

# 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	29JUN2011 06:30:53
Data source version	SCIA/7.04-U
Processing scope for products	16JUN2011 00:00:00 to 17JUN2011 00:00:00
Start time of first product within scope	16JUN2011 11:58:55
Stop time of last product within scope	17JUN2011 00:51:01
Total number of level 1 products	5
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	16JUN2011 12:30:57.819	16JUN2011 22:42:35.164
1	NADIR	07	09	N/A	16JUN2011 12:30:57.819	16JUN2011 22:42:35.164
2	NADIR	07	15	N/A	16JUN2011 12:30:57.819	16JUN2011 22:42:35.164
3	NADIR	07	24	N/A	16JUN2011 12:30:57.819	16JUN2011 22:42:35.164
4	NADIR	07	55	N/A	16JUN2011 12:30:57.819	16JUN2011 22:42:35.164
5	LIMB	32	09	~19 km	16JUN2011 12:17:47.179	16JUN2011 23:58:30.504
6	LIMB	32	09	~22 km	16JUN2011 12:17:47.179	16JUN2011 23:58:30.504
7	LIMB	32	09	~25 km	16JUN2011 12:17:47.179	16JUN2011 23:58:30.504
8	LIMB	32	15	~22 km	16JUN2011 12:17:47.179	16JUN2011 23:58:30.504
9	LIMB	32	15	~25 km	16JUN2011 12:17:47.179	16JUN2011 23:58:30.504
10	LIMB	32	15	~35 km	16JUN2011 12:17:47.179	16JUN2011 23:58:30.504

#### 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	#cpl_drk	#incpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110616_115855_000057413103_00311_48601_2267.N1</a>	16JUN2011 11:58:55	16JUN2011 13:09:09	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110616_133909_000057413103_00312_48602_2263.N1</a>	16JUN2011 13:39:09	16JUN2011 14:49:38	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110616_202005_000057413103_00316_48606_2264.N1</a>	16JUN2011 20:20:05	16JUN2011 21:30:34	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110616_220018_000057413103_00317_48607_2265.N1</a>	16JUN2011 22:00:18	16JUN2011 23:10:33	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110616_234032_000057413103_00318_48608_2266.N1</a>	16JUN2011 23:40:32	17JUN2011 00:51:01	0	36	30	0	0	1	0	0	

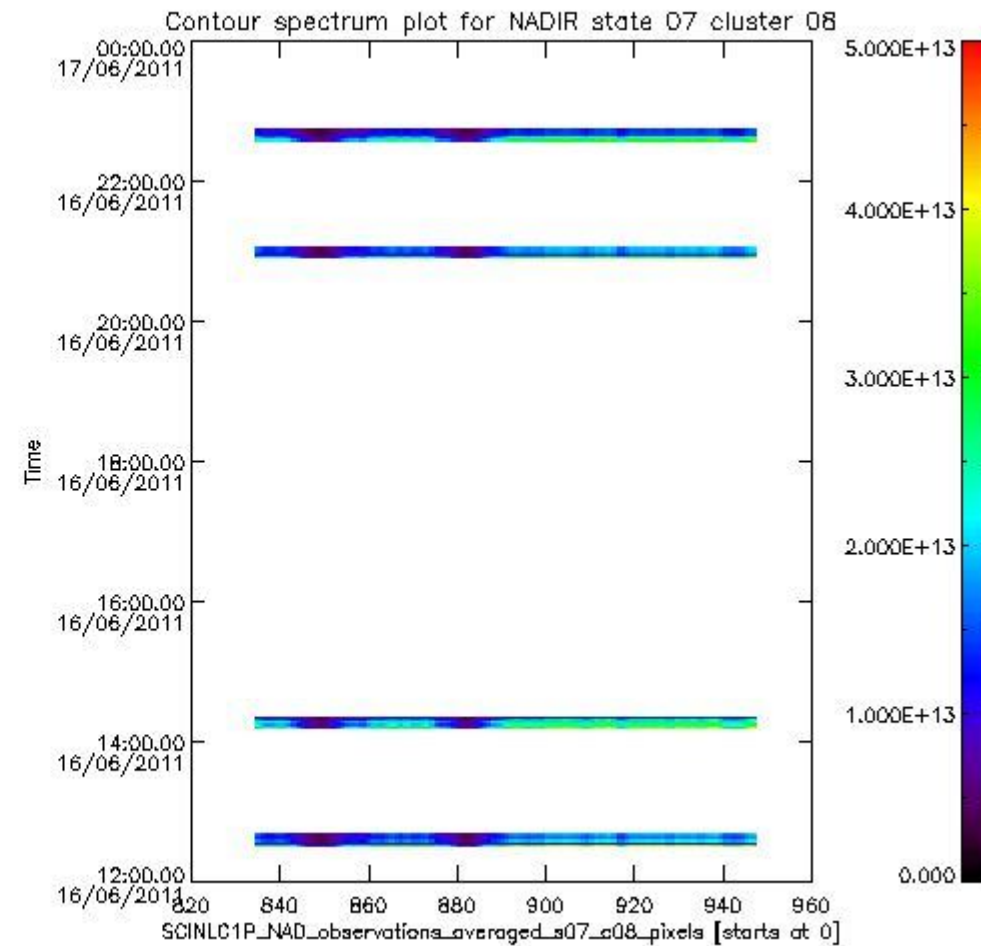
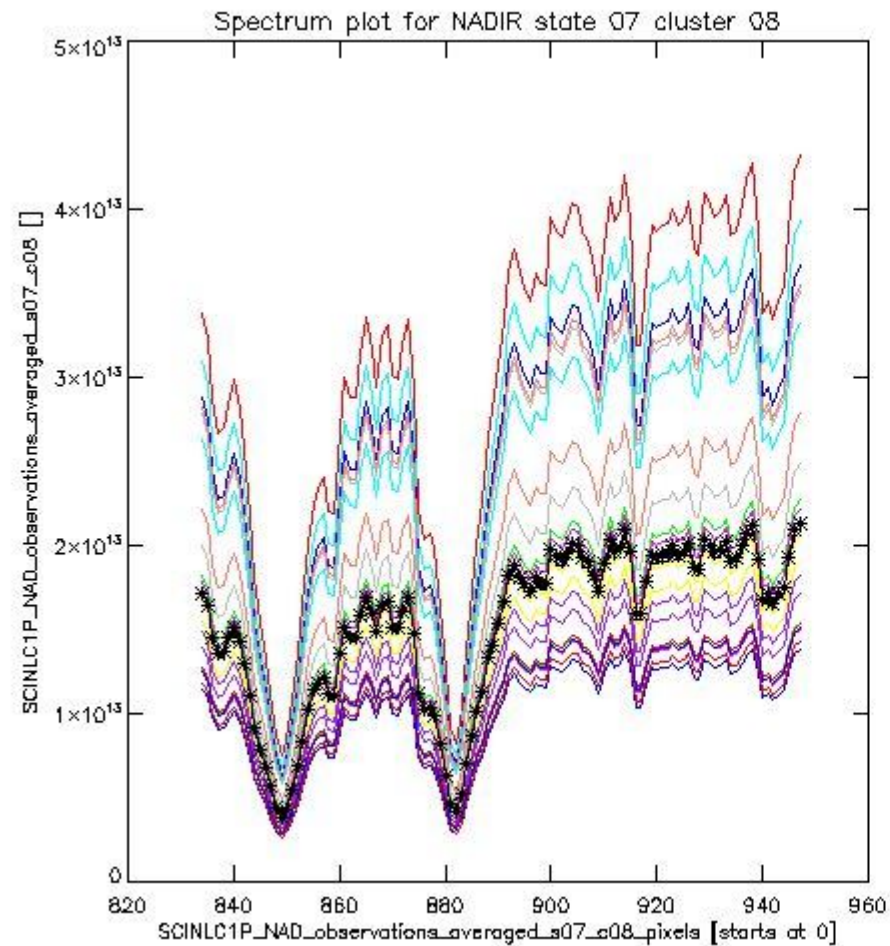
## 1.2 Source packet monitoring

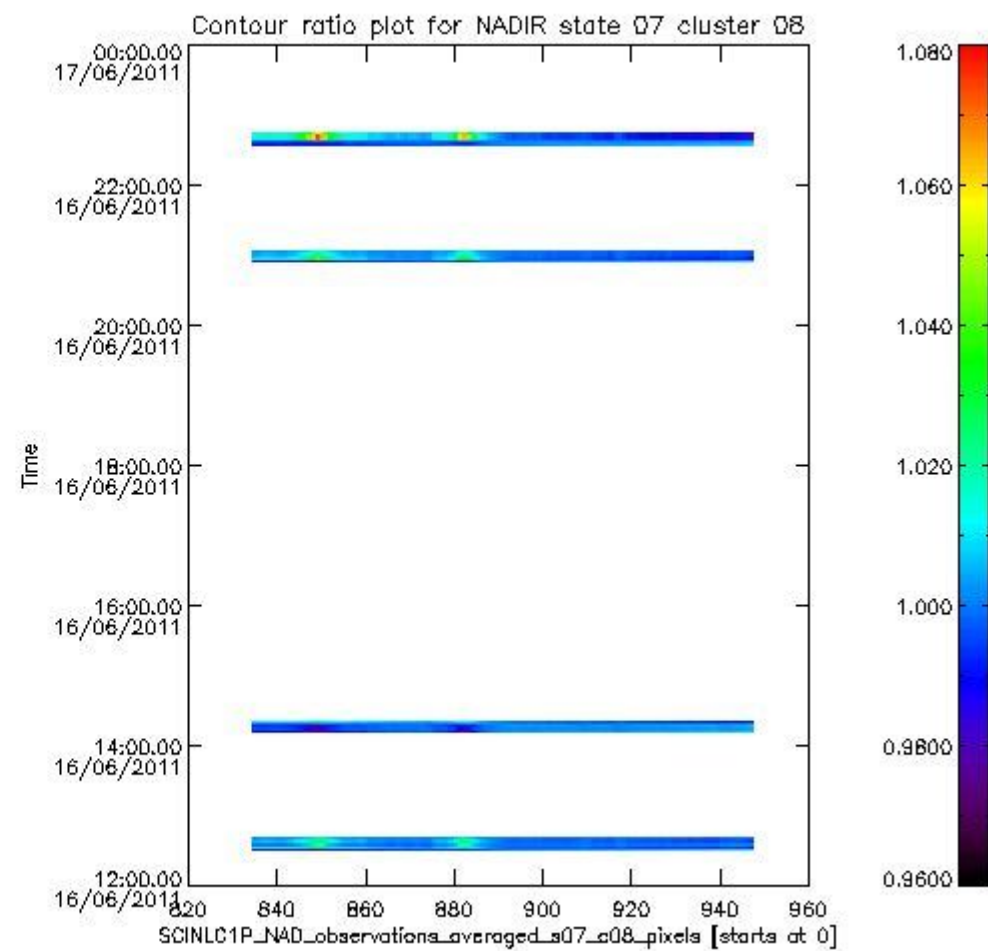
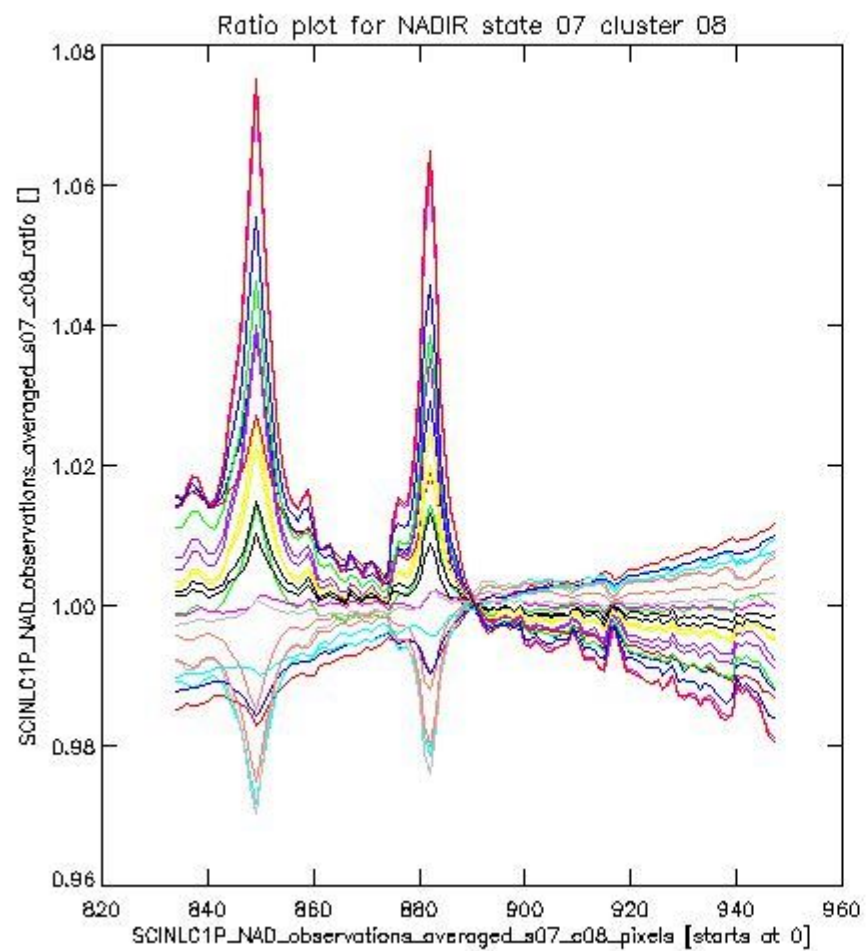
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	16JUN2011 12:30:57.819
Start time of last sample	16JUN2011 22:42:35.164
Reference period start time	17MAY2011 02:31:29.087
Reference period stop time	15JUN2011 04:56:47.328
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

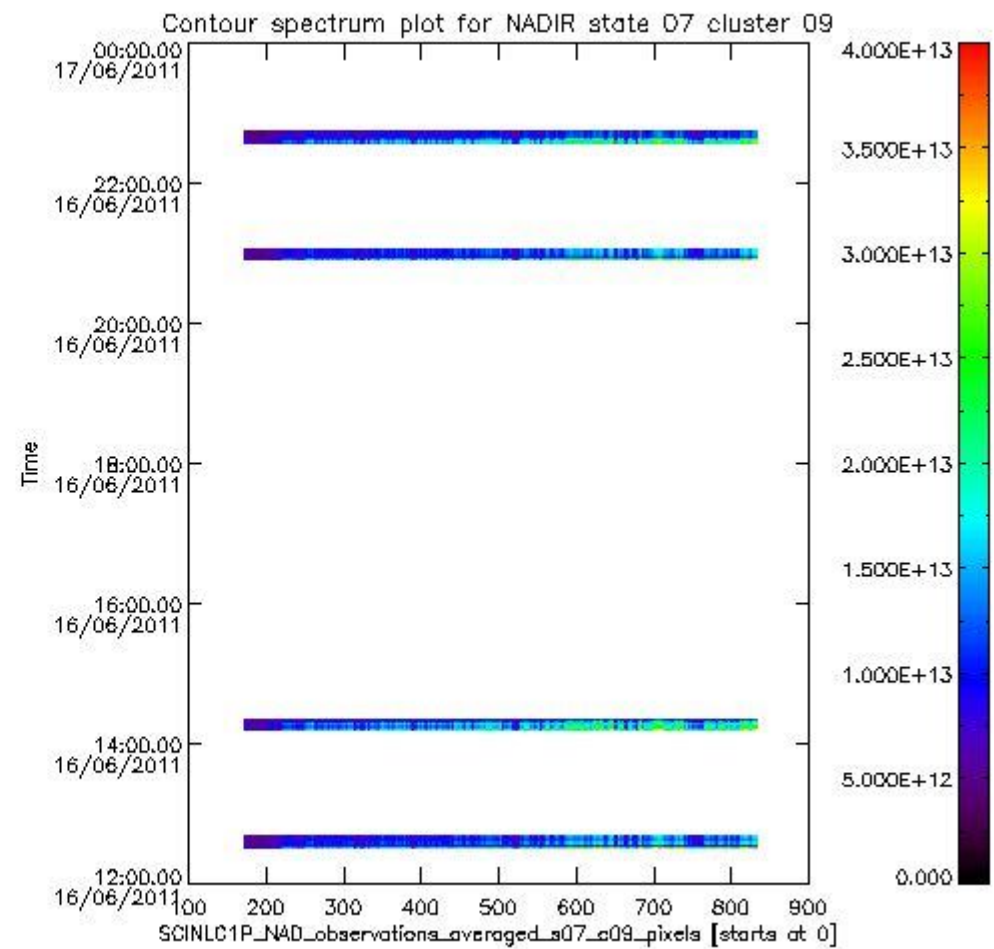
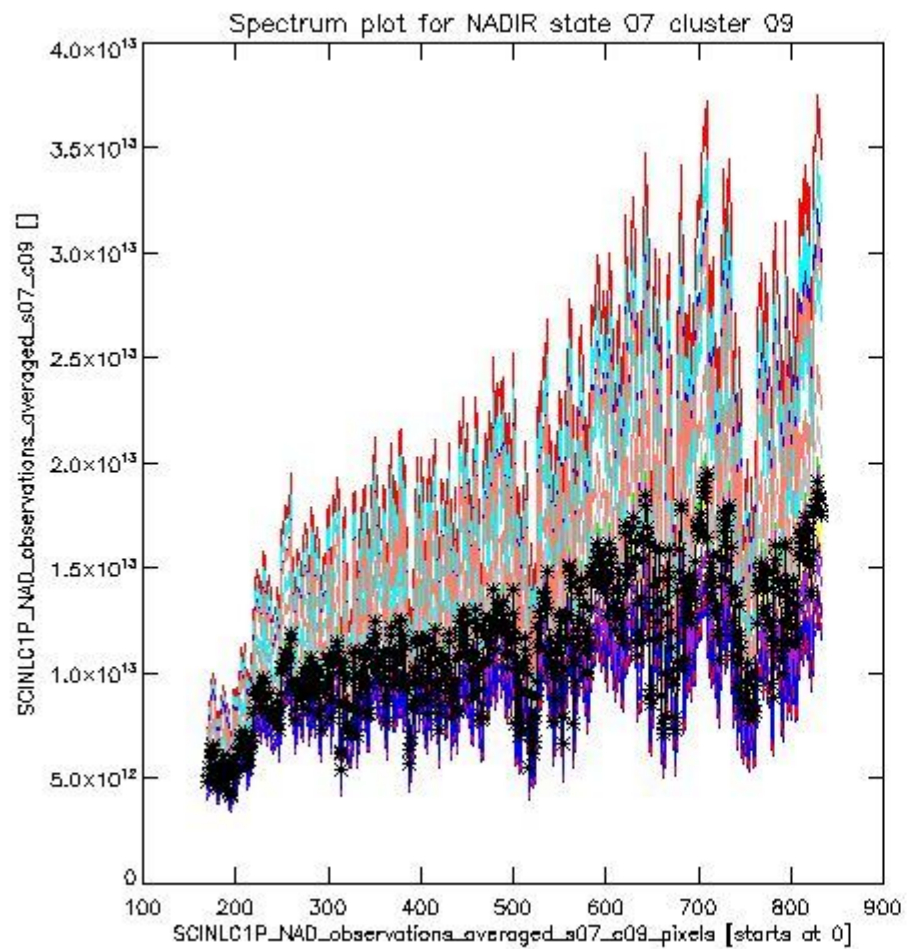




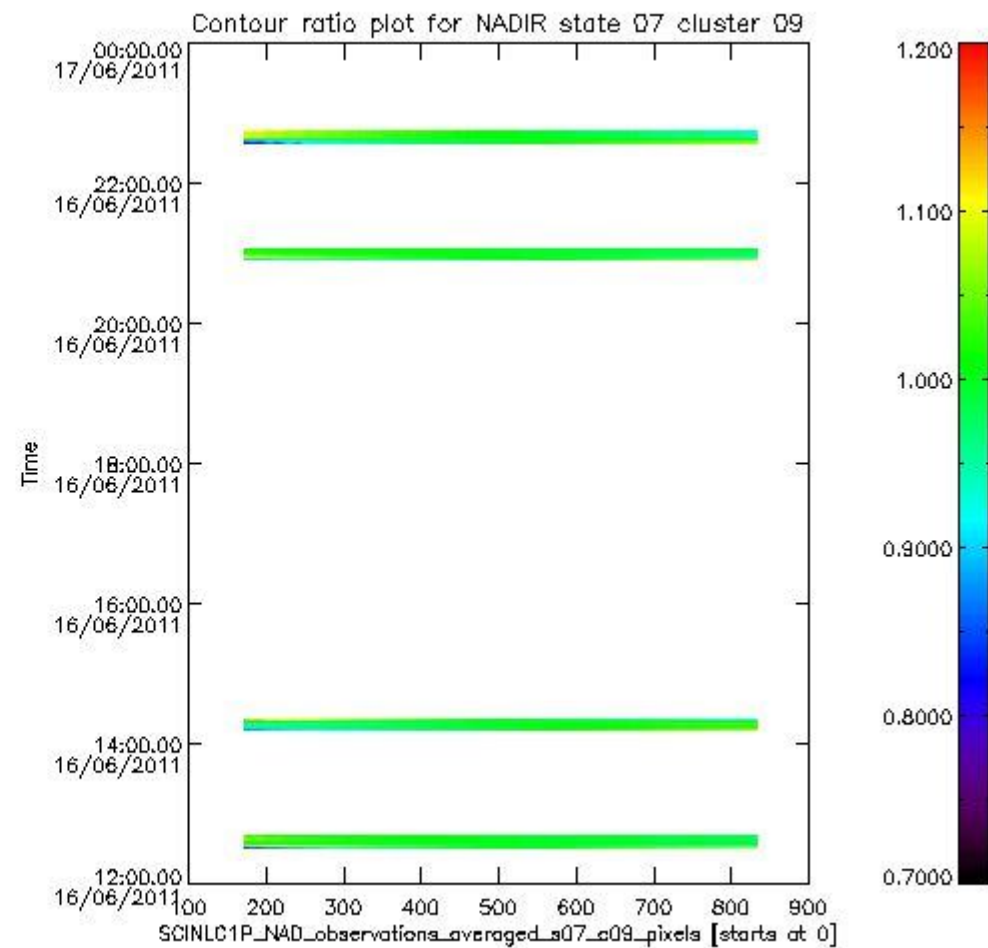
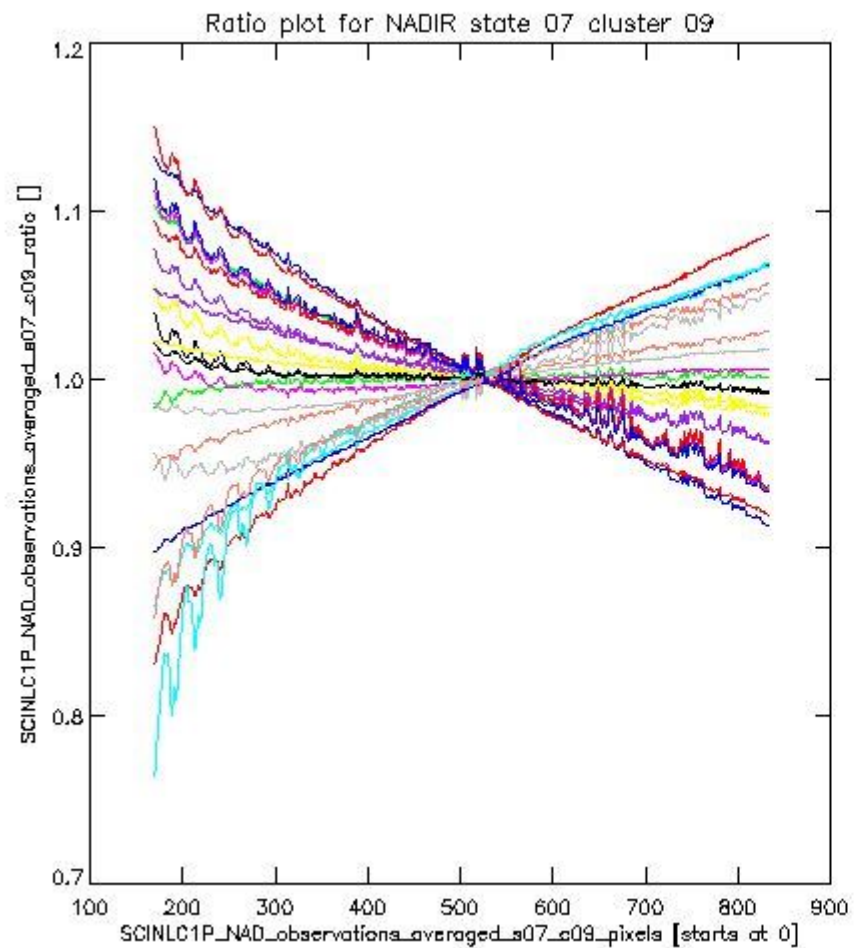
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_1.PNG

**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	16JUN2011 12:30:57.819
Start time of last sample	16JUN2011 22:42:35.164
Reference period start time	17MAY2011 02:31:29.087
Reference period stop time	15JUN2011 04:56:47.328
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



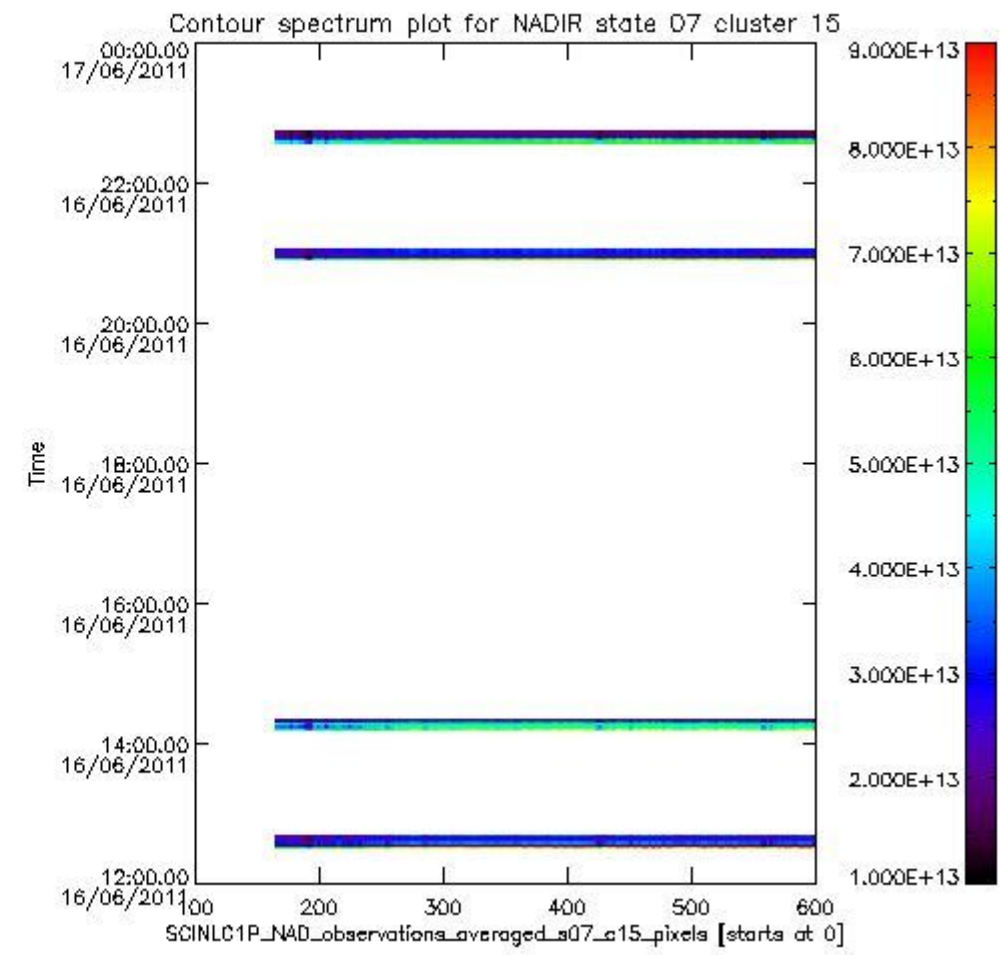
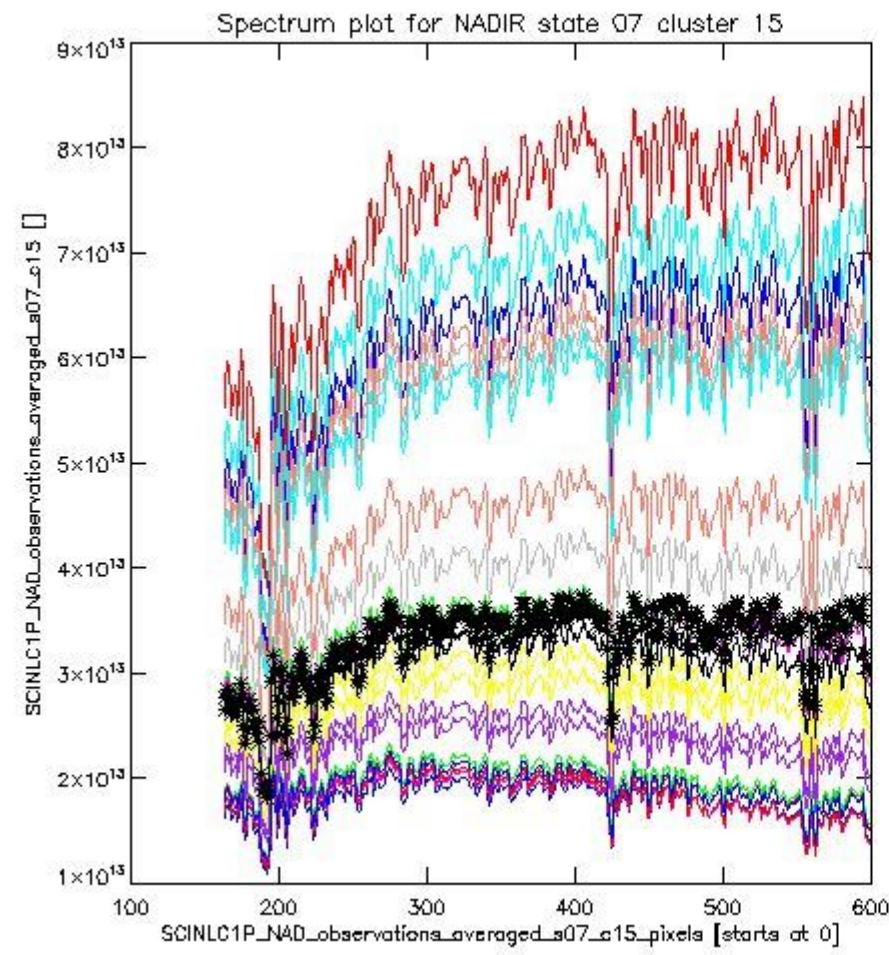
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_2.PNG



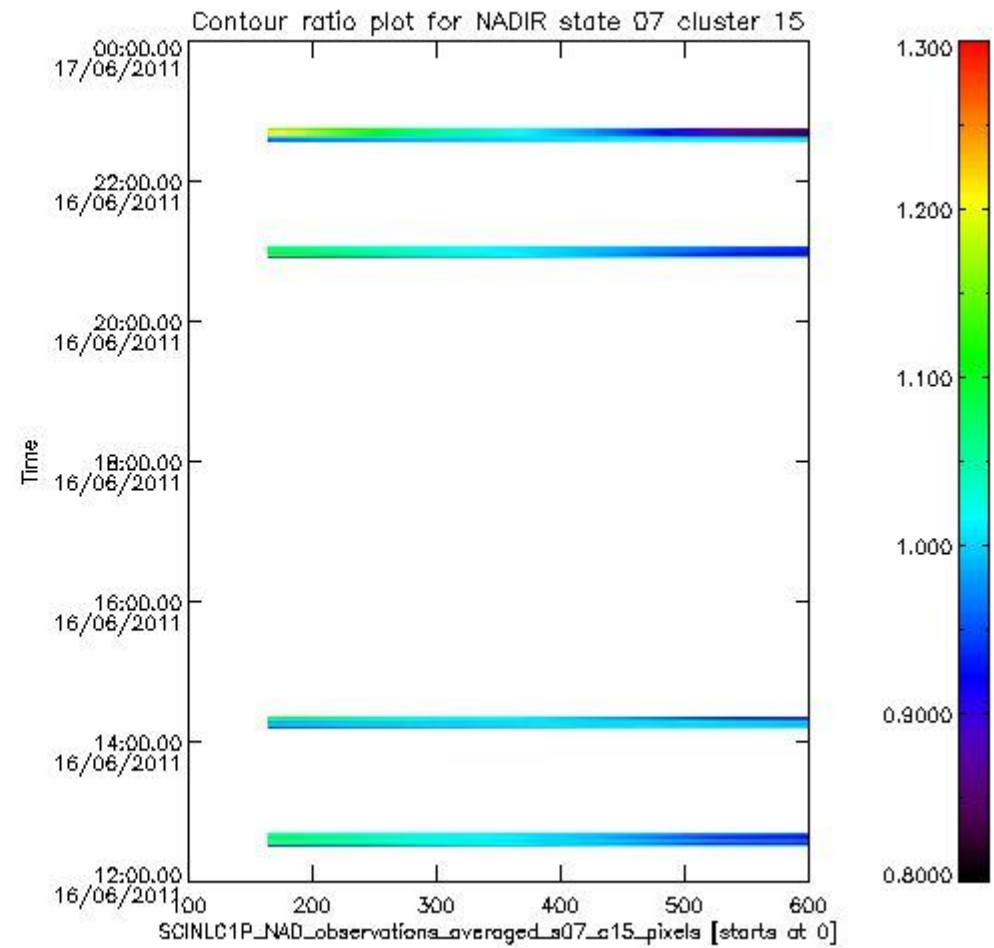
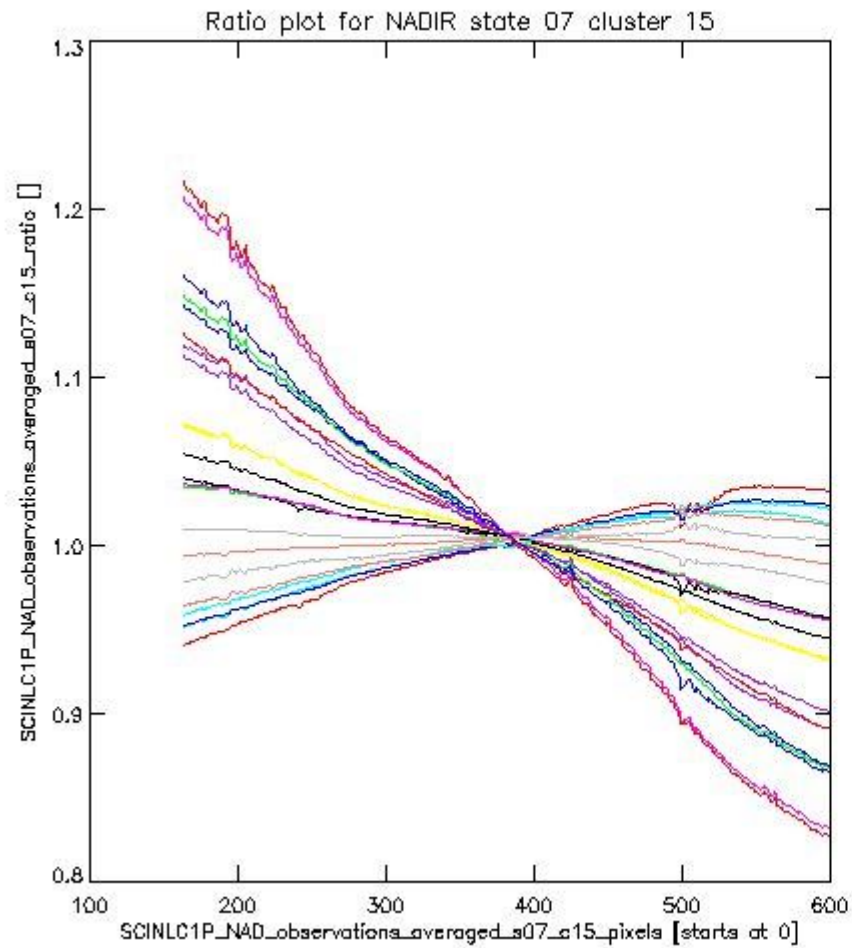
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_3.PNG

**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	16JUN2011 12:30:57.819
Start time of last sample	16JUN2011 22:42:35.164
Reference period start time	17MAY2011 02:31:29.087
Reference period stop time	15JUN2011 04:56:47.328
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



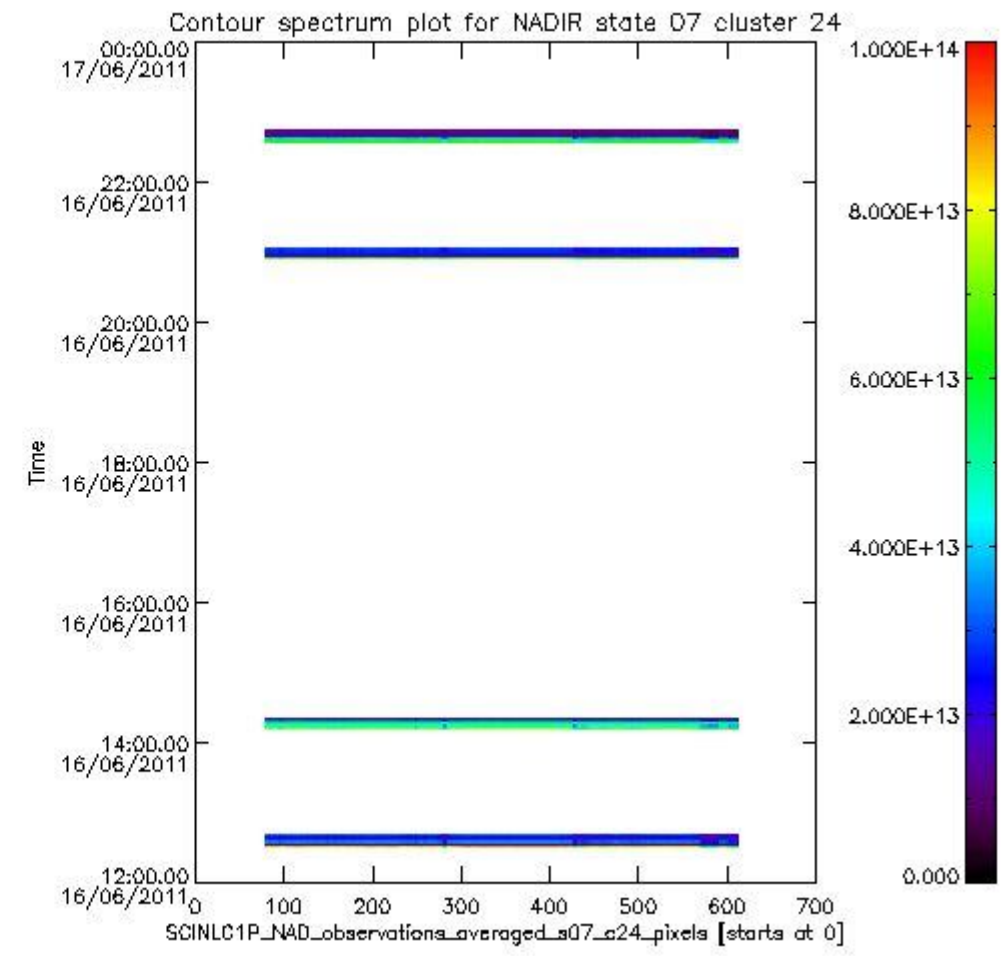
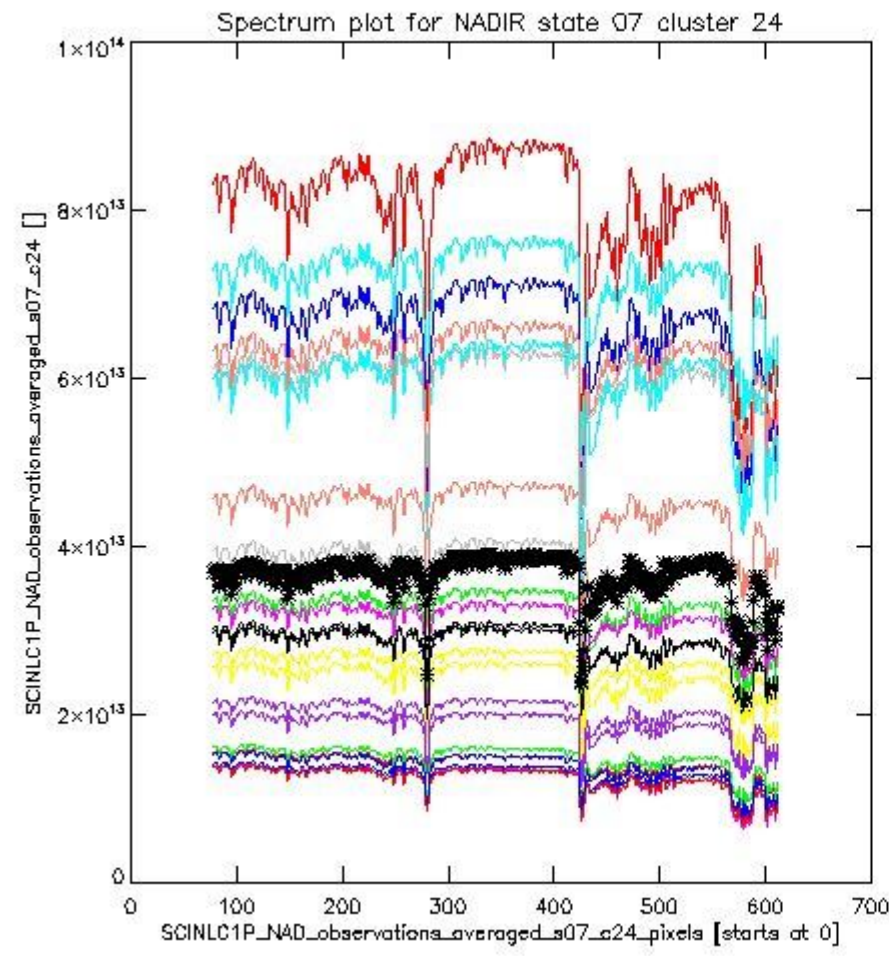
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_5.PNG

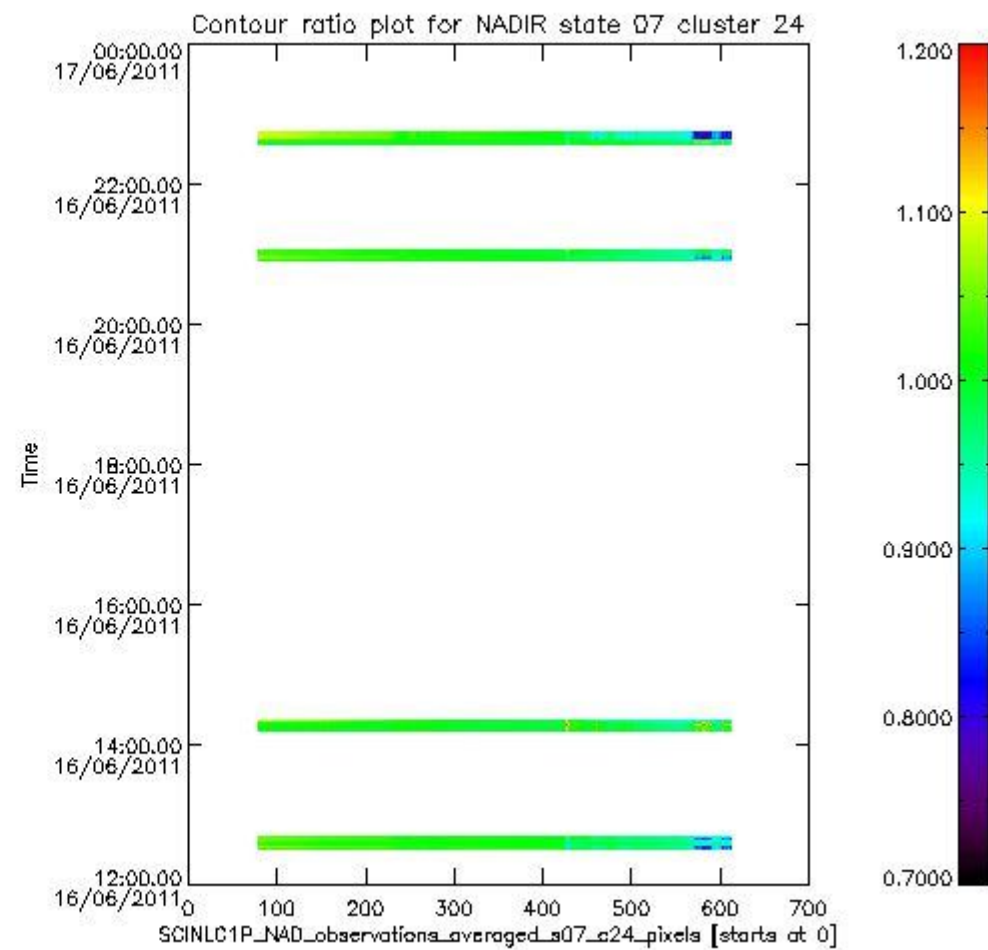
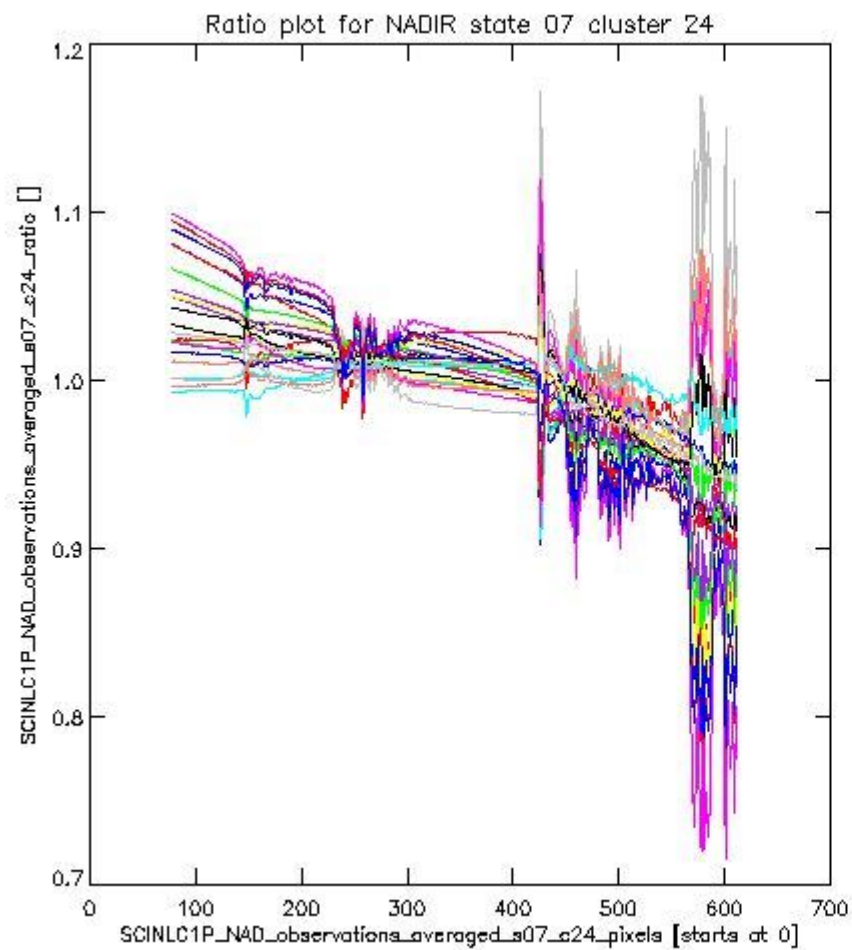
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	16JUN2011 12:30:57.819
Start time of last sample	16JUN2011 22:42:35.164
Reference period start time	17MAY2011 02:31:29.087
Reference period stop time	15JUN2011 04:56:47.328
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\_20110616\_6.PNG

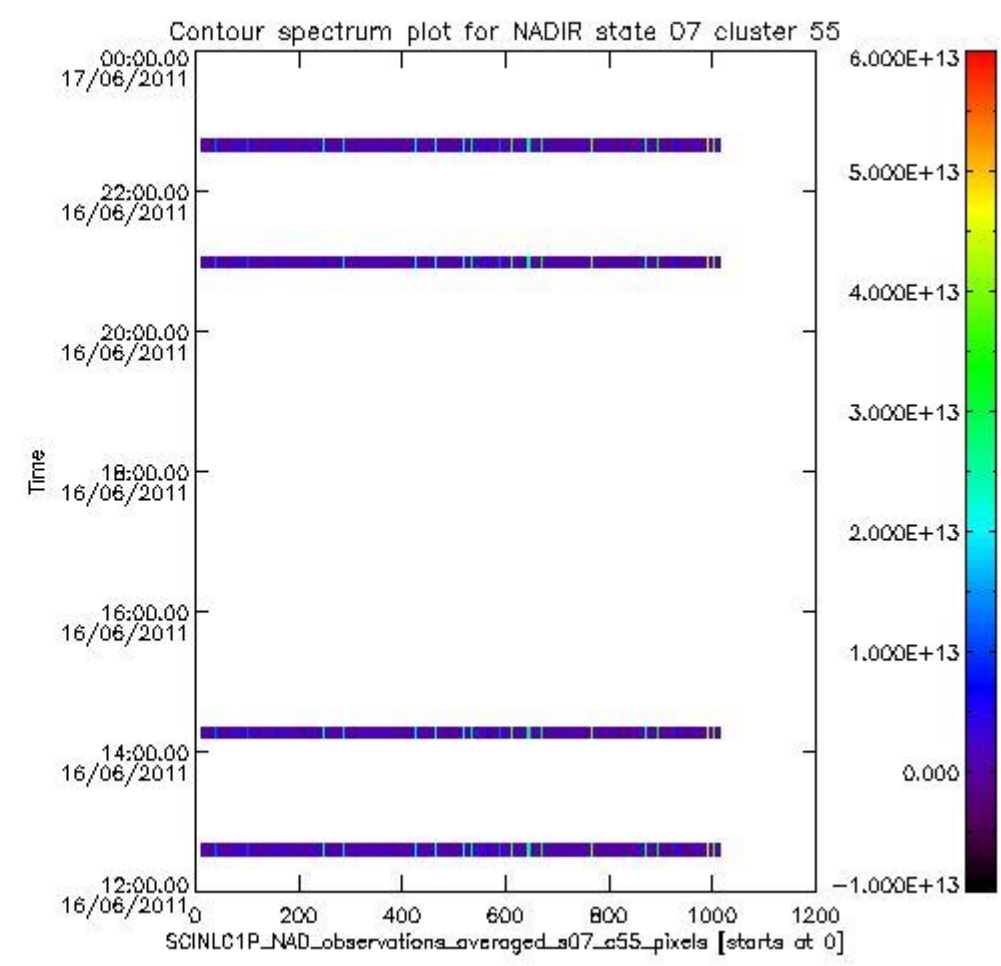
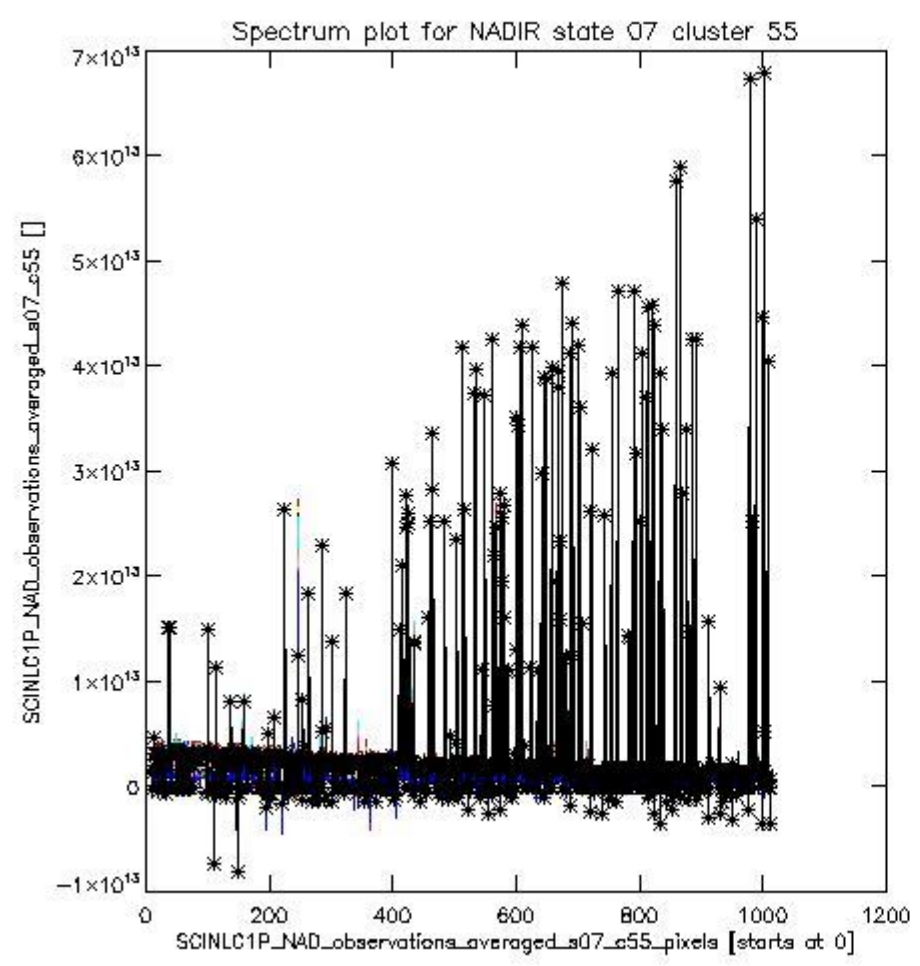




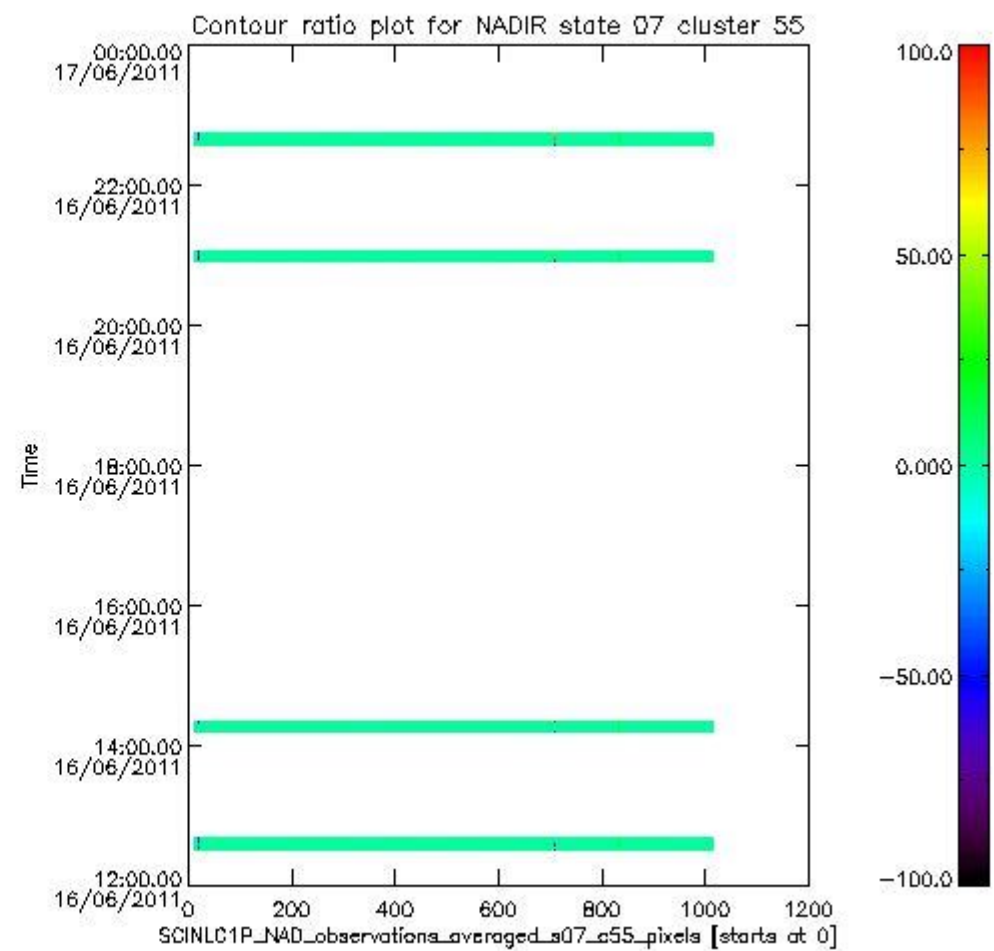
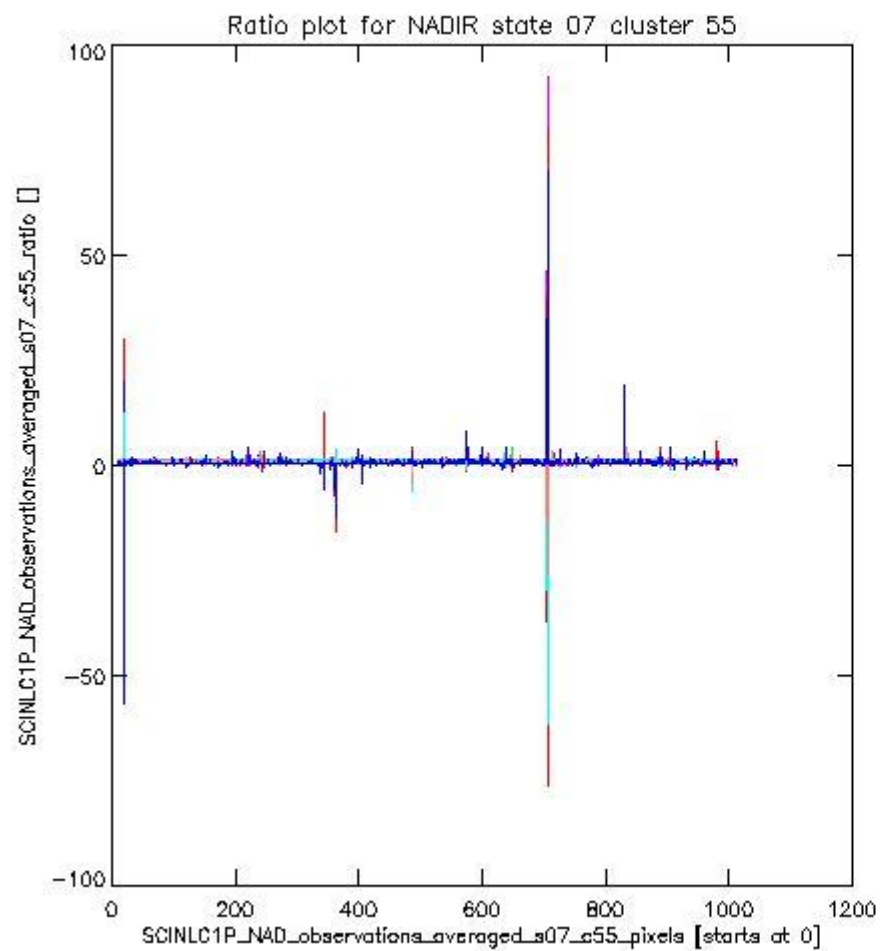
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_7.PNG

**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	16JUN2011 12:30:57.819
Start time of last sample	16JUN2011 22:42:35.164
Reference period start time	17MAY2011 02:31:29.087
Reference period stop time	15JUN2011 04:56:47.328
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



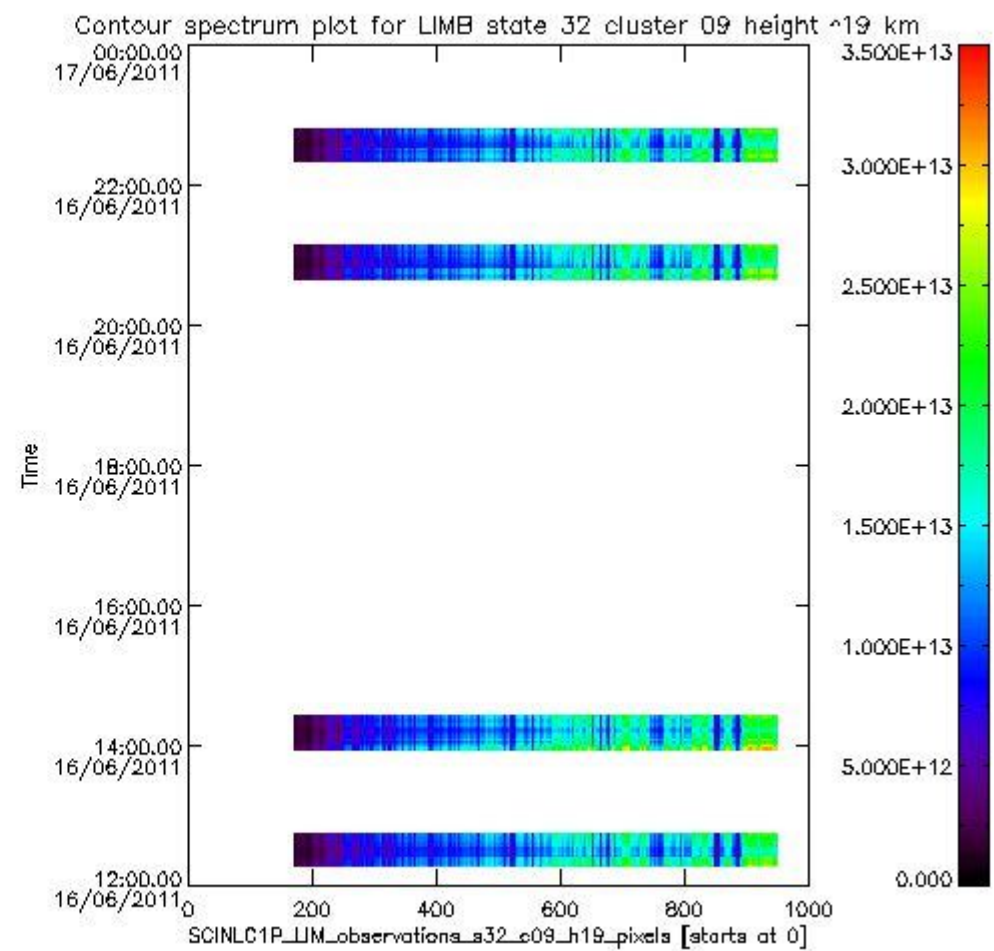
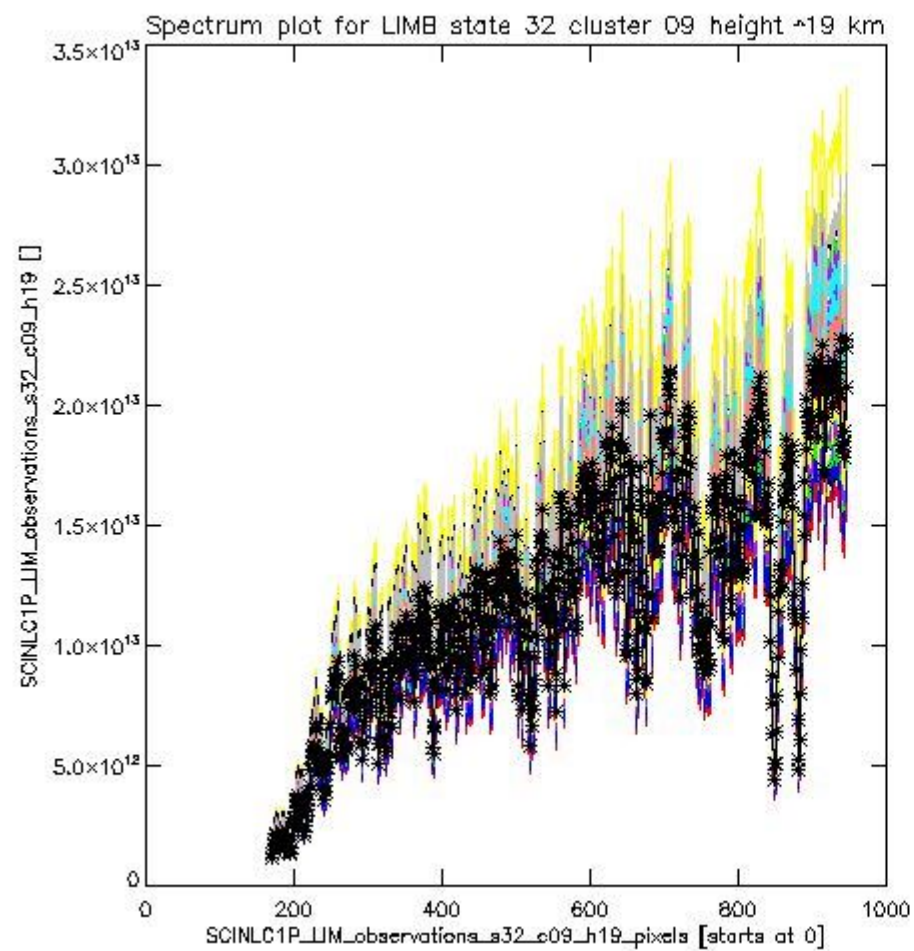
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_8.PNG



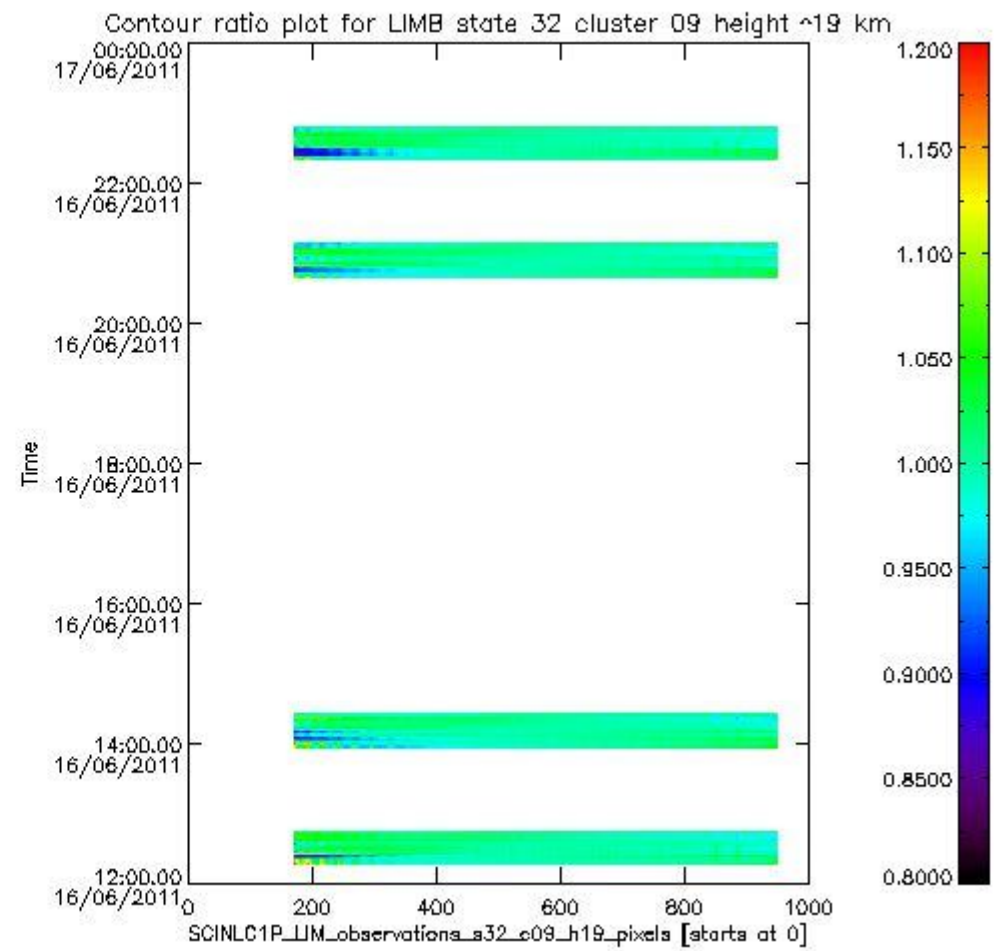
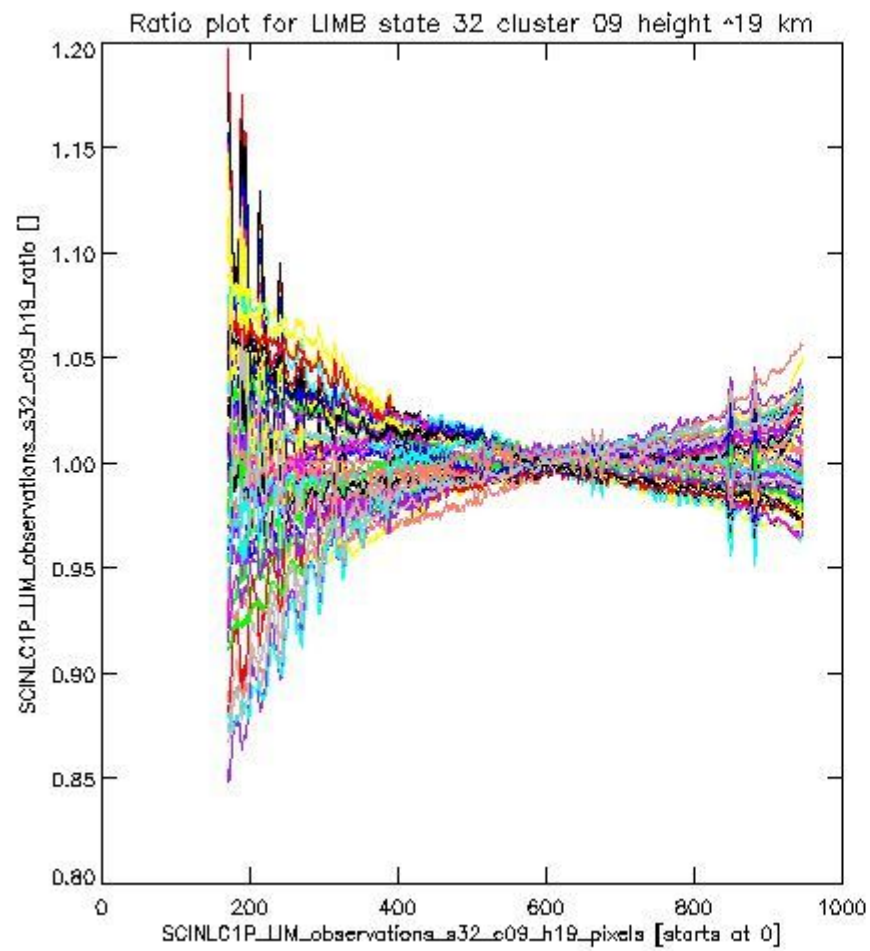
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_9.PNG

**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	16JUN2011 12:17:47.179
Start time of last sample	16JUN2011 23:58:30.504
Reference period start time	17MAY2011 02:16:15.708
Reference period stop time	15JUN2011 04:59:58.633
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



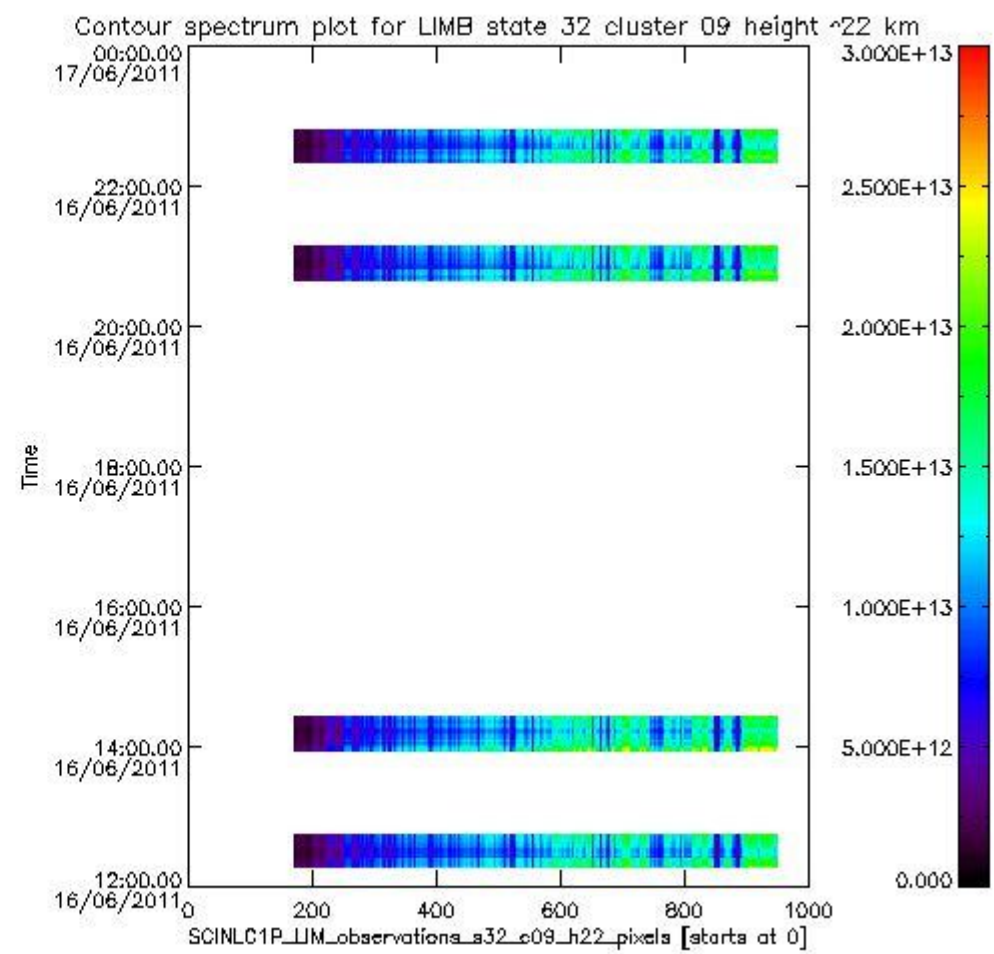
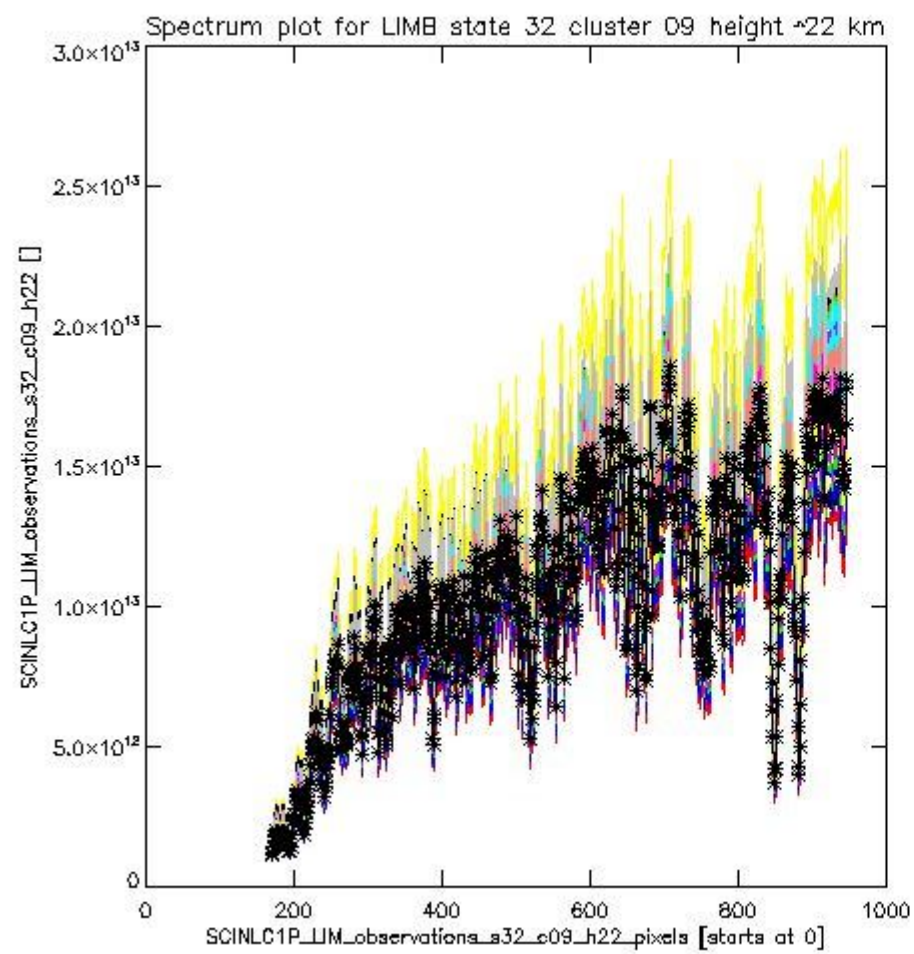
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_10.PNG



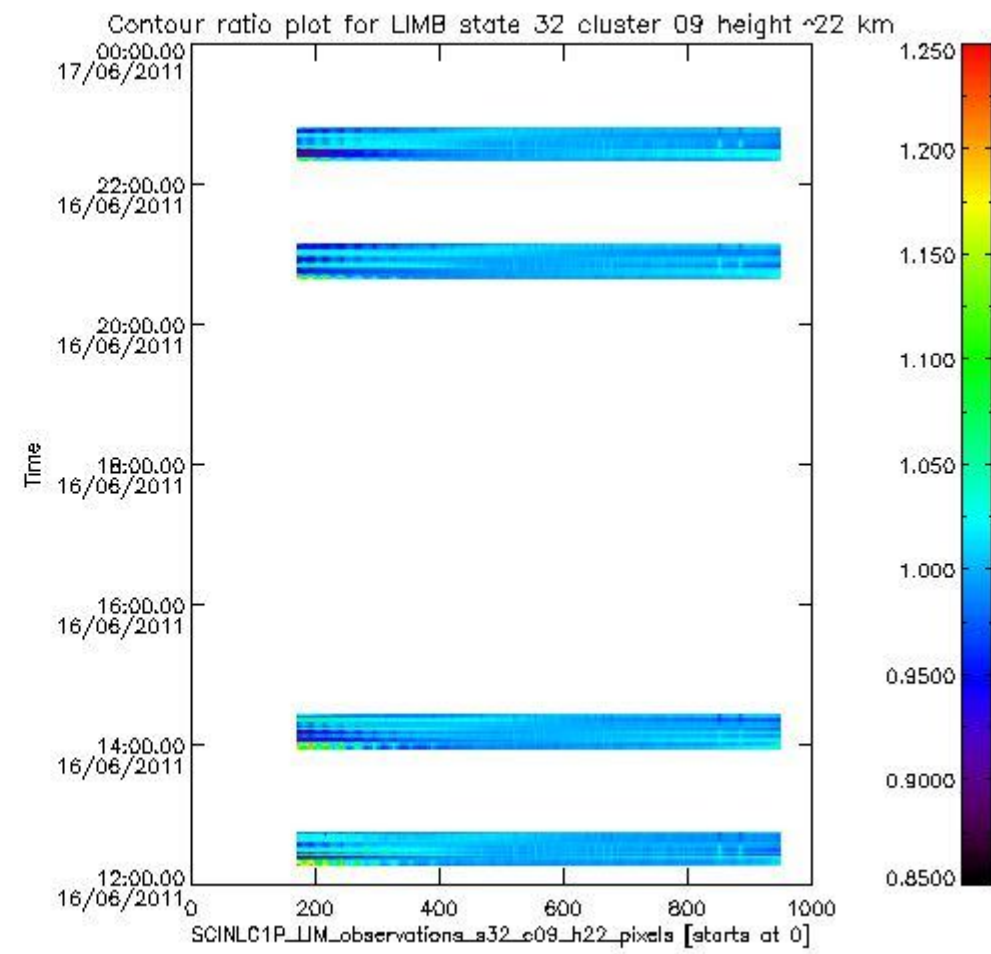
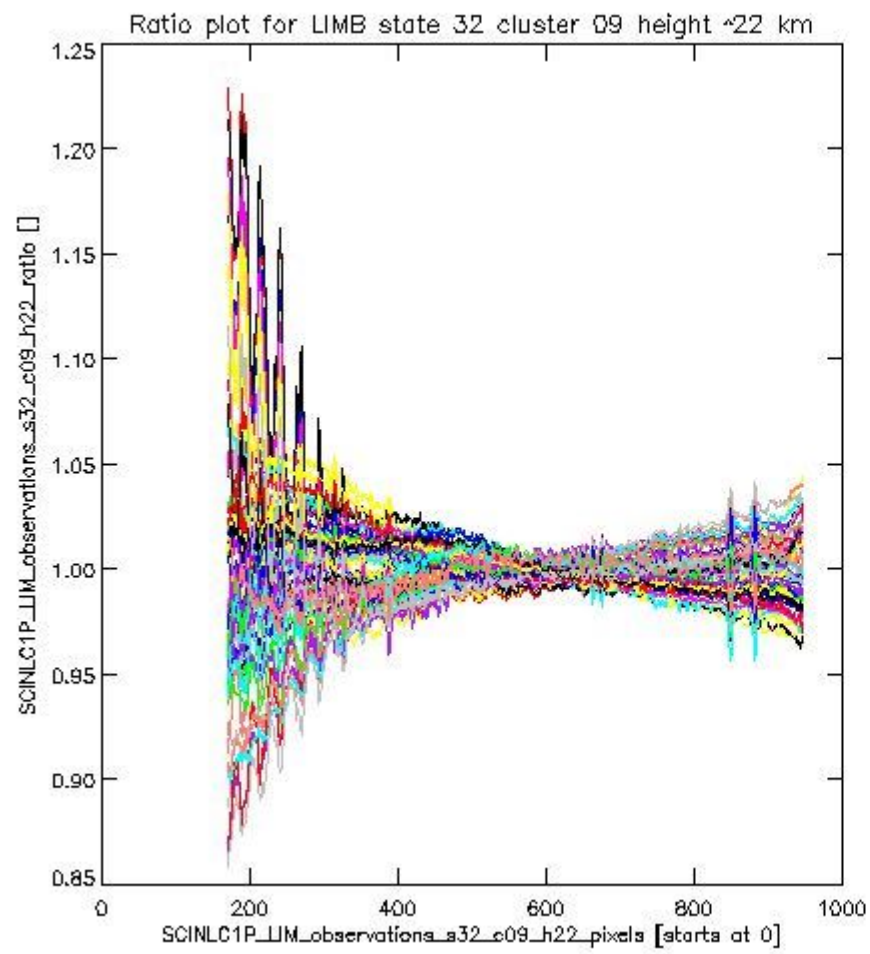
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_11.PNG

**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	16JUN2011 12:17:47.179
Start time of last sample	16JUN2011 23:58:30.504
Reference period start time	17MAY2011 02:16:15.708
Reference period stop time	15JUN2011 04:59:58.633
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



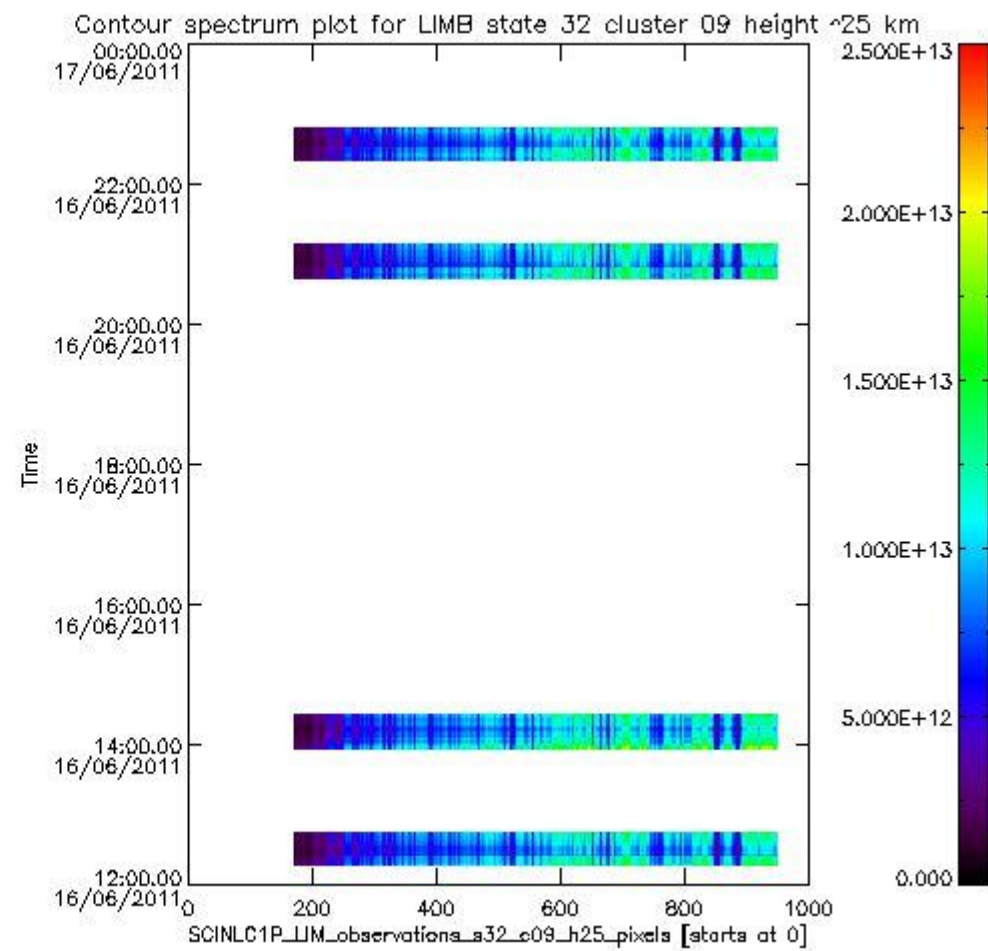
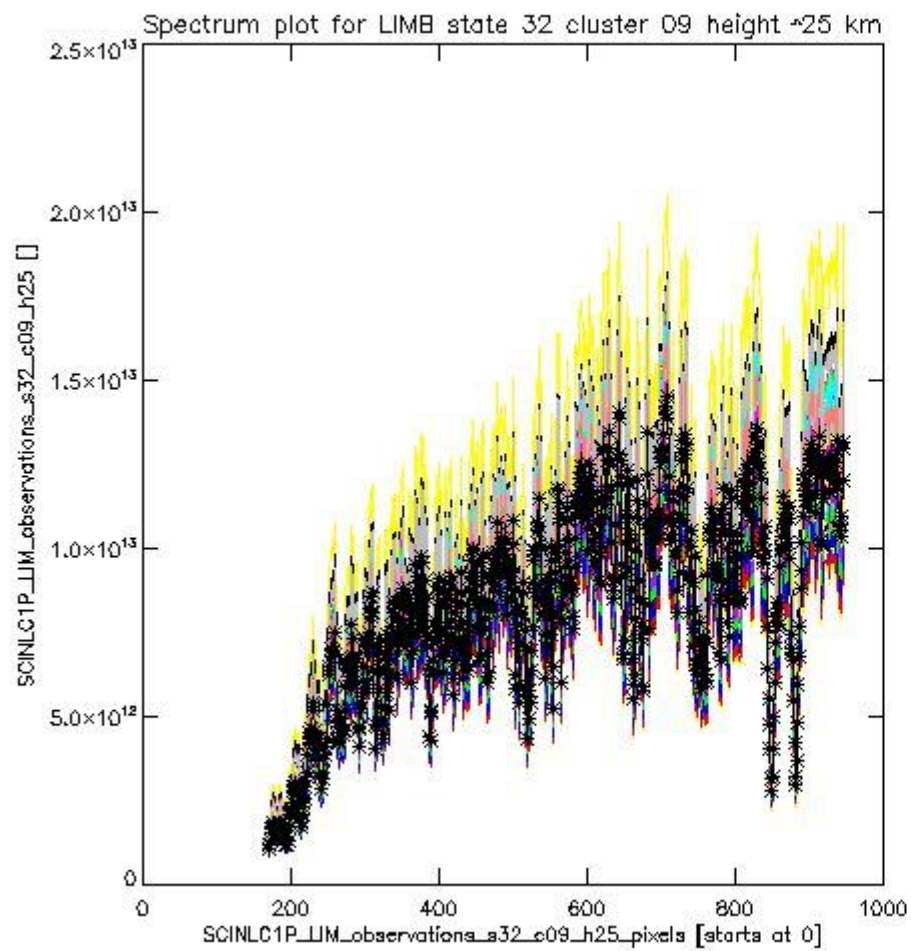
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_13.PNG

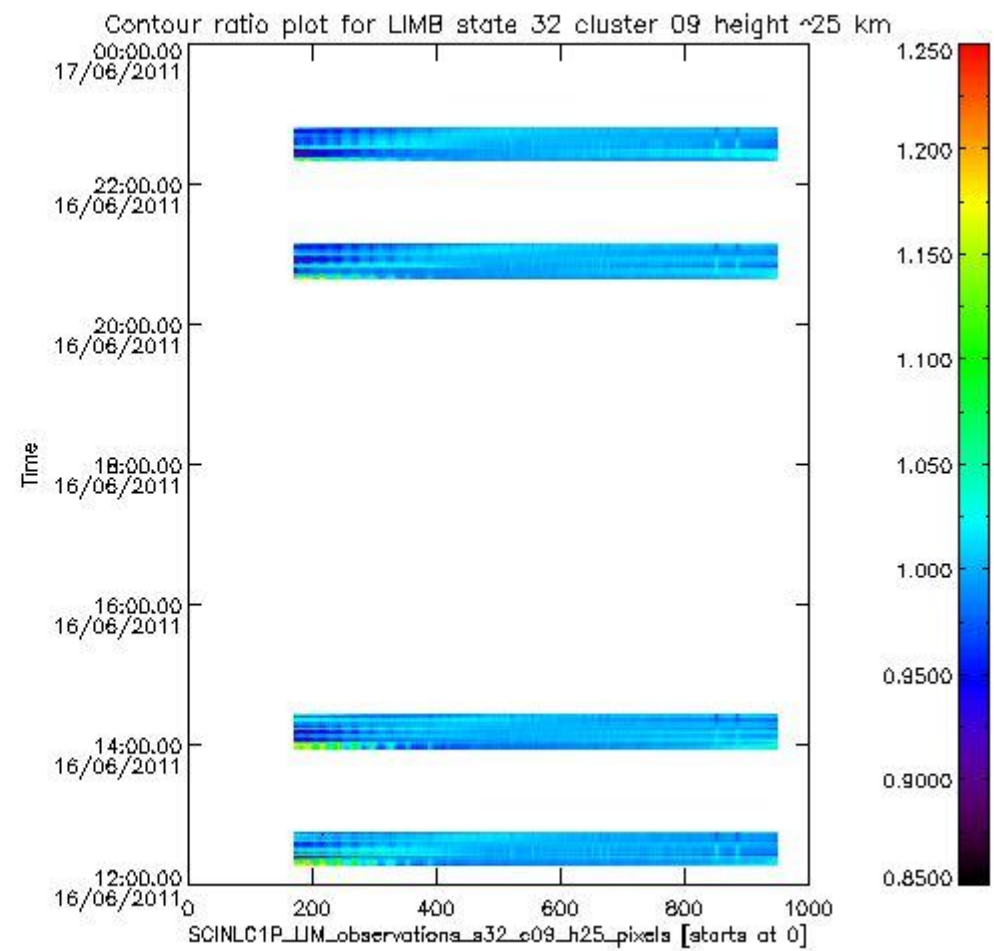
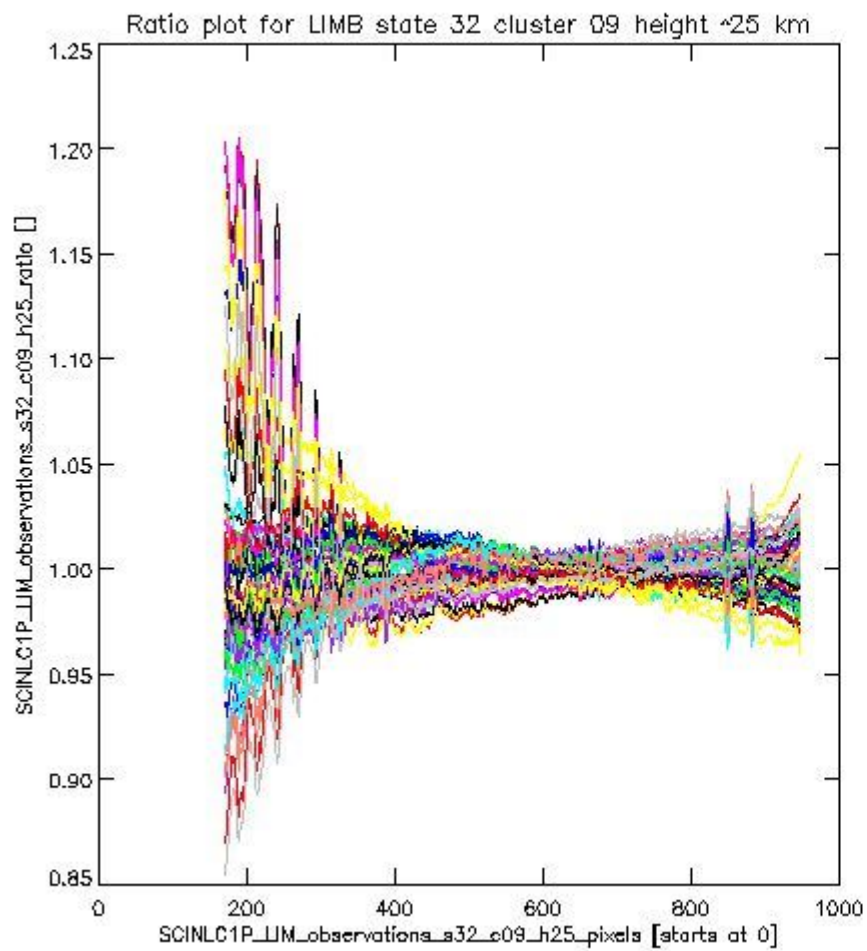
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	16JUN2011 12:17:47.179
Start time of last sample	16JUN2011 23:58:30.504
Reference period start time	17MAY2011 02:16:15.708
Reference period stop time	15JUN2011 04:59:58.633
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\_20110616\_14.PNG

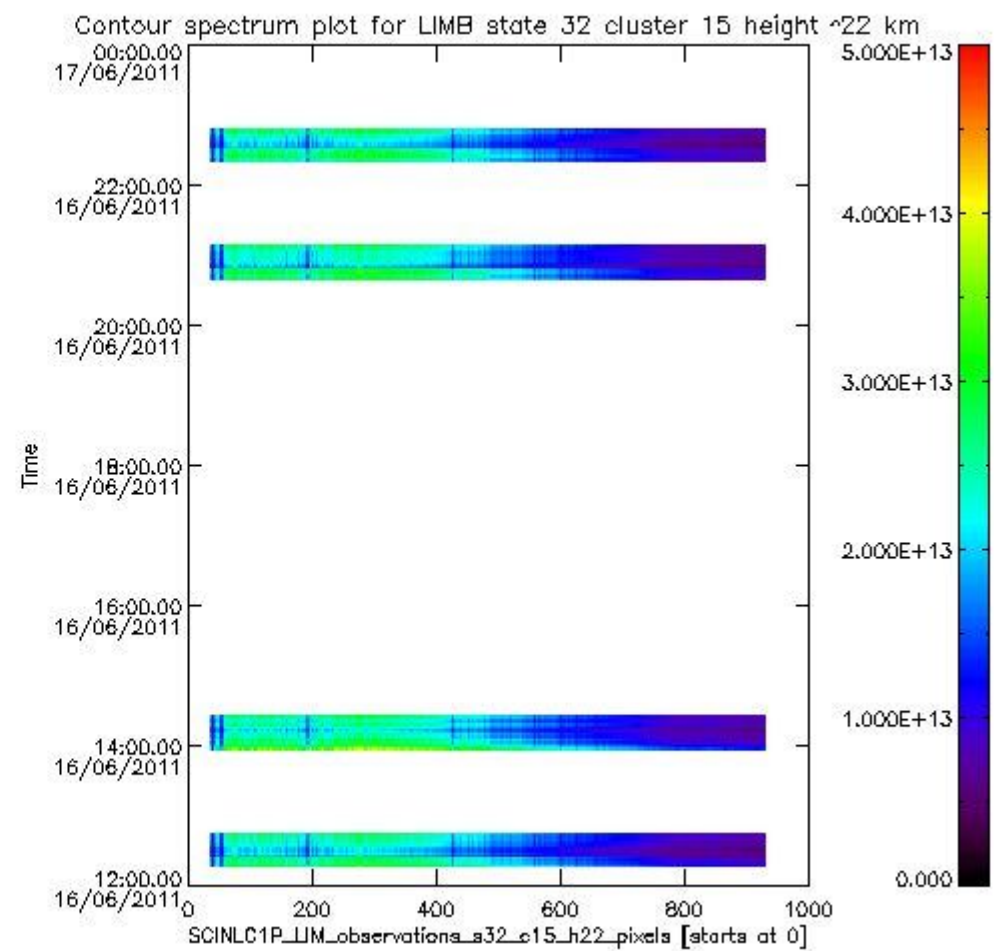
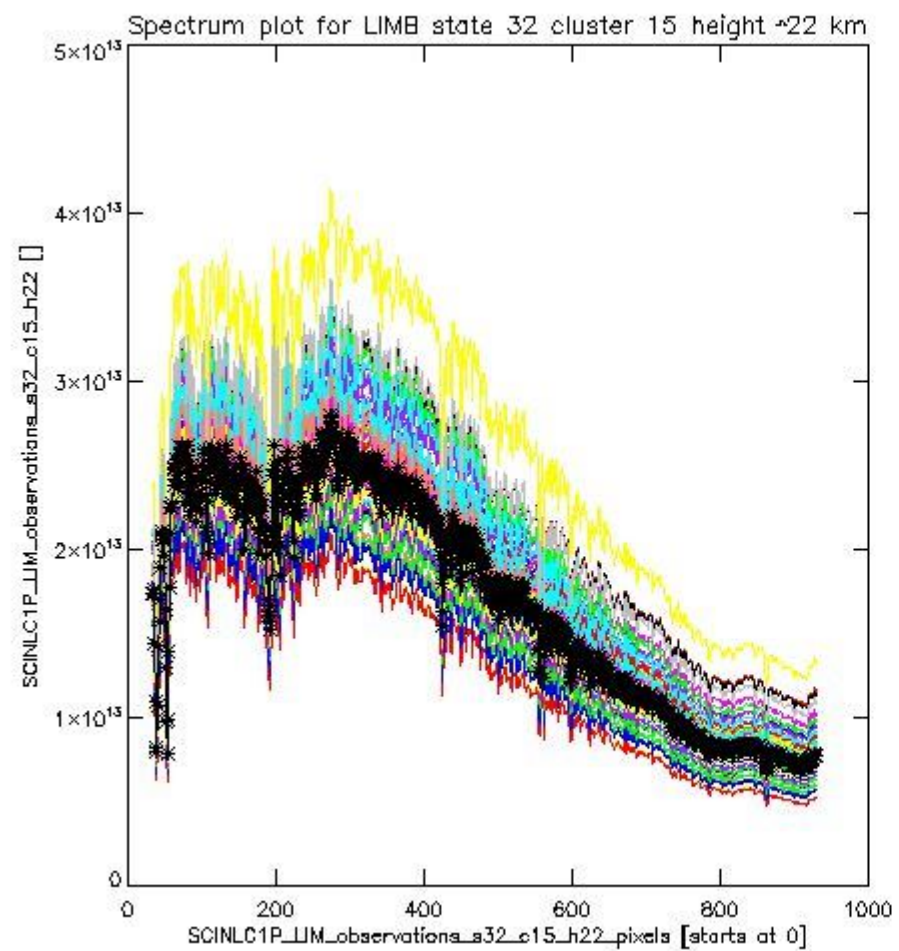




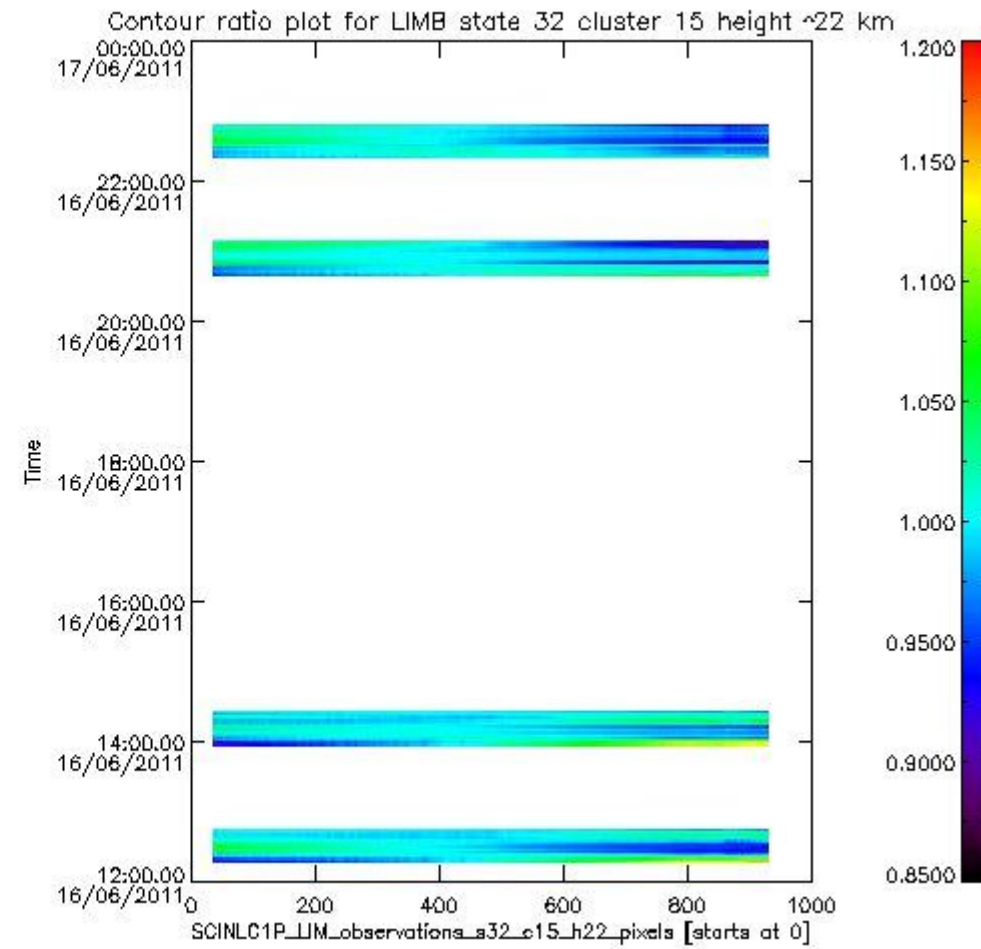
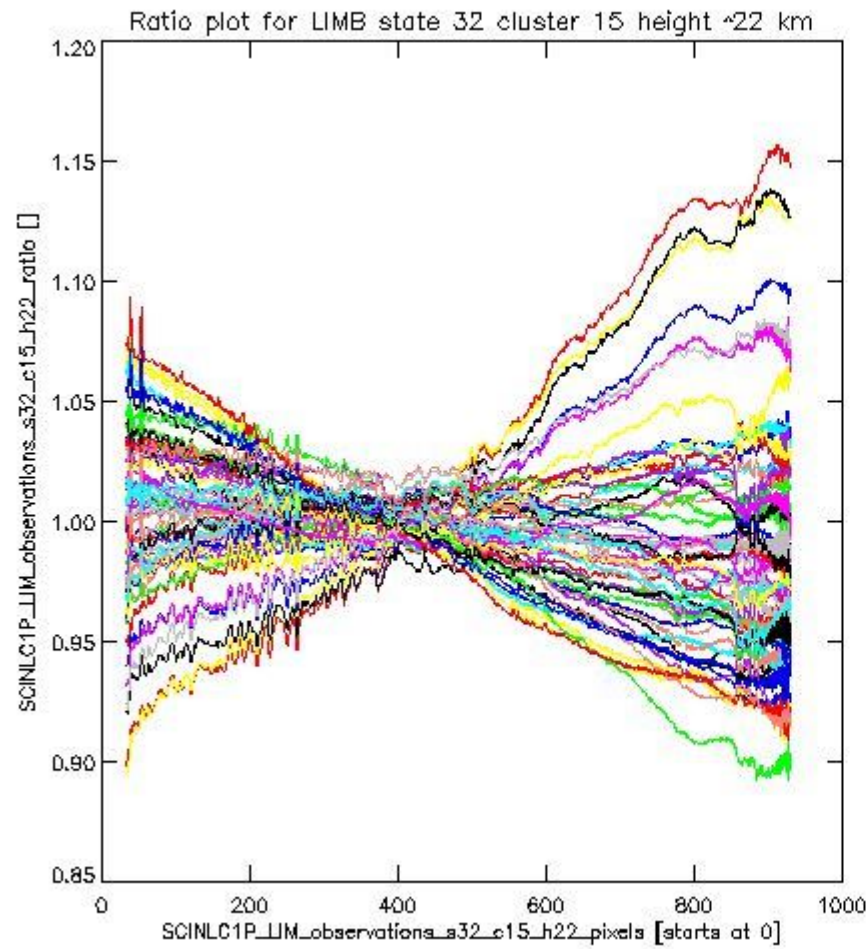
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_15.PNG

**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	16JUN2011 12:17:47.179
Start time of last sample	16JUN2011 23:58:30.504
Reference period start time	17MAY2011 02:16:15.708
Reference period stop time	15JUN2011 04:59:58.633
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



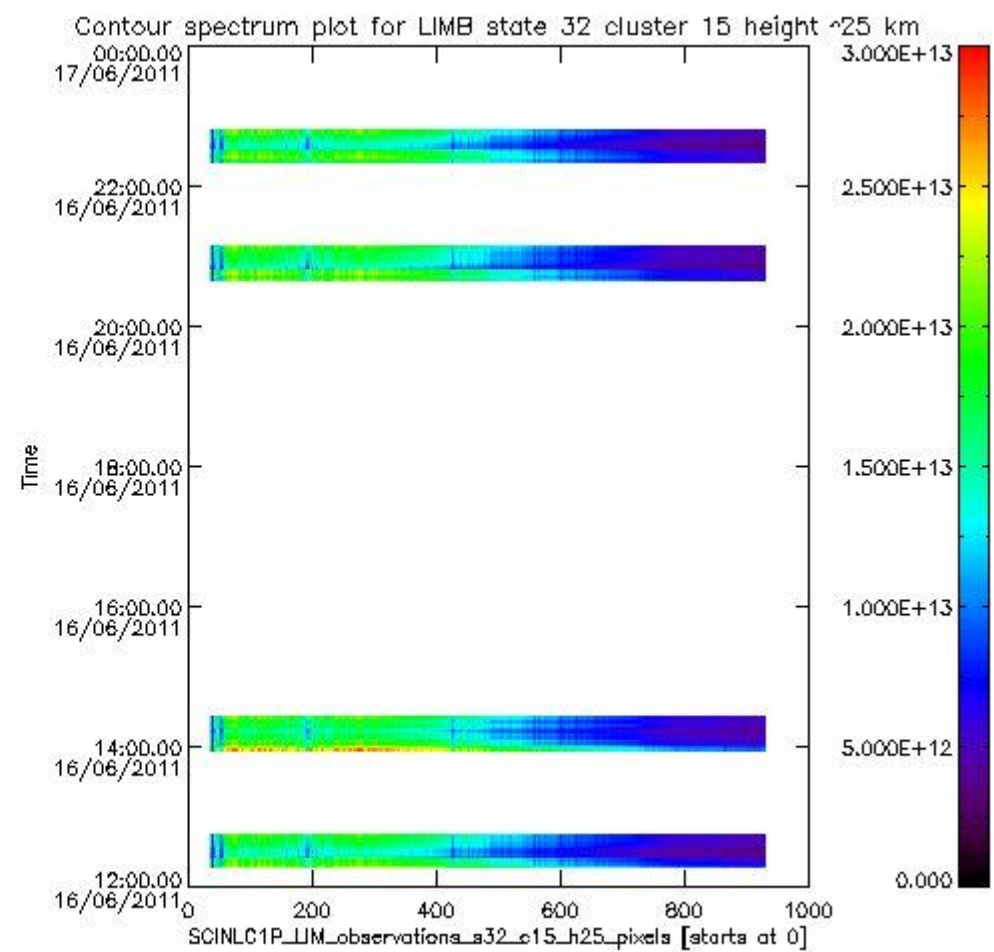
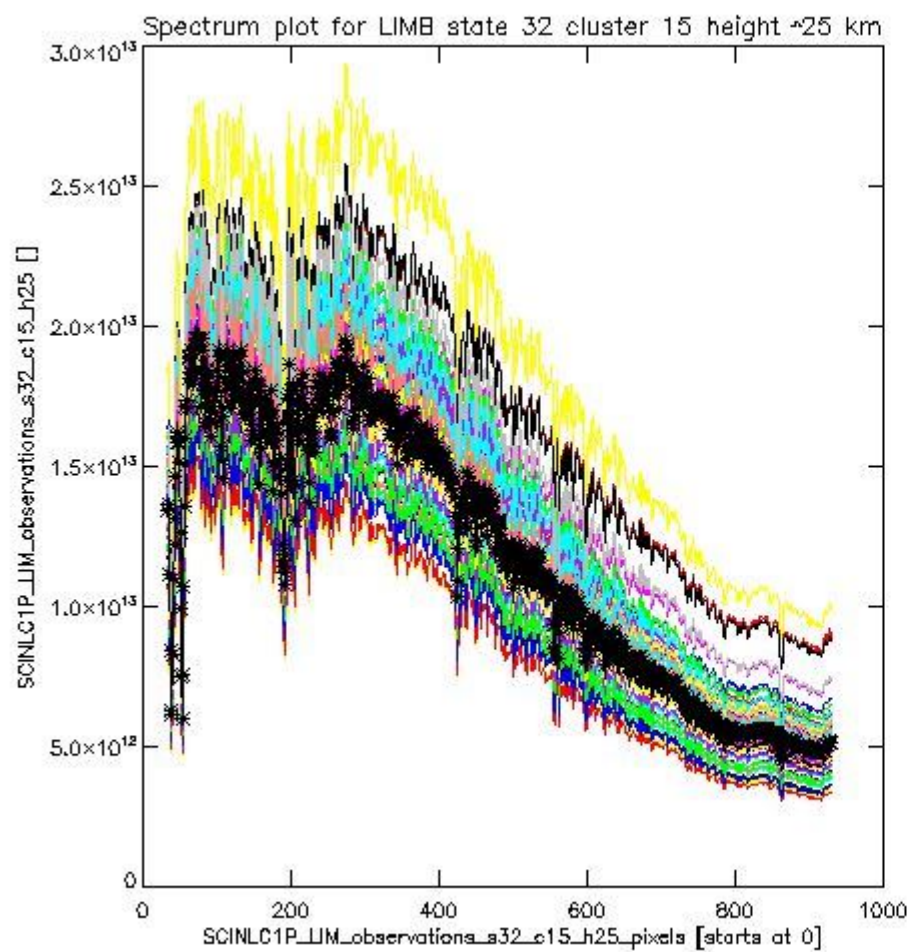
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_16.PNG

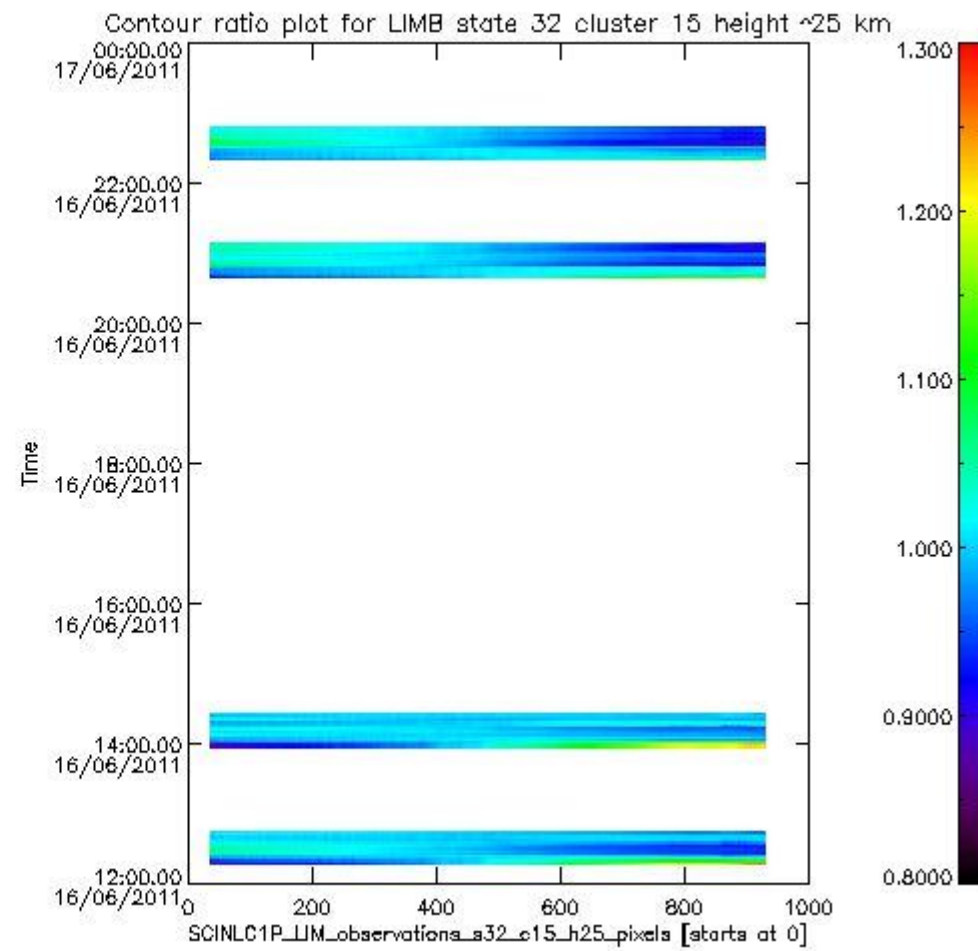
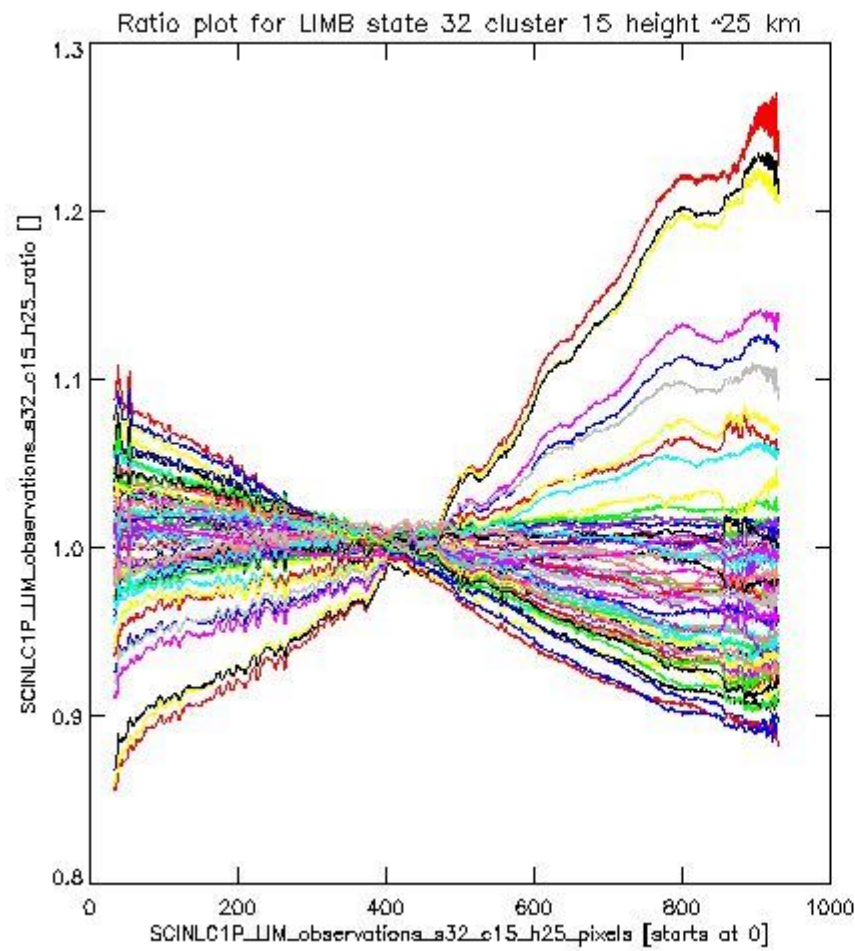


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_17.PNG

**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	16JUN2011 12:17:47.179
Start time of last sample	16JUN2011 23:58:30.504
Reference period start time	17MAY2011 02:16:15.708
Reference period stop time	15JUN2011 04:59:58.633
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

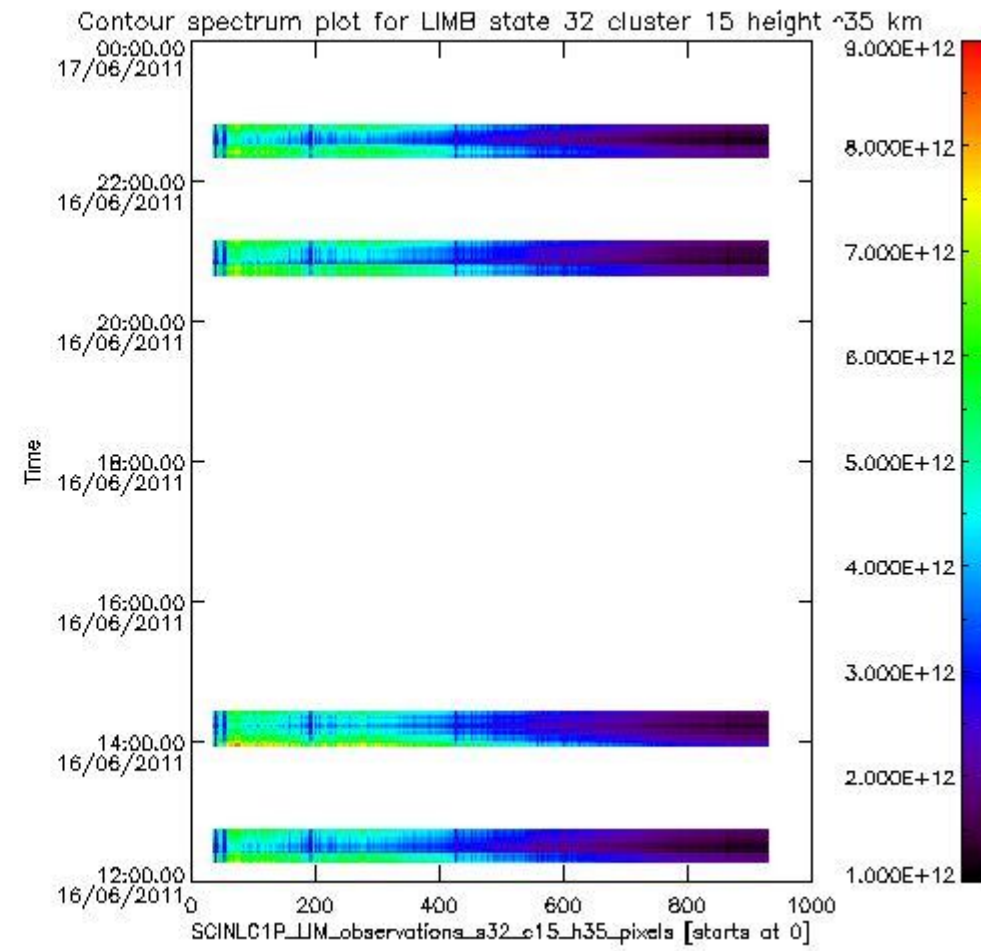
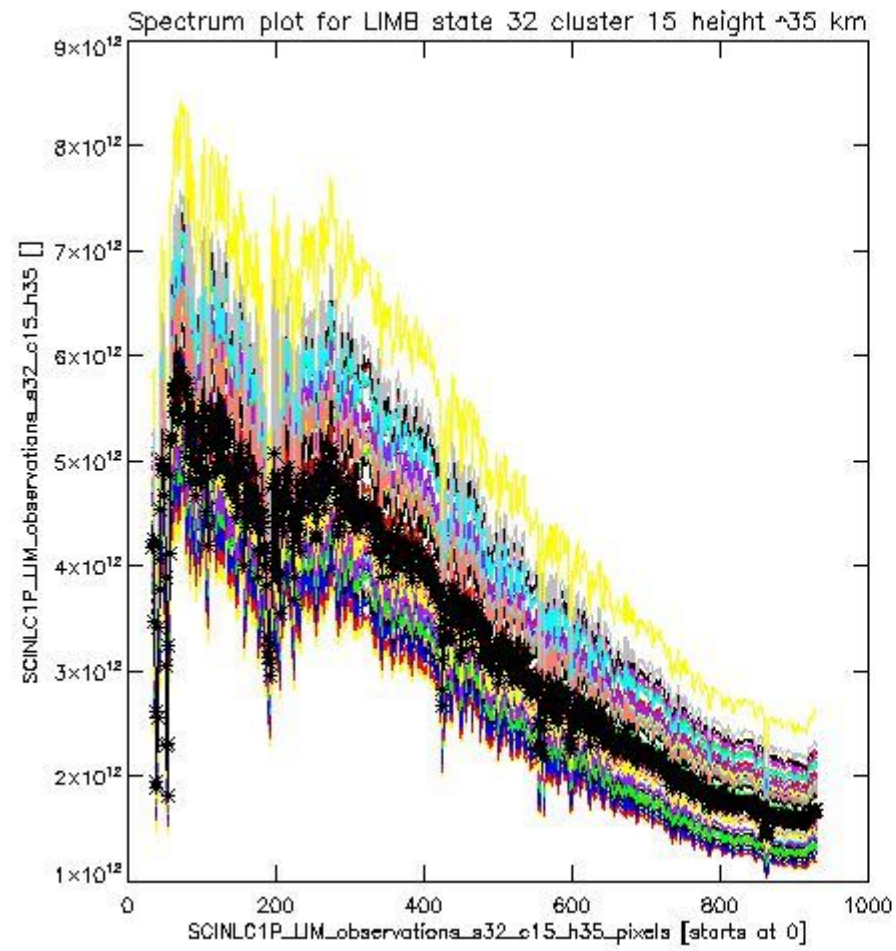




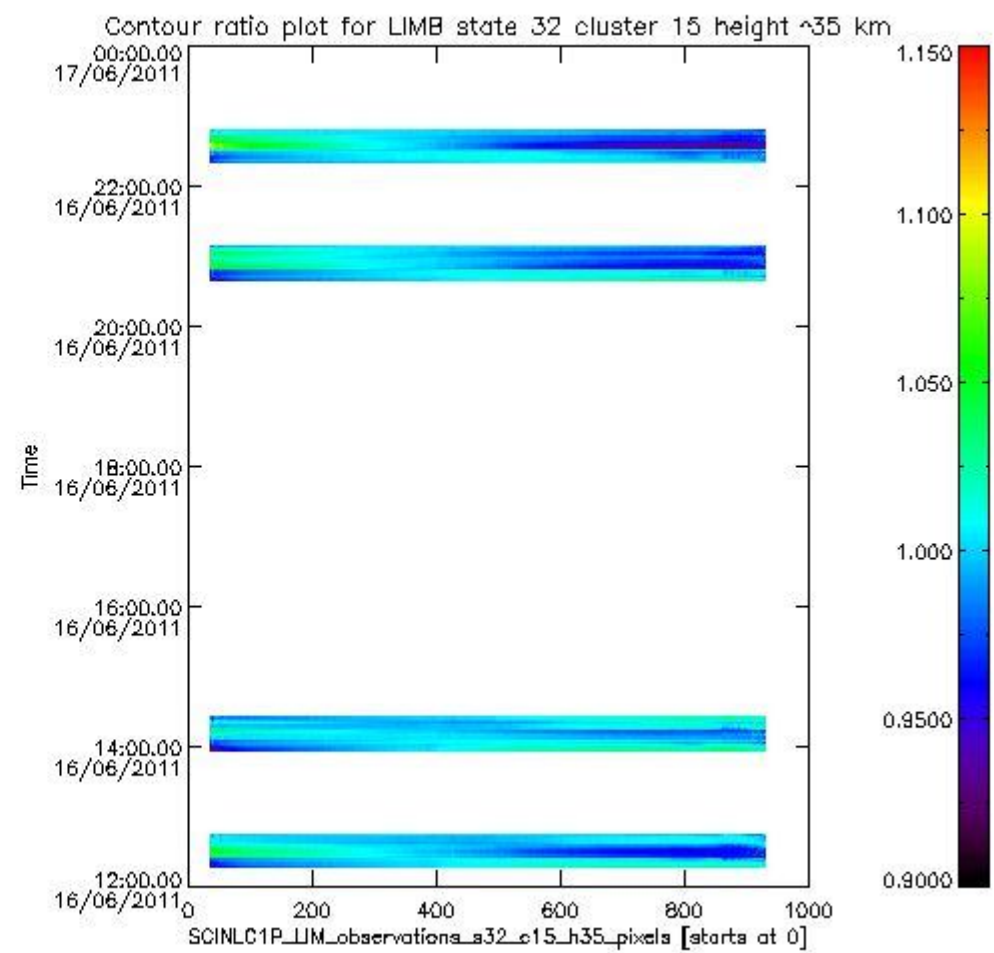
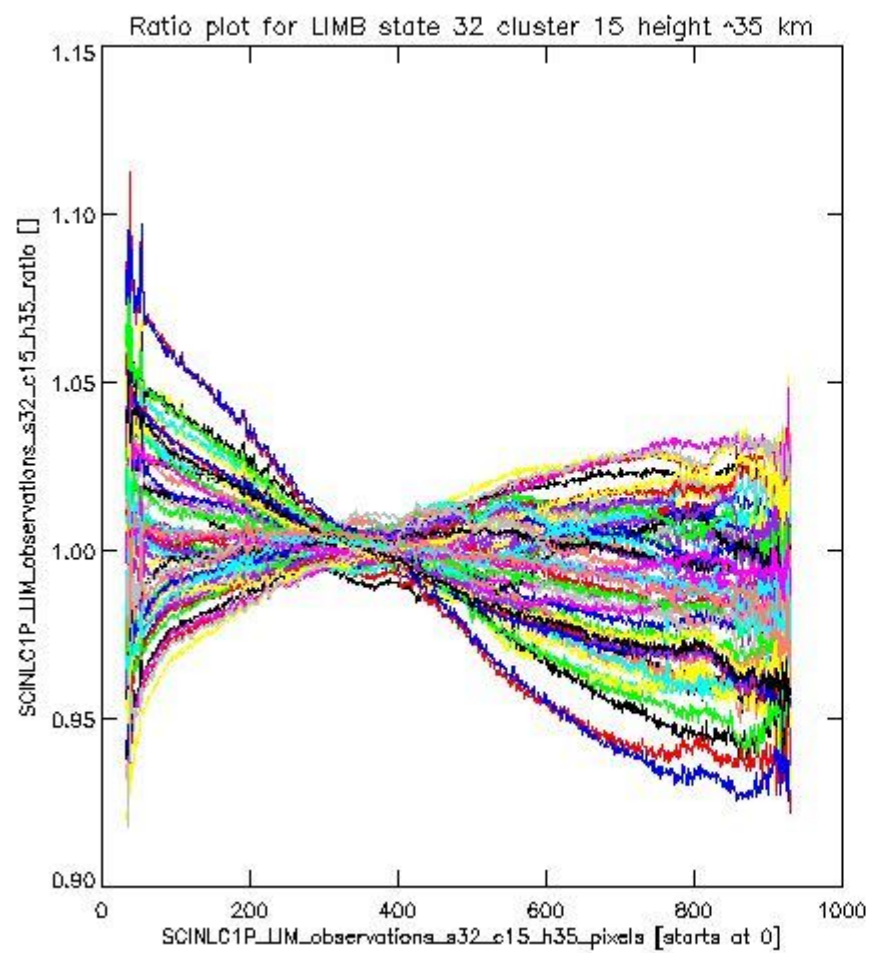
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_19.PNG

**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	16JUN2011 12:17:47.179
Start time of last sample	16JUN2011 23:58:30.504
Reference period start time	17MAY2011 02:16:15.708
Reference period stop time	15JUN2011 04:59:58.633
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\_20110616\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110616\_21.PNG

