

# 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	06MAR2011 06:55:36
Data source version	SCIA/7.04-U
Processing scope for products	23FEB2011 00:00:00 to 24FEB2011 00:00:00
Start time of first product within scope	22FEB2011 23:27:38
Stop time of last product within scope	24FEB2011 00:01:17
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	23FEB2011 00:00:50.086	23FEB2011 23:32:10.511
1	NADIR	07	09	N/A	23FEB2011 00:00:50.086	23FEB2011 23:32:10.511
2	NADIR	07	15	N/A	23FEB2011 00:00:50.086	23FEB2011 23:32:10.511
3	NADIR	07	24	N/A	23FEB2011 00:00:50.086	23FEB2011 23:32:10.511
4	NADIR	07	55	N/A	23FEB2011 00:00:50.086	23FEB2011 23:32:10.511
5	LIMB	32	09	~19 km	23FEB2011 00:01:58.641	23FEB2011 23:37:24.554
6	LIMB	32	09	~22 km	23FEB2011 00:01:58.641	23FEB2011 23:37:24.554
7	LIMB	32	09	~25 km	23FEB2011 00:01:58.641	23FEB2011 23:37:24.554
8	LIMB	32	15	~22 km	23FEB2011 00:01:58.641	23FEB2011 23:37:24.554
9	LIMB	32	15	~25 km	23FEB2011 00:01:58.641	23FEB2011 23:37:24.554
10	LIMB	32	15	~35 km	23FEB2011 00:01:58.641	23FEB2011 23:37:24.554

#### 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	#cmpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110222_231431_000060083099_00404_46970_4848.N1</a>	22FEB2011 23:27:38	23FEB2011 00:38:07	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110223_005443_000060113099_00405_46971_4850.N1</a>	23FEB2011 01:07:52	23FEB2011 02:18:07	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110223_023458_000035393099_00406_46972_4852.N1</a>	23FEB2011 02:48:05	23FEB2011 03:33:29	0	18	25	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110223_065509_000024243099_00408_46974_4854.N1</a>	23FEB2011 06:56:03	23FEB2011 07:19:02	0	17	4	0	0	2	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110223_073537_000060113099_00409_46975_4857.N1</a>	23FEB2011 07:48:46	23FEB2011 08:59:01	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110223_091552_000060083099_00410_46976_4858.N1</a>	23FEB2011 09:29:00	23FEB2011 10:39:29	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110223_105604_000060113099_00411_46977_4859.N1	23FEB2011 11:09:13	23FEB2011 12:19:28	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110223_123619_000060083099_00412_46978_4860.N1	23FEB2011 12:49:27	23FEB2011 13:59:56	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110223_141631_000060113099_00413_46979_4864.N1	23FEB2011 14:29:40	23FEB2011 15:39:55	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110223_155646_000060083099_00414_46980_4866.N1	23FEB2011 16:09:54	23FEB2011 17:20:23	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110223_173658_000060193099_00415_46981_4867.N1	23FEB2011 17:50:07	23FEB2011 19:13:46	0	35	31	0	2	1	0	0	
11	SCI_NLC_1CUDPA20110223_191723_000059983099_00416_46982_4869.N1	23FEB2011 19:17:46	23FEB2011 20:41:11	0	36	30	0	2	1	0	0	
12	SCI_NLC_1CUDPA20110223_205725_000060113099_00417_46983_4871.N1	23FEB2011 21:10:34	23FEB2011 22:20:49	0	35	31	0	0	1	0	0	
13	SCI_NLC_1CUDPA20110223_223739_000060083099_00418_46984_4872.N1	23FEB2011 22:50:48	24FEB2011 00:01:17	0	36	30	0	0	1	0	0	

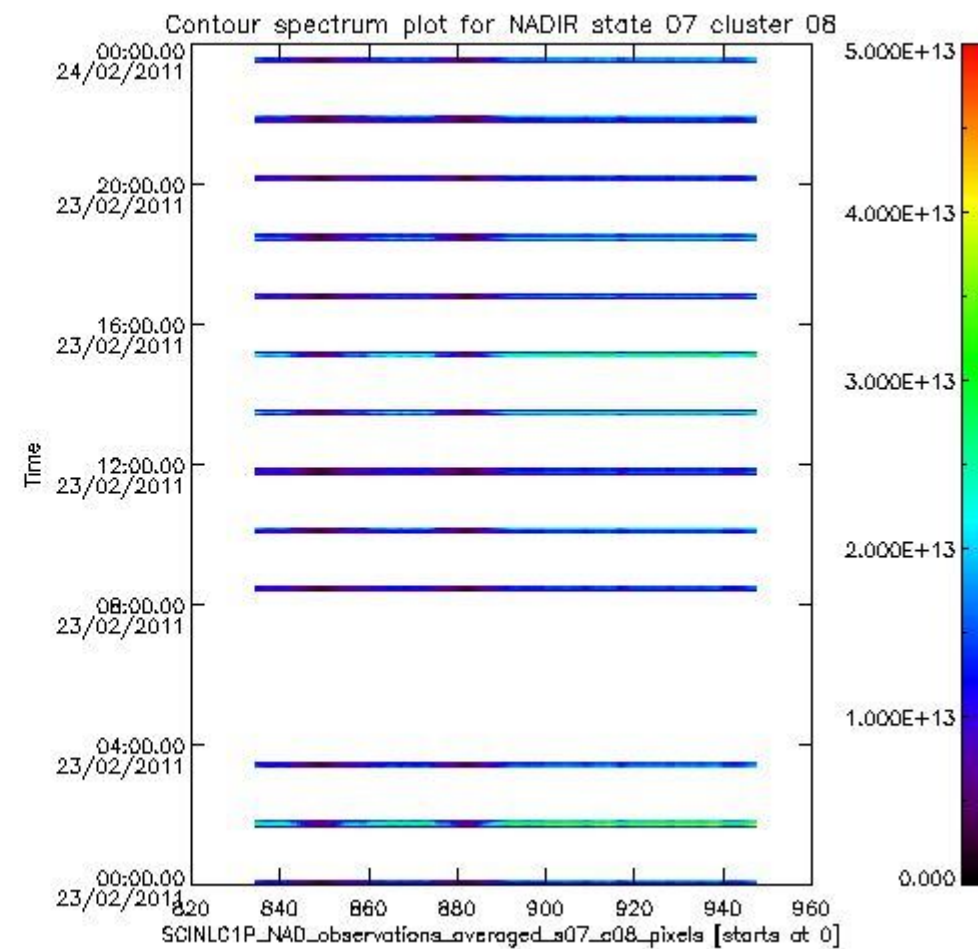
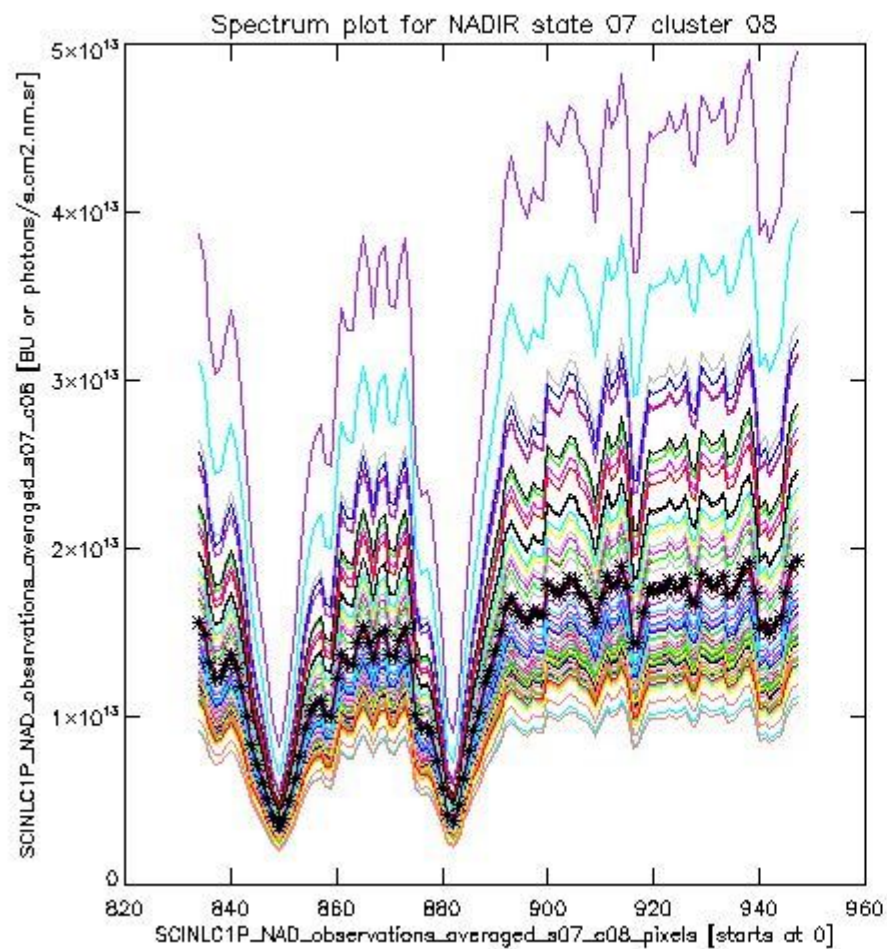
## 1.2 Source packet monitoring

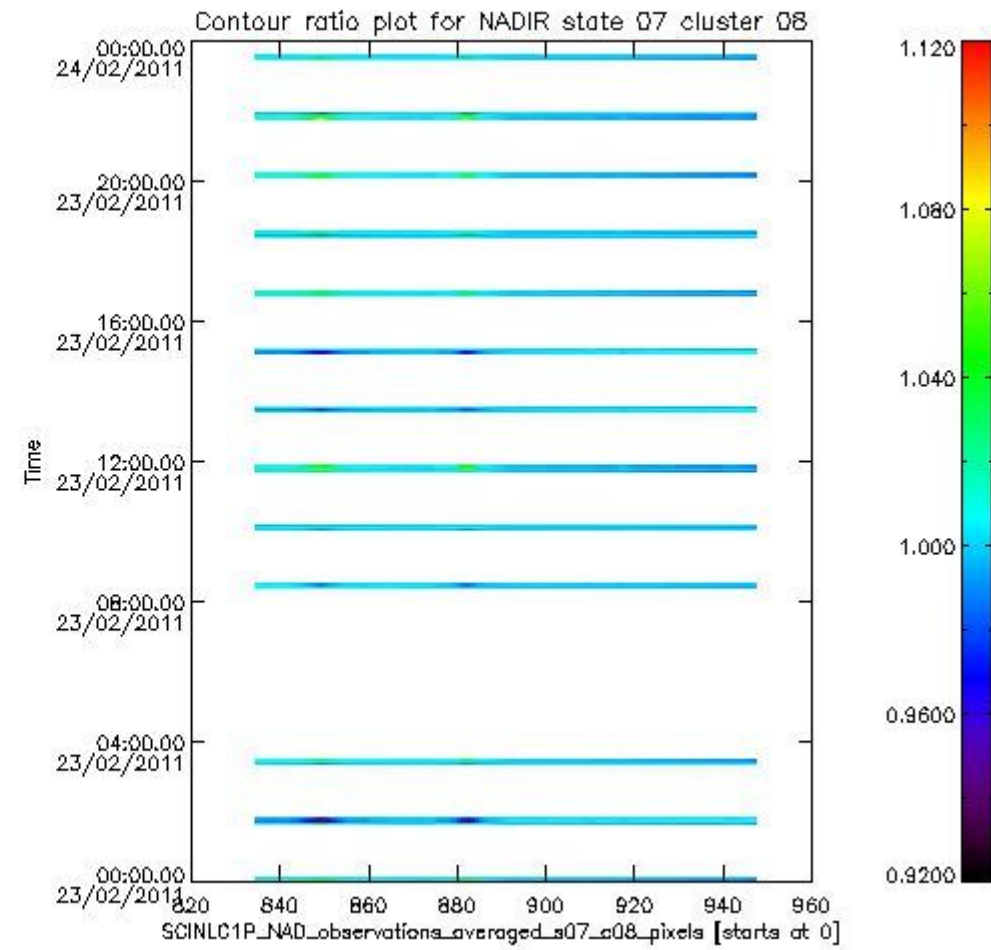
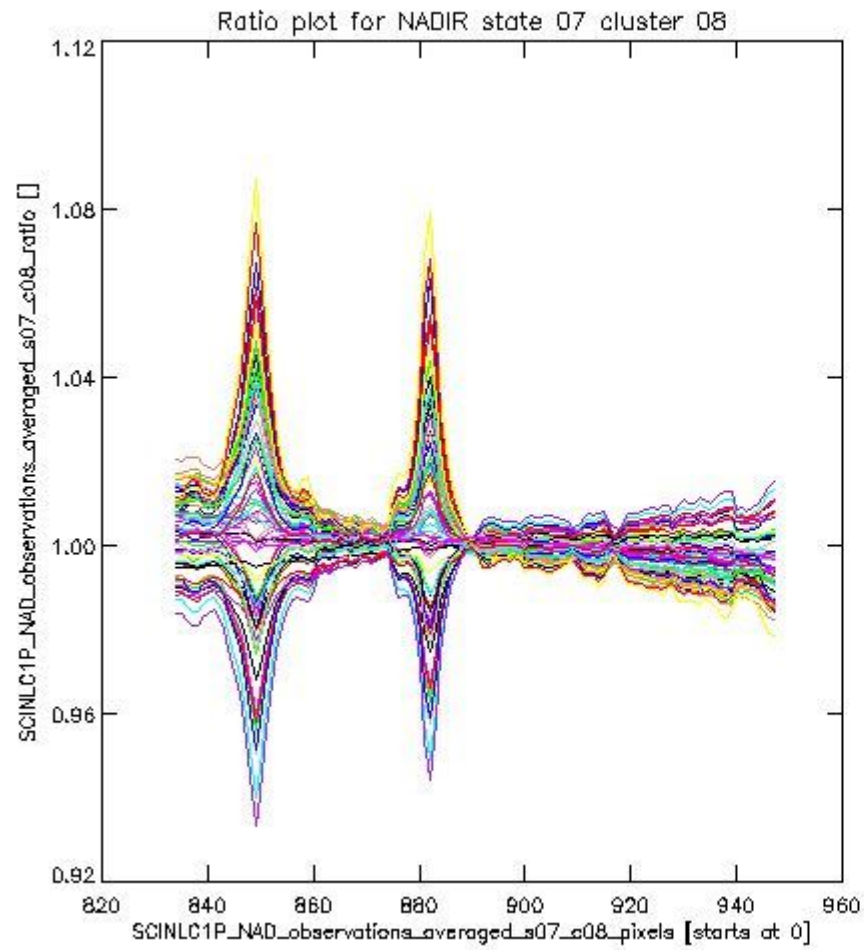
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

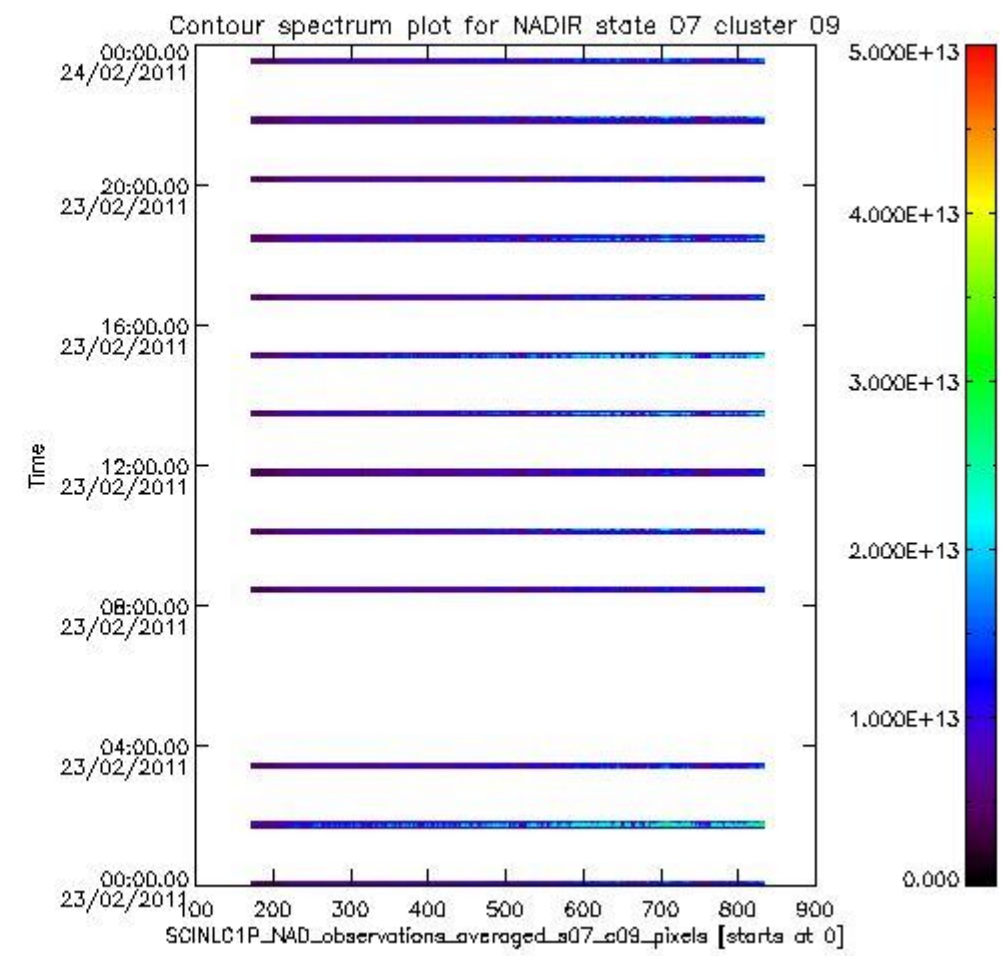
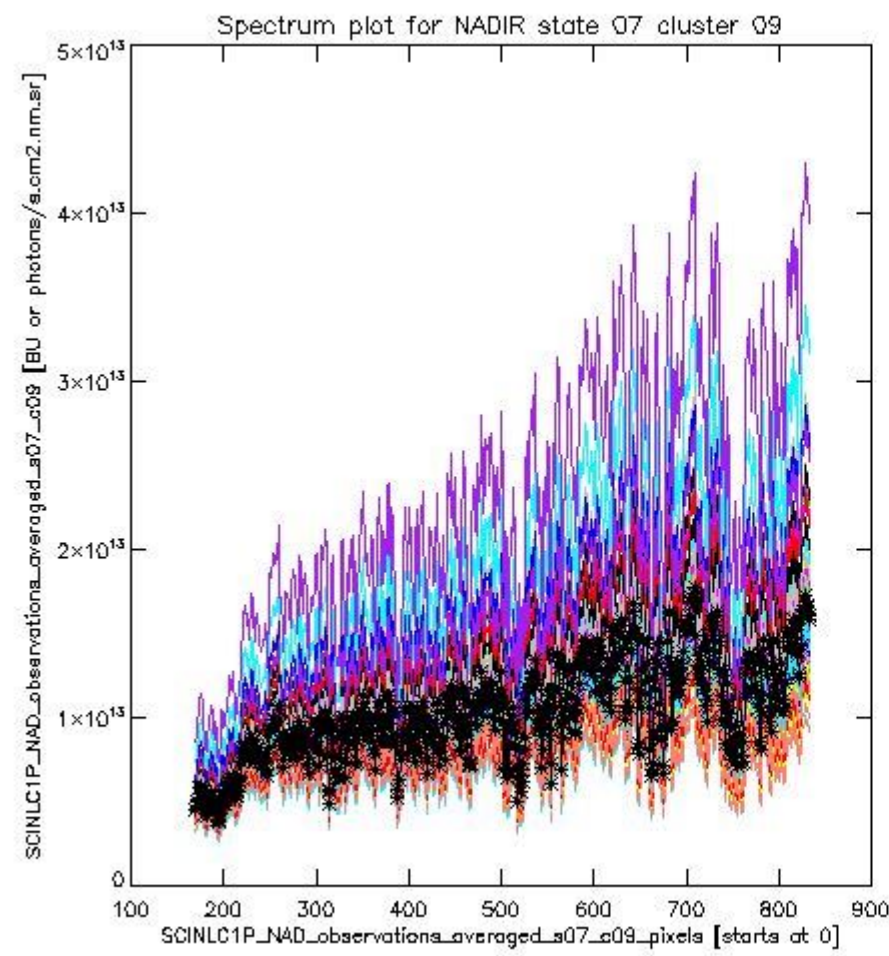
Item	Value
Start time of first sample	23FEB2011 00:00:50.086
Start time of last sample	23FEB2011 23:32:10.511
Reference period start time	24JAN2011 00:03:18.830
Reference period stop time	22FEB2011 22:29:41.757
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



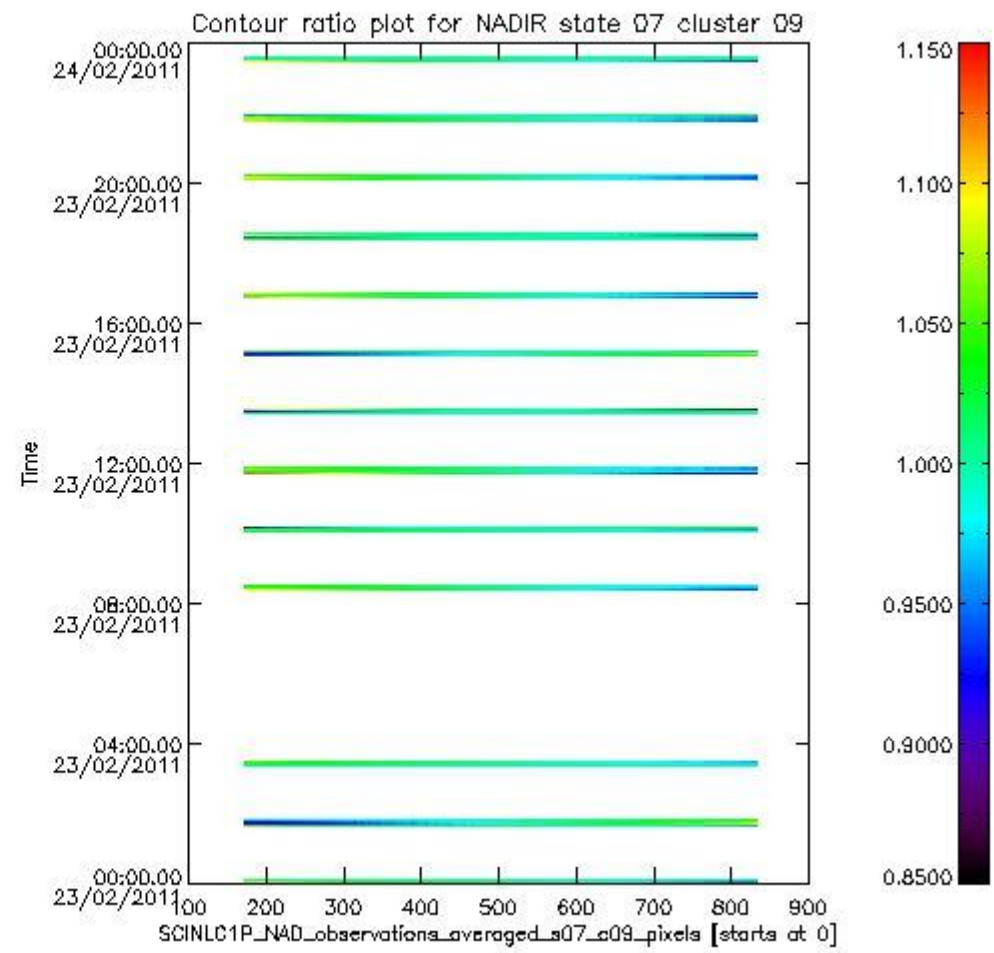
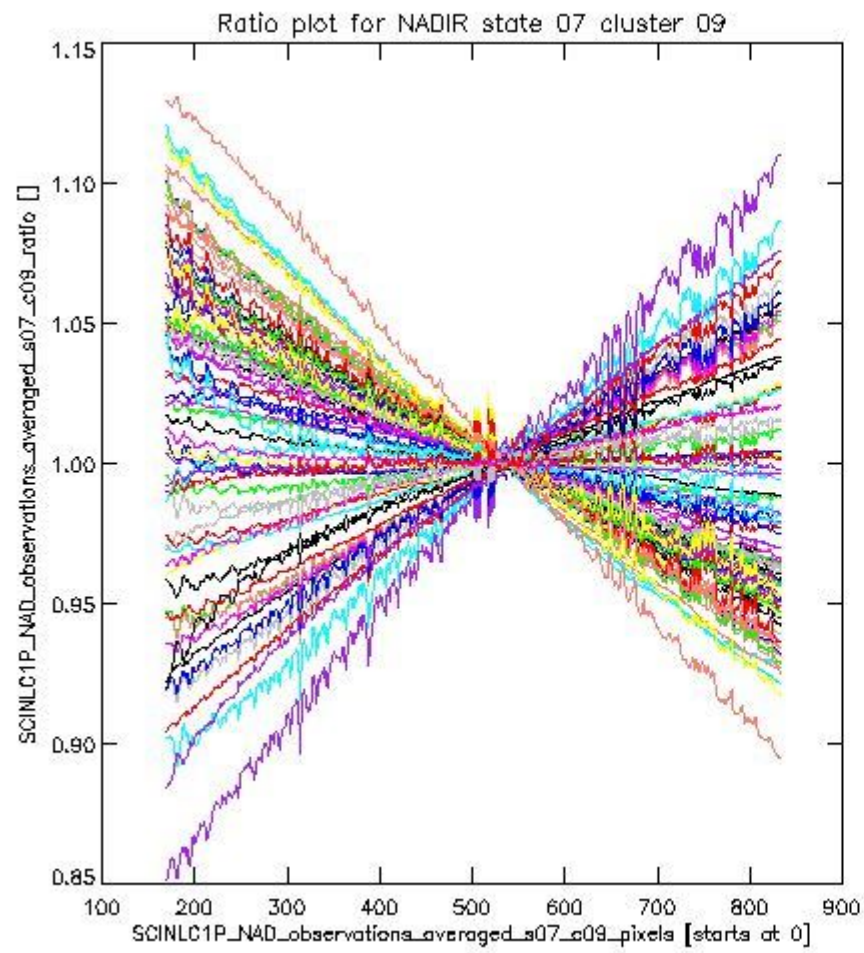


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	23FEB2011 00:00:50.086
Start time of last sample	23FEB2011 23:32:10.511
Reference period start time	24JAN2011 00:03:18.830
Reference period stop time	22FEB2011 22:29:41.757
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



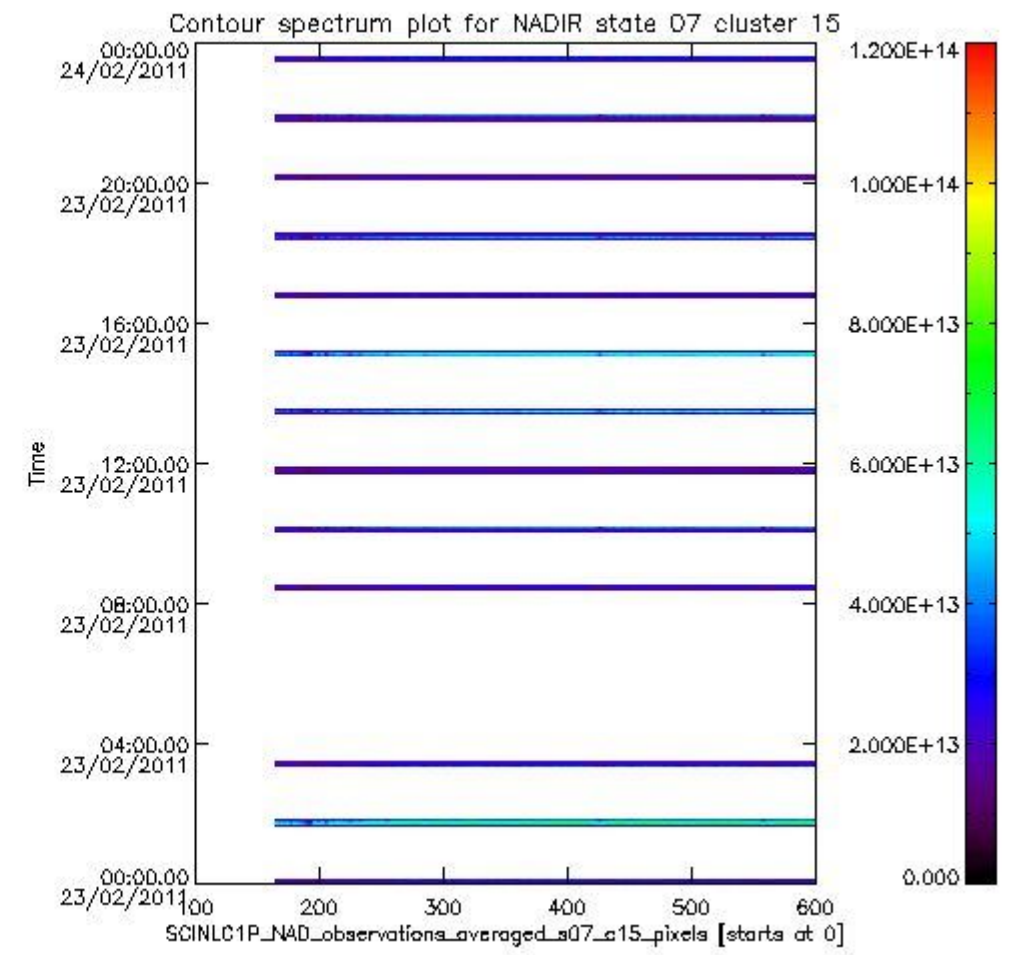
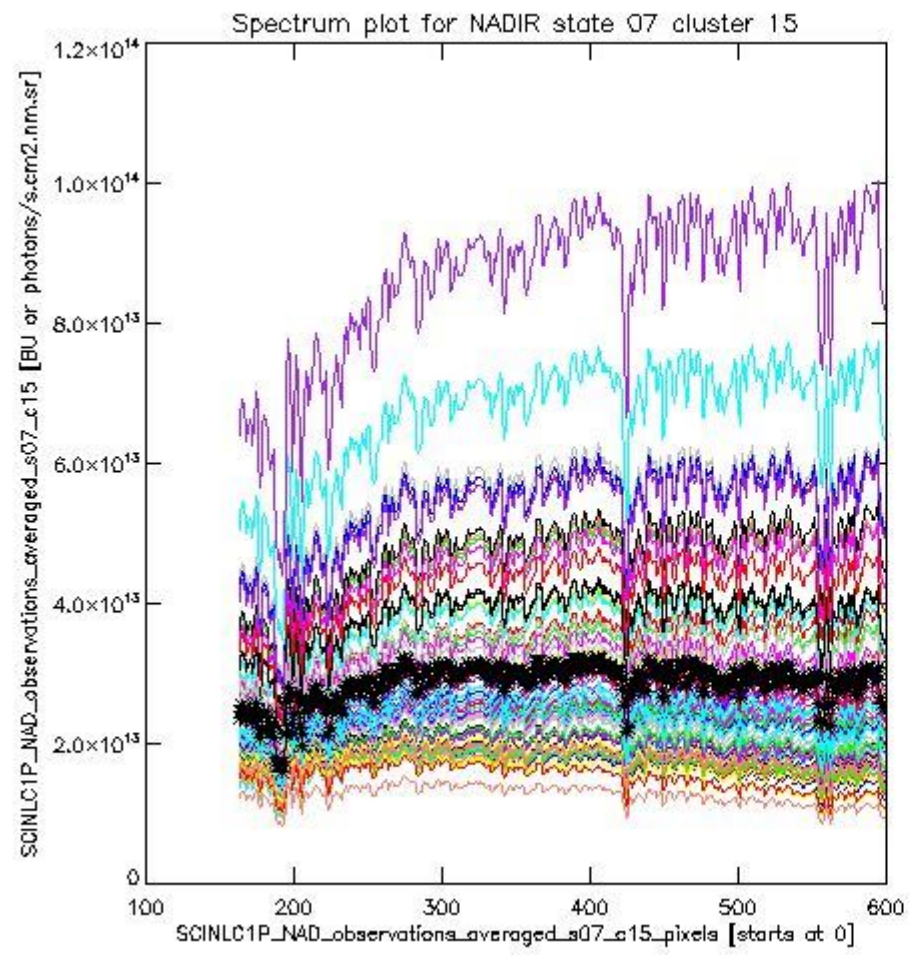
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_2.PNG



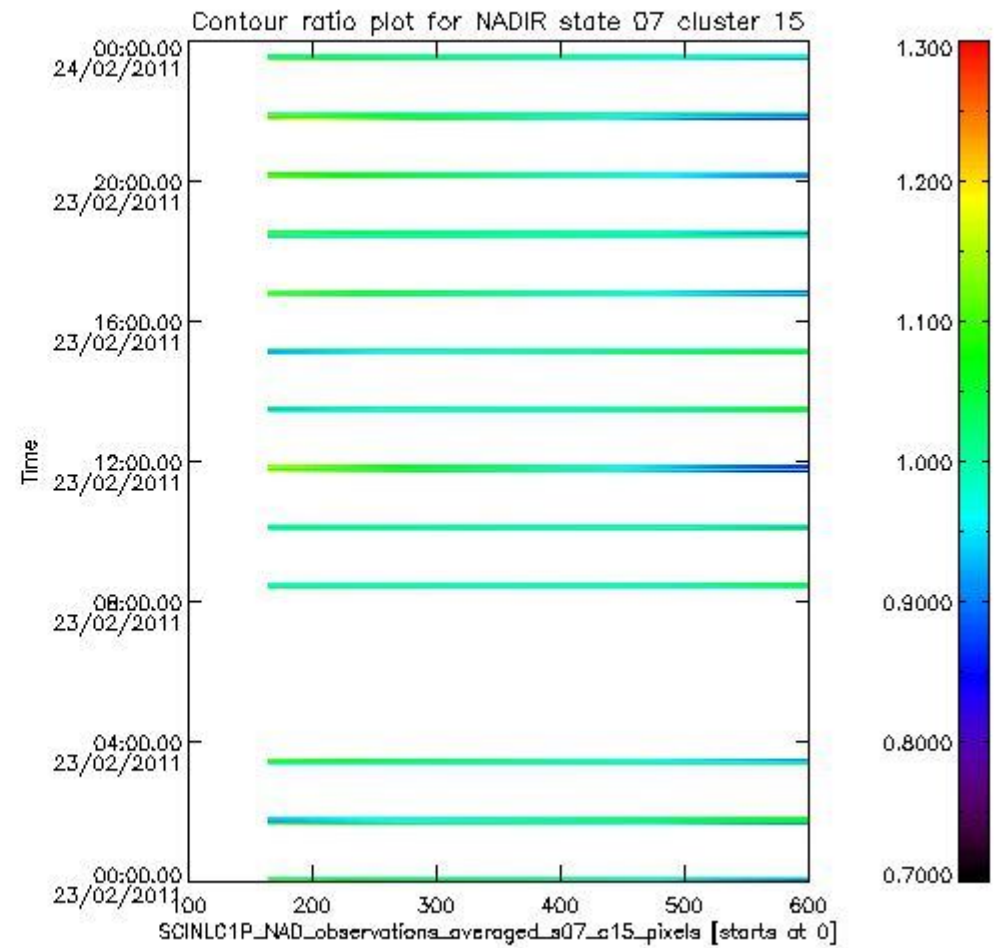
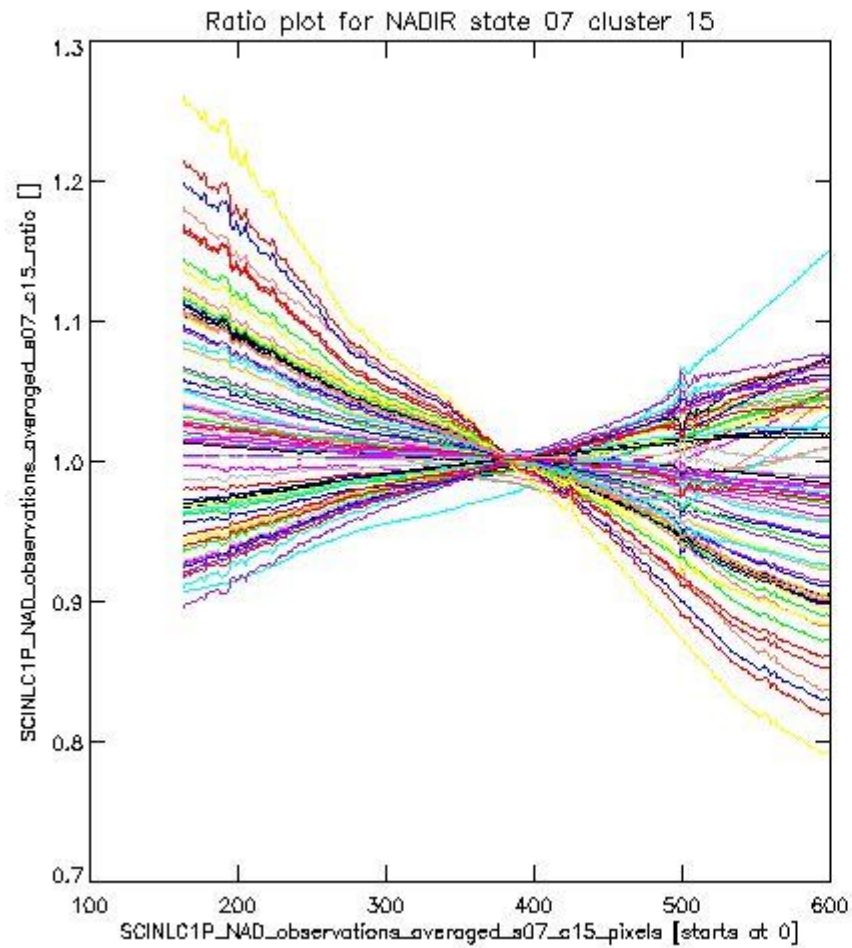
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_3.PNG

**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	23FEB2011 00:00:50.086
Start time of last sample	23FEB2011 23:32:10.511
Reference period start time	24JAN2011 00:03:18.830
Reference period stop time	22FEB2011 22:29:41.757
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



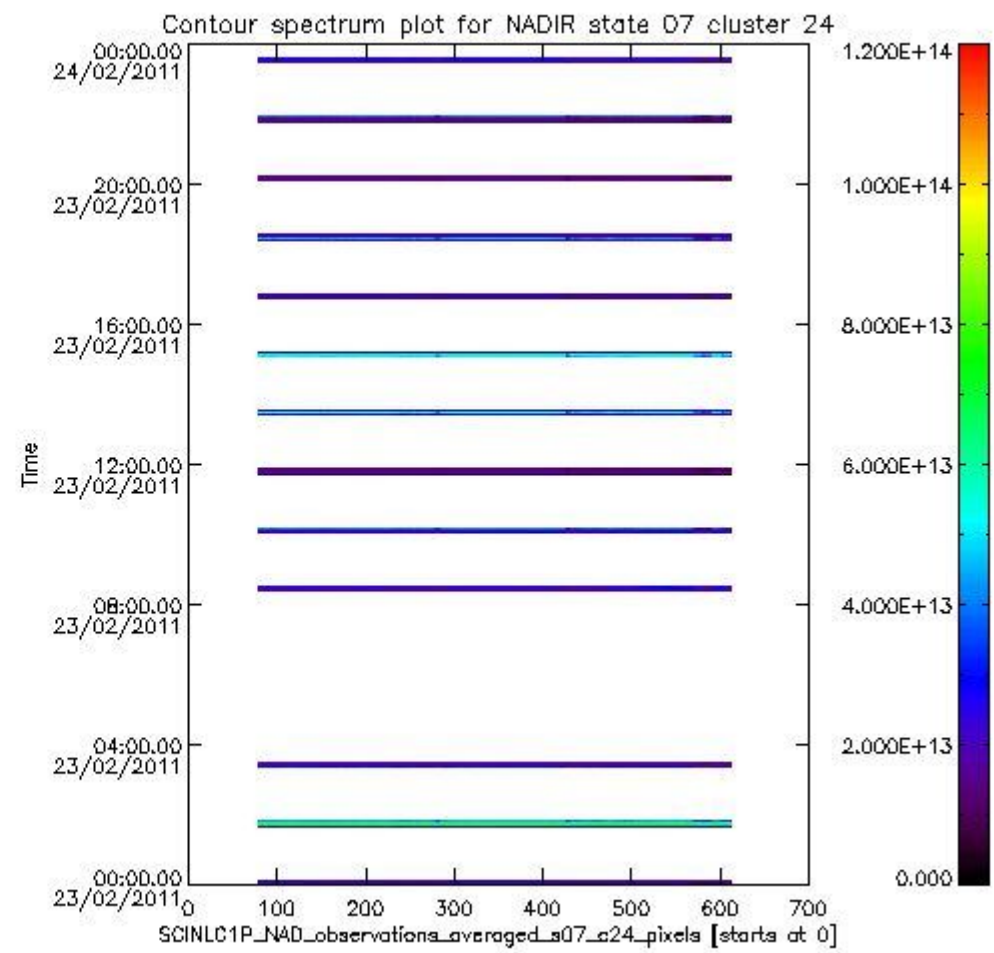
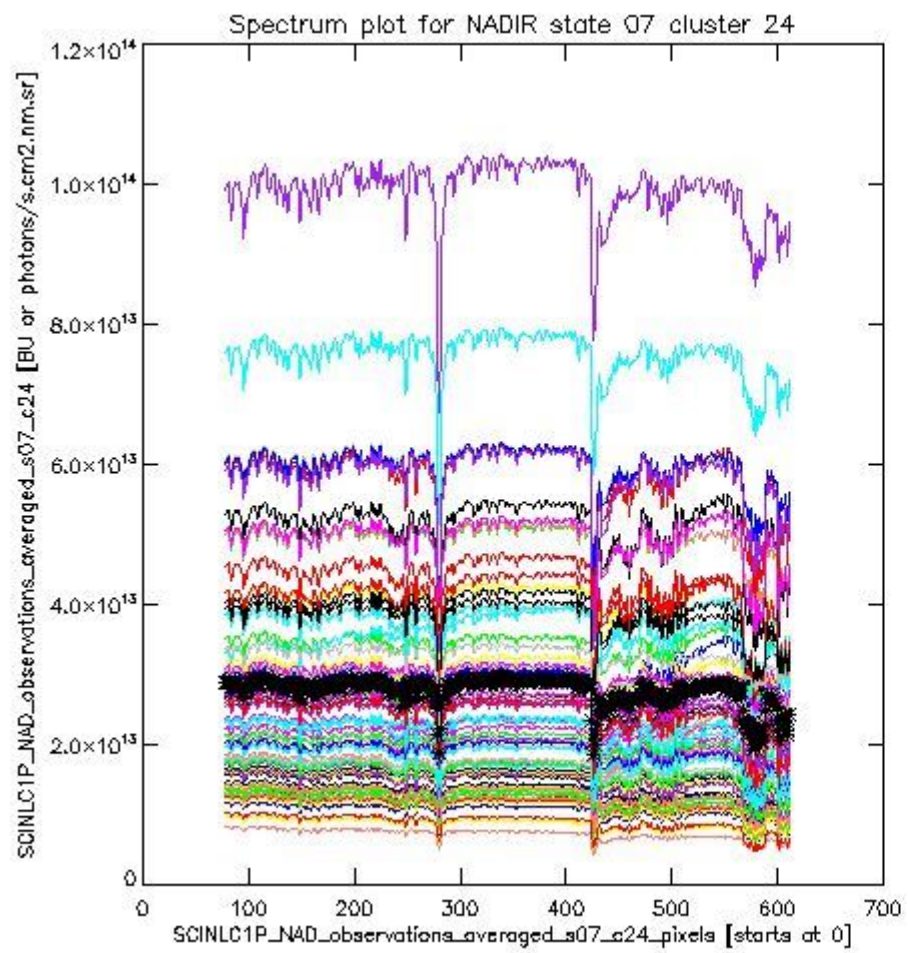
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_5.PNG

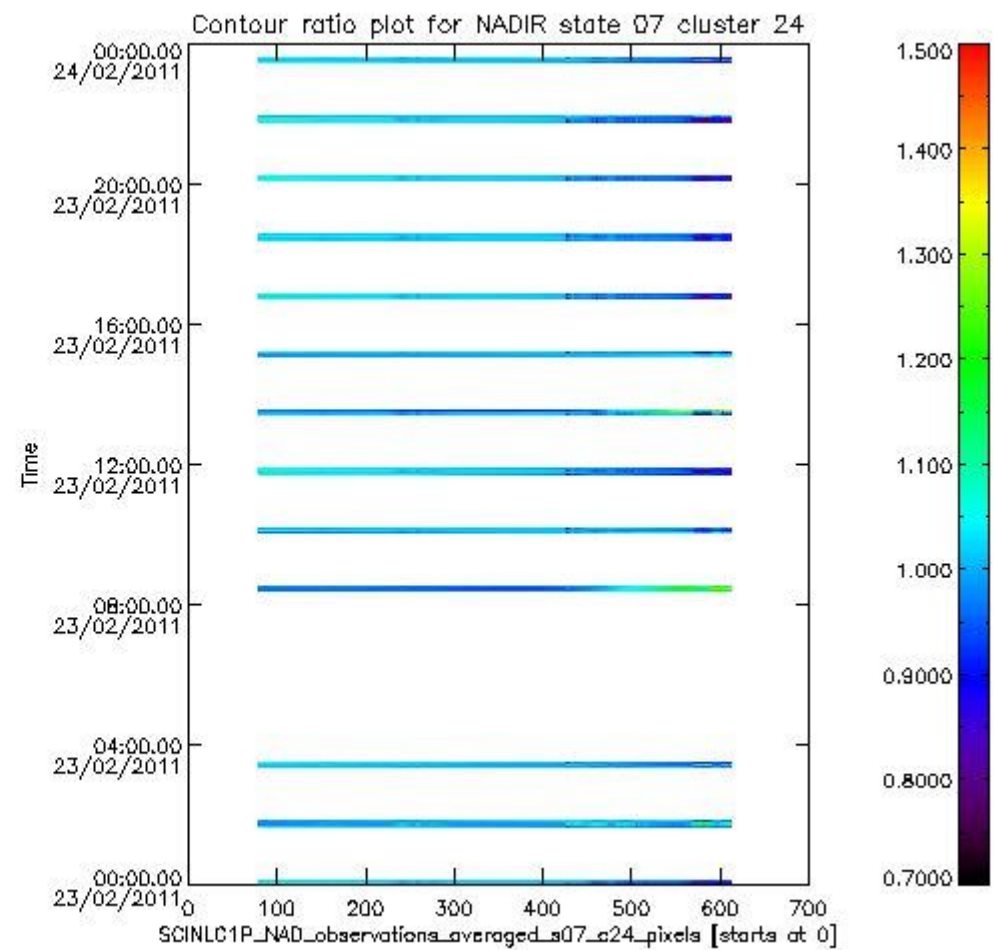
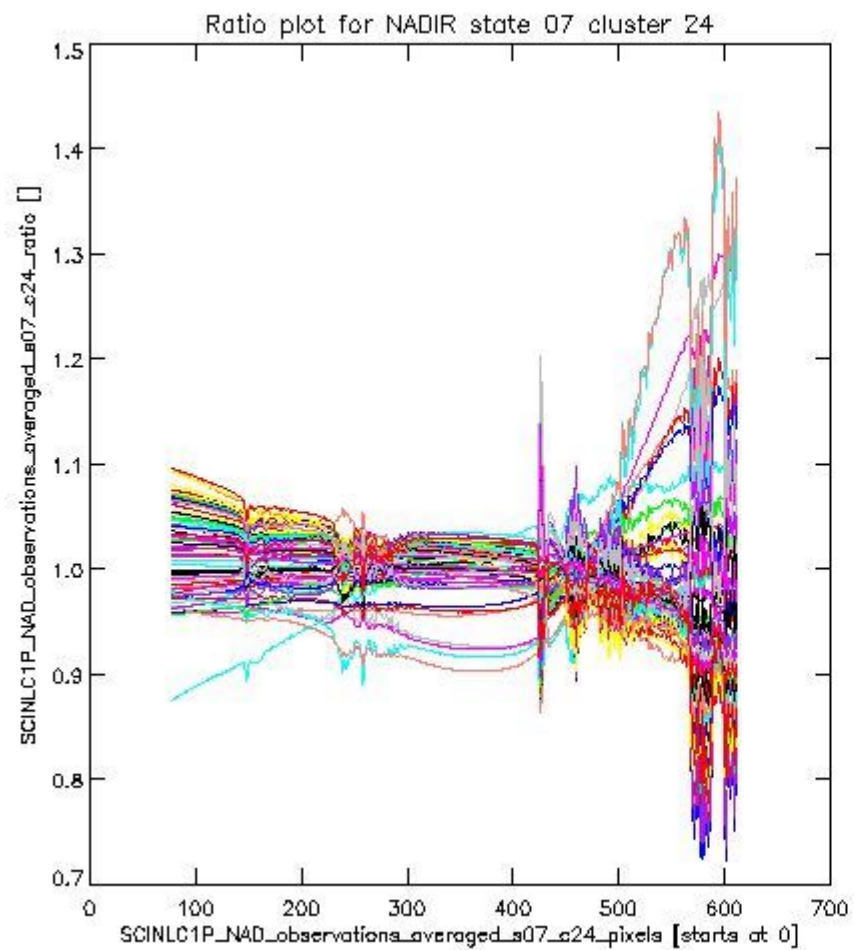
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	23FEB2011 00:00:50.086
Start time of last sample	23FEB2011 23:32:10.511
Reference period start time	24JAN2011 00:03:18.830
Reference period stop time	22FEB2011 22:29:41.757
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\_20110223\_6.PNG

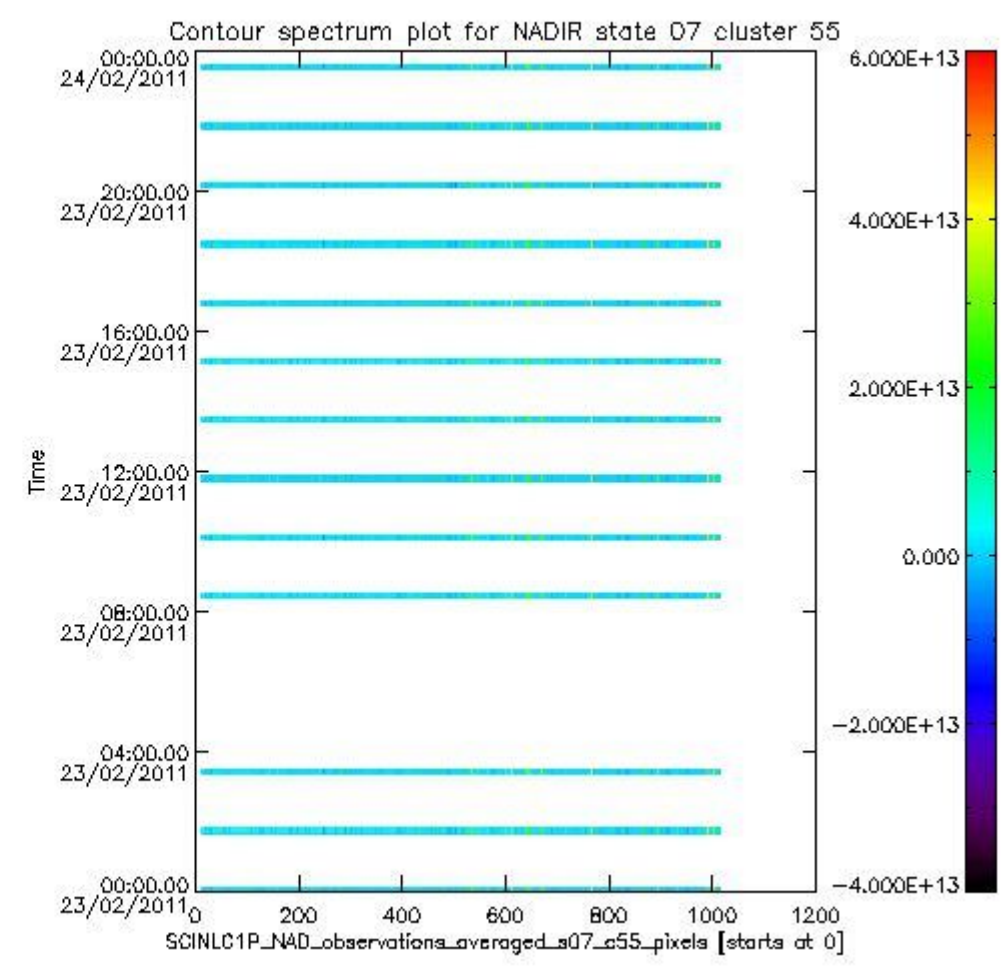
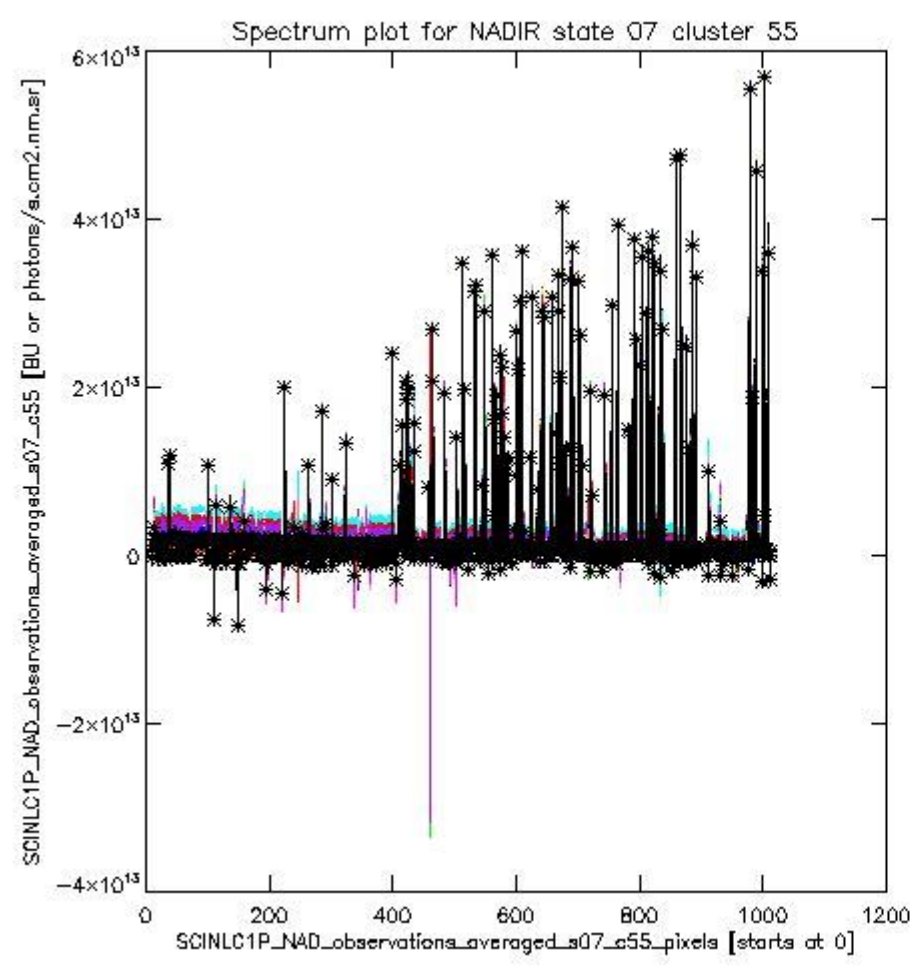




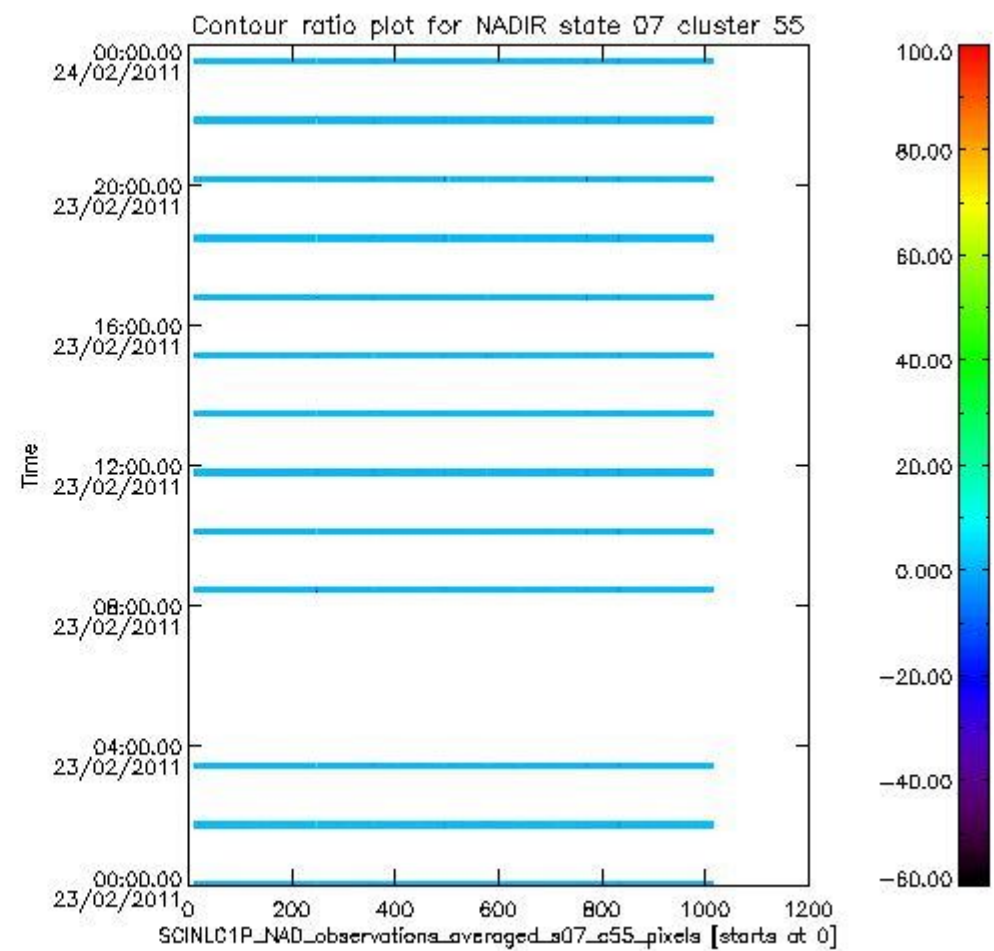
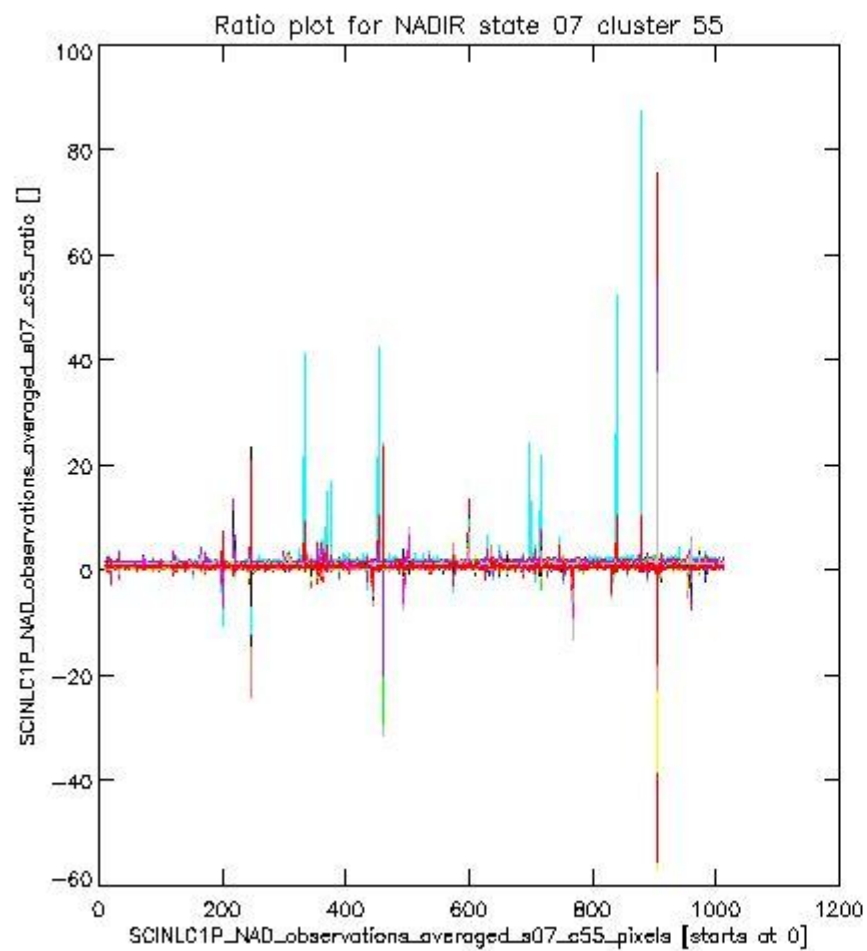
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_7.PNG

**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	23FEB2011 00:00:50.086
Start time of last sample	23FEB2011 23:32:10.511
Reference period start time	24JAN2011 00:03:18.830
Reference period stop time	22FEB2011 22:29:41.757
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



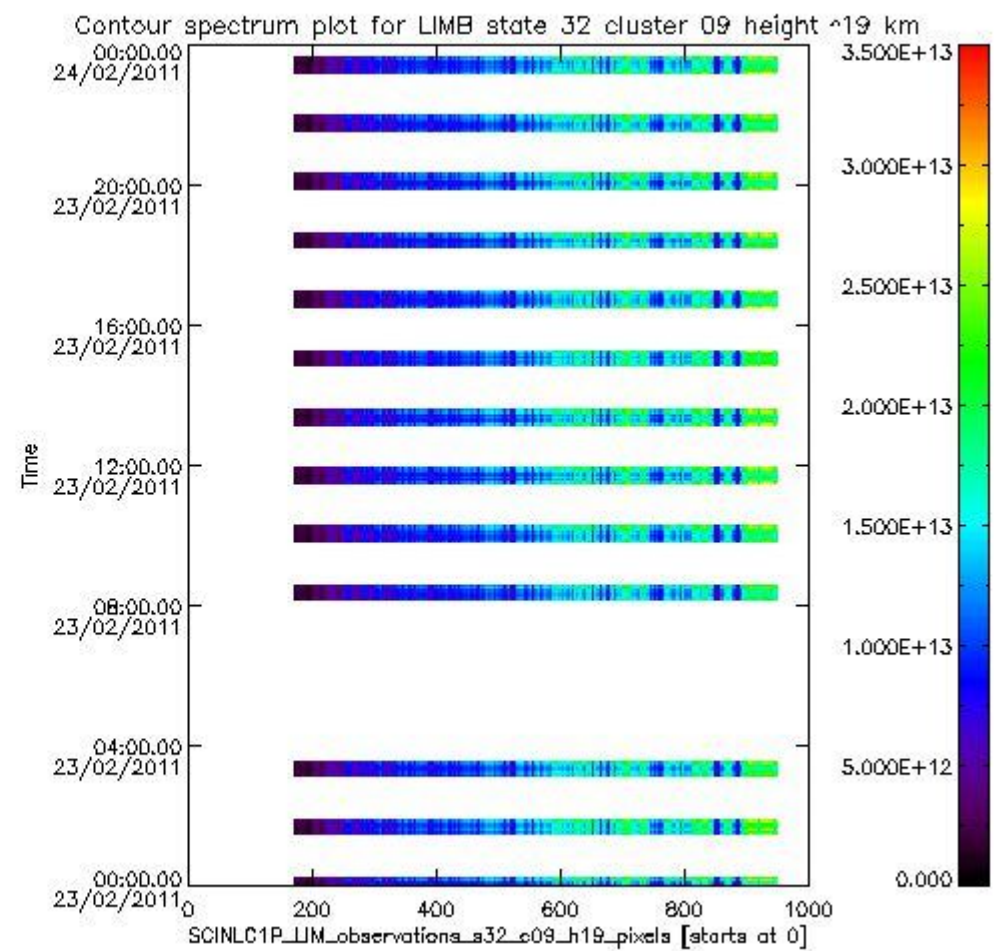
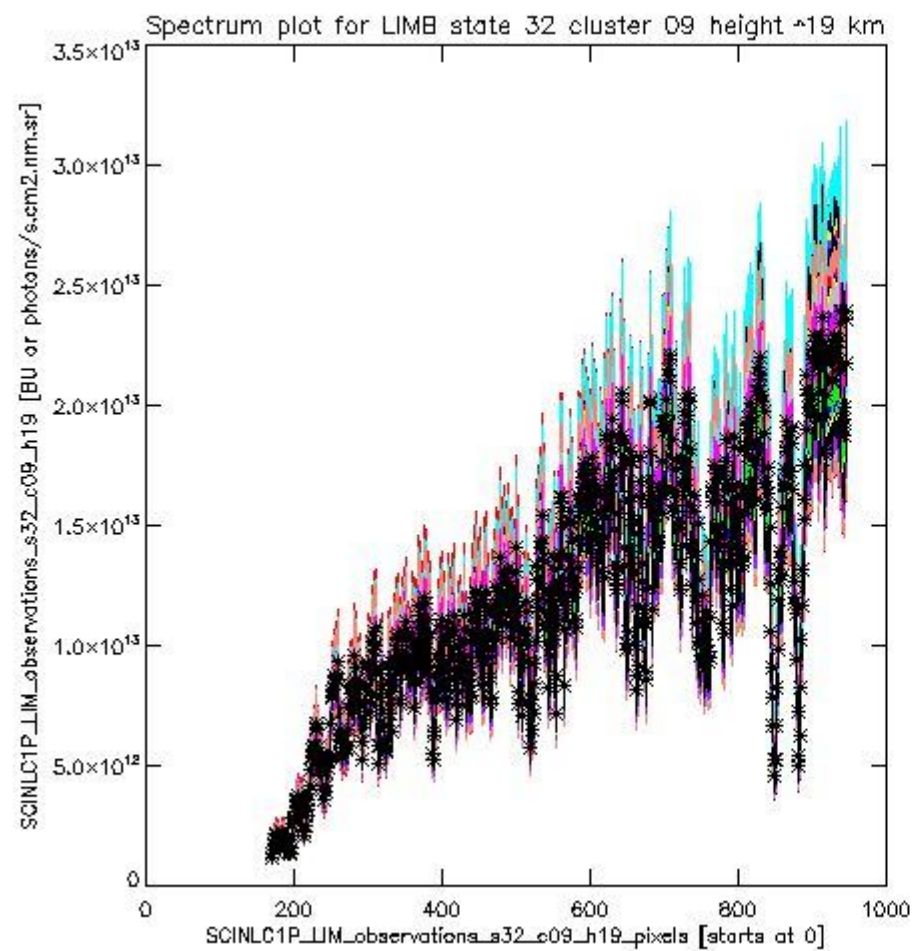
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_8.PNG



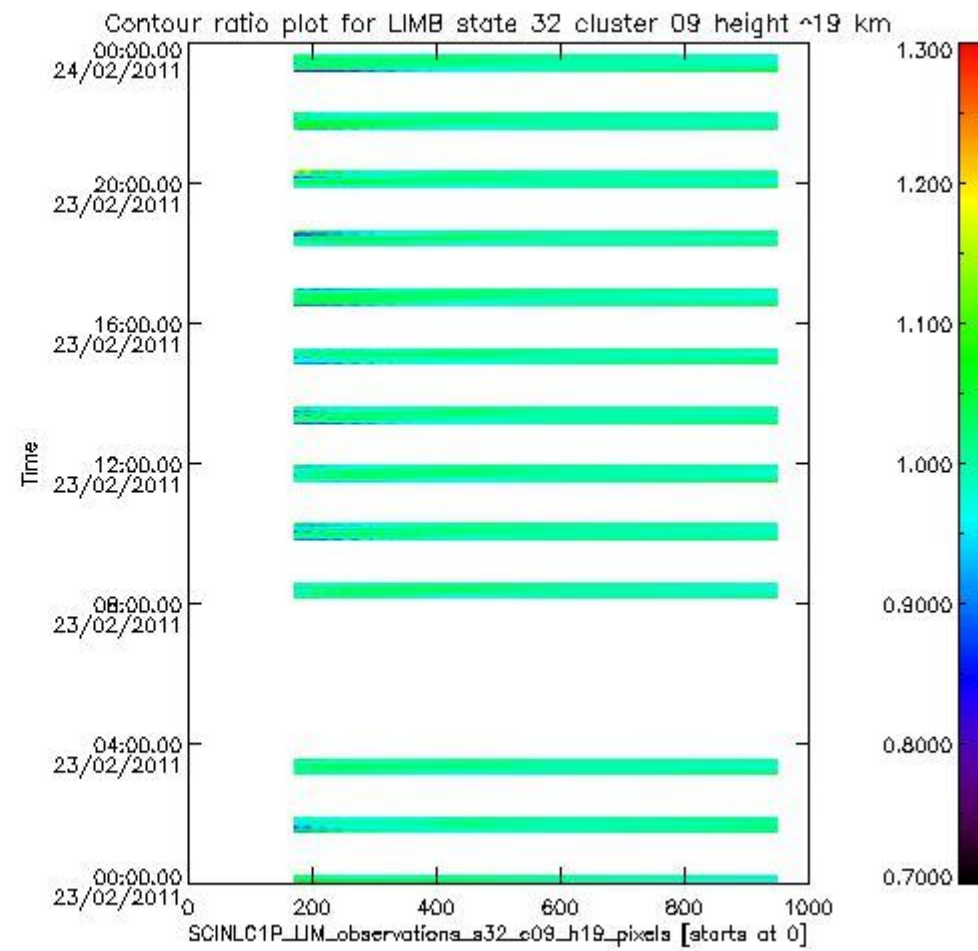
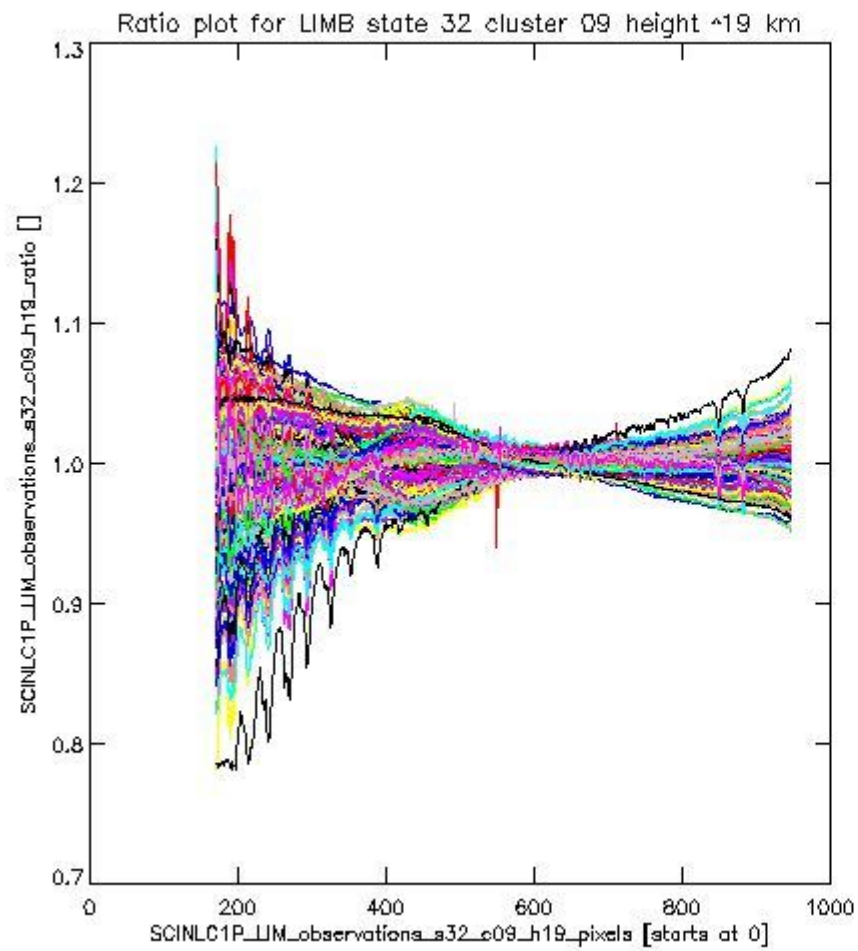
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_9.PNG

**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	23FEB2011 00:01:58.641
Start time of last sample	23FEB2011 23:37:24.554
Reference period start time	24JAN2011 00:00:21.908
Reference period stop time	22FEB2011 23:59:55.902
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



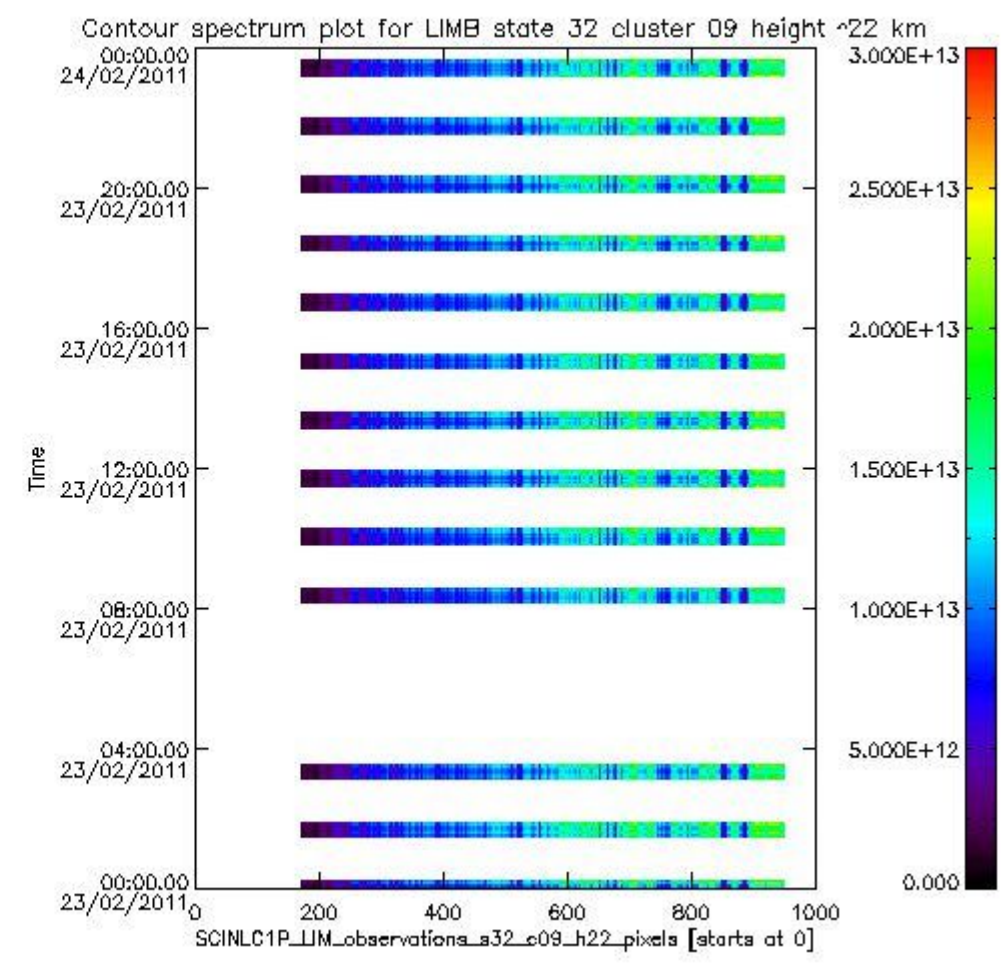
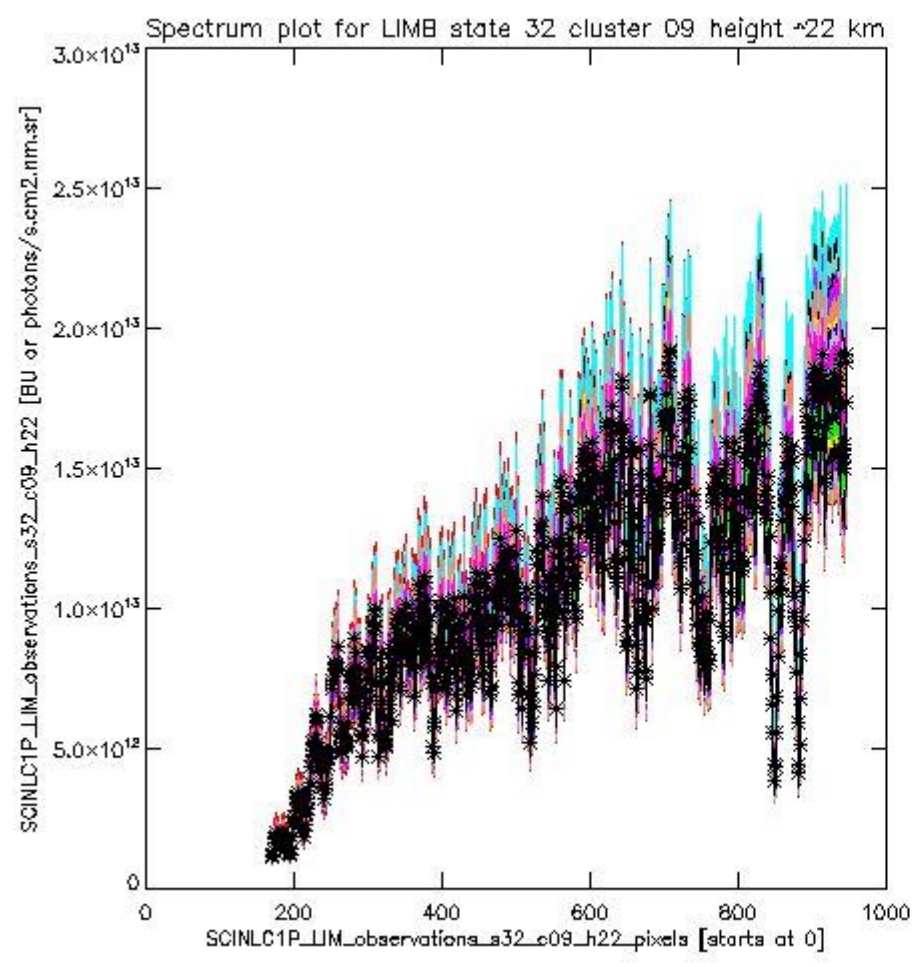
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_10.PNG



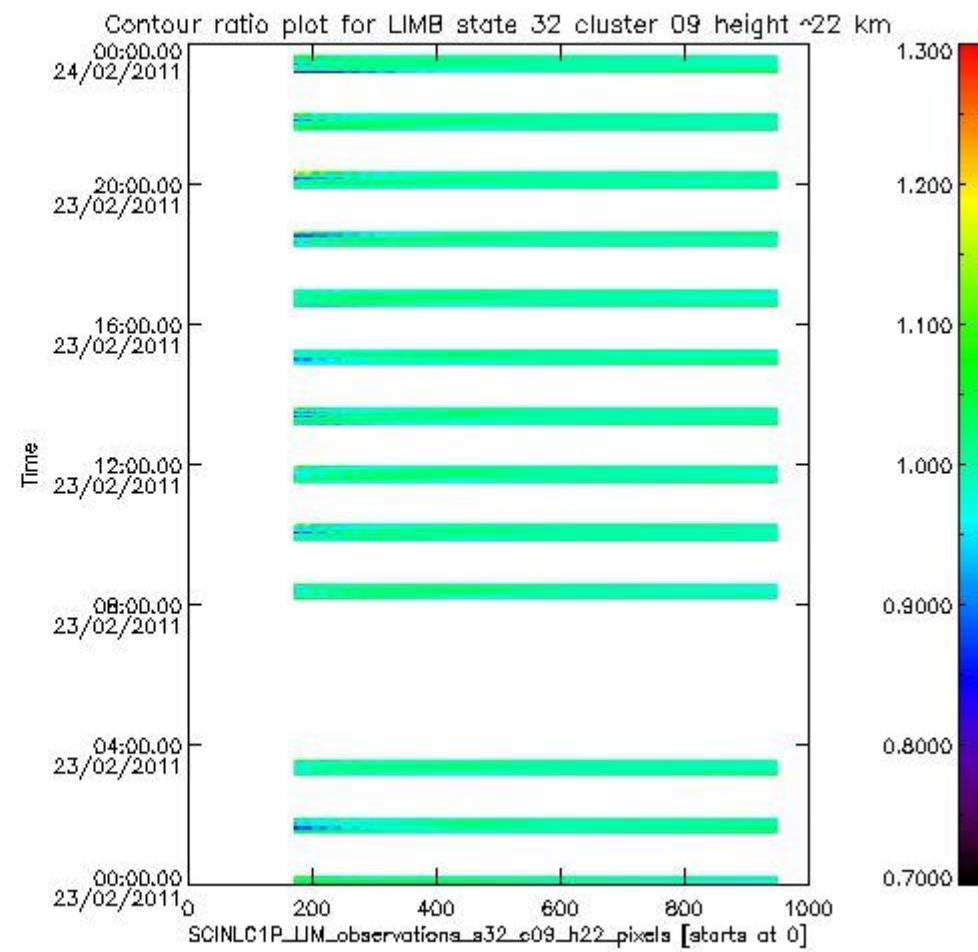
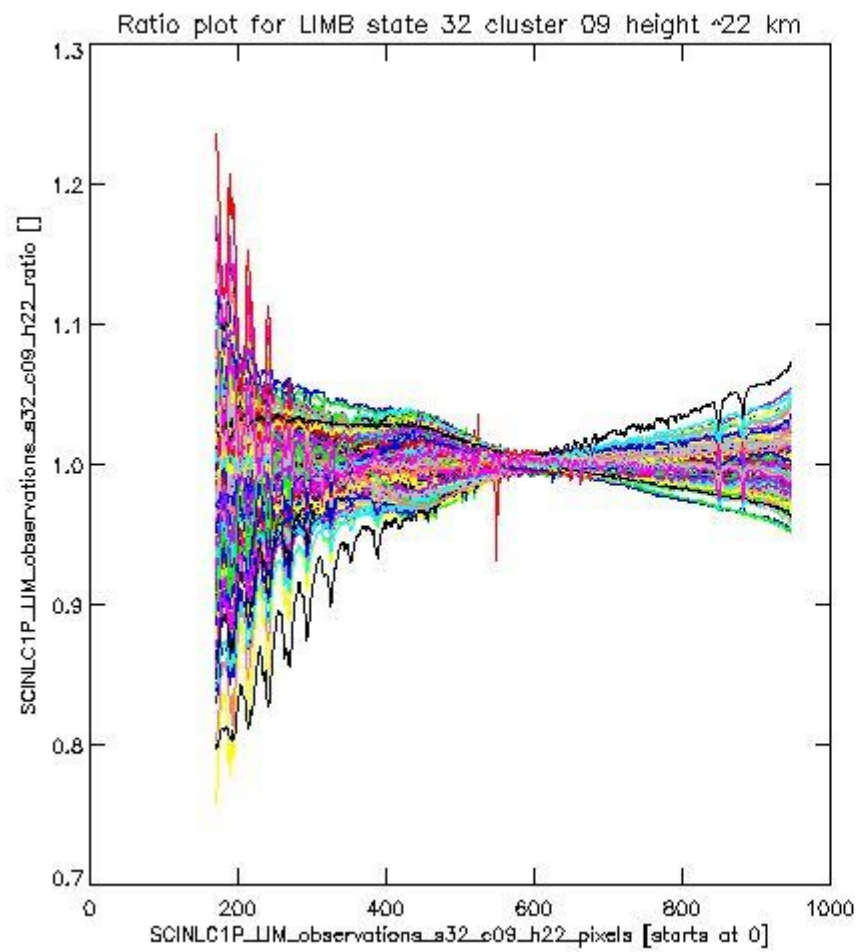
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_11.PNG

**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	23FEB2011 00:01:58.641
Start time of last sample	23FEB2011 23:37:24.554
Reference period start time	24JAN2011 00:00:21.908
Reference period stop time	22FEB2011 23:59:55.902
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



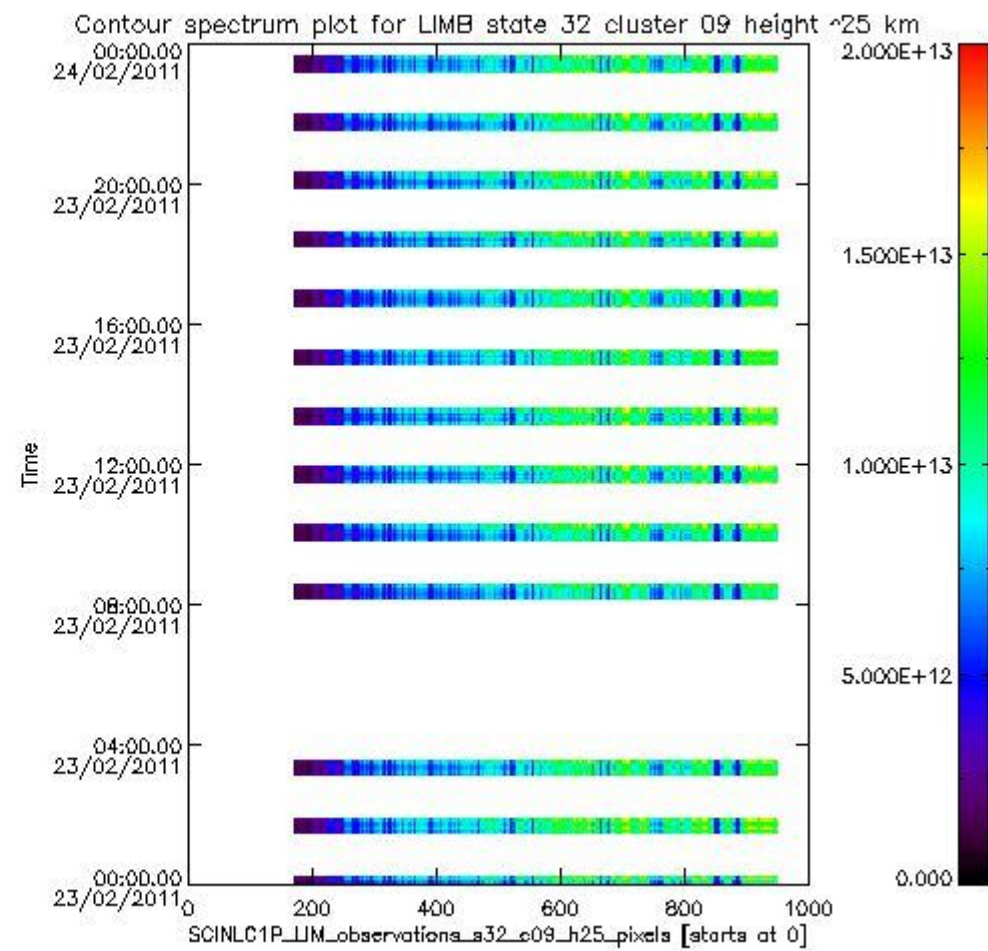
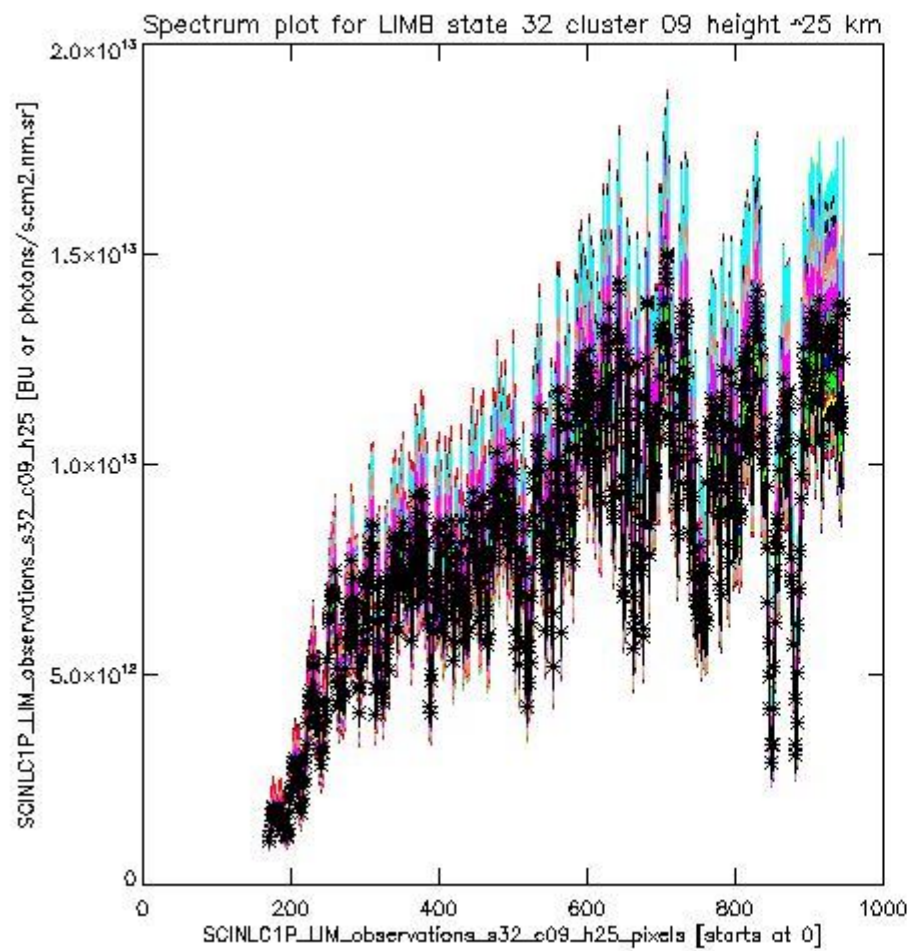
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_13.PNG

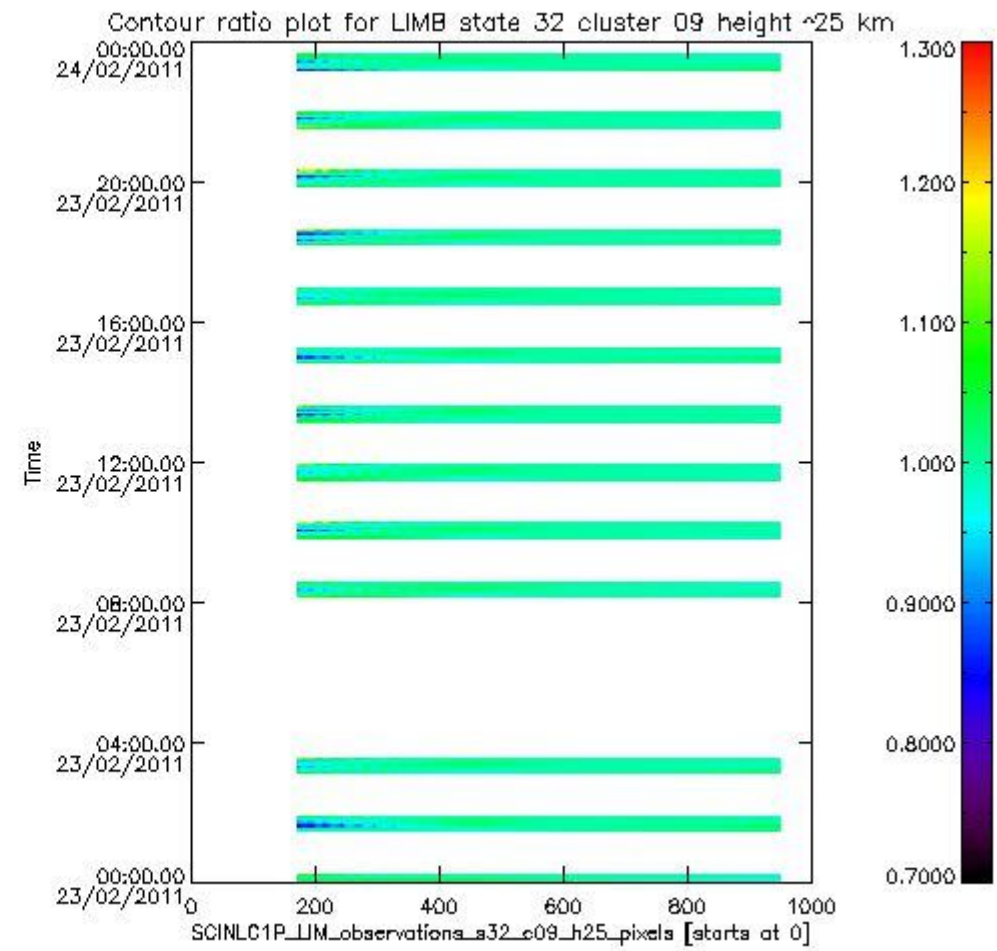
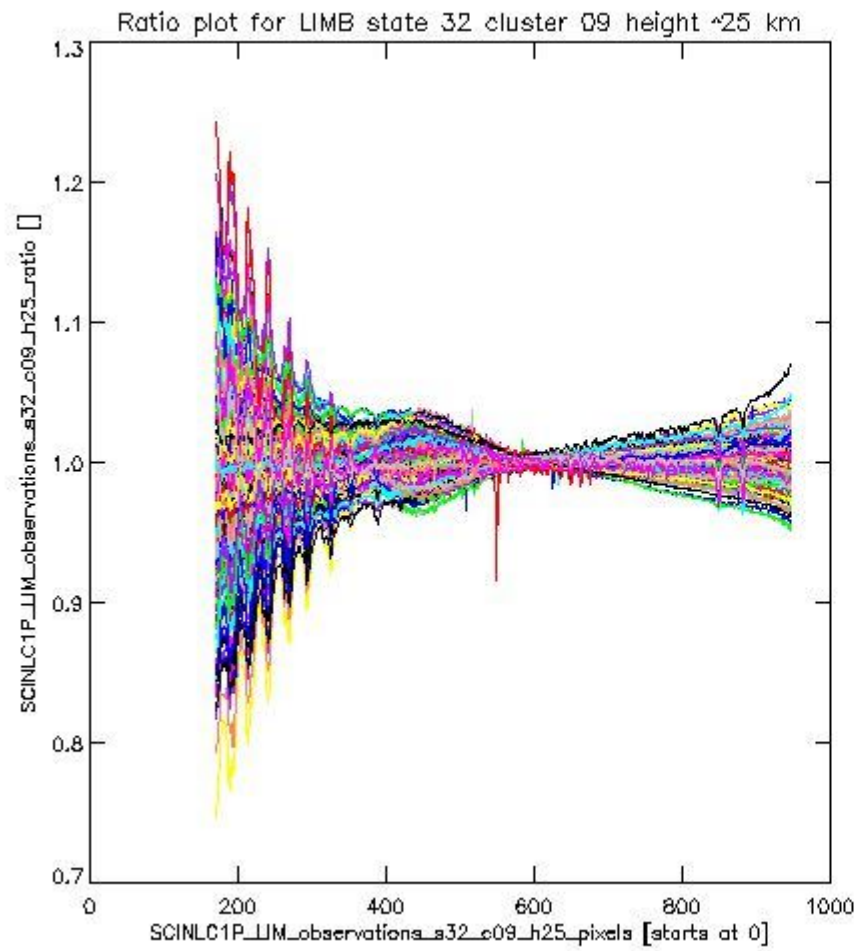
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	23FEB2011 00:01:58.641
Start time of last sample	23FEB2011 23:37:24.554
Reference period start time	24JAN2011 00:00:21.908
Reference period stop time	22FEB2011 23:59:55.902
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\_20110223\_14.PNG

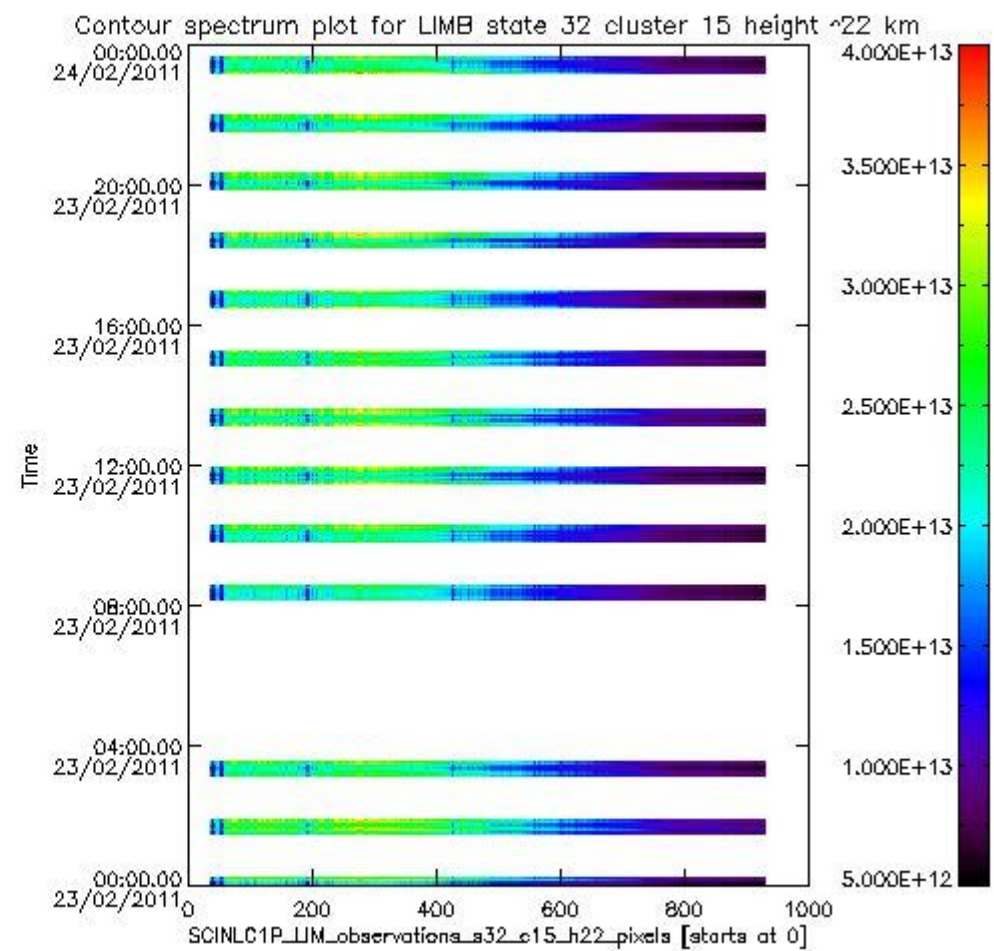
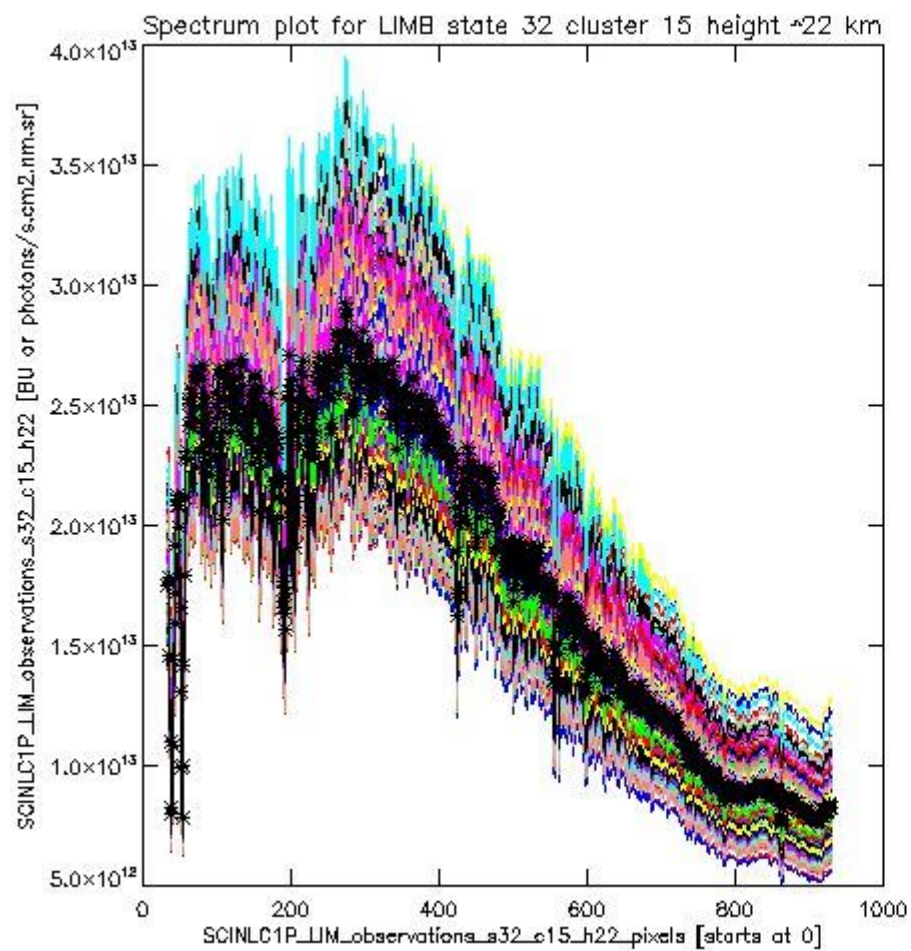




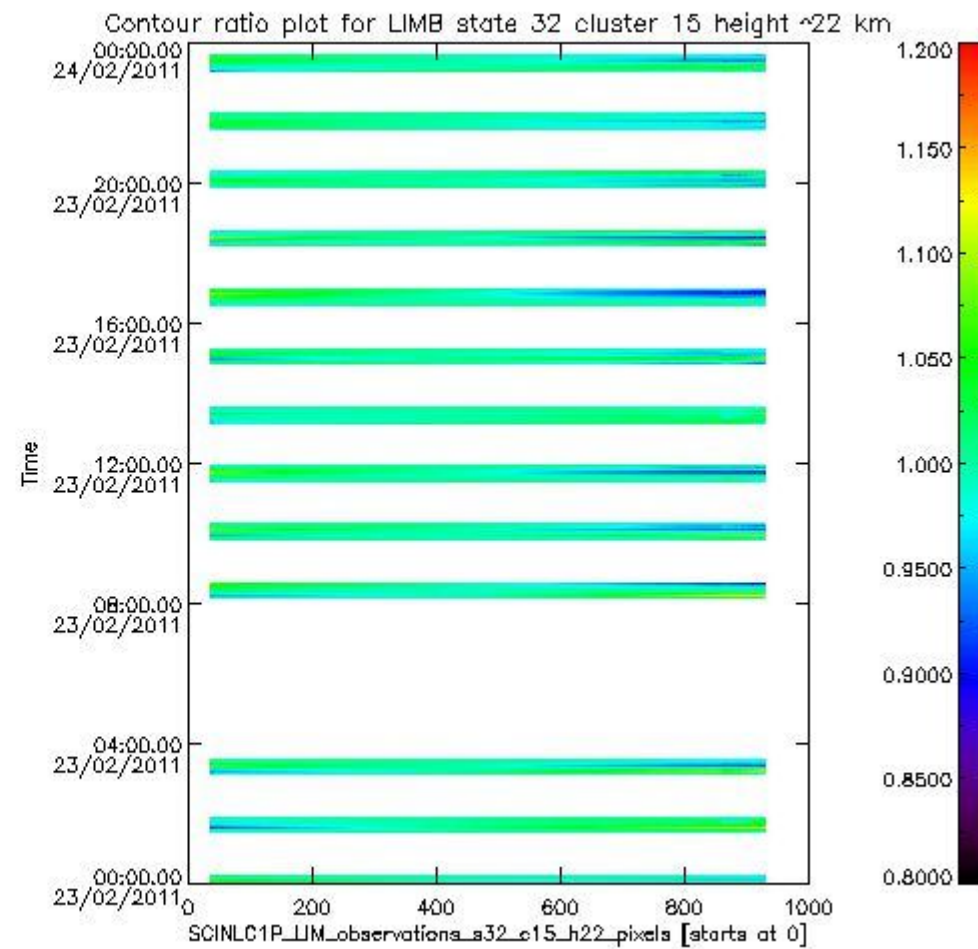
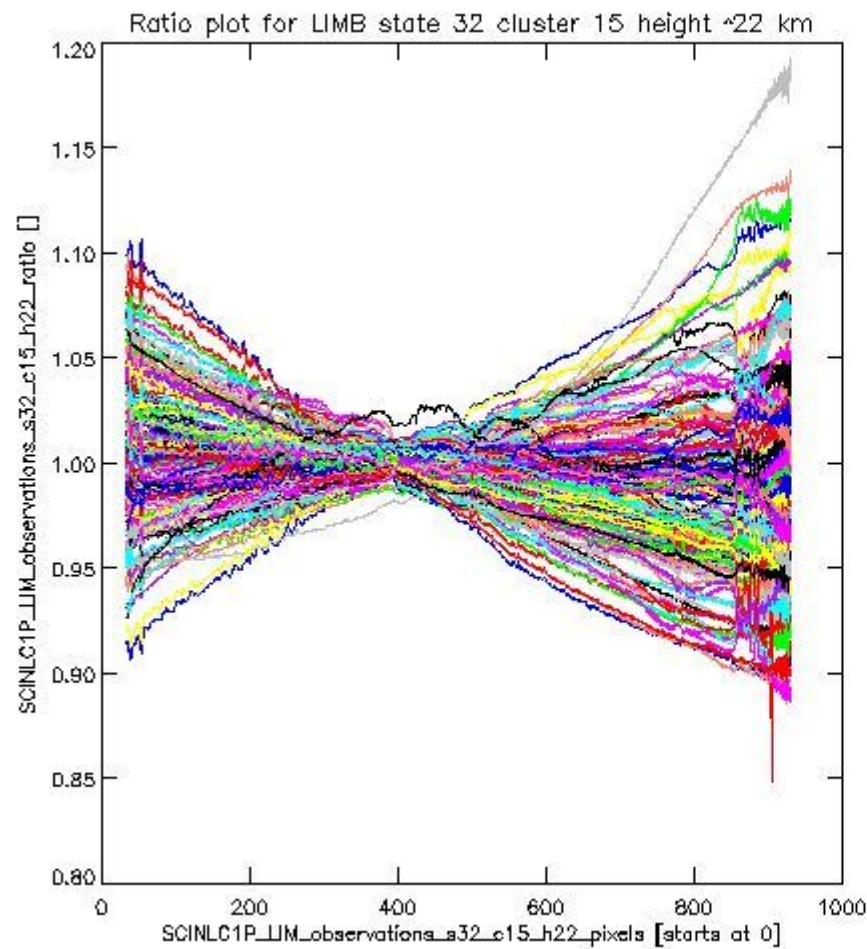
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_15.PNG

**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	23FEB2011 00:01:58.641
Start time of last sample	23FEB2011 23:37:24.554
Reference period start time	24JAN2011 00:00:21.908
Reference period stop time	22FEB2011 23:59:55.902
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



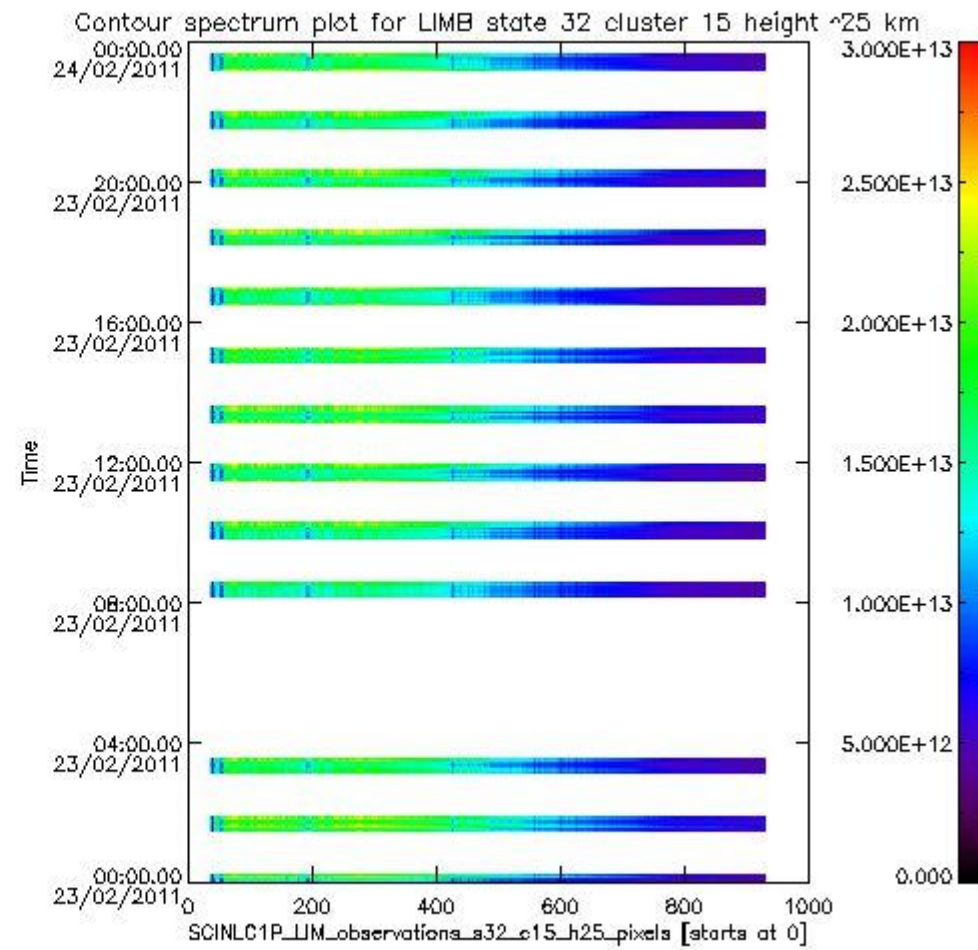
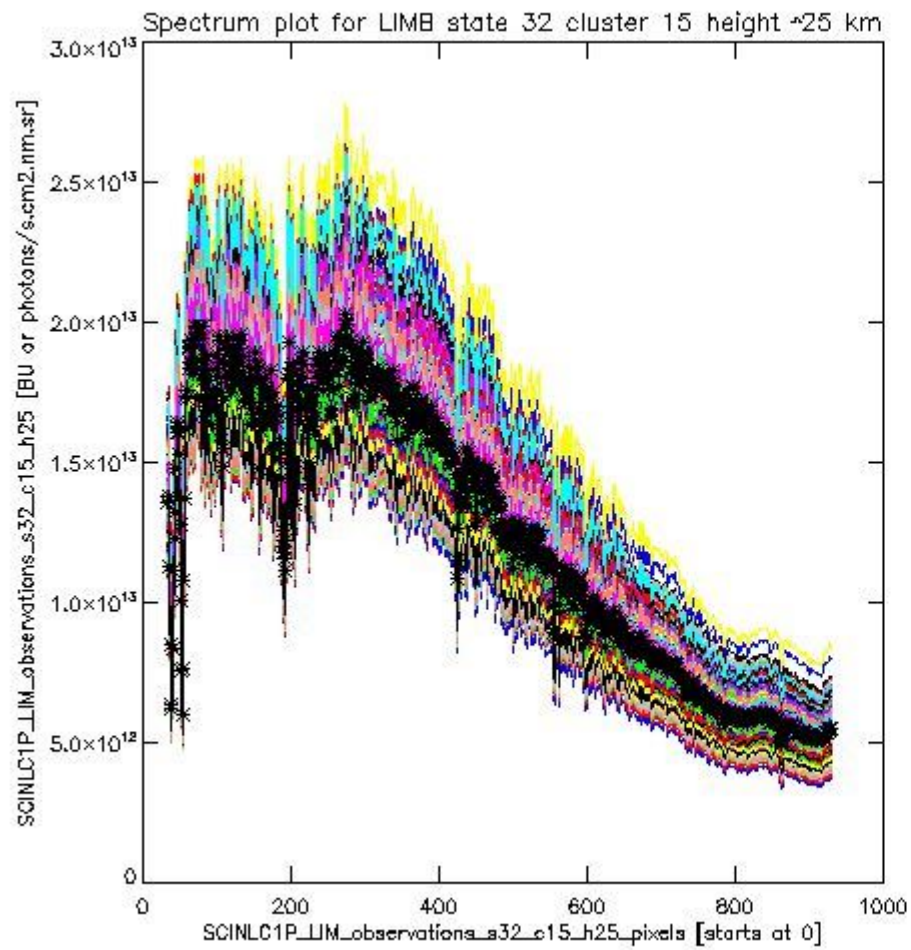
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_16.PNG



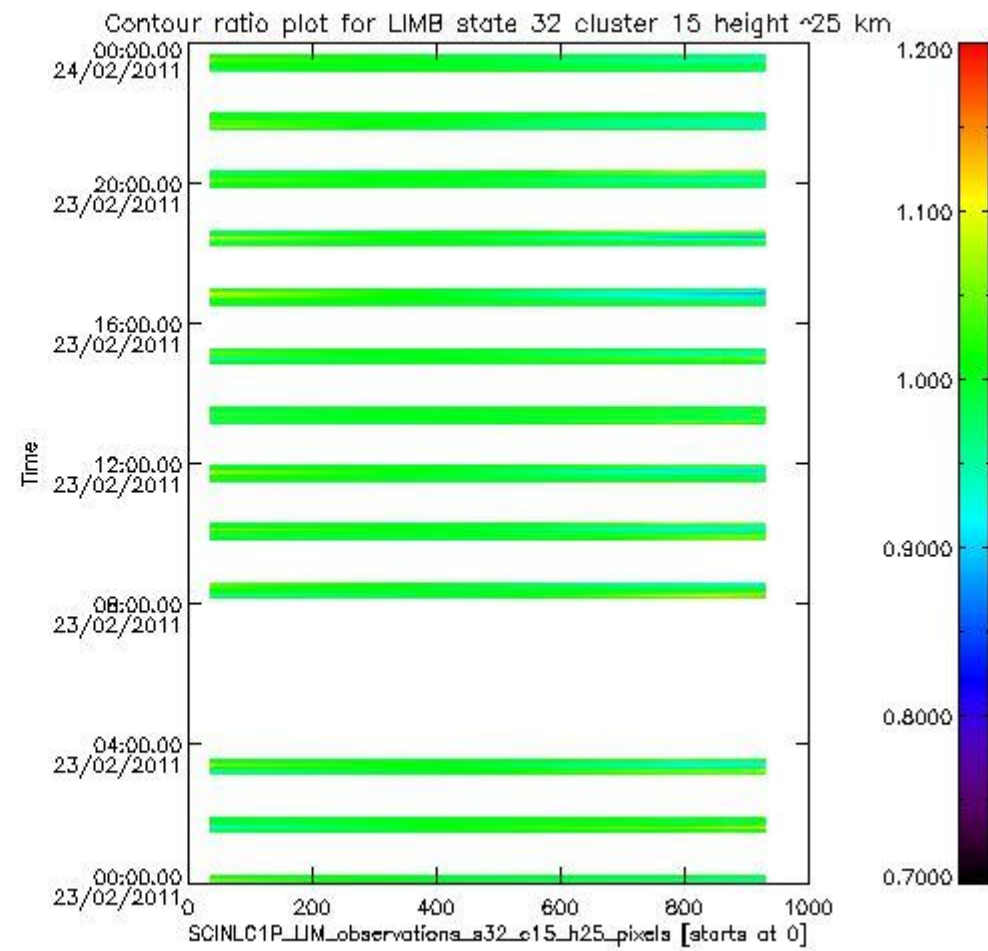
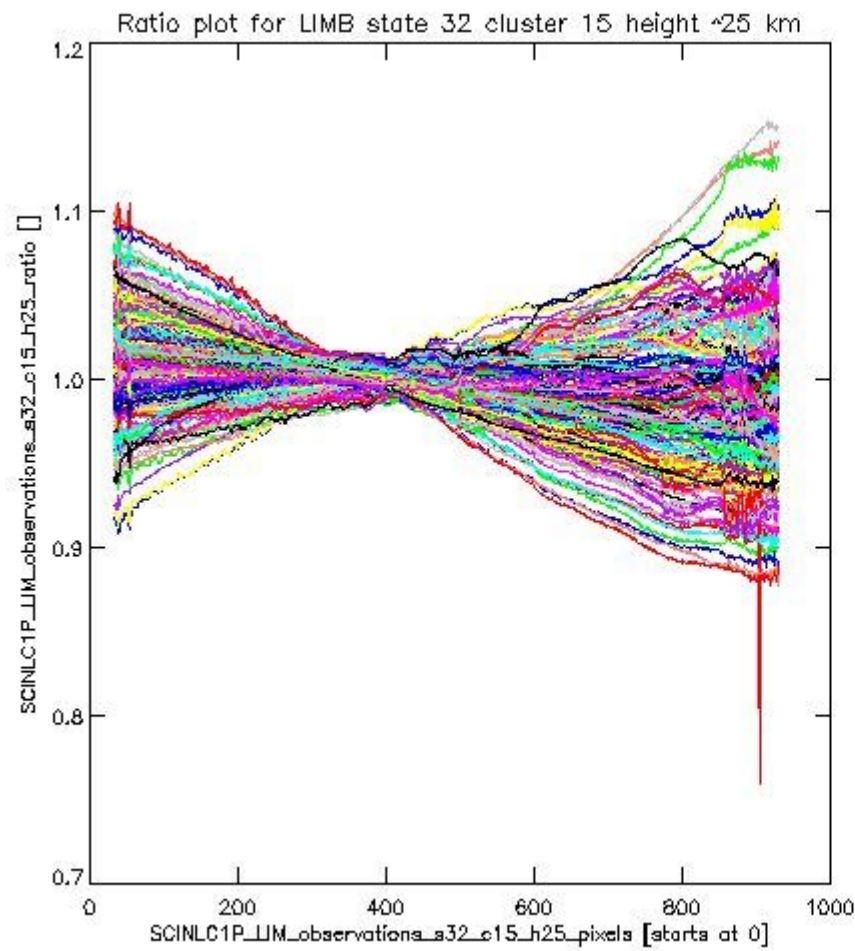
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_17.PNG

**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	23FEB2011 00:01:58.641
Start time of last sample	23FEB2011 23:37:24.554
Reference period start time	24JAN2011 00:00:21.908
Reference period stop time	22FEB2011 23:59:55.902
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



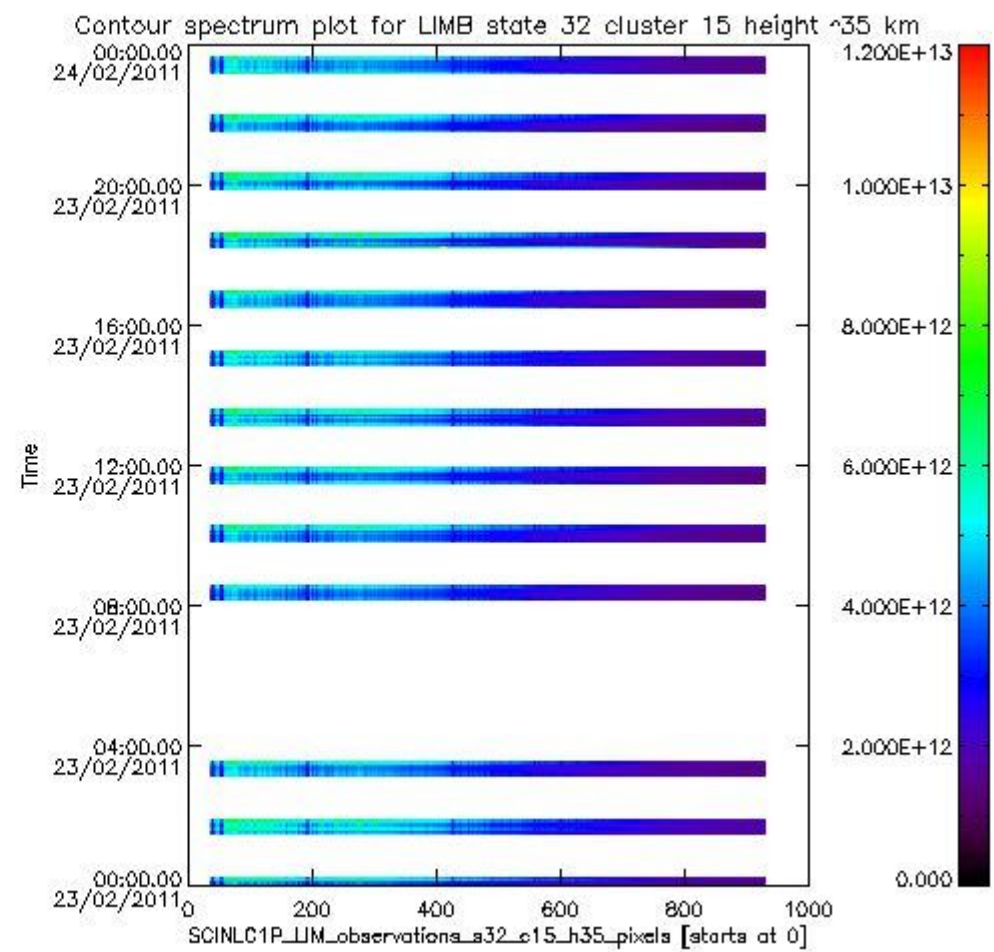
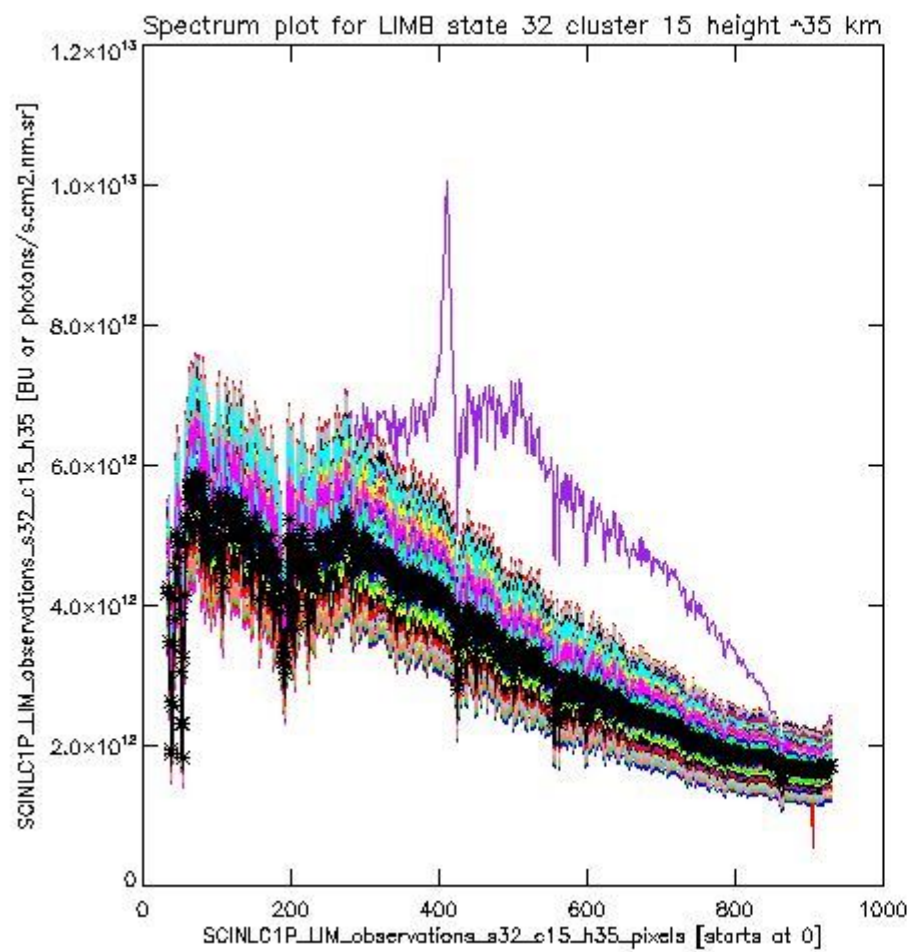
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_18.PNG



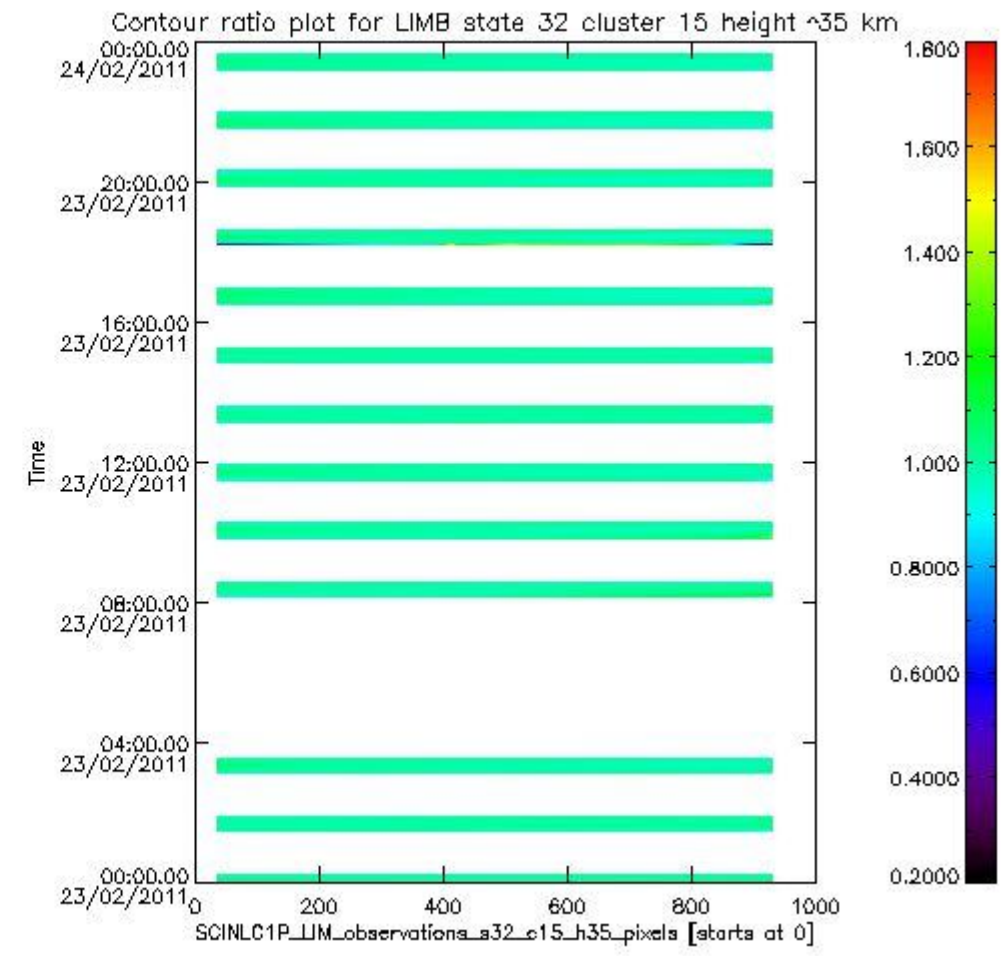
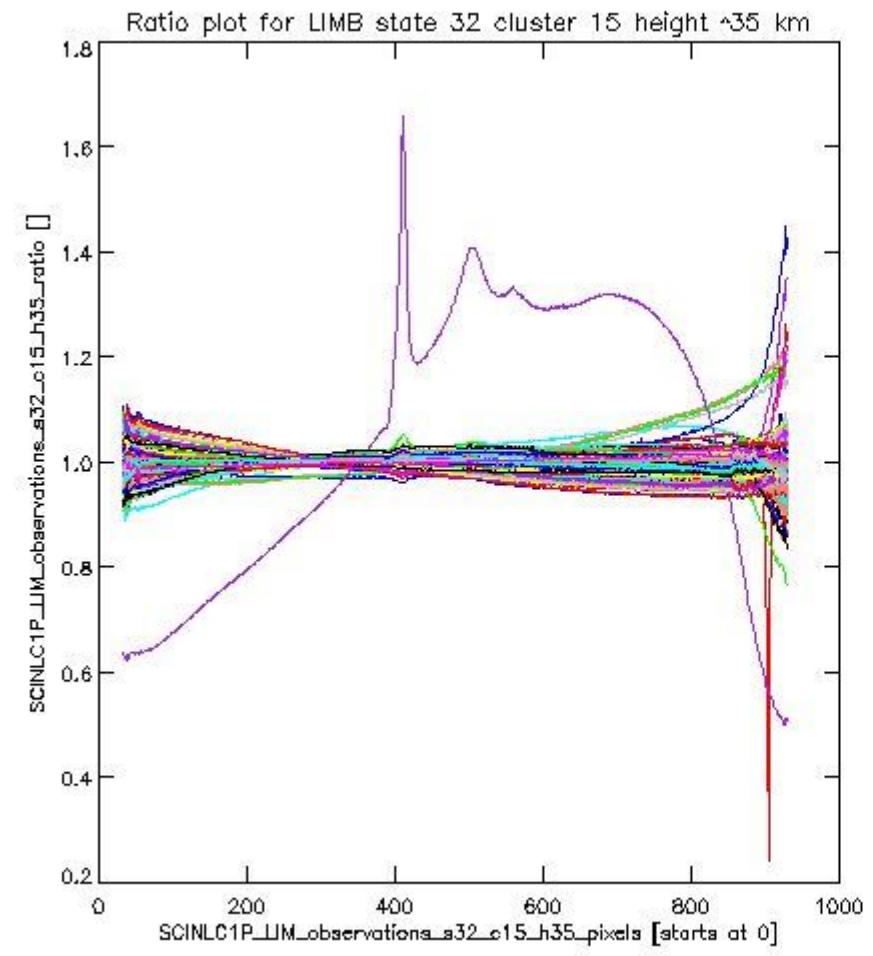
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_19.PNG

**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	23FEB2011 00:01:58.641
Start time of last sample	23FEB2011 23:37:24.554
Reference period start time	24JAN2011 00:00:21.908
Reference period stop time	22FEB2011 23:59:55.902
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\_20110223\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110223\_21.PNG

