

# 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	01AUG2011 17:19:51
Data source version	SCIA/7.04-U
Processing scope for products	15JUL2011 00:00:00 to 16JUL2011 00:00:00
Start time of first product within scope	15JUL2011 00:58:53
Stop time of last product within scope	15JUL2011 20:27:44
Total number of level 1 products	11
Number of level 1 products with errors	0
SCIAL1C executable used in processing	Unknown
SCIAL1C parameters used in processing	Unknown

#### 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	15JUL2011 03:08:09.489	15JUL2011 19:59:46.017
1	NADIR	07	09	N/A	15JUL2011 03:08:09.489	15JUL2011 19:59:46.017
2	NADIR	07	15	N/A	15JUL2011 03:08:09.489	15JUL2011 19:59:46.017
3	NADIR	07	24	N/A	15JUL2011 03:08:09.489	15JUL2011 19:59:46.017
4	NADIR	07	55	N/A	15JUL2011 03:08:09.489	15JUL2011 19:59:46.017
5	LIMB	32	09	~19 km	15JUL2011 02:52:56.107	15JUL2011 20:02:57.318
6	LIMB	32	09	~22 km	15JUL2011 02:52:56.107	15JUL2011 20:02:57.318
7	LIMB	32	09	~25 km	15JUL2011 02:52:56.107	15JUL2011 20:02:57.318
8	LIMB	32	15	~22 km	15JUL2011 02:52:56.107	15JUL2011 20:02:57.318
9	LIMB	32	15	~25 km	15JUL2011 02:52:56.107	15JUL2011 20:02:57.318
10	LIMB	32	15	~35 km	15JUL2011 02:52:56.107	15JUL2011 20:02:57.318

#### 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	#cpl_drk	#incpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110715_005853_000055063104_00290_49011_0073.N1</a>	15JUL2011 00:58:53	15JUL2011 02:30:40	0	0	0	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110715_023458_000057563104_00291_49012_0076.N1</a>	15JUL2011 02:34:58	15JUL2011 03:45:27	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110715_041512_000057563104_00292_49013_0078.N1</a>	15JUL2011 04:15:12	15JUL2011 05:25:27	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110715_055526_000057563104_00293_49014_0080.N1</a>	15JUL2011 05:55:26	15JUL2011 07:05:55	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110715_073541_000057563104_00294_49015_0081.N1</a>	15JUL2011 07:35:41	15JUL2011 08:45:55	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110715_091555_000057563104_00295_49016_0083.N1</a>	15JUL2011 09:15:55	15JUL2011 10:26:24	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110715_105609_000057563104_00296_49017_0085.N1	15JUL2011 10:56:09	15JUL2011 12:06:23	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110715_123623_000057563104_00297_49018_0086.N1	15JUL2011 12:36:23	15JUL2011 13:46:52	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110715_155651_000057563104_00299_49020_0090.N1	15JUL2011 15:56:51	15JUL2011 17:07:20	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110715_173705_000057563104_00300_49021_0091.N1	15JUL2011 17:37:05	15JUL2011 18:47:59	0	34	29	0	1	1	0	0	
10	SCI_NLC_1CUDPA20110715_191719_000057563104_00301_49022_0092.N1	15JUL2011 19:17:19	15JUL2011 20:27:44	0	35	31	0	1	1	0	0	

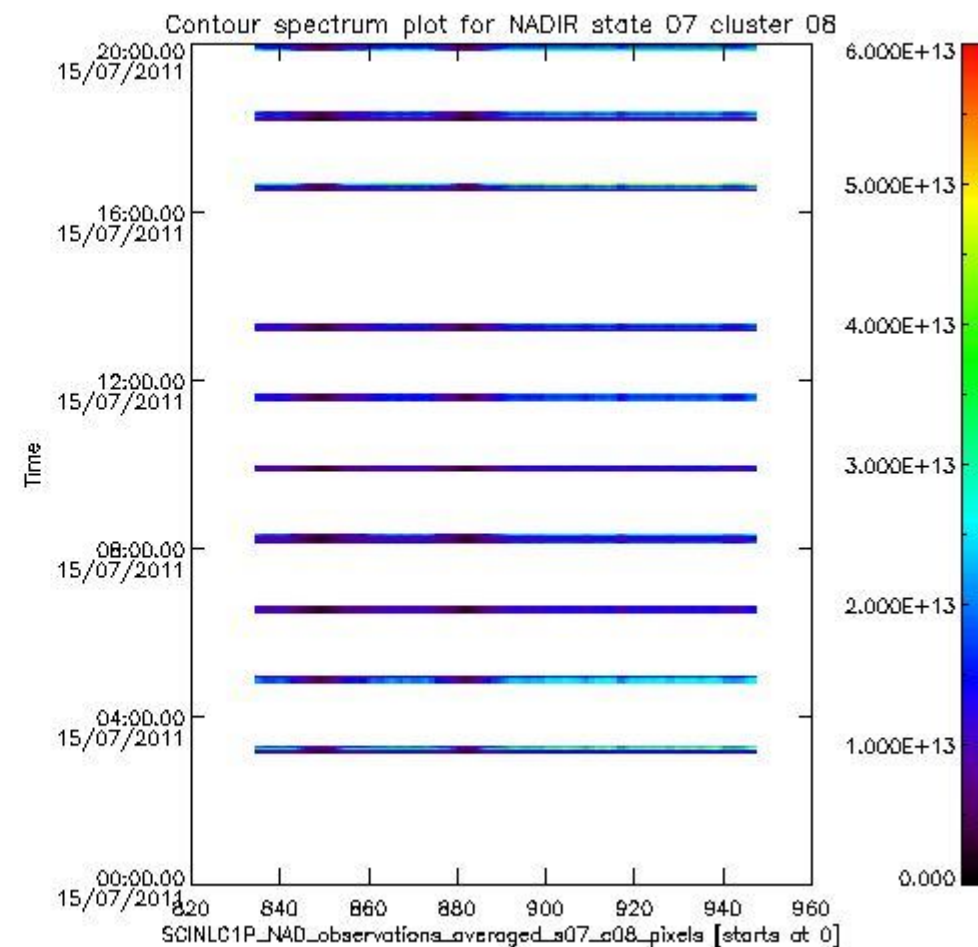
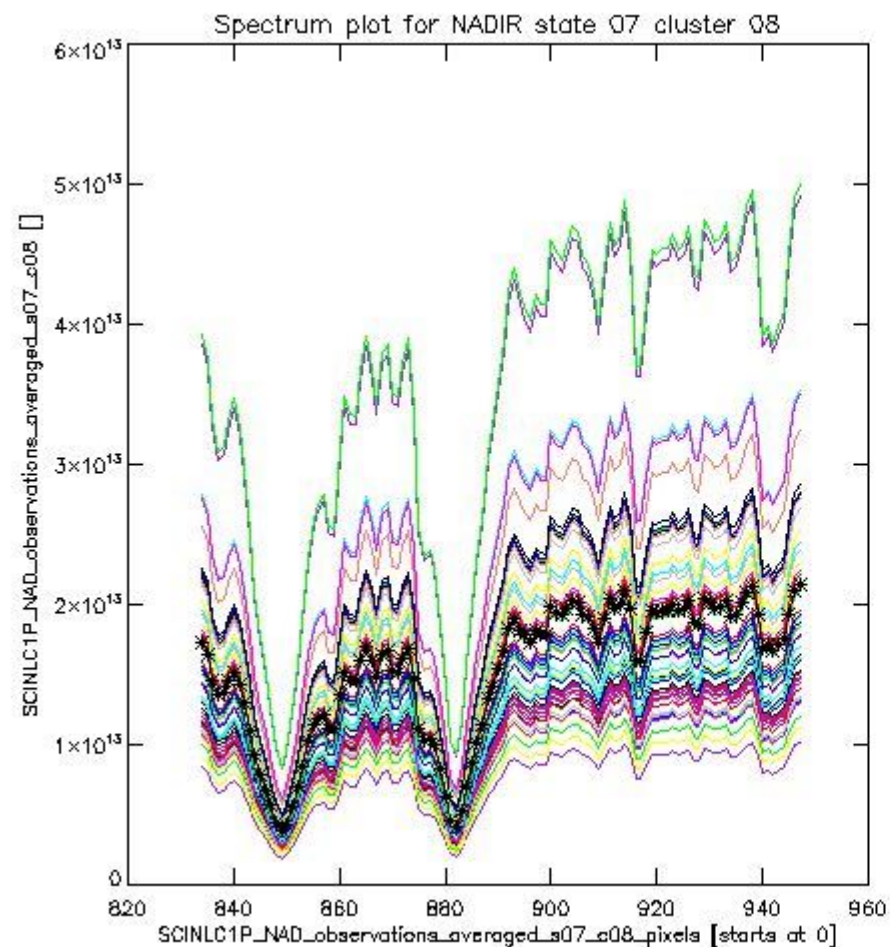
## 1.2 Source packet monitoring

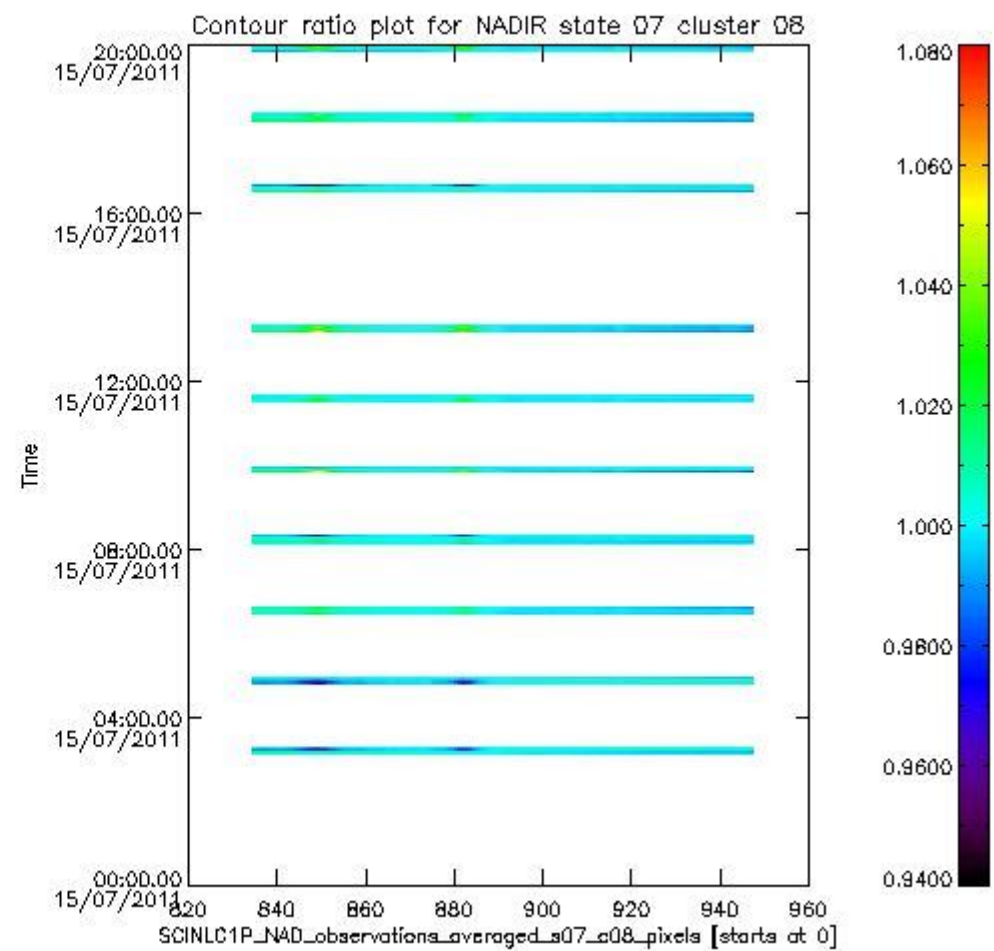
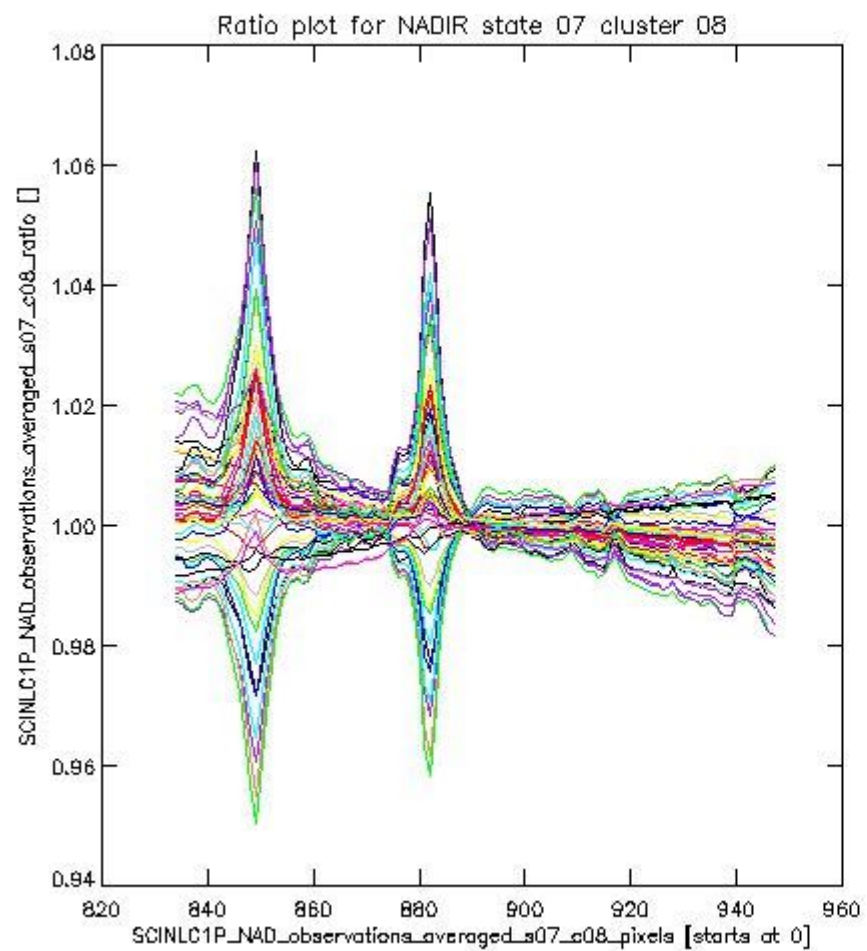
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	15JUL2011 03:08:09.489
Start time of last sample	15JUL2011 19:59:46.017
Reference period start time	15JUN2011 01:26:05.803
Reference period stop time	15JUL2011 19:59:46.017
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



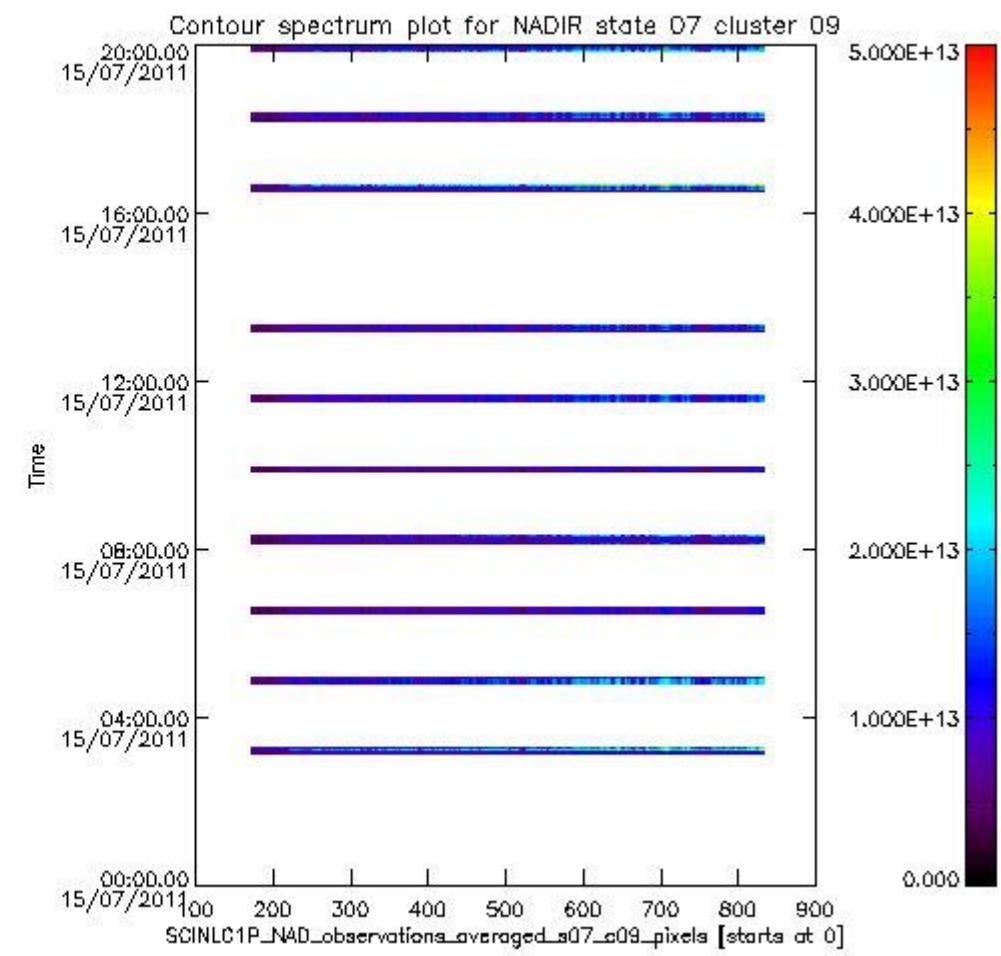
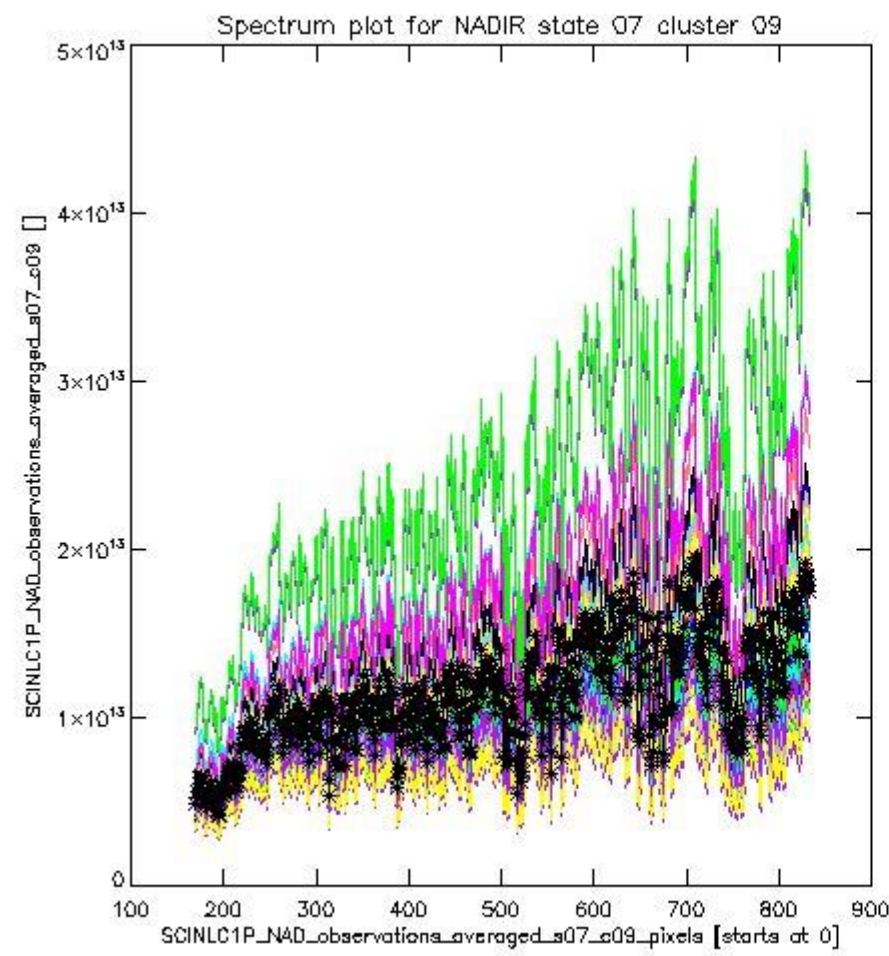


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_1.PNG

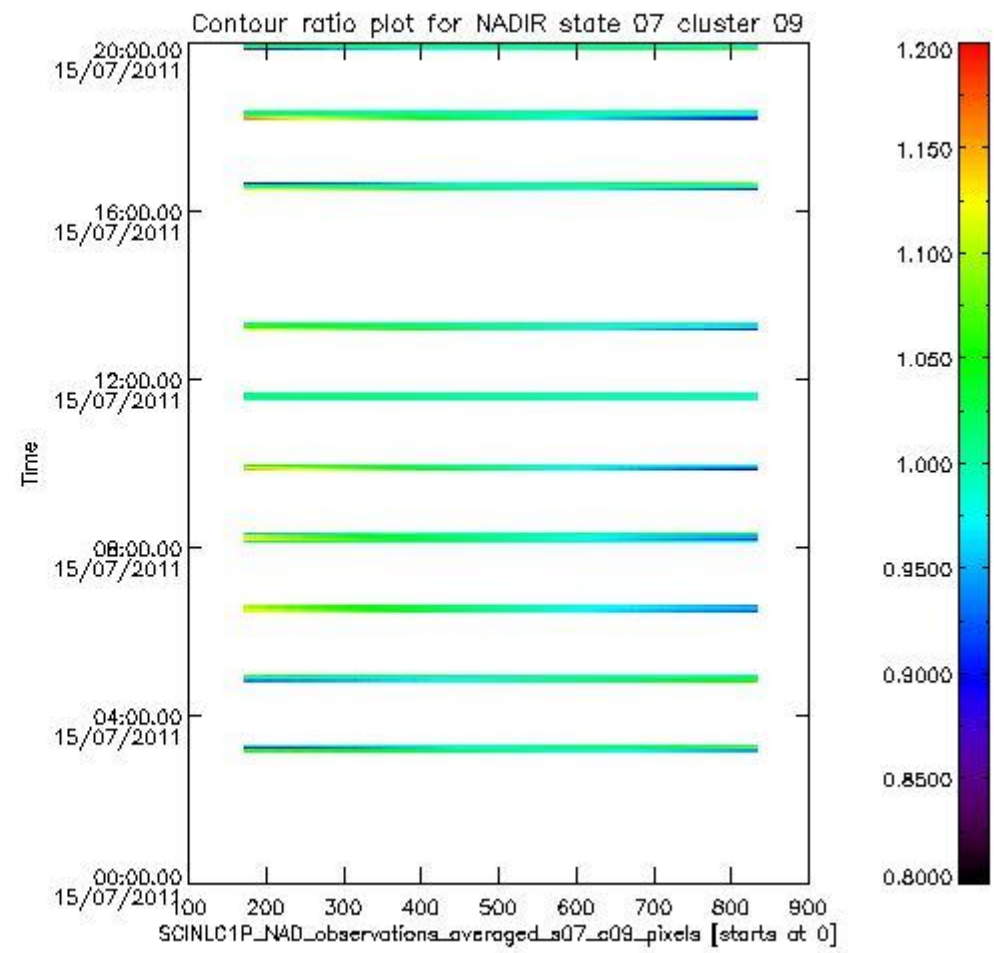
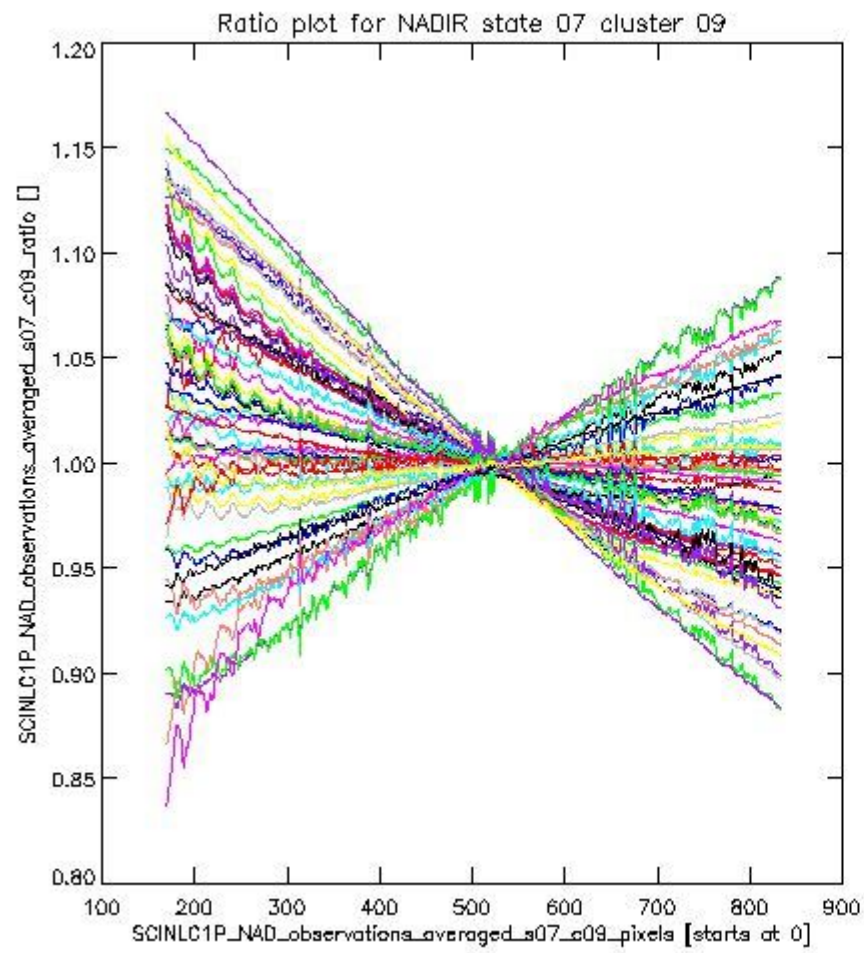
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	15JUL2011 03:08:09.489
Start time of last sample	15JUL2011 19:59:46.017
Reference period start time	15JUN2011 01:26:05.803
Reference period stop time	15JUL2011 19:59:46.017
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





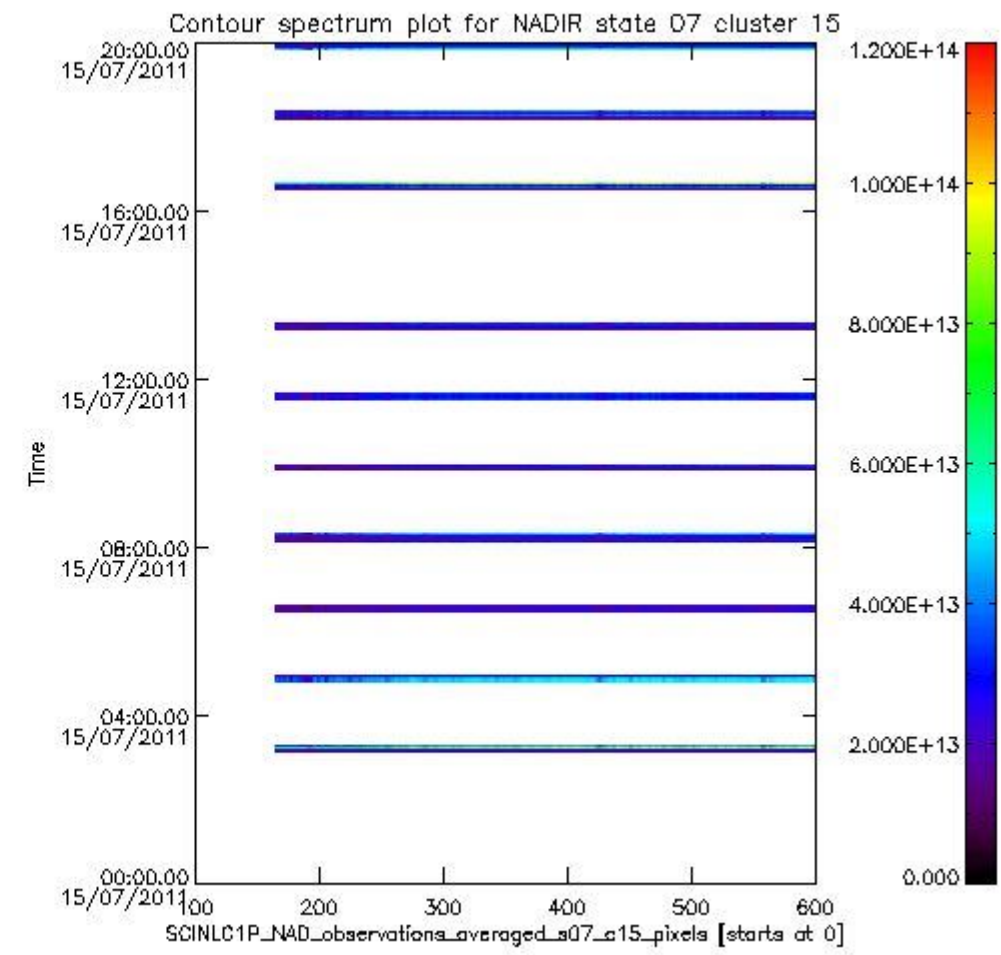
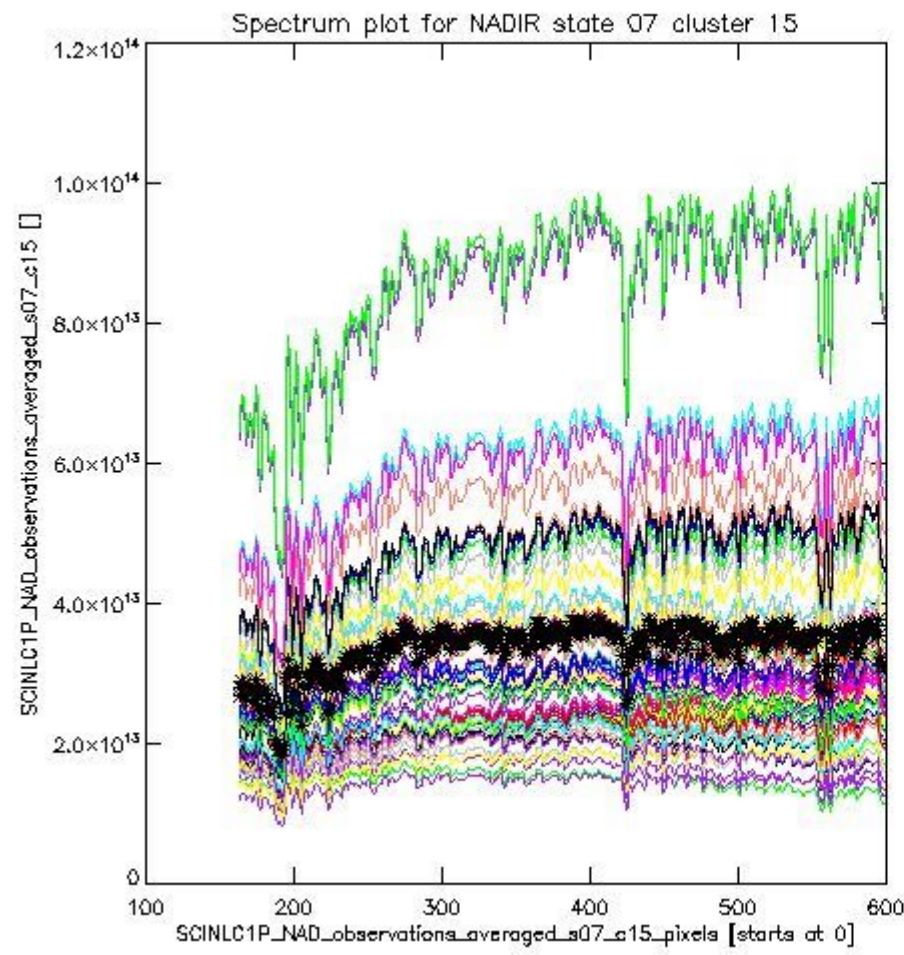
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_3.PNG

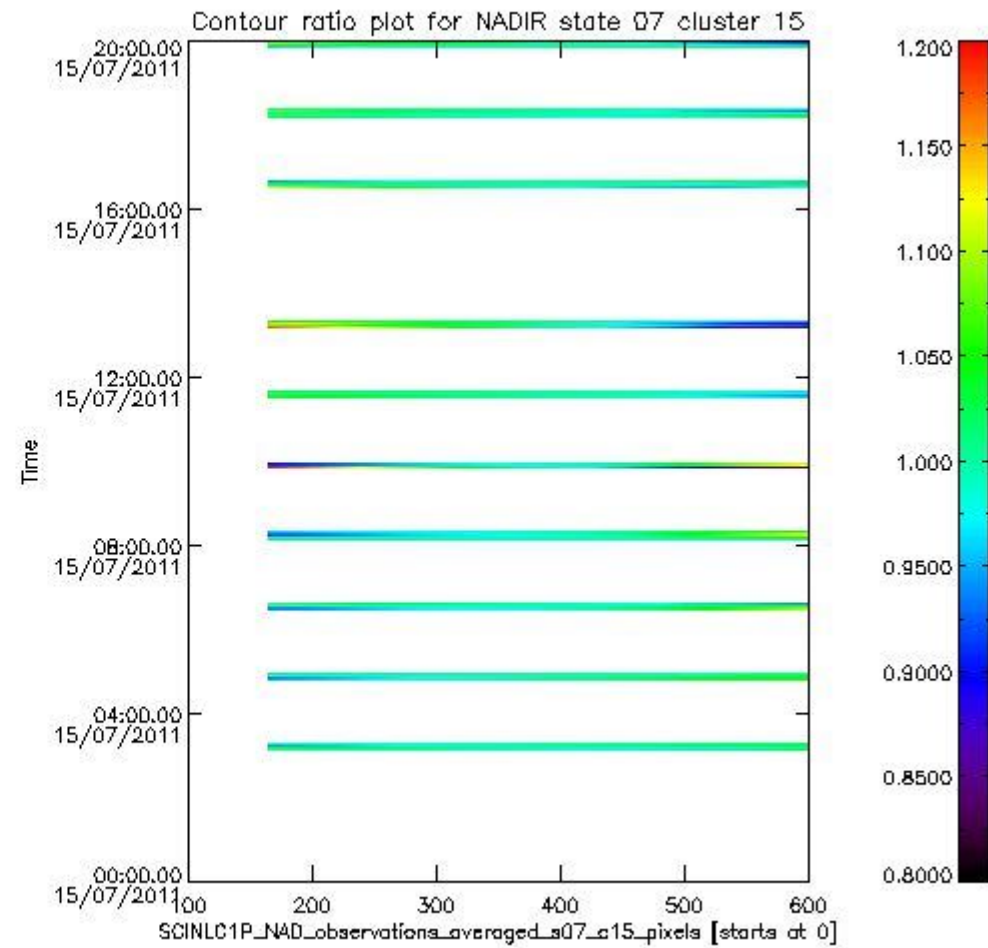
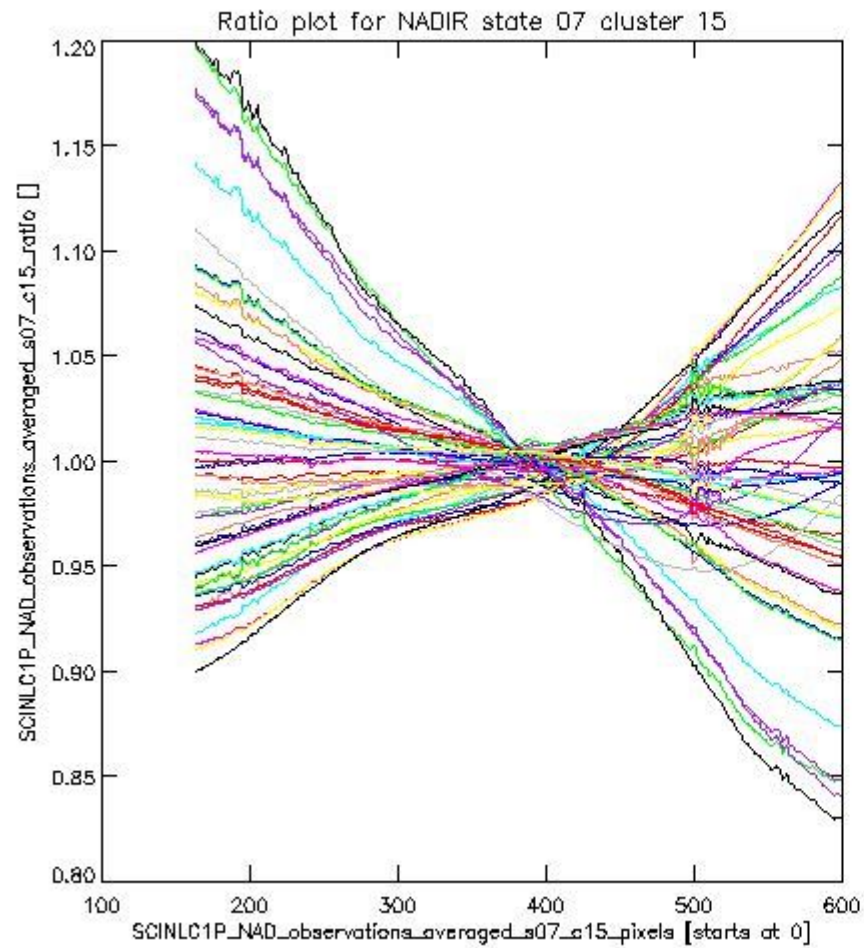
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	15JUL2011 03:08:09.489
Start time of last sample	15JUL2011 19:59:46.017
Reference period start time	15JUN2011 01:26:05.803
Reference period stop time	15JUL2011 19:59:46.017
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\_20110715\_4.PNG

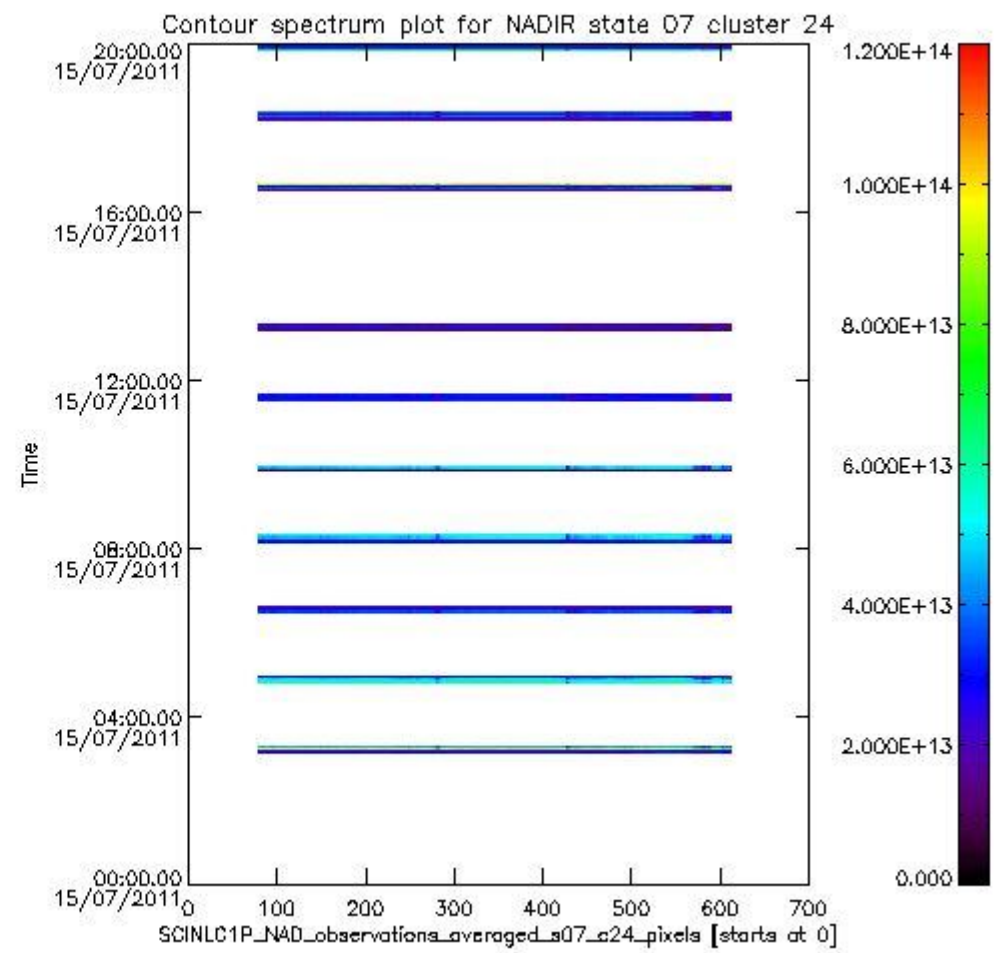
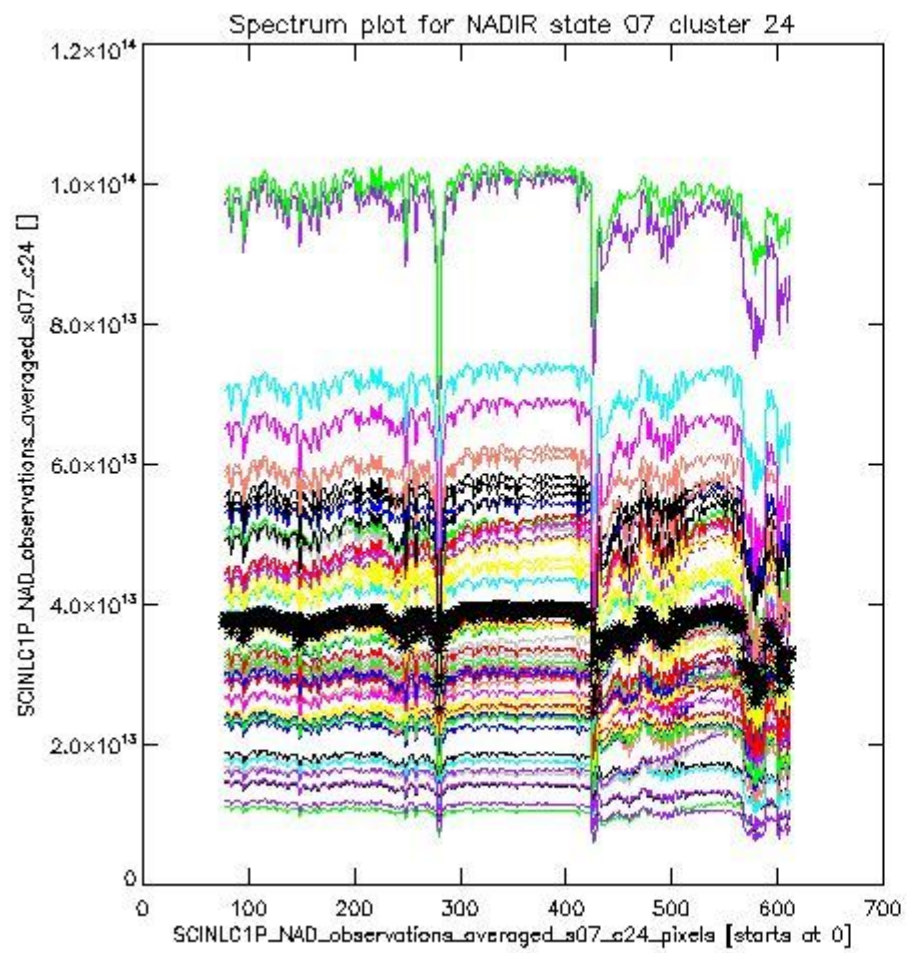




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_5.PNG

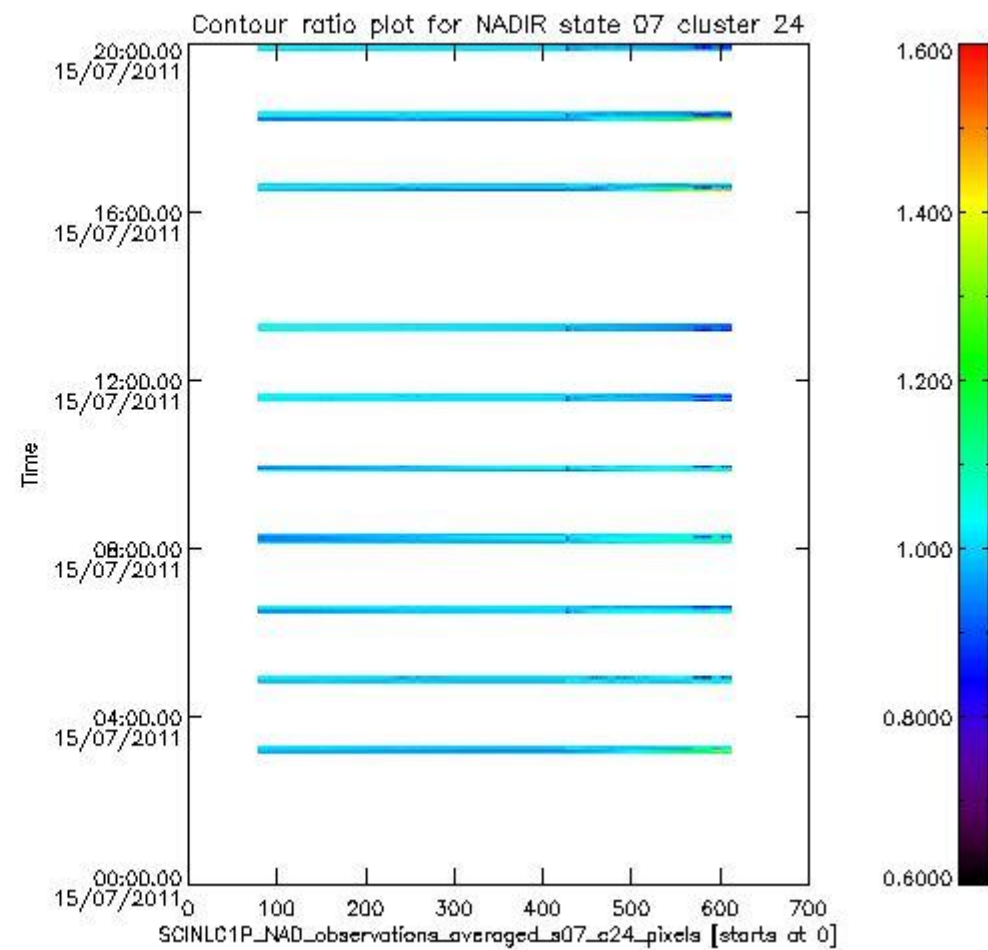
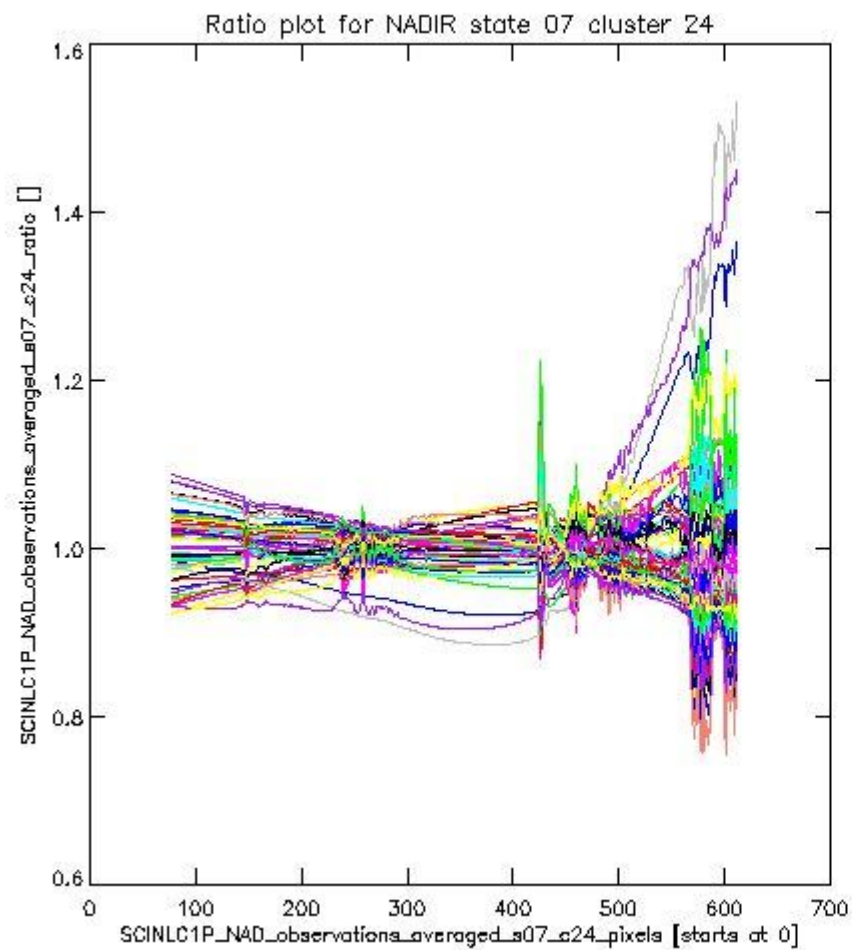
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	15JUL2011 03:08:09.489
Start time of last sample	15JUL2011 19:59:46.017
Reference period start time	15JUN2011 01:26:05.803
Reference period stop time	15JUL2011 19:59:46.017
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\_20110715\_6.PNG

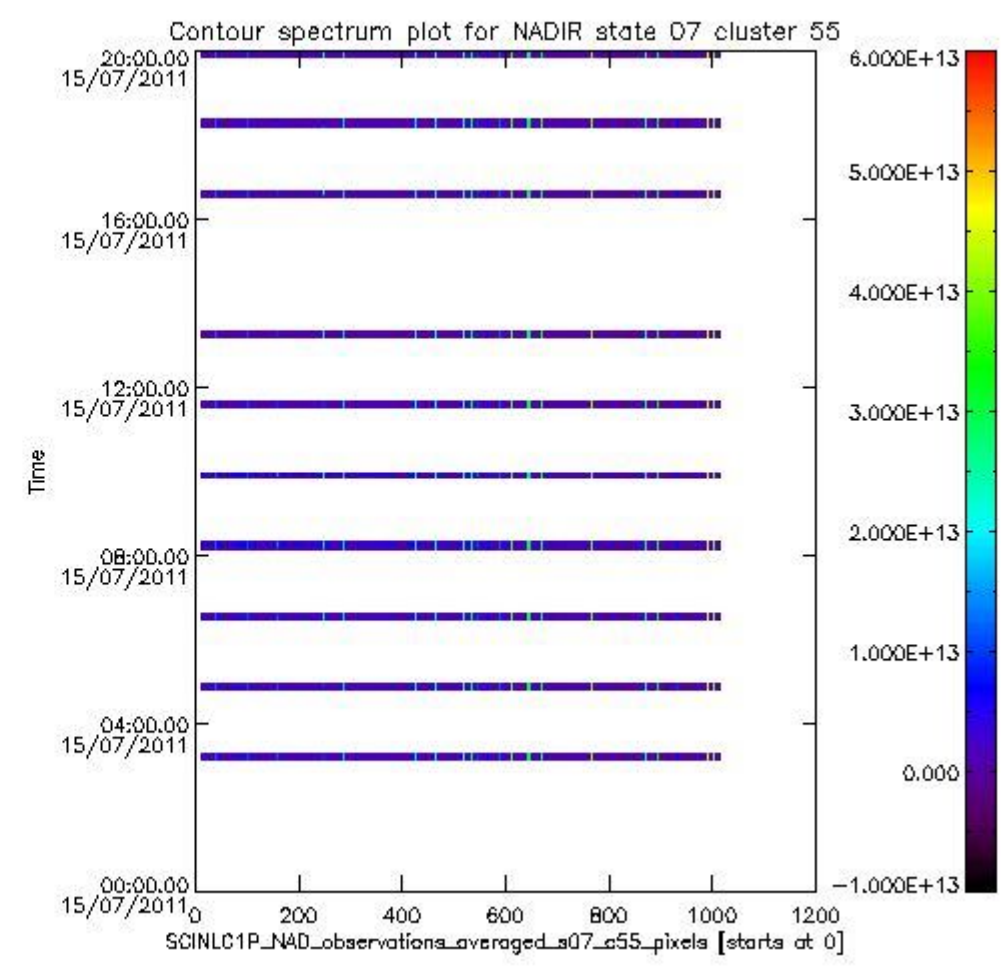
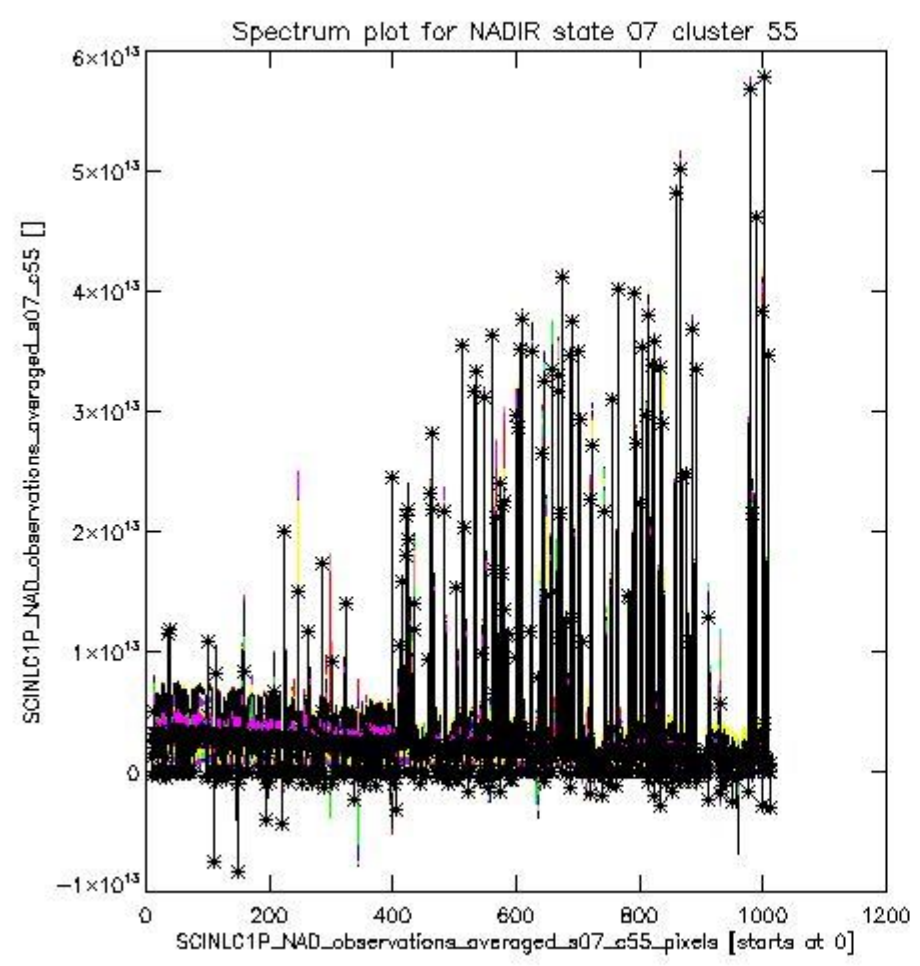




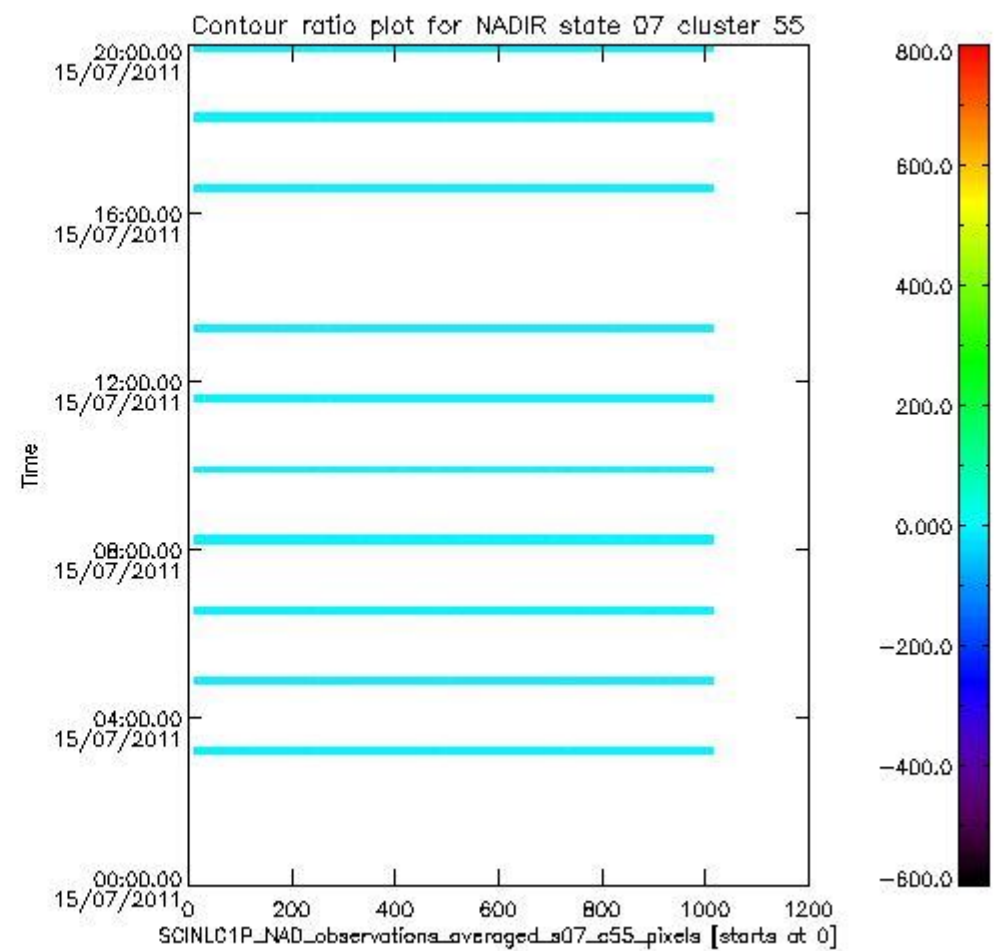
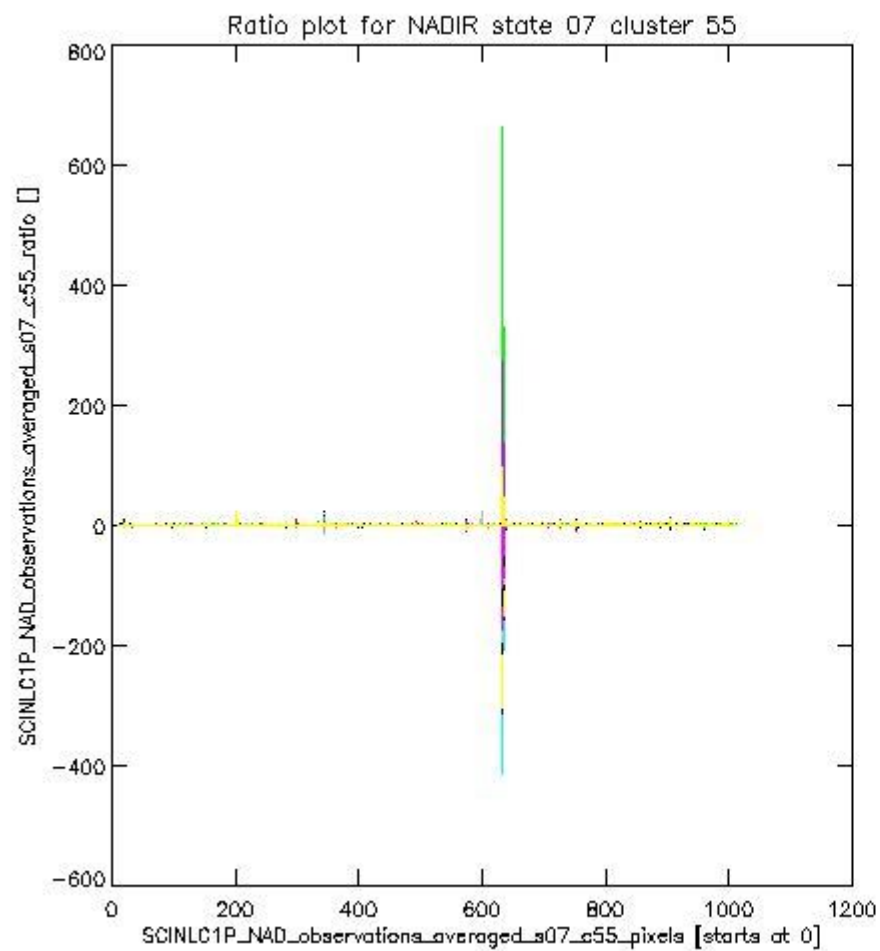
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_7.PNG

**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	15JUL2011 03:08:09.489
Start time of last sample	15JUL2011 19:59:46.017
Reference period start time	15JUN2011 01:26:05.803
Reference period stop time	15JUL2011 19:59:46.017
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\_20110715\_8.PNG

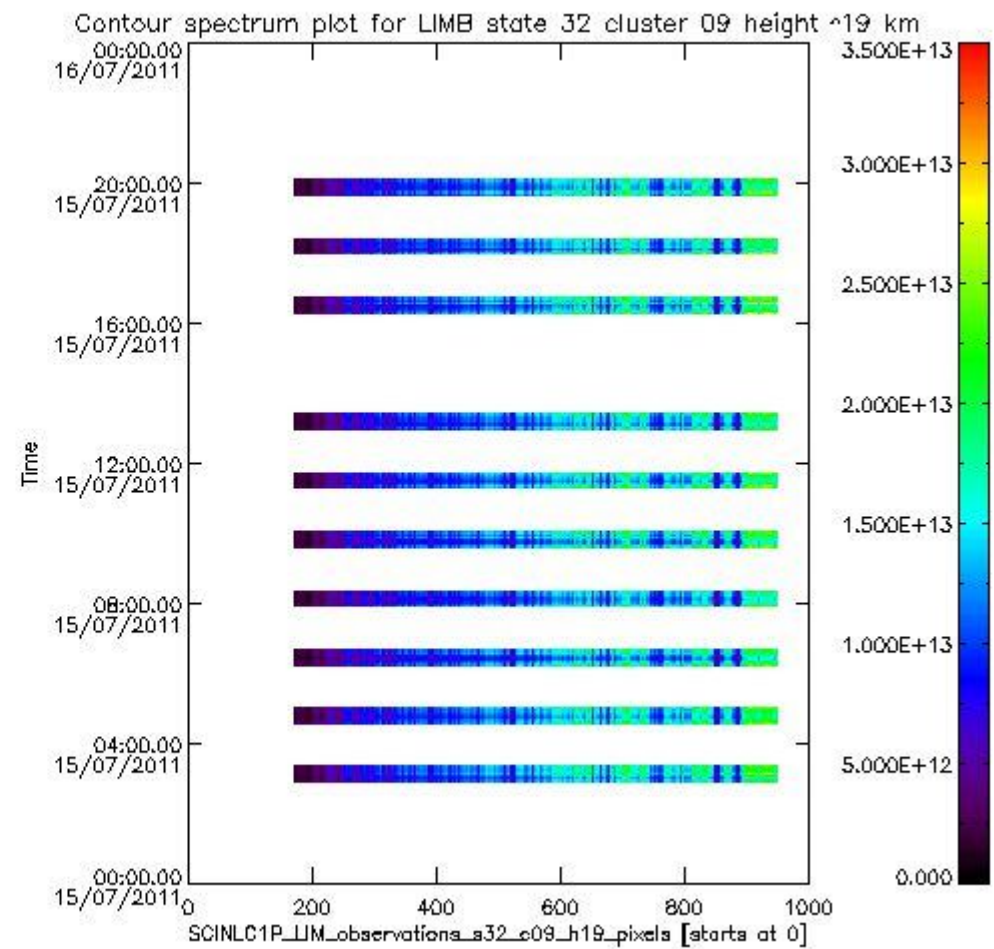
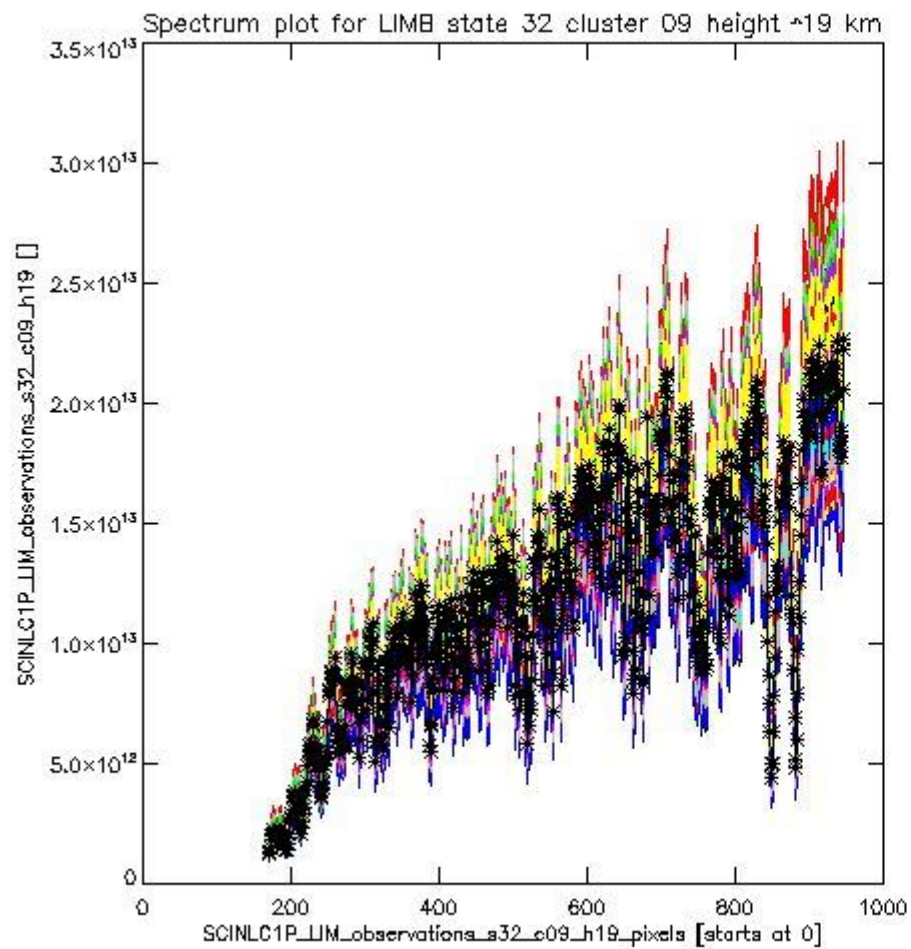


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_9.PNG

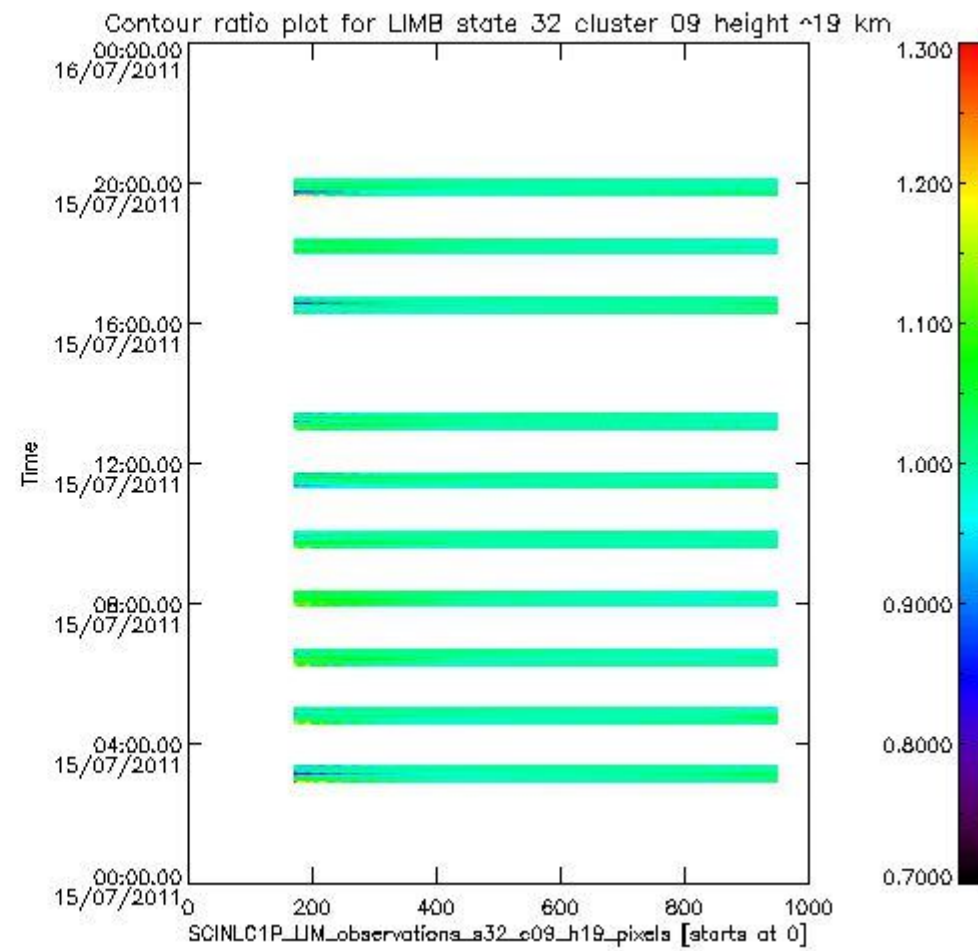
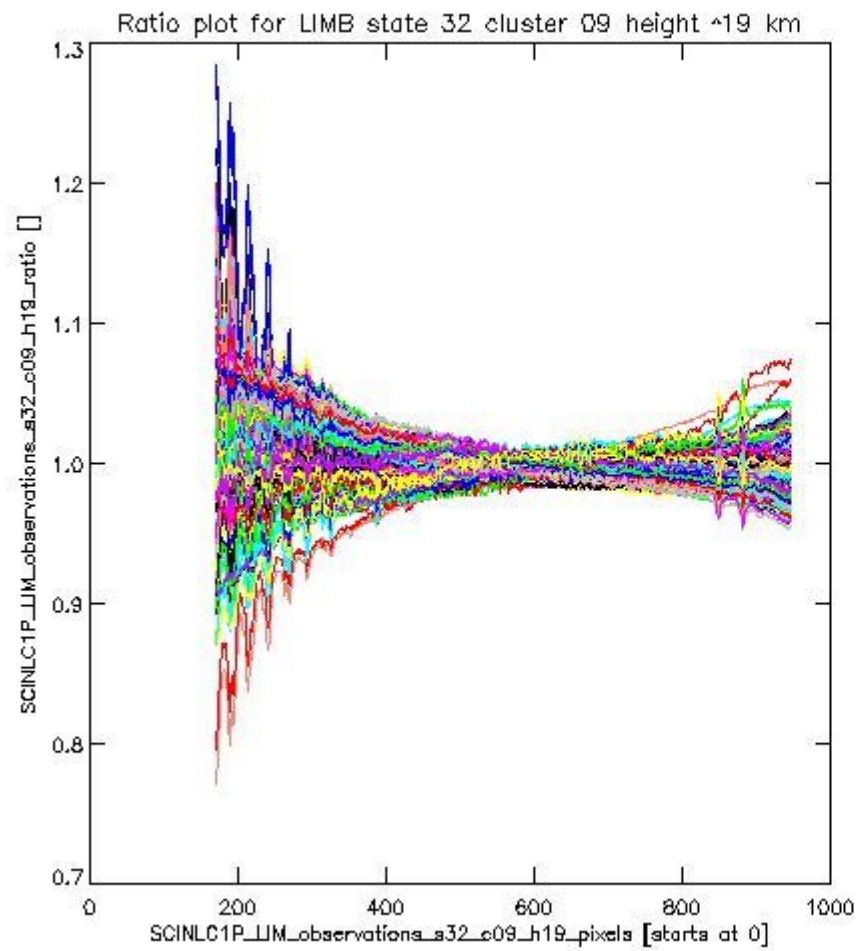
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	15JUL2011 02:52:56.107
Start time of last sample	15JUL2011 20:02:57.318
Reference period start time	15JUN2011 01:12:55.170
Reference period stop time	15JUL2011 20:02:57.318
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





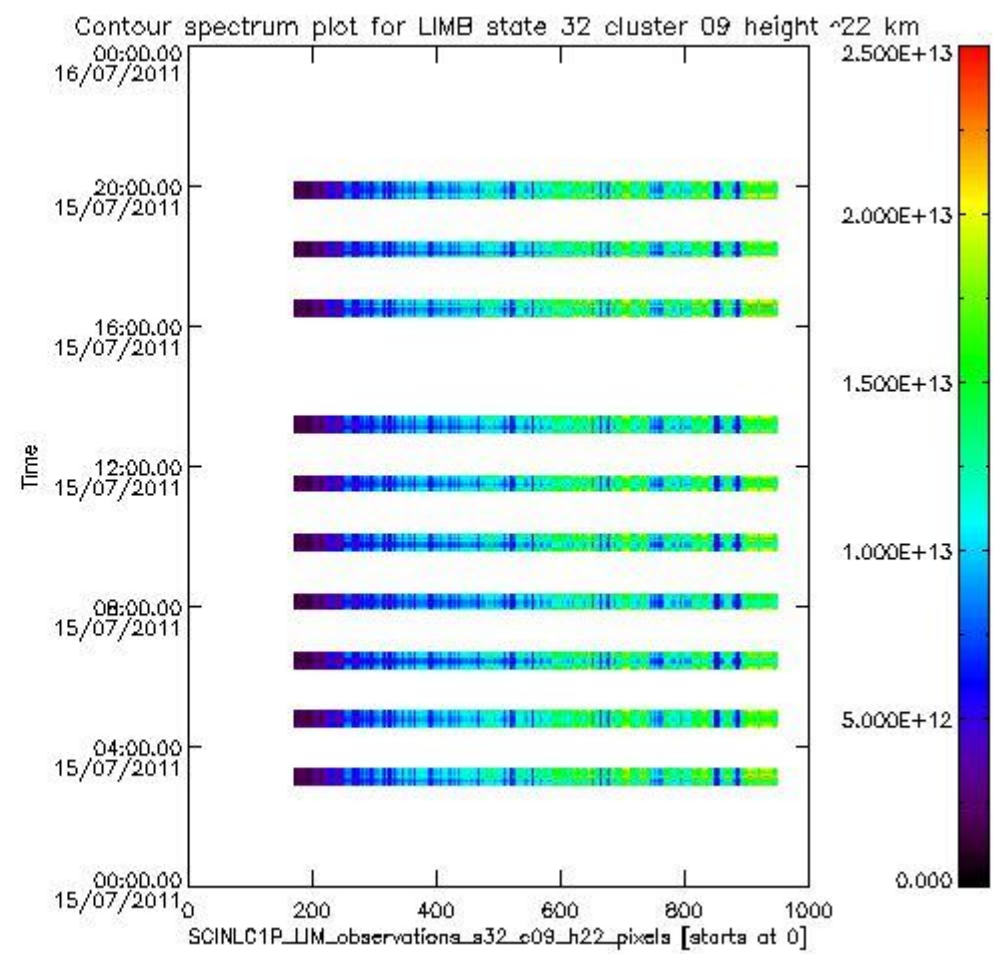
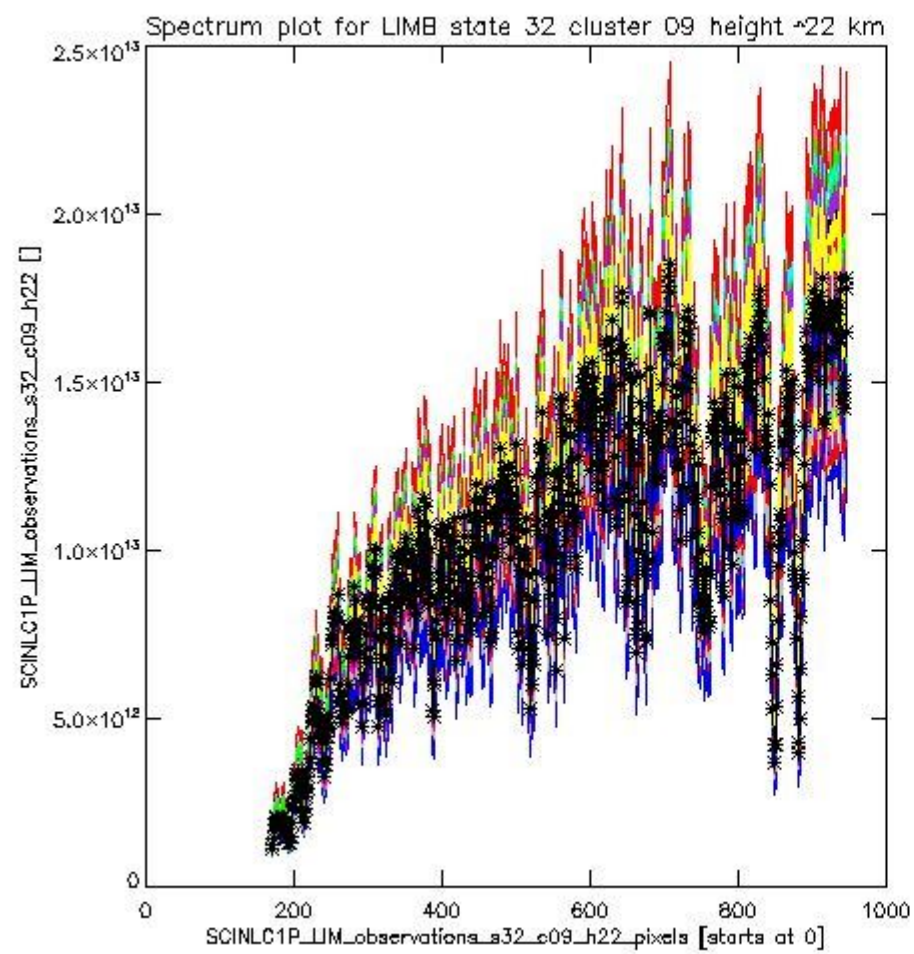
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_10.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_11.PNG

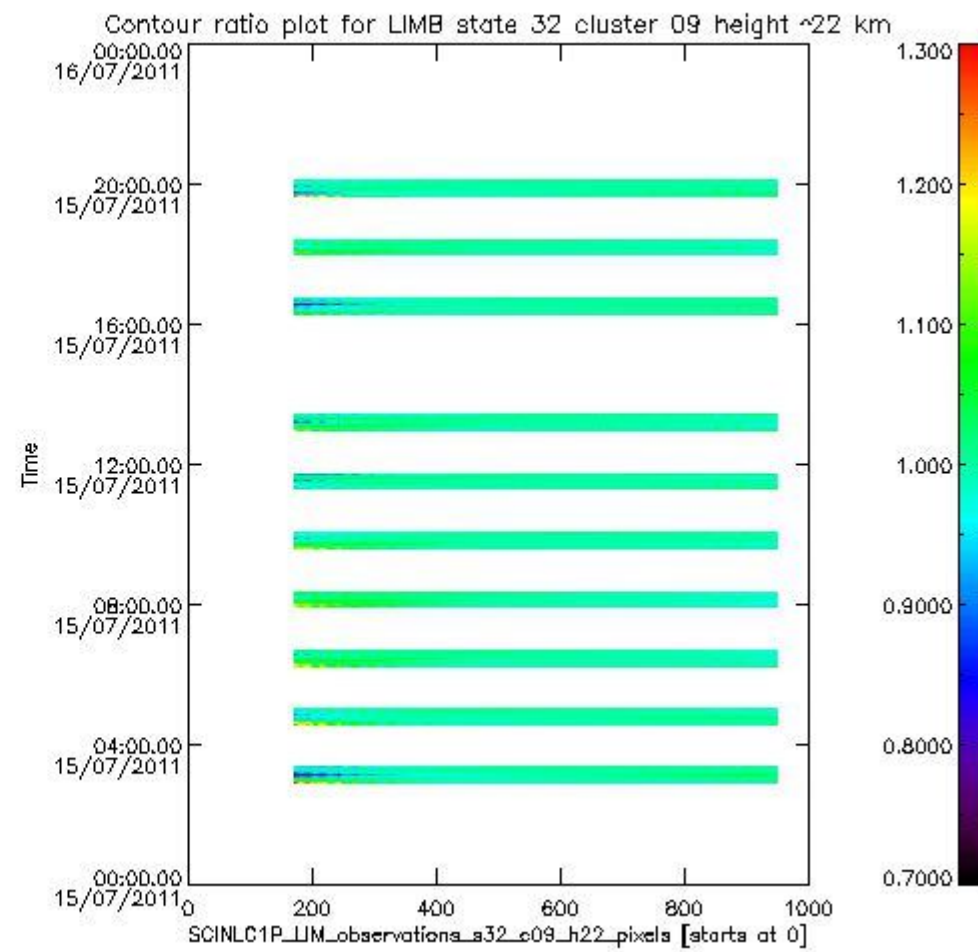
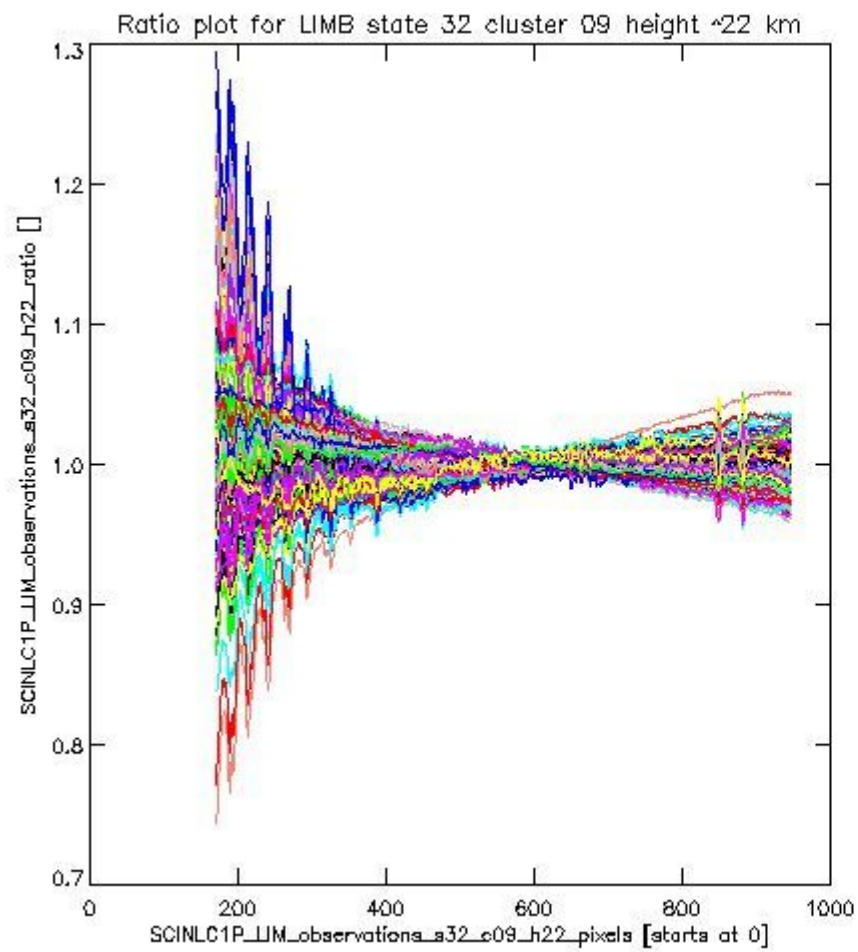
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	15JUL2011 02:52:56.107
Start time of last sample	15JUL2011 20:02:57.318
Reference period start time	15JUN2011 01:12:55.170
Reference period stop time	15JUL2011 20:02:57.318
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\_20110715\_12.PNG

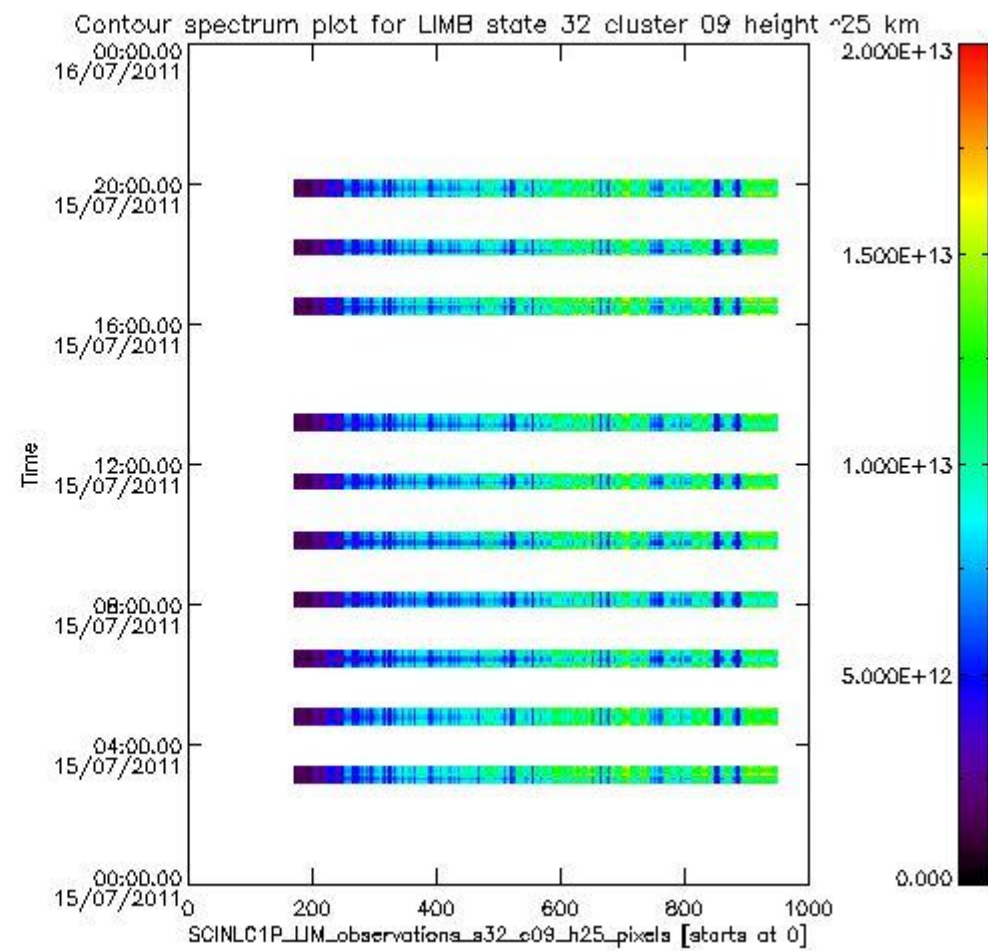
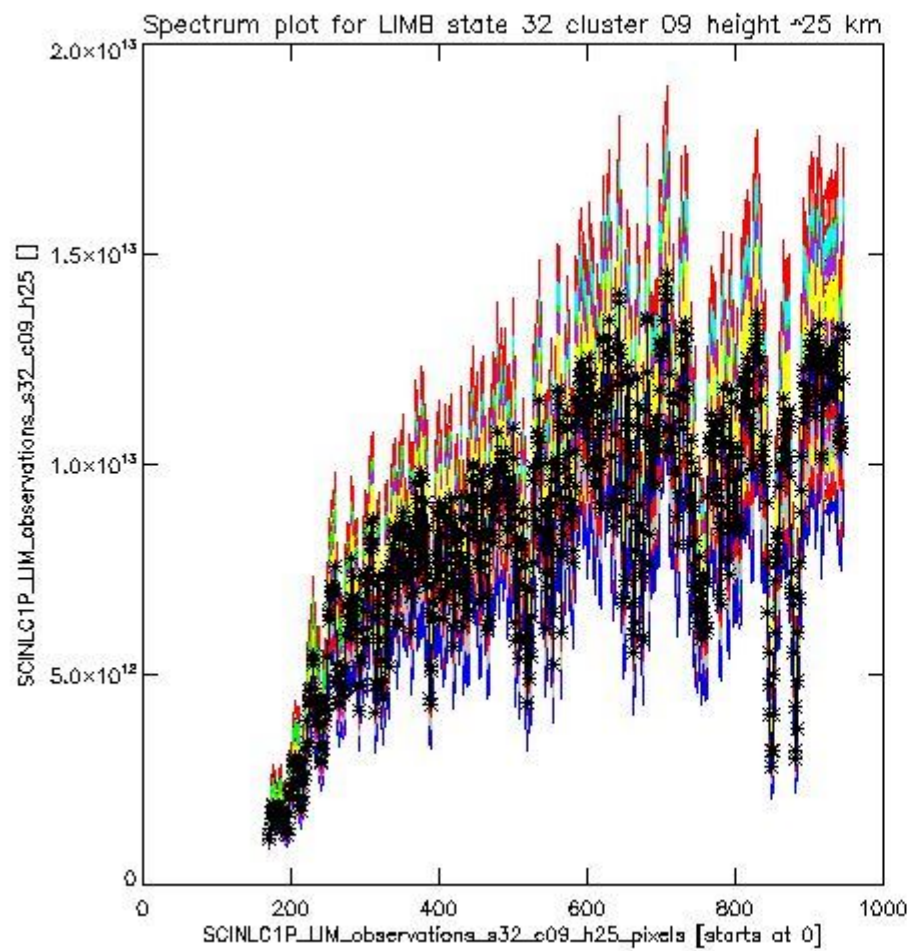




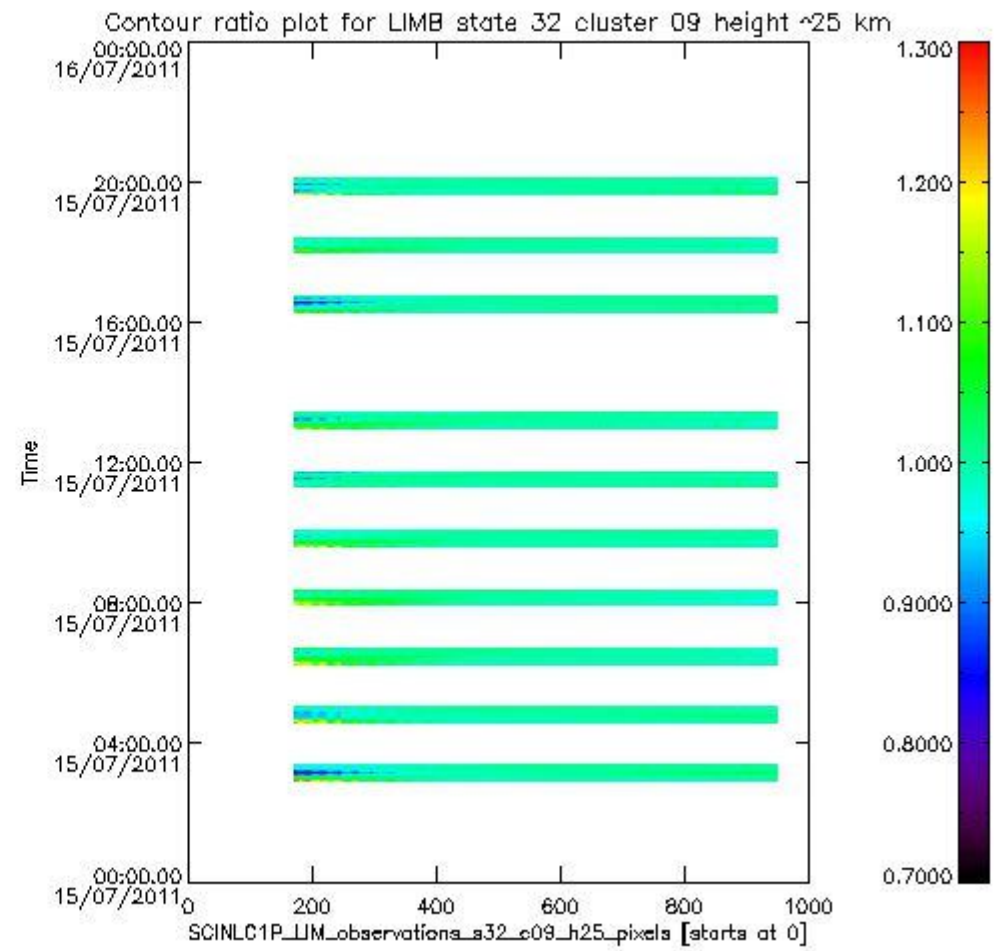
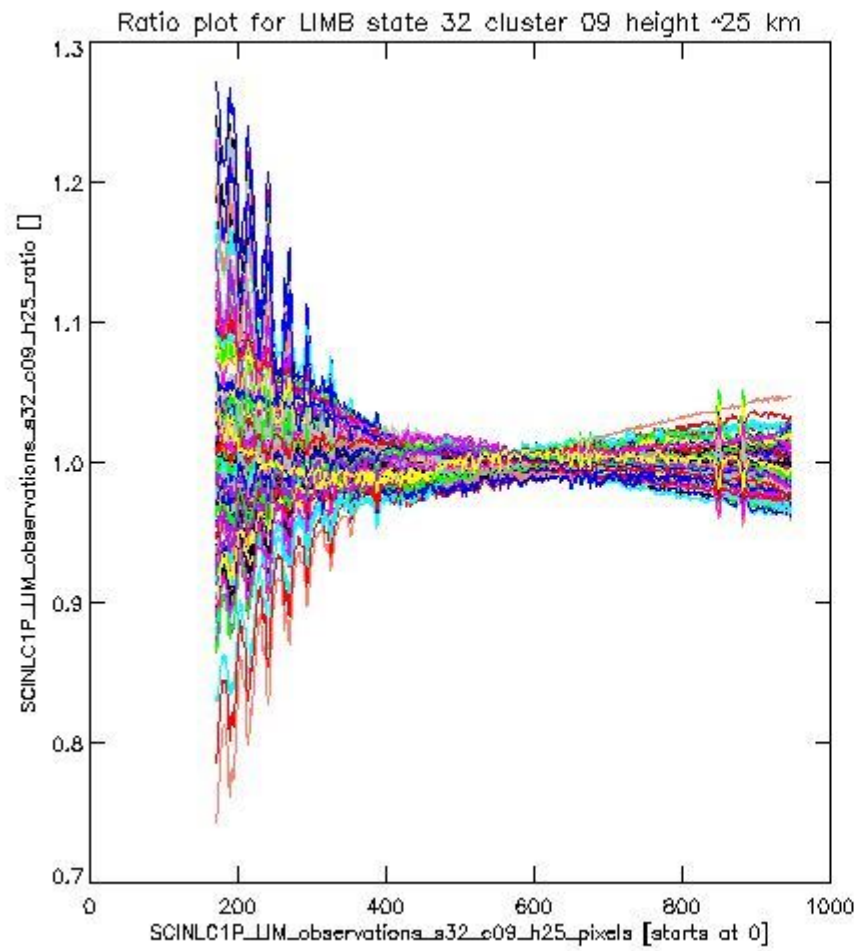
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_13.PNG

**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	15JUL2011 02:52:56.107
Start time of last sample	15JUL2011 20:02:57.318
Reference period start time	15JUN2011 01:12:55.170
Reference period stop time	15JUL2011 20:02:57.318
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\_20110715\_14.PNG

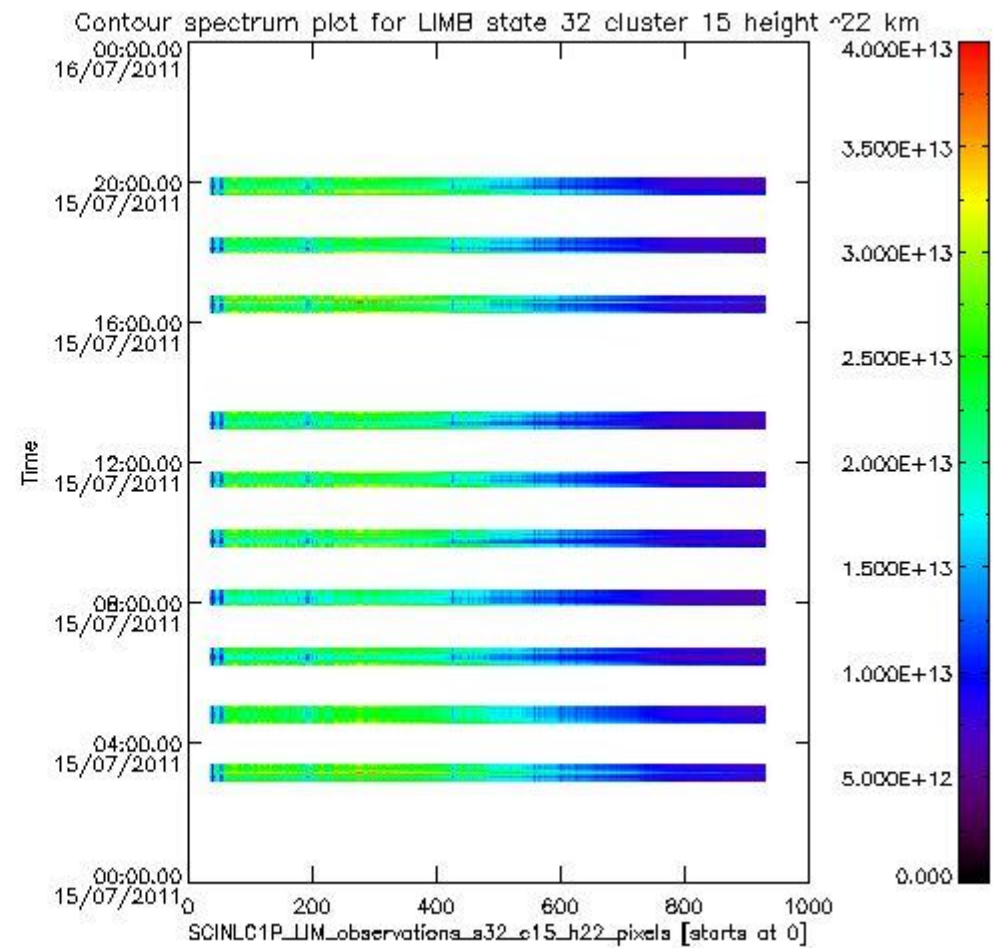
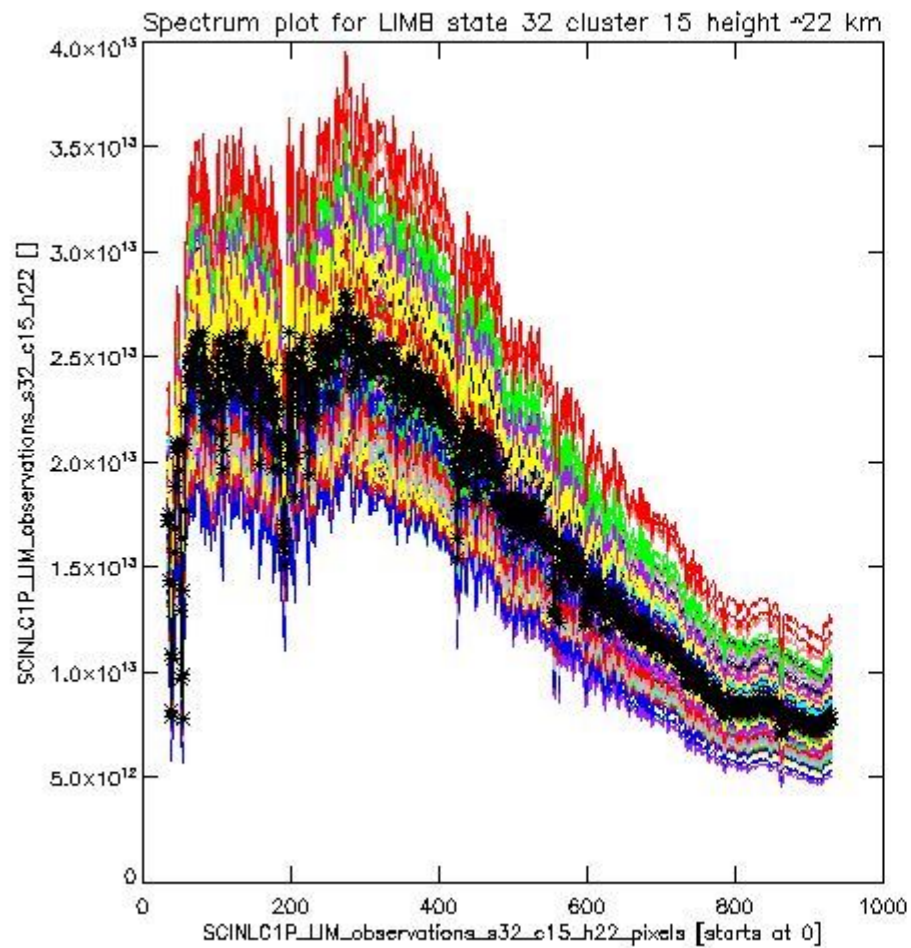


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_15.PNG

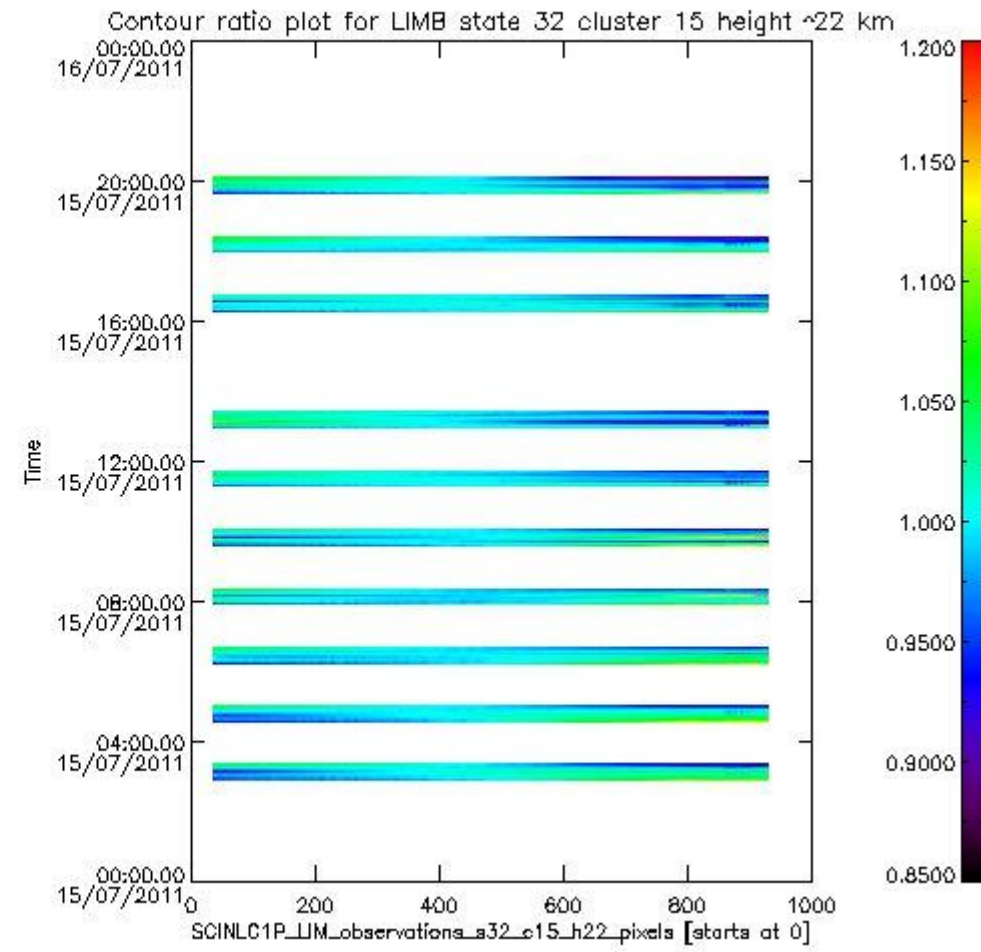
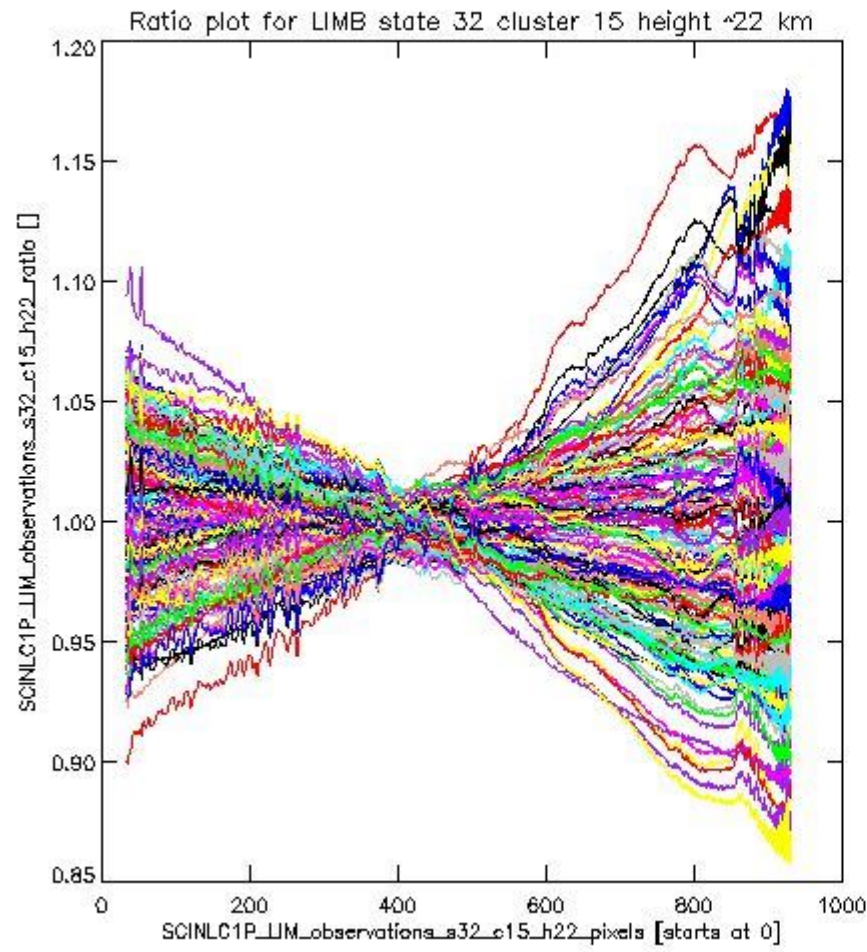
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	15JUL2011 02:52:56.107
Start time of last sample	15JUL2011 20:02:57.318
Reference period start time	15JUN2011 01:12:55.170
Reference period stop time	15JUL2011 20:02:57.318
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





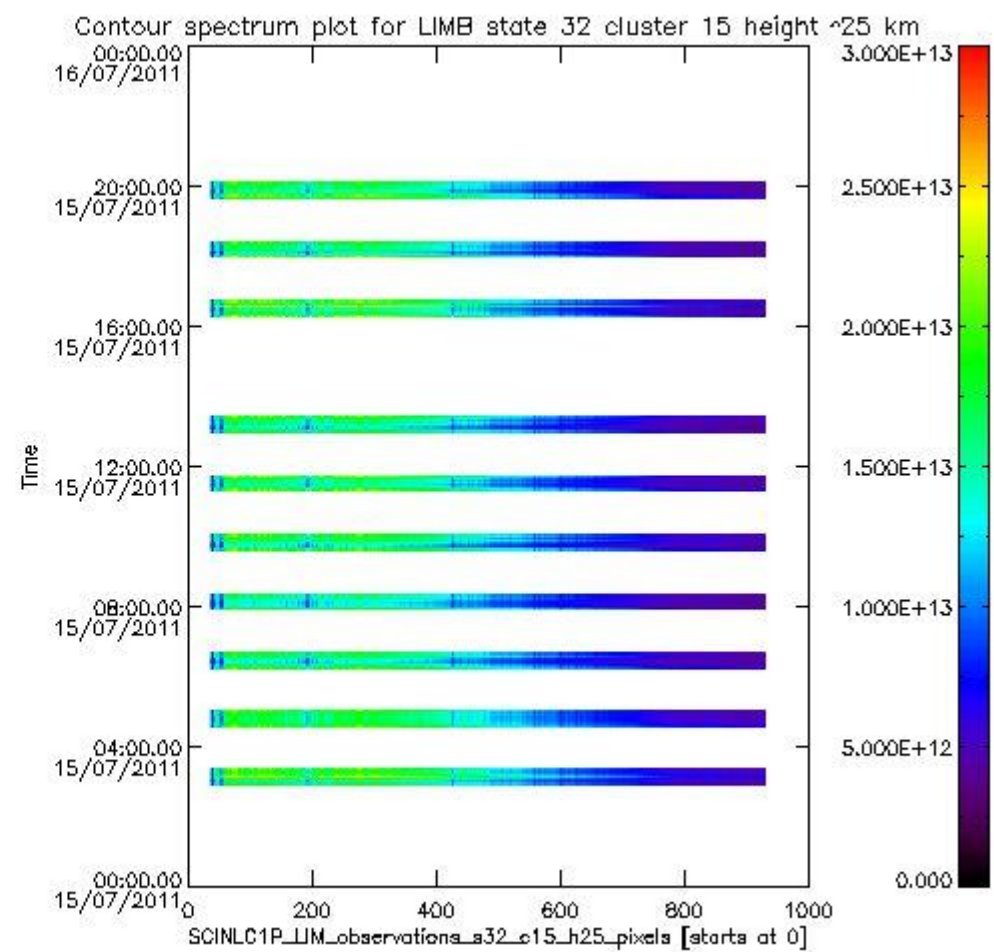
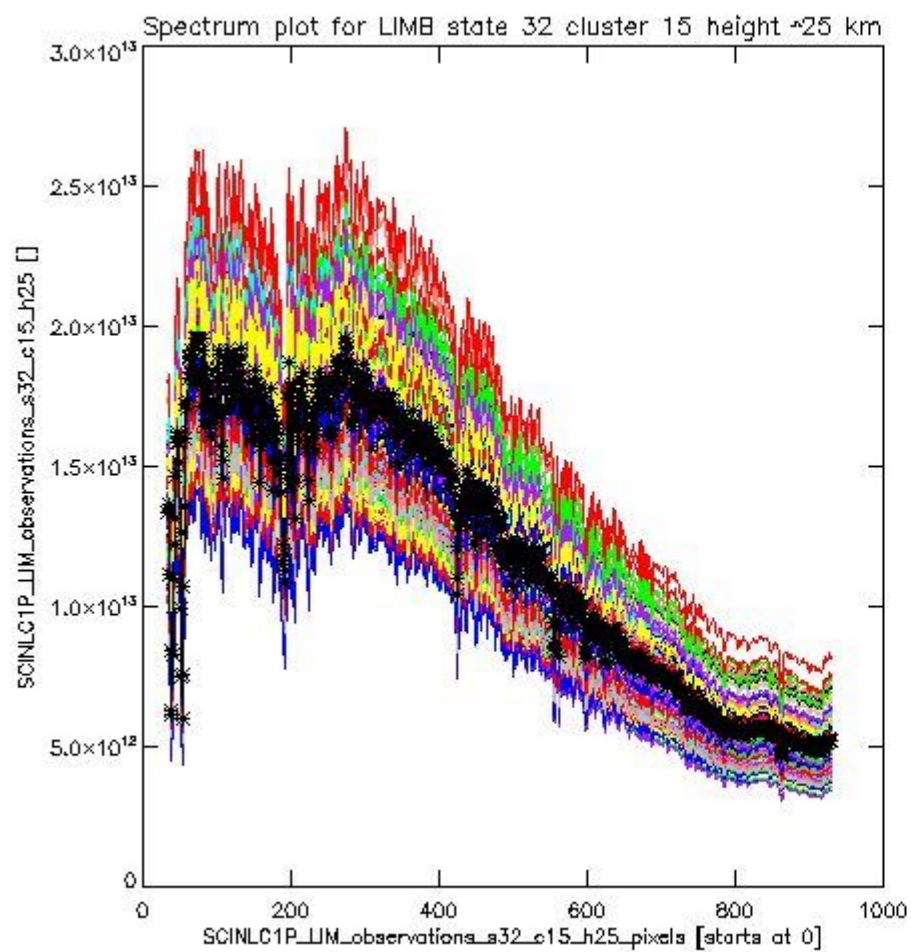
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_16.PNG



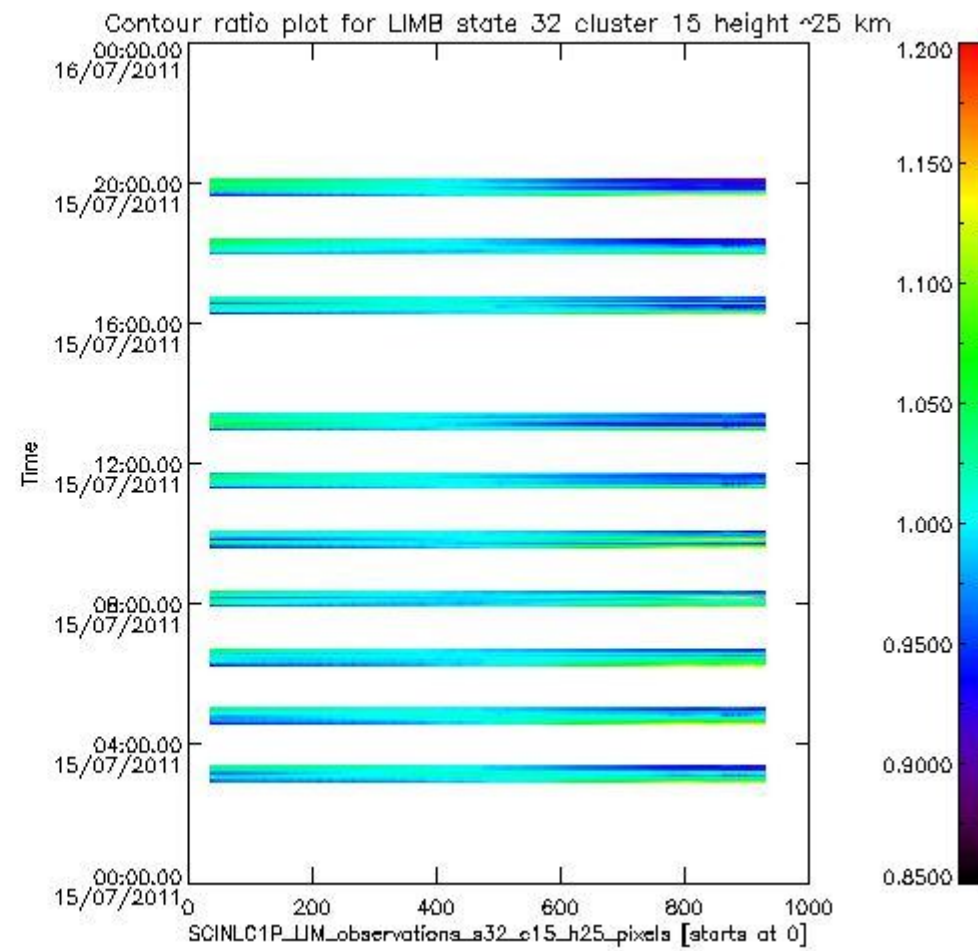
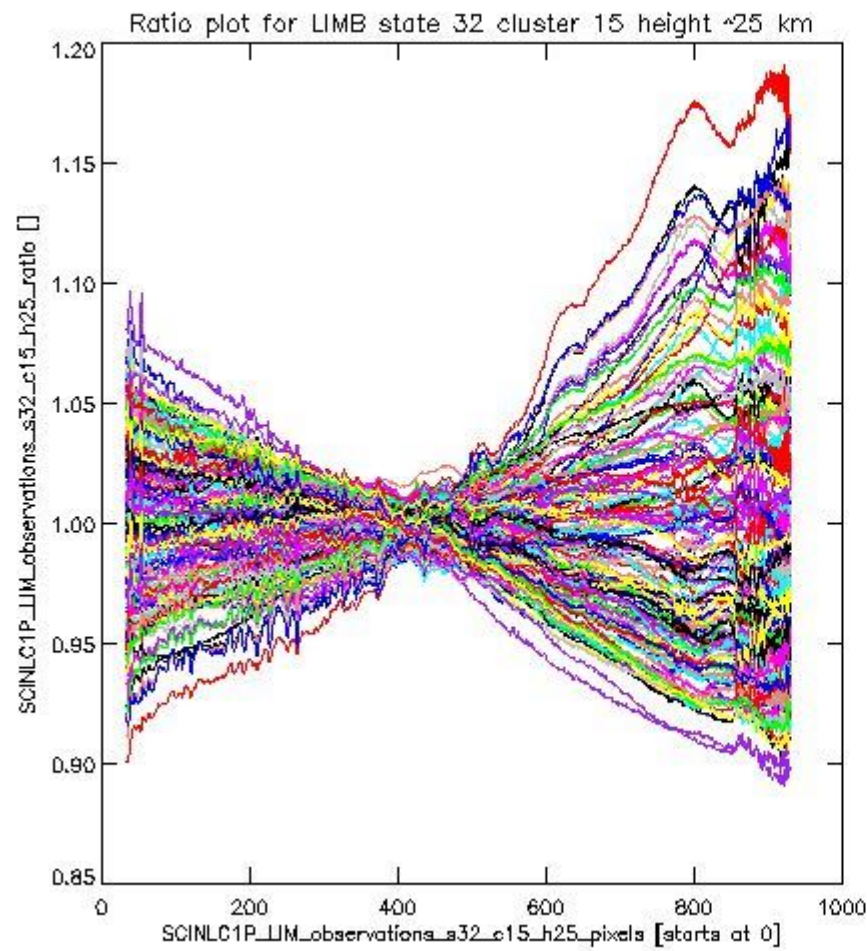
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_17.PNG

**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	15JUL2011 02:52:56.107
Start time of last sample	15JUL2011 20:02:57.318
Reference period start time	15JUN2011 01:12:55.170
Reference period stop time	15JUL2011 20:02:57.318
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



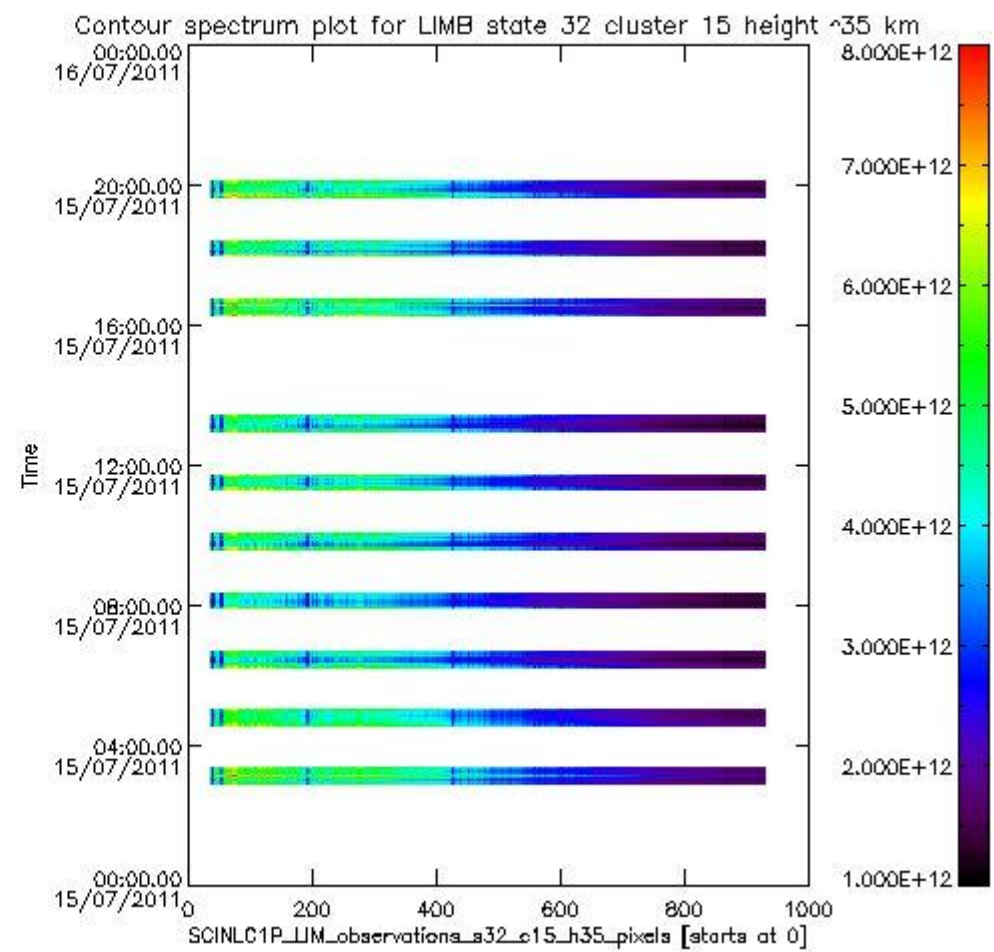
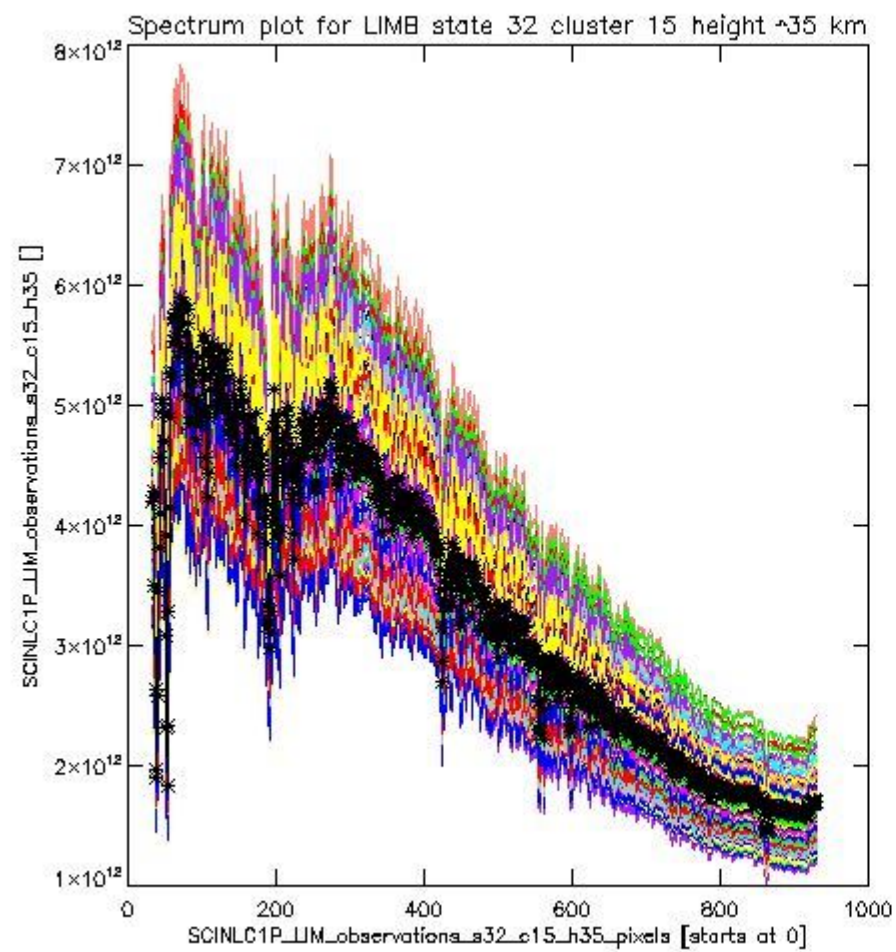


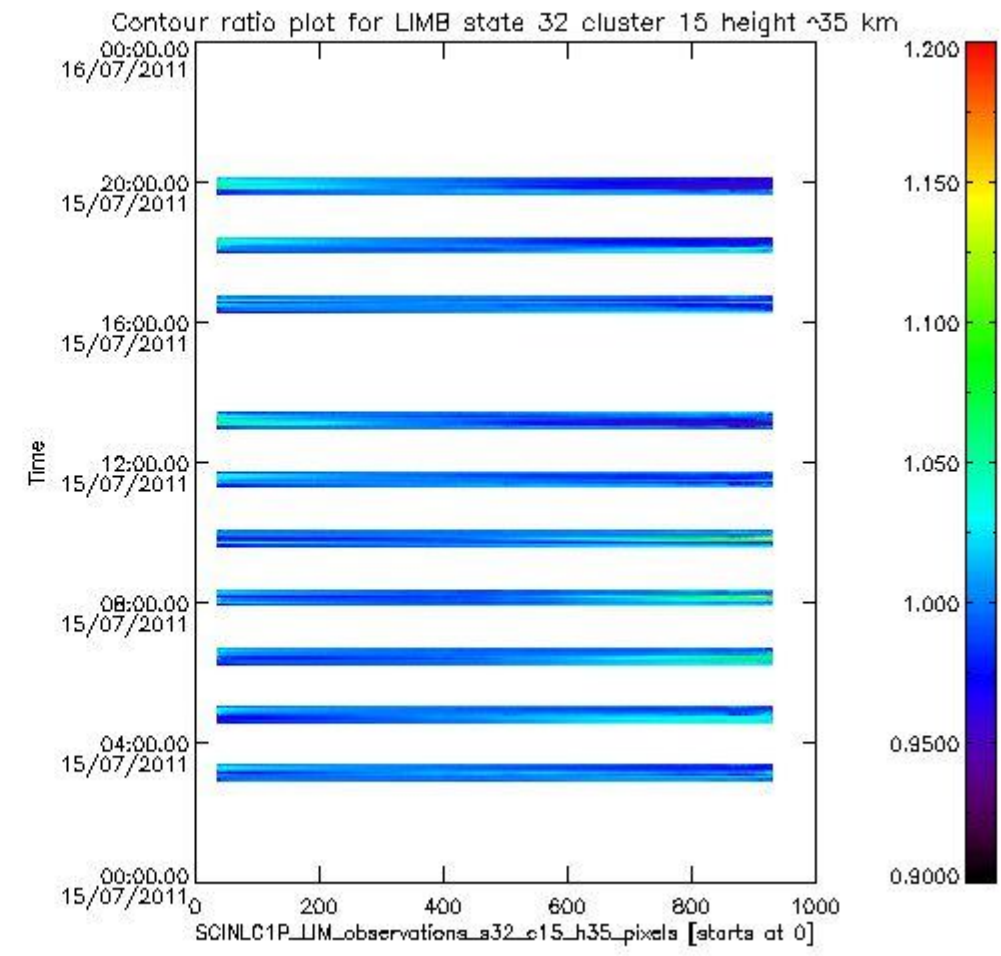
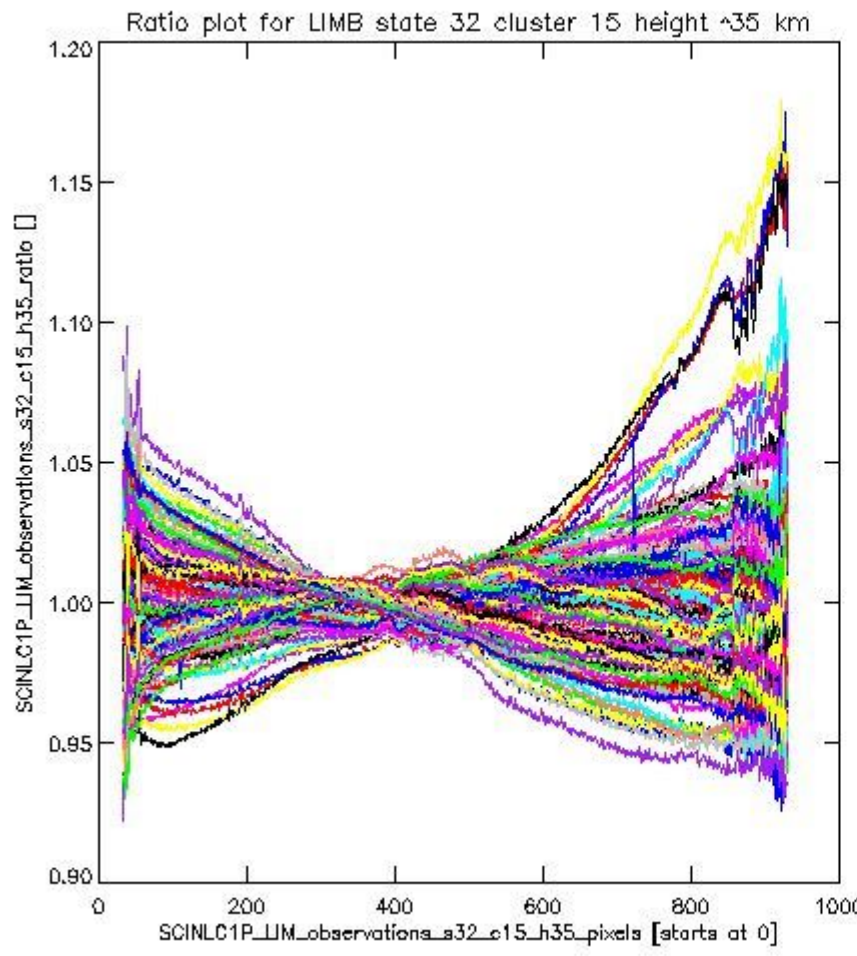


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110715\_19.PNG

**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	15JUL2011 02:52:56.107
Start time of last sample	15JUL2011 20:02:57.318
Reference period start time	15JUN2011 02:53:09.011
Reference period stop time	15JUL2011 20:02:57.318
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\_20110715\_21.PNG



