

# 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	16MAY2011 14:47:50
Data source version	SCIA/7.04-U
Processing scope for products	22APR2011 00:00:00 to 23APR2011 00:00:00
Start time of first product within scope	21APR2011 22:55:58
Stop time of last product within scope	23APR2011 01:09:52
Total number of level 1 products	16
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	22APR2011 01:09:23.356	22APR2011 23:01:25.905
1	NADIR	07	09	N/A	22APR2011 01:09:23.356	22APR2011 23:01:25.905
2	NADIR	07	15	N/A	22APR2011 01:09:23.356	22APR2011 23:01:25.905
3	NADIR	07	24	N/A	22APR2011 01:09:23.356	22APR2011 23:01:25.905
4	NADIR	07	55	N/A	22APR2011 01:09:23.356	22APR2011 23:01:25.905
5	LIMB	32	09	~19 km	22APR2011 00:54:09.977	22APR2011 23:04:37.202
6	LIMB	32	09	~22 km	22APR2011 00:54:09.977	22APR2011 23:04:37.202
7	LIMB	32	09	~25 km	22APR2011 00:54:09.977	22APR2011 23:04:37.202
8	LIMB	32	15	~22 km	22APR2011 00:54:09.977	22APR2011 23:04:37.202
9	LIMB	32	15	~25 km	22APR2011 00:54:09.977	22APR2011 23:04:37.202
10	LIMB	32	15	~35 km	22APR2011 00:54:09.977	22APR2011 23:04:37.202

#### 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	#noproc	#cmlpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110421_224905_000059783101_00375_47803_0357.N1</a>	21APR2011 22:55:58	22APR2011 00:06:13	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110422_002847_000060413101_00376_47804_0359.N1</a>	22APR2011 00:36:12	22APR2011 01:46:41	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110422_020932_000059783101_00377_47805_0365.N1</a>	22APR2011 02:16:25	22APR2011 03:26:40	0	34	31	0	0	2	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110422_034914_000060413101_00378_47806_0366.N1</a>	22APR2011 03:56:39	22APR2011 05:07:08	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110422_052959_000059783101_00379_47807_0367.N1</a>	22APR2011 05:36:53	22APR2011 06:47:07	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110422_070941_000060413101_00380_47808_0369.N1</a>	22APR2011 07:17:06	22APR2011 08:27:35	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110422_085026_000059783101_00381_47809_0372.N1	22APR2011 08:57:20	22APR2011 10:07:35	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110422_103008_000060413101_00382_47810_0377.N1	22APR2011 10:37:34	22APR2011 11:48:03	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110422_121053_000059783101_00383_47811_0376.N1	22APR2011 12:17:47	22APR2011 13:28:02	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110422_135035_000060413101_00384_47812_0379.N1	22APR2011 13:58:01	22APR2011 15:08:30	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110422_153120_000059783101_00385_47813_0380.N1	22APR2011 15:38:14	22APR2011 16:48:29	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110422_171102_000060413101_00386_47814_0385.N1	22APR2011 17:18:28	22APR2011 18:29:09	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110422_185148_000059783101_00387_47815_0386.N1	22APR2011 18:58:42	22APR2011 20:09:08	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110422_203130_000060413101_00388_47816_0389.N1	22APR2011 20:38:56	22APR2011 21:49:25	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110422_221215_000059783101_00389_47817_0393.N1	22APR2011 22:19:09	22APR2011 23:29:24	0	35	31	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110422_235156_000060413101_00390_47818_0394.N1	22APR2011 23:59:23	23APR2011 01:09:52	0	36	30	0	0	1	0	0	

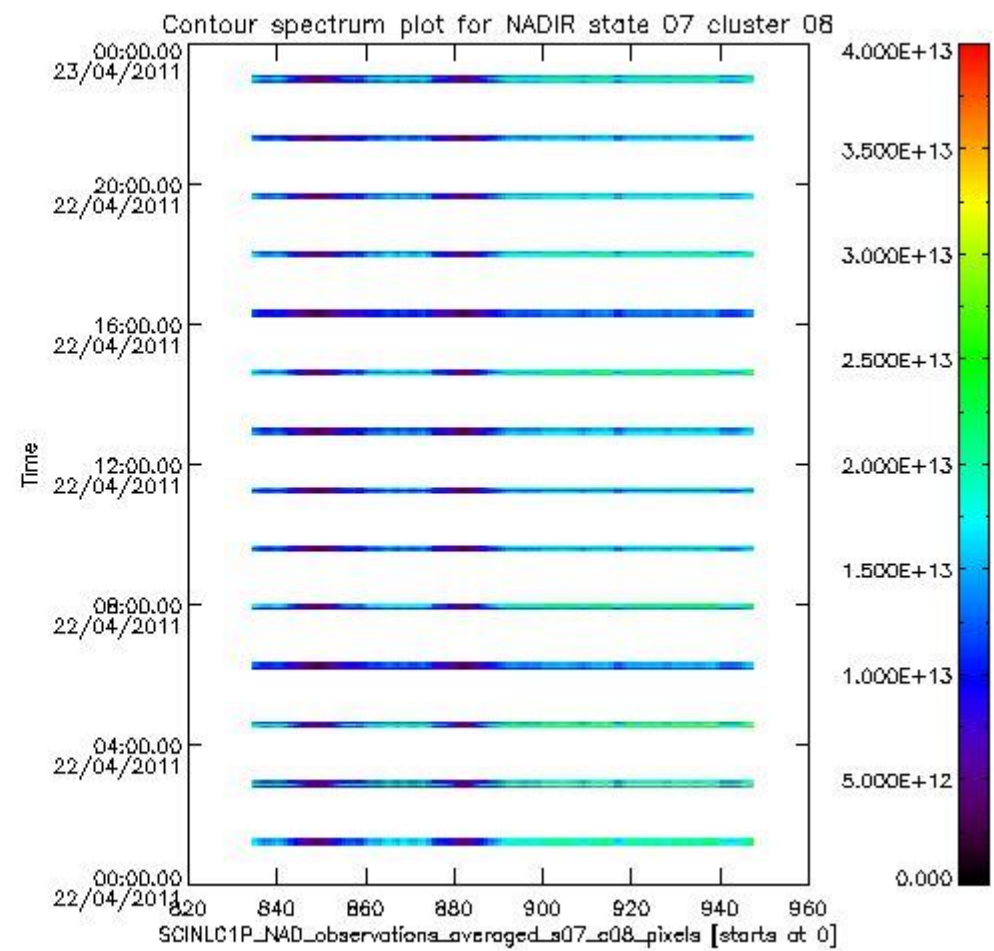
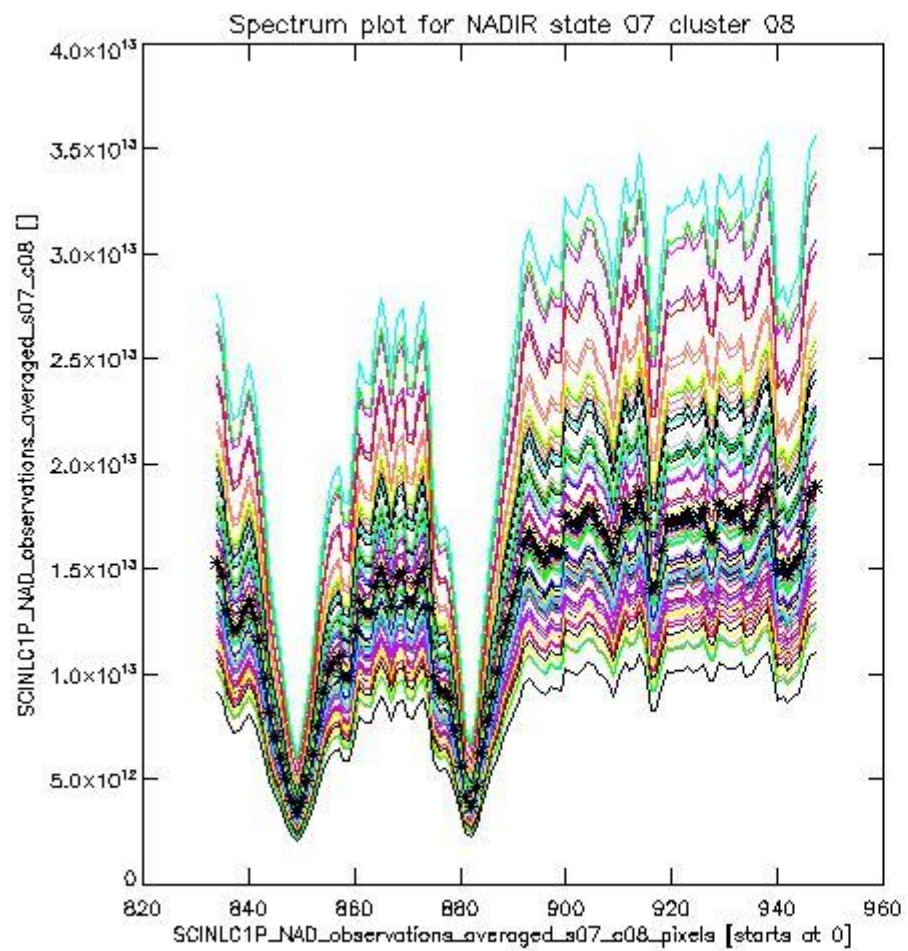
## 1.2 Source packet monitoring

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:

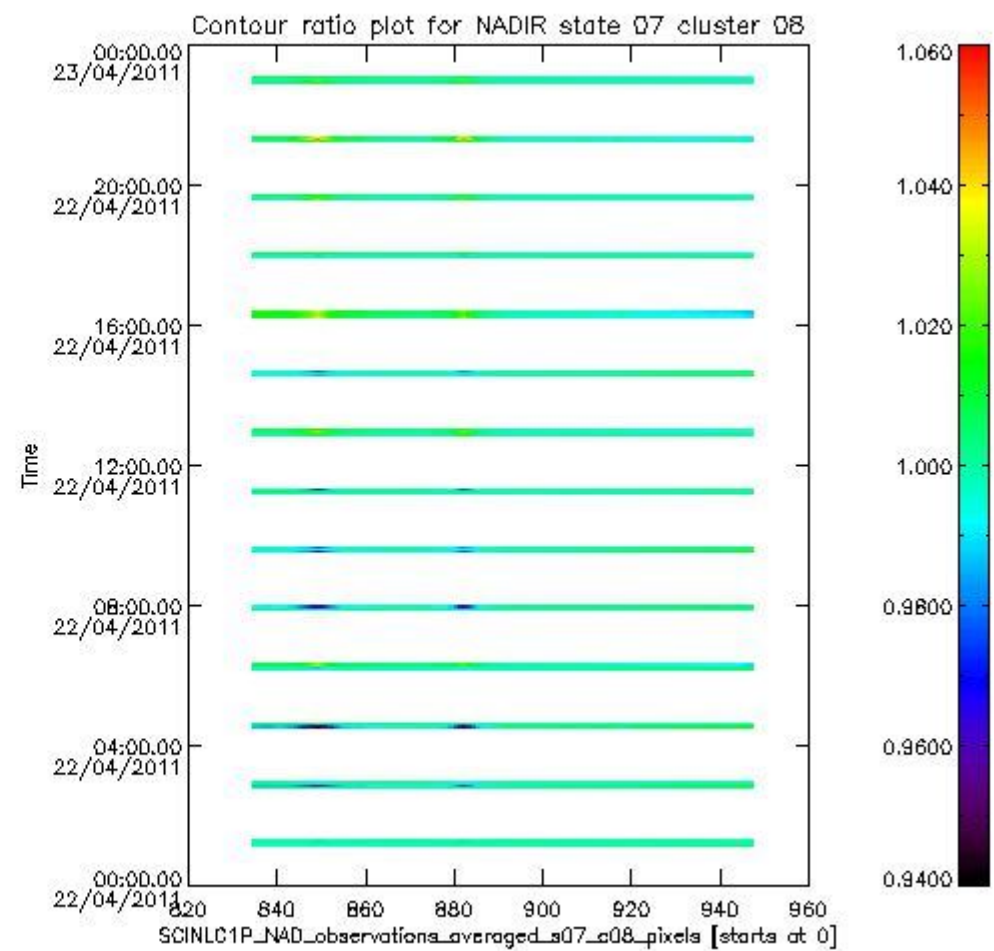
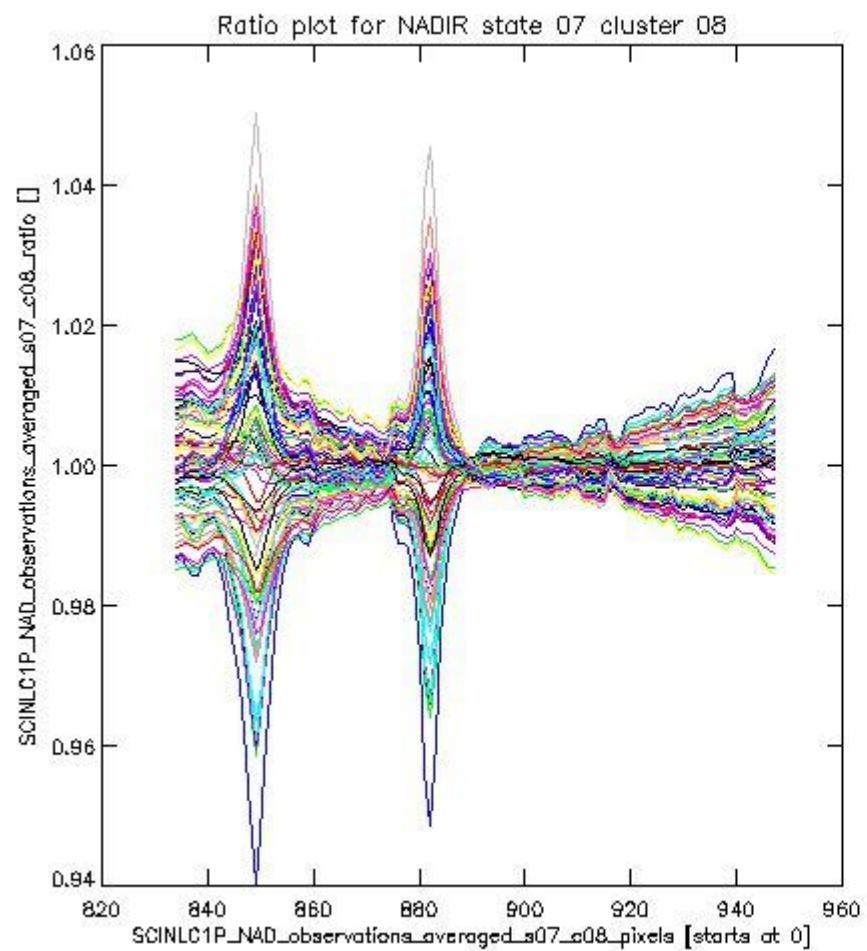
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	22APR2011 01:09:23.356
Start time of last sample	22APR2011 23:01:25.905
Reference period start time	22MAR2011 01:47:26.202
Reference period stop time	20APR2011 22:33:56.234
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



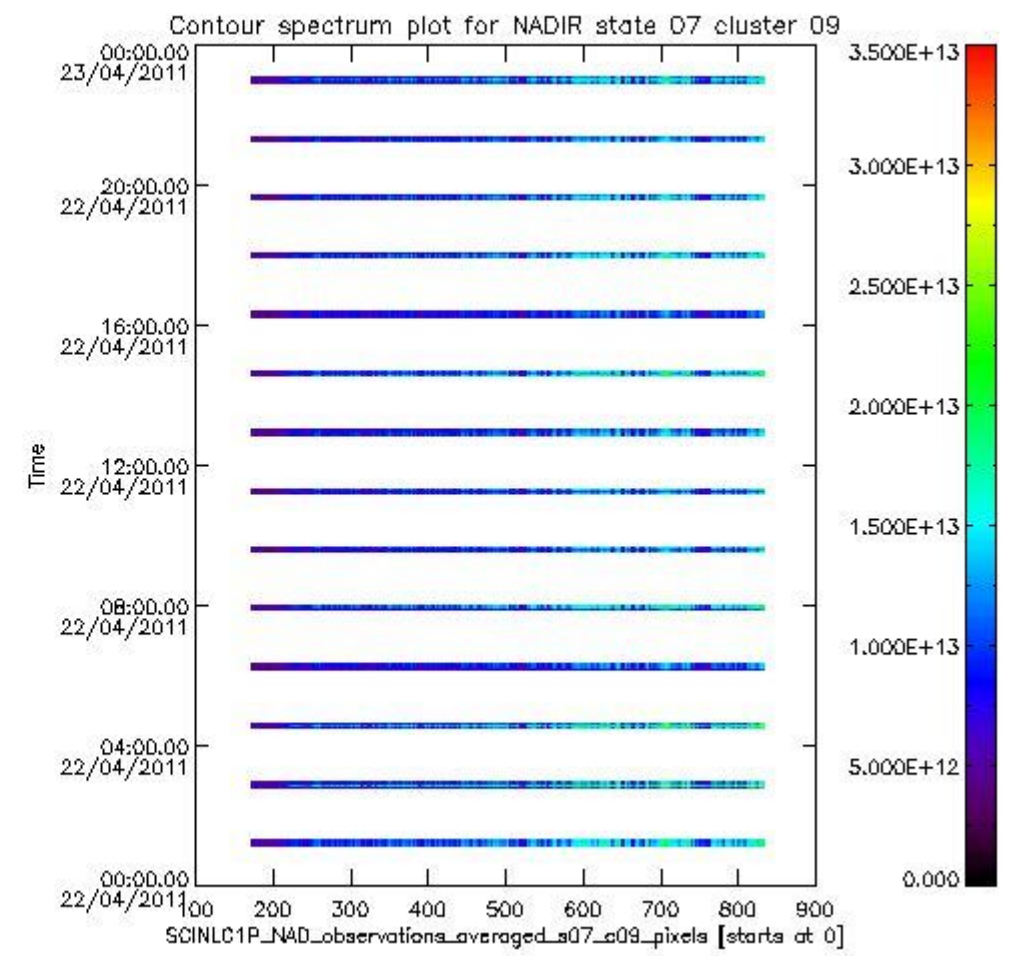
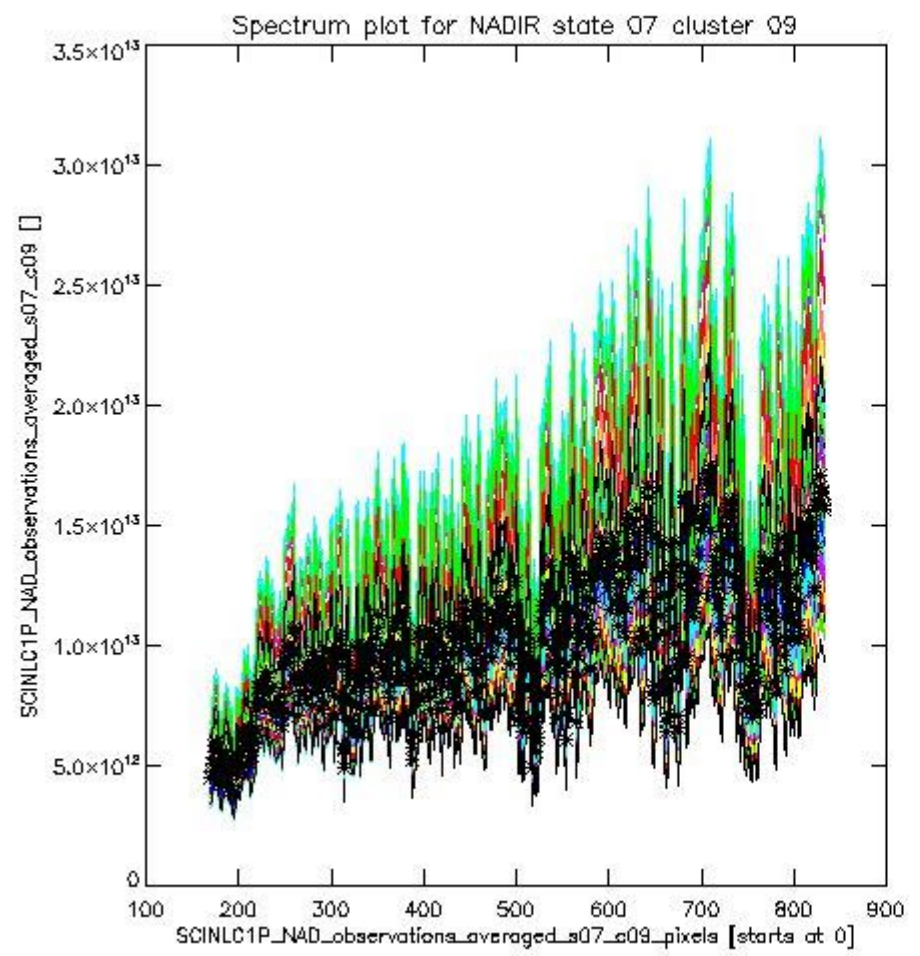
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_0.PNG



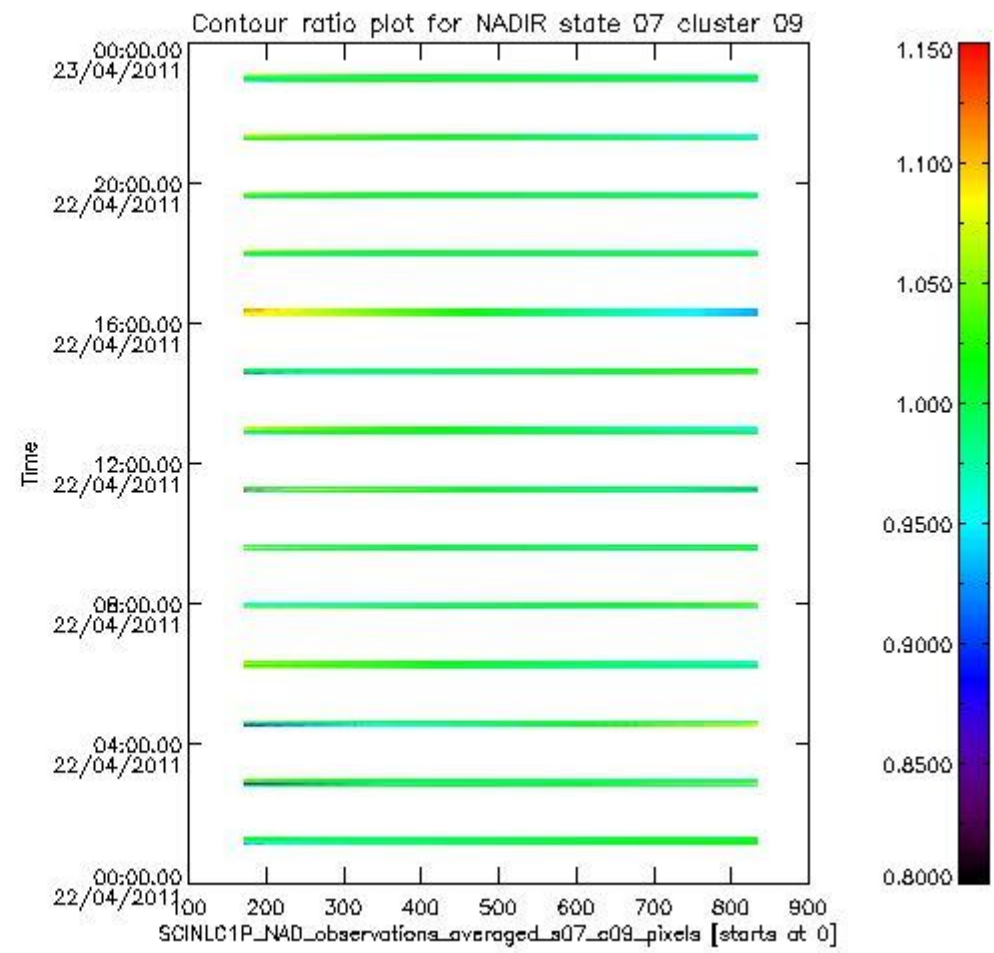
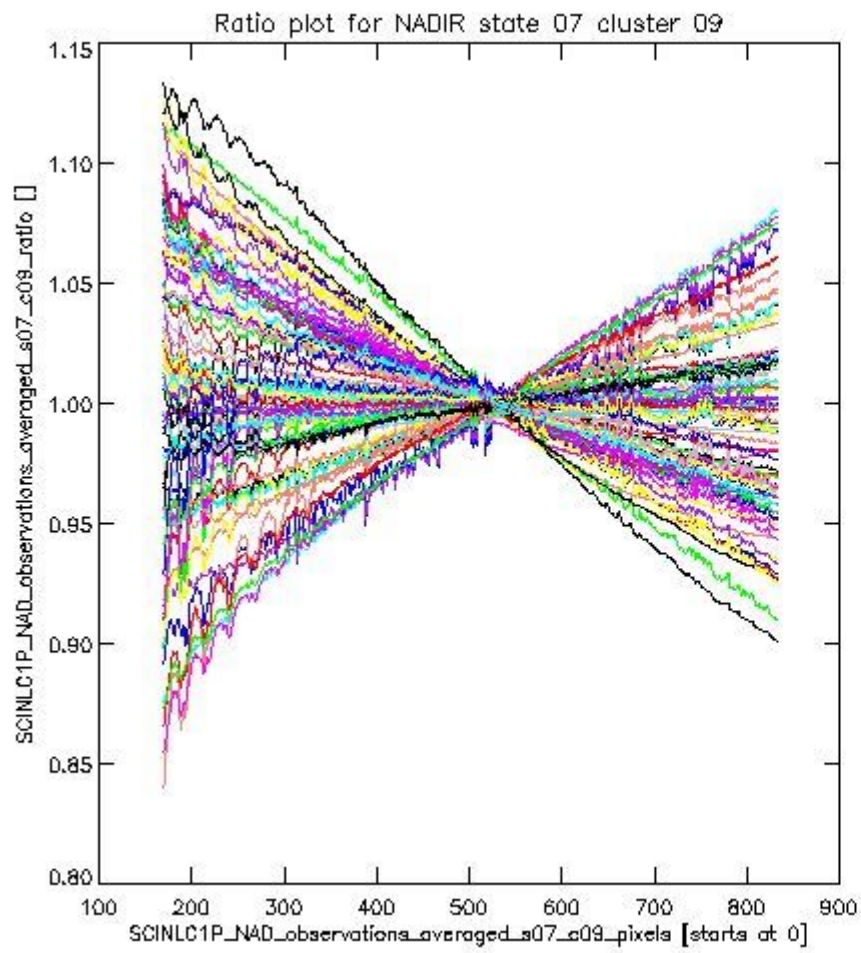
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_1.PNG

**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	22APR2011 01:09:23.356
Start time of last sample	22APR2011 23:01:25.905
Reference period start time	22MAR2011 01:47:26.202
Reference period stop time	20APR2011 22:33:56.234
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



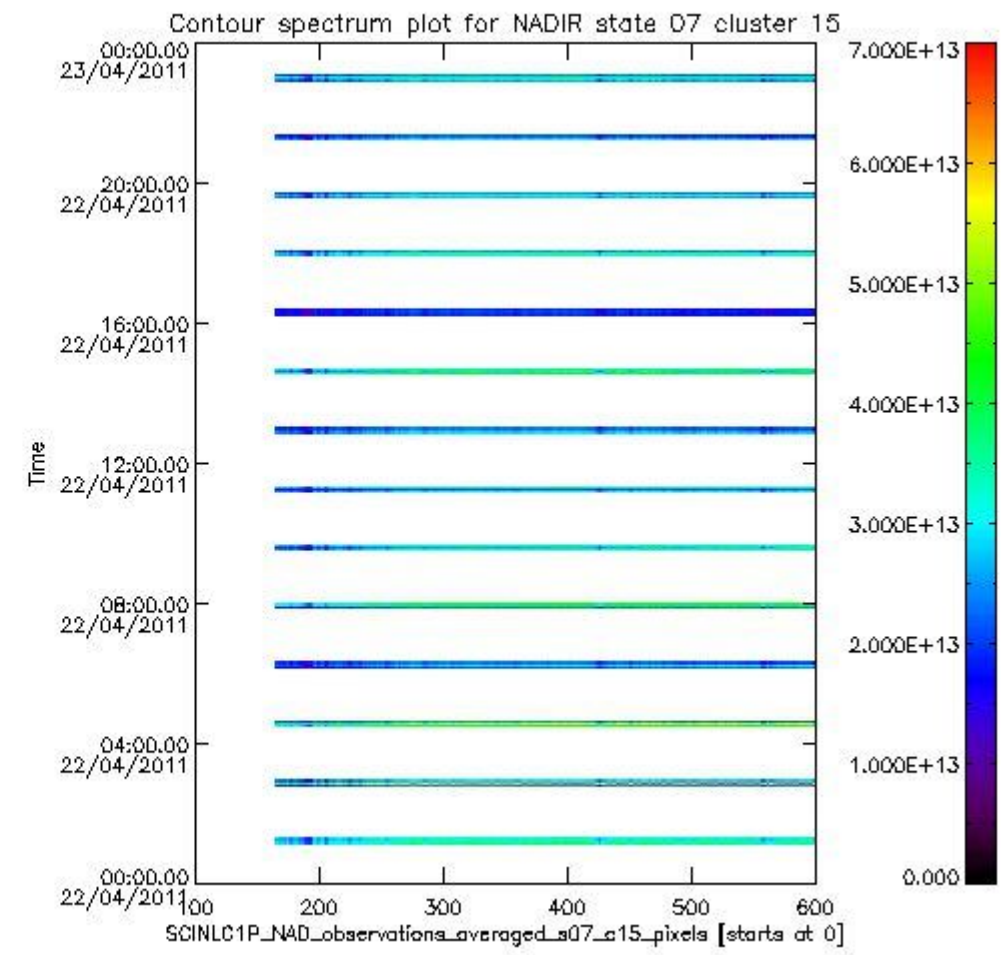
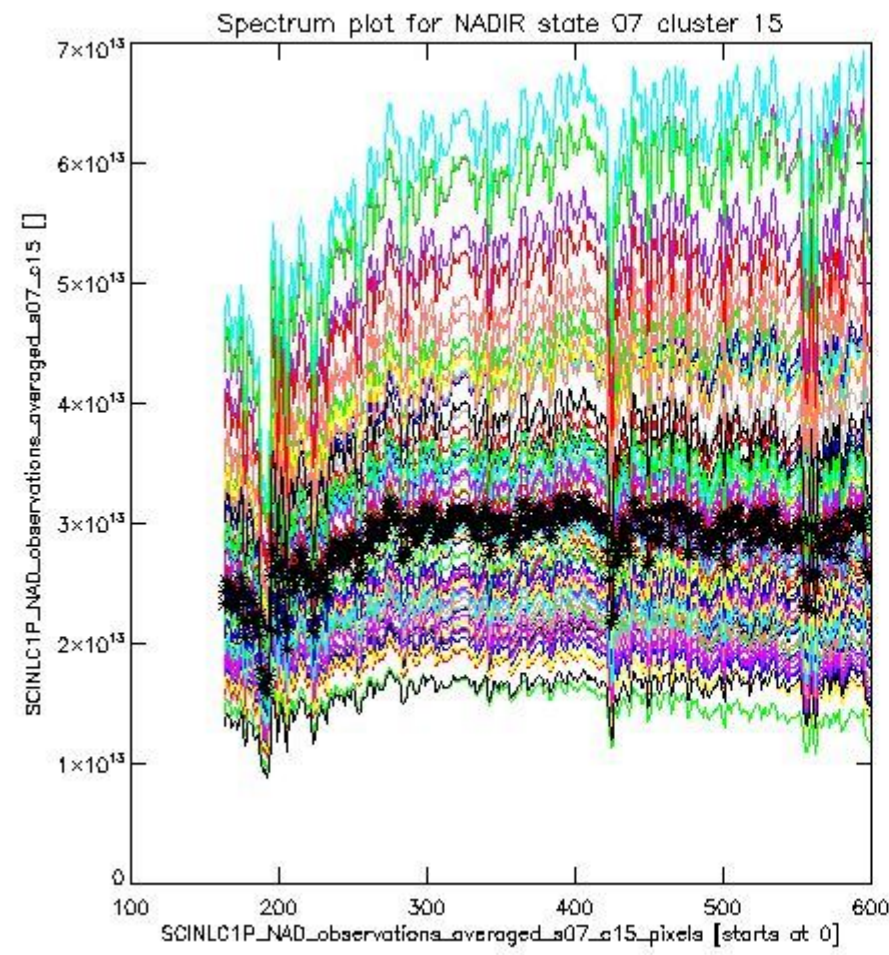
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_2.PNG



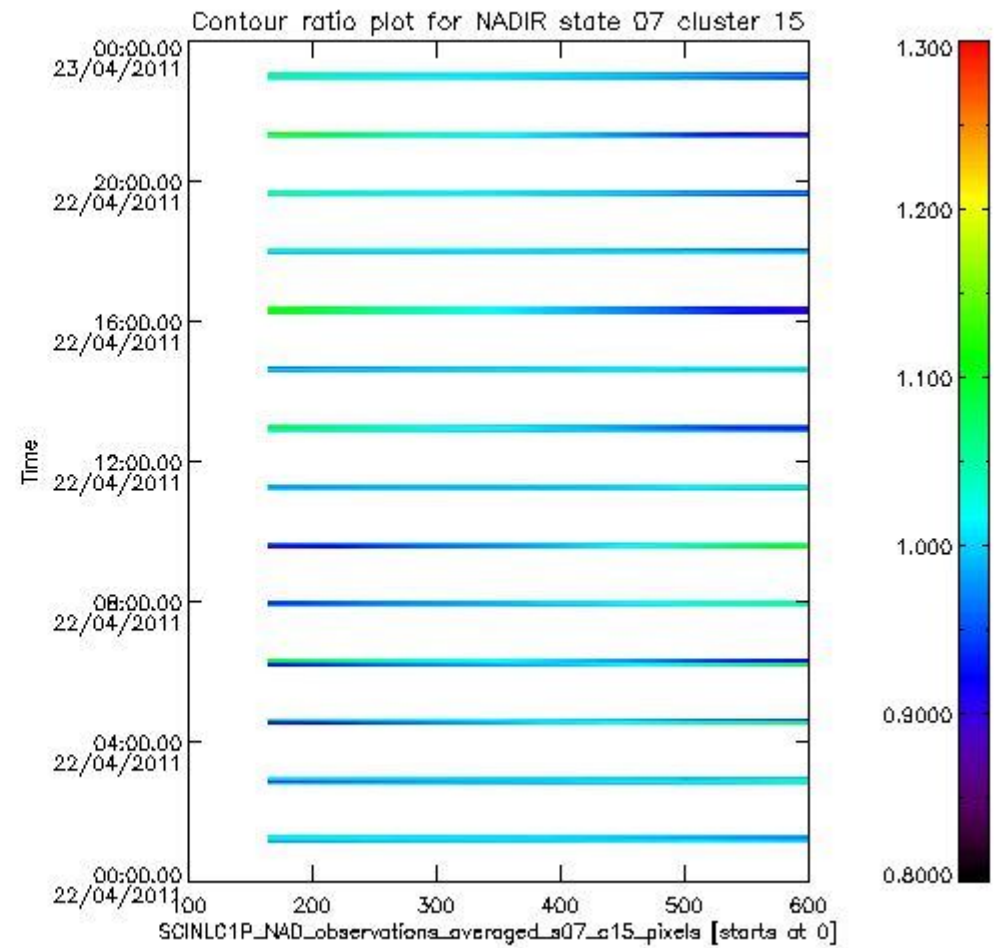
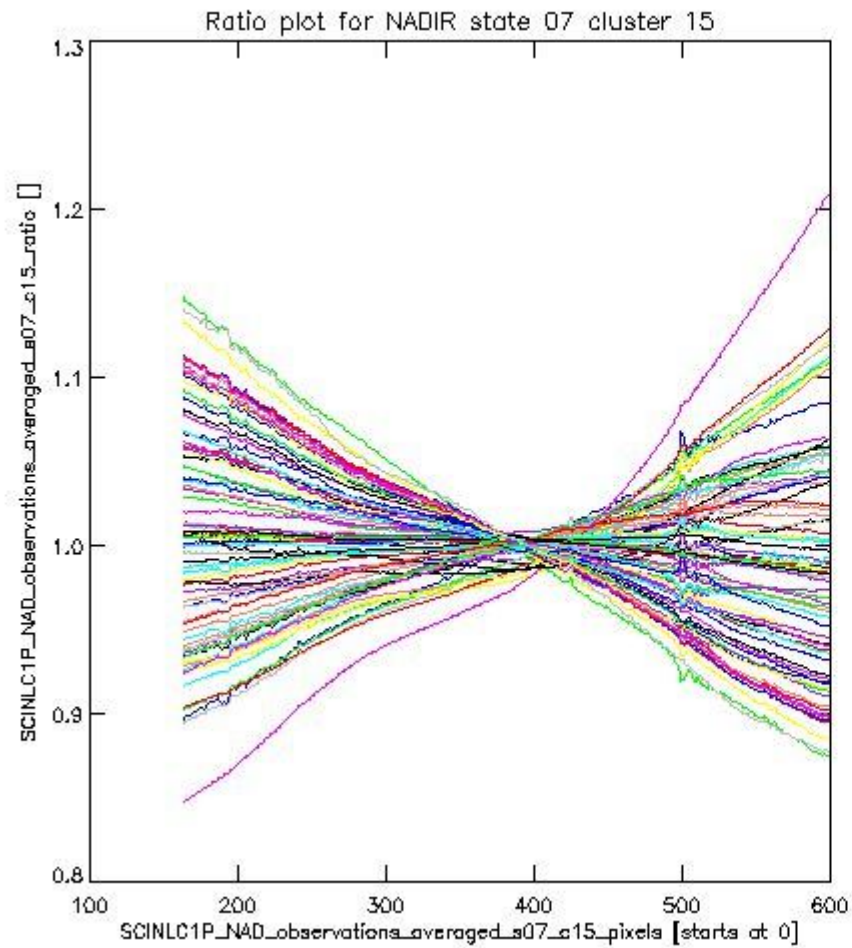
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_3.PNG

**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	22APR2011 01:09:23.356
Start time of last sample	22APR2011 23:01:25.905
Reference period start time	22MAR2011 01:47:26.202
Reference period stop time	20APR2011 22:33:56.234
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\_20110422\_4.PNG

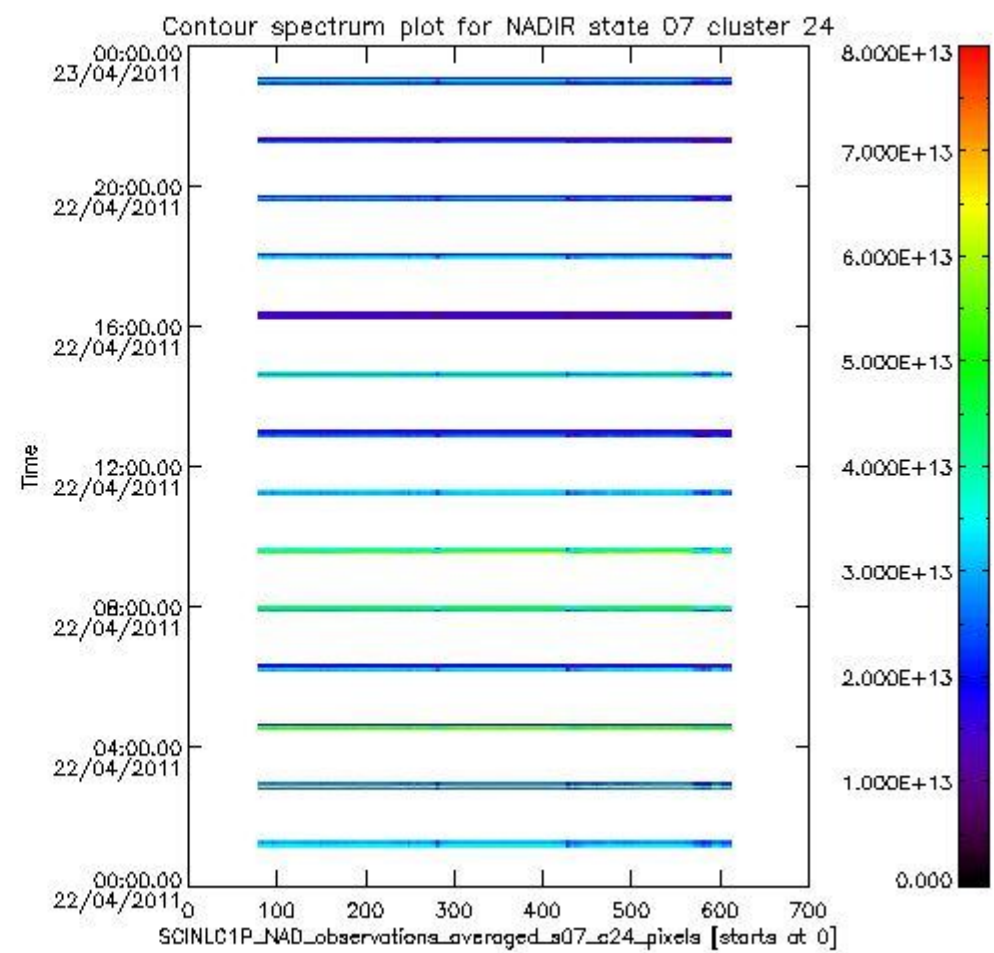
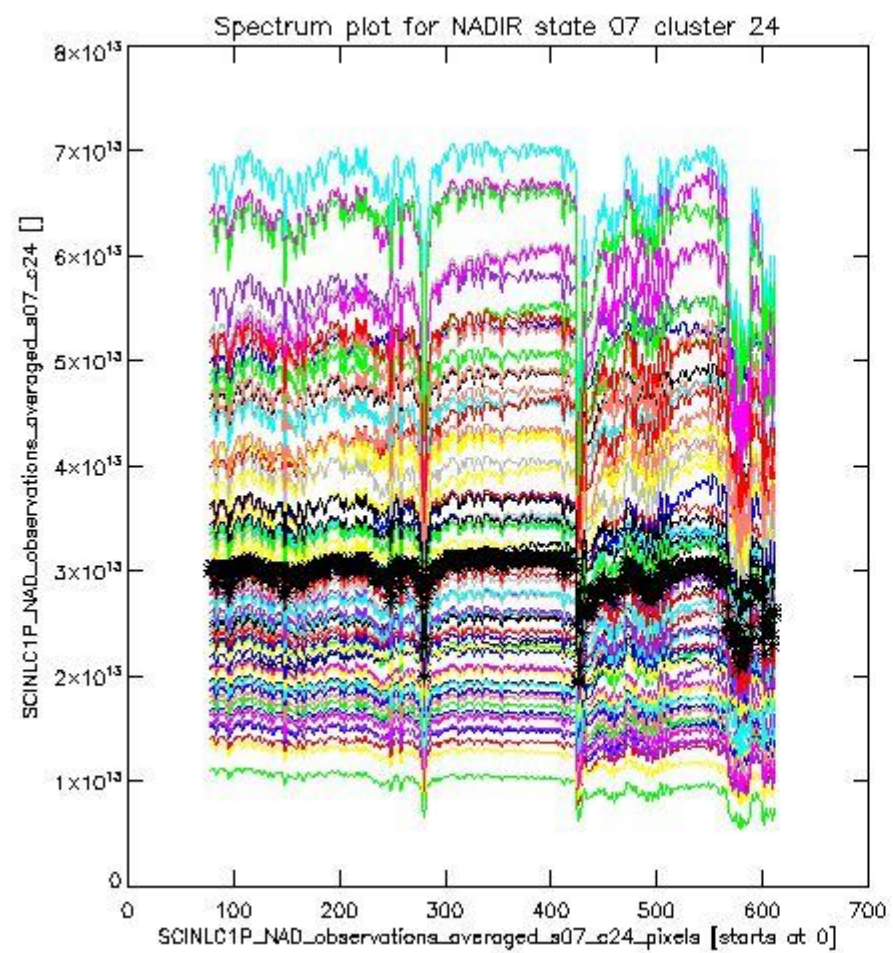


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_5.PNG

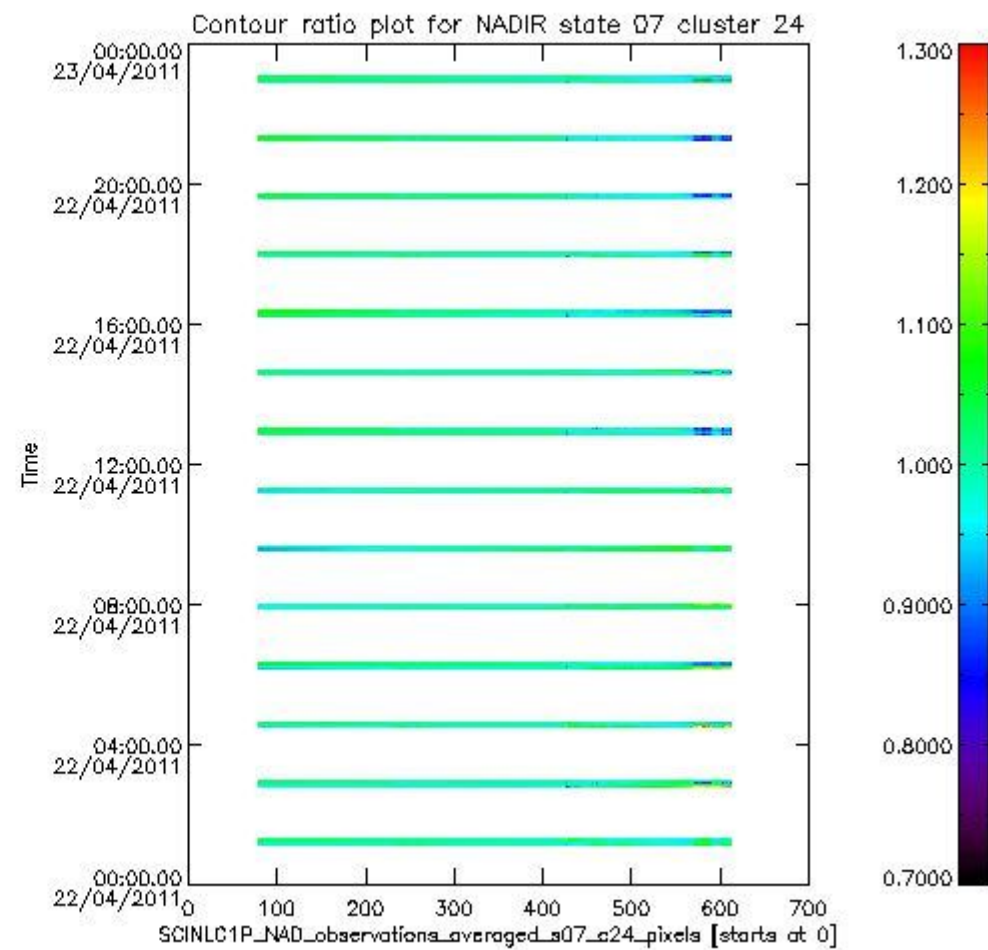
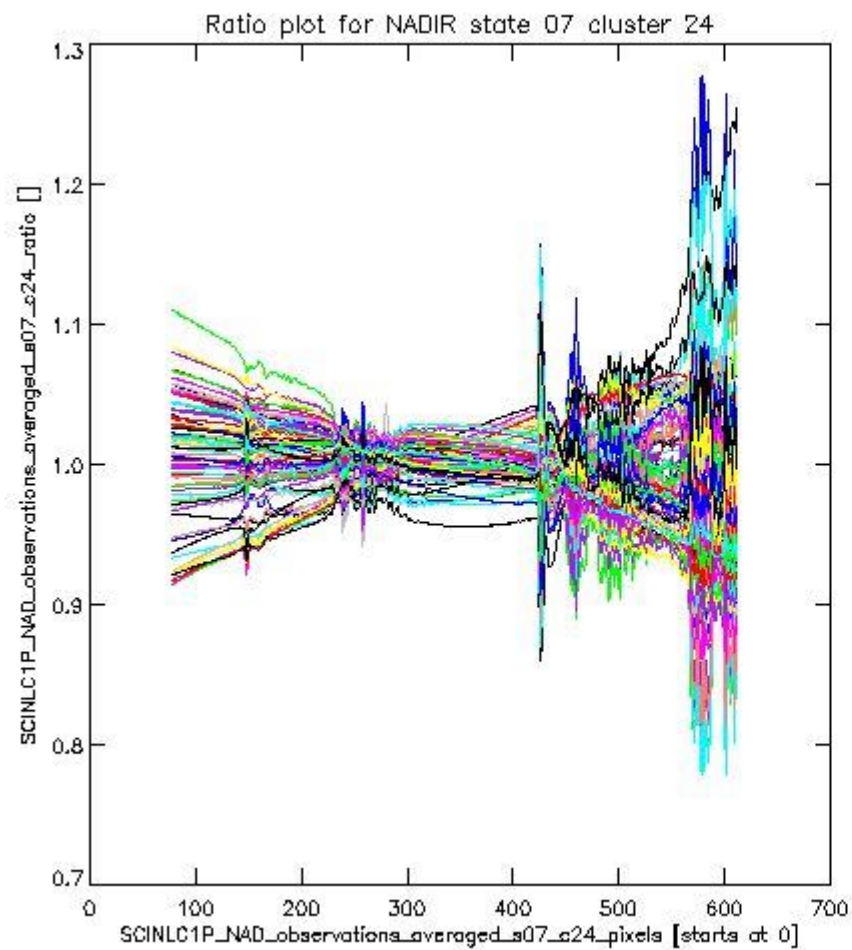
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	22APR2011 01:09:23.356
Start time of last sample	22APR2011 23:01:25.905
Reference period start time	22MAR2011 01:47:26.202
Reference period stop time	20APR2011 22:33:56.234
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612





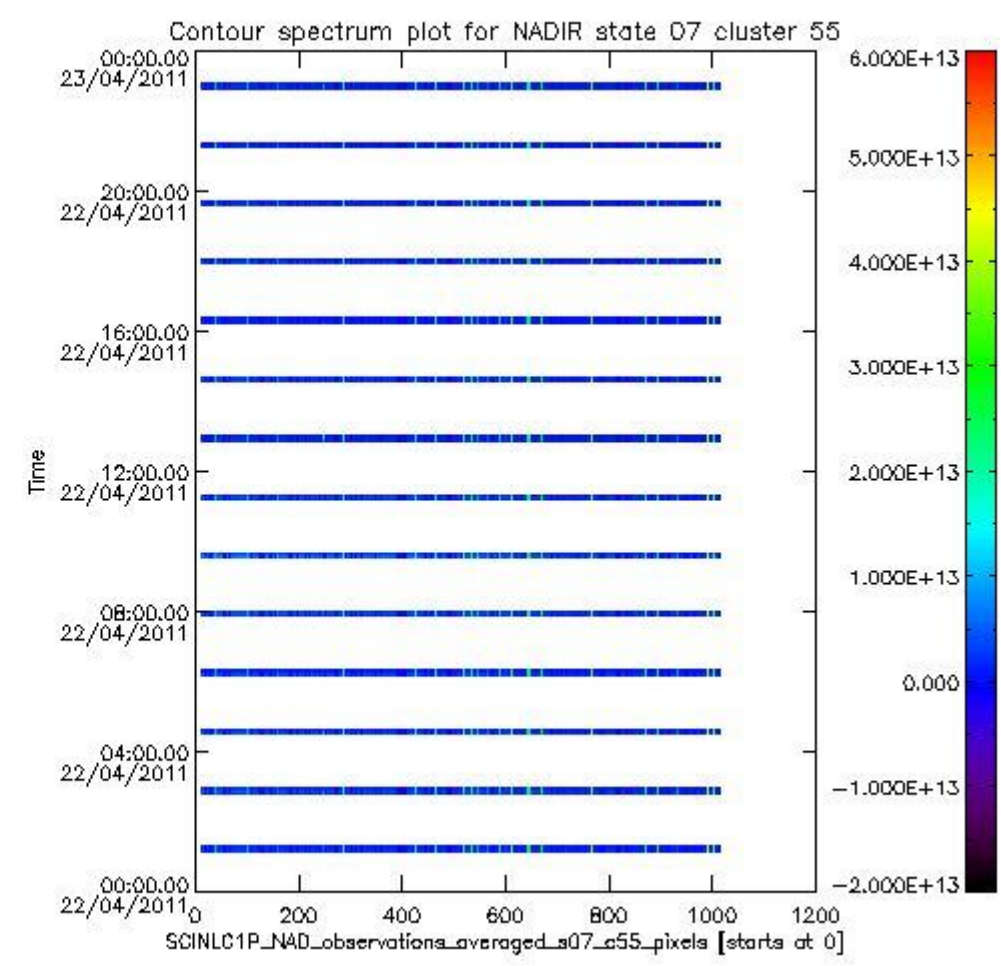
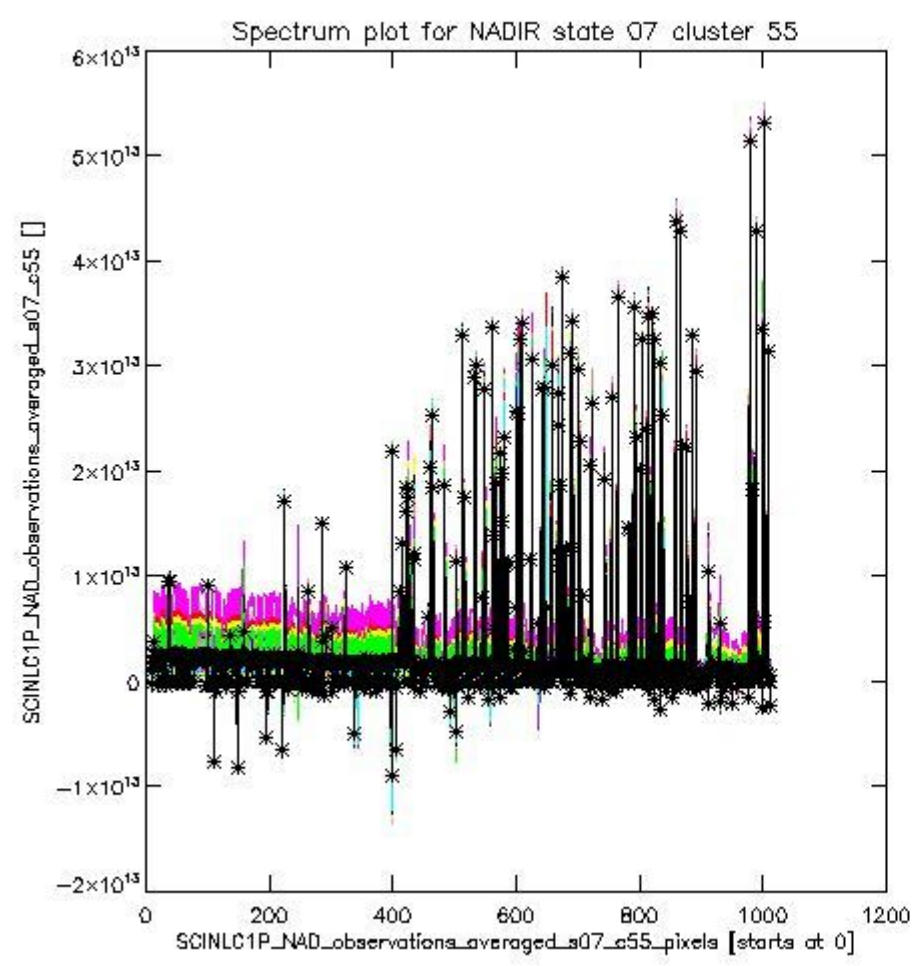
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_6.PNG



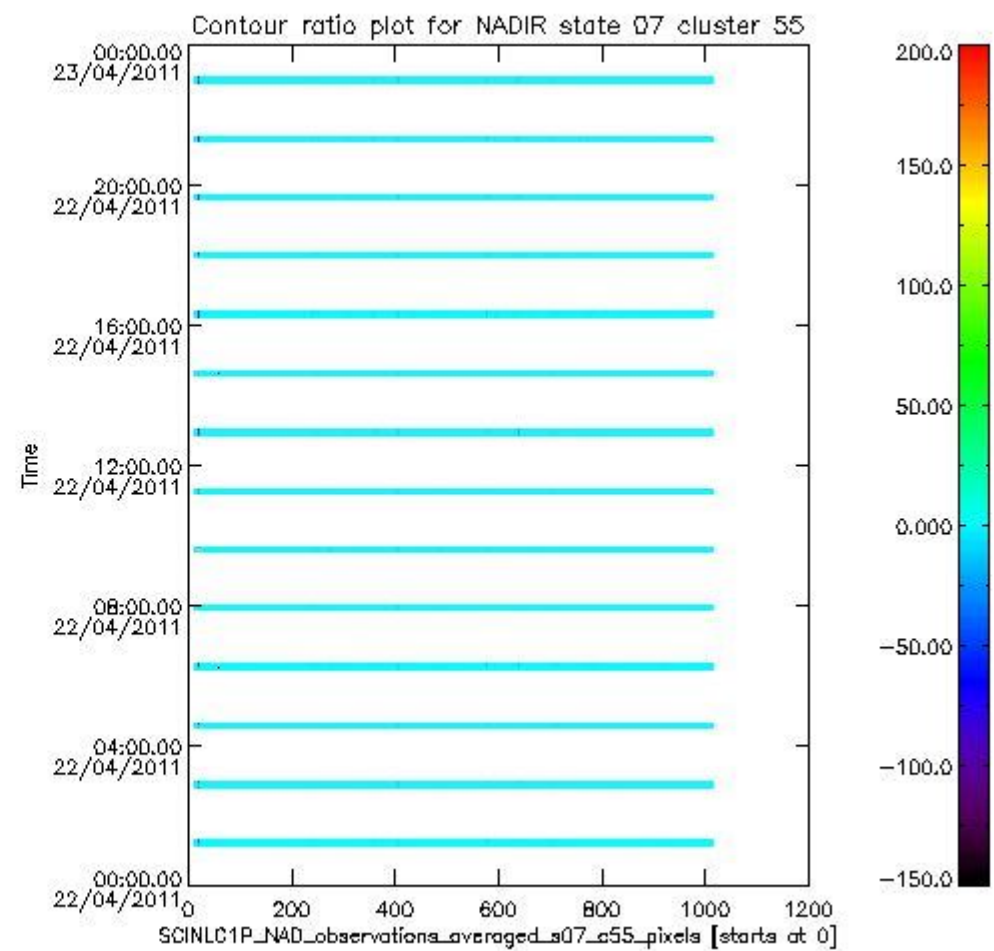
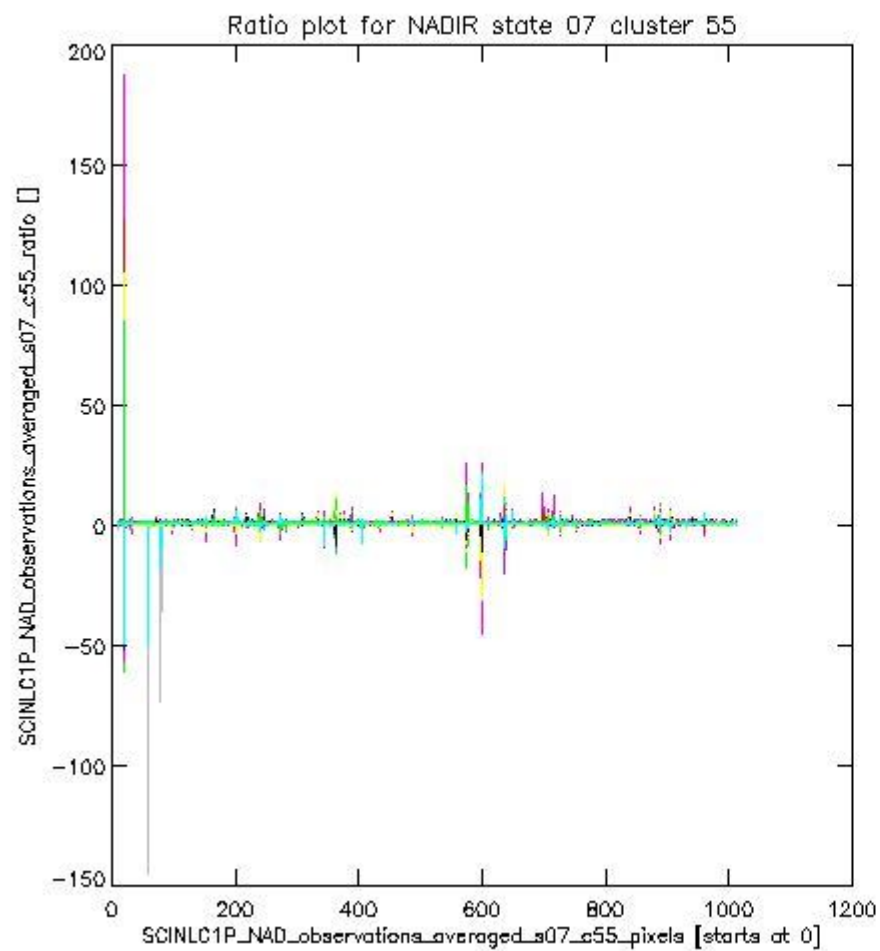
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_7.PNG

**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	22APR2011 01:09:23.356
Start time of last sample	22APR2011 23:01:25.905
Reference period start time	22MAR2011 01:47:26.202
Reference period stop time	20APR2011 22:33:56.234
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



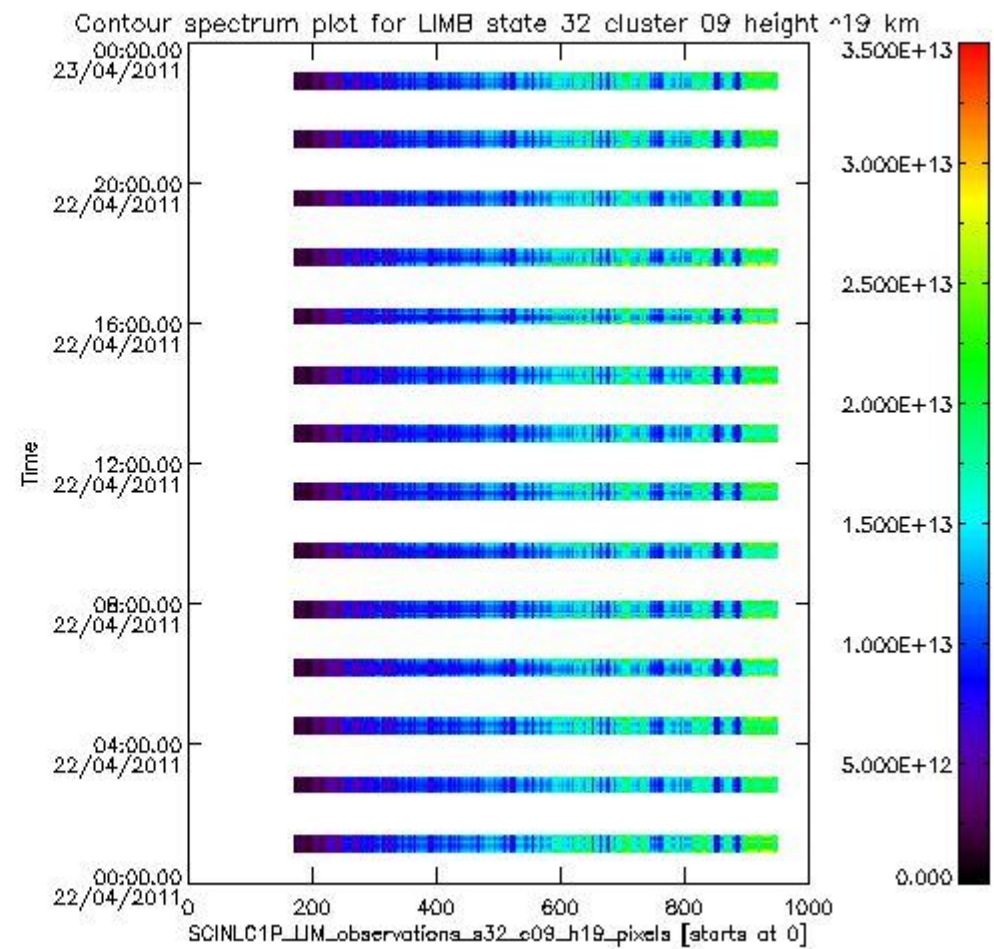
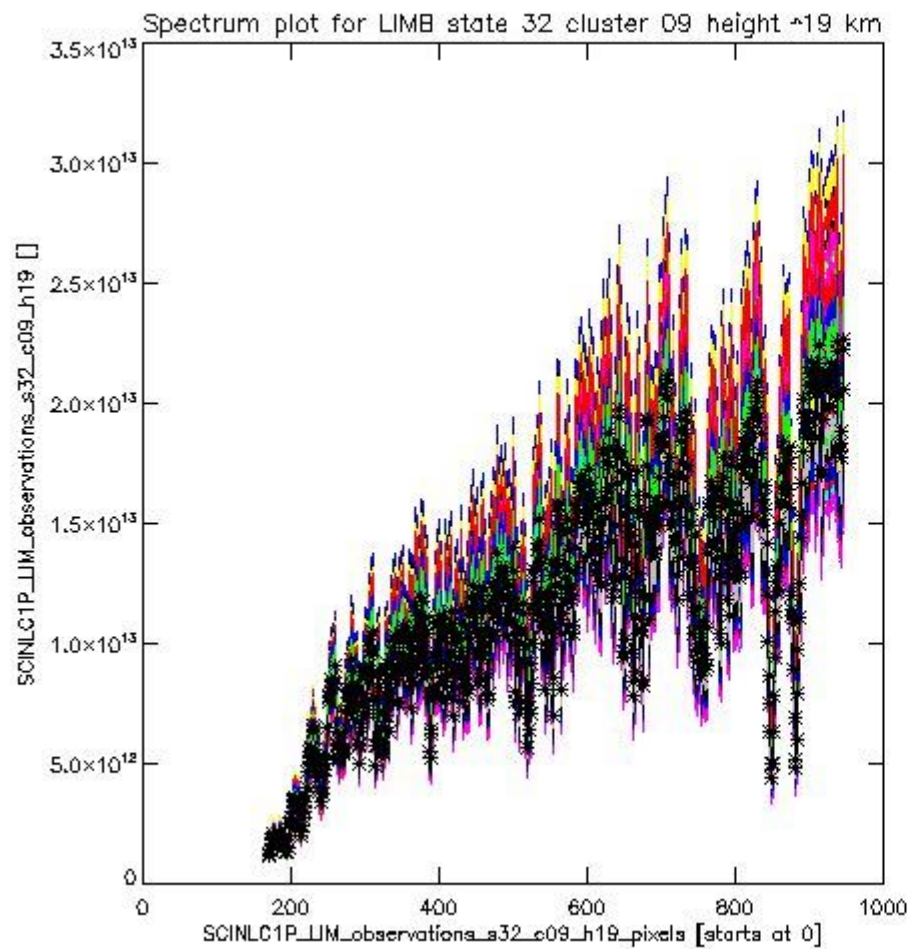
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_8.PNG



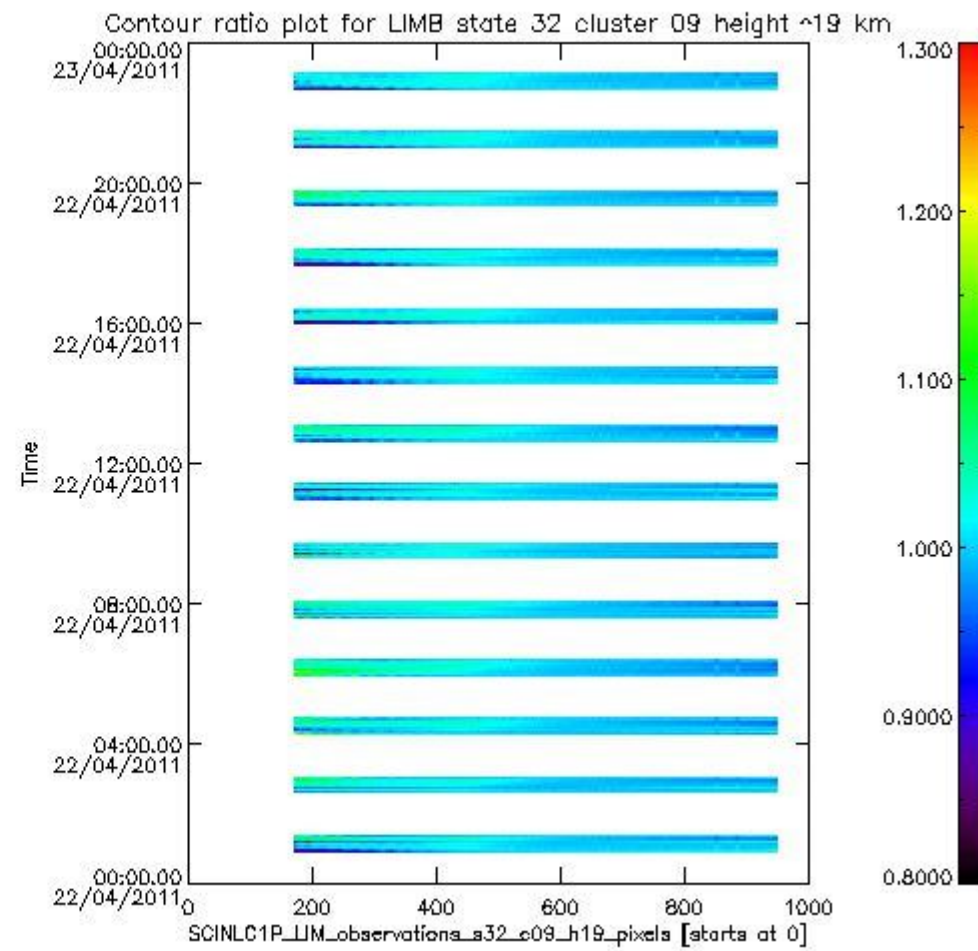
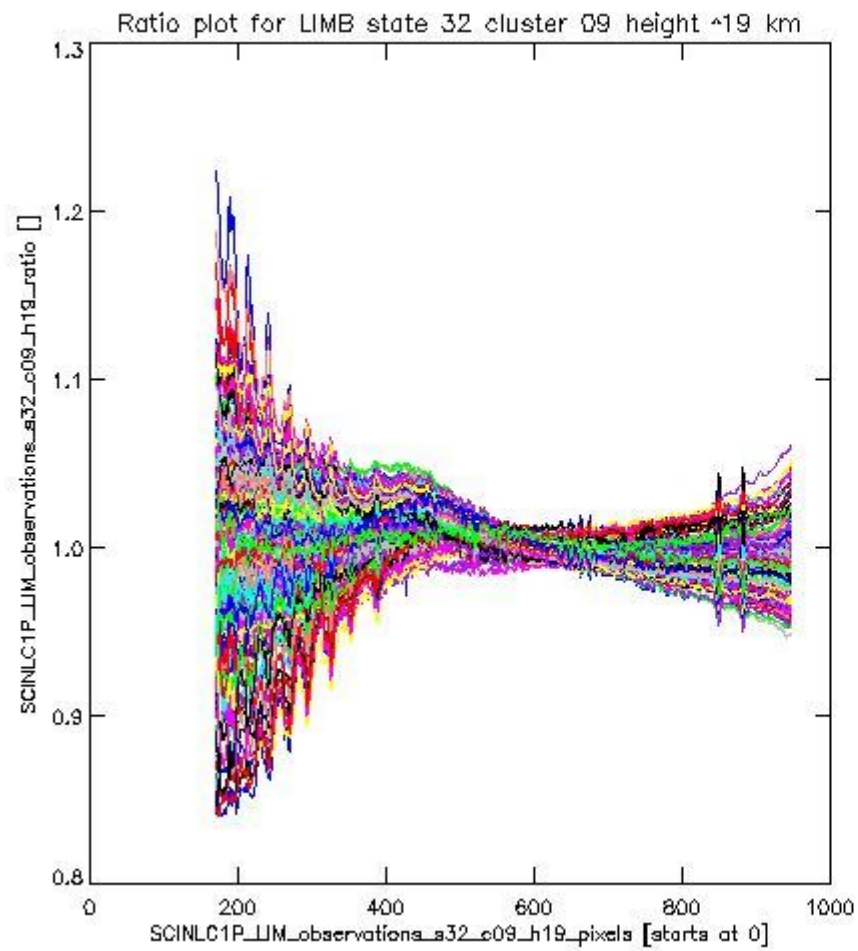
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_9.PNG

**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	22APR2011 00:54:09.977
Start time of last sample	22APR2011 23:04:37.202
Reference period start time	22MAR2011 01:34:15.565
Reference period stop time	20APR2011 23:59:50.618
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



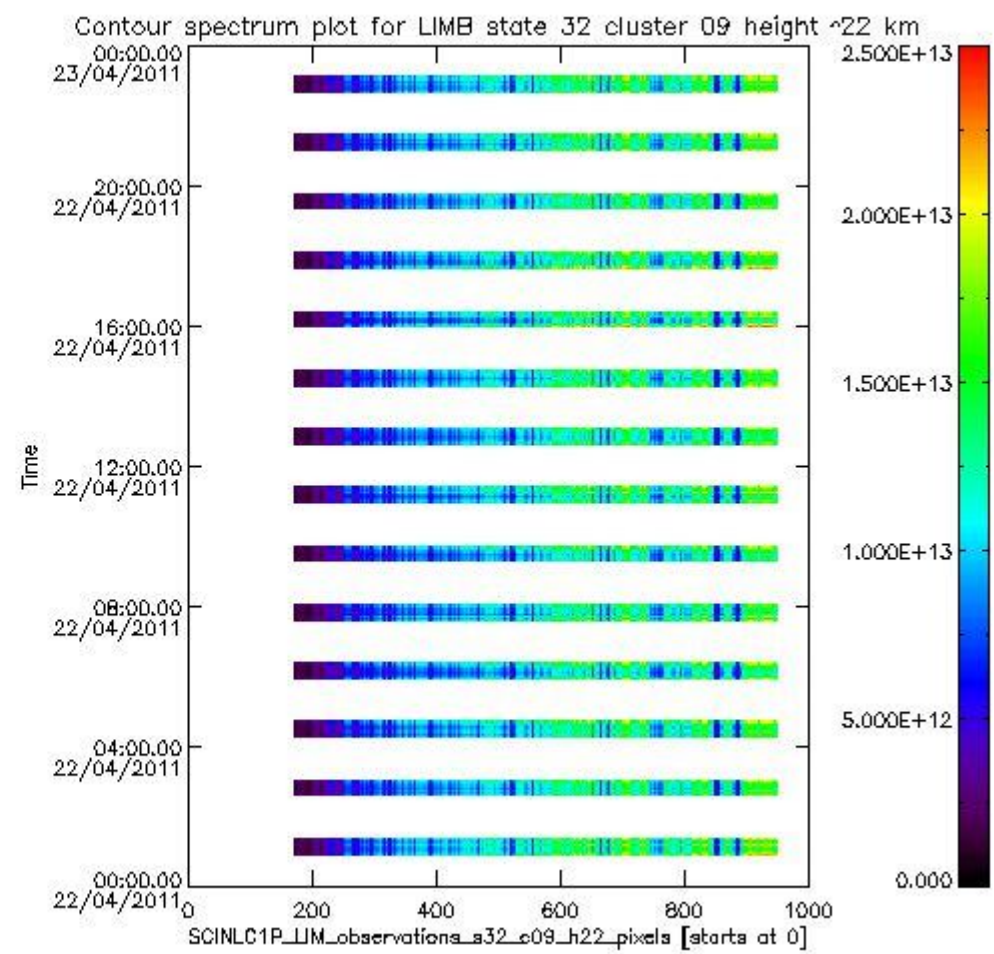
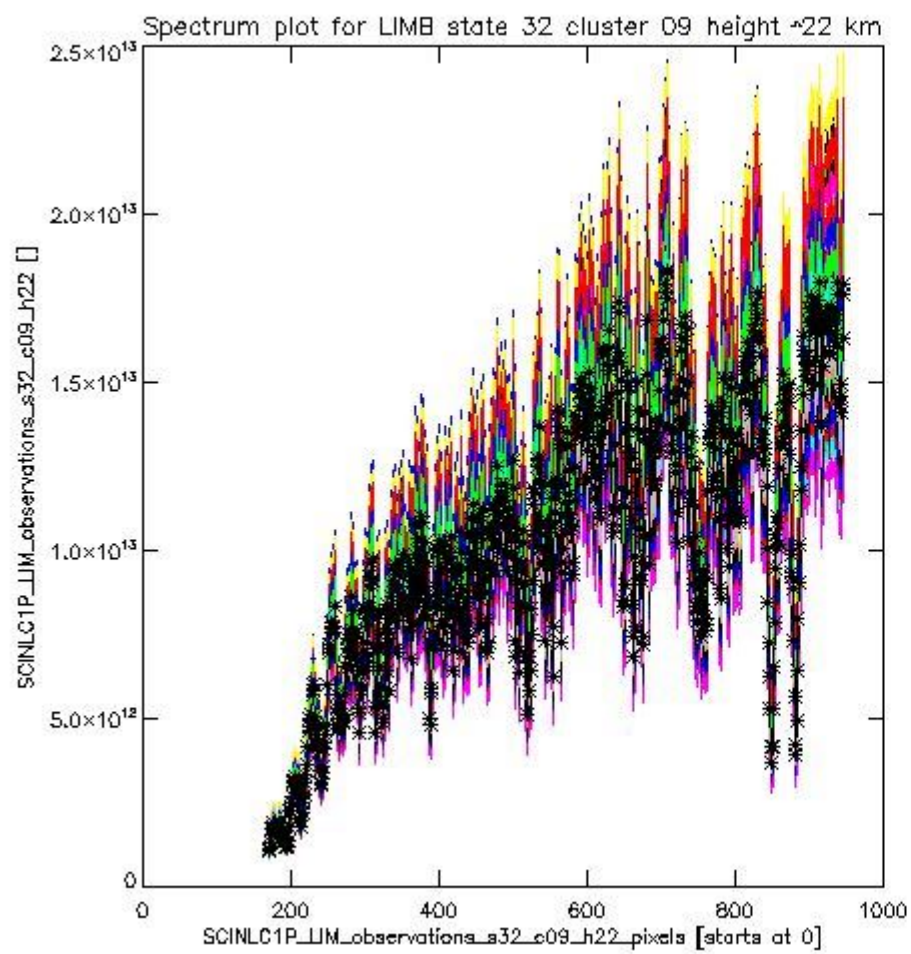
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_10.PNG



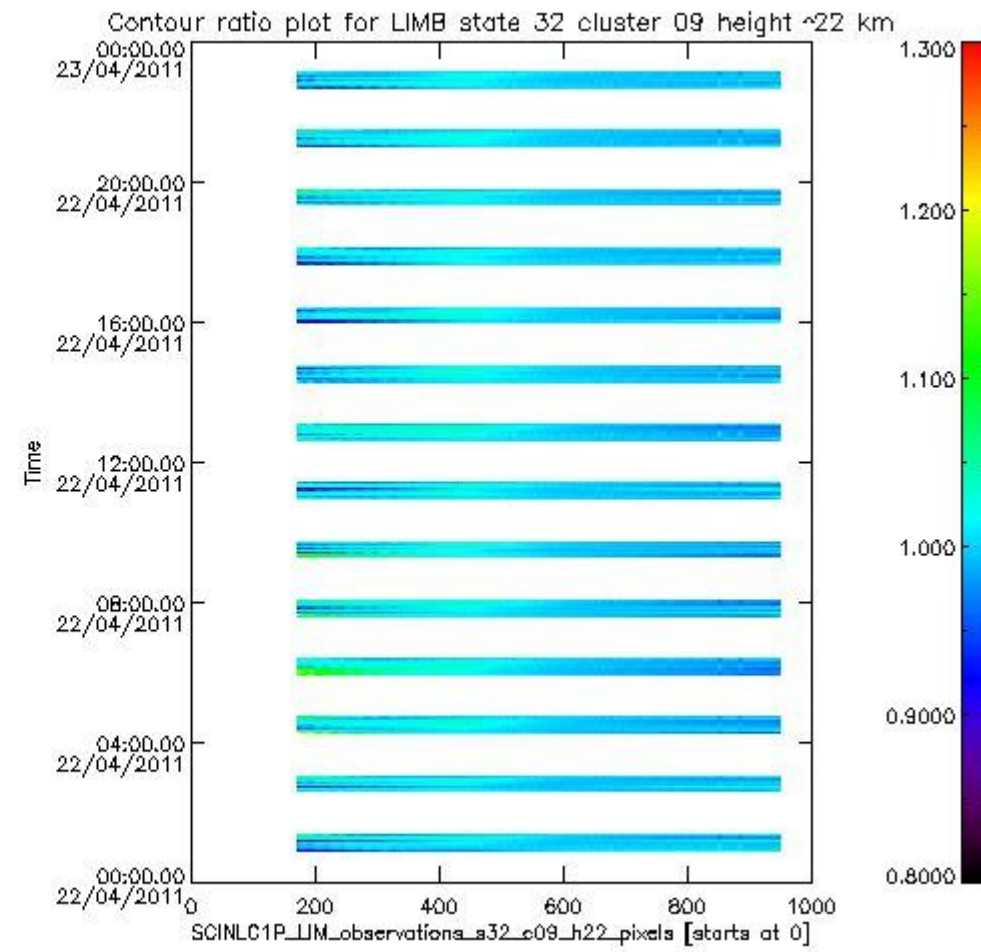
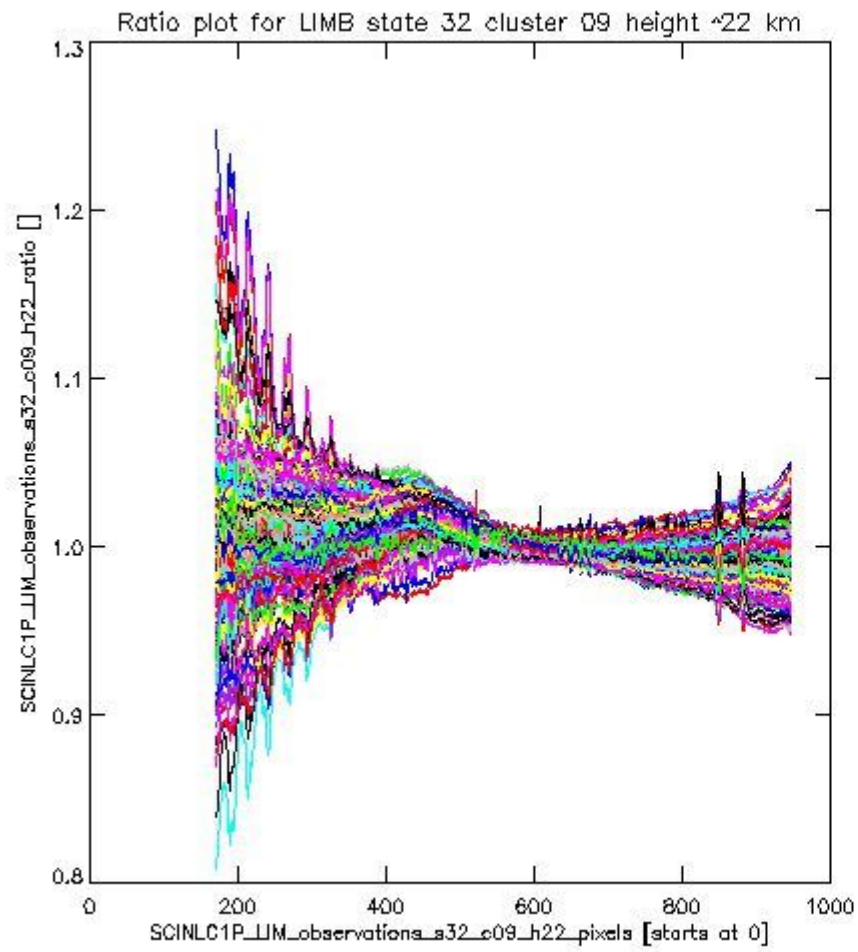
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_11.PNG

**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	22APR2011 00:54:09.977
Start time of last sample	22APR2011 23:04:37.202
Reference period start time	22MAR2011 01:34:15.565
Reference period stop time	20APR2011 23:59:50.618
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\_20110422\_12.PNG

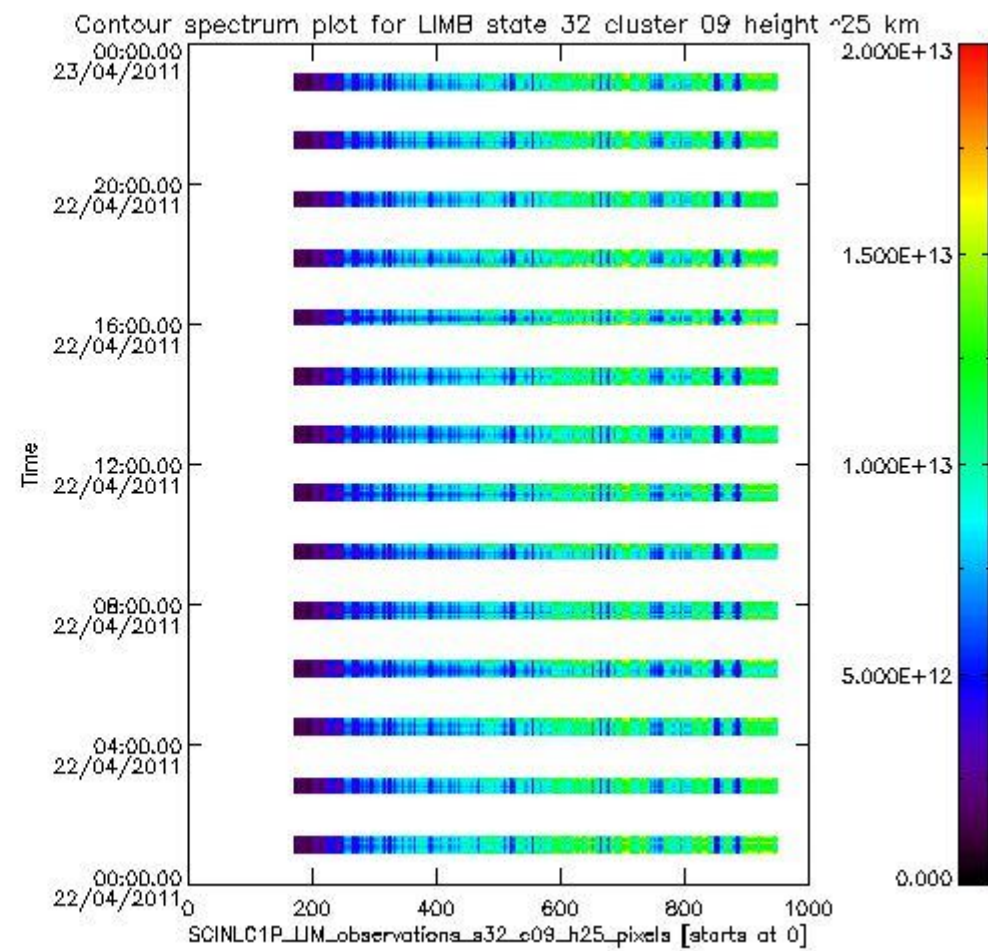
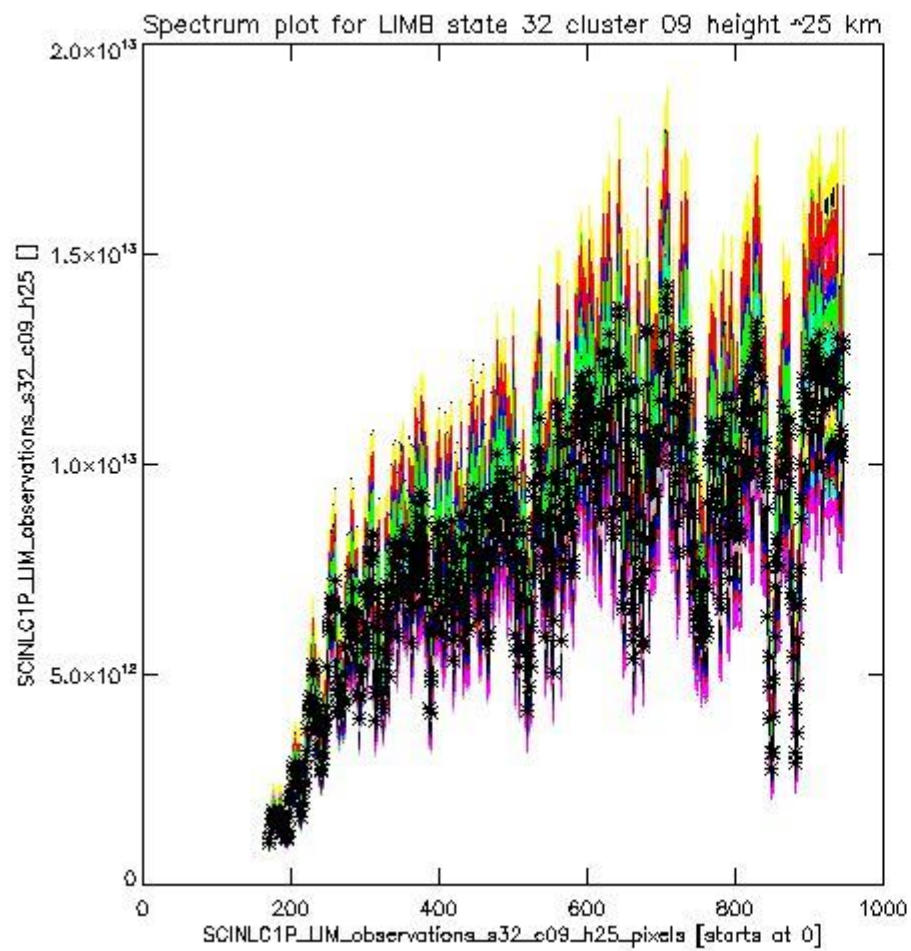


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_13.PNG

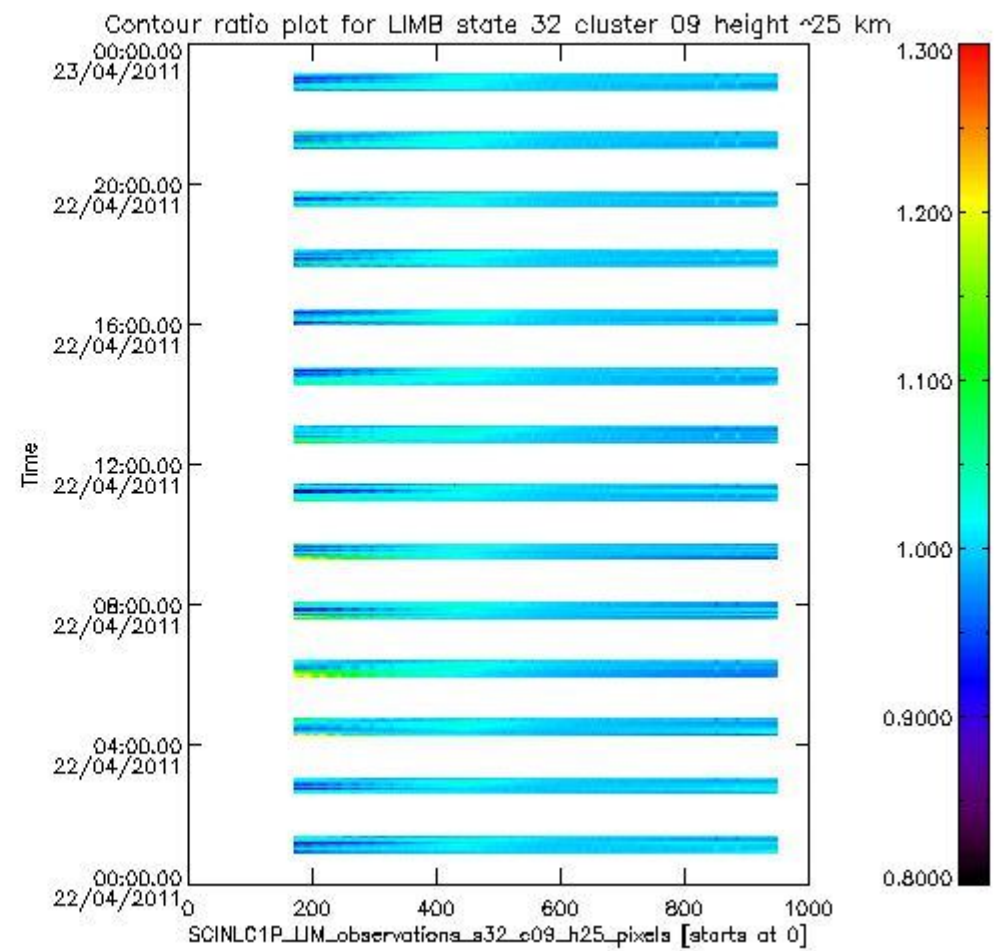
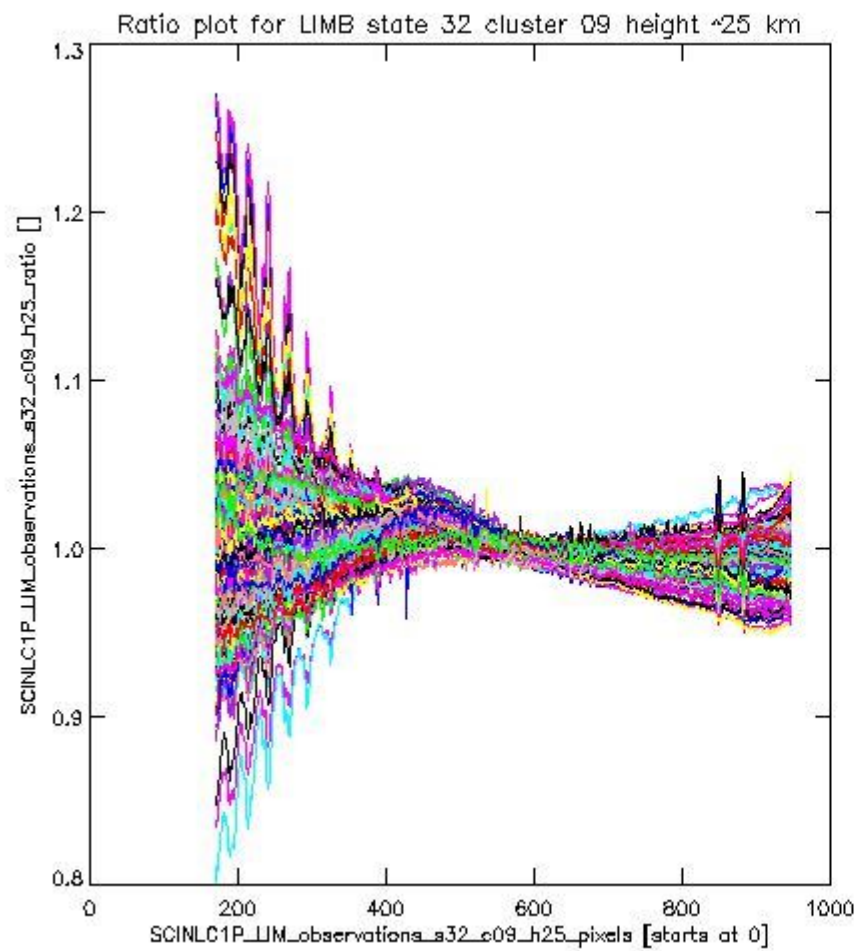
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	22APR2011 00:54:09.977
Start time of last sample	22APR2011 23:04:37.202
Reference period start time	22MAR2011 01:34:15.565
Reference period stop time	20APR2011 23:59:50.618
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





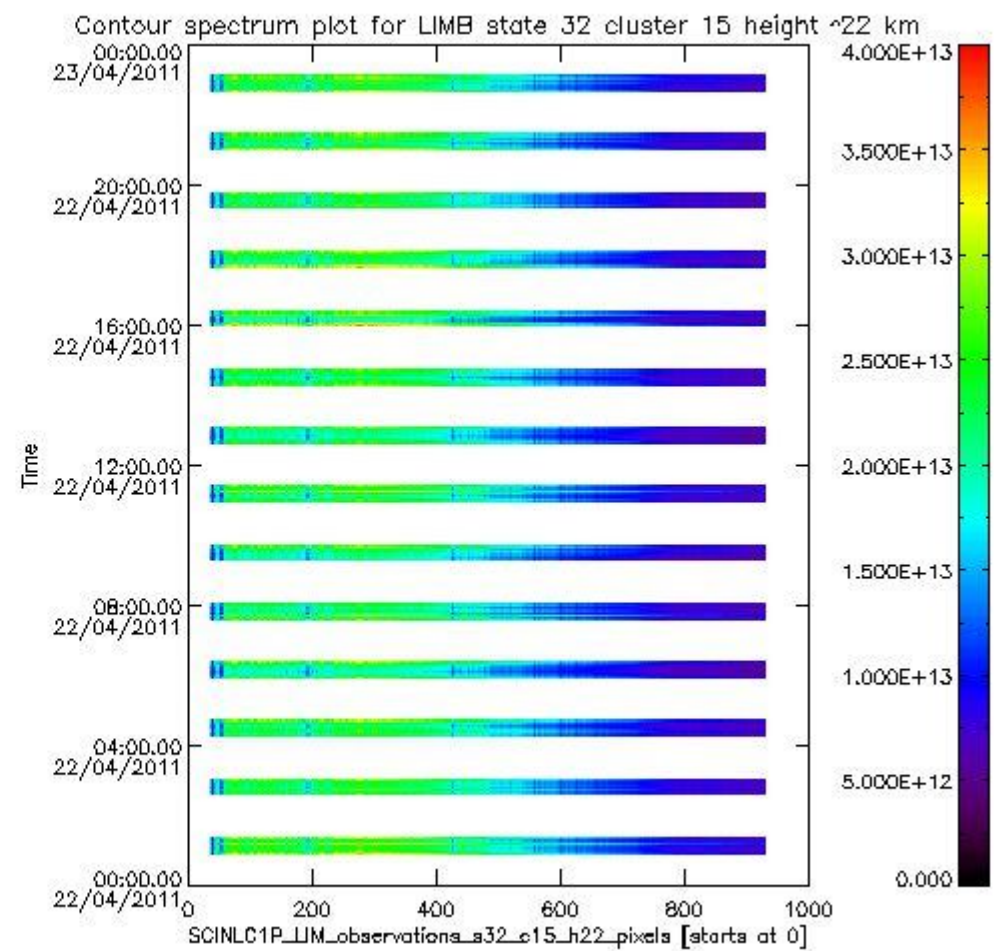
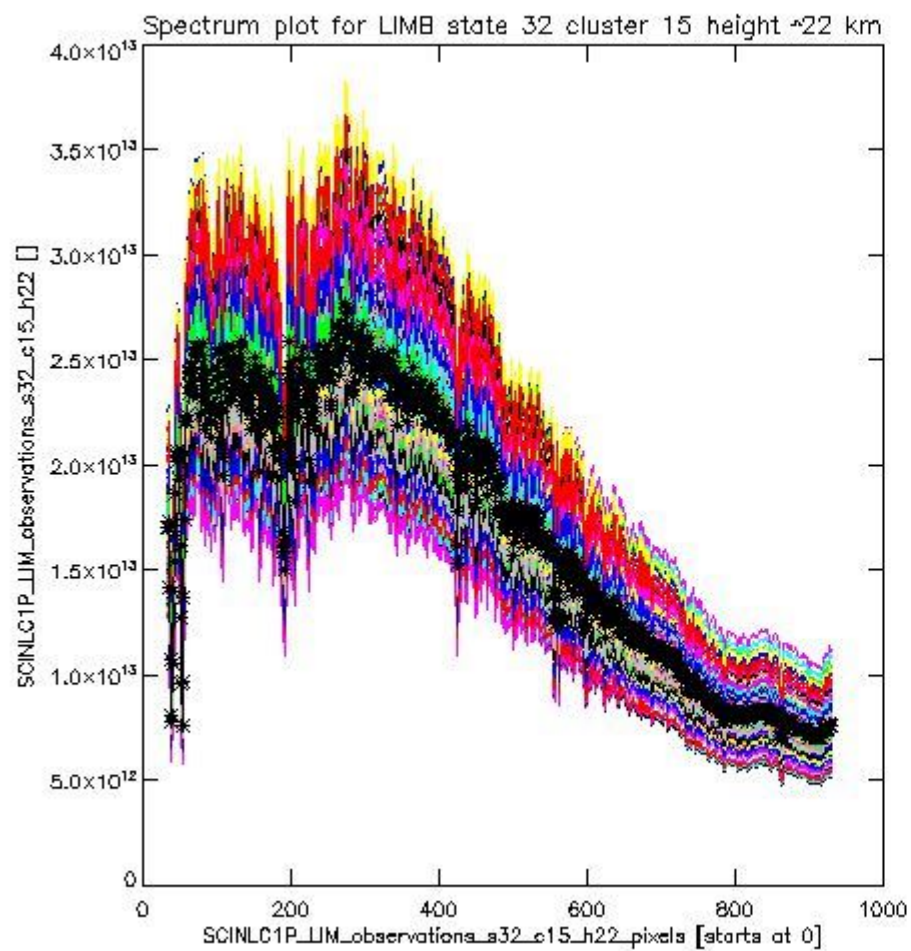
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_14.PNG



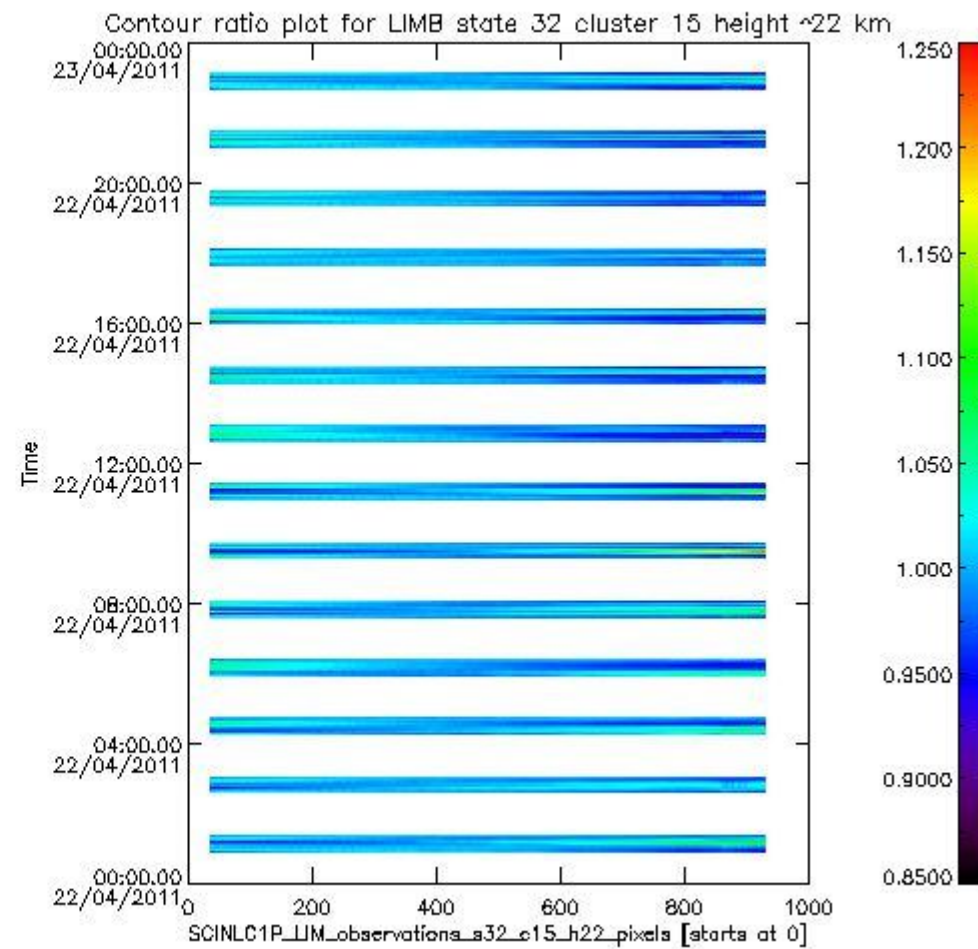
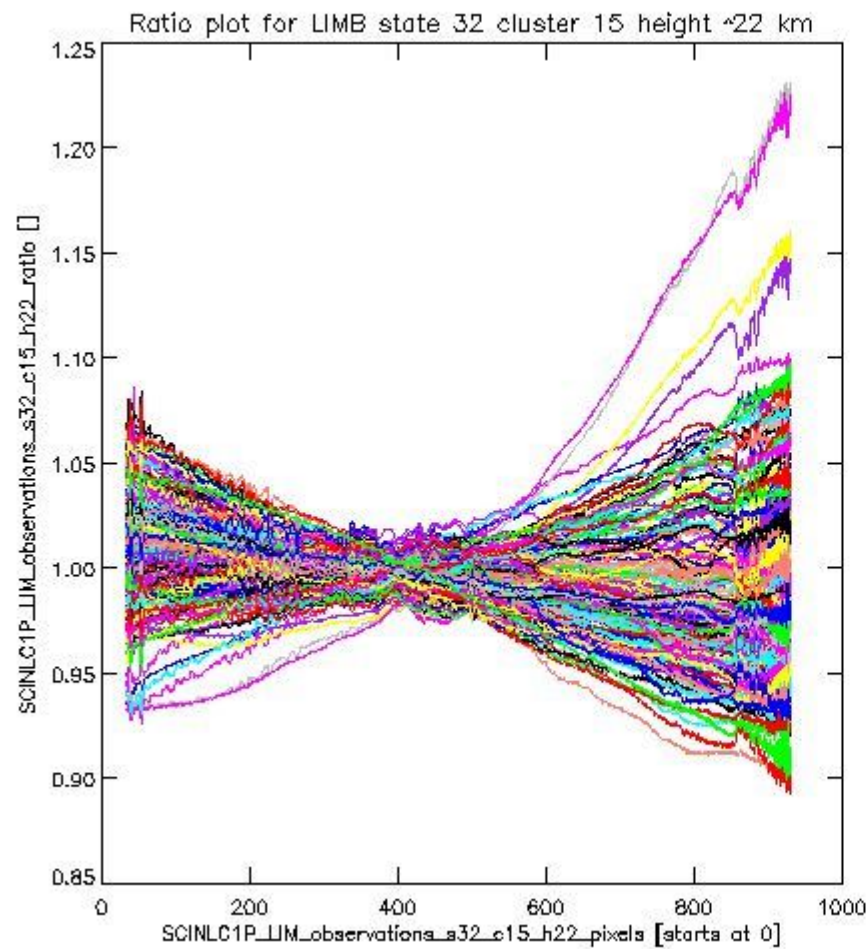
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_15.PNG

**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	22APR2011 00:54:09.977
Start time of last sample	22APR2011 23:04:37.202
Reference period start time	22MAR2011 01:34:15.565
Reference period stop time	20APR2011 23:59:50.618
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



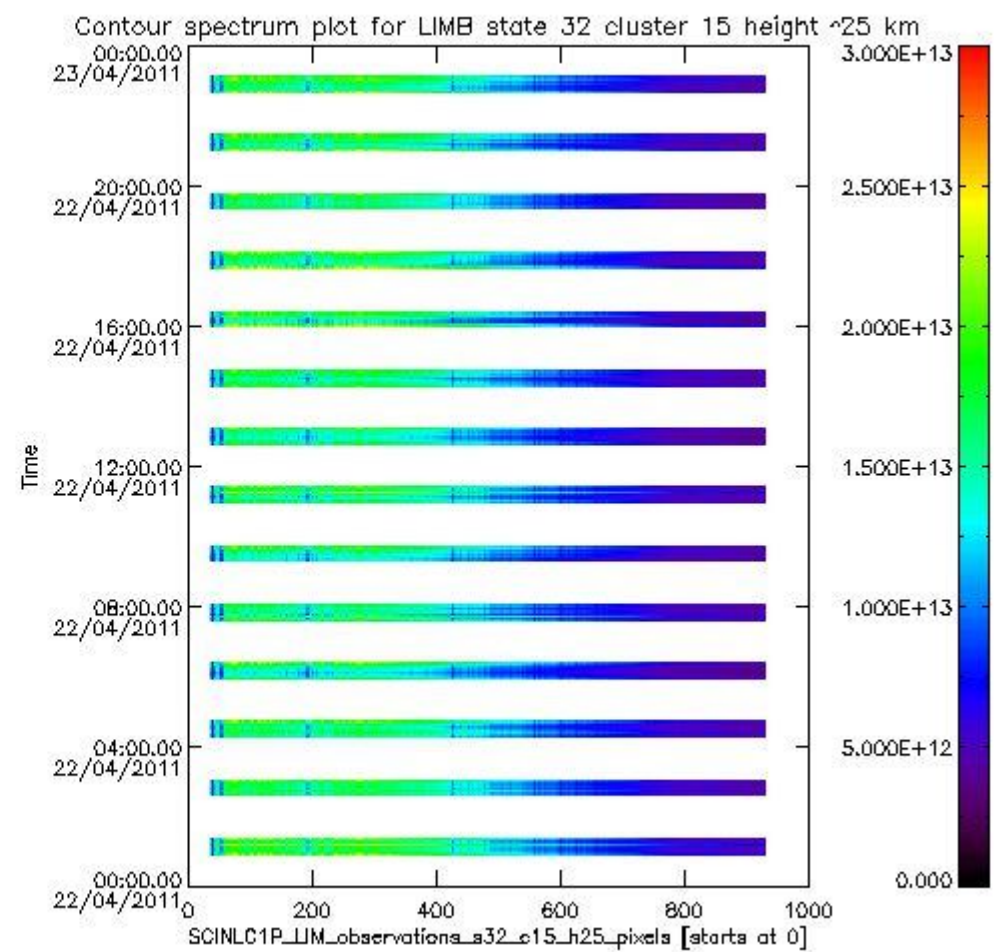
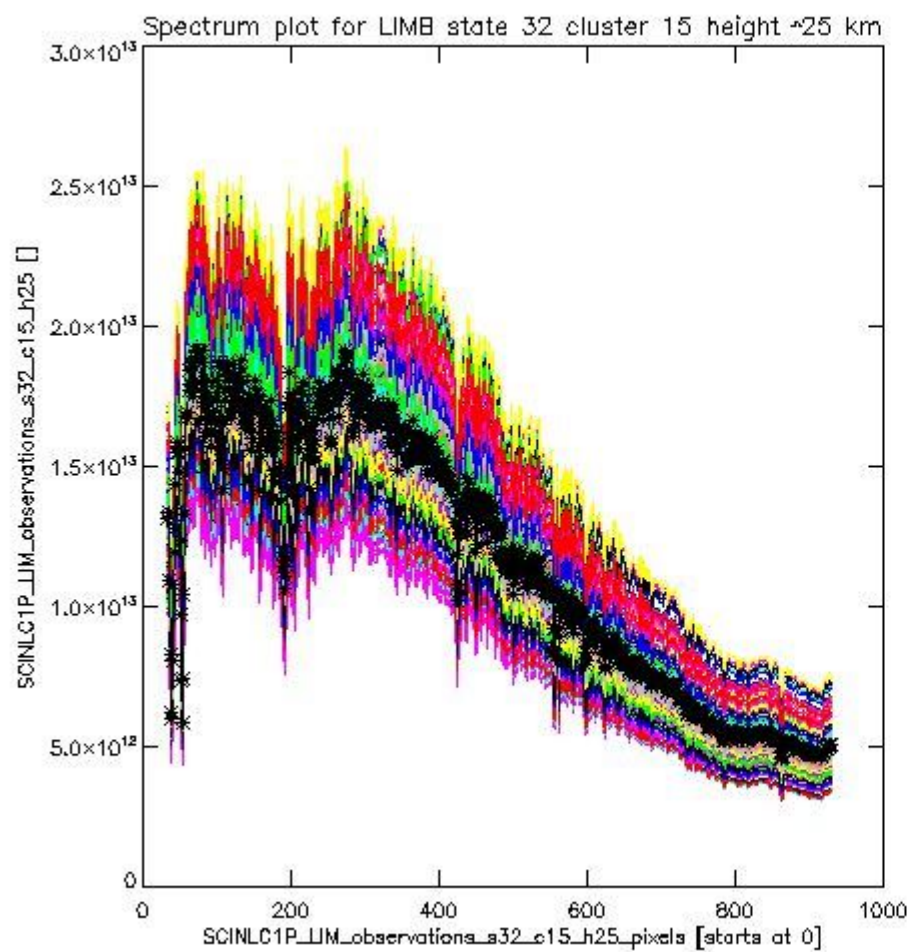
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_16.PNG

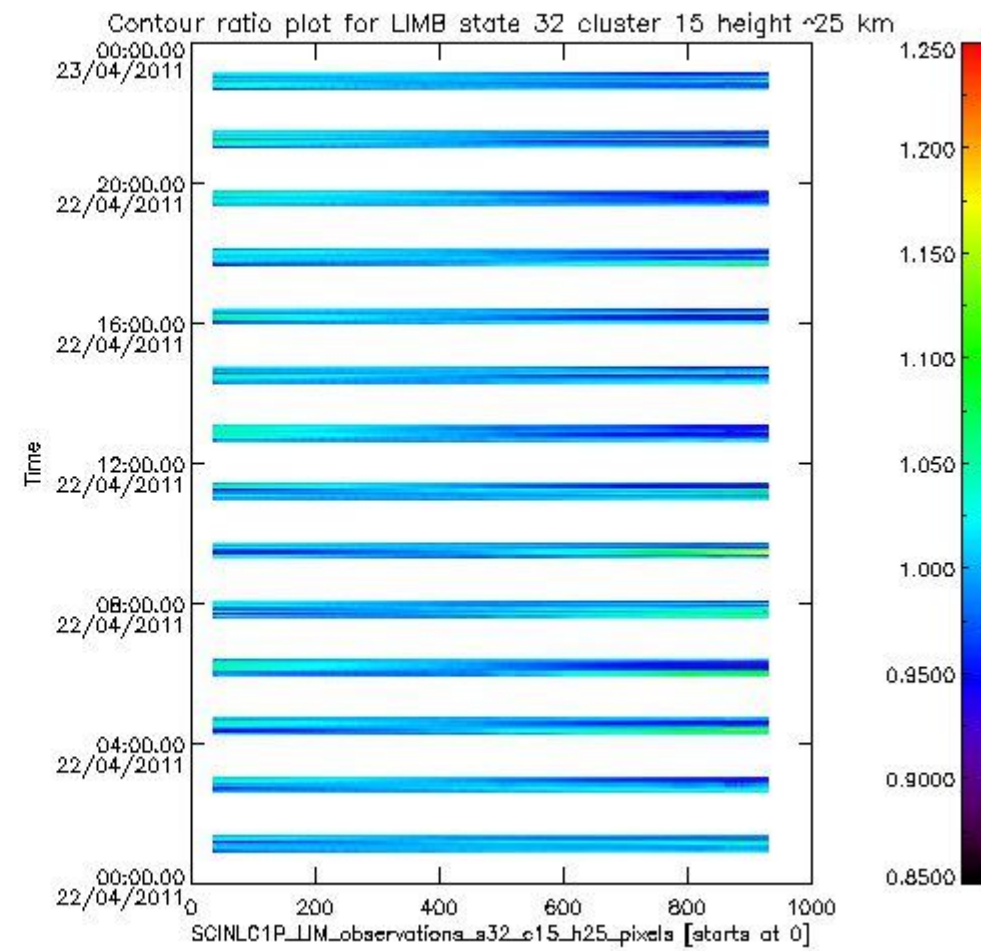
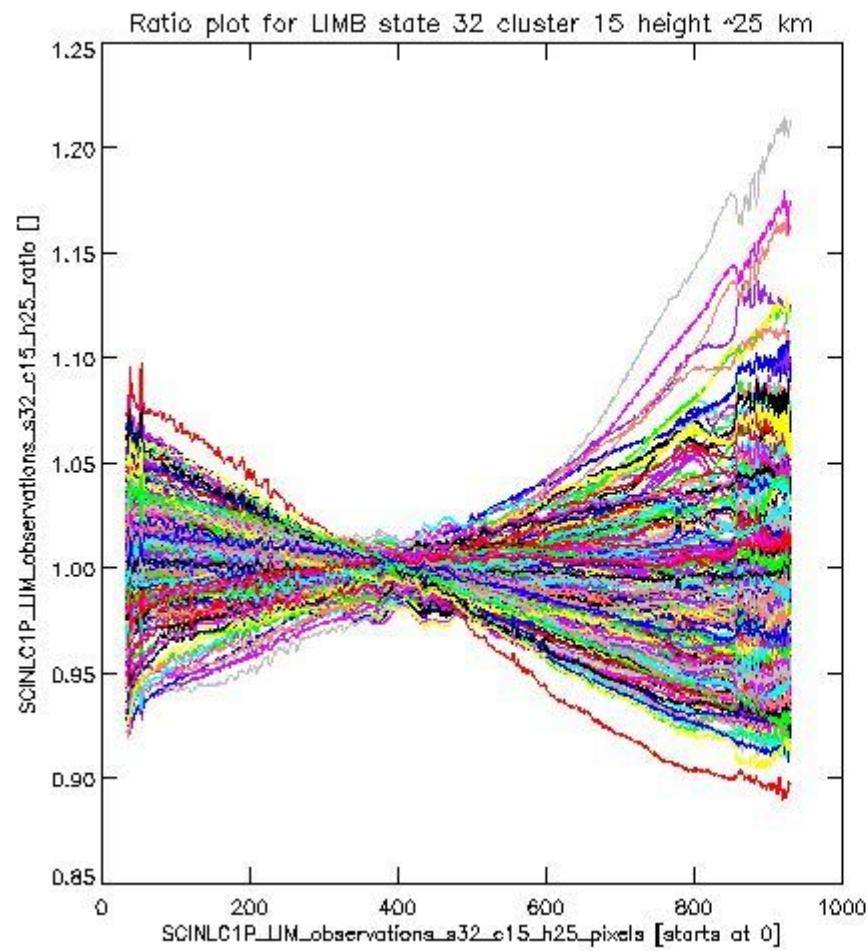


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_17.PNG

**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	22APR2011 00:54:09.977
Start time of last sample	22APR2011 23:04:37.202
Reference period start time	22MAR2011 01:34:15.565
Reference period stop time	20APR2011 23:59:50.618
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

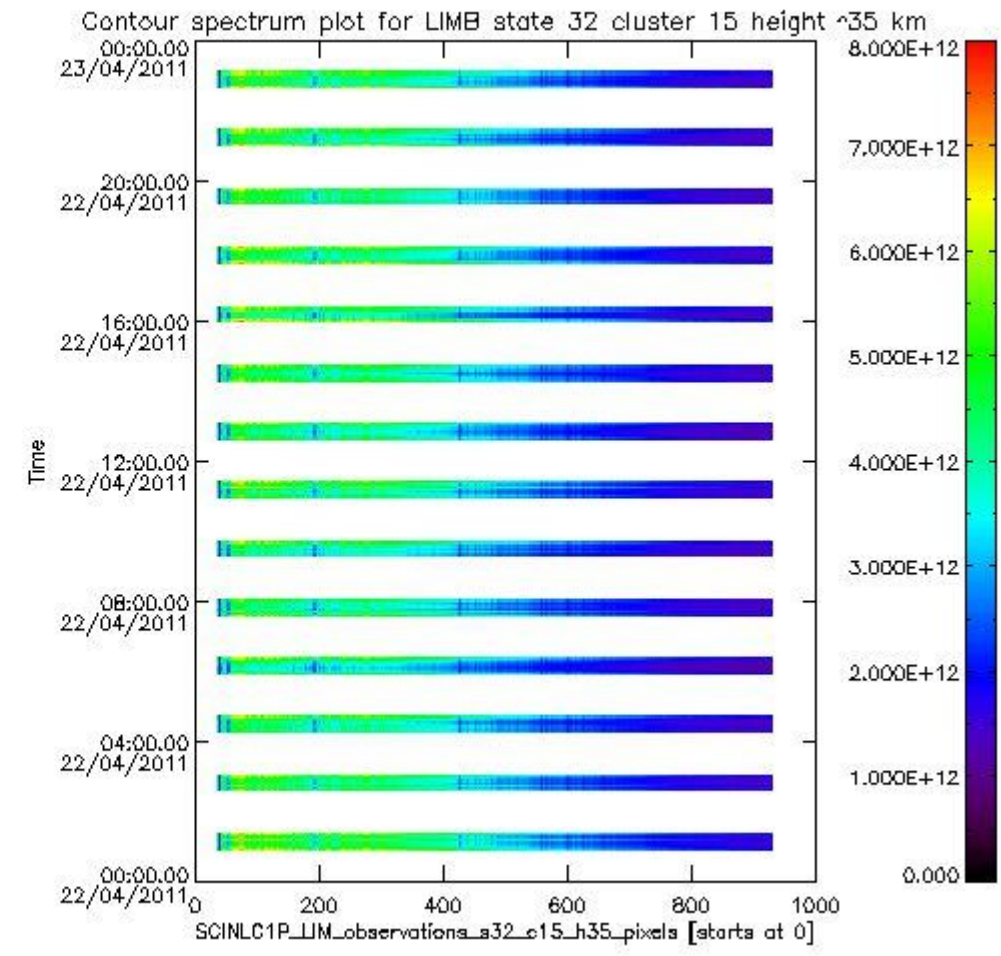
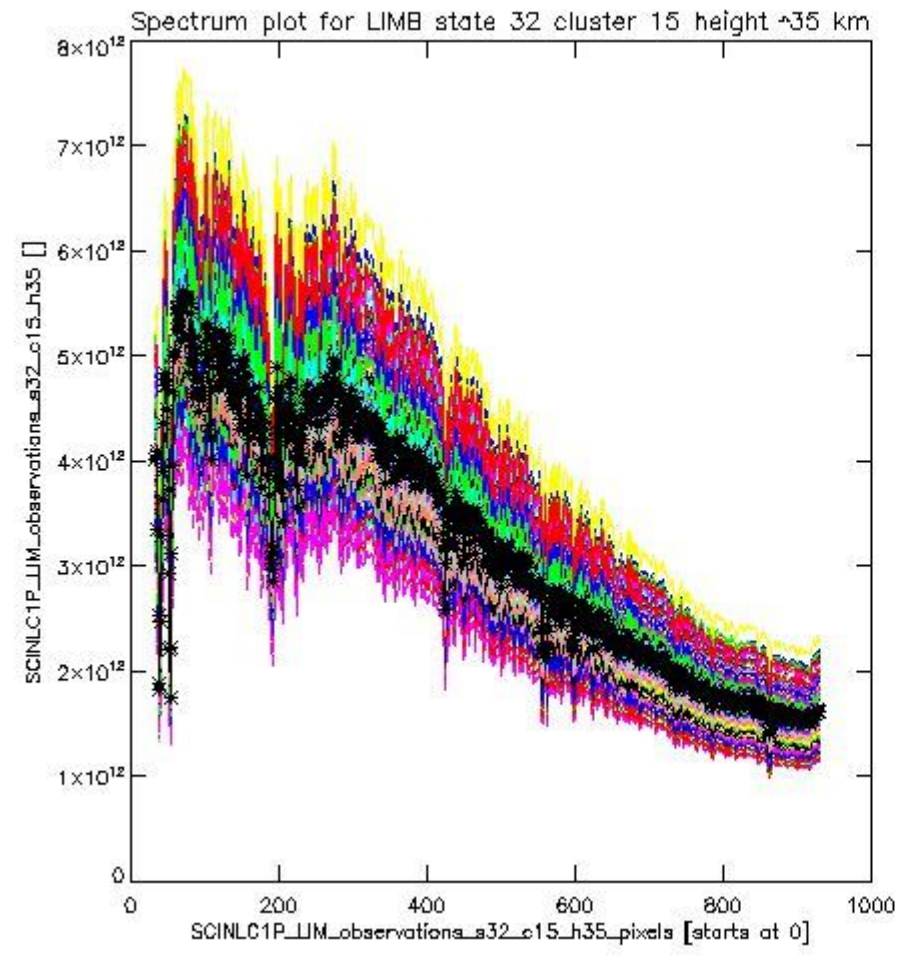




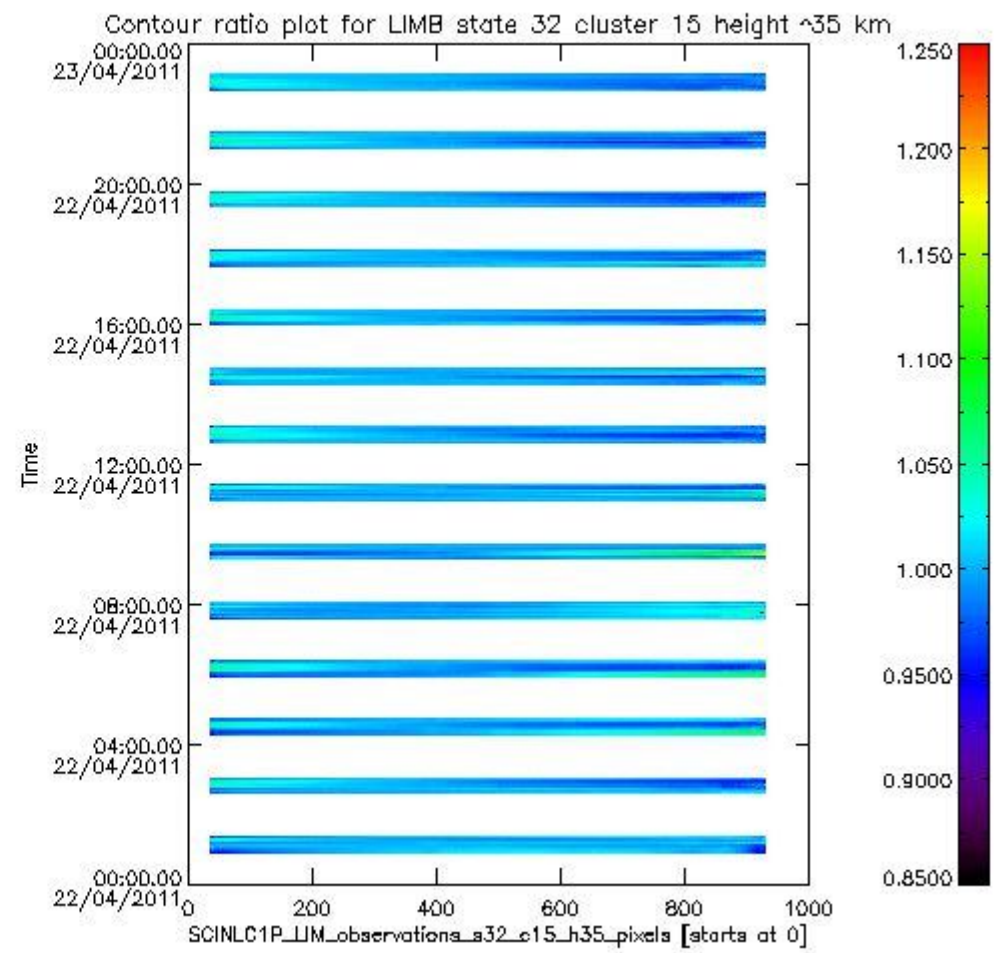
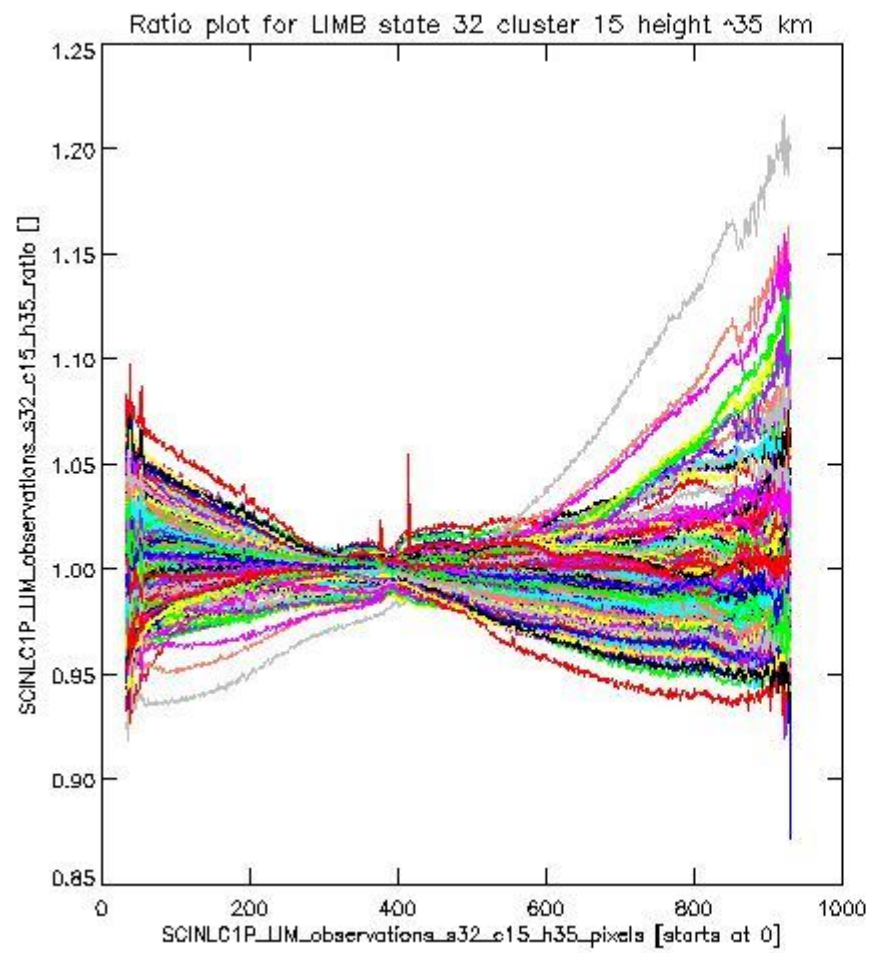
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_19.PNG

**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	22APR2011 00:54:09.977
Start time of last sample	22APR2011 23:04:37.202
Reference period start time	22MAR2011 01:34:15.565
Reference period stop time	20APR2011 23:59:50.618
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\_20110422\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110422\_21.PNG



