

# 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	18JUN2011 06:30:43
Data source version	SCIA/7.04-U
Processing scope for products	05JUN2011 00:00:00 to 06JUN2011 00:00:00
Start time of first product within scope	04JUN2011 22:40:32
Stop time of last product within scope	06JUN2011 00:54:29
Total number of level 1 products	16
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	05JUN2011 00:53:57.735	05JUN2011 22:46:02.882
1	NADIR	07	09	N/A	05JUN2011 00:53:57.735	05JUN2011 22:46:02.882
2	NADIR	07	15	N/A	05JUN2011 00:53:57.735	05JUN2011 22:46:02.882
3	NADIR	07	24	N/A	05JUN2011 00:53:57.735	05JUN2011 22:46:02.882
4	NADIR	07	55	N/A	05JUN2011 00:53:57.735	05JUN2011 22:46:02.882
5	LIMB	32	09	~19 km	05JUN2011 00:38:44.360	05JUN2011 22:49:14.178
6	LIMB	32	09	~22 km	05JUN2011 00:38:44.360	05JUN2011 22:49:14.178
7	LIMB	32	09	~25 km	05JUN2011 00:38:44.360	05JUN2011 22:49:14.178
8	LIMB	32	15	~22 km	05JUN2011 00:38:44.360	05JUN2011 22:49:14.178
9	LIMB	32	15	~25 km	05JUN2011 00:38:44.360	05JUN2011 22:49:14.178
10	LIMB	32	15	~35 km	05JUN2011 00:38:44.360	05JUN2011 22:49:14.178

#### 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_1CUDPA20110604_224032_000057403103_00145_48435_1929.N1</a>	04JUN2011 22:40:32	04JUN2011 23:50:47	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110605_002046_000057403103_00146_48436_1939.N1</a>	05JUN2011 00:20:46	05JUN2011 01:31:15	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110605_020100_000057403103_00147_48437_1930.N1</a>	05JUN2011 02:01:00	05JUN2011 03:11:14	0	35	30	0	0	2	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110605_034114_000057403103_00148_48438_1931.N1</a>	05JUN2011 03:41:14	05JUN2011 04:51:43	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110605_052128_000057403103_00149_48439_1935.N1</a>	05JUN2011 05:21:28	05JUN2011 06:31:42	0	34	31	0	0	2	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110605_070142_000057403103_00150_48440_1950.N1</a>	05JUN2011 07:01:42	05JUN2011 08:12:11	0	36	30	0	0	1	0	0	

6	<a href="#">SCI_NLC_1CUDPA20110605_084155_000057403103_00151_48441_1951.N1</a>	05JUN2011 08:41:55	05JUN2011 09:52:10	0	35	31	0	0	1	0	0	
7	<a href="#">SCI_NLC_1CUDPA20110605_102209_000057403103_00152_48442_1948.N1</a>	05JUN2011 10:22:09	05JUN2011 11:32:38	0	36	30	0	0	1	0	0	
8	<a href="#">SCI_NLC_1CUDPA20110605_120223_000057403103_00153_48443_1952.N1</a>	05JUN2011 12:02:23	05JUN2011 13:12:38	0	35	31	0	0	1	0	0	
9	<a href="#">SCI_NLC_1CUDPA20110605_134237_000057403103_00154_48444_1994.N1</a>	05JUN2011 13:42:37	05JUN2011 14:53:06	0	36	30	0	0	1	0	0	
10	<a href="#">SCI_NLC_1CUDPA20110605_152251_000057413103_00155_48445_1949.N1</a>	05JUN2011 15:22:51	05JUN2011 16:33:05	0	35	31	0	0	1	0	0	
11	<a href="#">SCI_NLC_1CUDPA20110605_170305_000057403103_00156_48446_1946.N1</a>	05JUN2011 17:03:05	05JUN2011 18:13:10	0	34	30	0	1	1	0	0	
12	<a href="#">SCI_NLC_1CUDPA20110605_184318_000057403103_00157_48447_1947.N1</a>	05JUN2011 18:43:18	05JUN2011 19:53:42	0	35	31	0	1	1	0	0	
13	<a href="#">SCI_NLC_1CUDPA20110605_202332_000057403103_00158_48448_1945.N1</a>	05JUN2011 20:23:32	05JUN2011 21:34:01	0	36	30	0	0	1	0	0	
14	<a href="#">SCI_NLC_1CUDPA20110605_220346_000057403103_00159_48449_1999.N1</a>	05JUN2011 22:03:46	05JUN2011 23:14:01	0	35	31	0	0	1	0	0	
15	<a href="#">SCI_NLC_1CUDPA20110605_234400_000057403103_00160_48450_1995.N1</a>	05JUN2011 23:44:00	06JUN2011 00:54:29	0	36	30	0	0	1	0	0	

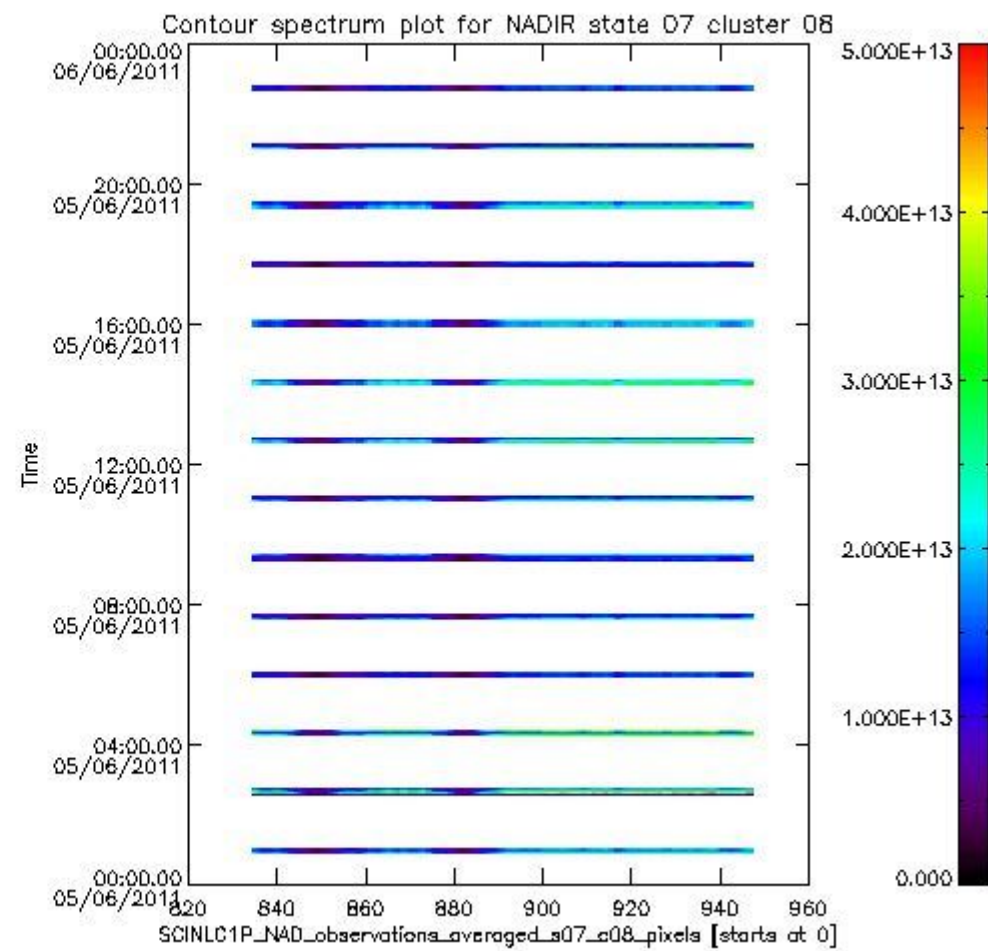
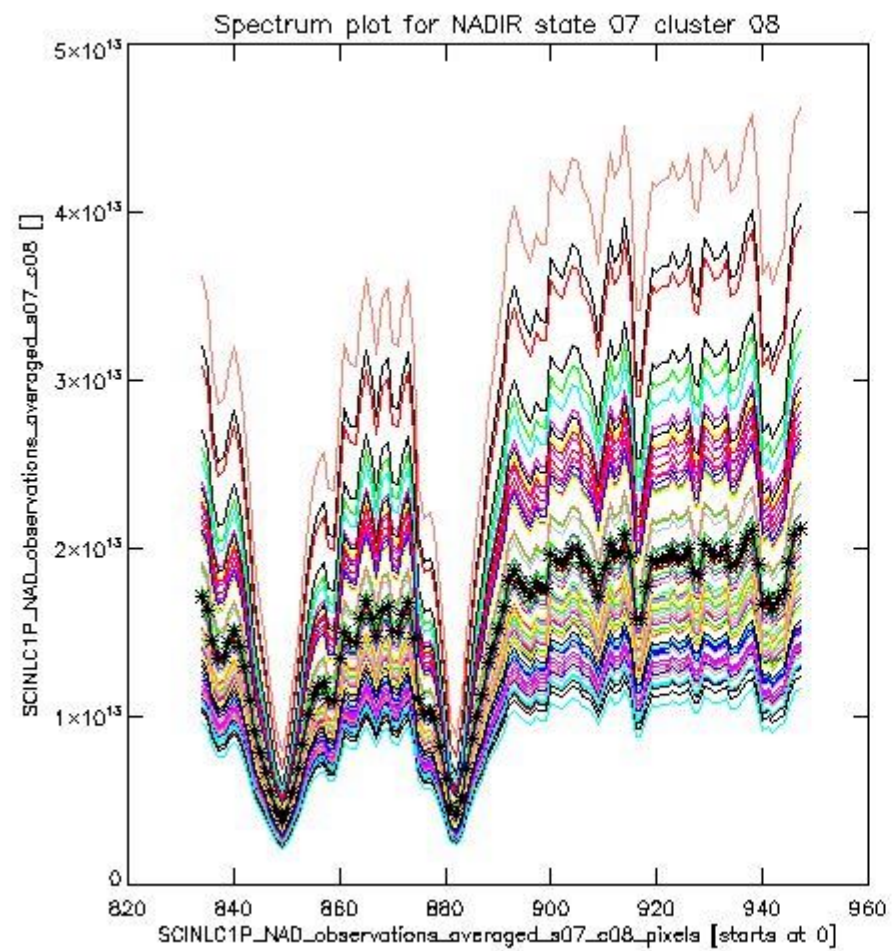
## 1.2 Source packet monitoring

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:

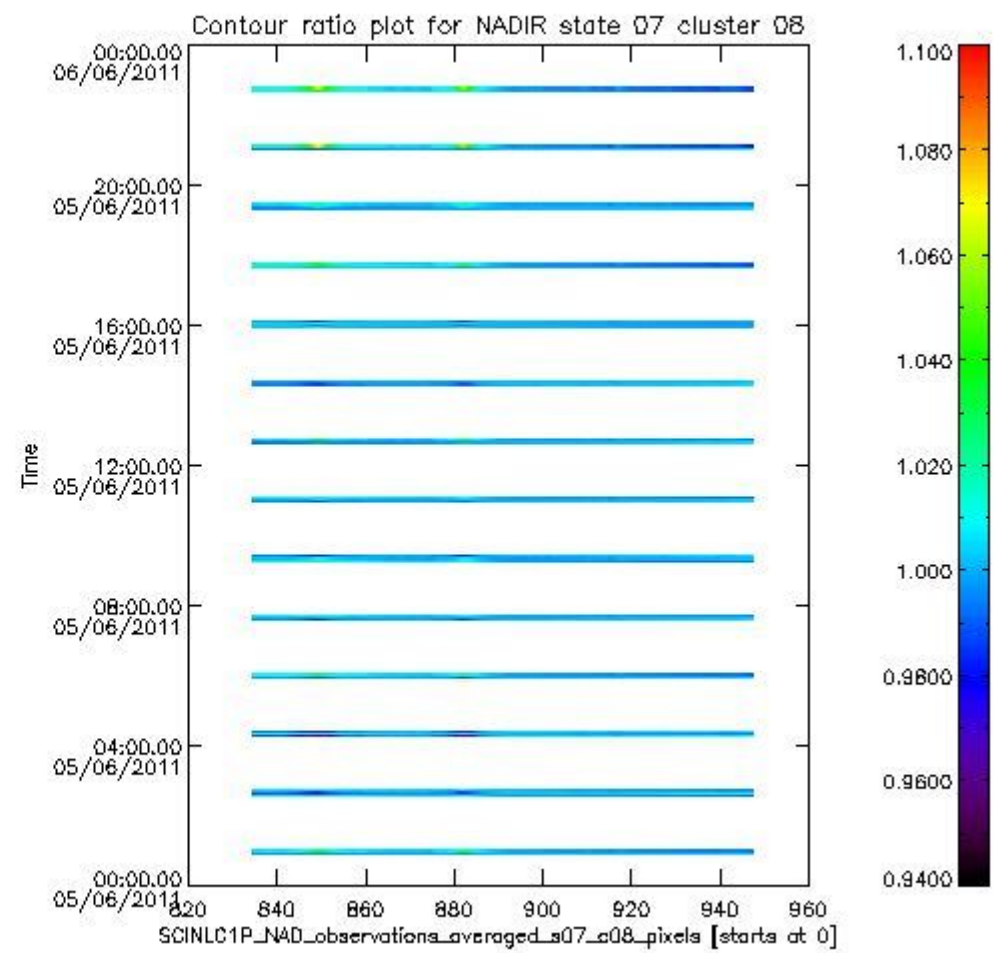
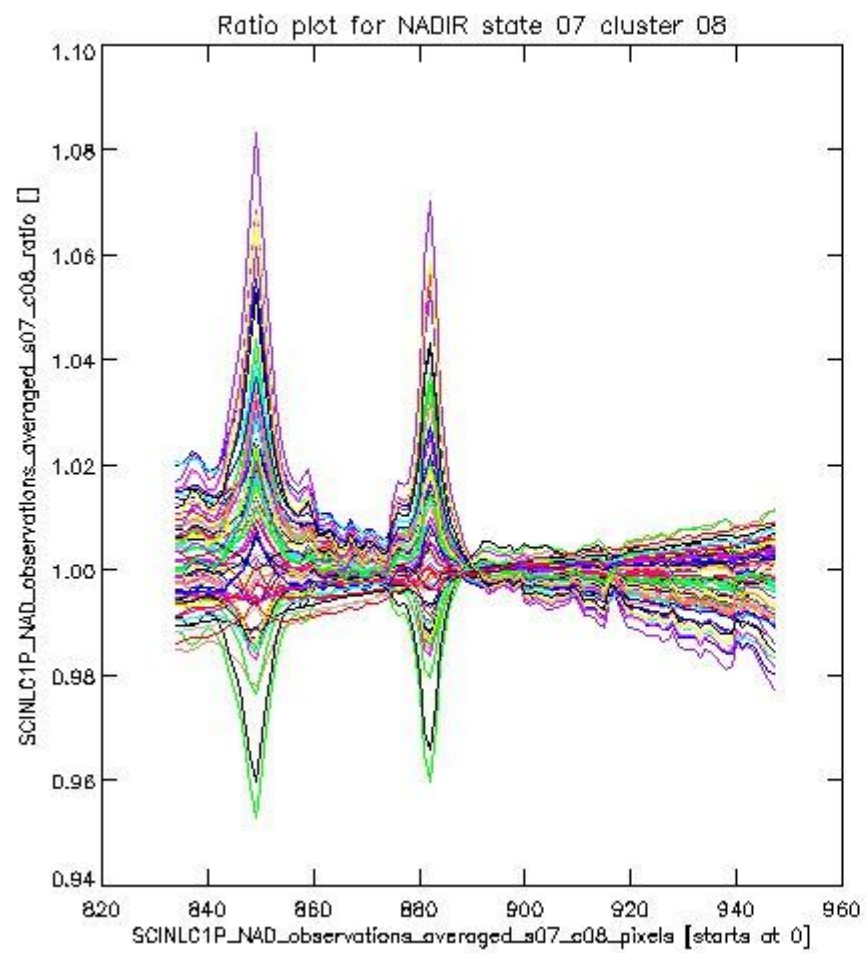
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	05JUN2011 00:53:57.735
Start time of last sample	05JUN2011 22:46:02.882
Reference period start time	06MAY2011 00:53:59.663
Reference period stop time	04JUN2011 23:22:49.113
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\_20110605\_0.PNG

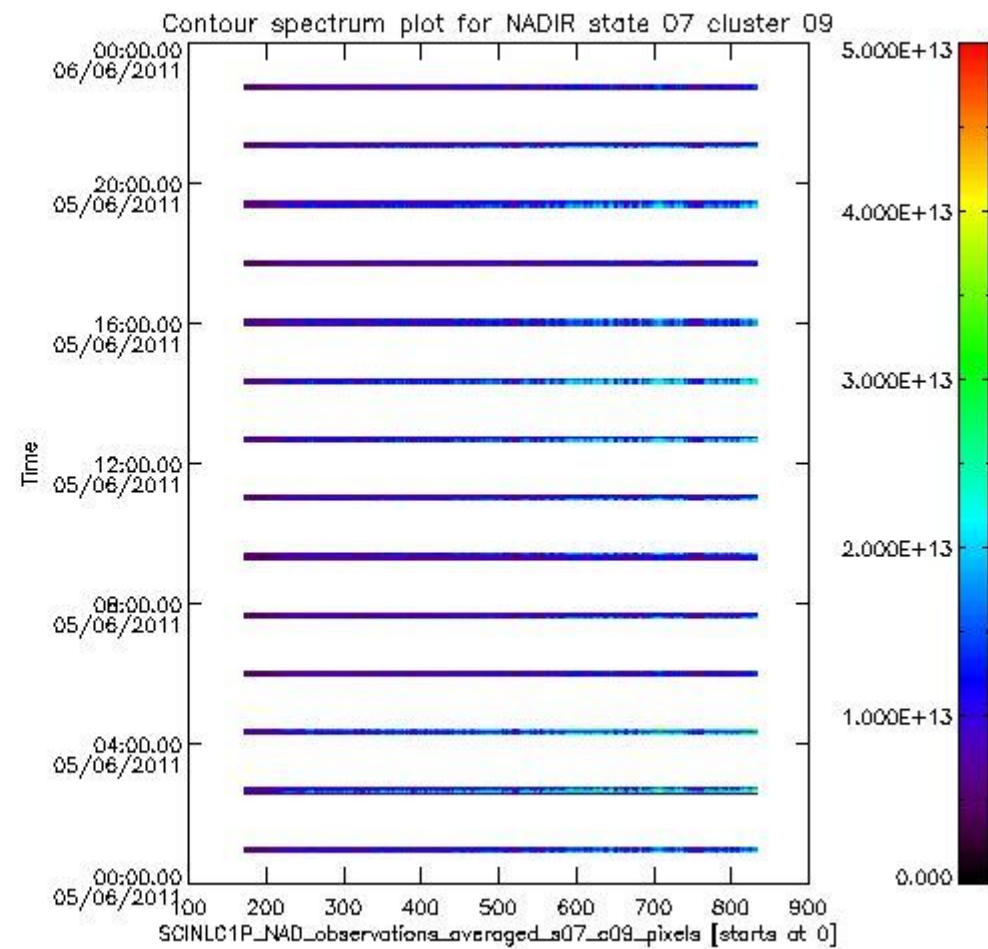
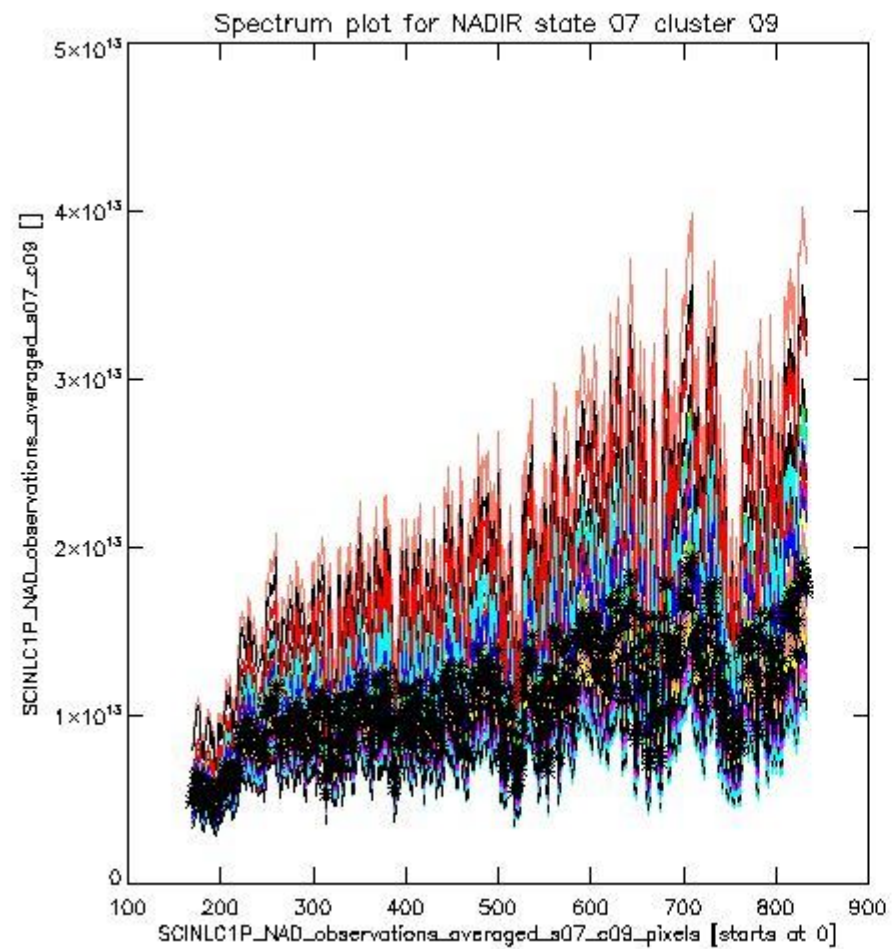


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_1.PNG

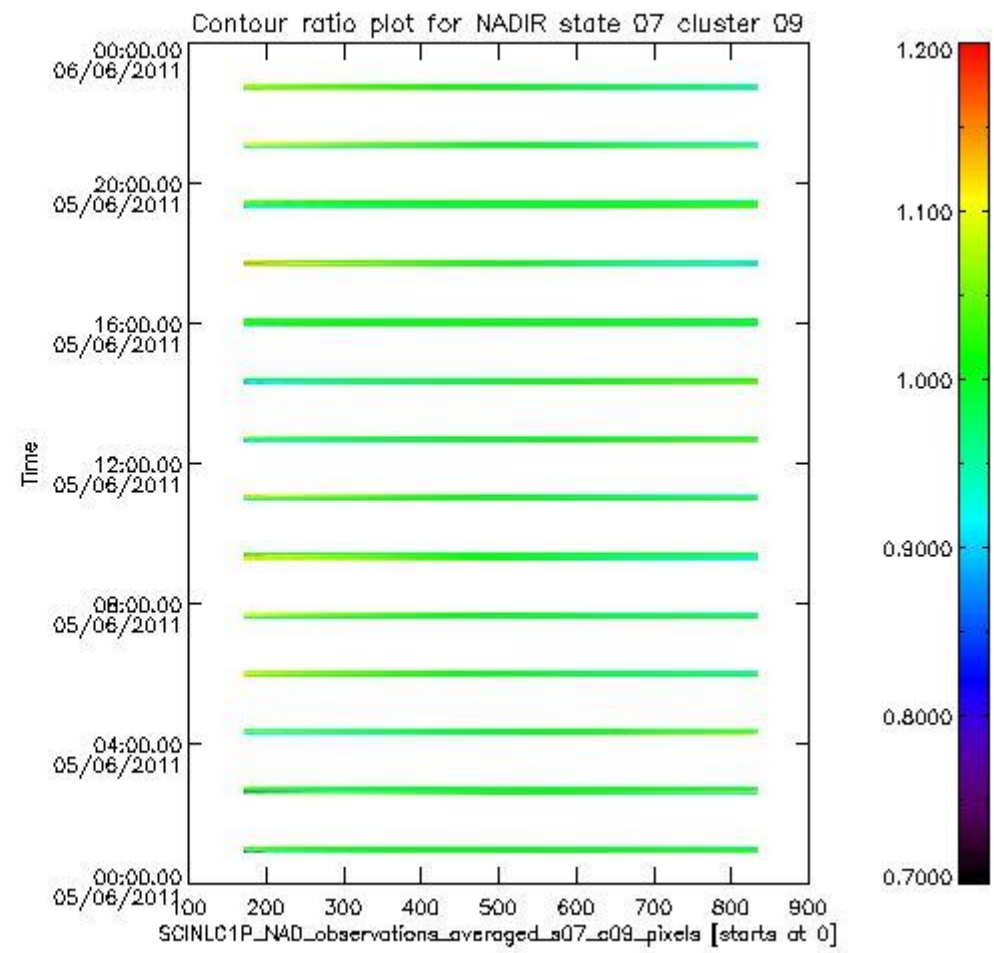
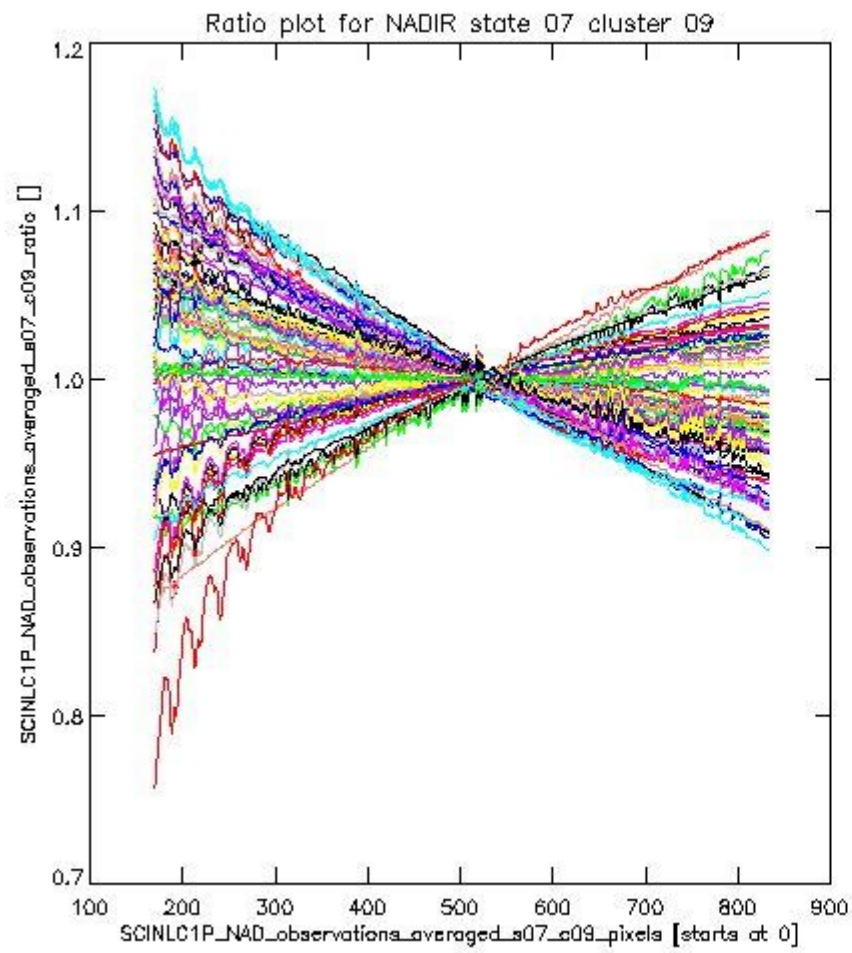
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:53:57.735
Start time of last sample	05JUN2011 22:46:02.882
Reference period start time	06MAY2011 00:53:59.663
Reference period stop time	04JUN2011 23:22:49.113
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





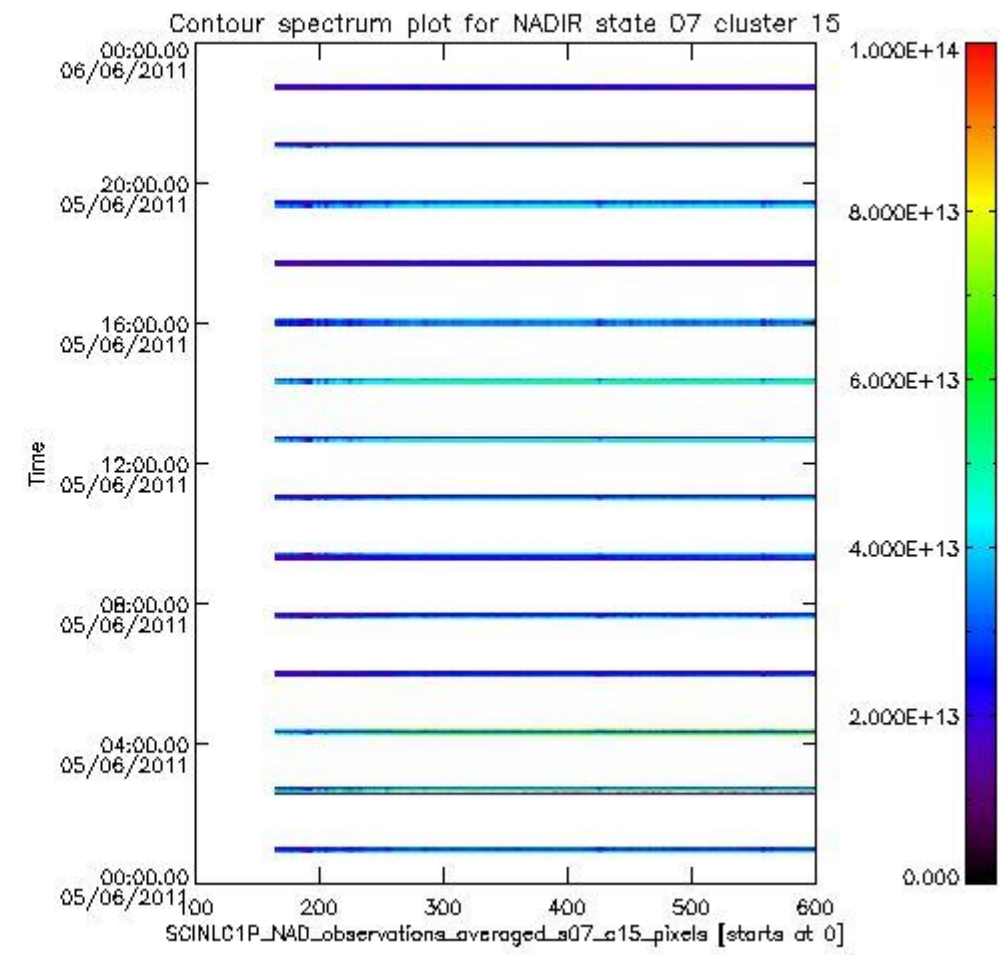
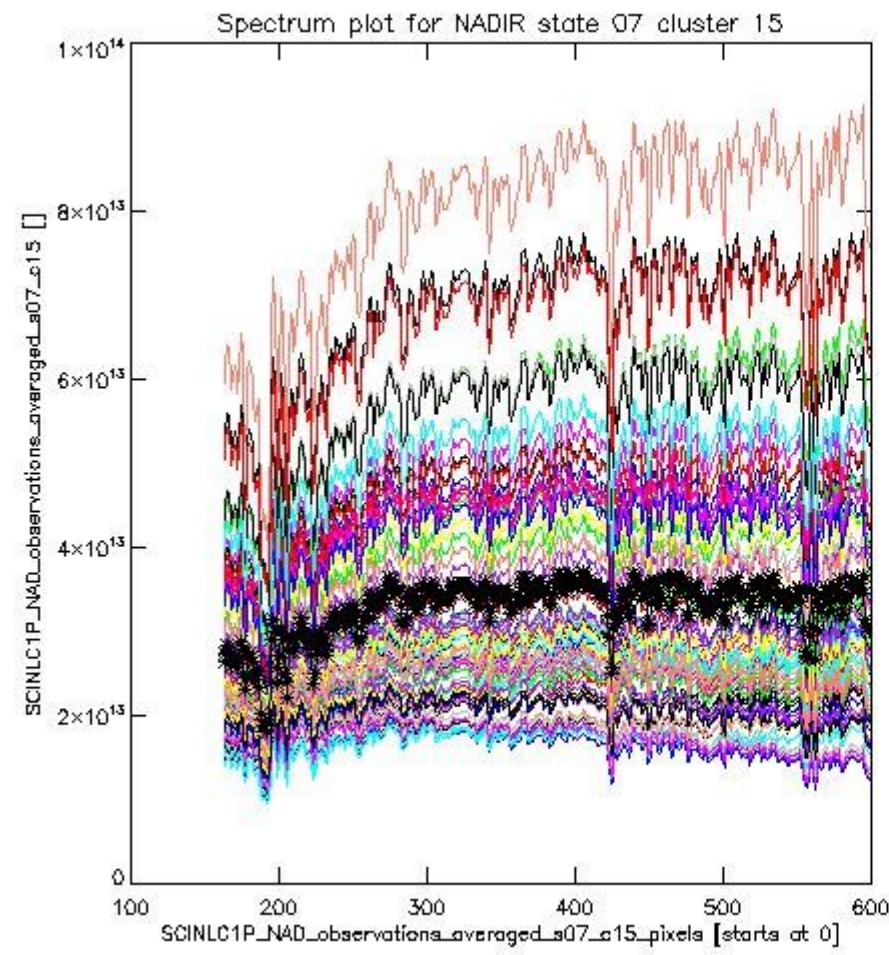
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_3.PNG

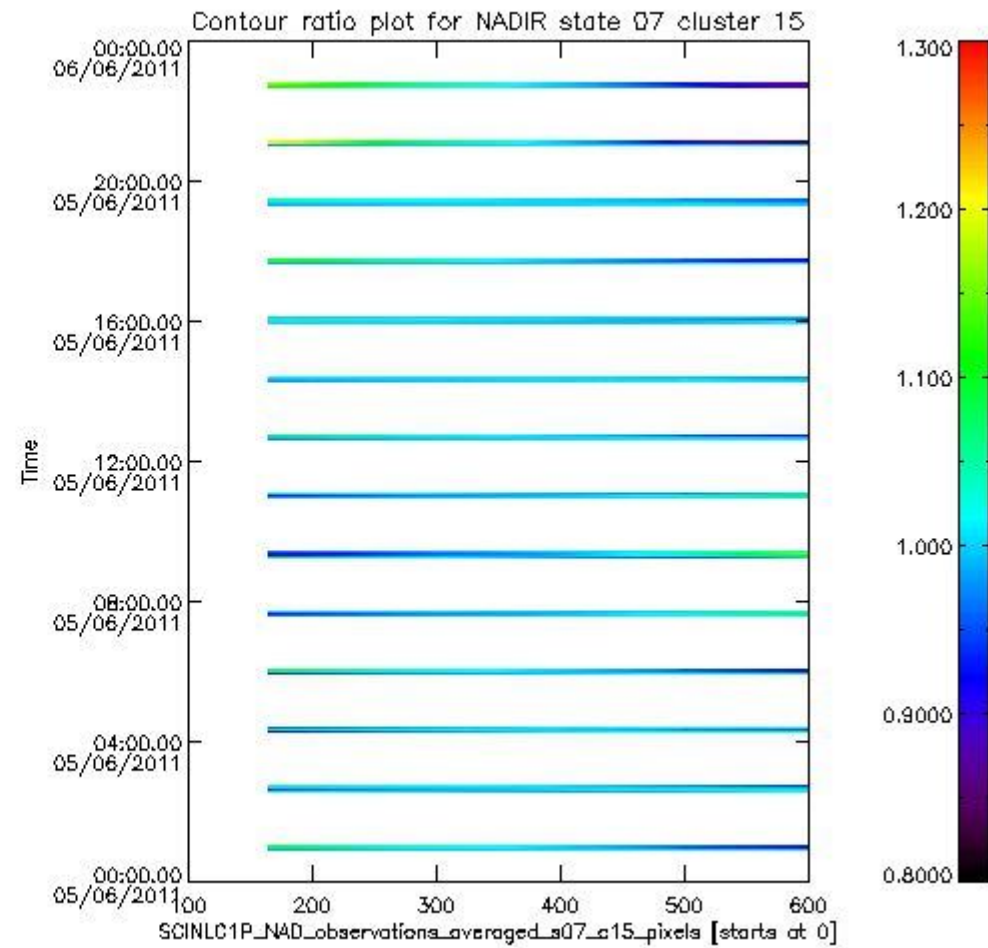
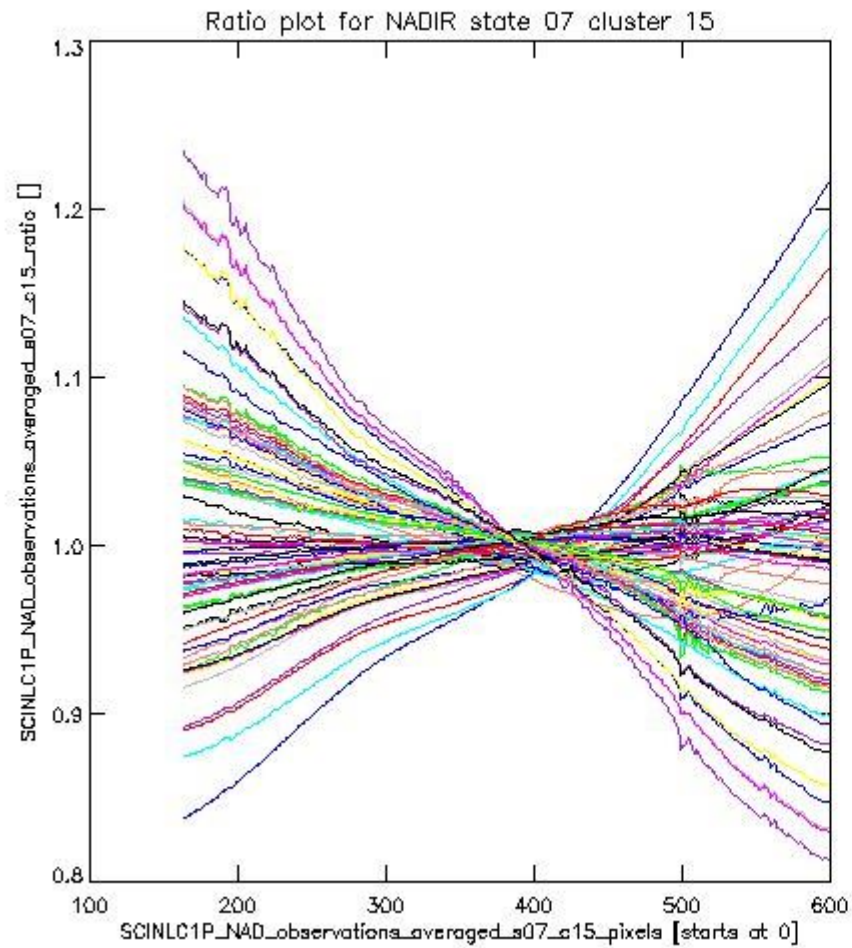
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:53:57.735
Start time of last sample	05JUN2011 22:46:02.882
Reference period start time	06MAY2011 00:53:59.663
Reference period stop time	04JUN2011 23:22:49.113
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\_20110605\_4.PNG



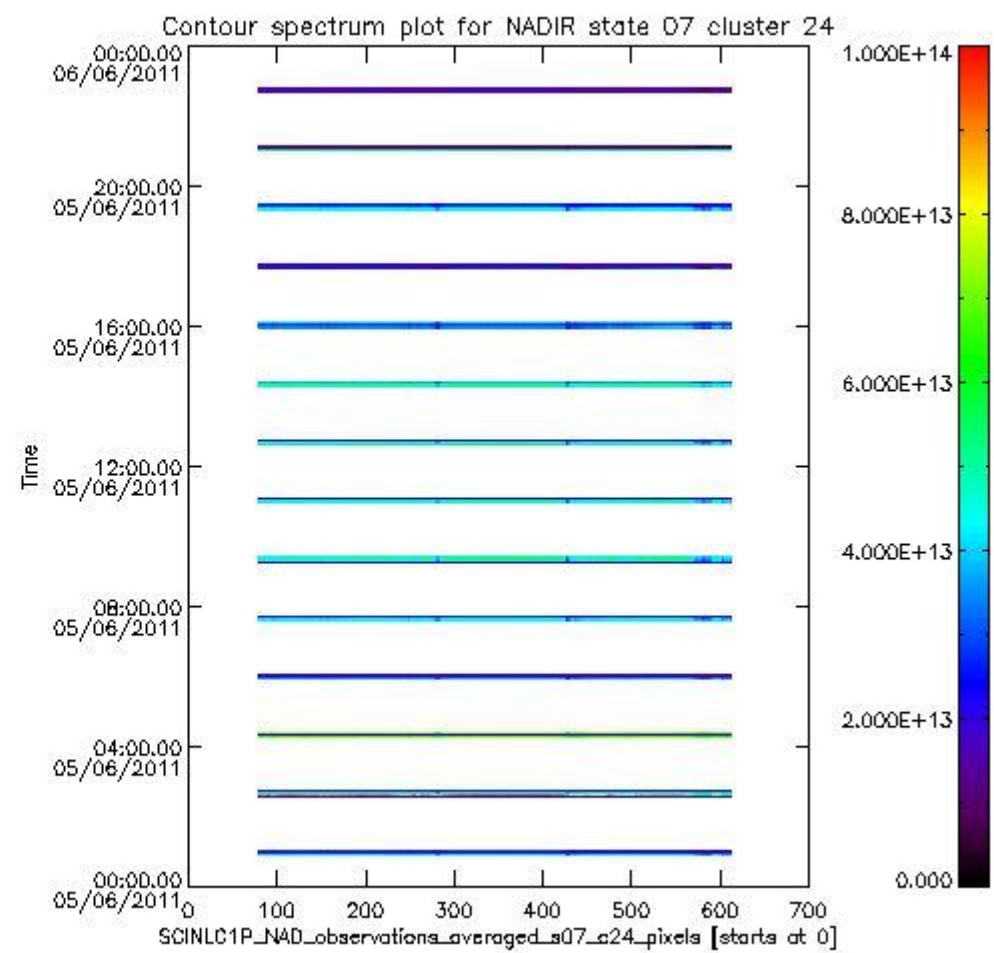
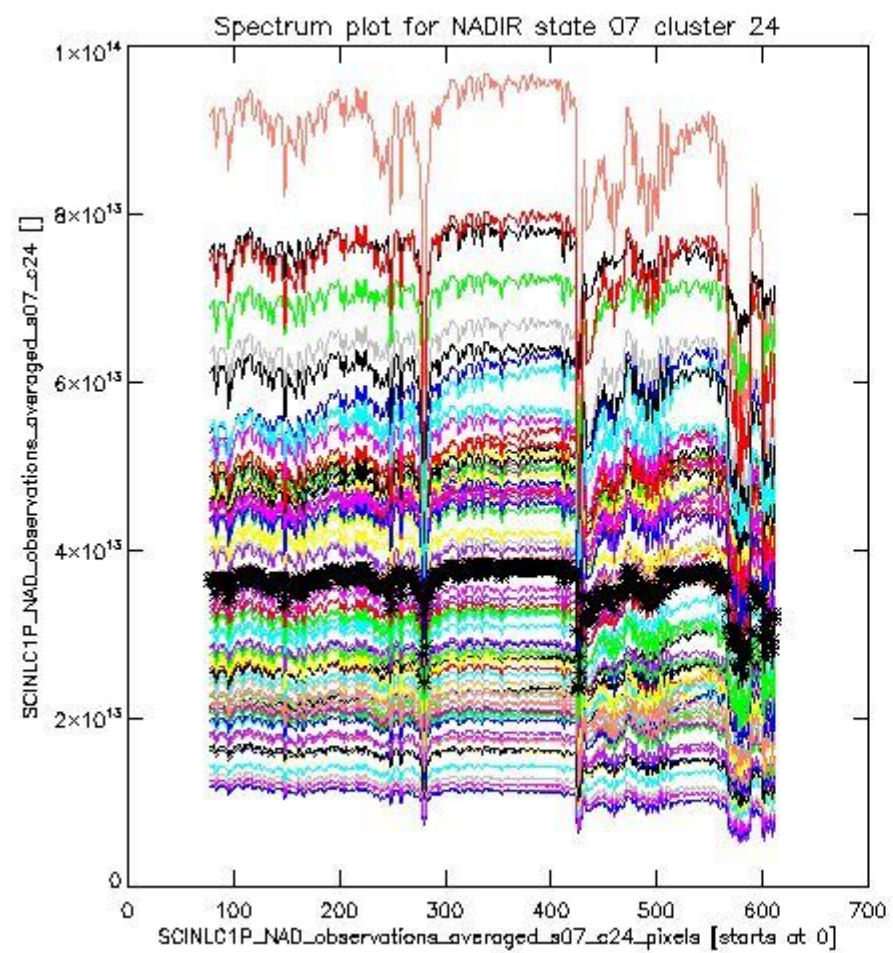


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_5.PNG

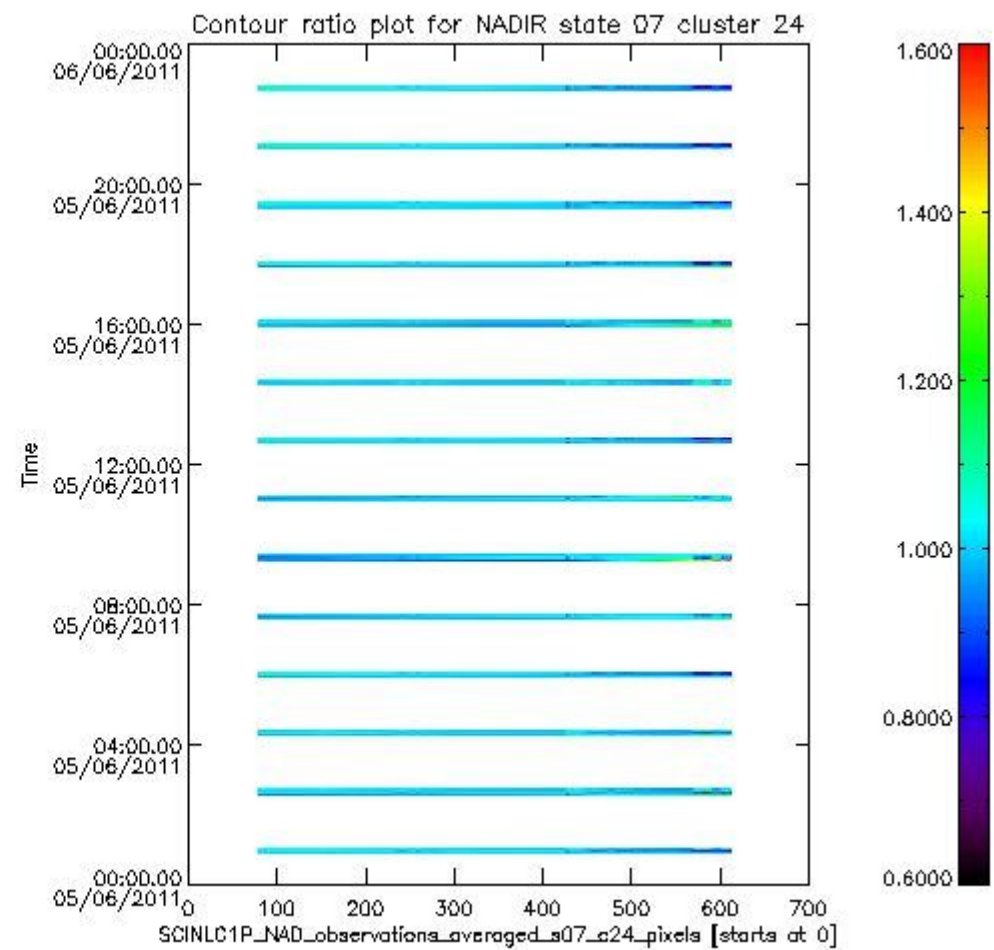
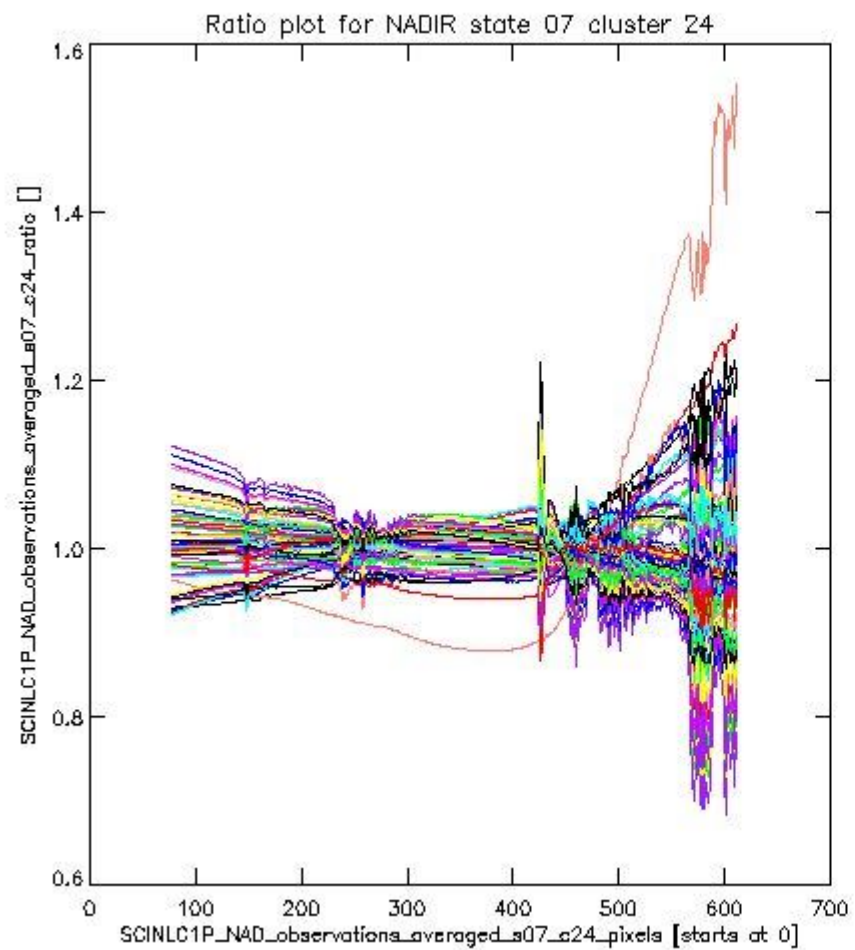
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:53:57.735
Start time of last sample	05JUN2011 22:46:02.882
Reference period start time	06MAY2011 00:53:59.663
Reference period stop time	04JUN2011 23:22:49.113
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612





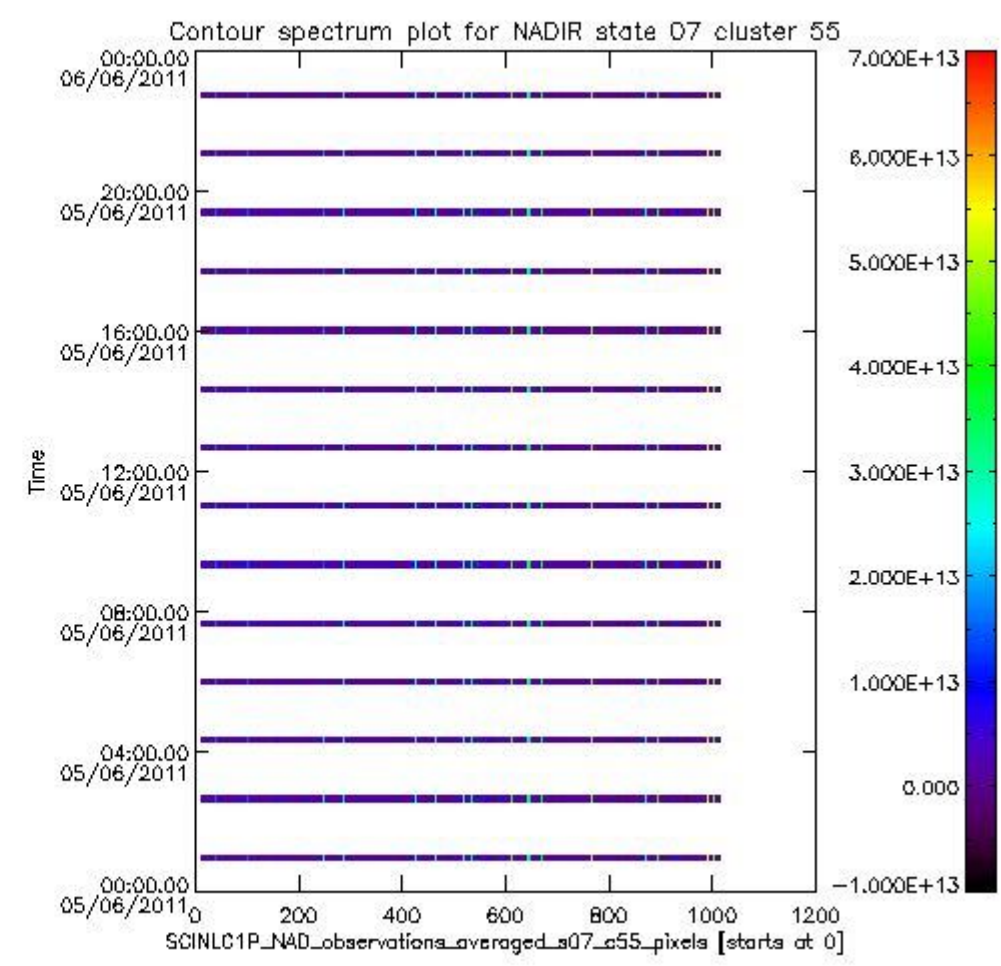
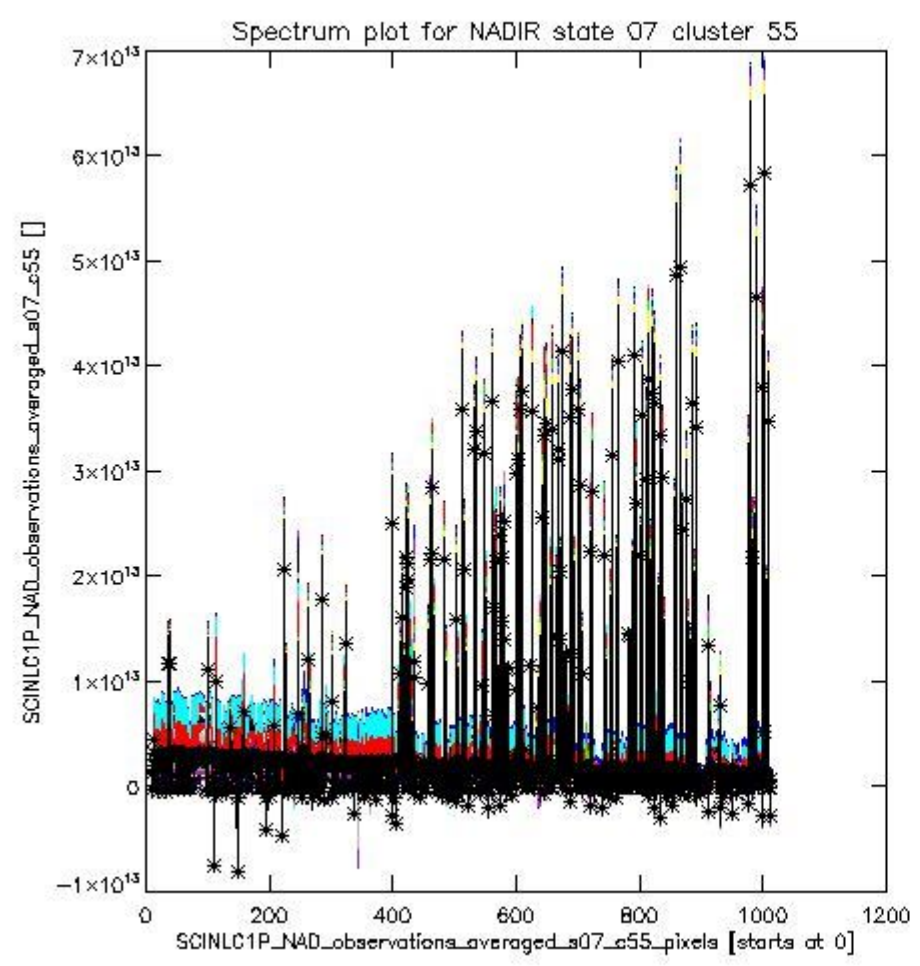
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_6.PNG



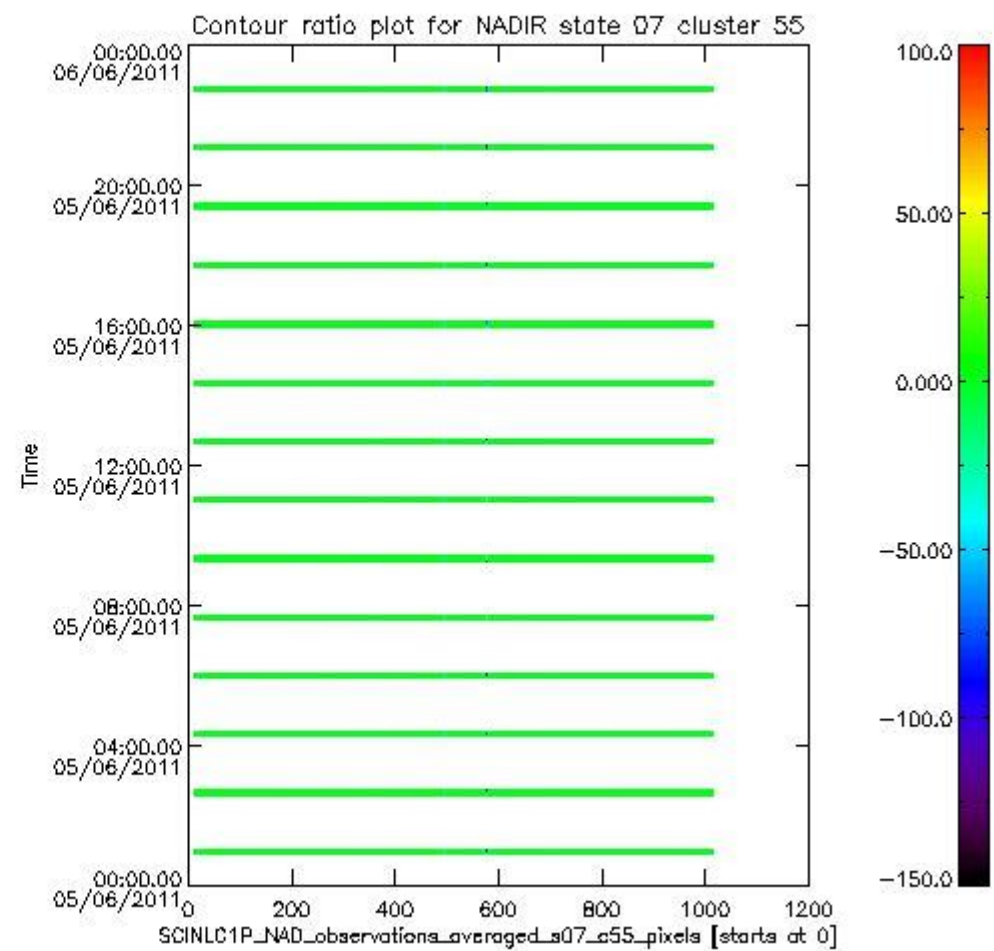
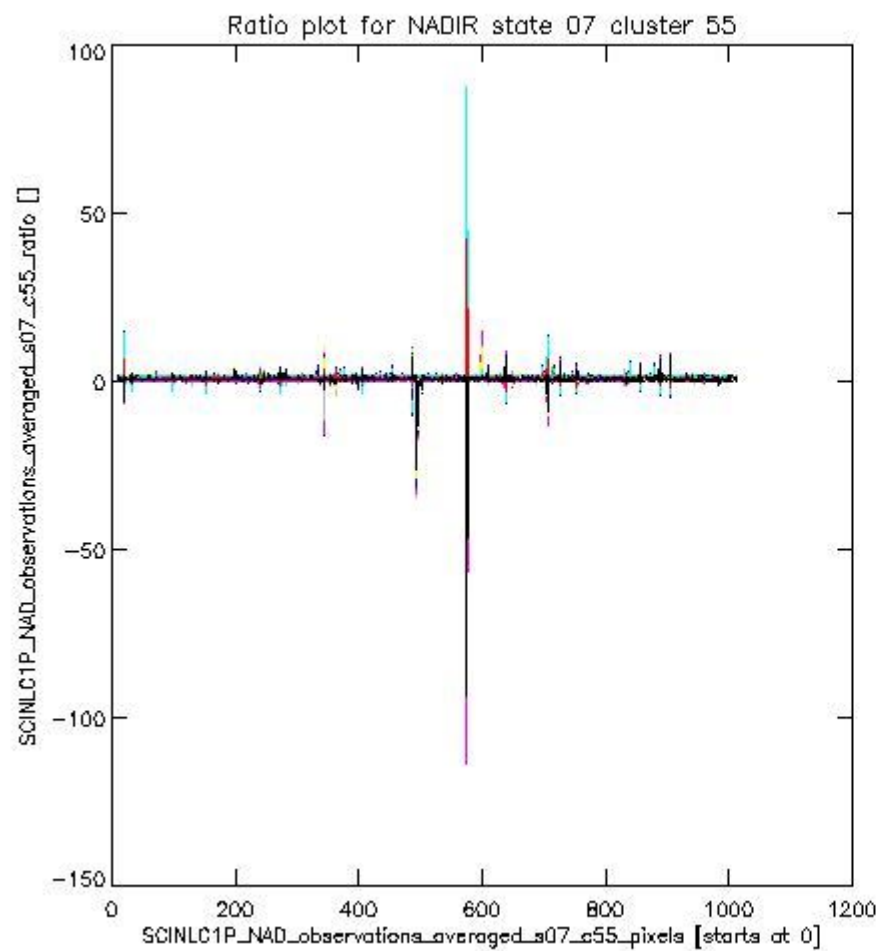
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_7.PNG

**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	05JUN2011 00:53:57.735
Start time of last sample	05JUN2011 22:46:02.882
Reference period start time	06MAY2011 00:53:59.663
Reference period stop time	04JUN2011 23:22:49.113
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\_20110605\_8.PNG

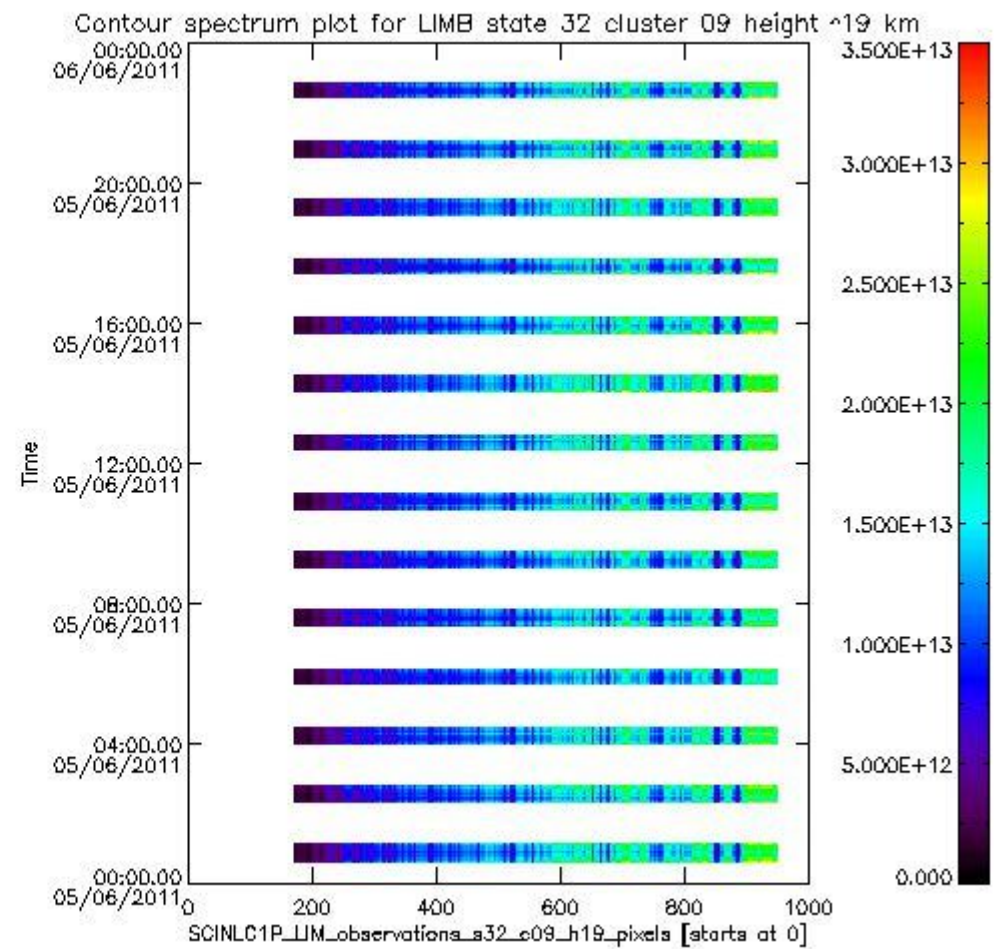
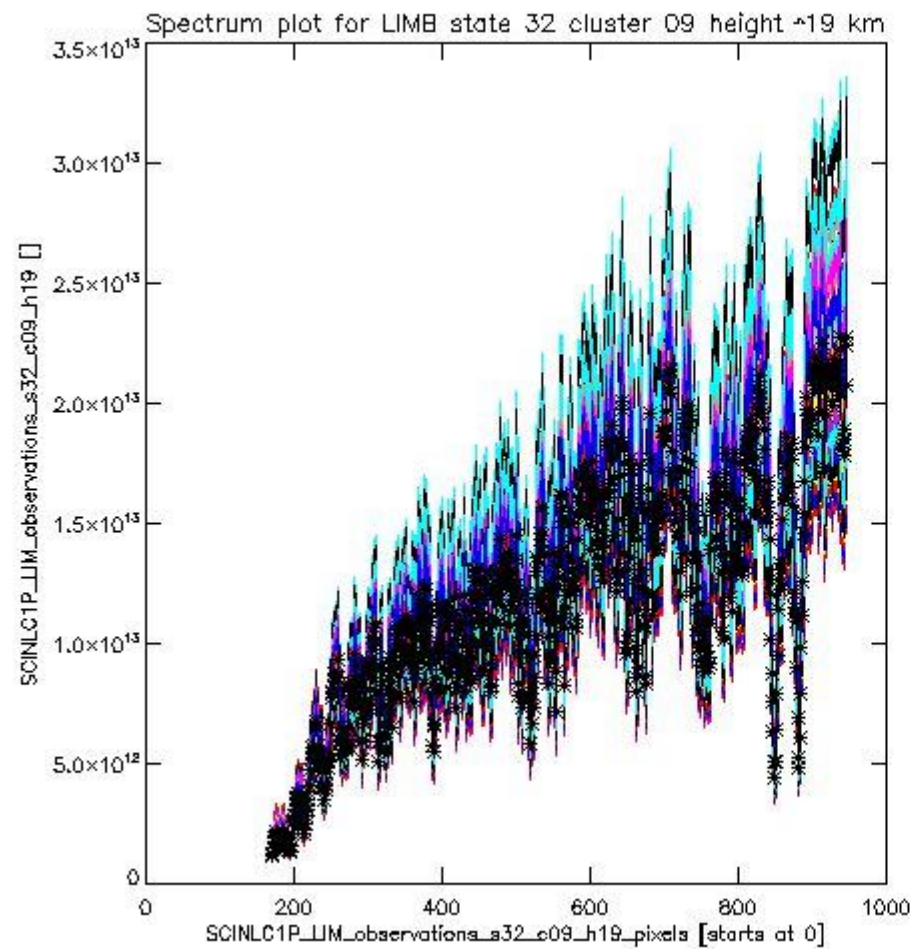


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_9.PNG

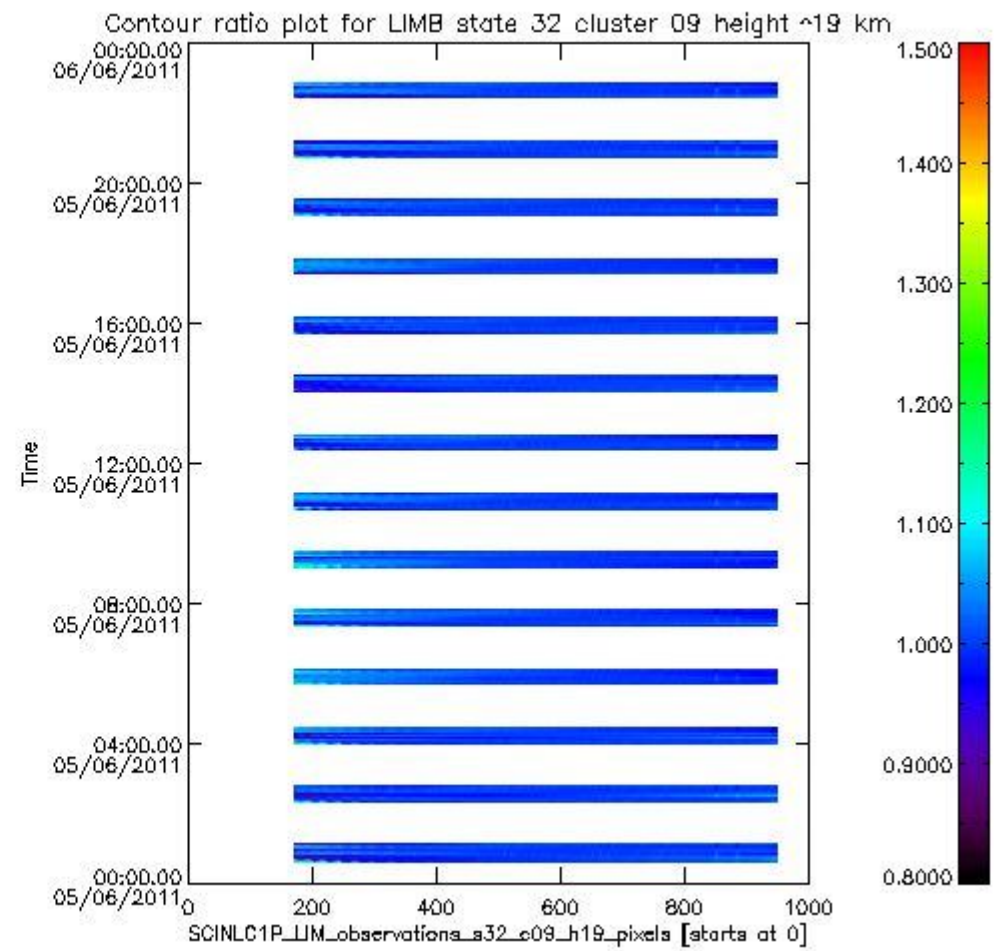
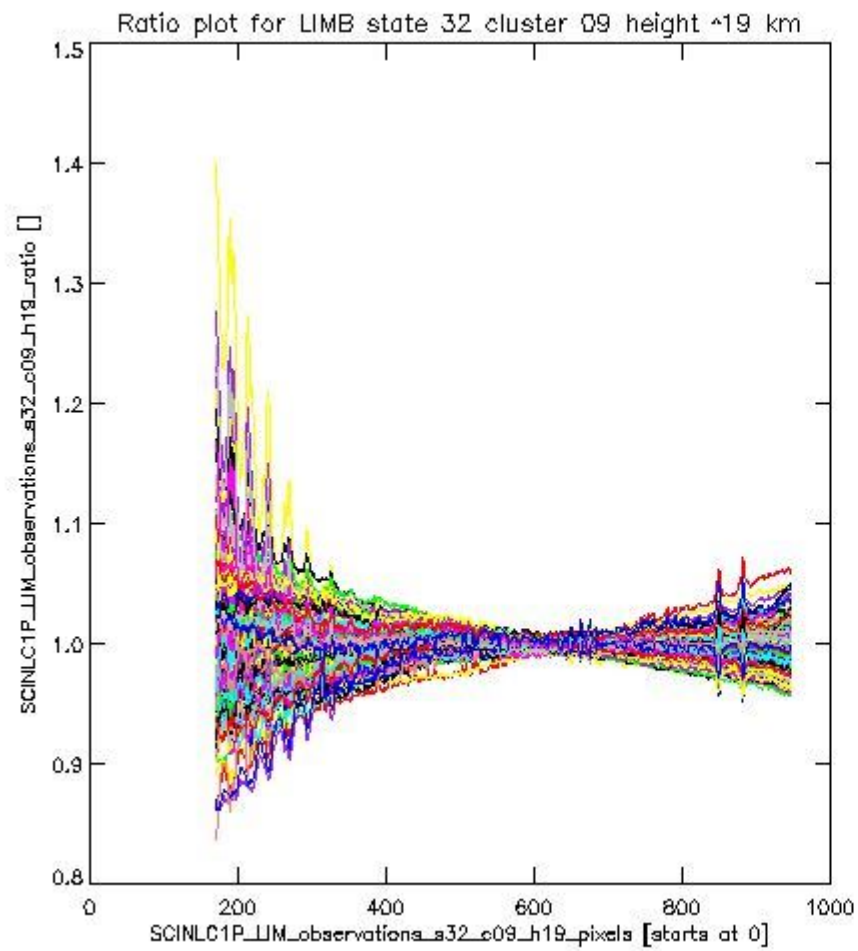
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:38:44.360
Start time of last sample	05JUN2011 22:49:14.178
Reference period start time	06MAY2011 00:40:49.027
Reference period stop time	04JUN2011 23:26:00.414
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





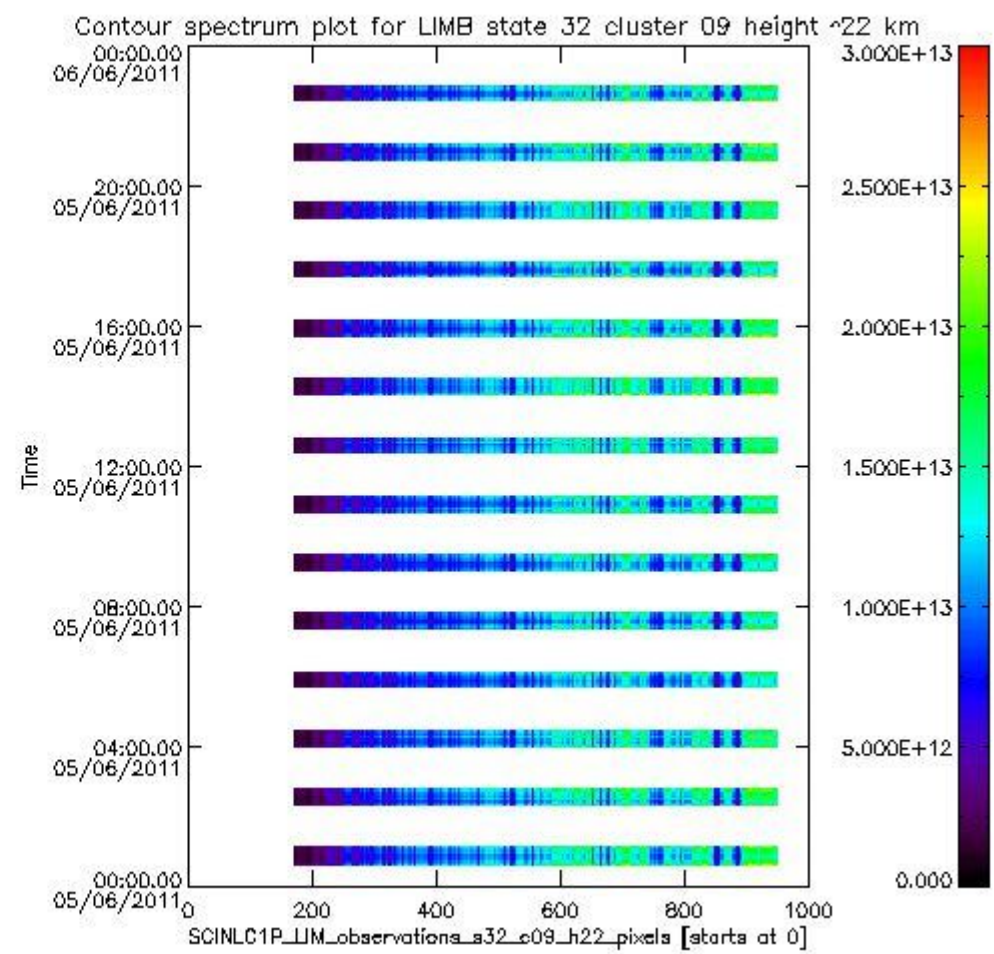
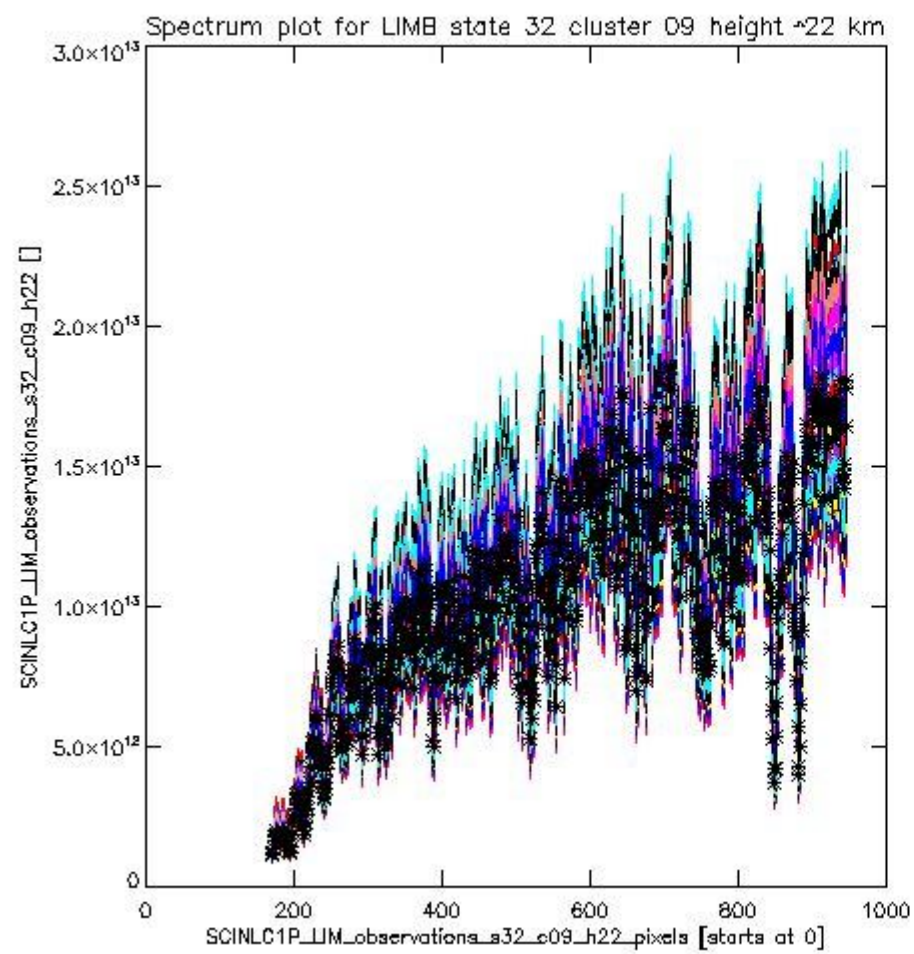
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_11.PNG

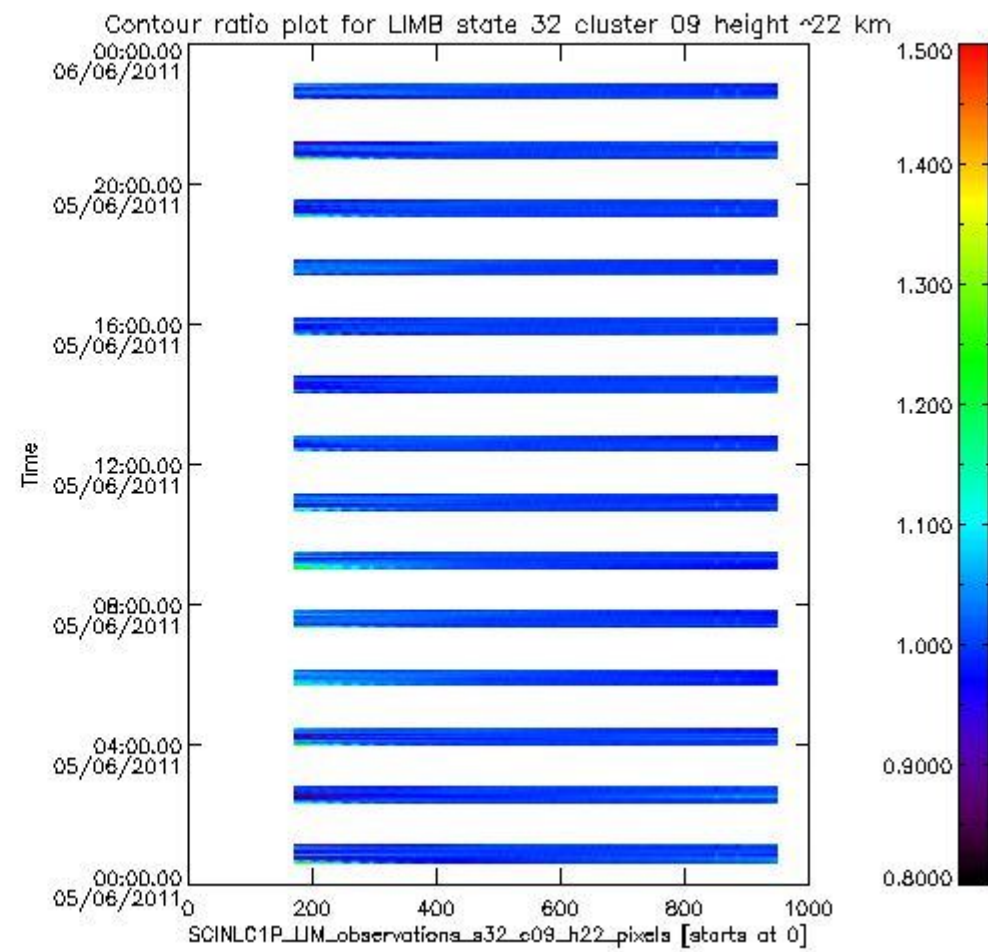
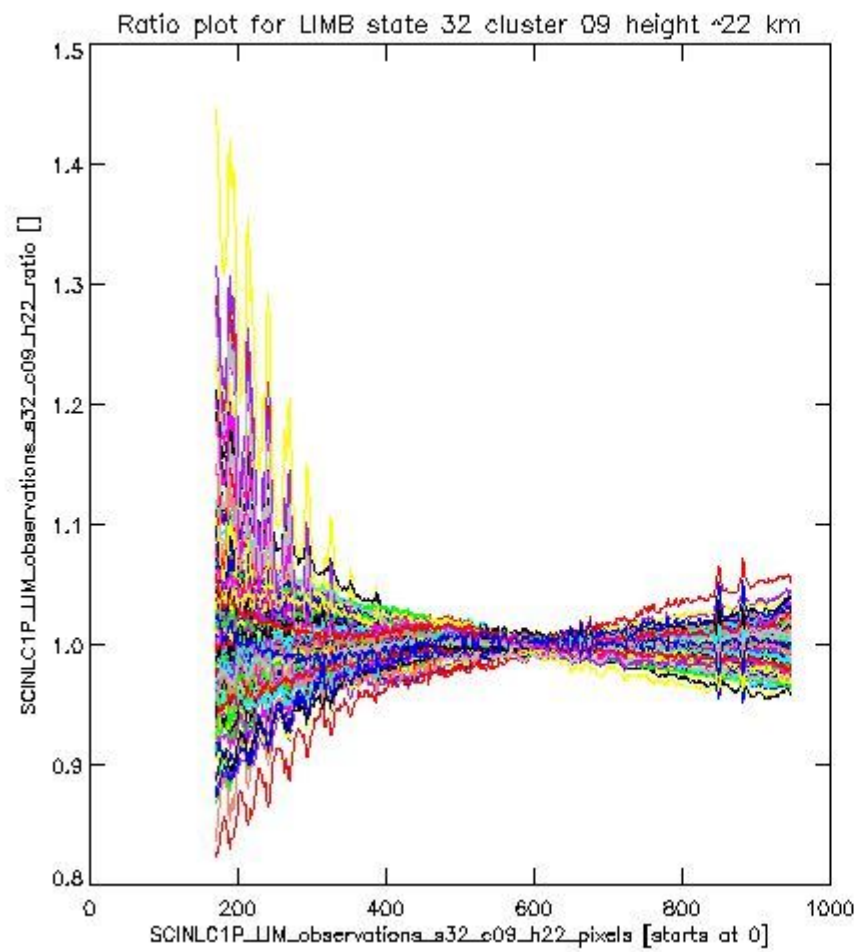
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:38:44.360
Start time of last sample	05JUN2011 22:49:14.178
Reference period start time	06MAY2011 00:40:49.027
Reference period stop time	04JUN2011 23:26:00.414
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\_20110605\_12.PNG



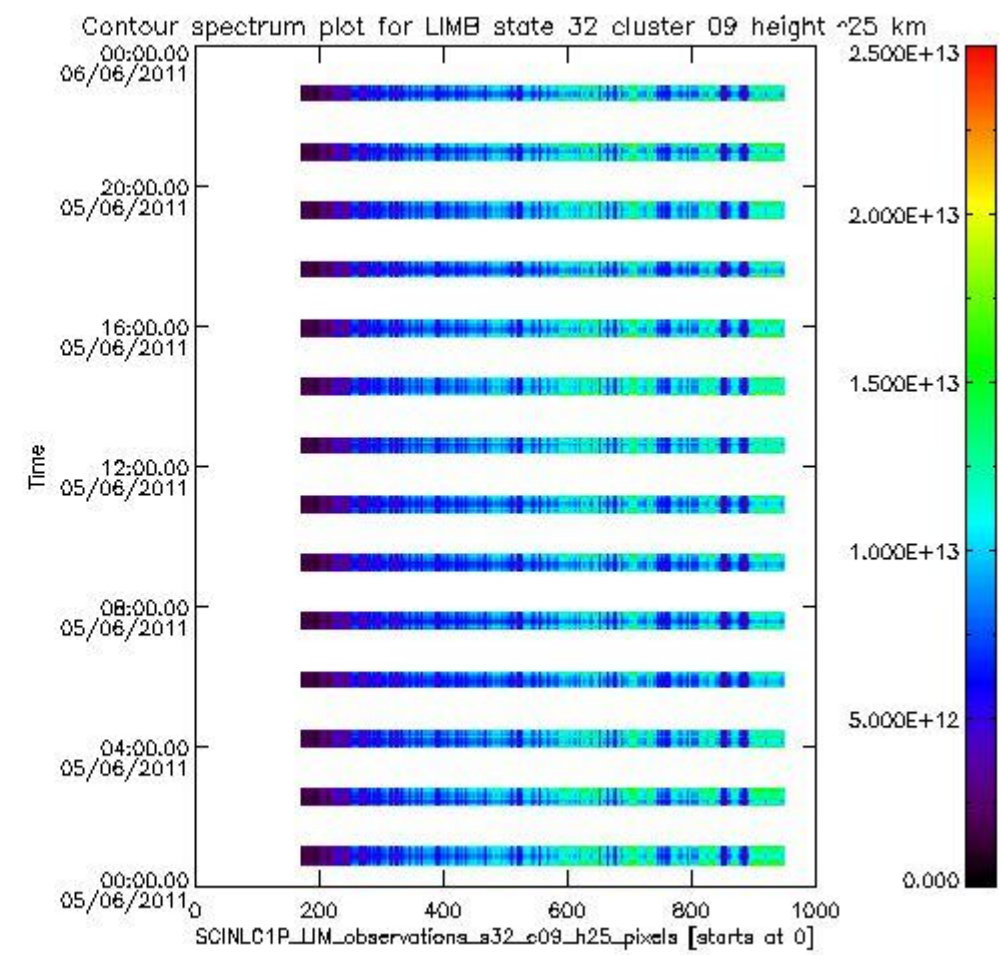
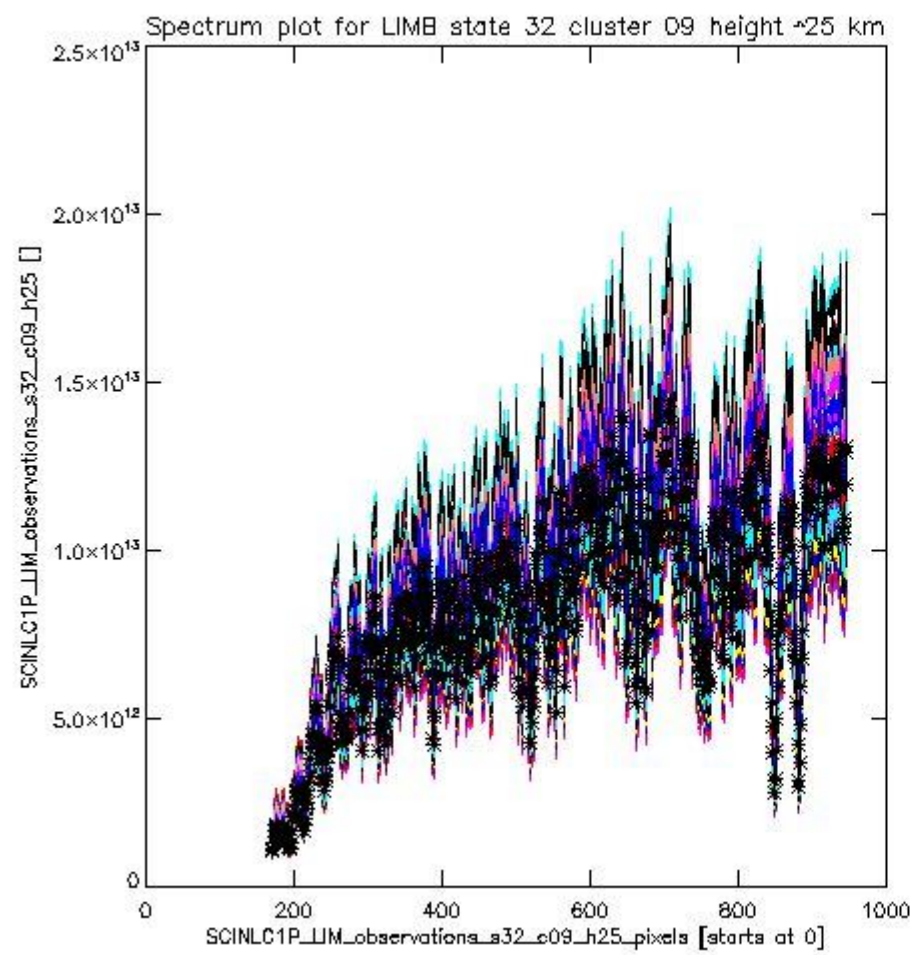


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_13.PNG

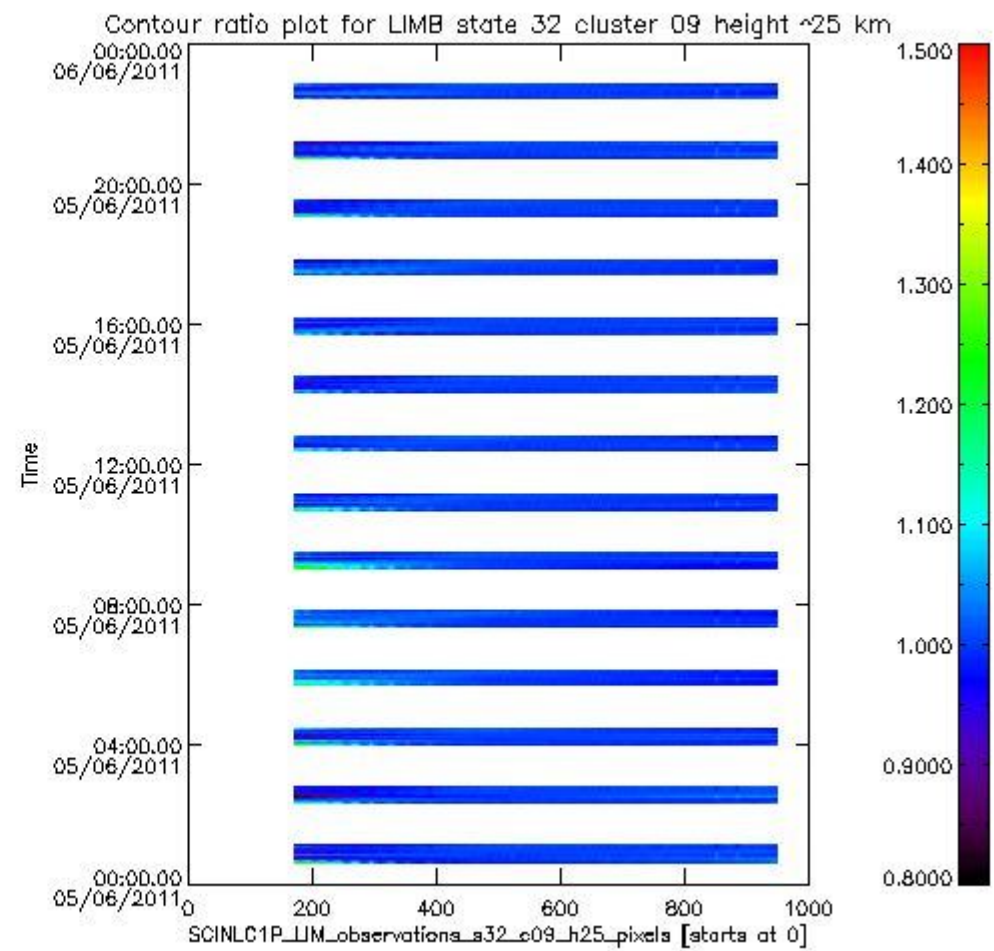
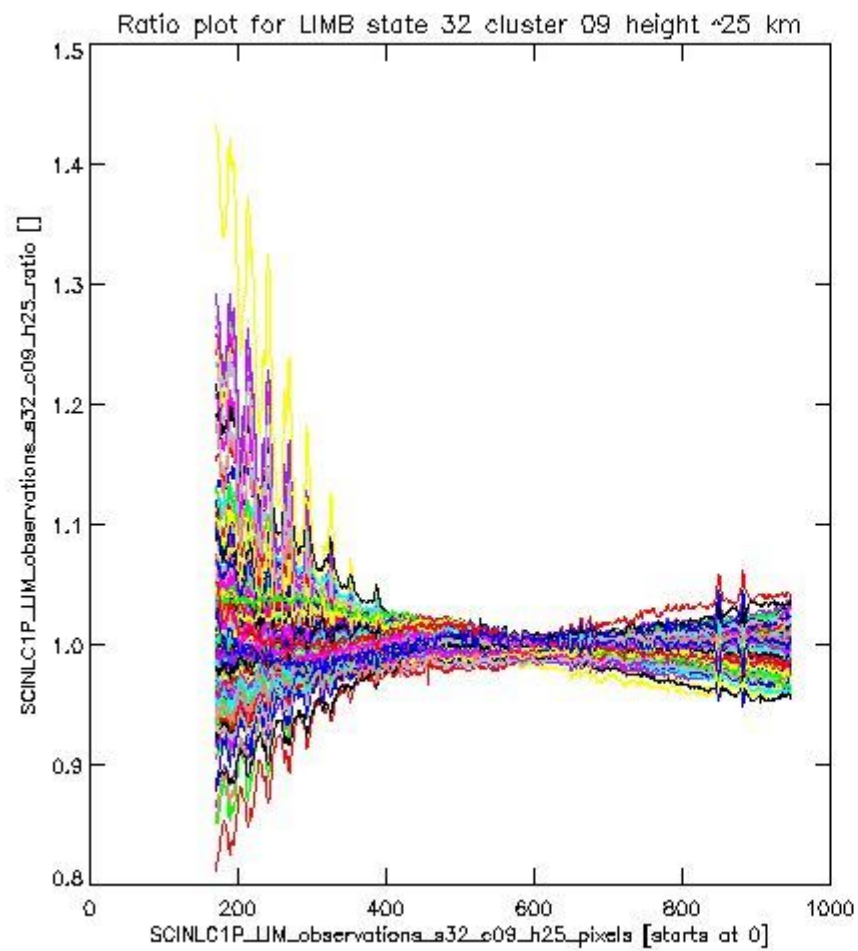
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:38:44.360
Start time of last sample	05JUN2011 22:49:14.178
Reference period start time	06MAY2011 00:40:49.027
Reference period stop time	04JUN2011 23:26:00.414
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





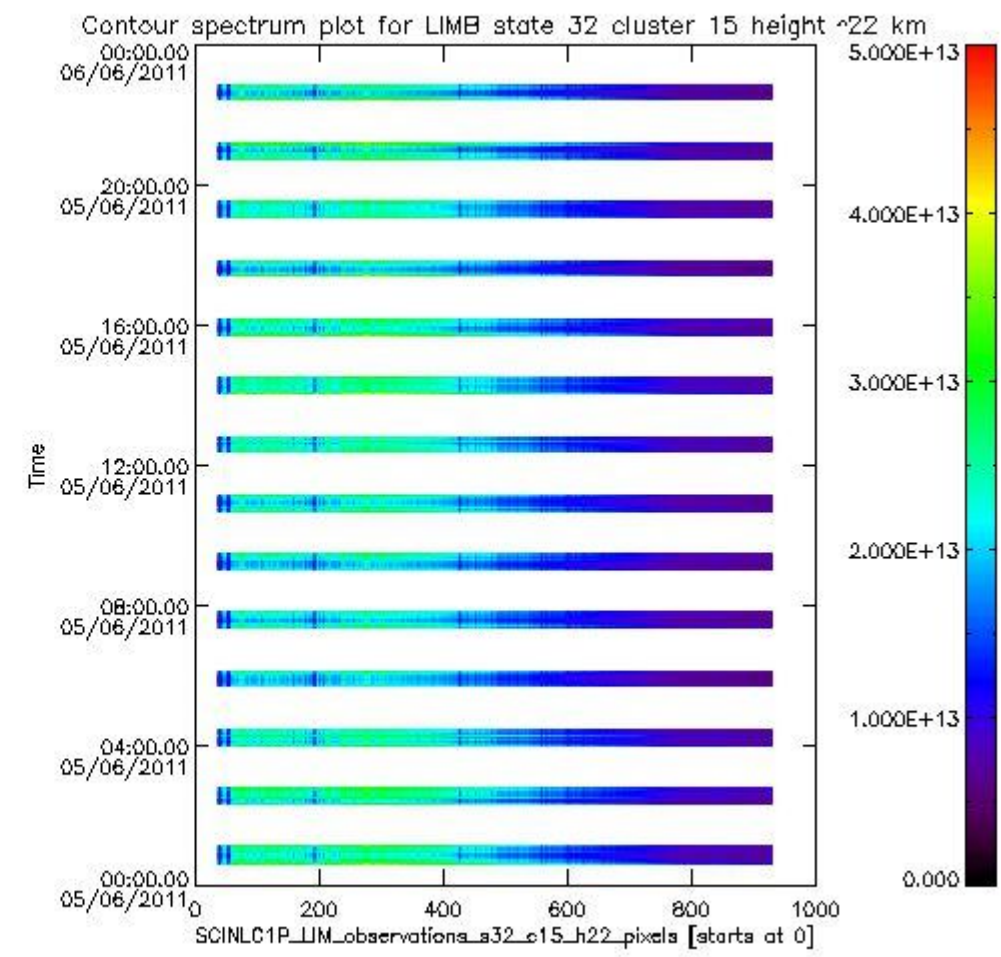
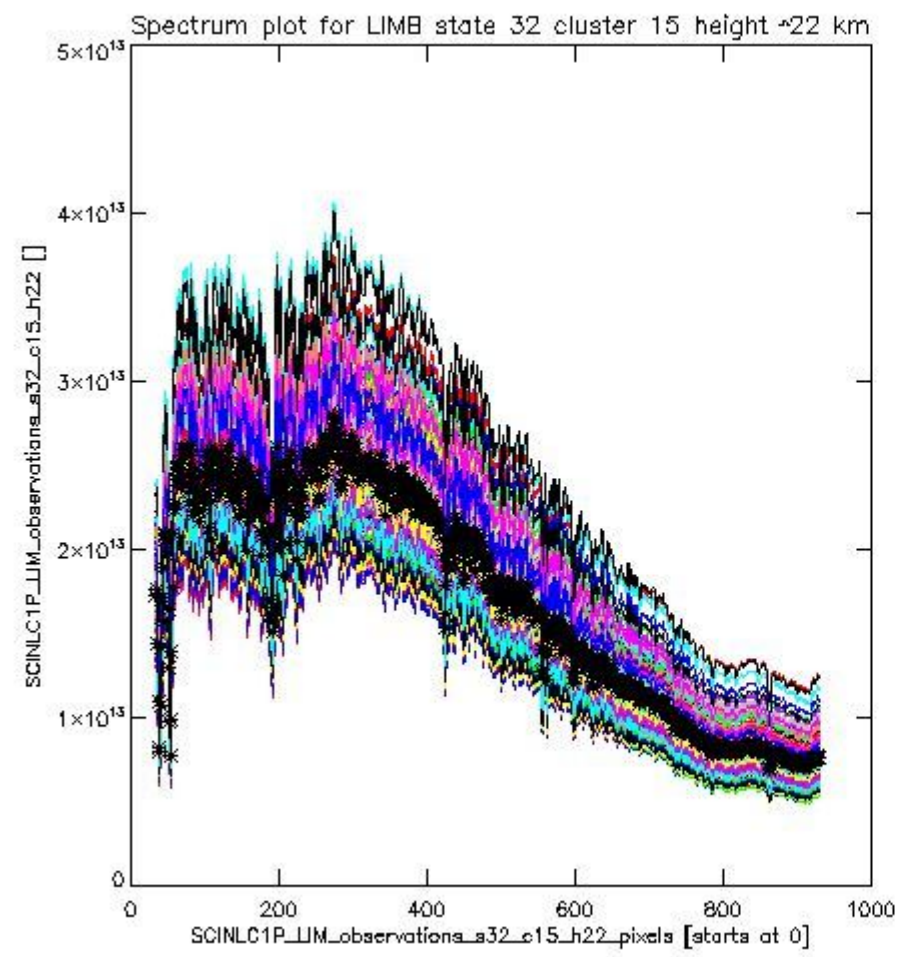
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_14.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_15.PNG

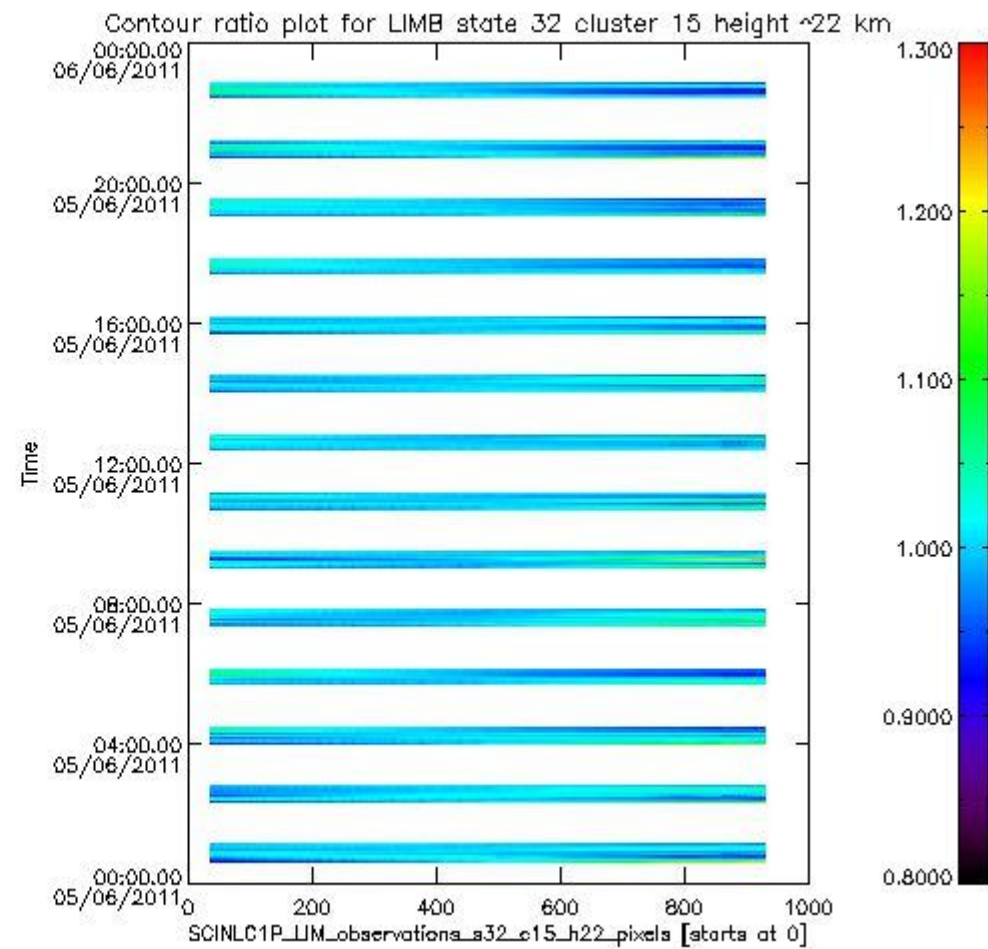
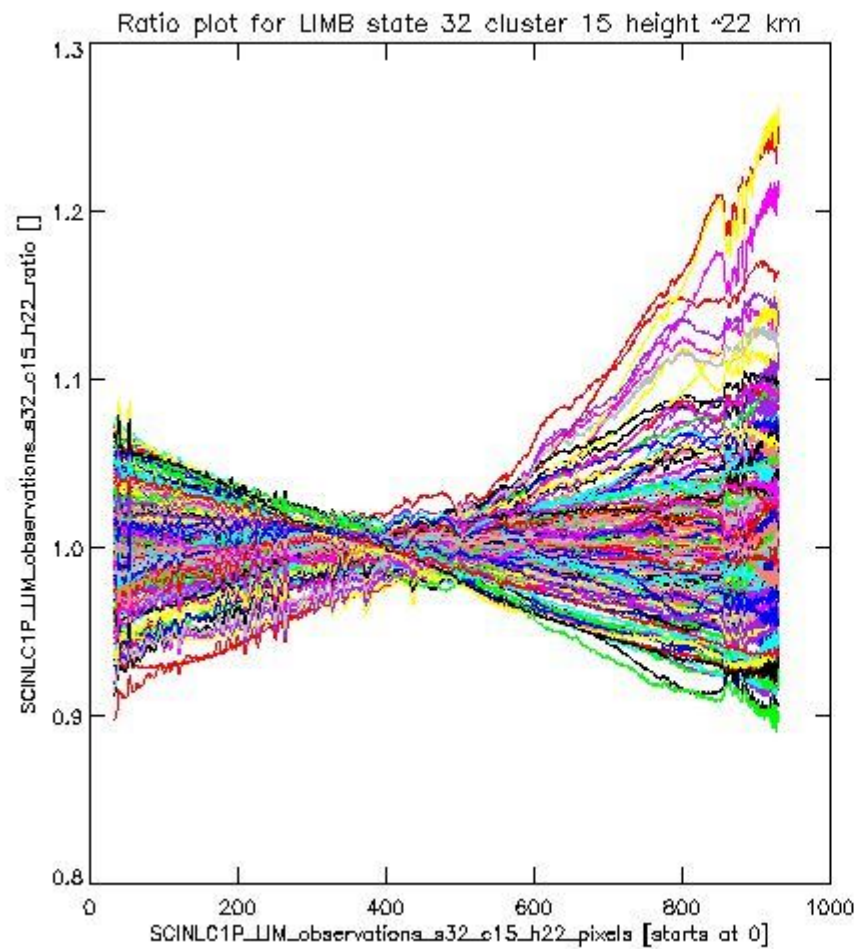
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:38:44.360
Start time of last sample	05JUN2011 22:49:14.178
Reference period start time	06MAY2011 00:40:49.027
Reference period stop time	04JUN2011 23:26:00.414
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\_20110605\_16.PNG



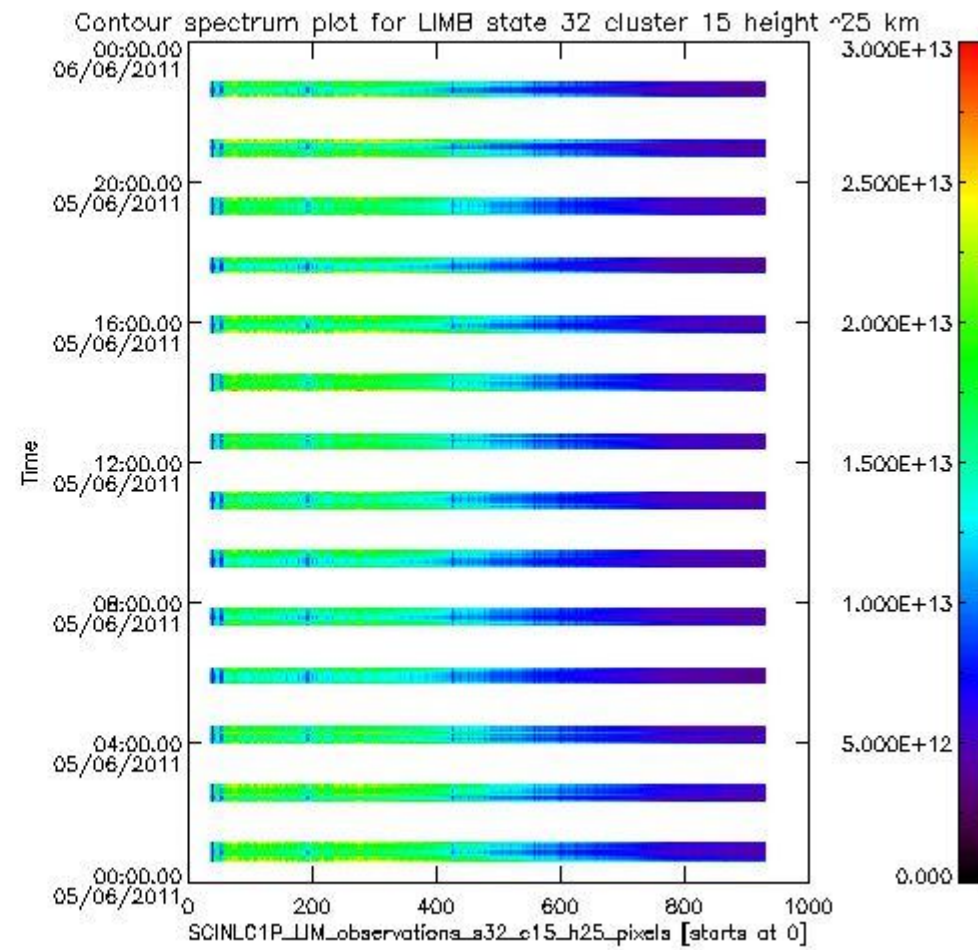
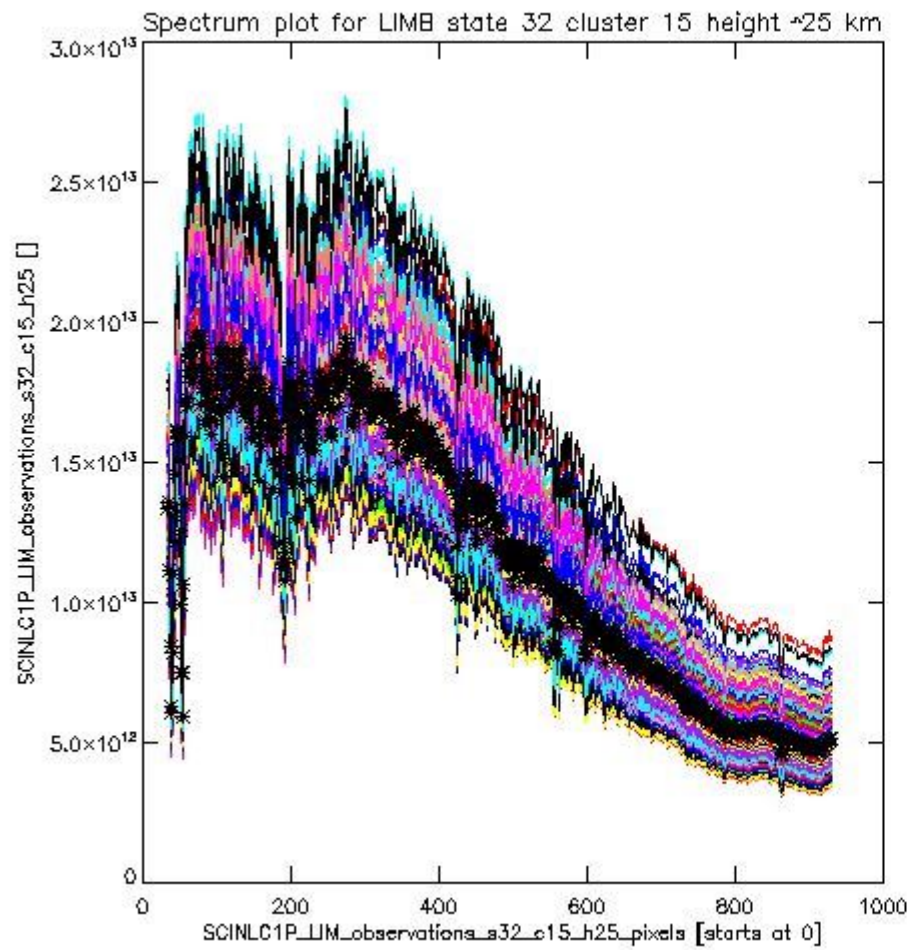


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_17.PNG

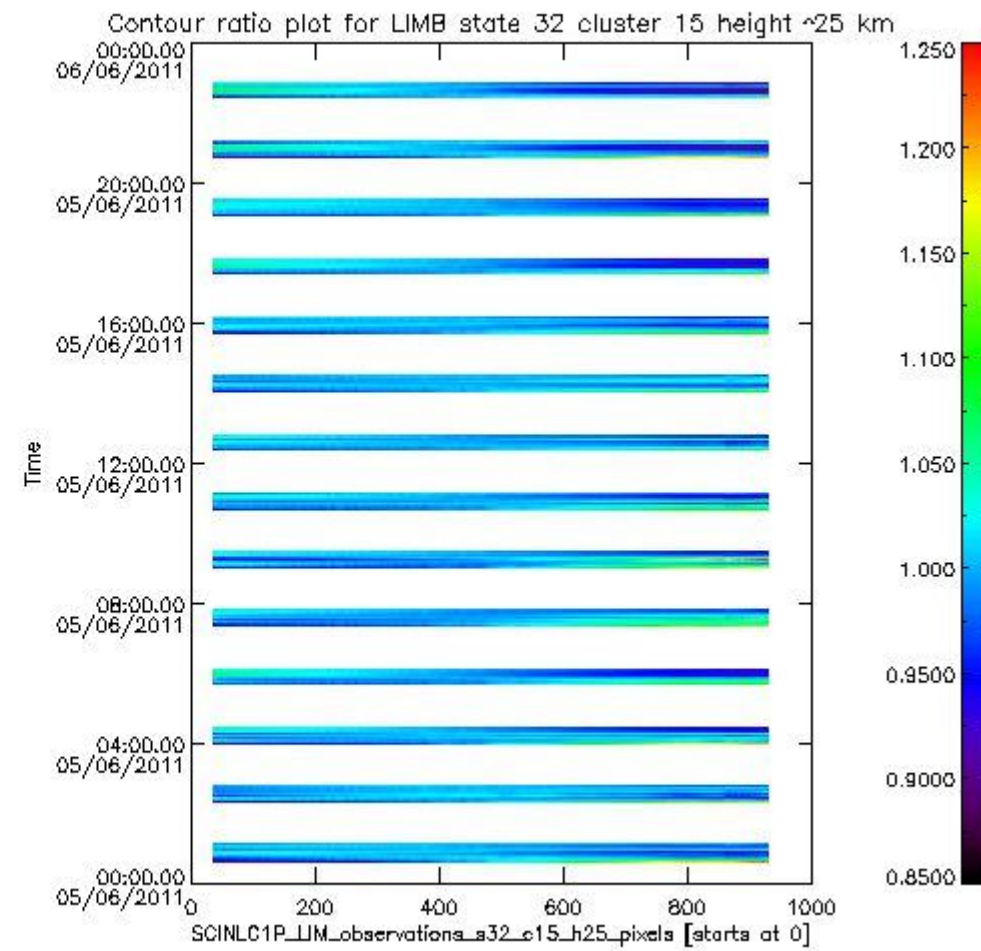
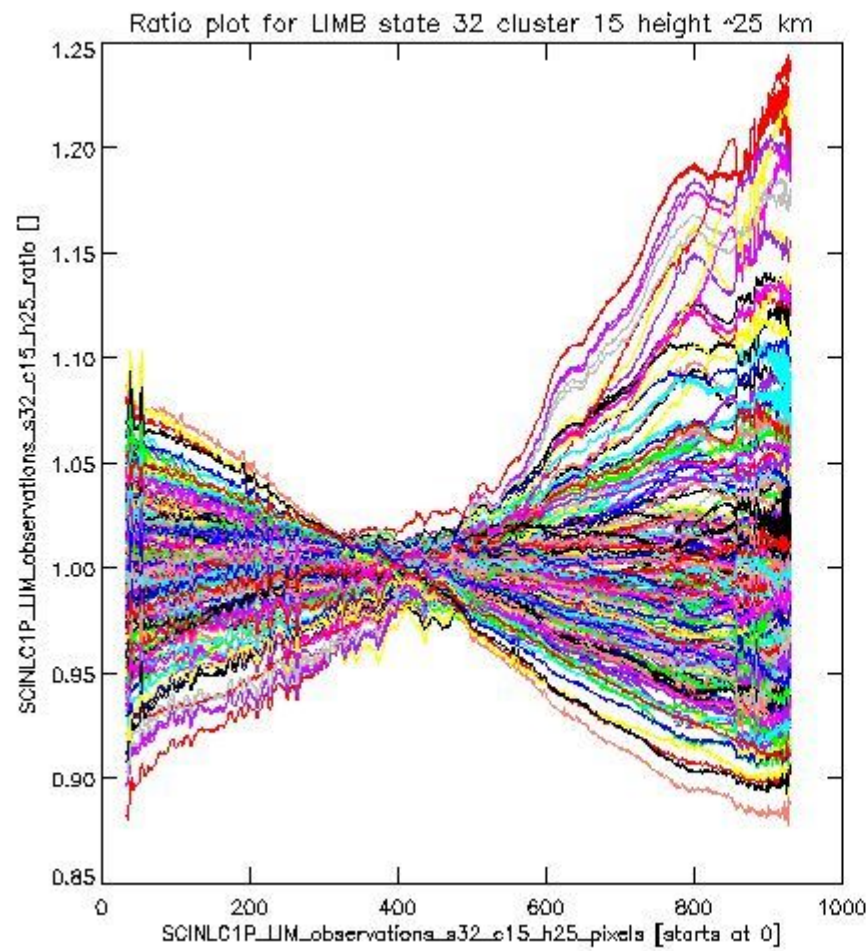
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	05JUN2011 00:38:44.360
Start time of last sample	05JUN2011 22:49:14.178
Reference period start time	06MAY2011 00:40:49.027
Reference period stop time	04JUN2011 23:26:00.414
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\_20110605\_18.PNG

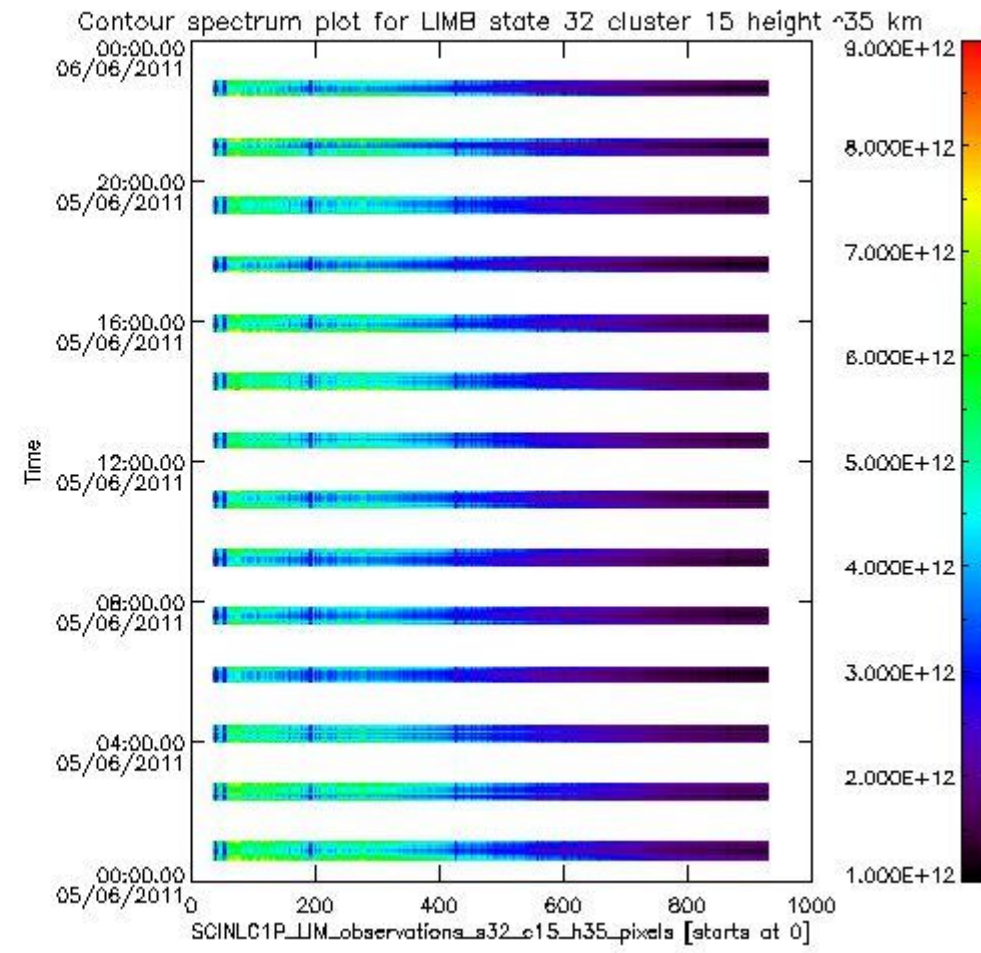
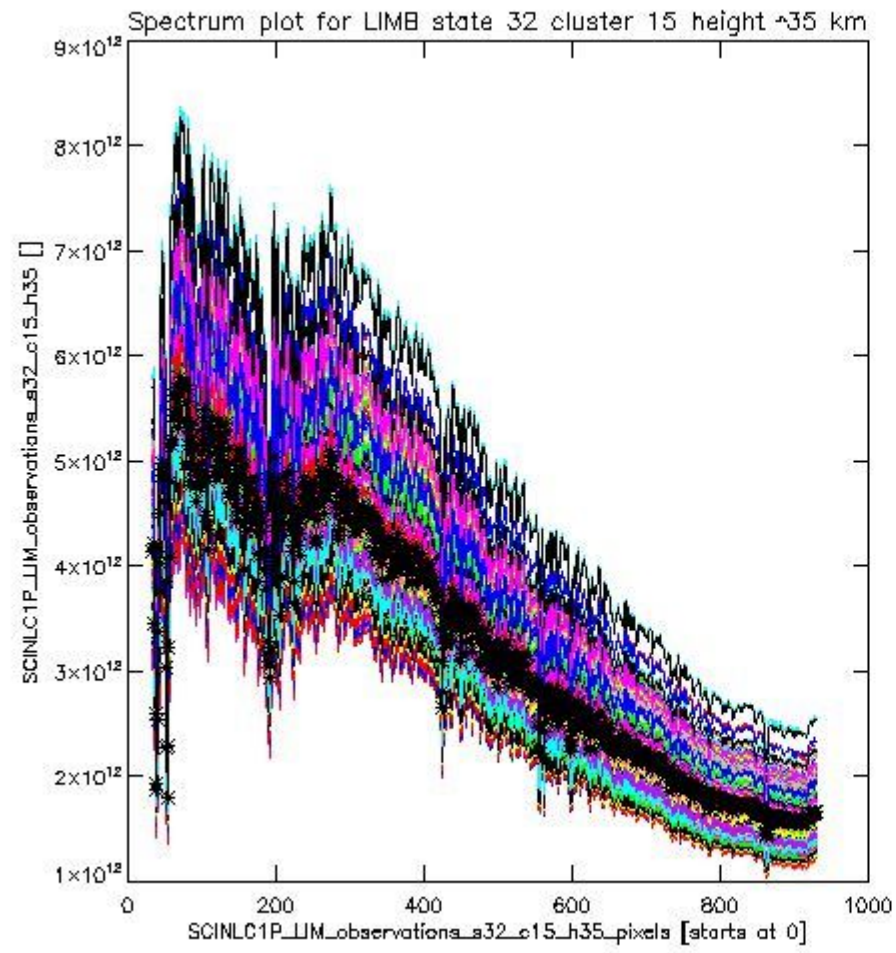


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_19.PNG

**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:

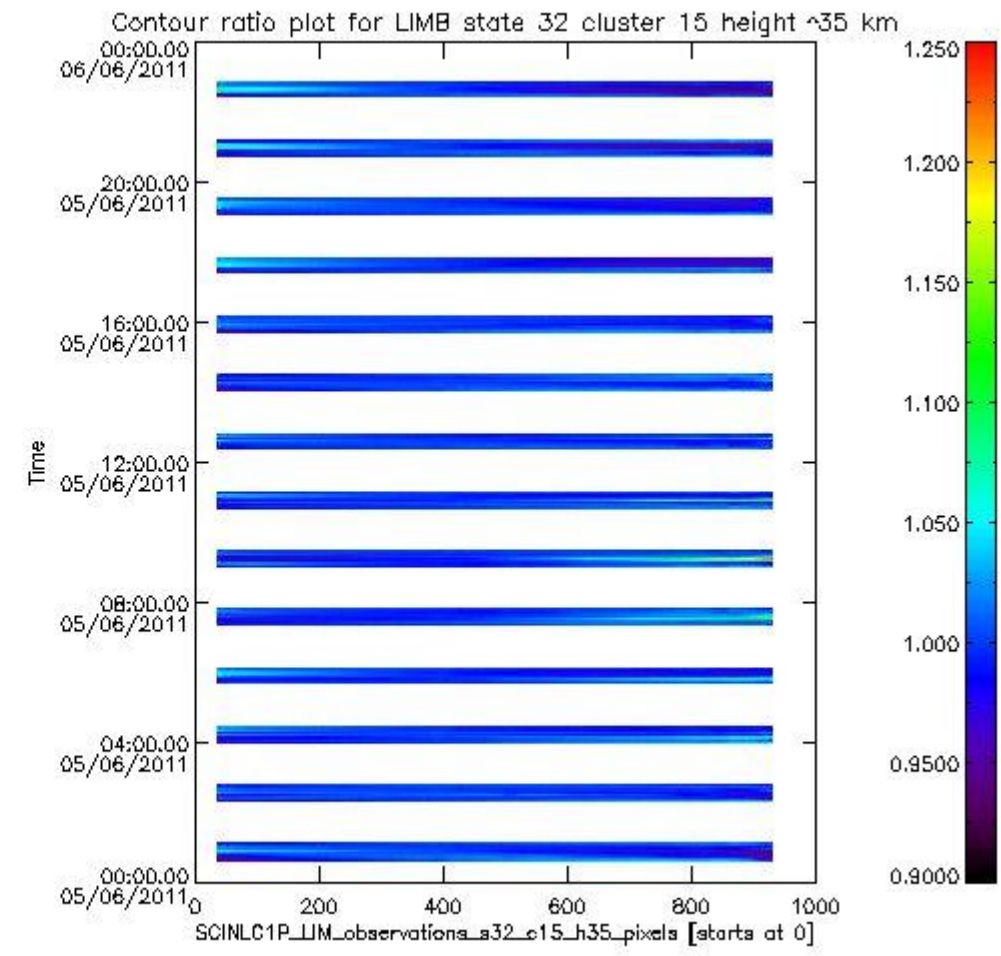
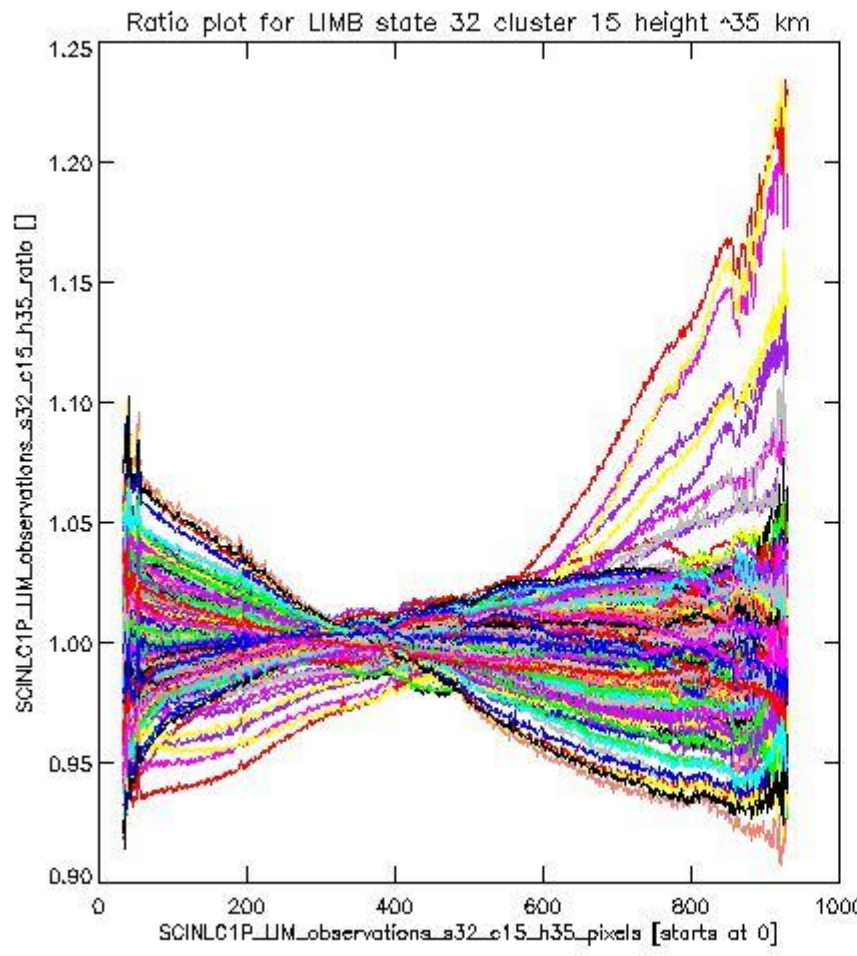
Item	Value
Start time of first sample	05JUN2011 00:38:44.360
Start time of last sample	05JUN2011 22:49:14.178
Reference period start time	06MAY2011 00:40:49.027
Reference period stop time	04JUN2011 23:26:00.414
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_20.PNG





sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110605\_21.PNG

