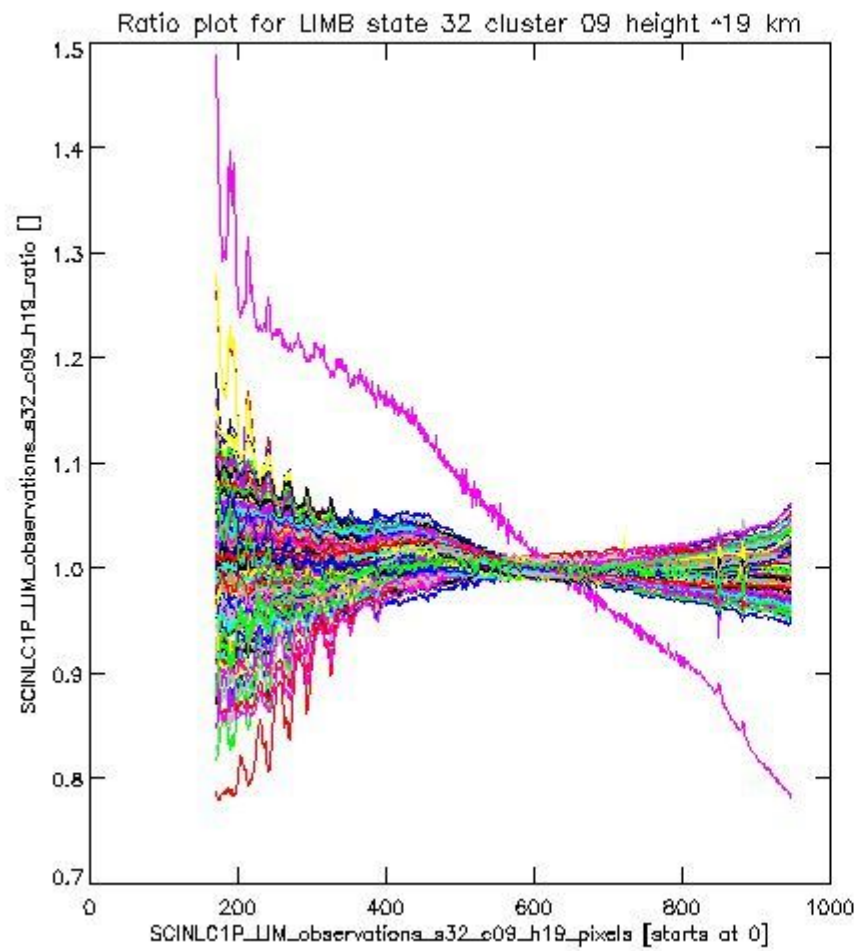
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	08APR2011 01:09:26.951
Start time of last sample	08APR2011 23:20:07.934
Reference period start time	09MAR2011 01:11:09.452
Reference period stop time	07APR2011 23:56:57.650
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





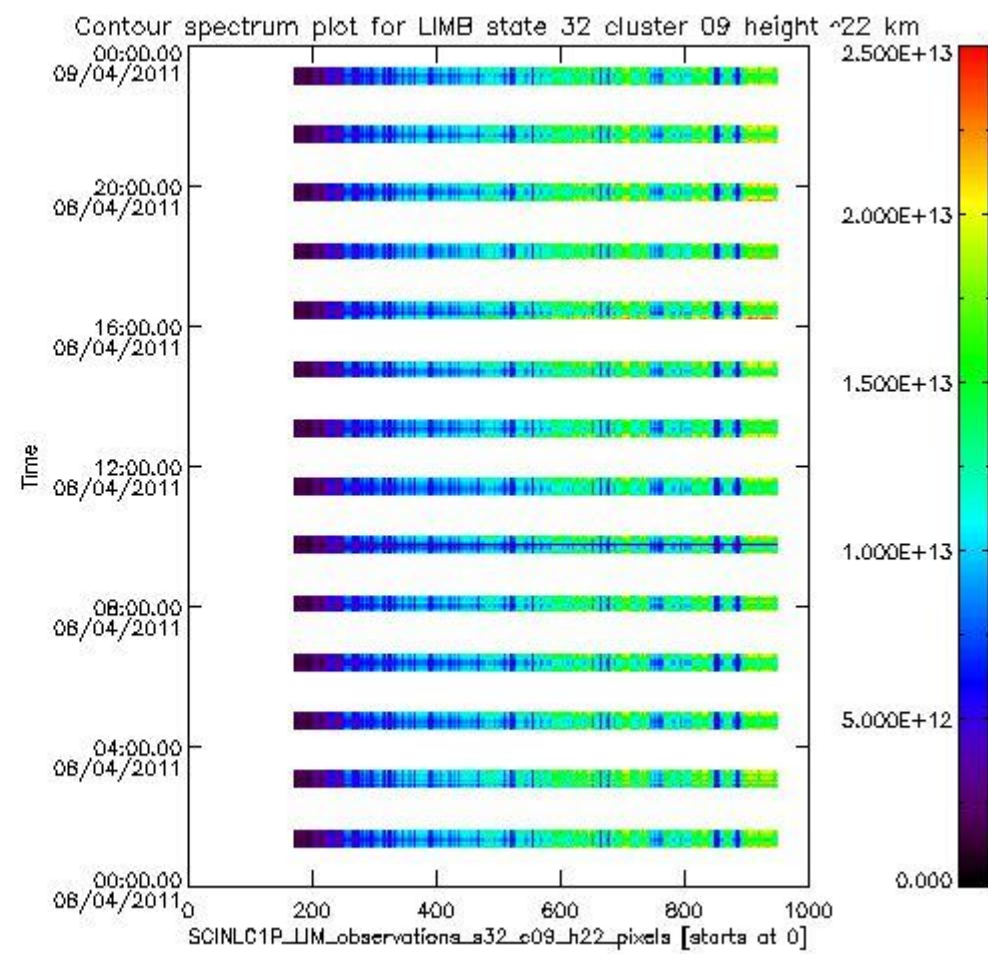
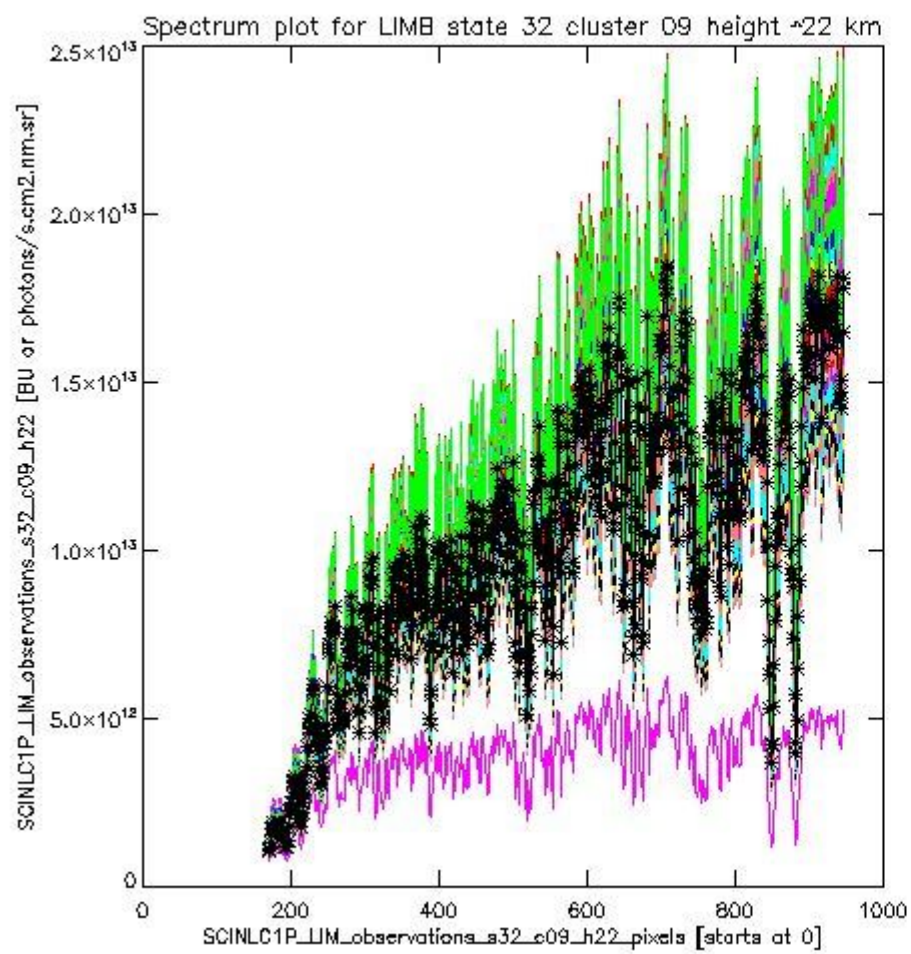
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_11.PNG

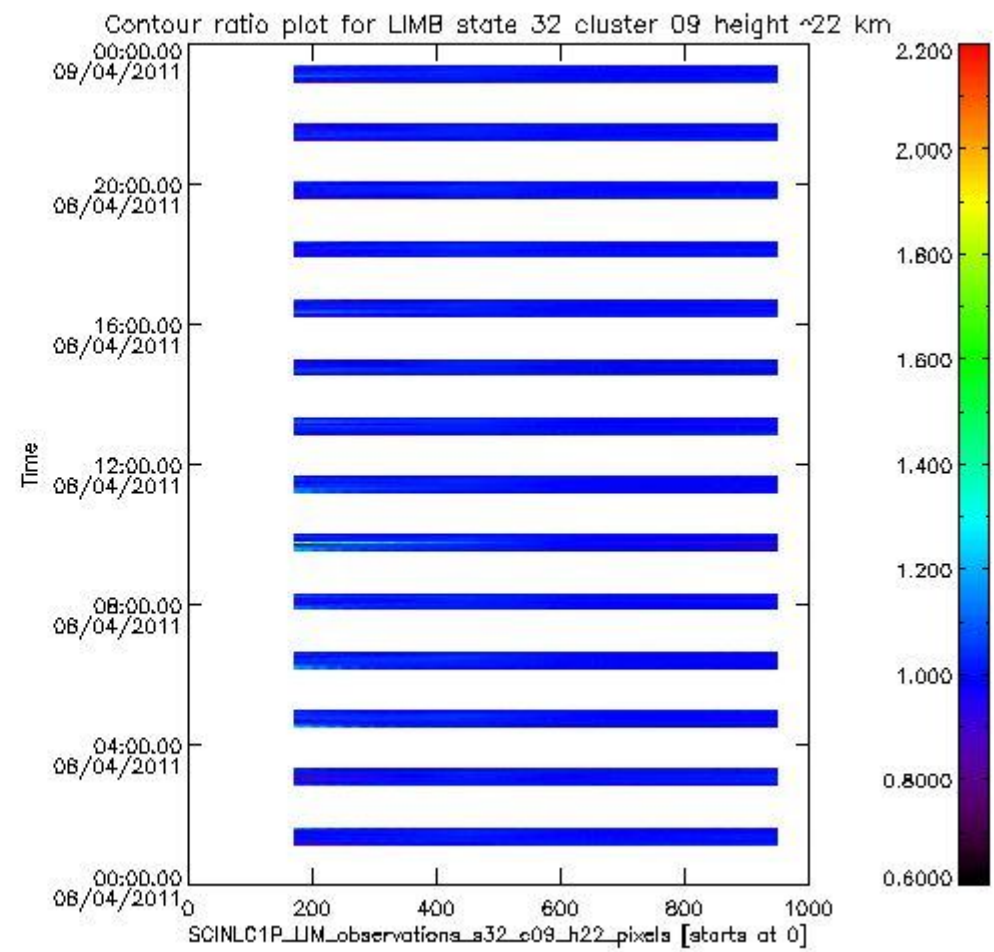
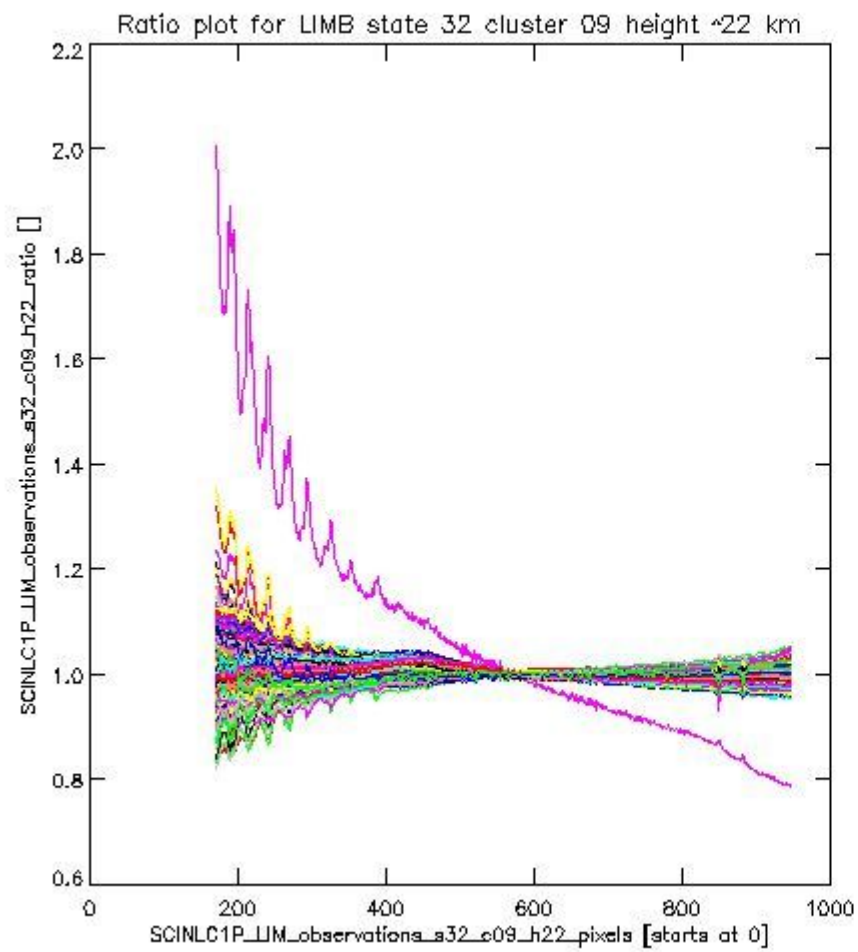
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	08APR2011 01:09:26.951
Start time of last sample	08APR2011 23:20:07.934
Reference period start time	09MAR2011 01:11:09.452
Reference period stop time	07APR2011 23:56:57.650
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\_20110408\_12.PNG

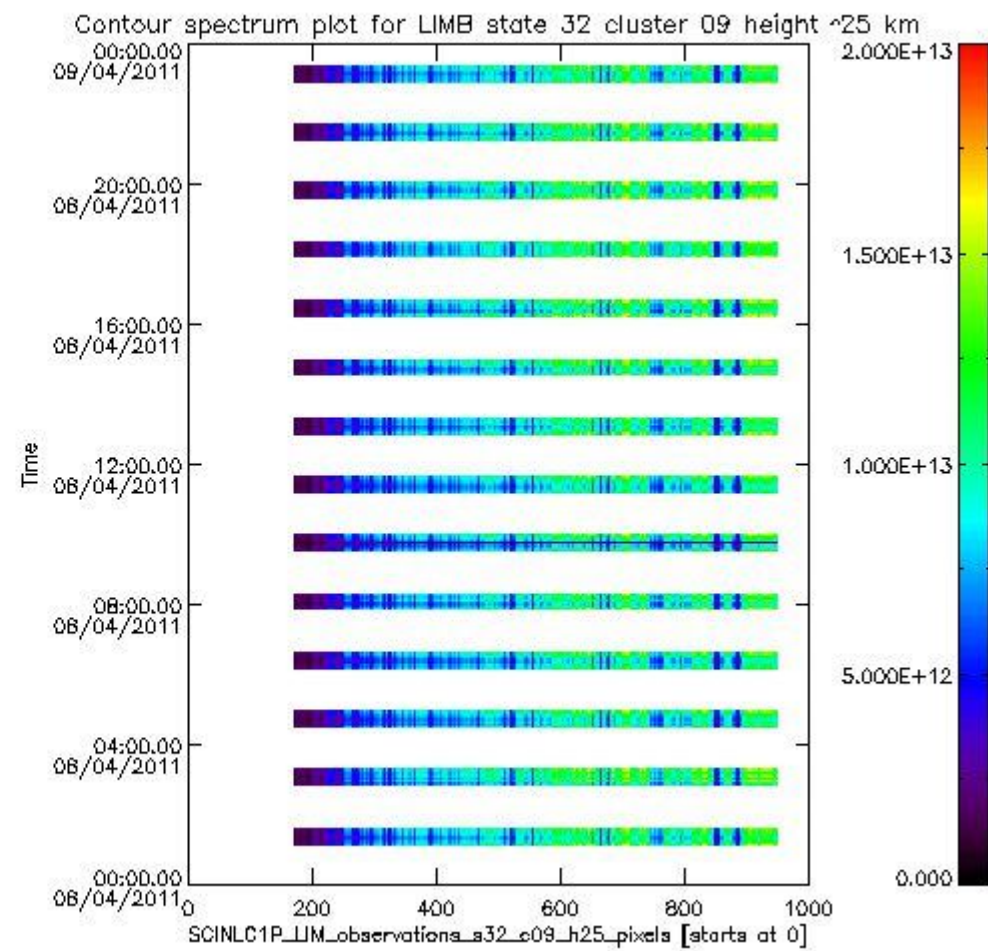
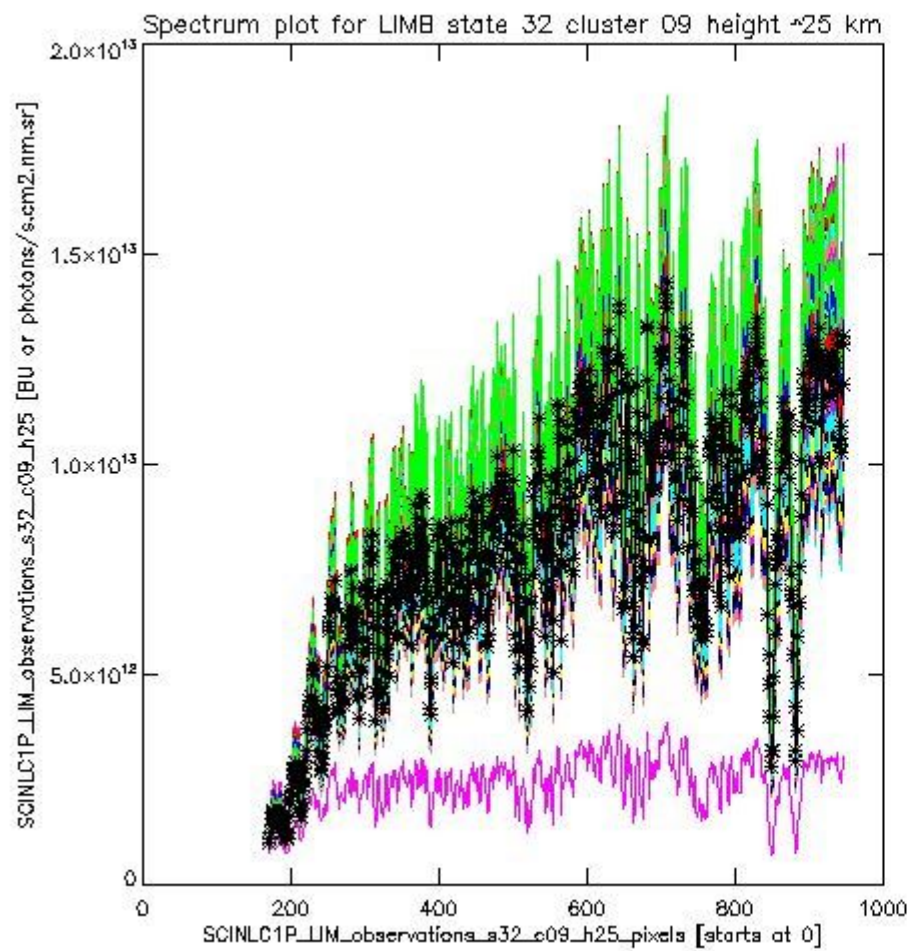




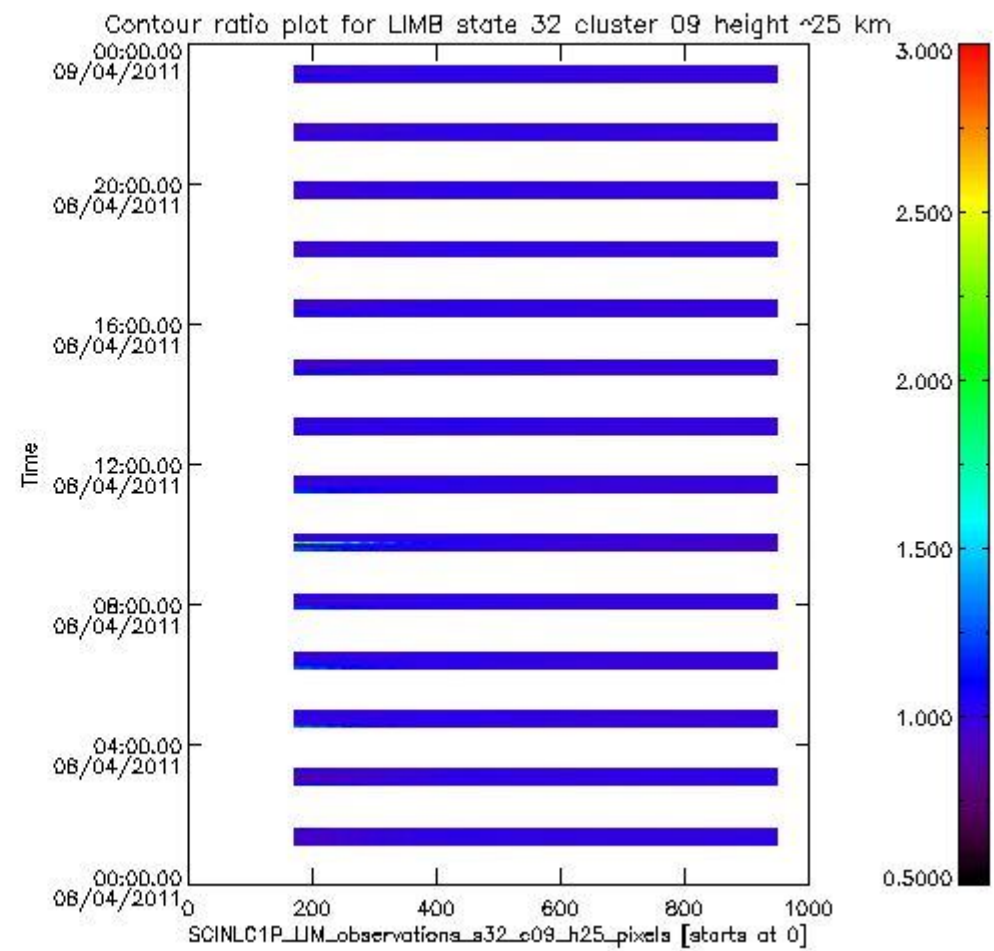
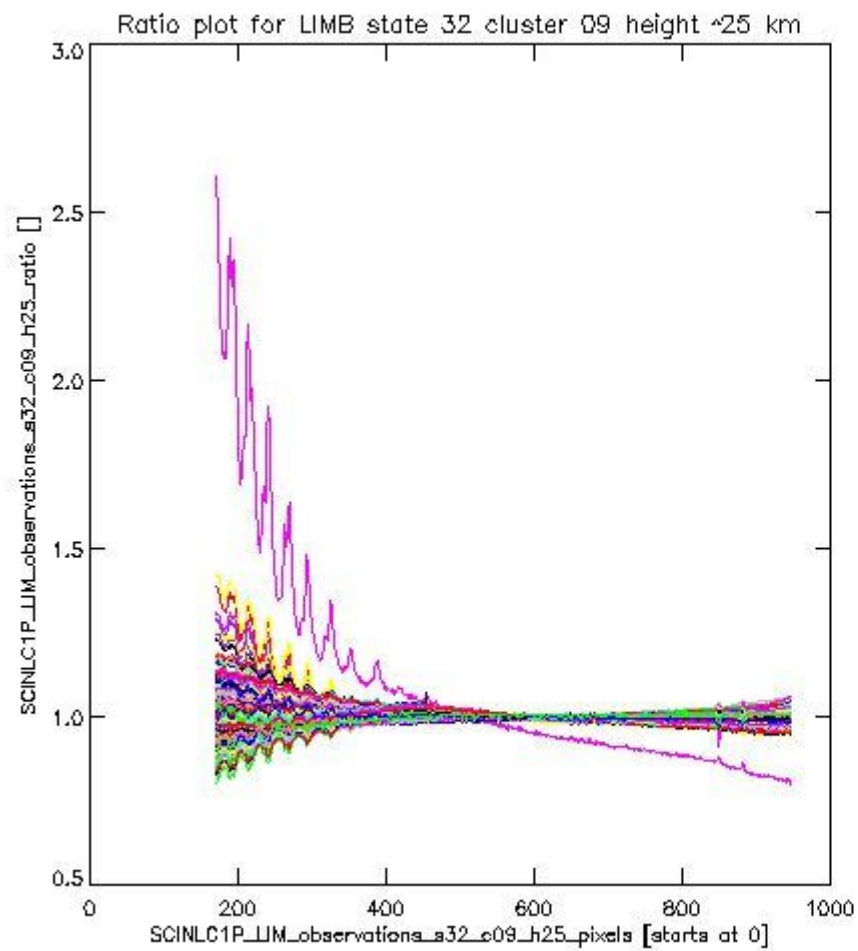
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_13.PNG

**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	08APR2011 01:09:26.951
Start time of last sample	08APR2011 23:20:07.934
Reference period start time	09MAR2011 01:11:09.452
Reference period stop time	07APR2011 23:56:57.650
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\_20110408\_14.PNG

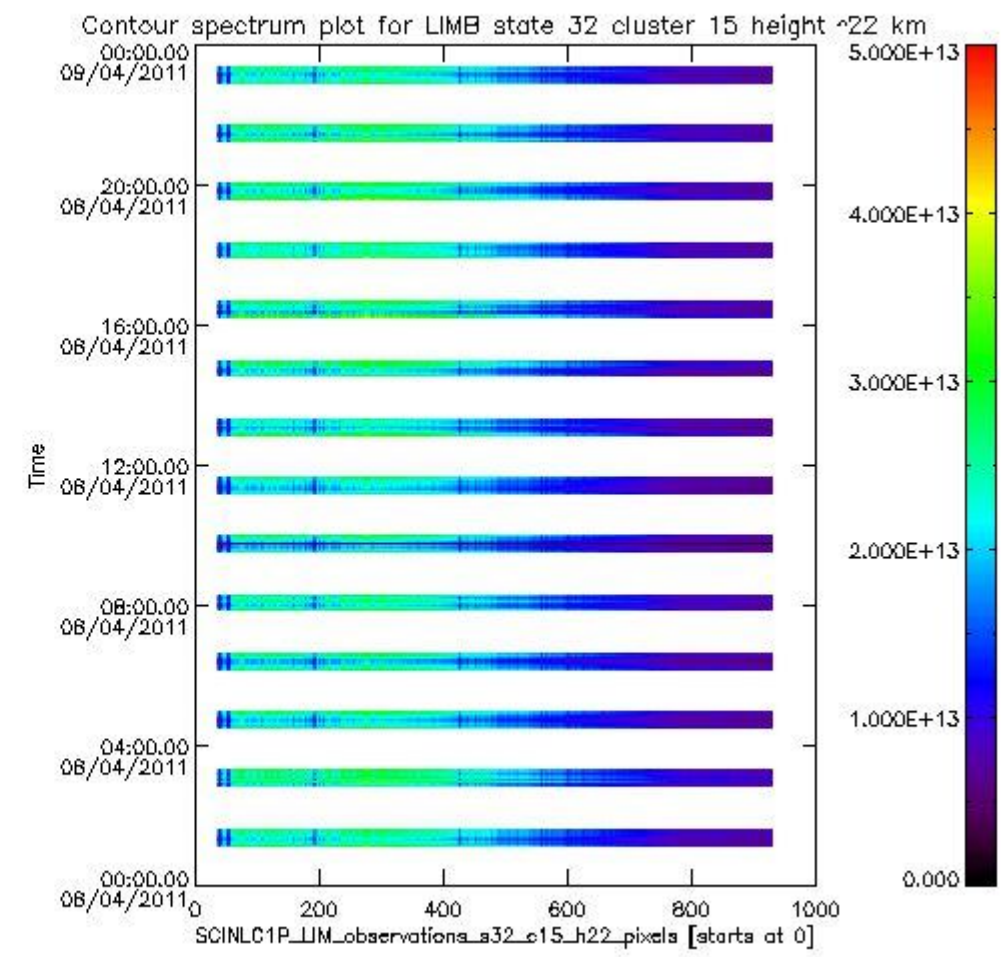
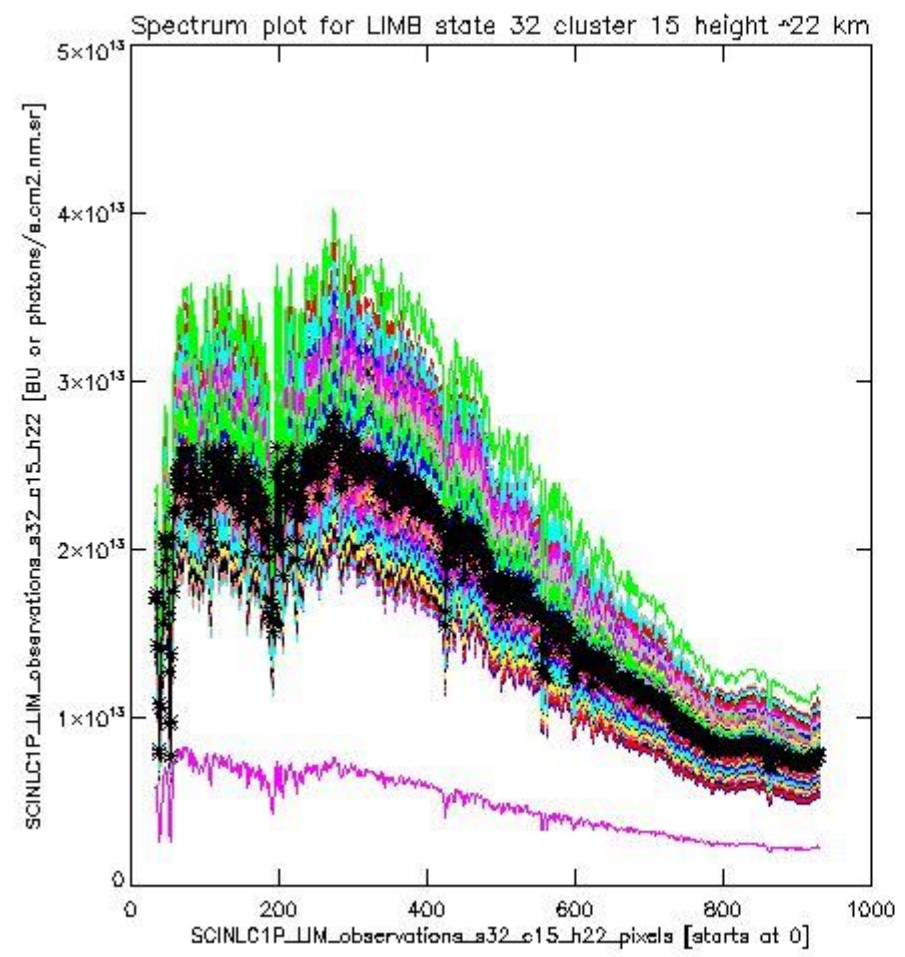


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_15.PNG

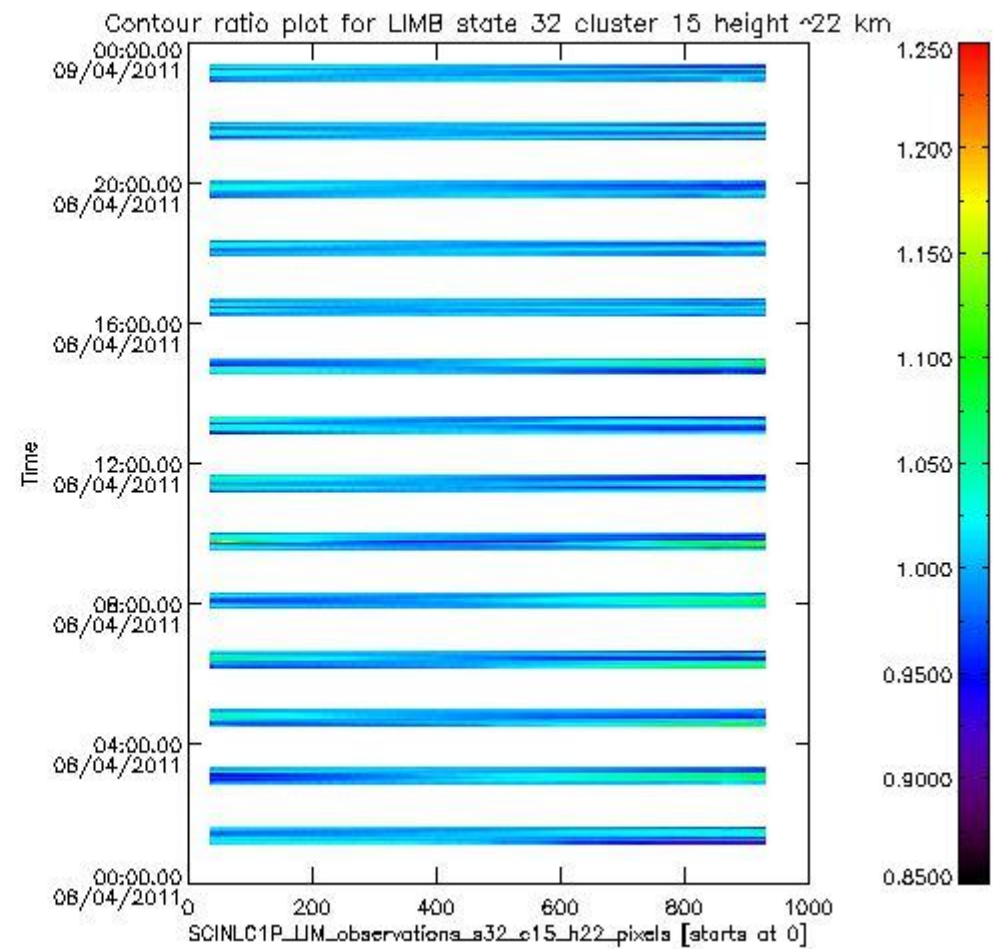
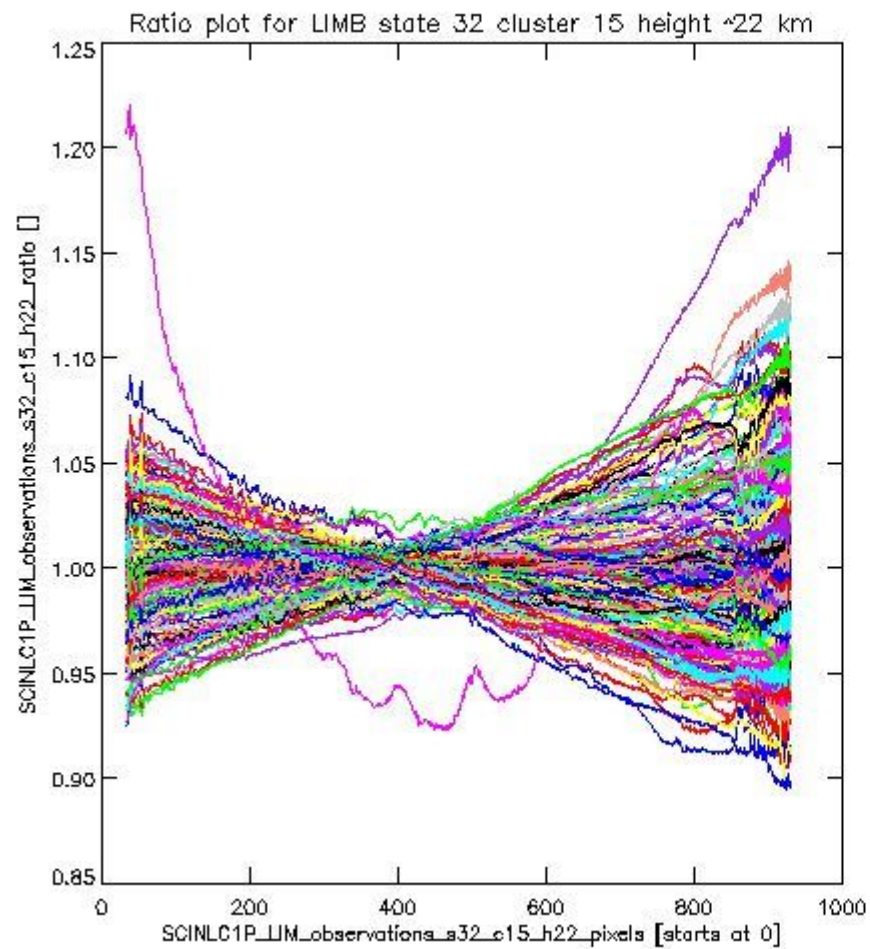
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	08APR2011 01:09:26.951
Start time of last sample	08APR2011 23:20:07.934
Reference period start time	09MAR2011 01:11:09.452
Reference period stop time	07APR2011 23:56:57.650
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





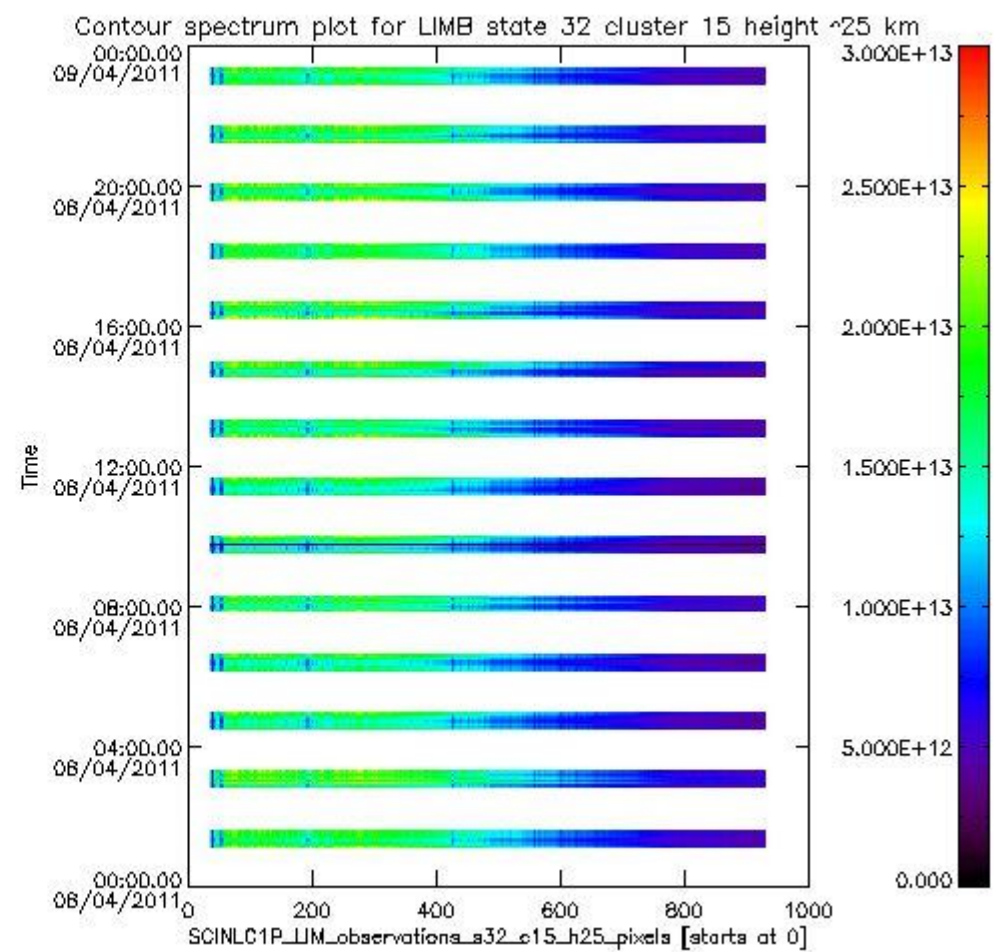
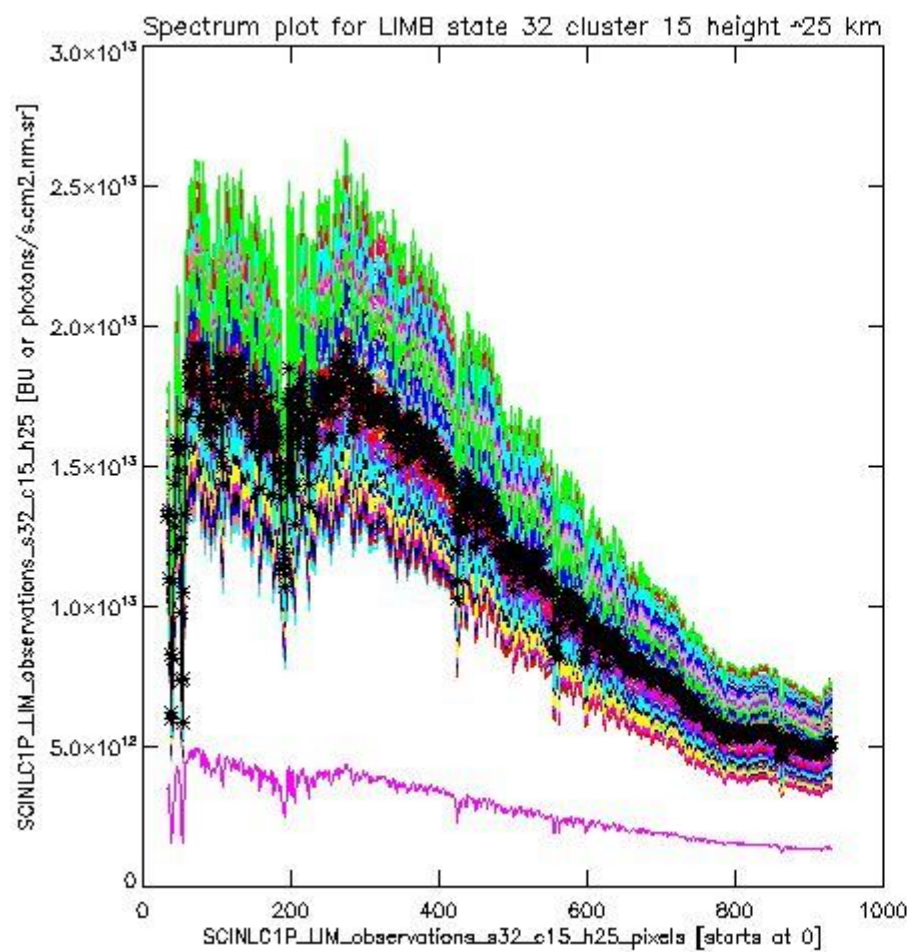
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_17.PNG

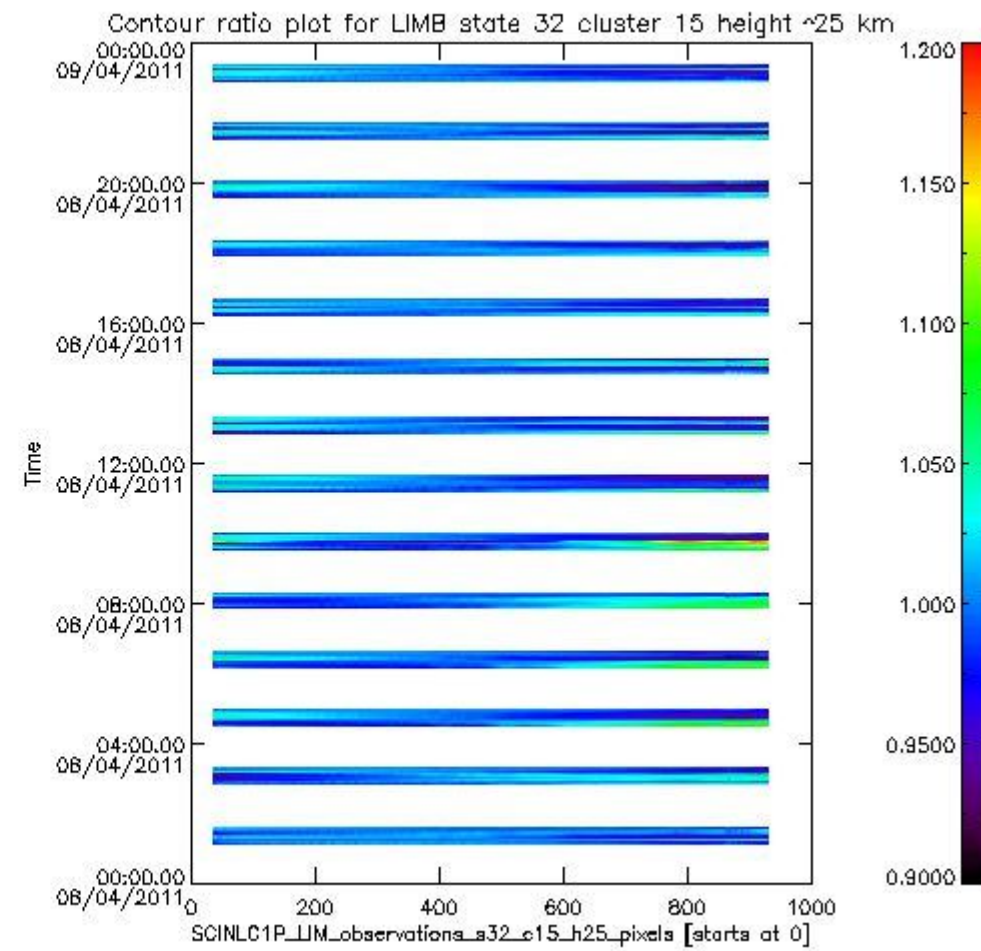
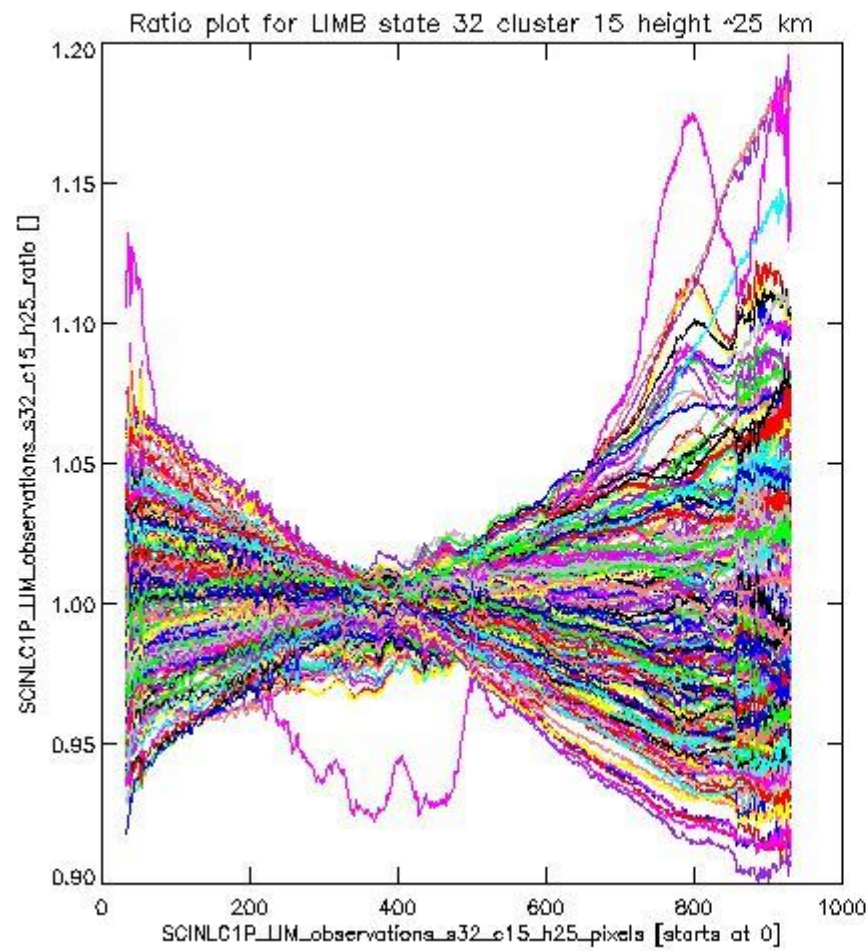
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	08APR2011 01:09:26.951
Start time of last sample	08APR2011 23:20:07.934
Reference period start time	09MAR2011 01:11:09.452
Reference period stop time	07APR2011 23:56:57.650
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\_20110408\_18.PNG

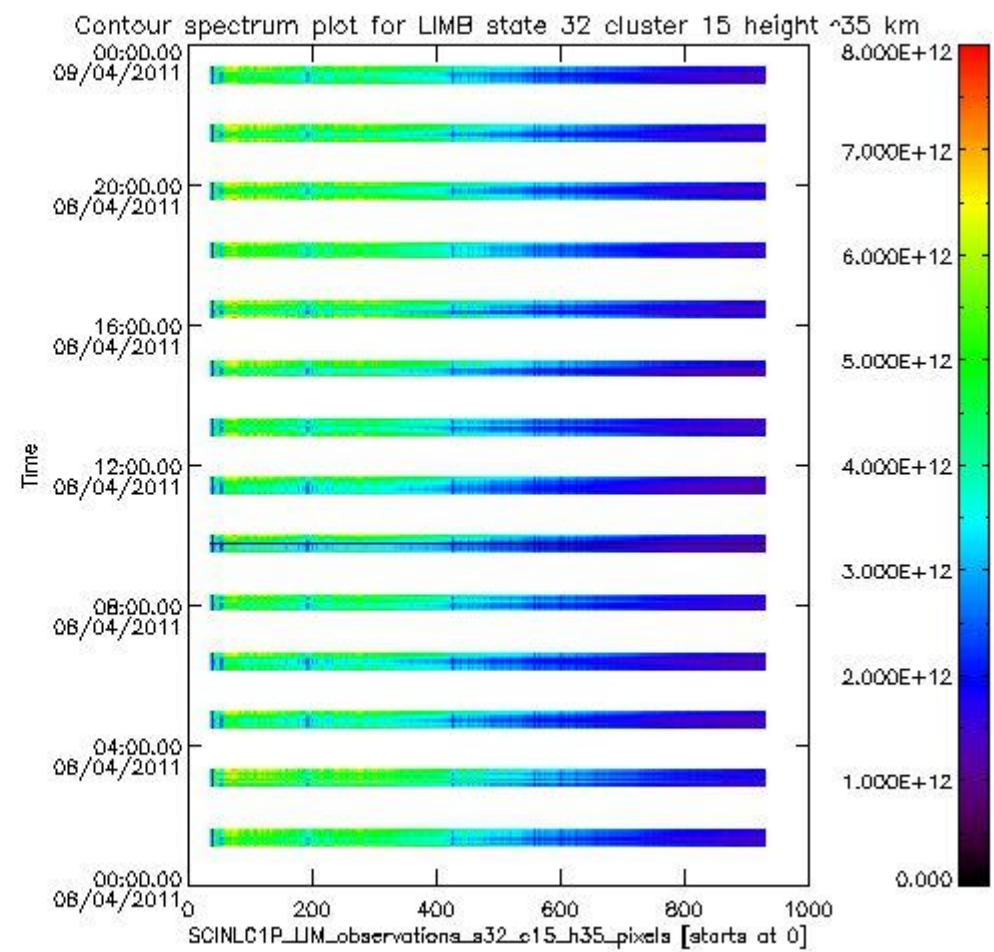
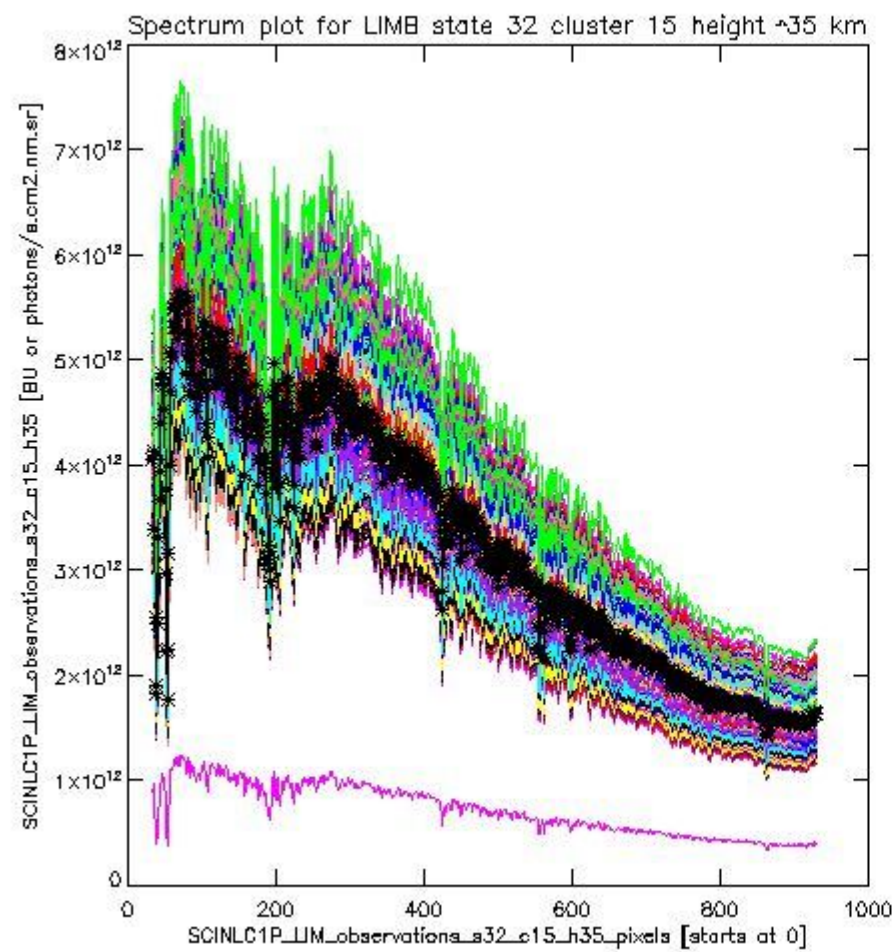




sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110408\_19.PNG

**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	08APR2011 01:09:26.951
Start time of last sample	08APR2011 23:20:07.934
Reference period start time	09MAR2011 09:33:11.347
Reference period stop time	07APR2011 23:56:57.650
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\_20110408\_20.PNG

