

# 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	17APR2011 09:58:01
Data source version	SCIA/7.04-U
Processing scope for products	06APR2011 00:00:00 to 07APR2011 00:00:00
Start time of first product within scope	05APR2011 22:43:47
Stop time of last product within scope	07APR2011 00:57:40
Total number of level 1 products	16
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	06APR2011 00:57:12.355	06APR2011 22:49:14.091
1	NADIR	07	09	N/A	06APR2011 00:57:12.355	06APR2011 22:49:14.091
2	NADIR	07	15	N/A	06APR2011 00:57:12.355	06APR2011 22:49:14.091
3	NADIR	07	24	N/A	06APR2011 00:57:12.355	06APR2011 22:49:14.091
4	NADIR	07	55	N/A	06APR2011 00:57:12.355	06APR2011 22:49:14.091
5	LIMB	32	09	~19 km	06APR2011 00:41:58.976	06APR2011 22:52:25.388
6	LIMB	32	09	~22 km	06APR2011 00:41:58.976	06APR2011 22:52:25.388
7	LIMB	32	09	~25 km	06APR2011 00:41:58.976	06APR2011 22:52:25.388
8	LIMB	32	15	~22 km	06APR2011 00:41:58.976	06APR2011 22:52:25.388
9	LIMB	32	15	~25 km	06APR2011 00:41:58.976	06APR2011 22:52:25.388
10	LIMB	32	15	~35 km	06APR2011 00:41:58.976	06APR2011 22:52:25.388

#### 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_1CUDPA20110405_223513_000060173101_00145_47573_6011.N1</a>	05APR2011 22:43:47	05APR2011 23:54:02	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110406_001534_000060013101_00146_47574_6012.N1</a>	06APR2011 00:24:01	06APR2011 01:34:30	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110406_015540_000060173101_00147_47575_6013.N1</a>	06APR2011 02:04:14	06APR2011 03:14:29	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110406_033601_000060023101_00148_47576_6014.N1</a>	06APR2011 03:44:28	06APR2011 04:54:57	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110406_051607_000060173101_00149_47577_6015.N1</a>	06APR2011 05:24:42	06APR2011 06:34:56	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110406_065628_000060013101_00150_47578_6019.N1</a>	06APR2011 07:04:55	06APR2011 08:15:24	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110406_083634_000060173101_00151_47579_6020.N1	06APR2011 08:45:09	06APR2011 09:55:23	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110406_101655_000060013101_00152_47580_6018.N1	06APR2011 10:25:22	06APR2011 11:35:51	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110406_115700_000060173101_00153_47581_6022.N1	06APR2011 12:05:36	06APR2011 13:15:50	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110406_133722_000060013101_00154_47582_0045.N1	06APR2011 13:45:49	06APR2011 14:56:18	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110406_151727_000060173101_00155_47583_0046.N1	06APR2011 15:26:03	06APR2011 16:36:17	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110406_165749_000060023101_00156_47584_0047.N1	06APR2011 17:06:16	06APR2011 18:17:00	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110406_183754_000060173101_00157_47585_0048.N1	06APR2011 18:46:30	06APR2011 19:56:59	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110406_201816_000060013101_00158_47586_0049.N1	06APR2011 20:26:44	06APR2011 21:37:13	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110406_215821_000060173101_00159_47587_0050.N1	06APR2011 22:06:57	06APR2011 23:17:12	0	35	31	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110406_233843_000060013101_00160_47588_0051.N1	06APR2011 23:47:11	07APR2011 00:57:40	0	36	30	0	0	1	0	0	

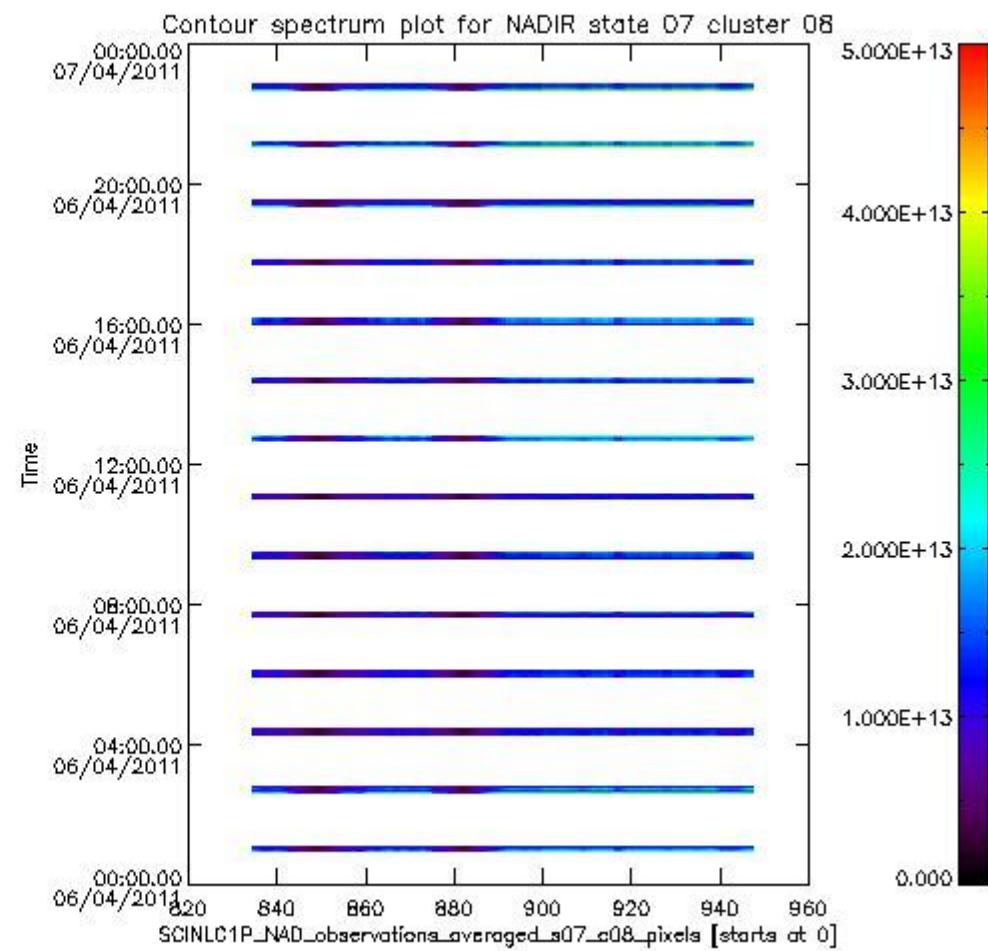
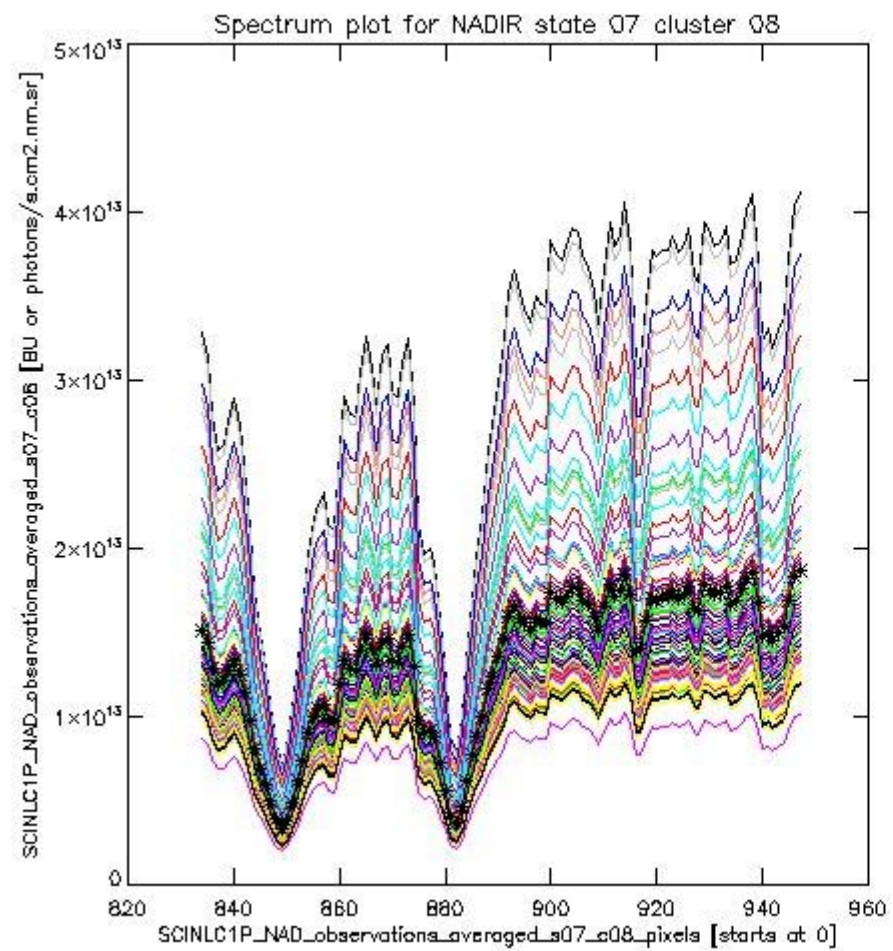
## 1.2 Source packet monitoring

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:

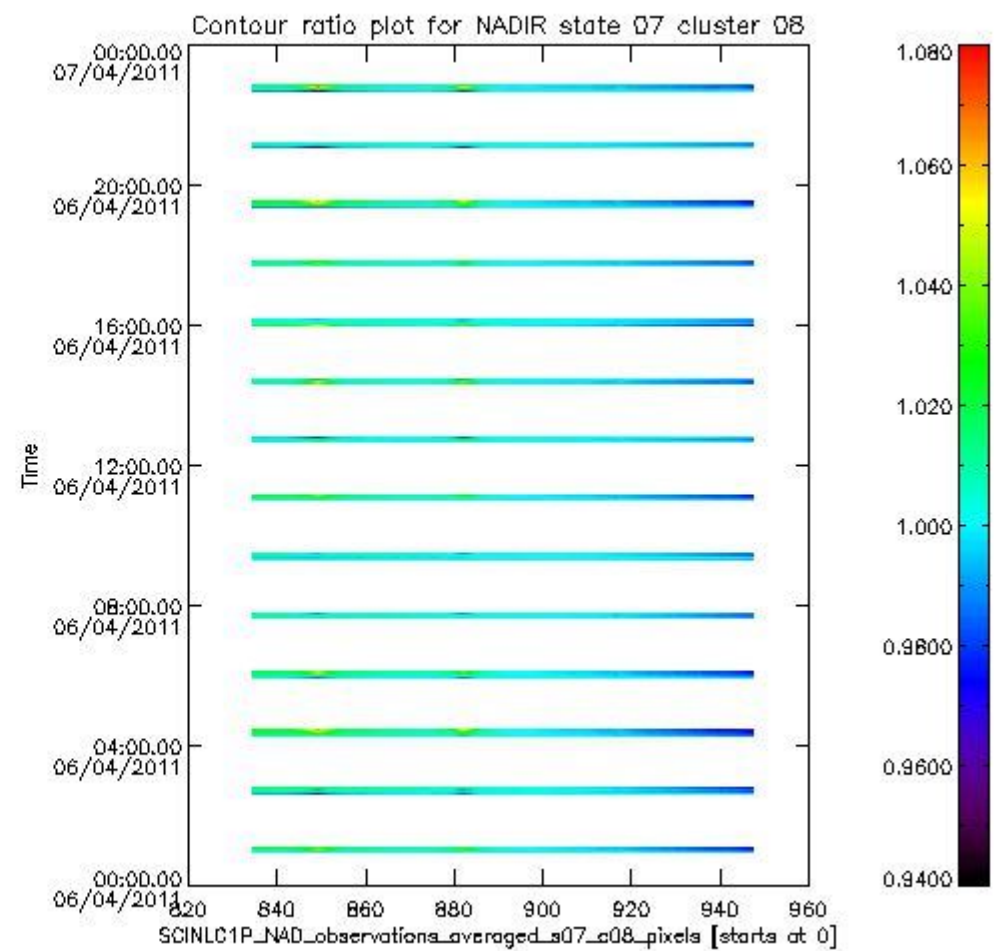
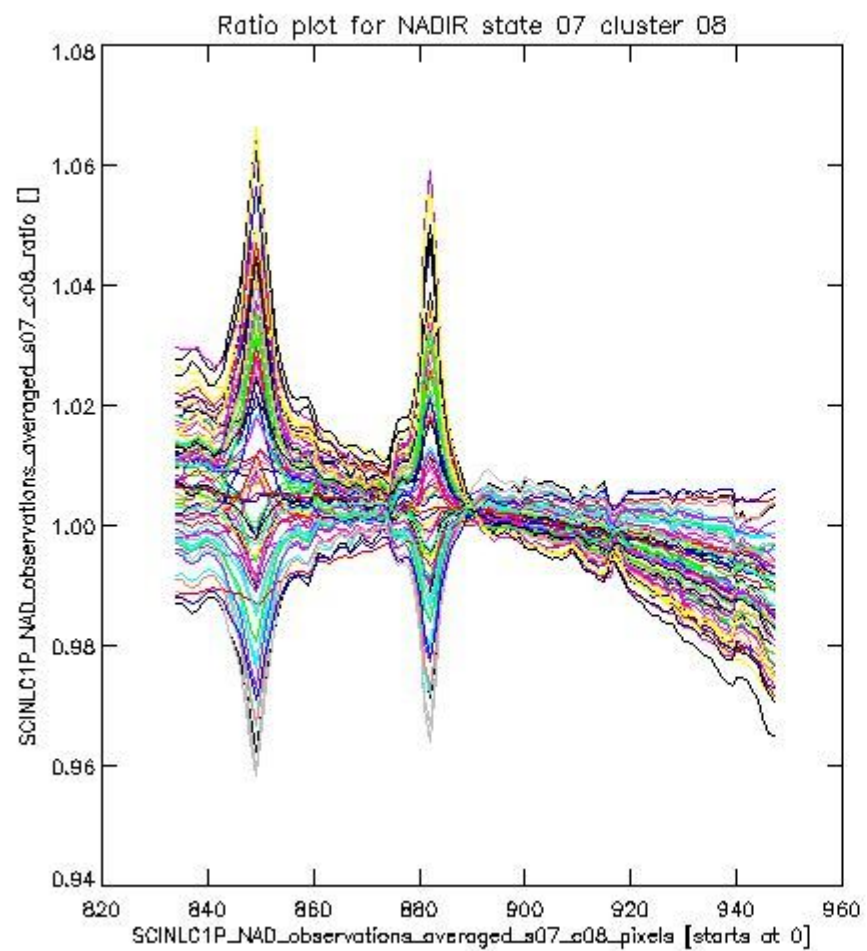
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	06APR2011 00:57:12.355
Start time of last sample	06APR2011 22:49:14.091
Reference period start time	07MAR2011 00:58:41.973
Reference period stop time	05APR2011 23:26:03.979
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



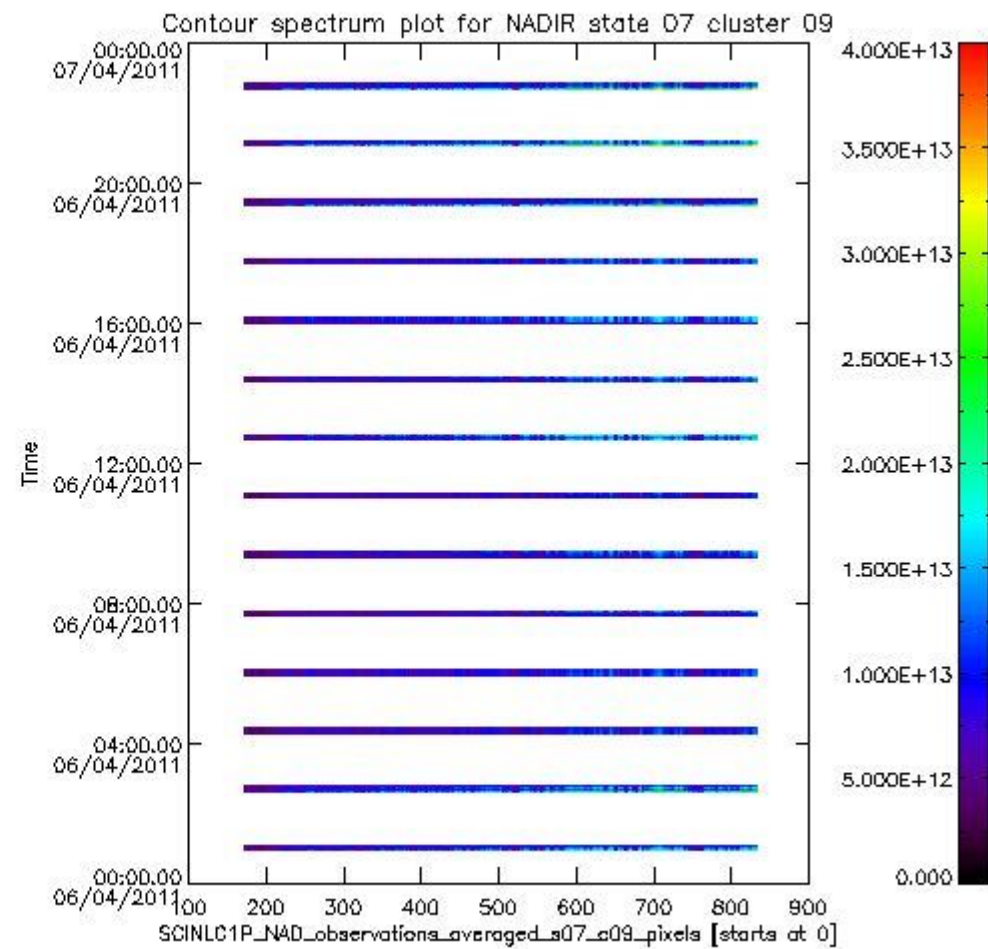
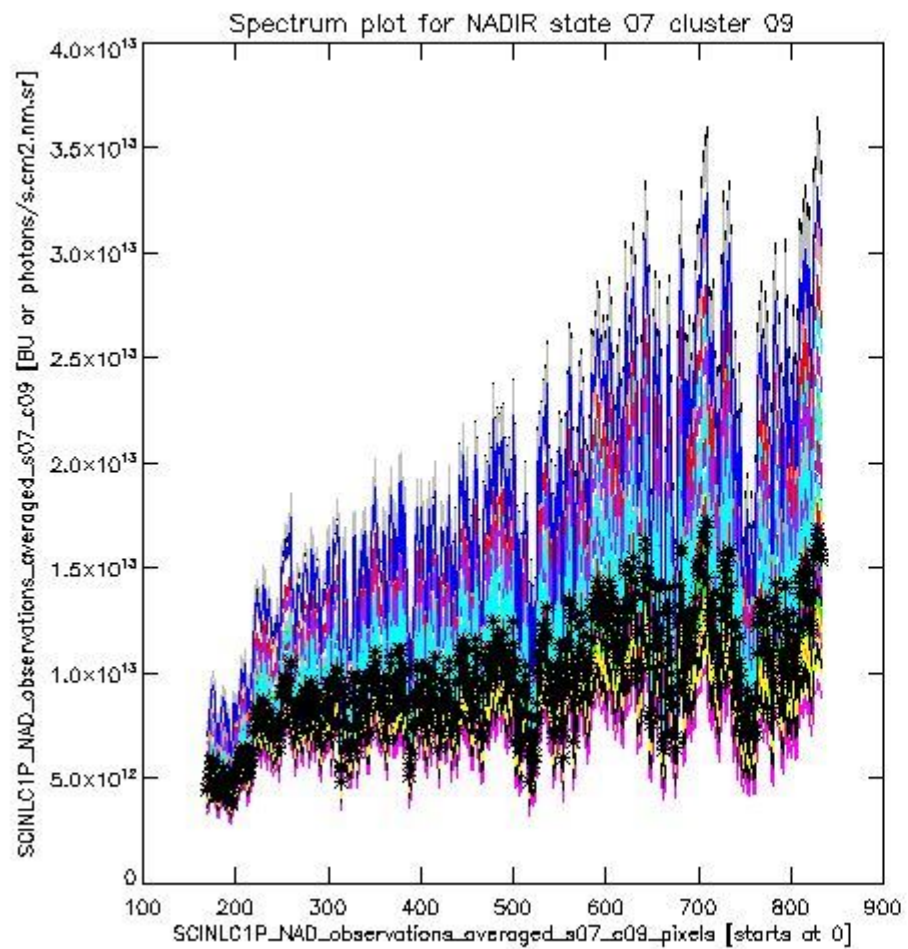
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_0.PNG



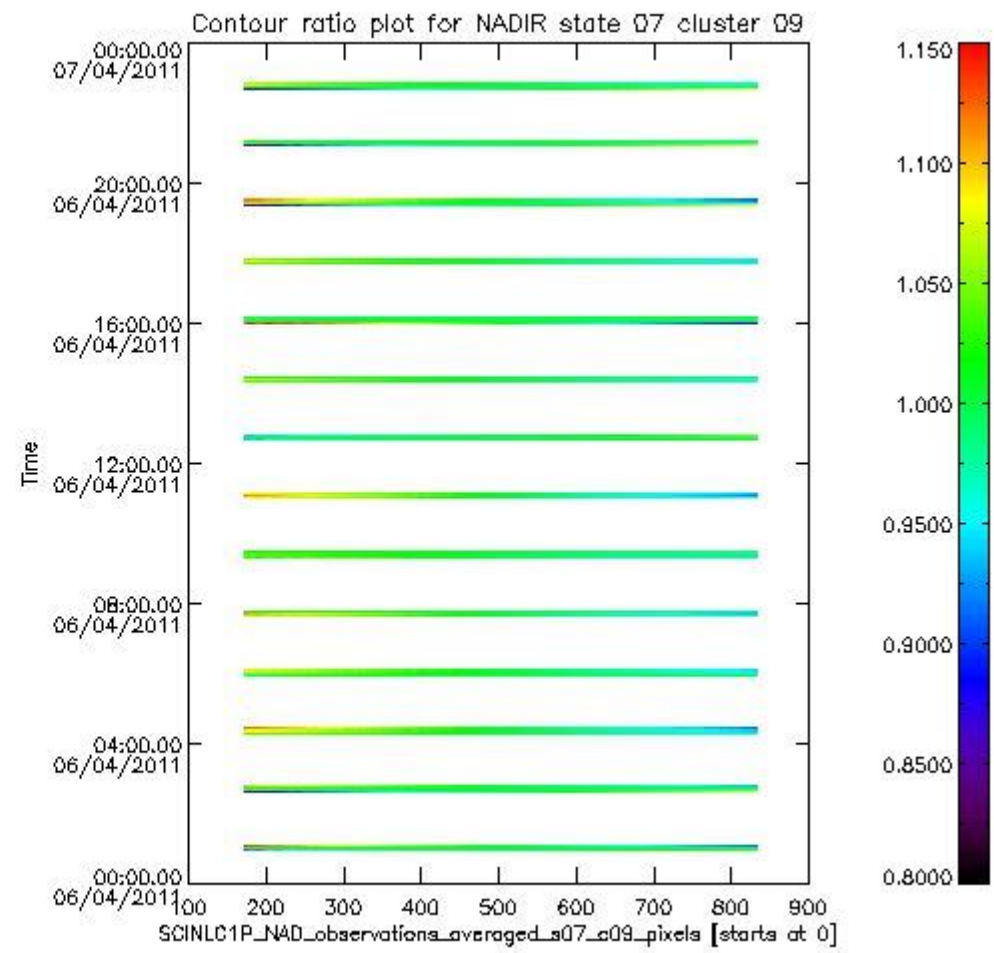
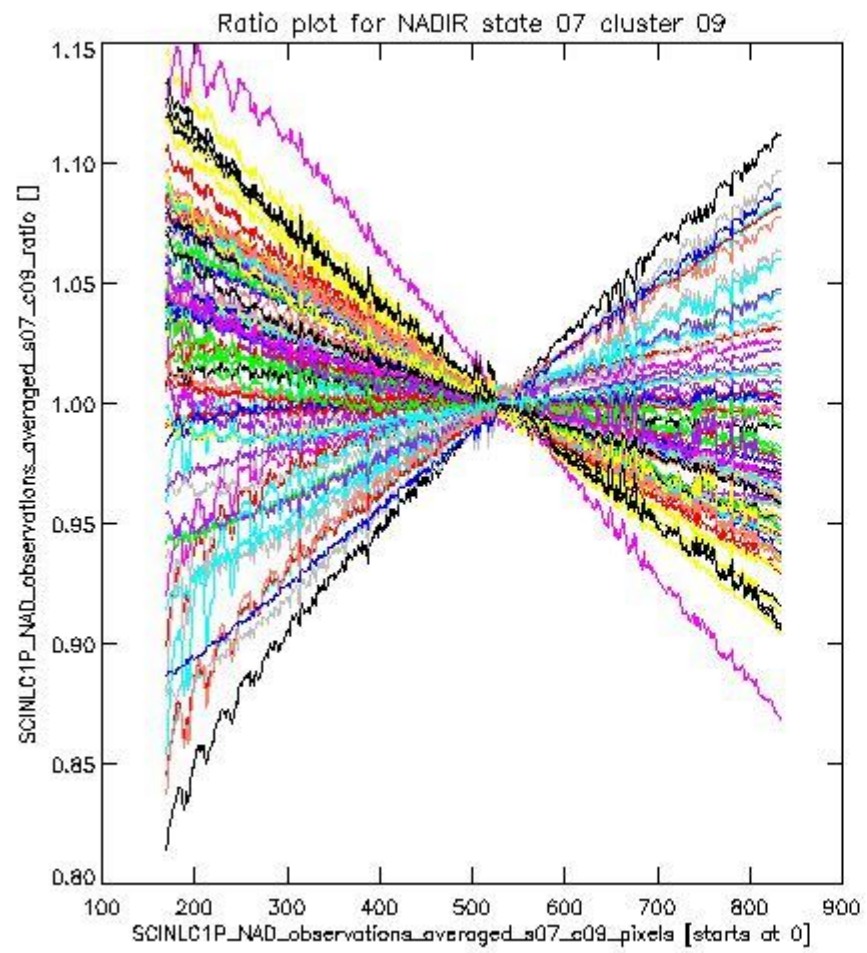
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_1.PNG

**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	06APR2011 00:57:12.355
Start time of last sample	06APR2011 22:49:14.091
Reference period start time	07MAR2011 00:58:41.973
Reference period stop time	05APR2011 23:26:03.979
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



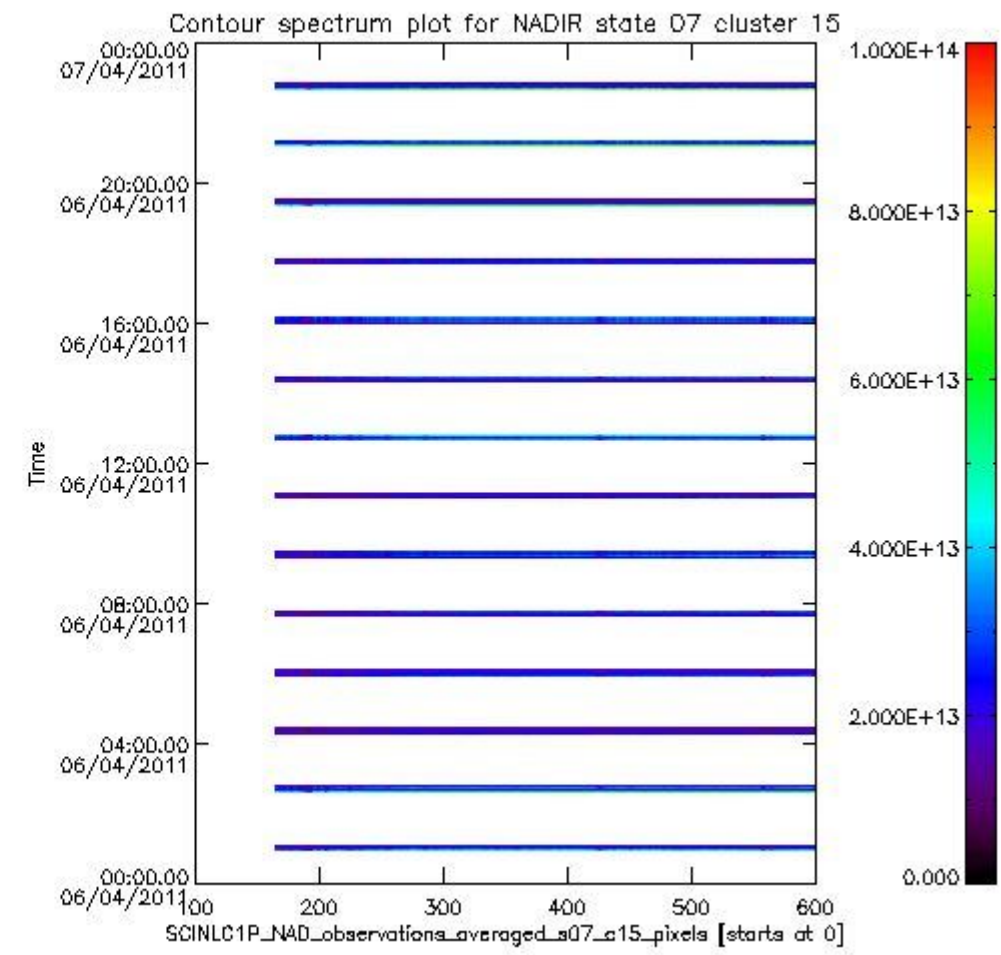
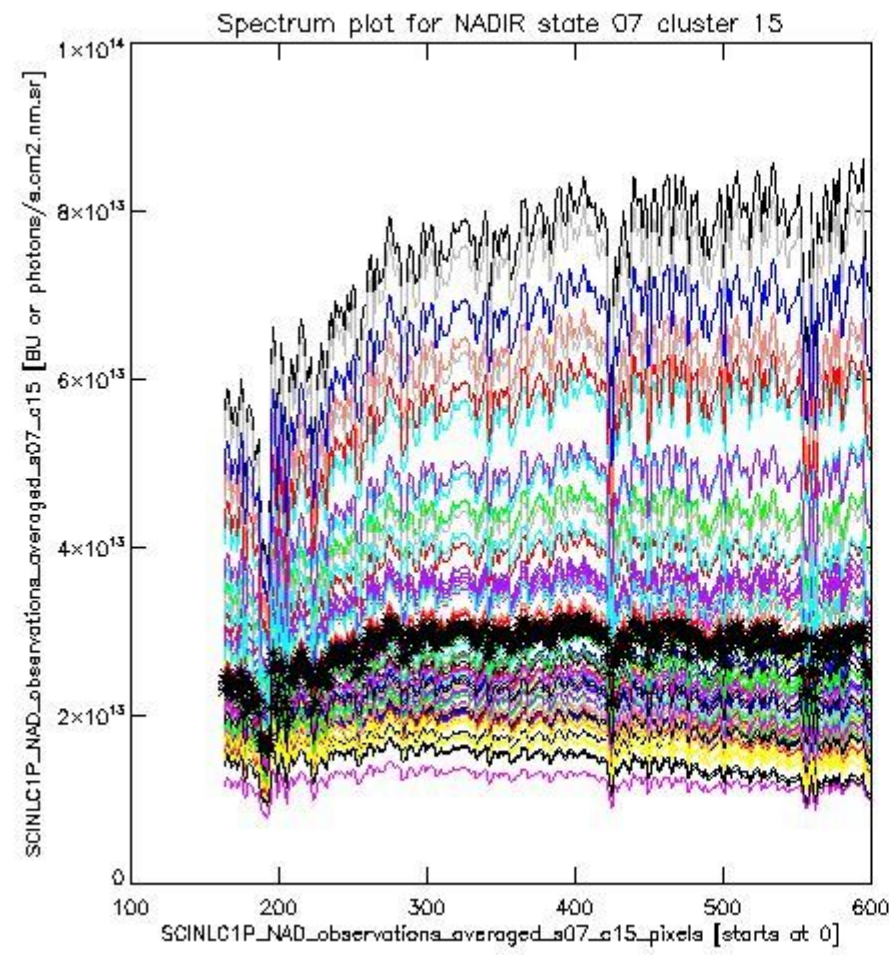
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_2.PNG



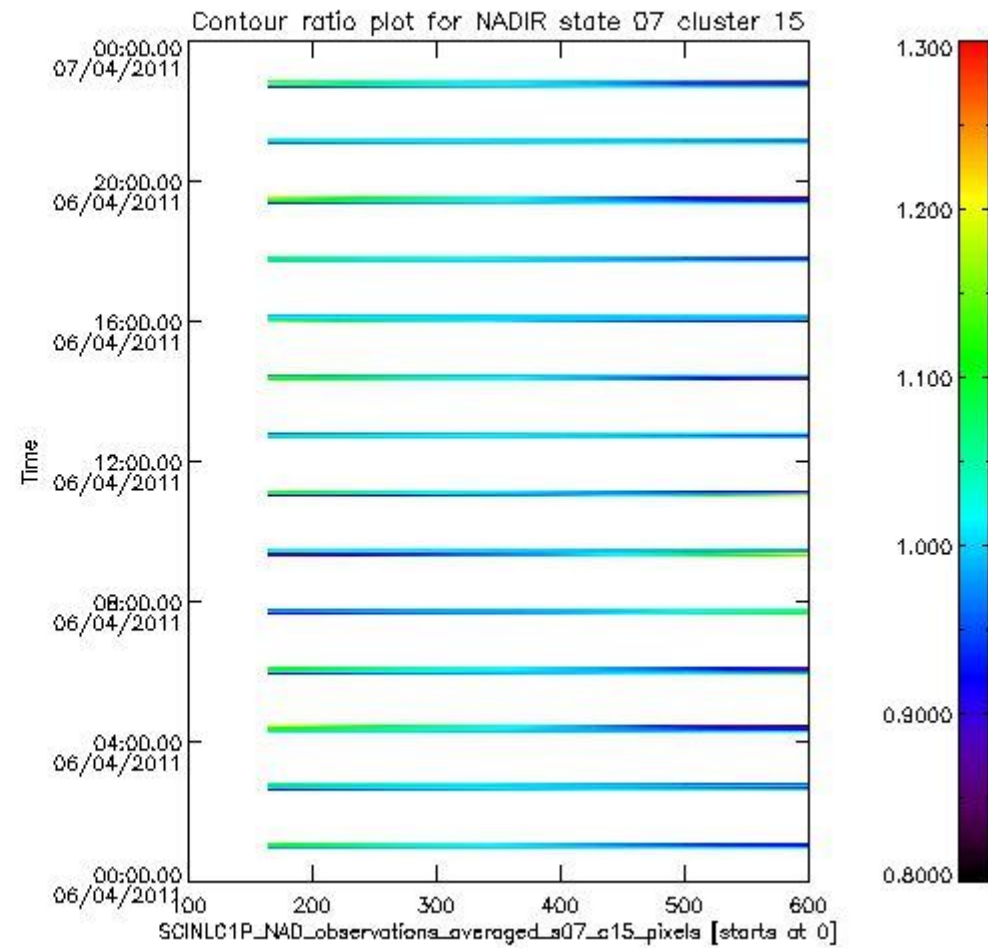
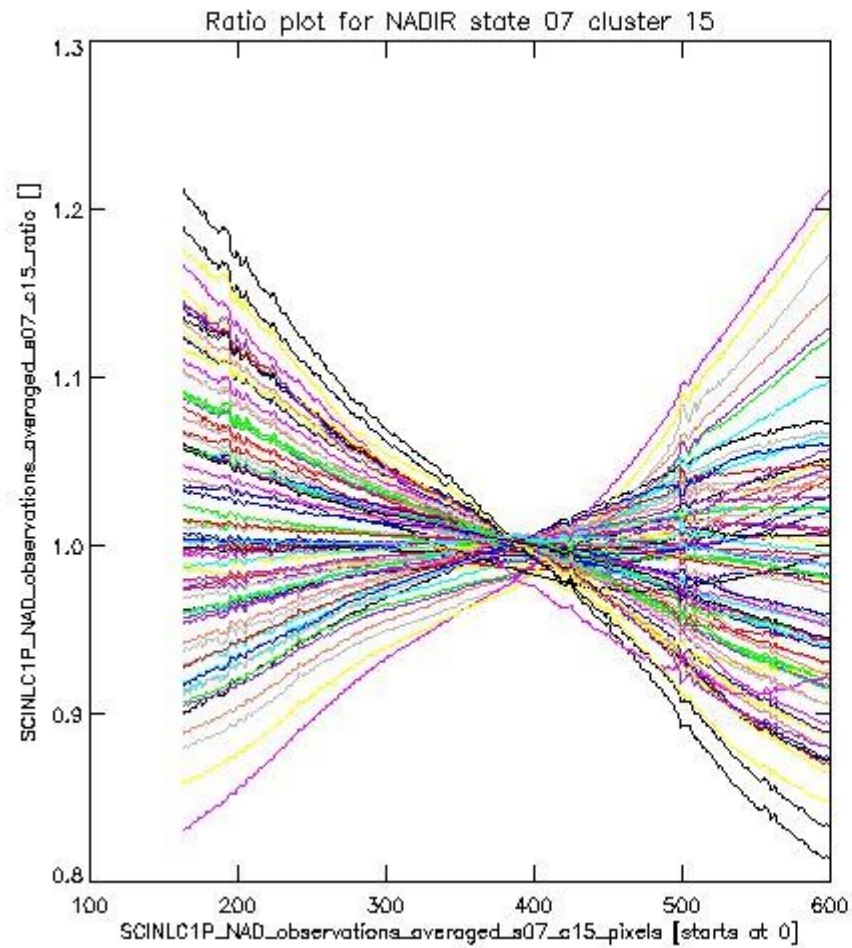
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_3.PNG

**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	06APR2011 00:57:12.355
Start time of last sample	06APR2011 22:49:14.091
Reference period start time	07MAR2011 00:58:41.973
Reference period stop time	05APR2011 23:26:03.979
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\_20110406\_4.PNG

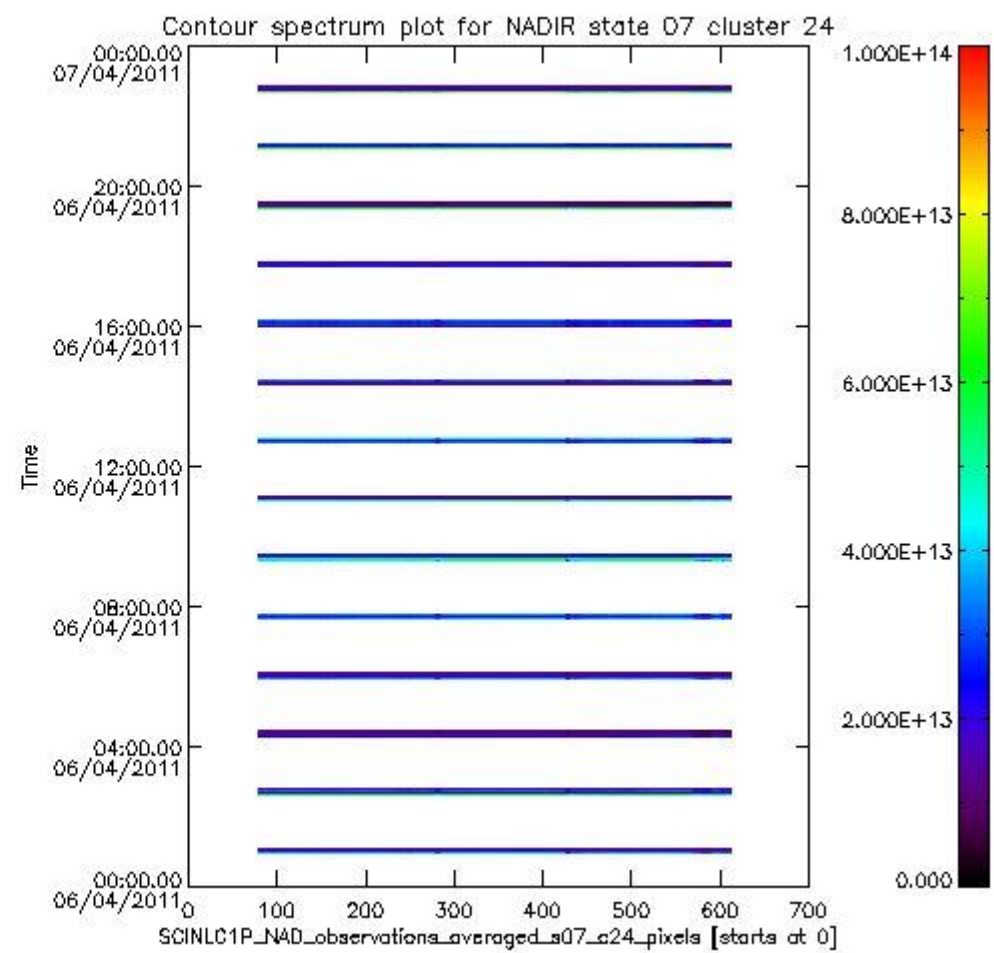
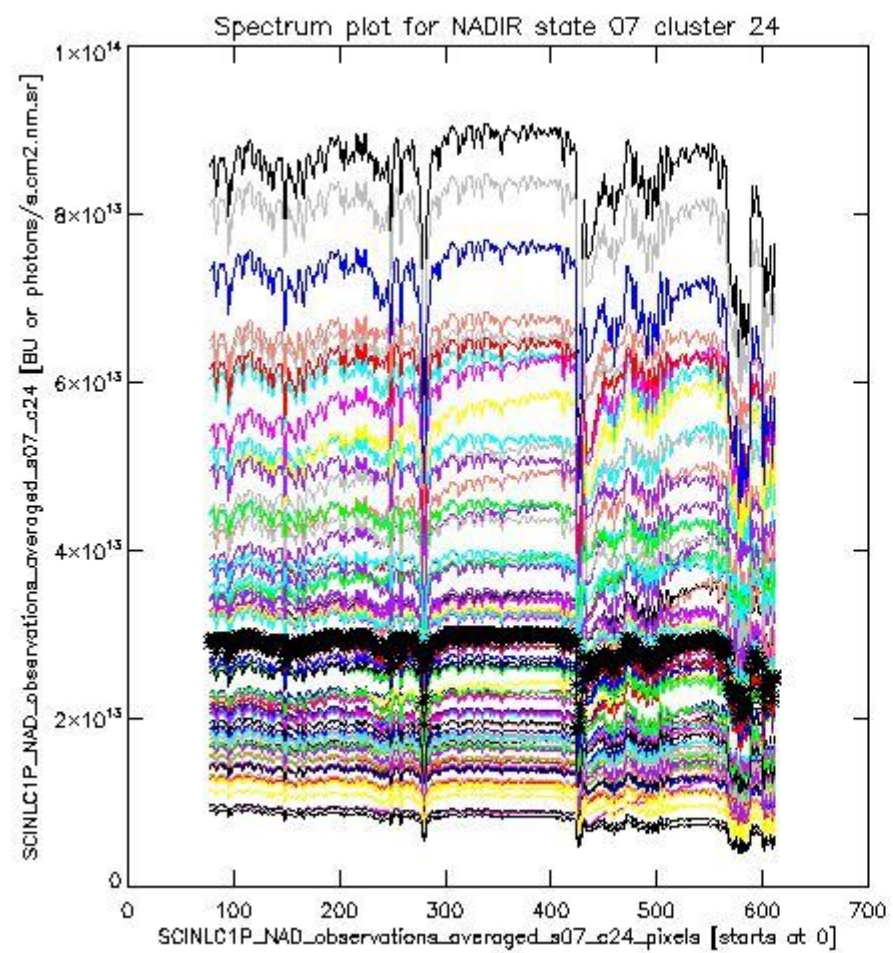


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_5.PNG

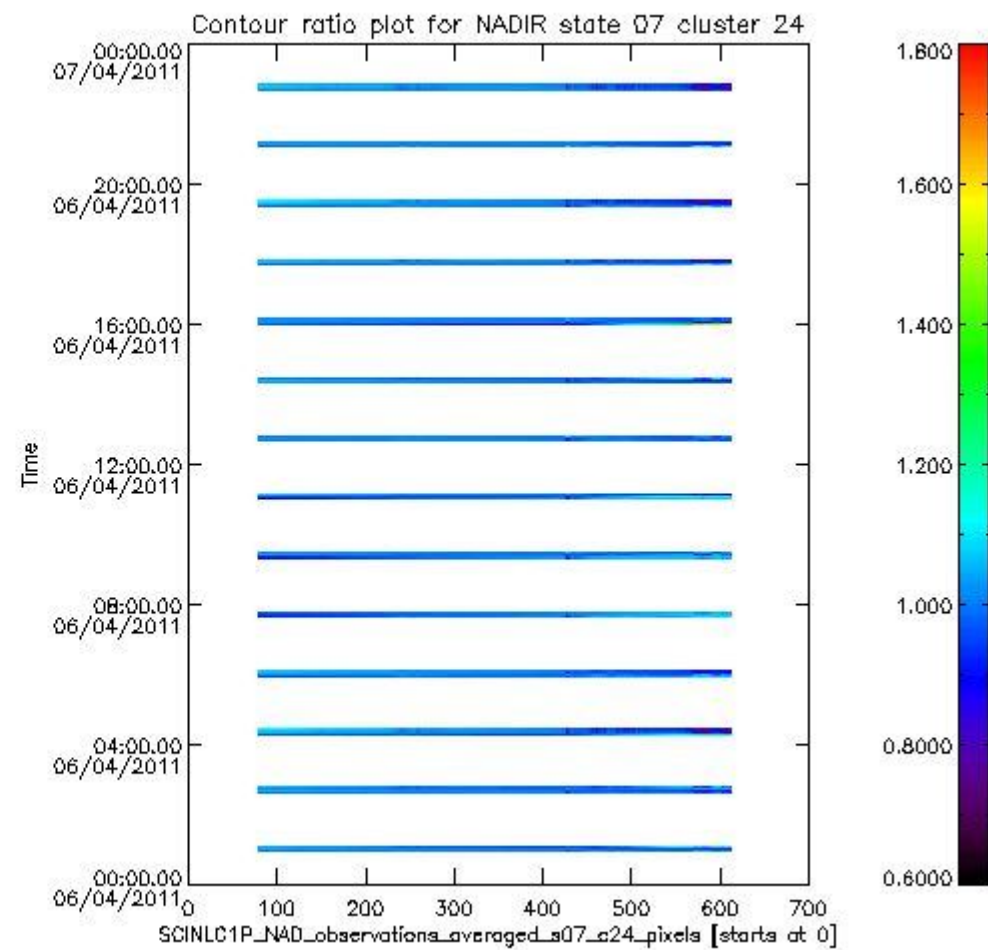
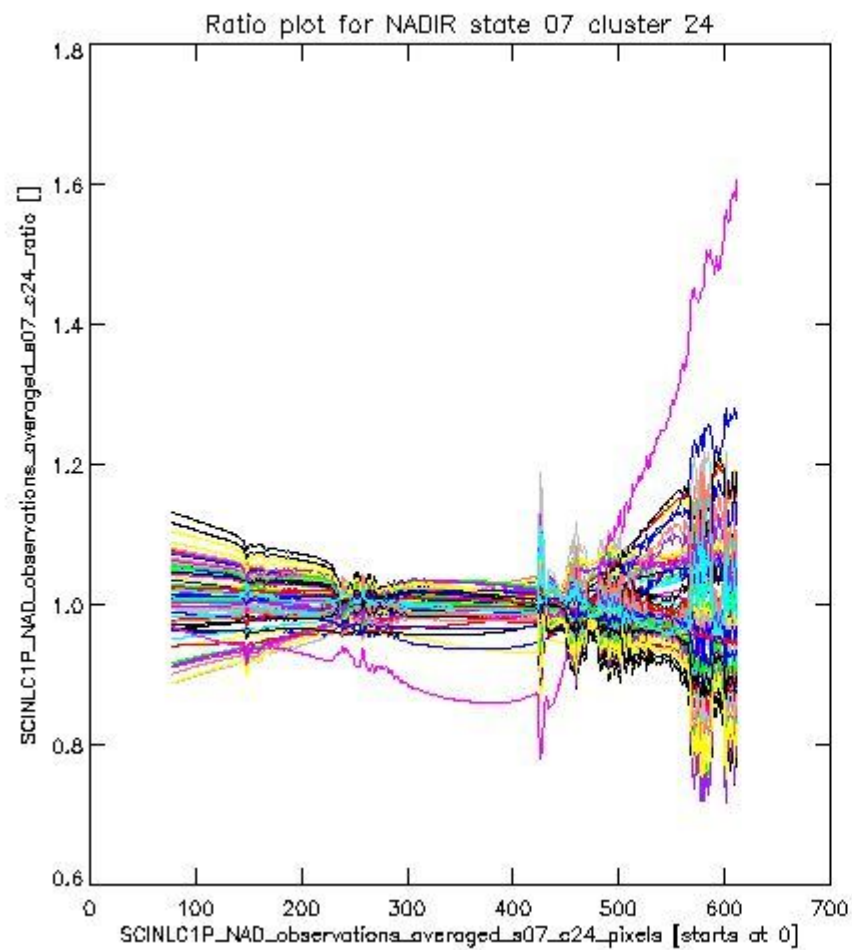
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	06APR2011 00:57:12.355
Start time of last sample	06APR2011 22:49:14.091
Reference period start time	07MAR2011 00:58:41.973
Reference period stop time	05APR2011 23:26:03.979
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612





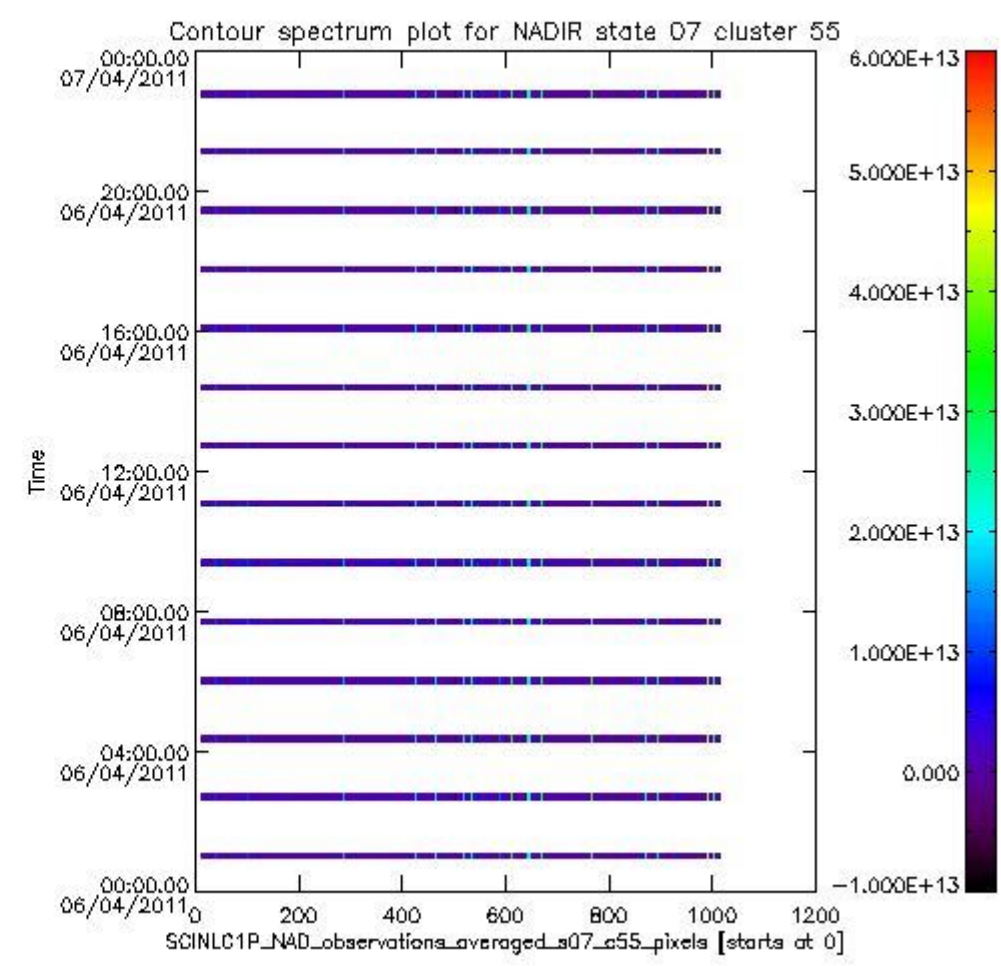
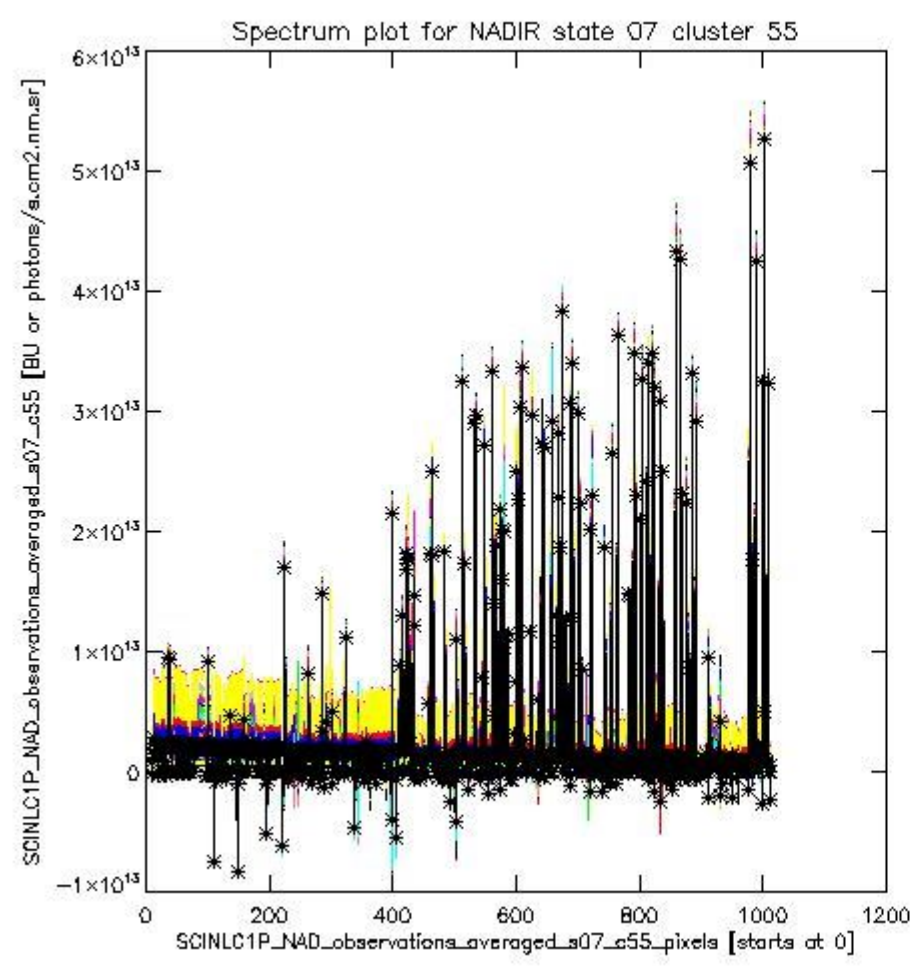
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_6.PNG



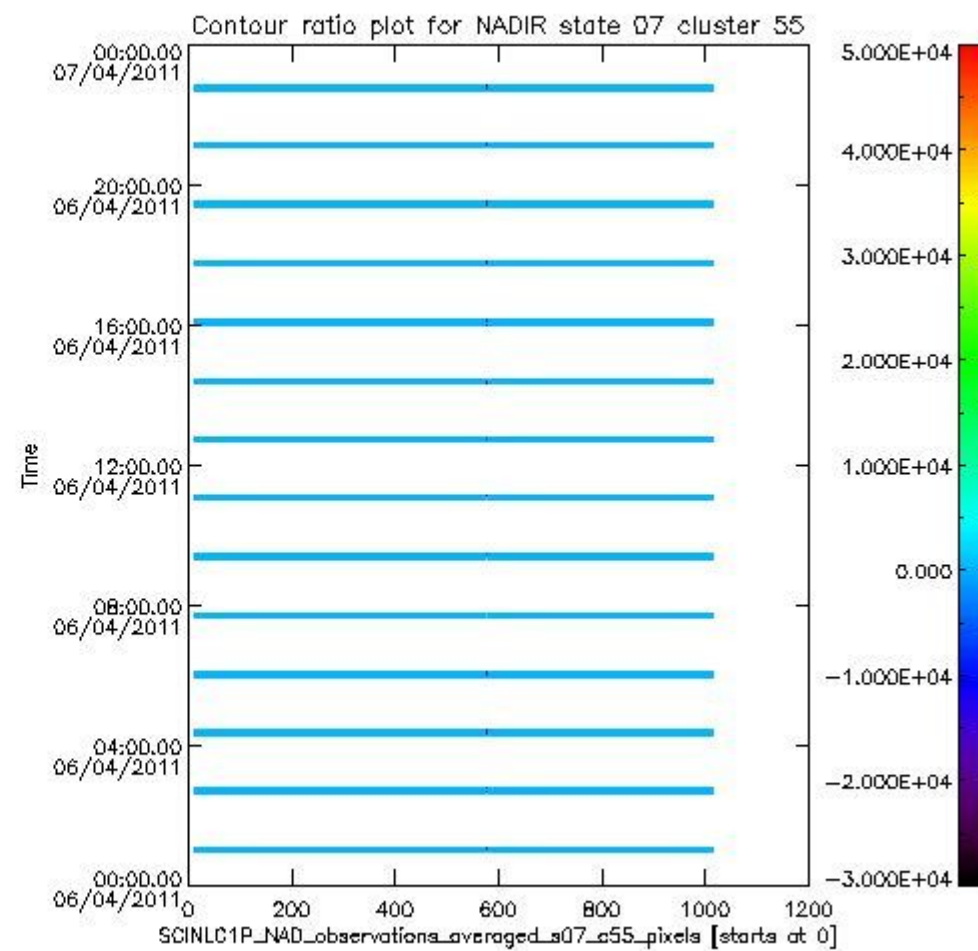
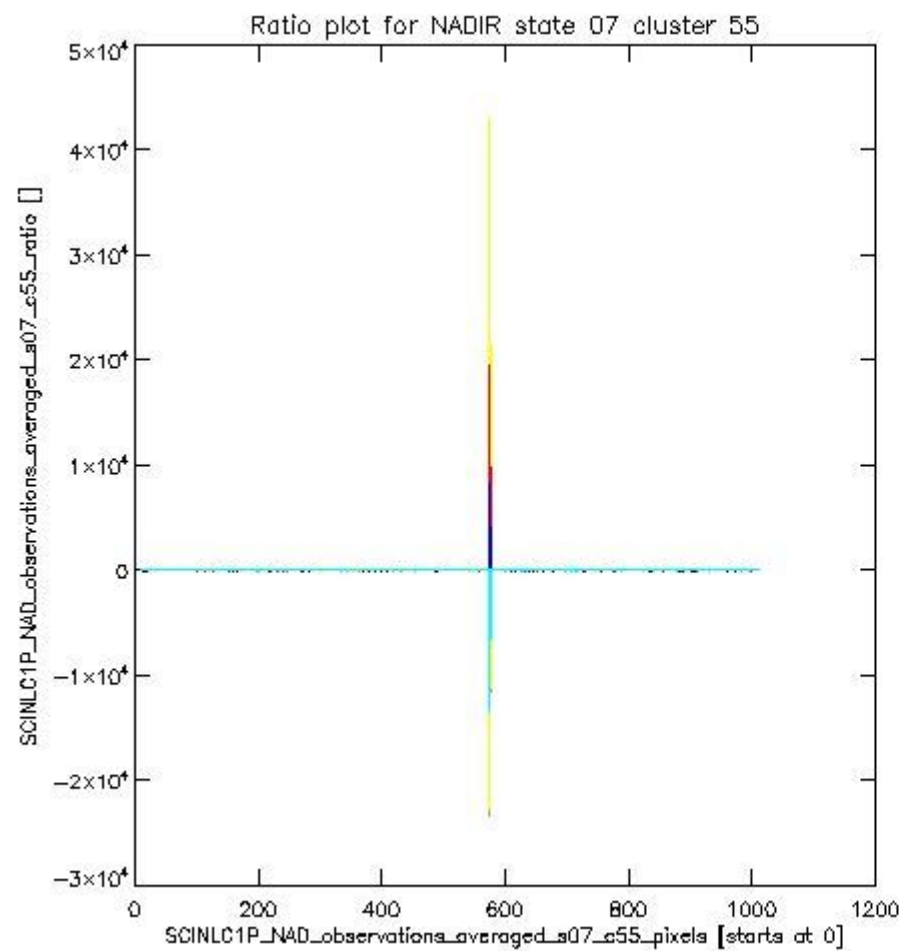
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_7.PNG

**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	06APR2011 00:57:12.355
Start time of last sample	06APR2011 22:49:14.091
Reference period start time	07MAR2011 00:58:41.973
Reference period stop time	05APR2011 23:26:03.979
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



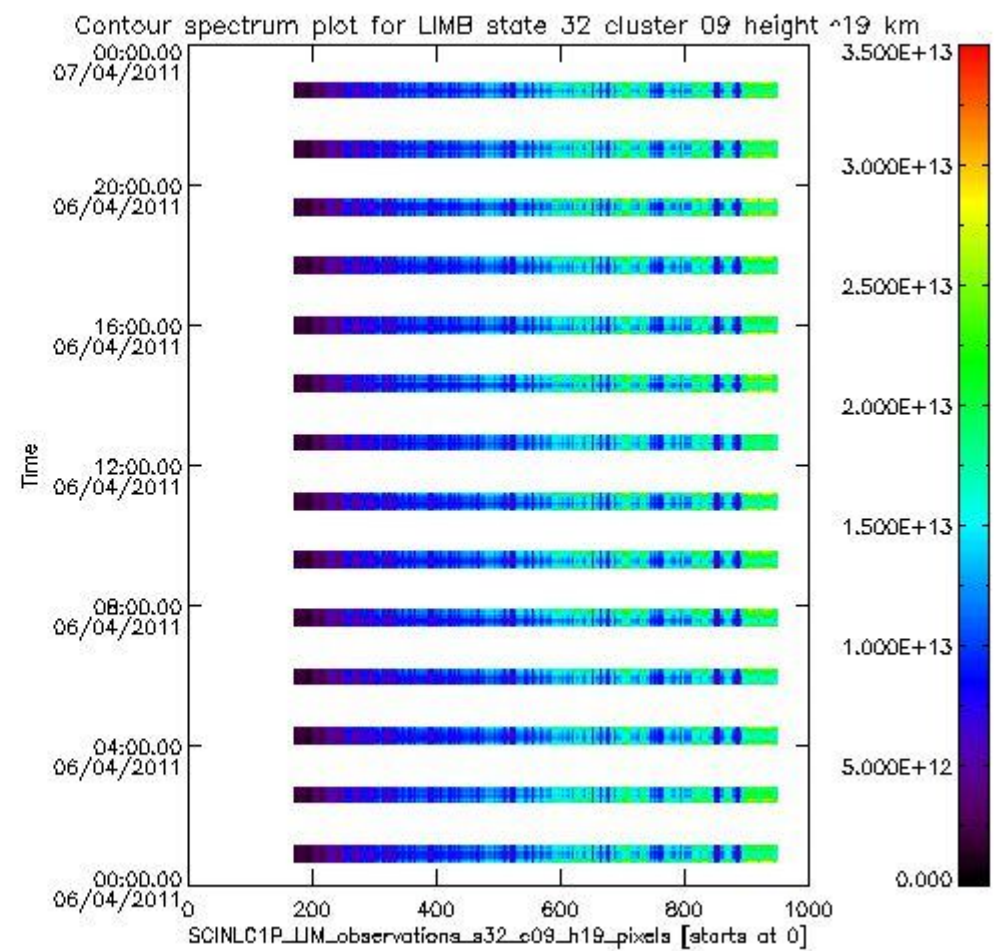
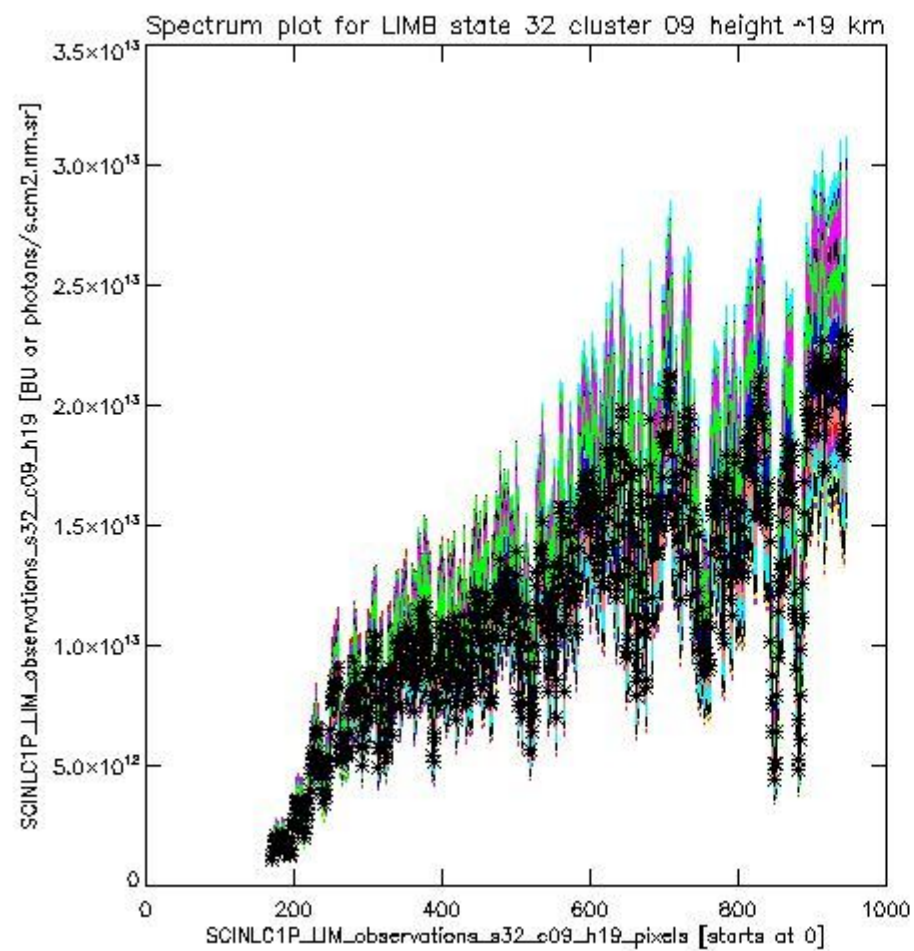
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_8.PNG



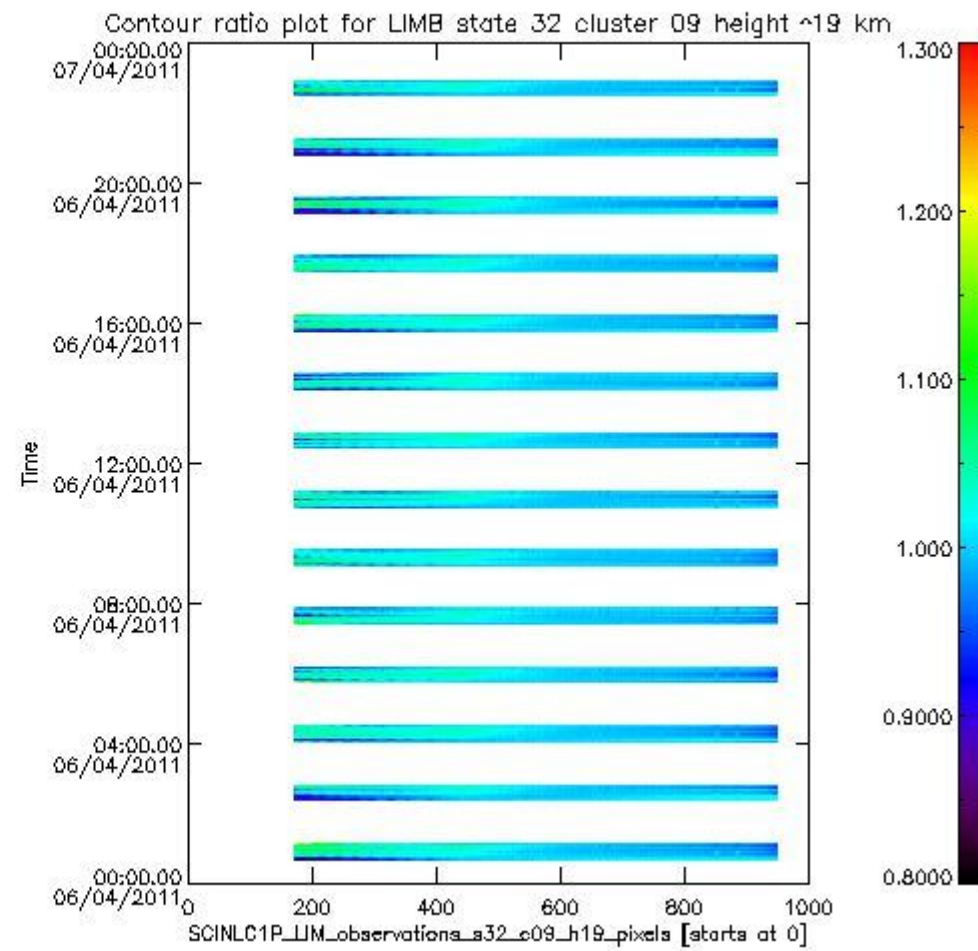
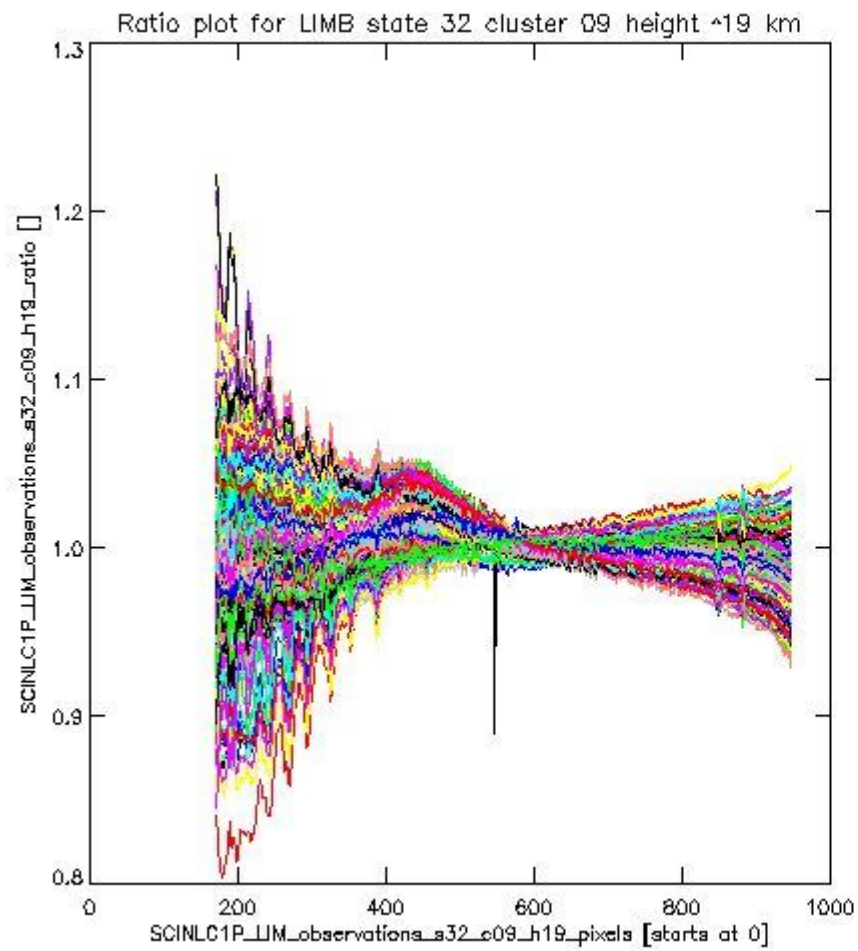
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_9.PNG

**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	06APR2011 00:41:58.976
Start time of last sample	06APR2011 22:52:25.388
Reference period start time	07MAR2011 00:45:31.336
Reference period stop time	05APR2011 23:29:15.284
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



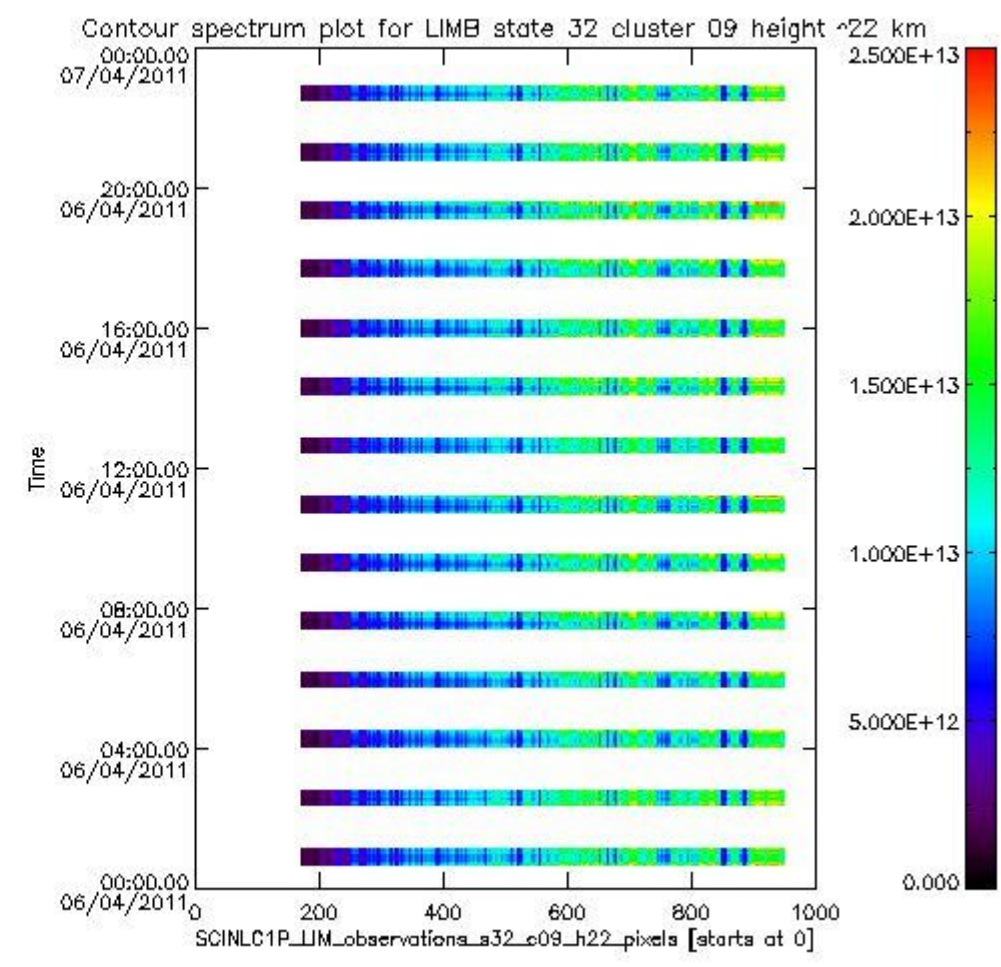
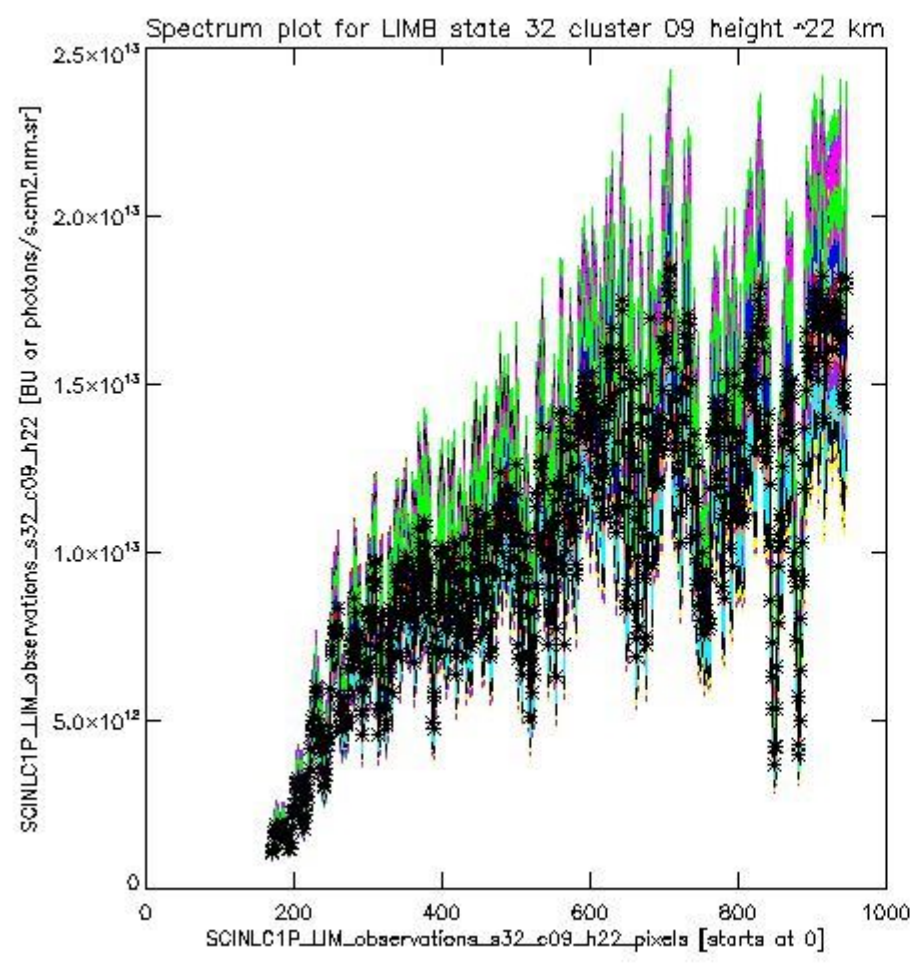
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_10.PNG



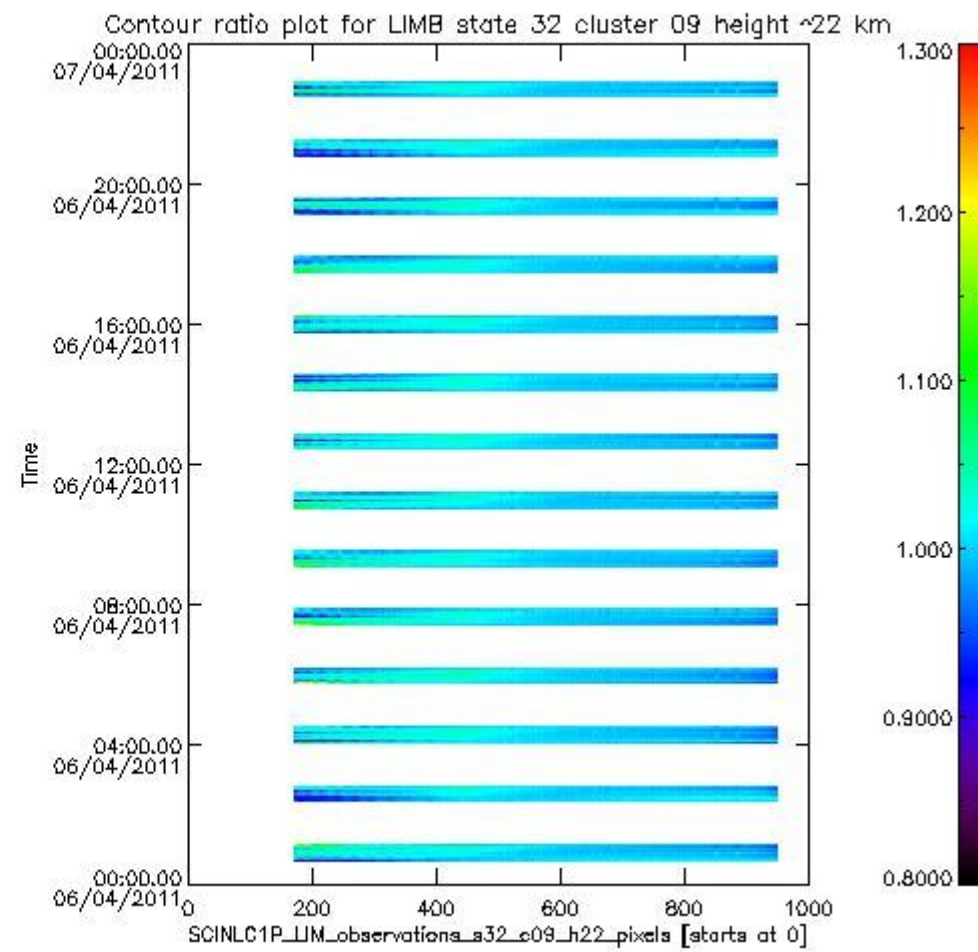
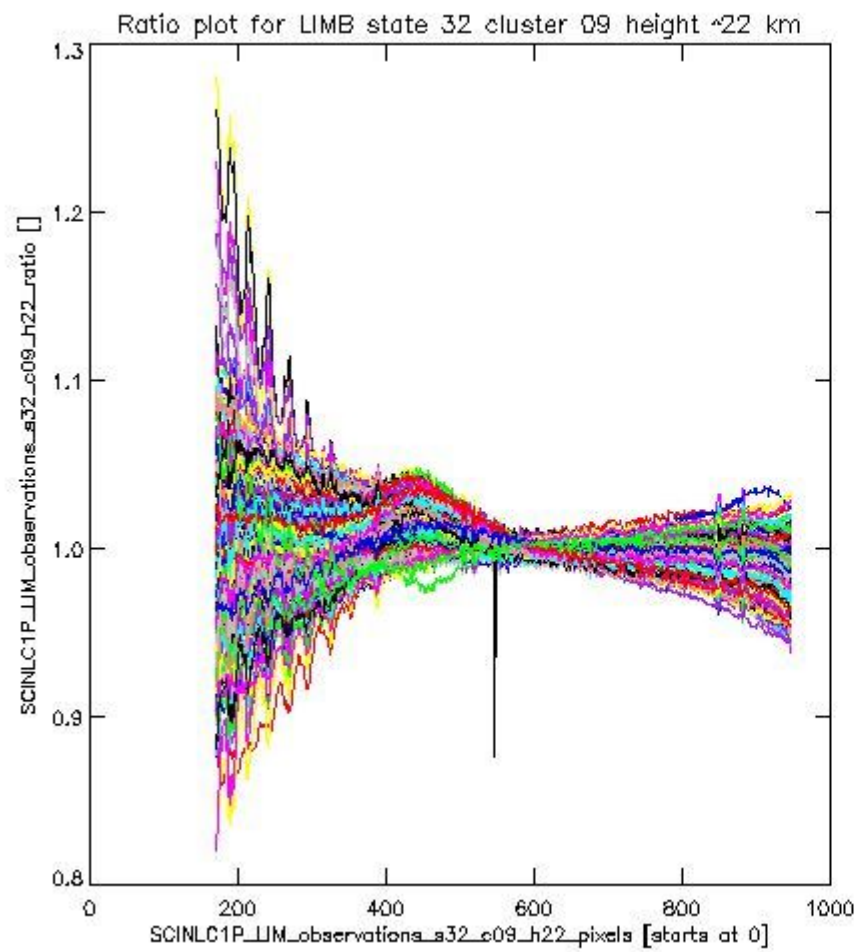
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_11.PNG

**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	06APR2011 00:41:58.976
Start time of last sample	06APR2011 22:52:25.388
Reference period start time	07MAR2011 00:45:31.336
Reference period stop time	05APR2011 23:29:15.284
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\_20110406\_12.PNG

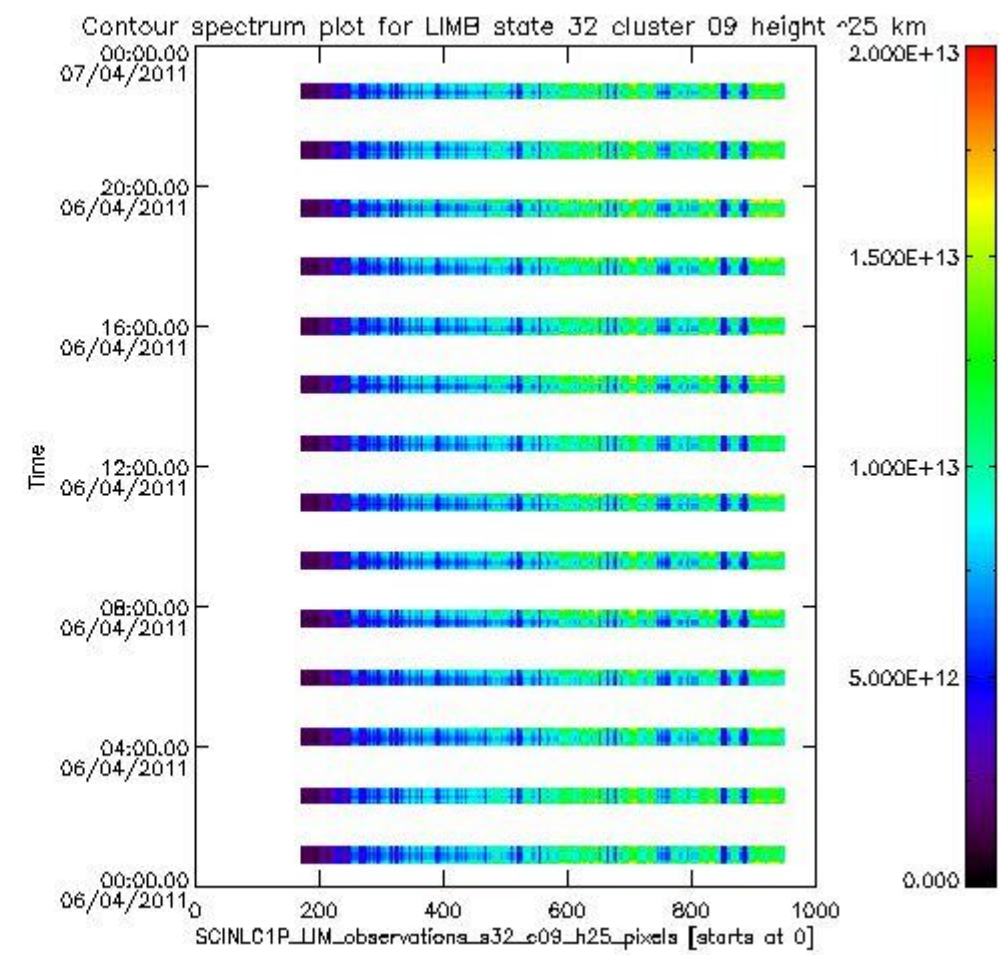
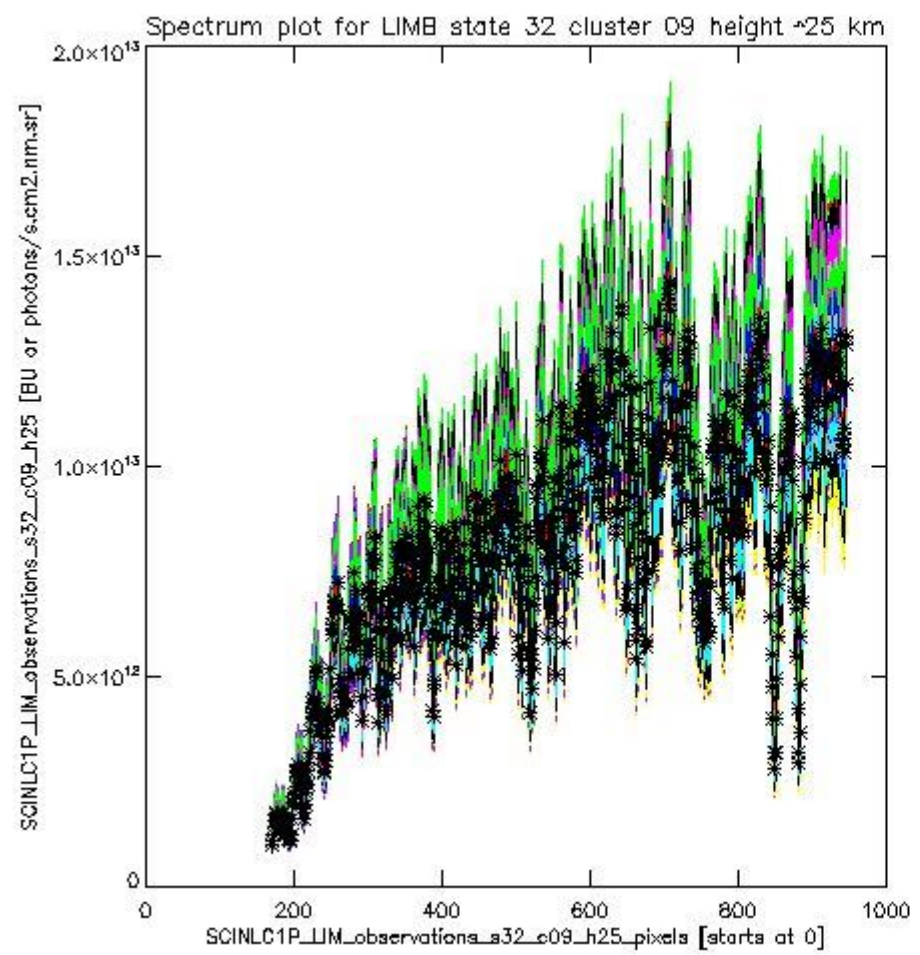


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_13.PNG

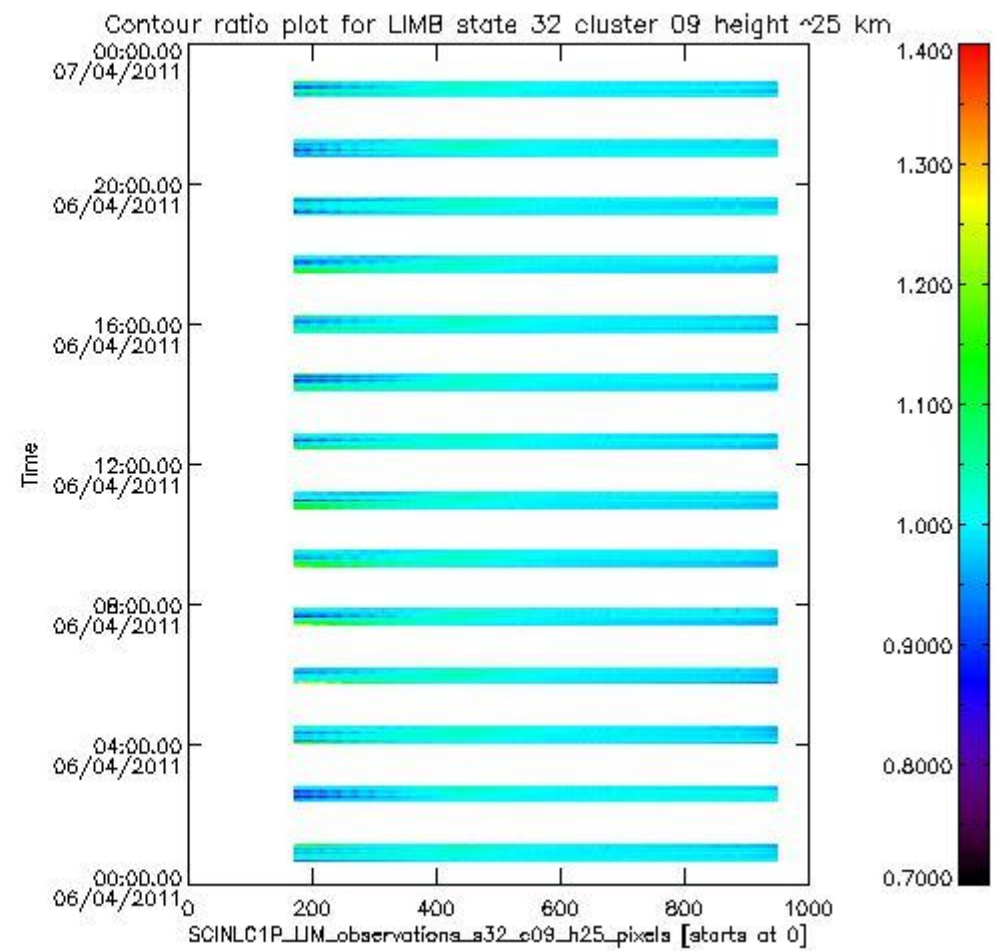
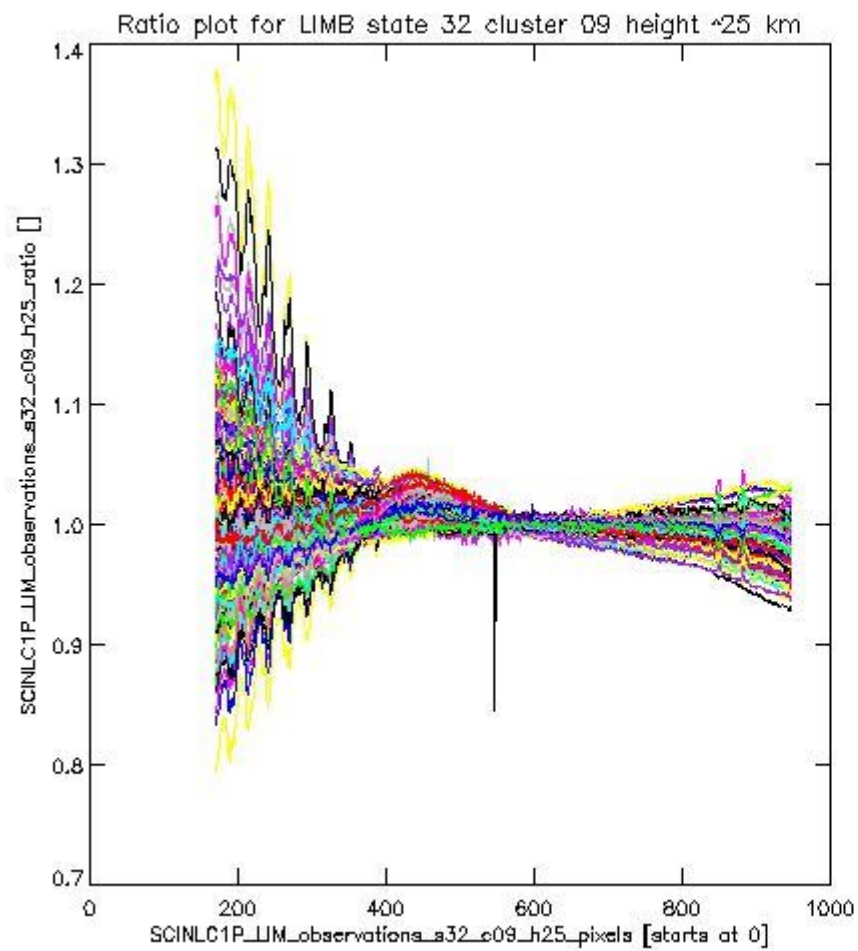
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	06APR2011 00:41:58.976
Start time of last sample	06APR2011 22:52:25.388
Reference period start time	07MAR2011 00:45:31.336
Reference period stop time	05APR2011 23:29:15.284
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





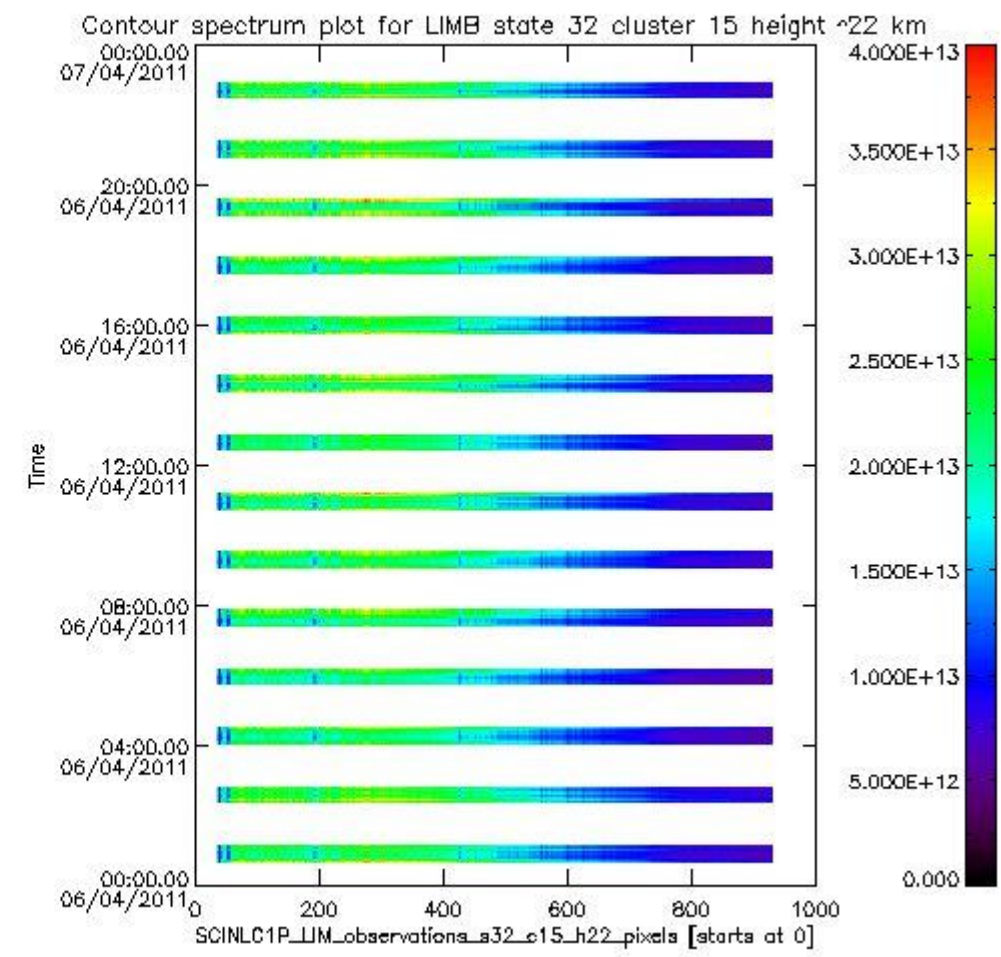
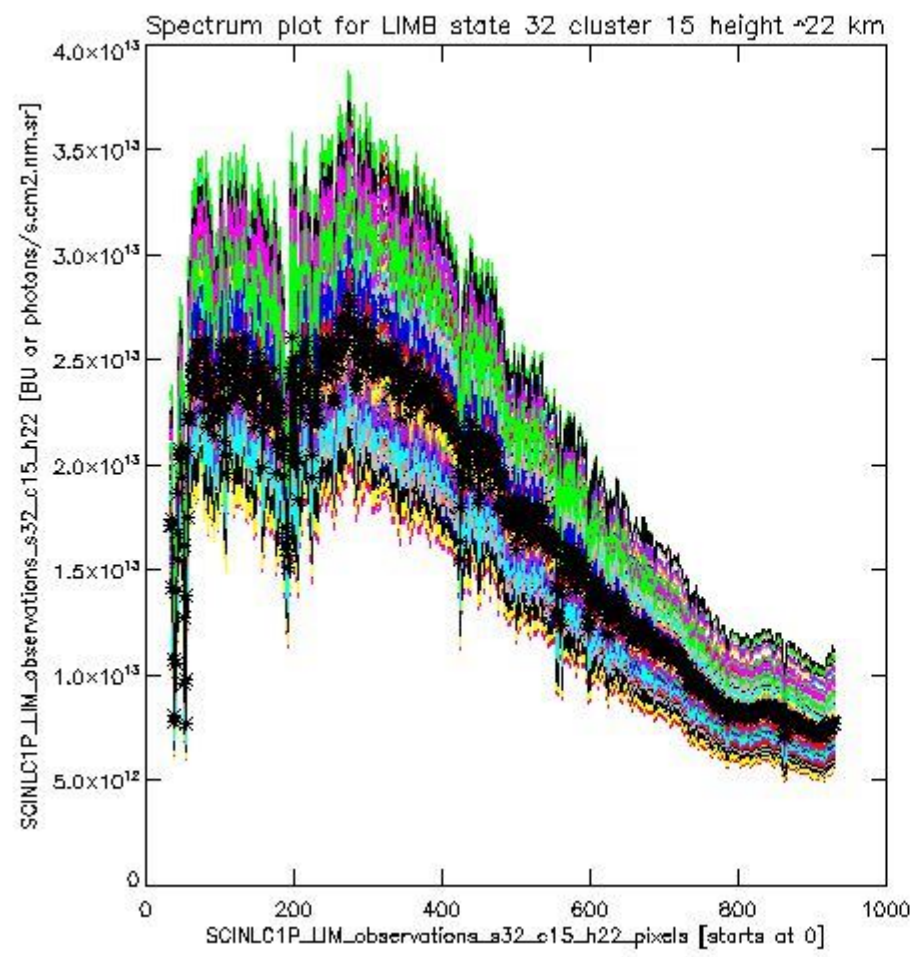
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_14.PNG



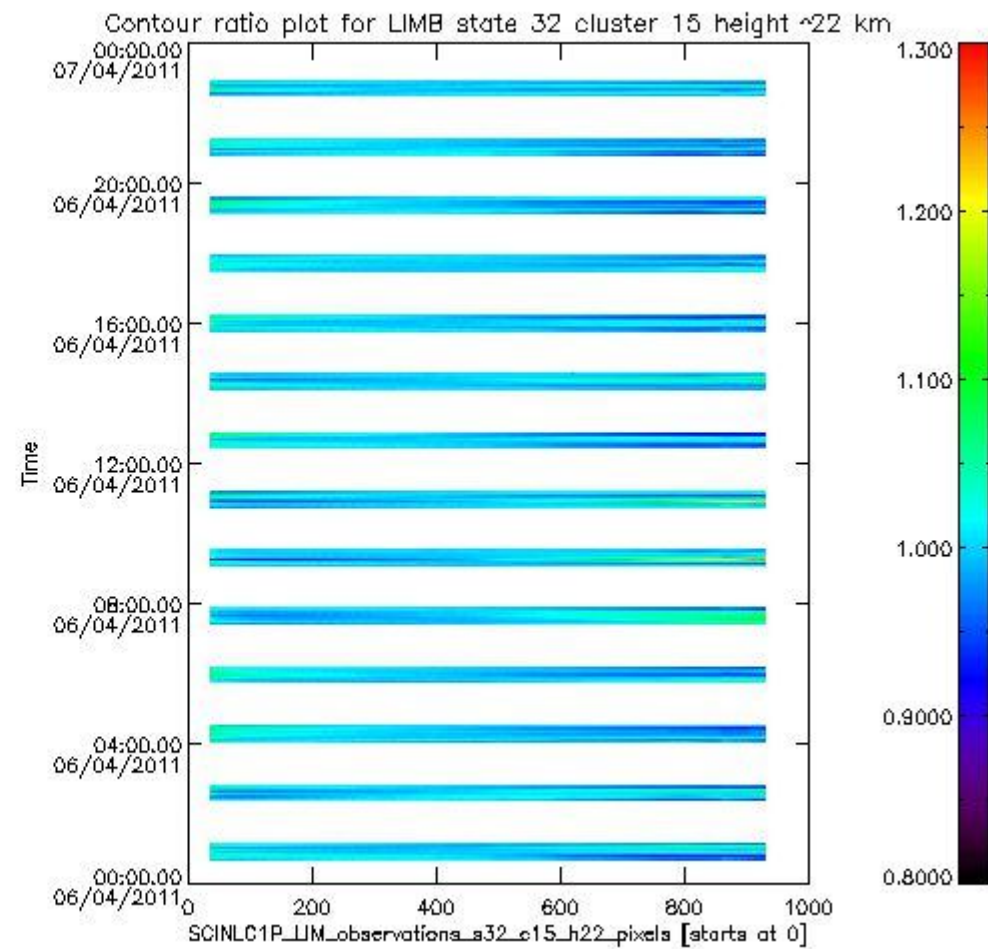
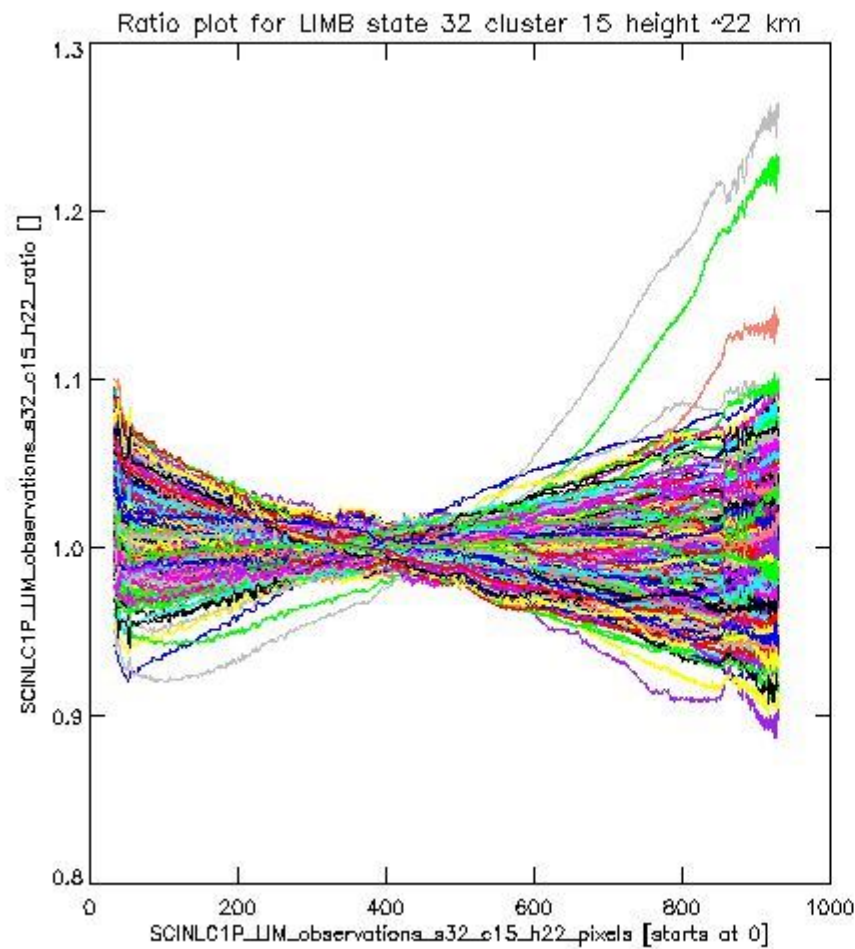
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_15.PNG

**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	06APR2011 00:41:58.976
Start time of last sample	06APR2011 22:52:25.388
Reference period start time	07MAR2011 00:45:31.336
Reference period stop time	05APR2011 23:29:15.284
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



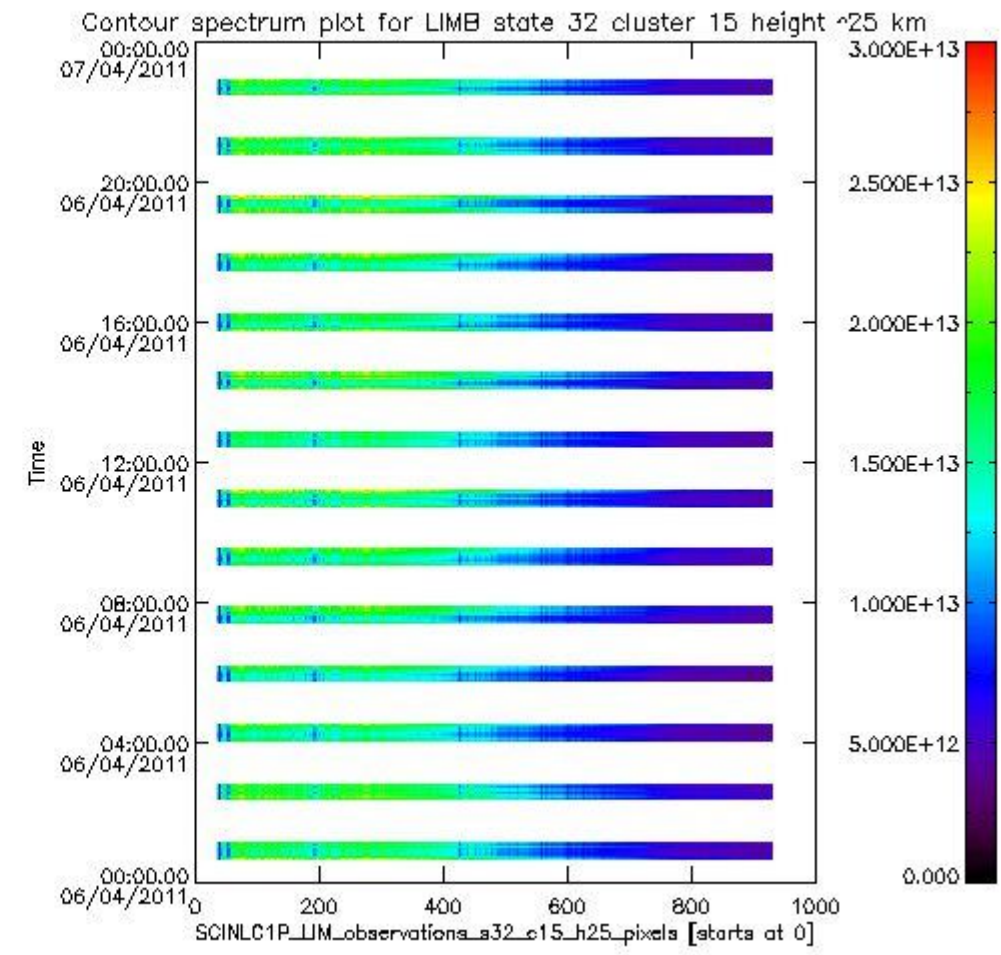
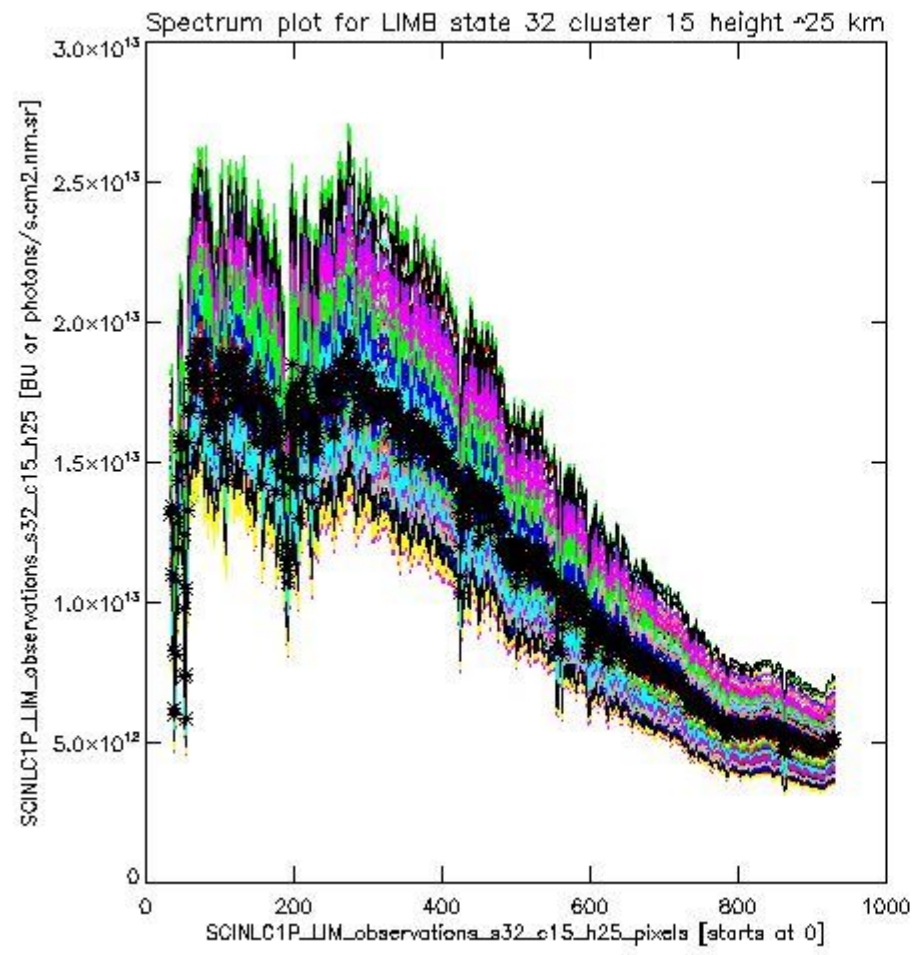
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_16.PNG



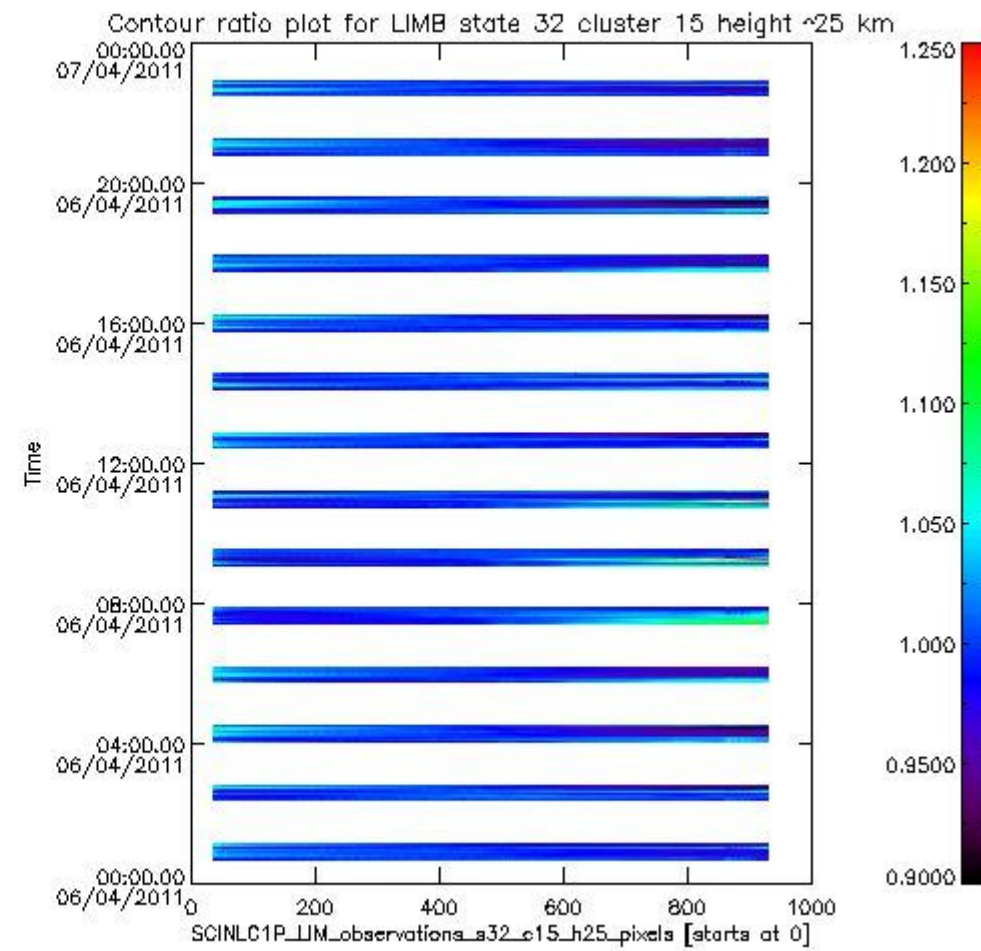
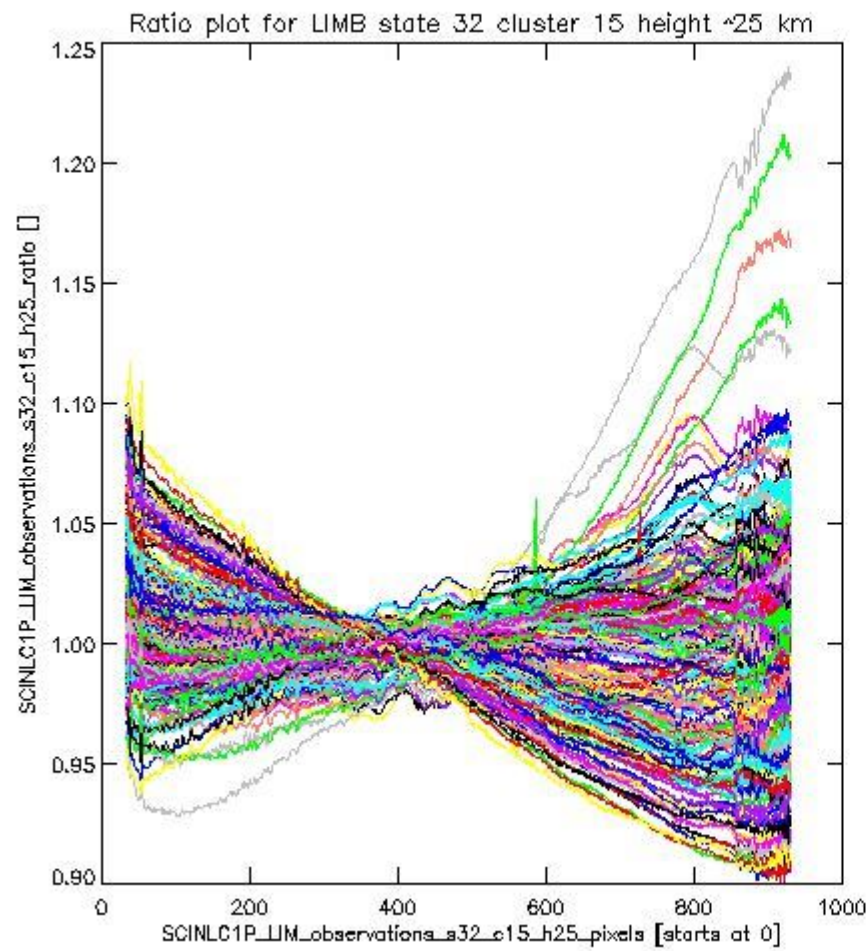
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_17.PNG

**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	06APR2011 00:41:58.976
Start time of last sample	06APR2011 22:52:25.388
Reference period start time	07MAR2011 00:45:31.336
Reference period stop time	05APR2011 23:29:15.284
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



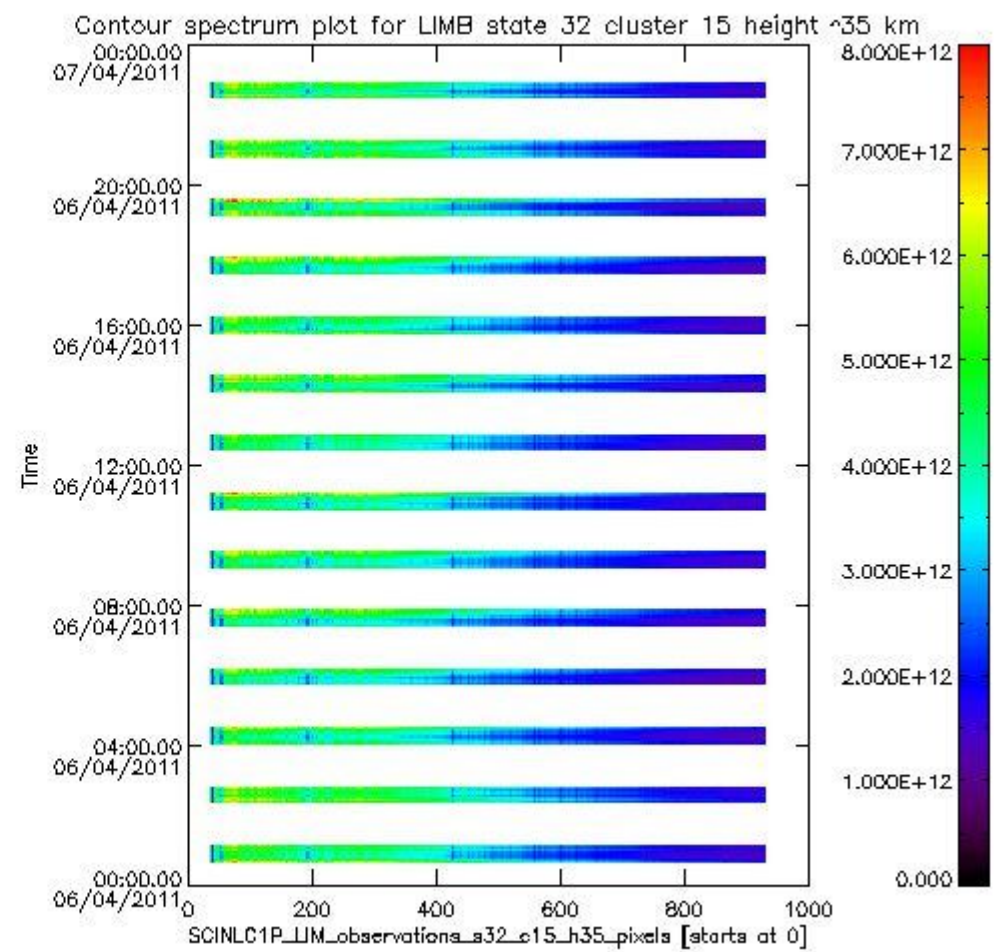
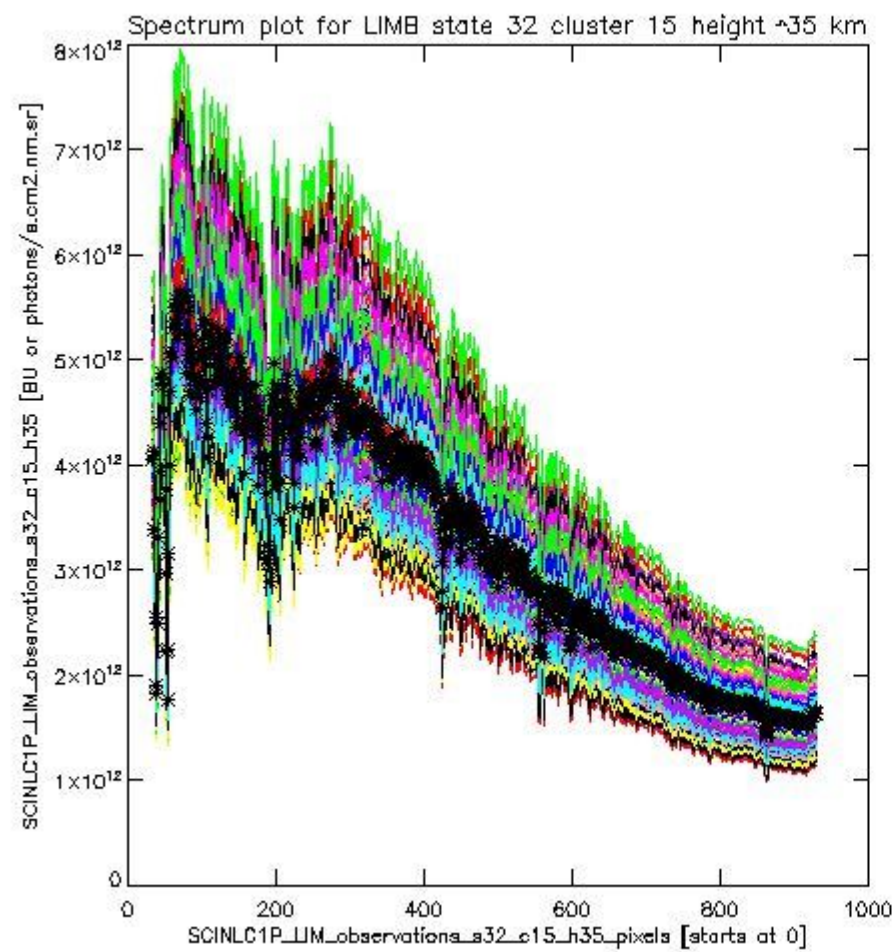
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_18.PNG



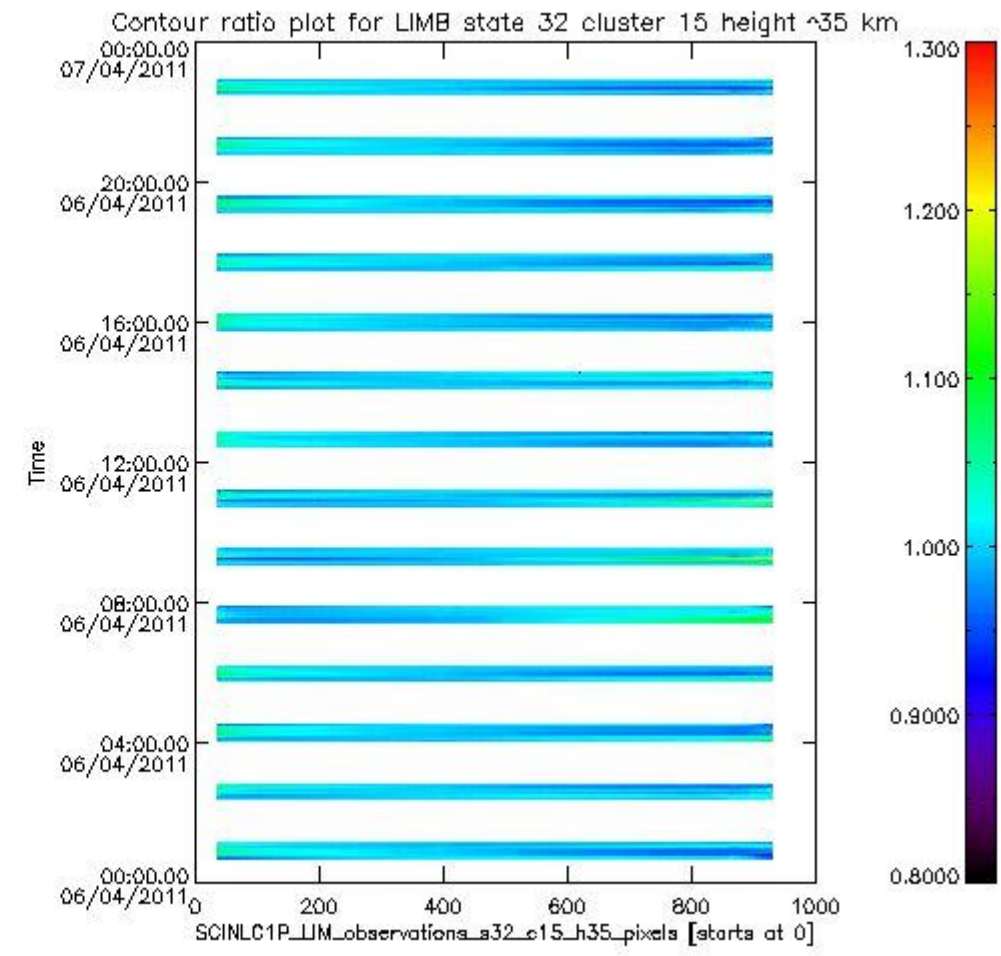
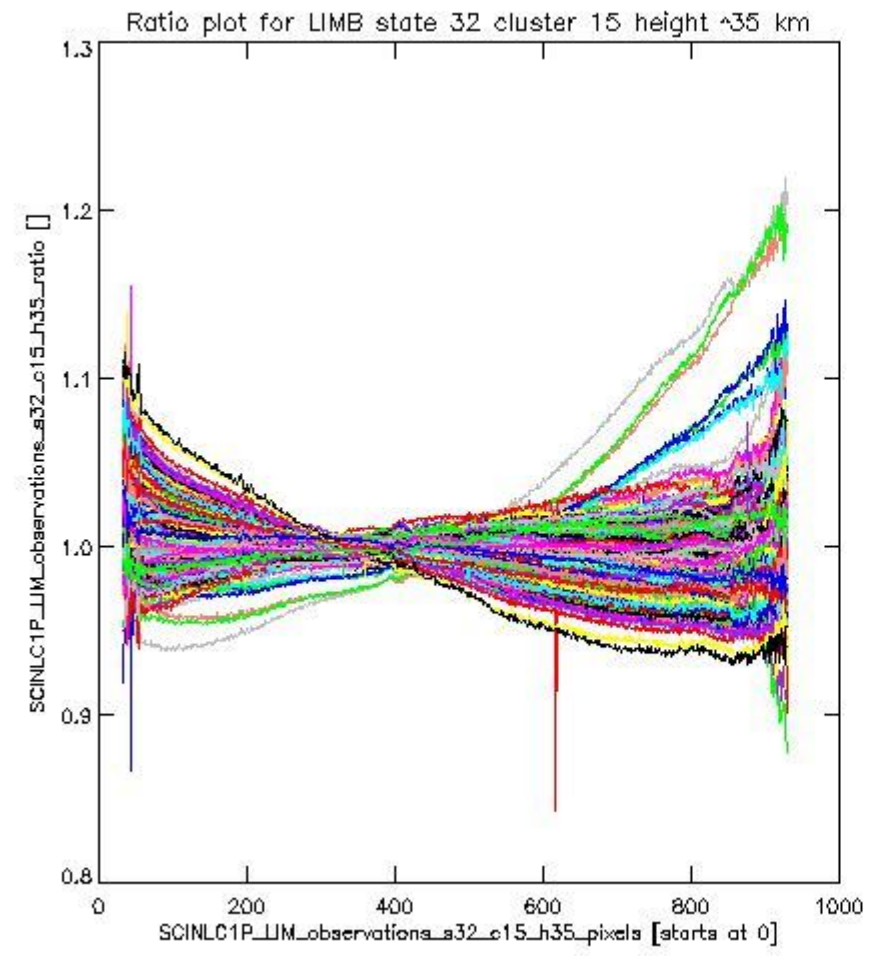
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_19.PNG

**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	06APR2011 00:41:58.976
Start time of last sample	06APR2011 22:52:25.388
Reference period start time	07MAR2011 00:45:31.336
Reference period stop time	05APR2011 23:29:15.284
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\_20110406\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110406\_21.PNG



