

# 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	13MAR2011 06:55:41
Data source version	SCIA/7.04-U
Processing scope for products	02MAR2011 00:00:00 to 03MAR2011 00:00:00
Start time of first product within scope	02MAR2011 00:10:25
Stop time of last product within scope	03MAR2011 00:43:49
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	02MAR2011 00:42:27.976	02MAR2011 22:34:43.432
1	NADIR	07	09	N/A	02MAR2011 00:42:27.976	02MAR2011 22:34:43.432
2	NADIR	07	15	N/A	02MAR2011 00:42:27.976	02MAR2011 22:34:43.432
3	NADIR	07	24	N/A	02MAR2011 00:42:27.976	02MAR2011 22:34:43.432
4	NADIR	07	55	N/A	02MAR2011 00:42:27.976	02MAR2011 22:34:43.432
5	LIMB	32	09	~19 km	02MAR2011 00:29:17.339	02MAR2011 23:58:34.975
6	LIMB	32	09	~22 km	02MAR2011 00:29:17.339	02MAR2011 23:58:34.975
7	LIMB	32	09	~25 km	02MAR2011 00:29:17.339	02MAR2011 23:58:34.975
8	LIMB	32	15	~22 km	02MAR2011 00:29:17.339	02MAR2011 23:58:34.975
9	LIMB	32	15	~25 km	02MAR2011 00:29:17.339	02MAR2011 23:58:34.975
10	LIMB	32	15	~35 km	02MAR2011 00:29:17.339	02MAR2011 23:58:34.975

#### 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	#noprocs	#cpl_drk	#incpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110301_235752_000060143100_00074_47071_5052.N1</a>	02MAR2011 00:10:25	02MAR2011 01:20:40	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110302_013810_000060053100_00075_47072_5054.N1</a>	02MAR2011 01:50:38	02MAR2011 03:01:07	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110302_031819_000060143100_00076_47073_5056.N1</a>	02MAR2011 03:30:52	02MAR2011 04:41:07	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110302_045837_000060053100_00077_47074_5059.N1</a>	02MAR2011 05:11:06	02MAR2011 06:21:35	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110302_063846_000060143100_00078_47075_5060.N1</a>	02MAR2011 06:51:19	02MAR2011 08:01:34	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110302_081904_000060053100_00079_47076_5062.N1</a>	02MAR2011 08:31:33	02MAR2011 09:42:02	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110302_095913_000060143100_00080_47077_5064.N1	02MAR2011 10:11:46	02MAR2011 11:22:01	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110302_113931_000060053100_00081_47078_5065.N1	02MAR2011 11:52:00	02MAR2011 13:02:29	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110302_131940_000060143100_00082_47079_5069.N1	02MAR2011 13:32:13	02MAR2011 14:42:28	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110302_145958_000060053100_00083_47080_5071.N1	02MAR2011 15:12:27	02MAR2011 16:22:56	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110302_164006_000060143100_00084_47081_5073.N1	02MAR2011 16:52:40	02MAR2011 18:02:55	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110302_182025_000060103100_00085_47082_5074.N1	02MAR2011 18:32:54	02MAR2011 20:00:36	0	36	30	0	3	1	0	0	
12	SCI_NLC_1CUDPA20110302_200043_000060043100_00086_47083_5076.N1	02MAR2011 20:13:07	02MAR2011 21:23:42	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110302_214051_000060053100_00087_47084_5078.N1	02MAR2011 21:53:21	02MAR2011 23:03:50	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110302_232100_000060143100_00088_47085_5080.N1	02MAR2011 23:33:34	03MAR2011 00:43:49	0	35	31	0	0	1	0	0	

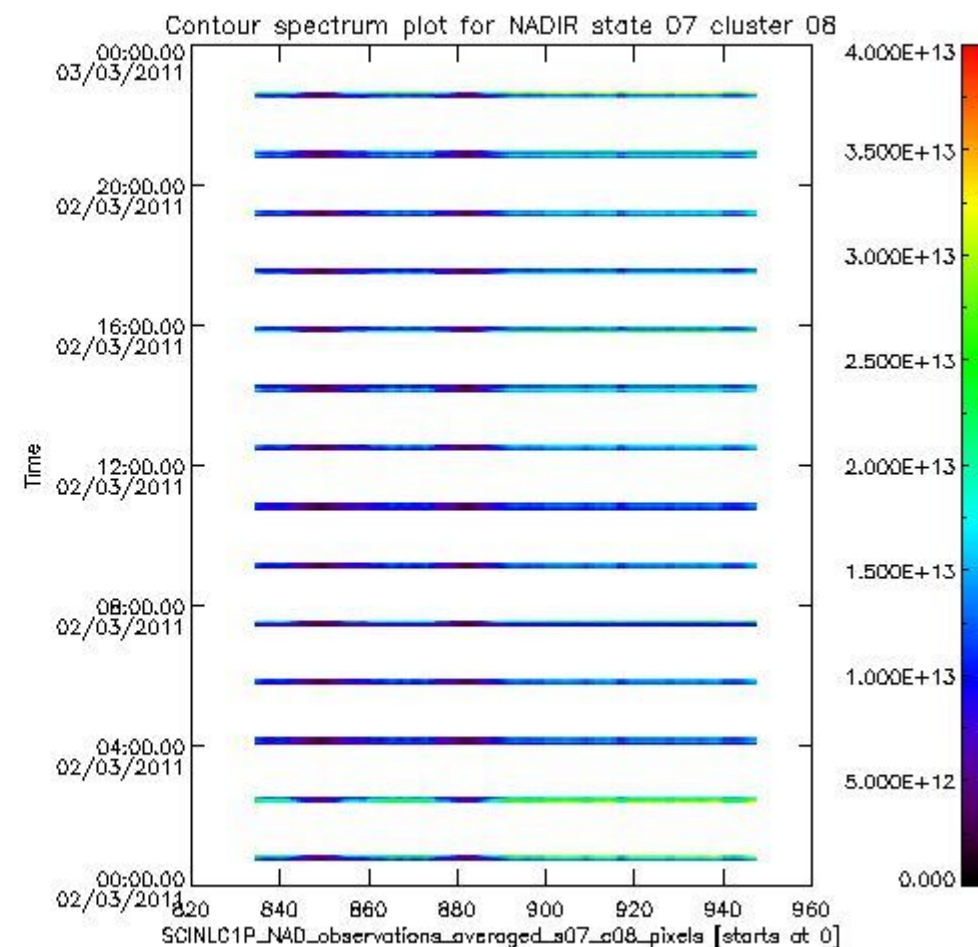
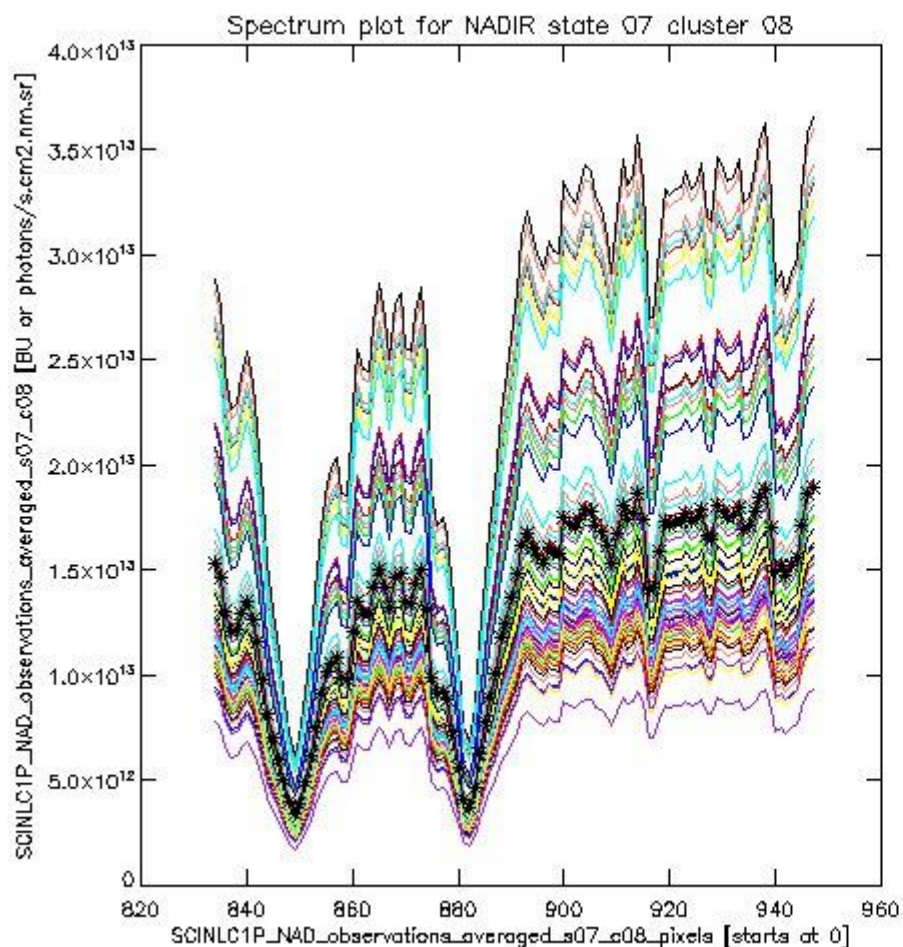
## 1.2 Source packet monitoring

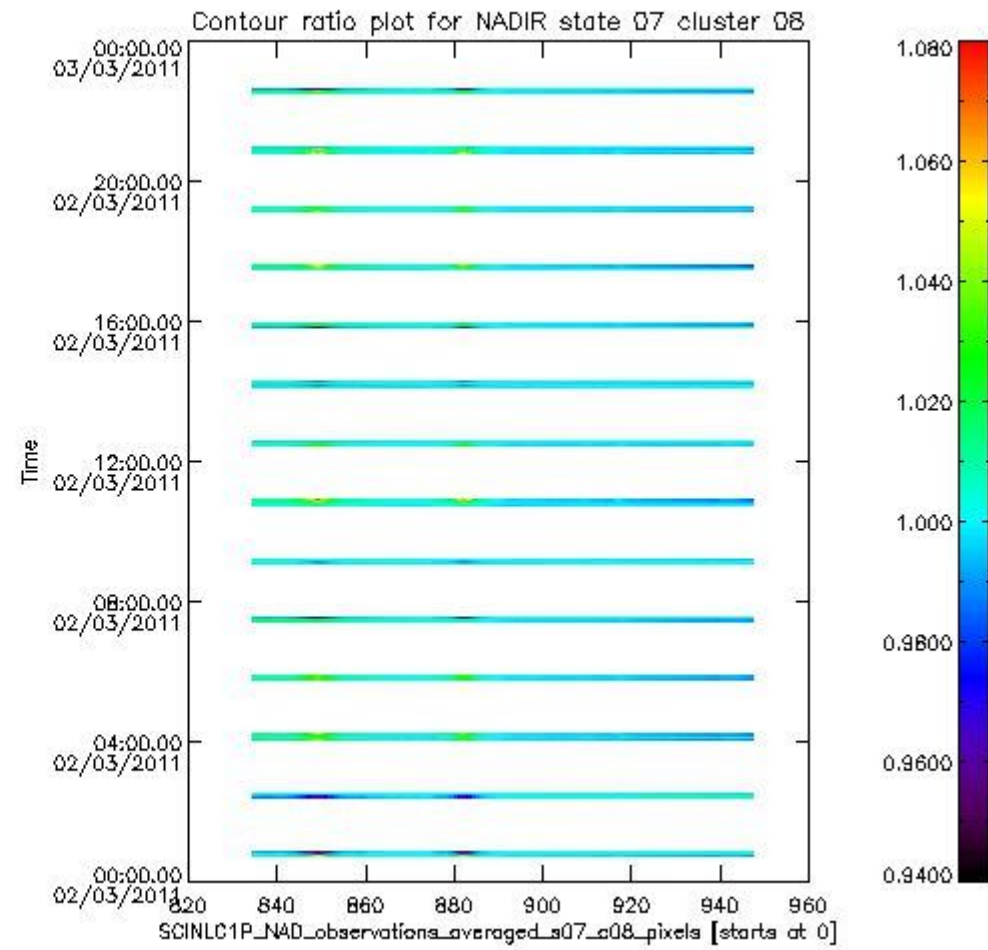
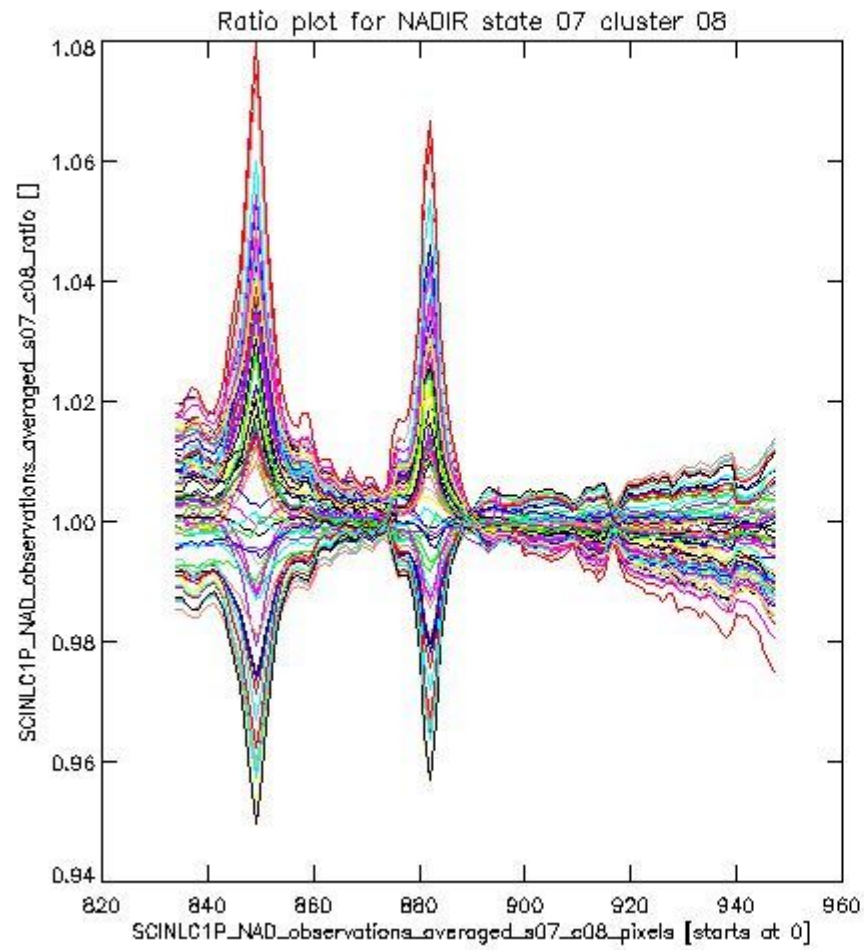
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

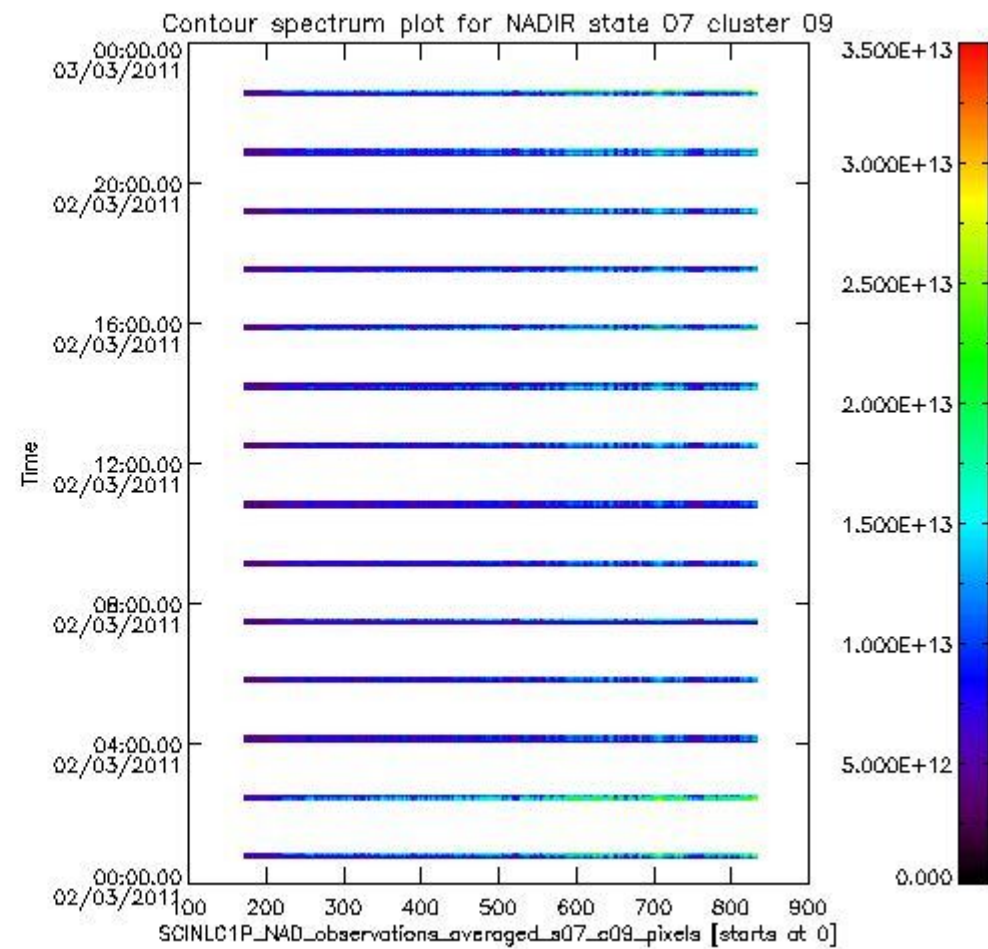
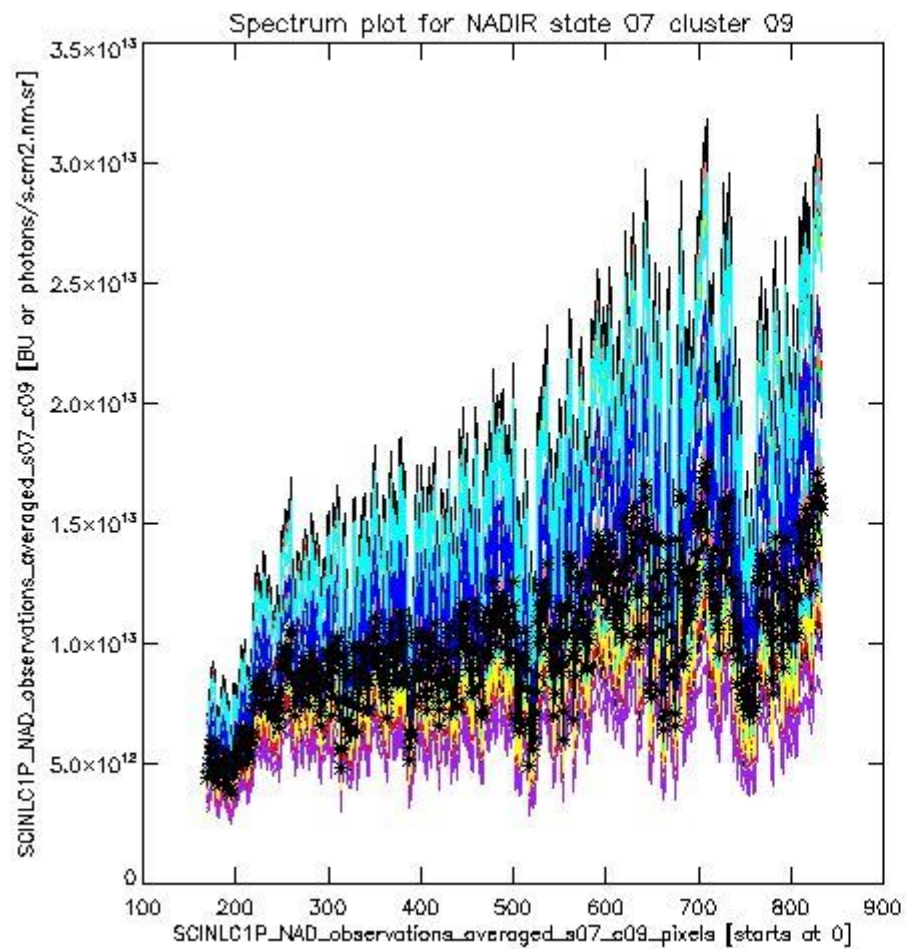
Item	Value
Start time of first sample	02MAR2011 00:42:27.976
Start time of last sample	02MAR2011 22:34:43.432
Reference period start time	31JAN2011 02:26:29.228
Reference period stop time	01MAR2011 23:11:34.022
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



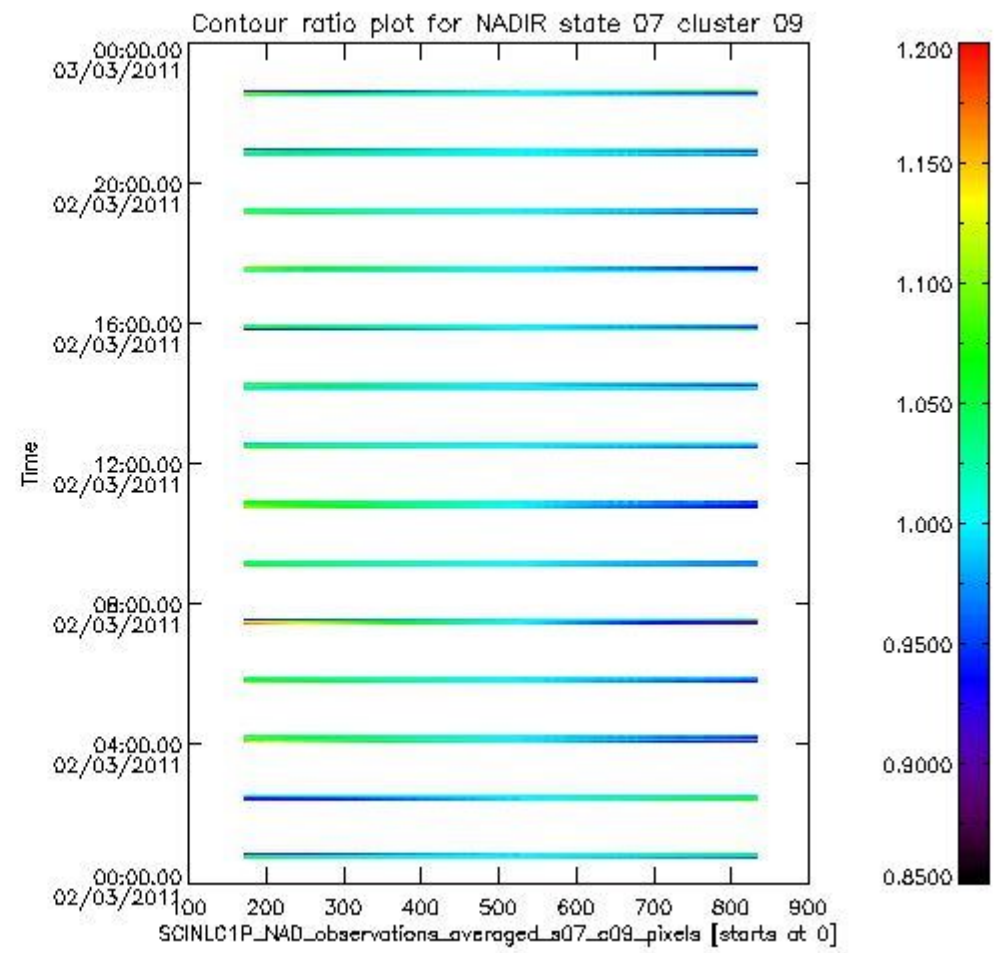
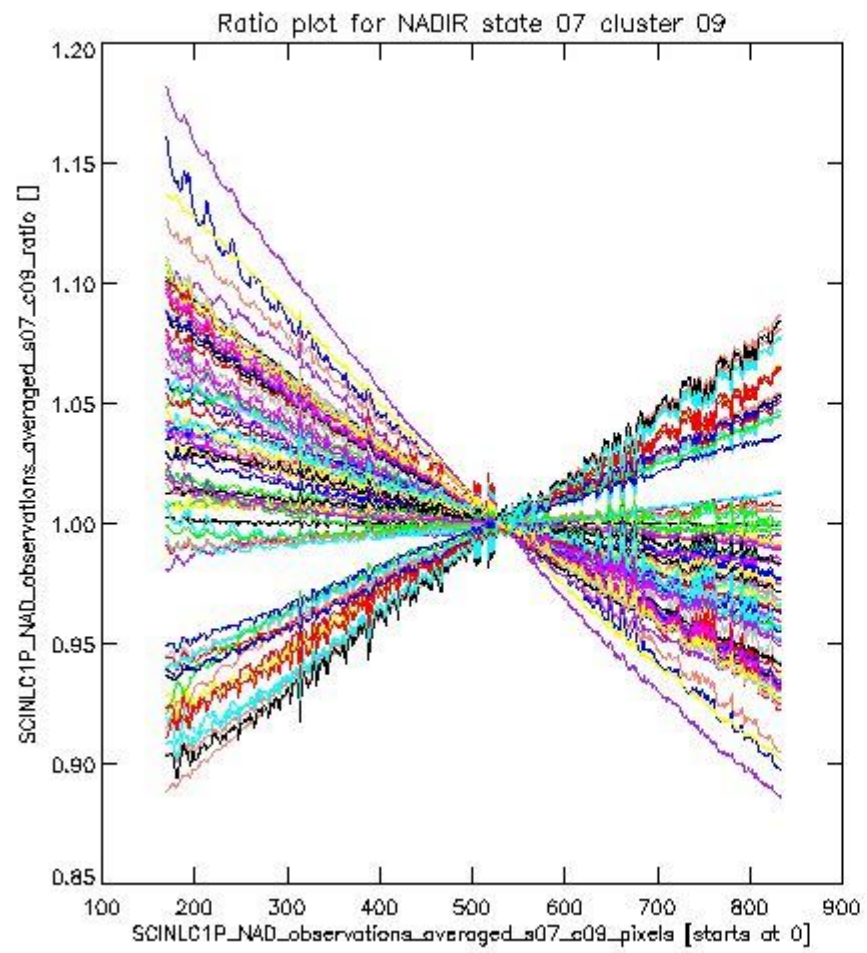


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	02MAR2011 00:42:27.976
Start time of last sample	02MAR2011 22:34:43.432
Reference period start time	31JAN2011 02:26:29.228
Reference period stop time	01MAR2011 23:11:34.022
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



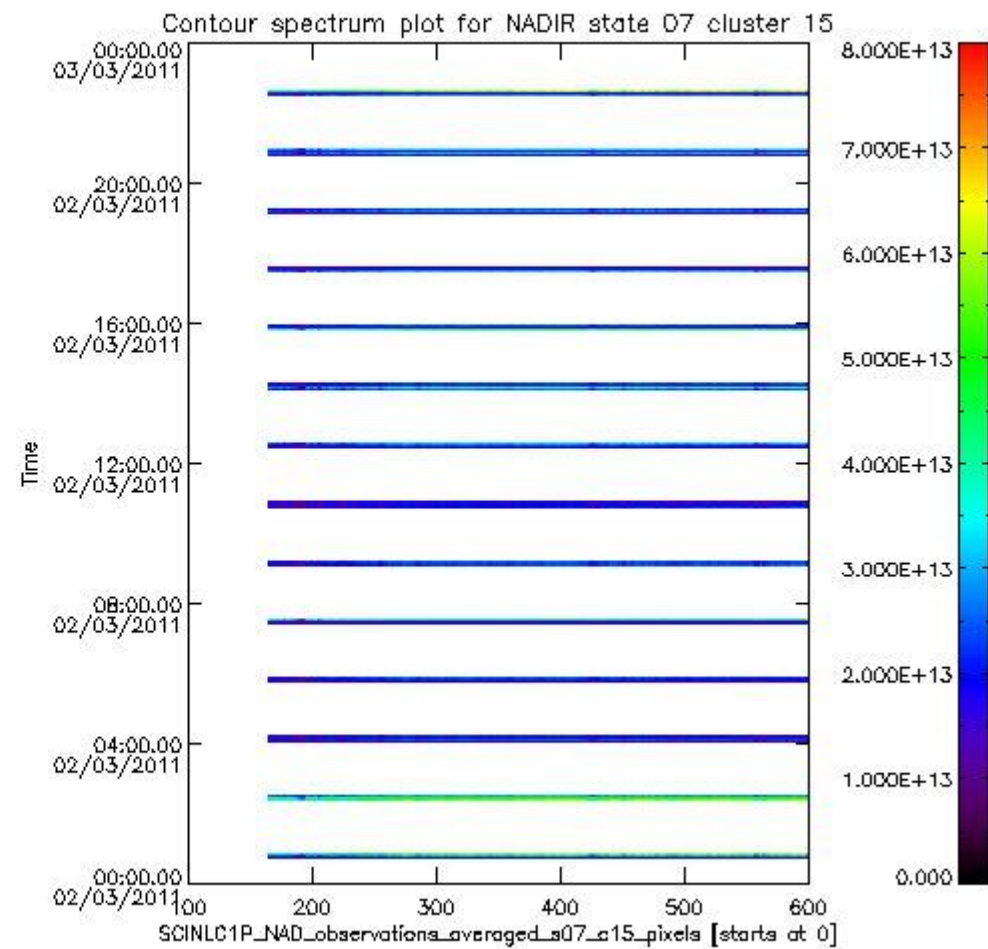
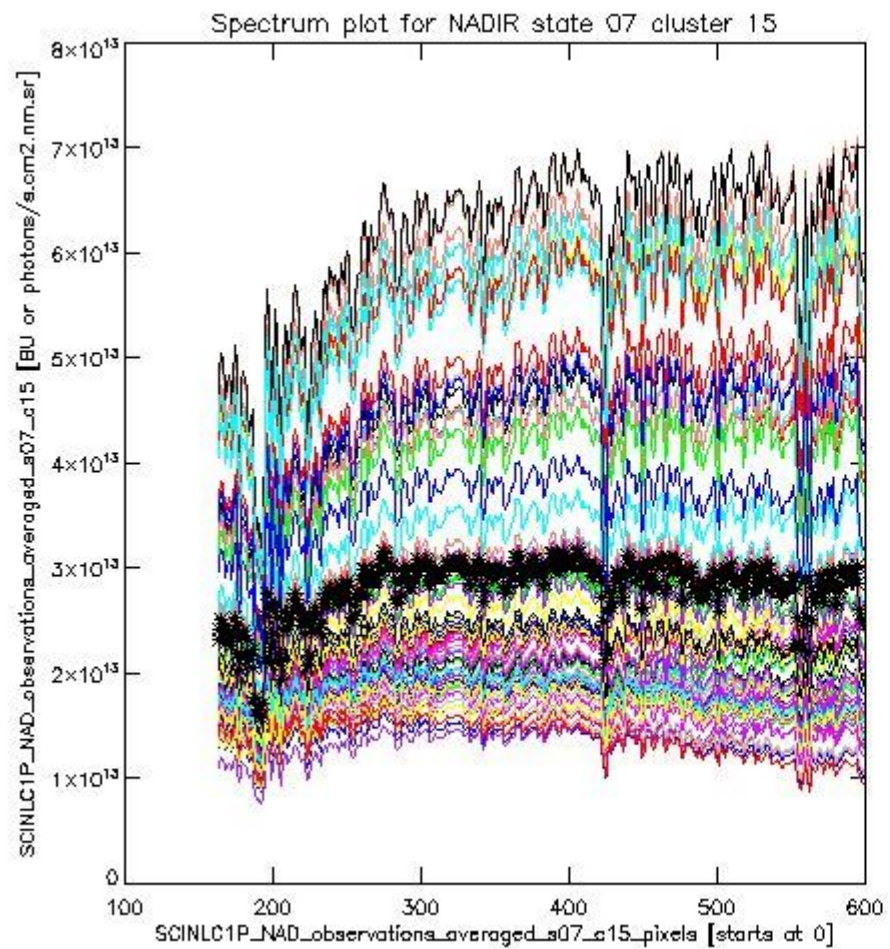
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_2.PNG



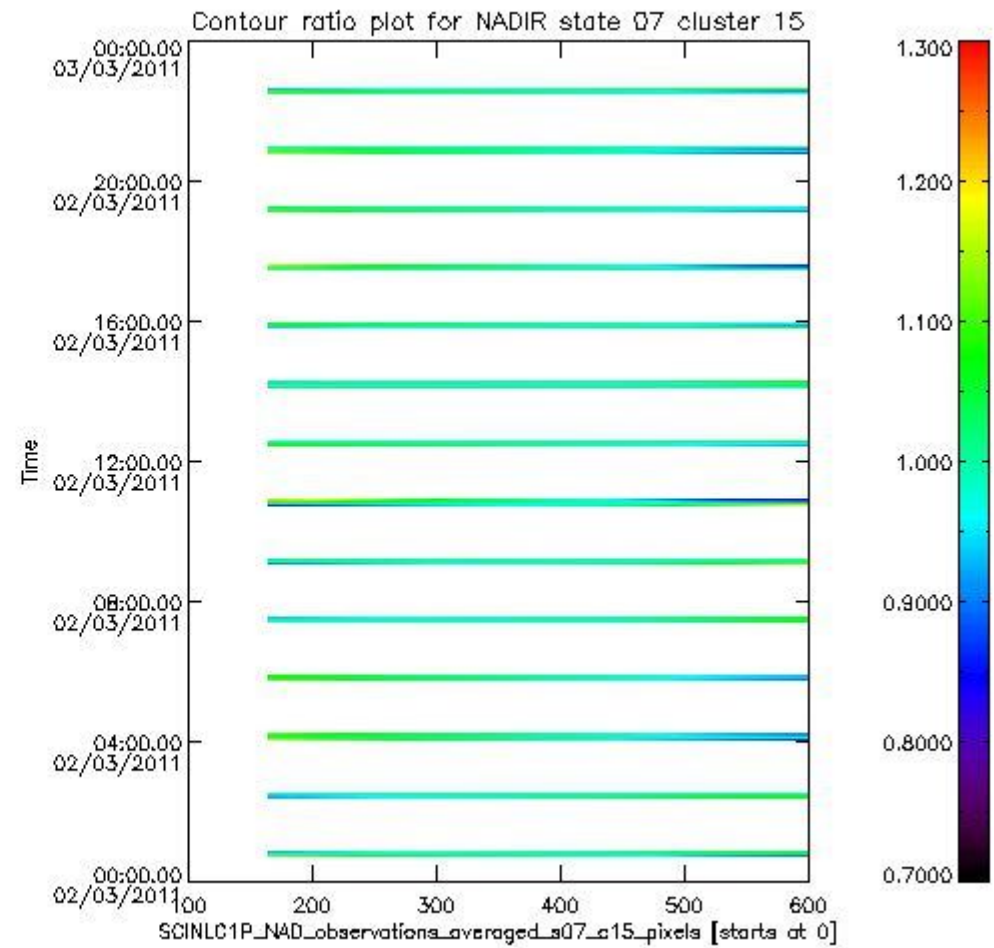
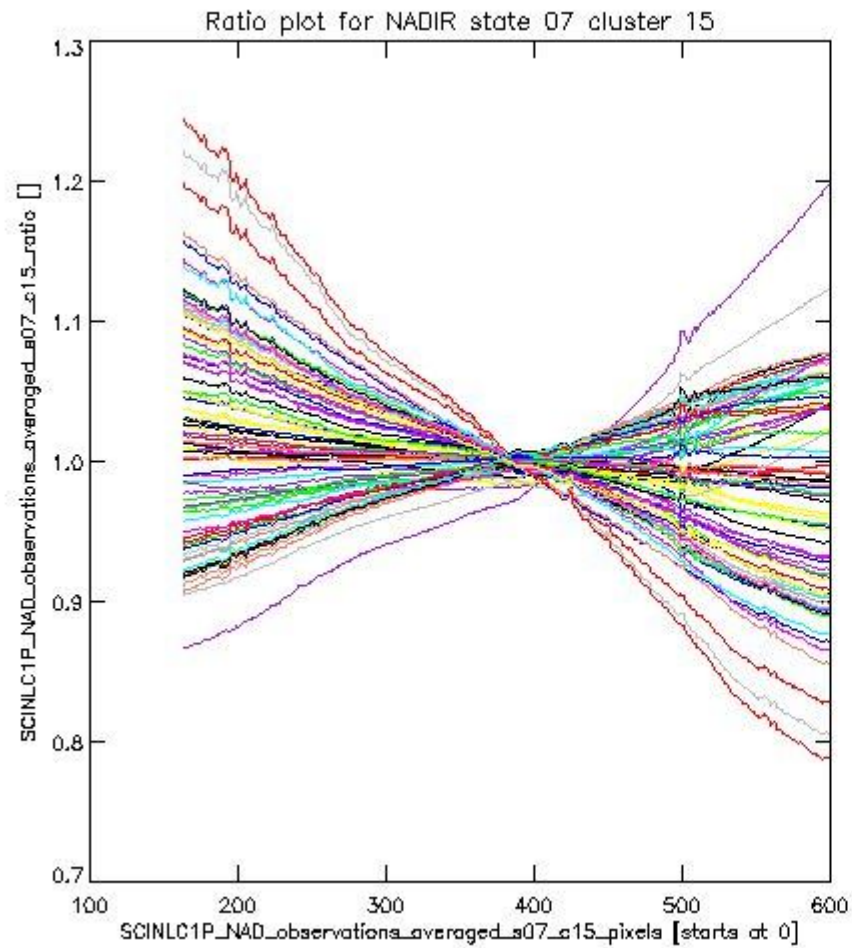
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_3.PNG

**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	02MAR2011 00:42:27.976
Start time of last sample	02MAR2011 22:34:43.432
Reference period start time	31JAN2011 02:26:29.228
Reference period stop time	01MAR2011 23:11:34.022
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



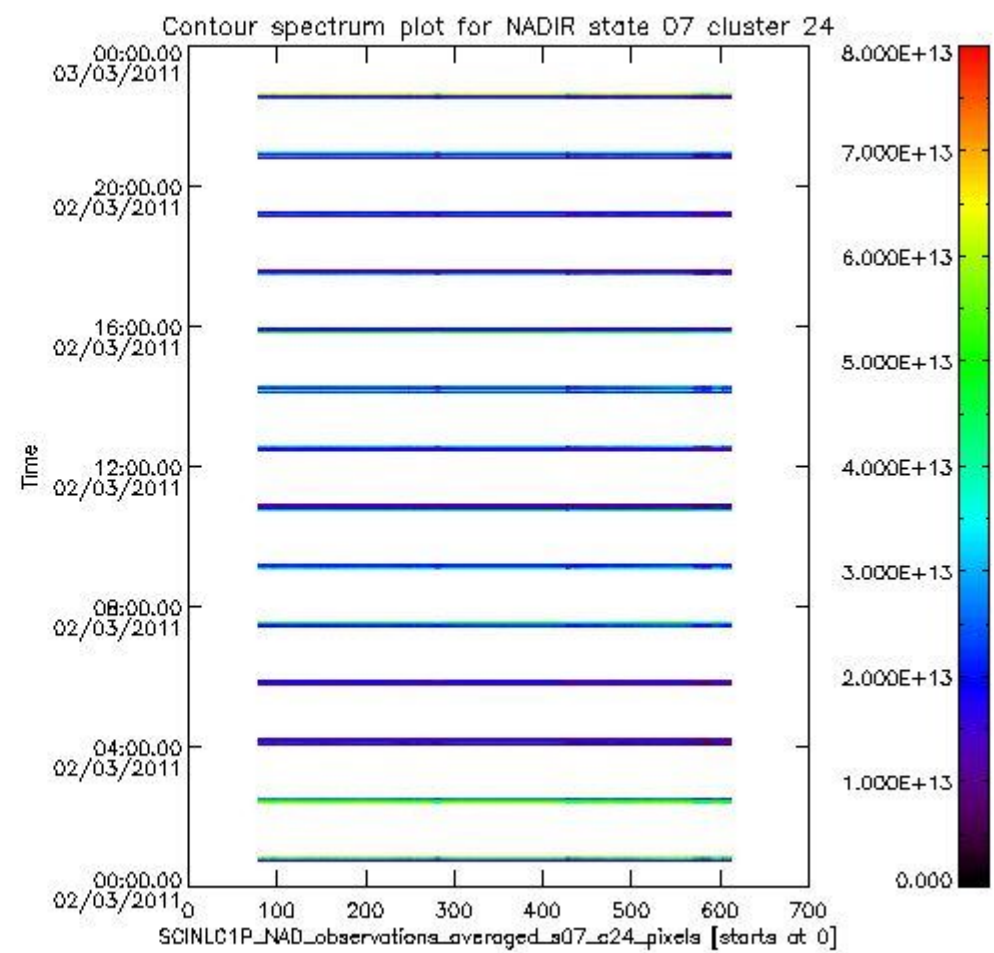
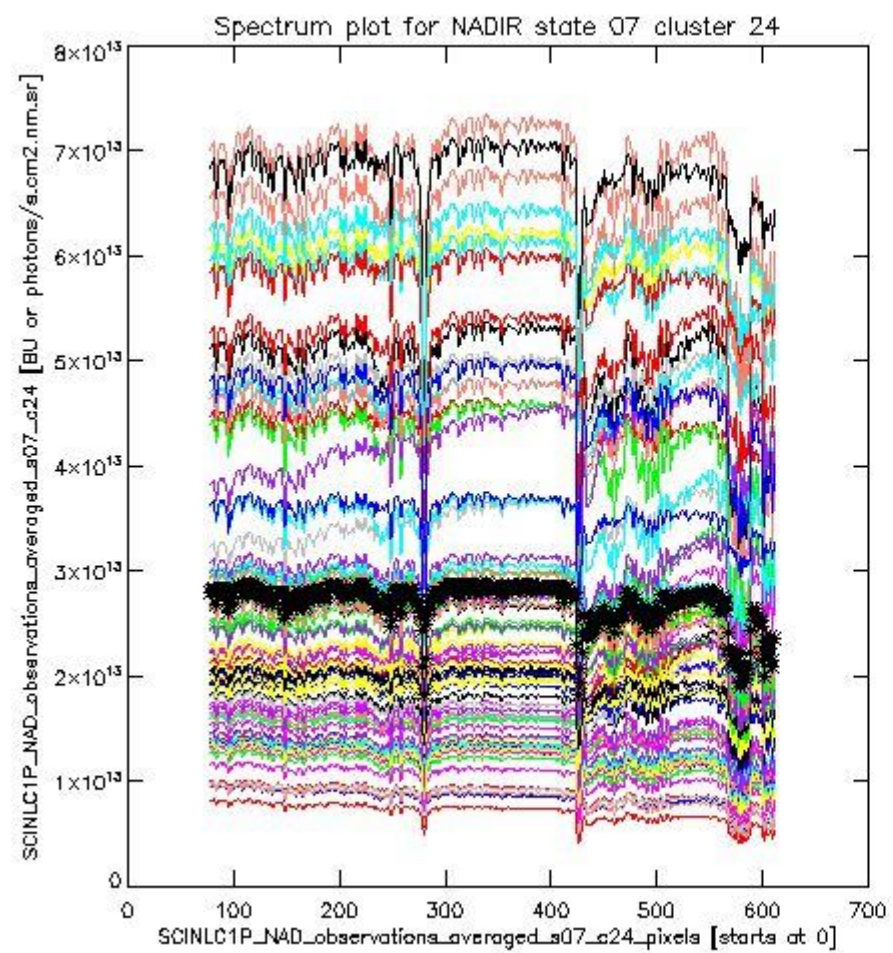
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_5.PNG

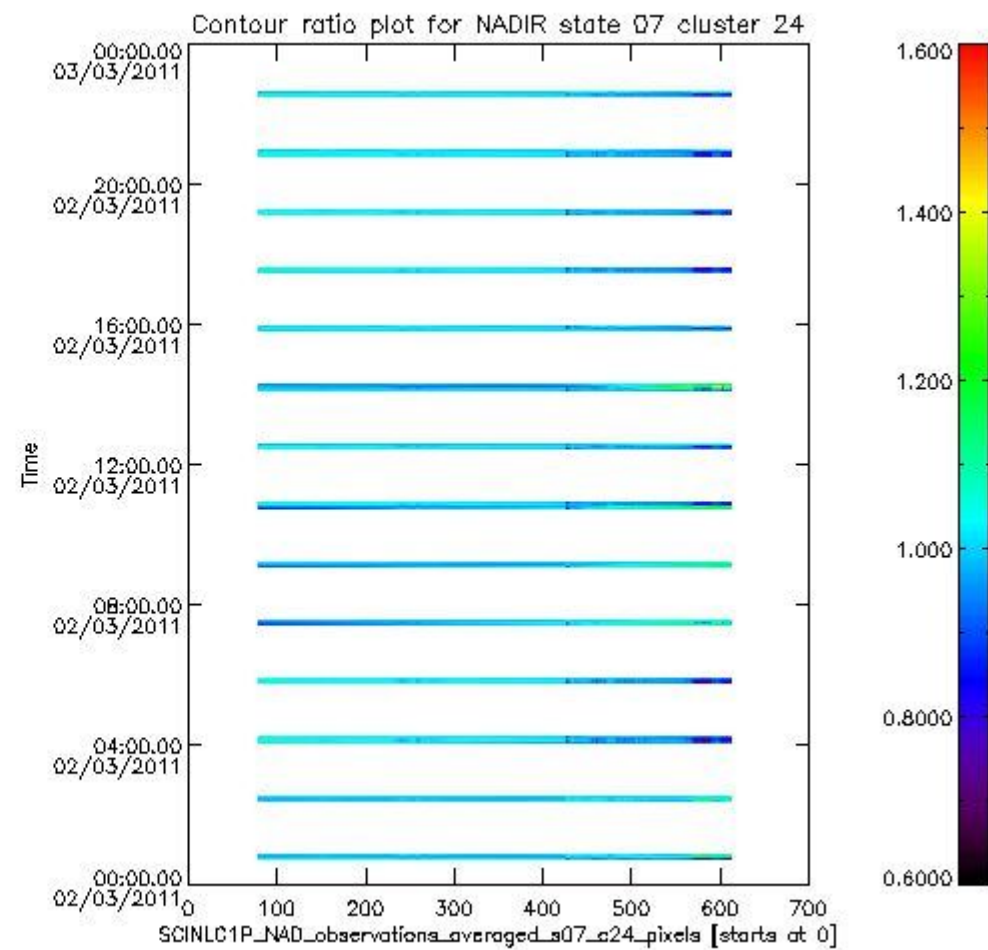
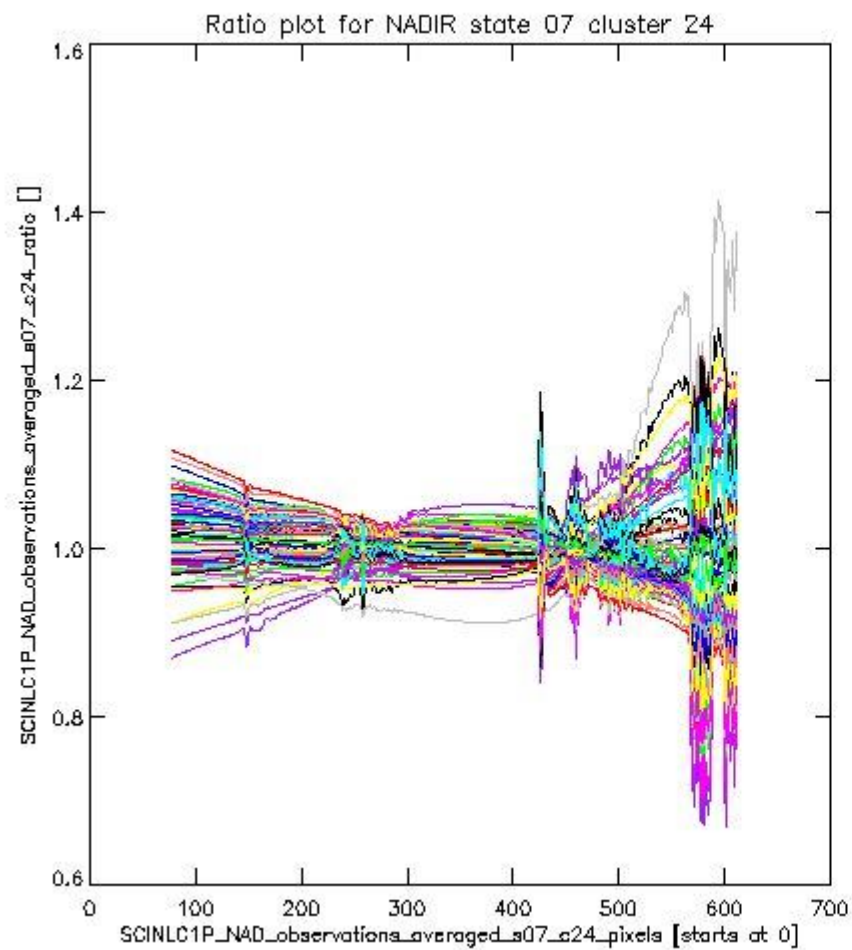
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	02MAR2011 00:42:27.976
Start time of last sample	02MAR2011 22:34:43.432
Reference period start time	31JAN2011 02:26:29.228
Reference period stop time	01MAR2011 23:11:34.022
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\_20110302\_6.PNG

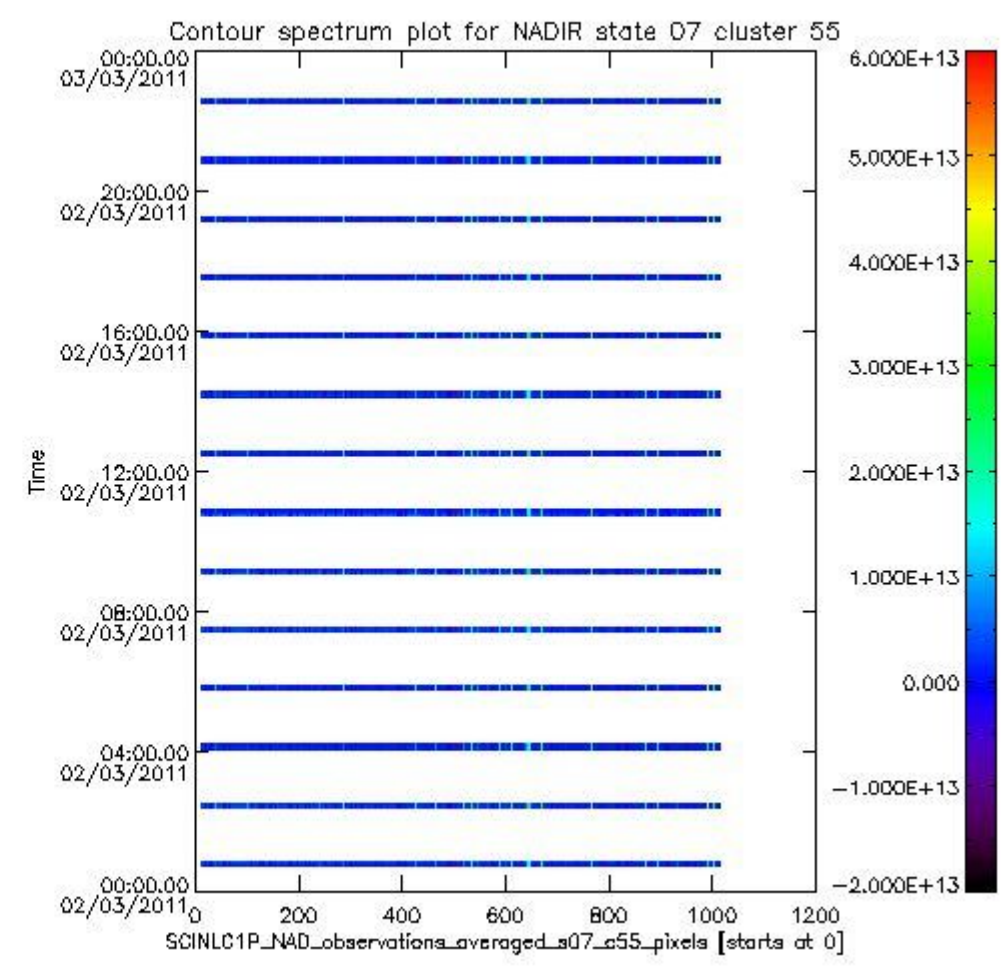
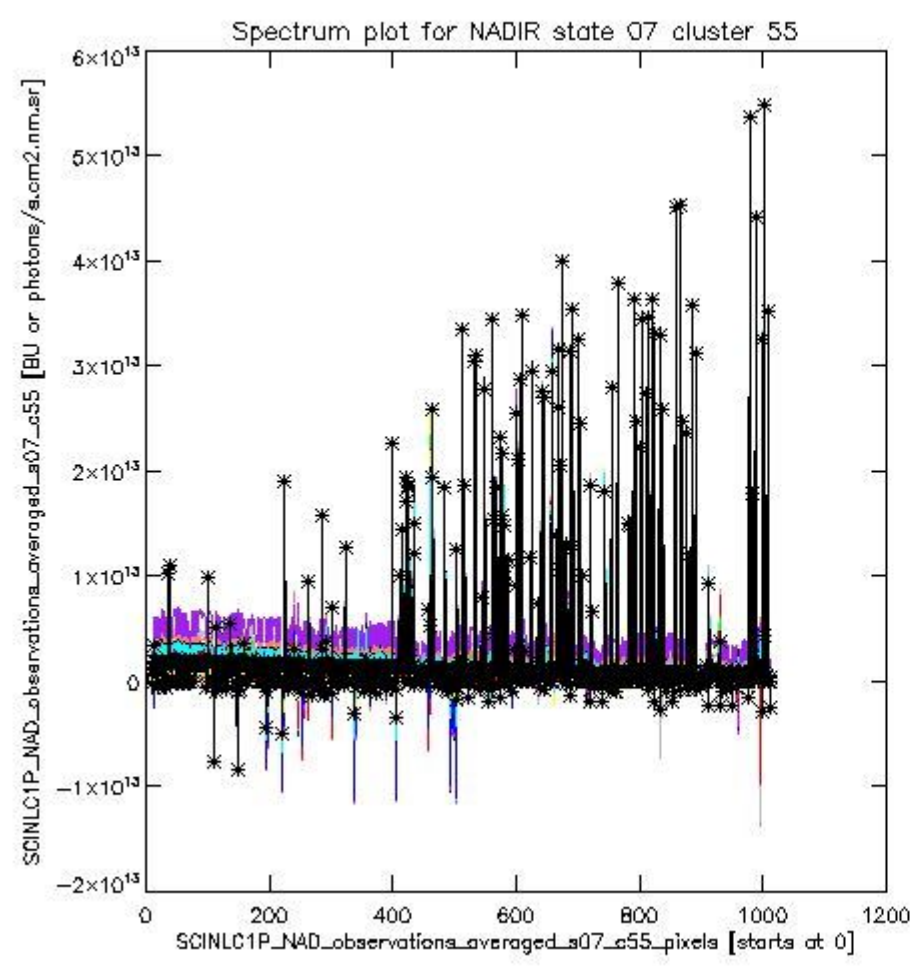




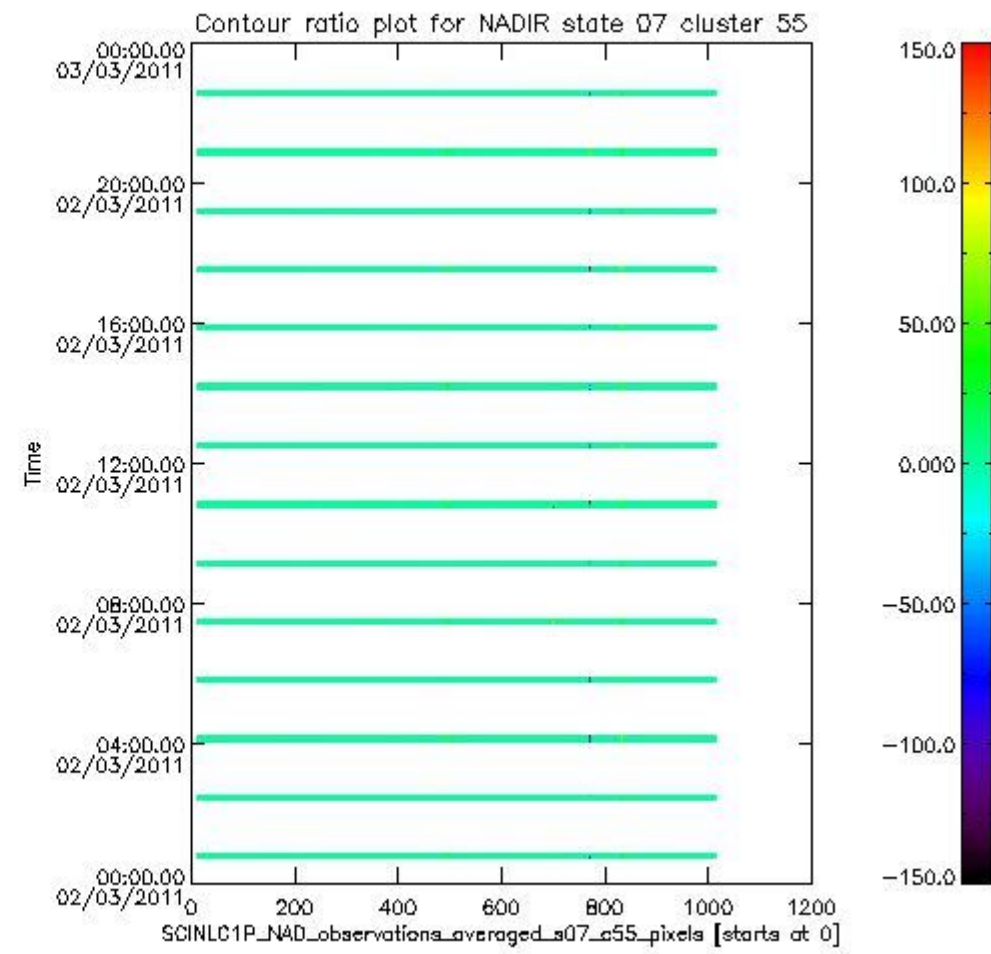
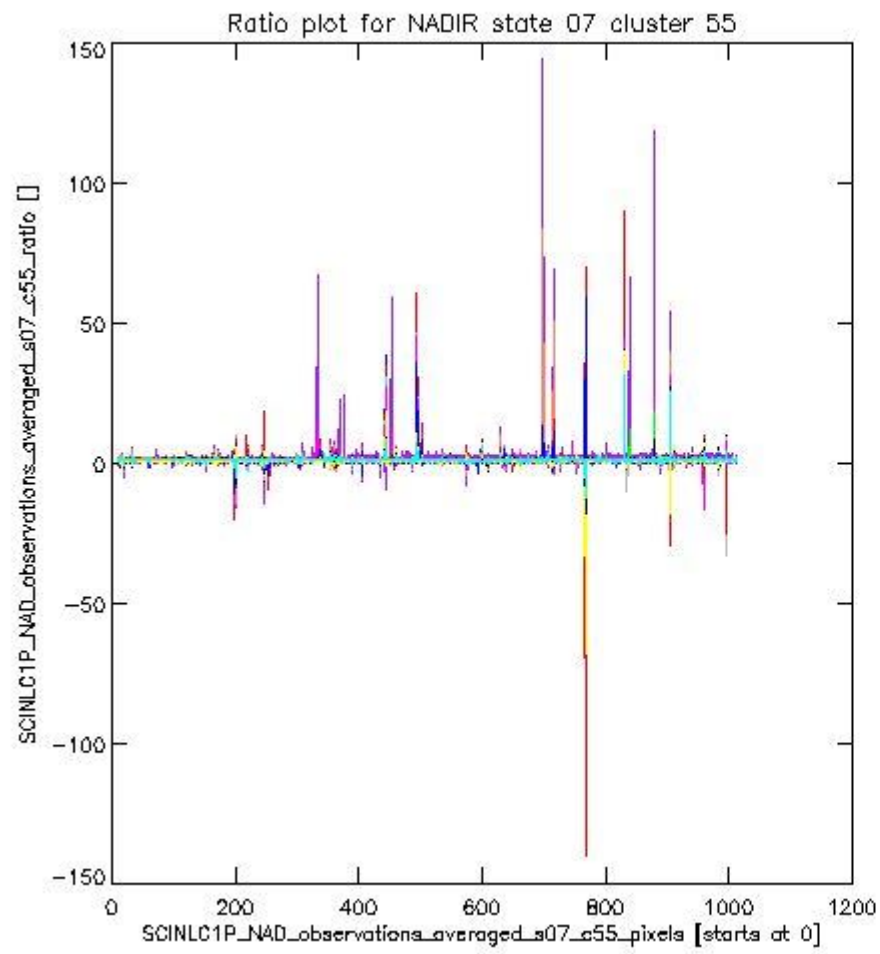
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_7.PNG

**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	02MAR2011 00:42:27.976
Start time of last sample	02MAR2011 22:34:43.432
Reference period start time	31JAN2011 02:26:29.228
Reference period stop time	01MAR2011 23:11:34.022
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



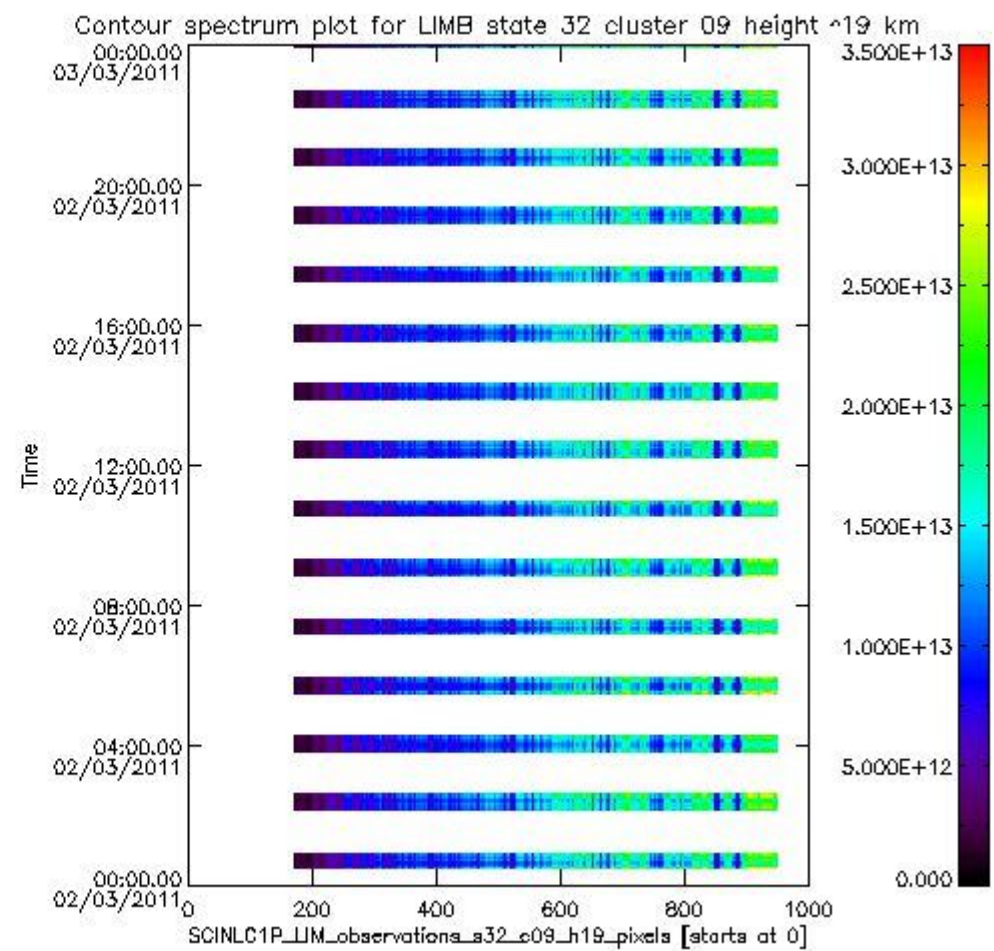
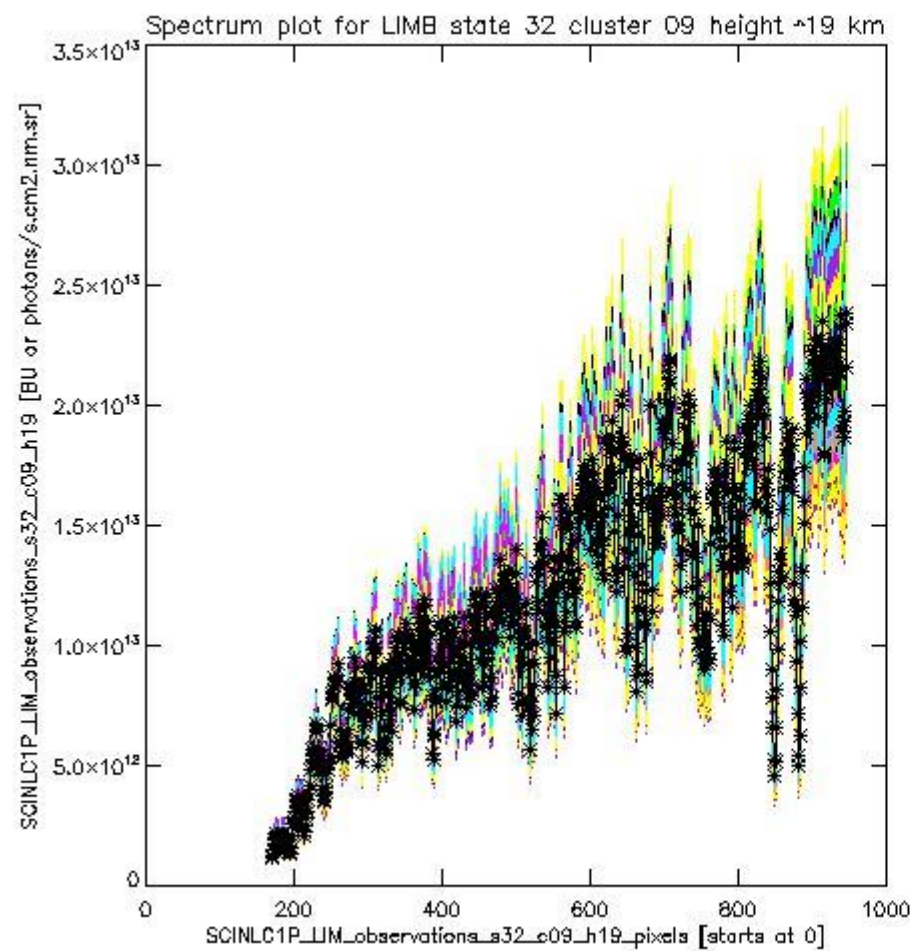
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_8.PNG



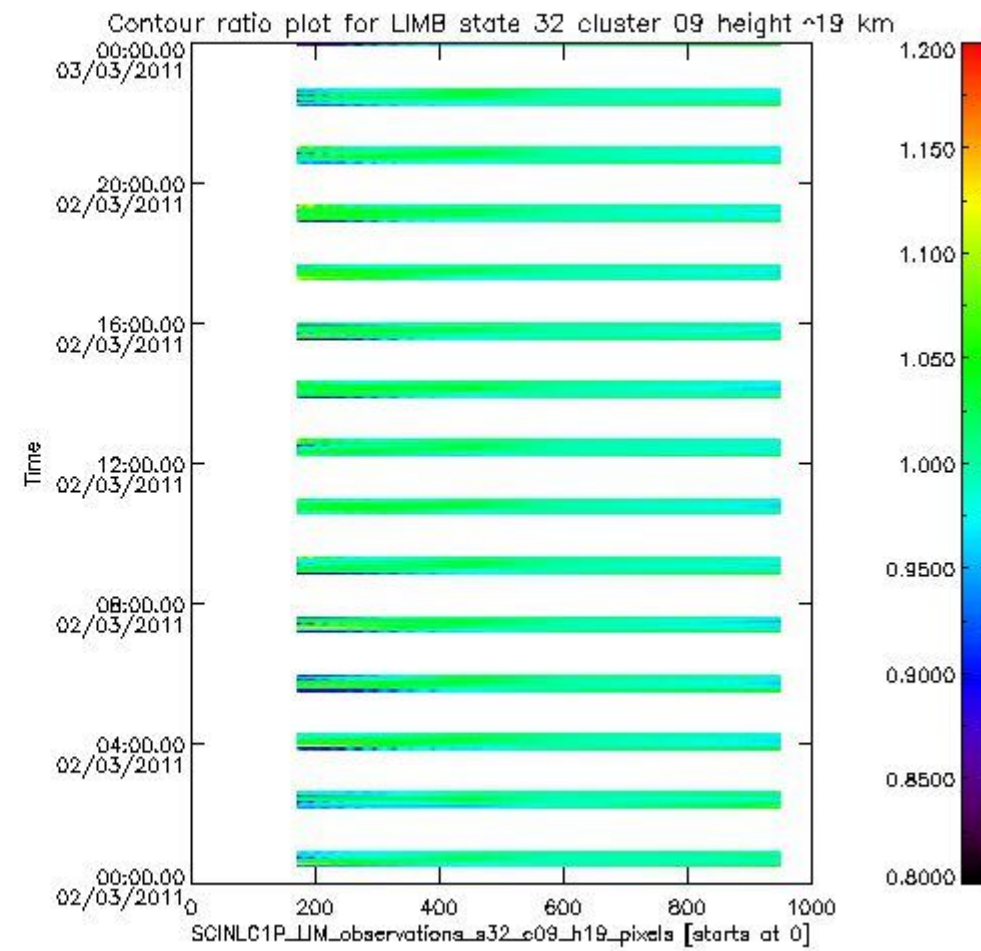
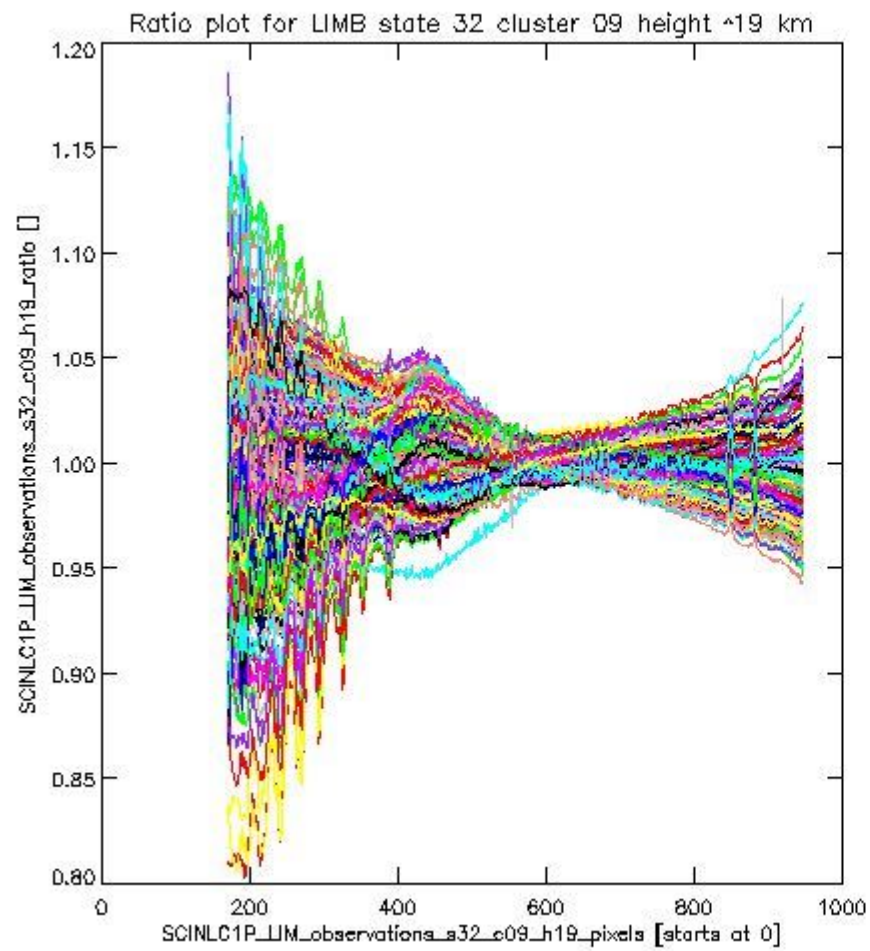
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_9.PNG

**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	02MAR2011 00:29:17.339
Start time of last sample	02MAR2011 23:58:34.975
Reference period start time	31JAN2011 02:11:15.853
Reference period stop time	01MAR2011 23:16:48.065
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



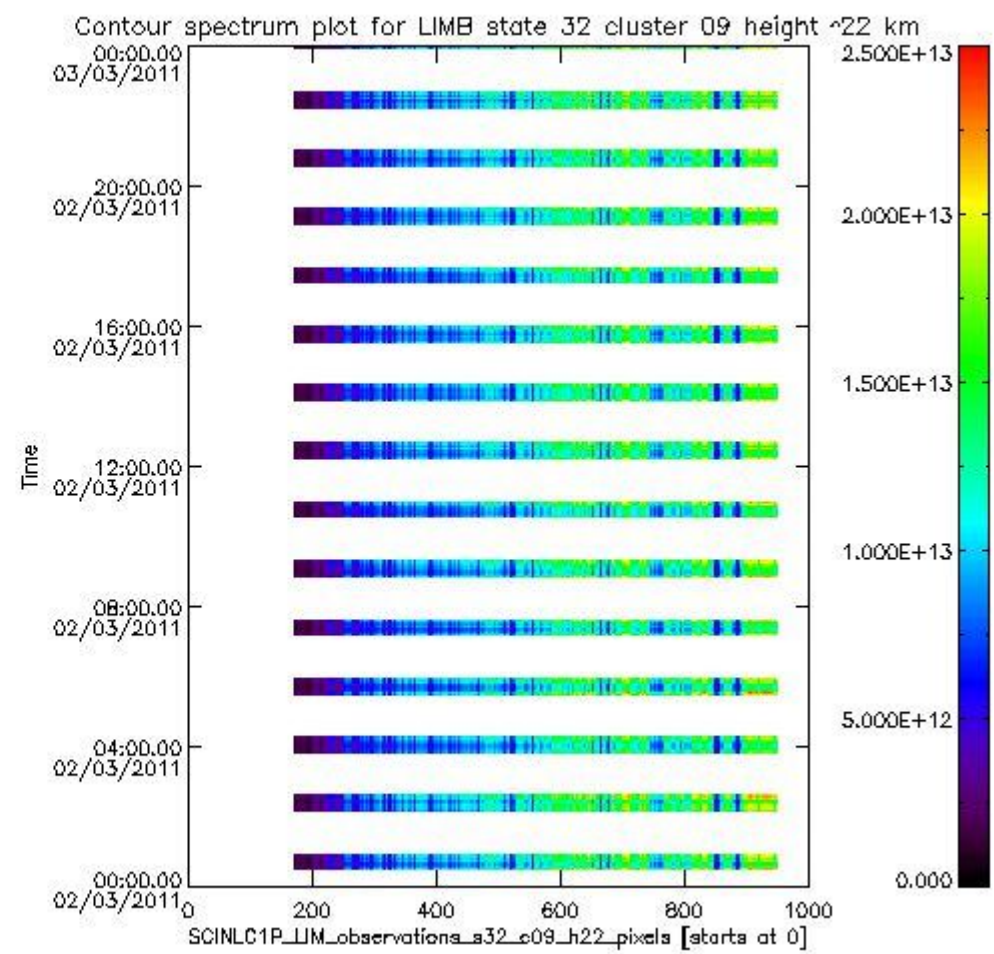
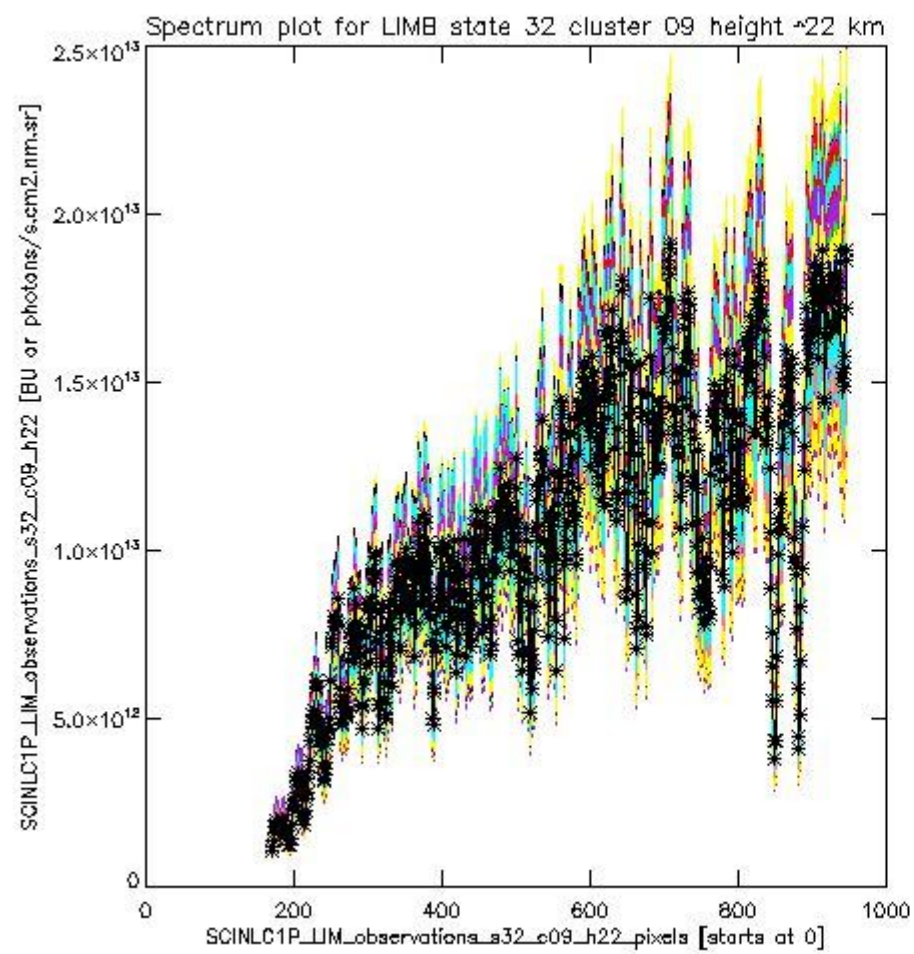
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_10.PNG



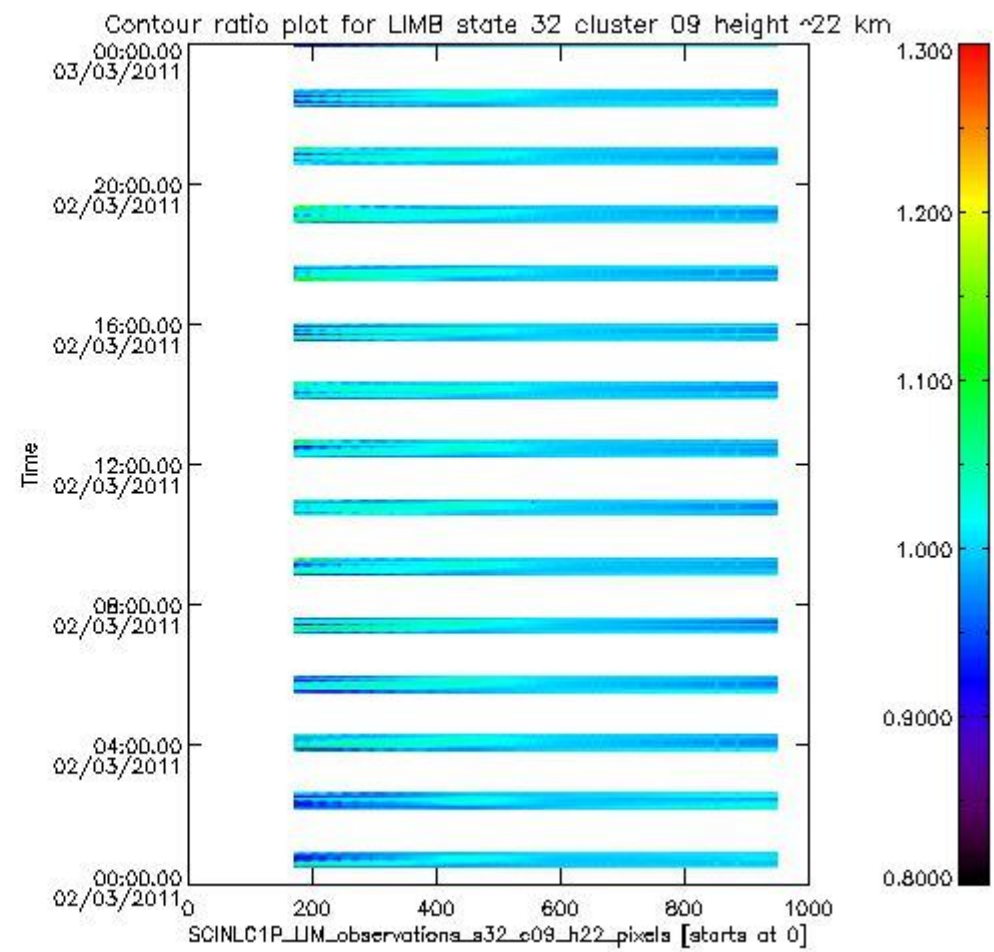
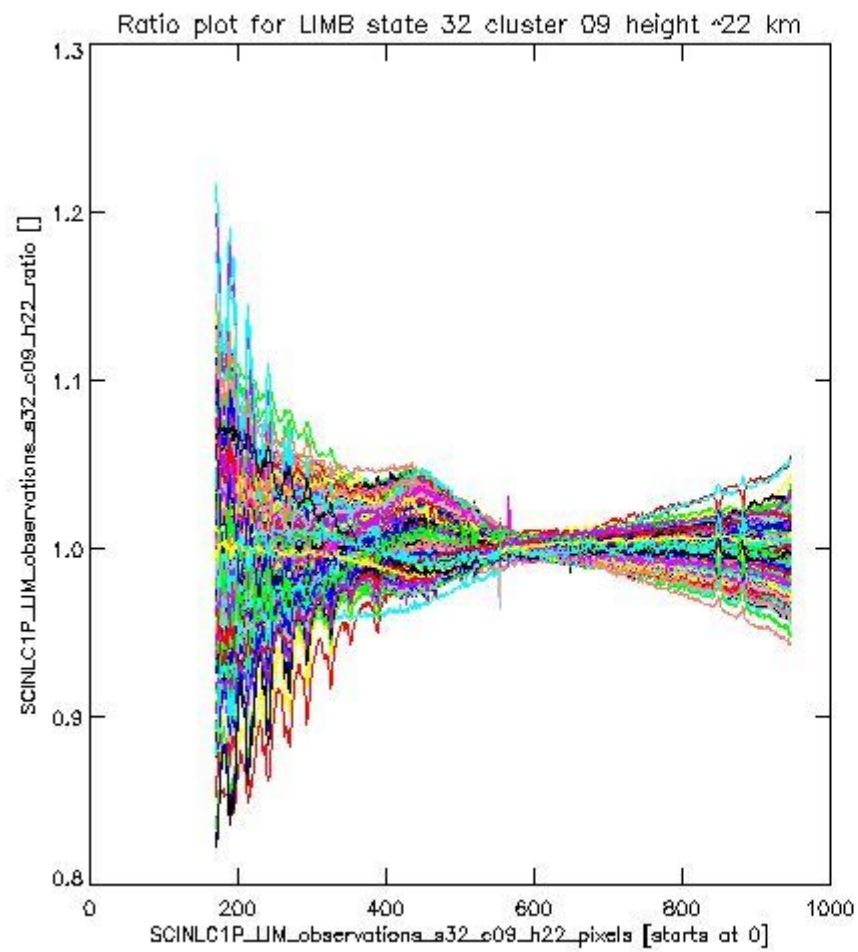
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_11.PNG

**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	02MAR2011 00:29:17.339
Start time of last sample	02MAR2011 23:58:34.975
Reference period start time	31JAN2011 02:11:15.853
Reference period stop time	01MAR2011 23:16:48.065
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



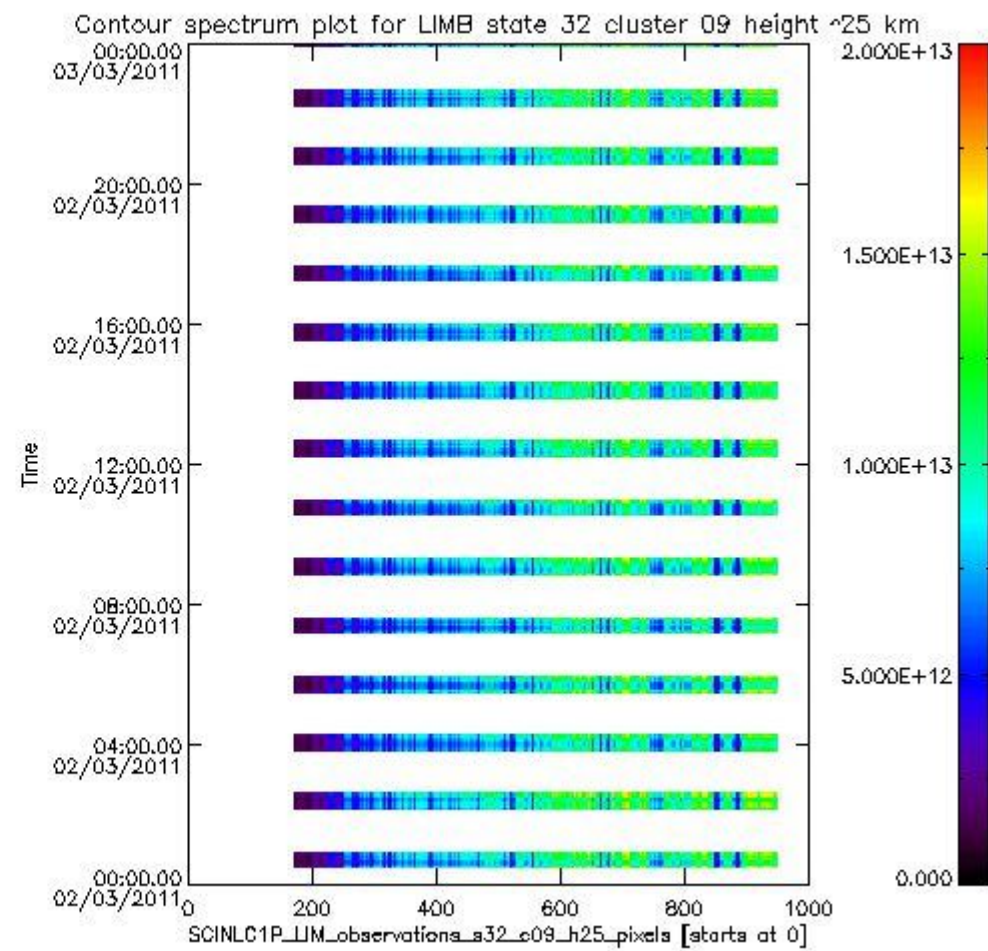
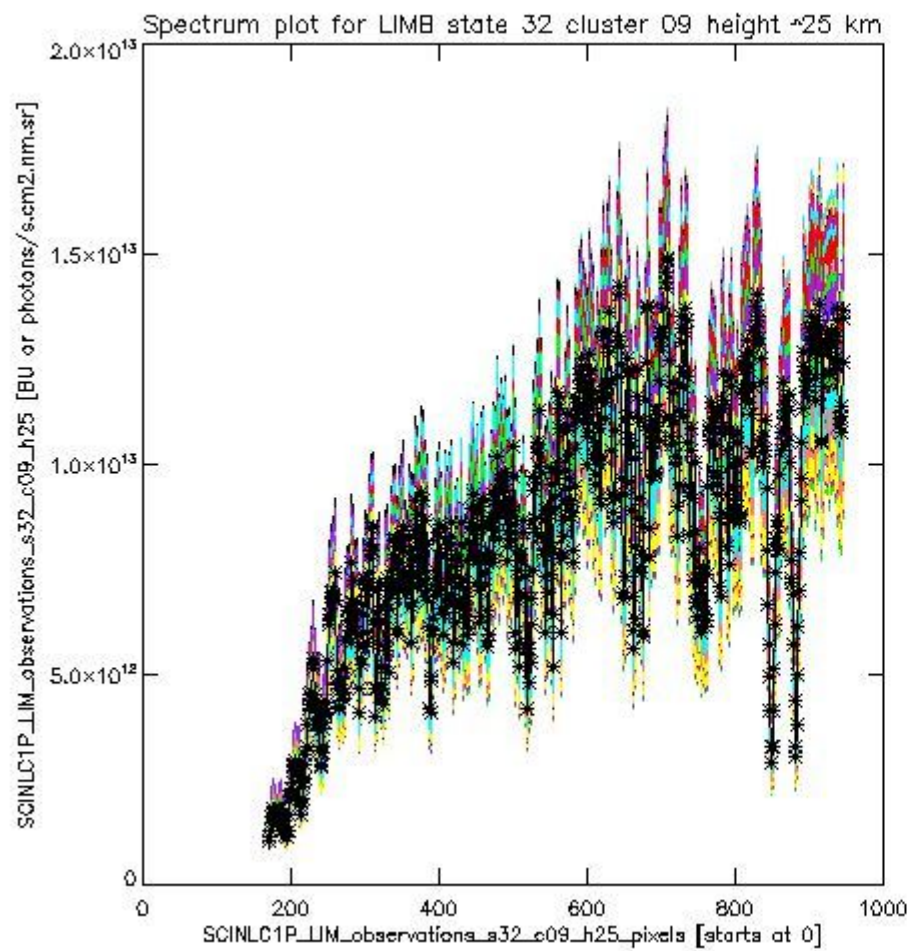
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_13.PNG

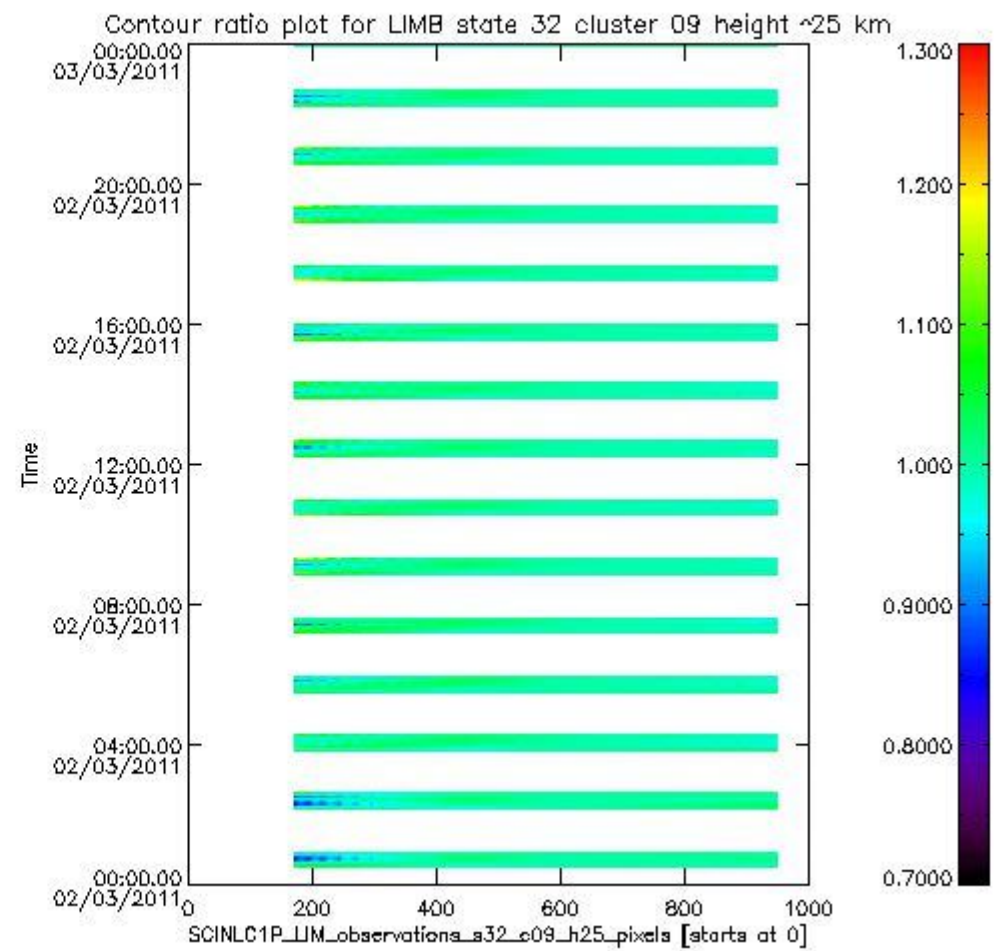
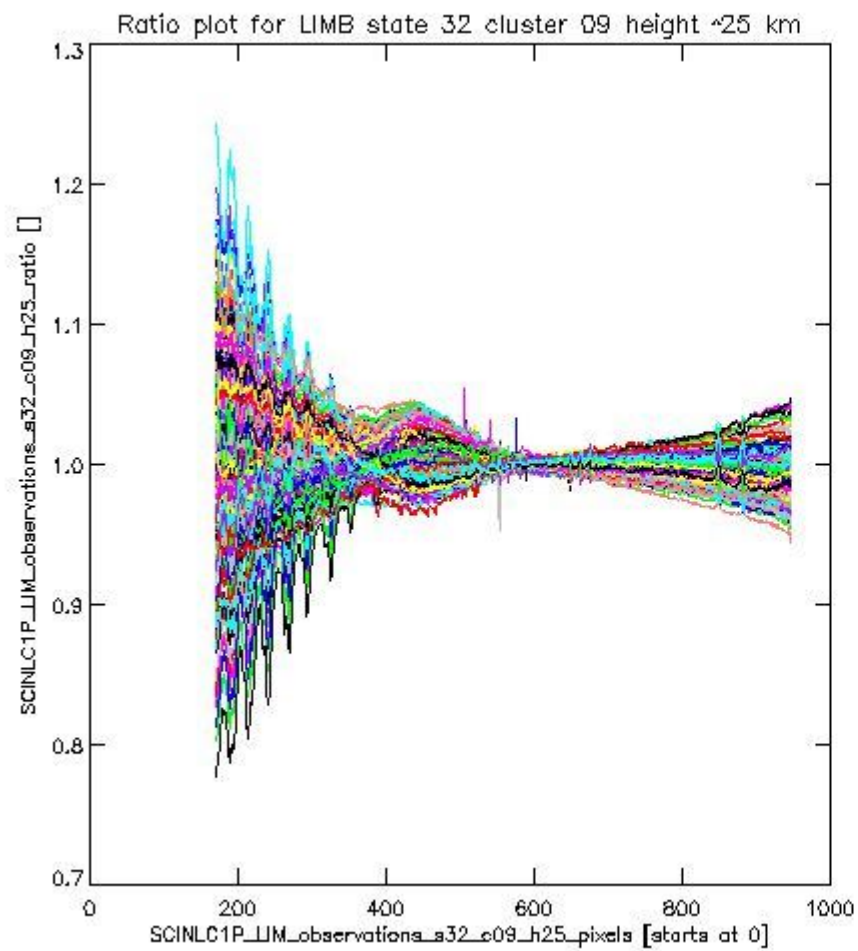
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	02MAR2011 00:29:17.339
Start time of last sample	02MAR2011 23:58:34.975
Reference period start time	31JAN2011 02:11:15.853
Reference period stop time	01MAR2011 23:16:48.065
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\_20110302\_14.PNG

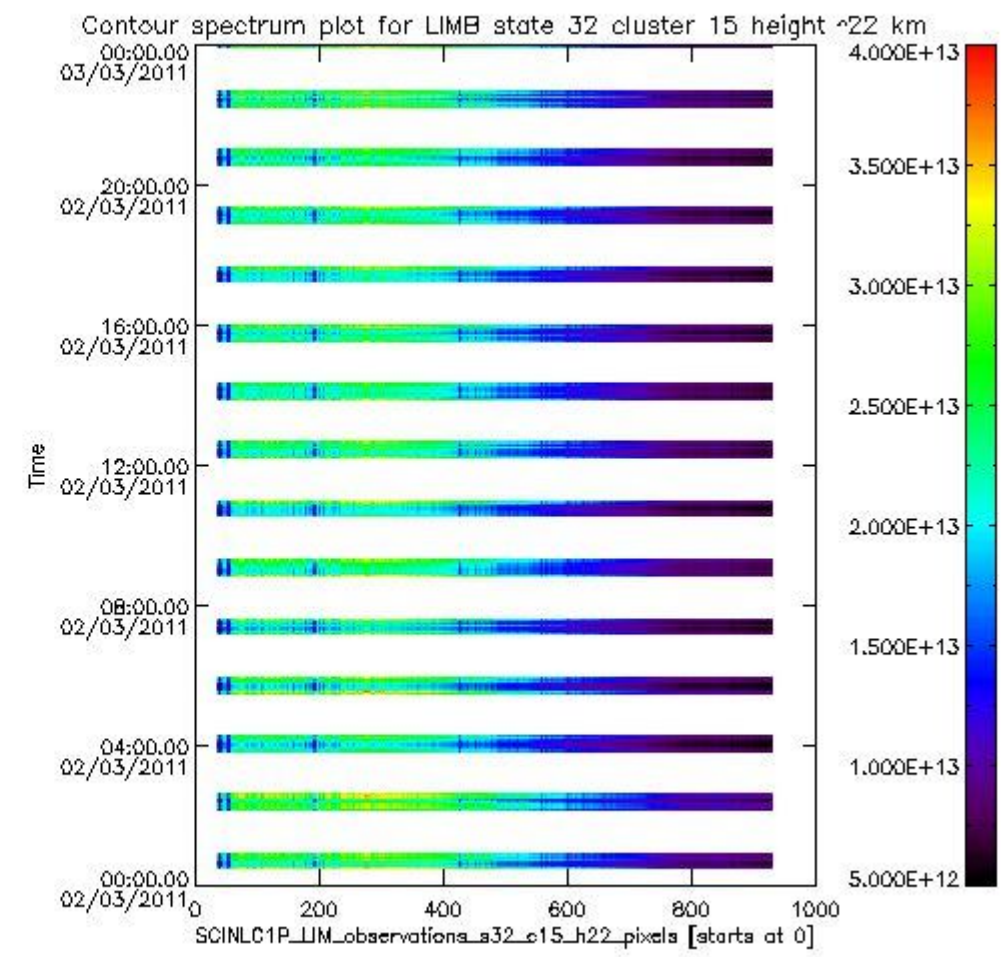
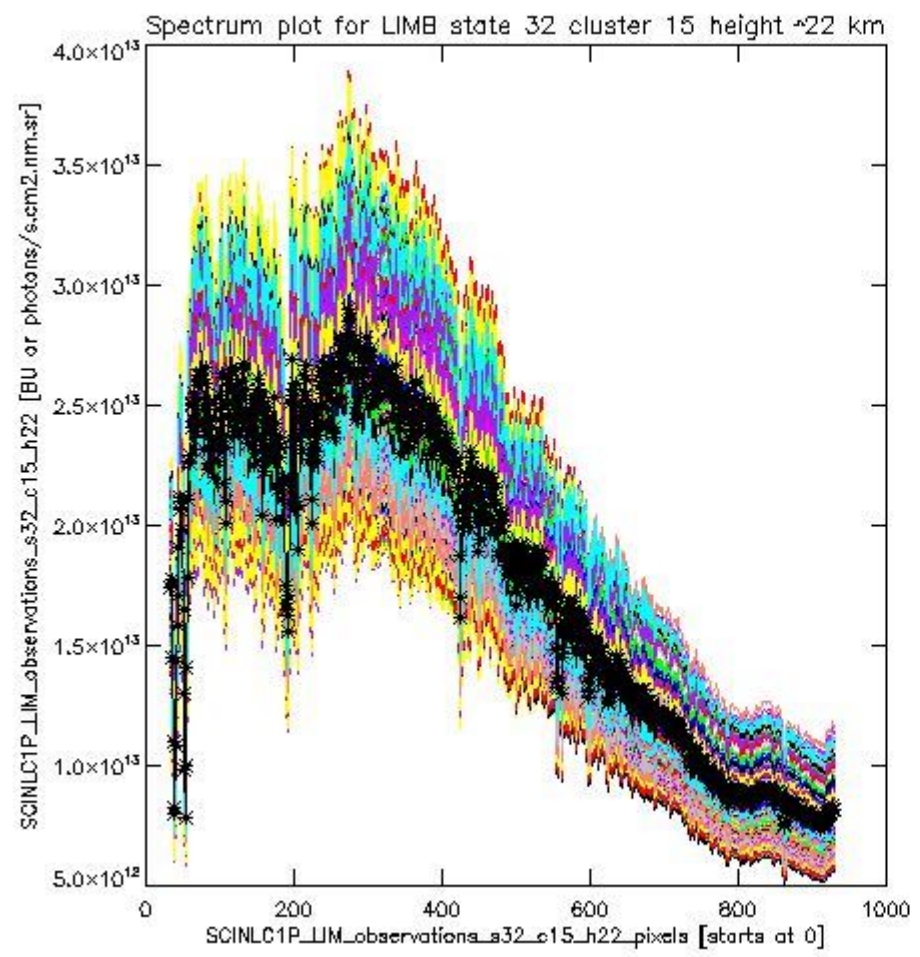




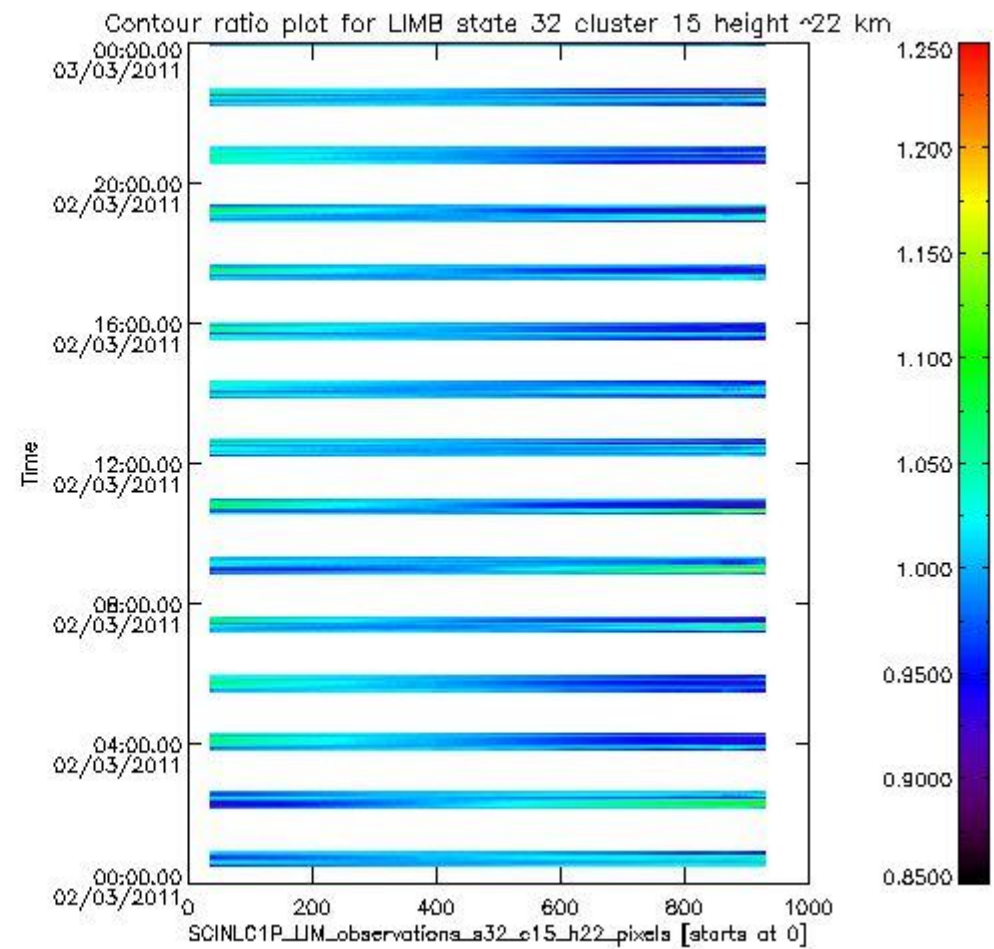
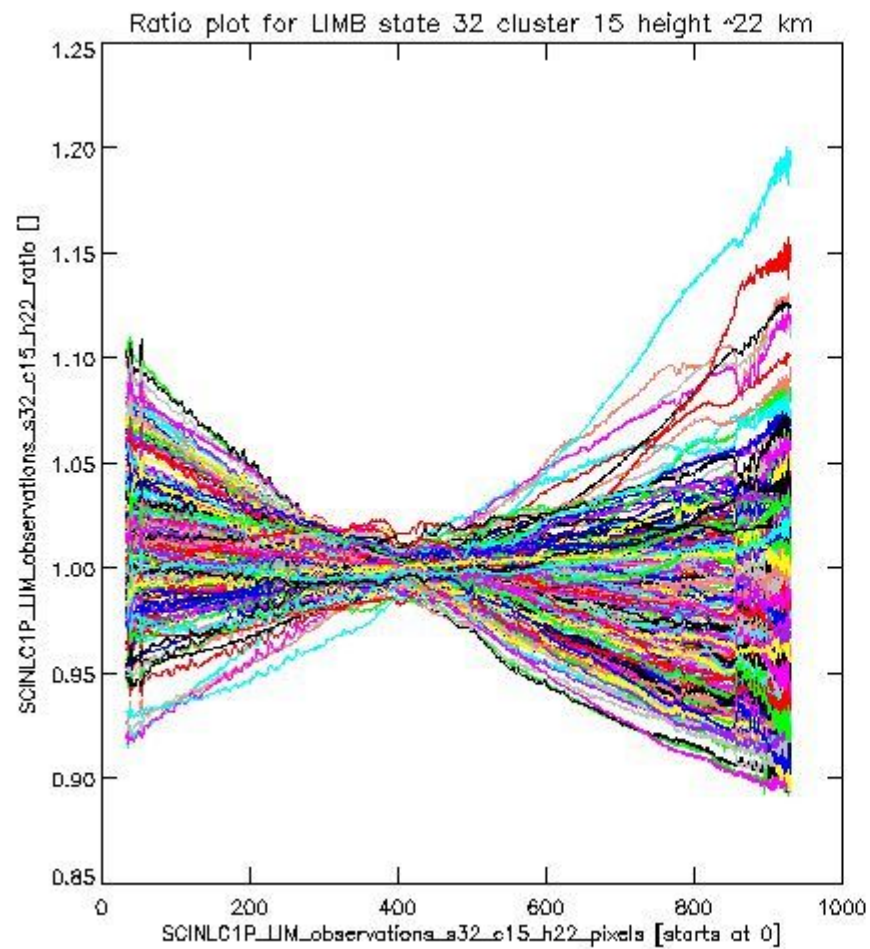
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_15.PNG

**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	02MAR2011 00:29:17.339
Start time of last sample	02MAR2011 23:58:34.975
Reference period start time	31JAN2011 02:11:15.853
Reference period stop time	01MAR2011 23:16:48.065
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



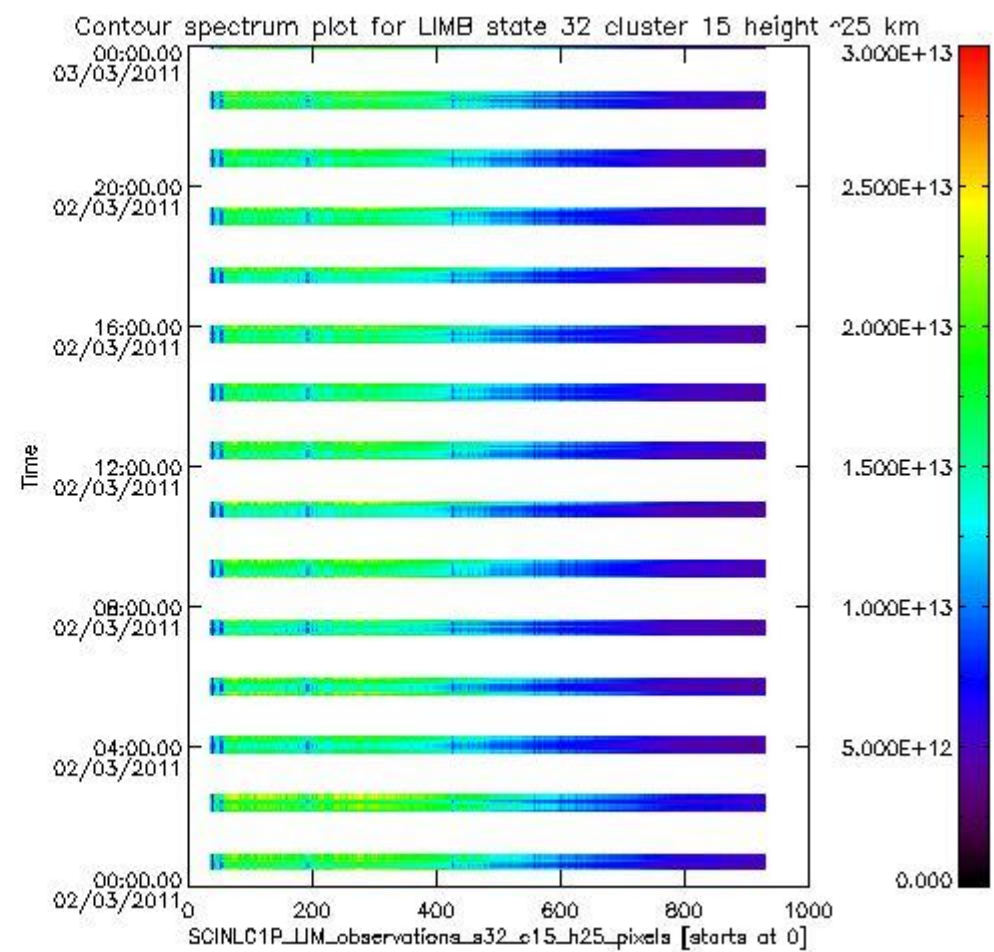
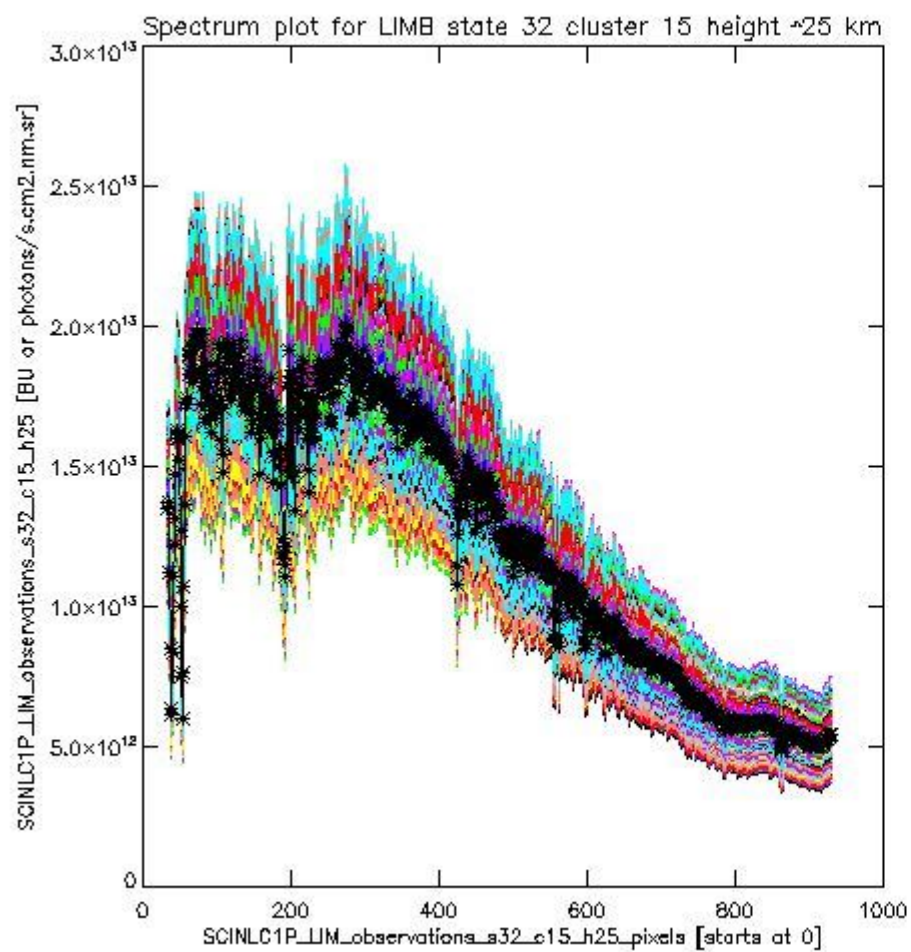
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_16.PNG



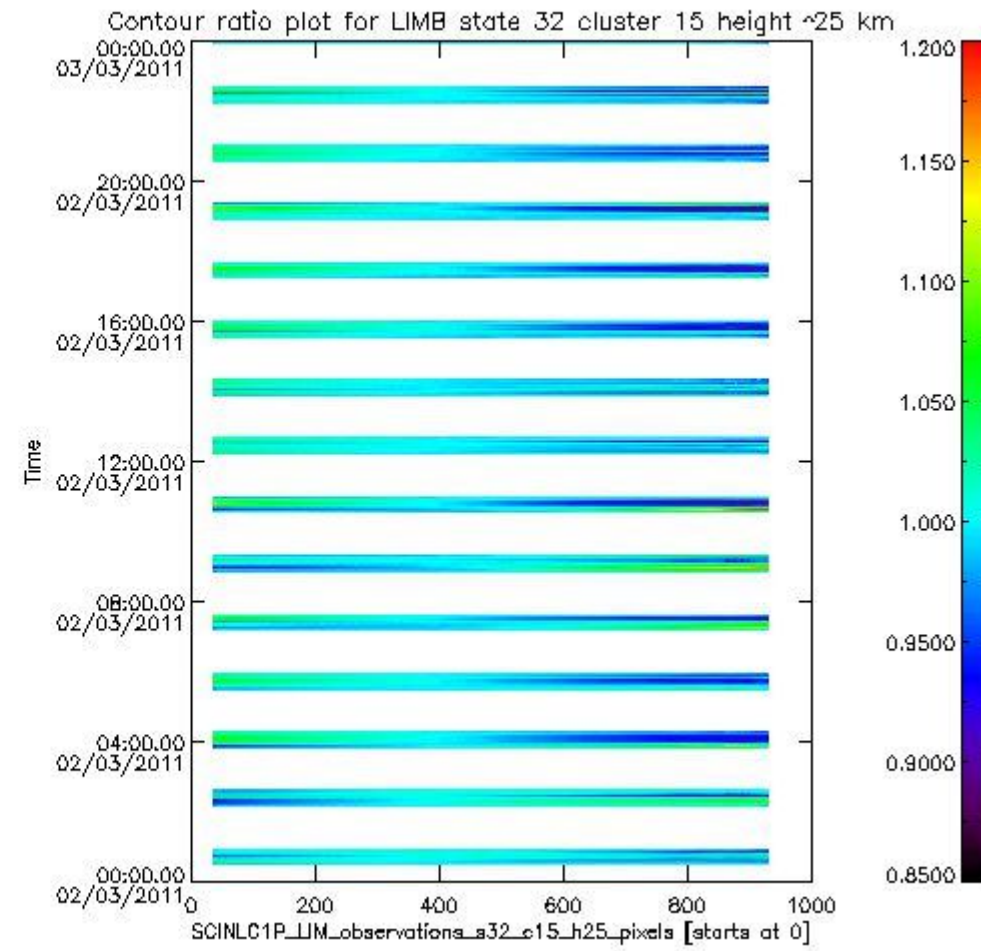
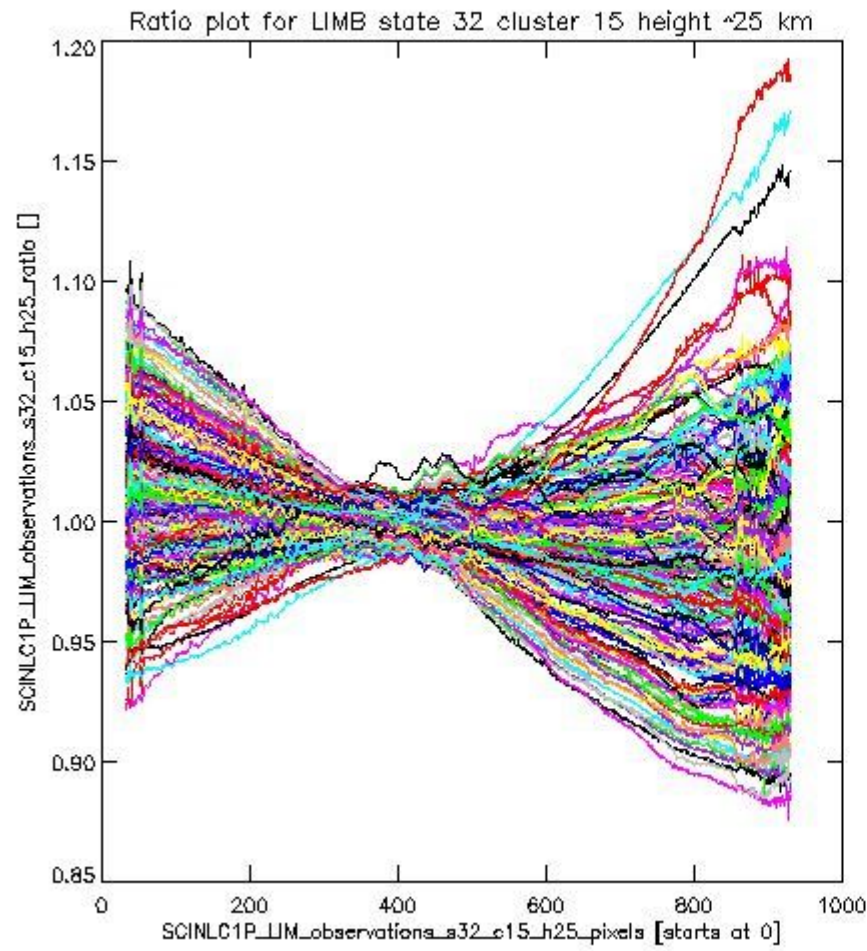
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_17.PNG

**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	02MAR2011 00:29:17.339
Start time of last sample	02MAR2011 23:58:34.975
Reference period start time	31JAN2011 02:11:15.853
Reference period stop time	01MAR2011 23:16:48.065
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



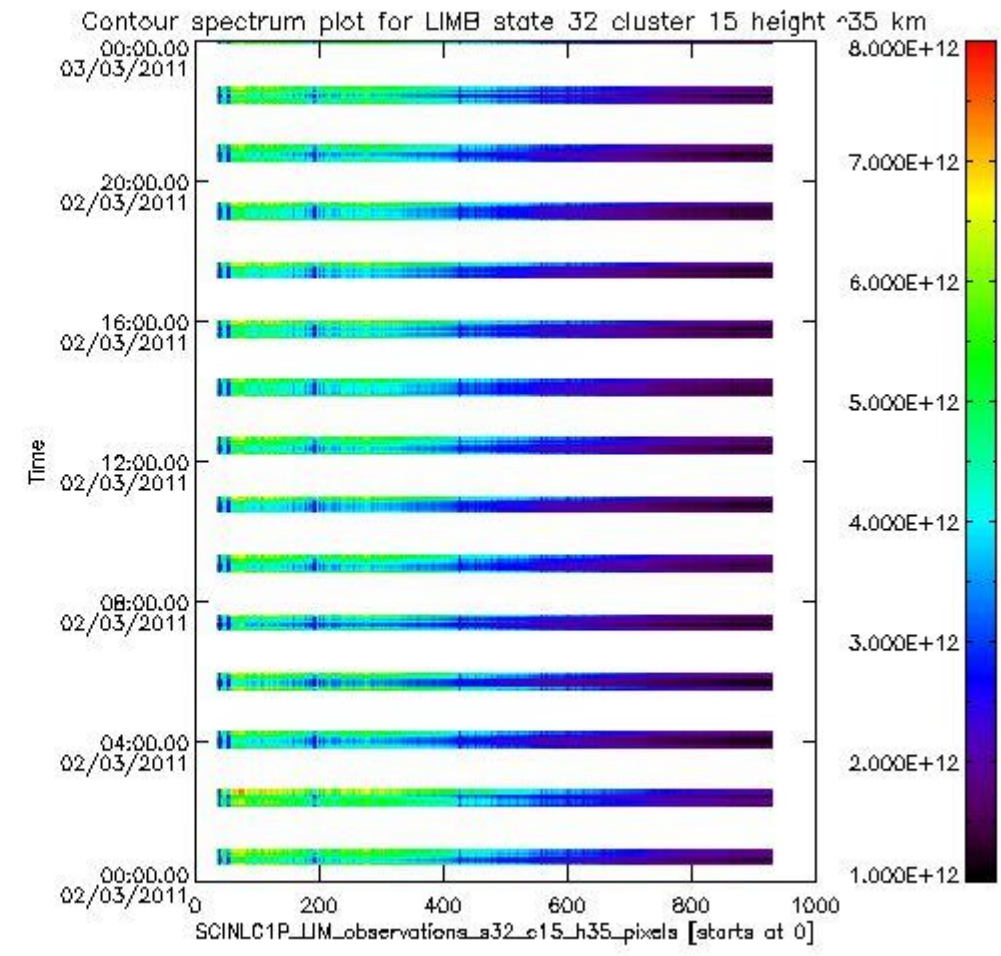
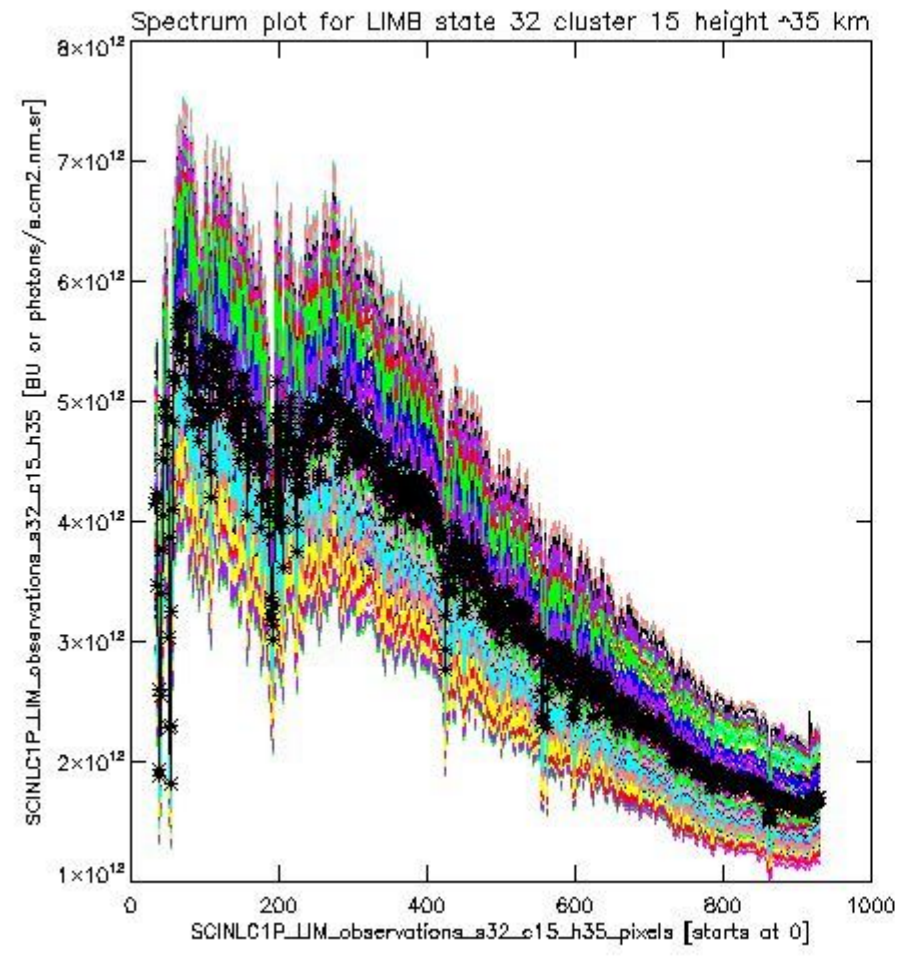
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_18.PNG



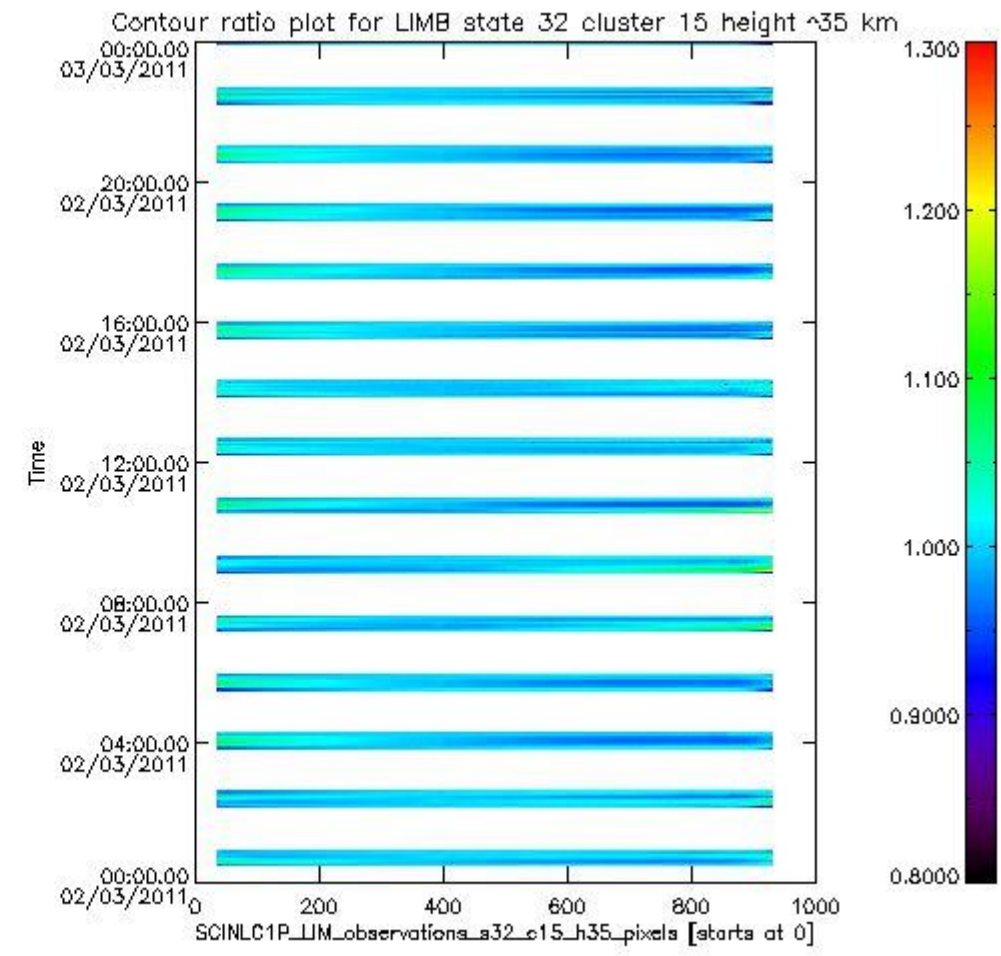
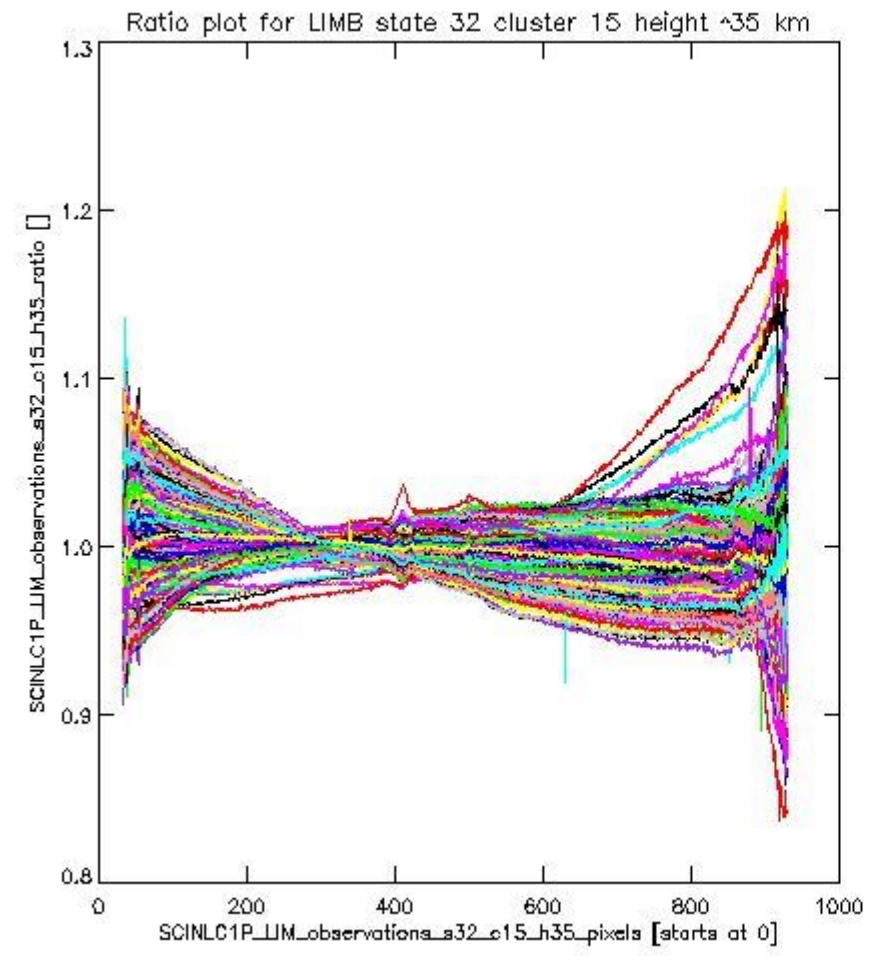
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_19.PNG

**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	02MAR2011 00:29:17.339
Start time of last sample	02MAR2011 23:58:34.975
Reference period start time	31JAN2011 02:11:15.853
Reference period stop time	01MAR2011 23:16:48.065
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\_20110302\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110302\_21.PNG

