

# 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	21JUL2011 06:30:28
Data source version	SCIA/7.04-U
Processing scope for products	08JUL2011 00:00:00 to 09JUL2011 00:00:00
Start time of first product within scope	08JUL2011 00:10:59
Stop time of last product within scope	08JUL2011 19:43:59
Total number of level 1 products	12
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	08JUL2011 00:44:11.028	08JUL2011 19:16:00.899
1	NADIR	07	09	N/A	08JUL2011 00:44:11.028	08JUL2011 19:16:00.899
2	NADIR	07	15	N/A	08JUL2011 00:44:11.028	08JUL2011 19:16:00.899
3	NADIR	07	24	N/A	08JUL2011 00:44:11.028	08JUL2011 19:16:00.899
4	NADIR	07	55	N/A	08JUL2011 00:44:11.028	08JUL2011 19:16:00.899
5	LIMB	32	09	~19 km	08JUL2011 00:28:57.652	08JUL2011 19:19:12.204
6	LIMB	32	09	~22 km	08JUL2011 00:28:57.652	08JUL2011 19:19:12.204
7	LIMB	32	09	~25 km	08JUL2011 00:28:57.652	08JUL2011 19:19:12.204
8	LIMB	32	15	~22 km	08JUL2011 00:28:57.652	08JUL2011 19:19:12.204
9	LIMB	32	15	~25 km	08JUL2011 00:28:57.652	08JUL2011 19:19:12.204
10	LIMB	32	15	~35 km	08JUL2011 00:28:57.652	08JUL2011 19:19:12.204

#### 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	#cmlp_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110708_001059_000057513104_00189_48910_2901.N1</a>	08JUL2011 00:10:59	08JUL2011 01:21:28	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110708_015113_000057513104_00190_48911_2903.N1</a>	08JUL2011 01:51:13	08JUL2011 03:01:28	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110708_033127_000057513104_00191_48912_2905.N1</a>	08JUL2011 03:31:27	08JUL2011 04:41:56	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110708_051142_000057513104_00192_48913_2906.N1</a>	08JUL2011 05:11:42	08JUL2011 06:21:56	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110708_065156_000057513104_00193_48914_2909.N1</a>	08JUL2011 06:51:56	08JUL2011 08:02:25	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110708_083210_000057513104_00194_48915_2912.N1</a>	08JUL2011 08:32:10	08JUL2011 09:42:25	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110708_101224_000057513104_00195_48916_2913.N1	08JUL2011 10:12:24	08JUL2011 11:22:53	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110708_115238_000057513104_00196_48917_2916.N1	08JUL2011 11:52:38	08JUL2011 13:02:53	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110708_133252_000057513104_00197_48918_2918.N1	08JUL2011 13:32:52	08JUL2011 14:43:21	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110708_151306_000057523104_00198_48919_2921.N1	08JUL2011 15:13:06	08JUL2011 16:23:21	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110708_165320_000057523104_00199_48920_2924.N1	08JUL2011 16:53:20	08JUL2011 18:03:49	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110708_183334_000057523104_00200_48921_2927.N1	08JUL2011 18:33:34	08JUL2011 19:43:59	0	35	31	0	1	1	0	0	

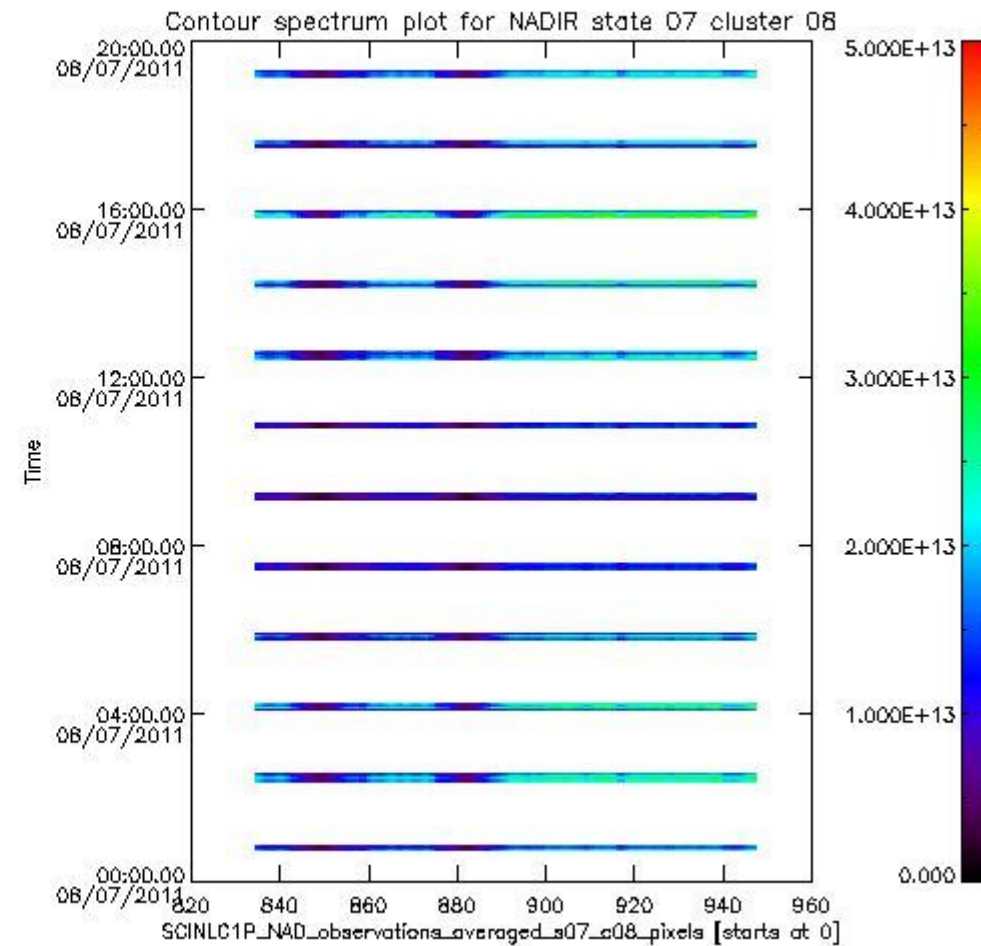
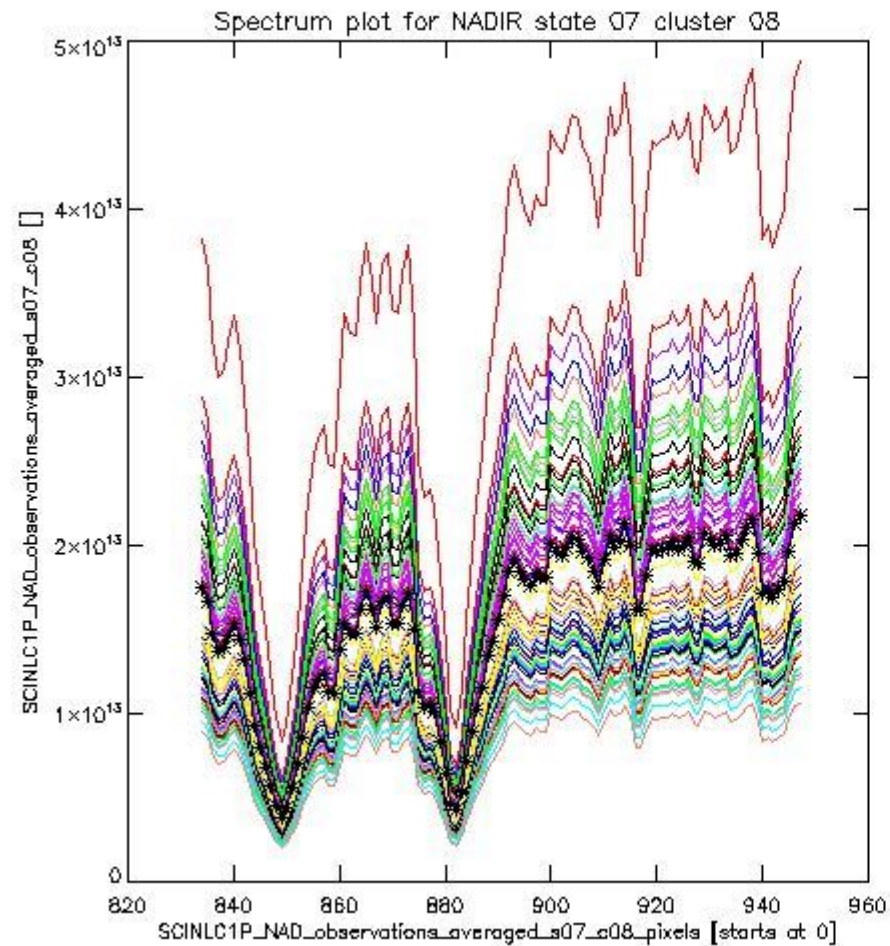
## 1.2 Source packet monitoring

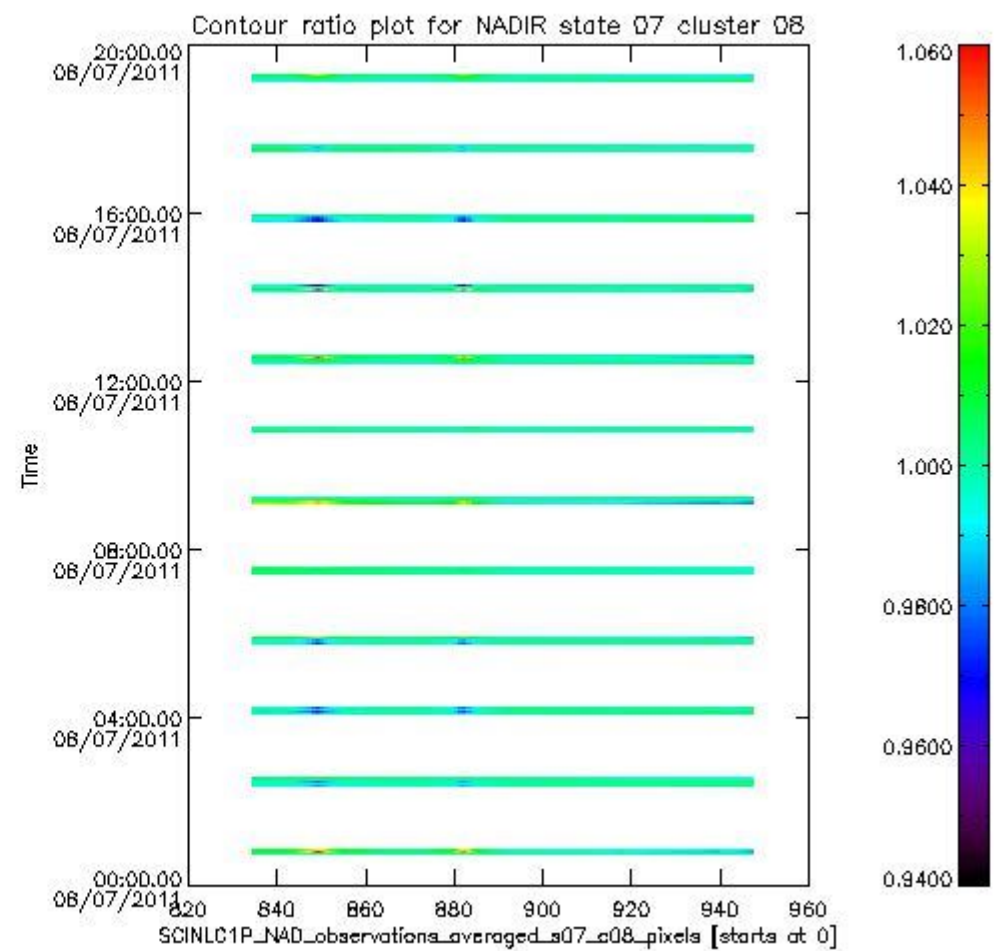
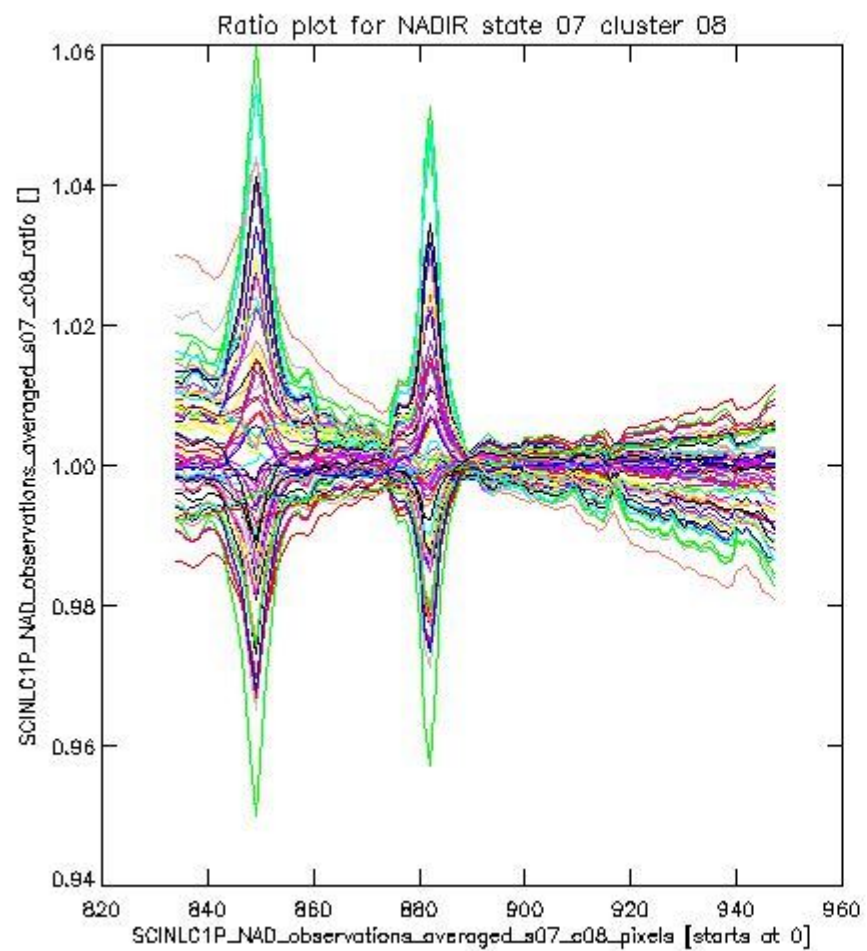
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	08JUL2011 00:44:11.028
Start time of last sample	08JUL2011 19:16:00.899
Reference period start time	08JUN2011 00:42:44.522
Reference period stop time	07JUL2011 13:11:37.635
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

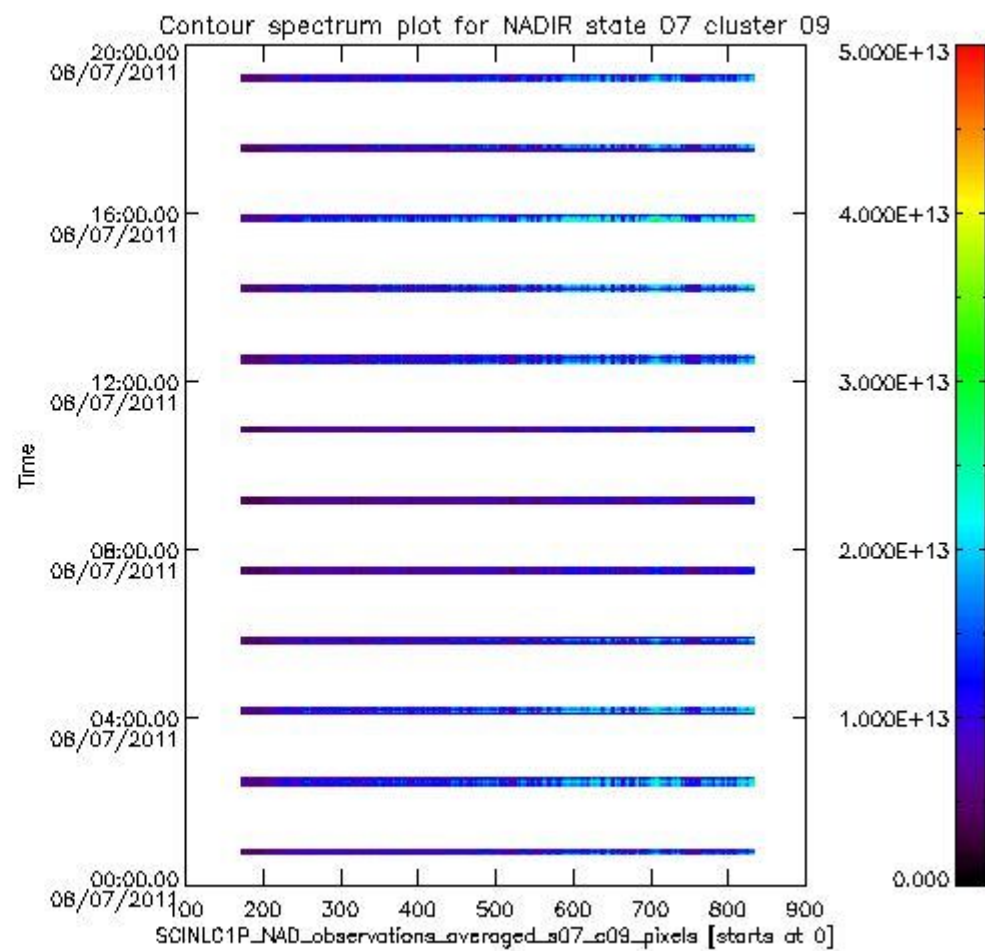
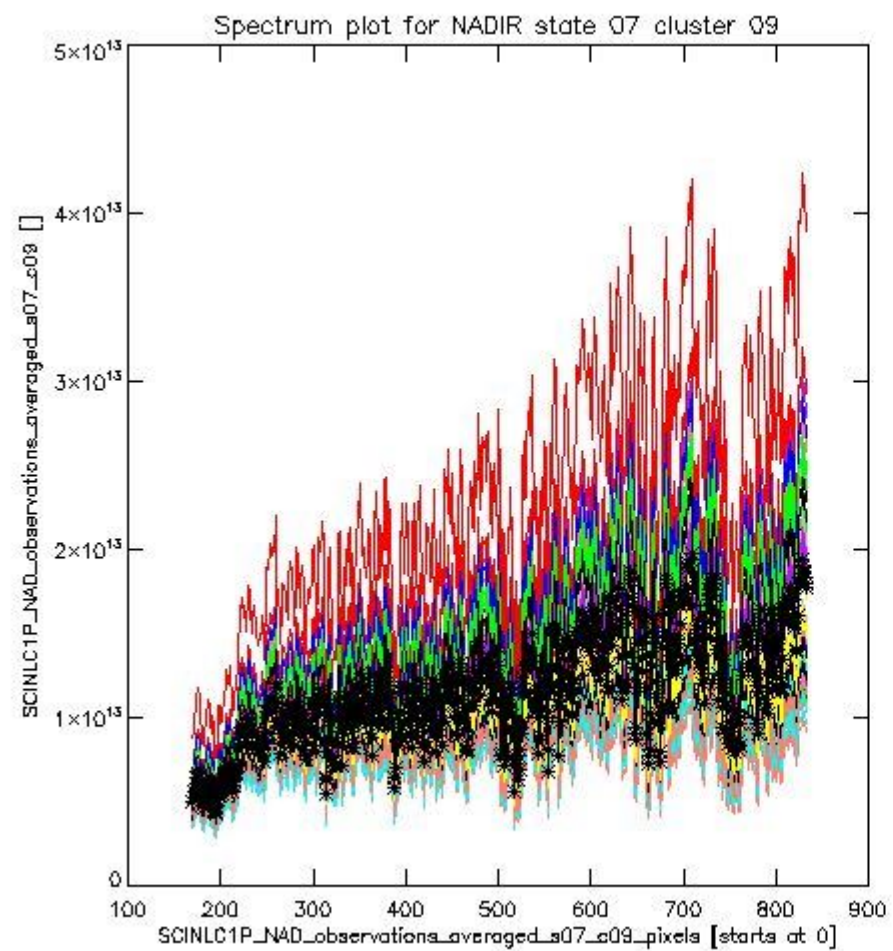




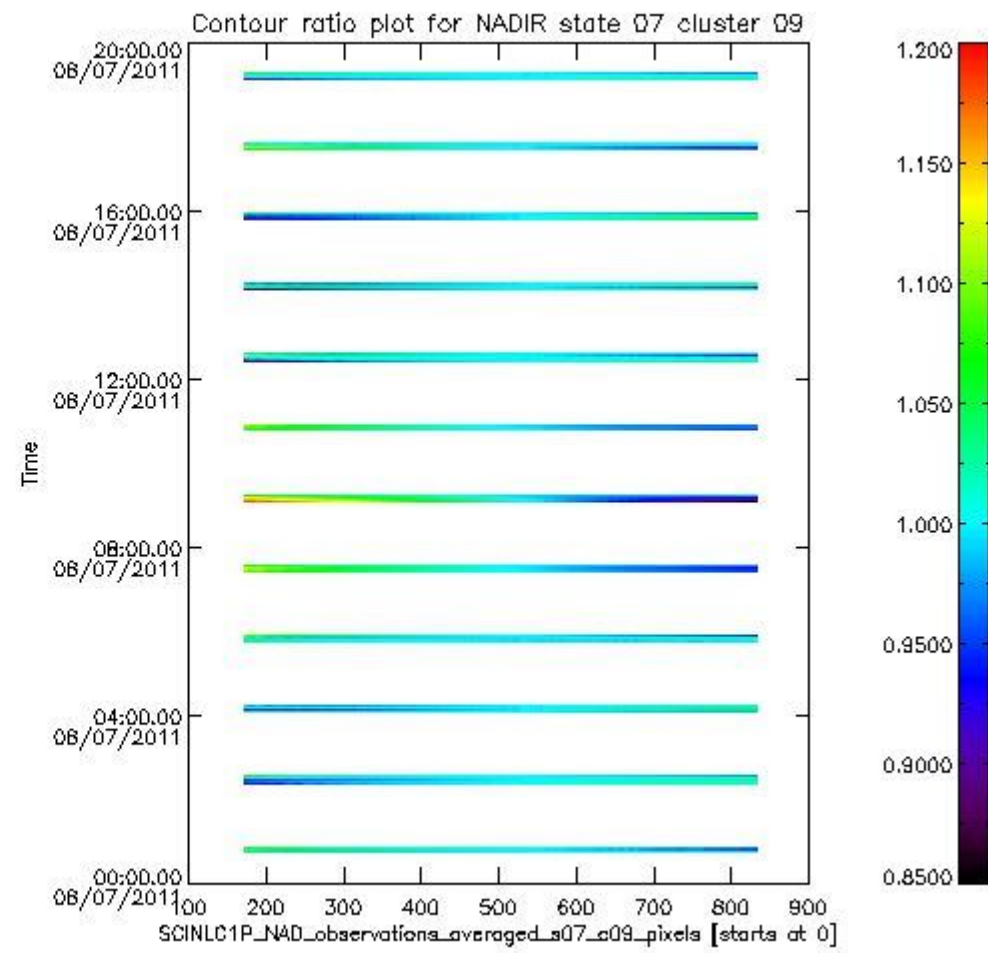
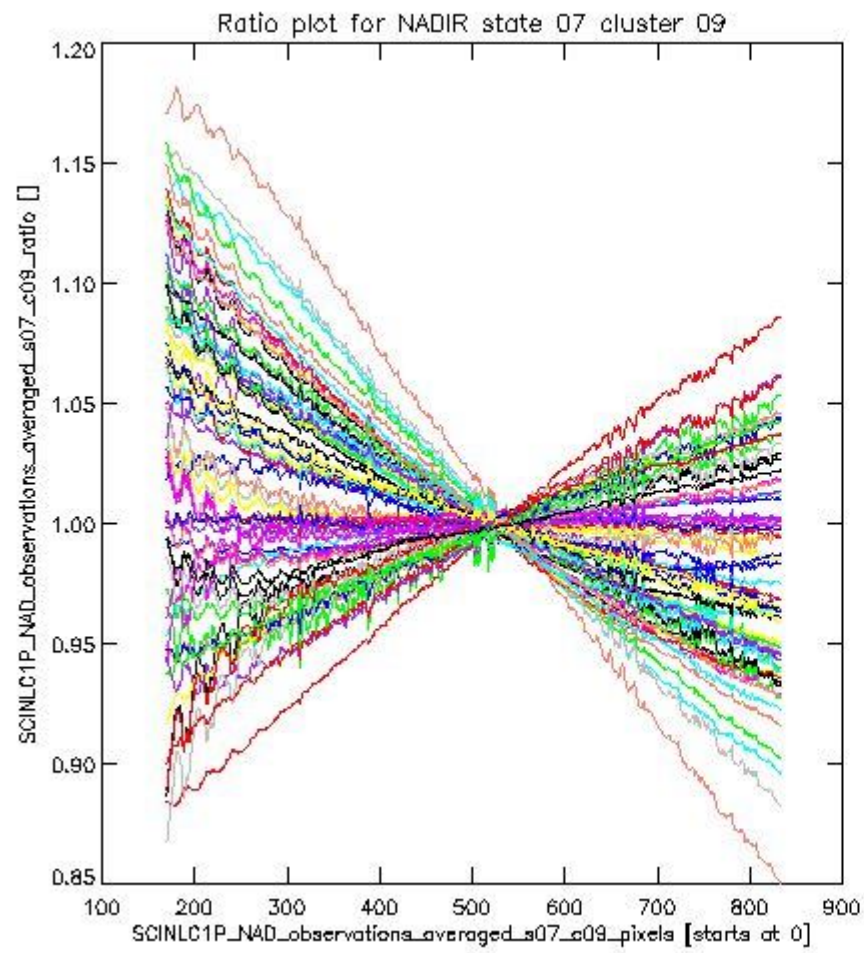
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_1.PNG

**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	08JUL2011 00:44:11.028
Start time of last sample	08JUL2011 19:16:00.899
Reference period start time	08JUN2011 00:42:44.522
Reference period stop time	07JUL2011 13:11:37.635
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



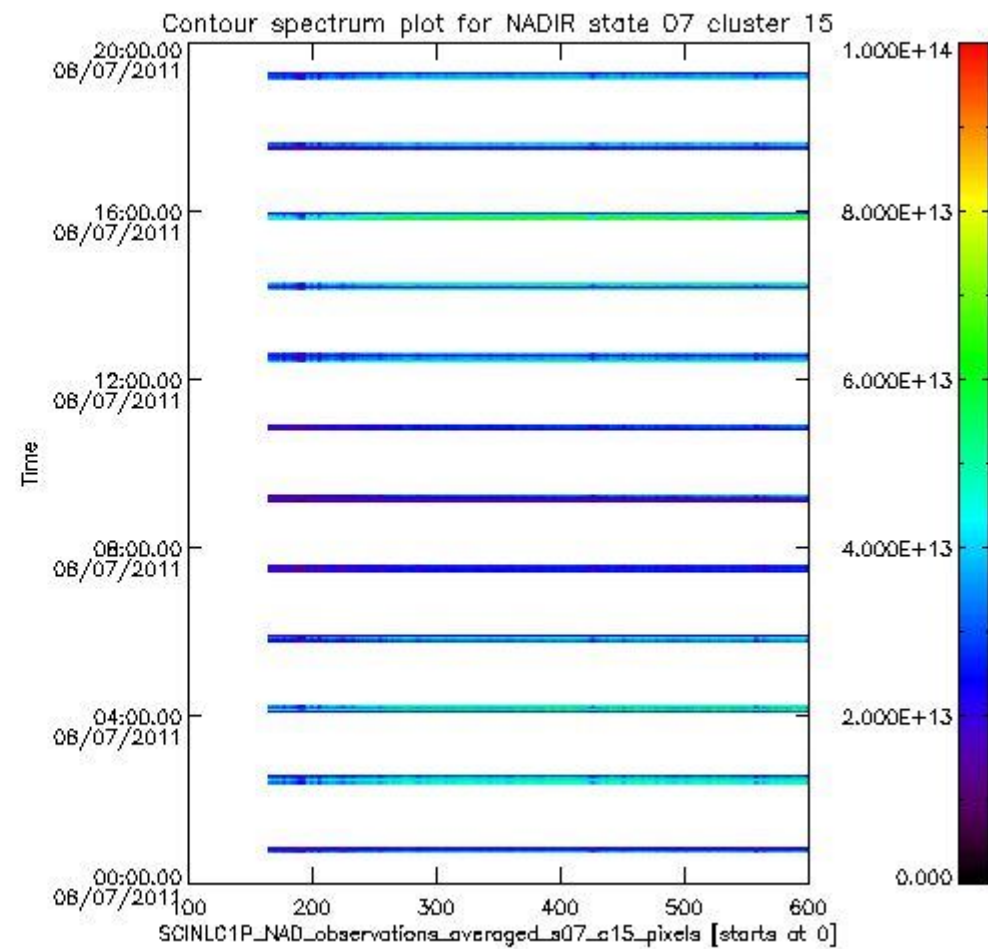
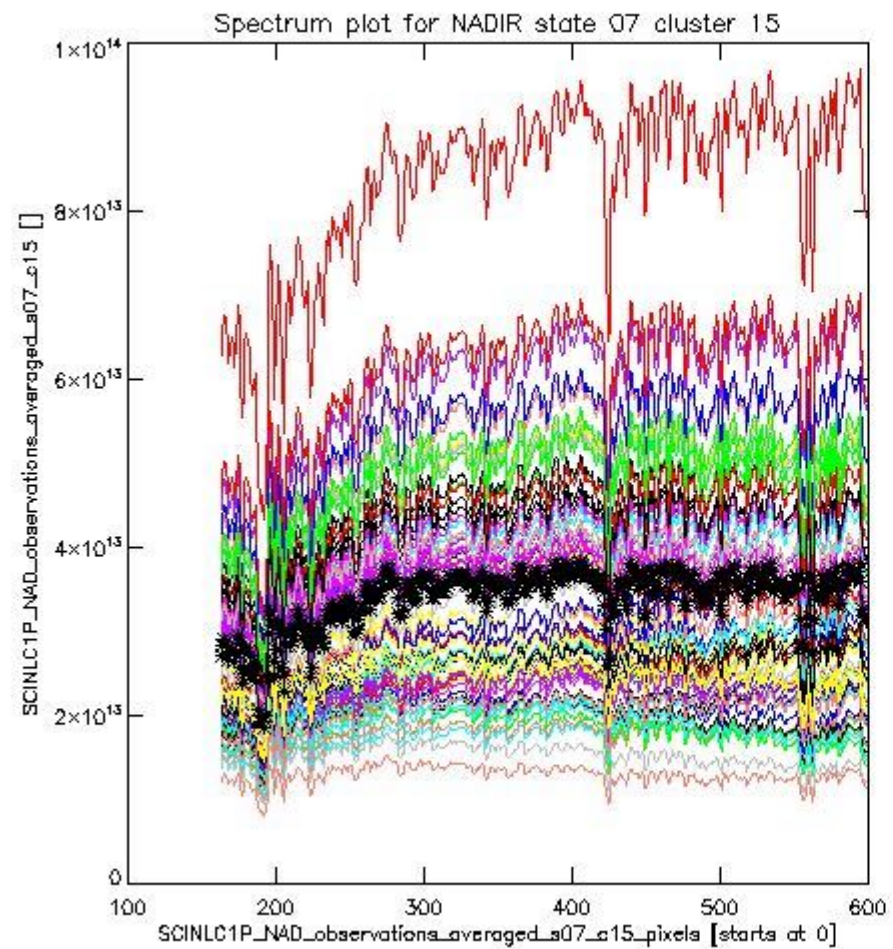
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_2.PNG



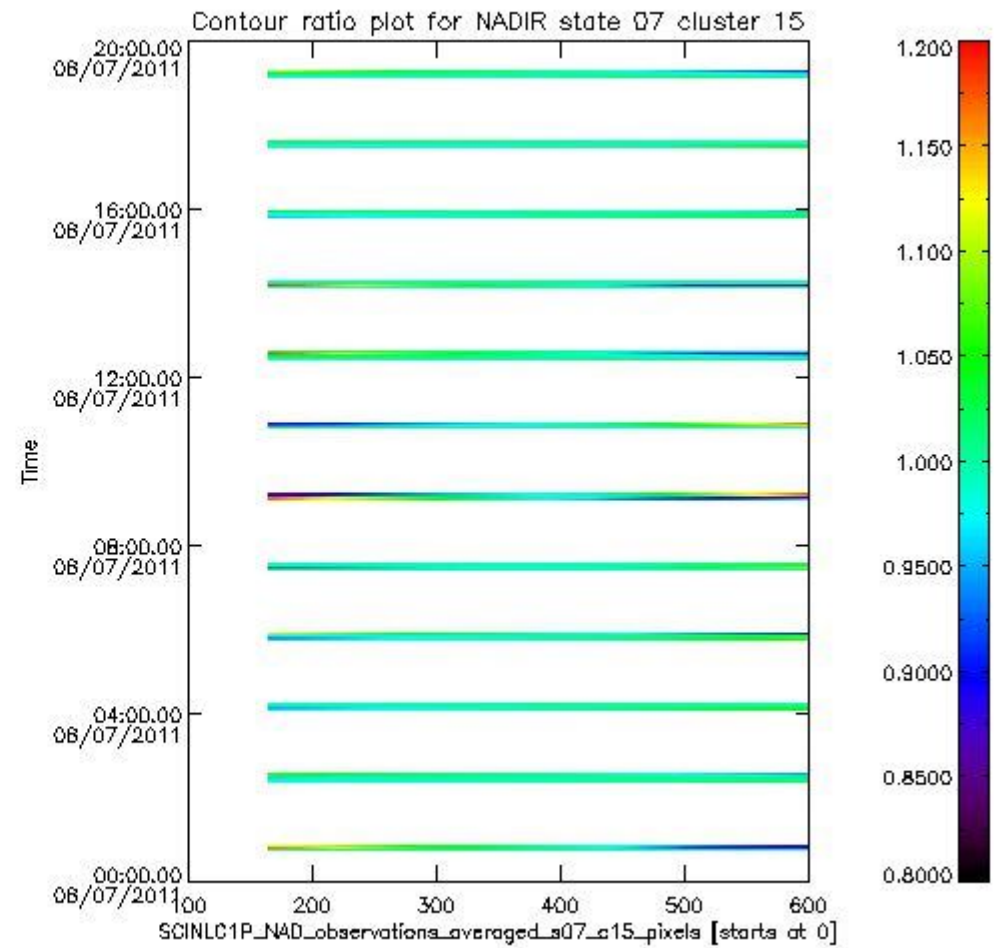
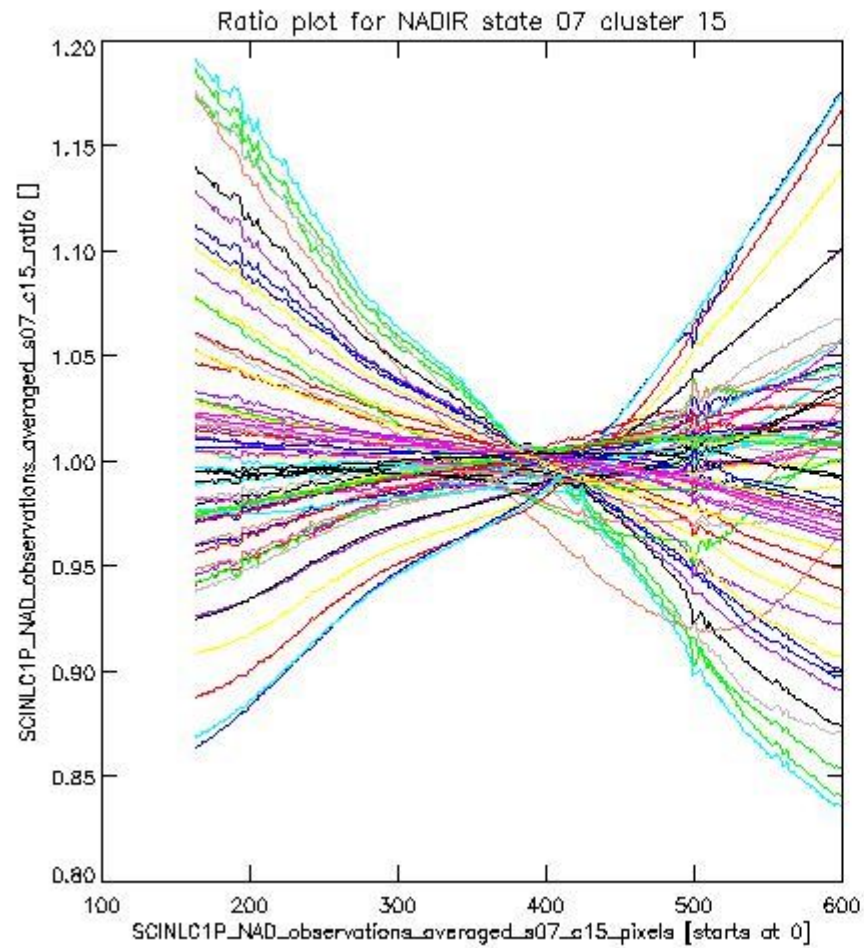
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_3.PNG

**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	08JUL2011 00:44:11.028
Start time of last sample	08JUL2011 19:16:00.899
Reference period start time	08JUN2011 00:42:44.522
Reference period stop time	07JUL2011 13:11:37.635
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



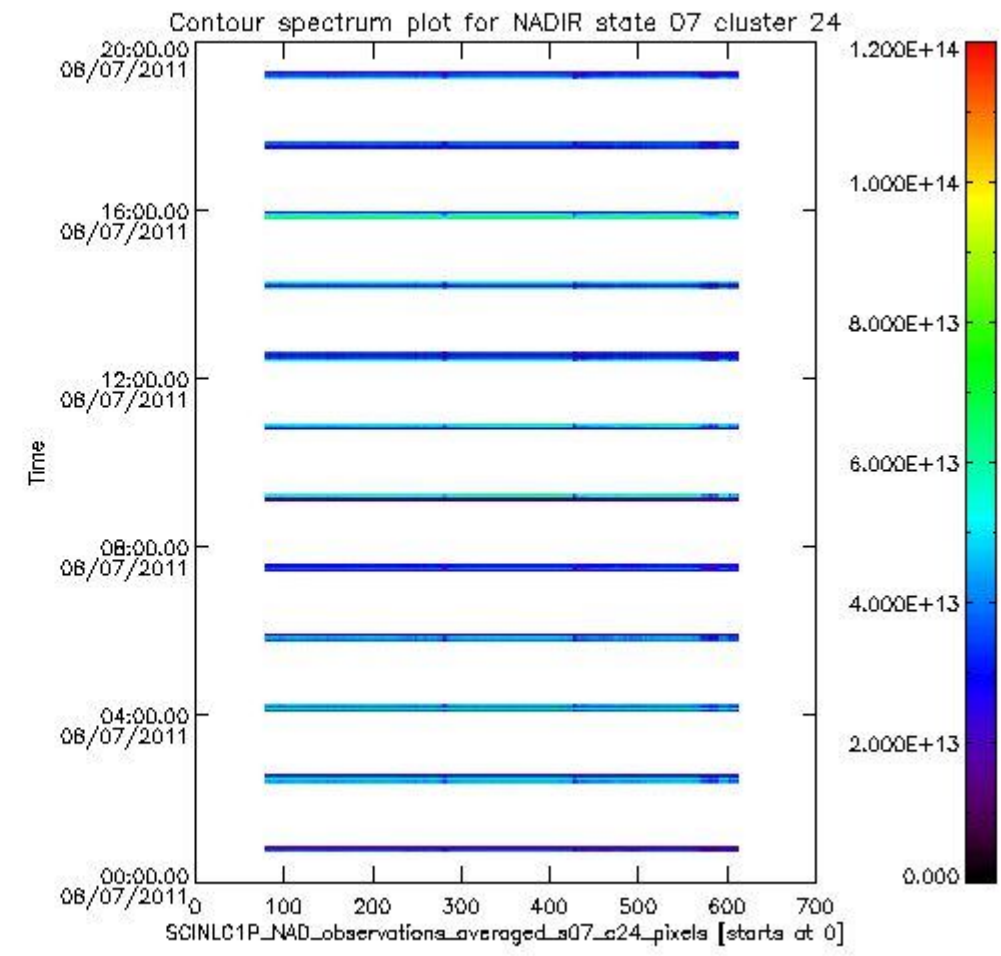
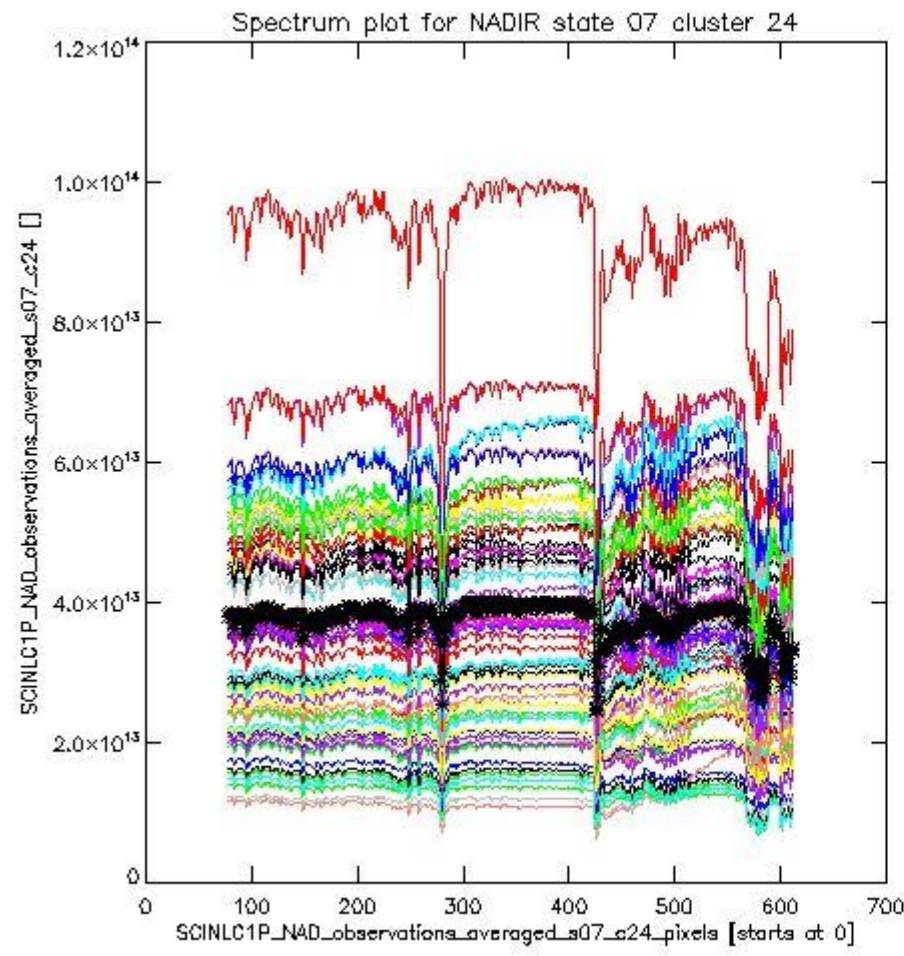
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_5.PNG

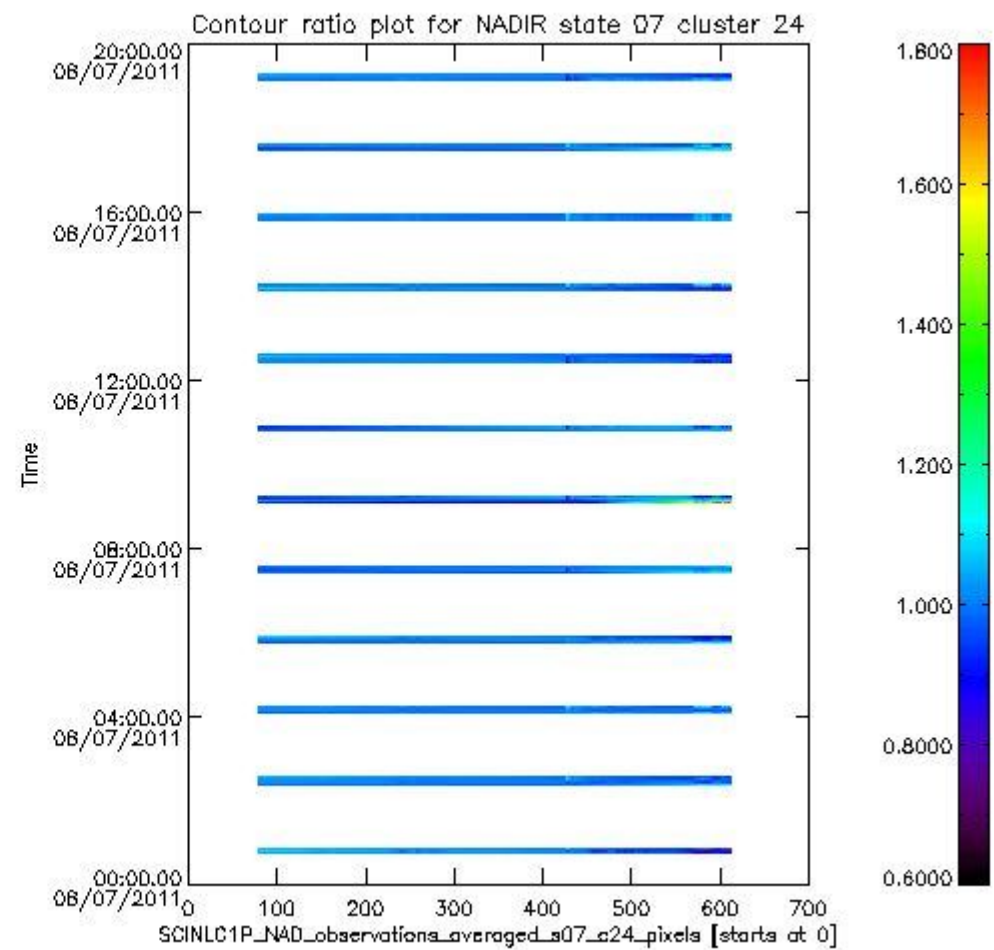
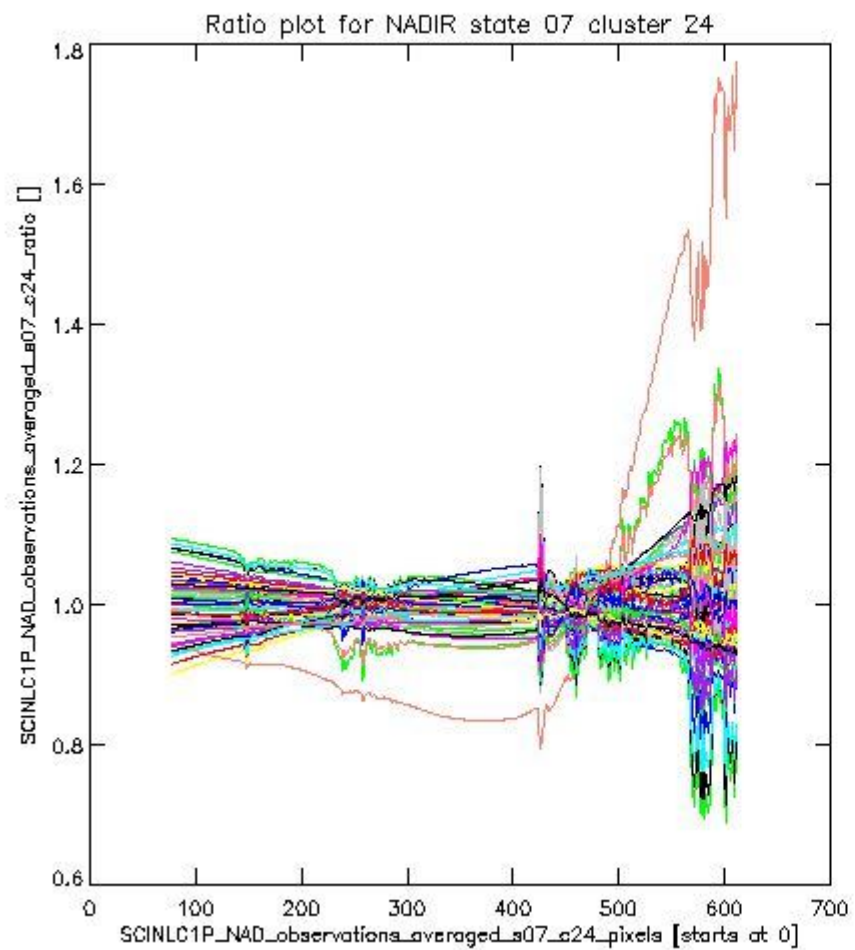
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	08JUL2011 00:44:11.028
Start time of last sample	08JUL2011 19:16:00.899
Reference period start time	08JUN2011 00:42:44.522
Reference period stop time	07JUL2011 13:11:37.635
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\_20110708\_6.PNG

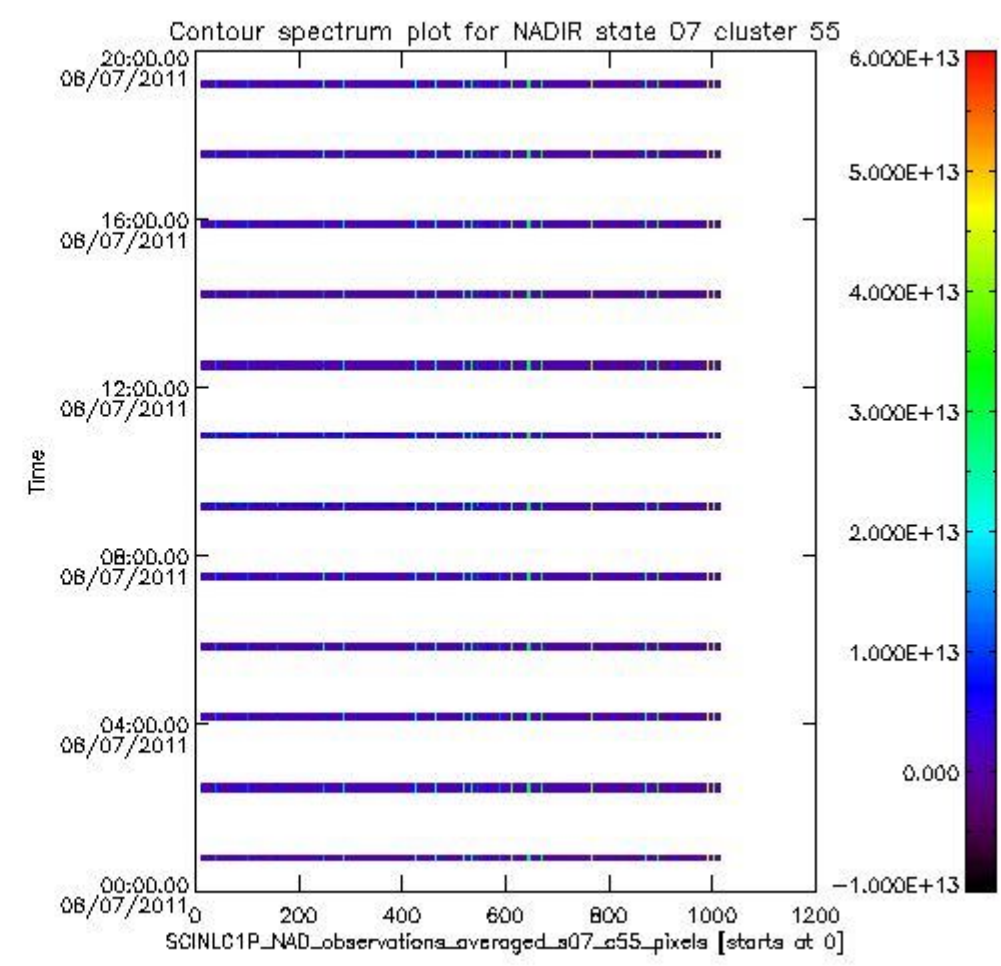
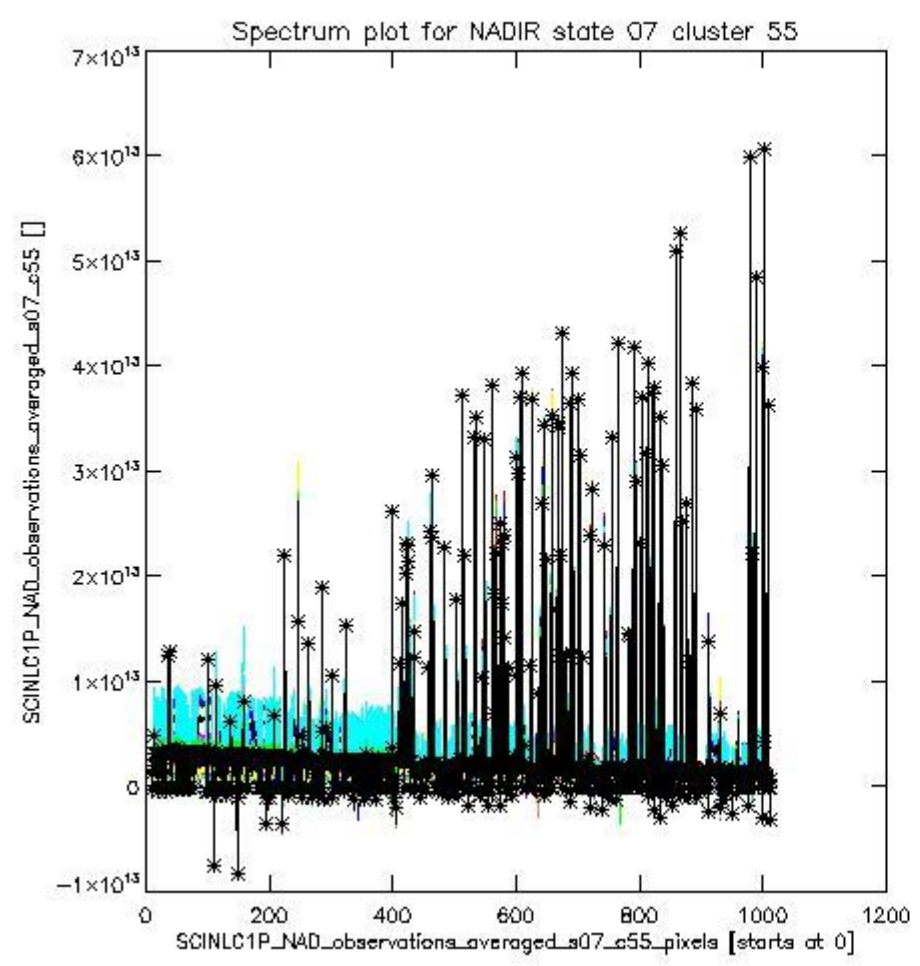




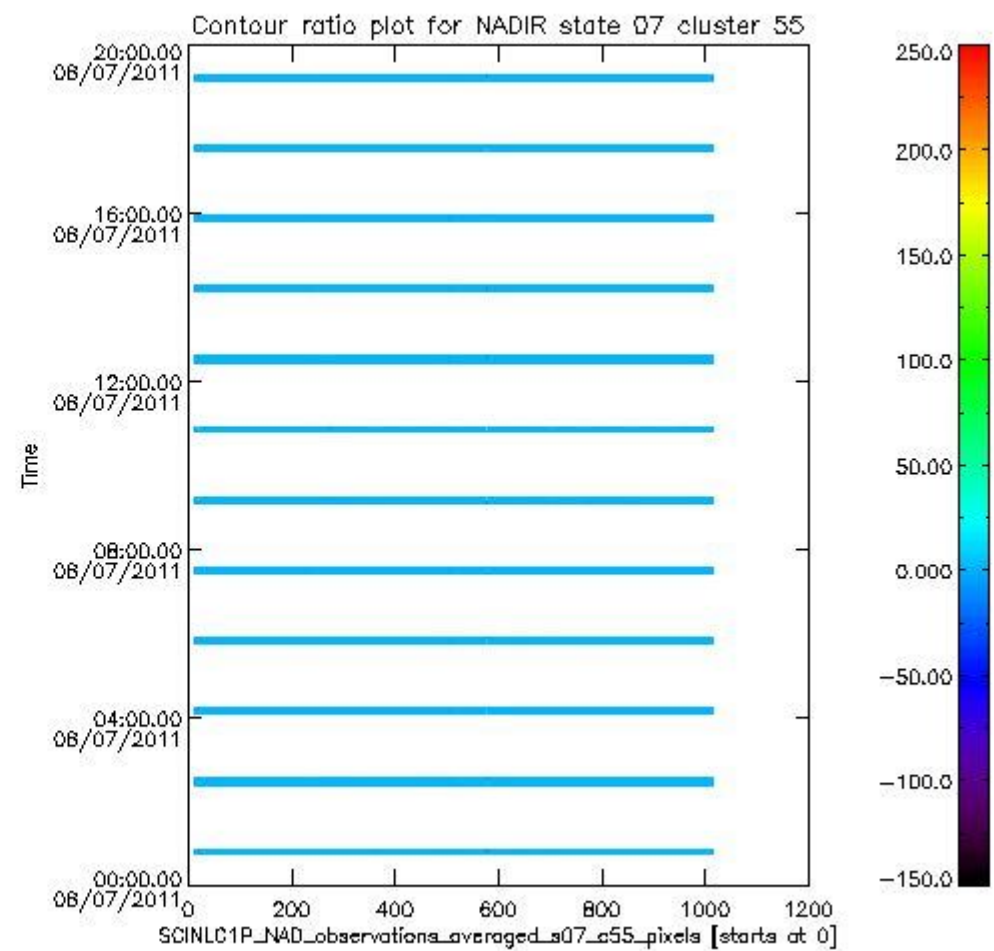
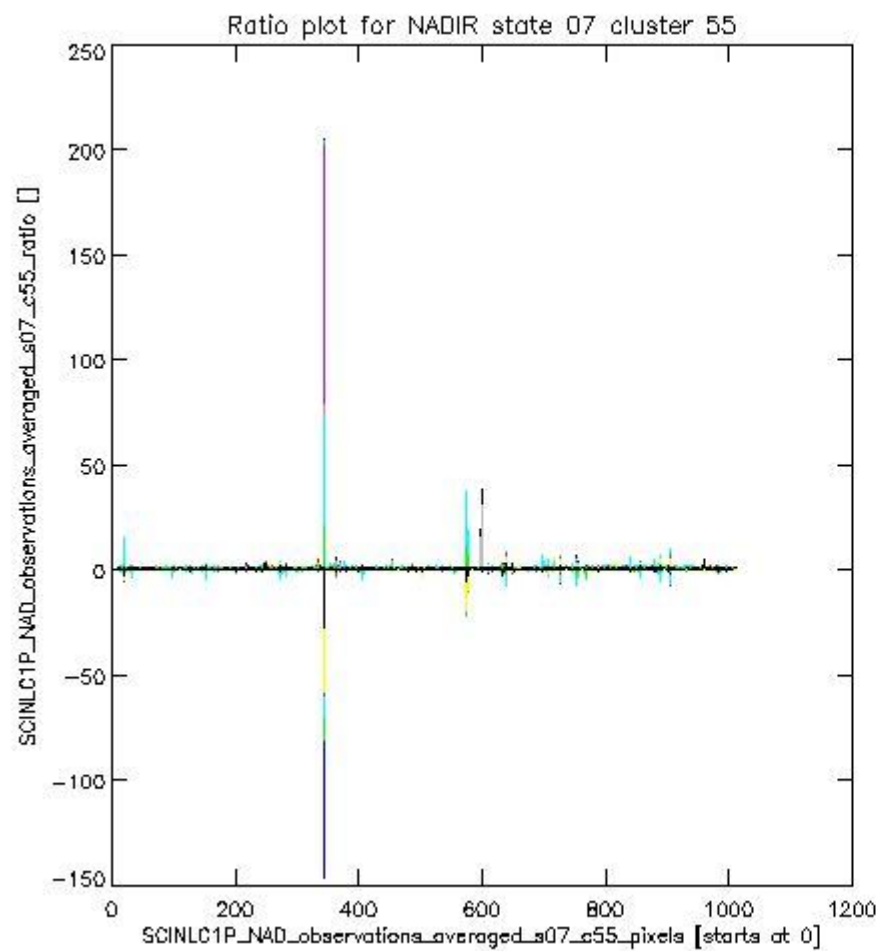
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_7.PNG

**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	08JUL2011 00:44:11.028
Start time of last sample	08JUL2011 19:16:00.899
Reference period start time	08JUN2011 00:42:44.522
Reference period stop time	07JUL2011 13:11:37.635
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



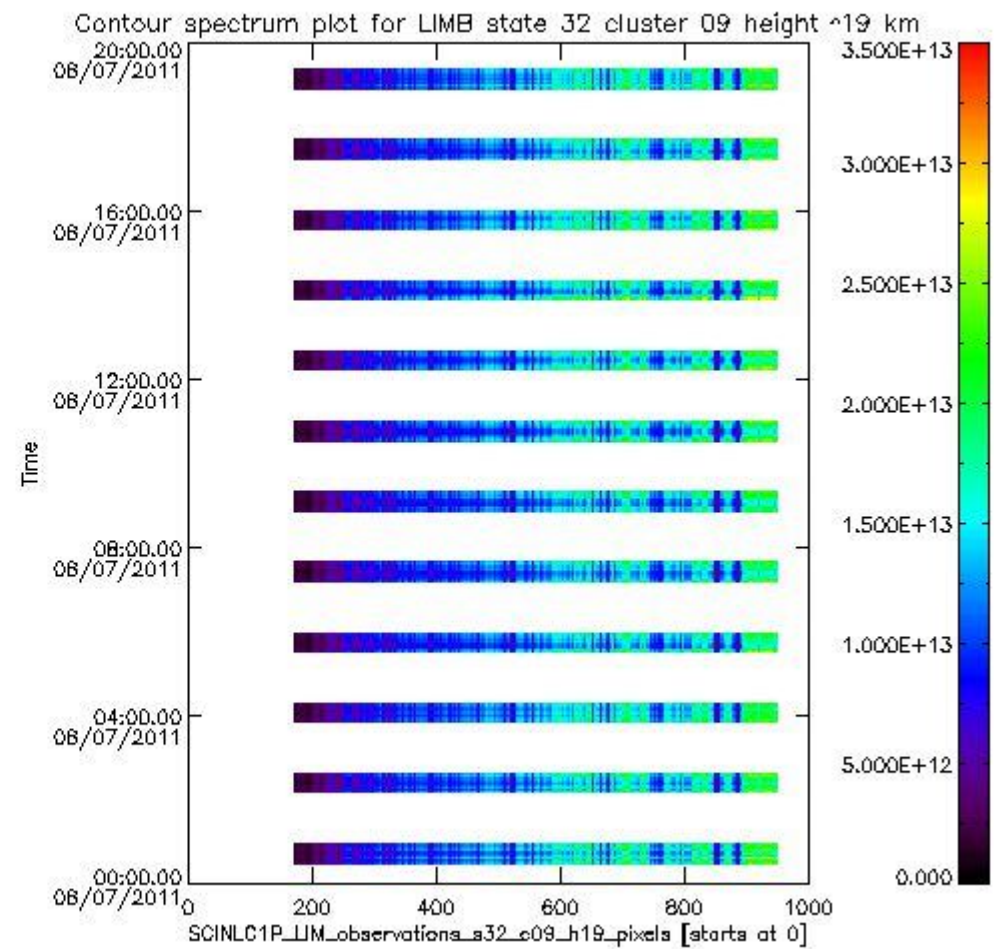
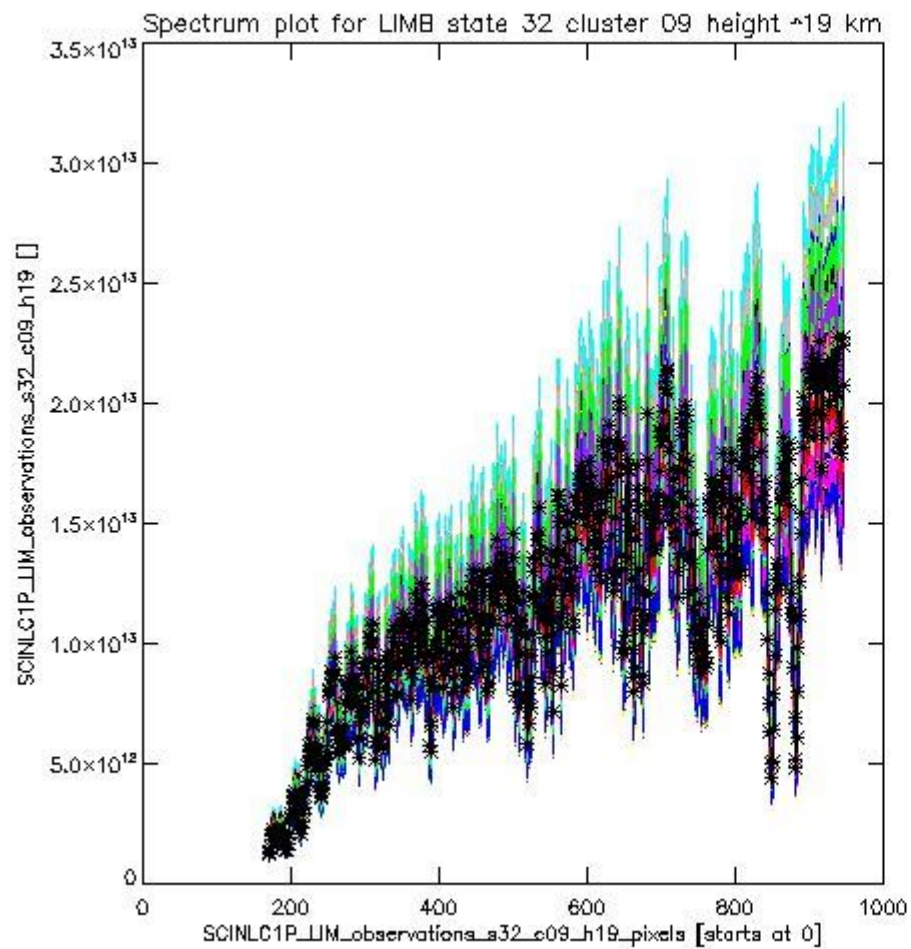
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_8.PNG



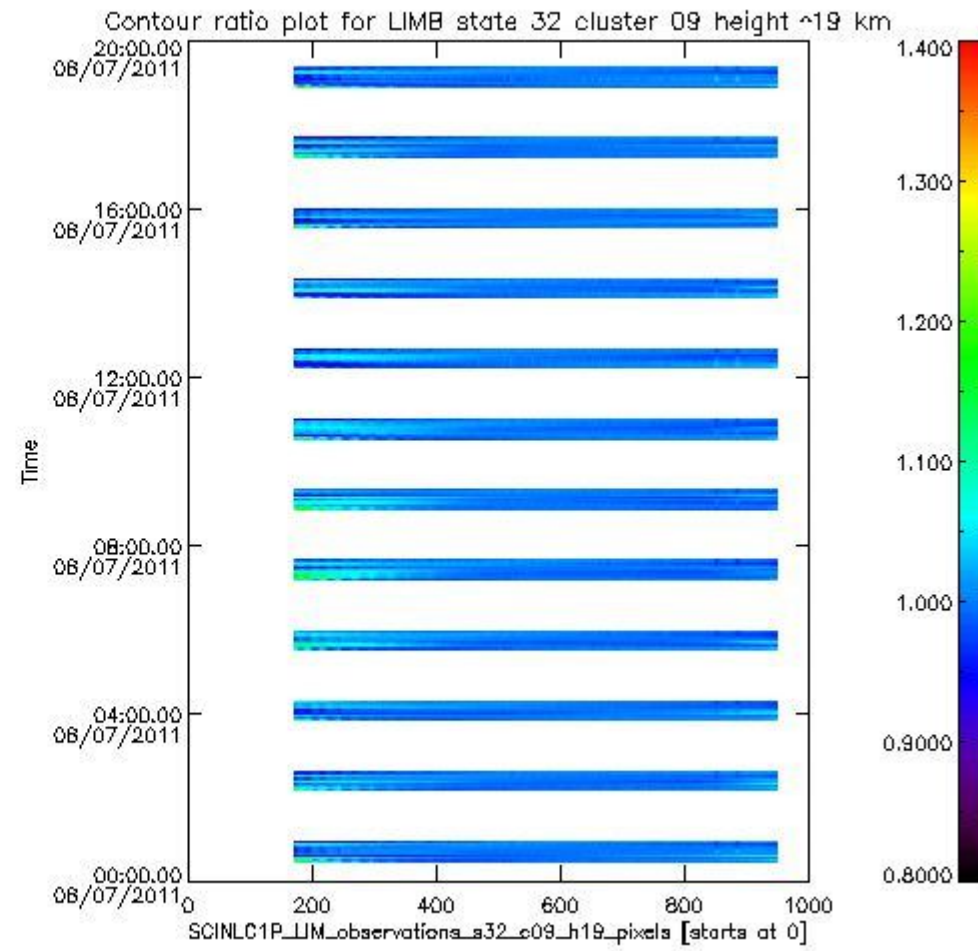
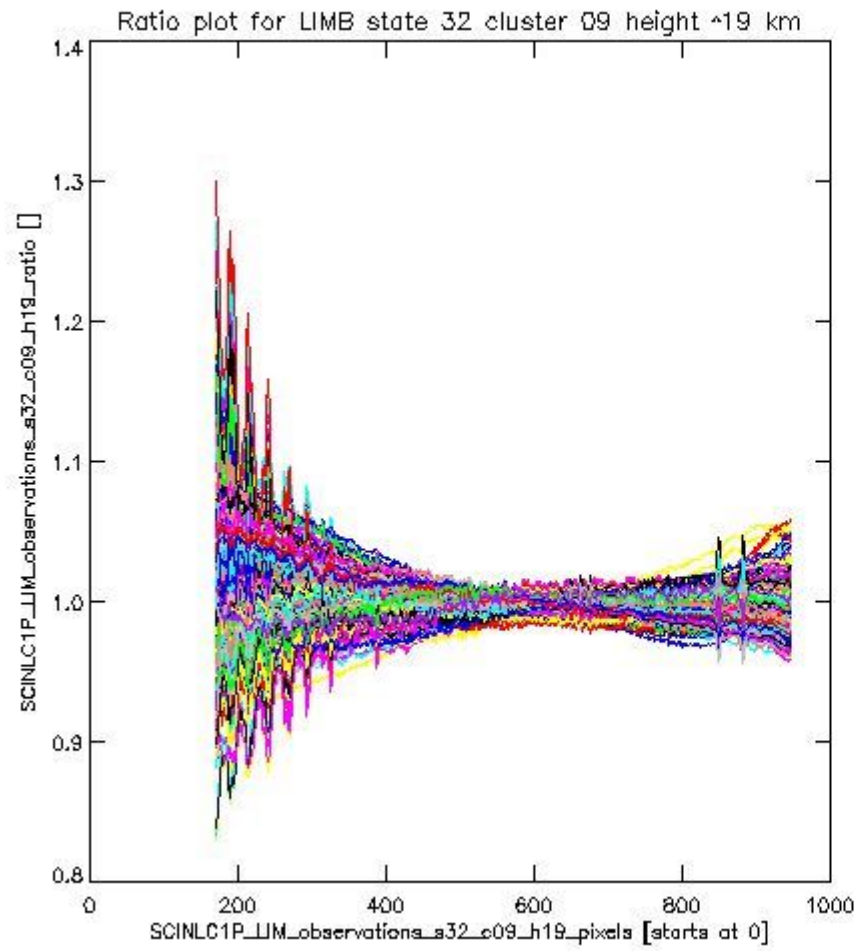
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_9.PNG

**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	08JUL2011 00:28:57.652
Start time of last sample	08JUL2011 19:19:12.204
Reference period start time	08JUN2011 00:29:33.885
Reference period stop time	07JUL2011 13:14:48.940
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



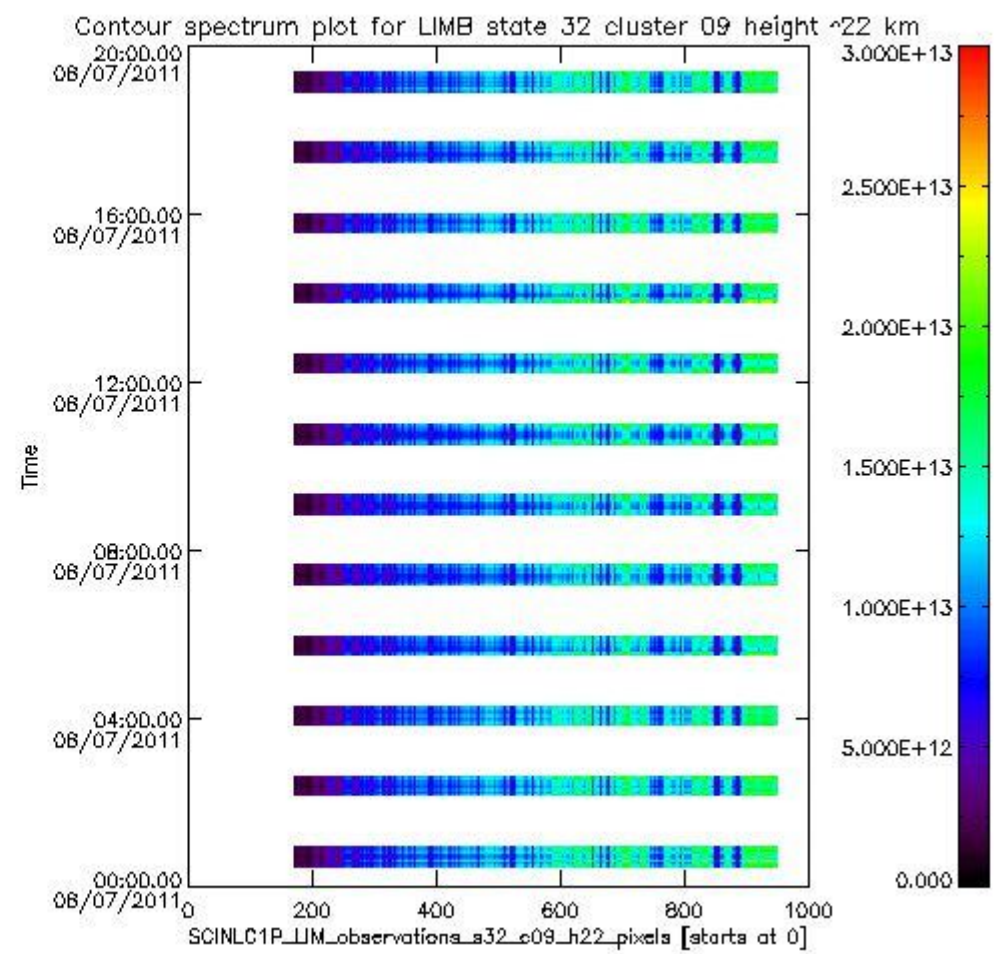
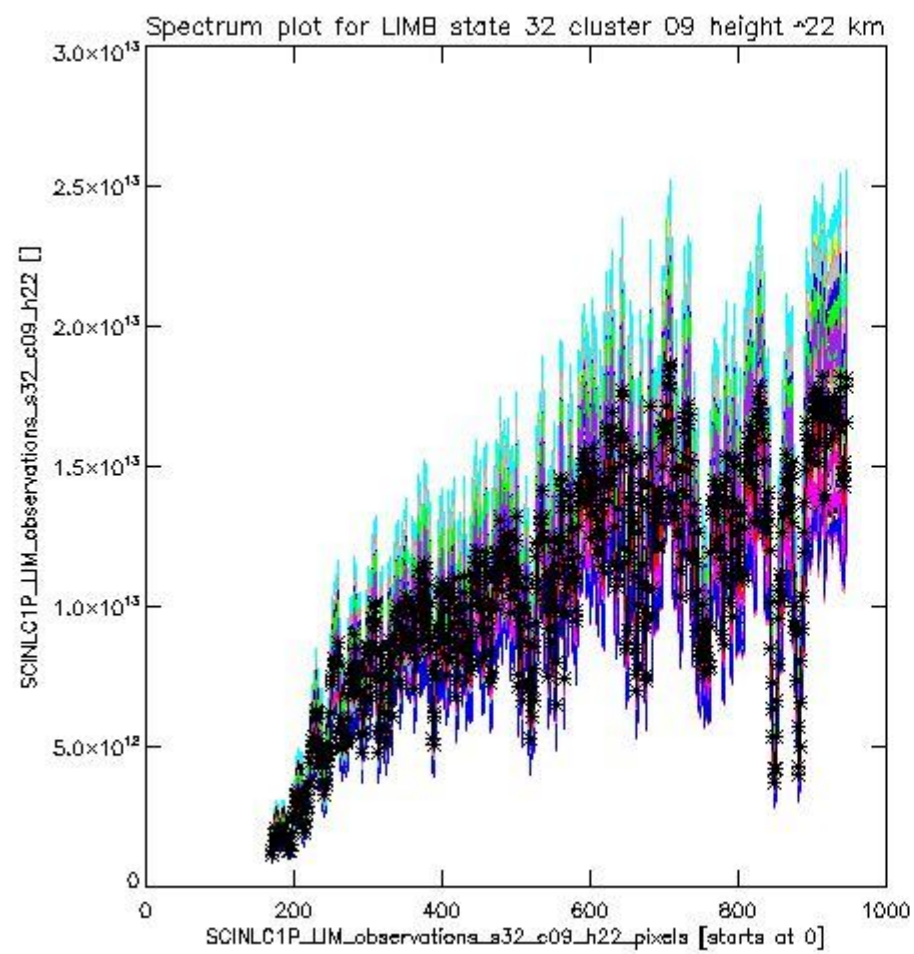
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_10.PNG



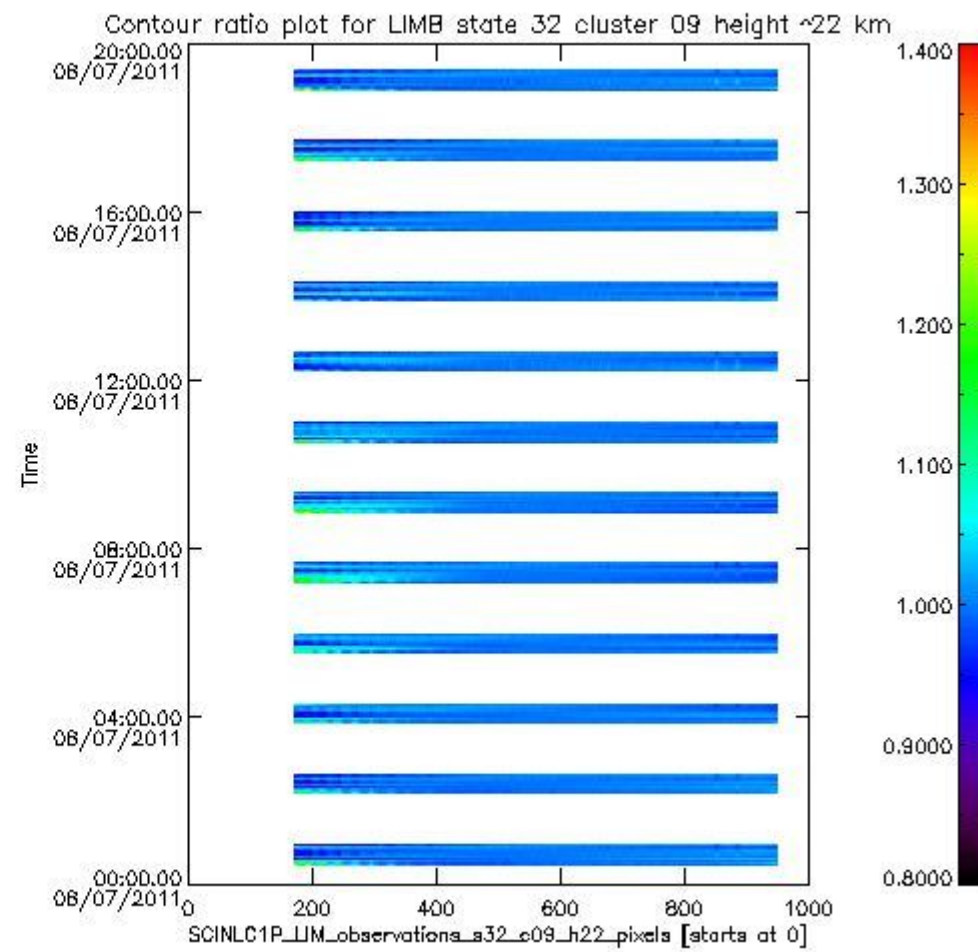
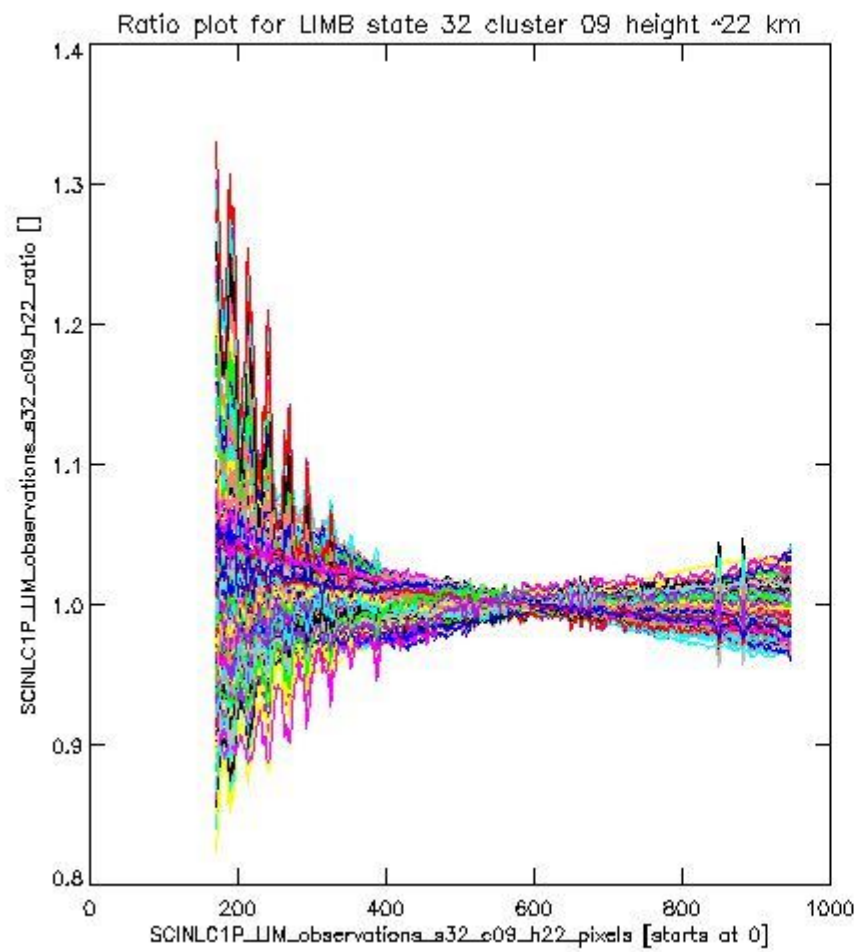
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_11.PNG

**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	08JUL2011 00:28:57.652
Start time of last sample	08JUL2011 19:19:12.204
Reference period start time	08JUN2011 00:29:33.885
Reference period stop time	07JUL2011 13:14:48.940
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



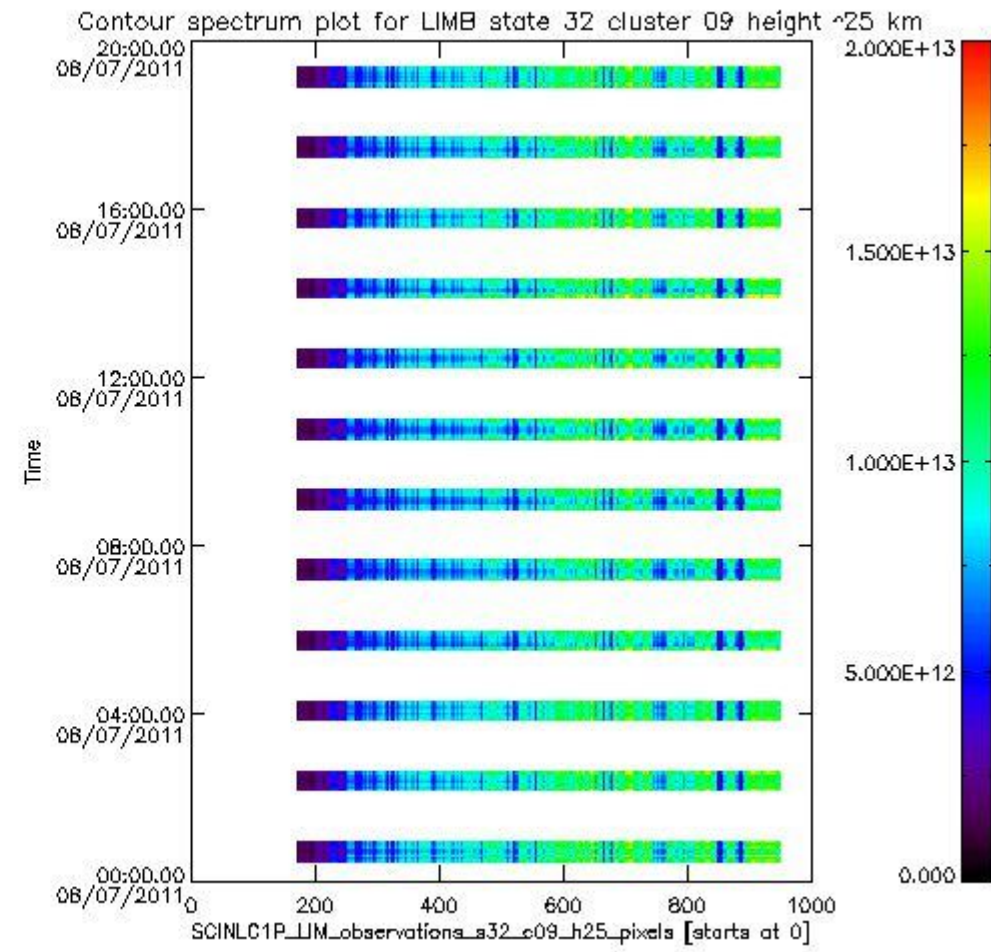
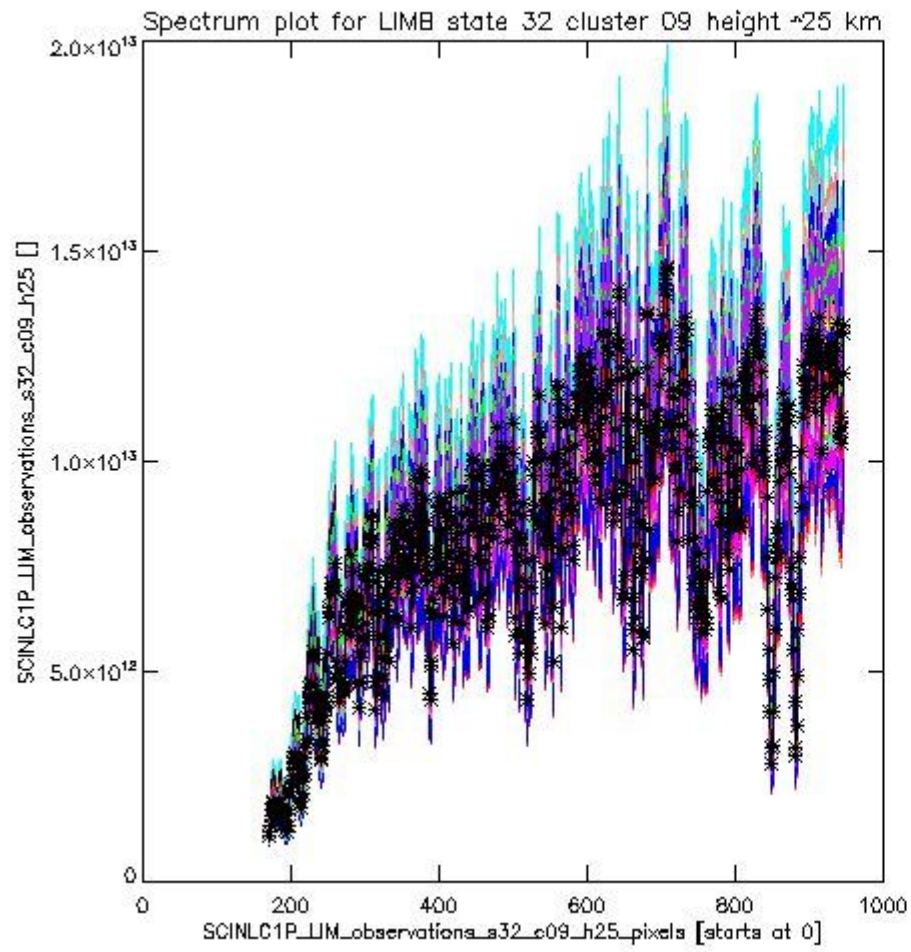
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_13.PNG

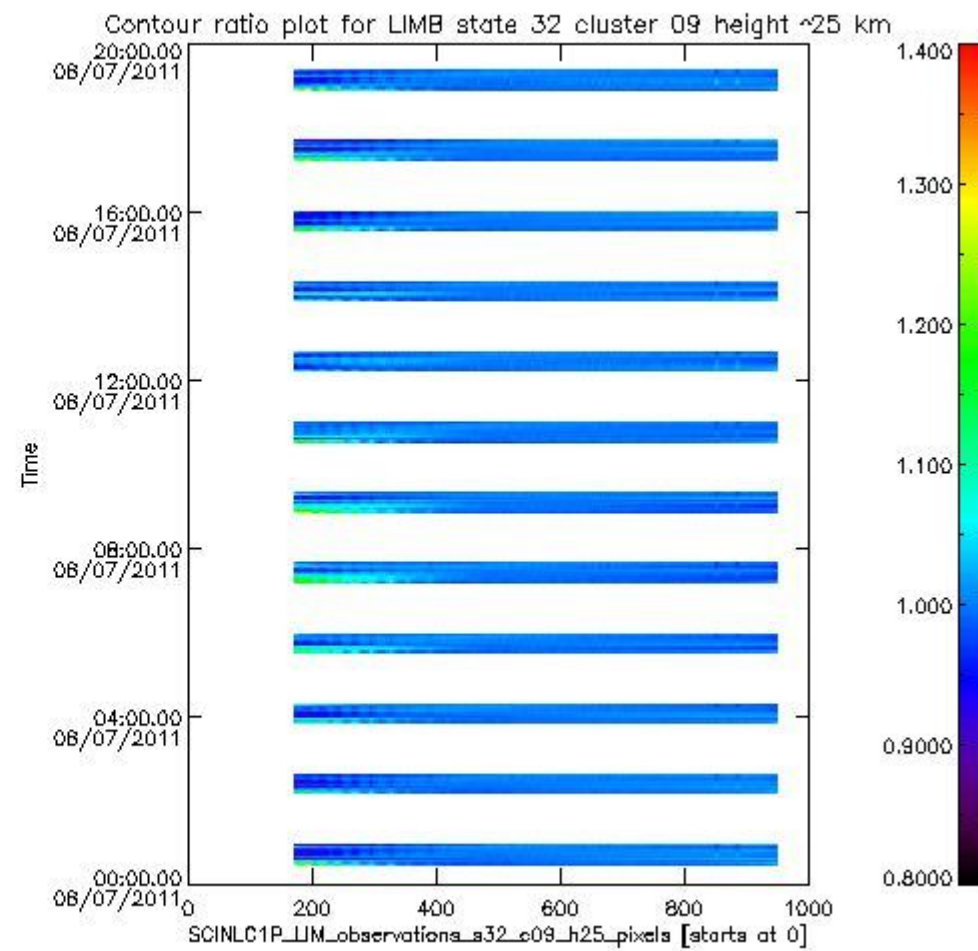
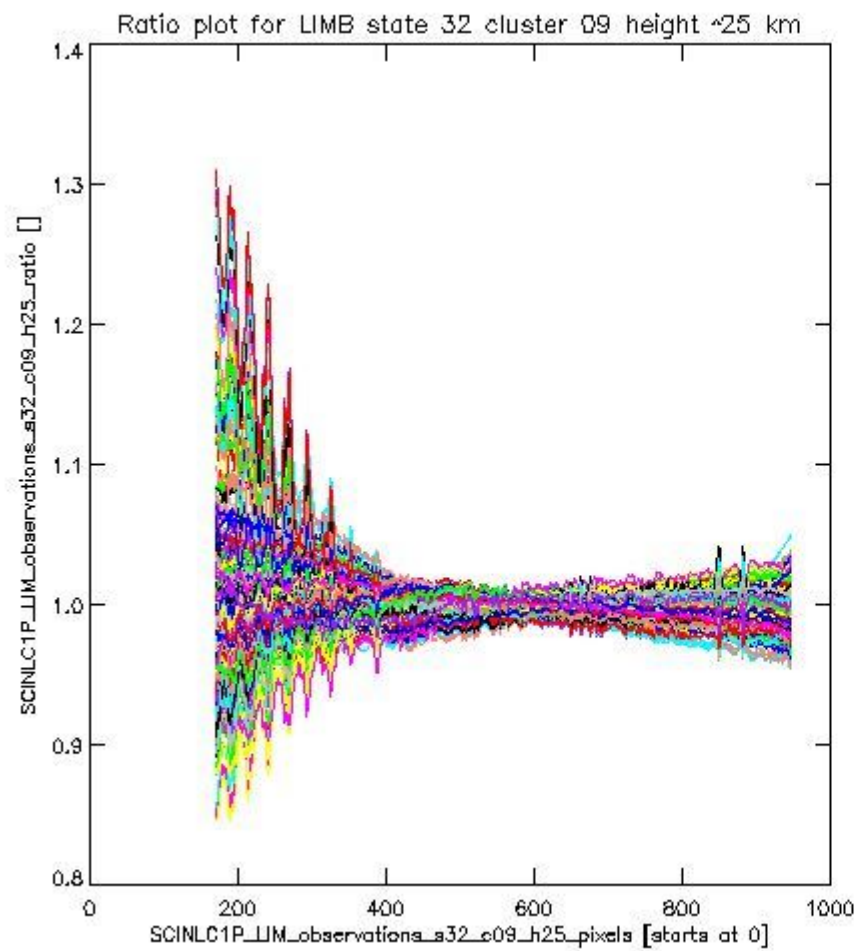
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	08JUL2011 00:28:57.652
Start time of last sample	08JUL2011 19:19:12.204
Reference period start time	08JUN2011 00:29:33.885
Reference period stop time	07JUL2011 13:14:48.940
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\_20110708\_14.PNG

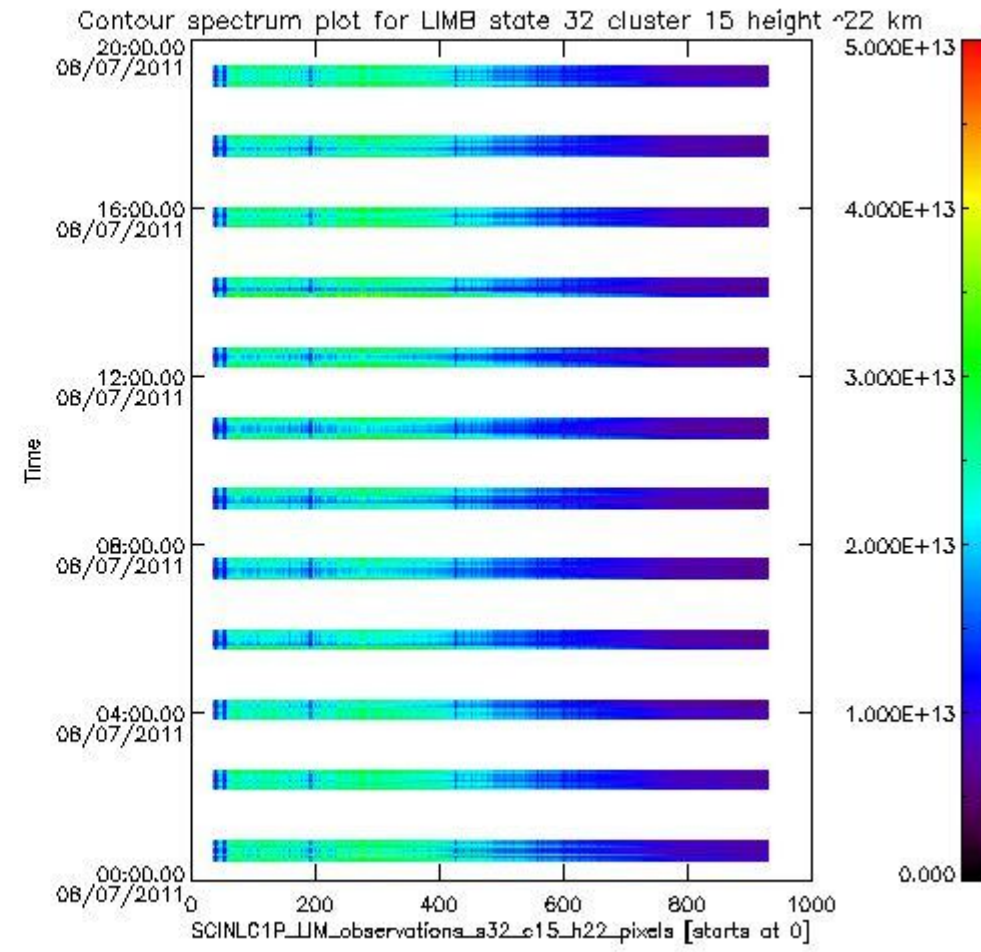
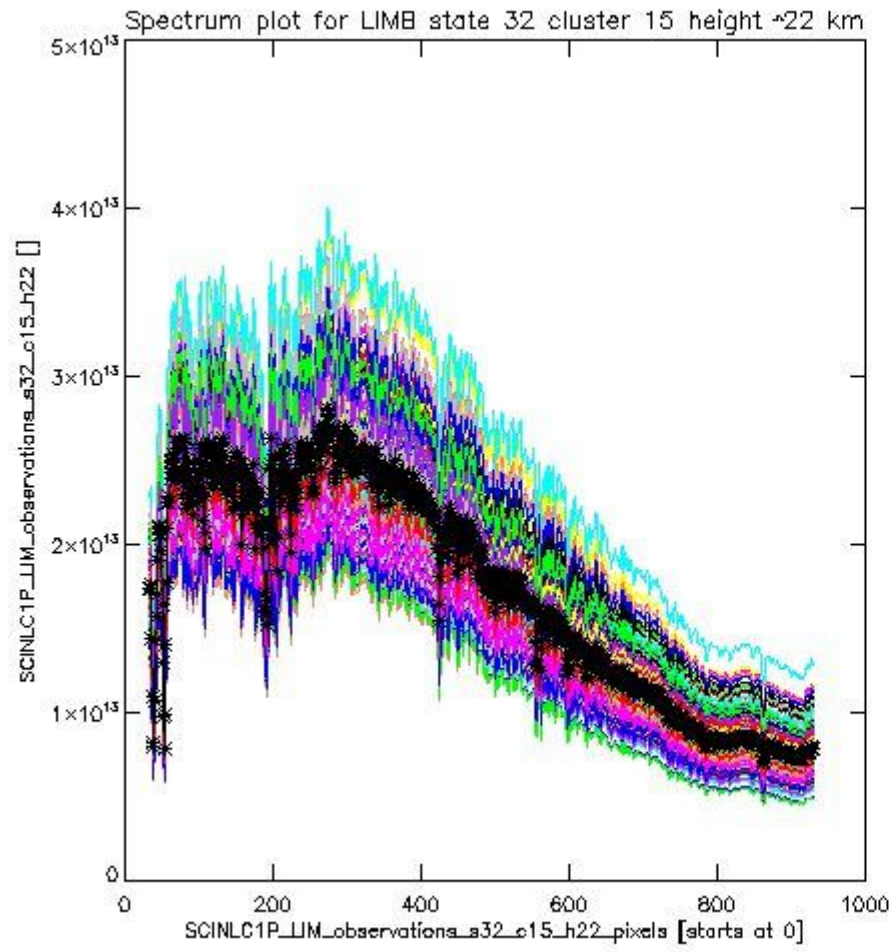




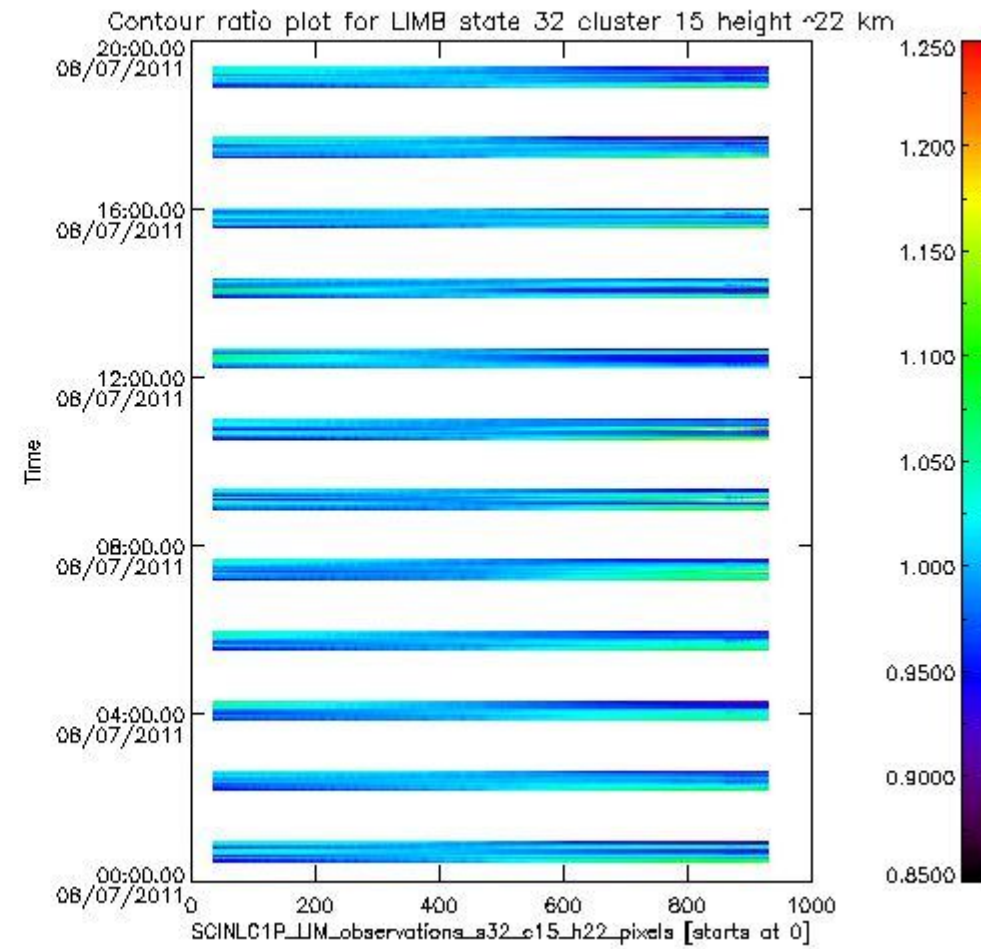
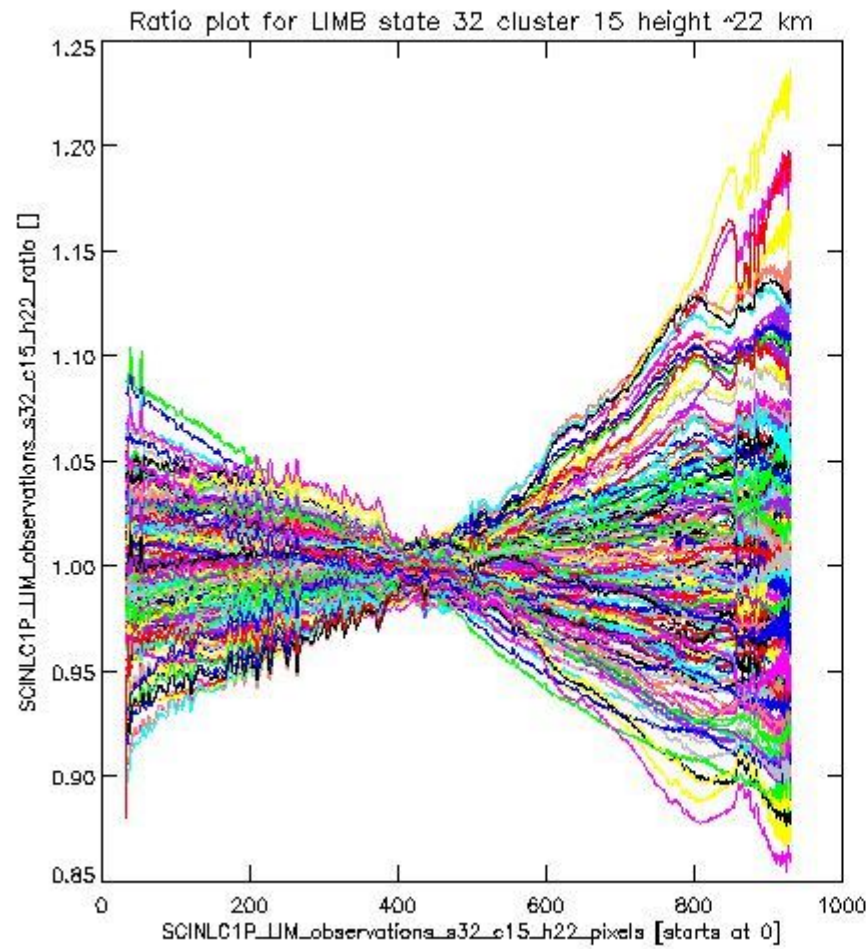
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_15.PNG

**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	08JUL2011 00:28:57.652
Start time of last sample	08JUL2011 19:19:12.204
Reference period start time	08JUN2011 00:29:33.885
Reference period stop time	07JUL2011 13:14:48.940
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



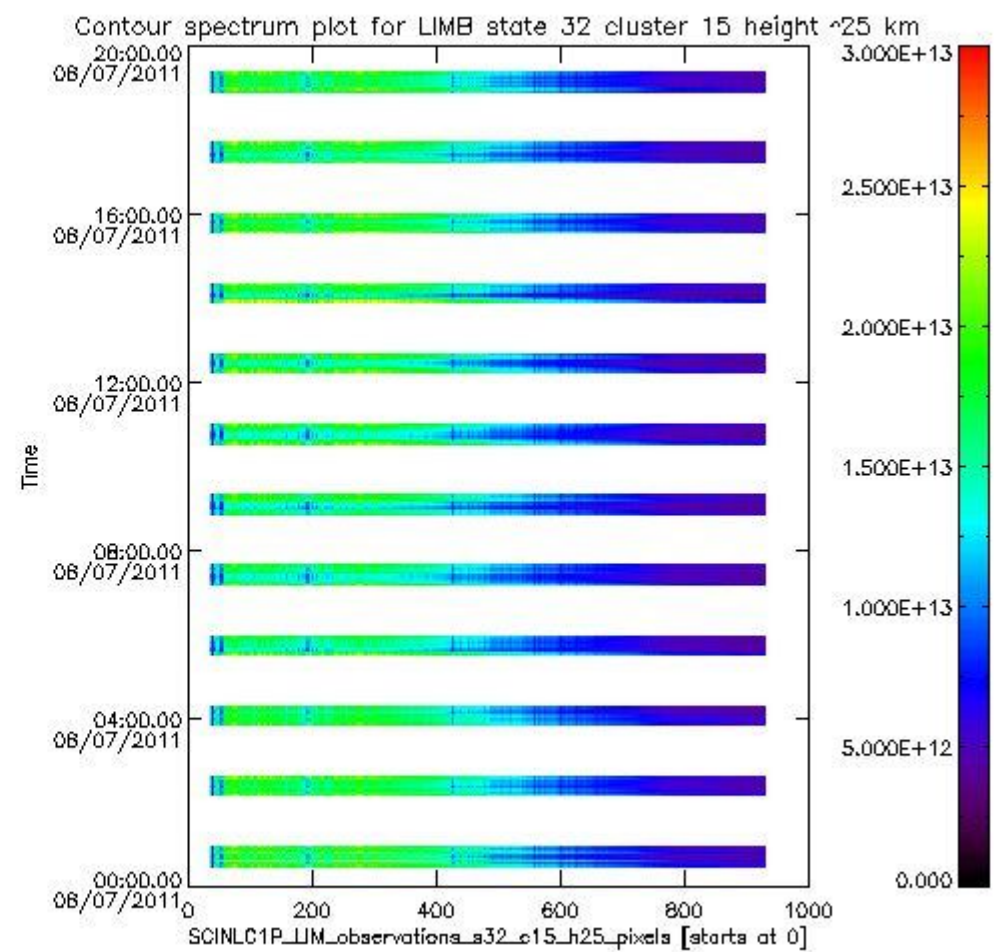
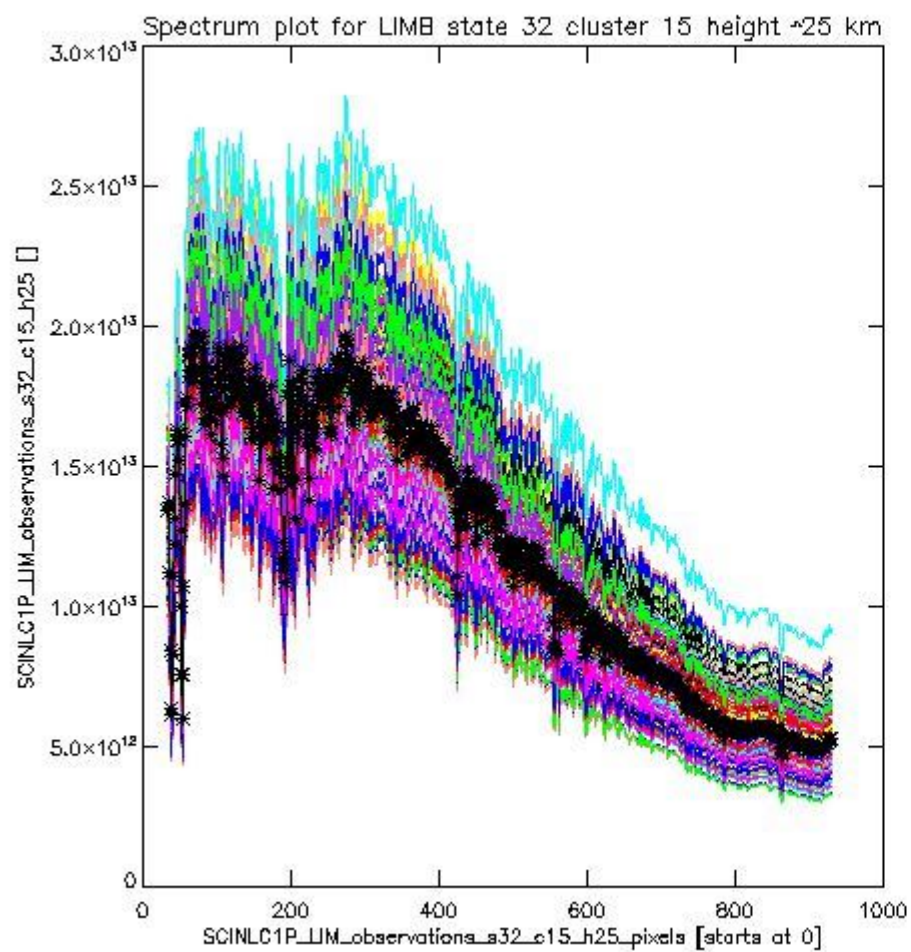
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_16.PNG



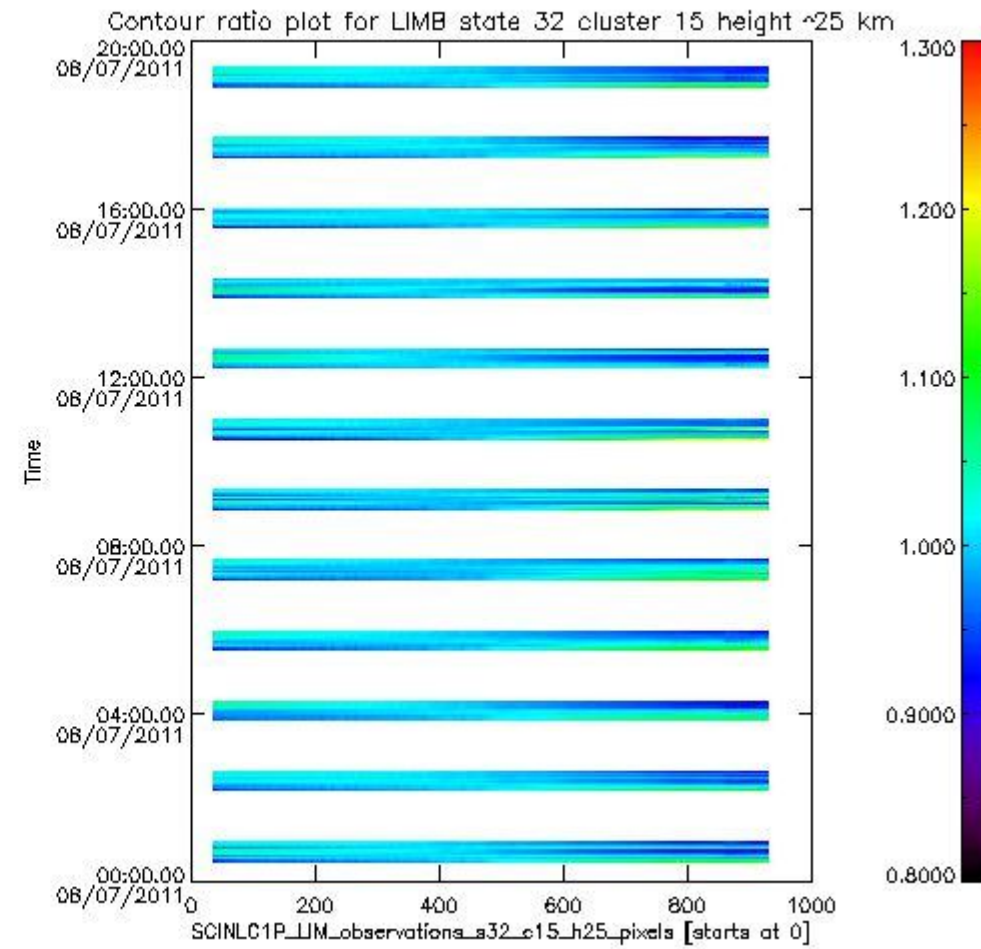
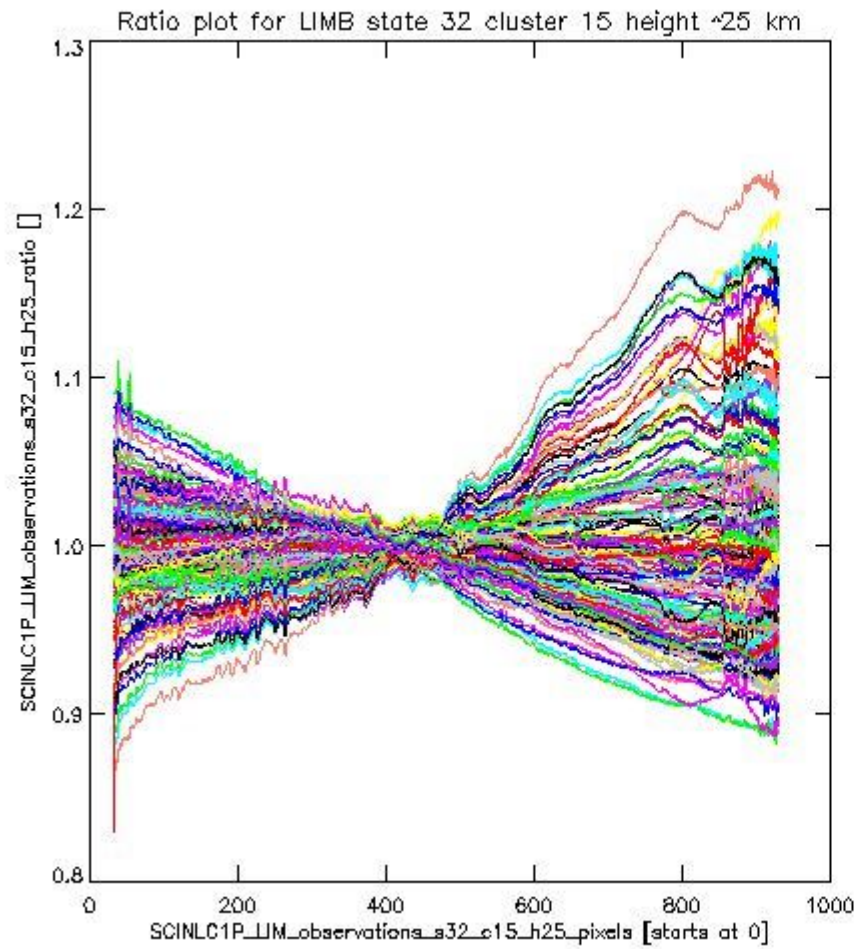
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_17.PNG

**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	08JUL2011 00:28:57.652
Start time of last sample	08JUL2011 19:19:12.204
Reference period start time	08JUN2011 00:29:33.885
Reference period stop time	07JUL2011 13:14:48.940
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



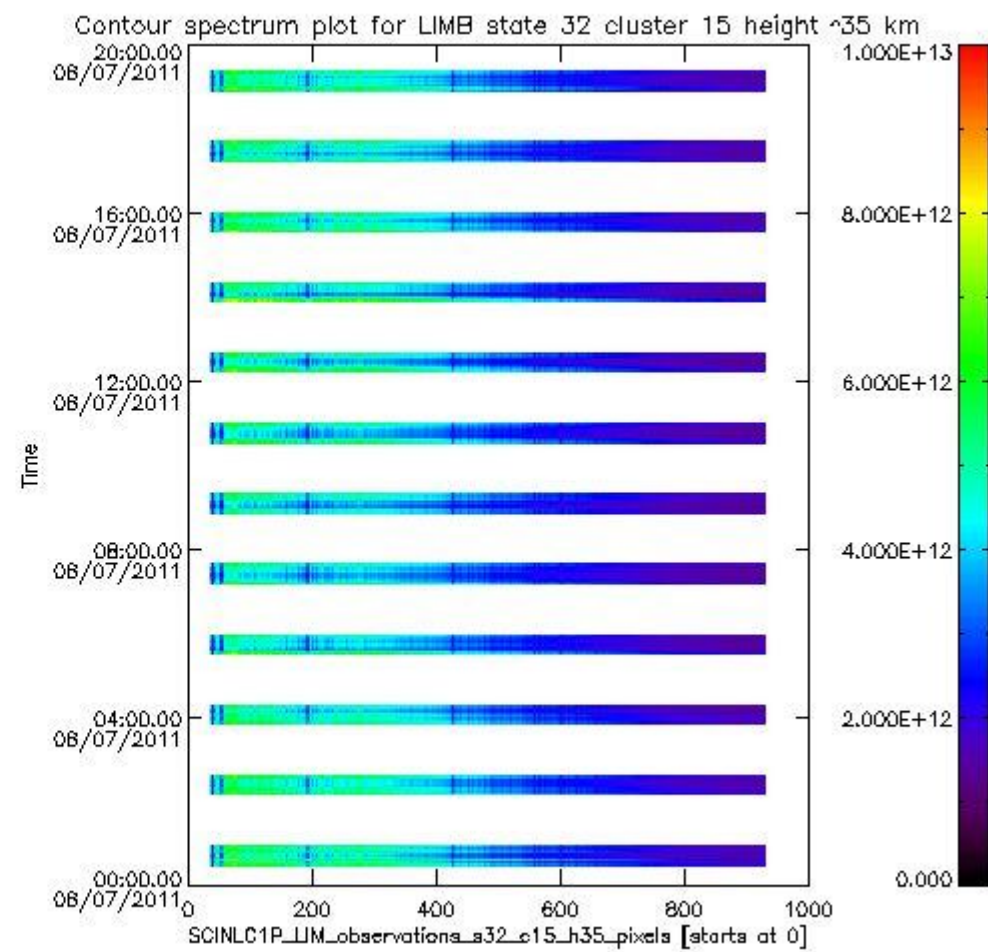
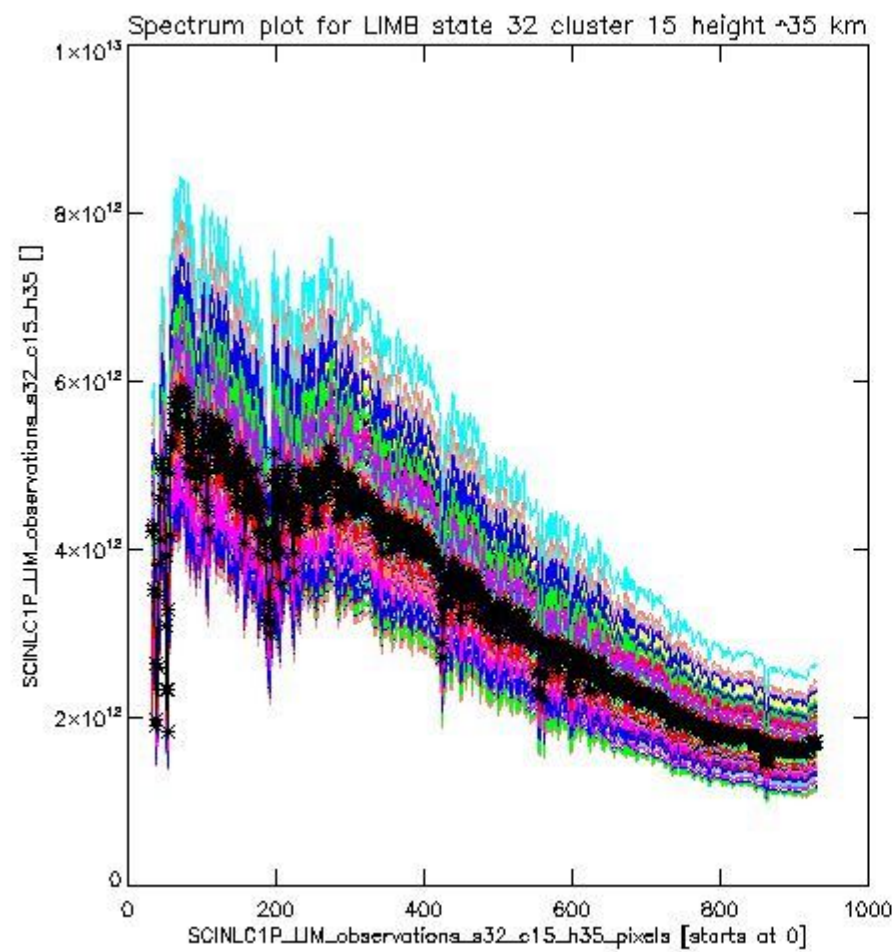
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_18.PNG

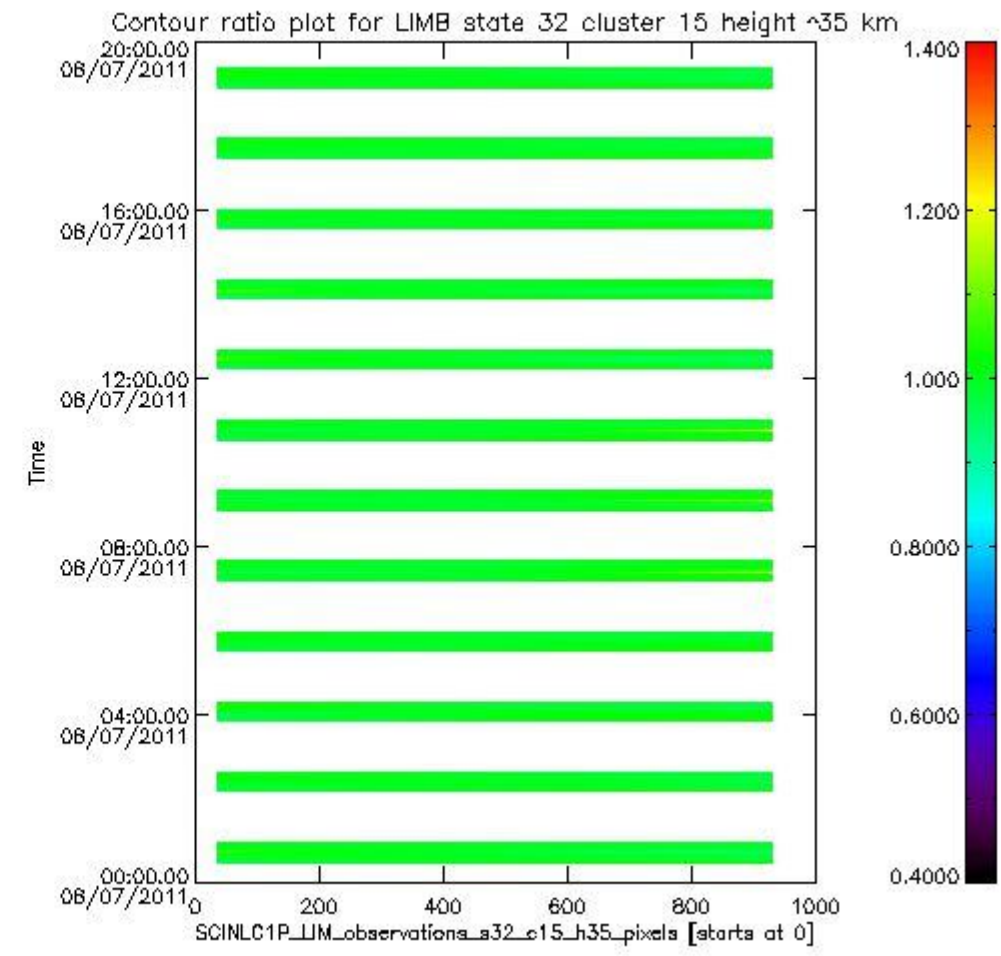
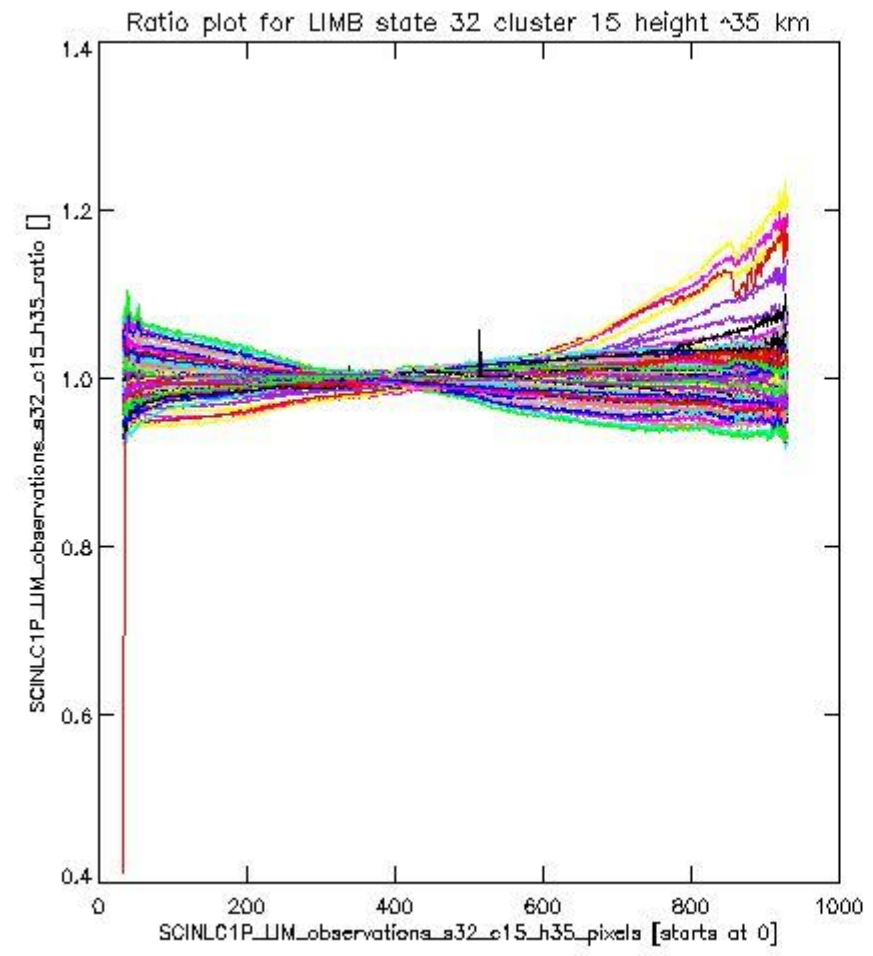


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110708\_19.PNG

**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	08JUL2011 00:28:57.652
Start time of last sample	08JUL2011 19:19:12.204
Reference period start time	08JUN2011 00:29:33.885
Reference period stop time	06JUL2011 18:53:32.604
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\_20110708\_21.PNG

