

# 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	29JUL2011 06:30:28
Data source version	SCIA/7.04-U
Processing scope for products	16JUL2011 00:00:00 to 17JUL2011 00:00:00
Start time of first product within scope	16JUL2011 00:18:02
Stop time of last product within scope	16JUL2011 15:45:06
Total number of level 1 products	10
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	16JUL2011 00:50:04.875	16JUL2011 14:22:11.685
1	NADIR	07	09	N/A	16JUL2011 00:50:04.875	16JUL2011 14:22:11.685
2	NADIR	07	15	N/A	16JUL2011 00:50:04.875	16JUL2011 14:22:11.685
3	NADIR	07	24	N/A	16JUL2011 00:50:04.875	16JUL2011 14:22:11.685
4	NADIR	07	55	N/A	16JUL2011 00:50:04.875	16JUL2011 14:22:11.685
5	LIMB	32	09	~19 km	16JUL2011 00:36:54.242	16JUL2011 15:44:15.542
6	LIMB	32	09	~22 km	16JUL2011 00:36:54.242	16JUL2011 15:44:15.542
7	LIMB	32	09	~25 km	16JUL2011 00:36:54.242	16JUL2011 15:44:15.542
8	LIMB	32	15	~22 km	16JUL2011 00:36:54.242	16JUL2011 15:44:15.542
9	LIMB	32	15	~25 km	16JUL2011 00:36:54.242	16JUL2011 15:44:15.542
10	LIMB	32	15	~35 km	16JUL2011 00:36:54.242	16JUL2011 15:44:15.542

#### 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_1CUDPA20110716_001802_000057563104_00304_49025_0093.N1</a>	16JUL2011 00:18:02	16JUL2011 01:28:16	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110716_015816_000057563104_00305_49026_0100.N1</a>	16JUL2011 01:58:16	16JUL2011 03:08:45	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110716_033830_000057573104_00306_49027_0103.N1</a>	16JUL2011 03:38:30	16JUL2011 04:48:45	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110716_051844_000057573104_00307_49028_0094.N1</a>	16JUL2011 05:18:44	16JUL2011 06:29:13	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110716_065859_000057573104_00308_49029_0104.N1</a>	16JUL2011 06:58:59	16JUL2011 08:09:13	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110716_083913_000057573104_00309_49030_0101.N1</a>	16JUL2011 08:39:13	16JUL2011 09:49:42	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110716_101927_000057573104_00310_49031_0096.N1	16JUL2011 10:19:27	16JUL2011 11:29:41	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110716_115941_000057573104_00311_49032_0097.N1	16JUL2011 11:59:41	16JUL2011 13:10:10	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110716_133955_000057573104_00312_49033_0098.N1	16JUL2011 13:39:55	16JUL2011 14:50:10	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110716_152009_000015493104_00313_49034_0095.N1	16JUL2011 15:20:09	16JUL2011 15:45:06	0	8	15	0	0	1	0	0	

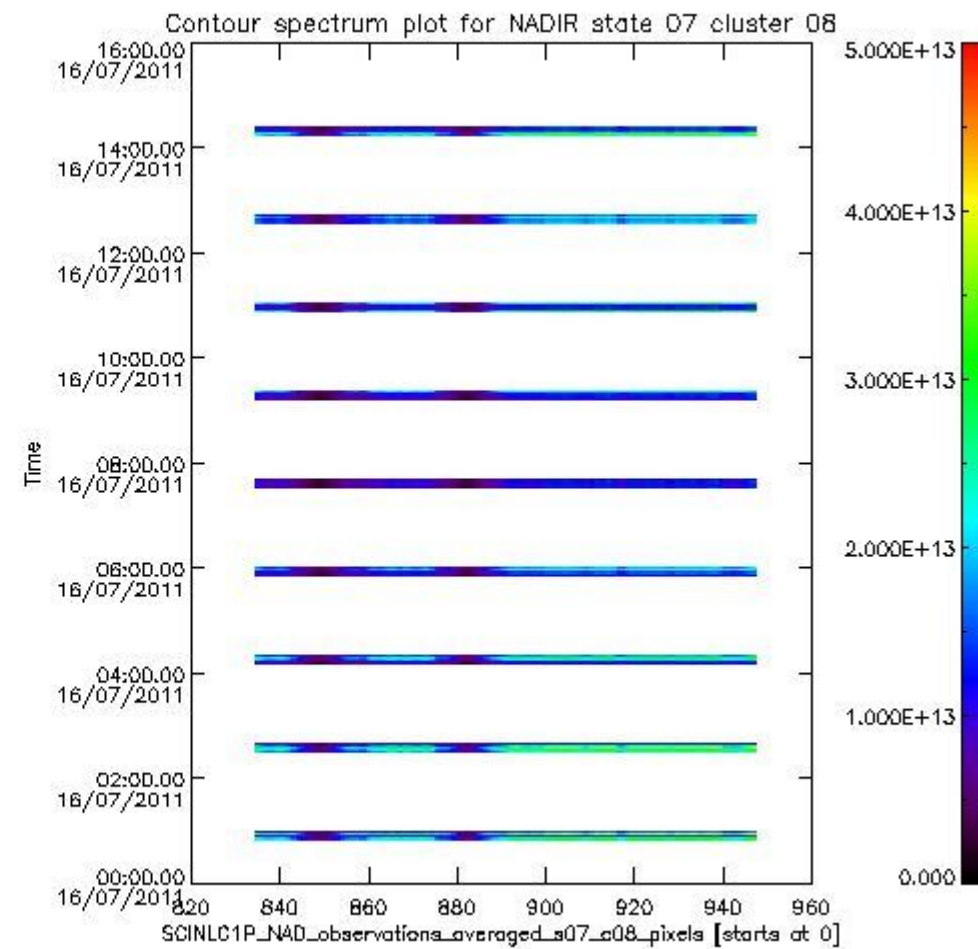
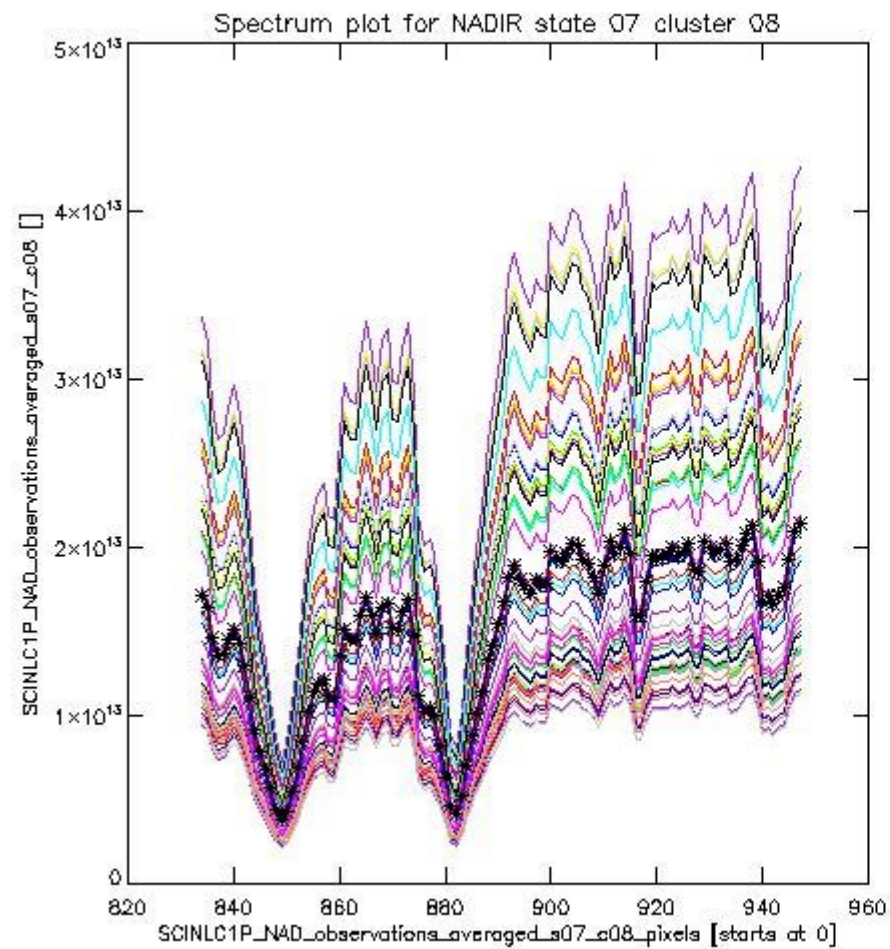
## 1.2 Source packet monitoring

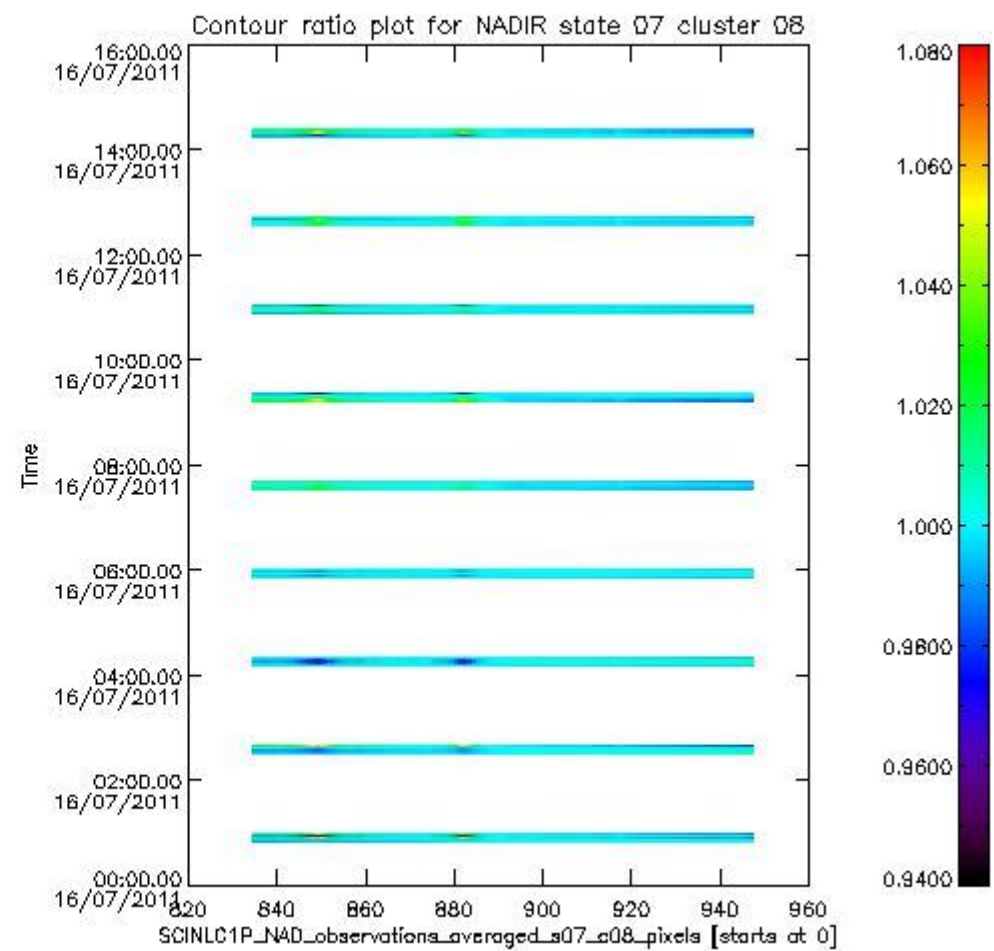
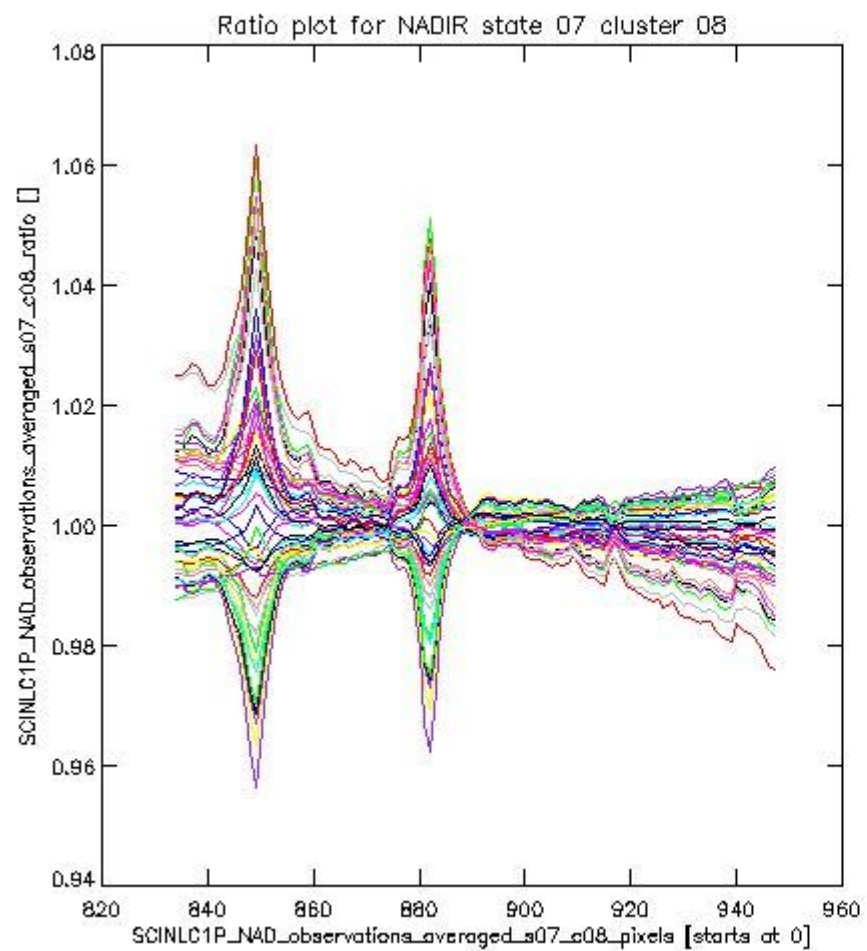
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	16JUL2011 00:50:04.875
Start time of last sample	16JUL2011 14:22:11.685
Reference period start time	16JUN2011 12:30:57.819
Reference period stop time	15JUL2011 19:59:46.017
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

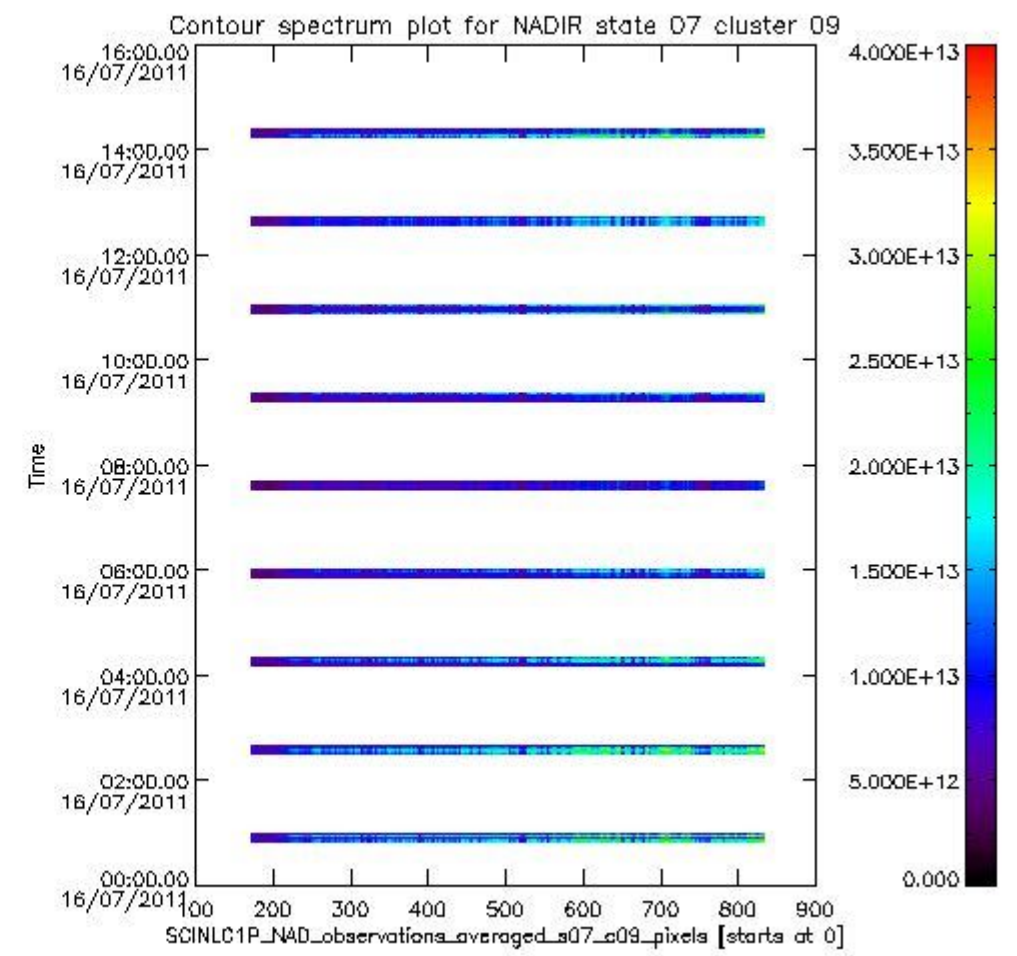
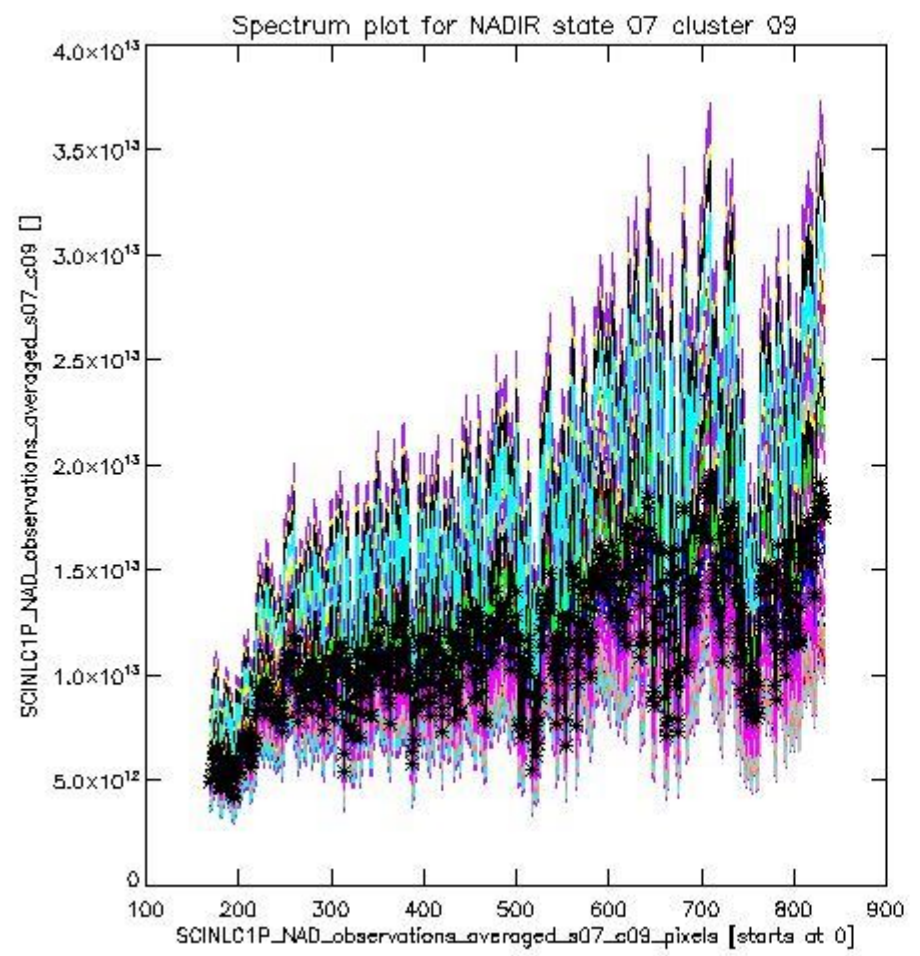




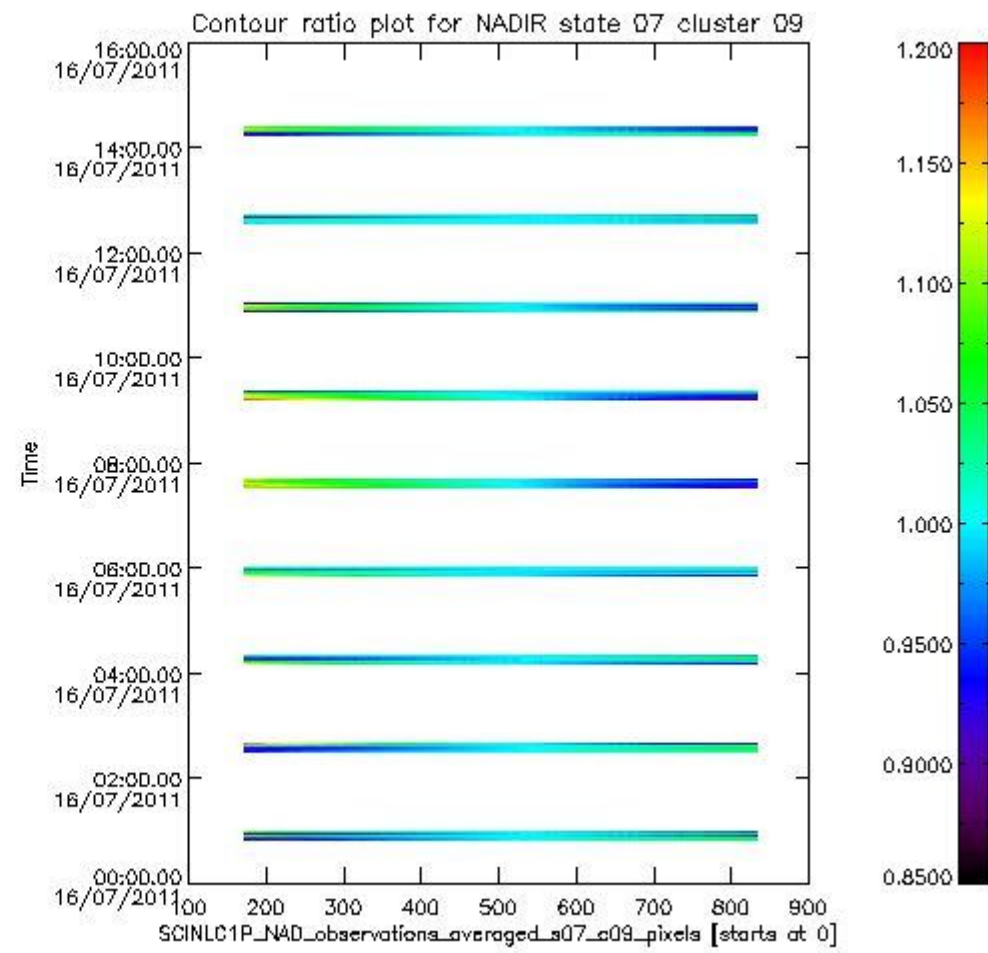
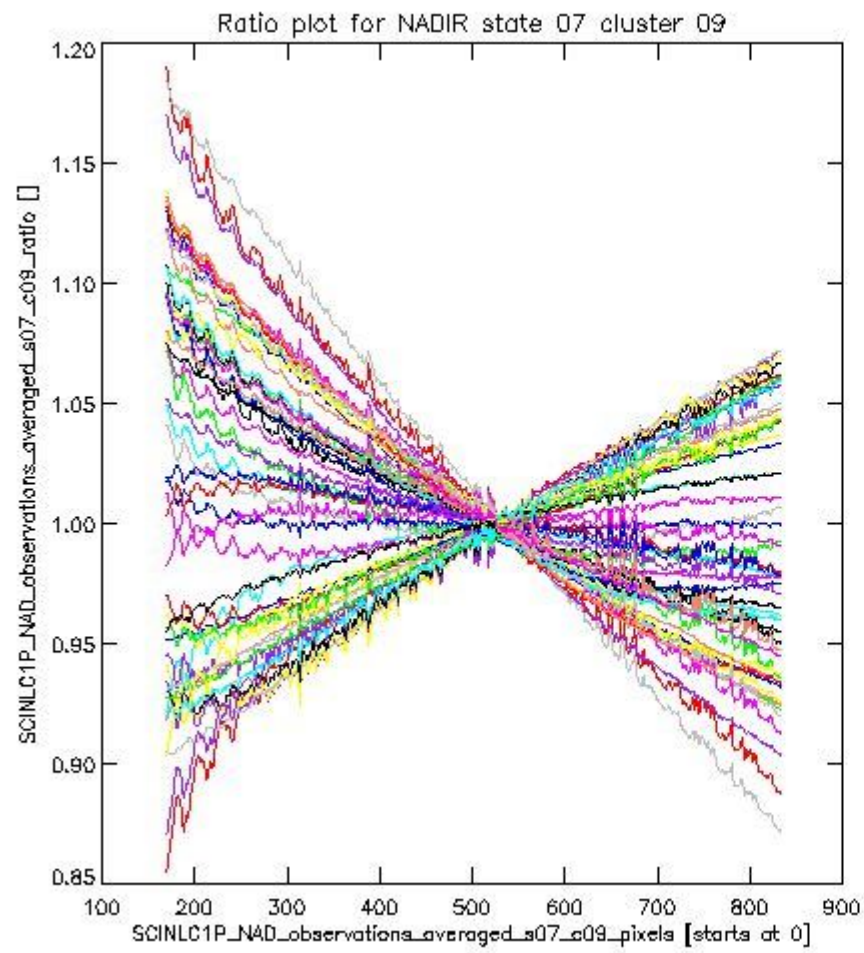
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_1.PNG

**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	16JUL2011 00:50:04.875
Start time of last sample	16JUL2011 14:22:11.685
Reference period start time	16JUN2011 12:30:57.819
Reference period stop time	15JUL2011 19:59:46.017
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



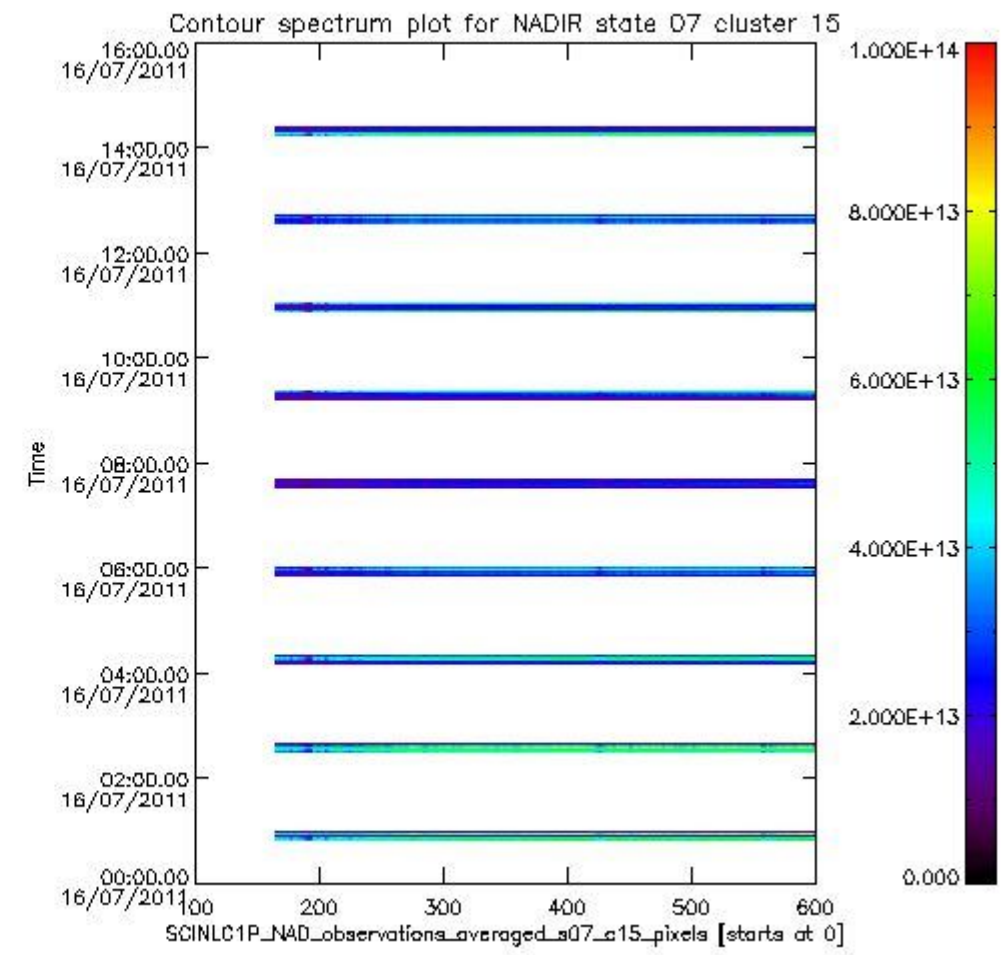
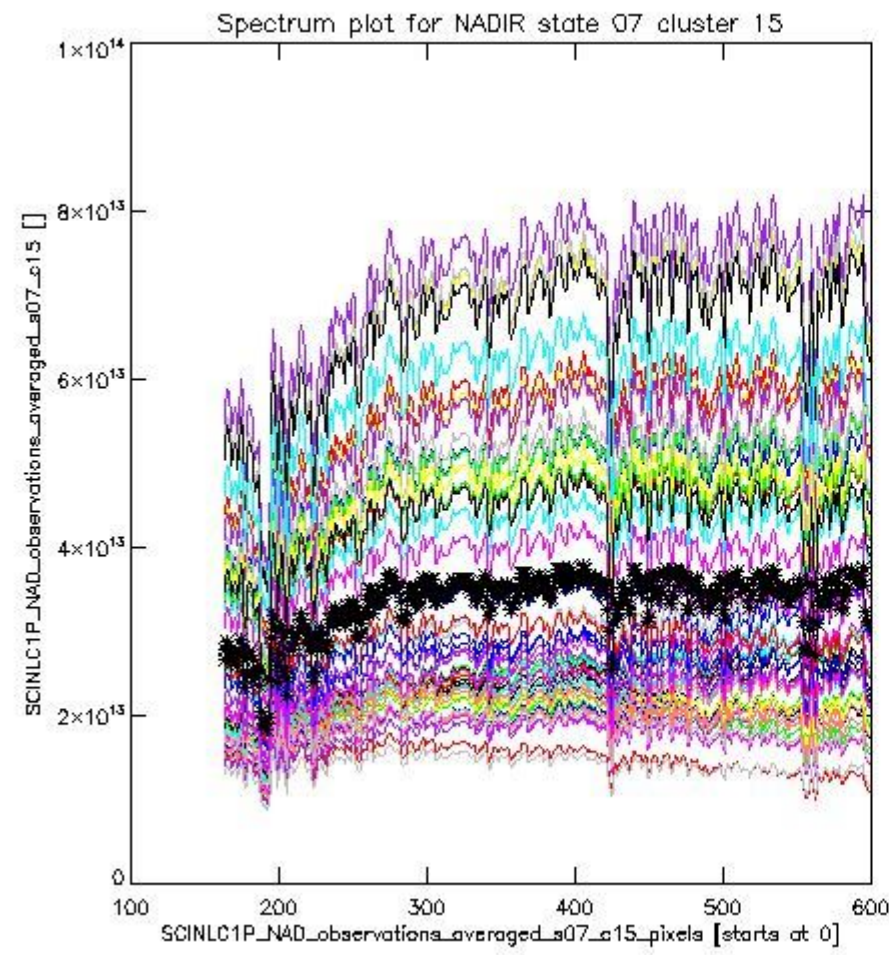
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_2.PNG



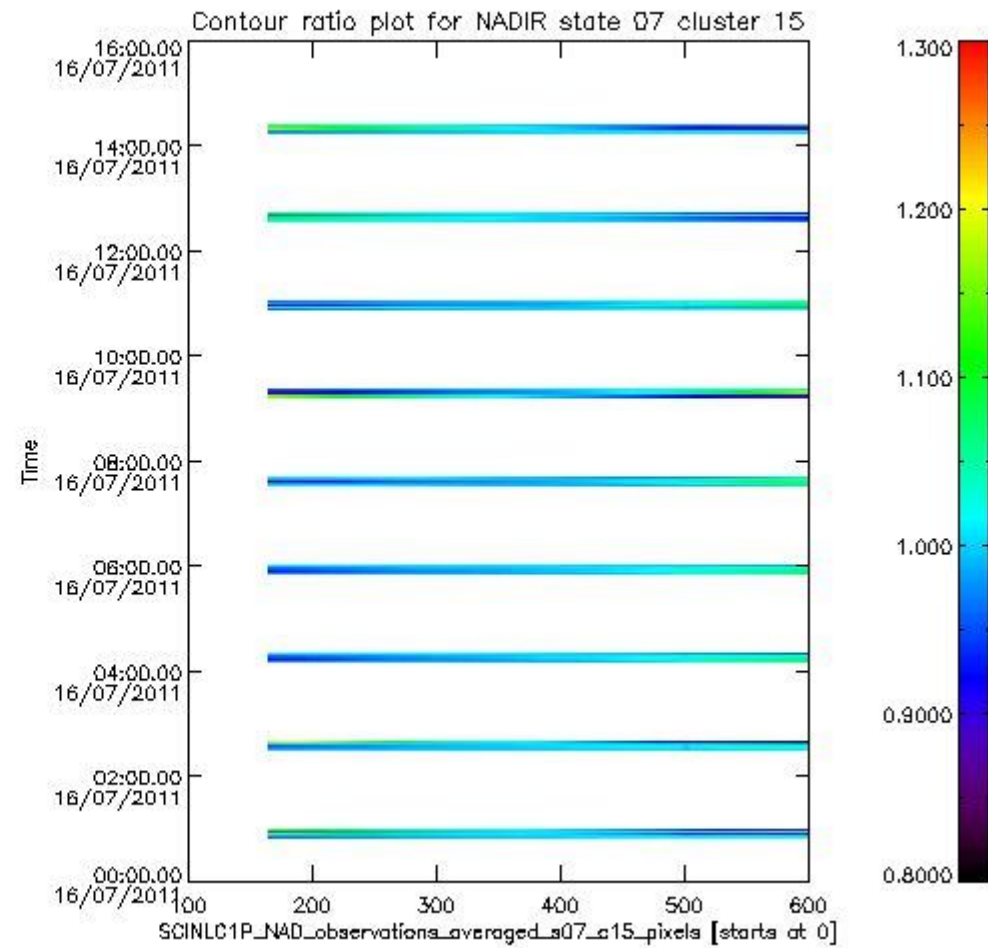
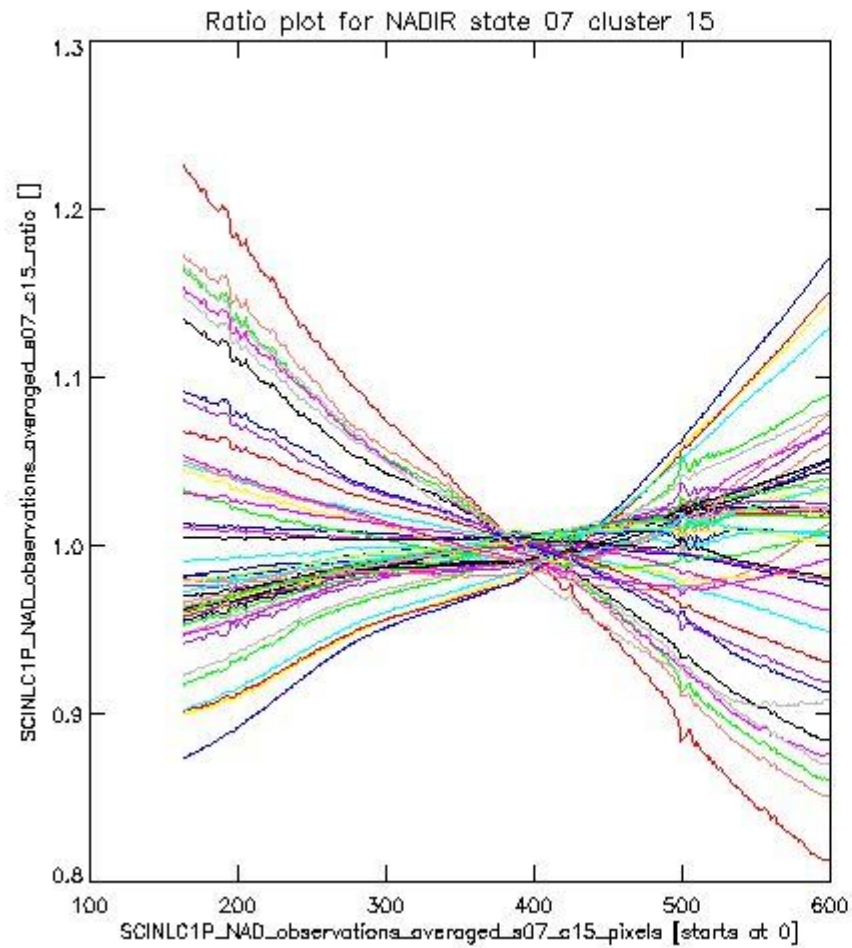
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_3.PNG

**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	16JUL2011 00:50:04.875
Start time of last sample	16JUL2011 14:22:11.685
Reference period start time	16JUN2011 12:30:57.819
Reference period stop time	15JUL2011 19:59:46.017
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



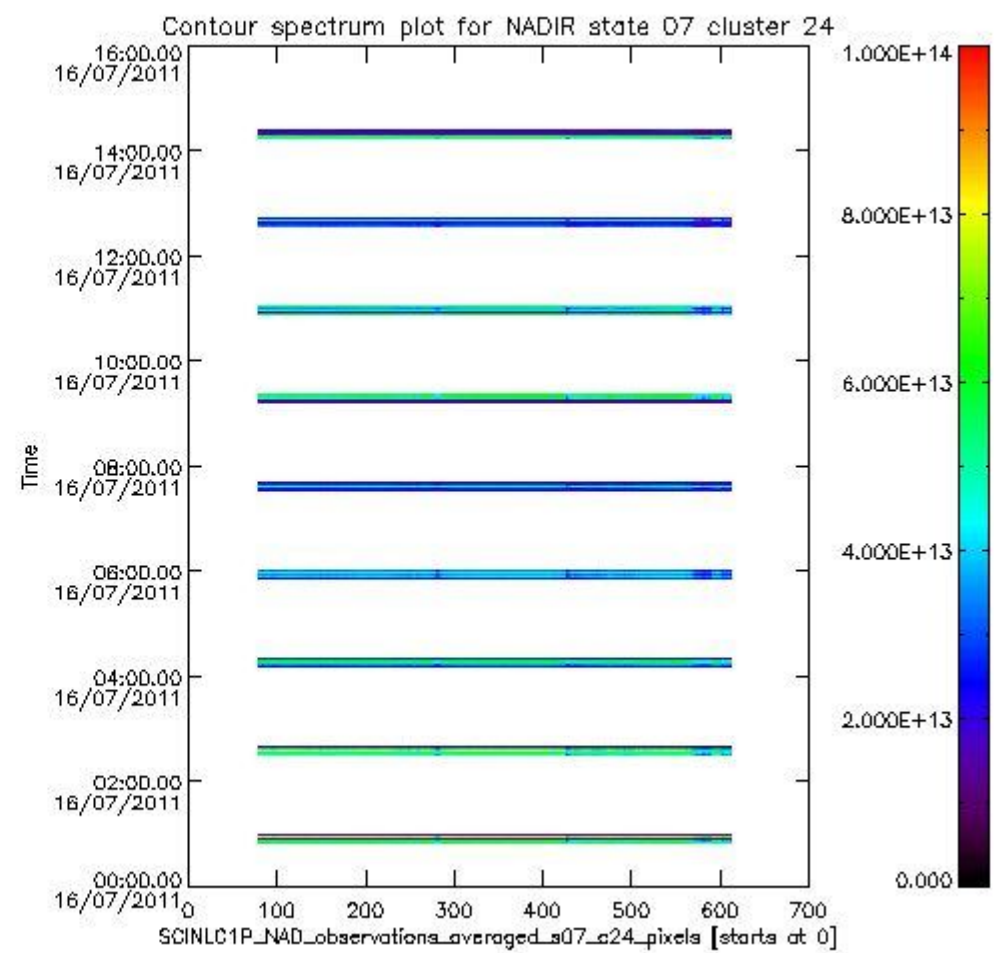
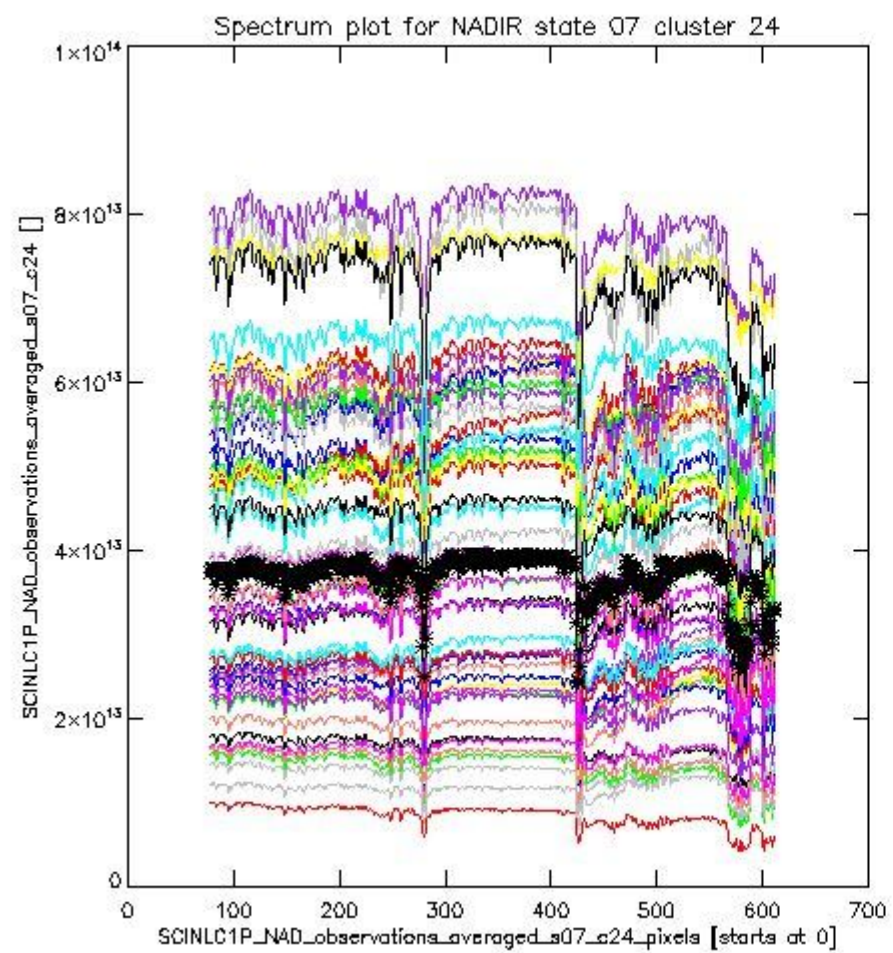
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_5.PNG

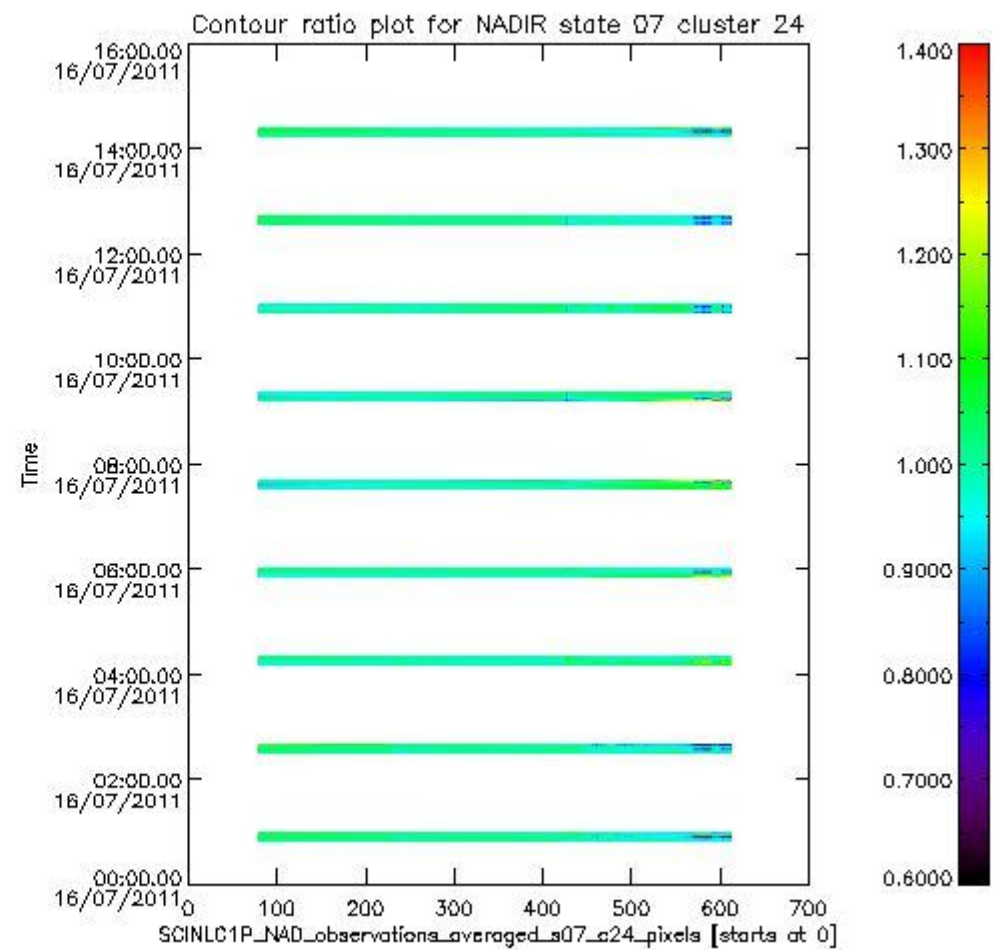
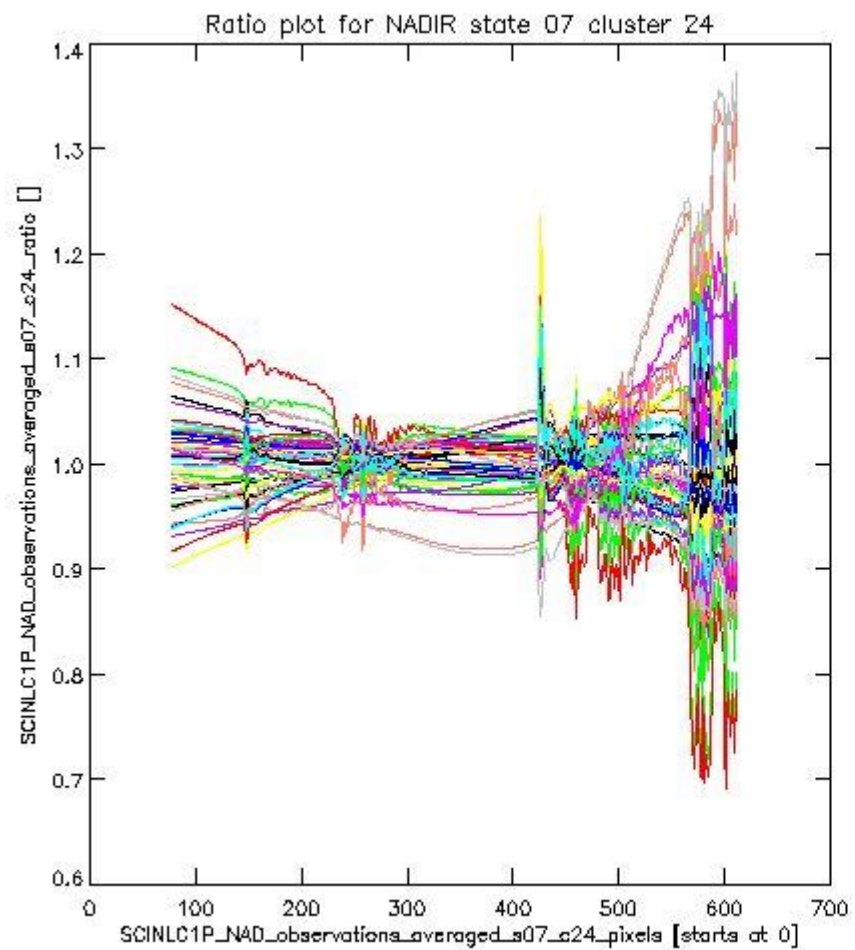
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	16JUL2011 00:50:04.875
Start time of last sample	16JUL2011 14:22:11.685
Reference period start time	16JUN2011 12:30:57.819
Reference period stop time	15JUL2011 19:59:46.017
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\_20110716\_6.PNG

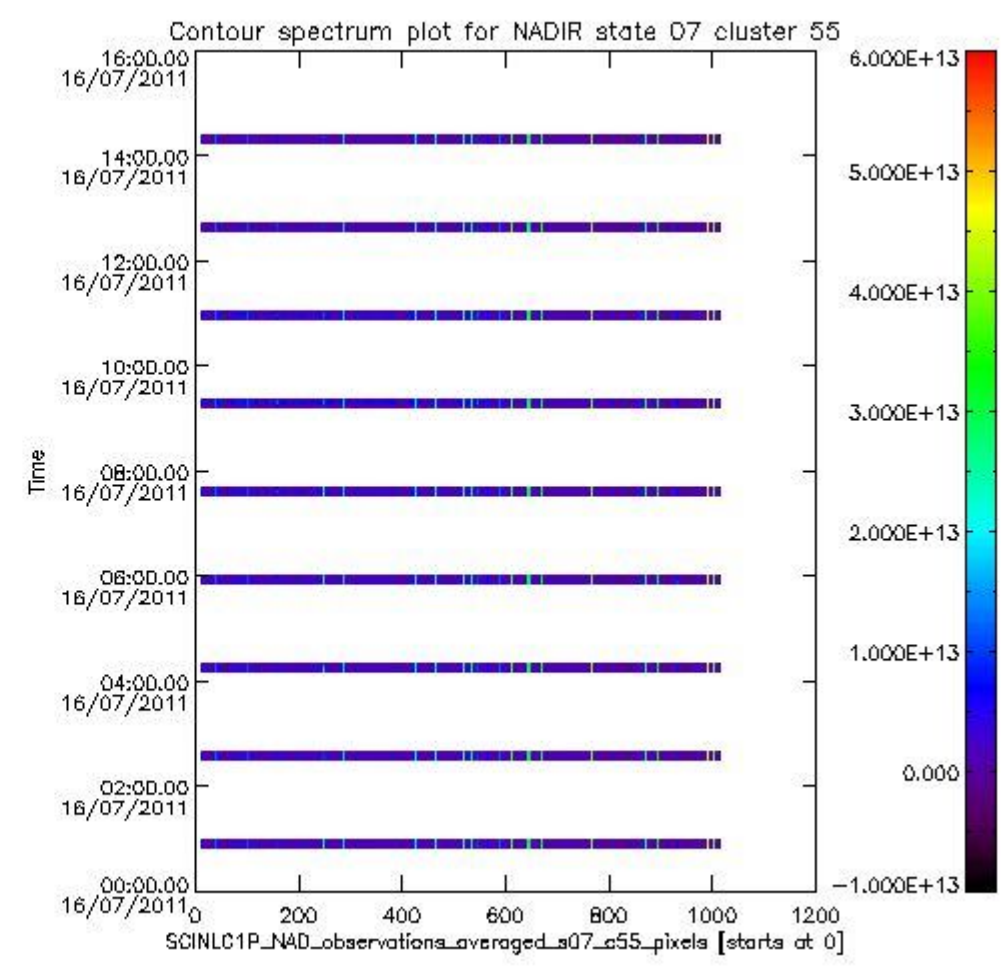
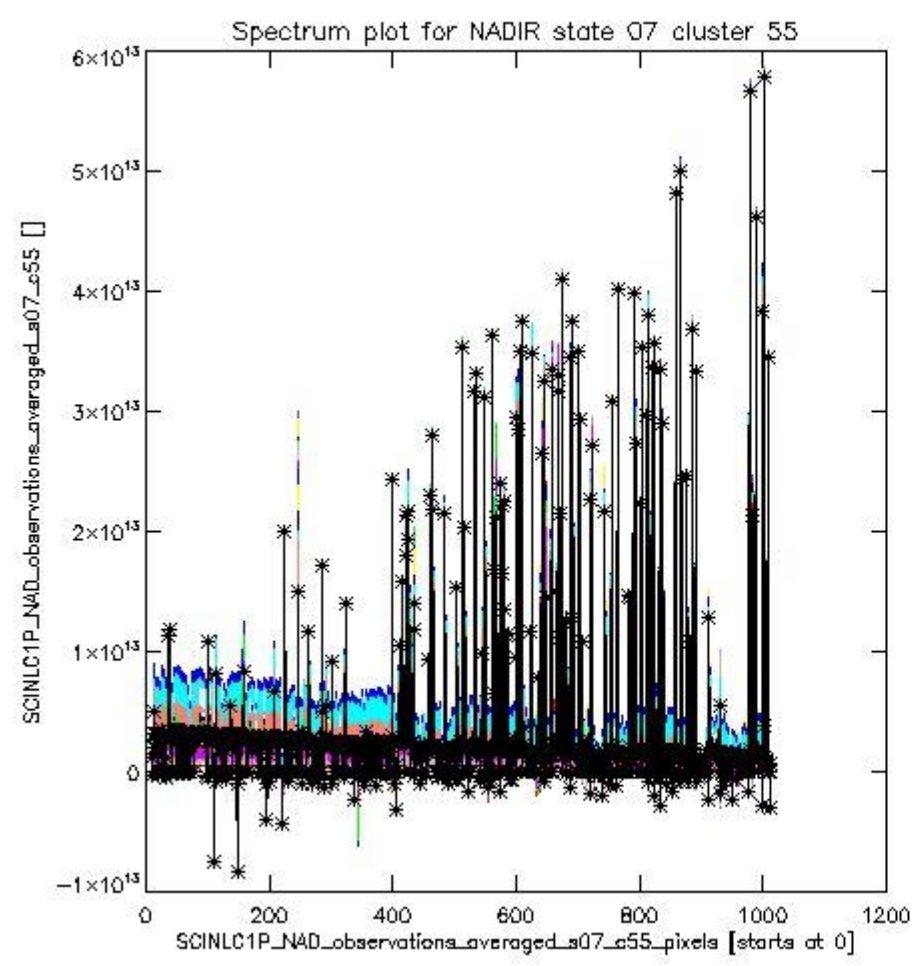




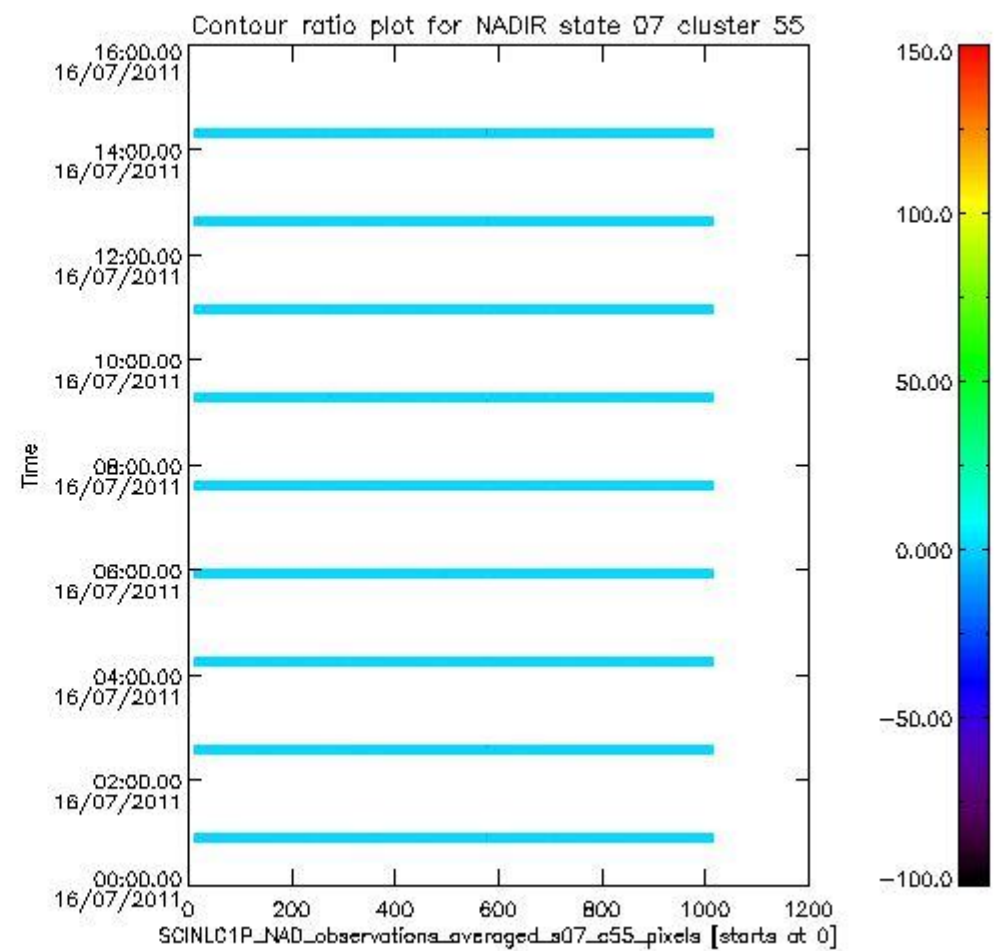
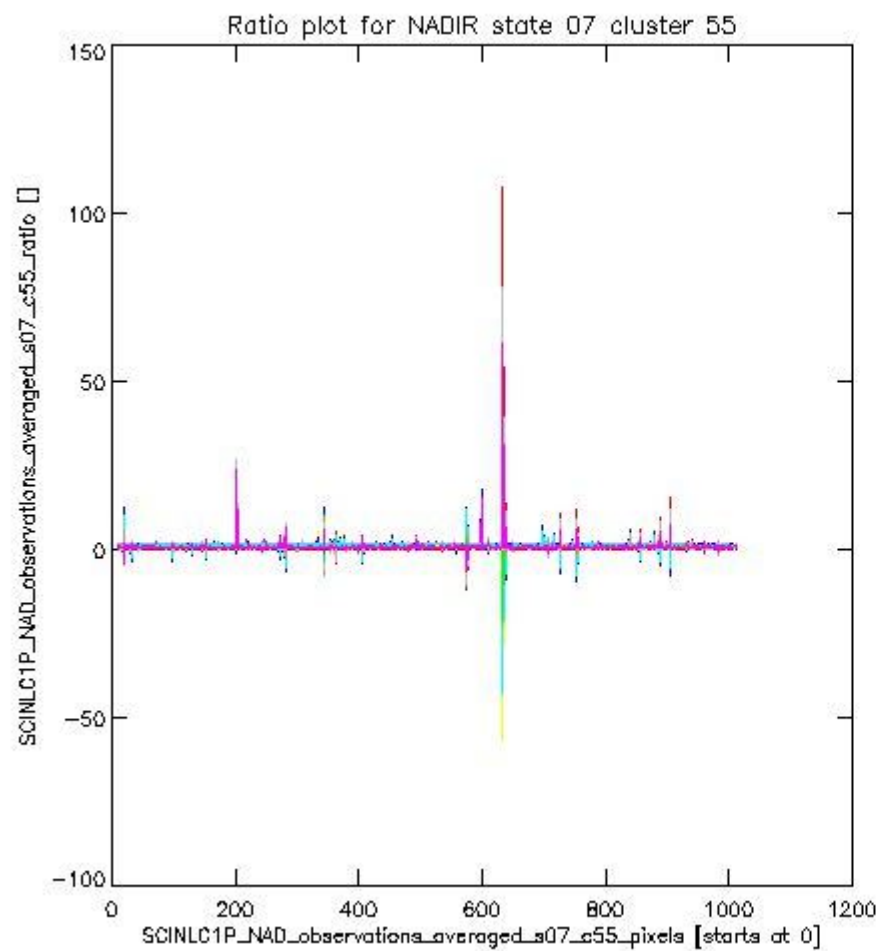
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_7.PNG

**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	16JUL2011 00:50:04.875
Start time of last sample	16JUL2011 14:22:11.685
Reference period start time	16JUN2011 12:30:57.819
Reference period stop time	15JUL2011 19:59:46.017
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



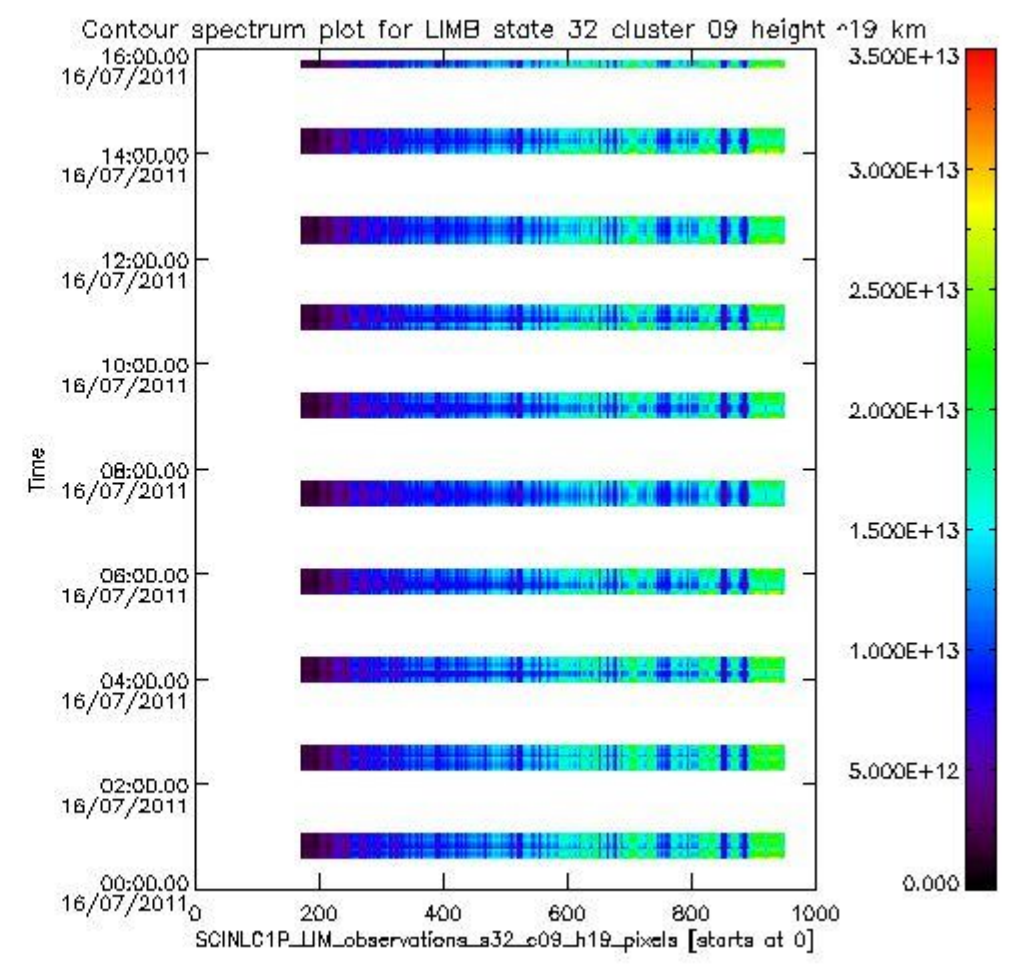
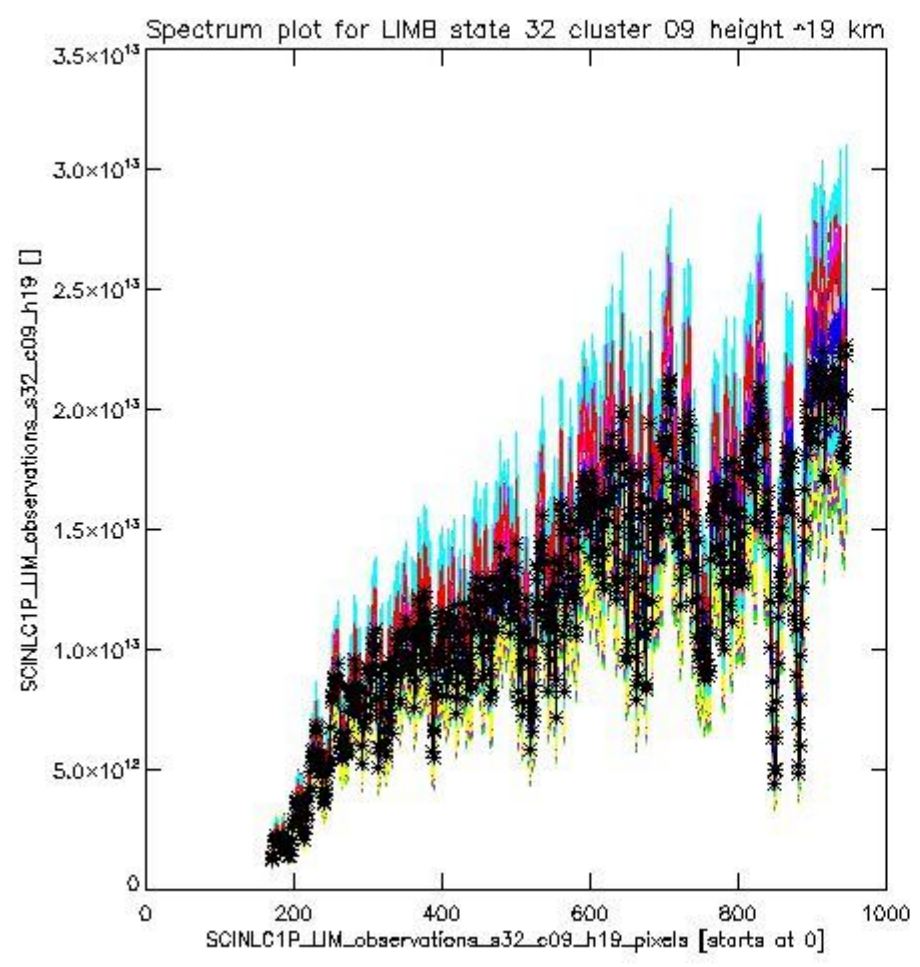
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_8.PNG



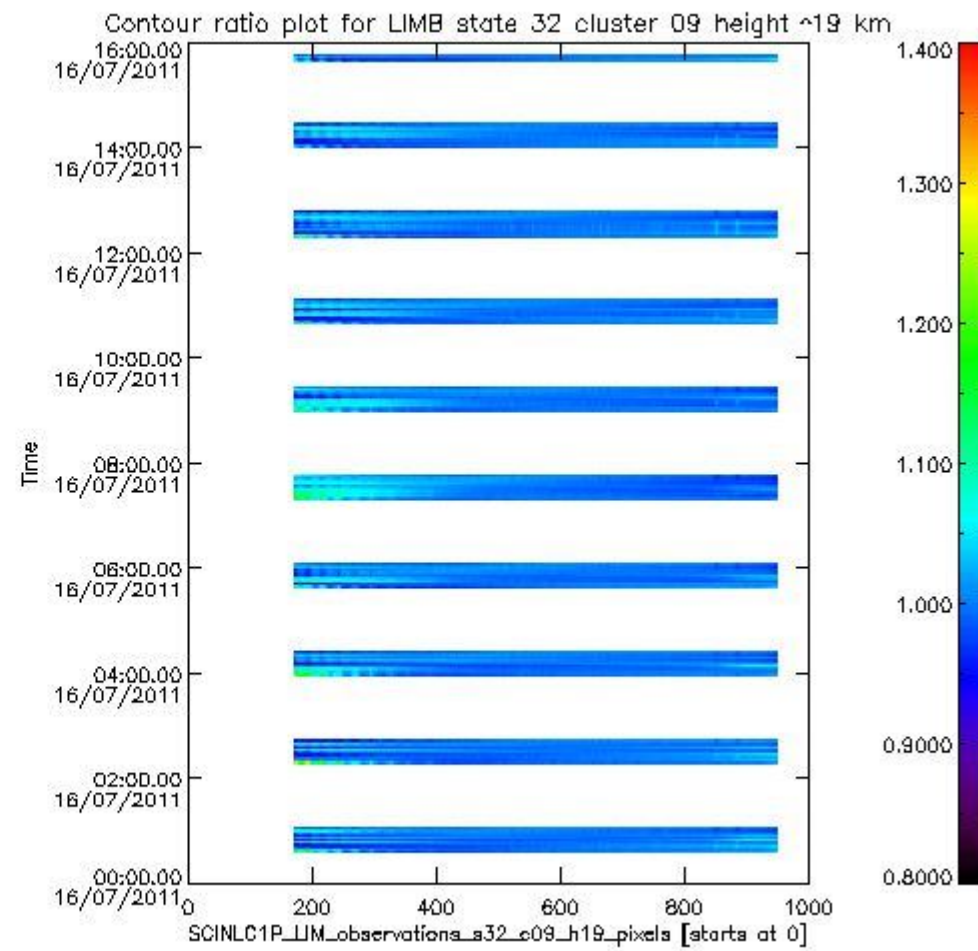
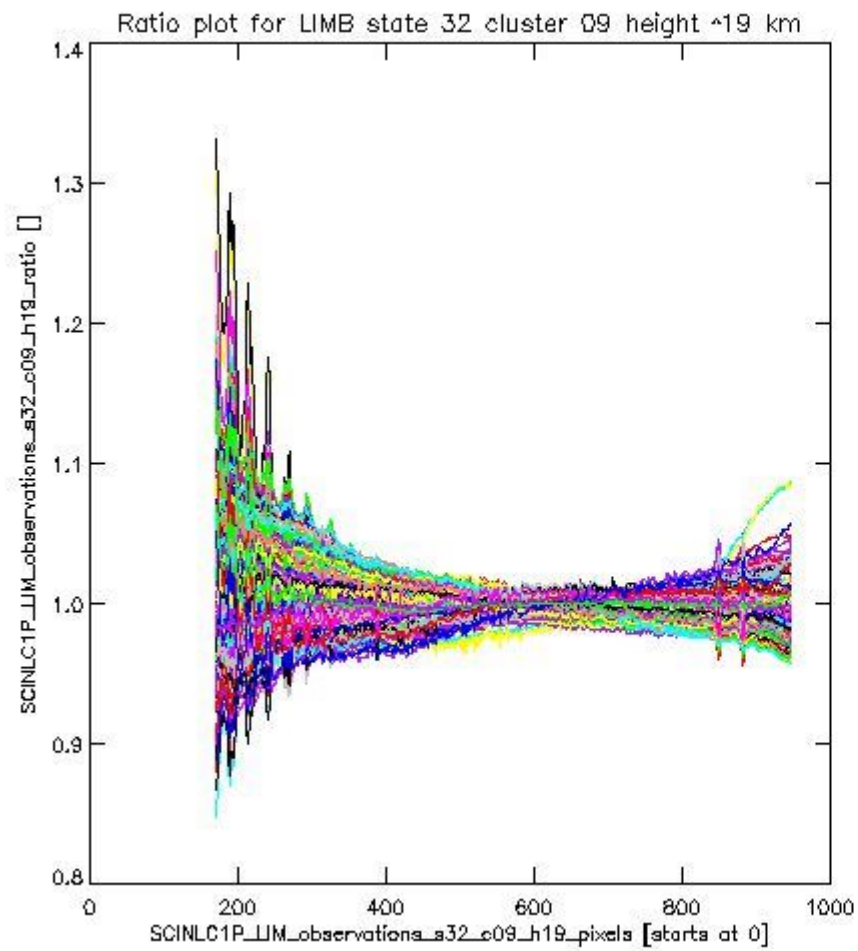
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_9.PNG

**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	16JUL2011 00:36:54.242
Start time of last sample	16JUL2011 15:44:15.542
Reference period start time	16JUN2011 12:17:47.179
Reference period stop time	15JUL2011 20:02:57.318
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



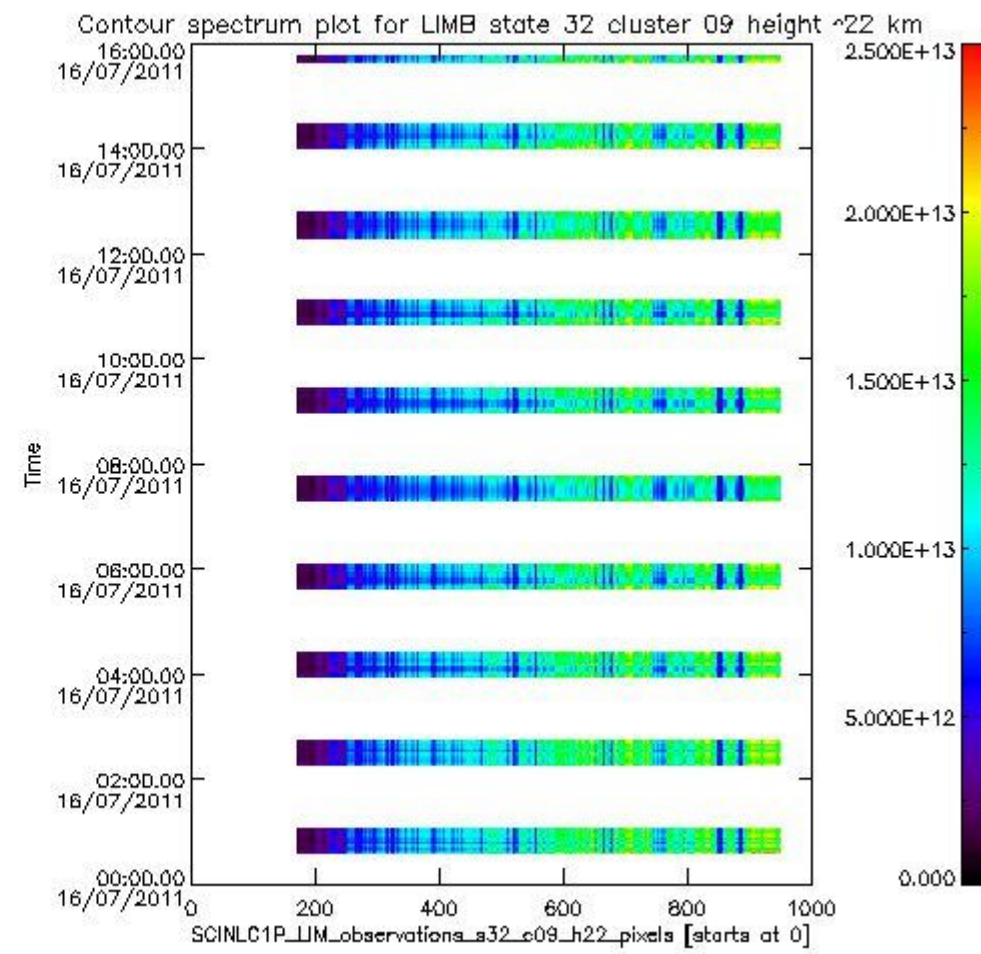
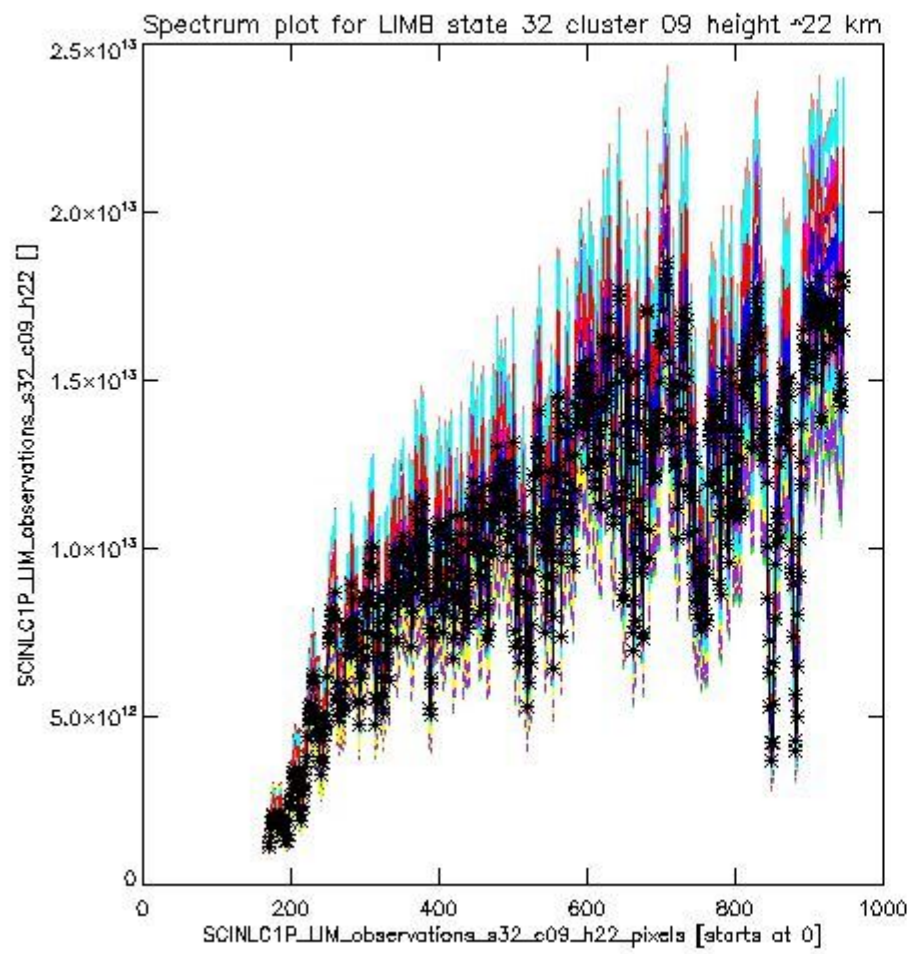
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_10.PNG



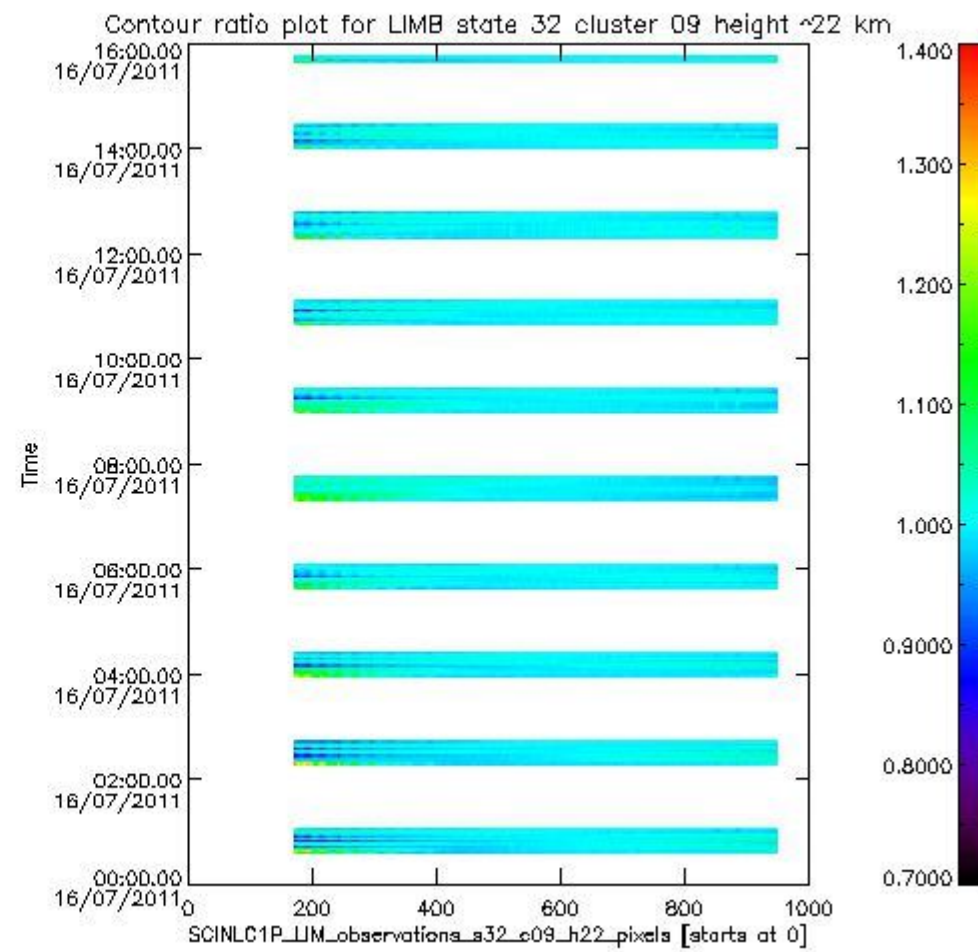
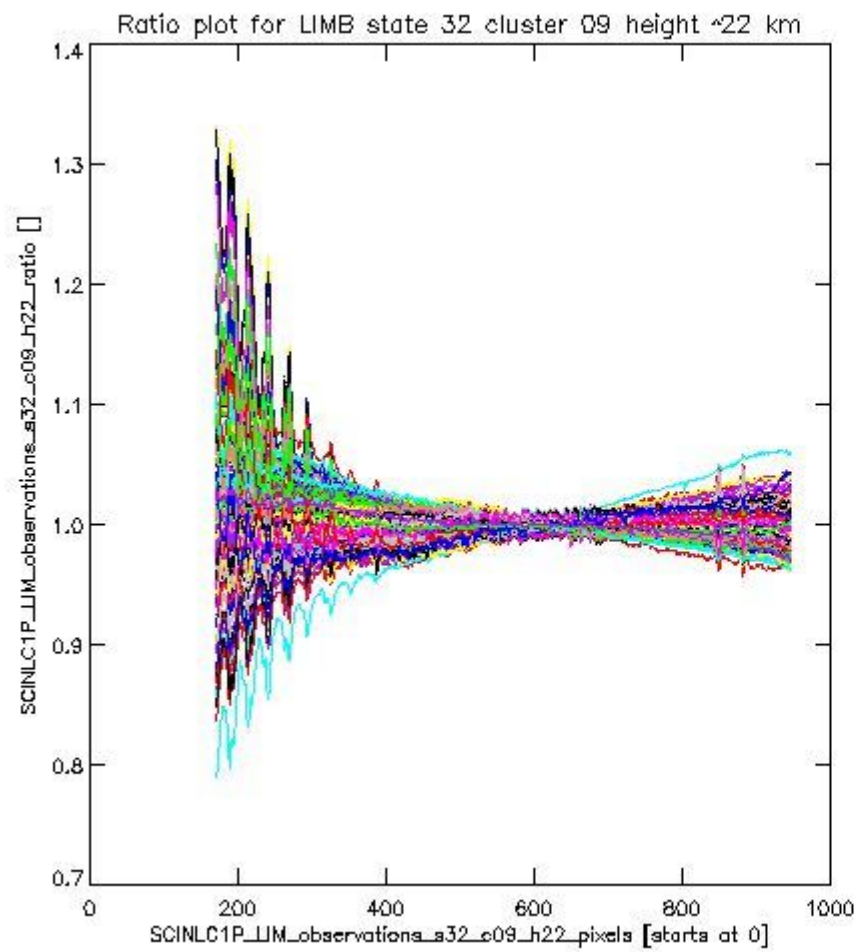
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_11.PNG

**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	16JUL2011 00:36:54.242
Start time of last sample	16JUL2011 15:44:15.542
Reference period start time	16JUN2011 12:17:47.179
Reference period stop time	15JUL2011 20:02:57.318
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



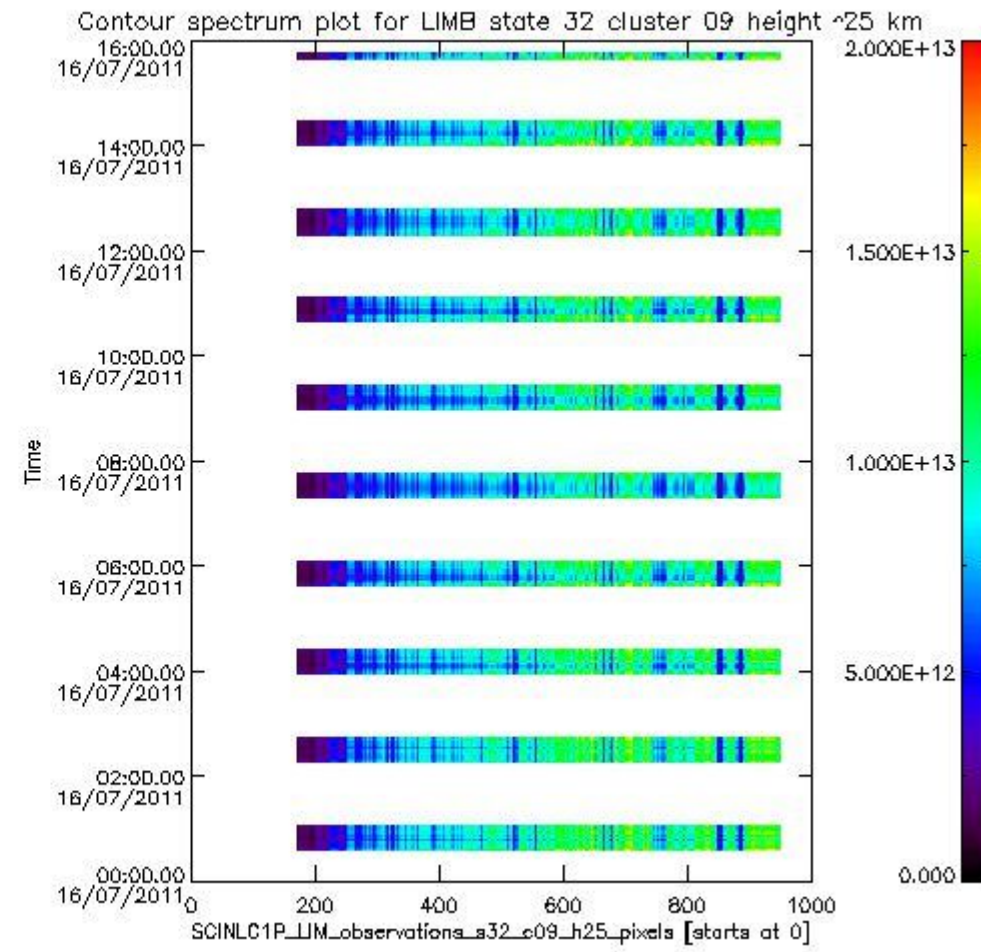
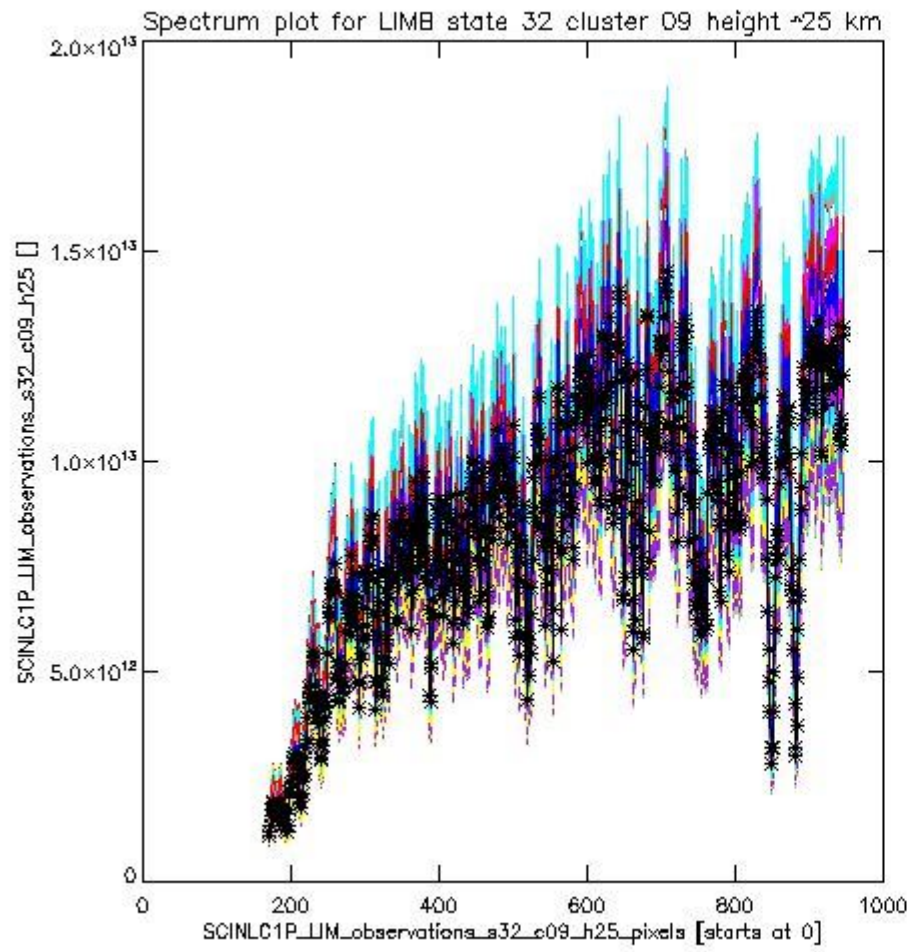
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_13.PNG

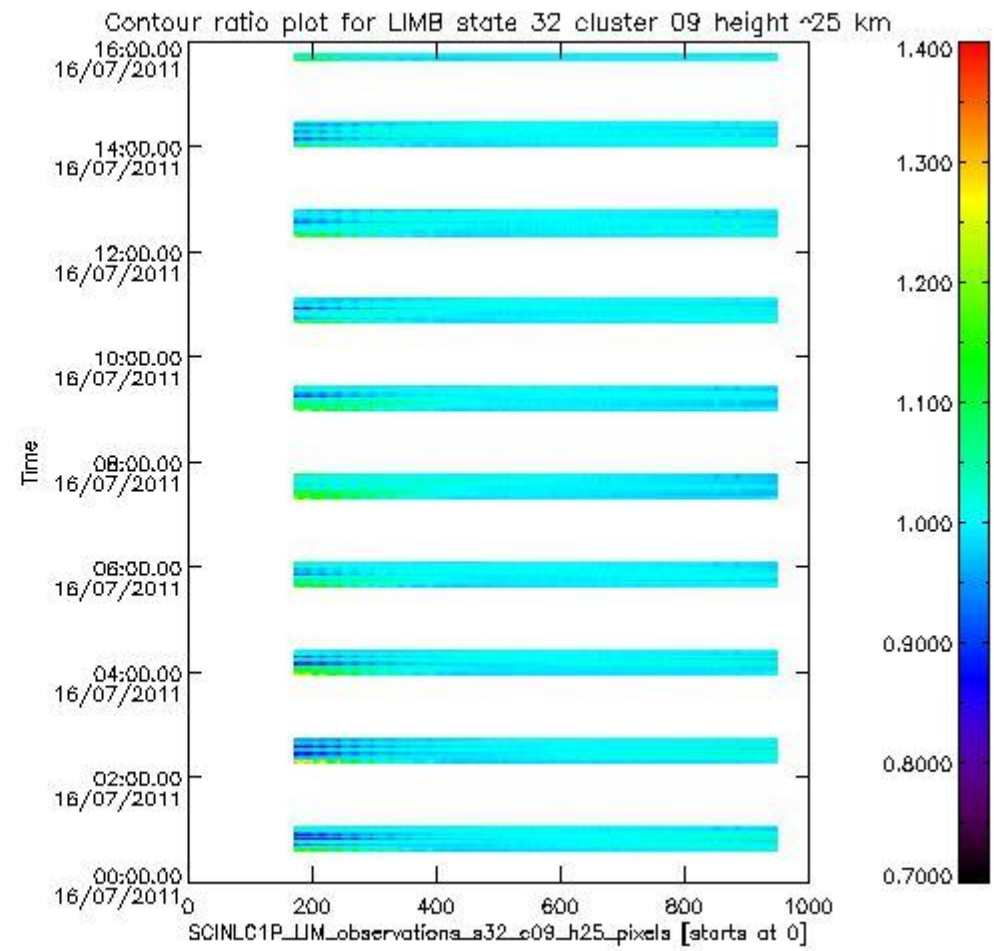
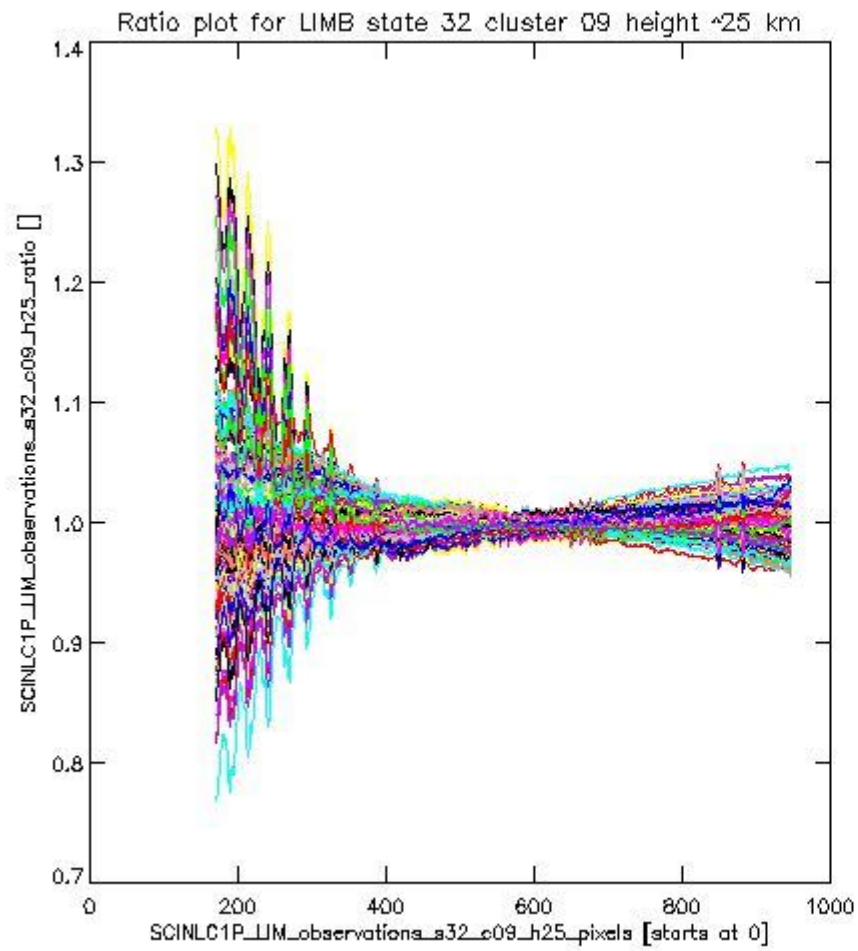
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	16JUL2011 00:36:54.242
Start time of last sample	16JUL2011 15:44:15.542
Reference period start time	16JUN2011 12:17:47.179
Reference period stop time	15JUL2011 20:02:57.318
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\_20110716\_14.PNG

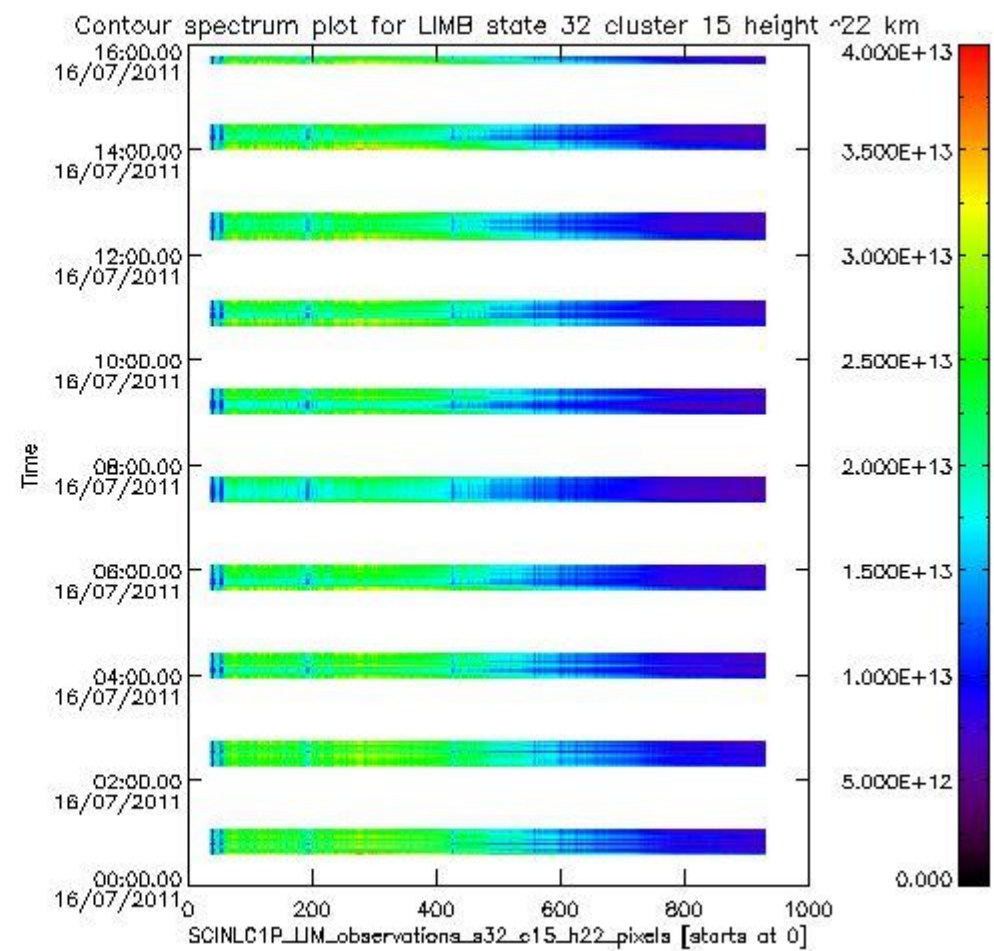
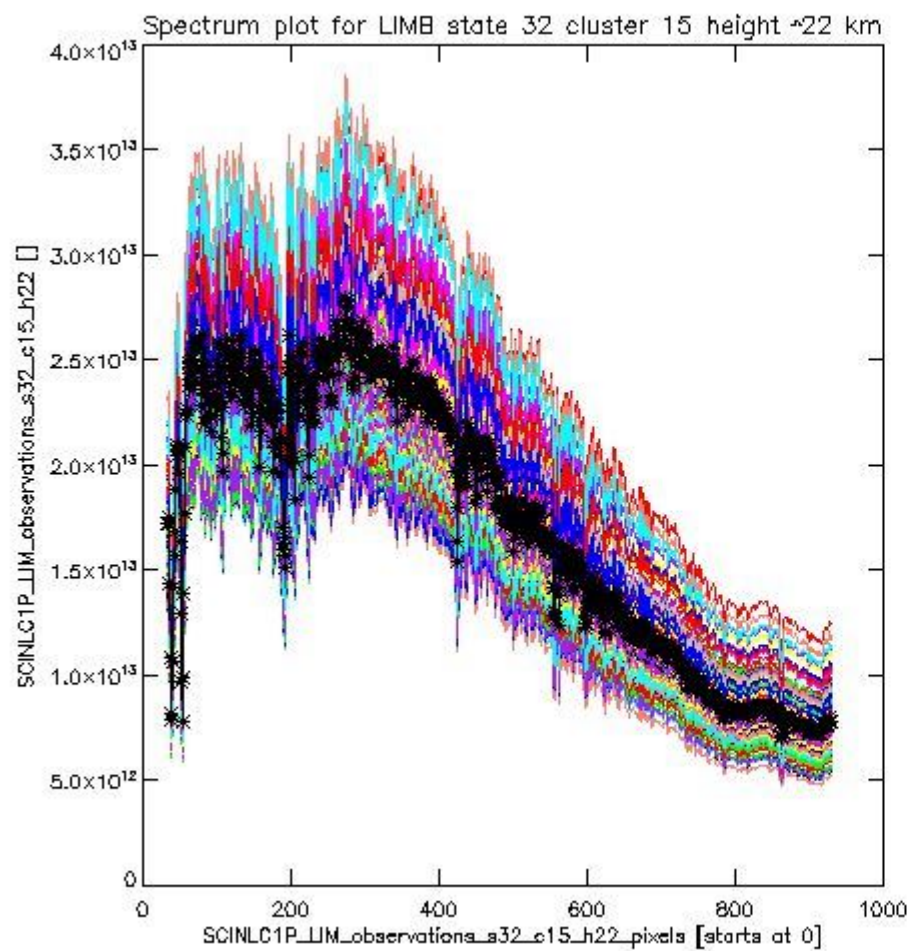




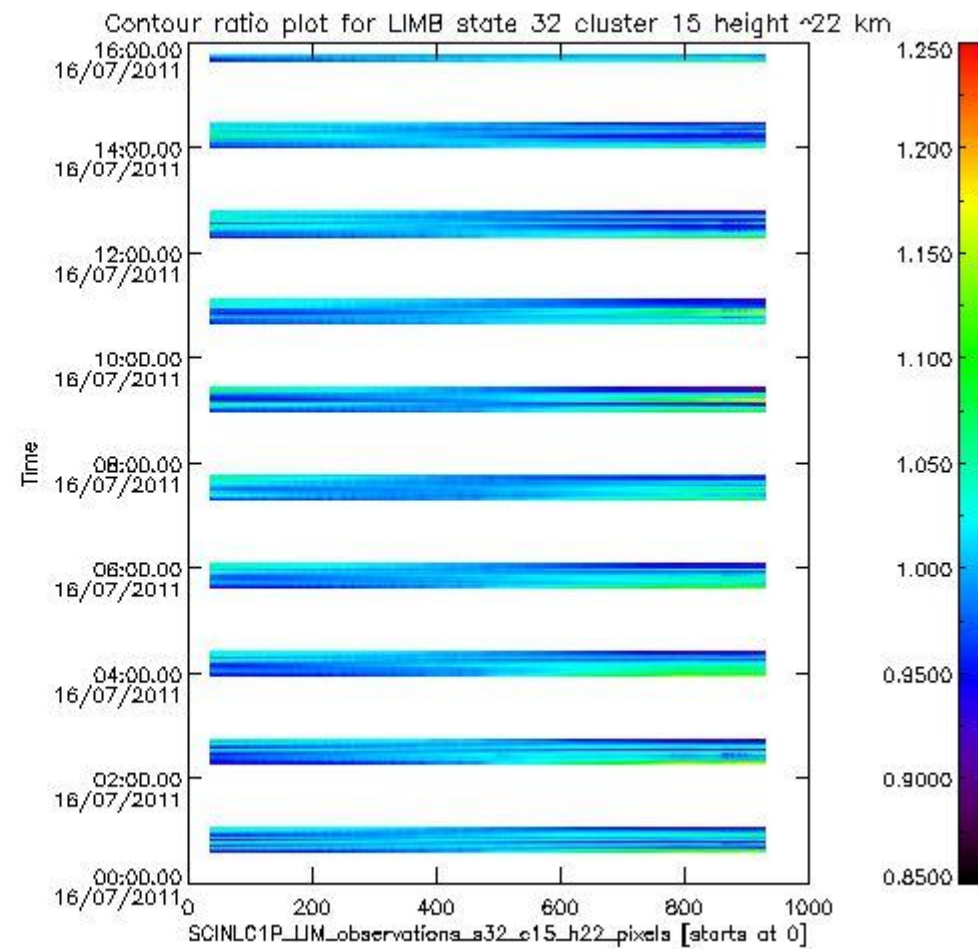
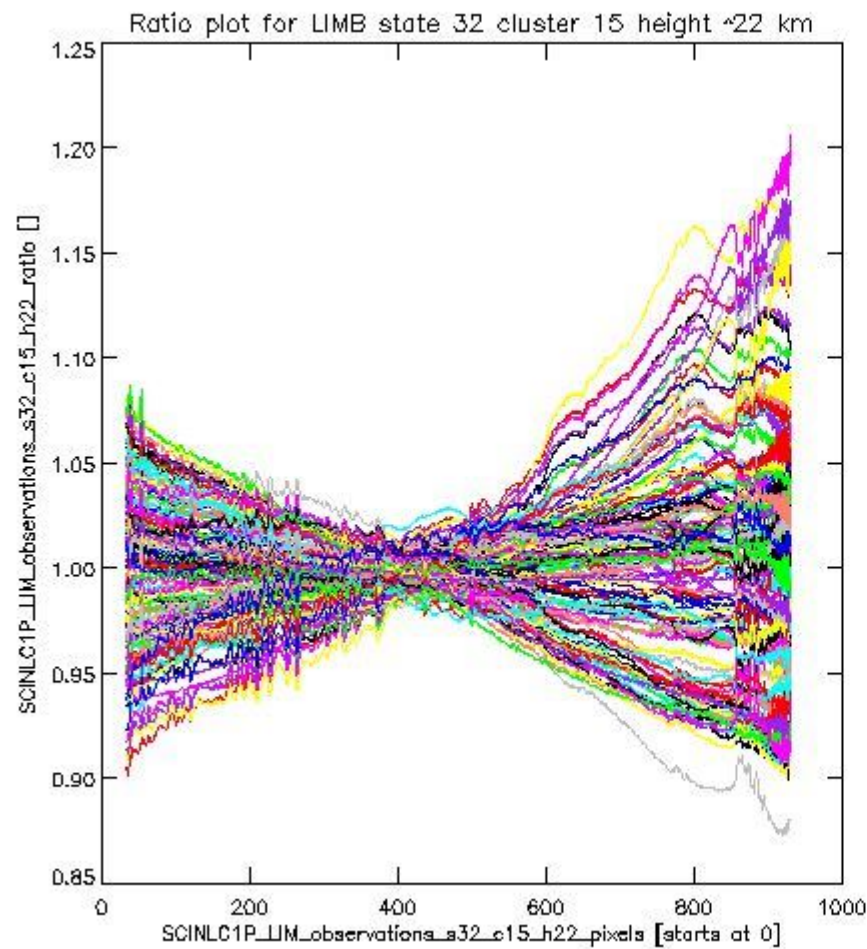
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_15.PNG

**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	16JUL2011 00:36:54.242
Start time of last sample	16JUL2011 15:44:15.542
Reference period start time	16JUN2011 12:17:47.179
Reference period stop time	15JUL2011 20:02:57.318
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



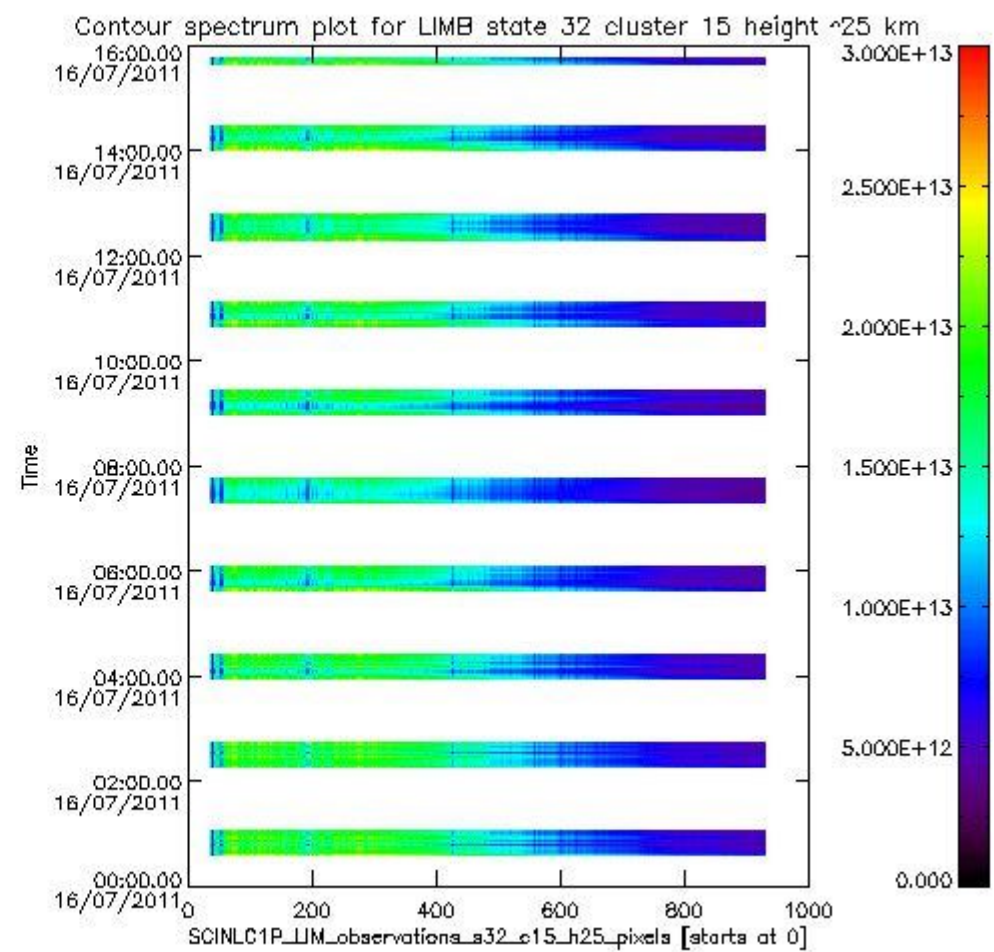
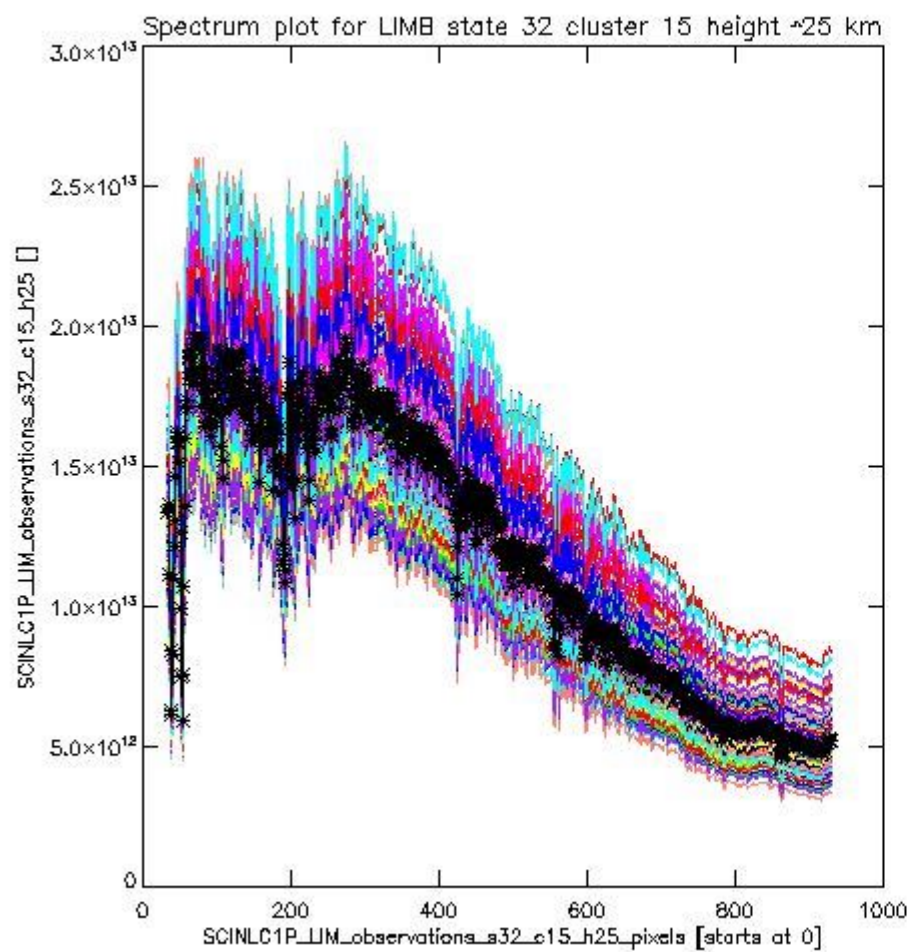
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_16.PNG

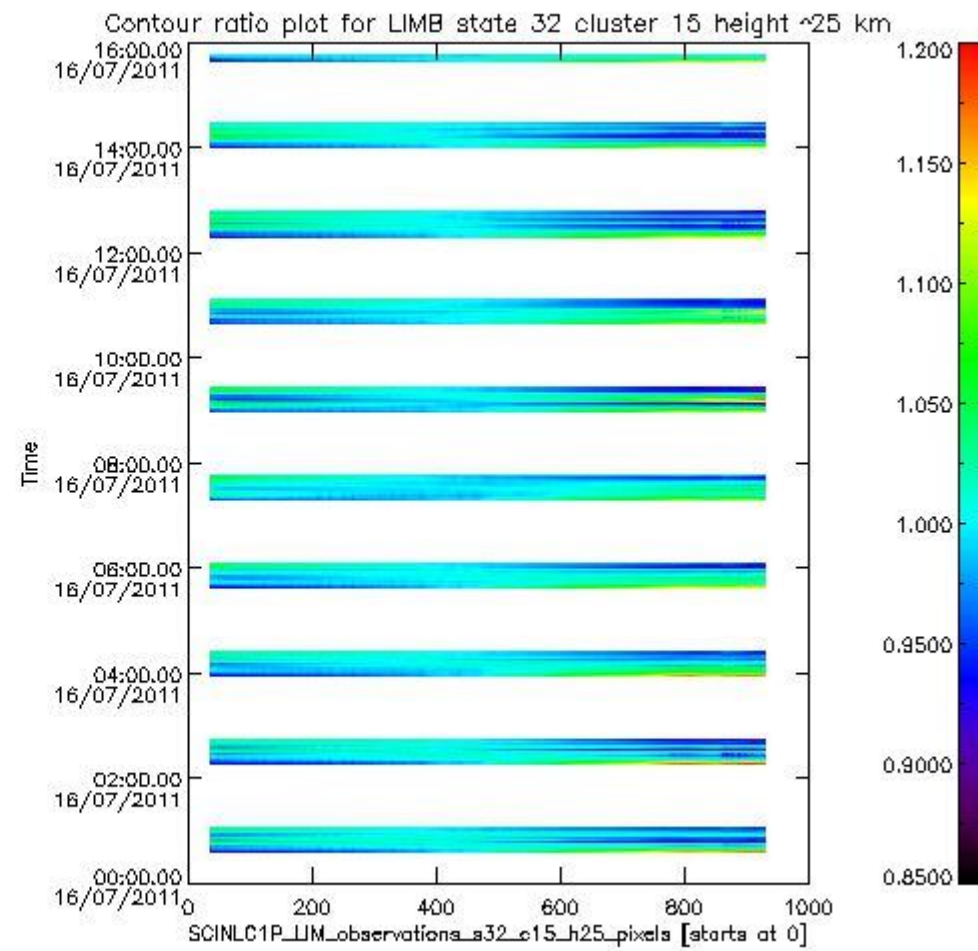
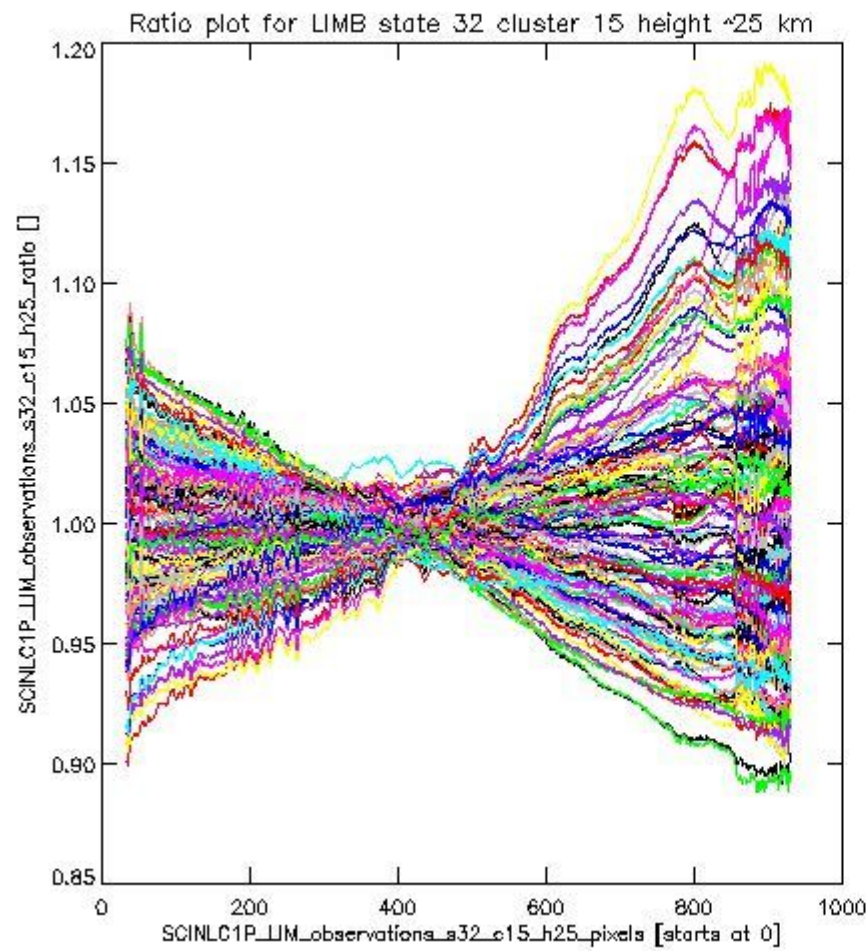


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_17.PNG

**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	16JUL2011 00:36:54.242
Start time of last sample	16JUL2011 15:44:15.542
Reference period start time	16JUN2011 12:17:47.179
Reference period stop time	15JUL2011 20:02:57.318
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

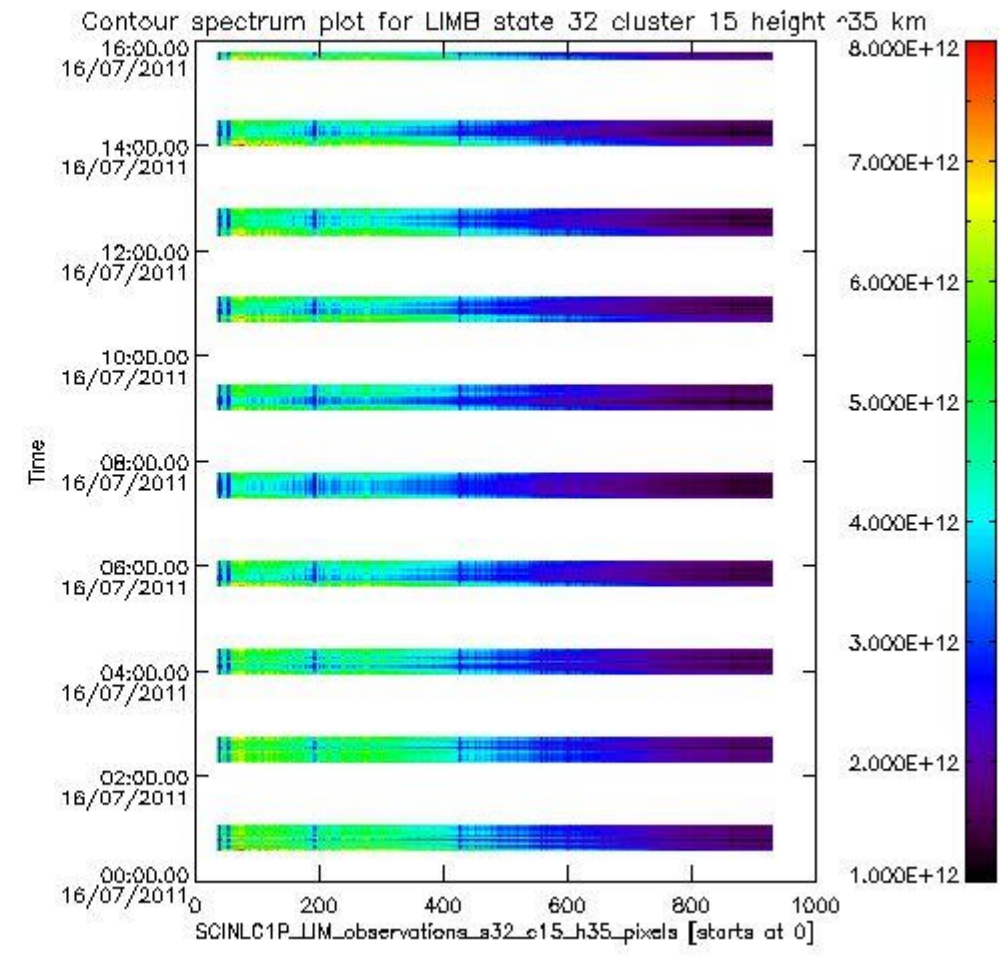
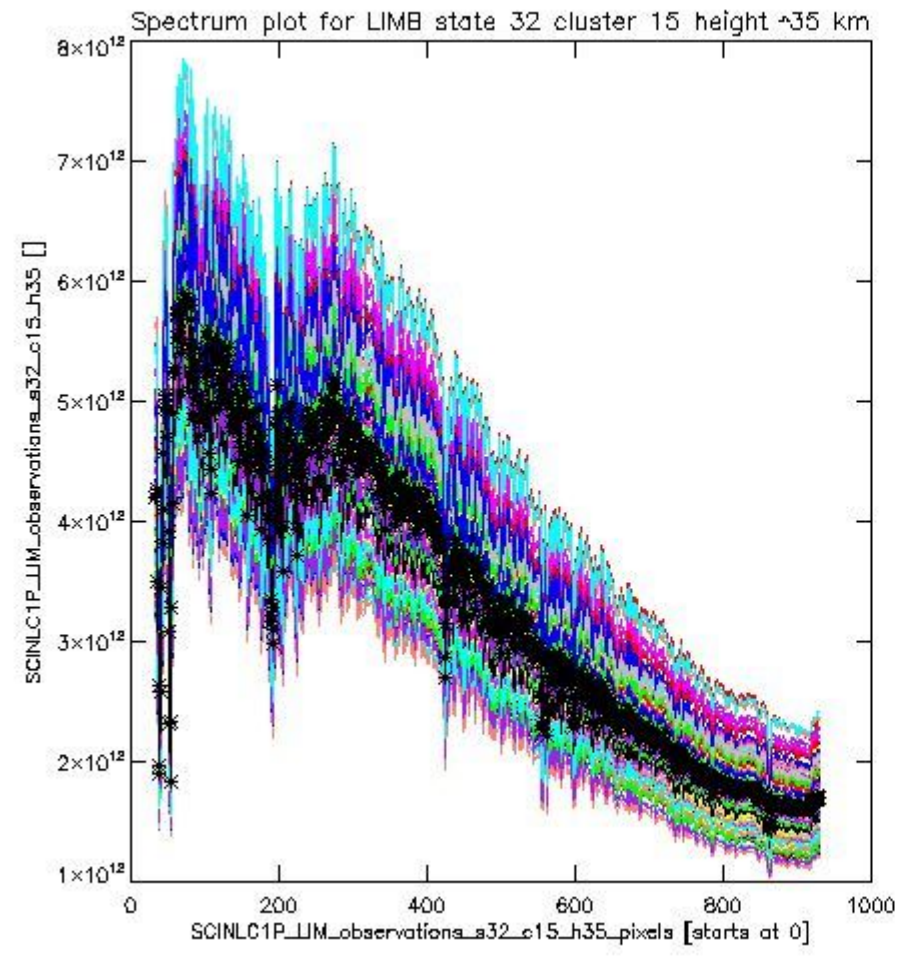




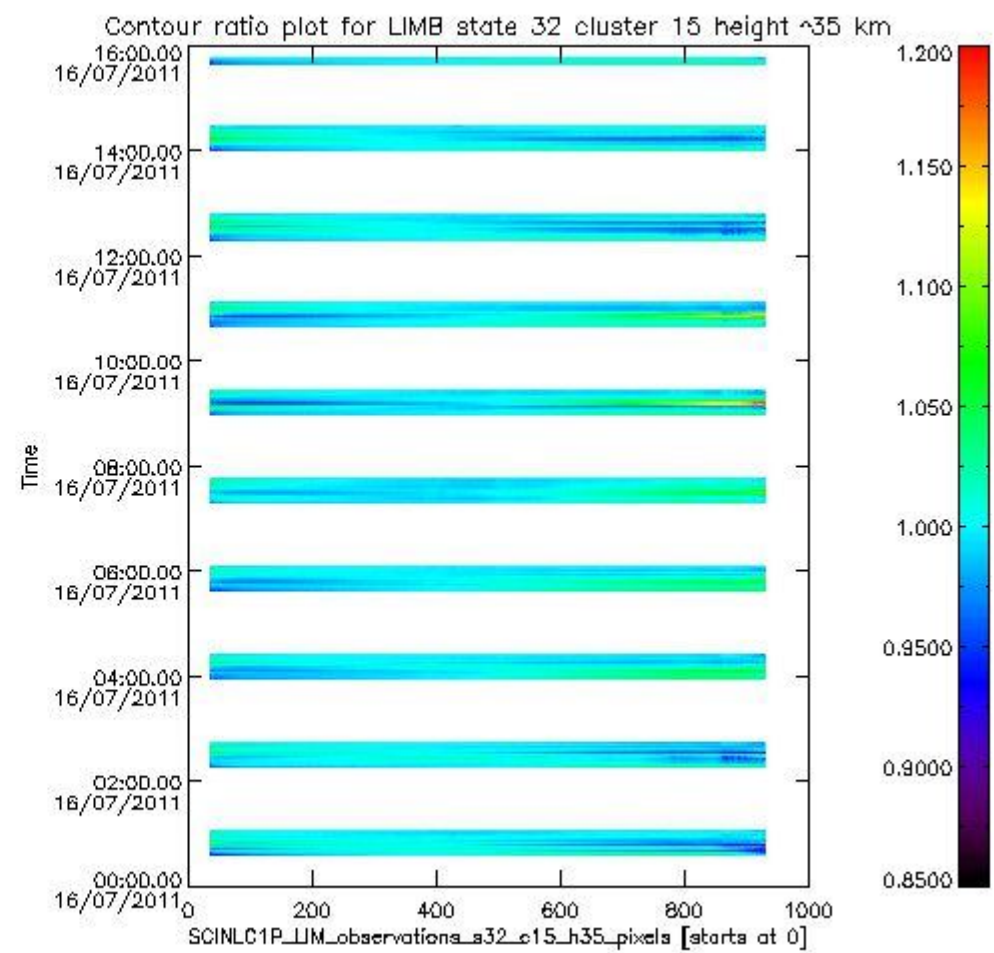
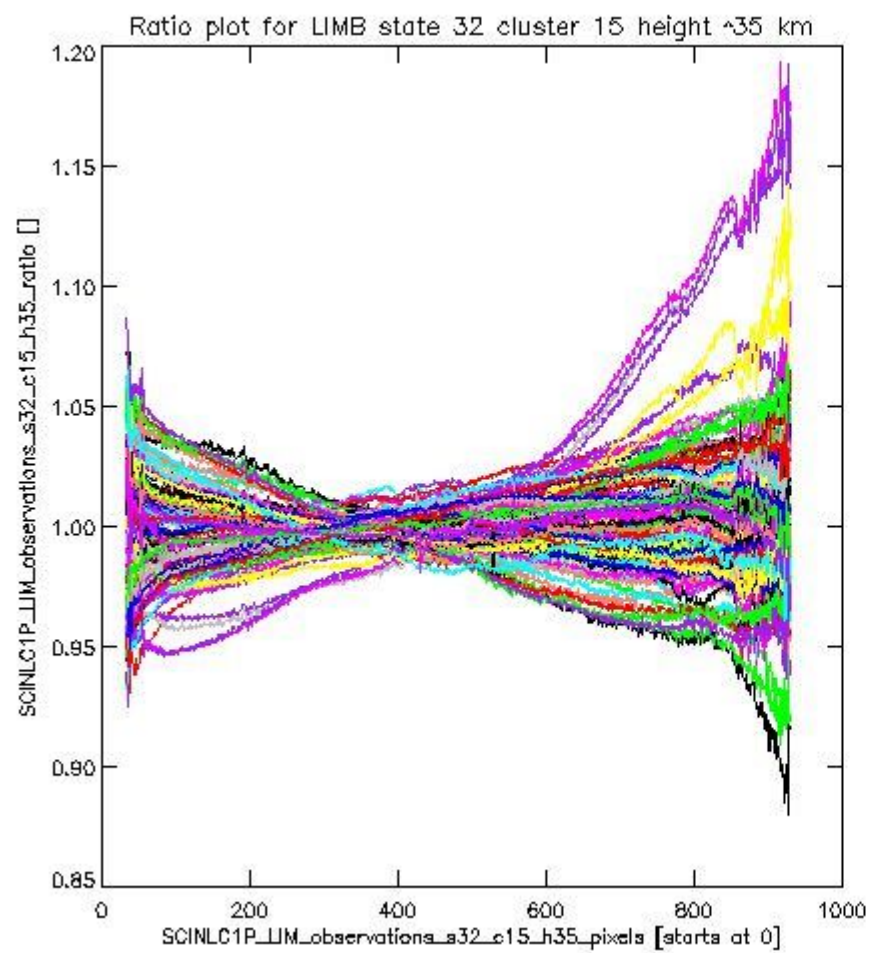
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_19.PNG

**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	16JUL2011 00:36:54.242
Start time of last sample	16JUL2011 15:44:15.542
Reference period start time	16JUN2011 12:17:47.179
Reference period stop time	15JUL2011 20:02:57.318
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\_20110716\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110716\_21.PNG

