

# 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	03MAR2011 06:55:39
Data source version	SCIA/7.04-U
Processing scope for products	20FEB2011 00:00:00 to 21FEB2011 00:00:00
Start time of first product within scope	19FEB2011 23:47:36
Stop time of last product within scope	20FEB2011 22:31:22
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	20FEB2011 00:10:24.846	20FEB2011 22:02:15.118
1	NADIR	07	09	N/A	20FEB2011 00:10:24.846	20FEB2011 22:02:15.118
2	NADIR	07	15	N/A	20FEB2011 00:10:24.846	20FEB2011 22:02:15.118
3	NADIR	07	24	N/A	20FEB2011 00:10:24.846	20FEB2011 22:02:15.118
4	NADIR	07	55	N/A	20FEB2011 00:10:24.846	20FEB2011 22:02:15.118
5	LIMB	32	09	~19 km	20FEB2011 01:36:08.179	20FEB2011 22:07:29.161
6	LIMB	32	09	~22 km	20FEB2011 01:36:08.179	20FEB2011 22:07:29.161
7	LIMB	32	09	~25 km	20FEB2011 01:36:08.179	20FEB2011 22:07:29.161
8	LIMB	32	15	~22 km	20FEB2011 01:36:08.179	20FEB2011 22:07:29.161
9	LIMB	32	15	~25 km	20FEB2011 01:36:08.179	20FEB2011 22:07:29.161
10	LIMB	32	15	~35 km	20FEB2011 01:36:08.179	20FEB2011 22:07:29.161

#### 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	#nopro	#cml_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110219_232406_000060213099_00361_46927_4769.N1</a>	19FEB2011 23:47:36	20FEB2011 00:47:48	0	34	0	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110220_010431_000059973099_00362_46928_4770.N1</a>	20FEB2011 01:18:10	20FEB2011 02:28:39	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110220_024433_000060213099_00363_46929_4773.N1</a>	20FEB2011 02:58:23	20FEB2011 04:08:38	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110220_042458_000059973099_00364_46930_4774.N1</a>	20FEB2011 04:38:37	20FEB2011 05:49:06	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110220_060500_000060213099_00365_46931_4777.N1</a>	20FEB2011 06:18:51	20FEB2011 07:29:05	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110220_074525_000059973099_00366_46932_4780.N1</a>	20FEB2011 07:59:04	20FEB2011 09:09:33	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110220_092527_000060213099_00367_46933_4781.N1	20FEB2011 09:39:18	20FEB2011 10:49:32	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110220_110552_000059973099_00368_46934_4783.N1	20FEB2011 11:19:31	20FEB2011 12:30:00	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110220_124554_000060213099_00369_46935_4784.N1	20FEB2011 12:59:45	20FEB2011 14:09:59	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110220_142619_000059973099_00370_46936_4787.N1	20FEB2011 14:39:58	20FEB2011 15:50:27	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110220_160621_000060223099_00371_46937_4788.N1	20FEB2011 16:20:12	20FEB2011 17:30:26	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110220_174646_000060413099_00372_46938_4789.N1	20FEB2011 18:00:25	20FEB2011 19:11:08	0	34	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110220_192732_000059773099_00373_46939_4793.N1	20FEB2011 19:40:39	20FEB2011 20:51:15	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110220_210713_000053693099_00374_46940_4795.N1	20FEB2011 21:20:53	20FEB2011 22:31:22	0	36	30	0	0	1	0	0	

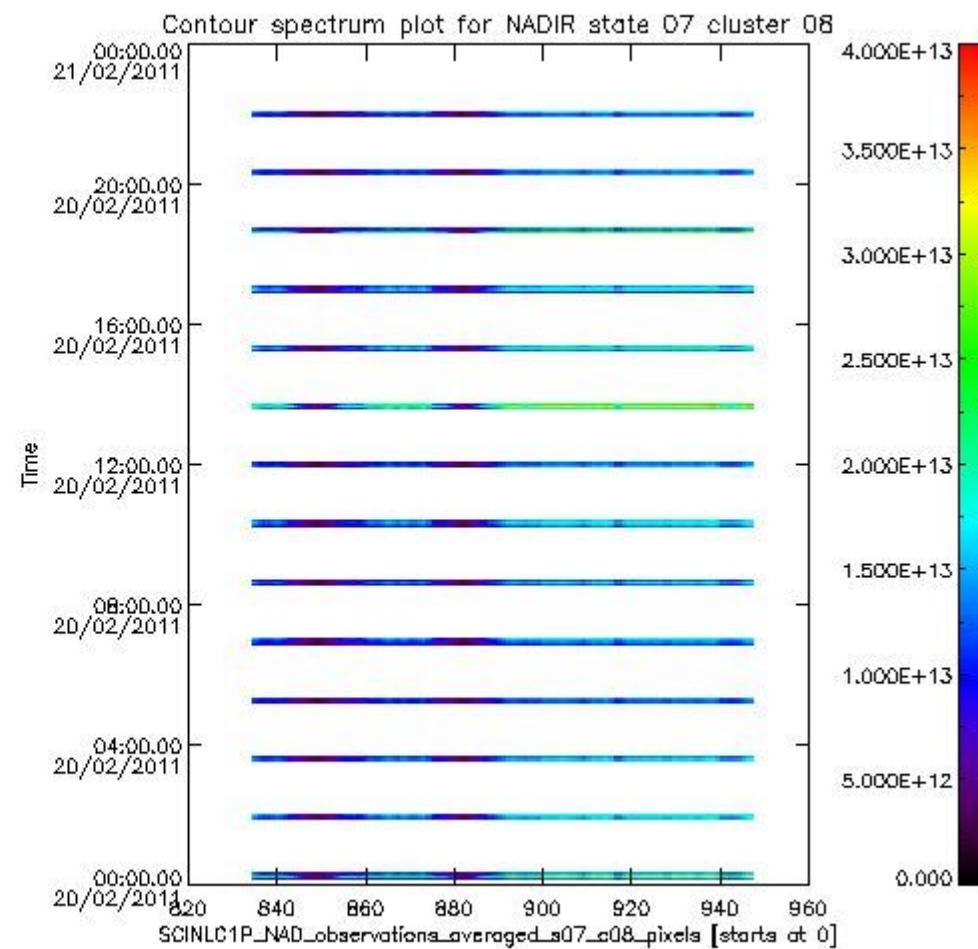
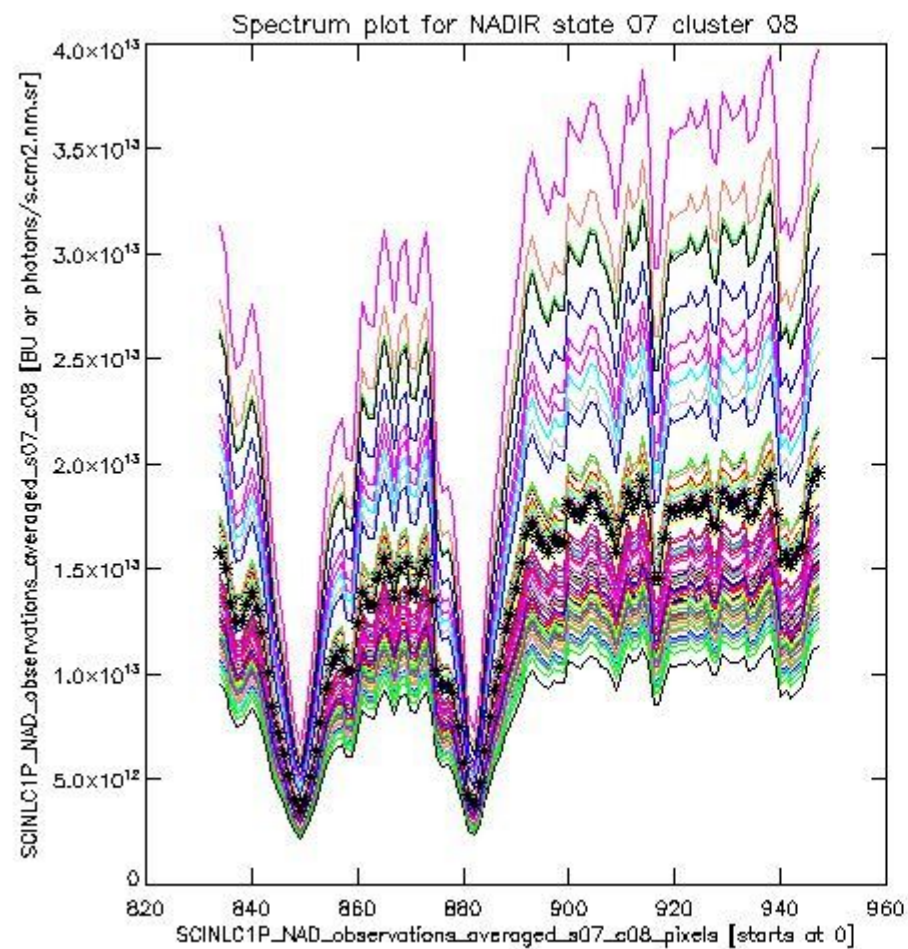
## 1.2 Source packet monitoring

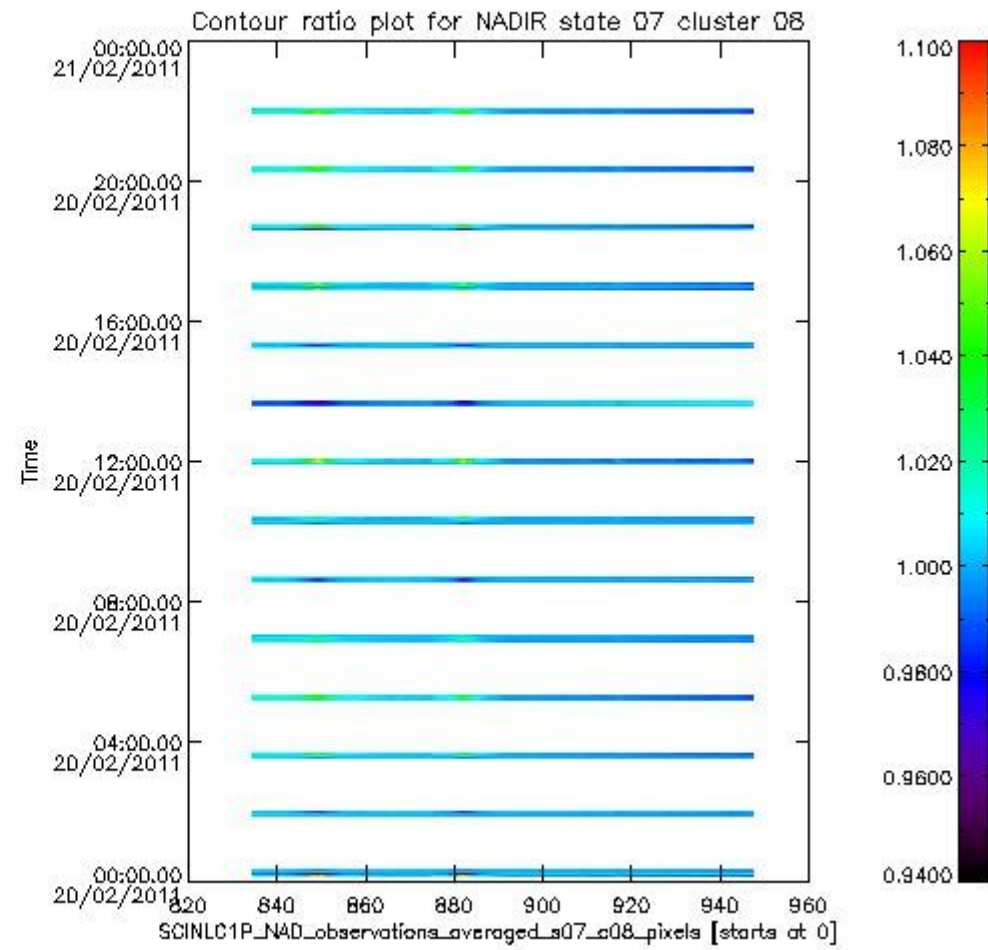
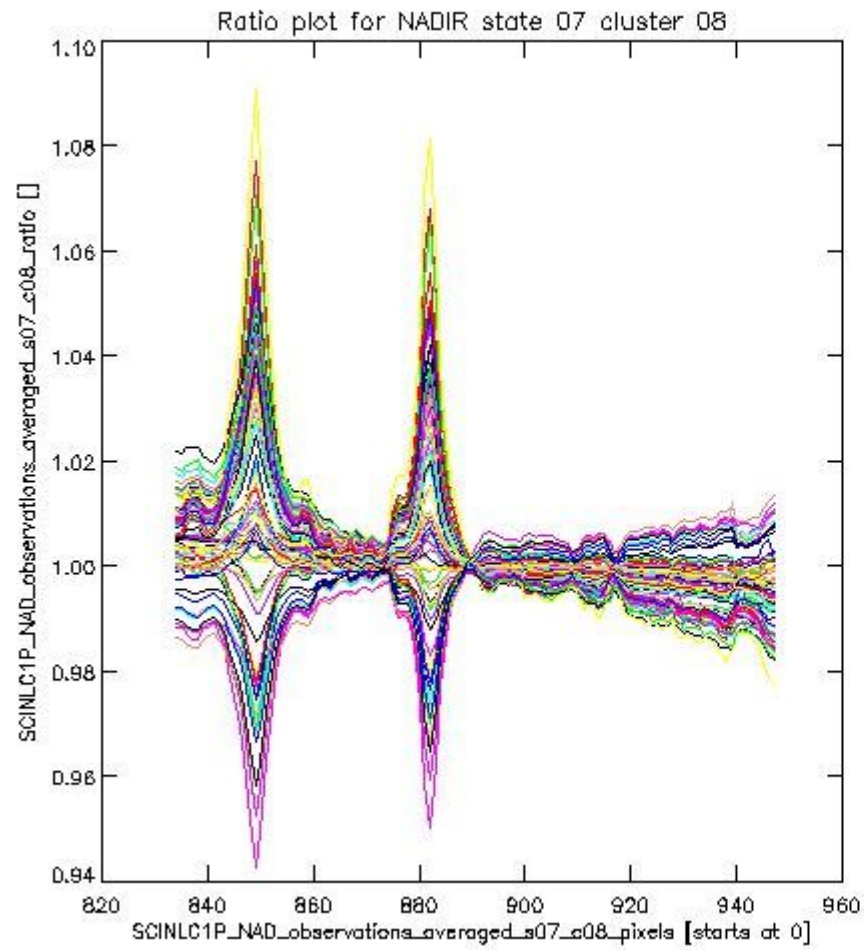
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

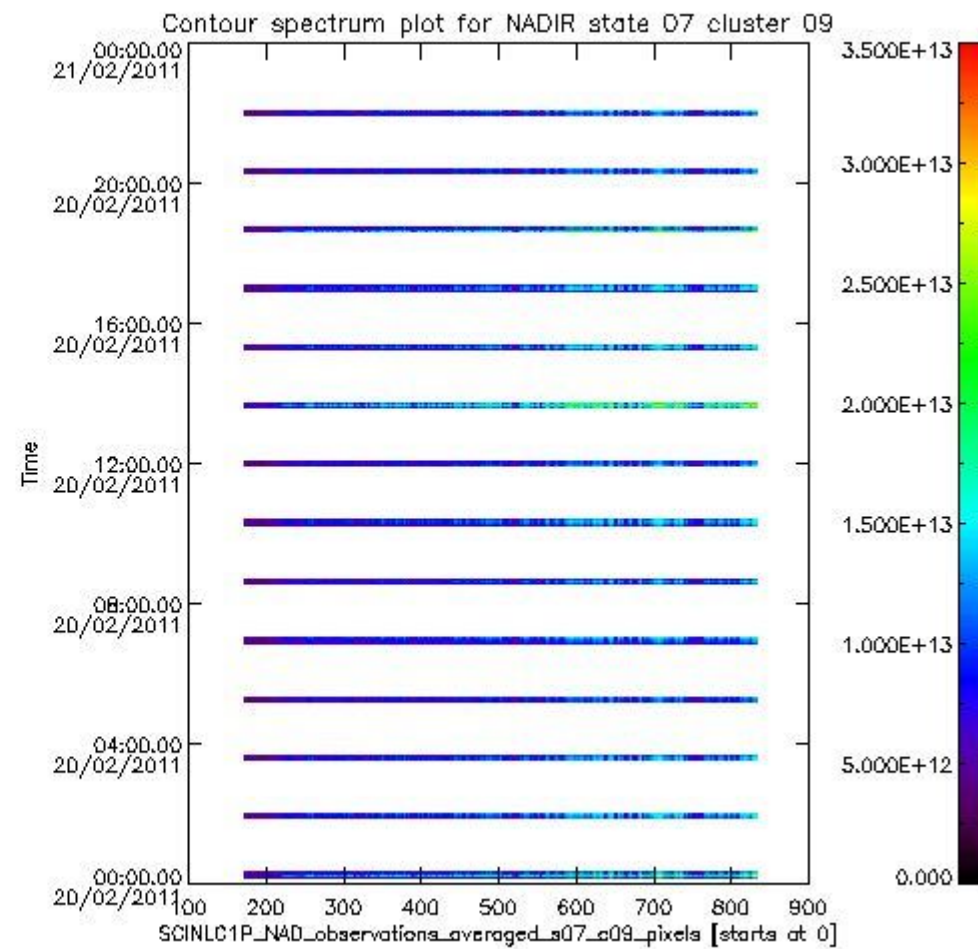
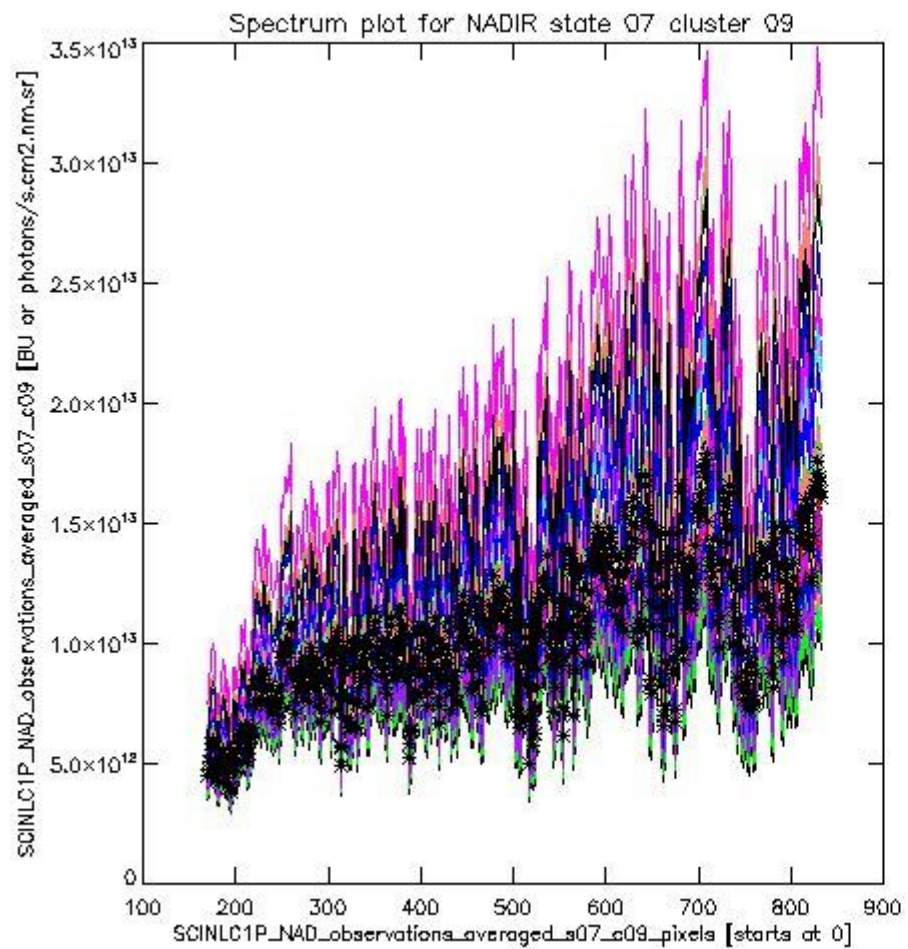
Item	Value
Start time of first sample	20FEB2011 00:10:24.846
Start time of last sample	20FEB2011 22:02:15.118
Reference period start time	21JAN2011 00:12:22.425
Reference period stop time	19FEB2011 22:39:37.630
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



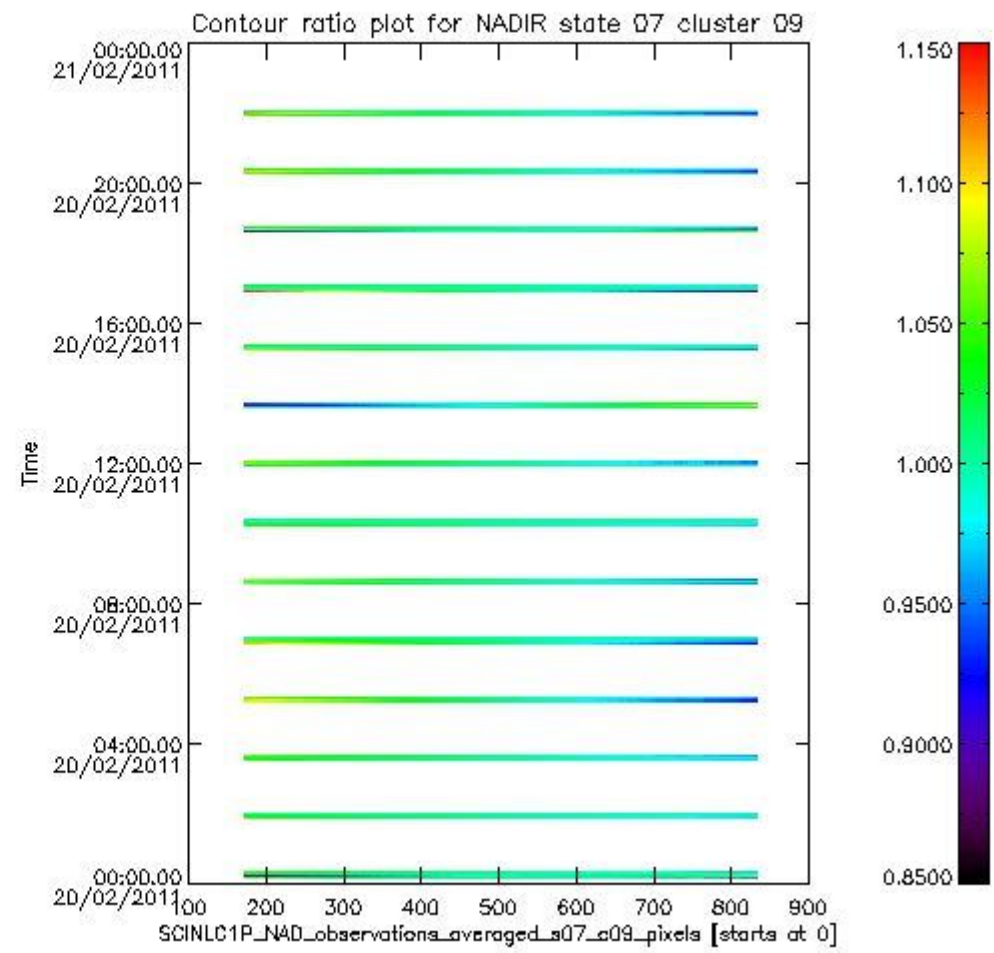
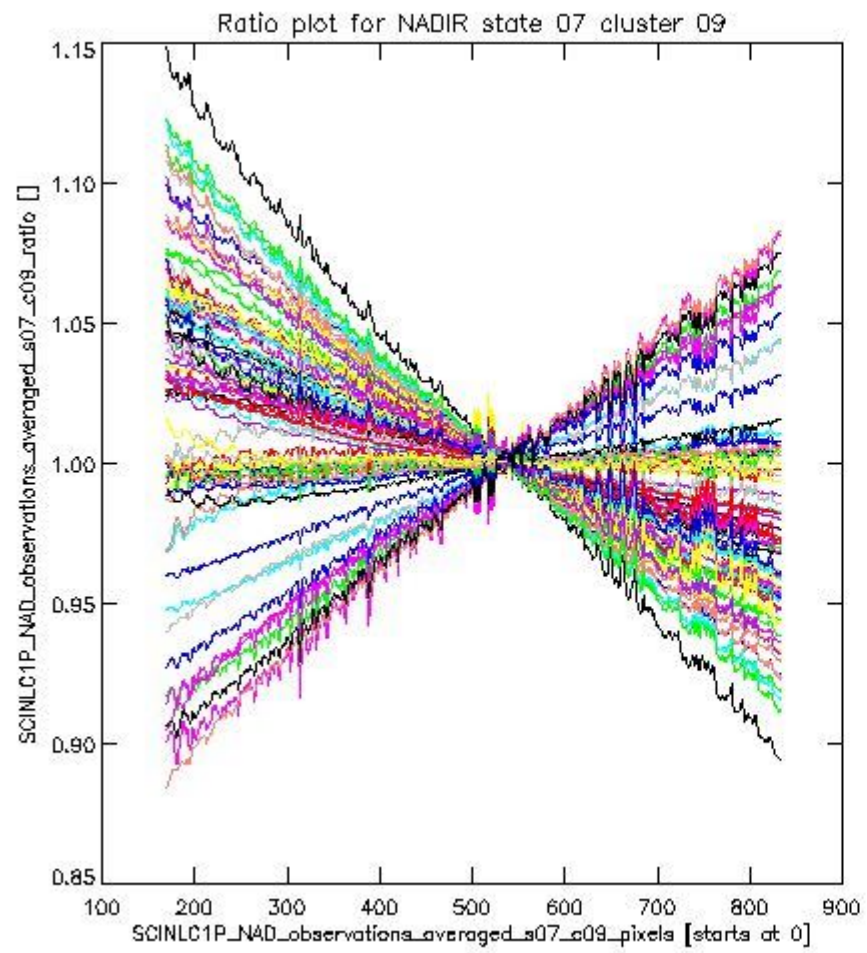


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	20FEB2011 00:10:24.846
Start time of last sample	20FEB2011 22:02:15.118
Reference period start time	21JAN2011 00:12:22.425
Reference period stop time	19FEB2011 22:39:37.630
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



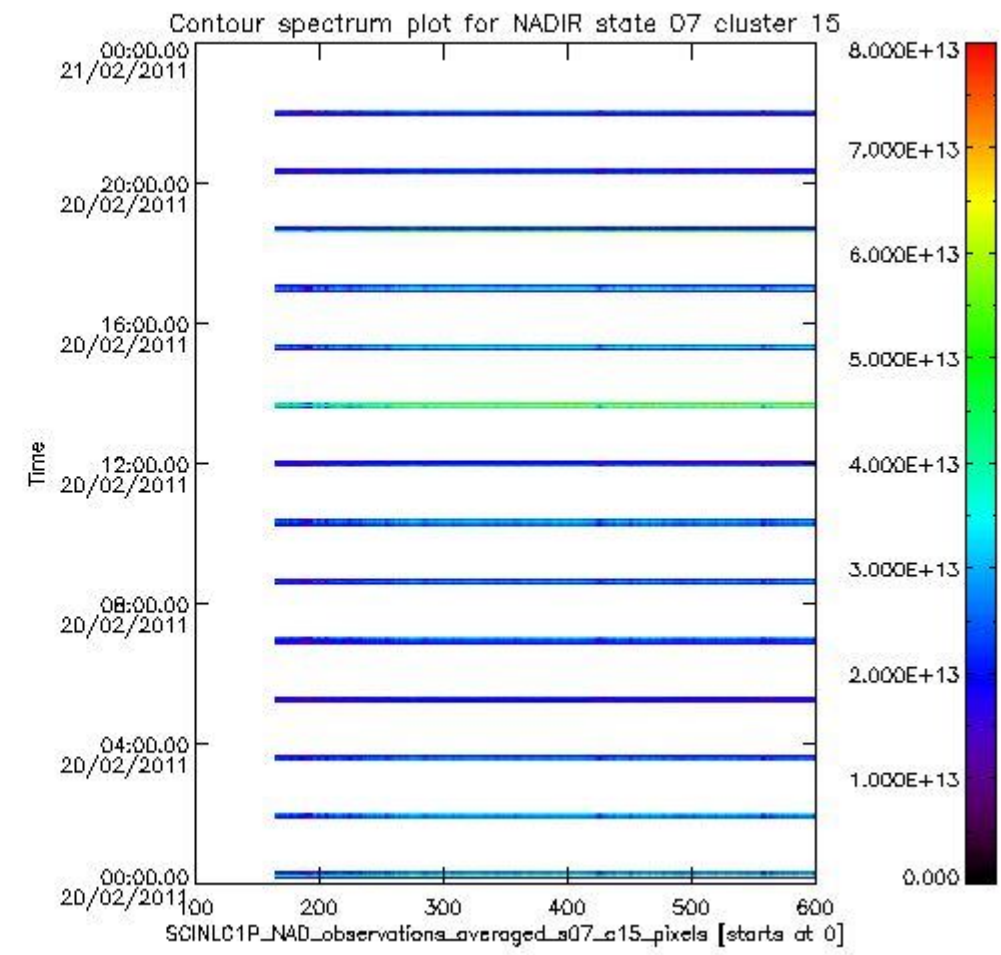
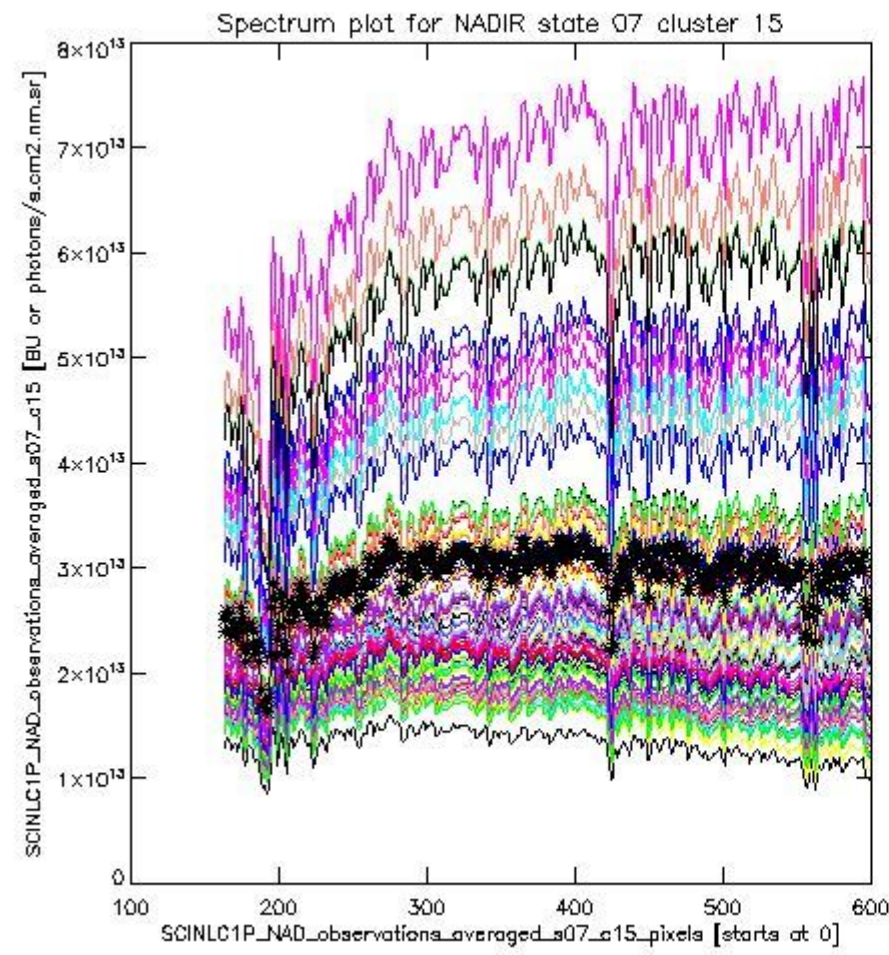
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_2.PNG



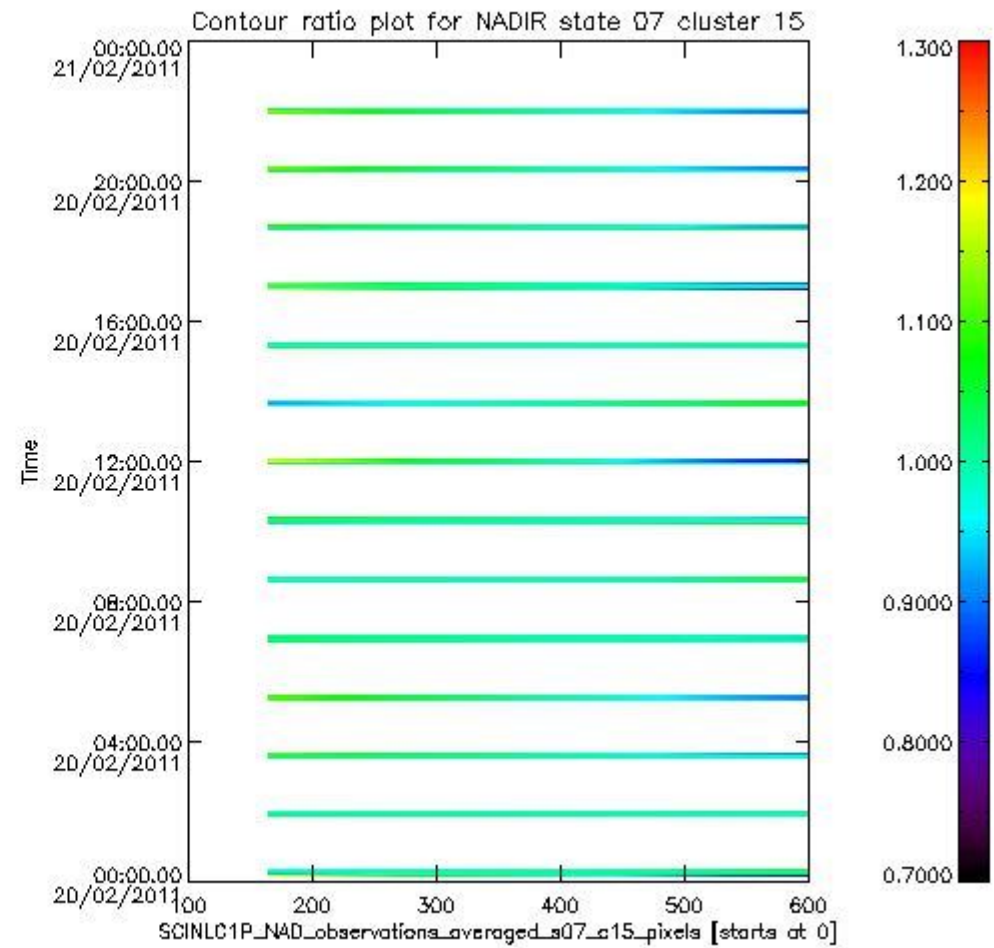
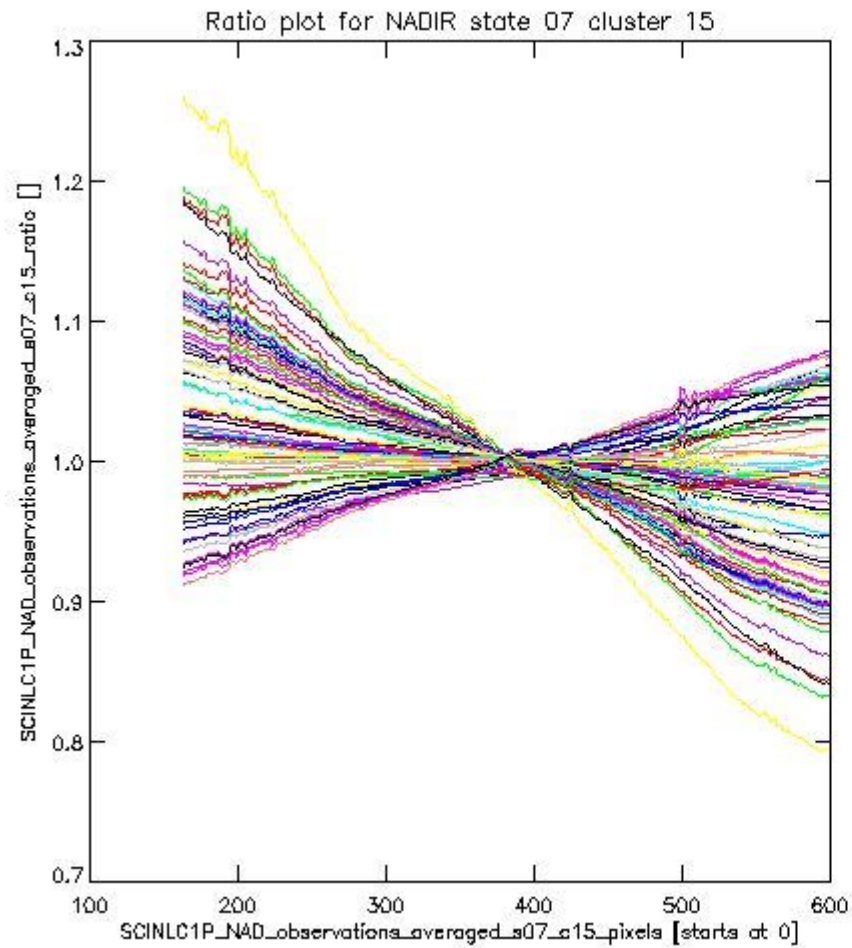
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_3.PNG

**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	20FEB2011 00:10:24.846
Start time of last sample	20FEB2011 22:02:15.118
Reference period start time	21JAN2011 00:12:22.425
Reference period stop time	19FEB2011 22:39:37.630
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



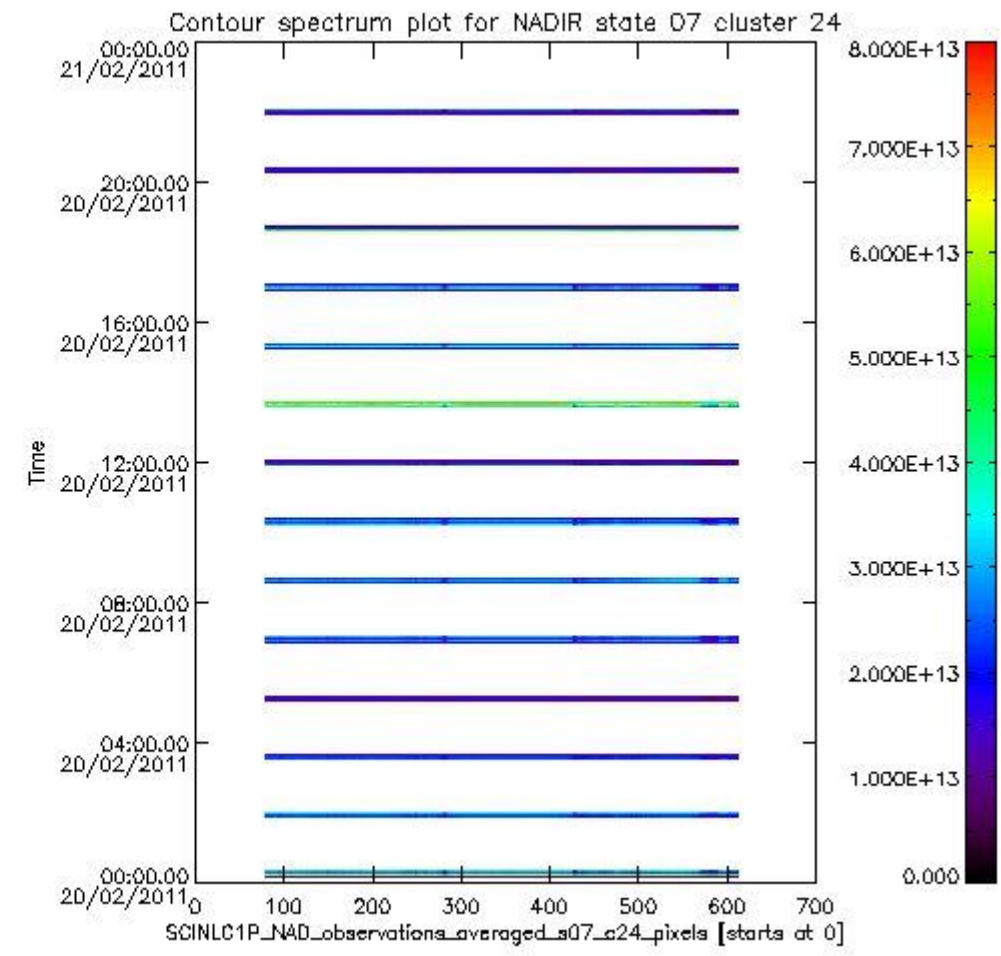
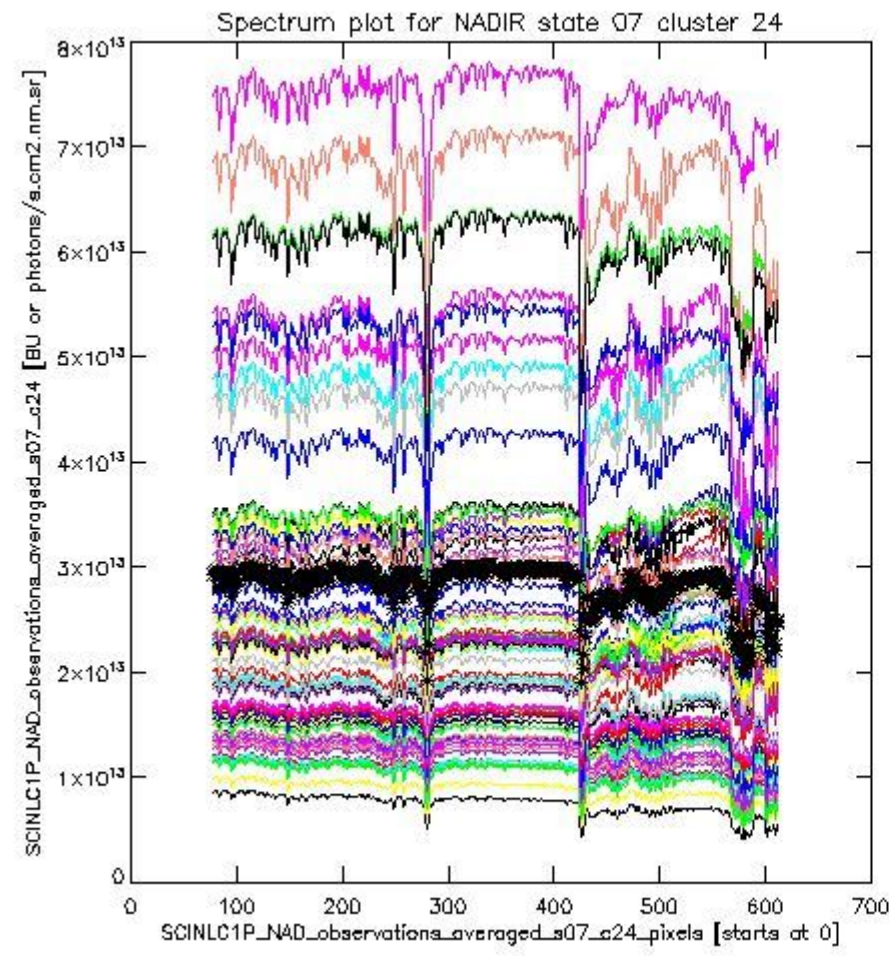
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_5.PNG

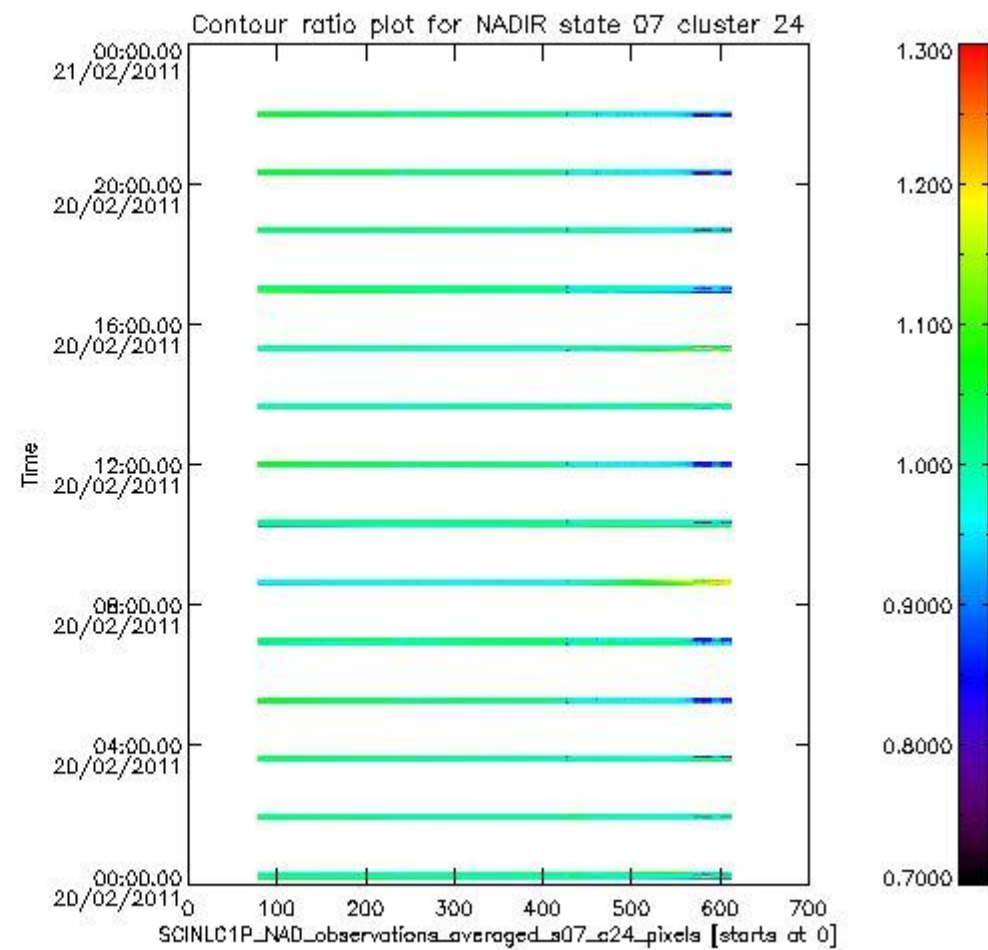
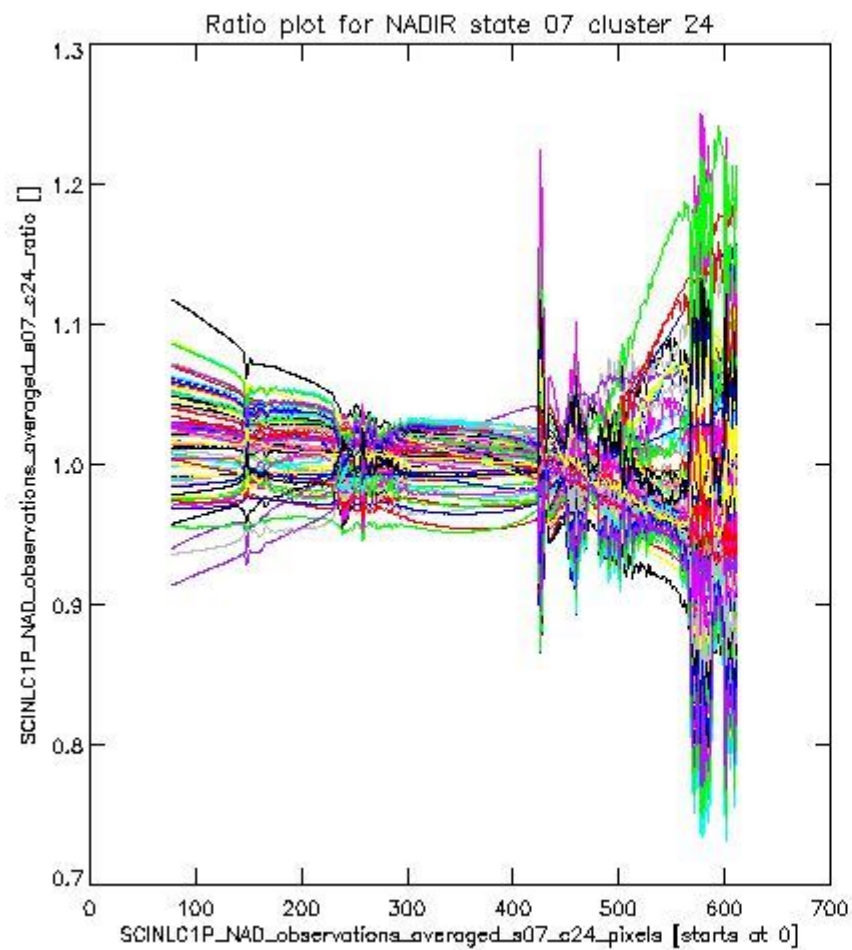
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	20FEB2011 00:10:24.846
Start time of last sample	20FEB2011 22:02:15.118
Reference period start time	21JAN2011 00:12:22.425
Reference period stop time	19FEB2011 22:39:37.630
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\_20110220\_6.PNG

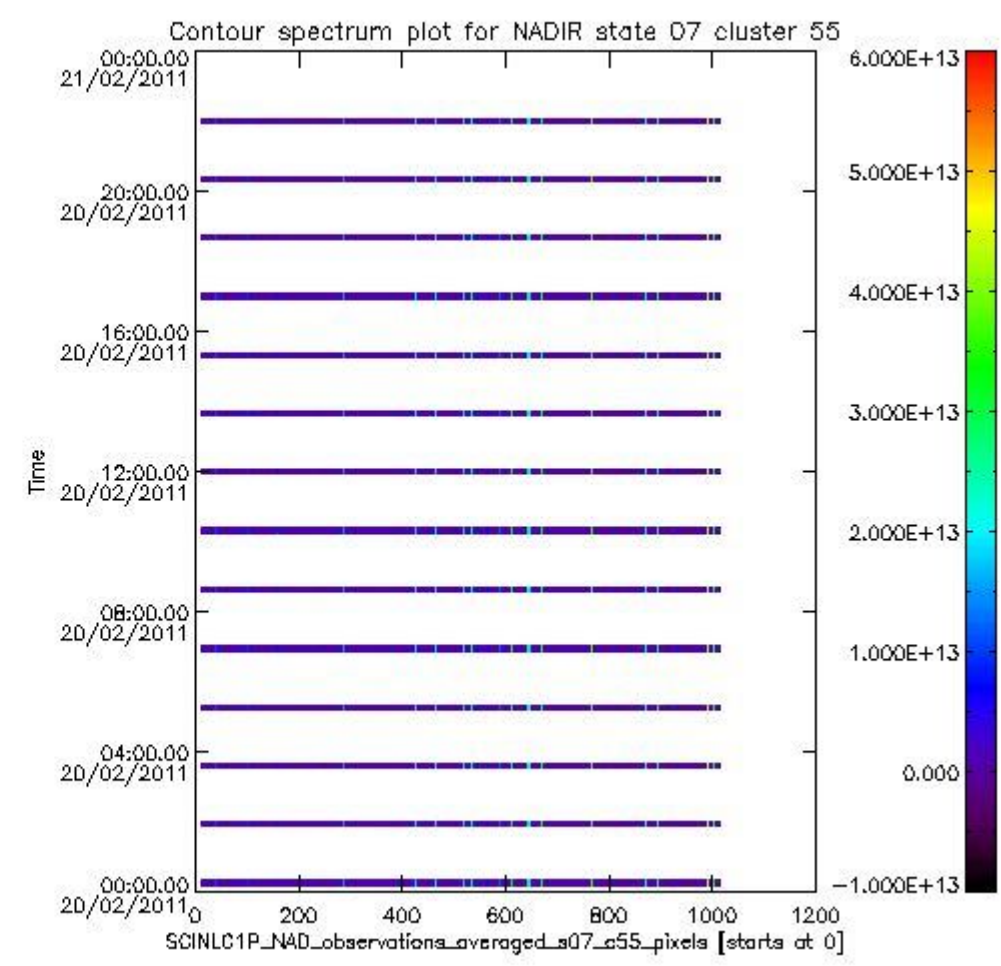
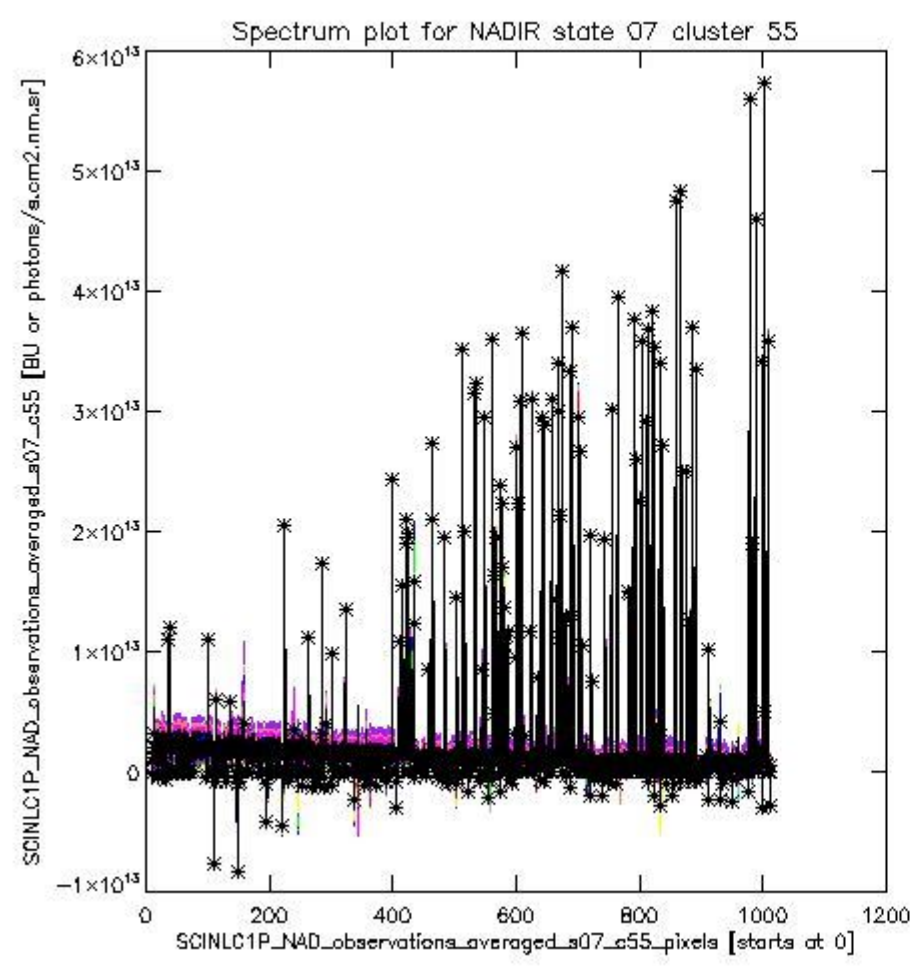




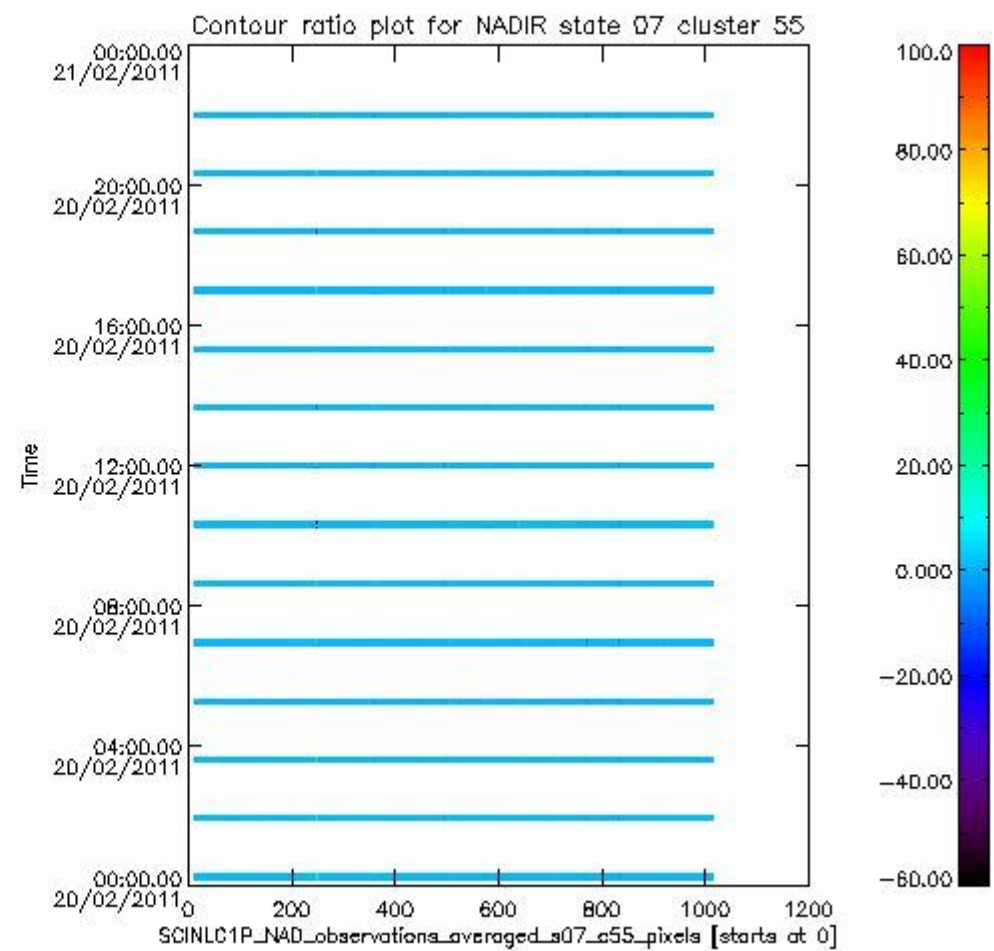
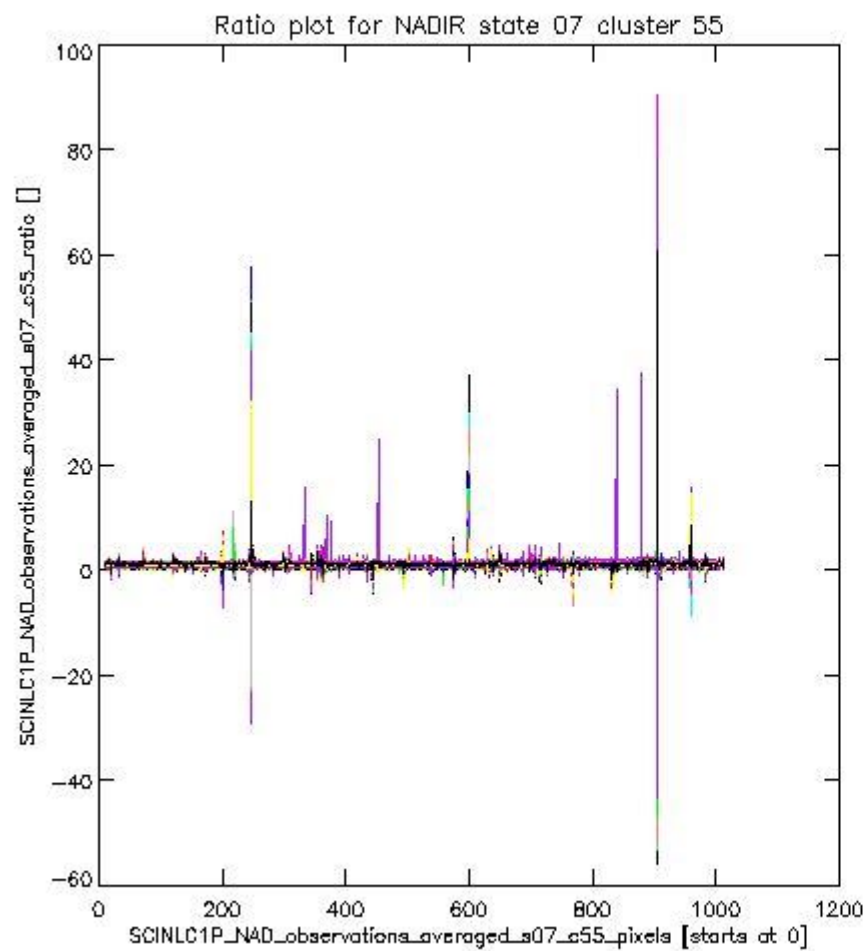
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_7.PNG

**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	20FEB2011 00:10:24.846
Start time of last sample	20FEB2011 22:02:15.118
Reference period start time	21JAN2011 00:12:22.425
Reference period stop time	19FEB2011 22:39:37.630
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



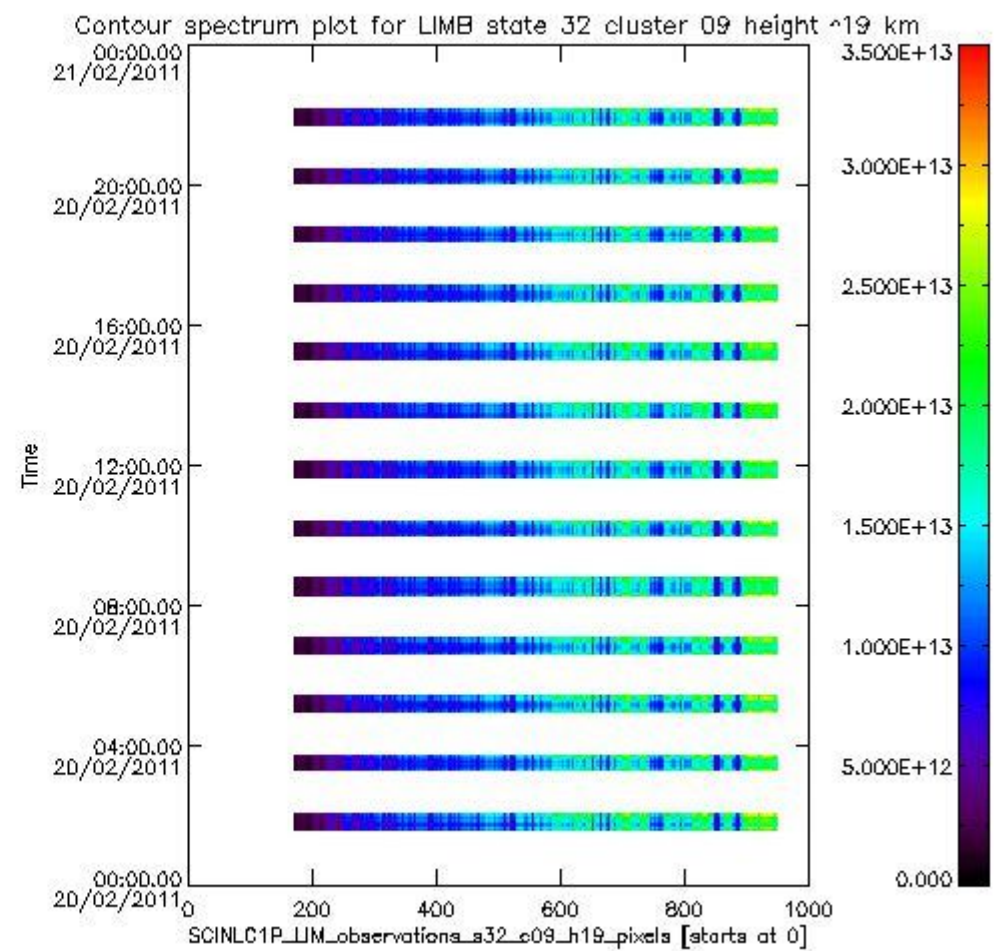
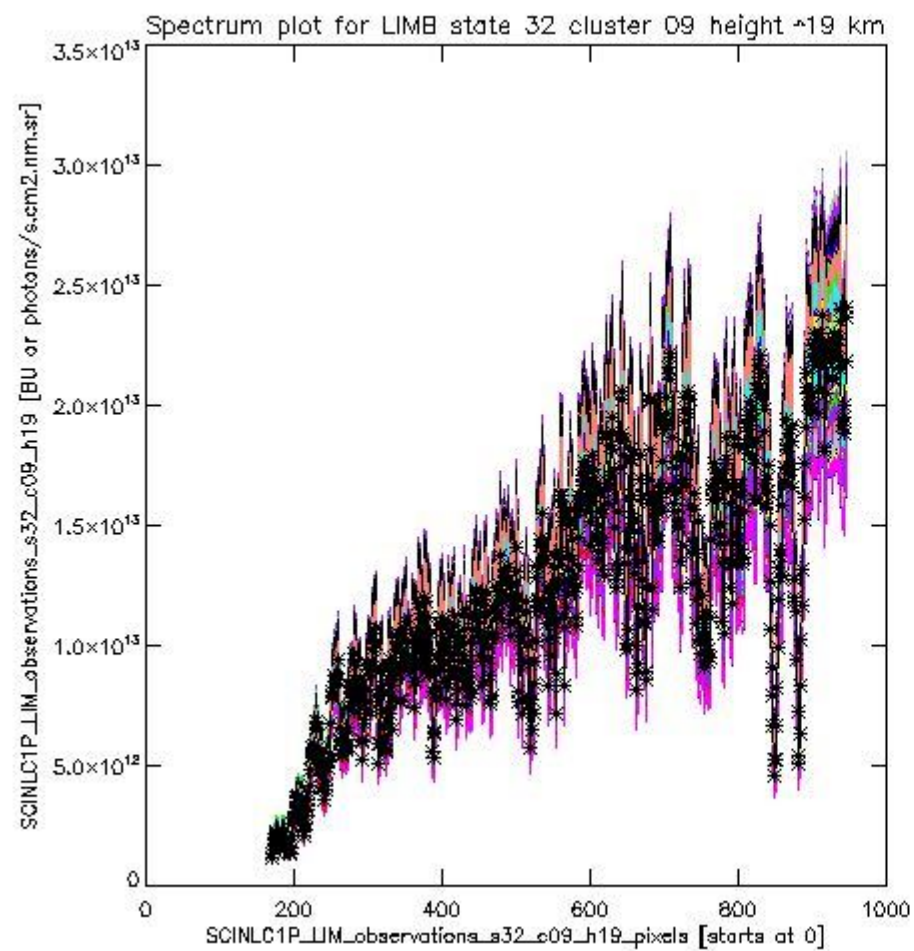
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_8.PNG



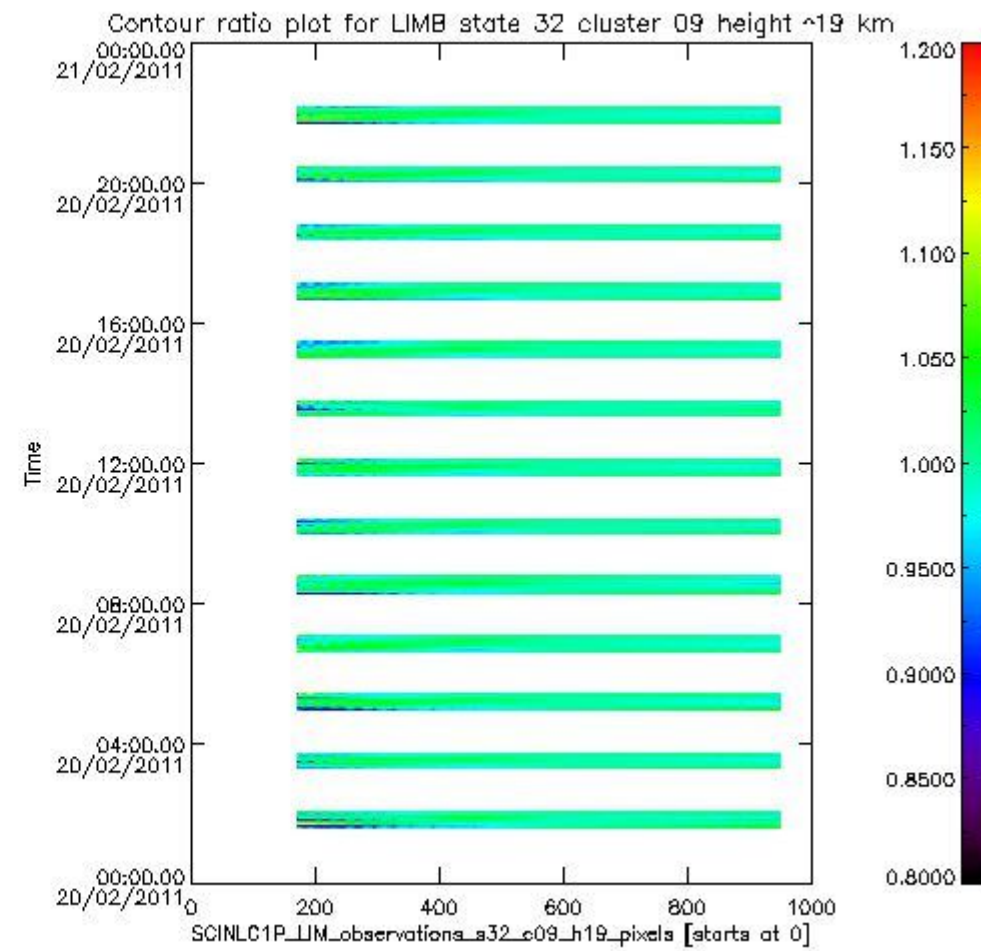
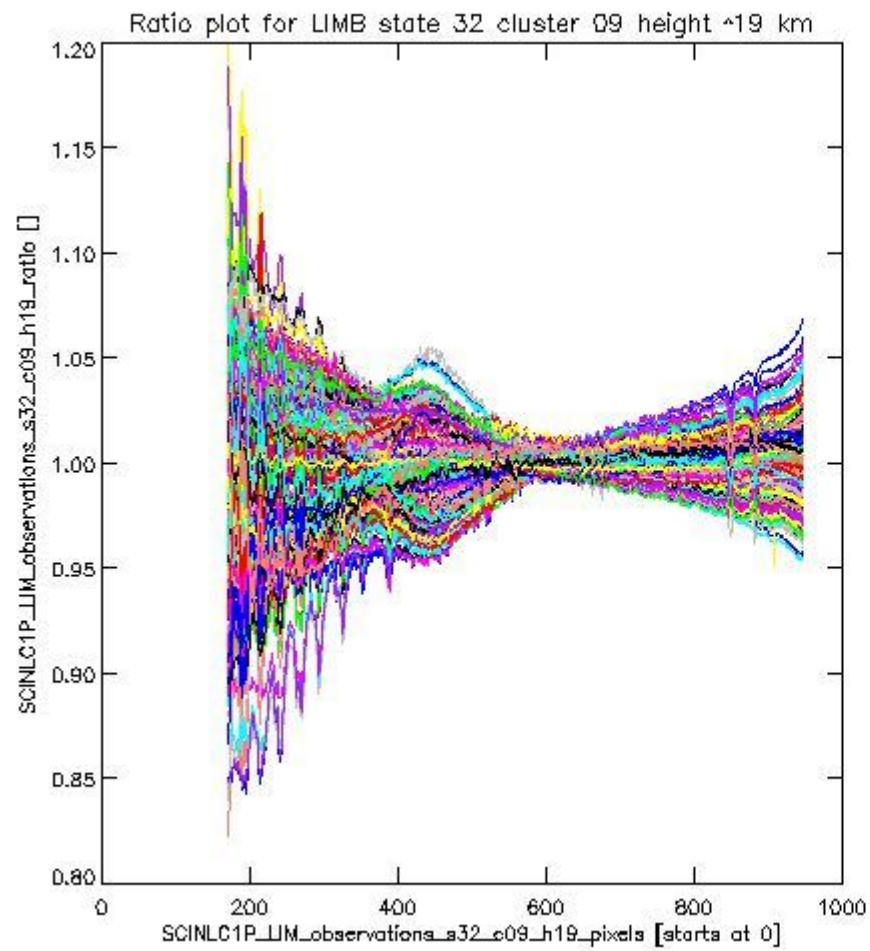
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_9.PNG

**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	20FEB2011 01:36:08.179
Start time of last sample	20FEB2011 22:07:29.161
Reference period start time	21JAN2011 00:01:14.531
Reference period stop time	18FEB2011 23:21:10.065
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



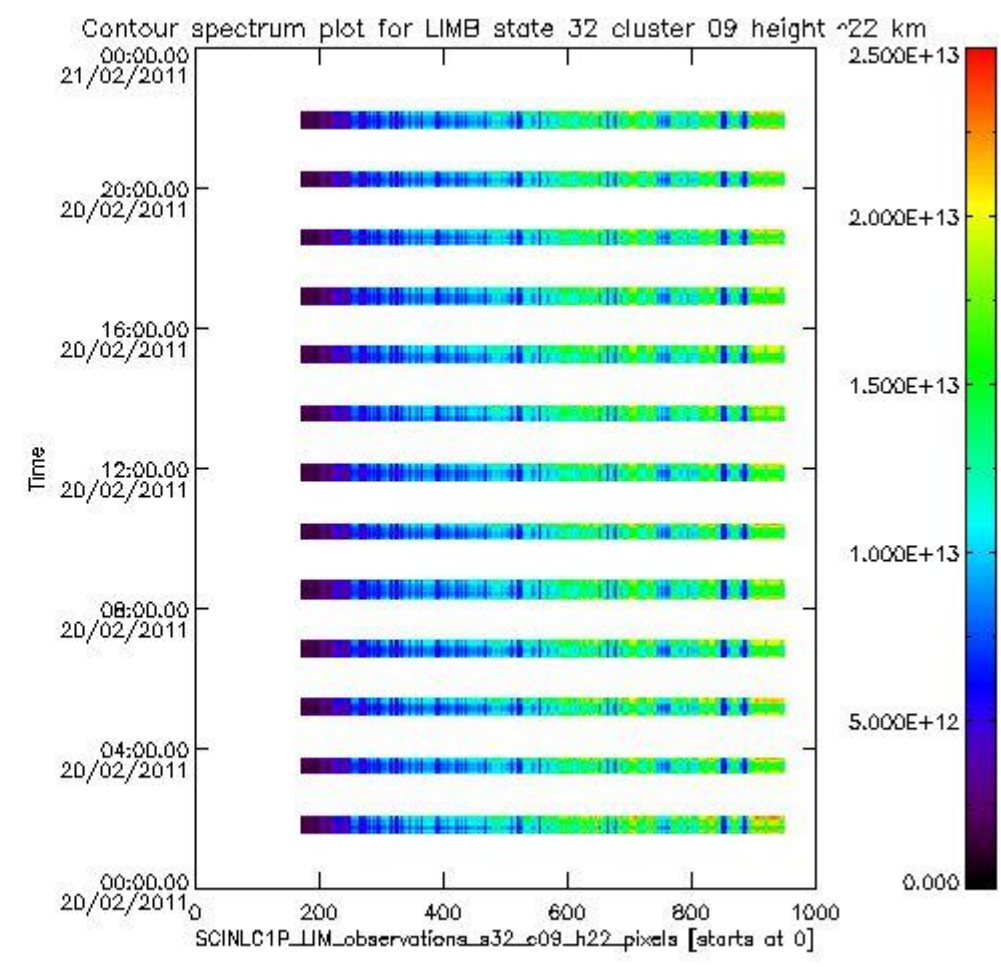
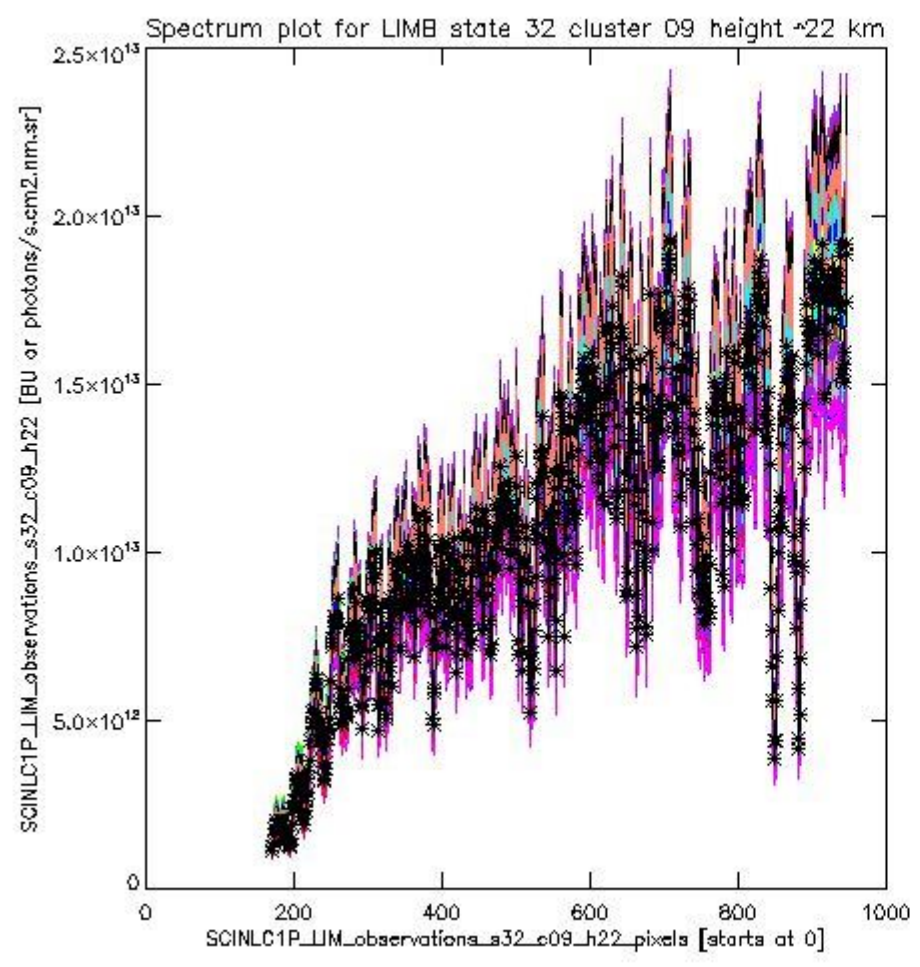
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_10.PNG



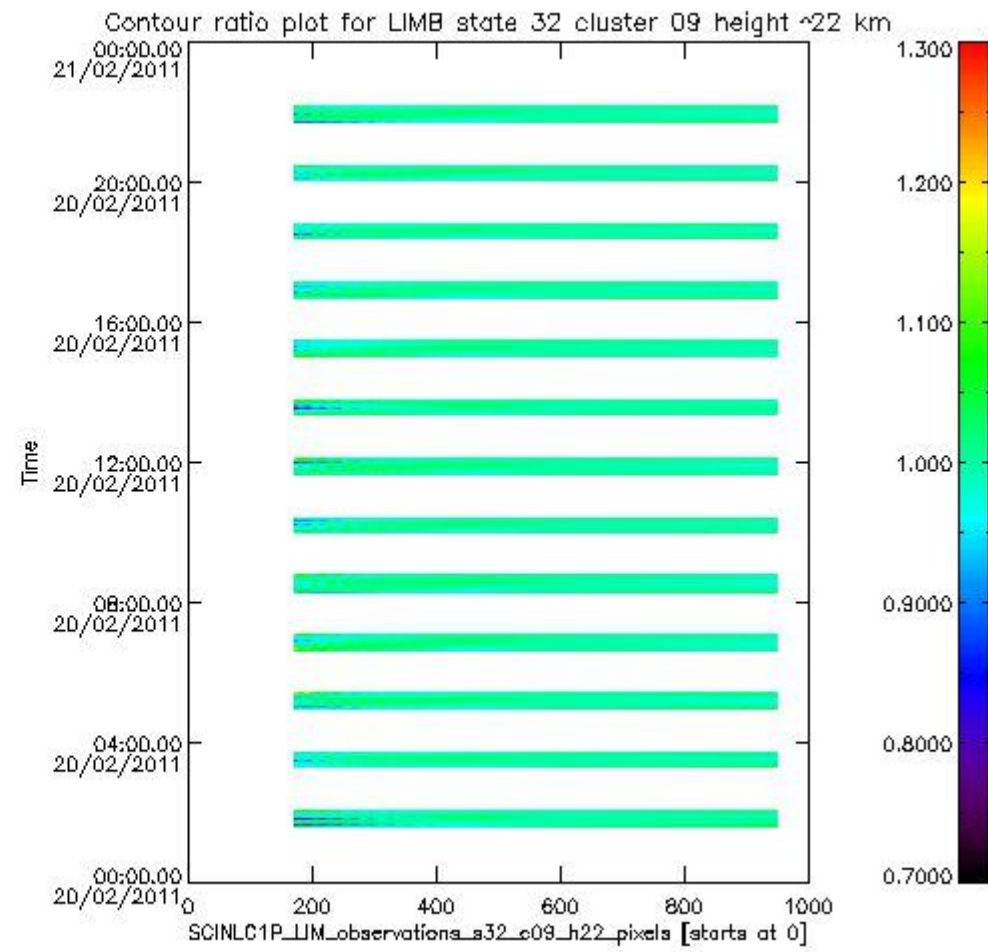
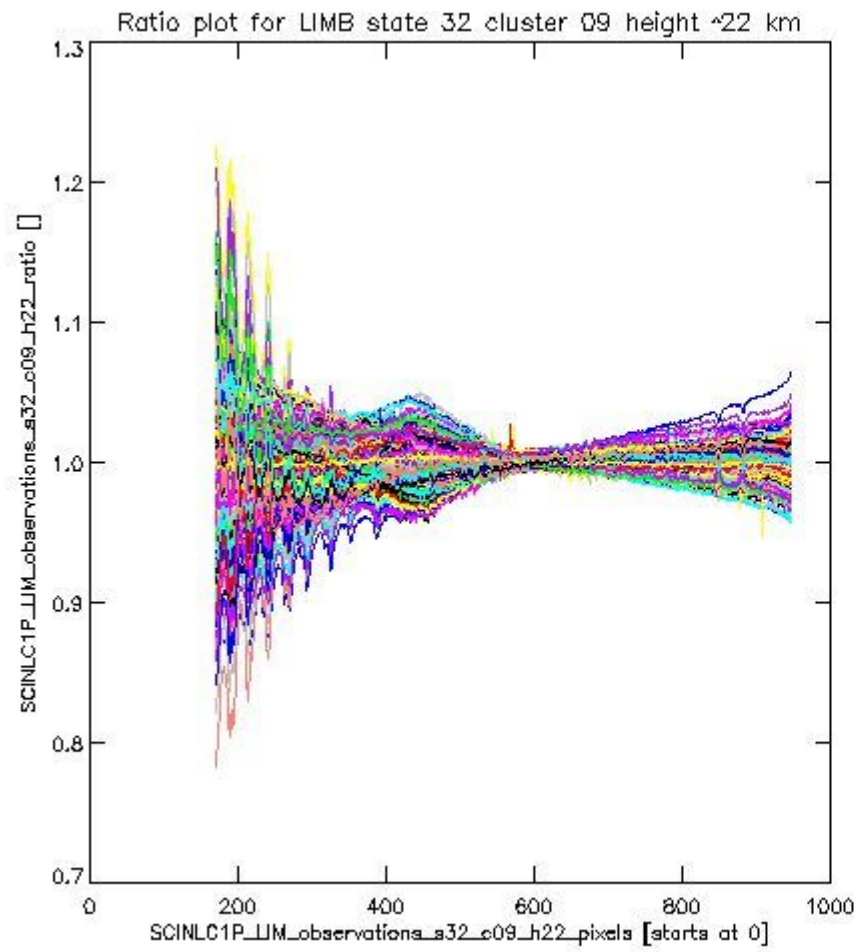
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_11.PNG

**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	20FEB2011 01:36:08.179
Start time of last sample	20FEB2011 22:07:29.161
Reference period start time	21JAN2011 00:01:14.531
Reference period stop time	18FEB2011 23:21:10.065
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



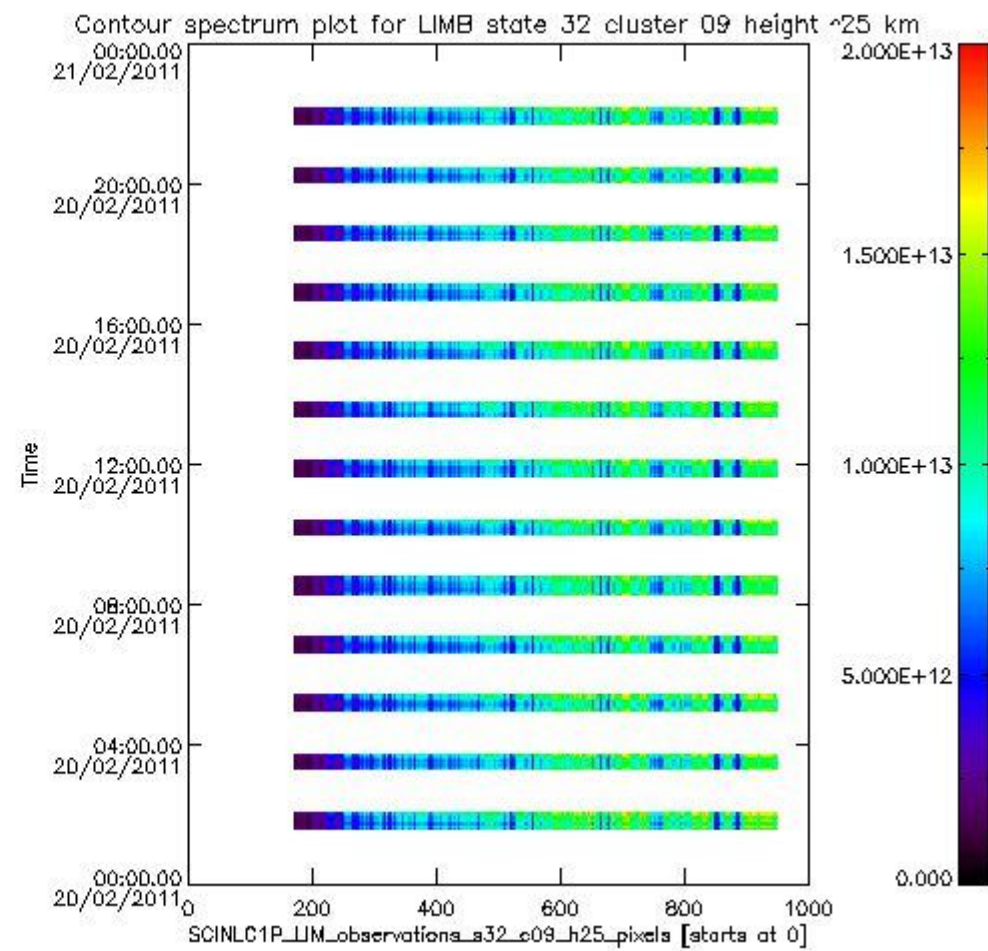
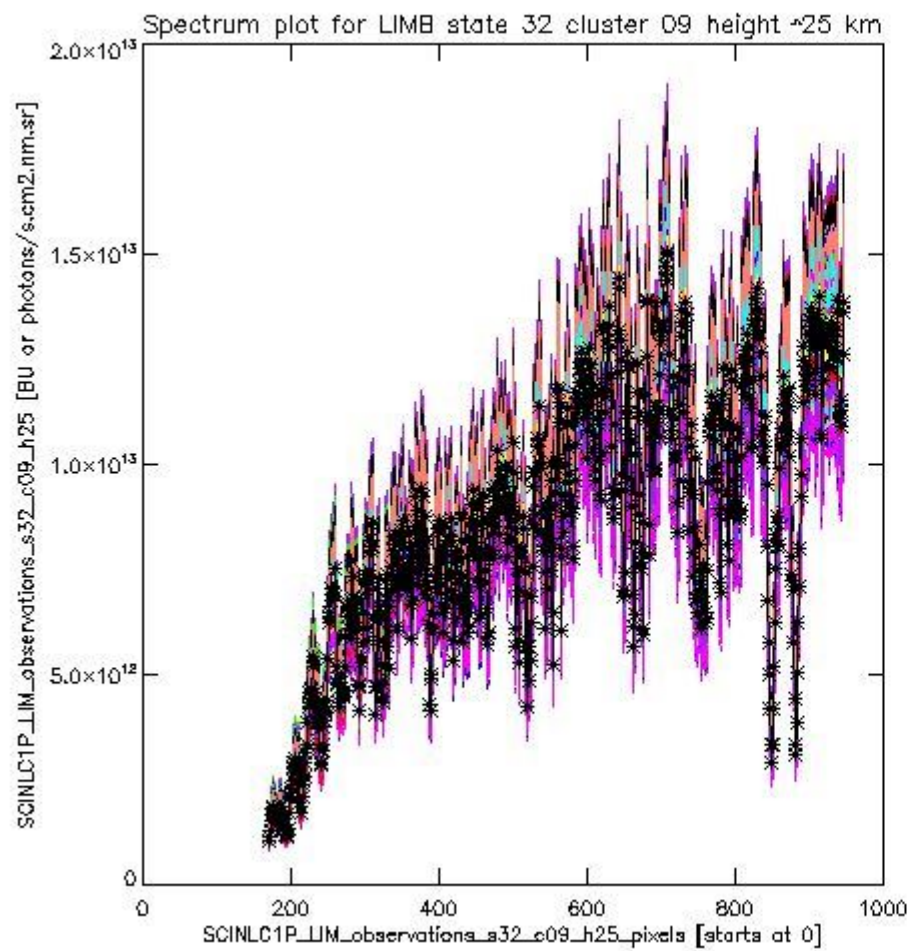
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_13.PNG

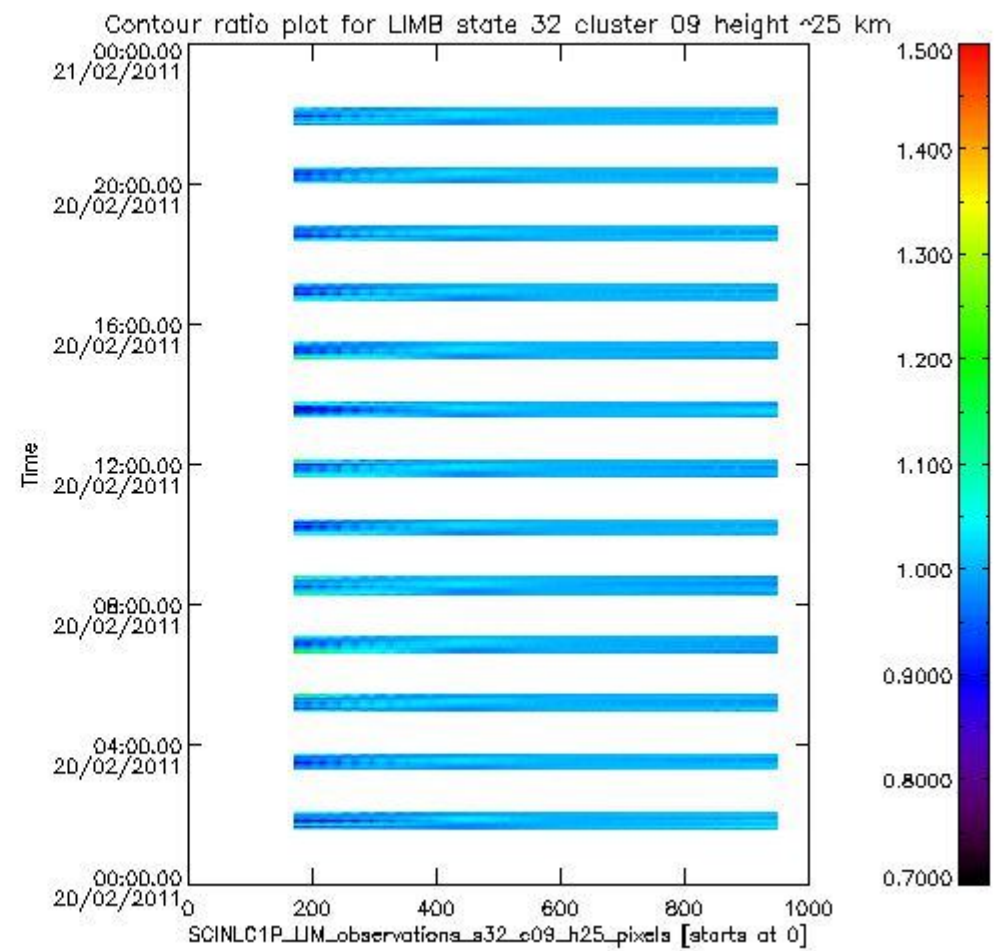
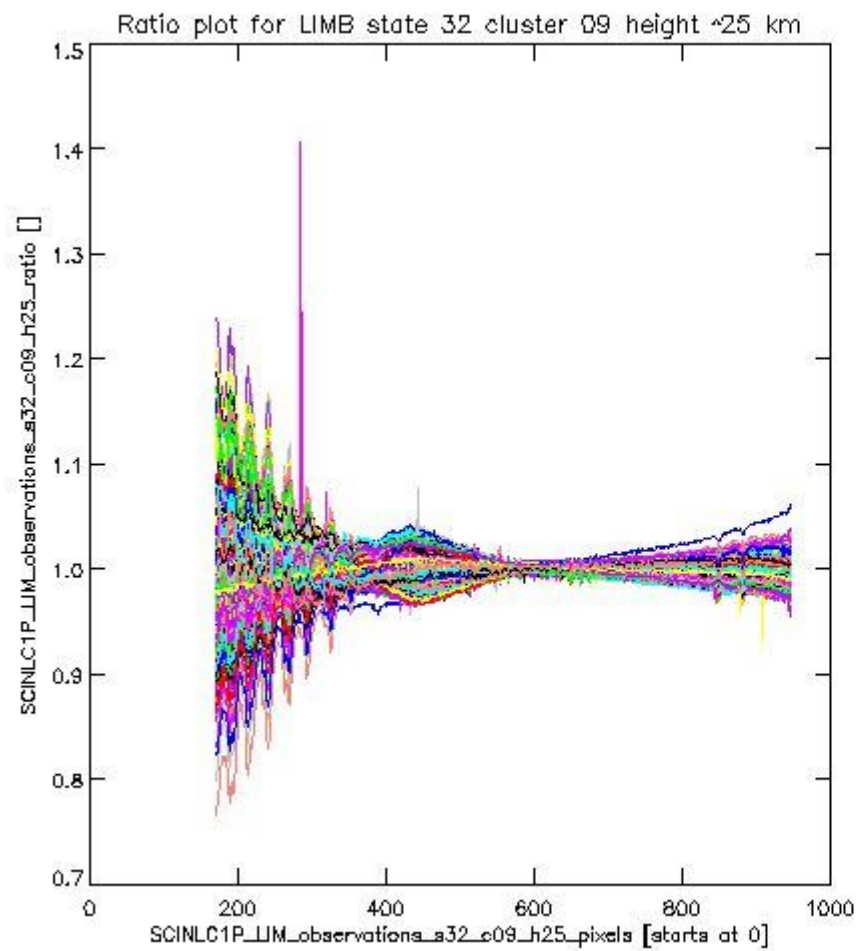
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	20FEB2011 01:36:08.179
Start time of last sample	20FEB2011 22:07:29.161
Reference period start time	21JAN2011 00:01:14.531
Reference period stop time	18FEB2011 23:21:10.065
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\_20110220\_14.PNG

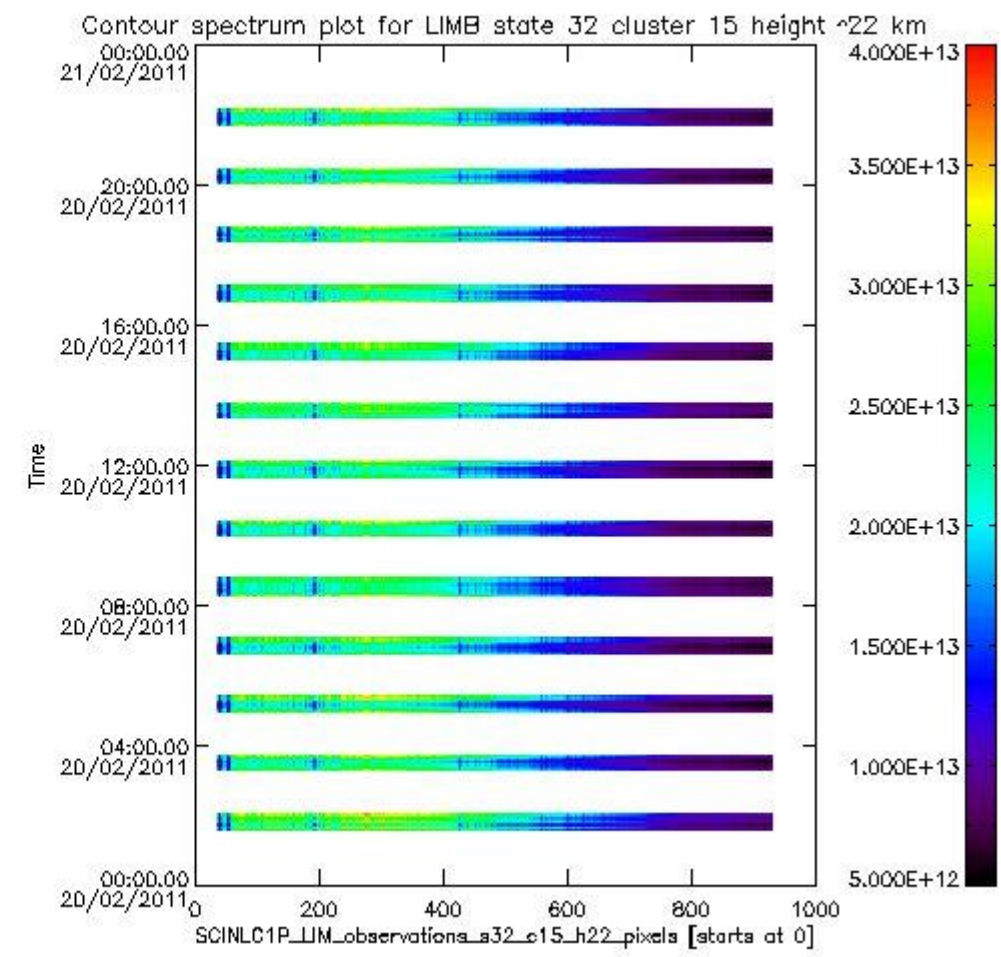
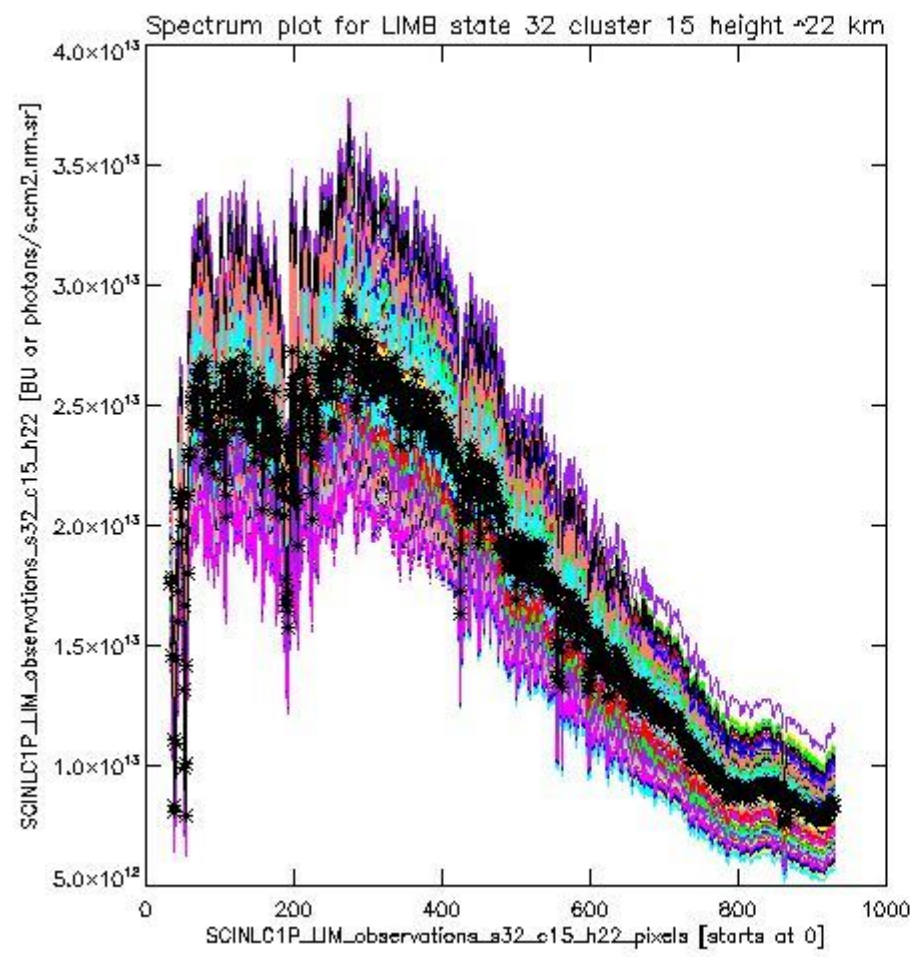




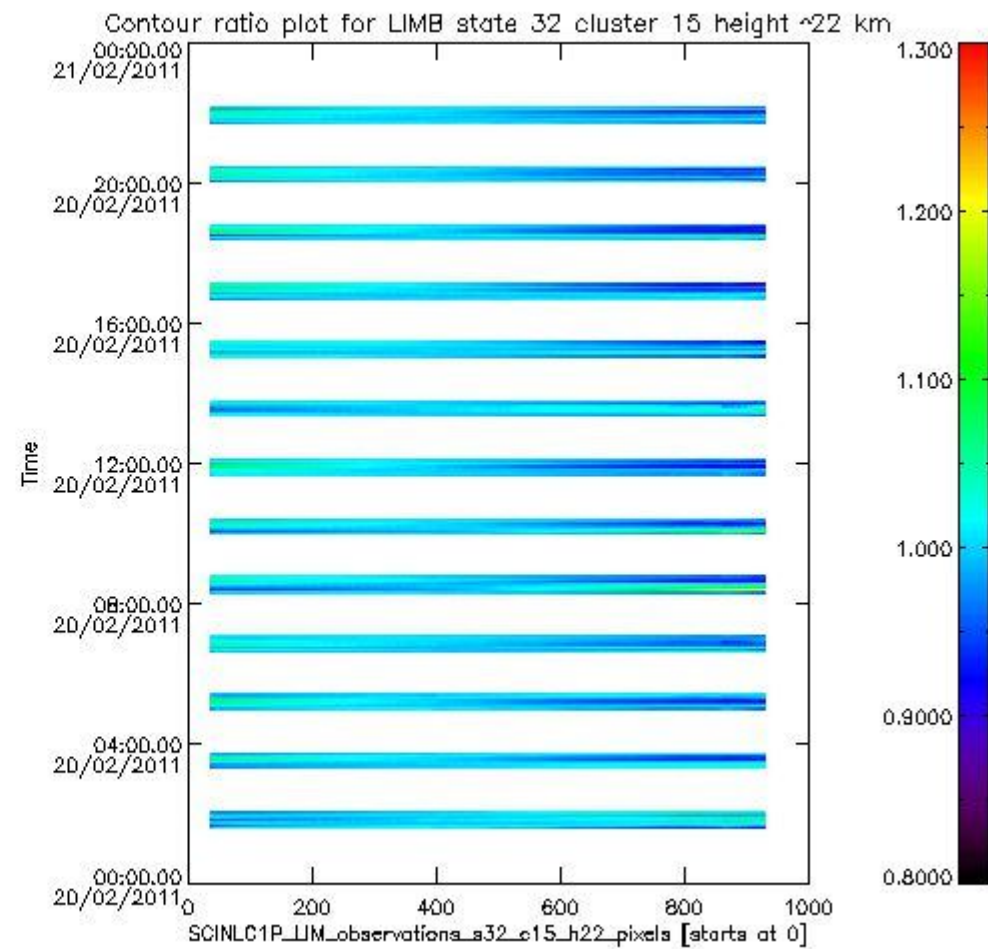
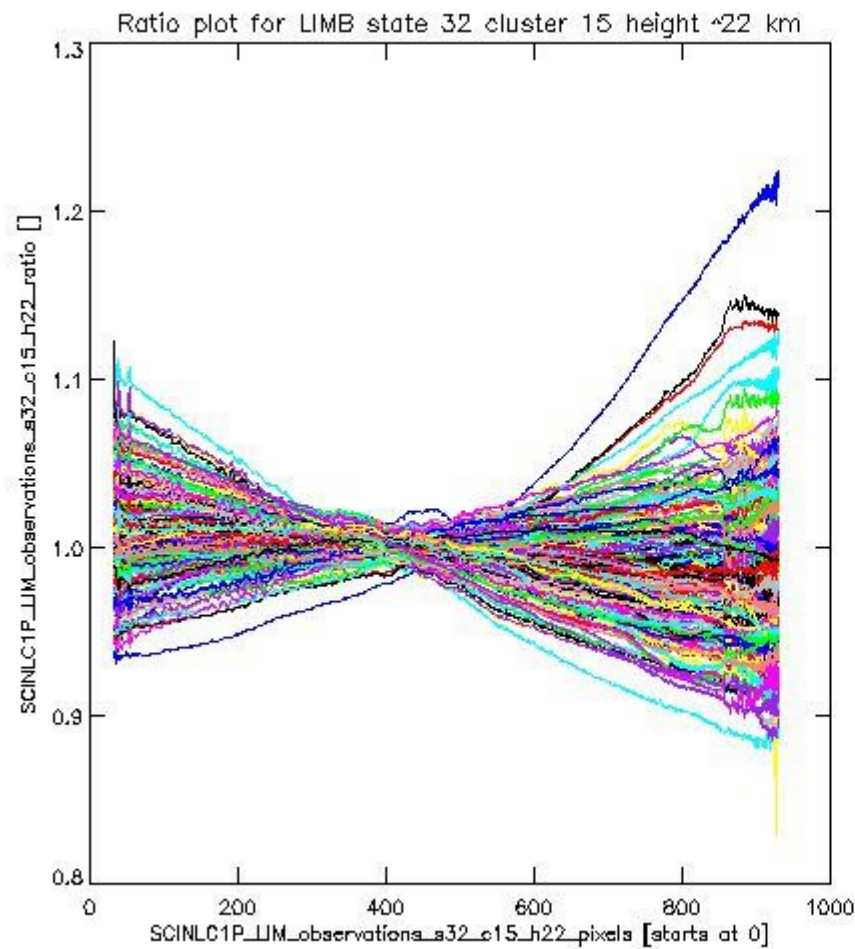
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_15.PNG

**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	20FEB2011 01:36:08.179
Start time of last sample	20FEB2011 22:07:29.161
Reference period start time	21JAN2011 00:01:14.531
Reference period stop time	18FEB2011 23:21:10.065
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



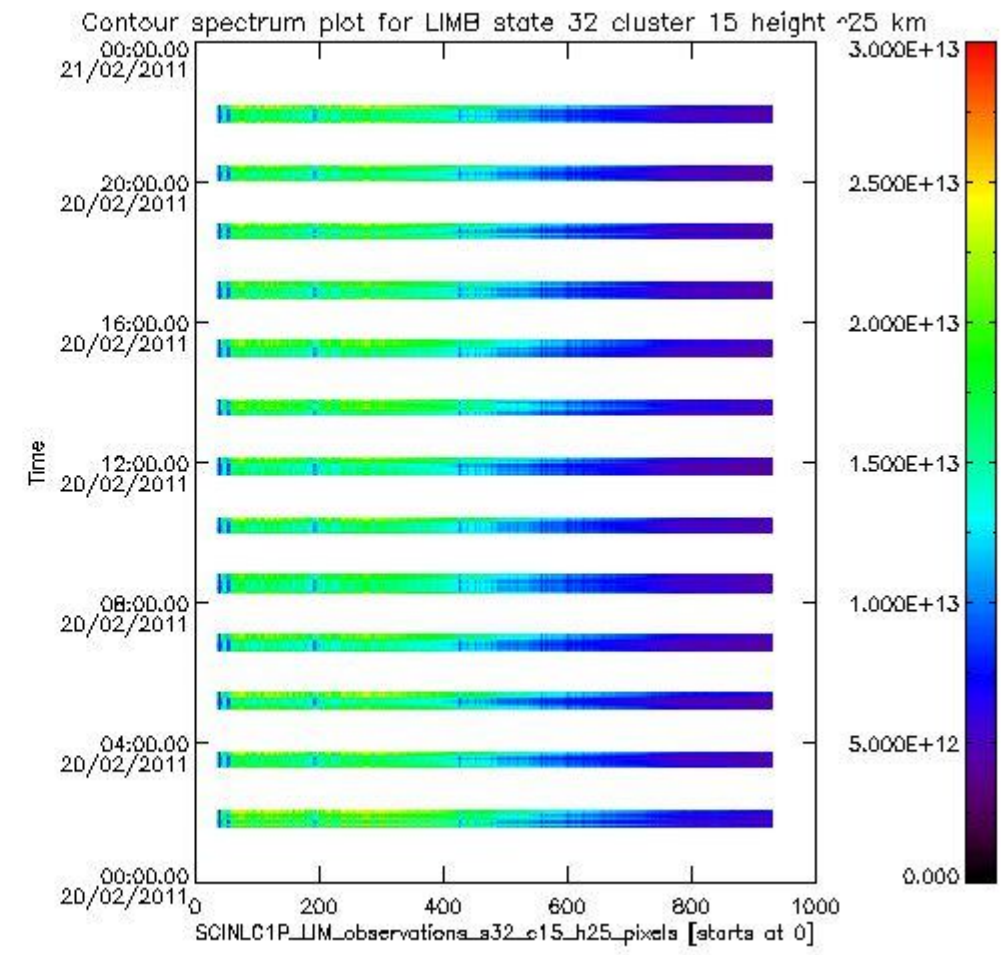
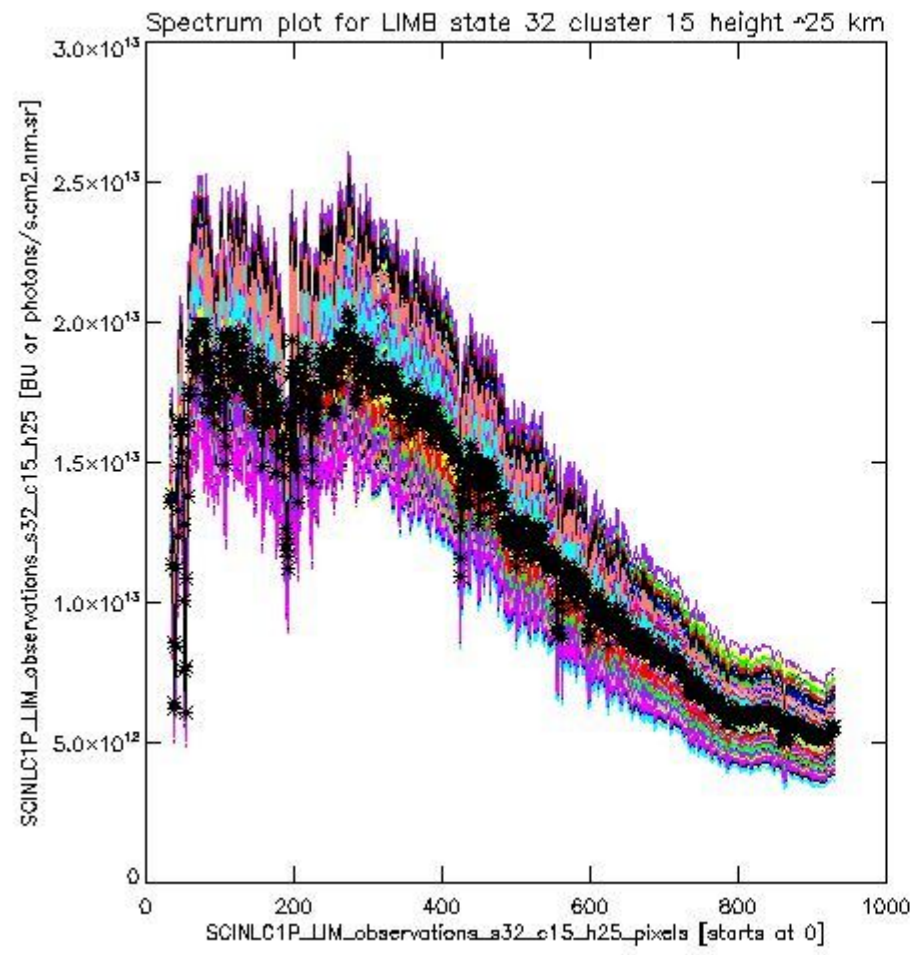
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_16.PNG



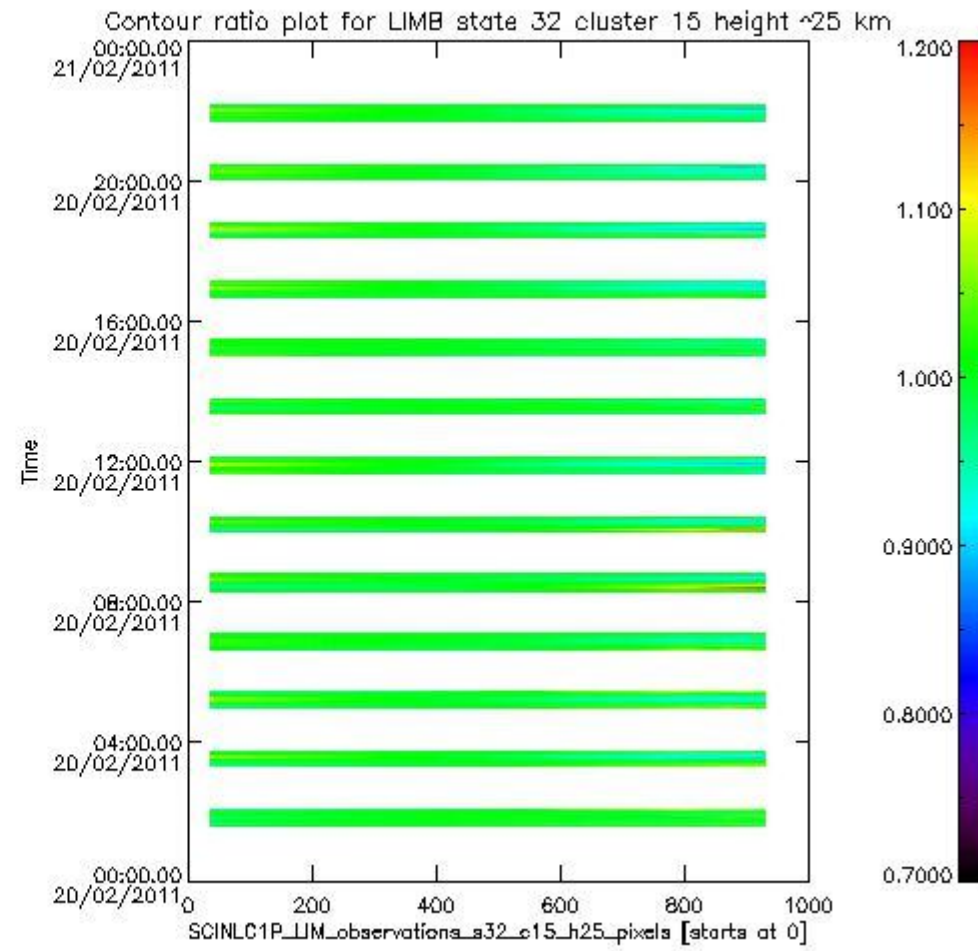
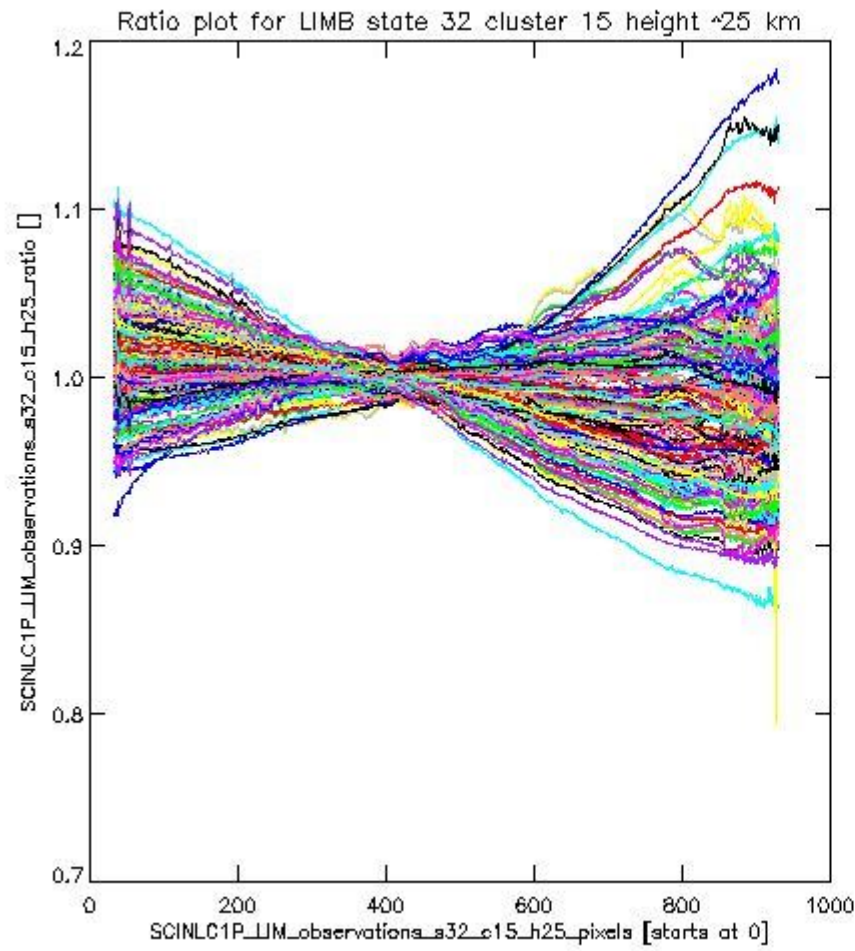
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_17.PNG

**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	20FEB2011 01:36:08.179
Start time of last sample	20FEB2011 22:07:29.161
Reference period start time	21JAN2011 00:01:14.531
Reference period stop time	18FEB2011 23:21:10.065
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



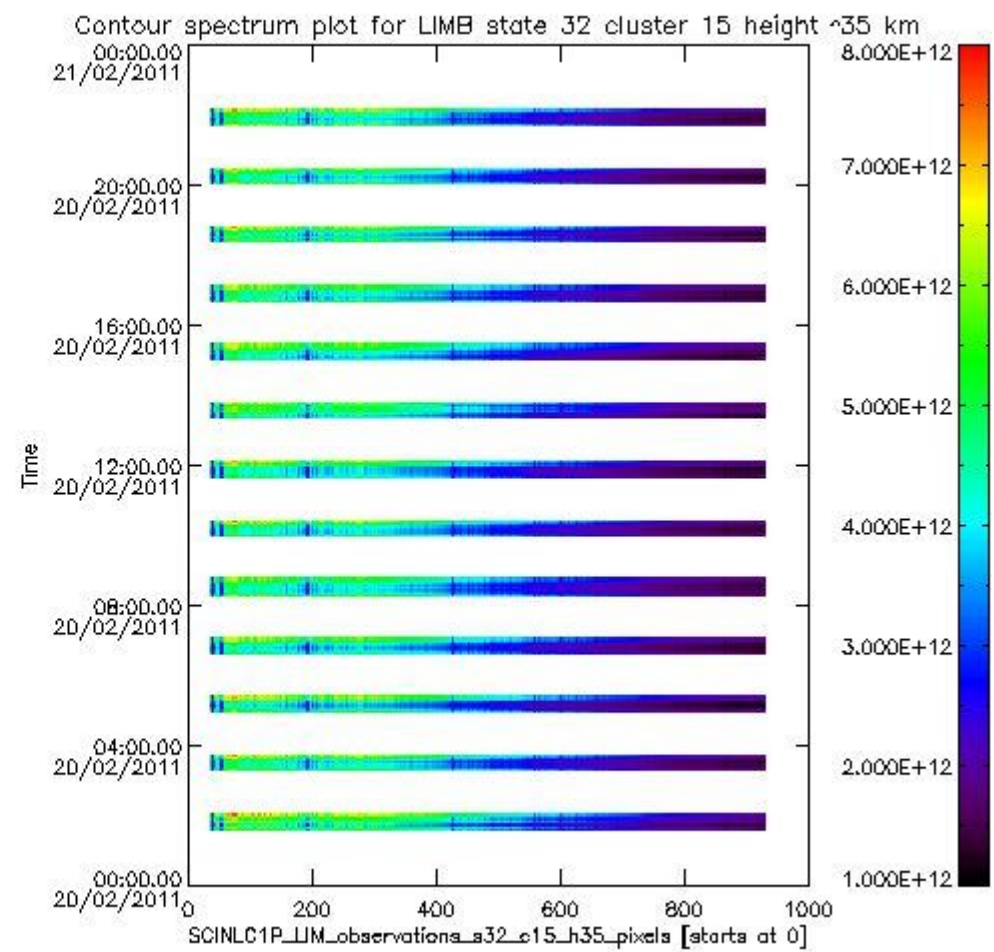
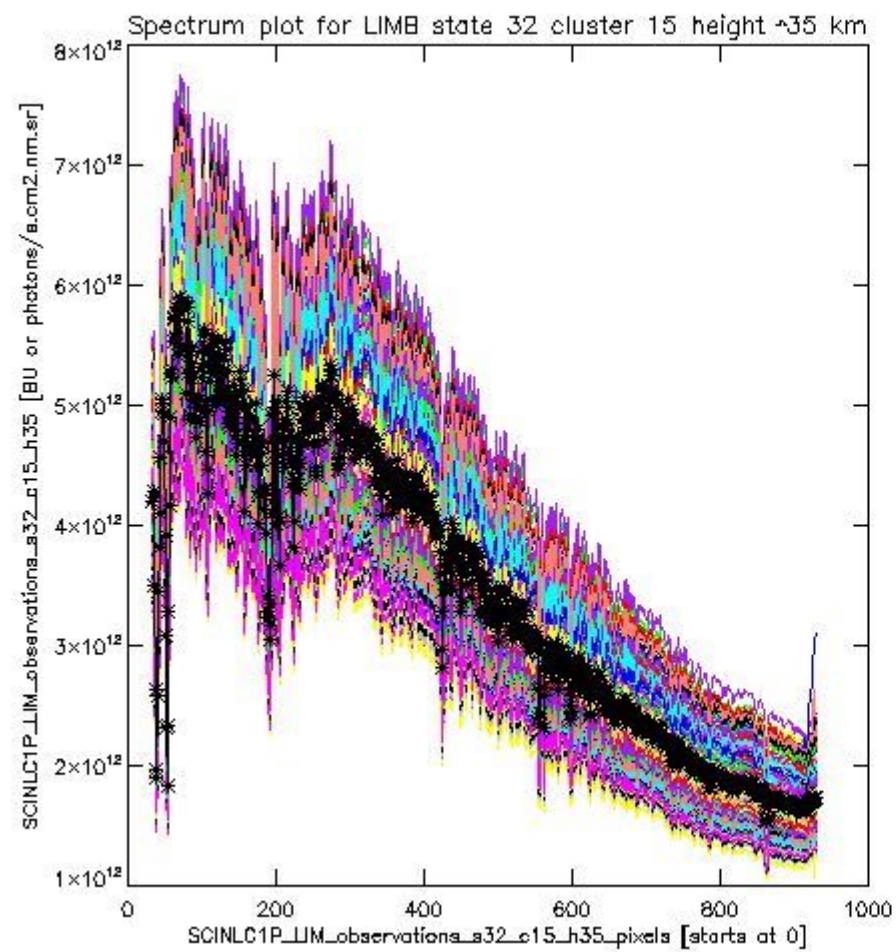
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_18.PNG



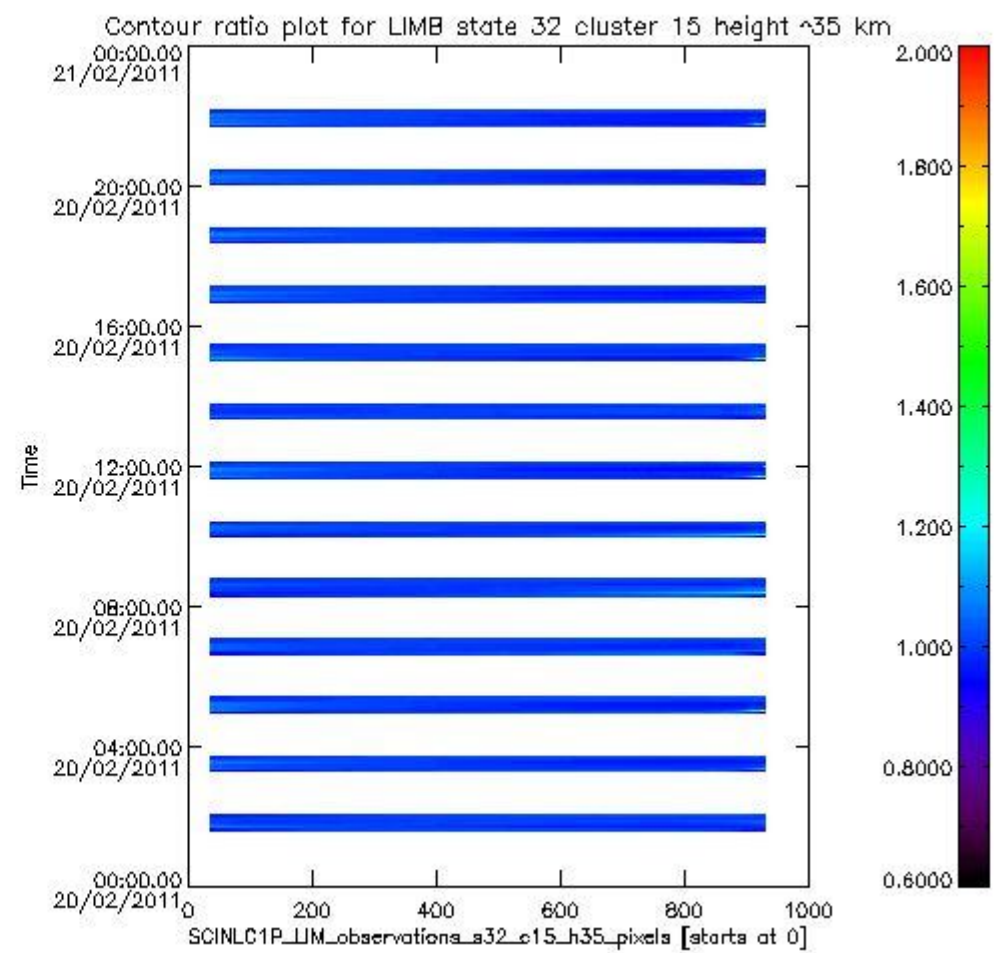
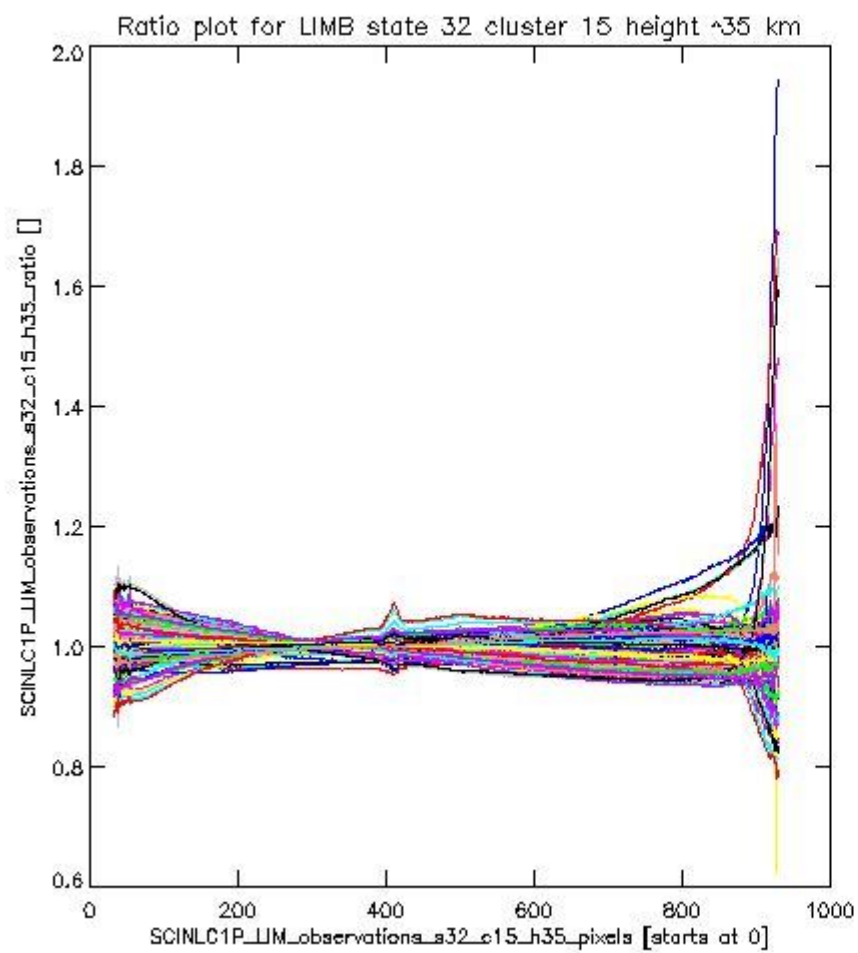
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_19.PNG

**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	20FEB2011 01:36:08.179
Start time of last sample	20FEB2011 22:07:29.161
Reference period start time	21JAN2011 00:01:14.531
Reference period stop time	18FEB2011 23:21:10.065
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\_20110220\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110220\_21.PNG

