

# 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	31MAY2011 06:55:46
Data source version	SCIA/7.04-U
Processing scope for products	18MAY2011 00:00:00 to 19MAY2011 00:00:00
Start time of first product within scope	17MAY2011 23:41:16
Stop time of last product within scope	19MAY2011 00:14:43
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	18MAY2011 00:13:19.206	18MAY2011 23:46:45.335
1	NADIR	07	09	N/A	18MAY2011 00:13:19.206	18MAY2011 23:46:45.335
2	NADIR	07	15	N/A	18MAY2011 00:13:19.206	18MAY2011 23:46:45.335
3	NADIR	07	24	N/A	18MAY2011 00:13:19.206	18MAY2011 23:46:45.335
4	NADIR	07	55	N/A	18MAY2011 00:13:19.206	18MAY2011 23:46:45.335
5	LIMB	32	09	~19 km	18MAY2011 00:00:08.566	18MAY2011 23:49:56.635
6	LIMB	32	09	~22 km	18MAY2011 00:00:08.566	18MAY2011 23:49:56.635
7	LIMB	32	09	~25 km	18MAY2011 00:00:08.566	18MAY2011 23:49:56.635
8	LIMB	32	15	~22 km	18MAY2011 00:00:08.566	18MAY2011 23:49:56.635
9	LIMB	32	15	~25 km	18MAY2011 00:00:08.566	18MAY2011 23:49:56.635
10	LIMB	32	15	~35 km	18MAY2011 00:00:08.566	18MAY2011 23:49:56.635

#### 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	#cmlprk	#incmpl_rk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110517_233609_000060543102_00318_48177_1470.N1</a>	17MAY2011 23:41:16	18MAY2011 00:51:31	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110518_012130_000057023102_00319_48178_1463.N1</a>	18MAY2011 01:21:30	18MAY2011 02:31:59	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110518_025636_000060543102_00320_48179_1511.N1</a>	18MAY2011 03:01:44	18MAY2011 04:11:58	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110518_044157_000057023102_00321_48180_1514.N1</a>	18MAY2011 04:41:57	18MAY2011 05:52:26	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110518_061704_000060543102_00322_48181_1516.N1</a>	18MAY2011 06:22:11	18MAY2011 07:32:26	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110518_080225_000057023102_00323_48182_1532.N1</a>	18MAY2011 08:02:25	18MAY2011 09:12:54	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110518_093731_000060543102_00324_48183_1540.N1	18MAY2011 09:42:39	18MAY2011 10:52:53	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110518_112252_000057023102_00325_48184_1537.N1	18MAY2011 11:22:52	18MAY2011 12:33:21	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110518_125758_000060543102_00326_48185_1536.N1	18MAY2011 13:03:06	18MAY2011 14:13:21	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110518_144320_000057023102_00327_48186_1534.N1	18MAY2011 14:43:20	18MAY2011 15:53:49	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110518_161826_000060543102_00328_48187_1533.N1	18MAY2011 16:23:34	18MAY2011 17:33:48	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110518_180347_000057023102_00329_48188_1535.N1	18MAY2011 18:03:47	18MAY2011 19:14:04	0	34	28	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110518_193853_000060543102_00330_48189_1538.N1	18MAY2011 19:44:01	18MAY2011 20:54:25	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110518_212415_000057013102_00331_48190_1539.N1	18MAY2011 21:24:15	18MAY2011 22:34:44	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110518_225920_000060543102_00332_48191_1541.N1	18MAY2011 23:04:29	19MAY2011 00:14:43	0	35	31	0	0	1	0	0	

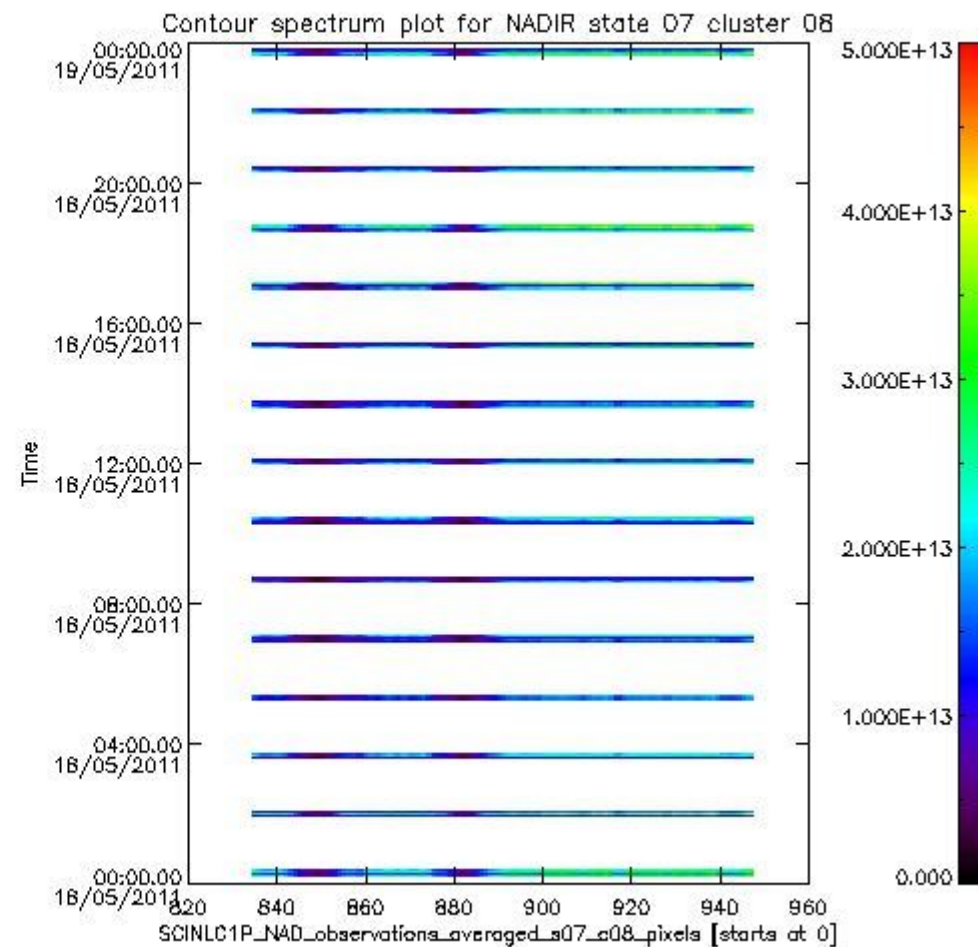
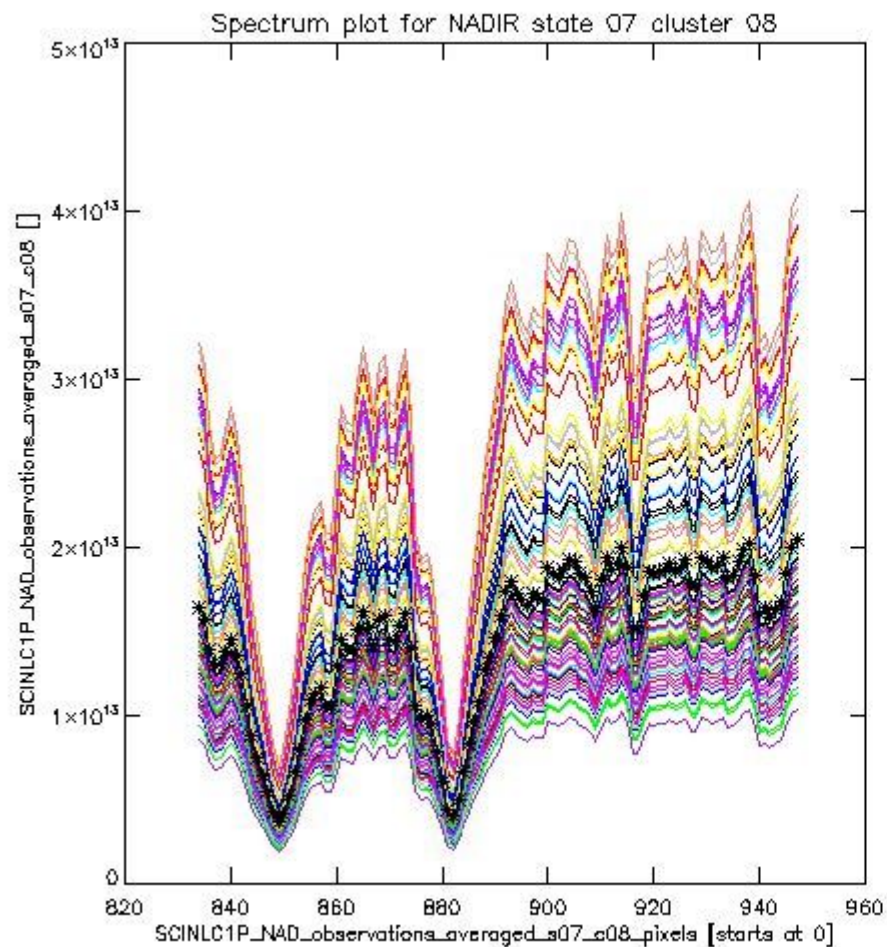
## 1.2 Source packet monitoring

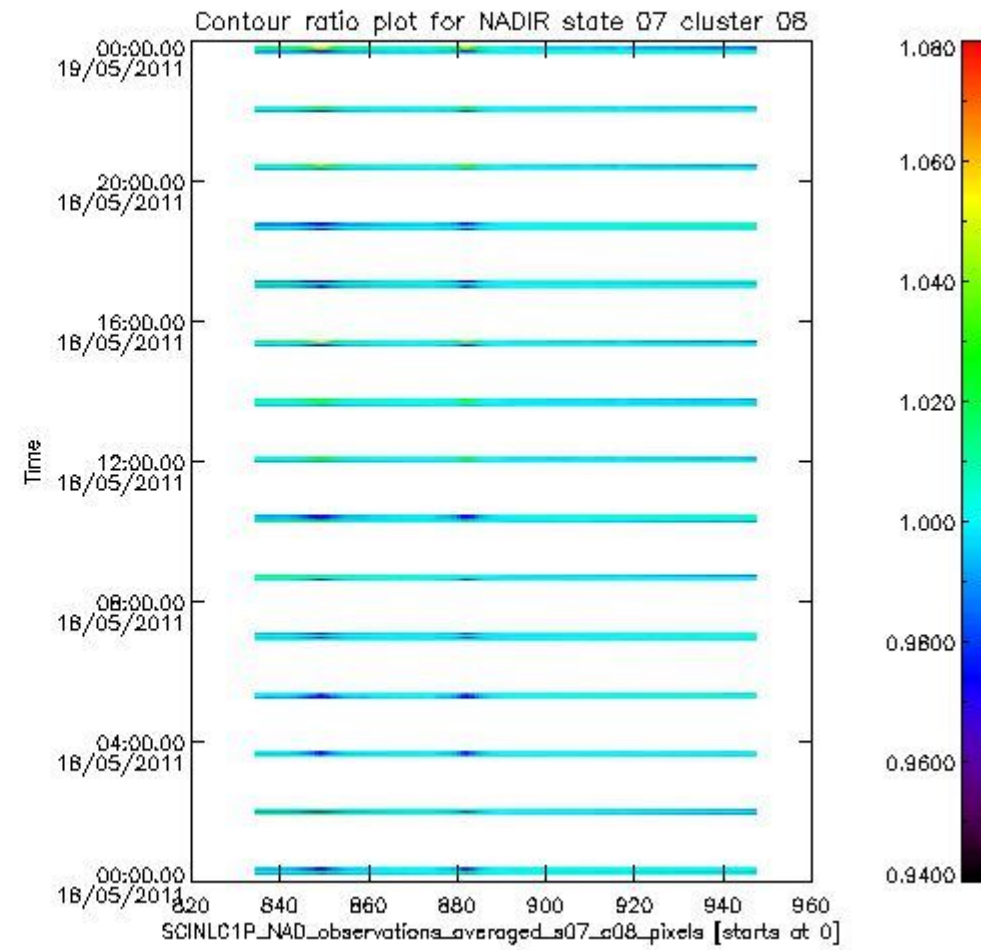
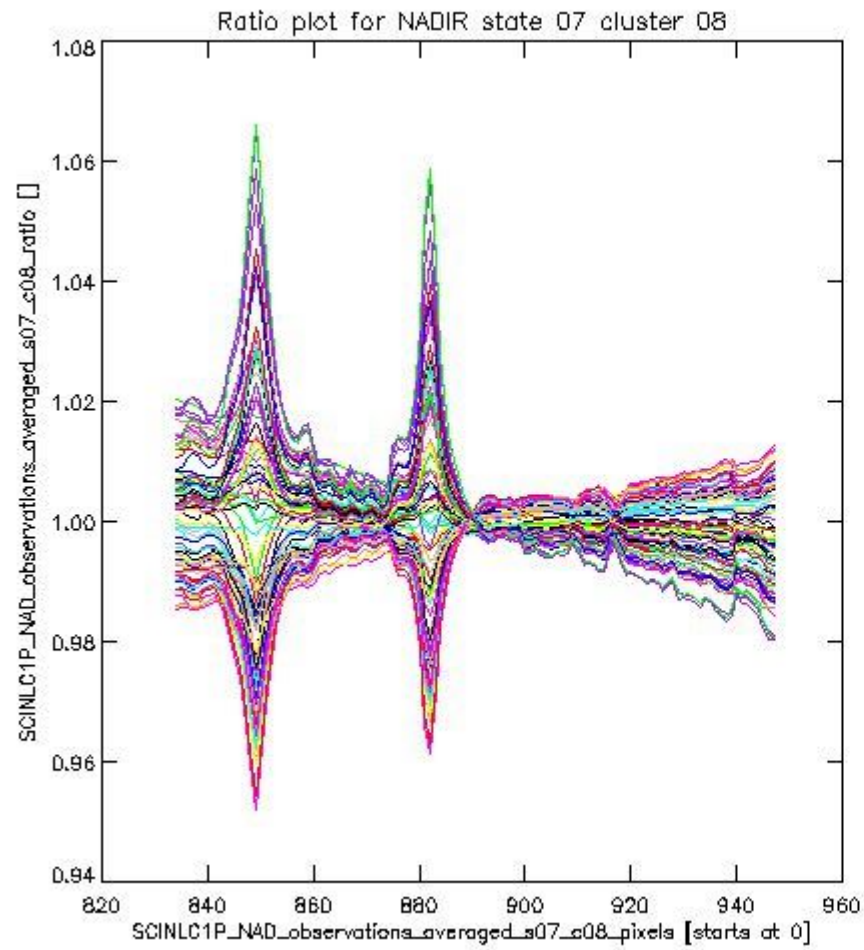
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

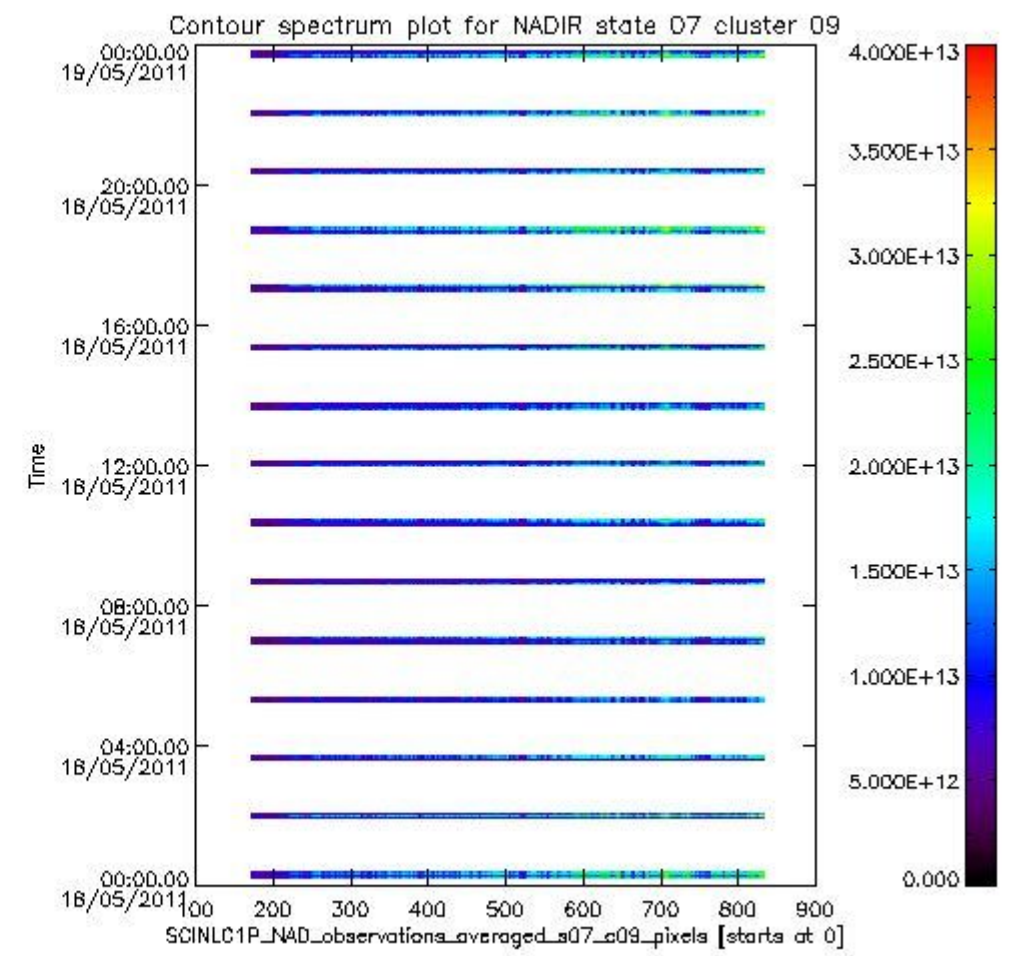
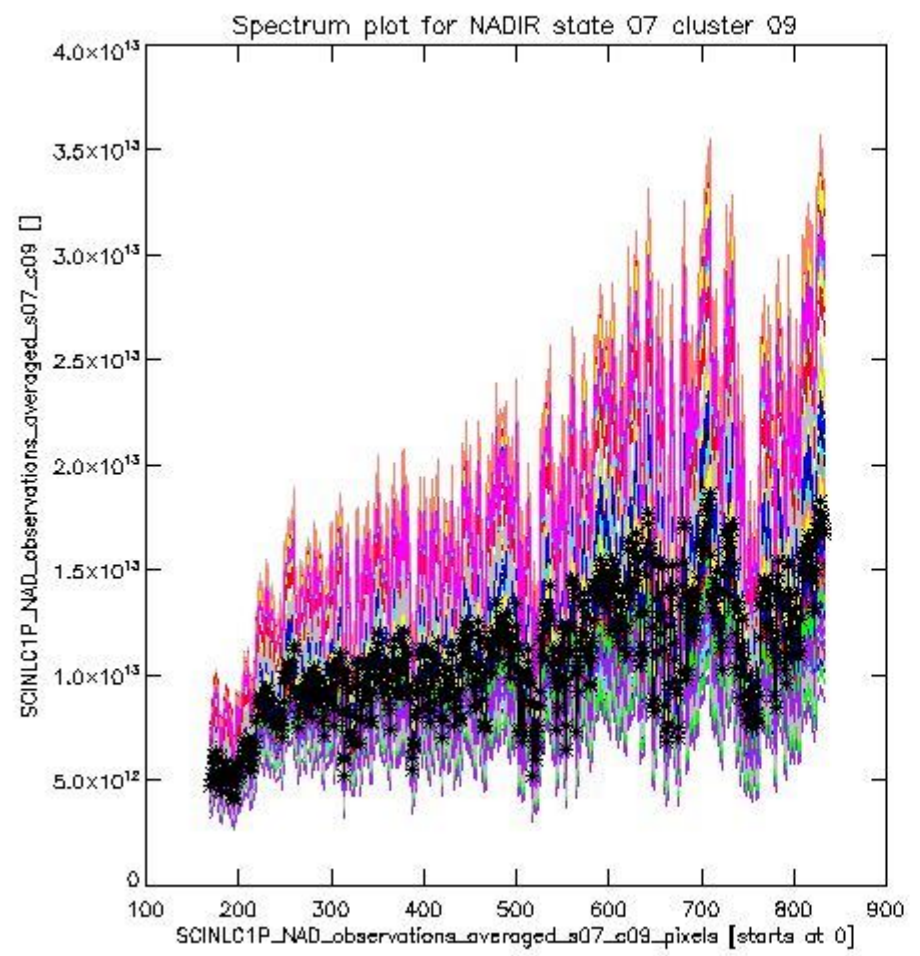
Item	Value
Start time of first sample	18MAY2011 00:13:19.206
Start time of last sample	18MAY2011 23:46:45.335
Reference period start time	18APR2011 00:16:12.444
Reference period stop time	17MAY2011 22:42:25.049
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



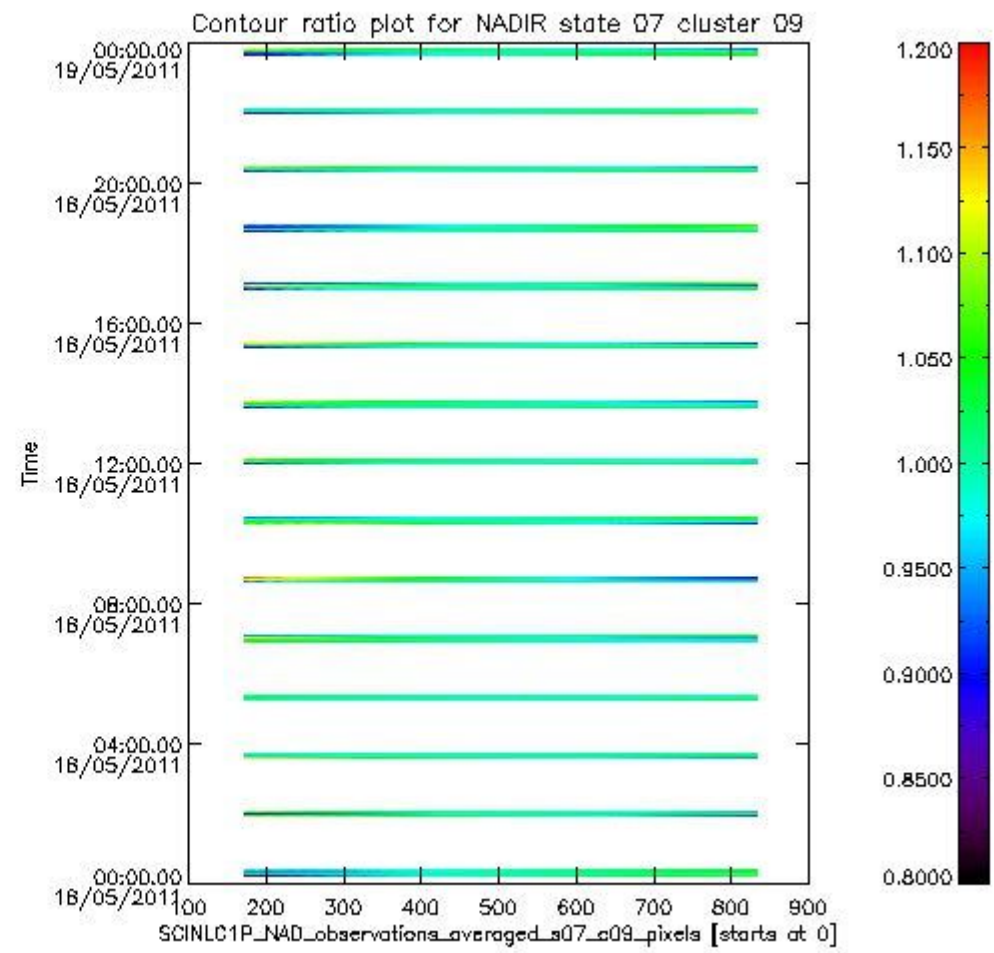
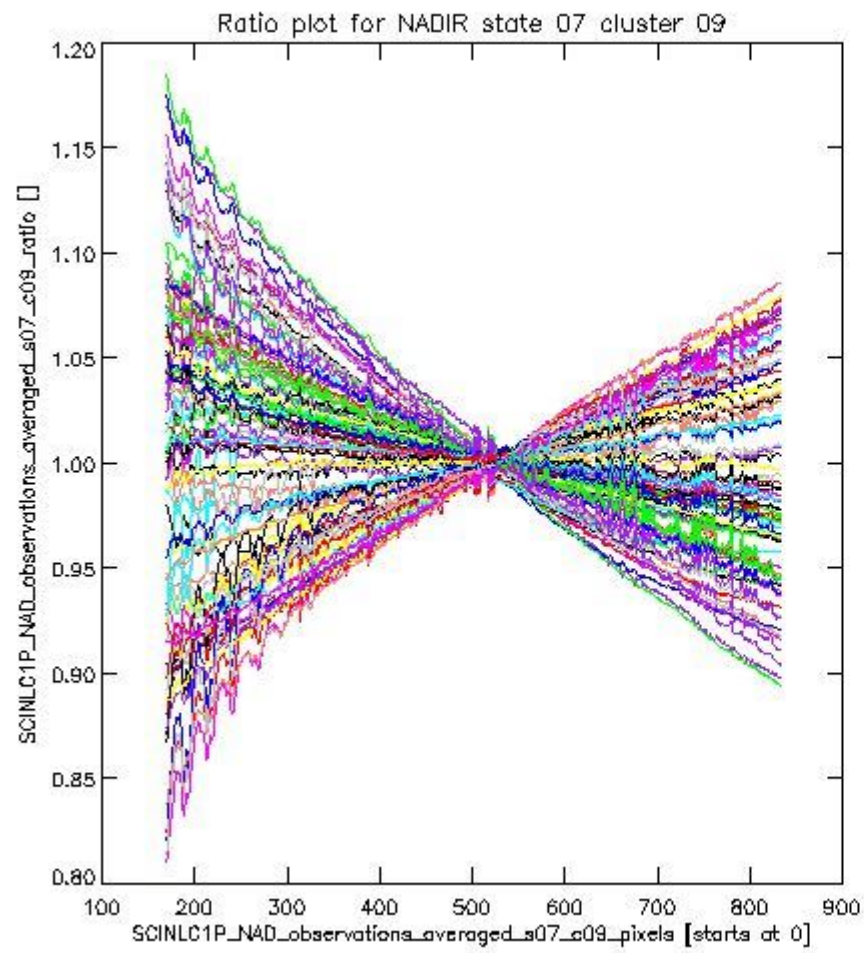


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	18MAY2011 00:13:19.206
Start time of last sample	18MAY2011 23:46:45.335
Reference period start time	18APR2011 00:16:12.444
Reference period stop time	17MAY2011 22:42:25.049
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



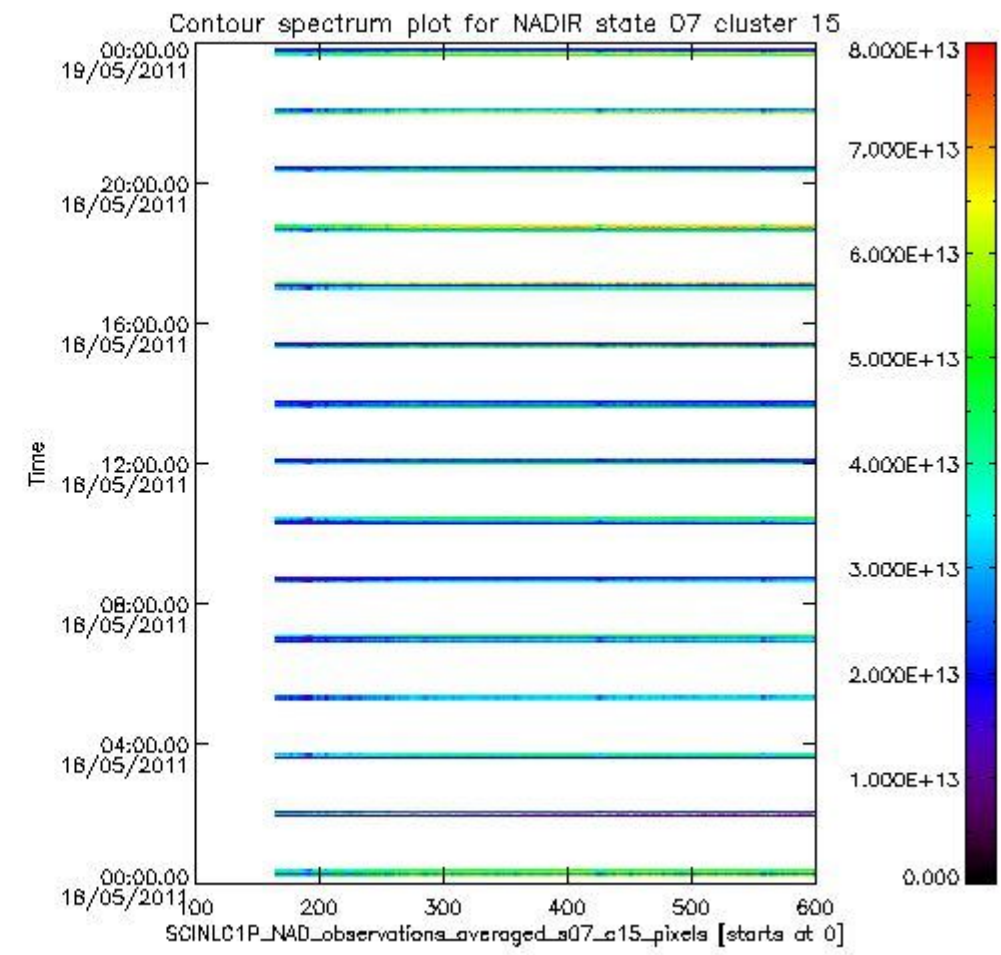
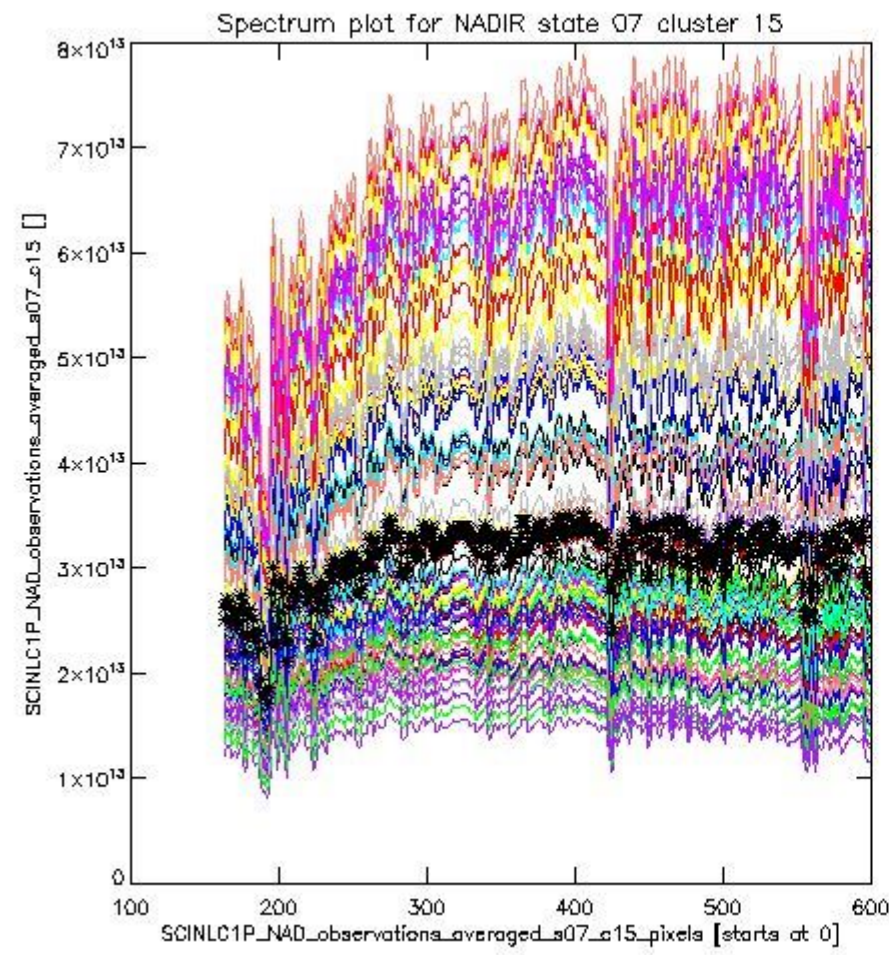
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_2.PNG



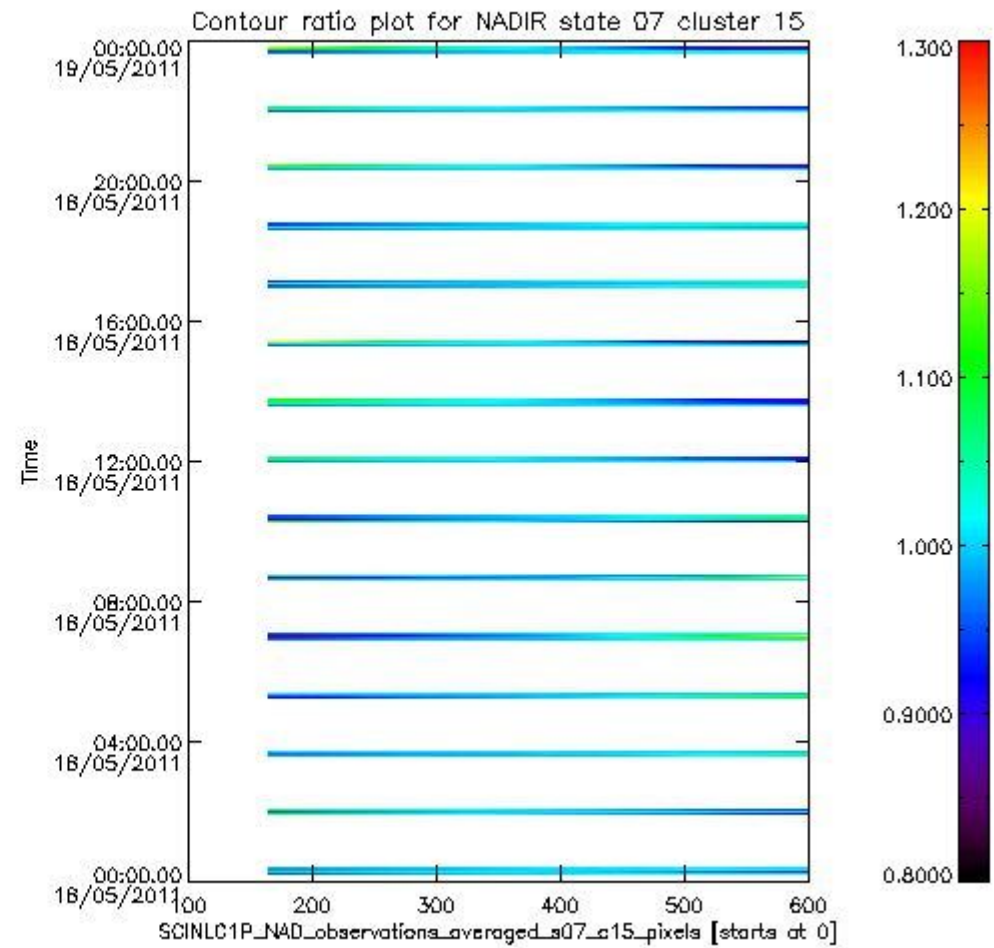
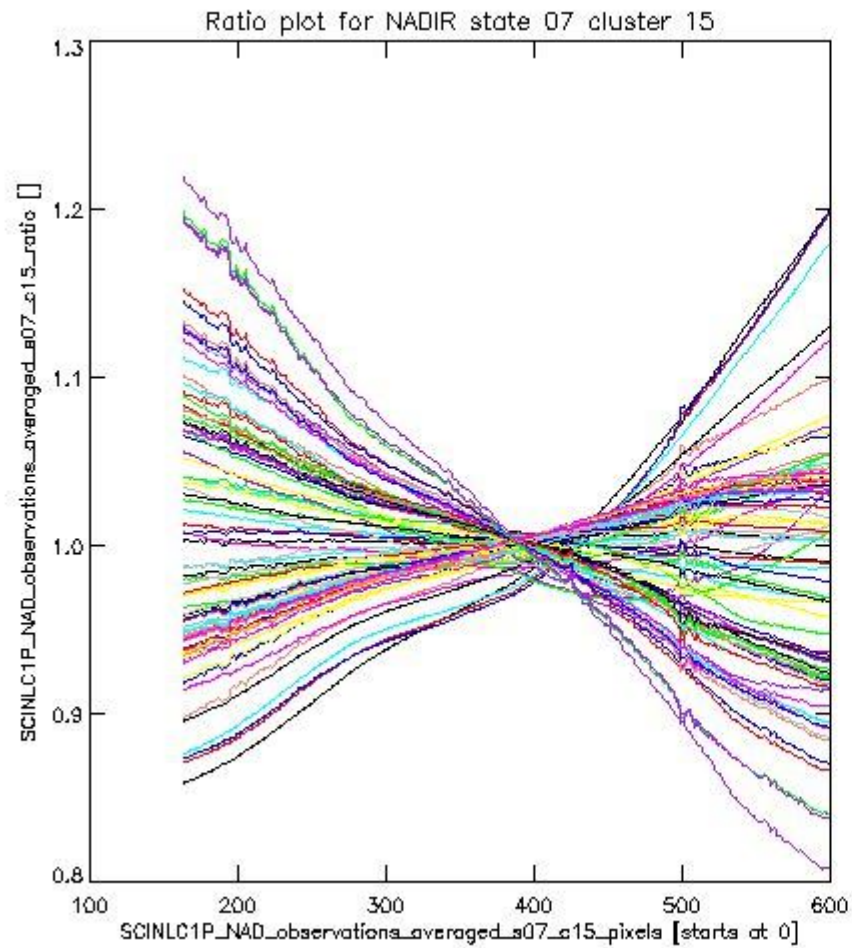
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_3.PNG

**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	18MAY2011 00:13:19.206
Start time of last sample	18MAY2011 23:46:45.335
Reference period start time	18APR2011 00:16:12.444
Reference period stop time	17MAY2011 22:42:25.049
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



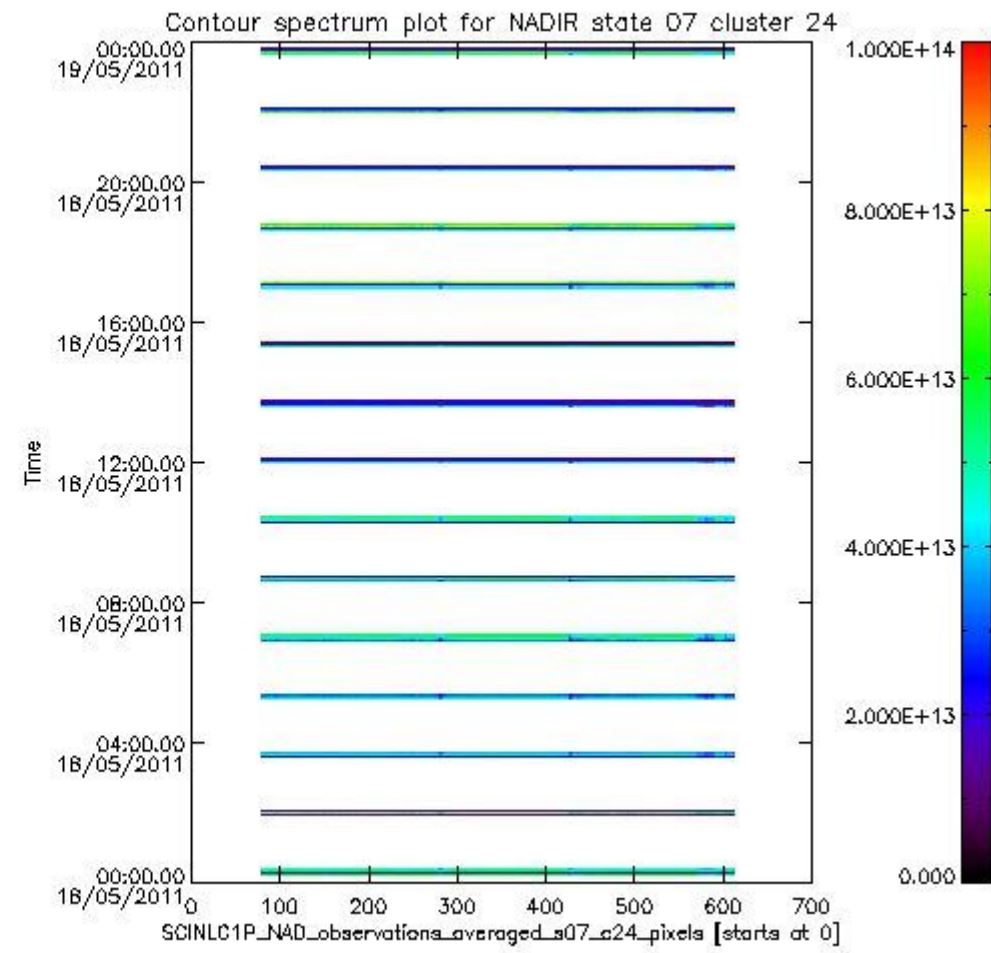
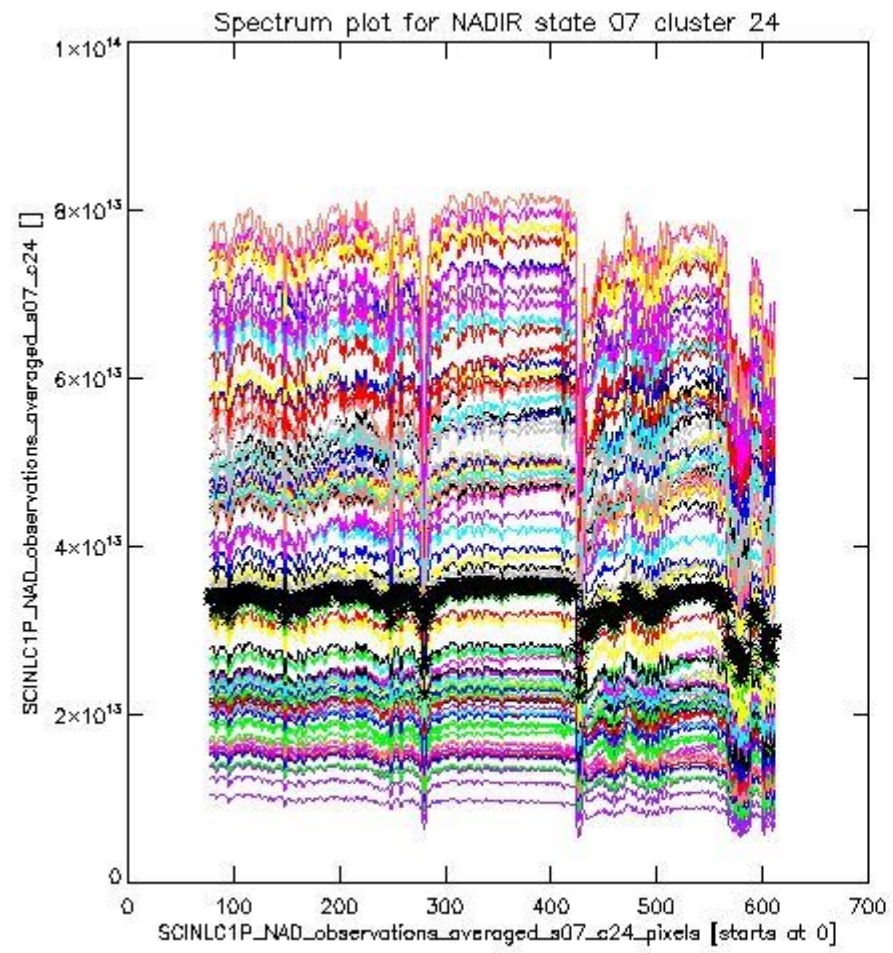
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_5.PNG

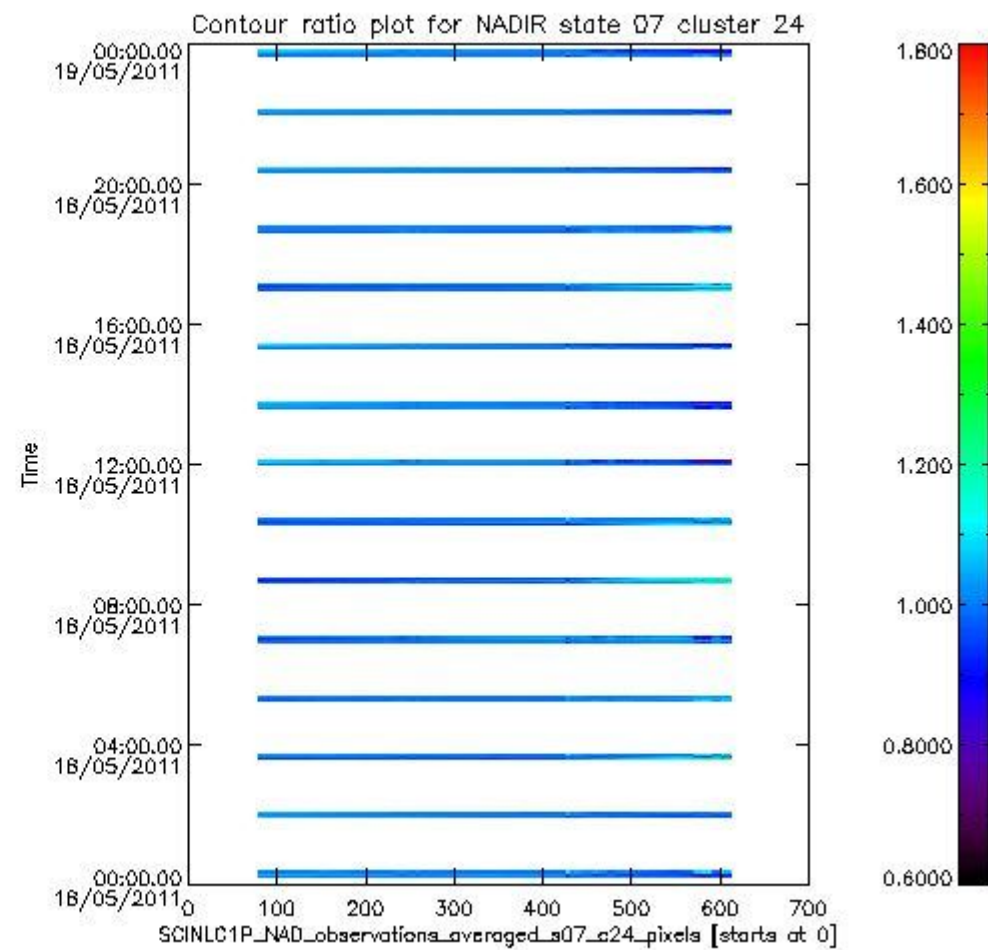
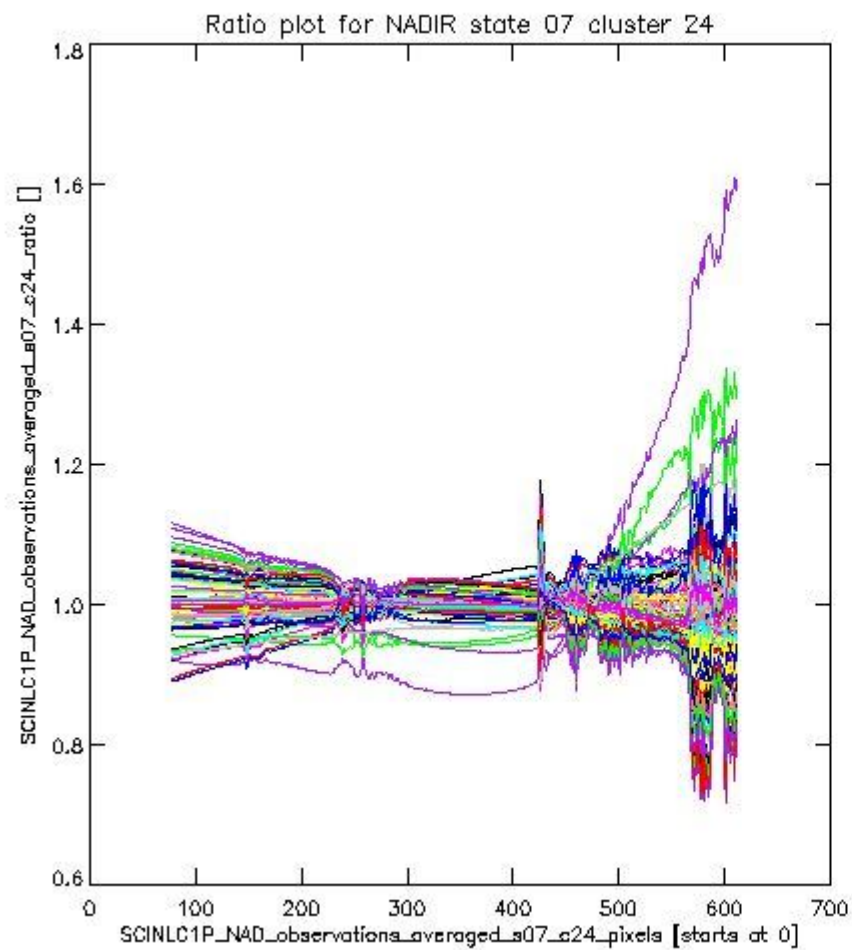
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	18MAY2011 00:13:19.206
Start time of last sample	18MAY2011 23:46:45.335
Reference period start time	18APR2011 00:16:12.444
Reference period stop time	17MAY2011 22:42:25.049
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\_20110518\_6.PNG

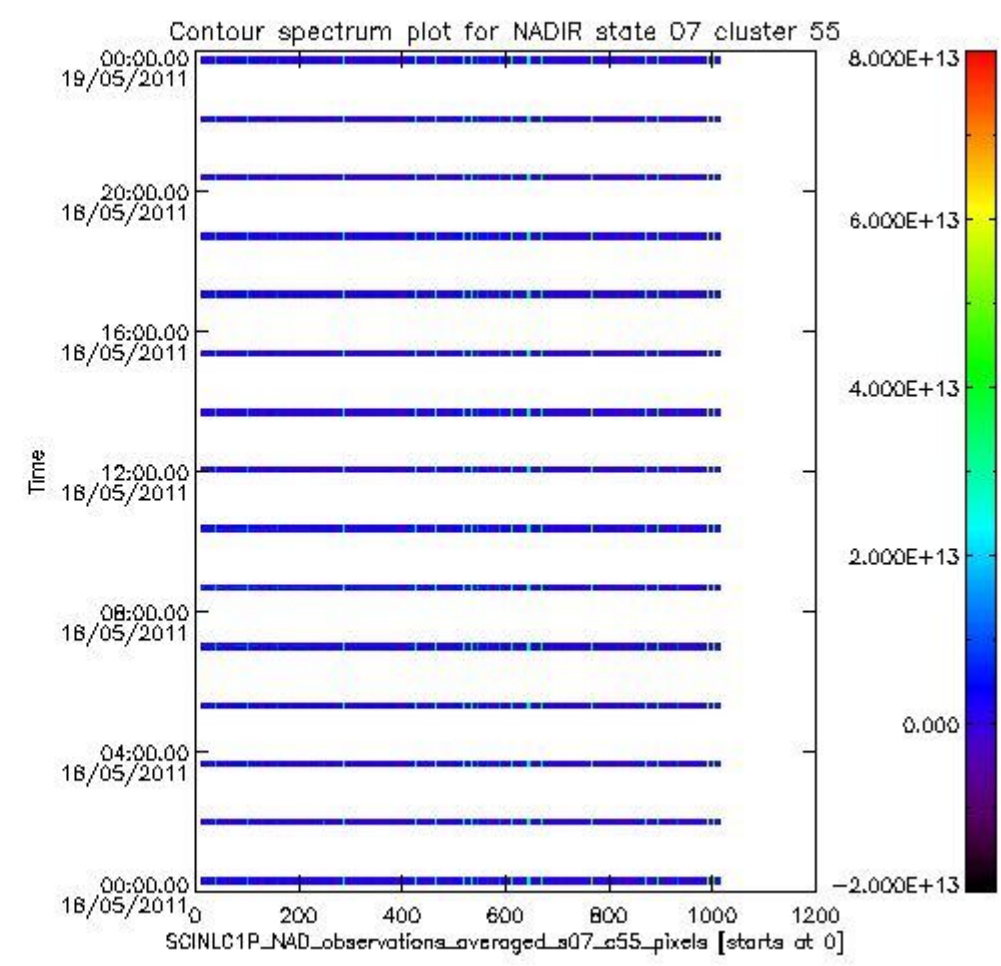
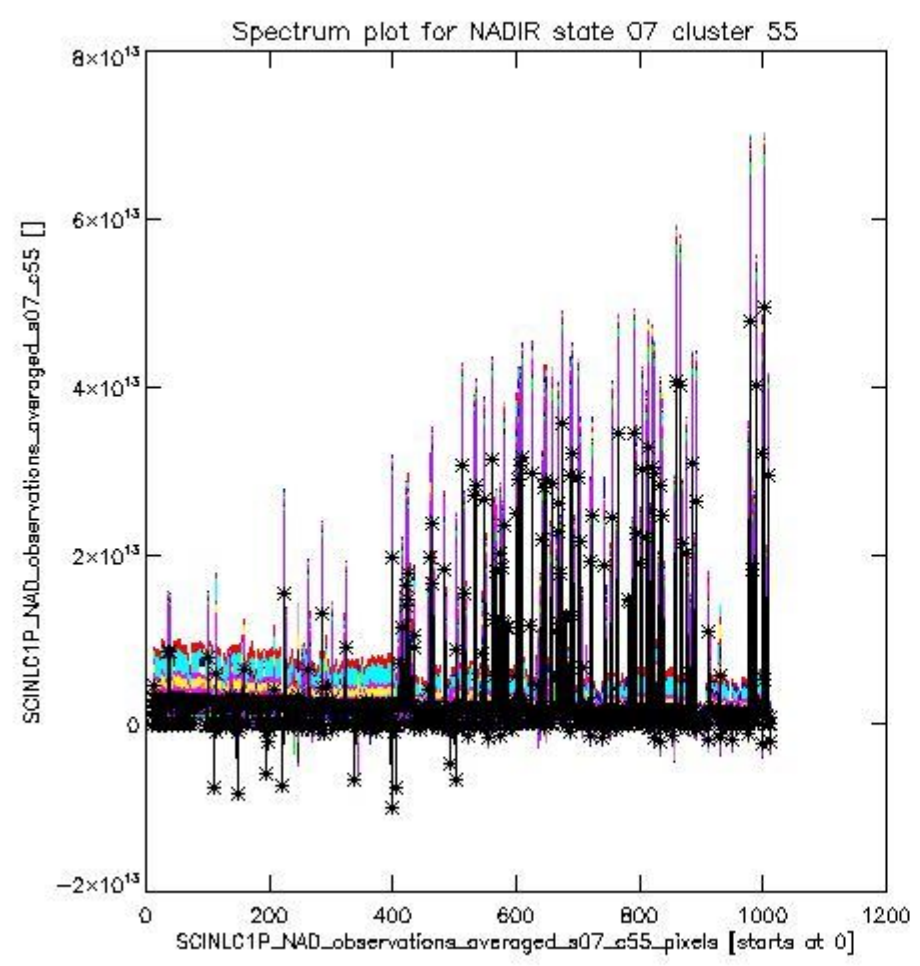




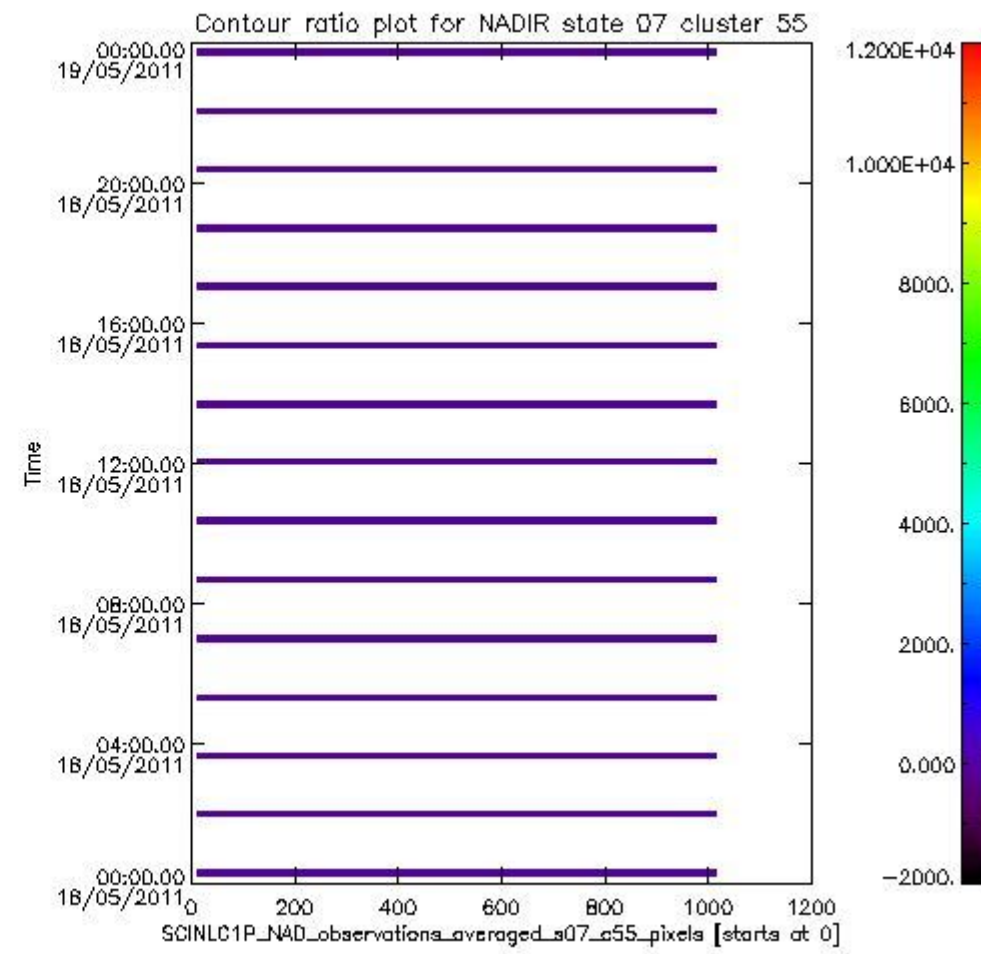
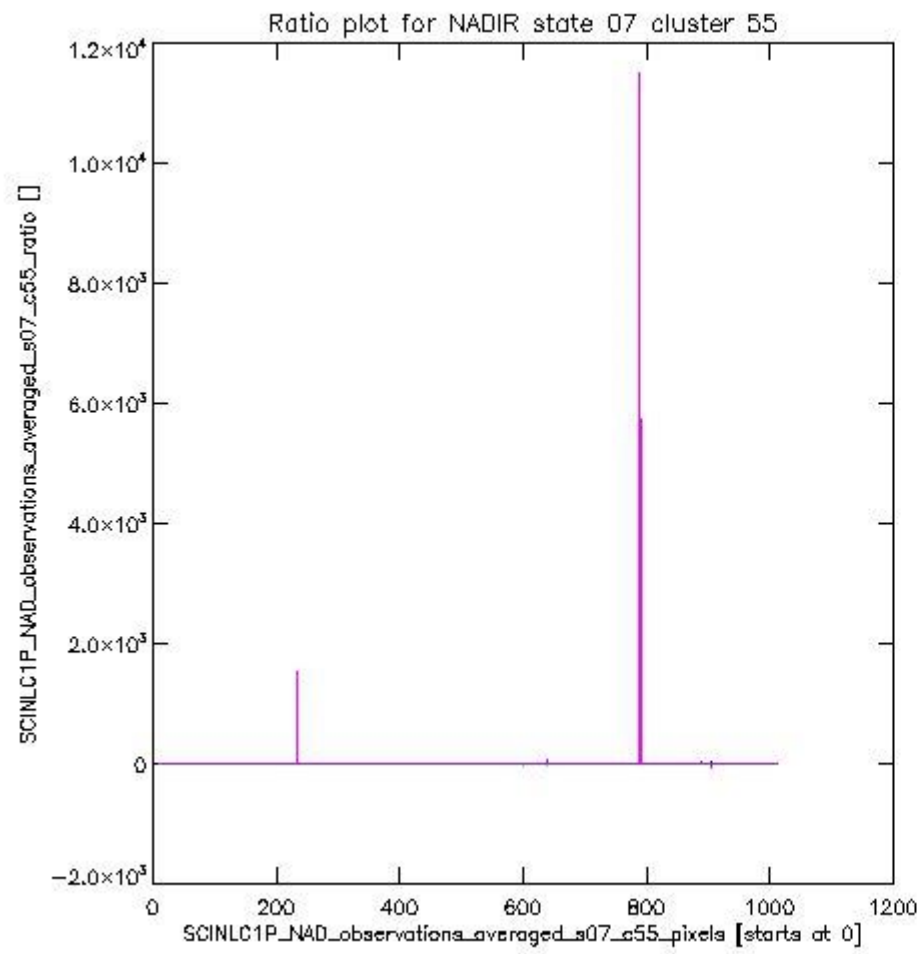
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_7.PNG

**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	18MAY2011 00:13:19.206
Start time of last sample	18MAY2011 23:46:45.335
Reference period start time	18APR2011 00:16:12.444
Reference period stop time	17MAY2011 22:42:25.049
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



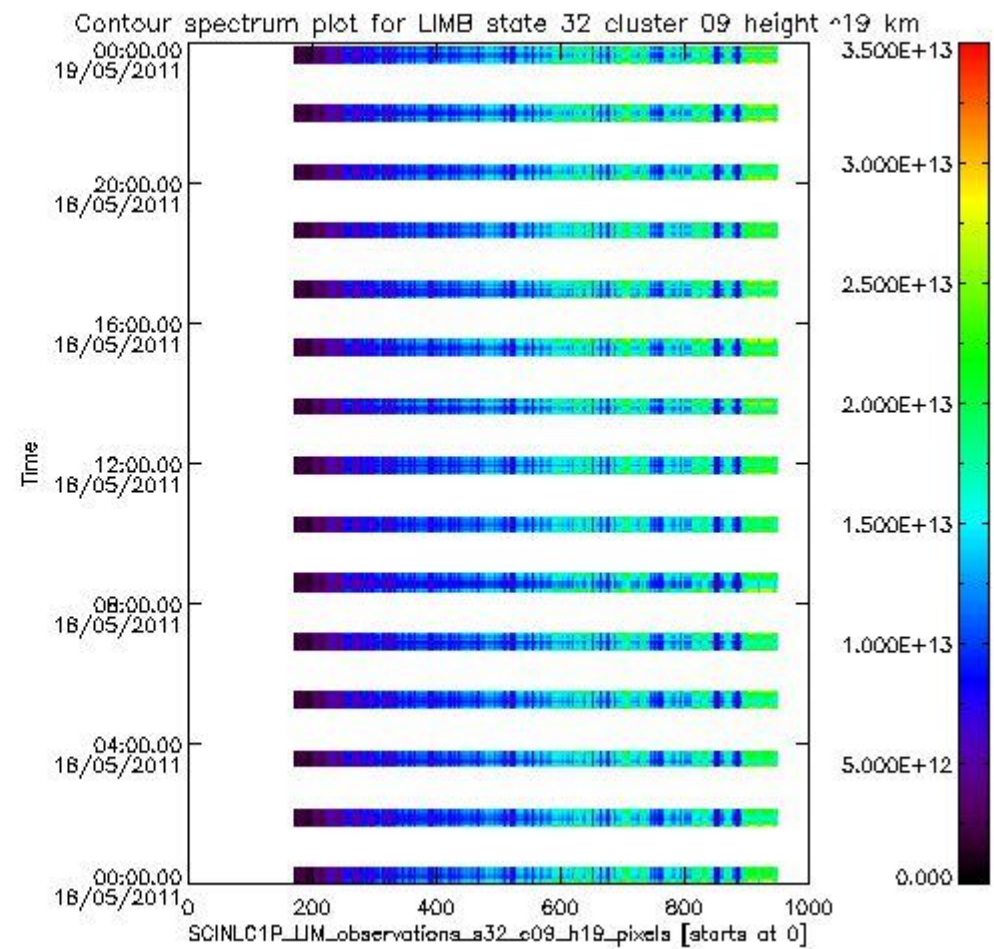
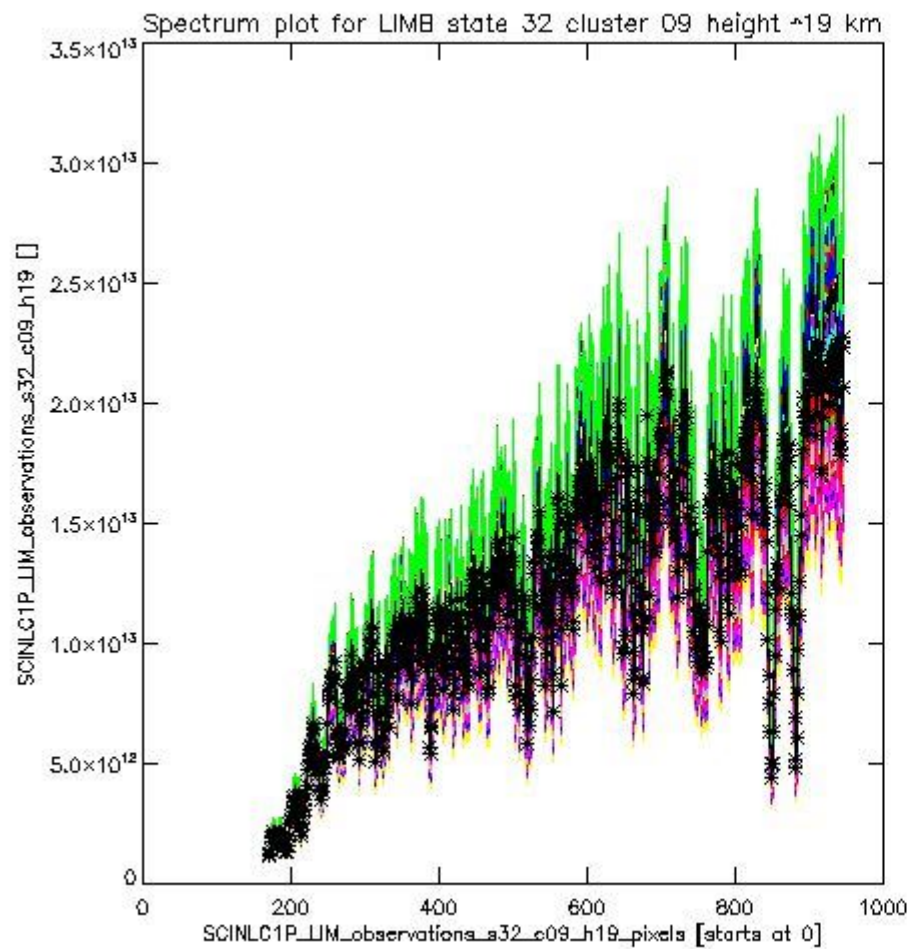
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_8.PNG



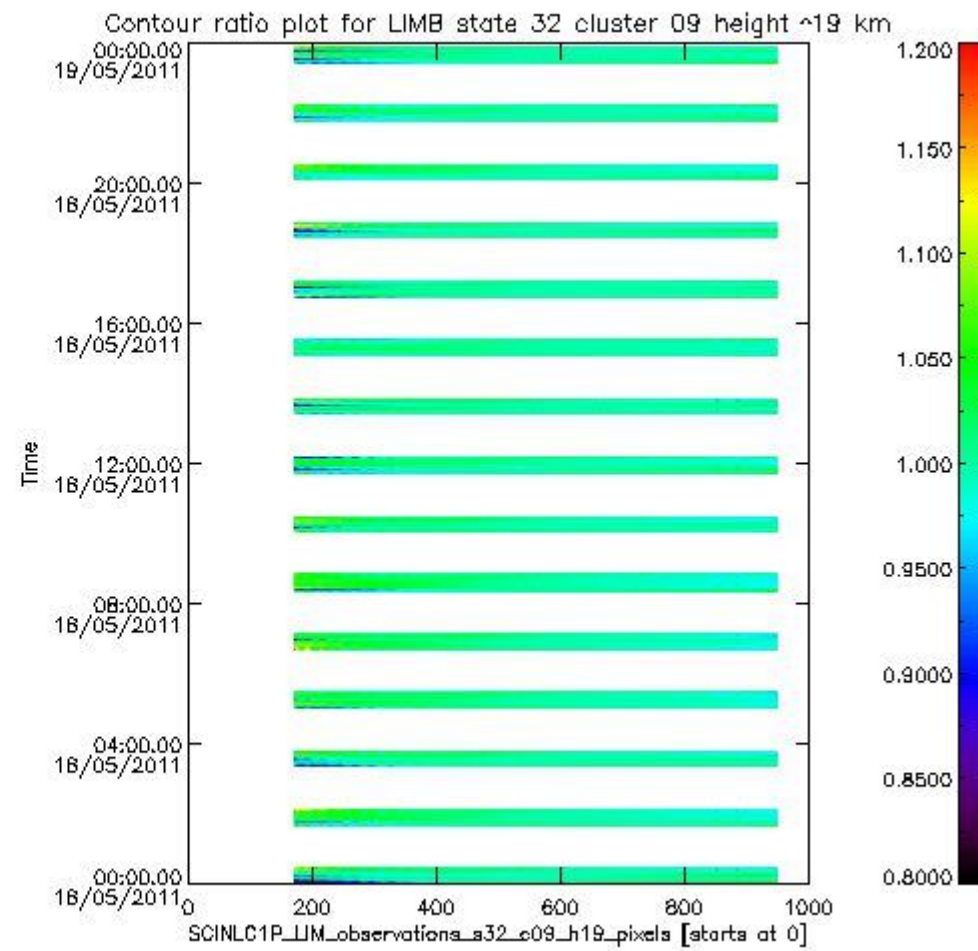
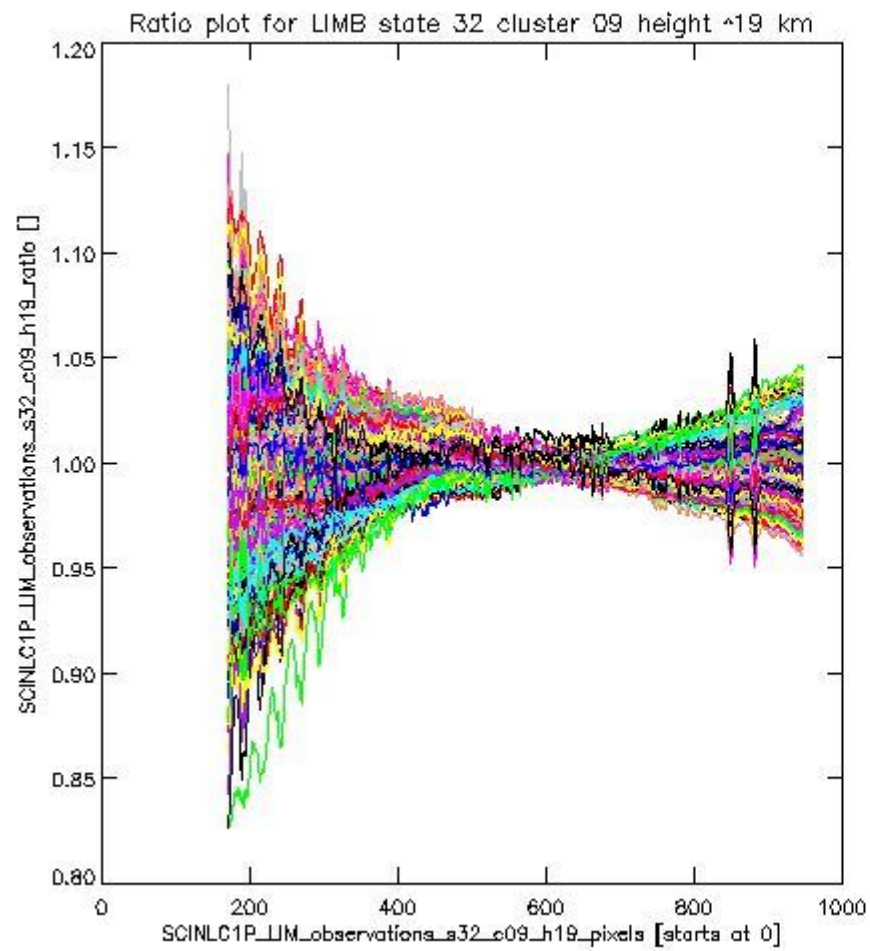
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_9.PNG

**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	18MAY2011 00:00:08.566
Start time of last sample	18MAY2011 23:49:56.635
Reference period start time	18APR2011 00:00:59.069
Reference period stop time	17MAY2011 22:47:39.089
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



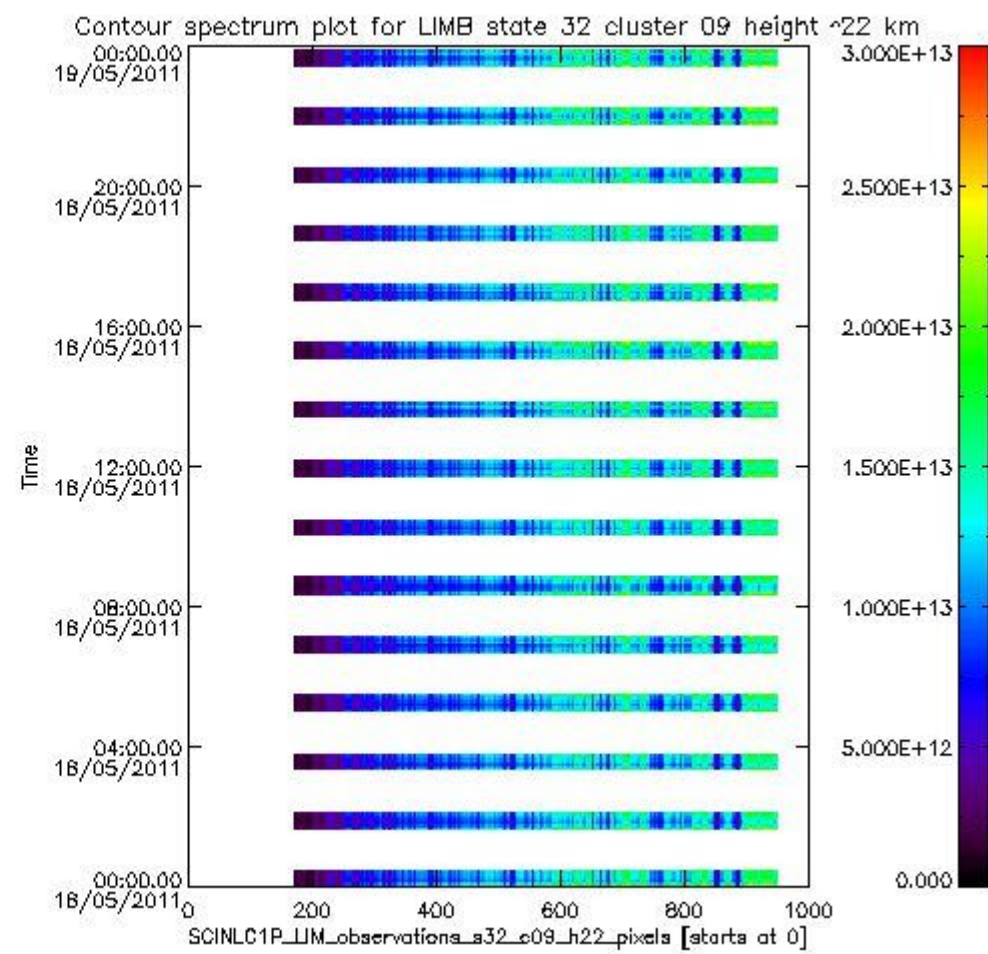
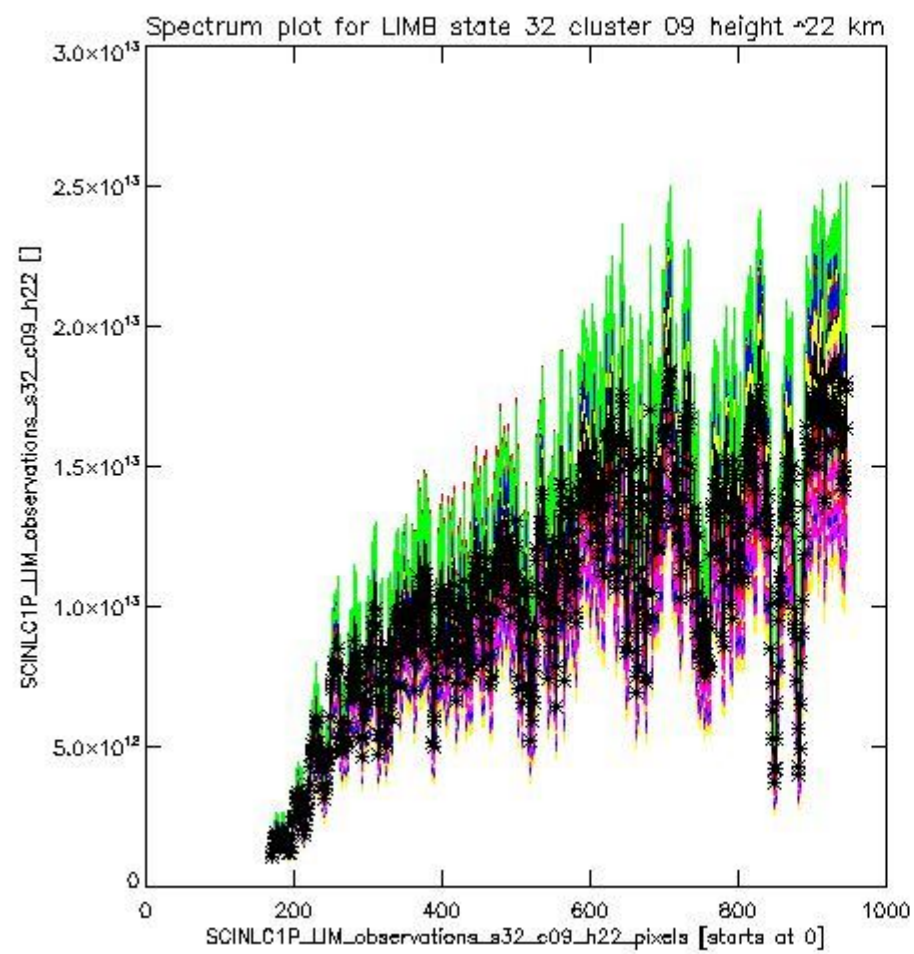
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_10.PNG



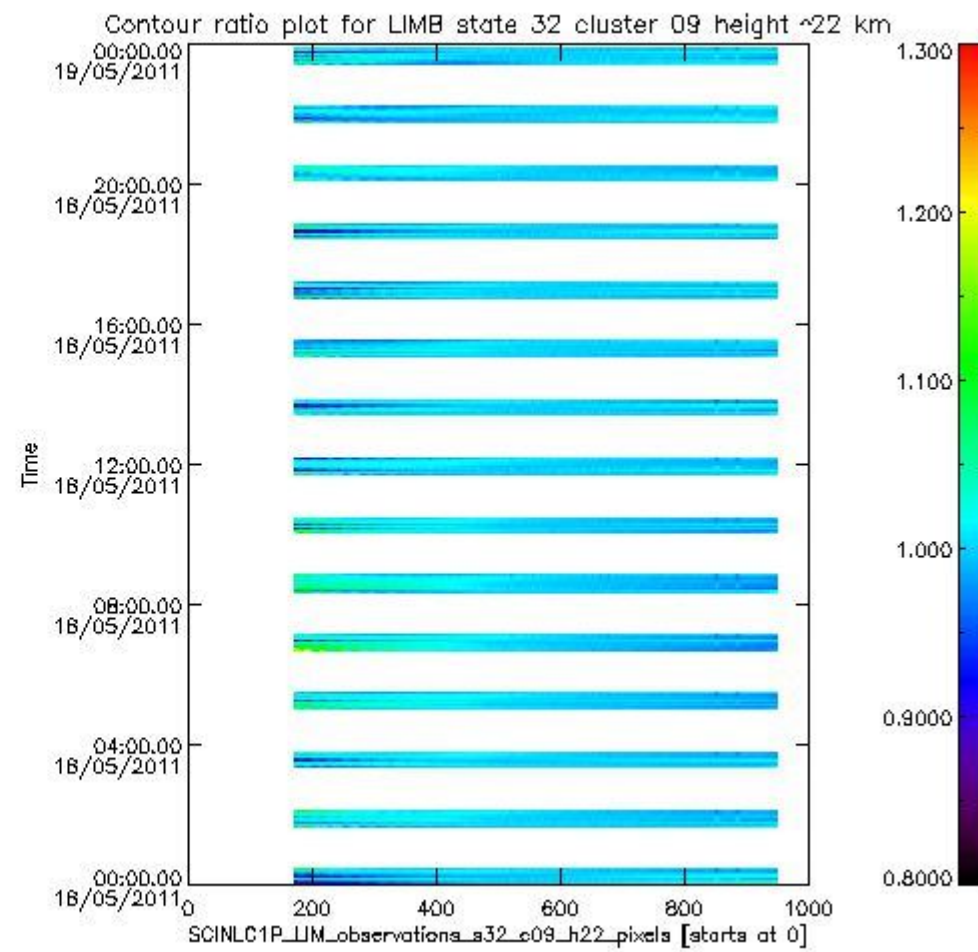
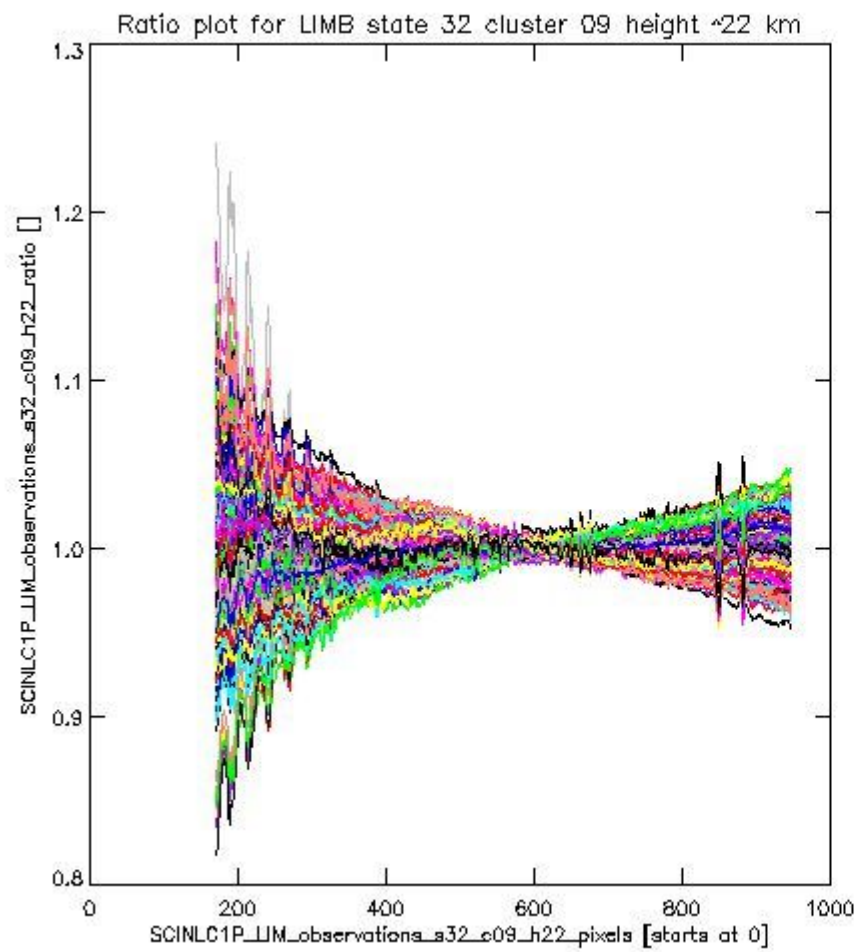
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_11.PNG

**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	18MAY2011 00:00:08.566
Start time of last sample	18MAY2011 23:49:56.635
Reference period start time	18APR2011 00:00:59.069
Reference period stop time	17MAY2011 22:47:39.089
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



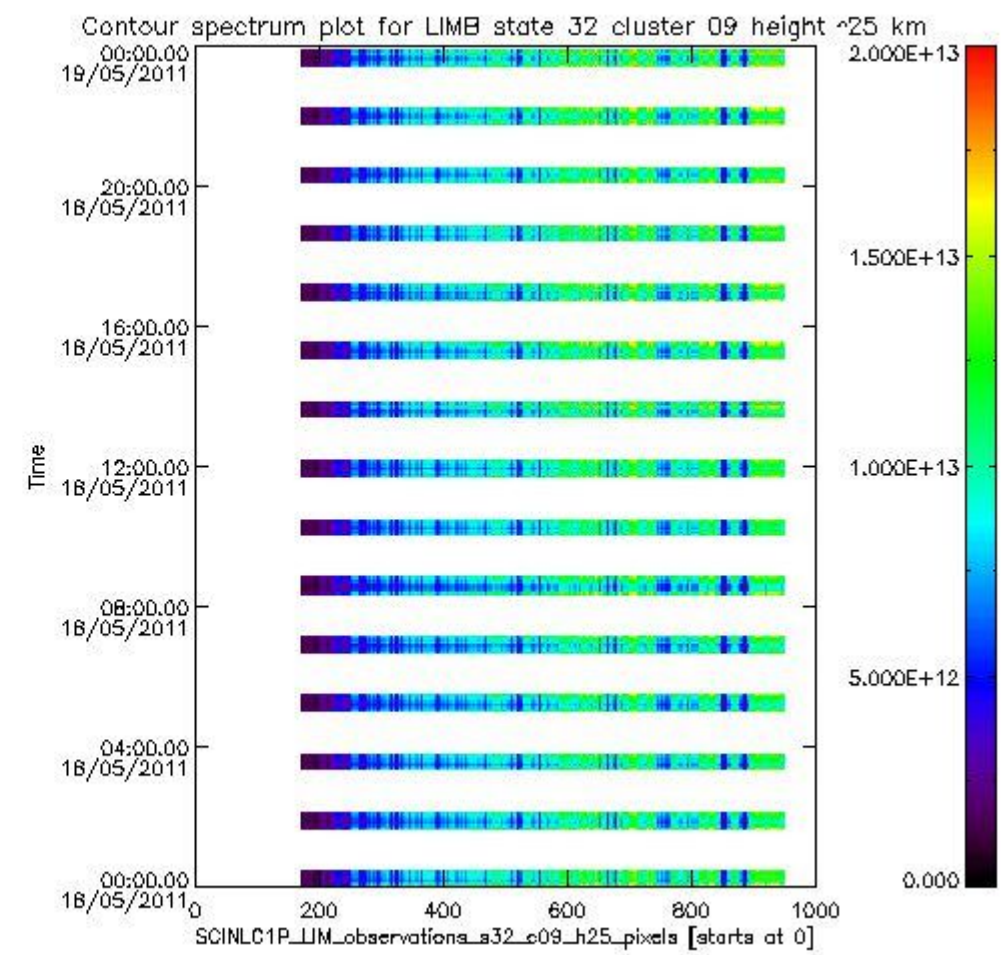
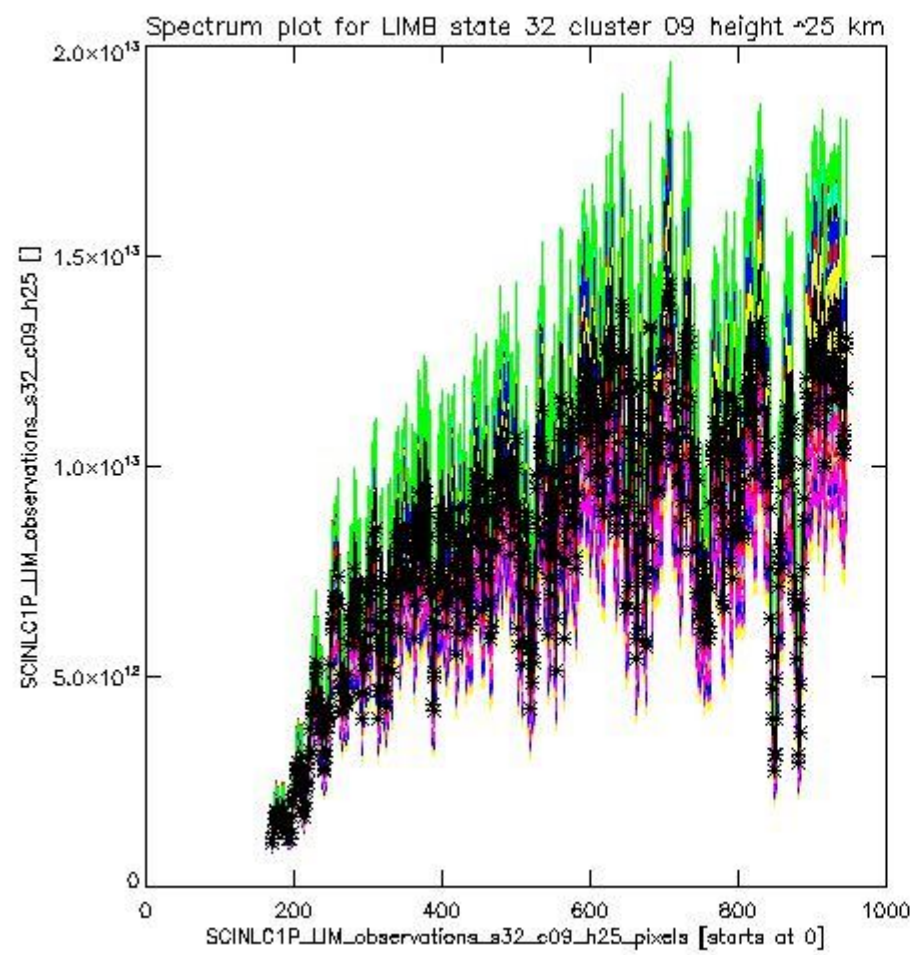
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_13.PNG

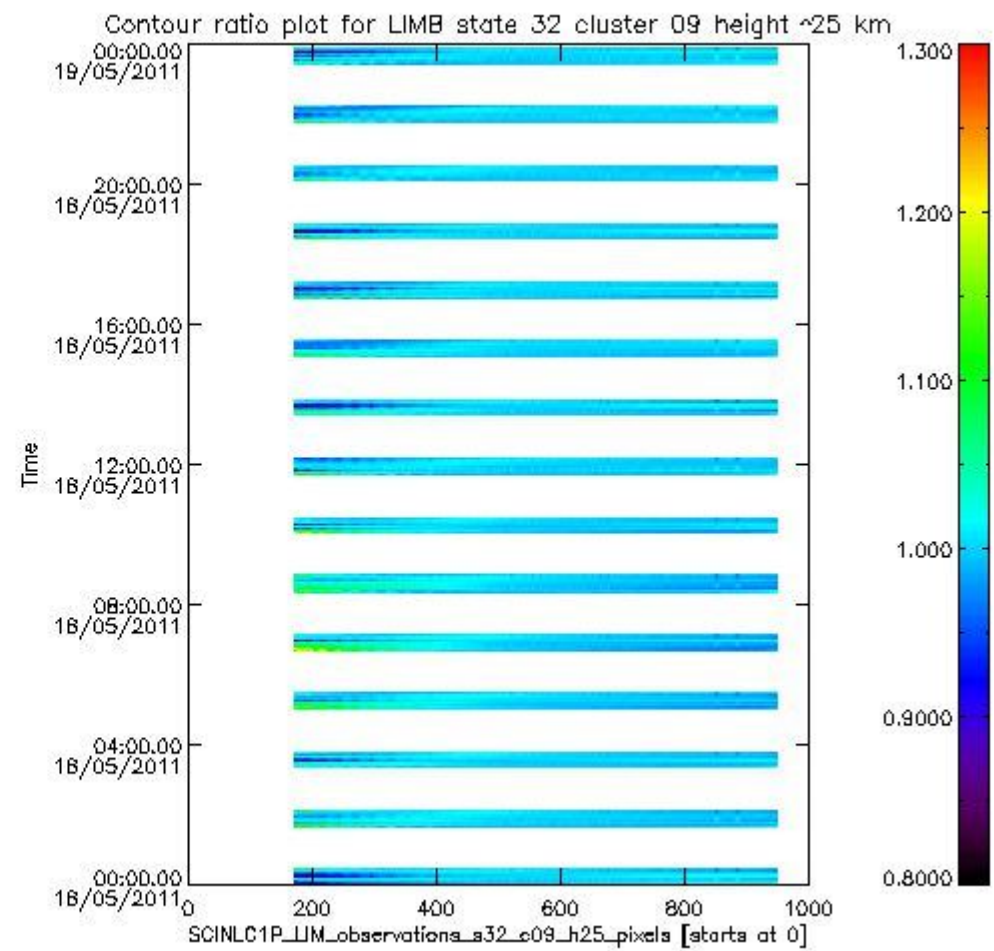
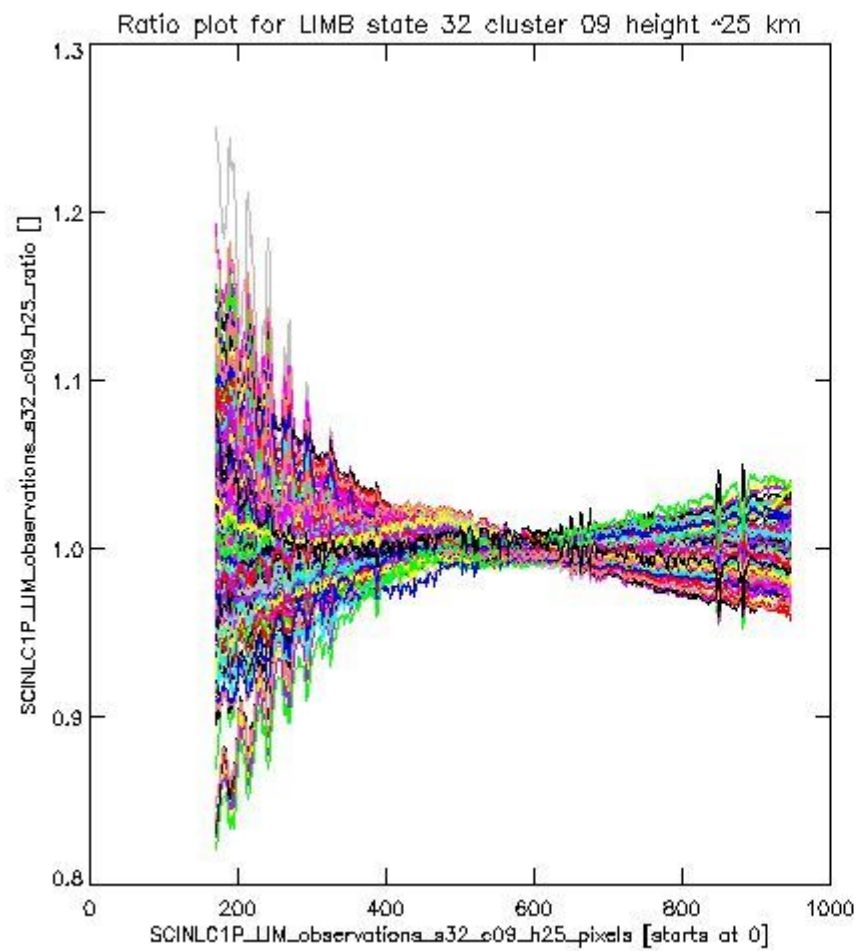
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	18MAY2011 00:00:08.566
Start time of last sample	18MAY2011 23:49:56.635
Reference period start time	18APR2011 00:00:59.069
Reference period stop time	17MAY2011 22:47:39.089
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\_20110518\_14.PNG

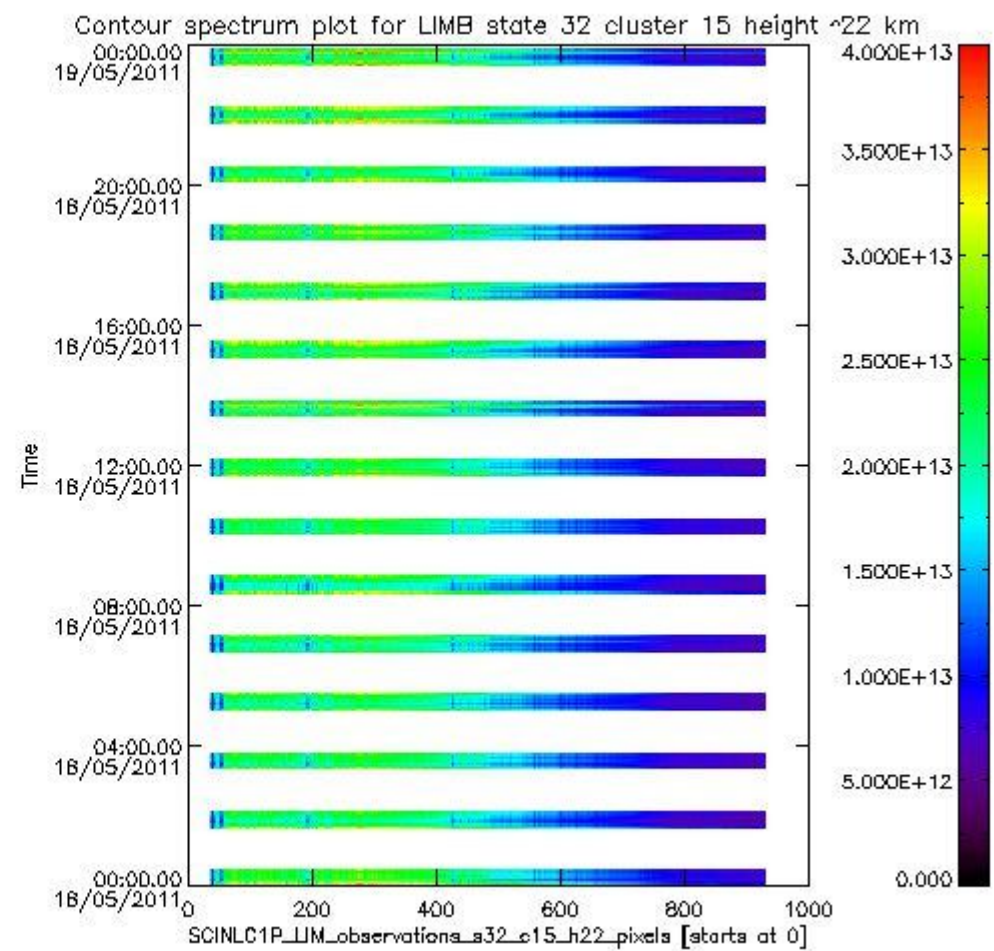
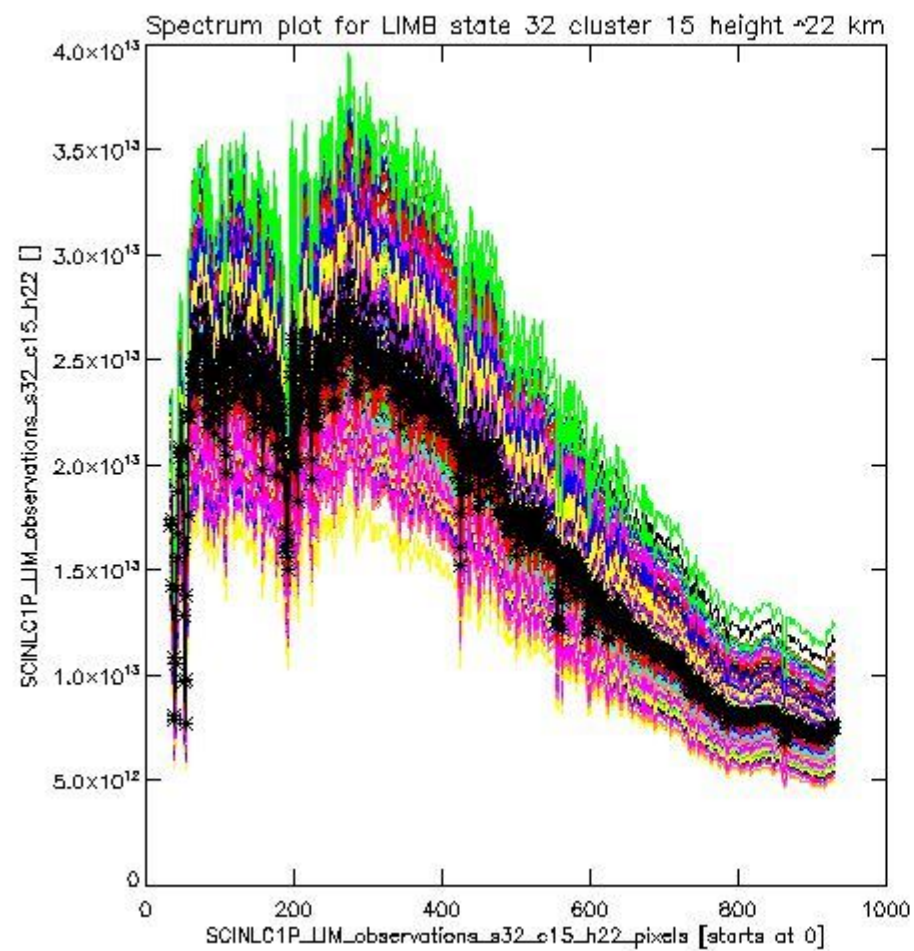




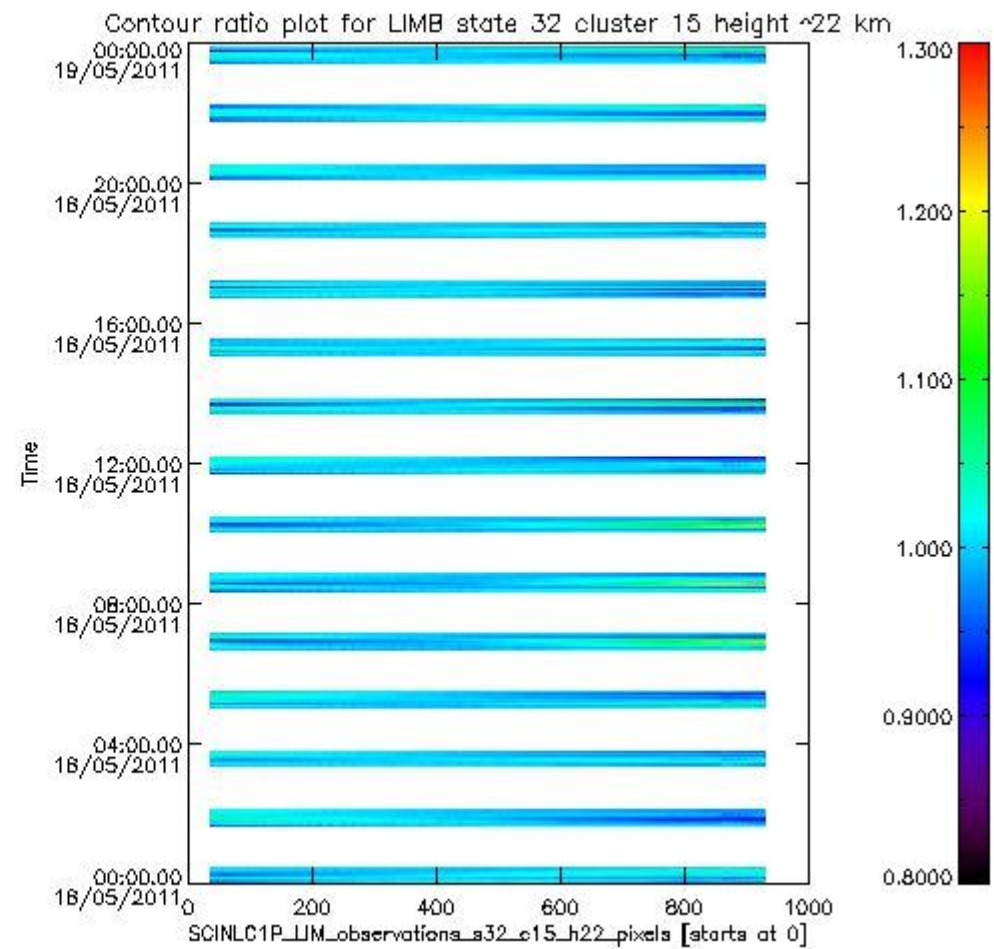
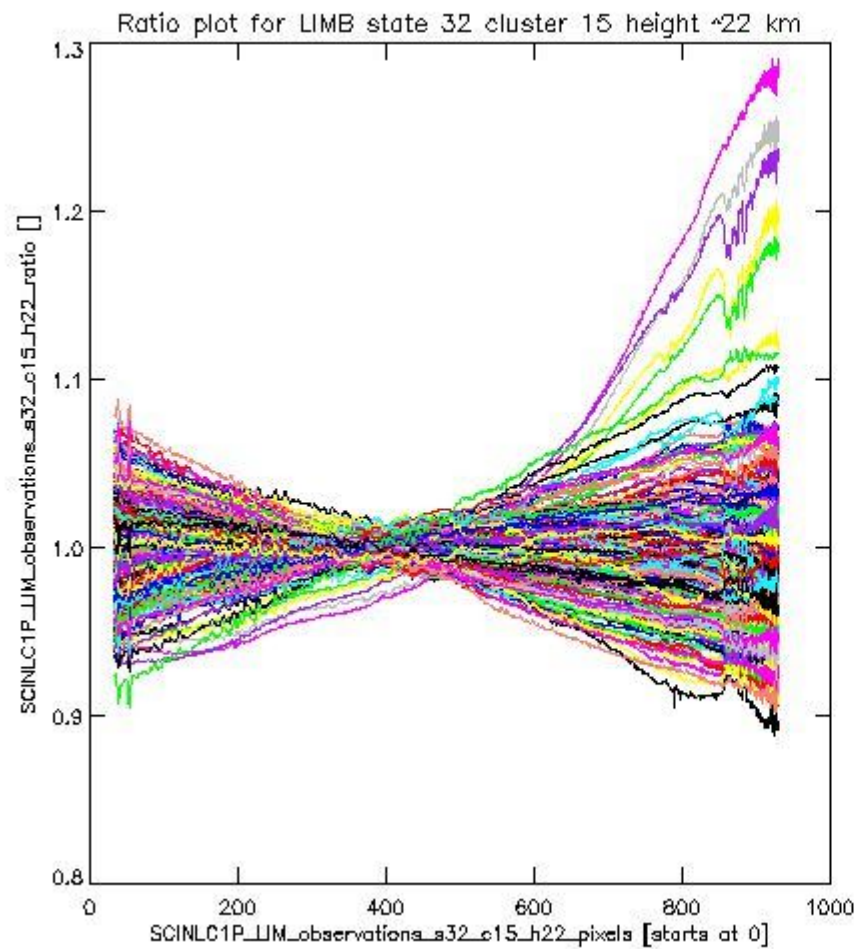
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_15.PNG

**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	18MAY2011 00:00:08.566
Start time of last sample	18MAY2011 23:49:56.635
Reference period start time	18APR2011 00:00:59.069
Reference period stop time	17MAY2011 22:47:39.089
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



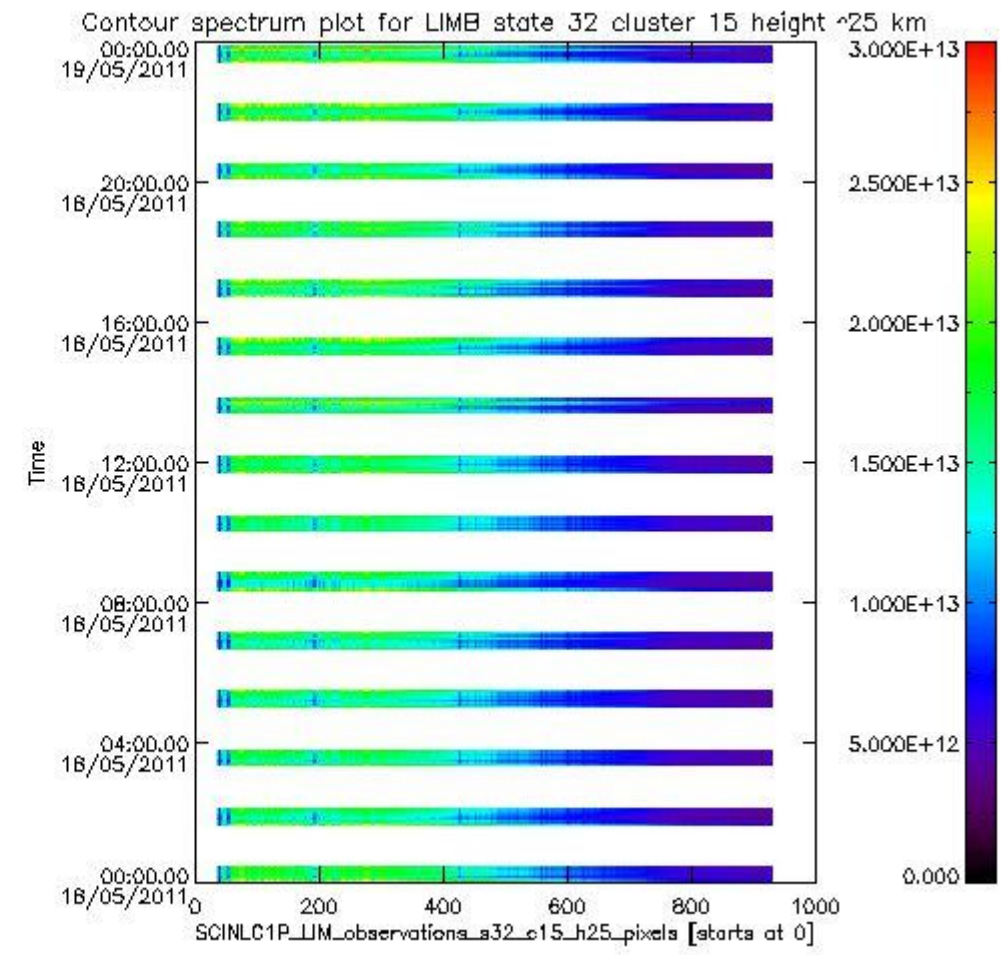
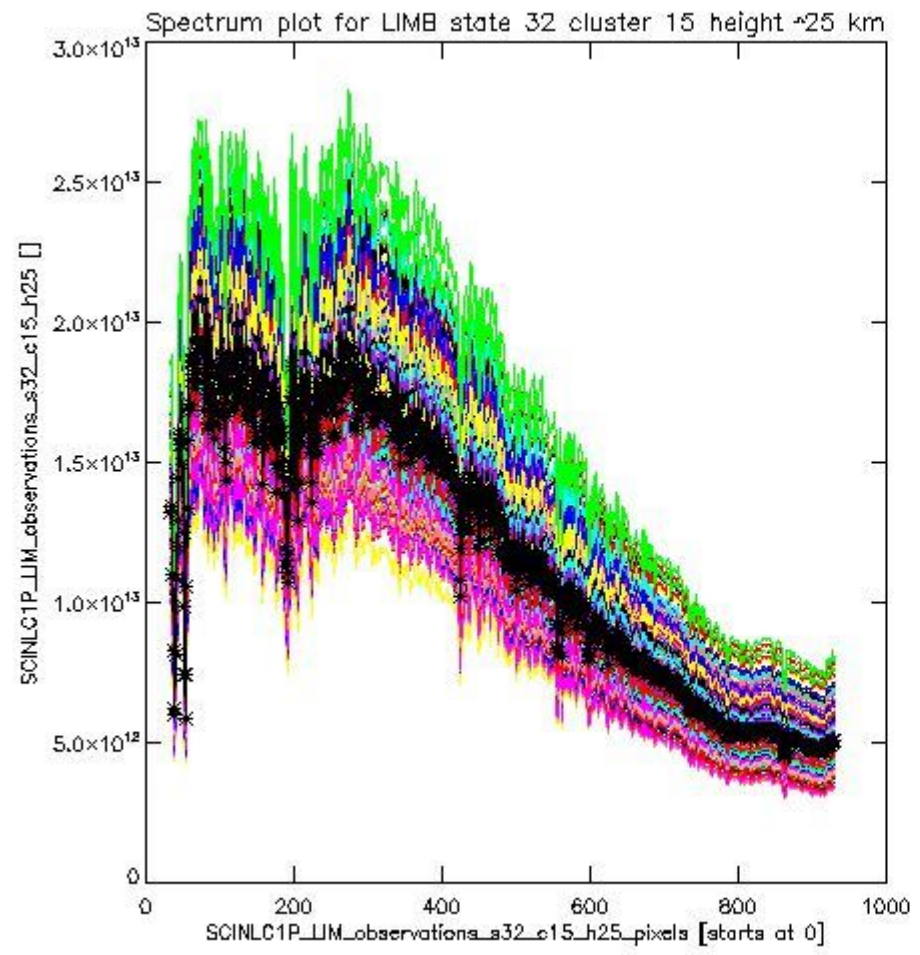
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_16.PNG



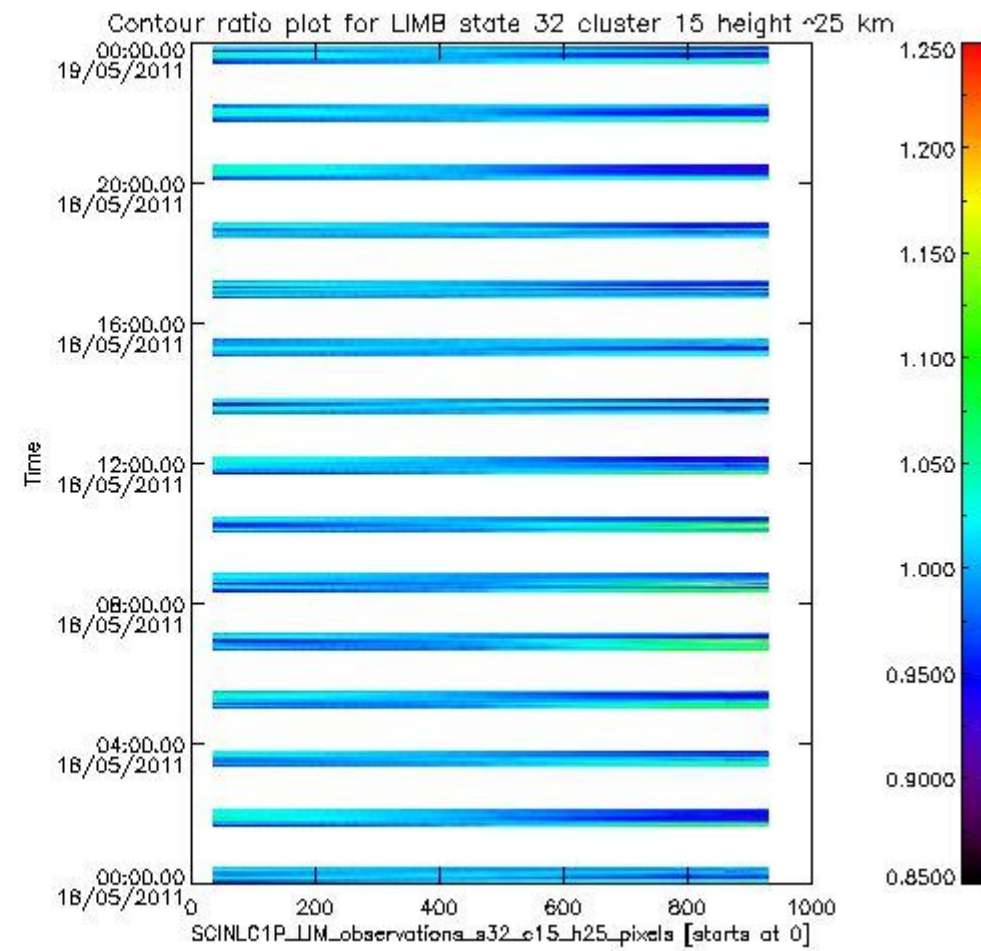
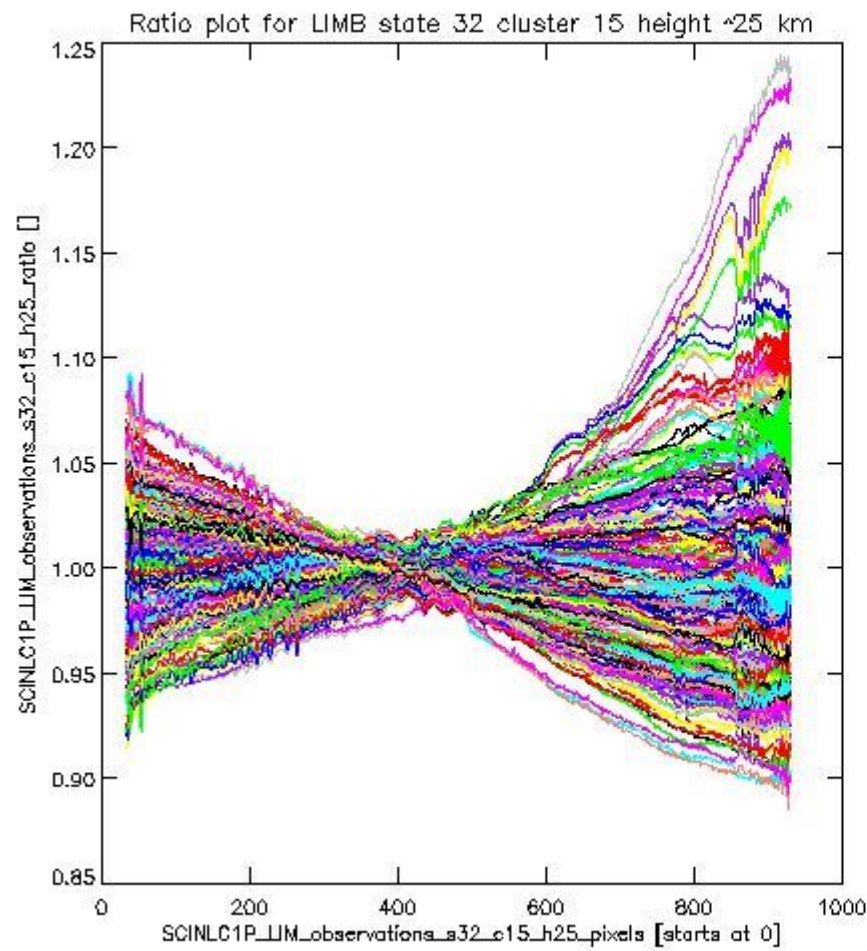
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_17.PNG

**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	18MAY2011 00:00:08.566
Start time of last sample	18MAY2011 23:49:56.635
Reference period start time	18APR2011 00:00:59.069
Reference period stop time	17MAY2011 22:47:39.089
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



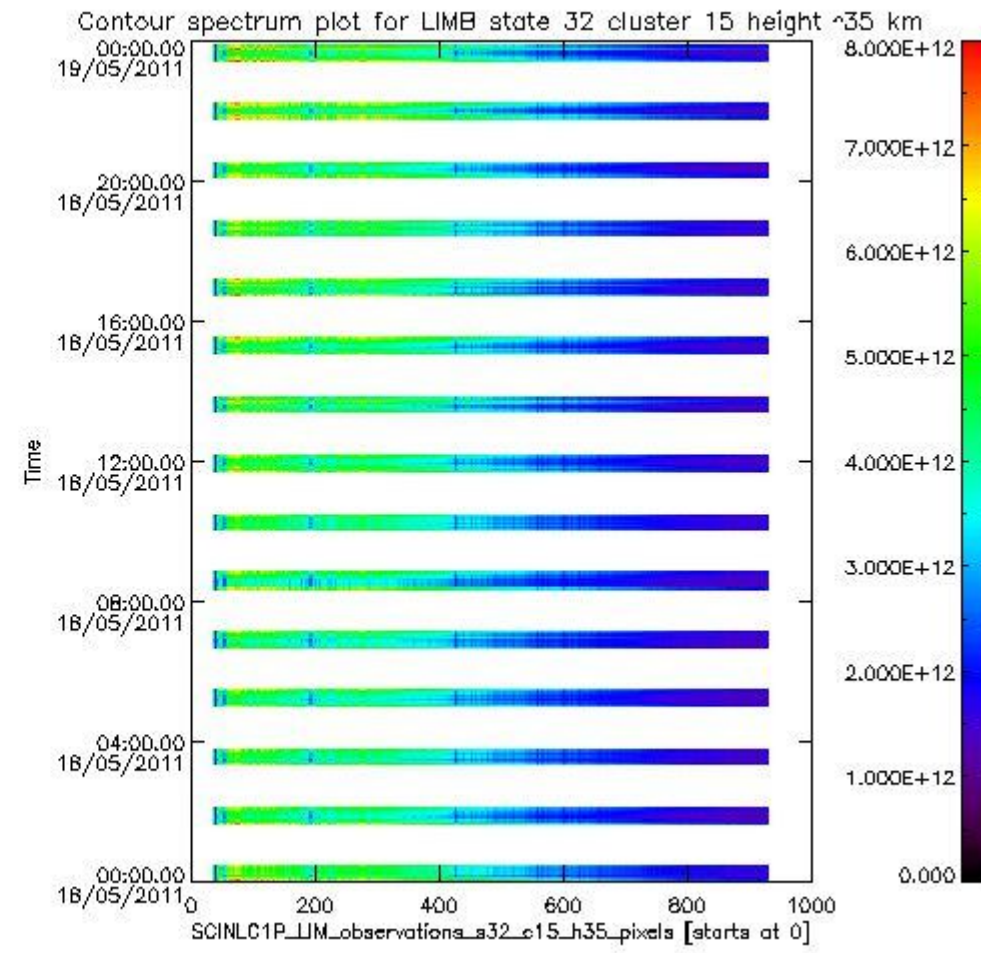
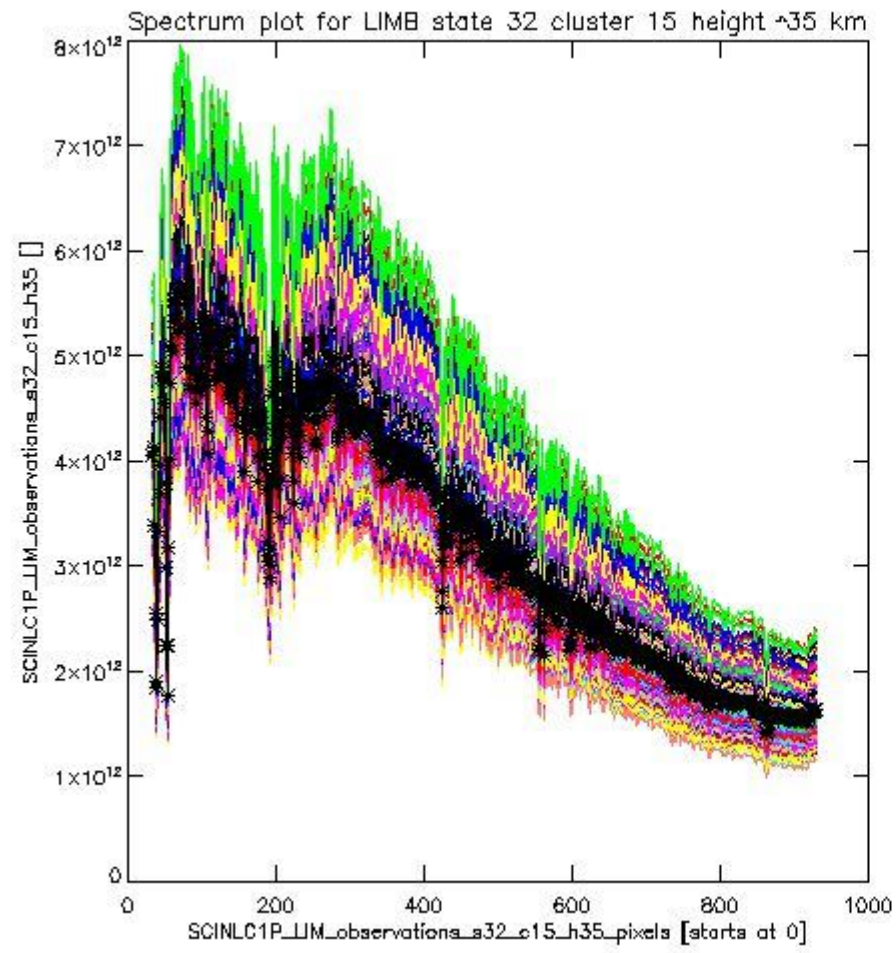
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_18.PNG



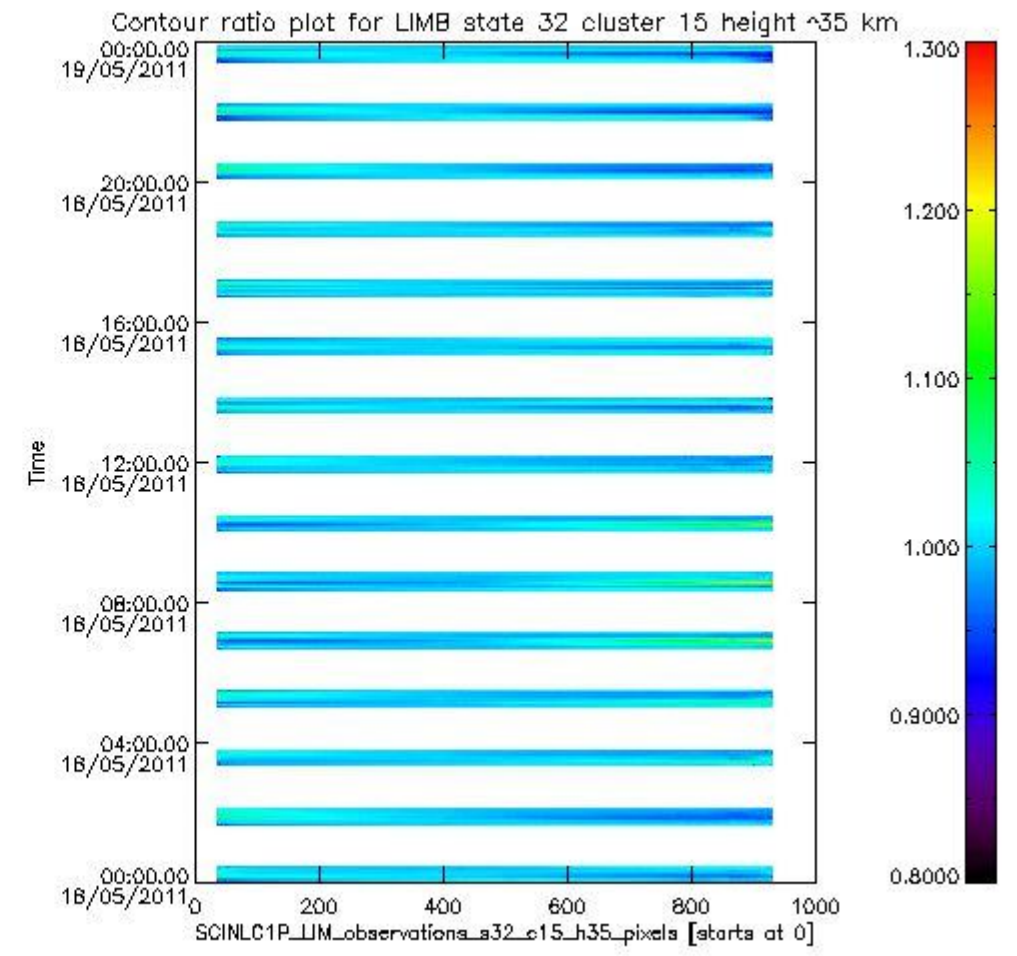
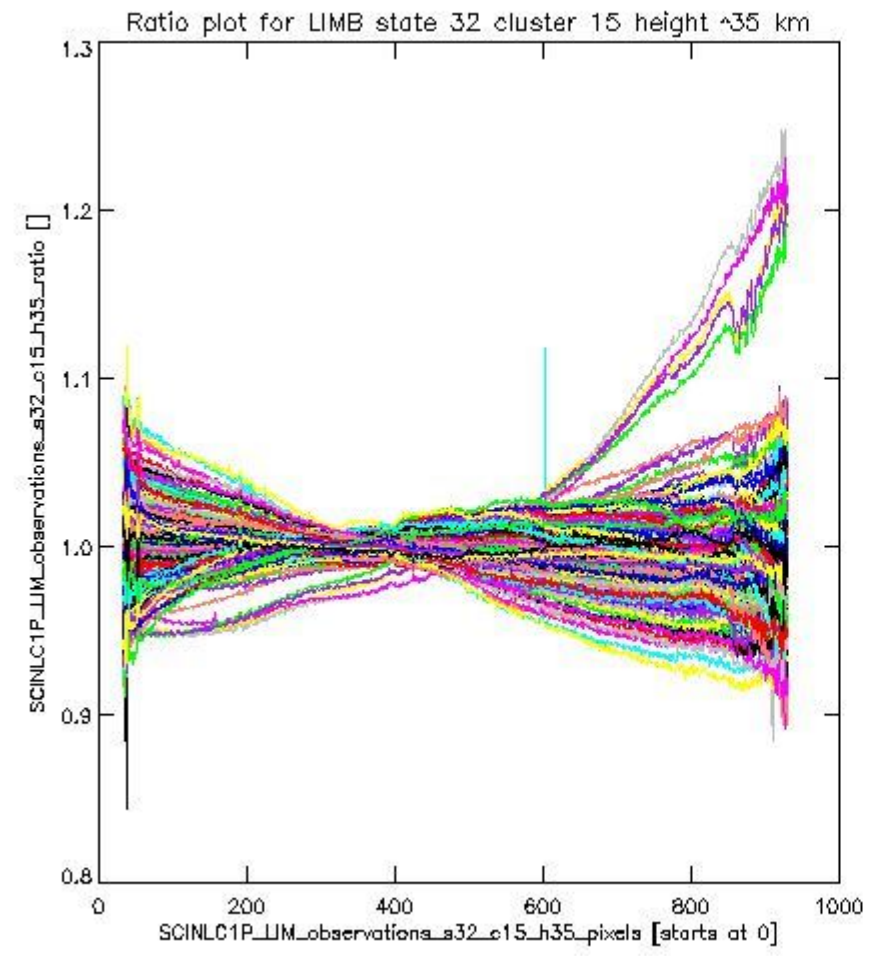
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_19.PNG

**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	18MAY2011 00:00:08.566
Start time of last sample	18MAY2011 23:49:56.635
Reference period start time	18APR2011 00:00:59.069
Reference period stop time	17MAY2011 22:47:39.089
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\_20110518\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110518\_21.PNG

