

# 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	21APR2011 06:55:32
Data source version	SCIA/7.04-U
Processing scope for products	10APR2011 00:00:00 to 11APR2011 00:00:00
Start time of first product within scope	09APR2011 23:36:55
Stop time of last product within scope	11APR2011 00:10:20
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	10APR2011 00:08:58.367	10APR2011 23:42:22.640
1	NADIR	07	09	N/A	10APR2011 00:08:58.367	10APR2011 23:42:22.640
2	NADIR	07	15	N/A	10APR2011 00:08:58.367	10APR2011 23:42:22.640
3	NADIR	07	24	N/A	10APR2011 00:08:58.367	10APR2011 23:42:22.640
4	NADIR	07	55	N/A	10APR2011 00:08:58.367	10APR2011 23:42:22.640
5	LIMB	32	09	~19 km	10APR2011 01:35:07.075	10APR2011 23:45:33.941
6	LIMB	32	09	~22 km	10APR2011 01:35:07.075	10APR2011 23:45:33.941
7	LIMB	32	09	~25 km	10APR2011 01:35:07.075	10APR2011 23:45:33.941
8	LIMB	32	15	~22 km	10APR2011 01:35:07.075	10APR2011 23:45:33.941
9	LIMB	32	15	~25 km	10APR2011 01:35:07.075	10APR2011 23:45:33.941
10	LIMB	32	15	~35 km	10APR2011 01:35:07.075	10APR2011 23:45:33.941

#### 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	#noproc	#cmlpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110409_232937_000059343101_00203_47631_0041.N1</a>	09APR2011 23:36:55	10APR2011 00:47:10	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110410_010835_000060853101_00204_47632_0044.N1</a>	10APR2011 01:17:09	10APR2011 02:27:38	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110410_025004_000059343101_00205_47633_0047.N1</a>	10APR2011 02:57:22	10APR2011 04:07:37	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110410_042902_000060853101_00206_47634_0048.N1</a>	10APR2011 04:37:36	10APR2011 05:48:05	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110410_061031_000059343101_00207_47635_0050.N1</a>	10APR2011 06:17:50	10APR2011 07:28:04	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110410_074929_000060853101_00208_47636_0052.N1</a>	10APR2011 07:58:03	10APR2011 09:08:32	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110410_093058_000059343101_00209_47637_0054.N1	10APR2011 09:38:17	10APR2011 10:48:32	0	34	31	0	0	2	0	0	
7	SCI_NLC_1CUDPA20110410_110956_000060853101_00210_47638_0087.N1	10APR2011 11:18:31	10APR2011 12:29:00	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110410_125125_000059343101_00211_47639_0088.N1	10APR2011 12:58:44	10APR2011 14:08:59	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110410_143023_000060853101_00212_47640_0089.N1	10APR2011 14:38:58	10APR2011 15:49:27	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110410_161152_000059343101_00213_47641_0090.N1	10APR2011 16:19:11	10APR2011 17:29:26	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110410_175050_000060853101_00214_47642_0091.N1	10APR2011 17:59:25	10APR2011 19:10:07	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110410_193219_000059343101_00215_47643_0092.N1	10APR2011 19:39:39	10APR2011 20:50:07	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110410_211117_000060853101_00216_47644_0093.N1	10APR2011 21:19:52	10APR2011 22:30:21	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110410_225246_000059343101_00217_47645_0094.N1	10APR2011 23:00:06	11APR2011 00:10:20	0	35	31	0	0	1	0	0	

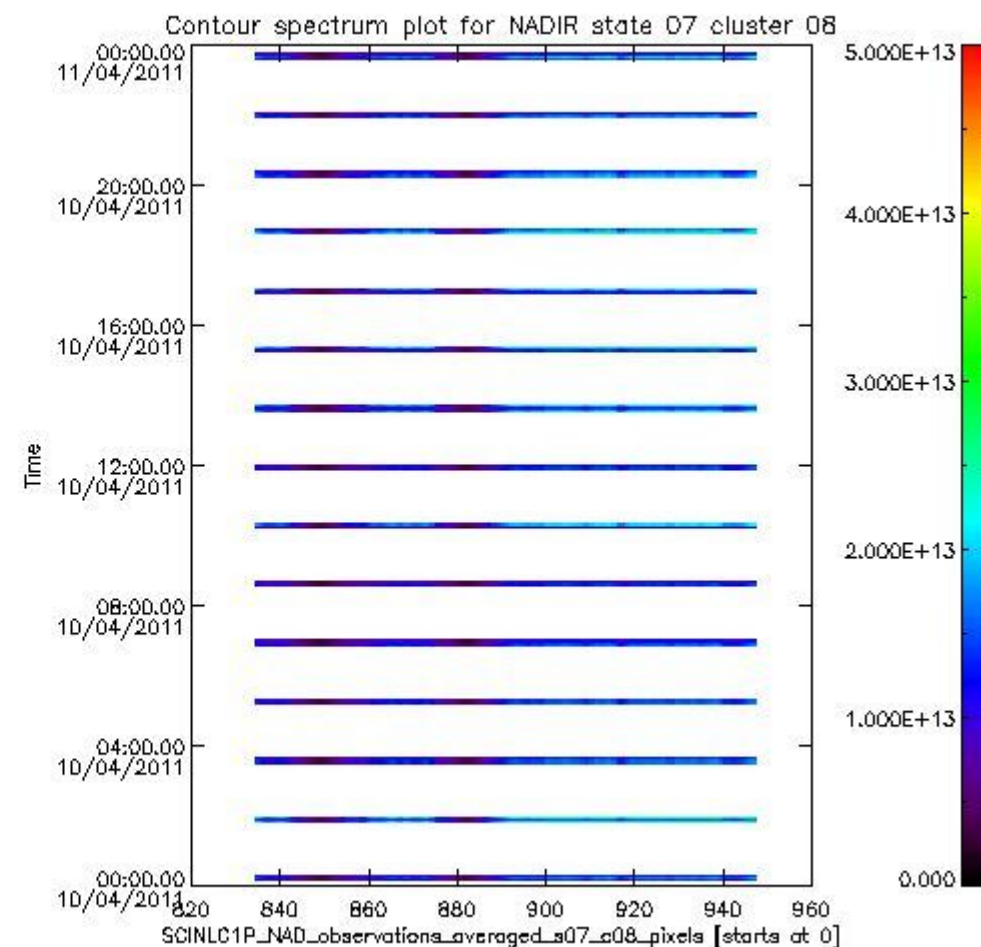
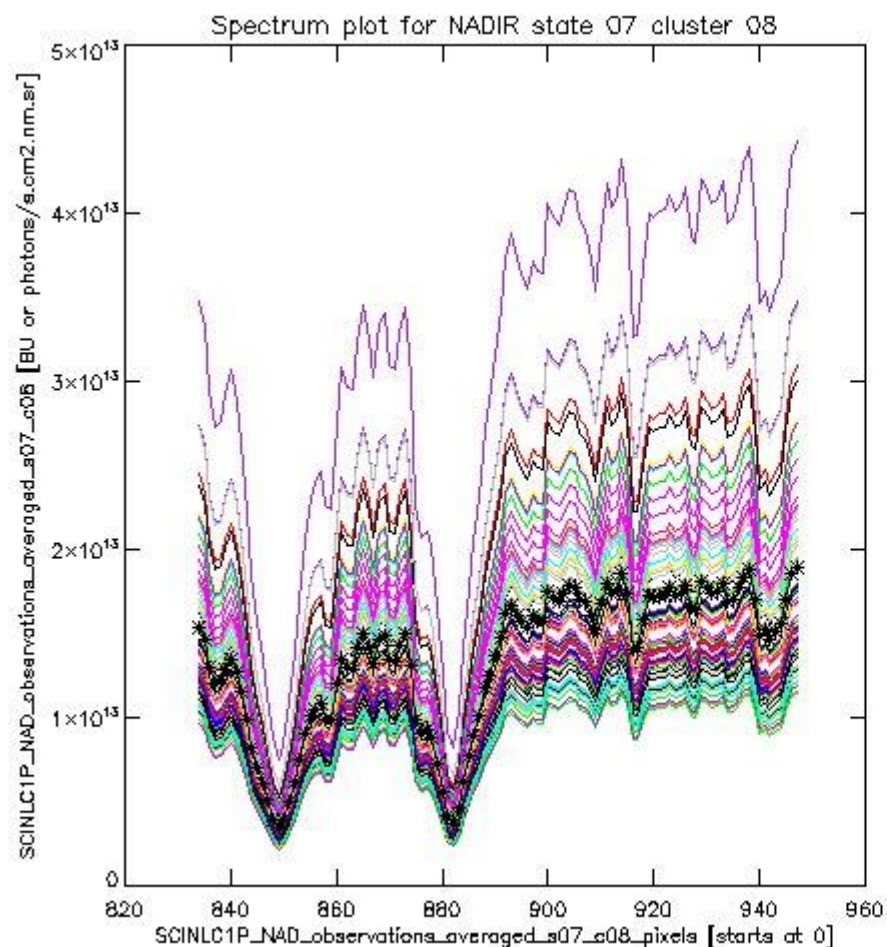
## 1.2 Source packet monitoring

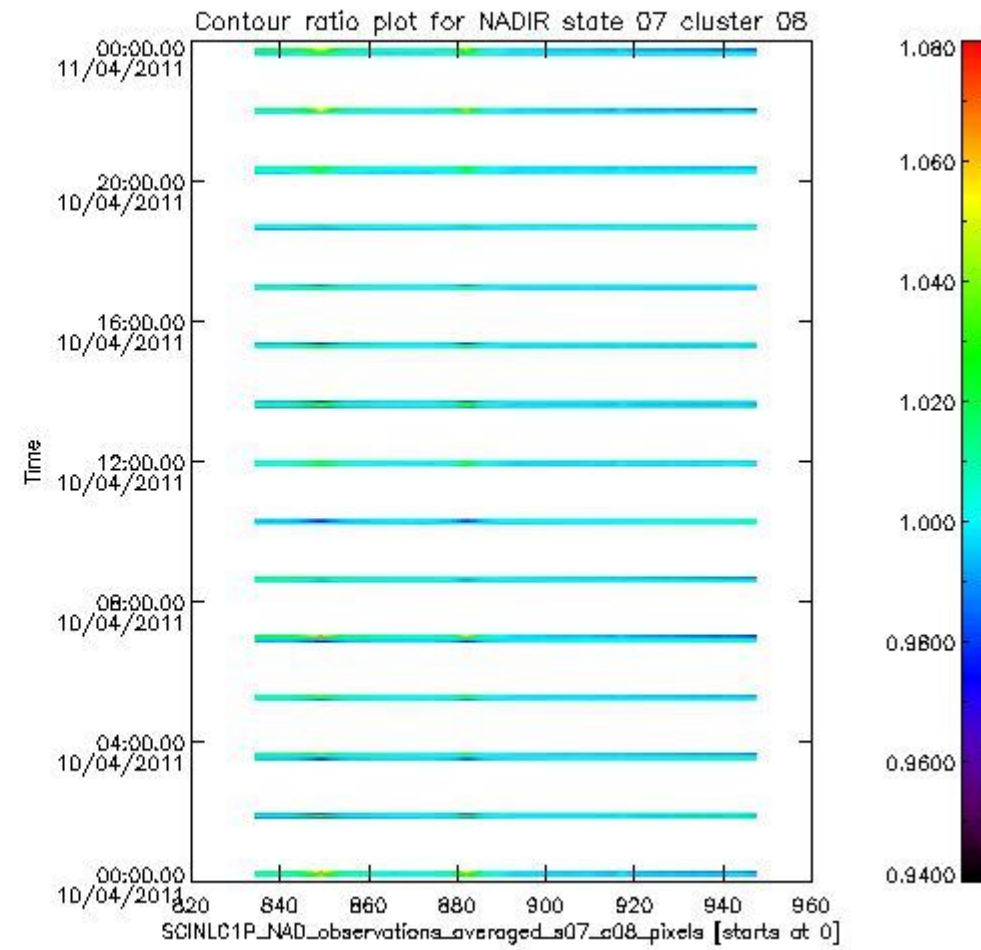
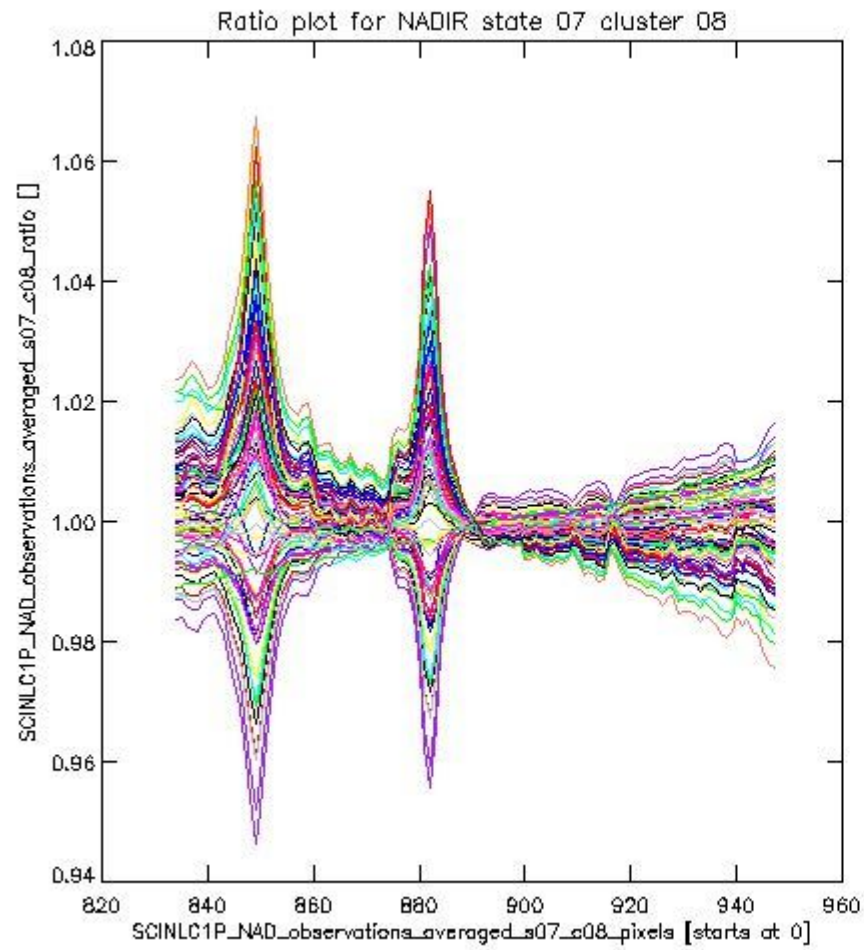
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	10APR2011 00:08:58.367
Start time of last sample	10APR2011 23:42:22.640
Reference period start time	11MAR2011 01:51:46.592
Reference period stop time	09APR2011 22:38:04.343
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

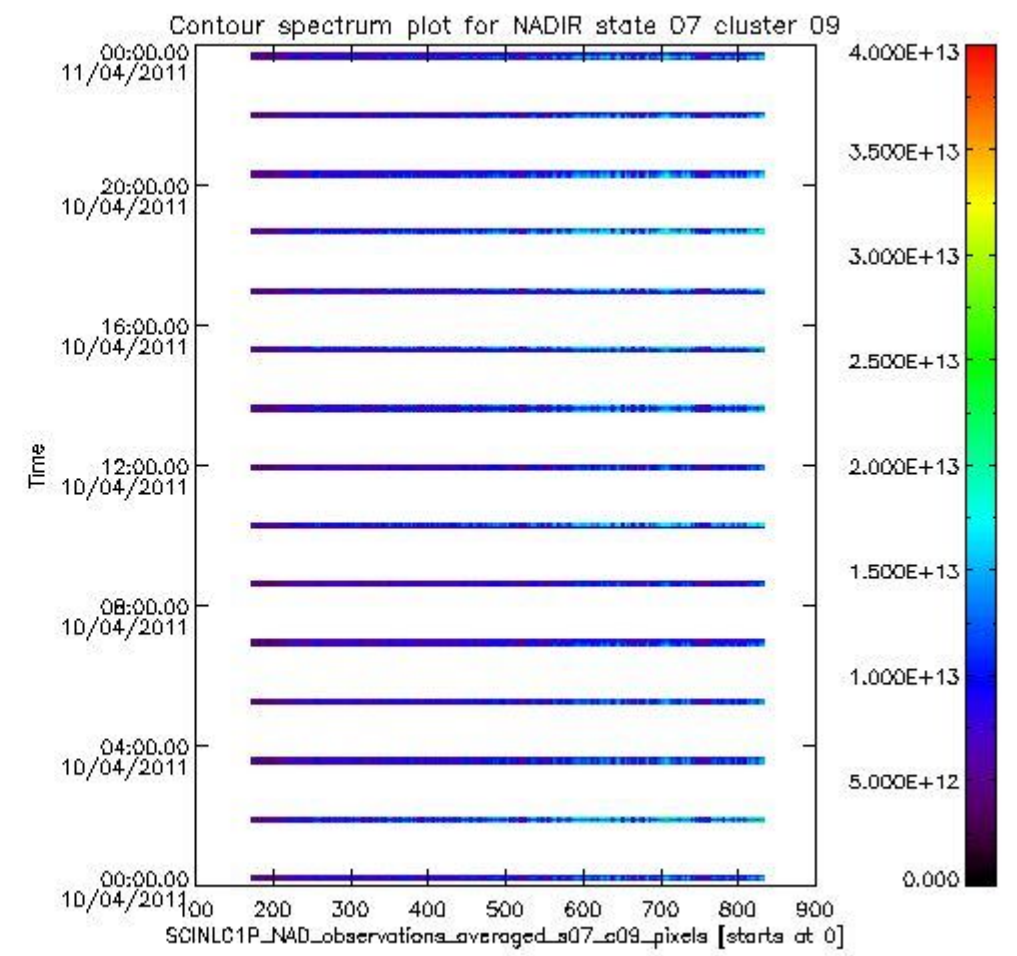
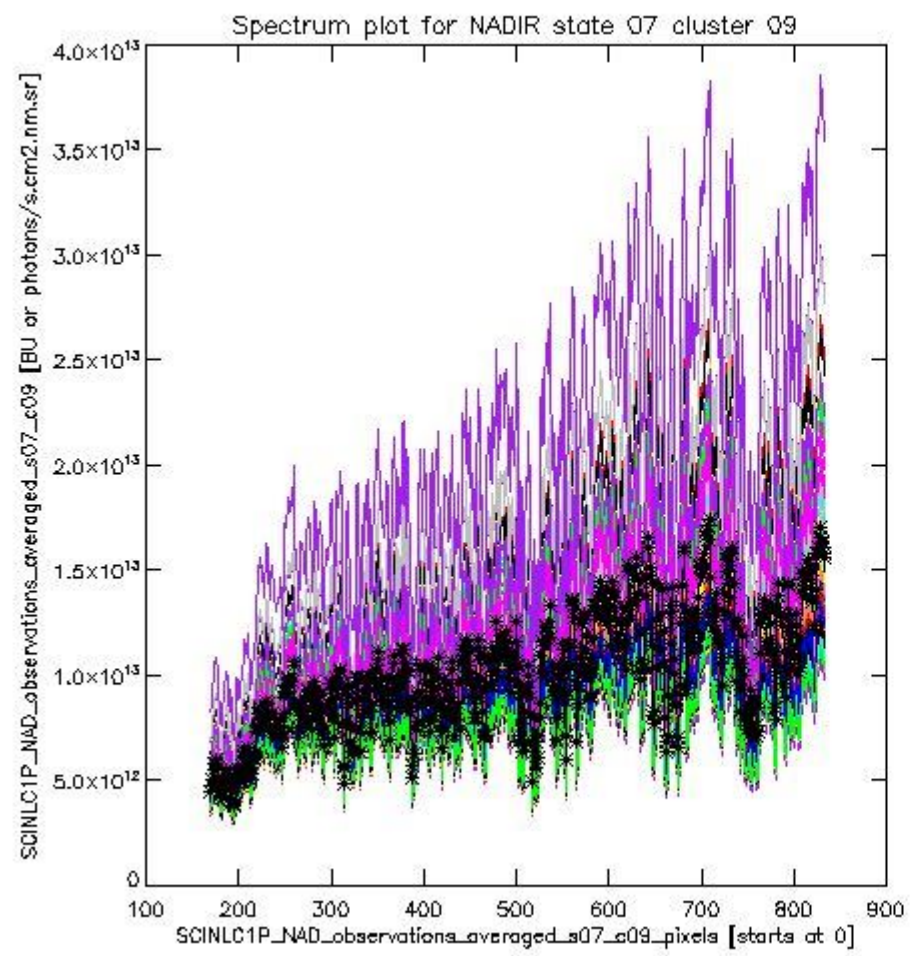




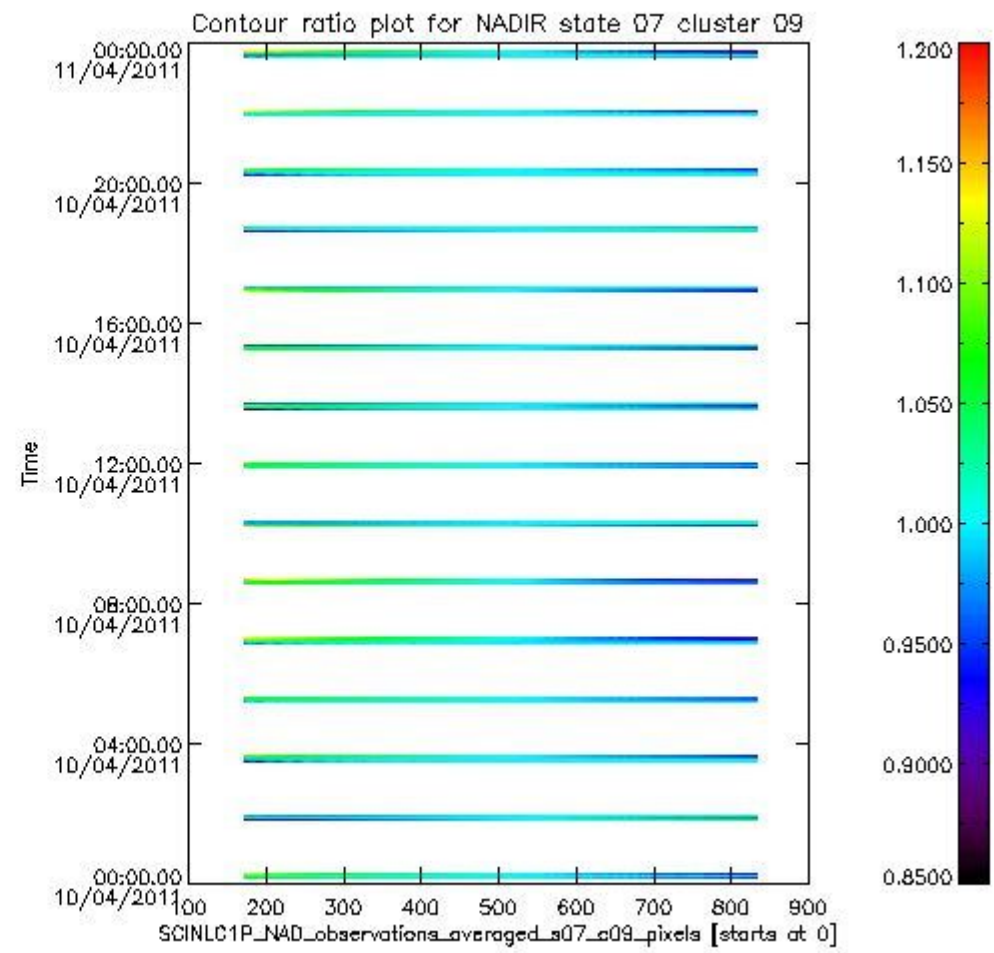
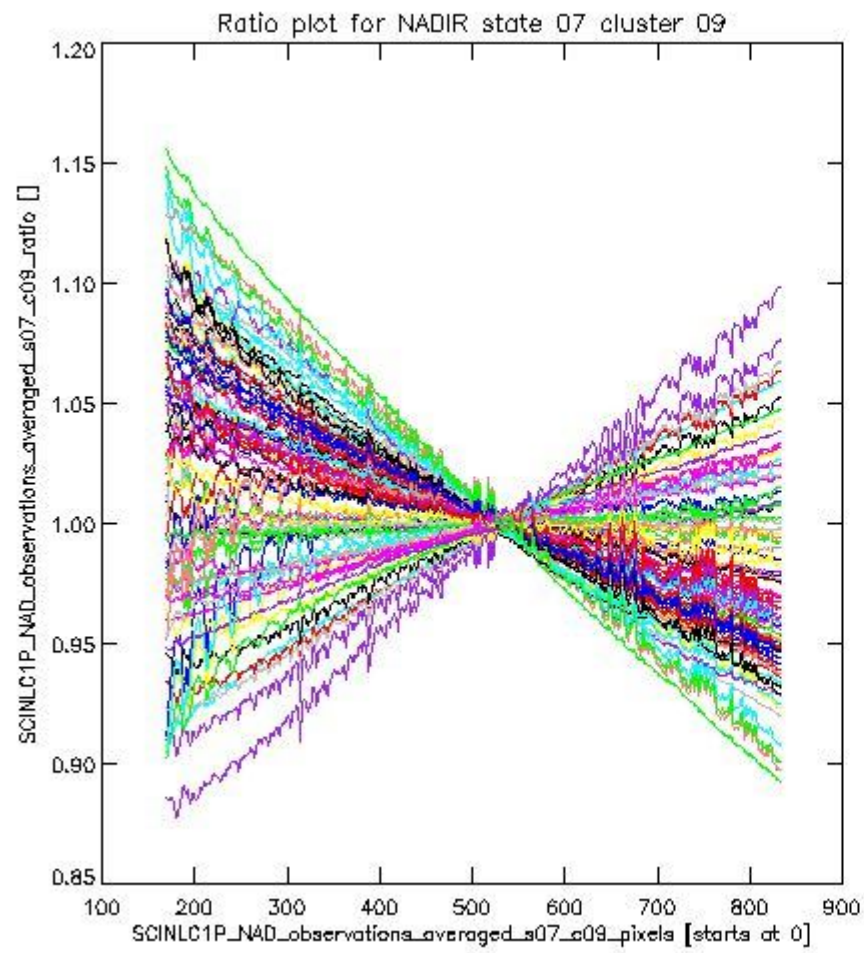
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	10APR2011 00:08:58.367
Start time of last sample	10APR2011 23:42:22.640
Reference period start time	11MAR2011 01:51:46.592
Reference period stop time	09APR2011 22:38:04.343
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





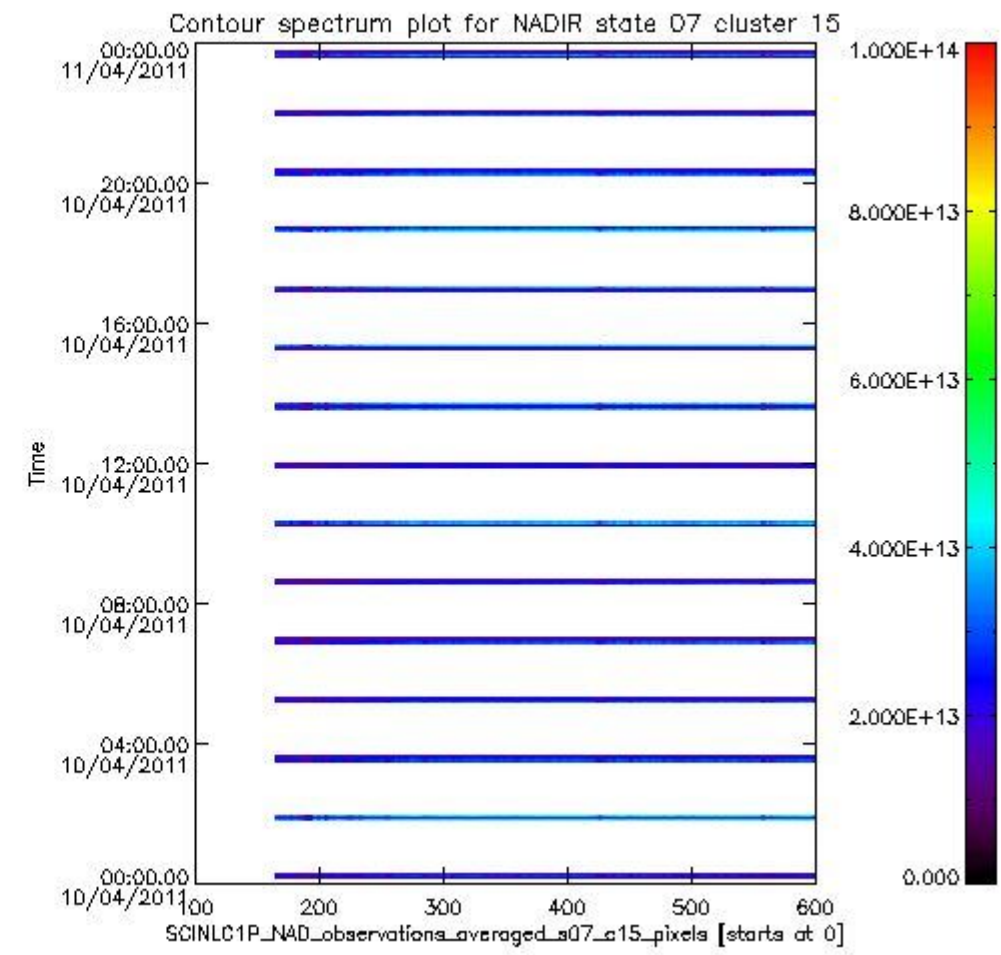
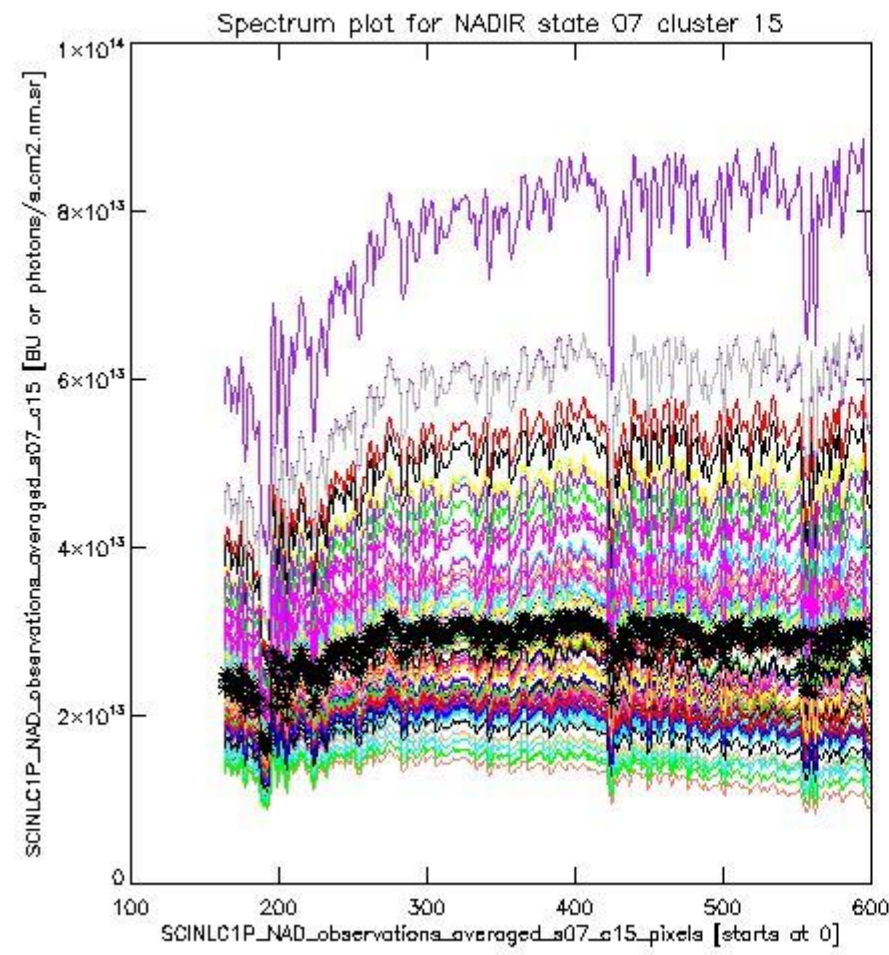
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_3.PNG

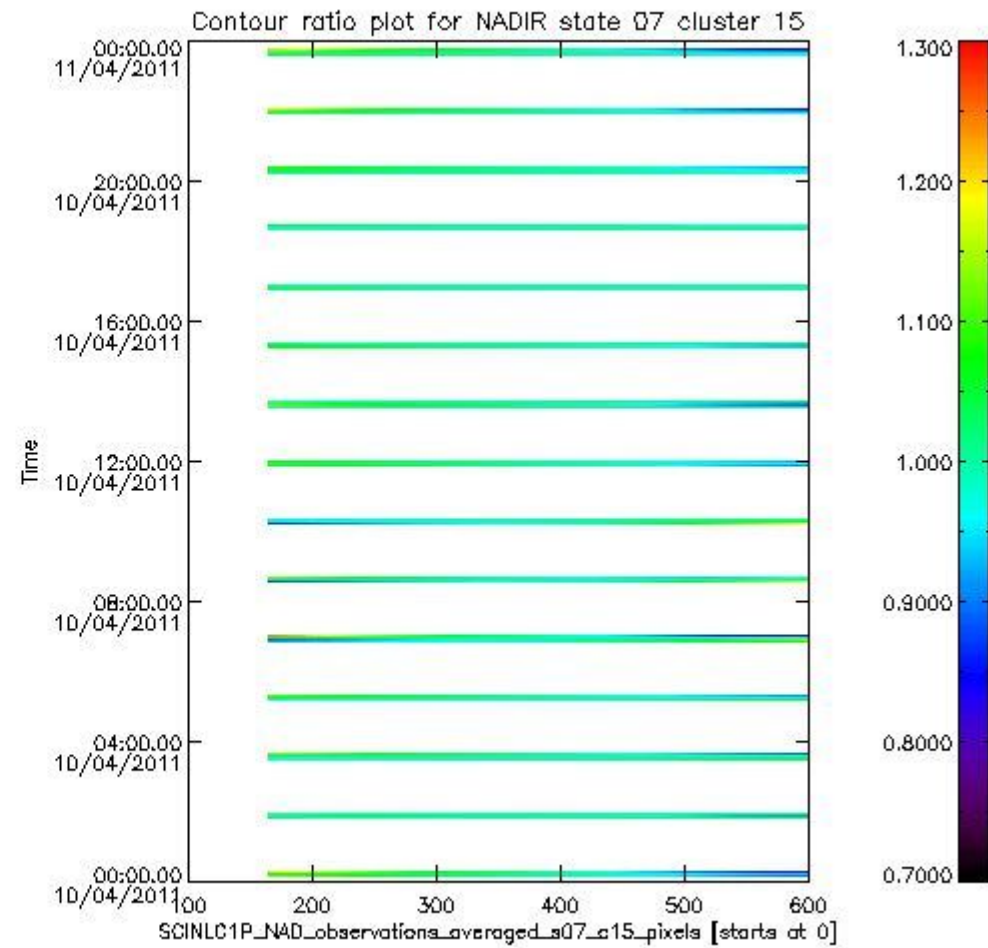
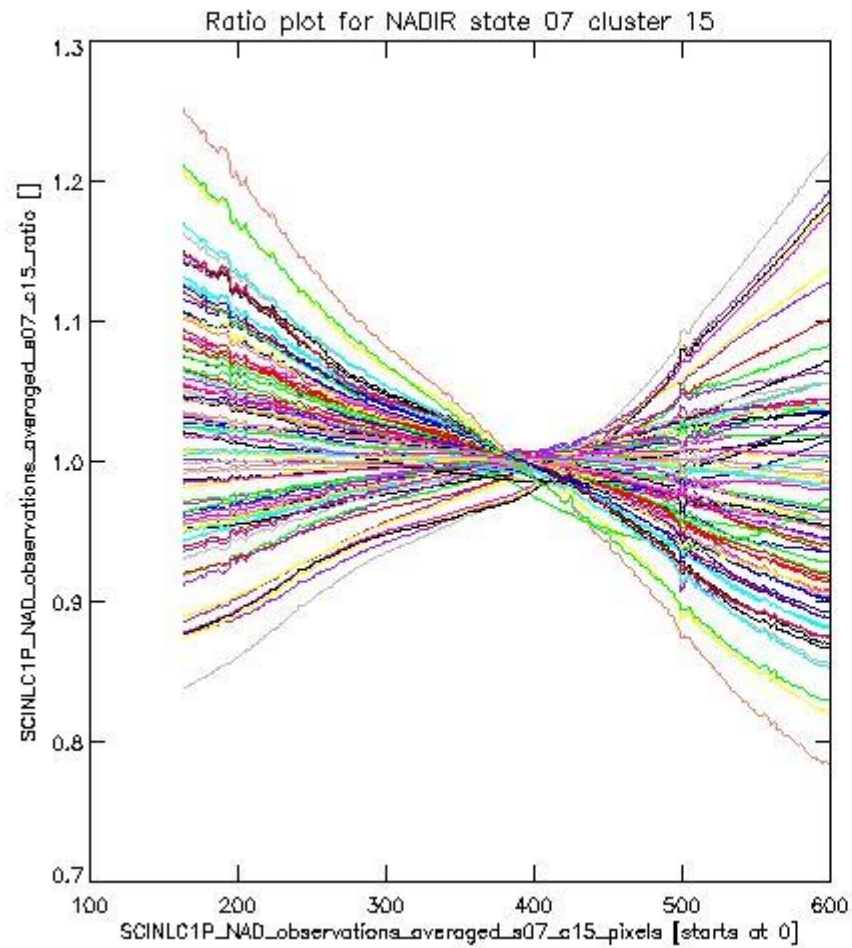
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	10APR2011 00:08:58.367
Start time of last sample	10APR2011 23:42:22.640
Reference period start time	11MAR2011 01:51:46.592
Reference period stop time	09APR2011 22:38:04.343
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\_20110410\_4.PNG

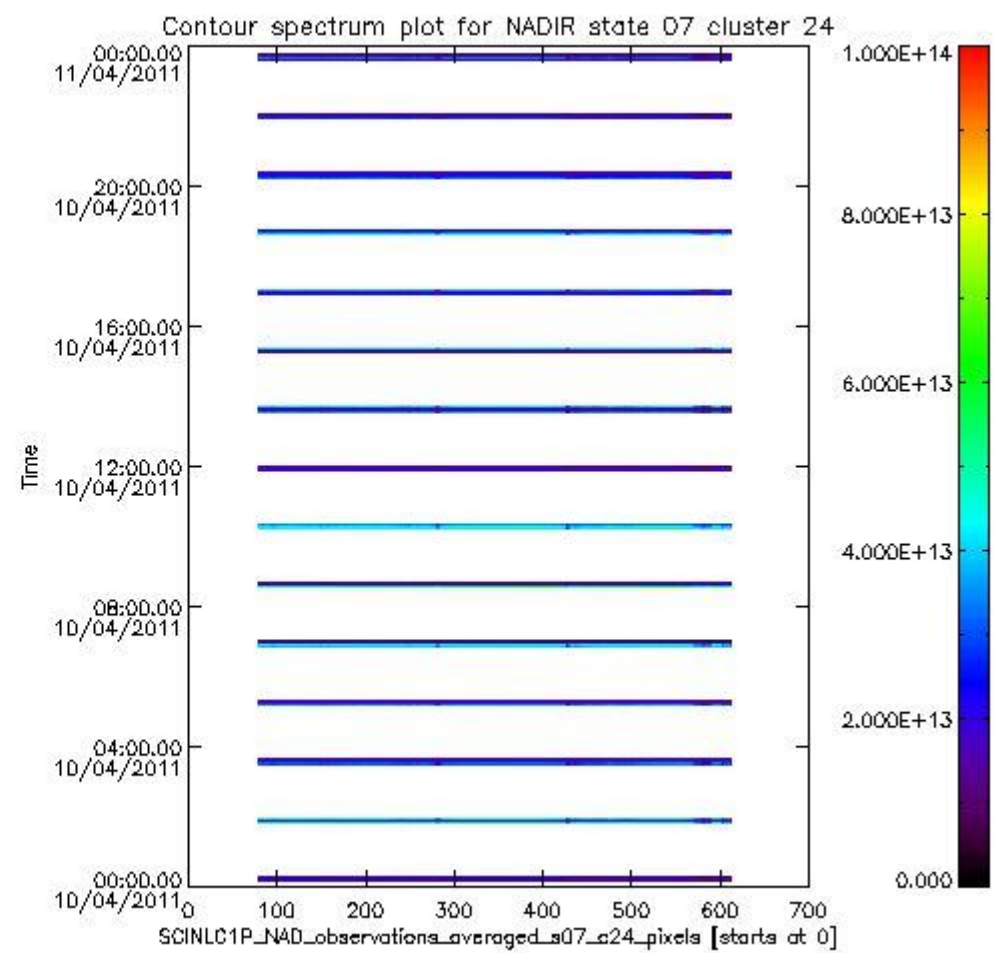
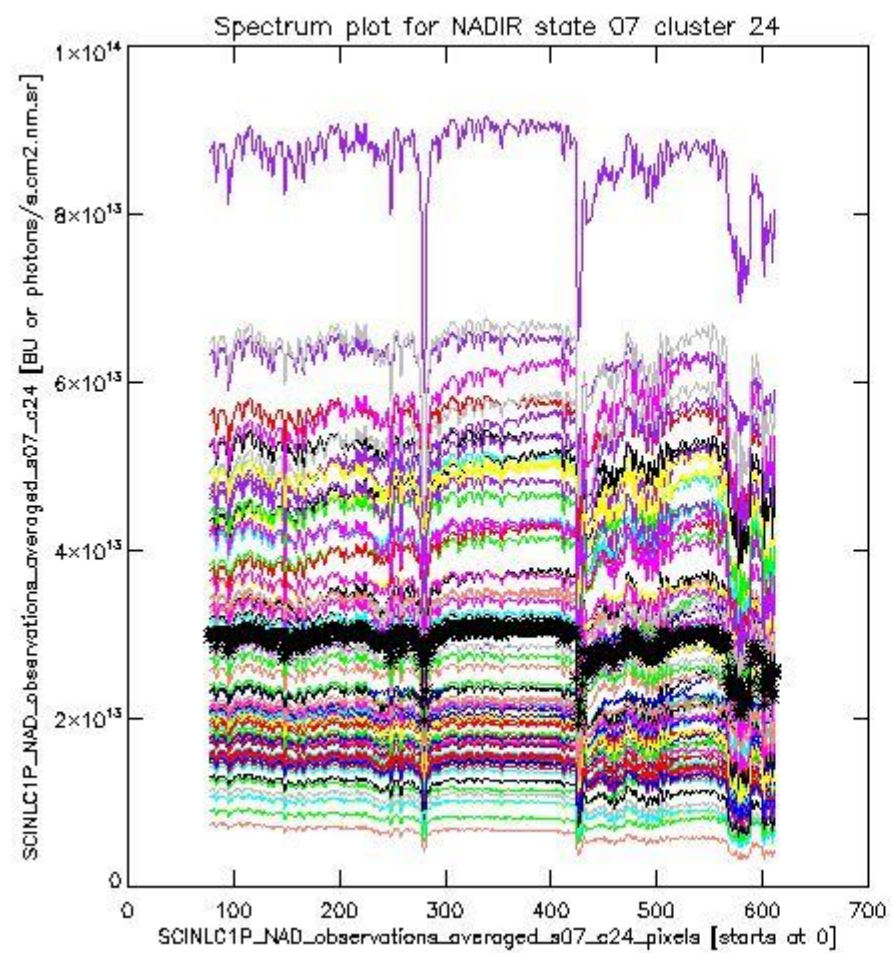




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_5.PNG

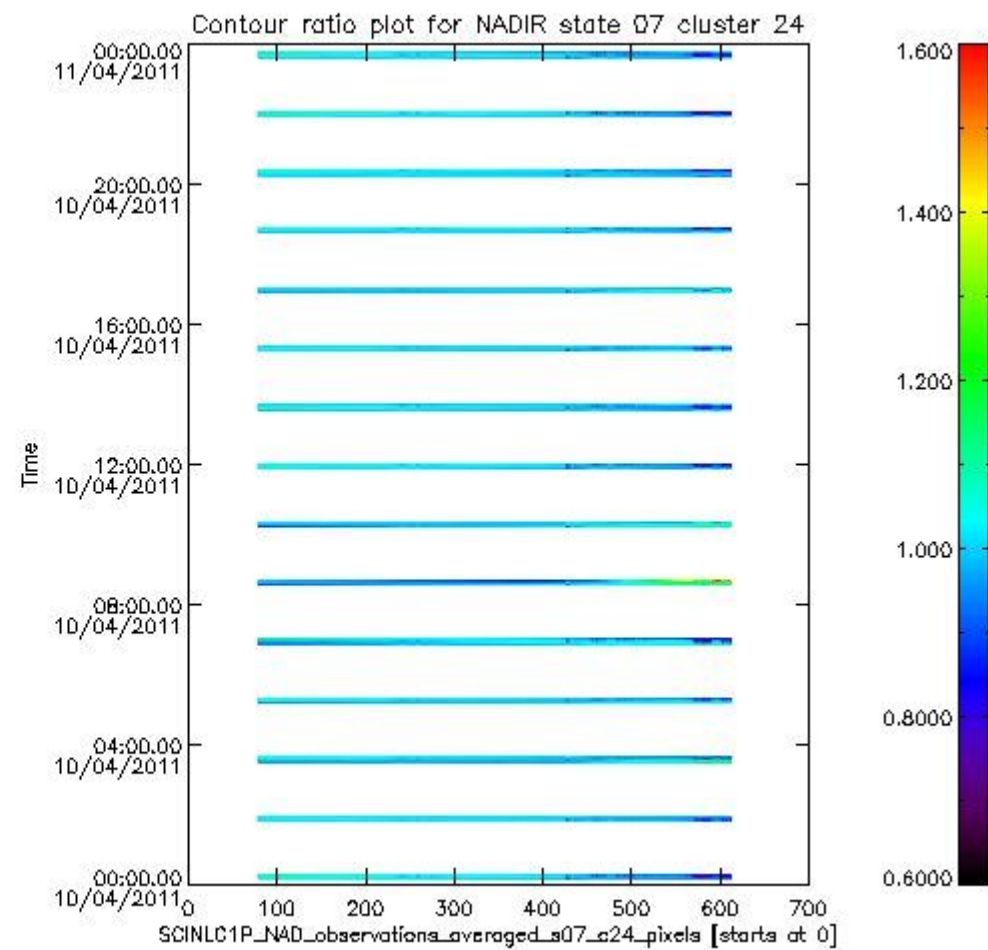
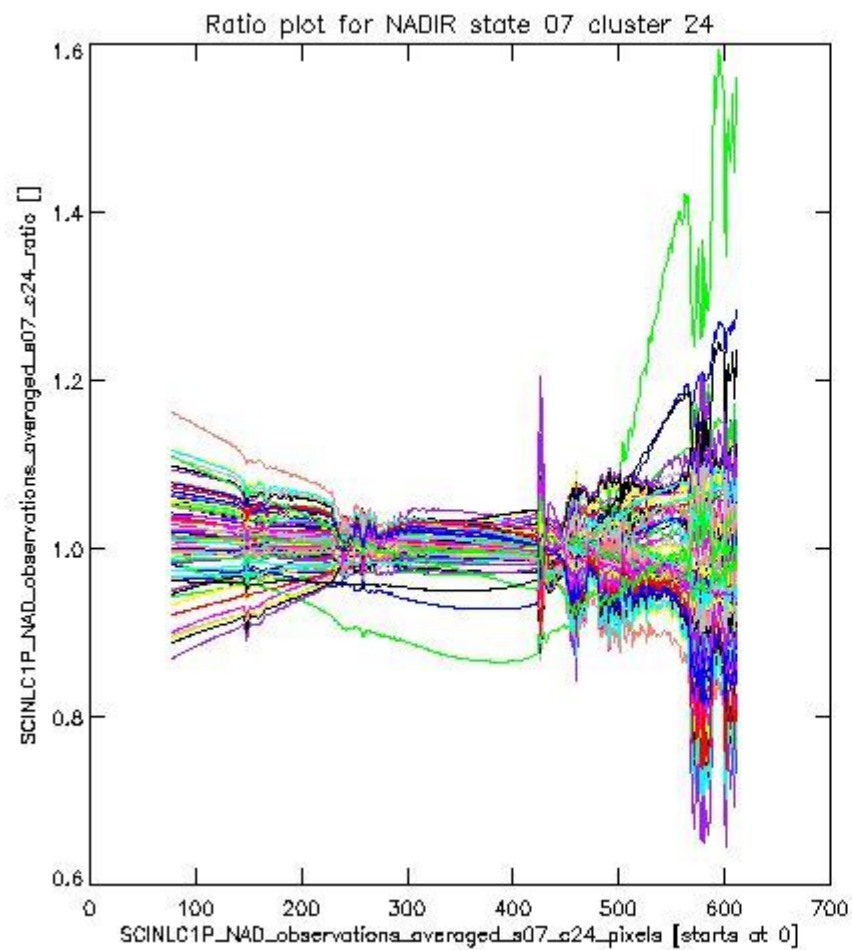
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	10APR2011 00:08:58.367
Start time of last sample	10APR2011 23:42:22.640
Reference period start time	11MAR2011 01:51:46.592
Reference period stop time	09APR2011 22:38:04.343
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\_20110410\_6.PNG

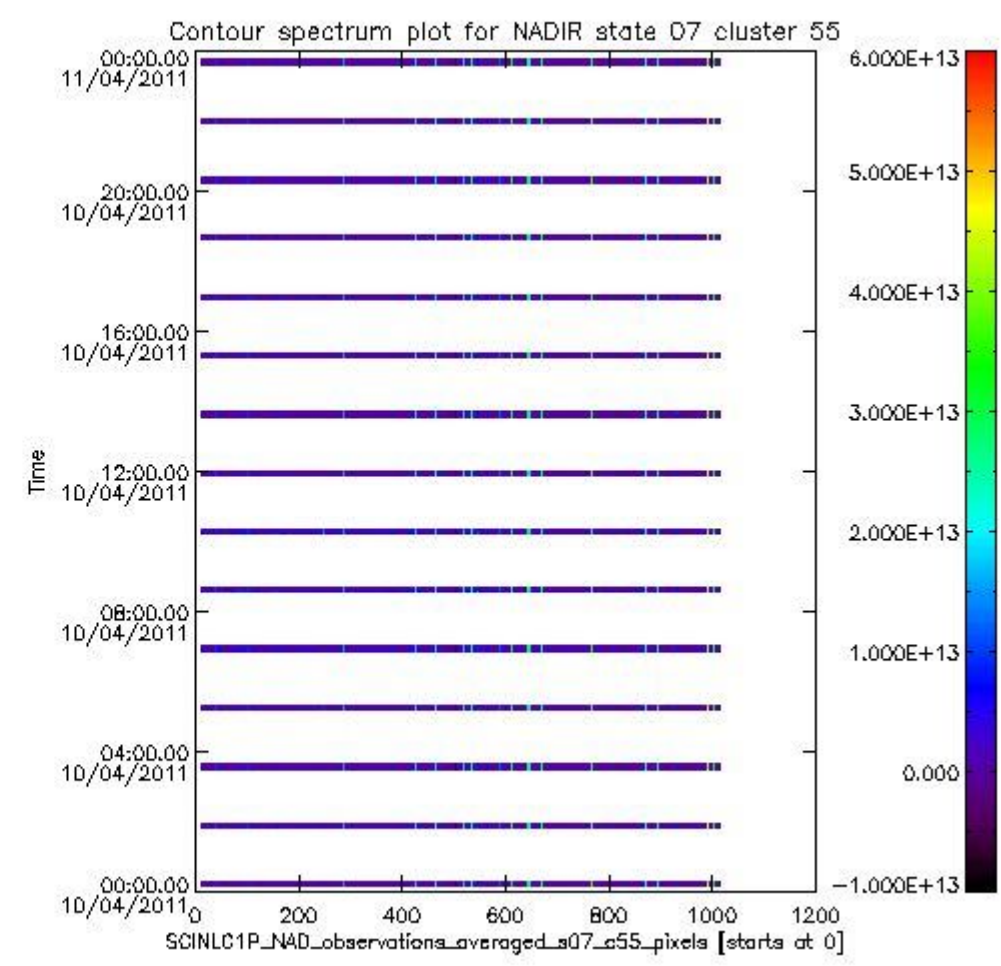
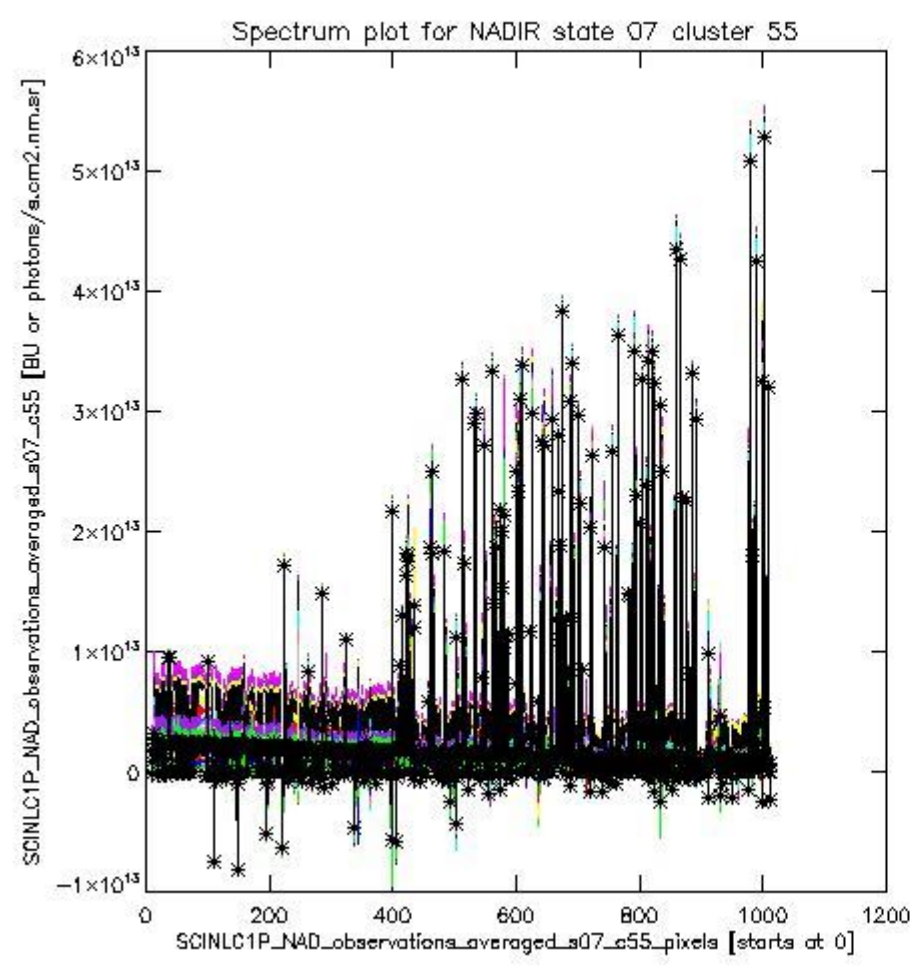




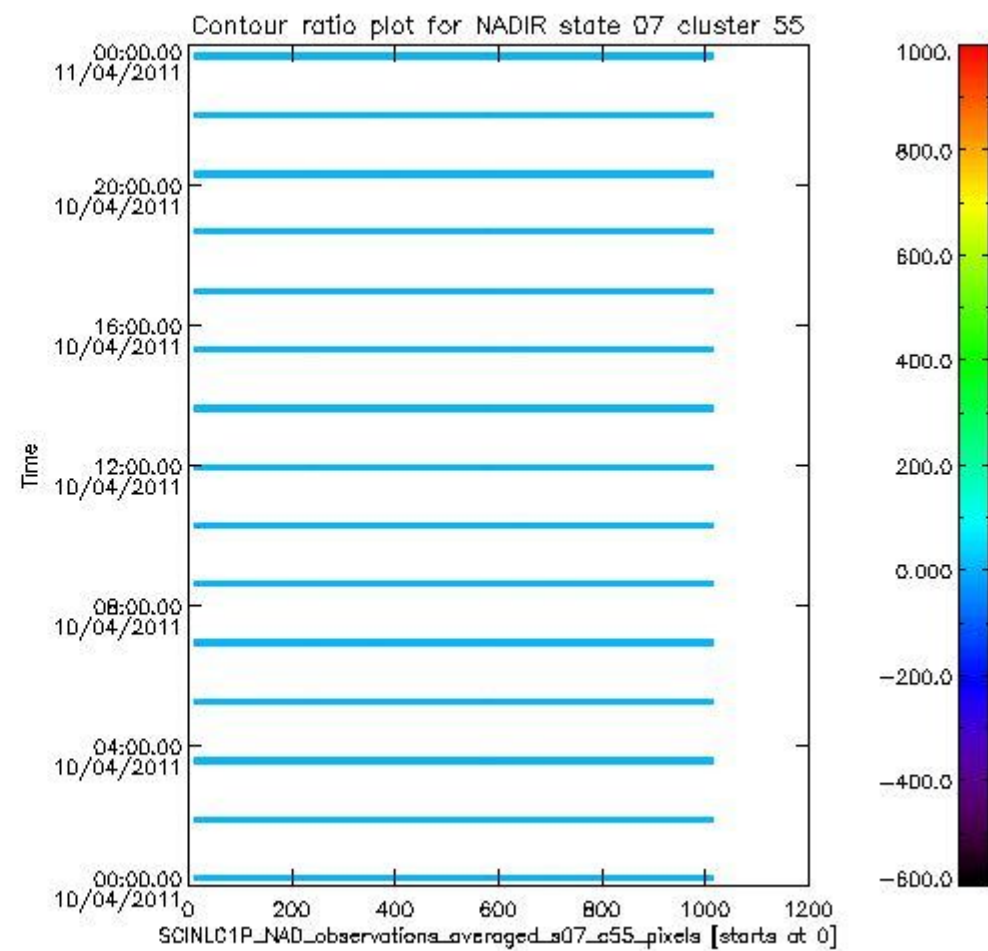
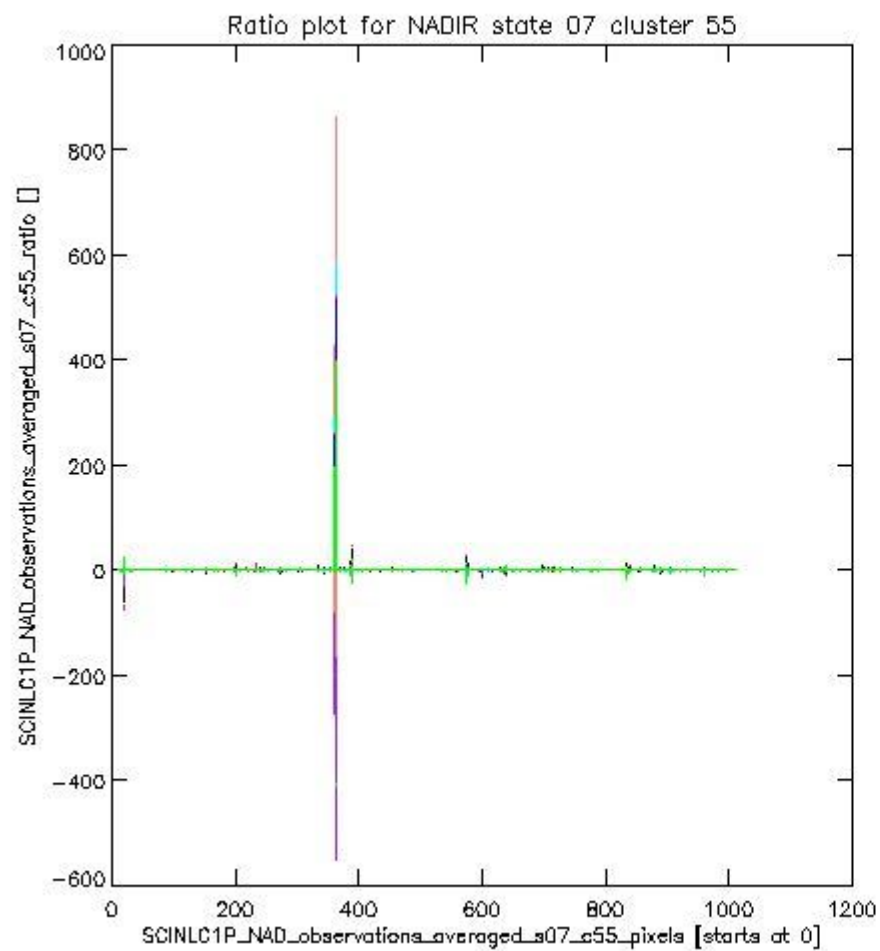
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_7.PNG

**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	10APR2011 00:08:58.367
Start time of last sample	10APR2011 23:42:22.640
Reference period start time	11MAR2011 01:51:46.592
Reference period stop time	09APR2011 22:36:01.601
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\_20110410\_8.PNG

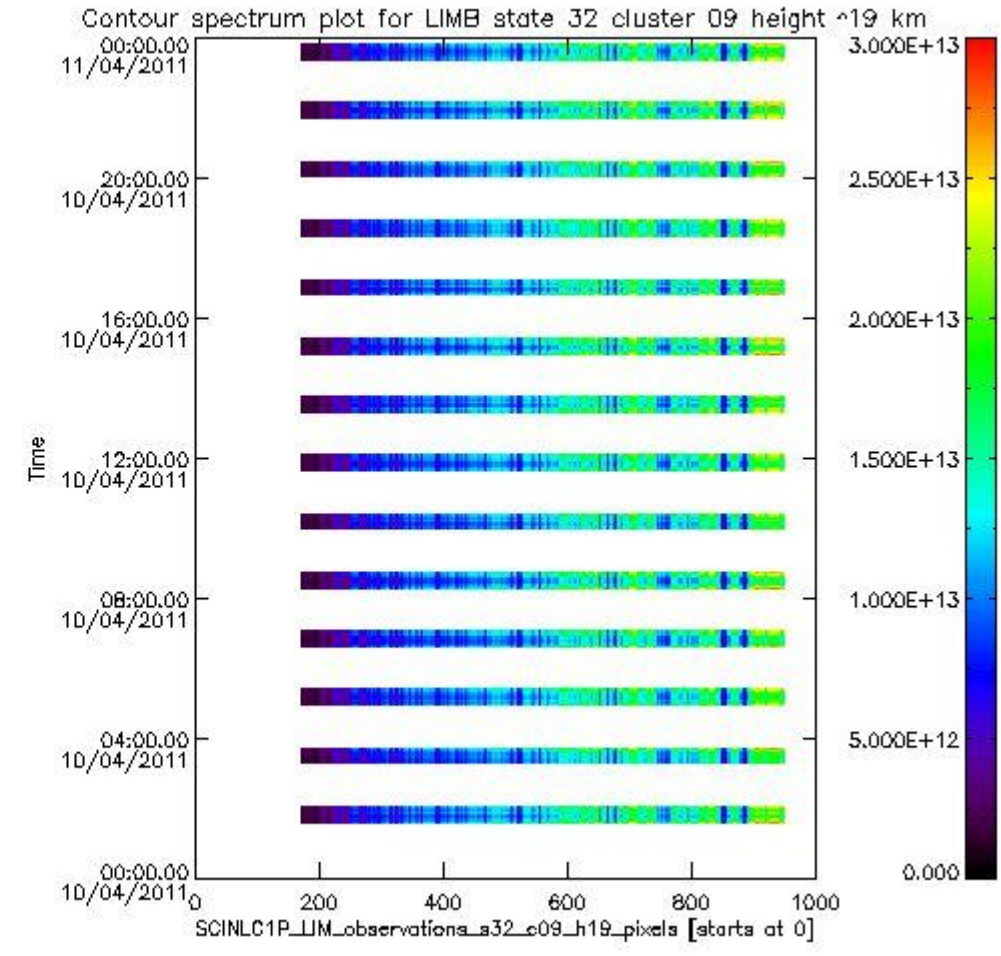
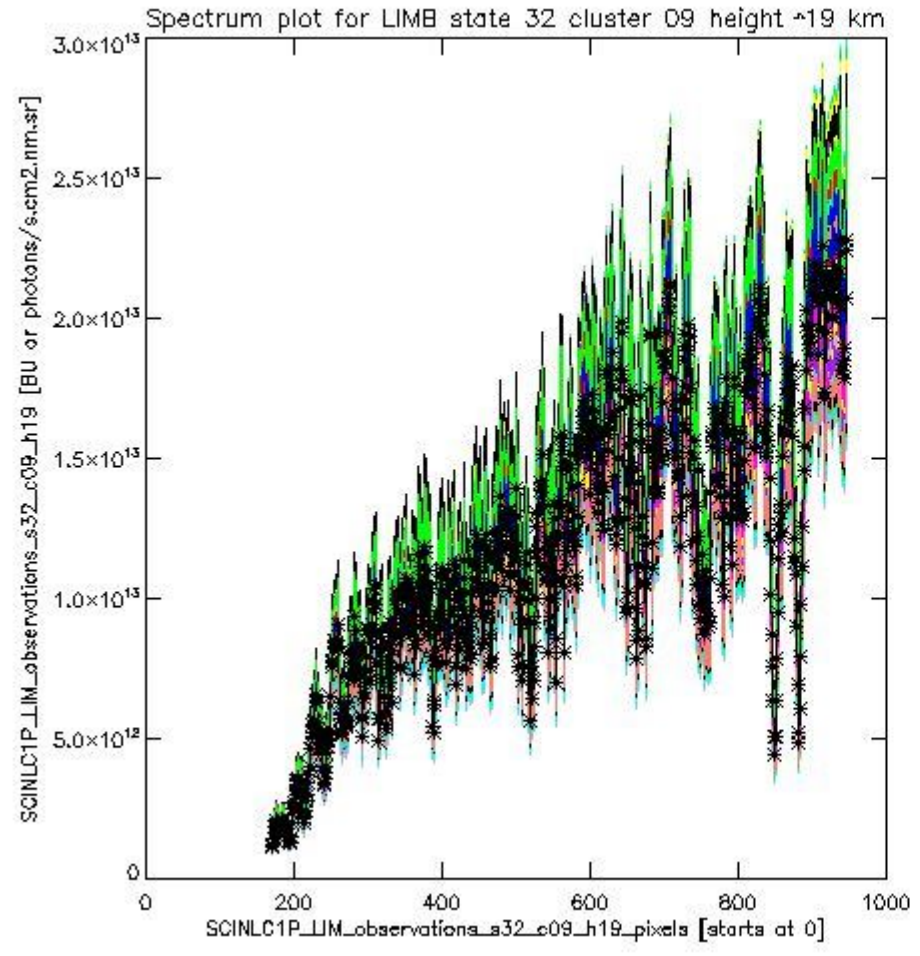


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_9.PNG

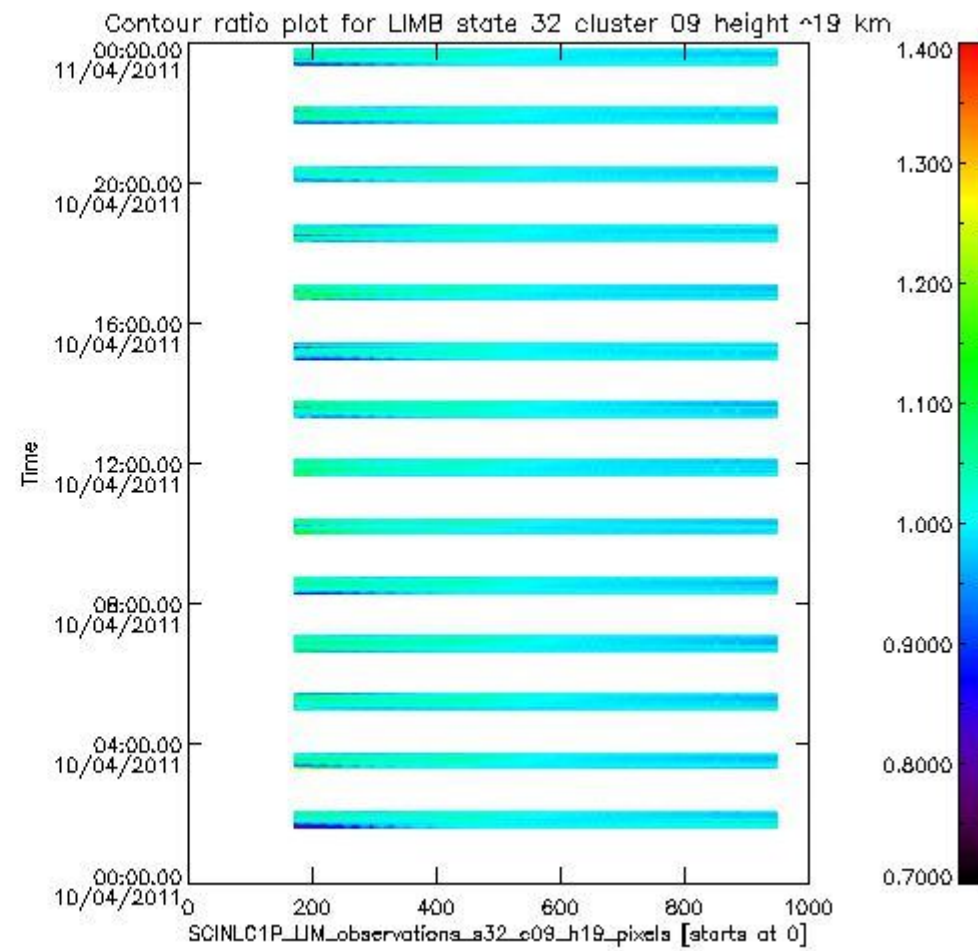
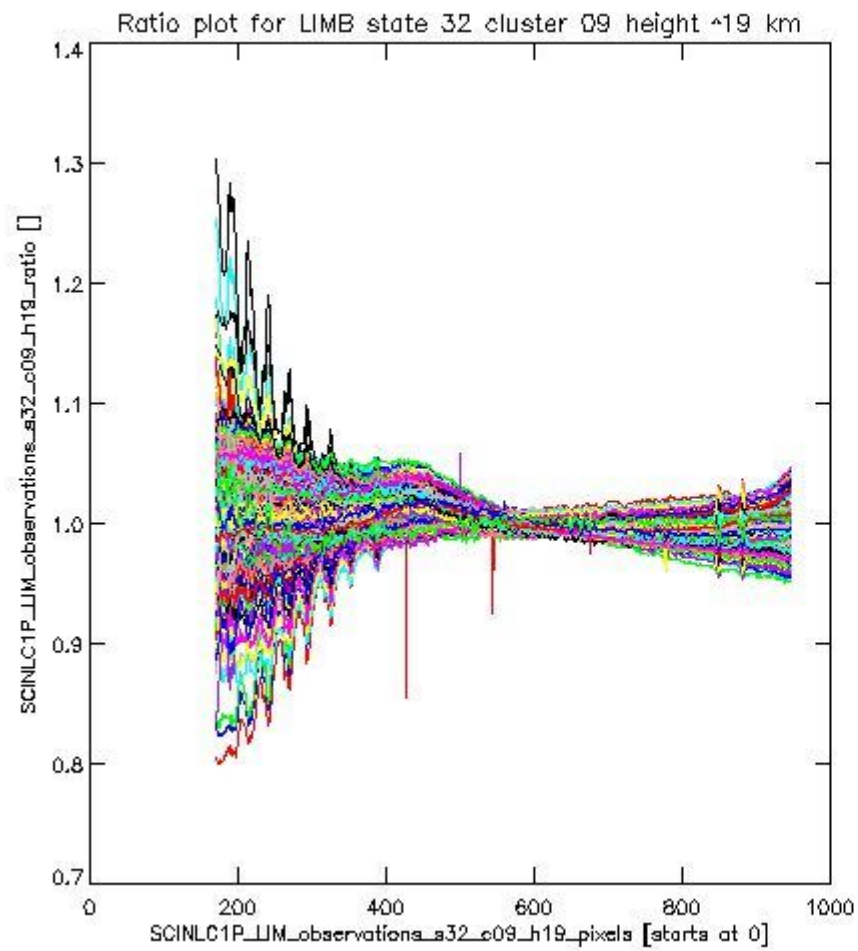
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	10APR2011 01:35:07.075
Start time of last sample	10APR2011 23:45:33.941
Reference period start time	11MAR2011 01:38:35.955
Reference period stop time	08APR2011 23:20:07.934
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





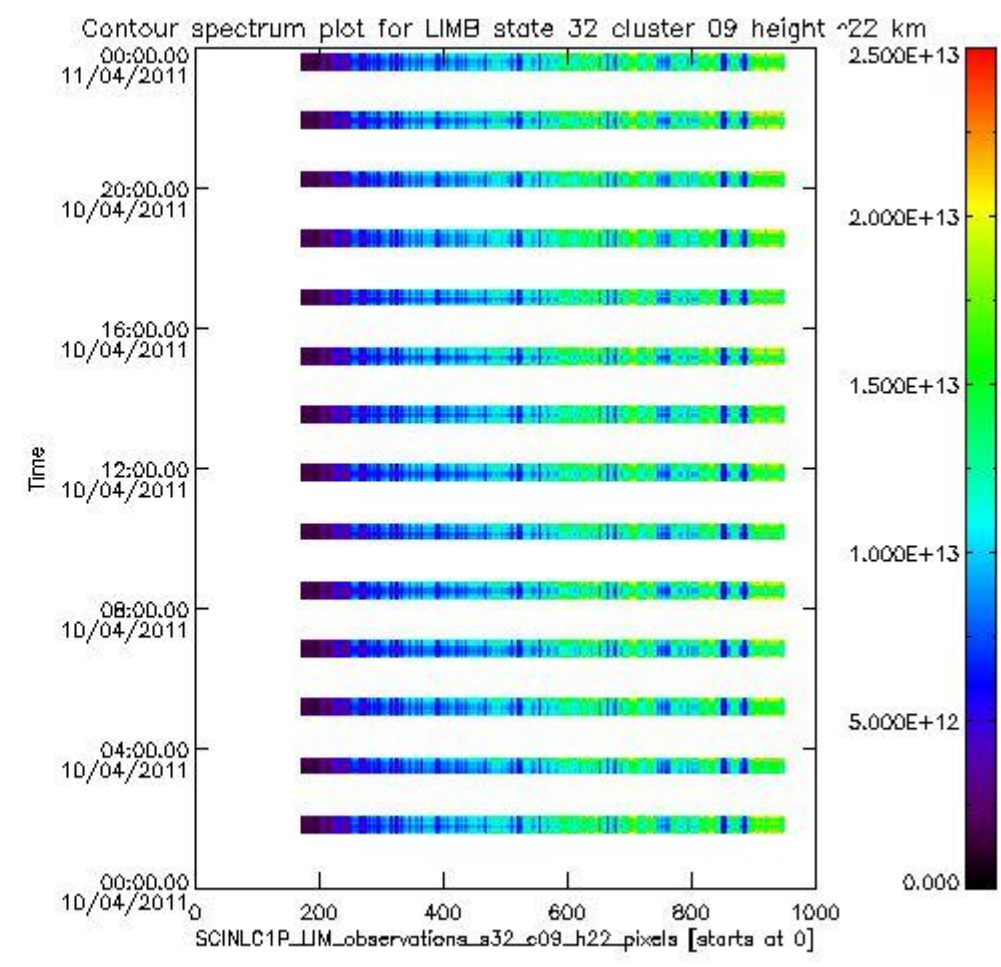
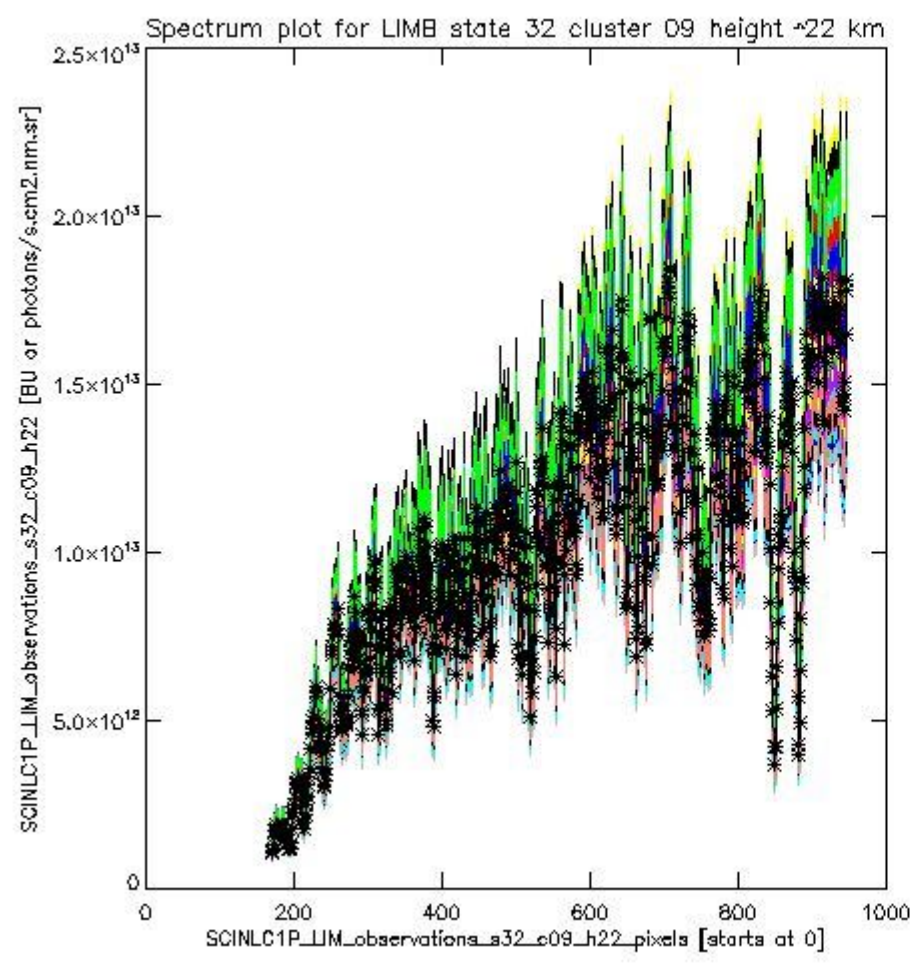
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_11.PNG

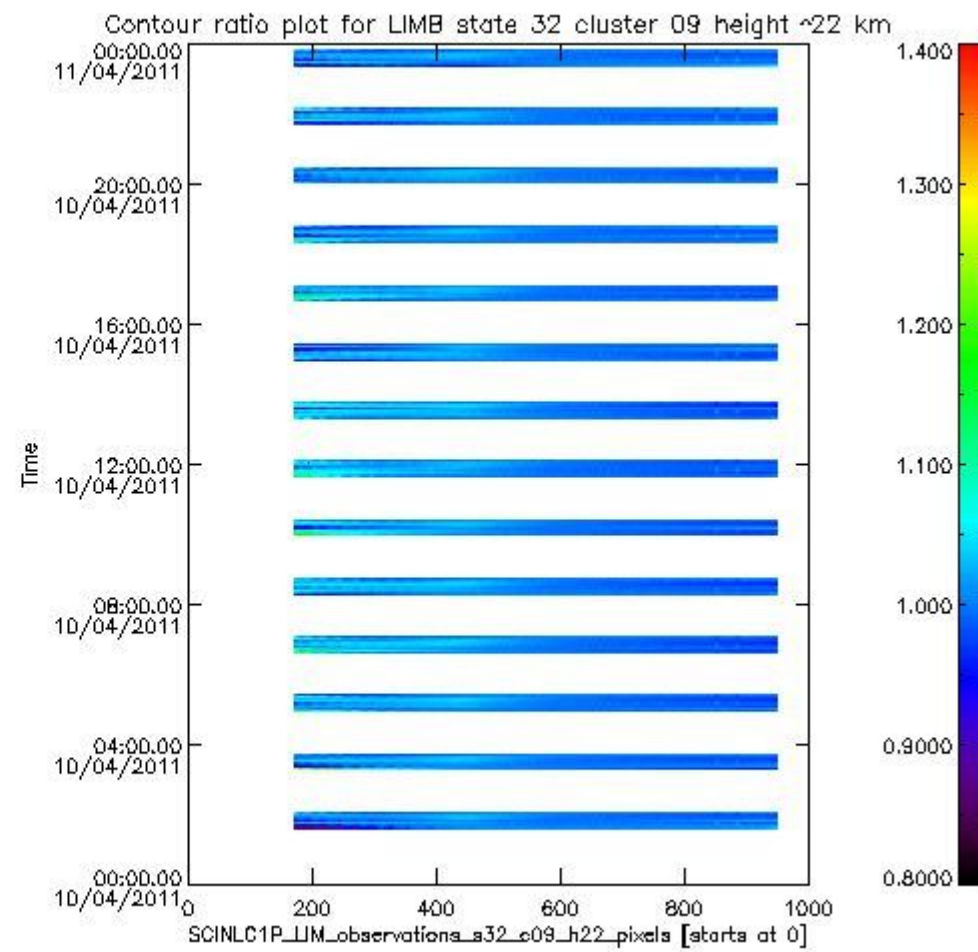
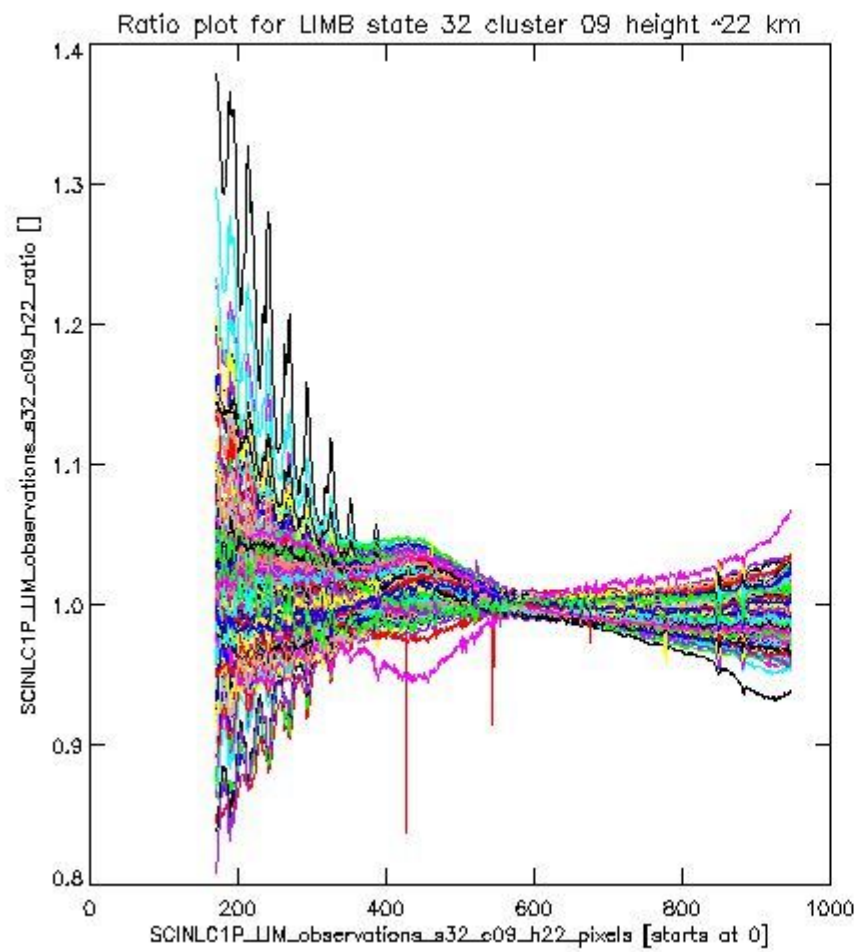
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	10APR2011 01:35:07.075
Start time of last sample	10APR2011 23:45:33.941
Reference period start time	11MAR2011 01:38:35.955
Reference period stop time	08APR2011 23:20:07.934
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\_20110410\_12.PNG

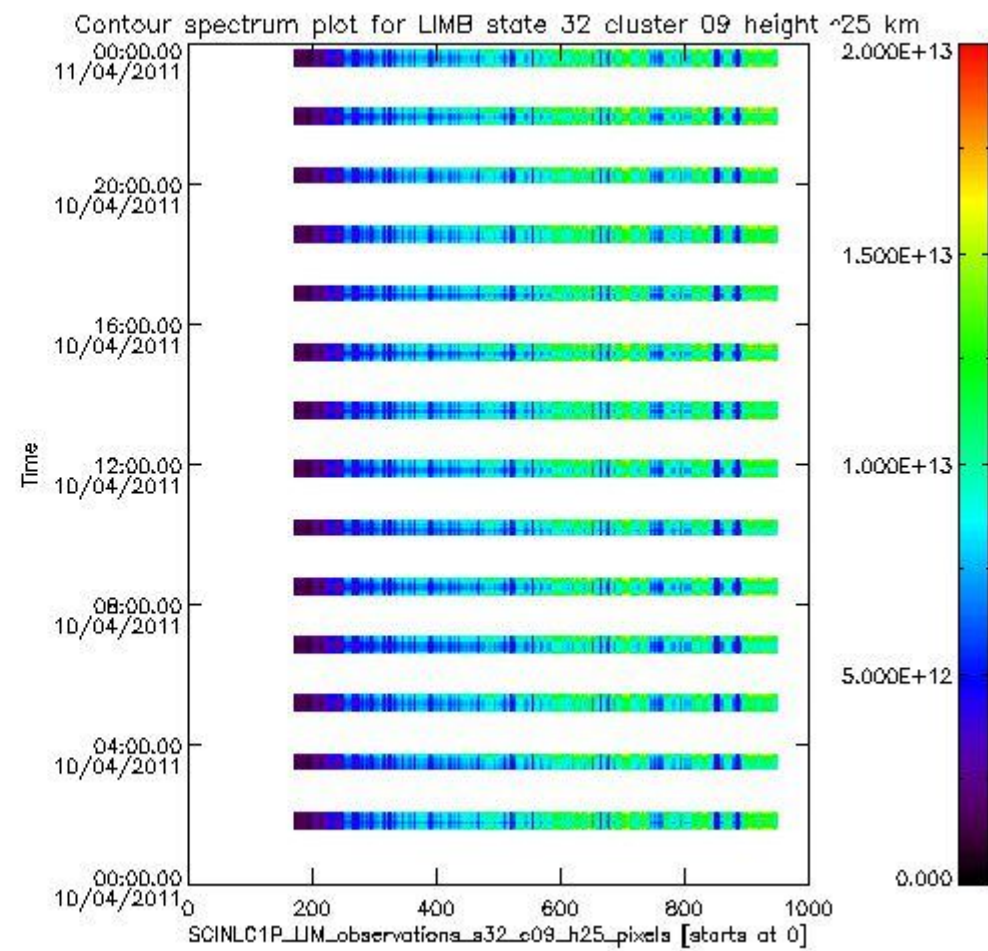
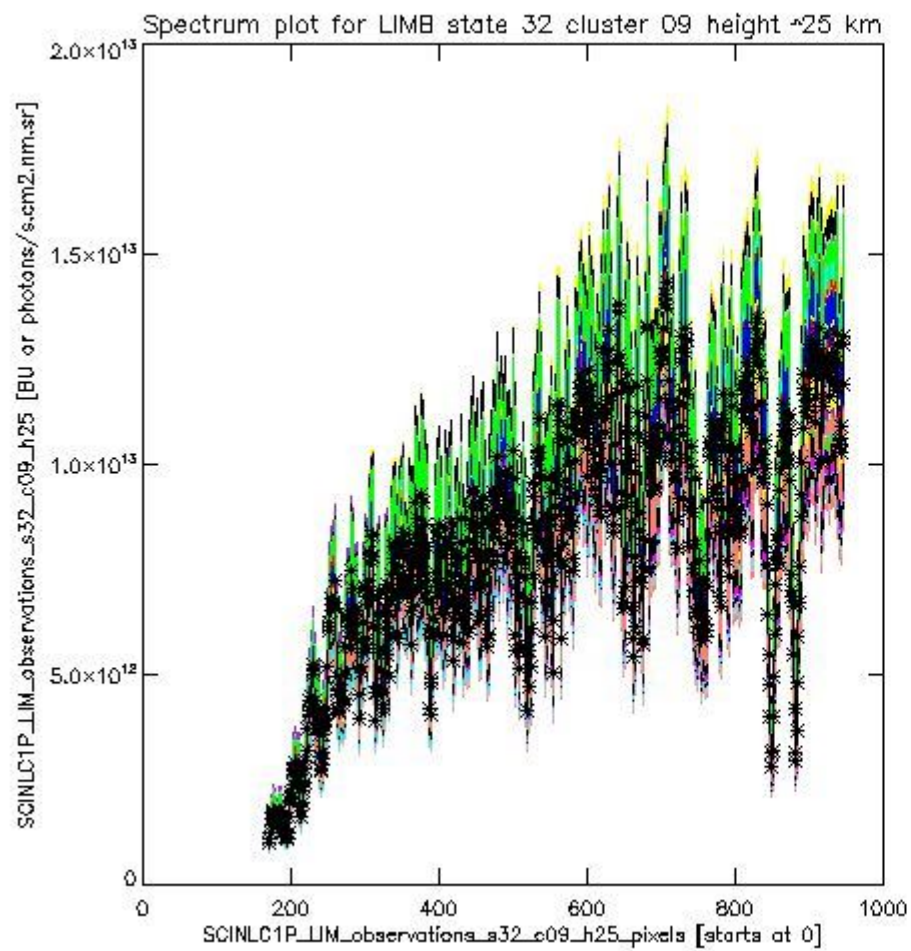




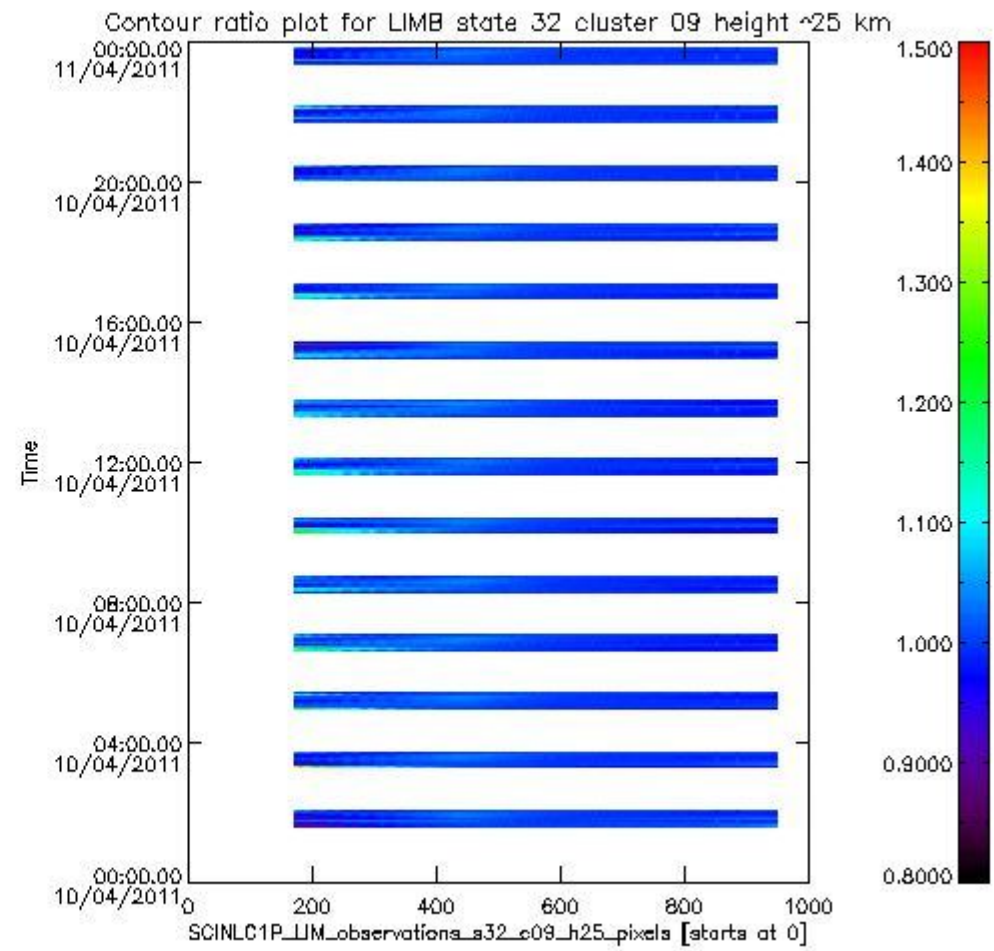
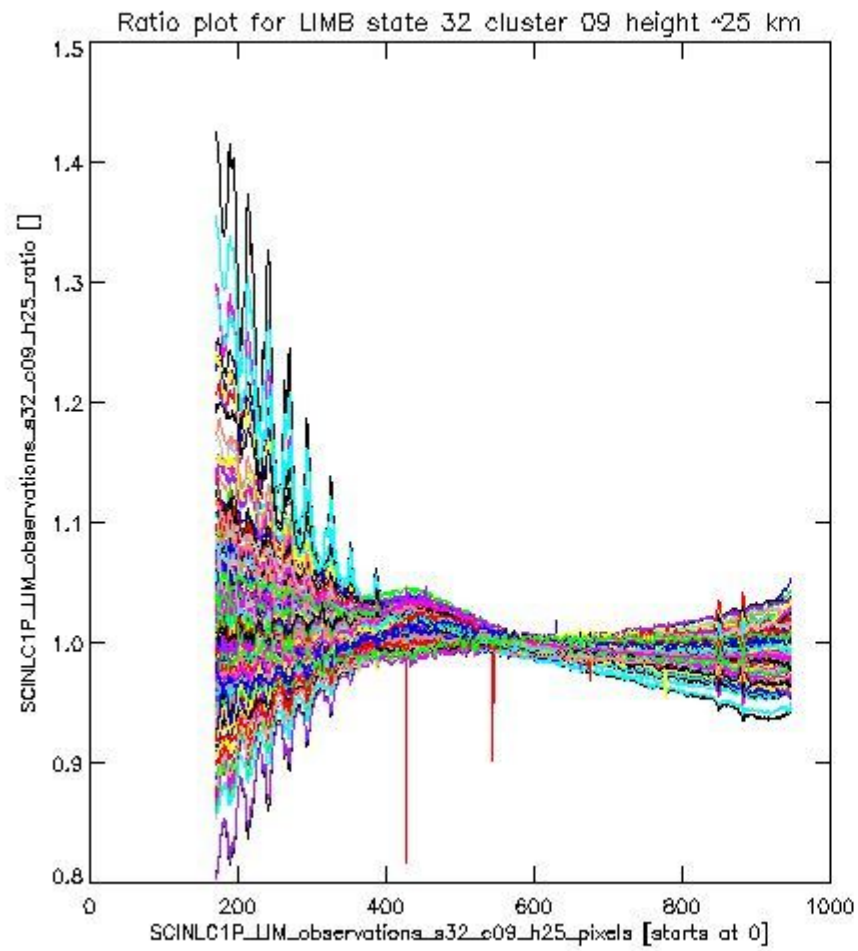
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_13.PNG

**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	10APR2011 01:35:07.075
Start time of last sample	10APR2011 23:45:33.941
Reference period start time	11MAR2011 01:38:35.955
Reference period stop time	08APR2011 23:20:07.934
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\_20110410\_14.PNG

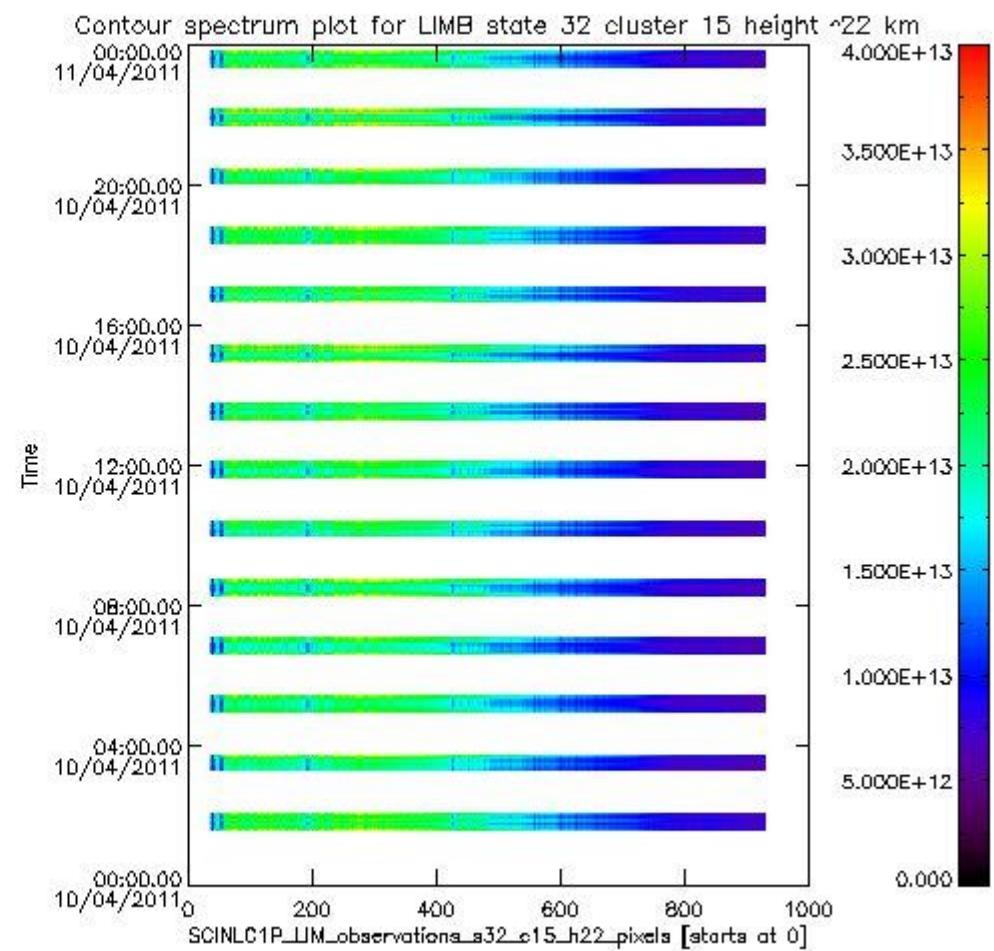
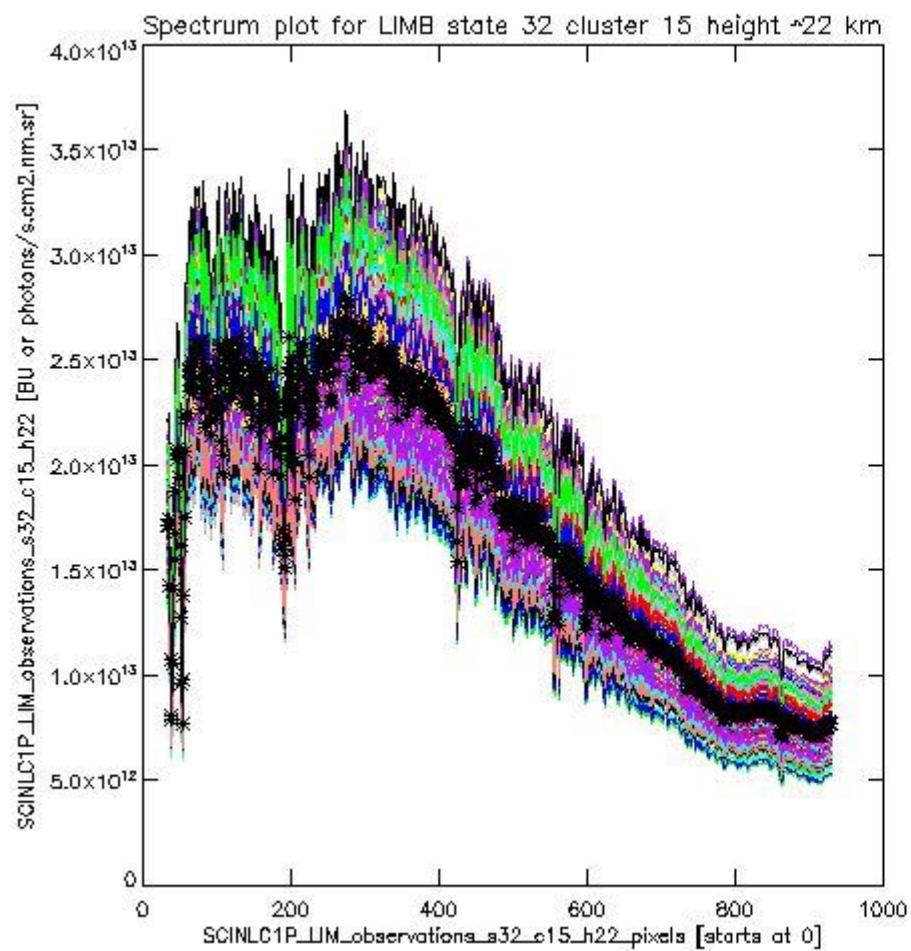


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_15.PNG

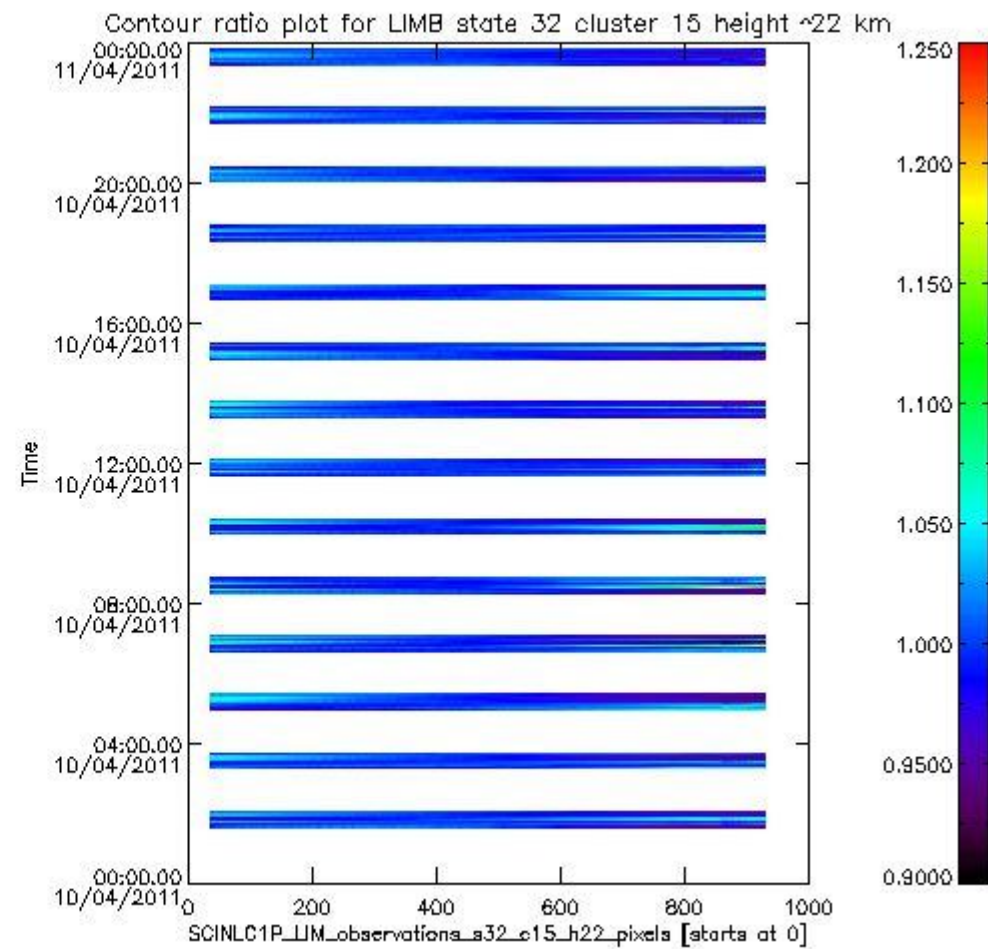
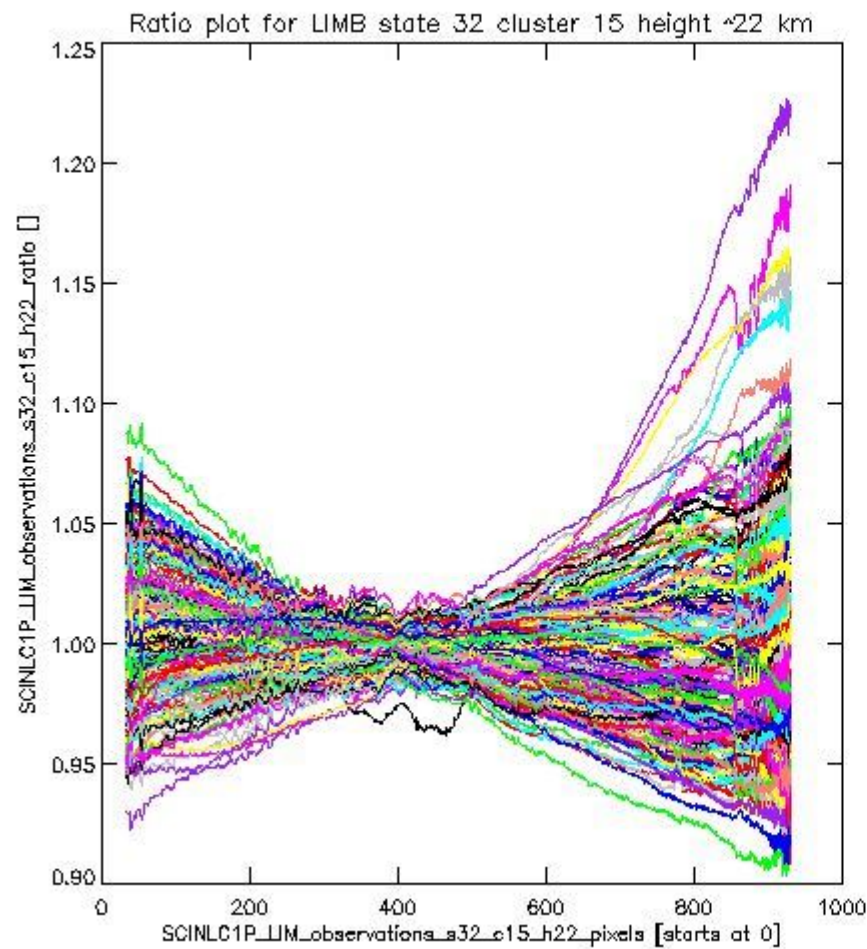
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	10APR2011 01:35:07.075
Start time of last sample	10APR2011 23:45:33.941
Reference period start time	11MAR2011 01:38:35.955
Reference period stop time	08APR2011 23:20:07.934
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





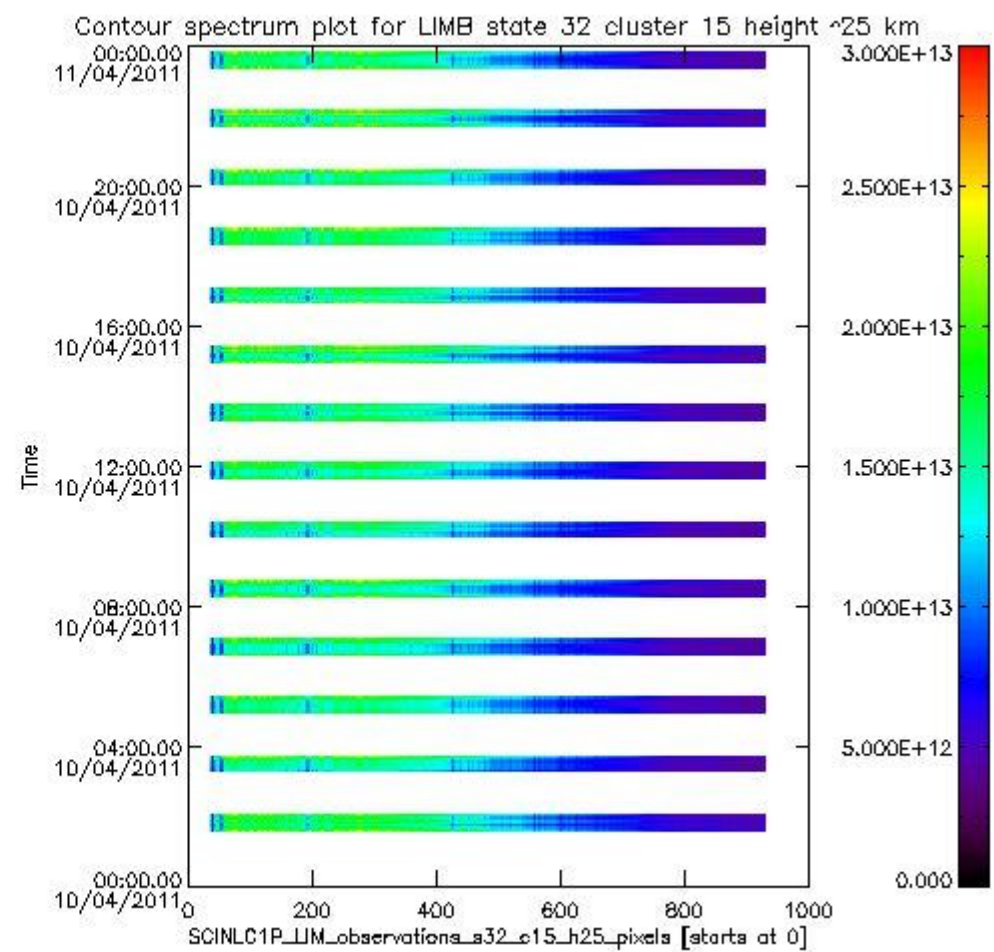
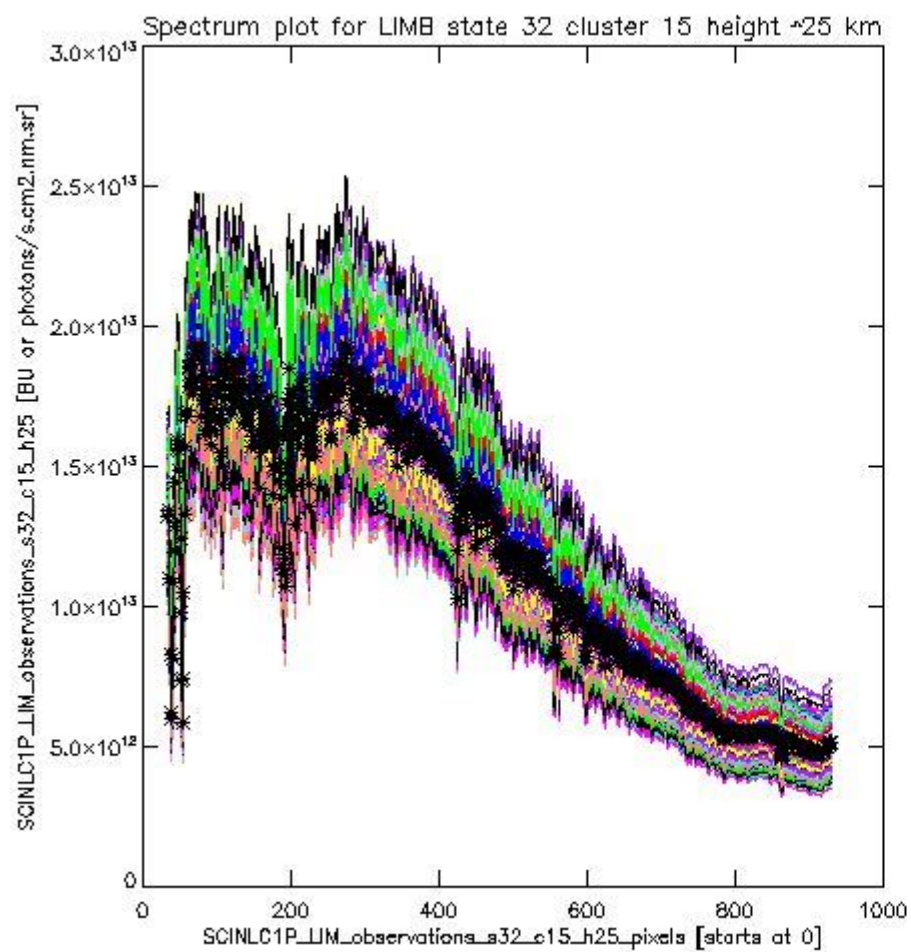
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_17.PNG

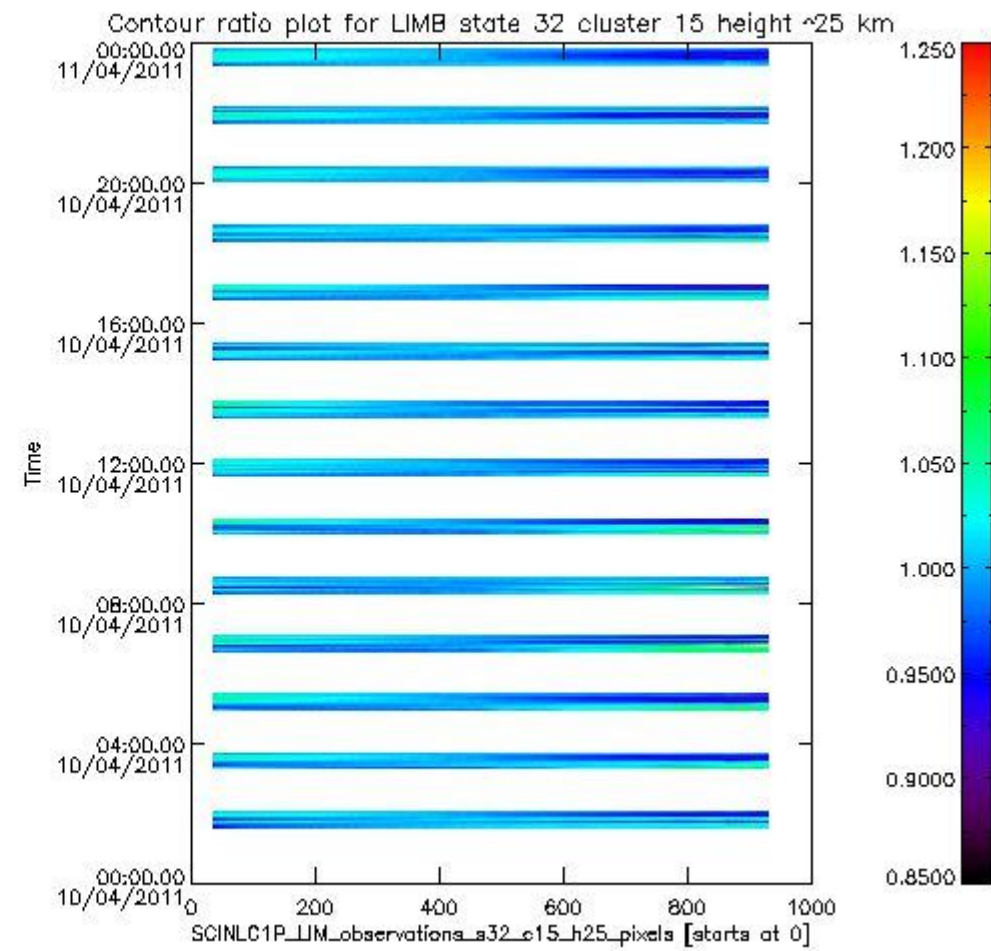
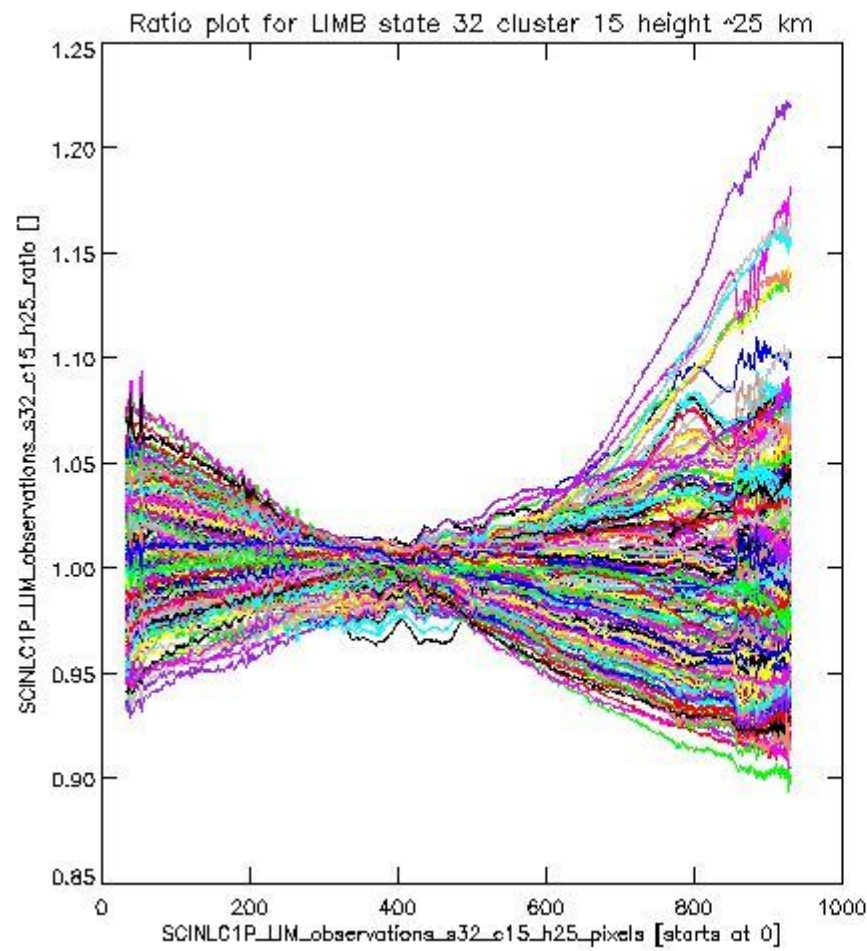
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	10APR2011 01:35:07.075
Start time of last sample	10APR2011 23:45:33.941
Reference period start time	11MAR2011 01:38:35.955
Reference period stop time	08APR2011 23:20:07.934
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\_20110410\_18.PNG

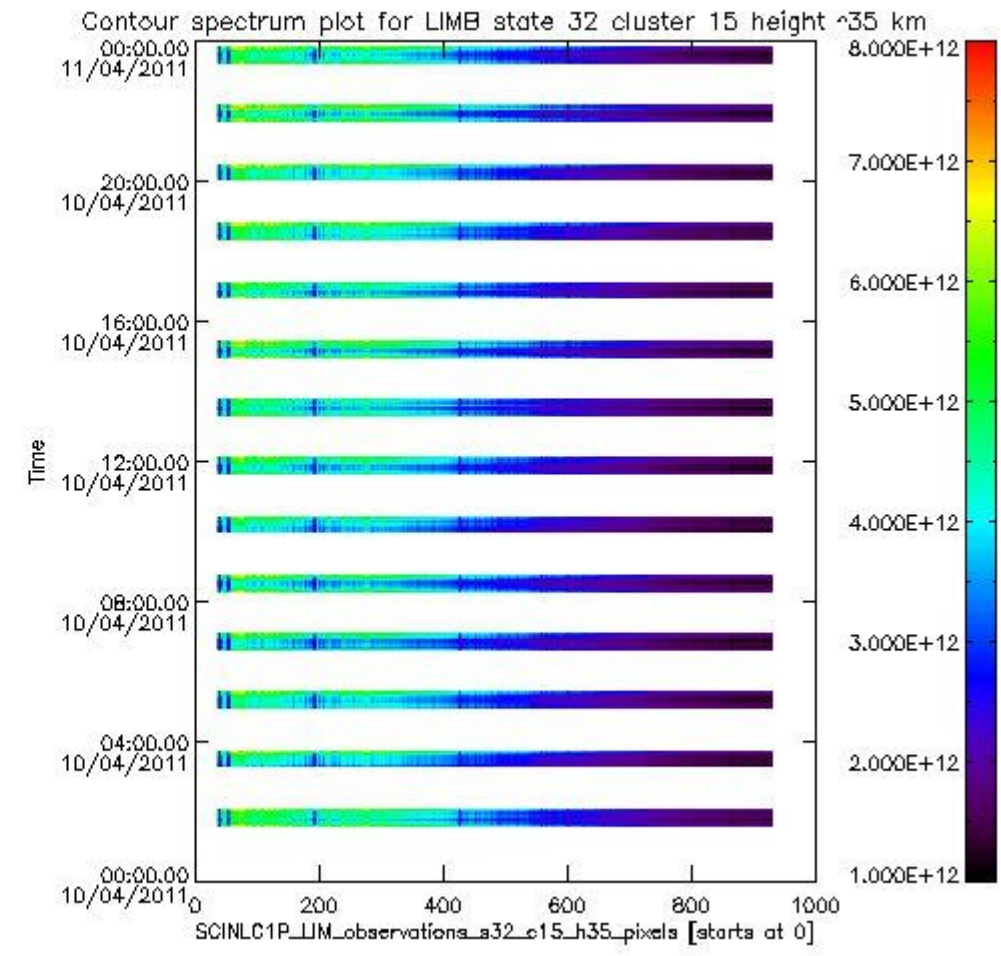
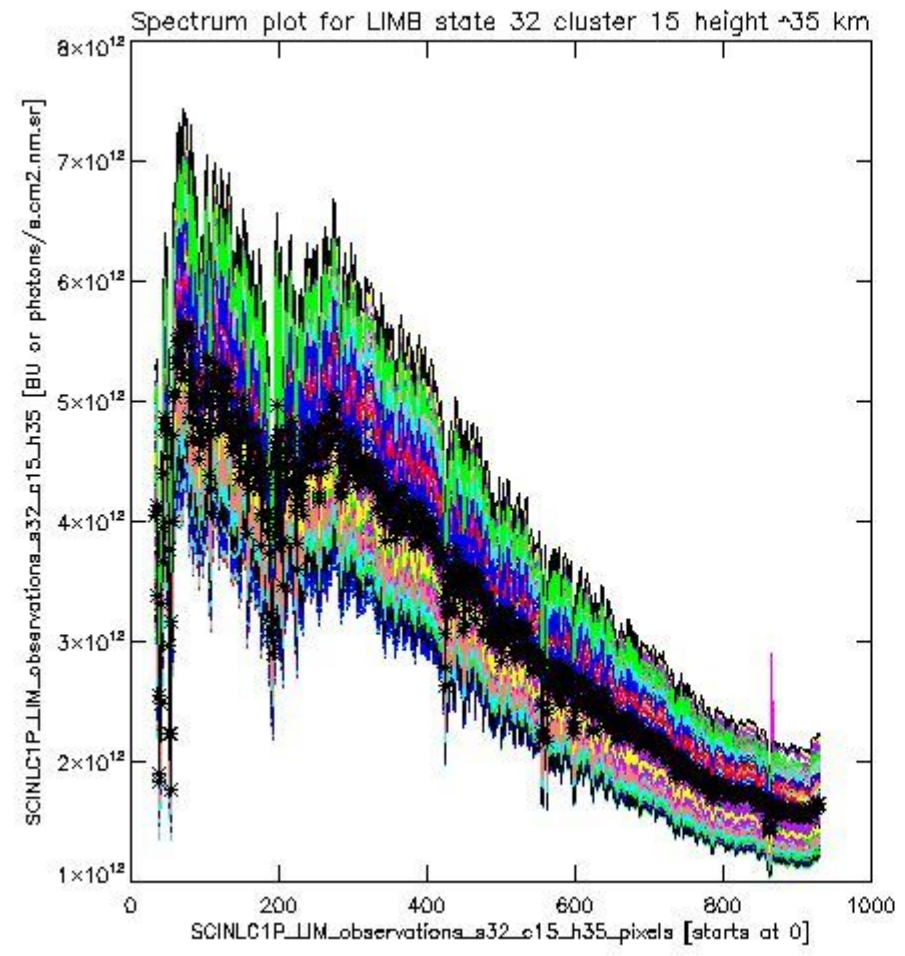




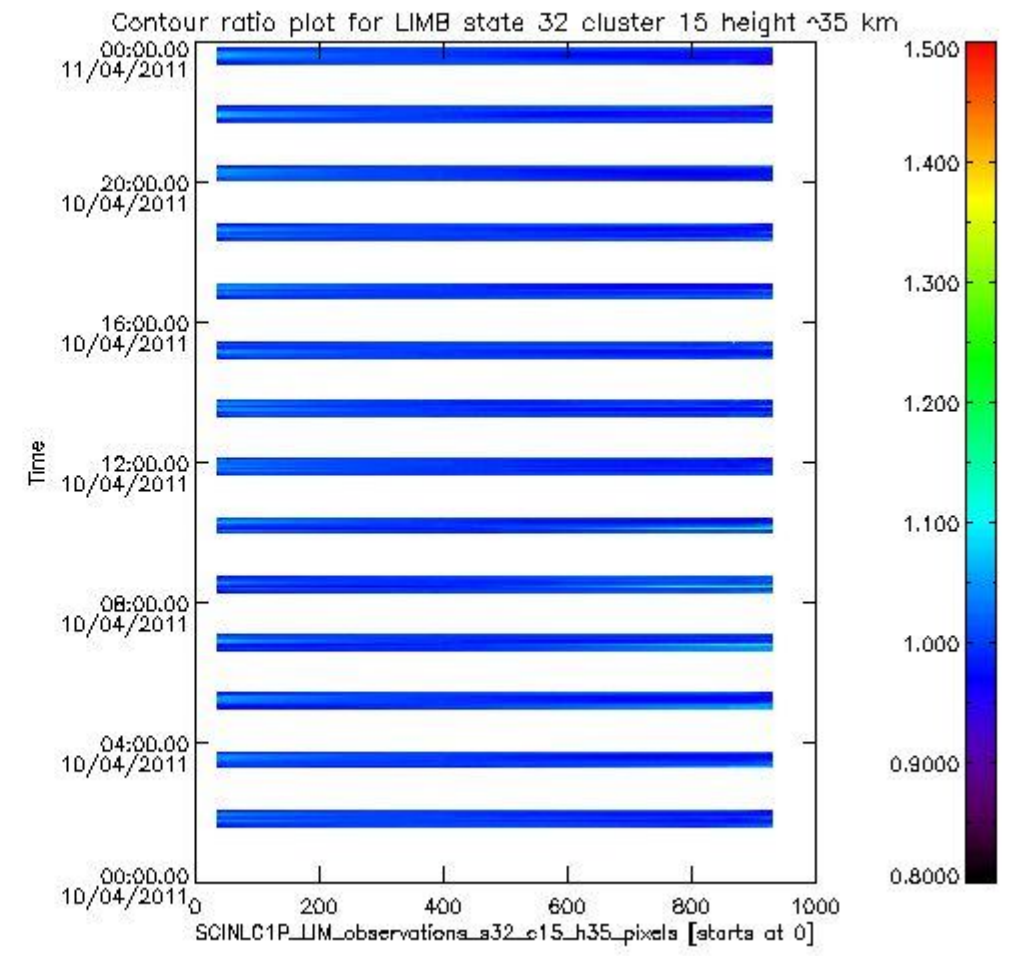
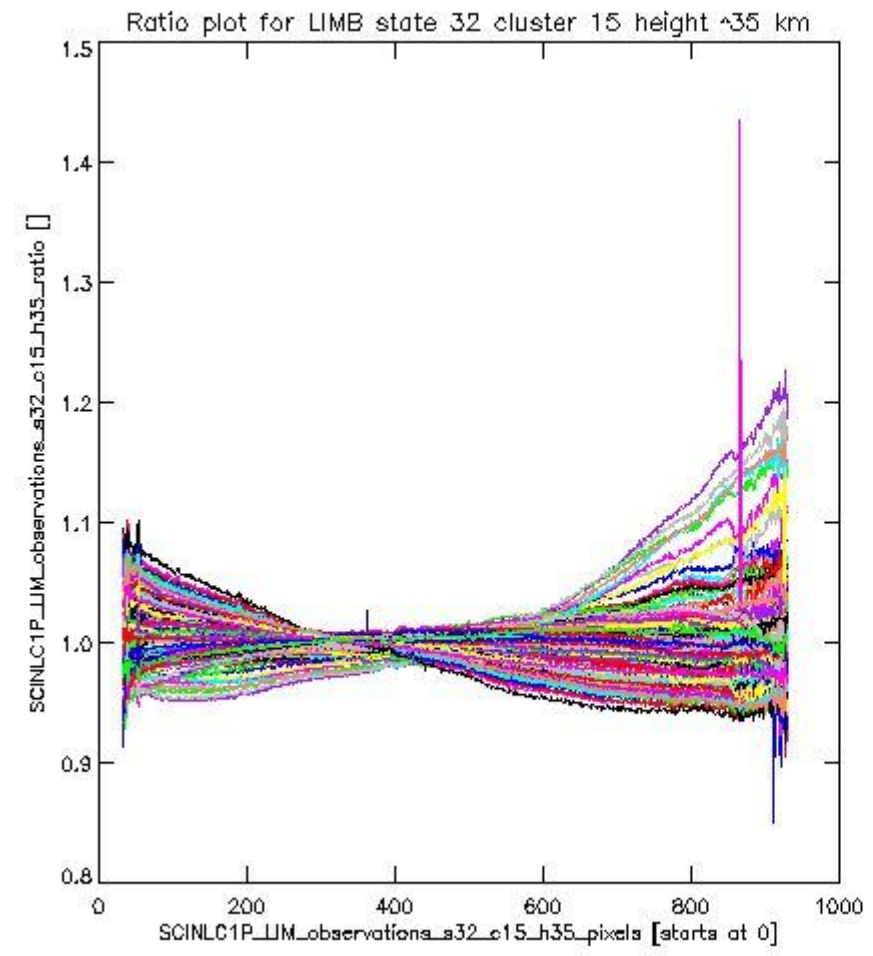
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_19.PNG

**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	10APR2011 01:35:07.075
Start time of last sample	10APR2011 23:45:33.941
Reference period start time	11MAR2011 01:38:35.955
Reference period stop time	08APR2011 23:20:07.934
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\_20110410\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110410\_21.PNG



