

# 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	03JUL2011 06:30:51
Data source version	SCIA/7.04-U
Processing scope for products	20JUN2011 00:00:00 to 21JUN2011 00:00:00
Start time of first product within scope	19JUN2011 23:30:31
Stop time of last product within scope	21JUN2011 00:04:01
Total number of level 1 products	15
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	20JUN2011 00:02:34.546	20JUN2011 23:36:03.553
1	NADIR	07	09	N/A	20JUN2011 00:02:34.546	20JUN2011 23:36:03.553
2	NADIR	07	15	N/A	20JUN2011 00:02:34.546	20JUN2011 23:36:03.553
3	NADIR	07	24	N/A	20JUN2011 00:02:34.546	20JUN2011 23:36:03.553
4	NADIR	07	55	N/A	20JUN2011 00:02:34.546	20JUN2011 23:36:03.553
5	LIMB	32	09	~19 km	20JUN2011 00:01:40.362	20JUN2011 23:39:14.857
6	LIMB	32	09	~22 km	20JUN2011 00:01:40.362	20JUN2011 23:39:14.857
7	LIMB	32	09	~25 km	20JUN2011 00:01:40.362	20JUN2011 23:39:14.857
8	LIMB	32	15	~22 km	20JUN2011 00:01:40.362	20JUN2011 23:39:14.857
9	LIMB	32	15	~25 km	20JUN2011 00:01:40.362	20JUN2011 23:39:14.857
10	LIMB	32	15	~35 km	20JUN2011 00:01:40.362	20JUN2011 23:39:14.857

#### 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	#noprocc	#cmpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110619_233031_000057423103_00361_48651_2352.N1</a>	19JUN2011 23:30:31	20JUN2011 00:40:46	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110620_011045_000057423103_00362_48652_2354.N1</a>	20JUN2011 01:10:45	20JUN2011 02:21:14	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110620_025059_000057433103_00363_48653_2355.N1</a>	20JUN2011 02:50:59	20JUN2011 04:01:14	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110620_043113_000057433103_00364_48654_2357.N1</a>	20JUN2011 04:31:13	20JUN2011 05:41:42	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110620_061127_000057433103_00365_48655_2358.N1</a>	20JUN2011 06:11:27	20JUN2011 07:21:42	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110620_075141_000057423103_00366_48656_2360.N1</a>	20JUN2011 07:51:41	20JUN2011 09:02:10	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110620_093155_000057433103_00367_48657_2363.N1	20JUN2011 09:31:55	20JUN2011 10:42:10	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110620_111209_000057423103_00368_48658_2366.N1	20JUN2011 11:12:09	20JUN2011 12:22:38	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110620_125223_000057433103_00369_48659_2369.N1	20JUN2011 12:52:23	20JUN2011 14:02:38	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110620_143237_000057433103_00370_48660_2372.N1	20JUN2011 14:32:37	20JUN2011 15:43:06	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110620_161251_000057433103_00371_48661_2374.N1	20JUN2011 16:12:51	20JUN2011 17:23:06	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110620_175305_000057433103_00372_48662_2375.N1	20JUN2011 17:53:05	20JUN2011 19:03:43	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110620_193319_000057433103_00373_48663_2378.N1	20JUN2011 19:33:19	20JUN2011 20:43:43	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110620_211333_000057433103_00374_48664_2380.N1	20JUN2011 21:13:33	20JUN2011 22:24:02	0	36	30	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110620_225347_000057433103_00375_48665_2381.N1	20JUN2011 22:53:47	21JUN2011 00:04:01	0	35	31	0	0	1	0	0	

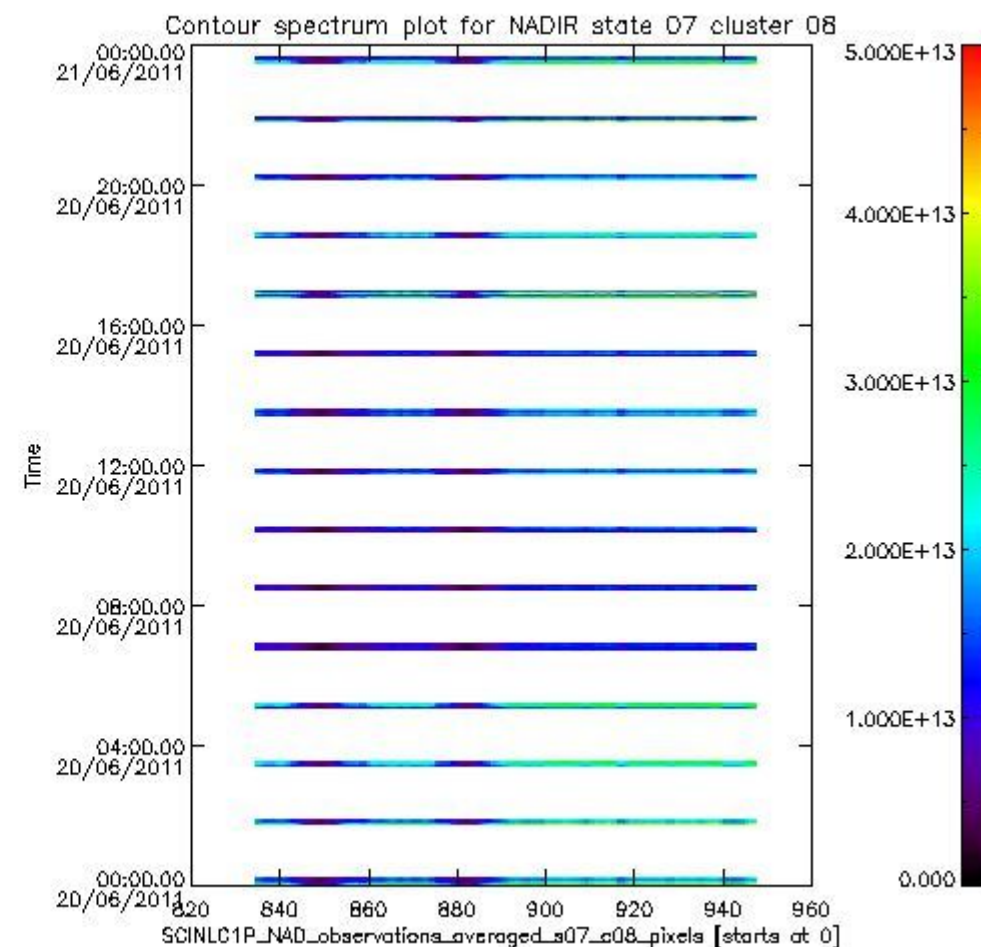
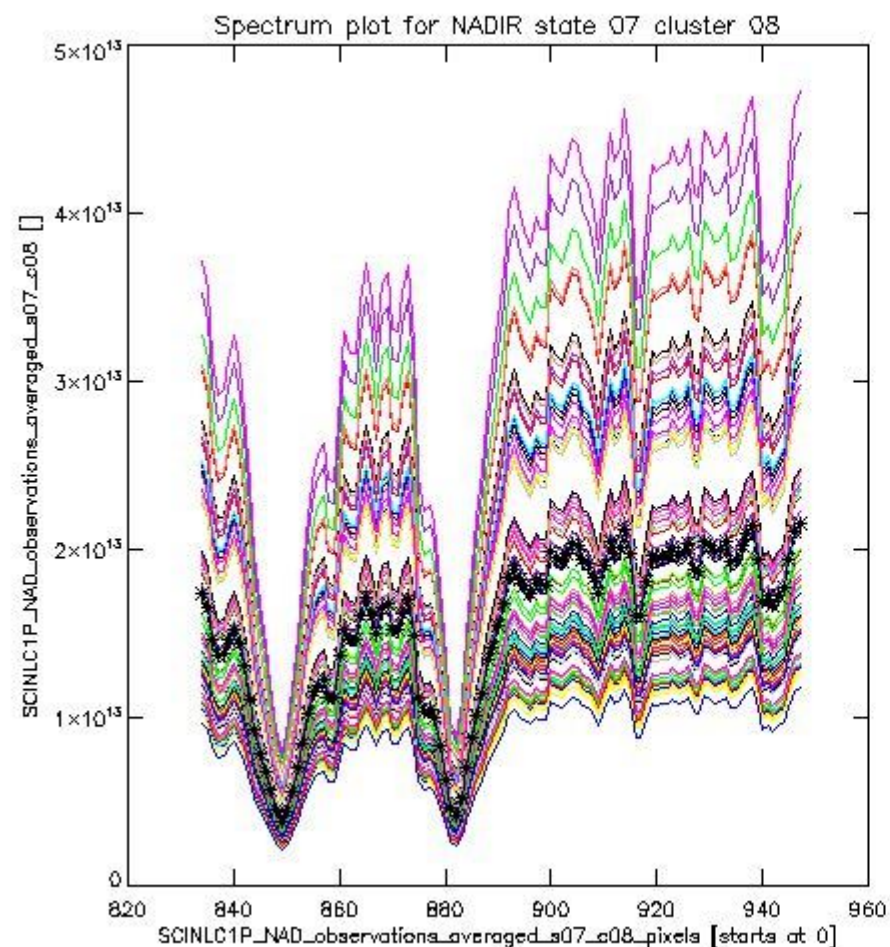
## 1.2 Source packet monitoring

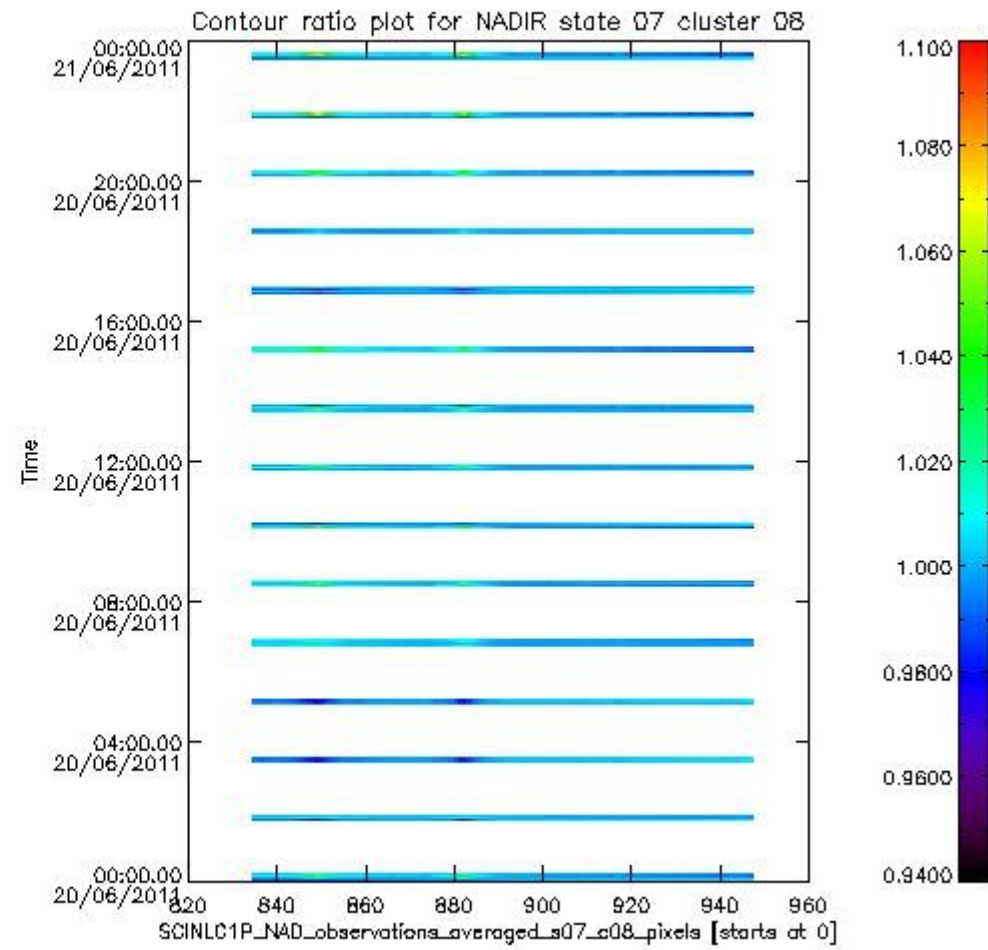
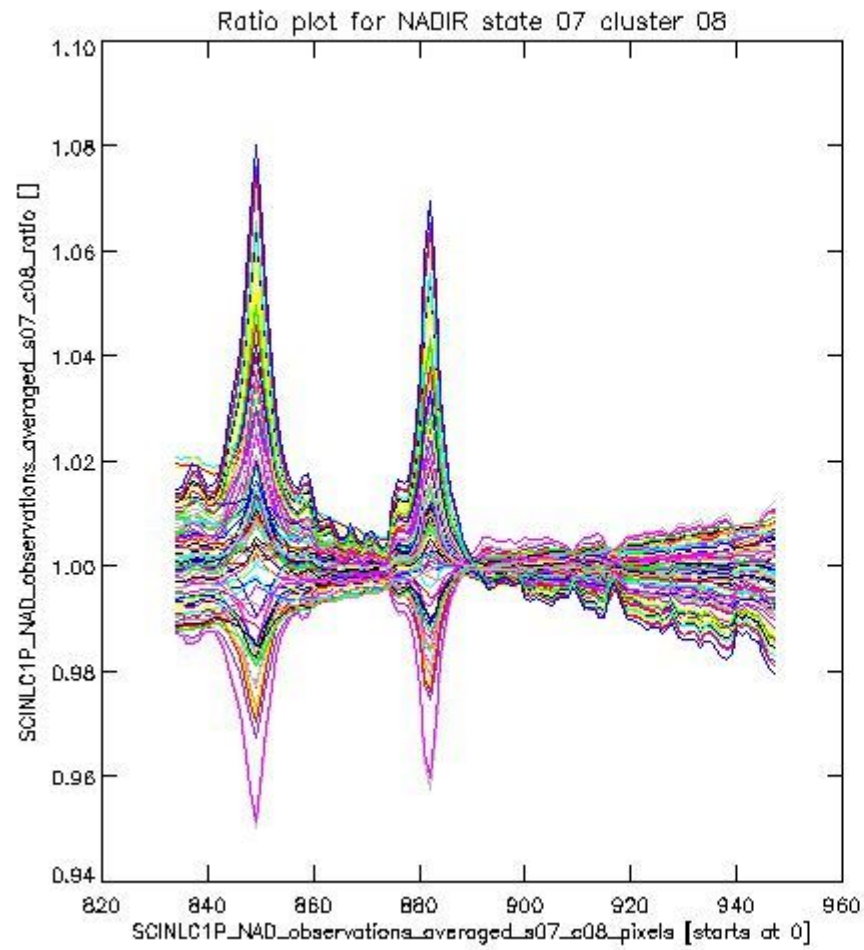
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	20JUN2011 00:02:34.546
Start time of last sample	20JUN2011 23:36:03.553
Reference period start time	21MAY2011 00:04:18.865
Reference period stop time	19JUN2011 17:31:52.468
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

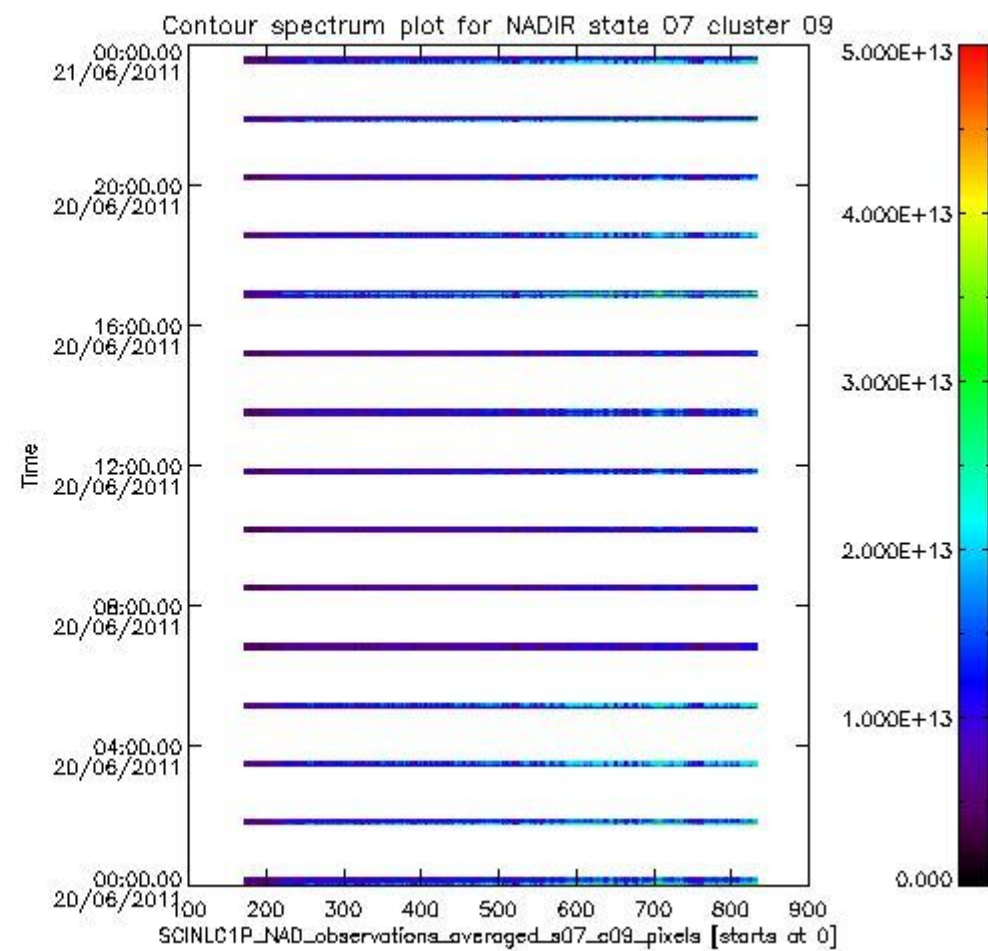
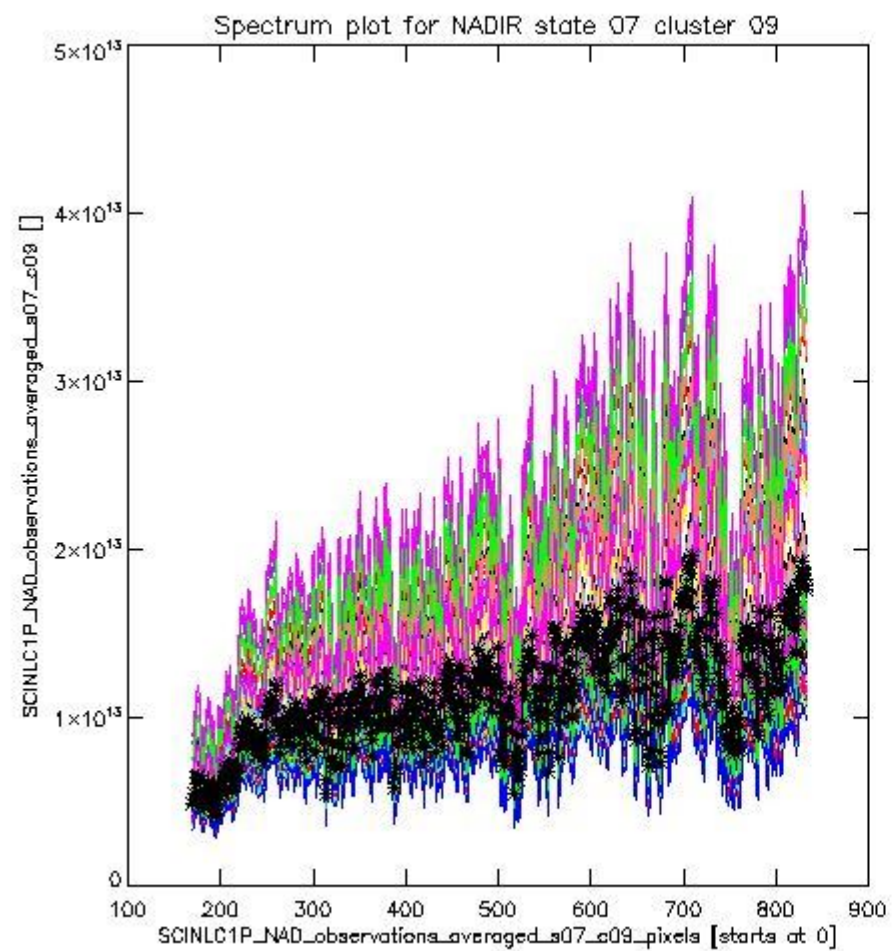




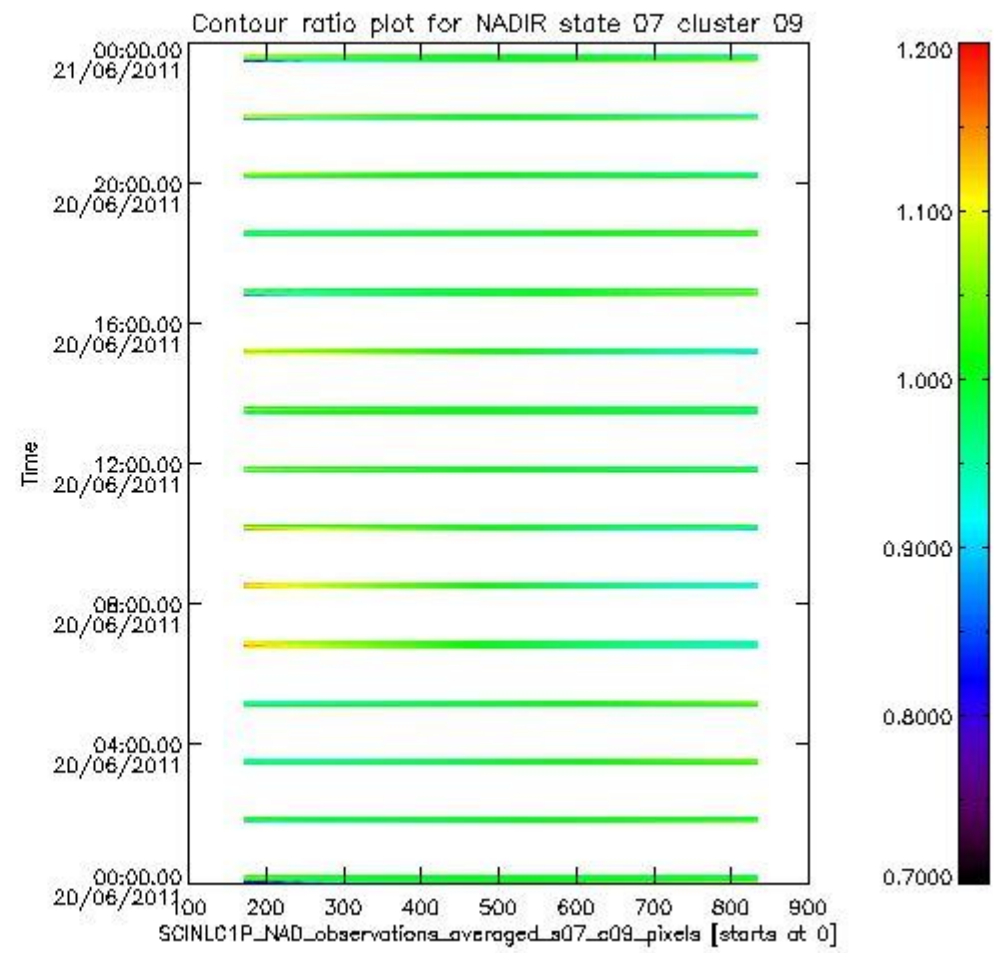
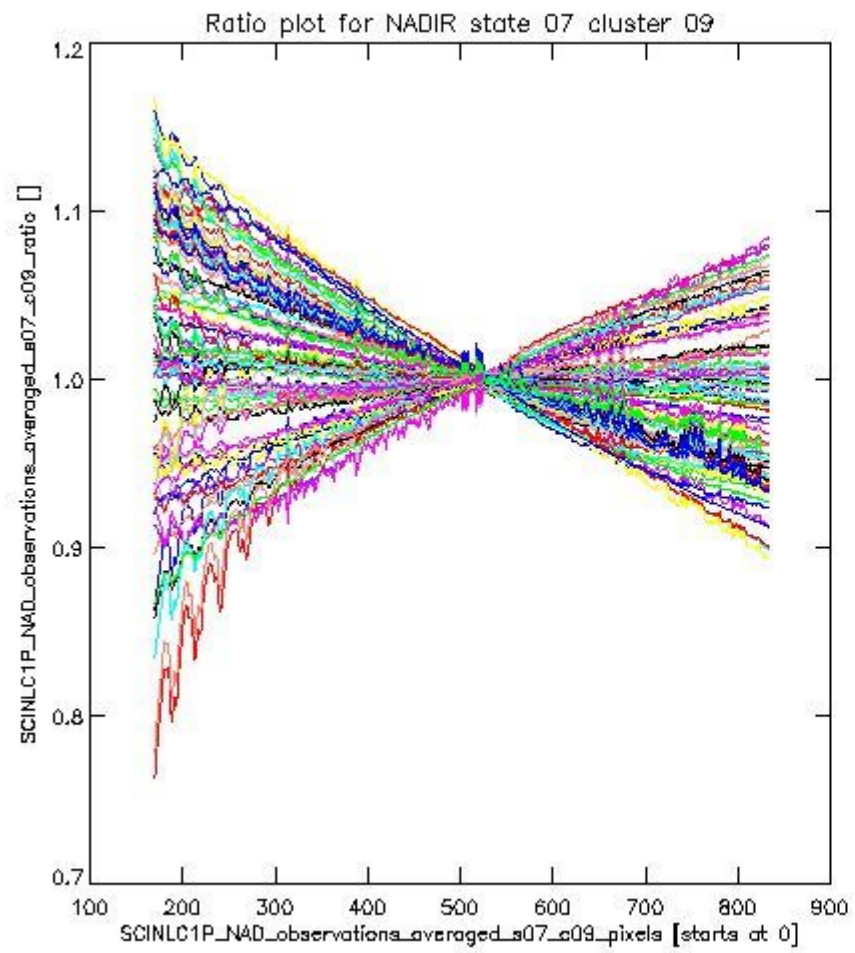
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	20JUN2011 00:02:34.546
Start time of last sample	20JUN2011 23:36:03.553
Reference period start time	21MAY2011 00:04:18.865
Reference period stop time	19JUN2011 17:31:52.468
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





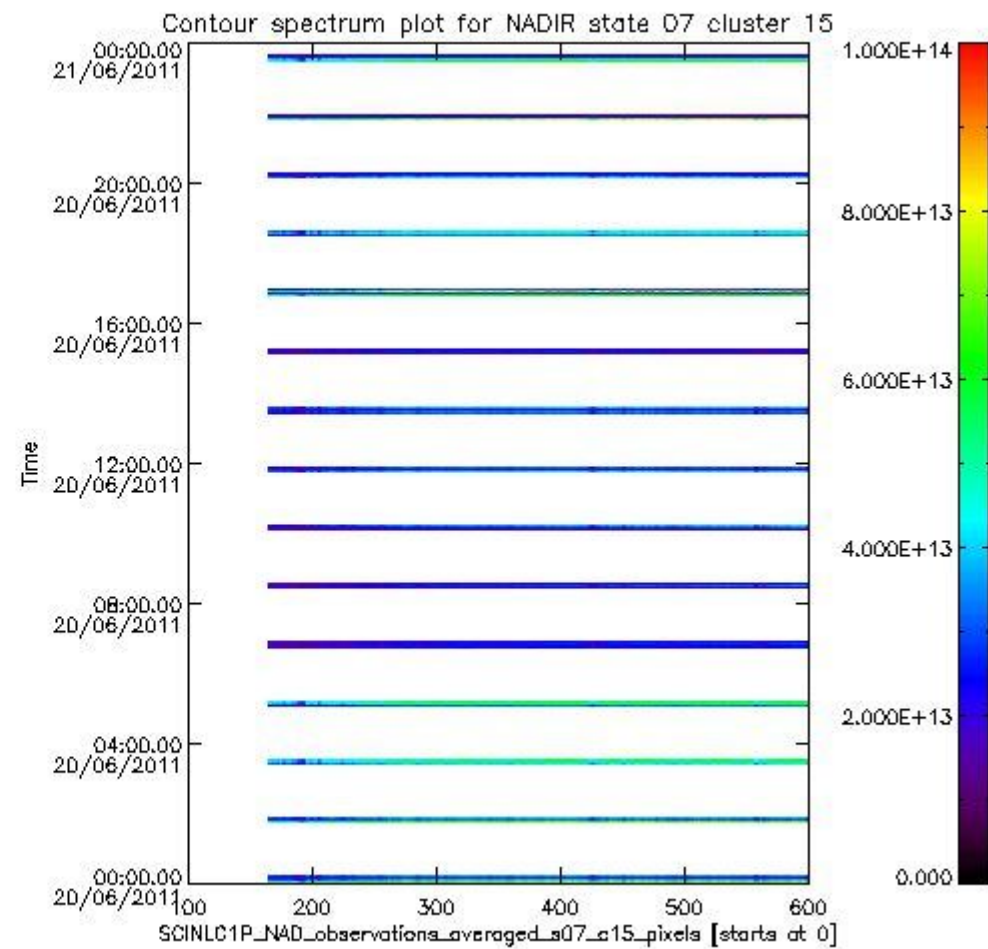
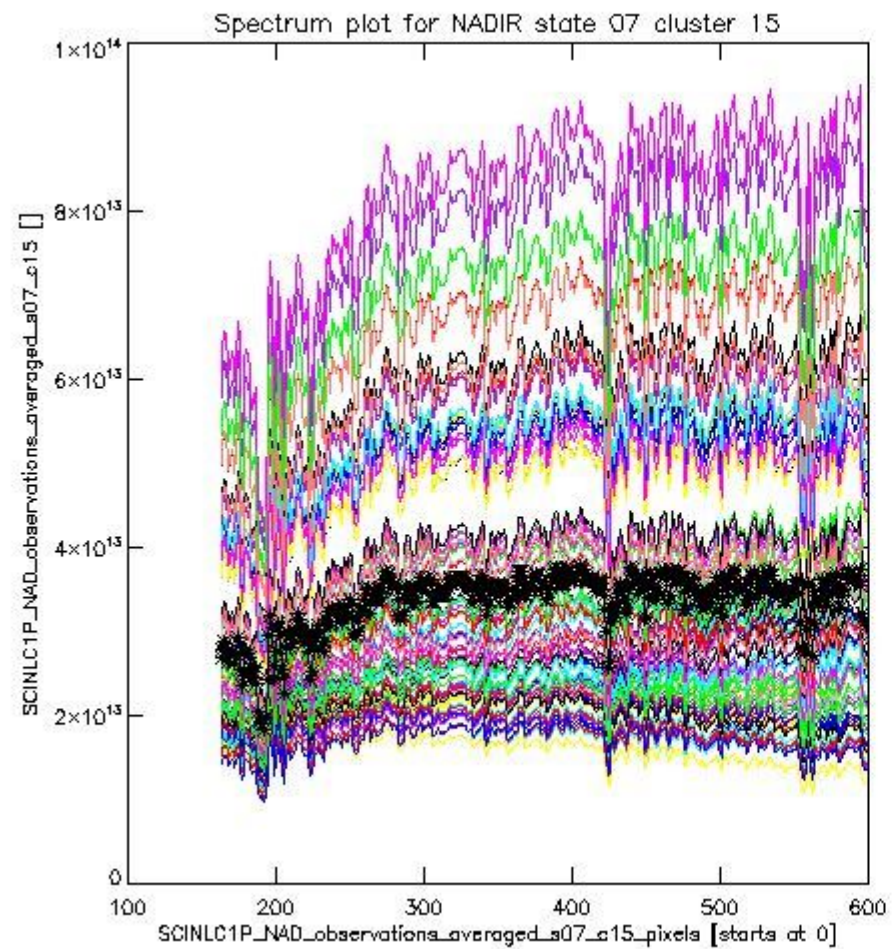
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_3.PNG

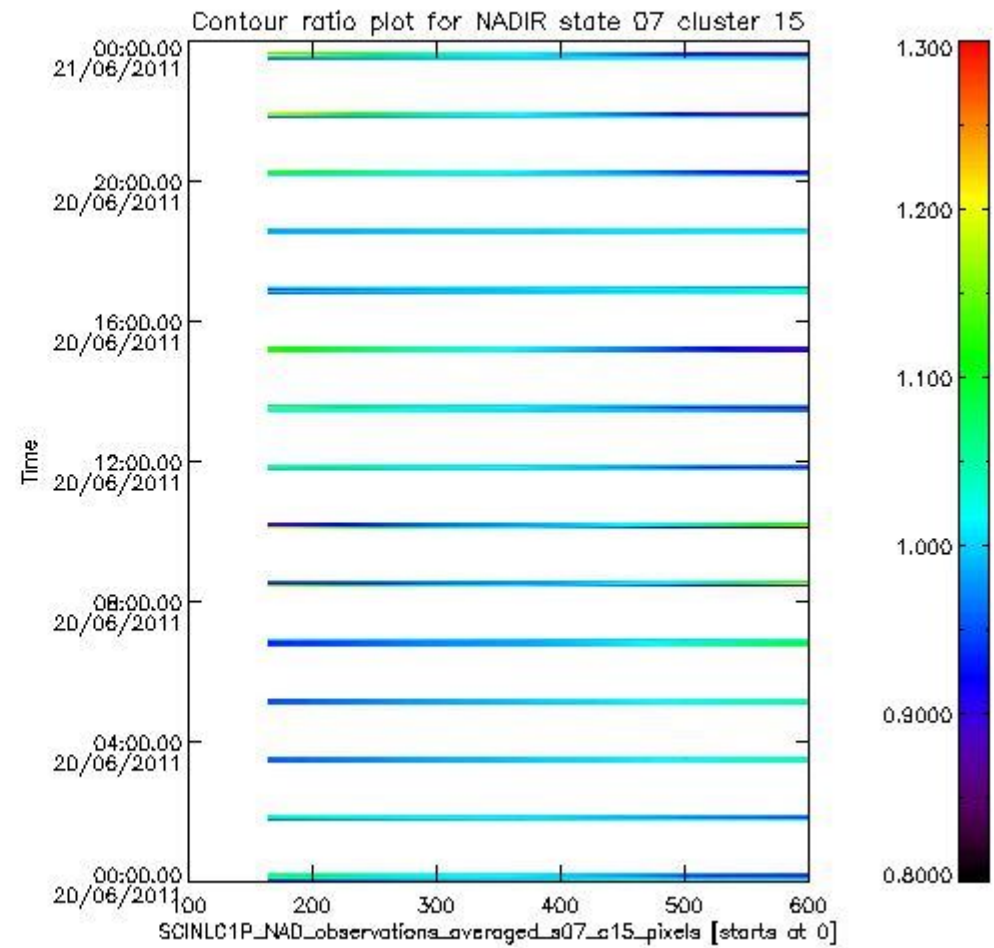
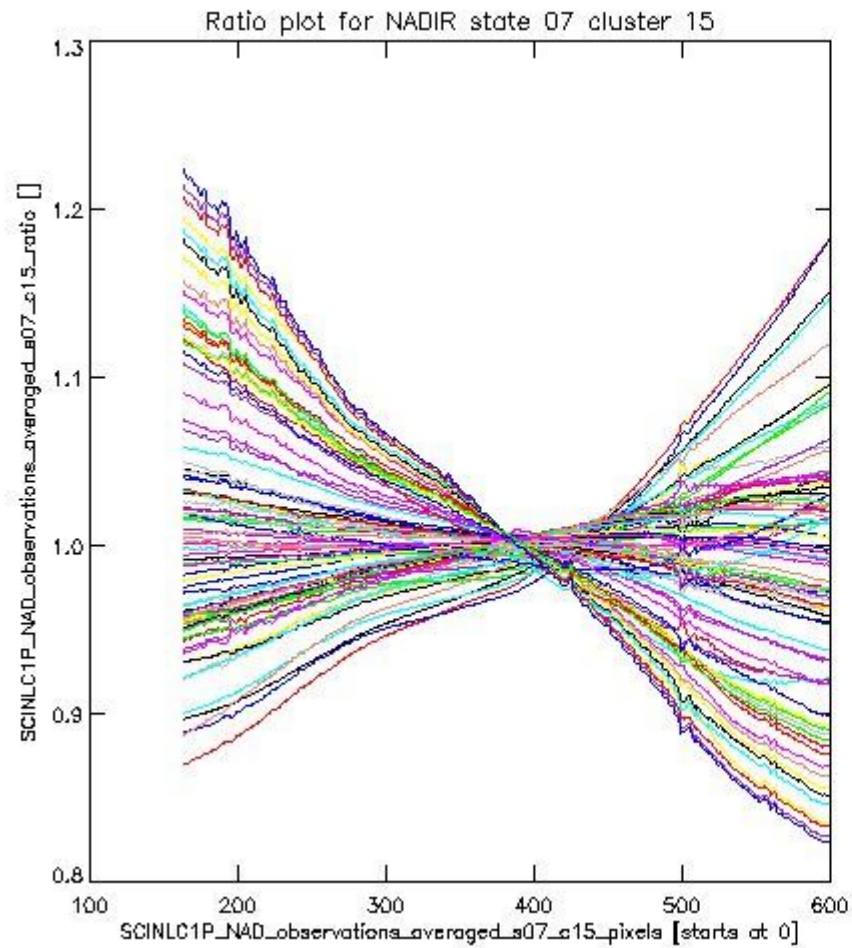
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	20JUN2011 00:02:34.546
Start time of last sample	20JUN2011 23:36:03.553
Reference period start time	21MAY2011 00:04:18.865
Reference period stop time	19JUN2011 17:31:52.468
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\_20110620\_4.PNG

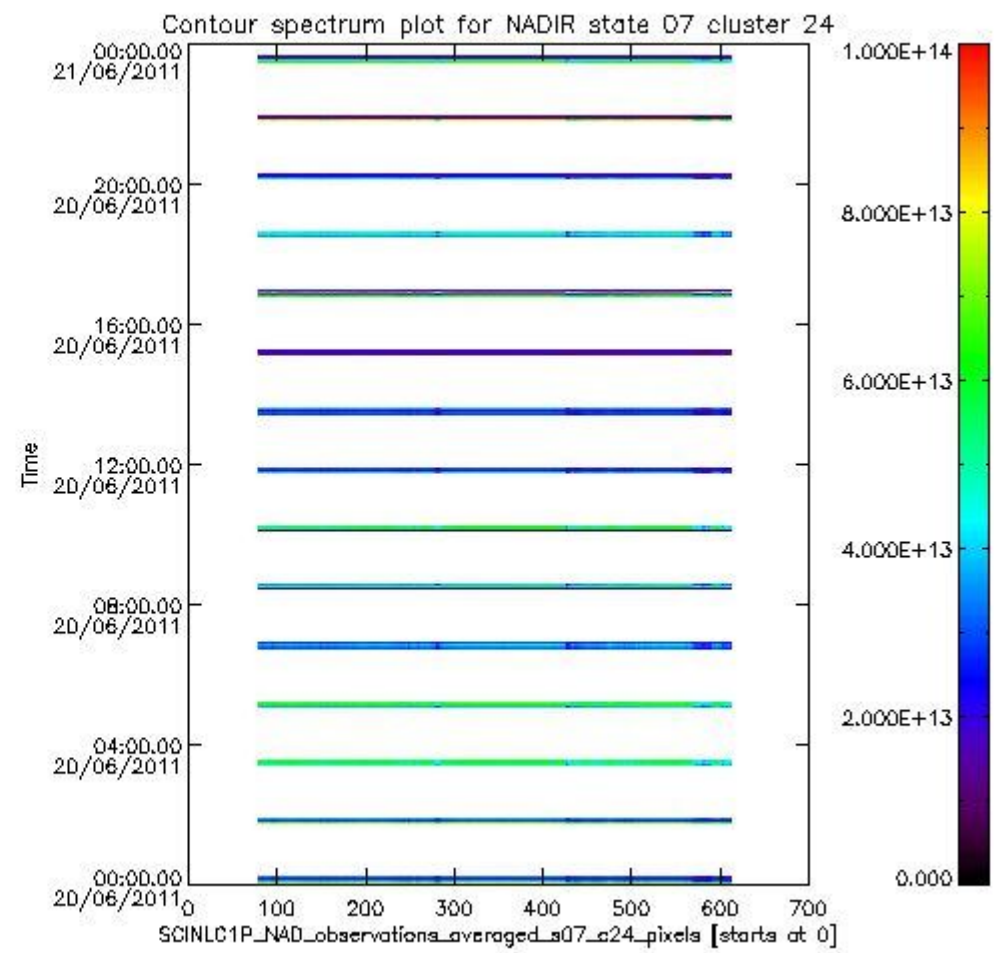
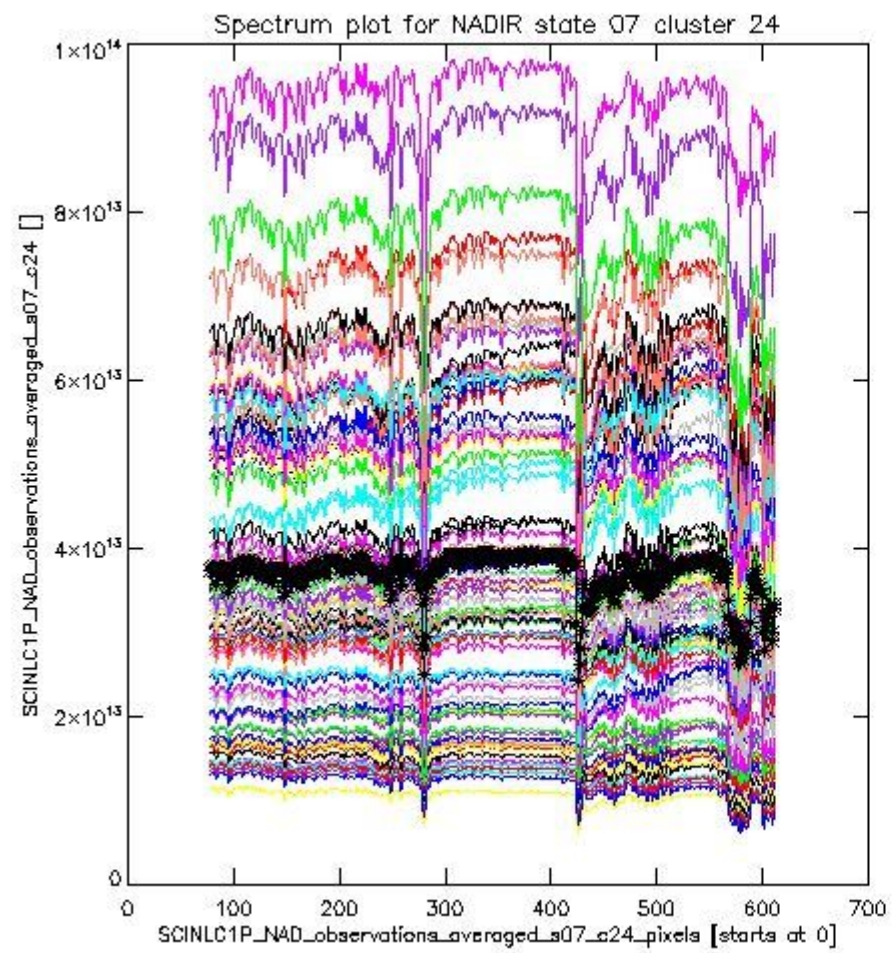




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_5.PNG

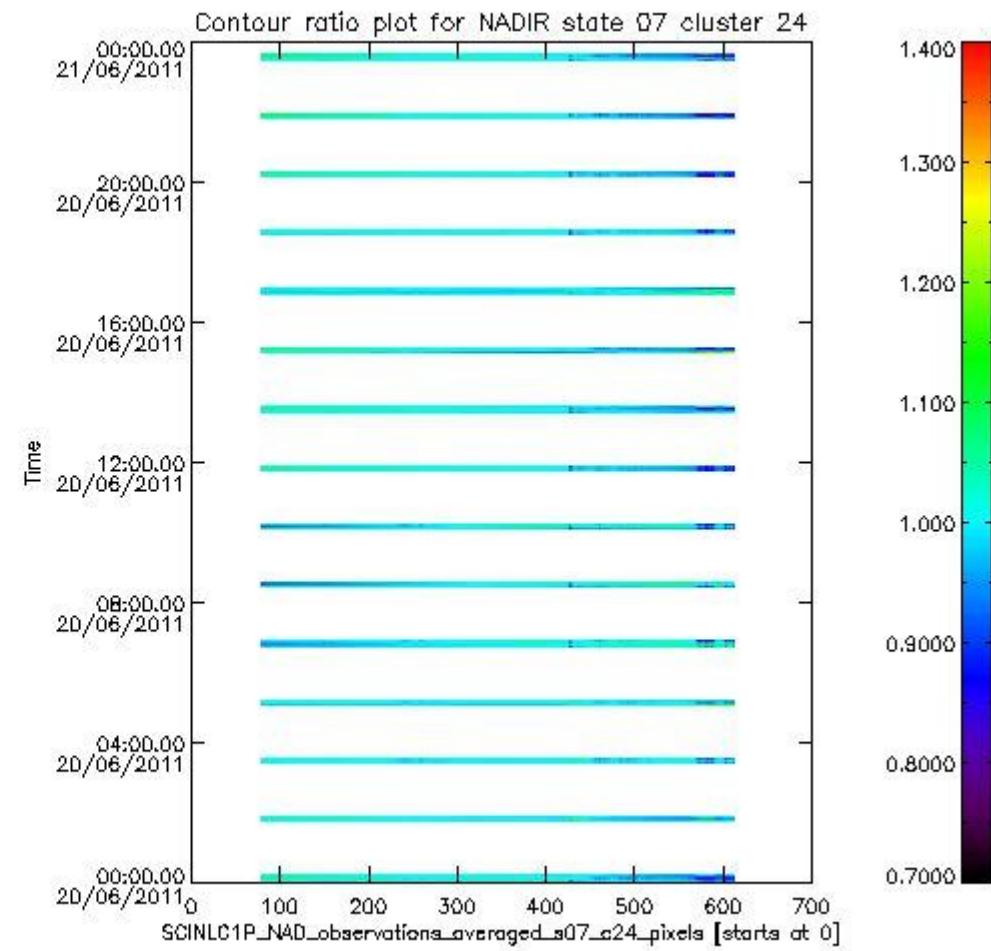
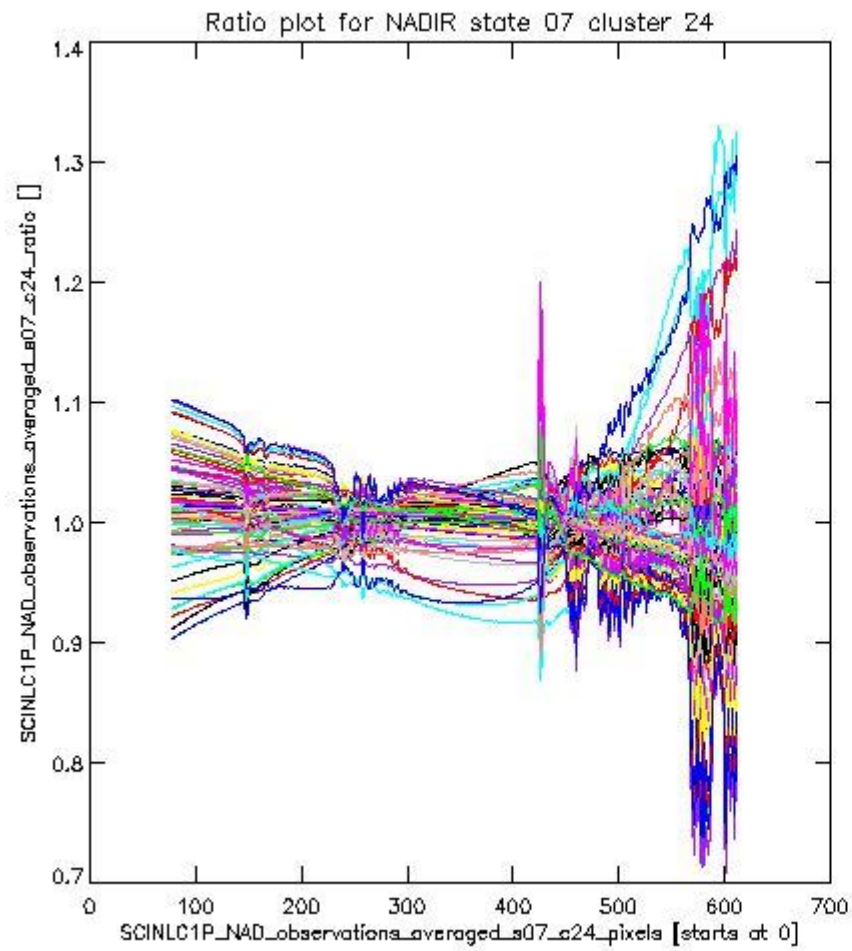
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	20JUN2011 00:02:34.546
Start time of last sample	20JUN2011 23:36:03.553
Reference period start time	21MAY2011 00:04:18.865
Reference period stop time	19JUN2011 17:31:52.468
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\_20110620\_6.PNG

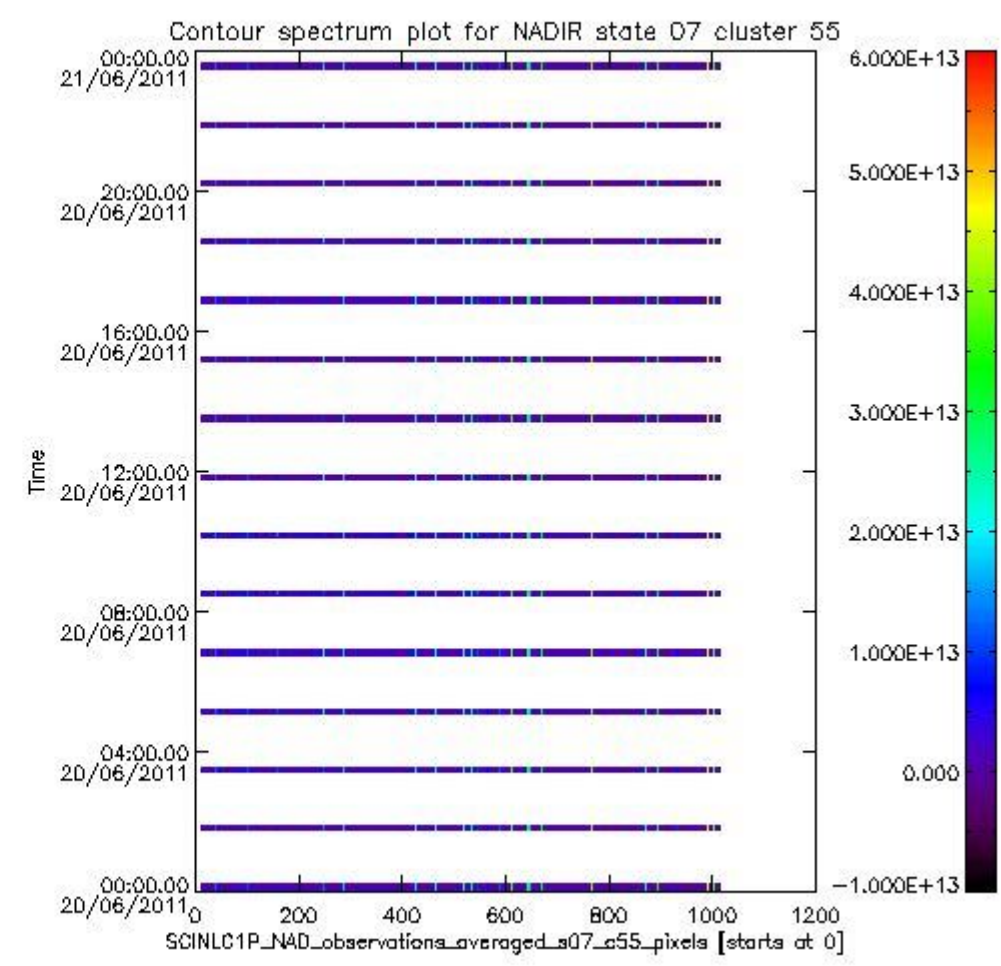
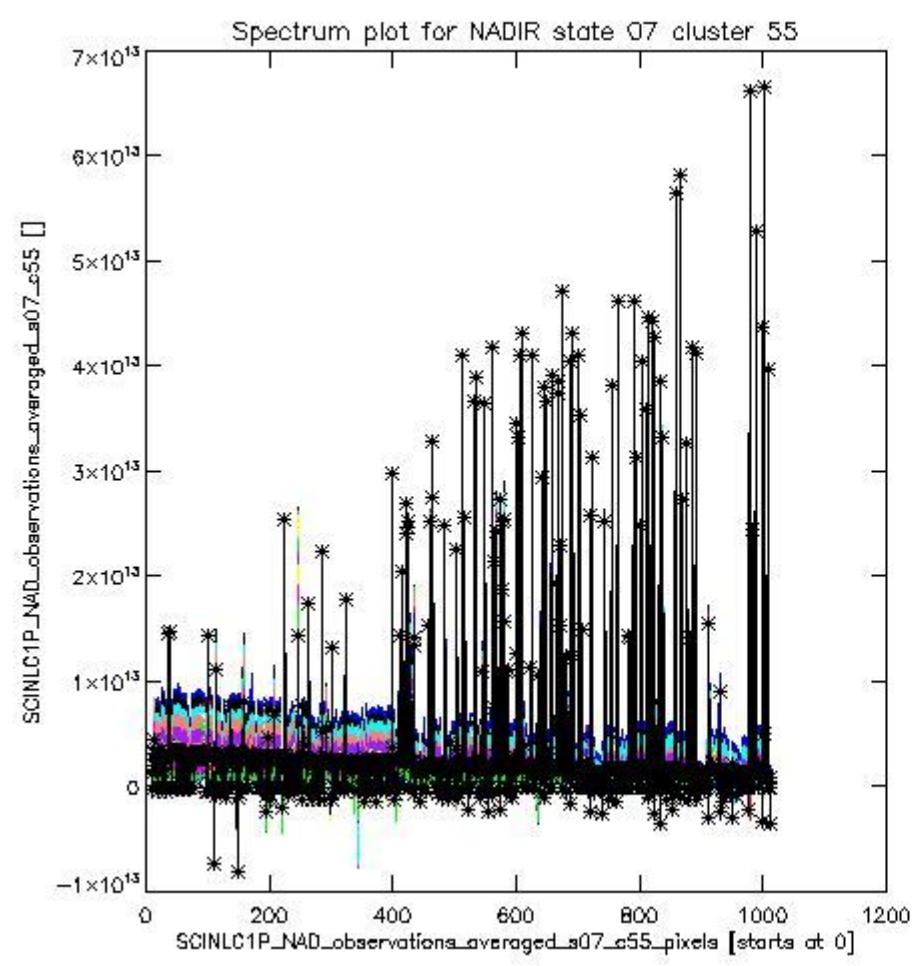




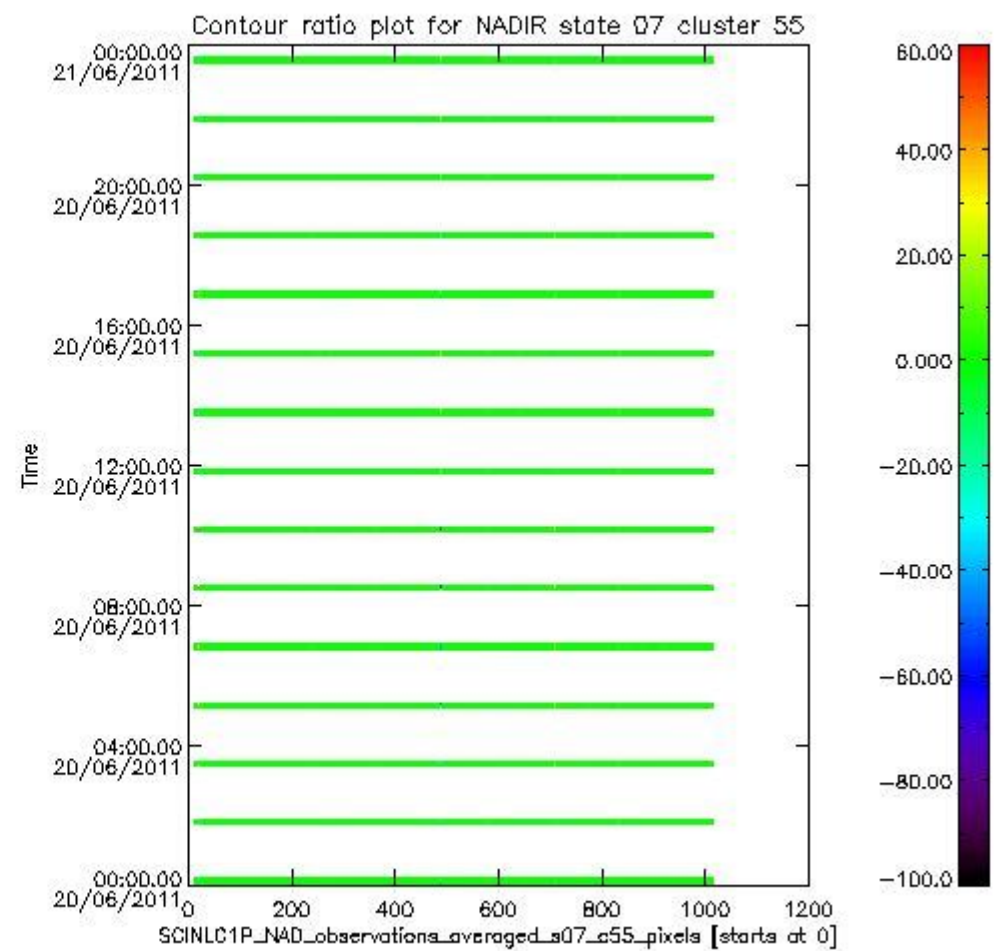
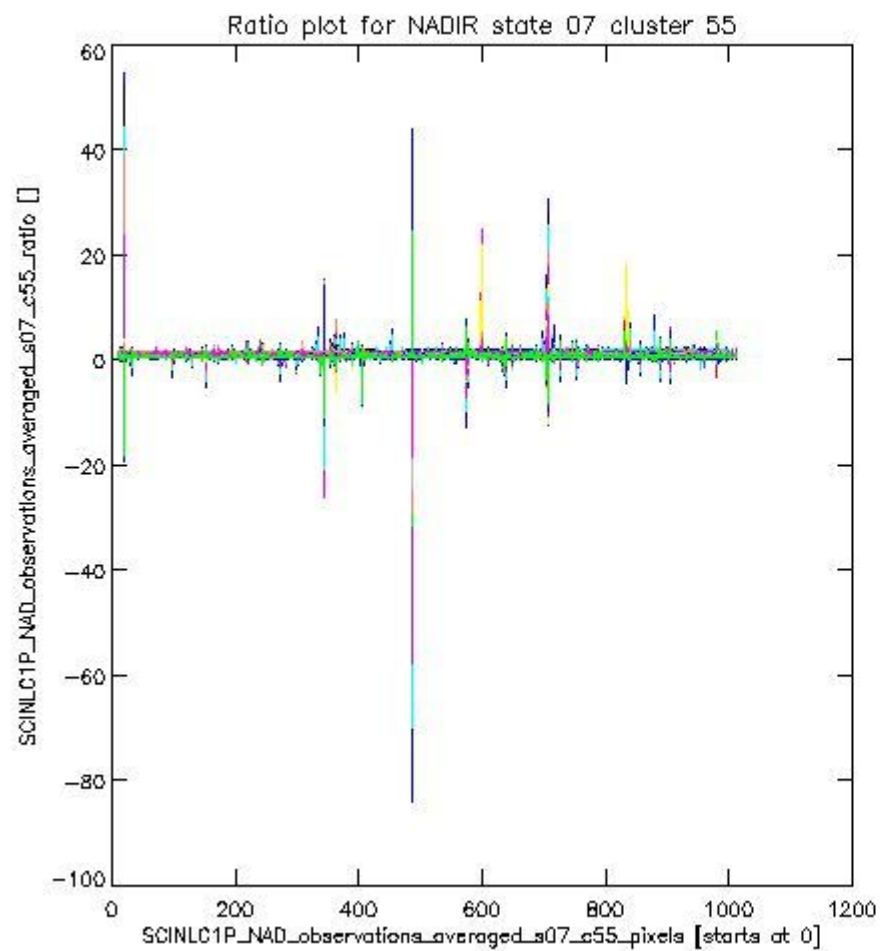
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_7.PNG

**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	20JUN2011 00:02:34.546
Start time of last sample	20JUN2011 23:36:03.553
Reference period start time	21MAY2011 00:04:18.865
Reference period stop time	19JUN2011 17:31:52.468
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\_20110620\_8.PNG

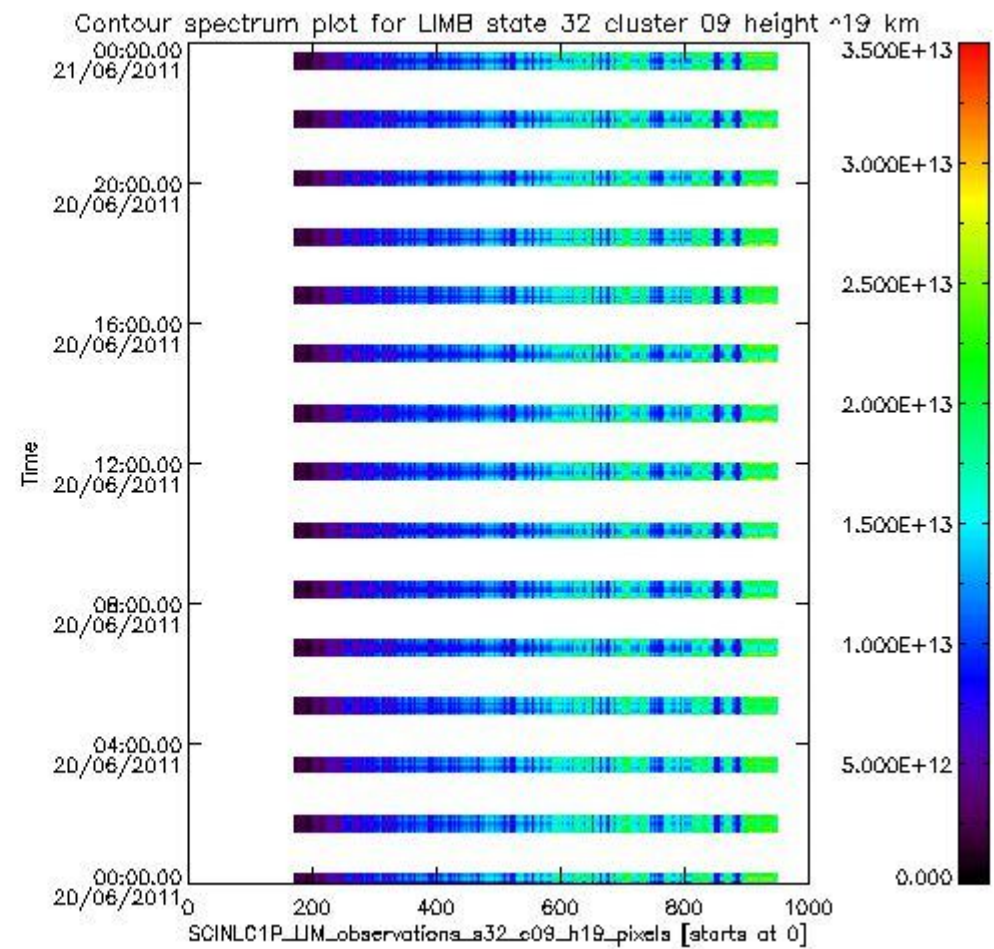
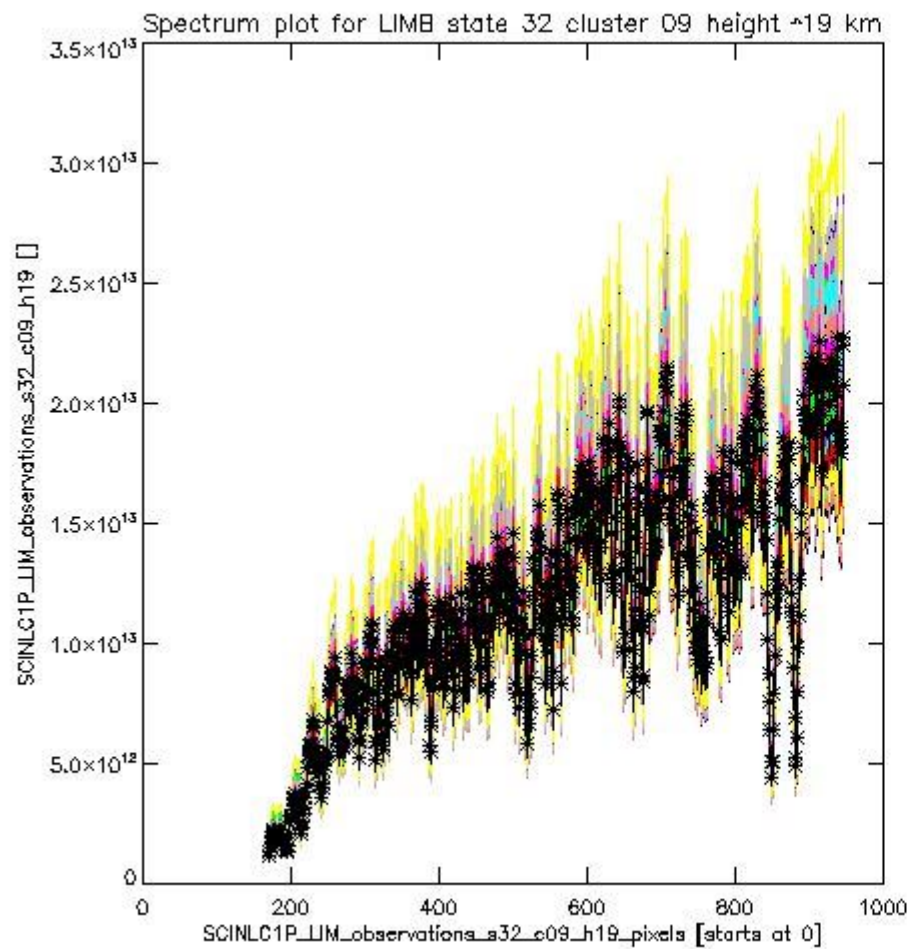


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_9.PNG

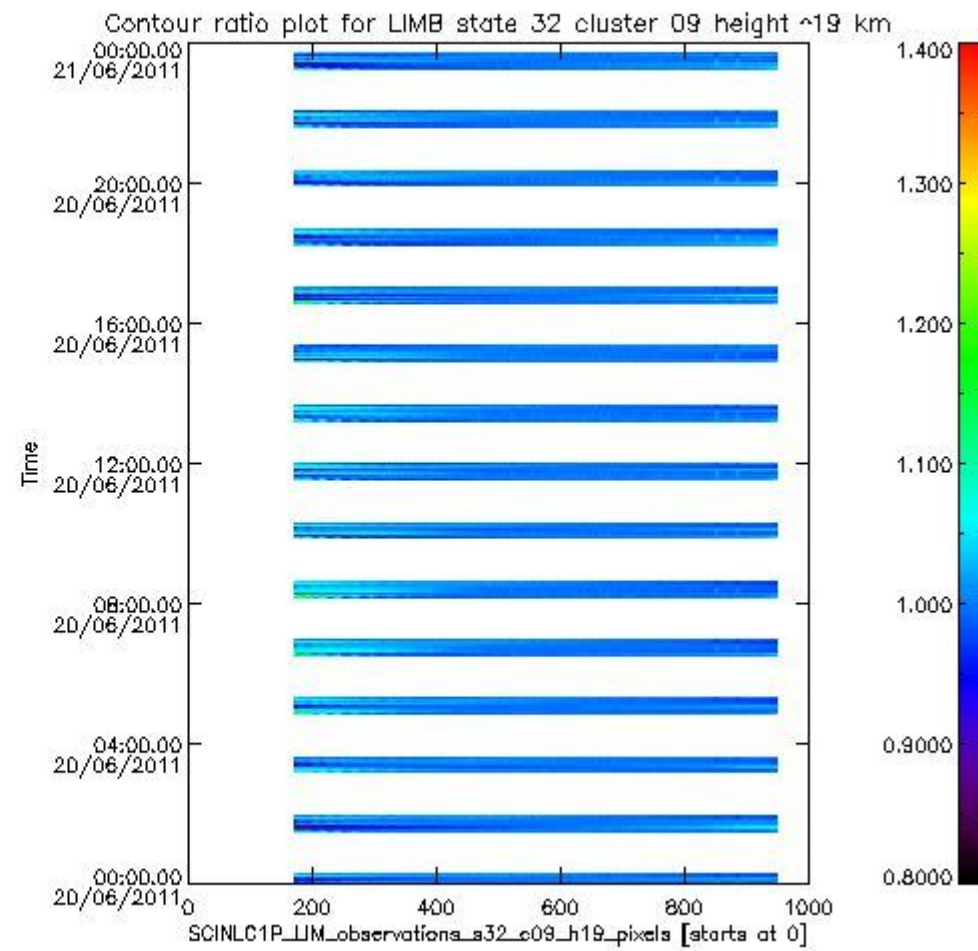
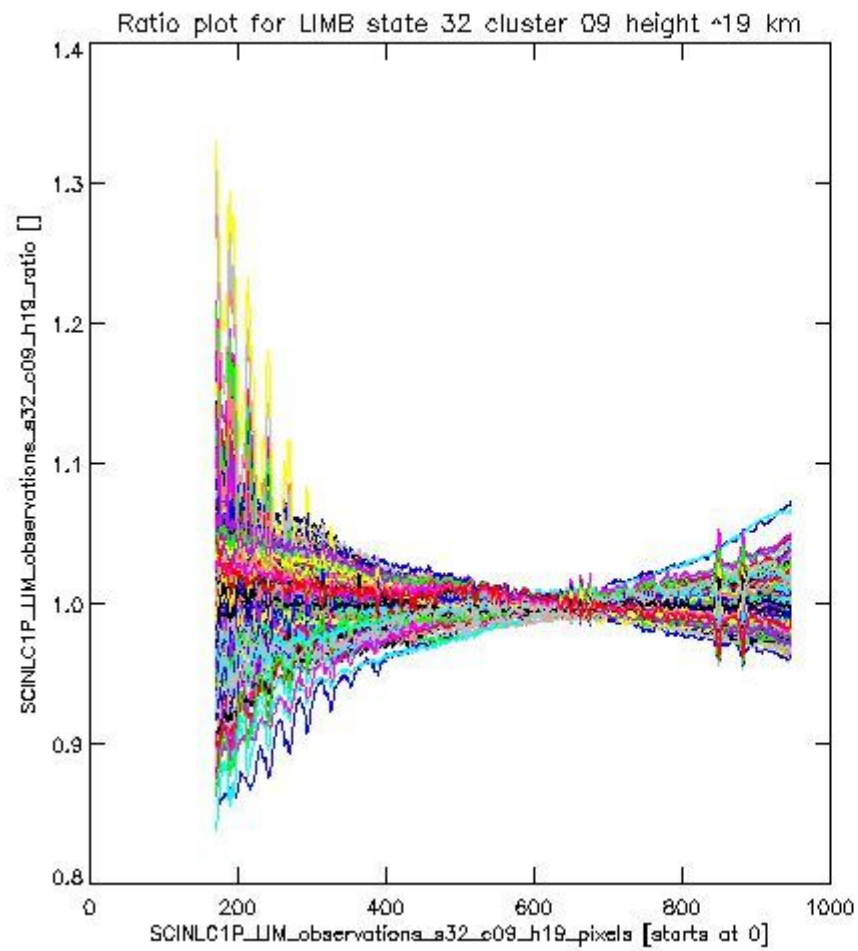
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	20JUN2011 00:01:40.362
Start time of last sample	20JUN2011 23:39:14.857
Reference period start time	21MAY2011 00:01:21.939
Reference period stop time	19JUN2011 23:59:37.616
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





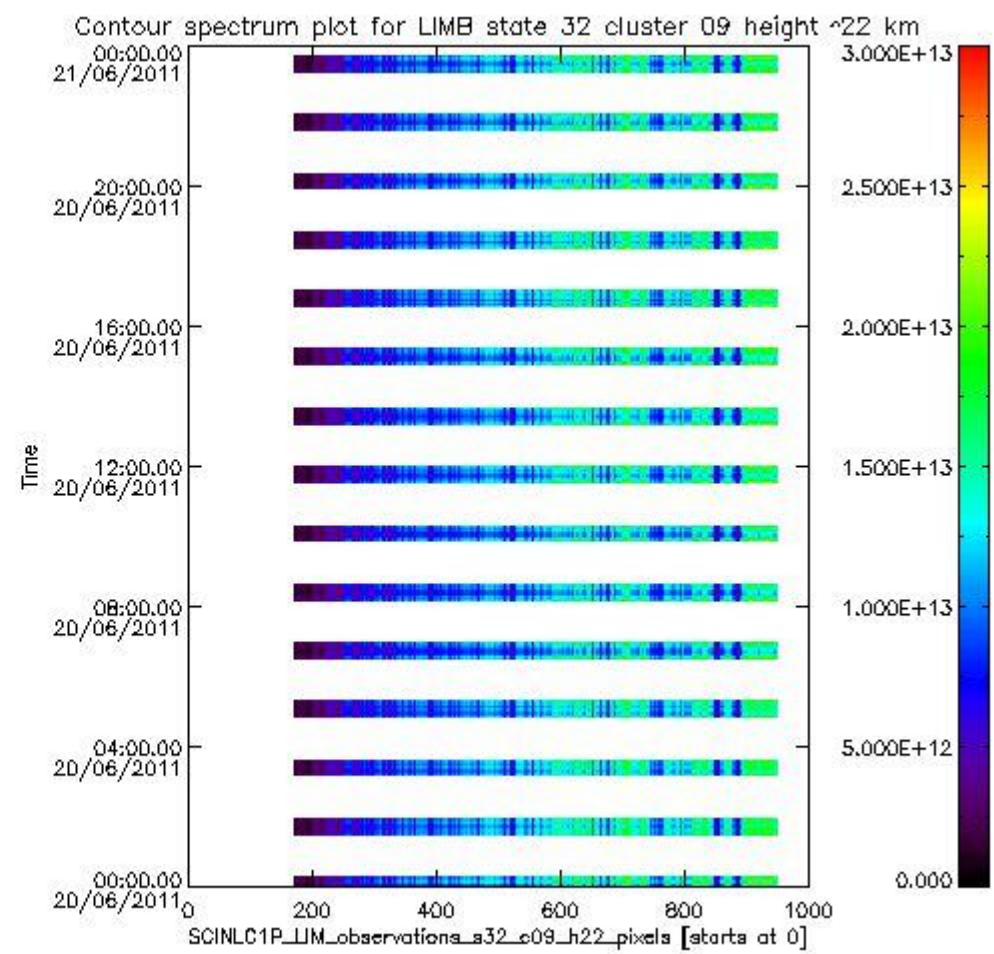
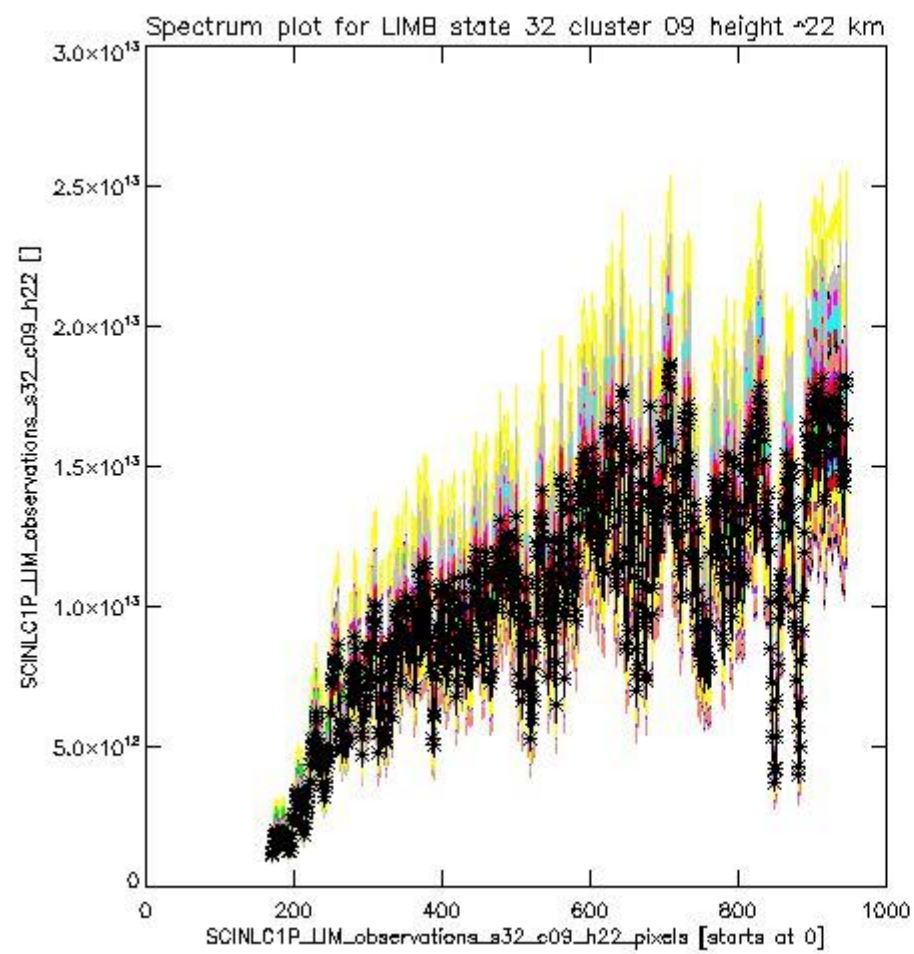
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_11.PNG

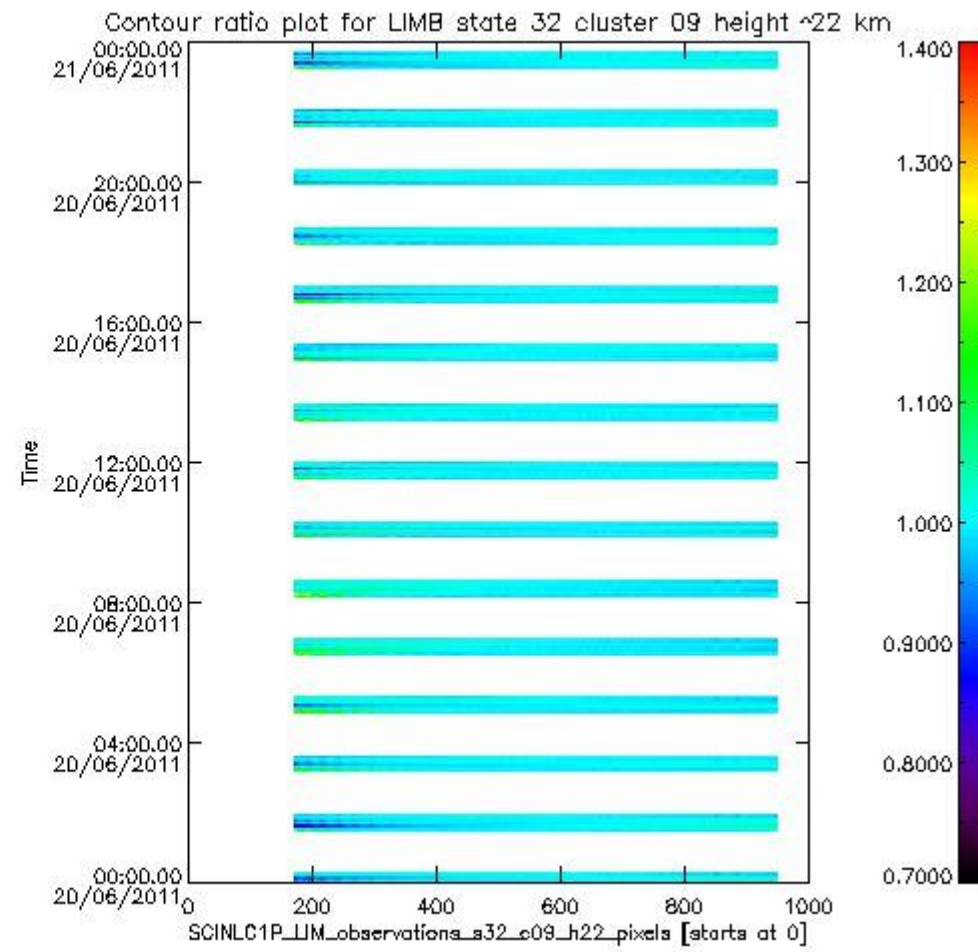
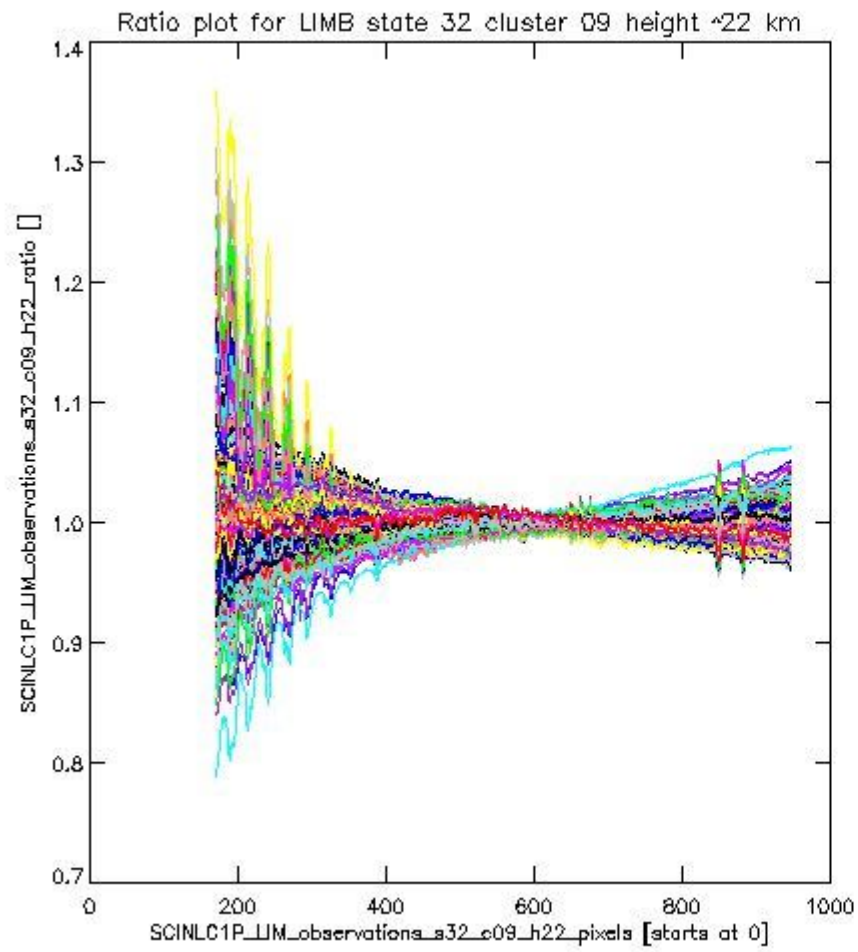
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	20JUN2011 00:01:40.362
Start time of last sample	20JUN2011 23:39:14.857
Reference period start time	21MAY2011 00:01:21.939
Reference period stop time	19JUN2011 23:59:37.616
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\_20110620\_12.PNG

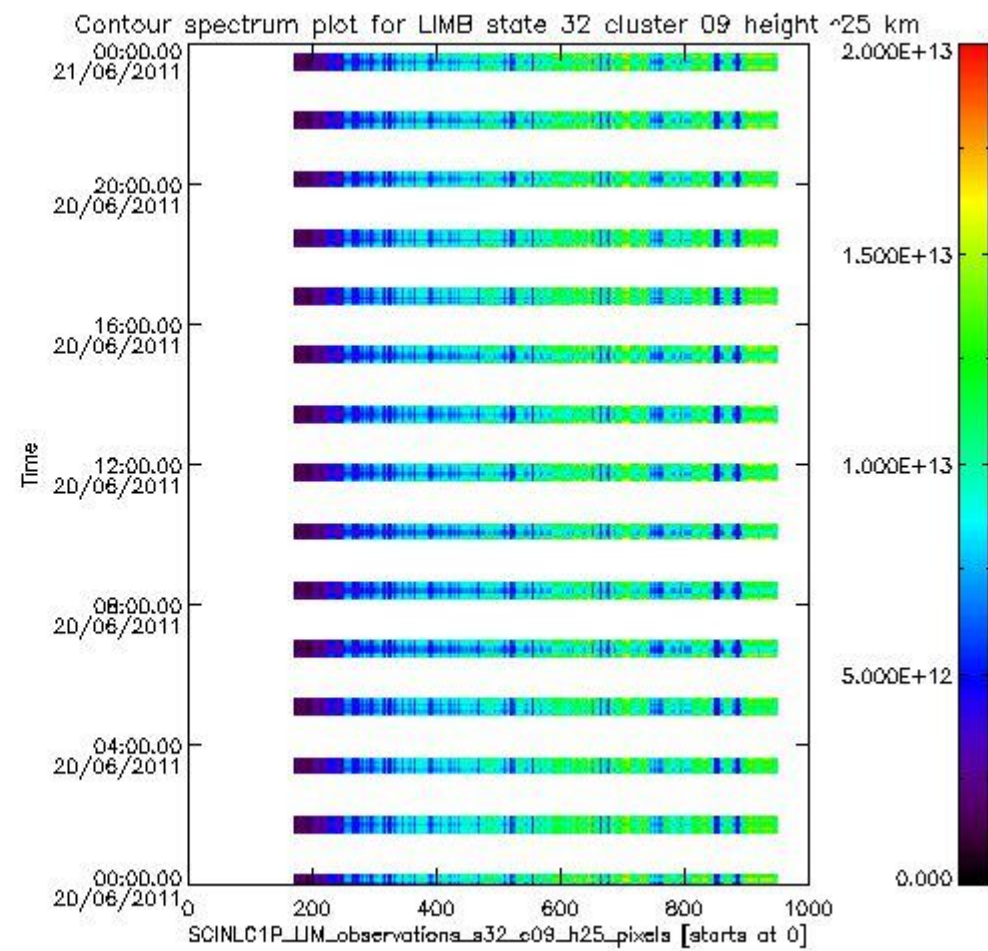
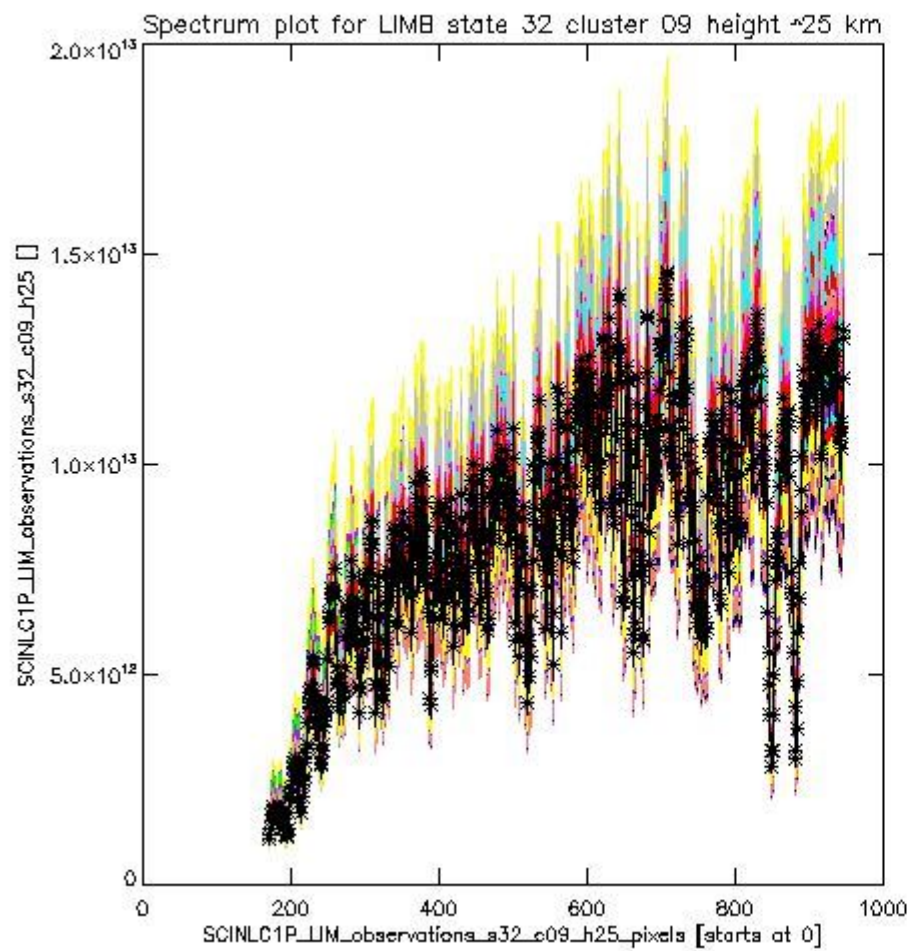




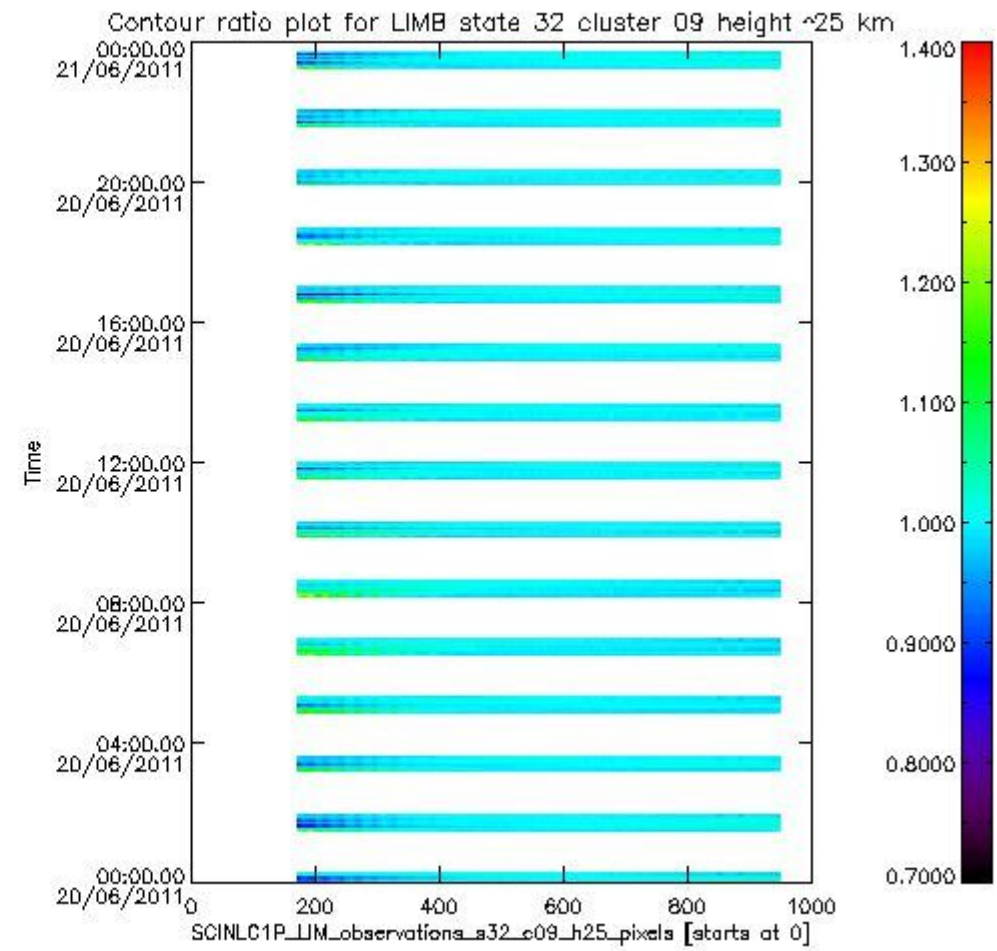
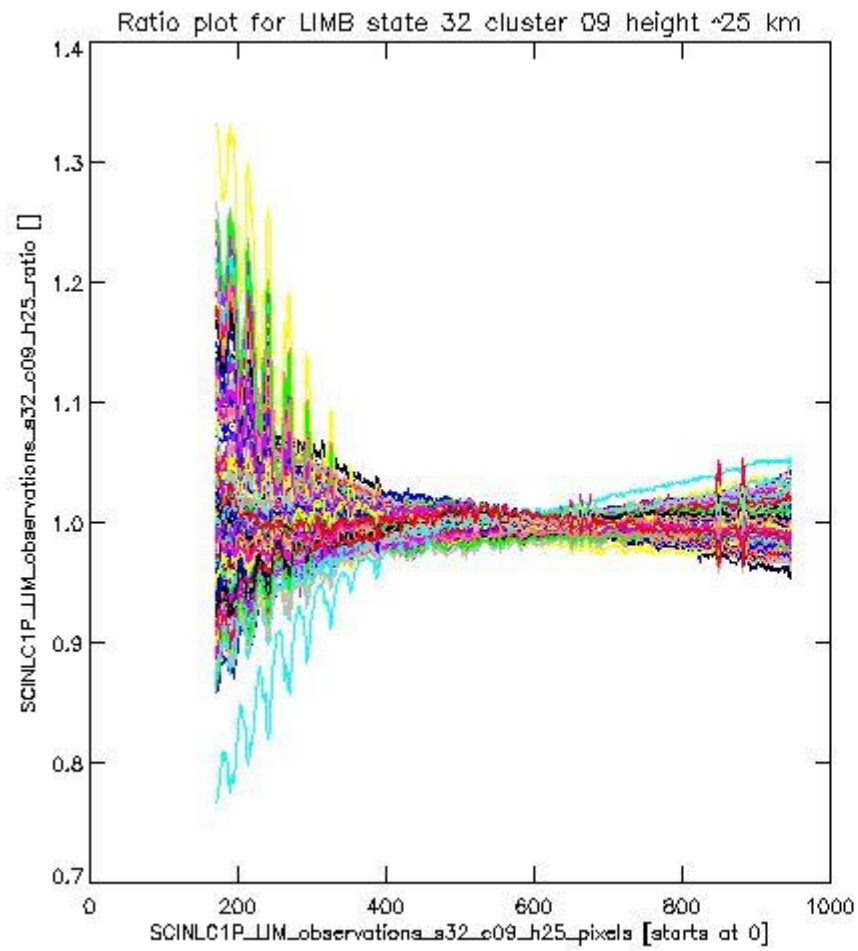
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_13.PNG

**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	20JUN2011 00:01:40.362
Start time of last sample	20JUN2011 23:39:14.857
Reference period start time	21MAY2011 00:01:21.939
Reference period stop time	19JUN2011 23:59:37.616
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\_20110620\_14.PNG

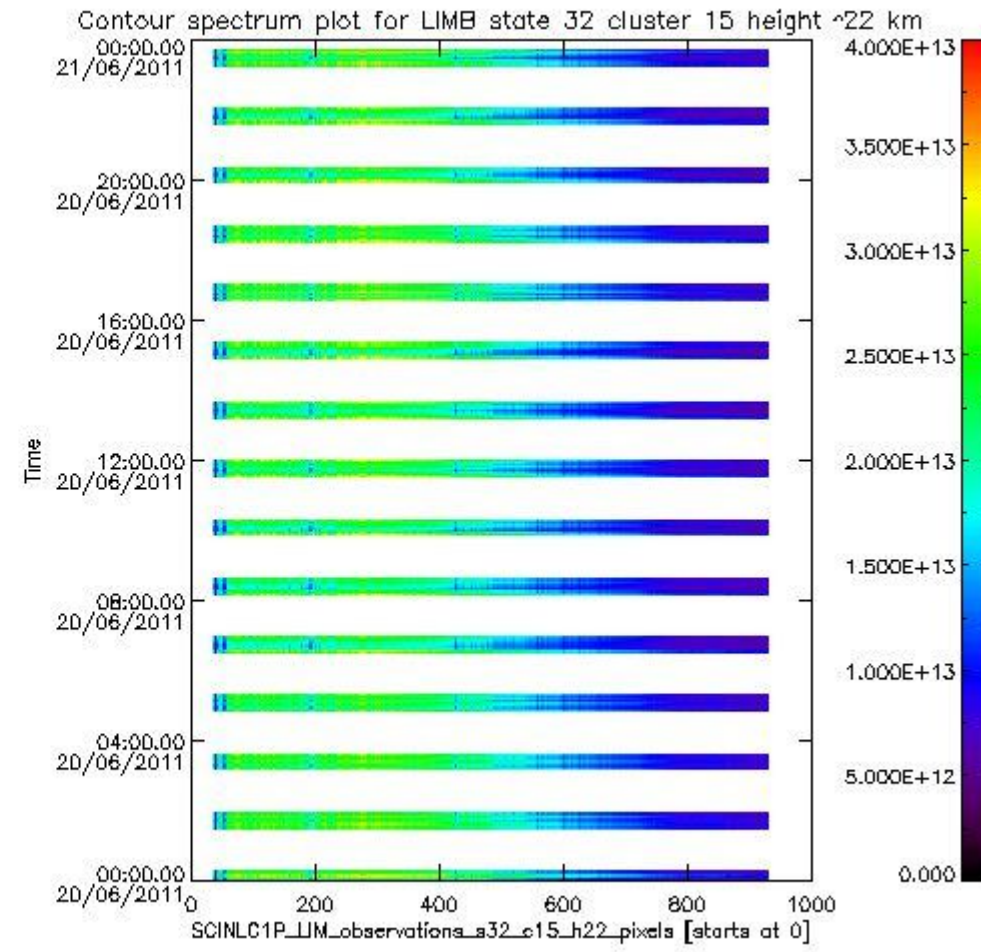
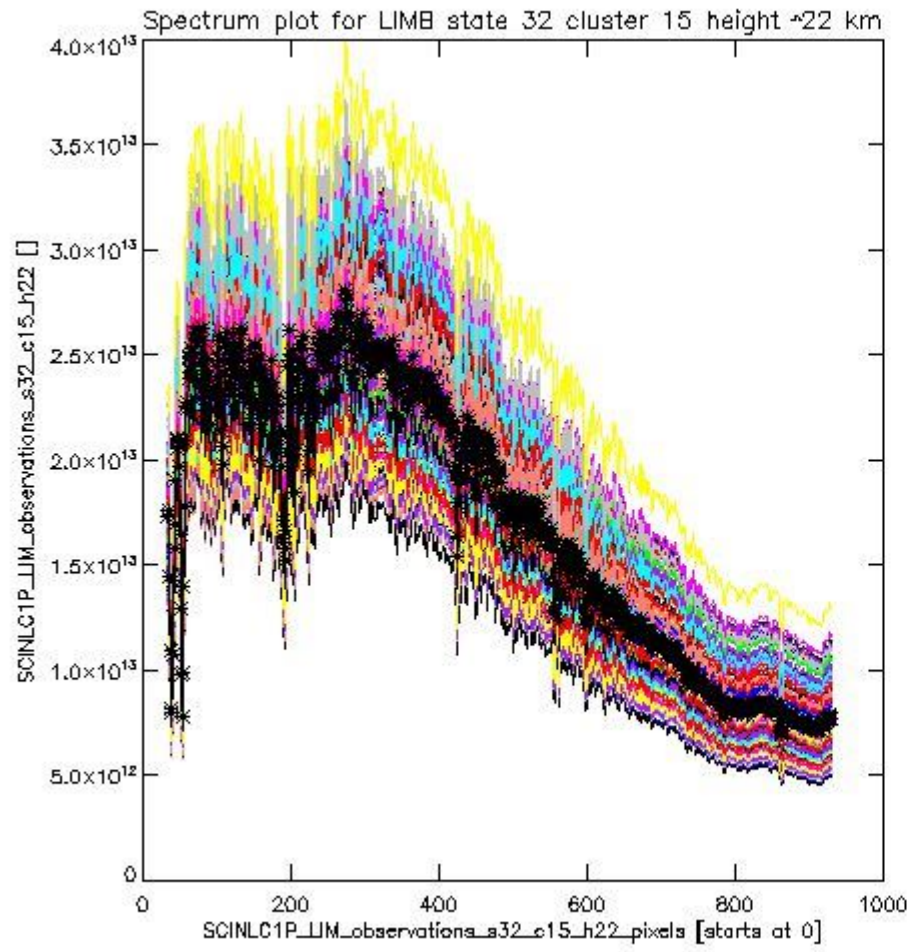


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_15.PNG

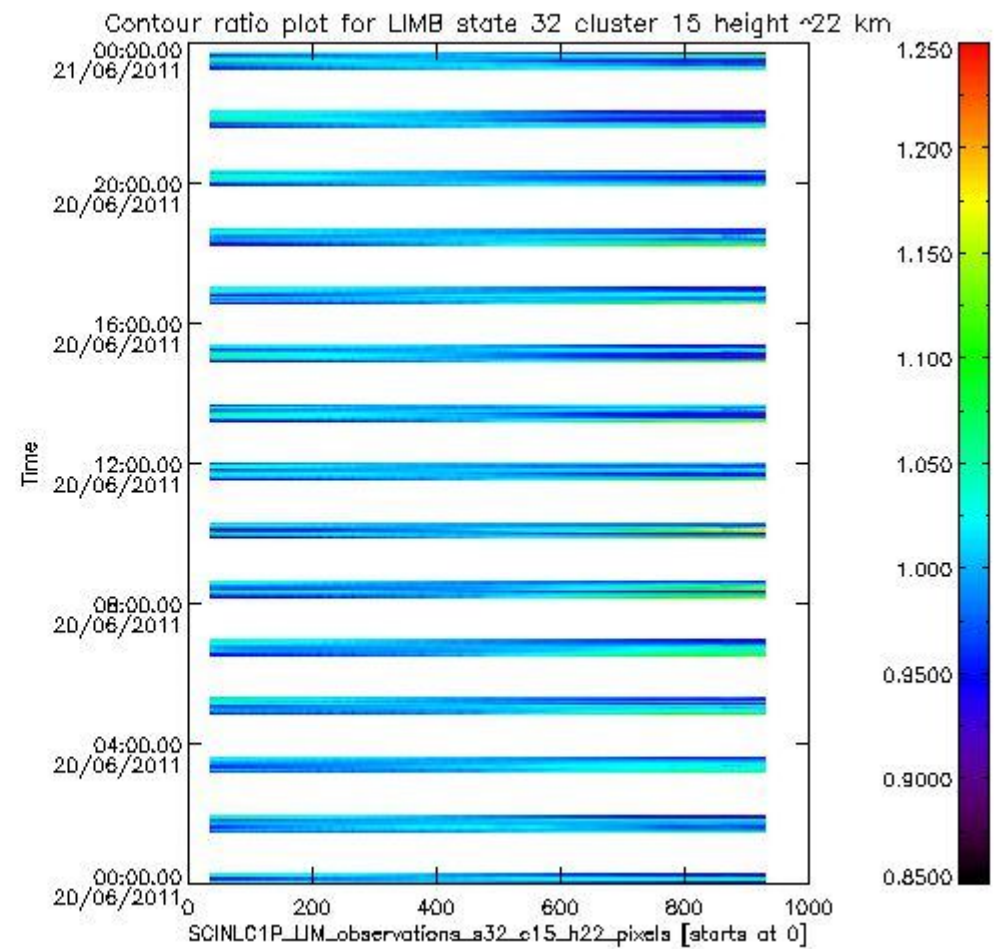
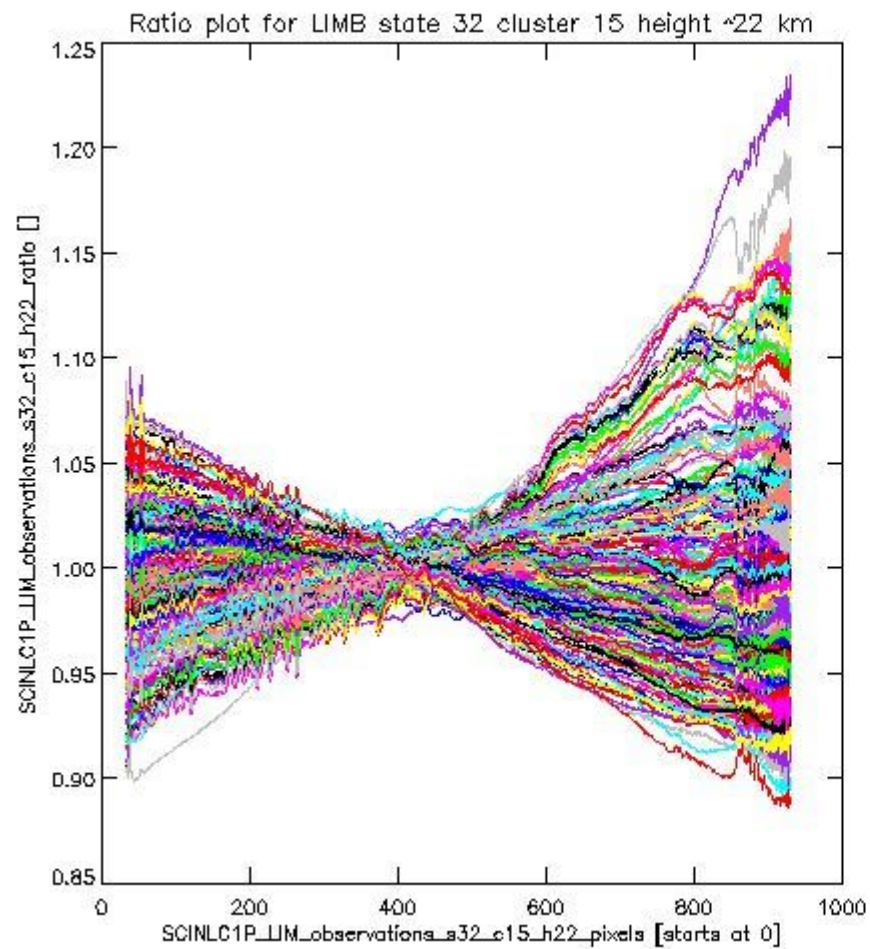
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	20JUN2011 00:01:40.362
Start time of last sample	20JUN2011 23:39:14.857
Reference period start time	21MAY2011 00:01:21.939
Reference period stop time	19JUN2011 23:59:37.616
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\_20110620\_16.PNG

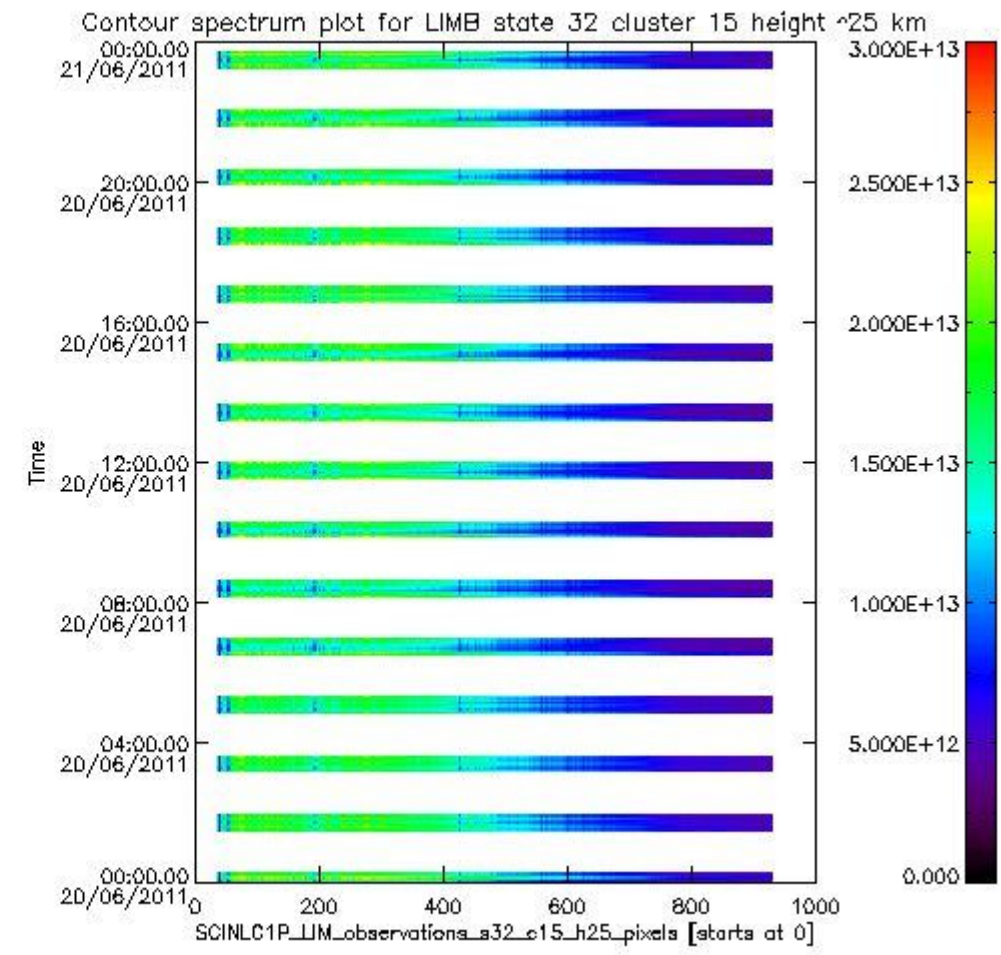
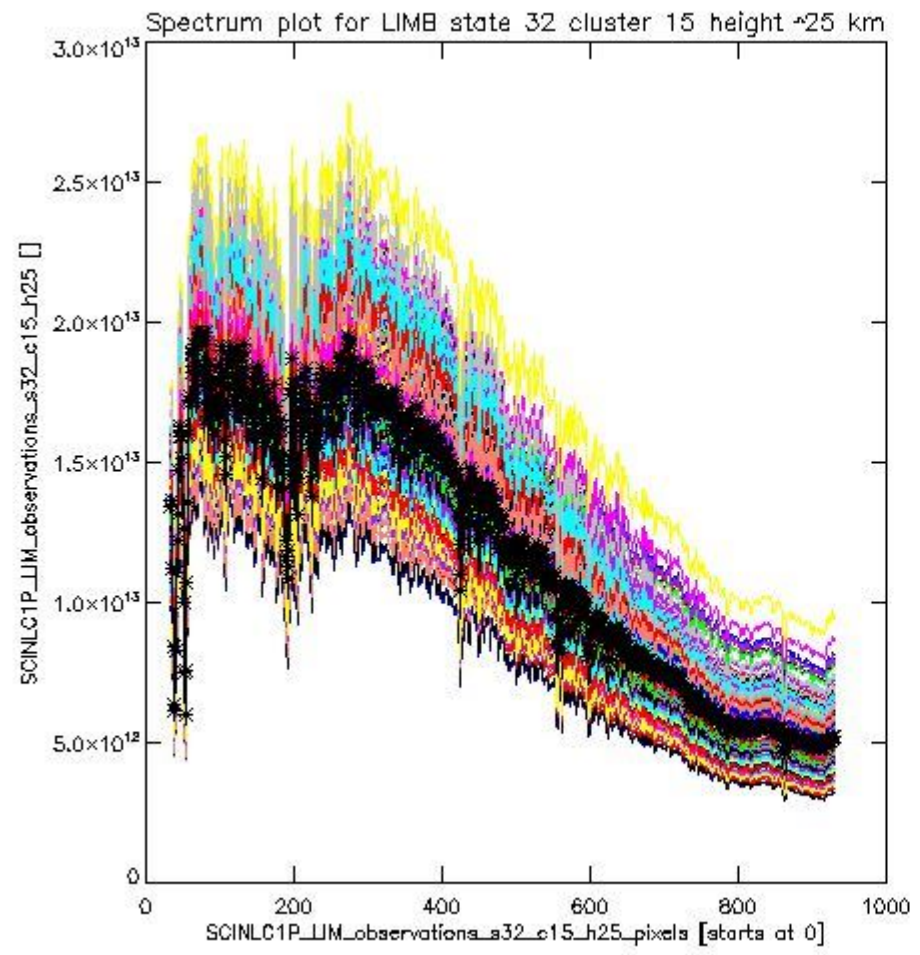


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_17.PNG

**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:

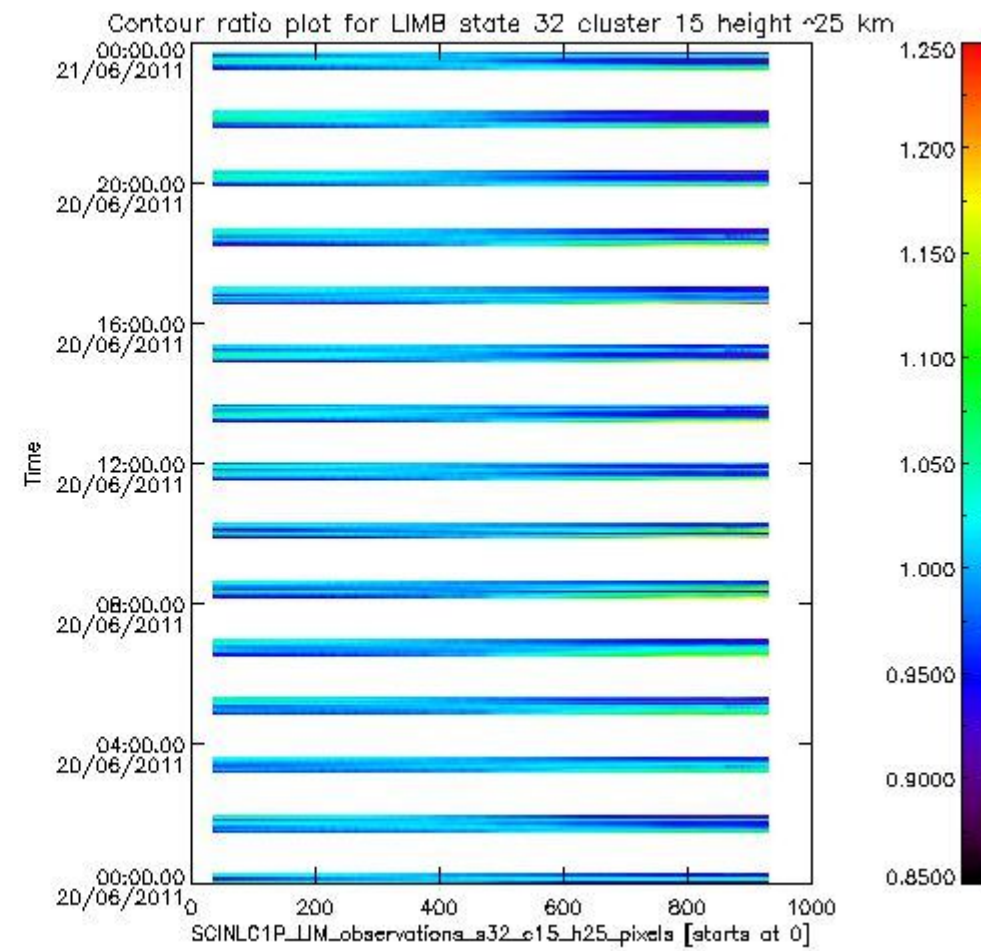
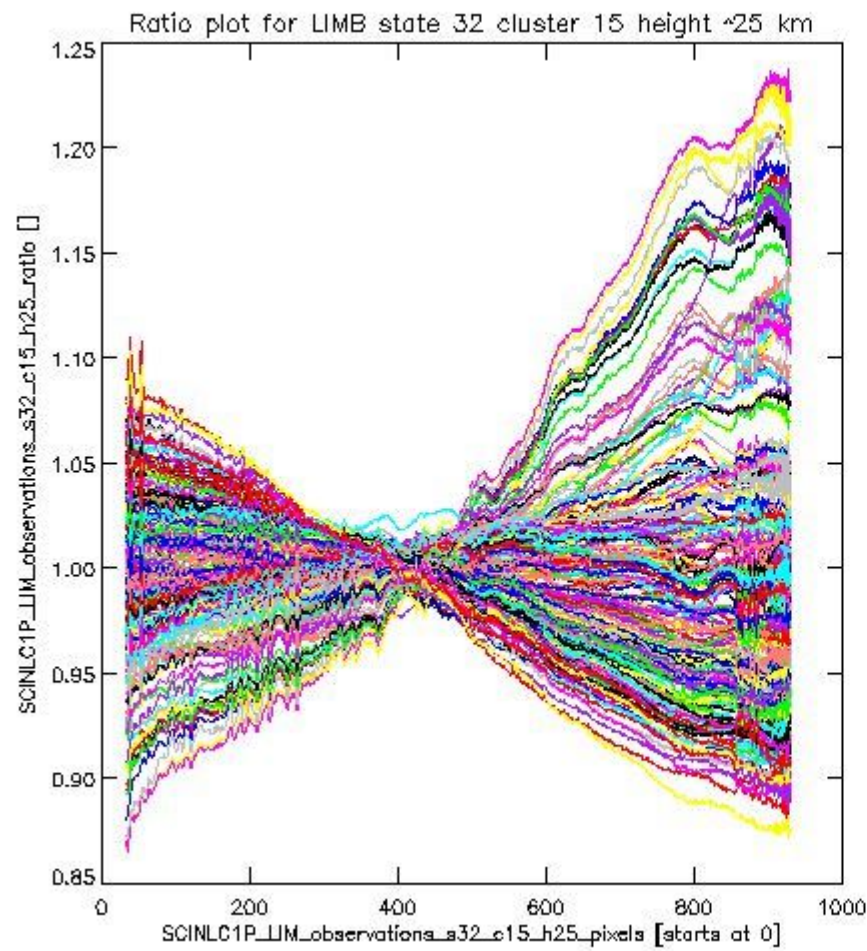
Item	Value
Start time of first sample	20JUN2011 00:01:40.362
Start time of last sample	20JUN2011 23:39:14.857
Reference period start time	21MAY2011 00:01:21.939
Reference period stop time	19JUN2011 23:59:37.616
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_18.PNG

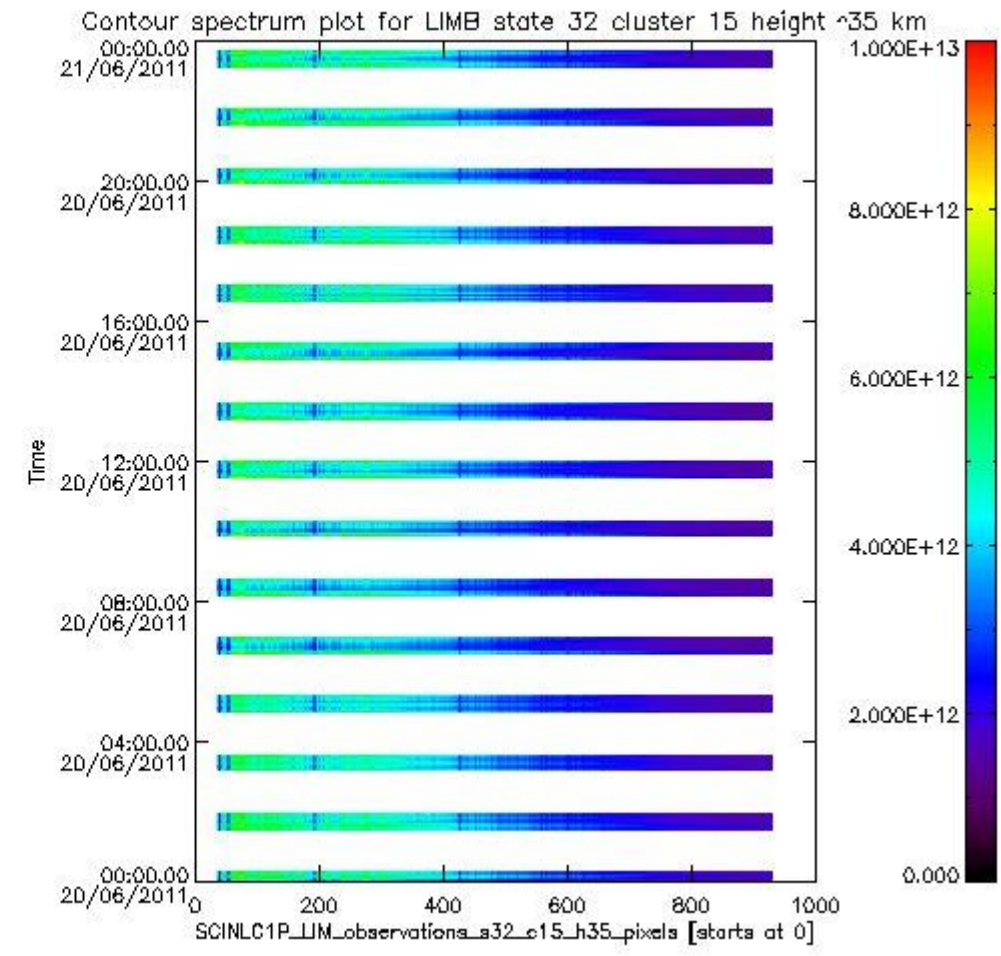
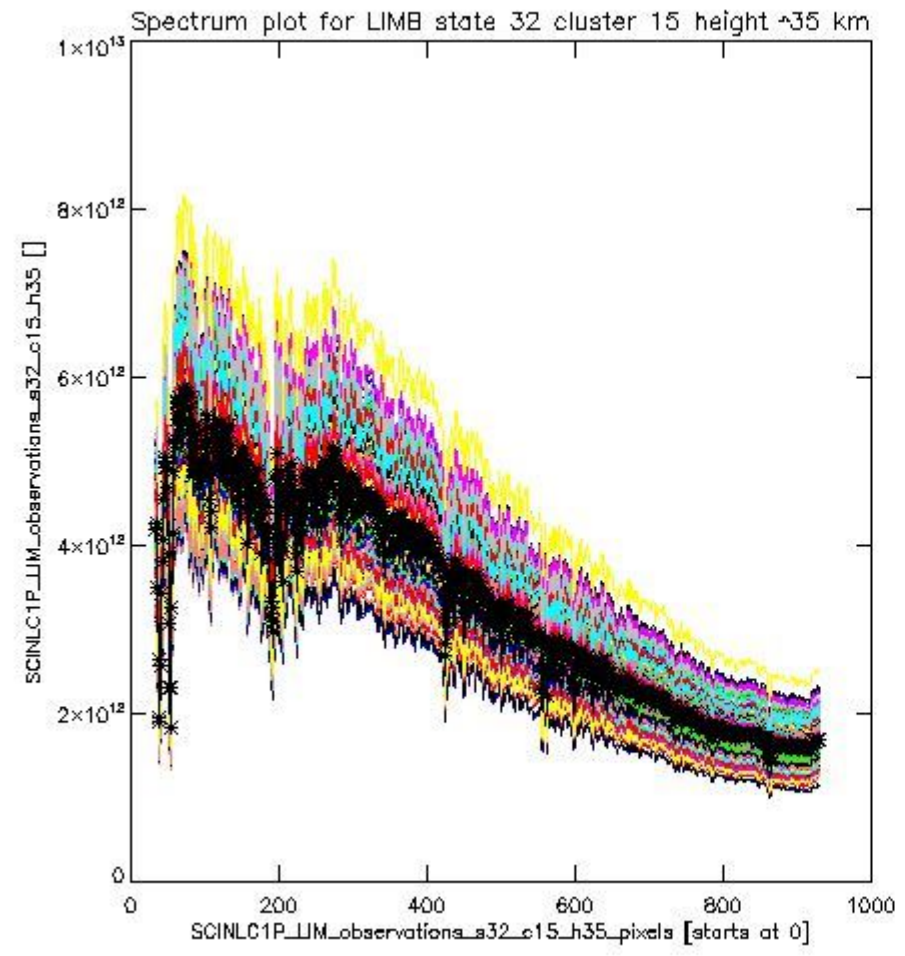


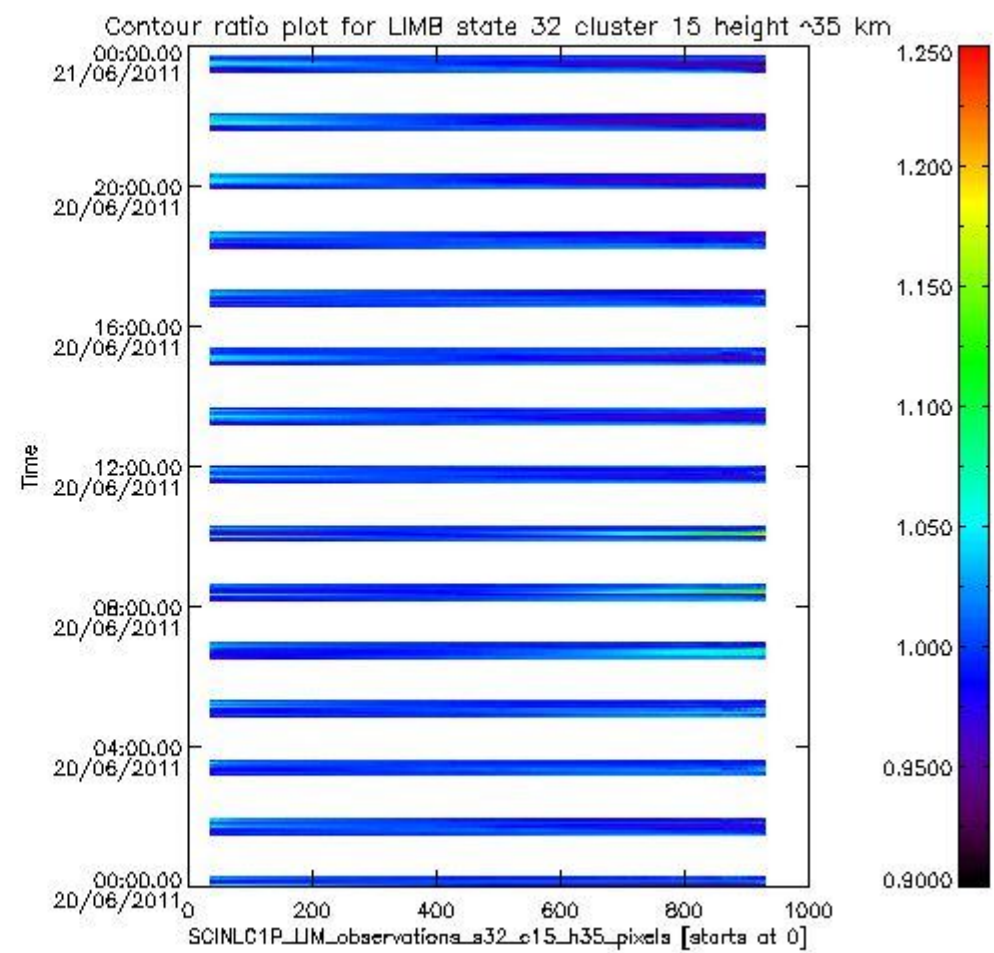
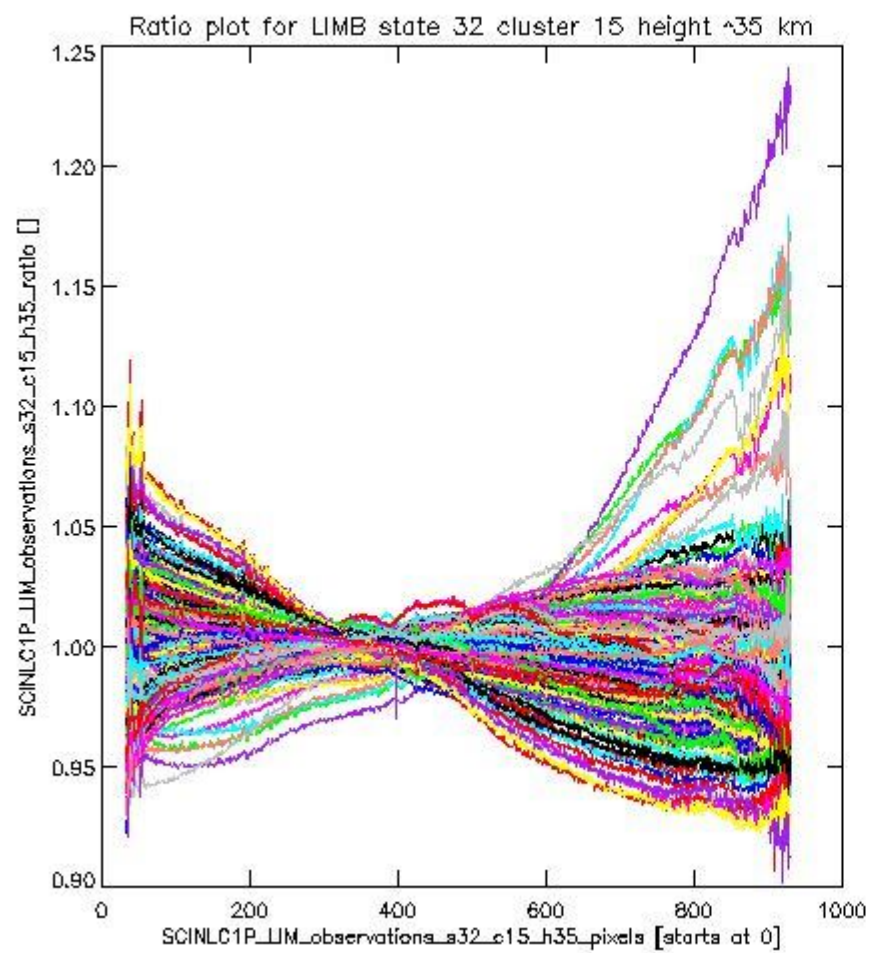


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110620\_19.PNG

**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	20JUN2011 00:01:40.362
Start time of last sample	20JUN2011 23:39:14.857
Reference period start time	21MAY2011 00:01:21.939
Reference period stop time	19JUN2011 23:59:37.616
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\_20110620\_21.PNG



