

# 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	13FEB2011 06:55:36
Data source version	SCIA/7.04-U
Processing scope for products	02FEB2011 00:00:00 to 03FEB2011 00:00:00
Start time of first product within scope	01FEB2011 22:59:25
Stop time of last product within scope	03FEB2011 01:13:18
Total number of level 1 products	14
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	02FEB2011 04:33:17.302	02FEB2011 23:04:52.103
1	NADIR	07	09	N/A	02FEB2011 04:33:17.302	02FEB2011 23:04:52.103
2	NADIR	07	15	N/A	02FEB2011 04:33:17.302	02FEB2011 23:04:52.103
3	NADIR	07	24	N/A	02FEB2011 04:33:17.302	02FEB2011 23:04:52.103
4	NADIR	07	55	N/A	02FEB2011 04:33:17.302	02FEB2011 23:04:52.103
5	LIMB	32	09	~19 km	02FEB2011 04:18:03.923	02FEB2011 23:08:03.400
6	LIMB	32	09	~22 km	02FEB2011 04:18:03.923	02FEB2011 23:08:03.400
7	LIMB	32	09	~25 km	02FEB2011 04:18:03.923	02FEB2011 23:08:03.400
8	LIMB	32	15	~22 km	02FEB2011 04:18:03.923	02FEB2011 23:08:03.400
9	LIMB	32	15	~25 km	02FEB2011 04:18:03.923	02FEB2011 23:08:03.400
10	LIMB	32	15	~35 km	02FEB2011 04:18:03.923	02FEB2011 23:08:03.400

#### 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_1CUDPA20110201_224452_000059343099_00102_46668_4220.N1</a>	01FEB2011 22:59:25	02FEB2011 00:09:40	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110202_034418_000060853099_00105_46671_4231.N1</a>	02FEB2011 04:00:06	02FEB2011 05:10:35	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110202_052547_000059343099_00106_46672_4233.N1</a>	02FEB2011 05:40:19	02FEB2011 06:50:34	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110202_070445_000060853099_00107_46673_4230.N1</a>	02FEB2011 07:20:33	02FEB2011 08:31:02	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110202_084614_000059343099_00108_46674_4245.N1</a>	02FEB2011 09:00:47	02FEB2011 10:11:01	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110202_102512_000060853099_00109_46675_4246.N1</a>	02FEB2011 10:41:00	02FEB2011 11:51:29	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110202_120641_000059343099_00110_46676_4223.N1	02FEB2011 12:21:14	02FEB2011 13:31:28	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110202_134539_000060853099_00111_46677_4224.N1	02FEB2011 14:01:27	02FEB2011 15:11:56	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110202_152709_000059343099_00112_46678_4227.N1	02FEB2011 15:41:41	02FEB2011 16:51:55	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110202_170607_000060853099_00113_46679_4228.N1	02FEB2011 17:21:55	02FEB2011 18:32:38	0	34	30	0	1	1	0	0	
10	SCI_NLC_1CUDPA20110202_184736_000059783099_00114_46680_4252.N1	02FEB2011 19:02:08	02FEB2011 20:12:45	0	35	31	0	1	2	0	0	
11	SCI_NLC_1CUDPA20110202_202718_000060413099_00115_46681_4249.N1	02FEB2011 20:42:22	02FEB2011 21:52:51	0	36	30	0	0	1	0	0	
12	SCI_NLC_1CUDPA20110202_220803_000059783099_00116_46682_4250.N1	02FEB2011 22:22:35	02FEB2011 23:32:50	0	35	31	0	0	1	0	0	
13	SCI_NLC_1CUDPA20110202_234745_000060413099_00117_46683_4239.N1	03FEB2011 00:02:49	03FEB2011 01:13:18	0	36	30	0	0	1	0	0	

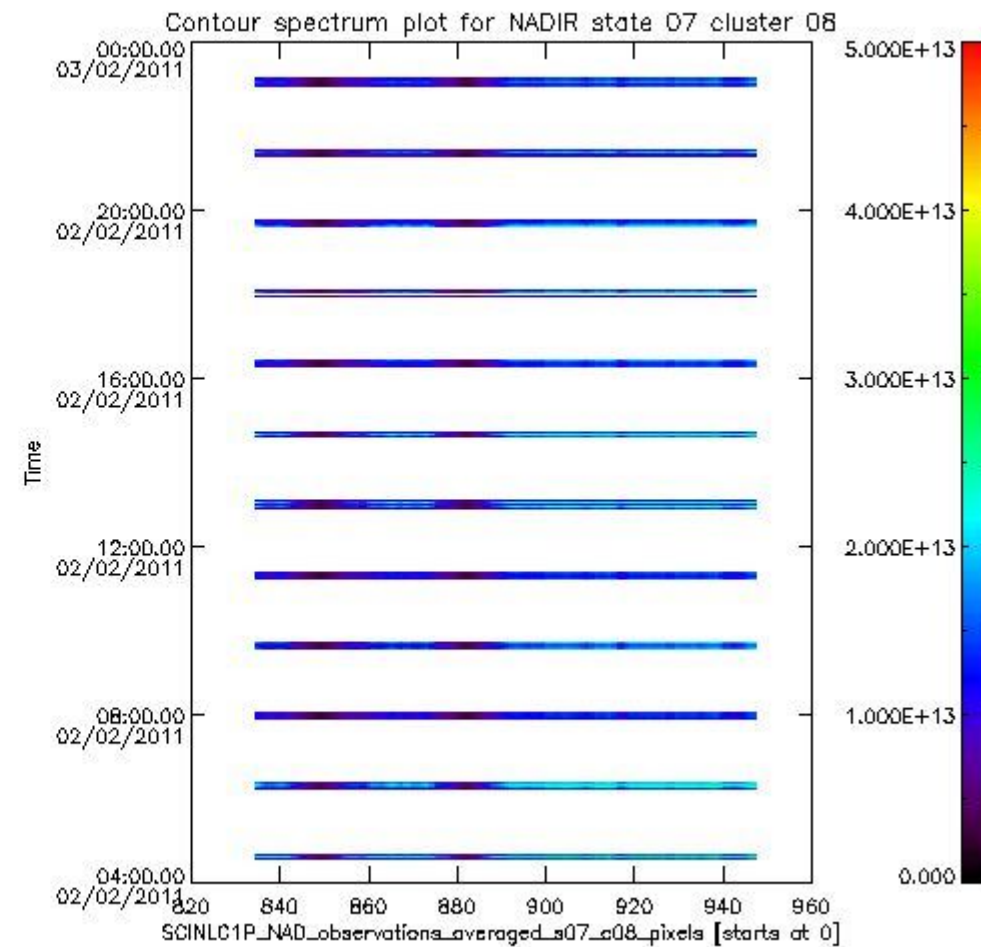
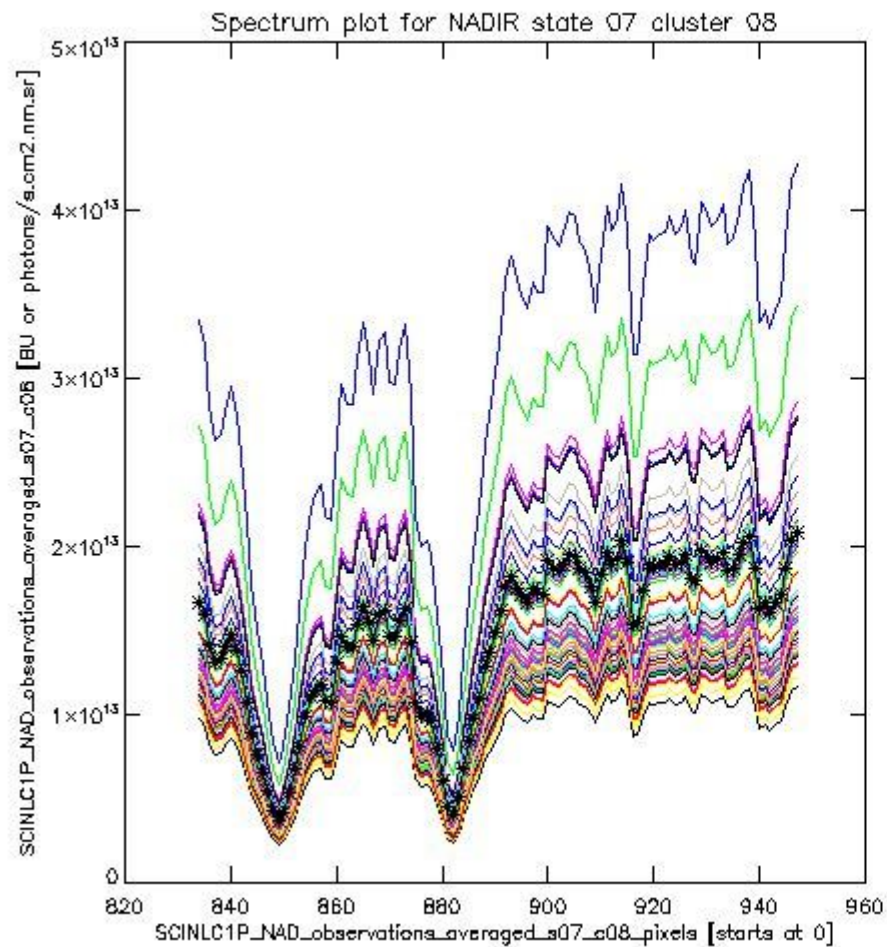
## 1.2 Source packet monitoring

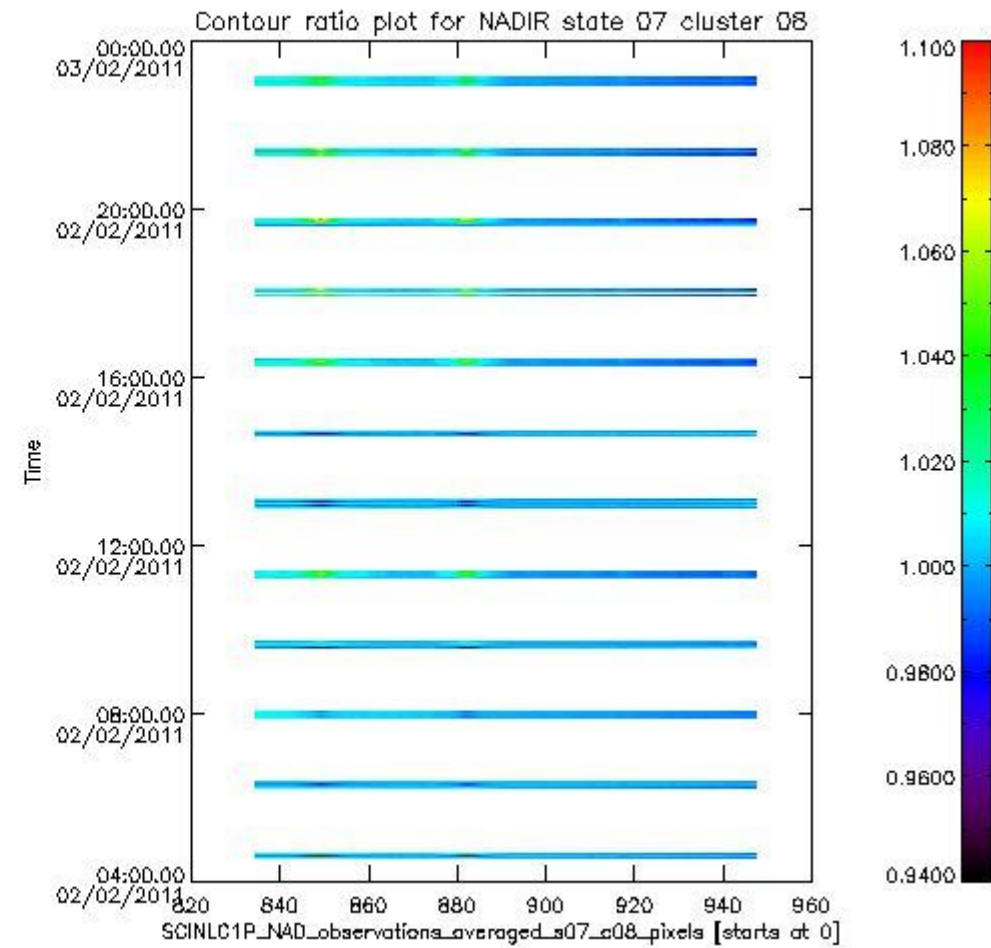
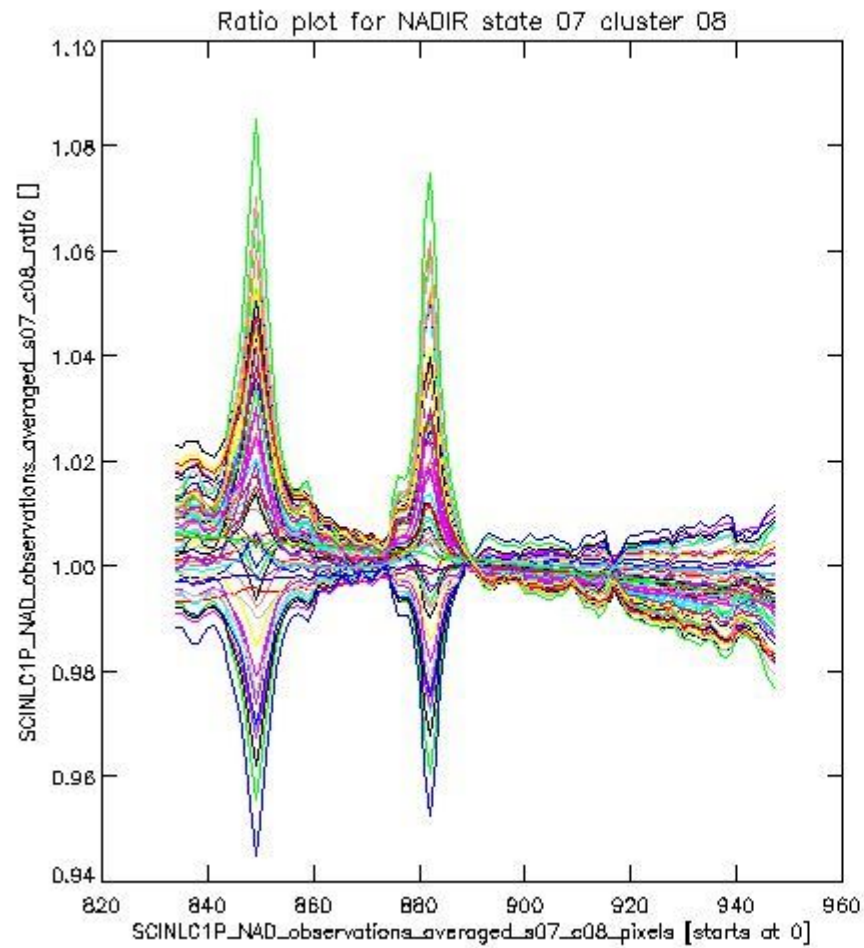
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

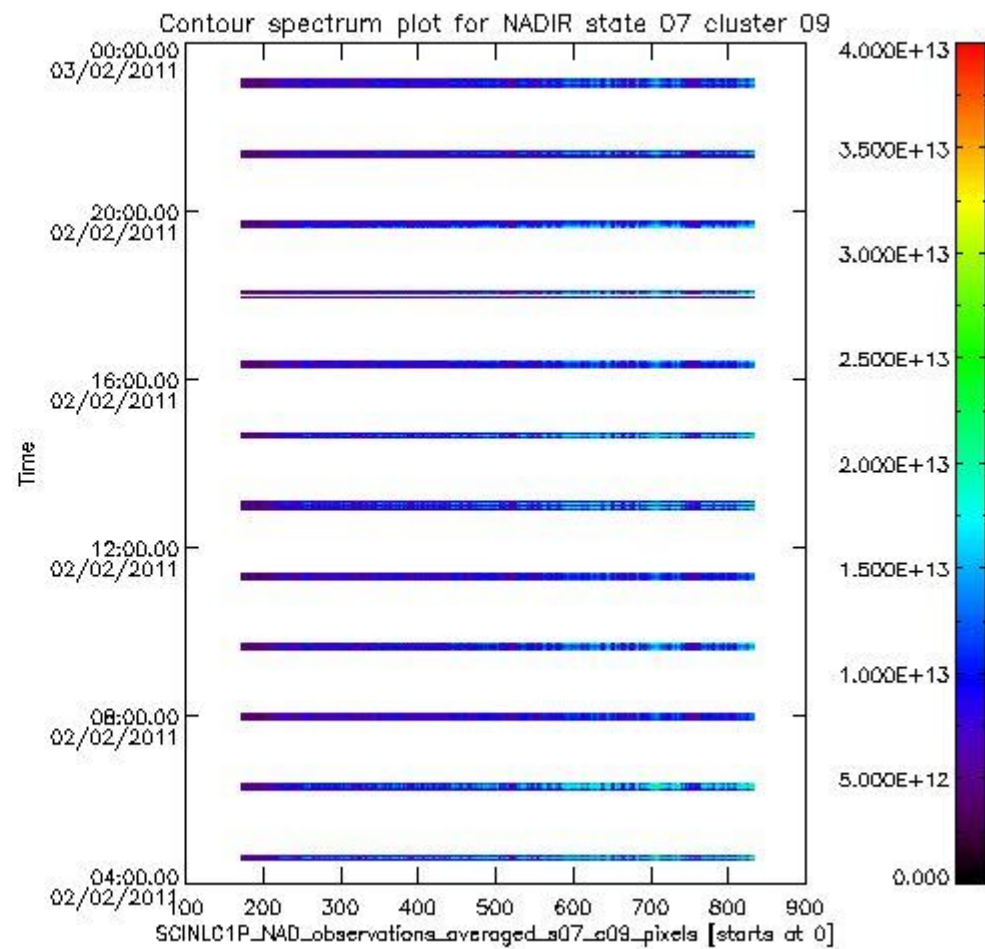
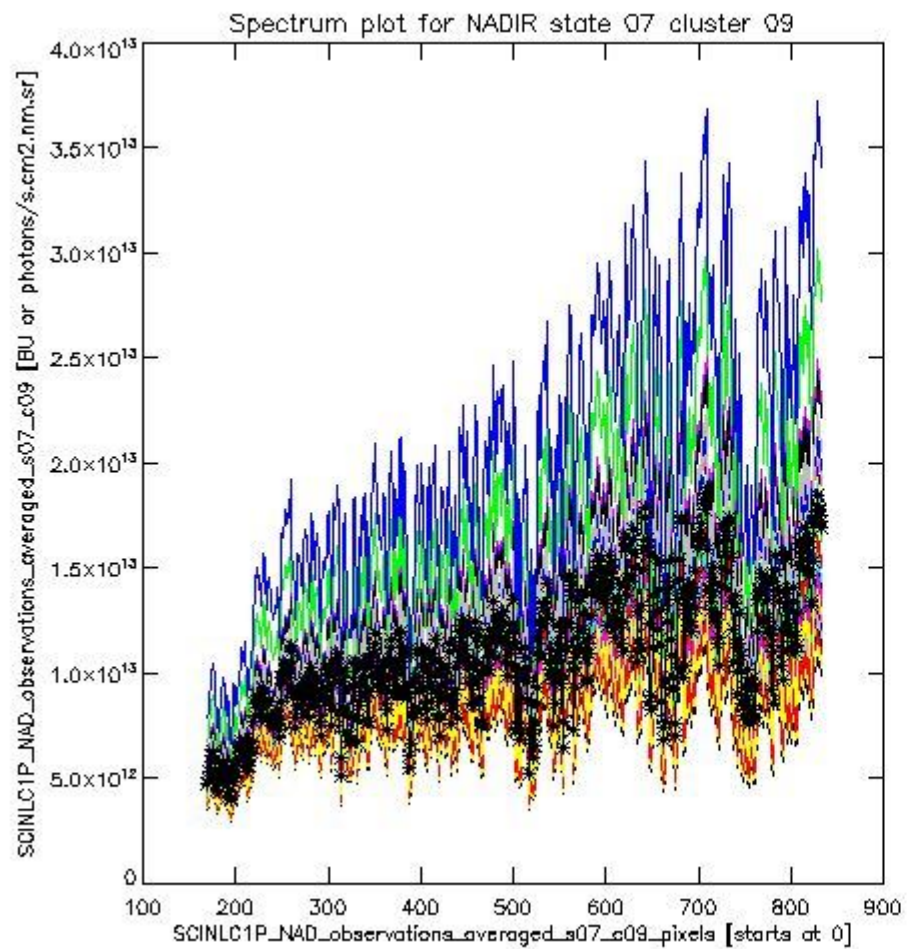
Item	Value
Start time of first sample	02FEB2011 04:33:17.302
Start time of last sample	02FEB2011 23:04:52.103
Reference period start time	03JAN2011 01:13:36.490
Reference period stop time	01FEB2011 23:41:41.749
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



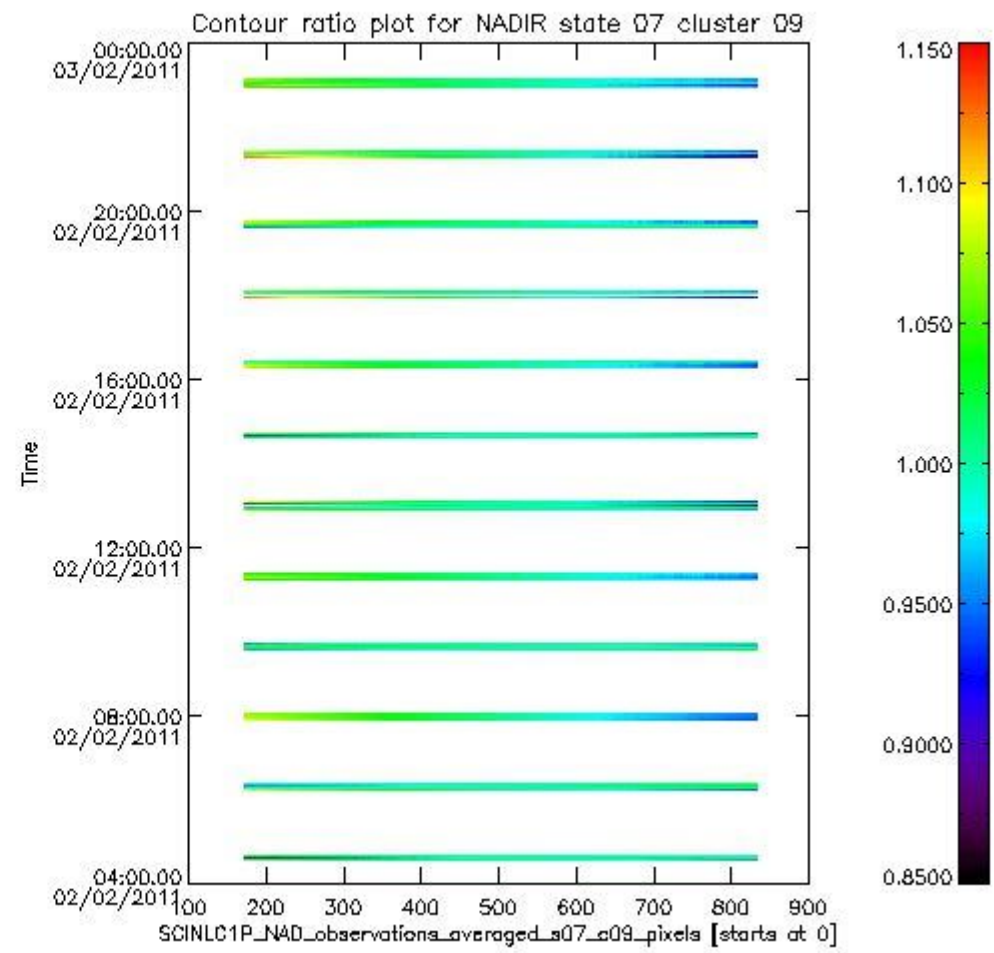
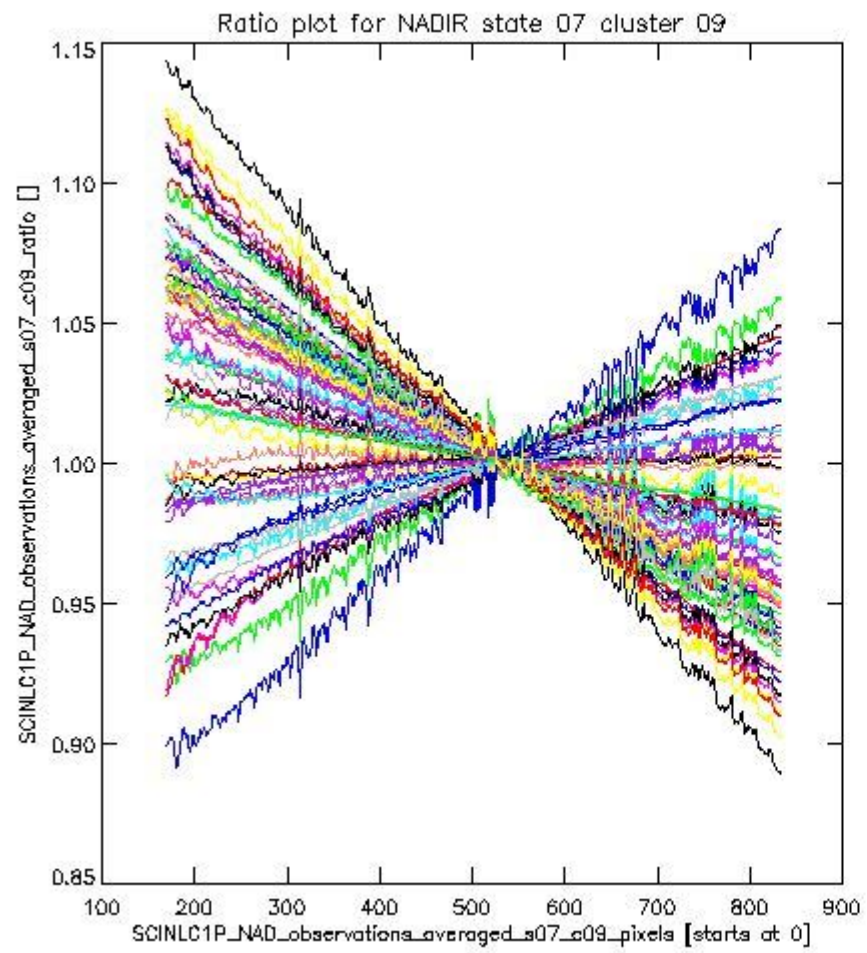


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	02FEB2011 04:33:17.302
Start time of last sample	02FEB2011 23:04:52.103
Reference period start time	03JAN2011 01:13:36.490
Reference period stop time	01FEB2011 23:41:41.749
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



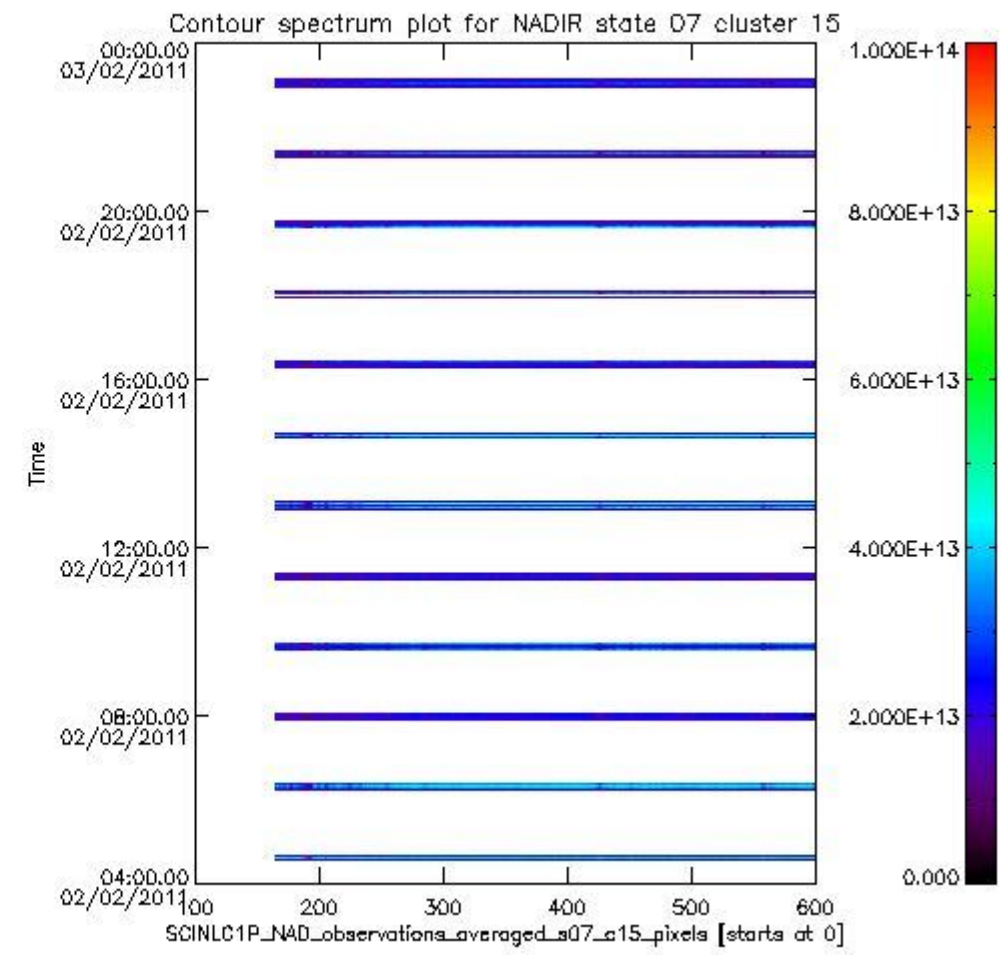
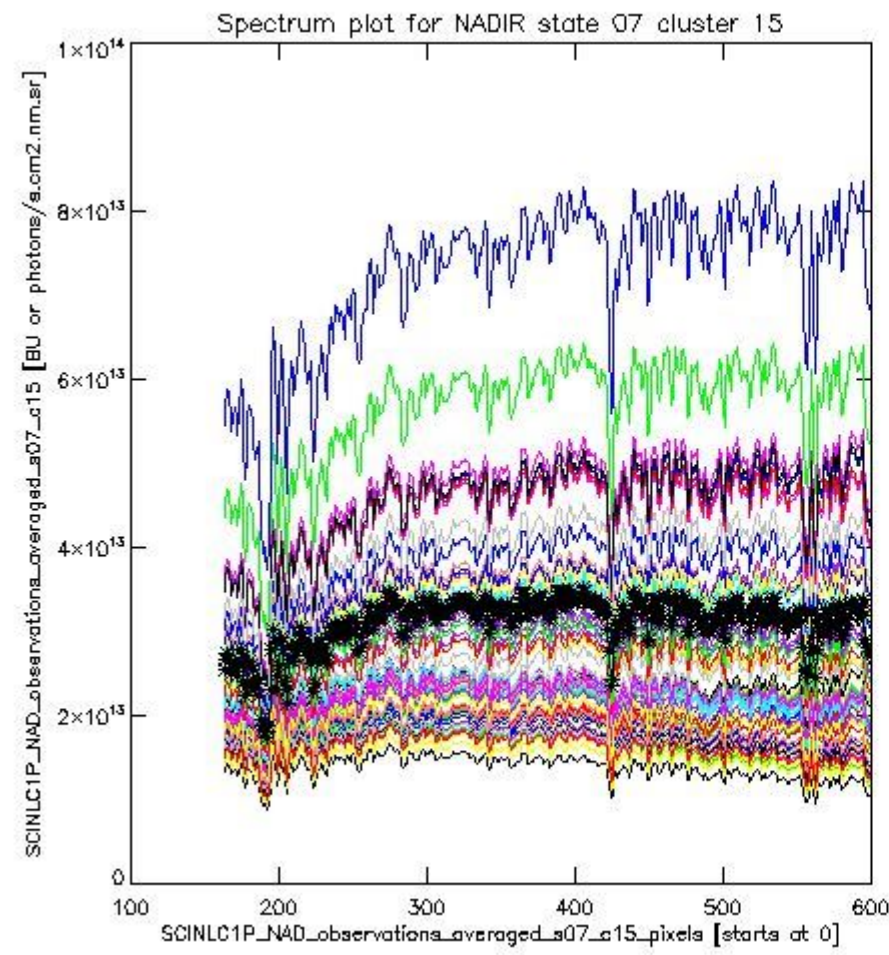
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_2.PNG



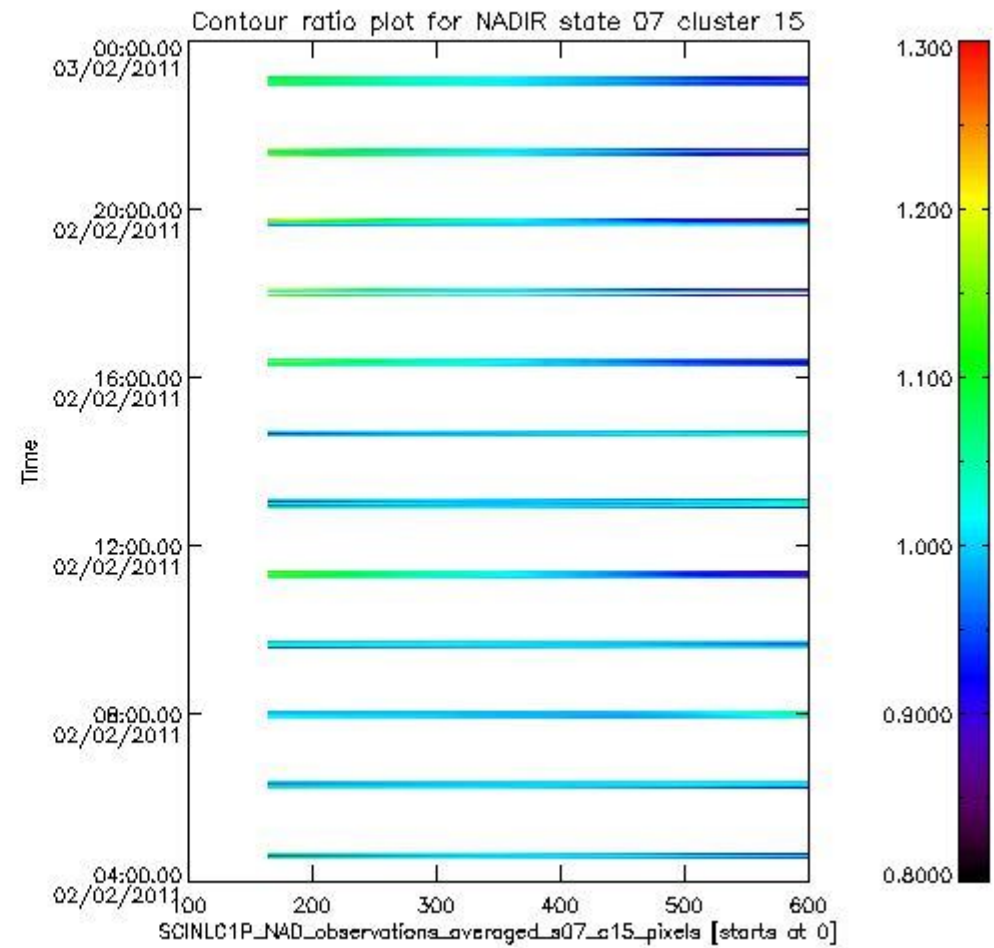
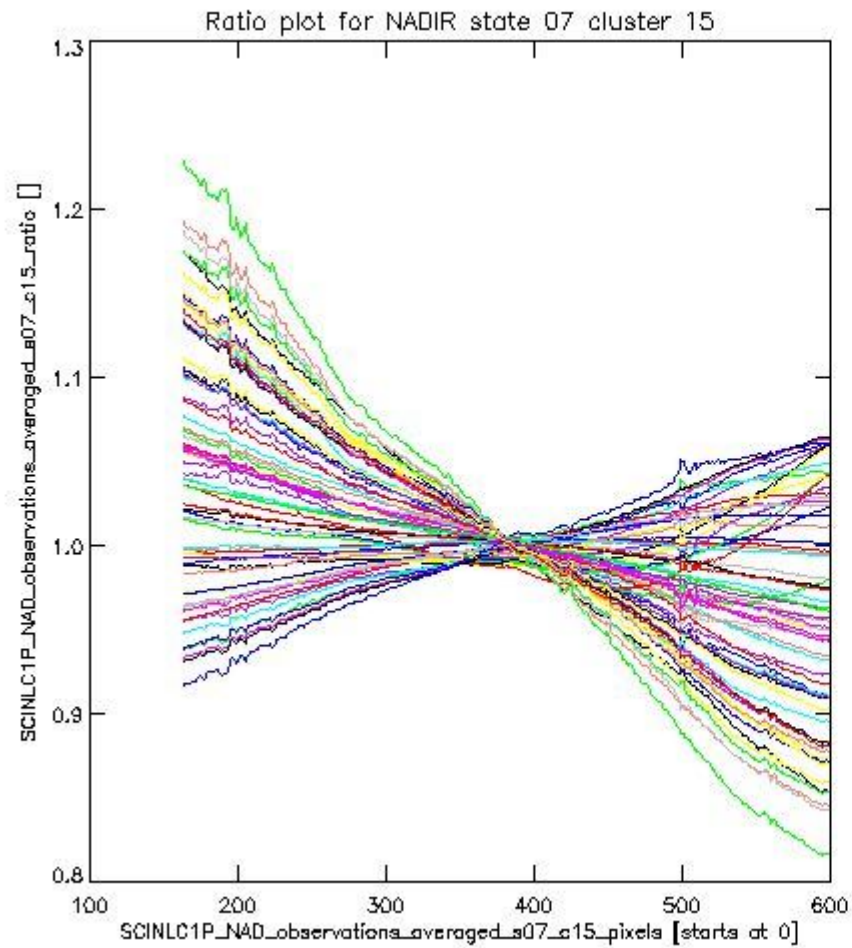
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_3.PNG

**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	02FEB2011 04:33:17.302
Start time of last sample	02FEB2011 23:04:52.103
Reference period start time	03JAN2011 01:13:36.490
Reference period stop time	01FEB2011 23:41:41.749
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



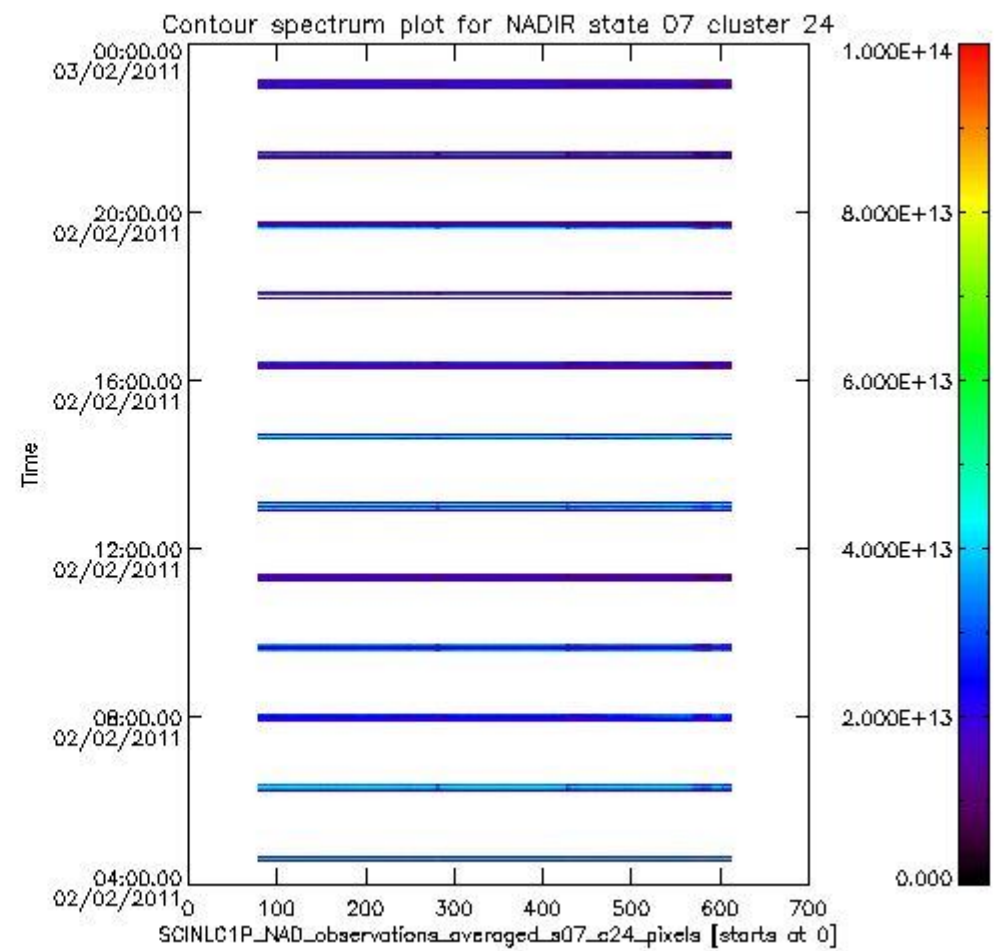
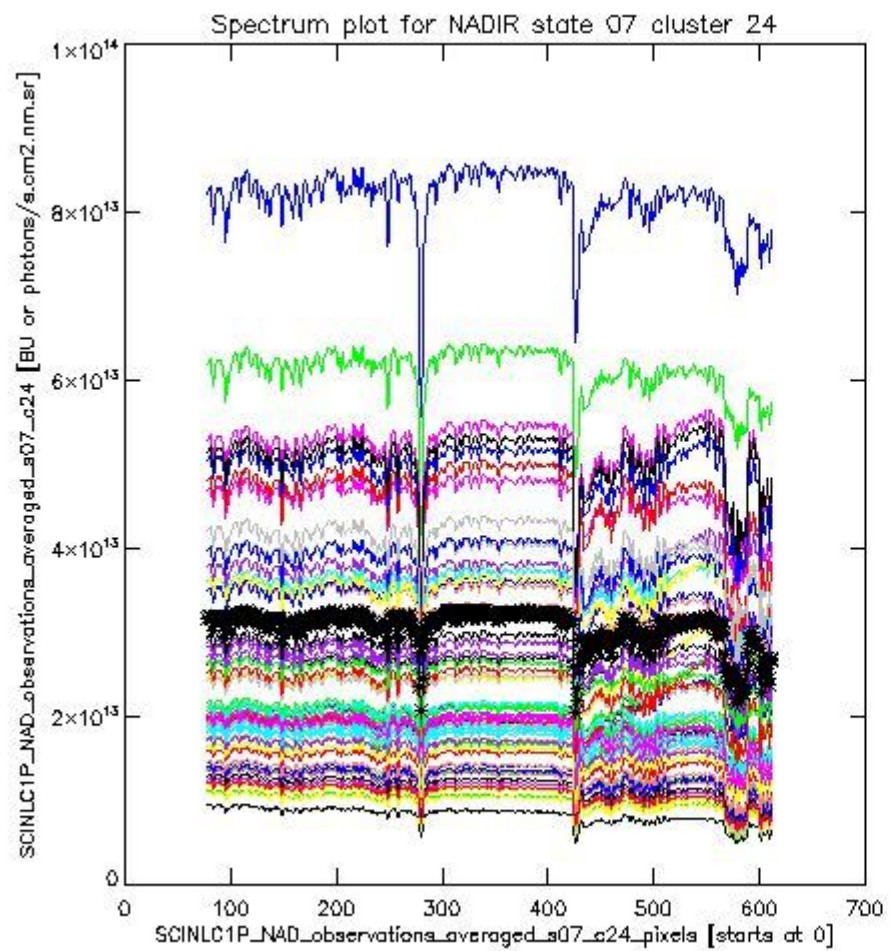
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_5.PNG

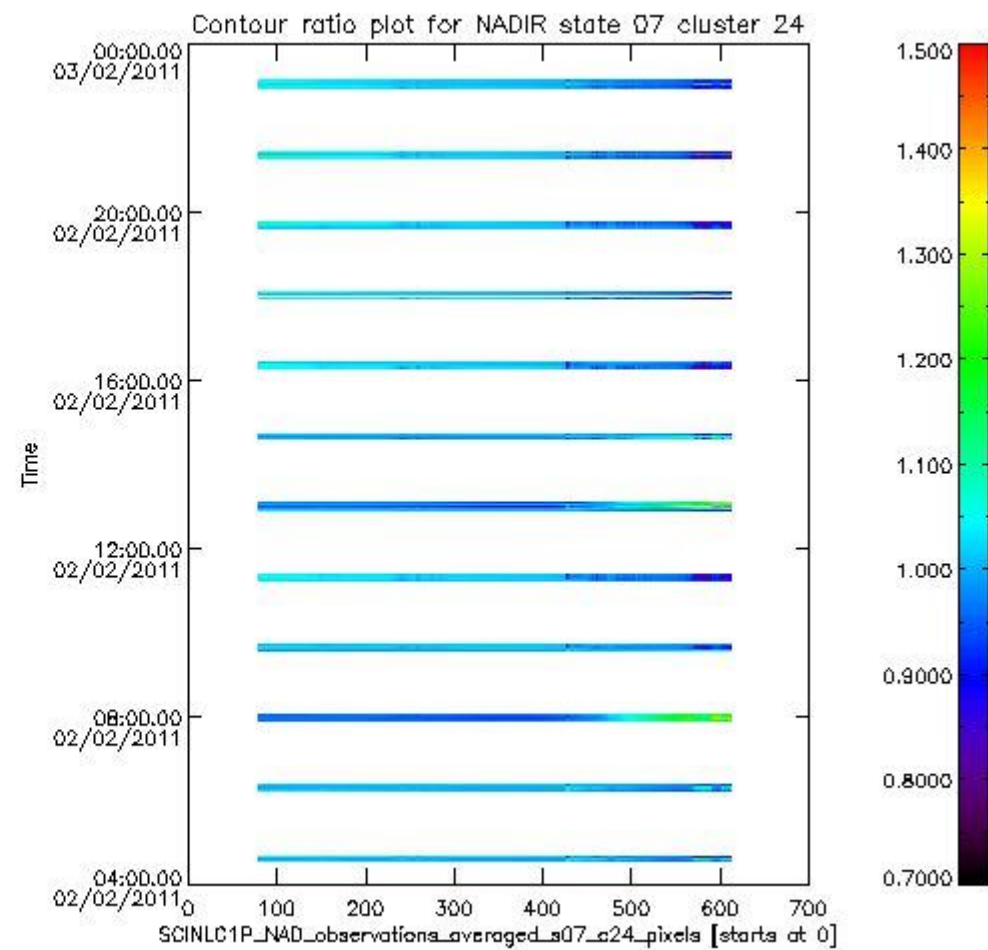
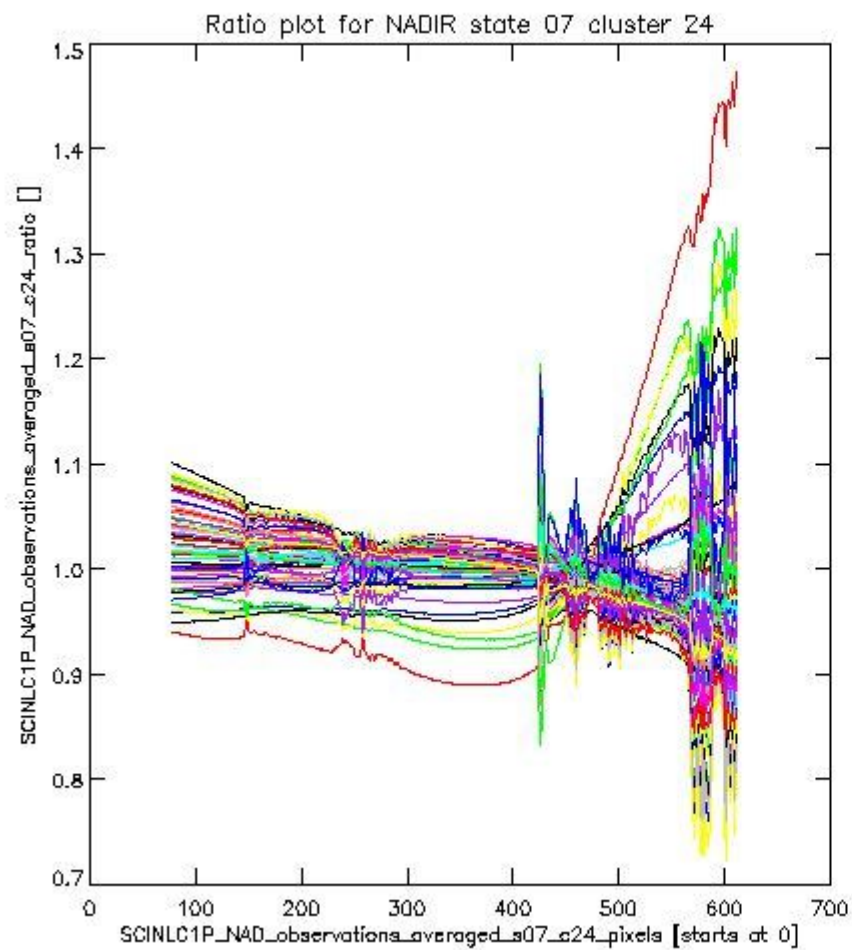
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	02FEB2011 04:33:17.302
Start time of last sample	02FEB2011 23:04:52.103
Reference period start time	03JAN2011 01:13:36.490
Reference period stop time	01FEB2011 23:41:41.749
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\_20110202\_6.PNG

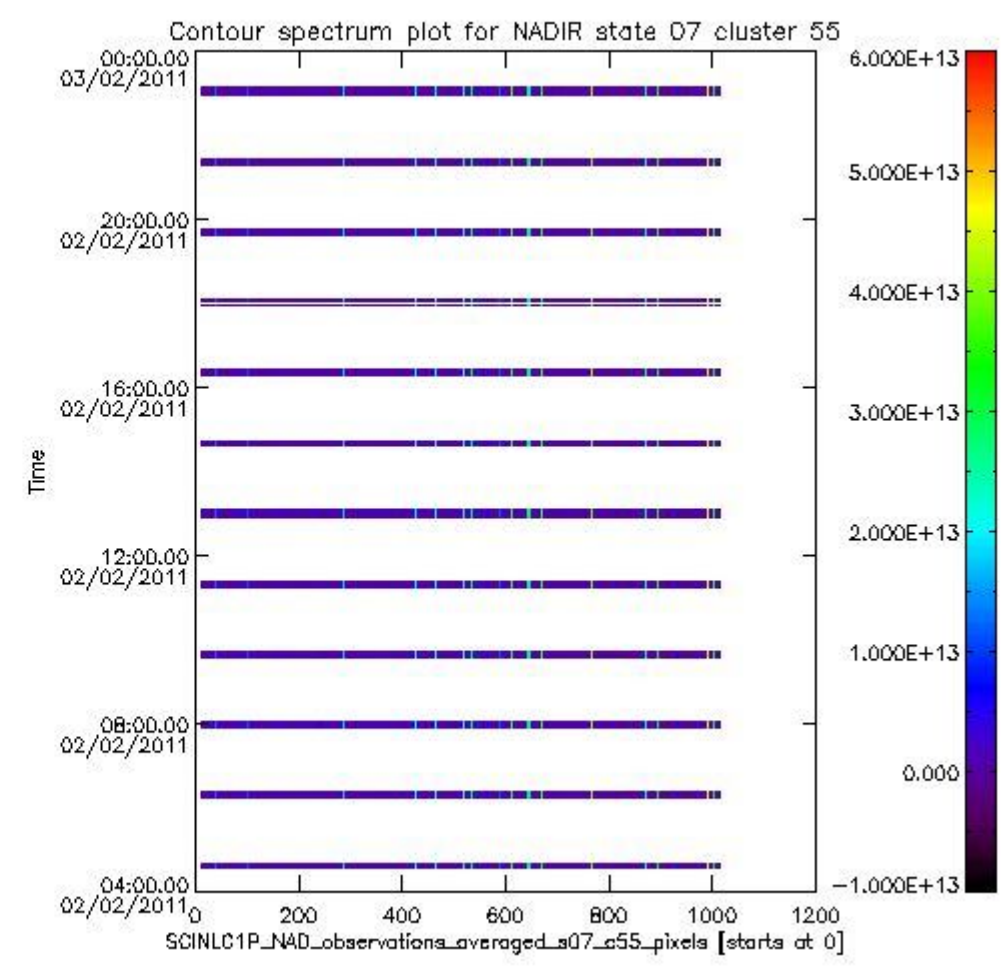
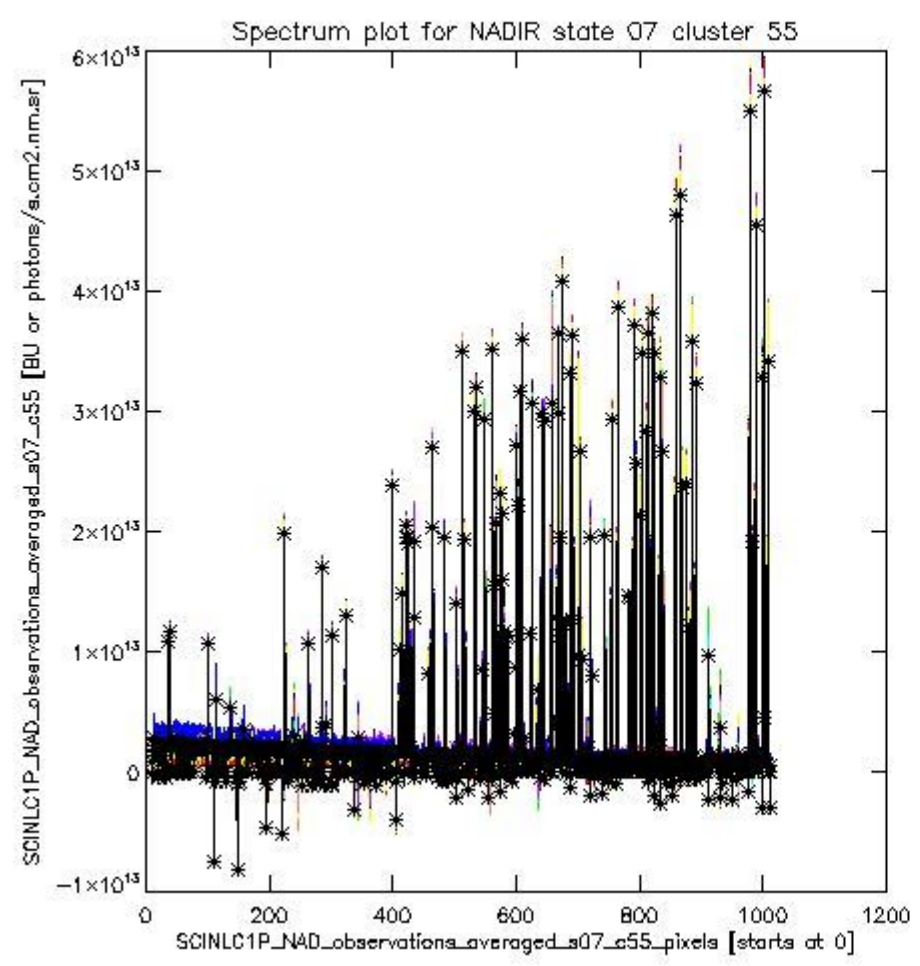




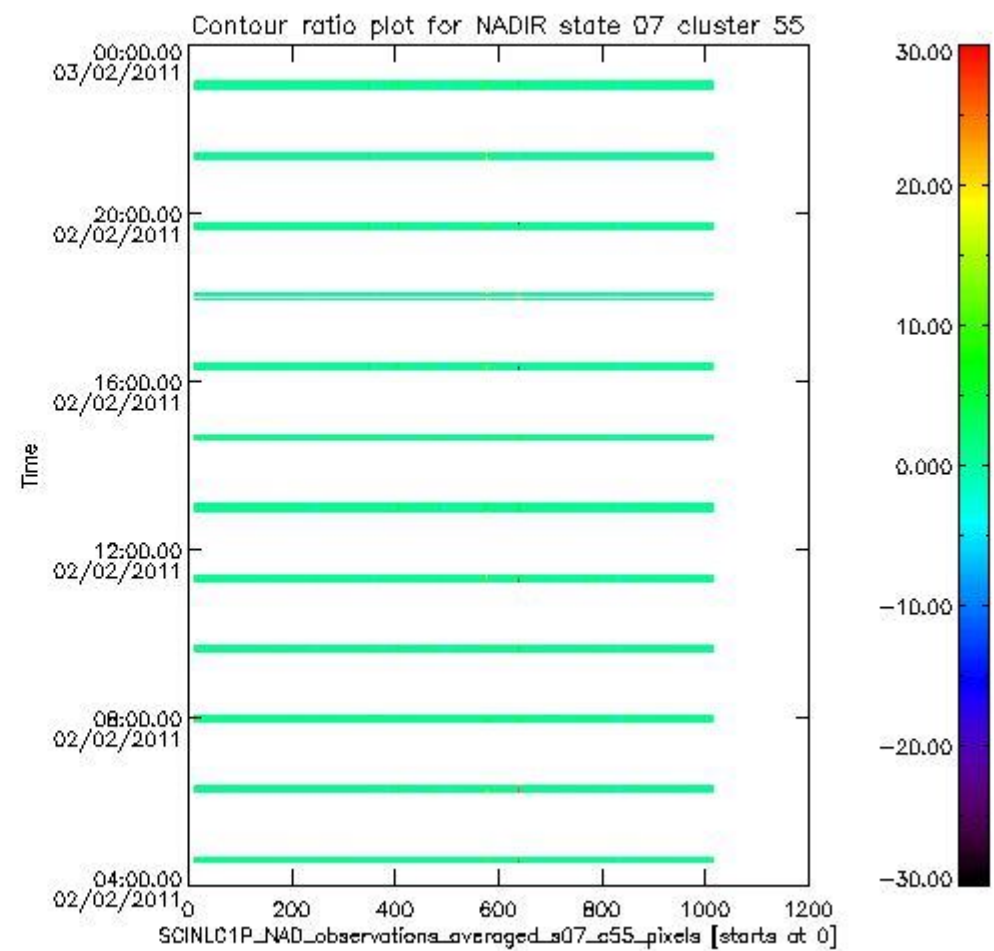
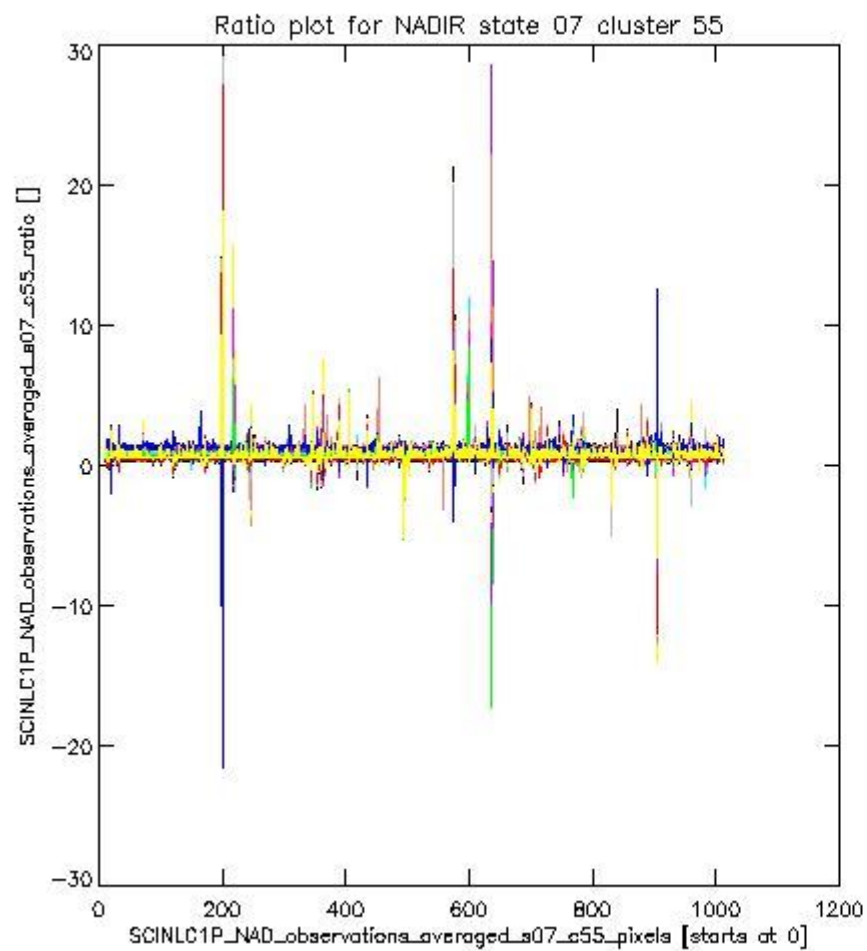
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_7.PNG

**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	02FEB2011 04:33:17.302
Start time of last sample	02FEB2011 23:04:52.103
Reference period start time	03JAN2011 01:13:36.490
Reference period stop time	01FEB2011 23:41:41.749
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



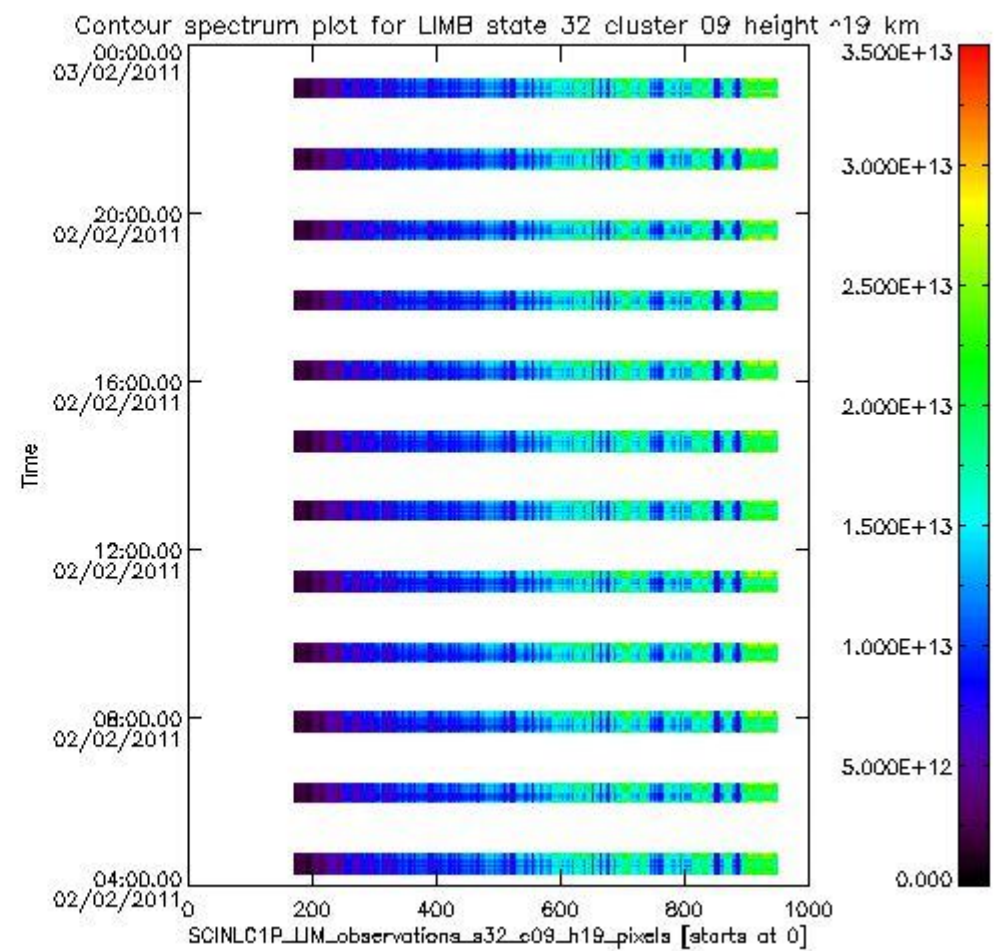
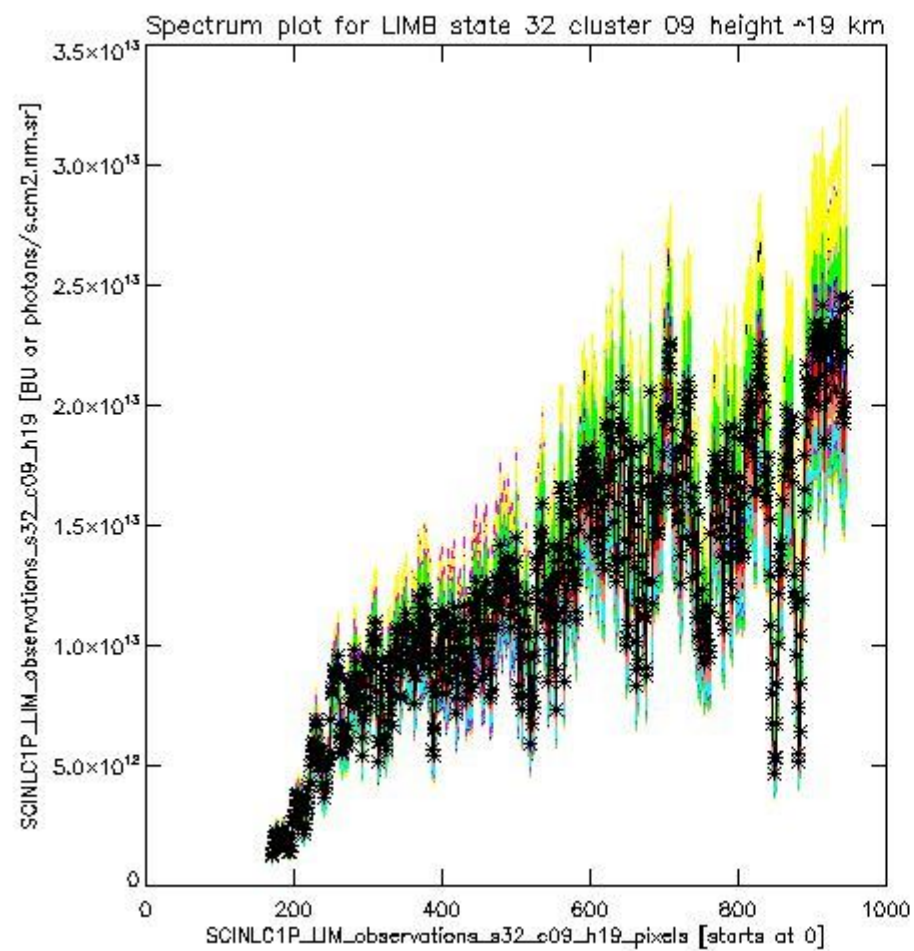
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_8.PNG



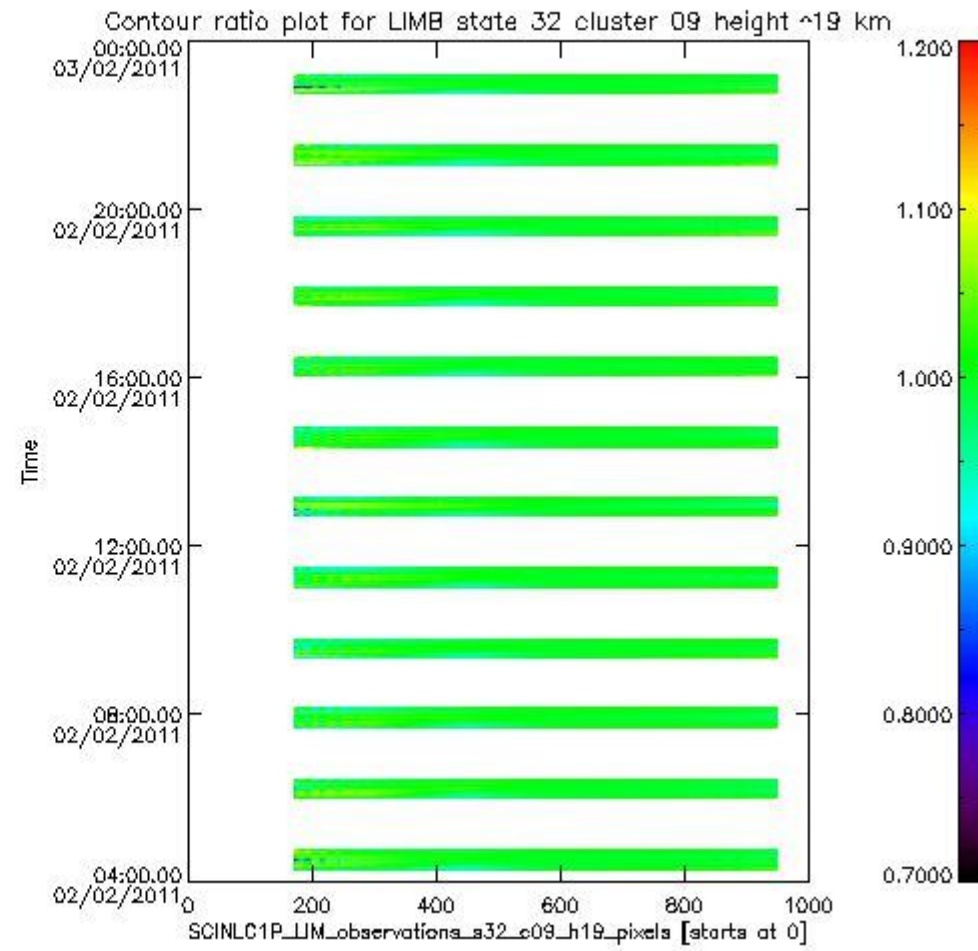
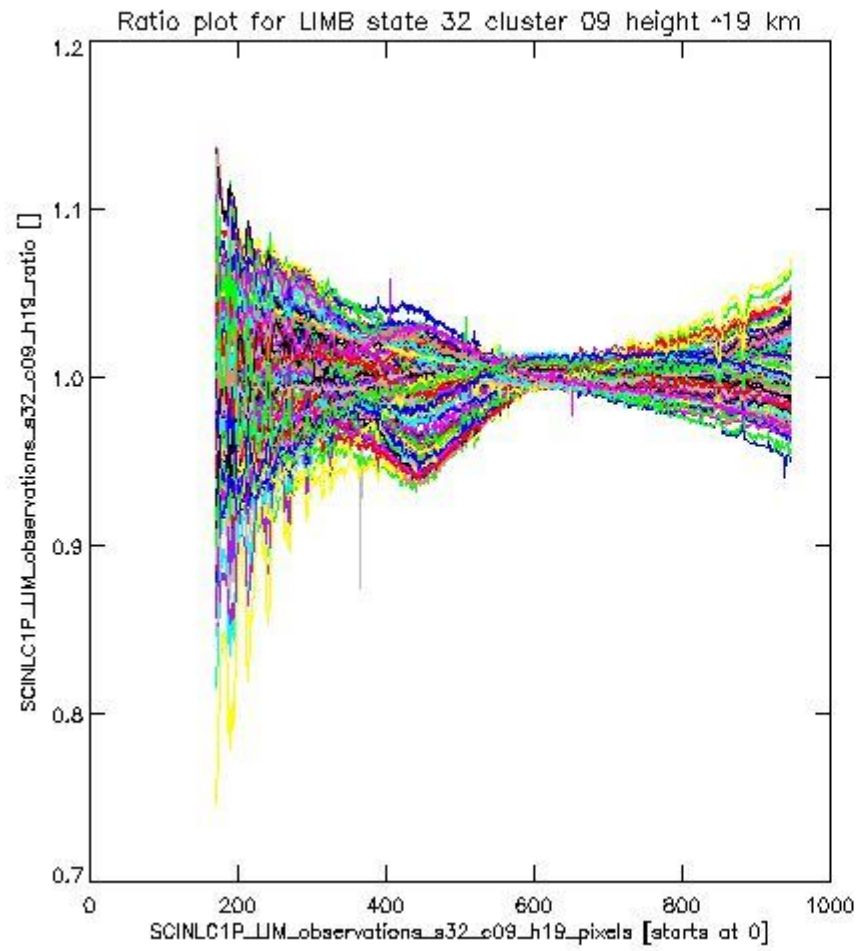
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_9.PNG

**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	02FEB2011 04:18:03.923
Start time of last sample	02FEB2011 23:08:03.400
Reference period start time	03JAN2011 02:39:20.158
Reference period stop time	01FEB2011 23:44:53.050
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



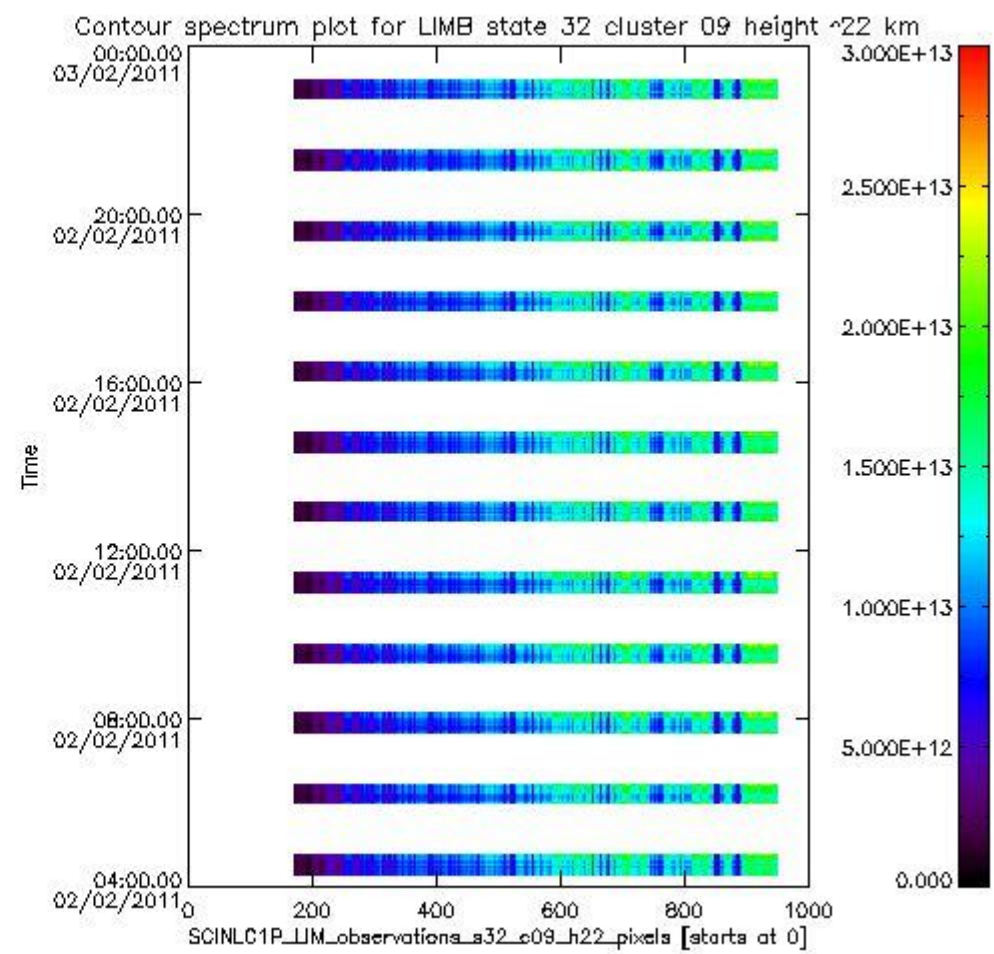
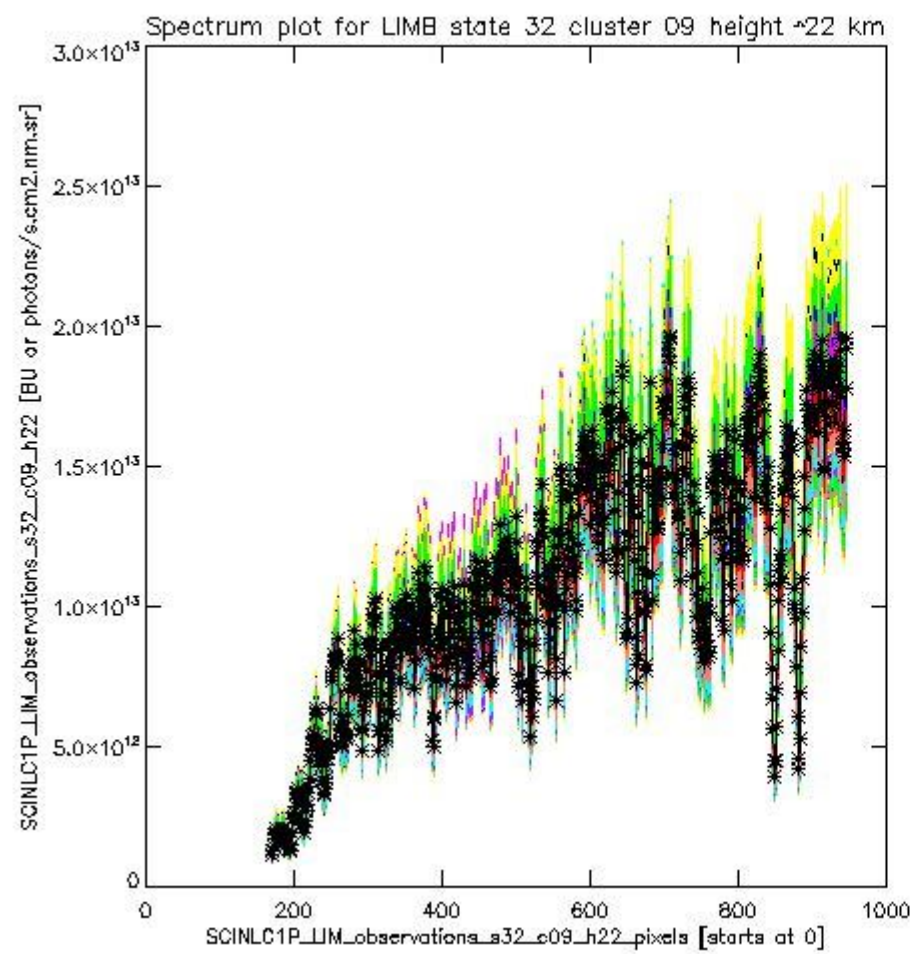
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_10.PNG



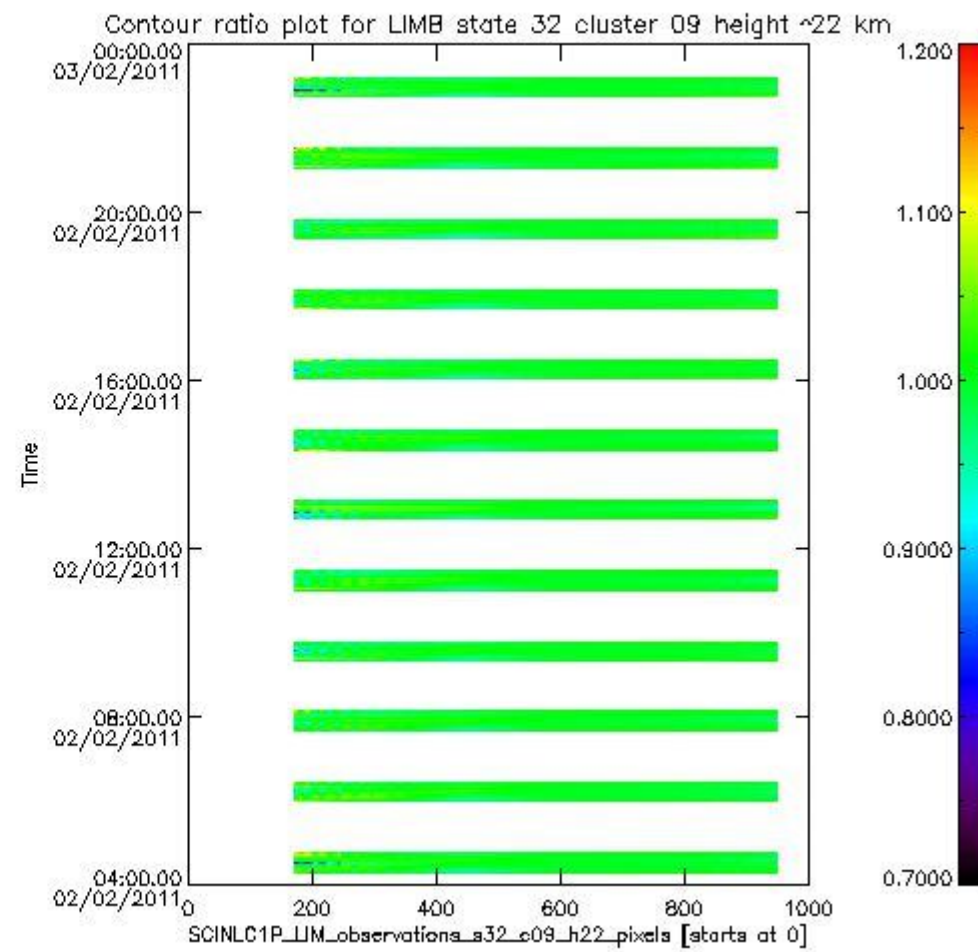
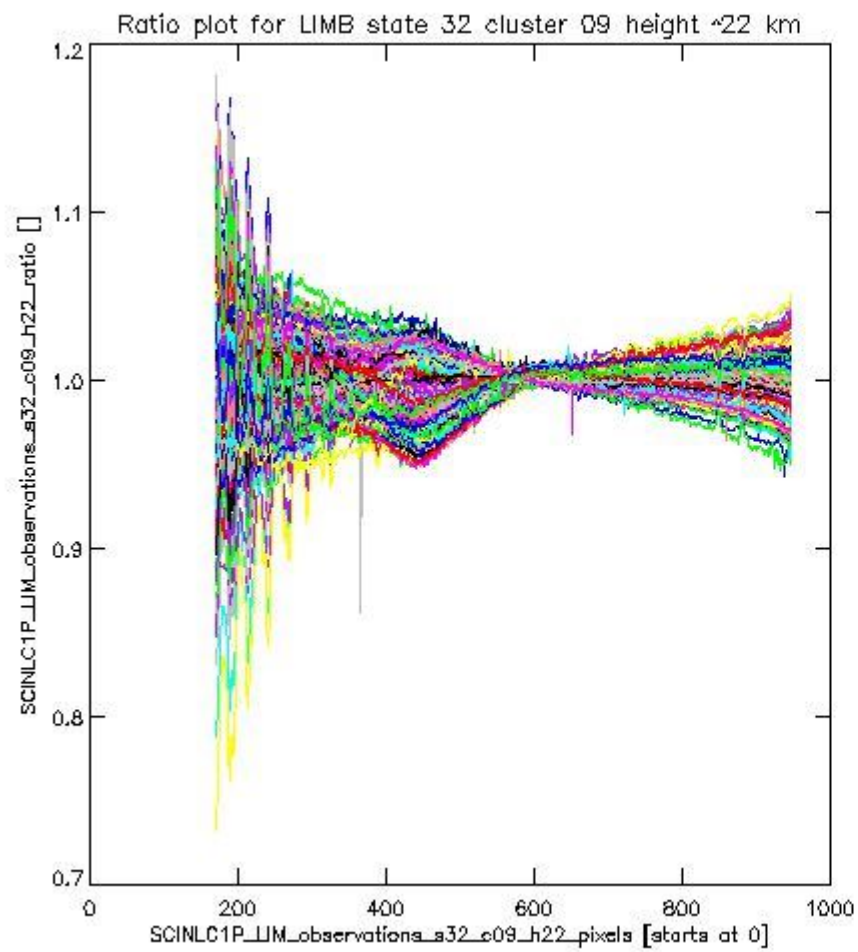
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_11.PNG

**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	02FEB2011 04:18:03.923
Start time of last sample	02FEB2011 23:08:03.400
Reference period start time	03JAN2011 02:39:20.158
Reference period stop time	01FEB2011 23:44:53.050
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



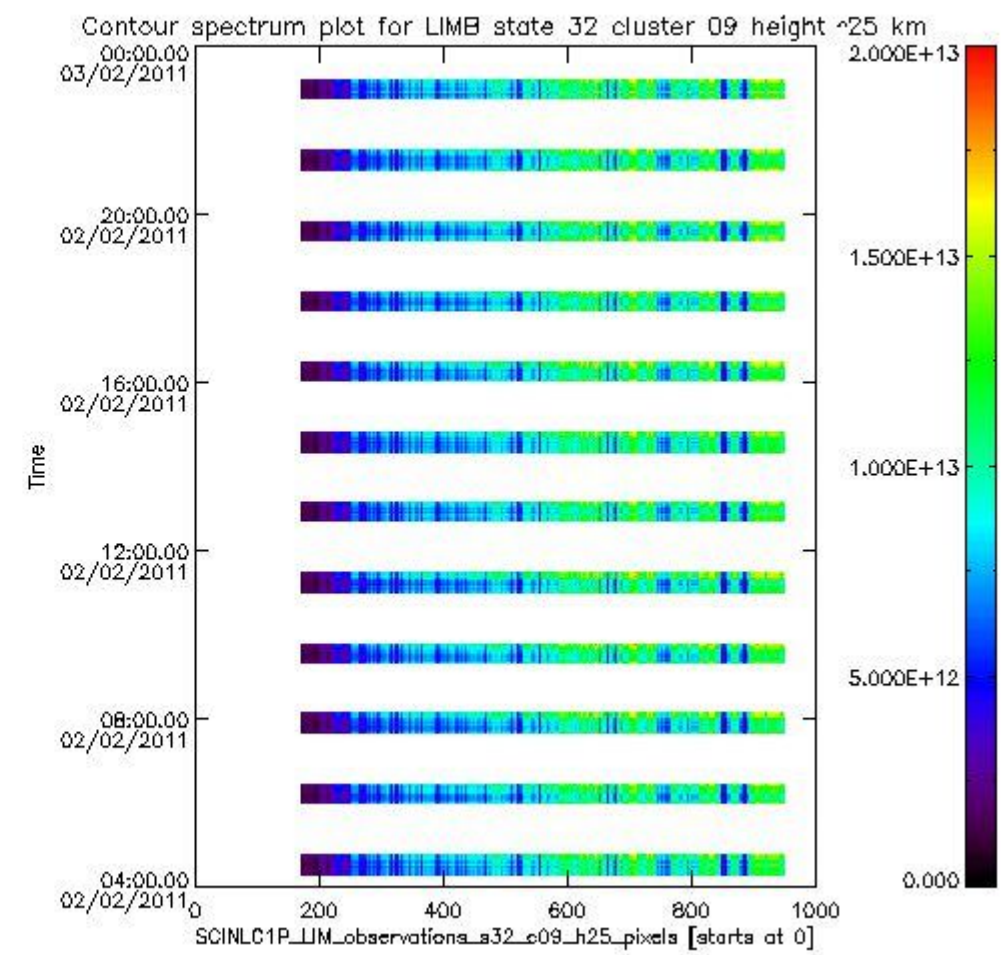
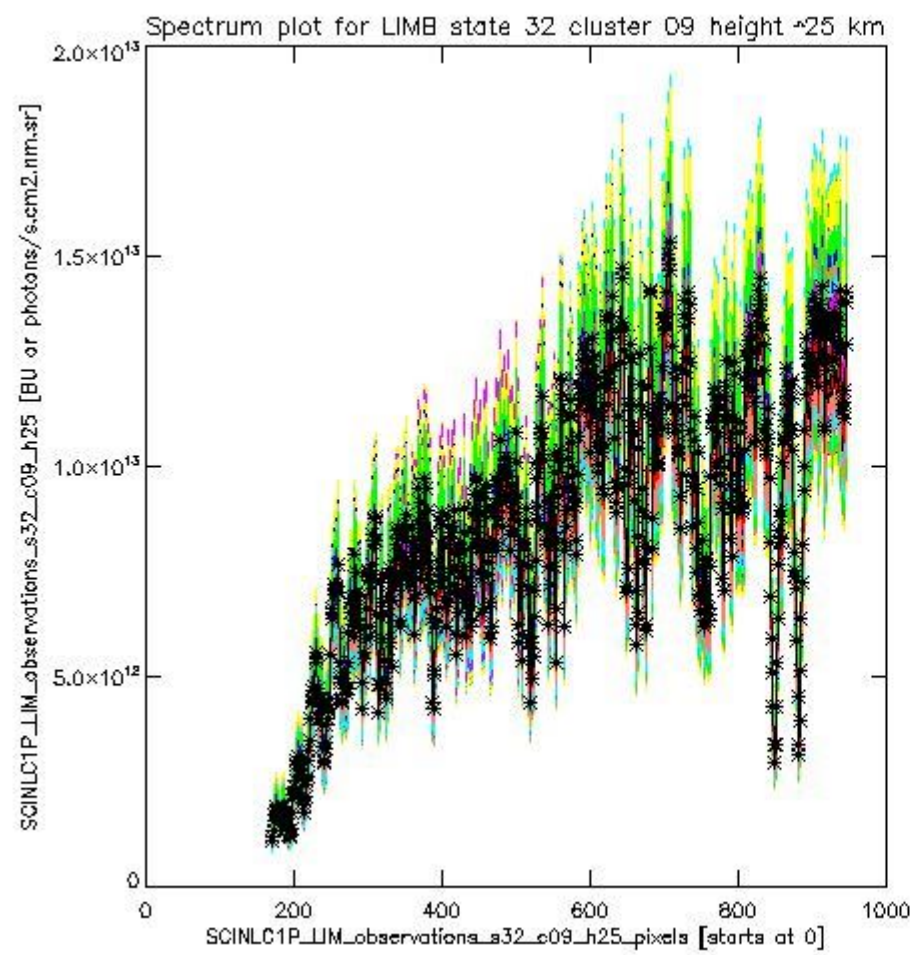
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_13.PNG

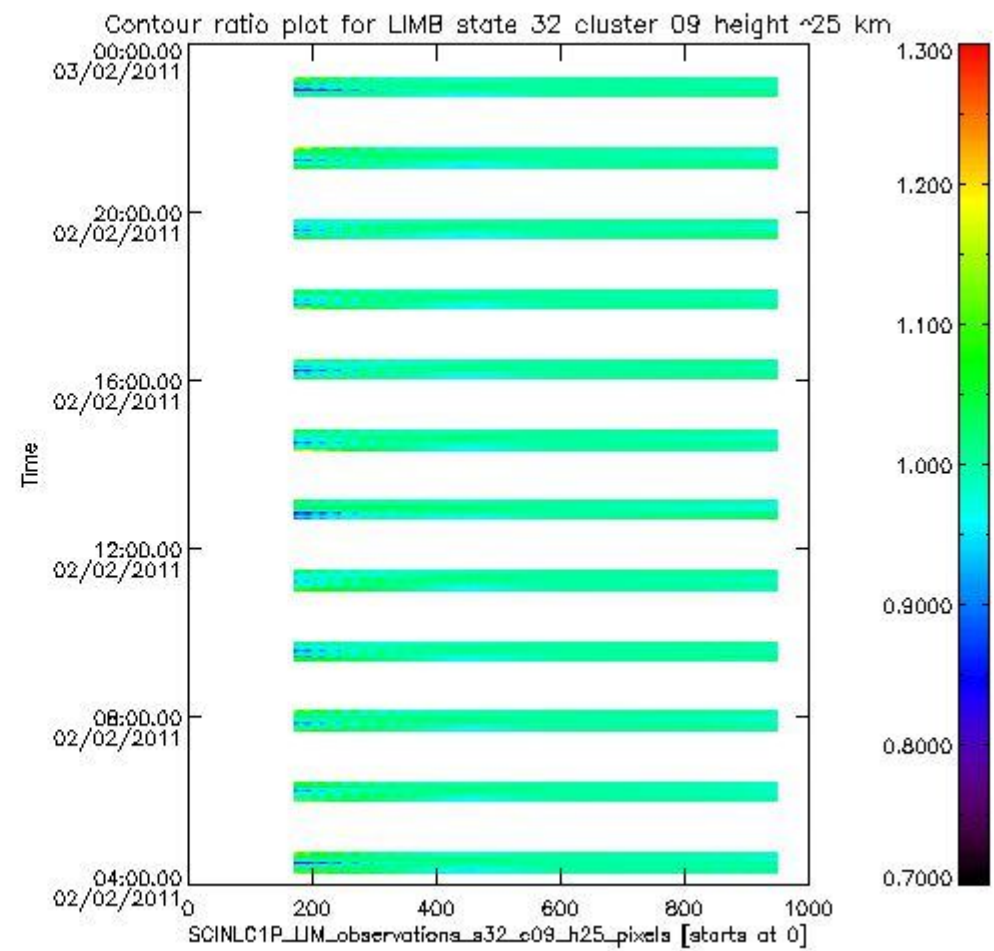
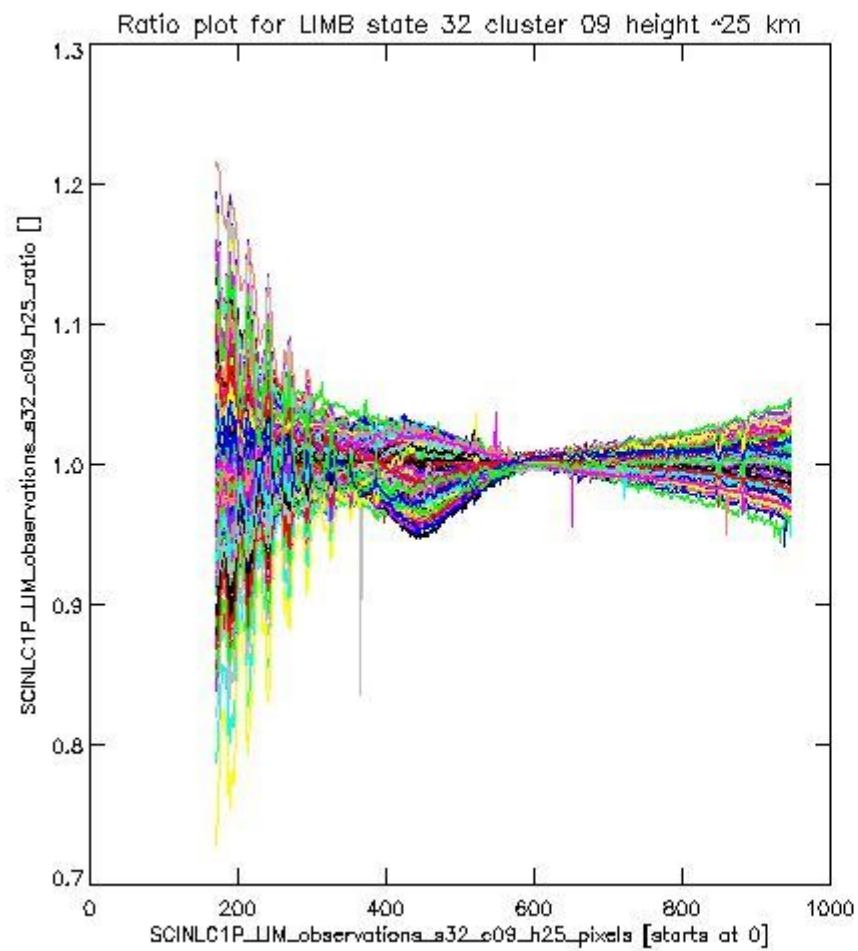
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	02FEB2011 04:18:03.923
Start time of last sample	02FEB2011 23:08:03.400
Reference period start time	03JAN2011 02:39:20.158
Reference period stop time	01FEB2011 23:44:53.050
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\_20110202\_14.PNG

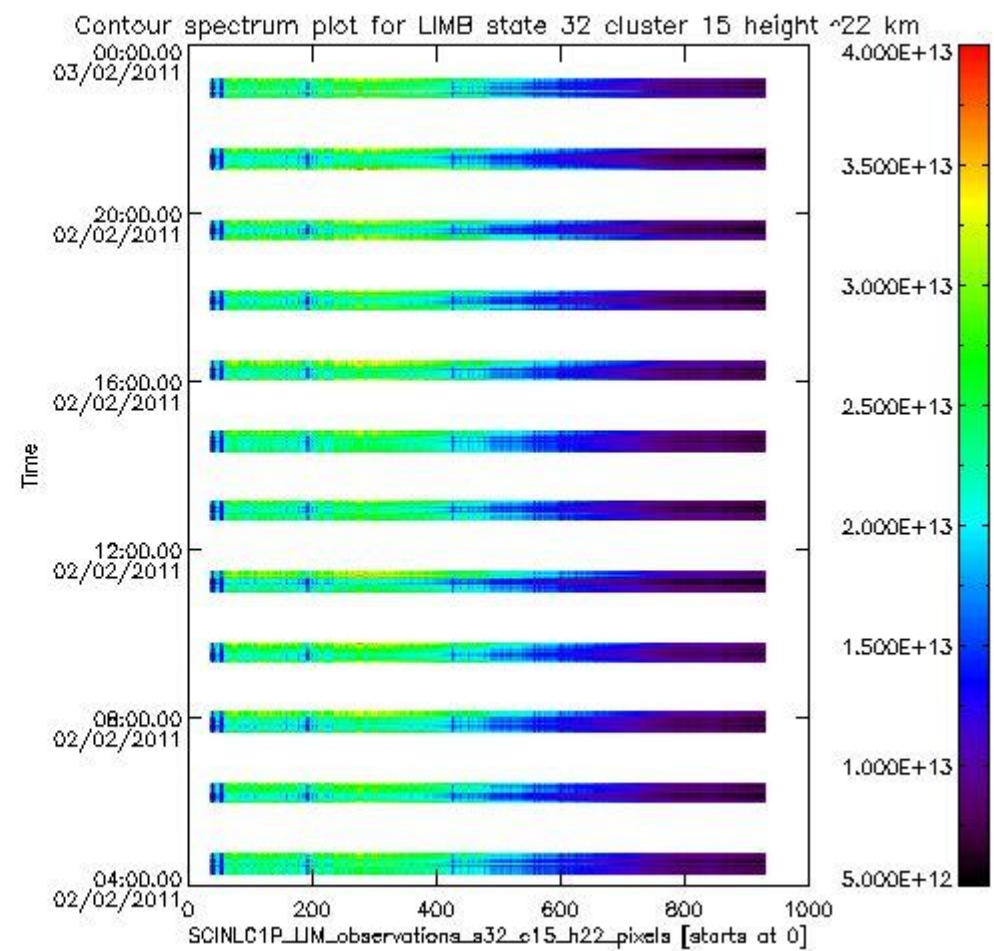
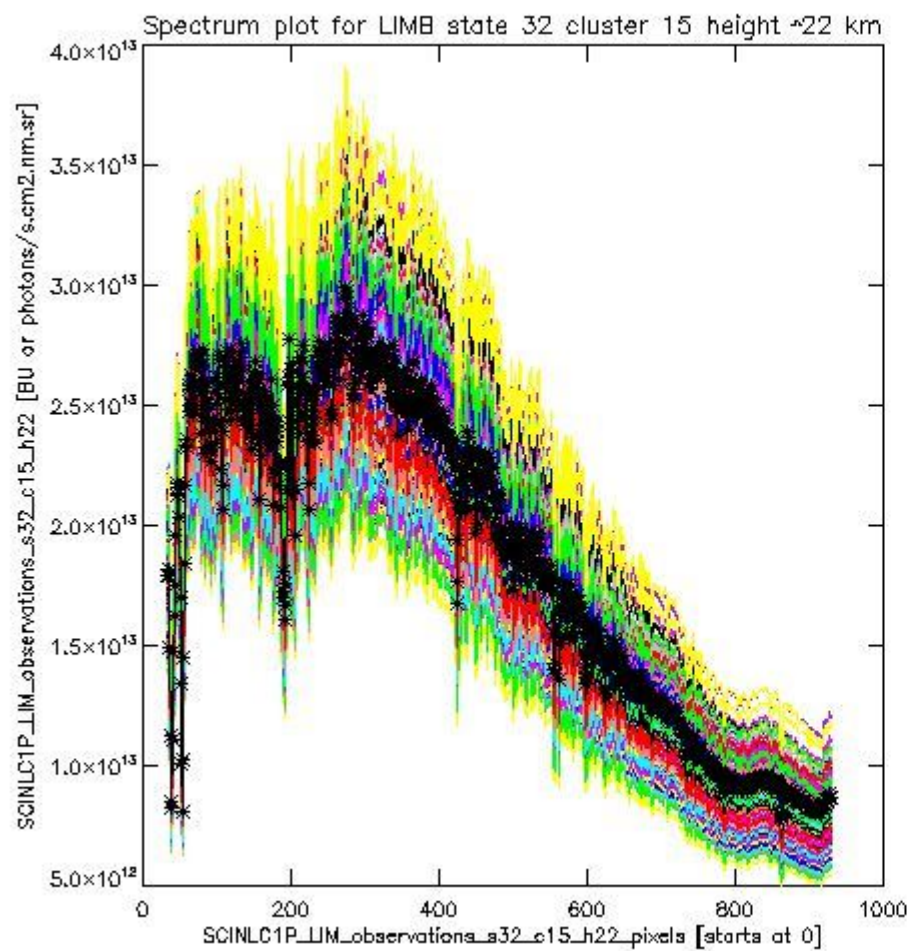




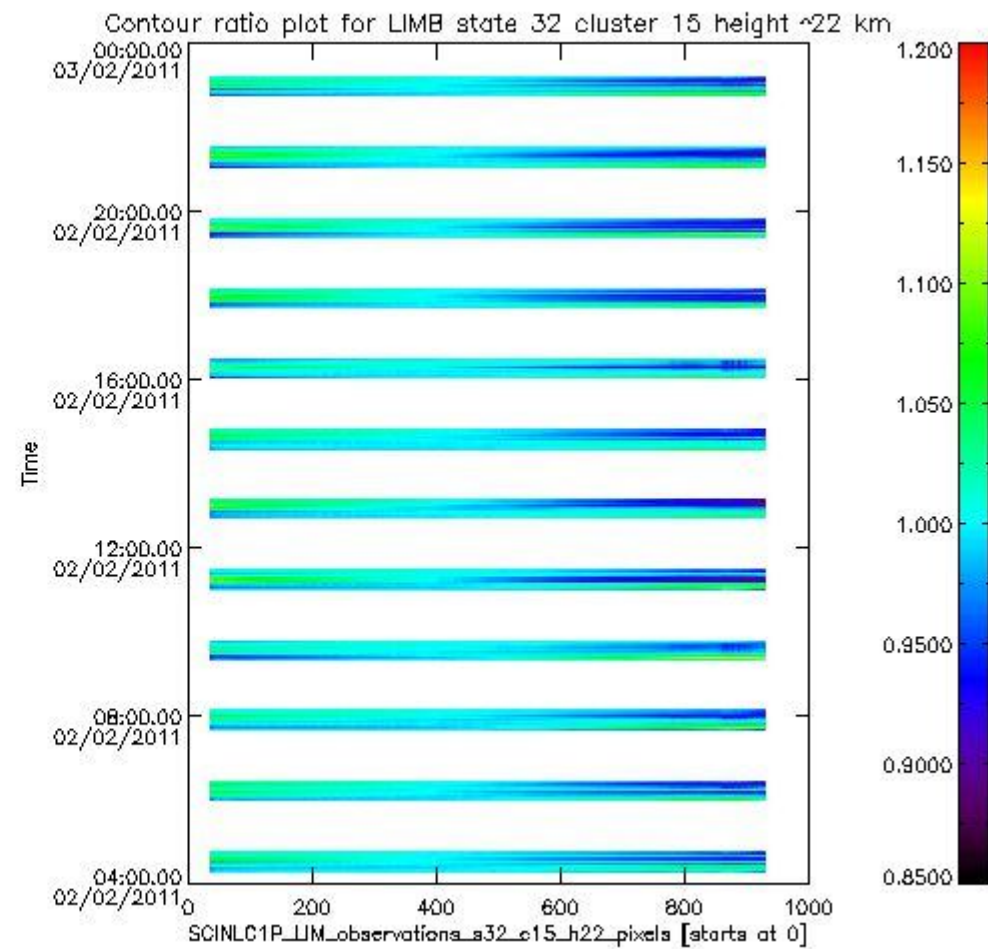
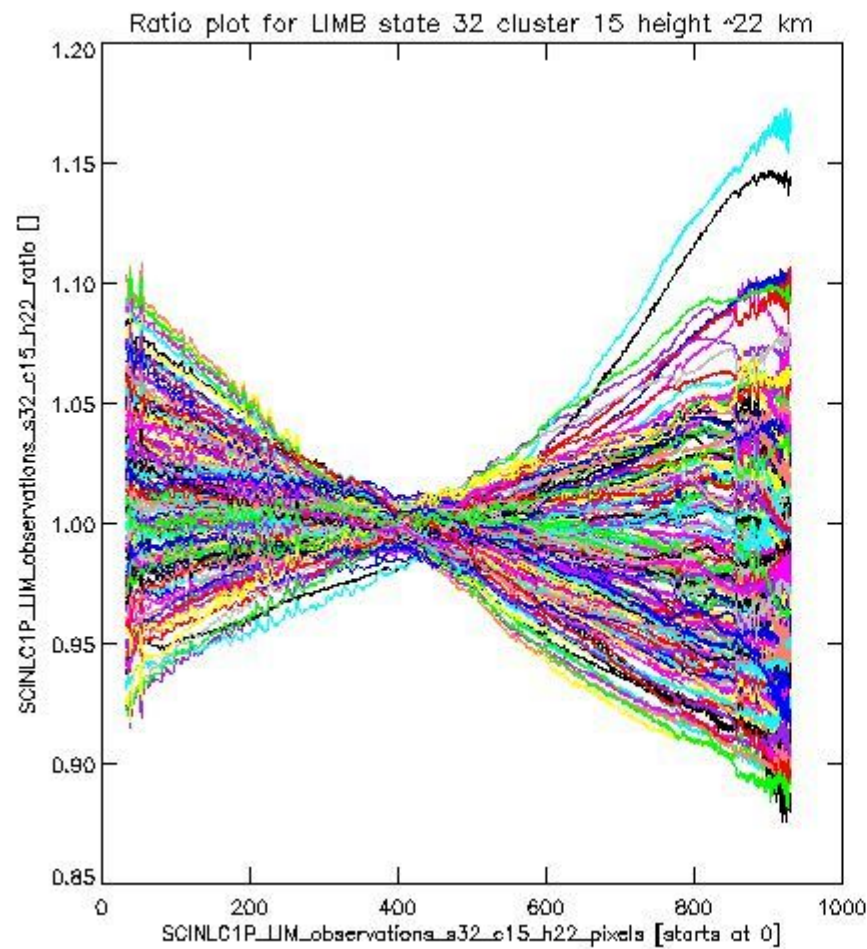
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_15.PNG

**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	02FEB2011 04:18:03.923
Start time of last sample	02FEB2011 23:08:03.400
Reference period start time	03JAN2011 02:39:20.158
Reference period stop time	01FEB2011 23:44:53.050
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



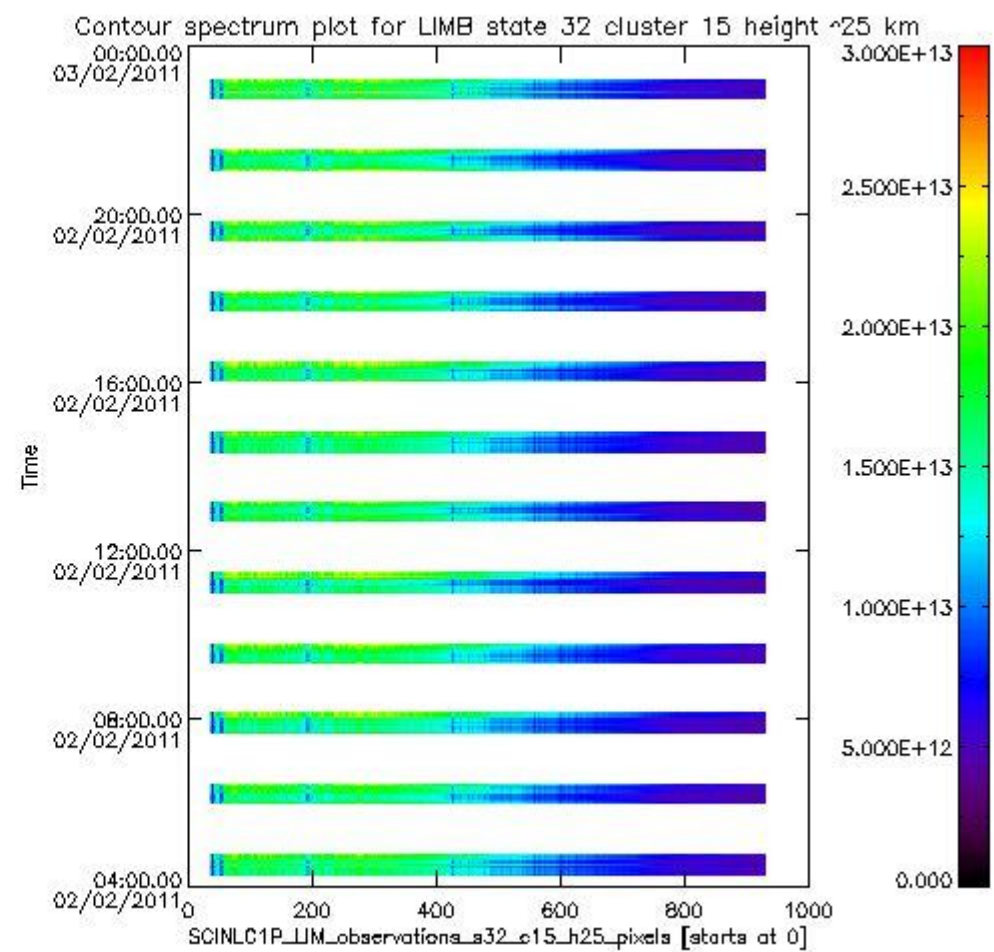
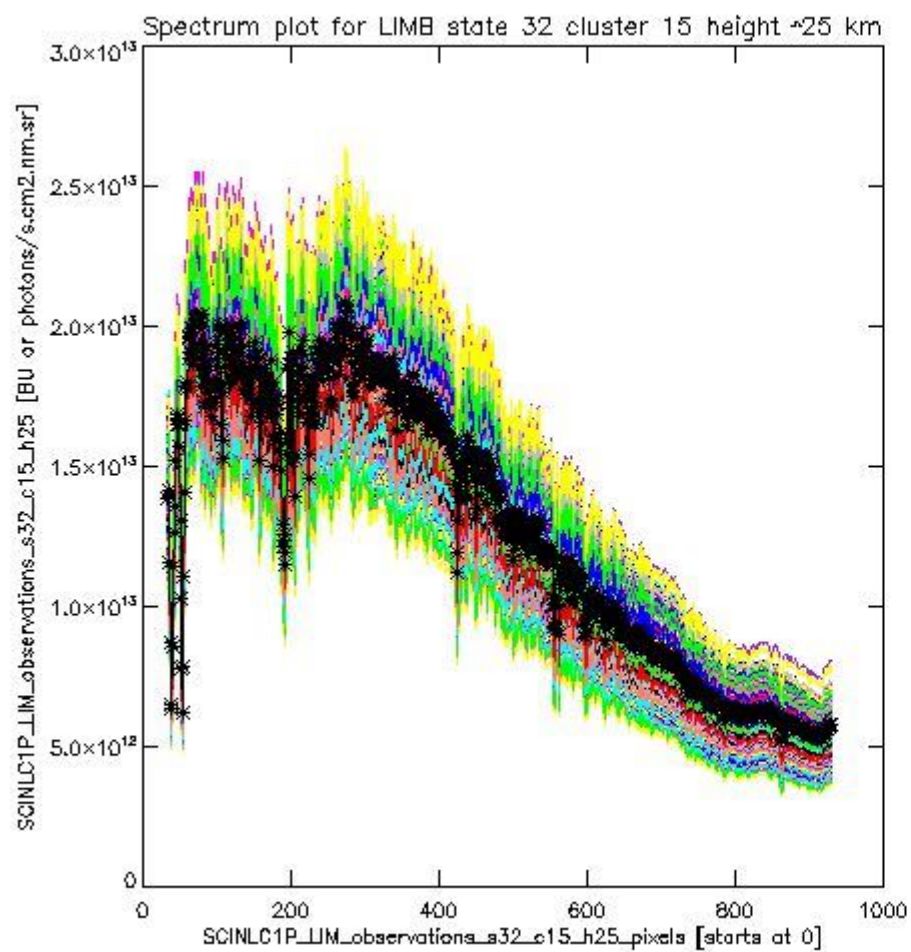
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_16.PNG



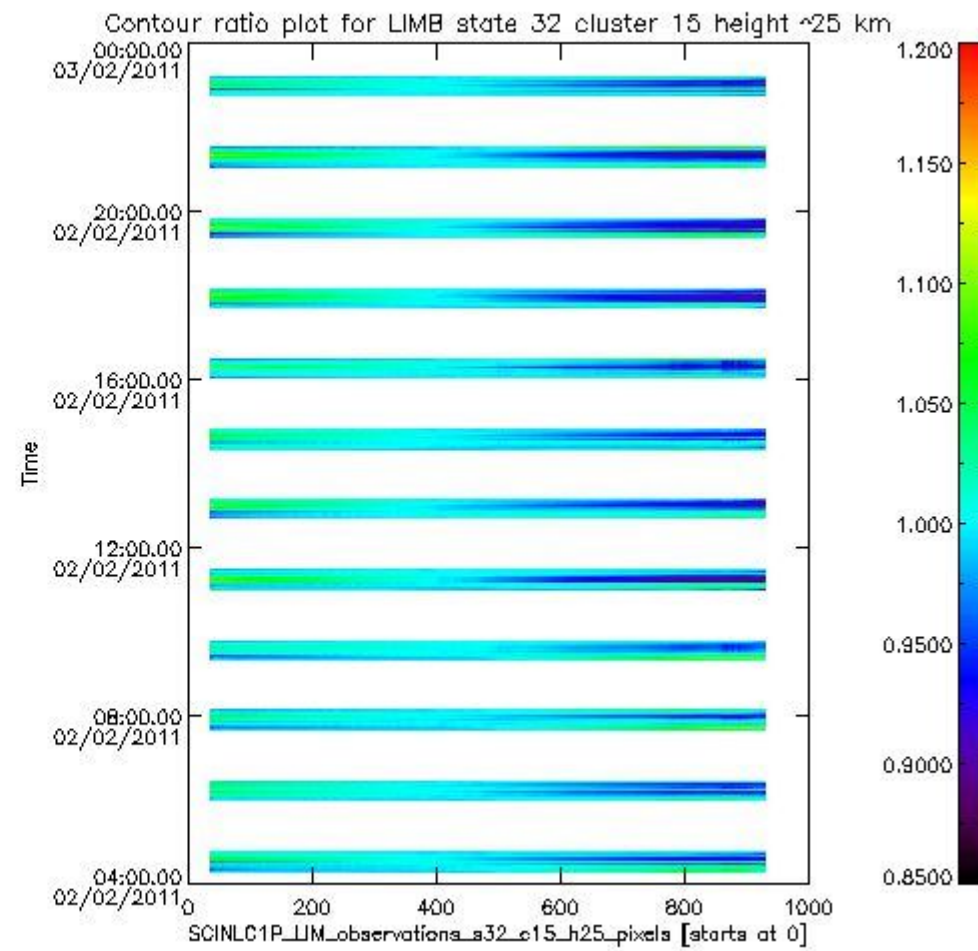
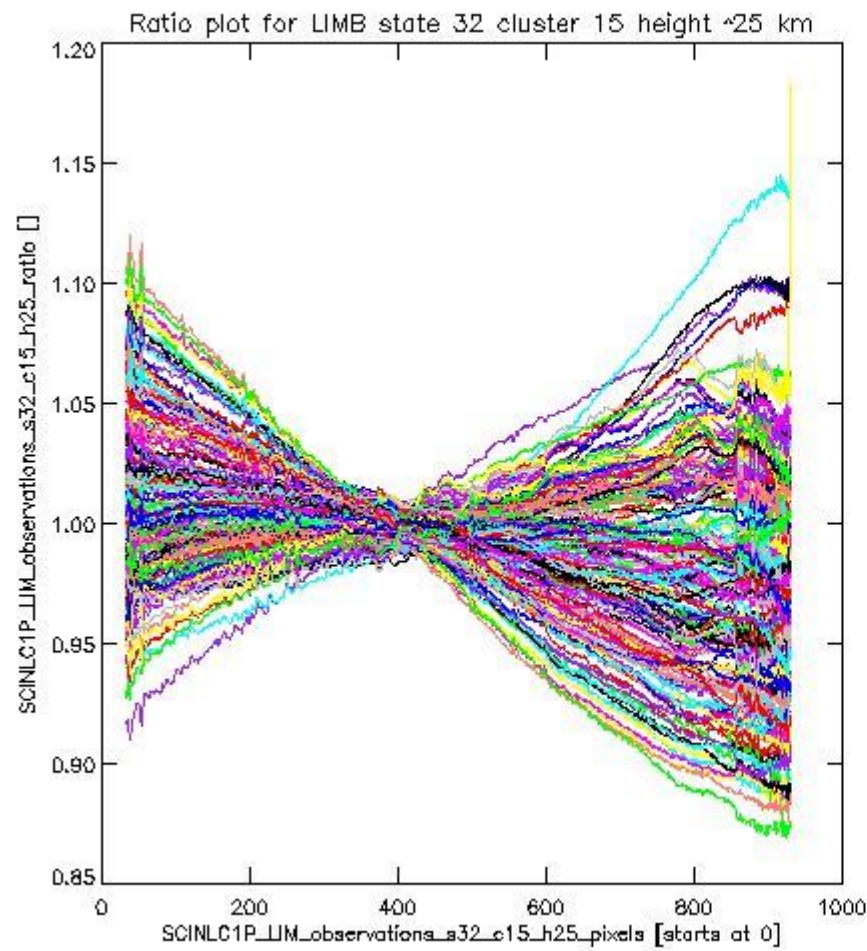
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_17.PNG

**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	02FEB2011 04:18:03.923
Start time of last sample	02FEB2011 23:08:03.400
Reference period start time	03JAN2011 02:39:20.158
Reference period stop time	01FEB2011 23:44:53.050
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



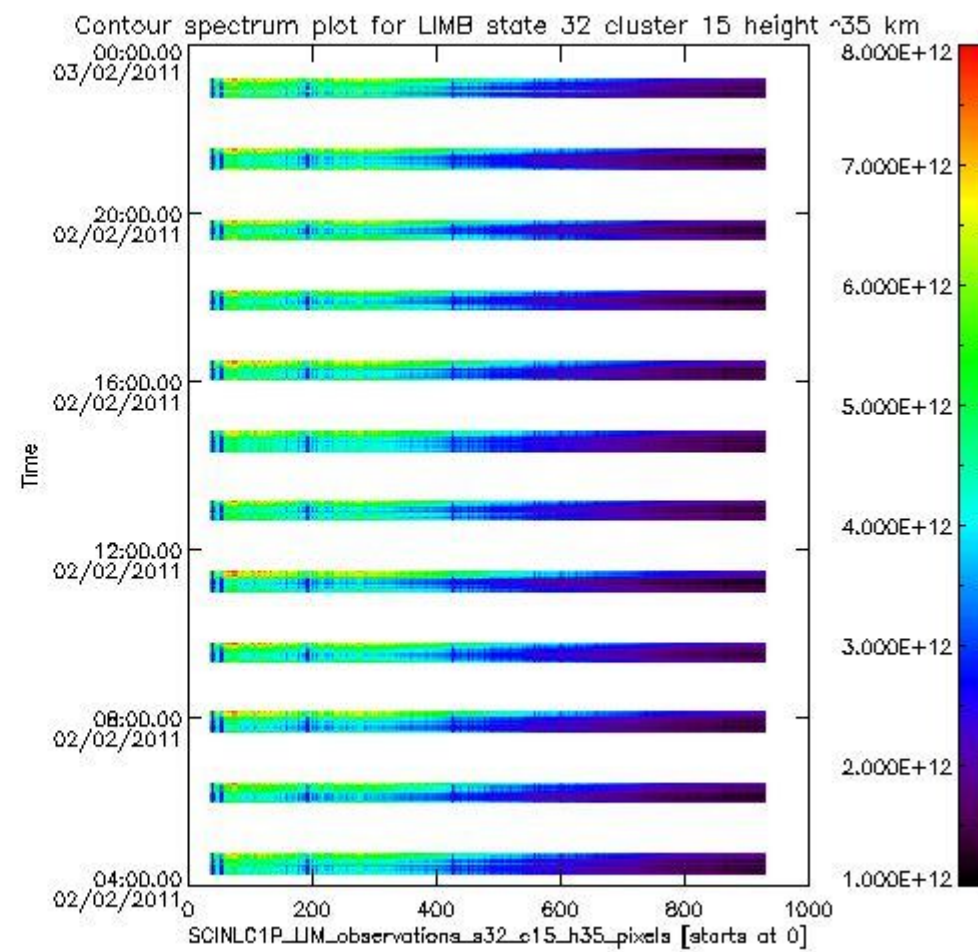
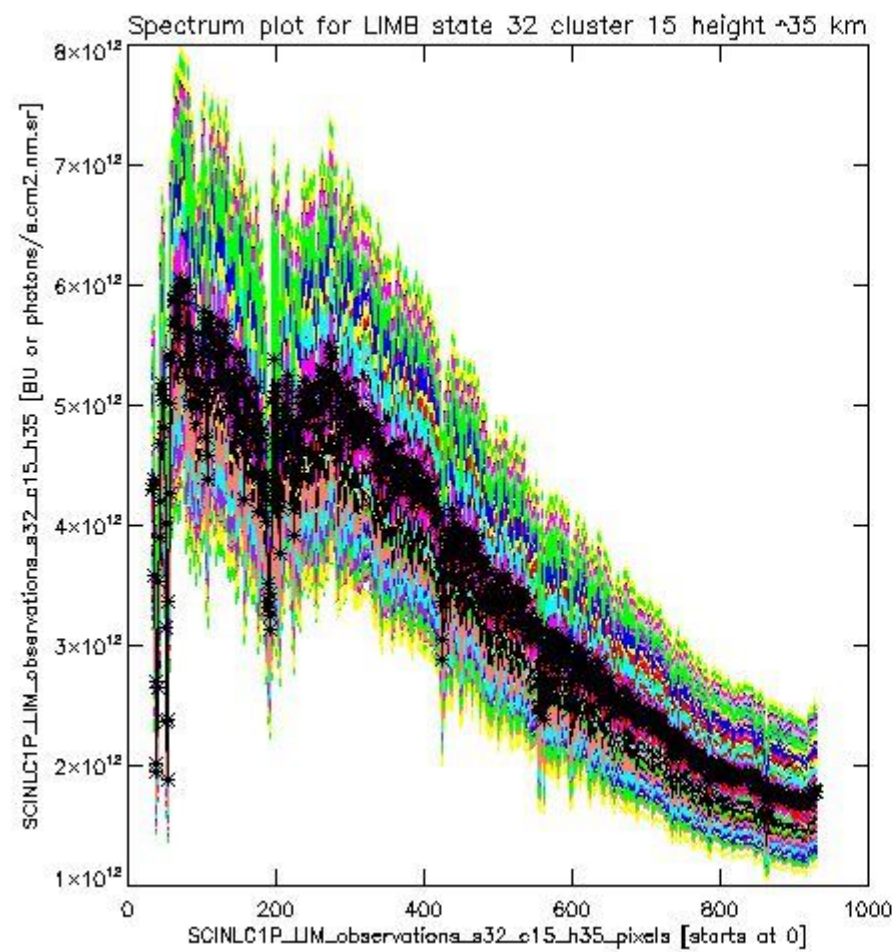
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_18.PNG



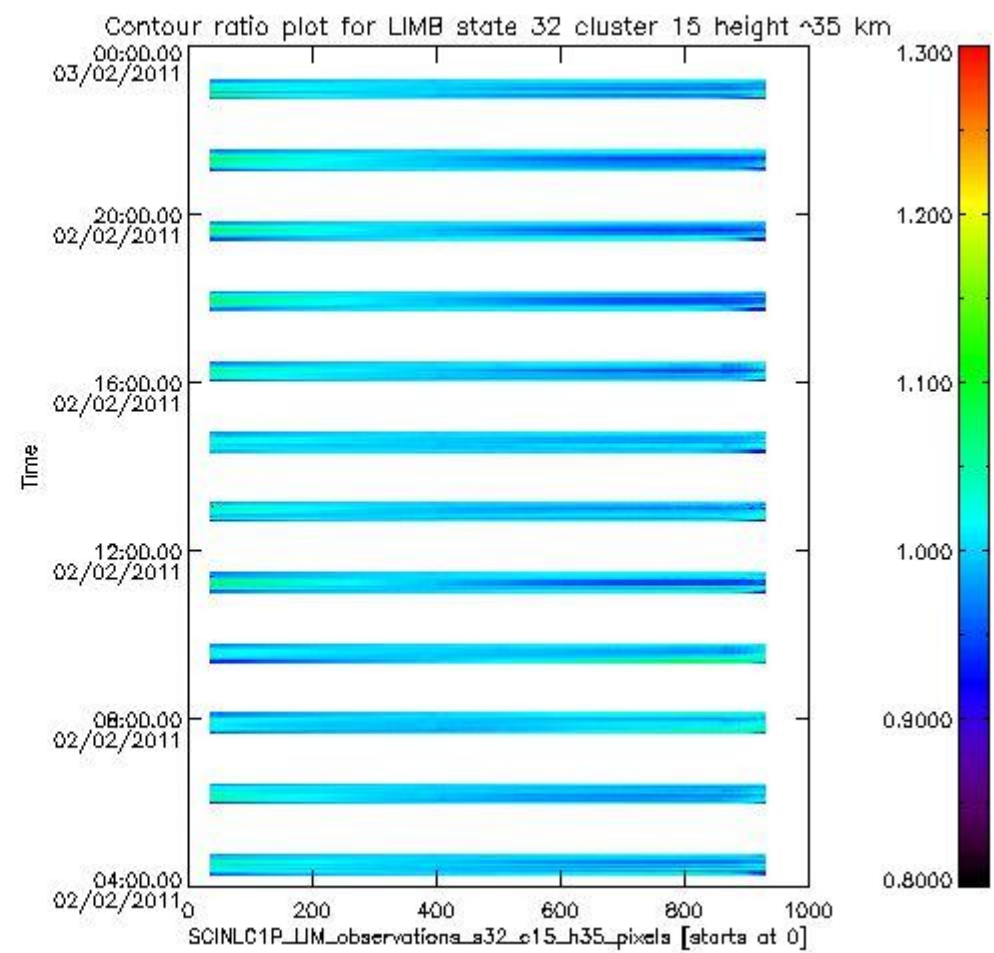
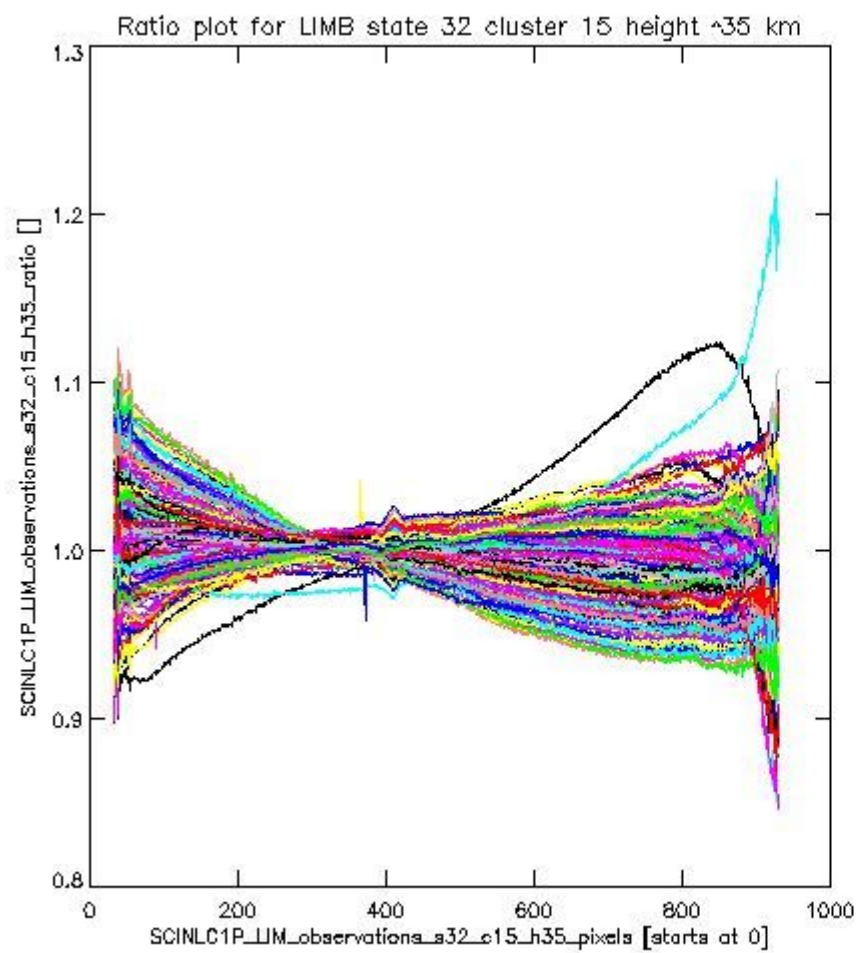
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_19.PNG

**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	02FEB2011 04:18:03.923
Start time of last sample	02FEB2011 23:08:03.400
Reference period start time	03JAN2011 02:39:20.158
Reference period stop time	01FEB2011 23:44:53.050
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\_20110202\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110202\_21.PNG

