

# 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	08JUN2011 06:55:44
Data source version	SCIA/7.04-U
Processing scope for products	26MAY2011 00:00:00 to 27MAY2011 00:00:00
Start time of first product within scope	25MAY2011 23:47:38
Stop time of last product within scope	26MAY2011 16:48:44
Total number of level 1 products	11
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	26MAY2011 00:20:49.858	26MAY2011 15:31:58.919
1	NADIR	07	09	N/A	26MAY2011 00:20:49.858	26MAY2011 15:31:58.919
2	NADIR	07	15	N/A	26MAY2011 00:20:49.858	26MAY2011 15:31:58.919
3	NADIR	07	24	N/A	26MAY2011 00:20:49.858	26MAY2011 15:31:58.919
4	NADIR	07	55	N/A	26MAY2011 00:20:49.858	26MAY2011 15:31:58.919
5	LIMB	32	09	~19 km	26MAY2011 00:05:36.483	26MAY2011 16:47:54.225
6	LIMB	32	09	~22 km	26MAY2011 00:05:36.483	26MAY2011 16:47:54.225
7	LIMB	32	09	~25 km	26MAY2011 00:05:36.483	26MAY2011 16:47:54.225
8	LIMB	32	15	~22 km	26MAY2011 00:05:36.483	26MAY2011 16:47:54.225
9	LIMB	32	15	~25 km	26MAY2011 00:05:36.483	26MAY2011 16:47:54.225
10	LIMB	32	15	~35 km	26MAY2011 00:05:36.483	26MAY2011 16:47:54.225

#### 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	#cmlpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110525_234738_000056983103_00002_48292_1651.N1</a>	25MAY2011 23:47:38	26MAY2011 00:58:07	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110526_012241_000060543103_00003_48293_1655.N1</a>	26MAY2011 01:27:52	26MAY2011 02:38:07	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110526_030806_000056983103_00004_48294_1656.N1</a>	26MAY2011 03:08:06	26MAY2011 04:18:35	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110526_044308_000060543103_00005_48295_1658.N1</a>	26MAY2011 04:48:20	26MAY2011 05:58:34	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110526_062833_000056983103_00006_48296_1659.N1</a>	26MAY2011 06:28:33	26MAY2011 07:39:02	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110526_080336_000060543103_00007_48297_1661.N1</a>	26MAY2011 08:08:47	26MAY2011 09:19:02	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110526_094901_000056983103_00008_48298_1664.N1	26MAY2011 09:49:01	26MAY2011 10:59:30	0	36	30	0	0	1	0	0
7	SCI_NLC_1CUDPA20110526_112403_000060543103_00009_48299_1666.N1	26MAY2011 11:29:15	26MAY2011 12:39:29	0	35	31	0	0	1	0	0
8	SCI_NLC_1CUDPA20110526_130928_000056983103_00010_48300_1667.N1	26MAY2011 13:09:28	26MAY2011 14:19:57	0	36	30	0	0	1	0	0
9	SCI_NLC_1CUDPA20110526_144431_000060543103_00011_48301_1670.N1	26MAY2011 14:49:42	26MAY2011 15:59:57	0	35	31	0	0	1	0	0
10	SCI_NLC_1CUDPA20110526_162956_000011353103_00012_48302_1673.N1	26MAY2011 16:29:56	26MAY2011 16:48:44	0	5	12	0	0	1	0	0

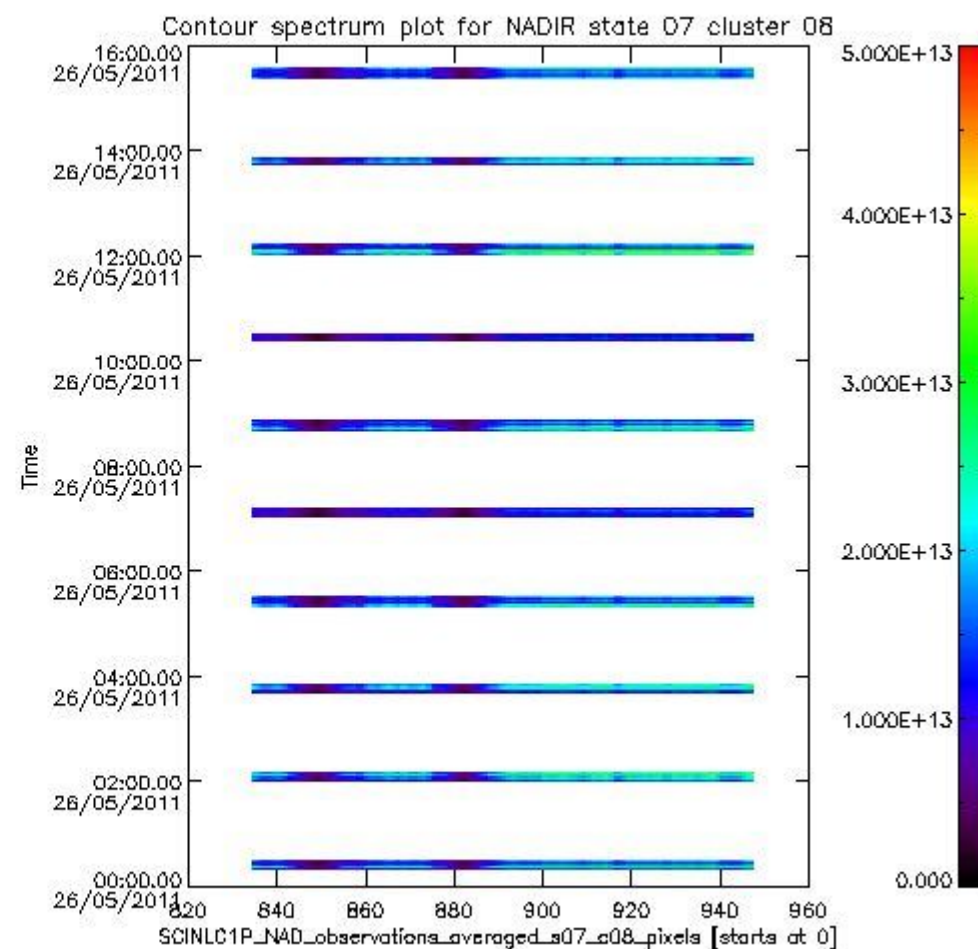
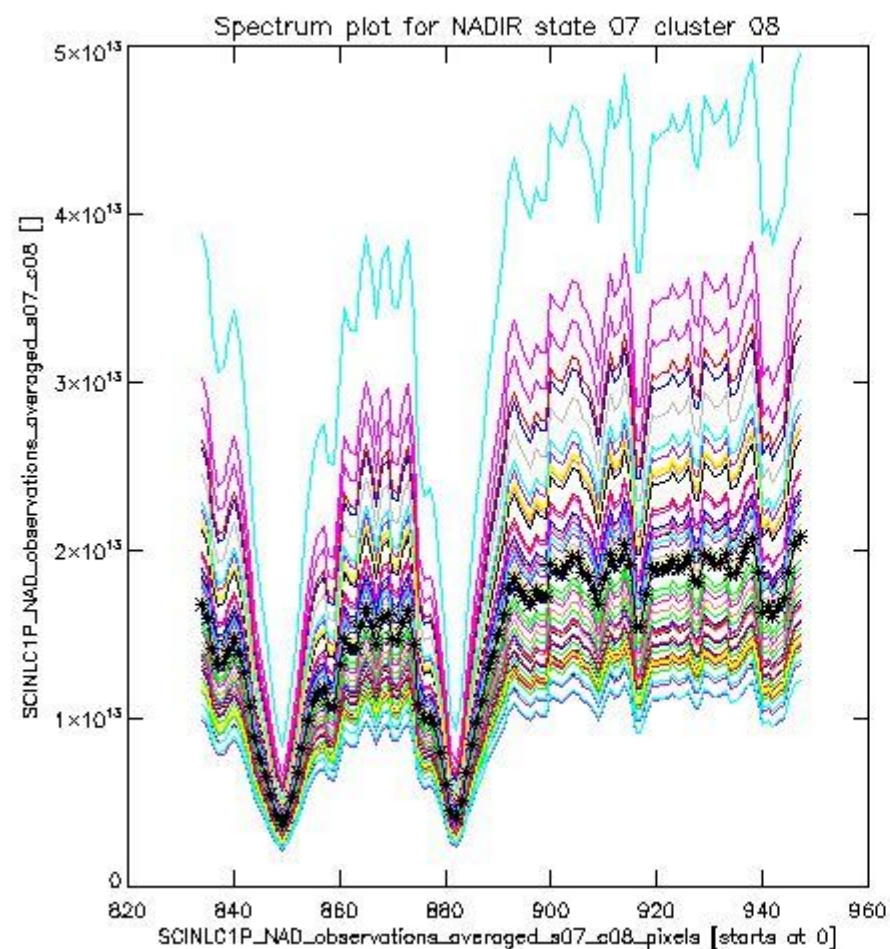
## 1.2 Source packet monitoring

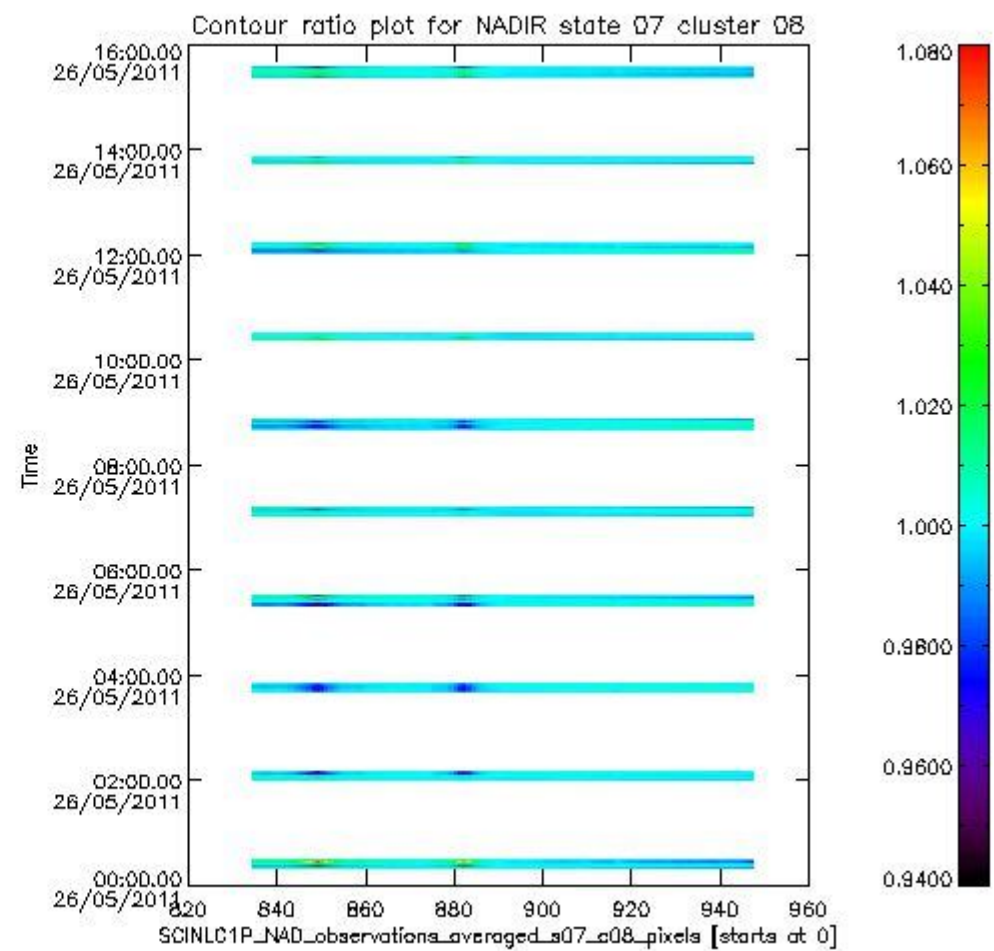
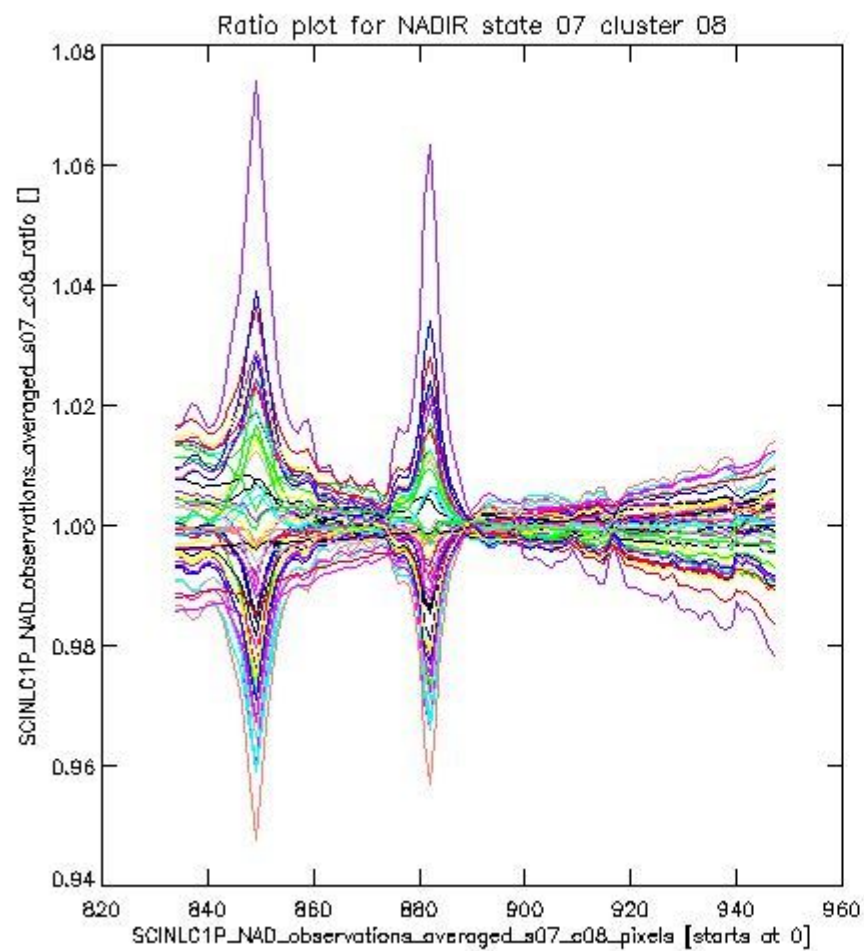
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	26MAY2011 00:20:49.858
Start time of last sample	26MAY2011 15:31:58.919
Reference period start time	26APR2011 00:21:12.451
Reference period stop time	25MAY2011 22:49:41.291
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



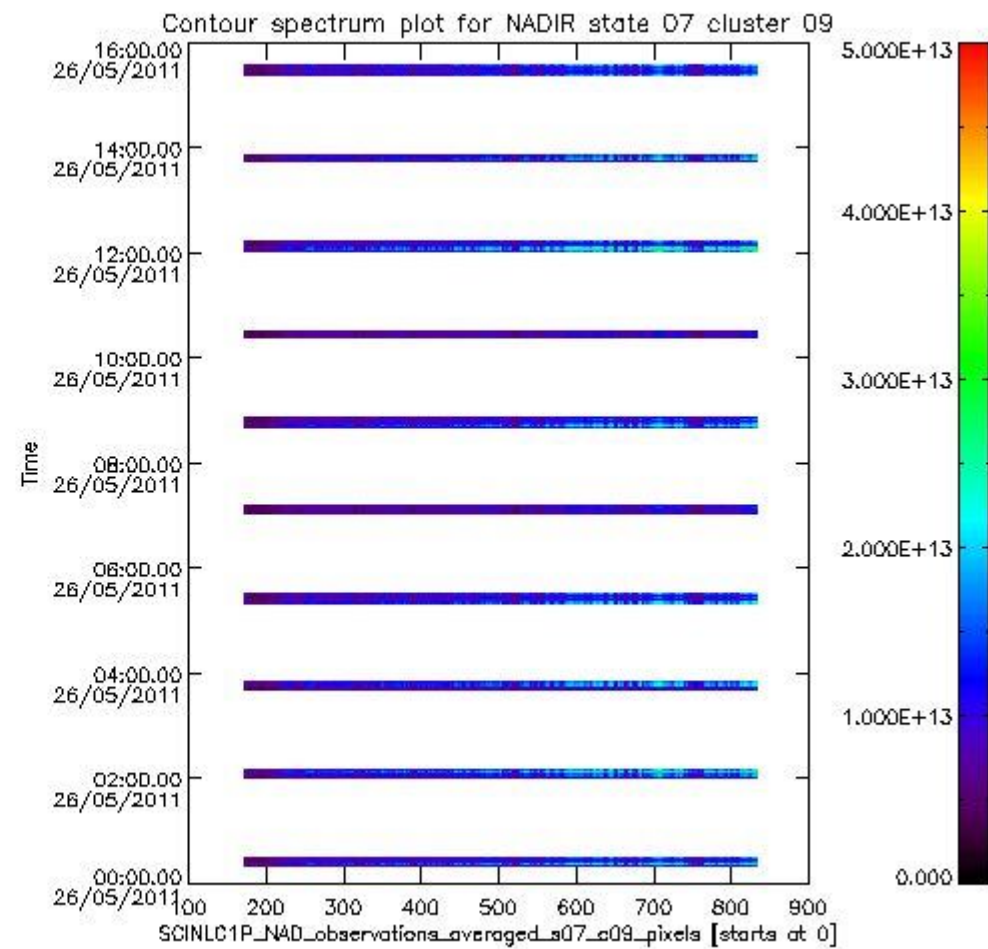
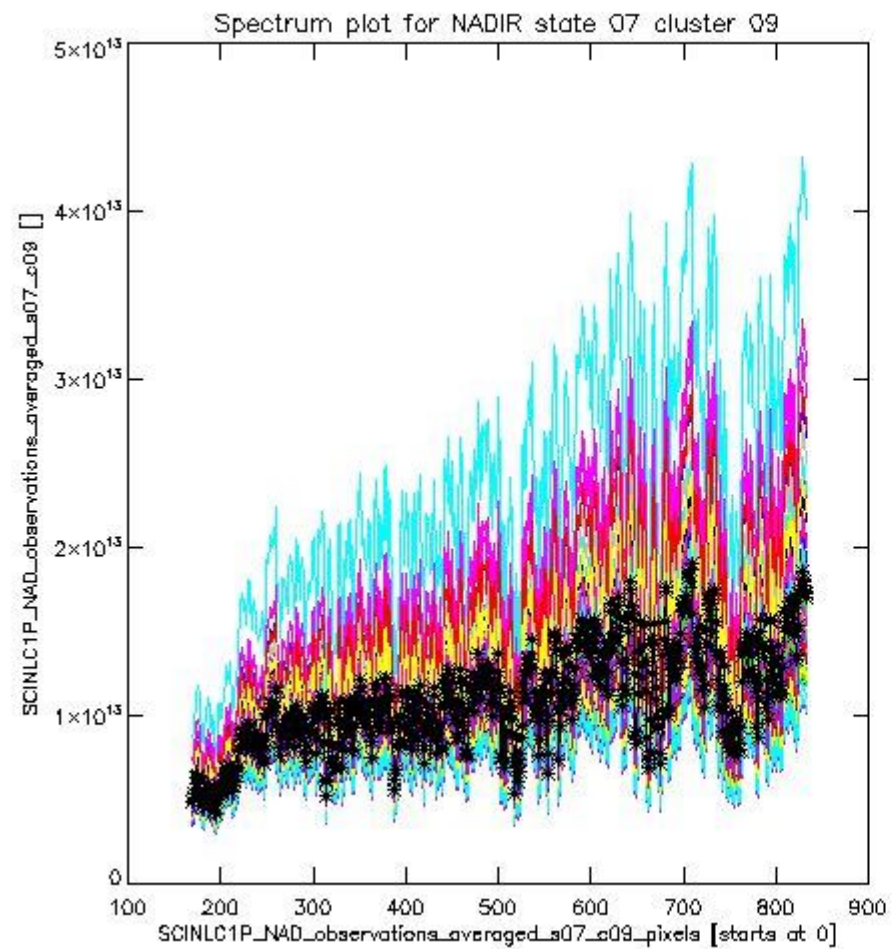


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_1.PNG

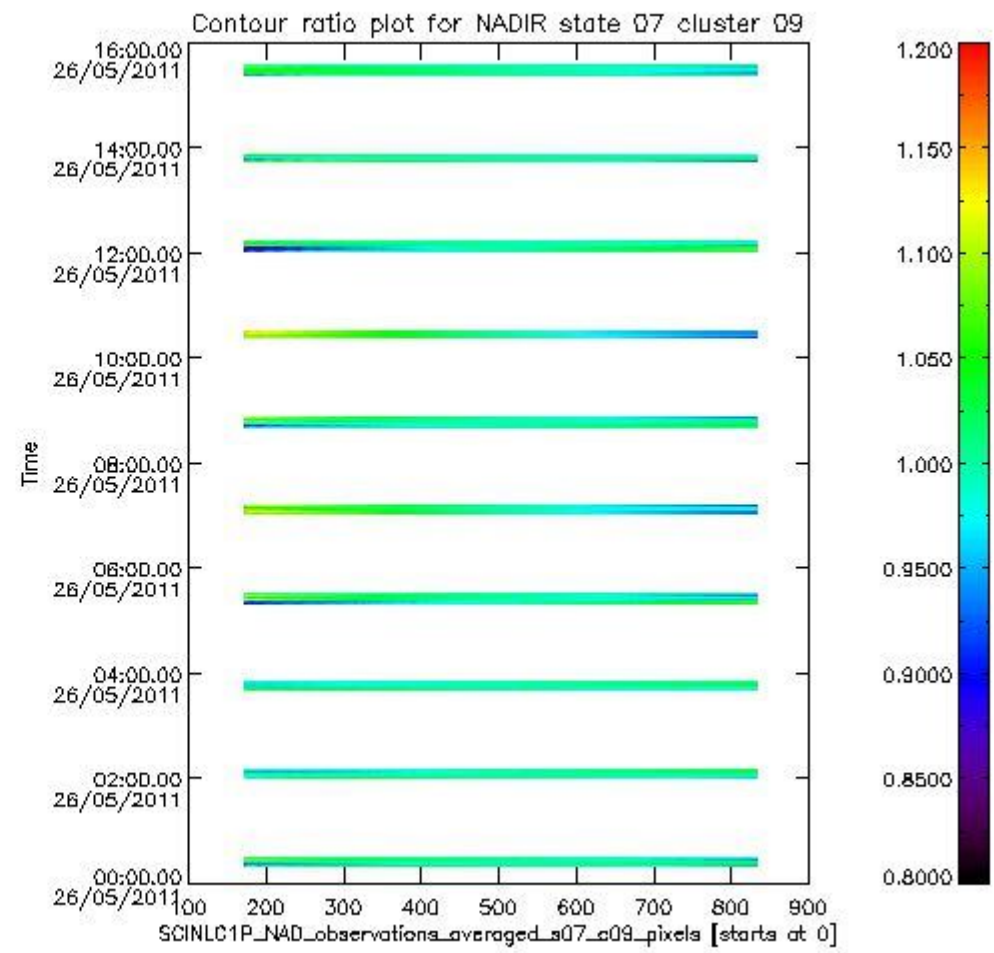
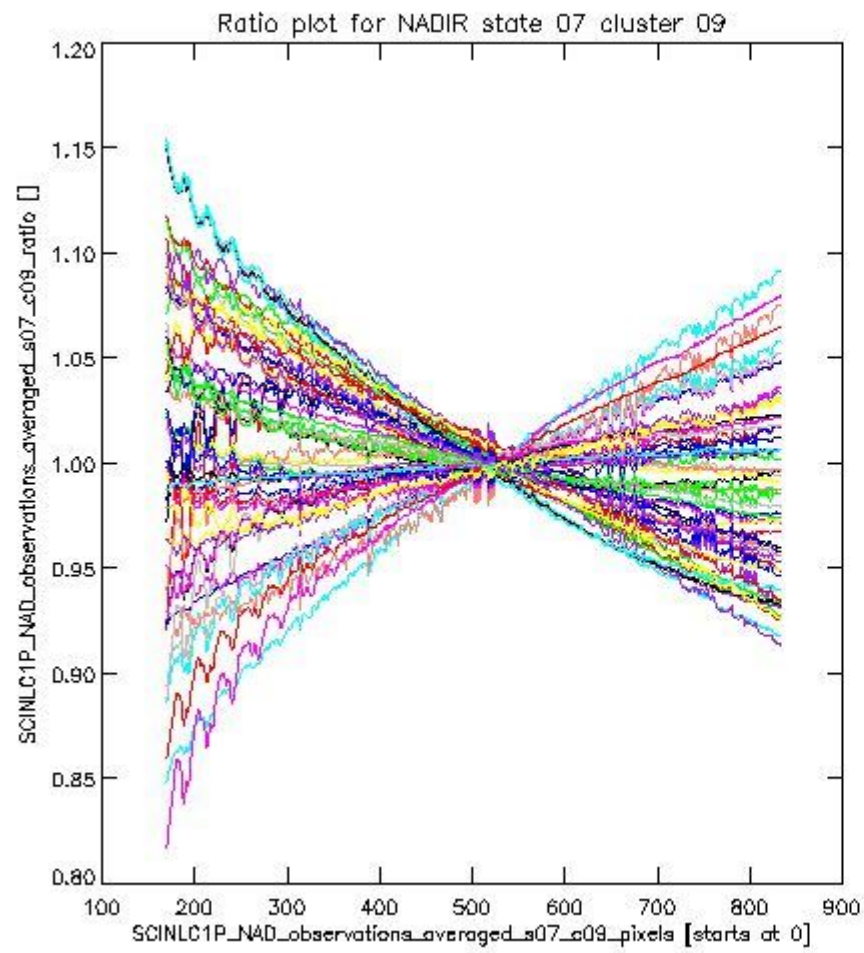
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	26MAY2011 00:20:49.858
Start time of last sample	26MAY2011 15:31:58.919
Reference period start time	26APR2011 00:21:12.451
Reference period stop time	25MAY2011 22:49:41.291
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





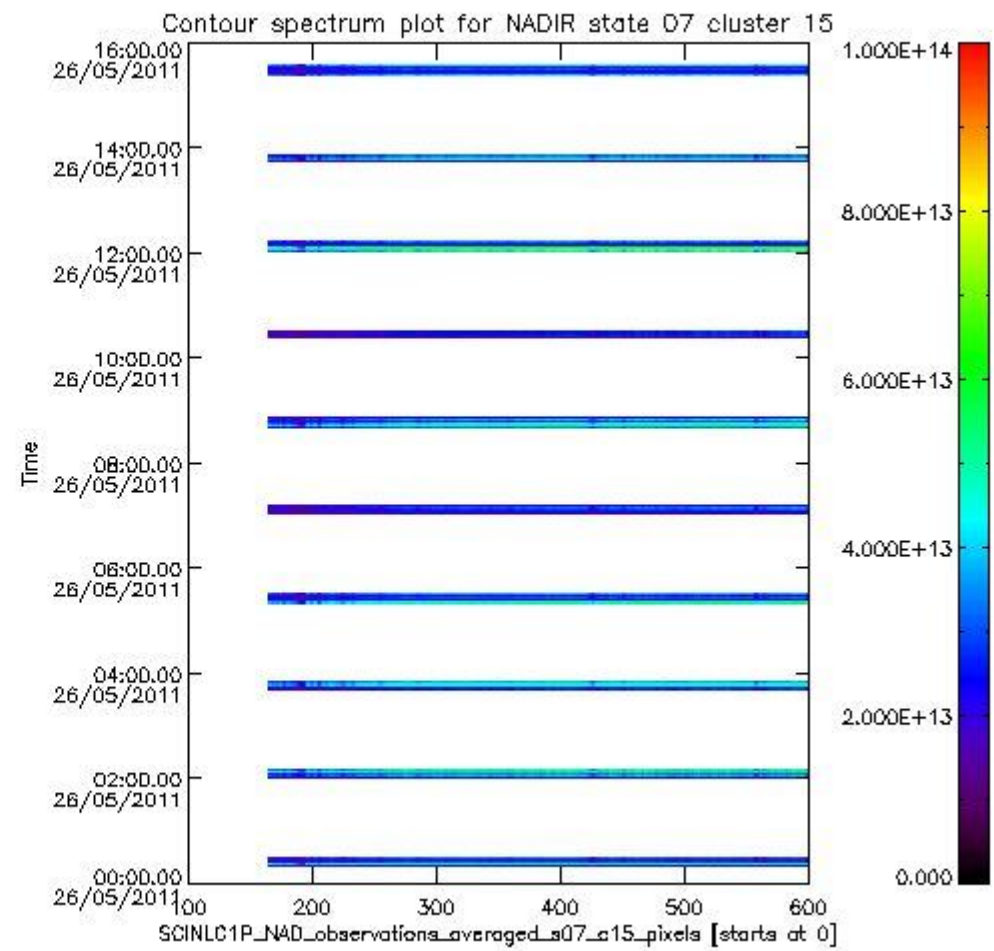
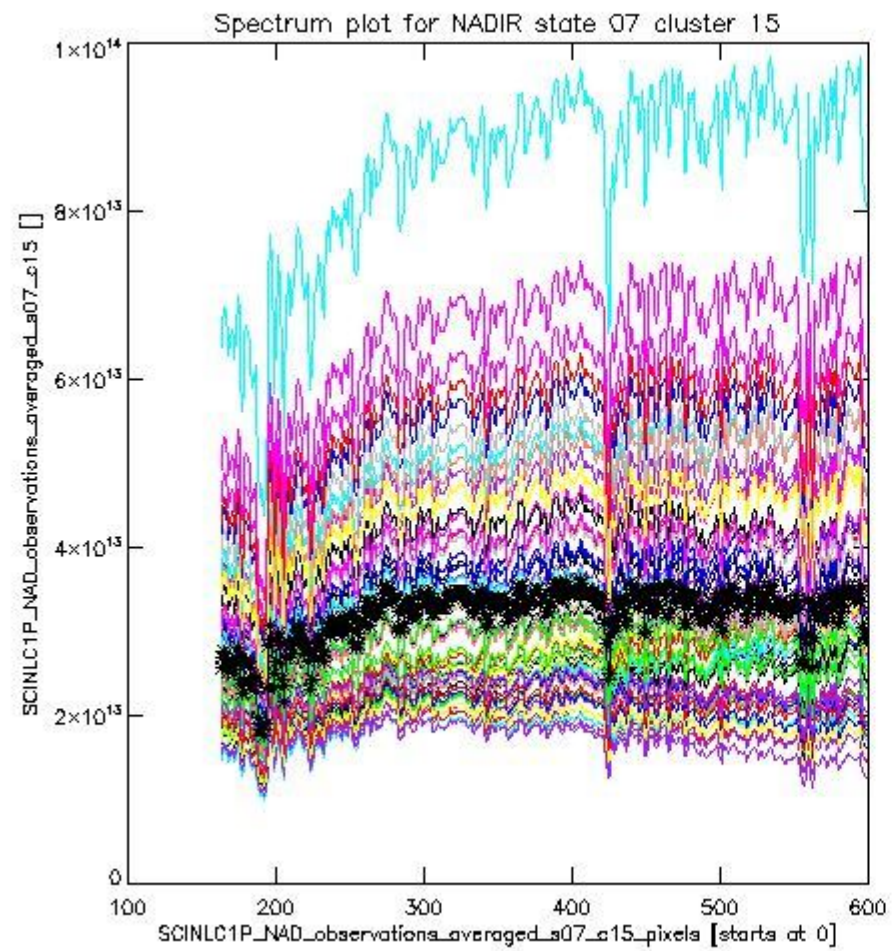
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_3.PNG

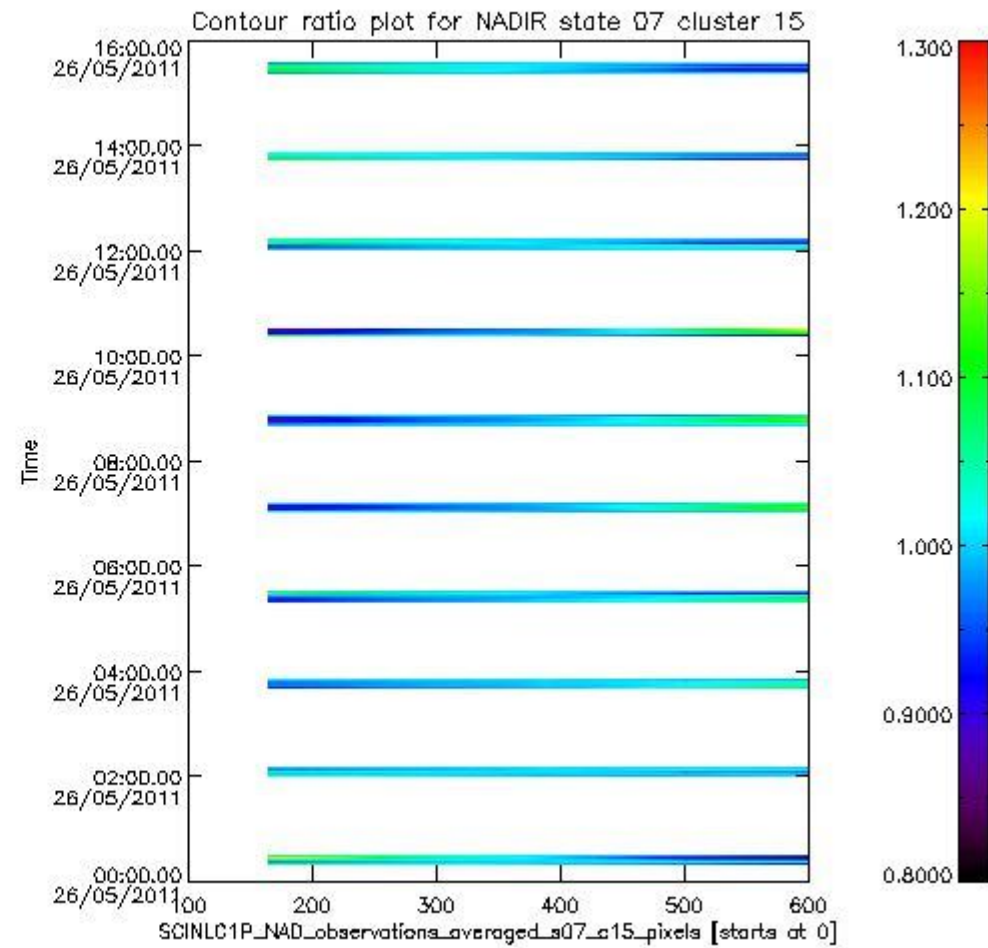
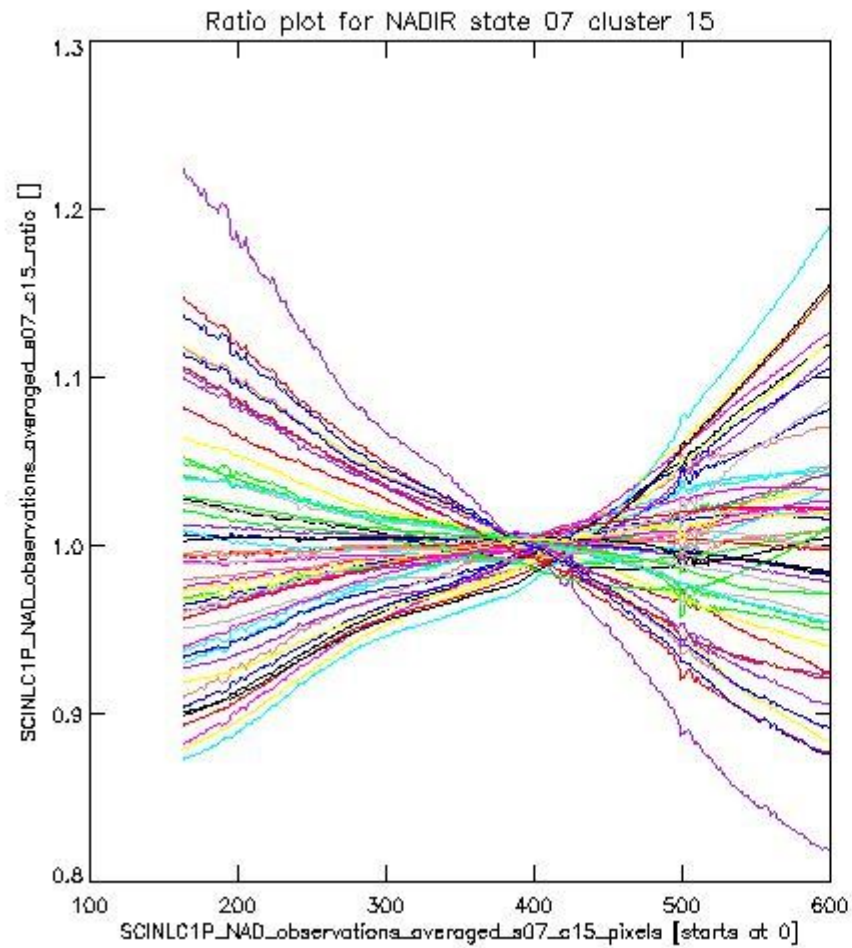
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	26MAY2011 00:20:49.858
Start time of last sample	26MAY2011 15:31:58.919
Reference period start time	26APR2011 00:21:12.451
Reference period stop time	25MAY2011 22:49:41.291
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\_20110526\_4.PNG

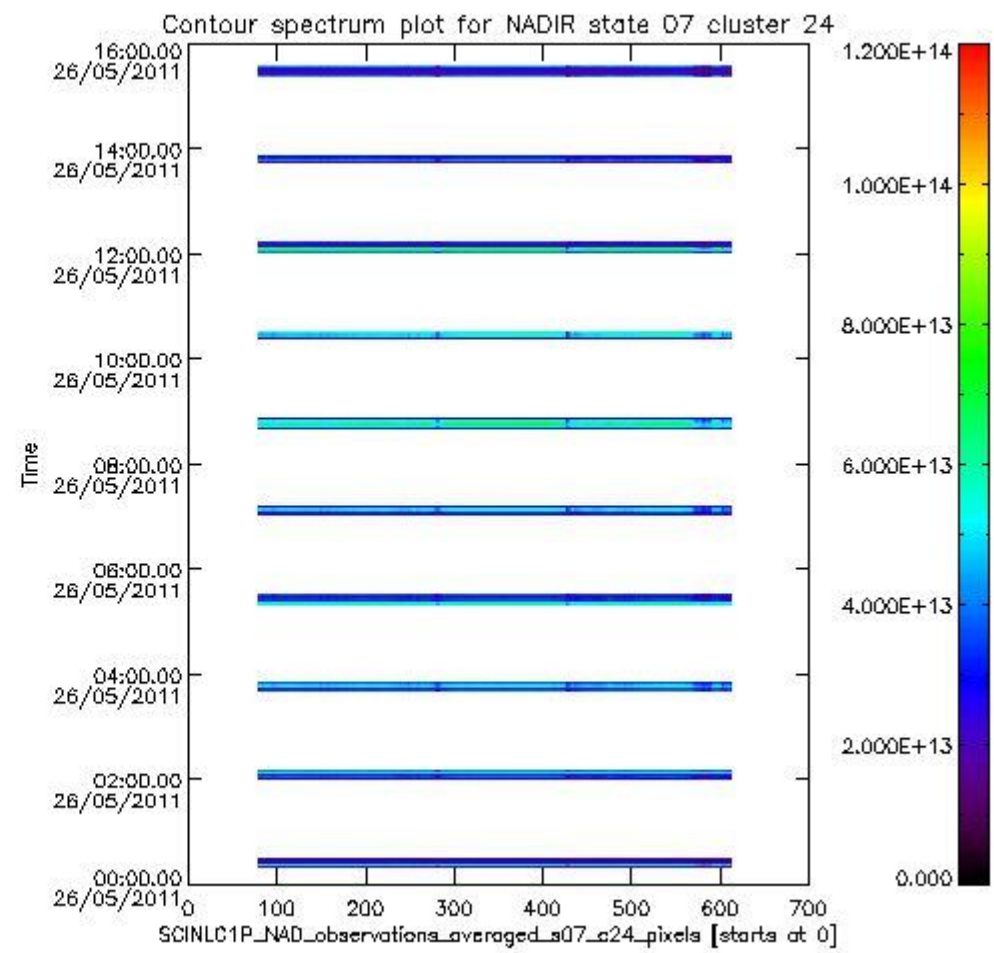
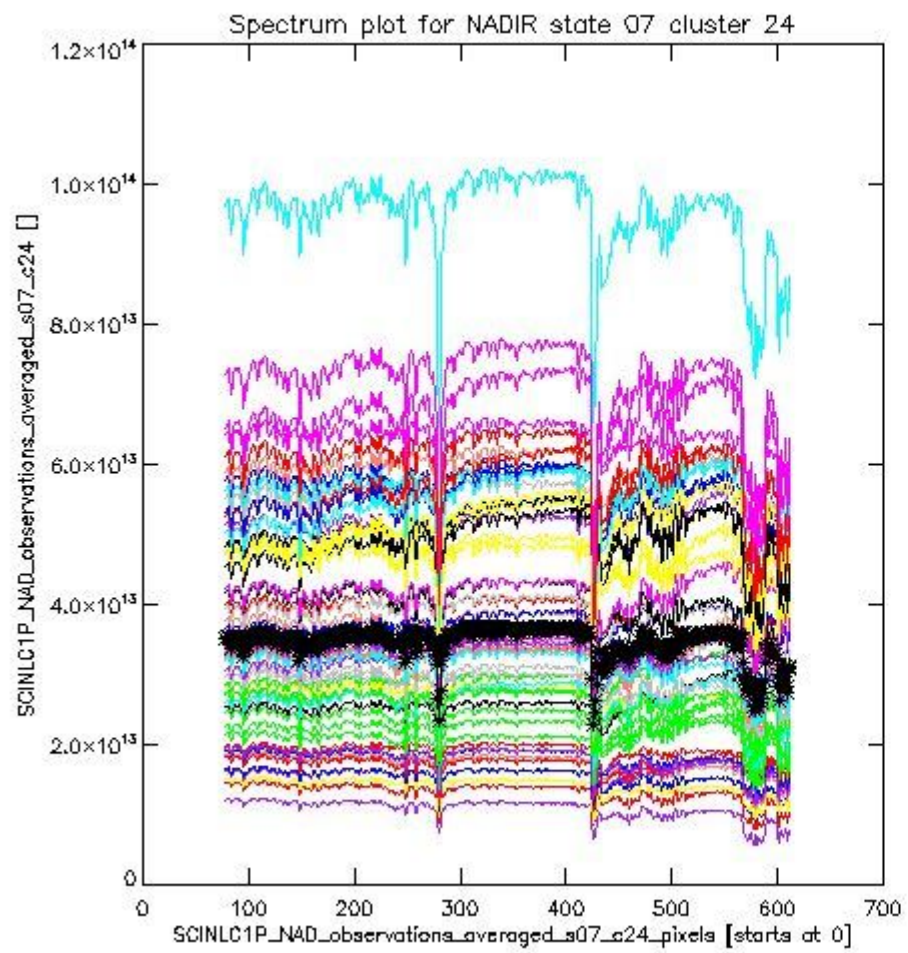




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_5.PNG

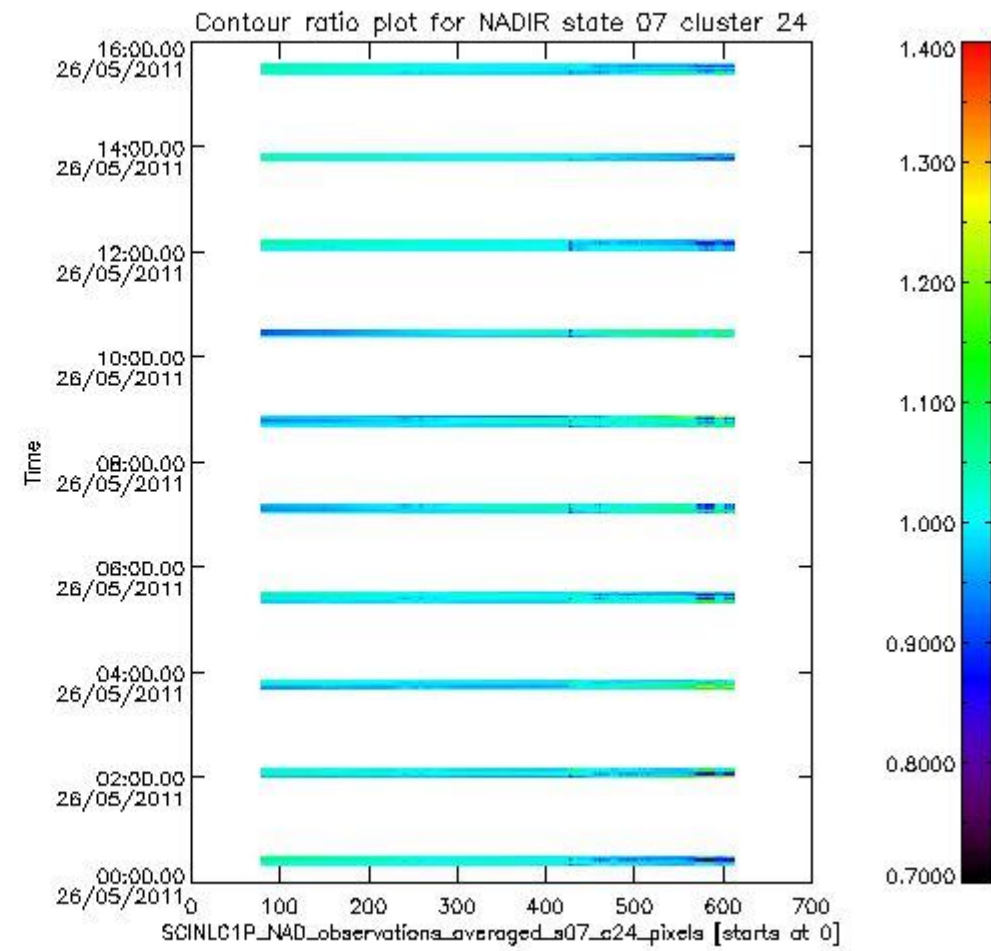
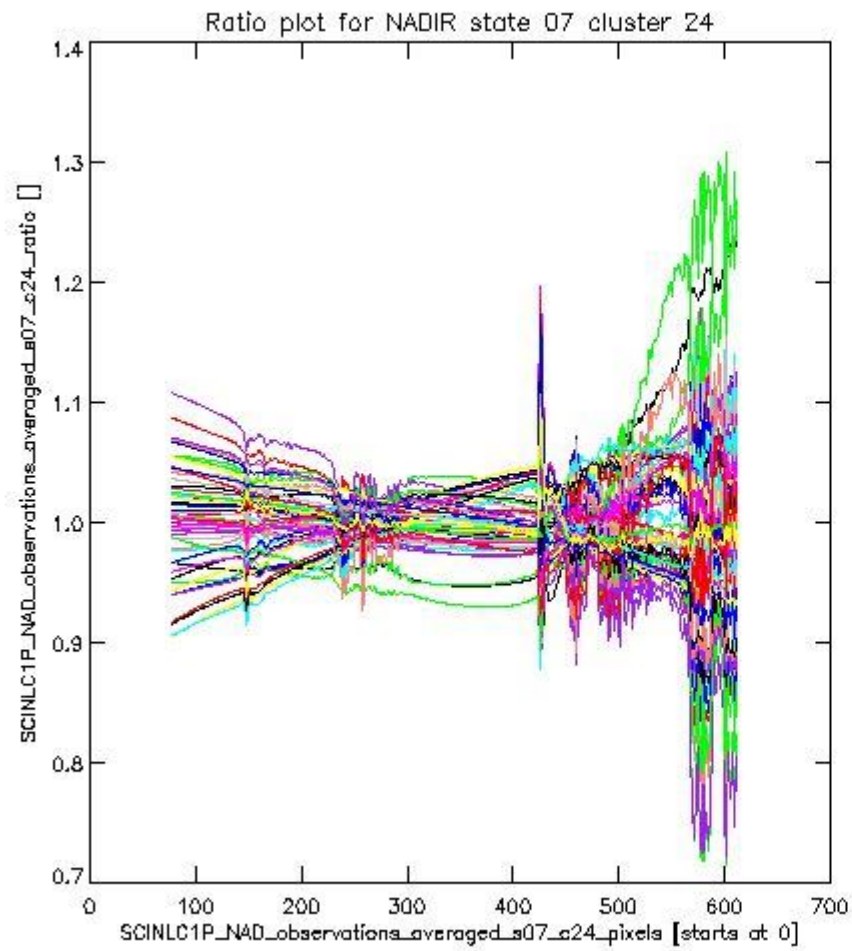
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	26MAY2011 00:20:49.858
Start time of last sample	26MAY2011 15:31:58.919
Reference period start time	26APR2011 00:21:12.451
Reference period stop time	25MAY2011 22:49:41.291
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\_20110526\_6.PNG

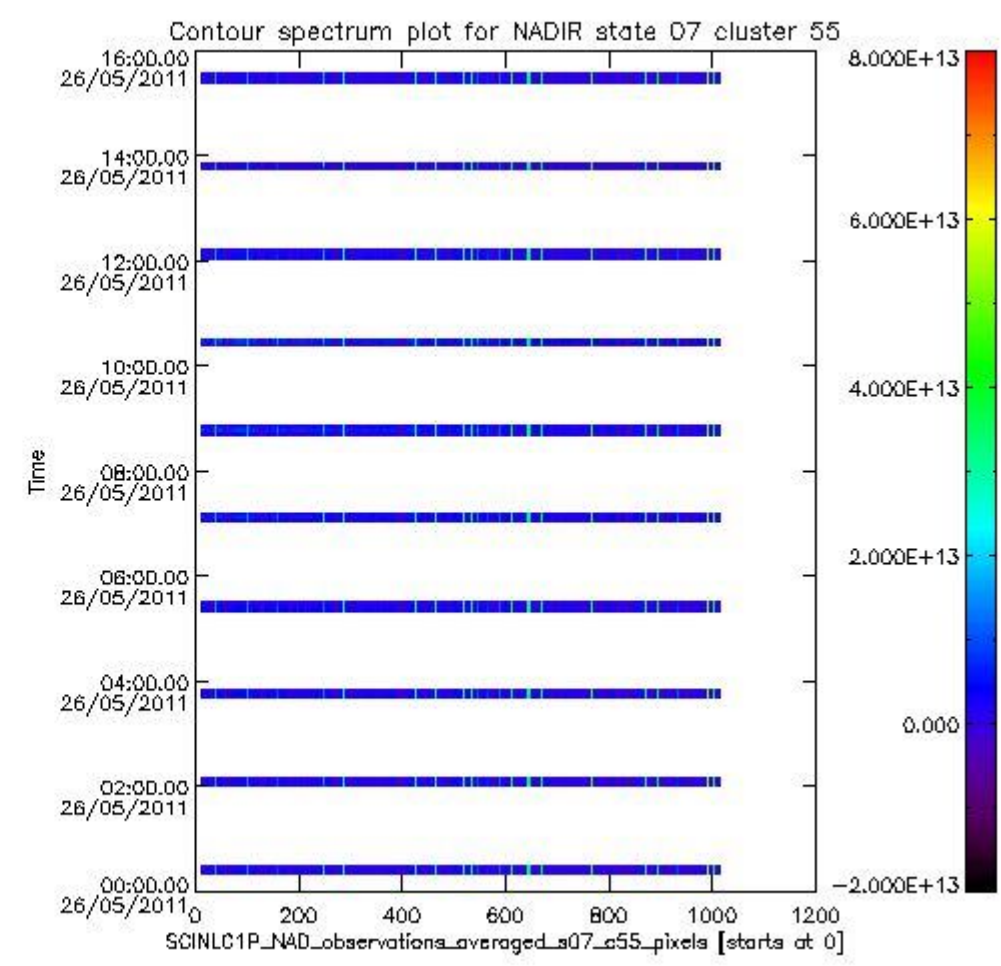
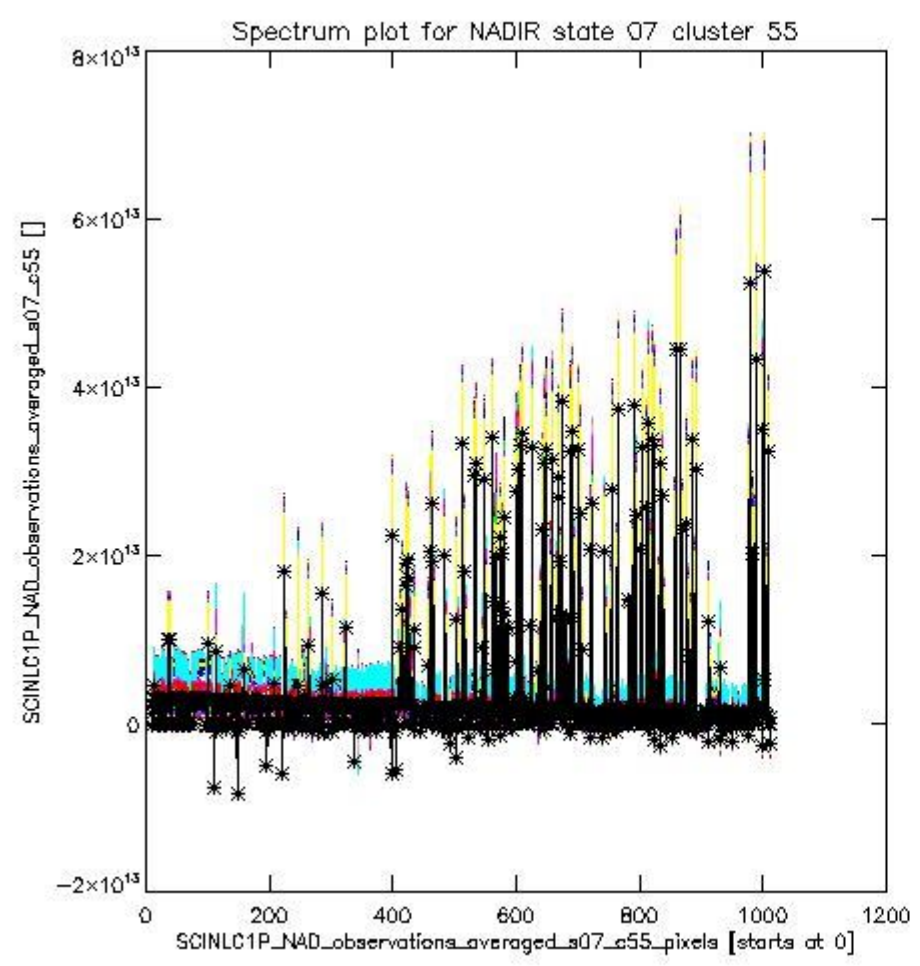




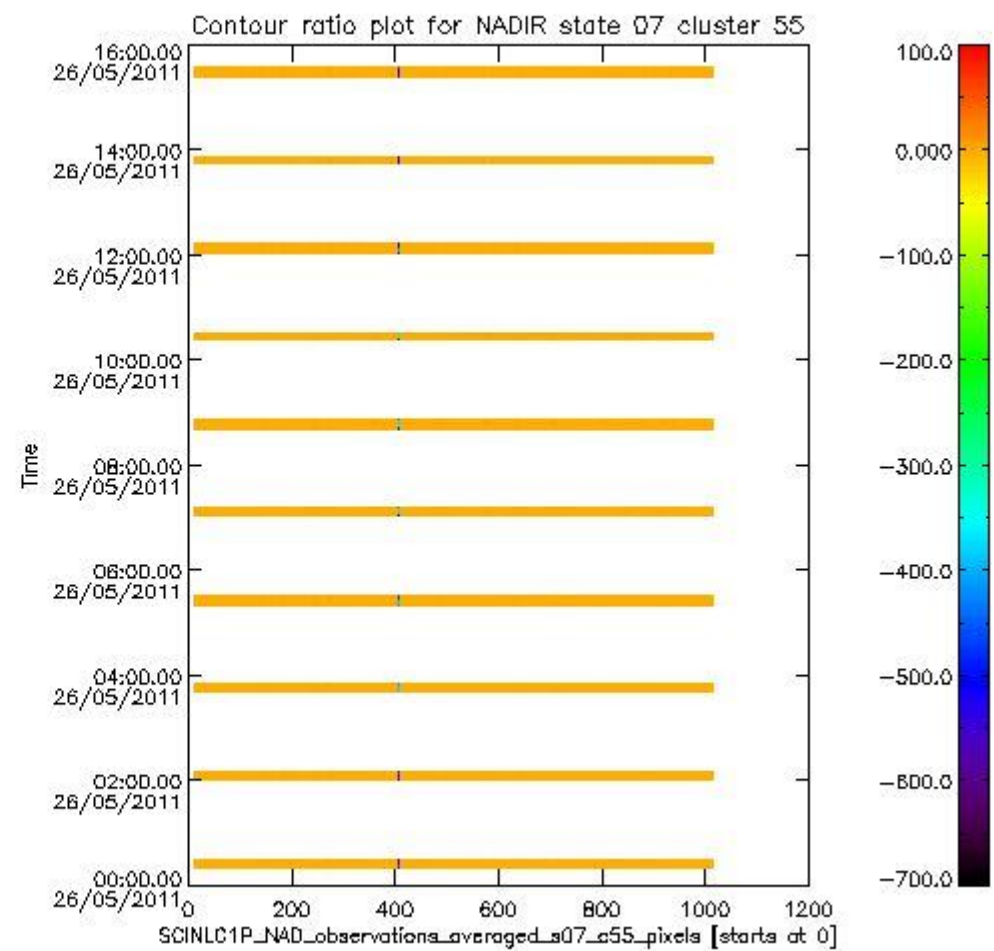
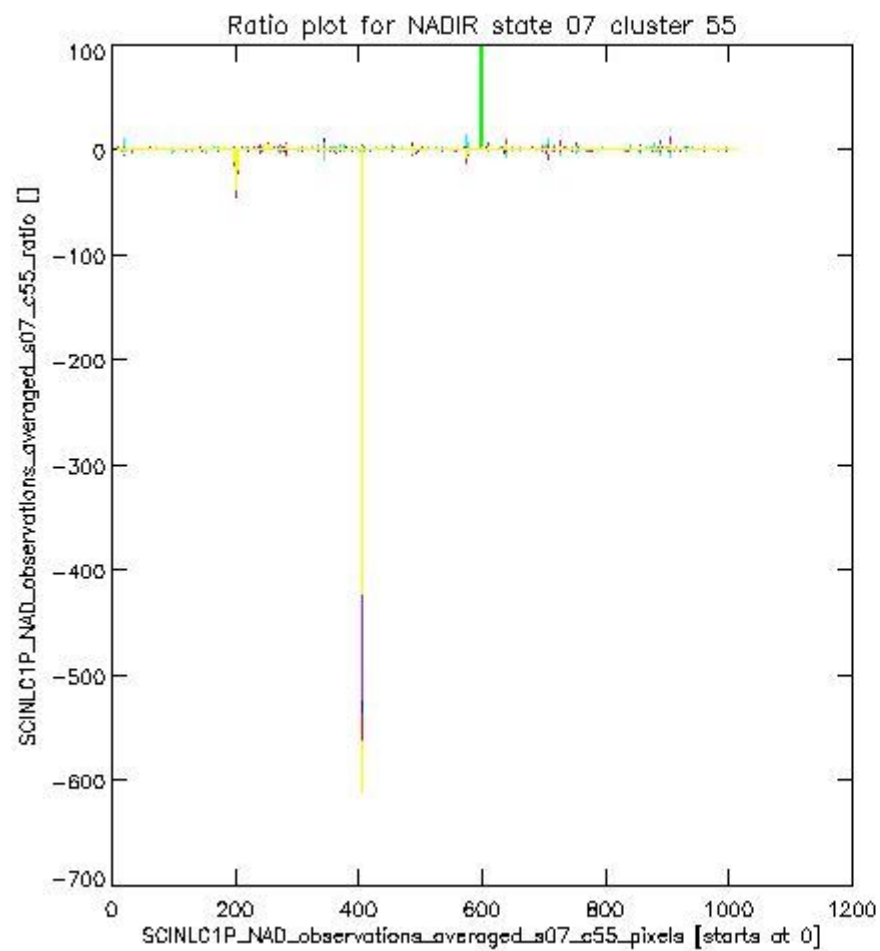
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_7.PNG

**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	26MAY2011 00:20:49.858
Start time of last sample	26MAY2011 15:31:58.919
Reference period start time	26APR2011 00:21:12.451
Reference period stop time	25MAY2011 22:49:41.291
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\_20110526\_8.PNG

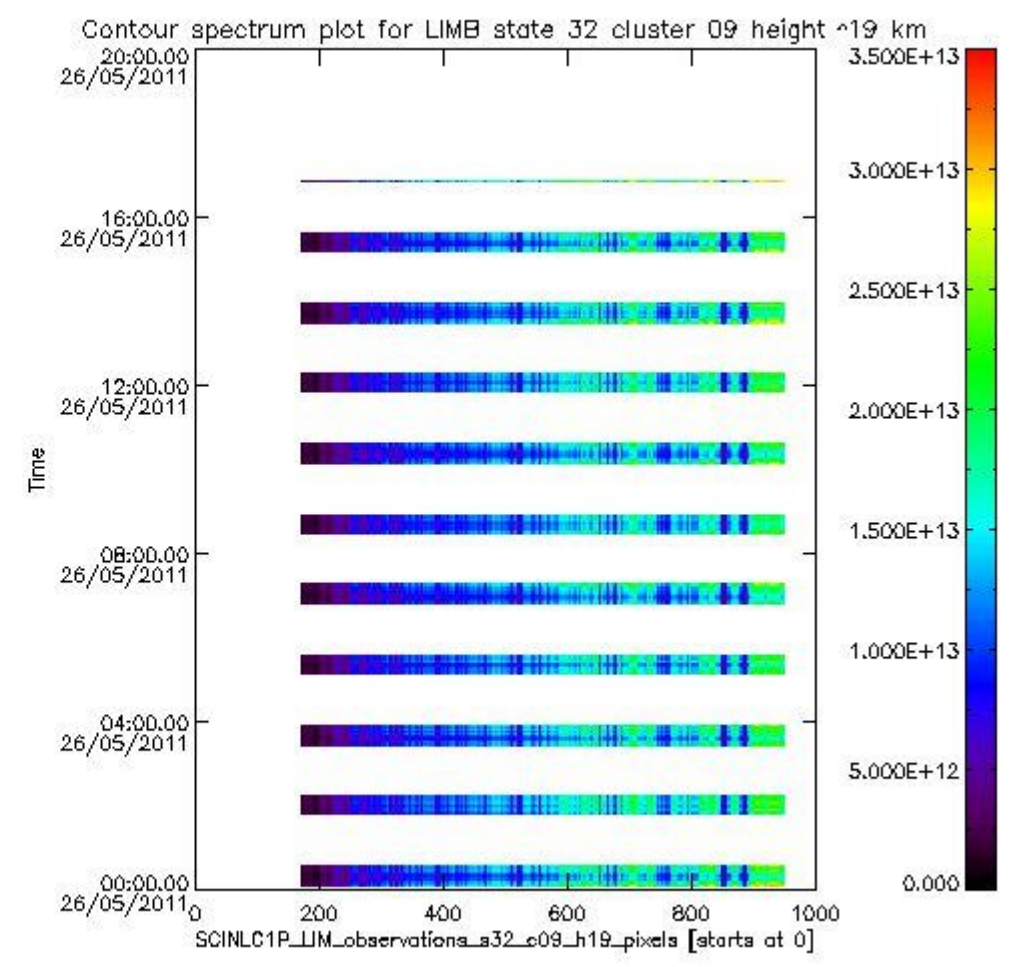
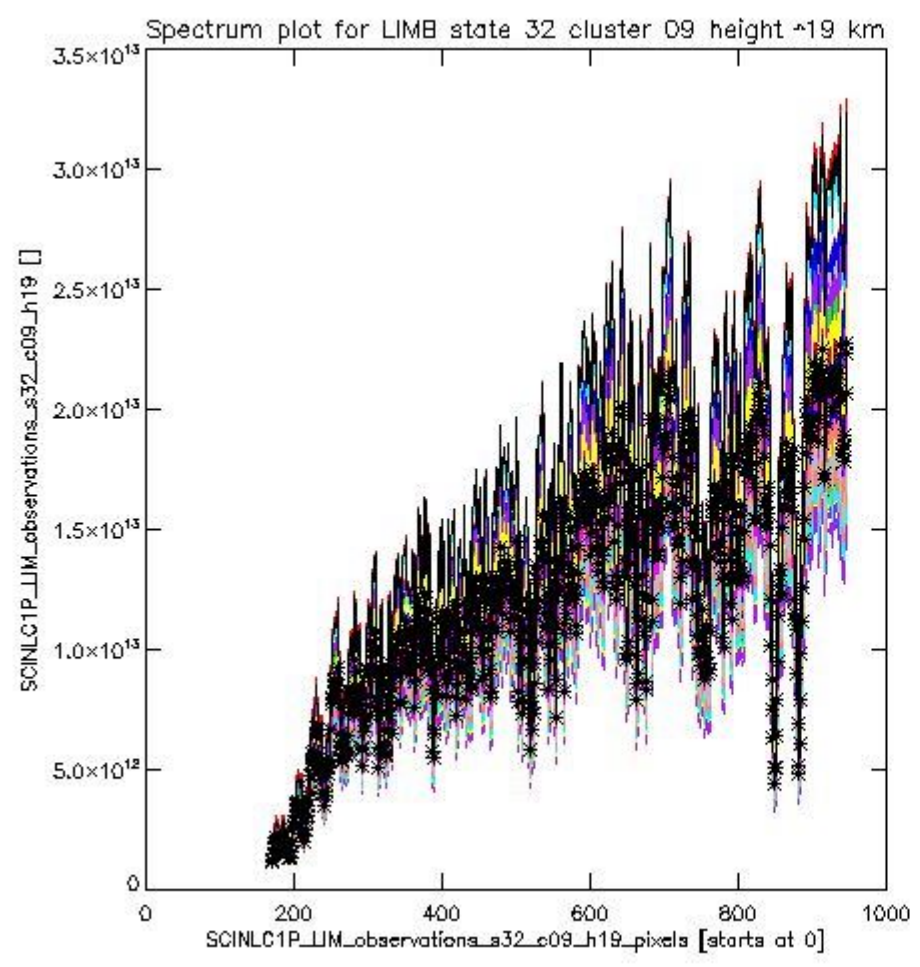


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_9.PNG

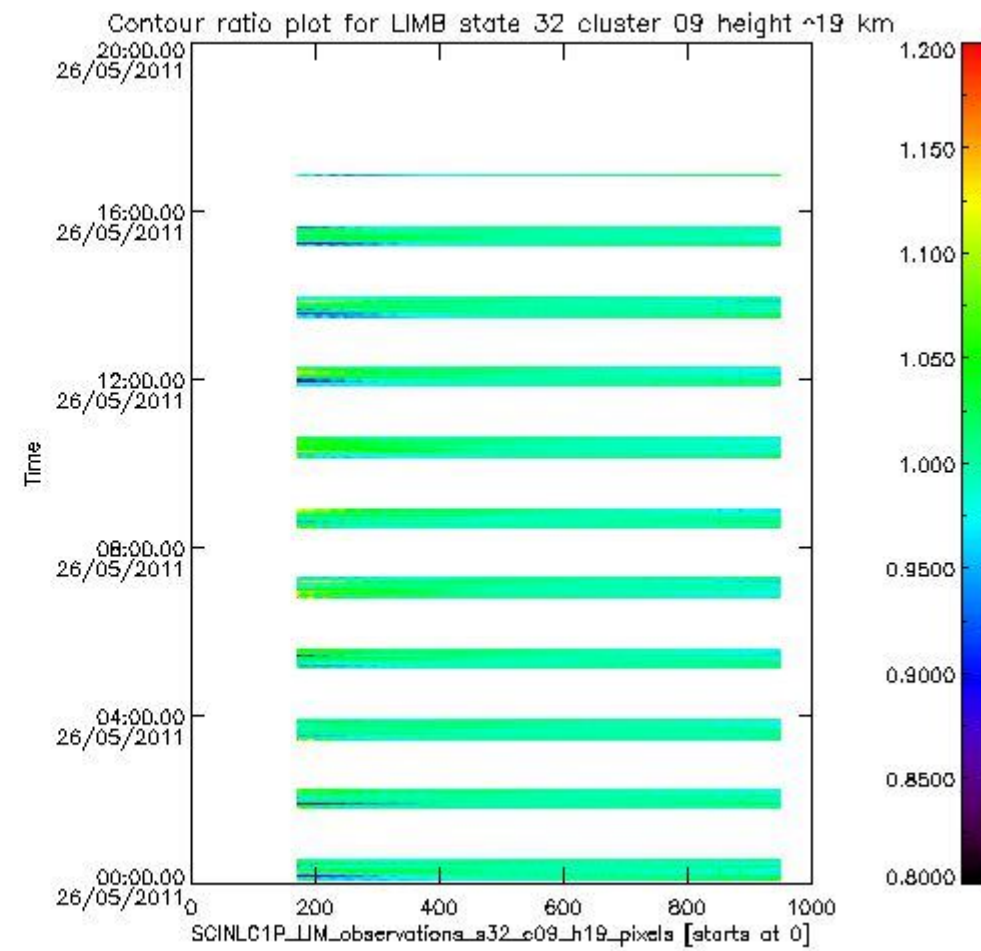
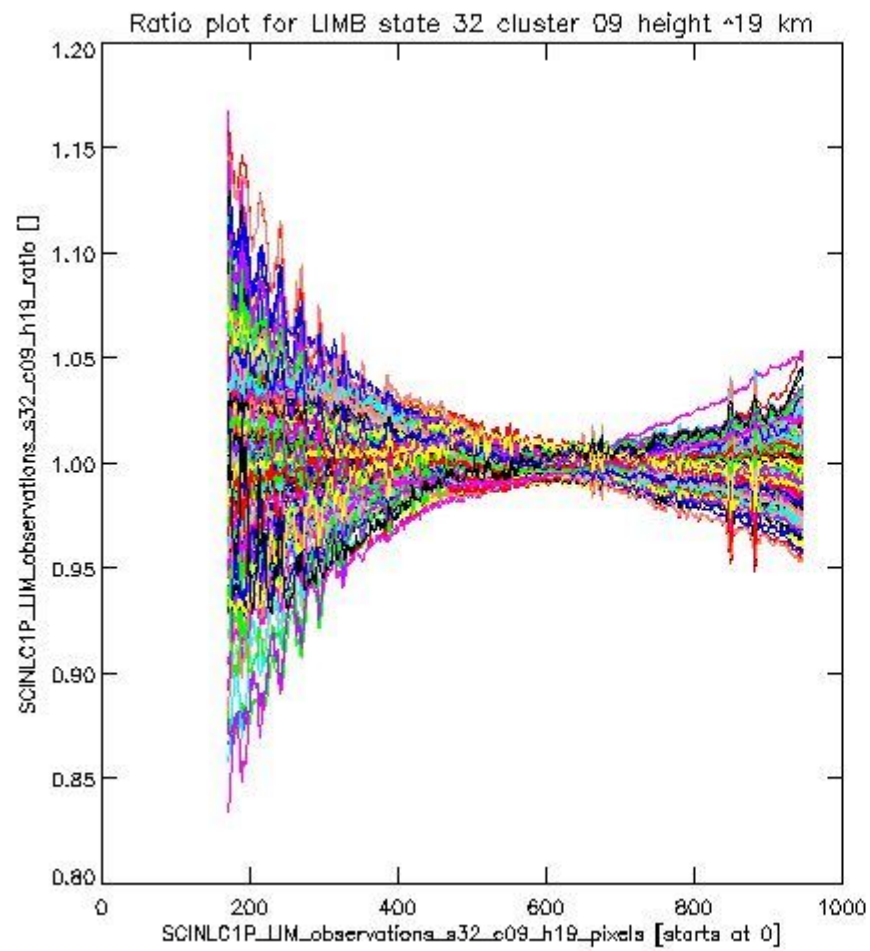
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	26MAY2011 00:05:36.483
Start time of last sample	26MAY2011 16:47:54.225
Reference period start time	26APR2011 00:08:01.818
Reference period stop time	25MAY2011 22:52:52.595
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





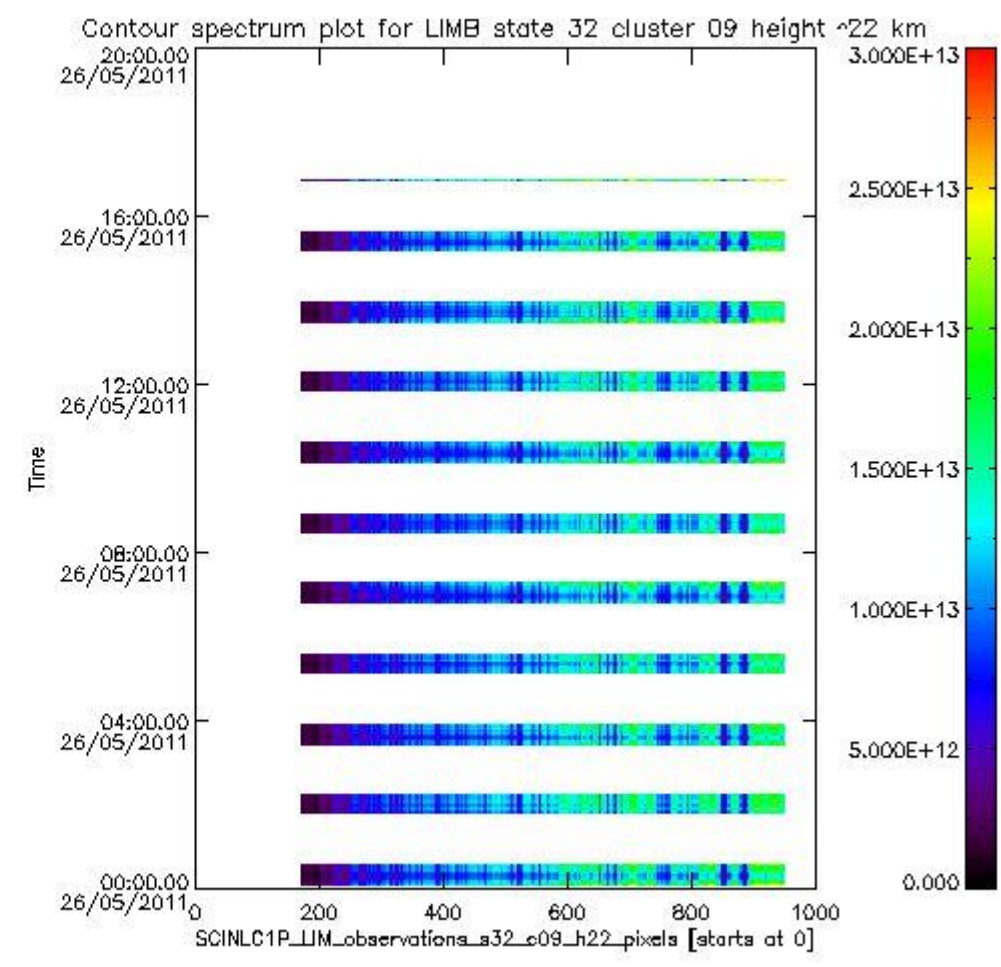
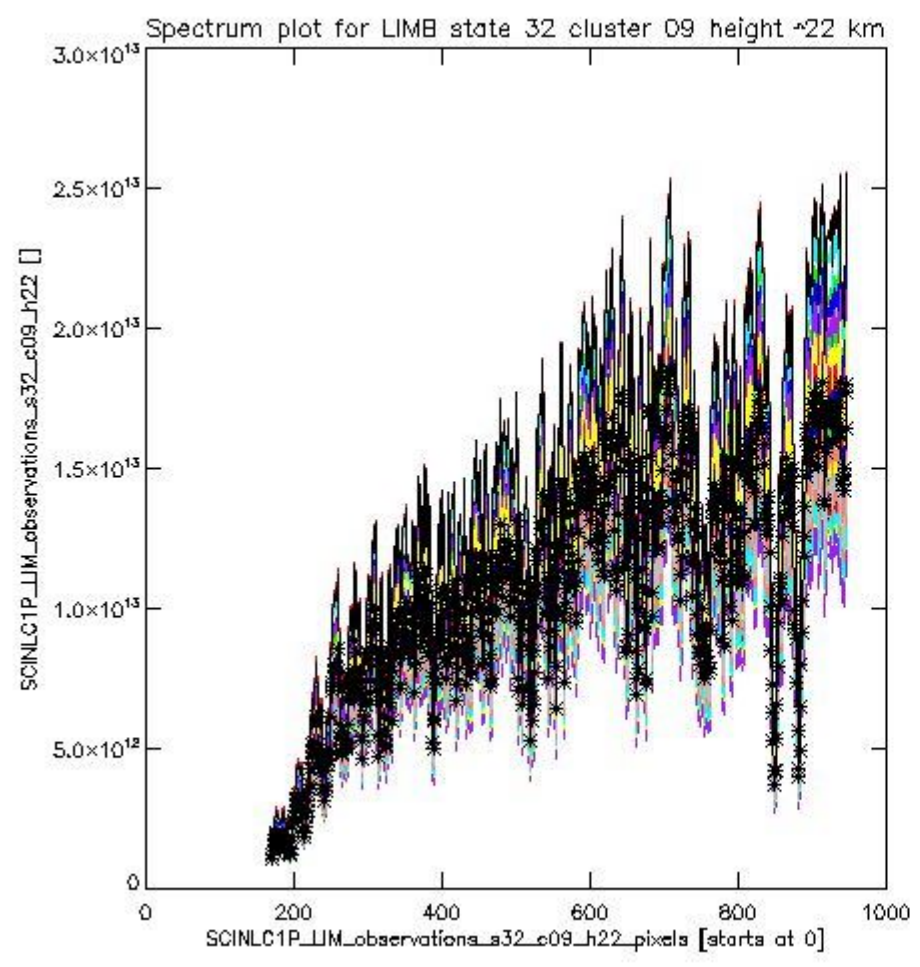
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_10.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_11.PNG

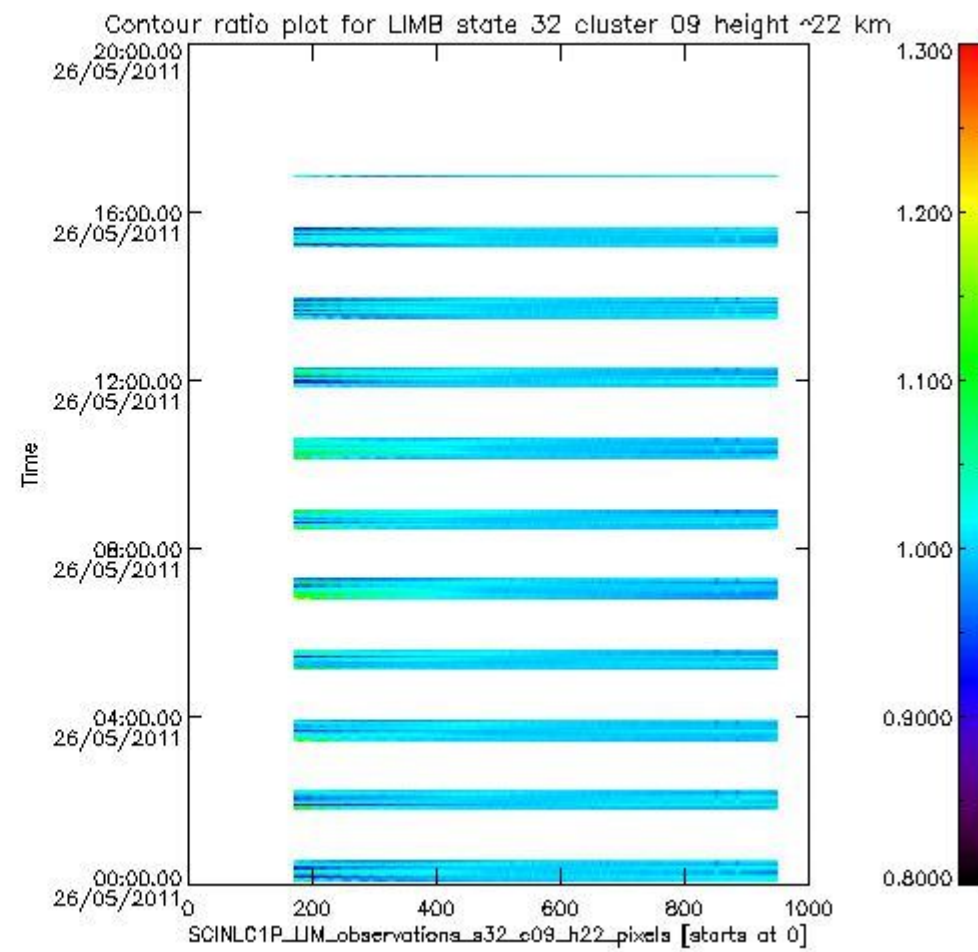
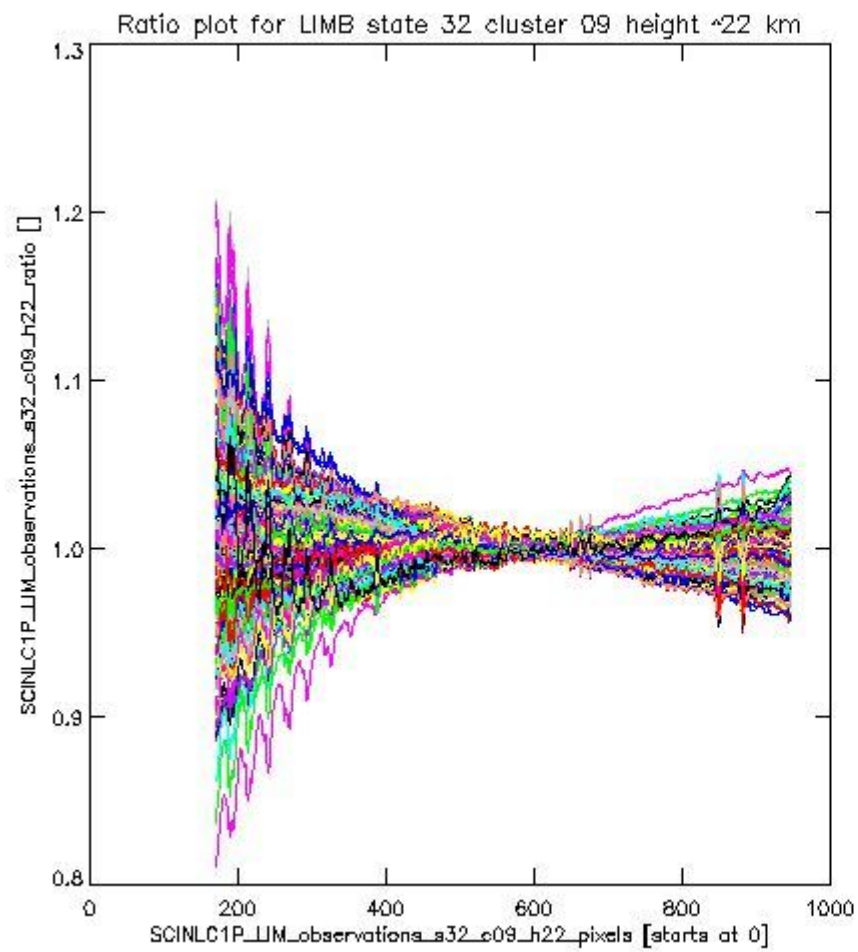
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	26MAY2011 00:05:36.483
Start time of last sample	26MAY2011 16:47:54.225
Reference period start time	26APR2011 00:08:01.818
Reference period stop time	25MAY2011 22:52:52.595
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\_20110526\_12.PNG

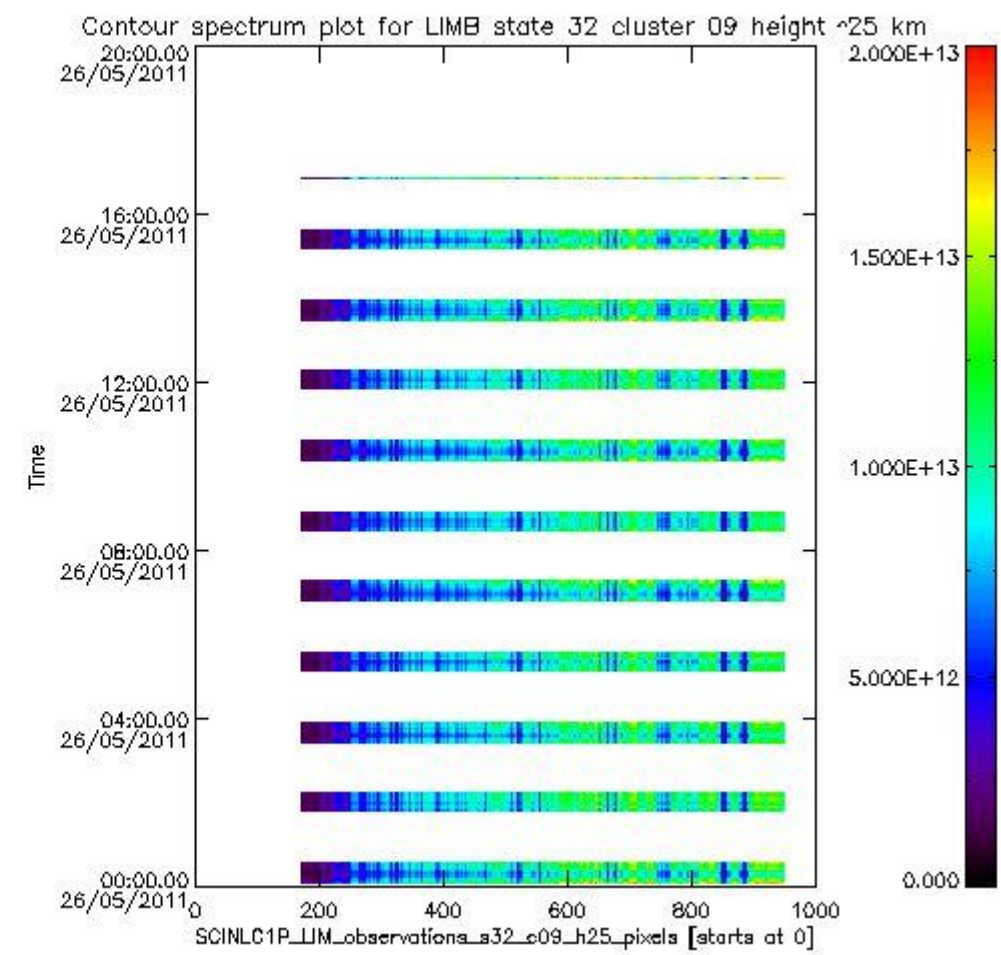
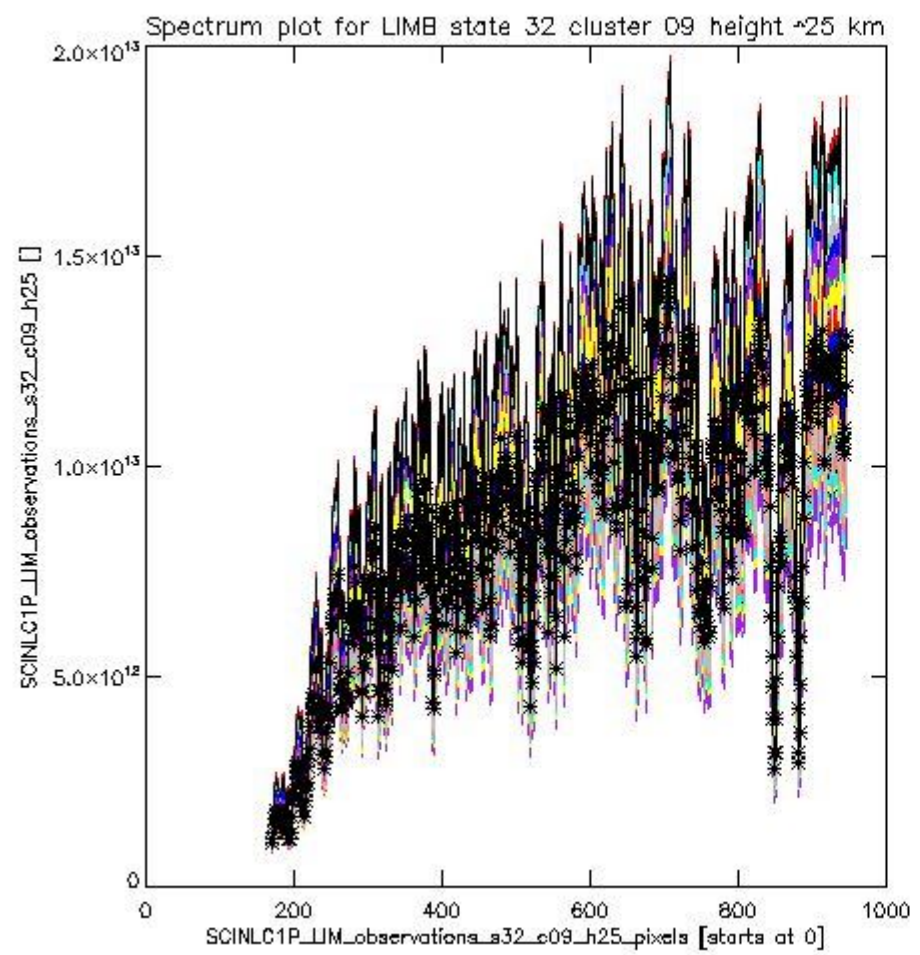




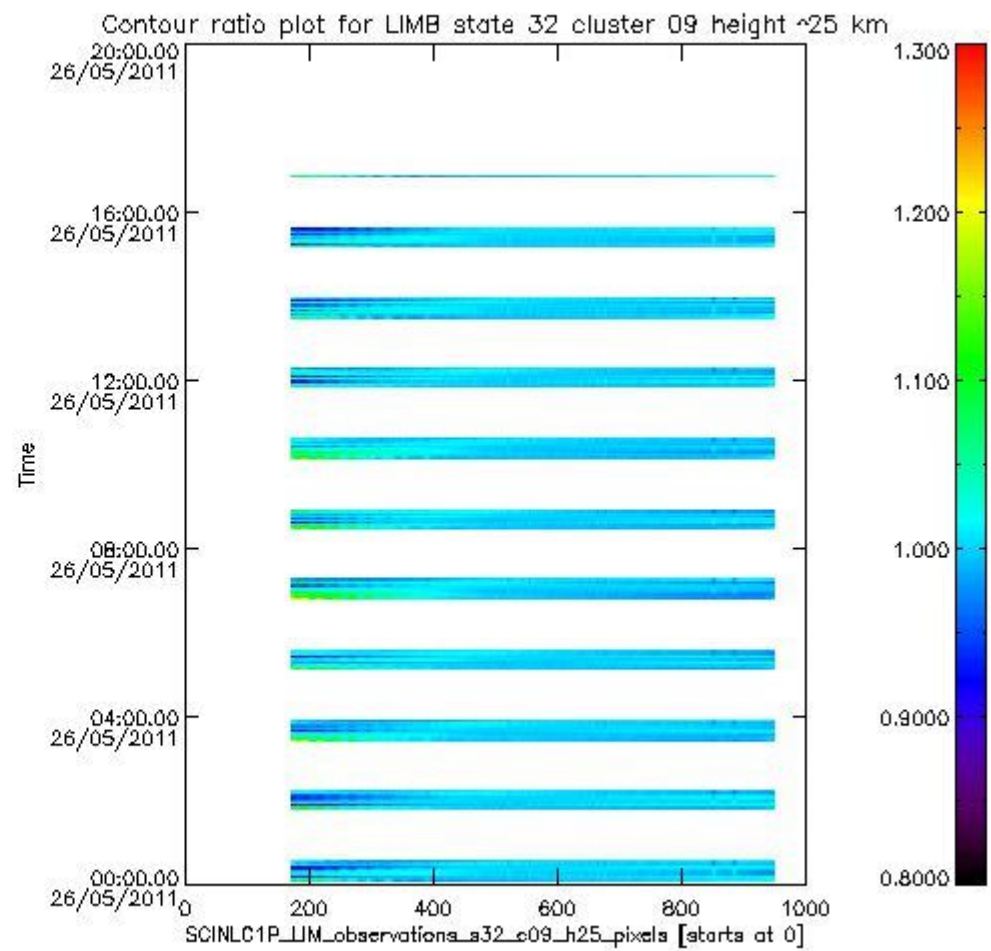
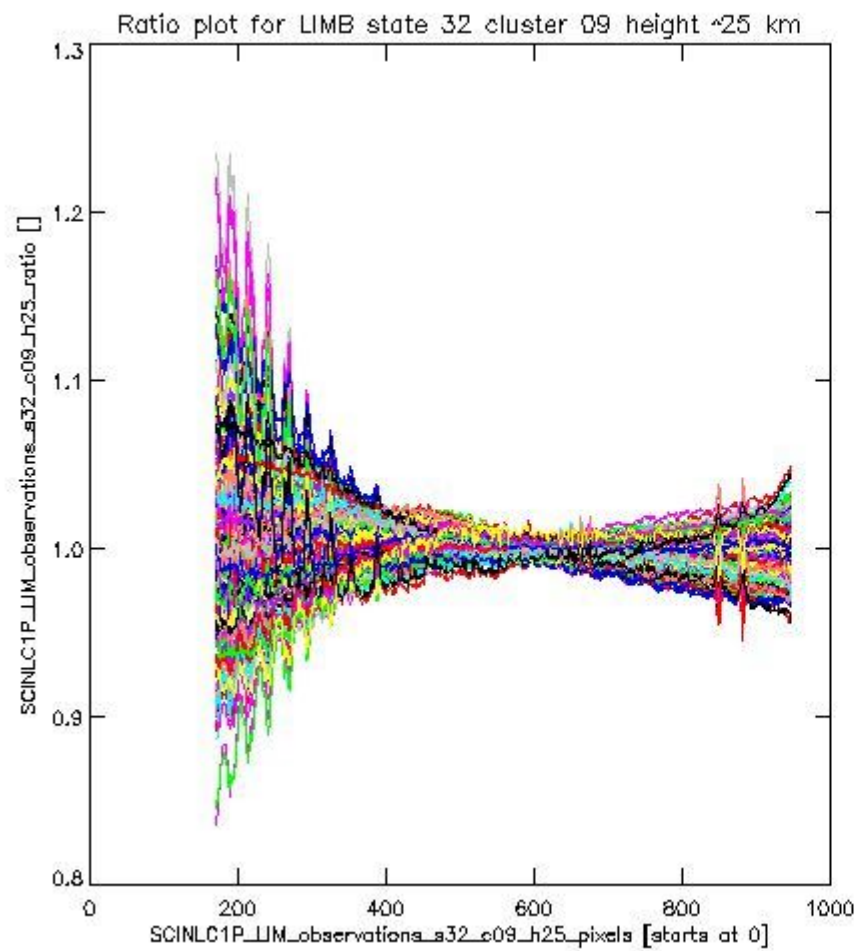
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_13.PNG

**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	26MAY2011 00:05:36.483
Start time of last sample	26MAY2011 16:47:54.225
Reference period start time	26APR2011 00:08:01.818
Reference period stop time	25MAY2011 22:52:52.595
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\_20110526\_14.PNG

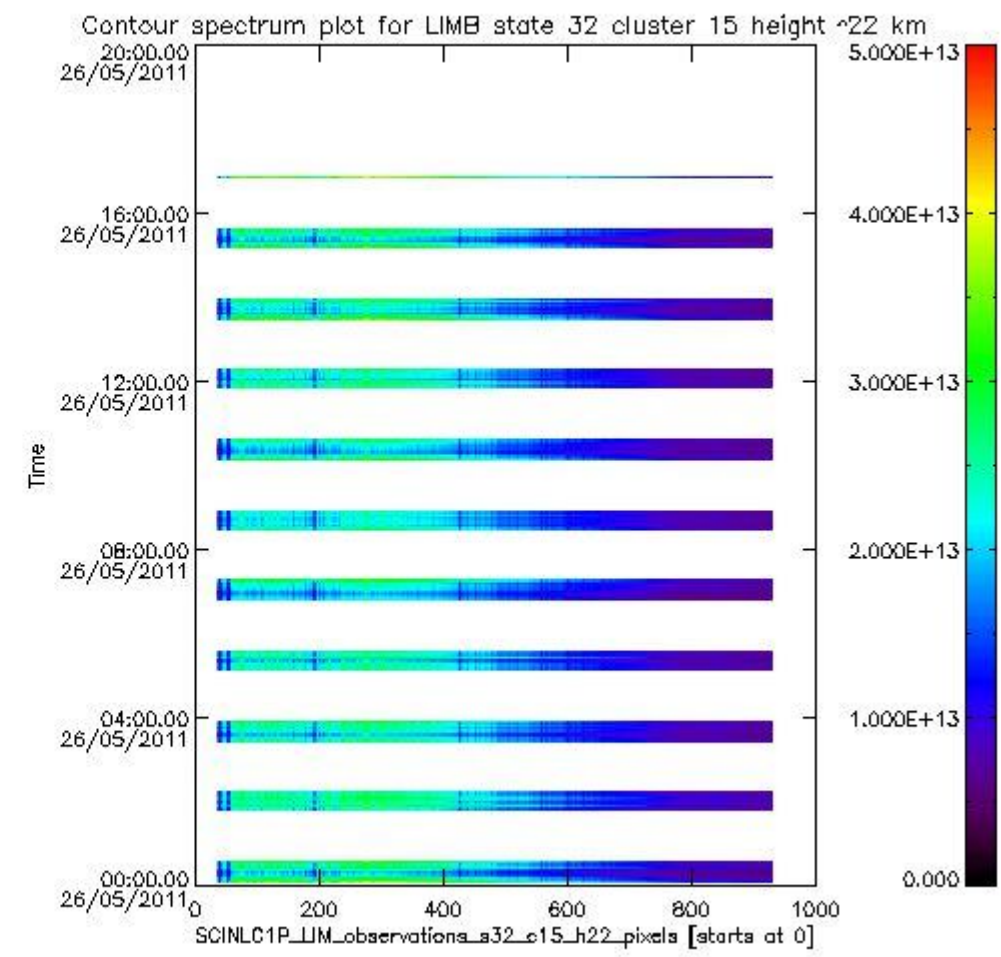
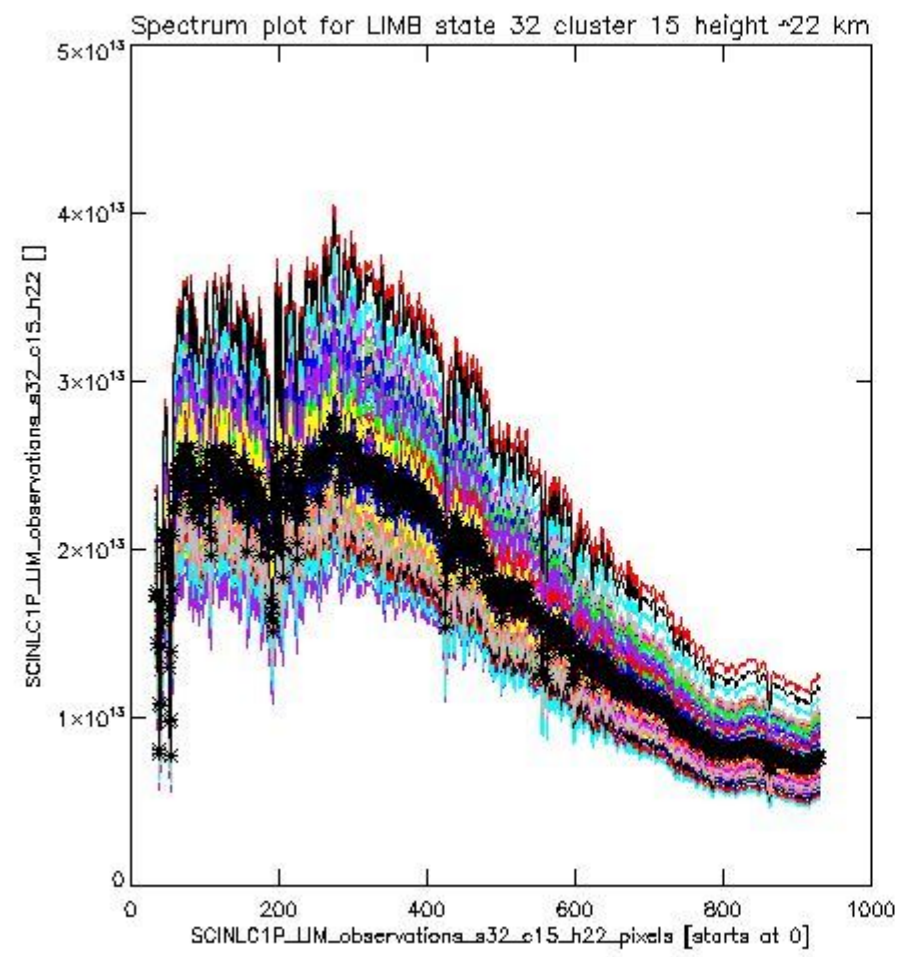


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_15.PNG

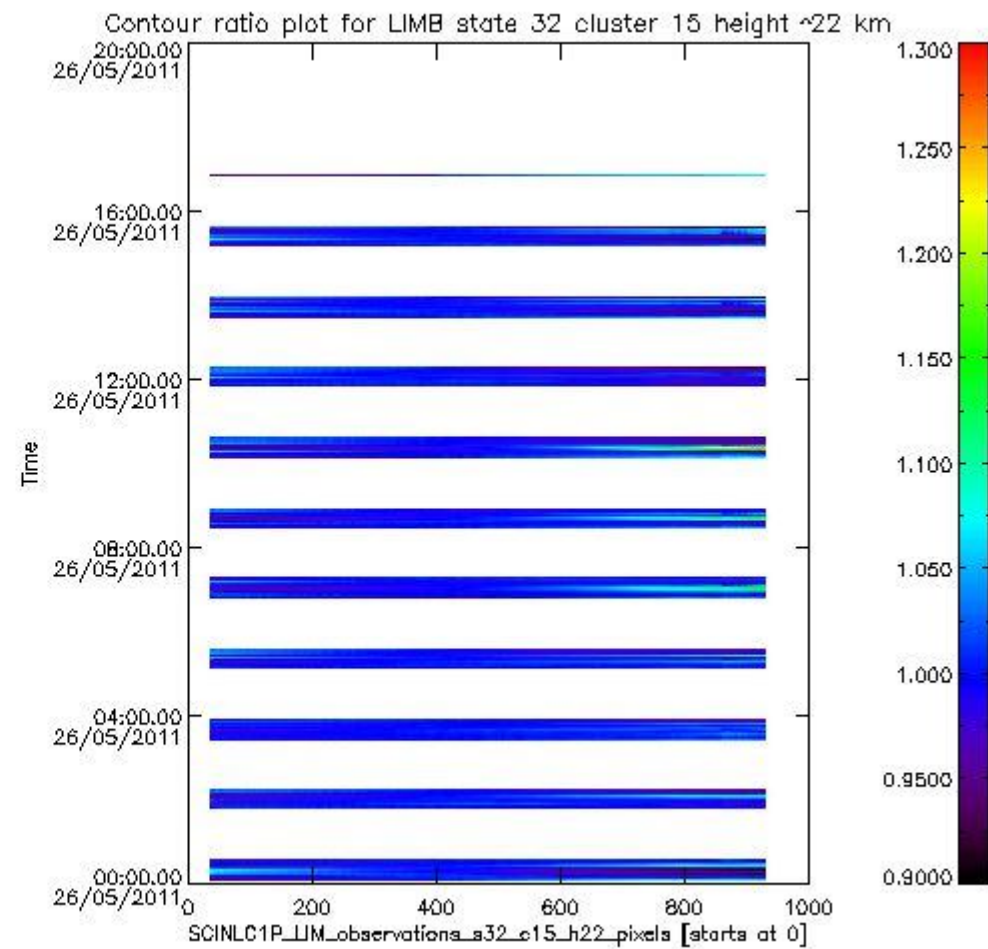
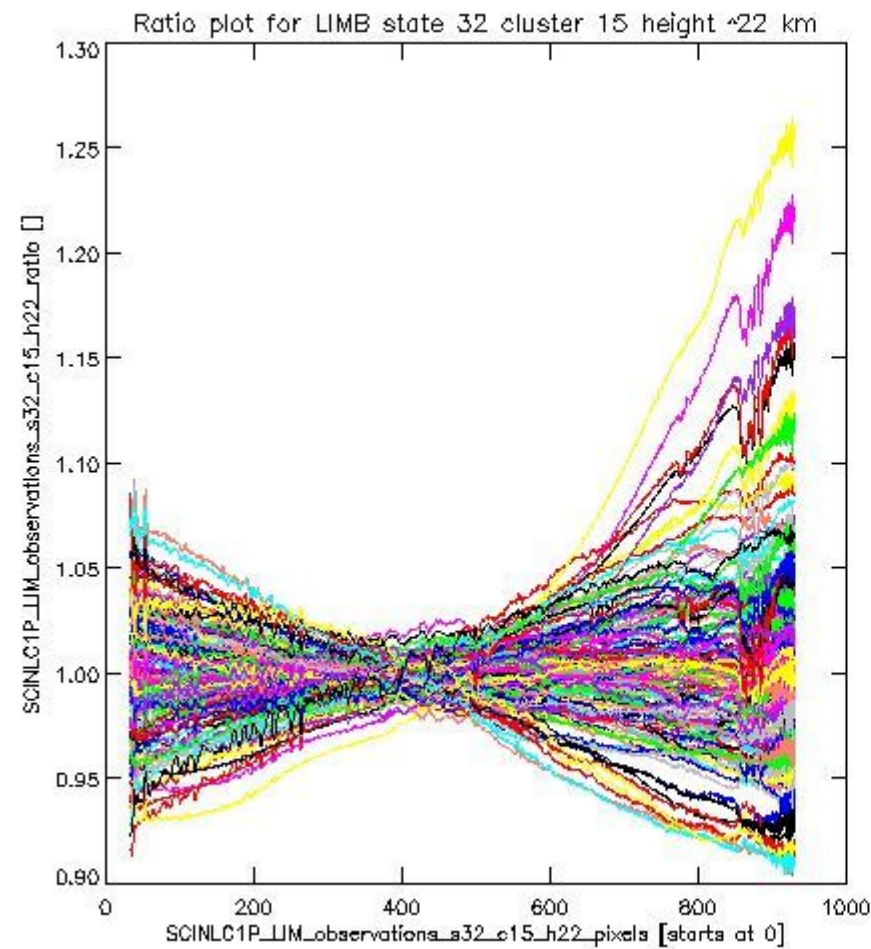
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	26MAY2011 00:05:36.483
Start time of last sample	26MAY2011 16:47:54.225
Reference period start time	26APR2011 00:08:01.818
Reference period stop time	25MAY2011 22:52:52.595
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





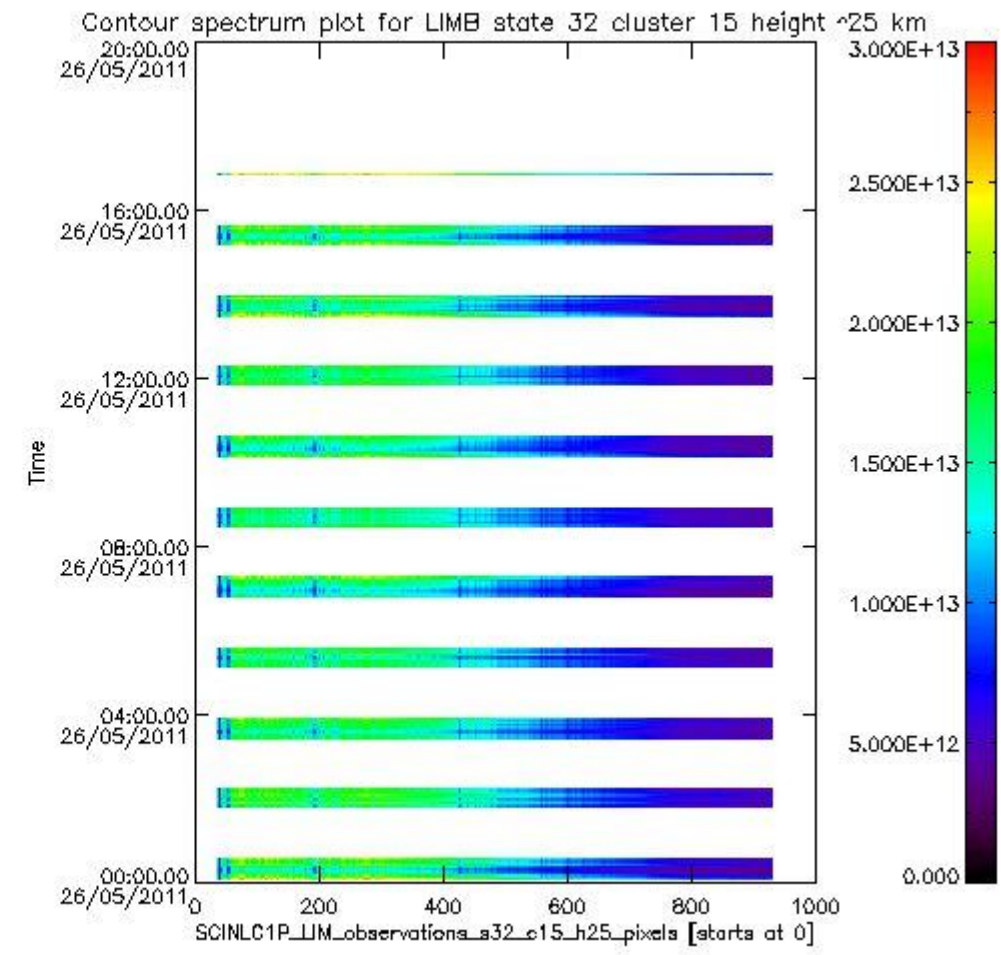
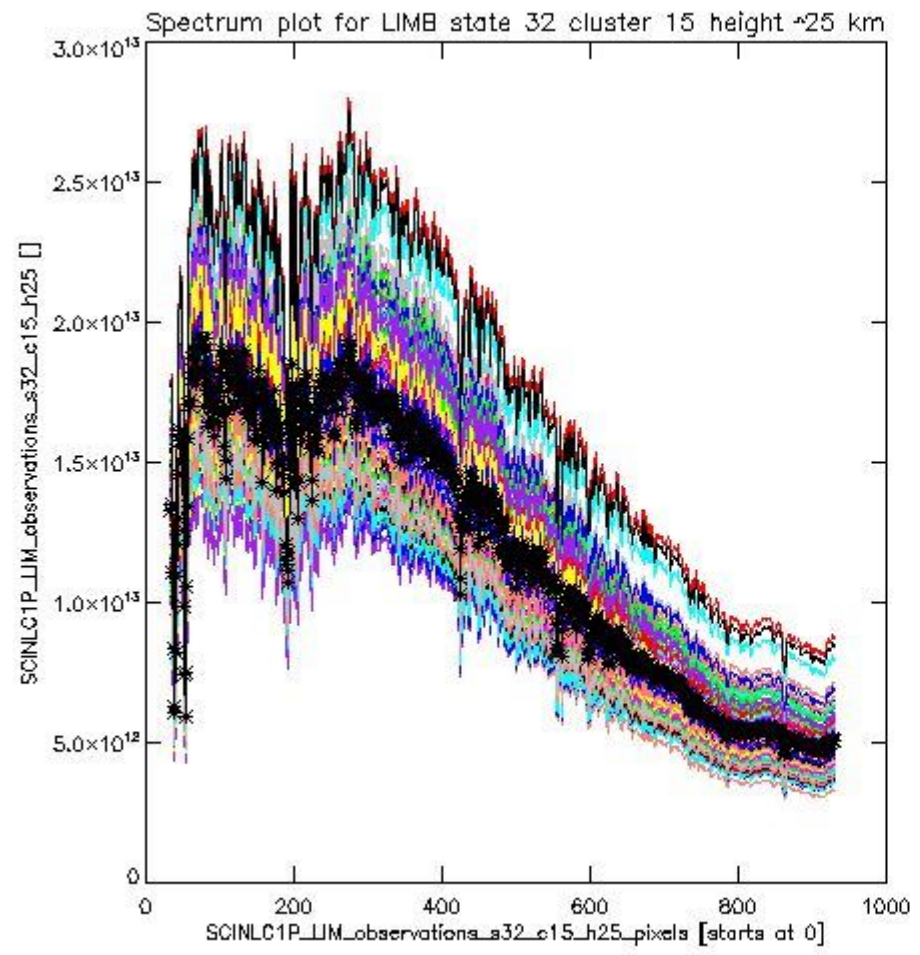
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_17.PNG

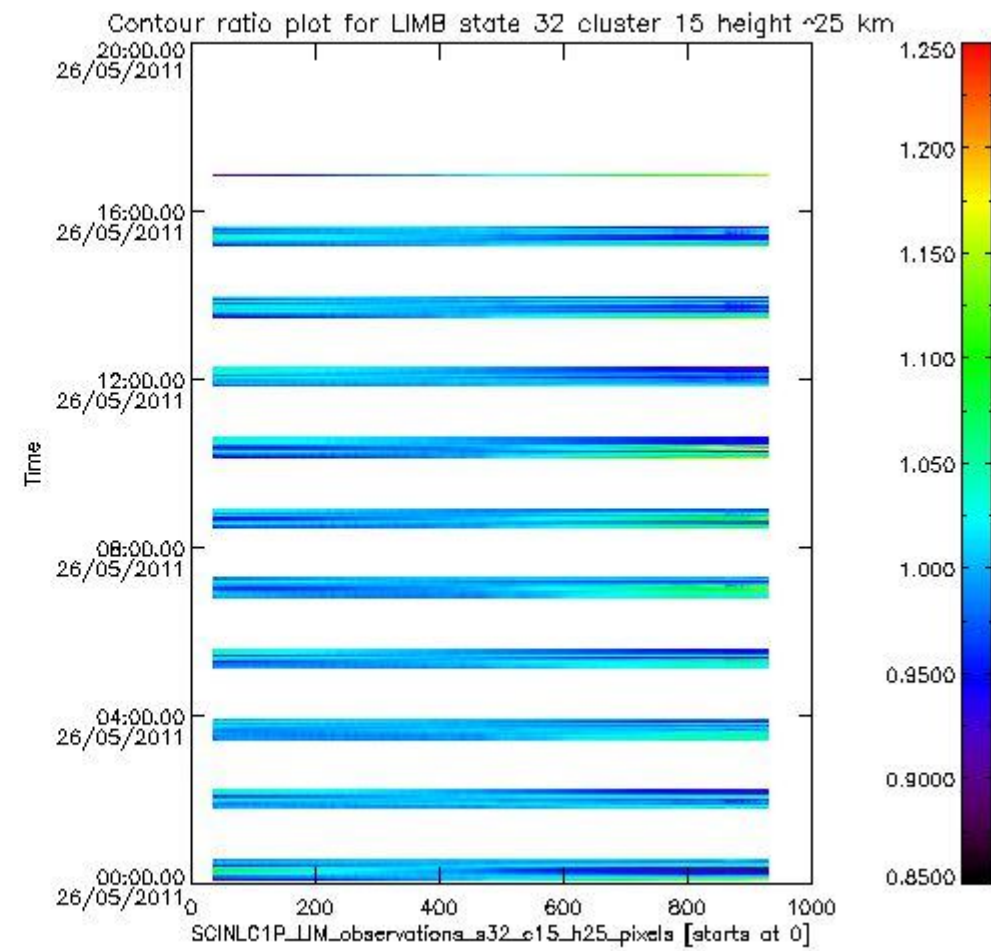
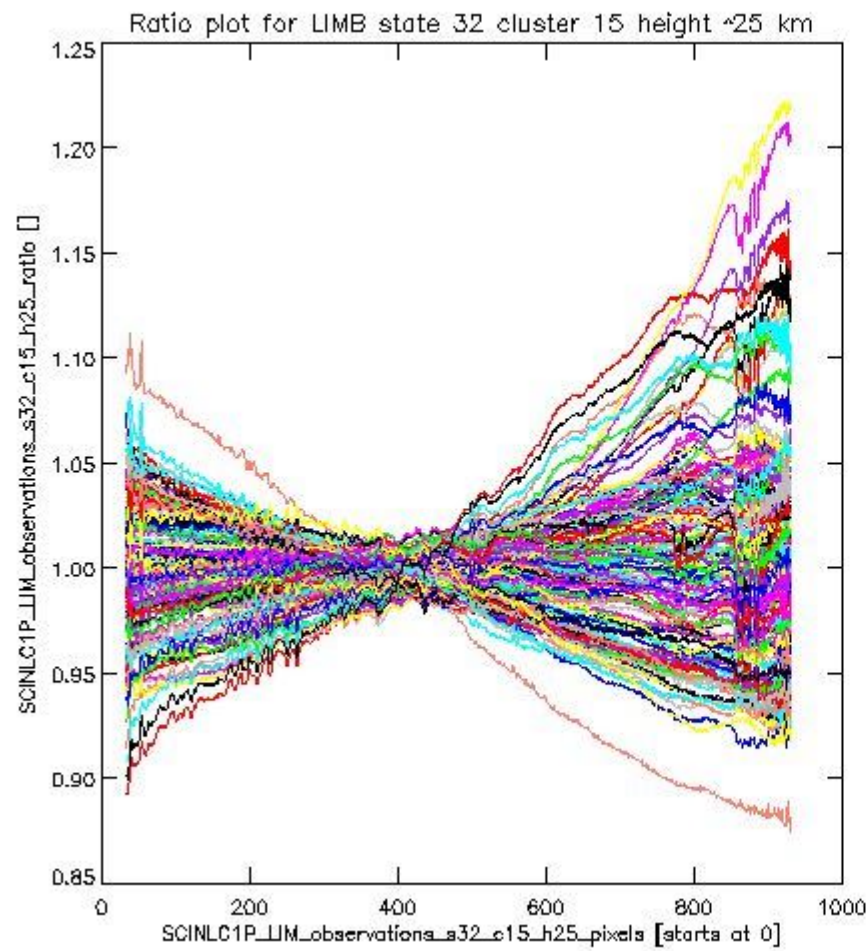
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	26MAY2011 00:05:36.483
Start time of last sample	26MAY2011 16:47:54.225
Reference period start time	26APR2011 00:08:01.818
Reference period stop time	25MAY2011 22:52:52.595
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\_20110526\_18.PNG

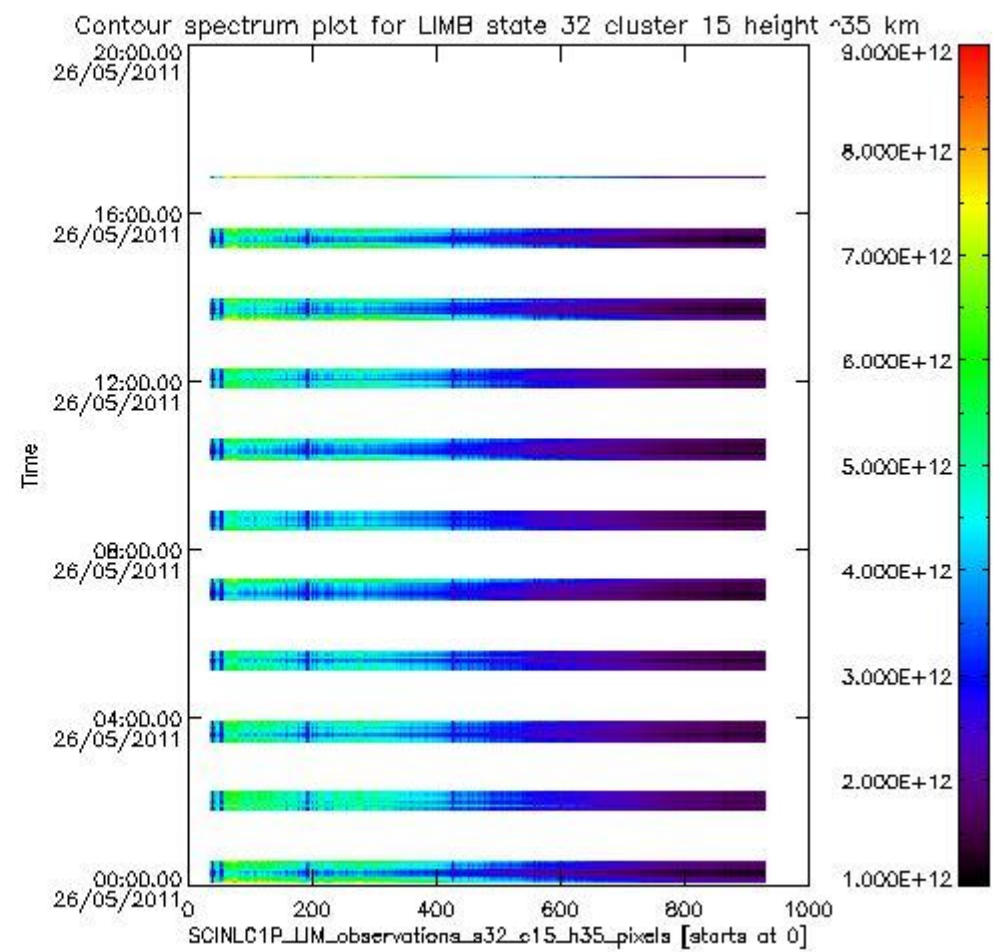
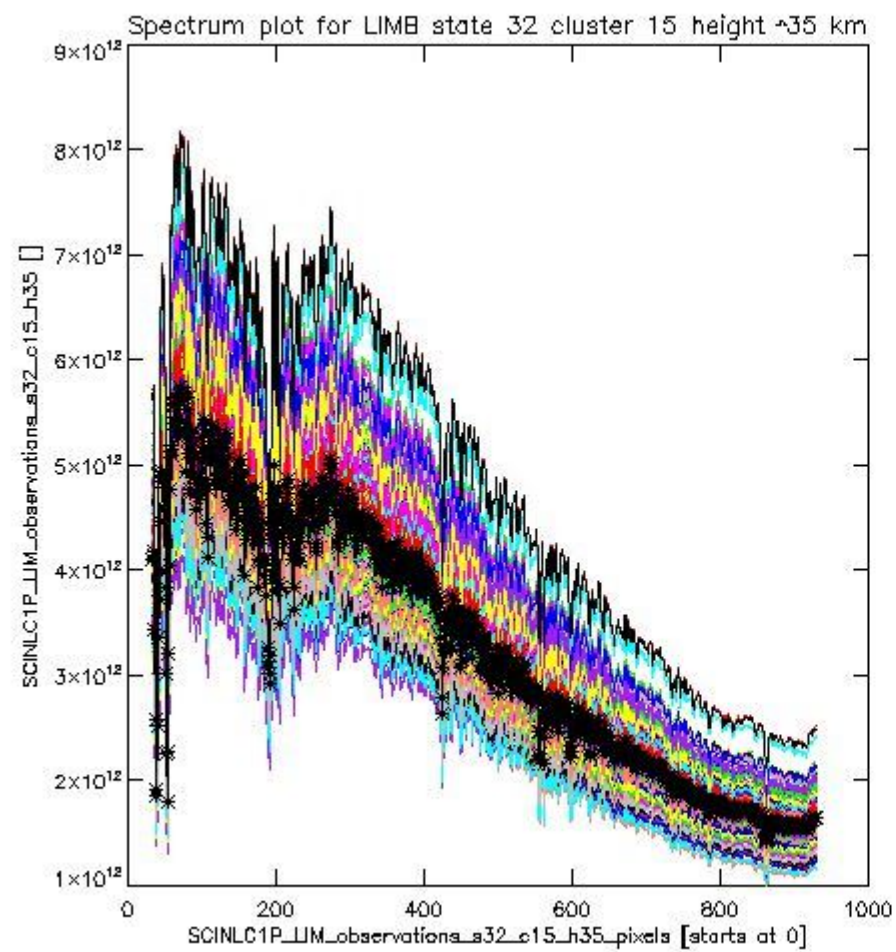




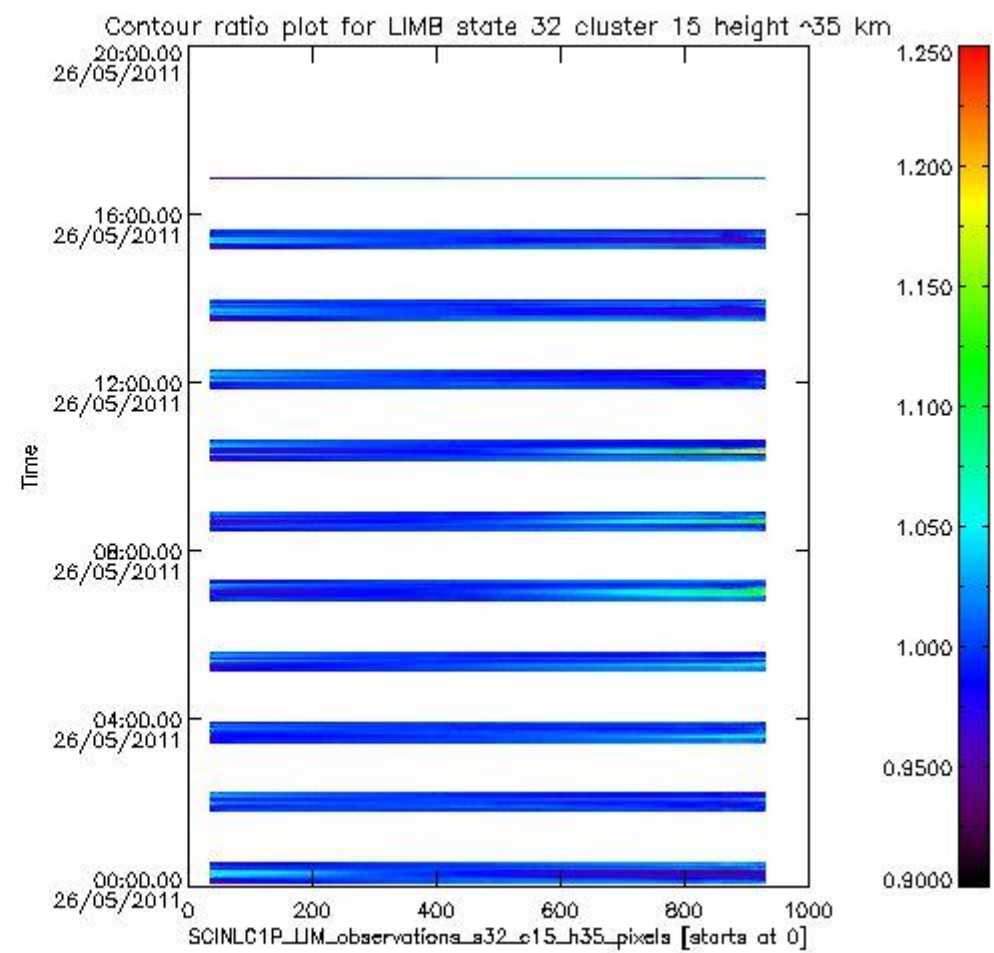
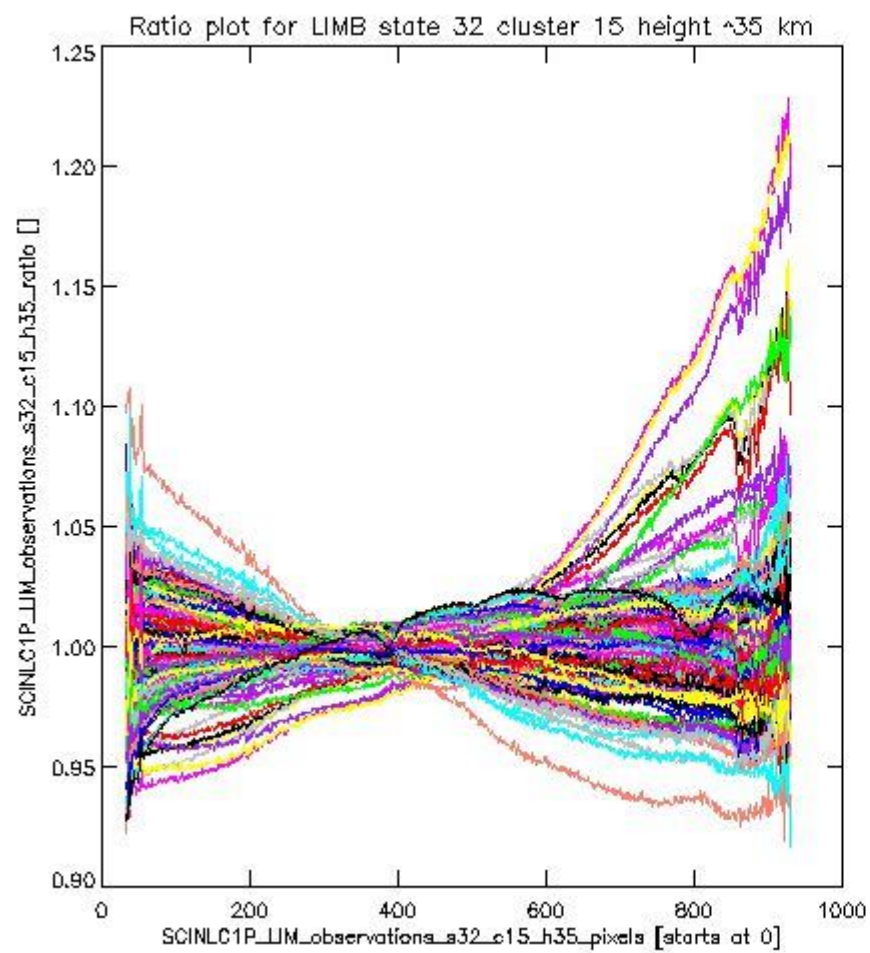
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_19.PNG

**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	26MAY2011 00:05:36.483
Start time of last sample	26MAY2011 16:47:54.225
Reference period start time	26APR2011 00:08:01.818
Reference period stop time	25MAY2011 22:52:52.595
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\_20110526\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110526\_21.PNG



