

# 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	09JUL2011 06:30:45
Data source version	SCIA/7.04-U
Processing scope for products	26JUN2011 00:00:00 to 27JUN2011 00:00:00
Start time of first product within scope	25JUN2011 23:10:32
Stop time of last product within scope	26JUN2011 23:44:03
Total number of level 1 products	15
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	26JUN2011 01:23:58.019	26JUN2011 23:16:05.131
1	NADIR	07	09	N/A	26JUN2011 01:23:58.019	26JUN2011 23:16:05.131
2	NADIR	07	15	N/A	26JUN2011 01:23:58.019	26JUN2011 23:16:05.131
3	NADIR	07	24	N/A	26JUN2011 01:23:58.019	26JUN2011 23:16:05.131
4	NADIR	07	55	N/A	26JUN2011 01:23:58.019	26JUN2011 23:16:05.131
5	LIMB	32	09	~19 km	26JUN2011 01:08:44.640	26JUN2011 23:19:16.428
6	LIMB	32	09	~22 km	26JUN2011 01:08:44.640	26JUN2011 23:19:16.428
7	LIMB	32	09	~25 km	26JUN2011 01:08:44.640	26JUN2011 23:19:16.428
8	LIMB	32	15	~22 km	26JUN2011 01:08:44.640	26JUN2011 23:19:16.428
9	LIMB	32	15	~25 km	26JUN2011 01:08:44.640	26JUN2011 23:19:16.428
10	LIMB	32	15	~35 km	26JUN2011 01:08:44.640	26JUN2011 23:19:16.428

#### 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	#nopro	#cml_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110625_231032_000057453104_00016_48737_2531.N1</a>	25JUN2011 23:10:32	26JUN2011 00:20:47	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110626_005046_000057453104_00017_48738_2566.N1</a>	26JUN2011 00:50:46	26JUN2011 02:01:15	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110626_023100_000057453104_00018_48739_2533.N1</a>	26JUN2011 02:31:00	26JUN2011 03:41:15	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110626_041114_000057453104_00019_48740_2535.N1</a>	26JUN2011 04:11:14	26JUN2011 05:21:43	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110626_055128_000057453104_00020_48741_2538.N1</a>	26JUN2011 05:51:28	26JUN2011 07:01:43	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110626_073143_000057453104_00021_48742_2539.N1</a>	26JUN2011 07:31:43	26JUN2011 08:42:12	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110626_091156_000057453104_00022_48743_2541.N1	26JUN2011 09:11:56	26JUN2011 10:22:11	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110626_105210_000057453104_00023_48744_2543.N1	26JUN2011 10:52:10	26JUN2011 12:02:39	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110626_123224_000057453104_00024_48745_2546.N1	26JUN2011 12:32:24	26JUN2011 13:42:39	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110626_141238_000057453104_00025_48746_2548.N1	26JUN2011 14:12:38	26JUN2011 15:23:07	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110626_155252_000057453104_00026_48747_2552.N1	26JUN2011 15:52:52	26JUN2011 17:03:07	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110626_173306_000057453104_00027_48748_2553.N1	26JUN2011 17:33:06	26JUN2011 18:43:45	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110626_191320_000057453104_00028_48749_2555.N1	26JUN2011 19:13:20	26JUN2011 20:23:44	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110626_205334_000057453104_00029_48750_2557.N1	26JUN2011 20:53:34	26JUN2011 22:04:03	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110626_223348_000057453104_00030_48751_2560.N1	26JUN2011 22:33:48	26JUN2011 23:44:03	0	35	31	0	0	1	0	0	

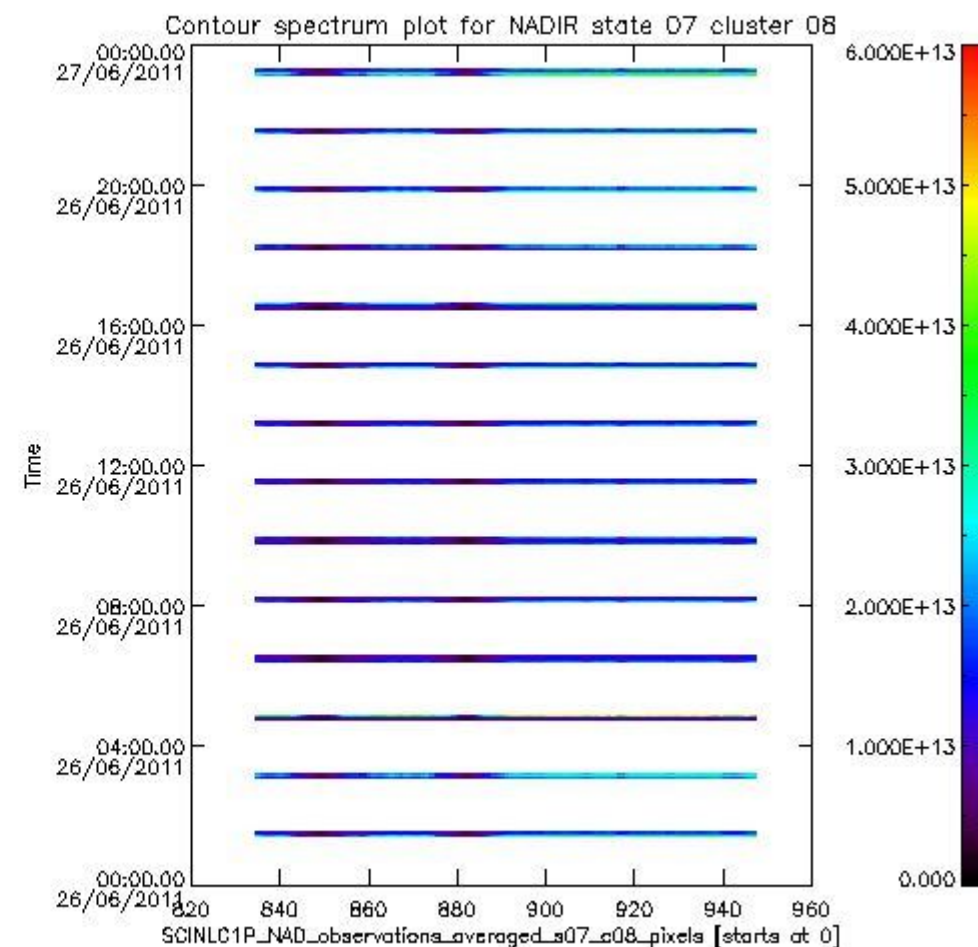
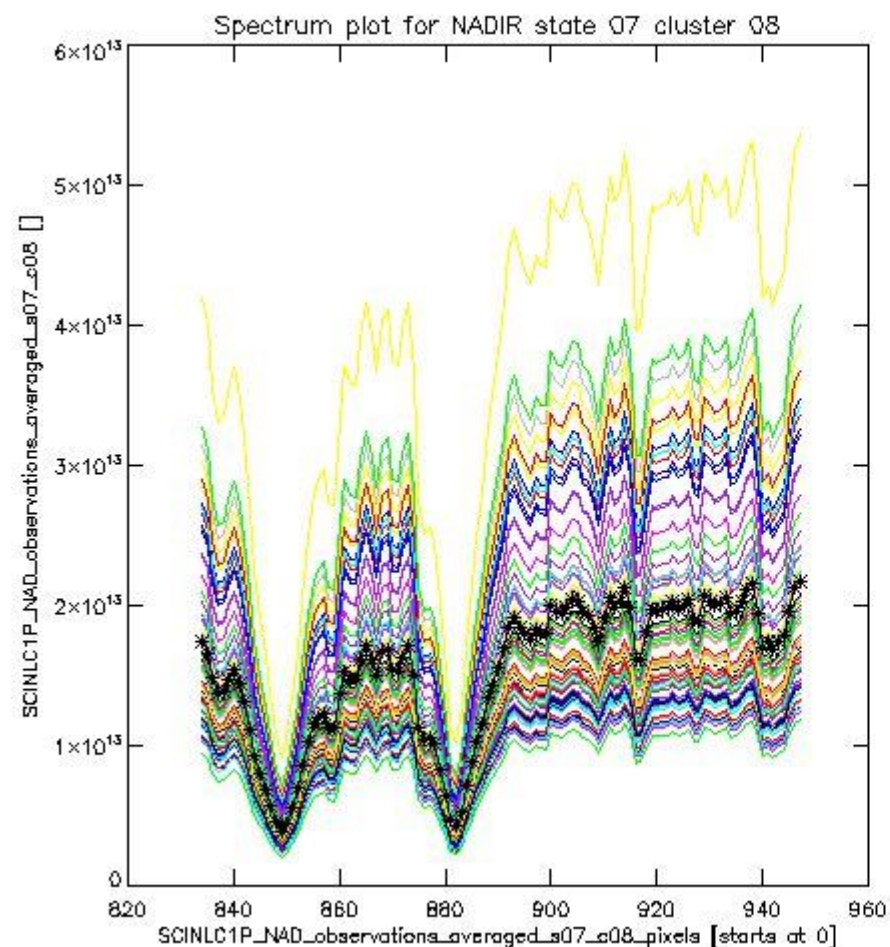
## 1.2 Source packet monitoring

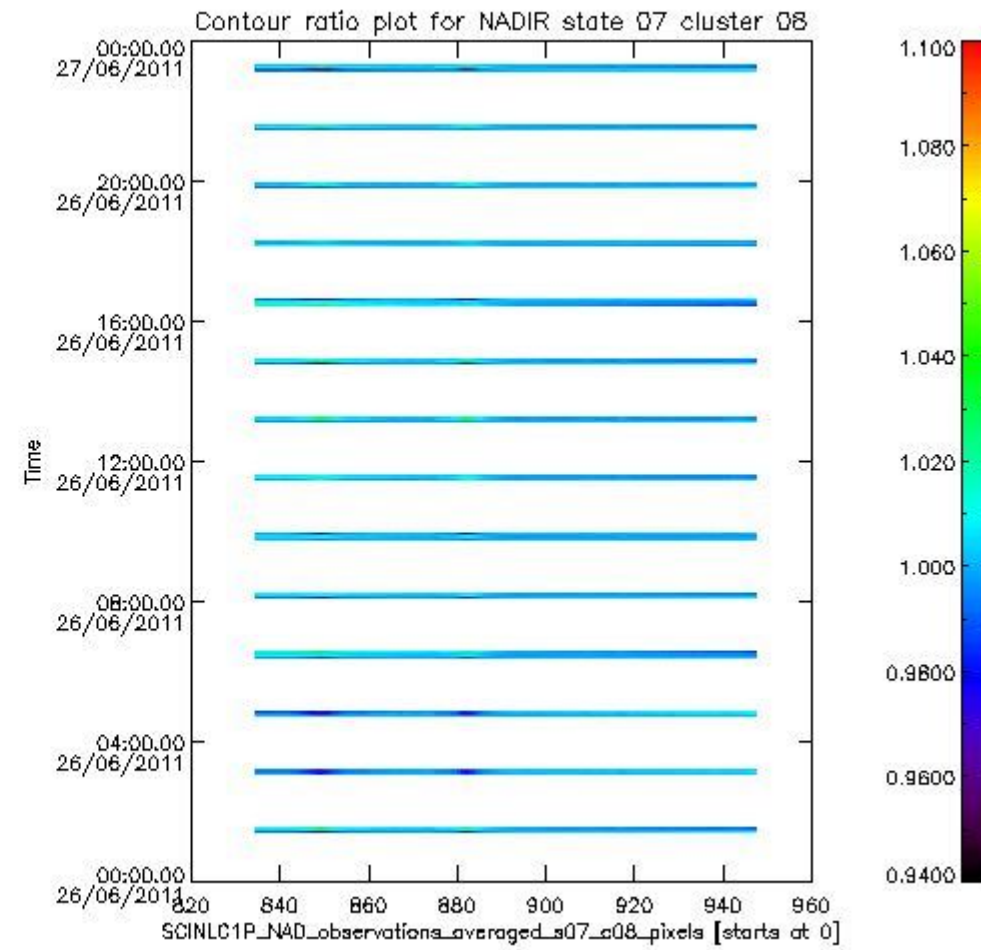
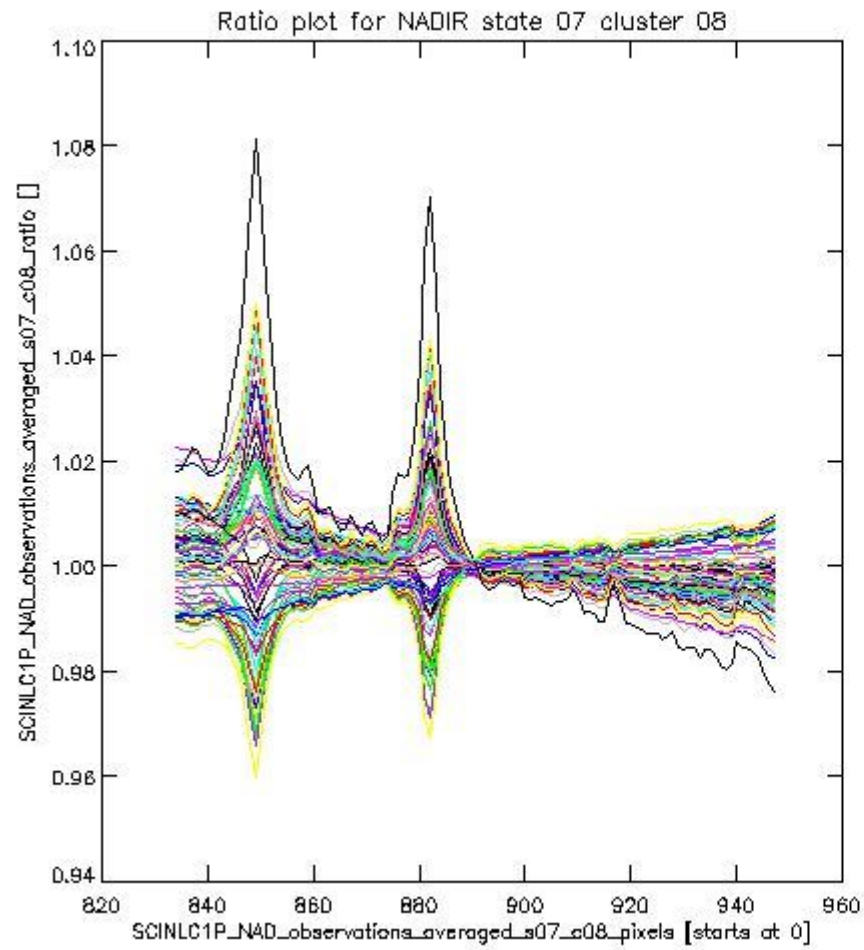
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	26JUN2011 01:23:58.019
Start time of last sample	26JUN2011 23:16:05.131
Reference period start time	28MAY2011 09:08:38.532
Reference period stop time	25JUN2011 23:52:49.269
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

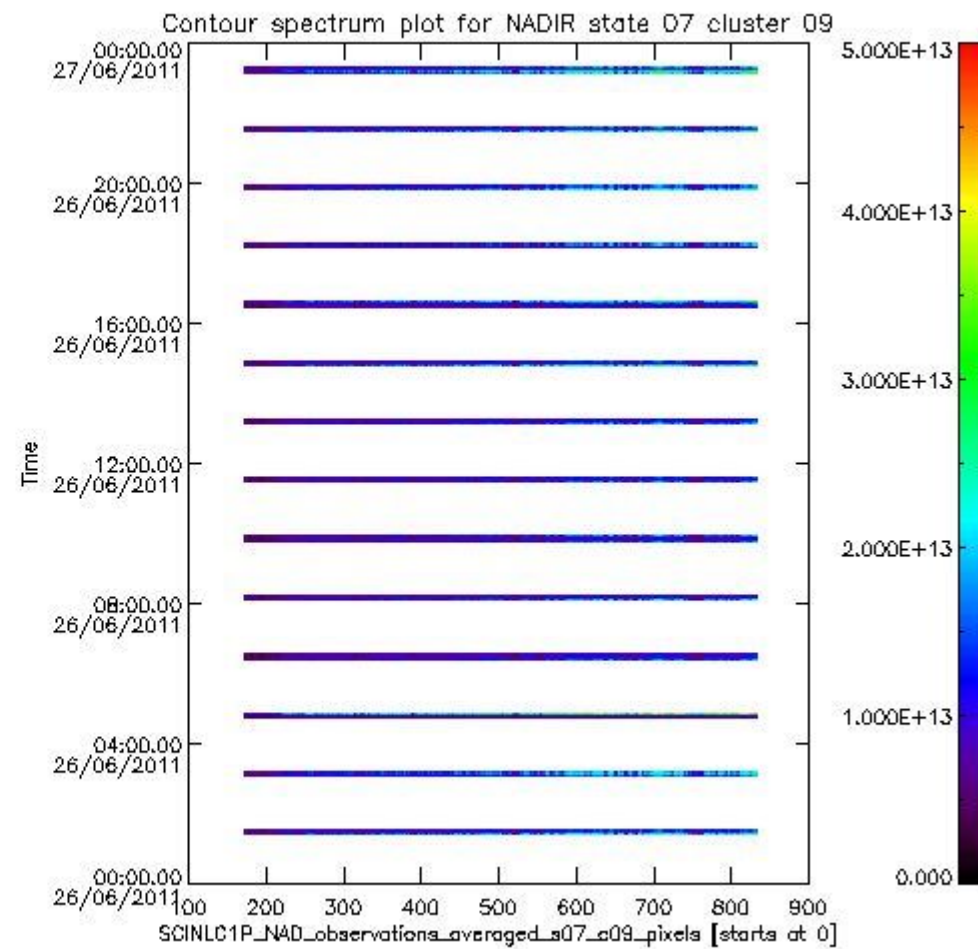
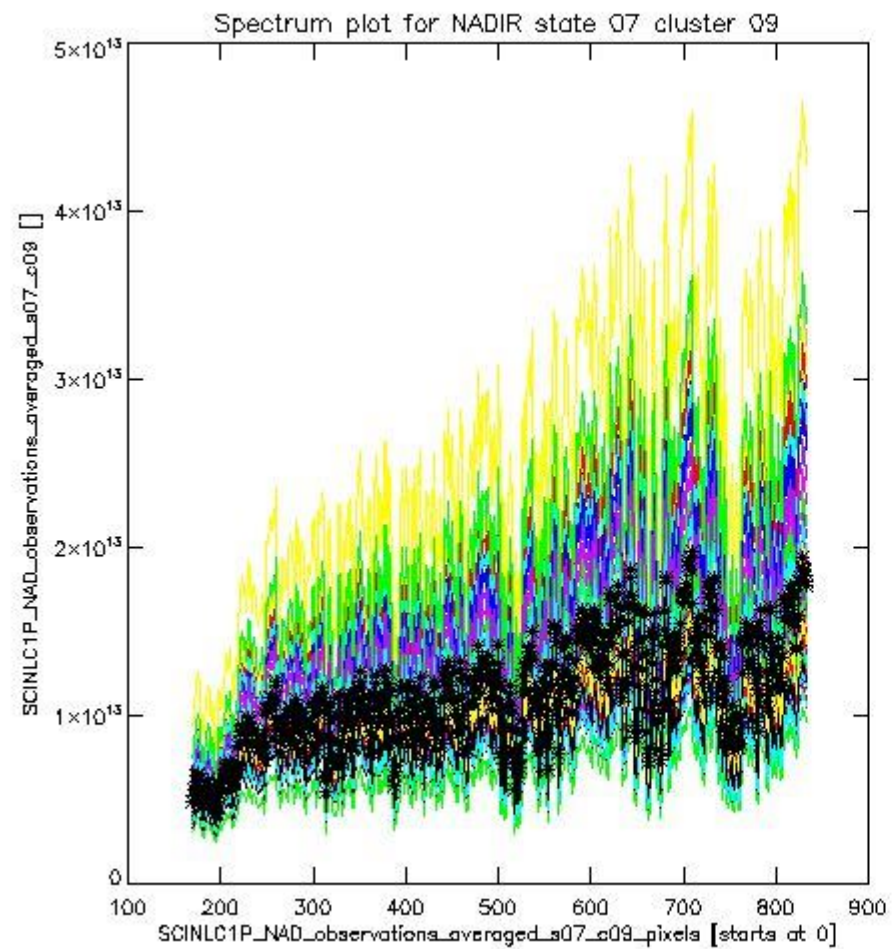




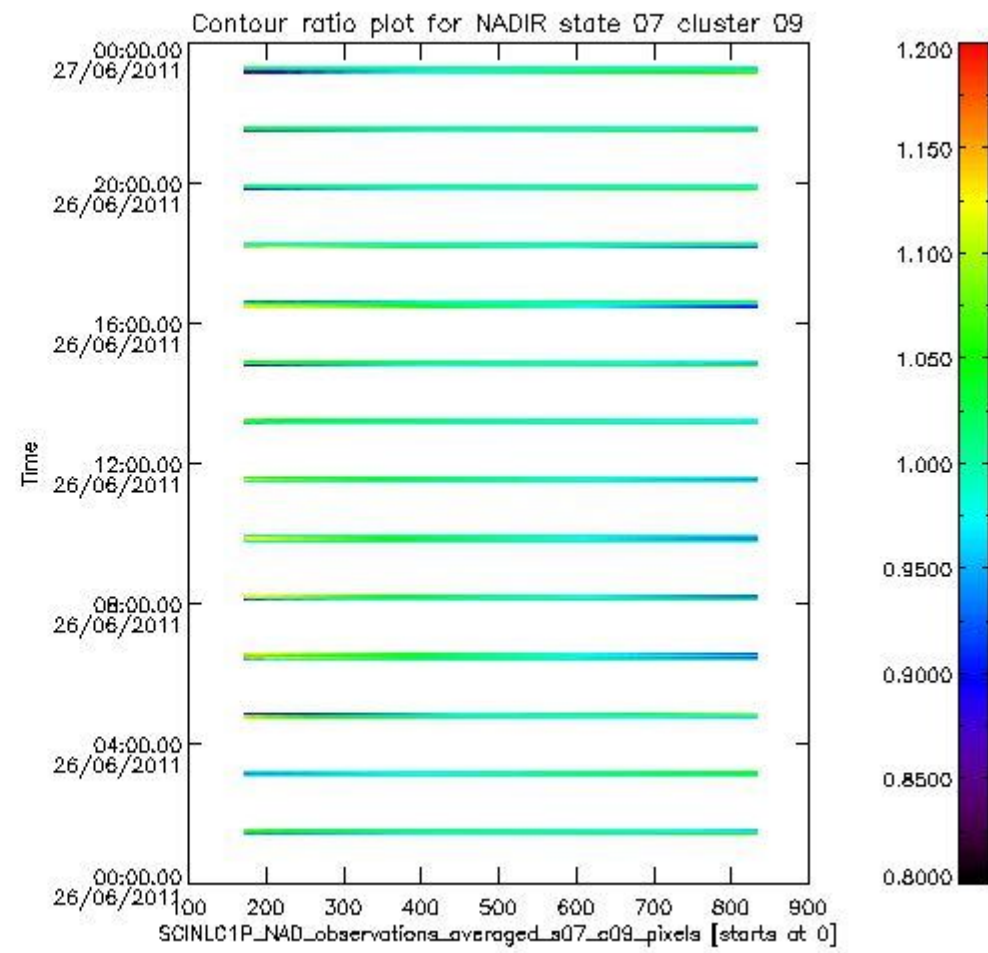
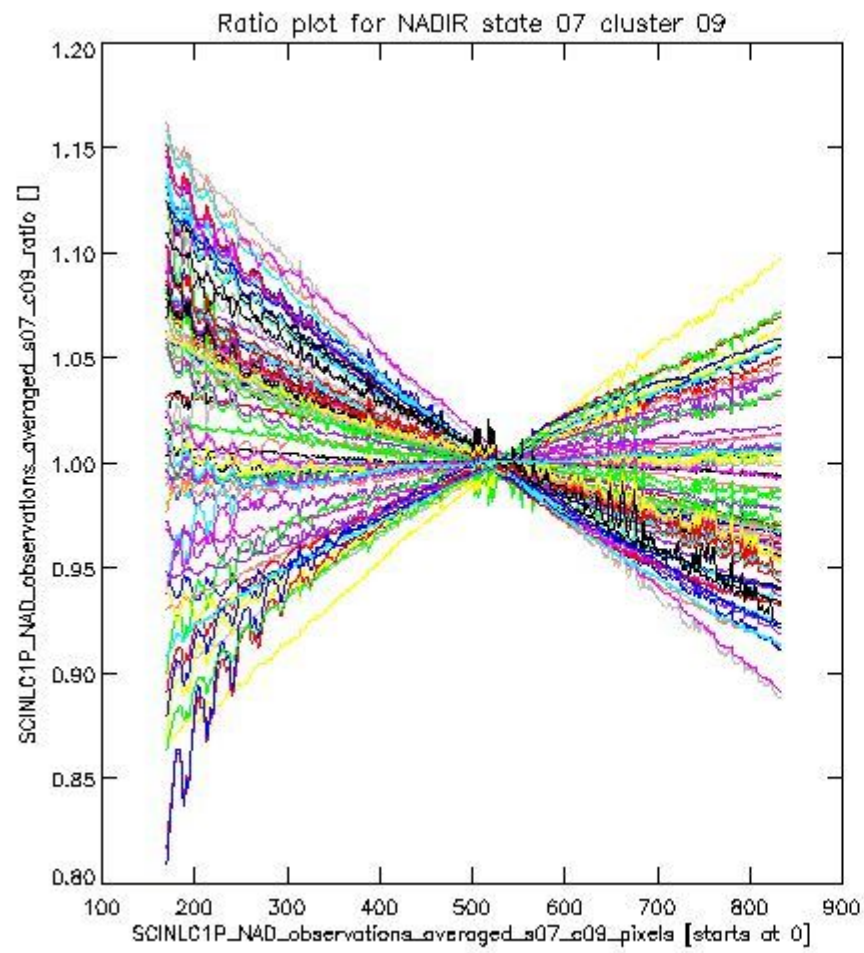
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	26JUN2011 01:23:58.019
Start time of last sample	26JUN2011 23:16:05.131
Reference period start time	28MAY2011 09:08:38.532
Reference period stop time	25JUN2011 23:52:49.269
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





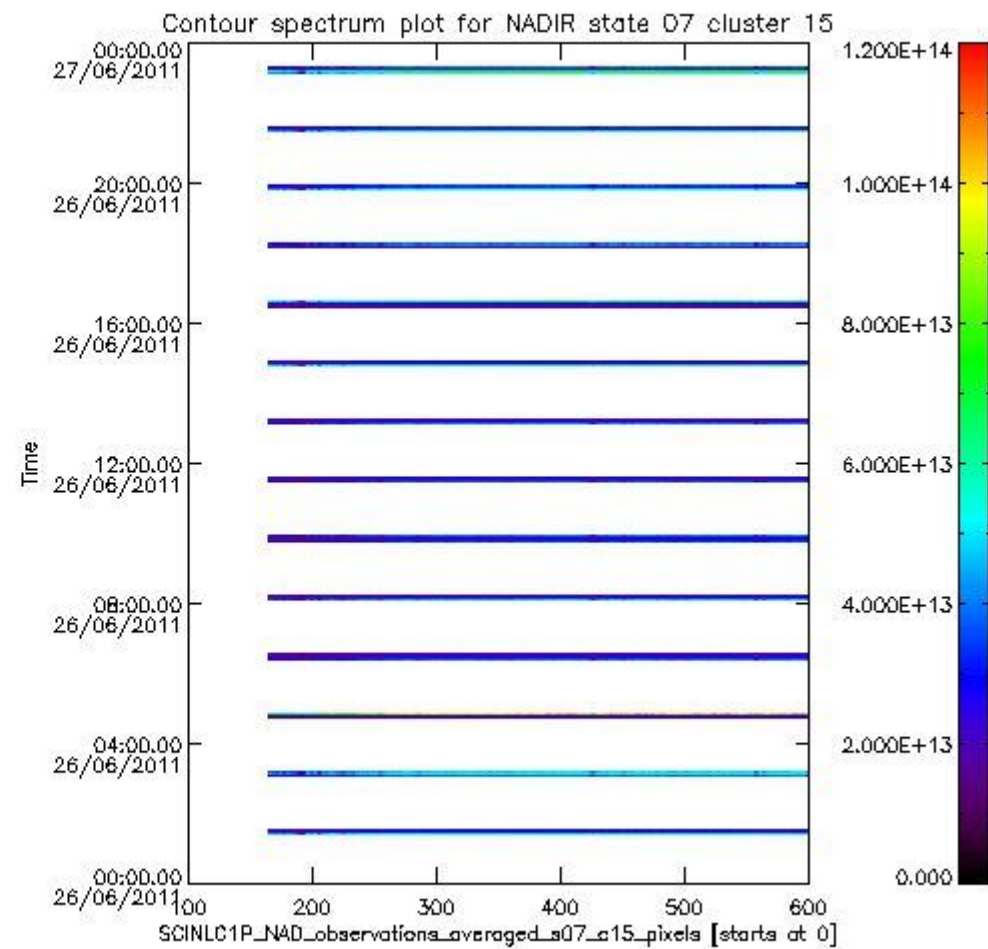
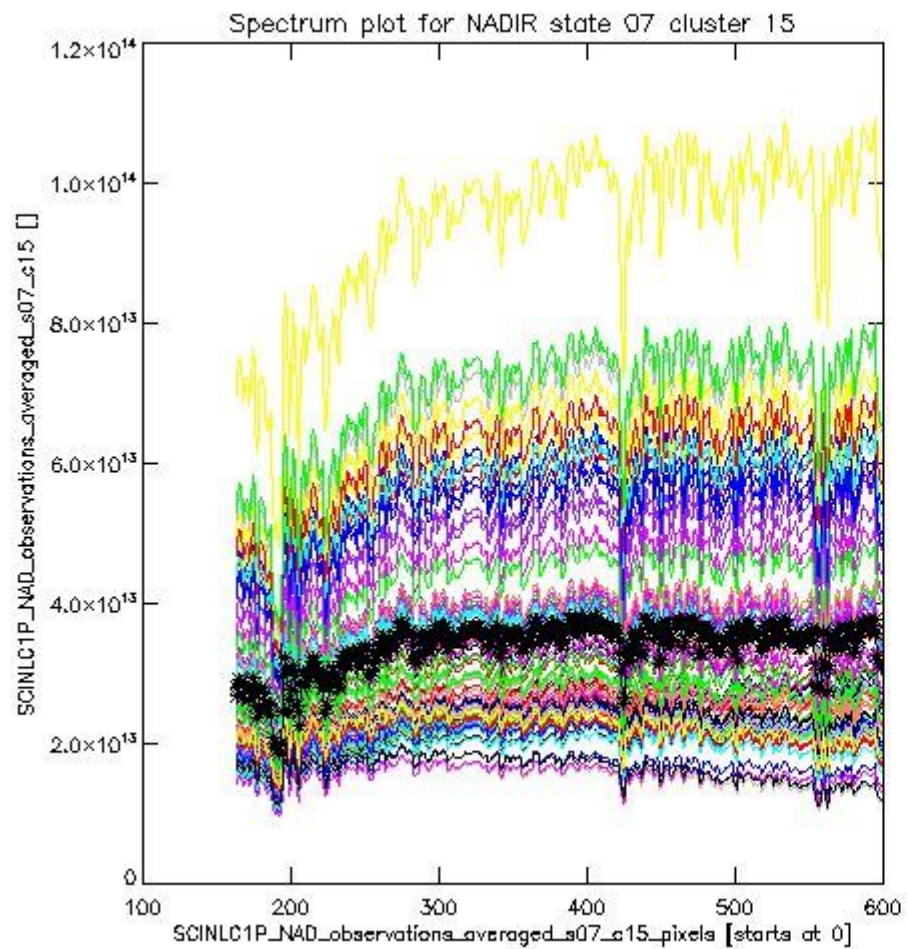
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_3.PNG

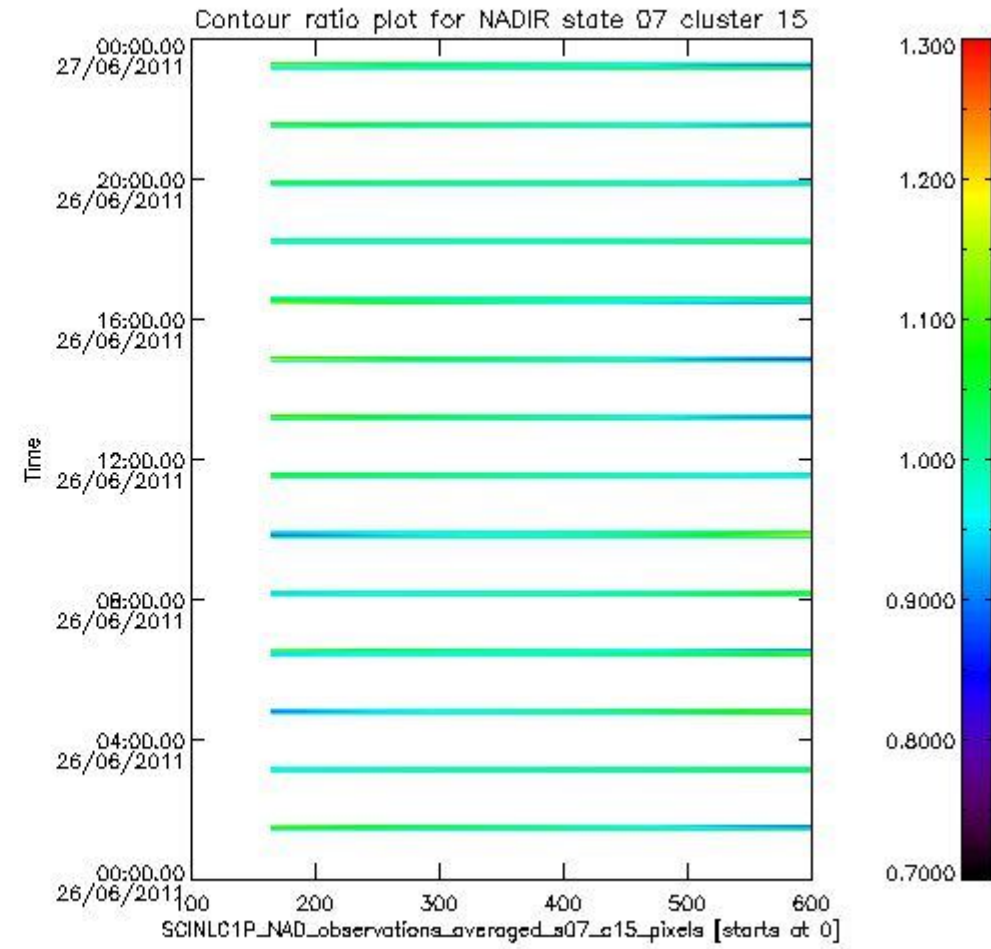
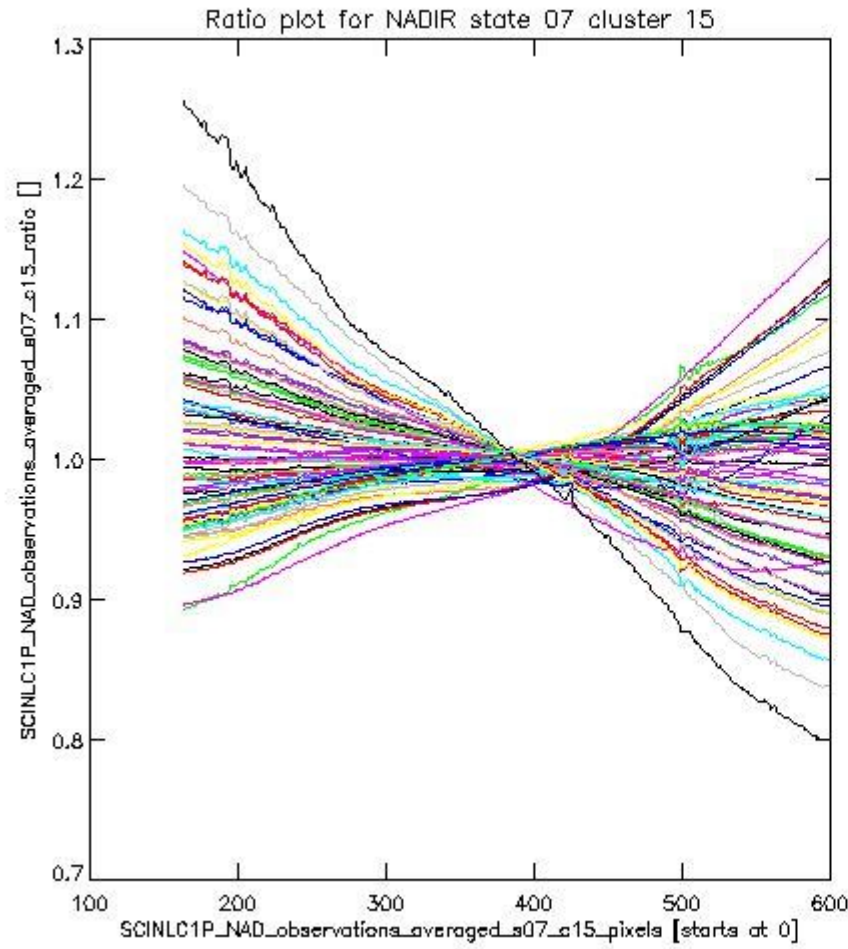
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	26JUN2011 01:23:58.019
Start time of last sample	26JUN2011 23:16:05.131
Reference period start time	28MAY2011 09:08:38.532
Reference period stop time	25JUN2011 23:52:49.269
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\_20110626\_4.PNG

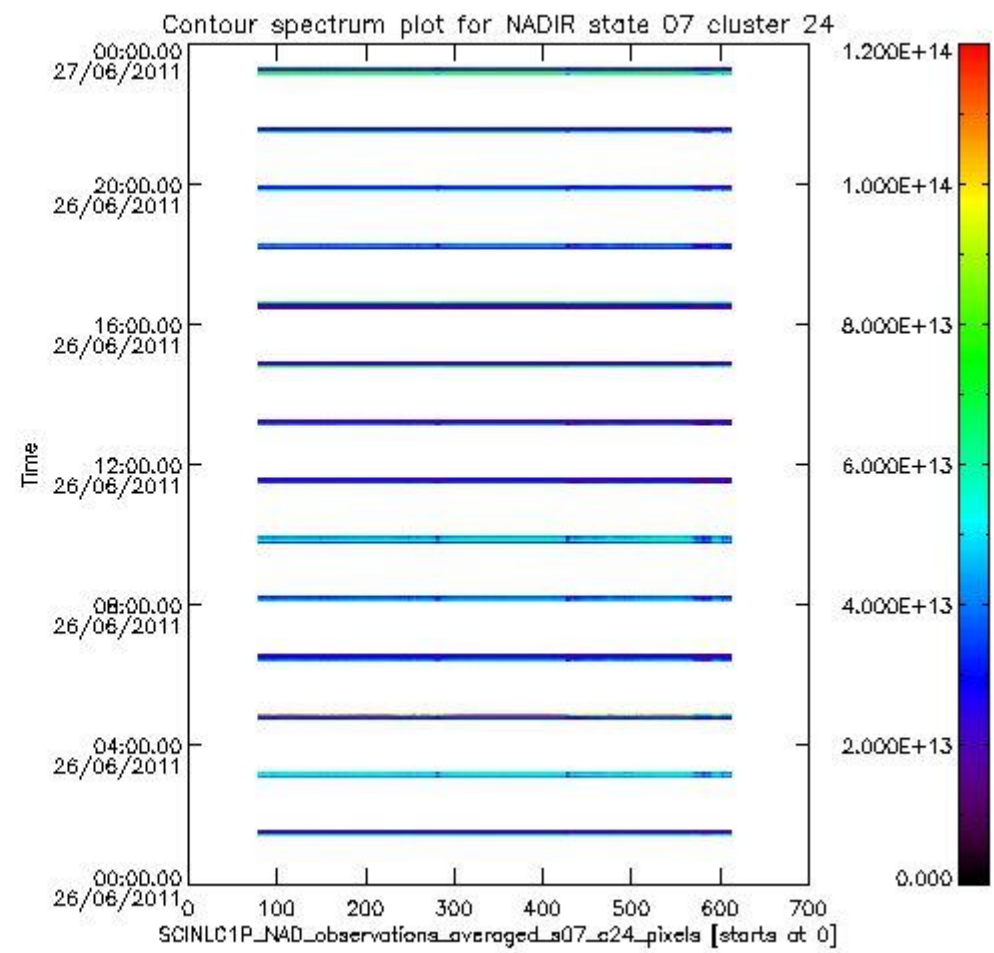
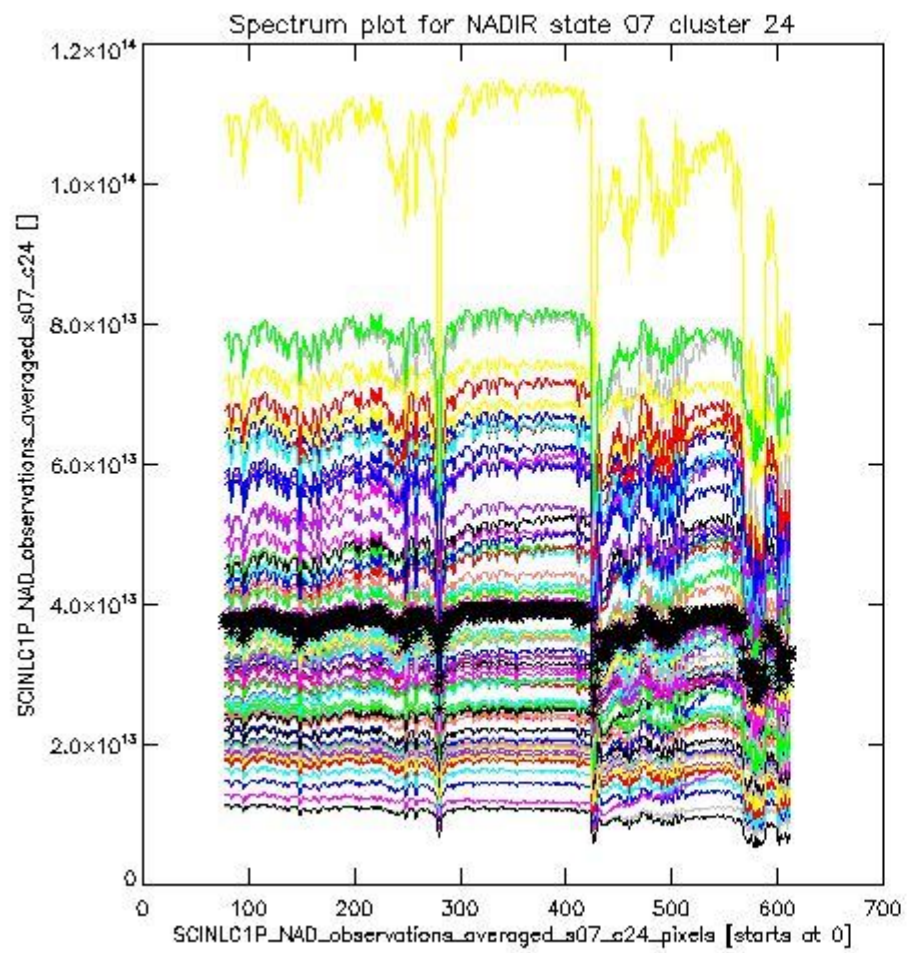




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_5.PNG

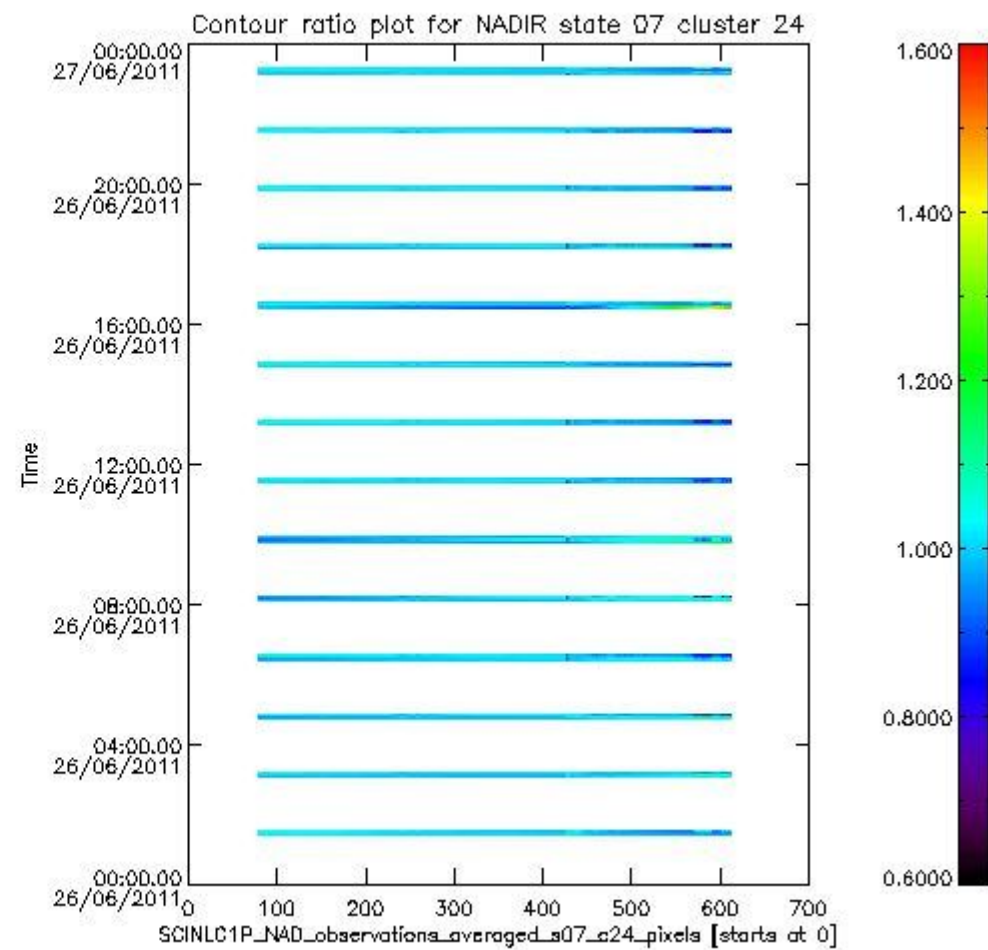
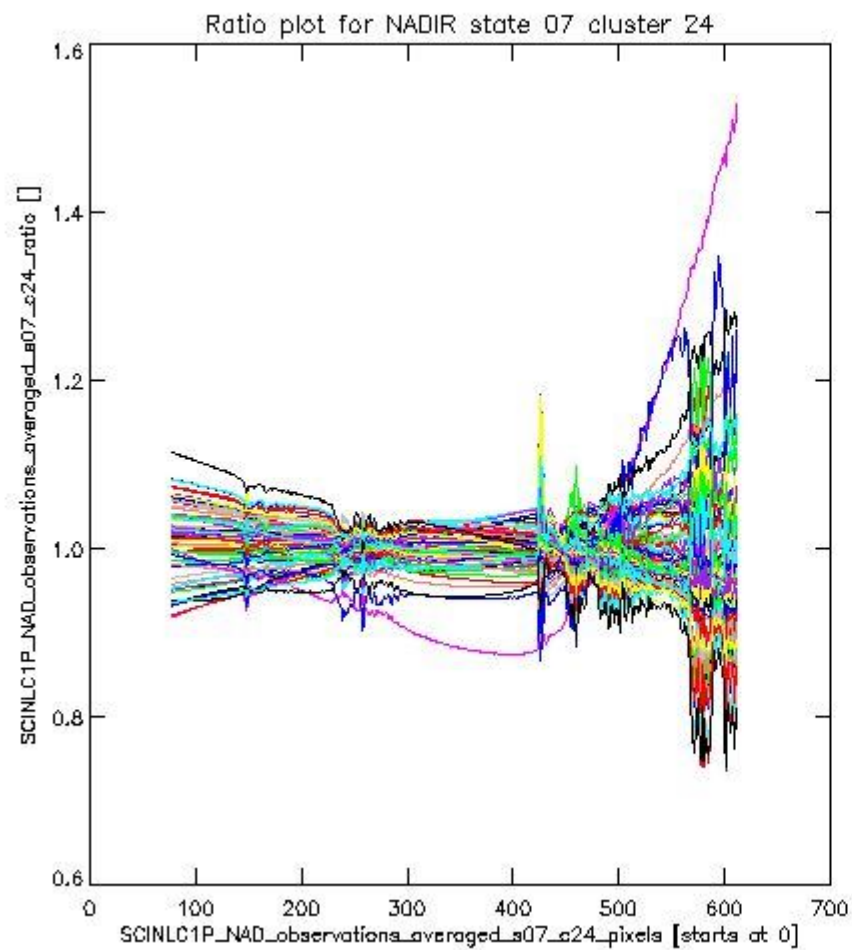
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	26JUN2011 01:23:58.019
Start time of last sample	26JUN2011 23:16:05.131
Reference period start time	28MAY2011 09:08:38.532
Reference period stop time	25JUN2011 23:52:49.269
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\_20110626\_6.PNG

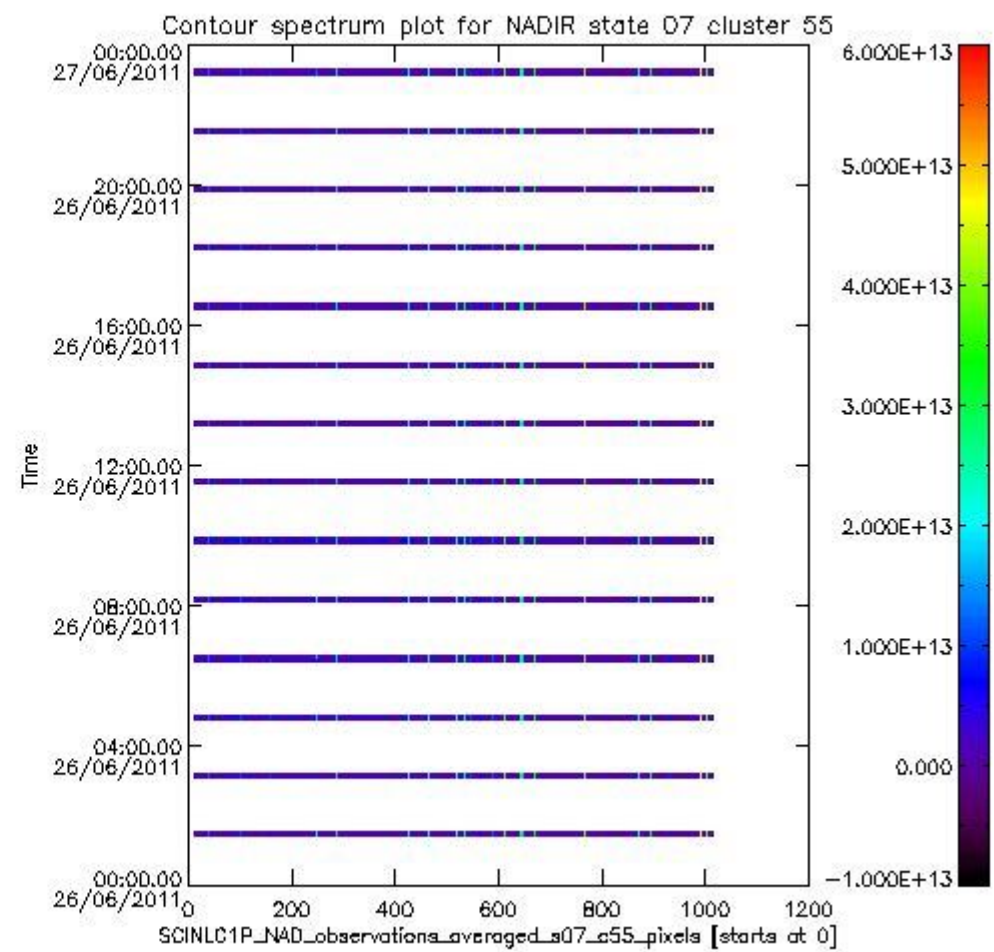
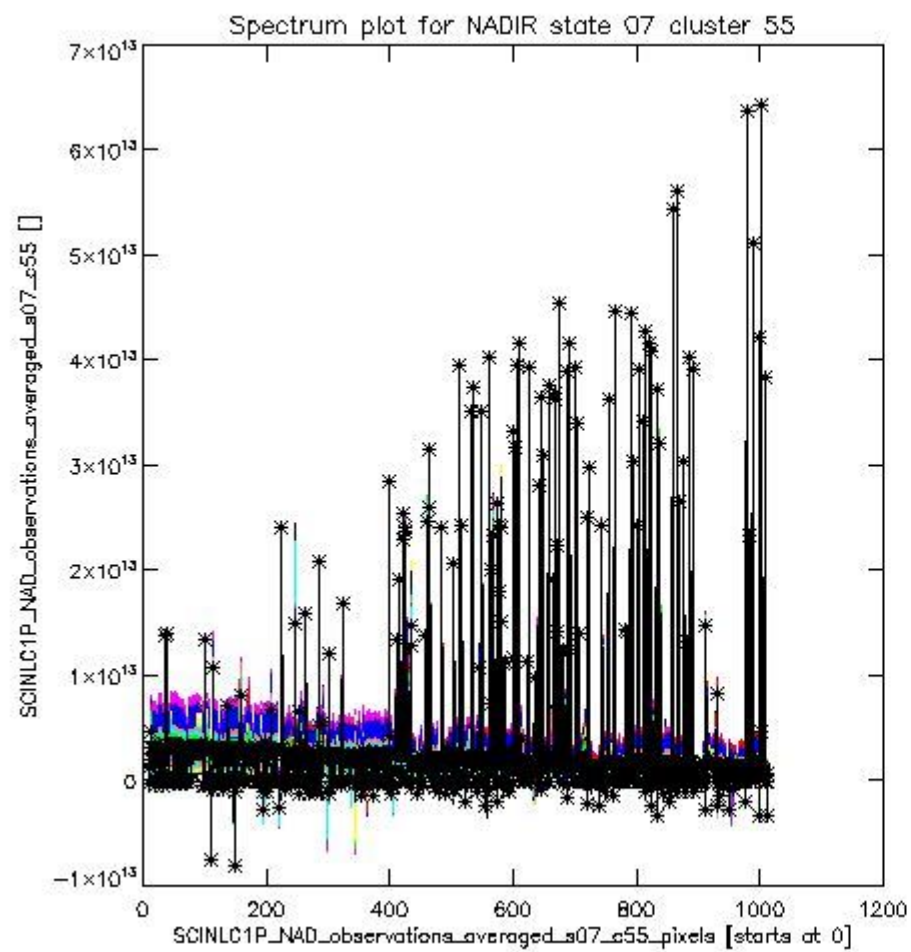




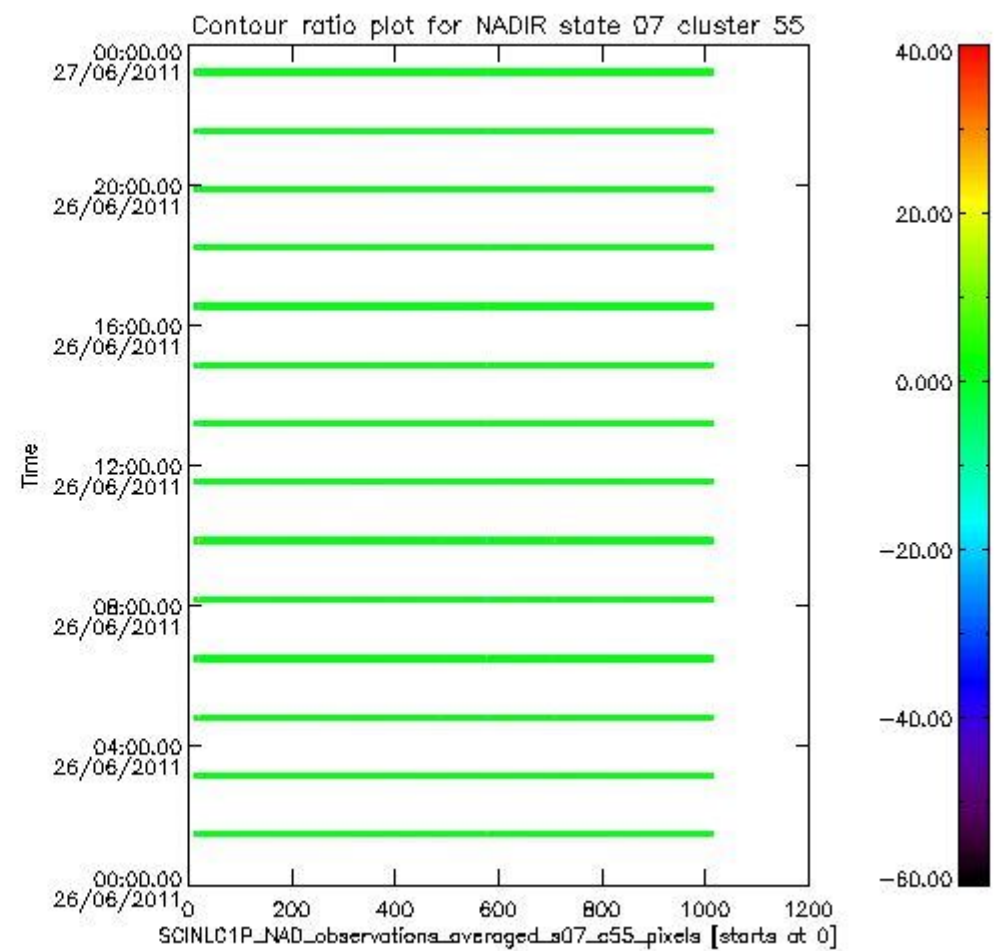
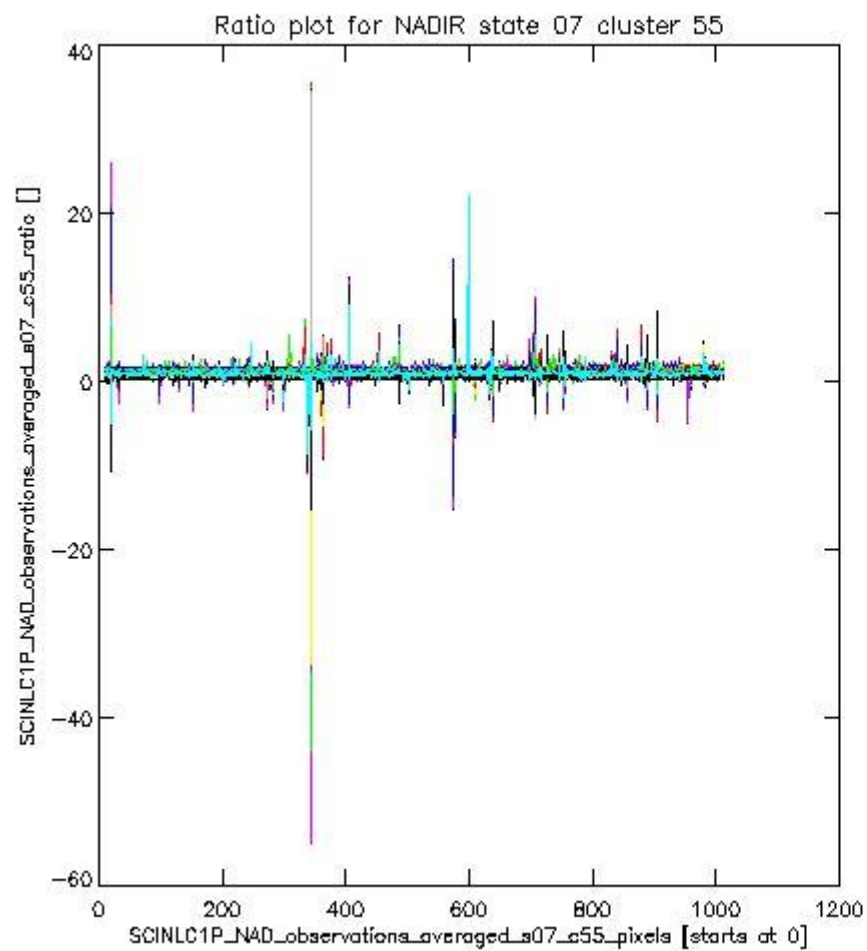
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_7.PNG

**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	26JUN2011 01:23:58.019
Start time of last sample	26JUN2011 23:16:05.131
Reference period start time	28MAY2011 09:08:38.532
Reference period stop time	25JUN2011 23:48:43.784
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\_20110626\_8.PNG

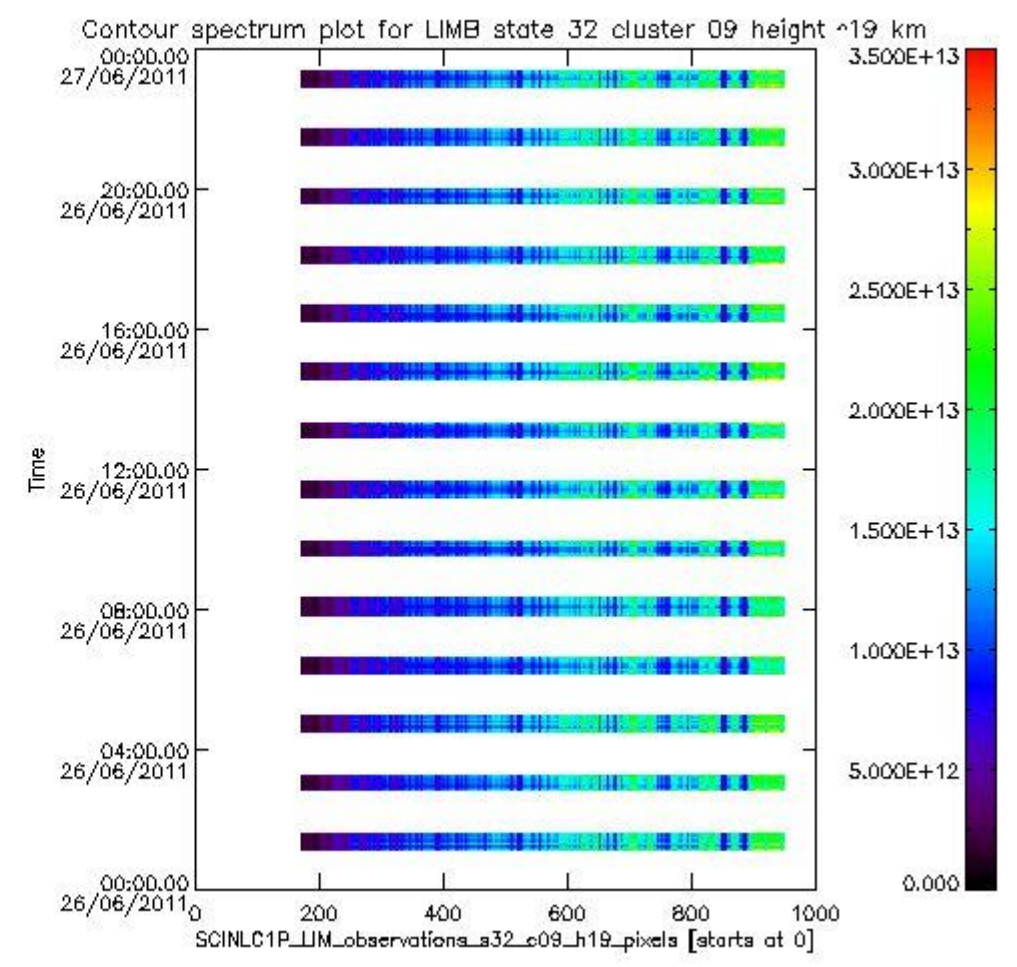
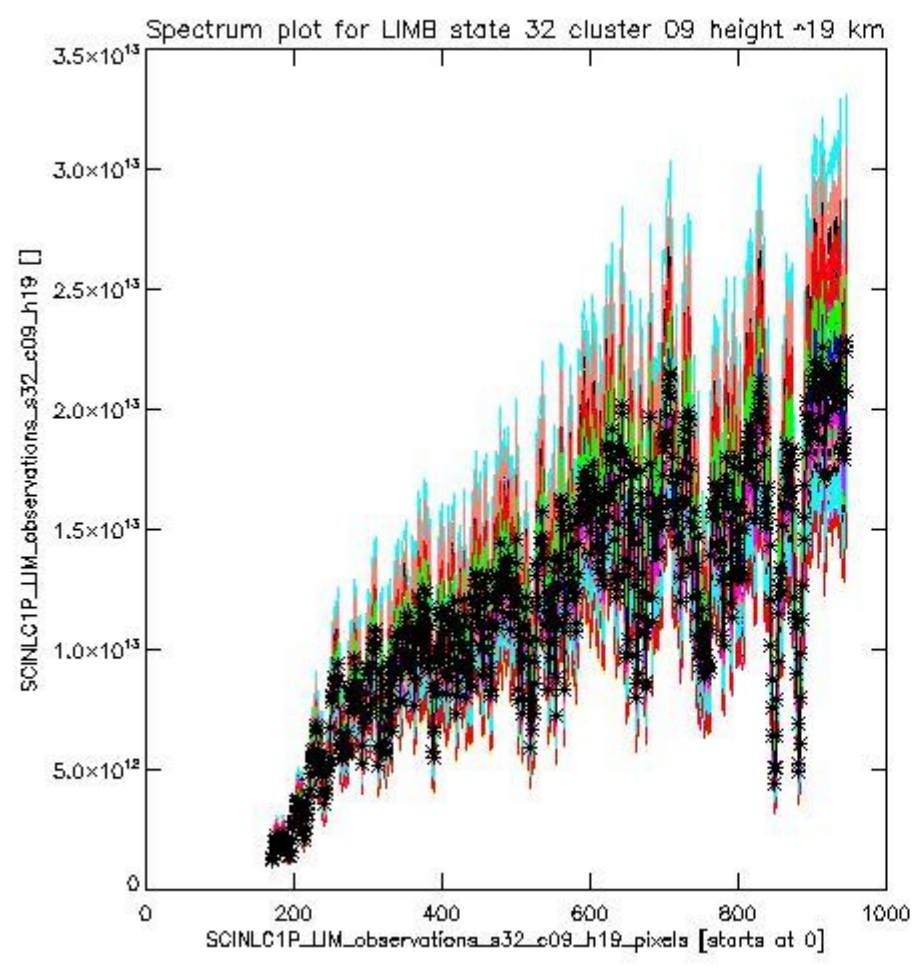


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_9.PNG

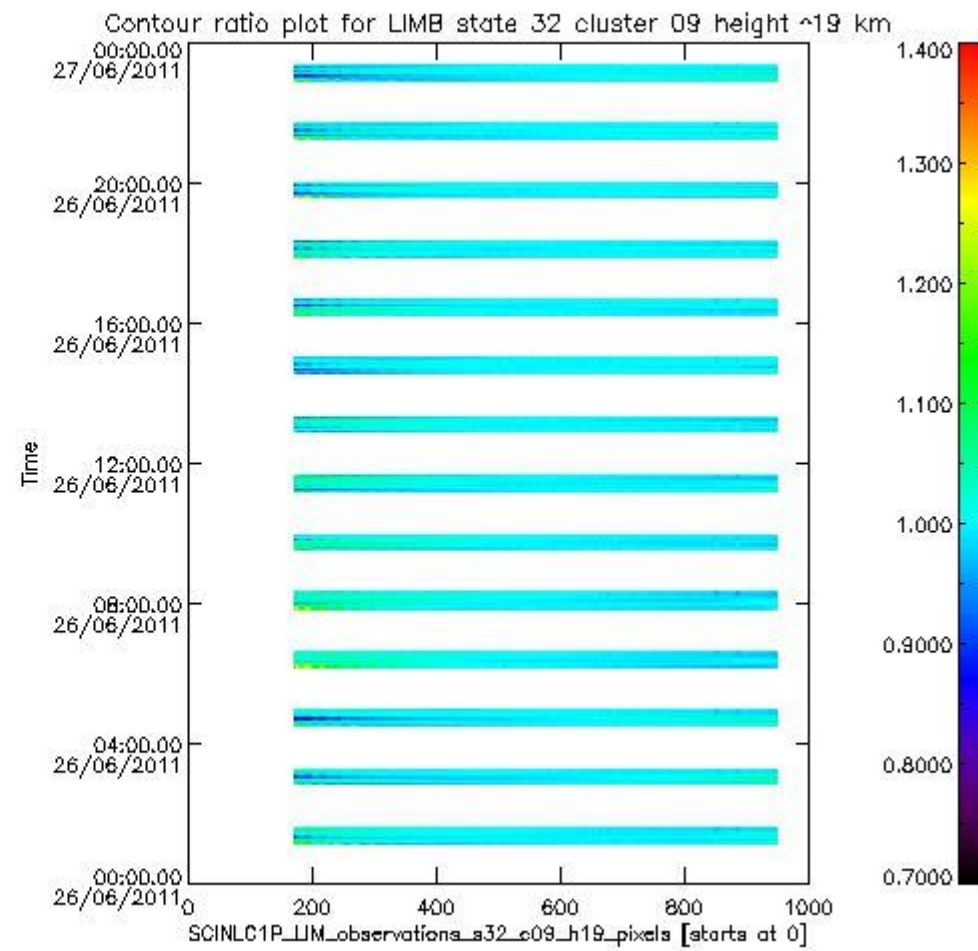
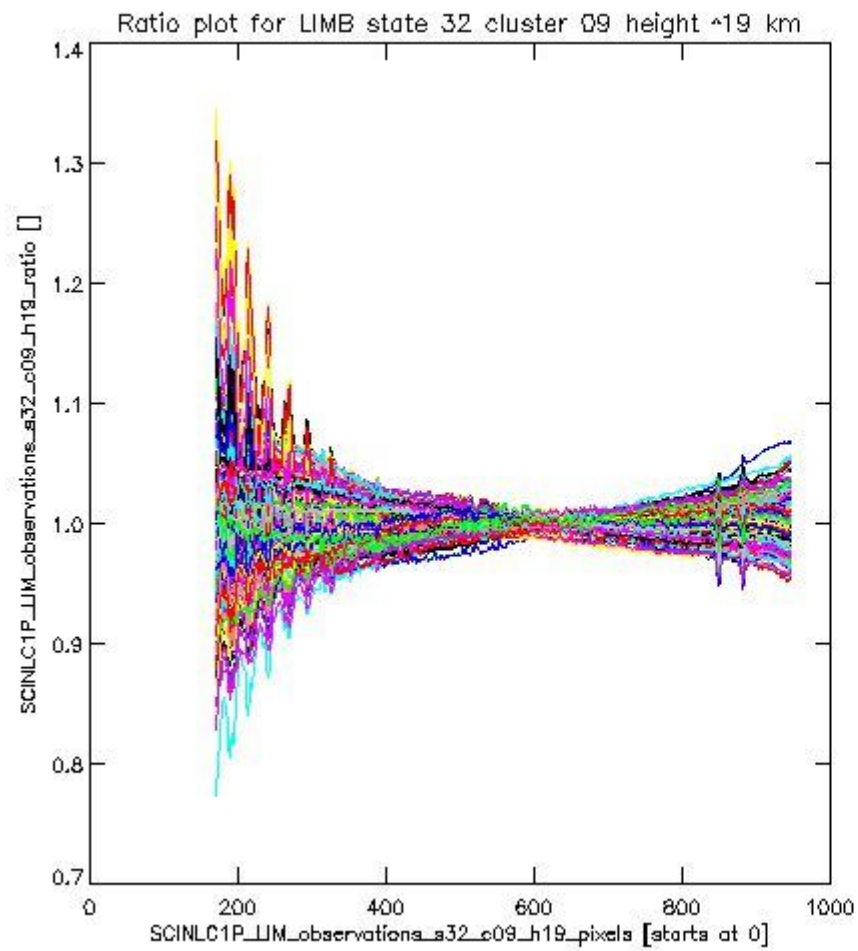
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	26JUN2011 01:08:44.640
Start time of last sample	26JUN2011 23:19:16.428
Reference period start time	28MAY2011 08:53:25.150
Reference period stop time	25JUN2011 23:56:00.569
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





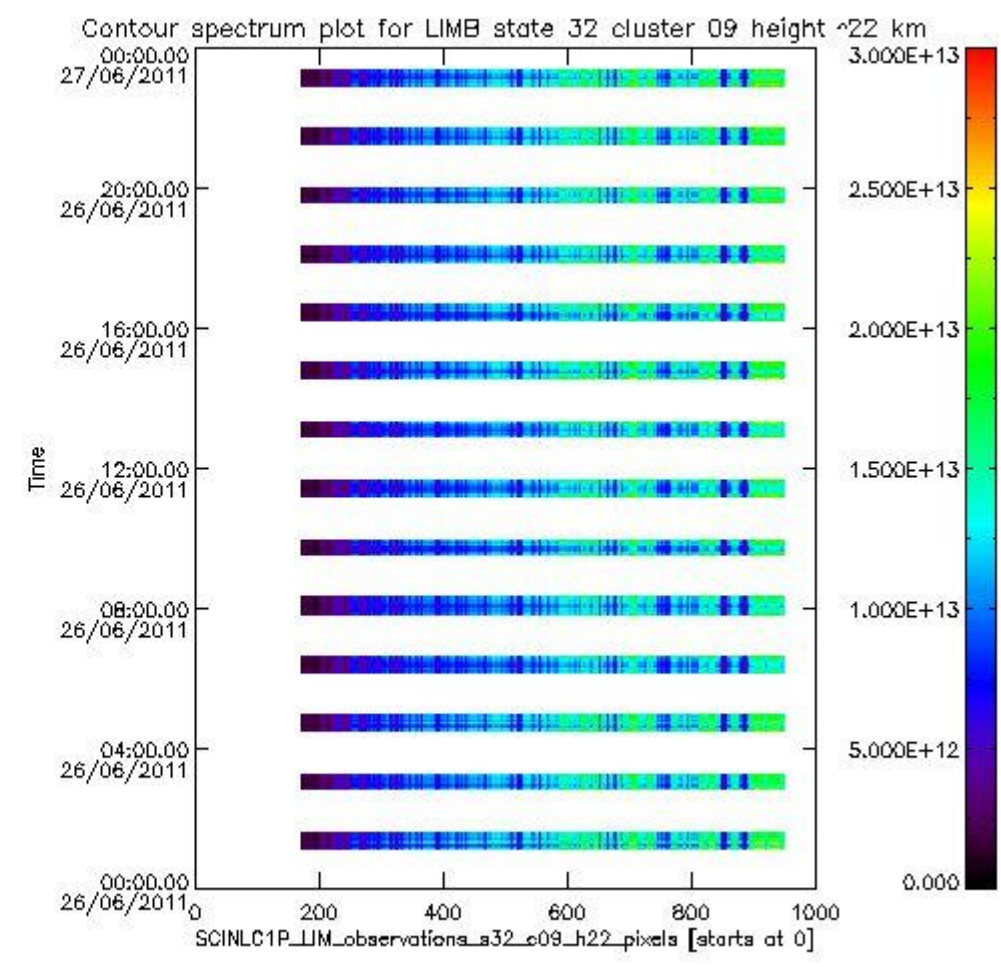
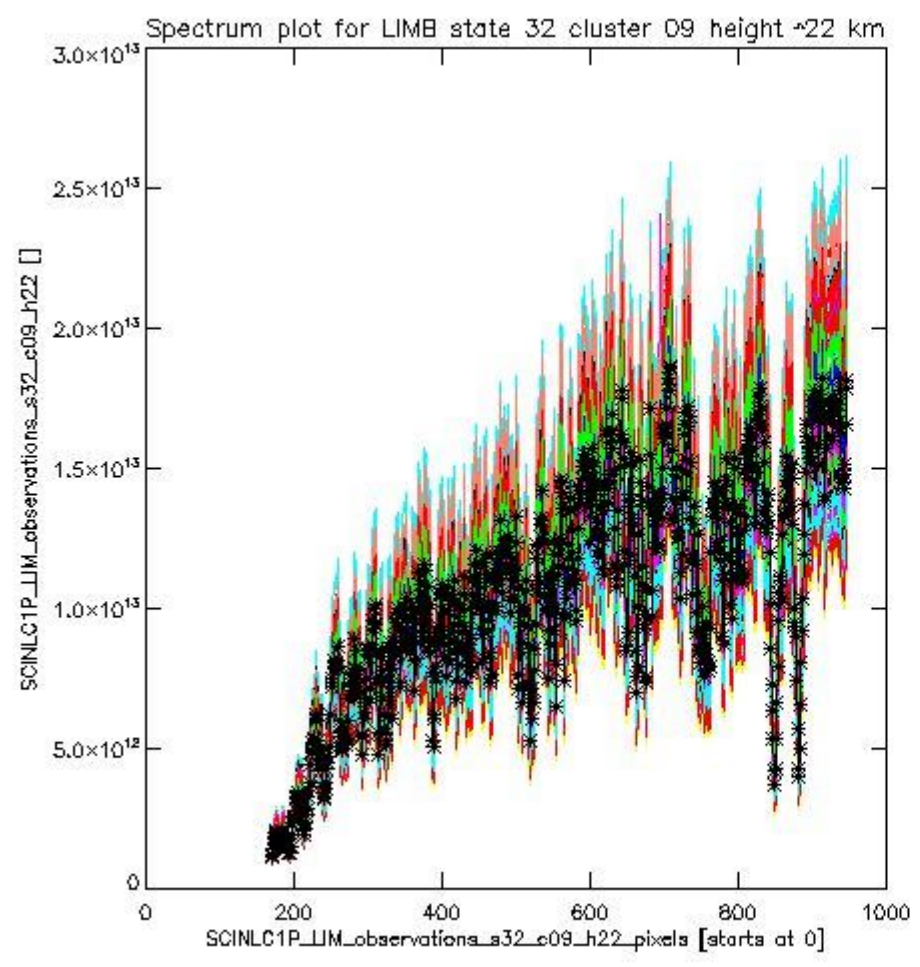
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_10.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_11.PNG

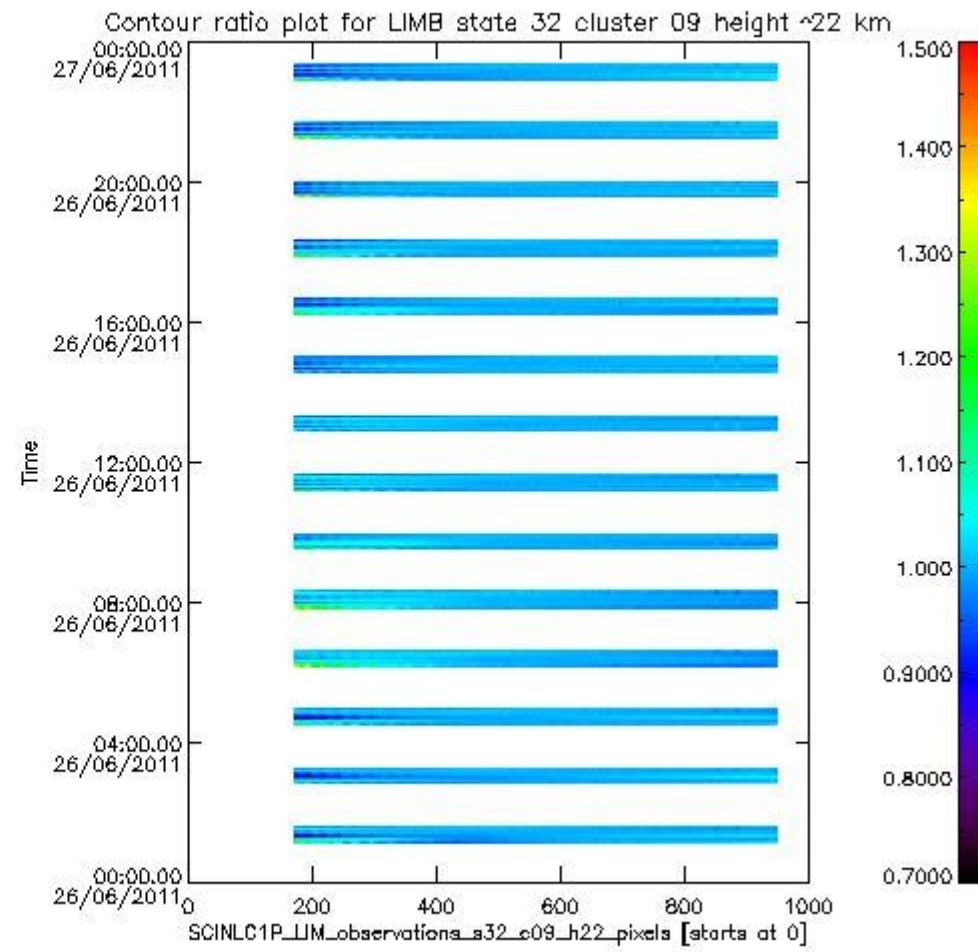
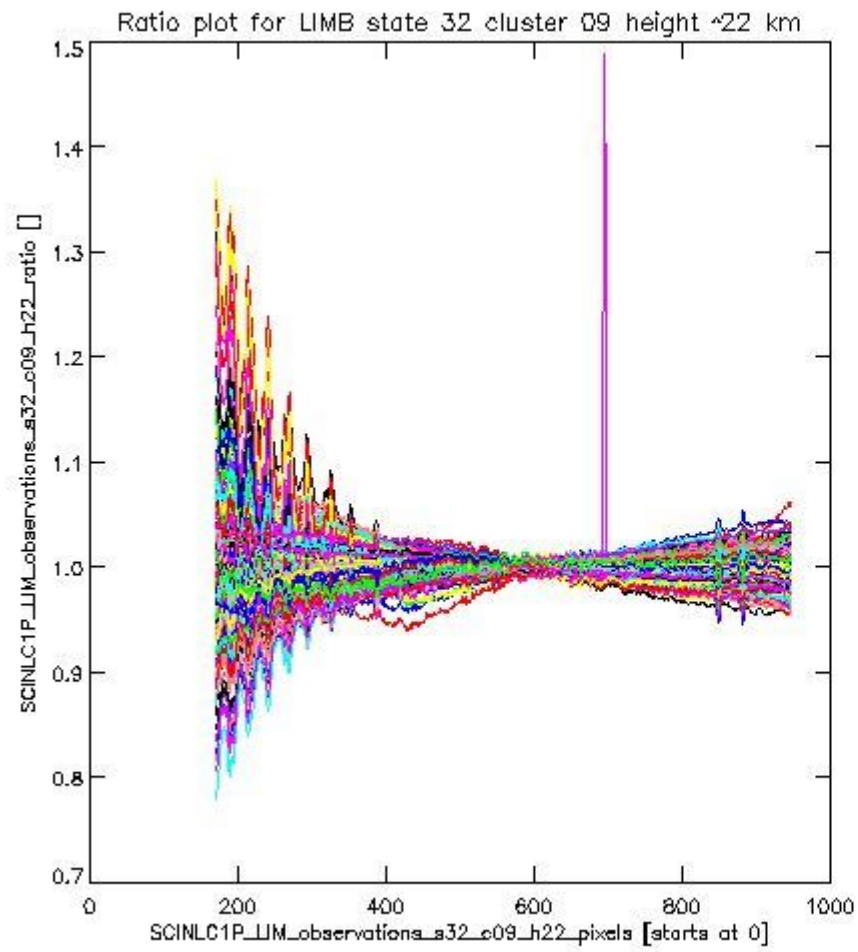
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	26JUN2011 01:08:44.640
Start time of last sample	26JUN2011 23:19:16.428
Reference period start time	28MAY2011 08:53:25.150
Reference period stop time	25JUN2011 23:56:00.569
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\_20110626\_12.PNG

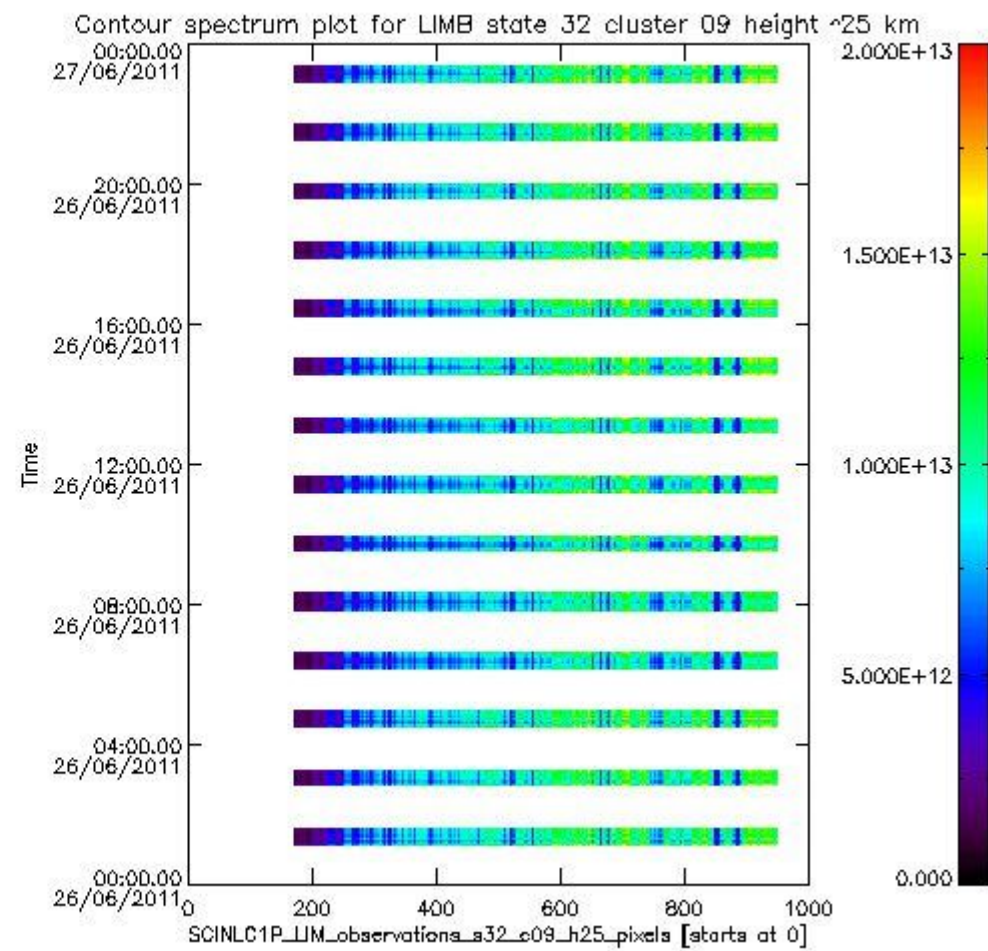
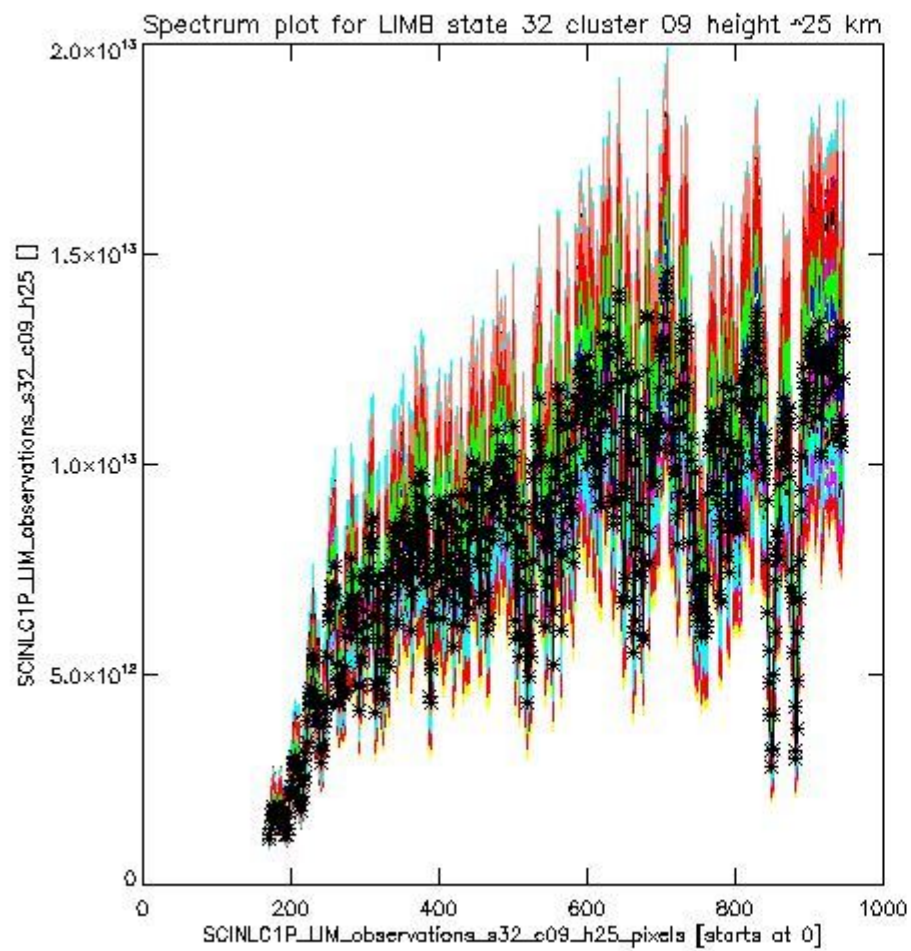




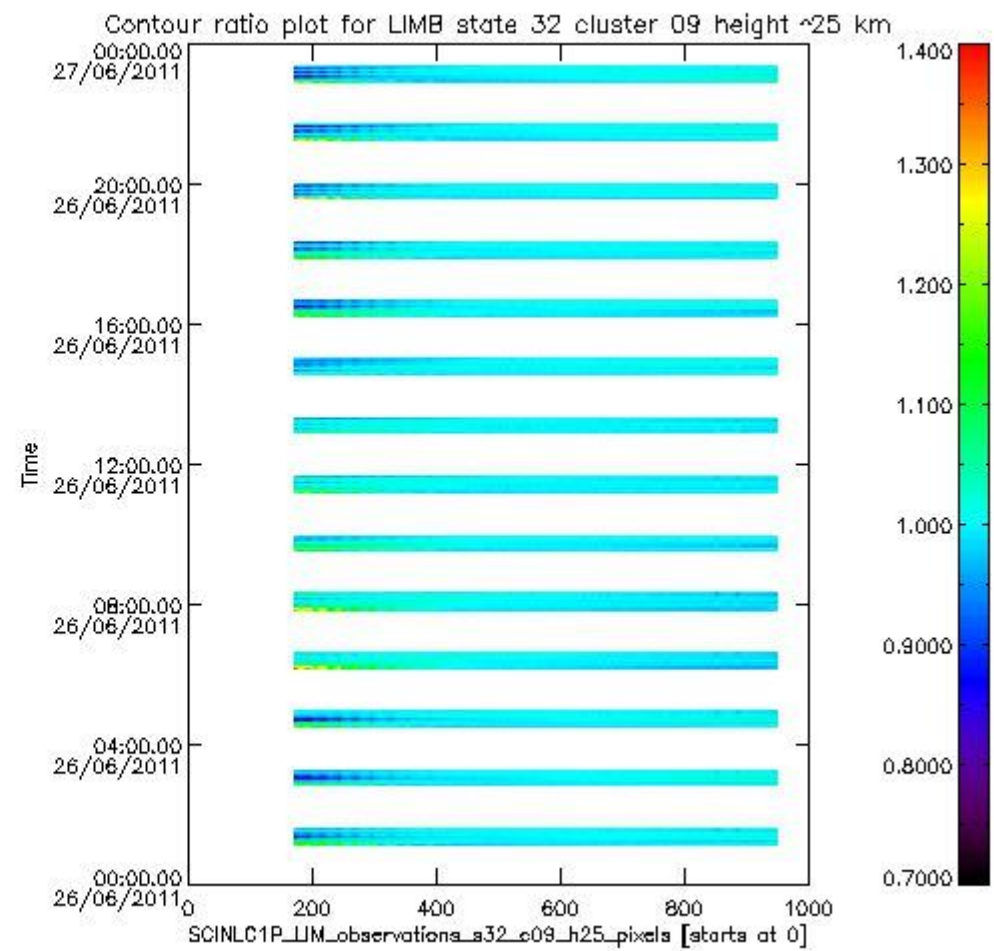
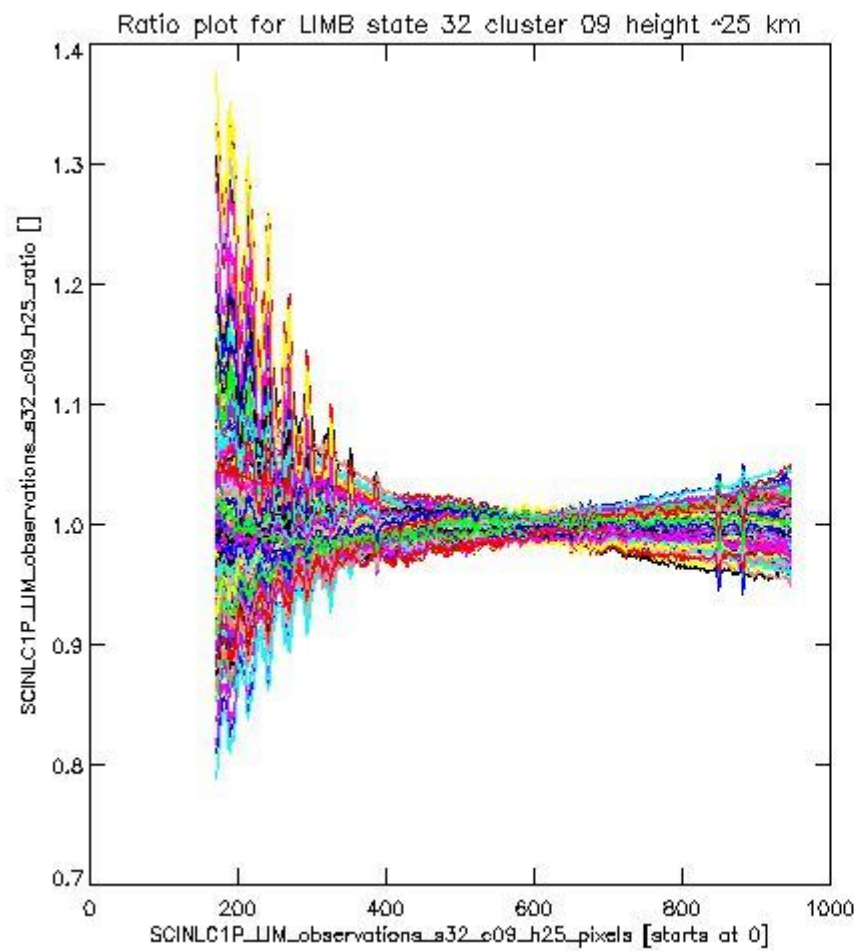
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_13.PNG

**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	26JUN2011 01:08:44.640
Start time of last sample	26JUN2011 23:19:16.428
Reference period start time	28MAY2011 08:53:25.150
Reference period stop time	25JUN2011 23:56:00.569
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\_20110626\_14.PNG

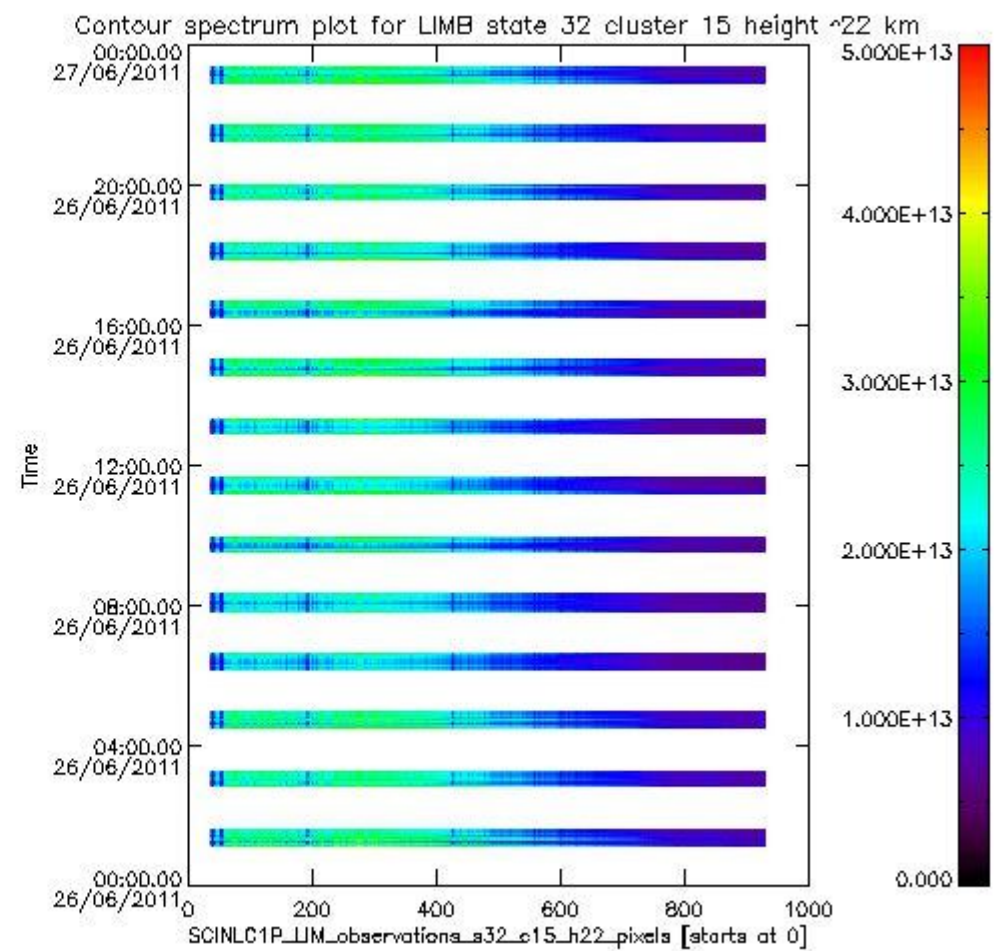
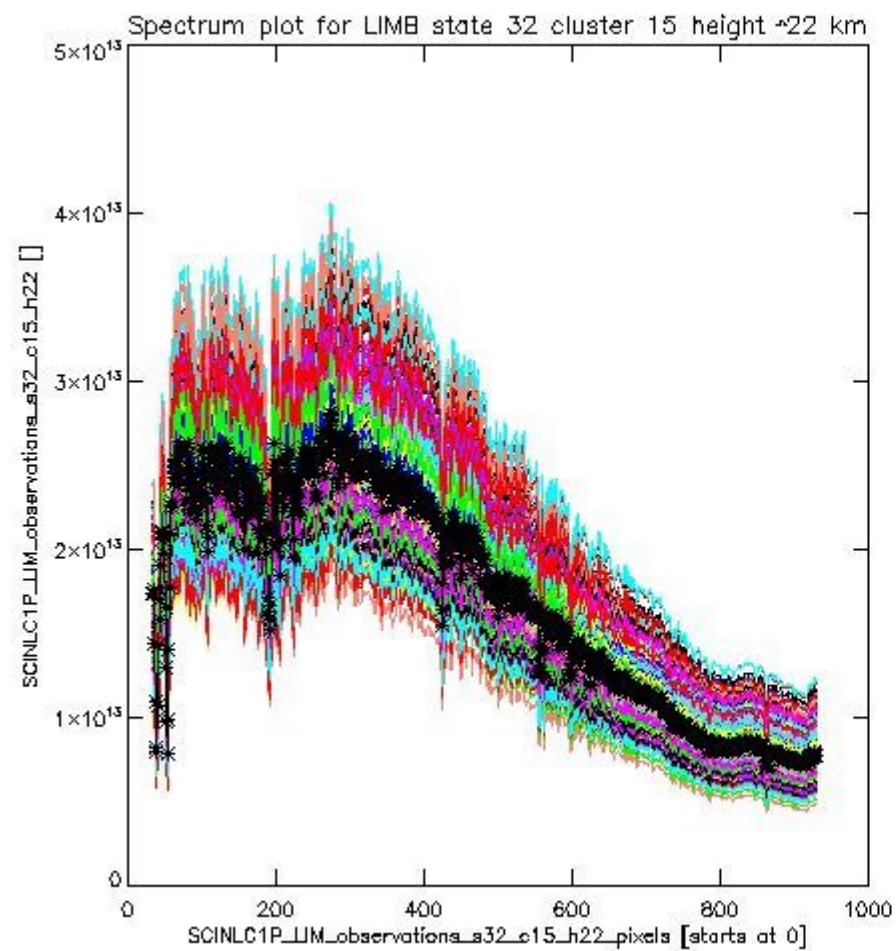


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_15.PNG

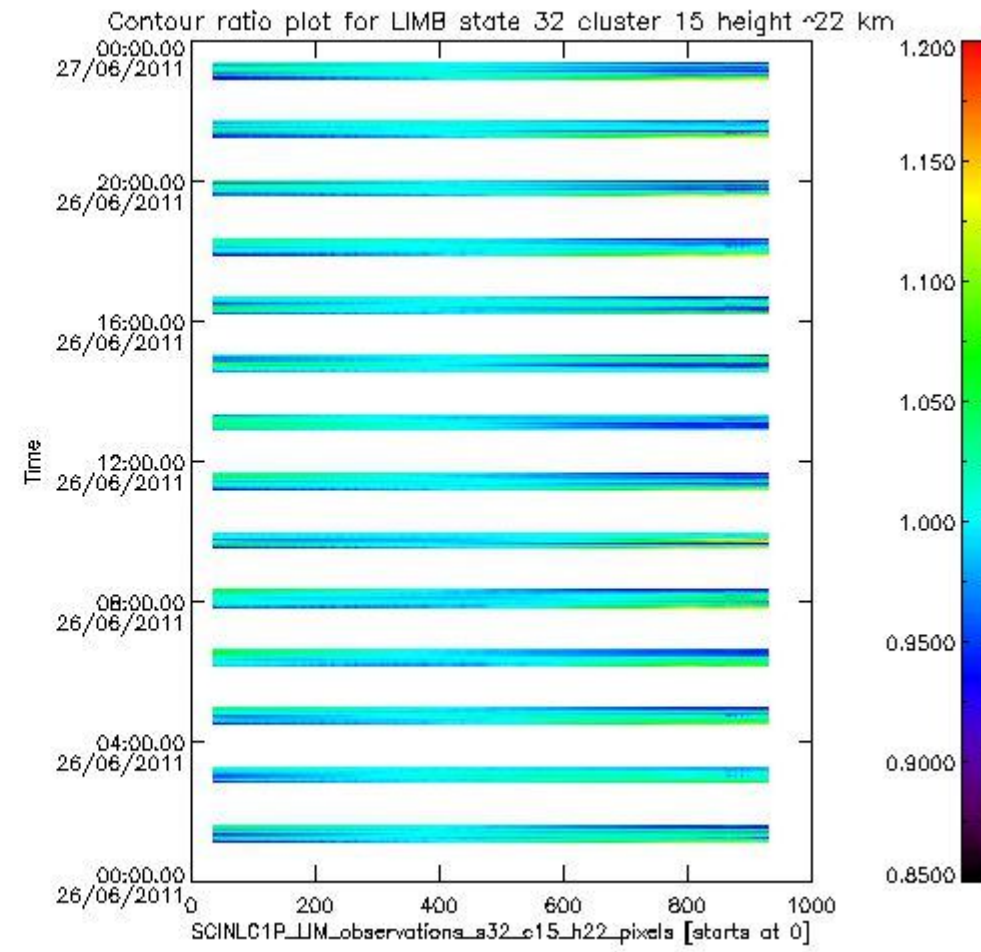
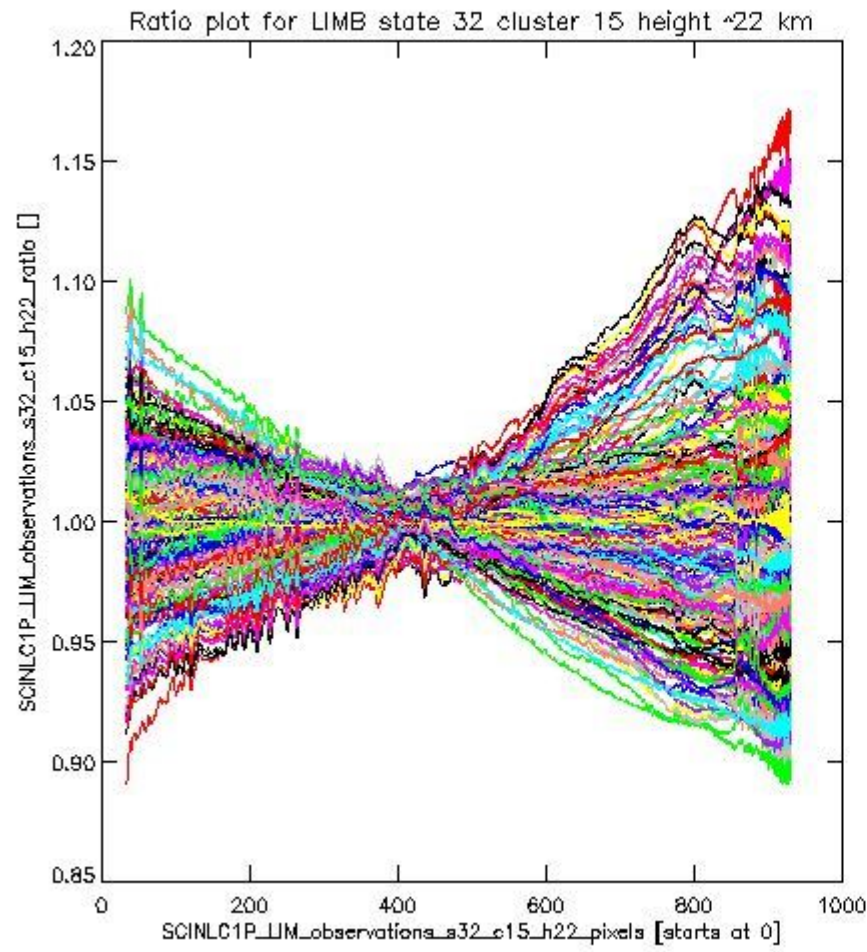
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	26JUN2011 01:08:44.640
Start time of last sample	26JUN2011 23:19:16.428
Reference period start time	28MAY2011 08:53:25.150
Reference period stop time	25JUN2011 23:56:00.569
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





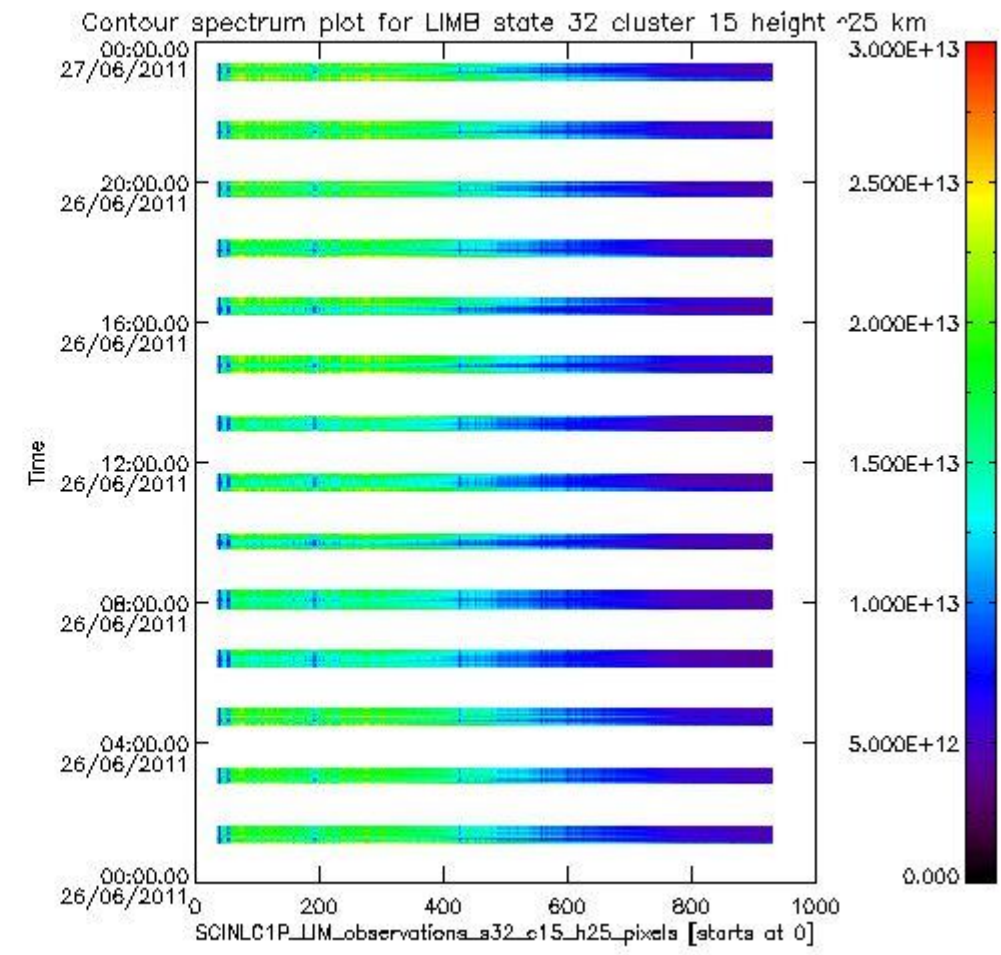
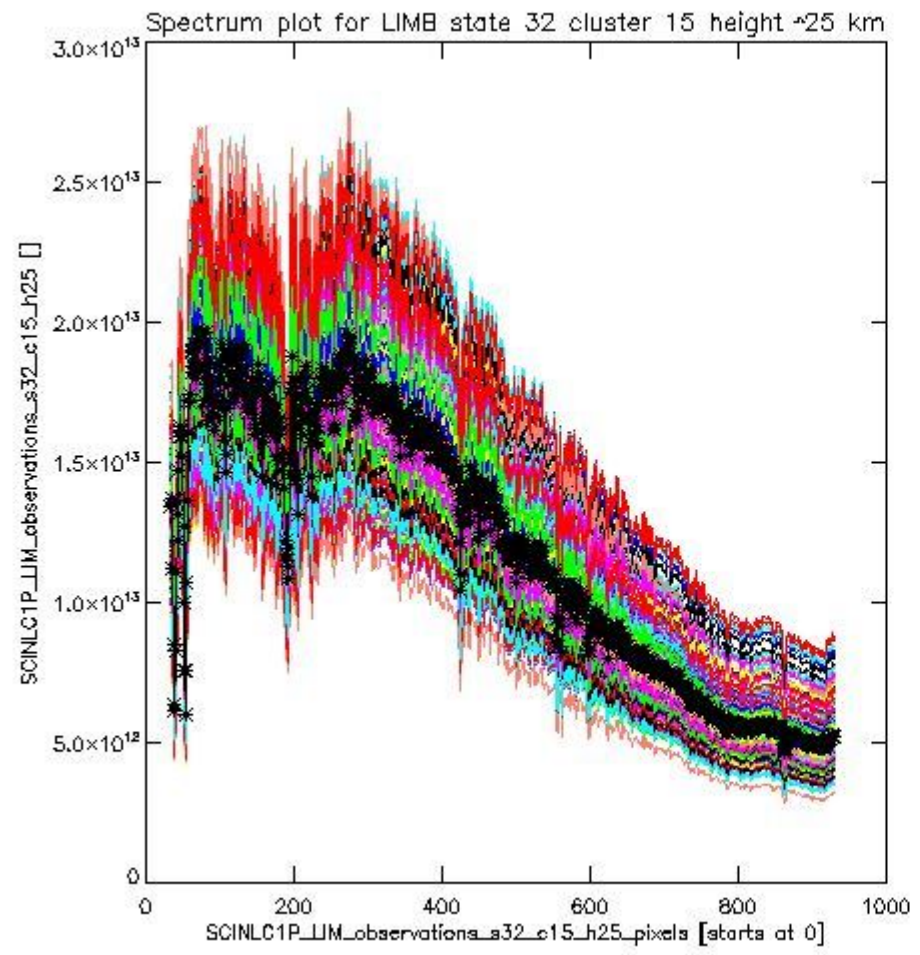
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_17.PNG

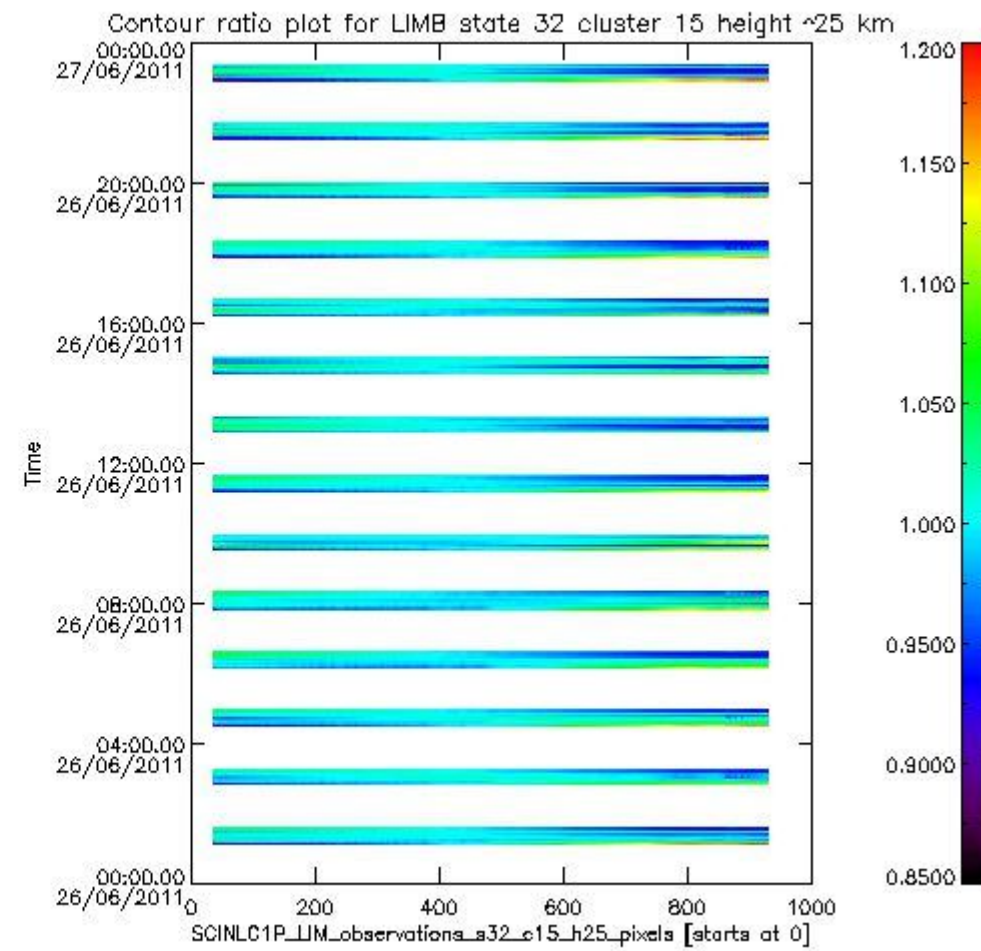
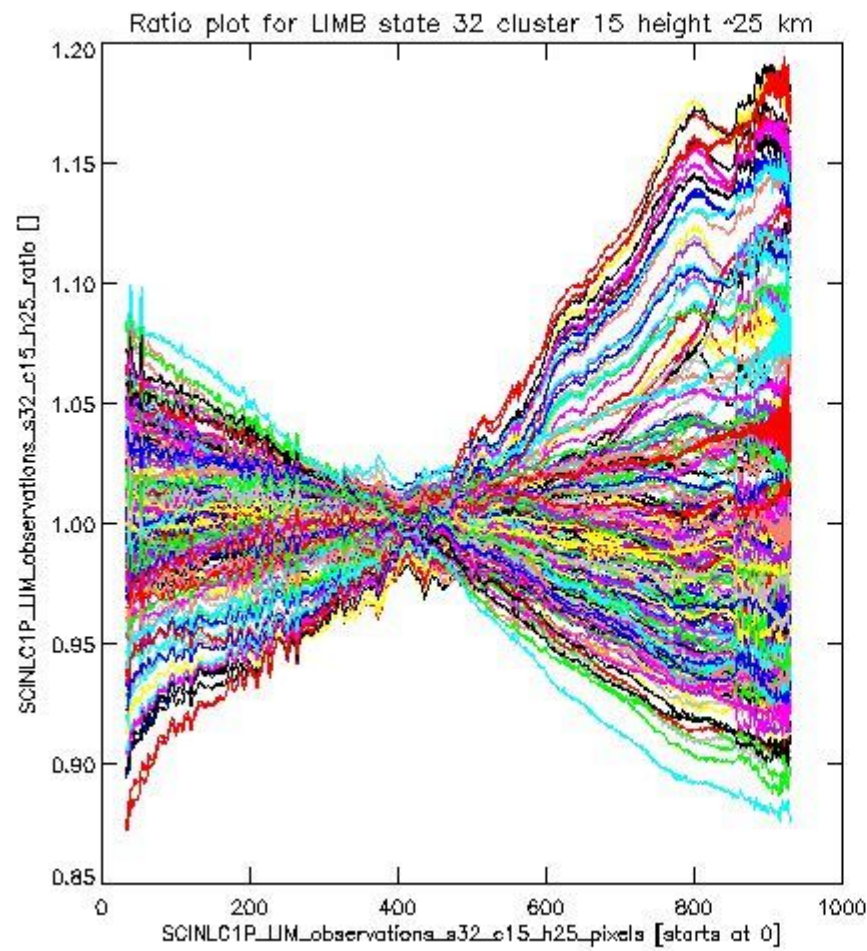
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	26JUN2011 01:08:44.640
Start time of last sample	26JUN2011 23:19:16.428
Reference period start time	28MAY2011 08:53:25.150
Reference period stop time	25JUN2011 23:56:00.569
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\_20110626\_18.PNG

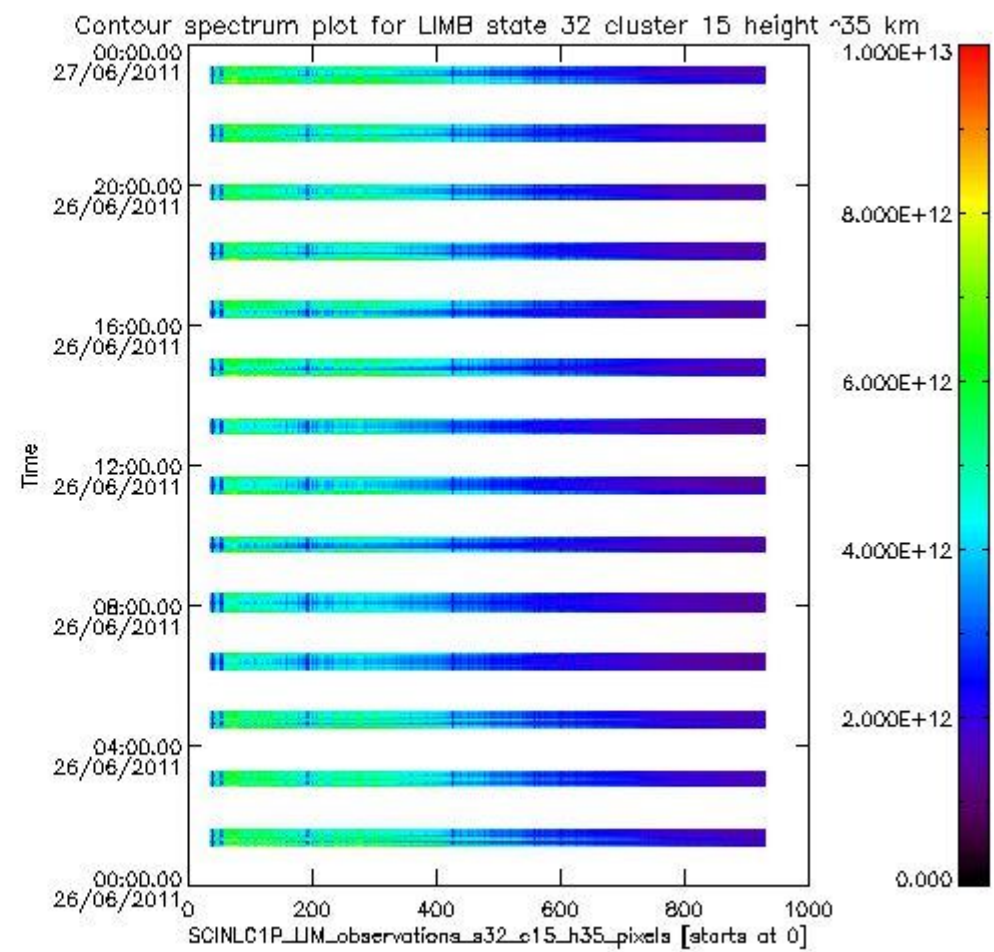
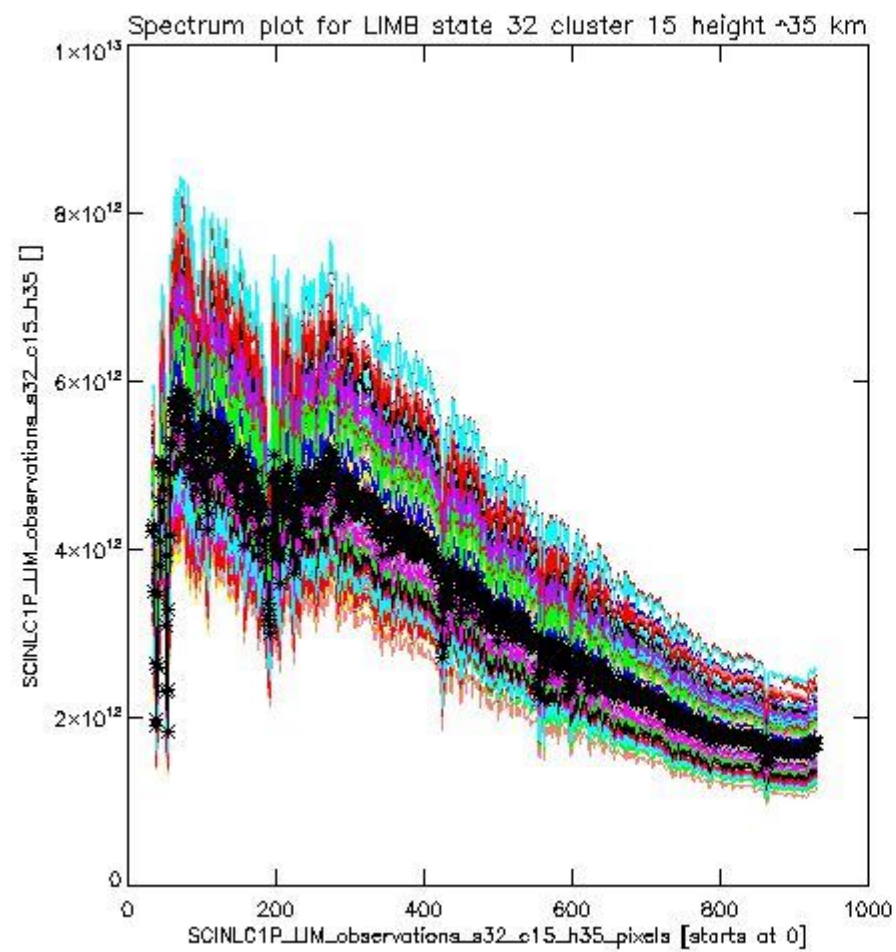


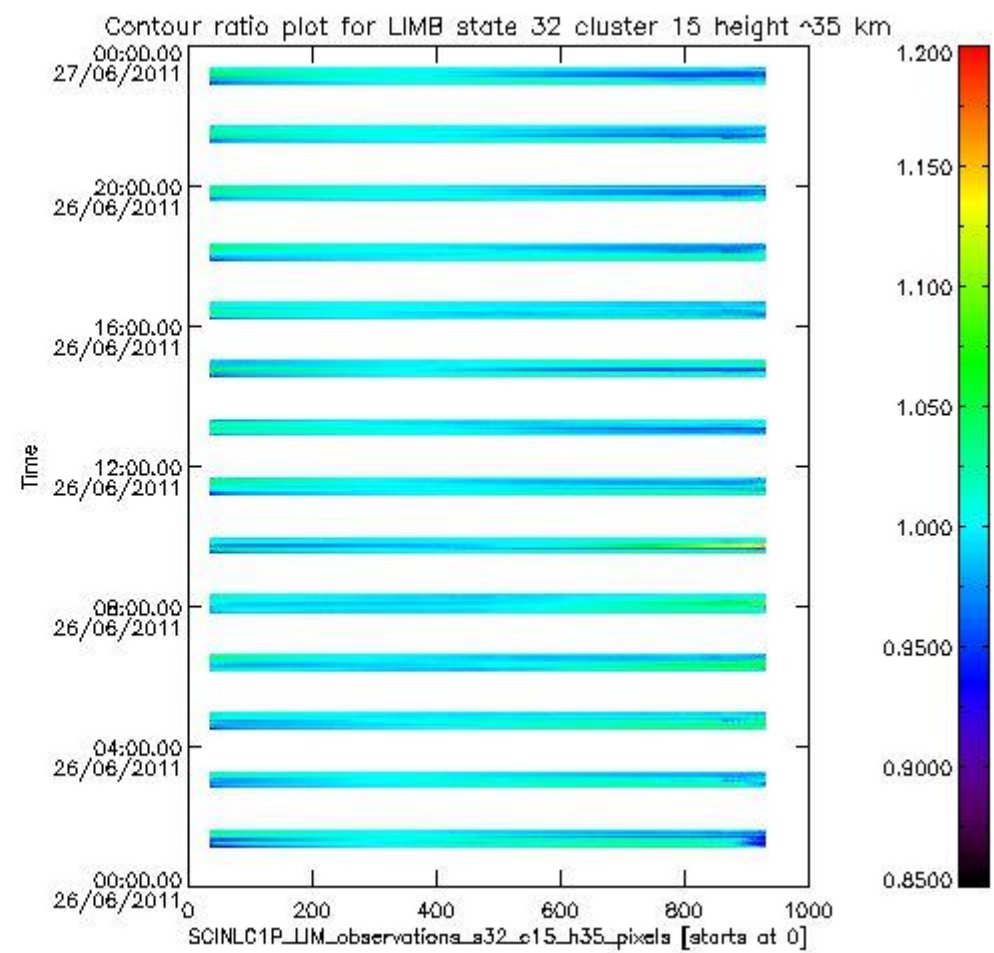
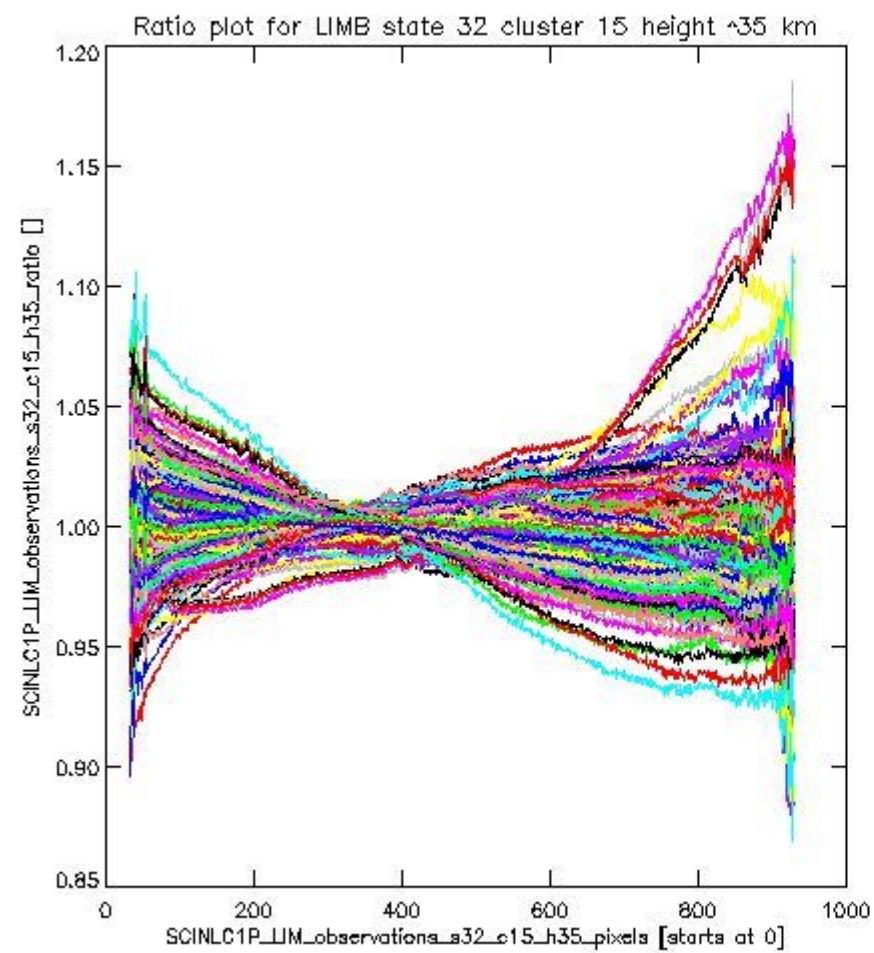


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110626\_19.PNG

**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	26JUN2011 01:08:44.640
Start time of last sample	26JUN2011 23:19:16.428
Reference period start time	28MAY2011 08:53:25.150
Reference period stop time	25JUN2011 23:56:00.569
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\_20110626\_21.PNG



