

# 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	08APR2011 06:55:30
Data source version	SCIA/7.04-U
Processing scope for products	28MAR2011 00:00:00 to 29MAR2011 00:00:00
Start time of first product within scope	27MAR2011 23:14:36
Stop time of last product within scope	28MAR2011 20:28:04
Total number of level 1 products	13
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	28MAR2011 01:26:52.674	28MAR2011 19:58:57.284
1	NADIR	07	09	N/A	28MAR2011 01:26:52.674	28MAR2011 19:58:57.284
2	NADIR	07	15	N/A	28MAR2011 01:26:52.674	28MAR2011 19:58:57.284
3	NADIR	07	24	N/A	28MAR2011 01:26:52.674	28MAR2011 19:58:57.284
4	NADIR	07	55	N/A	28MAR2011 01:26:52.674	28MAR2011 19:58:57.284
5	LIMB	32	09	~19 km	28MAR2011 00:01:12.751	28MAR2011 20:04:11.323
6	LIMB	32	09	~22 km	28MAR2011 00:01:12.751	28MAR2011 20:04:11.323
7	LIMB	32	09	~25 km	28MAR2011 00:01:12.751	28MAR2011 20:04:11.323
8	LIMB	32	15	~22 km	28MAR2011 00:01:12.751	28MAR2011 20:04:11.323
9	LIMB	32	15	~25 km	28MAR2011 00:01:12.751	28MAR2011 20:04:11.323
10	LIMB	32	15	~35 km	28MAR2011 00:01:12.751	28MAR2011 20:04:11.323

#### 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_1CUDPA20110327_230459_00060093101_00016_47444_5798.N1</a>	27MAR2011 23:14:36	28MAR2011 00:25:05	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110328_004511_00060103101_00017_47445_5799.N1</a>	28MAR2011 00:54:50	28MAR2011 02:05:04	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110328_022525_00060093101_00018_47446_5800.N1</a>	28MAR2011 02:35:03	28MAR2011 03:45:32	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110328_040538_00060103101_00019_47447_5801.N1</a>	28MAR2011 04:15:17	28MAR2011 05:25:31	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110328_054552_00060093101_00020_47448_5802.N1</a>	28MAR2011 05:55:30	28MAR2011 07:05:59	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110328_072605_00017143101_00021_47449_5803.N1</a>	28MAR2011 07:35:44	28MAR2011 07:54:32	0	5	12	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110328_093449_000042993101_00022_47450_5805.N1	28MAR2011 09:35:58	28MAR2011 10:26:27	0	30	18	0	0	2	0	0	
7	SCI_NLC_1CUDPA20110328_104632_000060103101_00023_47451_5806.N1	28MAR2011 10:56:11	28MAR2011 12:06:26	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110328_122646_000060093101_00024_47452_5808.N1	28MAR2011 12:36:25	28MAR2011 13:46:54	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110328_140659_000060103101_00025_47453_5821.N1	28MAR2011 14:16:38	28MAR2011 15:26:53	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110328_154713_000060093101_00026_47454_5853.N1	28MAR2011 15:56:52	28MAR2011 17:07:21	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110328_172726_000060103101_00027_47455_5854.N1	28MAR2011 17:37:05	28MAR2011 18:47:36	0	35	31	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110328_190740_000060093101_00028_47456_5855.N1	28MAR2011 19:17:19	28MAR2011 20:28:04	0	36	30	0	1	1	0	0	

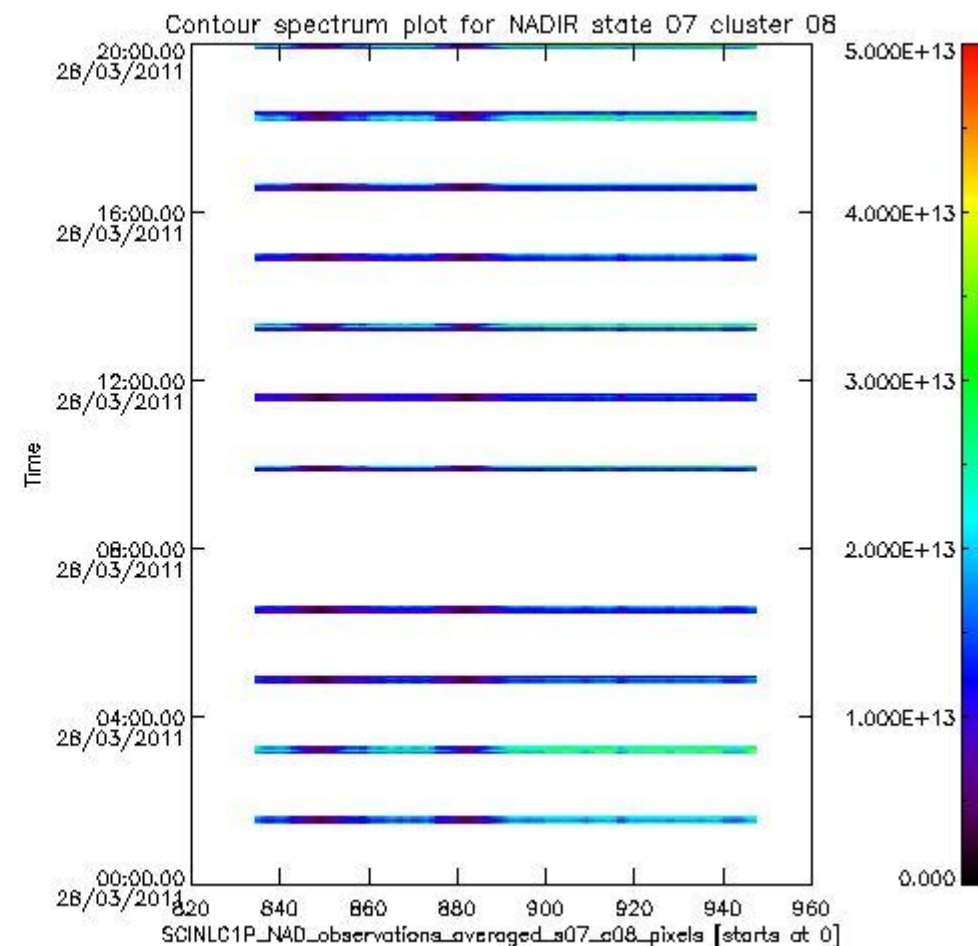
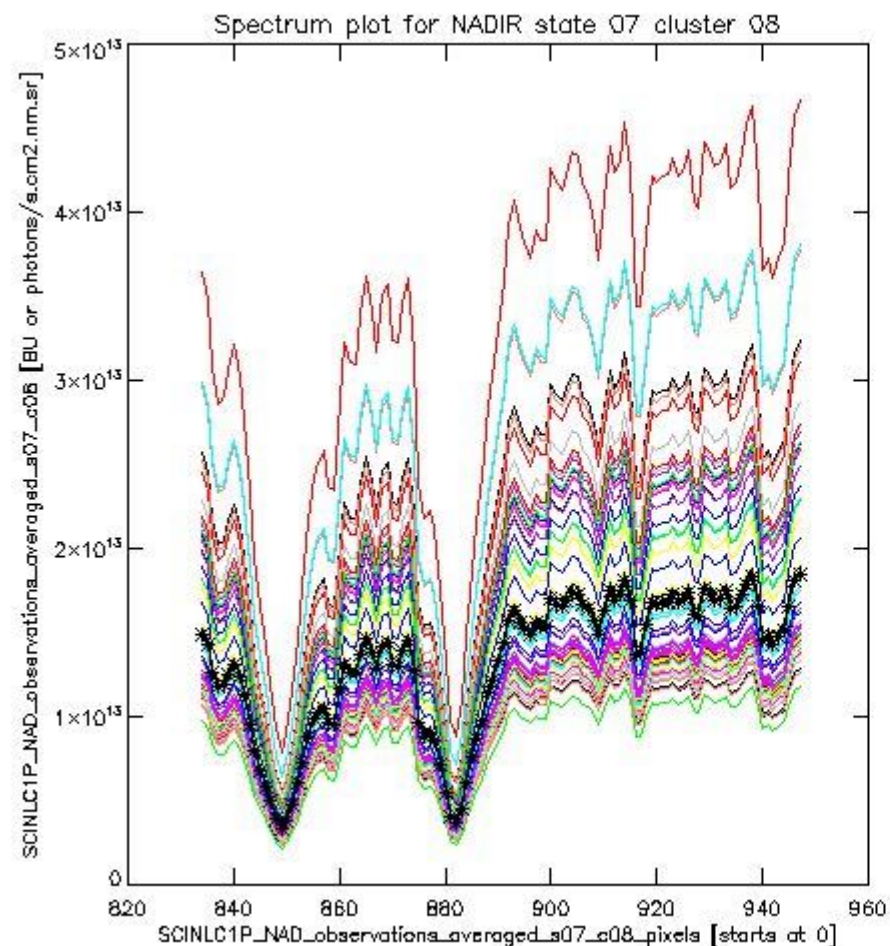
## 1.2 Source packet monitoring

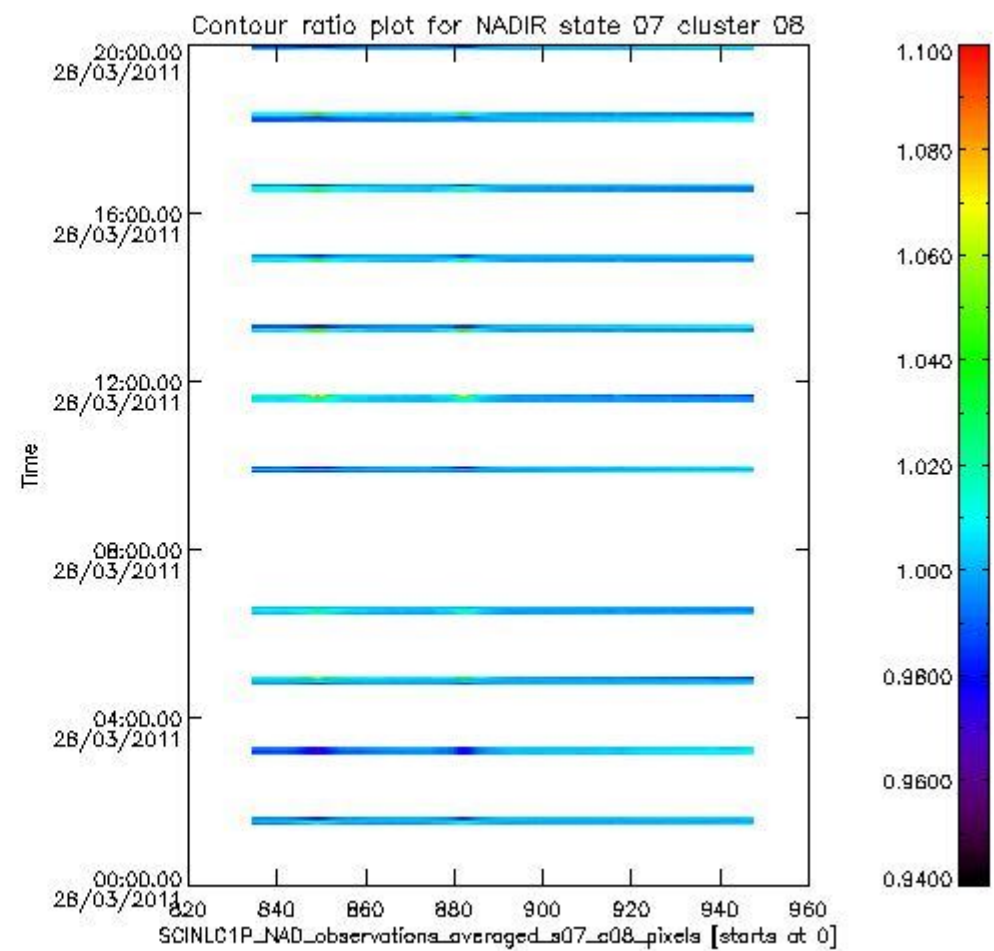
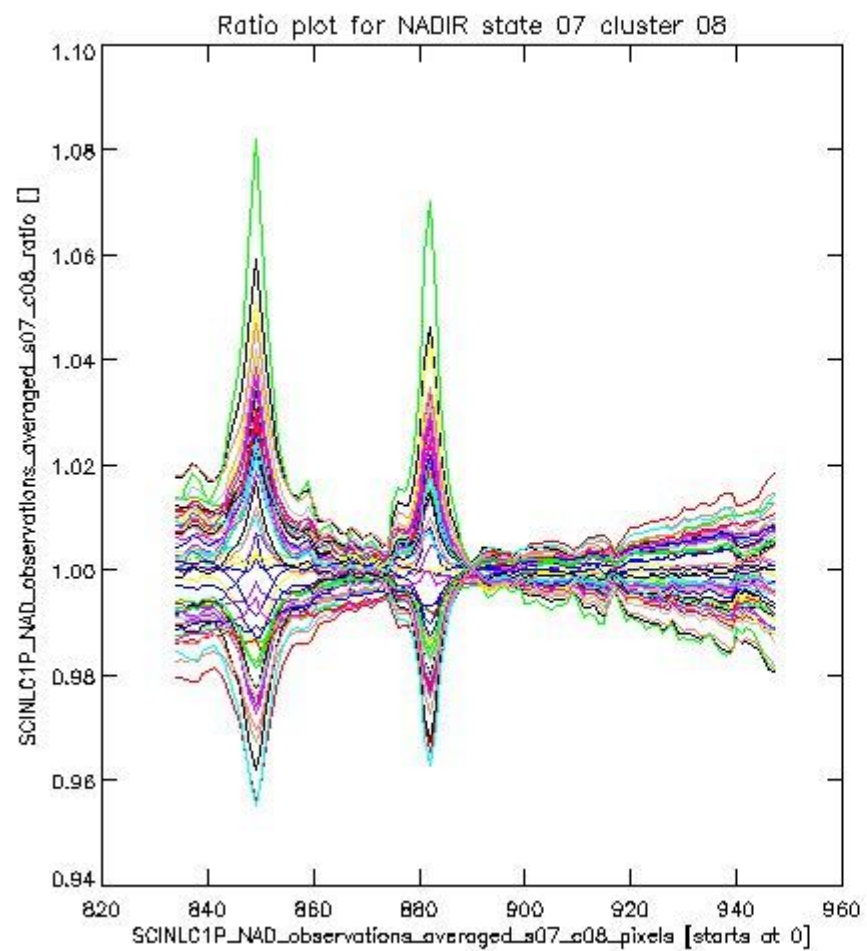
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	28MAR2011 01:26:52.674
Start time of last sample	28MAR2011 19:58:57.284
Reference period start time	26FEB2011 01:30:45.354
Reference period stop time	27MAR2011 23:55:58.705
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

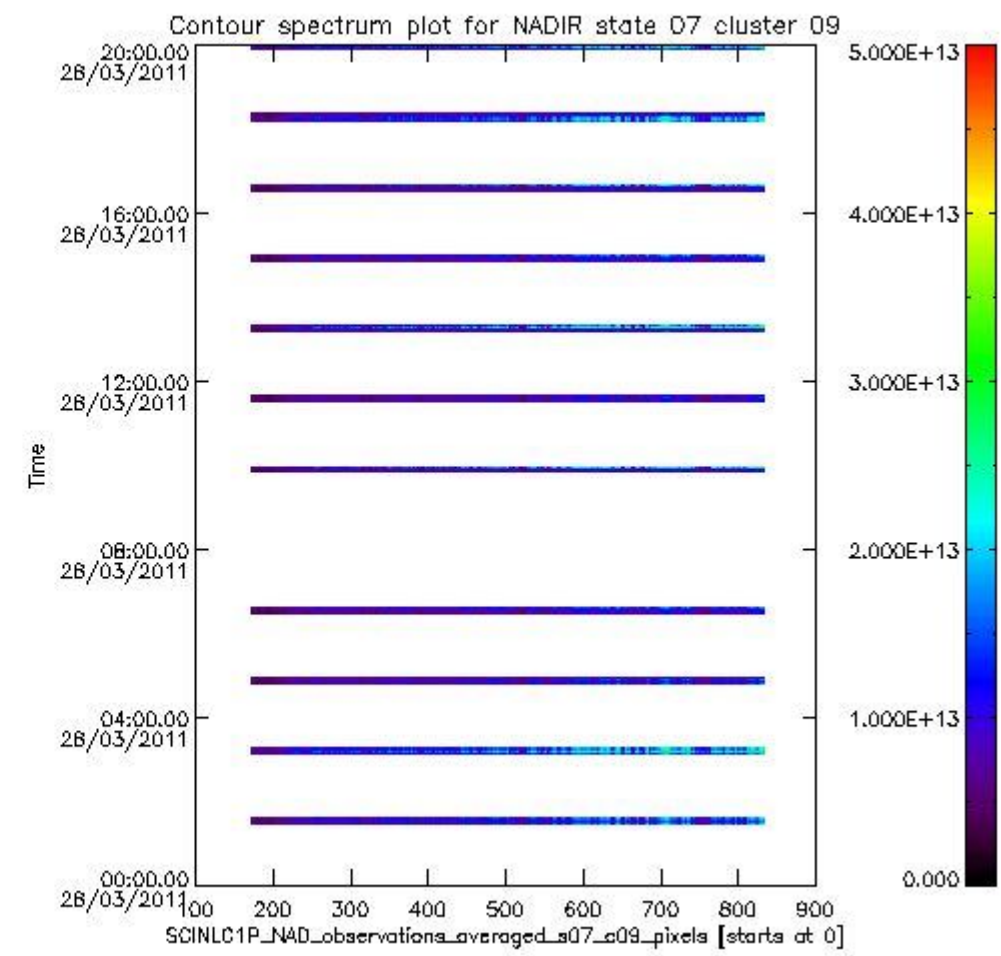
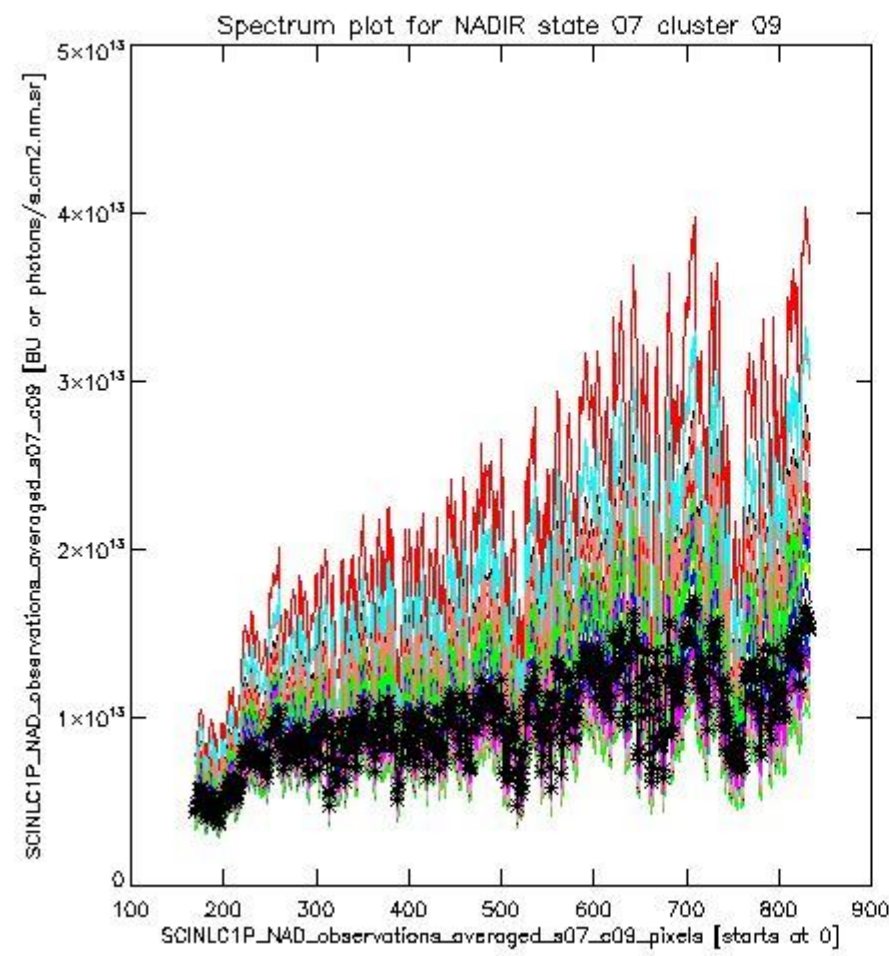




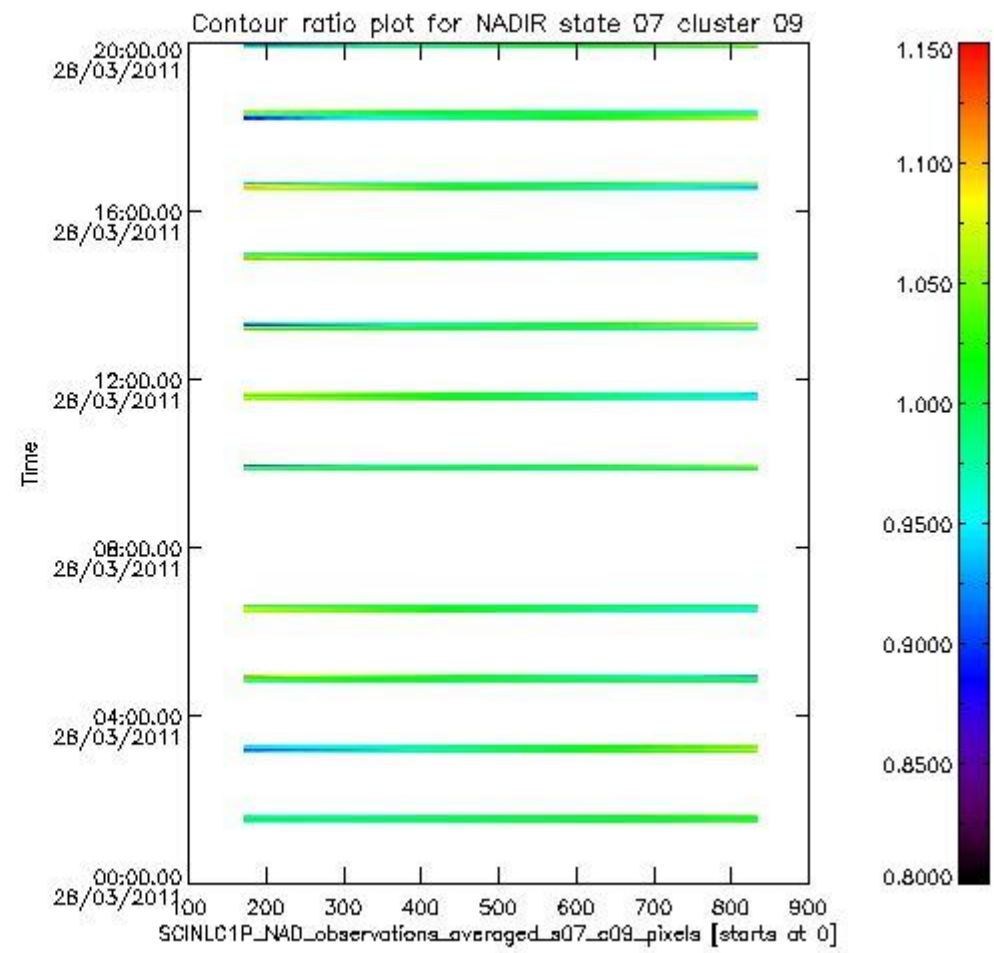
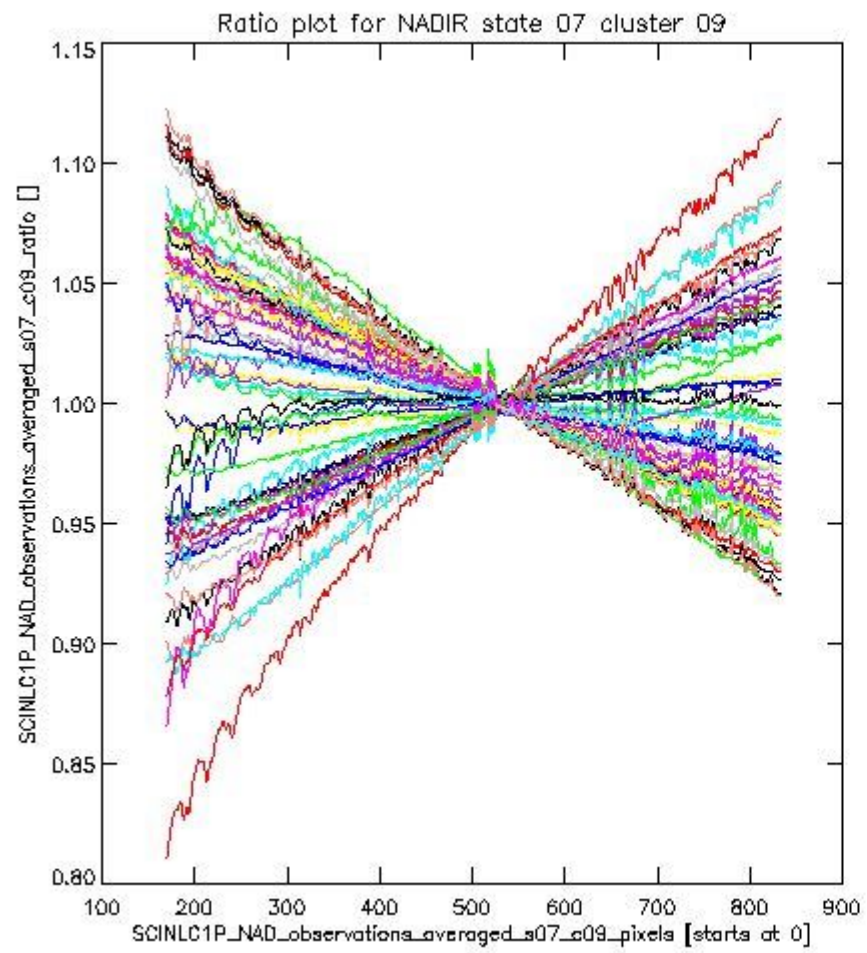
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_1.PNG

**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	28MAR2011 01:26:52.674
Start time of last sample	28MAR2011 19:58:57.284
Reference period start time	26FEB2011 01:30:45.354
Reference period stop time	27MAR2011 23:55:58.705
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



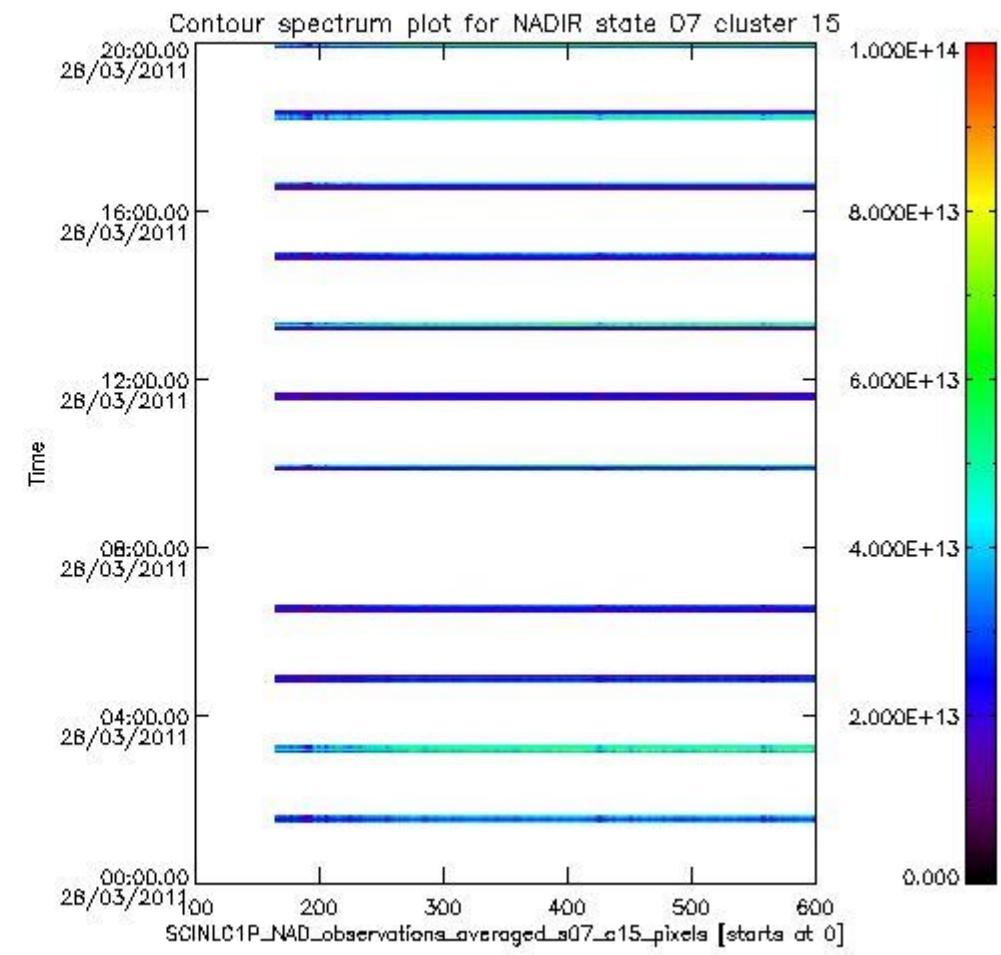
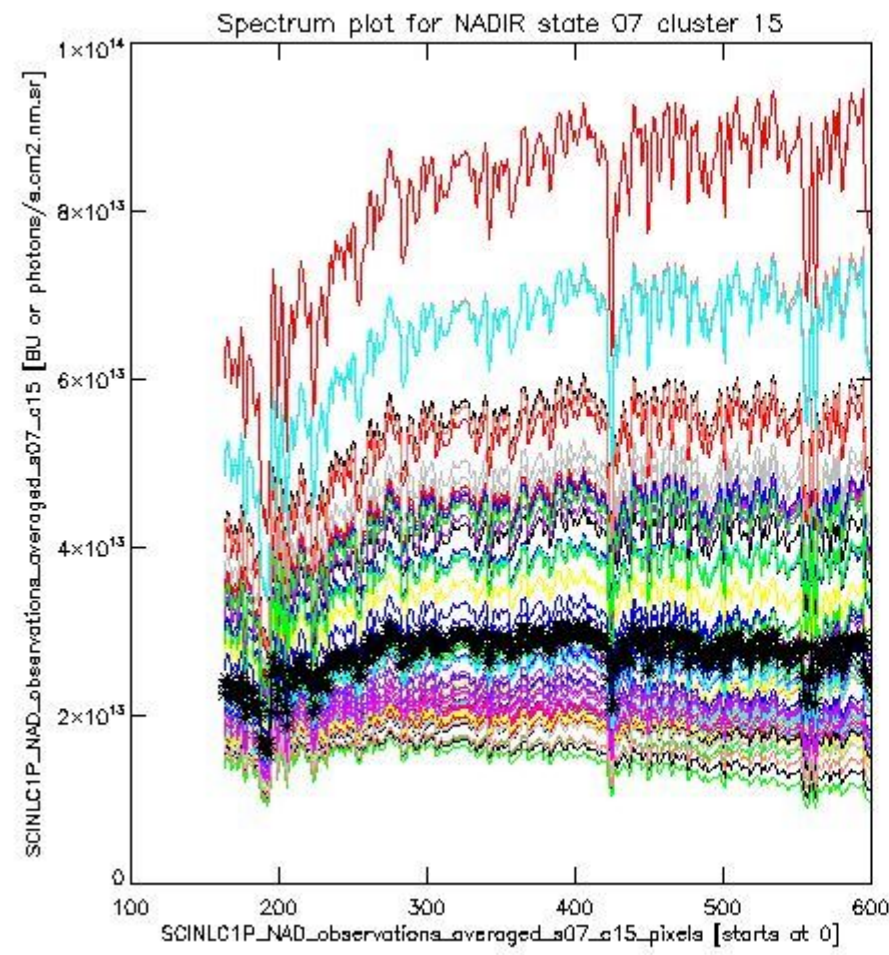
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_2.PNG



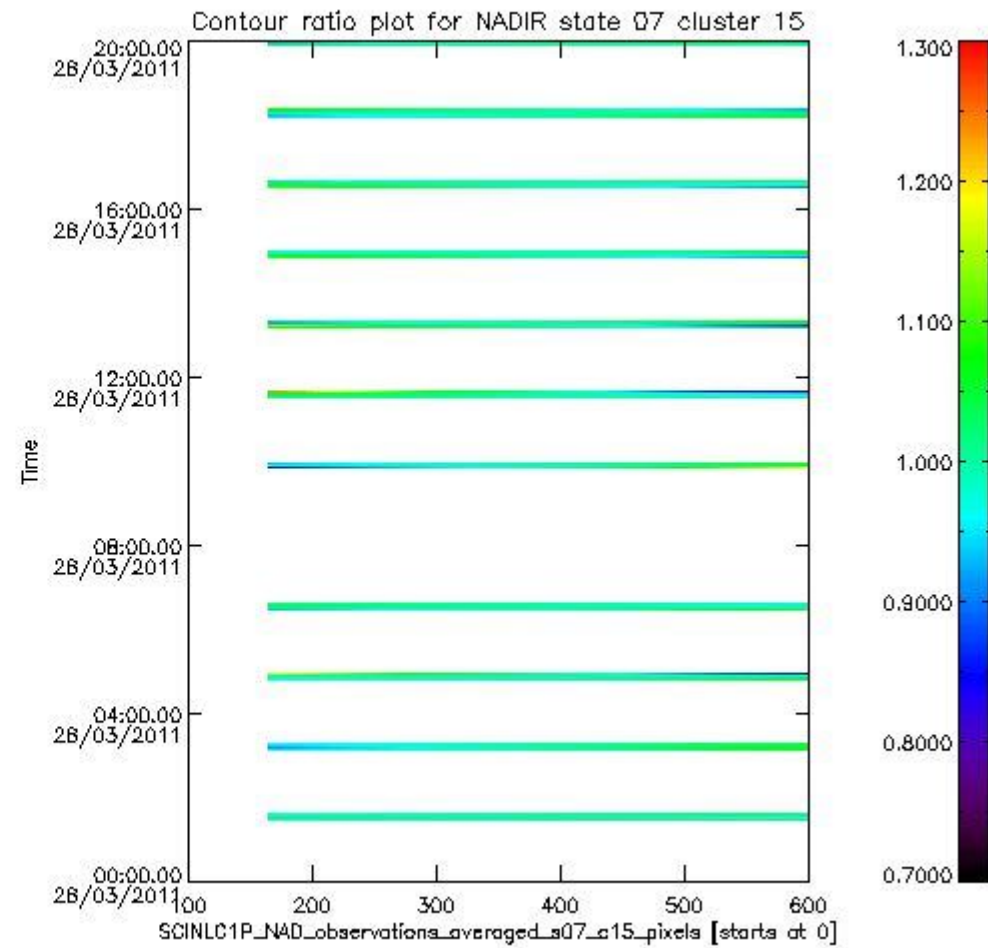
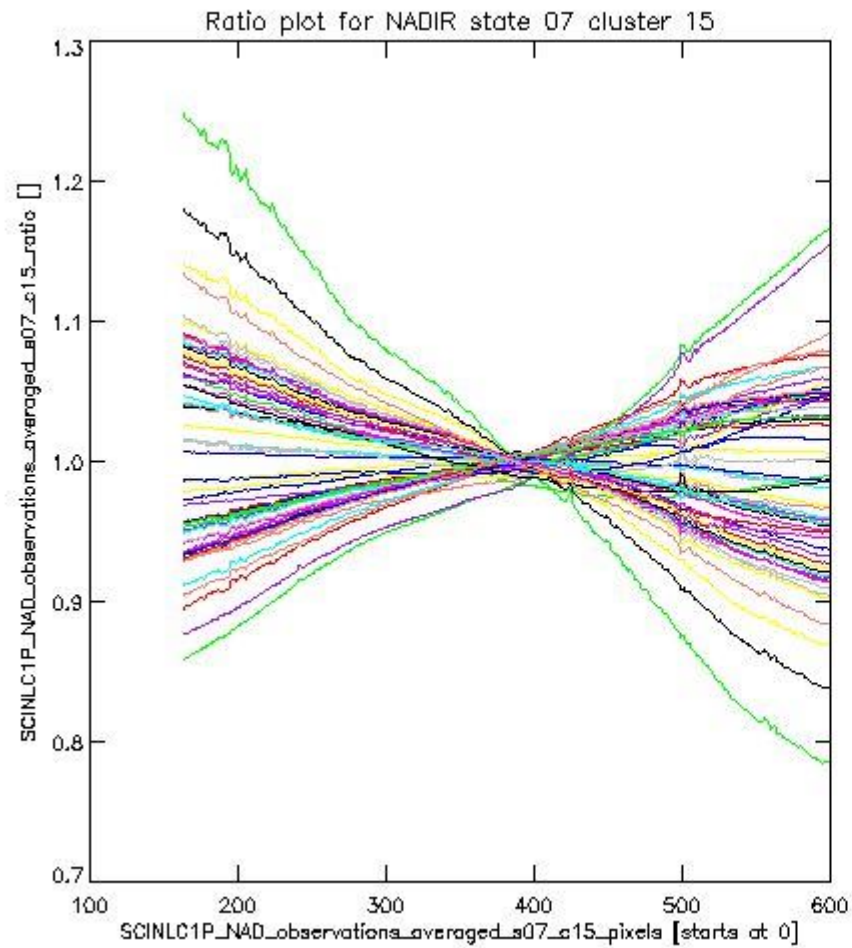
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_3.PNG

**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	28MAR2011 01:26:52.674
Start time of last sample	28MAR2011 19:58:57.284
Reference period start time	26FEB2011 01:30:45.354
Reference period stop time	27MAR2011 23:55:58.705
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



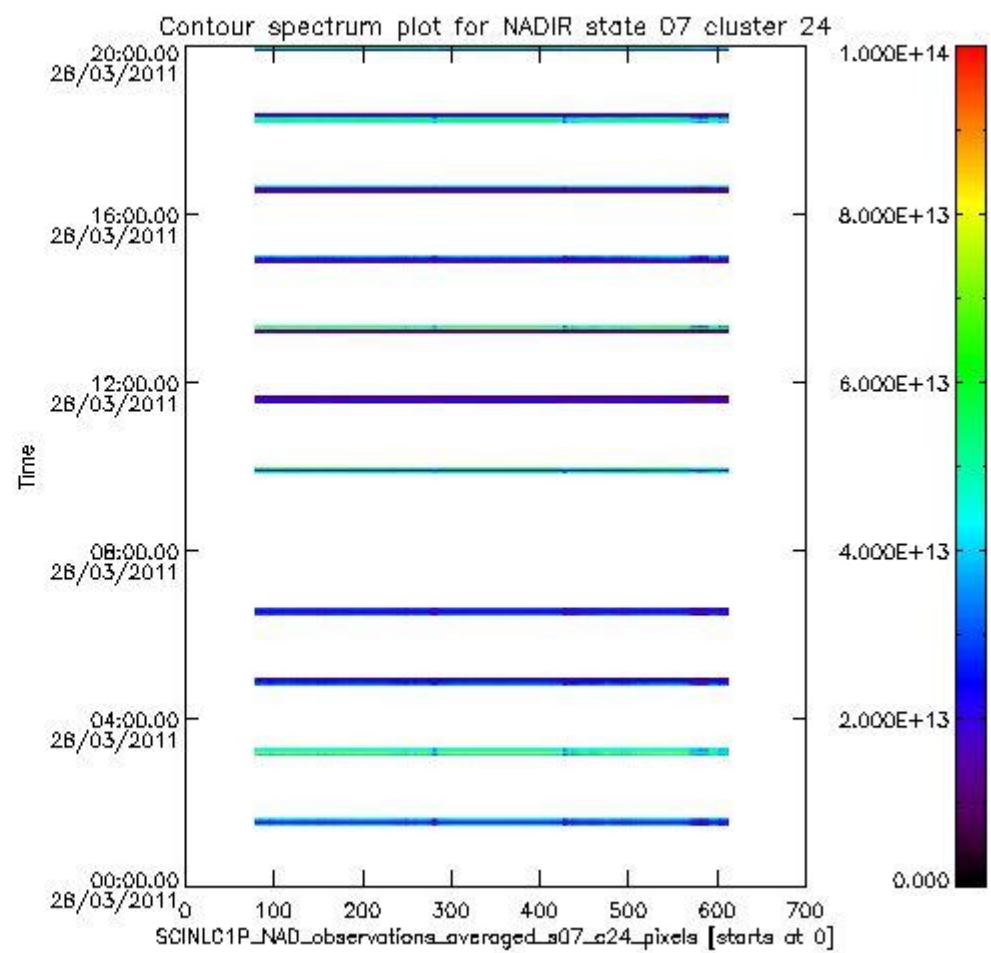
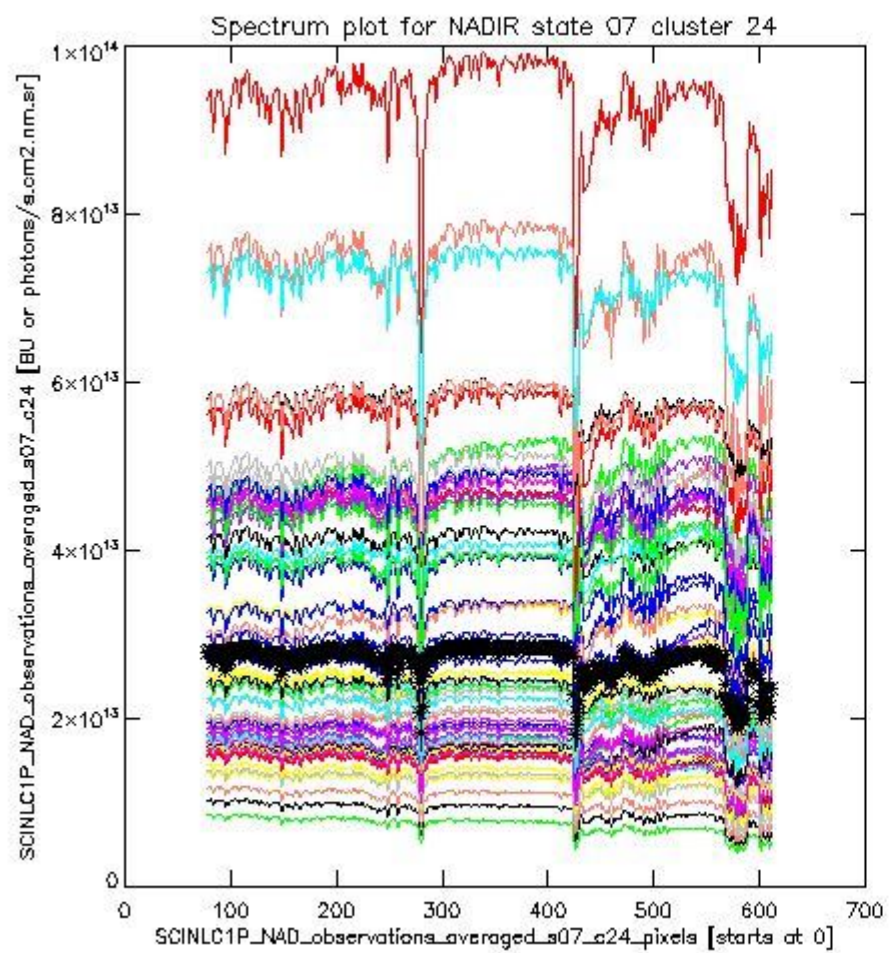
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_5.PNG

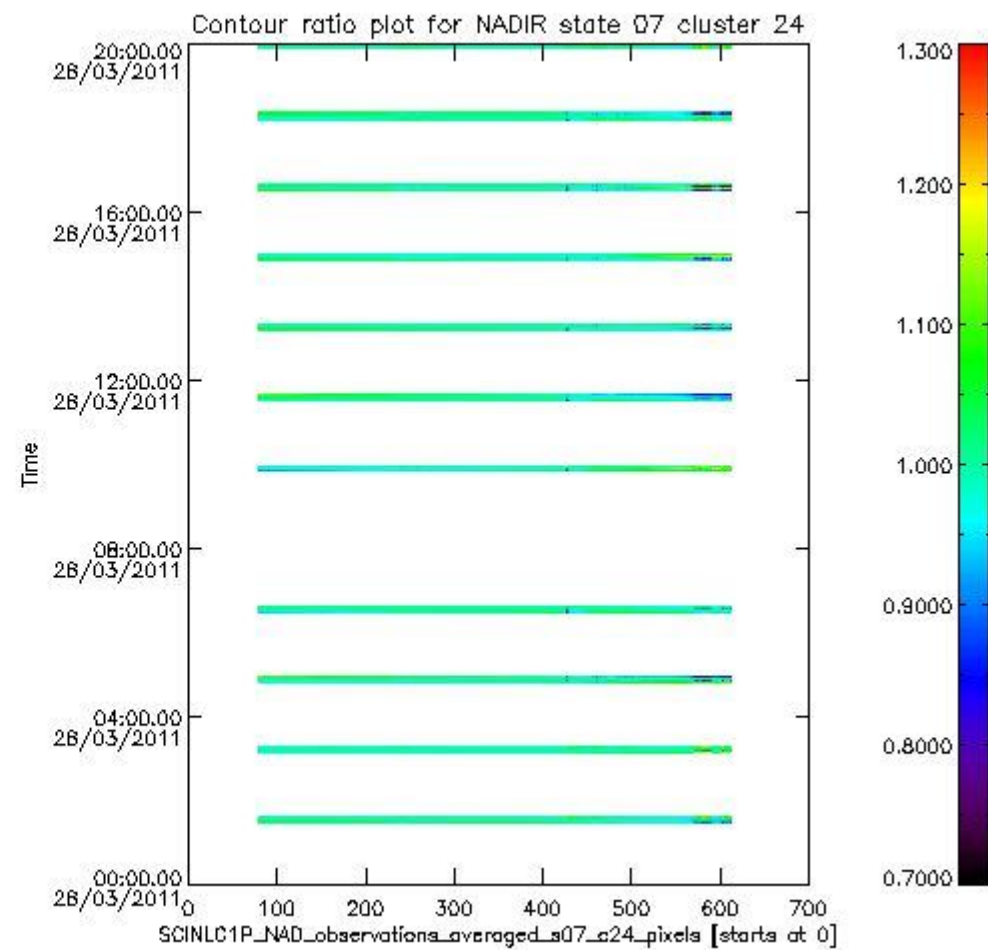
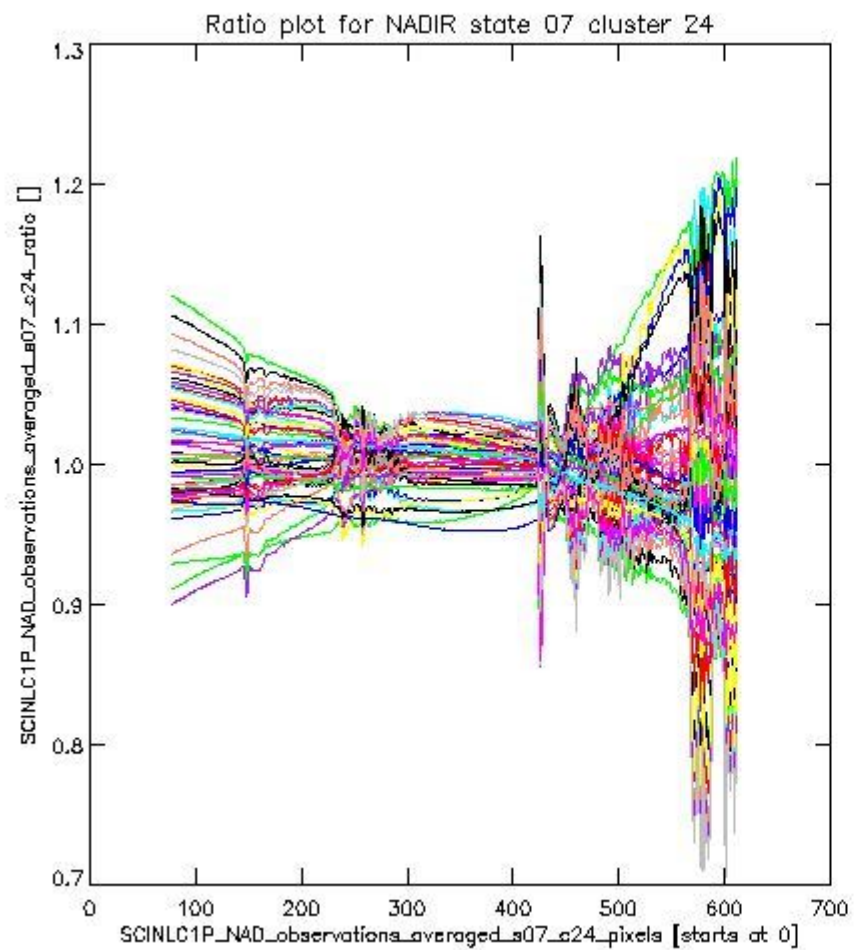
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	28MAR2011 01:26:52.674
Start time of last sample	28MAR2011 19:58:57.284
Reference period start time	26FEB2011 01:30:45.354
Reference period stop time	27MAR2011 23:55:58.705
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\_20110328\_6.PNG

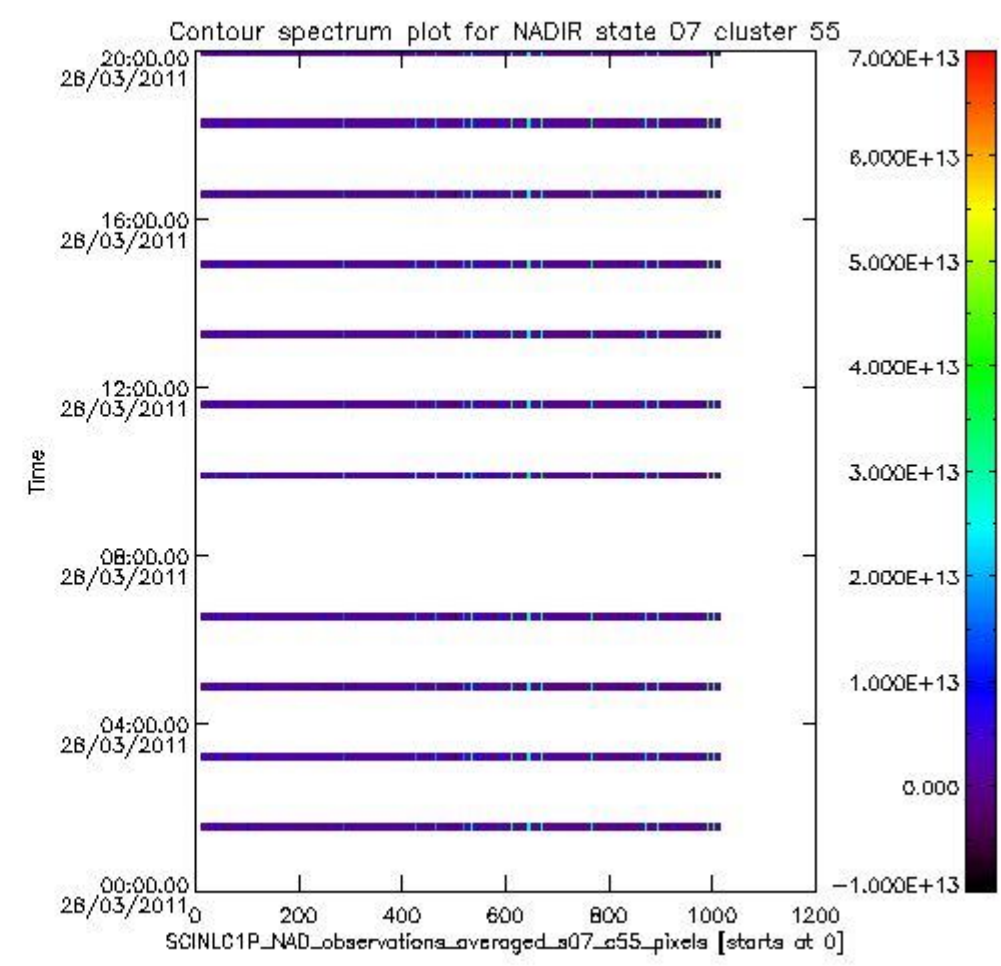
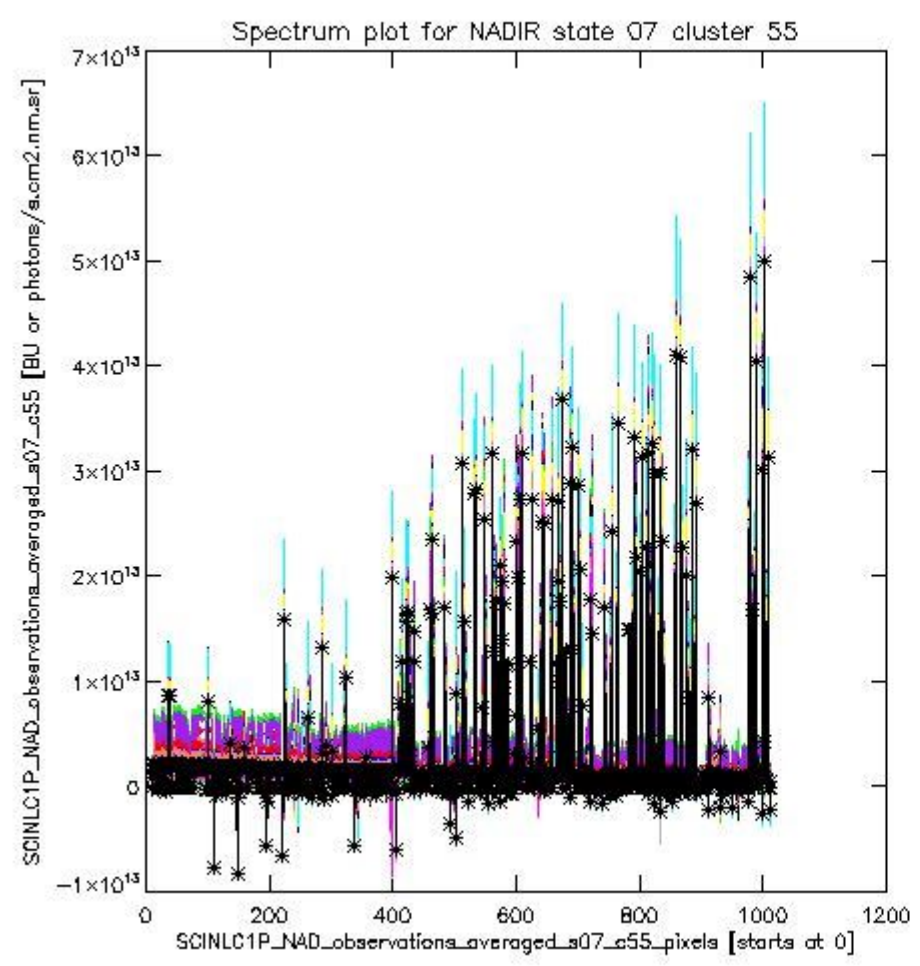




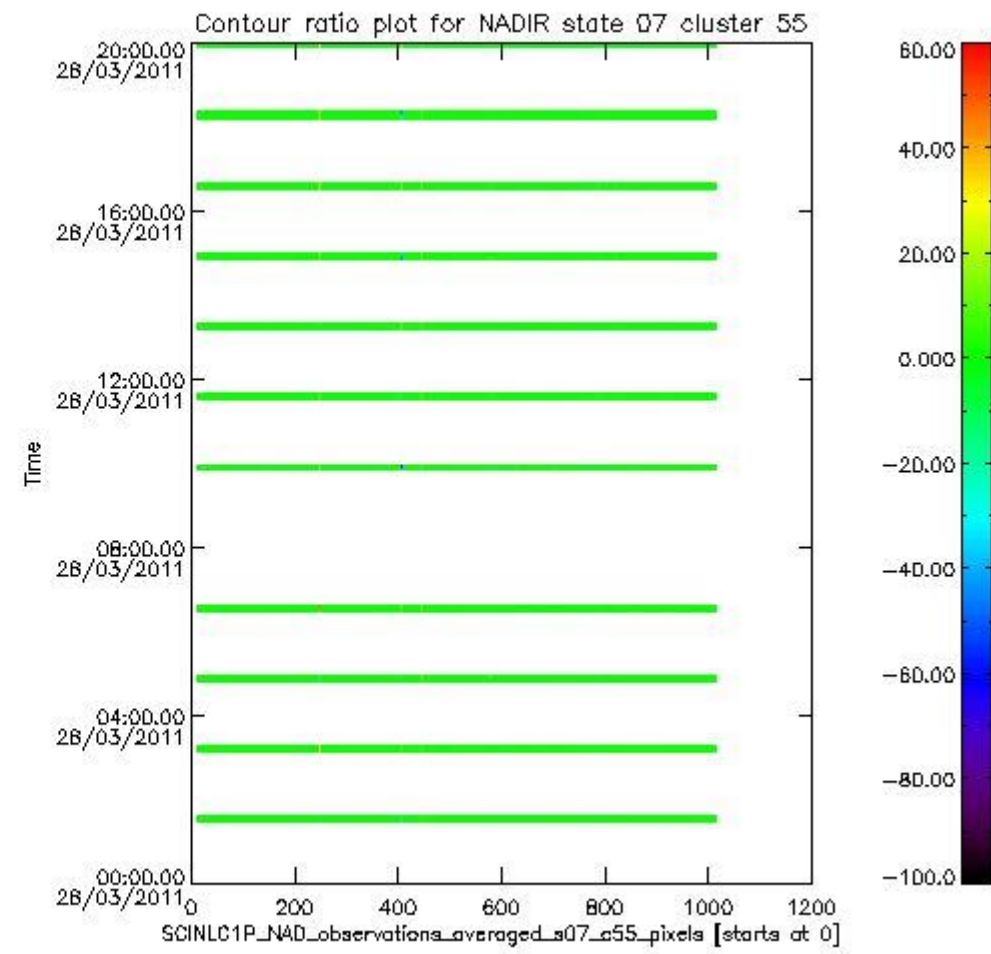
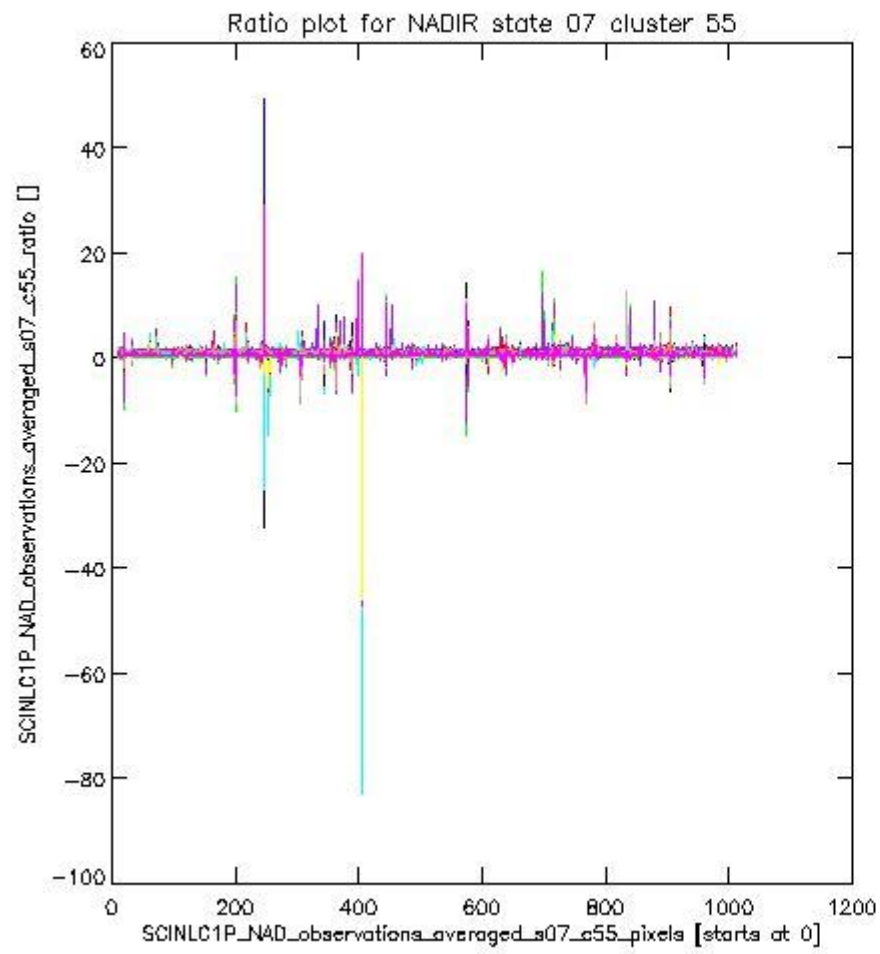
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_7.PNG

**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	28MAR2011 01:26:52.674
Start time of last sample	28MAR2011 19:58:57.284
Reference period start time	26FEB2011 01:30:45.354
Reference period stop time	27MAR2011 23:55:58.705
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



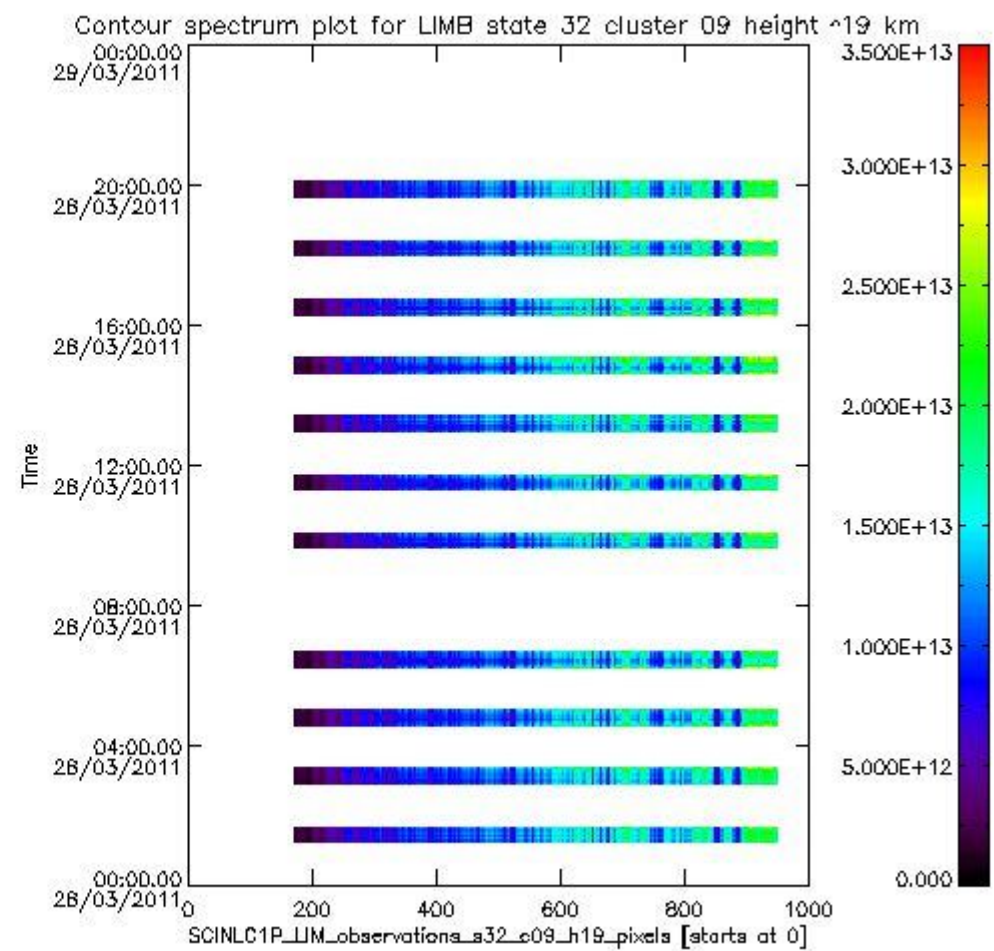
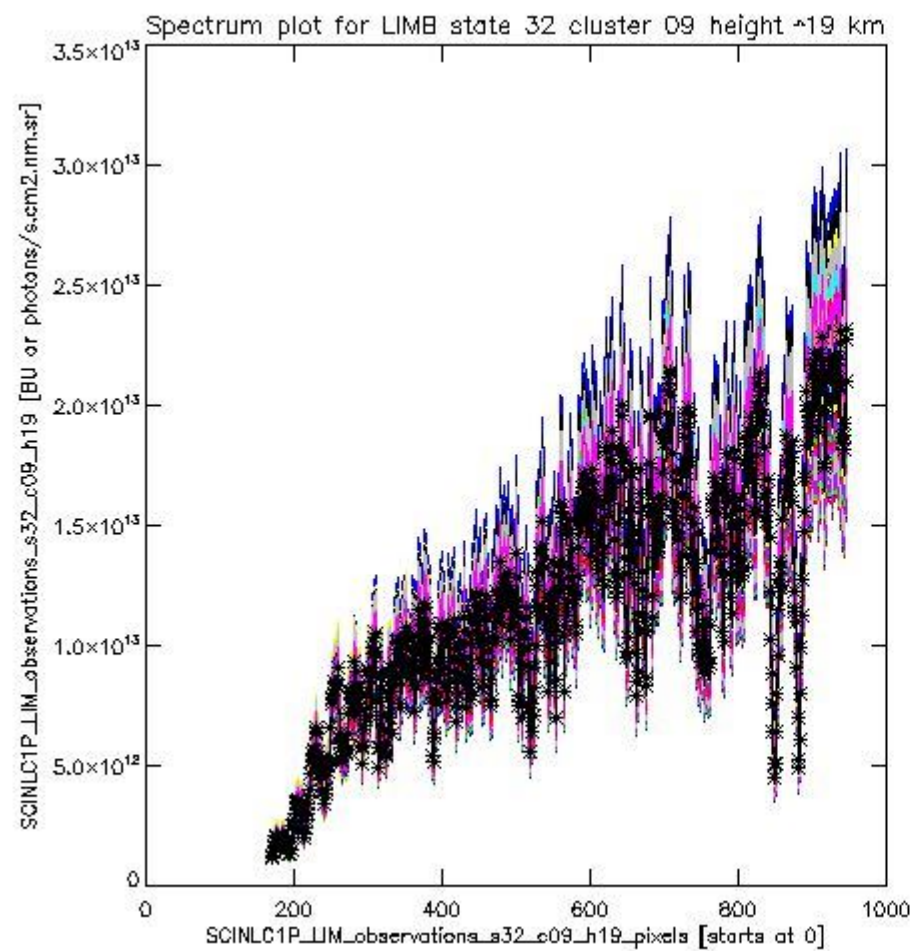
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_8.PNG



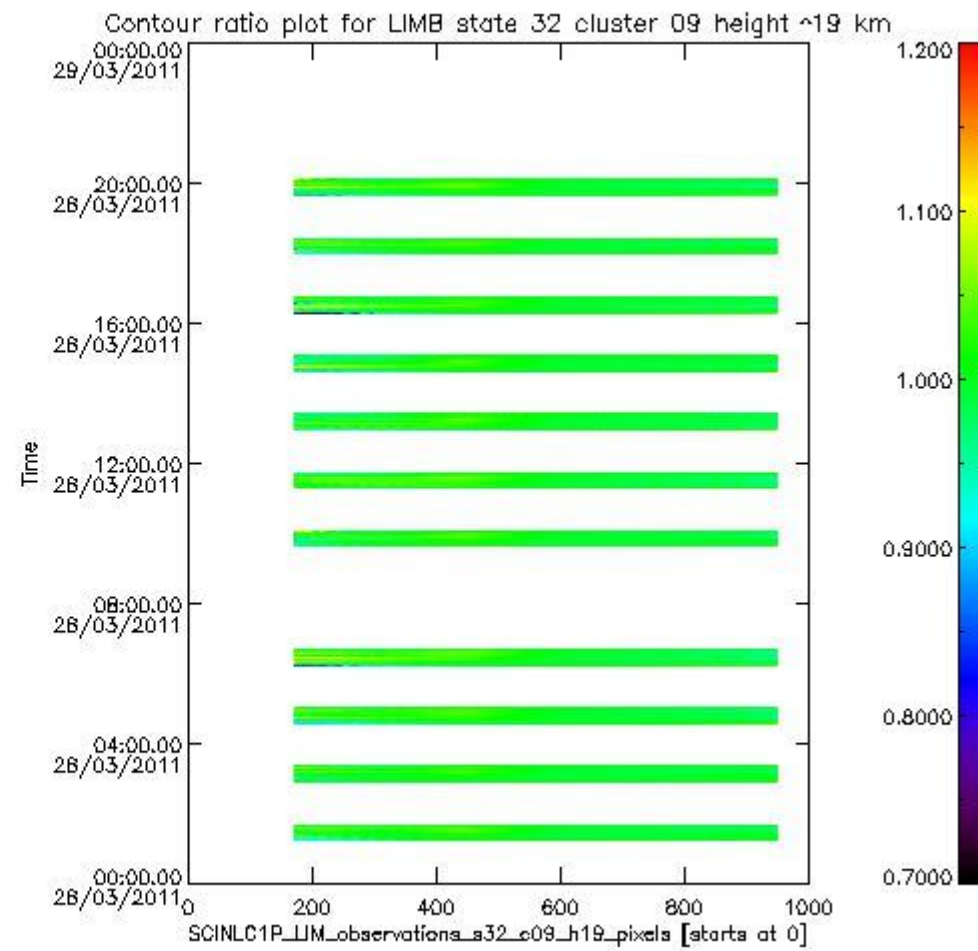
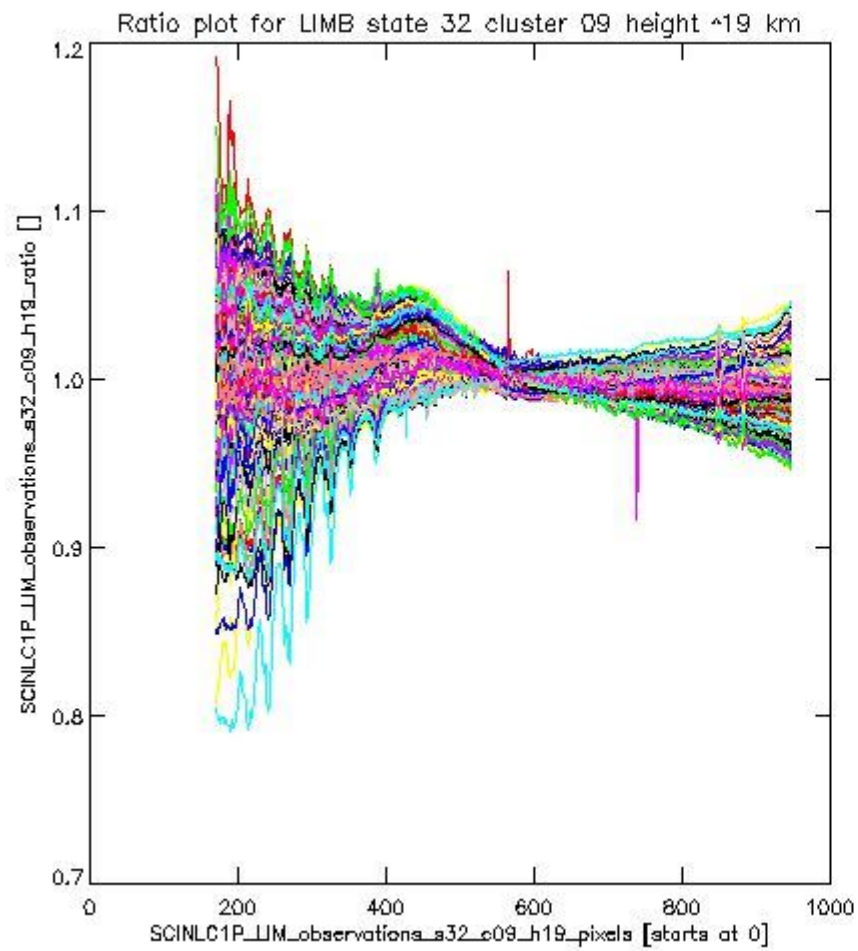
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_9.PNG

**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	28MAR2011 00:01:12.751
Start time of last sample	28MAR2011 20:04:11.323
Reference period start time	26FEB2011 00:00:45.607
Reference period stop time	27MAR2011 23:59:10.009
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



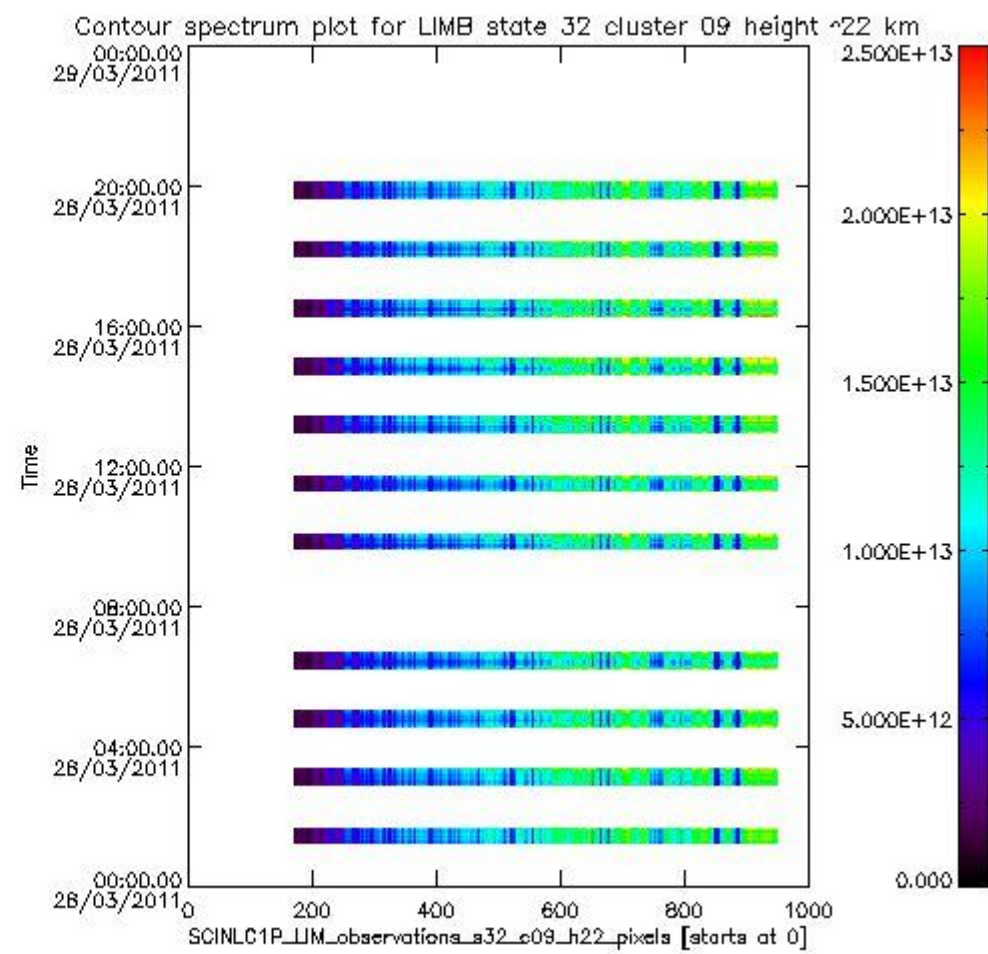
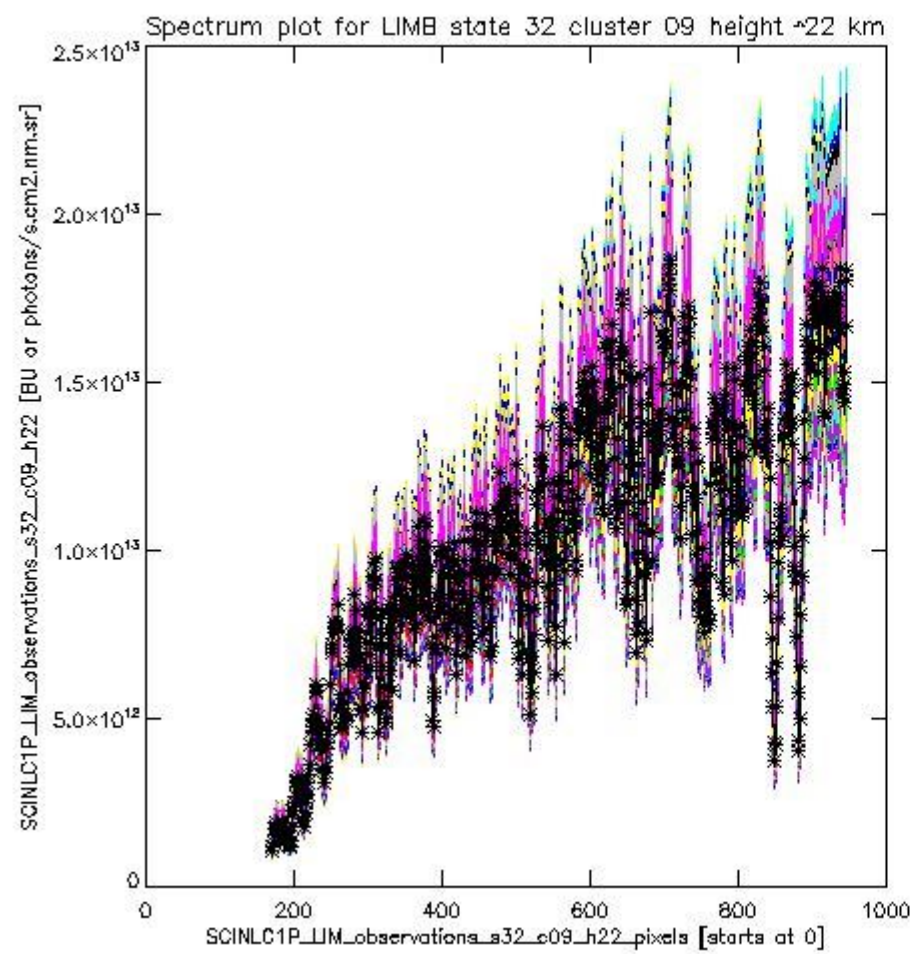
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_10.PNG



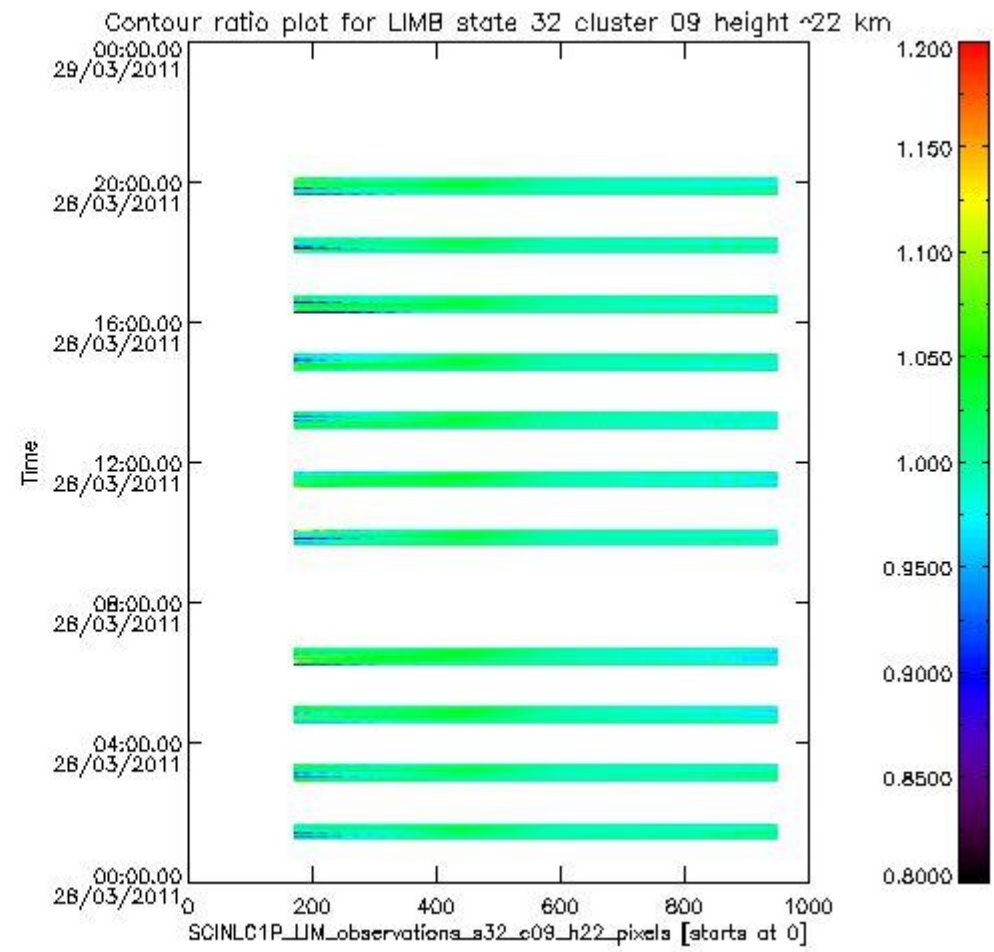
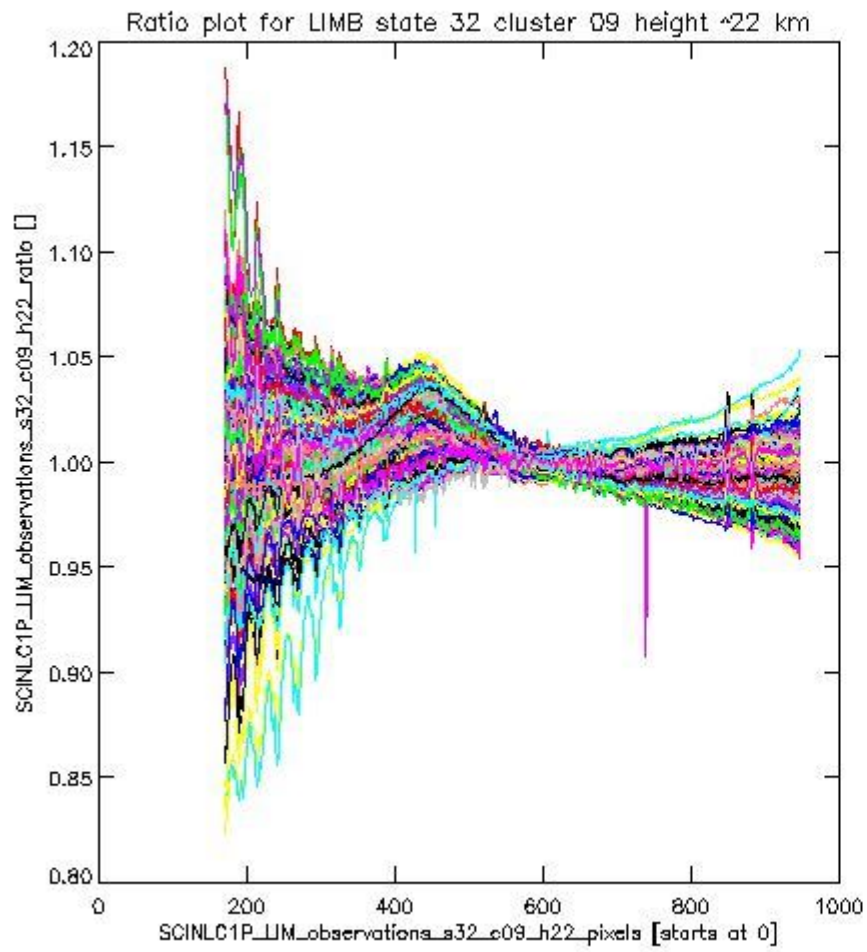
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_11.PNG

**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	28MAR2011 00:01:12.751
Start time of last sample	28MAR2011 20:04:11.323
Reference period start time	26FEB2011 00:00:45.607
Reference period stop time	27MAR2011 23:59:10.009
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



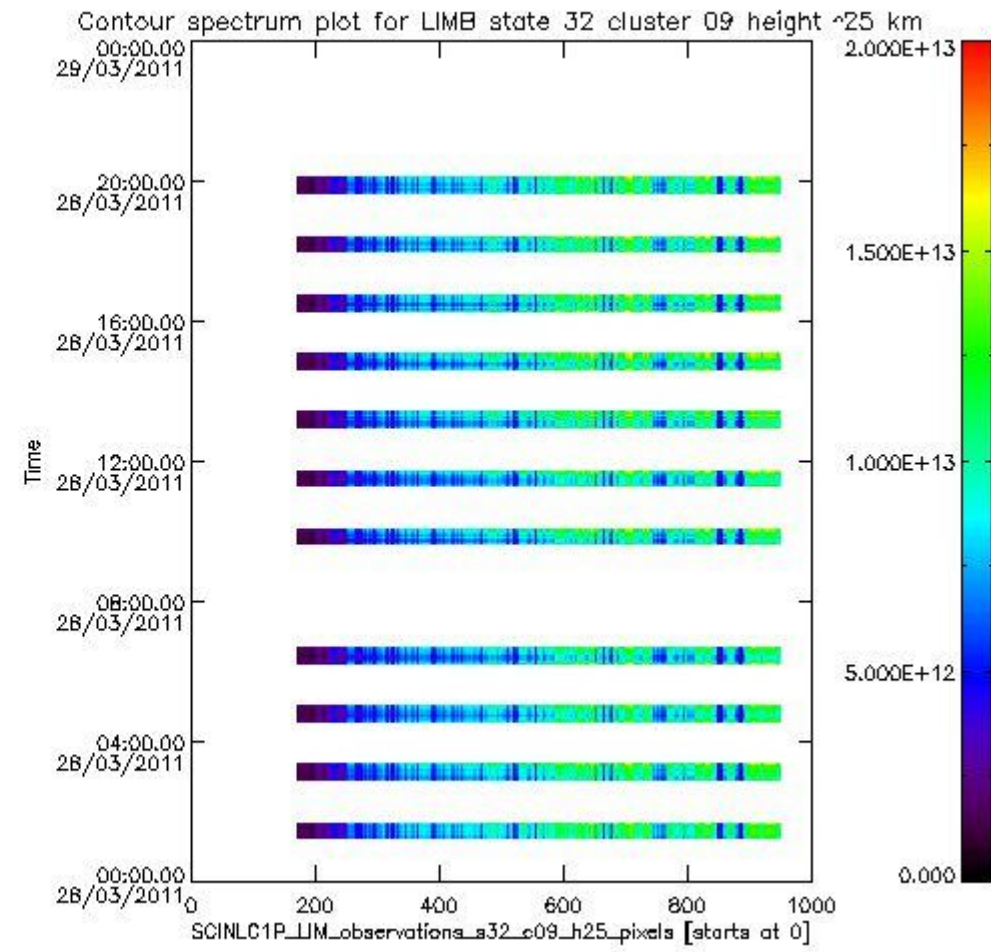
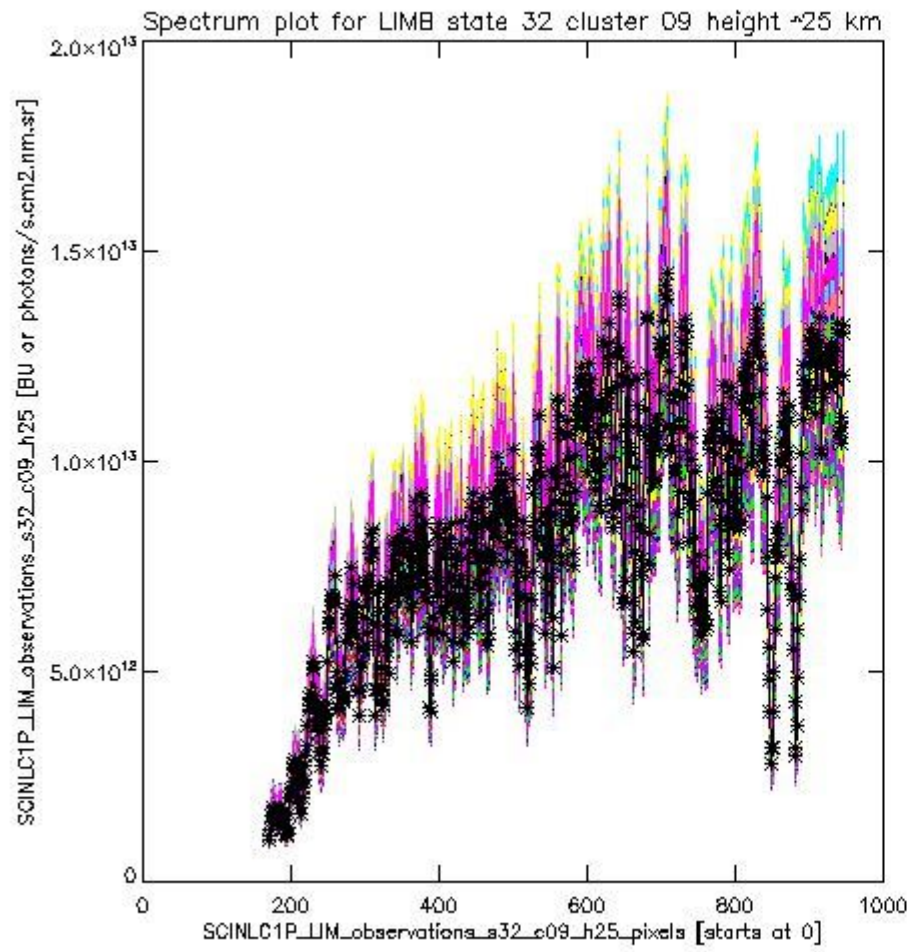
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_13.PNG

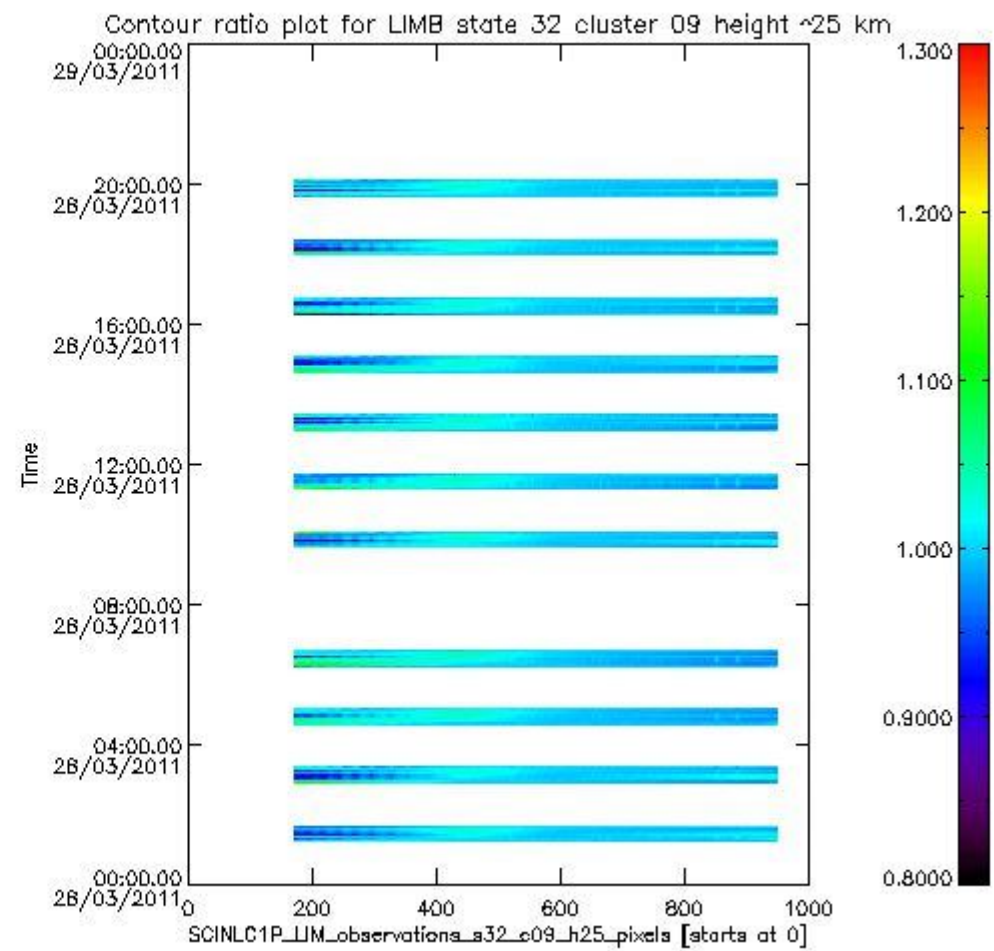
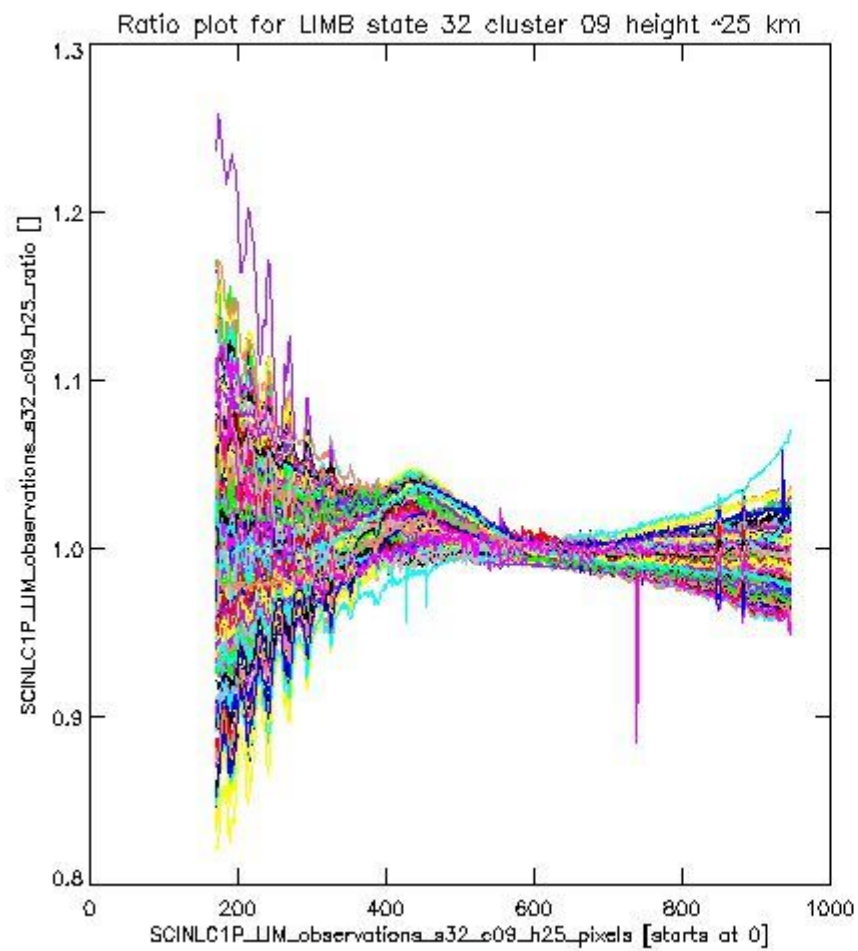
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	28MAR2011 00:01:12.751
Start time of last sample	28MAR2011 20:04:11.323
Reference period start time	26FEB2011 00:00:45.607
Reference period stop time	27MAR2011 23:59:10.009
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\_20110328\_14.PNG

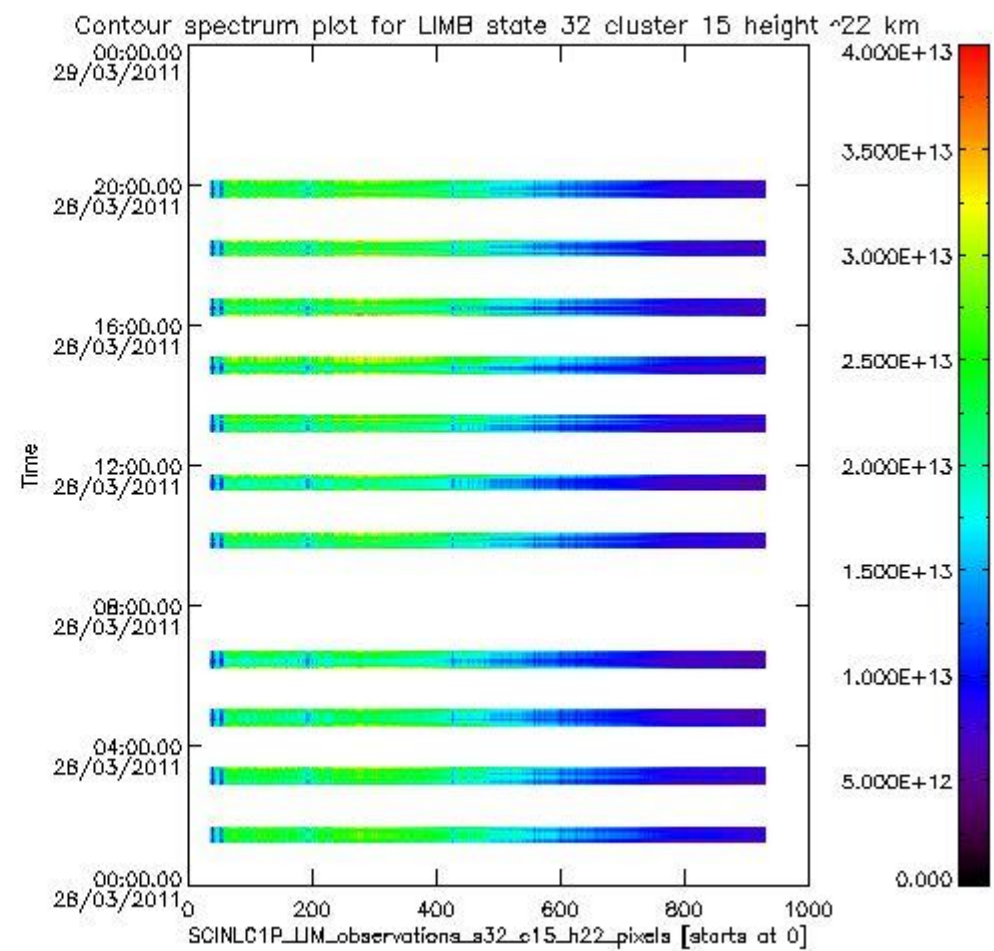
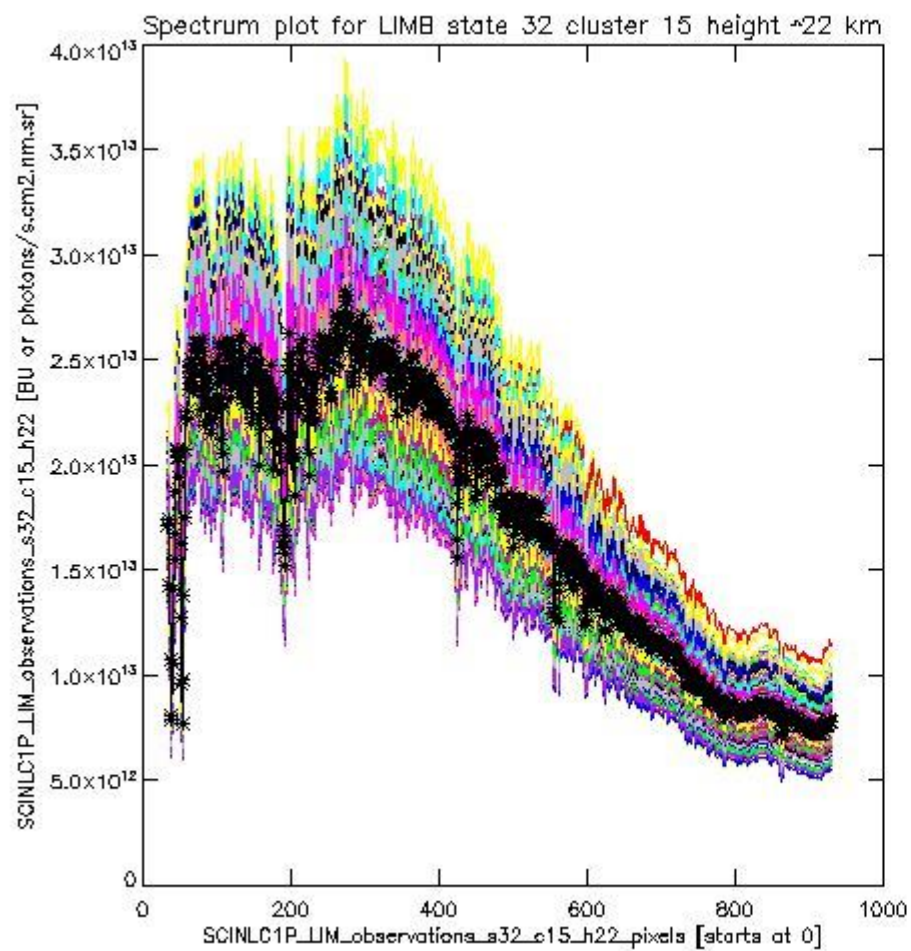




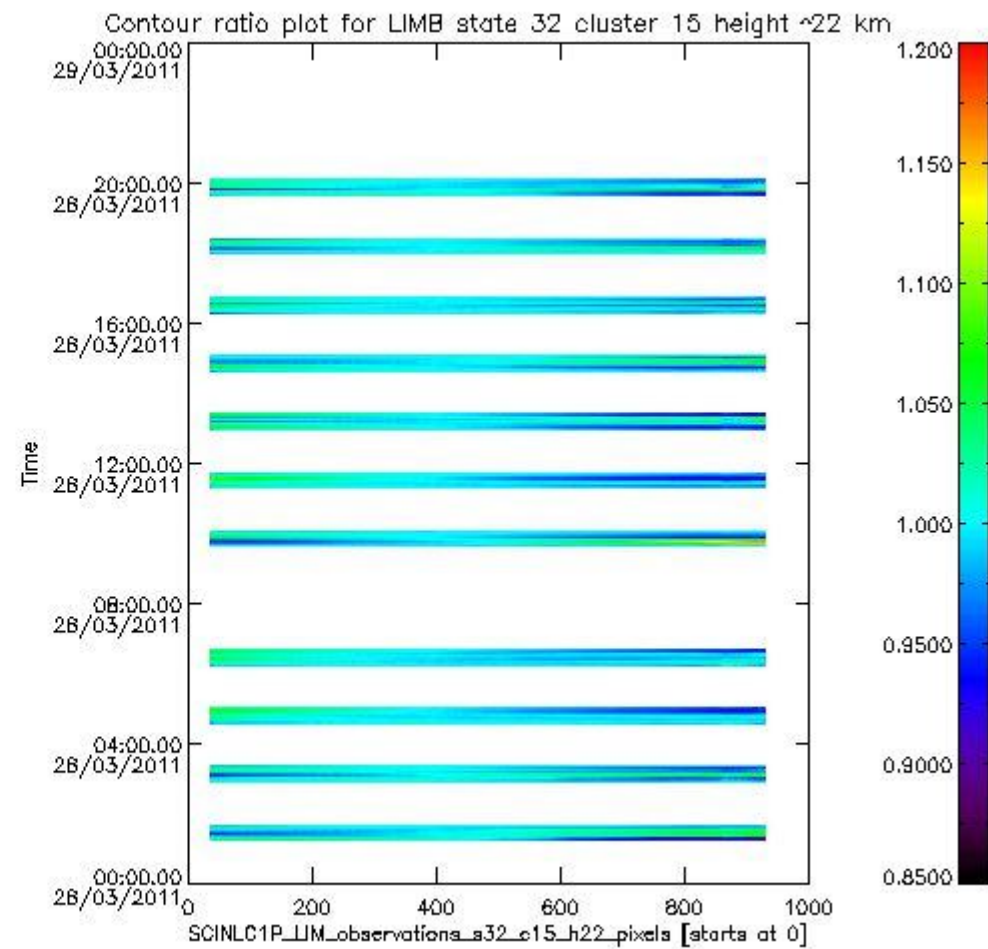
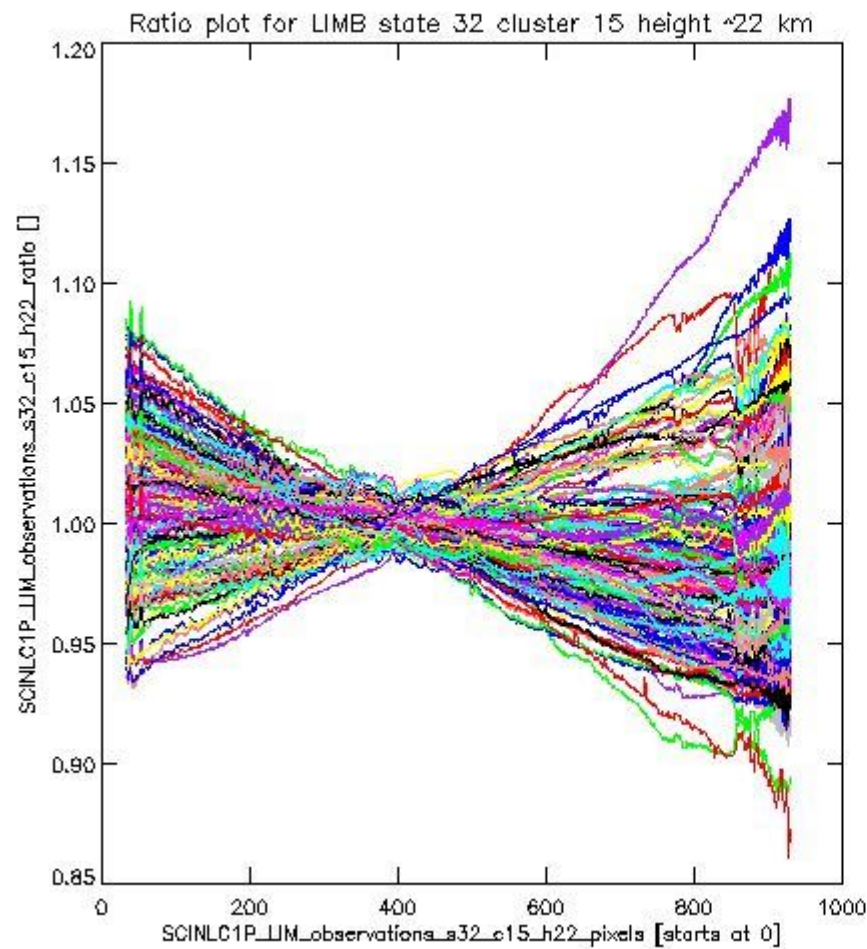
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_15.PNG

**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	28MAR2011 00:01:12.751
Start time of last sample	28MAR2011 20:04:11.323
Reference period start time	26FEB2011 00:00:45.607
Reference period stop time	27MAR2011 23:59:10.009
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



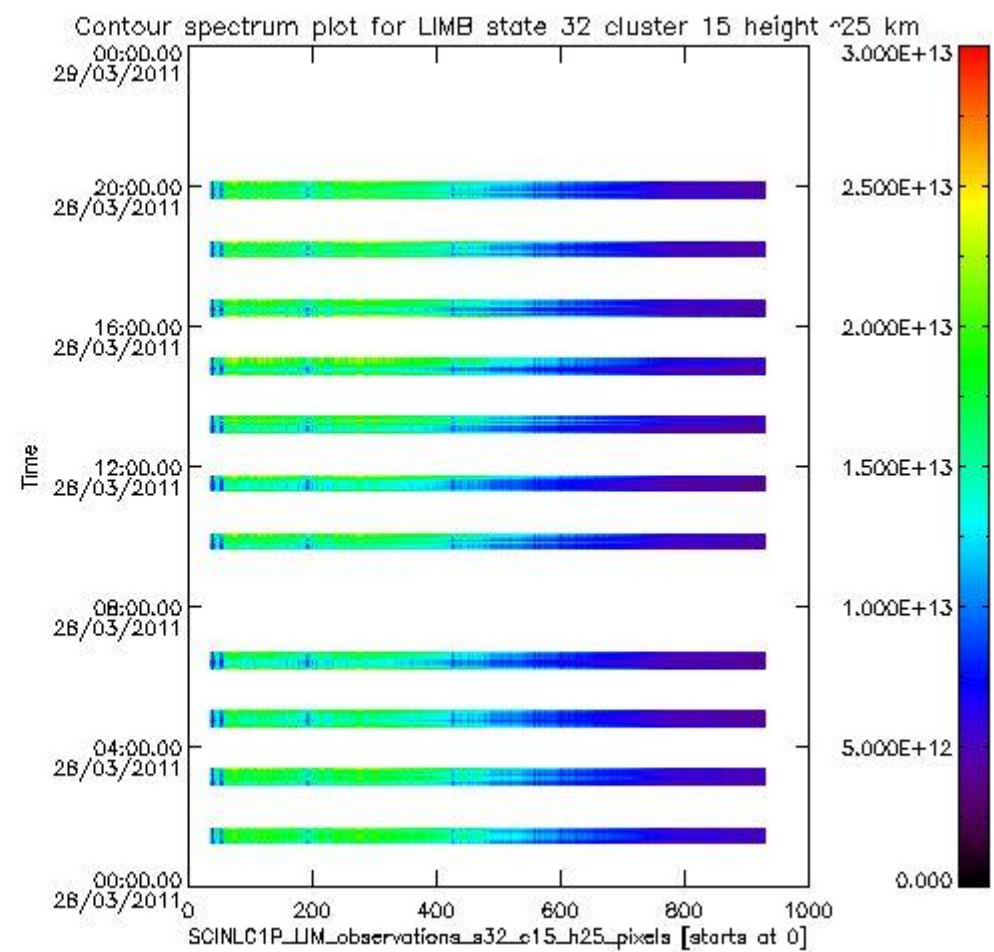
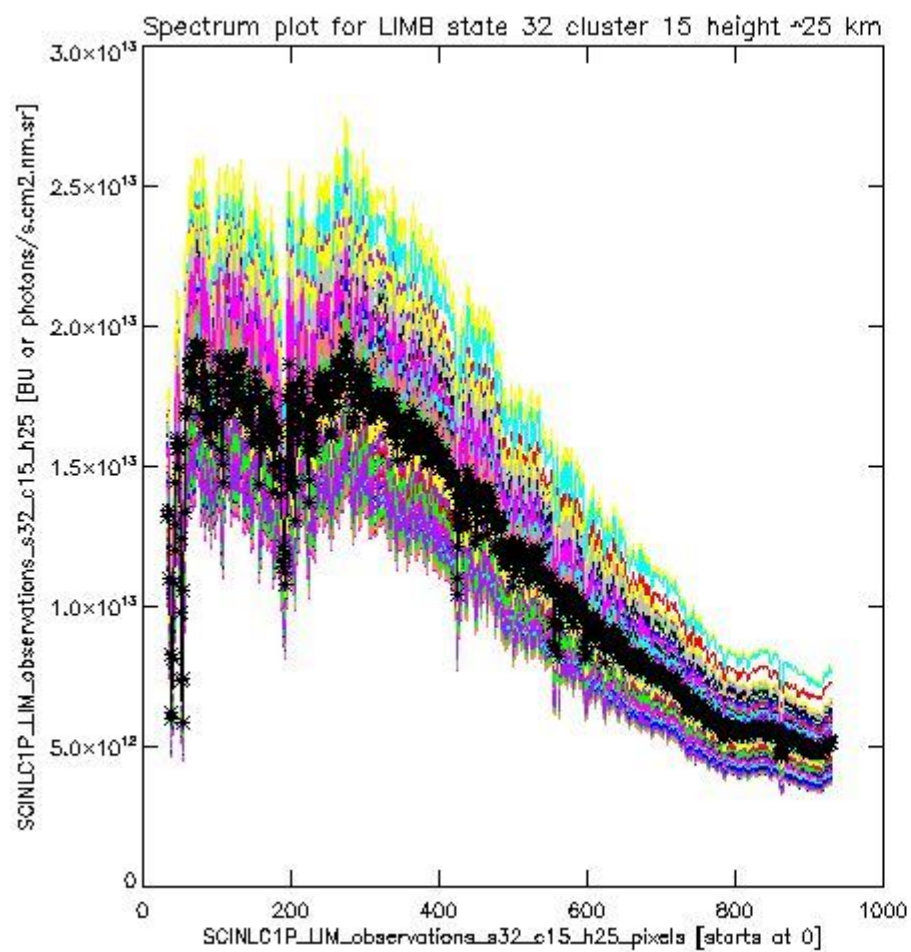
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_16.PNG



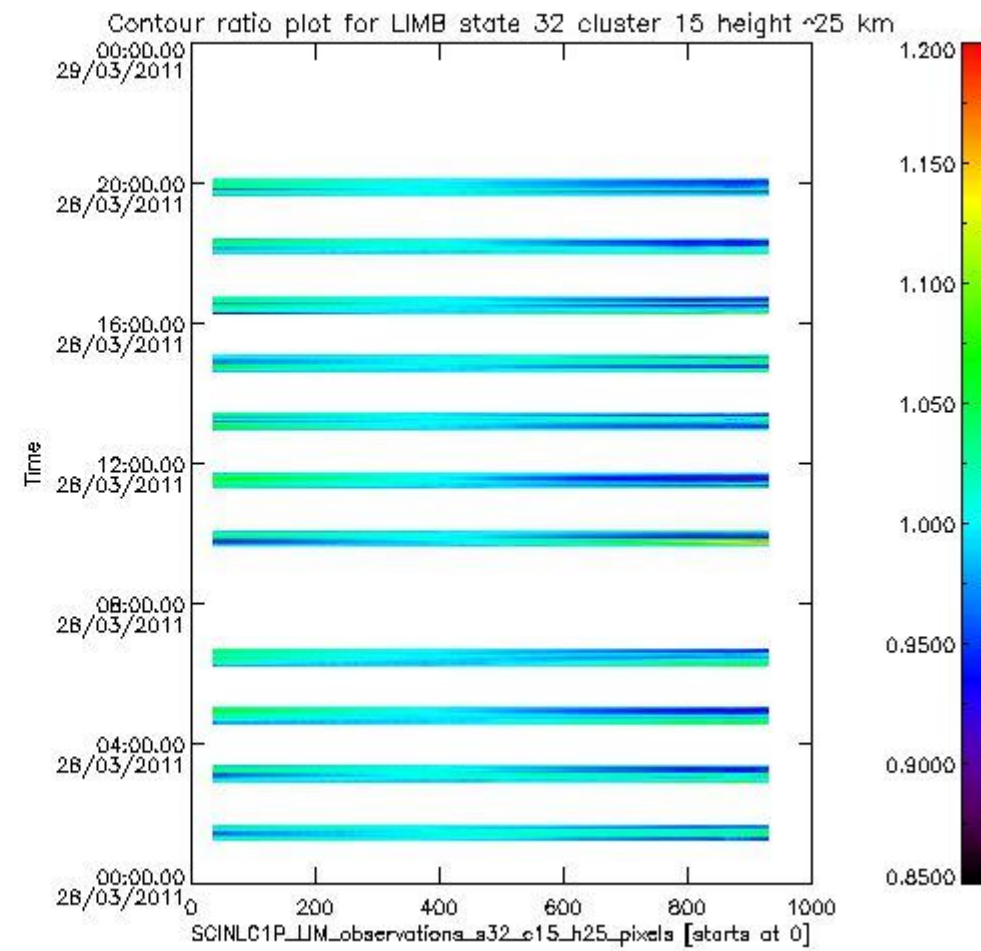
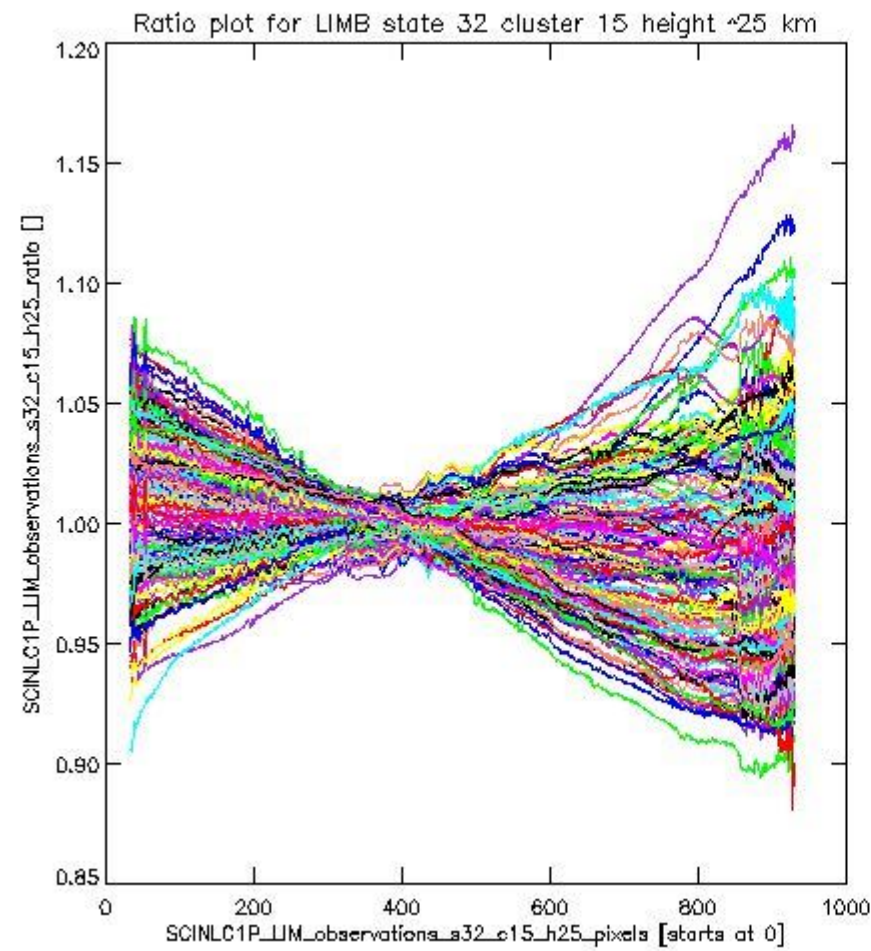
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_17.PNG

**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	28MAR2011 00:01:12.751
Start time of last sample	28MAR2011 20:04:11.323
Reference period start time	26FEB2011 00:00:45.607
Reference period stop time	27MAR2011 23:59:10.009
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



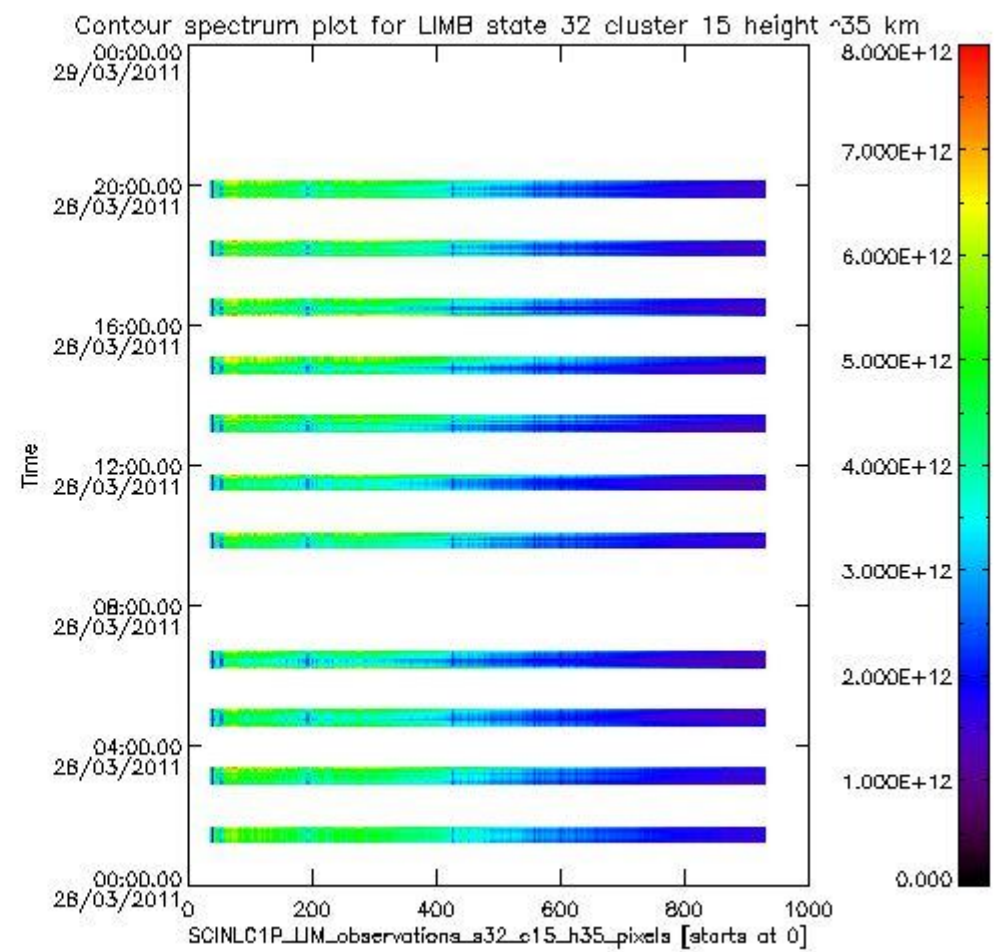
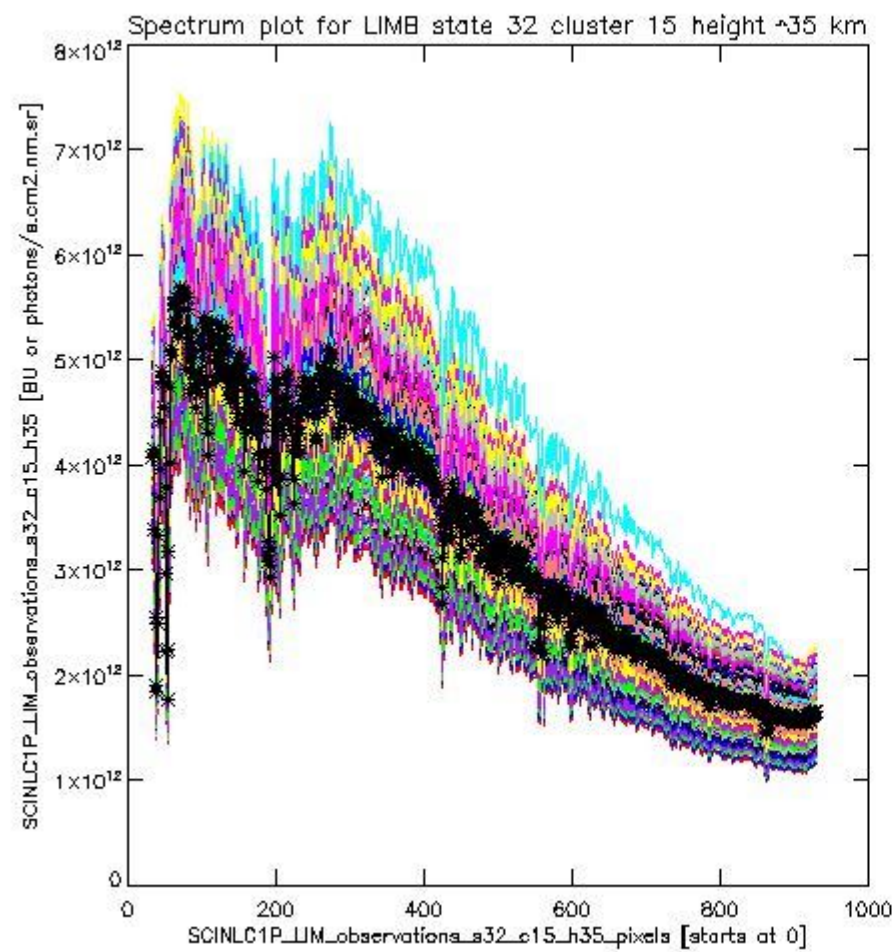
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_18.PNG



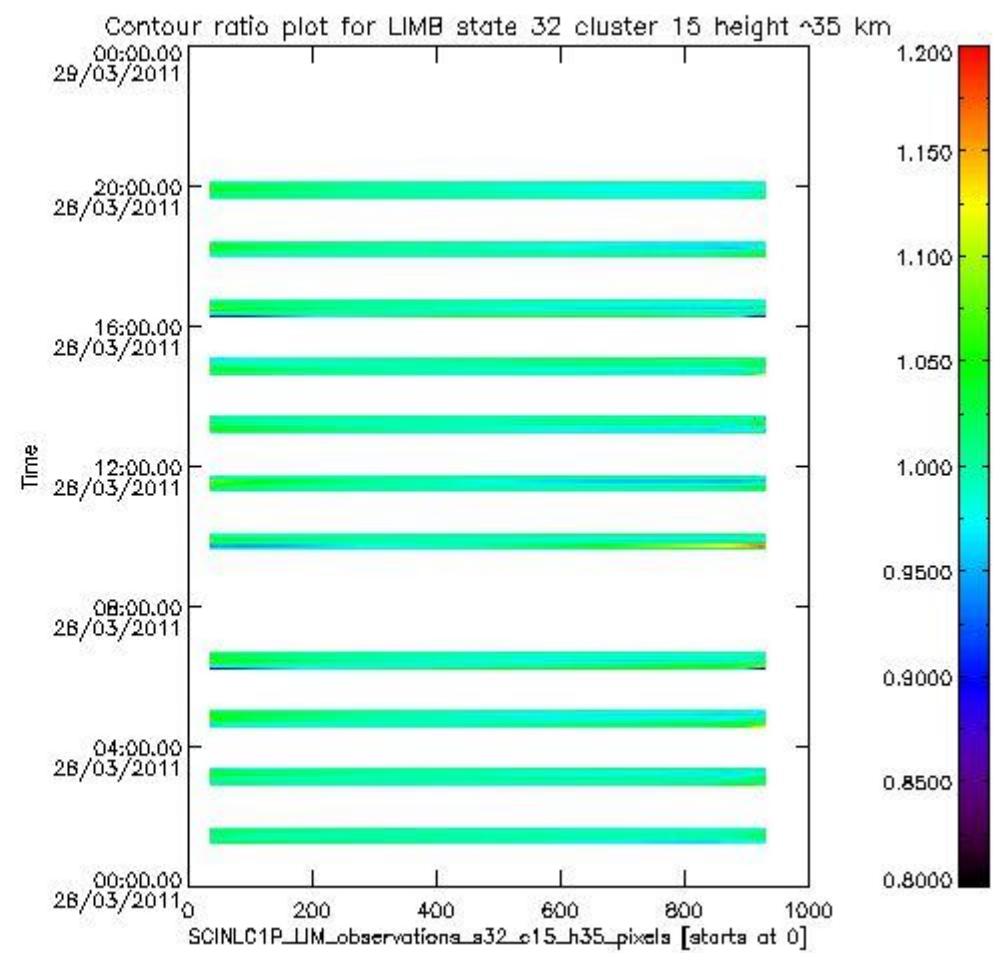
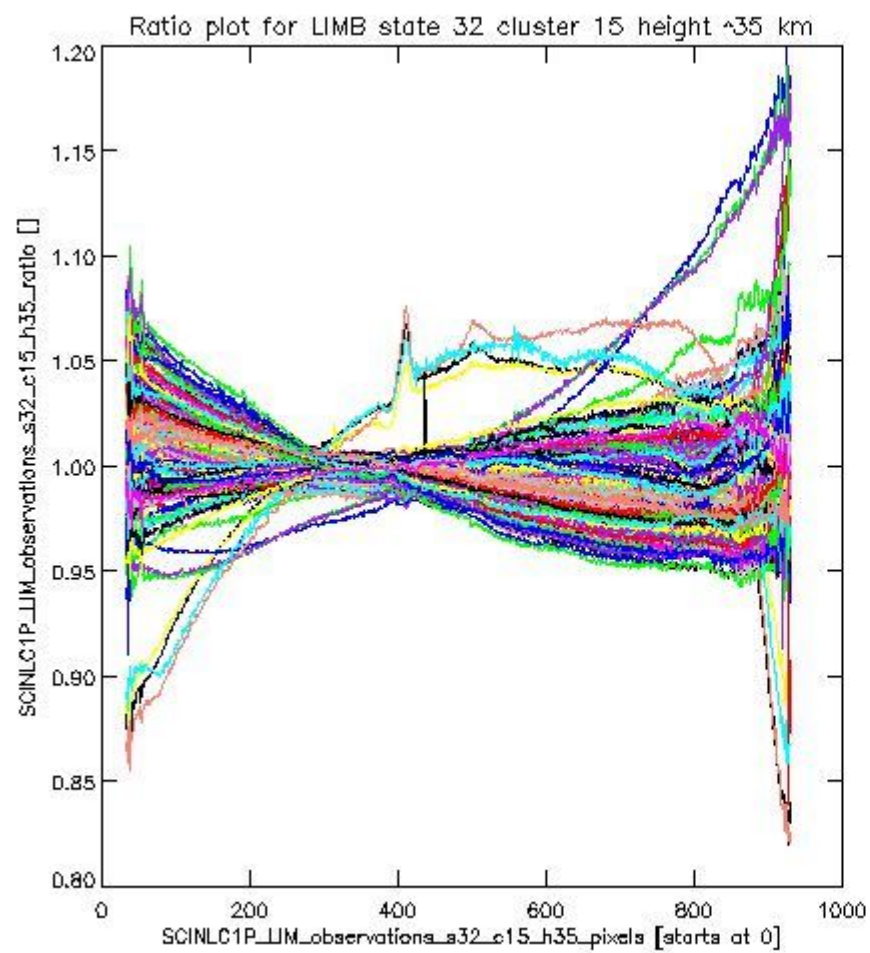
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_19.PNG

**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	28MAR2011 00:01:12.751
Start time of last sample	28MAR2011 20:04:11.323
Reference period start time	26FEB2011 01:15:31.979
Reference period stop time	27MAR2011 23:59:10.009
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\_20110328\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110328\_21.PNG

