

# 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	15MAR2011 06:55:40
Data source version	SCIA/7.04-U
Processing scope for products	04MAR2011 00:00:00 to 05MAR2011 00:00:00
Start time of first product within scope	03MAR2011 23:06:23
Stop time of last product within scope	05MAR2011 01:10:36
Total number of level 1 products	16
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	04MAR2011 01:10:34.135	04MAR2011 23:02:09.915
1	NADIR	07	09	N/A	04MAR2011 01:10:34.135	04MAR2011 23:02:09.915
2	NADIR	07	15	N/A	04MAR2011 01:10:34.135	04MAR2011 23:02:09.915
3	NADIR	07	24	N/A	04MAR2011 01:10:34.135	04MAR2011 23:02:09.915
4	NADIR	07	55	N/A	04MAR2011 01:10:34.135	04MAR2011 23:02:09.915
5	LIMB	32	09	~19 km	04MAR2011 02:36:03.089	04MAR2011 23:05:21.216
6	LIMB	32	09	~22 km	04MAR2011 02:36:03.089	04MAR2011 23:05:21.216
7	LIMB	32	09	~25 km	04MAR2011 02:36:03.089	04MAR2011 23:05:21.216
8	LIMB	32	15	~22 km	04MAR2011 02:36:03.089	04MAR2011 23:05:21.216
9	LIMB	32	15	~25 km	04MAR2011 02:36:03.089	04MAR2011 23:05:21.216
10	LIMB	32	15	~35 km	04MAR2011 02:36:03.089	04MAR2011 23:05:21.216

#### 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_1CUDPA20110303_224452_000059703100_00102_47099_5108.N1</a>	03MAR2011 23:06:23	04MAR2011 00:06:35	0	34	0	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110304_002426_000060493100_00103_47100_5110.N1</a>	04MAR2011 00:45:40	04MAR2011 01:47:02	0	35	0	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110304_020519_000059703100_00104_47101_5113.N1</a>	04MAR2011 02:17:11	04MAR2011 03:27:25	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110304_034453_000060493100_00105_47102_5114.N1</a>	04MAR2011 03:57:24	04MAR2011 05:07:53	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110304_052546_000059703100_00106_47103_5116.N1</a>	04MAR2011 05:37:38	04MAR2011 06:47:52	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110304_070520_000060493100_00107_47104_5118.N1</a>	04MAR2011 07:17:51	04MAR2011 08:28:20	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110304_084613_000059703100_00108_47105_5120.N1	04MAR2011 08:58:05	04MAR2011 10:08:20	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110304_102710_000059653100_00109_47106_5123.N1	04MAR2011 10:38:18	04MAR2011 11:48:47	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110304_120640_000060533100_00110_47107_5125.N1	04MAR2011 12:18:32	04MAR2011 13:28:46	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110304_134737_000059653100_00111_47108_5126.N1	04MAR2011 13:58:45	04MAR2011 15:09:14	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110304_152707_000060543100_00112_47109_5128.N1	04MAR2011 15:38:59	04MAR2011 16:49:14	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110304_170804_000059653100_00113_47110_5131.N1	04MAR2011 17:19:12	04MAR2011 18:29:51	0	34	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110304_184734_000060533100_00114_47111_5132.N1	04MAR2011 18:59:26	04MAR2011 20:10:01	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110304_202831_000059653100_00115_47112_5134.N1	04MAR2011 20:39:40	04MAR2011 21:50:09	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110304_220800_000060533100_00116_47113_5137.N1	04MAR2011 22:19:53	04MAR2011 23:30:08	0	35	31	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110304_234858_000059653100_00117_47114_5138.N1	05MAR2011 00:00:07	05MAR2011 01:10:36	0	36	30	0	0	1	0	0	

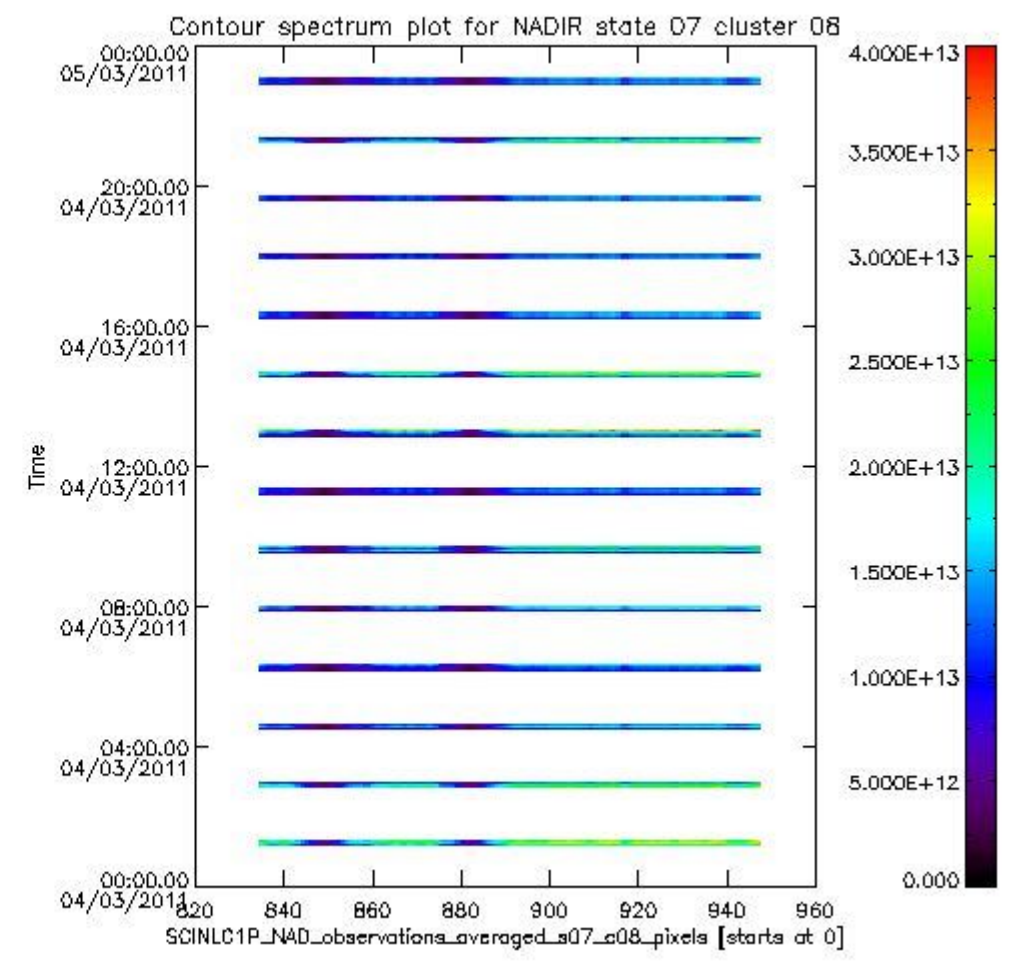
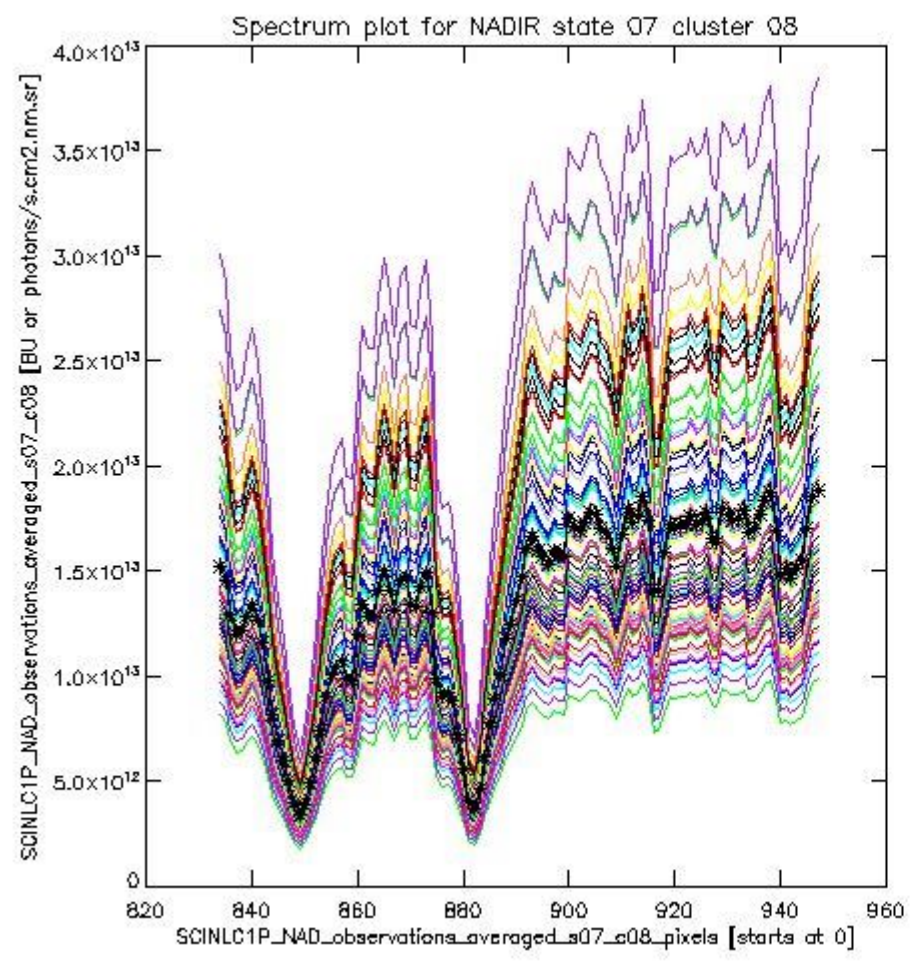
## 1.2 Source packet monitoring

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:

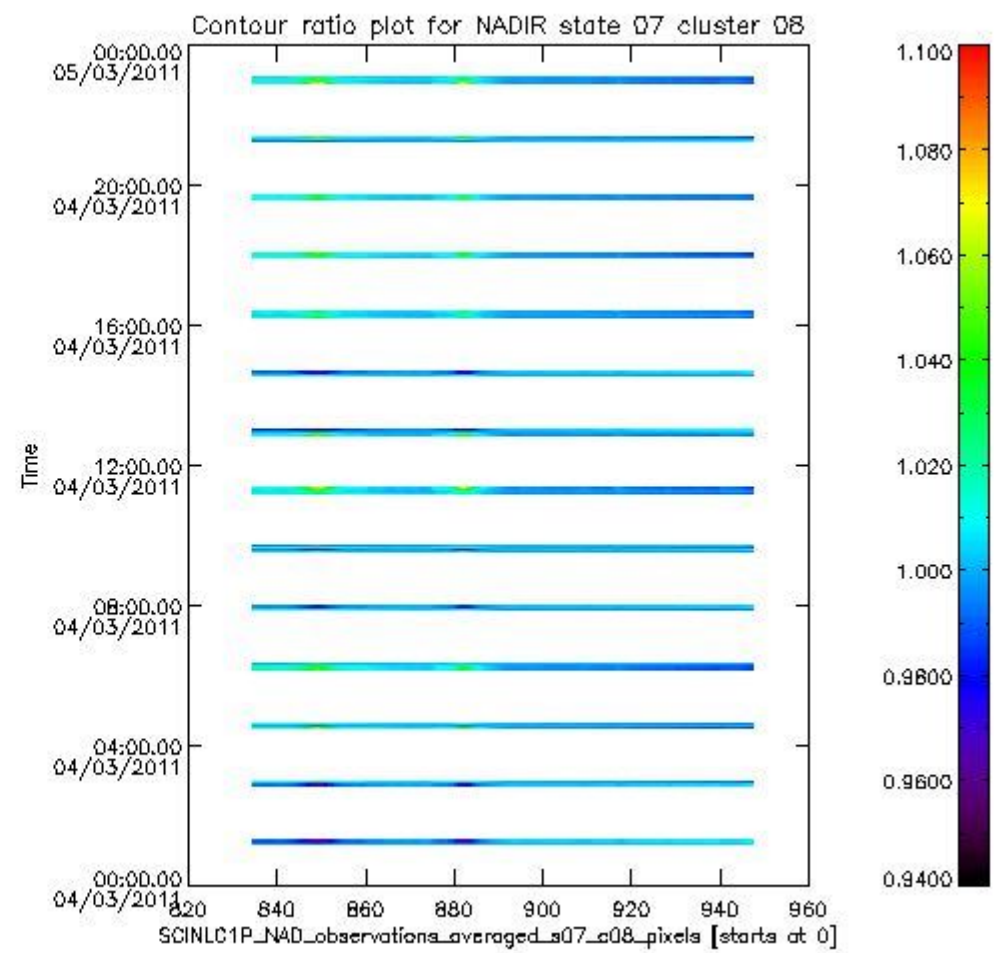
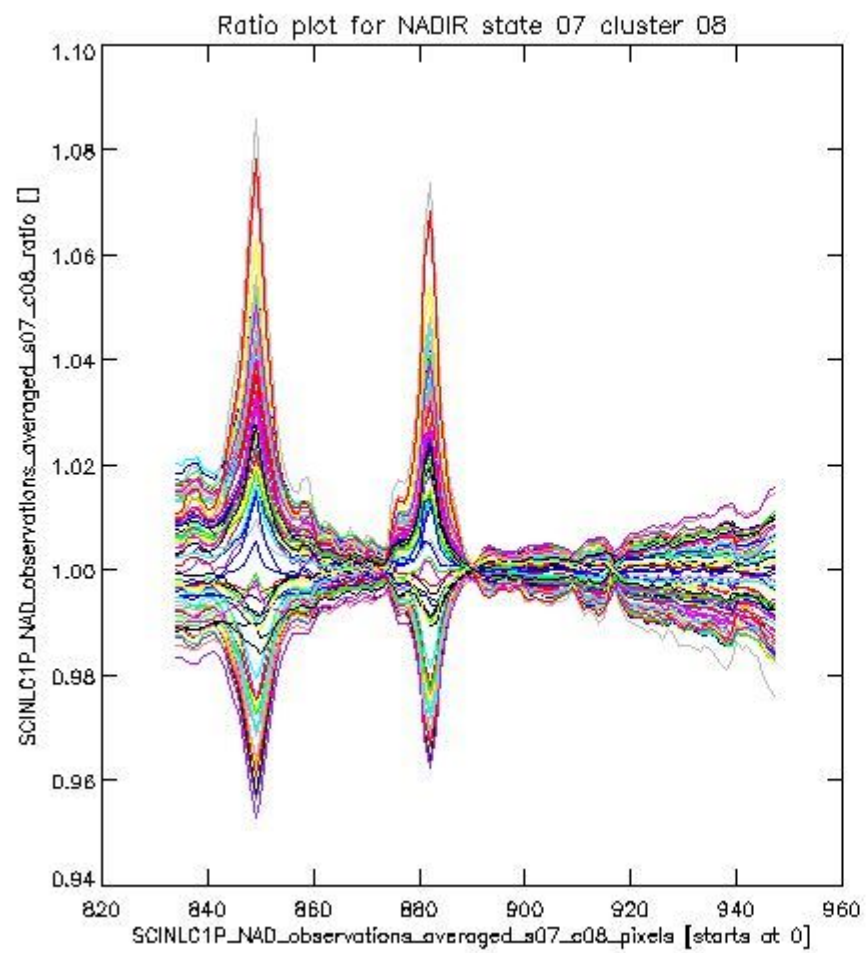
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	04MAR2011 01:10:34.135
Start time of last sample	04MAR2011 23:02:09.915
Reference period start time	02FEB2011 04:33:17.302
Reference period stop time	03MAR2011 23:39:34.263
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\_20110304\_0.PNG

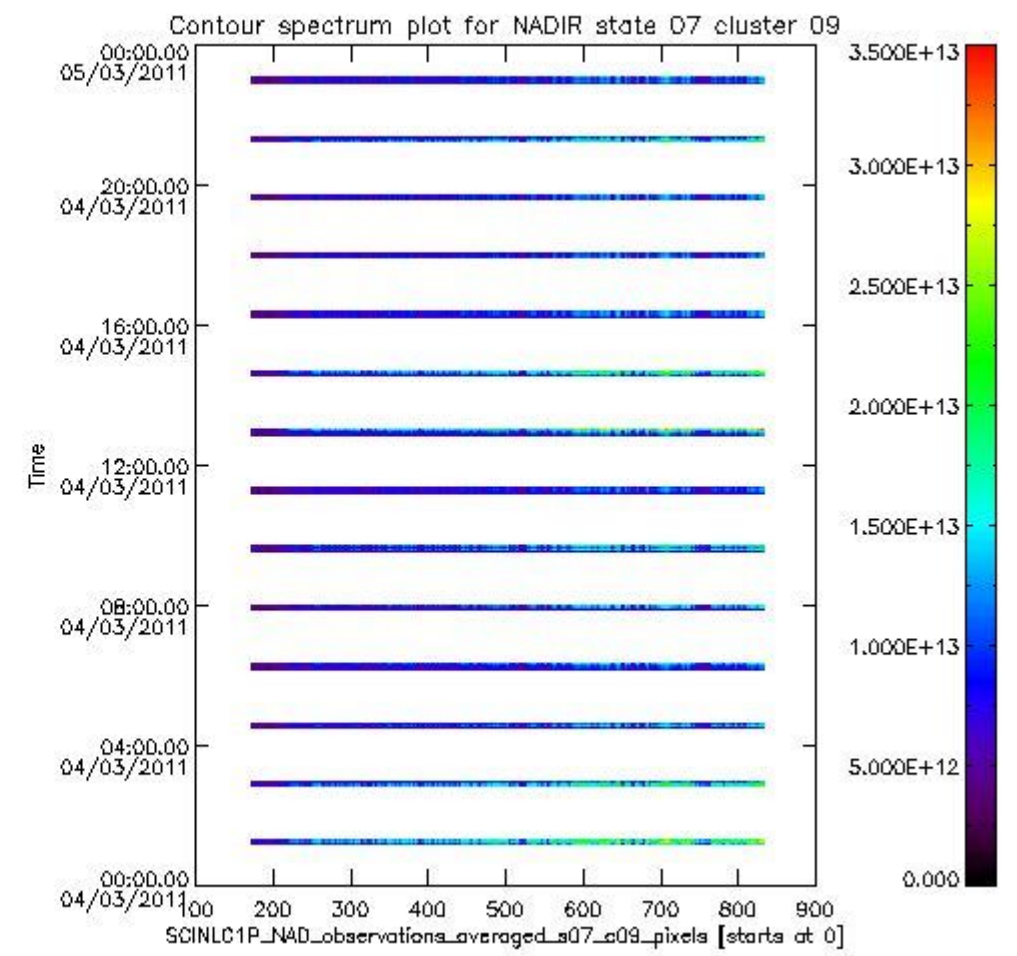
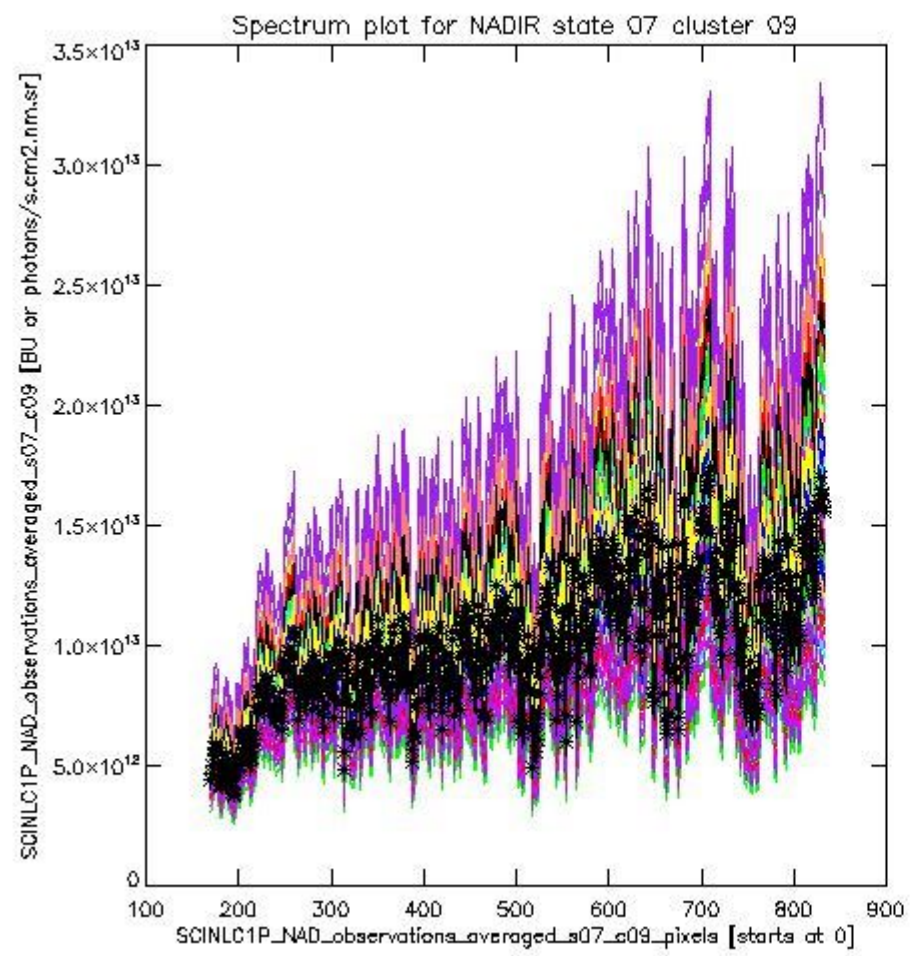


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_1.PNG

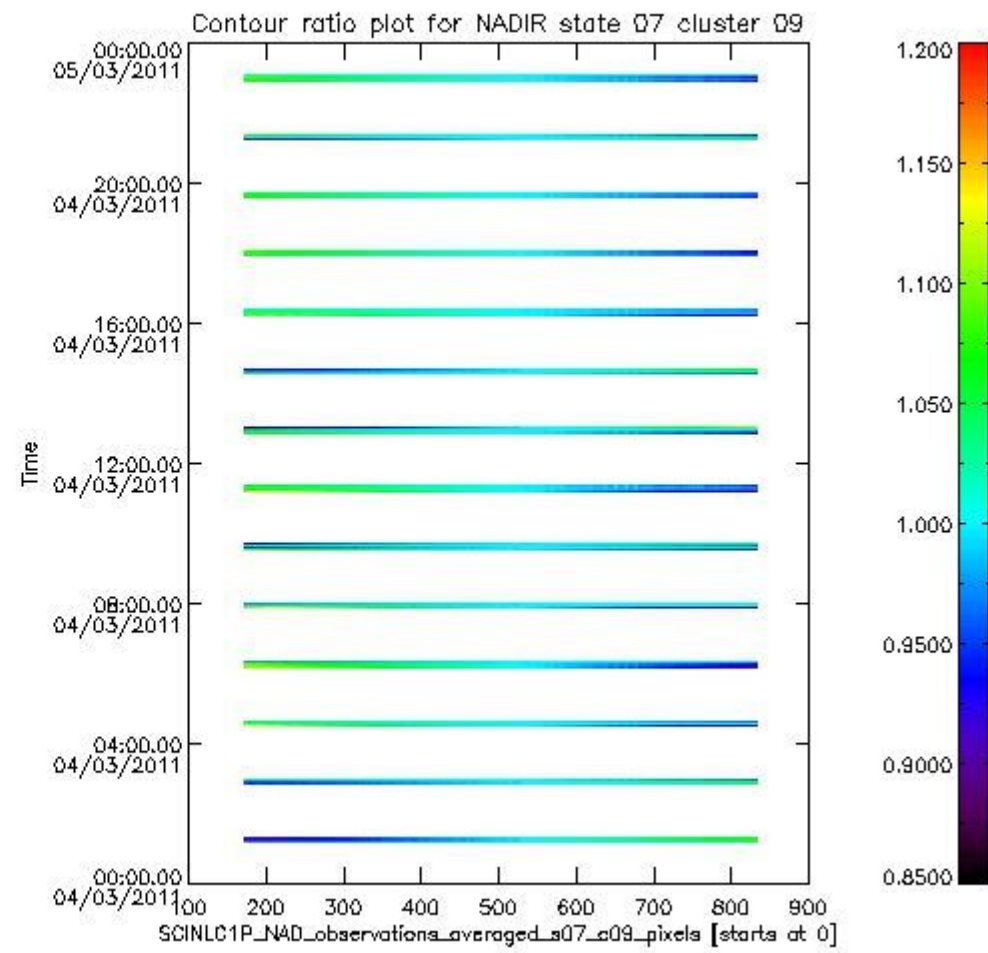
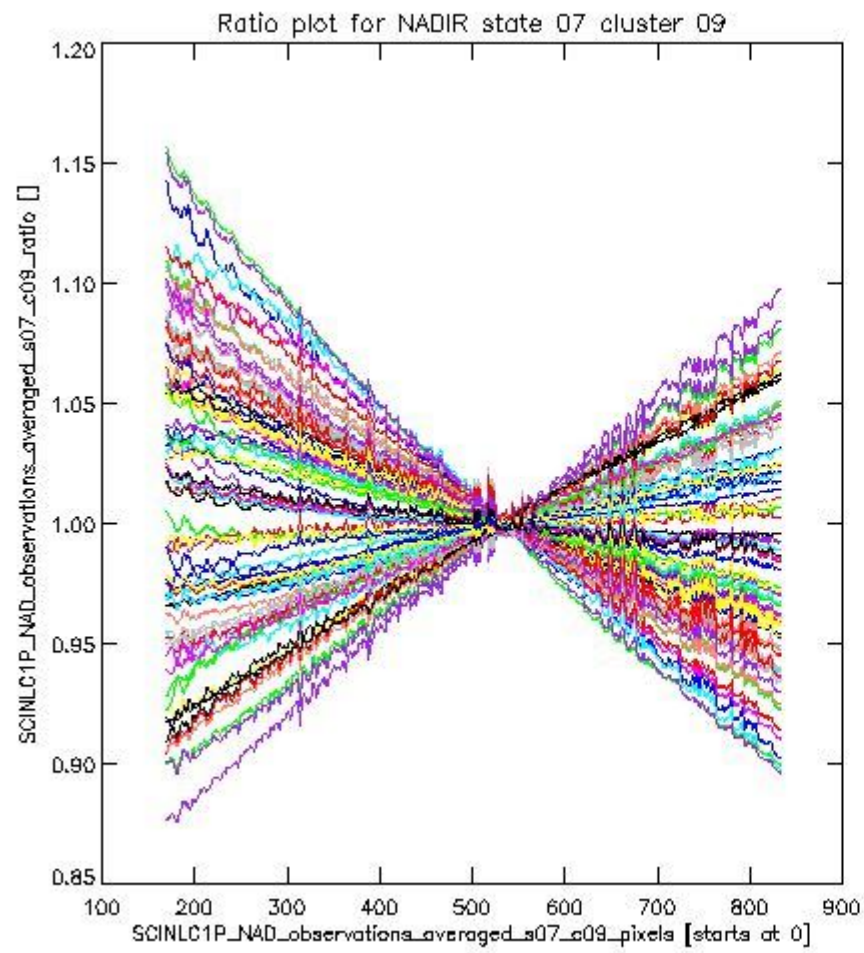
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 01:10:34.135
Start time of last sample	04MAR2011 23:02:09.915
Reference period start time	02FEB2011 04:33:17.302
Reference period stop time	03MAR2011 23:39:34.263
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





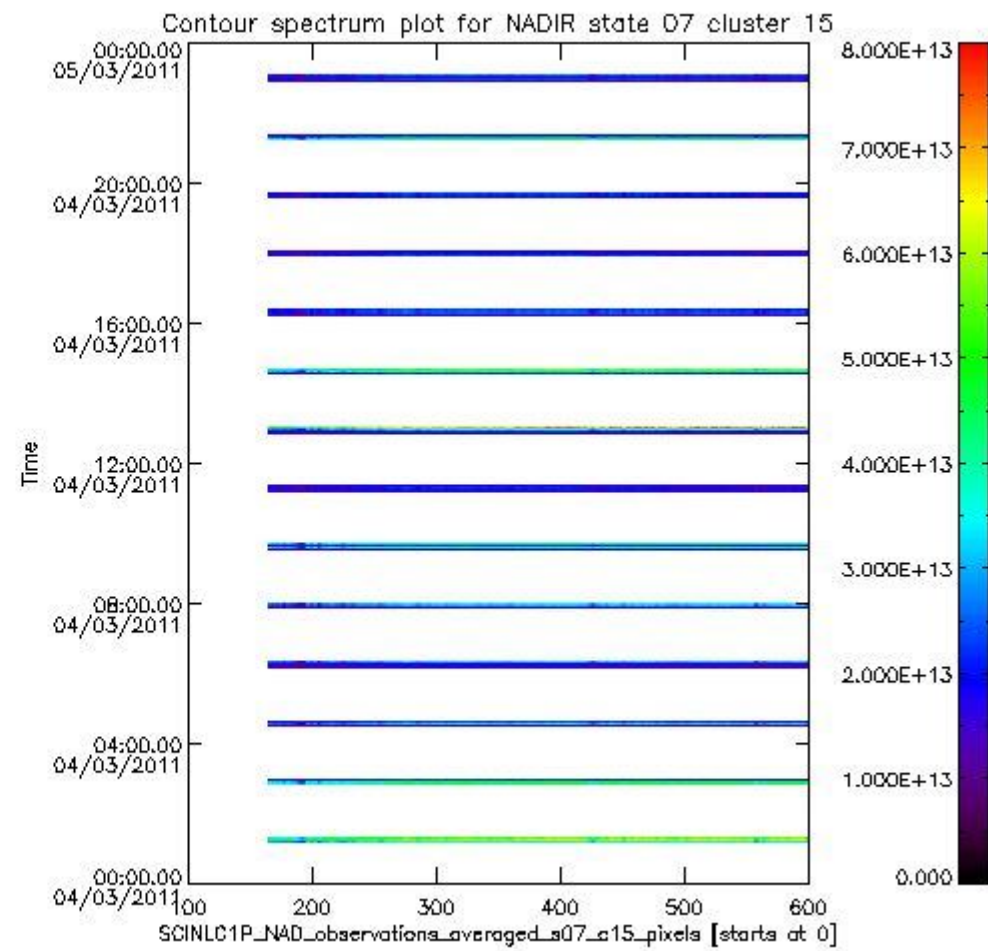
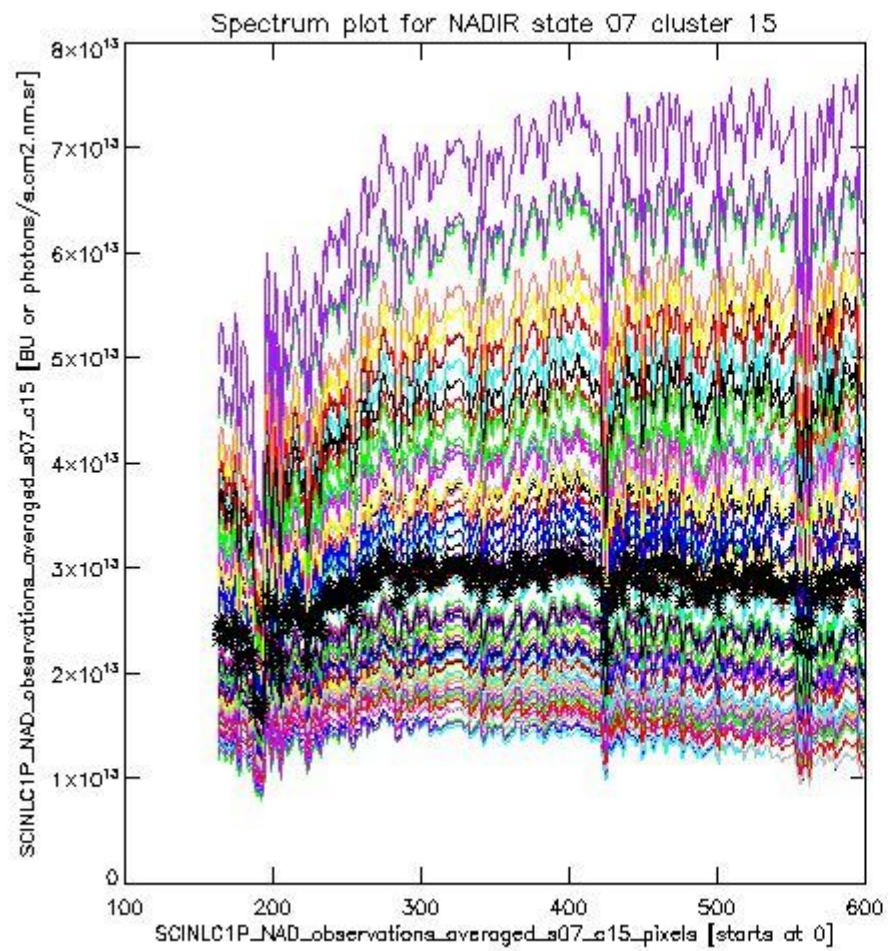
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_3.PNG

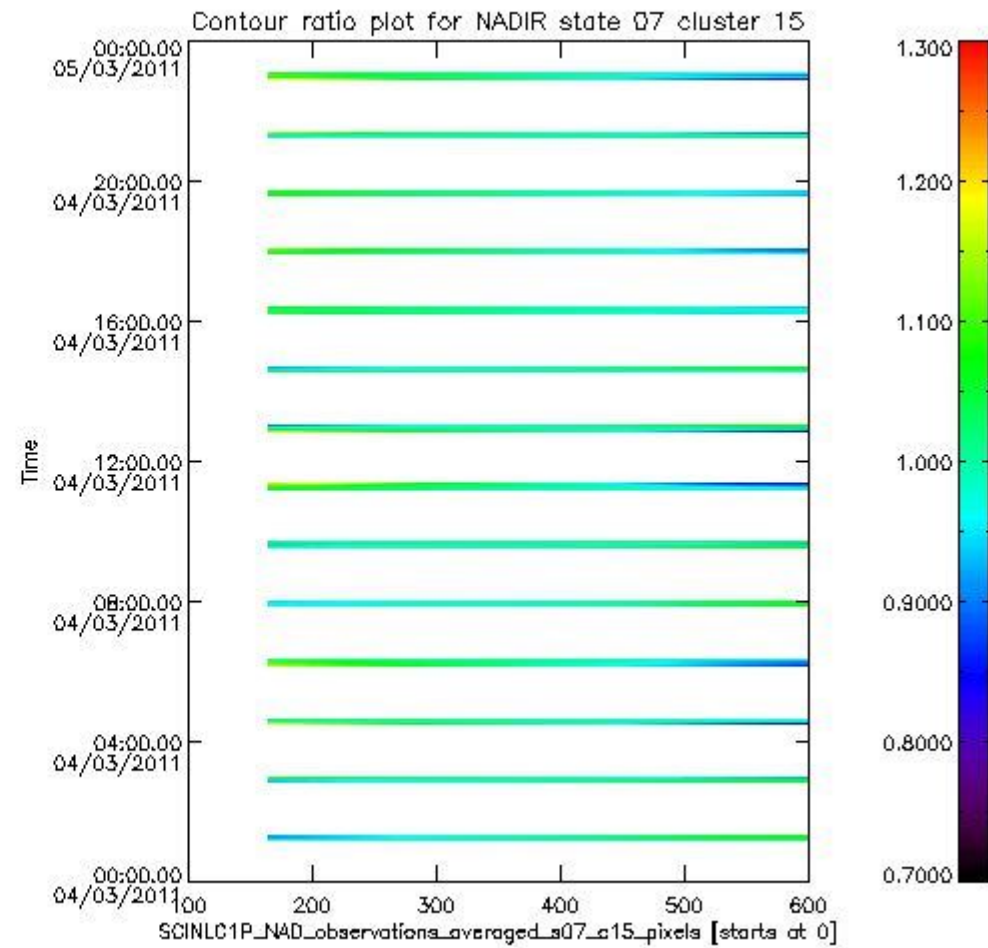
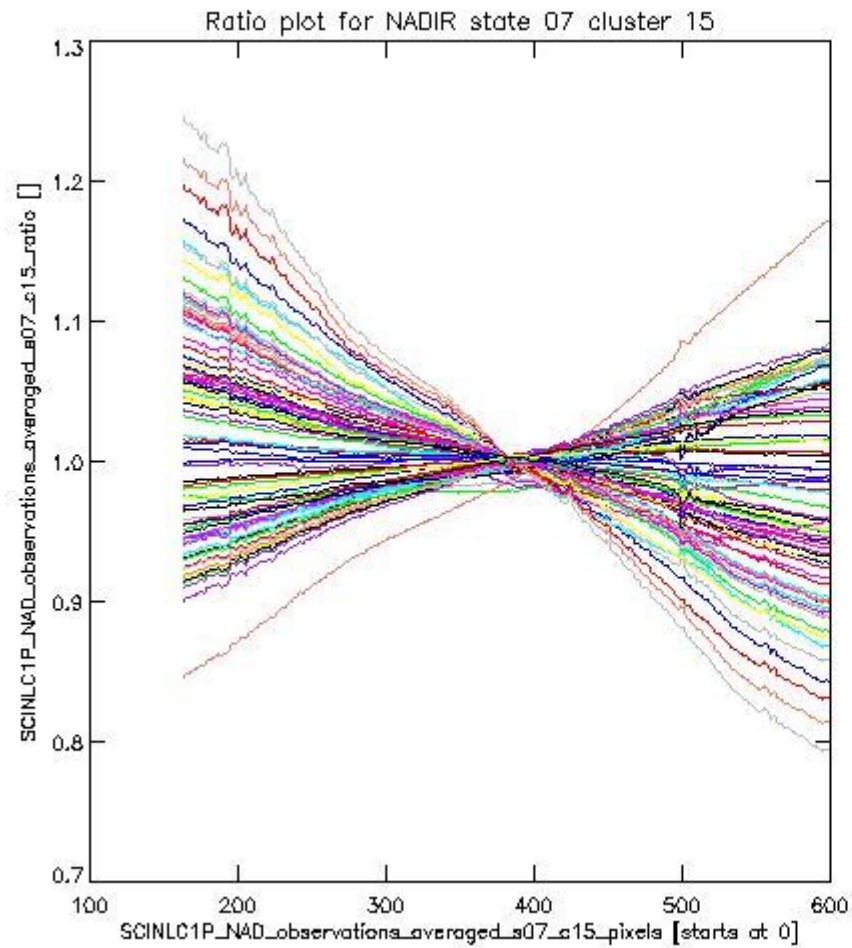
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 01:10:34.135
Start time of last sample	04MAR2011 23:02:09.915
Reference period start time	02FEB2011 04:33:17.302
Reference period stop time	03MAR2011 23:39:34.263
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\_20110304\_4.PNG



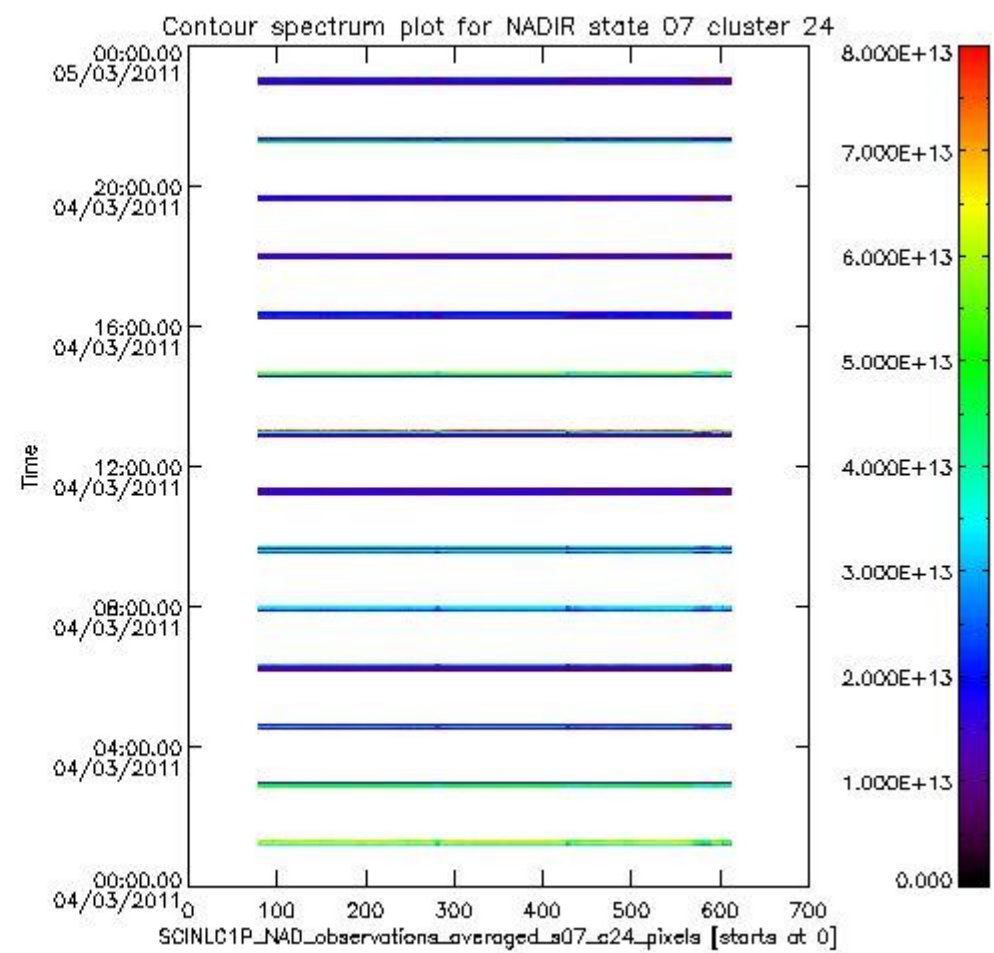
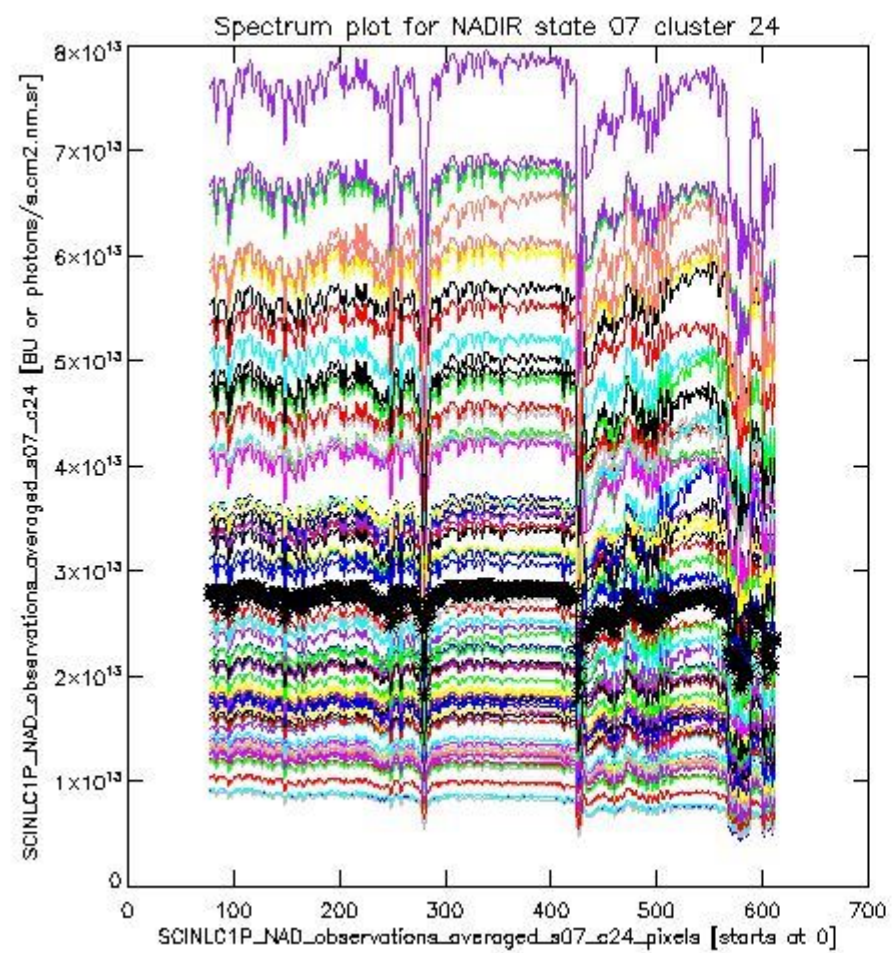


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_5.PNG

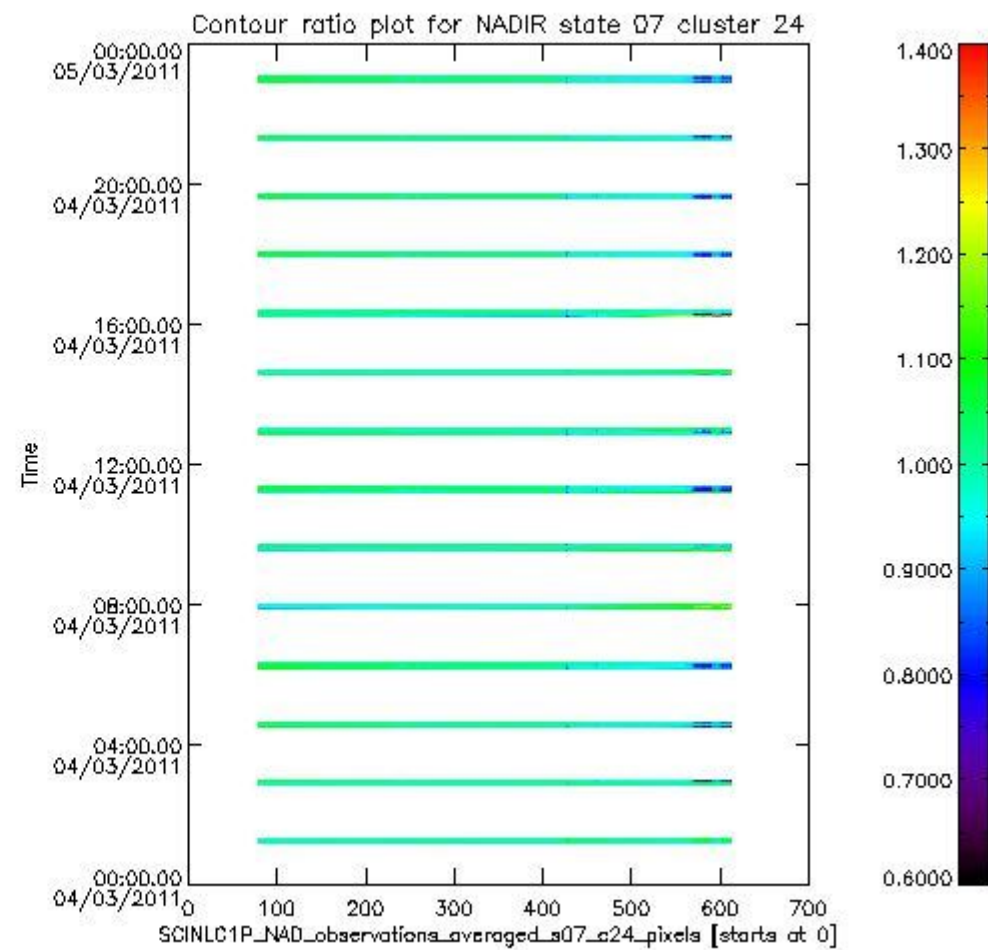
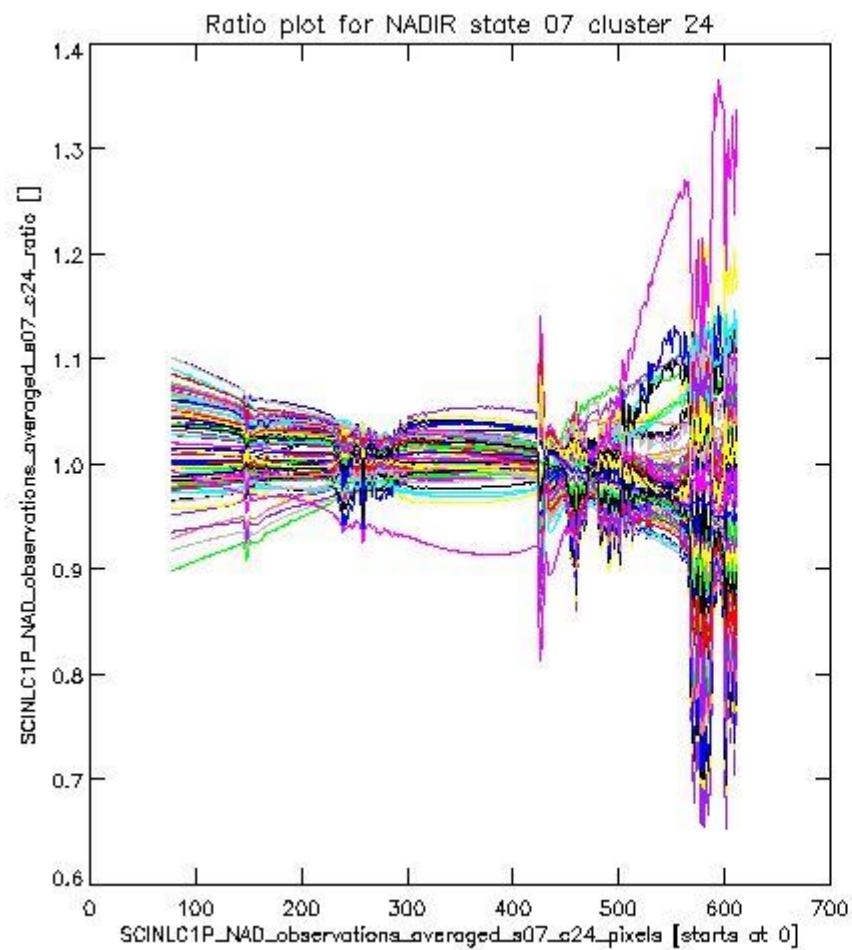
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 01:10:34.135
Start time of last sample	04MAR2011 23:02:09.915
Reference period start time	02FEB2011 04:33:17.302
Reference period stop time	03MAR2011 23:39:34.263
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612





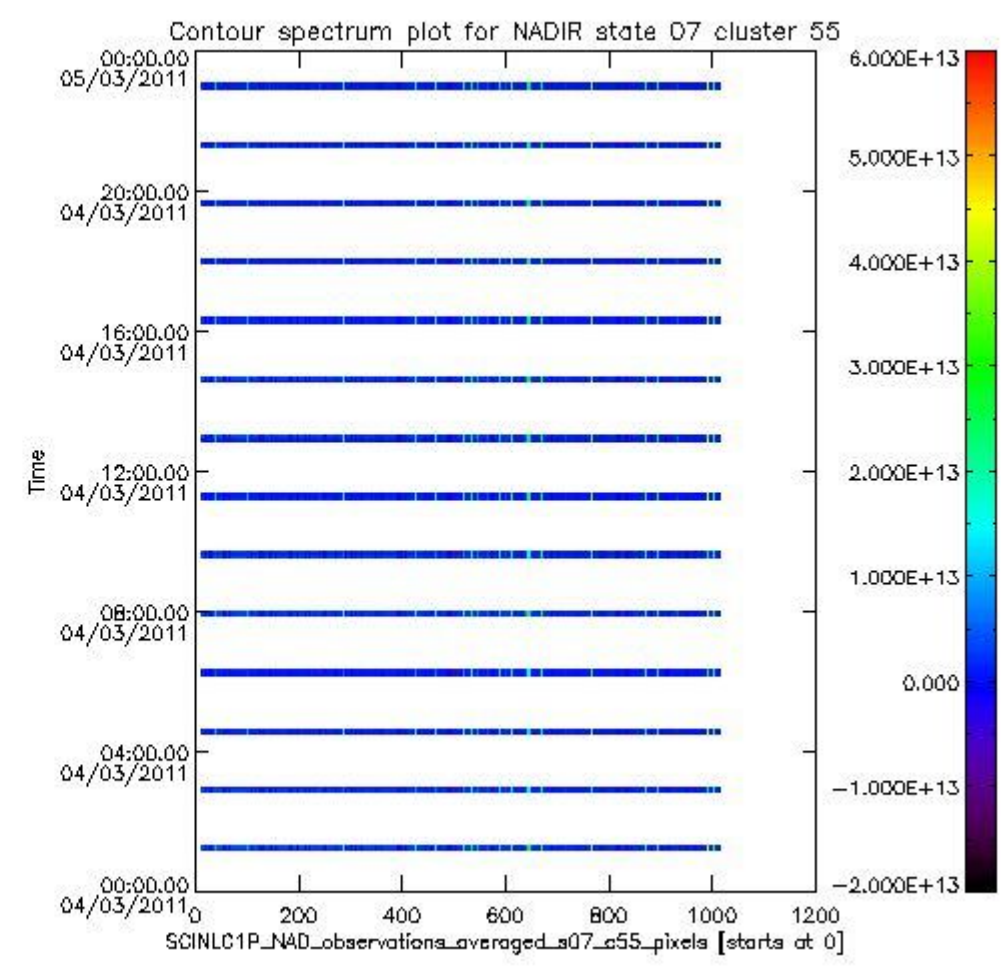
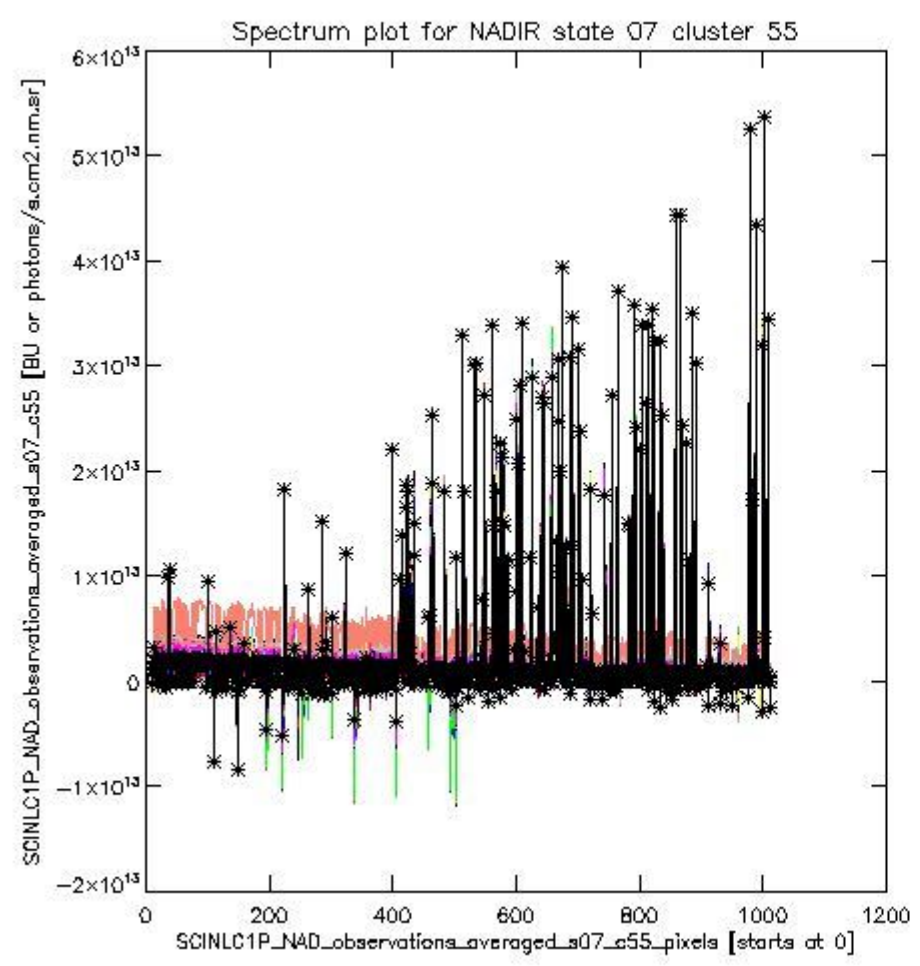
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_6.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_7.PNG

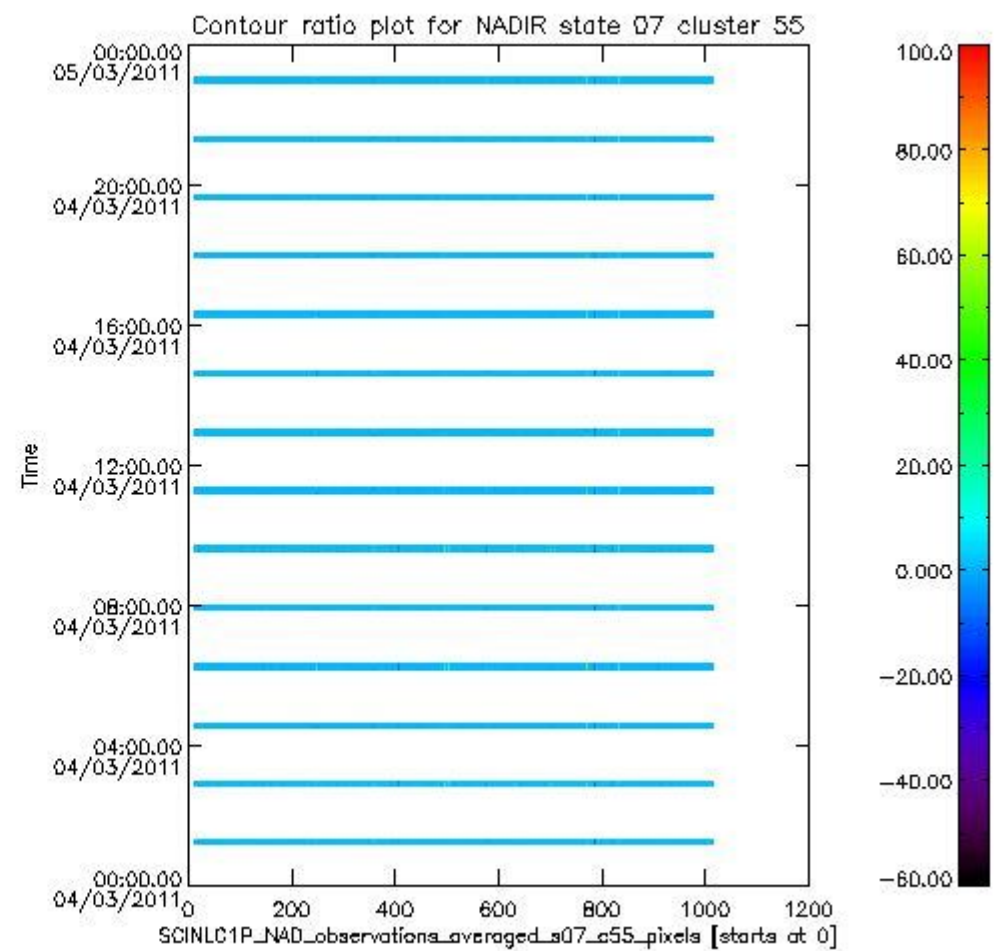
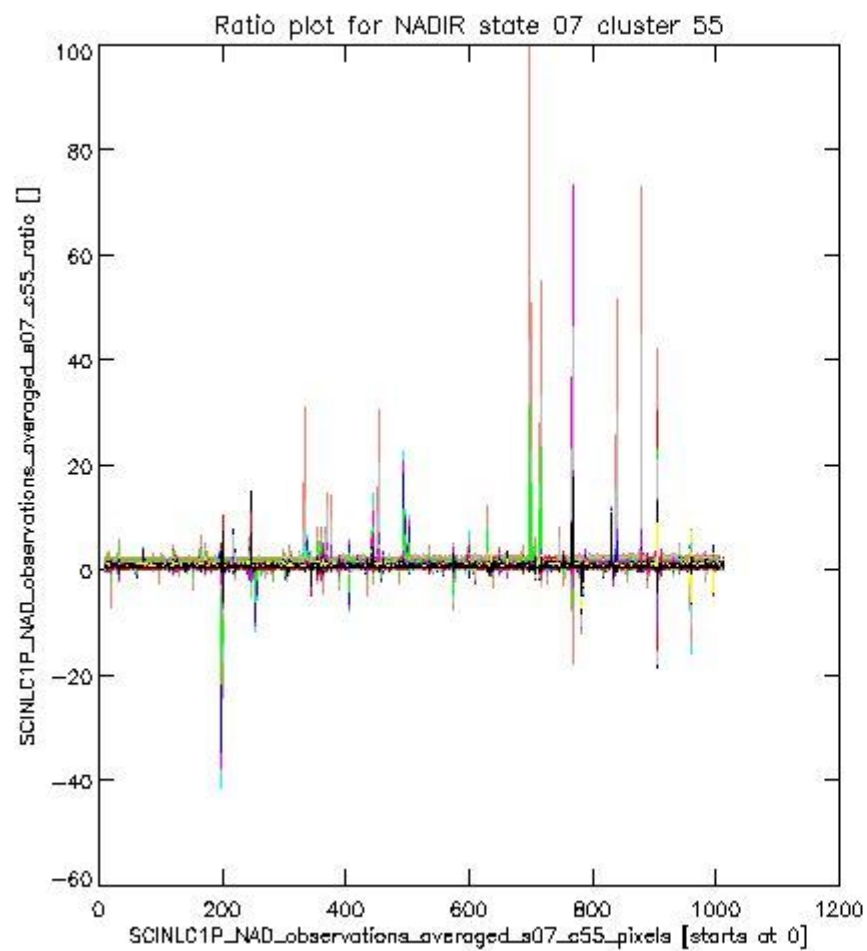
**1.2.5 NADIR state 07 cluster 55** The data for the analysis of NADIR state 07 cluster 55 have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 01:10:34.135
Start time of last sample	04MAR2011 23:02:09.915
Reference period start time	02FEB2011 04:33:17.302
Reference period stop time	03MAR2011 23:39:34.263
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\_20110304\_8.PNG

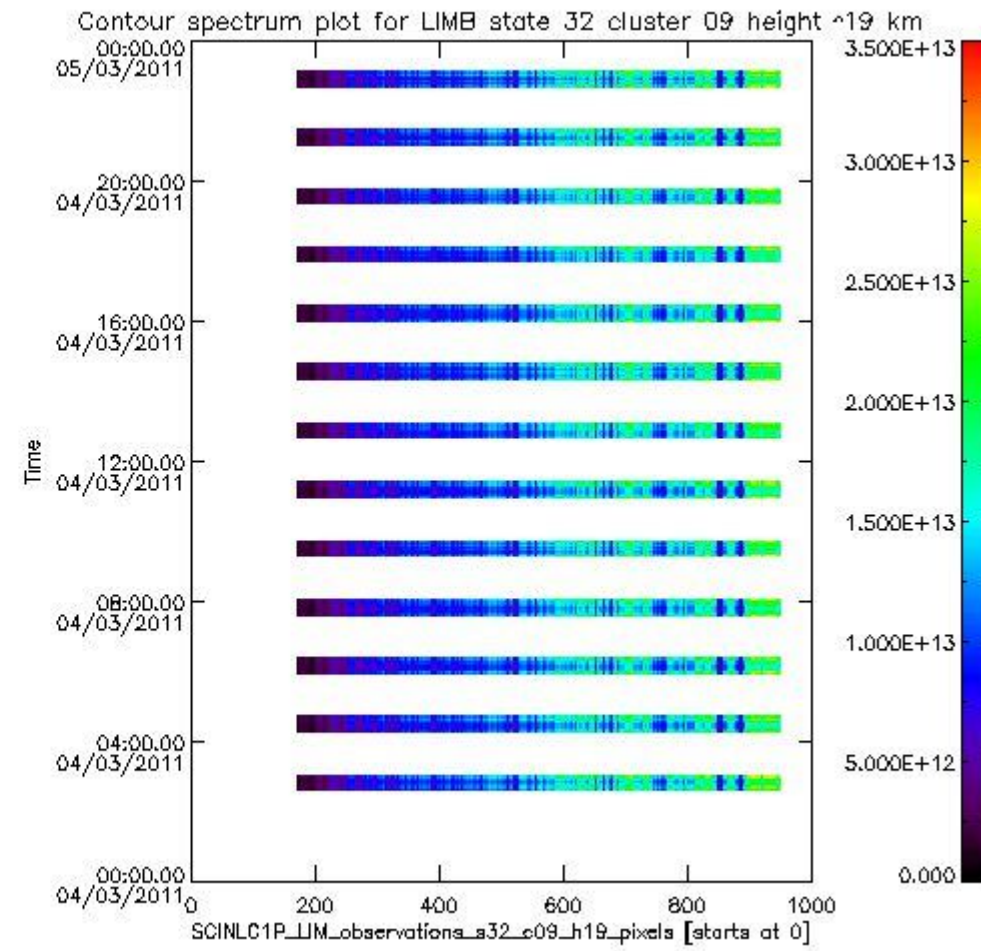
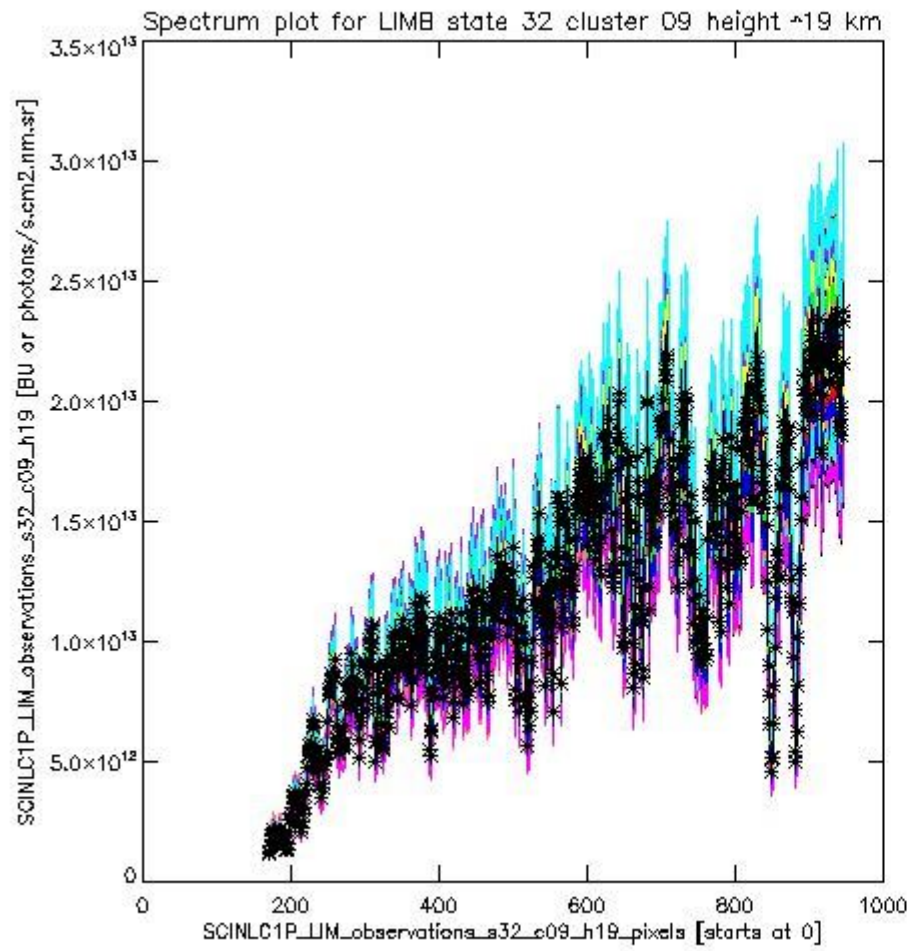




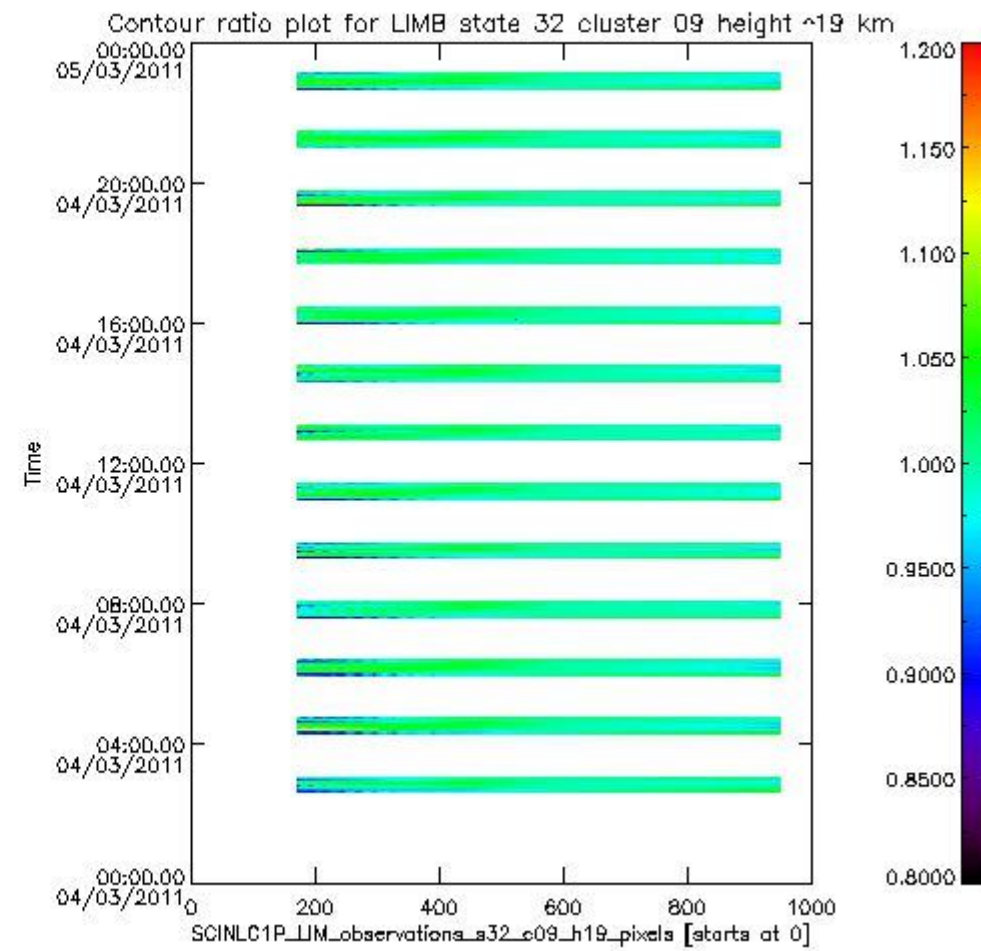
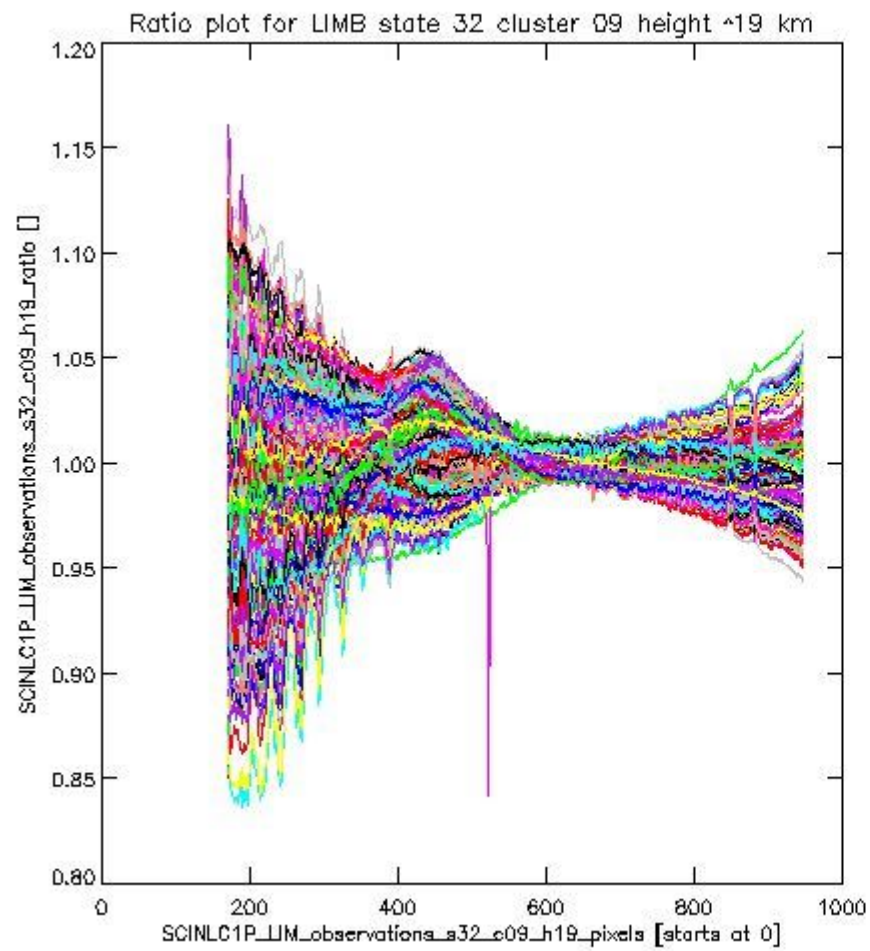
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_9.PNG

**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	04MAR2011 02:36:03.089
Start time of last sample	04MAR2011 23:05:21.216
Reference period start time	02FEB2011 04:18:03.923
Reference period stop time	03MAR2011 00:19:02.393
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\_20110304\_10.PNG

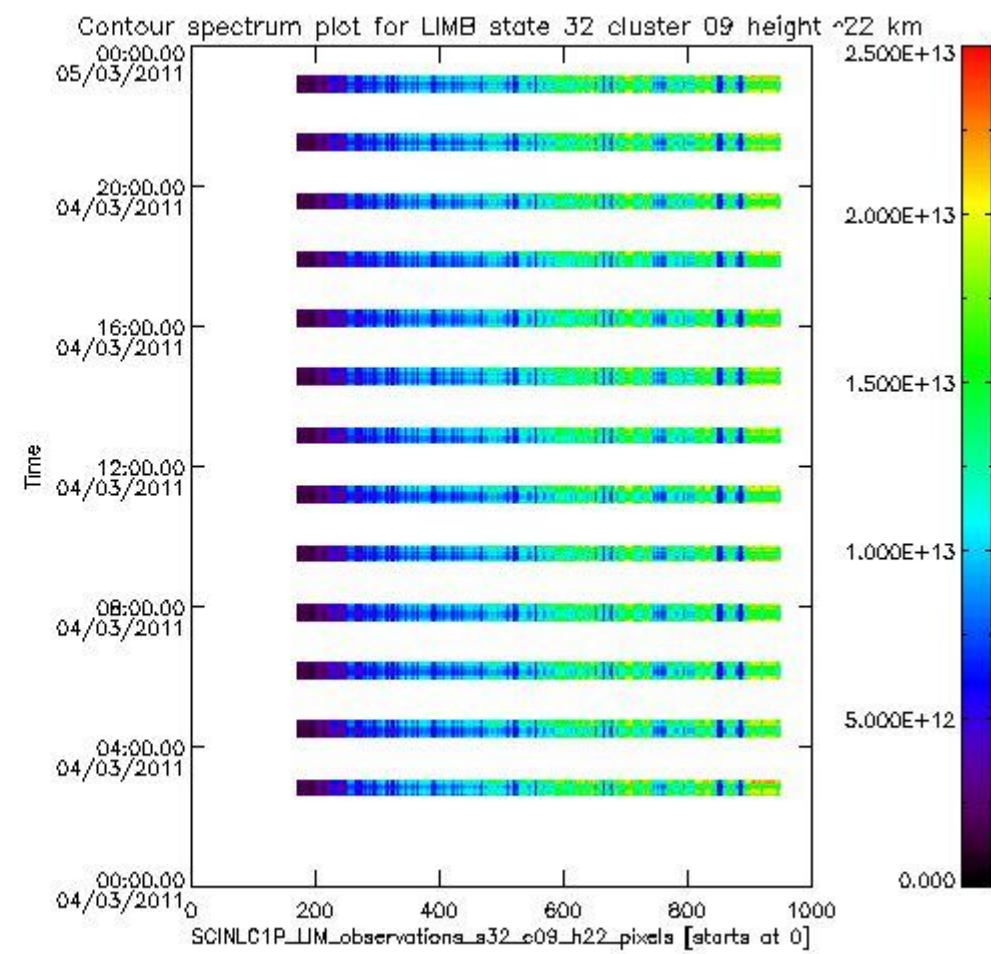
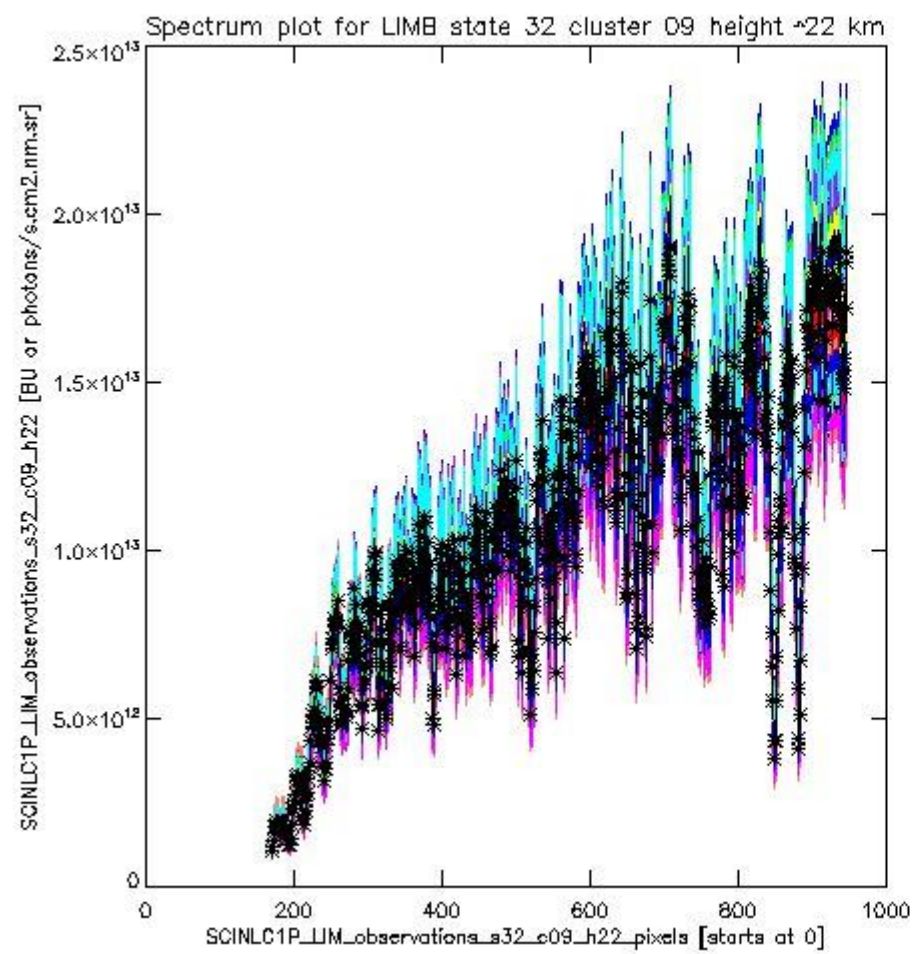


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_11.PNG

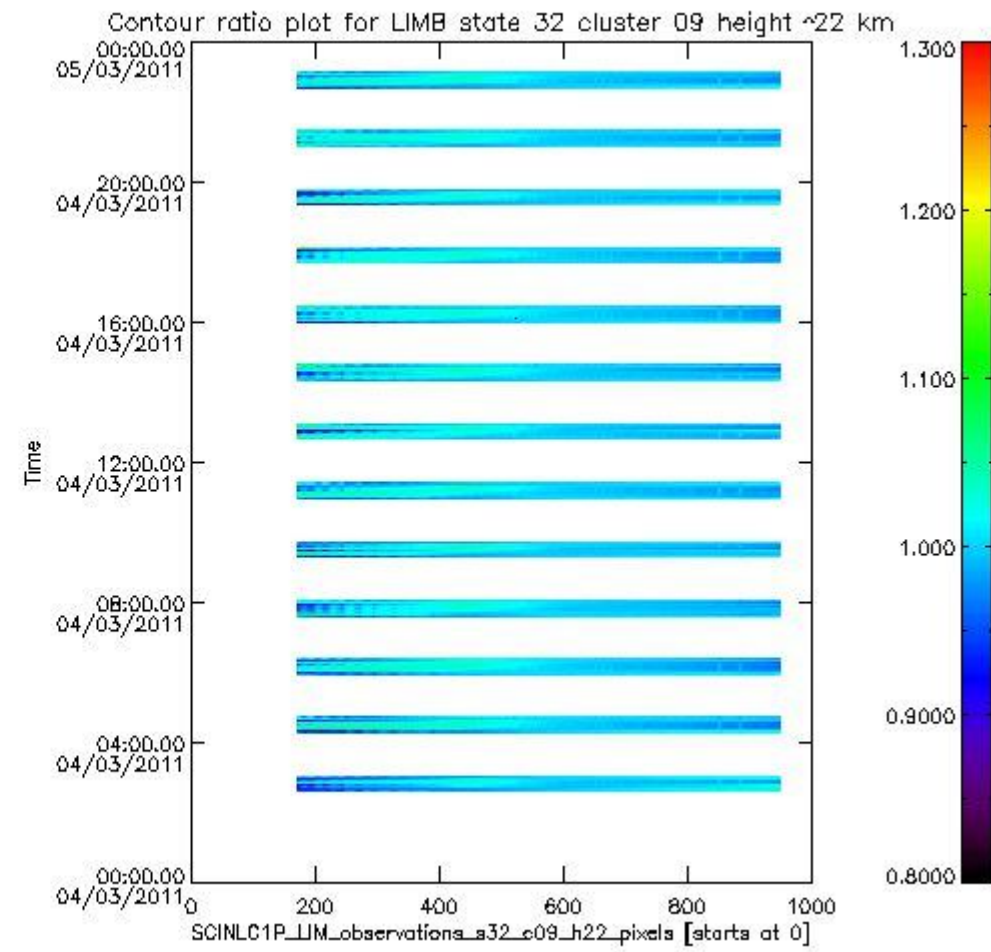
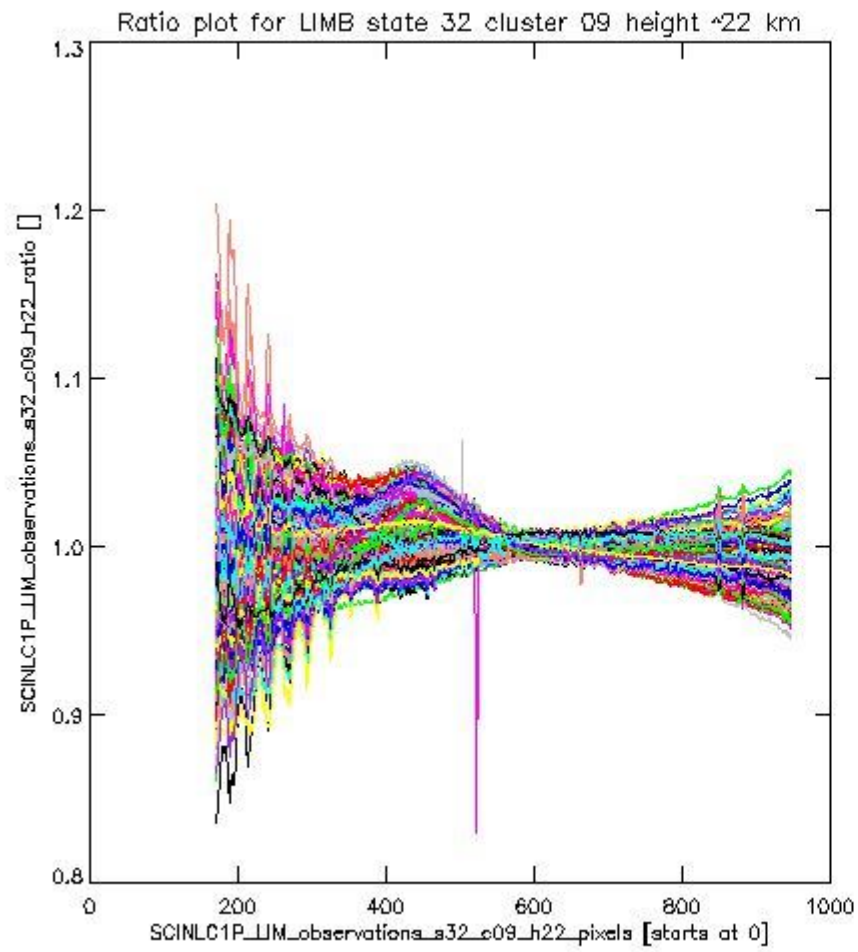
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 02:36:03.089
Start time of last sample	04MAR2011 23:05:21.216
Reference period start time	02FEB2011 04:18:03.923
Reference period stop time	03MAR2011 00:19:02.393
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





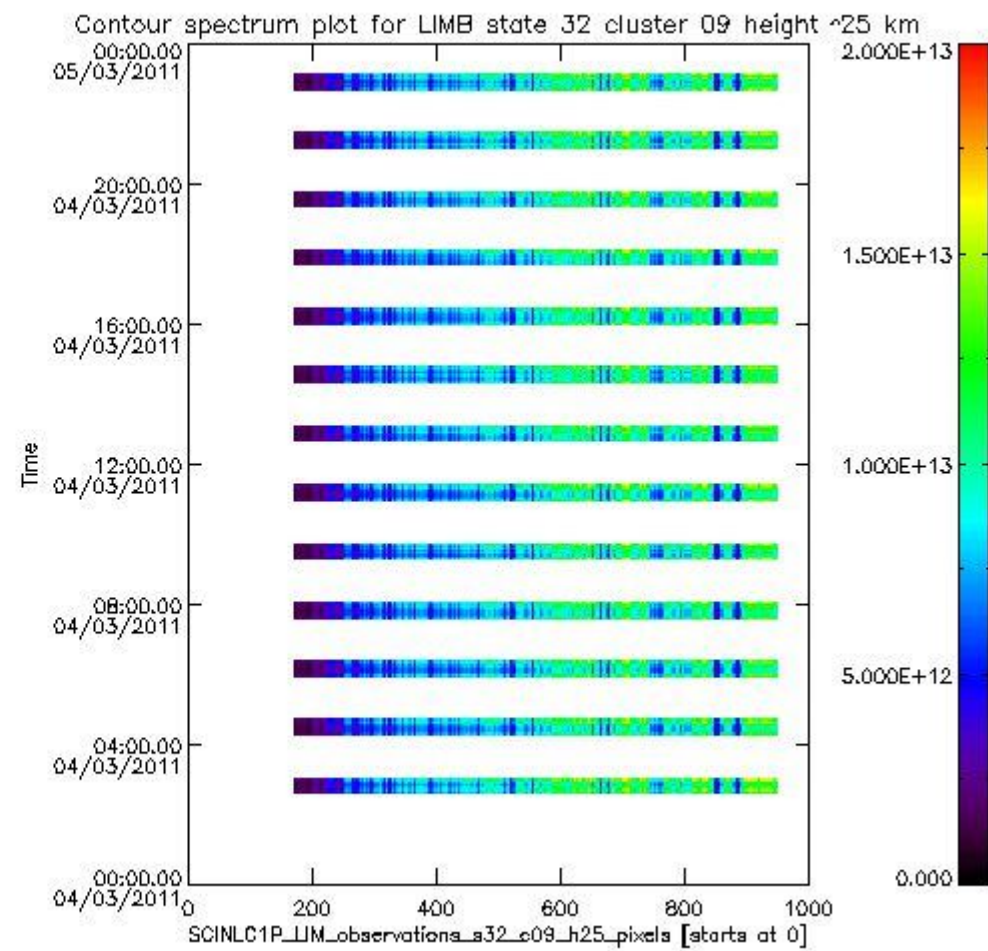
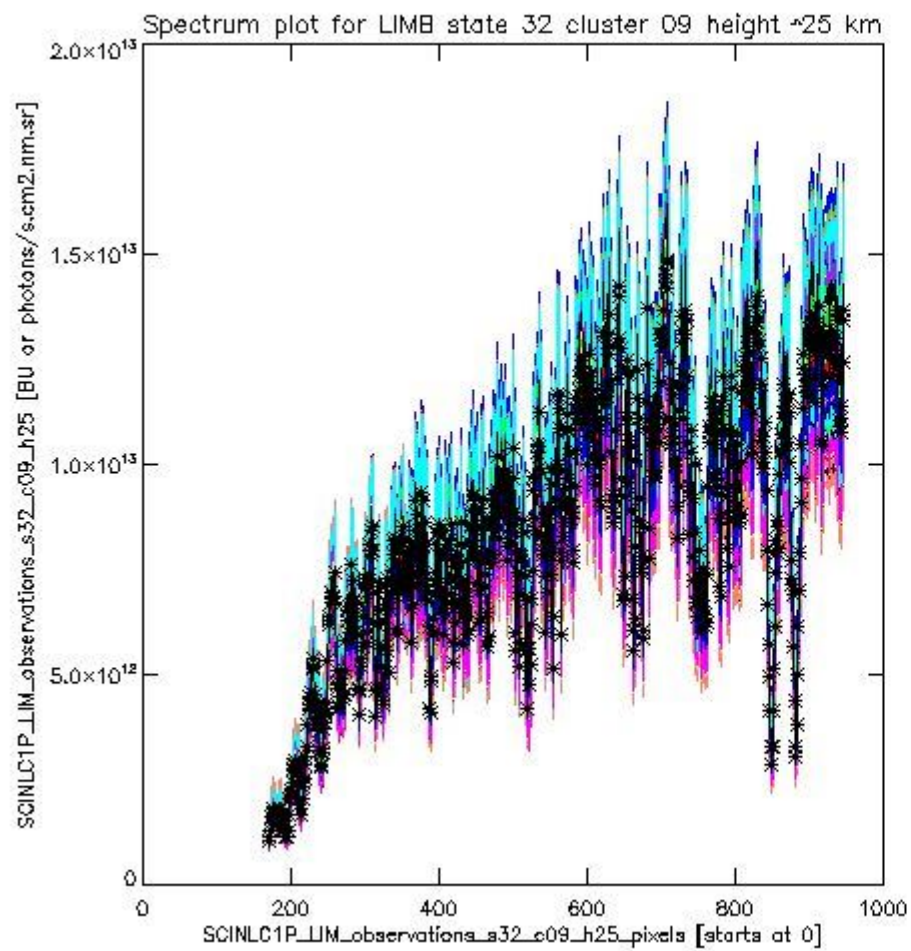
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_13.PNG

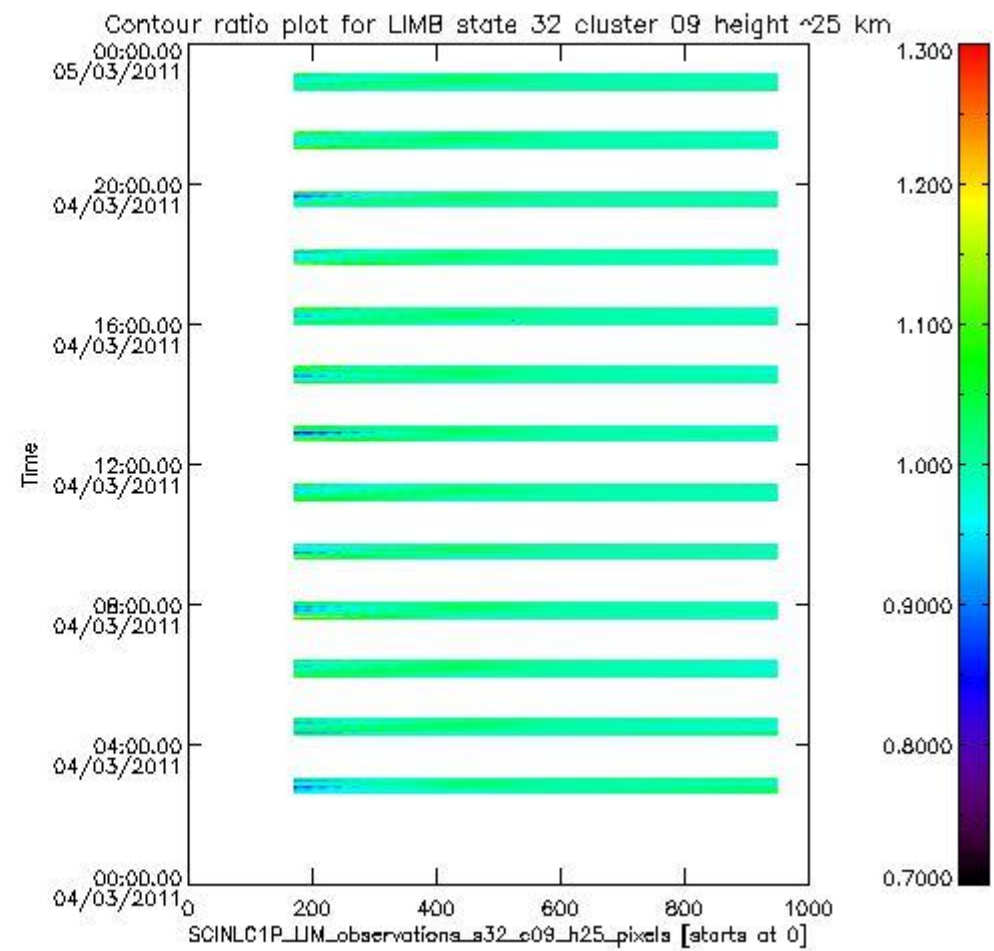
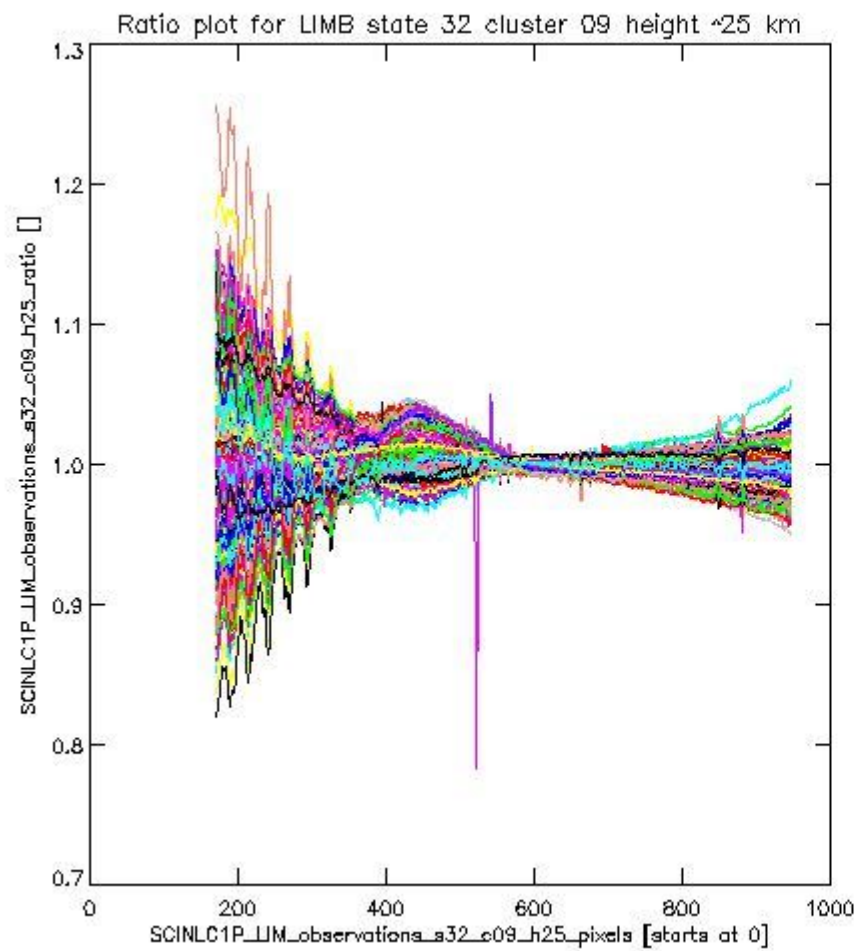
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 02:36:03.089
Start time of last sample	04MAR2011 23:05:21.216
Reference period start time	02FEB2011 04:18:03.923
Reference period stop time	03MAR2011 00:19:02.393
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\_20110304\_14.PNG

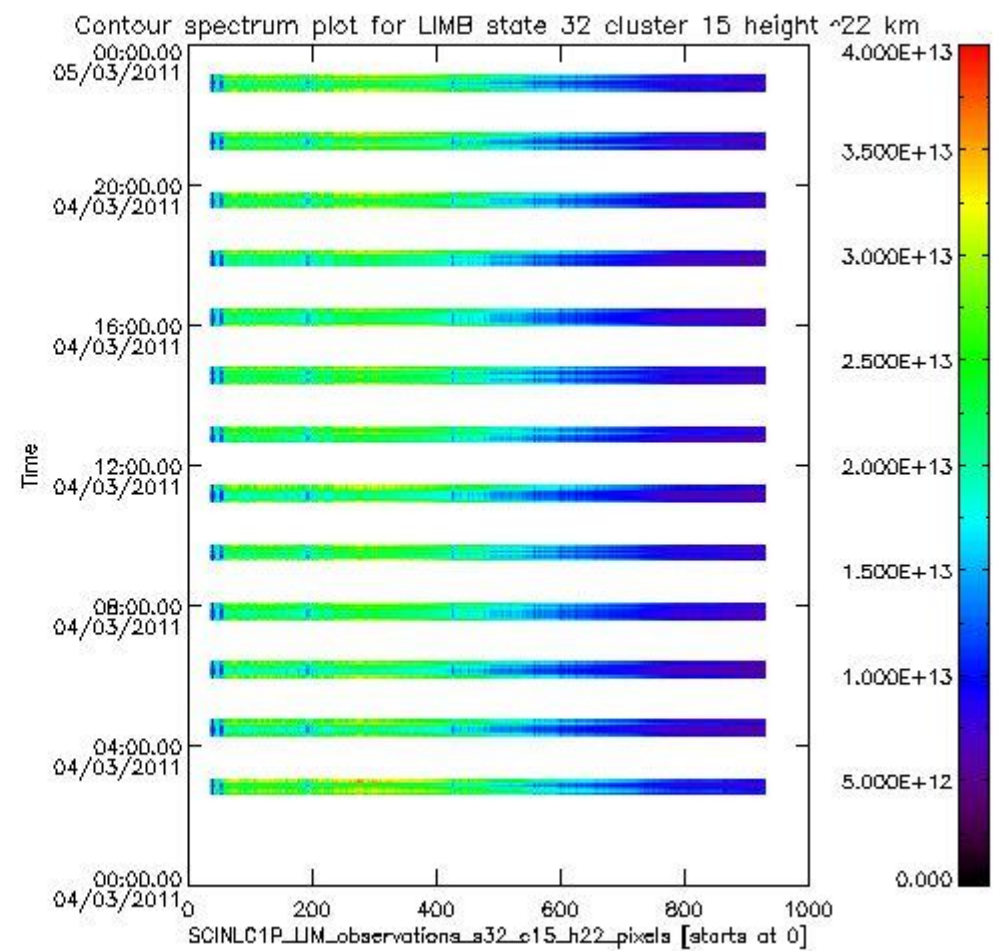
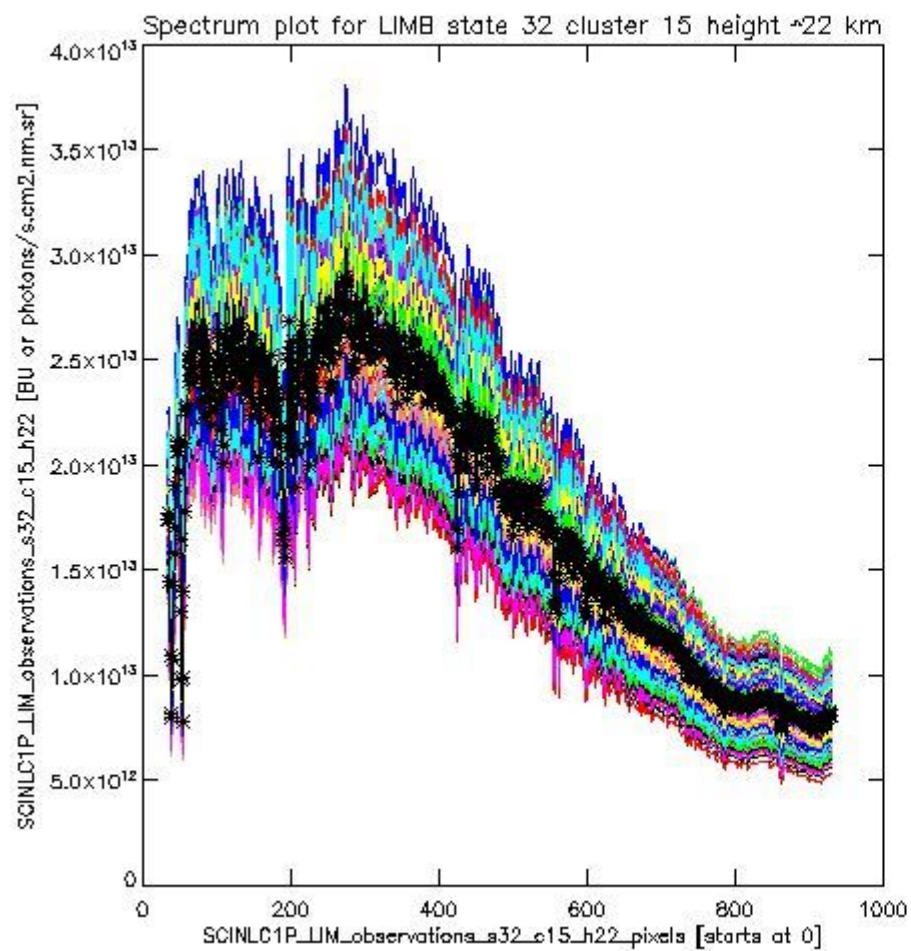




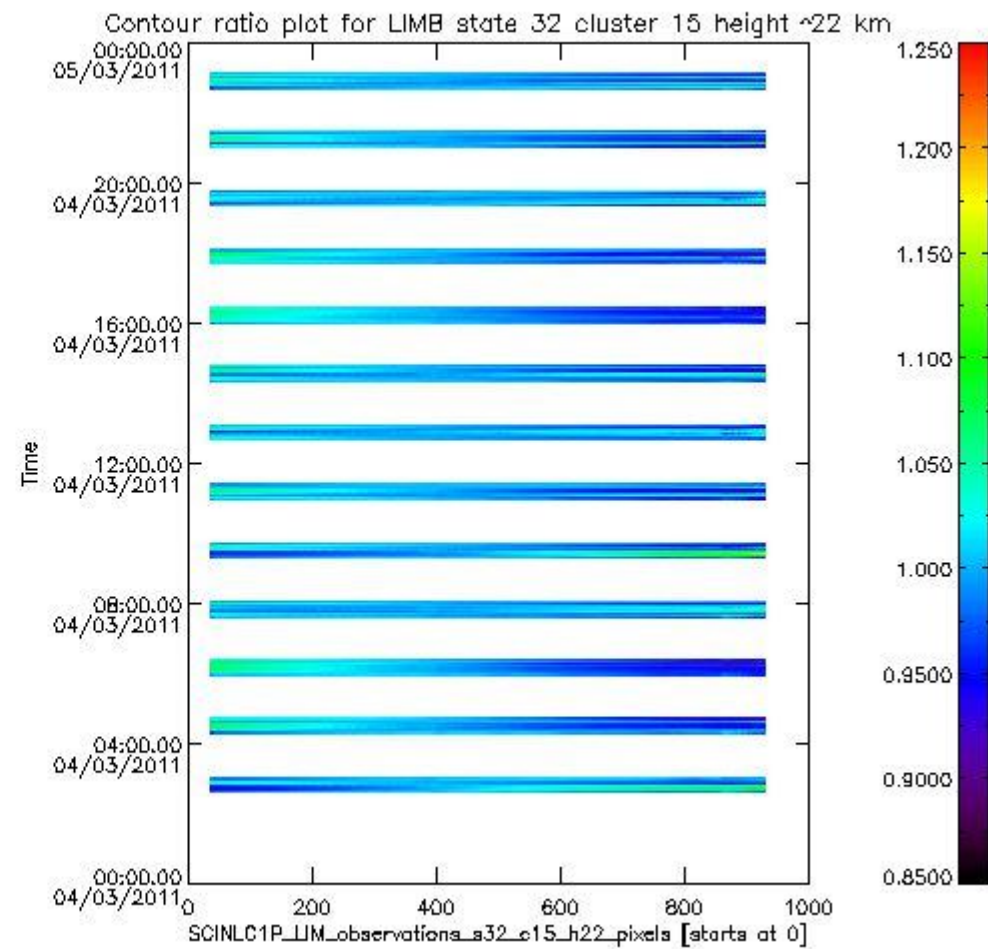
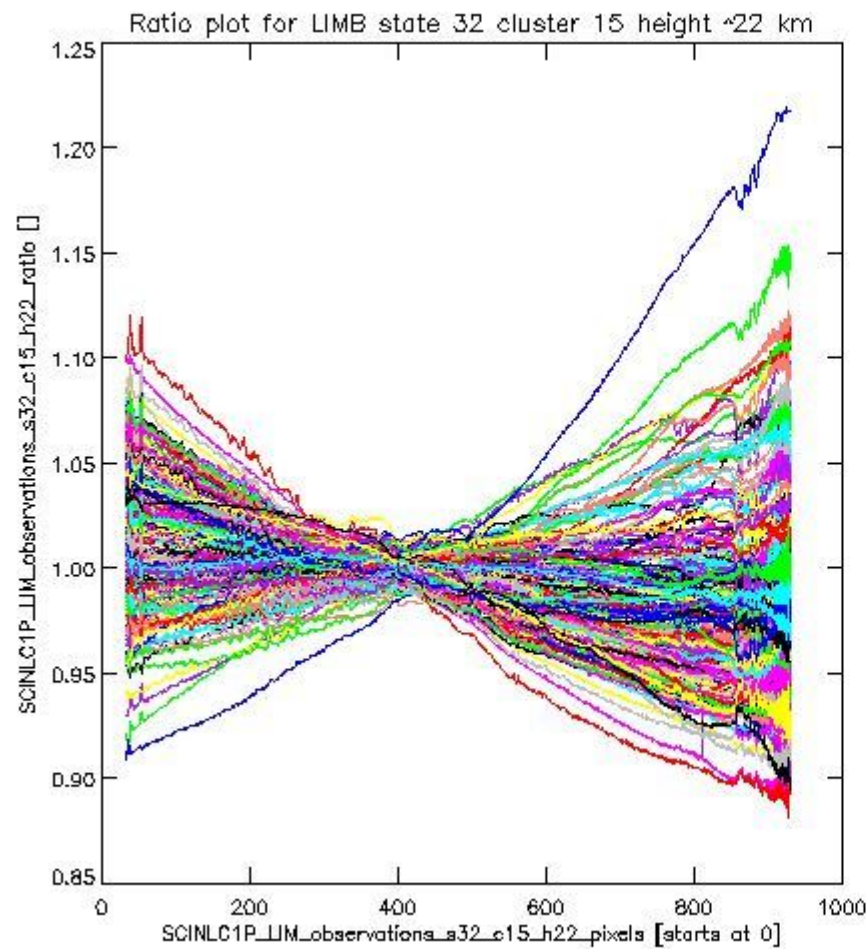
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_15.PNG

**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	04MAR2011 02:36:03.089
Start time of last sample	04MAR2011 23:05:21.216
Reference period start time	02FEB2011 04:18:03.923
Reference period stop time	03MAR2011 00:19:02.393
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\_20110304\_16.PNG

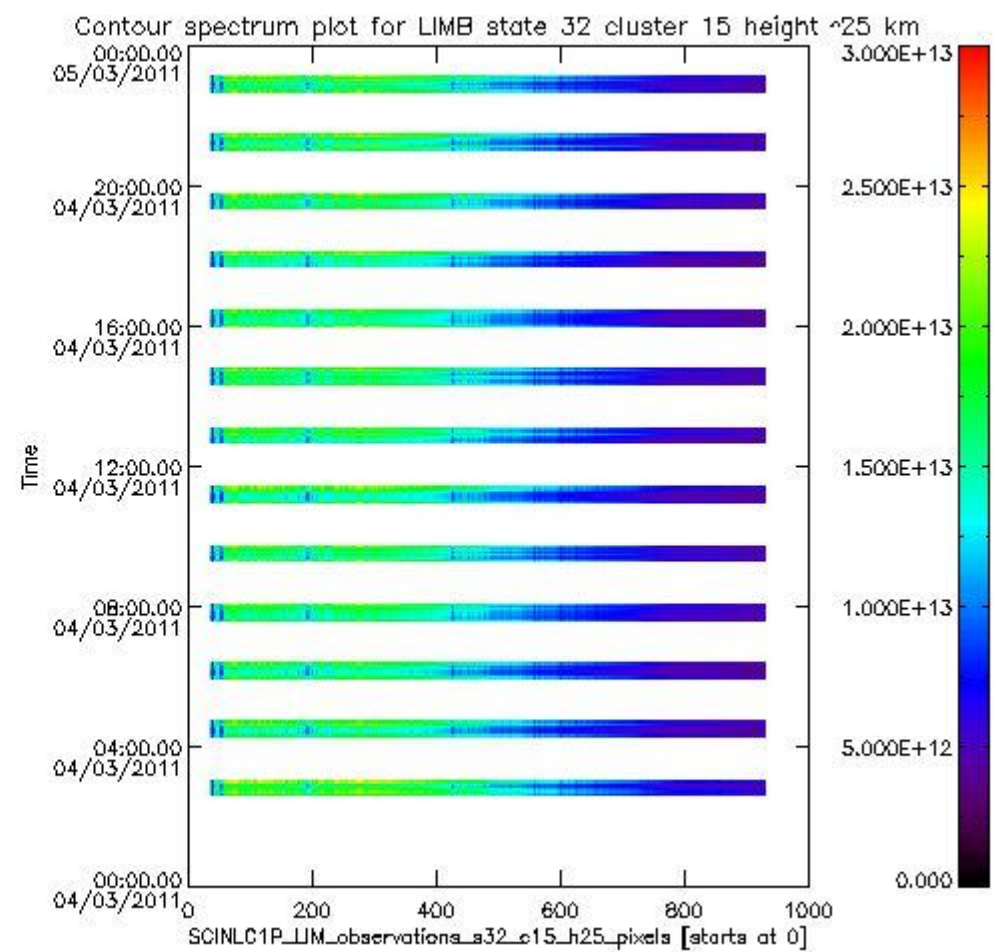
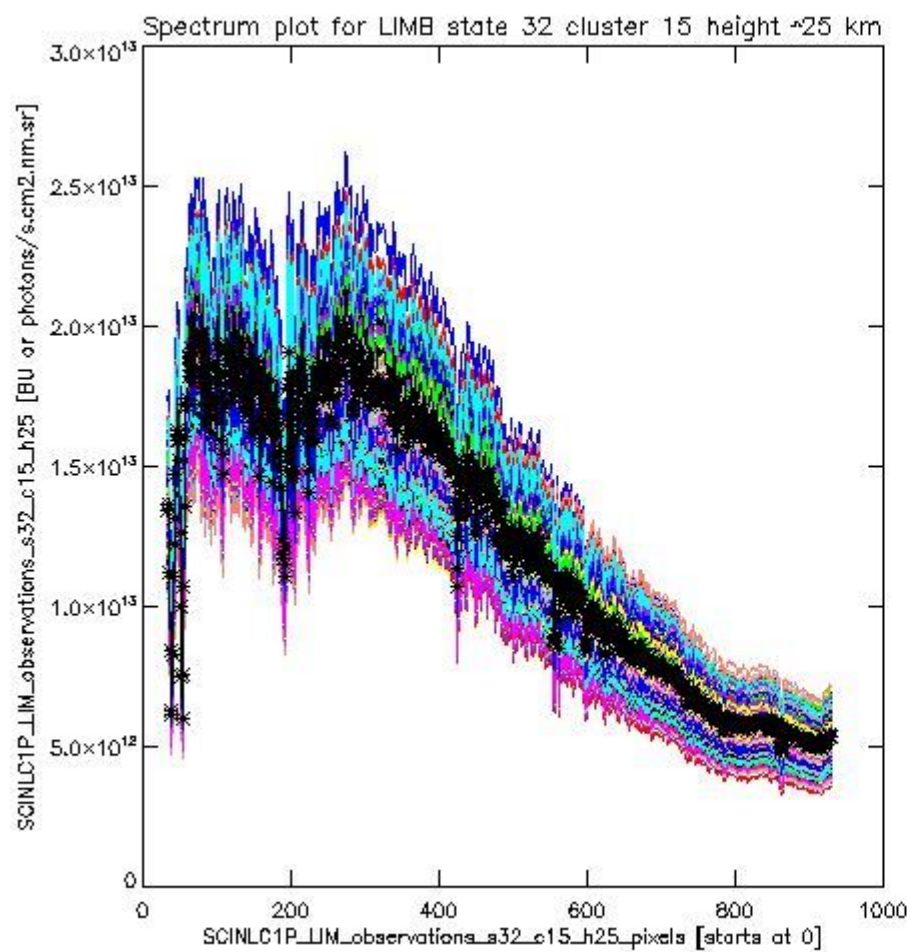


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_17.PNG

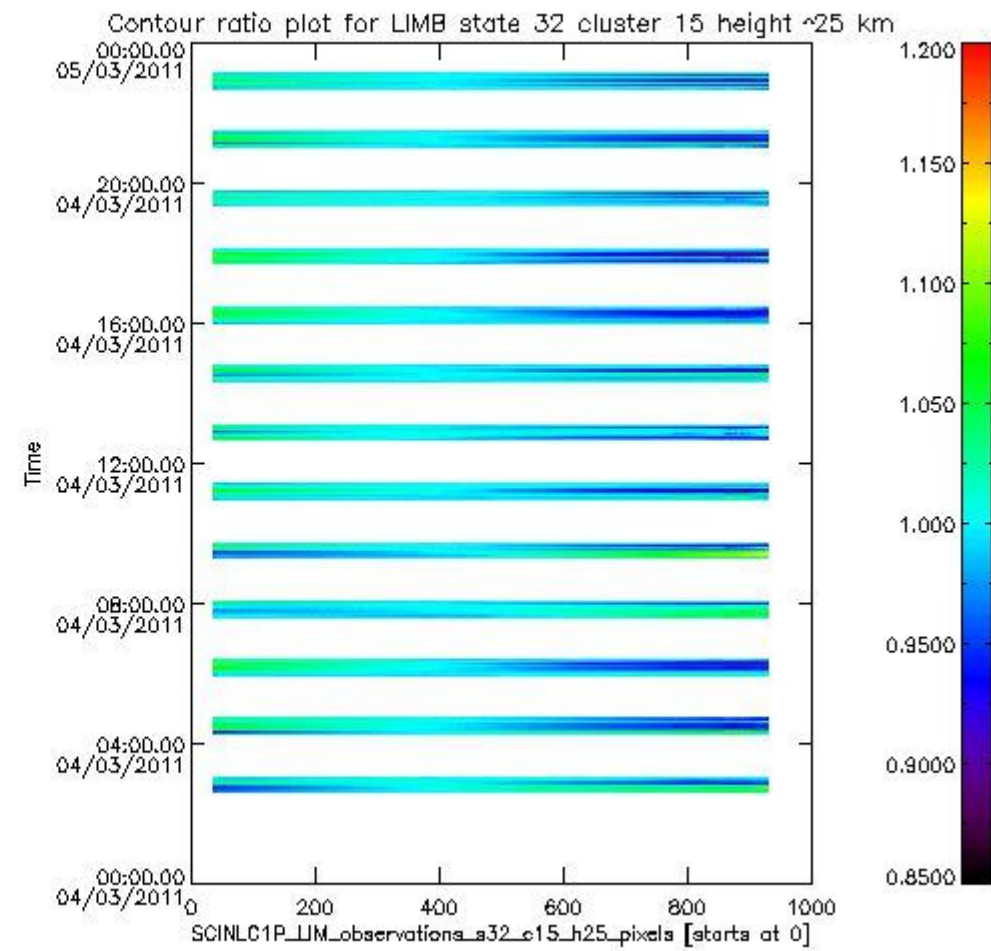
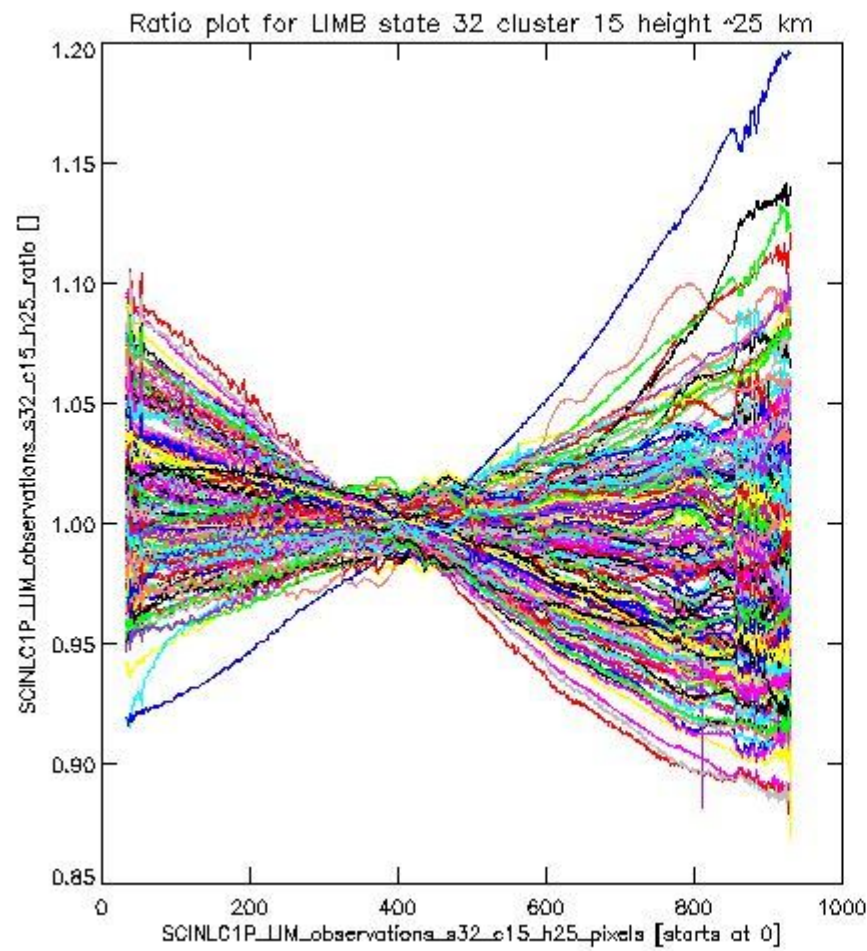
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 02:36:03.089
Start time of last sample	04MAR2011 23:05:21.216
Reference period start time	02FEB2011 04:18:03.923
Reference period stop time	03MAR2011 00:19:02.393
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





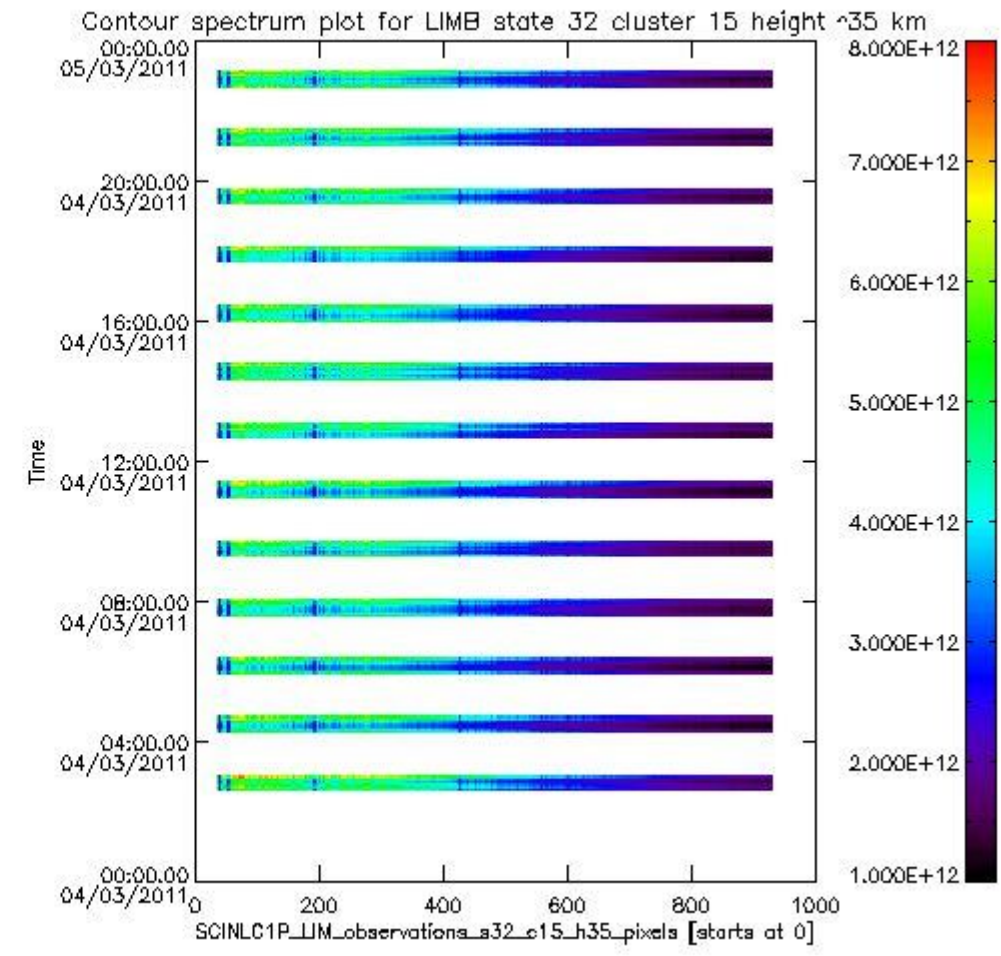
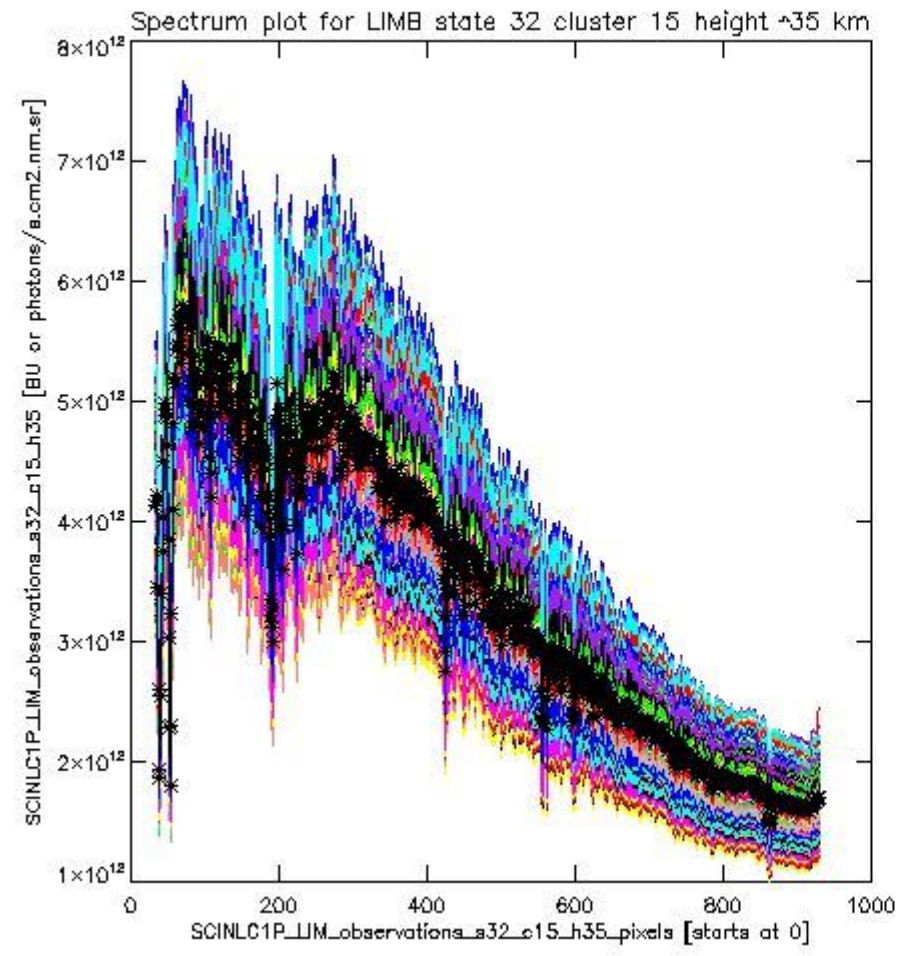
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_18.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_19.PNG

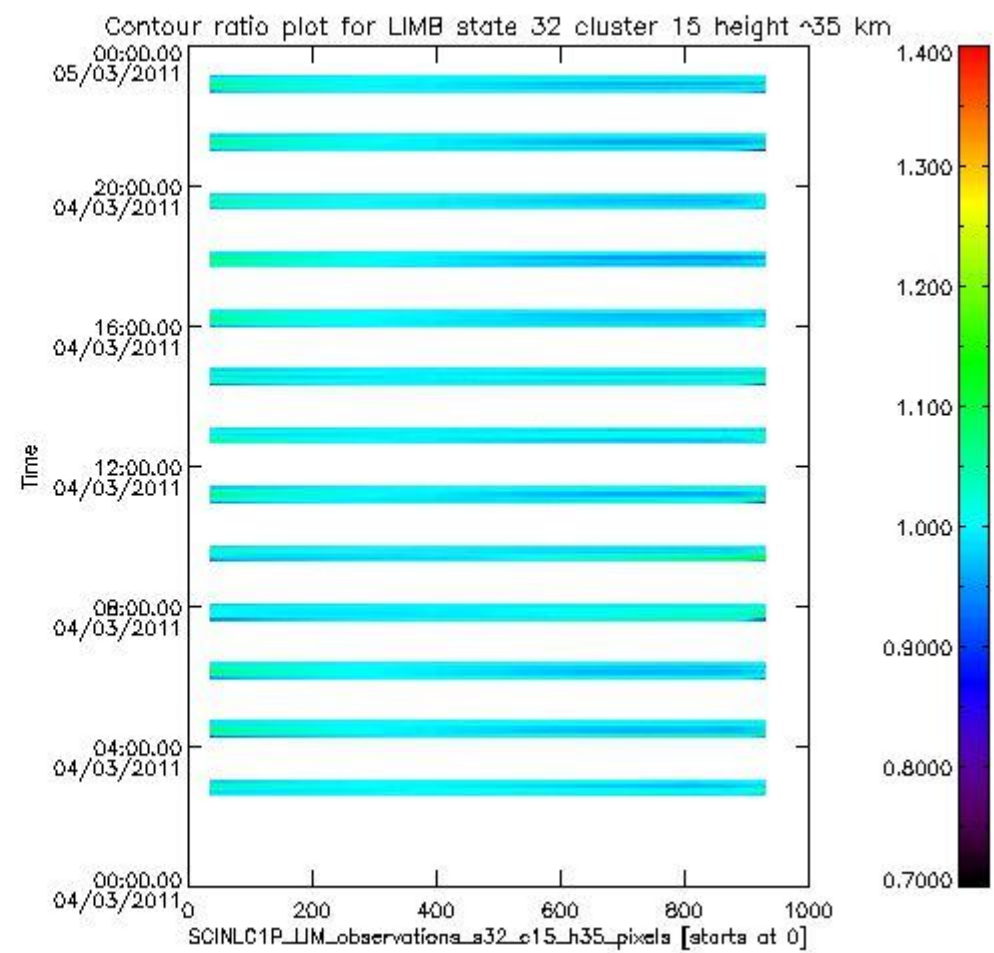
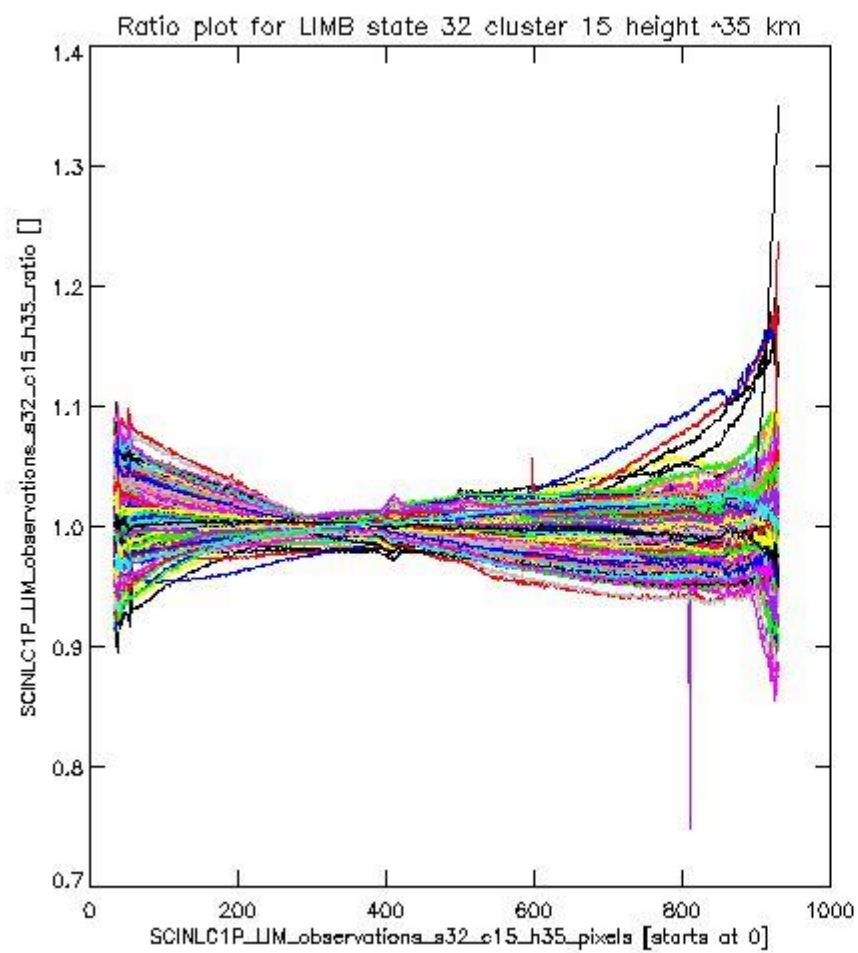
**1.2.11 LIMB state 32 cluster 15 height ~35 km** The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

Item	Value
Start time of first sample	04MAR2011 02:36:03.089
Start time of last sample	04MAR2011 23:05:21.216
Reference period start time	02FEB2011 04:18:03.923
Reference period stop time	03MAR2011 00:19:02.393
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\_20110304\_20.PNG





sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110304\_21.PNG

