

# 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	21FEB2011 06:55:34
Data source version	SCIA/7.04-U
Processing scope for products	10FEB2011 00:00:00 to 11FEB2011 00:00:00
Start time of first product within scope	09FEB2011 23:05:26
Stop time of last product within scope	11FEB2011 01:19:04
Total number of level 1 products	13
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	10FEB2011 01:17:42.783	10FEB2011 23:09:58.617
1	NADIR	07	09	N/A	10FEB2011 01:17:42.783	10FEB2011 23:09:58.617
2	NADIR	07	15	N/A	10FEB2011 01:17:42.783	10FEB2011 23:09:58.617
3	NADIR	07	24	N/A	10FEB2011 01:17:42.783	10FEB2011 23:09:58.617
4	NADIR	07	55	N/A	10FEB2011 01:17:42.783	10FEB2011 23:09:58.617
5	LIMB	32	09	~19 km	10FEB2011 01:04:32.142	10FEB2011 23:15:12.660
6	LIMB	32	09	~22 km	10FEB2011 01:04:32.142	10FEB2011 23:15:12.660
7	LIMB	32	09	~25 km	10FEB2011 01:04:32.142	10FEB2011 23:15:12.660
8	LIMB	32	15	~22 km	10FEB2011 01:04:32.142	10FEB2011 23:15:12.660
9	LIMB	32	15	~25 km	10FEB2011 01:04:32.142	10FEB2011 23:15:12.660
10	LIMB	32	15	~35 km	10FEB2011 01:04:32.142	10FEB2011 23:15:12.660

#### 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_1CUDPA20110209_225024_000060413099_00217_46783_4484.N1</a>	09FEB2011 23:05:26	10FEB2011 00:15:55	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110210_003109_000059783099_00218_46784_4486.N1</a>	10FEB2011 00:45:40	10FEB2011 01:55:54	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110210_021135_000059973099_00219_46785_4490.N1</a>	10FEB2011 02:25:53	10FEB2011 03:36:22	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110210_035136_000060223099_00220_46786_4493.N1</a>	10FEB2011 04:06:07	10FEB2011 05:16:21	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110210_053202_000059973099_00221_46787_4492.N1</a>	10FEB2011 05:46:20	10FEB2011 06:56:49	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110210_071203_000060223099_00222_46788_4494.N1</a>	10FEB2011 07:26:34	10FEB2011 08:36:49	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110210_135257_000060223099_00226_46792_4498.N1	10FEB2011 14:07:28	10FEB2011 15:17:43	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110210_153323_000059973099_00227_46793_4501.N1	10FEB2011 15:47:42	10FEB2011 16:58:11	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110210_171325_000060223099_00228_46794_4503.N1	10FEB2011 17:27:55	10FEB2011 18:38:32	0	35	31	0	1	1	0	0	
9	SCI_NLC_1CUDPA20110210_185351_000059973099_00229_46795_4505.N1	10FEB2011 19:08:09	10FEB2011 20:19:00	0	36	30	0	1	1	0	0	
10	SCI_NLC_1CUDPA20110210_203352_000060223099_00230_46796_4507.N1	10FEB2011 20:48:23	10FEB2011 21:58:37	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110210_221418_000059973099_00231_46797_4509.N1	10FEB2011 22:28:36	10FEB2011 23:39:05	0	36	30	0	0	1	0	0	
12	SCI_NLC_1CUDPA20110210_235419_000060223099_00232_46798_4511.N1	11FEB2011 00:08:50	11FEB2011 01:19:04	0	35	31	0	0	1	0	0	

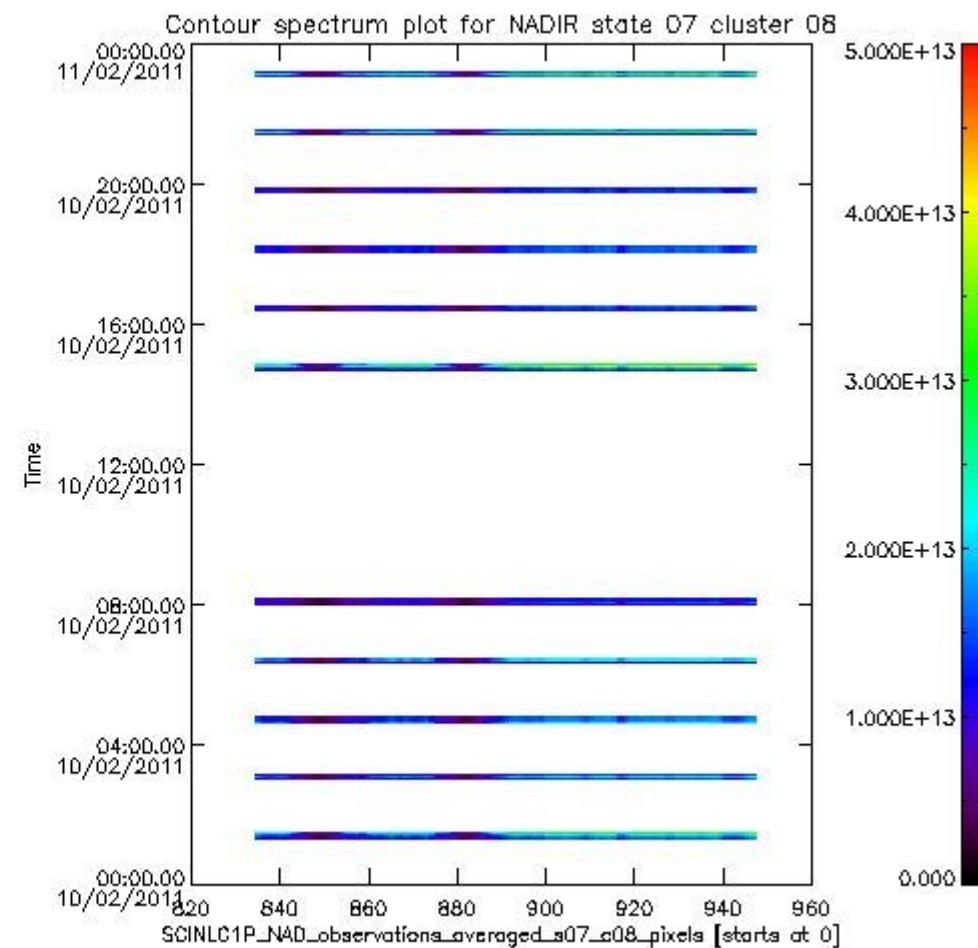
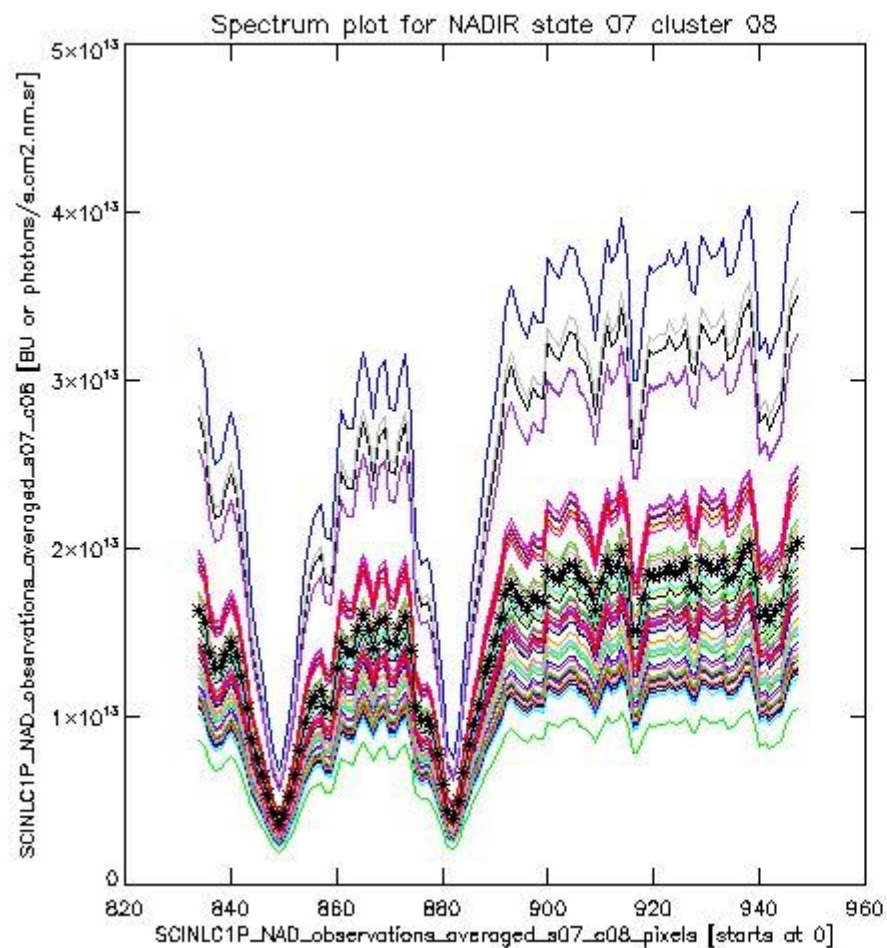
## 1.2 Source packet monitoring

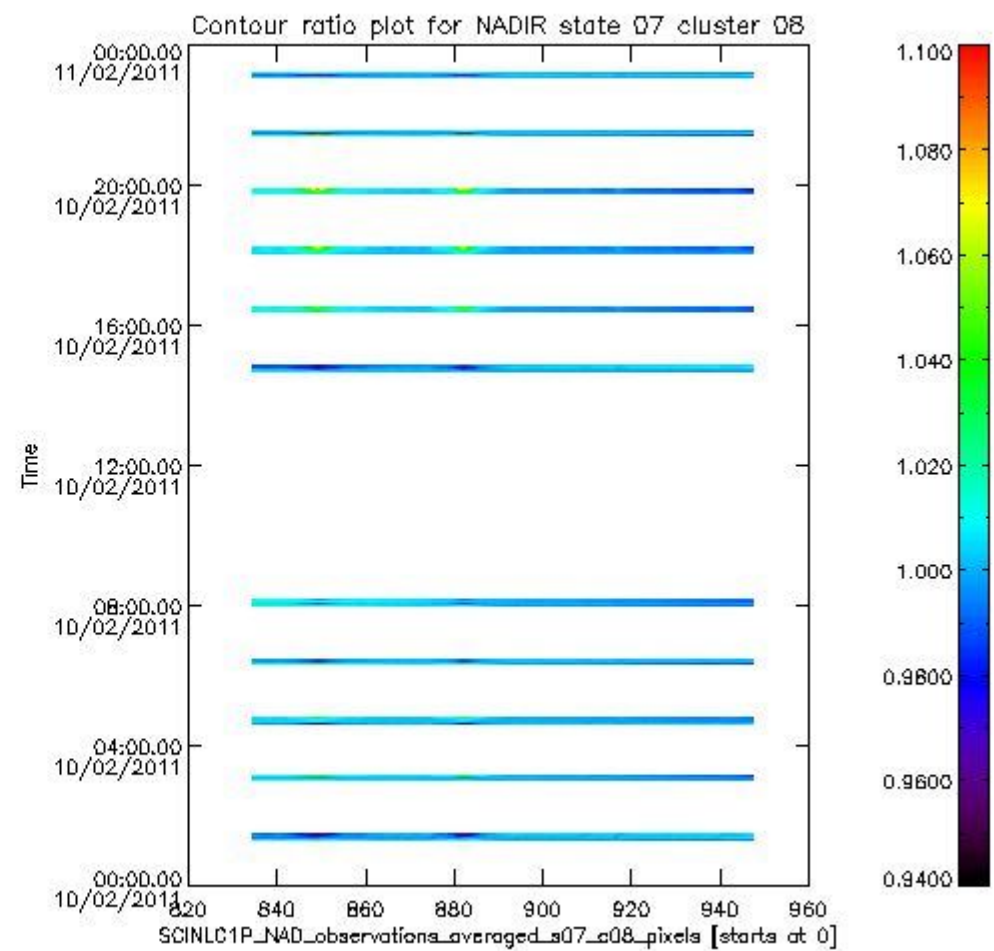
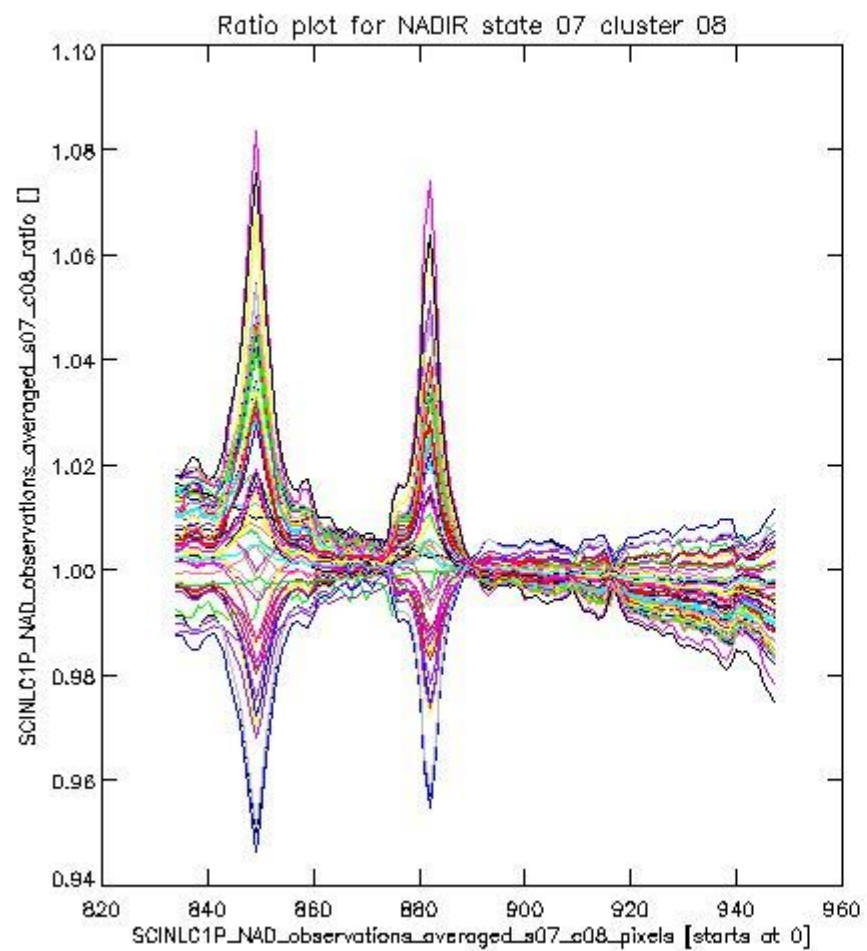
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	10FEB2011 01:17:42.783
Start time of last sample	10FEB2011 23:09:58.617
Reference period start time	11JAN2011 01:20:48.093
Reference period stop time	09FEB2011 23:46:48.806
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



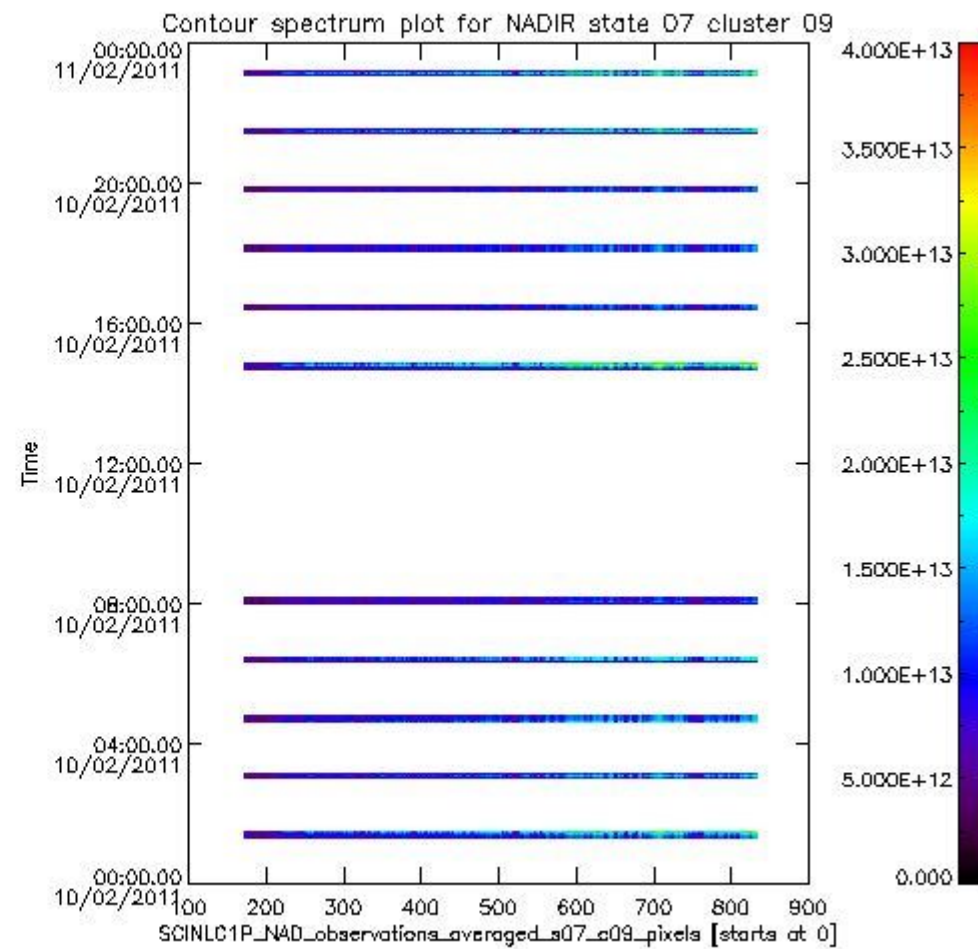
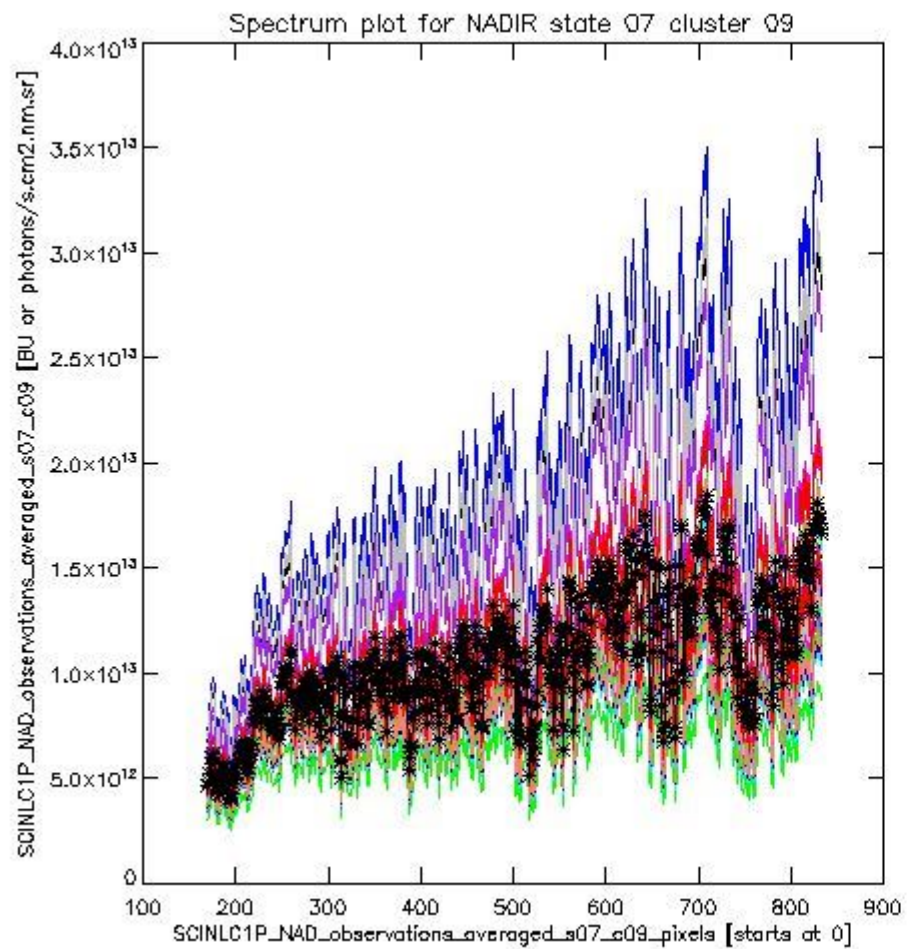


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_1.PNG

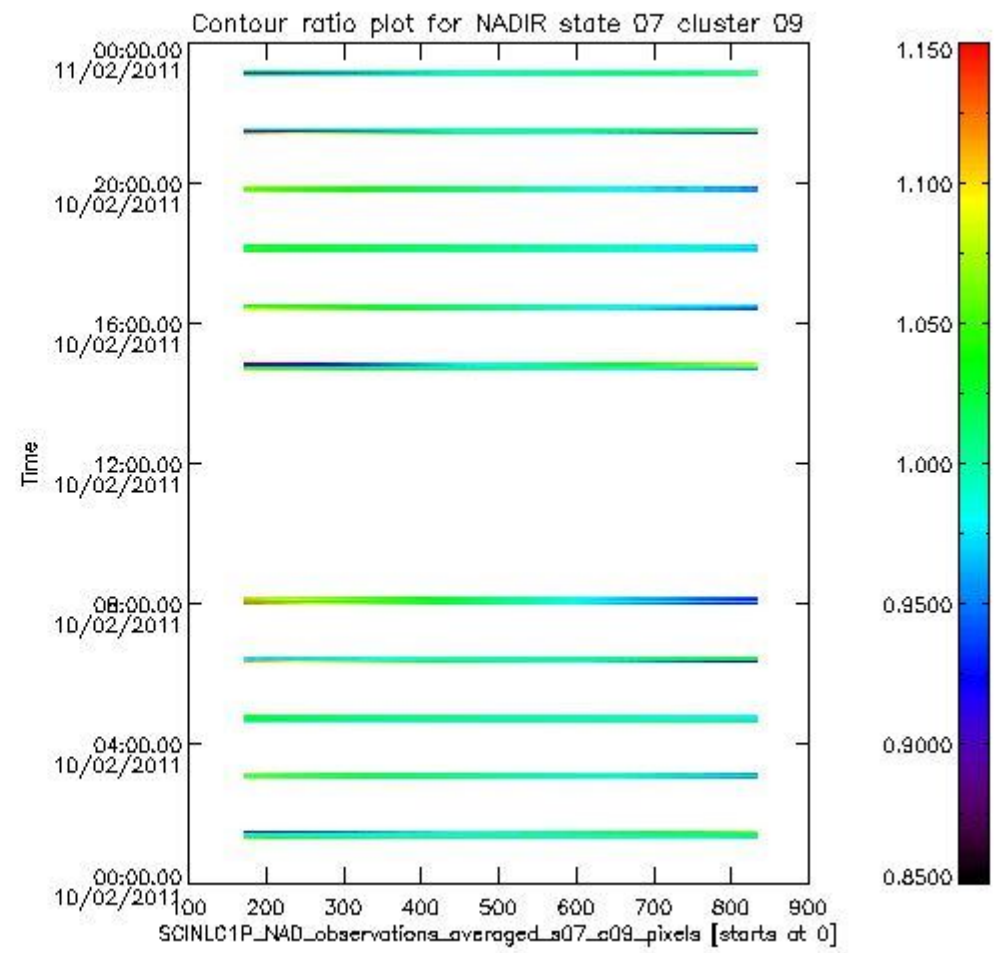
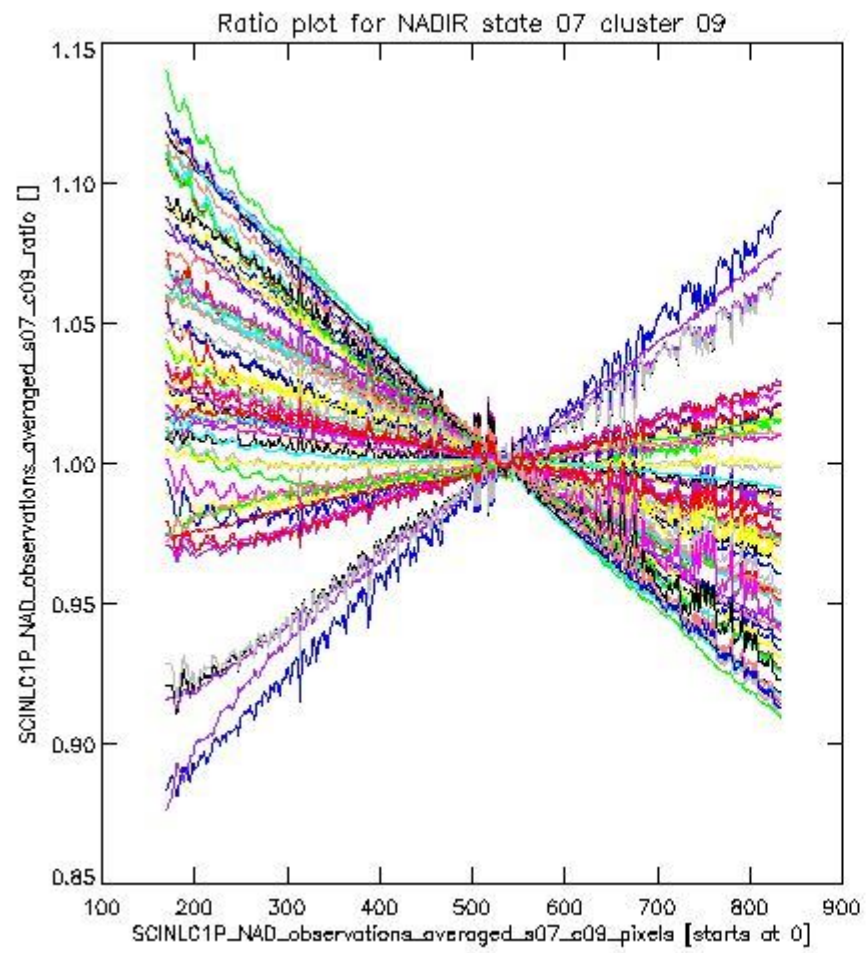
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	10FEB2011 01:17:42.783
Start time of last sample	10FEB2011 23:09:58.617
Reference period start time	11JAN2011 01:20:48.093
Reference period stop time	09FEB2011 23:46:48.806
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





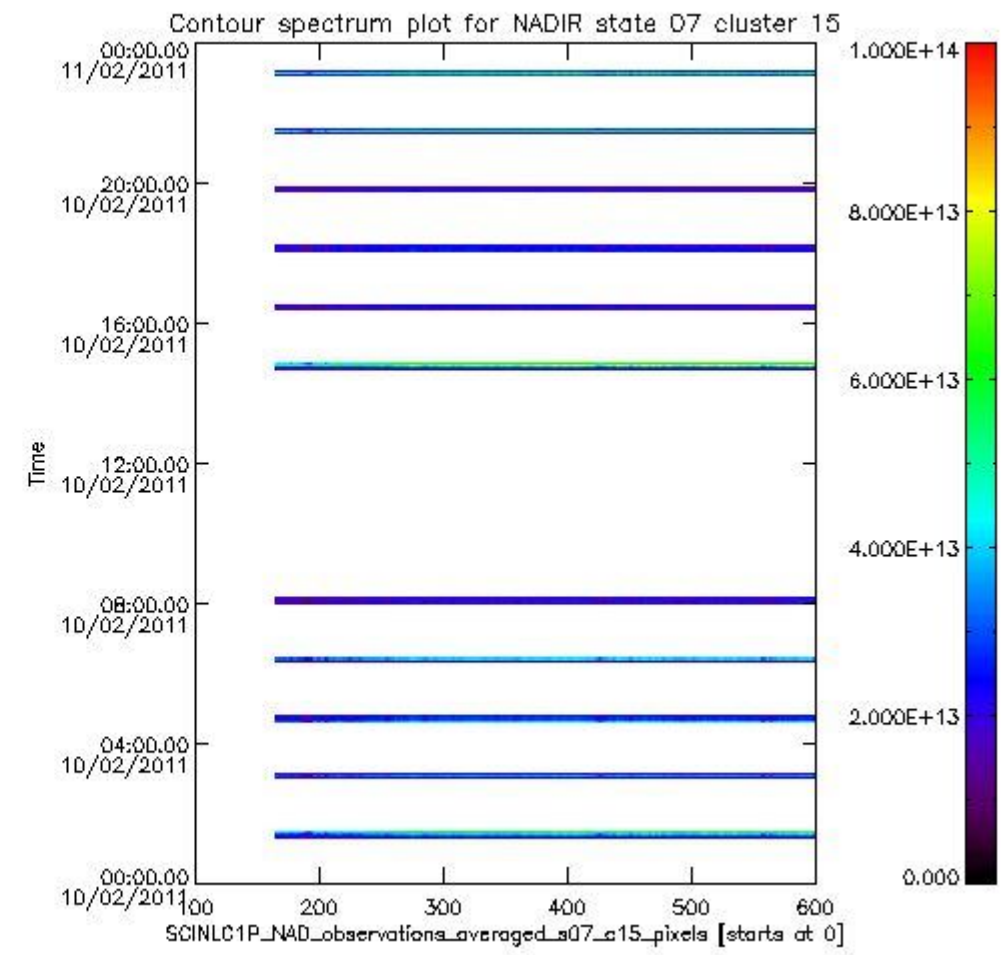
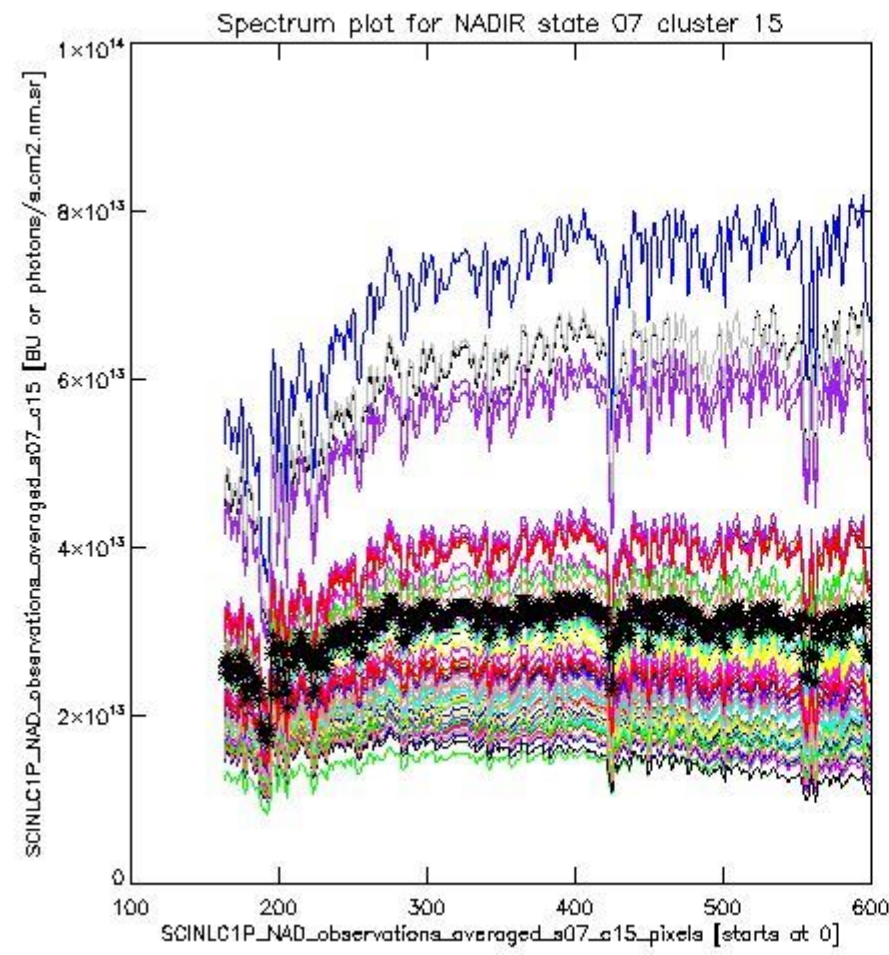
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_3.PNG

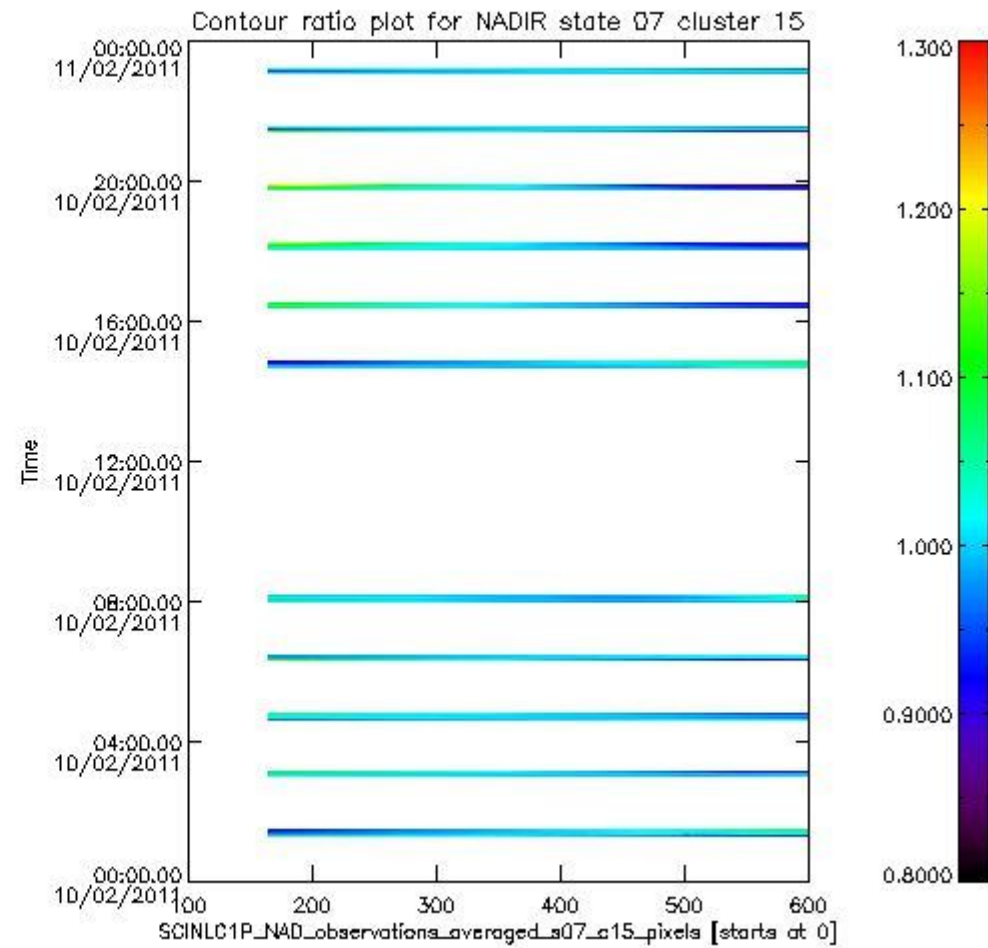
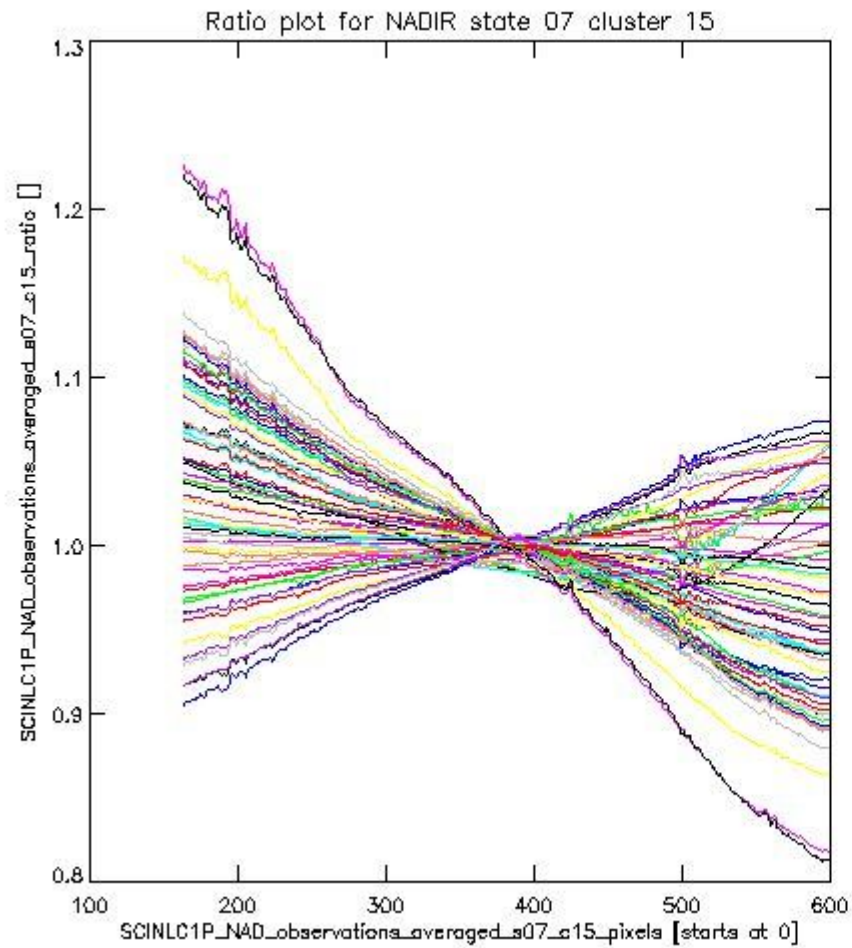
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	10FEB2011 01:17:42.783
Start time of last sample	10FEB2011 23:09:58.617
Reference period start time	11JAN2011 01:20:48.093
Reference period stop time	09FEB2011 23:46:48.806
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\_20110210\_4.PNG

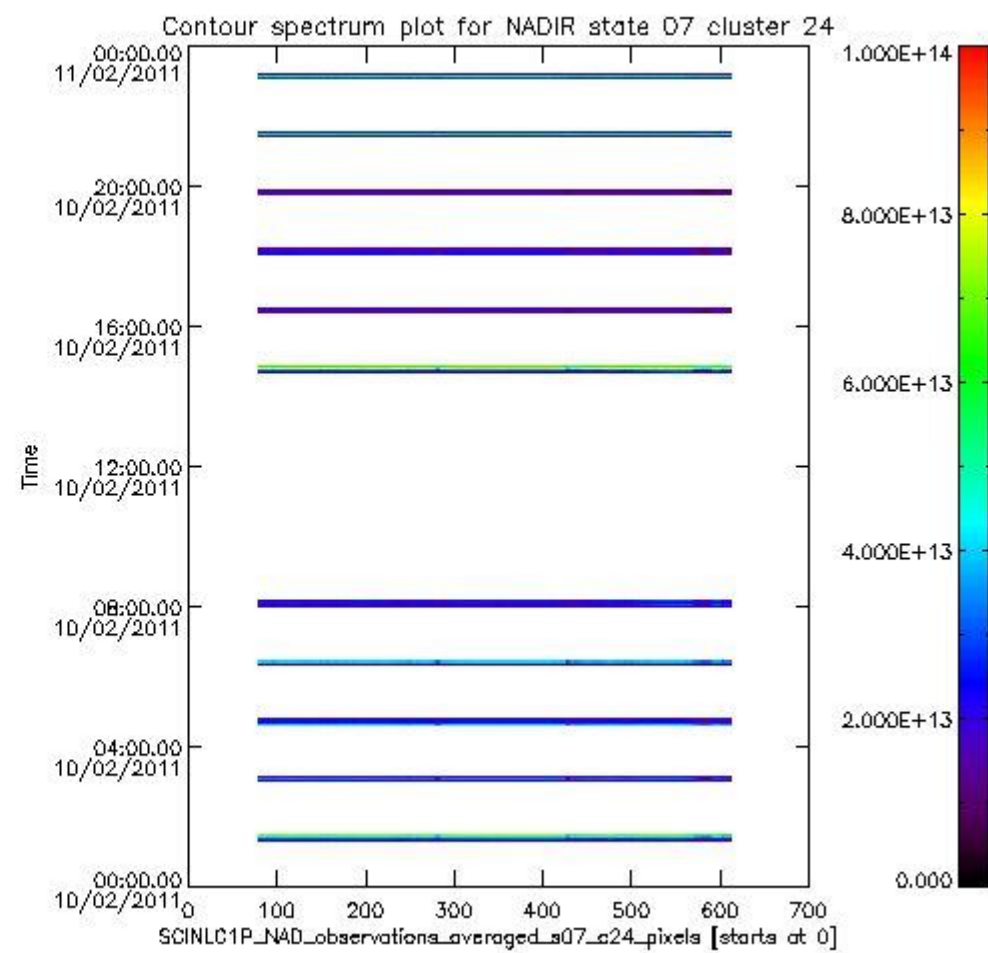
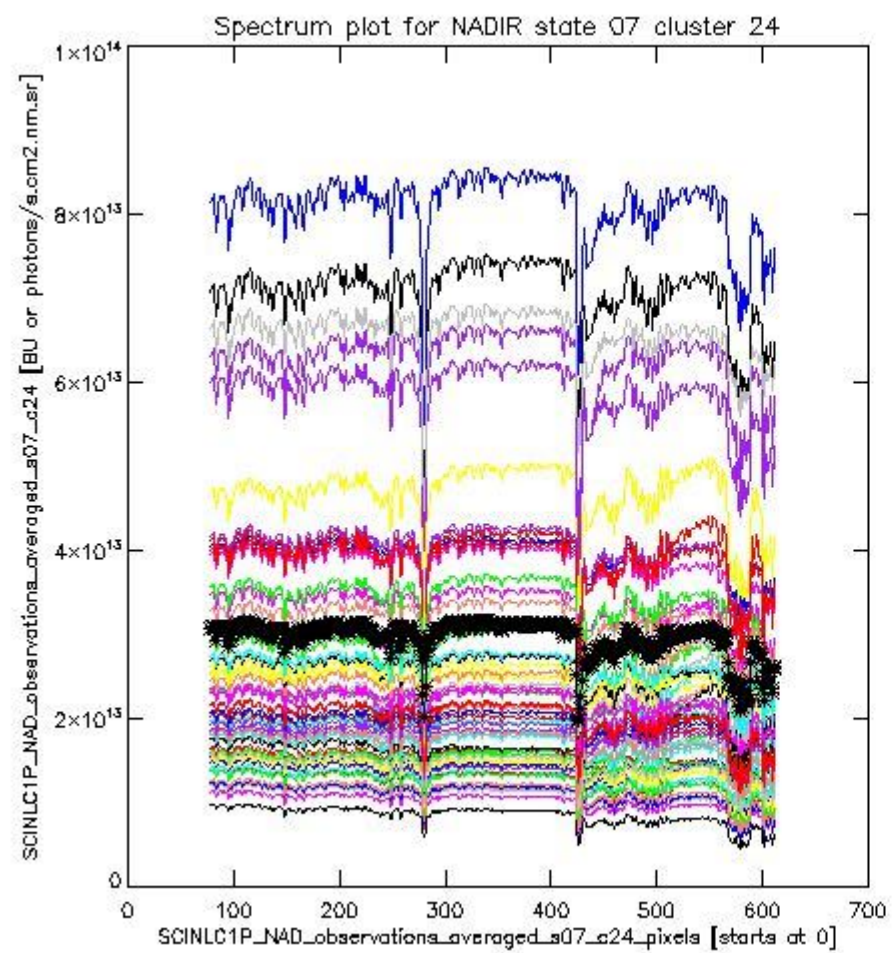




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_5.PNG

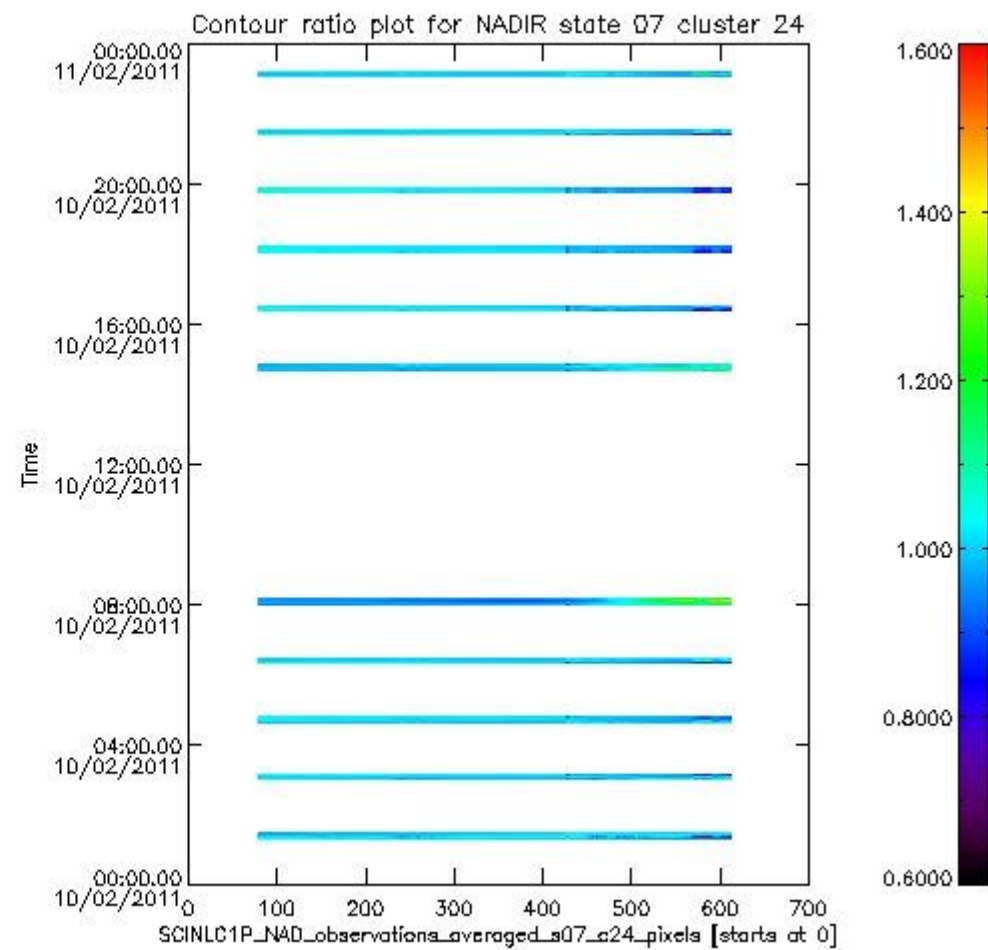
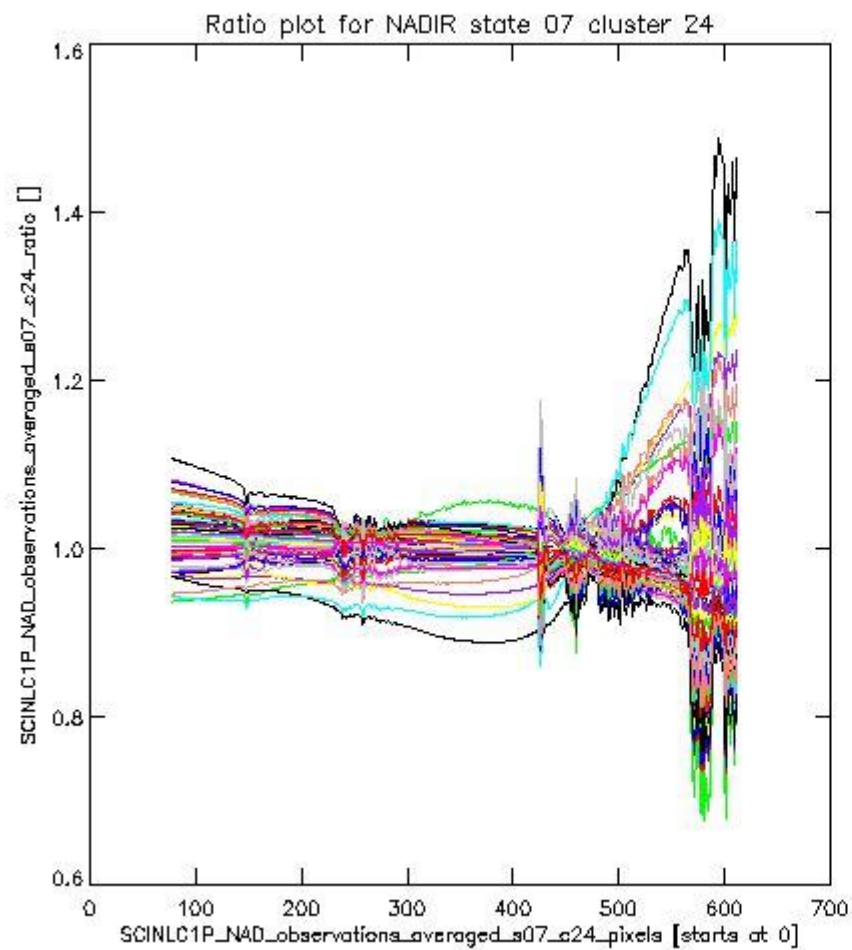
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	10FEB2011 01:17:42.783
Start time of last sample	10FEB2011 23:09:58.617
Reference period start time	11JAN2011 01:20:48.093
Reference period stop time	09FEB2011 23:46:48.806
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\_20110210\_6.PNG

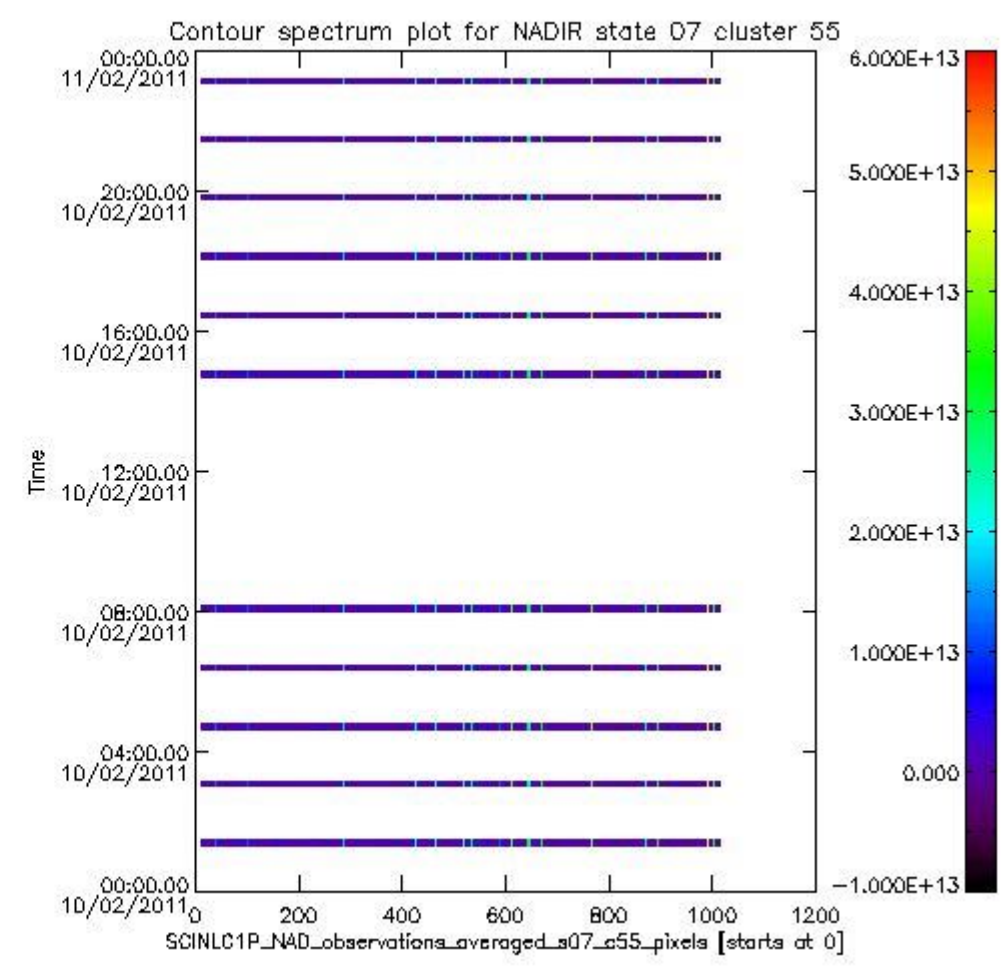
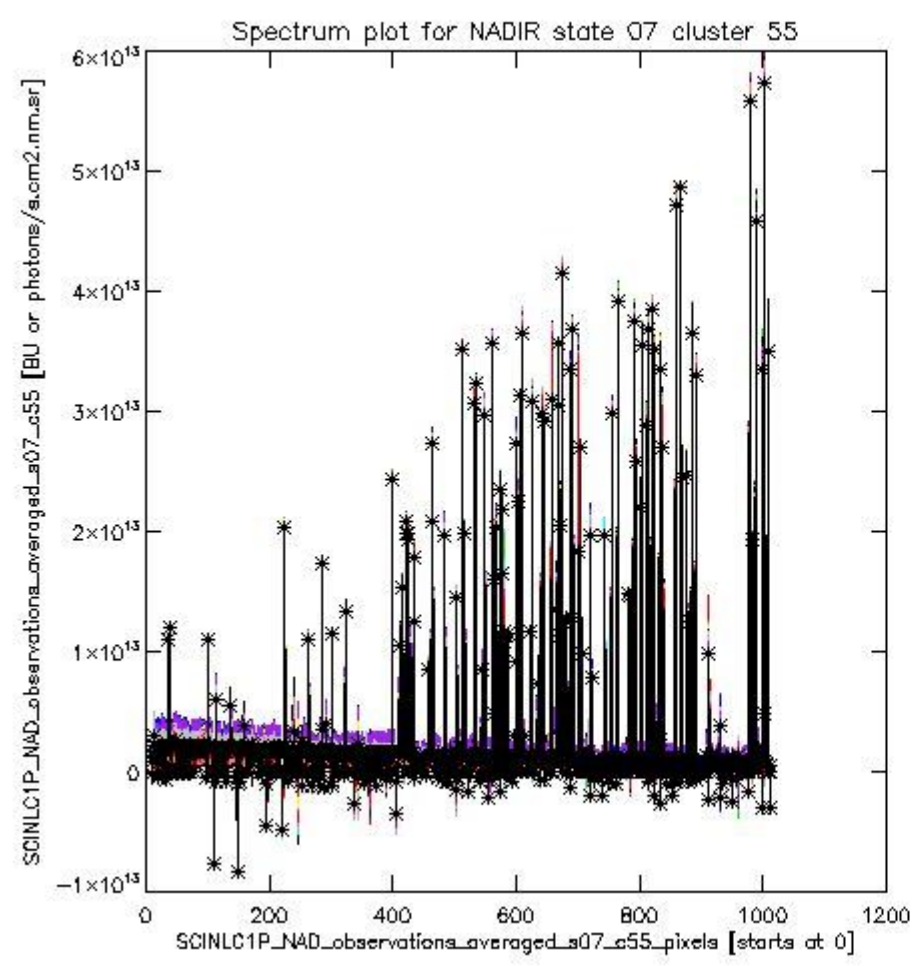




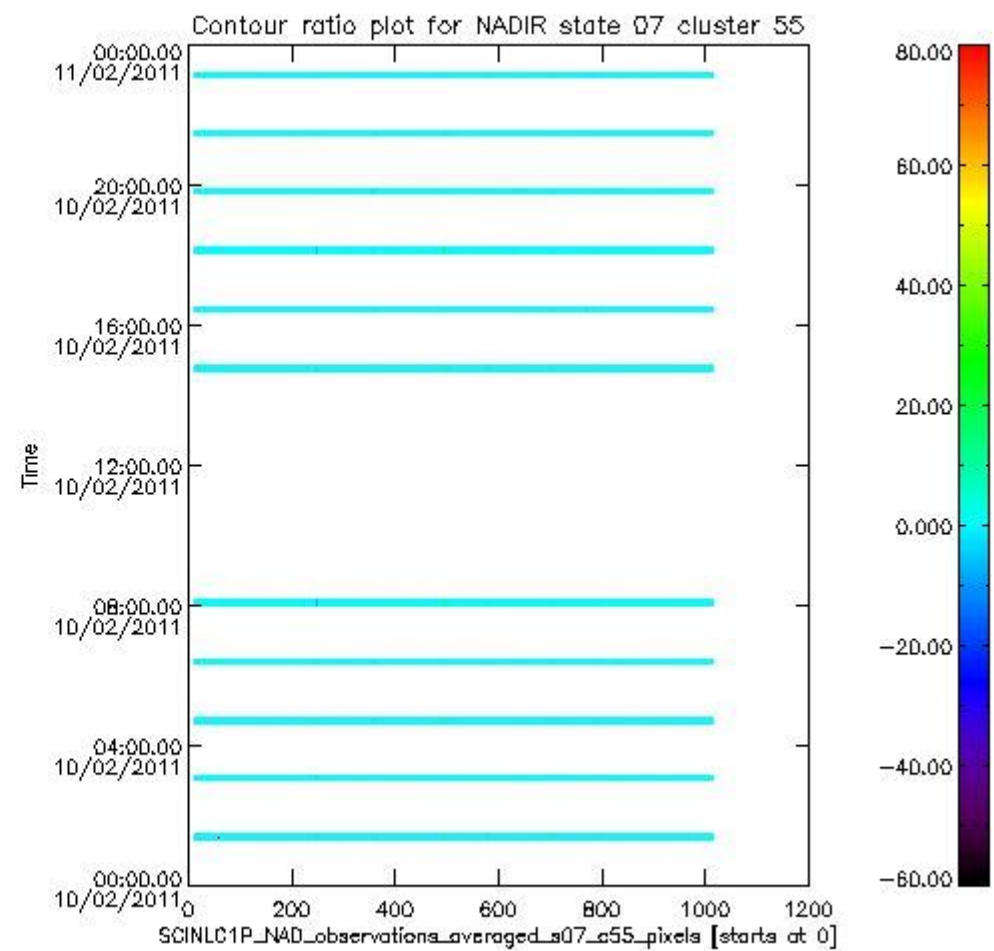
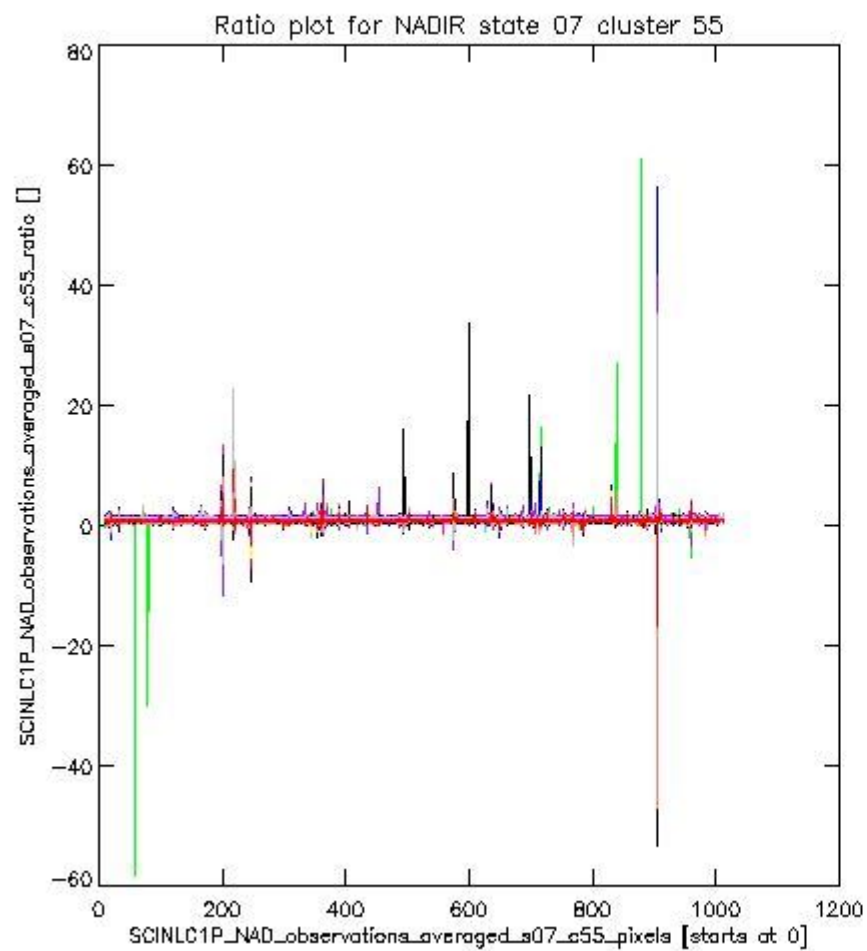
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_7.PNG

**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	10FEB2011 01:17:42.783
Start time of last sample	10FEB2011 23:09:58.617
Reference period start time	11JAN2011 01:20:48.093
Reference period stop time	09FEB2011 23:46:48.806
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\_20110210\_8.PNG

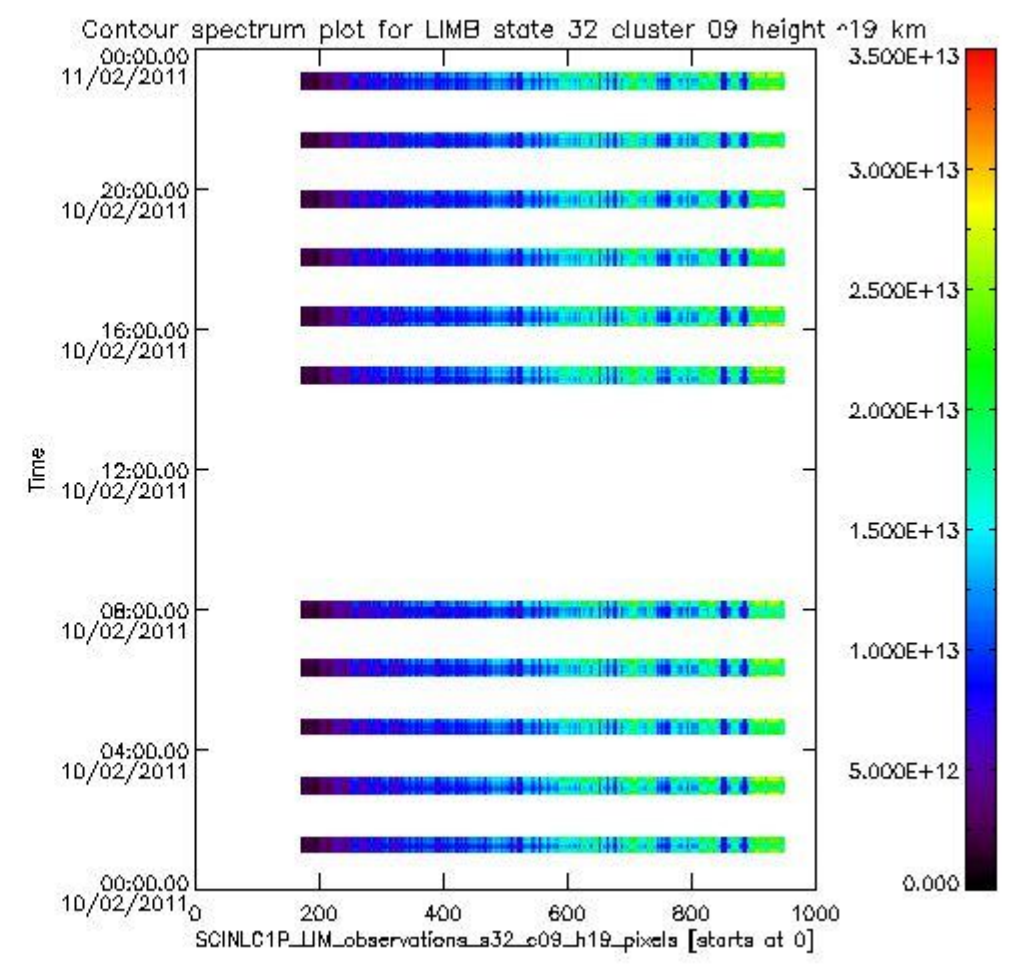
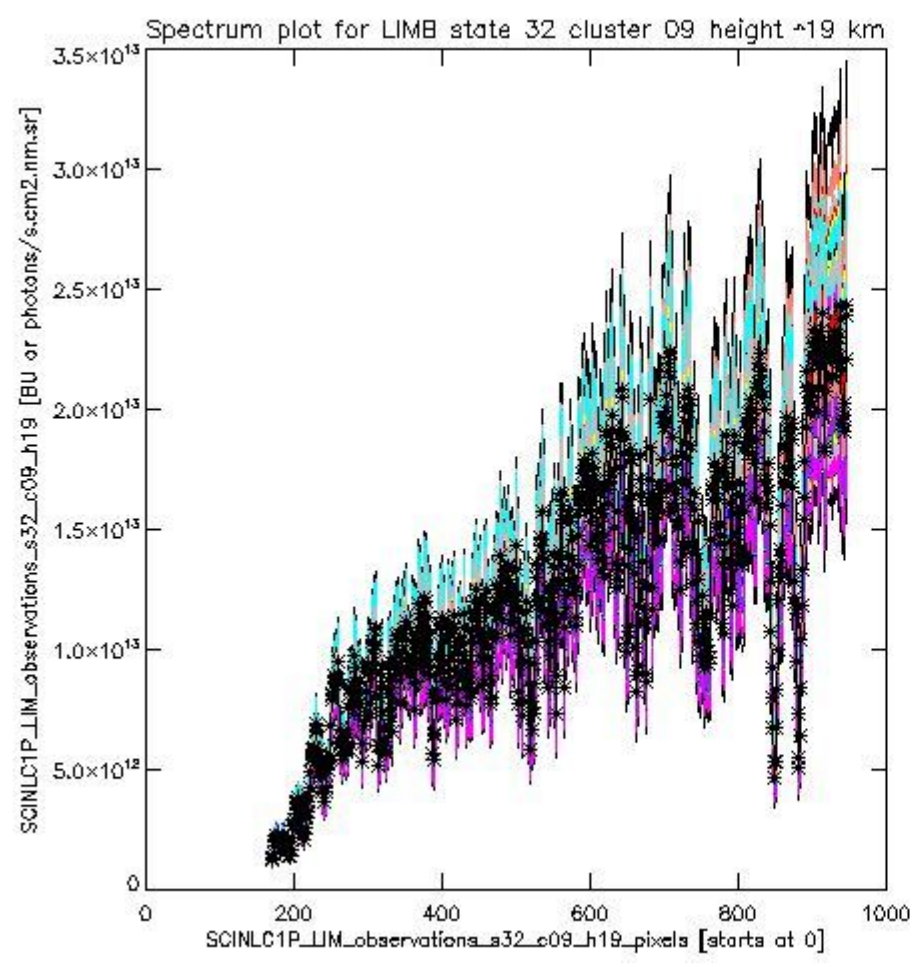


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_9.PNG

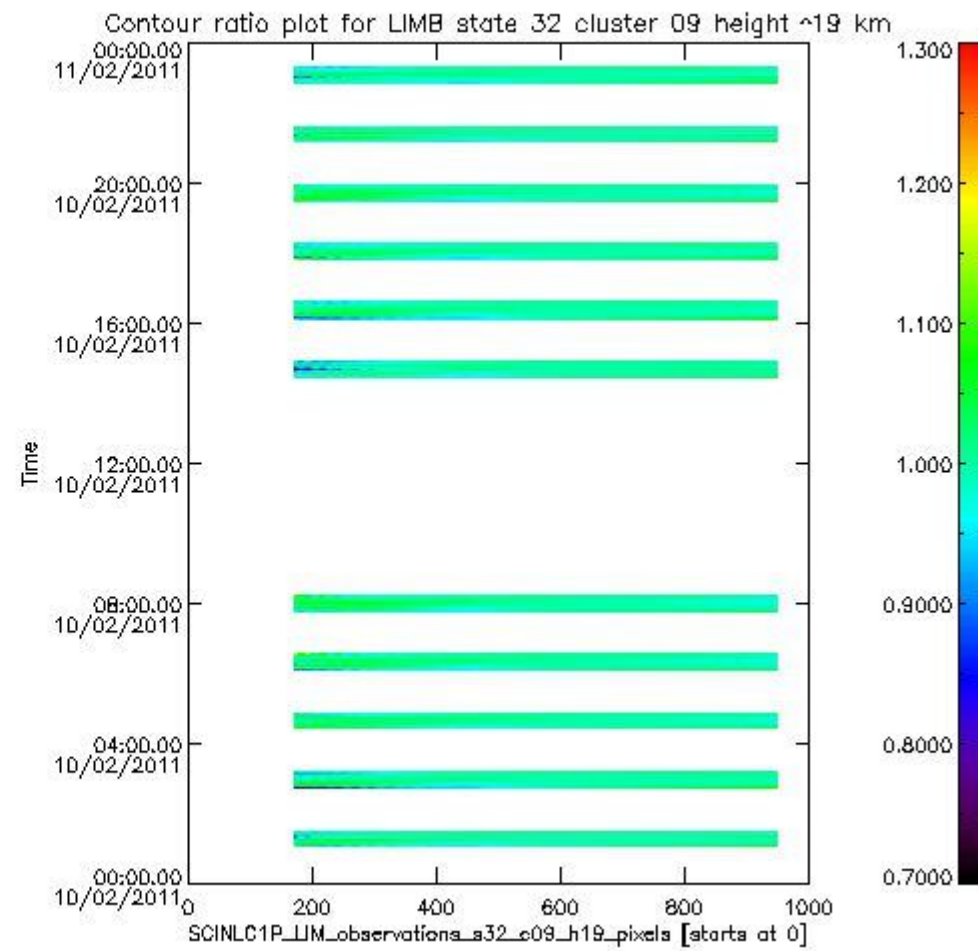
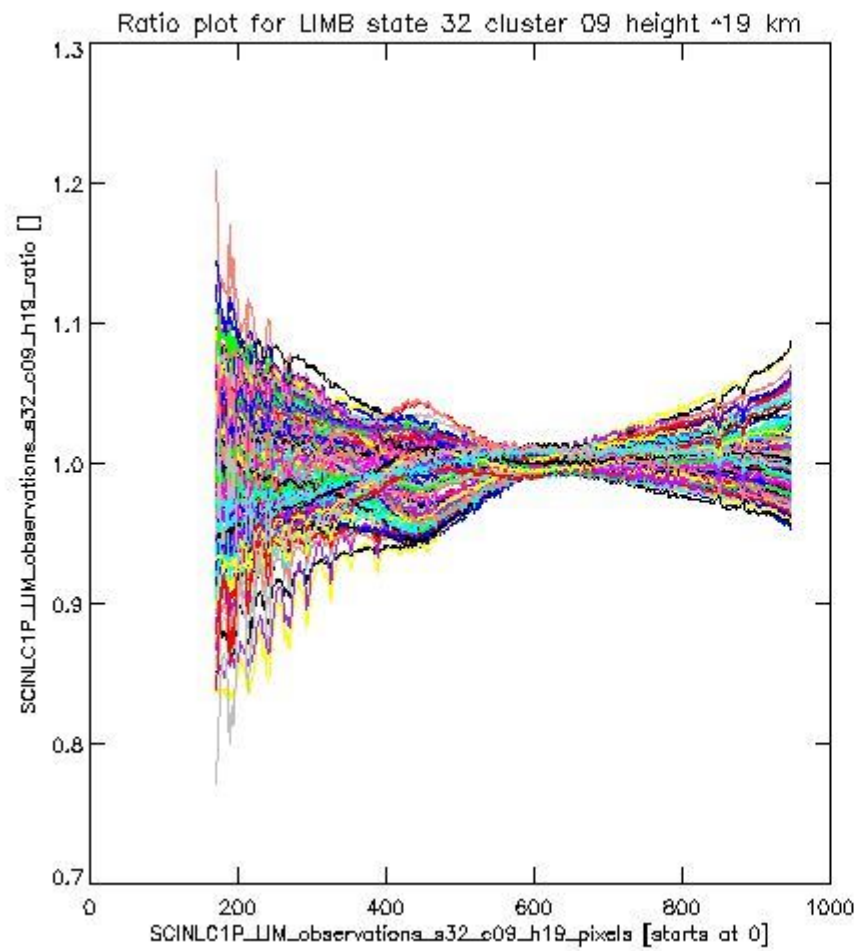
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	10FEB2011 01:04:32.142
Start time of last sample	10FEB2011 23:15:12.660
Reference period start time	11JAN2011 01:05:34.714
Reference period stop time	09FEB2011 23:52:02.849
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





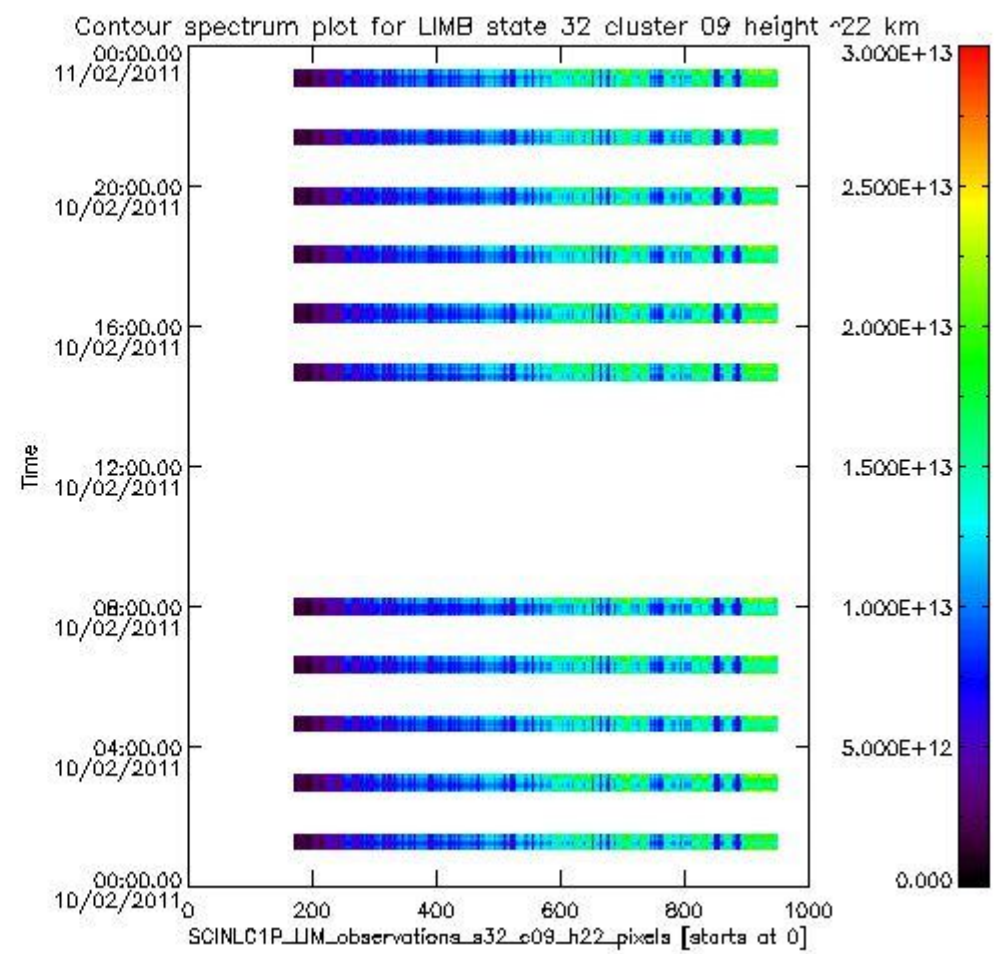
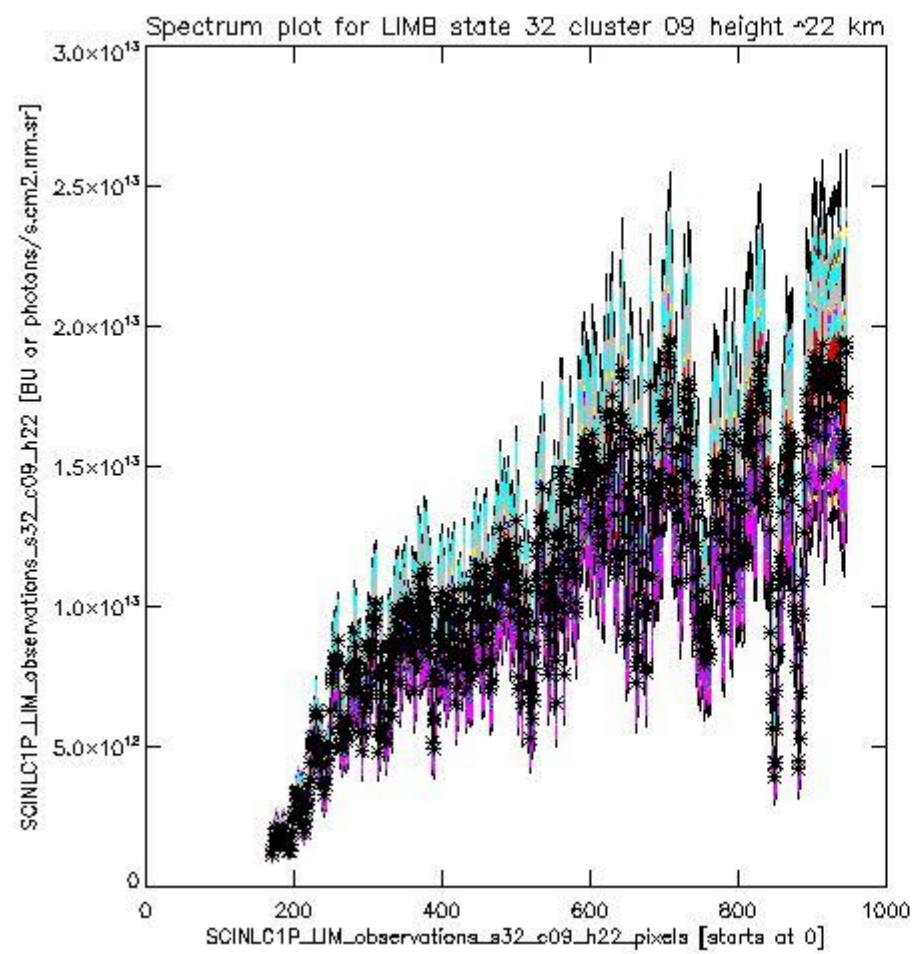
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_10.PNG



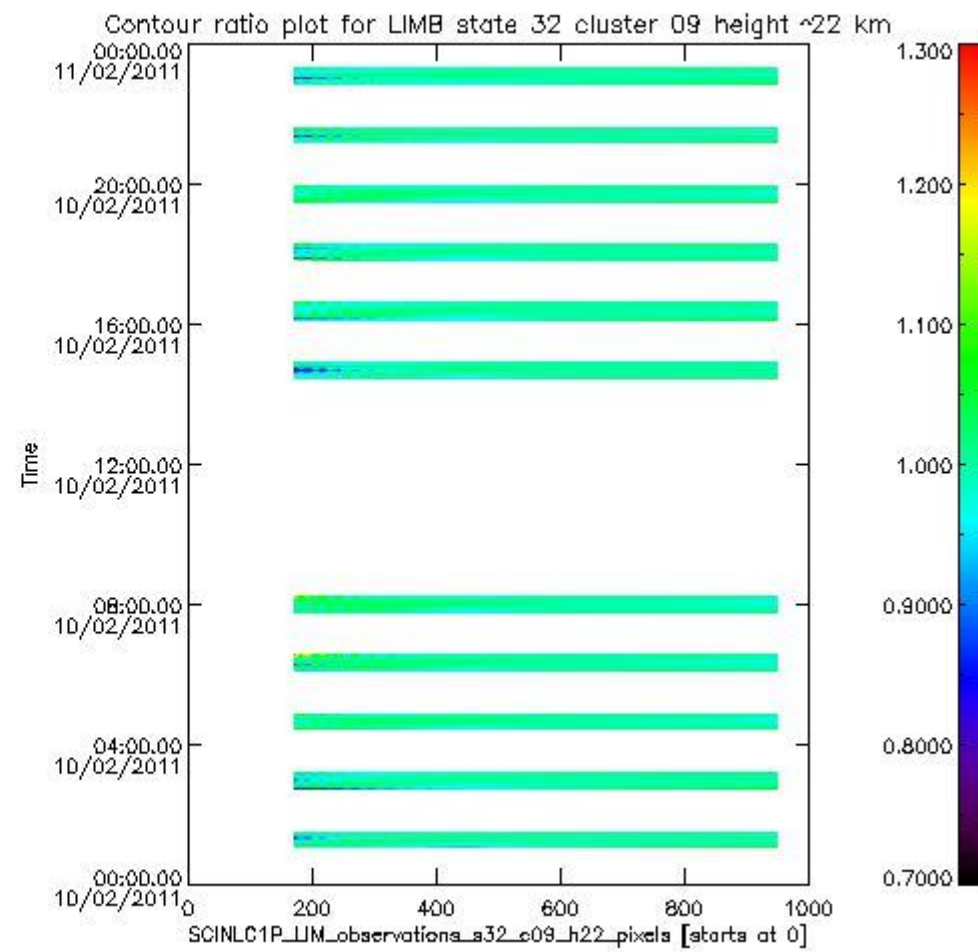
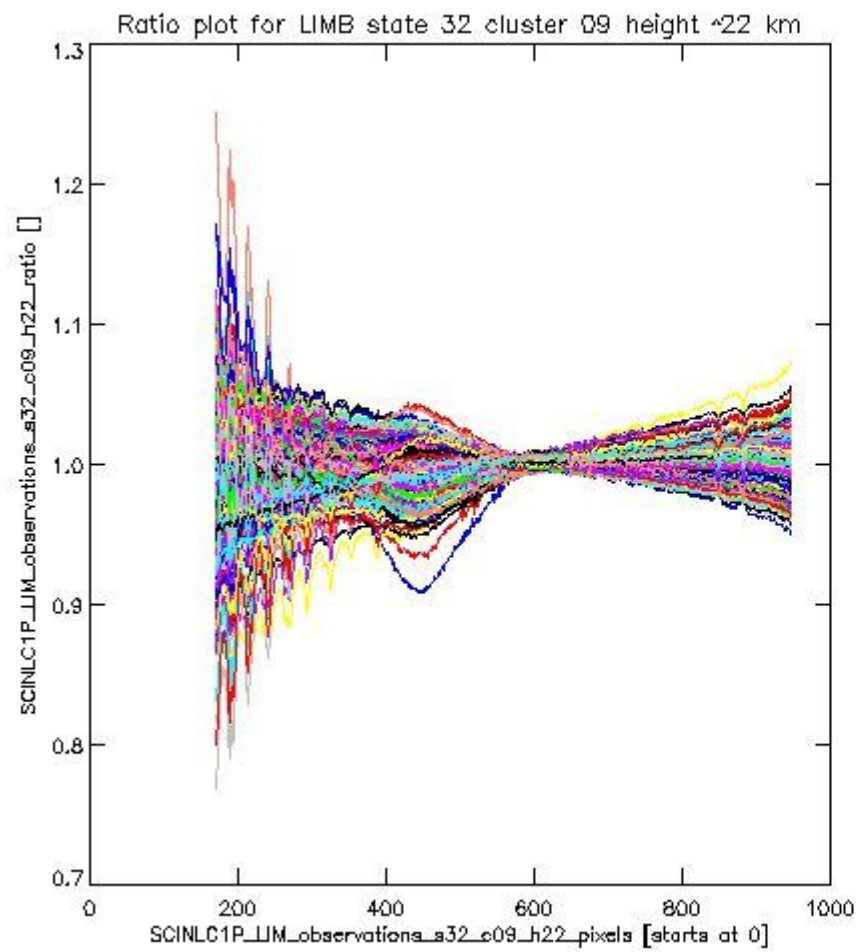
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_11.PNG

**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	10FEB2011 01:04:32.142
Start time of last sample	10FEB2011 23:15:12.660
Reference period start time	11JAN2011 01:05:34.714
Reference period stop time	09FEB2011 23:52:02.849
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



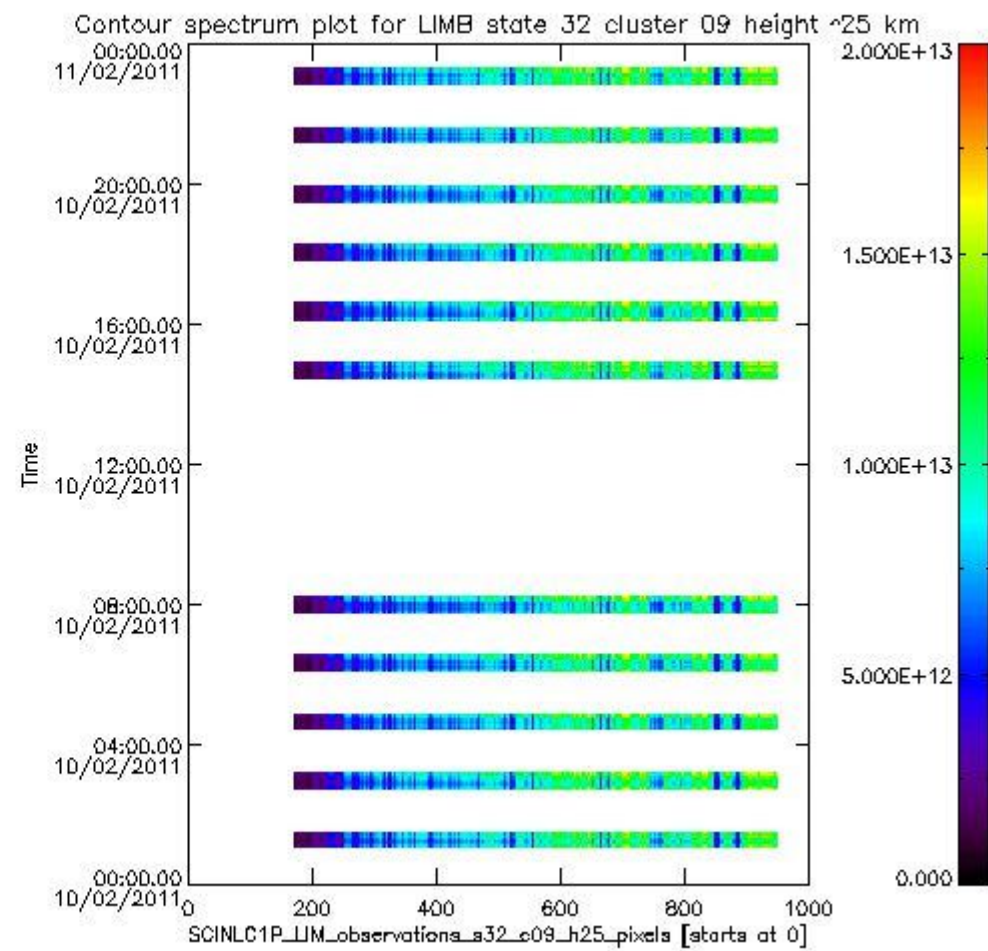
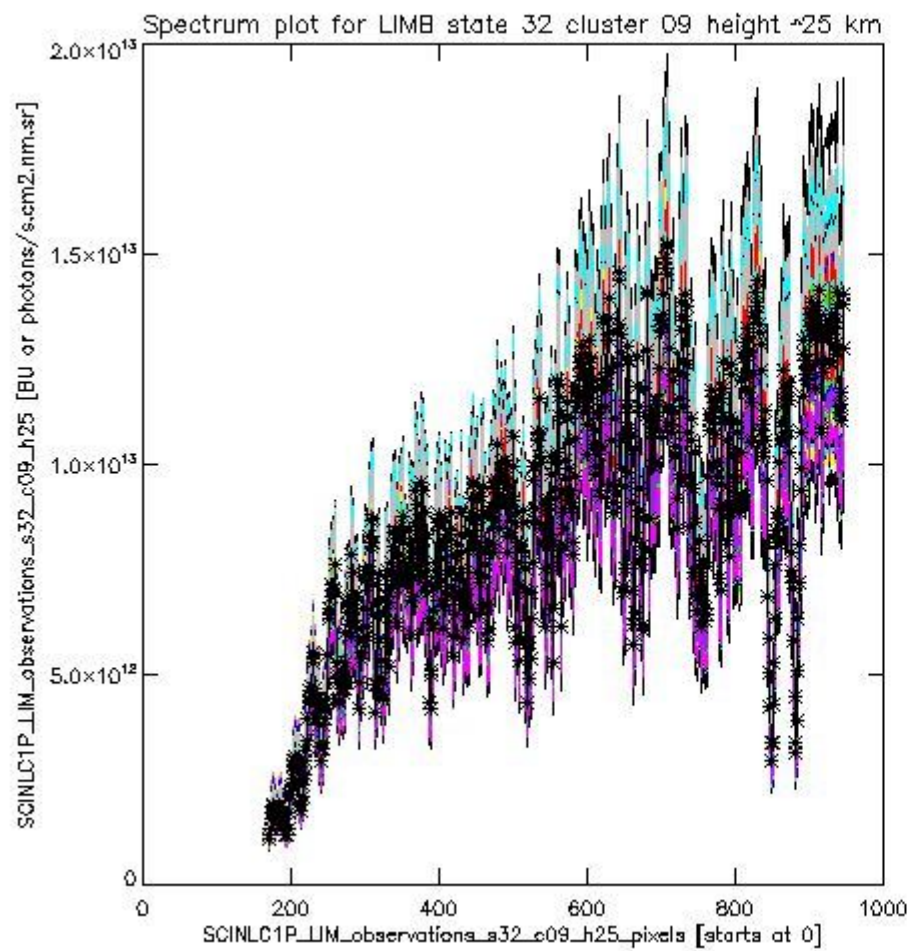




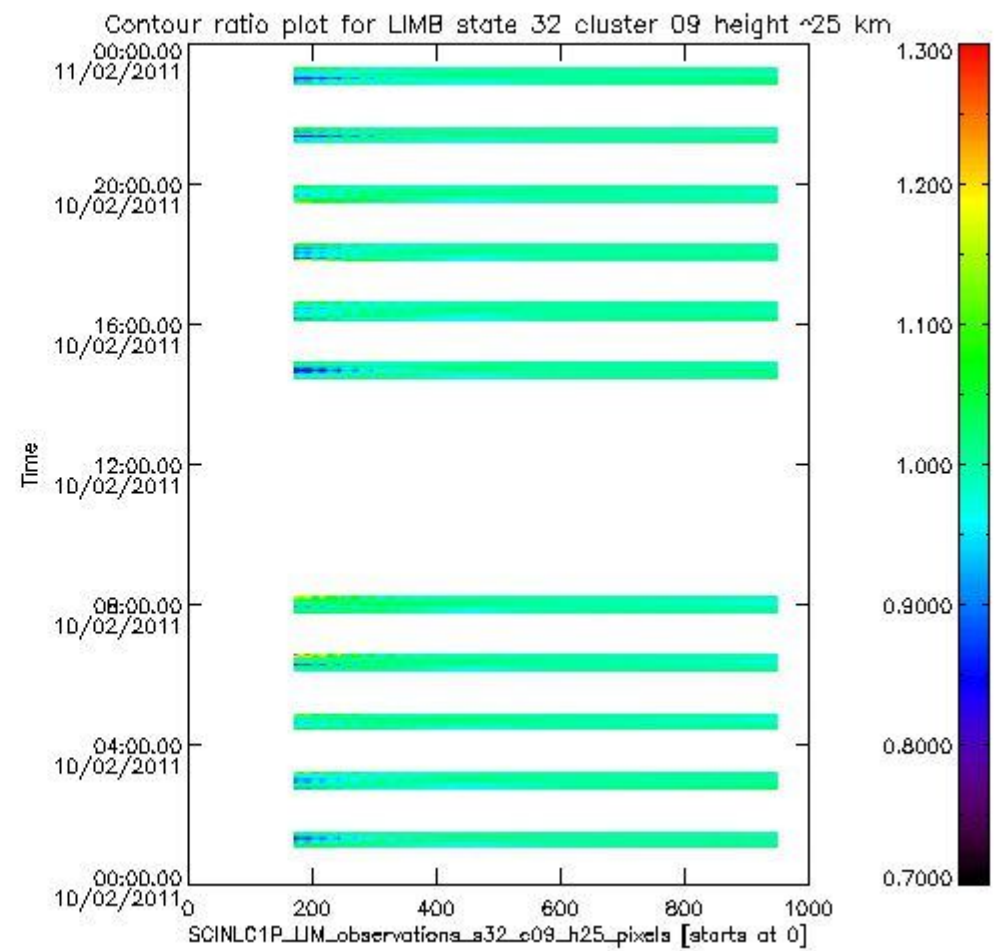
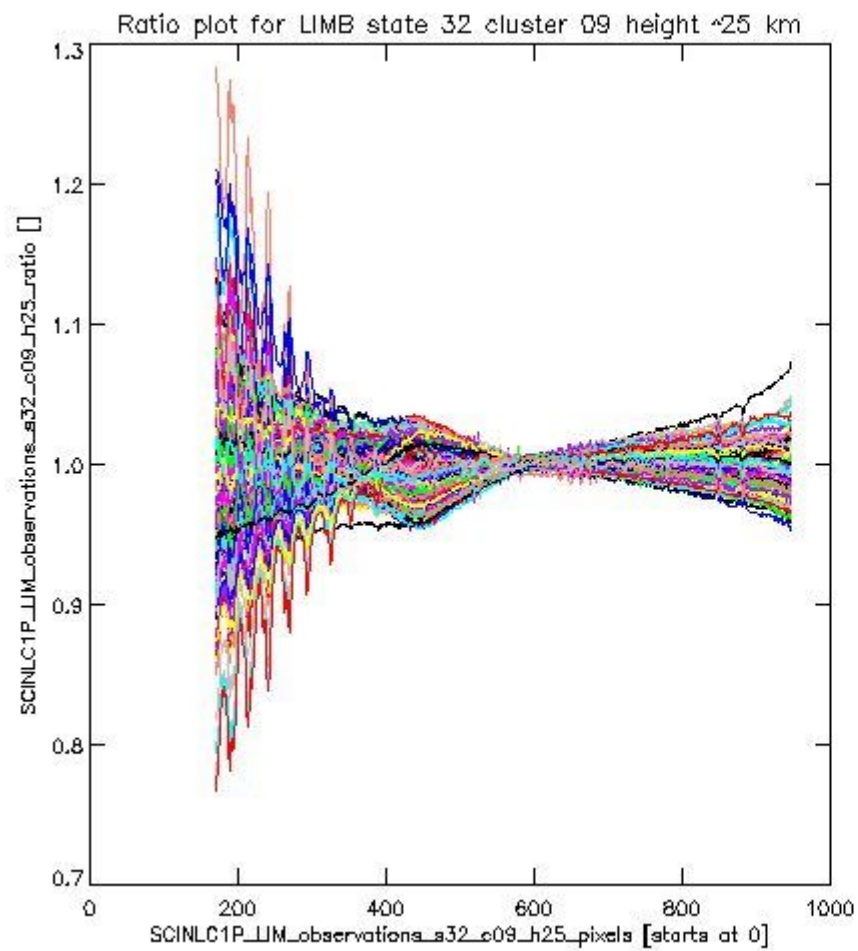
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_13.PNG

**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	10FEB2011 01:04:32.142
Start time of last sample	10FEB2011 23:15:12.660
Reference period start time	11JAN2011 01:05:34.714
Reference period stop time	09FEB2011 23:52:02.849
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\_20110210\_14.PNG

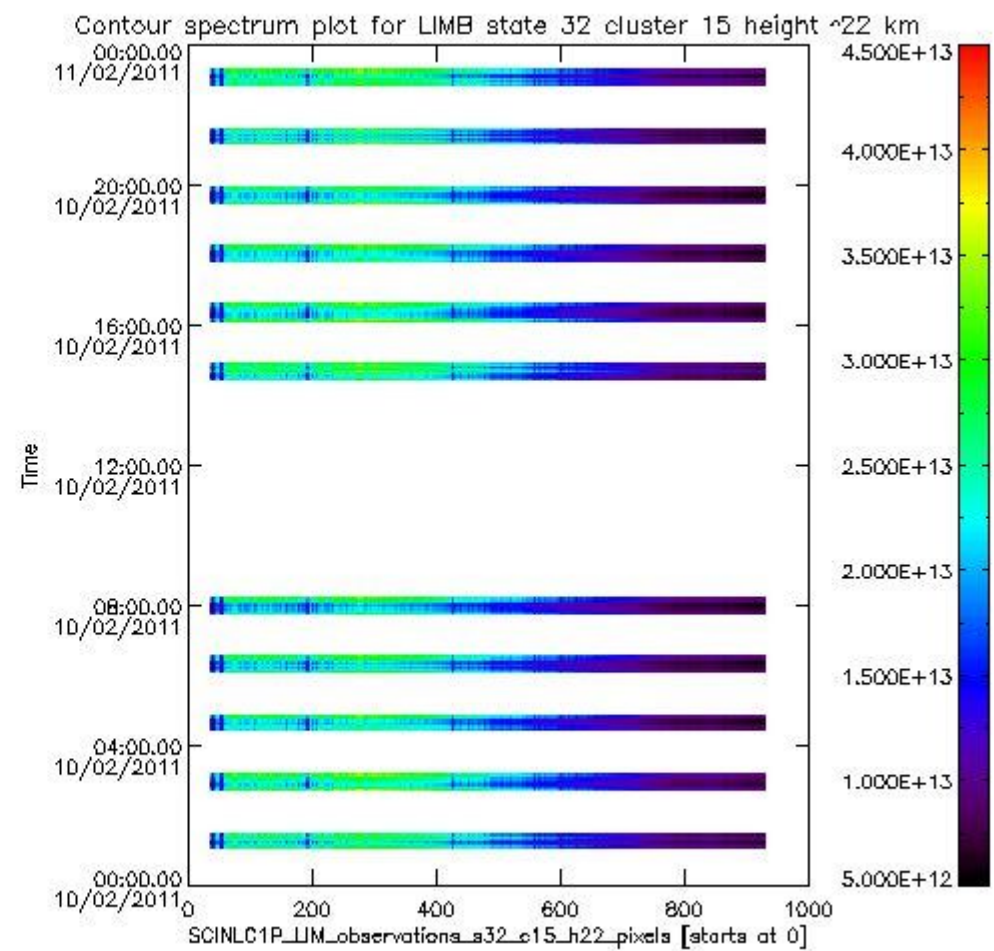
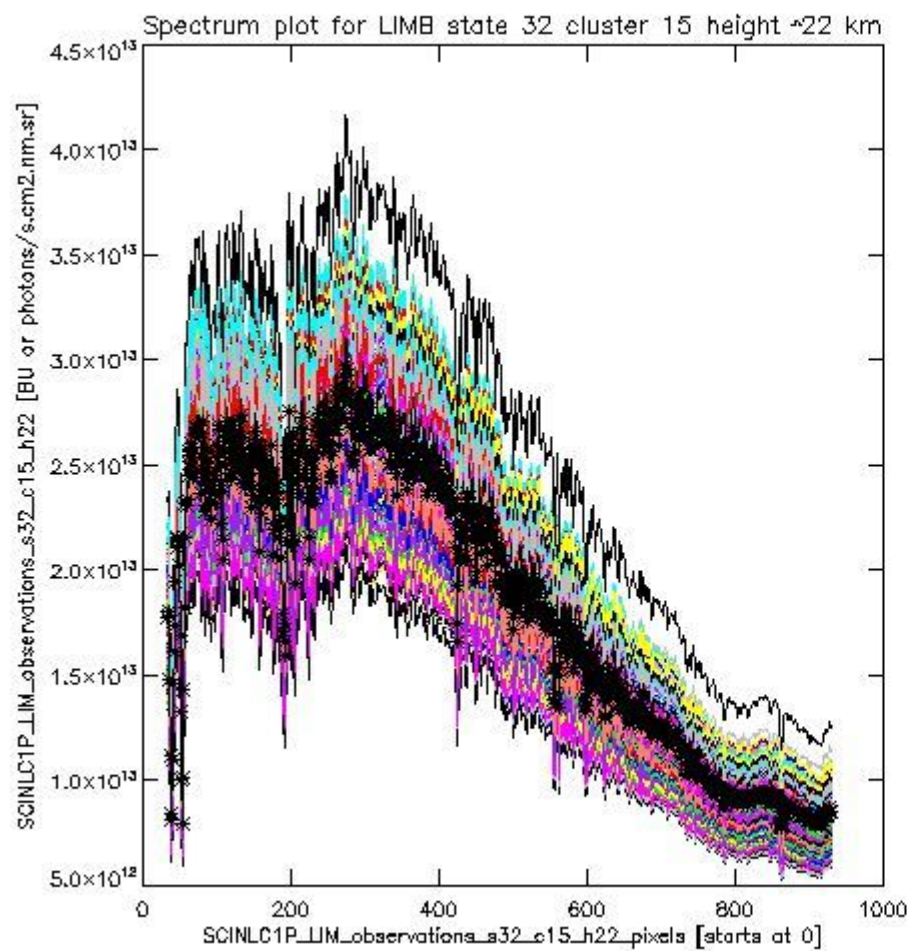


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_15.PNG

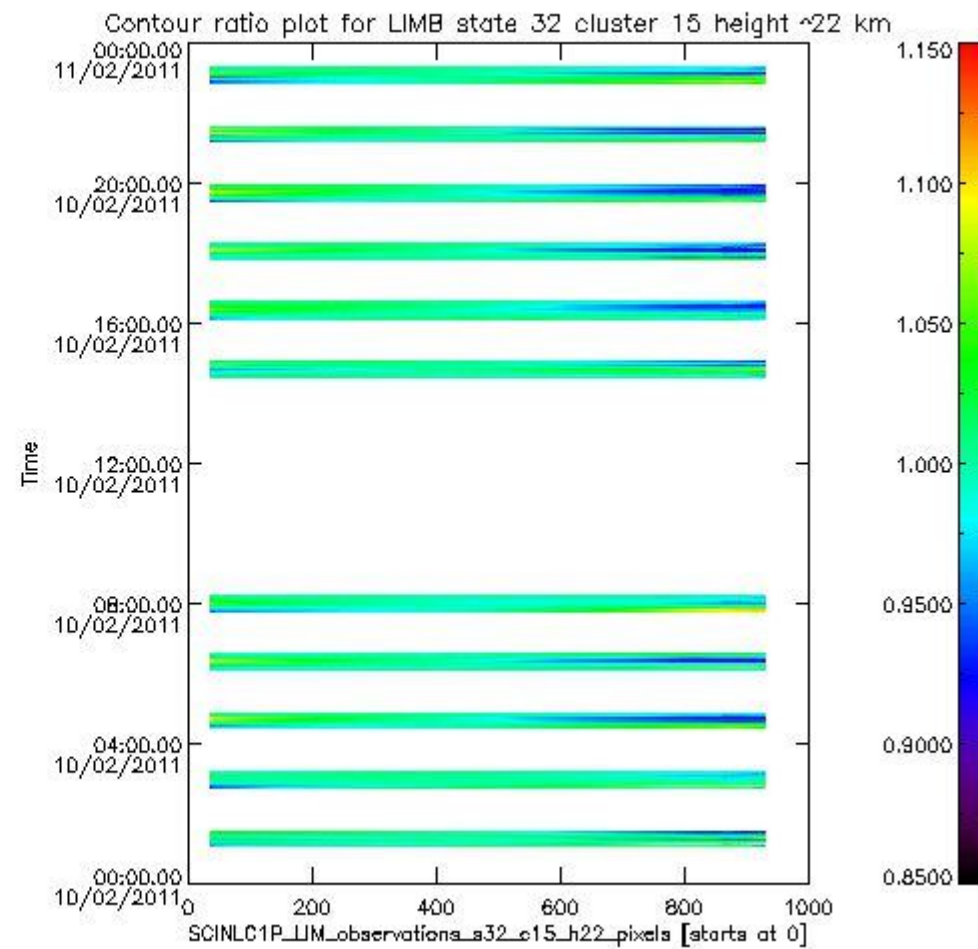
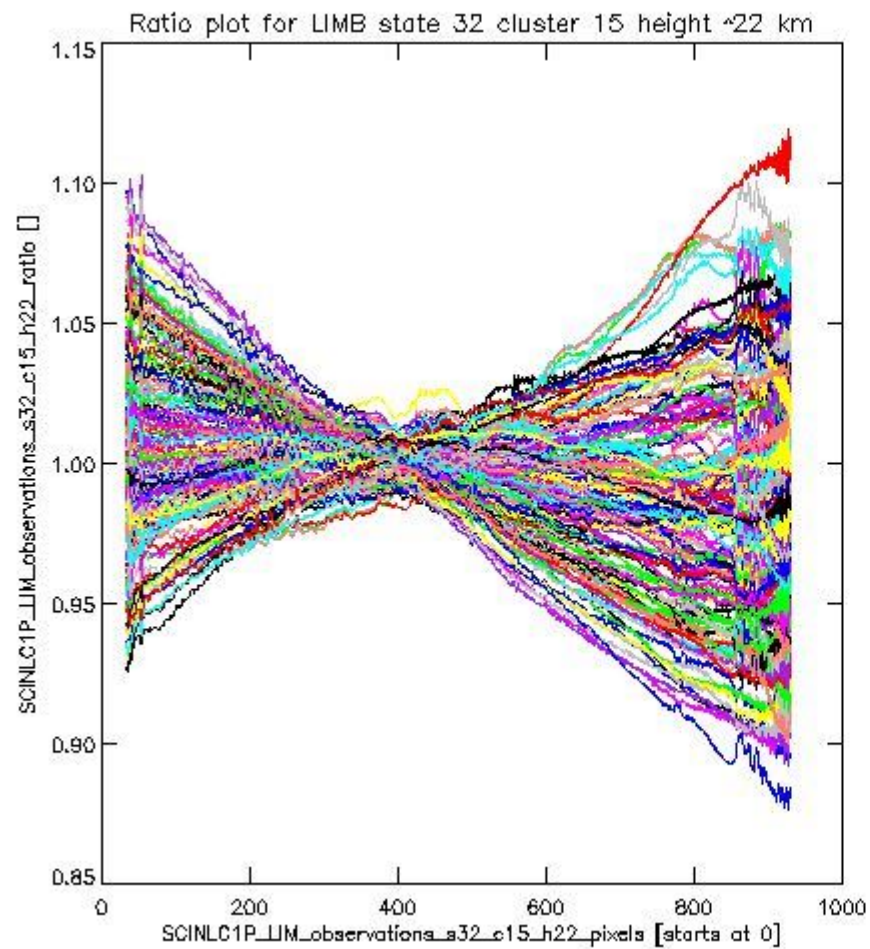
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	10FEB2011 01:04:32.142
Start time of last sample	10FEB2011 23:15:12.660
Reference period start time	11JAN2011 01:05:34.714
Reference period stop time	09FEB2011 23:52:02.849
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





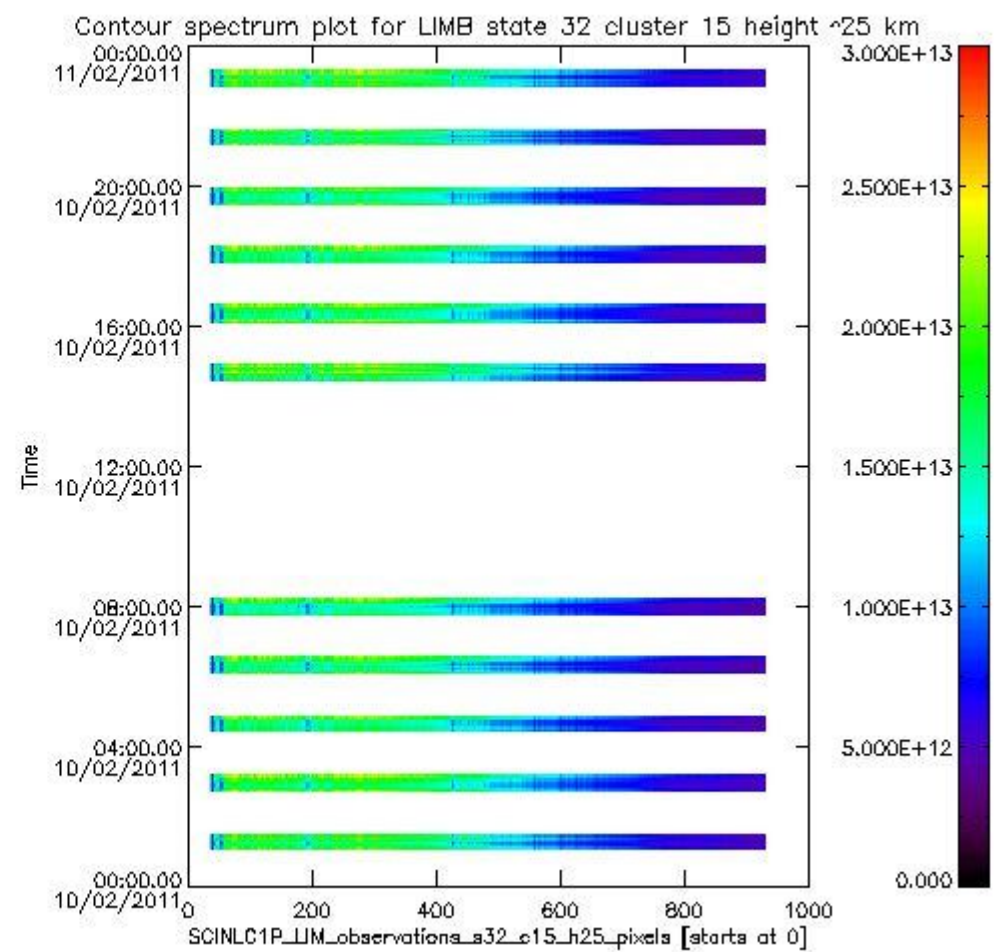
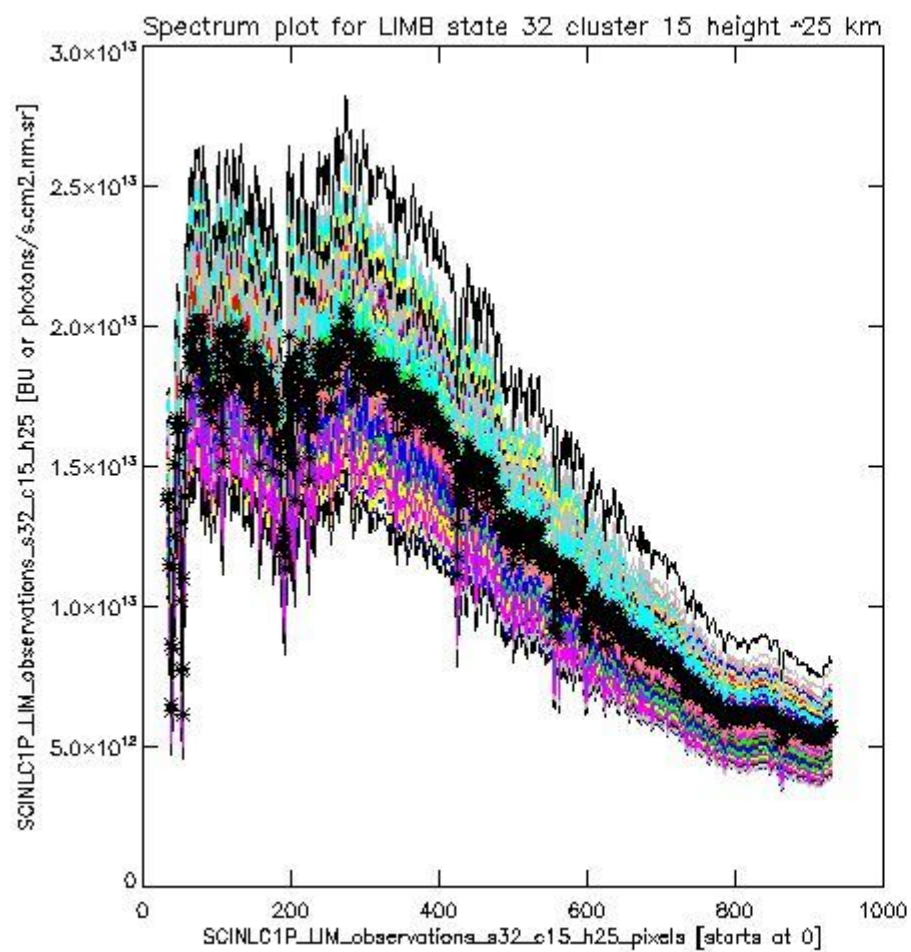
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_16.PNG



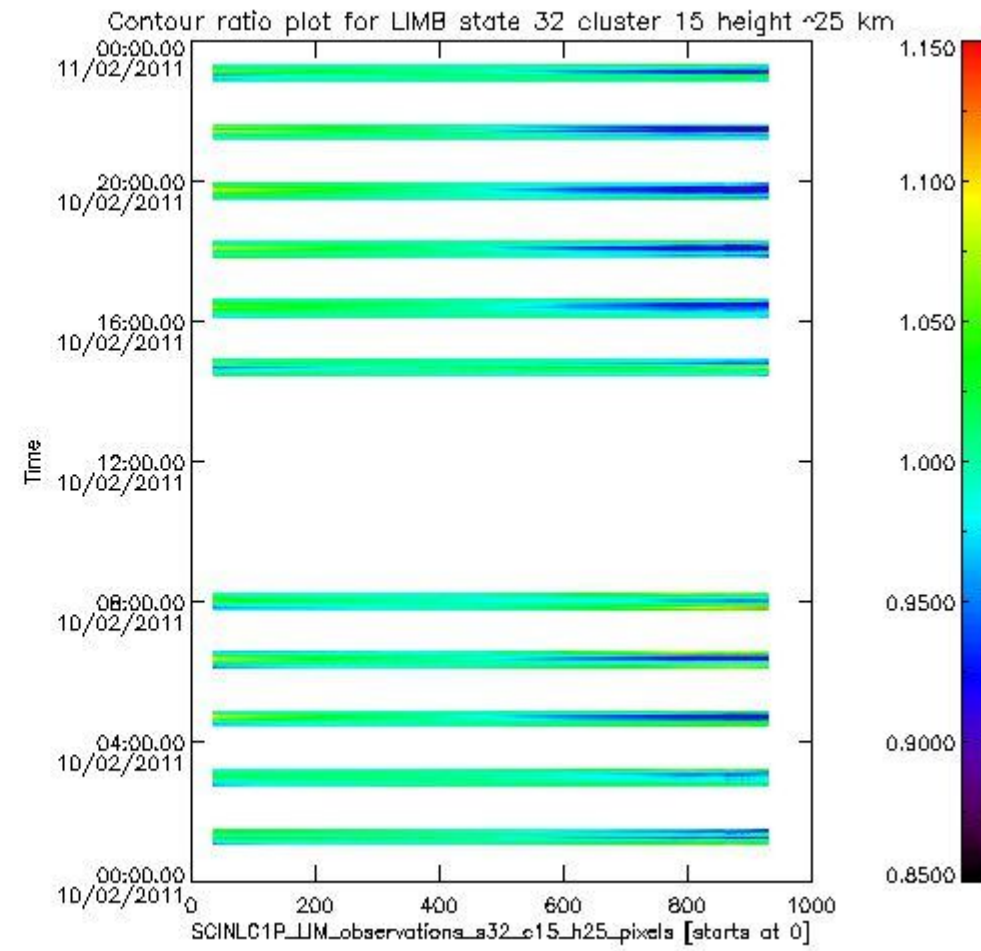
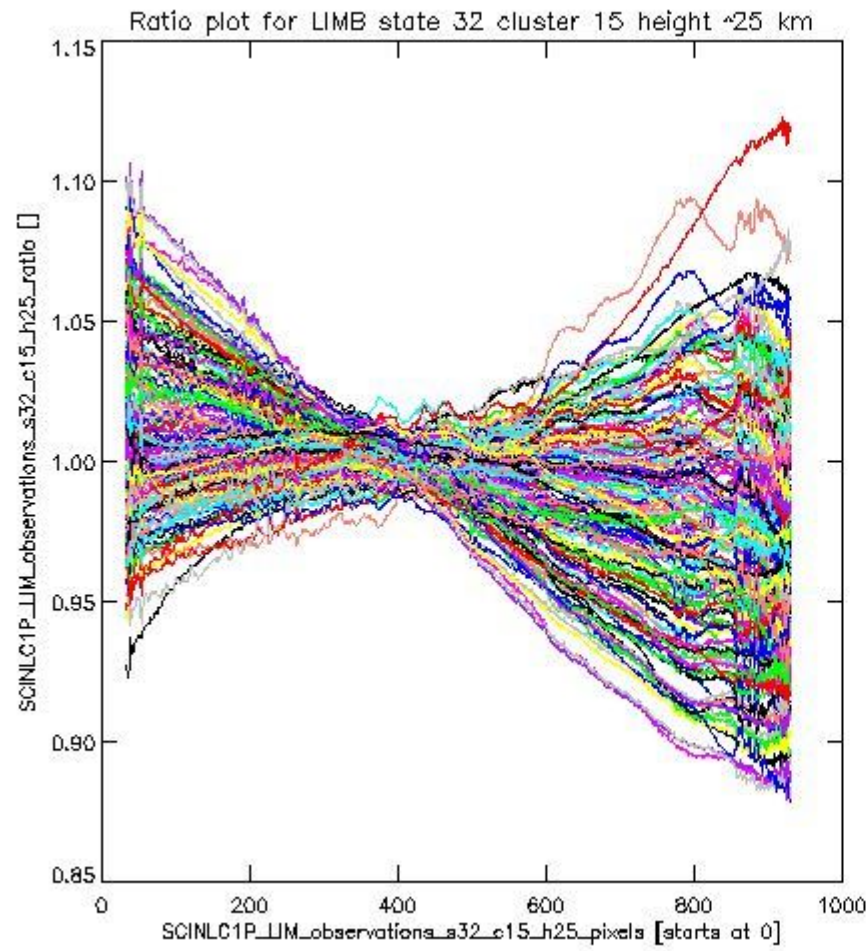
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_17.PNG

**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	10FEB2011 01:04:32.142
Start time of last sample	10FEB2011 23:15:12.660
Reference period start time	11JAN2011 01:05:34.714
Reference period stop time	09FEB2011 23:52:02.849
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



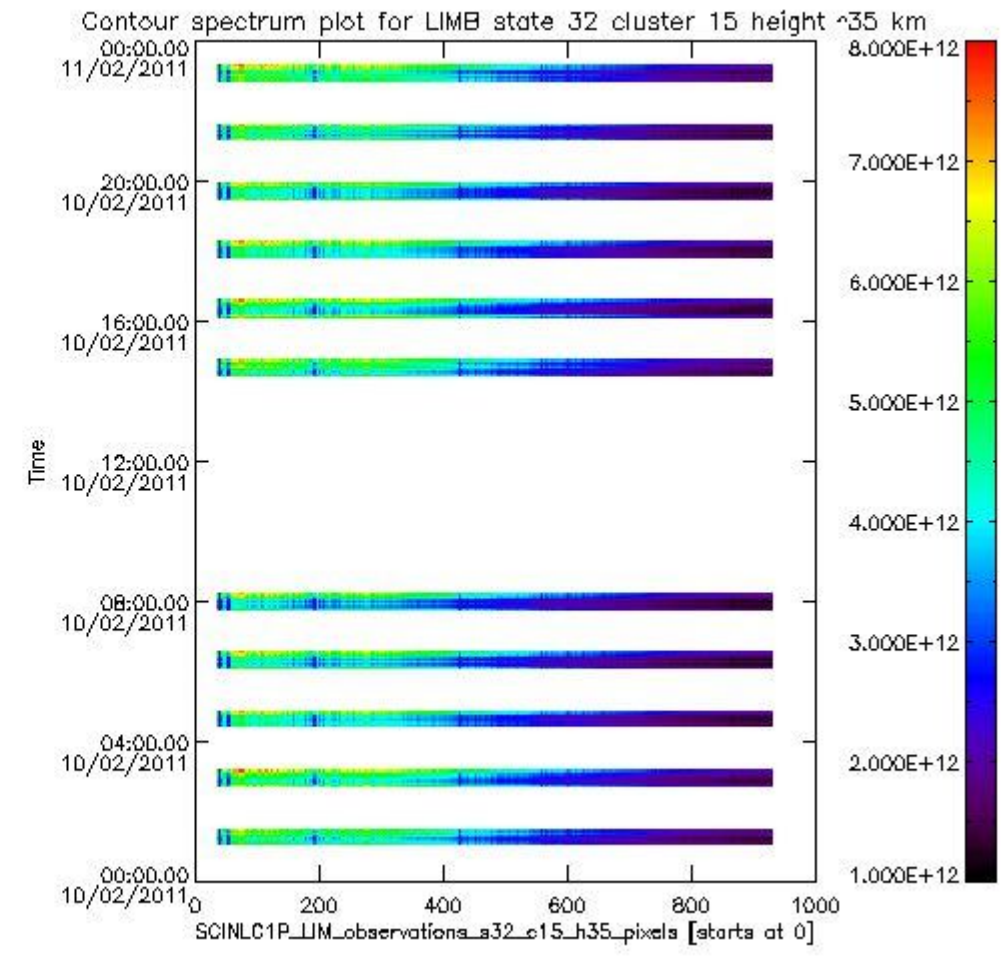
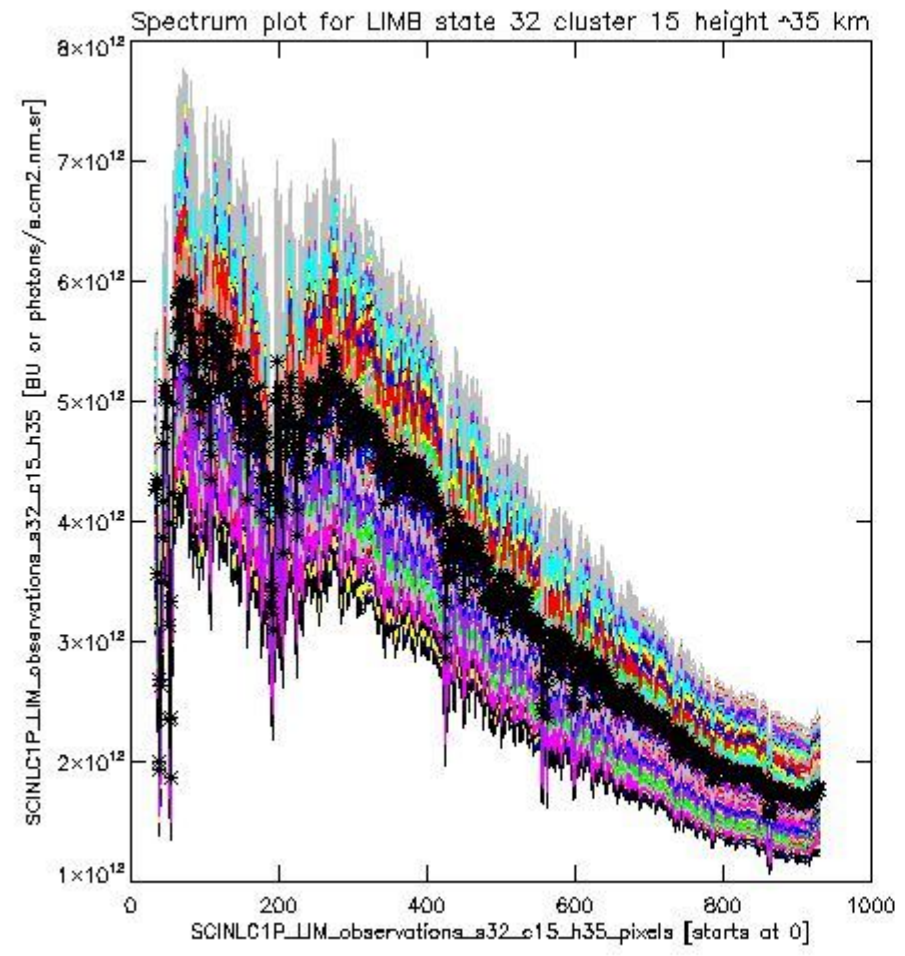




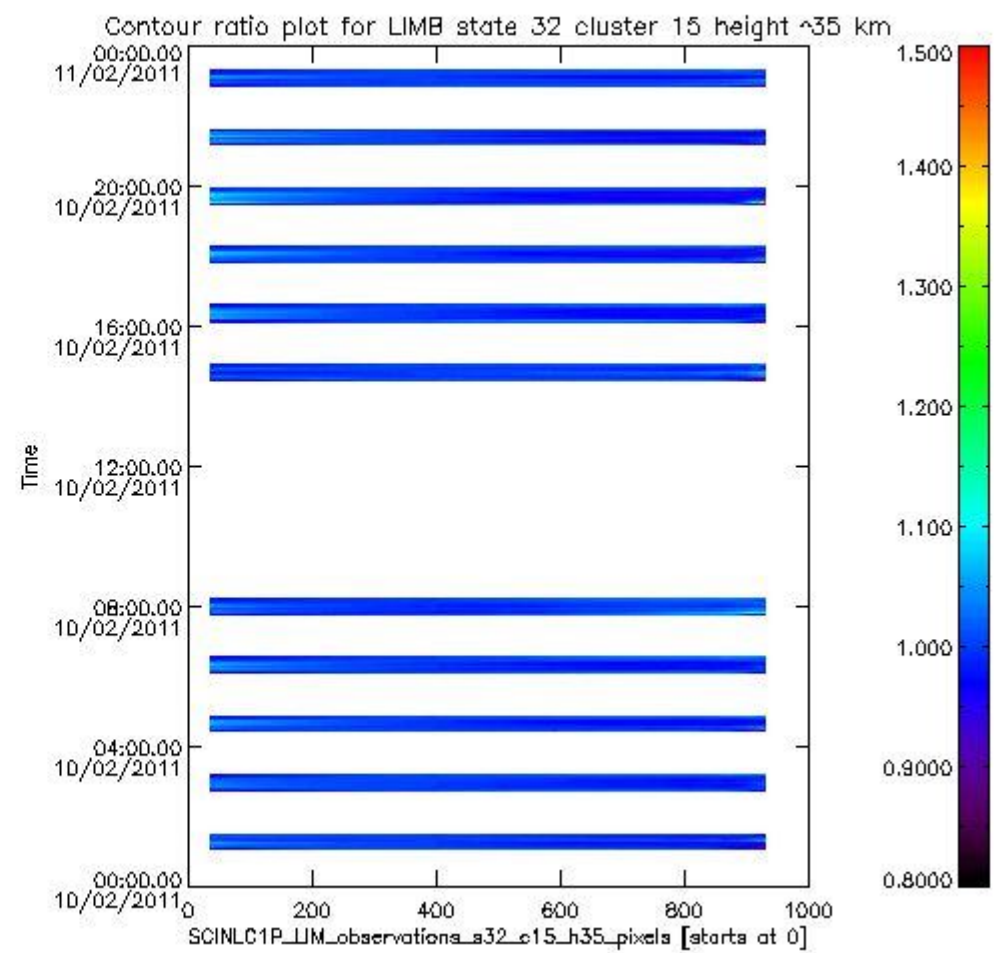
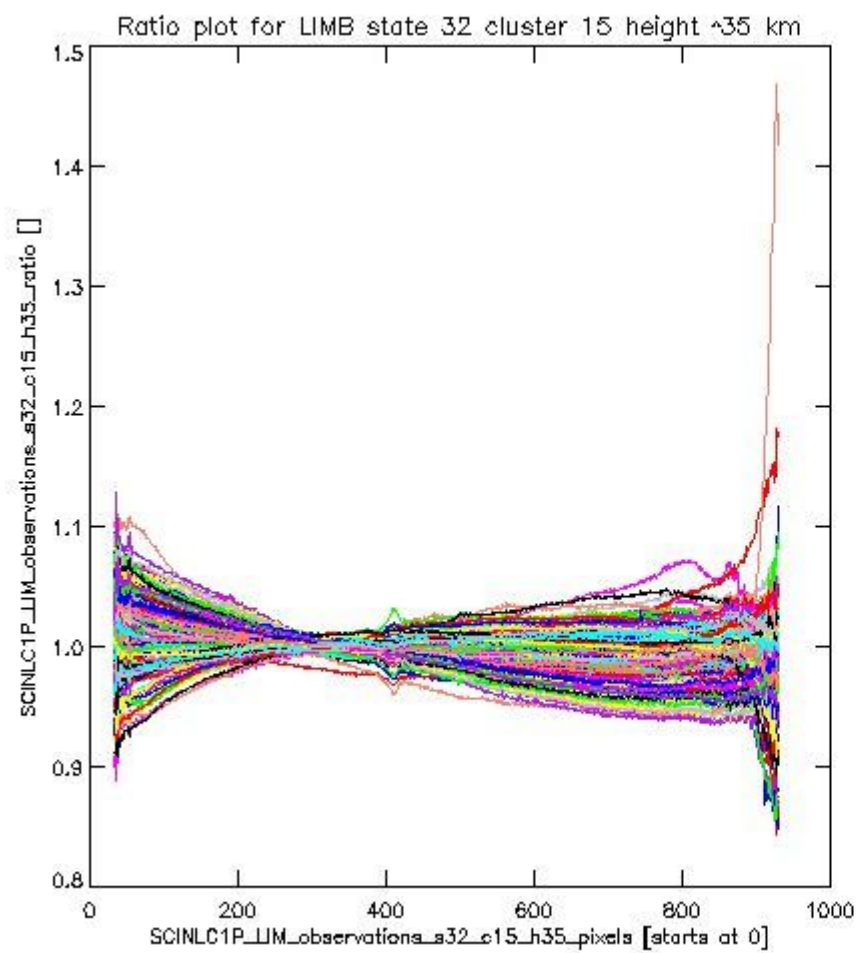
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_19.PNG

**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	10FEB2011 01:04:32.142
Start time of last sample	10FEB2011 23:15:12.660
Reference period start time	11JAN2011 01:05:34.714
Reference period stop time	09FEB2011 23:52:02.849
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\_20110210\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110210\_21.PNG



