

# 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	26MAY2011 06:55:41
Data source version	SCIA/7.04-U
Processing scope for products	13MAY2011 00:00:00 to 14MAY2011 00:00:00
Start time of first product within scope	12MAY2011 23:24:48
Stop time of last product within scope	13MAY2011 23:58:30
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	13MAY2011 00:00:56.116	13MAY2011 23:30:16.490
1	NADIR	07	09	N/A	13MAY2011 00:00:56.116	13MAY2011 23:30:16.490
2	NADIR	07	15	N/A	13MAY2011 00:00:56.116	13MAY2011 23:30:16.490
3	NADIR	07	24	N/A	13MAY2011 00:00:56.116	13MAY2011 23:30:16.490
4	NADIR	07	55	N/A	13MAY2011 00:00:56.116	13MAY2011 23:30:16.490
5	LIMB	32	09	~19 km	13MAY2011 00:00:01.936	13MAY2011 23:33:27.787
6	LIMB	32	09	~22 km	13MAY2011 00:00:01.936	13MAY2011 23:33:27.787
7	LIMB	32	09	~25 km	13MAY2011 00:00:01.936	13MAY2011 23:33:27.787
8	LIMB	32	15	~22 km	13MAY2011 00:00:01.936	13MAY2011 23:33:27.787
9	LIMB	32	15	~25 km	13MAY2011 00:00:01.936	13MAY2011 23:33:27.787
10	LIMB	32	15	~35 km	13MAY2011 00:00:01.936	13MAY2011 23:33:27.787

#### 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_1CUDPA20110512_231859_000060143102_00246_48105_1341.N1</a>	12MAY2011 23:24:48	13MAY2011 00:34:18	0	31	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110513_005917_000060053102_00247_48106_1342.N1</a>	13MAY2011 01:05:01	13MAY2011 02:15:35	0	32	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110513_023927_000060143102_00248_48107_1344.N1</a>	13MAY2011 02:45:15	13MAY2011 03:55:43	0	32	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110513_041945_000060053102_00249_48108_1345.N1</a>	13MAY2011 04:25:29	13MAY2011 05:35:51	0	32	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110513_055954_000060143102_00250_48109_1348.N1</a>	13MAY2011 06:05:43	13MAY2011 07:16:00	0	32	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110513_074012_000060053102_00251_48110_1350.N1</a>	13MAY2011 07:45:56	13MAY2011 08:56:08	0	32	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110513_092022_000060143102_00252_48111_1364.N1	13MAY2011 09:26:10	13MAY2011 10:36:16	0	31	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110513_110040_000060053102_00253_48112_1384.N1	13MAY2011 11:06:24	13MAY2011 12:16:25	0	31	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110513_124049_000060143102_00254_48113_1429.N1	13MAY2011 12:46:37	13MAY2011 13:56:33	0	31	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110513_142107_000060053102_00255_48114_1377.N1	13MAY2011 14:26:51	13MAY2011 15:36:41	0	31	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110513_160116_000060143102_00256_48115_1373.N1	13MAY2011 16:07:05	13MAY2011 17:16:49	0	31	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110513_174134_000060053102_00257_48116_1375.N1	13MAY2011 17:47:19	13MAY2011 18:57:14	0	32	31	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110513_192144_000060143102_00258_48117_1381.N1	13MAY2011 19:27:32	13MAY2011 20:38:14	0	32	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110513_210202_000060053102_00259_48118_1380.N1	13MAY2011 21:07:46	13MAY2011 22:18:22	0	32	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110513_224211_000060143102_00260_48119_1379.N1	13MAY2011 22:48:00	13MAY2011 23:58:30	0	32	31	0	0	1	0	0	

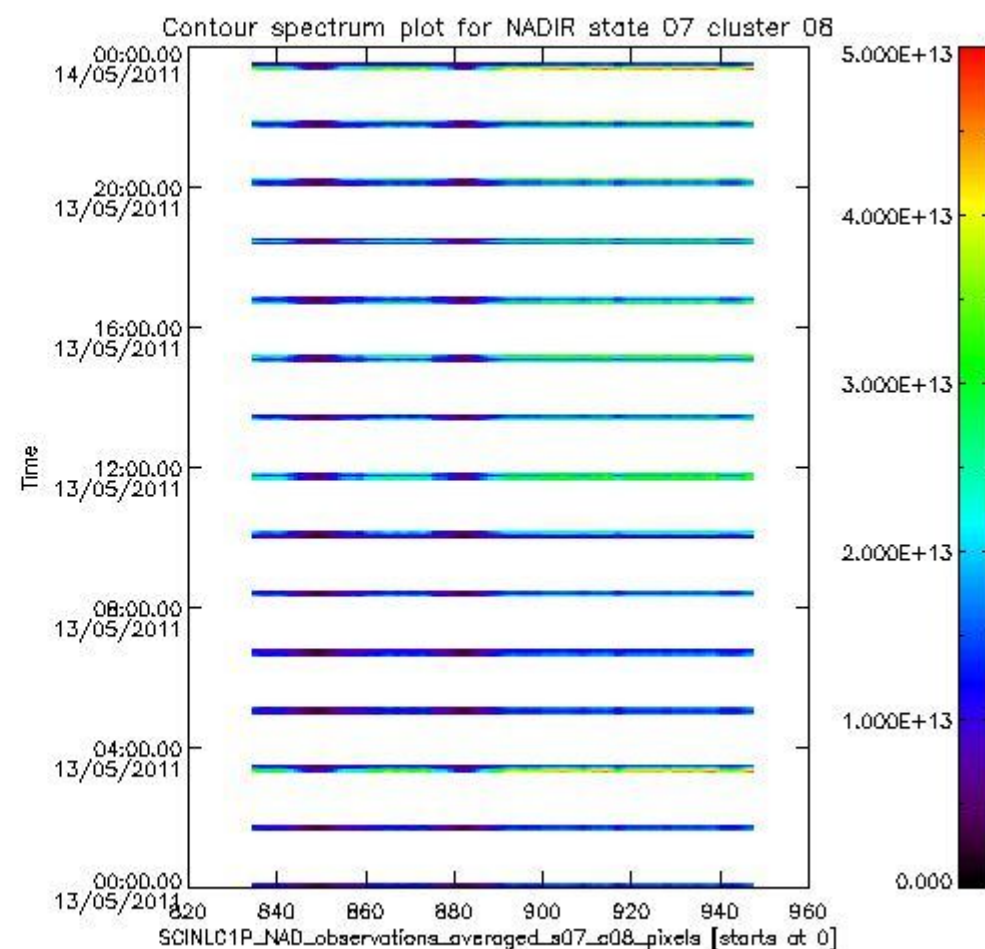
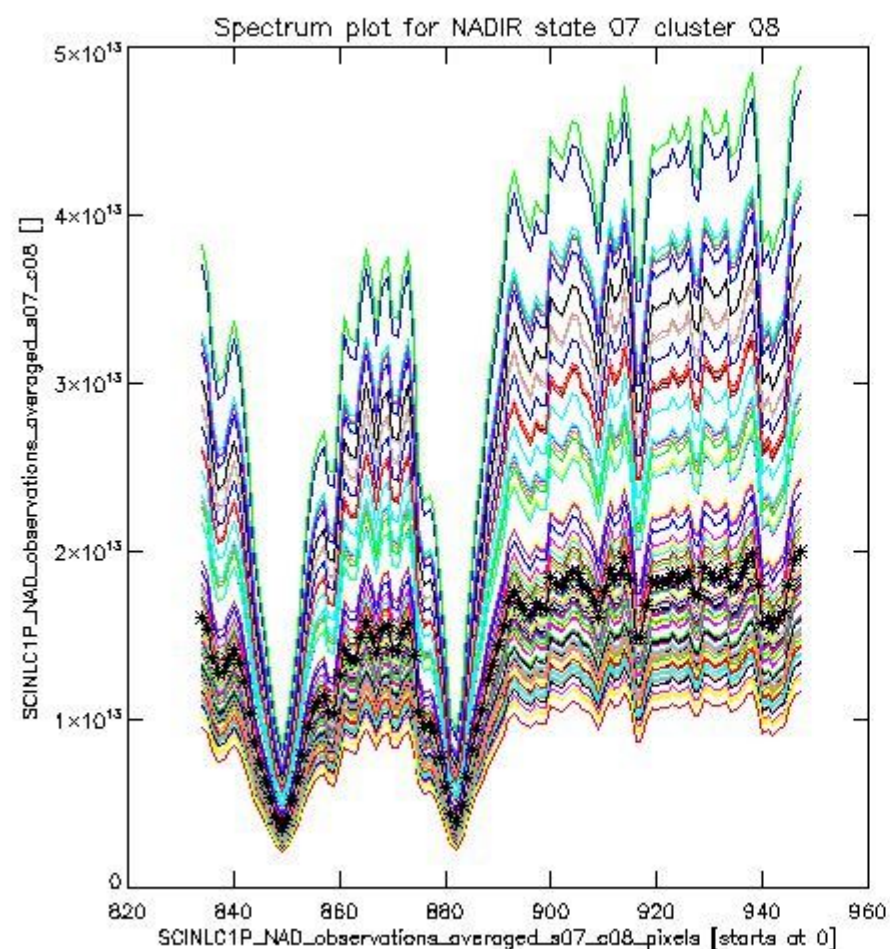
## 1.2 Source packet monitoring

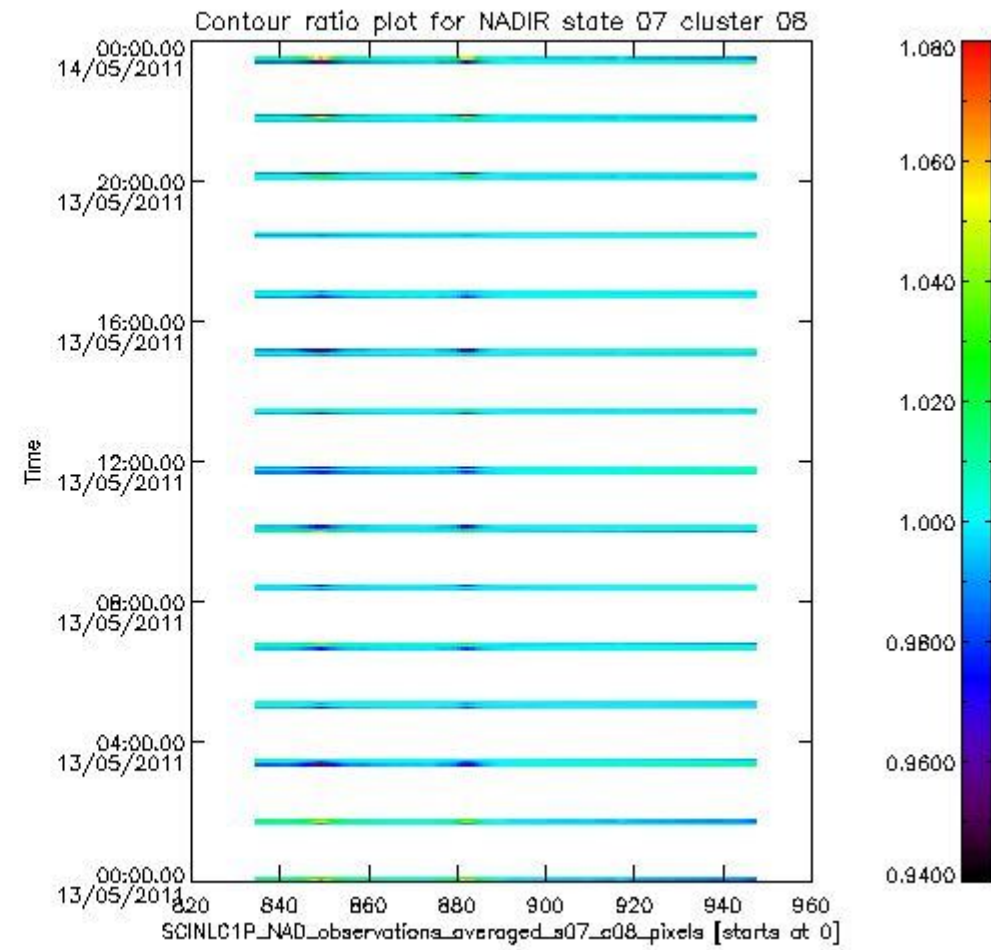
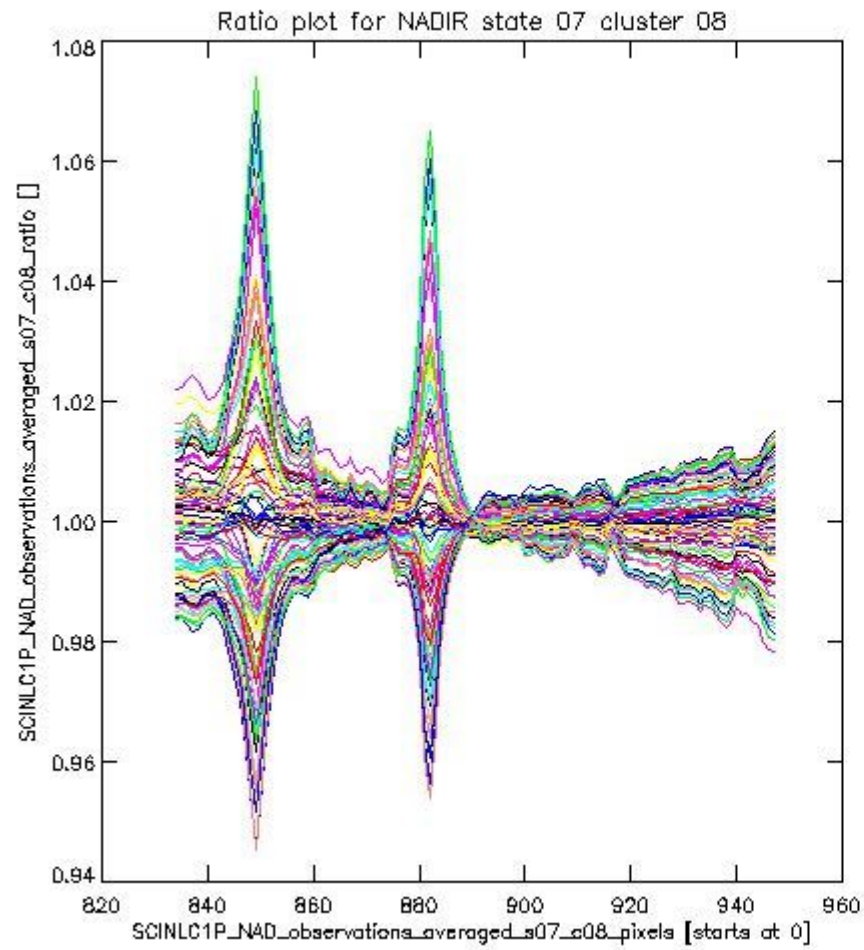
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	13MAY2011 00:00:56.116
Start time of last sample	13MAY2011 23:30:16.490
Reference period start time	13APR2011 00:00:46.318
Reference period stop time	12MAY2011 23:58:53.377
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

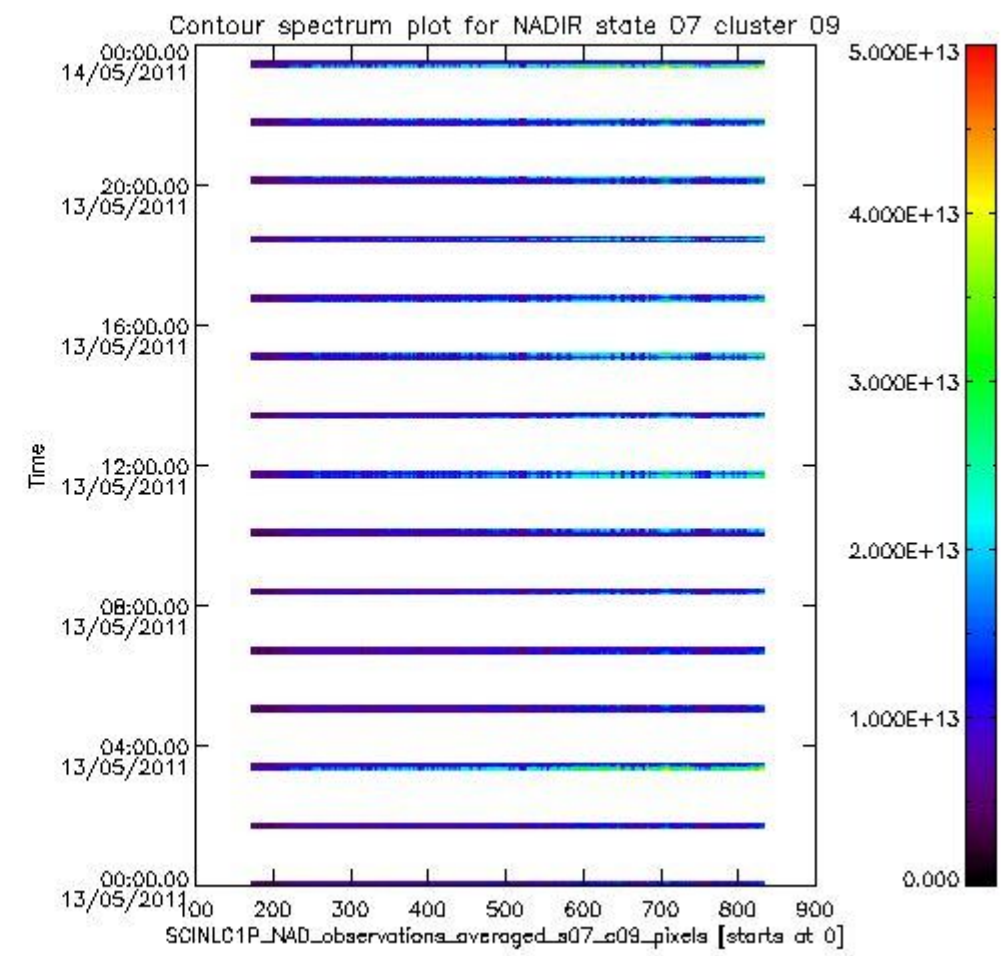
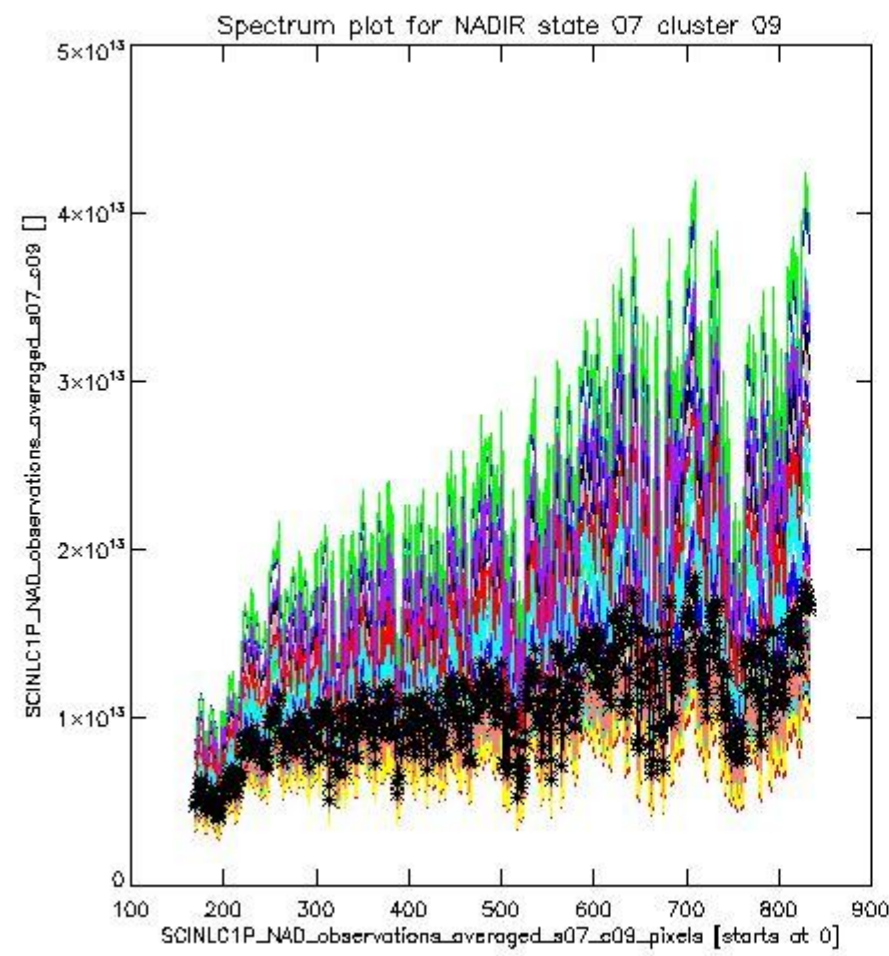




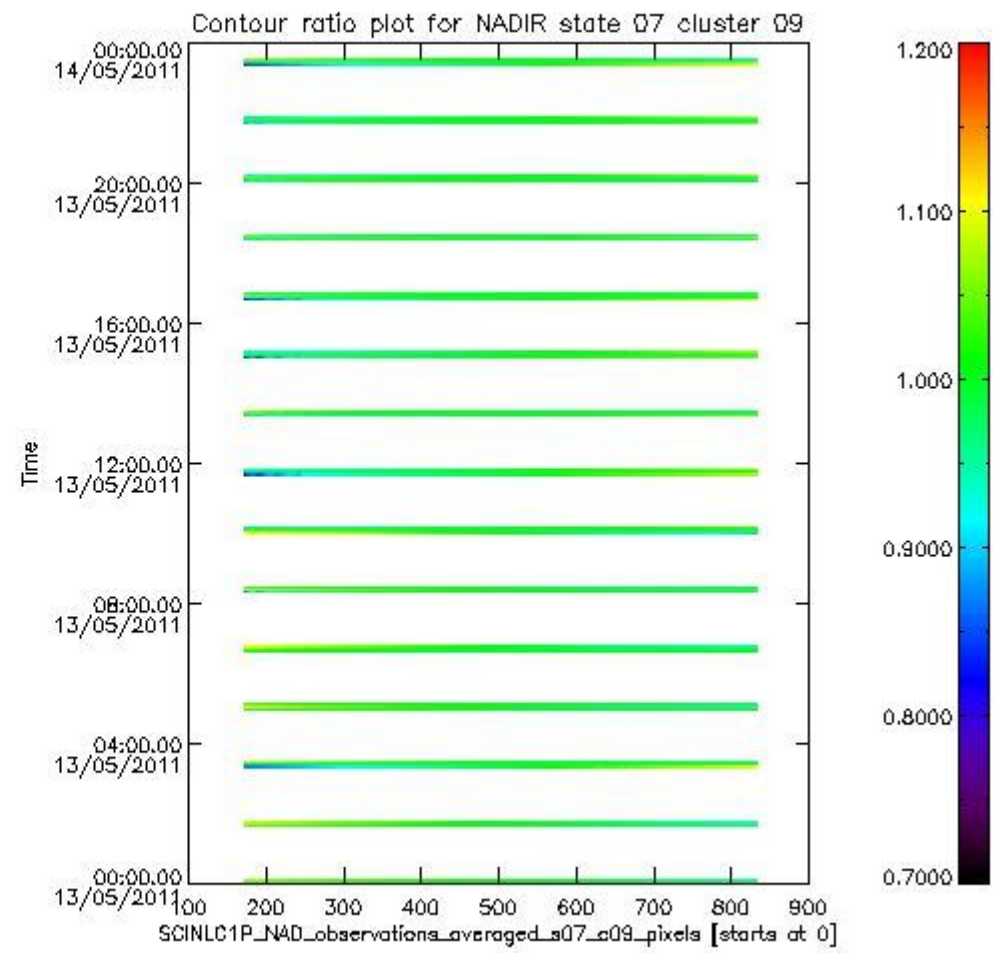
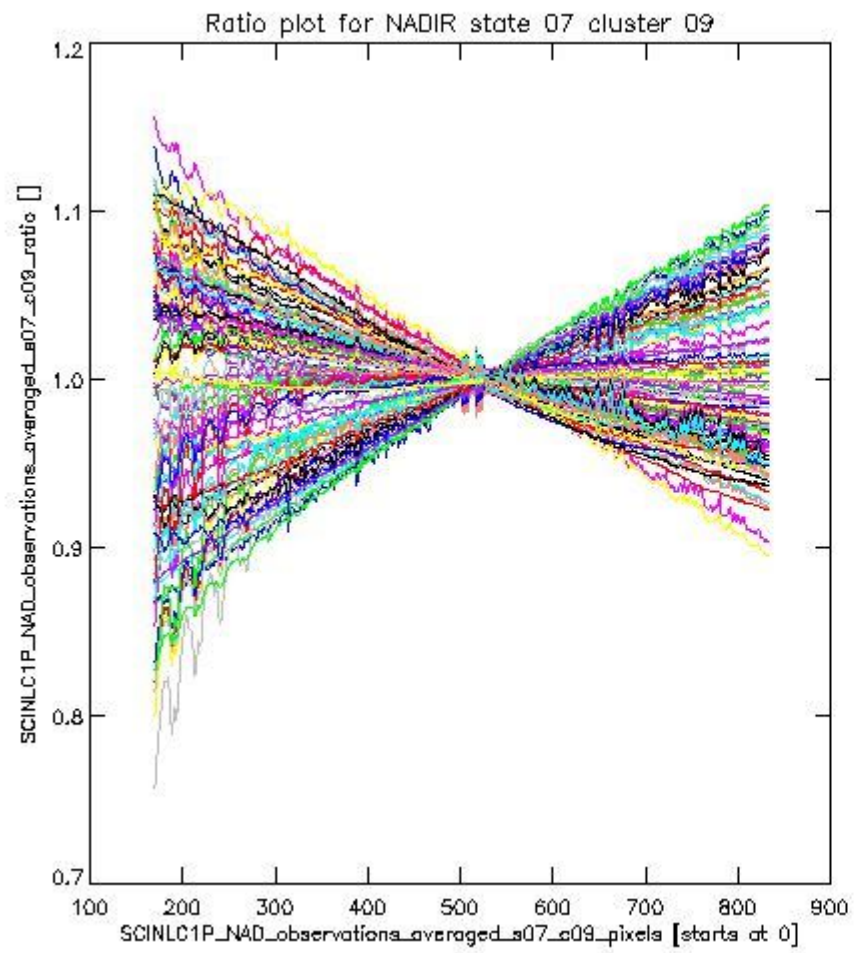
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	13MAY2011 00:00:56.116
Start time of last sample	13MAY2011 23:30:16.490
Reference period start time	13APR2011 00:00:46.318
Reference period stop time	12MAY2011 23:58:53.377
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





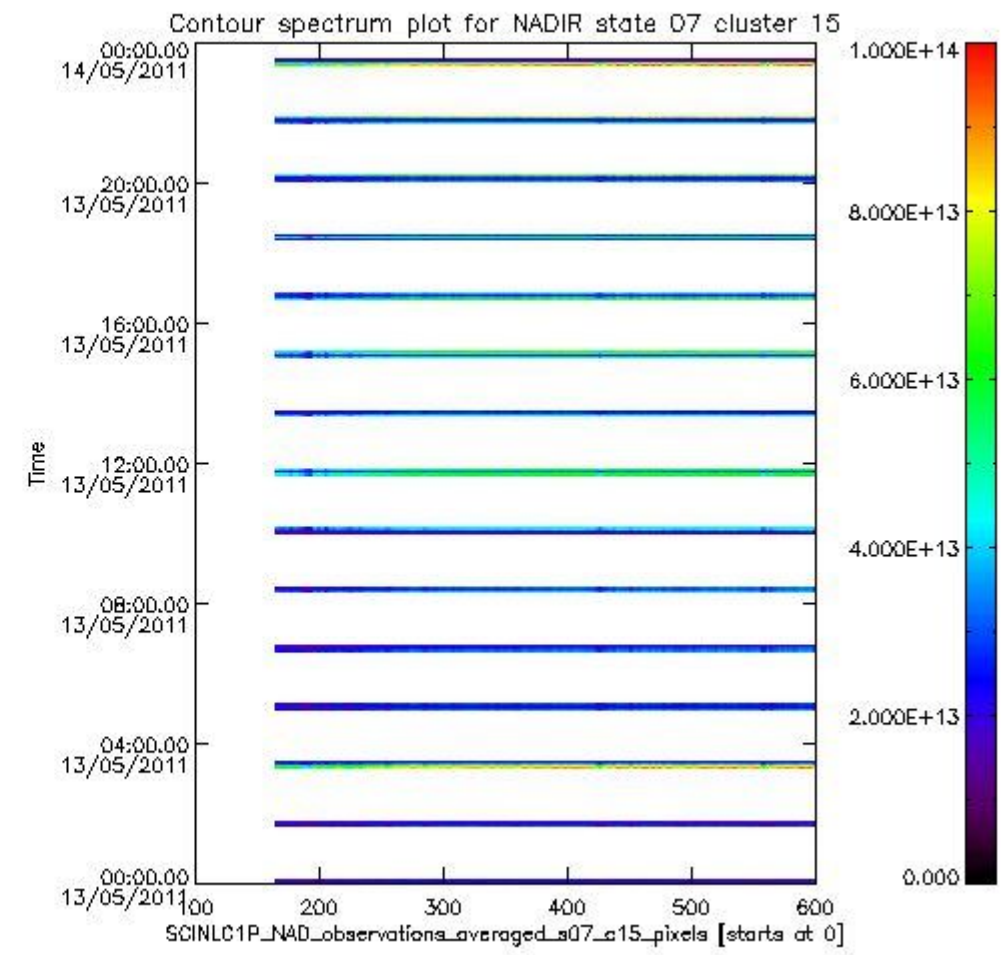
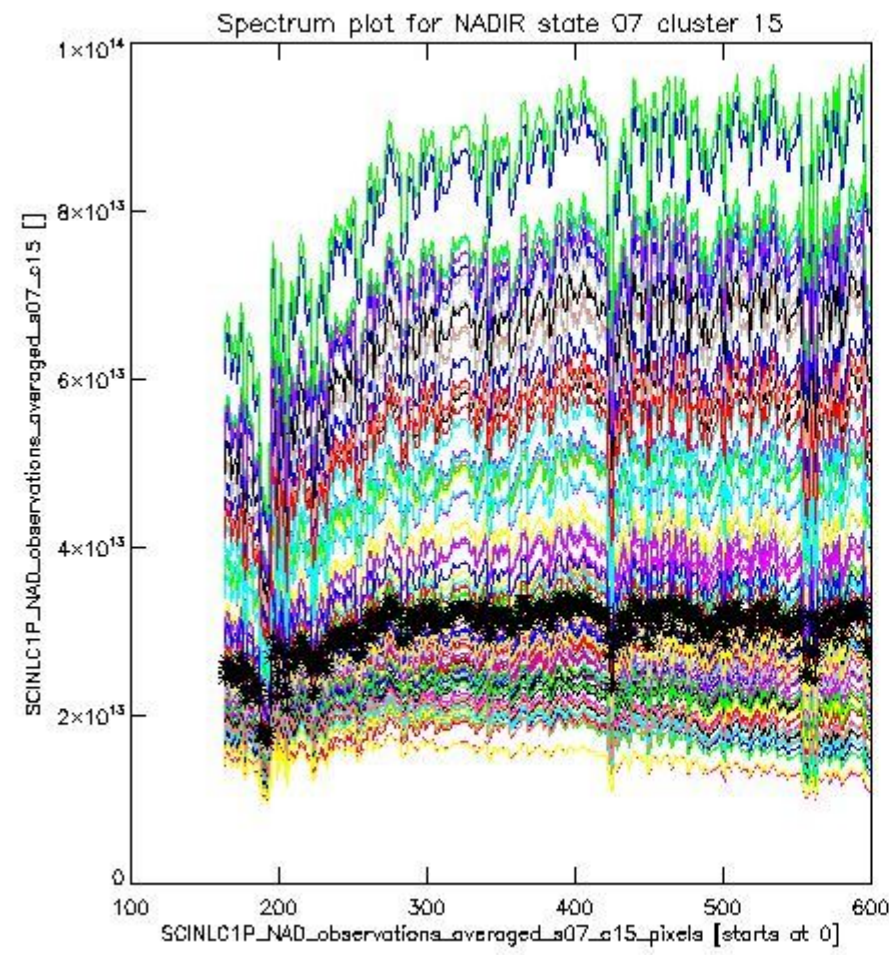
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_3.PNG

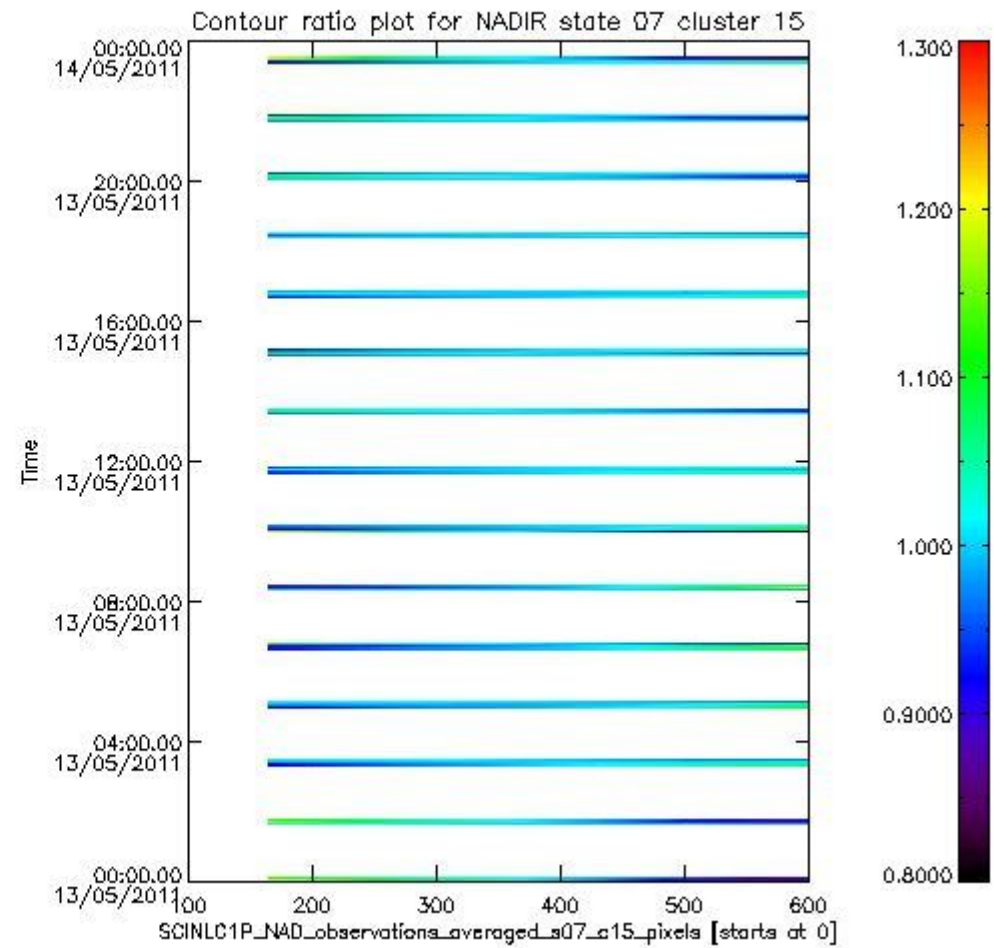
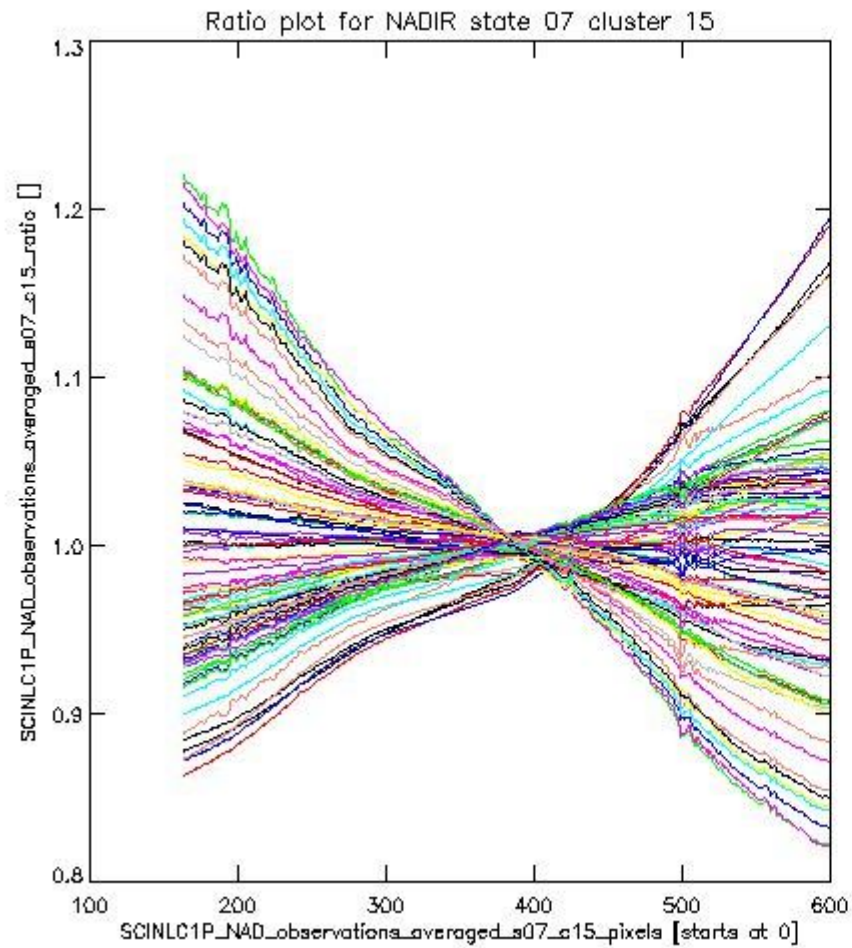
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	13MAY2011 00:00:56.116
Start time of last sample	13MAY2011 23:30:16.490
Reference period start time	13APR2011 00:00:46.318
Reference period stop time	12MAY2011 23:58:53.377
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\_20110513\_4.PNG

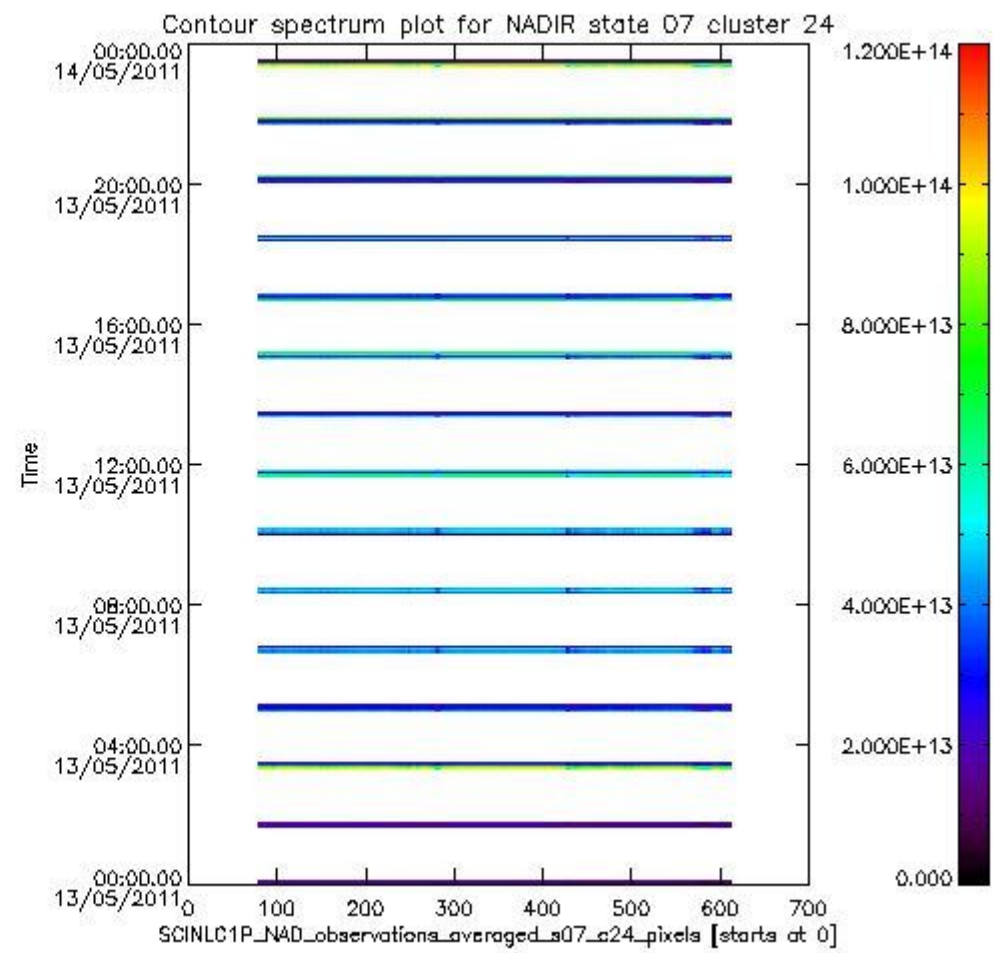
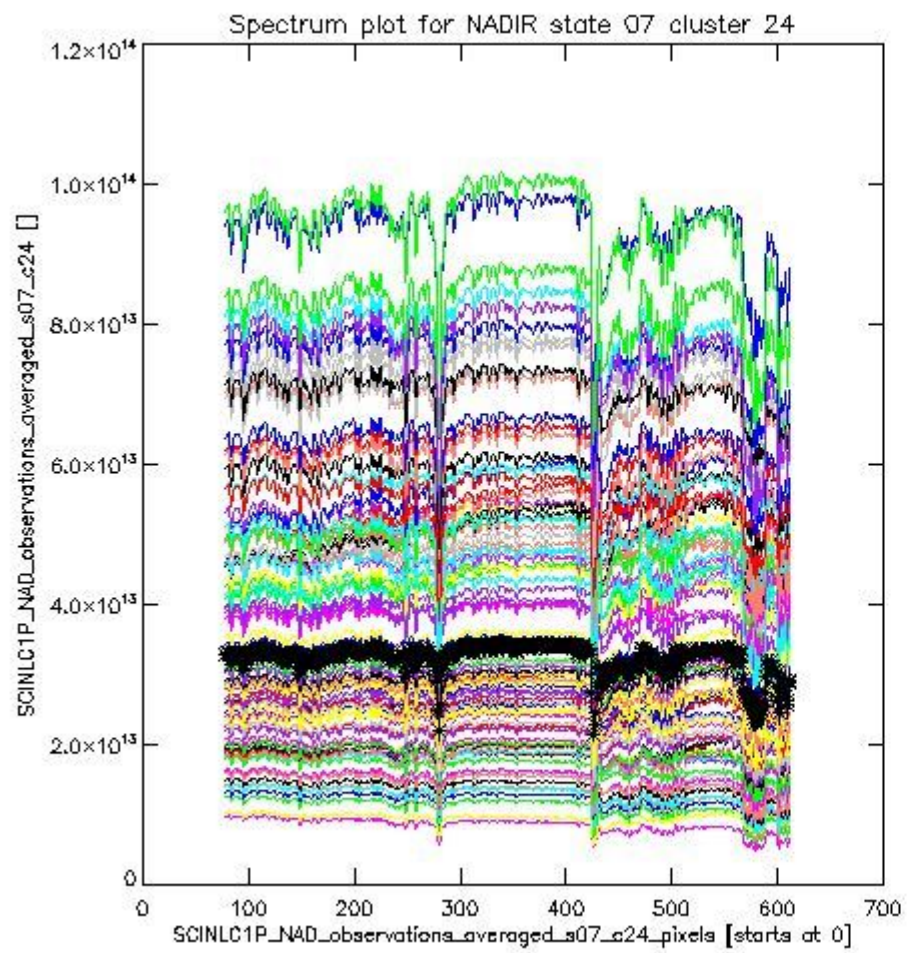




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_5.PNG

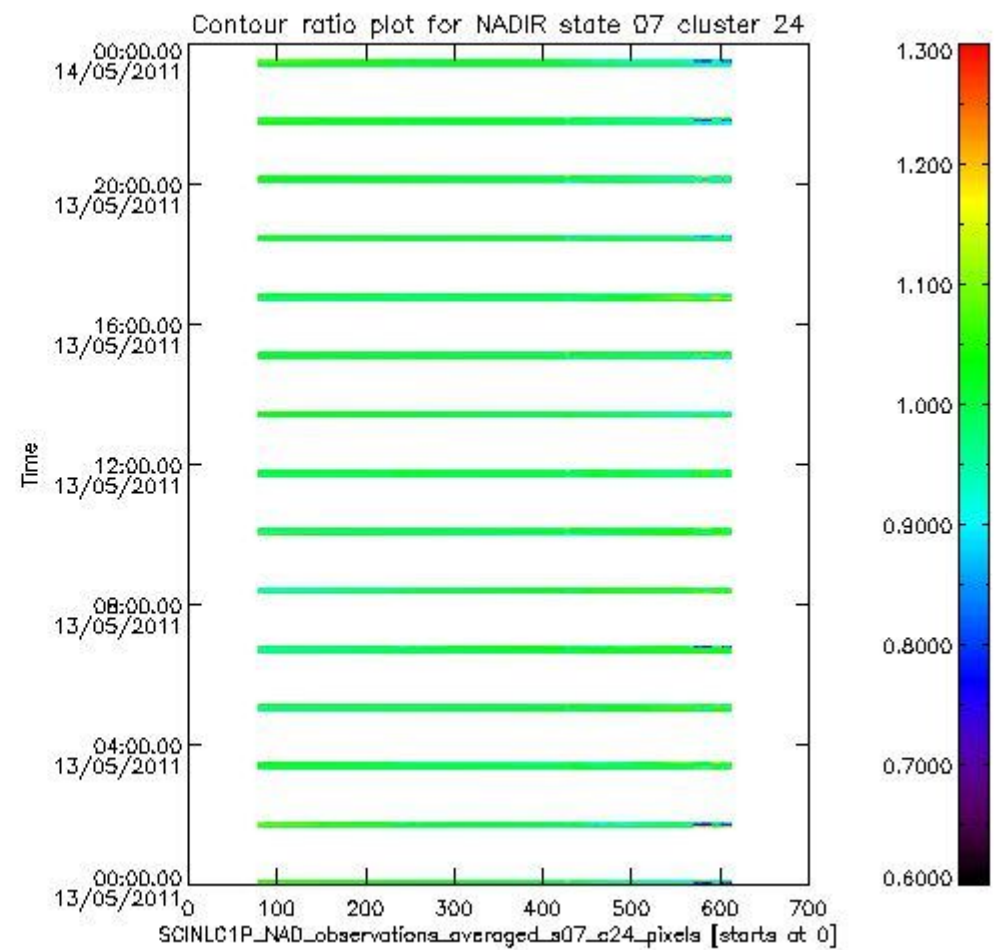
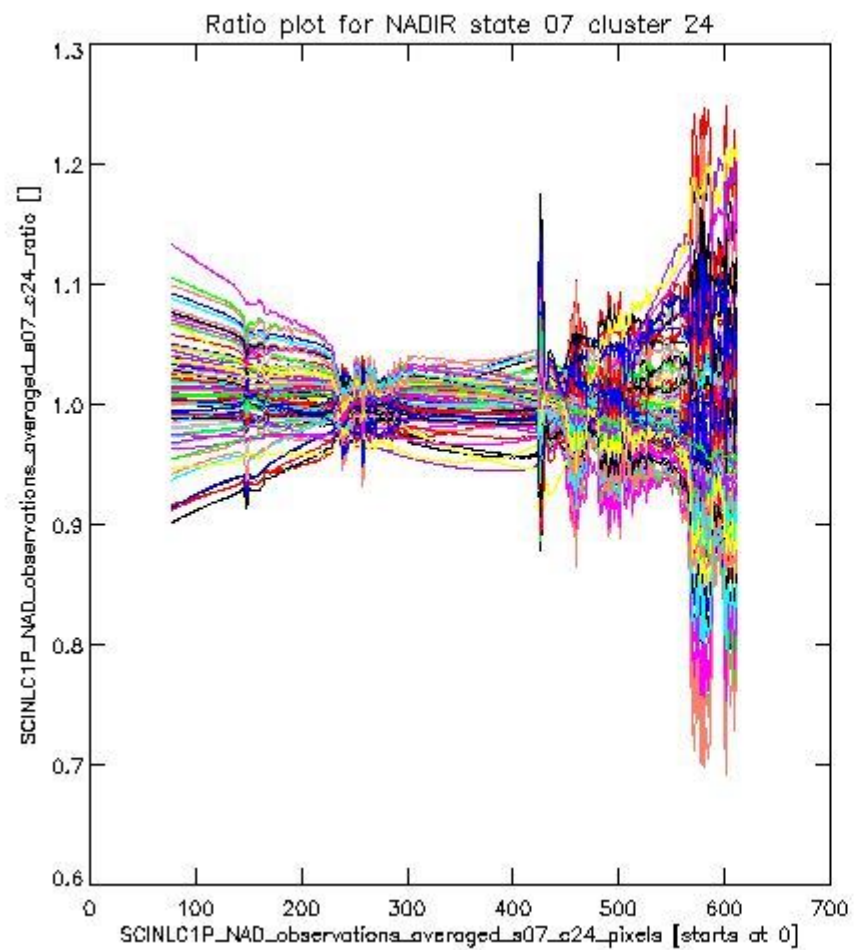
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	13MAY2011 00:00:56.116
Start time of last sample	13MAY2011 23:30:16.490
Reference period start time	13APR2011 00:00:46.318
Reference period stop time	12MAY2011 23:58:53.377
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\_20110513\_6.PNG

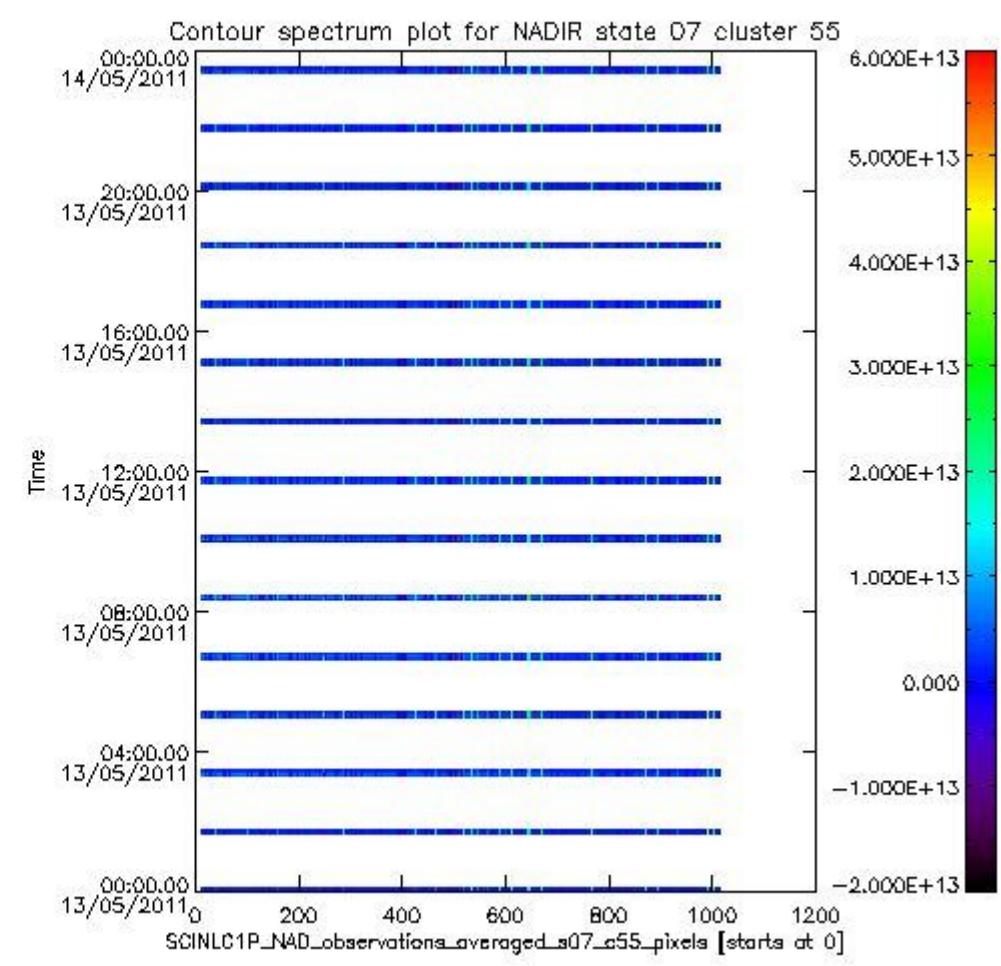
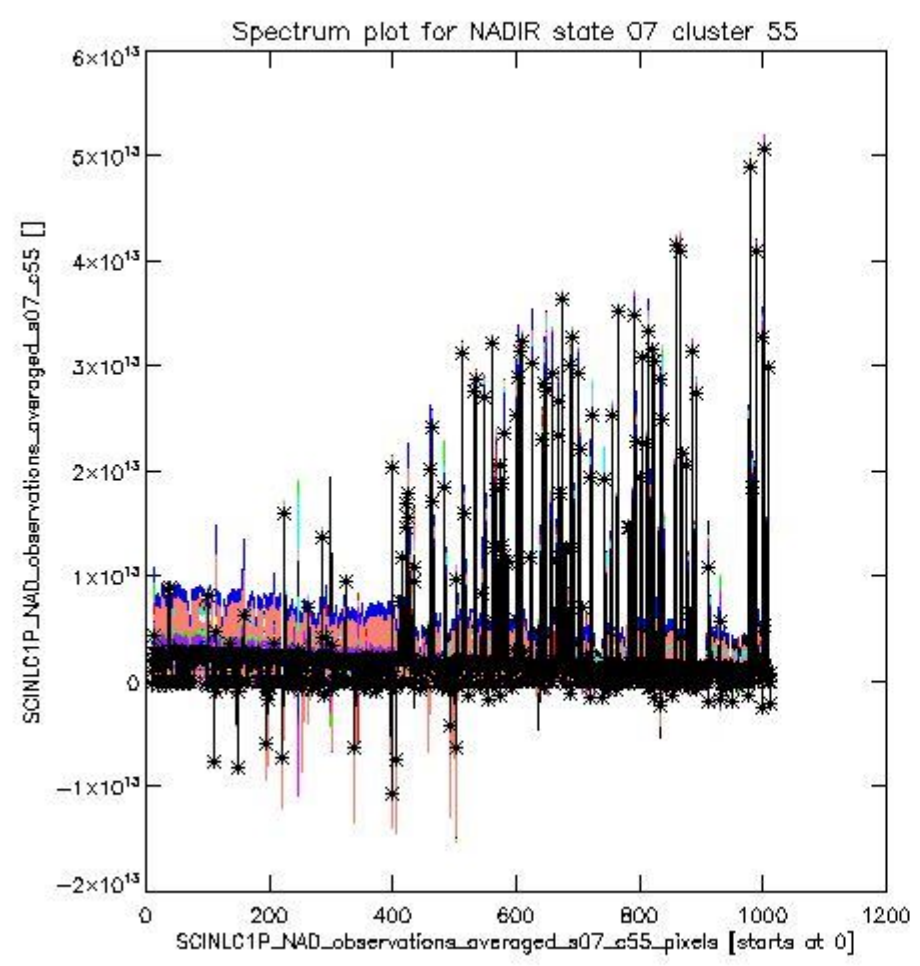




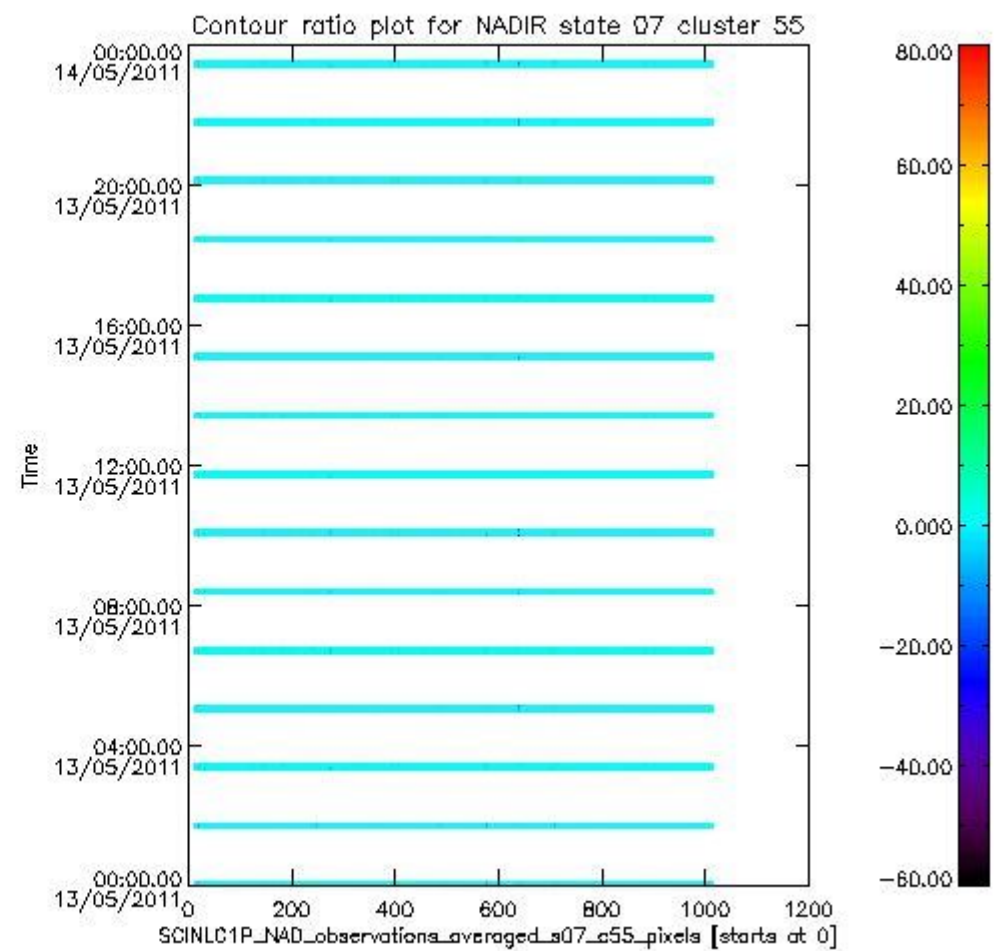
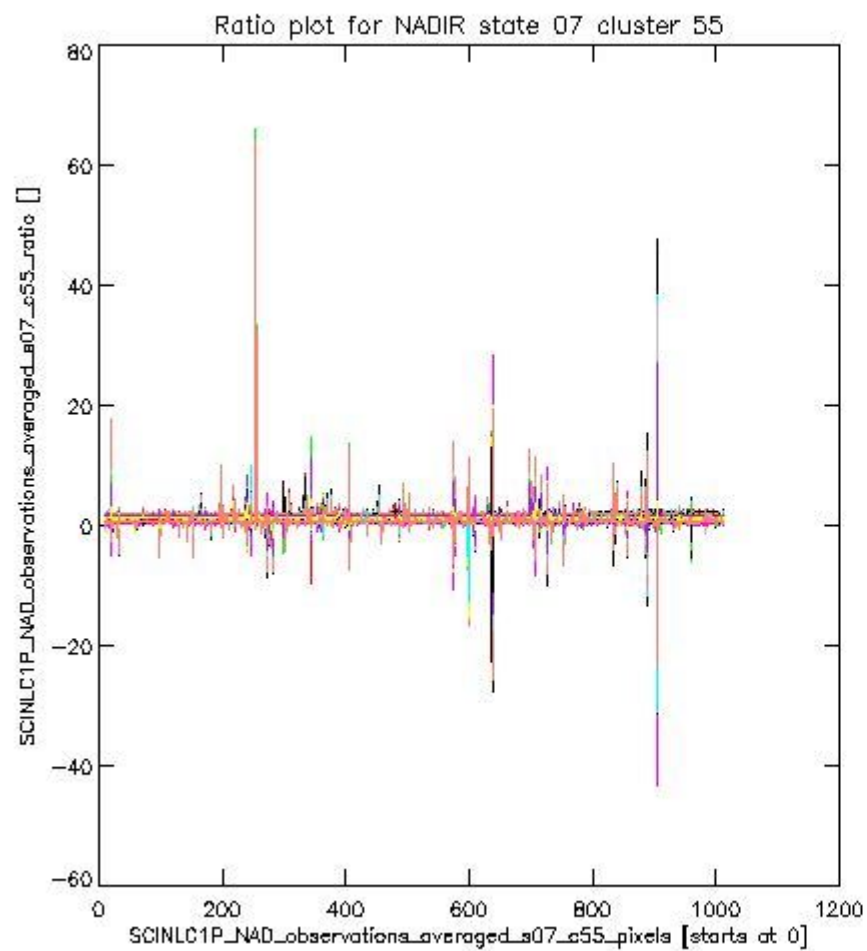
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_7.PNG

**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	13MAY2011 00:00:56.116
Start time of last sample	13MAY2011 23:30:16.490
Reference period start time	13APR2011 00:00:46.318
Reference period stop time	12MAY2011 23:58:53.377
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\_20110513\_8.PNG

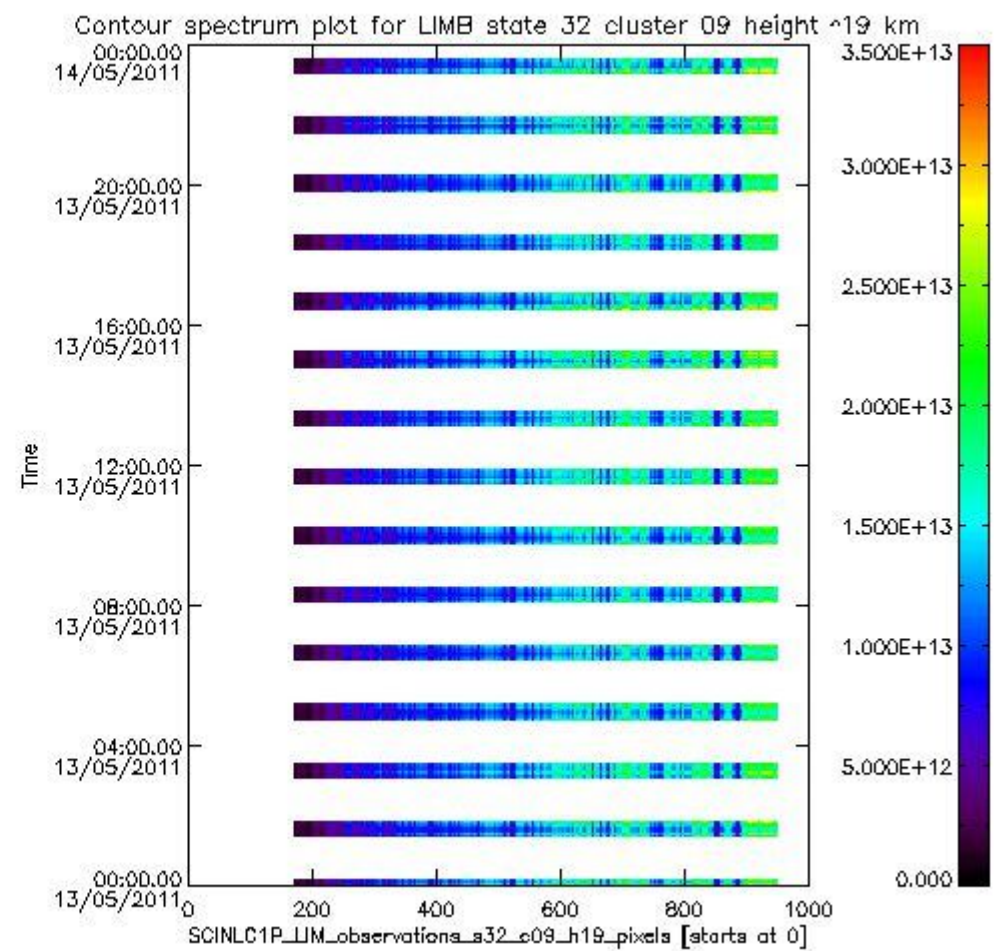
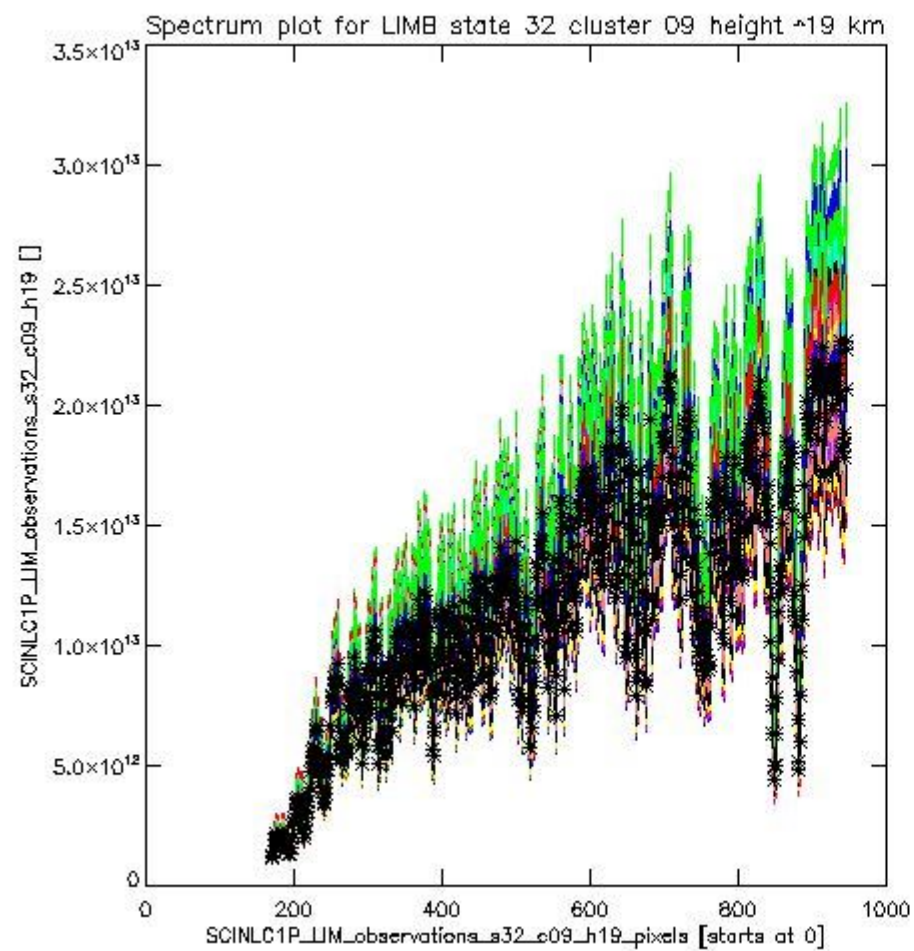


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_9.PNG

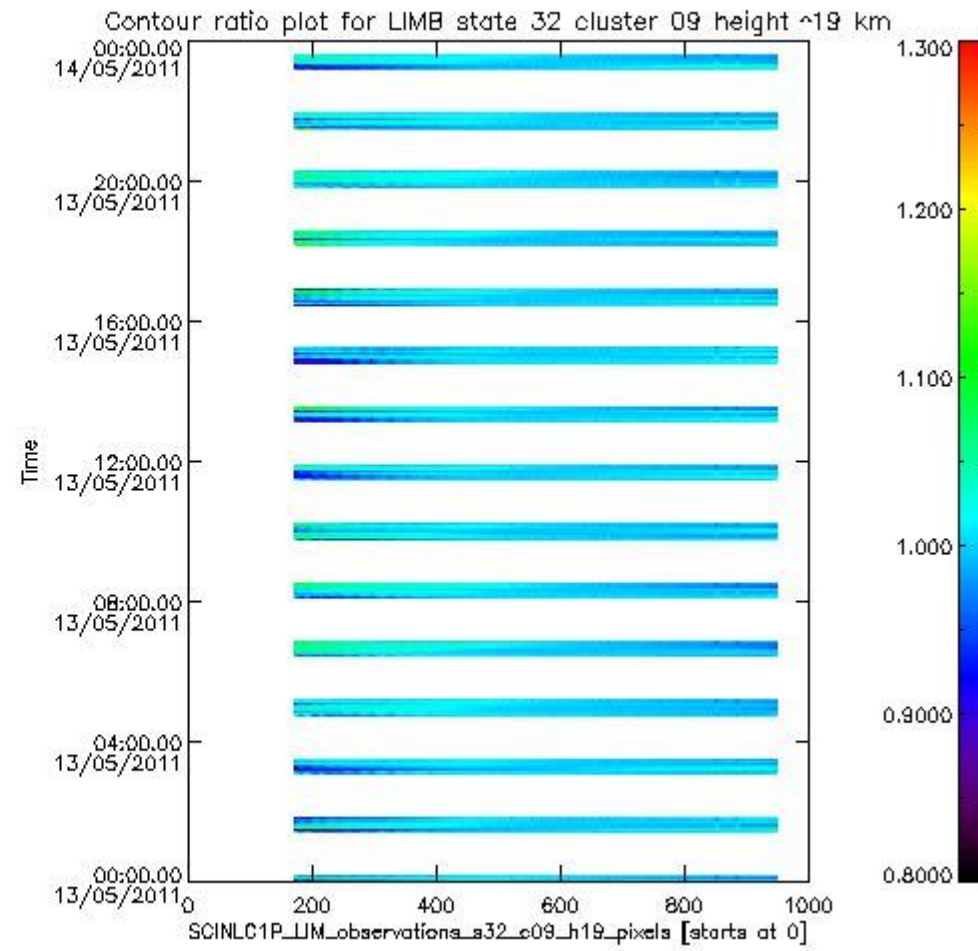
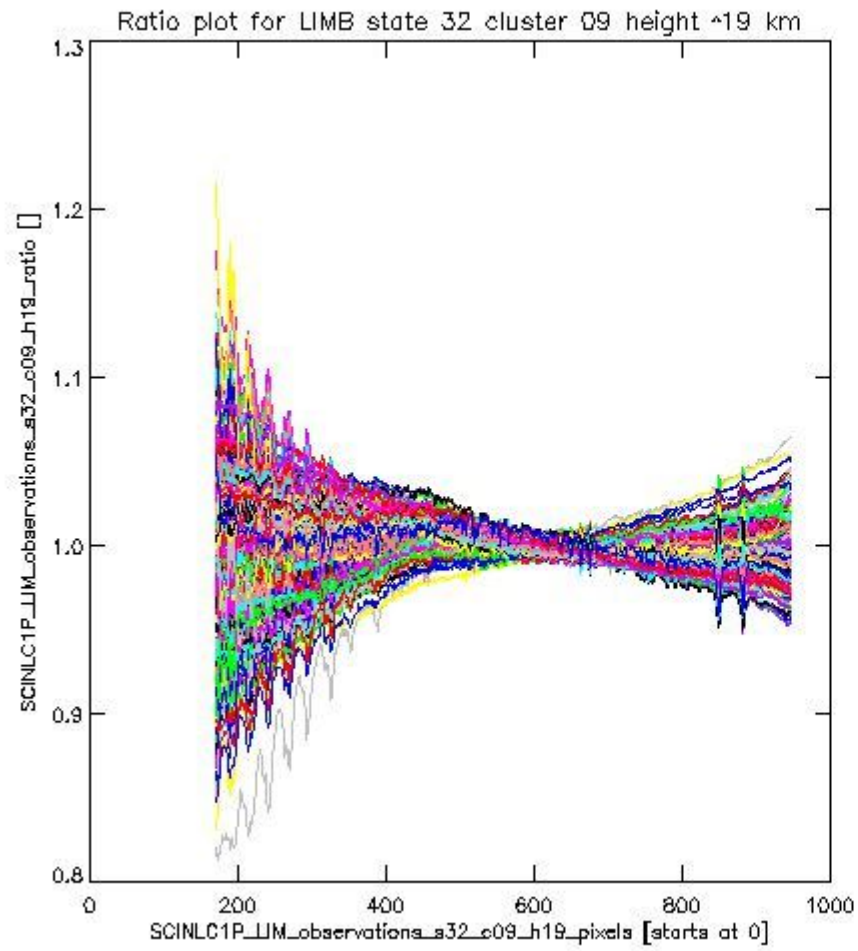
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	13MAY2011 00:00:01.936
Start time of last sample	13MAY2011 23:33:27.787
Reference period start time	13APR2011 00:01:54.877
Reference period stop time	12MAY2011 23:57:59.190
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





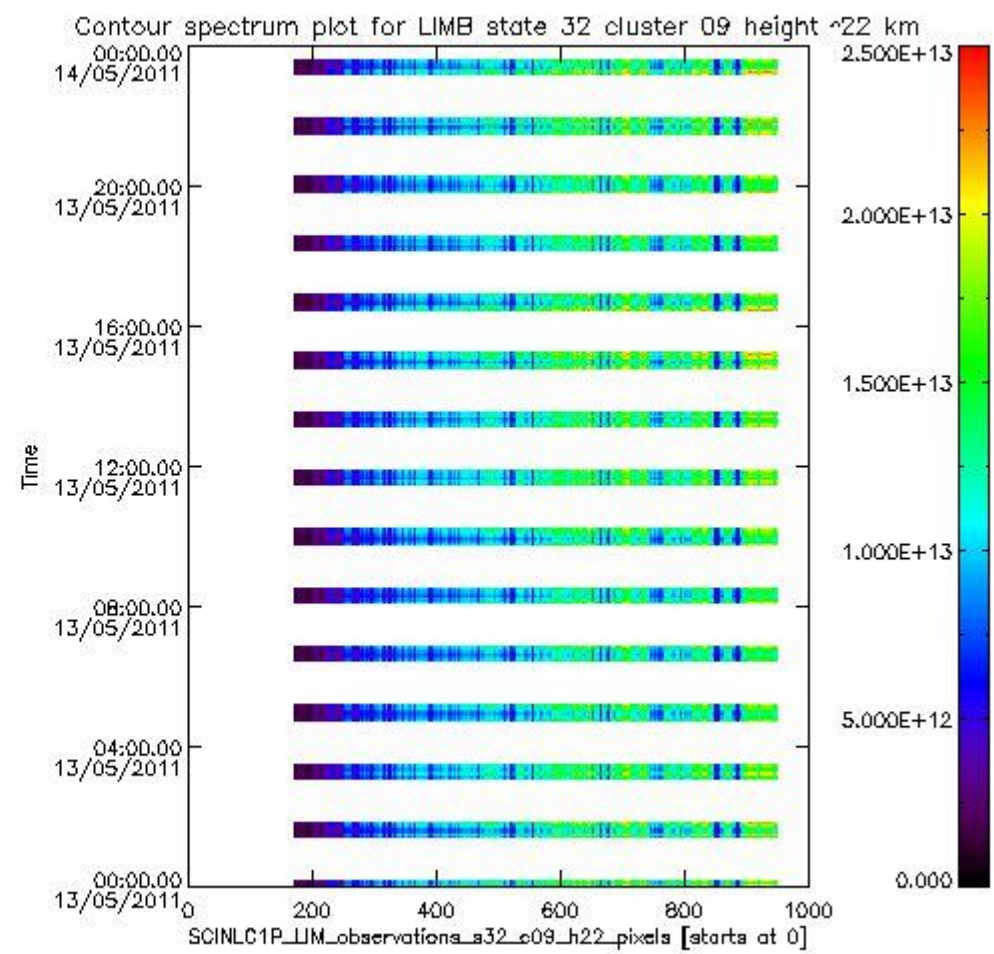
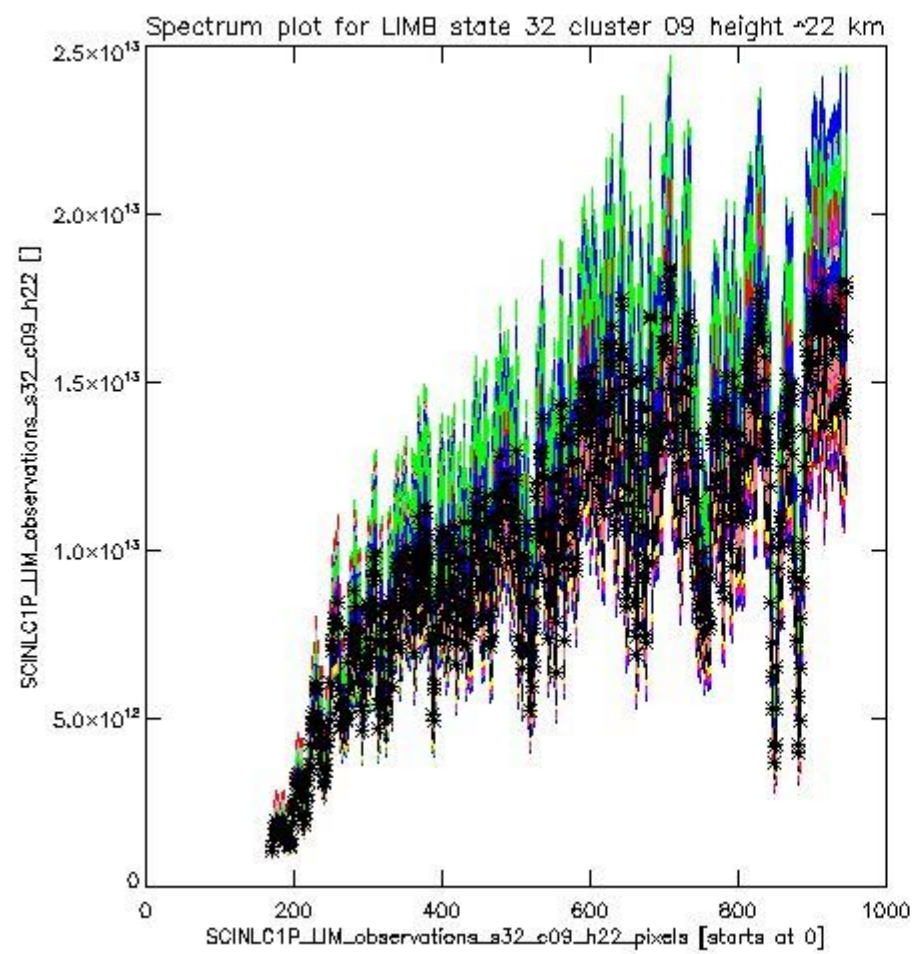
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_11.PNG

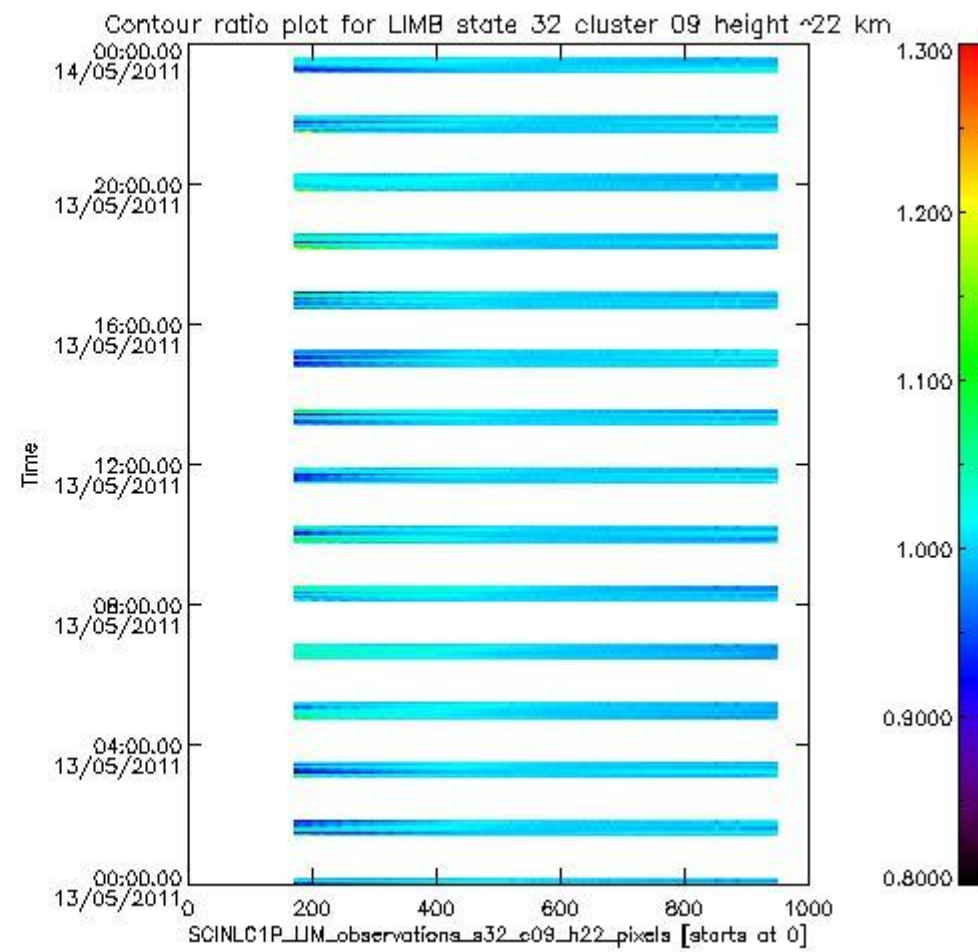
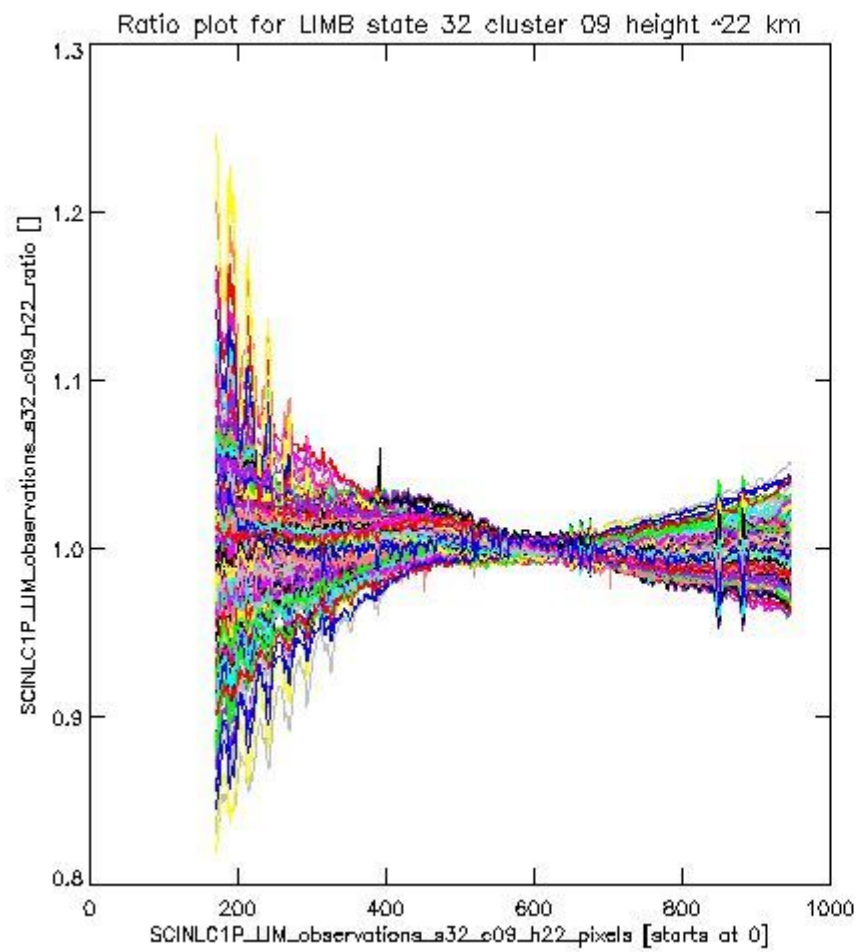
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	13MAY2011 00:00:01.936
Start time of last sample	13MAY2011 23:33:27.787
Reference period start time	13APR2011 00:01:54.877
Reference period stop time	12MAY2011 23:57:59.190
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\_20110513\_12.PNG

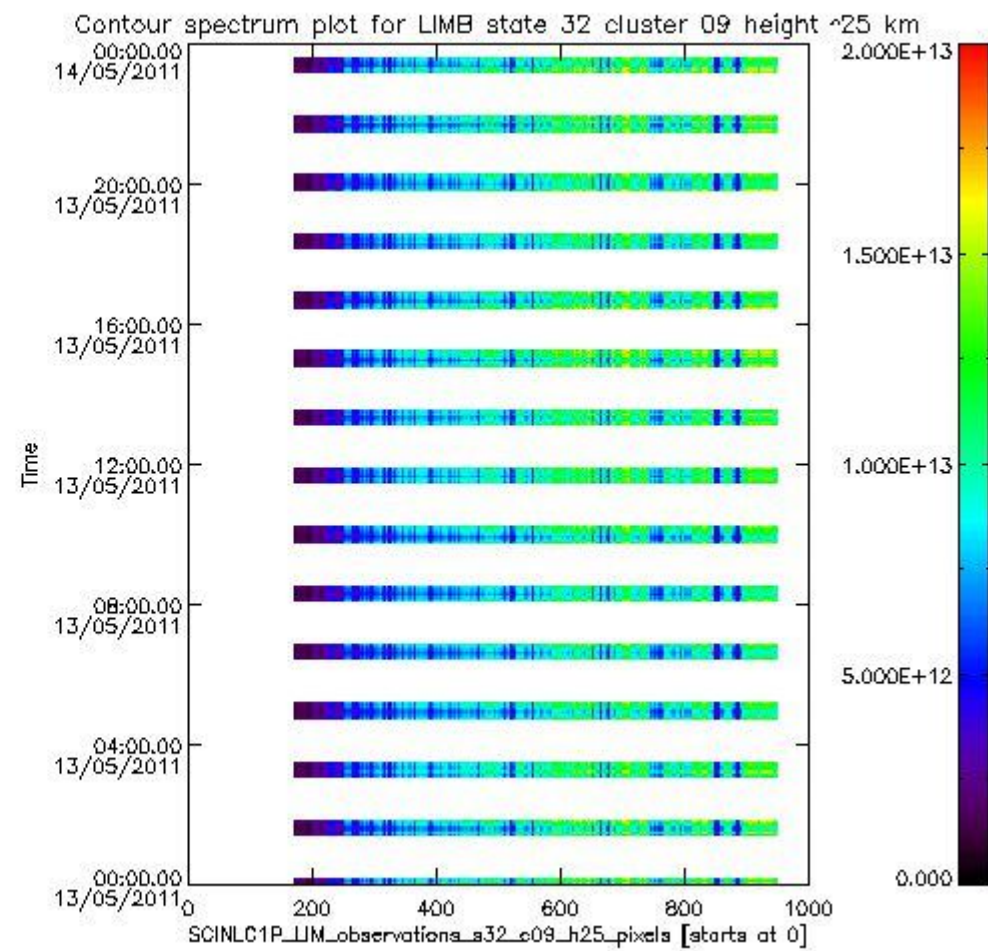
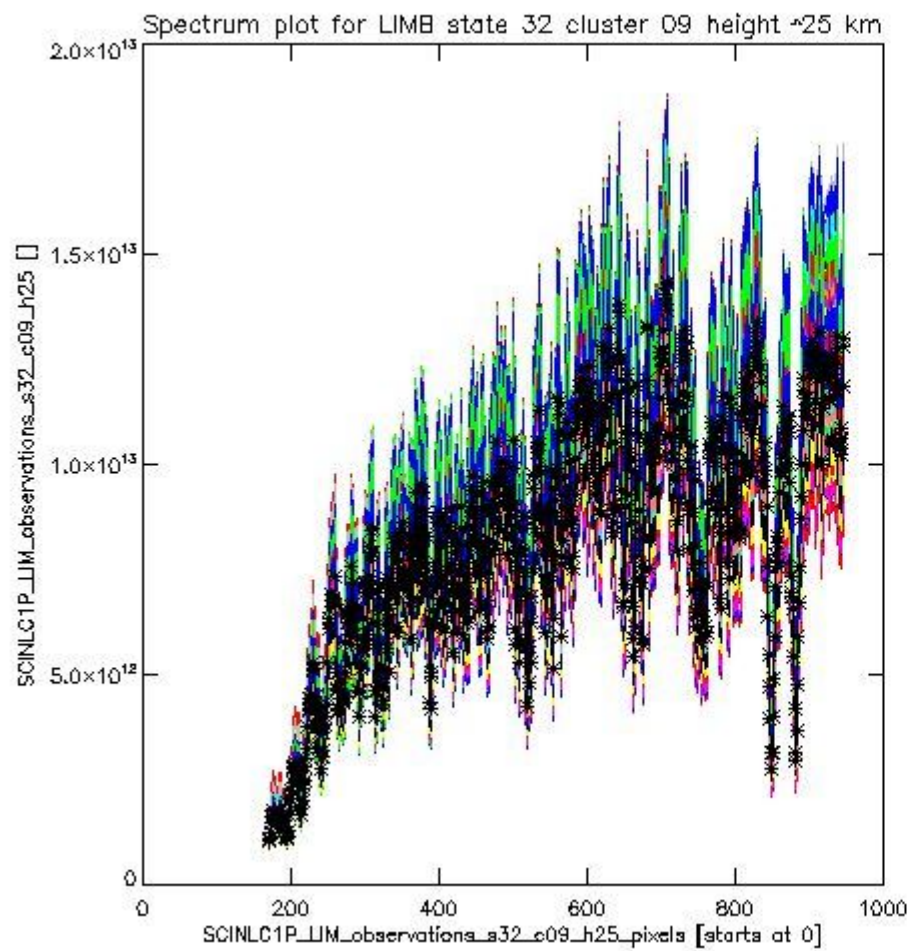




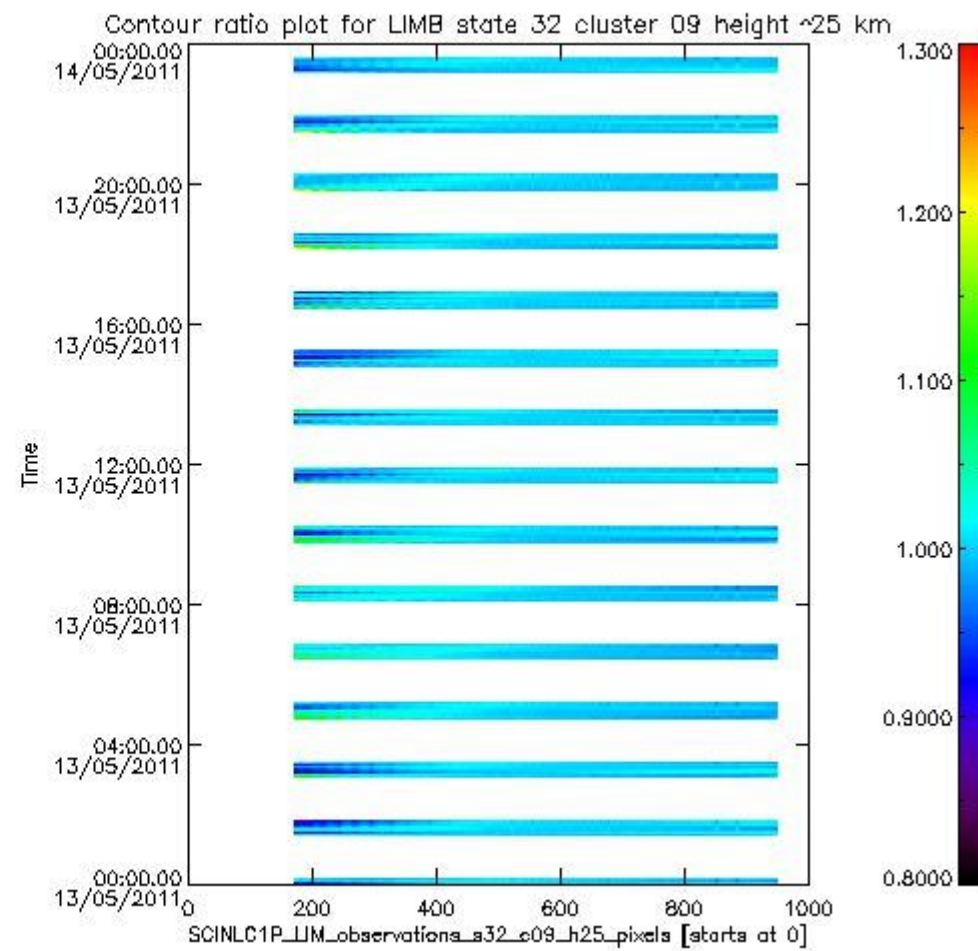
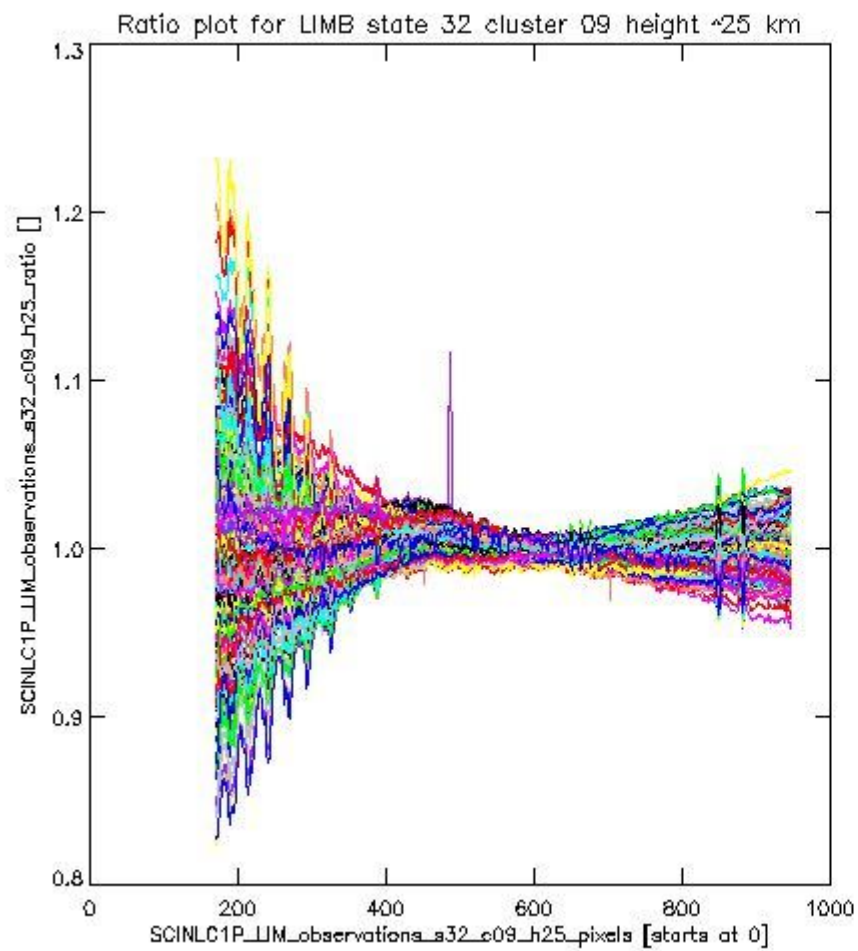
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_13.PNG

**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	13MAY2011 00:00:01.936
Start time of last sample	13MAY2011 23:33:27.787
Reference period start time	13APR2011 00:01:54.877
Reference period stop time	12MAY2011 23:57:59.190
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\_20110513\_14.PNG

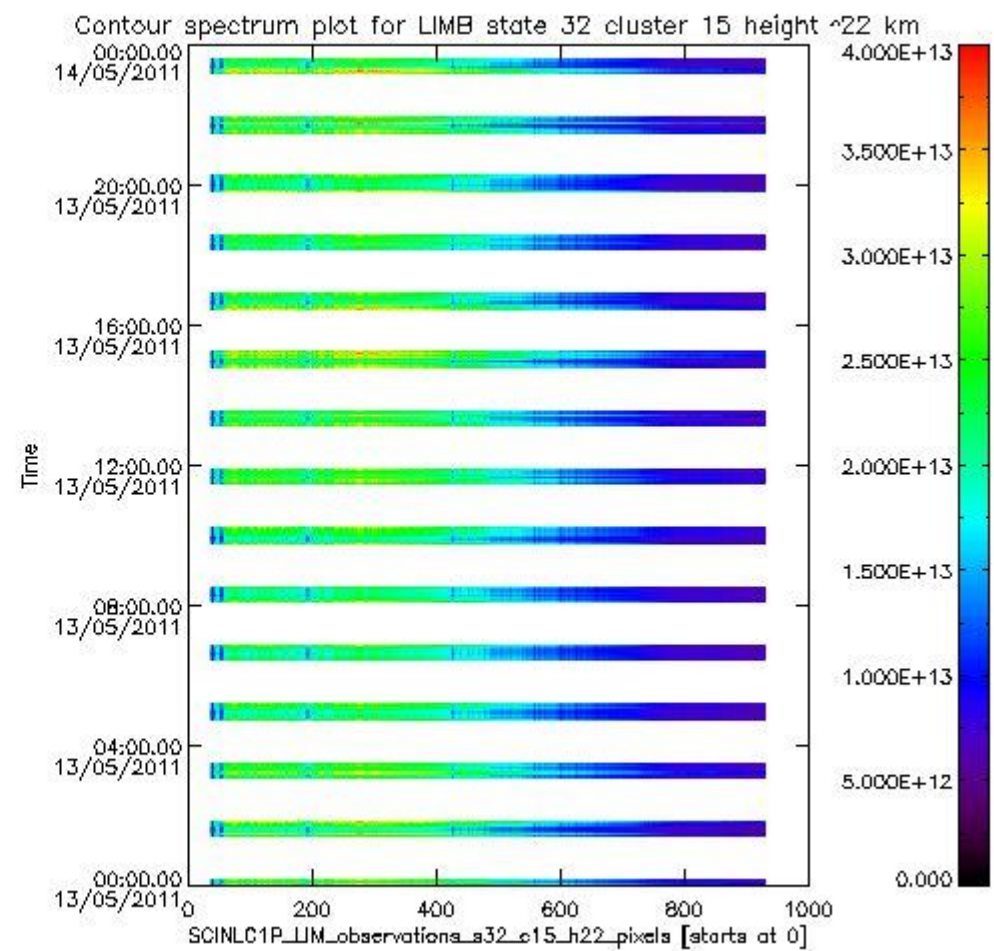
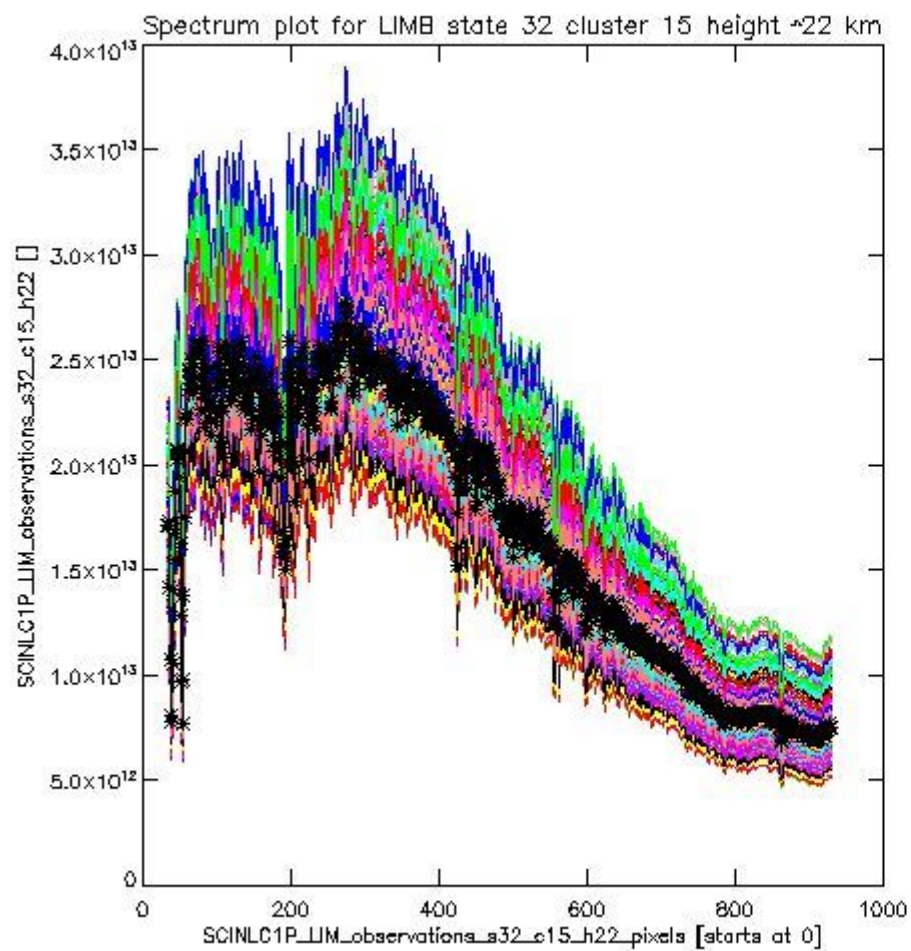


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_15.PNG

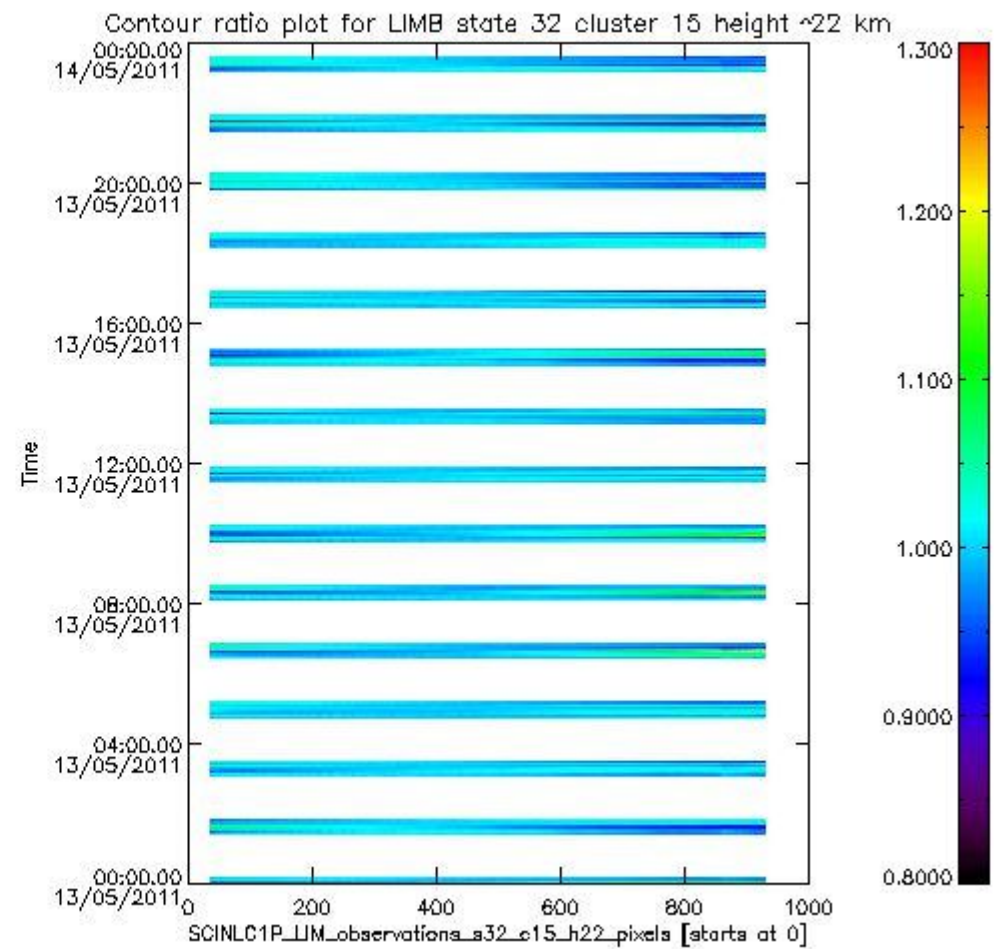
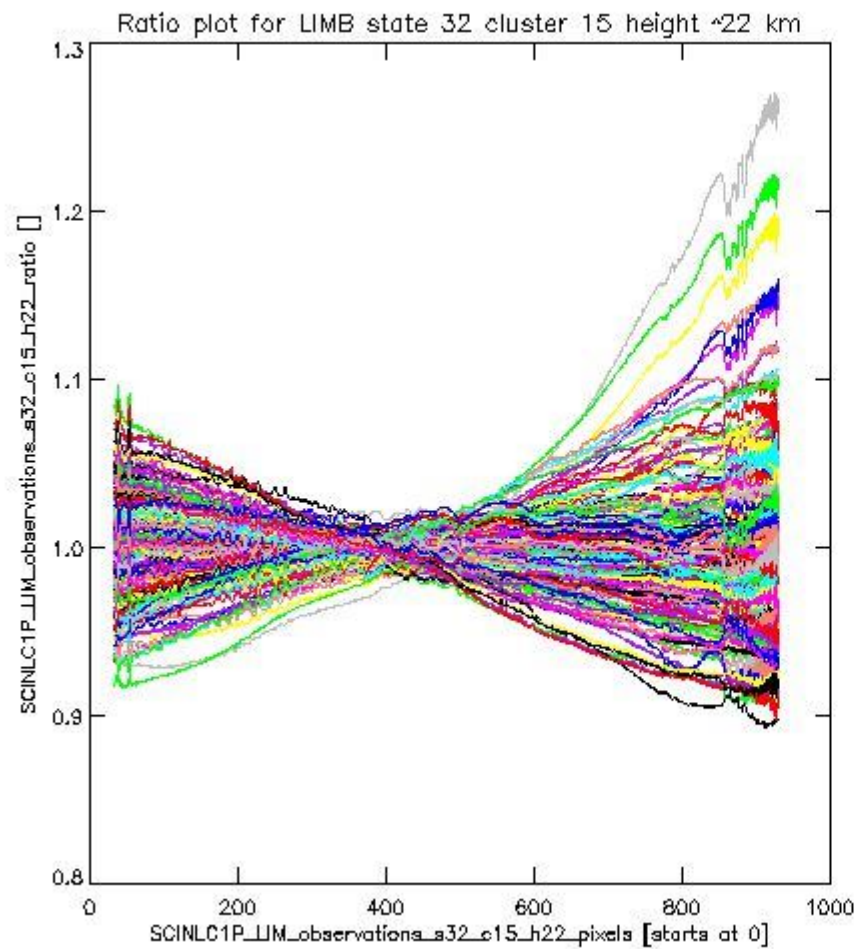
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	13MAY2011 00:00:01.936
Start time of last sample	13MAY2011 23:33:27.787
Reference period start time	13APR2011 00:01:54.877
Reference period stop time	12MAY2011 23:57:59.190
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





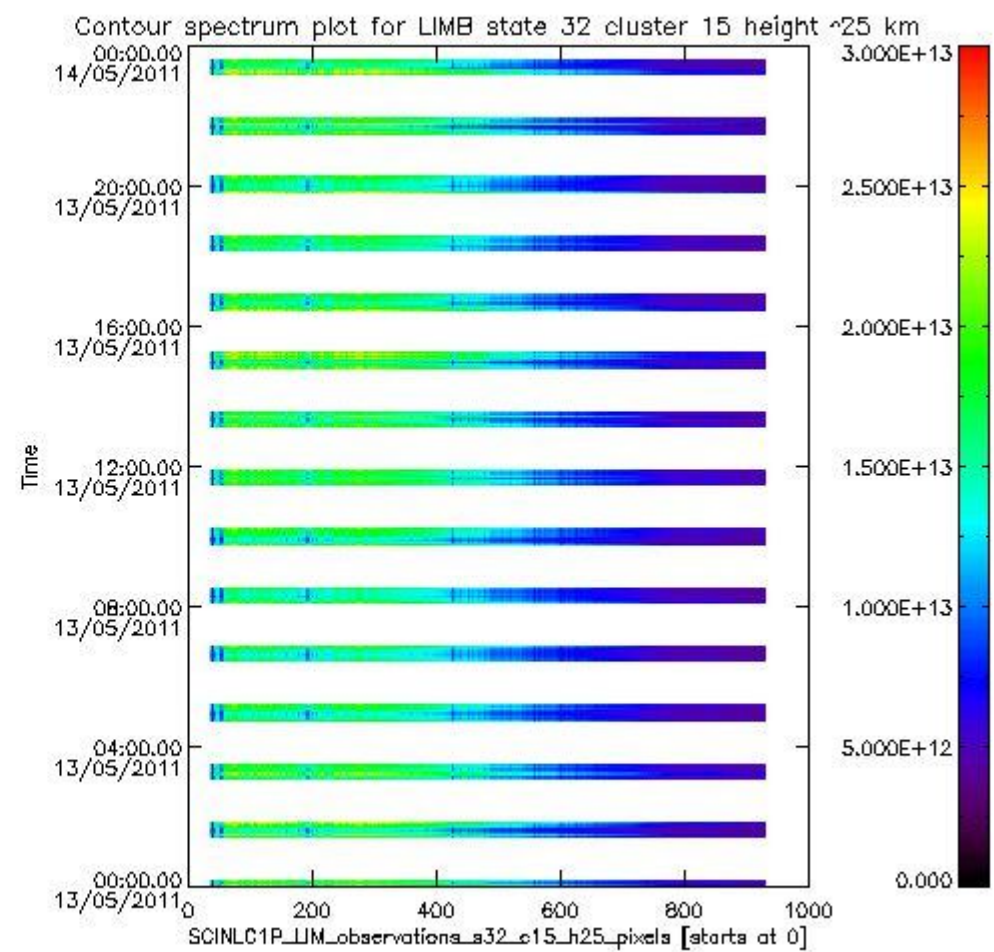
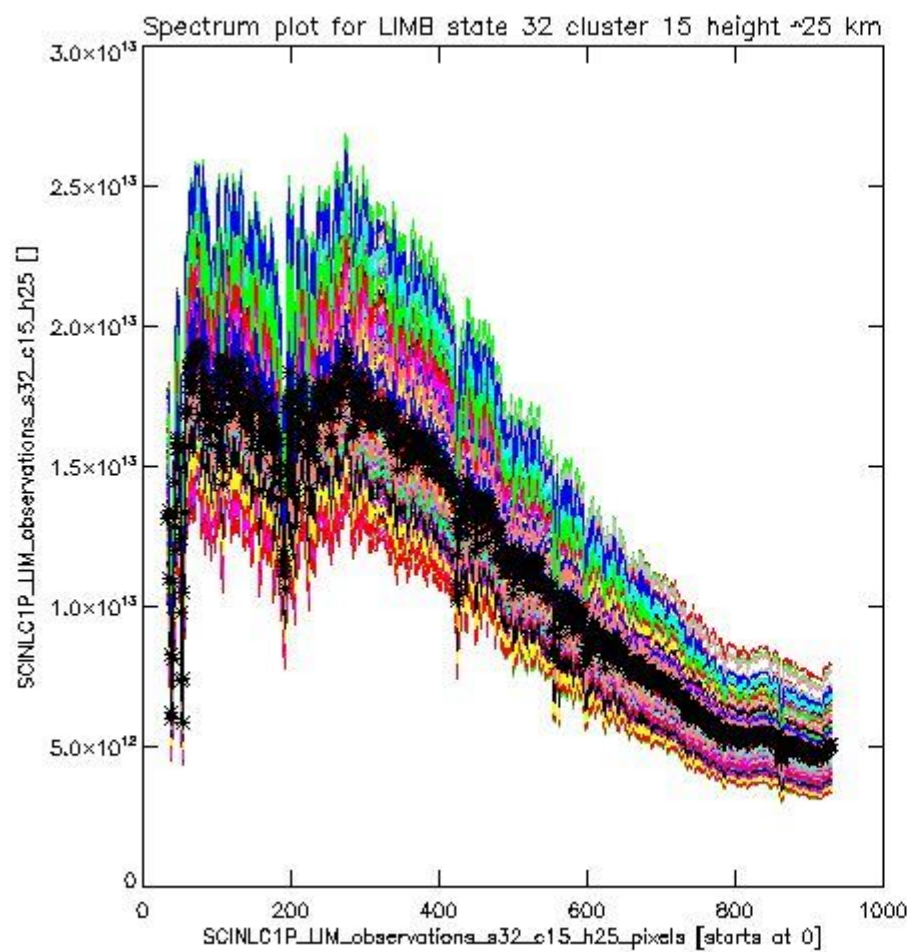
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_16.PNG



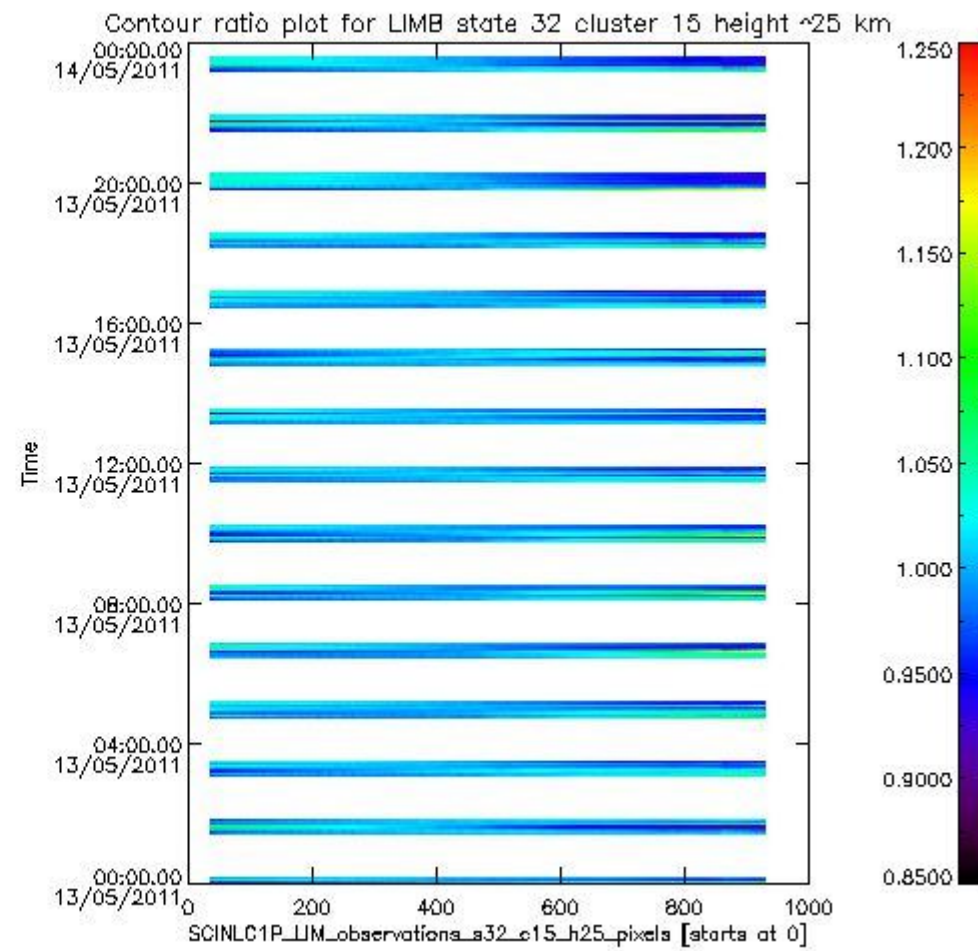
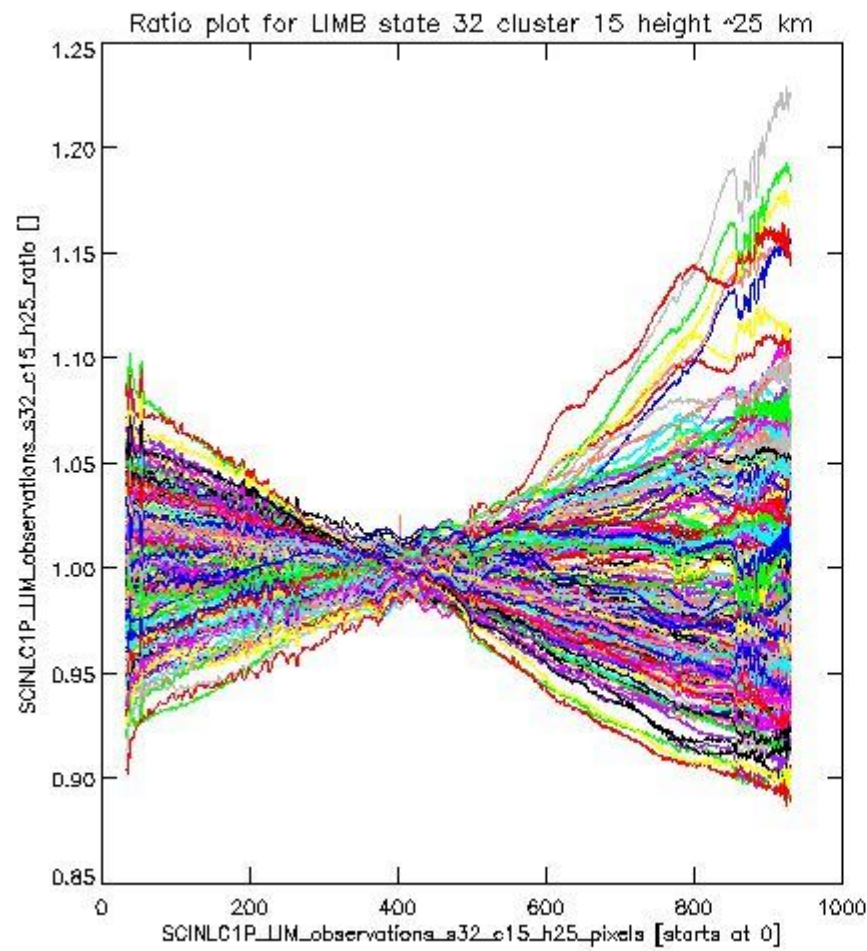
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_17.PNG

**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	13MAY2011 00:00:01.936
Start time of last sample	13MAY2011 23:33:27.787
Reference period start time	13APR2011 00:01:54.877
Reference period stop time	12MAY2011 23:57:59.190
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



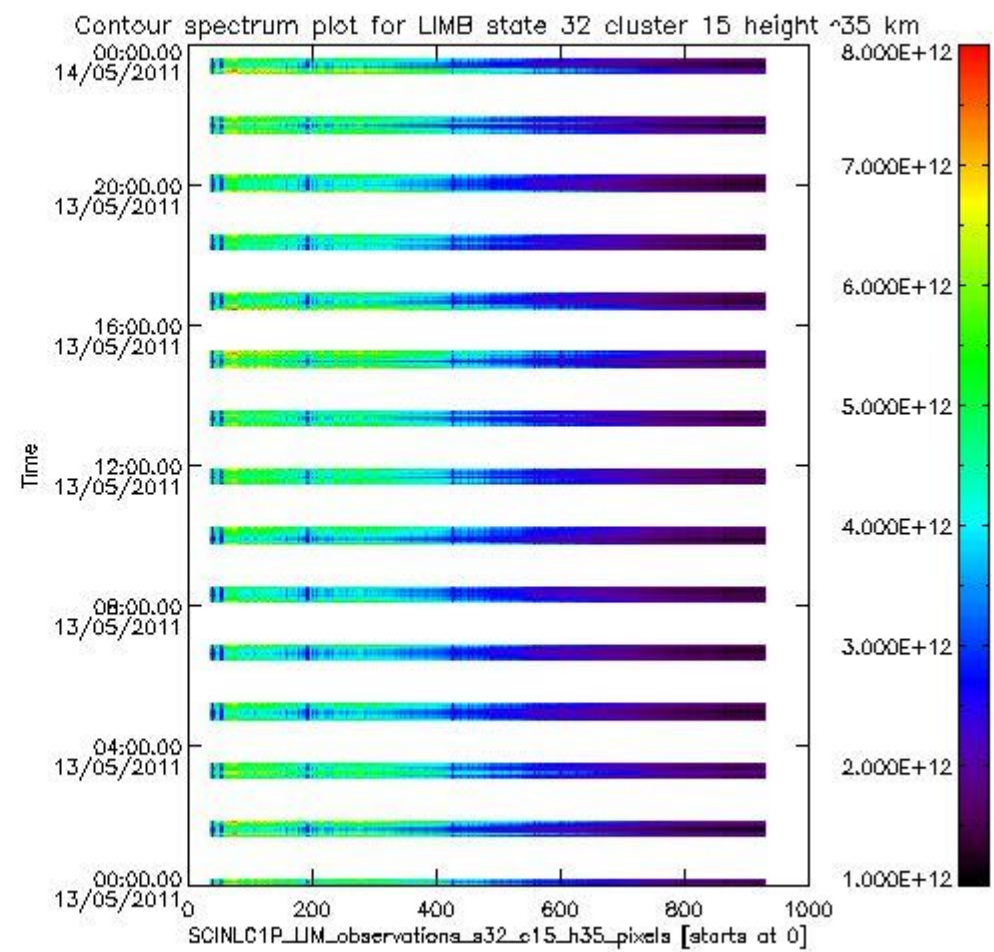
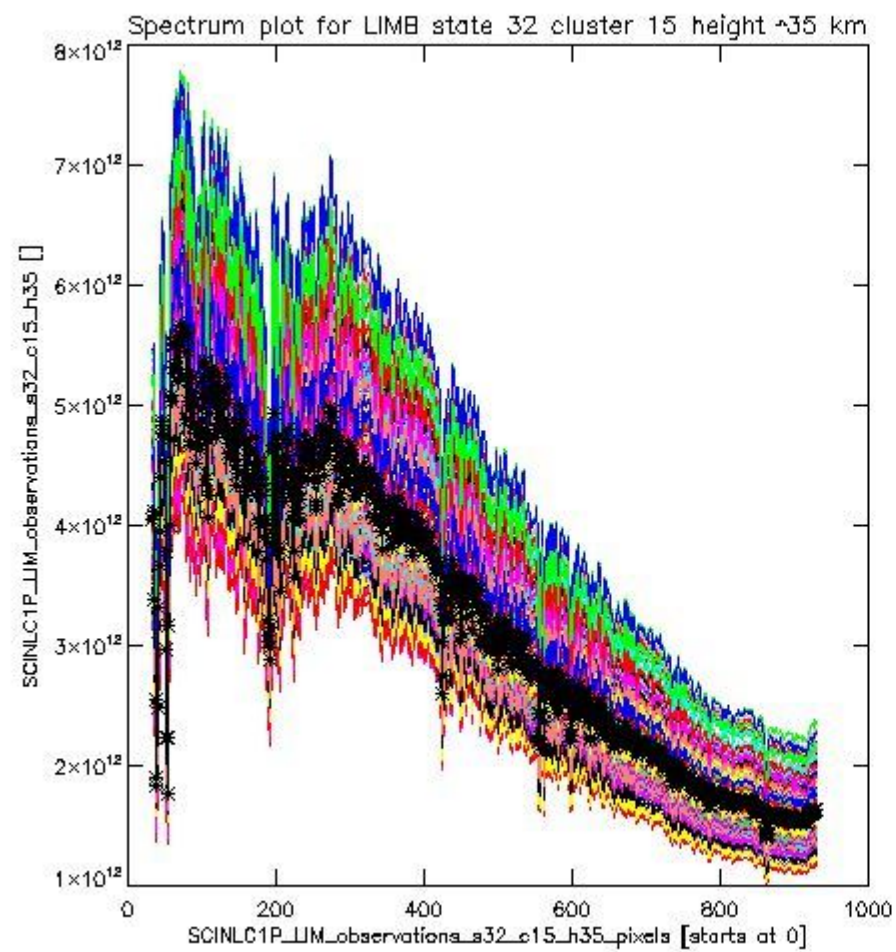


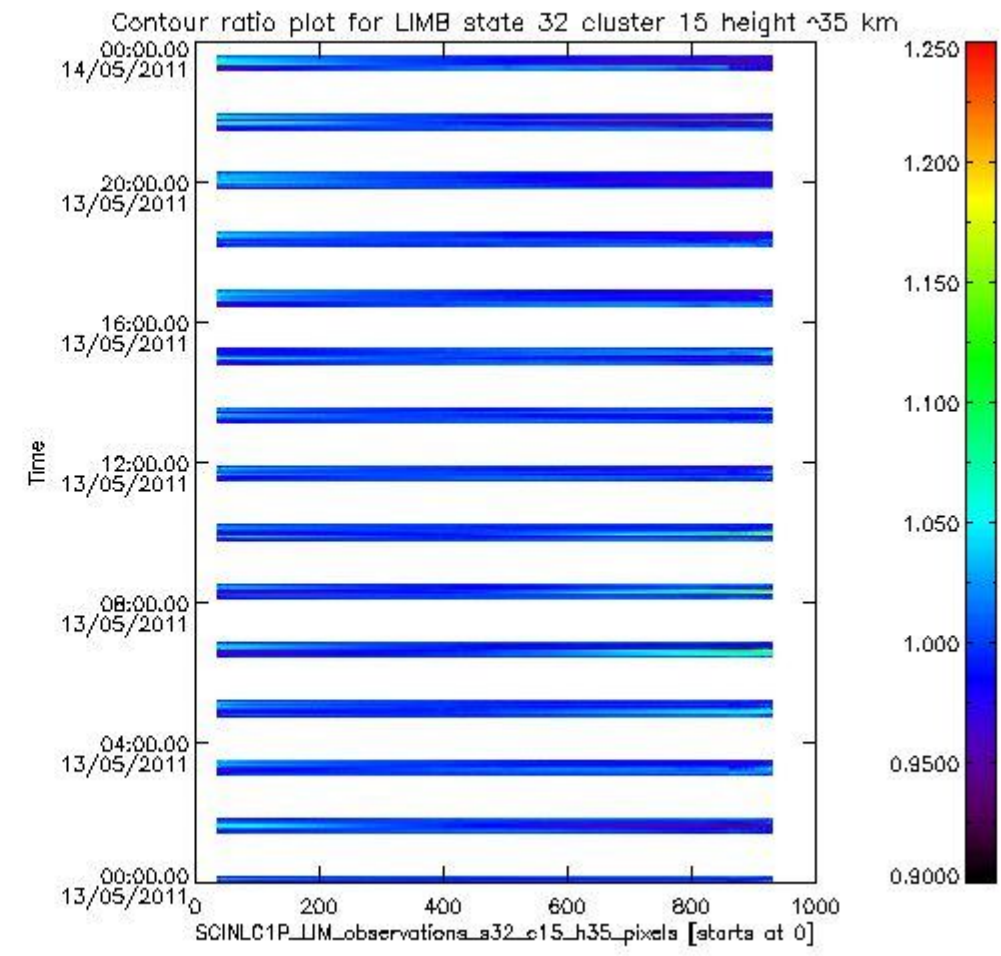
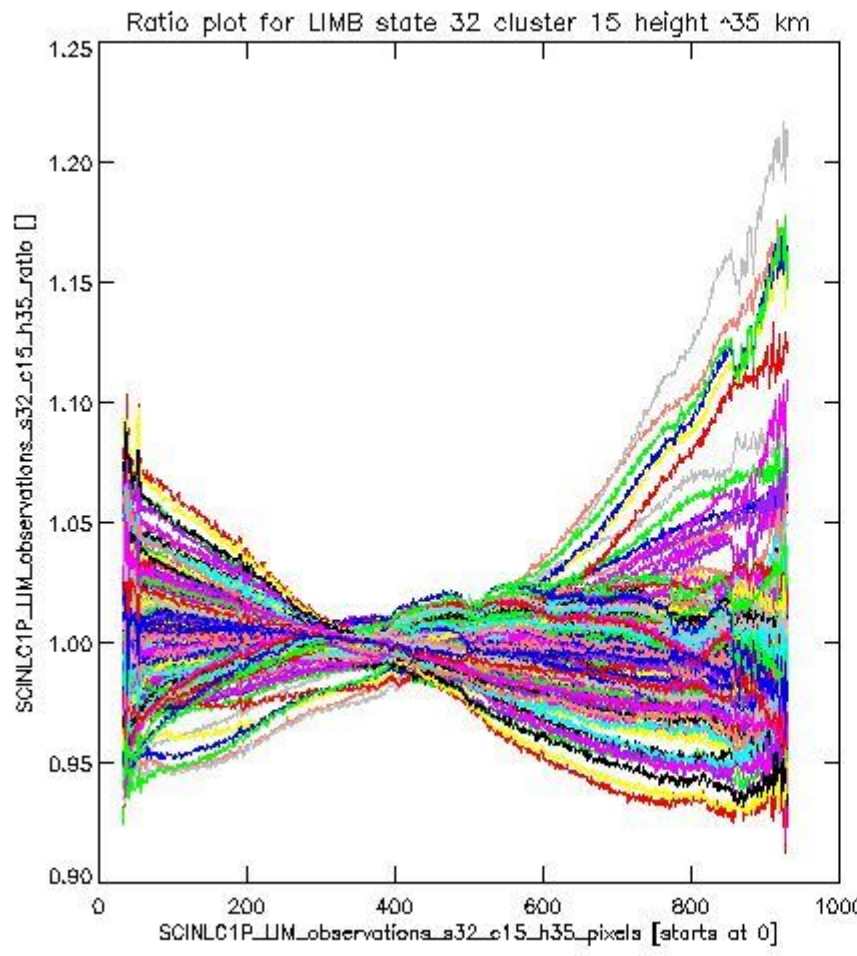


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110513\_19.PNG

**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	13MAY2011 00:00:01.936
Start time of last sample	13MAY2011 23:33:27.787
Reference period start time	13APR2011 00:01:54.877
Reference period stop time	12MAY2011 23:57:59.190
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\_20110513\_21.PNG



