

# 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	21JAN2011 06:55:30
Data source version	SCIA/7.04-U
Processing scope for products	10JAN2011 00:00:00 to 11JAN2011 00:00:00
Start time of first product within scope	09JAN2011 23:44:10
Stop time of last product within scope	11JAN2011 00:14:12
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	10JAN2011 00:16:12.953	10JAN2011 23:49:39.526
1	NADIR	07	09	N/A	10JAN2011 00:16:12.953	10JAN2011 23:49:39.526
2	NADIR	07	15	N/A	10JAN2011 00:16:12.953	10JAN2011 23:49:39.526
3	NADIR	07	24	N/A	10JAN2011 00:16:12.953	10JAN2011 23:49:39.526
4	NADIR	07	55	N/A	10JAN2011 00:16:12.953	10JAN2011 23:49:39.526
5	LIMB	32	09	~19 km	10JAN2011 00:03:02.316	10JAN2011 23:52:50.827
6	LIMB	32	09	~22 km	10JAN2011 00:03:02.316	10JAN2011 23:52:50.827
7	LIMB	32	09	~25 km	10JAN2011 00:03:02.316	10JAN2011 23:52:50.827
8	LIMB	32	15	~22 km	10JAN2011 00:03:02.316	10JAN2011 23:52:50.827
9	LIMB	32	15	~25 km	10JAN2011 00:03:02.316	10JAN2011 23:52:50.827
10	LIMB	32	15	~35 km	10JAN2011 00:03:02.316	10JAN2011 23:52:50.827

#### 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_1CUDPA20110109_232630_000060103098_00203_46338_1606.N1</a>	09JAN2011 23:44:10	10JAN2011 00:54:25	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110110_010644_000060093098_00204_46339_1608.N1</a>	10JAN2011 01:24:24	10JAN2011 02:34:53	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110110_024658_000060103098_00205_46340_1615.N1</a>	10JAN2011 03:04:37	10JAN2011 04:14:52	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110110_042712_000060093098_00206_46341_1611.N1</a>	10JAN2011 04:44:51	10JAN2011 05:55:20	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110110_060726_000060103098_00207_46342_1612.N1</a>	10JAN2011 06:25:05	10JAN2011 07:35:20	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110110_074740_000060093098_00208_46343_1613.N1</a>	10JAN2011 08:05:19	10JAN2011 09:15:48	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110110_092753_000060103098_00209_46344_1618.N1	10JAN2011 09:45:33	10JAN2011 10:55:47	0	34	31	0	0	2	0	0	
7	SCI_NLC_1CUDPA20110110_110808_000060093098_00210_46345_1620.N1	10JAN2011 11:25:46	10JAN2011 12:36:15	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110110_124821_000060103098_00211_46346_1624.N1	10JAN2011 13:06:00	10JAN2011 14:16:15	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110110_142835_000060093098_00212_46347_1626.N1	10JAN2011 14:46:14	10JAN2011 15:56:43	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110110_160849_000060103098_00213_46348_1625.N1	10JAN2011 16:26:28	10JAN2011 17:36:42	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110110_174903_000060413098_00214_46349_1628.N1	10JAN2011 18:06:41	10JAN2011 19:17:31	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110110_192952_000059753098_00215_46350_1629.N1	10JAN2011 19:29:52	10JAN2011 20:57:30	0	35	31	0	3	1	0	0	
13	SCI_NLC_1CUDPA20110110_210931_000060093098_00216_46351_1632.N1	10JAN2011 21:27:09	10JAN2011 22:37:38	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110110_224944_000060103098_00217_46352_1634.N1	10JAN2011 23:07:23	11JAN2011 00:14:12	0	32	31	0	0	2	0	0	

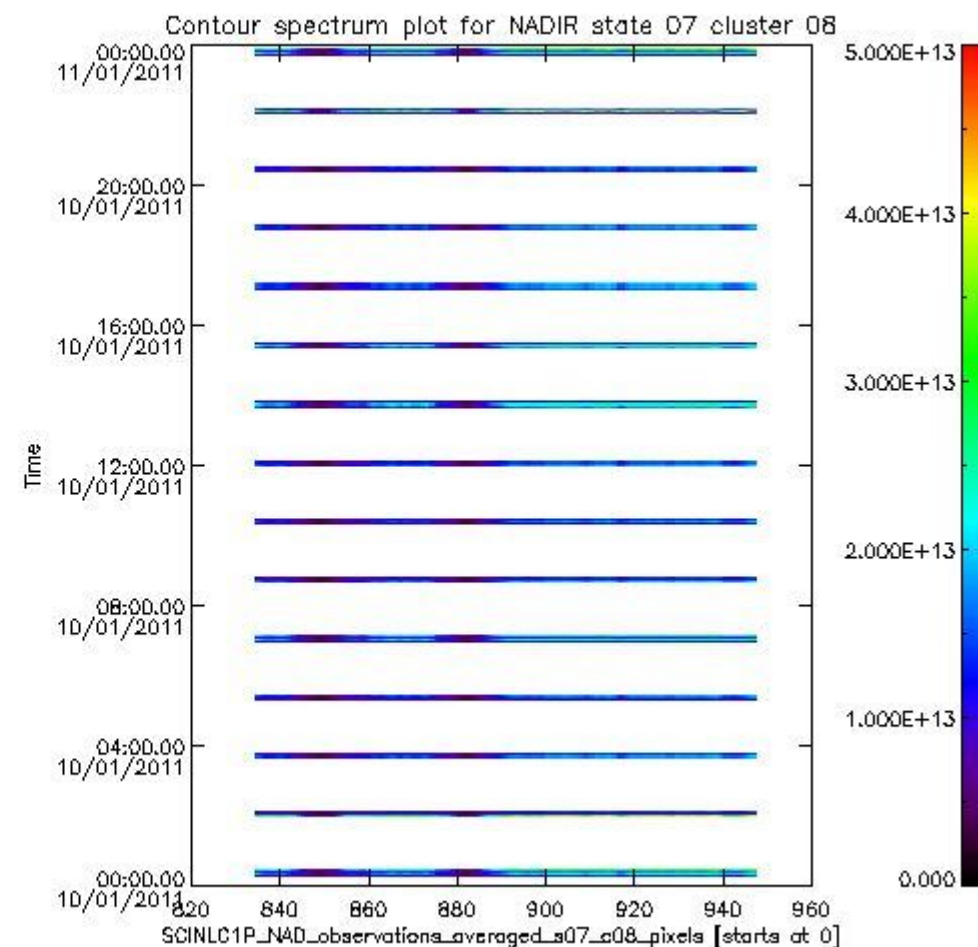
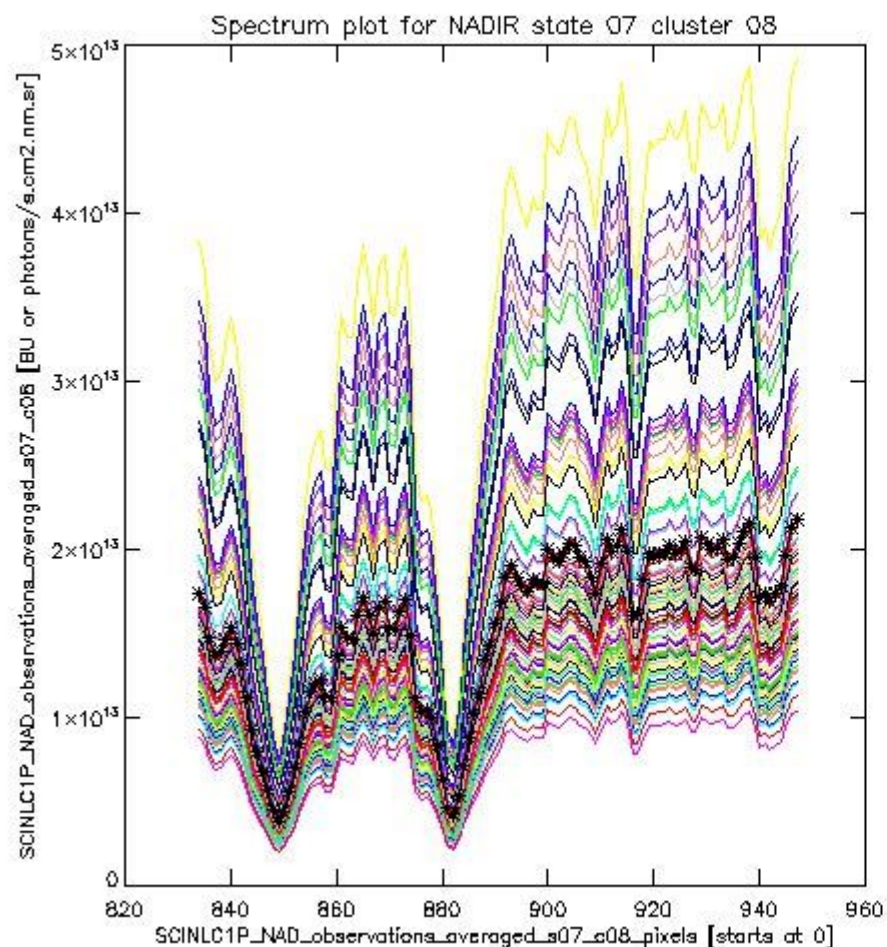
## 1.2 Source packet monitoring

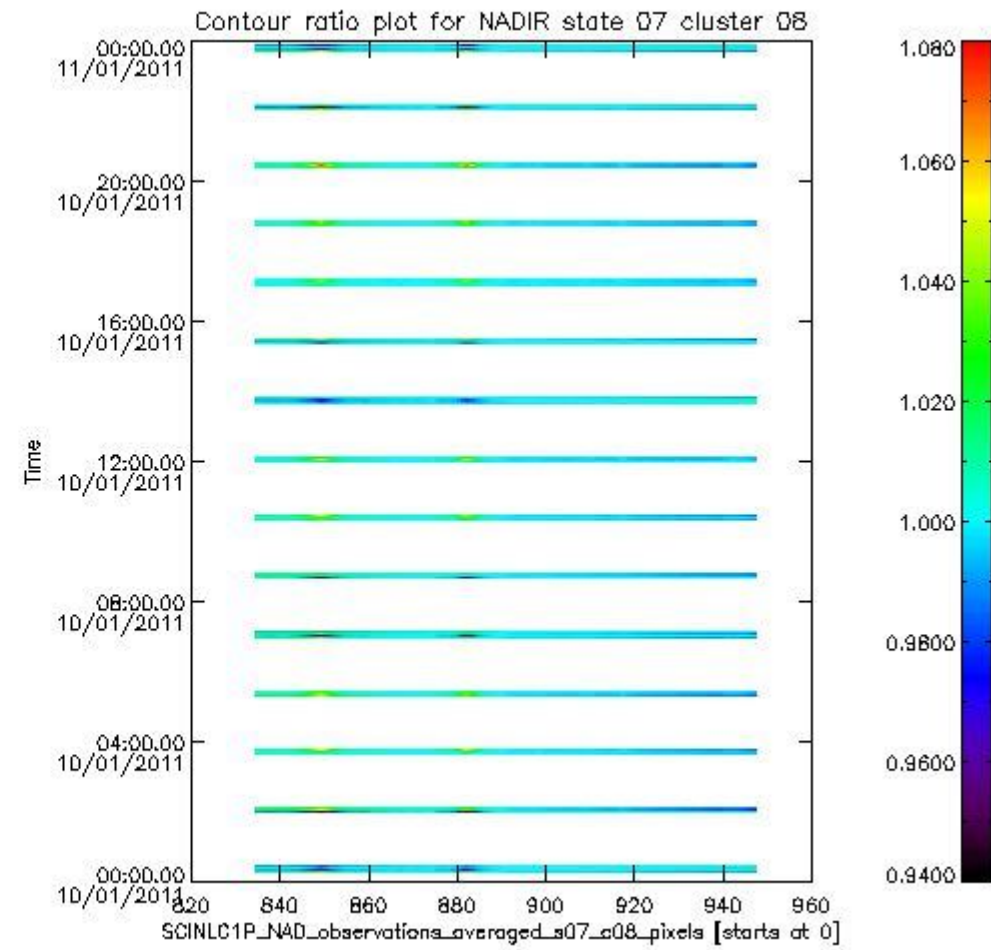
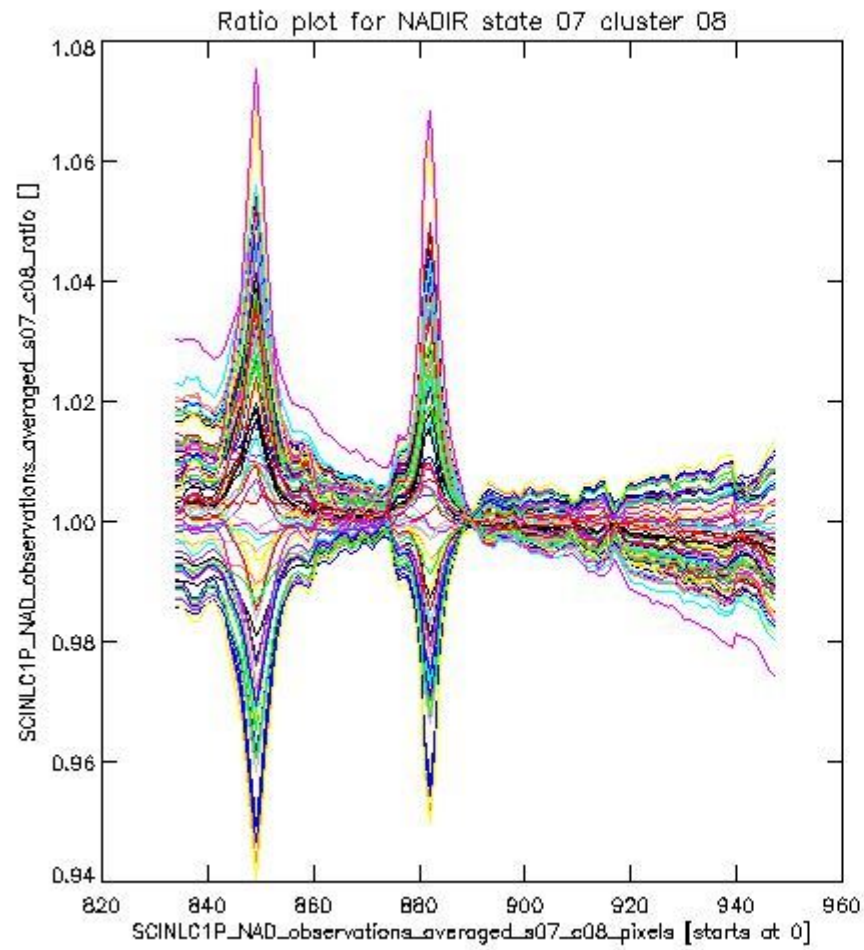
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

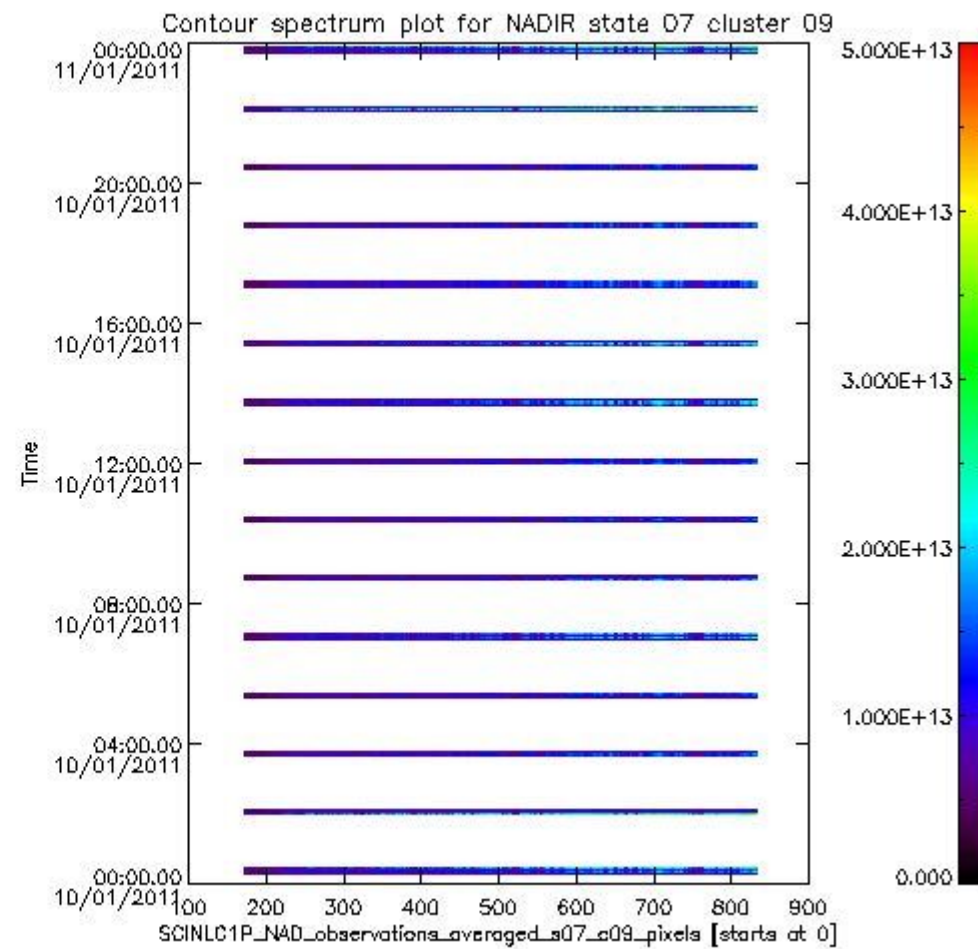
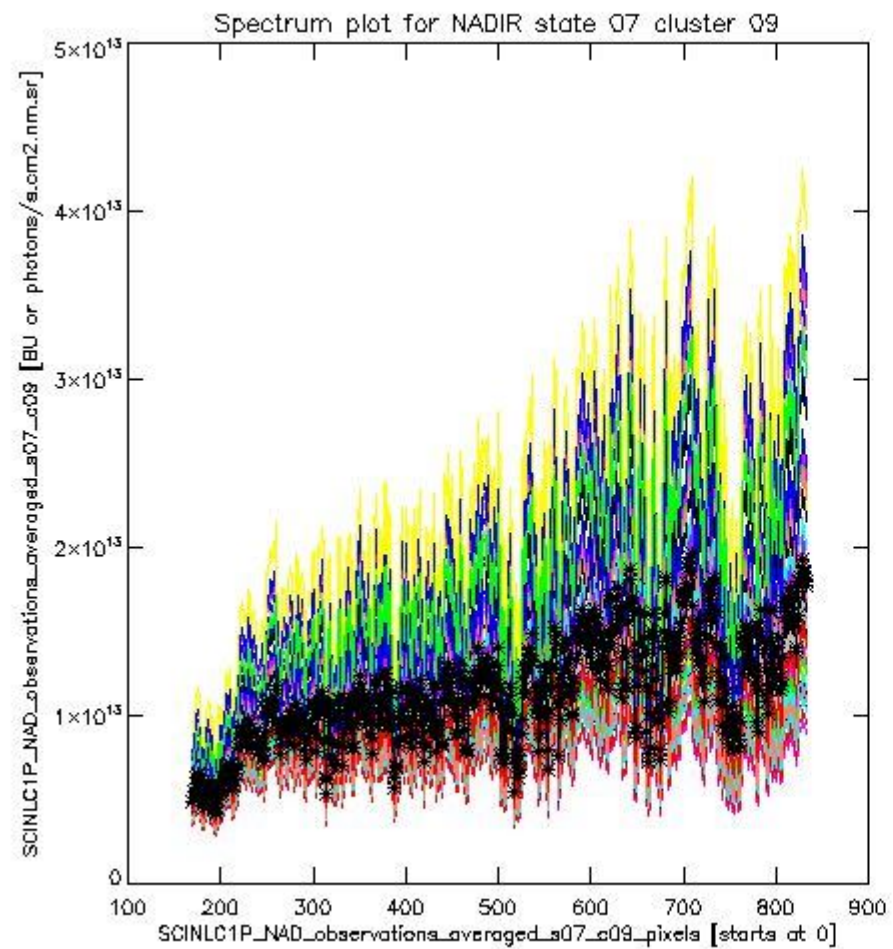
Item	Value
Start time of first sample	10JAN2011 00:16:12.953
Start time of last sample	10JAN2011 23:49:39.526
Reference period start time	11DEC2010 01:56:16.221
Reference period stop time	09JAN2011 22:45:18.741
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



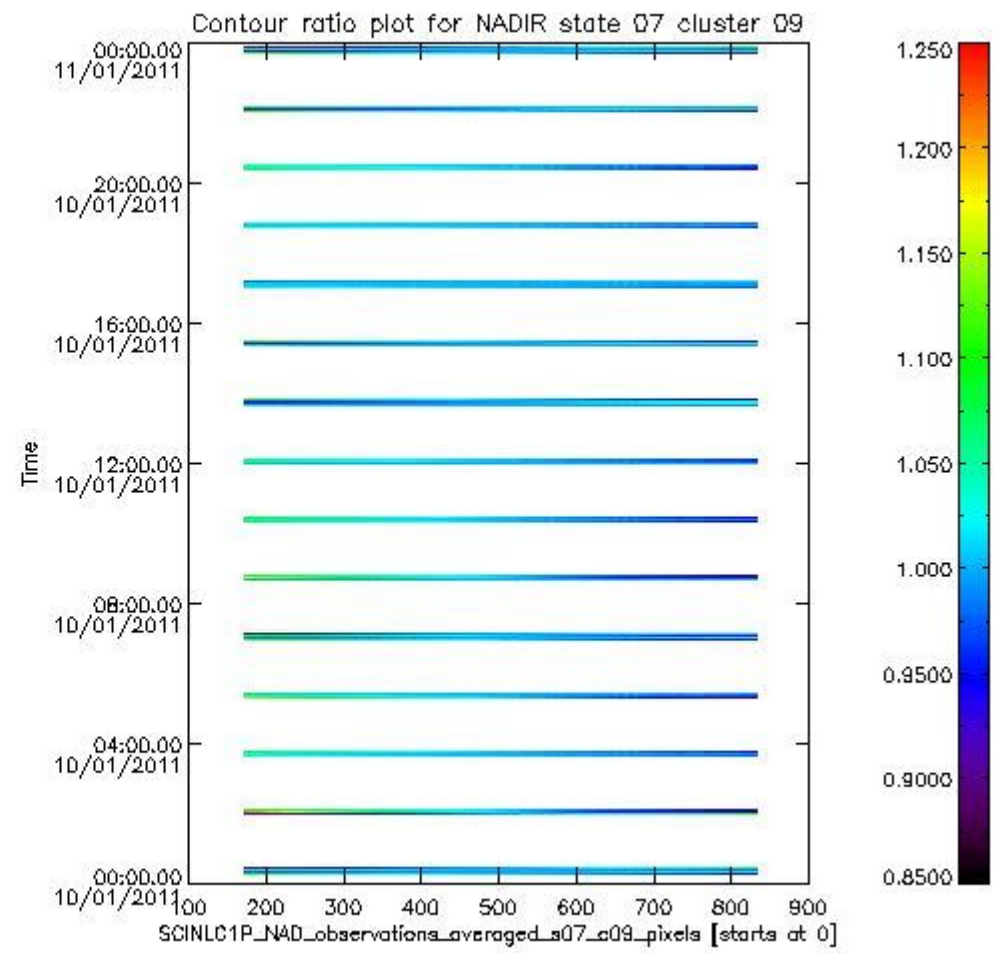
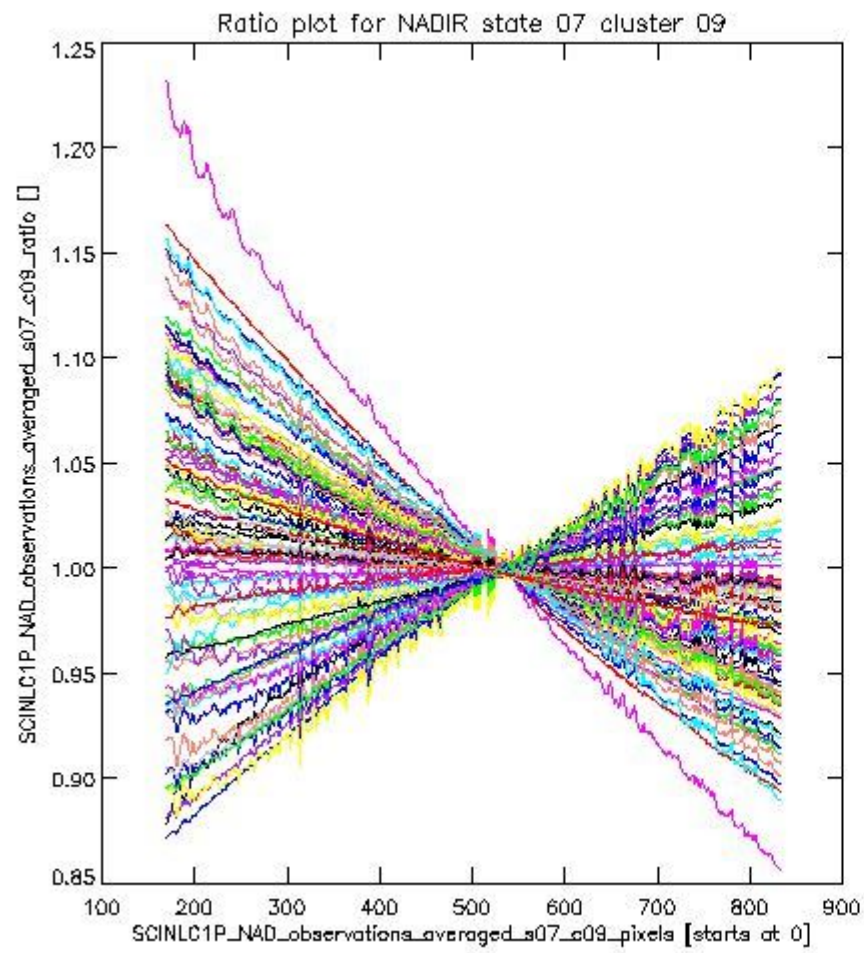


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	10JAN2011 00:16:12.953
Start time of last sample	10JAN2011 23:49:39.526
Reference period start time	11DEC2010 01:56:16.221
Reference period stop time	09JAN2011 22:45:18.741
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



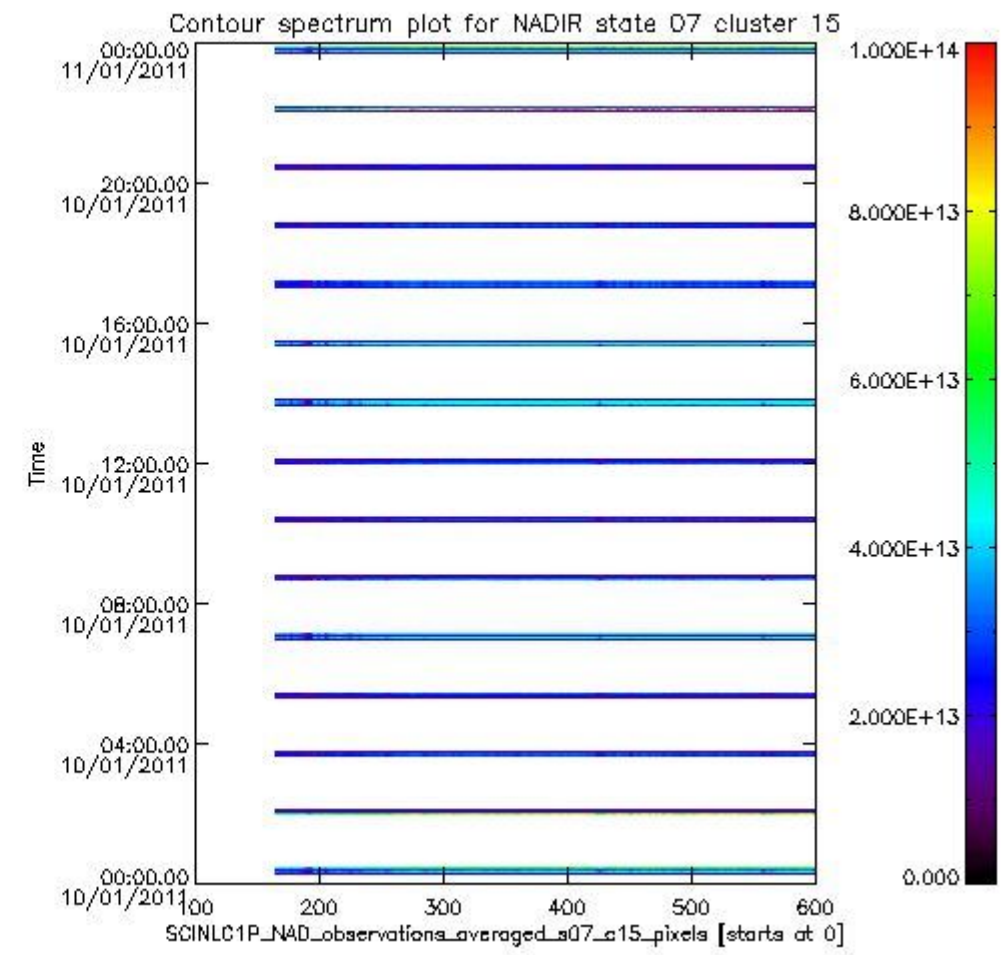
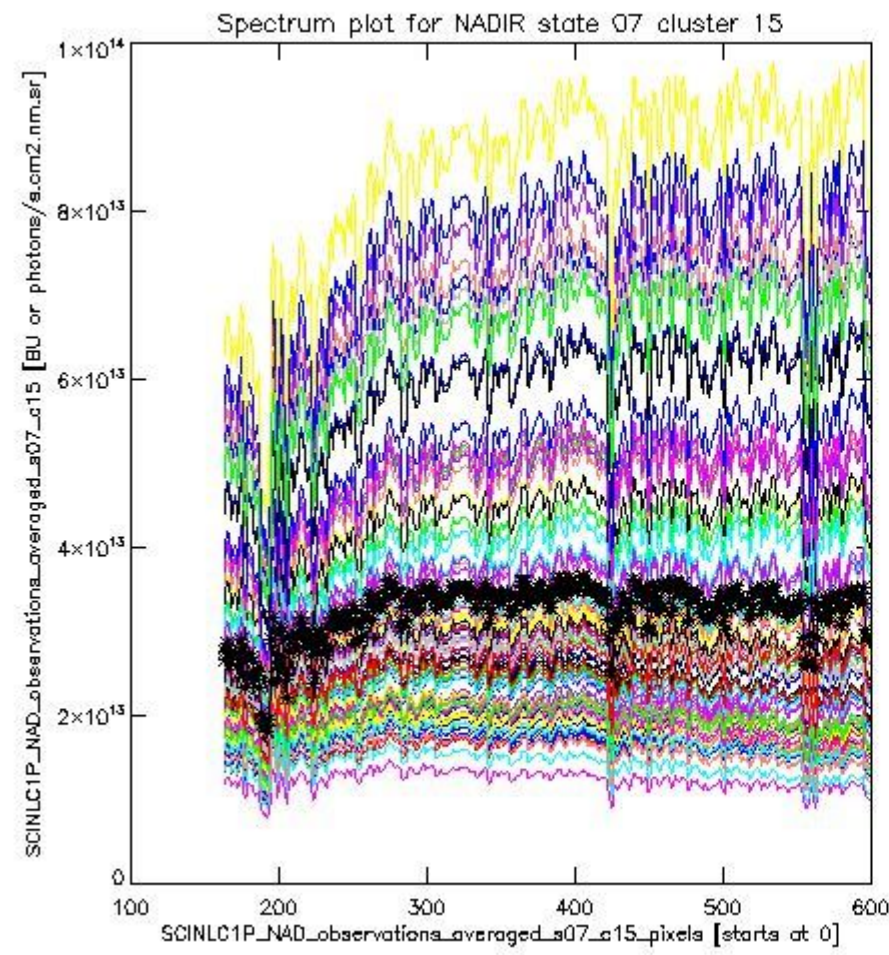
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_2.PNG



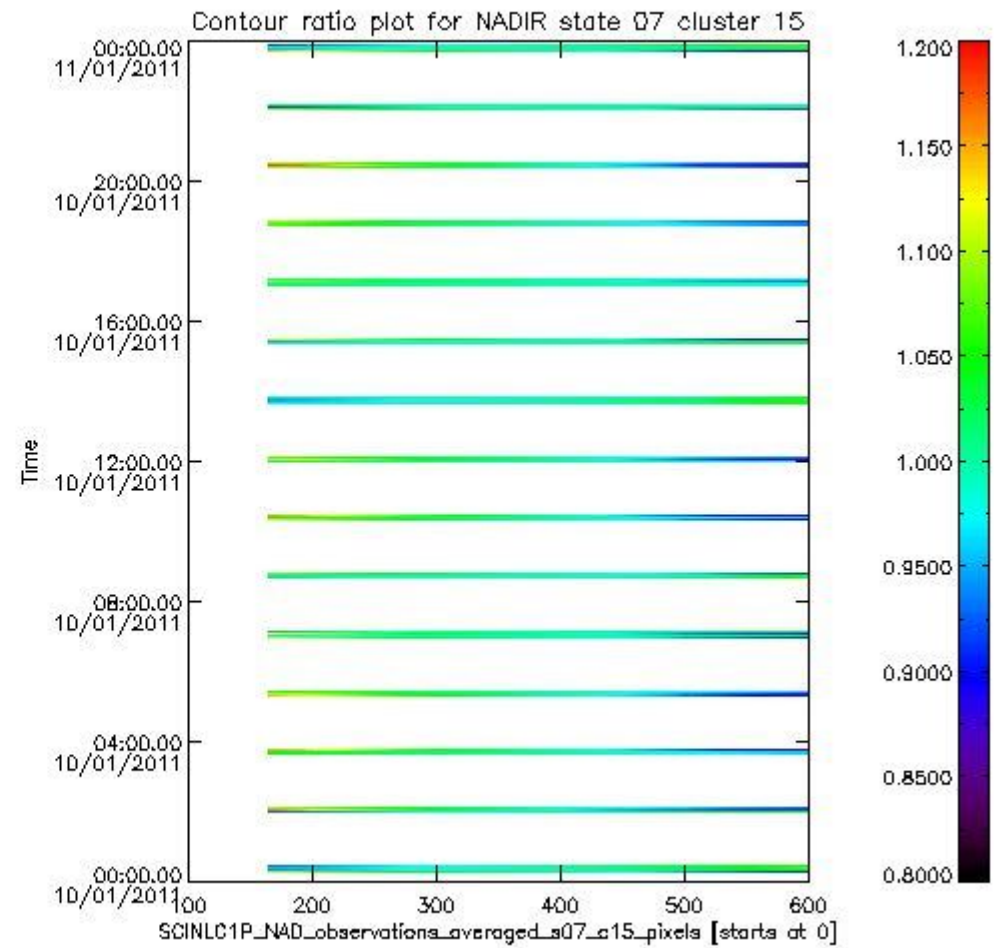
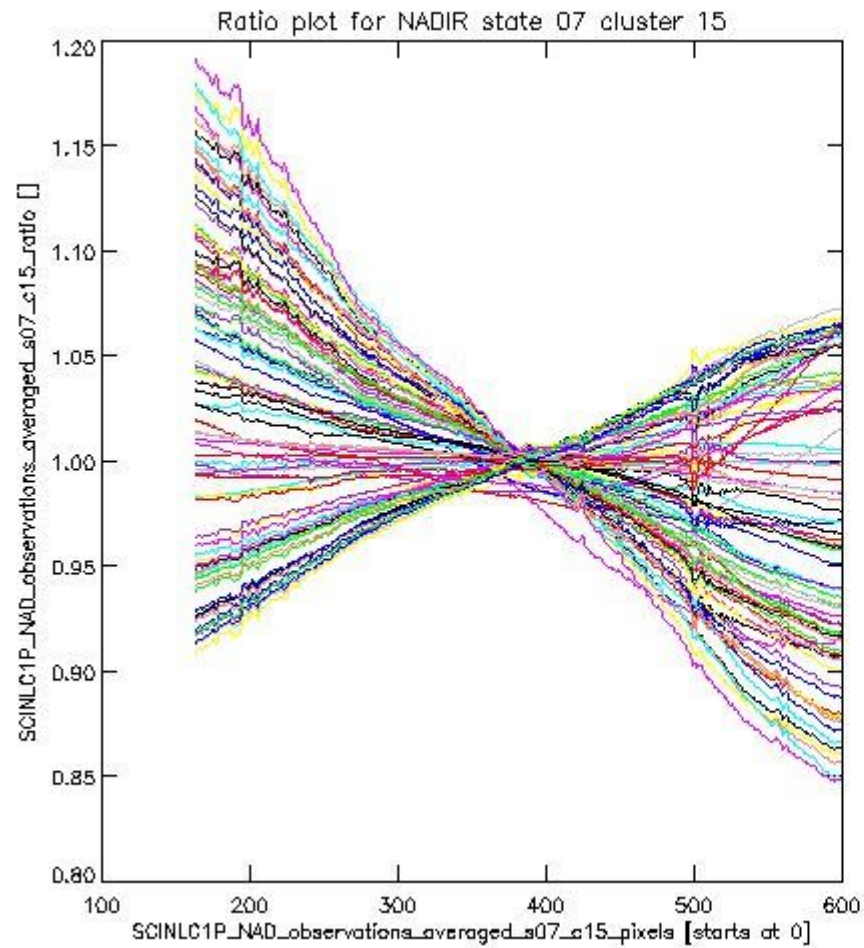
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_3.PNG

**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	10JAN2011 00:16:12.953
Start time of last sample	10JAN2011 23:49:39.526
Reference period start time	11DEC2010 01:56:16.221
Reference period stop time	09JAN2011 22:45:18.741
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



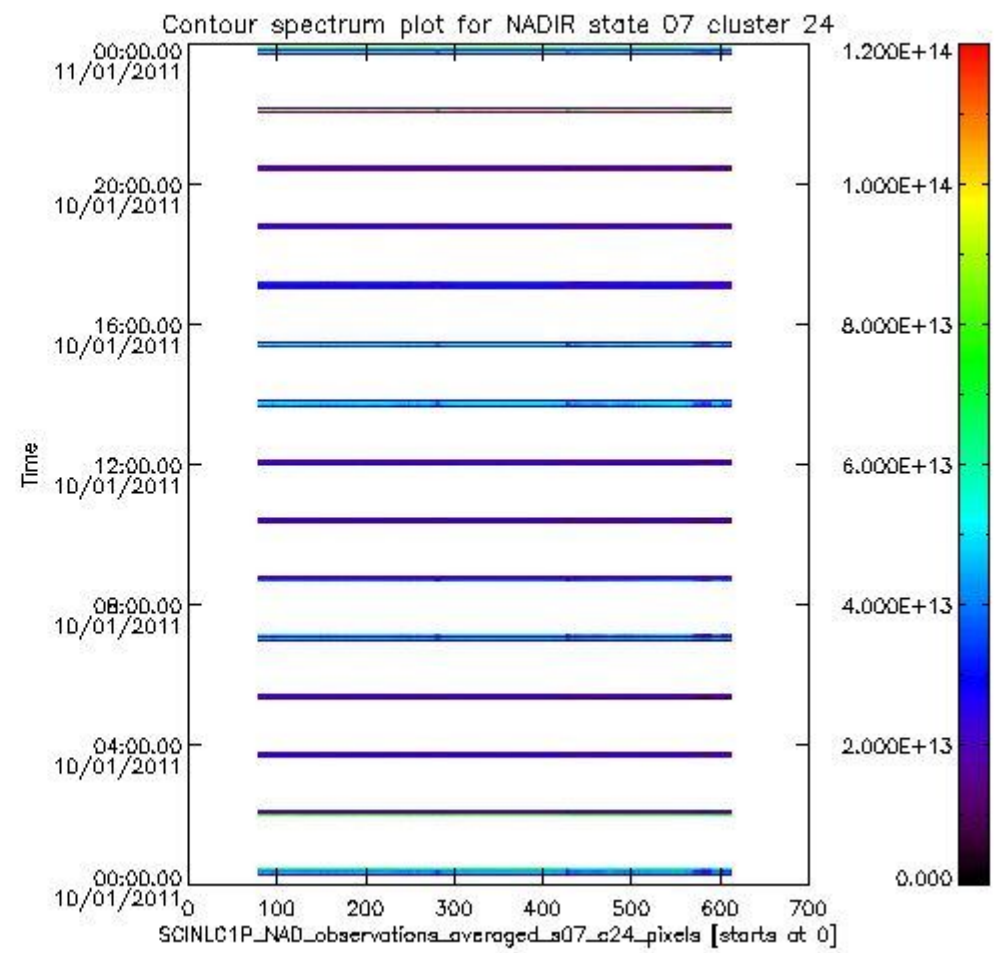
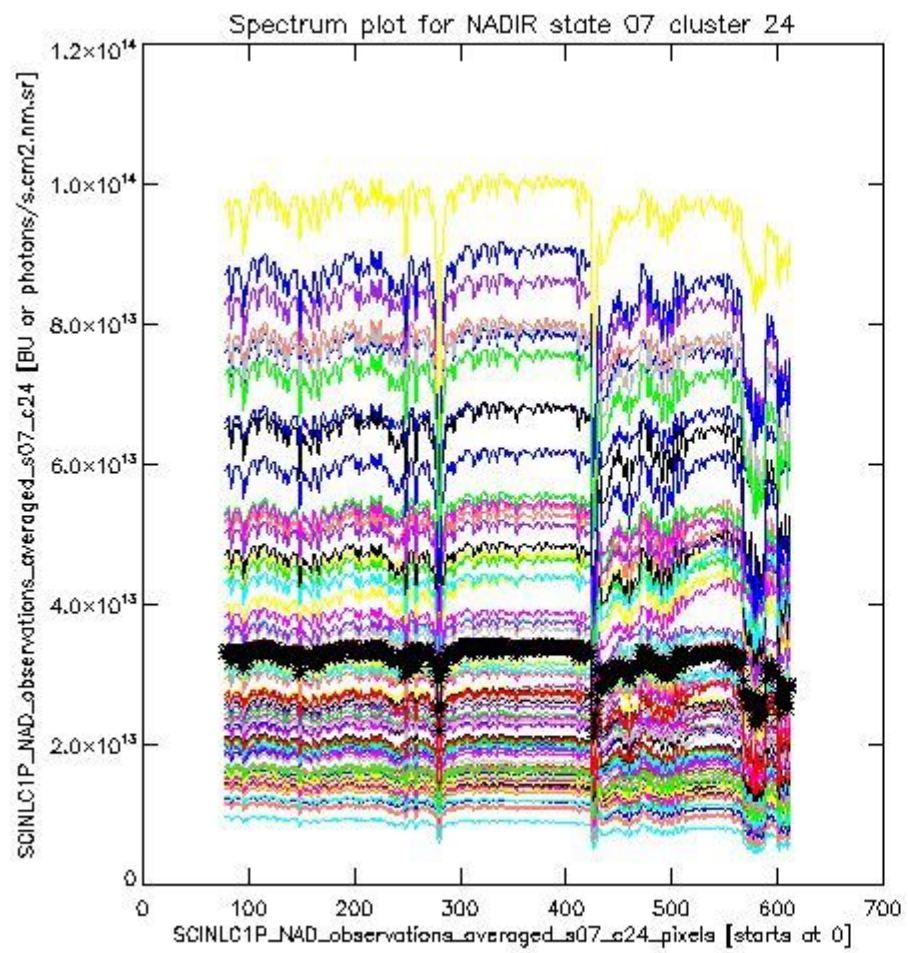
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_5.PNG

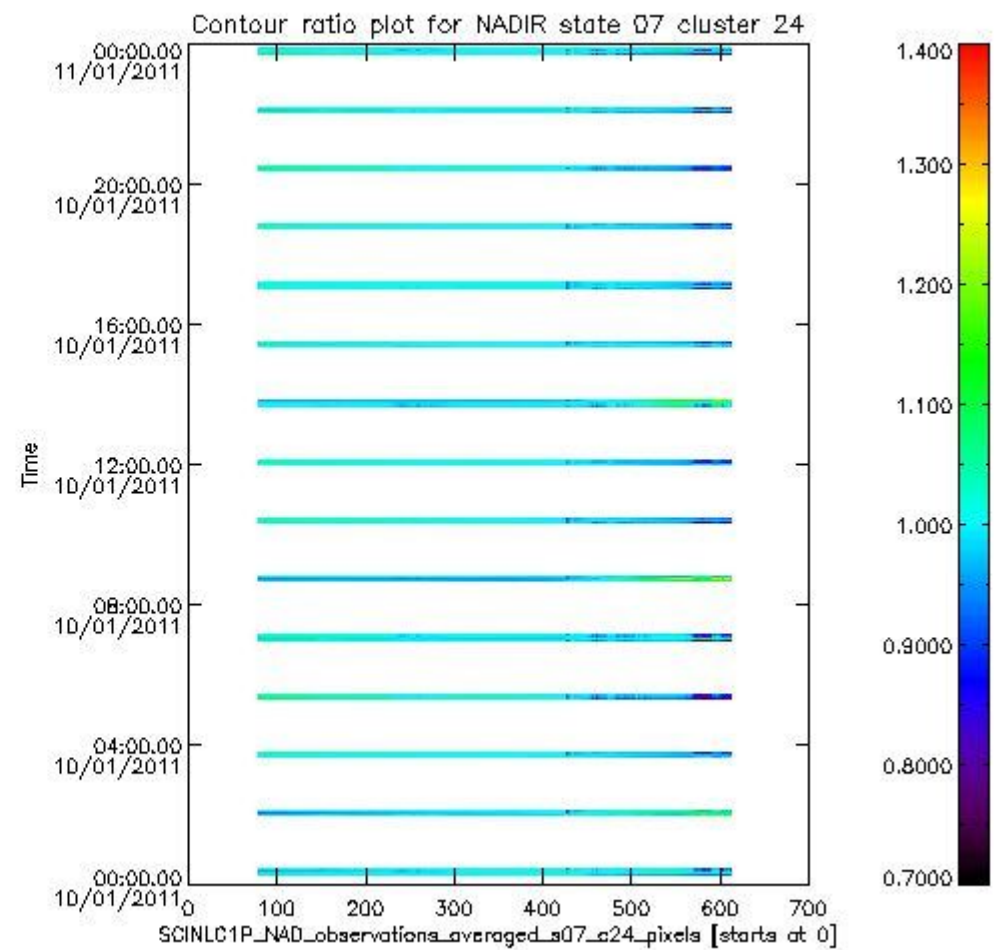
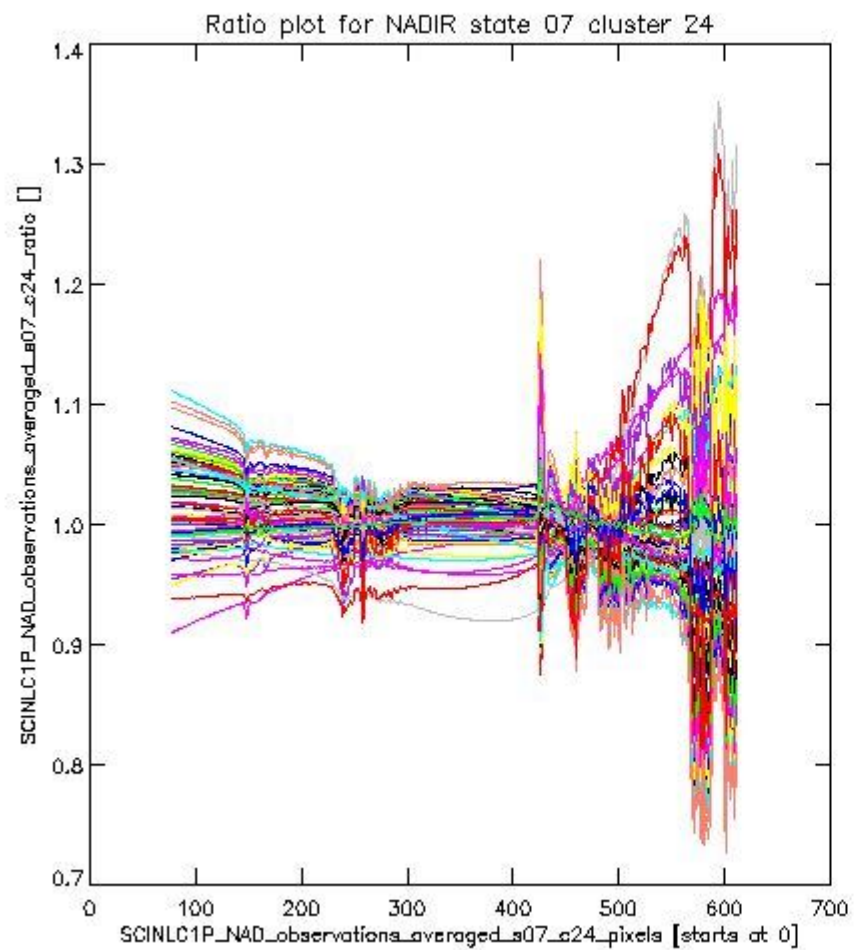
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	10JAN2011 00:16:12.953
Start time of last sample	10JAN2011 23:49:39.526
Reference period start time	11DEC2010 01:56:16.221
Reference period stop time	09JAN2011 22:45:18.741
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\_20110110\_6.PNG

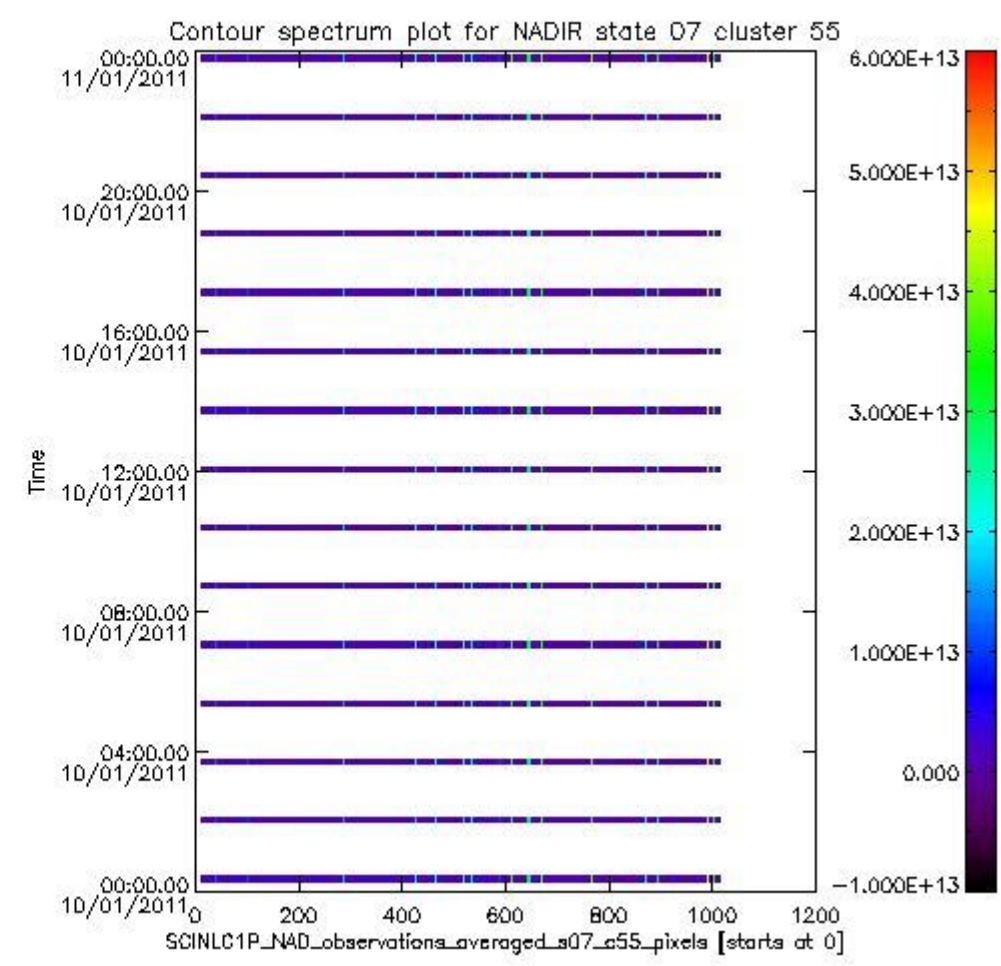
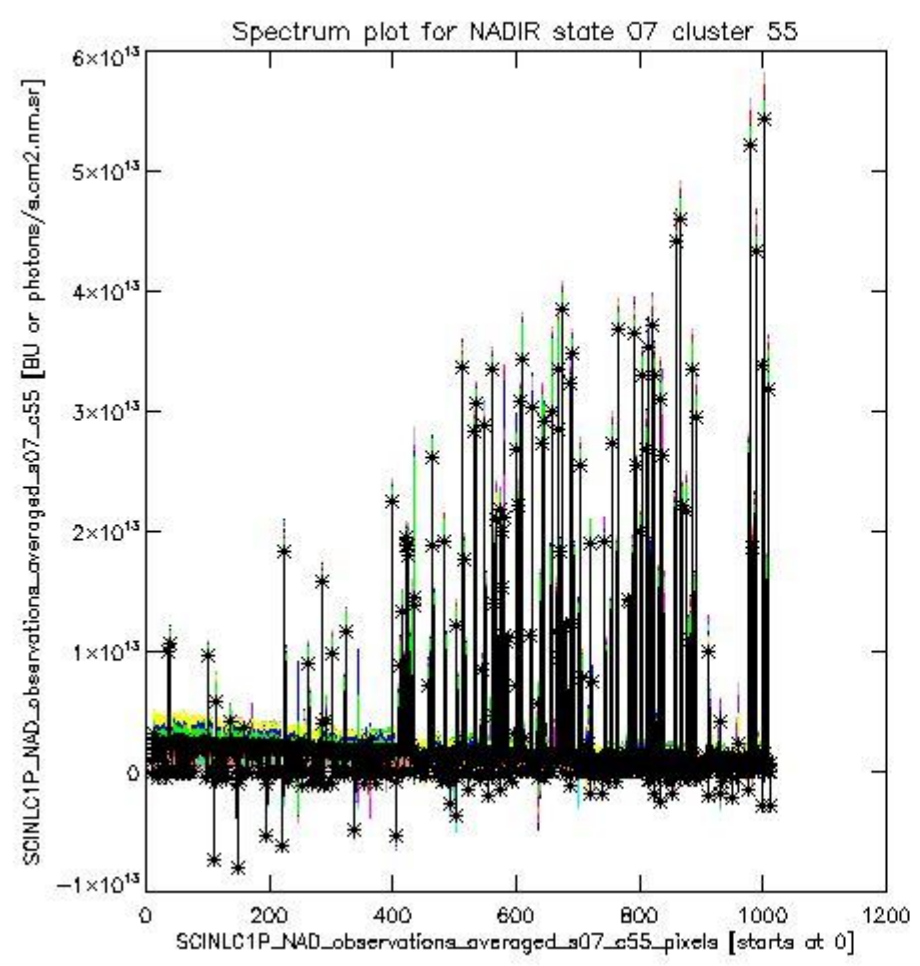




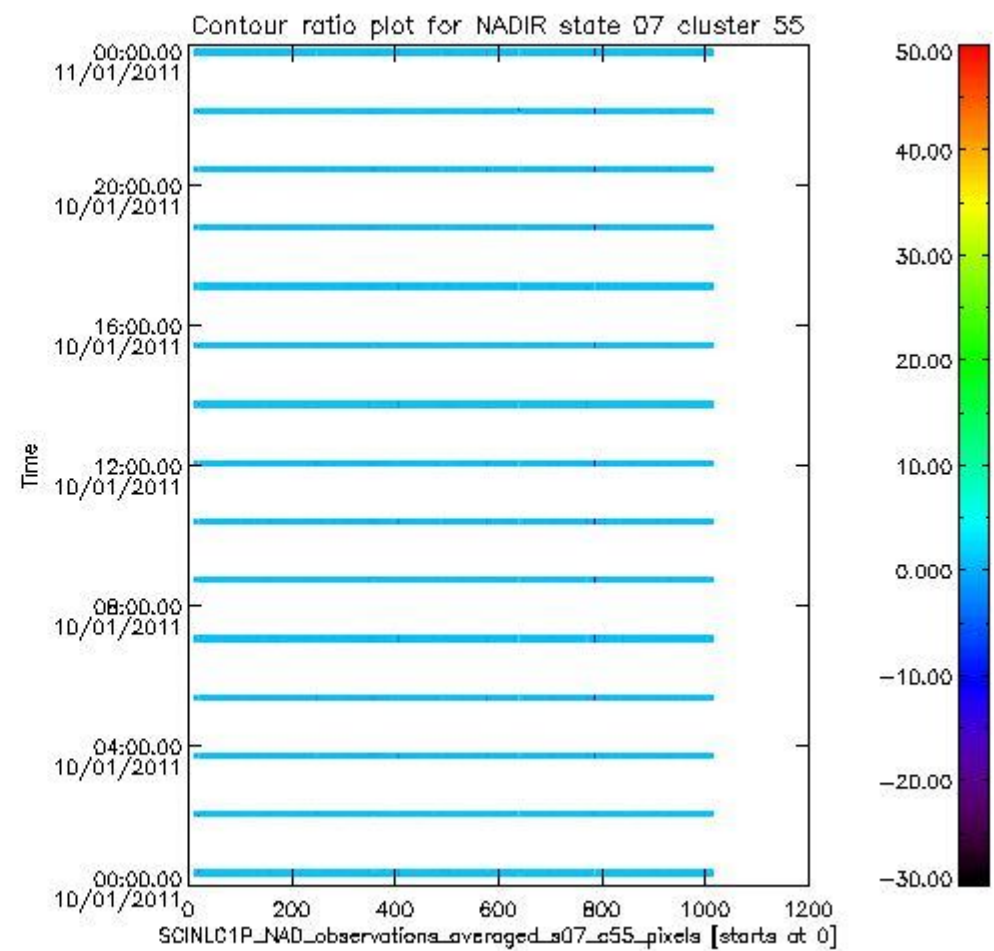
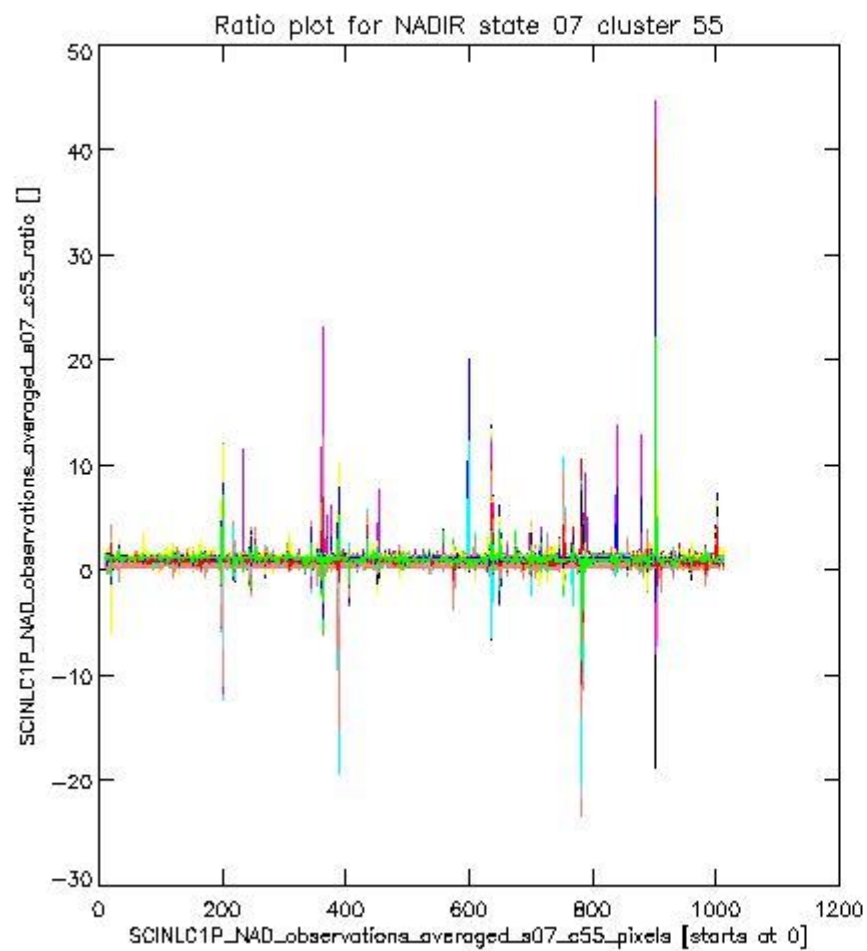
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_7.PNG

**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	10JAN2011 00:16:12.953
Start time of last sample	10JAN2011 23:49:39.526
Reference period start time	11DEC2010 01:56:16.221
Reference period stop time	09JAN2011 22:45:18.741
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



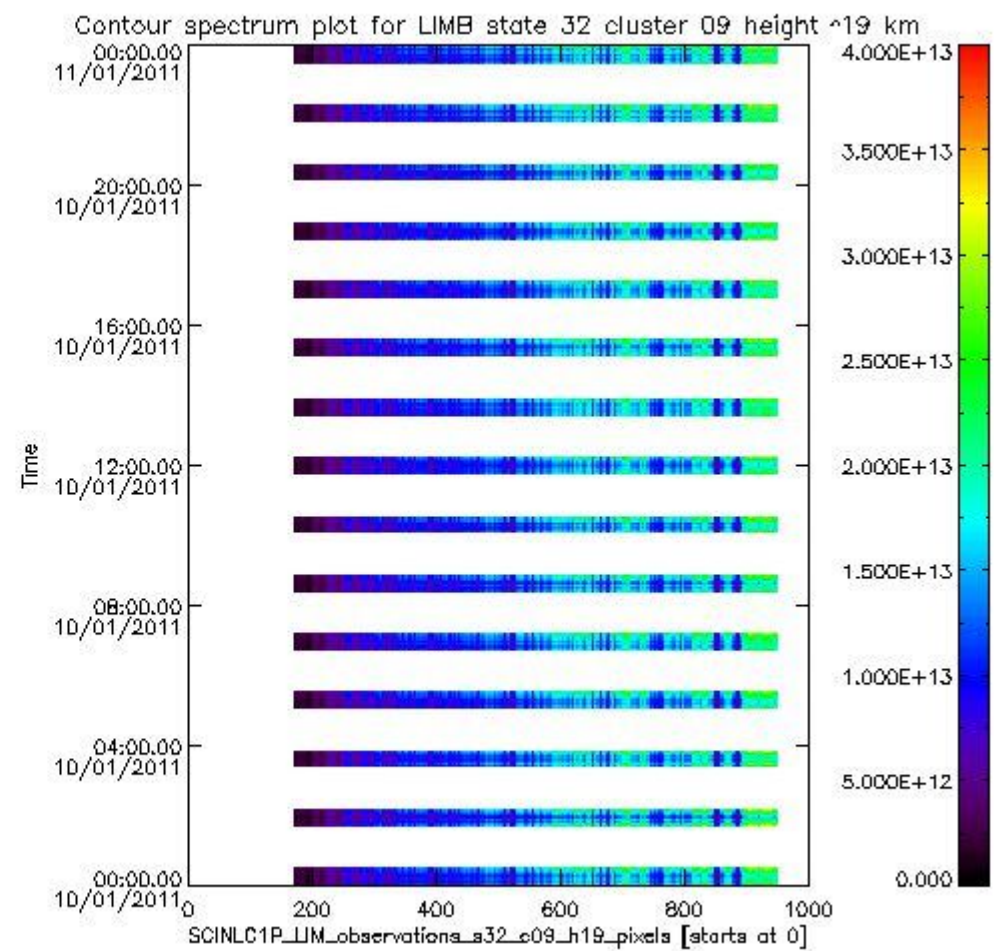
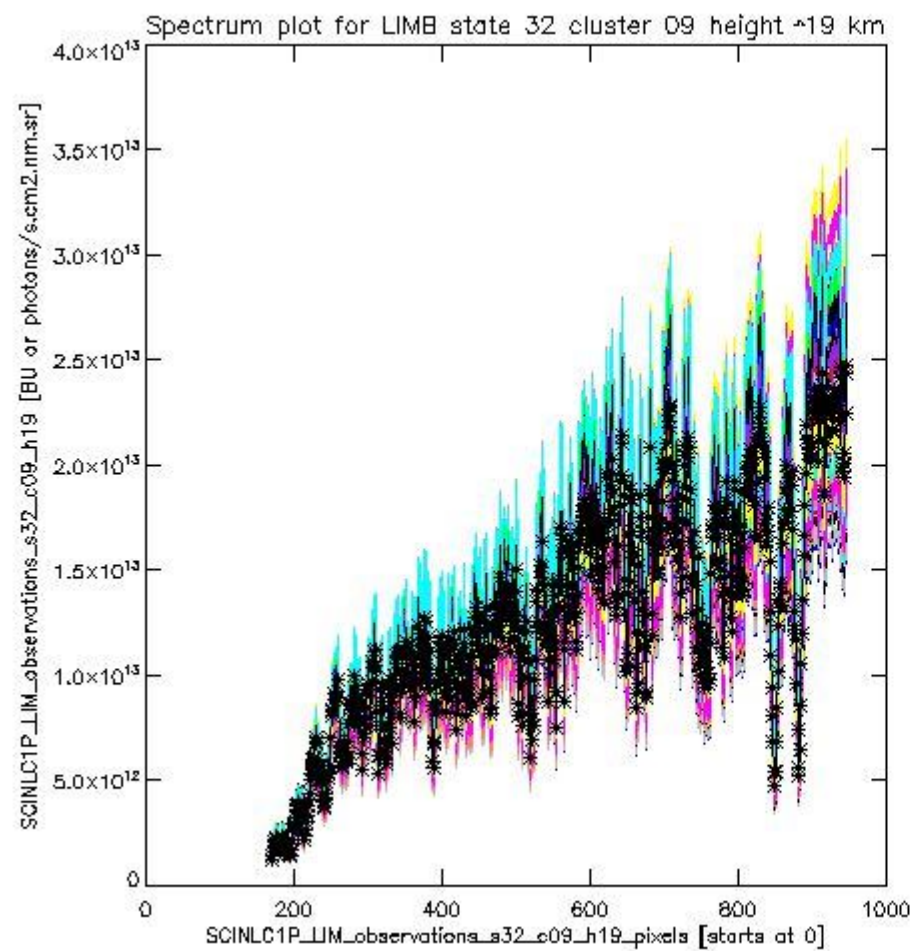
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_8.PNG



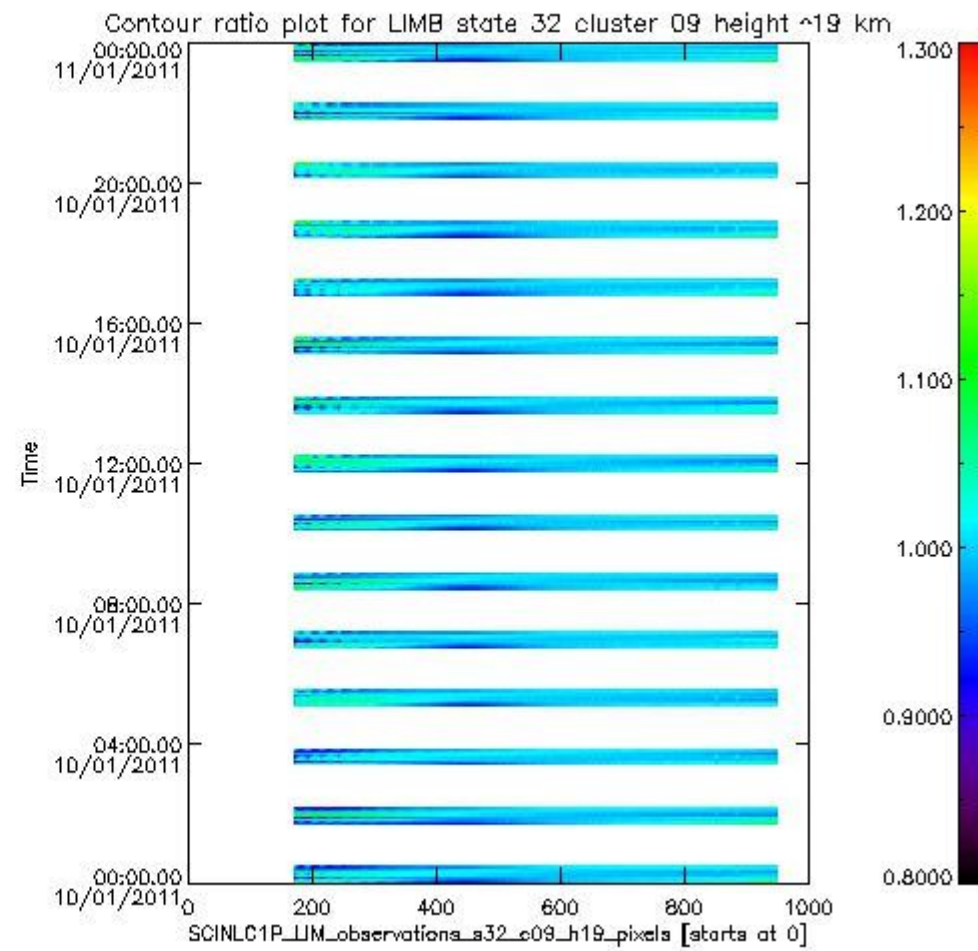
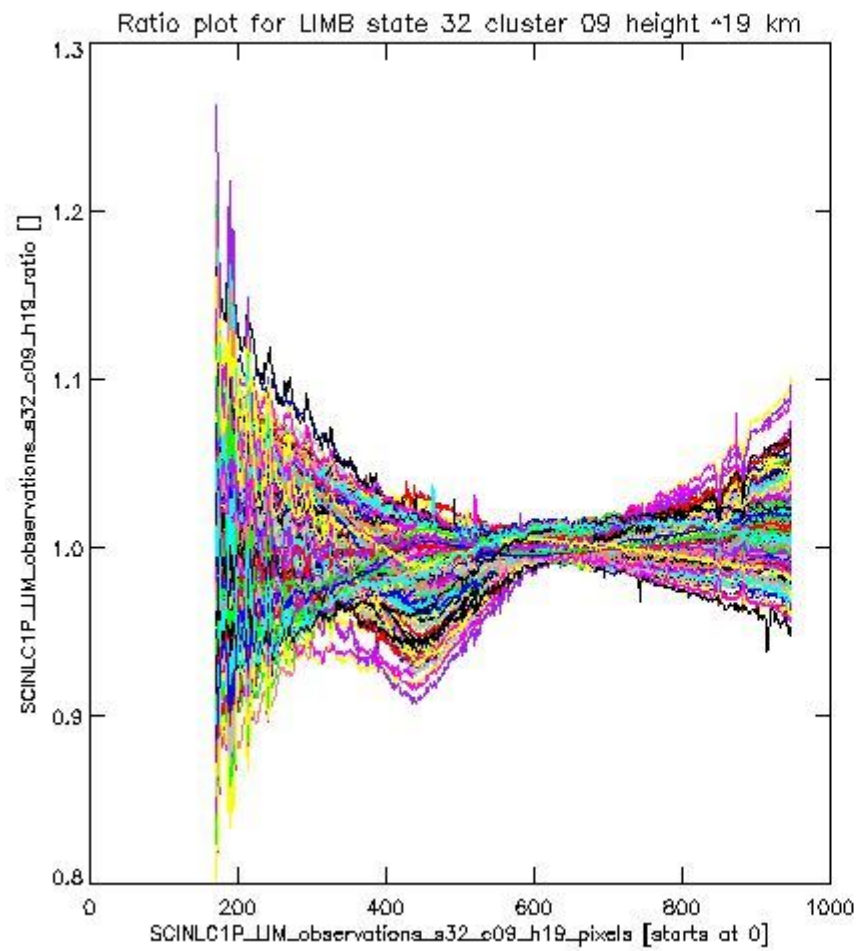
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_9.PNG

**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	10JAN2011 00:03:02.316
Start time of last sample	10JAN2011 23:52:50.827
Reference period start time	11DEC2010 01:43:05.585
Reference period stop time	09JAN2011 22:50:32.788
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



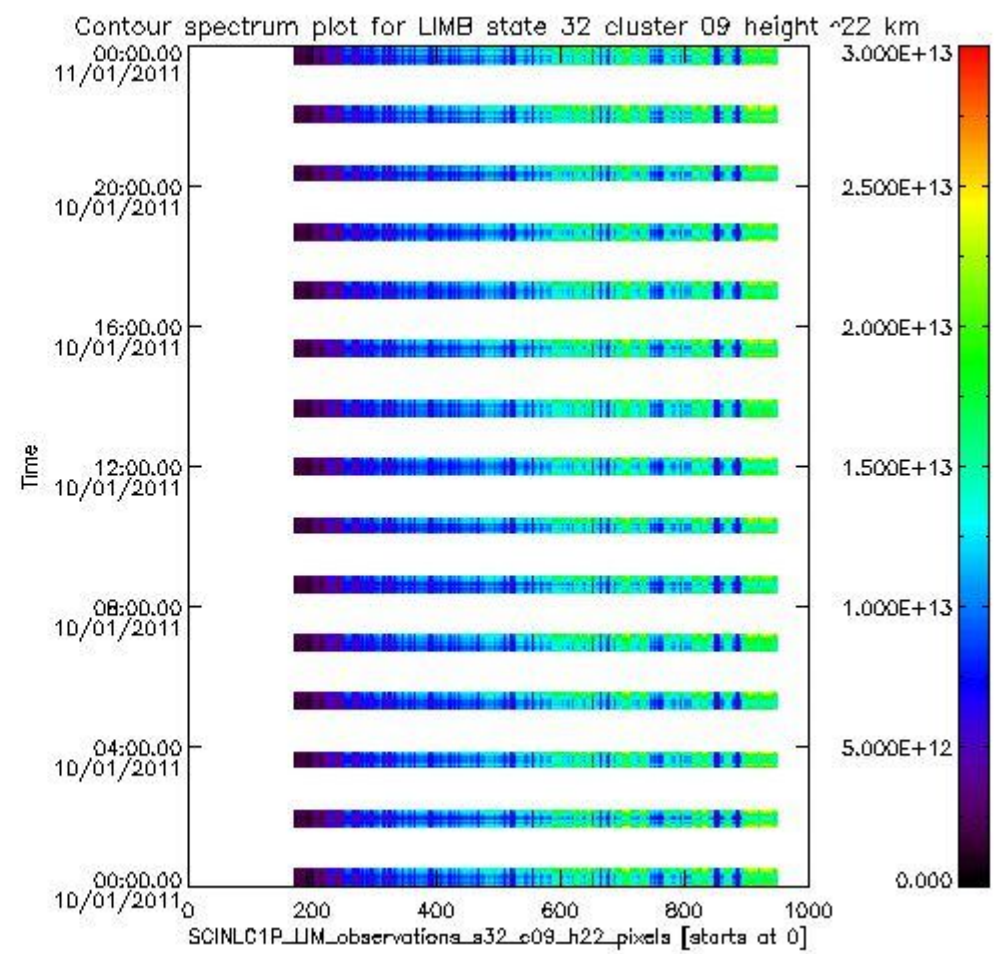
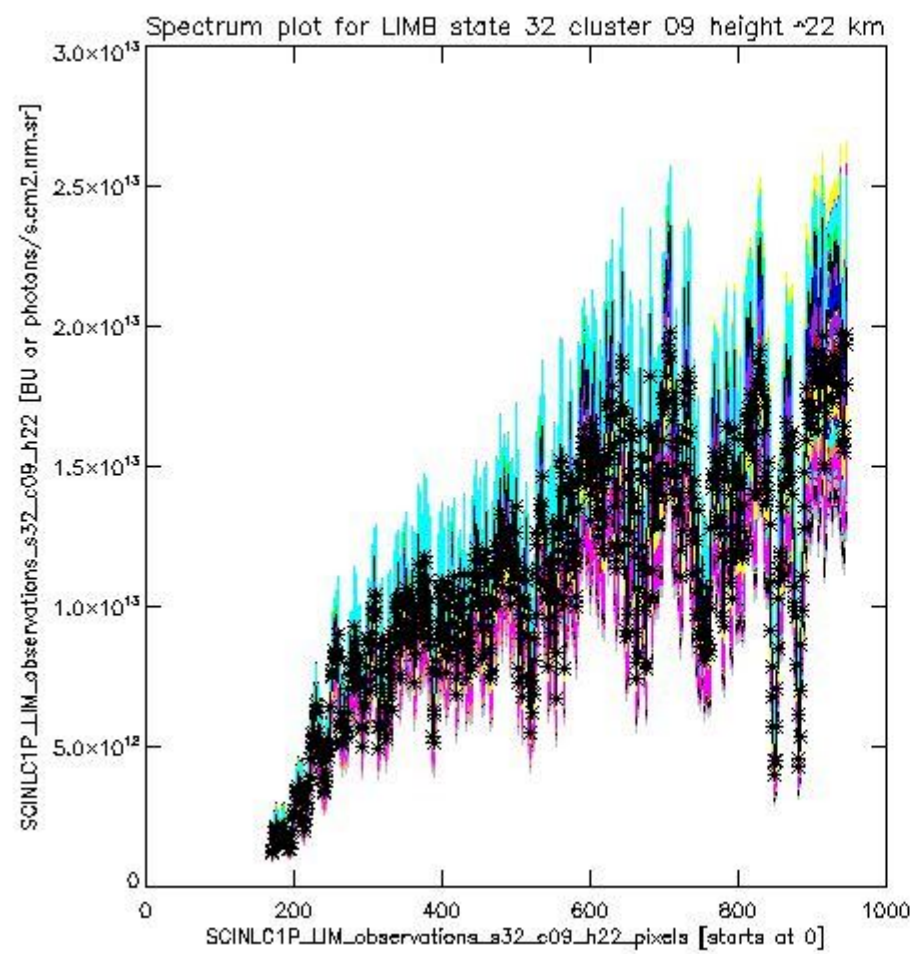
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_10.PNG



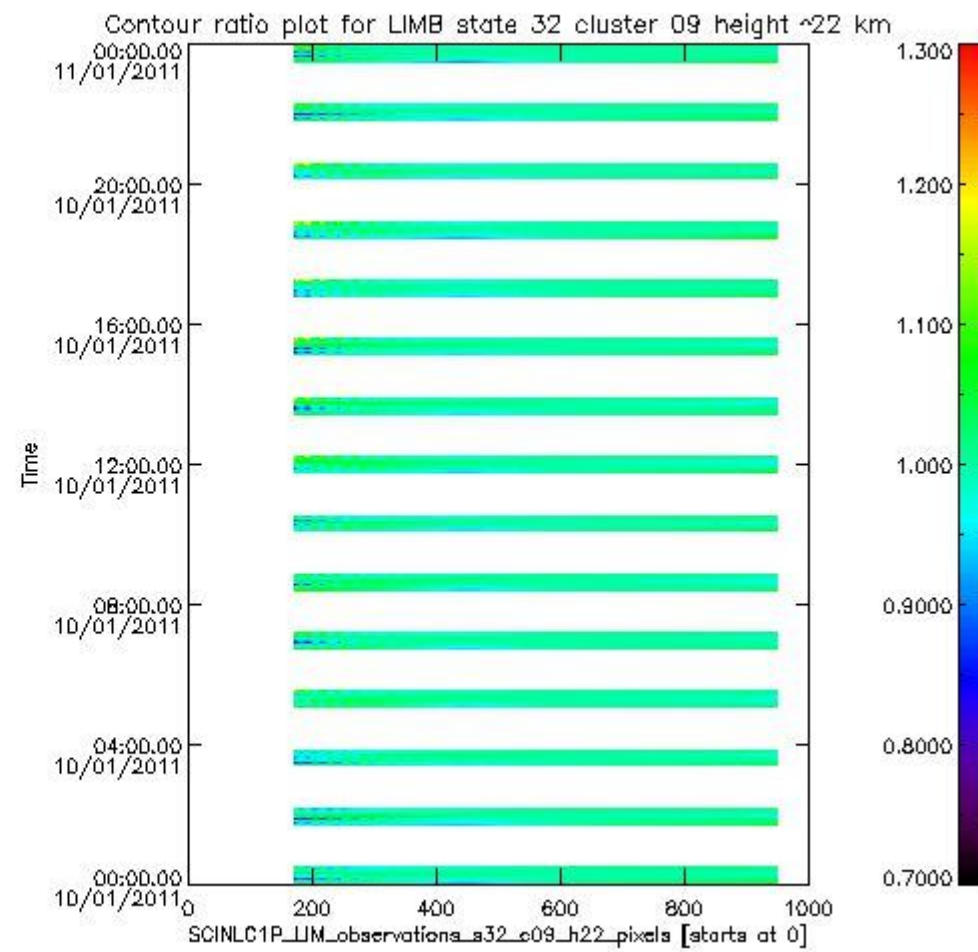
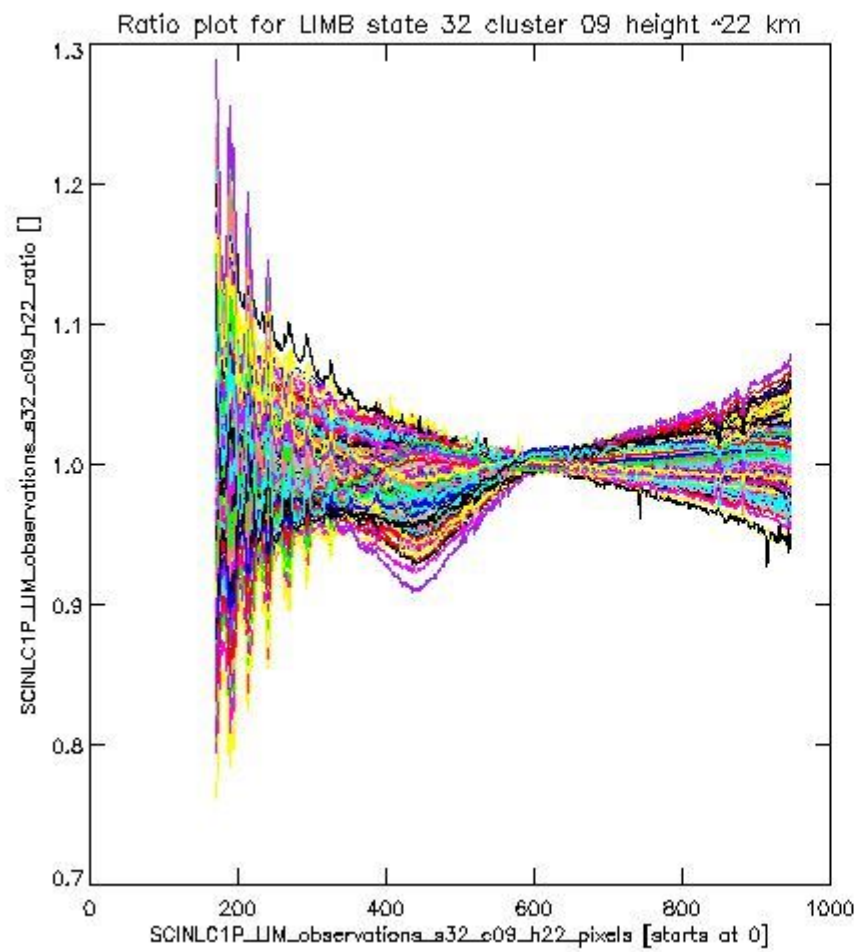
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_11.PNG

**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	10JAN2011 00:03:02.316
Start time of last sample	10JAN2011 23:52:50.827
Reference period start time	11DEC2010 01:43:05.585
Reference period stop time	09JAN2011 22:50:32.788
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



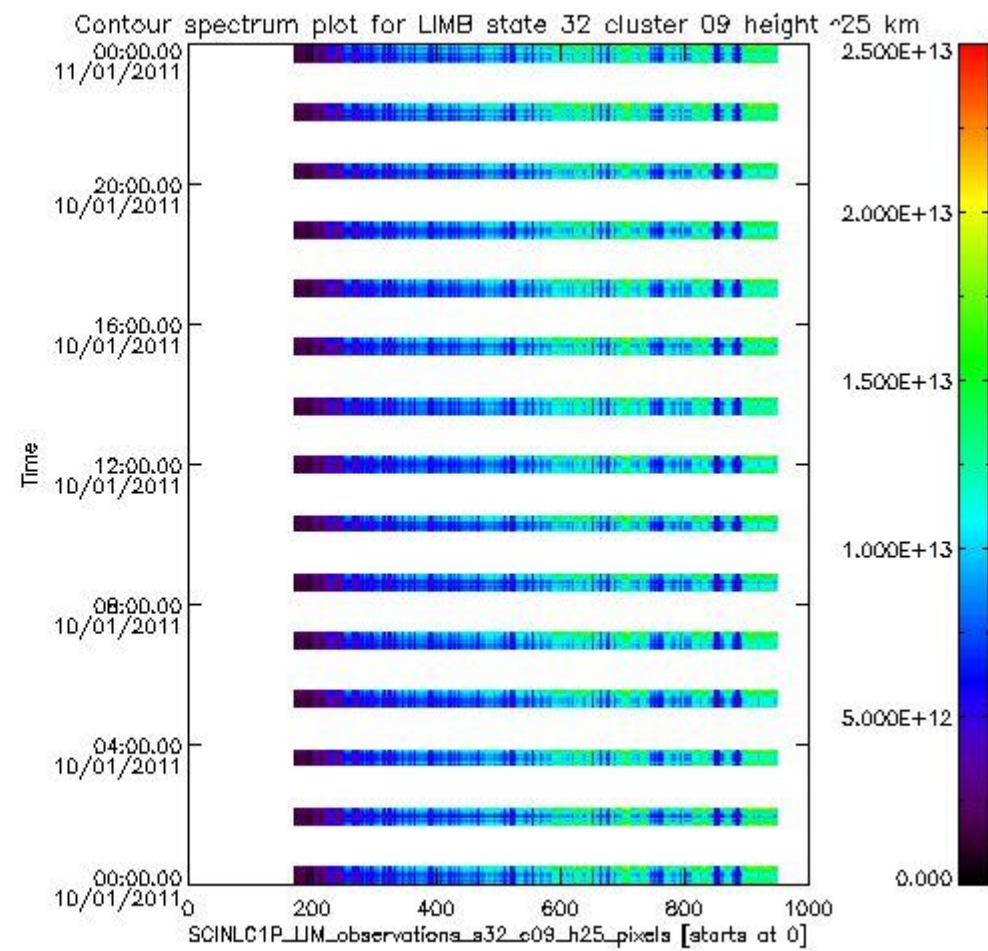
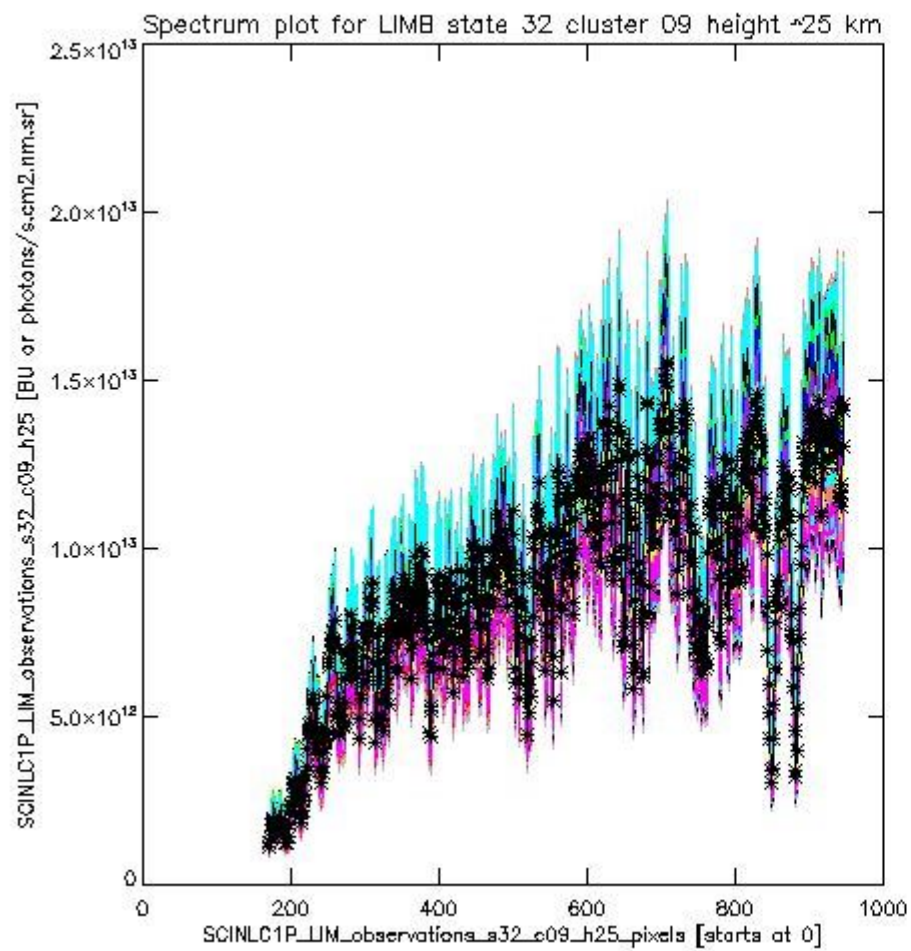
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_13.PNG

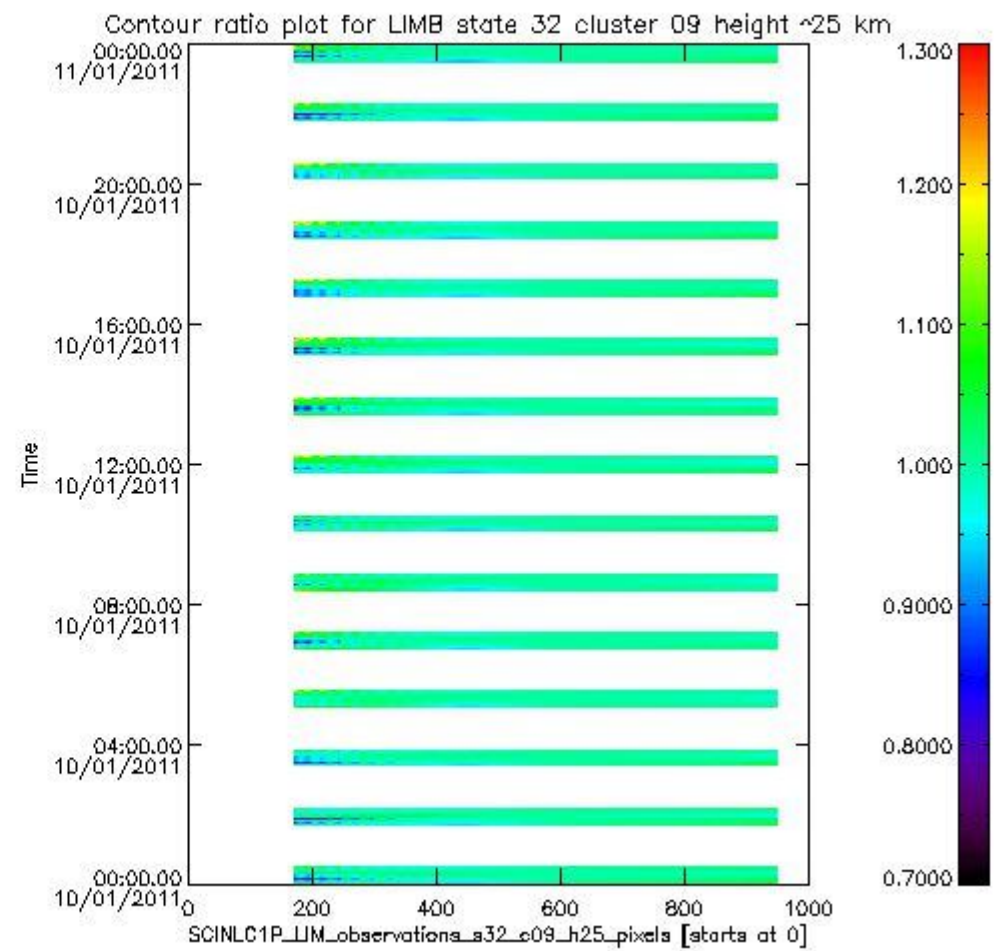
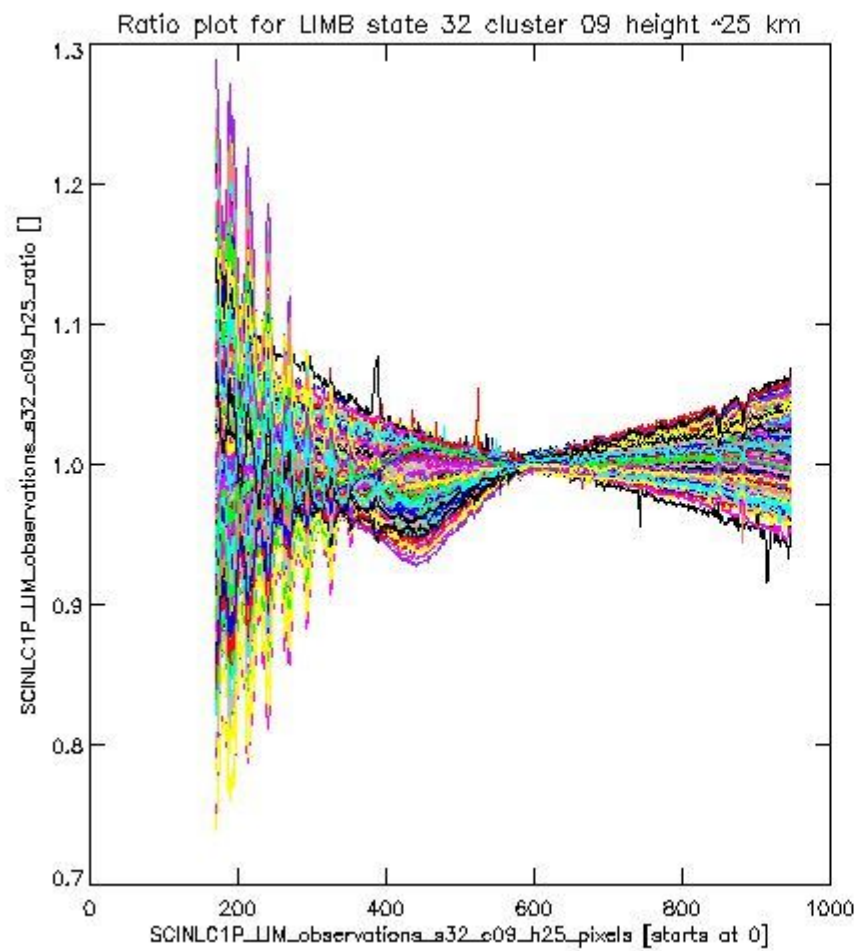
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	10JAN2011 00:03:02.316
Start time of last sample	10JAN2011 23:52:50.827
Reference period start time	11DEC2010 01:43:05.585
Reference period stop time	09JAN2011 22:50:32.788
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\_20110110\_14.PNG

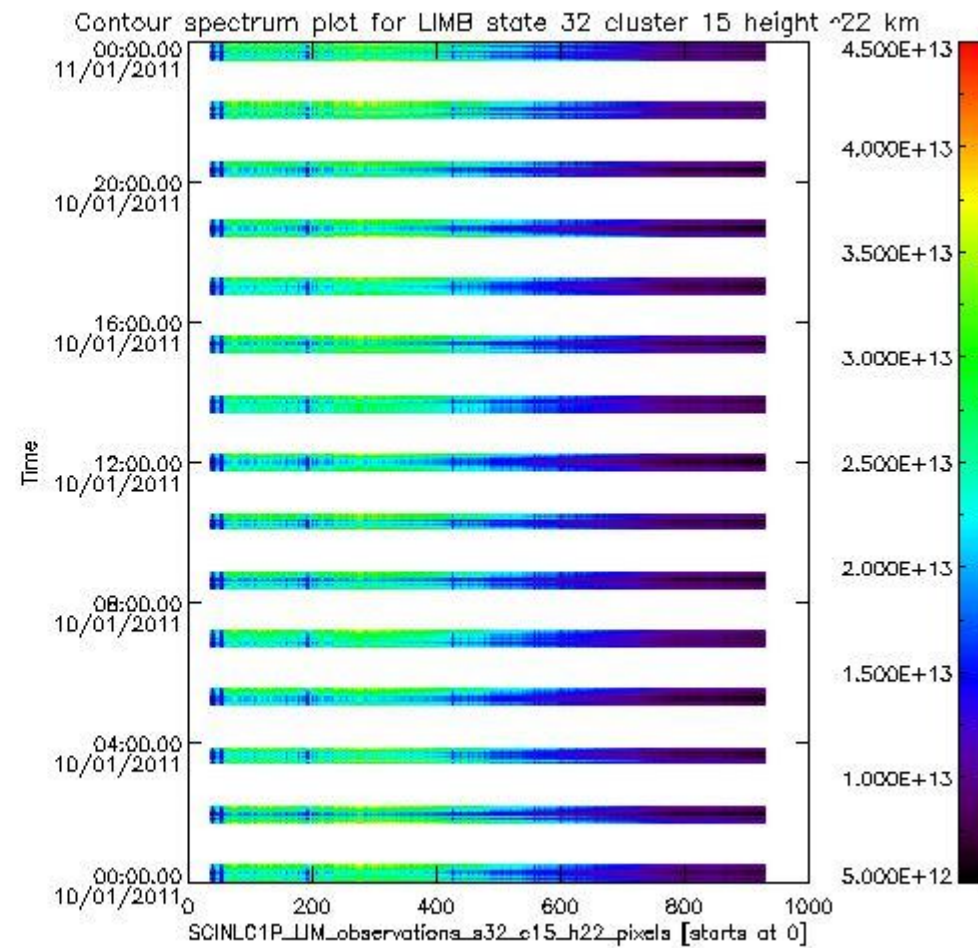
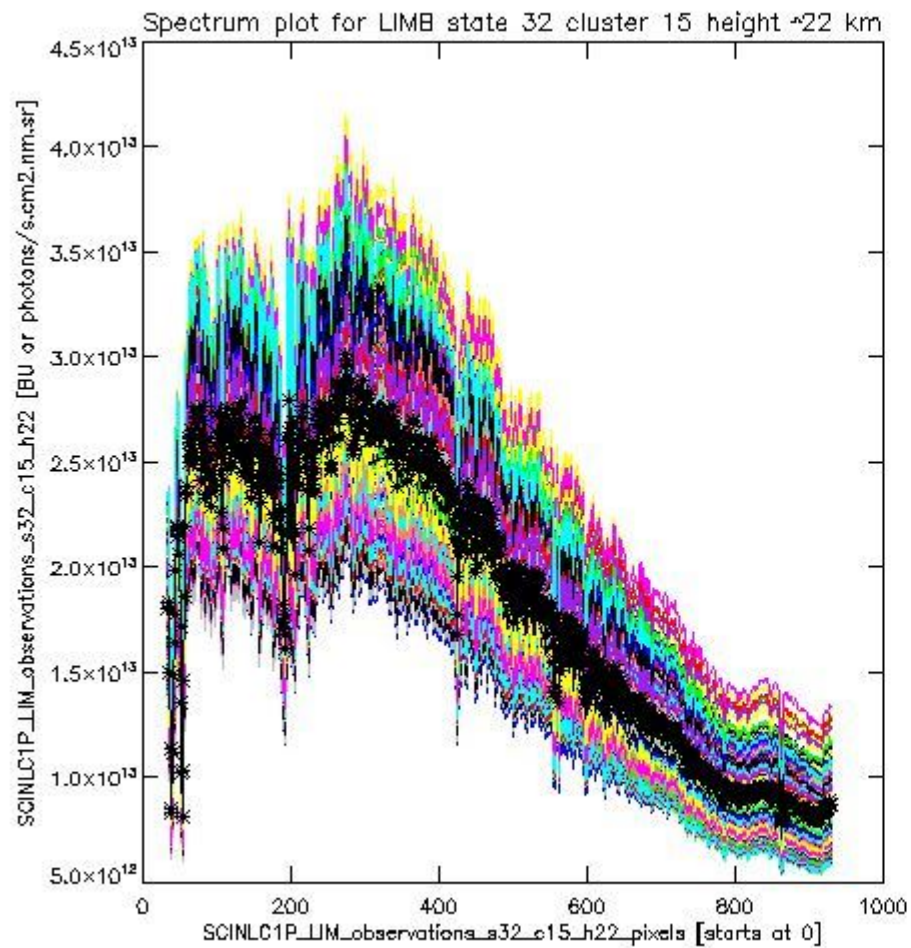




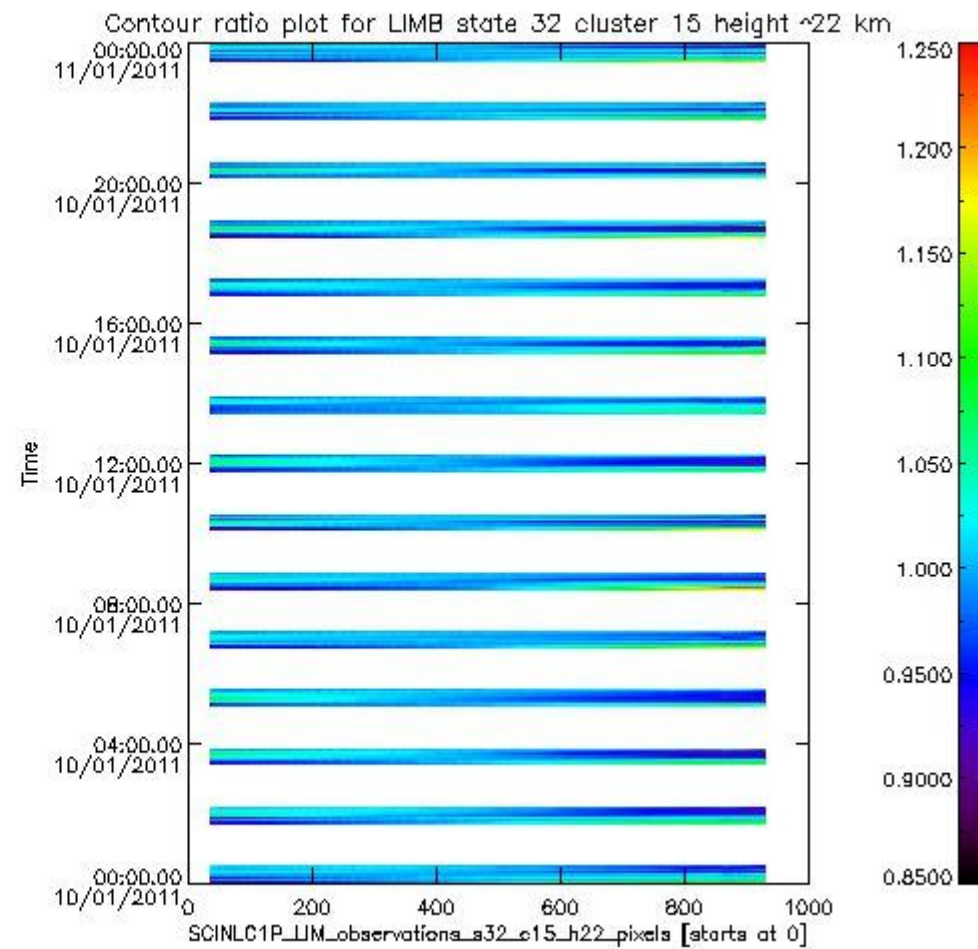
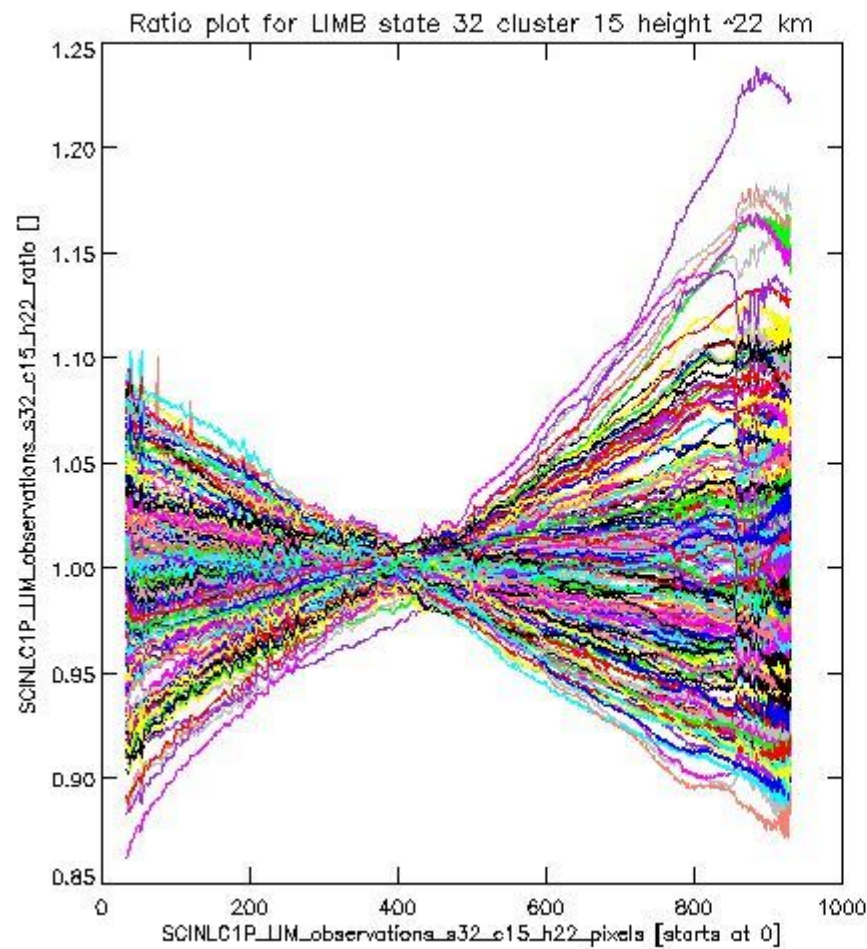
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_15.PNG

**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	10JAN2011 00:03:02.316
Start time of last sample	10JAN2011 23:52:50.827
Reference period start time	11DEC2010 01:43:05.585
Reference period stop time	09JAN2011 22:50:32.788
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



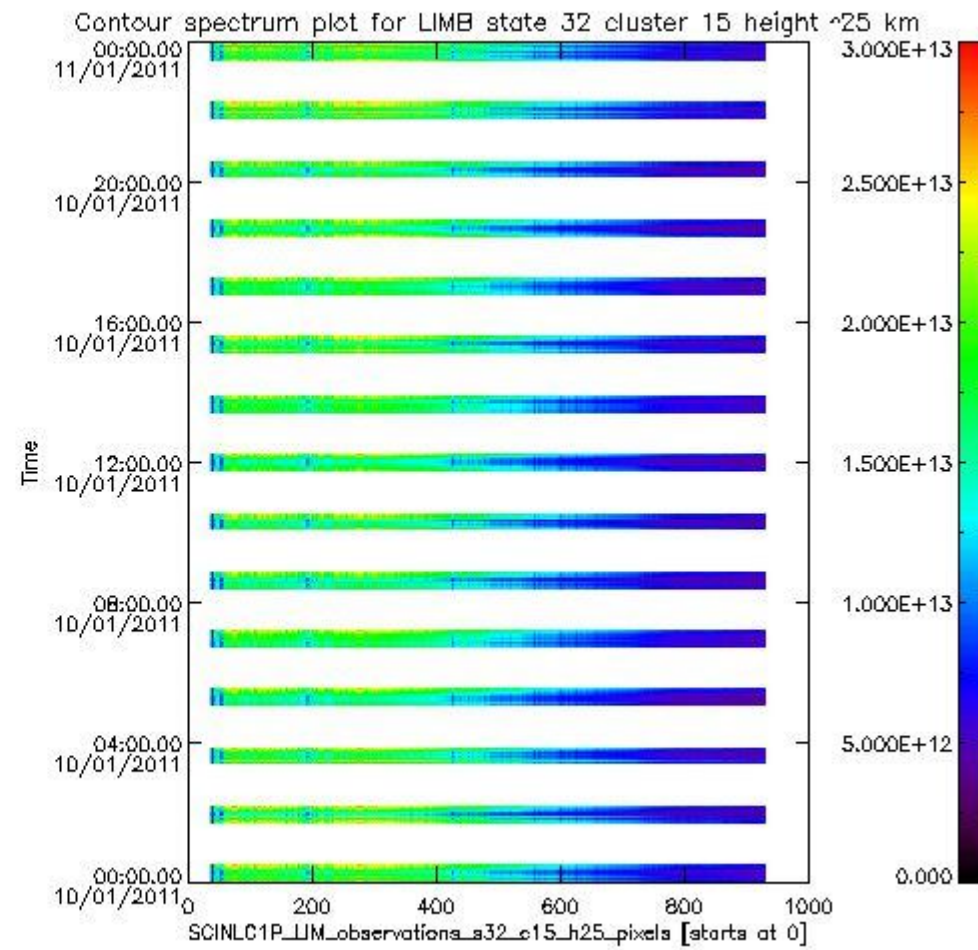
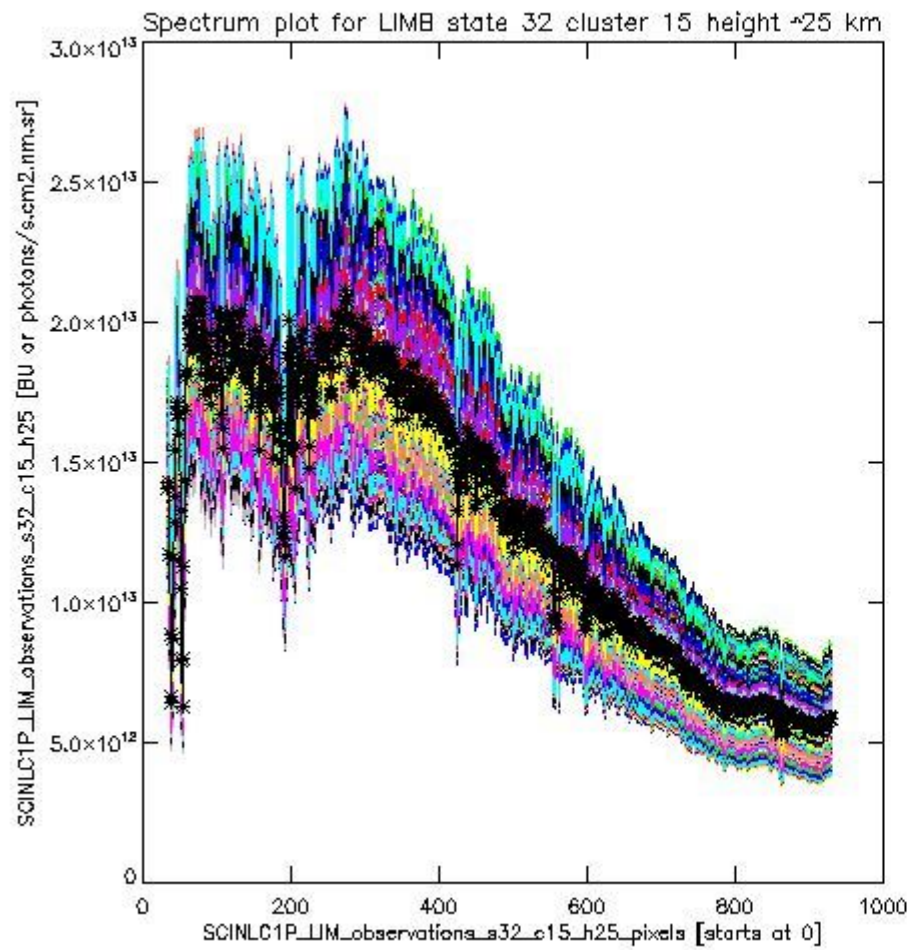
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_16.PNG



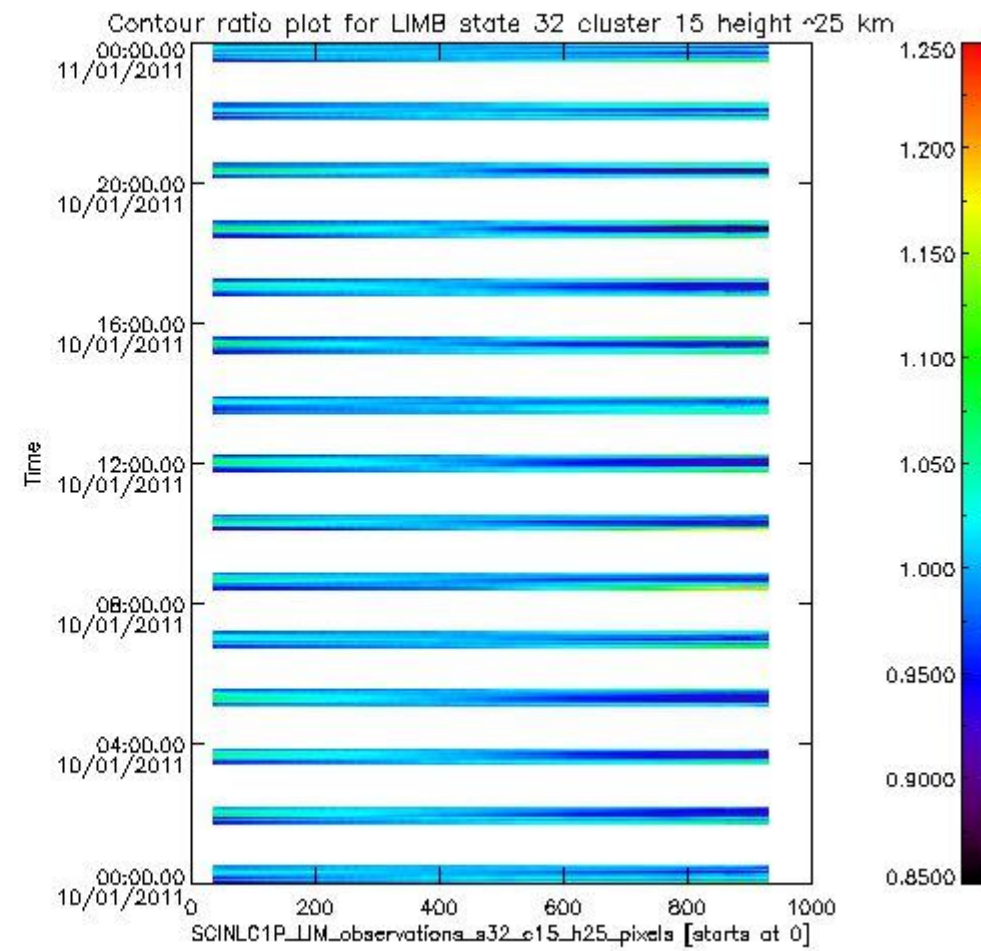
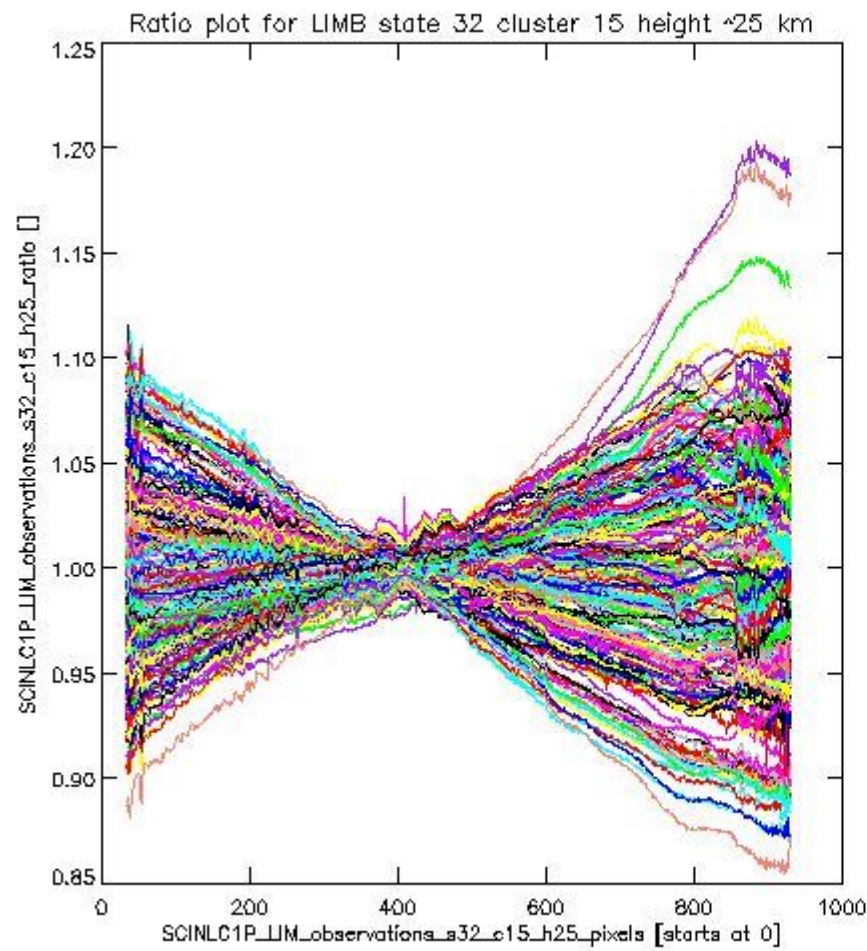
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_17.PNG

**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	10JAN2011 00:03:02.316
Start time of last sample	10JAN2011 23:52:50.827
Reference period start time	11DEC2010 01:43:05.585
Reference period stop time	09JAN2011 22:50:32.788
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



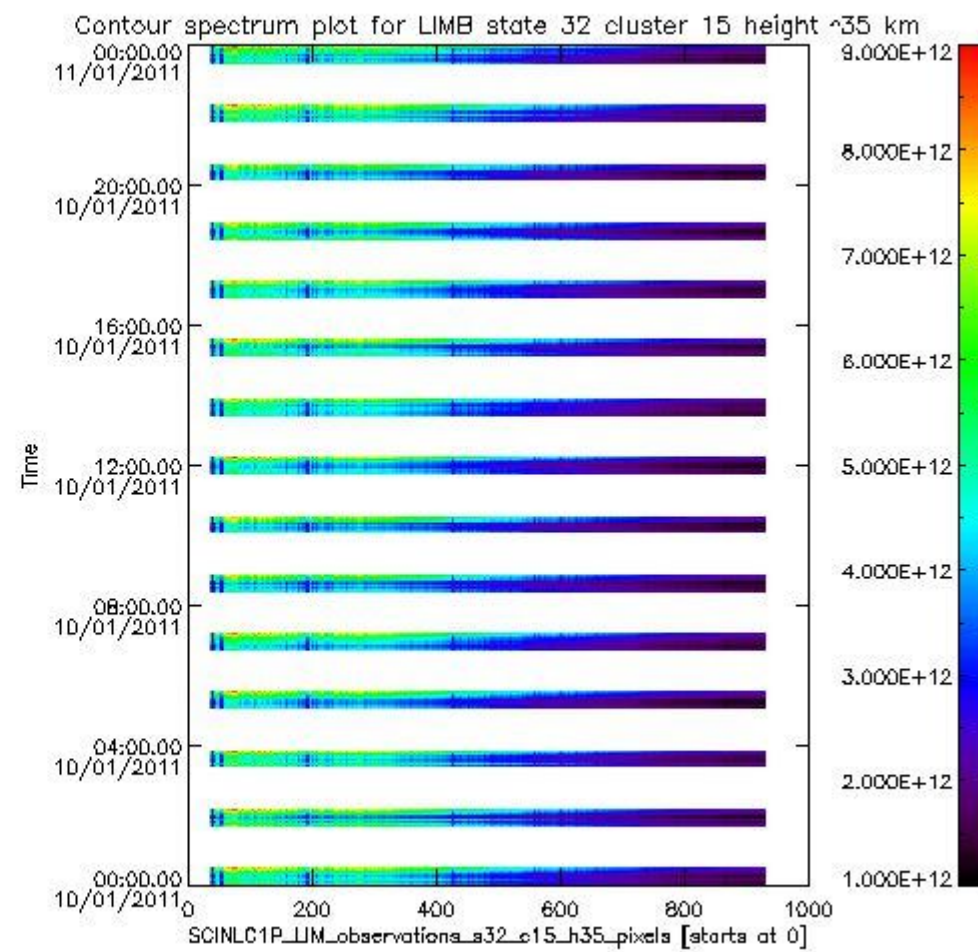
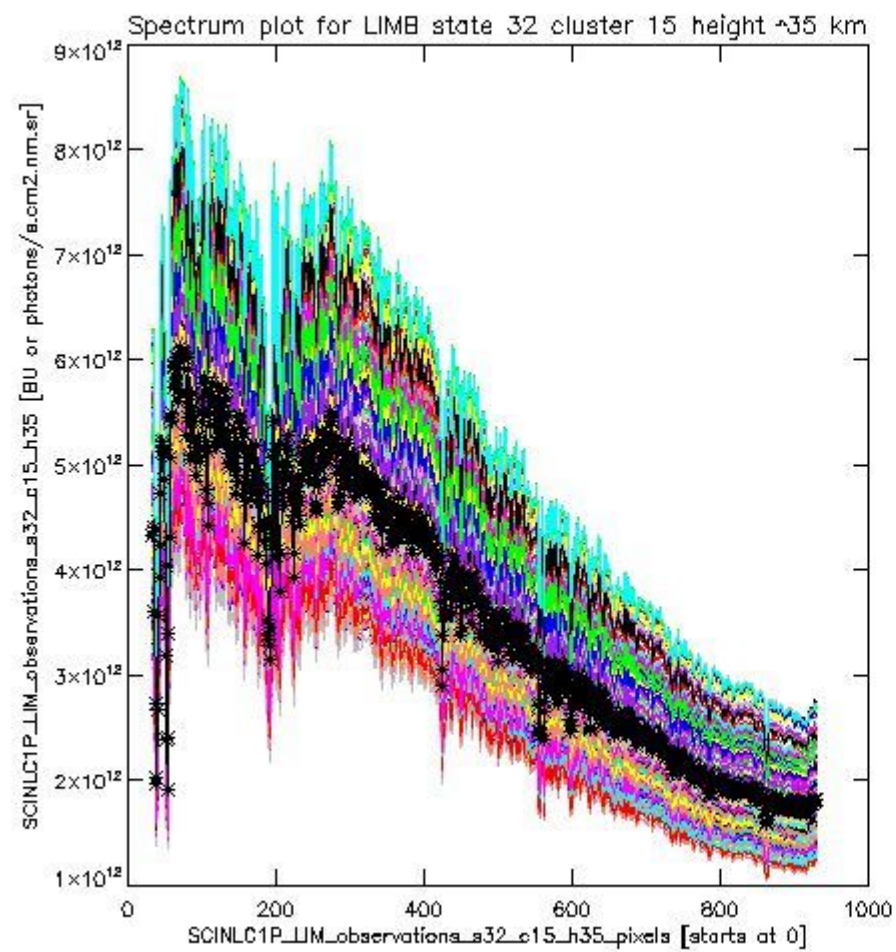
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_18.PNG



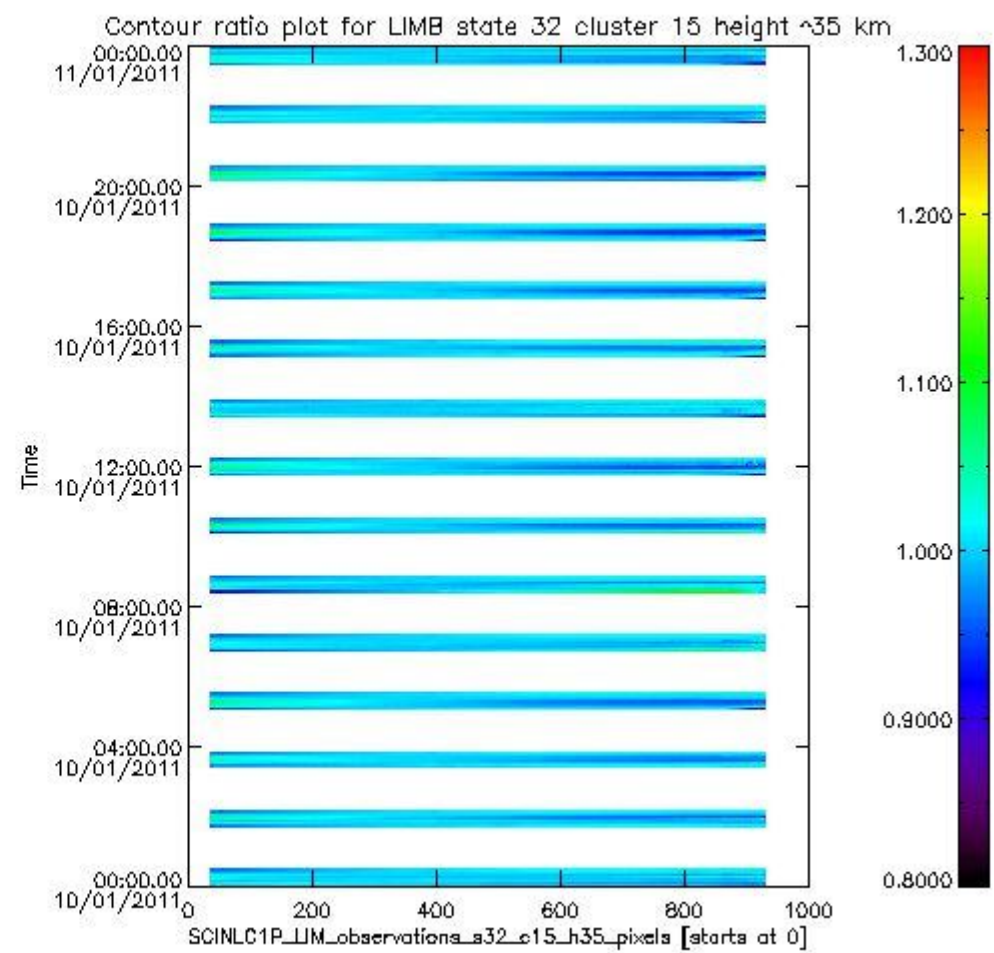
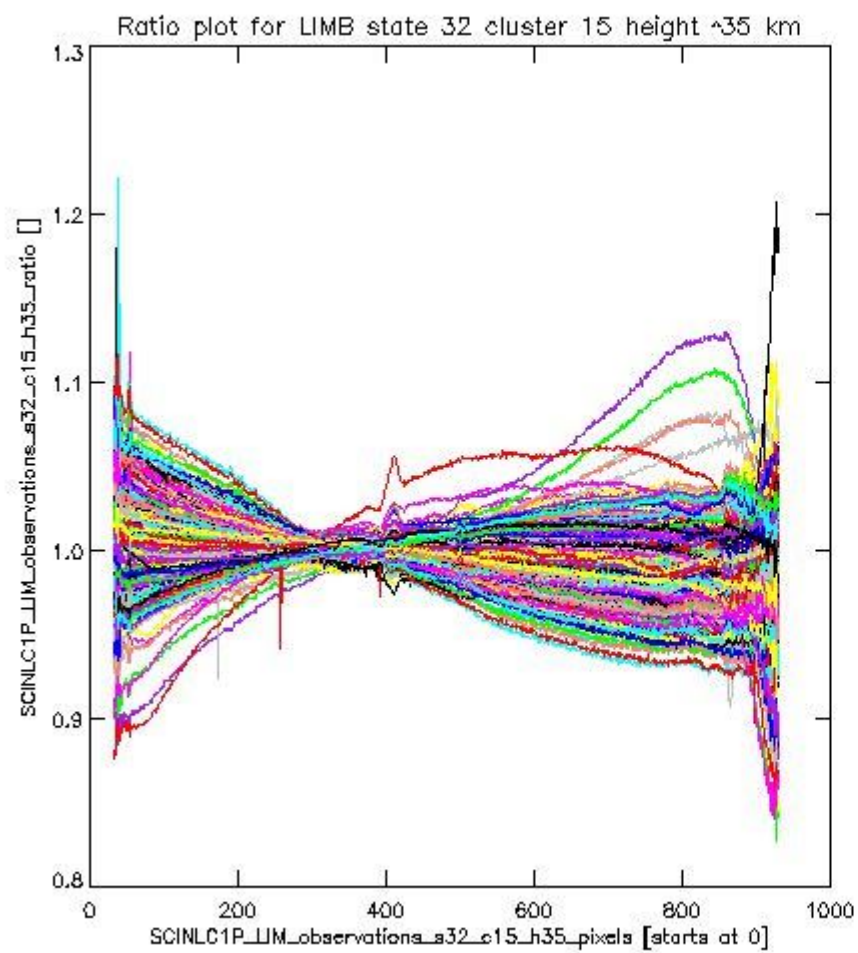
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_19.PNG

**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	10JAN2011 00:03:02.316
Start time of last sample	10JAN2011 23:52:50.827
Reference period start time	11DEC2010 01:43:05.585
Reference period stop time	09JAN2011 22:50:32.788
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\_20110110\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110110\_21.PNG

