

# 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	19MAY2011 11:12:03
Data source version	SCIA/7.04-U
Processing scope for products	02MAY2011 00:00:00 to 03MAY2011 00:00:00
Start time of first product within scope	01MAY2011 23:28:44
Stop time of last product within scope	03MAY2011 00:02:10
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	02MAY2011 00:00:46.783	02MAY2011 23:34:11.821
1	NADIR	07	09	N/A	02MAY2011 00:00:46.783	02MAY2011 23:34:11.821
2	NADIR	07	15	N/A	02MAY2011 00:00:46.783	02MAY2011 23:34:11.821
3	NADIR	07	24	N/A	02MAY2011 00:00:46.783	02MAY2011 23:34:11.821
4	NADIR	07	55	N/A	02MAY2011 00:00:46.783	02MAY2011 23:34:11.821
5	LIMB	32	09	~19 km	02MAY2011 00:01:55.337	02MAY2011 23:37:23.126
6	LIMB	32	09	~22 km	02MAY2011 00:01:55.337	02MAY2011 23:37:23.126
7	LIMB	32	09	~25 km	02MAY2011 00:01:55.337	02MAY2011 23:37:23.126
8	LIMB	32	15	~22 km	02MAY2011 00:01:55.337	02MAY2011 23:37:23.126
9	LIMB	32	15	~25 km	02MAY2011 00:01:55.337	02MAY2011 23:37:23.126
10	LIMB	32	15	~35 km	02MAY2011 00:01:55.337	02MAY2011 23:37:23.126

#### 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	#cmlp_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110501_232222_000060113102_00088_47947_1017.N1</a>	01MAY2011 23:28:44	02MAY2011 00:38:58	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110502_010237_000060083102_00089_47948_1036.N1</a>	02MAY2011 01:08:57	02MAY2011 02:19:26	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110502_024249_000060113102_00090_47949_1037.N1</a>	02MAY2011 02:49:11	02MAY2011 03:59:26	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110502_042304_000060083102_00091_47950_1018.N1</a>	02MAY2011 04:29:25	02MAY2011 05:39:54	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110502_060316_000060113102_00092_47951_1040.N1</a>	02MAY2011 06:09:38	02MAY2011 07:19:53	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110502_074331_000060083102_00093_47952_1041.N1</a>	02MAY2011 07:49:52	02MAY2011 09:00:21	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110502_092343_000060113102_00094_47953_1046.N1	02MAY2011 09:30:06	02MAY2011 10:40:20	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110502_110358_000060083102_00095_47954_1048.N1	02MAY2011 11:10:19	02MAY2011 12:20:48	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110502_124410_000060113102_00096_47955_1050.N1	02MAY2011 12:50:33	02MAY2011 14:00:48	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110502_142425_000060083102_00097_47956_1043.N1	02MAY2011 14:30:47	02MAY2011 15:41:16	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110502_160438_000060113102_00098_47957_1057.N1	02MAY2011 16:11:00	02MAY2011 17:21:15	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110502_174453_000060083102_00099_47958_1053.N1	02MAY2011 17:51:14	02MAY2011 19:01:24	0	34	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110502_192505_000060113102_00100_47959_1054.N1	02MAY2011 19:31:28	02MAY2011 20:41:53	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110502_210520_000060083102_00101_47960_1056.N1	02MAY2011 21:11:41	02MAY2011 22:22:10	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110502_224532_000060113102_00102_47961_1055.N1	02MAY2011 22:51:55	03MAY2011 00:02:10	0	35	31	0	0	1	0	0	

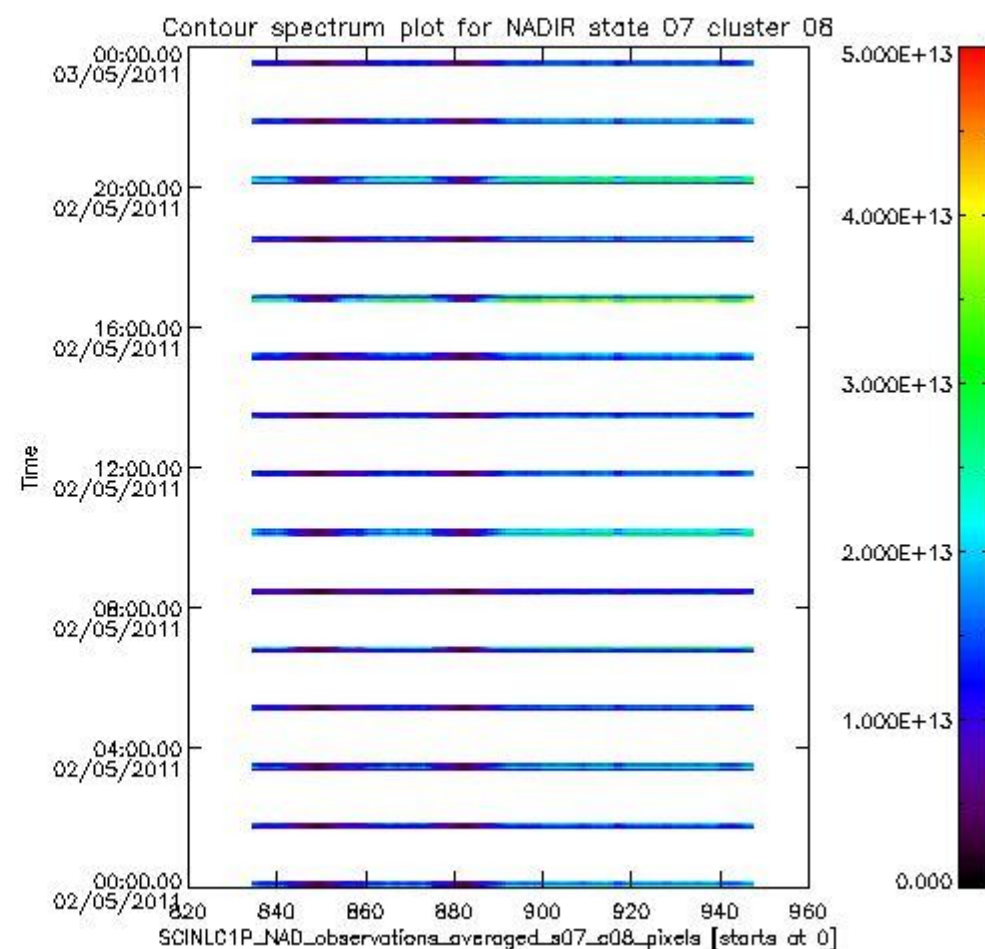
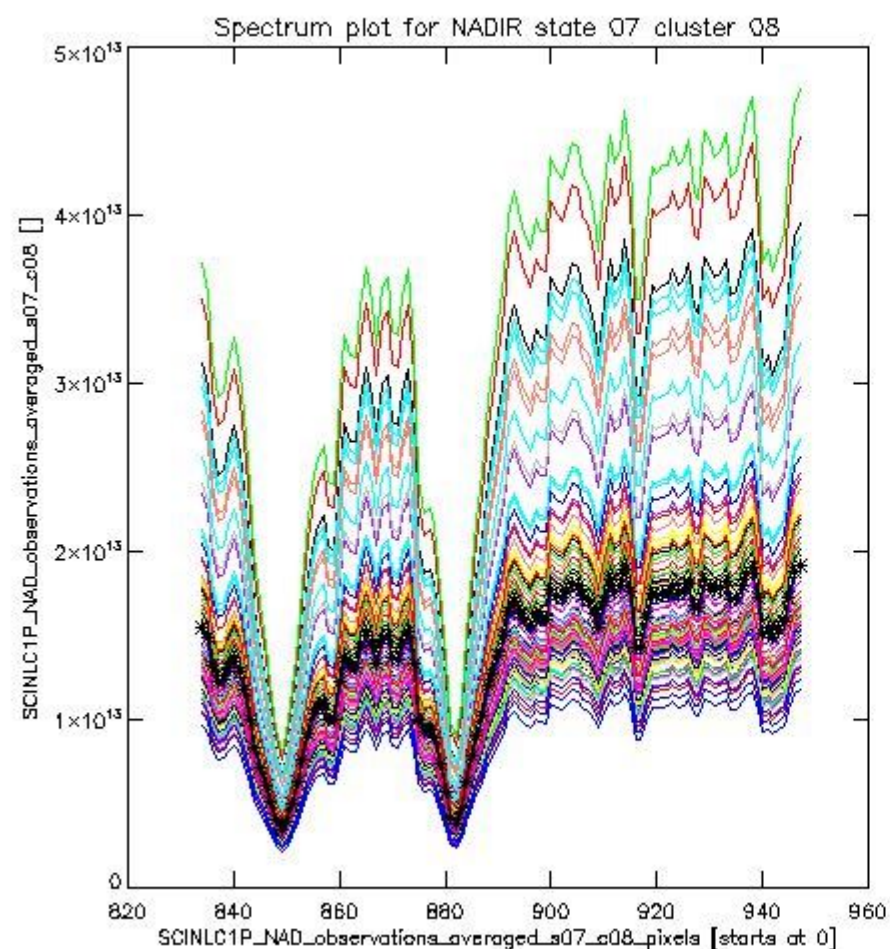
## 1.2 Source packet monitoring

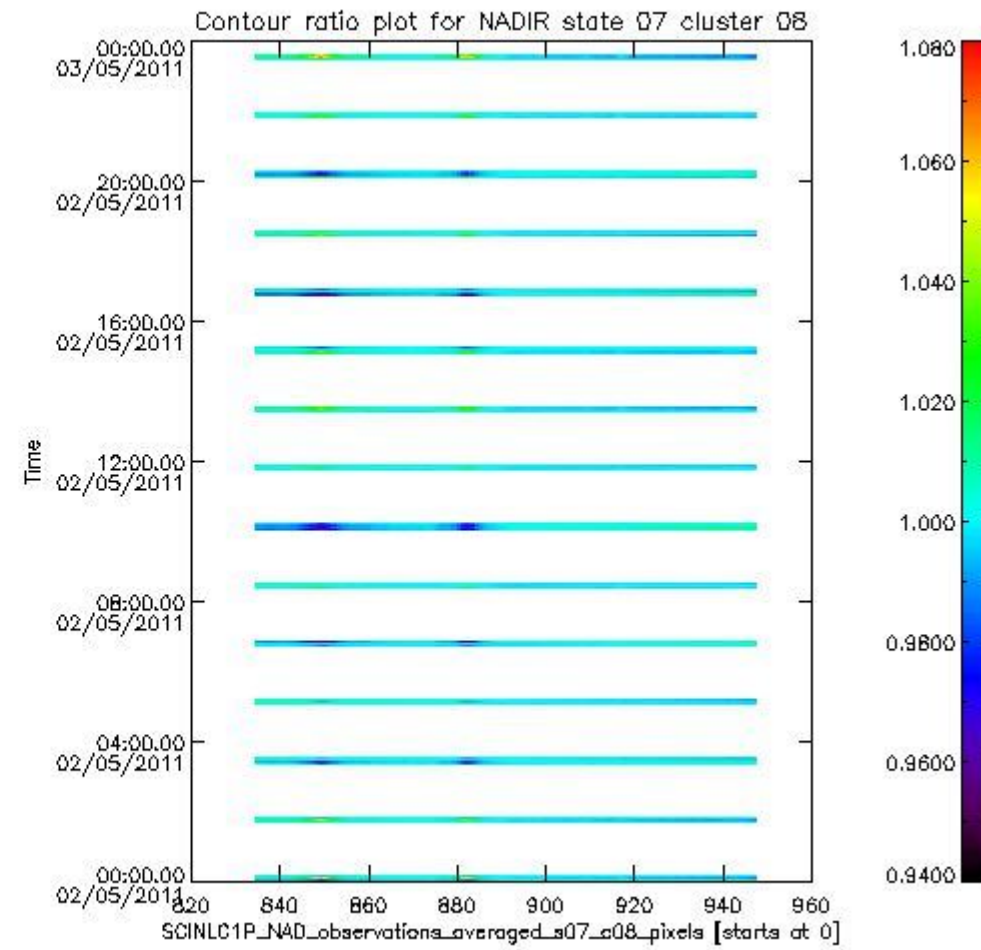
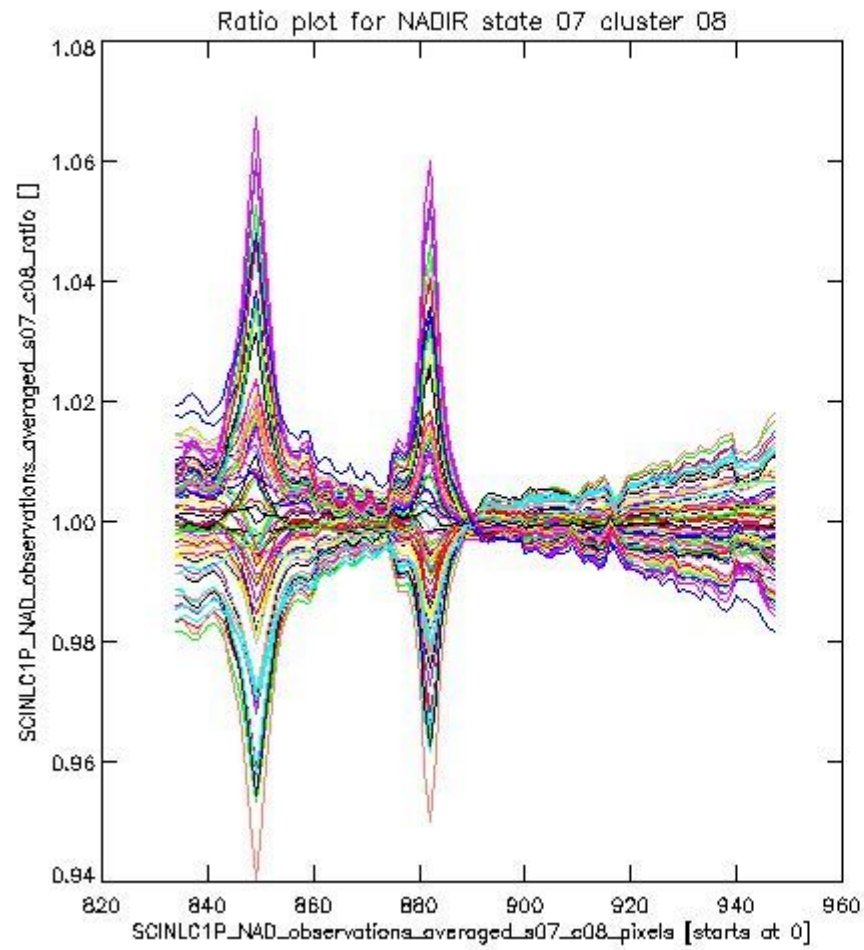
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

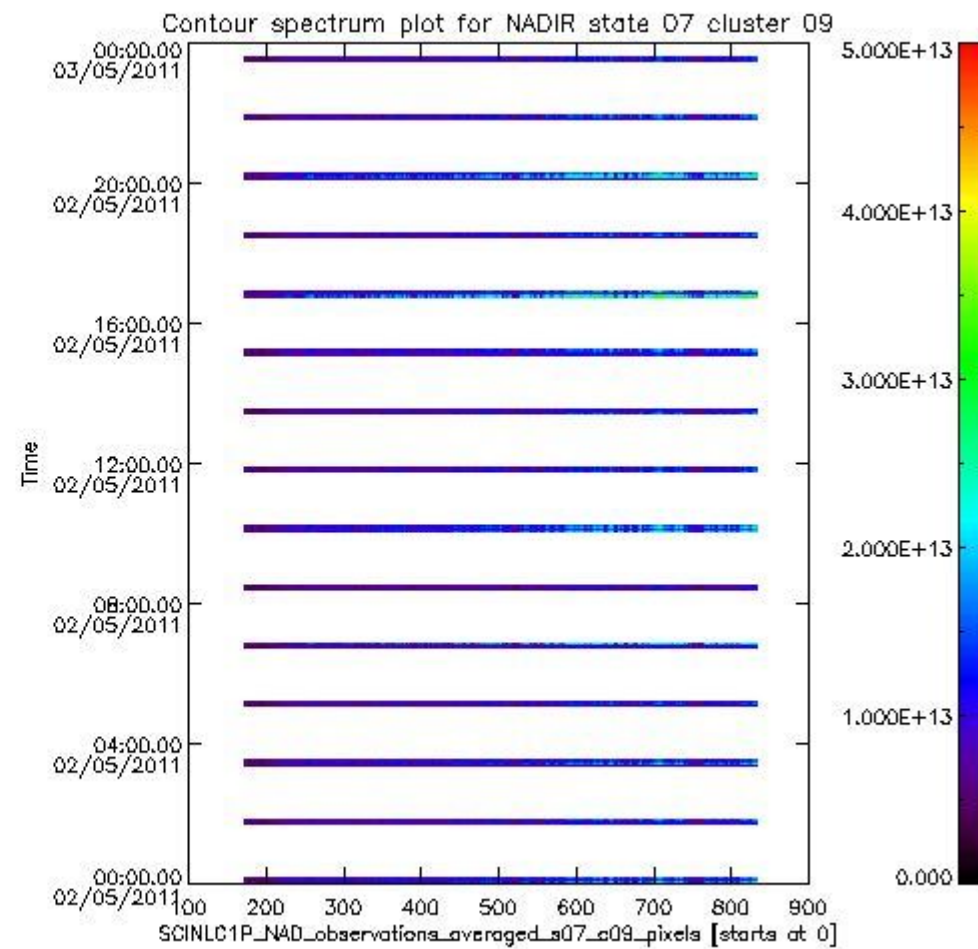
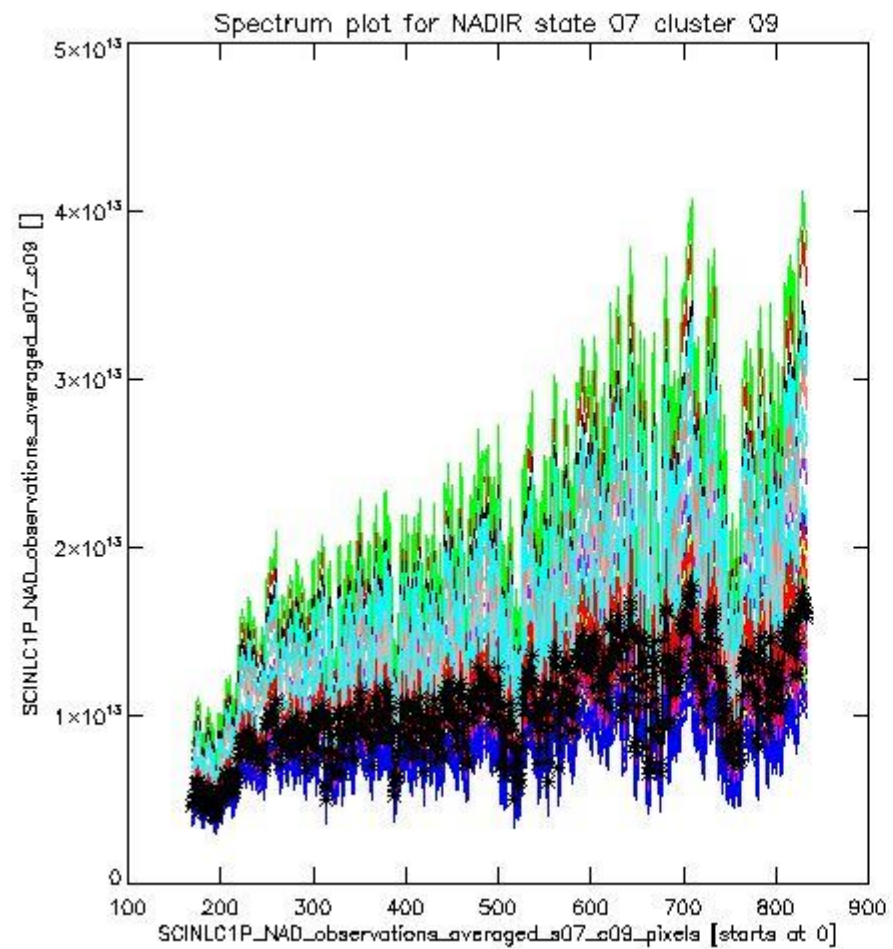
Item	Value
Start time of first sample	02MAY2011 00:00:46.783
Start time of last sample	02MAY2011 23:34:11.821
Reference period start time	02APR2011 01:43:09.866
Reference period stop time	30APR2011 23:06:41.424
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



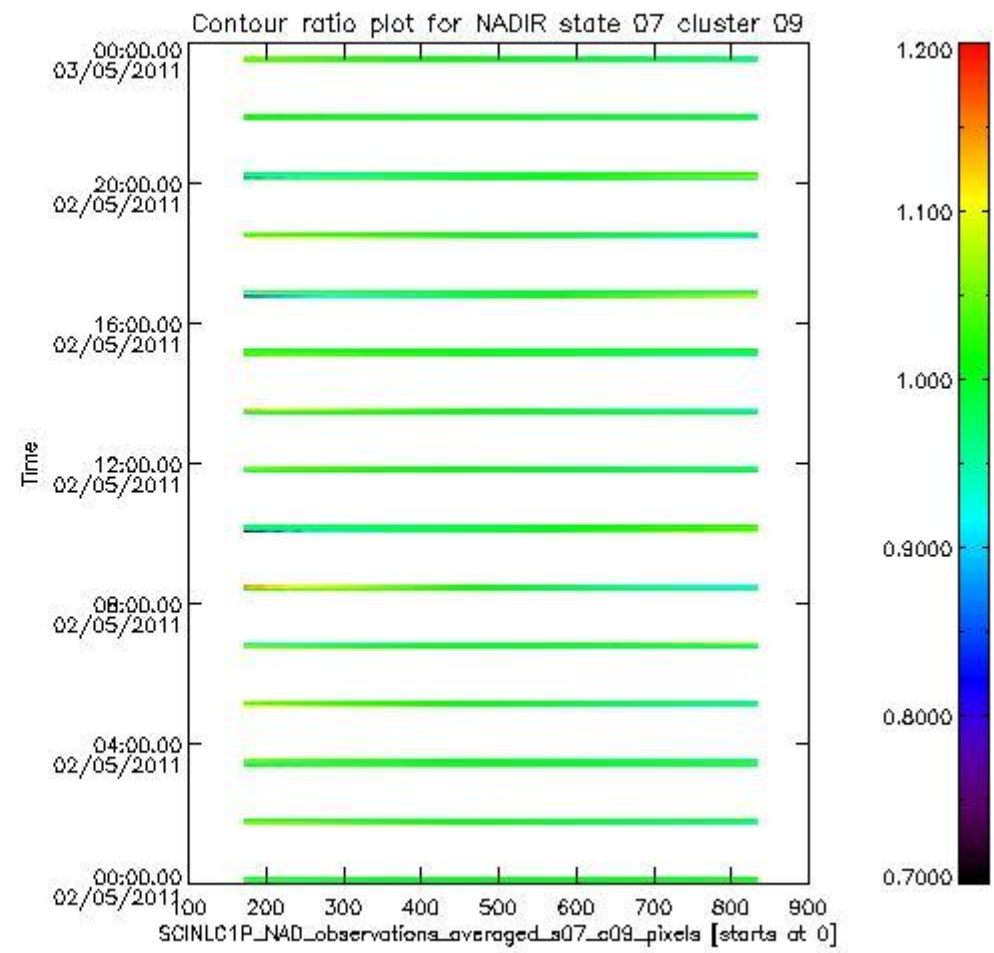
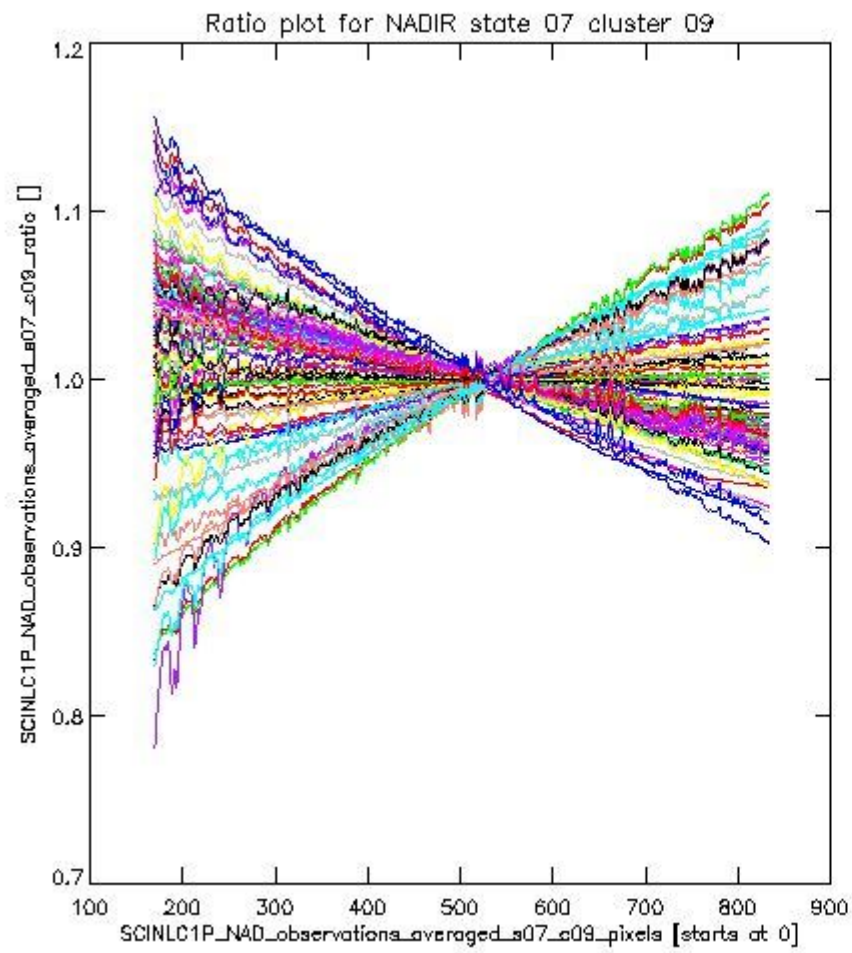


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	02MAY2011 00:00:46.783
Start time of last sample	02MAY2011 23:34:11.821
Reference period start time	02APR2011 01:43:09.866
Reference period stop time	30APR2011 23:06:41.424
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



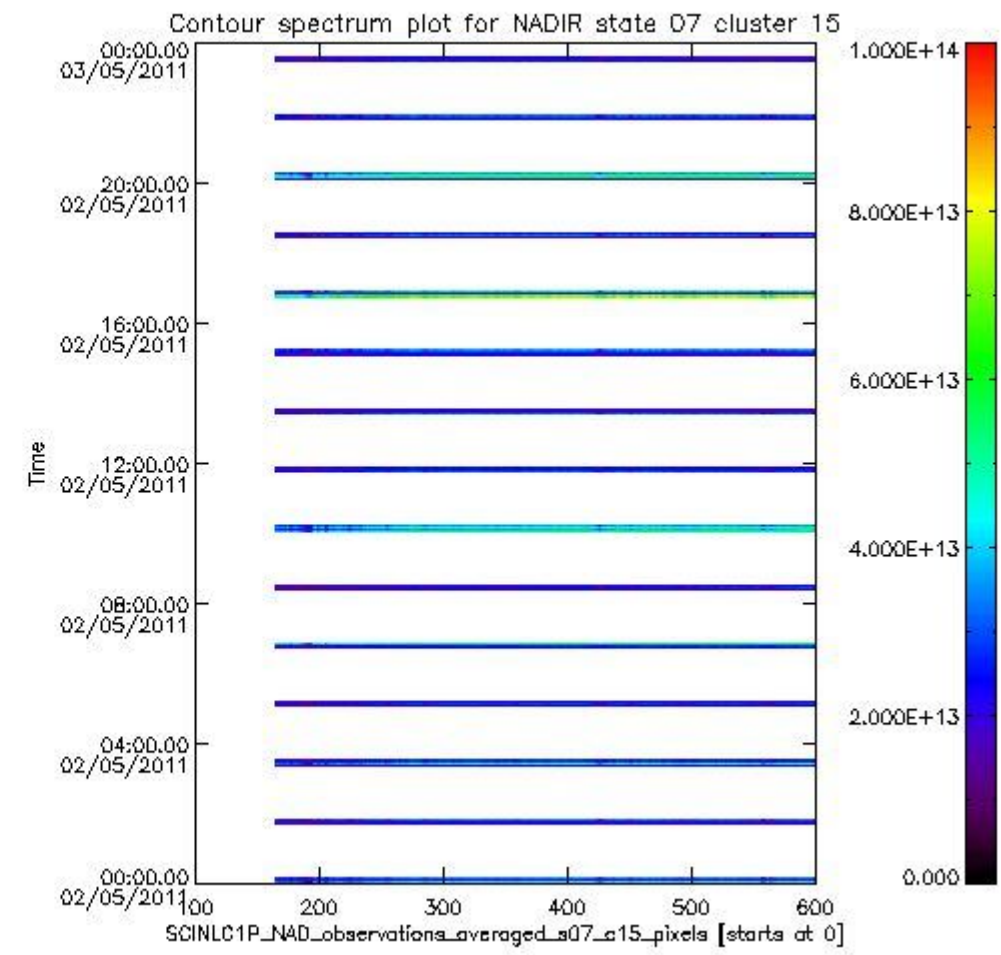
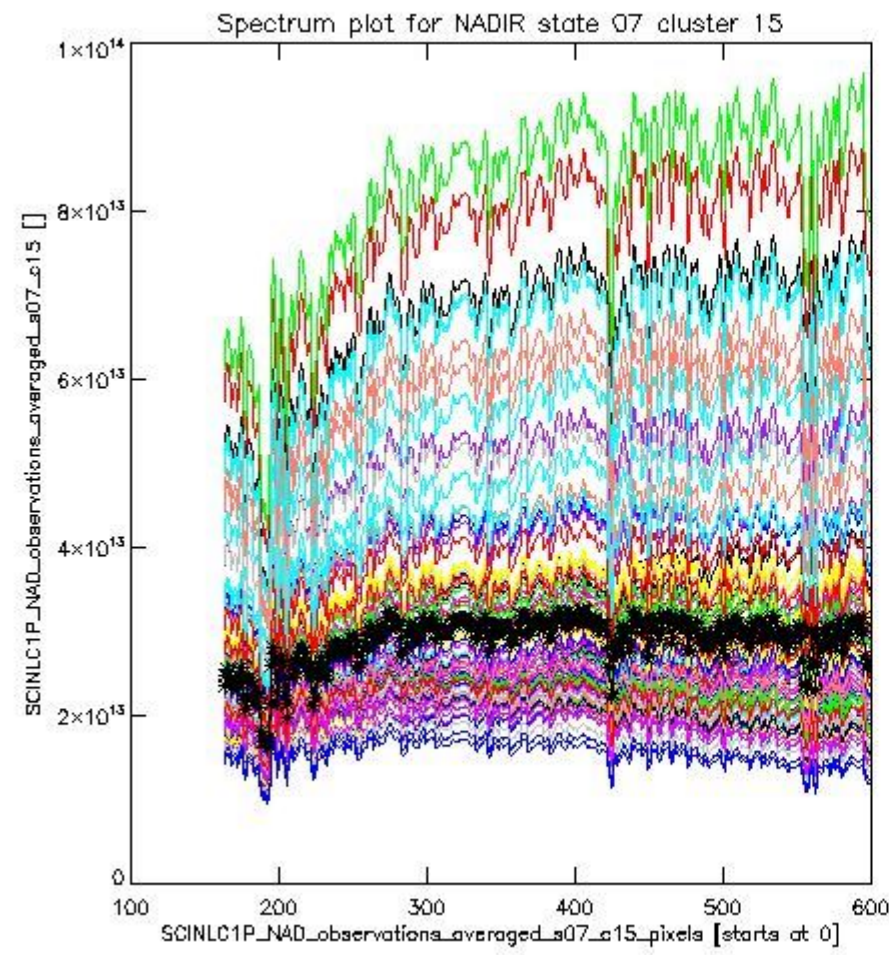
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_2.PNG



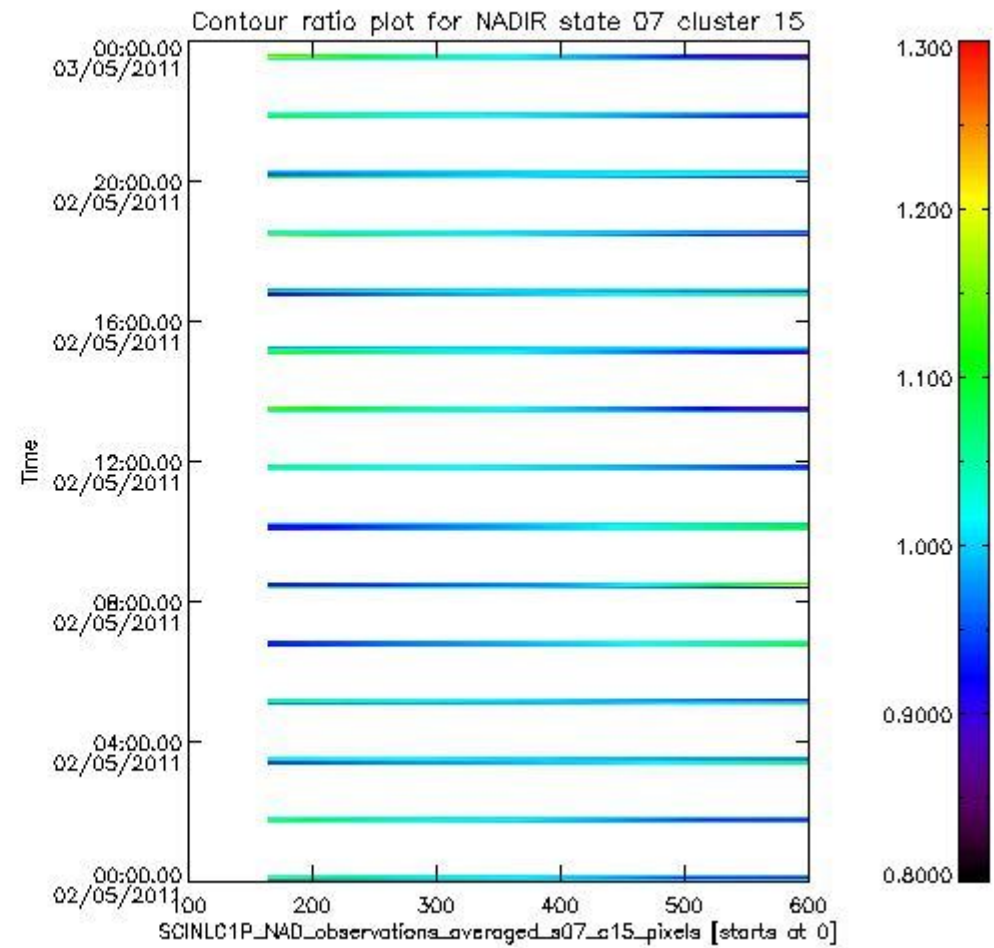
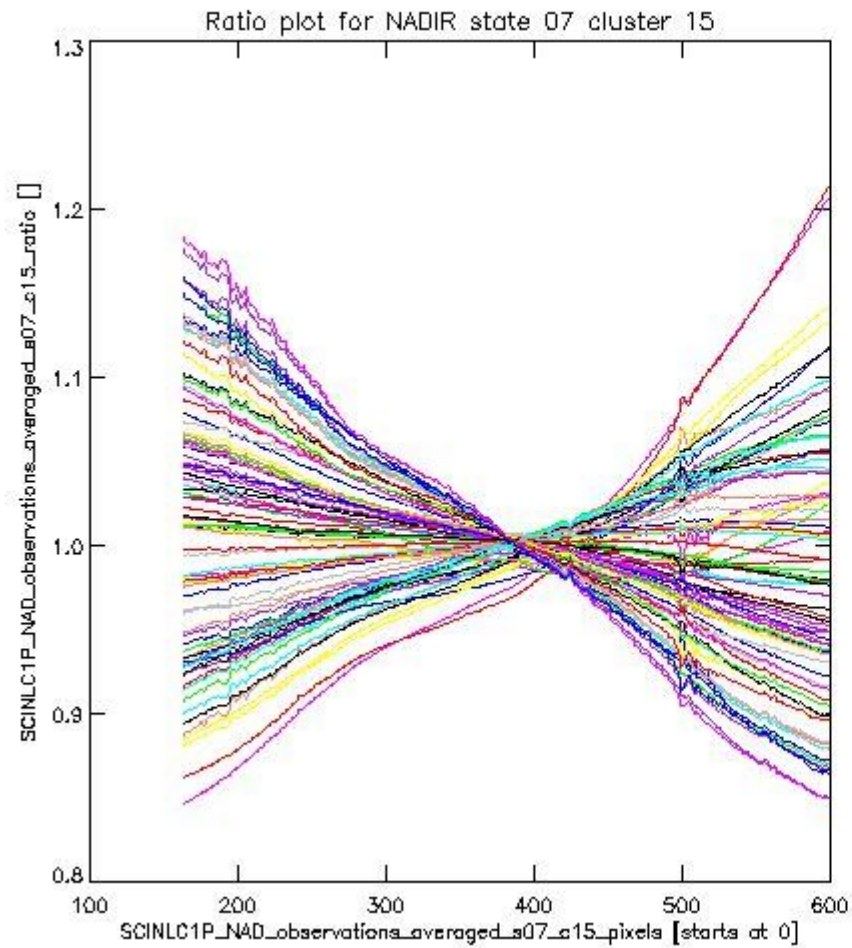
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_3.PNG

**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	02MAY2011 00:00:46.783
Start time of last sample	02MAY2011 23:34:11.821
Reference period start time	02APR2011 01:43:09.866
Reference period stop time	30APR2011 23:06:41.424
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



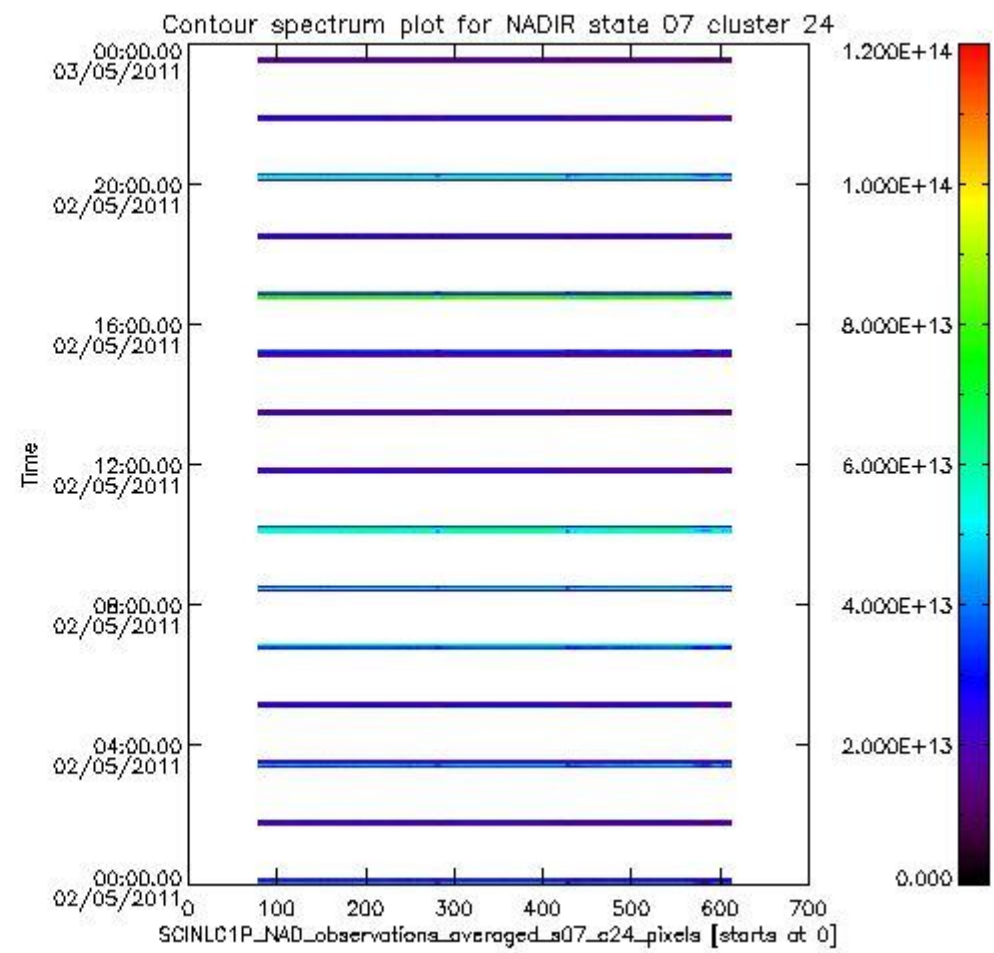
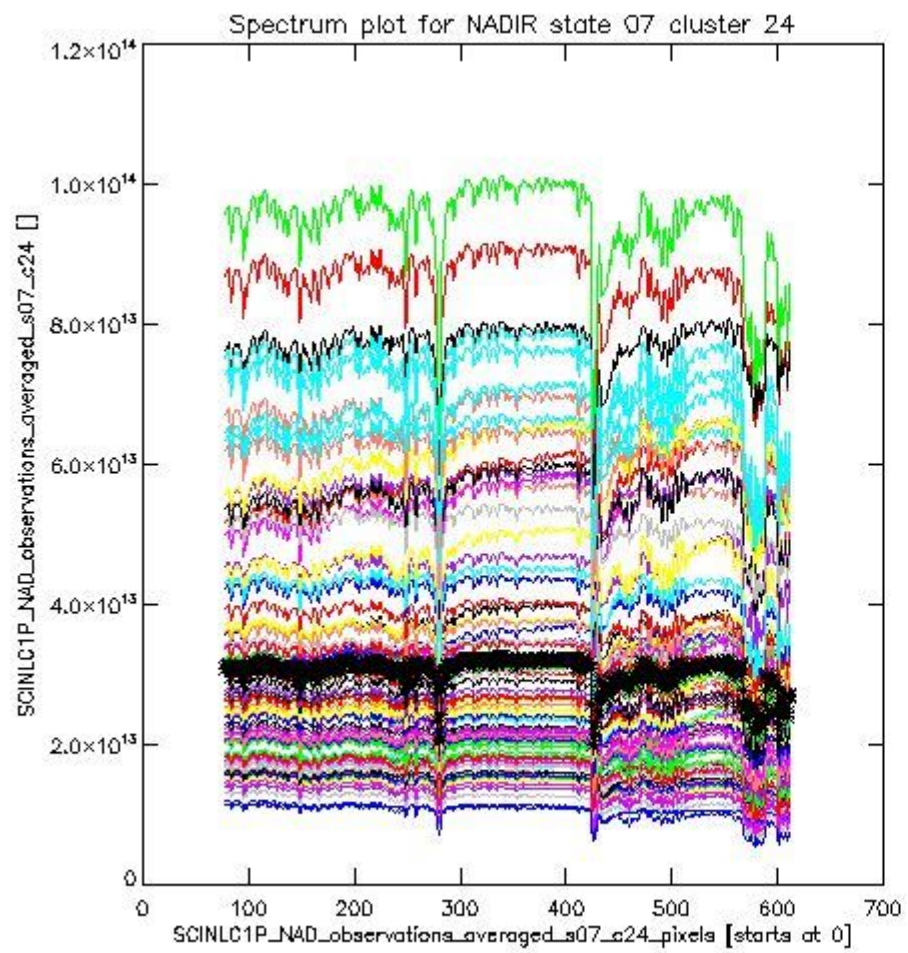
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_5.PNG

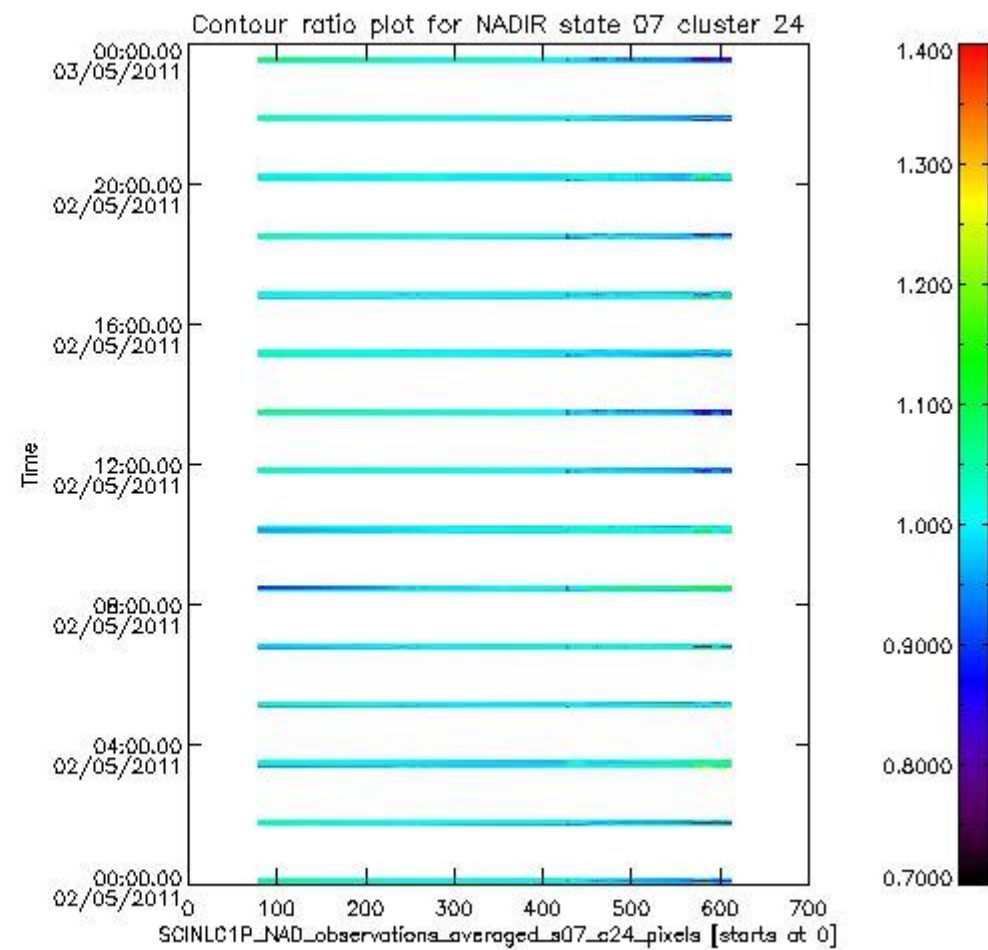
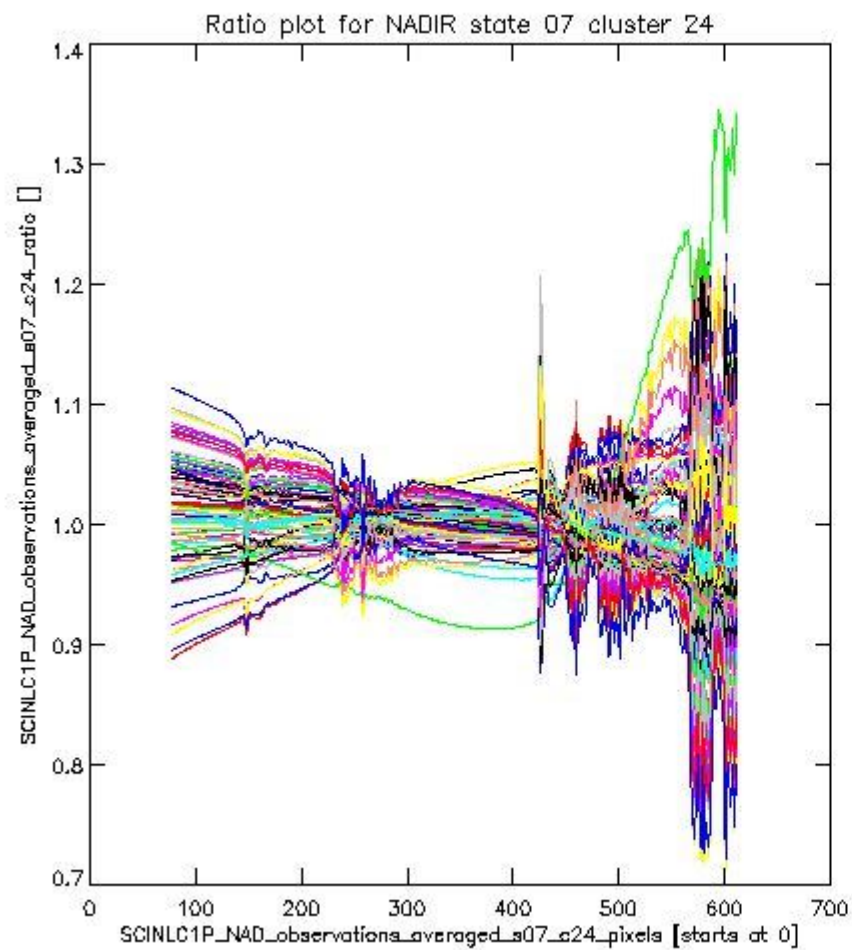
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	02MAY2011 00:00:46.783
Start time of last sample	02MAY2011 23:34:11.821
Reference period start time	02APR2011 01:43:09.866
Reference period stop time	30APR2011 23:06:41.424
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\_20110502\_6.PNG

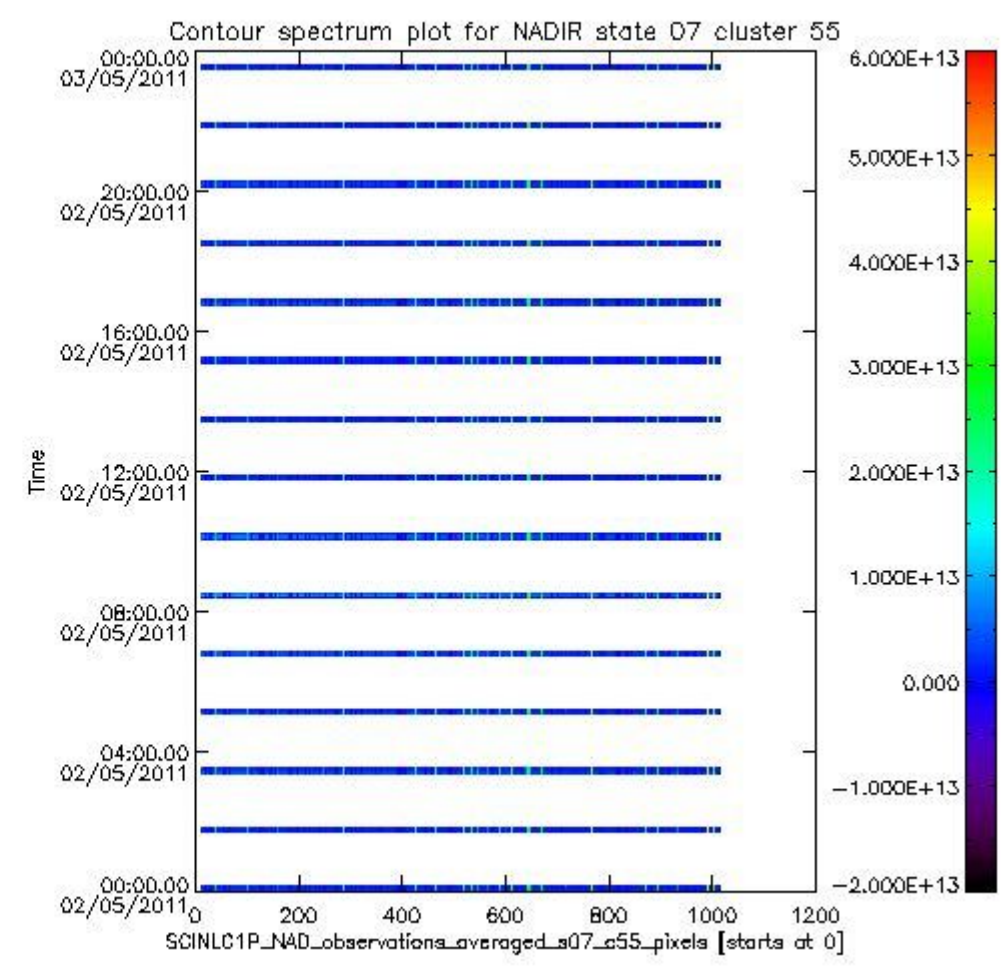
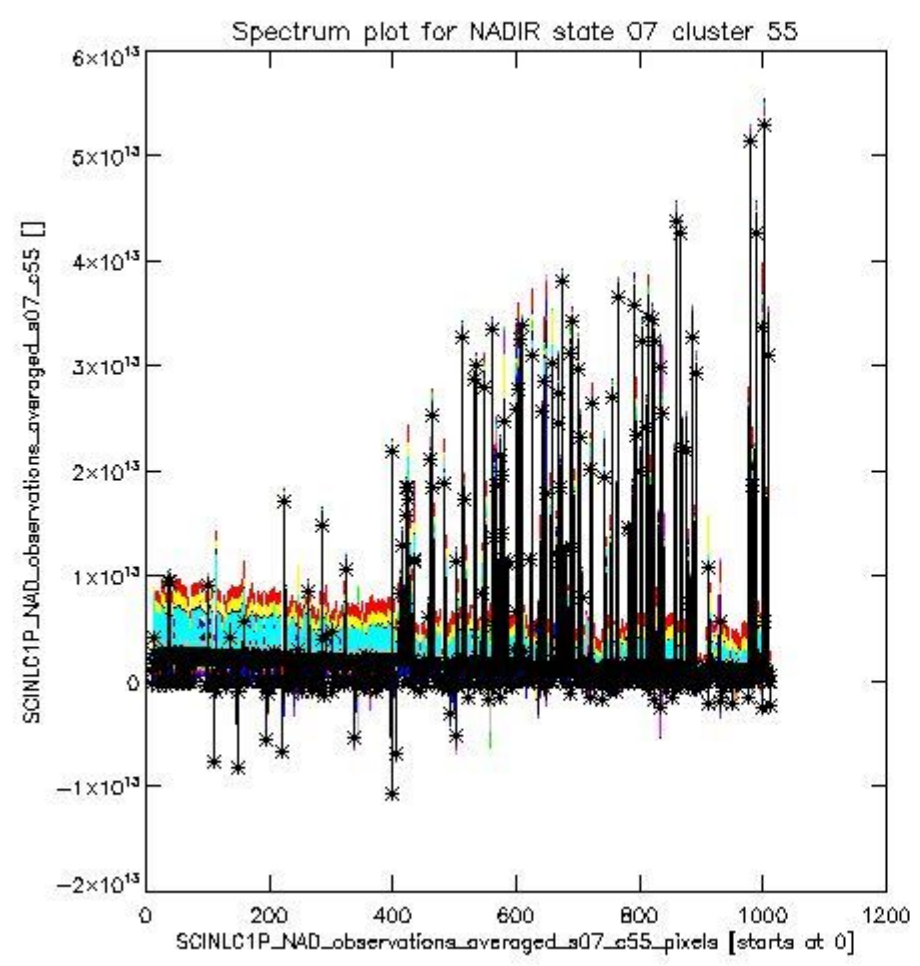




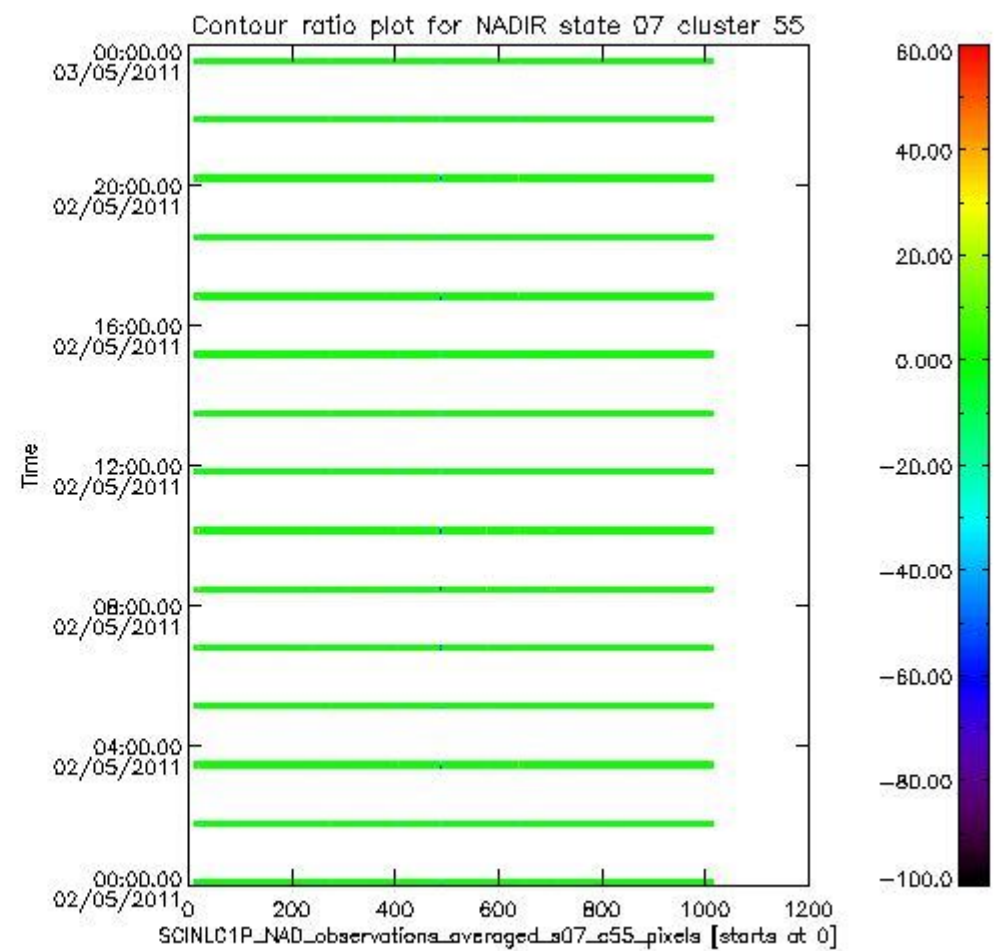
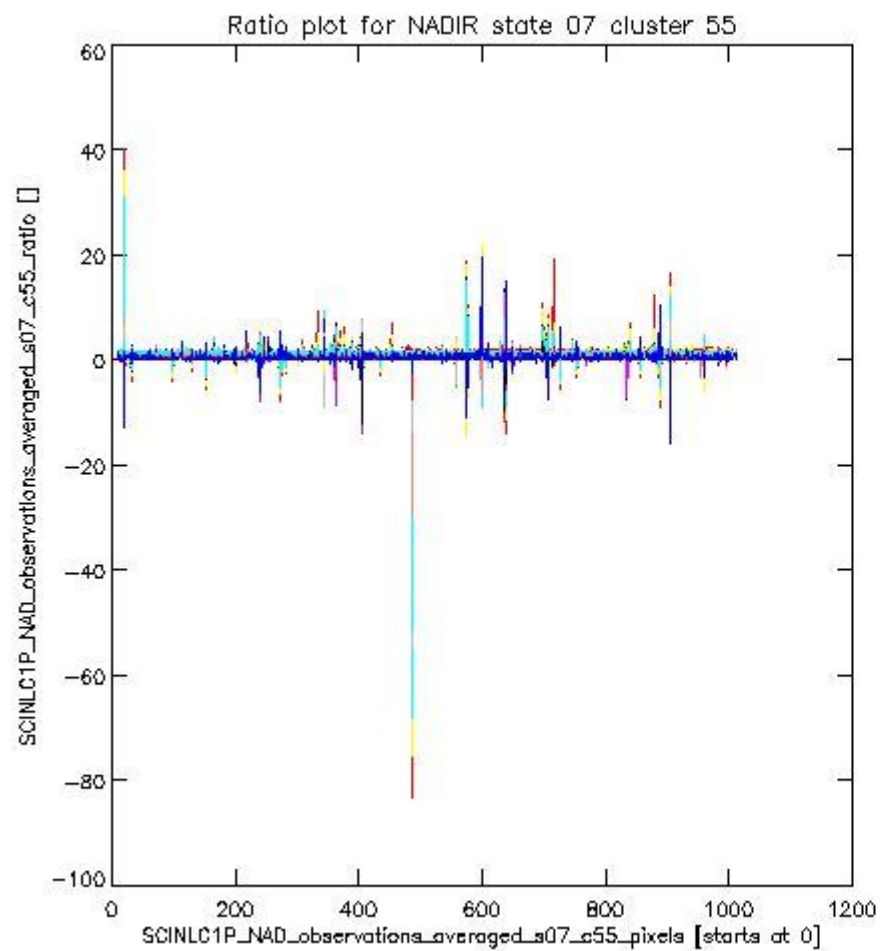
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_7.PNG

**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	02MAY2011 00:00:46.783
Start time of last sample	02MAY2011 23:34:11.821
Reference period start time	02APR2011 01:43:09.866
Reference period stop time	30APR2011 23:06:41.424
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



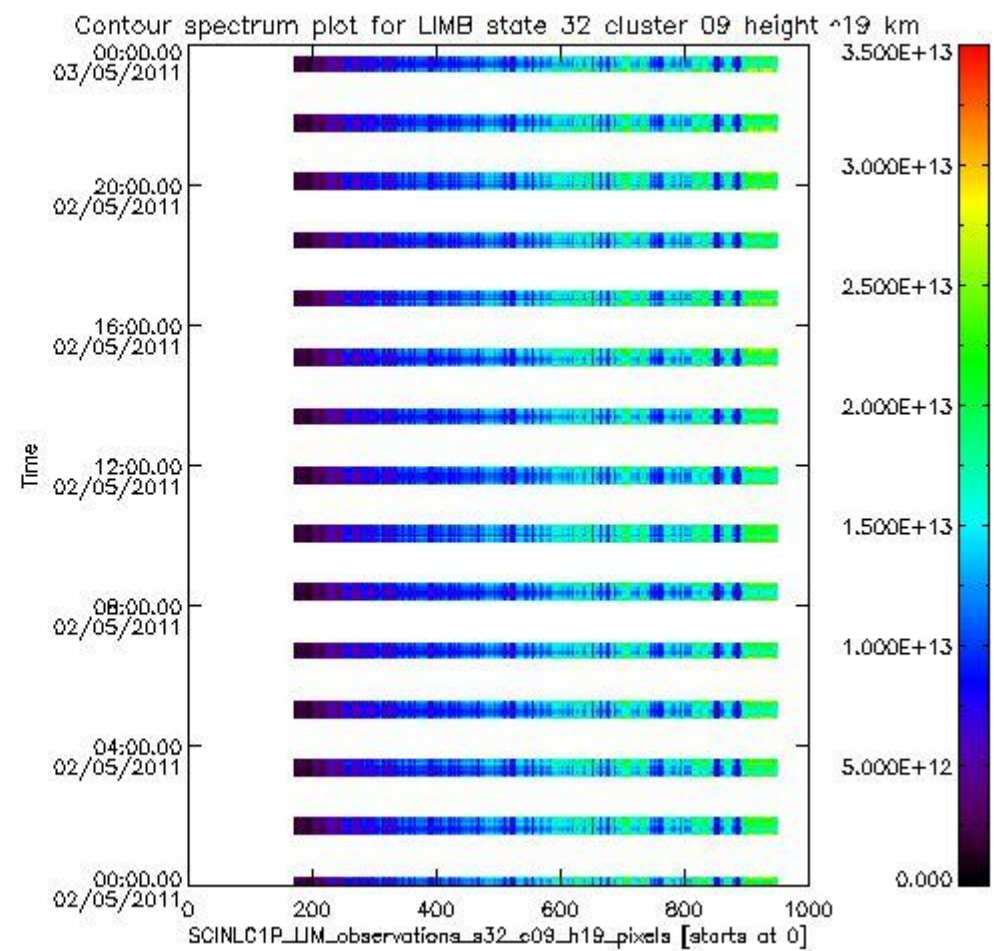
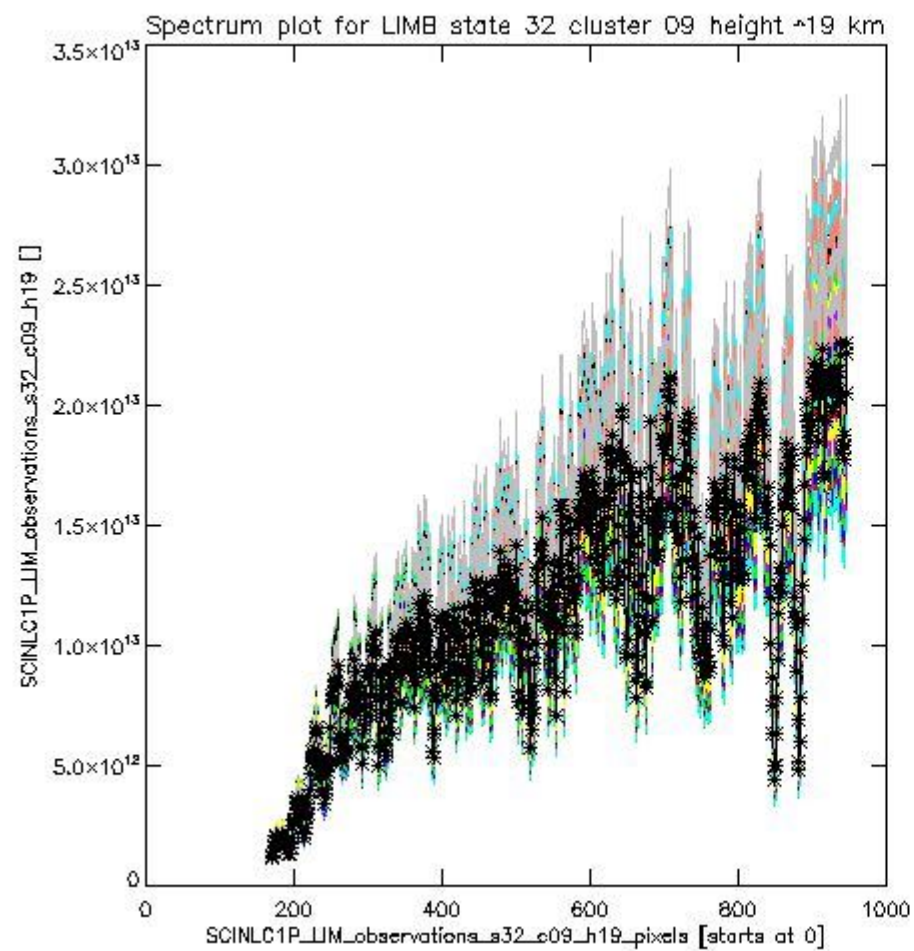
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_8.PNG



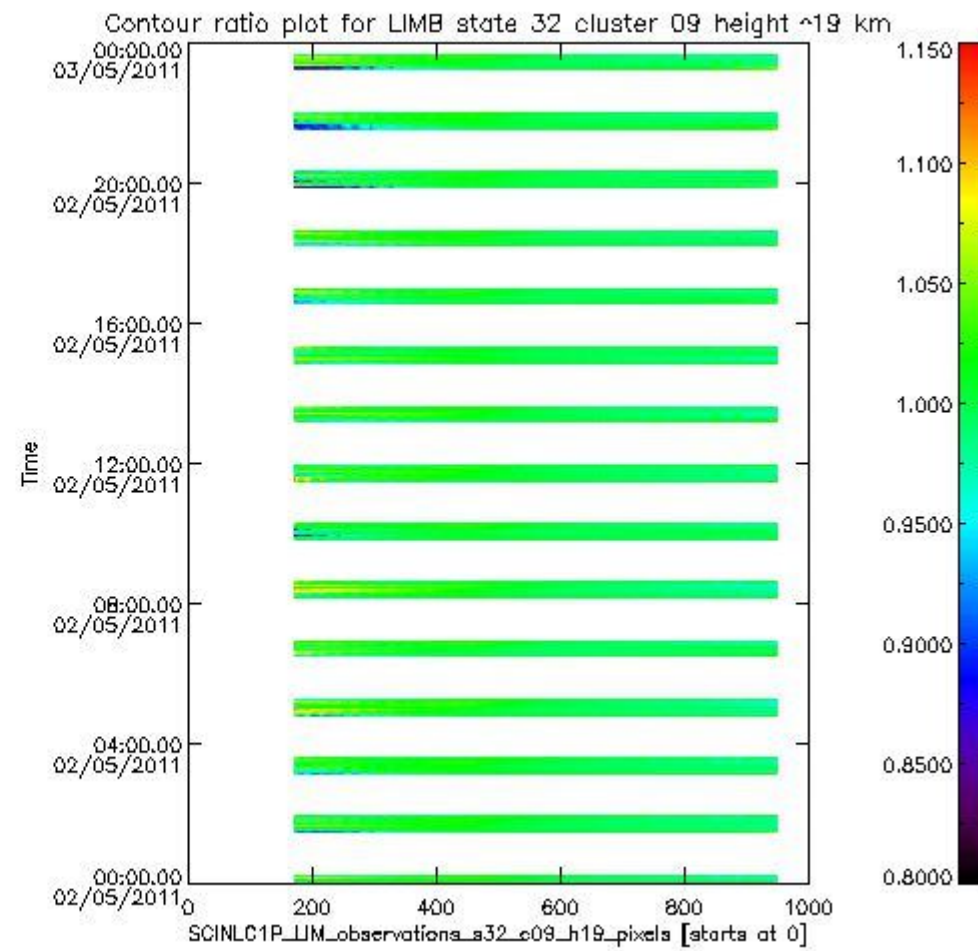
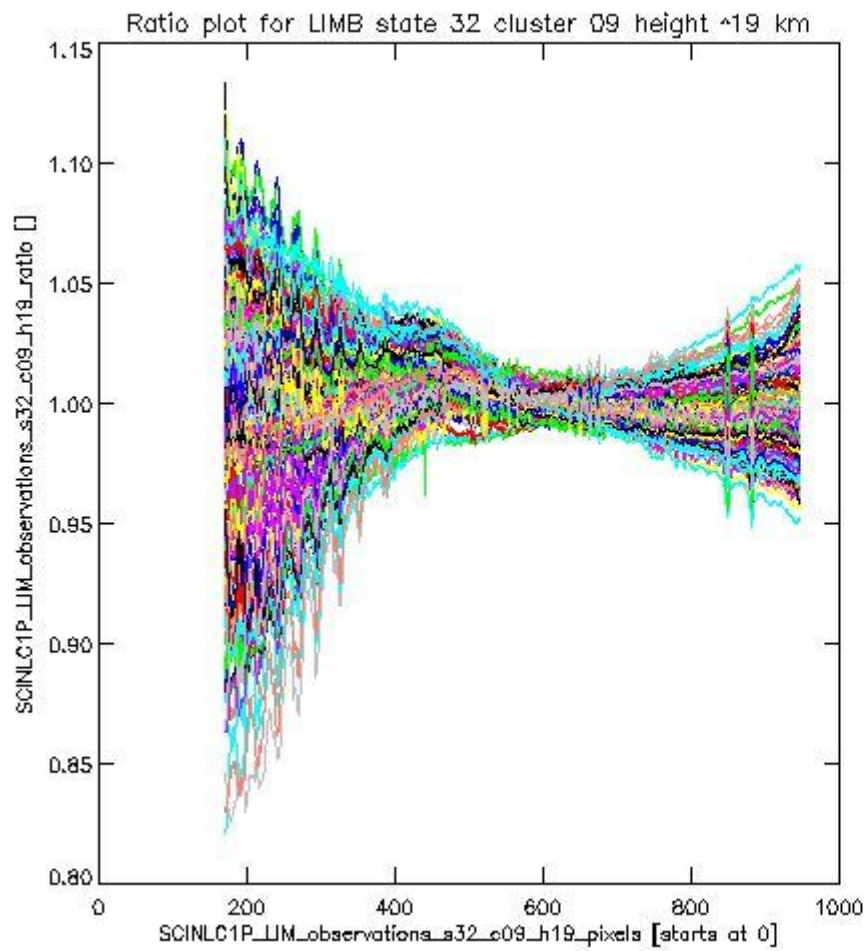
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_9.PNG

**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	02MAY2011 00:01:55.337
Start time of last sample	02MAY2011 23:37:23.126
Reference period start time	02APR2011 01:29:59.233
Reference period stop time	30APR2011 23:11:55.463
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



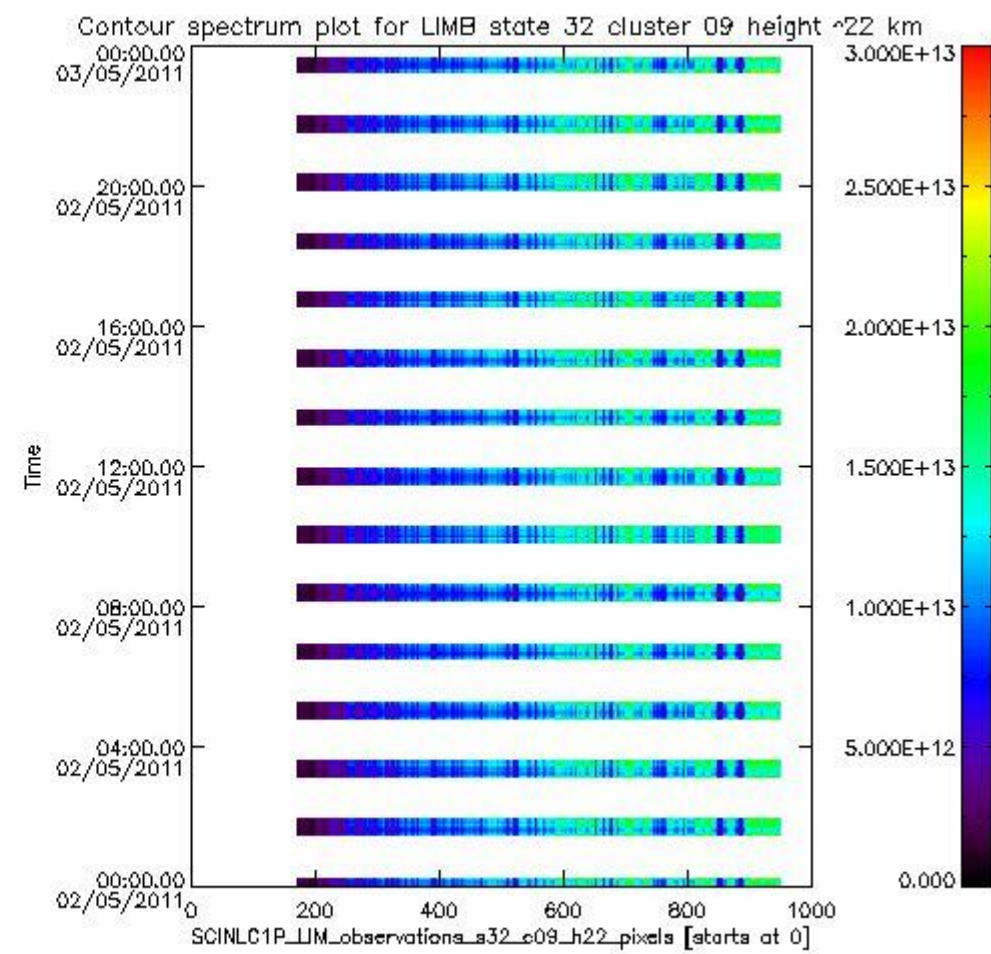
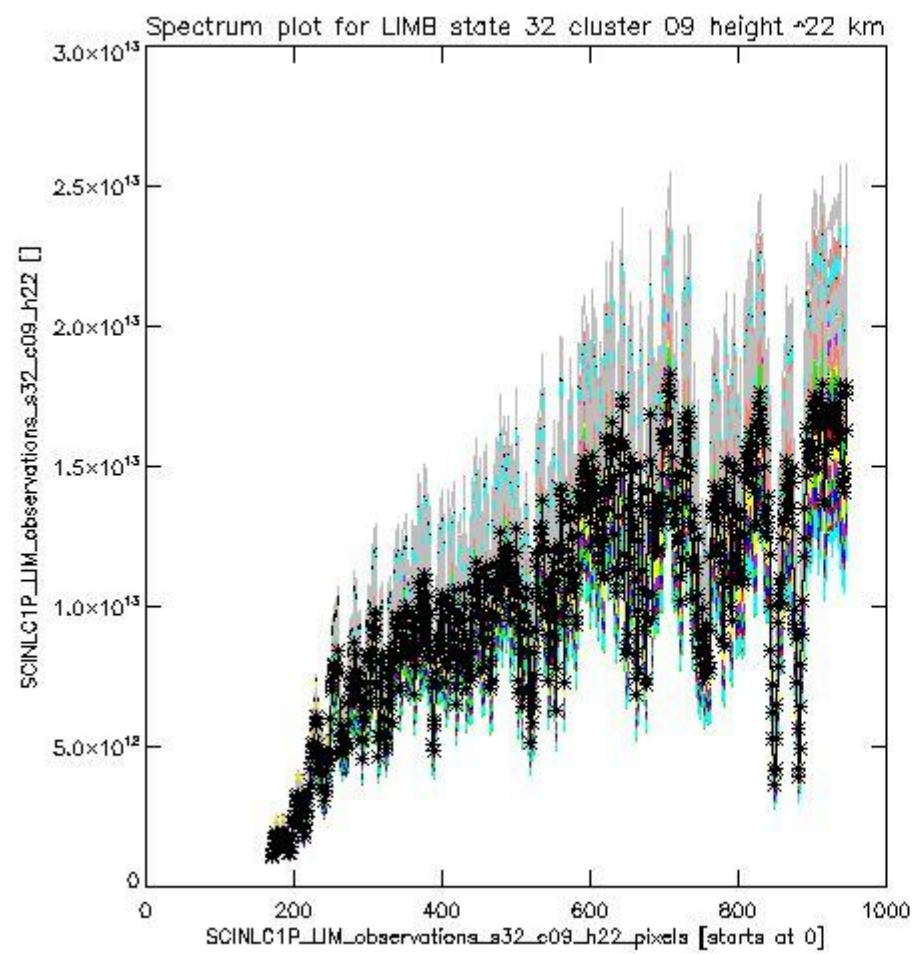
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_10.PNG



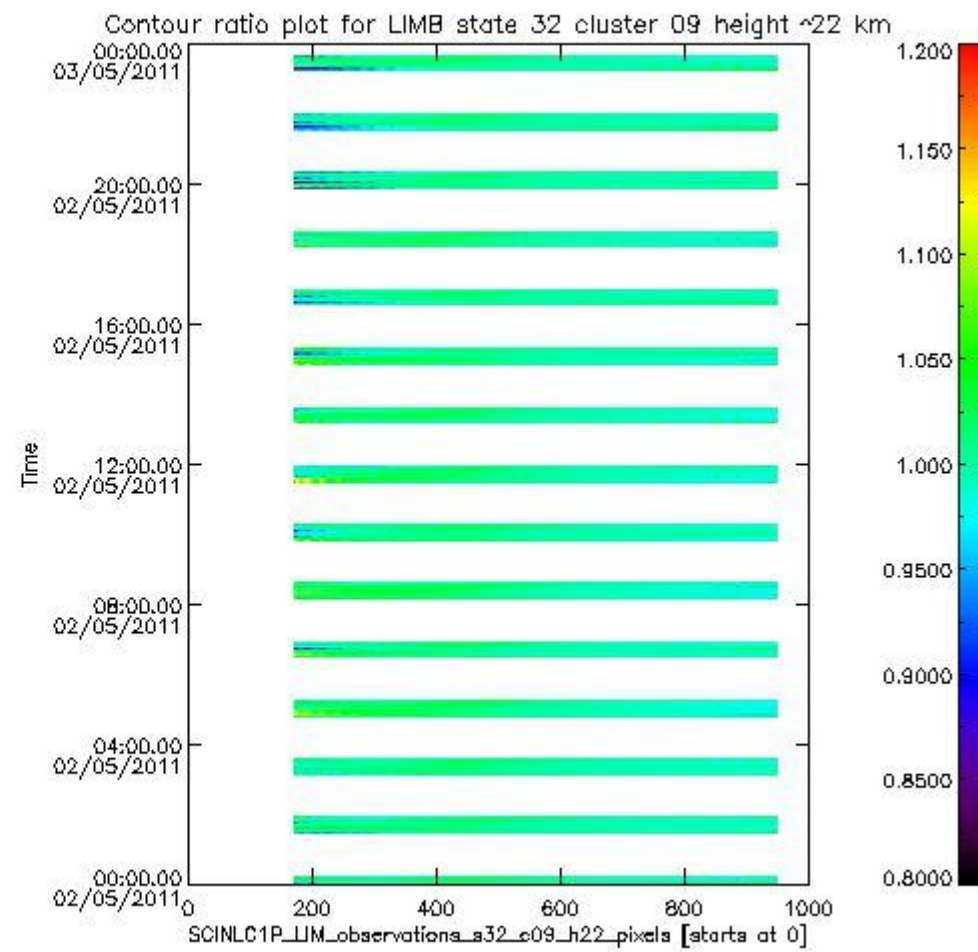
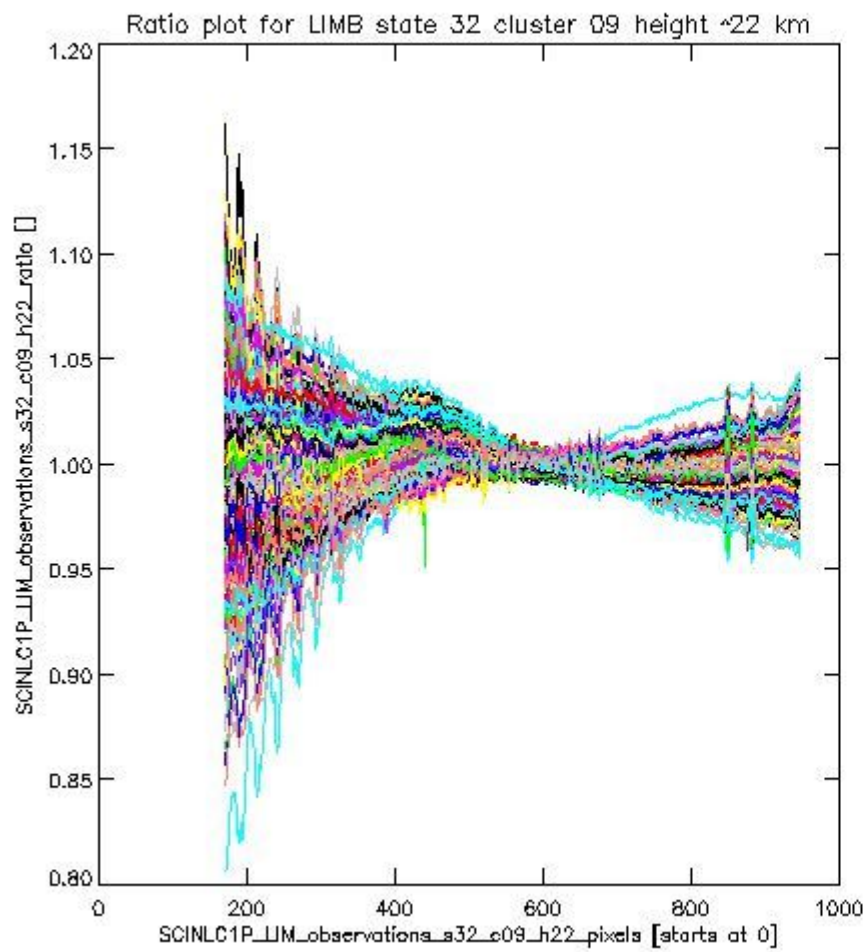
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_11.PNG

**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	02MAY2011 00:01:55.337
Start time of last sample	02MAY2011 23:37:23.126
Reference period start time	02APR2011 01:29:59.233
Reference period stop time	30APR2011 23:11:55.463
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



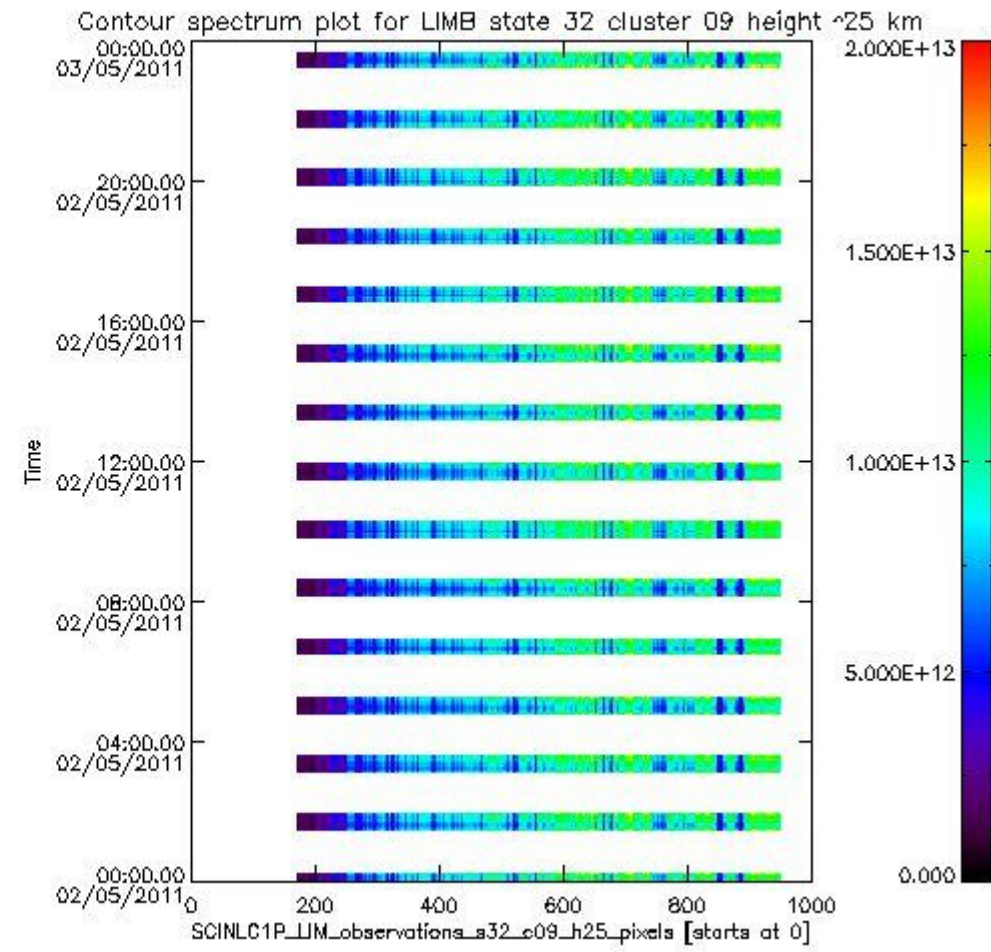
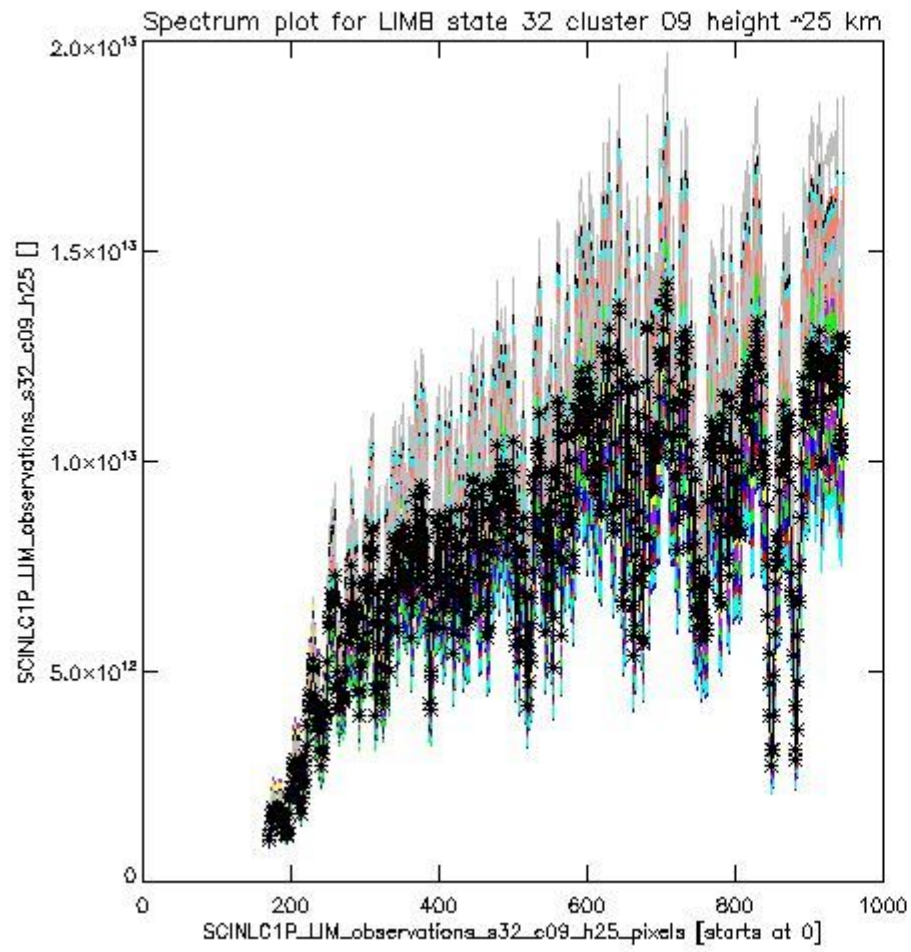
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_13.PNG

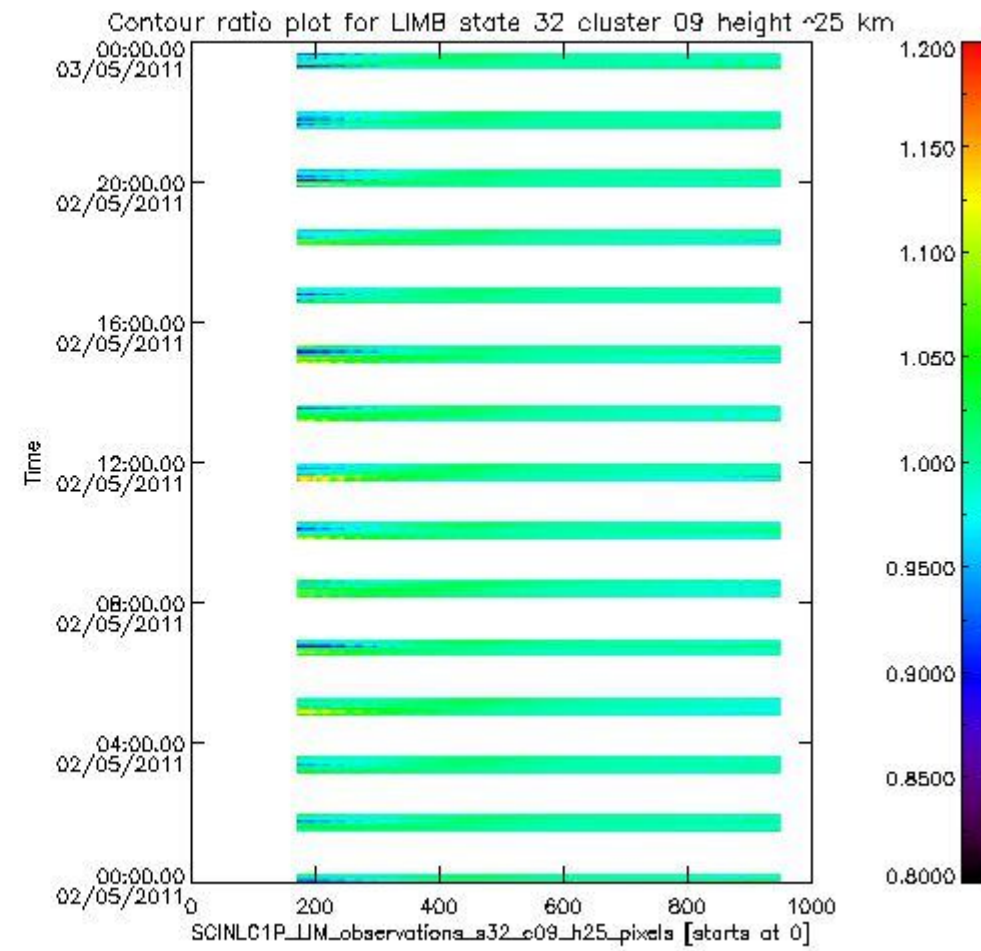
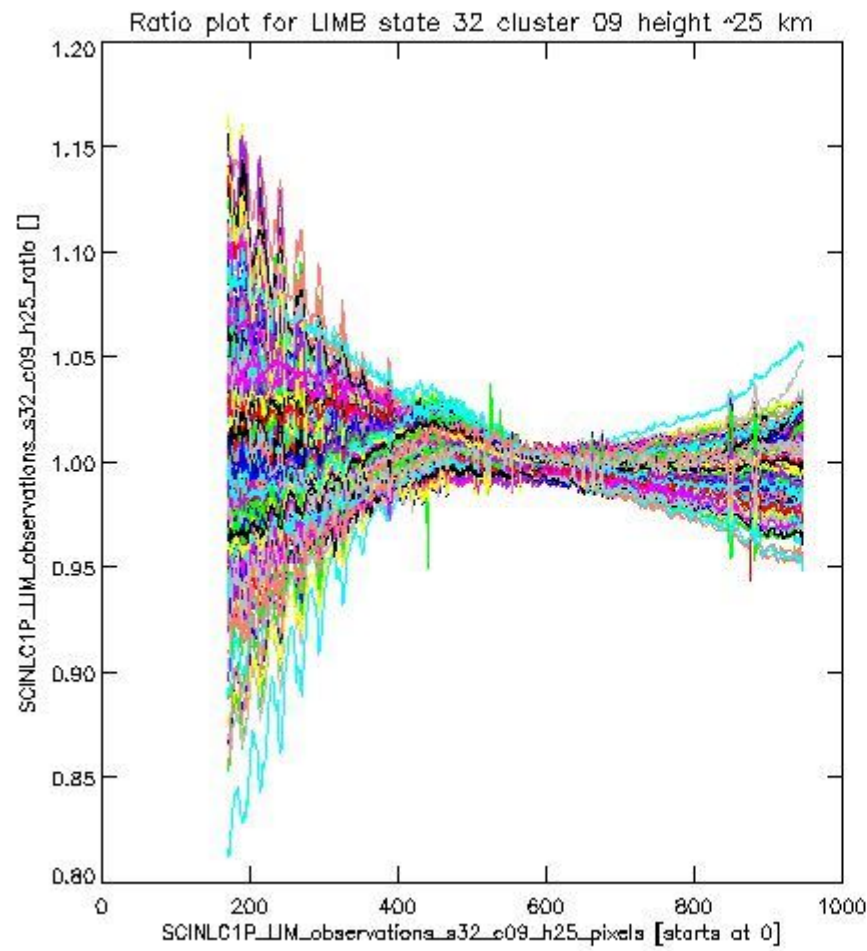
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	02MAY2011 00:01:55.337
Start time of last sample	02MAY2011 23:37:23.126
Reference period start time	02APR2011 01:29:59.233
Reference period stop time	30APR2011 23:11:55.463
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\_20110502\_14.PNG

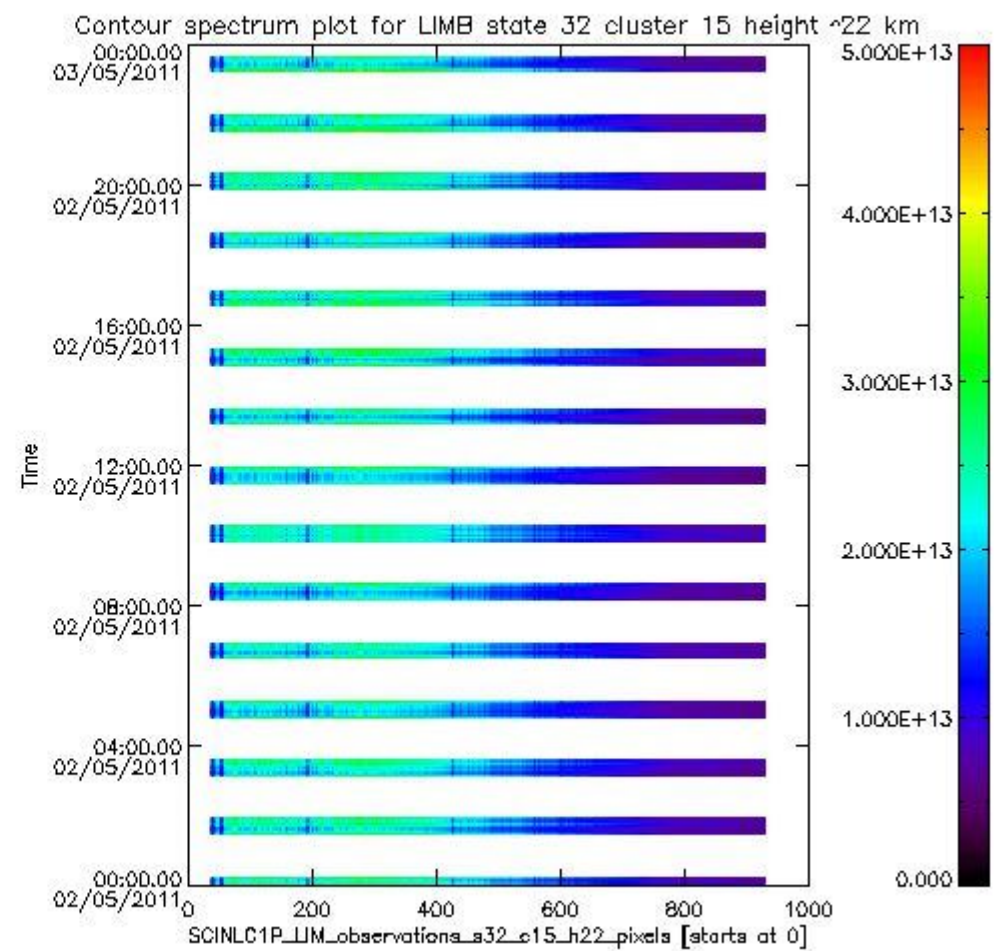
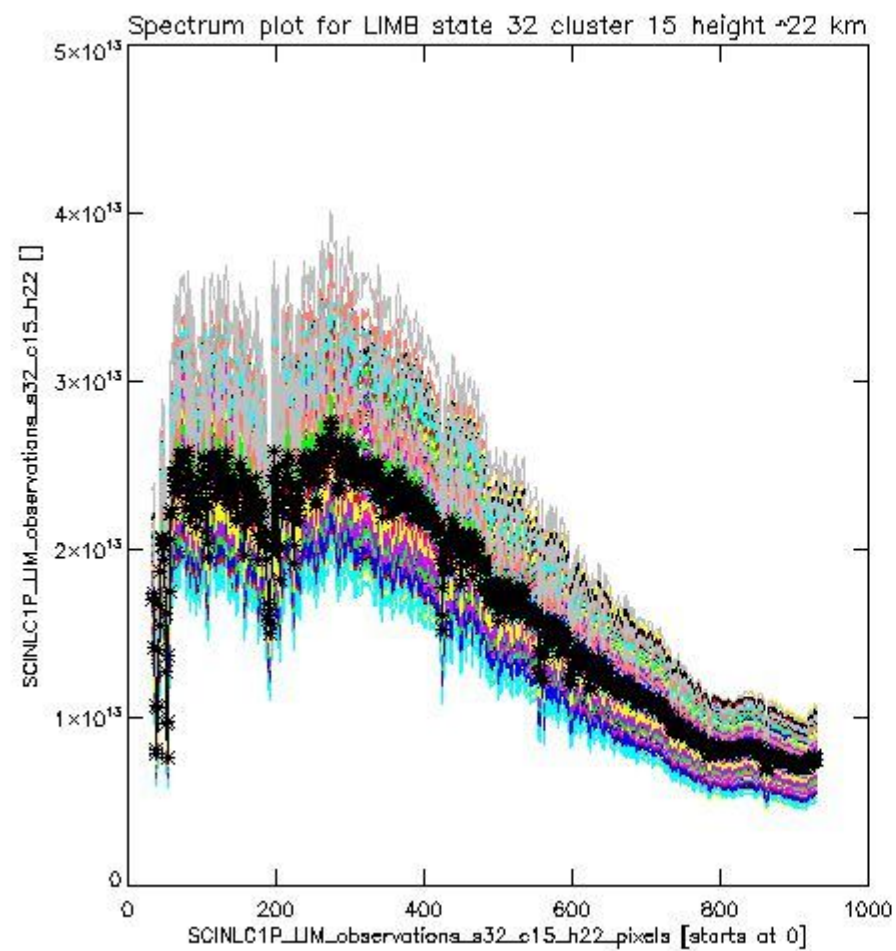




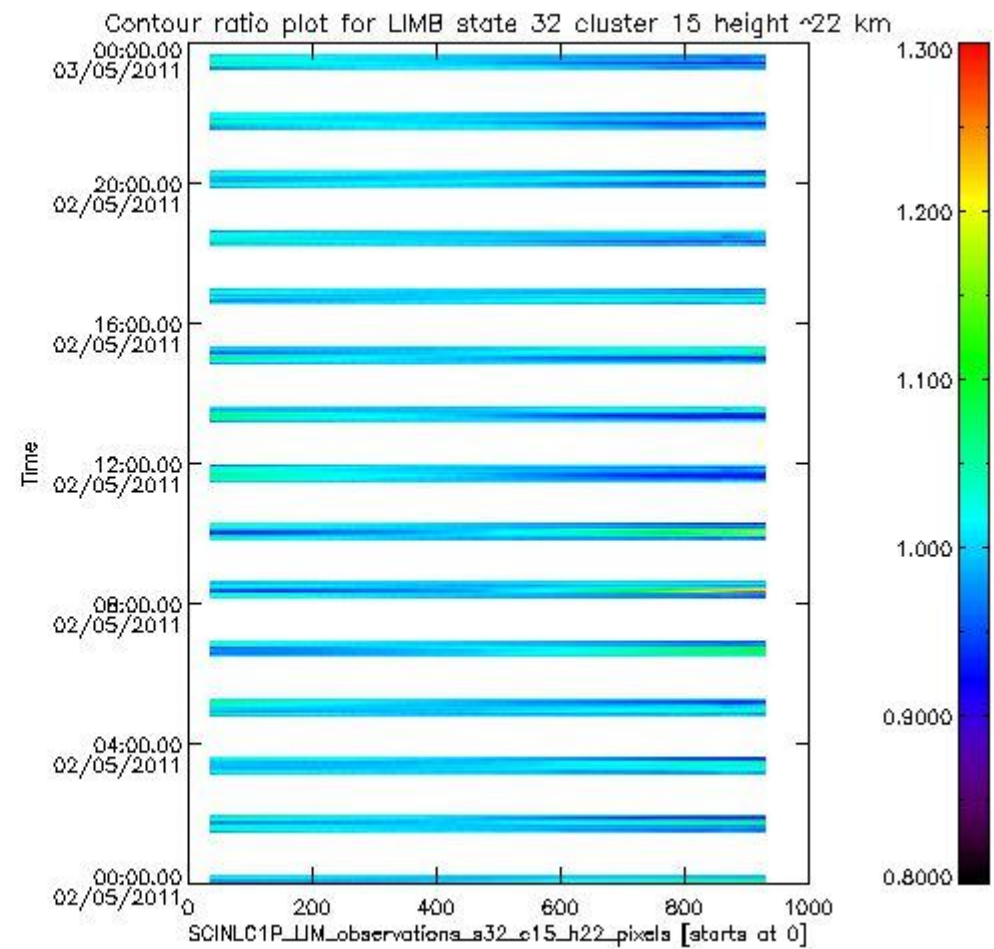
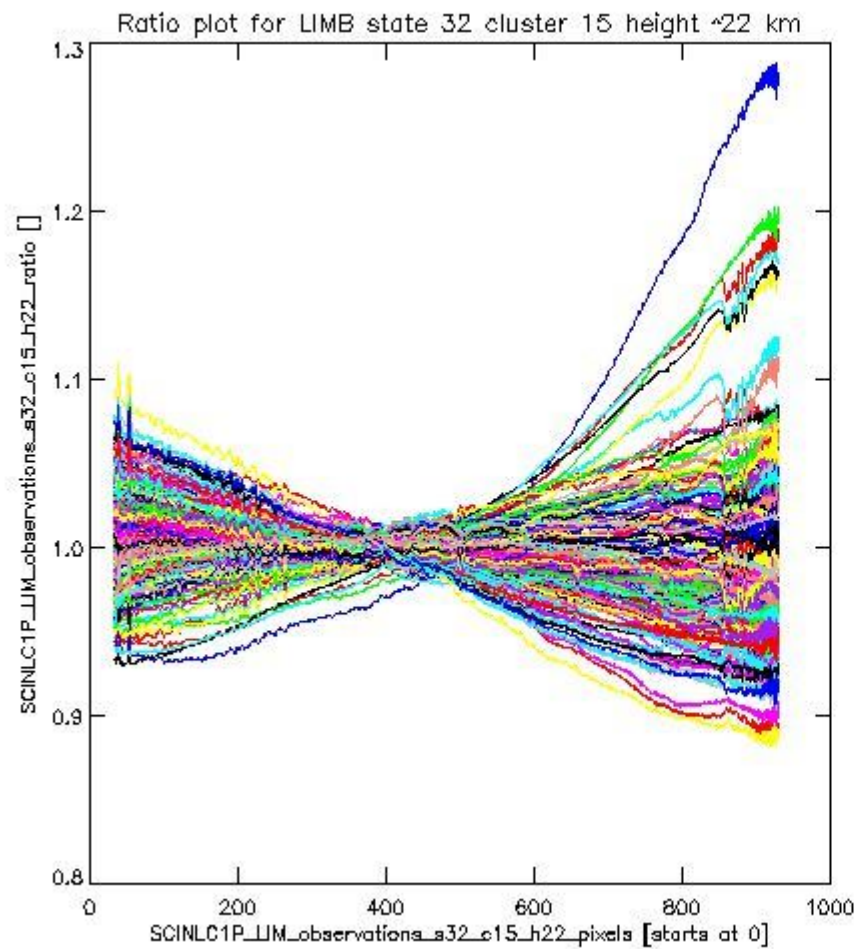
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_15.PNG

**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	02MAY2011 00:01:55.337
Start time of last sample	02MAY2011 23:37:23.126
Reference period start time	02APR2011 01:29:59.233
Reference period stop time	30APR2011 23:11:55.463
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



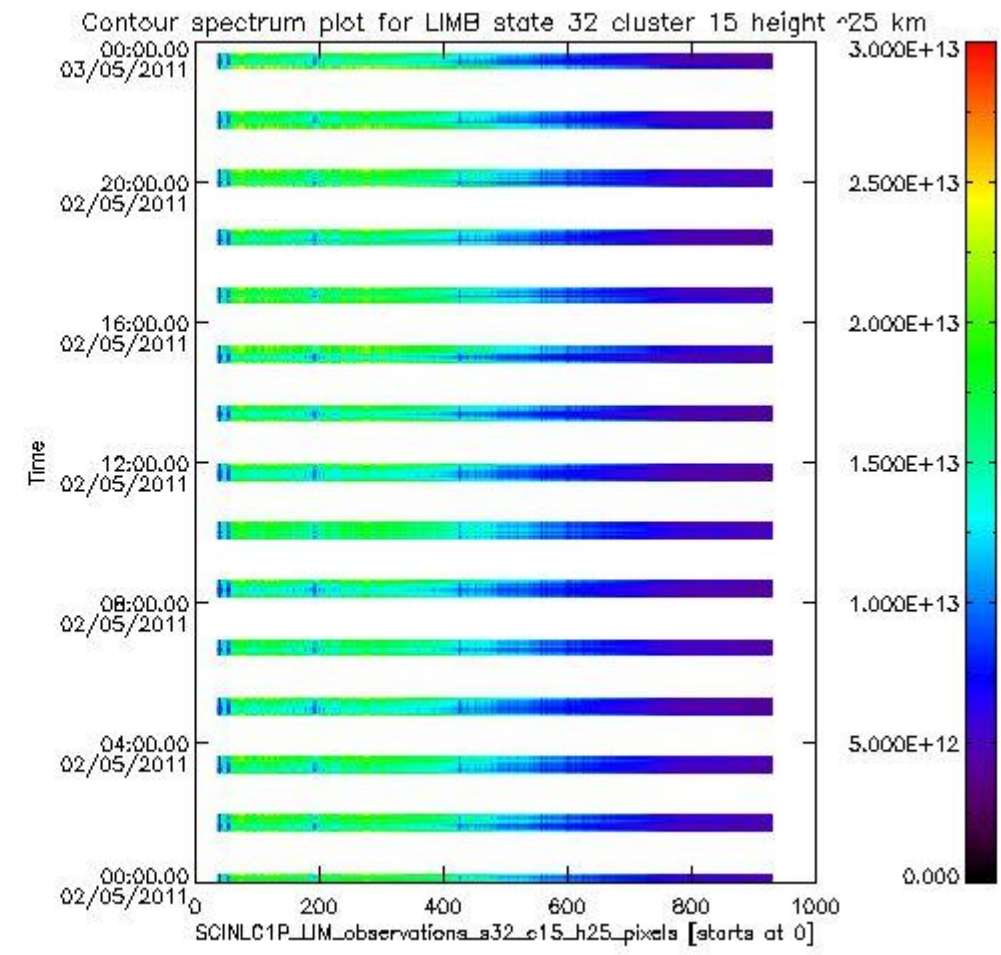
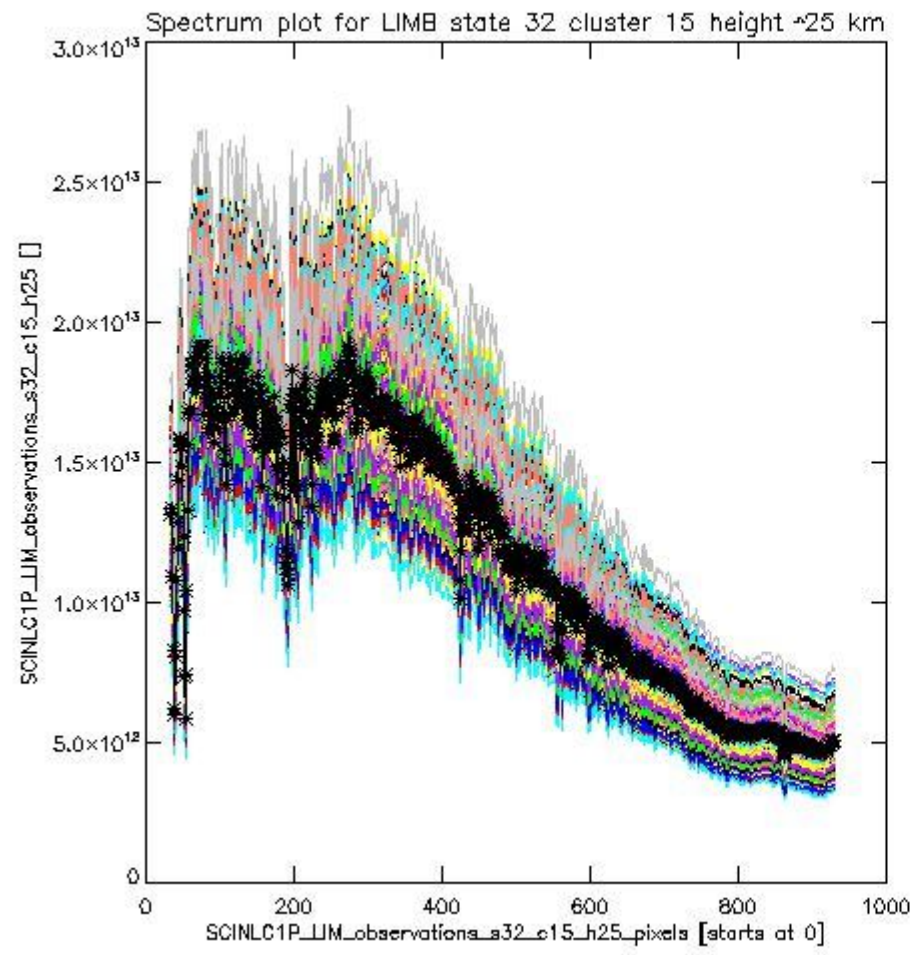
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_16.PNG



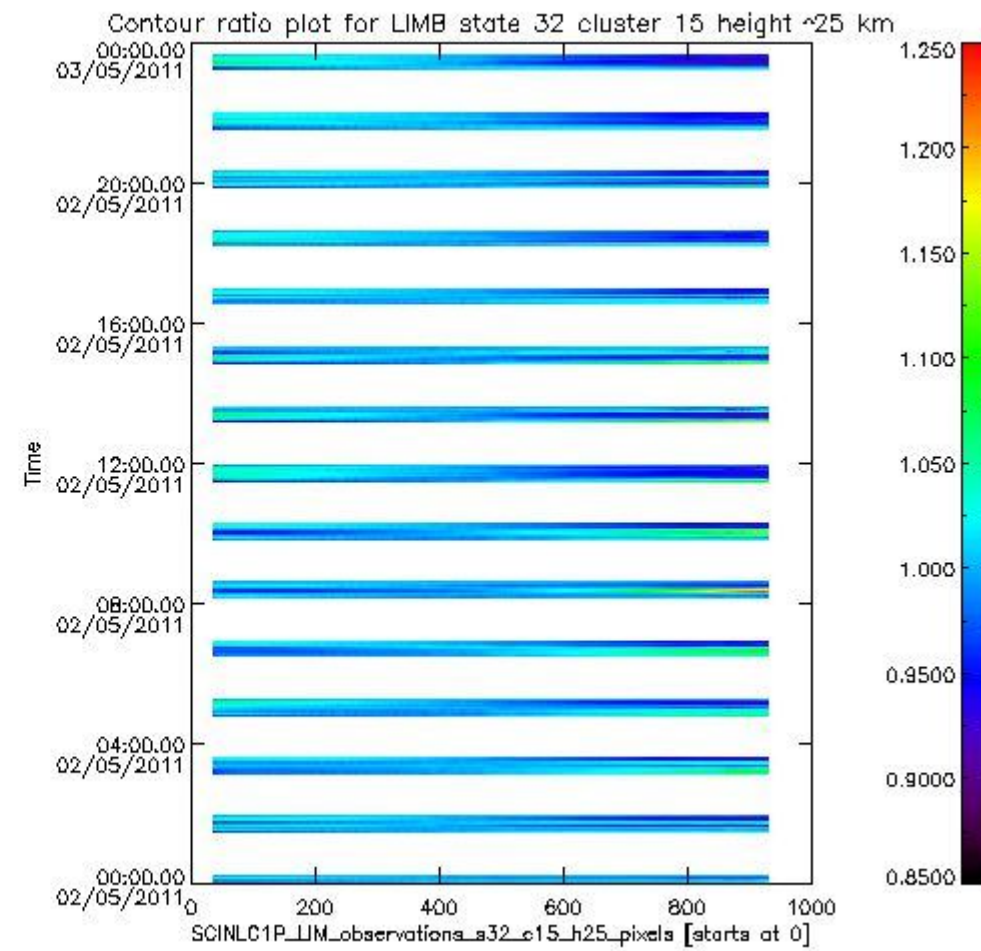
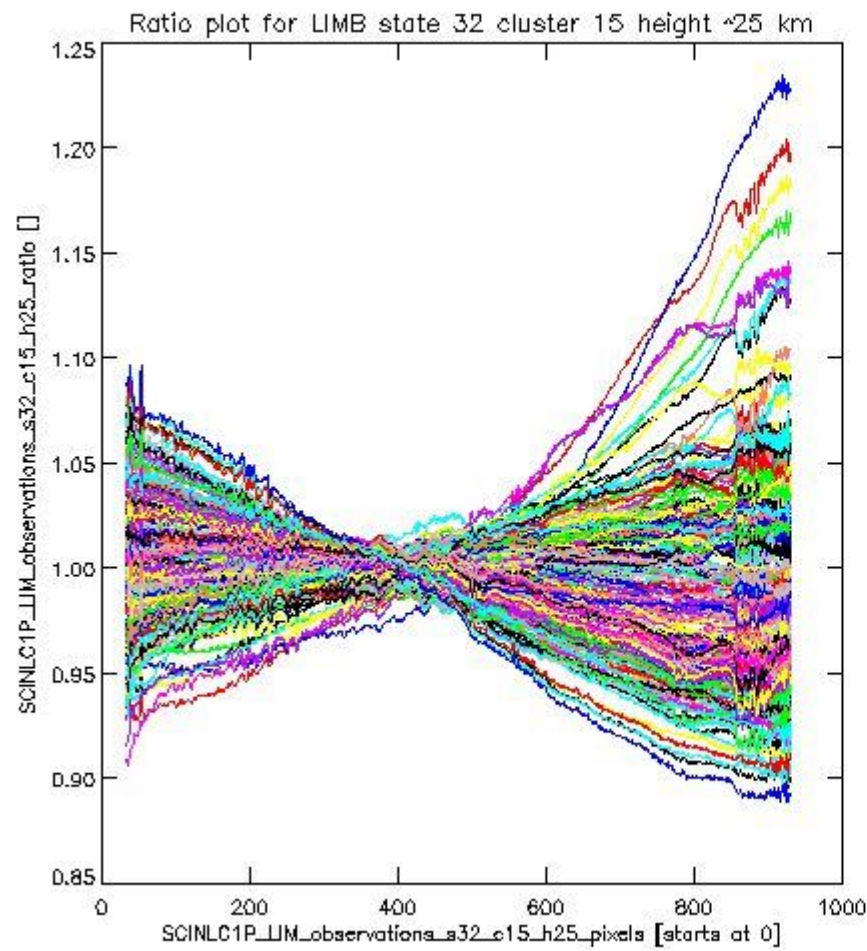
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_17.PNG

**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	02MAY2011 00:01:55.337
Start time of last sample	02MAY2011 23:37:23.126
Reference period start time	02APR2011 01:29:59.233
Reference period stop time	30APR2011 23:11:55.463
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



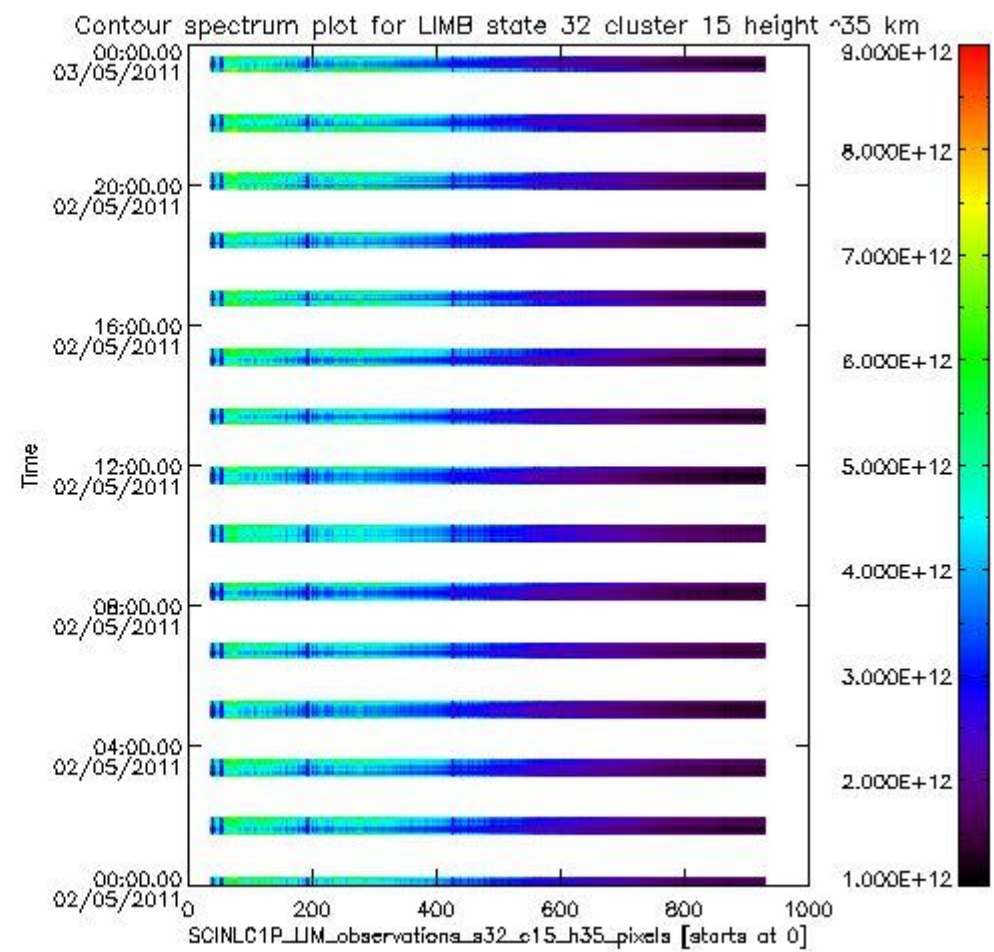
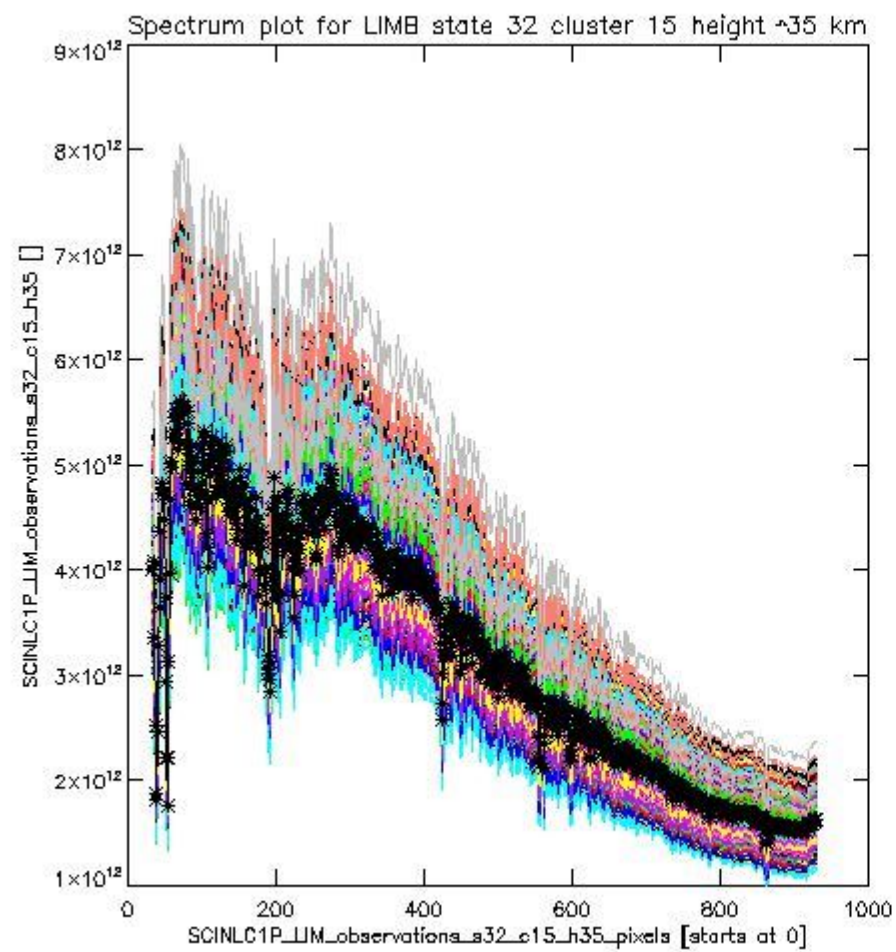
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_18.PNG

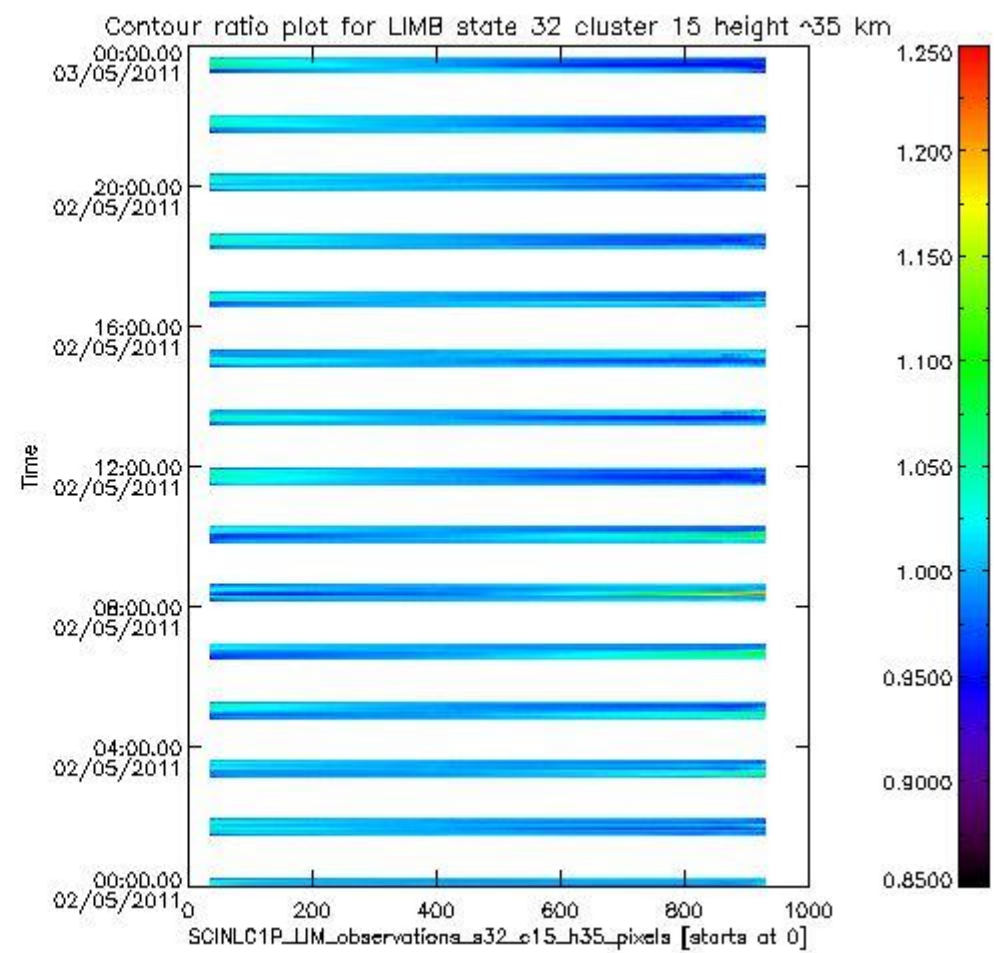
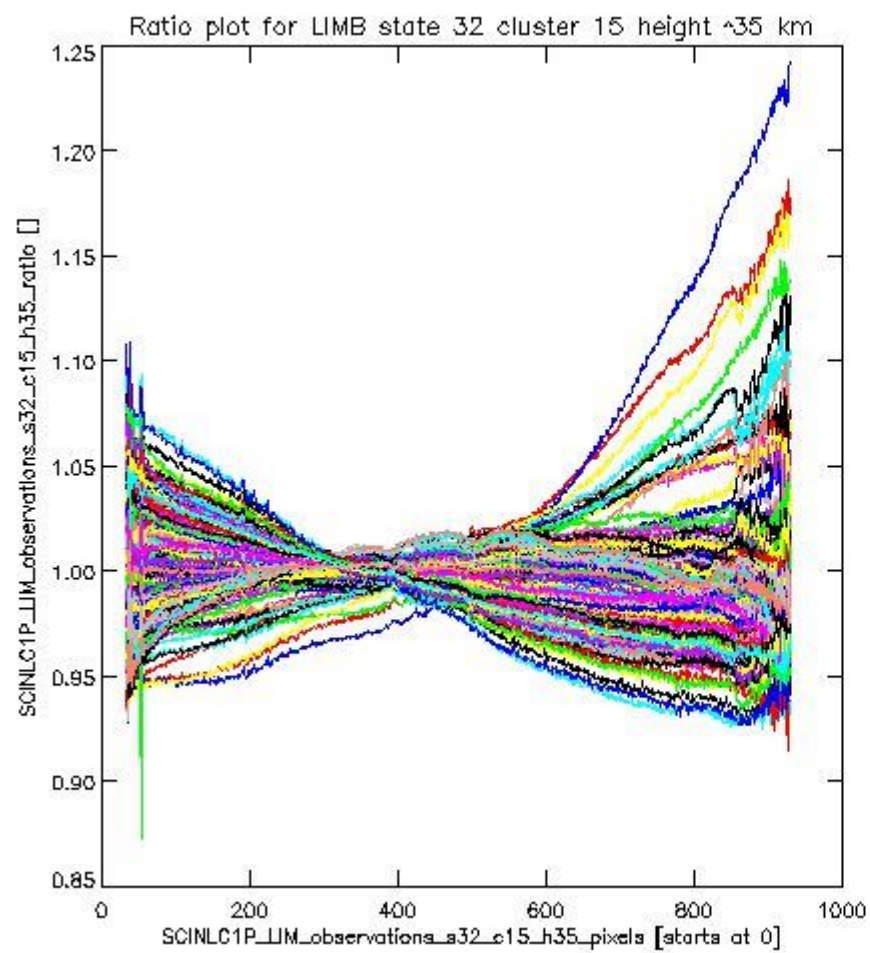


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110502\_19.PNG

**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	02MAY2011 00:01:55.337
Start time of last sample	02MAY2011 23:37:23.126
Reference period start time	02APR2011 01:29:59.233
Reference period stop time	30APR2011 23:11:55.463
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\_20110502\_21.PNG

