

# 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 11:14:02
Data source version	SCIA/7.04-U
Processing scope for products	04MAY2011 00:00:00 to 05MAY2011 00:00:00
Start time of first product within scope	03MAY2011 23:55:20
Stop time of last product within scope	05MAY2011 00:28:36
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	04MAY2011 00:28:31.567	04MAY2011 23:58:21.527
1	NADIR	07	09	N/A	04MAY2011 00:28:31.567	04MAY2011 23:58:21.527
2	NADIR	07	15	N/A	04MAY2011 00:28:31.567	04MAY2011 23:58:21.527
3	NADIR	07	24	N/A	04MAY2011 00:28:31.567	04MAY2011 23:58:21.527
4	NADIR	07	55	N/A	04MAY2011 00:28:31.567	04MAY2011 23:58:21.527
5	LIMB	32	09	~19 km	04MAY2011 00:13:18.188	04MAY2011 00:41:56.575
6	LIMB	32	09	~22 km	04MAY2011 00:13:18.188	04MAY2011 00:41:56.575
7	LIMB	32	09	~25 km	04MAY2011 00:13:18.188	04MAY2011 00:41:56.575
8	LIMB	32	15	~22 km	04MAY2011 00:13:18.188	04MAY2011 00:41:56.575
9	LIMB	32	15	~25 km	04MAY2011 00:13:18.188	04MAY2011 00:41:56.575
10	LIMB	32	15	~35 km	04MAY2011 00:13:18.188	04MAY2011 00:41:56.575

#### 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_1CUDPA20110503_234857_000060083102_00117_47976_1088.N1</a>	03MAY2011 23:55:20	04MAY2011 01:05:49	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110504_012909_000060113102_00118_47977_1093.N1</a>	04MAY2011 01:45:13	04MAY2011 02:45:25	0	34	0	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110504_030924_000060083102_00119_47978_1095.N1</a>	04MAY2011 03:24:30	04MAY2011 04:25:51	0	35	0	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110504_044937_000060113102_00120_47979_1097.N1</a>	04MAY2011 05:05:40	04MAY2011 06:05:53	0	34	0	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110504_081004_000060113102_00122_47981_1100.N1</a>	04MAY2011 08:26:08	04MAY2011 09:26:20	0	34	0	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110504_095019_000060083102_00123_47982_1099.N1</a>	04MAY2011 10:05:25	04MAY2011 11:06:46	0	35	0	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110504_131046_000060083102_00125_47984_1110.N1	04MAY2011 13:25:52	04MAY2011 14:27:14	0	35	0	0	0	1	0	0
7	SCI_NLC_1CUDPA20110504_181126_000010603102_00128_47987_1111.N1	04MAY2011 18:23:16	04MAY2011 18:28:45	0	1	0	0	1	1	0	0
8	SCI_NLC_1CUDPA20110504_200410_000052583102_00129_47988_1107.N1	04MAY2011 20:06:58	04MAY2011 21:08:19	0	35	0	0	0	2	0	0
9	SCI_NLC_1CUDPA20110504_213153_000060113102_00130_47989_1108.N1	04MAY2011 21:47:57	04MAY2011 22:48:09	0	34	0	0	0	1	0	0
10	SCI_NLC_1CUDPA20110504_231208_000060083102_00131_47990_1109.N1	04MAY2011 23:27:15	05MAY2011 00:28:36	0	35	0	0	0	1	0	0

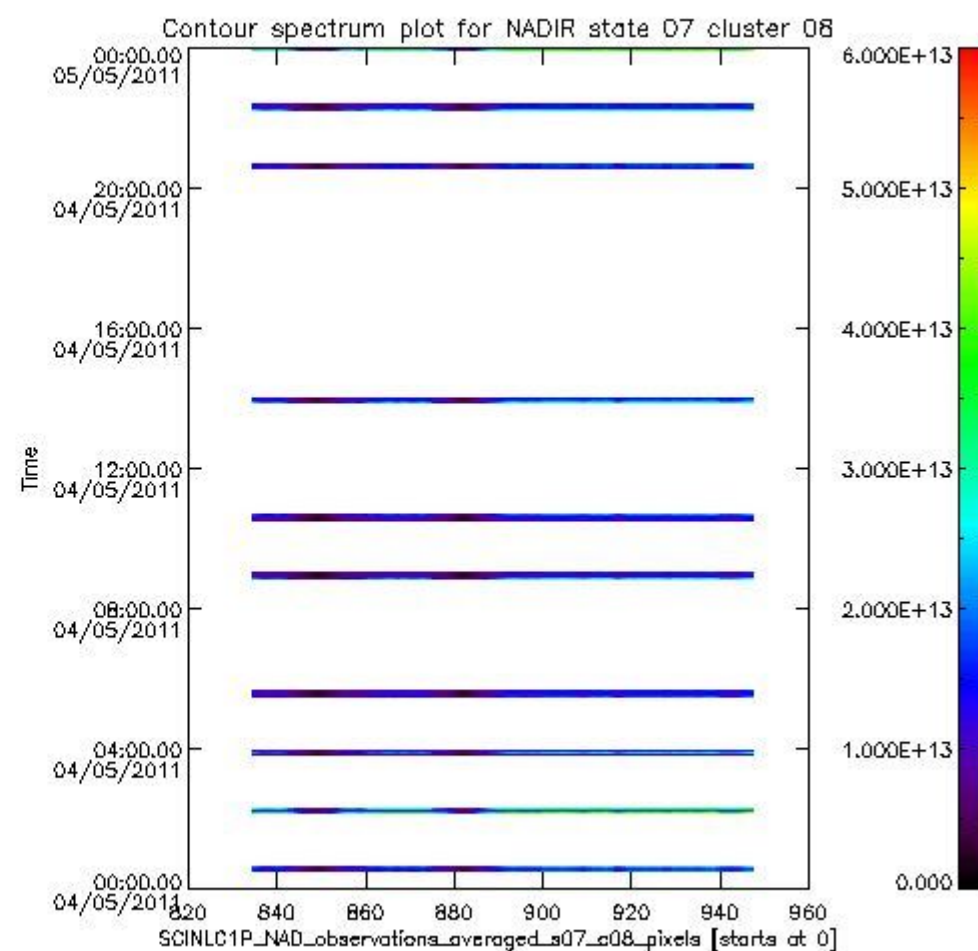
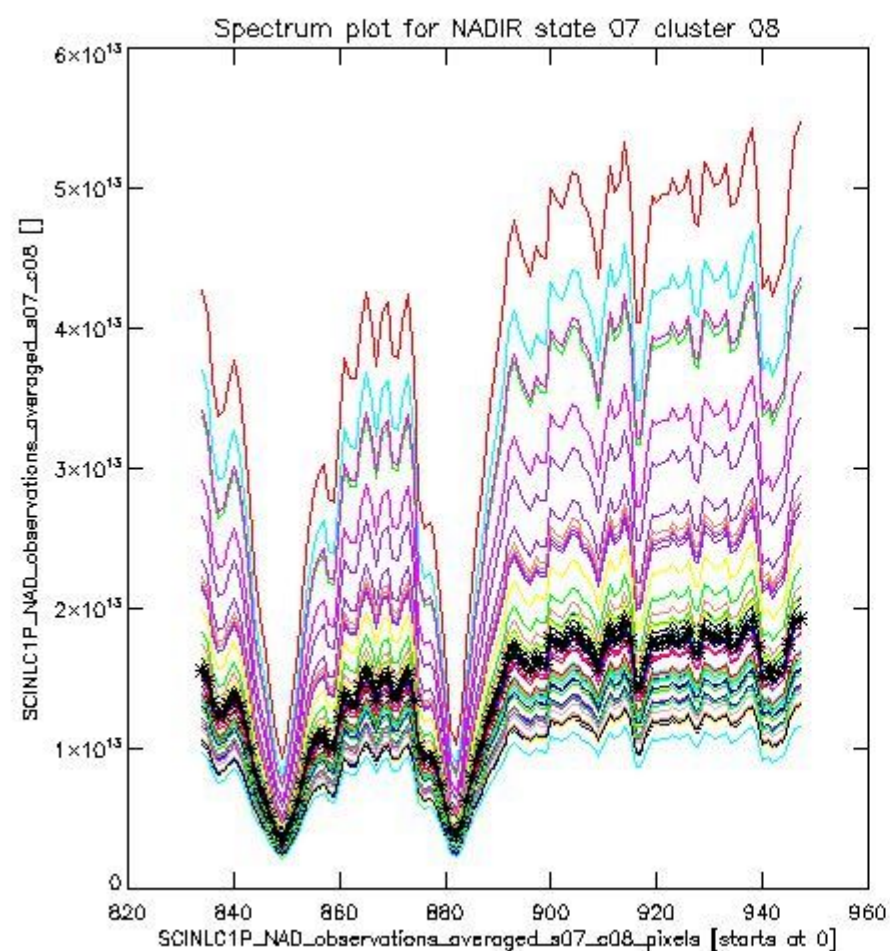
## 1.2 Source packet monitoring

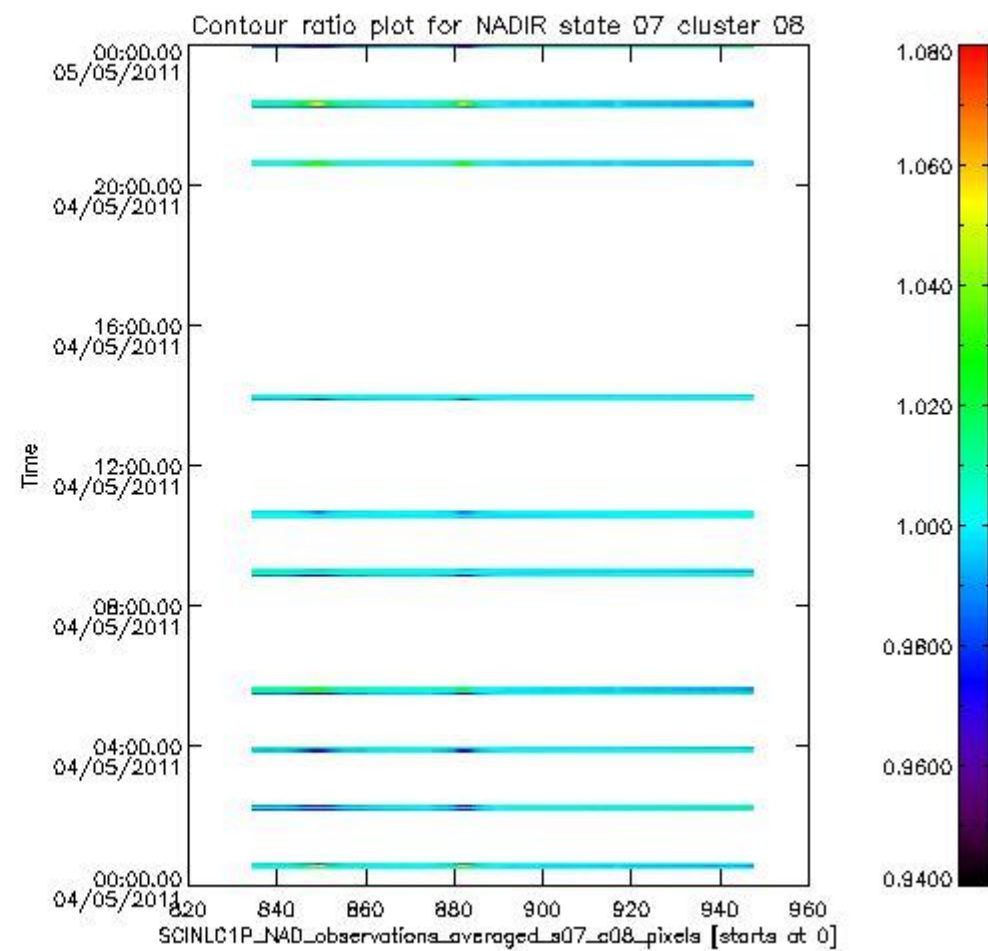
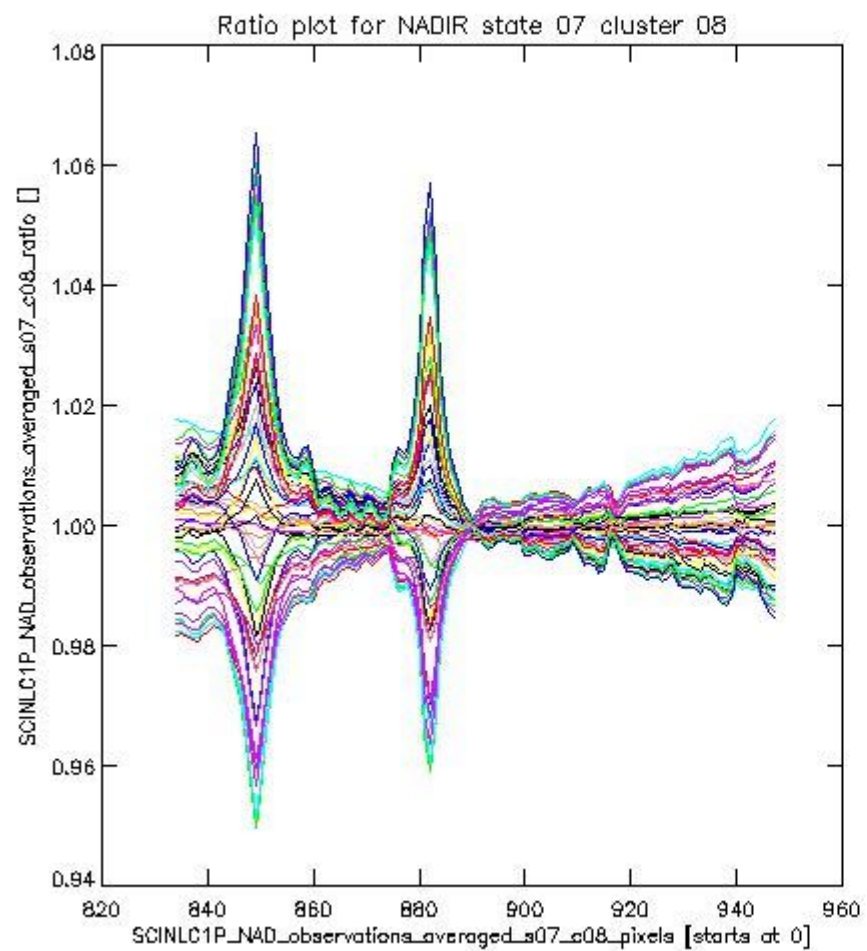
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	04MAY2011 00:28:31.567
Start time of last sample	04MAY2011 23:58:21.527
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	02MAY2011 23:34:11.821
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



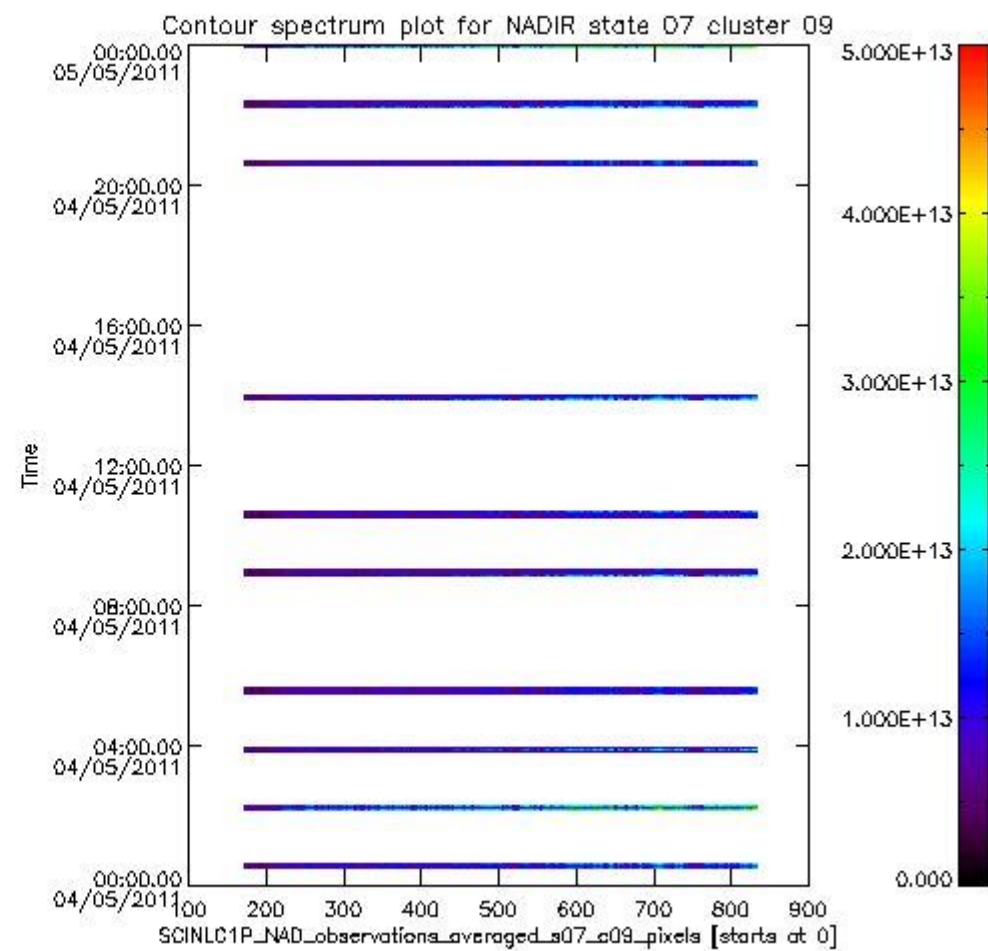
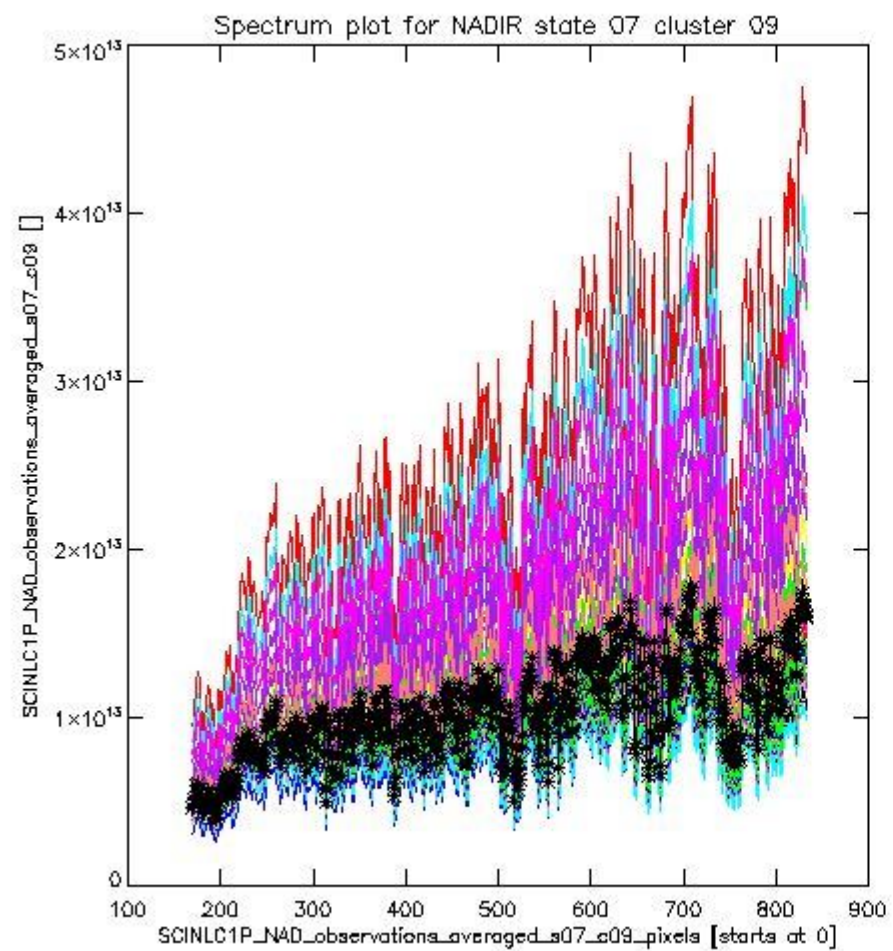


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_1.PNG

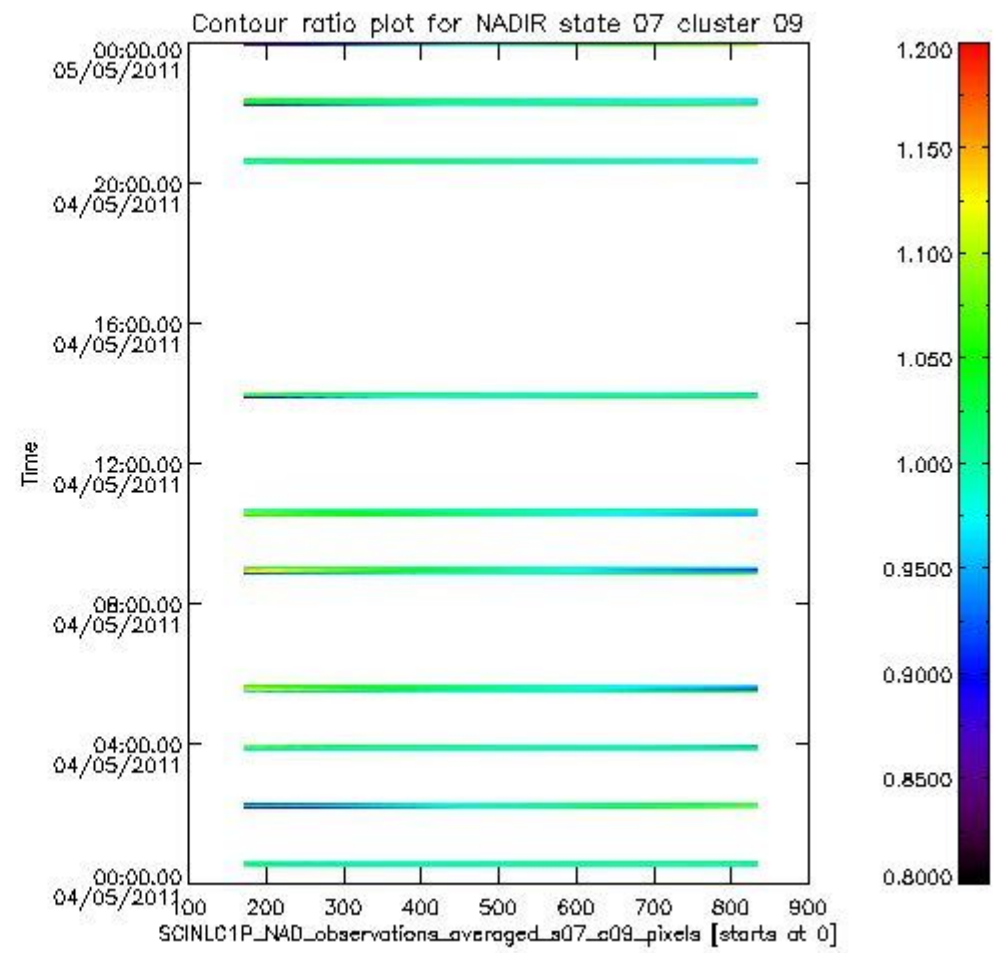
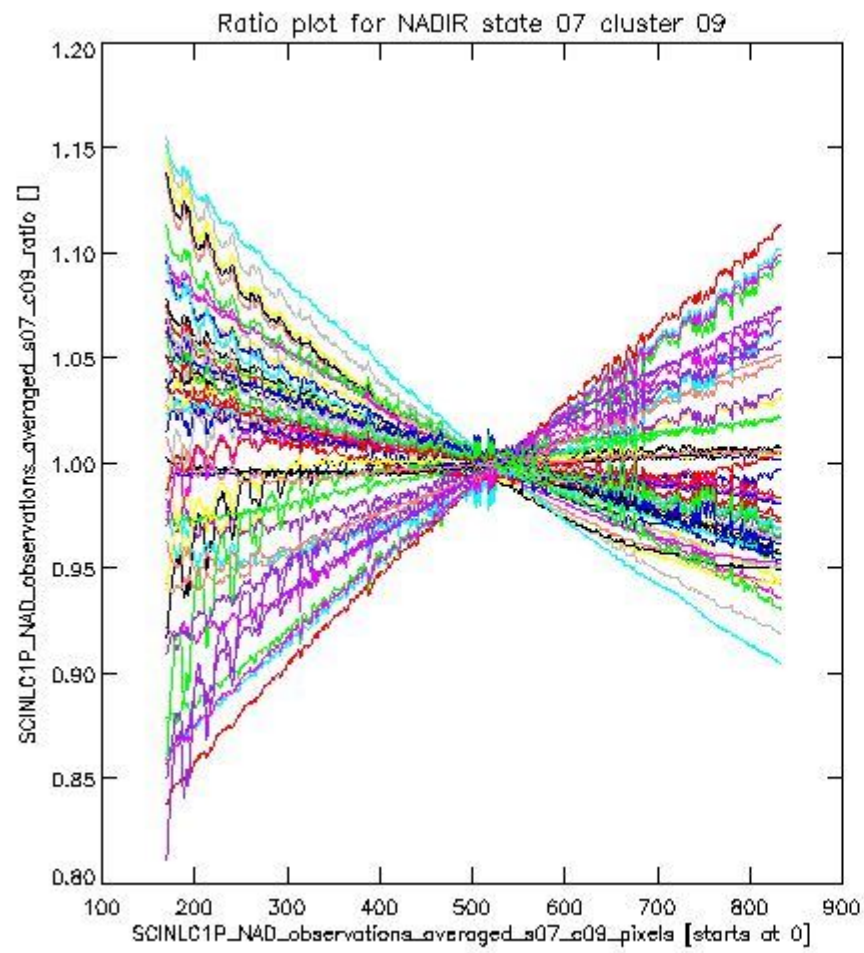
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	04MAY2011 00:28:31.567
Start time of last sample	04MAY2011 23:58:21.527
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	02MAY2011 23:34:11.821
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





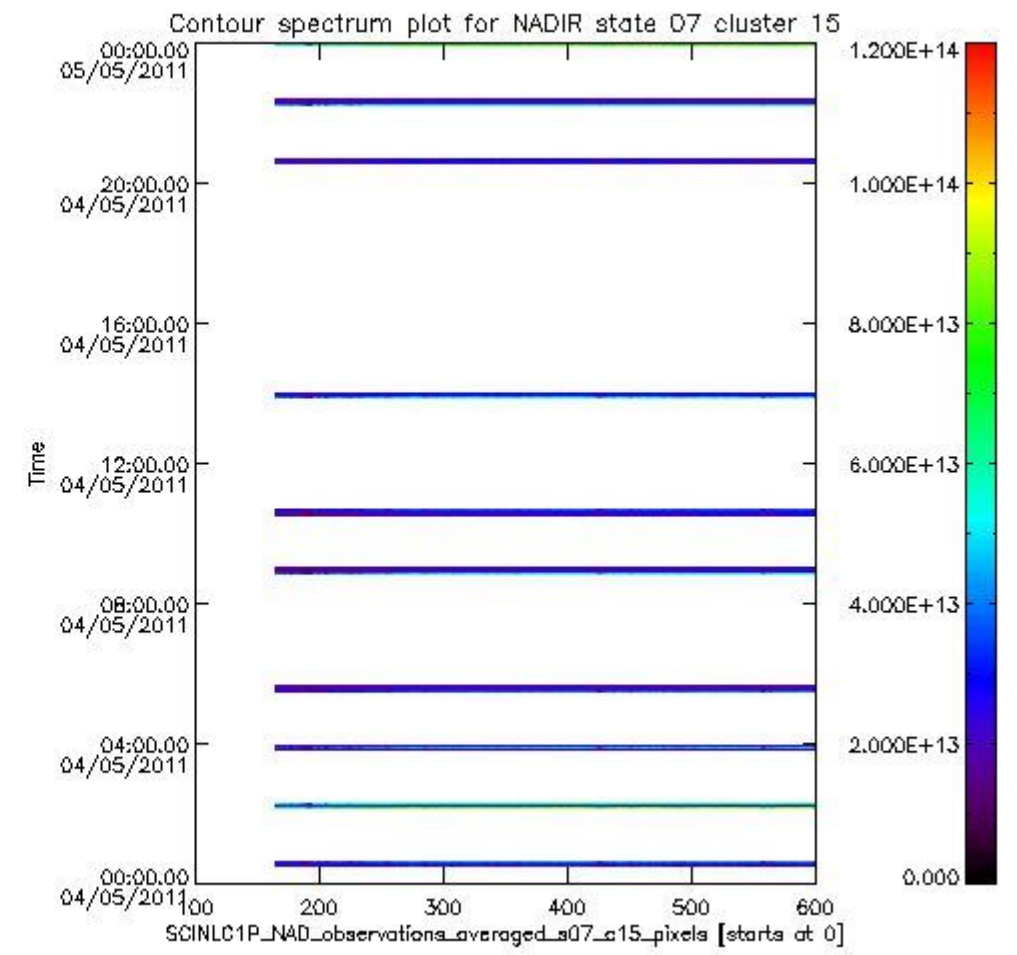
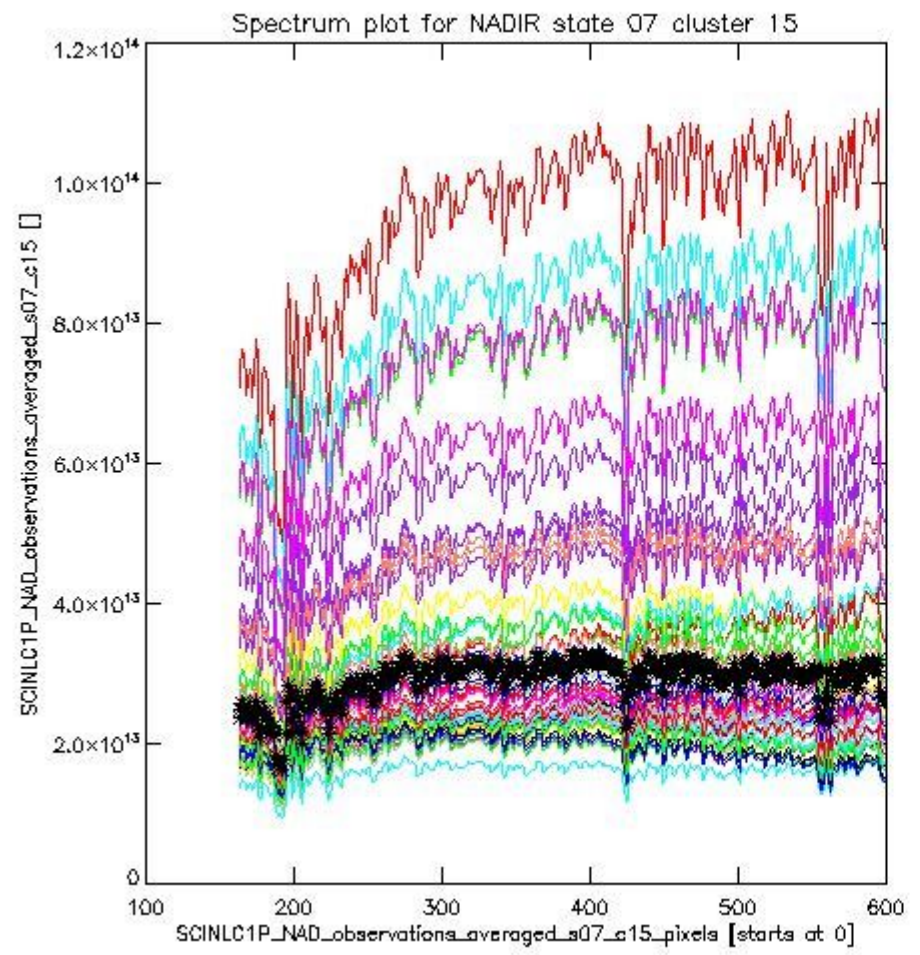
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_3.PNG

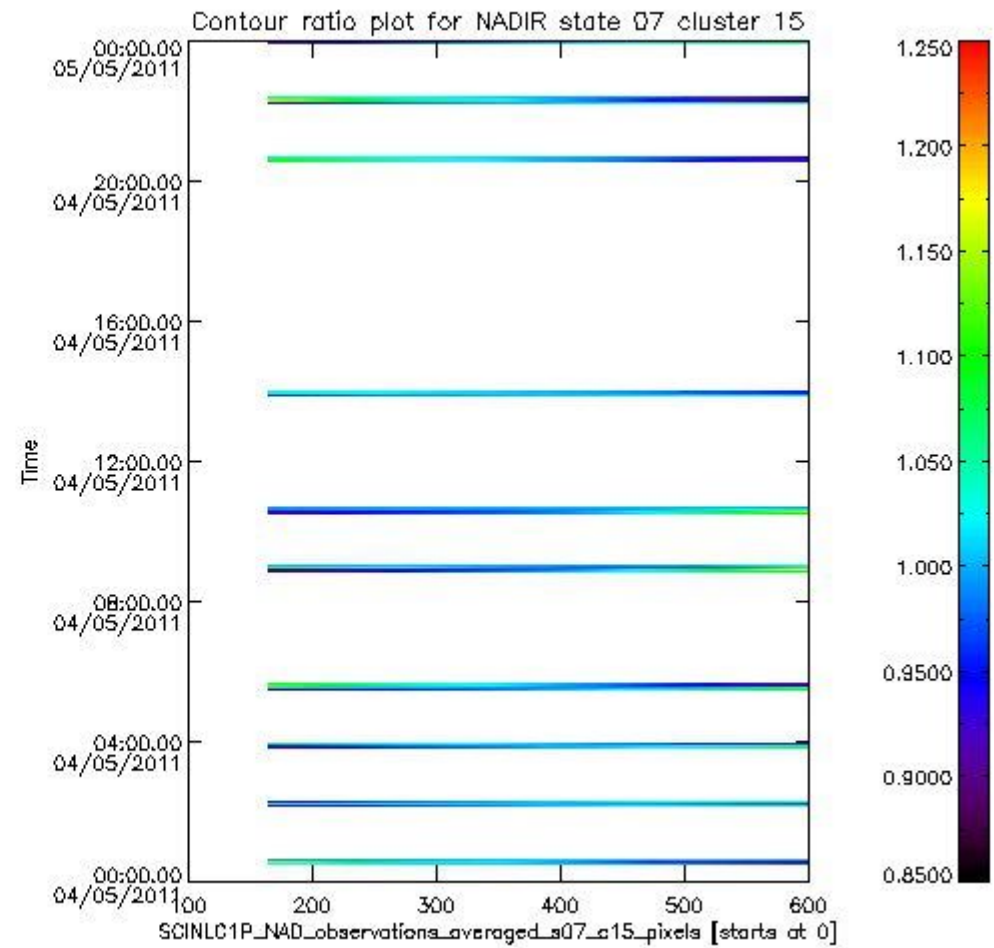
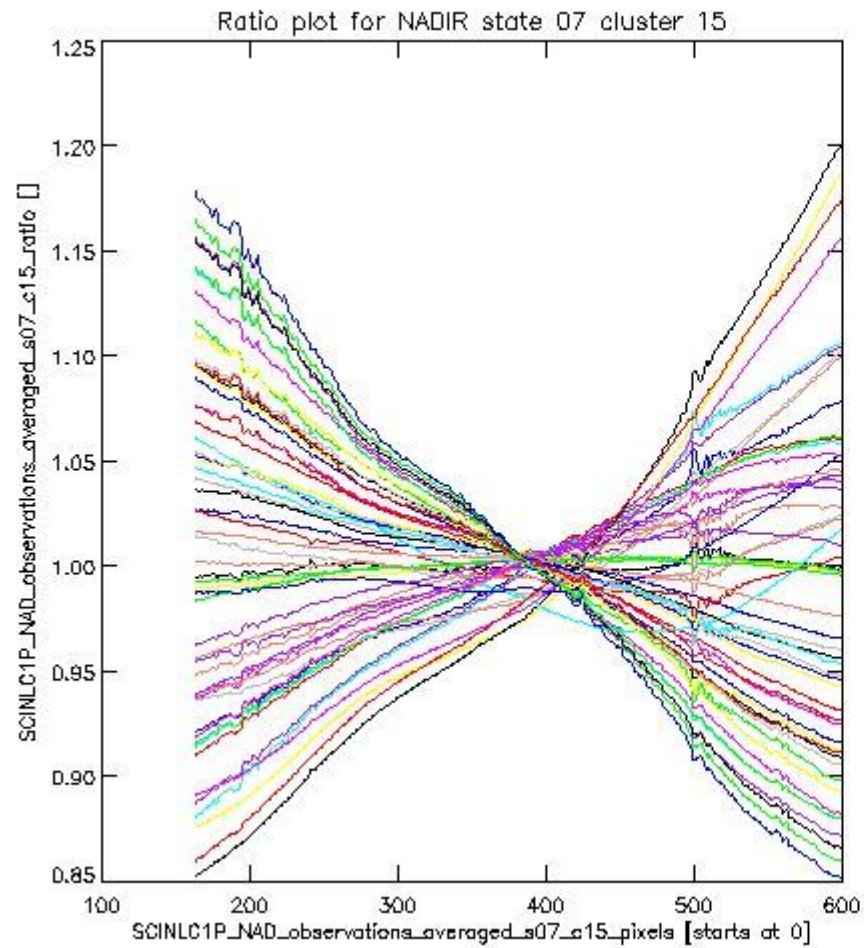
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	04MAY2011 00:28:31.567
Start time of last sample	04MAY2011 23:58:21.527
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	02MAY2011 23:34:11.821
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\_20110504\_4.PNG

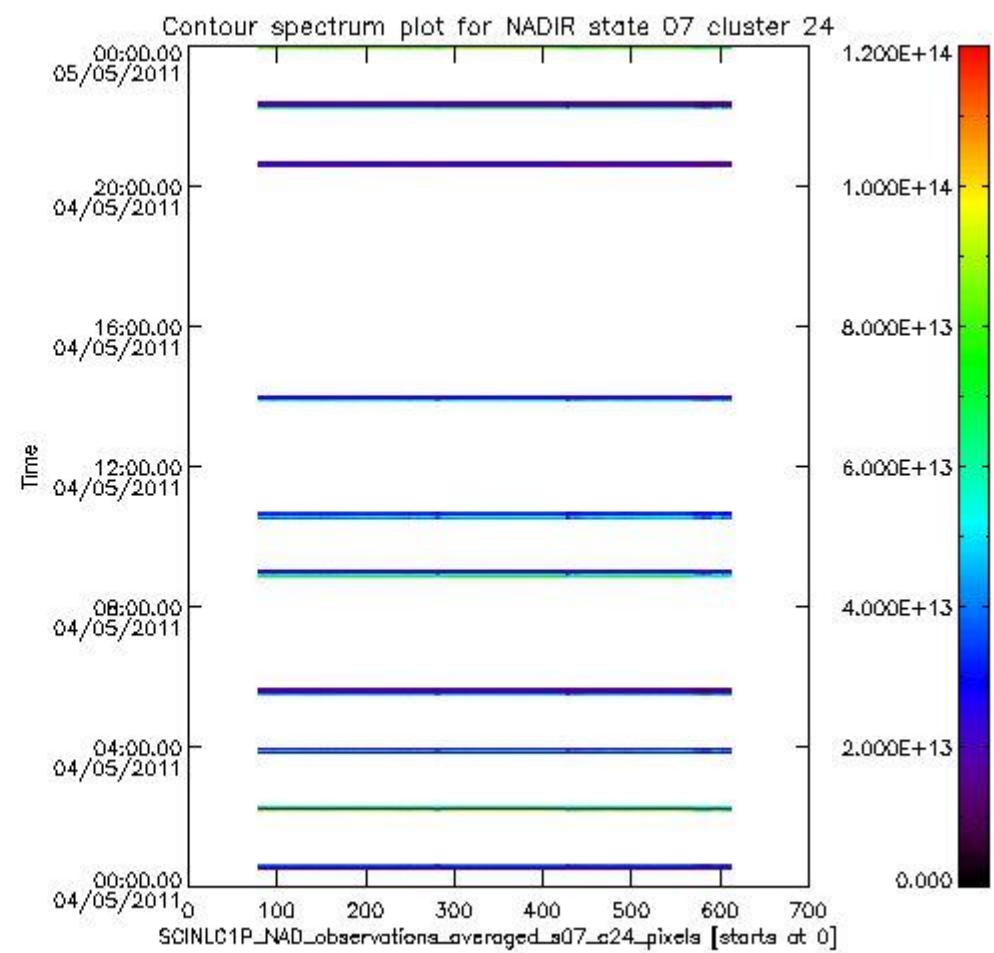
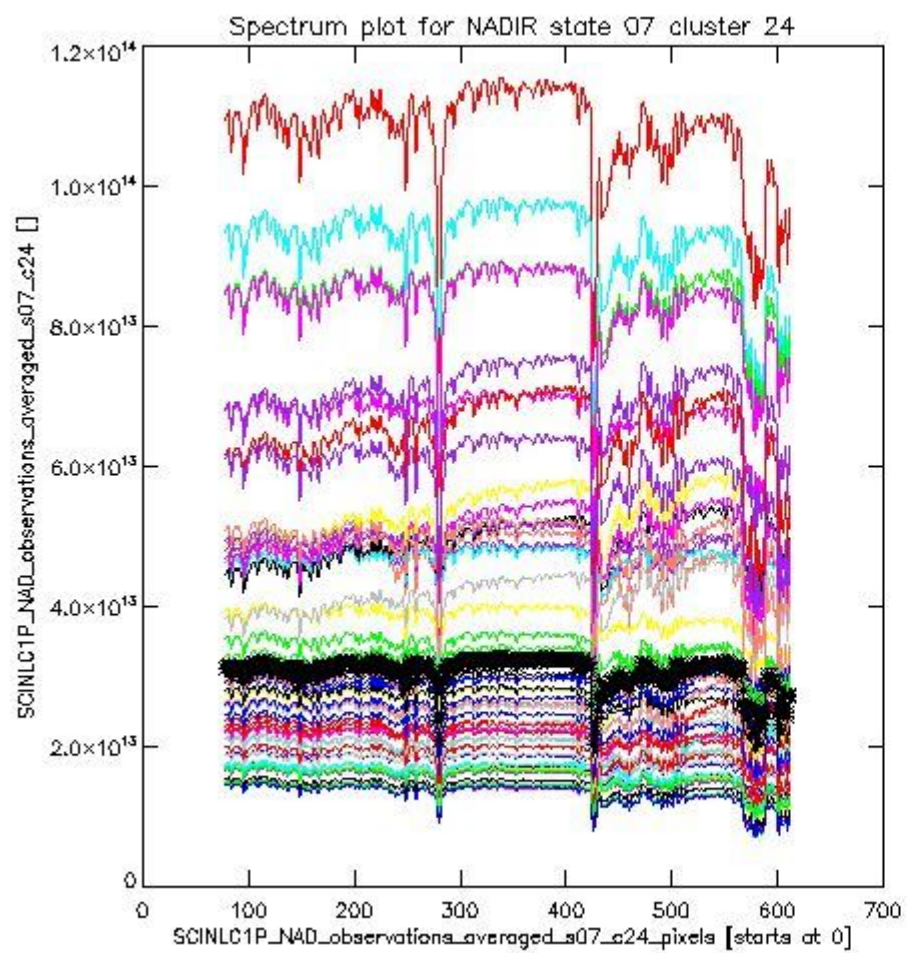




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_5.PNG

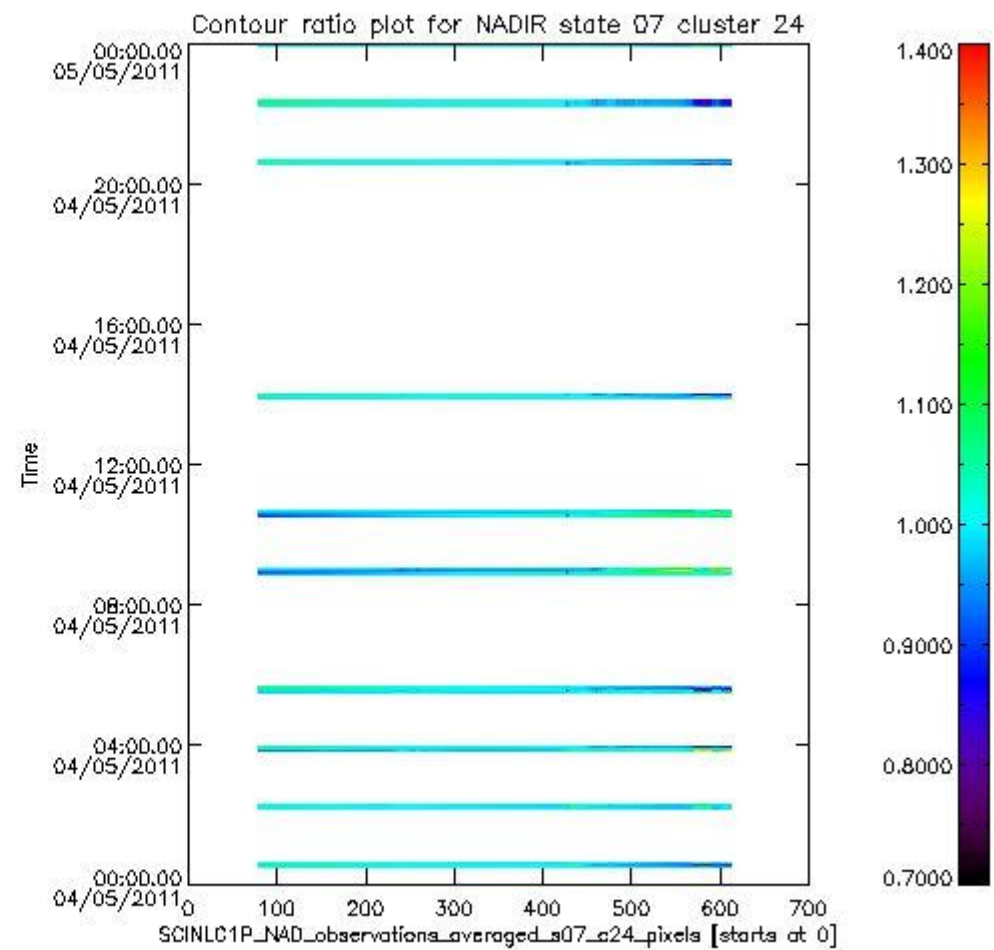
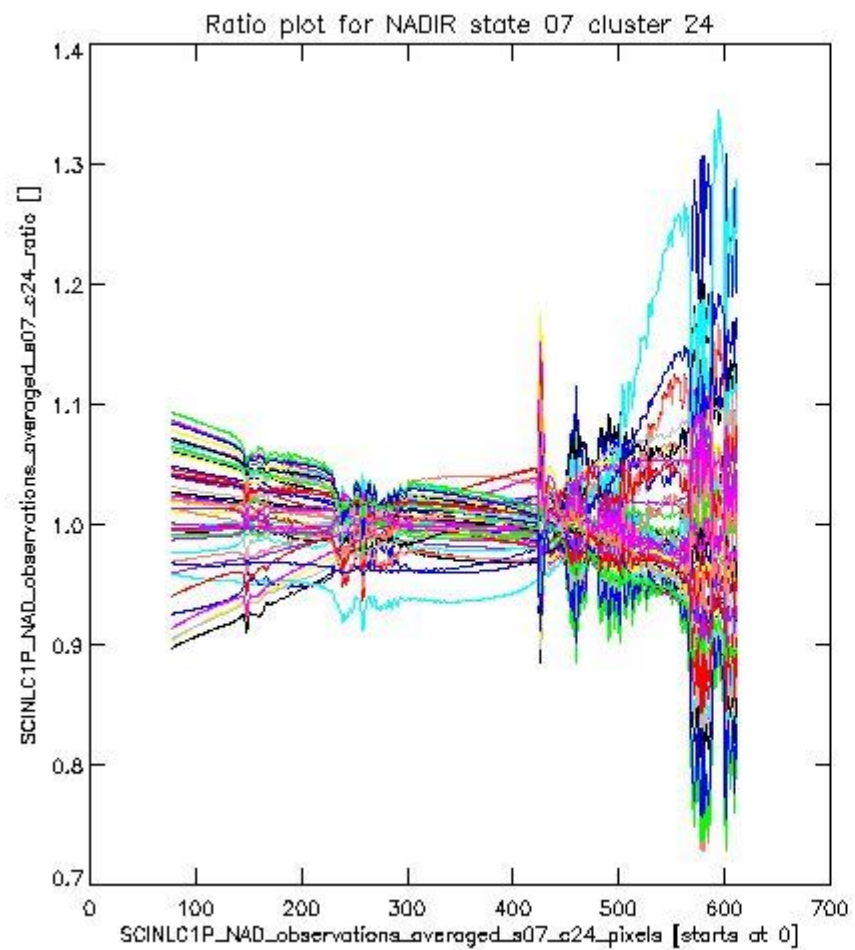
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	04MAY2011 00:28:31.567
Start time of last sample	04MAY2011 23:58:21.527
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	02MAY2011 23:34:11.821
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\_20110504\_6.PNG

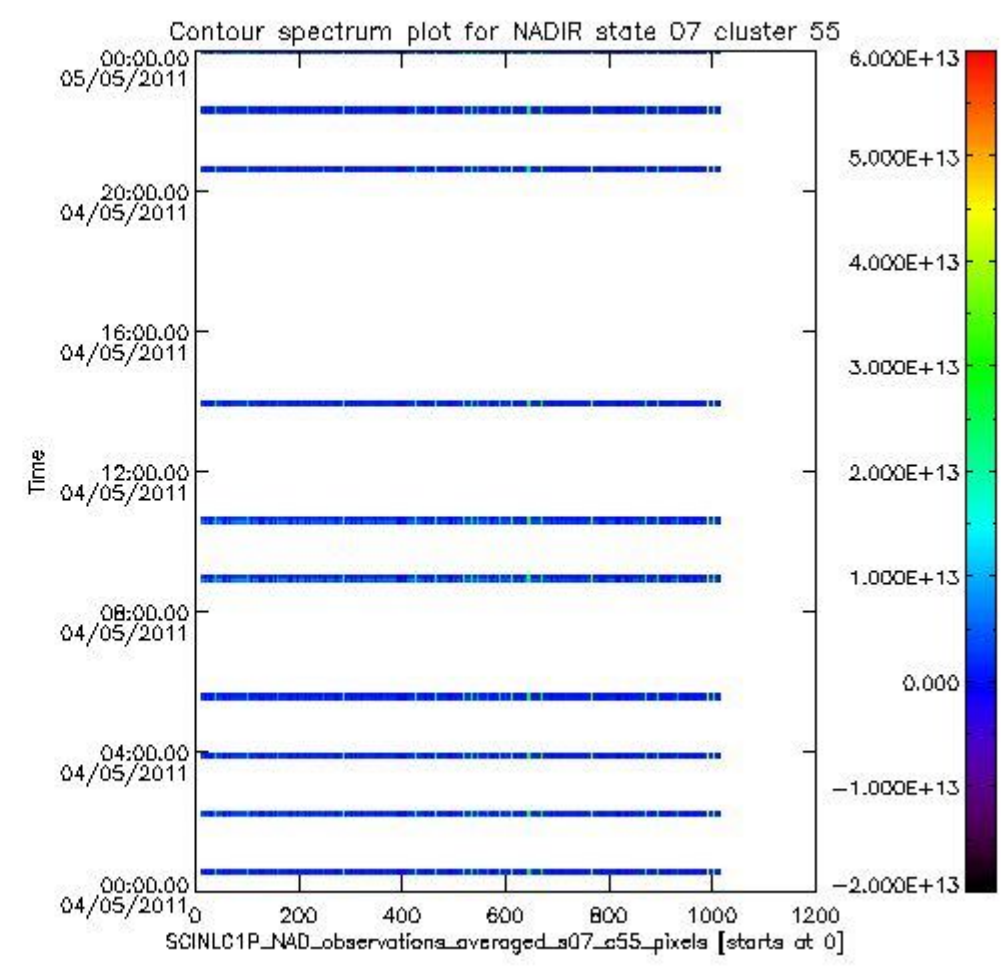
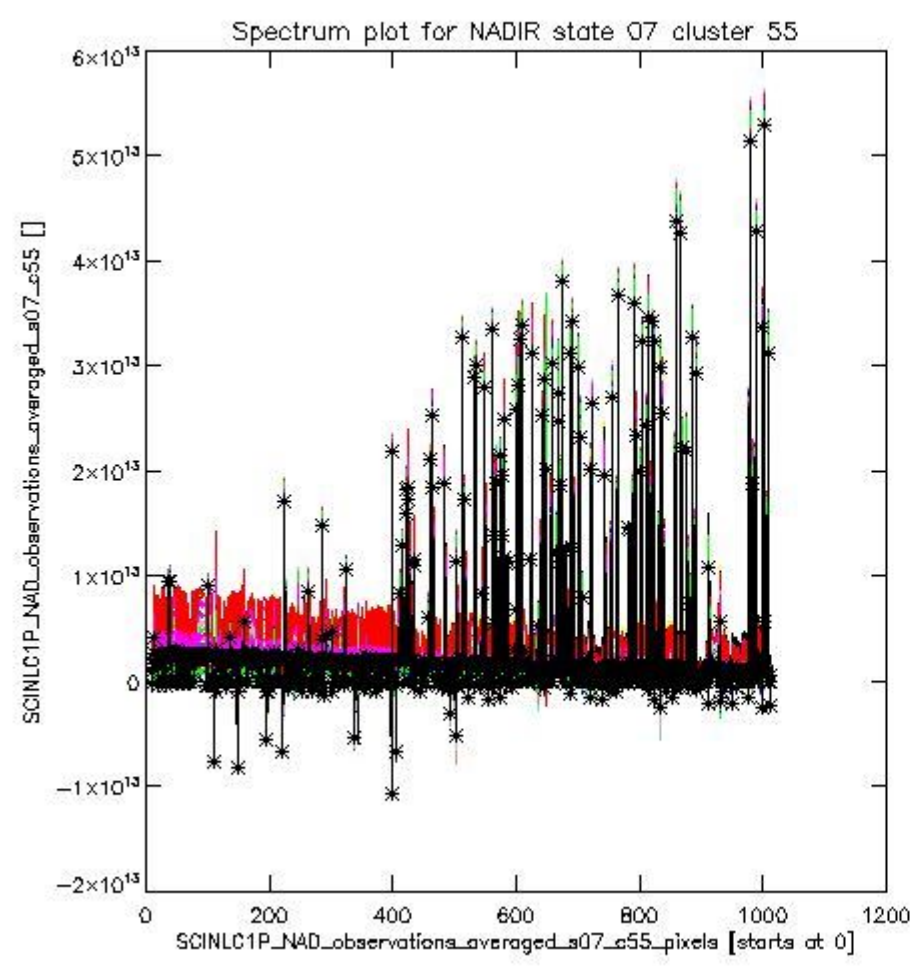




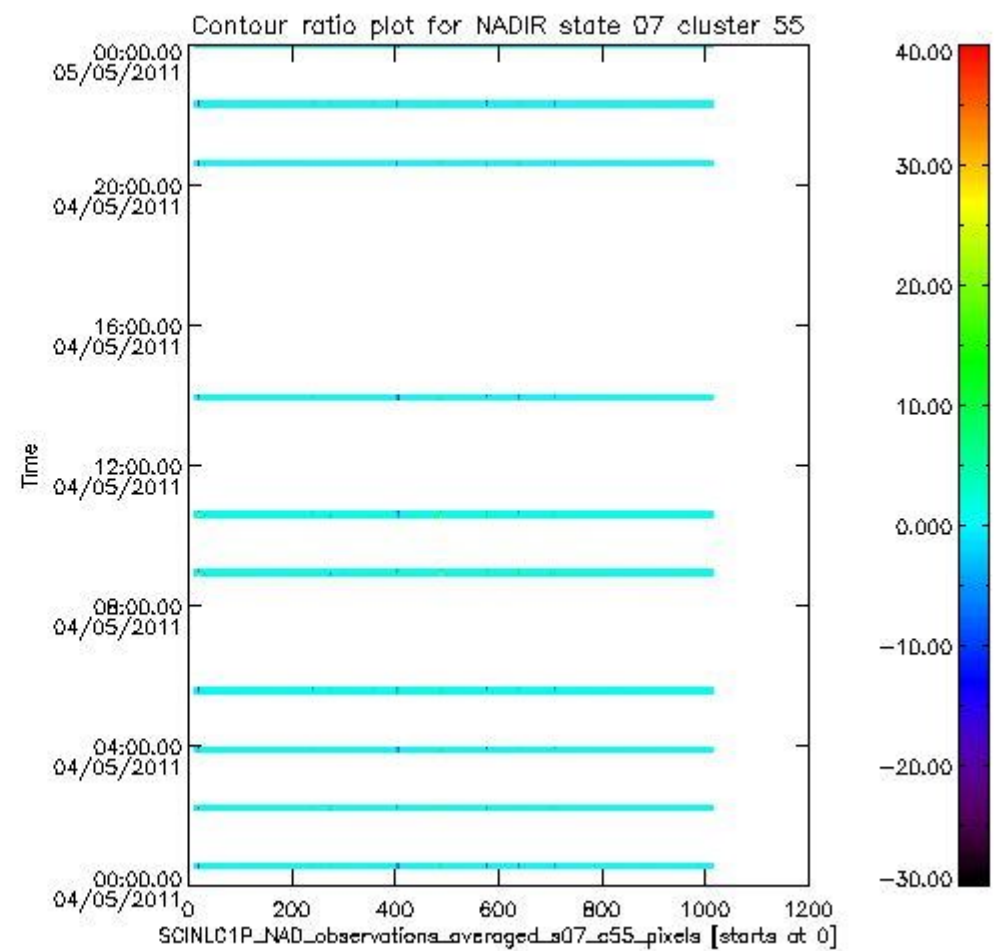
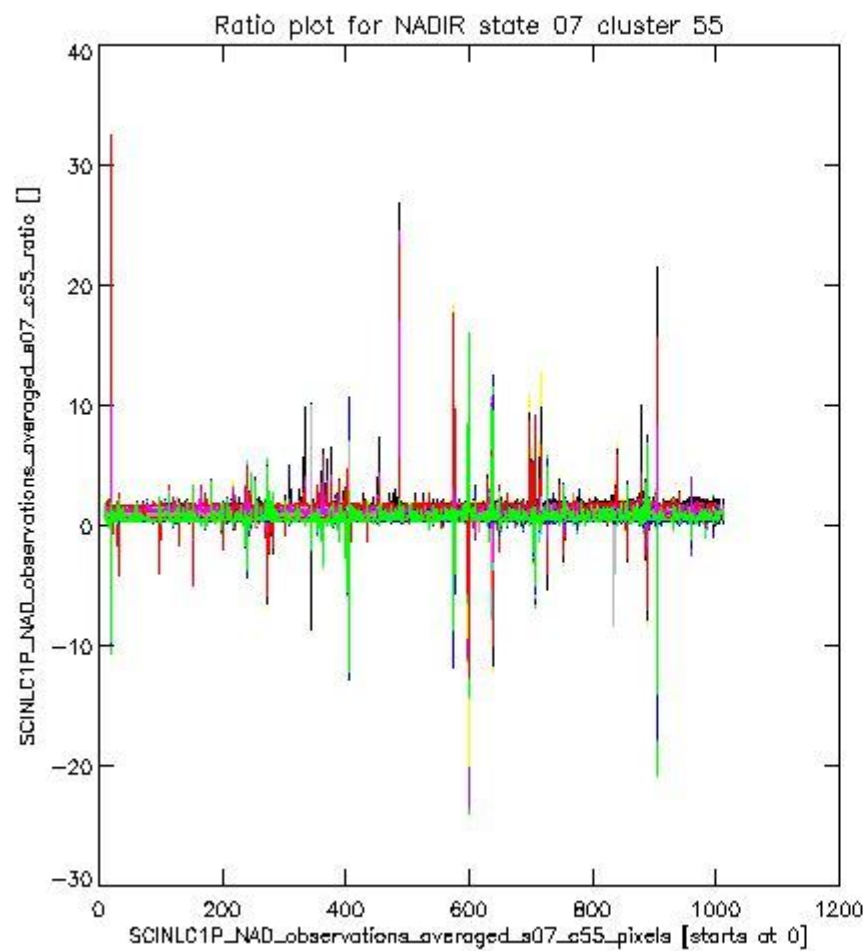
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_7.PNG

**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	04MAY2011 00:28:31.567
Start time of last sample	04MAY2011 23:58:21.527
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	02MAY2011 23:32:09.079
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\_20110504\_8.PNG

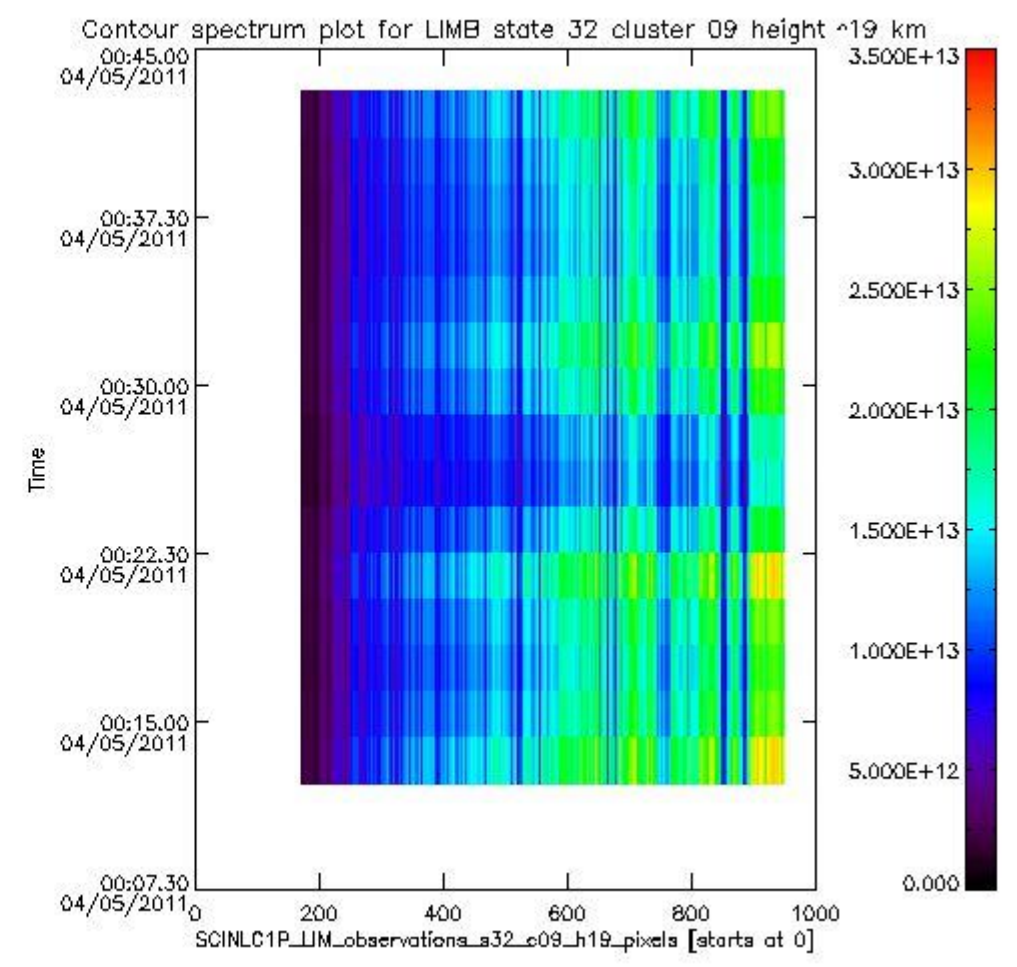
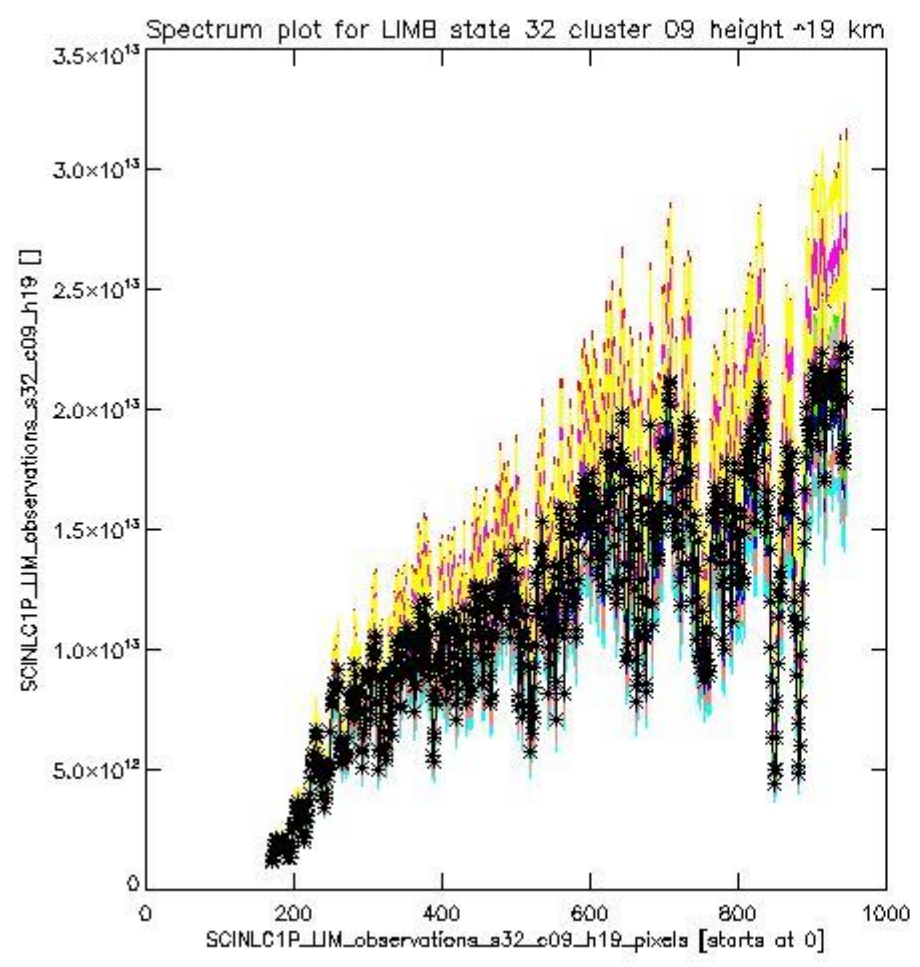


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_9.PNG

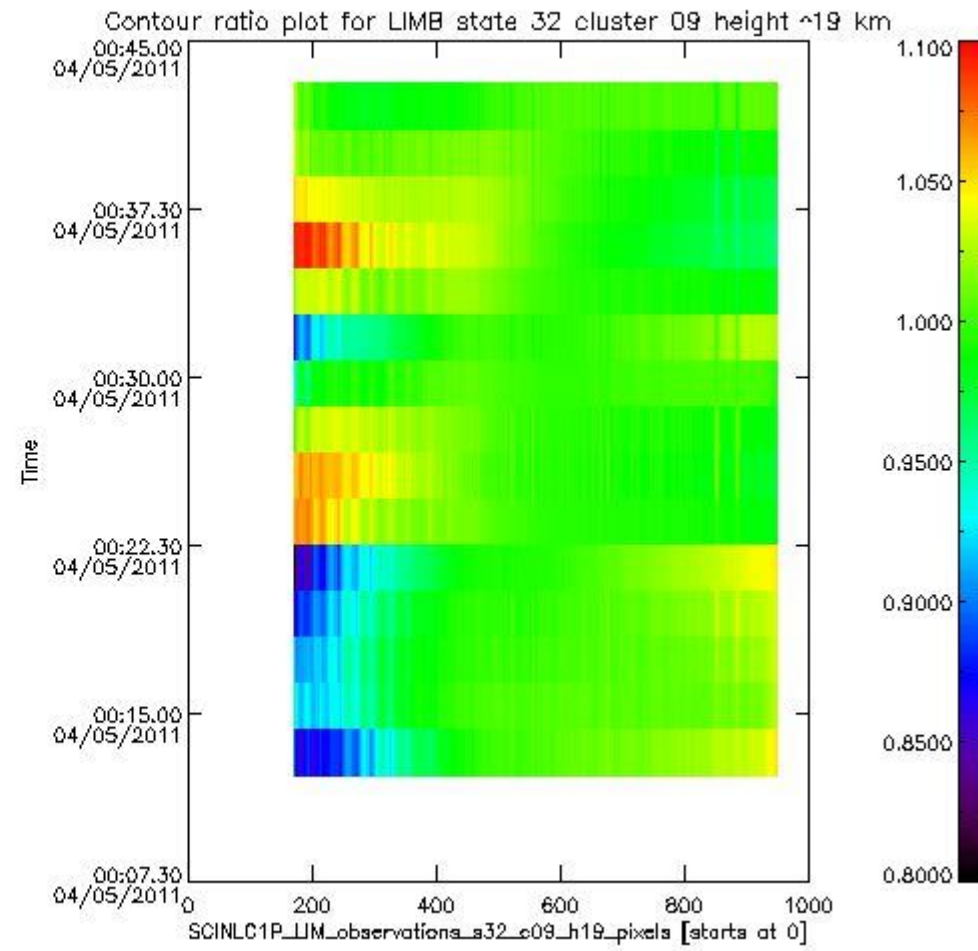
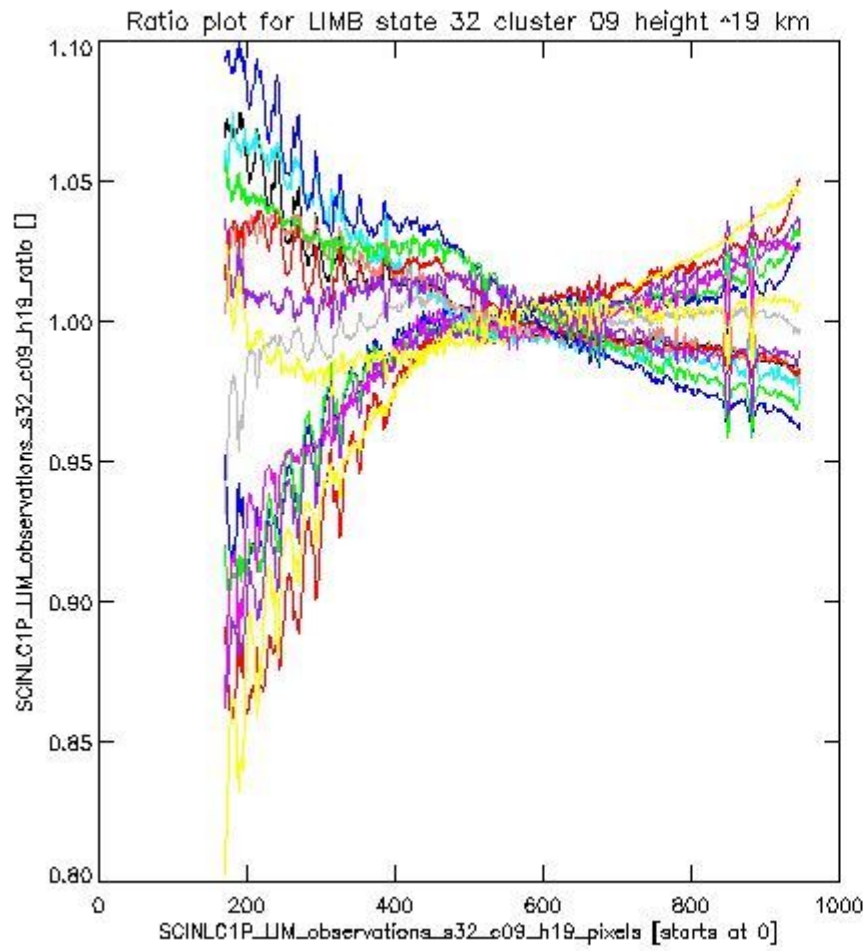
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	04MAY2011 00:13:18.188
Start time of last sample	04MAY2011 00:41:56.575
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	02MAY2011 23:37:23.126
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





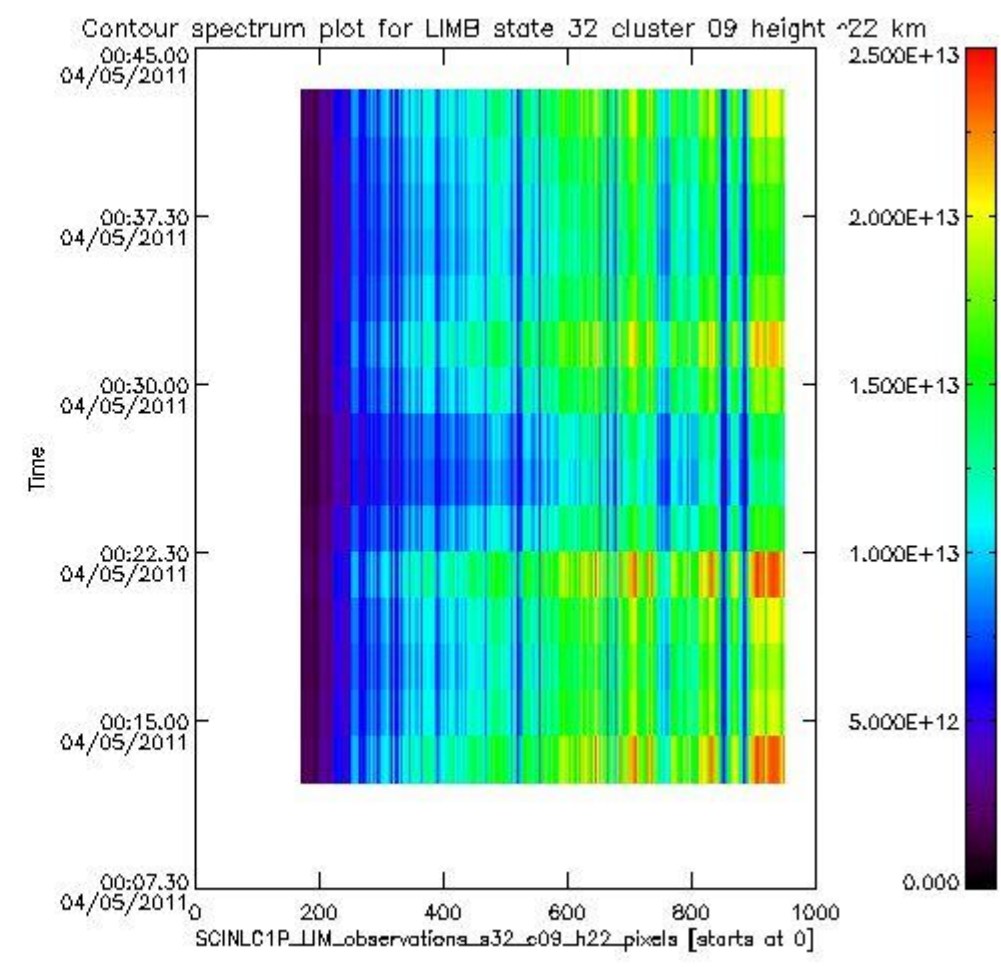
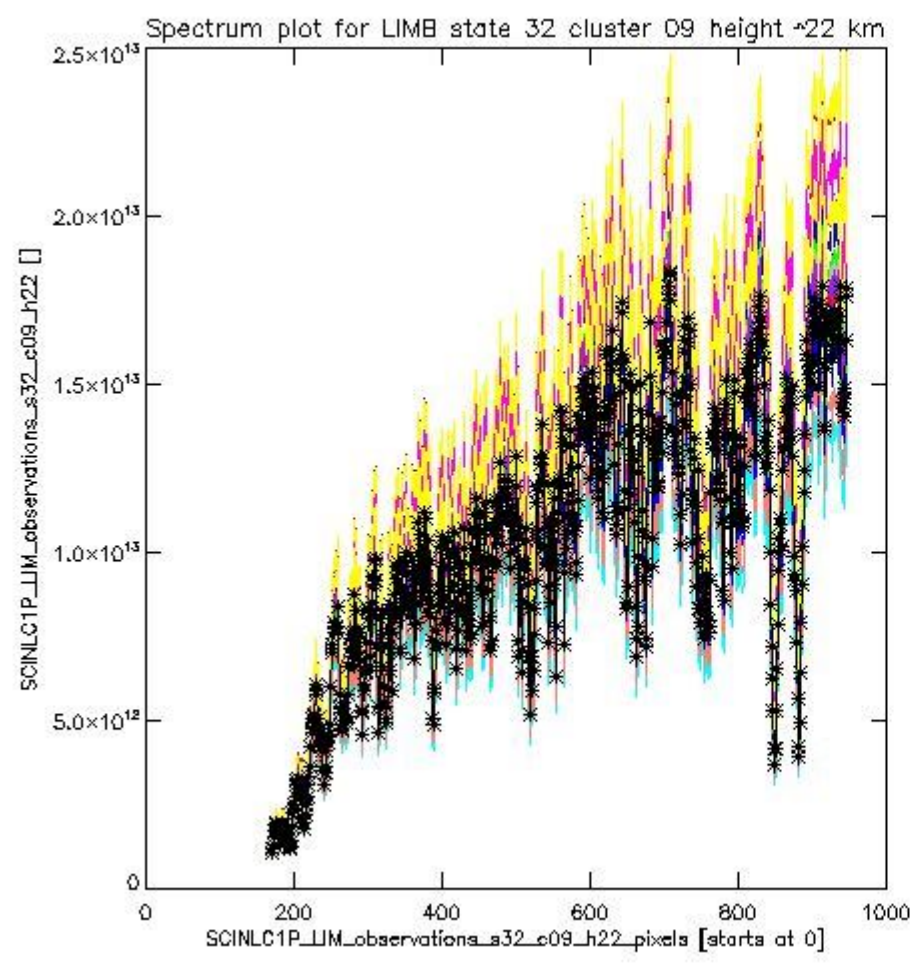
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_11.PNG

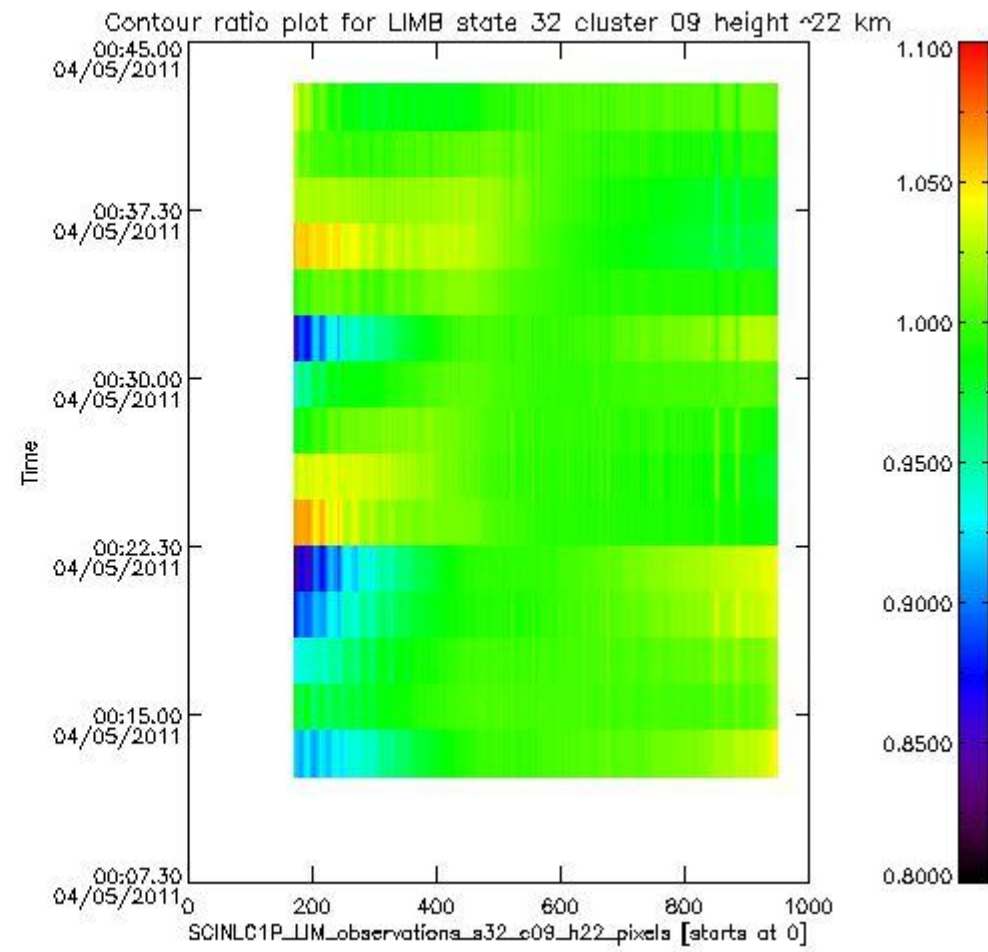
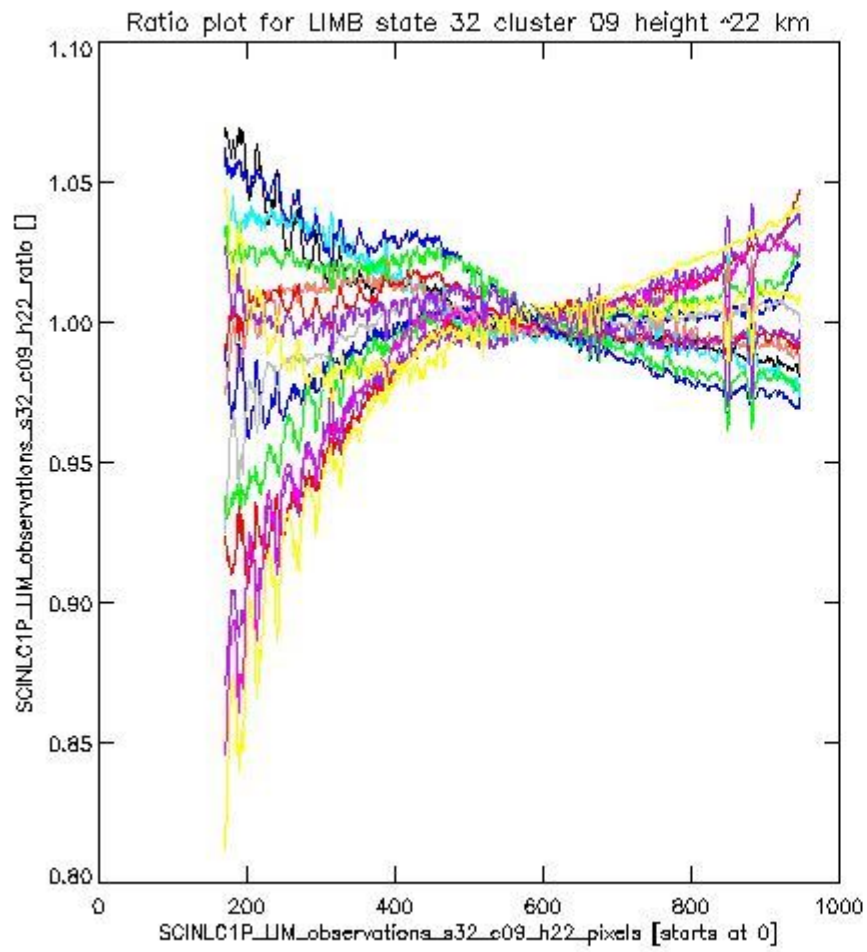
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	04MAY2011 00:13:18.188
Start time of last sample	04MAY2011 00:41:56.575
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	02MAY2011 23:37:23.126
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\_20110504\_12.PNG

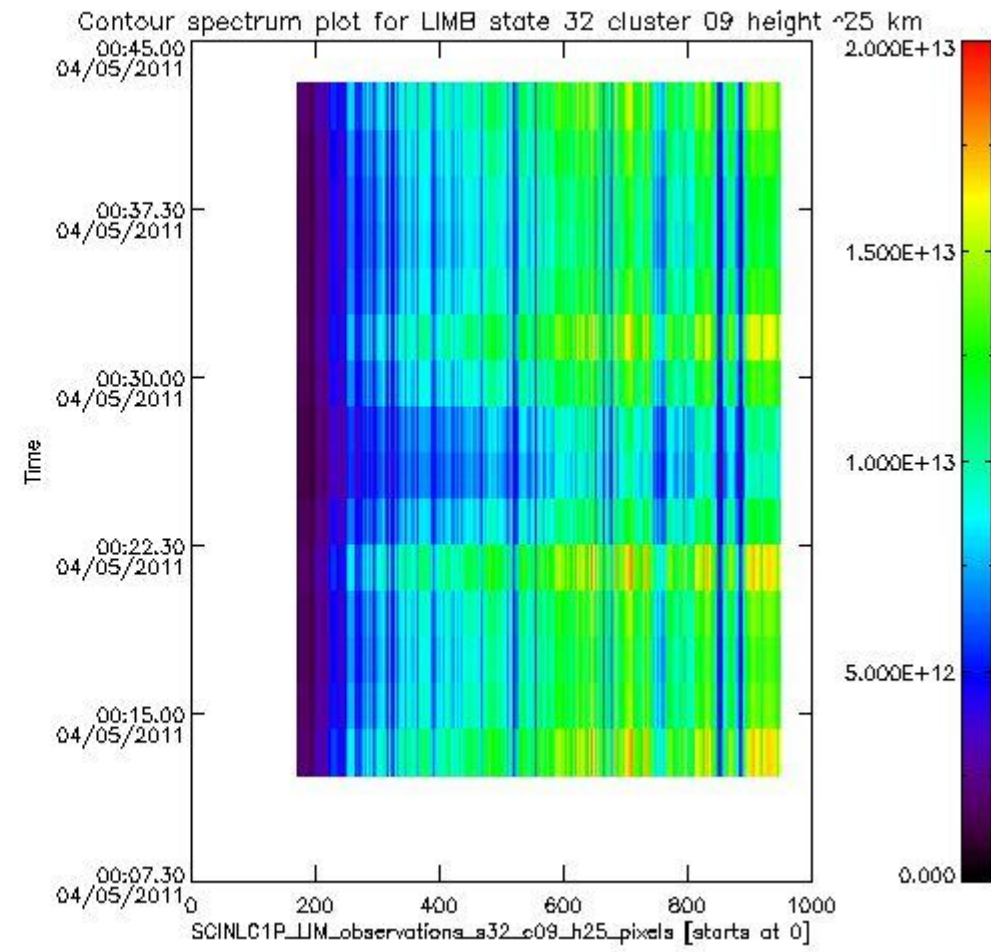
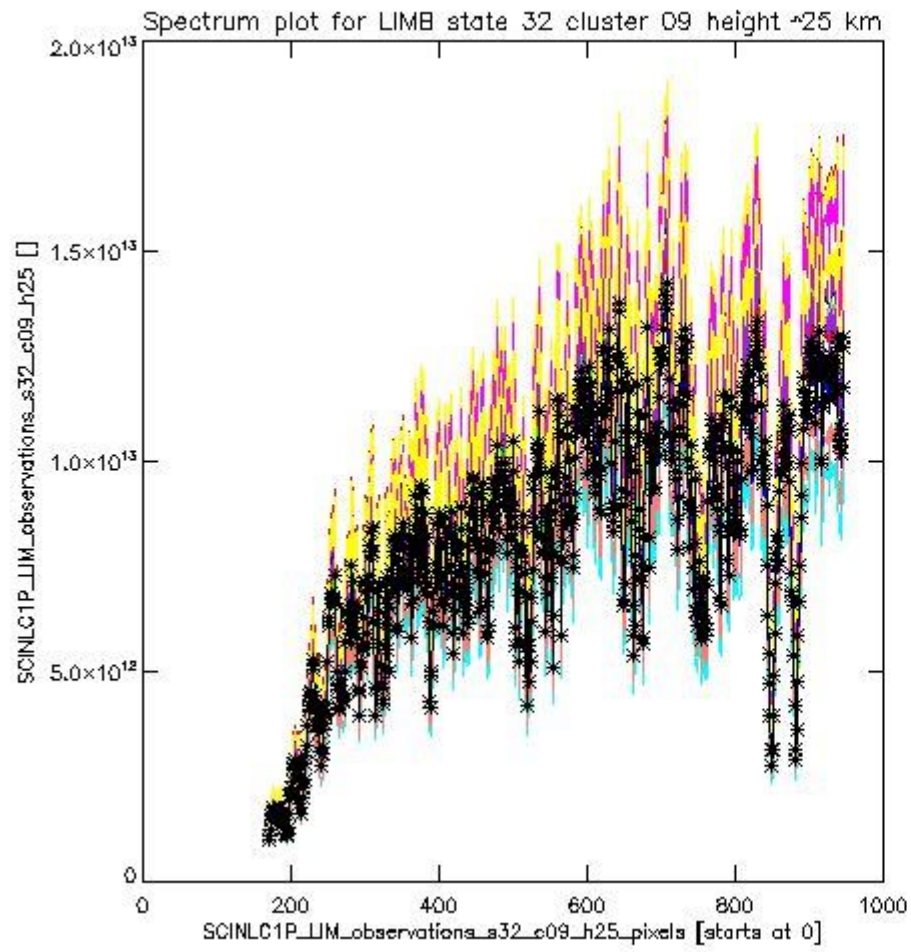




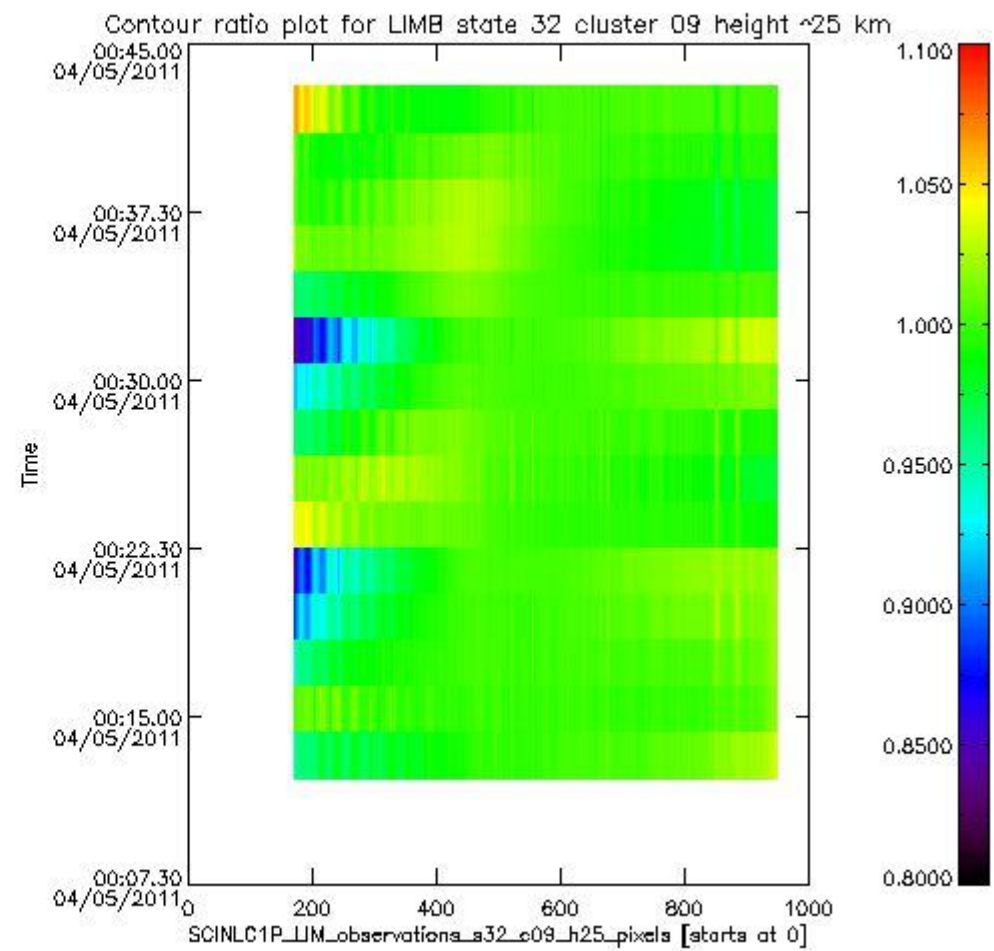
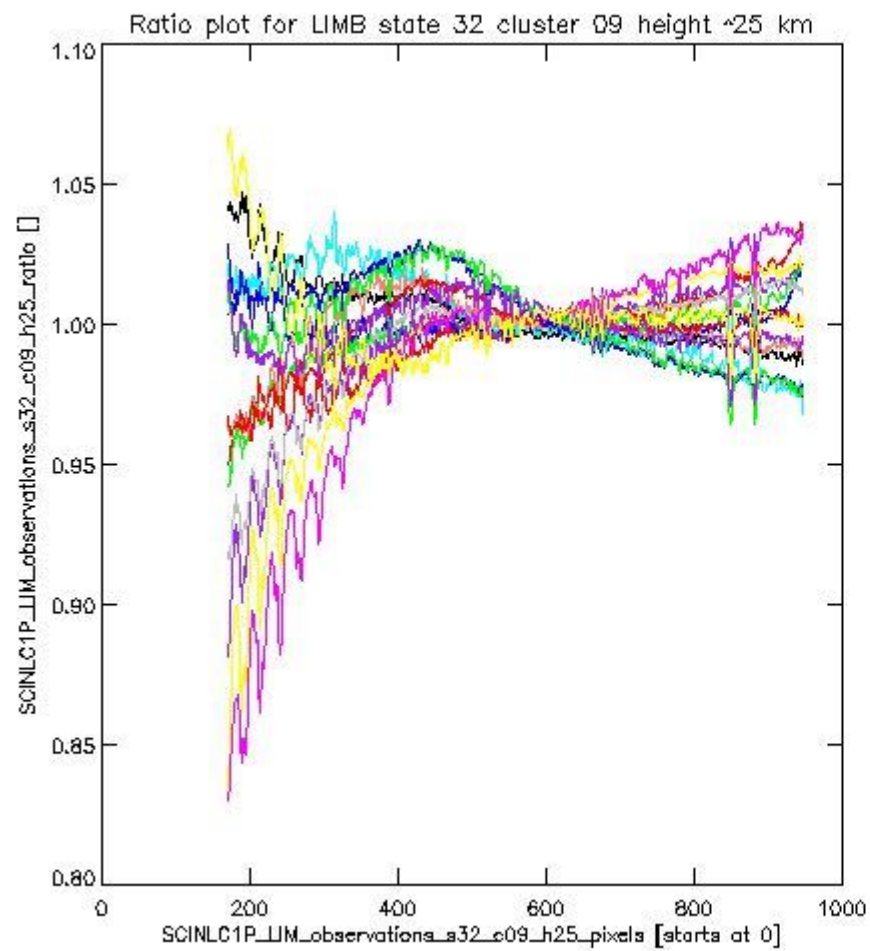
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_13.PNG

**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	04MAY2011 00:13:18.188
Start time of last sample	04MAY2011 00:41:56.575
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	02MAY2011 23:37:23.126
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\_20110504\_14.PNG

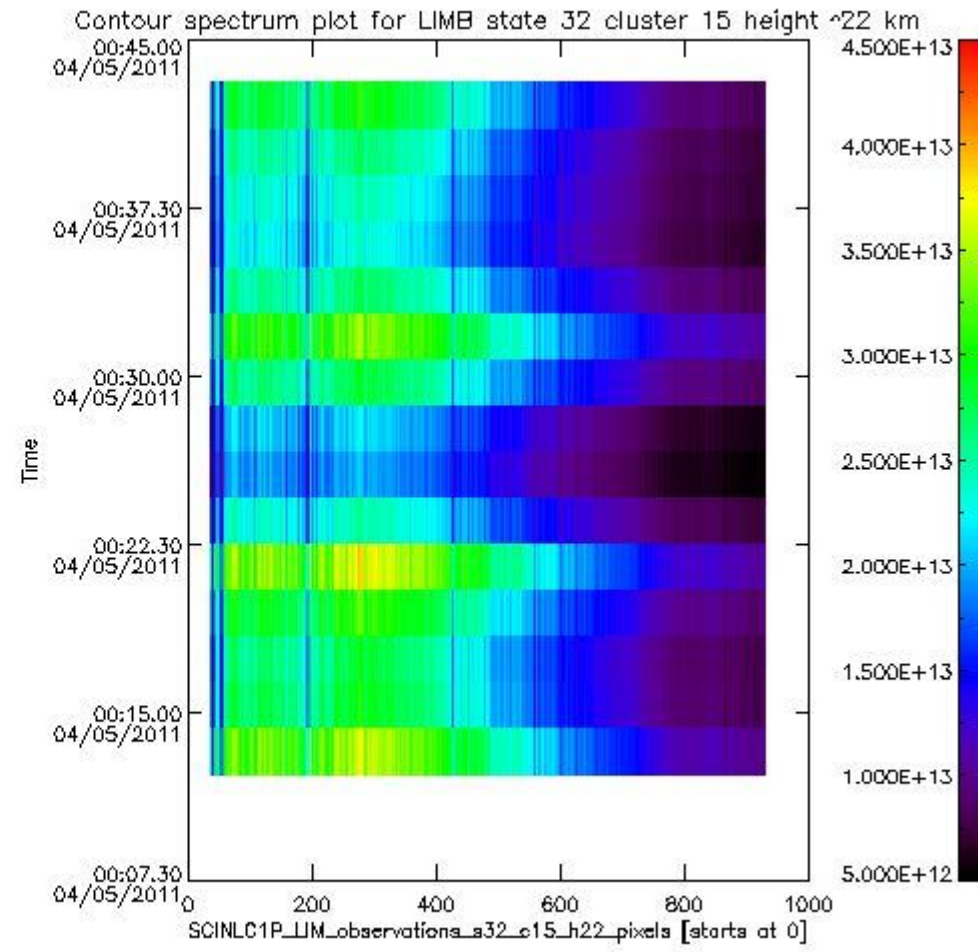
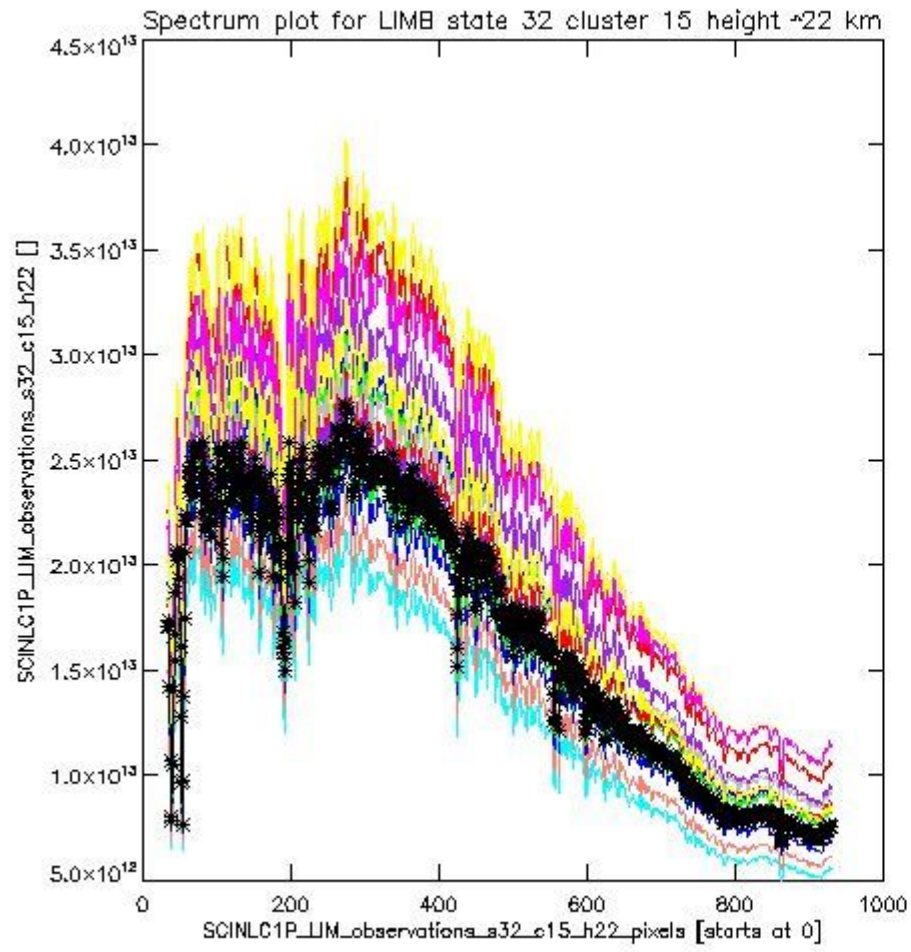


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_15.PNG

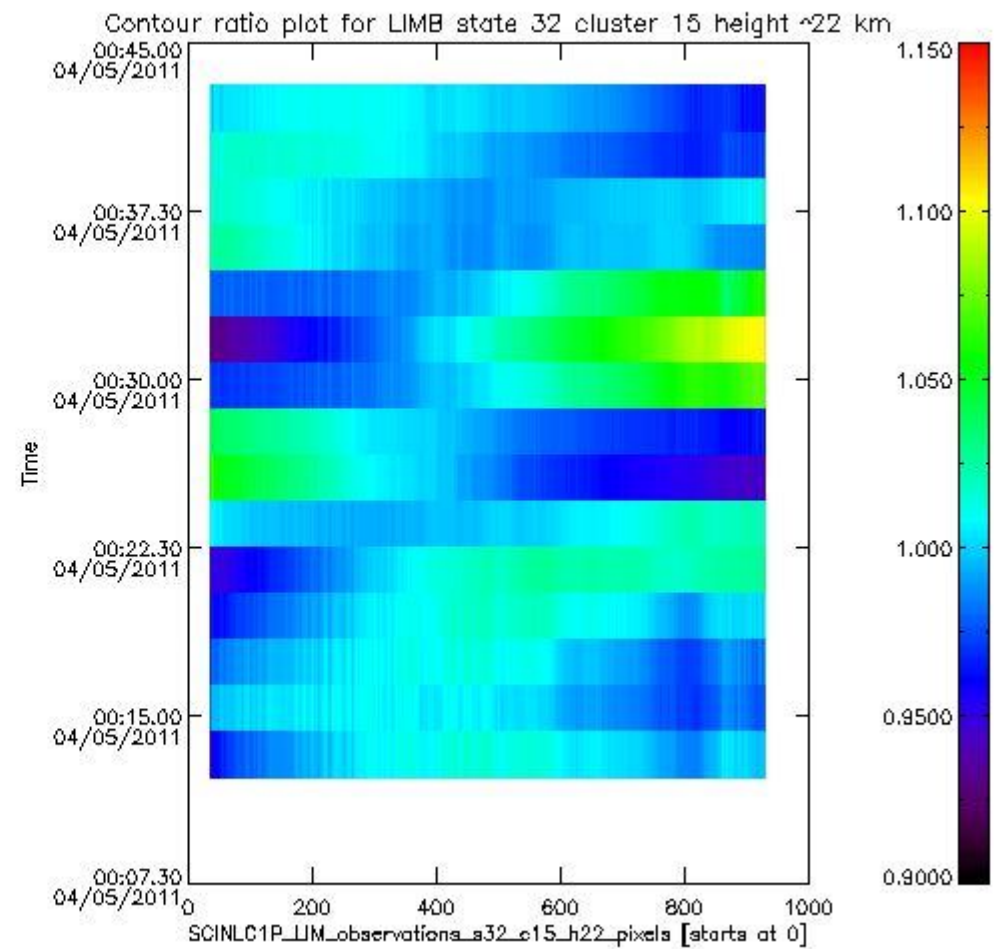
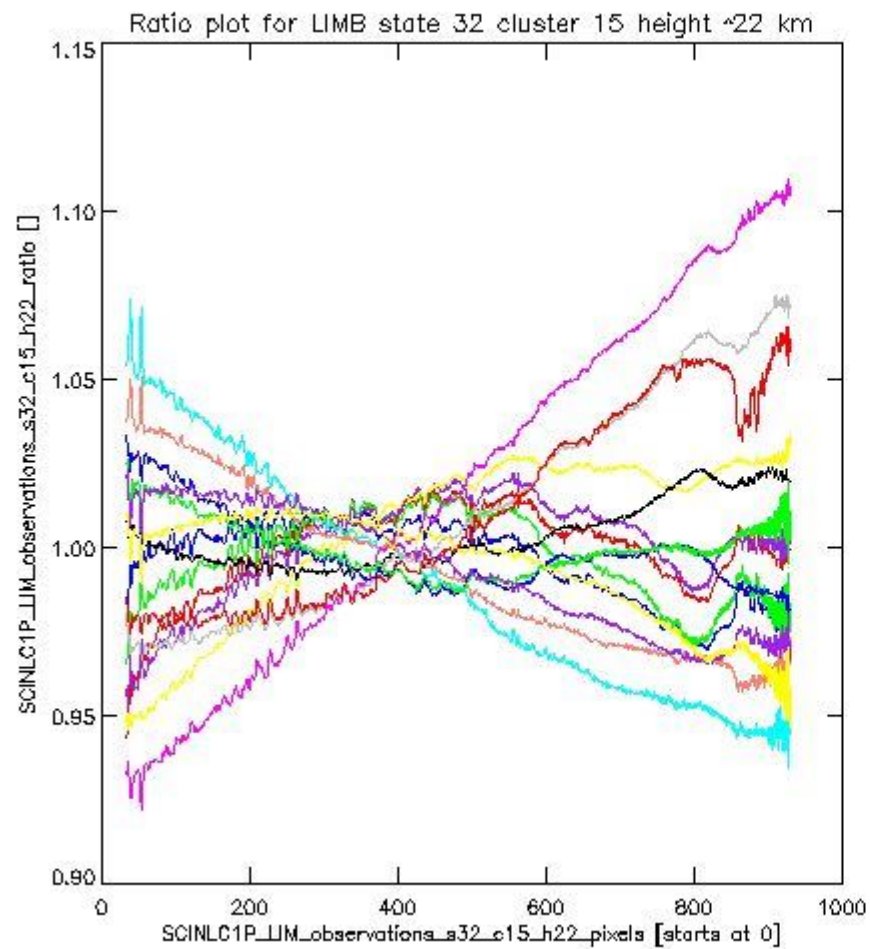
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	04MAY2011 00:13:18.188
Start time of last sample	04MAY2011 00:41:56.575
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	02MAY2011 23:37:23.126
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





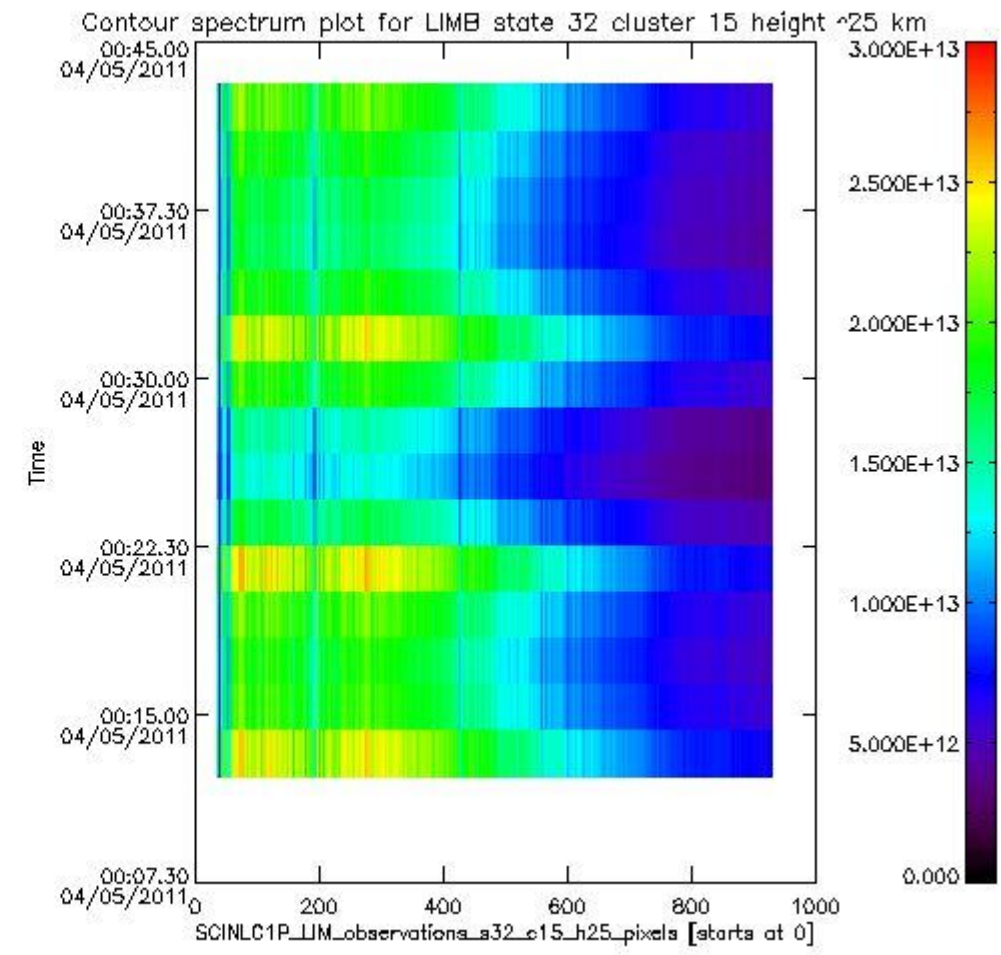
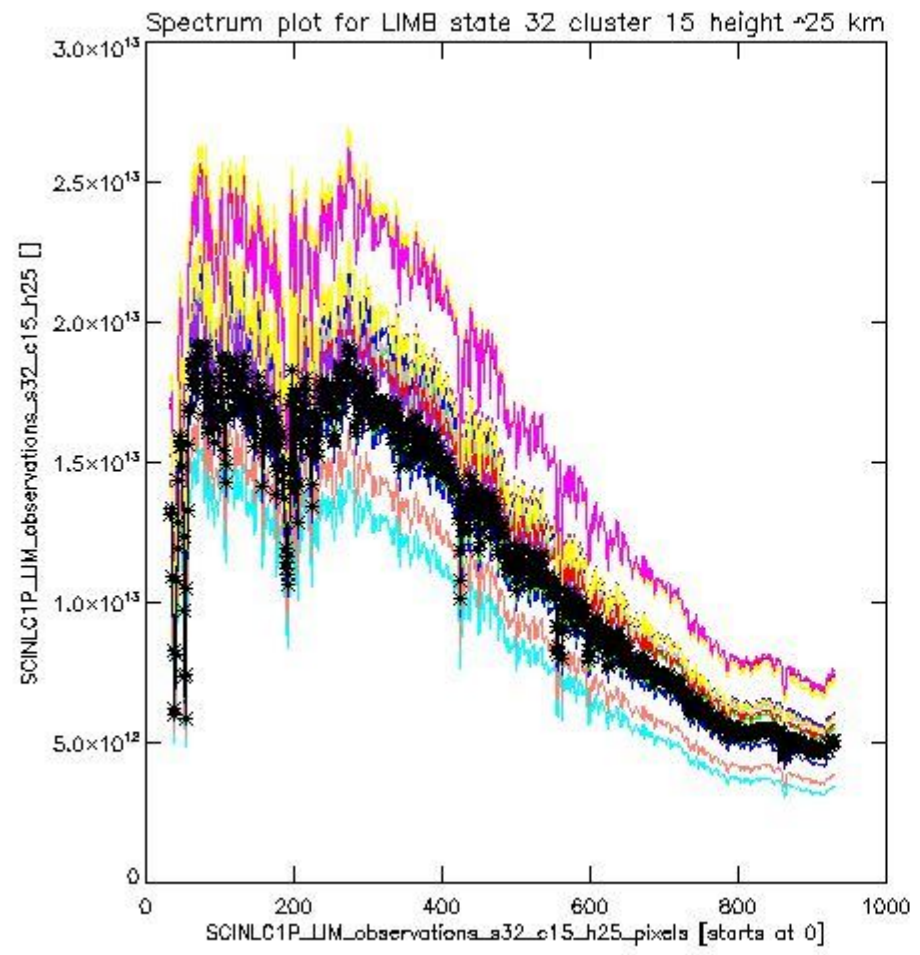
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_17.PNG

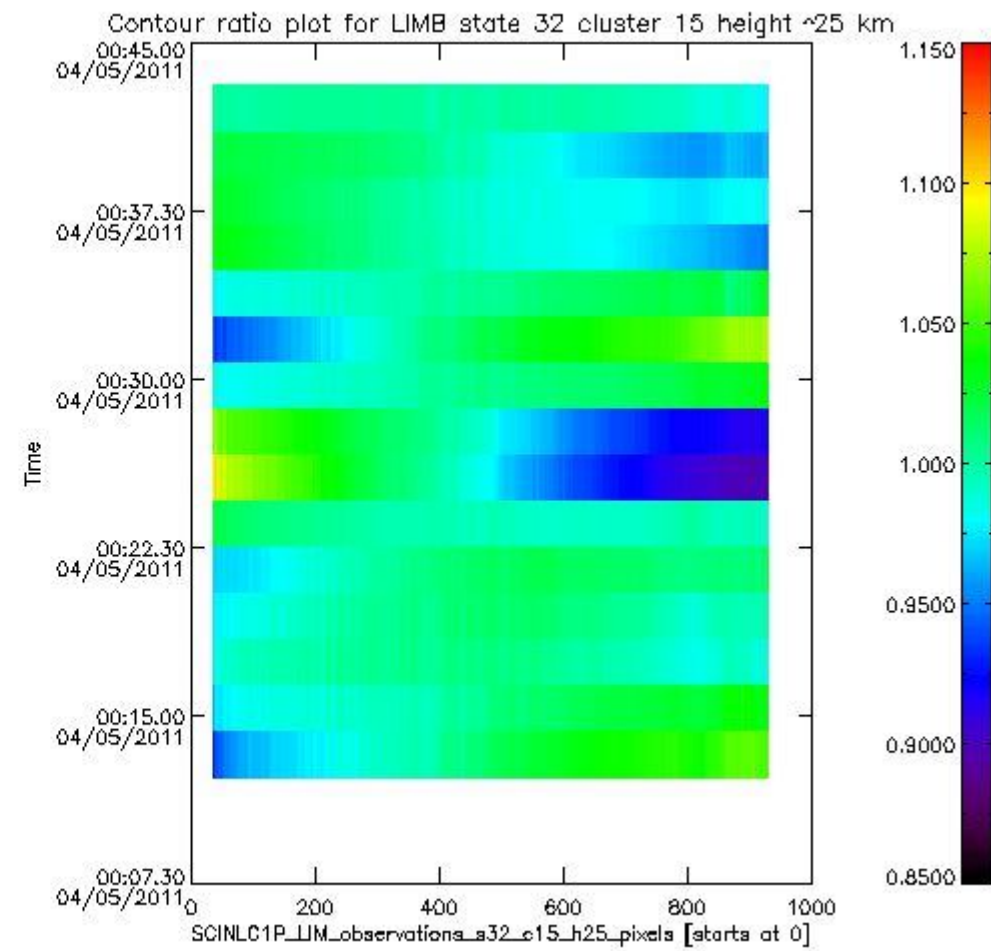
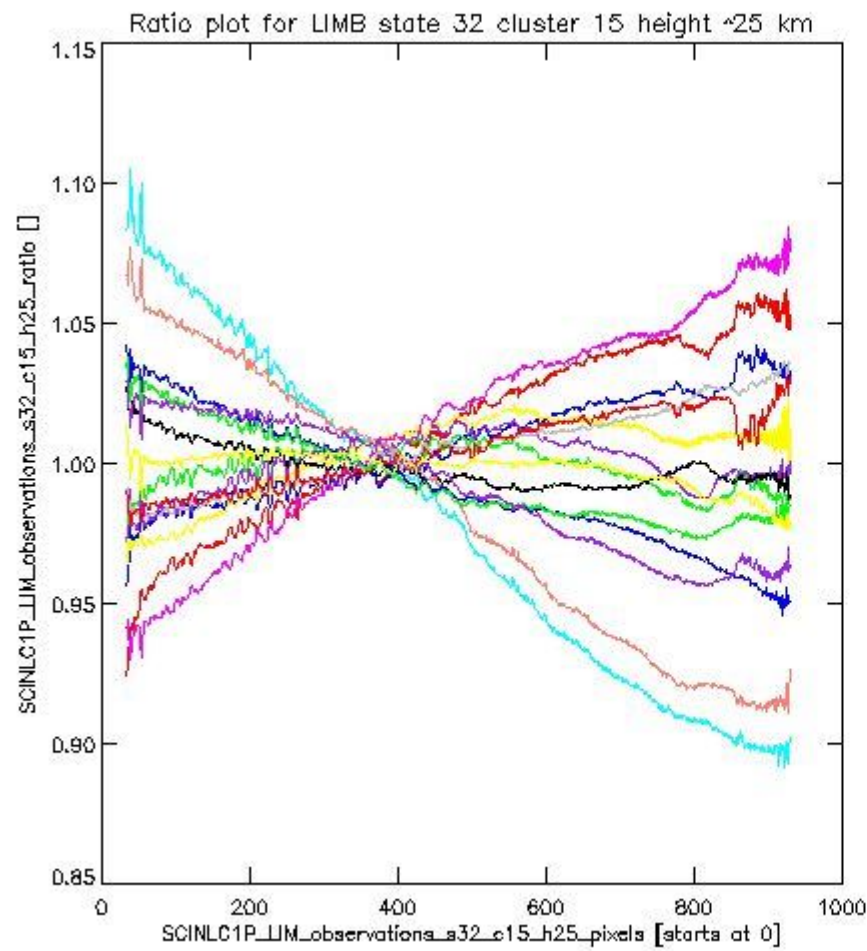
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	04MAY2011 00:13:18.188
Start time of last sample	04MAY2011 00:41:56.575
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	02MAY2011 23:37:23.126
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\_20110504\_18.PNG

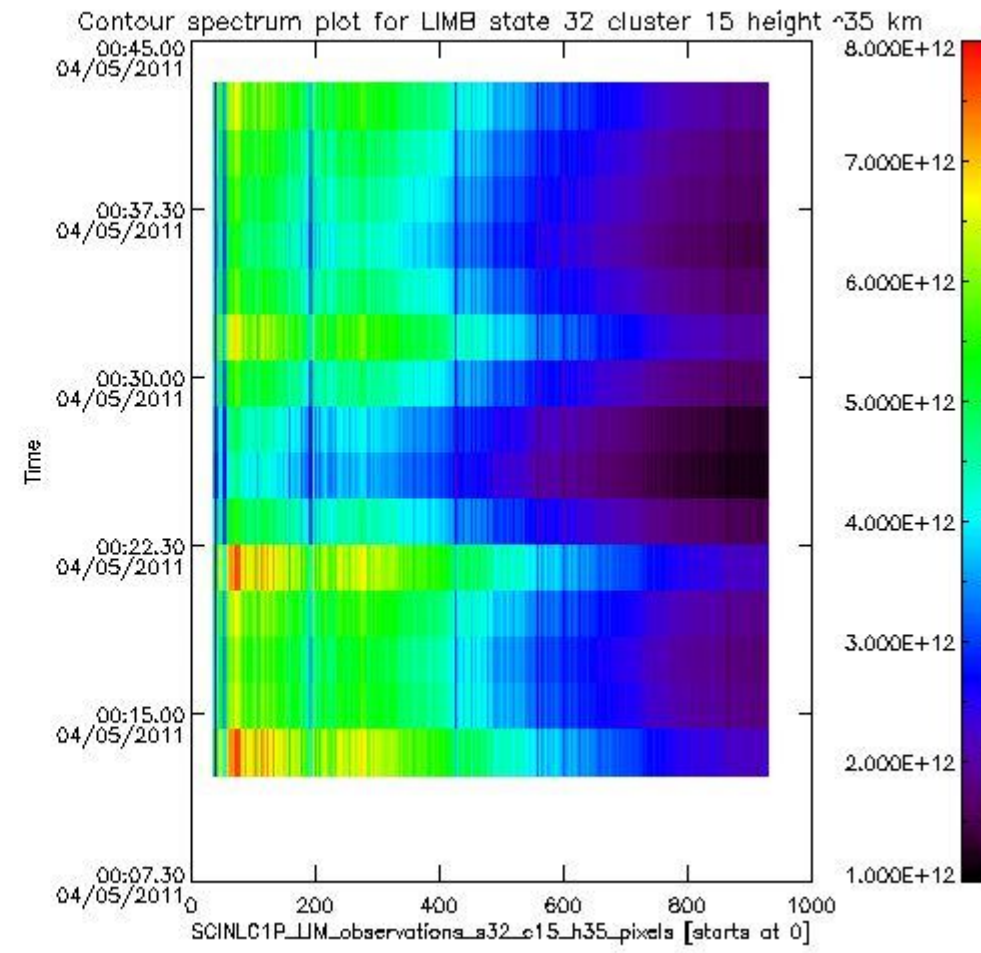
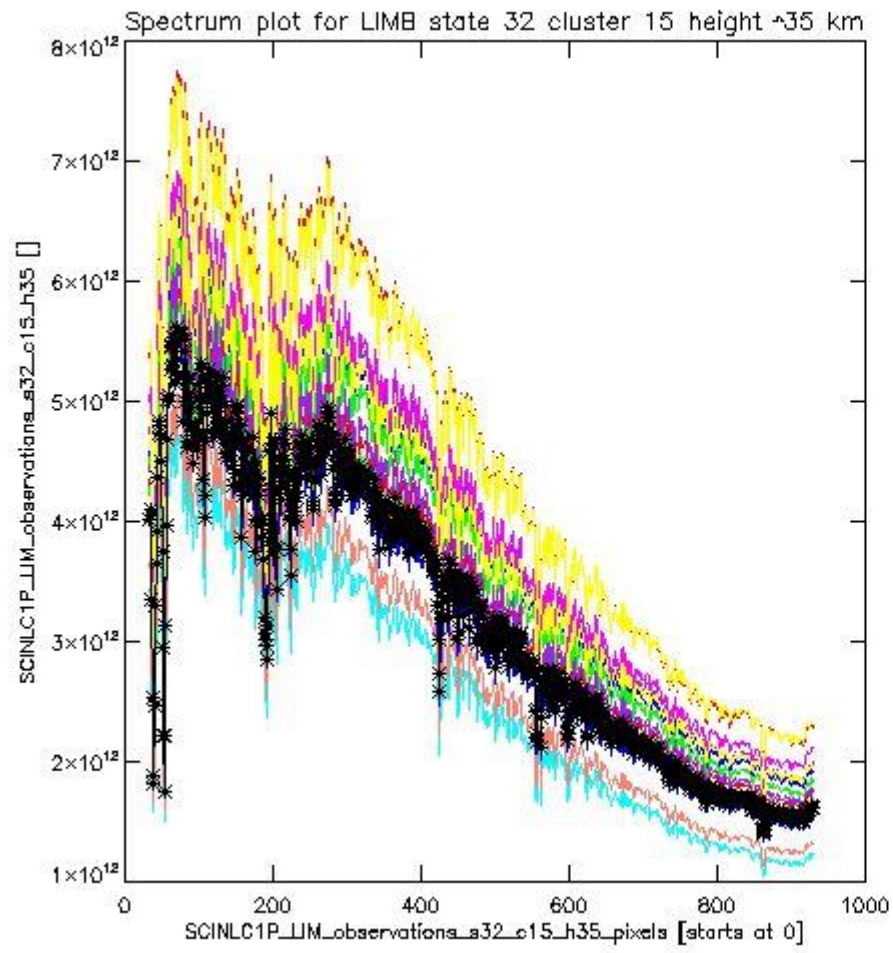


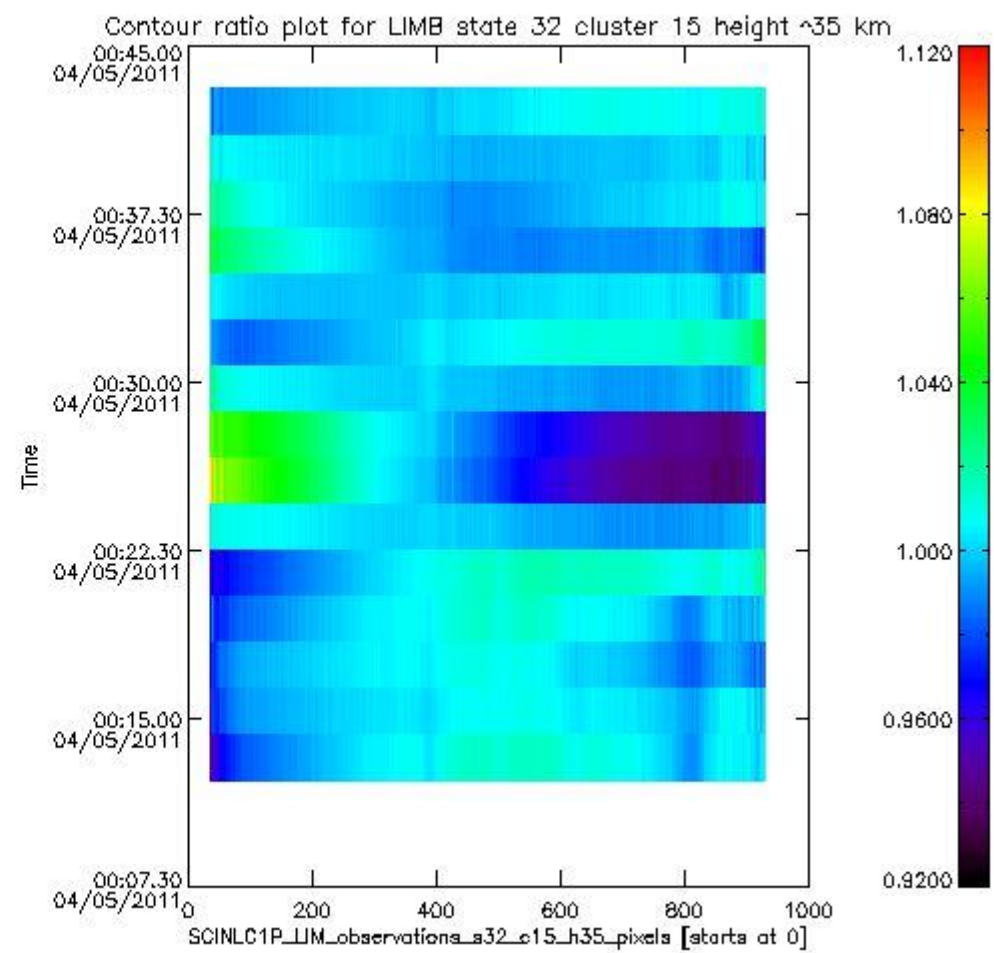
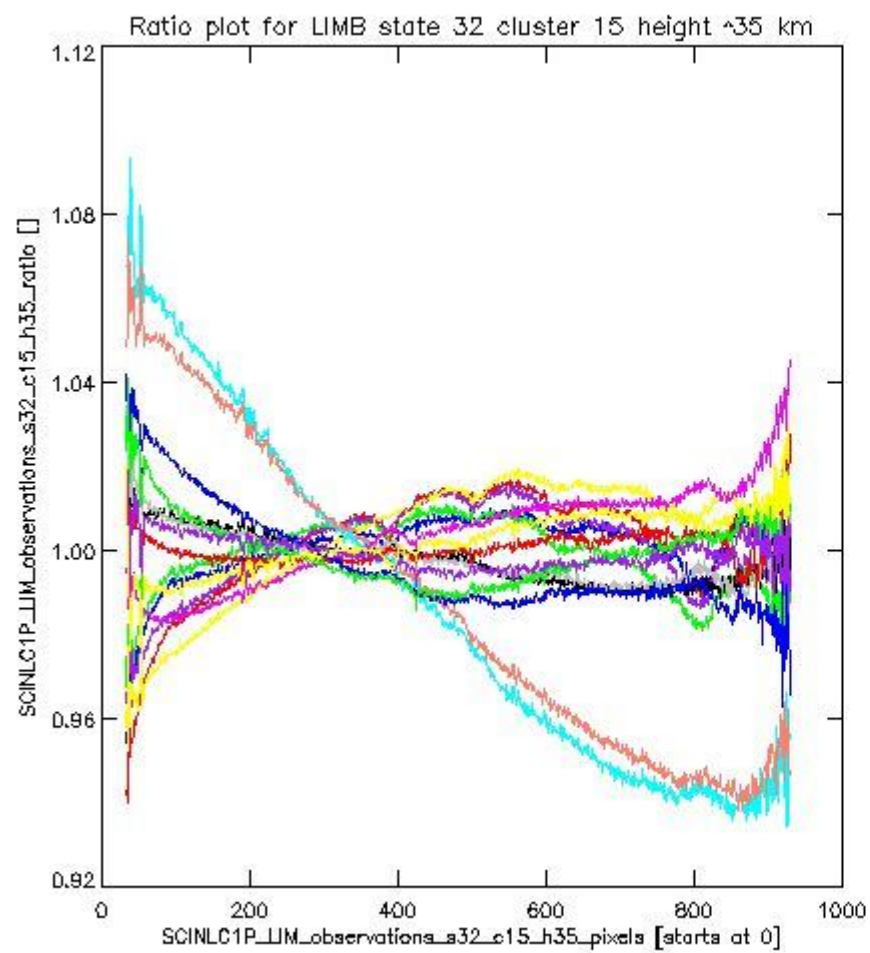


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110504\_19.PNG

**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	04MAY2011 00:13:18.188
Start time of last sample	04MAY2011 00:41:56.575
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	02MAY2011 23:37:23.126
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\_20110504\_21.PNG



