

# 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	14JAN2011 06:55:34
Data source version	SCIA/7.04-U
Processing scope for products	03JAN2011 00:00:00 to 04JAN2011 00:00:00
Start time of first product within scope	02JAN2011 23:09:38
Stop time of last product within scope	04JAN2011 01:14:37
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	03JAN2011 01:13:36.490	03JAN2011 23:05:30.847
1	NADIR	07	09	N/A	03JAN2011 01:13:36.490	03JAN2011 23:05:30.847
2	NADIR	07	15	N/A	03JAN2011 01:13:36.490	03JAN2011 23:05:30.847
3	NADIR	07	24	N/A	03JAN2011 01:13:36.490	03JAN2011 23:05:30.847
4	NADIR	07	55	N/A	03JAN2011 01:13:36.490	03JAN2011 23:05:30.847
5	LIMB	32	09	~19 km	03JAN2011 02:39:20.158	03JAN2011 23:10:44.890
6	LIMB	32	09	~22 km	03JAN2011 02:39:20.158	03JAN2011 23:10:44.890
7	LIMB	32	09	~25 km	03JAN2011 02:39:20.158	03JAN2011 23:10:44.890
8	LIMB	32	15	~22 km	03JAN2011 02:39:20.158	03JAN2011 23:10:44.890
9	LIMB	32	15	~25 km	03JAN2011 02:39:20.158	03JAN2011 23:10:44.890
10	LIMB	32	15	~35 km	03JAN2011 02:39:20.158	03JAN2011 23:10:44.890

#### 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_1CUDPA20110102_224305_000060093098_00102_46237_1410.N1</a>	02JAN2011 23:09:38	03JAN2011 00:10:59	0	35	0	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110103_002319_000060103098_00103_46238_1412.N1</a>	03JAN2011 00:50:47	03JAN2011 01:51:00	0	34	0	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110103_020333_000060093098_00104_46239_1415.N1</a>	03JAN2011 02:21:22	03JAN2011 03:31:51	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110103_034346_000060103098_00105_46240_1417.N1</a>	03JAN2011 04:01:36	03JAN2011 05:11:50	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110103_052401_000060093098_00106_46241_1419.N1</a>	03JAN2011 05:41:50	03JAN2011 06:52:19	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110103_070414_000060103098_00107_46242_1420.N1</a>	03JAN2011 07:22:04	03JAN2011 08:32:18	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110103_084429_000060093098_00108_46243_1424.N1	03JAN2011 09:02:17	03JAN2011 10:12:46	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110103_102442_000060103098_00109_46244_1425.N1	03JAN2011 10:42:31	03JAN2011 11:52:46	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110103_120457_000060093098_00110_46245_1426.N1	03JAN2011 12:22:45	03JAN2011 13:33:14	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110103_134510_000060103098_00111_46246_1429.N1	03JAN2011 14:02:59	03JAN2011 15:13:13	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110103_152525_000060093098_00112_46247_1431.N1	03JAN2011 15:43:13	03JAN2011 16:53:42	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110103_170538_000060423098_00113_46248_1433.N1	03JAN2011 17:23:27	03JAN2011 18:34:01	0	35	31	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110103_184627_000059753098_00114_46249_1435.N1	03JAN2011 18:46:27	03JAN2011 20:14:29	0	35	30	0	3	2	0	0	
13	SCI_NLC_1CUDPA20110103_202606_000060103098_00115_46250_1436.N1	03JAN2011 20:43:54	03JAN2011 21:54:09	0	35	31	0	0	2	0	0	
14	SCI_NLC_1CUDPA20110103_220620_000060093098_00116_46251_1439.N1	03JAN2011 22:24:08	03JAN2011 23:34:37	0	36	30	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110103_234634_000060103098_00117_46252_1441.N1	04JAN2011 00:04:22	04JAN2011 01:14:37	0	35	31	0	0	1	0	0	

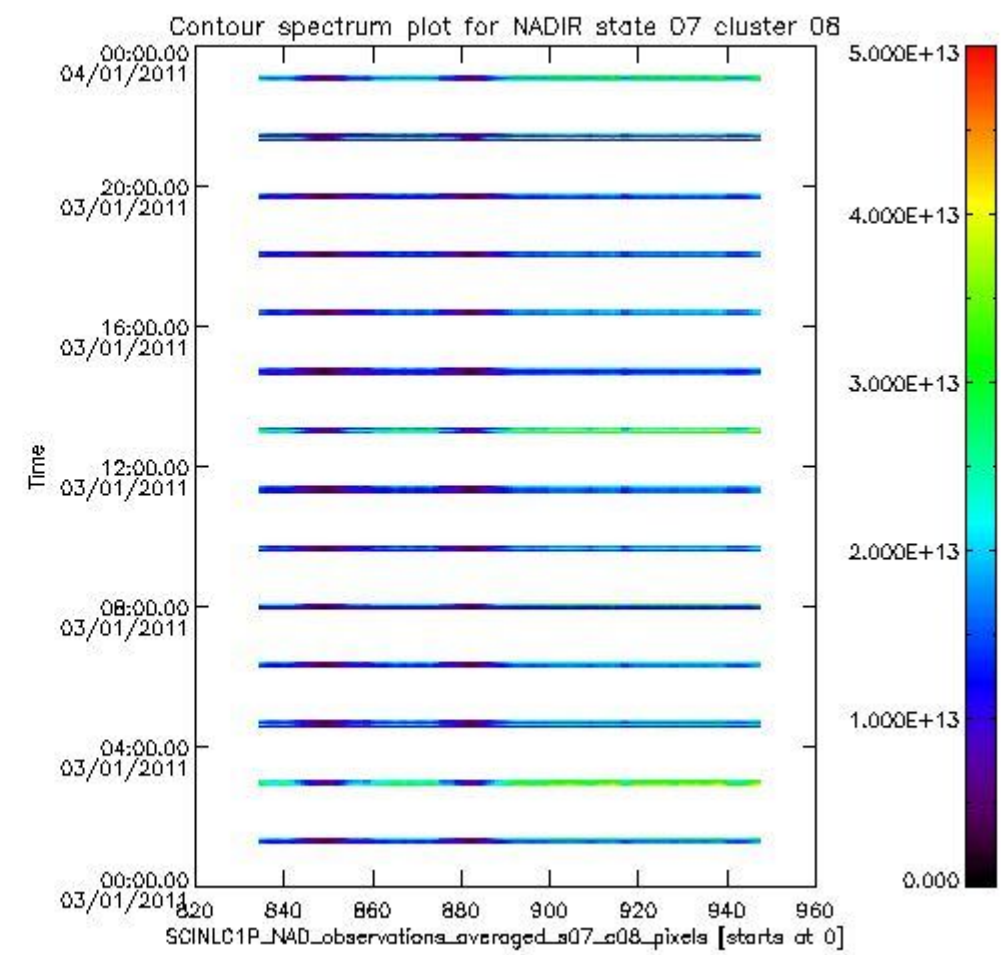
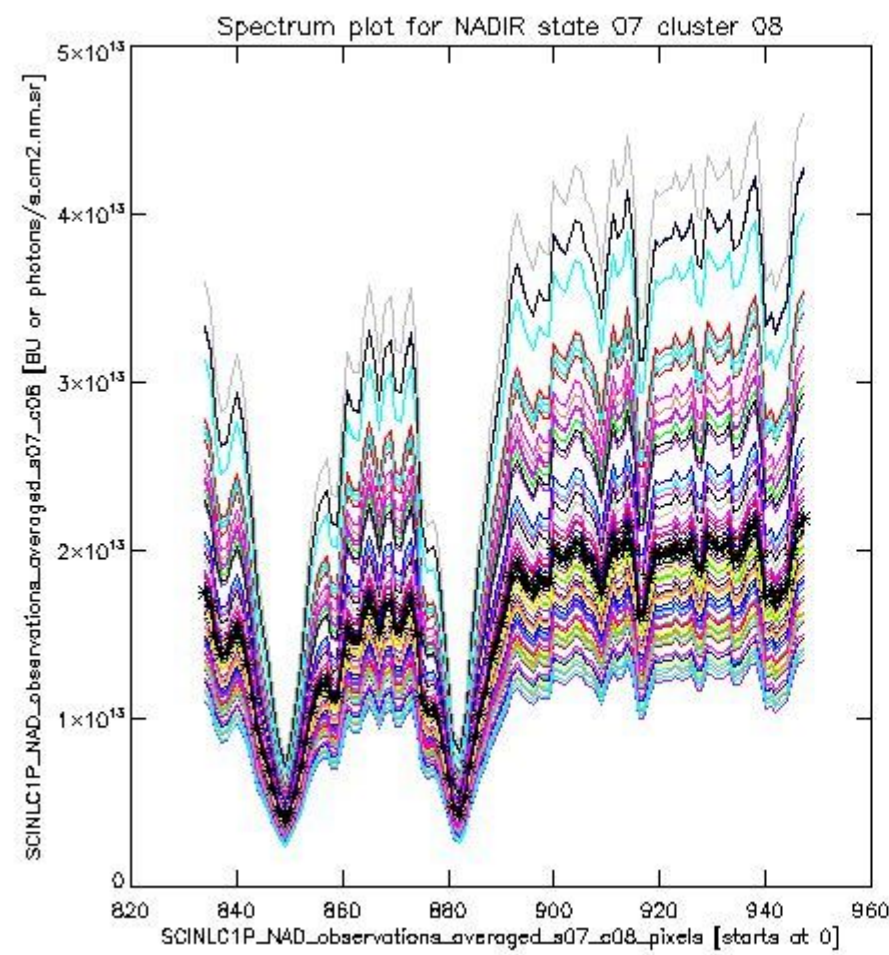
## 1.2 Source packet monitoring

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:

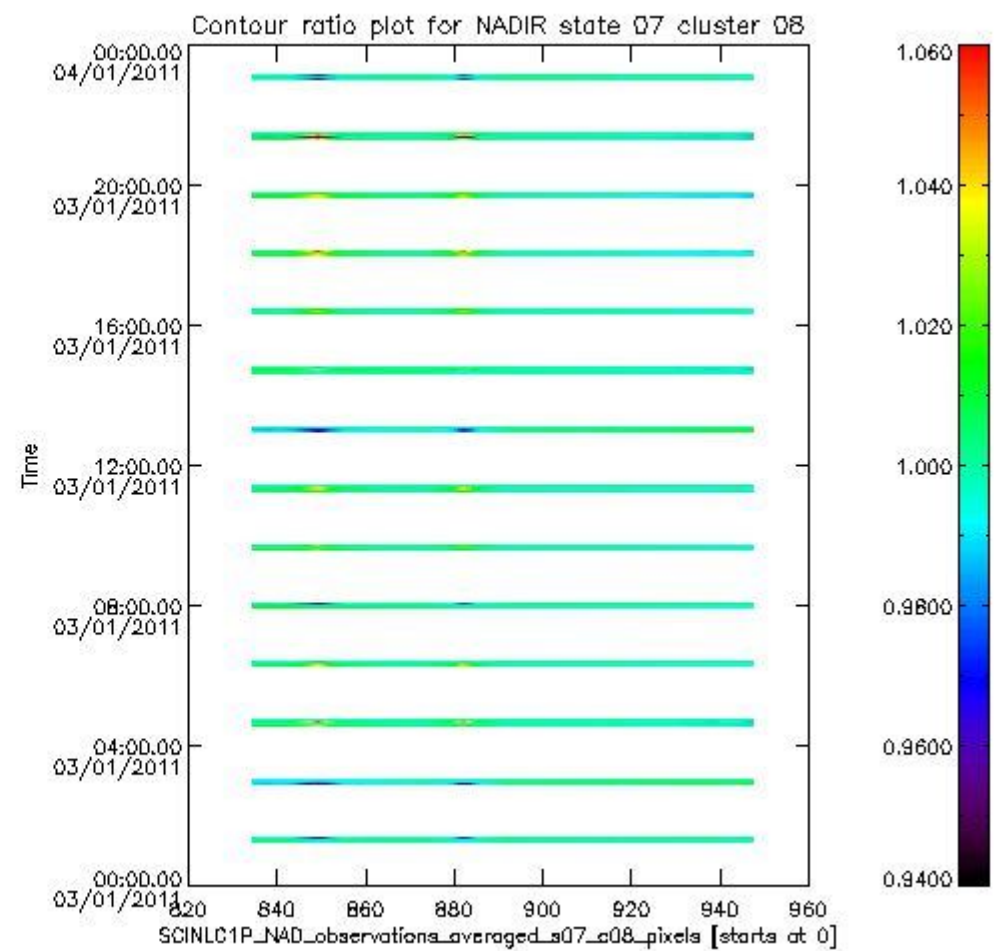
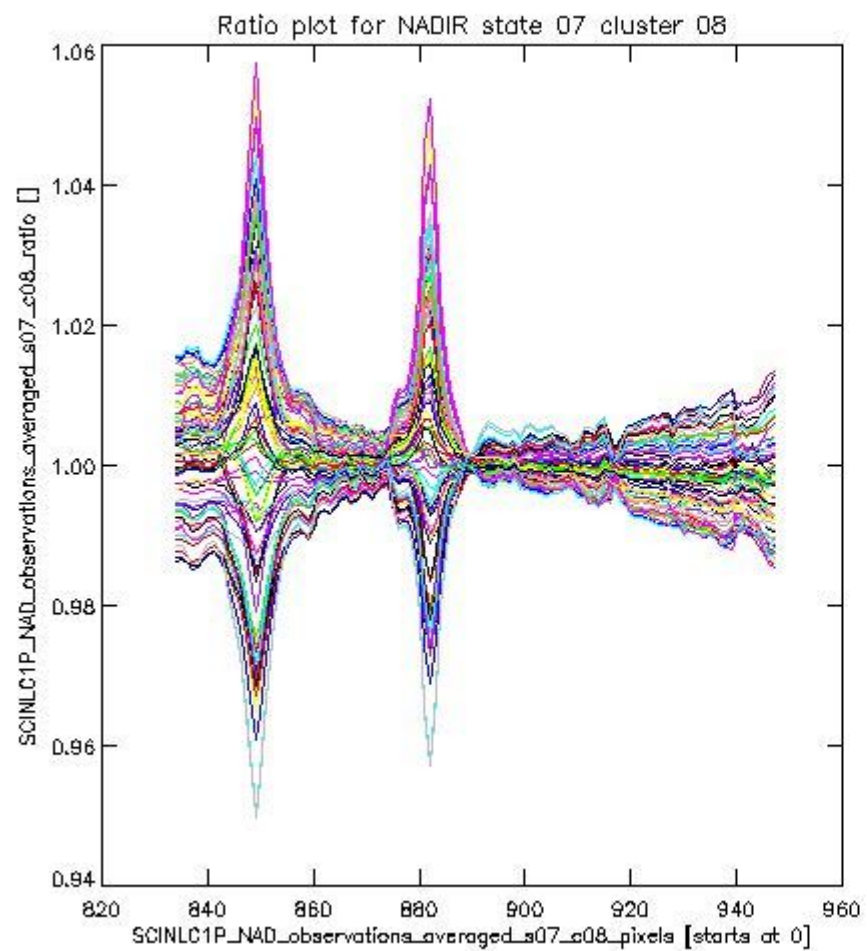
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	03JAN2011 01:13:36.490
Start time of last sample	03JAN2011 23:05:30.847
Reference period start time	04DEC2010 01:13:35.785
Reference period stop time	02JAN2011 23:42:48.965
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



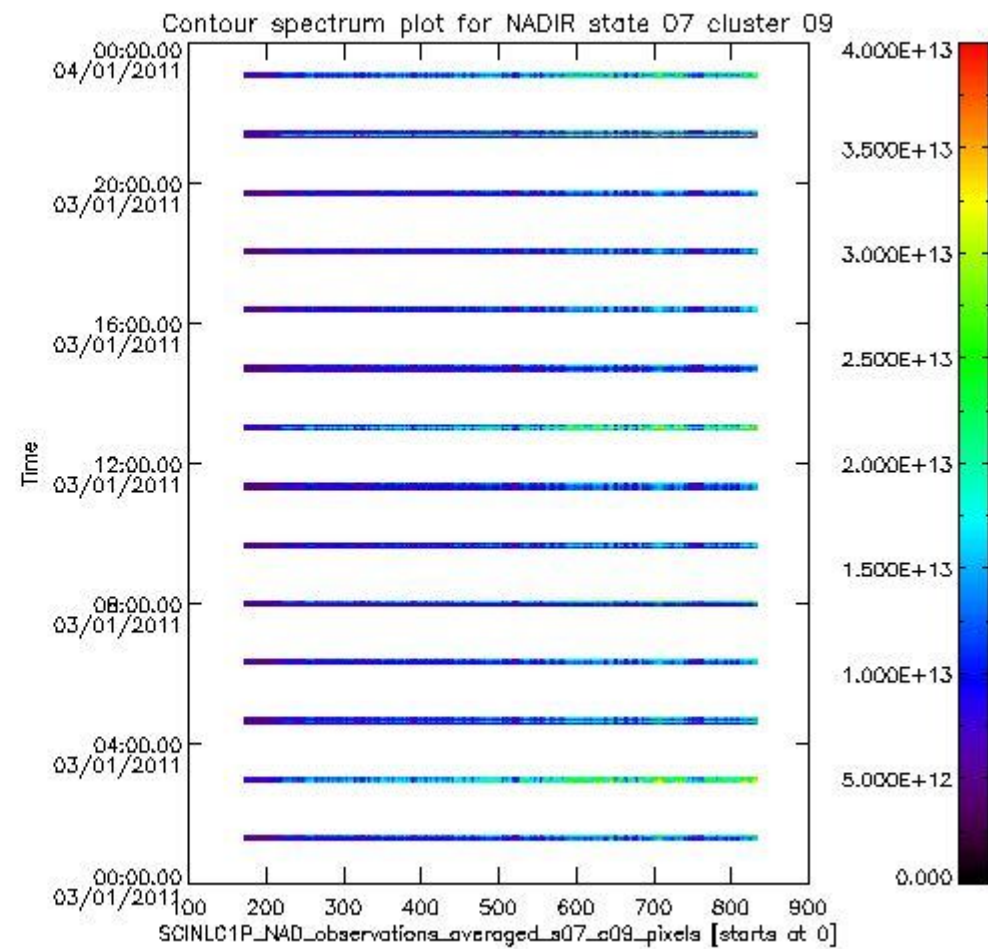
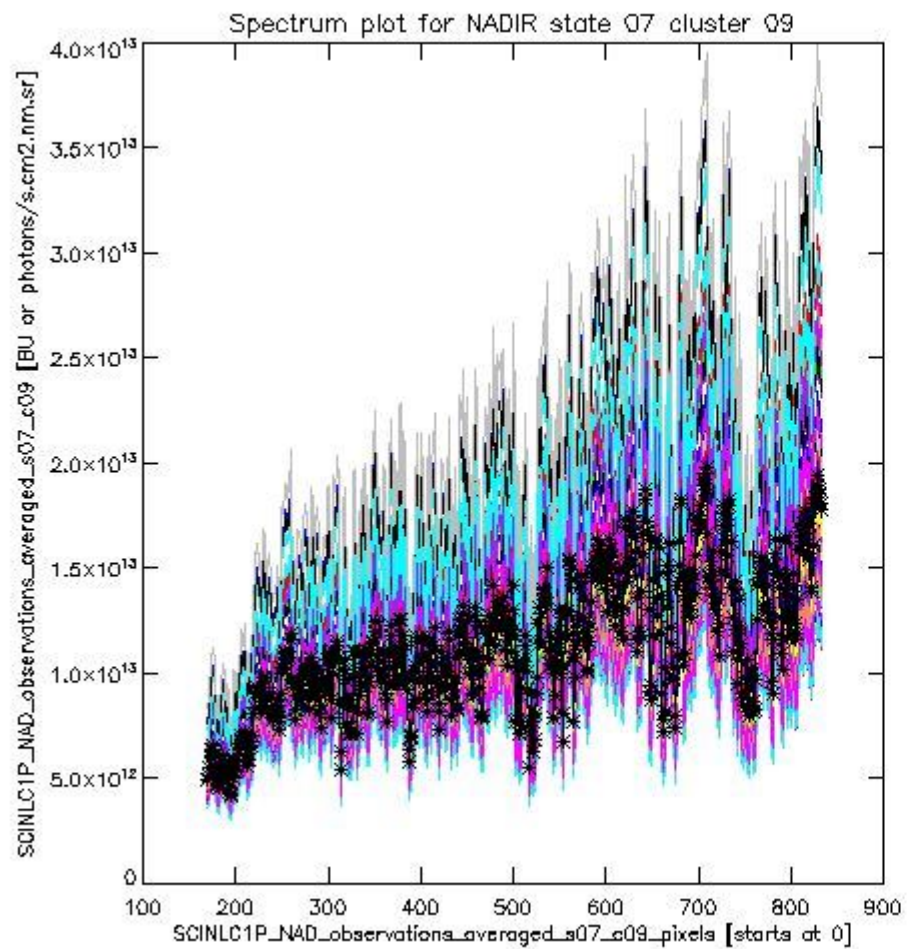
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_0.PNG



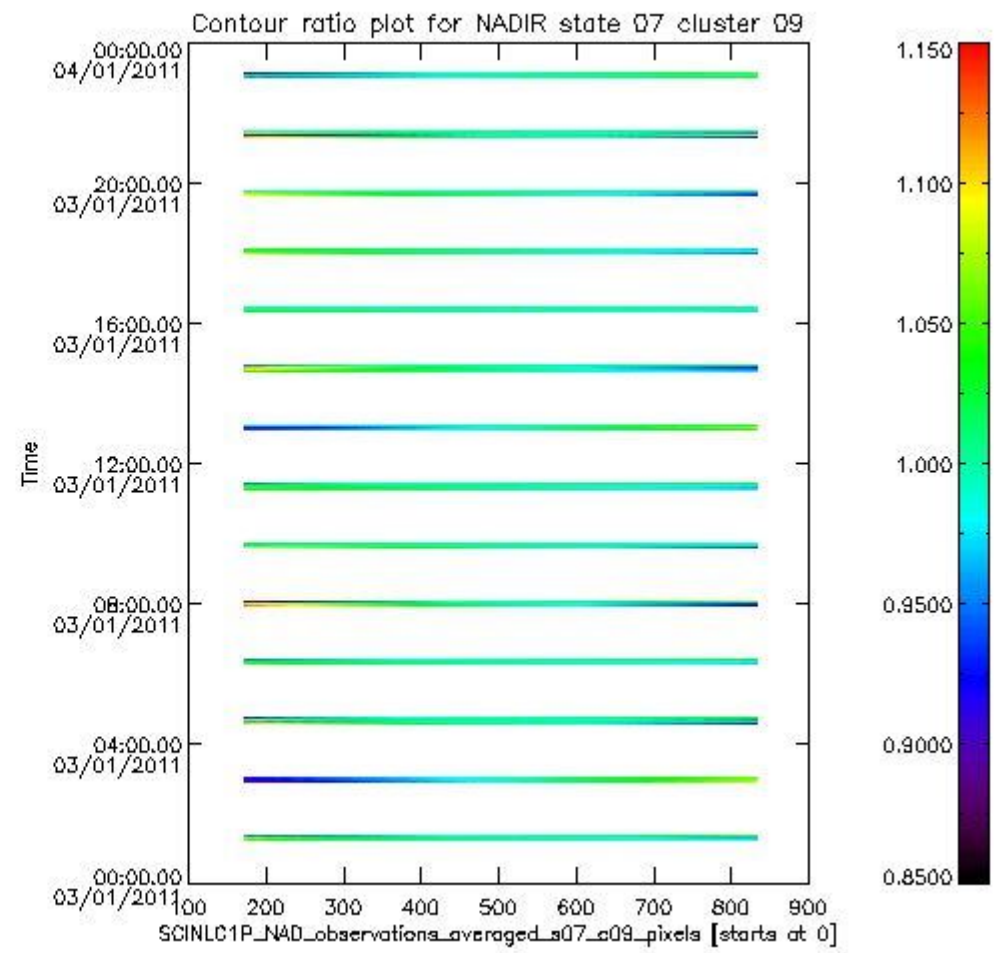
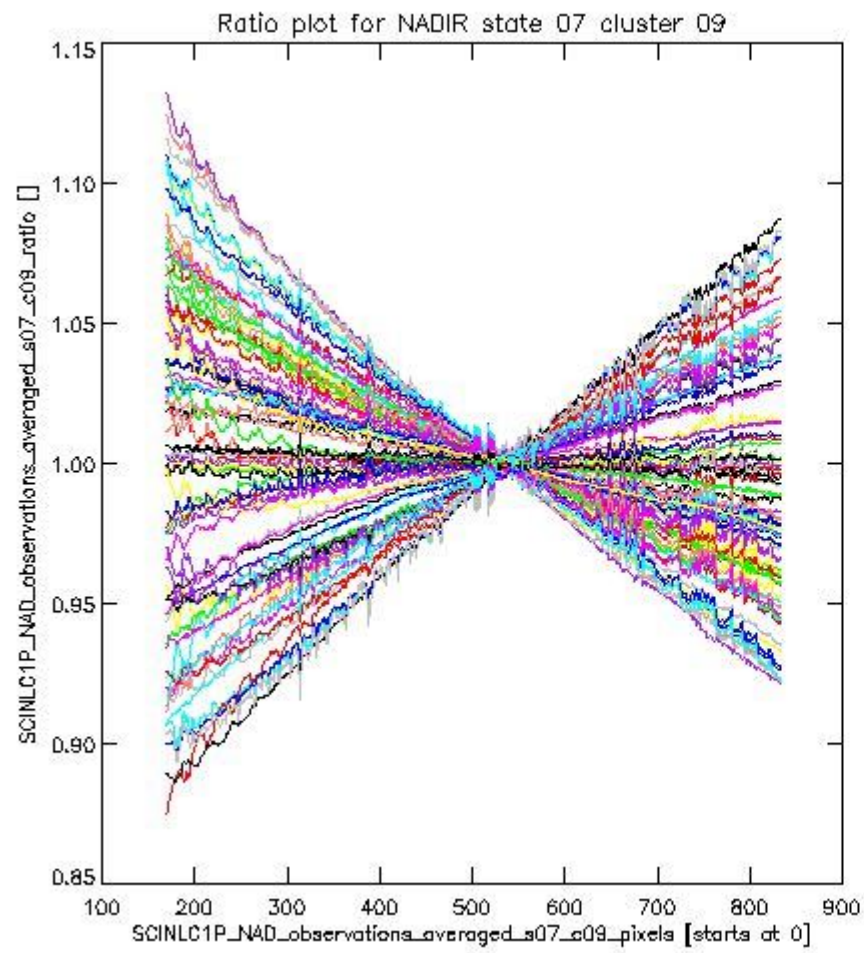
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_1.PNG

**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	03JAN2011 01:13:36.490
Start time of last sample	03JAN2011 23:05:30.847
Reference period start time	04DEC2010 01:13:35.785
Reference period stop time	02JAN2011 23:42:48.965
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



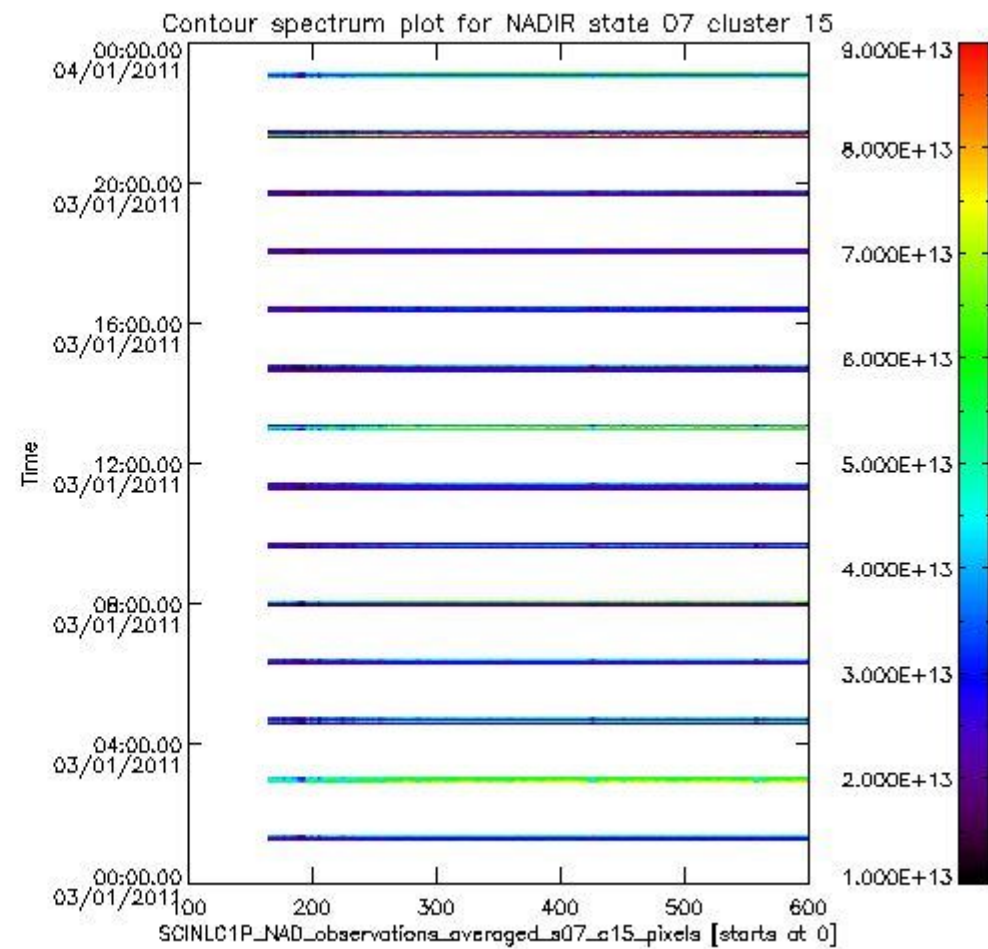
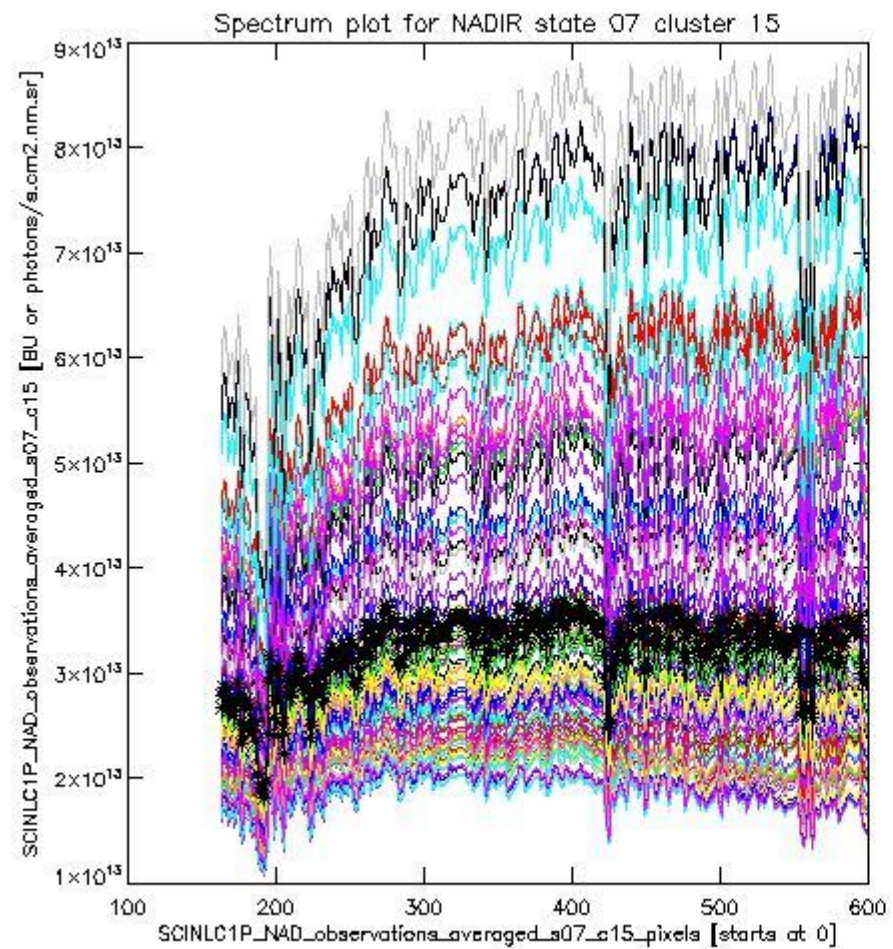
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_2.PNG



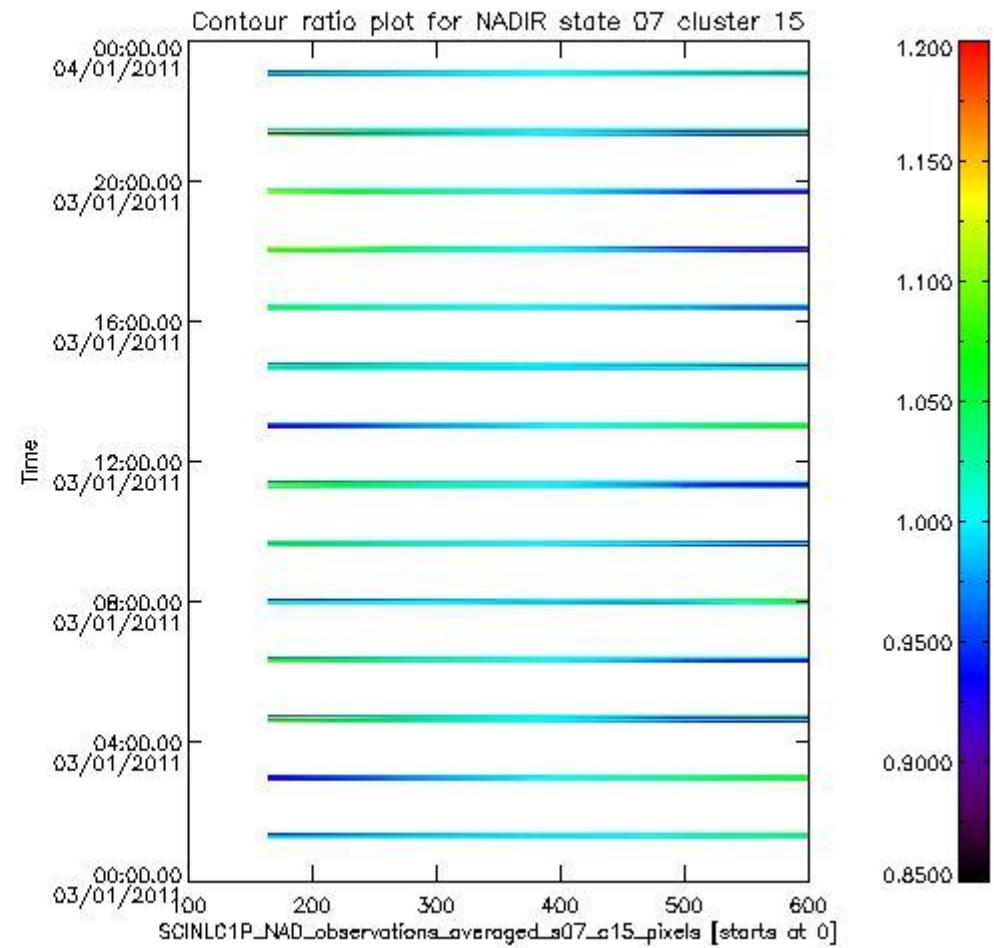
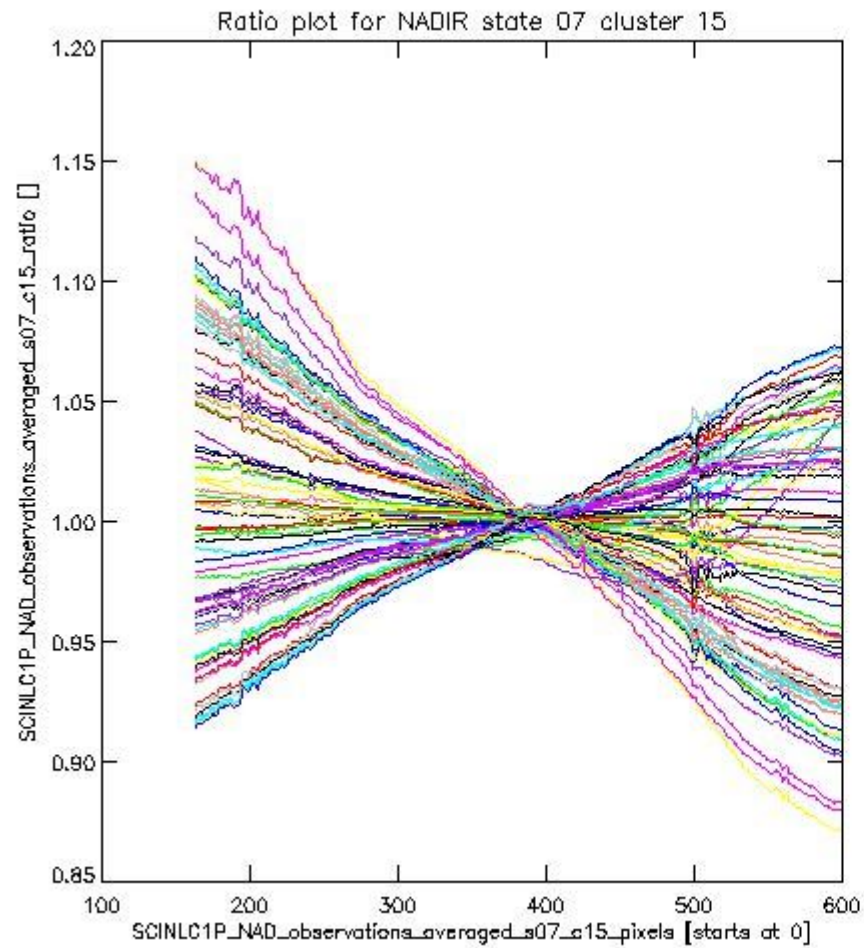
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_3.PNG

**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	03JAN2011 01:13:36.490
Start time of last sample	03JAN2011 23:05:30.847
Reference period start time	04DEC2010 01:13:35.785
Reference period stop time	02JAN2011 23:42:48.965
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\_20110103\_4.PNG

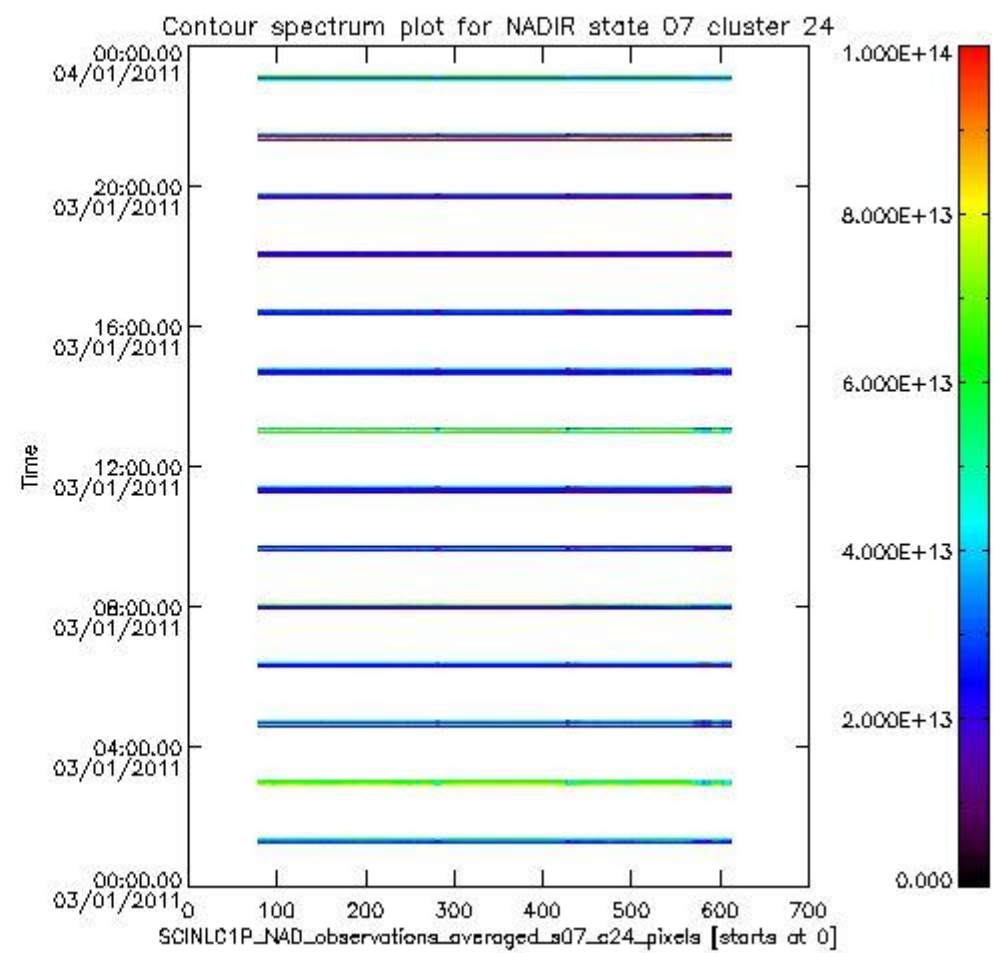
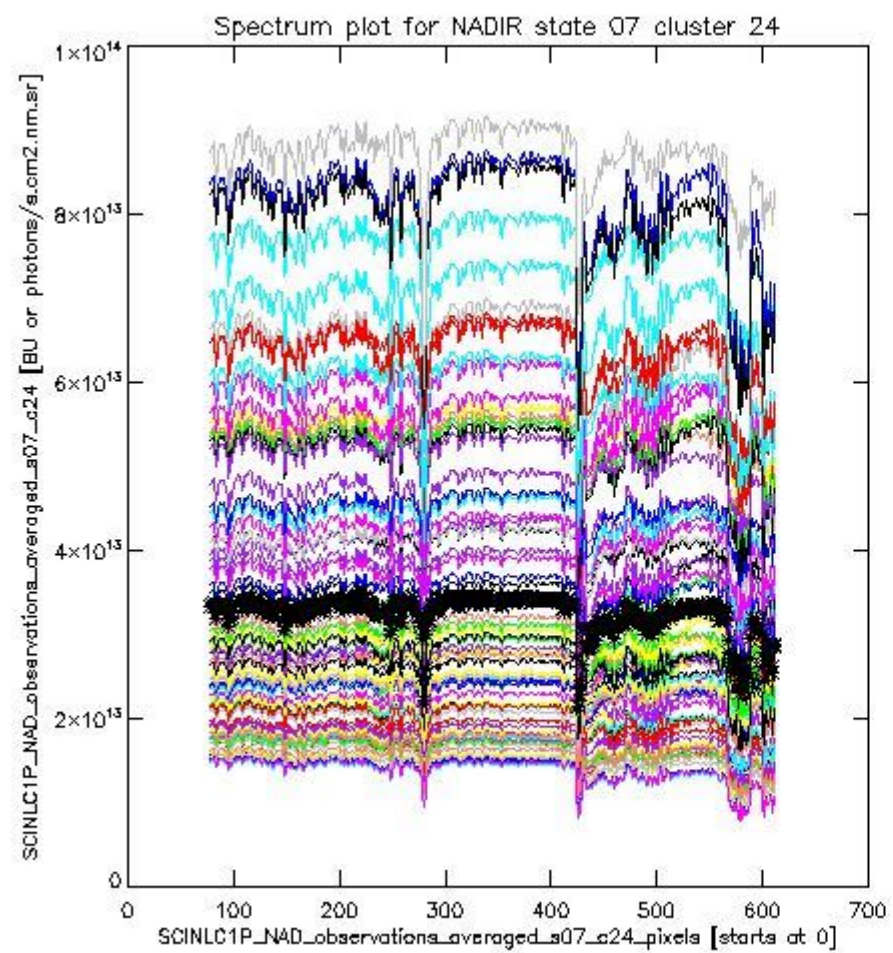


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_5.PNG

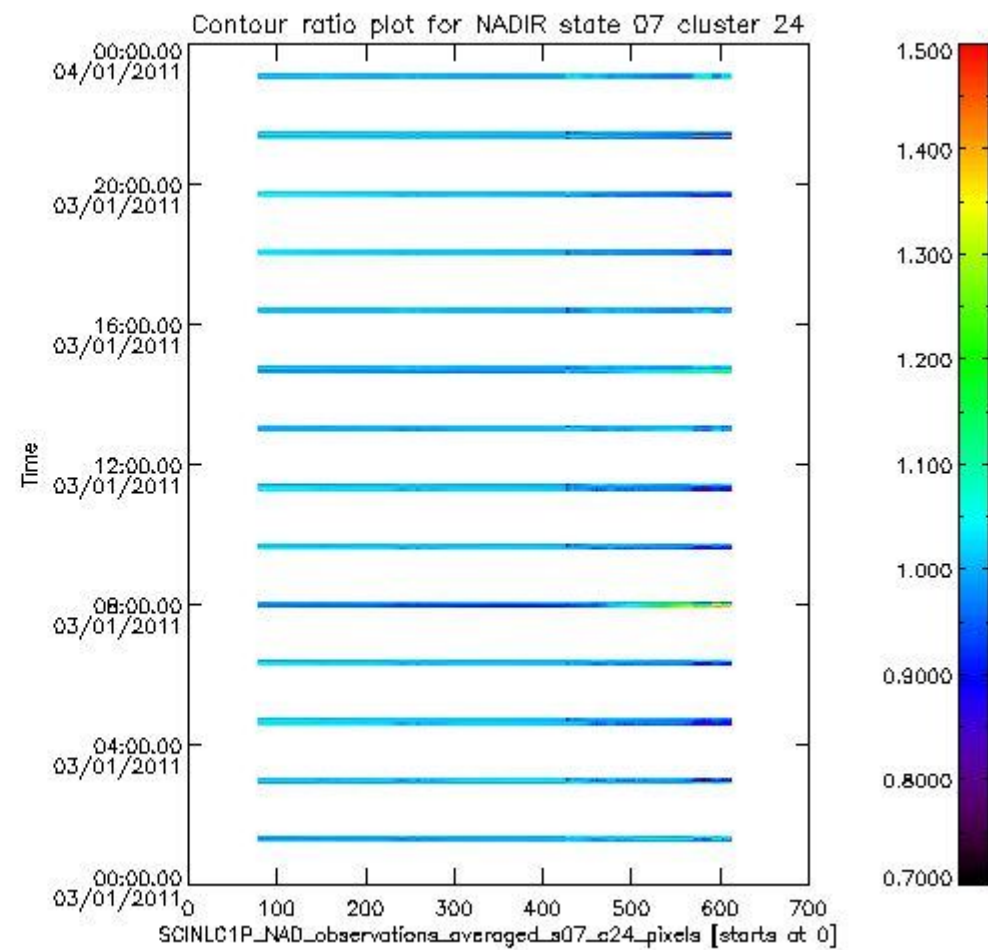
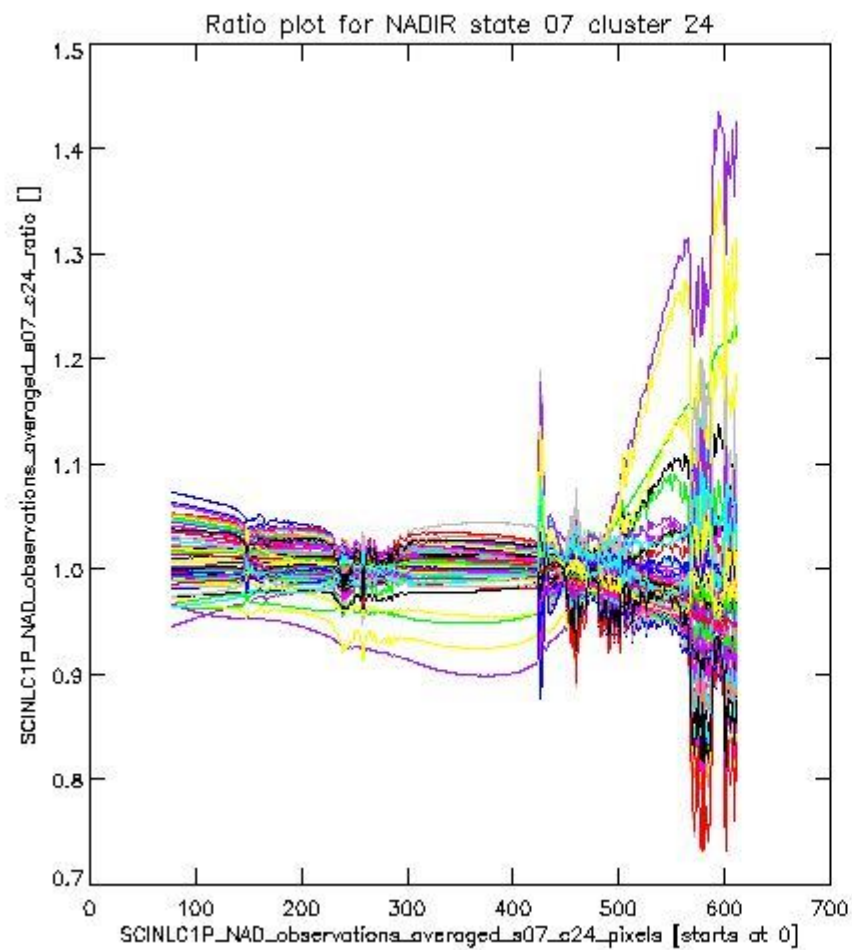
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	03JAN2011 01:13:36.490
Start time of last sample	03JAN2011 23:05:30.847
Reference period start time	04DEC2010 01:13:35.785
Reference period stop time	02JAN2011 23:42:48.965
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612





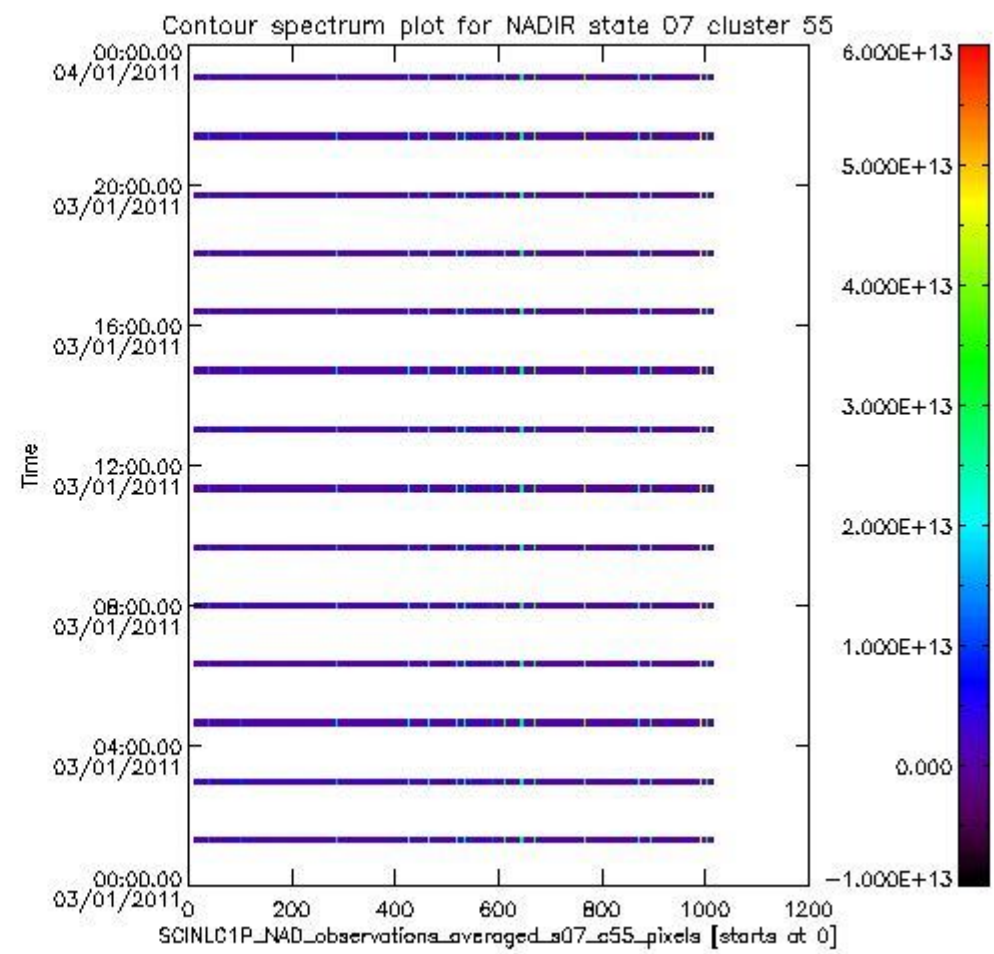
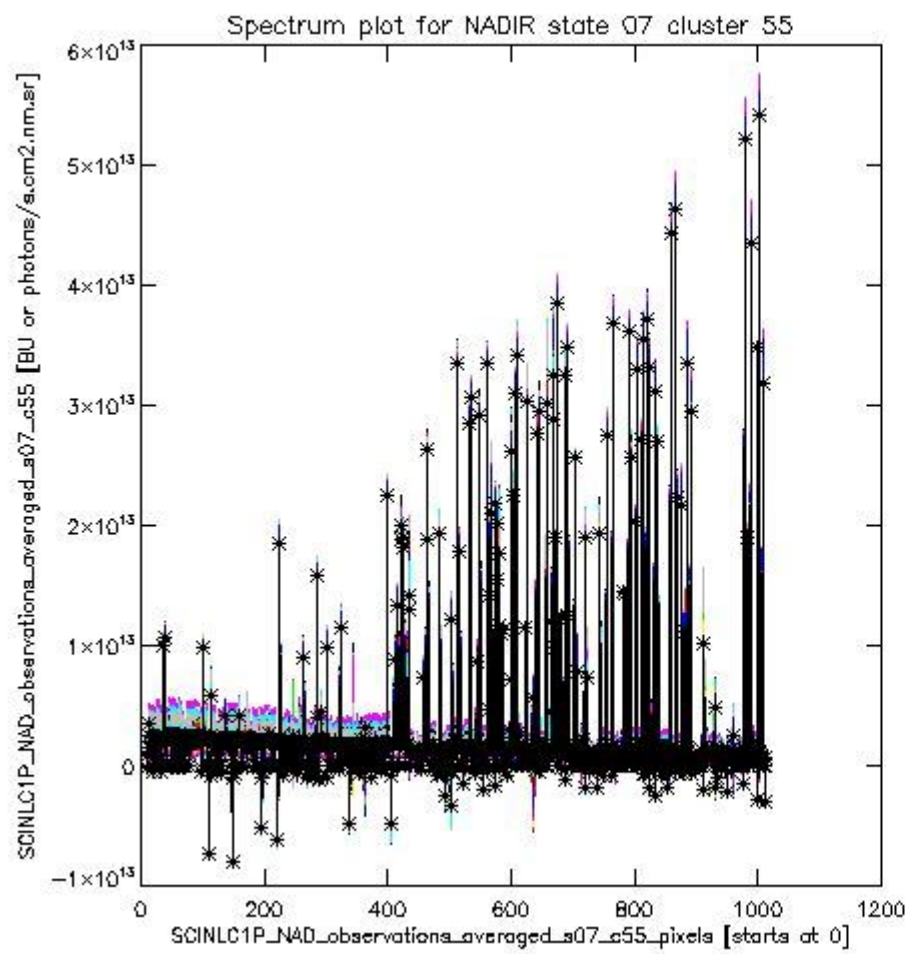
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_6.PNG



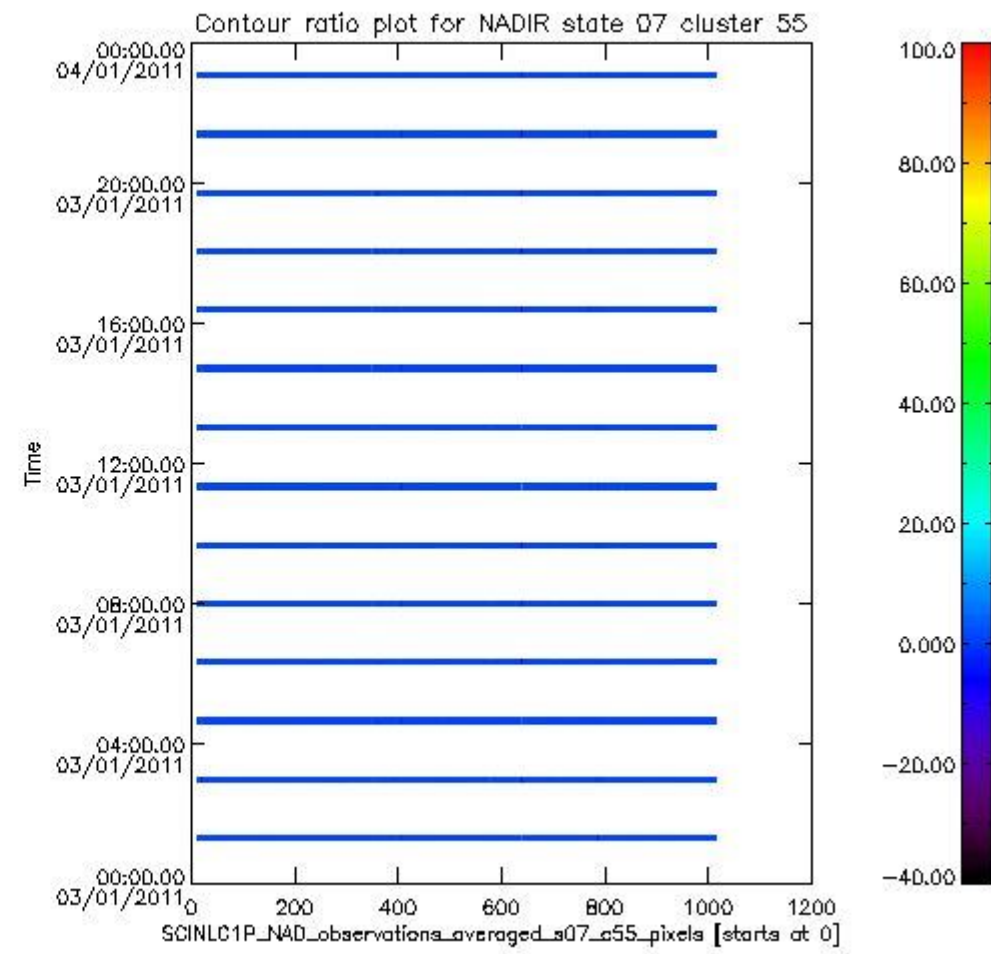
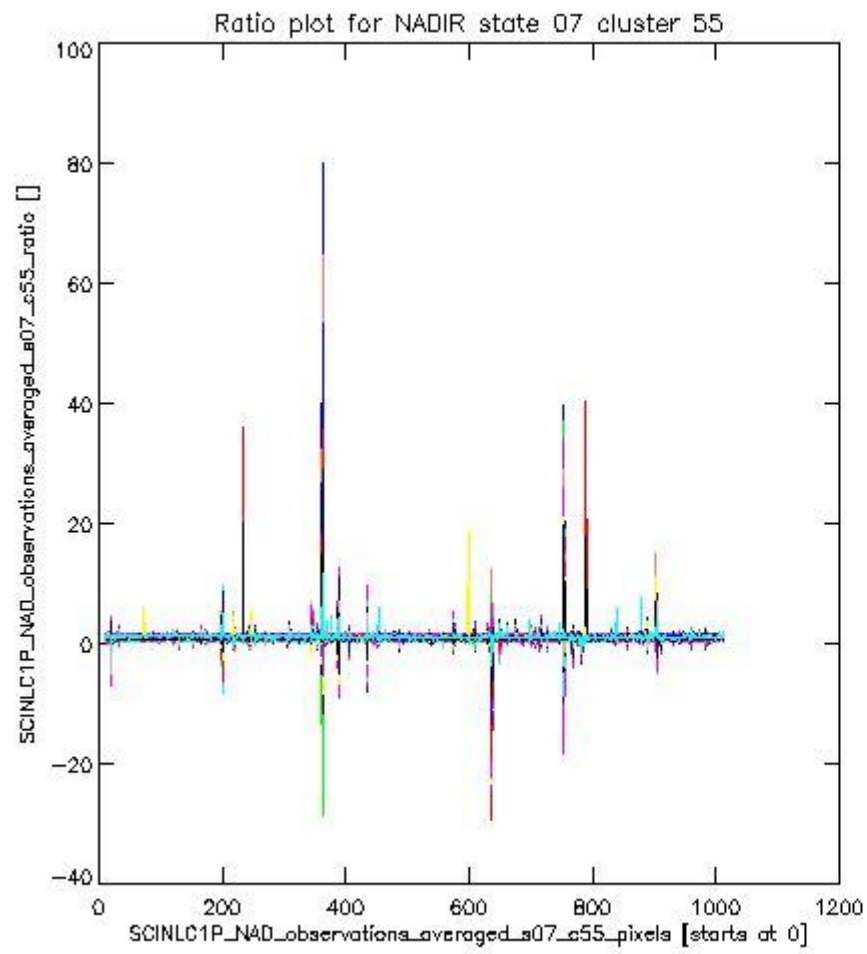
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_7.PNG

**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	03JAN2011 01:13:36.490
Start time of last sample	03JAN2011 23:05:30.847
Reference period start time	04DEC2010 01:13:35.785
Reference period stop time	02JAN2011 23:42:48.965
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



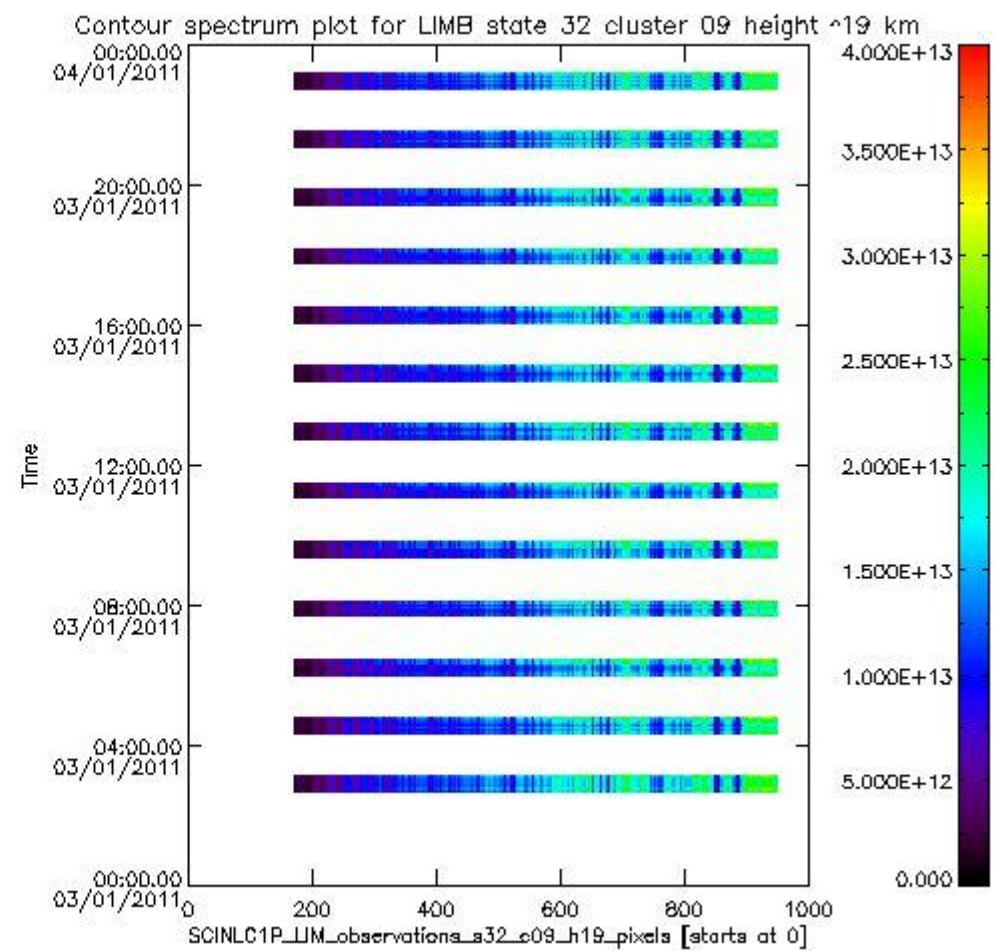
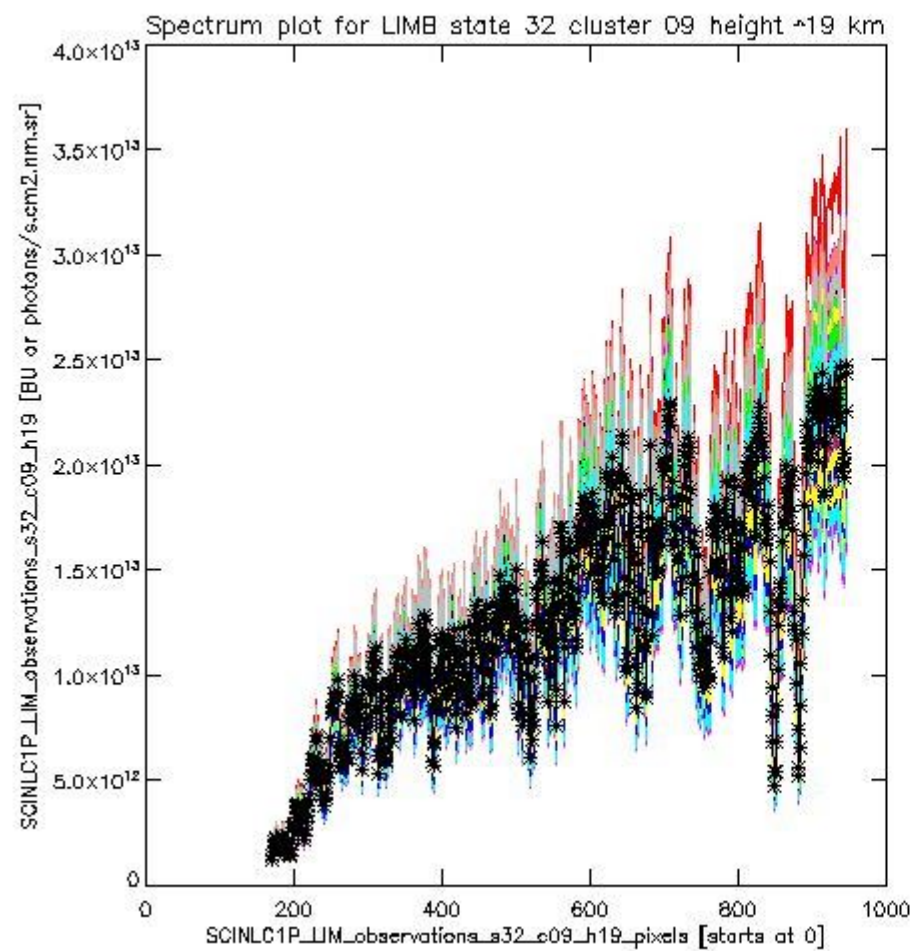
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_8.PNG



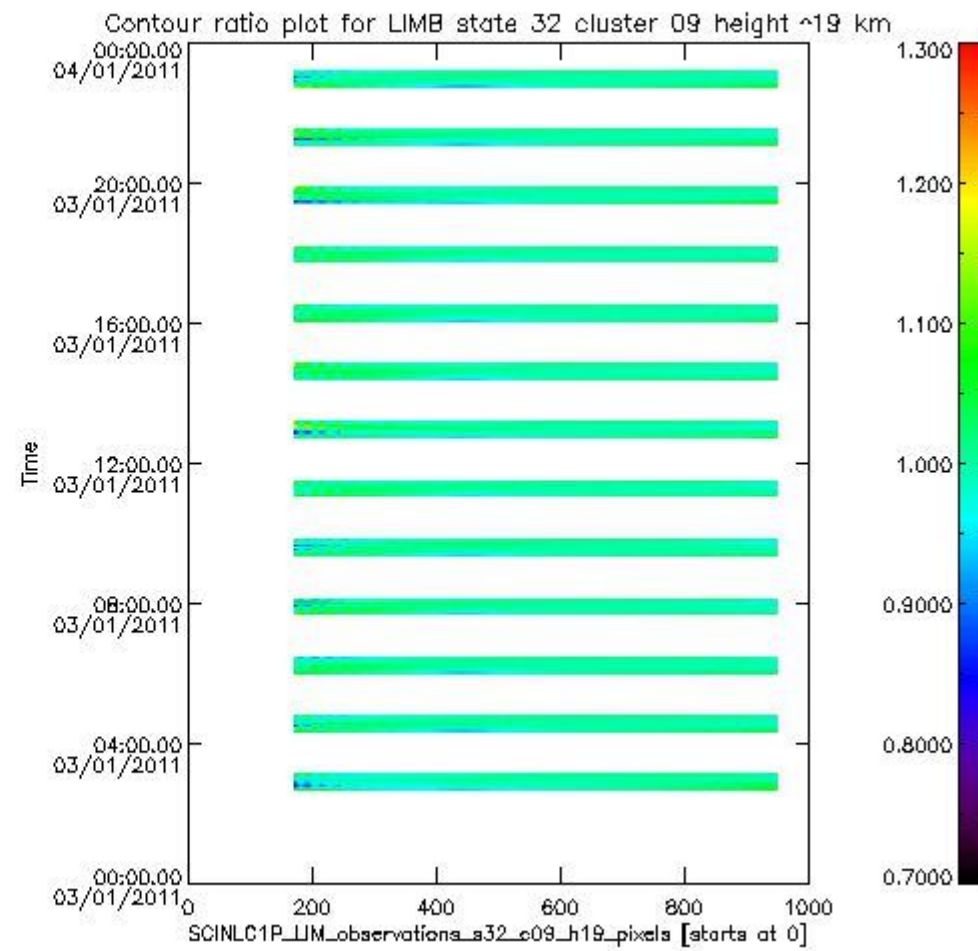
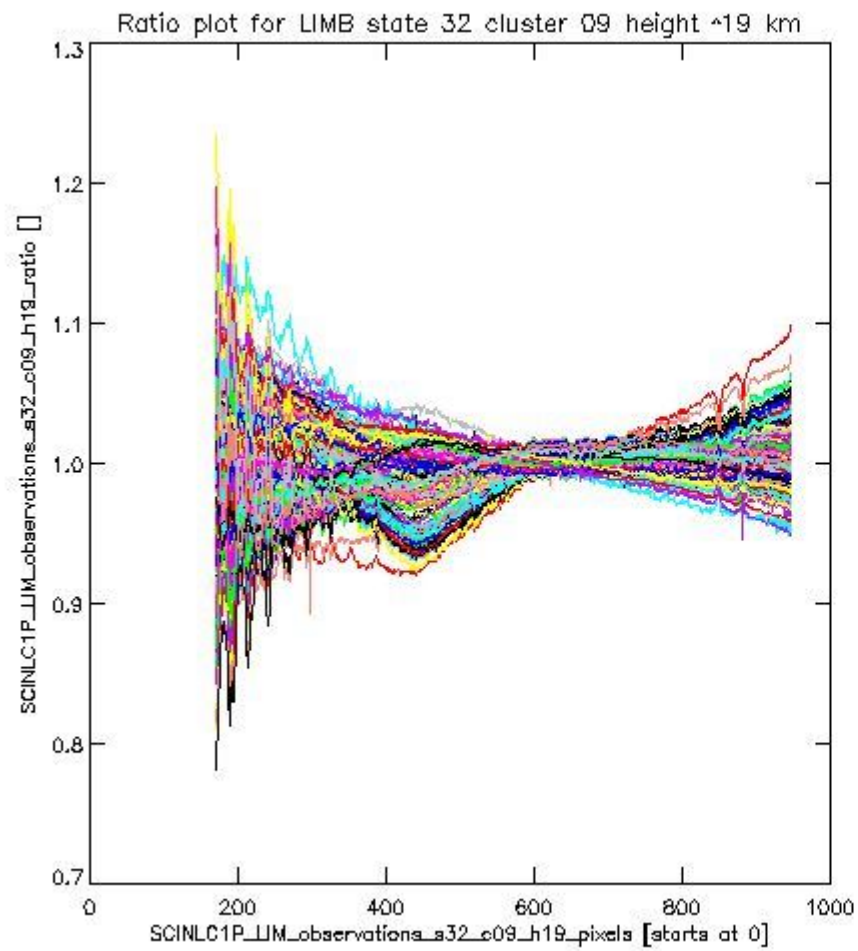
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_9.PNG

**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	03JAN2011 02:39:20.158
Start time of last sample	03JAN2011 23:10:44.890
Reference period start time	04DEC2010 00:58:22.410
Reference period stop time	02JAN2011 00:24:16.857
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



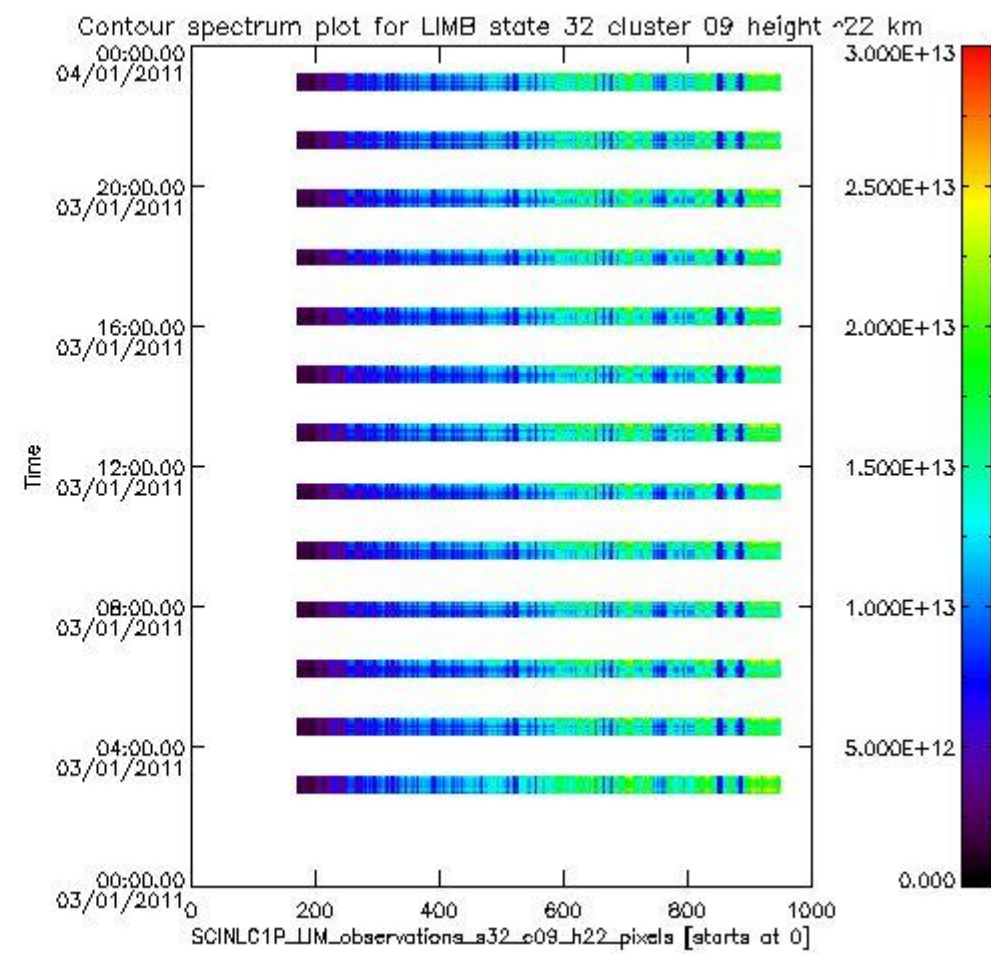
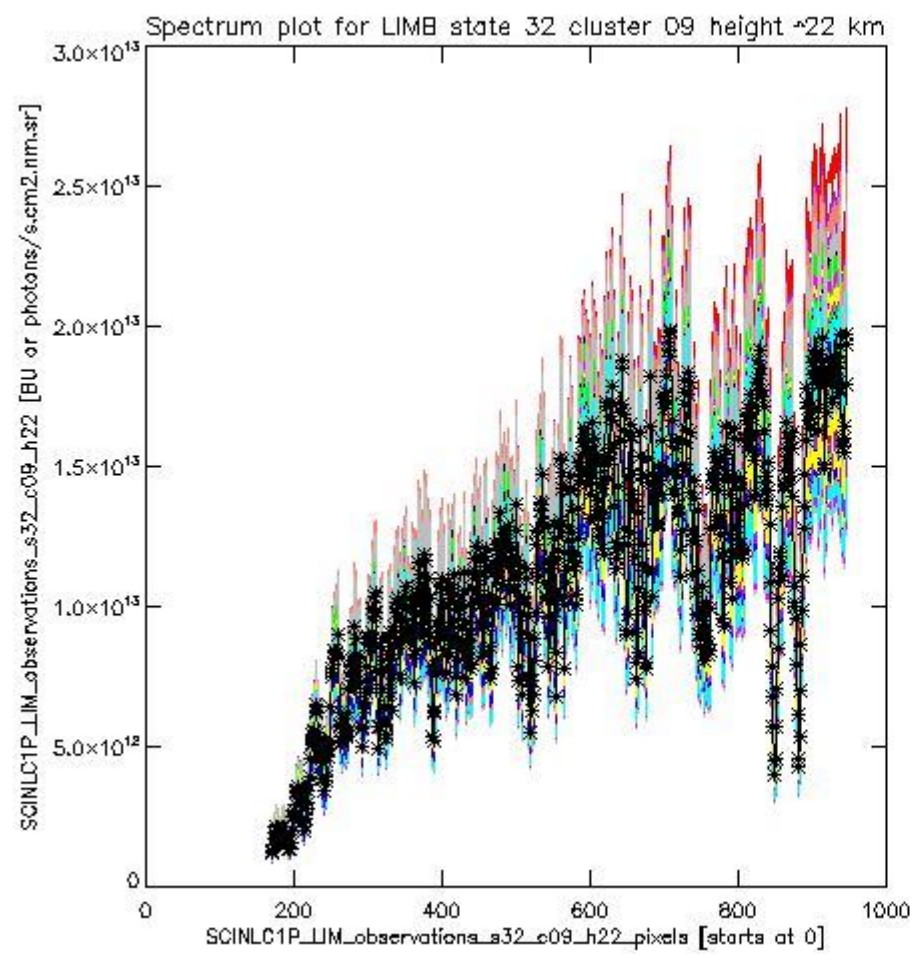
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_10.PNG



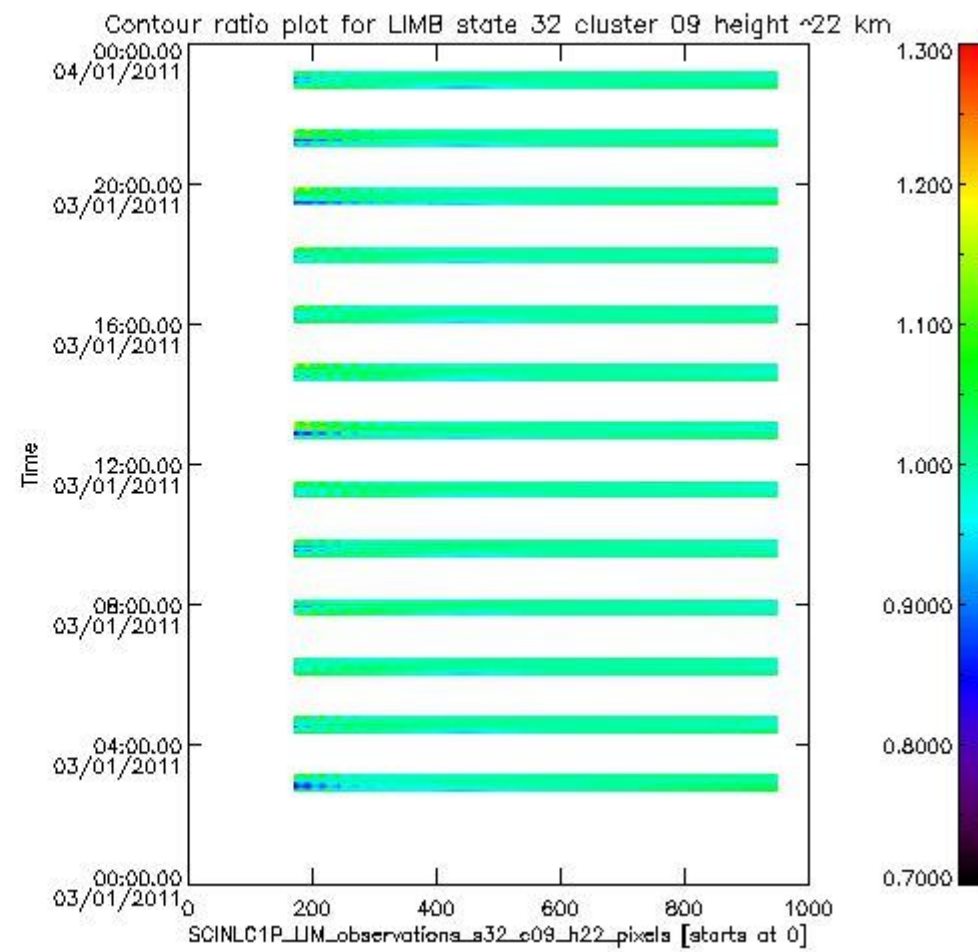
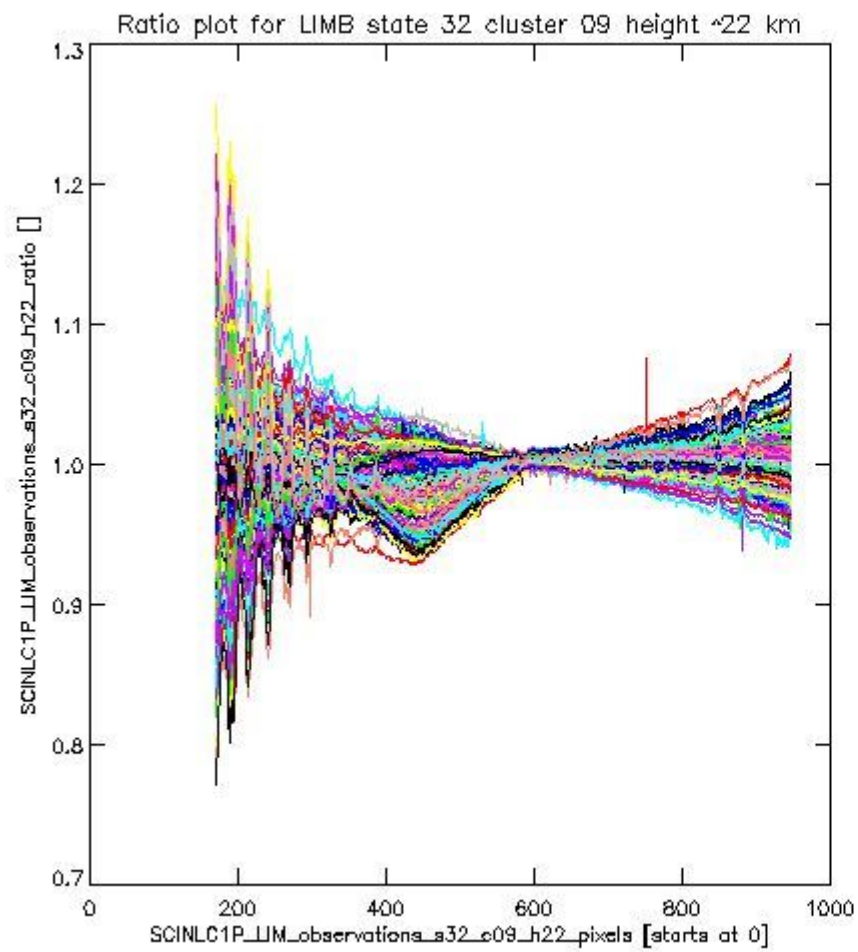
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_11.PNG

**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	03JAN2011 02:39:20.158
Start time of last sample	03JAN2011 23:10:44.890
Reference period start time	04DEC2010 00:58:22.410
Reference period stop time	02JAN2011 00:24:16.857
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\_20110103\_12.PNG

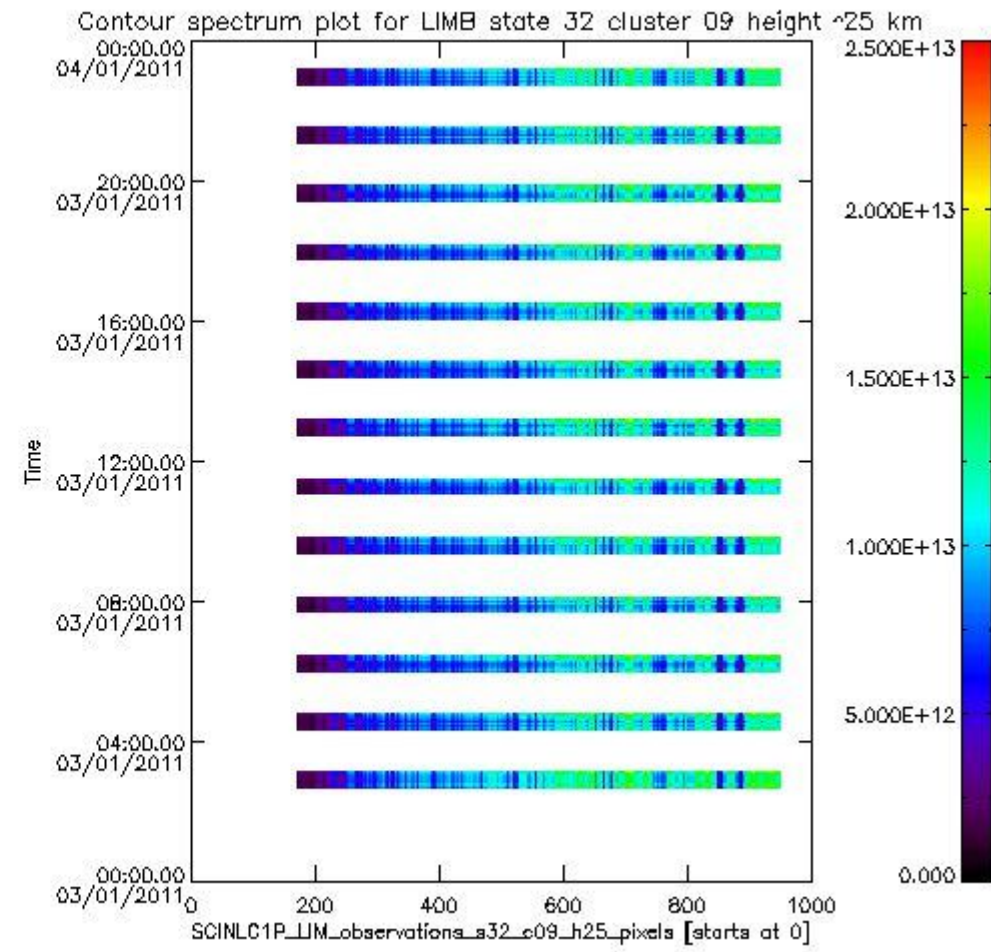
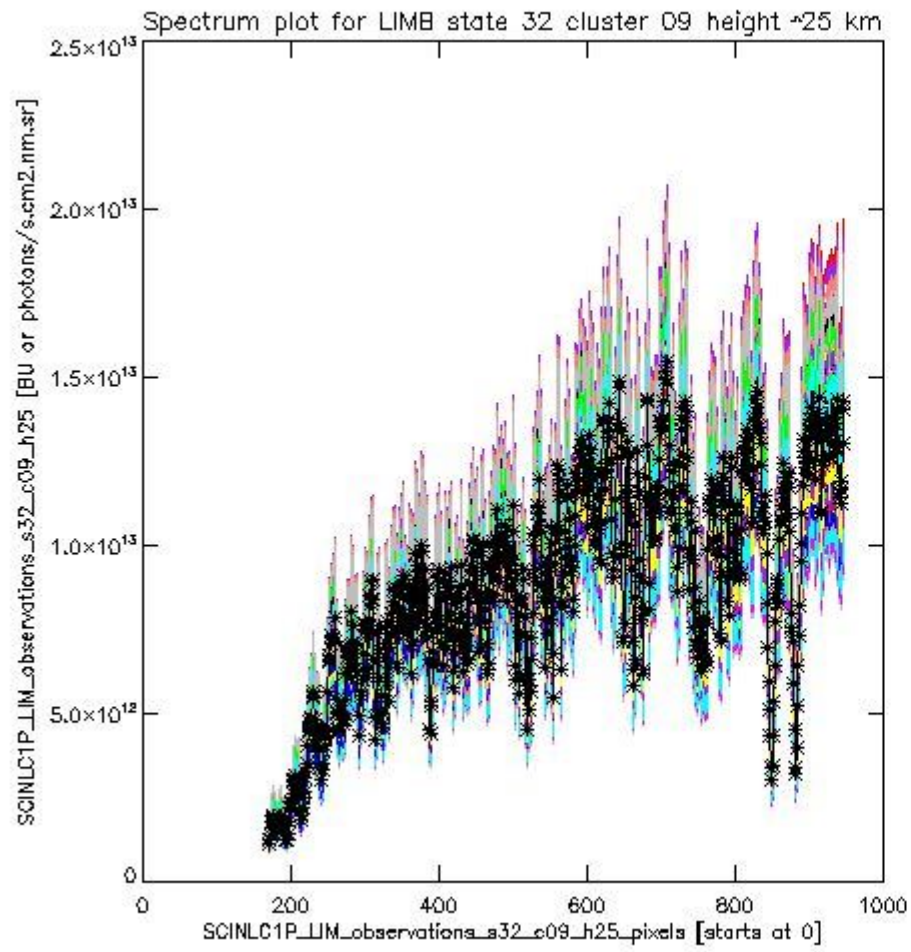


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_13.PNG

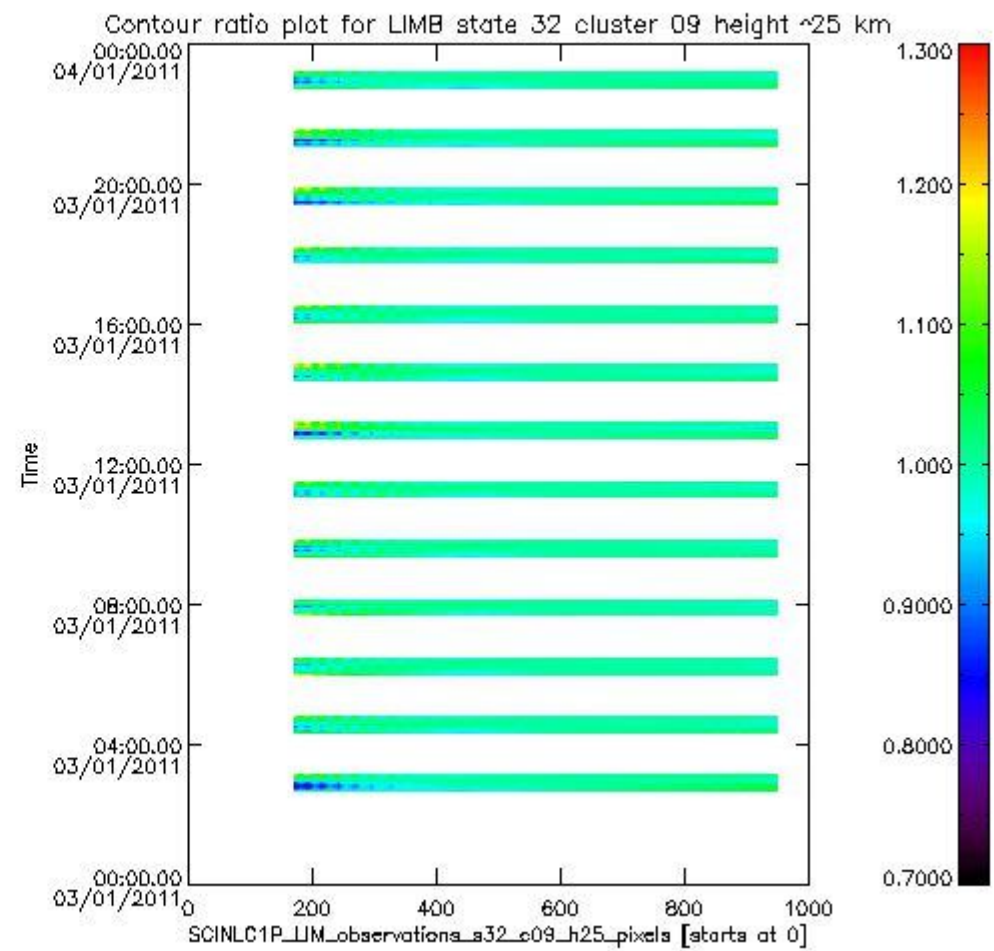
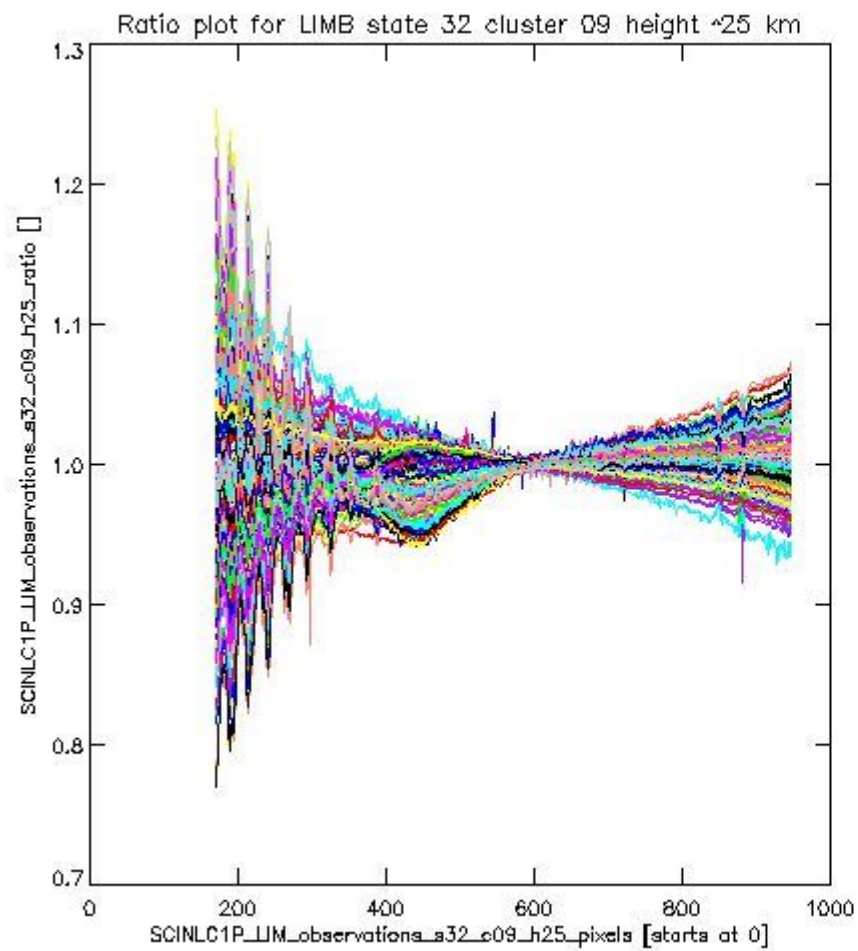
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	03JAN2011 02:39:20.158
Start time of last sample	03JAN2011 23:10:44.890
Reference period start time	04DEC2010 00:58:22.410
Reference period stop time	02JAN2011 00:24:16.857
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





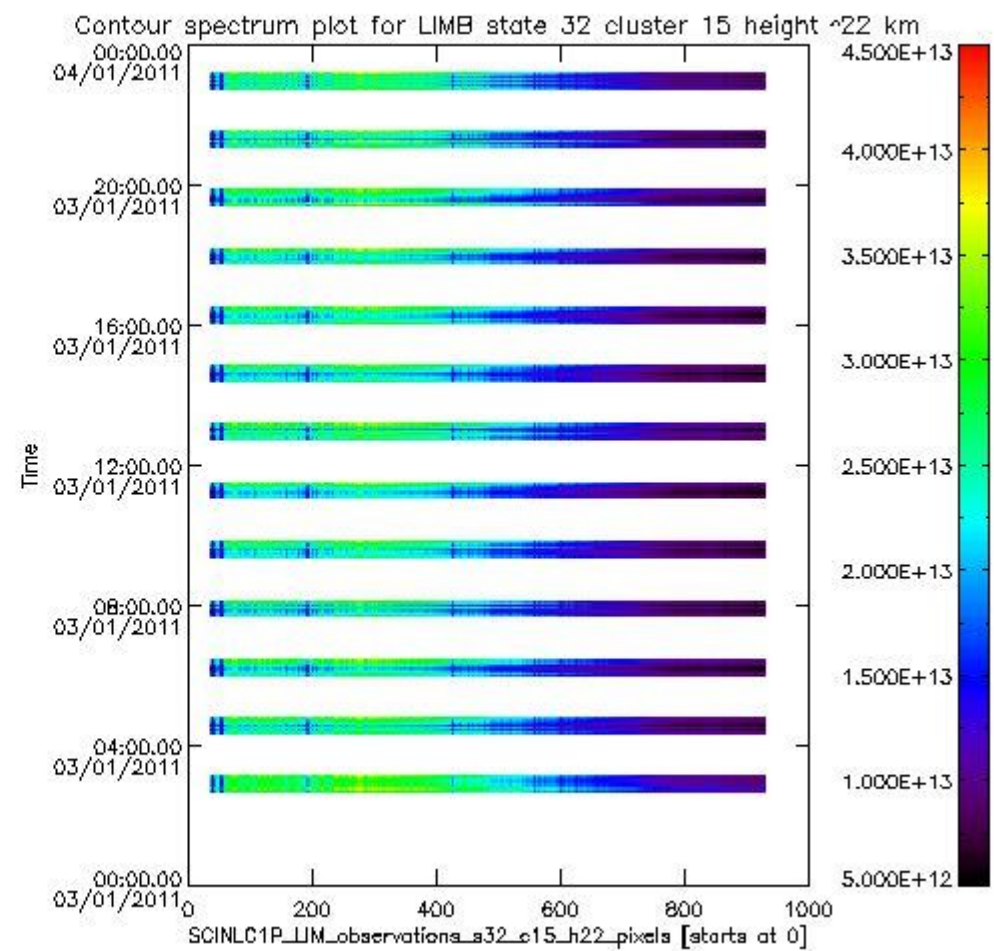
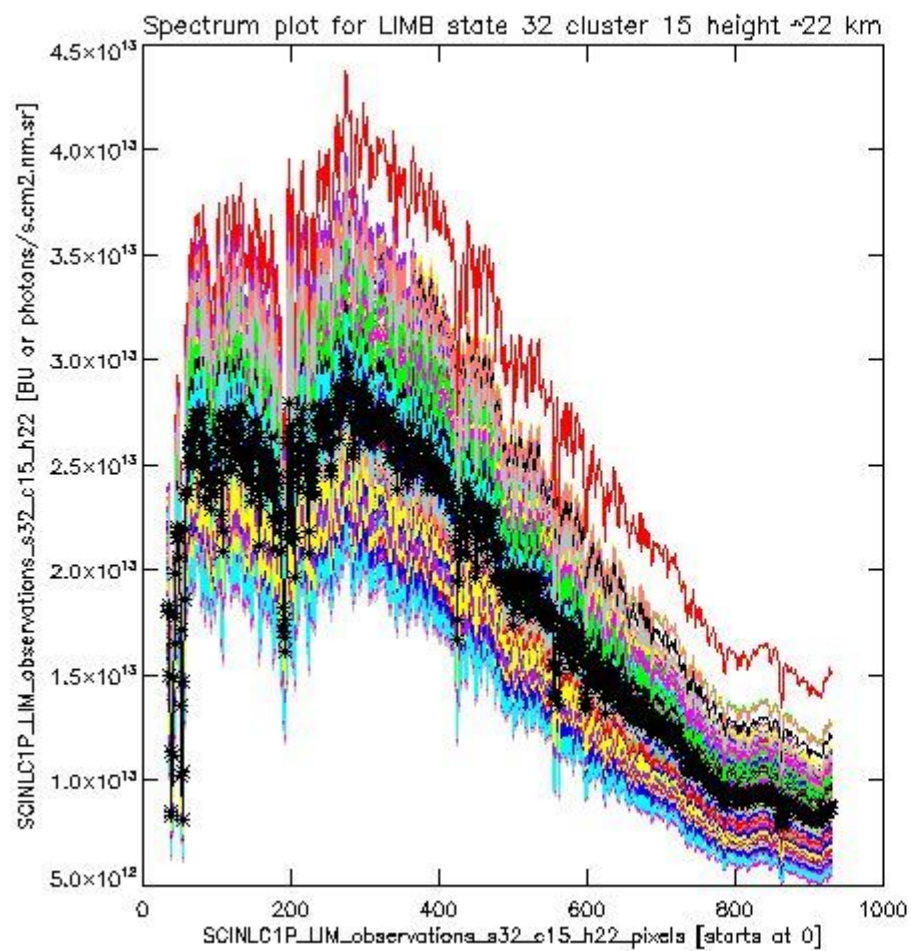
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_14.PNG



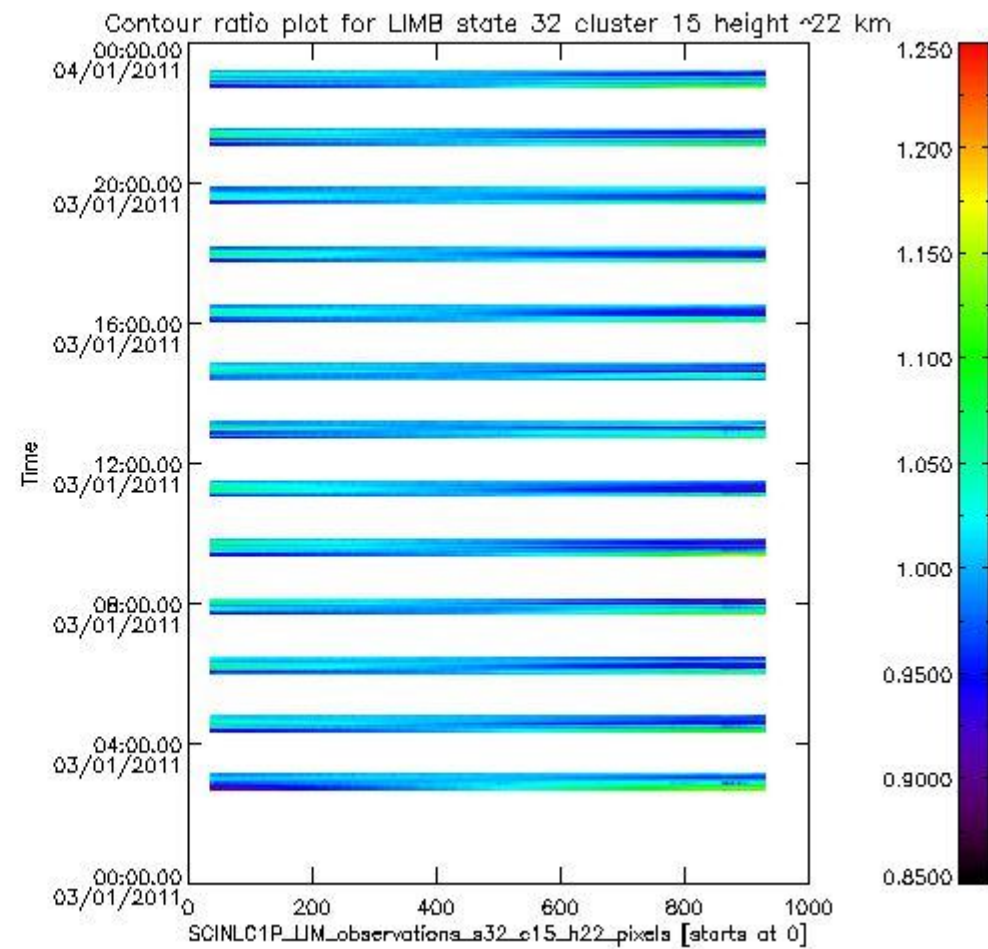
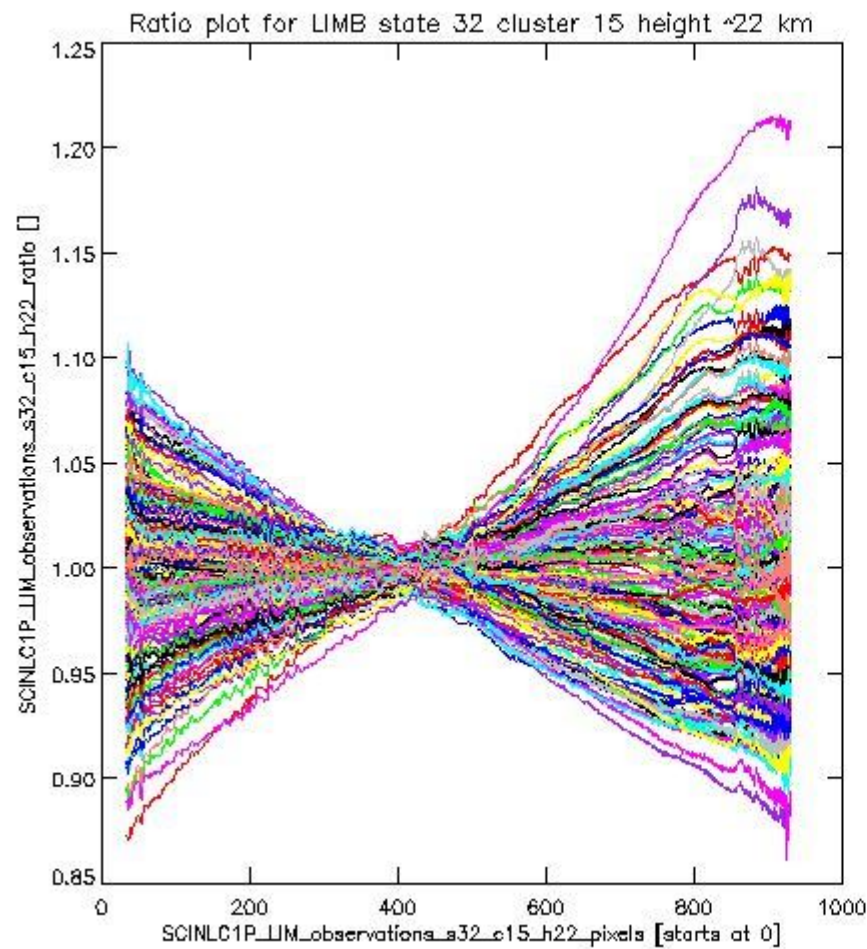
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_15.PNG

**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	03JAN2011 02:39:20.158
Start time of last sample	03JAN2011 23:10:44.890
Reference period start time	04DEC2010 00:58:22.410
Reference period stop time	02JAN2011 00:24:16.857
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



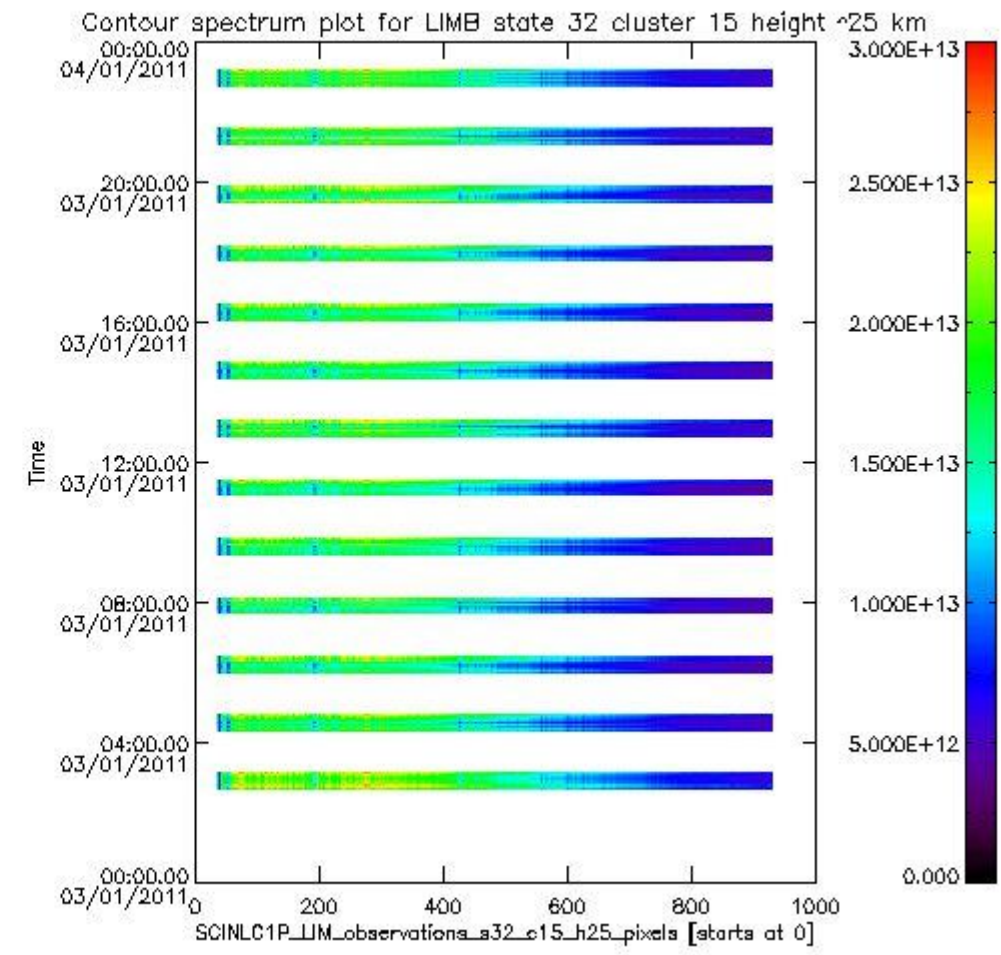
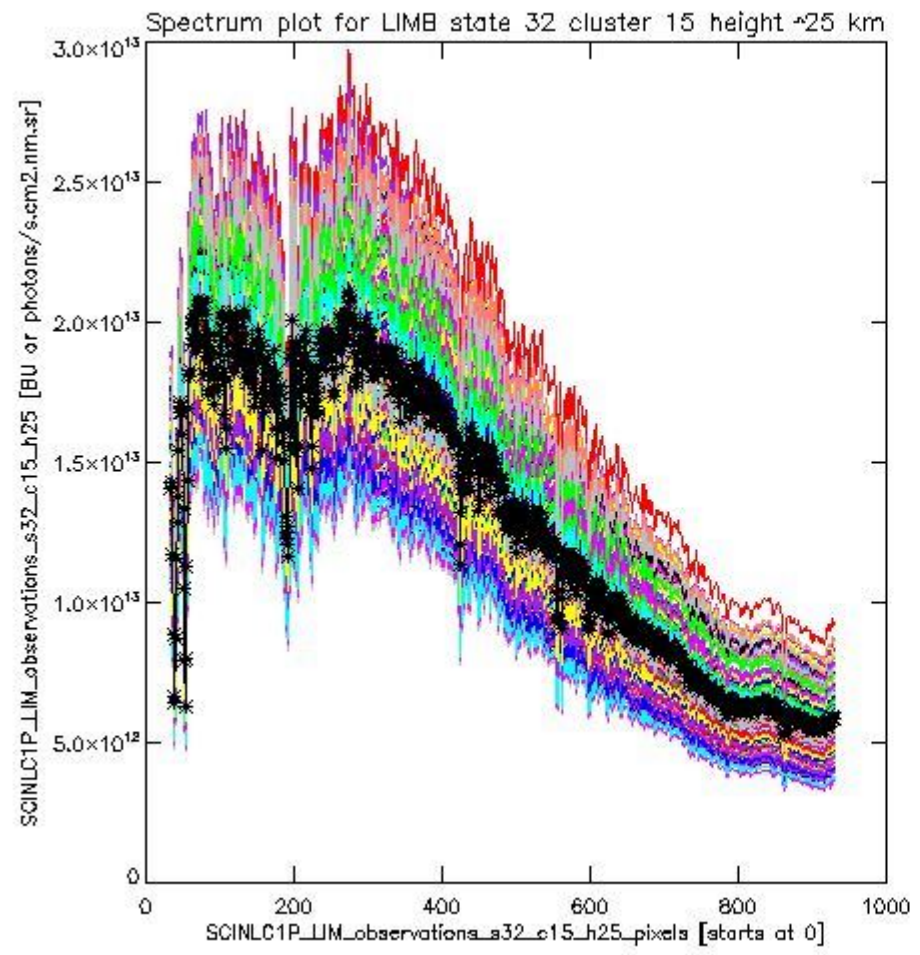
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_16.PNG



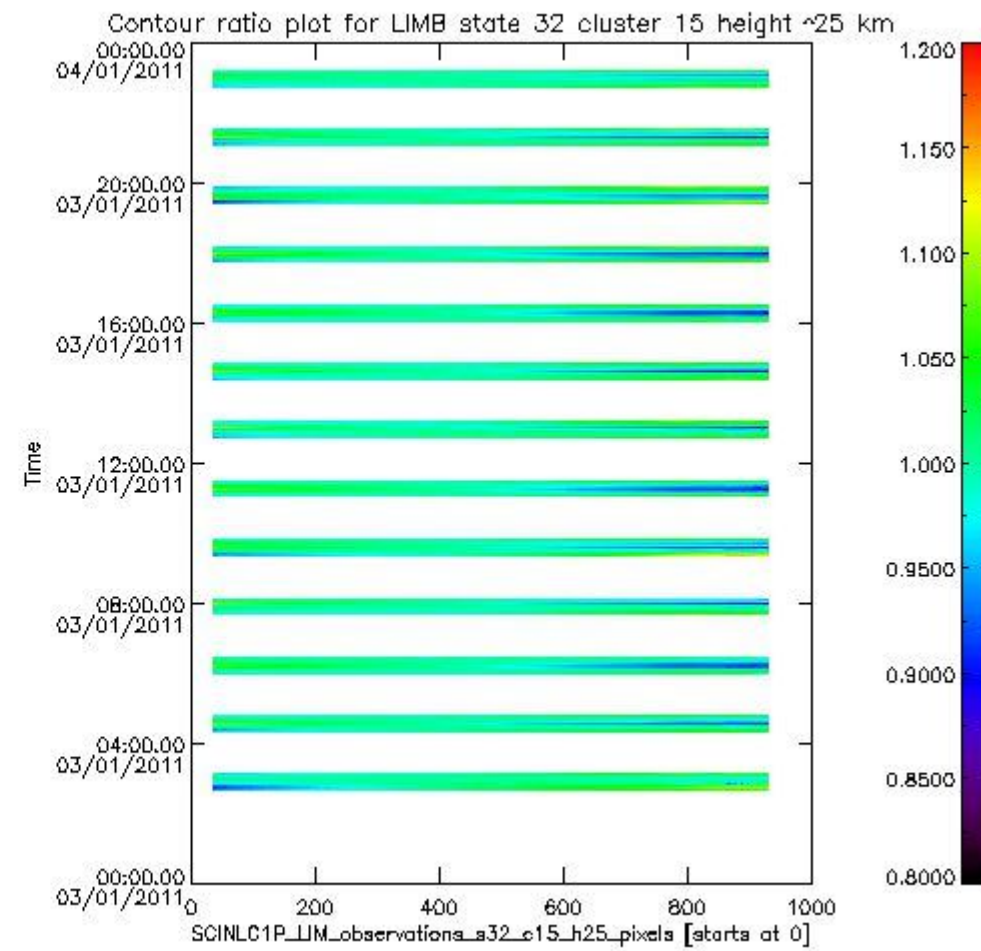
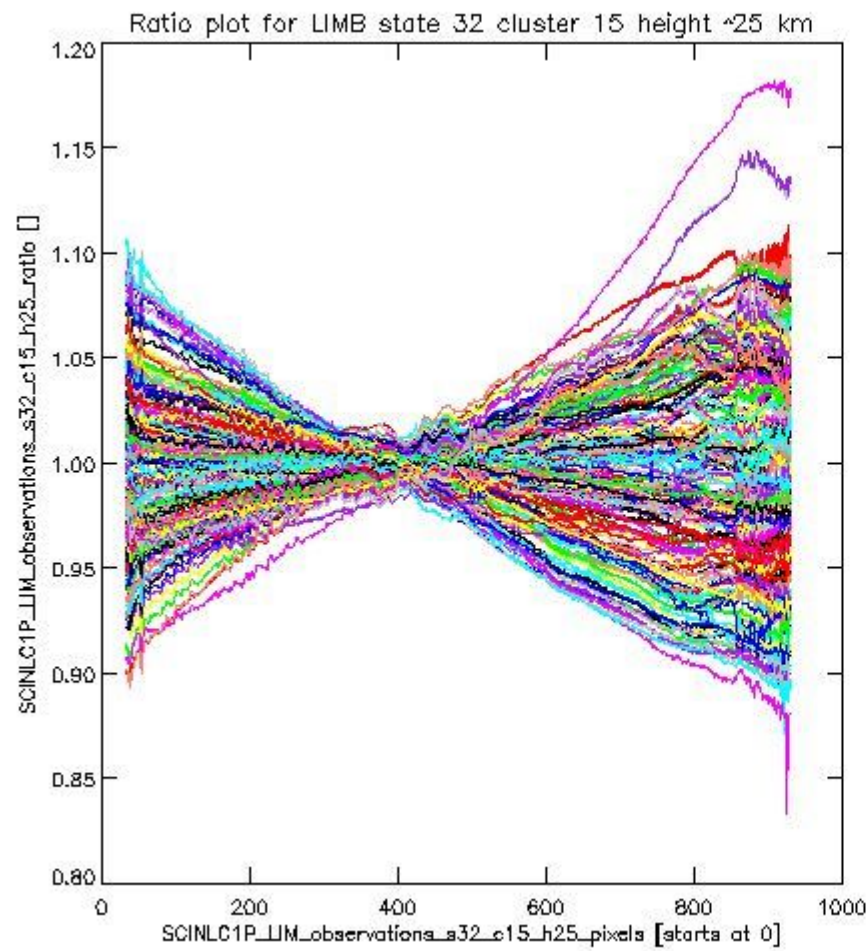
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_17.PNG

**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	03JAN2011 02:39:20.158
Start time of last sample	03JAN2011 23:10:44.890
Reference period start time	04DEC2010 00:58:22.410
Reference period stop time	02JAN2011 00:24:16.857
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



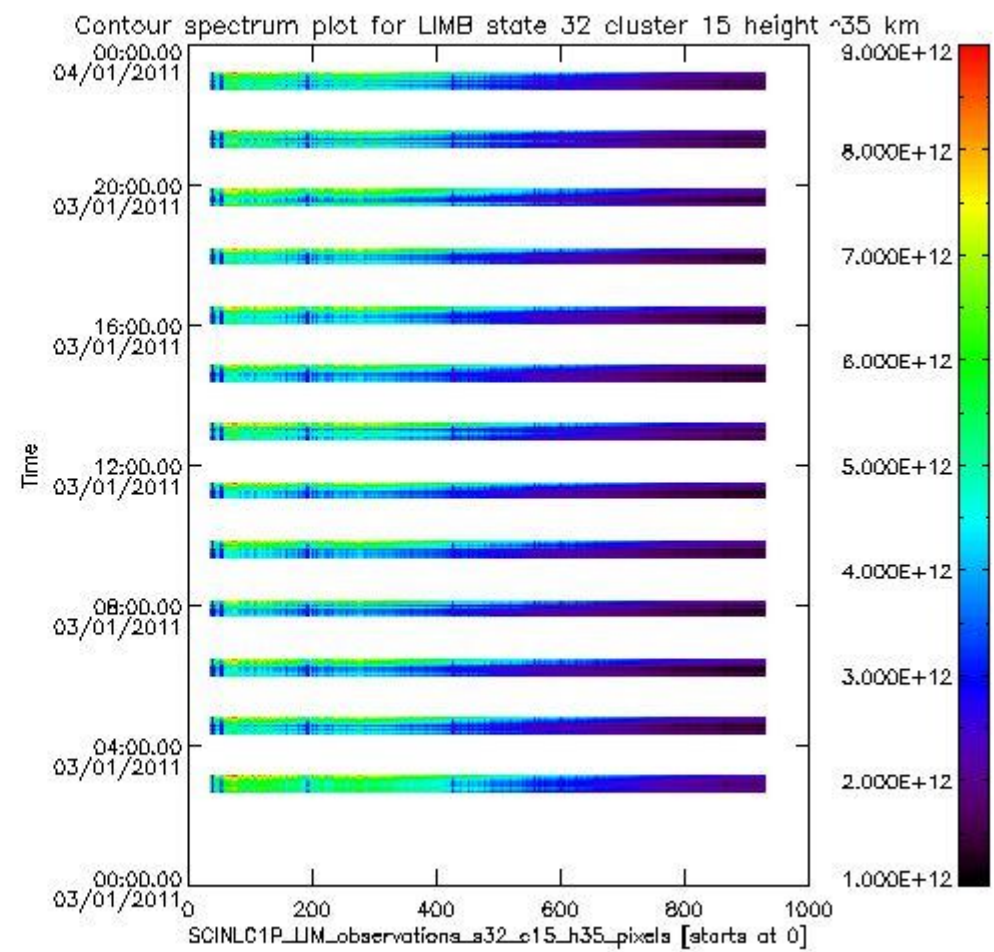
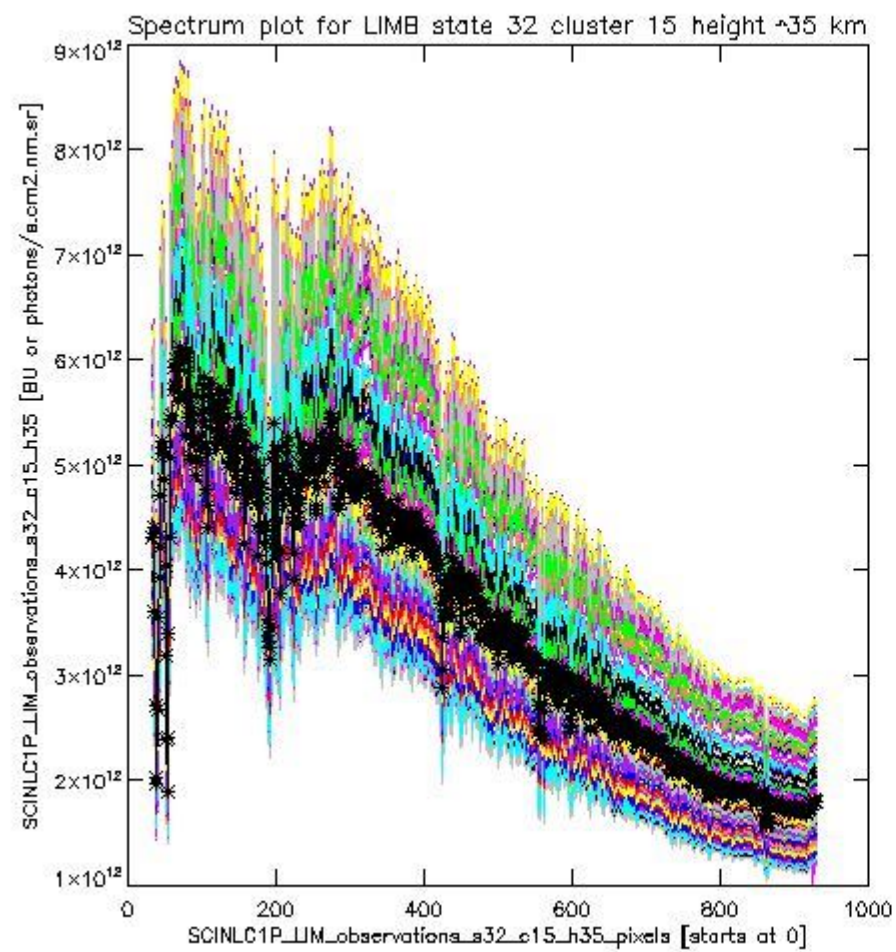
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_18.PNG



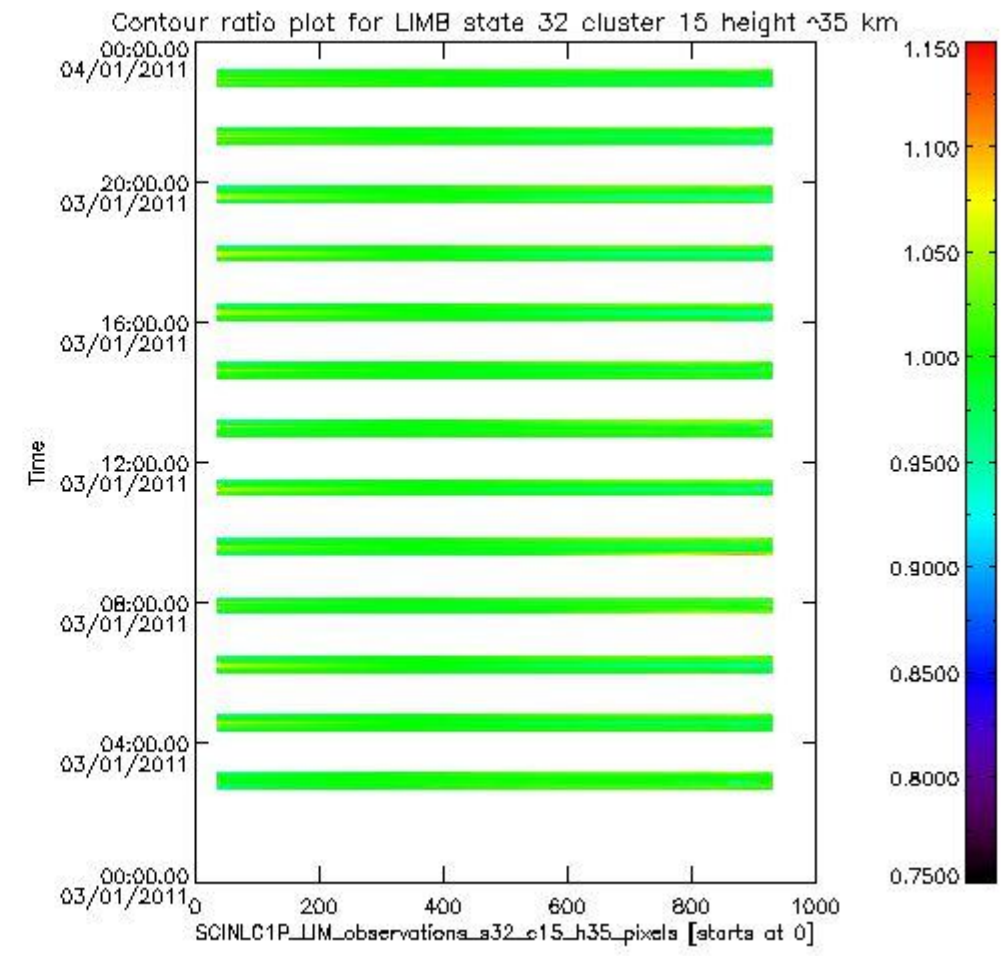
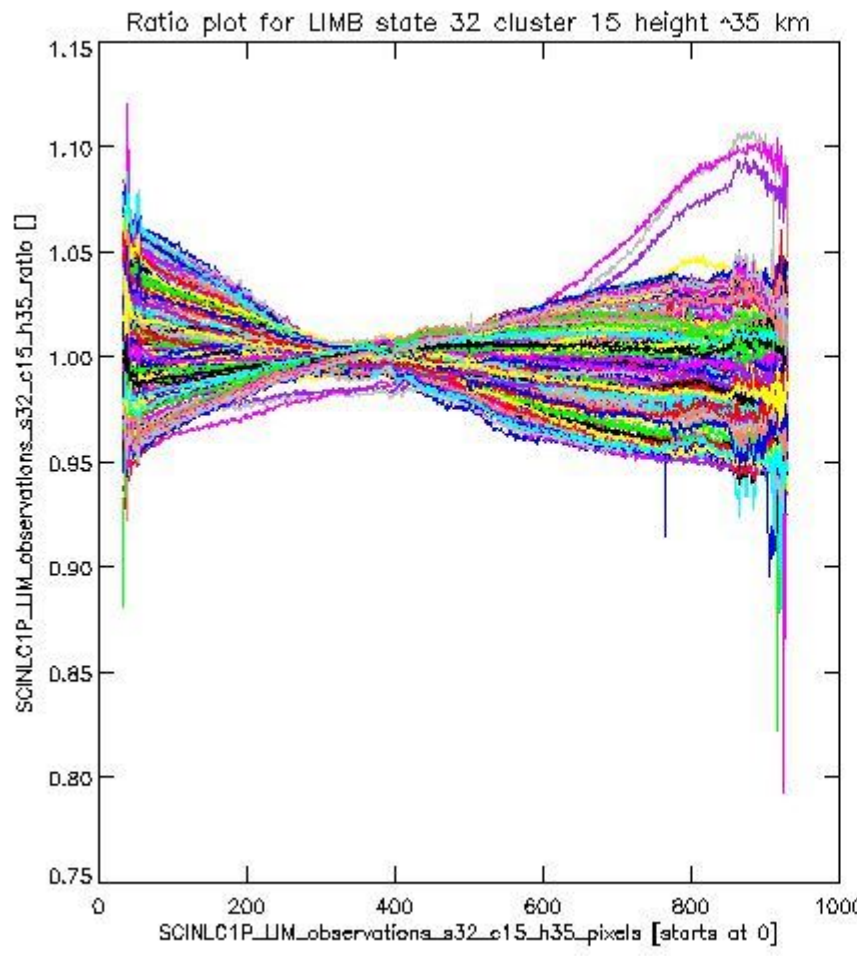
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_19.PNG

**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	03JAN2011 02:39:20.158
Start time of last sample	03JAN2011 23:10:44.890
Reference period start time	04DEC2010 00:58:22.410
Reference period stop time	02JAN2011 00:24:16.857
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\_20110103\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110103\_21.PNG



