

# 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	01FEB2011 06:55:33
Data source version	SCIA/7.04-U
Processing scope for products	21JAN2011 00:00:00 to 22JAN2011 00:00:00
Start time of first product within scope	20JAN2011 23:40:19
Stop time of last product within scope	22JAN2011 00:13:46
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	21JAN2011 00:12:22.425	21JAN2011 23:45:47.667
1	NADIR	07	09	N/A	21JAN2011 00:12:22.425	21JAN2011 23:45:47.667
2	NADIR	07	15	N/A	21JAN2011 00:12:22.425	21JAN2011 23:45:47.667
3	NADIR	07	24	N/A	21JAN2011 00:12:22.425	21JAN2011 23:45:47.667
4	NADIR	07	55	N/A	21JAN2011 00:12:22.425	21JAN2011 23:45:47.667
5	LIMB	32	09	~19 km	21JAN2011 00:01:14.531	21JAN2011 23:48:58.971
6	LIMB	32	09	~22 km	21JAN2011 00:01:14.531	21JAN2011 23:48:58.971
7	LIMB	32	09	~25 km	21JAN2011 00:01:14.531	21JAN2011 23:48:58.971
8	LIMB	32	15	~22 km	21JAN2011 00:01:14.531	21JAN2011 23:48:58.971
9	LIMB	32	15	~25 km	21JAN2011 00:01:14.531	21JAN2011 23:48:58.971
10	LIMB	32	15	~35 km	21JAN2011 00:01:14.531	21JAN2011 23:48:58.971

#### 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_1CUDPA20110120_232327_000060213098_00361_46496_3791.N1</a>	20JAN2011 23:40:19	21JAN2011 00:50:34	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110121_010351_000059993098_00362_46497_3793.N1</a>	21JAN2011 01:20:33	21JAN2011 02:31:02	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110121_024354_000060213098_00363_46498_3797.N1</a>	21JAN2011 03:00:47	21JAN2011 04:11:01	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110121_042419_000059993098_00364_46499_3799.N1</a>	21JAN2011 04:41:00	21JAN2011 05:51:29	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110121_060422_000060213098_00365_46500_3801.N1</a>	21JAN2011 06:21:14	21JAN2011 07:31:29	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110121_074447_000059993098_00366_46501_3805.N1</a>	21JAN2011 08:01:28	21JAN2011 09:11:57	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110121_092449_000060213098_00367_46502_3807.N1	21JAN2011 09:41:41	21JAN2011 10:51:56	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110121_110514_000059993098_00368_46503_3832.N1	21JAN2011 11:21:55	21JAN2011 12:32:24	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110121_124517_000060213098_00369_46504_3834.N1	21JAN2011 13:02:09	21JAN2011 14:12:23	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110121_142541_000059993098_00370_46505_3836.N1	21JAN2011 14:42:22	21JAN2011 15:52:51	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110121_160544_000060213098_00371_46506_3838.N1	21JAN2011 16:22:36	21JAN2011 17:32:51	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110121_174609_000059993098_00372_46507_3840.N1	21JAN2011 18:02:50	21JAN2011 19:13:40	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110121_192612_000060213098_00373_46508_3842.N1	21JAN2011 19:43:04	21JAN2011 20:53:40	0	35	31	0	1	2	0	0	
13	SCI_NLC_1CUDPA20110121_210637_000059993098_00374_46509_3844.N1	21JAN2011 21:23:17	21JAN2011 22:33:46	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110121_224639_000060213098_00375_46510_3847.N1	21JAN2011 23:03:31	22JAN2011 00:13:46	0	35	31	0	0	1	0	0	

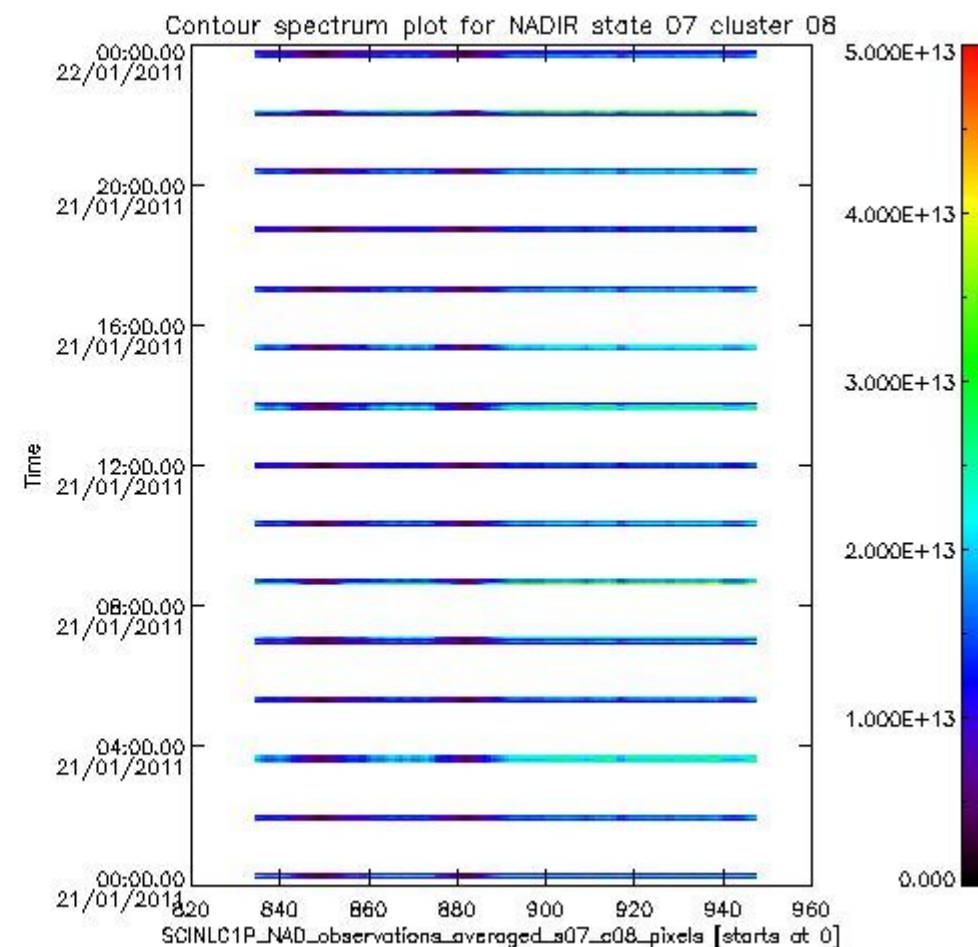
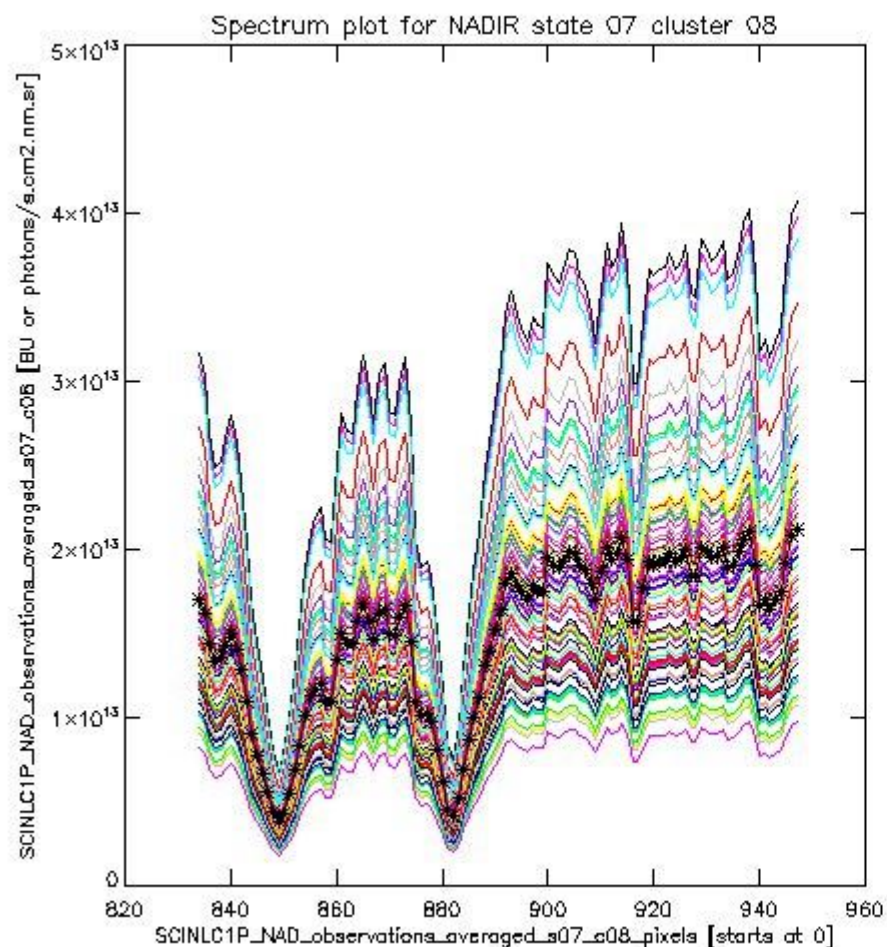
## 1.2 Source packet monitoring

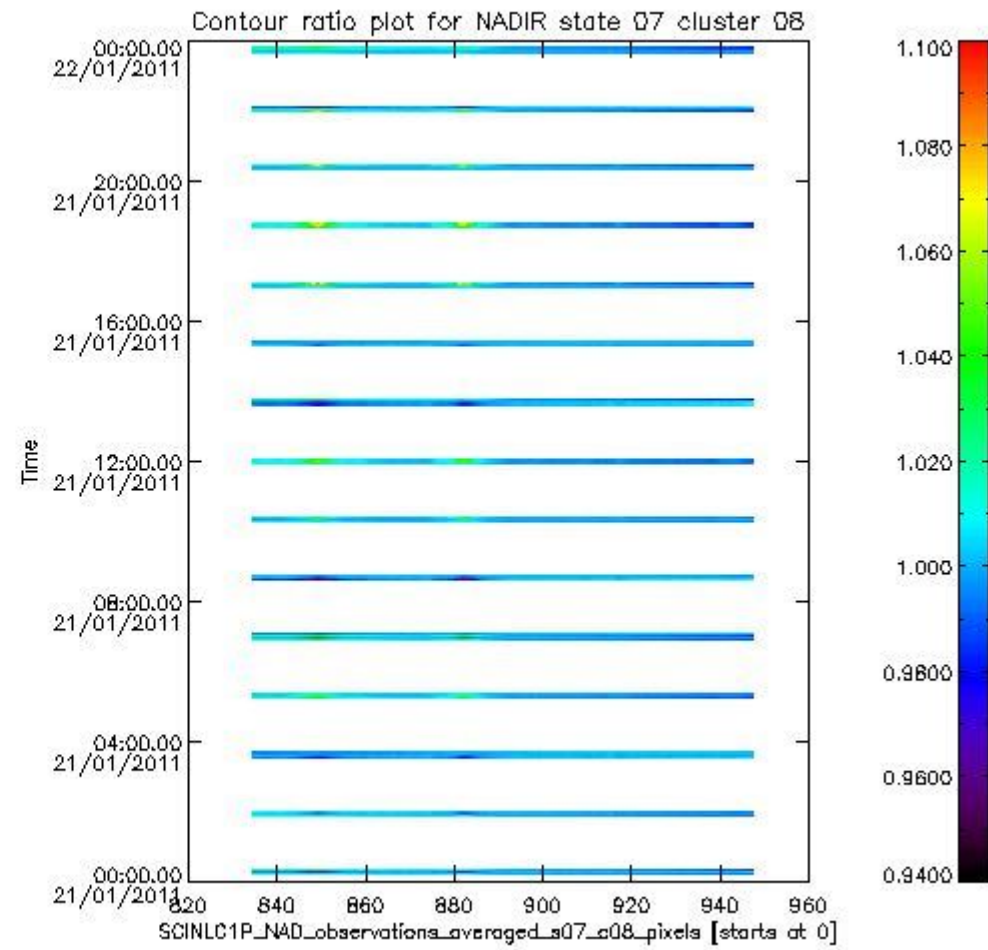
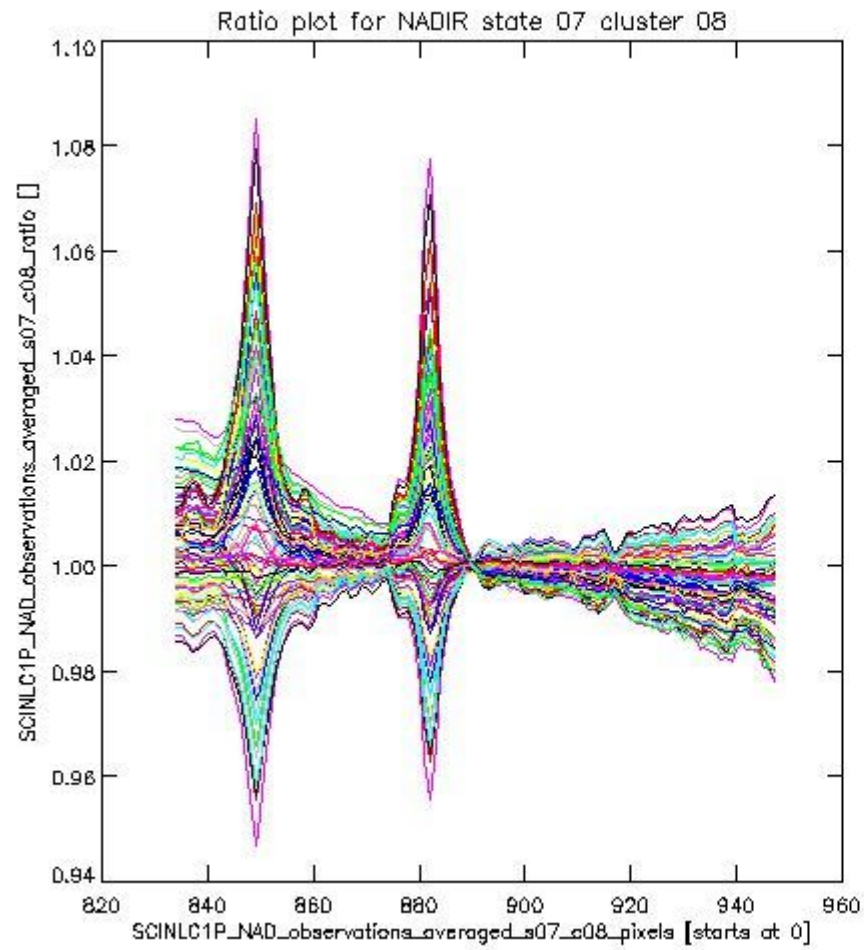
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	21JAN2011 00:12:22.425
Start time of last sample	21JAN2011 23:45:47.667
Reference period start time	22DEC2010 00:14:10.912
Reference period stop time	20JAN2011 22:41:28.315
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

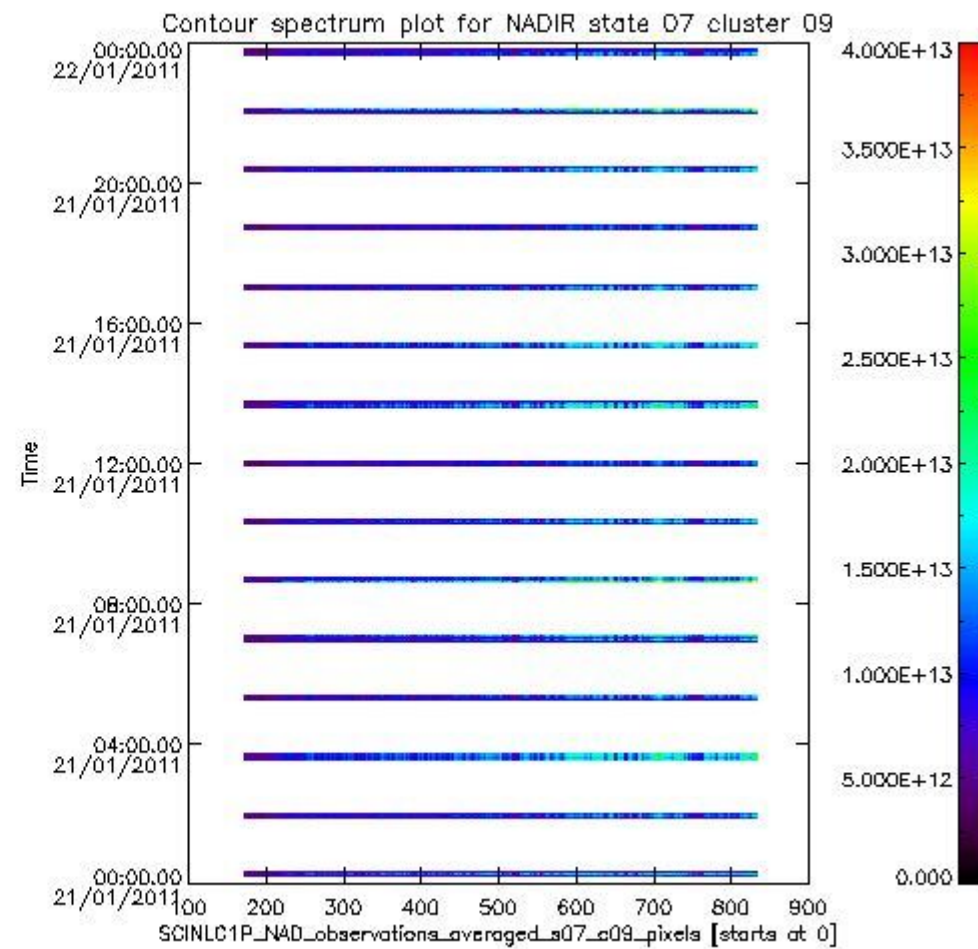
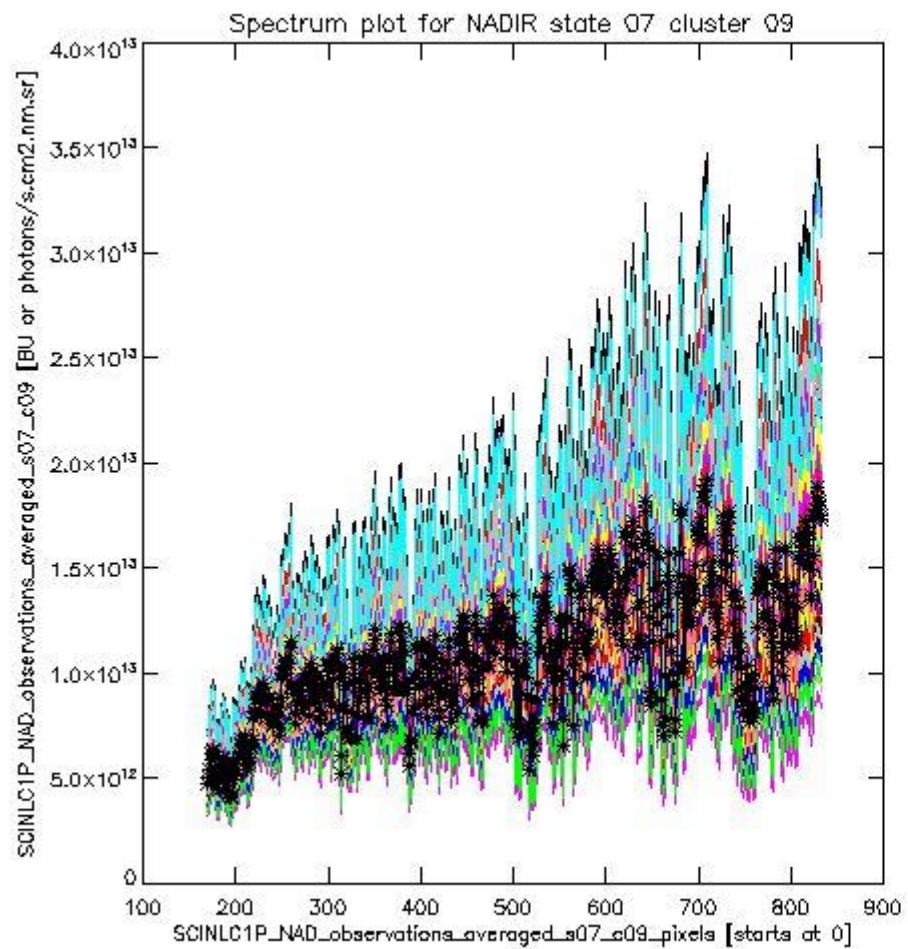




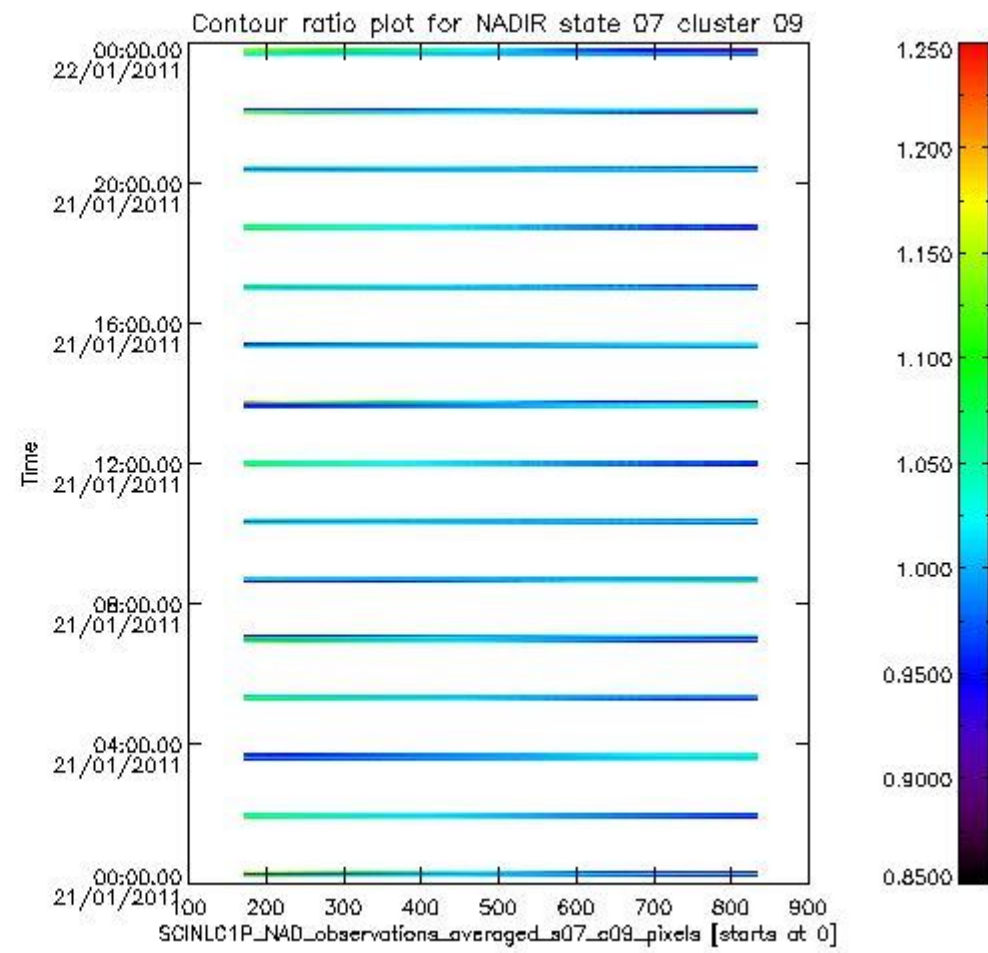
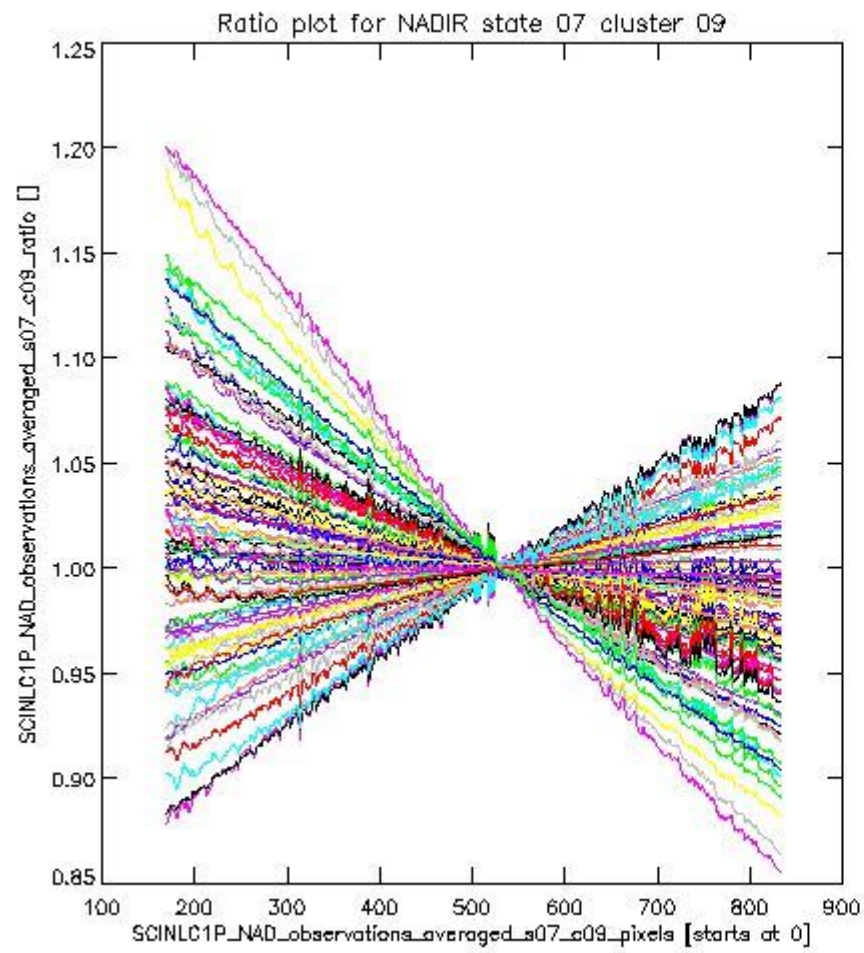
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	21JAN2011 00:12:22.425
Start time of last sample	21JAN2011 23:45:47.667
Reference period start time	22DEC2010 00:14:10.912
Reference period stop time	20JAN2011 22:41:28.315
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





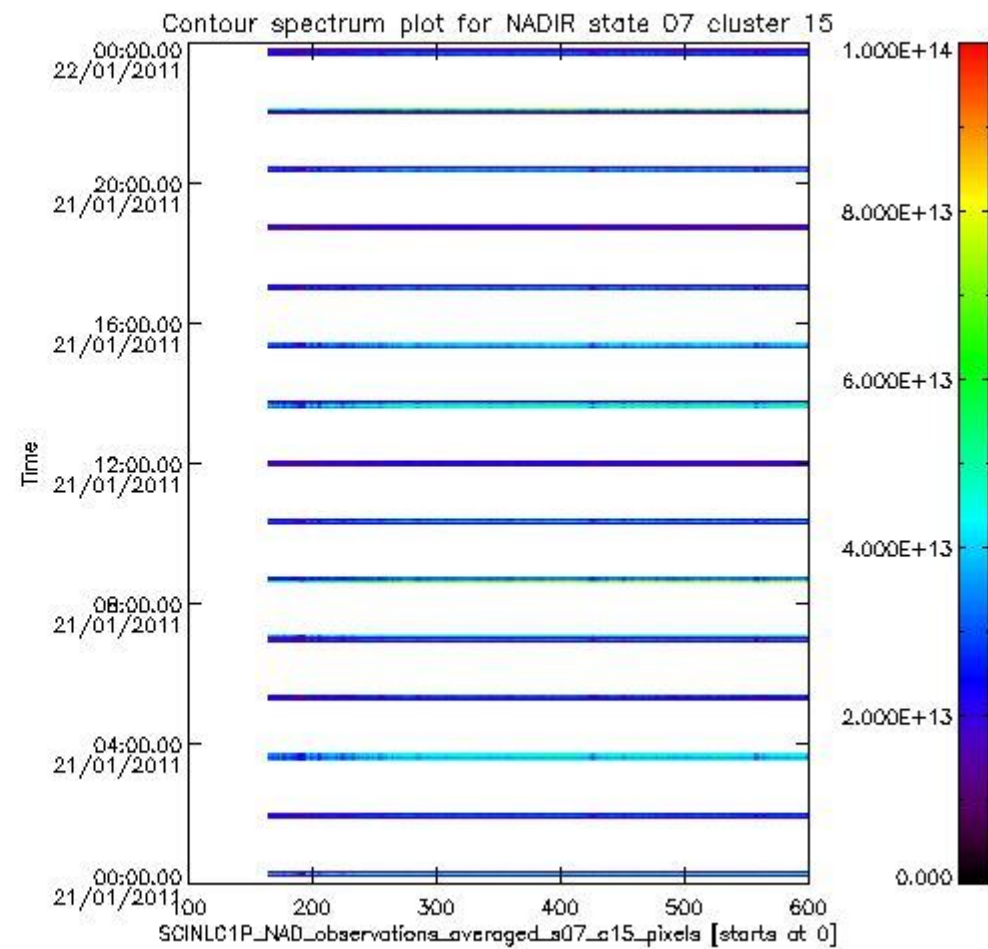
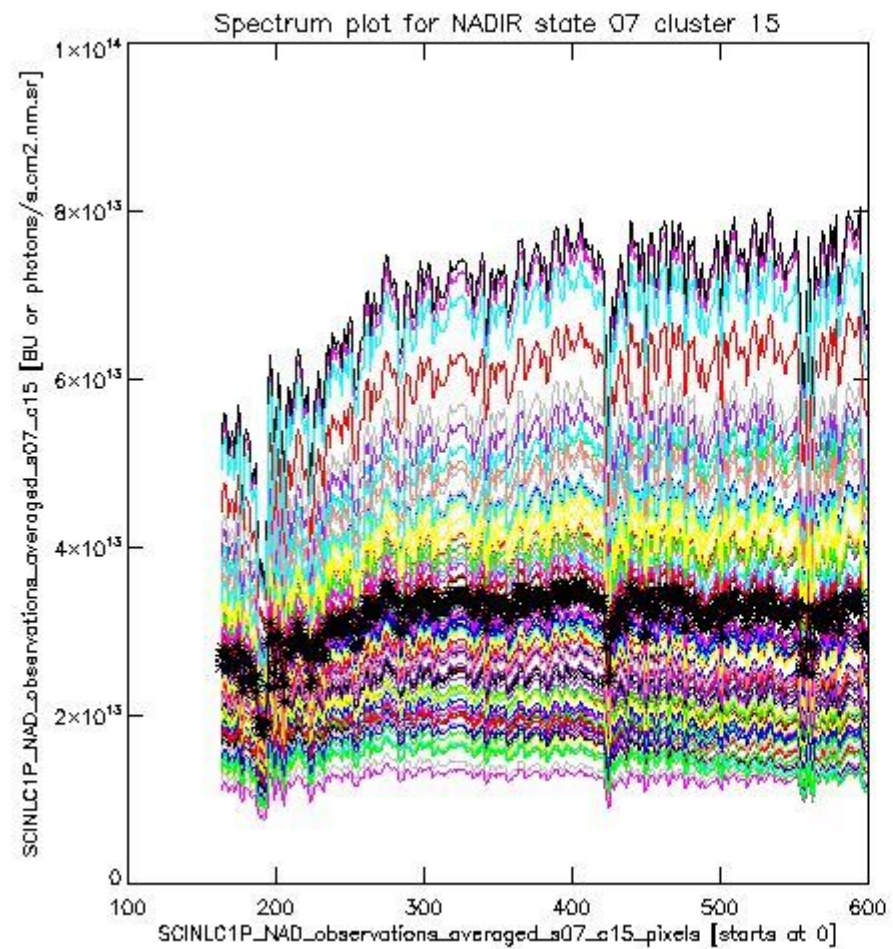
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_3.PNG

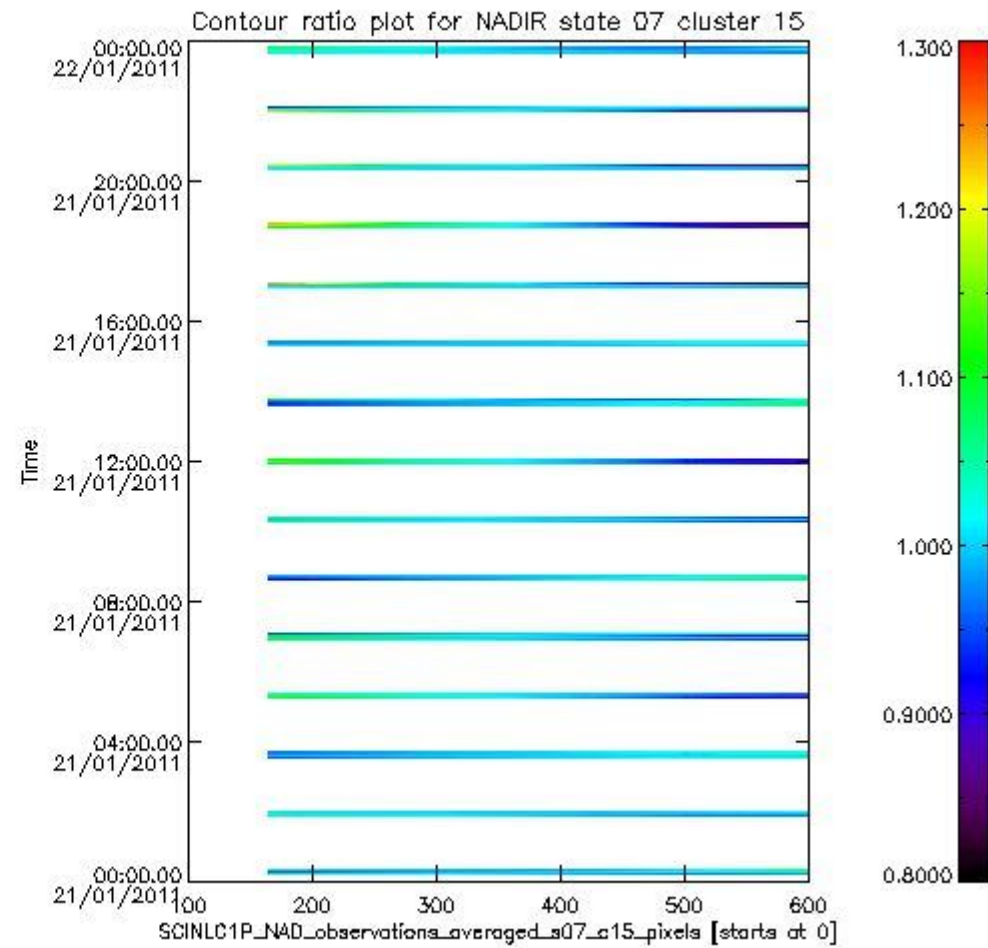
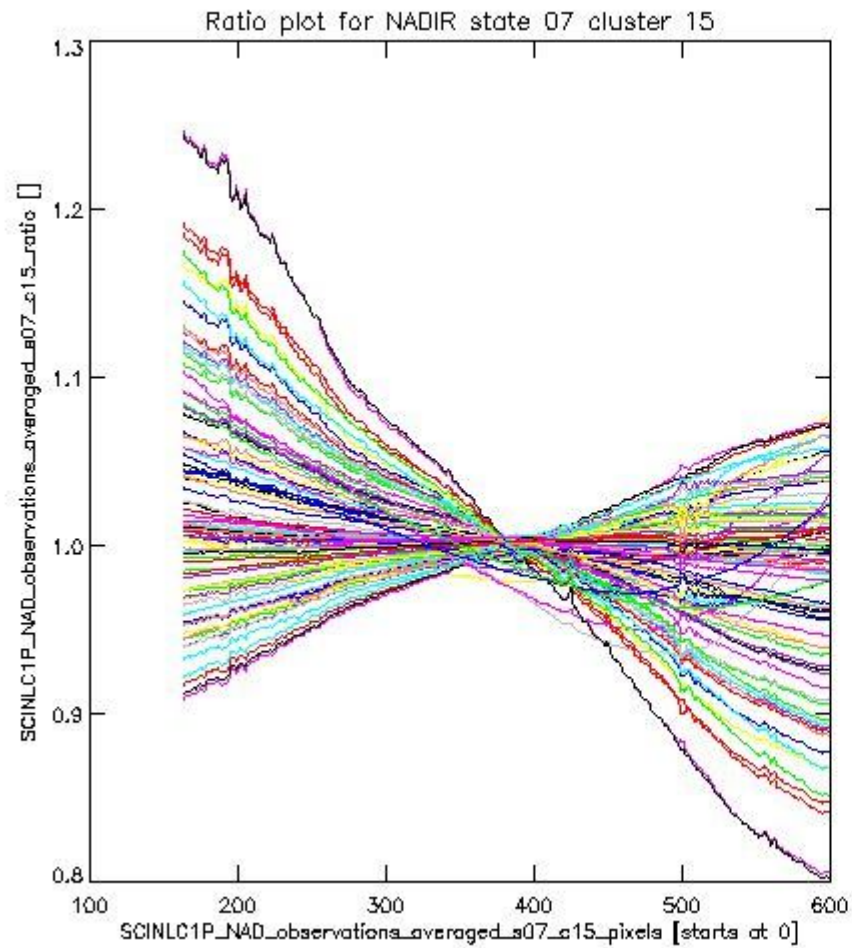
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	21JAN2011 00:12:22.425
Start time of last sample	21JAN2011 23:45:47.667
Reference period start time	22DEC2010 00:14:10.912
Reference period stop time	20JAN2011 22:41:28.315
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\_20110121\_4.PNG

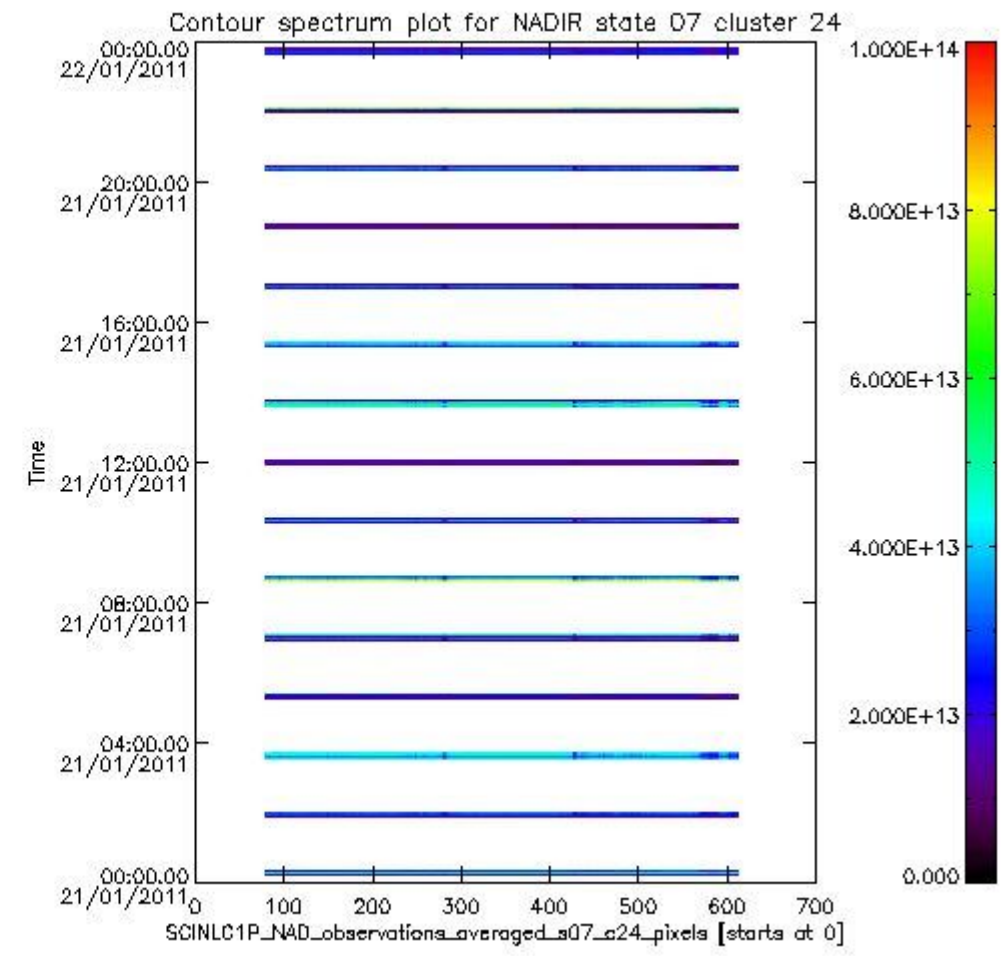
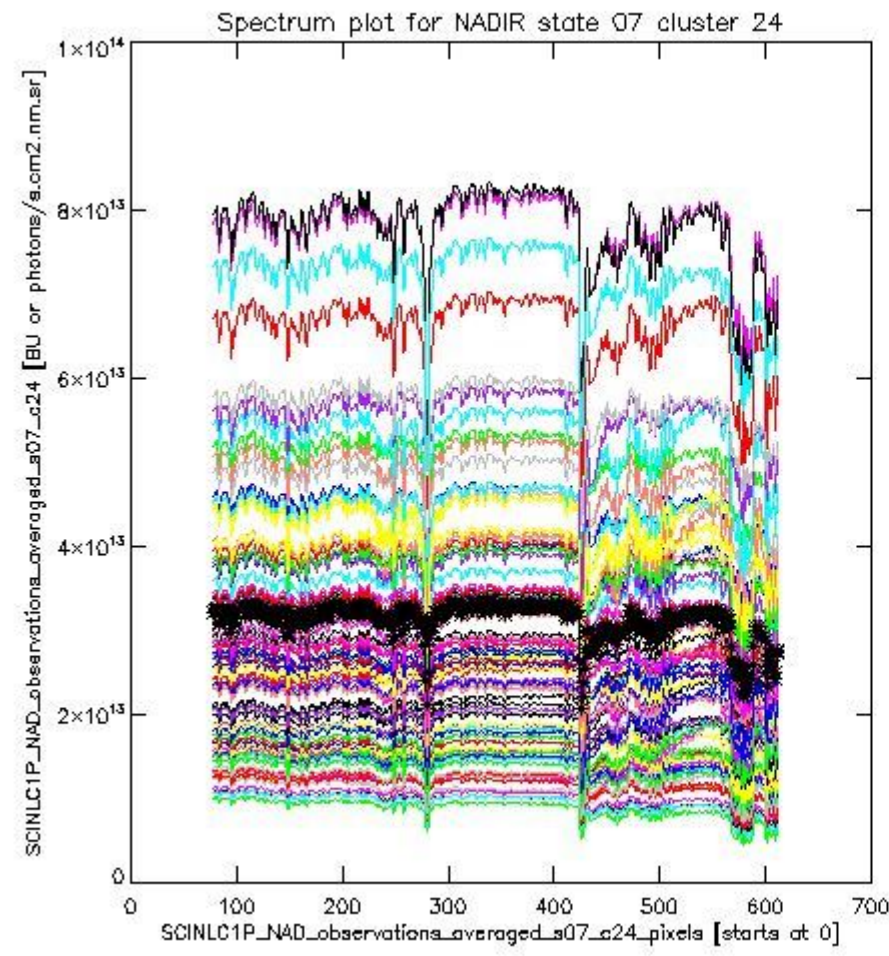




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_5.PNG

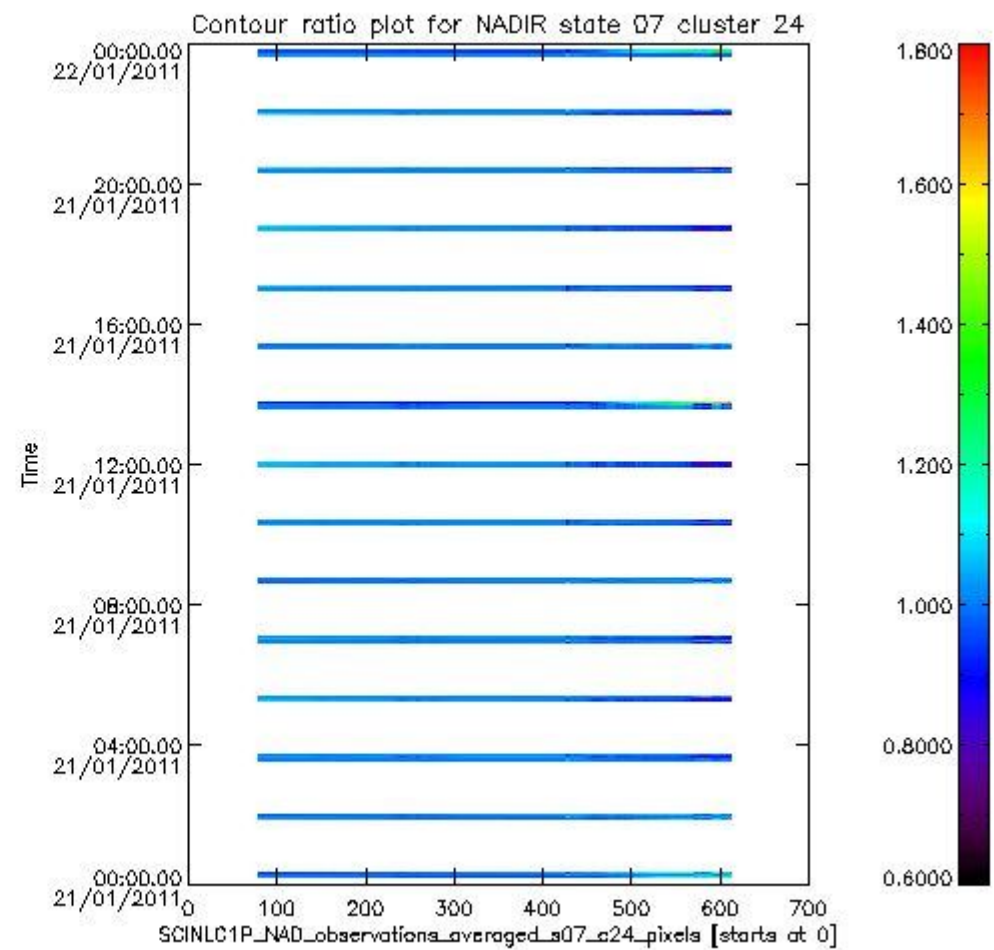
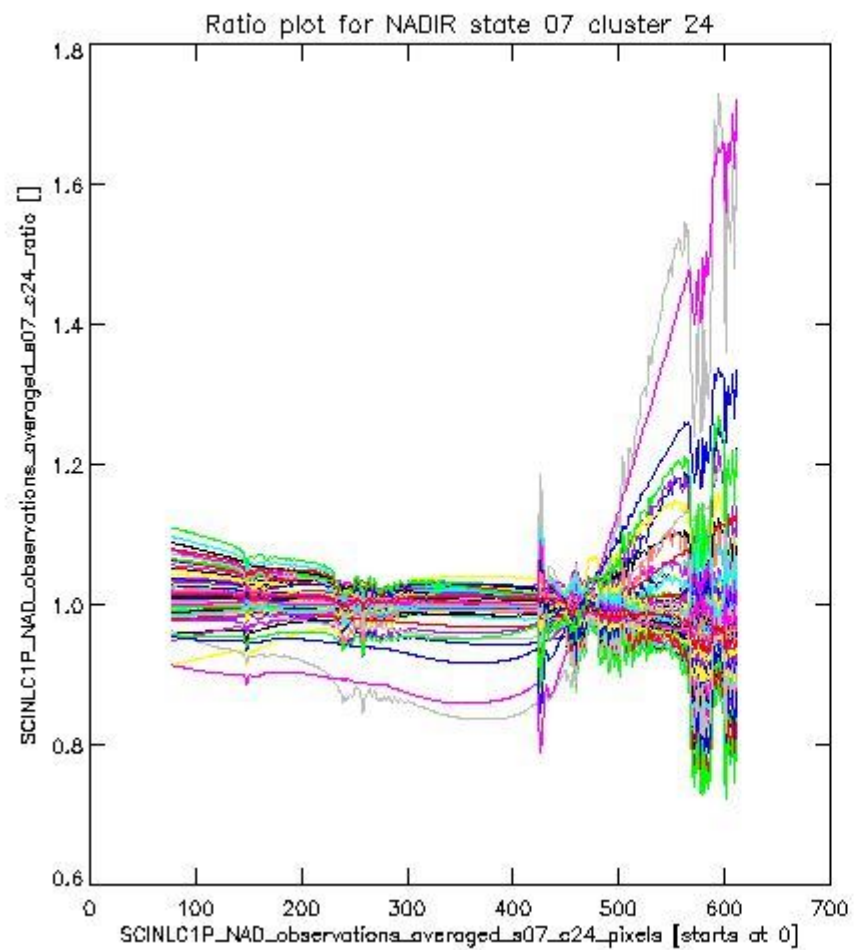
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	21JAN2011 00:12:22.425
Start time of last sample	21JAN2011 23:45:47.667
Reference period start time	22DEC2010 00:14:10.912
Reference period stop time	20JAN2011 22:41:28.315
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\_20110121\_6.PNG

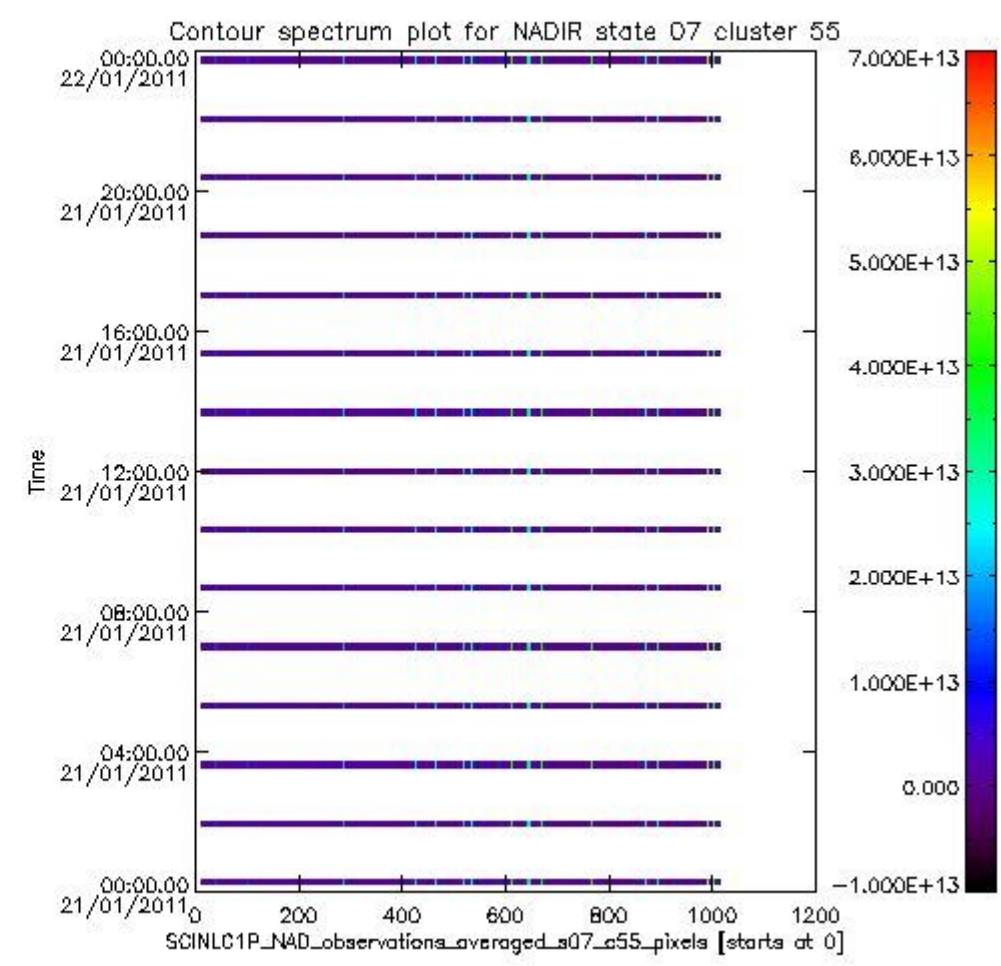
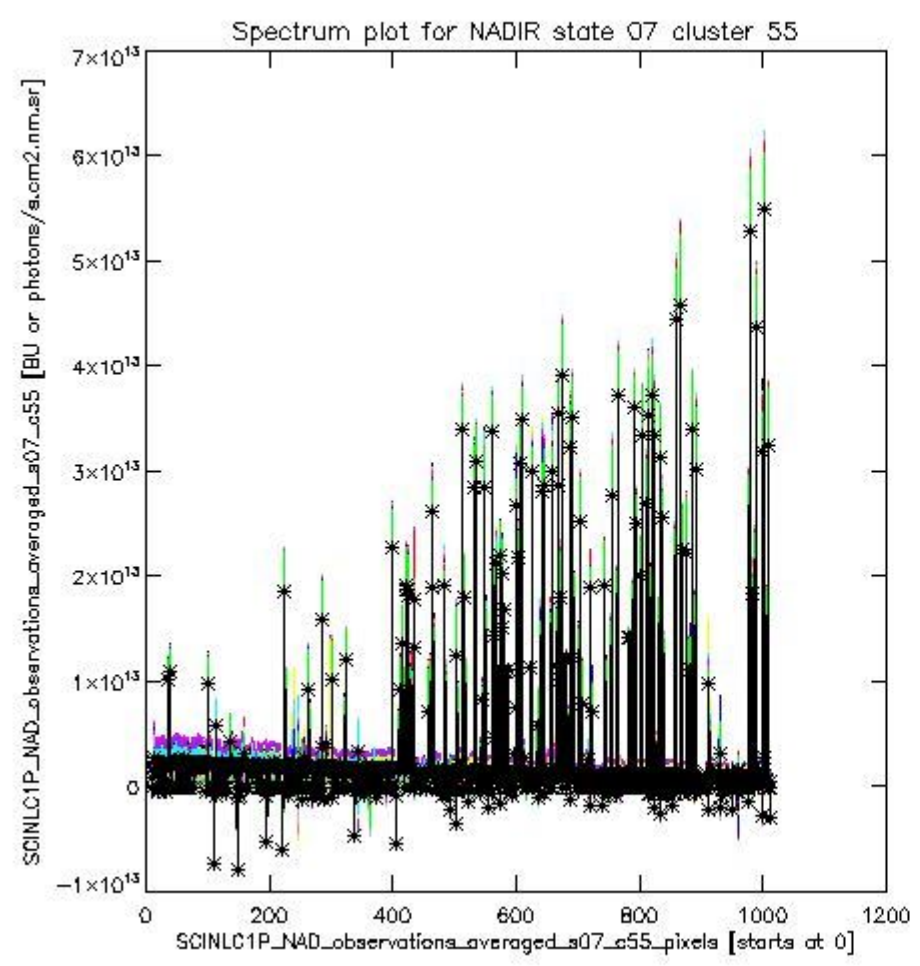




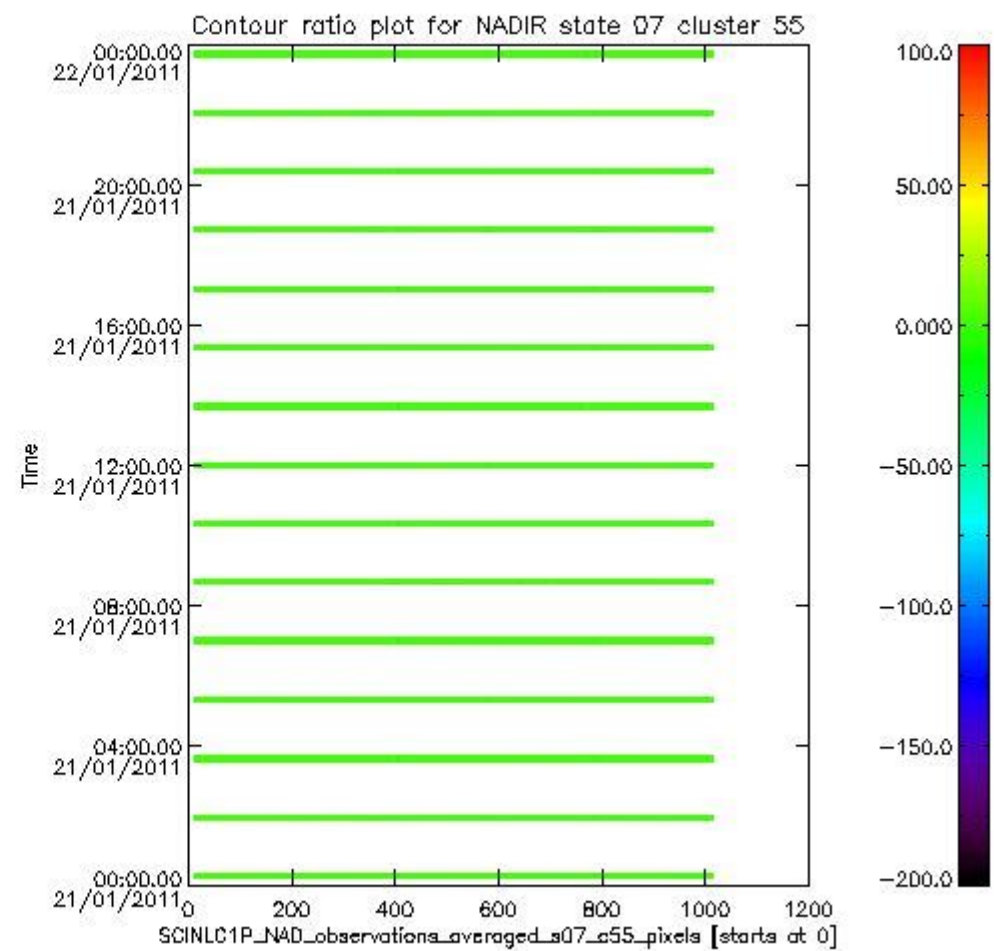
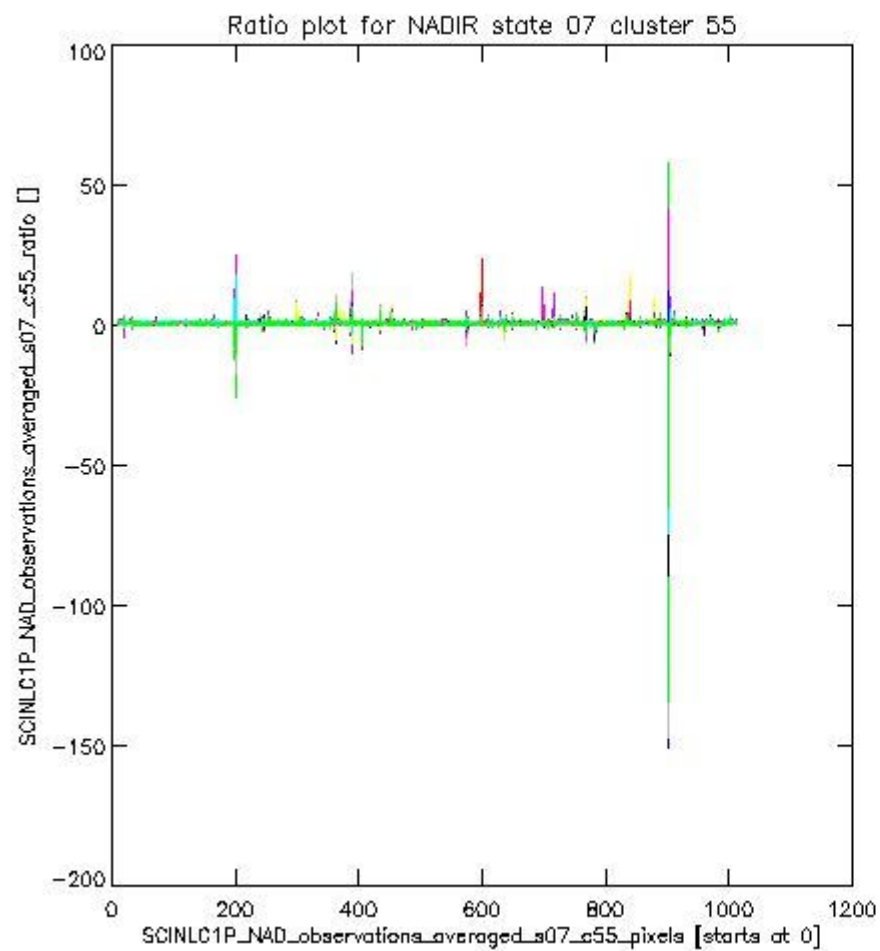
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_7.PNG

**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	21JAN2011 00:12:22.425
Start time of last sample	21JAN2011 23:45:47.667
Reference period start time	22DEC2010 00:14:10.912
Reference period stop time	20JAN2011 22:41:28.315
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\_20110121\_8.PNG

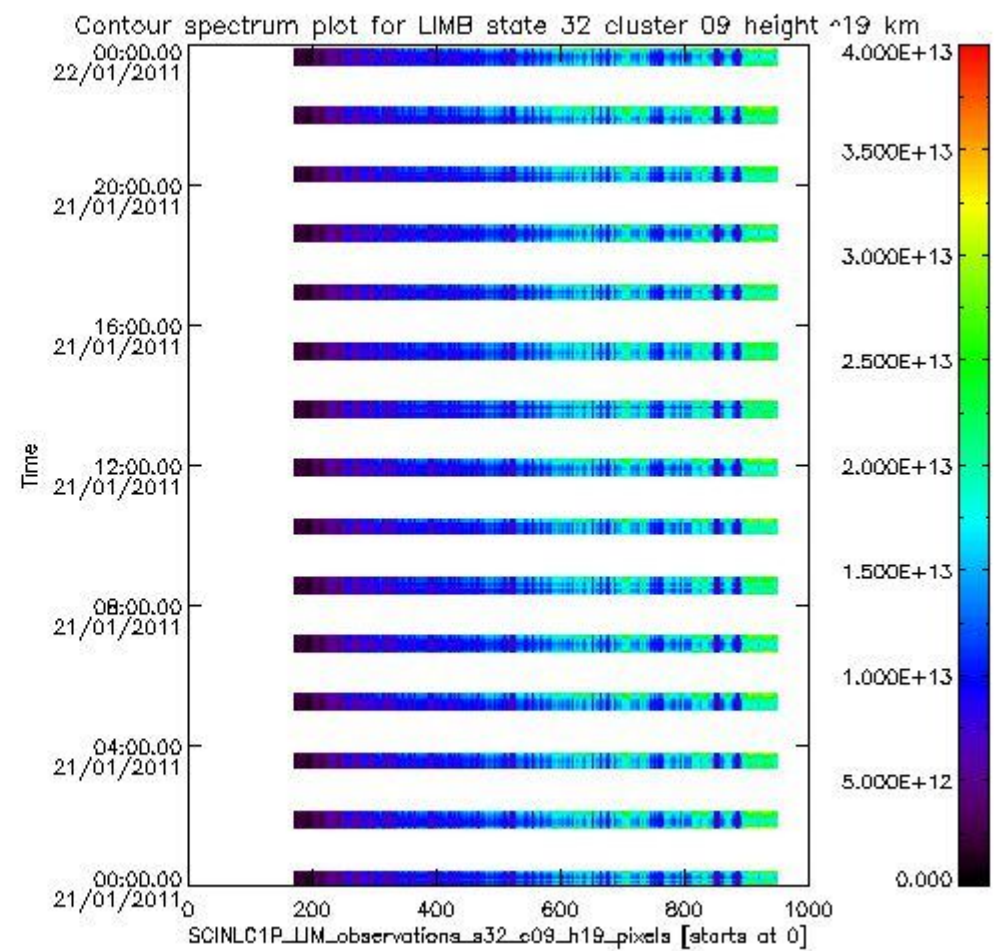
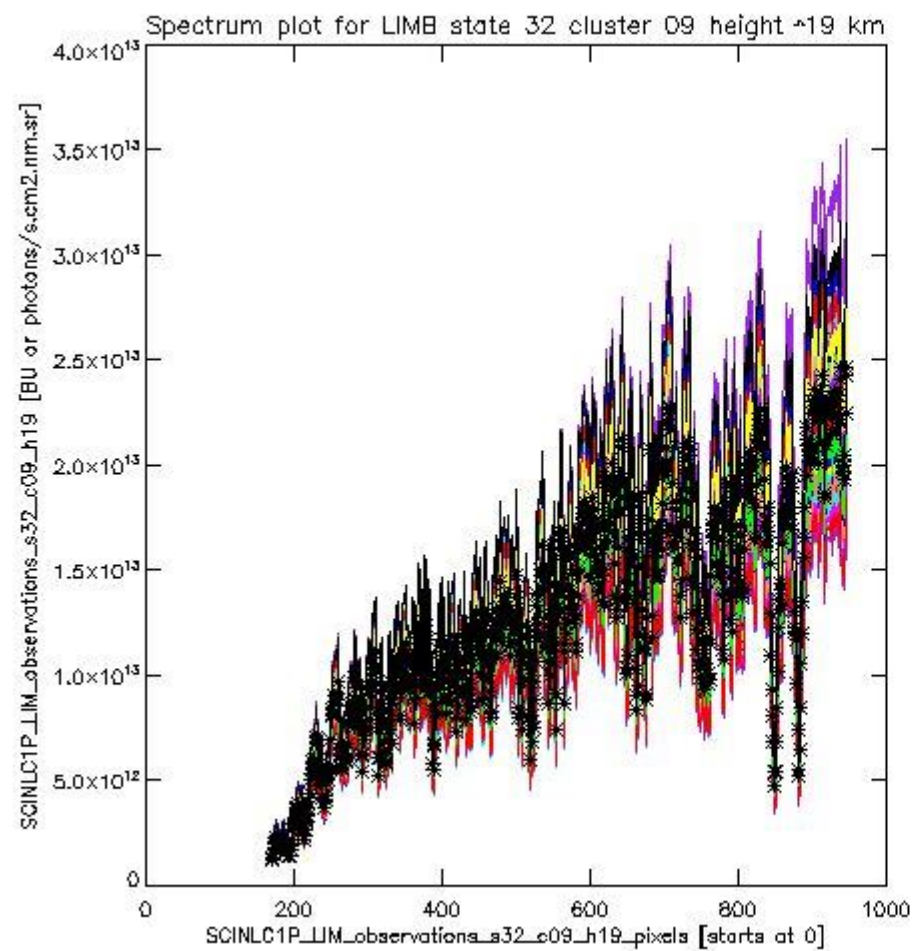


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_9.PNG

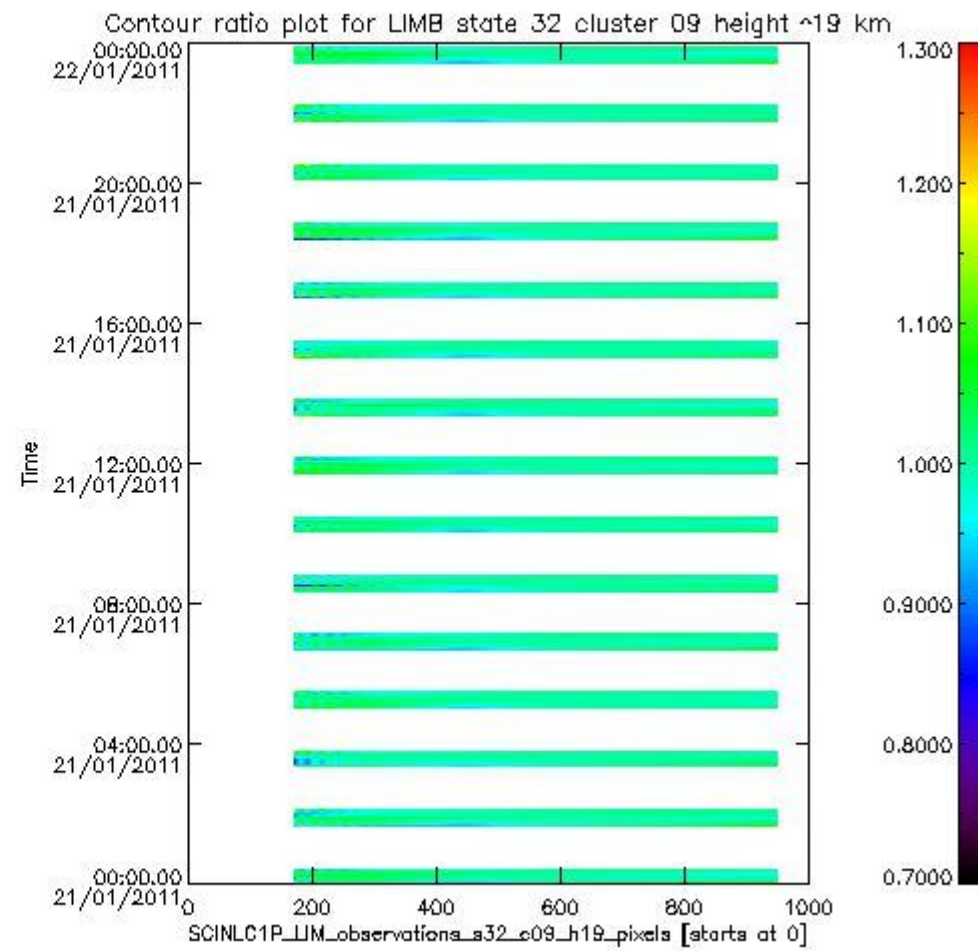
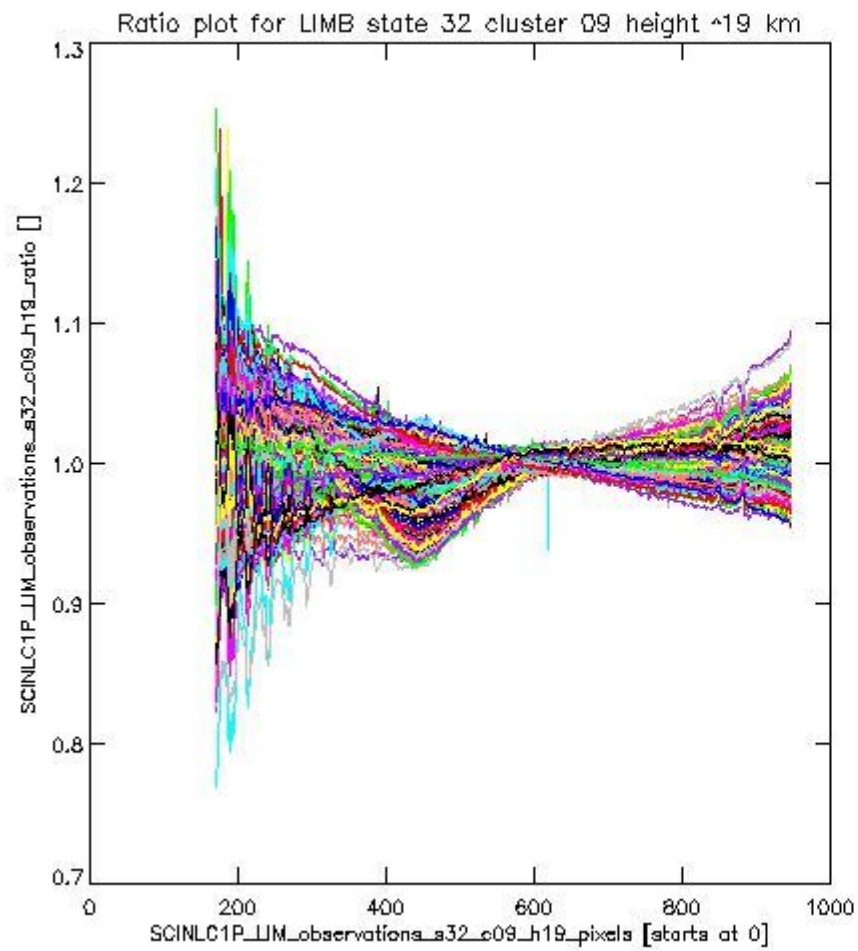
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	21JAN2011 00:01:14.531
Start time of last sample	21JAN2011 23:48:58.971
Reference period start time	22DEC2010 00:01:00.279
Reference period stop time	20JAN2011 23:59:11.785
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





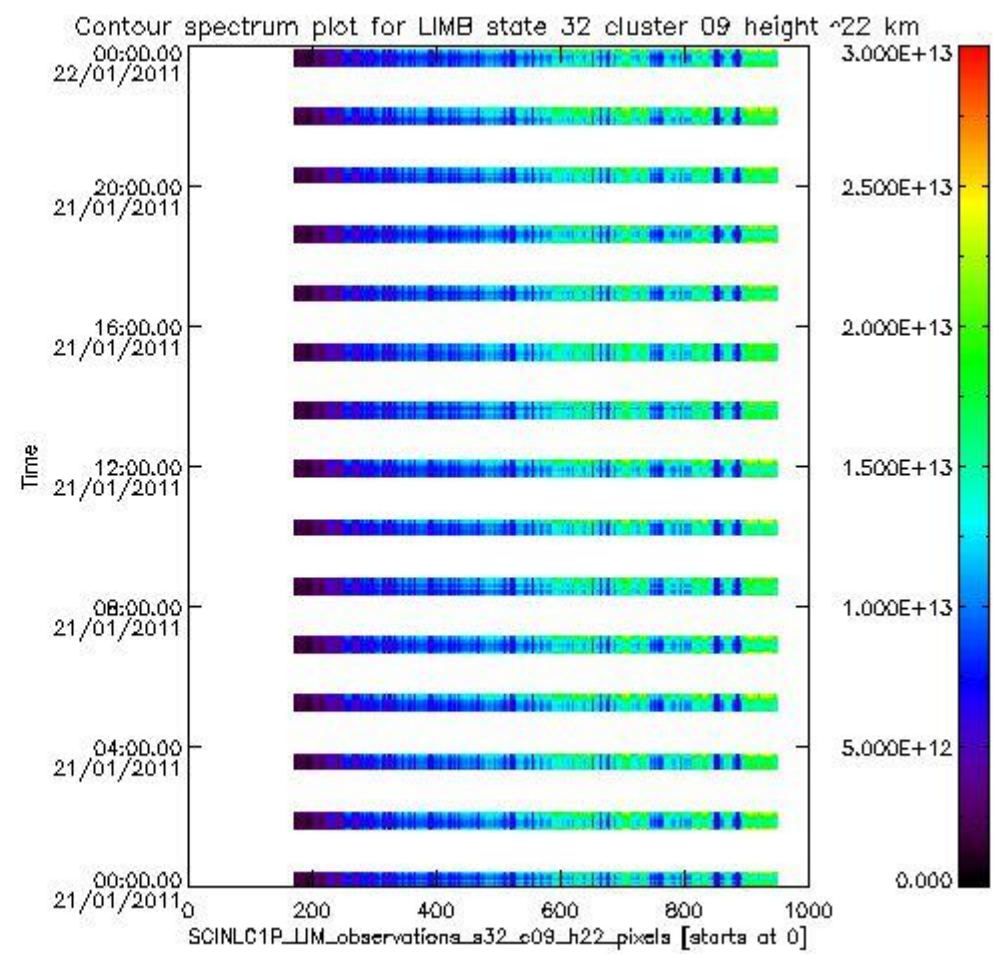
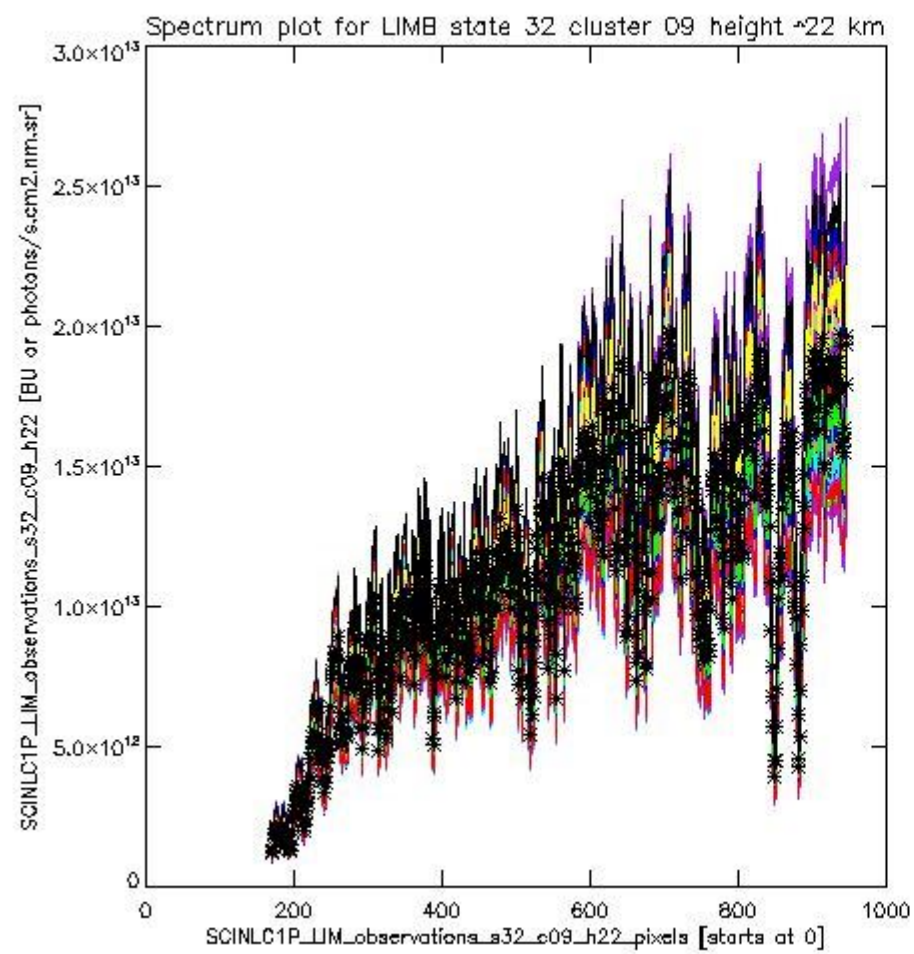
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_10.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_11.PNG

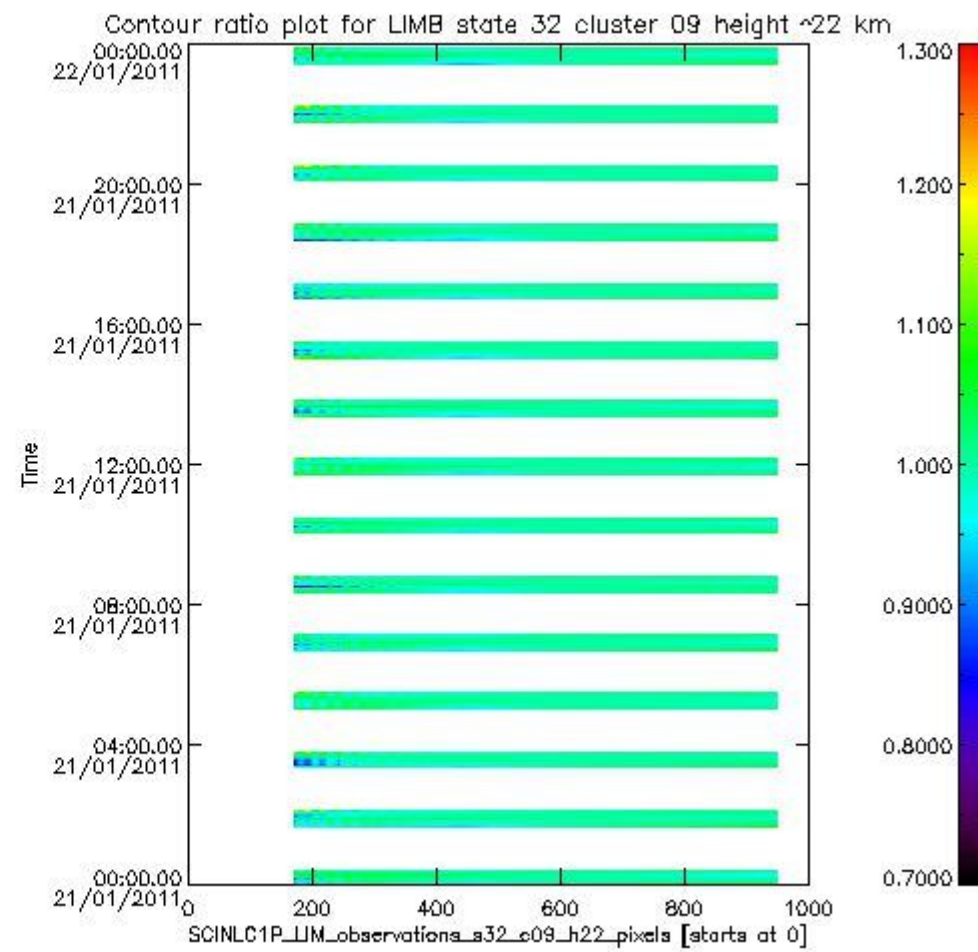
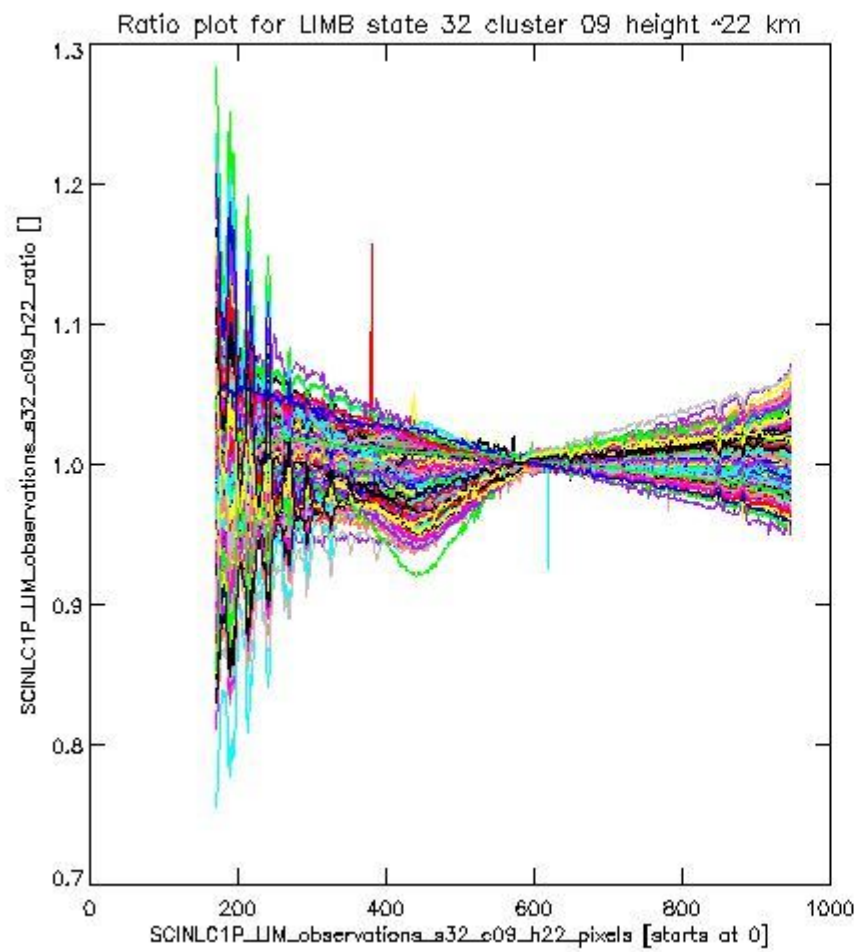
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	21JAN2011 00:01:14.531
Start time of last sample	21JAN2011 23:48:58.971
Reference period start time	22DEC2010 00:01:00.279
Reference period stop time	20JAN2011 23:59:11.785
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\_20110121\_12.PNG

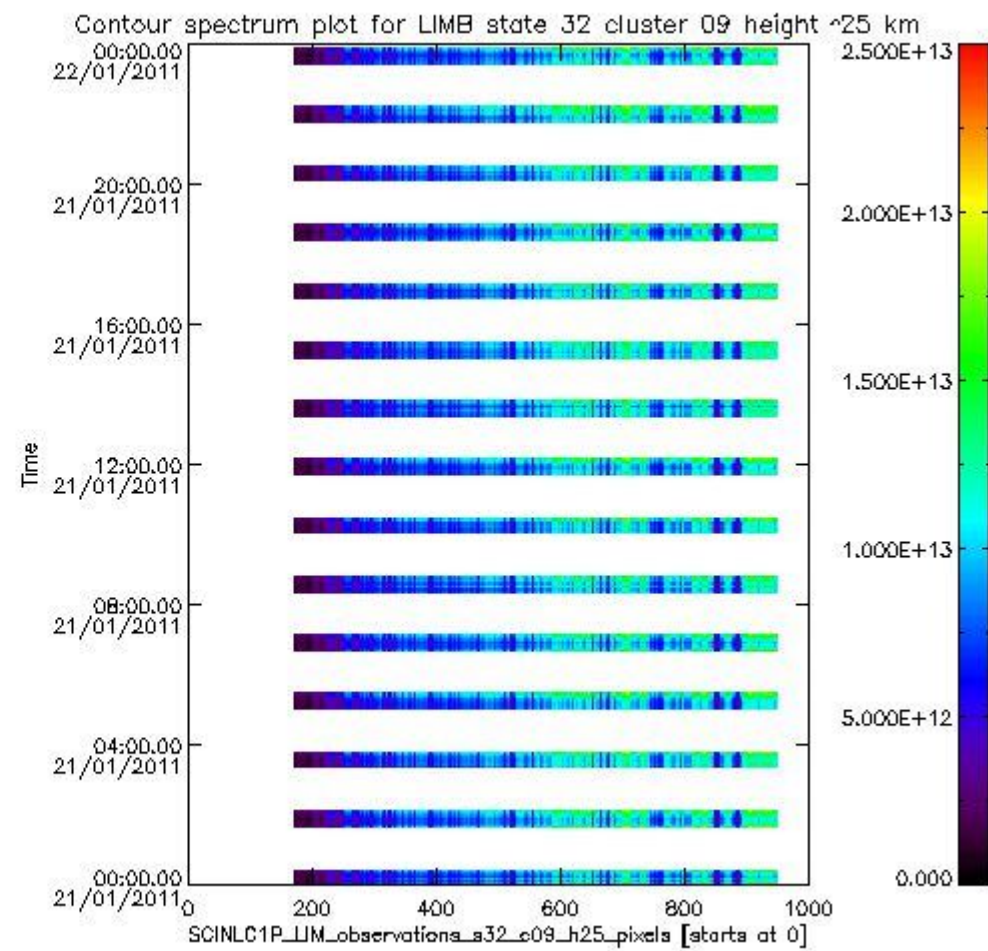
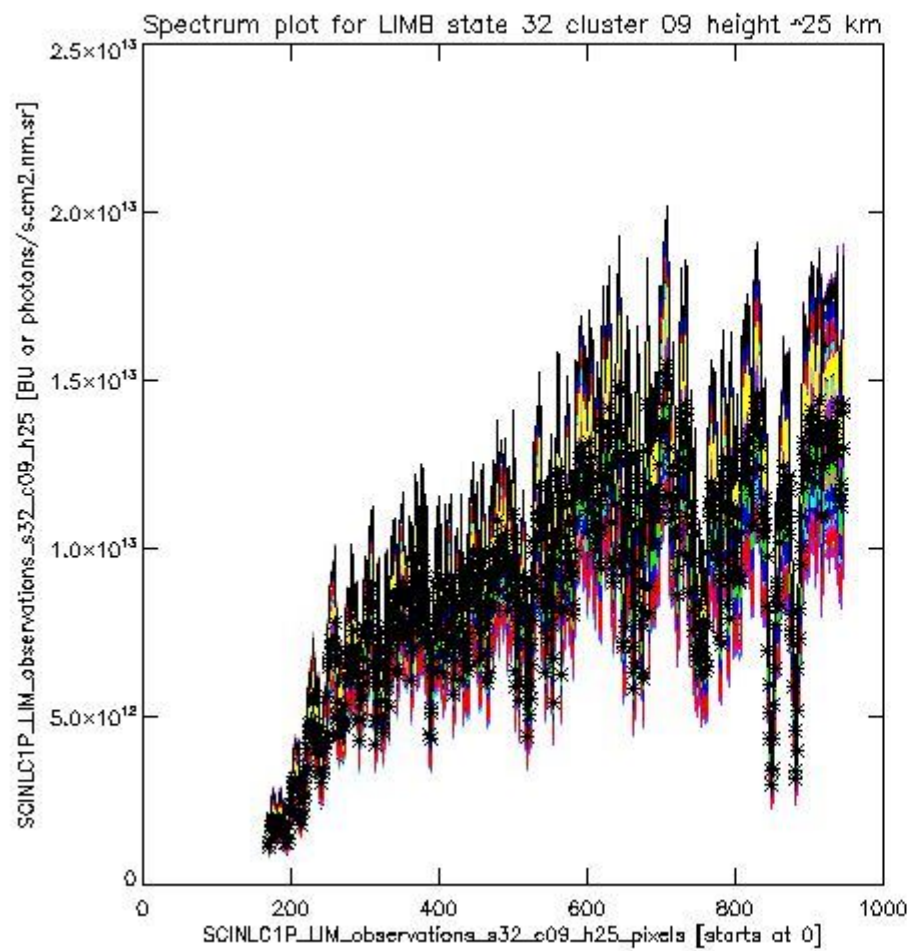




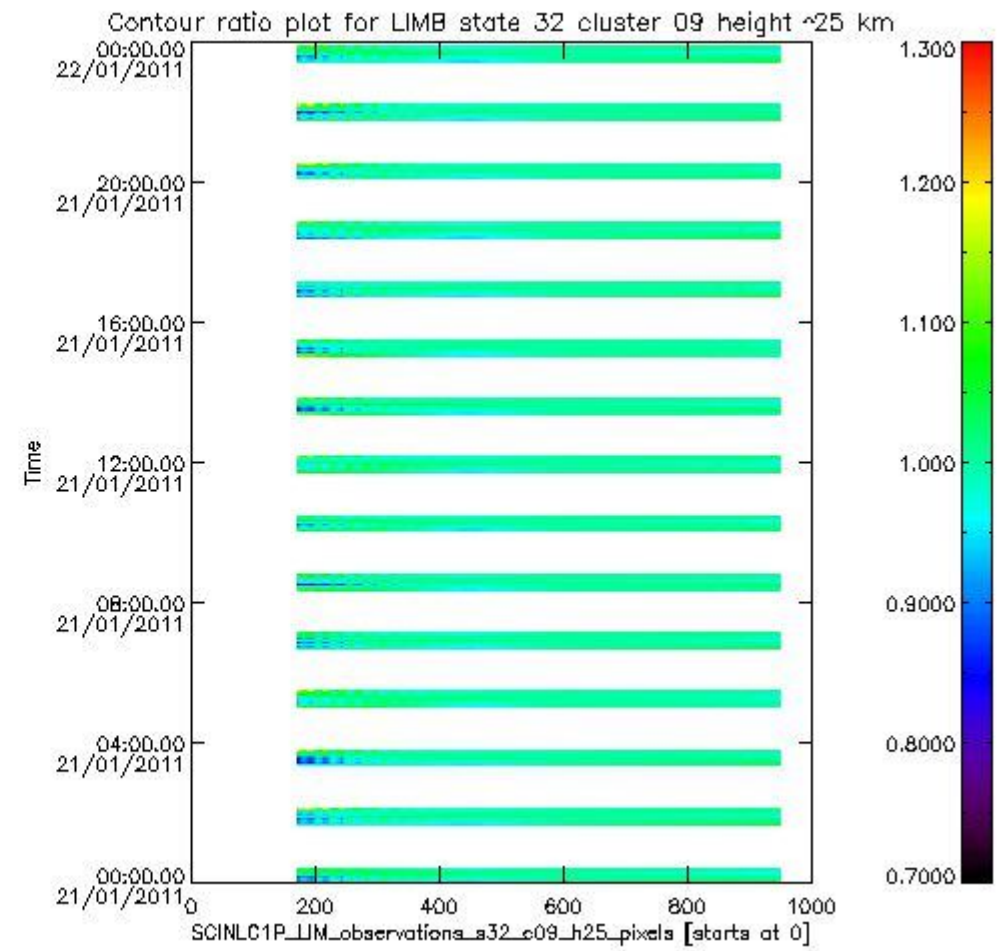
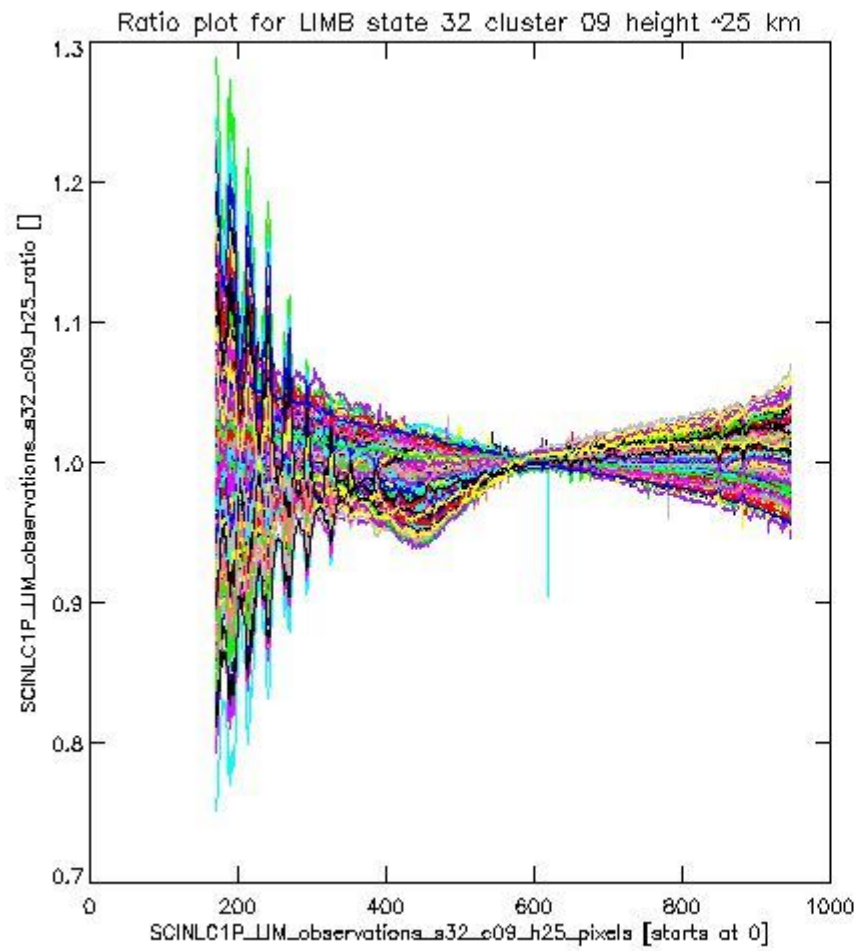
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_13.PNG

**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	21JAN2011 00:01:14.531
Start time of last sample	21JAN2011 23:48:58.971
Reference period start time	22DEC2010 00:01:00.279
Reference period stop time	20JAN2011 23:59:11.785
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\_20110121\_14.PNG

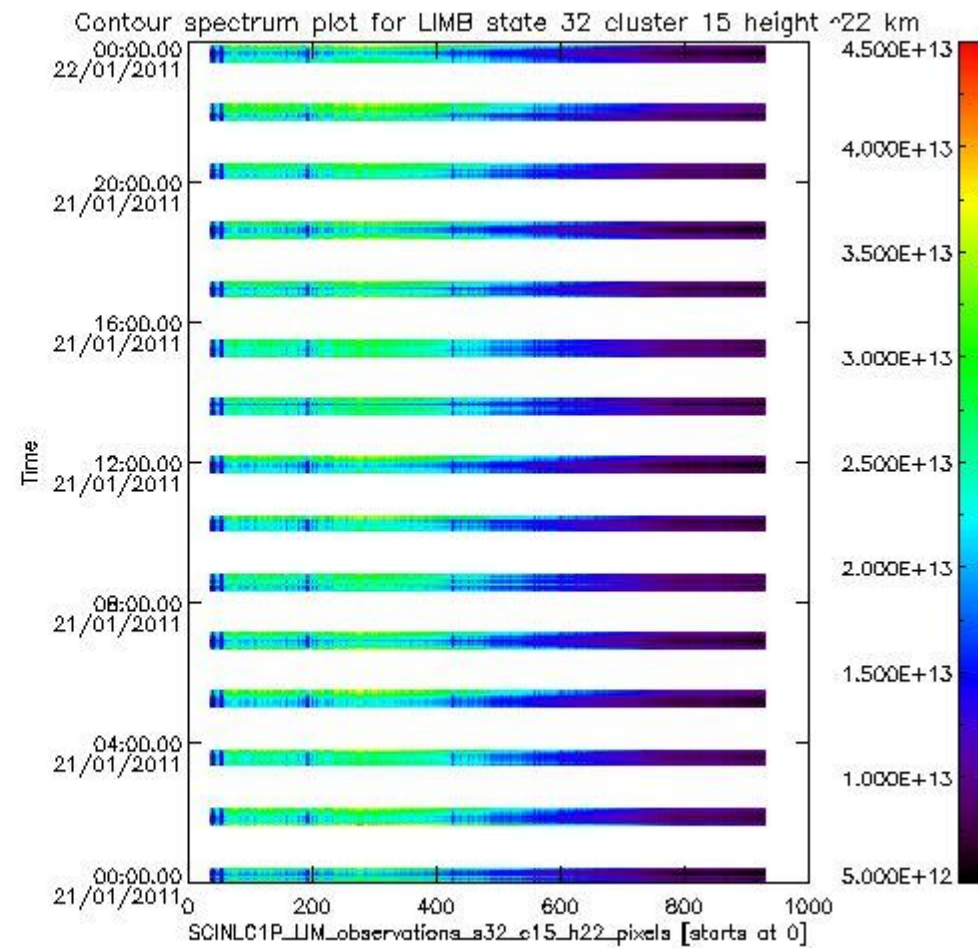
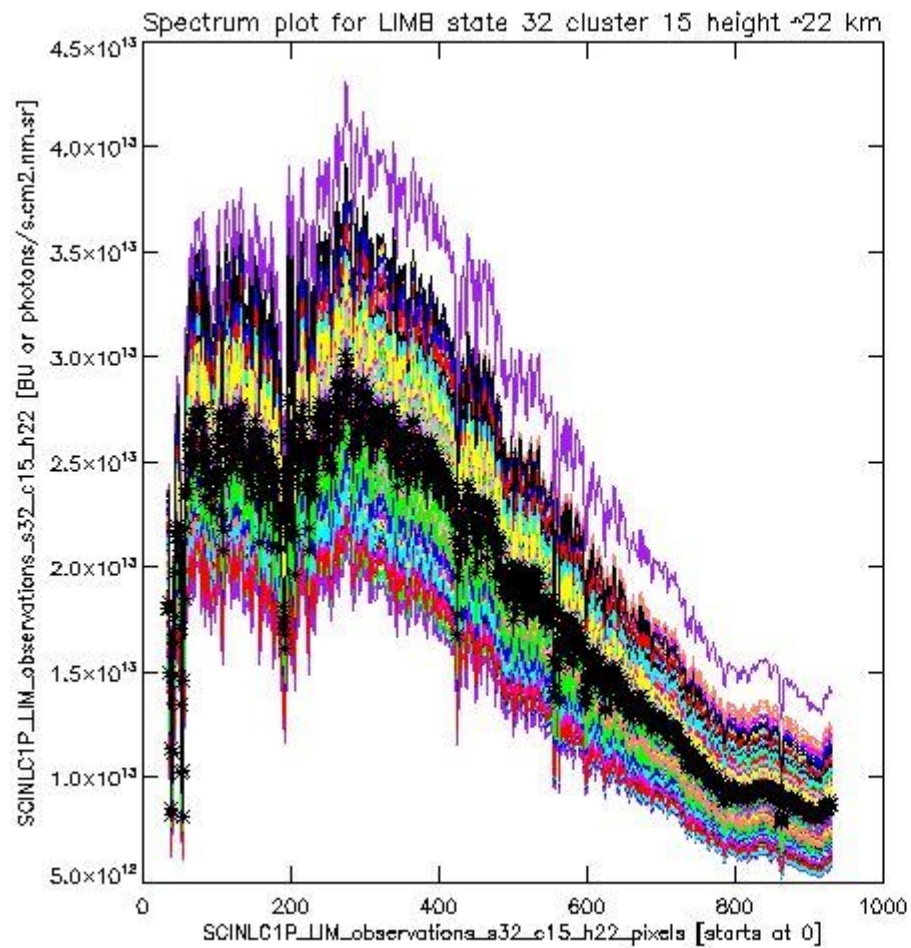


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_15.PNG

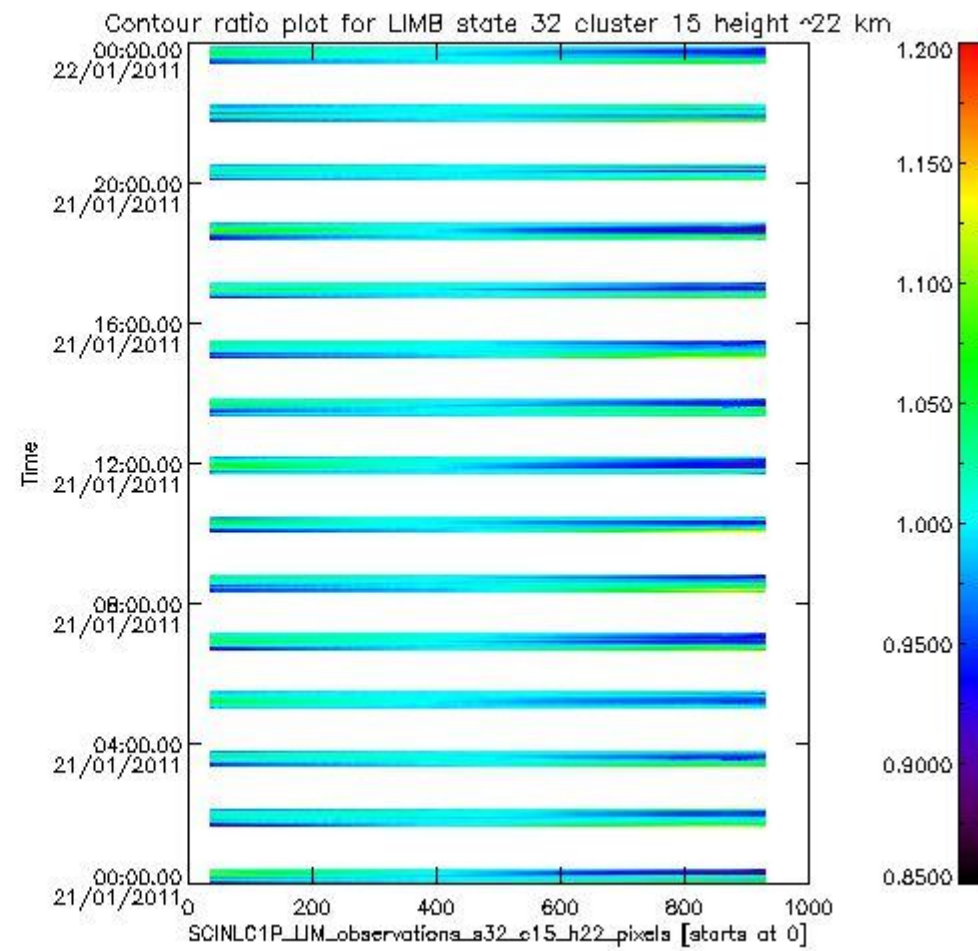
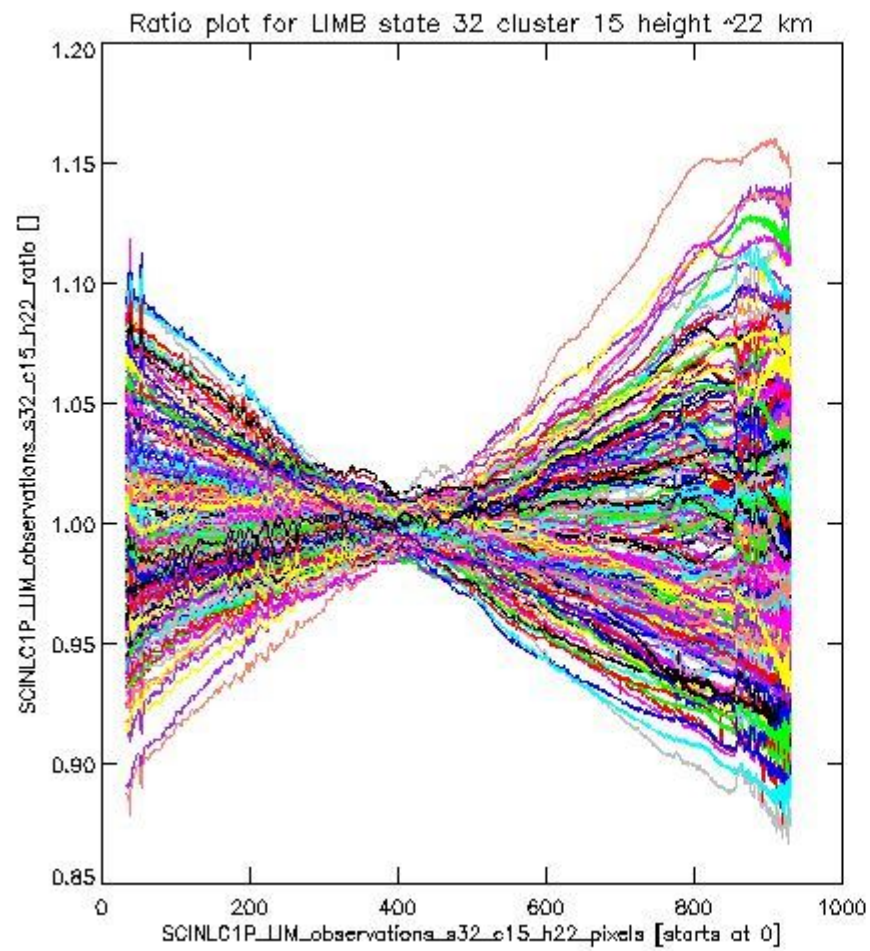
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	21JAN2011 00:01:14.531
Start time of last sample	21JAN2011 23:48:58.971
Reference period start time	22DEC2010 00:01:00.279
Reference period stop time	20JAN2011 23:59:11.785
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\_20110121\_16.PNG

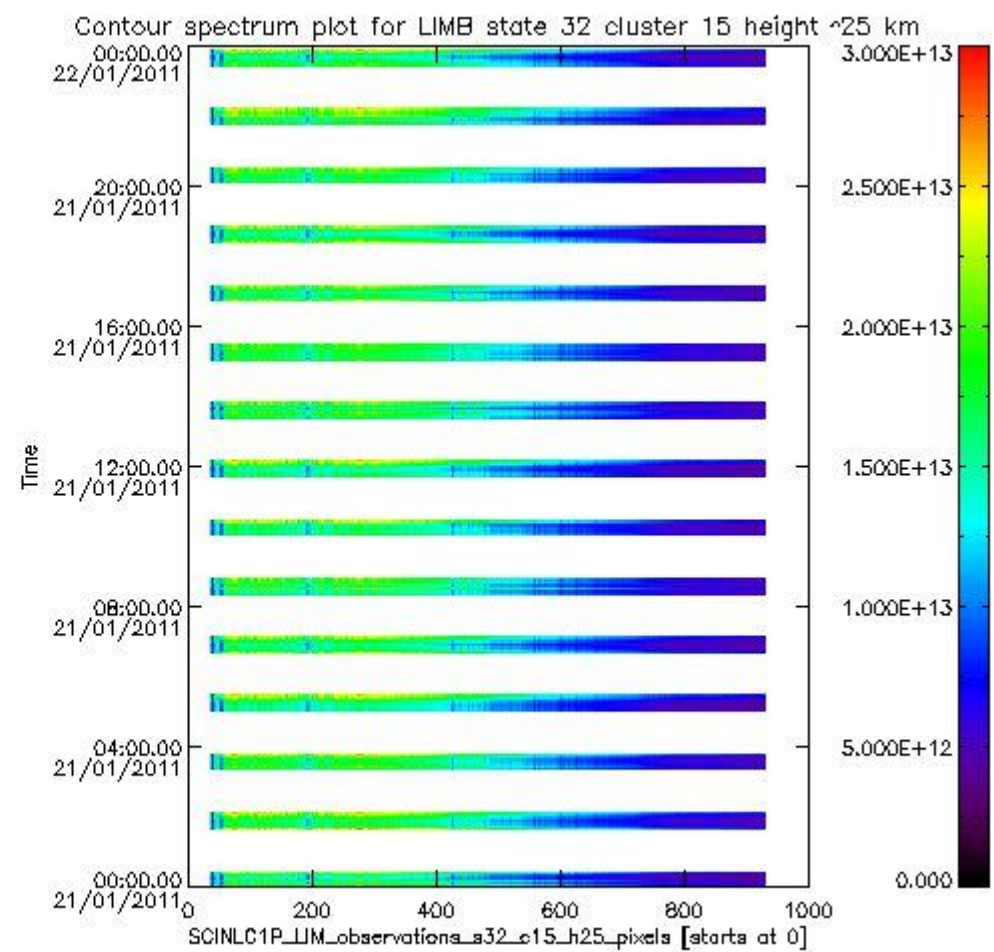
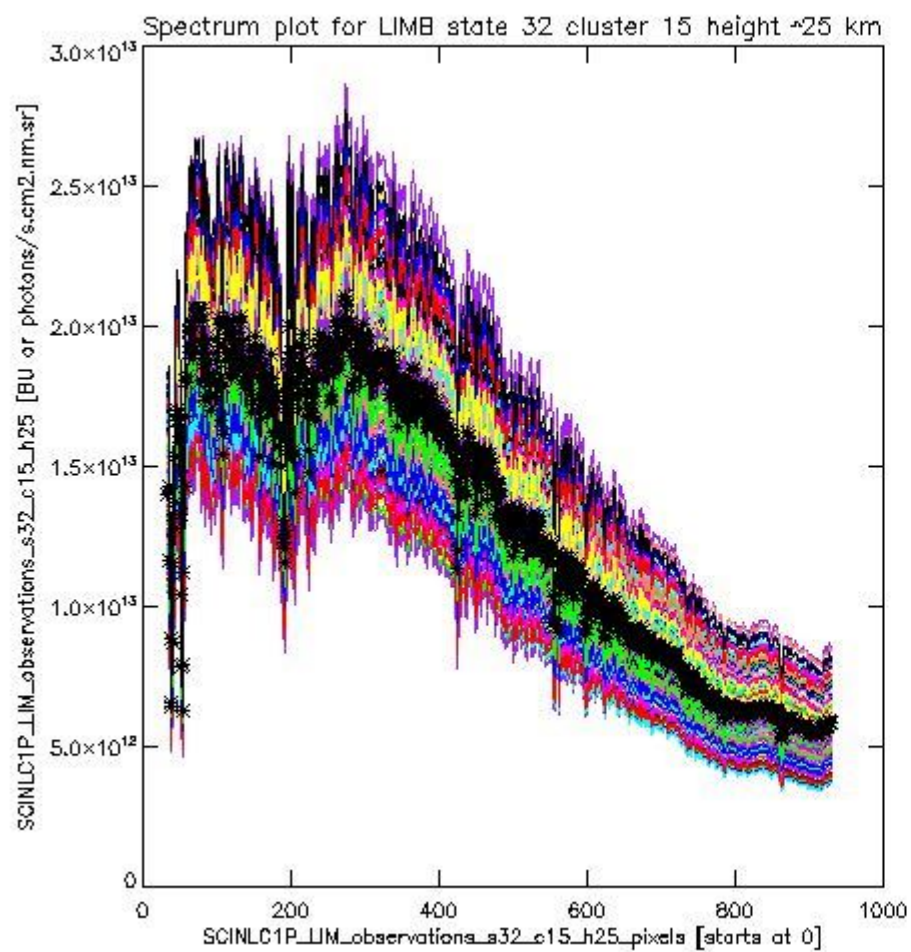


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_17.PNG

**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:

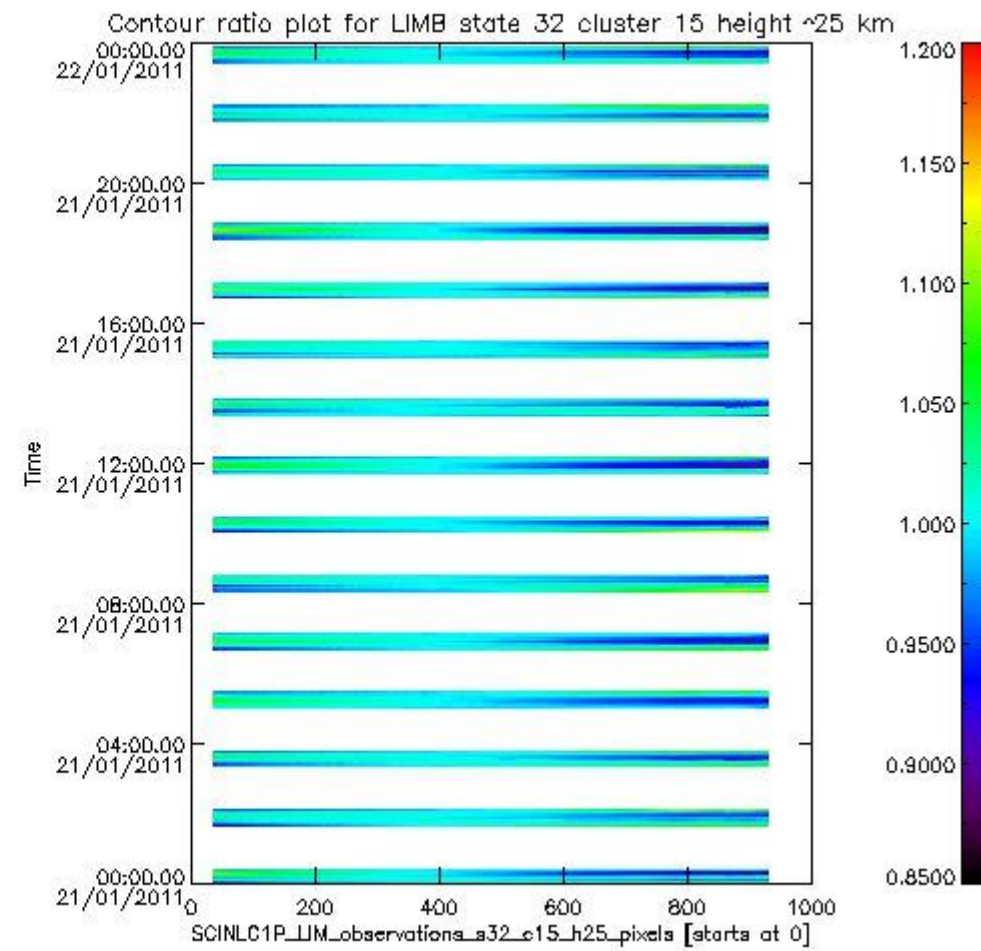
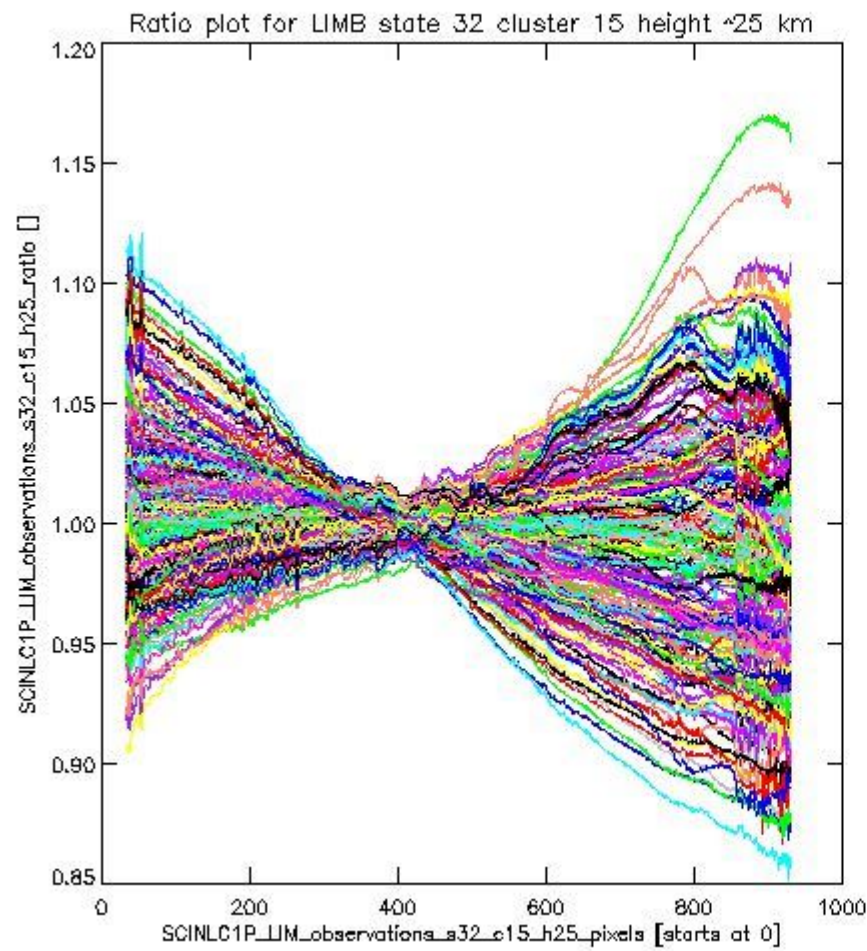
Item	Value
Start time of first sample	21JAN2011 00:01:14.531
Start time of last sample	21JAN2011 23:48:58.971
Reference period start time	22DEC2010 00:01:00.279
Reference period stop time	20JAN2011 23:59:11.785
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_18.PNG

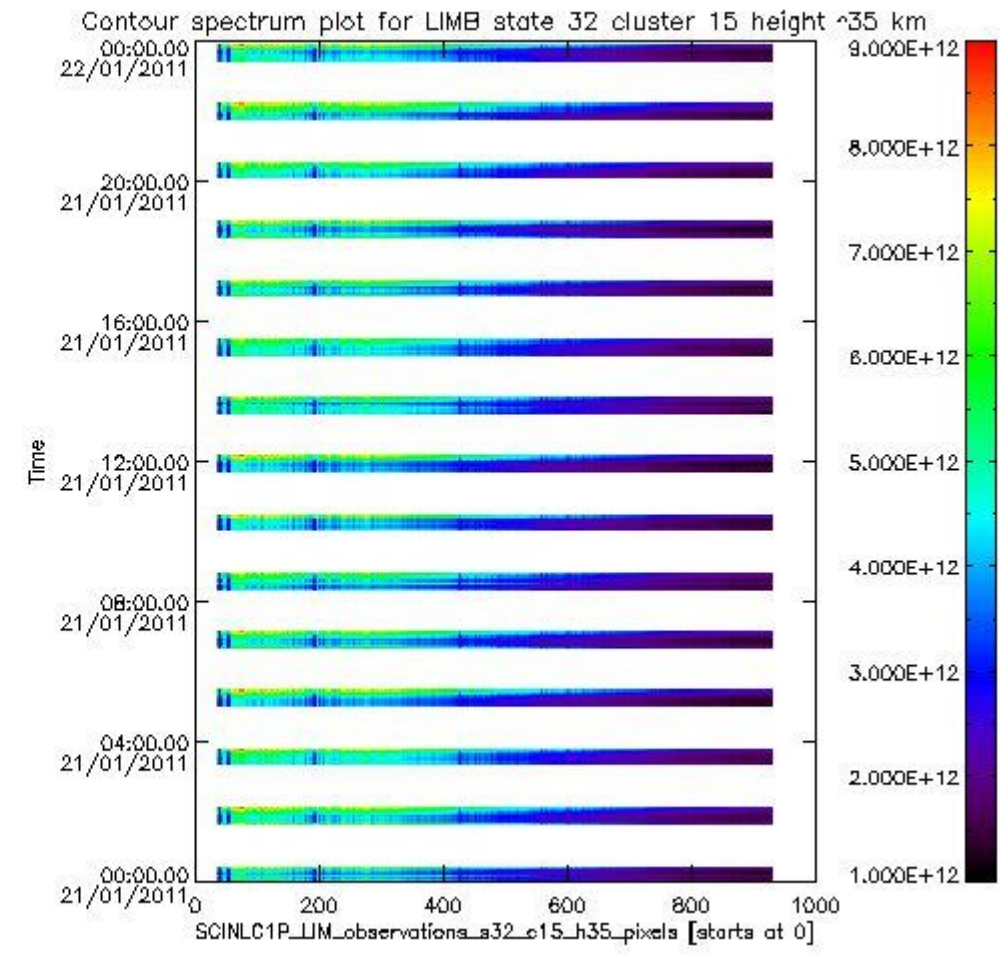
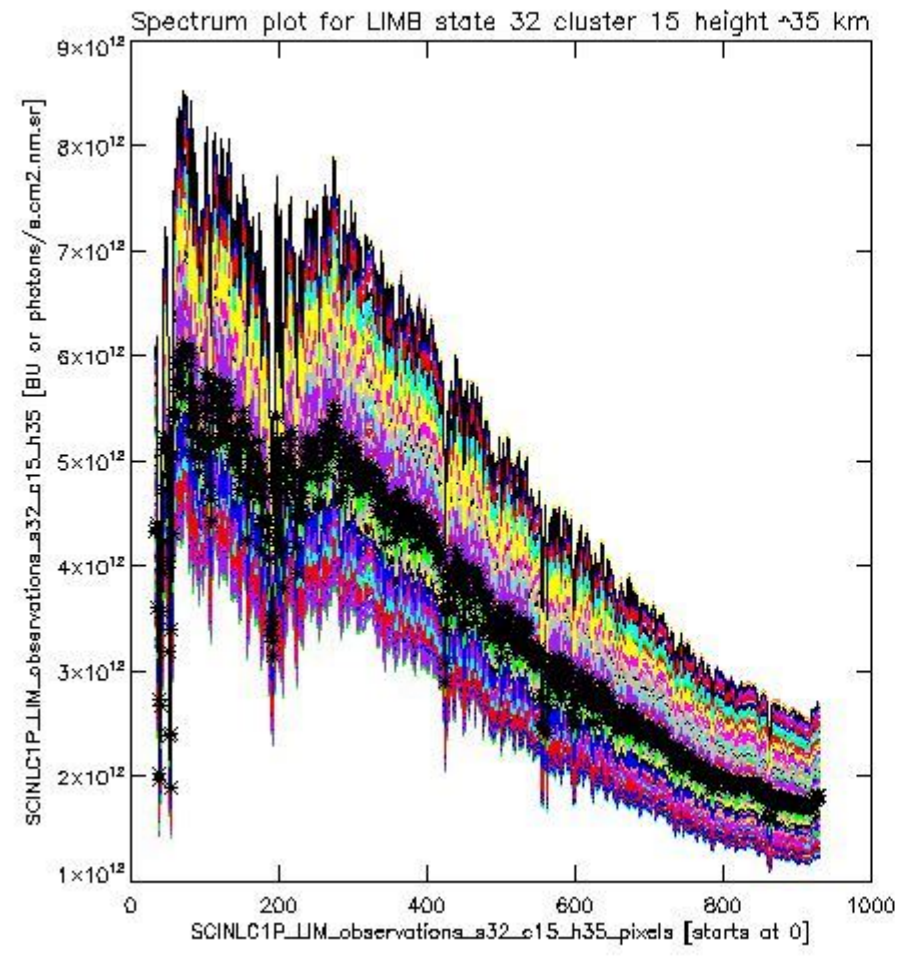




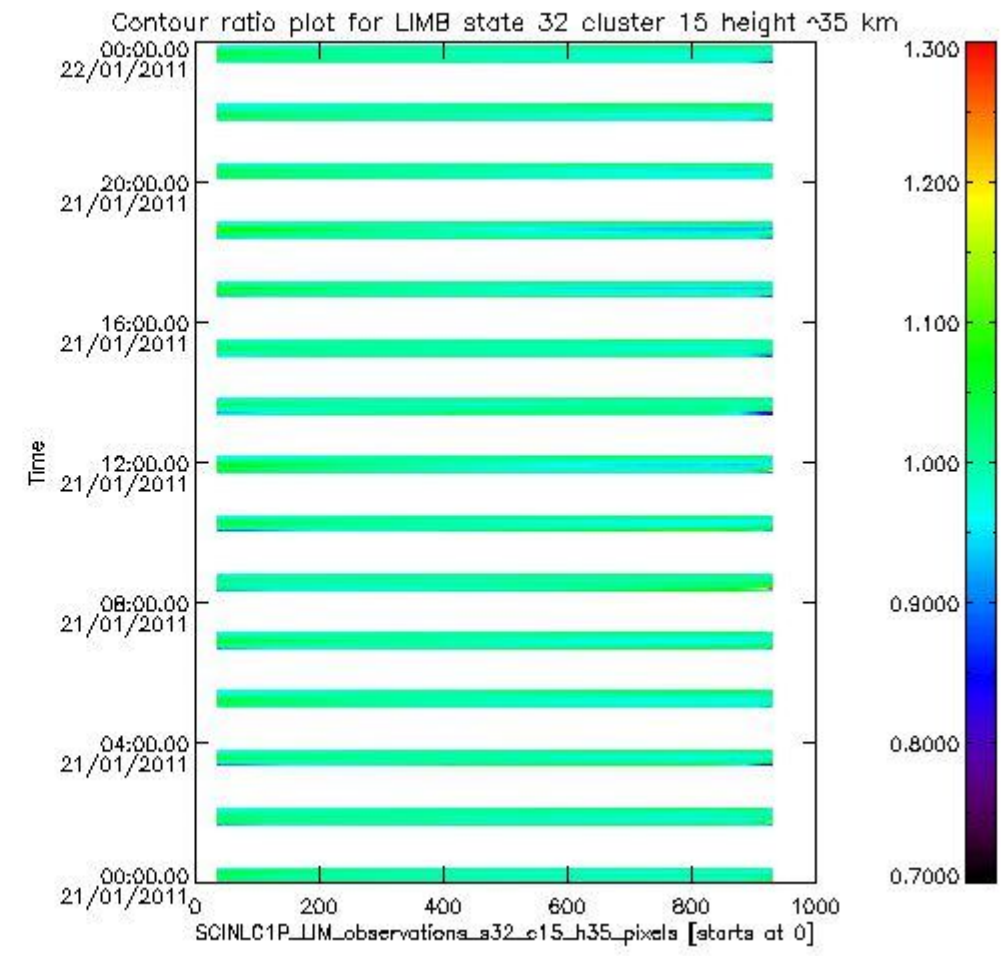
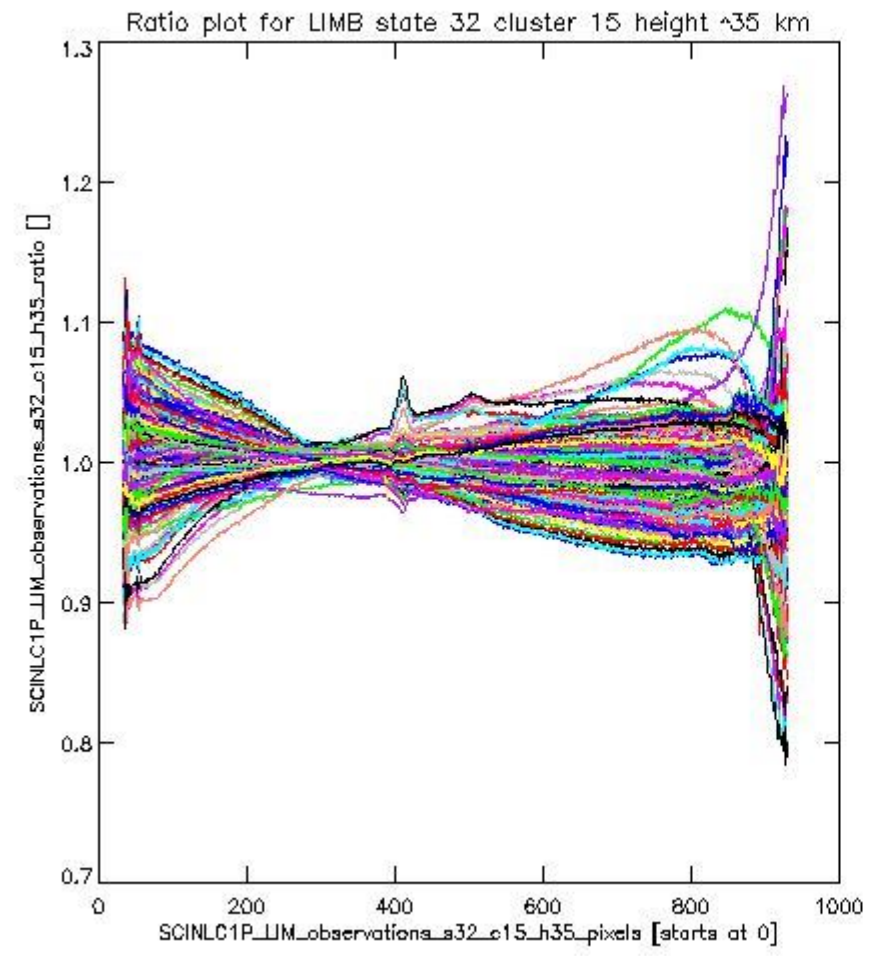
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_19.PNG

**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	21JAN2011 00:01:14.531
Start time of last sample	21JAN2011 23:48:58.971
Reference period start time	22DEC2010 00:01:00.279
Reference period stop time	20JAN2011 23:59:11.785
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\_20110121\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110121\_21.PNG



