

# 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	02JUL2011 06:30:38
Data source version	SCIA/7.04-U
Processing scope for products	19JUN2011 00:00:00 to 20JUN2011 00:00:00
Start time of first product within scope	18JUN2011 22:35:45
Stop time of last product within scope	20JUN2011 00:40:46
Total number of level 1 products	13
Number of level 1 products with errors	0
SCIAL1C executable used in processing	Unknown
SCIAL1C parameters used in processing	Unknown

#### 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	19JUN2011 00:39:43.988	19JUN2011 17:31:52.468
1	NADIR	07	09	N/A	19JUN2011 00:39:43.988	19JUN2011 17:31:52.468
2	NADIR	07	15	N/A	19JUN2011 00:39:43.988	19JUN2011 17:31:52.468
3	NADIR	07	24	N/A	19JUN2011 00:39:43.988	19JUN2011 17:31:52.468
4	NADIR	07	55	N/A	19JUN2011 00:39:43.988	19JUN2011 17:31:52.468
5	LIMB	32	09	~19 km	19JUN2011 02:05:27.703	19JUN2011 23:59:37.616
6	LIMB	32	09	~22 km	19JUN2011 02:05:27.703	19JUN2011 23:59:37.616
7	LIMB	32	09	~25 km	19JUN2011 02:05:27.703	19JUN2011 23:59:37.616
8	LIMB	32	15	~22 km	19JUN2011 02:05:27.703	19JUN2011 23:59:37.616
9	LIMB	32	15	~25 km	19JUN2011 02:05:27.703	19JUN2011 23:59:37.616
10	LIMB	32	15	~35 km	19JUN2011 02:05:27.703	19JUN2011 23:59:37.616

#### 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_1CUDPA20110618_222655_000057493103_00346_48636_2321.N1</a>	18JUN2011 22:35:45	18JUN2011 23:37:06	0	35	0	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110619_000709_000057493103_00347_48637_2324.N1</a>	19JUN2011 00:16:55	19JUN2011 01:17:07	0	34	0	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110619_014729_000057423103_00348_48638_2327.N1</a>	19JUN2011 01:47:29	19JUN2011 02:57:58	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110619_032743_000057423103_00349_48639_2326.N1</a>	19JUN2011 03:27:43	19JUN2011 04:37:58	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110619_050757_000057423103_00350_48640_2330.N1</a>	19JUN2011 05:07:57	19JUN2011 06:18:26	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110619_064812_000057423103_00351_48641_2332.N1</a>	19JUN2011 06:48:12	19JUN2011 07:58:27	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110619_082826_000057423103_00352_48642_2335.N1	19JUN2011 08:28:26	19JUN2011 09:38:55	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110619_100840_000057423103_00353_48643_2336.N1	19JUN2011 10:08:40	19JUN2011 11:18:55	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110619_114854_000057423103_00354_48644_2339.N1	19JUN2011 11:48:54	19JUN2011 12:59:23	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110619_132908_000057423103_00355_48645_2340.N1	19JUN2011 13:29:08	19JUN2011 14:39:22	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110619_150922_000057423103_00356_48646_2343.N1	19JUN2011 15:09:22	19JUN2011 16:19:51	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110619_164936_000057423103_00357_48647_2344.N1	19JUN2011 16:49:36	19JUN2011 17:59:50	0	35	31	0	0	1	0	0	
12	SCI_NLC_1CUDPA20110619_233031_000057423103_00361_48651_2352.N1	19JUN2011 23:30:31	20JUN2011 00:40:46	0	35	31	0	0	1	0	0	

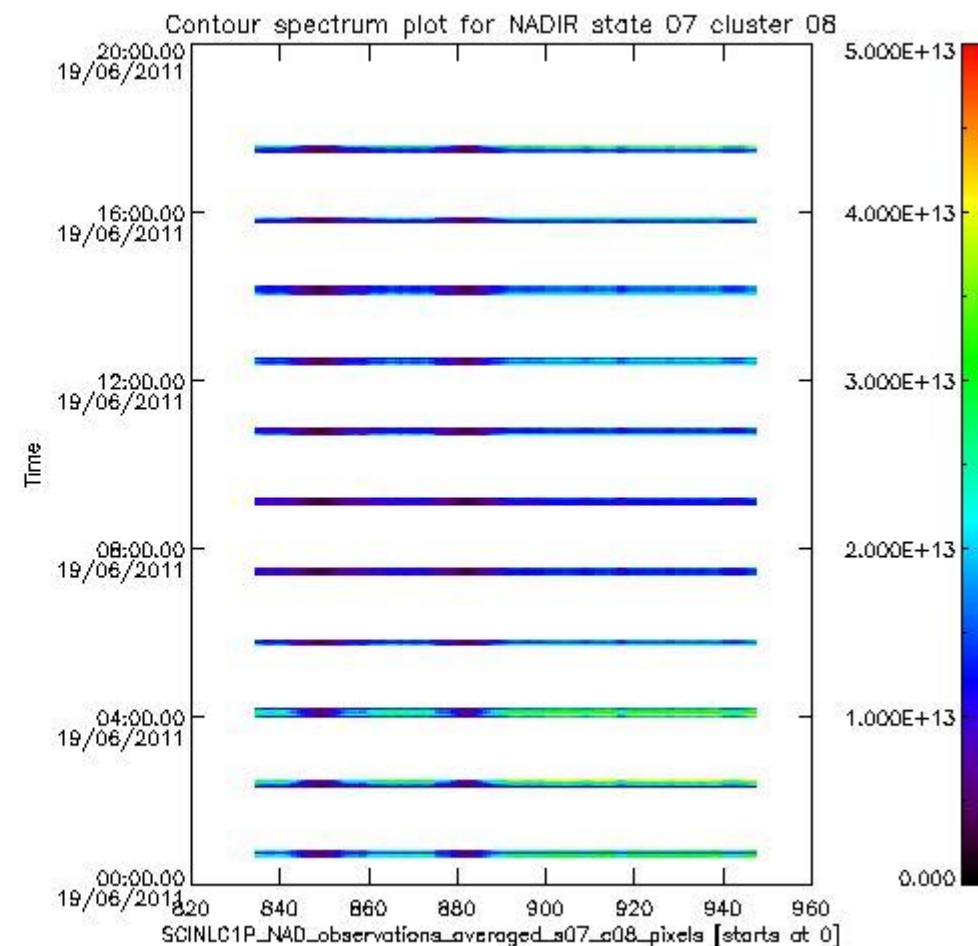
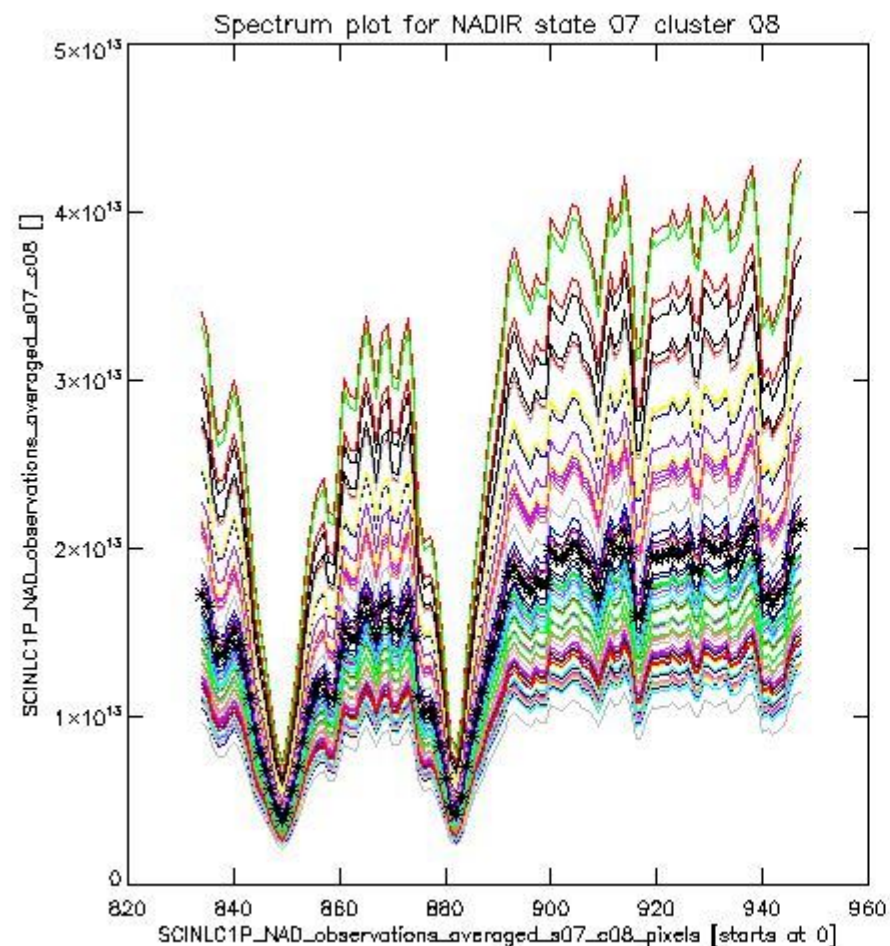
## 1.2 Source packet monitoring

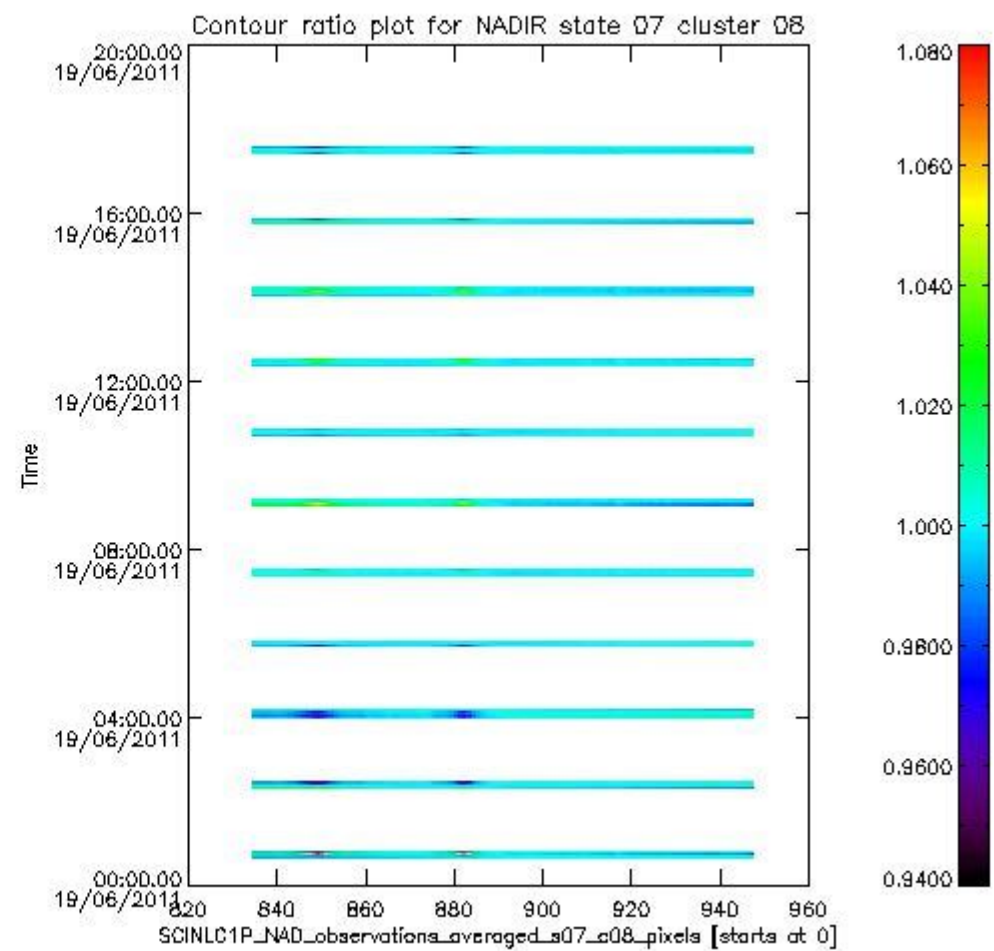
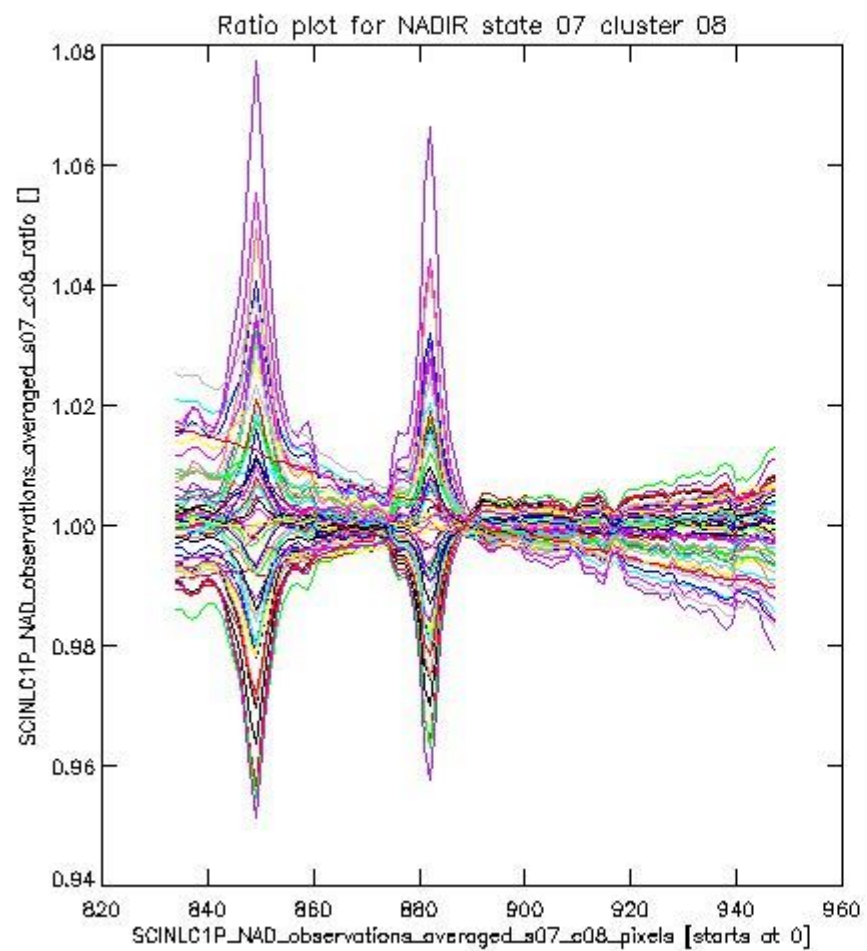
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	19JUN2011 00:39:43.988
Start time of last sample	19JUN2011 17:31:52.468
Reference period start time	20MAY2011 00:41:31.662
Reference period stop time	18JUN2011 23:08:56.409
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



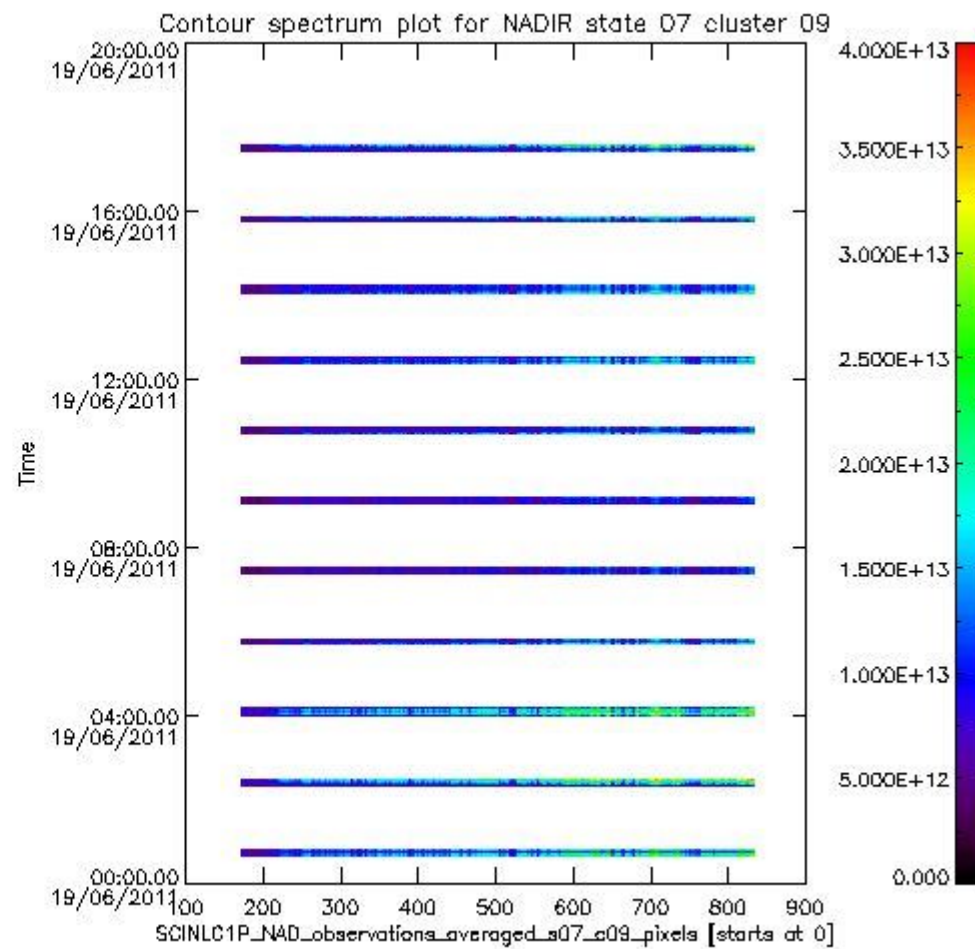
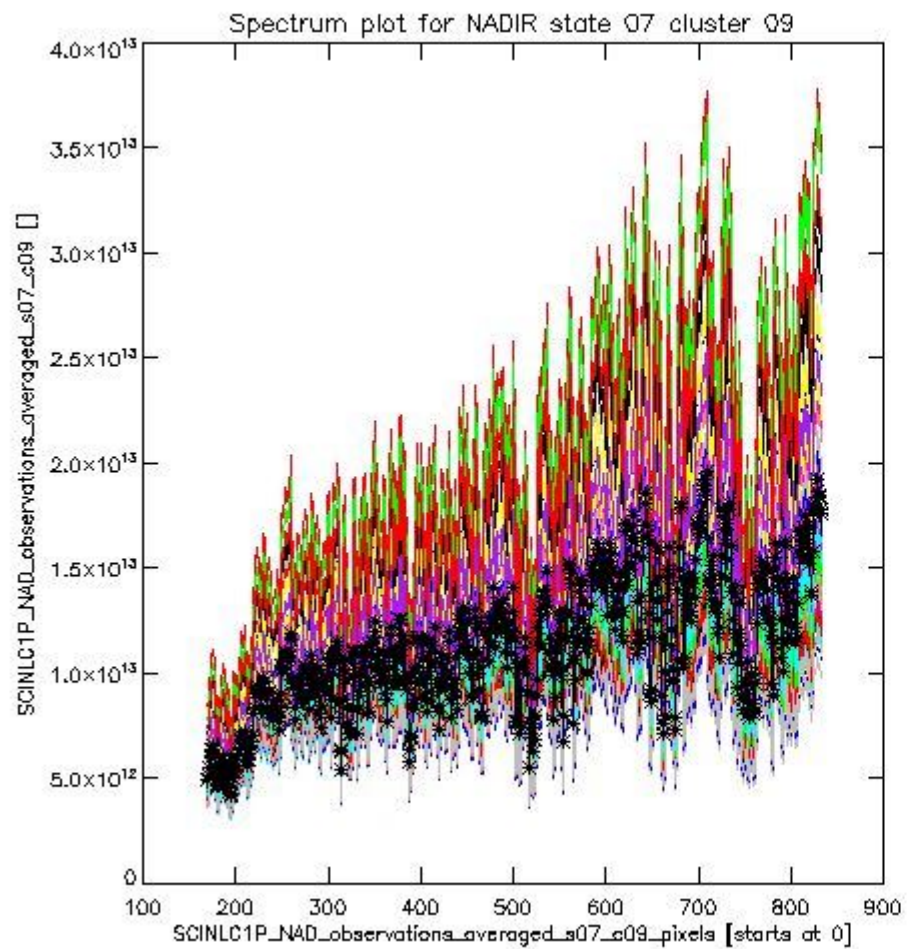


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_1.PNG

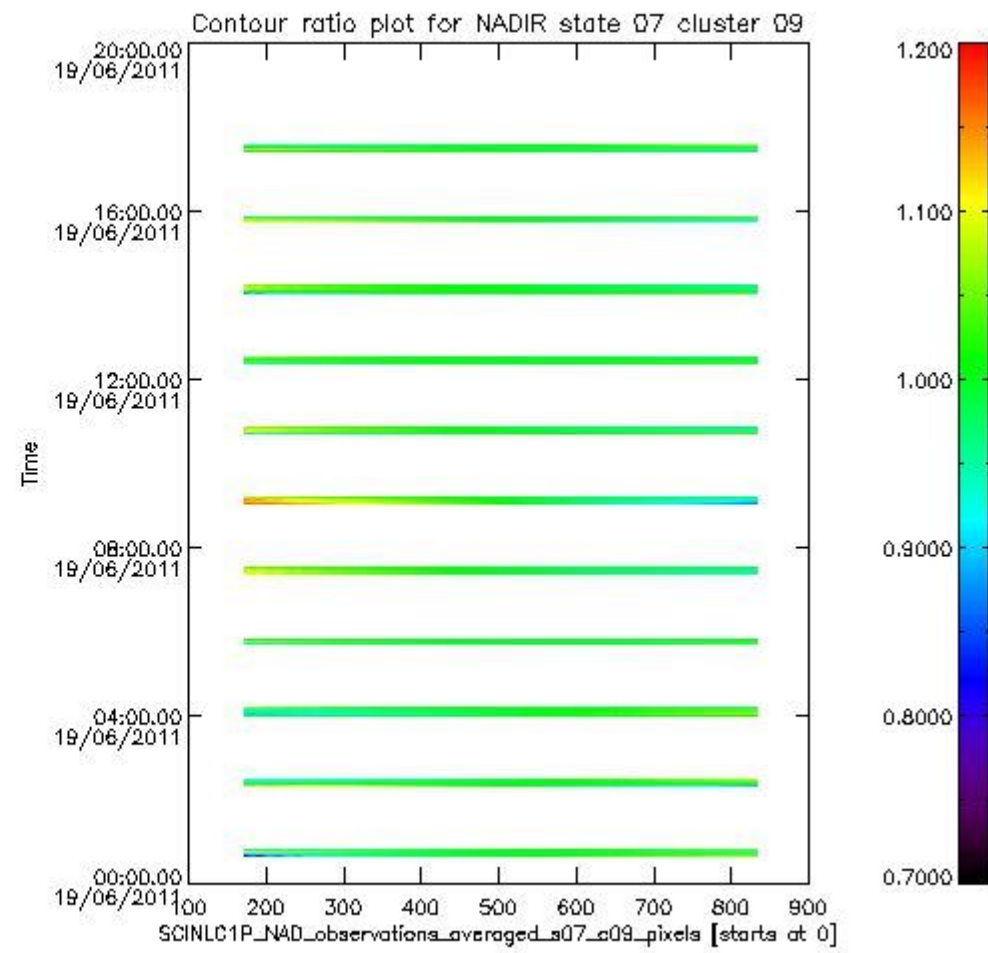
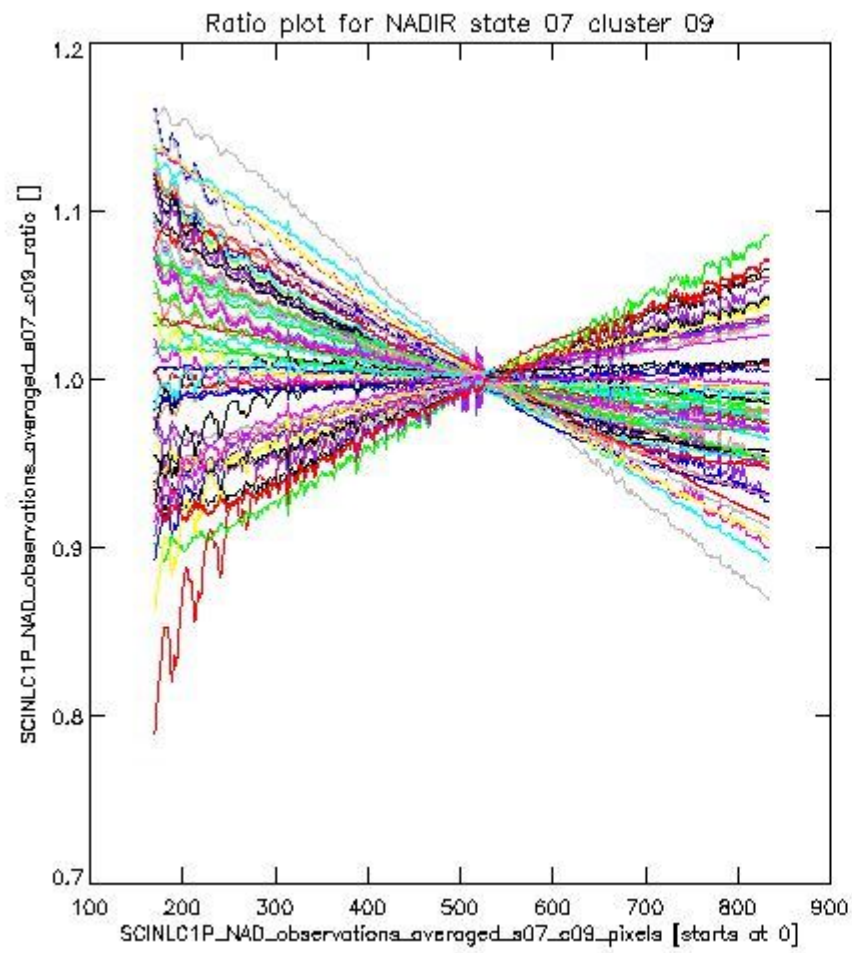
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	19JUN2011 00:39:43.988
Start time of last sample	19JUN2011 17:31:52.468
Reference period start time	20MAY2011 00:41:31.662
Reference period stop time	18JUN2011 23:08:56.409
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





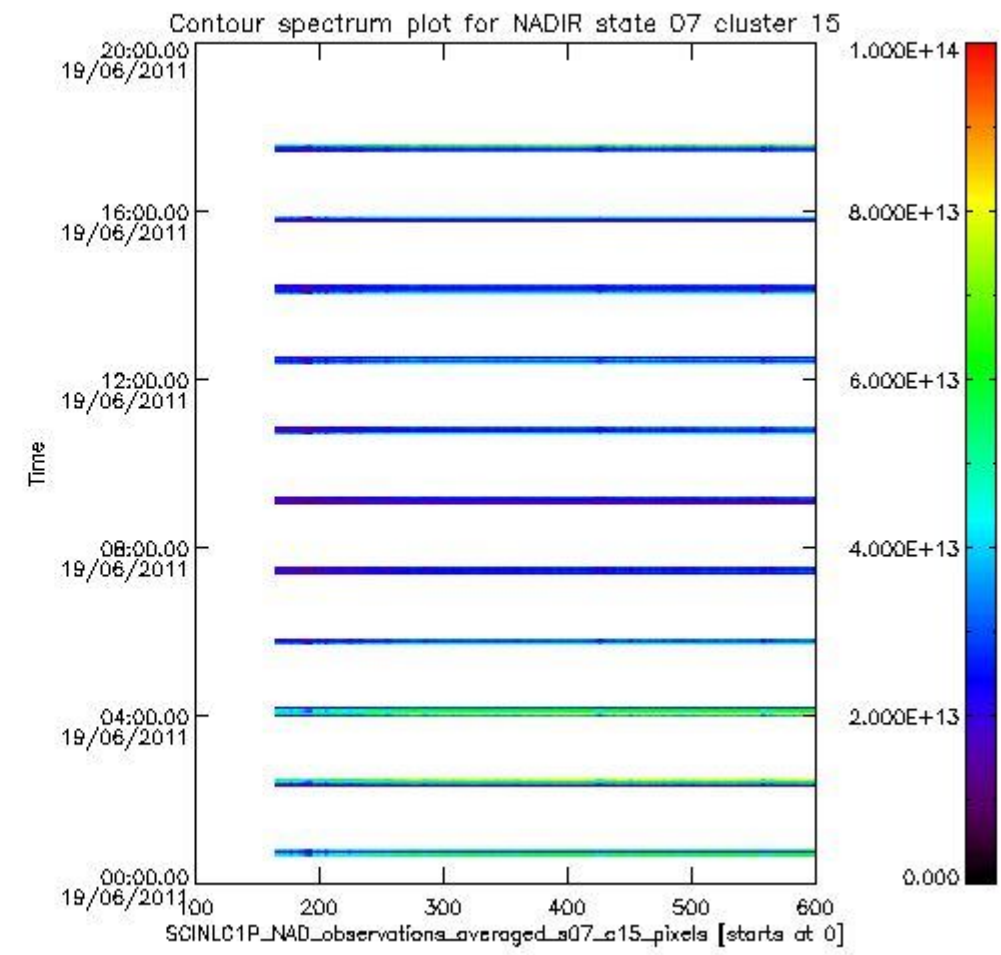
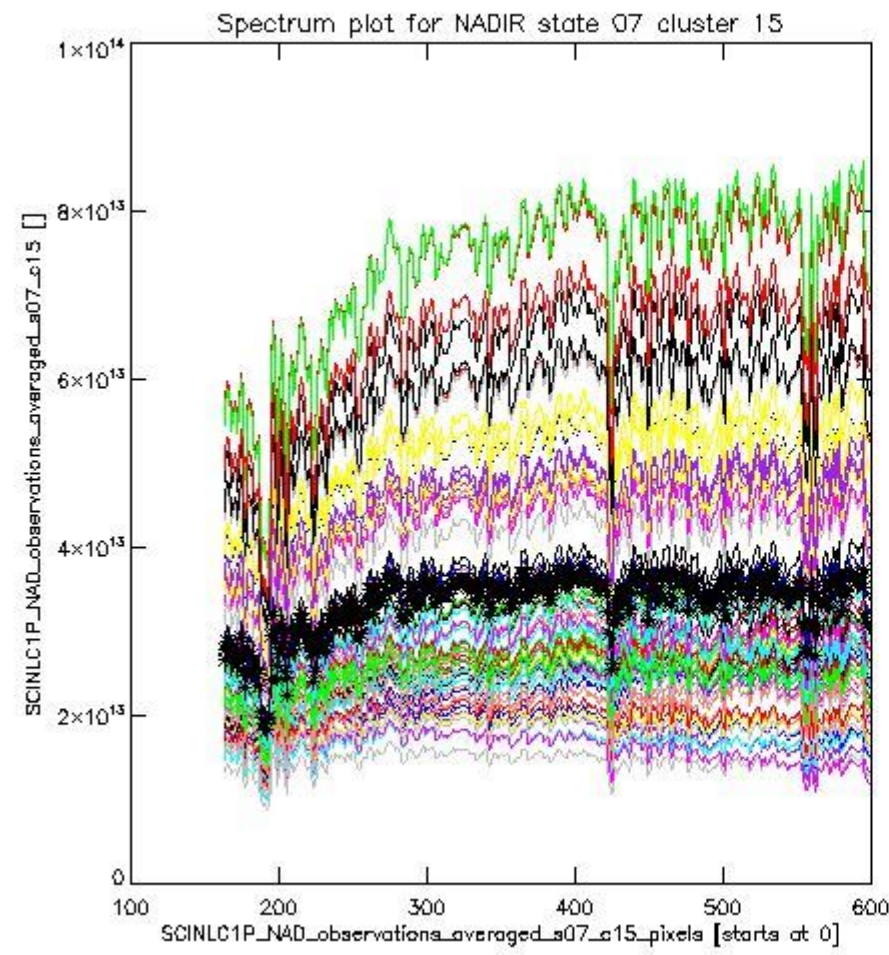
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_3.PNG

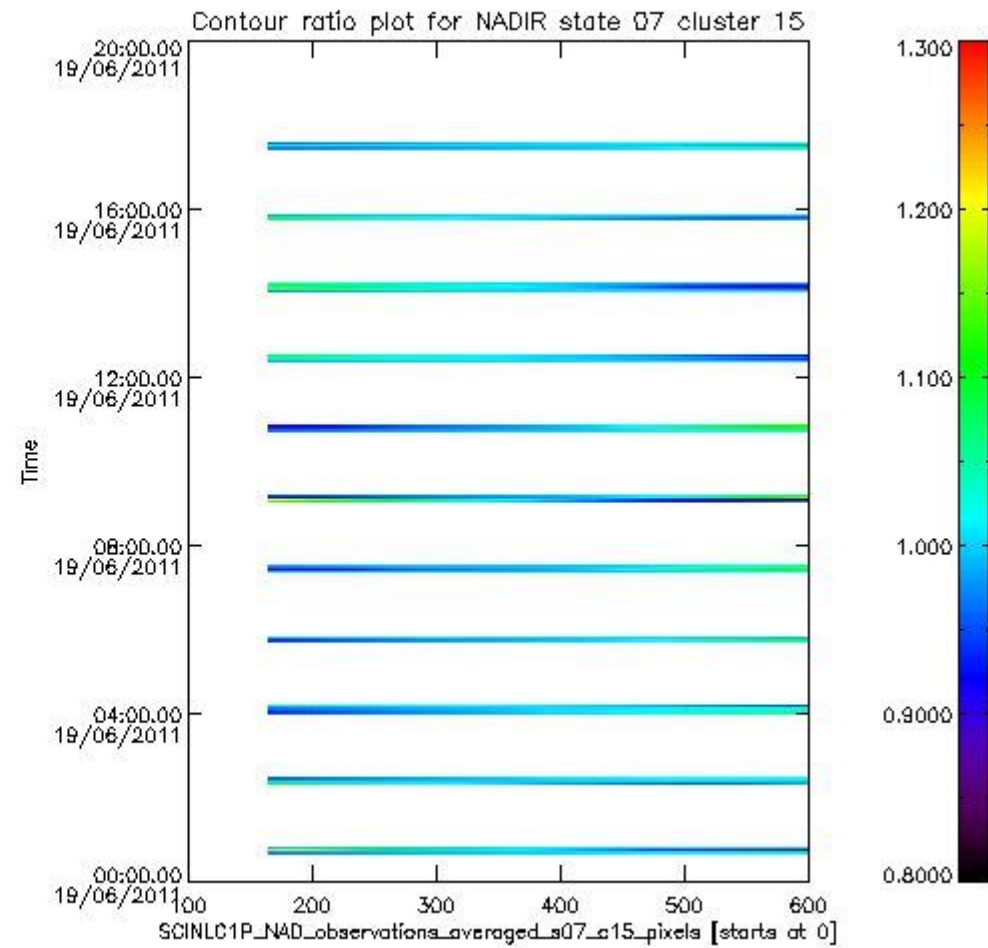
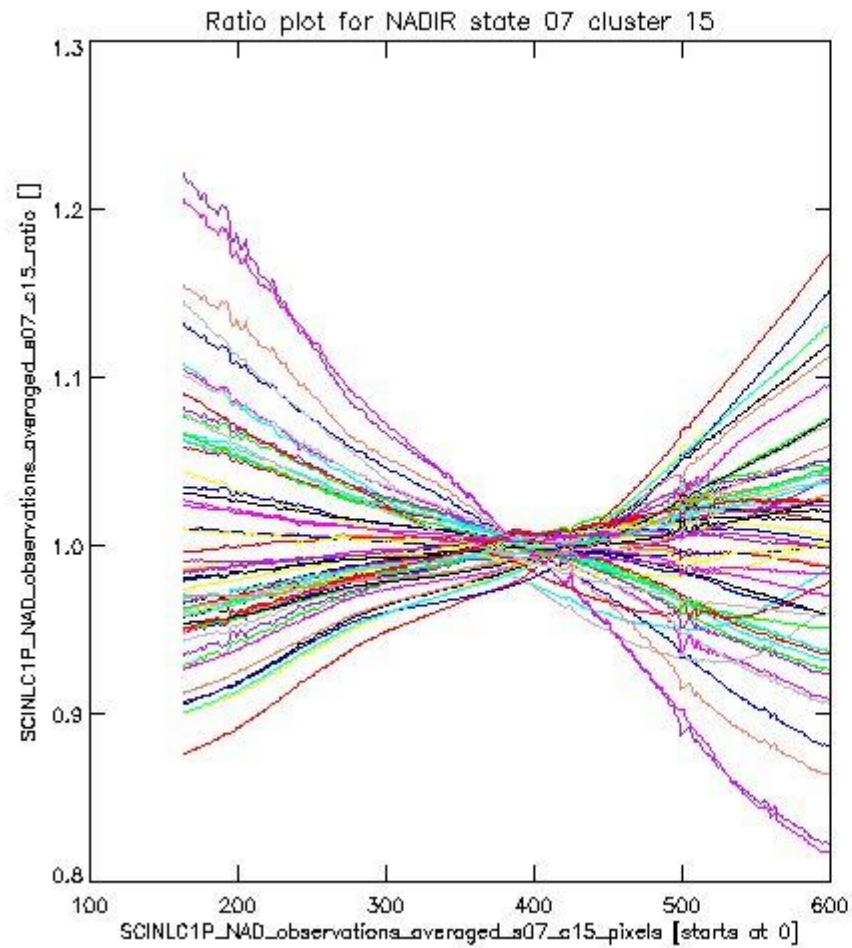
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	19JUN2011 00:39:43.988
Start time of last sample	19JUN2011 17:31:52.468
Reference period start time	20MAY2011 00:41:31.662
Reference period stop time	18JUN2011 23:08:56.409
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\_20110619\_4.PNG

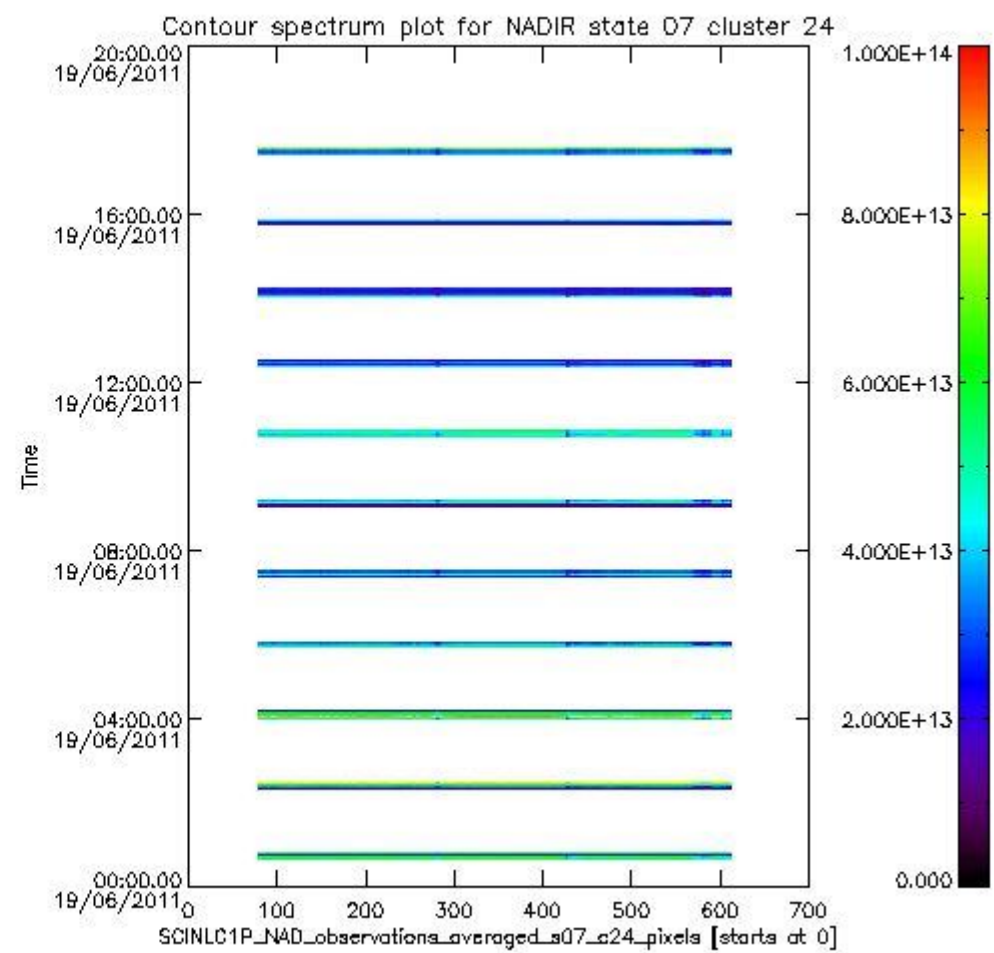
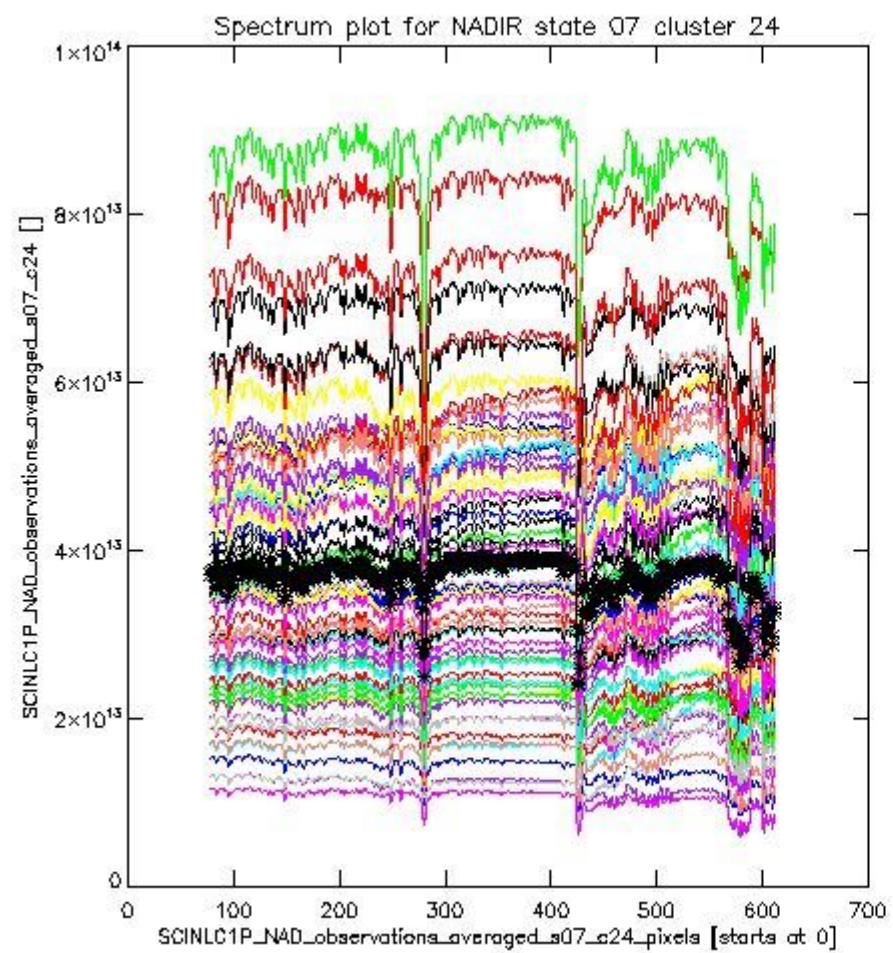




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_5.PNG

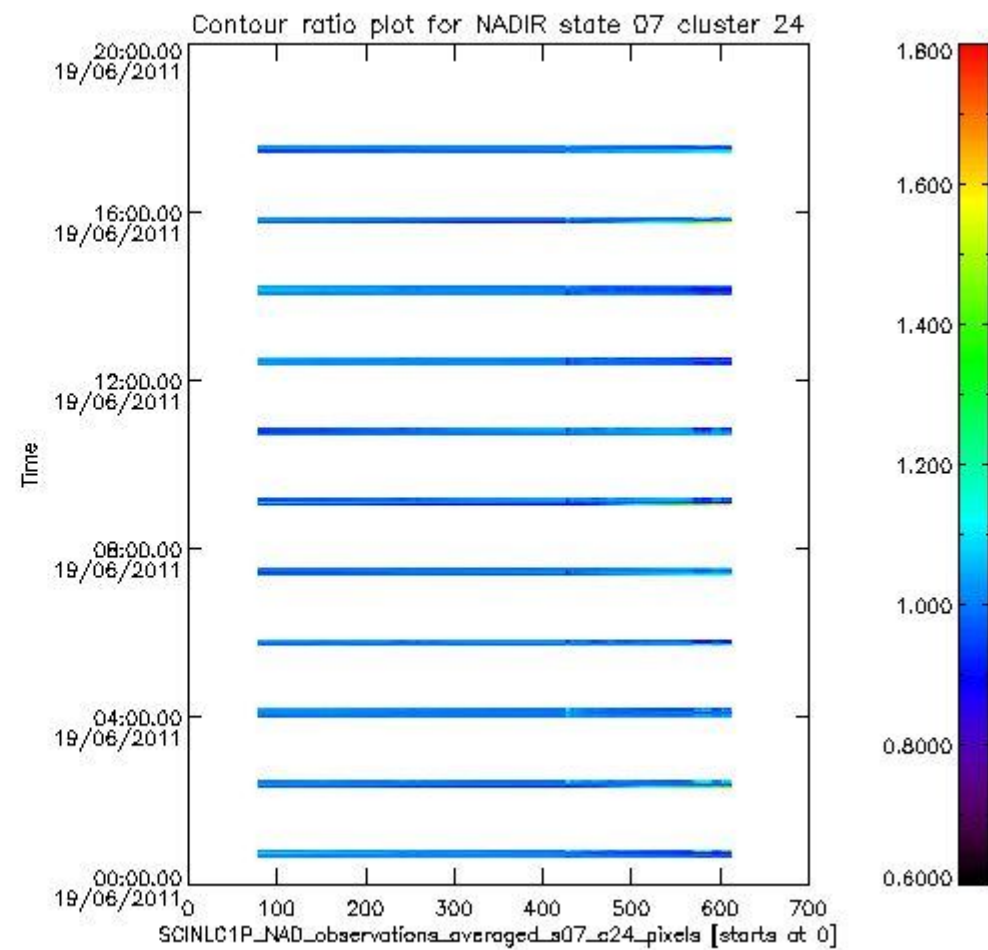
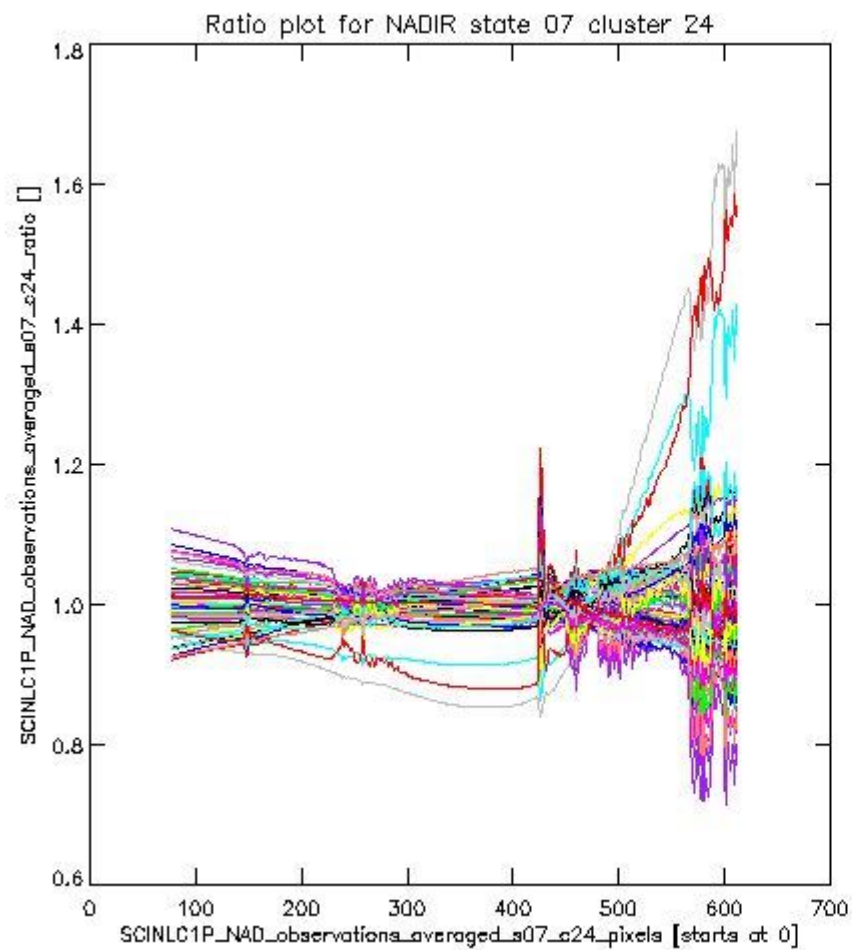
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	19JUN2011 00:39:43.988
Start time of last sample	19JUN2011 17:31:52.468
Reference period start time	20MAY2011 00:41:31.662
Reference period stop time	18JUN2011 23:08:56.409
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\_20110619\_6.PNG

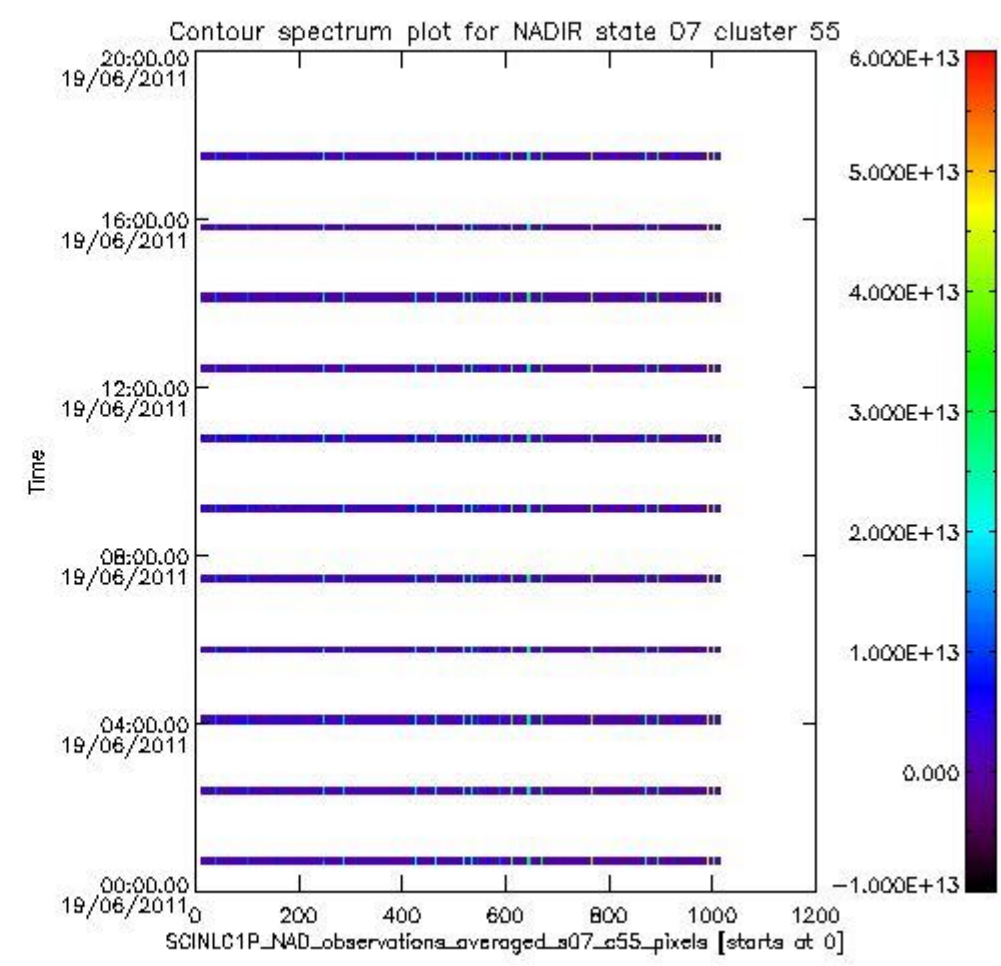
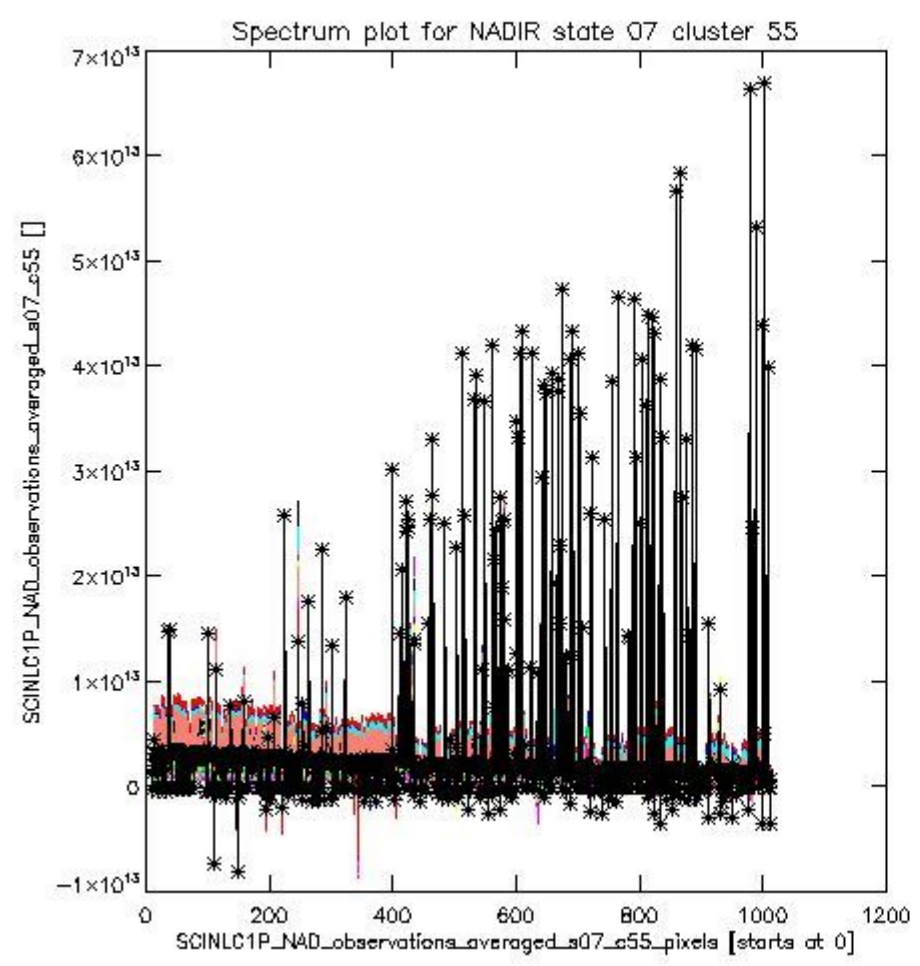




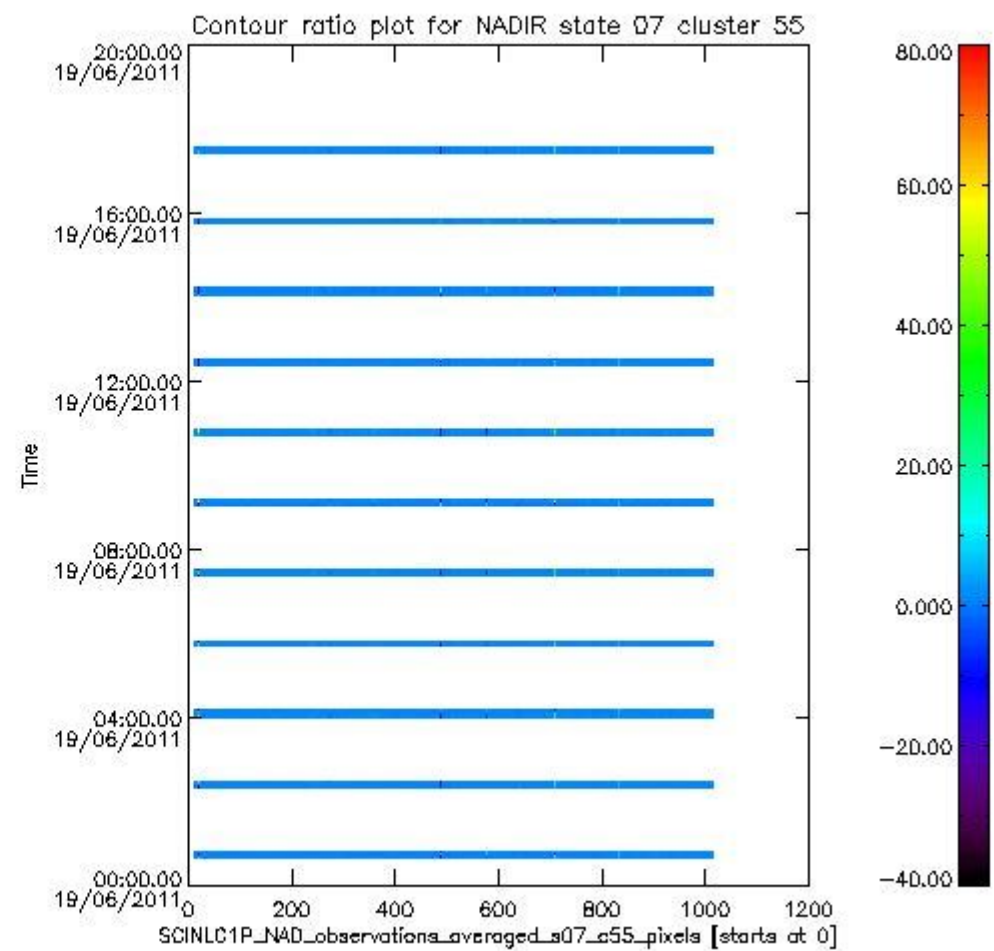
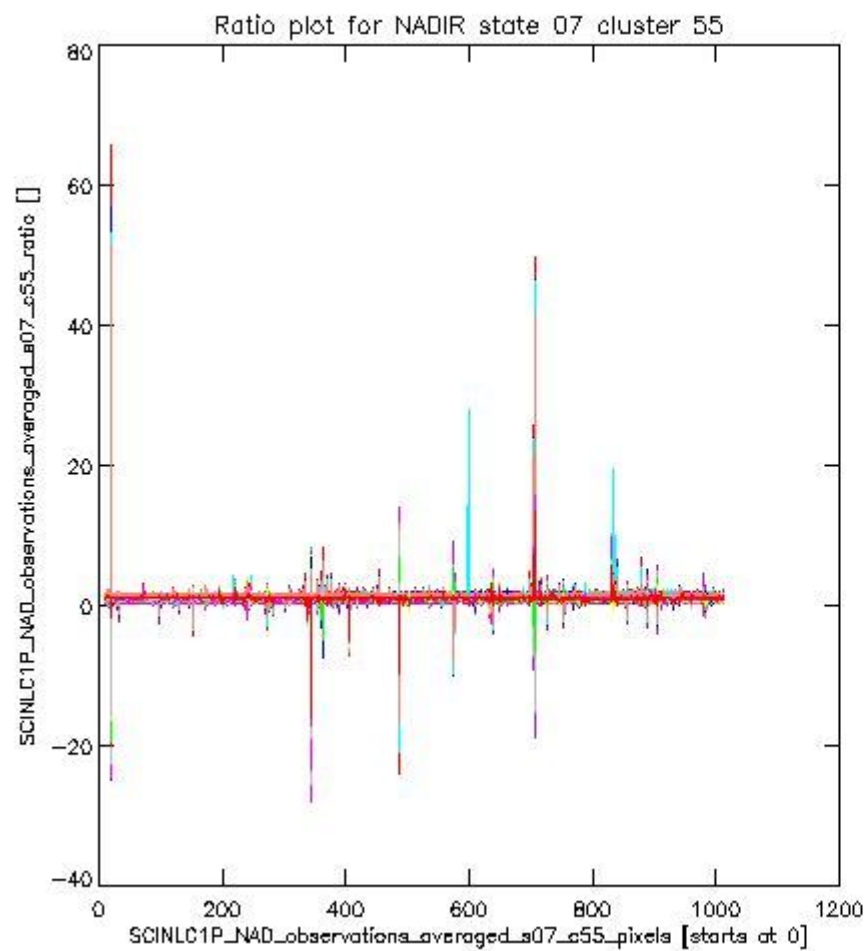
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_7.PNG

**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	19JUN2011 00:39:43.988
Start time of last sample	19JUN2011 17:31:52.468
Reference period start time	20MAY2011 00:41:31.662
Reference period stop time	18JUN2011 23:08:56.409
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\_20110619\_8.PNG

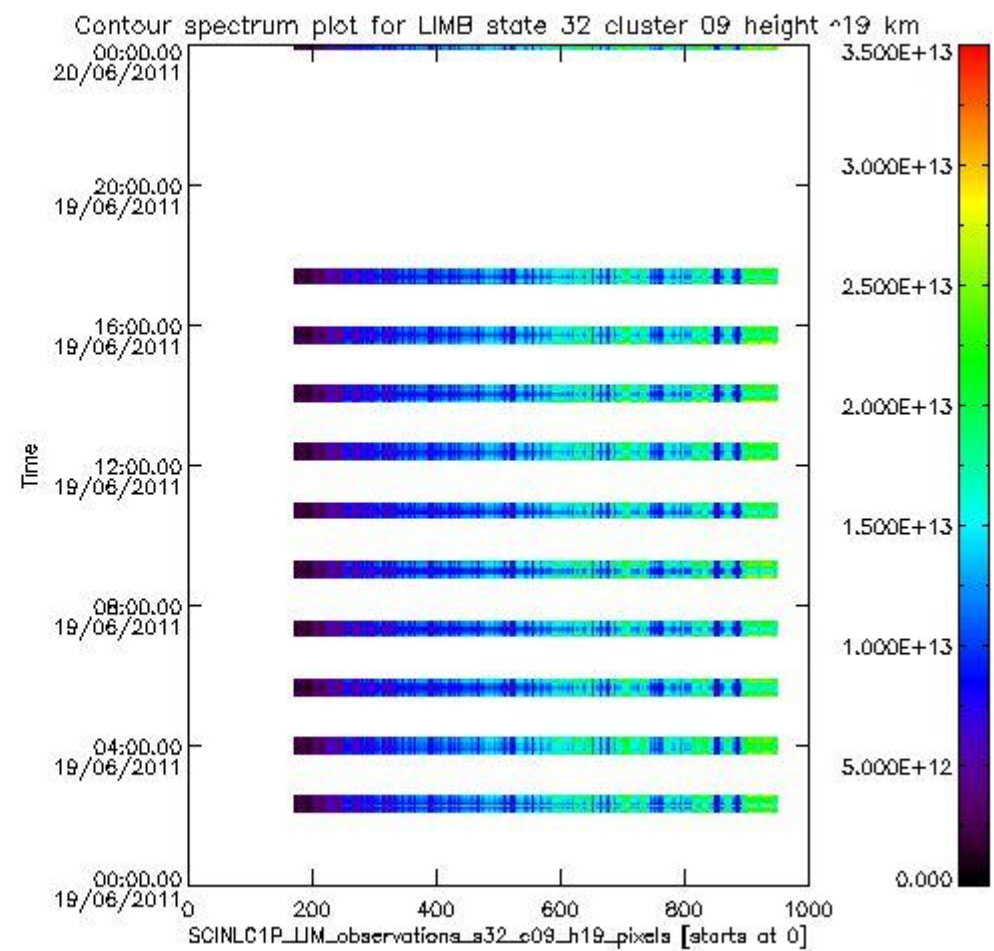
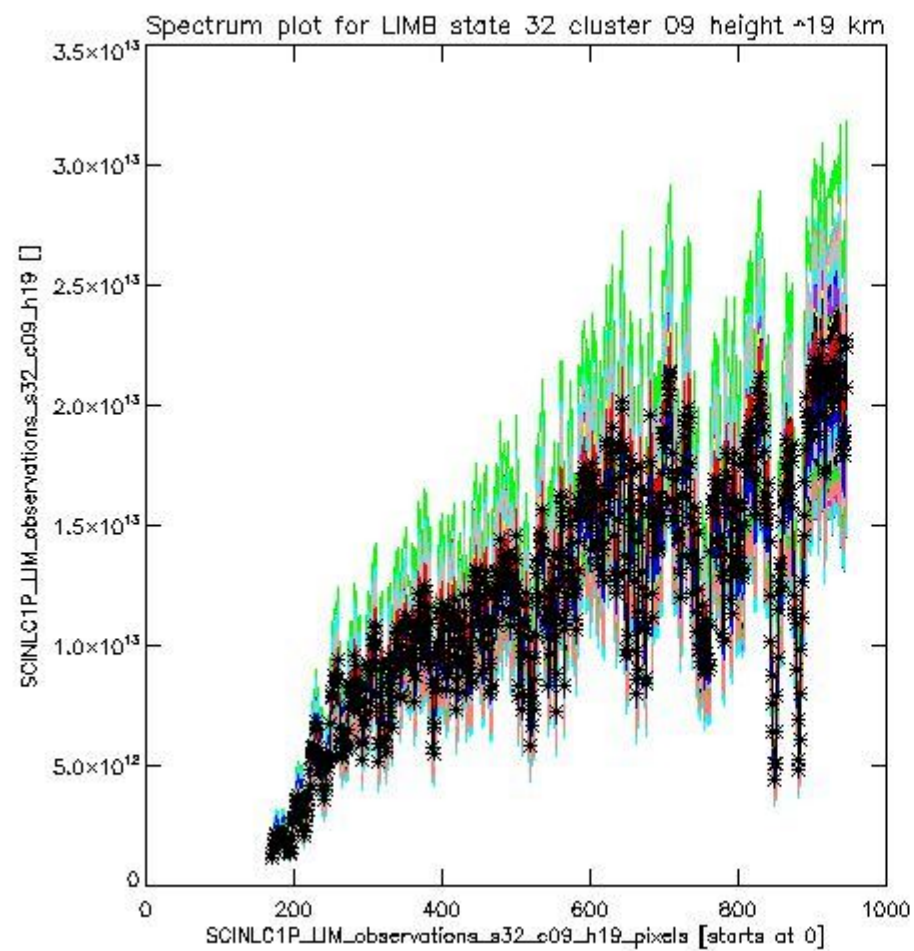


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_9.PNG

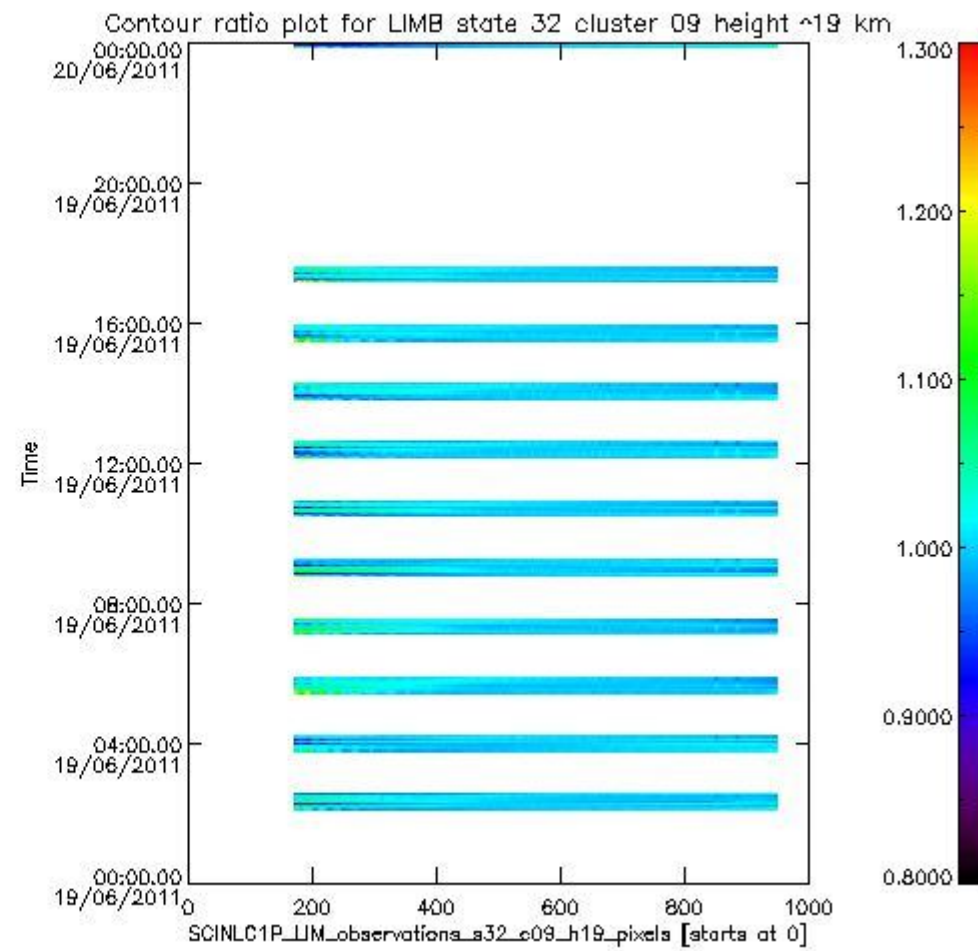
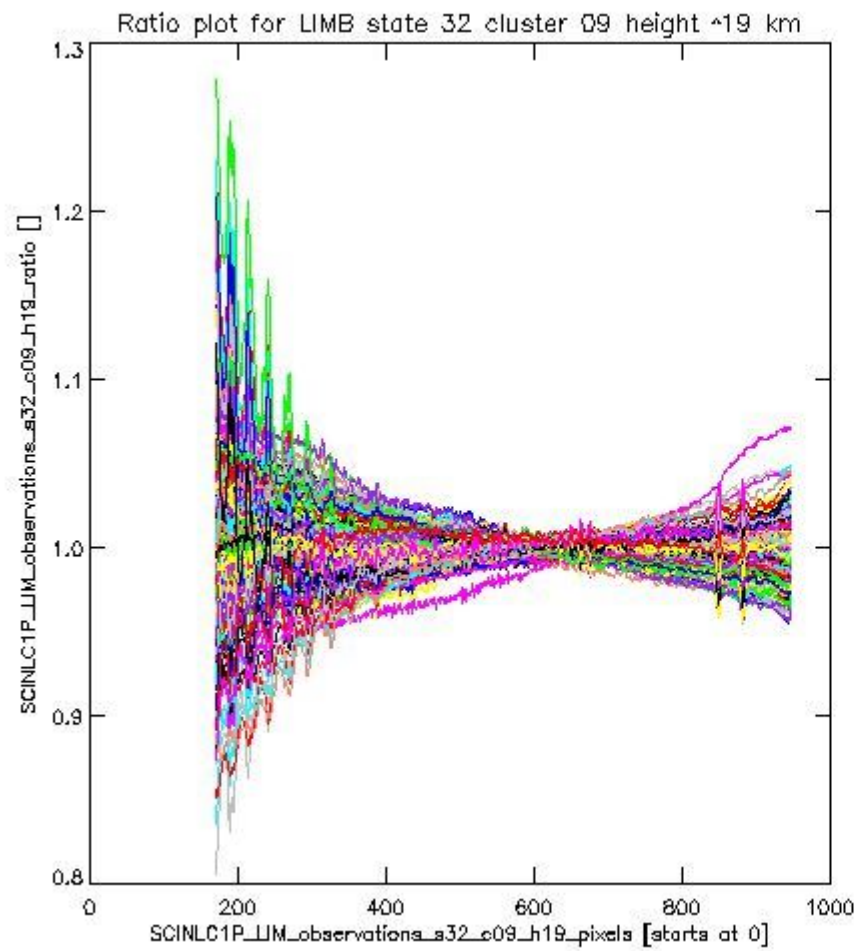
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	19JUN2011 02:05:27.703
Start time of last sample	19JUN2011 23:59:37.616
Reference period start time	20MAY2011 02:07:00.823
Reference period stop time	17JUN2011 23:50:23.504
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





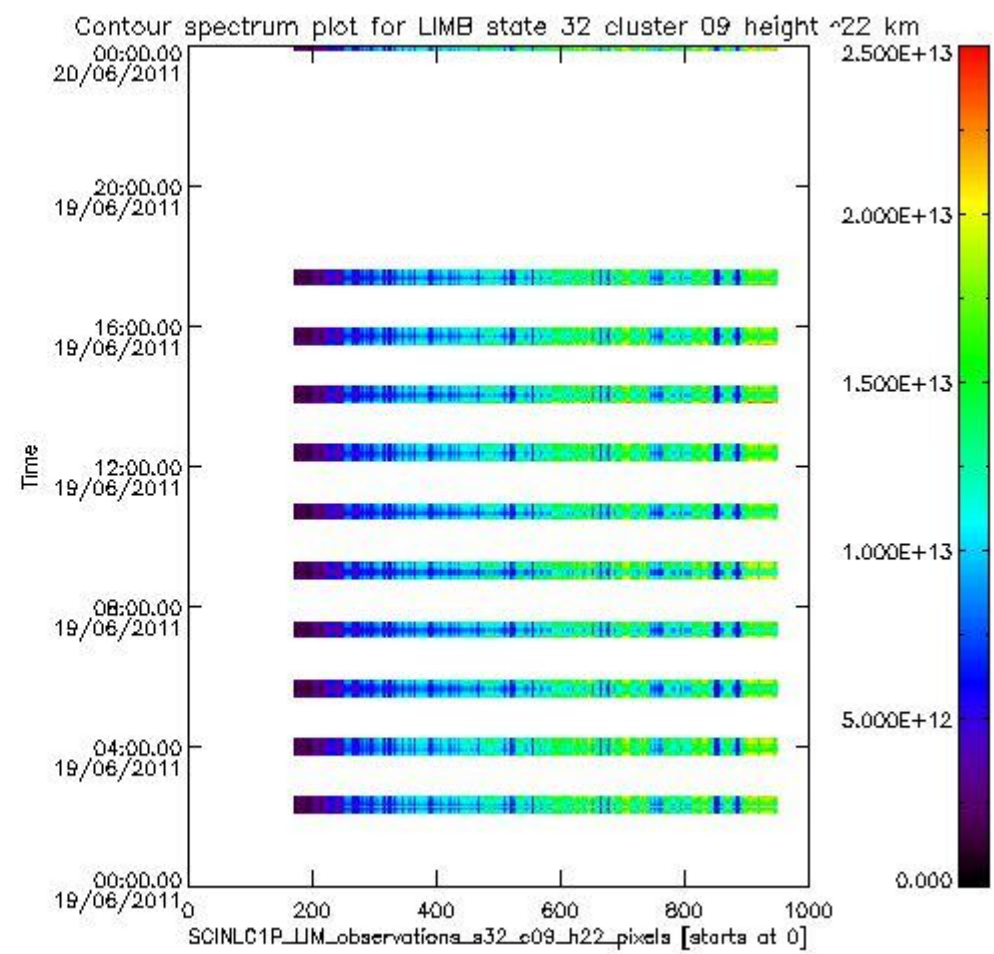
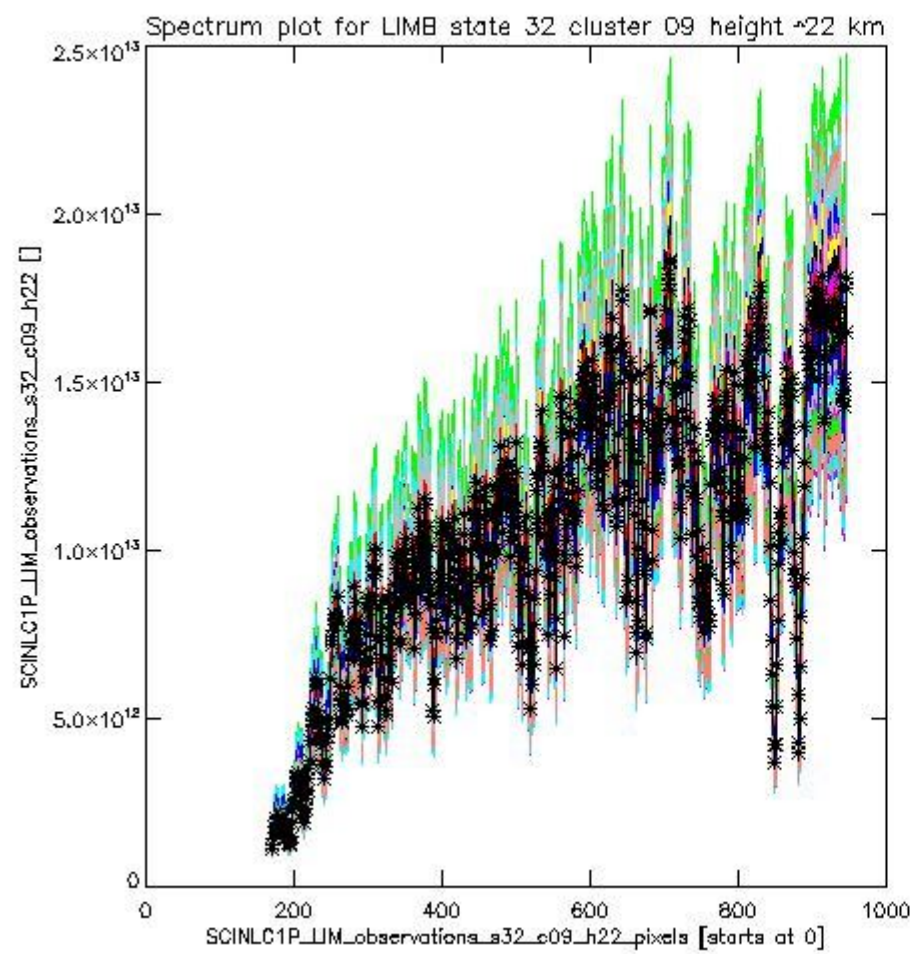
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_11.PNG

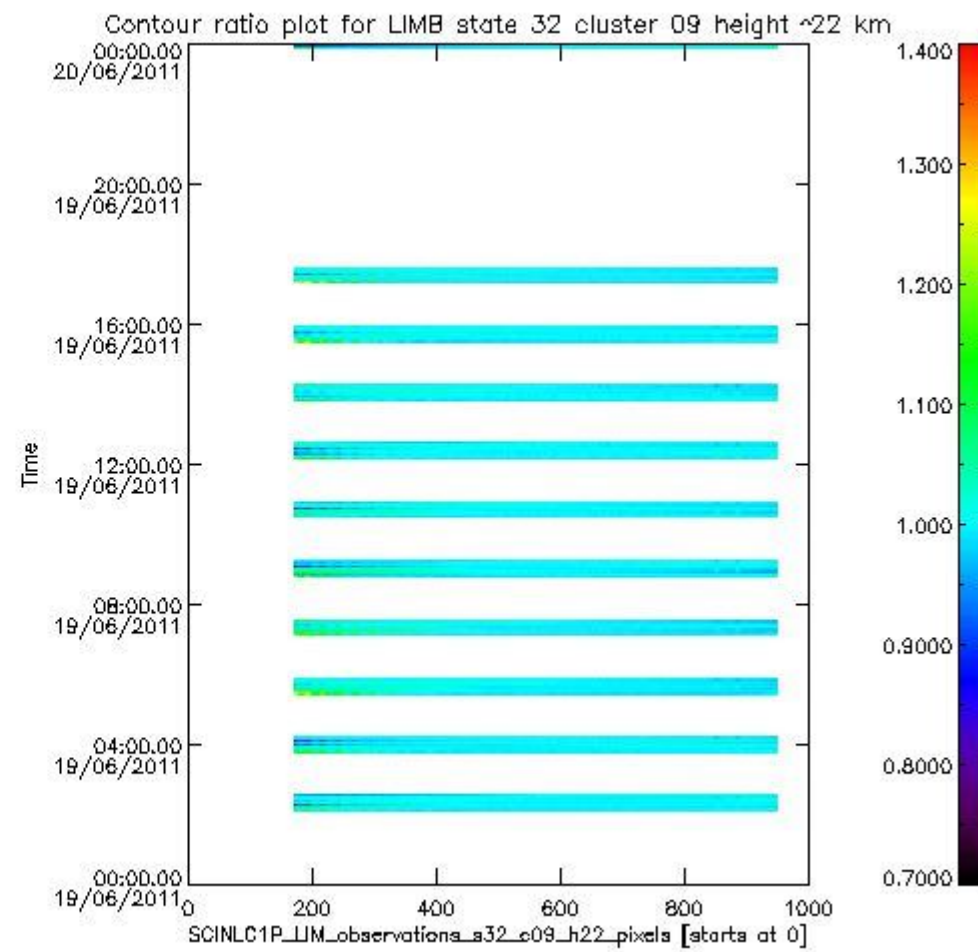
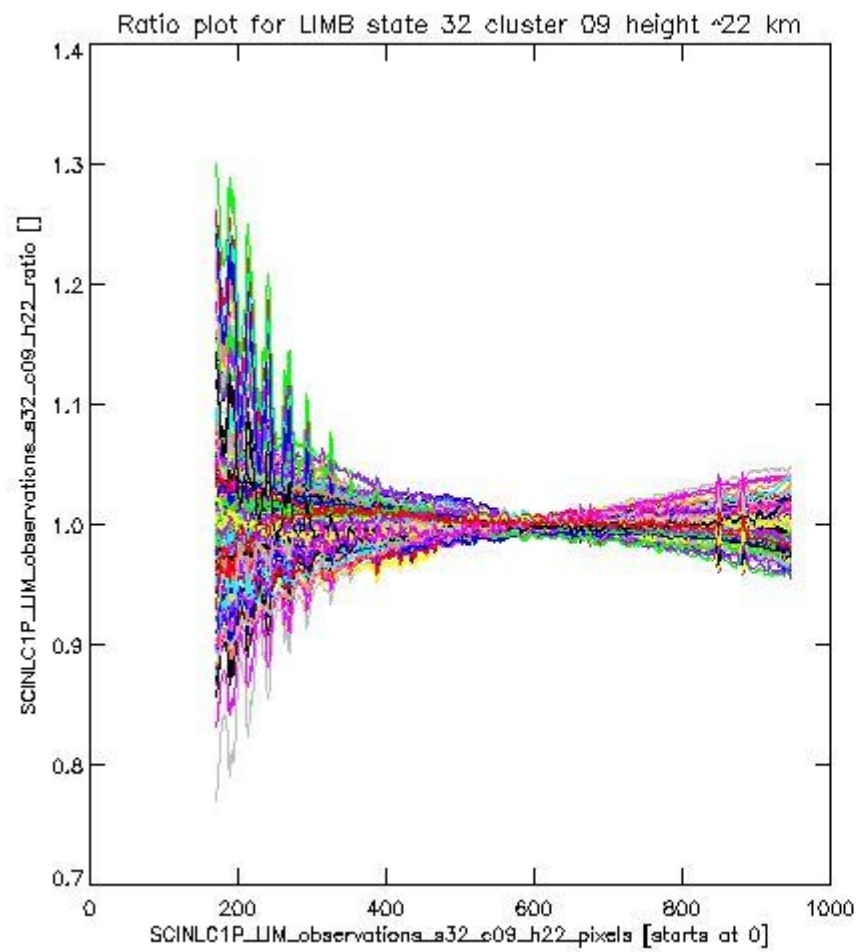
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	19JUN2011 02:05:27.703
Start time of last sample	19JUN2011 23:59:37.616
Reference period start time	20MAY2011 02:07:00.823
Reference period stop time	17JUN2011 23:50:23.504
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\_20110619\_12.PNG

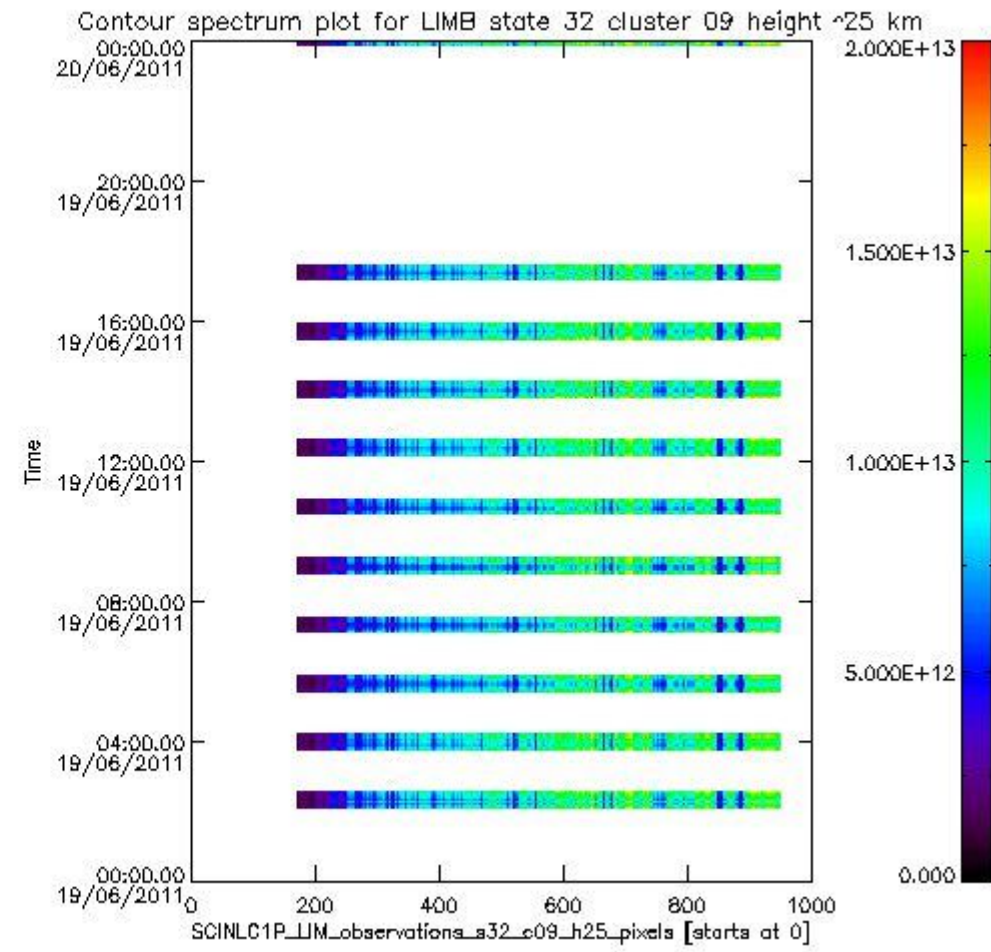
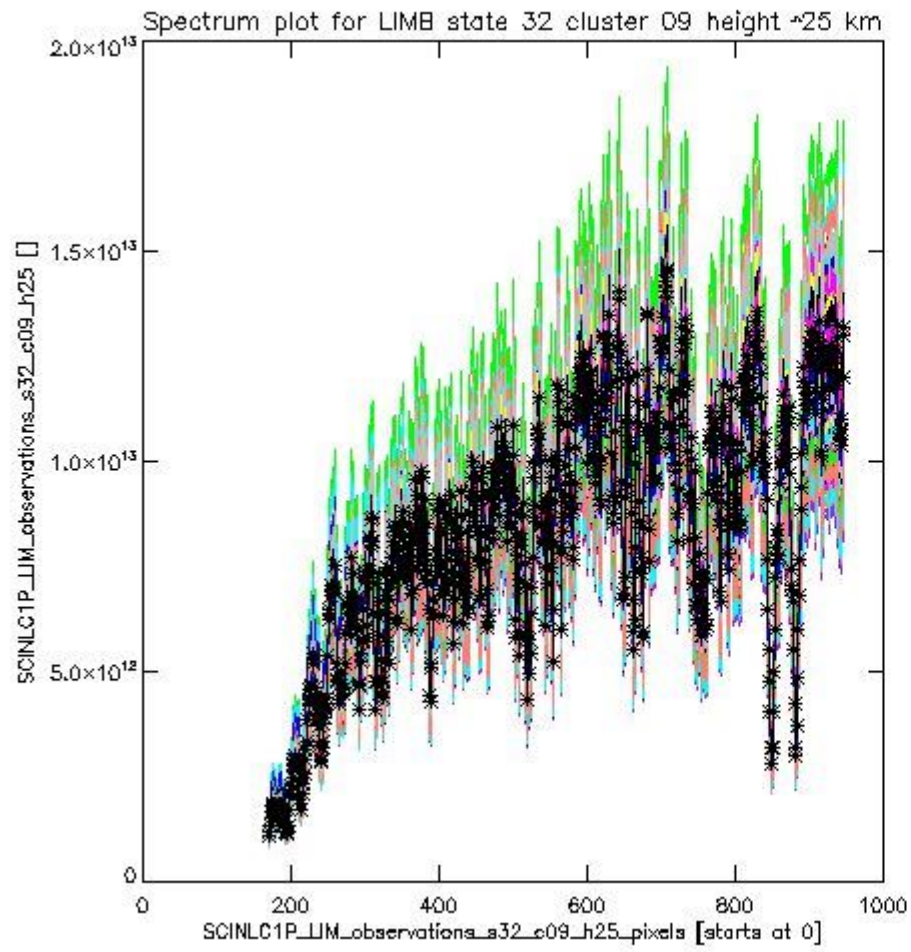




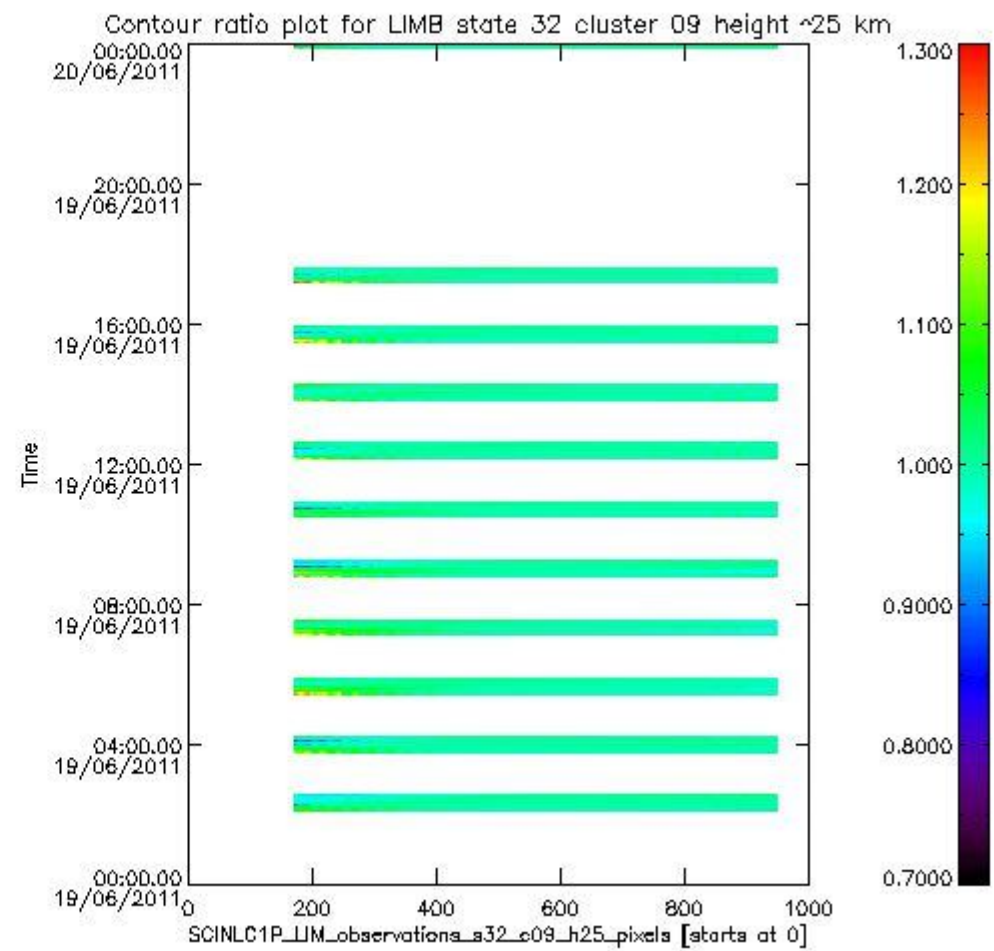
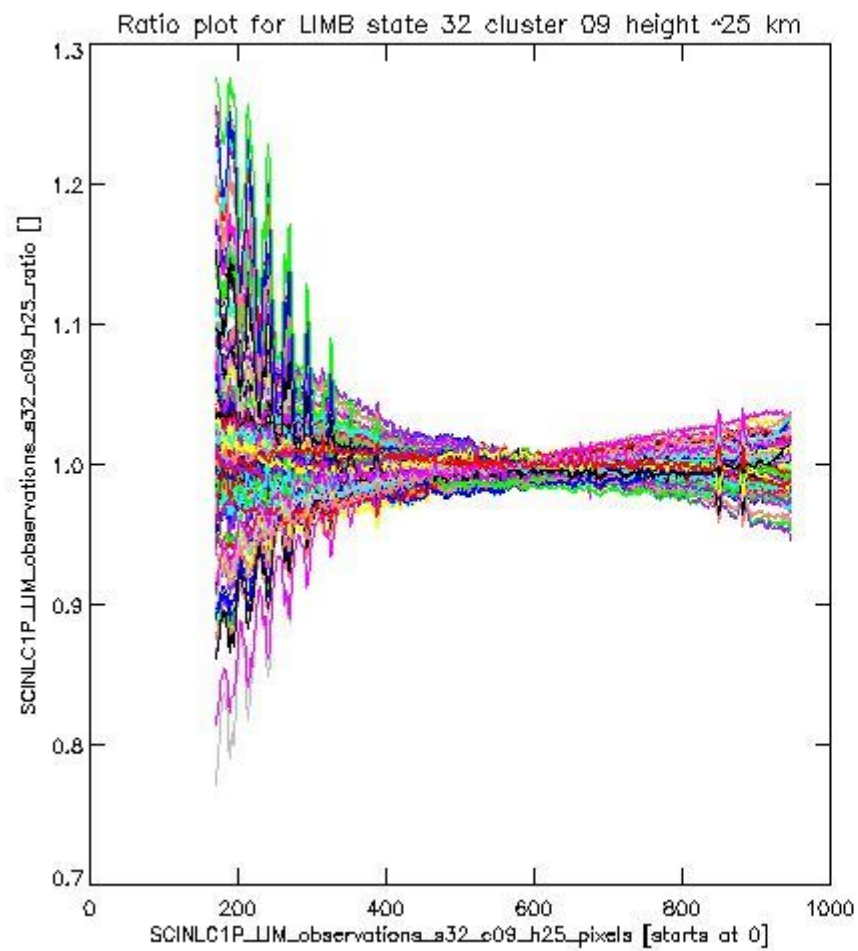
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_13.PNG

**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	19JUN2011 02:05:27.703
Start time of last sample	19JUN2011 23:59:37.616
Reference period start time	20MAY2011 02:07:00.823
Reference period stop time	17JUN2011 23:50:23.504
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\_20110619\_14.PNG

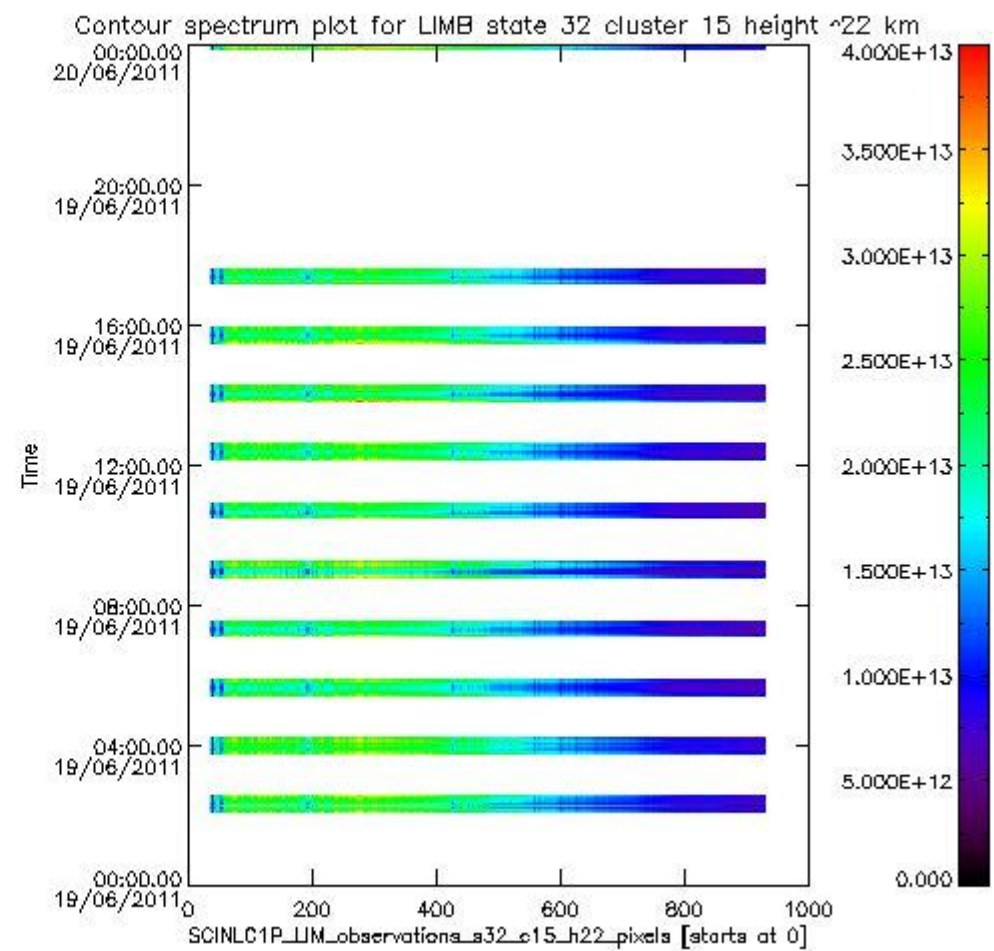
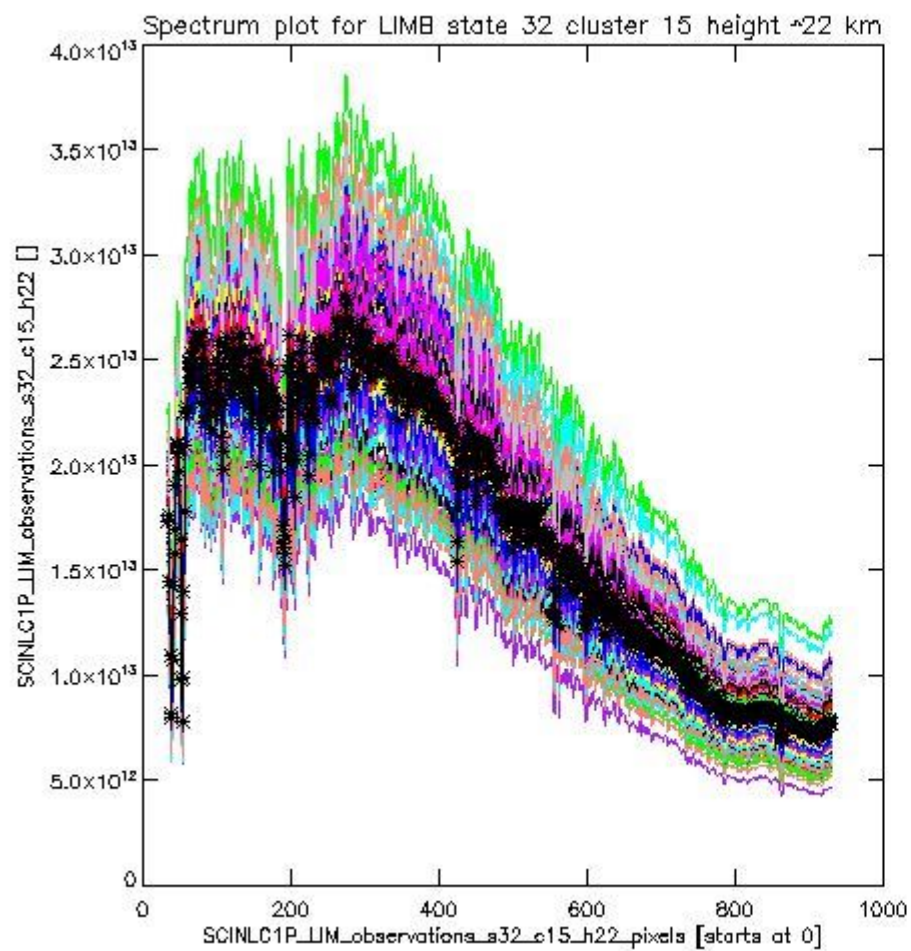


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_15.PNG

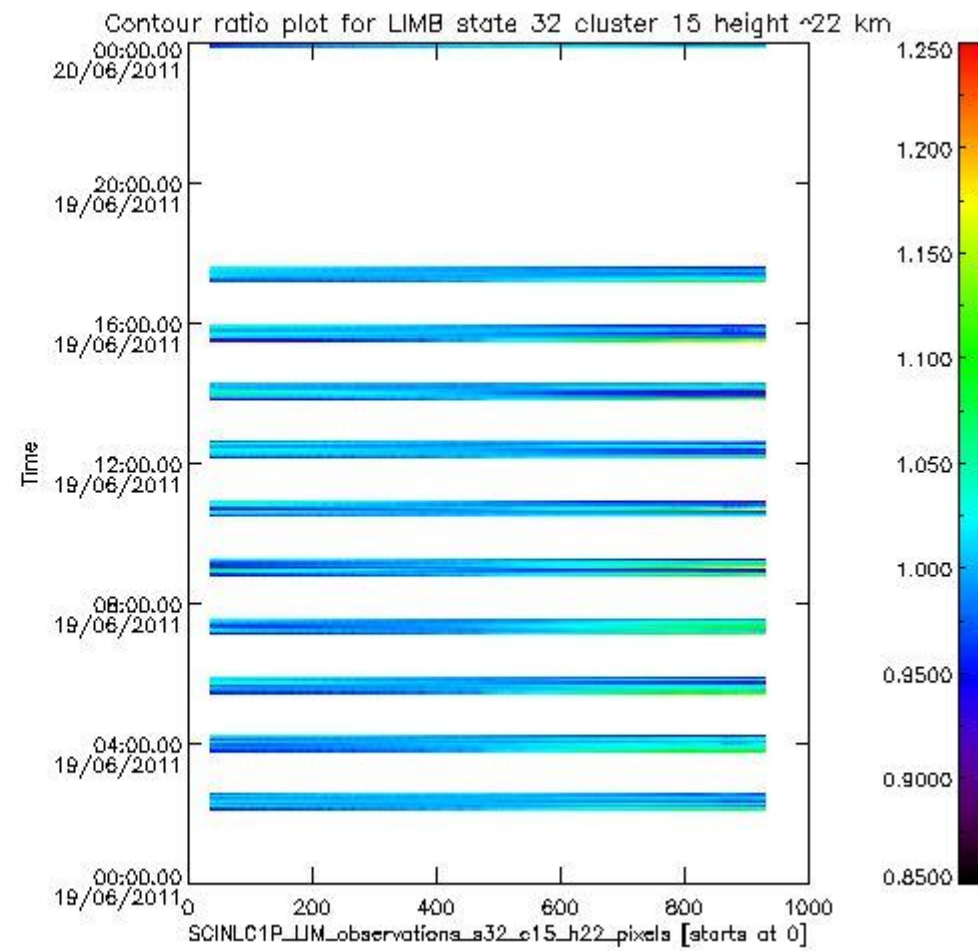
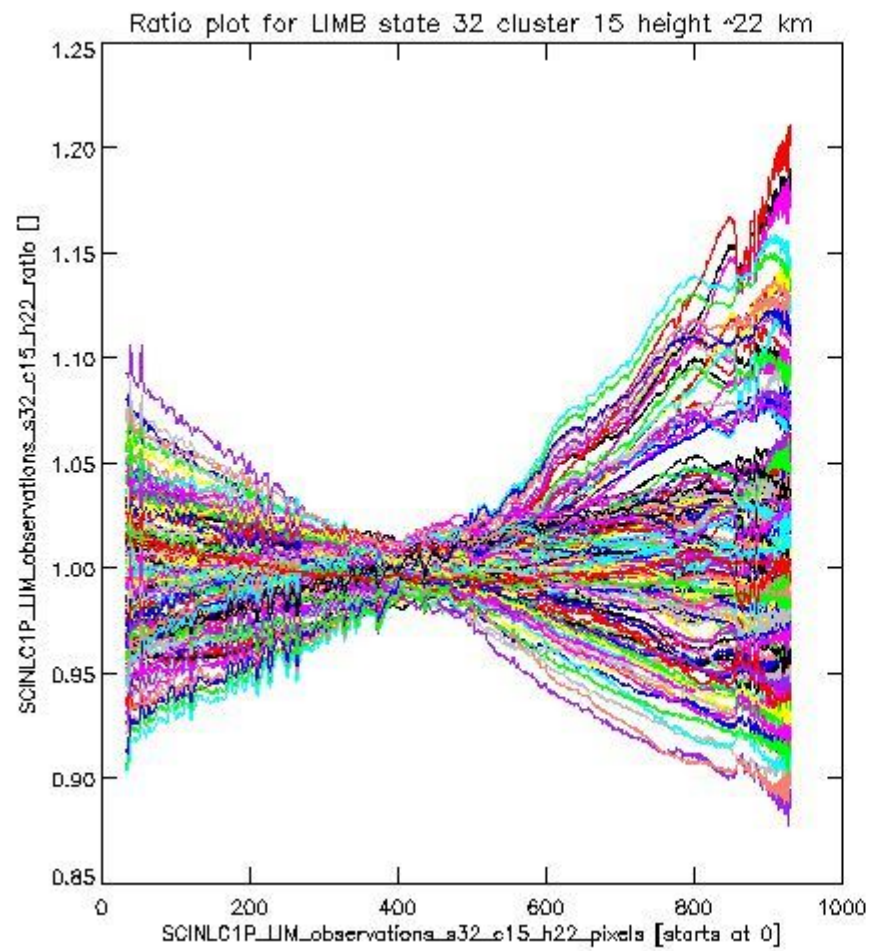
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	19JUN2011 02:05:27.703
Start time of last sample	19JUN2011 23:59:37.616
Reference period start time	20MAY2011 02:07:00.823
Reference period stop time	17JUN2011 23:50:23.504
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





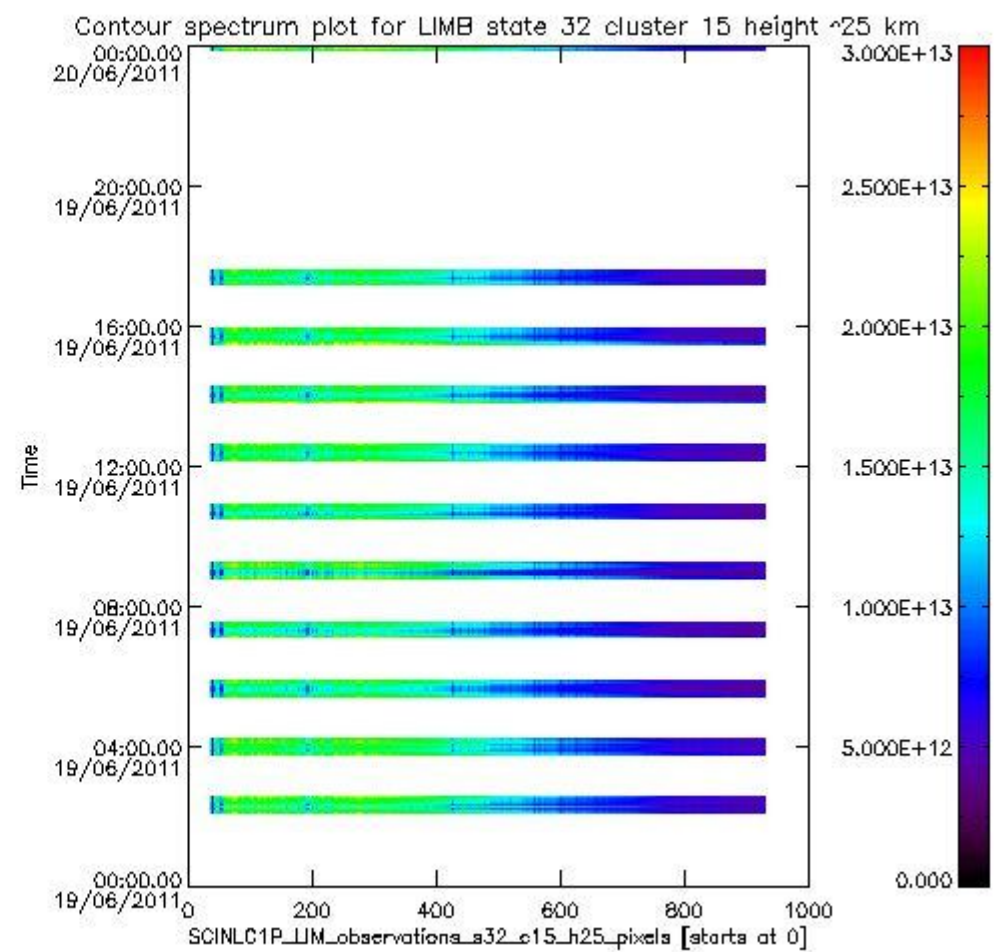
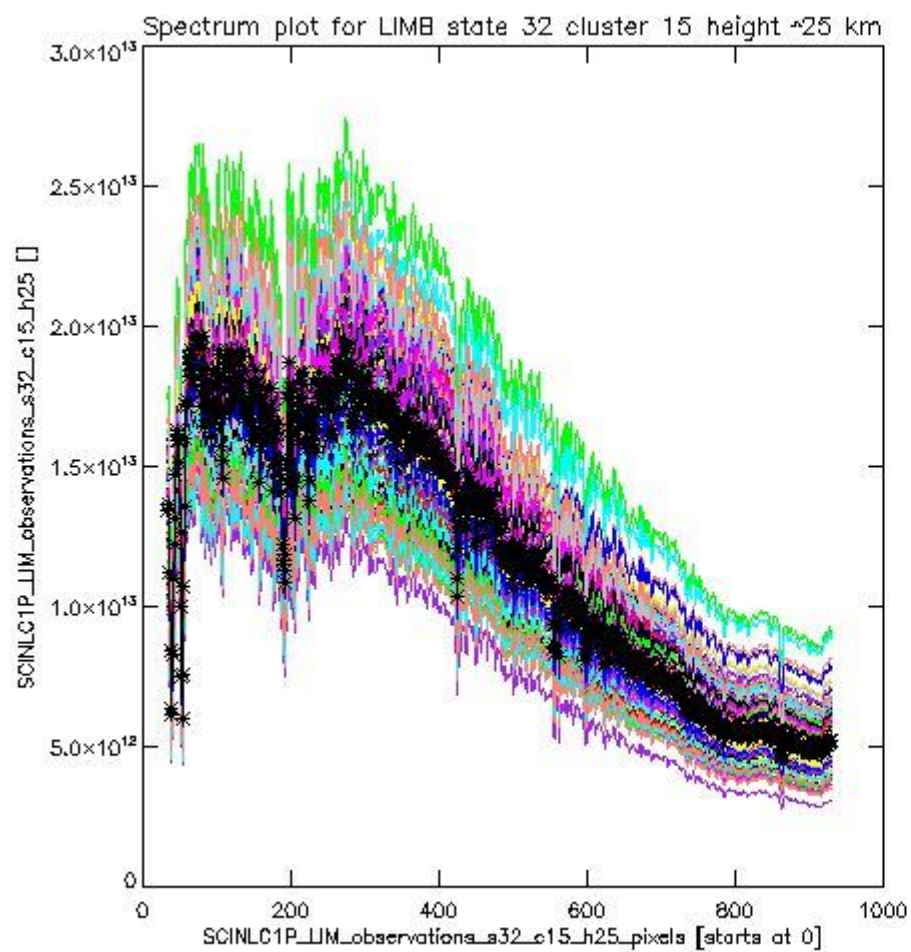
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_17.PNG

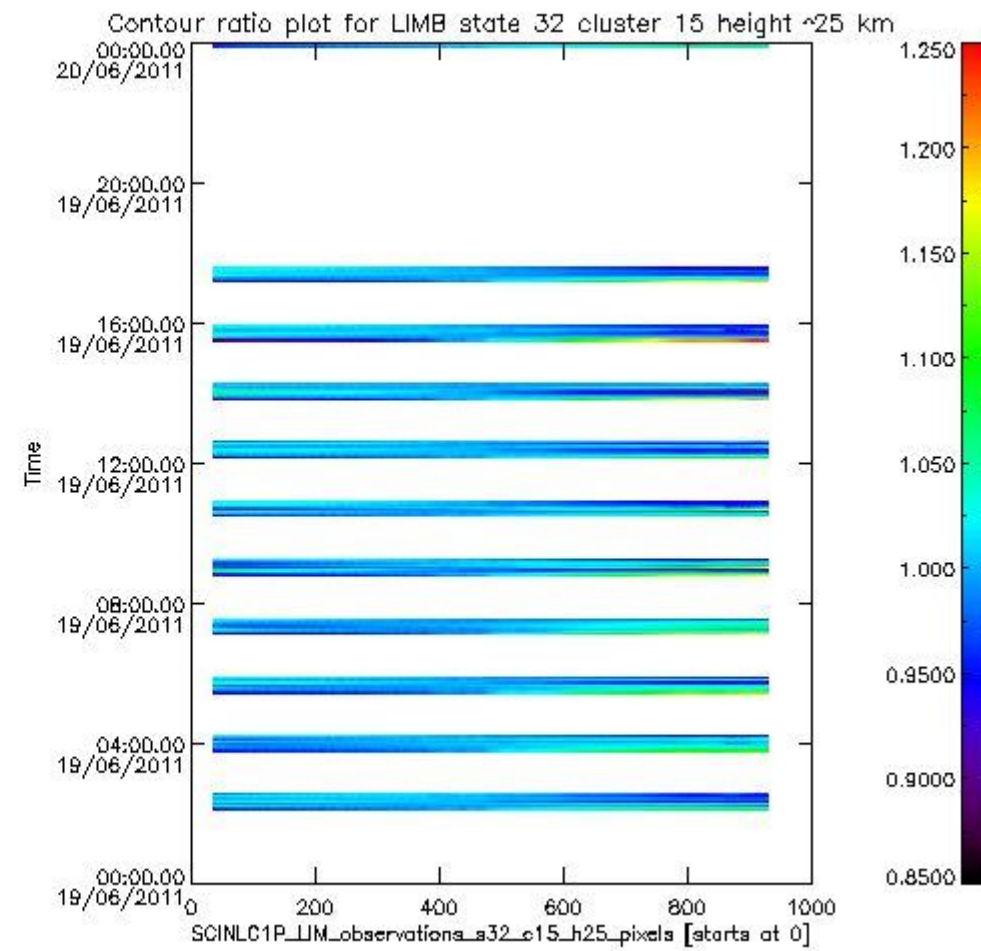
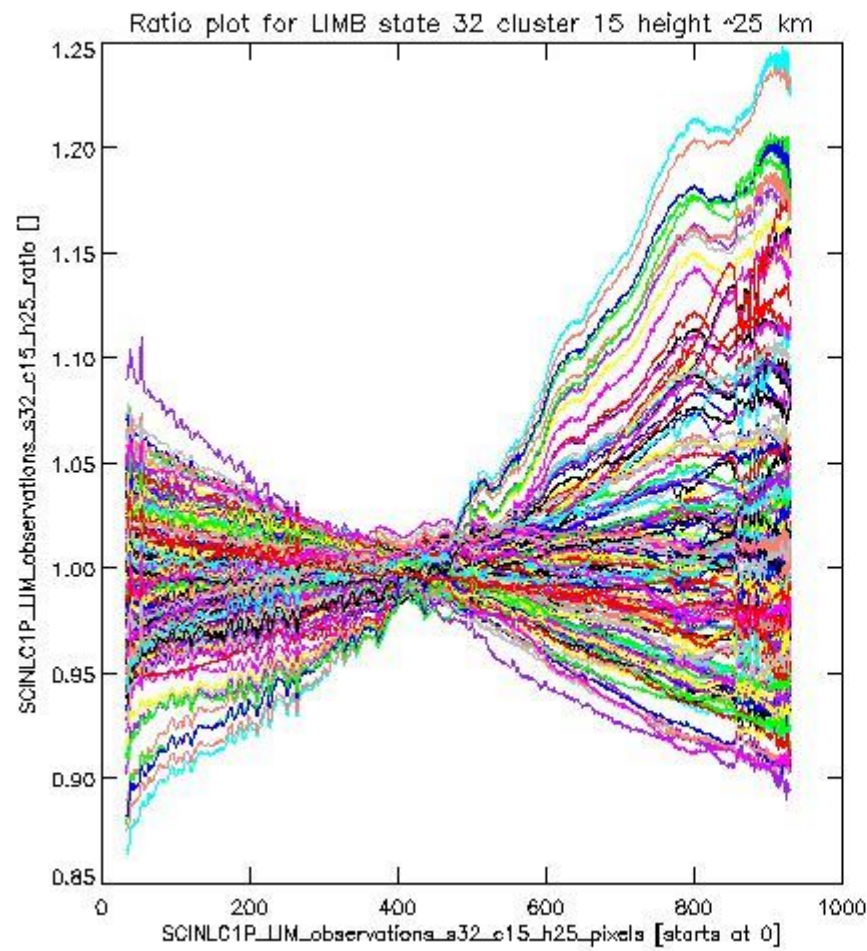
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	19JUN2011 02:05:27.703
Start time of last sample	19JUN2011 23:59:37.616
Reference period start time	20MAY2011 02:07:00.823
Reference period stop time	17JUN2011 23:50:23.504
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\_20110619\_18.PNG

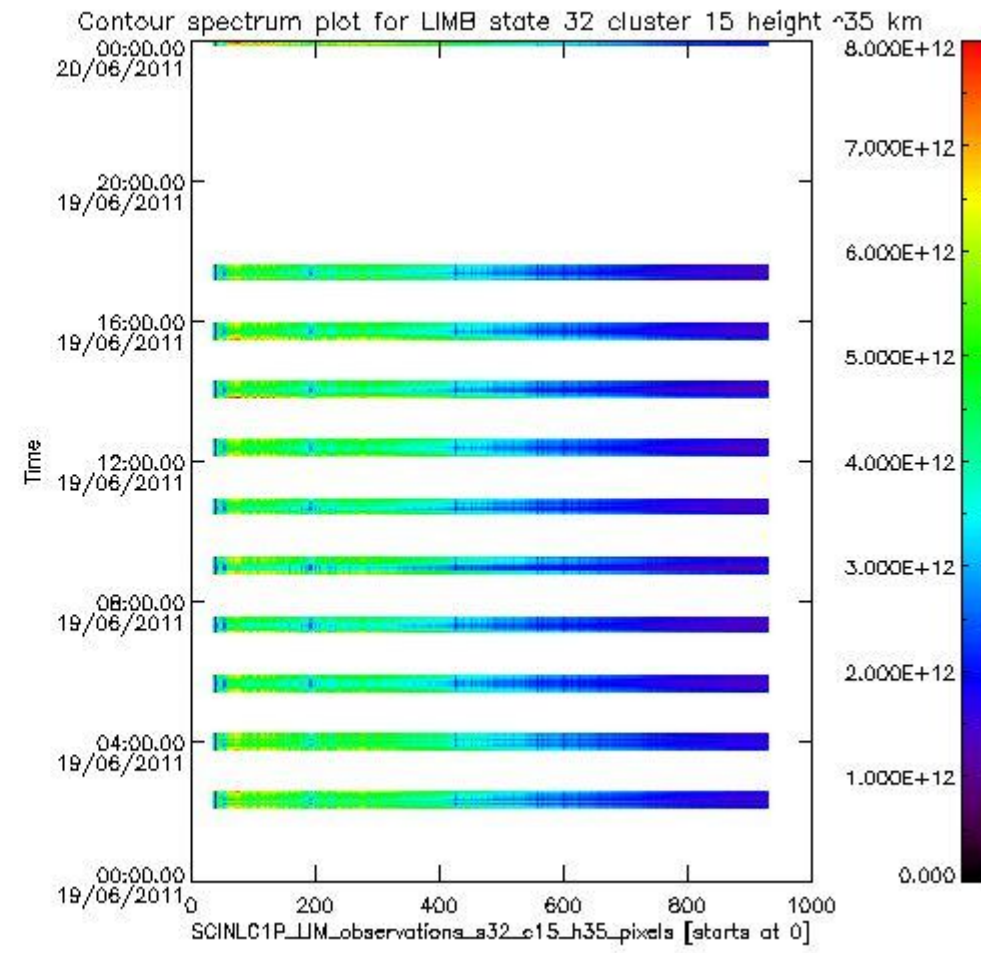
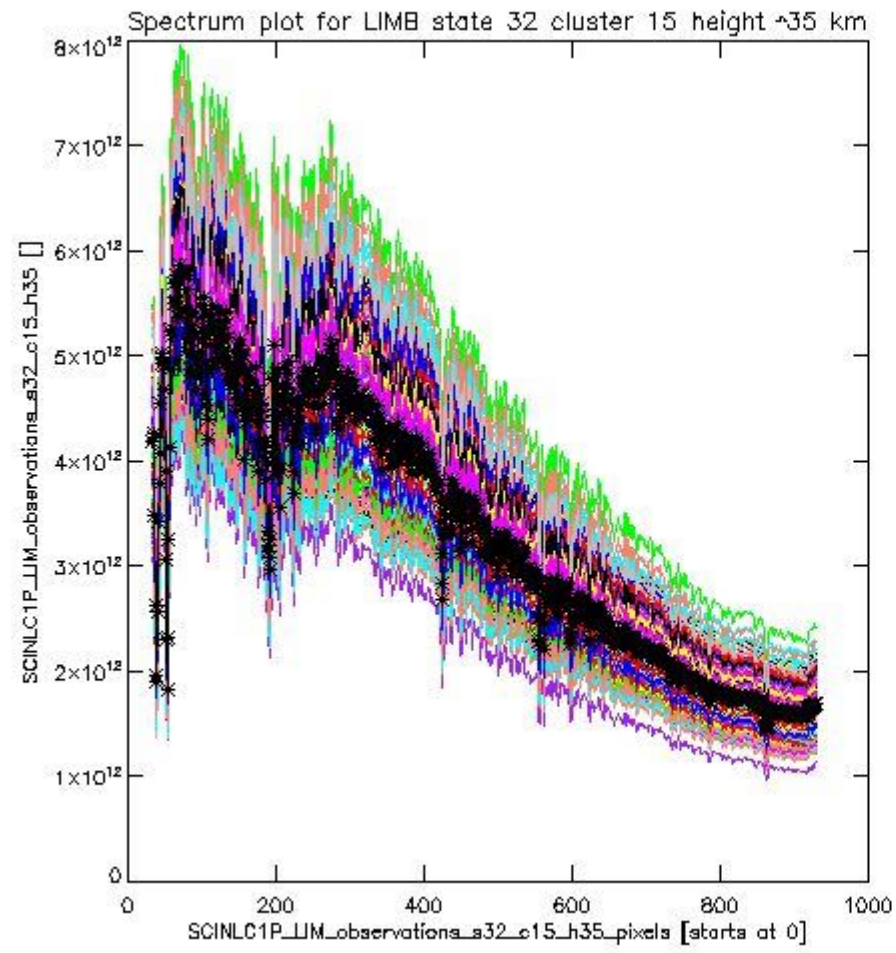




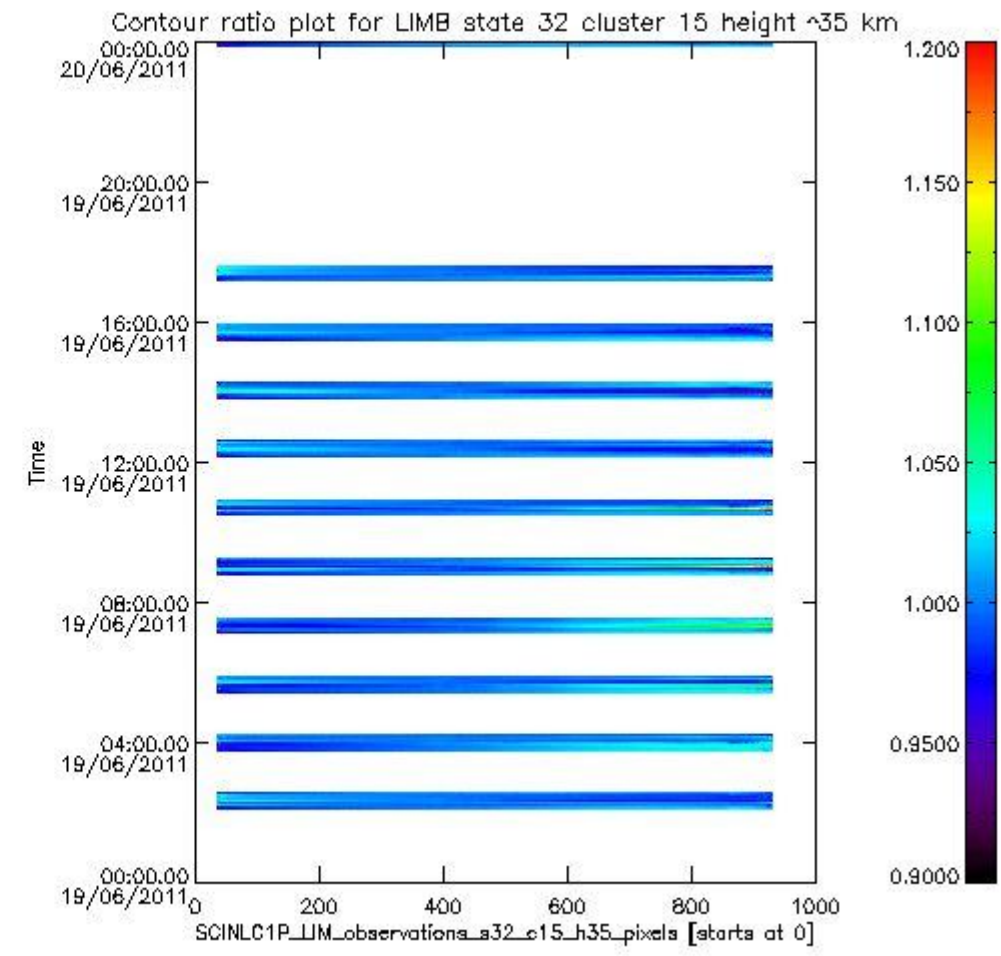
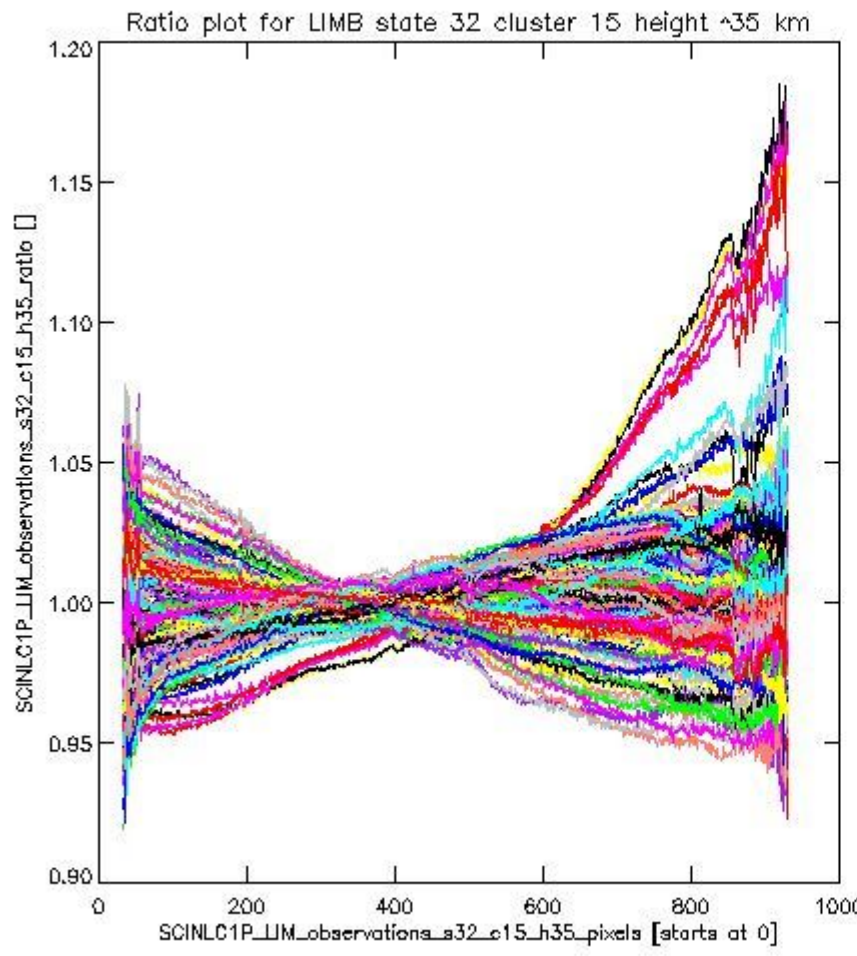
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_19.PNG

**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	19JUN2011 02:05:27.703
Start time of last sample	19JUN2011 23:59:37.616
Reference period start time	20MAY2011 02:07:00.823
Reference period stop time	17JUN2011 23:50:23.504
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\_20110619\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110619\_21.PNG



