

# 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	05MAR2011 06:55:35
Data source version	SCIA/7.04-U
Processing scope for products	22FEB2011 00:00:00 to 23FEB2011 00:00:00
Start time of first product within scope	22FEB2011 00:04:29
Stop time of last product within scope	23FEB2011 00:38:07
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	22FEB2011 00:37:40.614	22FEB2011 22:29:41.757
1	NADIR	07	09	N/A	22FEB2011 00:37:40.614	22FEB2011 22:29:41.757
2	NADIR	07	15	N/A	22FEB2011 00:37:40.614	22FEB2011 22:29:41.757
3	NADIR	07	24	N/A	22FEB2011 00:37:40.614	22FEB2011 22:29:41.757
4	NADIR	07	55	N/A	22FEB2011 00:37:40.614	22FEB2011 22:29:41.757
5	LIMB	32	09	~19 km	22FEB2011 00:22:27.235	22FEB2011 23:59:55.902
6	LIMB	32	09	~22 km	22FEB2011 00:22:27.235	22FEB2011 23:59:55.902
7	LIMB	32	09	~25 km	22FEB2011 00:22:27.235	22FEB2011 23:59:55.902
8	LIMB	32	15	~22 km	22FEB2011 00:22:27.235	22FEB2011 23:59:55.902
9	LIMB	32	15	~25 km	22FEB2011 00:22:27.235	22FEB2011 23:59:55.902
10	LIMB	32	15	~35 km	22FEB2011 00:22:27.235	22FEB2011 23:59:55.902

#### 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_1CUDPA20110221_235049_000060413099_00390_46956_4824.N1</a>	22FEB2011 00:04:29	22FEB2011 01:14:58	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110222_013134_000059773099_00391_46957_4828.N1</a>	22FEB2011 01:44:42	22FEB2011 02:54:57	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110222_031116_000060423099_00392_46958_4825.N1</a>	22FEB2011 03:24:56	22FEB2011 04:35:25	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110222_045201_000059773099_00393_46959_4826.N1</a>	22FEB2011 05:05:10	22FEB2011 06:15:24	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110222_063143_000060413099_00394_46960_4827.N1</a>	22FEB2011 06:45:23	22FEB2011 07:55:52	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110222_081228_000060113099_00395_46961_4829.N1</a>	22FEB2011 08:25:37	22FEB2011 09:35:51	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110222_095243_000060083099_00396_46962_4831.N1	22FEB2011 10:05:50	22FEB2011 11:16:19	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110222_113255_000060113099_00397_46963_4832.N1	22FEB2011 11:46:04	22FEB2011 12:56:18	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110222_131310_000060083099_00398_46964_4835.N1	22FEB2011 13:26:17	22FEB2011 14:36:46	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110222_145322_000060113099_00399_46965_4839.N1	22FEB2011 15:06:31	22FEB2011 16:16:45	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110222_163337_000060083099_00400_46966_4840.N1	22FEB2011 16:46:44	22FEB2011 17:57:13	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110222_181349_000060113099_00401_46967_4842.N1	22FEB2011 18:26:58	22FEB2011 19:37:34	0	35	31	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110222_195404_000060083099_00402_46968_4843.N1	22FEB2011 20:07:11	22FEB2011 21:18:02	0	36	30	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110222_213416_000060113099_00403_46969_4847.N1	22FEB2011 21:47:25	22FEB2011 22:57:40	0	35	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110222_231431_000060083099_00404_46970_4848.N1	22FEB2011 23:27:38	23FEB2011 00:38:07	0	36	30	0	0	1	0	0	

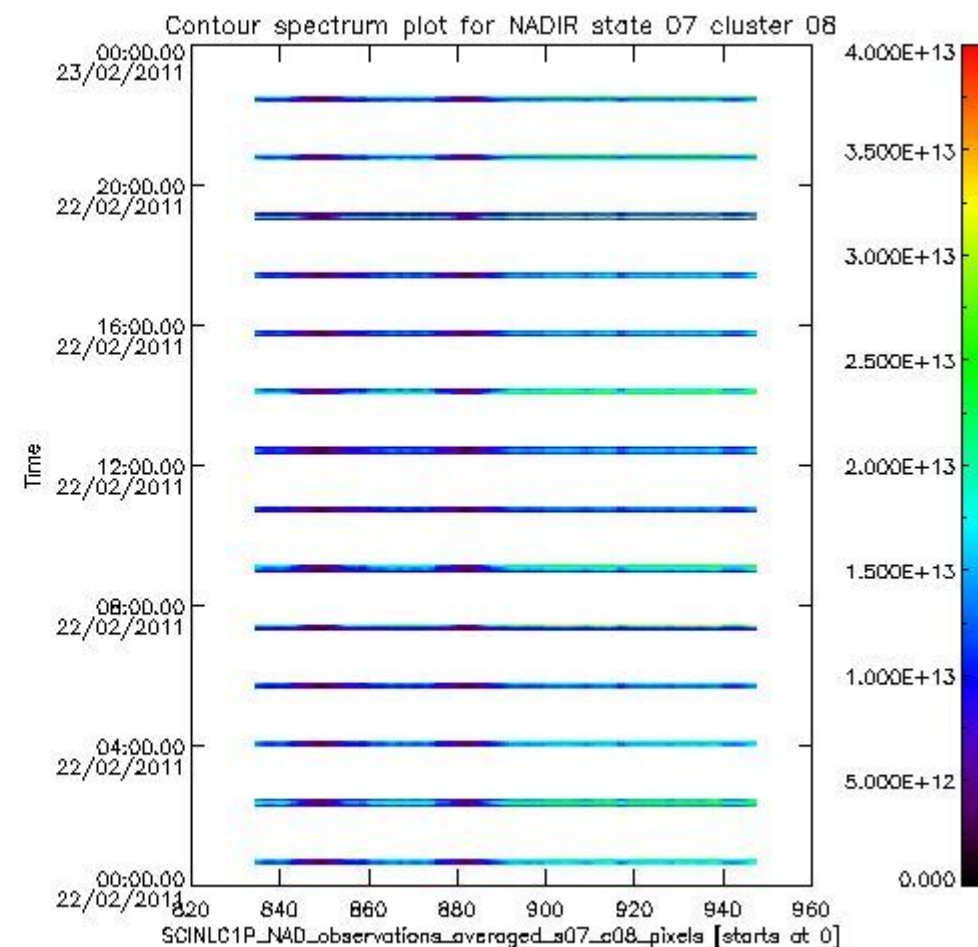
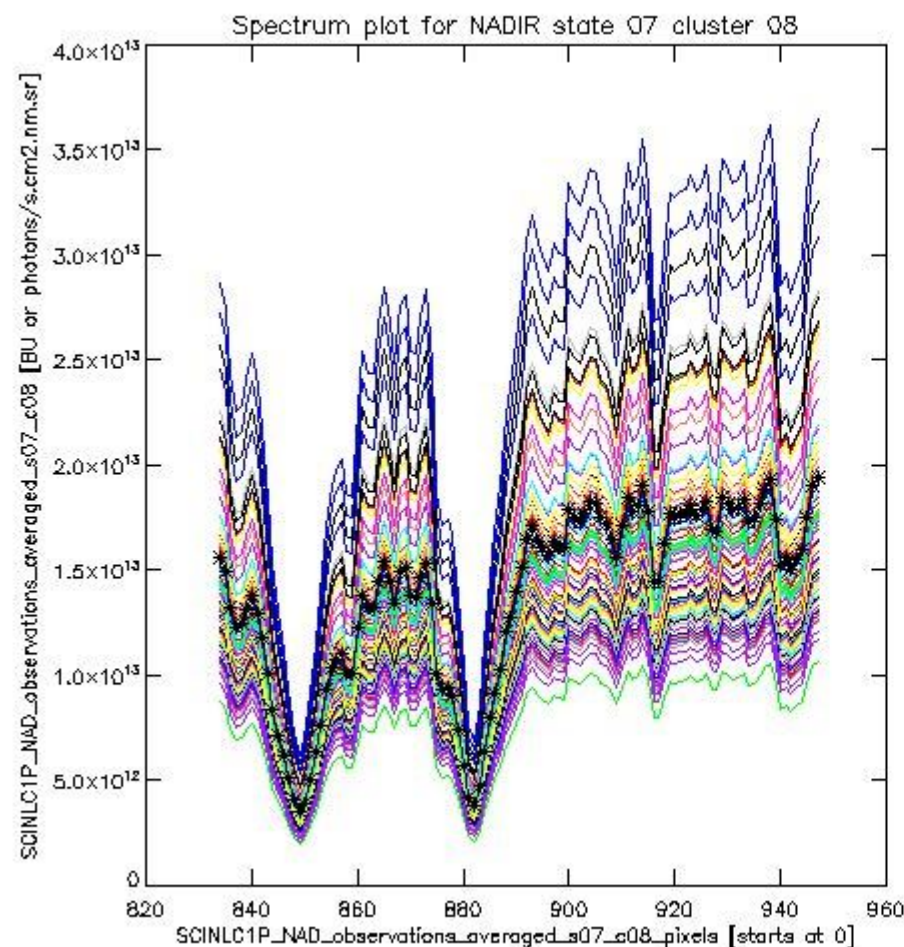
## 1.2 Source packet monitoring

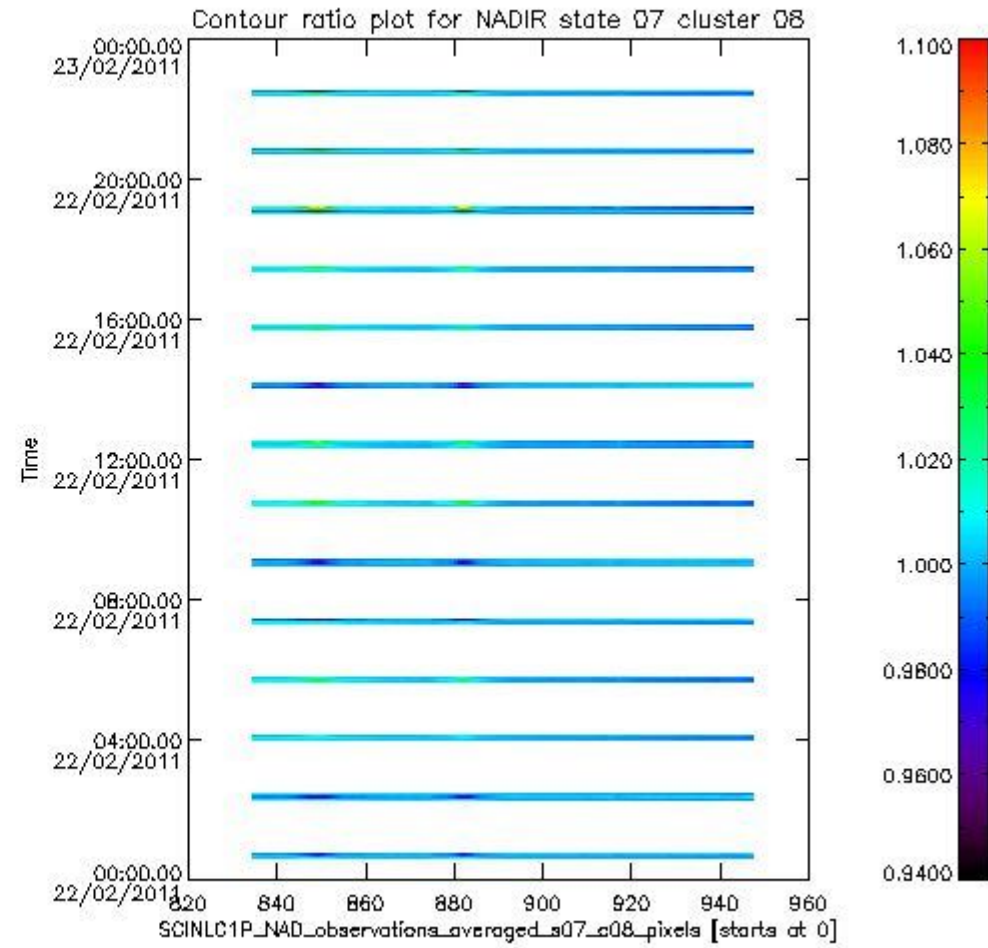
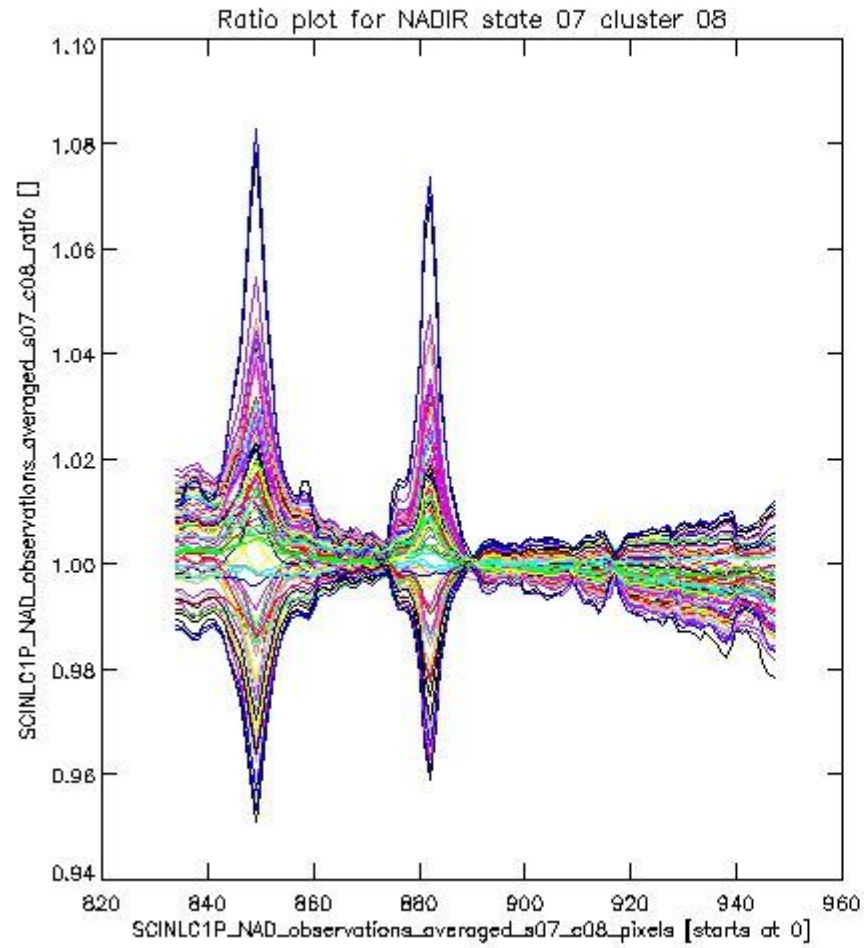
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	22FEB2011 00:37:40.614
Start time of last sample	22FEB2011 22:29:41.757
Reference period start time	23JAN2011 00:40:07.557
Reference period stop time	21FEB2011 23:06:32.278
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

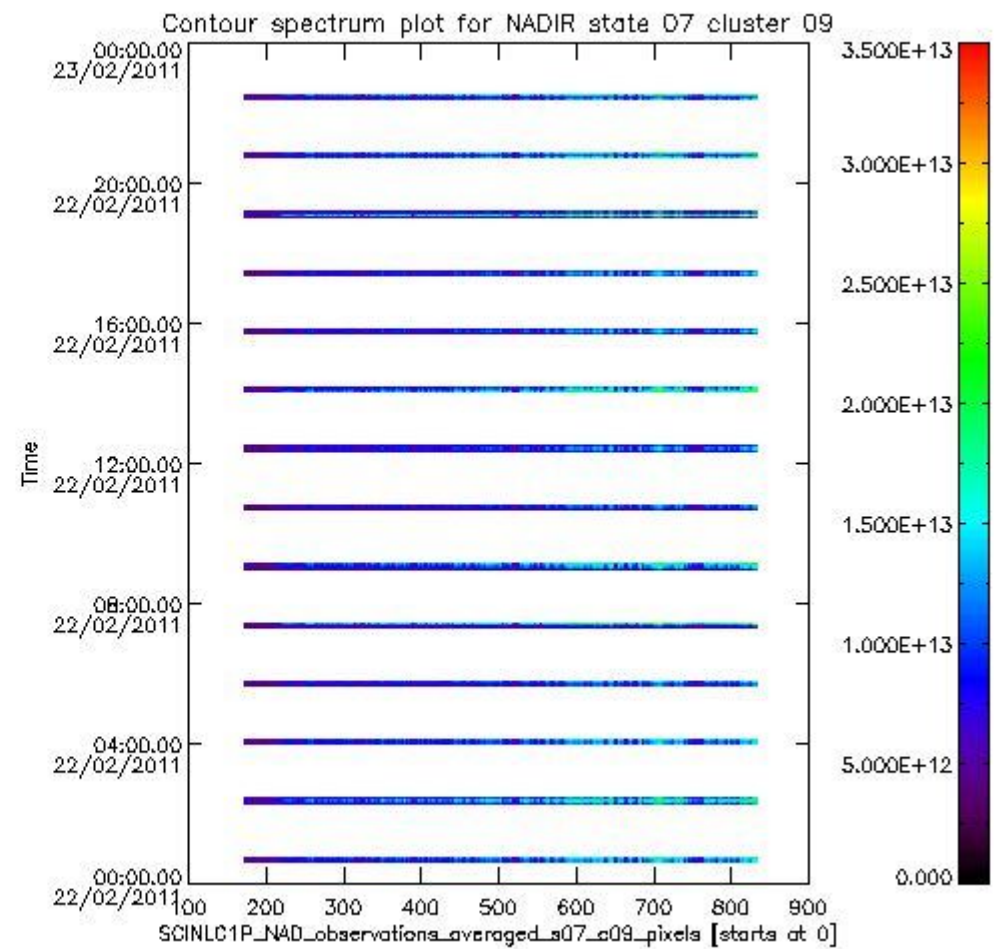
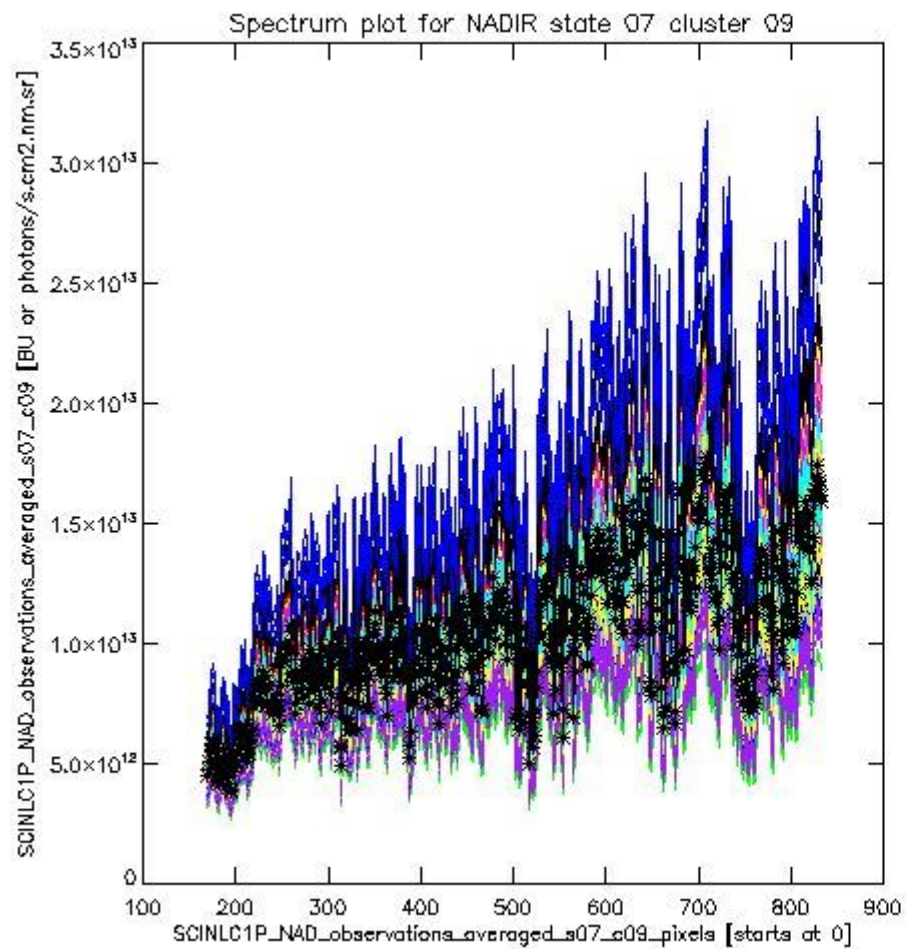




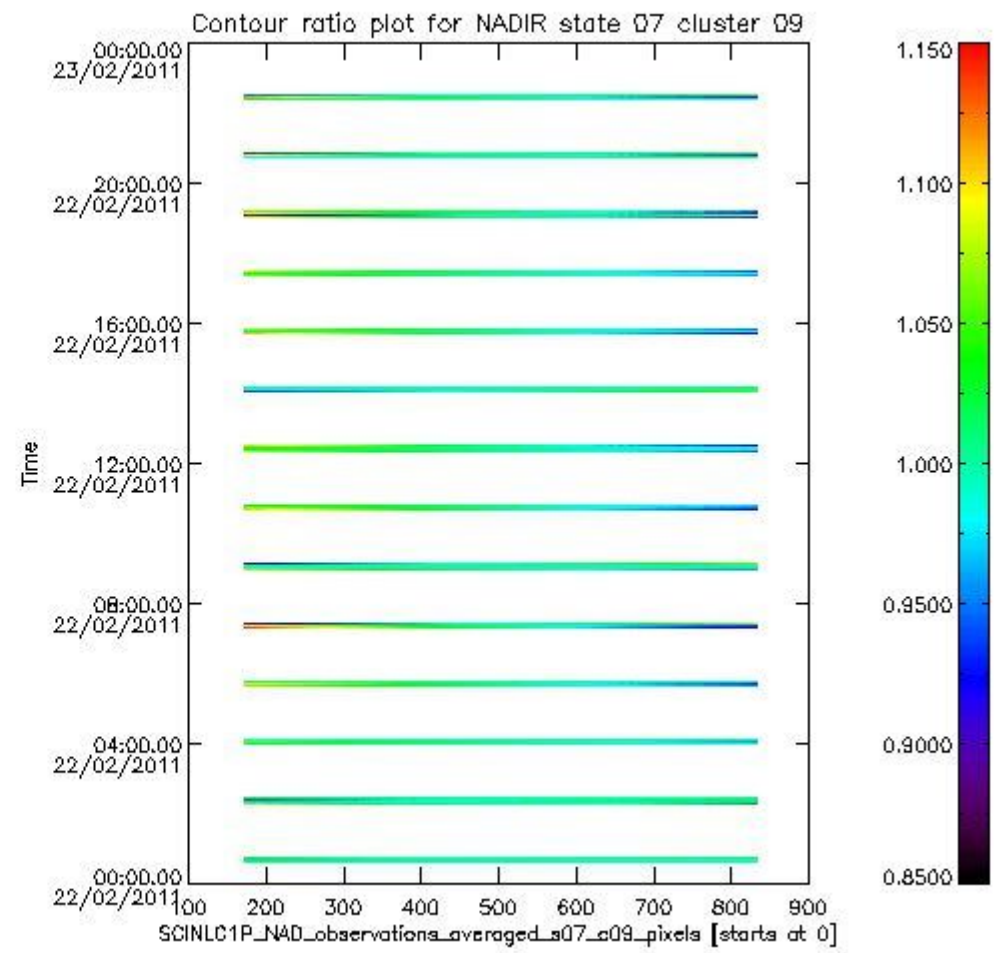
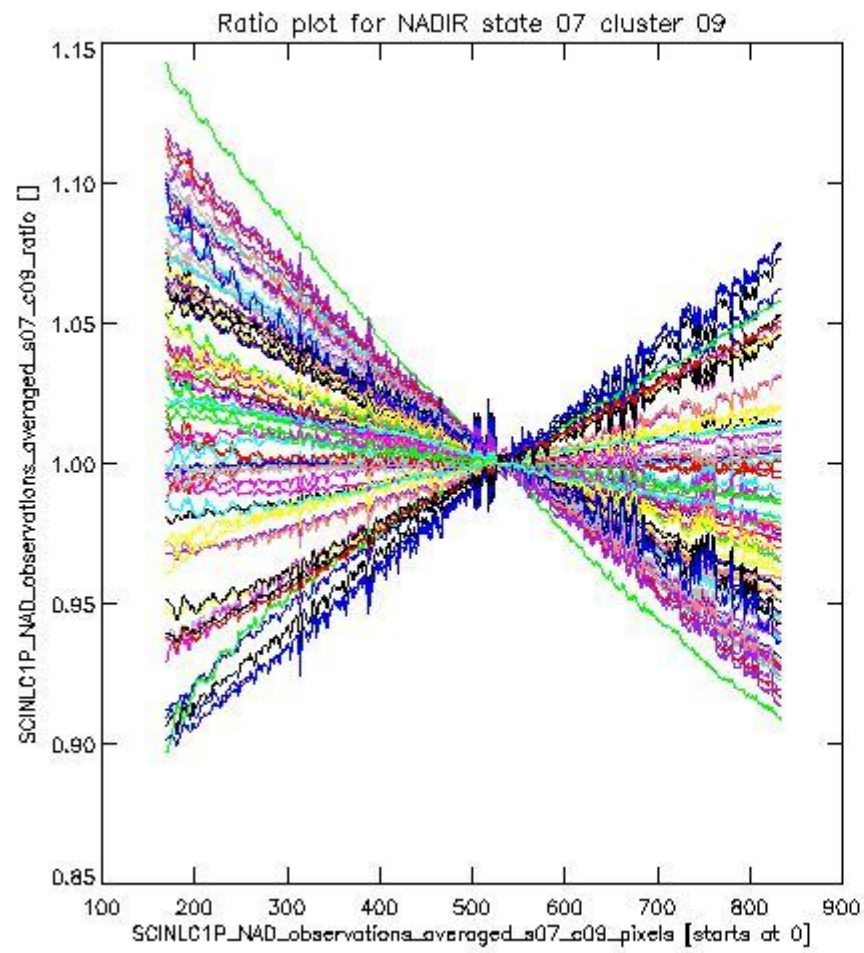
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	22FEB2011 00:37:40.614
Start time of last sample	22FEB2011 22:29:41.757
Reference period start time	23JAN2011 00:40:07.557
Reference period stop time	21FEB2011 23:06:32.278
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





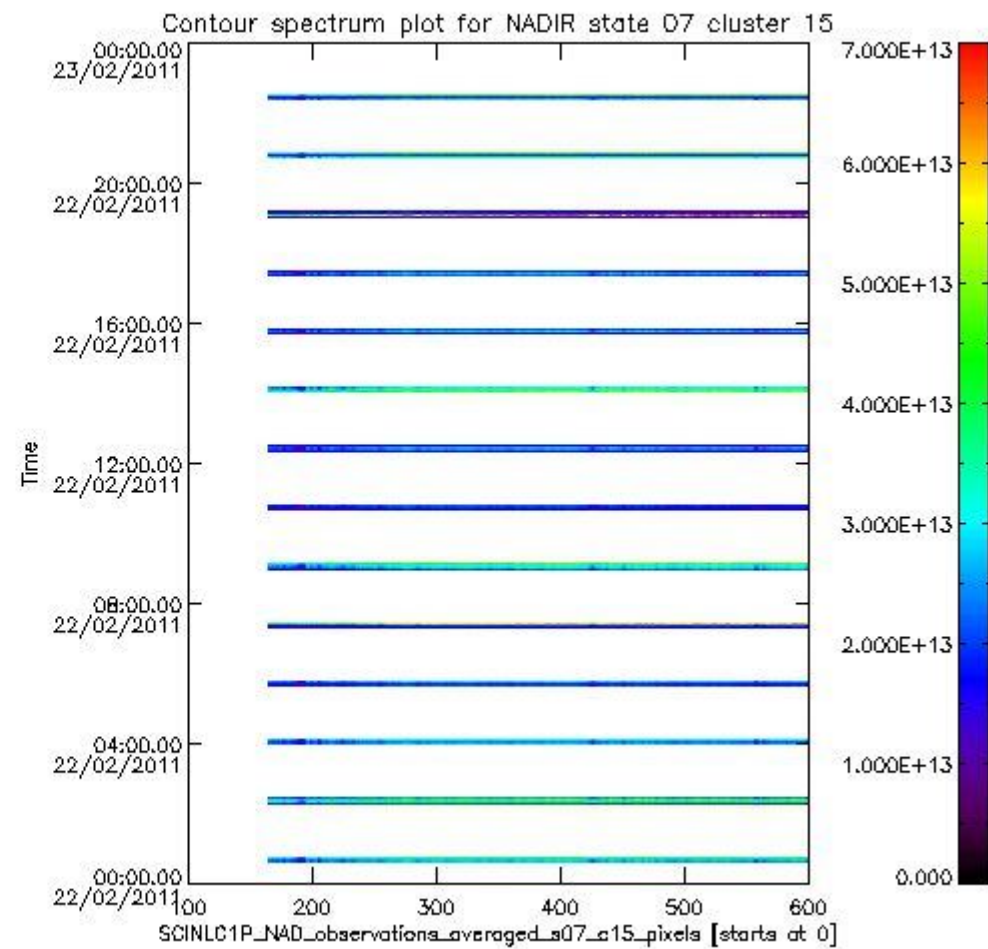
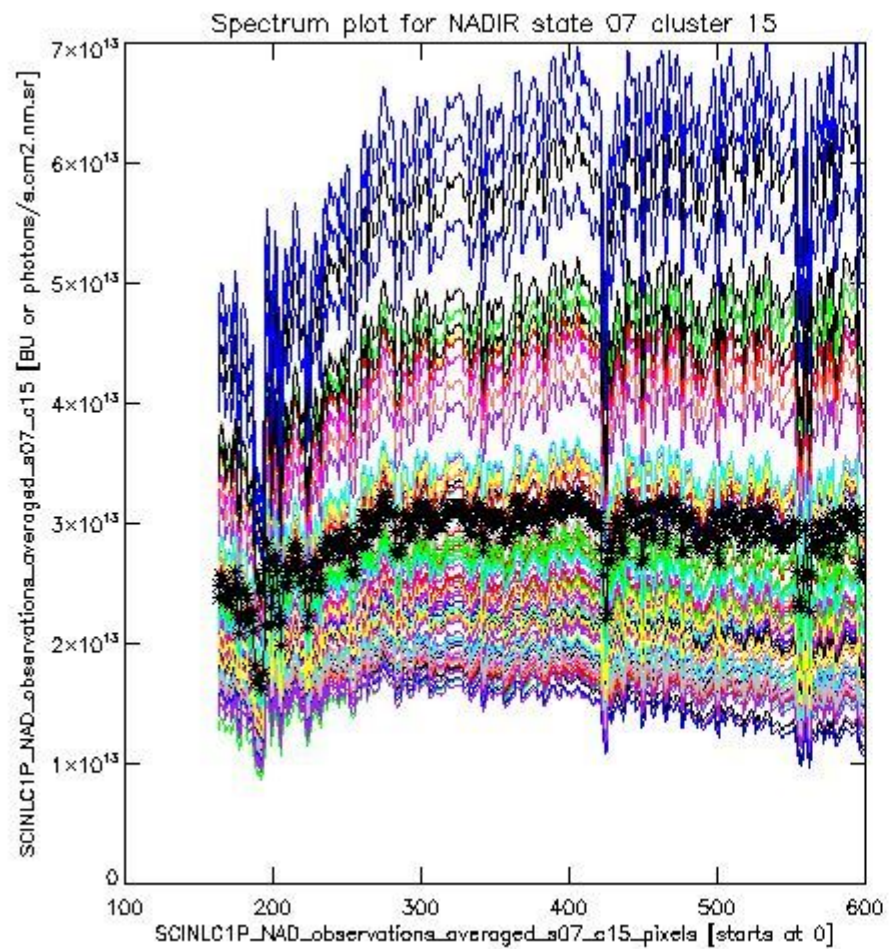
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_3.PNG

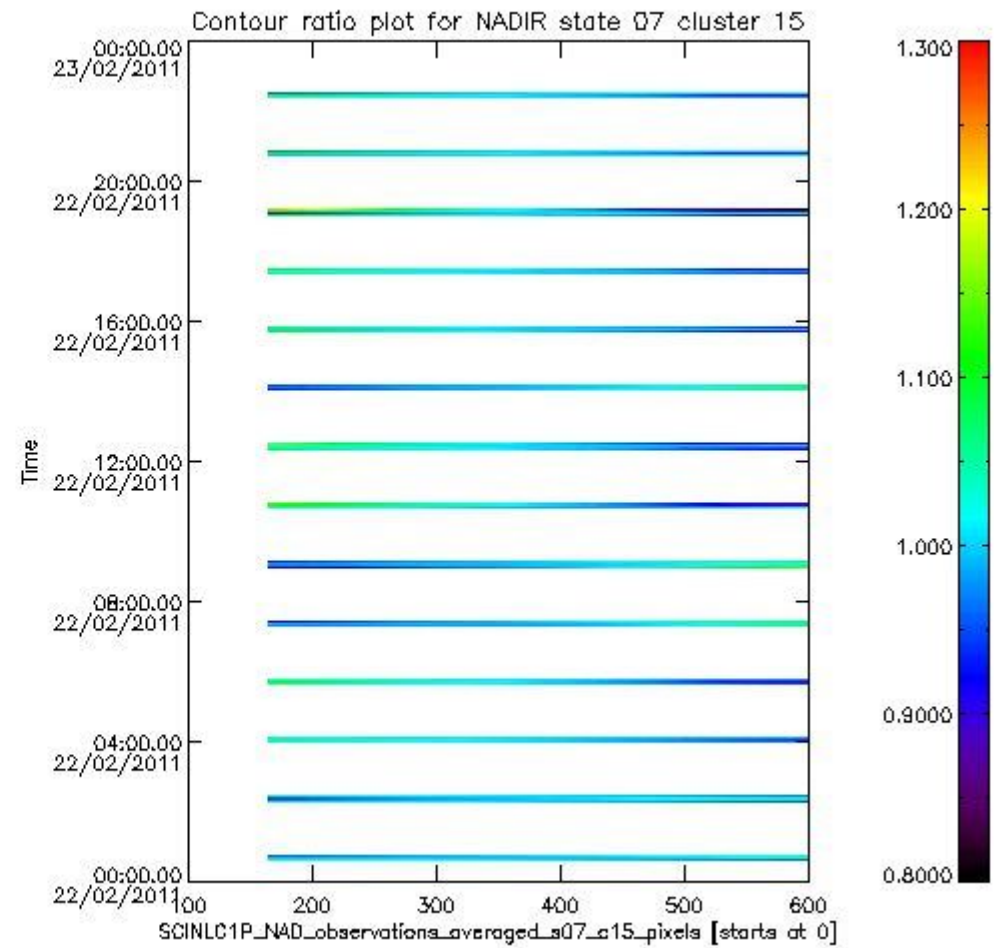
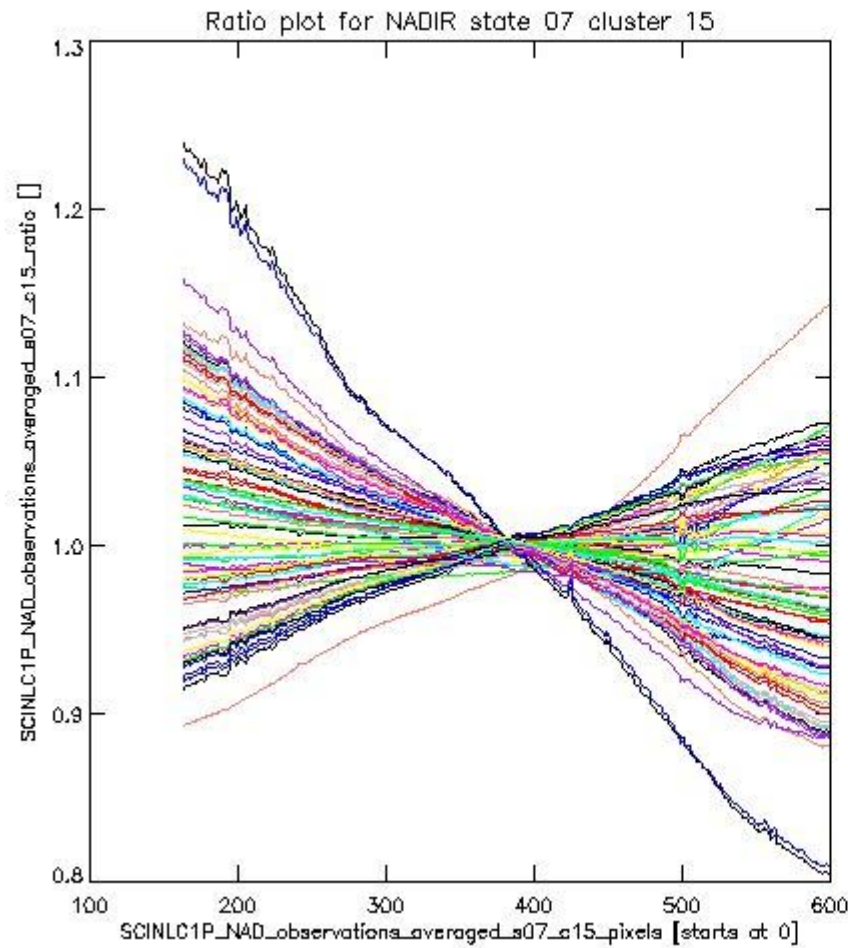
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	22FEB2011 00:37:40.614
Start time of last sample	22FEB2011 22:29:41.757
Reference period start time	23JAN2011 00:40:07.557
Reference period stop time	21FEB2011 23:06:32.278
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\_20110222\_4.PNG

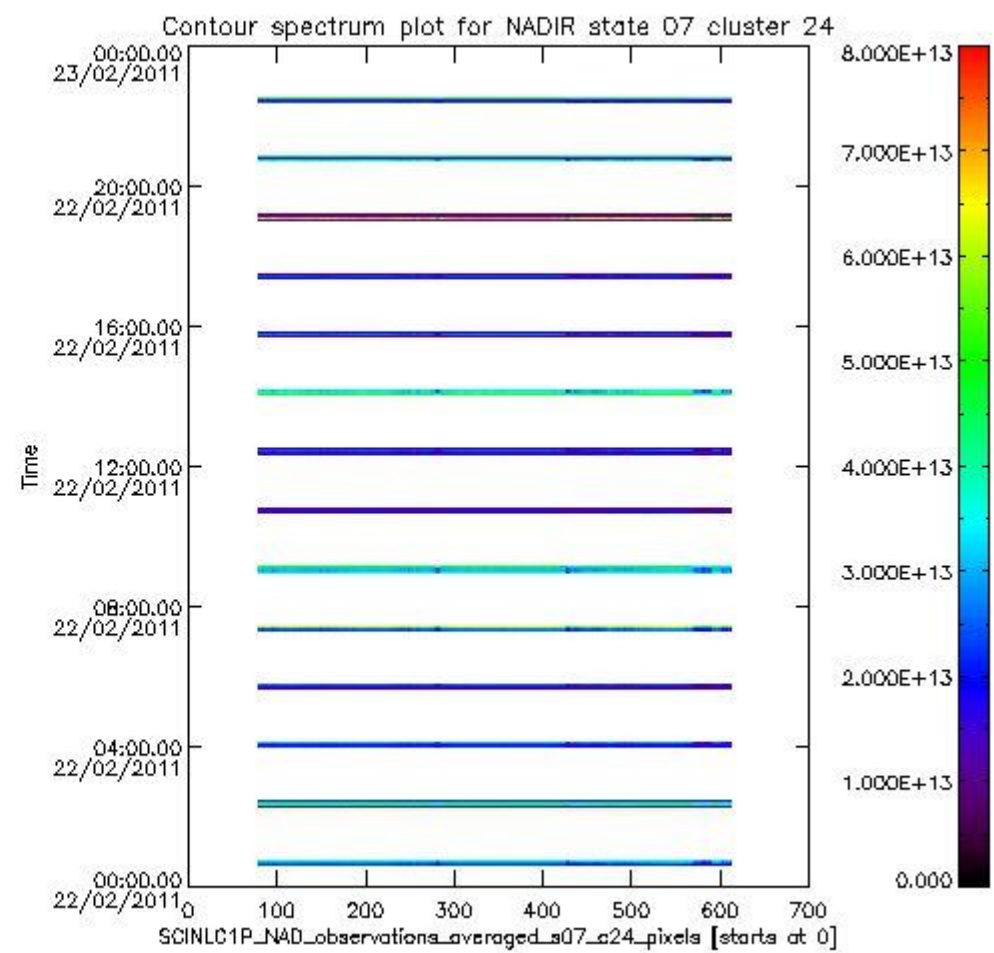
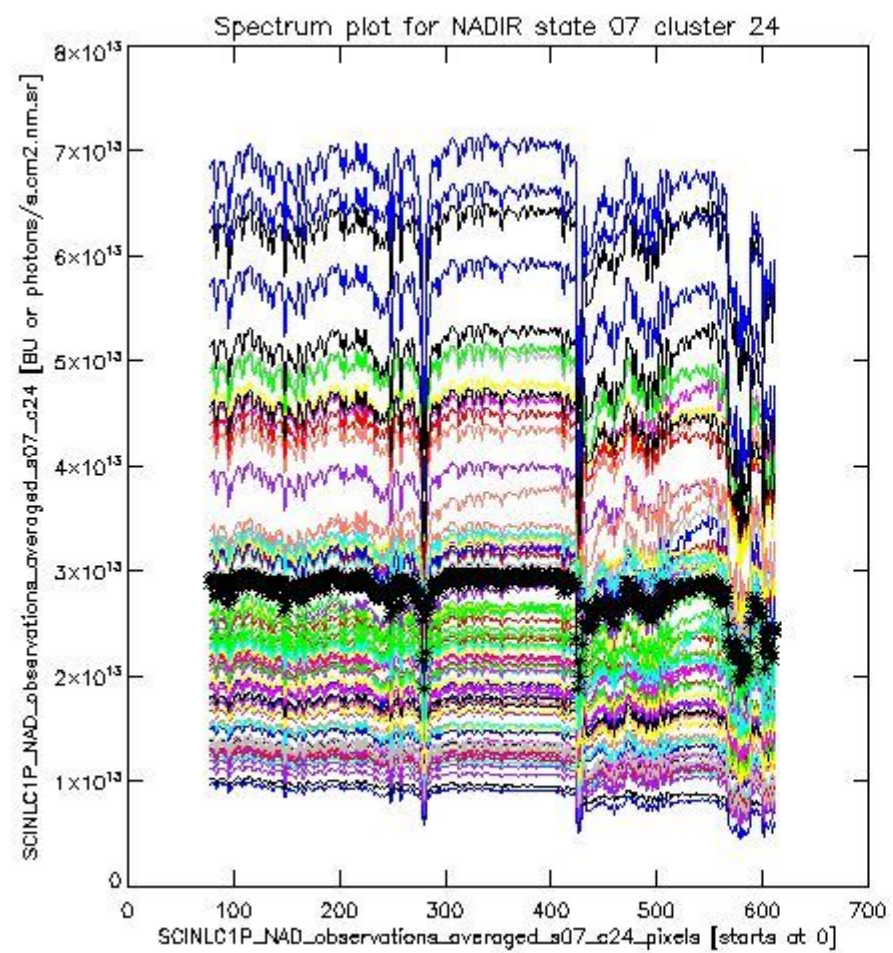




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_5.PNG

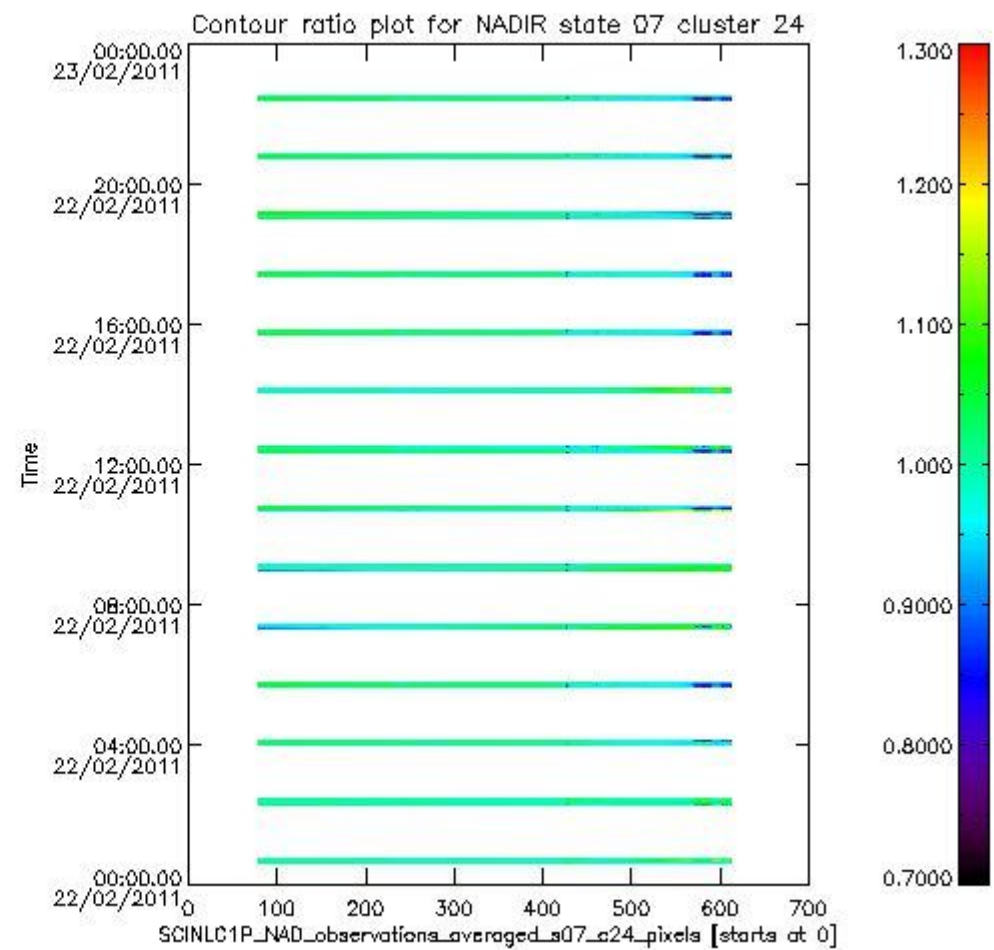
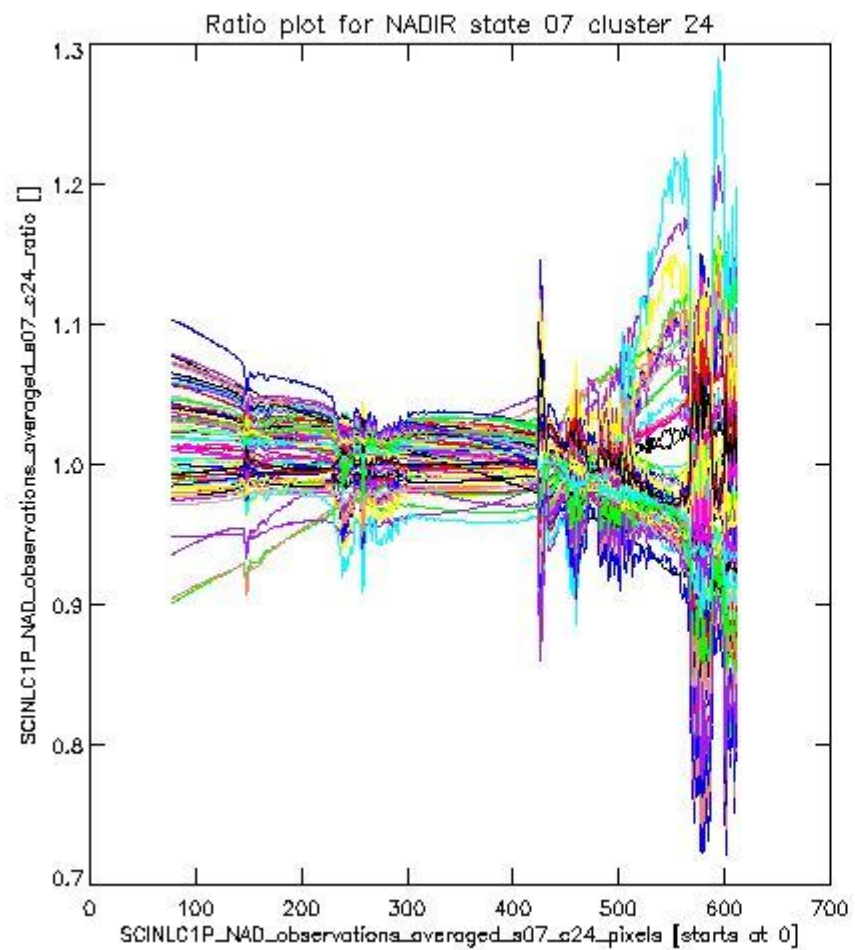
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	22FEB2011 00:37:40.614
Start time of last sample	22FEB2011 22:29:41.757
Reference period start time	23JAN2011 00:40:07.557
Reference period stop time	21FEB2011 23:06:32.278
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\_20110222\_6.PNG

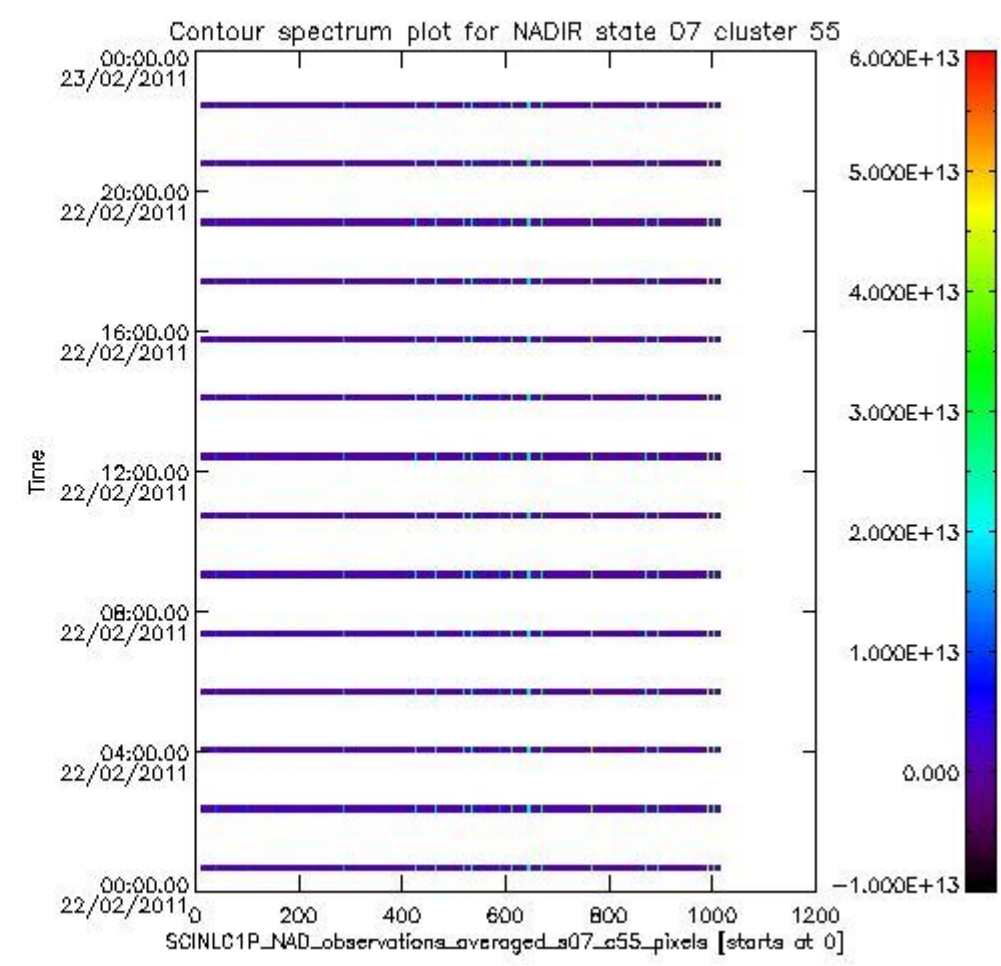
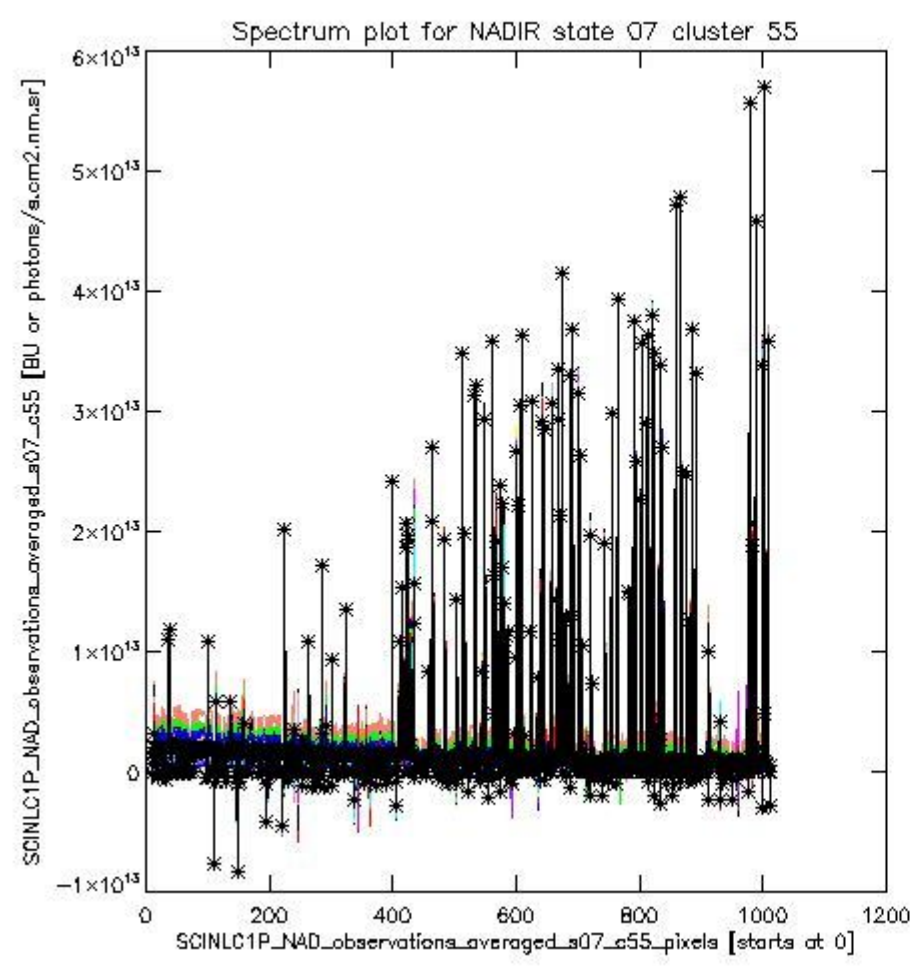




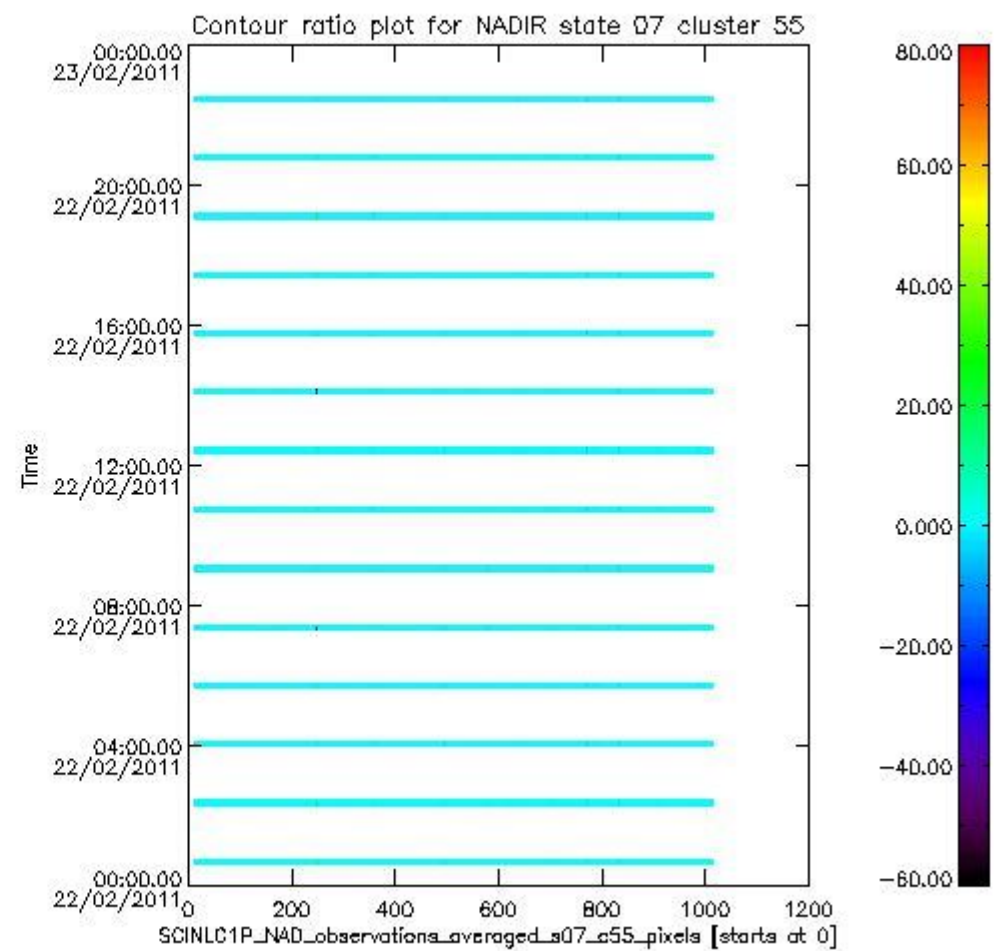
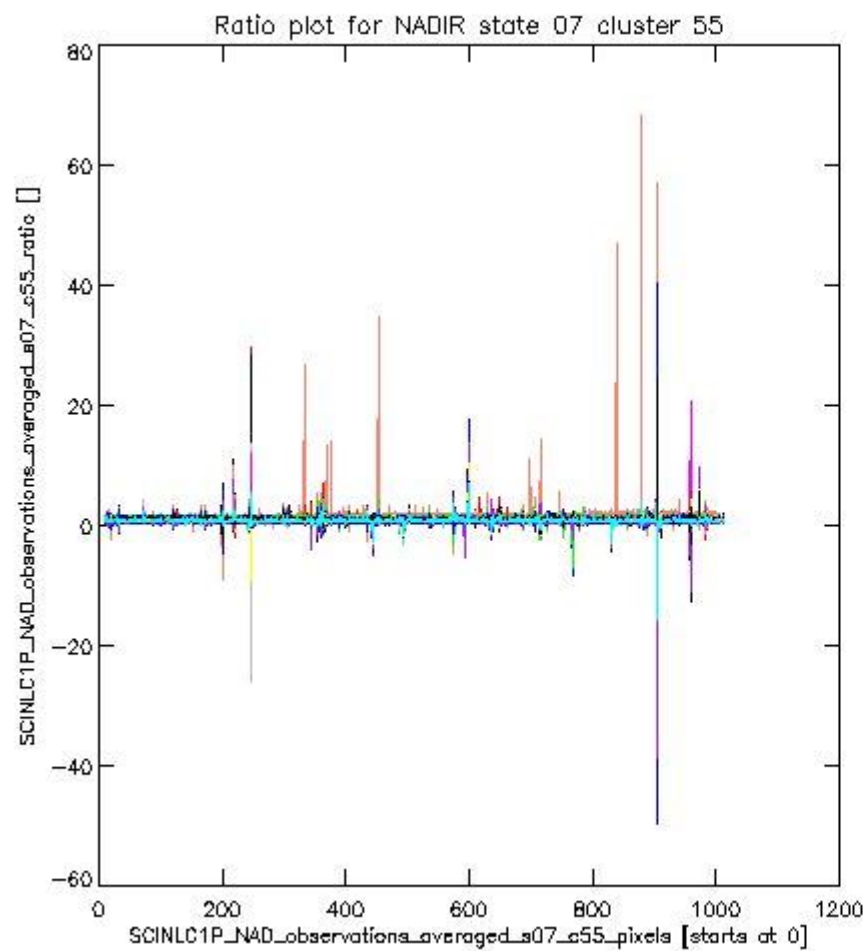
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_7.PNG

**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	22FEB2011 00:37:40.614
Start time of last sample	22FEB2011 22:29:41.757
Reference period start time	23JAN2011 00:40:07.557
Reference period stop time	21FEB2011 23:06:32.278
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\_20110222\_8.PNG

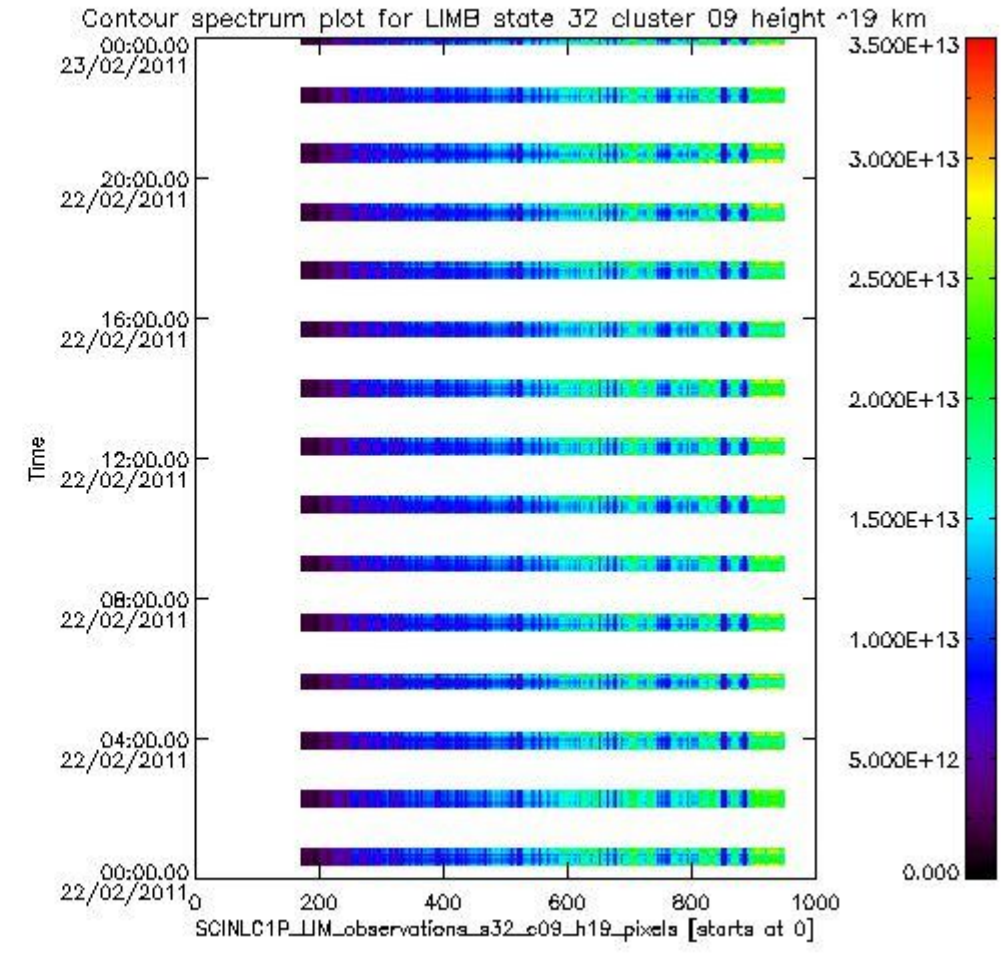
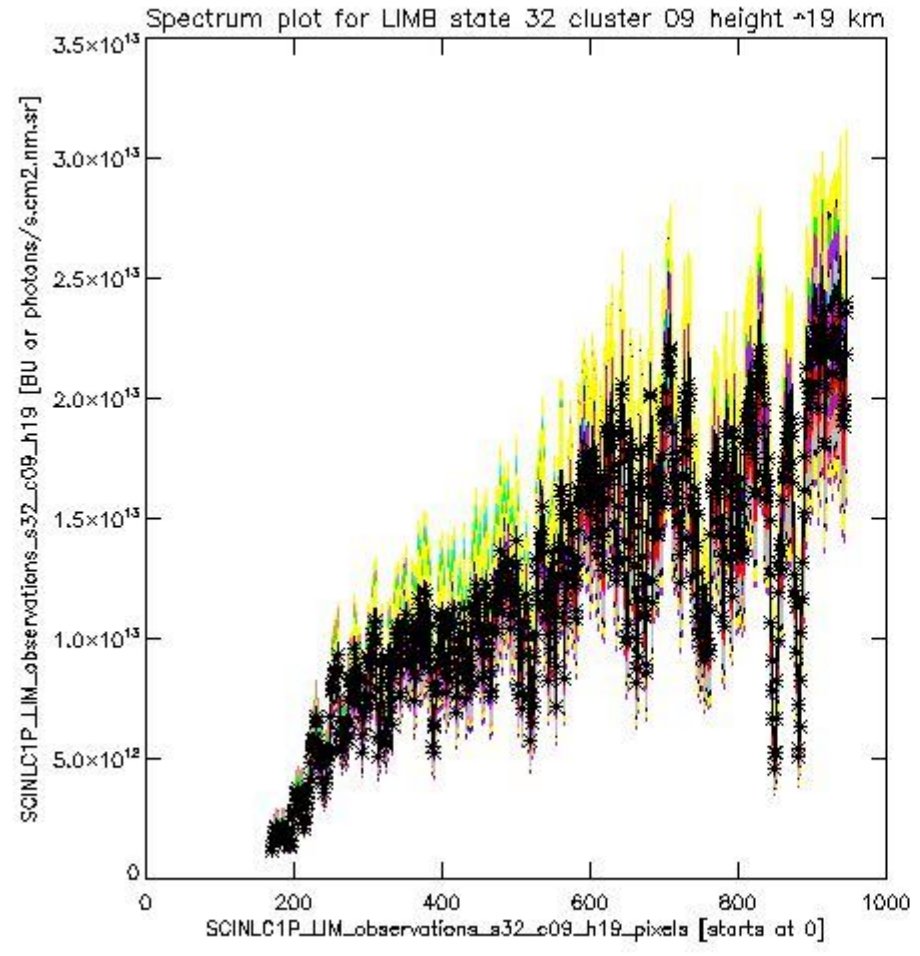


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_9.PNG

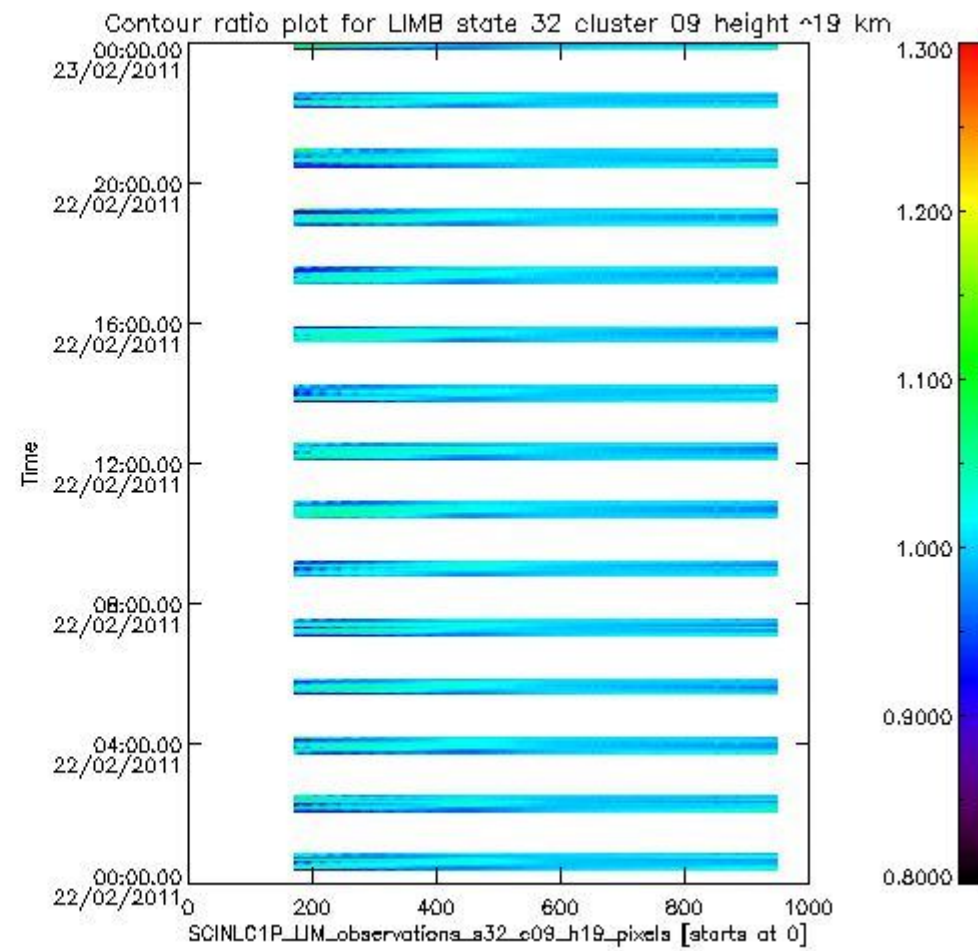
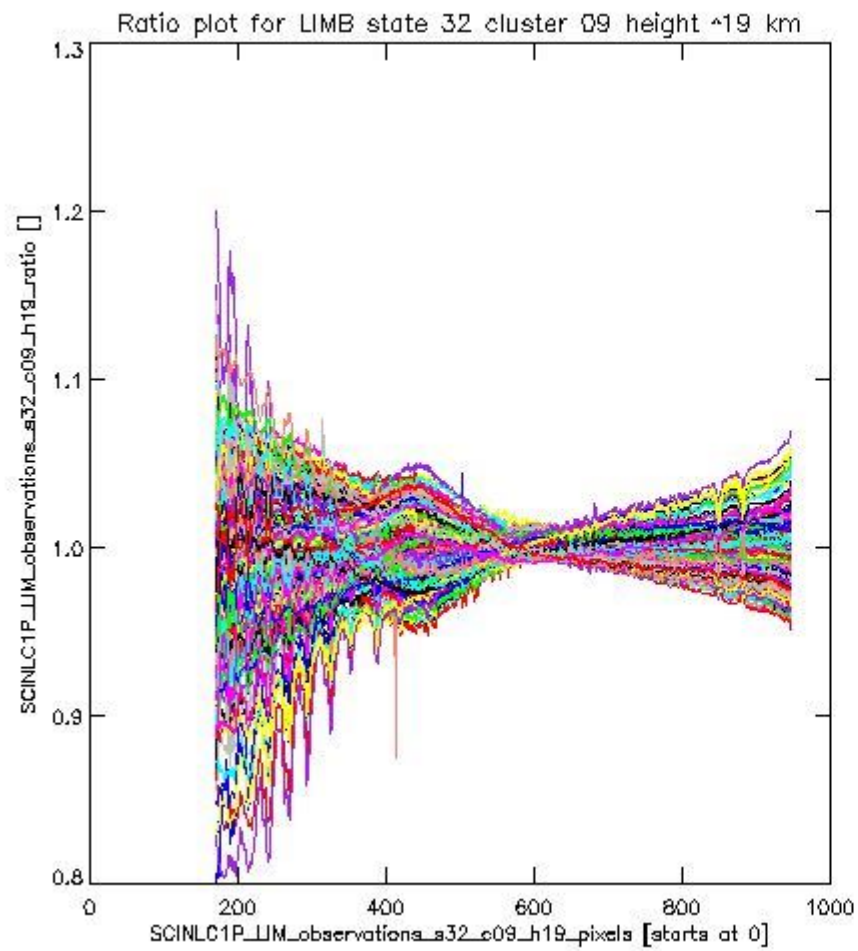
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	22FEB2011 00:22:27.235
Start time of last sample	22FEB2011 23:59:55.902
Reference period start time	23JAN2011 00:24:54.178
Reference period stop time	21FEB2011 23:09:43.579
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





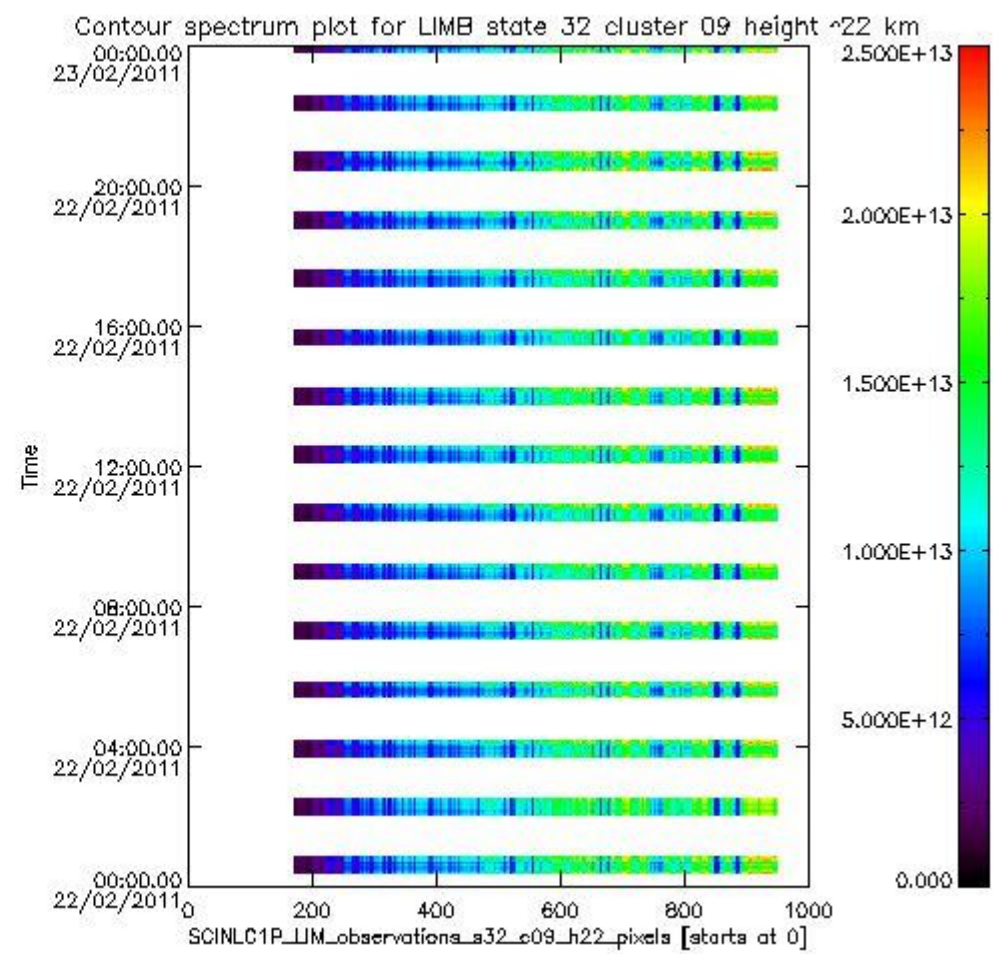
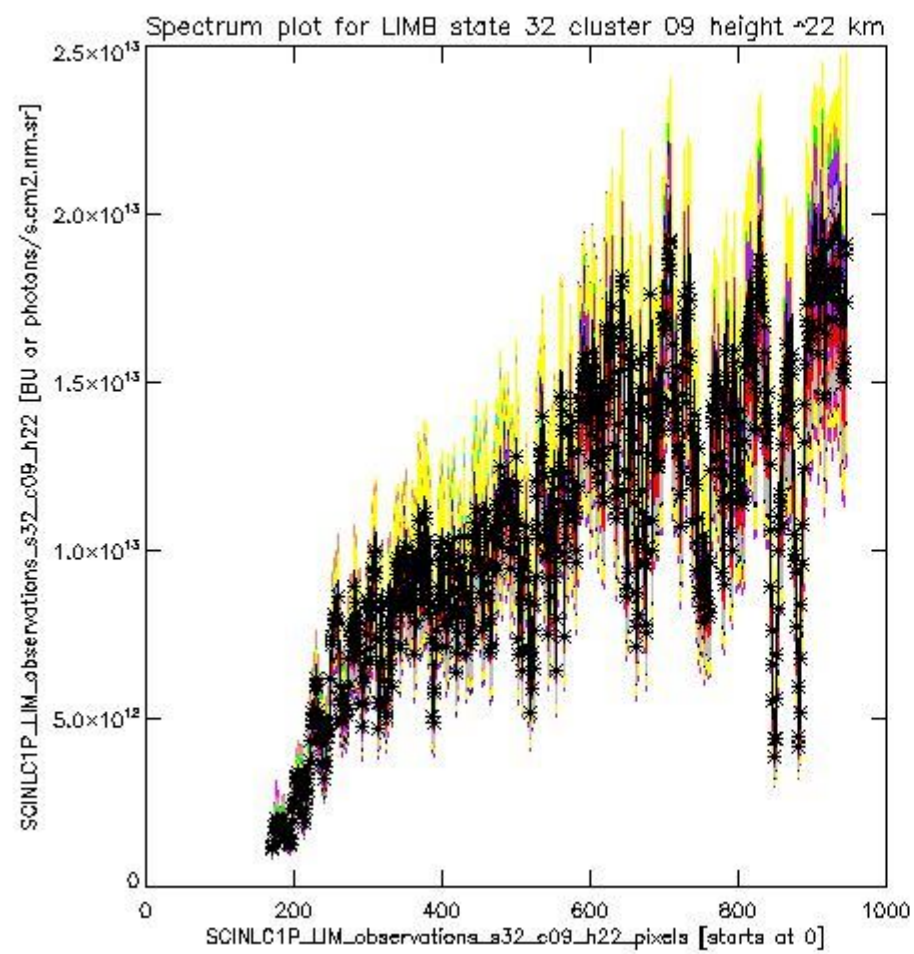
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_11.PNG

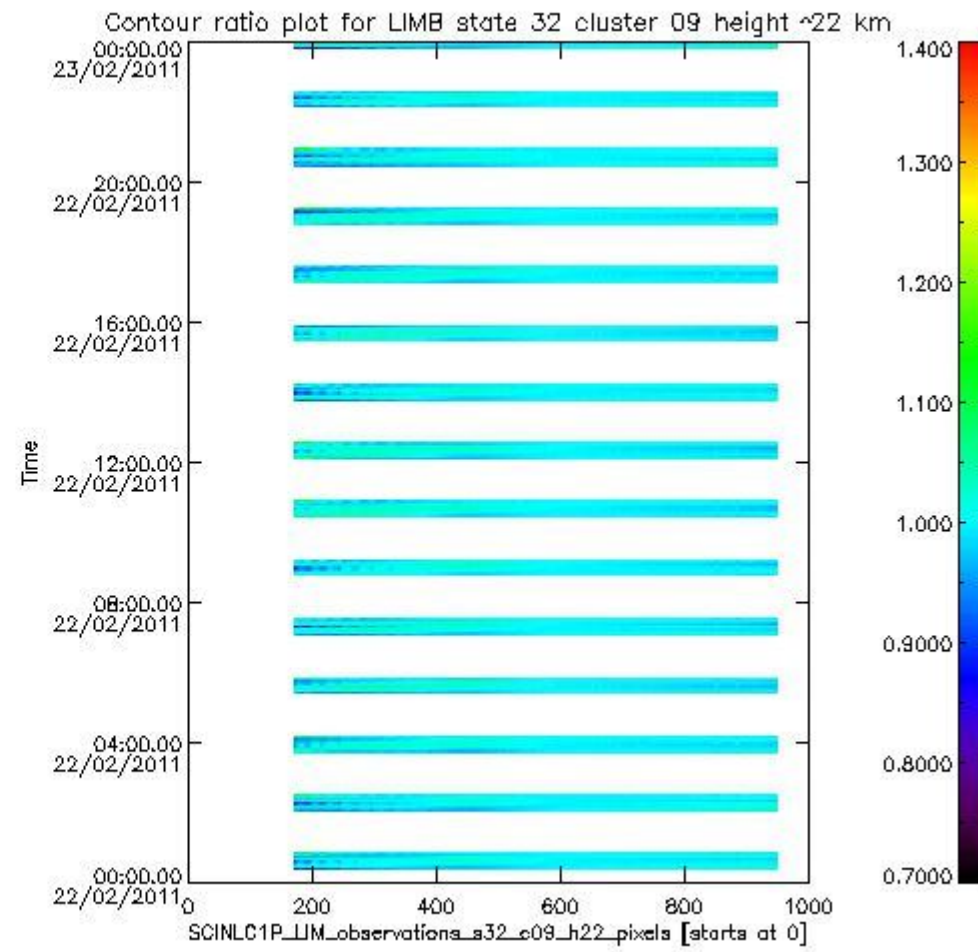
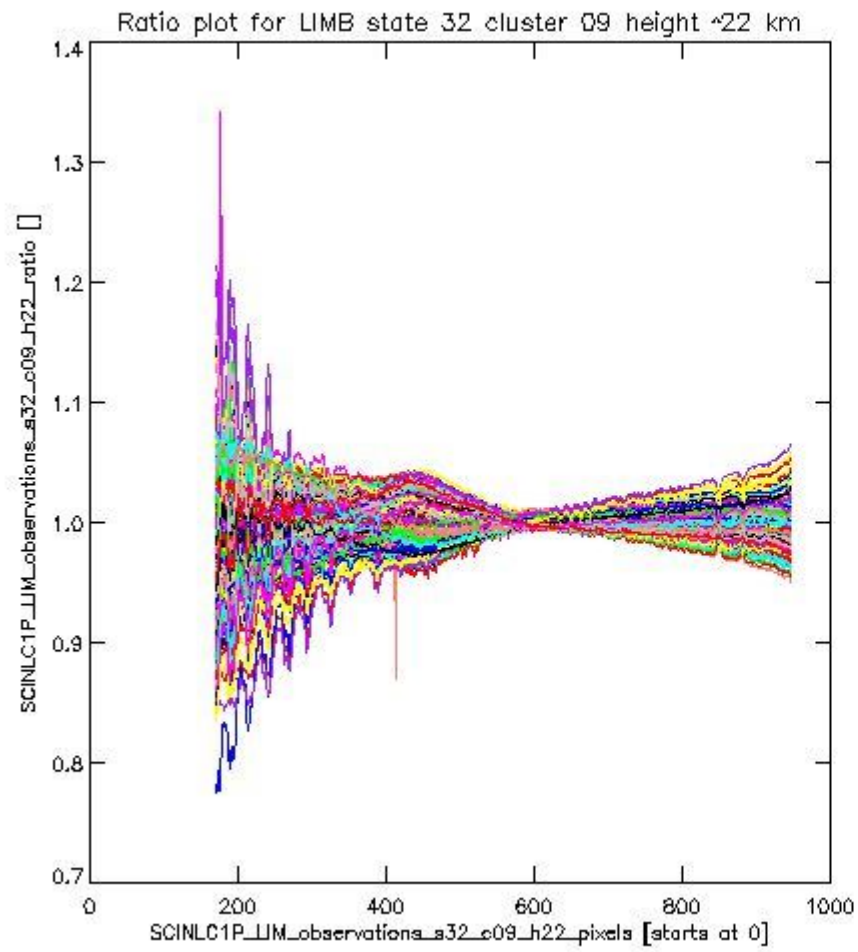
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	22FEB2011 00:22:27.235
Start time of last sample	22FEB2011 23:59:55.902
Reference period start time	23JAN2011 00:24:54.178
Reference period stop time	21FEB2011 23:09:43.579
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\_20110222\_12.PNG

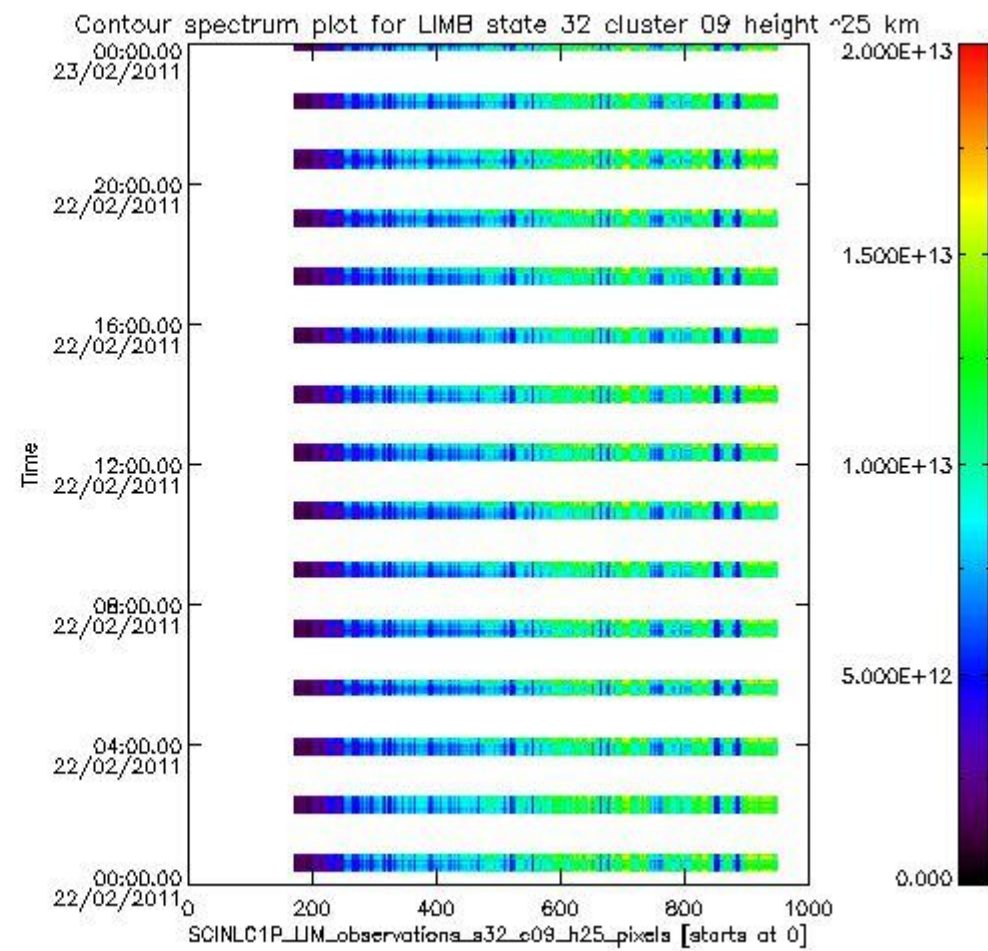
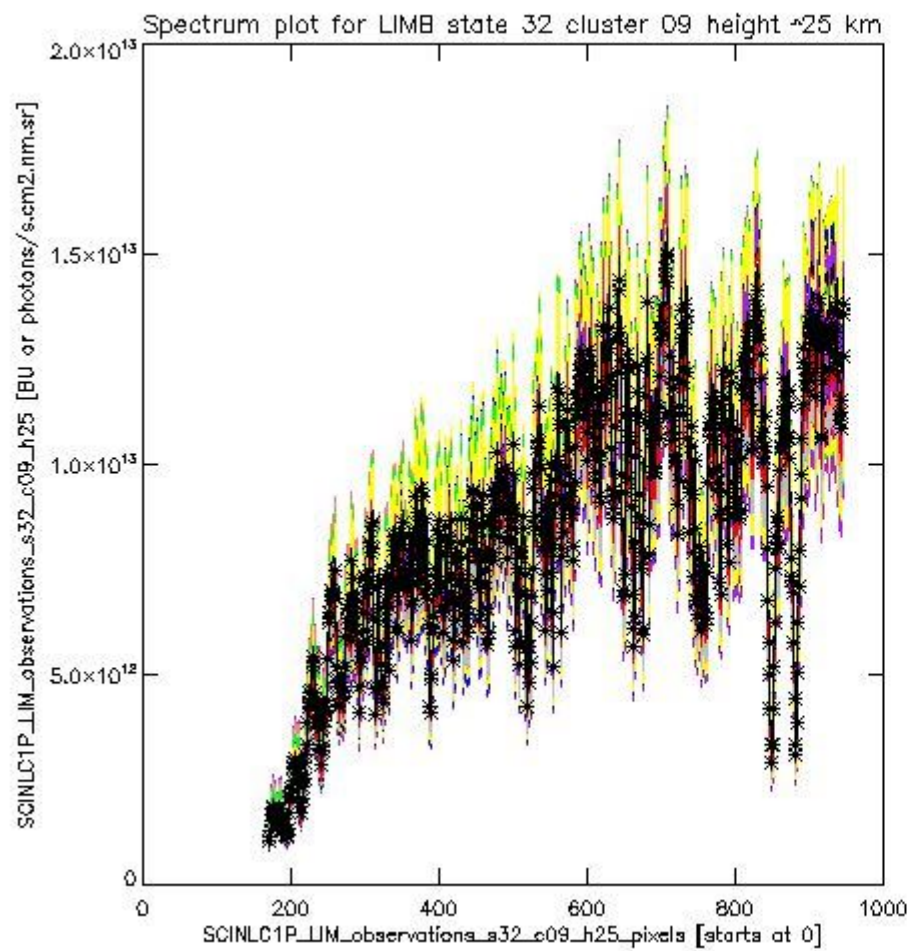




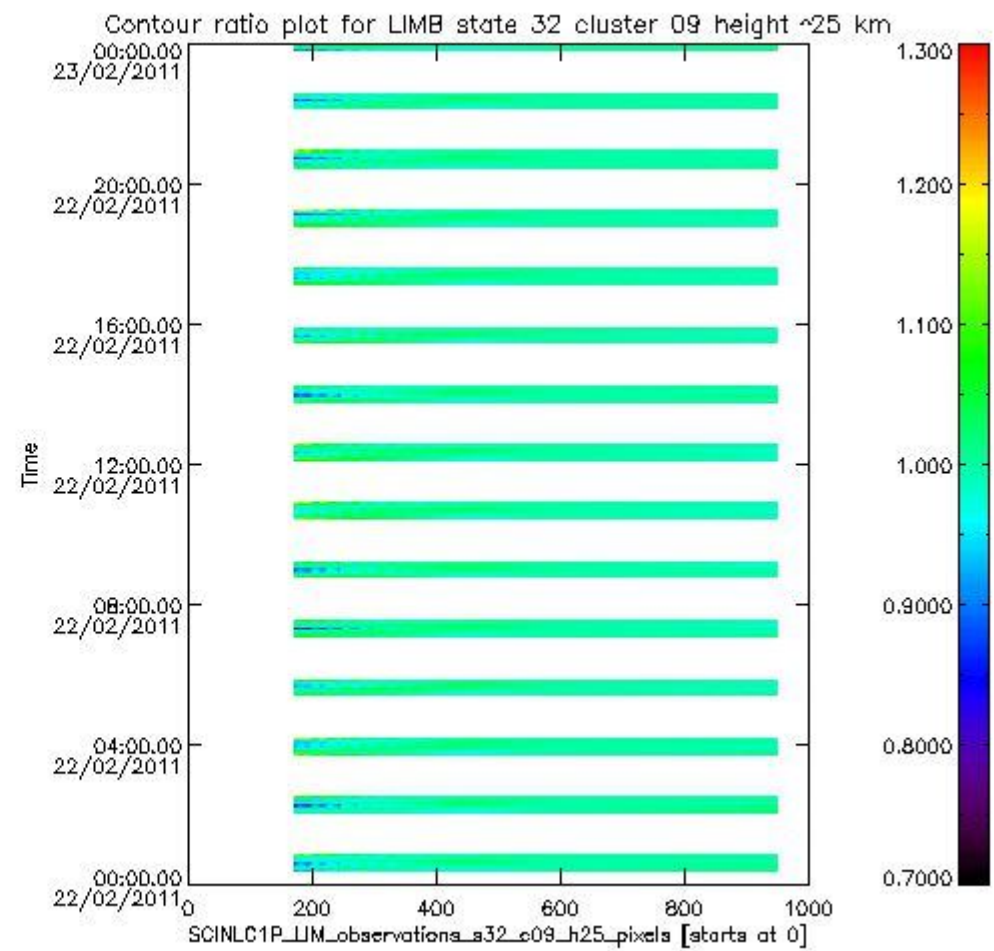
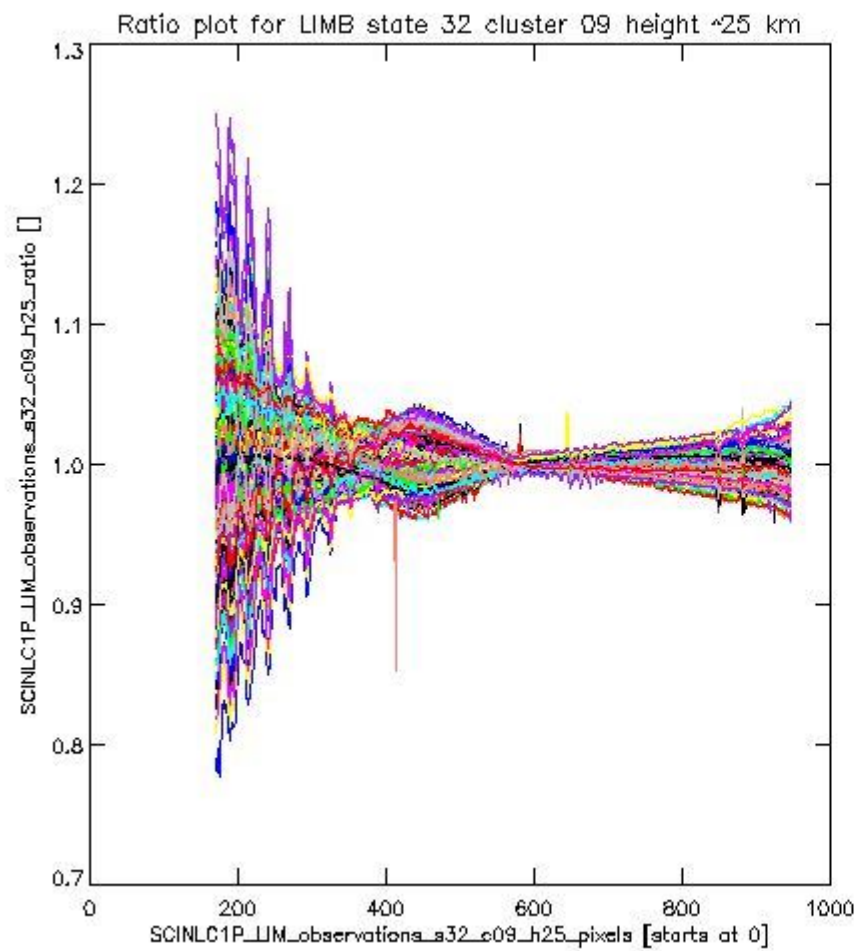
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_13.PNG

**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	22FEB2011 00:22:27.235
Start time of last sample	22FEB2011 23:59:55.902
Reference period start time	23JAN2011 00:24:54.178
Reference period stop time	21FEB2011 23:09:43.579
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\_20110222\_14.PNG

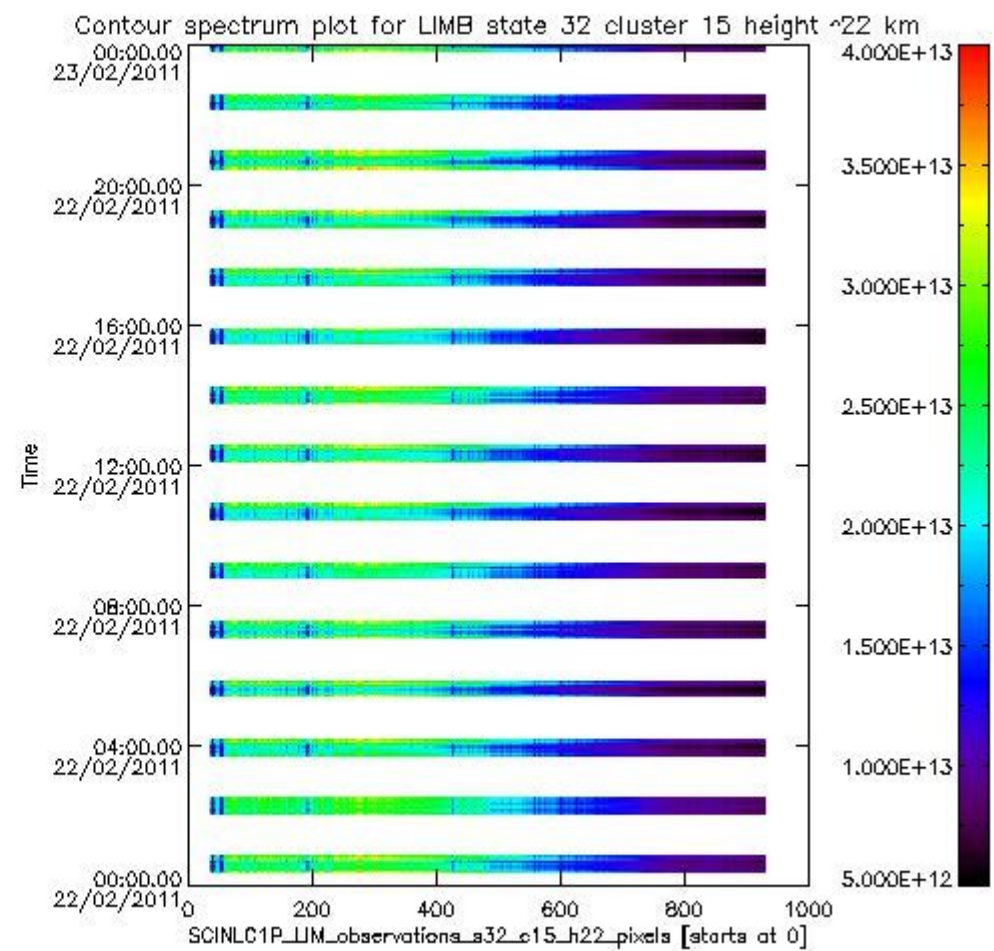
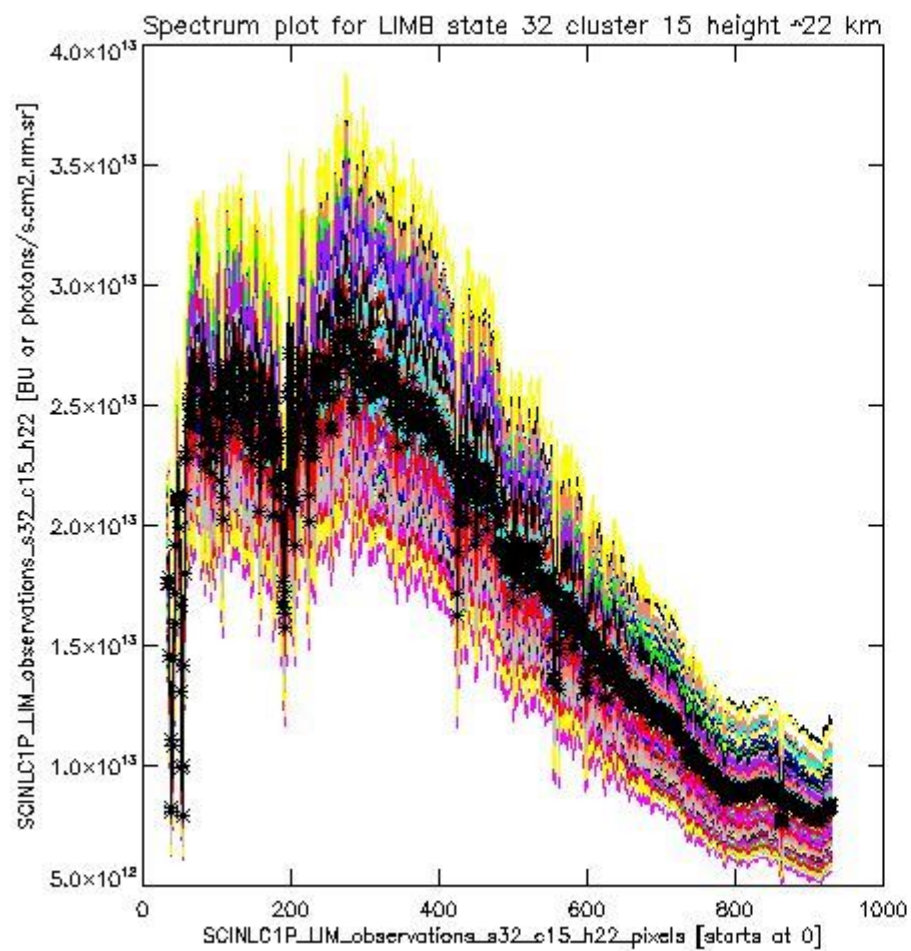


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_15.PNG

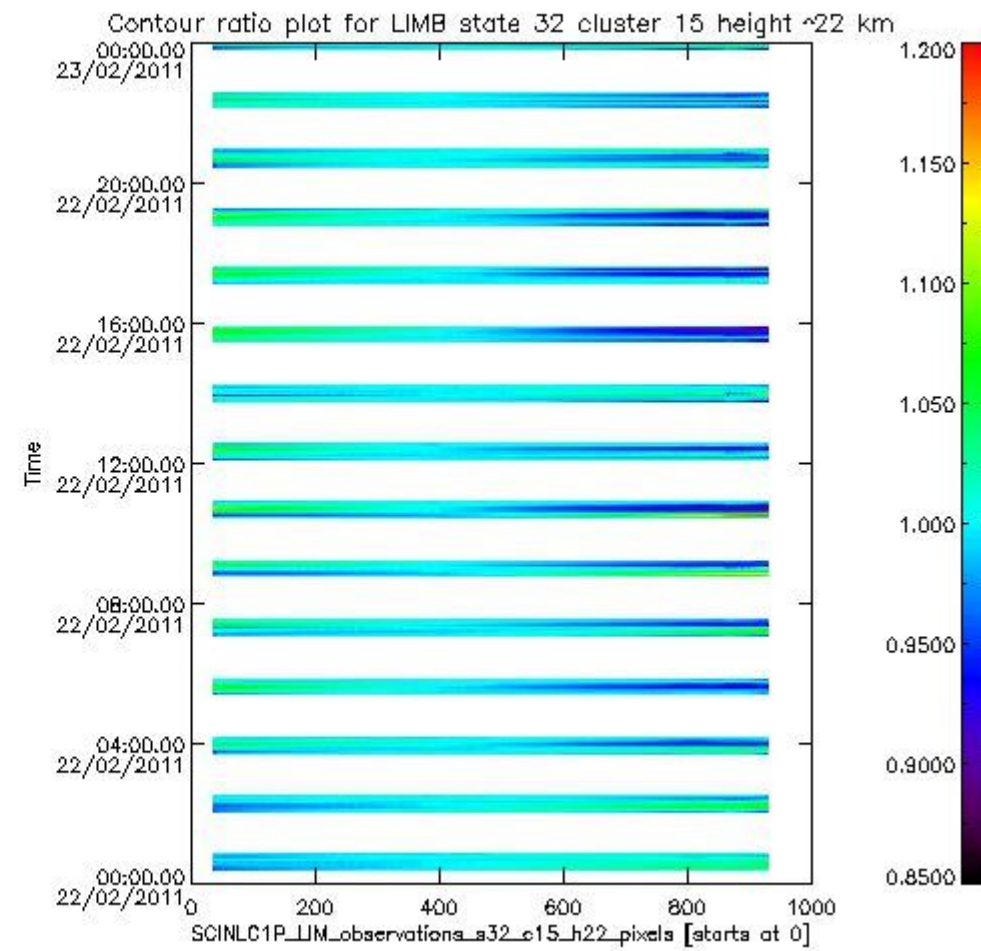
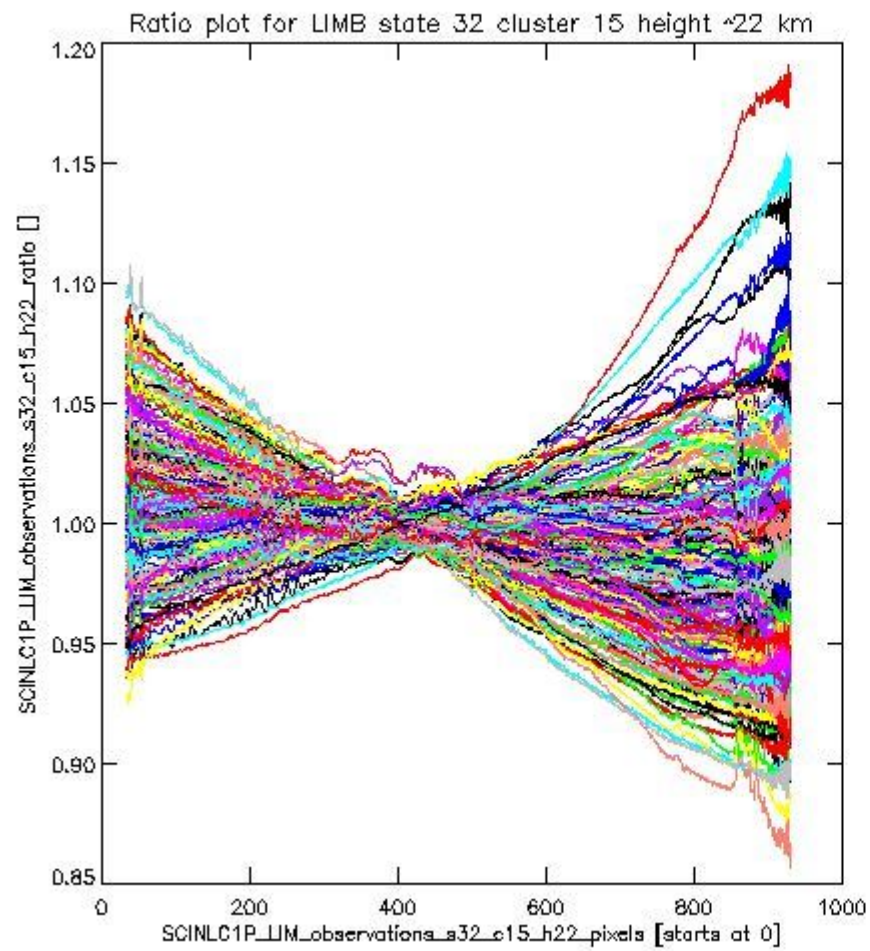
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	22FEB2011 00:22:27.235
Start time of last sample	22FEB2011 23:59:55.902
Reference period start time	23JAN2011 00:24:54.178
Reference period stop time	21FEB2011 23:09:43.579
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





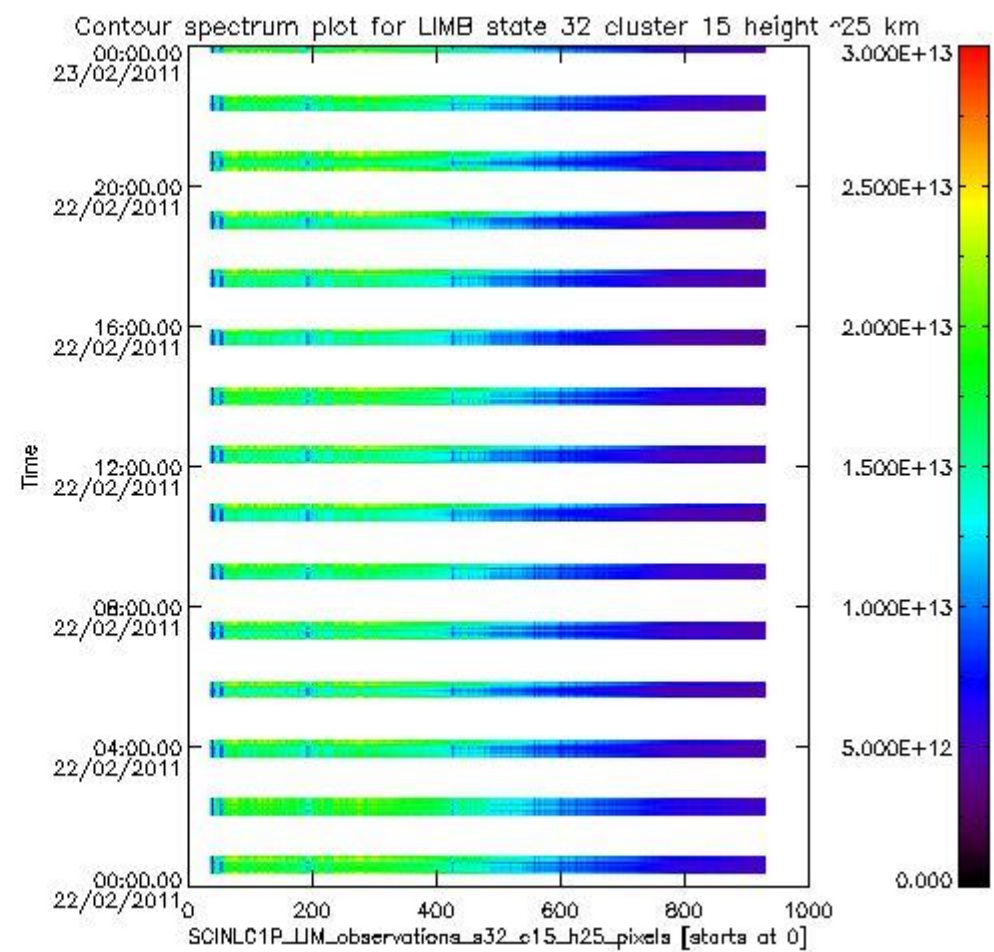
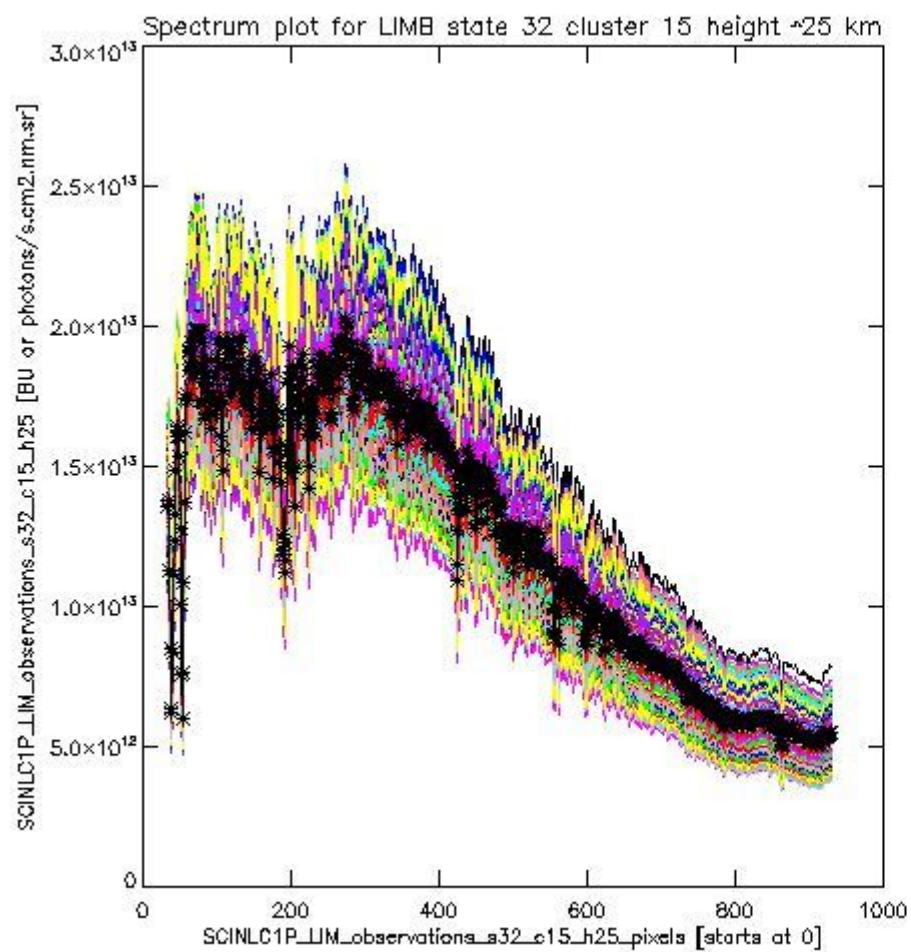
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_17.PNG

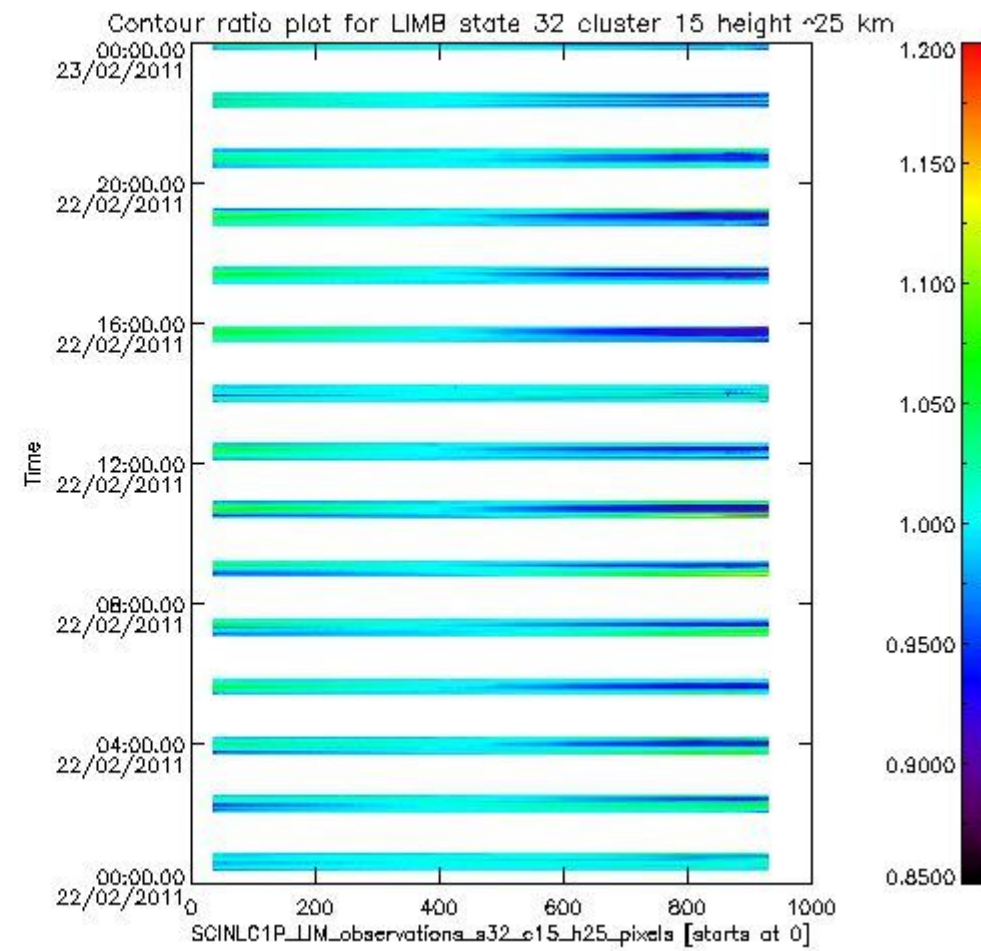
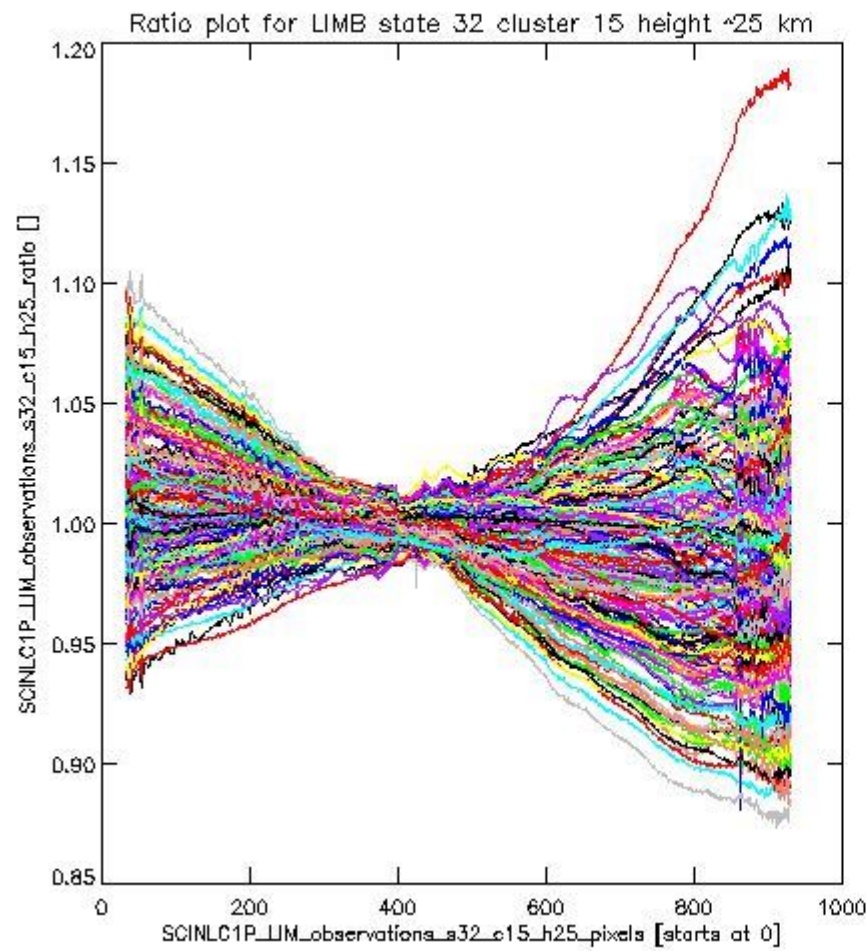
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	22FEB2011 00:22:27.235
Start time of last sample	22FEB2011 23:59:55.902
Reference period start time	23JAN2011 00:24:54.178
Reference period stop time	21FEB2011 23:09:43.579
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\_20110222\_18.PNG

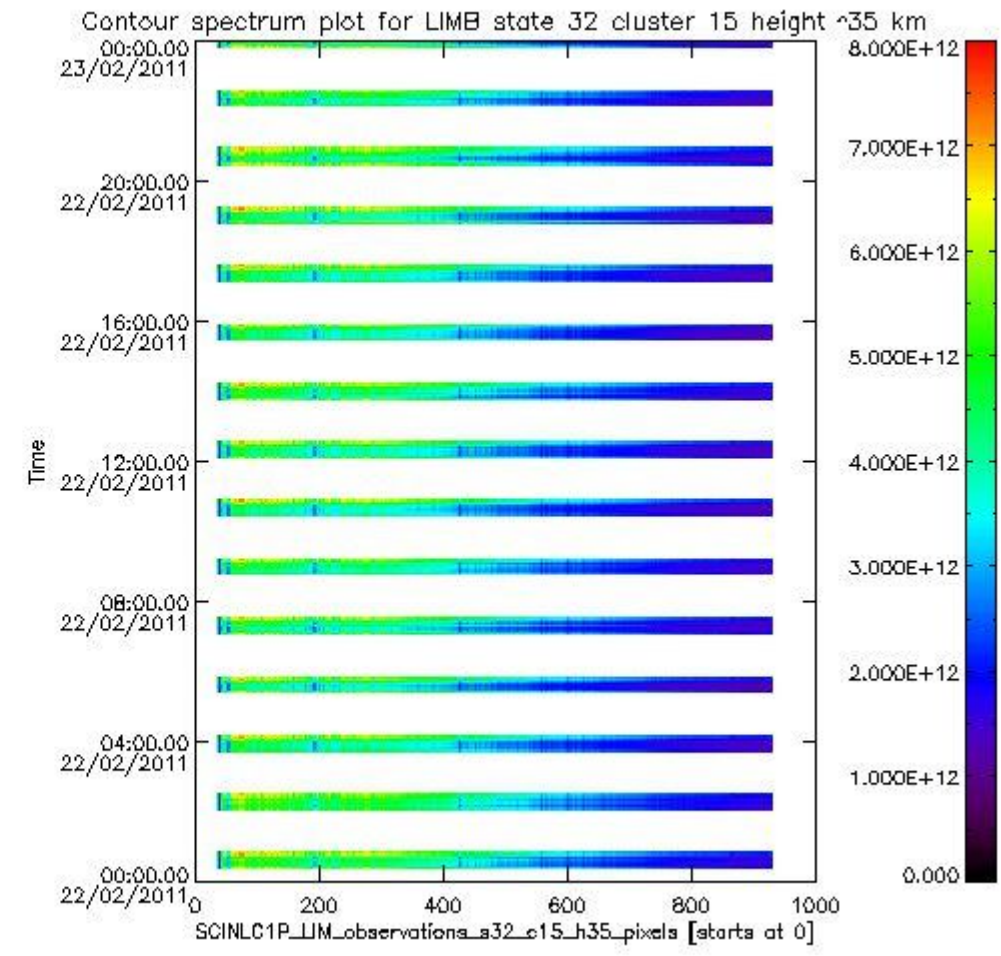
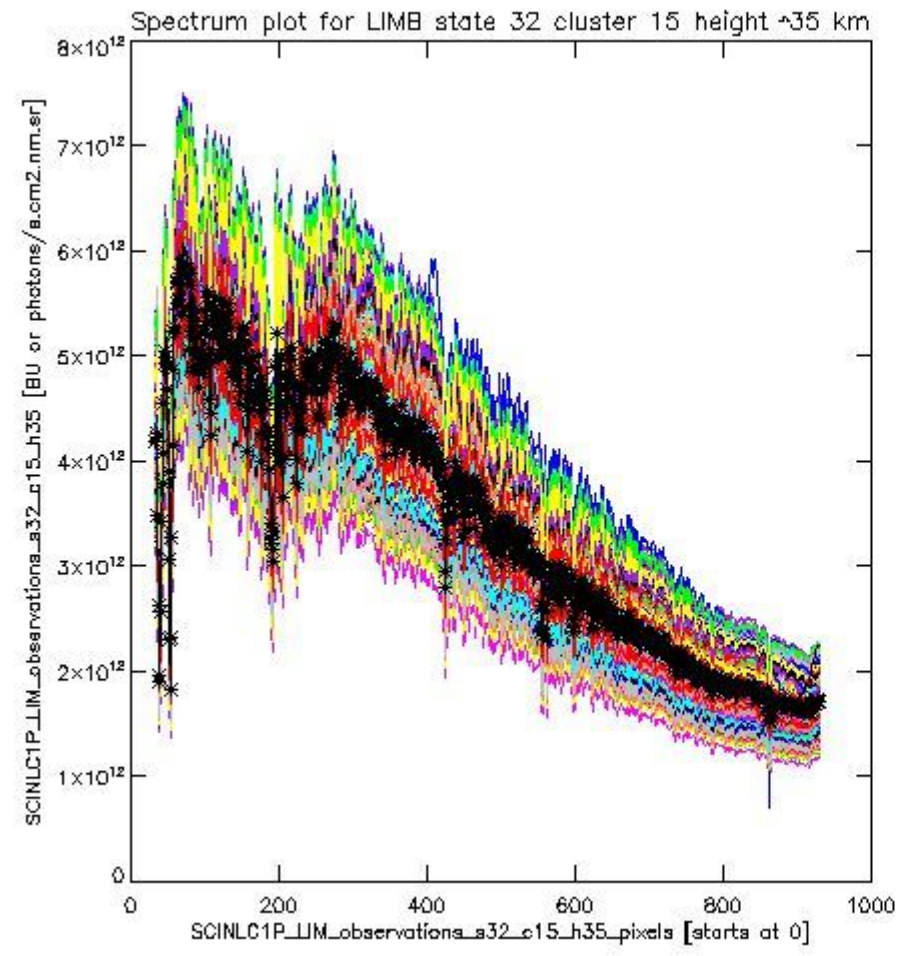




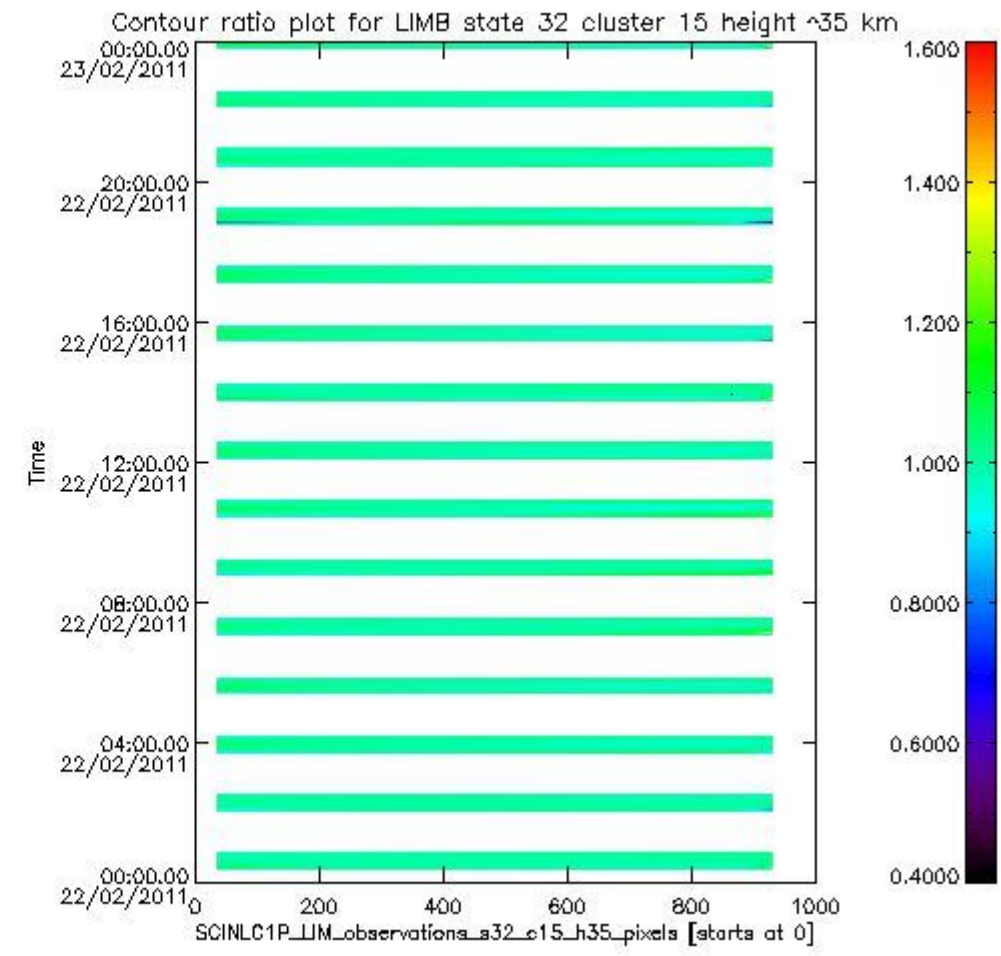
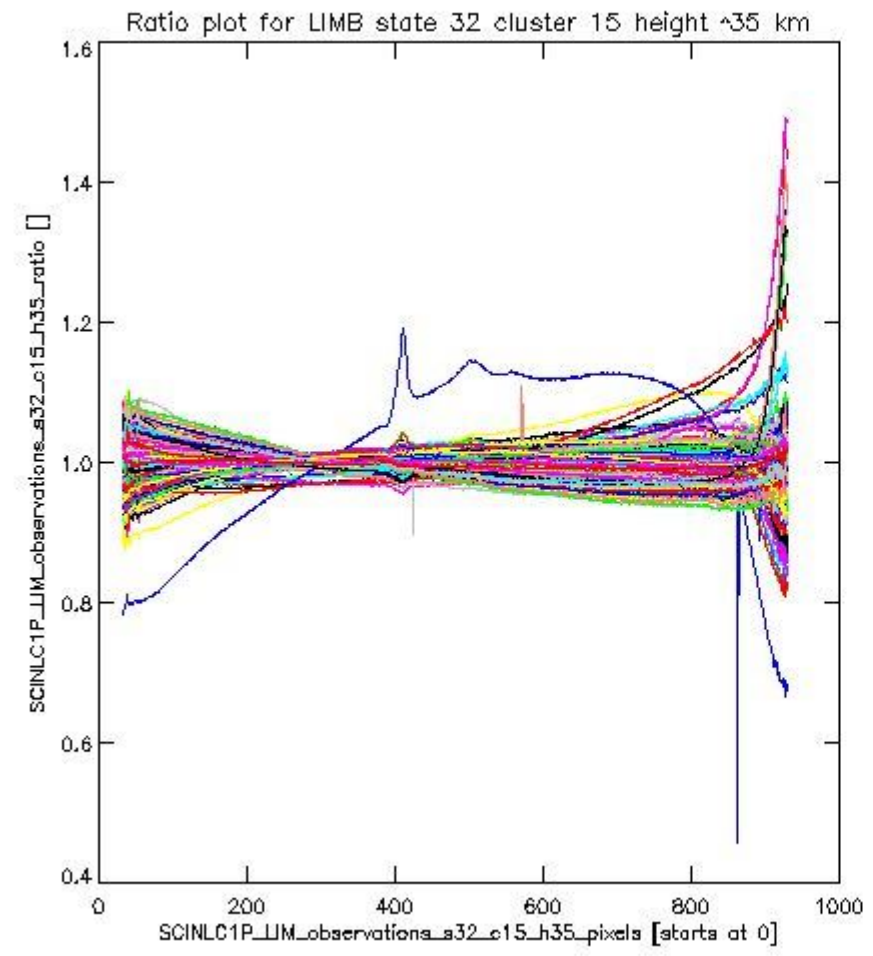
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_19.PNG

**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	22FEB2011 00:22:27.235
Start time of last sample	22FEB2011 23:59:55.902
Reference period start time	23JAN2011 00:24:54.178
Reference period stop time	21FEB2011 23:09:43.579
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\_20110222\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110222\_21.PNG



