

# 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	11JUL2011 06:30:46
Data source version	SCIA/7.04-U
Processing scope for products	28JUN2011 00:00:00 to 29JUN2011 00:00:00
Start time of first product within scope	28JUN2011 11:18:56
Stop time of last product within scope	28JUN2011 22:30:35
Total number of level 1 products	5
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	28JUN2011 11:50:59.308	28JUN2011 22:02:37.141
1	NADIR	07	09	N/A	28JUN2011 11:50:59.308	28JUN2011 22:02:37.141
2	NADIR	07	15	N/A	28JUN2011 11:50:59.308	28JUN2011 22:02:37.141
3	NADIR	07	24	N/A	28JUN2011 11:50:59.308	28JUN2011 22:02:37.141
4	NADIR	07	55	N/A	28JUN2011 11:50:59.308	28JUN2011 22:02:37.141
5	LIMB	32	09	~19 km	28JUN2011 11:37:48.671	28JUN2011 22:05:48.442
6	LIMB	32	09	~22 km	28JUN2011 11:37:48.671	28JUN2011 22:05:48.442
7	LIMB	32	09	~25 km	28JUN2011 11:37:48.671	28JUN2011 22:05:48.442
8	LIMB	32	15	~22 km	28JUN2011 11:37:48.671	28JUN2011 22:05:48.442
9	LIMB	32	15	~25 km	28JUN2011 11:37:48.671	28JUN2011 22:05:48.442
10	LIMB	32	15	~35 km	28JUN2011 11:37:48.671	28JUN2011 22:05:48.442

#### 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_1CUDPA20110628_111856_000057463104_00052_48773_2597.N1</a>	28JUN2011 11:18:56	28JUN2011 12:29:11	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110628_143924_000057463104_00054_48775_2591.N1</a>	28JUN2011 14:39:24	28JUN2011 15:49:39	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110628_161938_000057463104_00055_48776_2592.N1</a>	28JUN2011 16:19:38	28JUN2011 17:30:07	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110628_194006_000057463104_00057_48778_2595.N1</a>	28JUN2011 19:40:06	28JUN2011 20:50:45	0	36	30	0	1	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110628_212020_000057463104_00058_48779_2590.N1</a>	28JUN2011 21:20:20	28JUN2011 22:30:35	0	35	31	0	0	1	0	0	

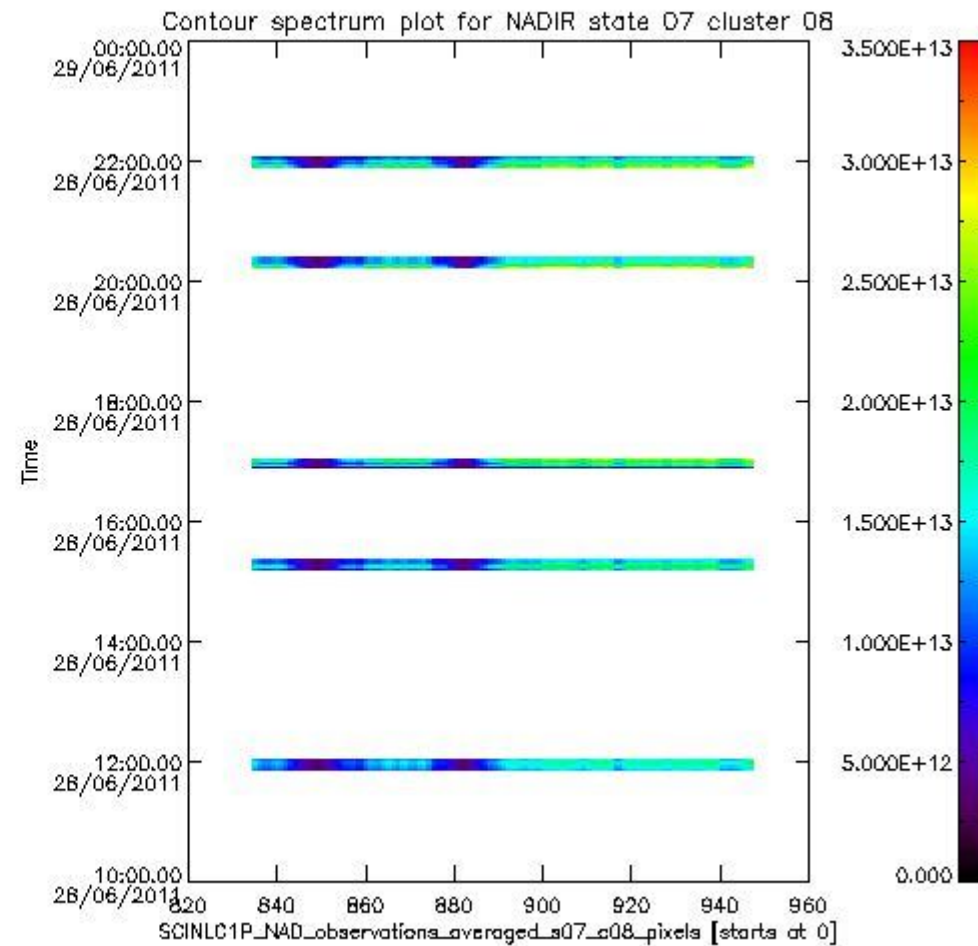
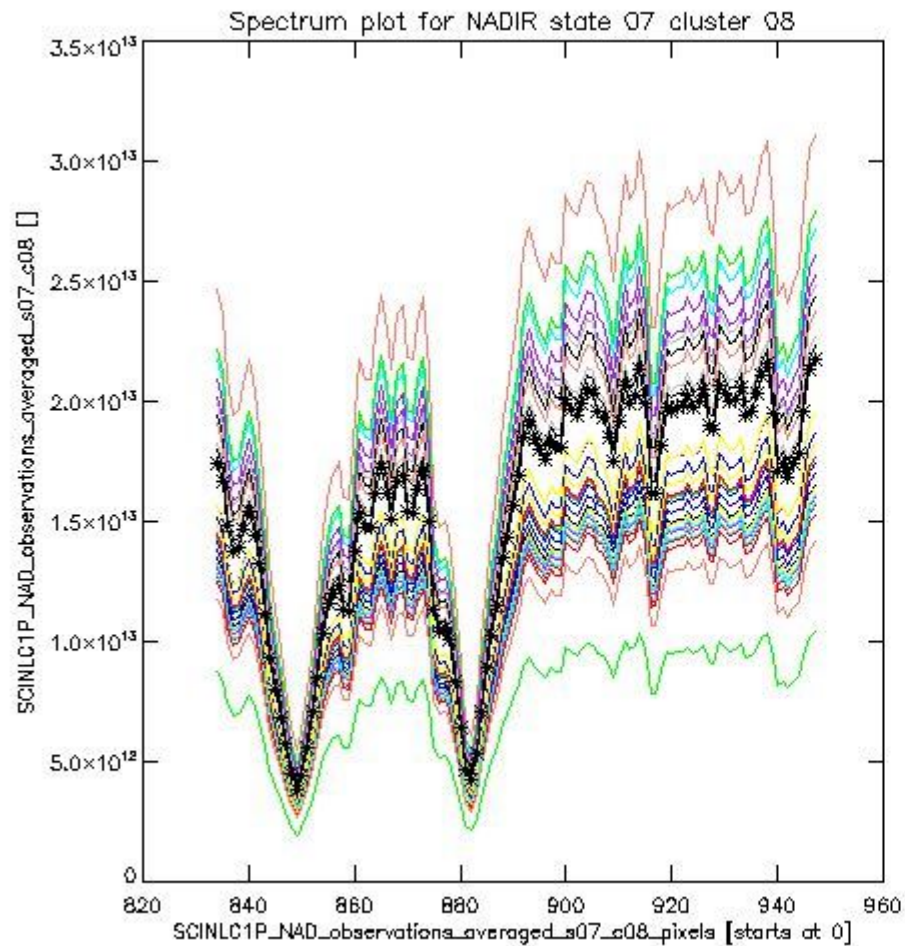
## 1.2 Source packet monitoring

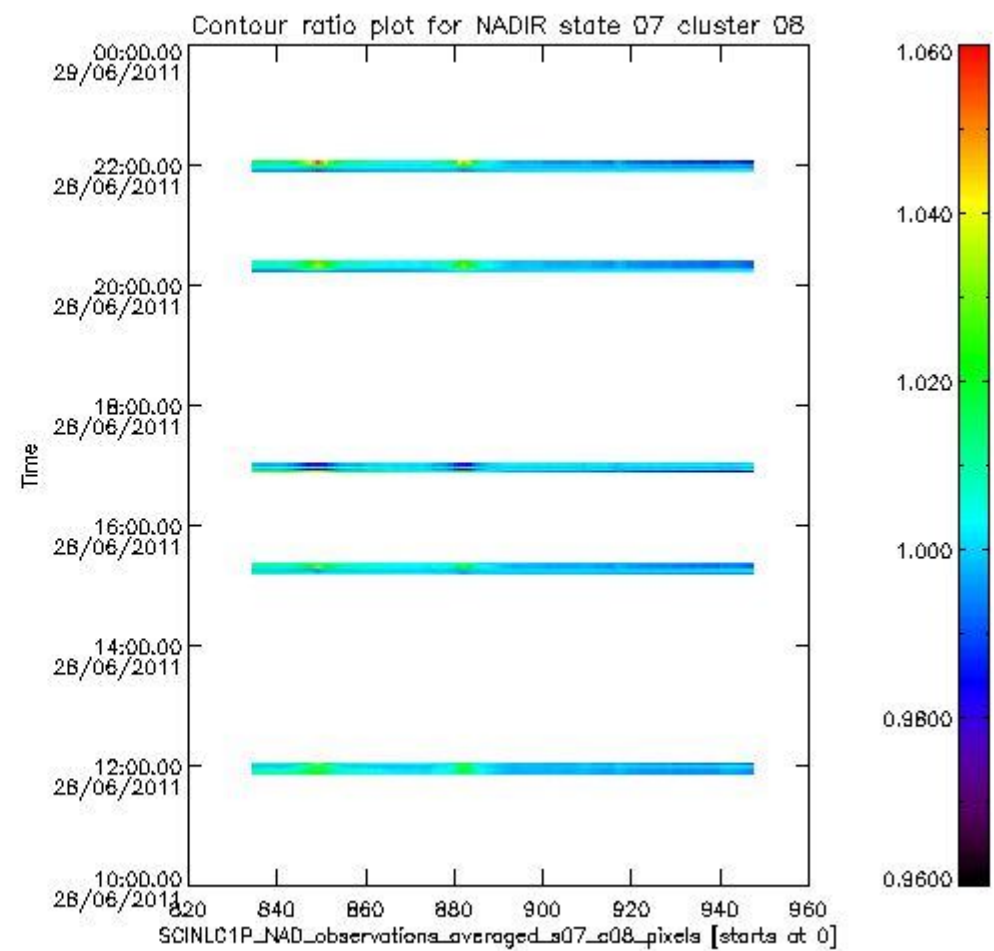
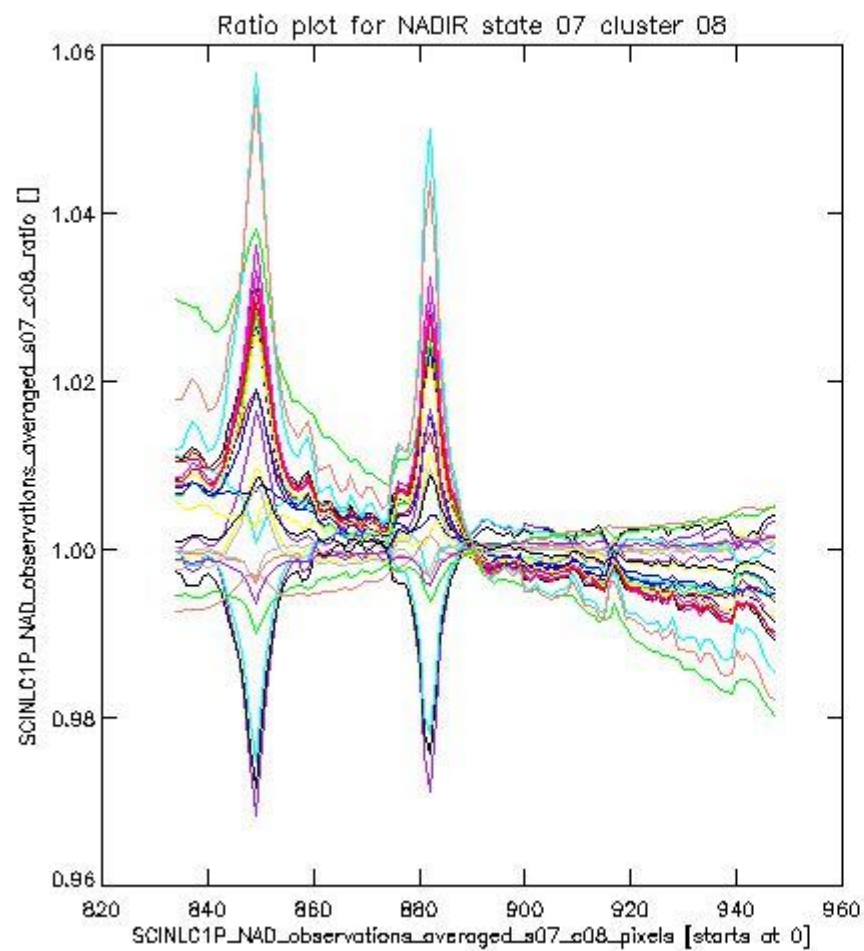
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	28JUN2011 11:50:59.308
Start time of last sample	28JUN2011 22:02:37.141
Reference period start time	29MAY2011 00:09:33.969
Reference period stop time	27JUN2011 05:57:01.107
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

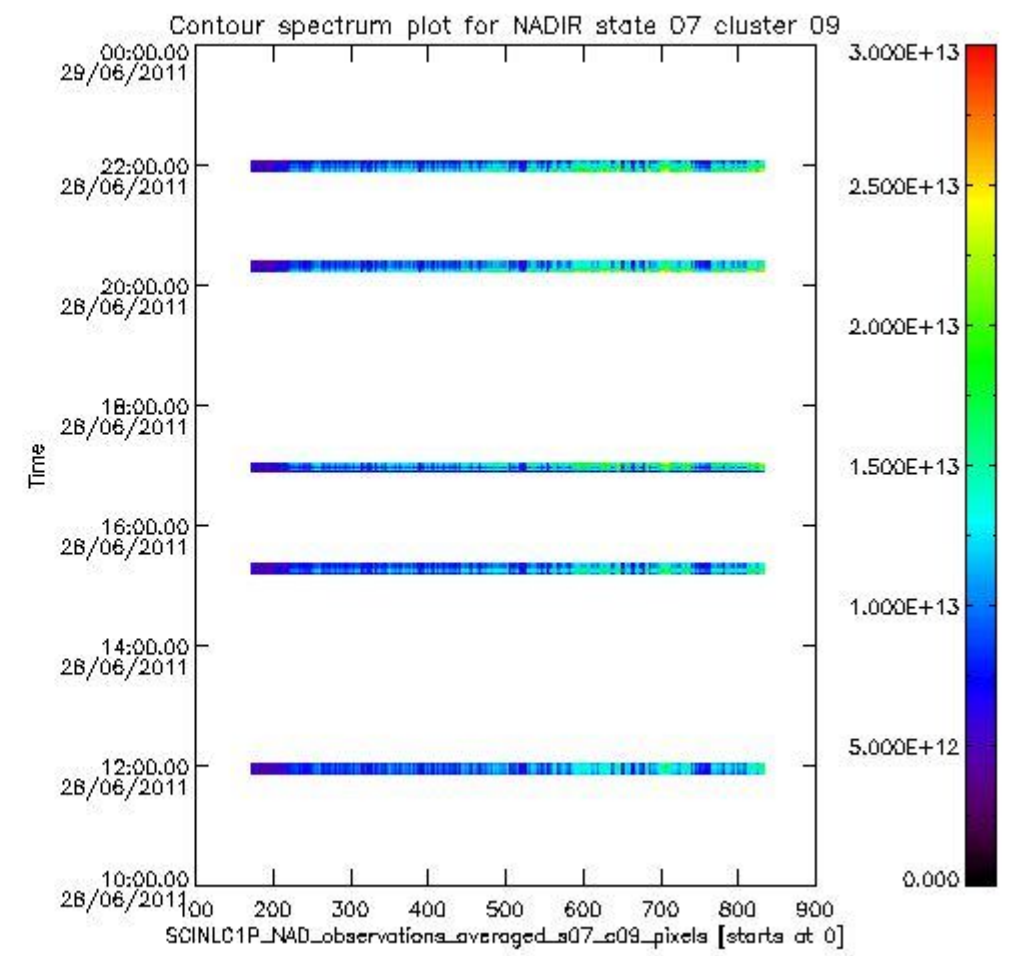
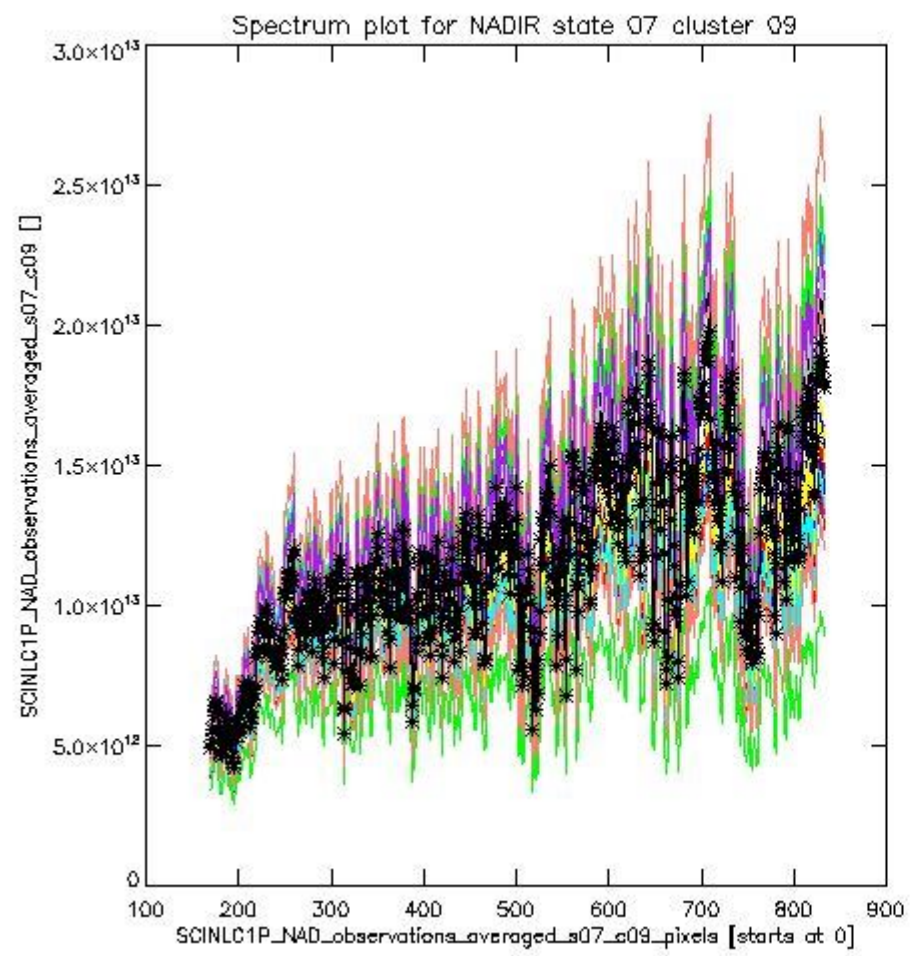




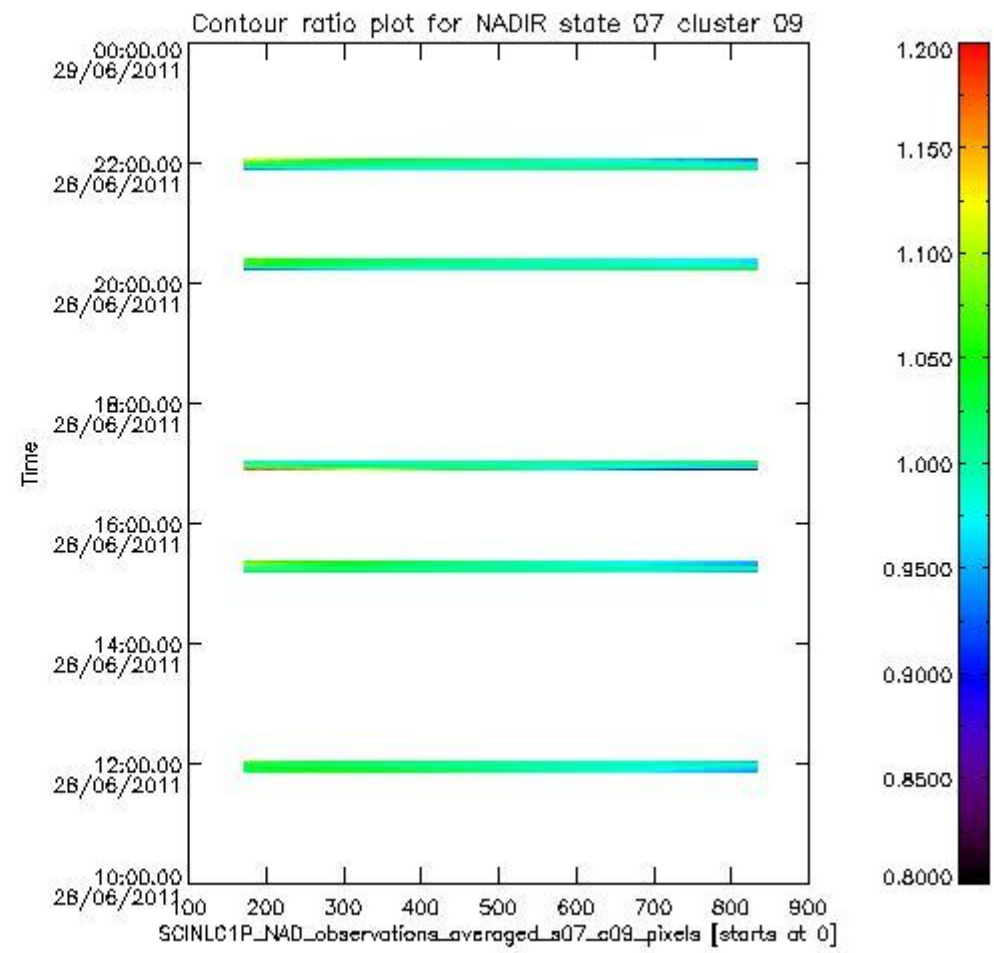
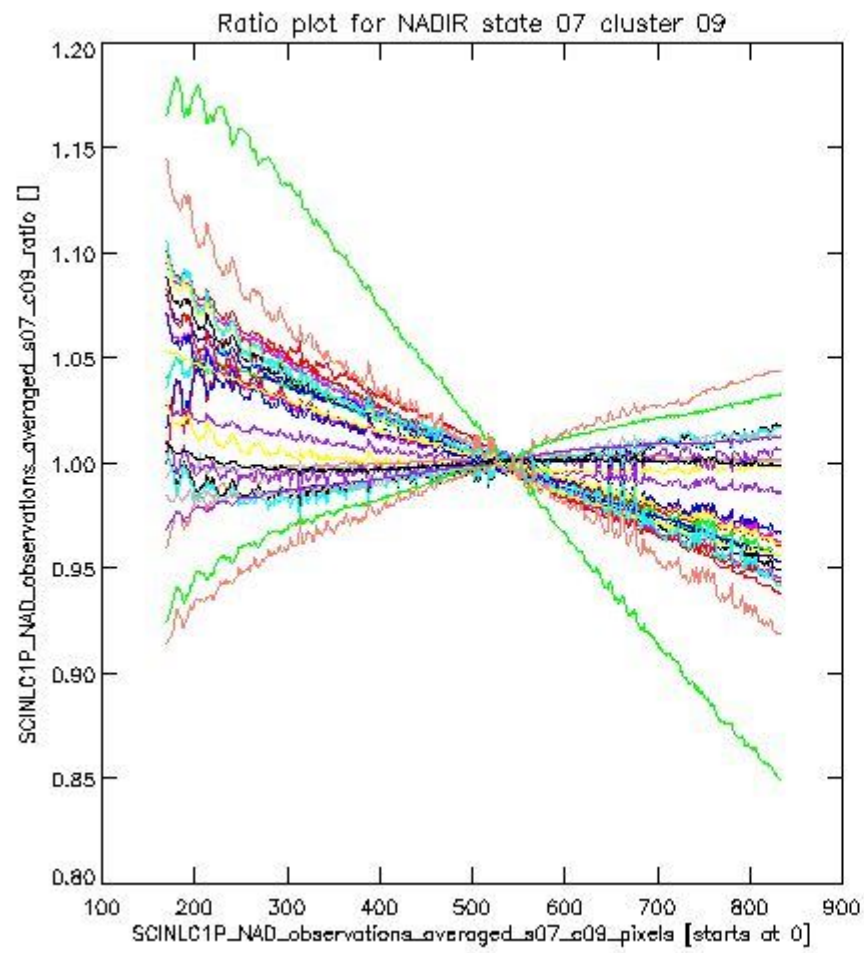
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_1.PNG

**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	28JUN2011 11:50:59.308
Start time of last sample	28JUN2011 22:02:37.141
Reference period start time	29MAY2011 00:09:33.969
Reference period stop time	27JUN2011 05:57:01.107
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



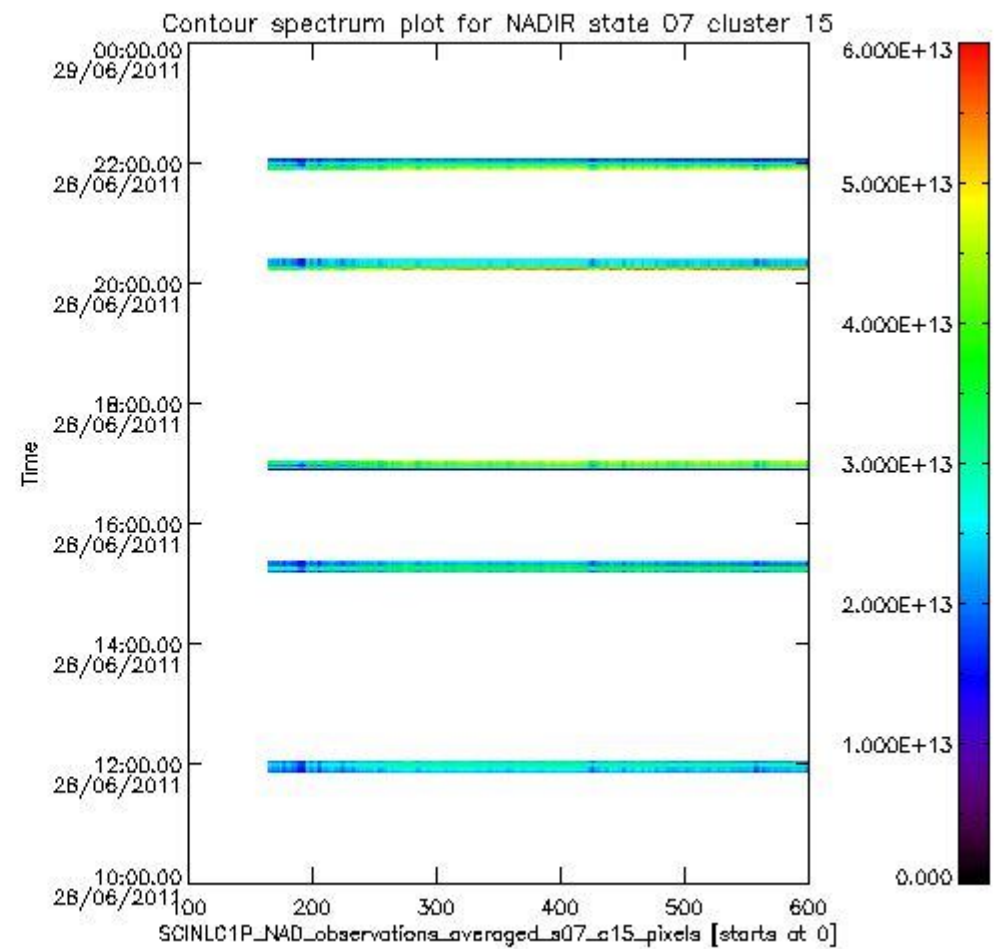
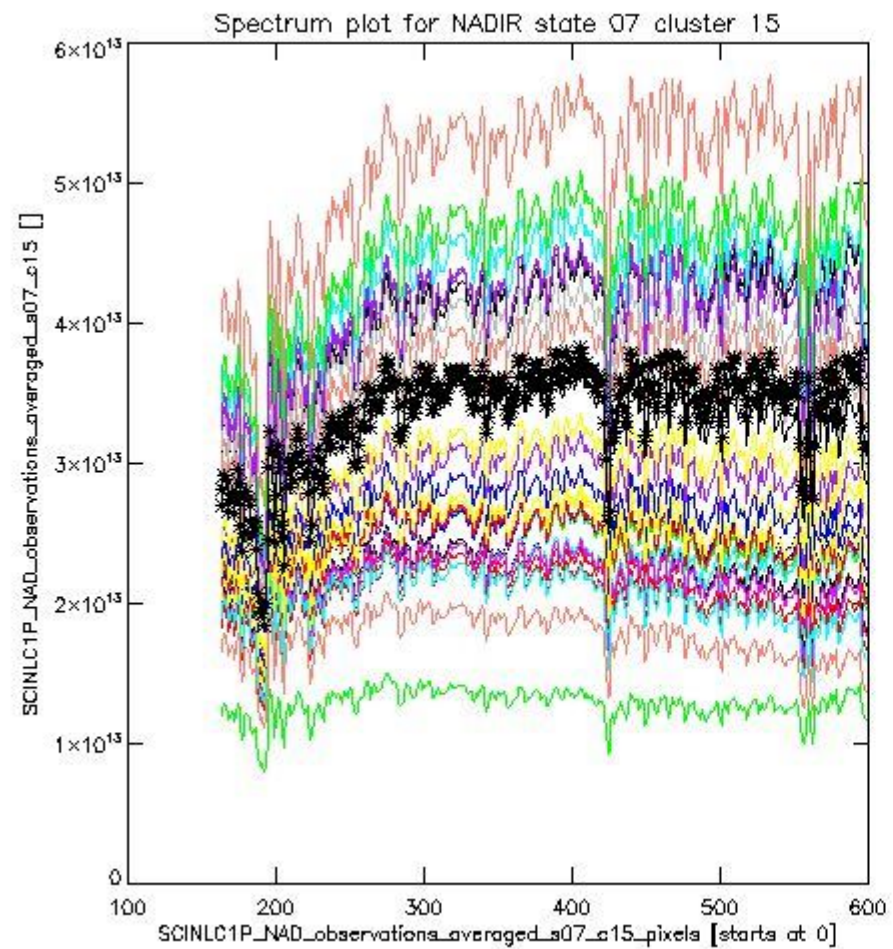
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_2.PNG



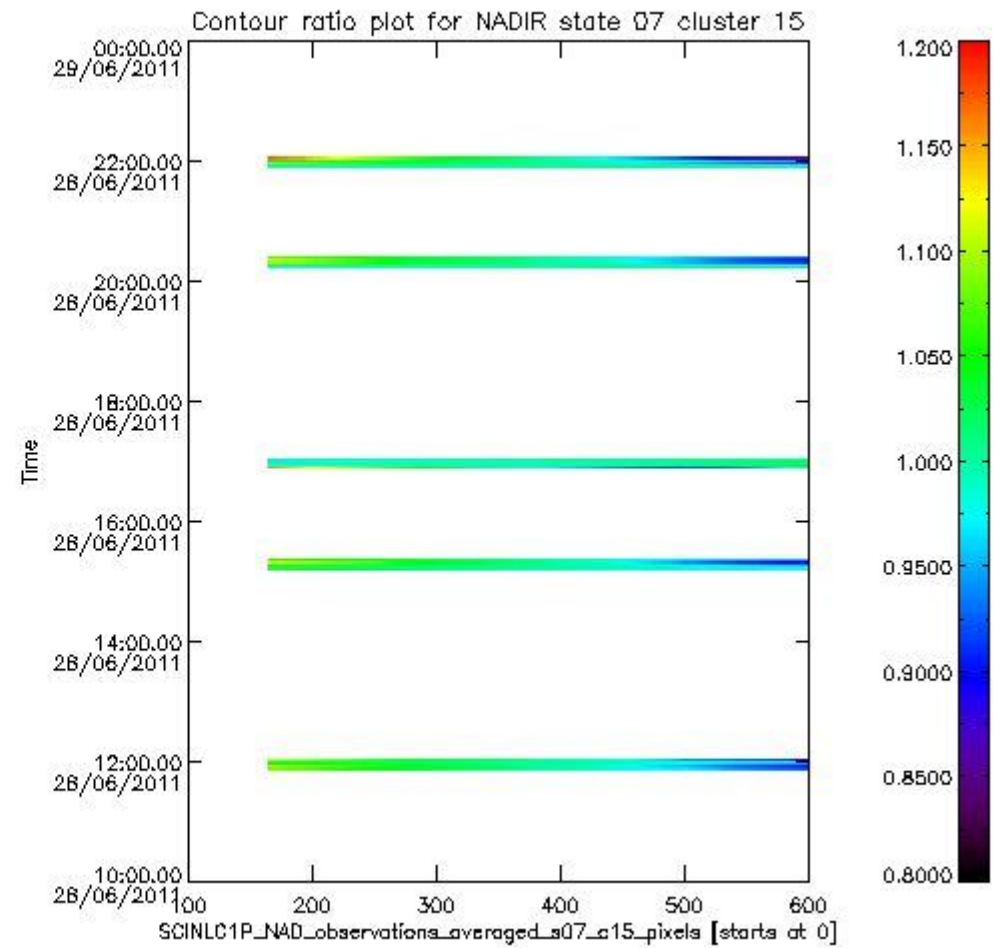
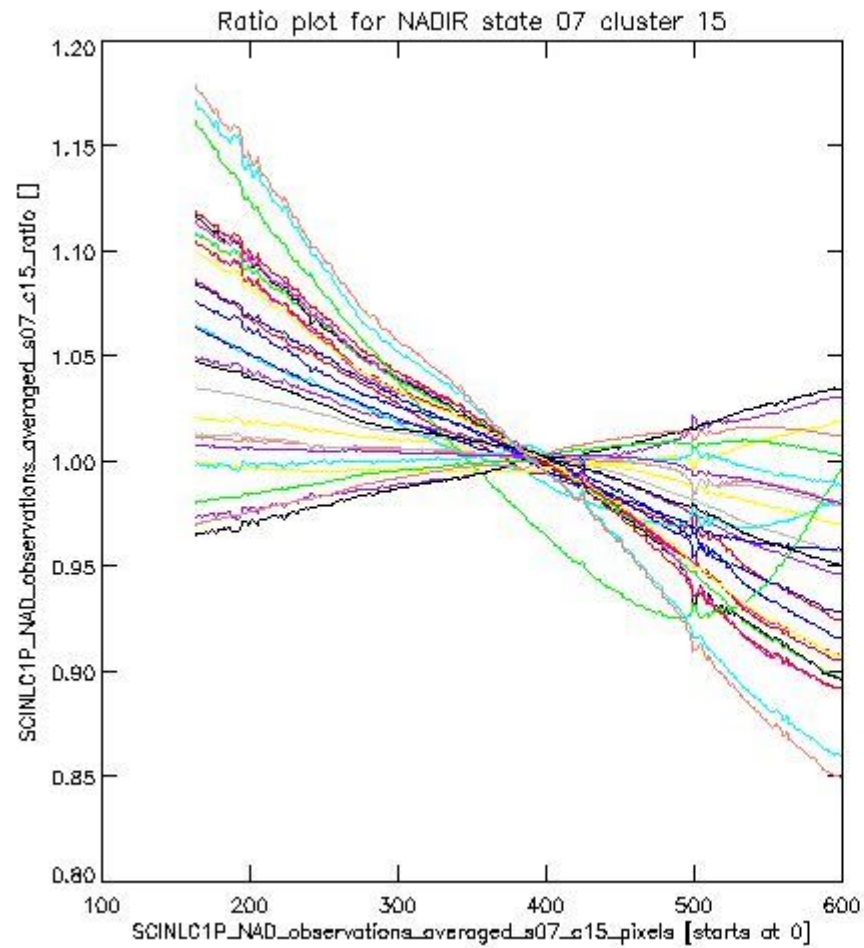
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_3.PNG

**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	28JUN2011 11:50:59.308
Start time of last sample	28JUN2011 22:02:37.141
Reference period start time	29MAY2011 00:09:33.969
Reference period stop time	27JUN2011 05:57:01.107
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



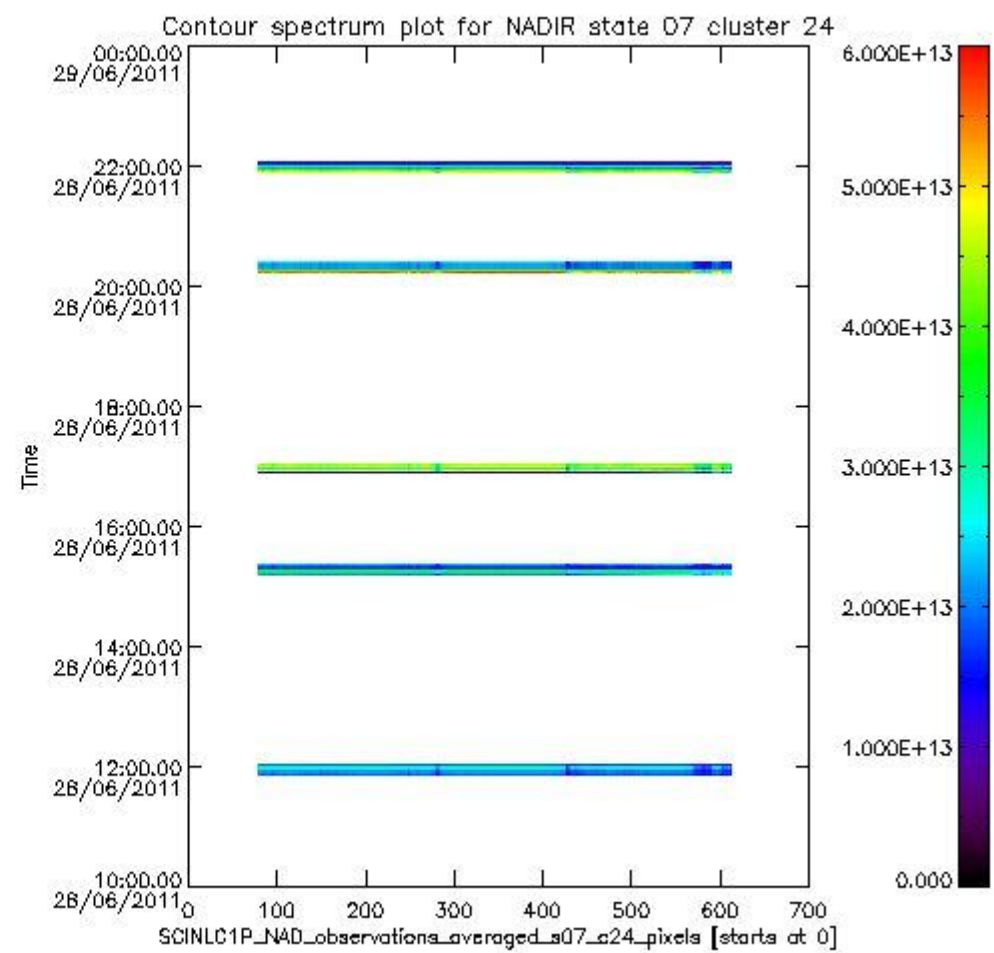
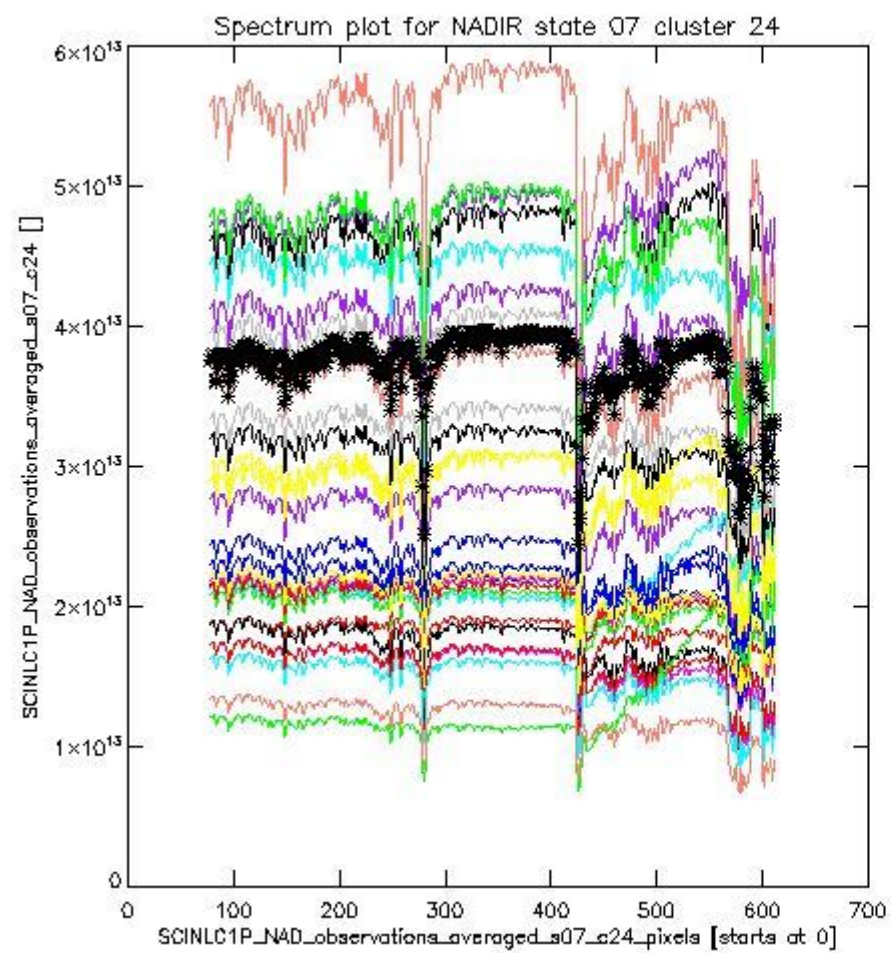
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_5.PNG

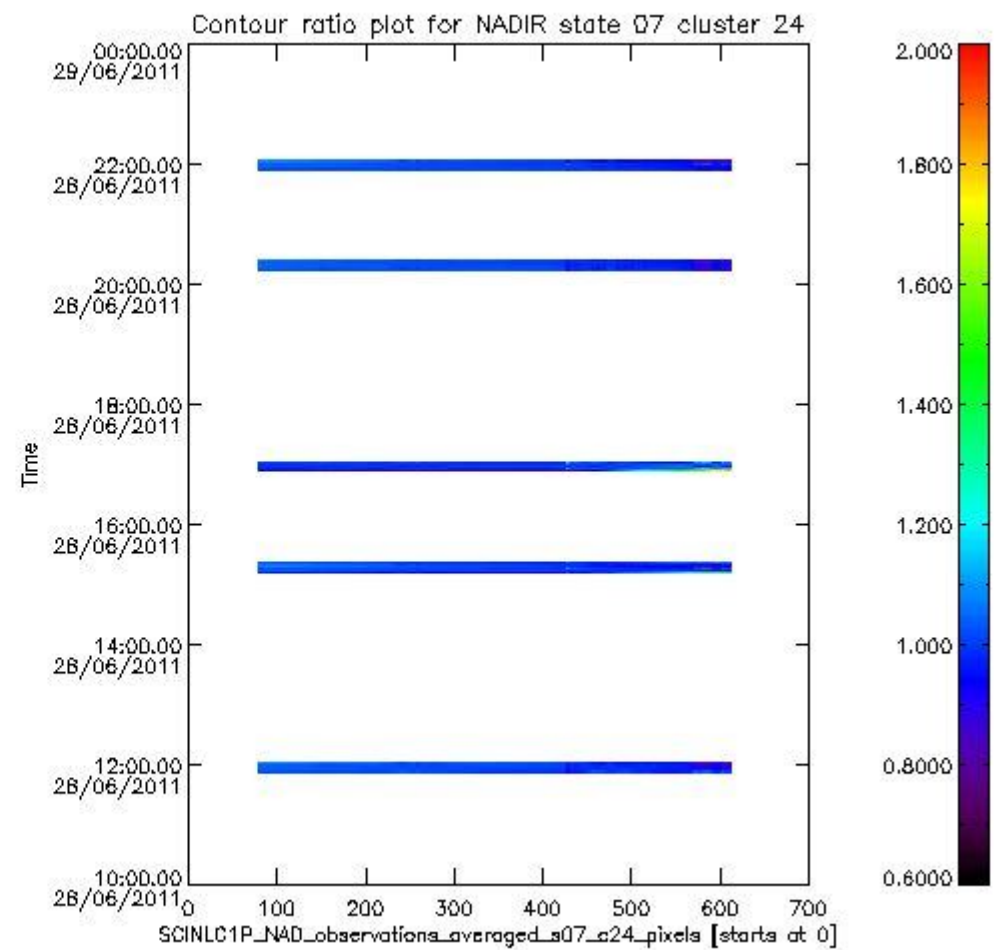
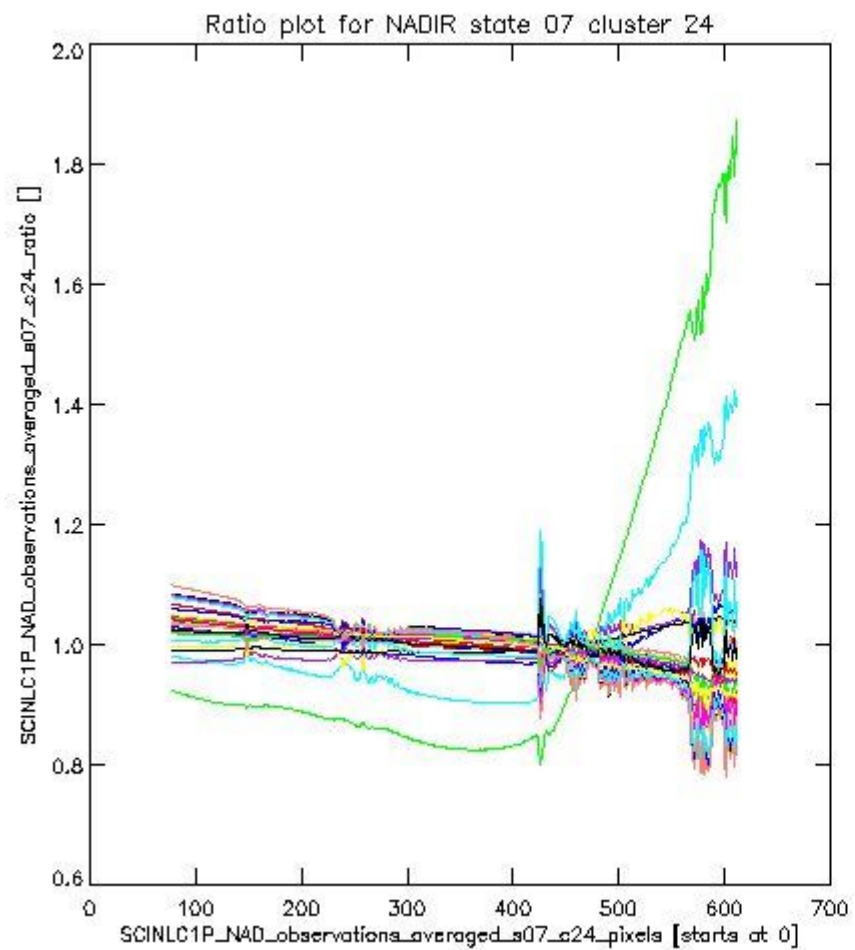
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	28JUN2011 11:50:59.308
Start time of last sample	28JUN2011 22:02:37.141
Reference period start time	29MAY2011 00:09:33.969
Reference period stop time	27JUN2011 05:57:01.107
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\_20110628\_6.PNG

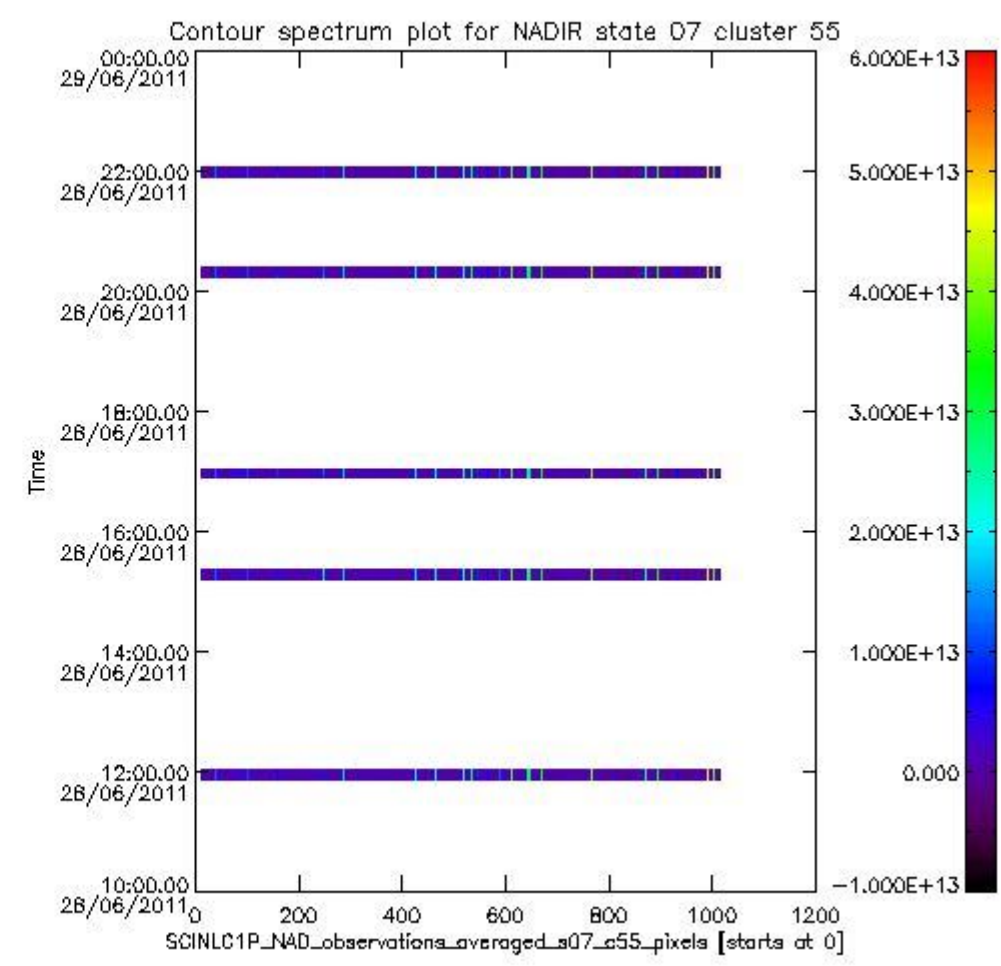
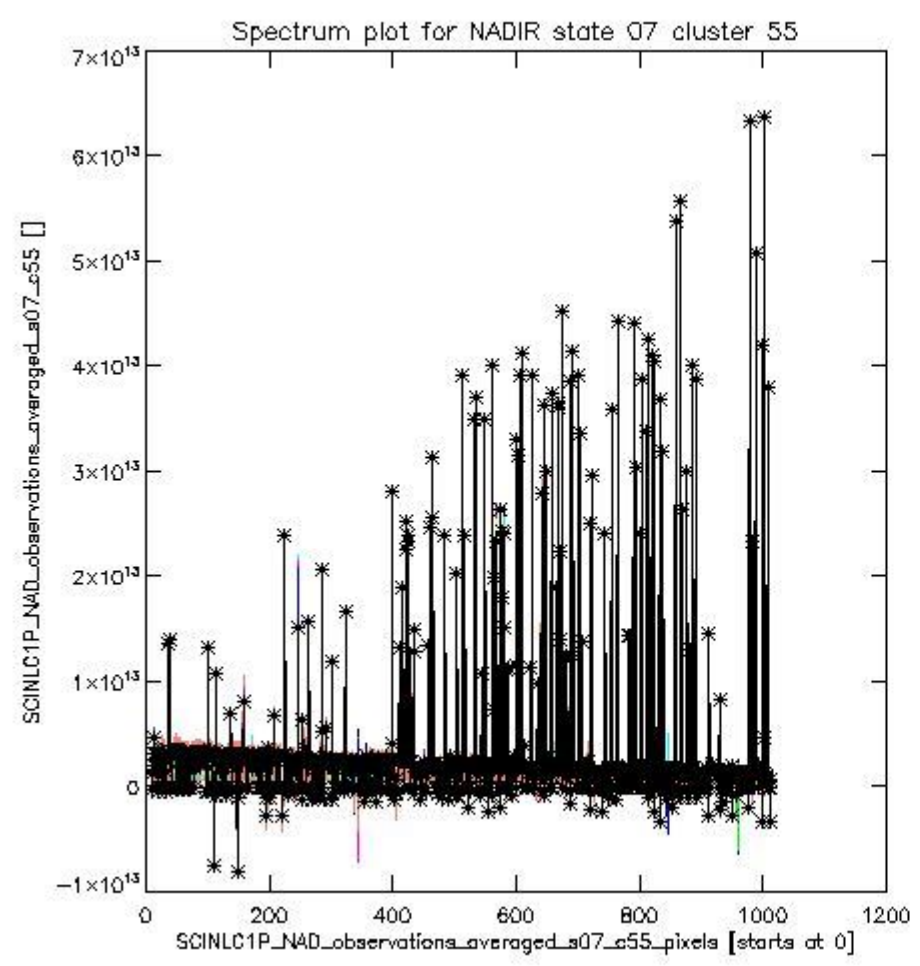




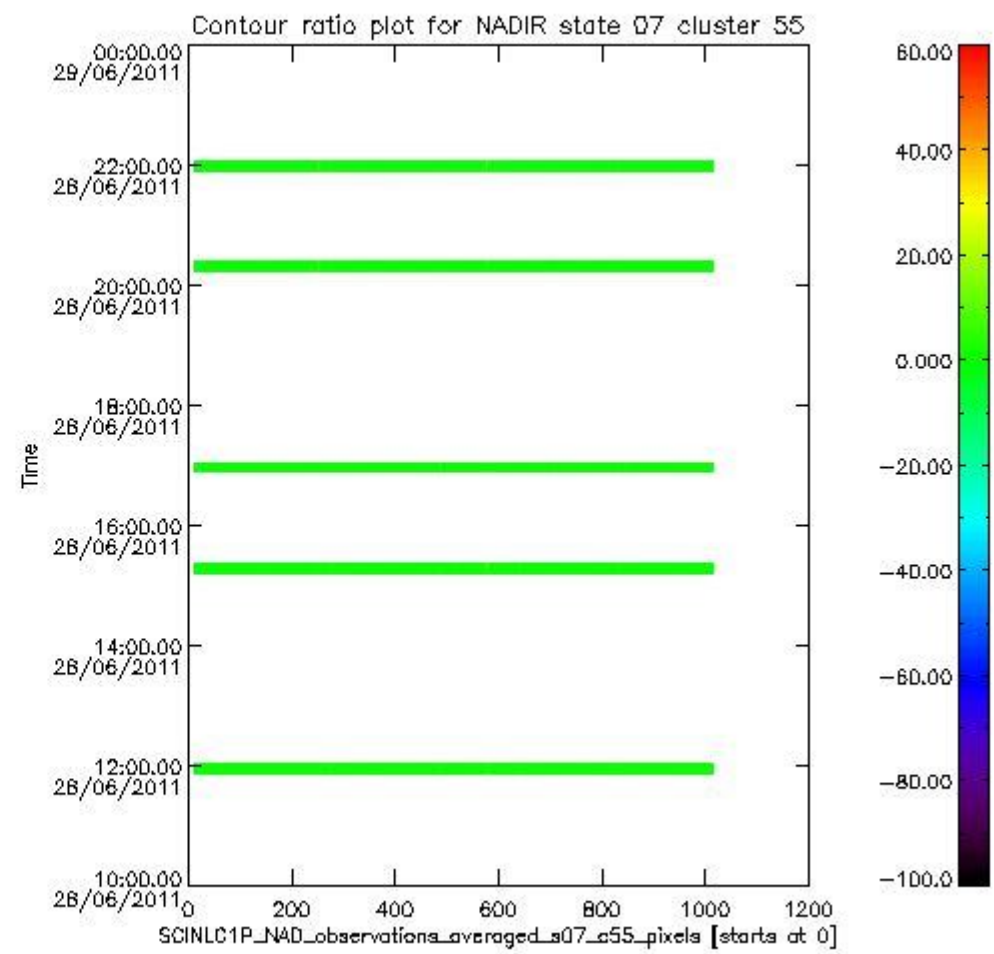
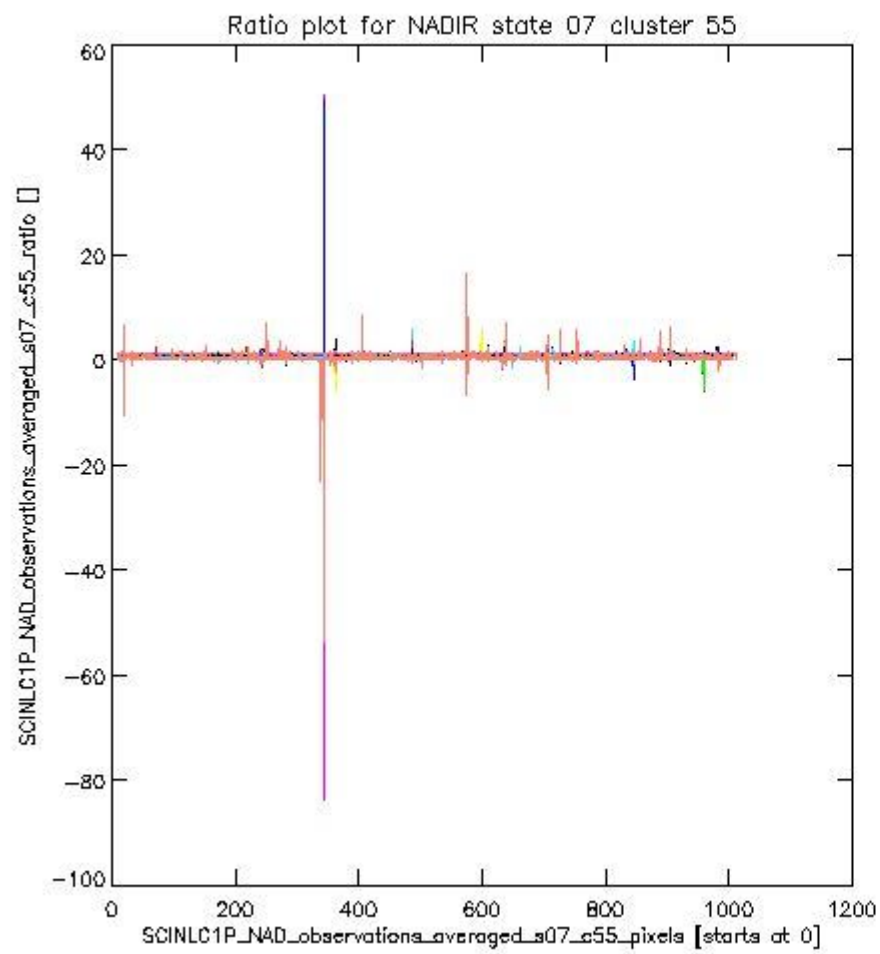
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_7.PNG

**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	28JUN2011 11:50:59.308
Start time of last sample	28JUN2011 22:02:37.141
Reference period start time	29MAY2011 00:09:33.969
Reference period stop time	27JUN2011 05:57:01.107
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



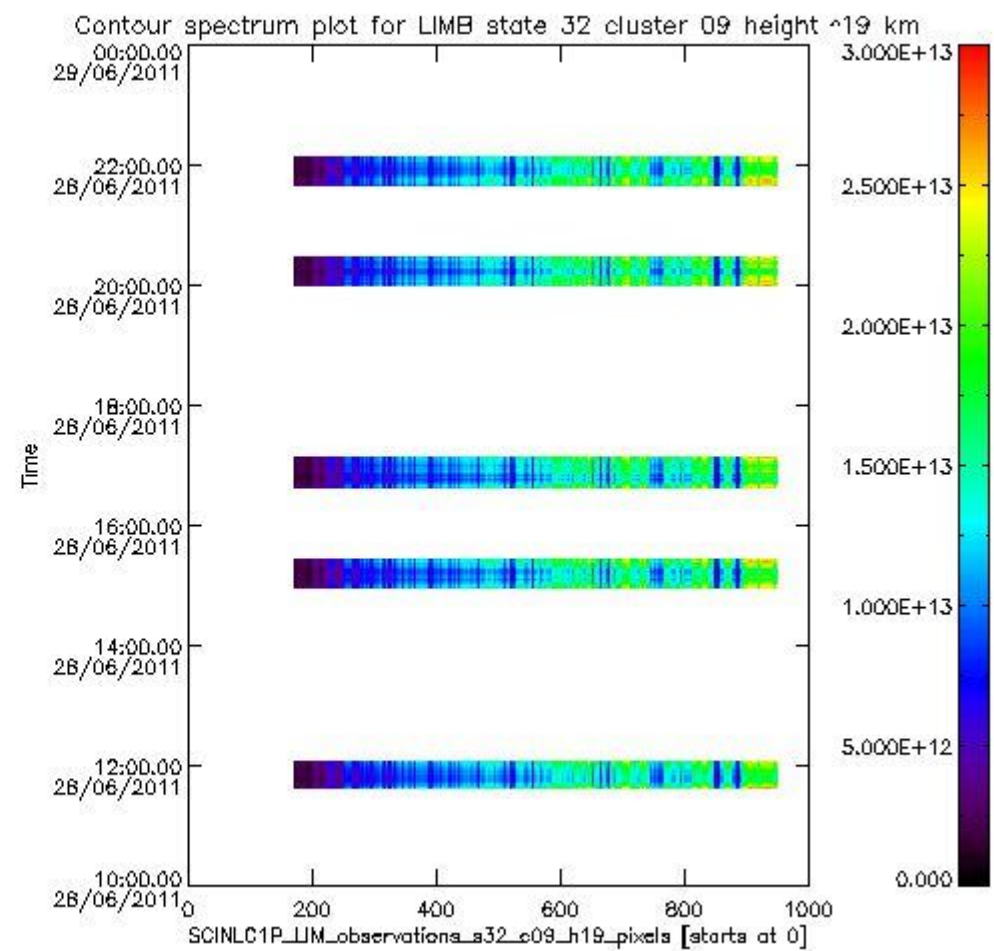
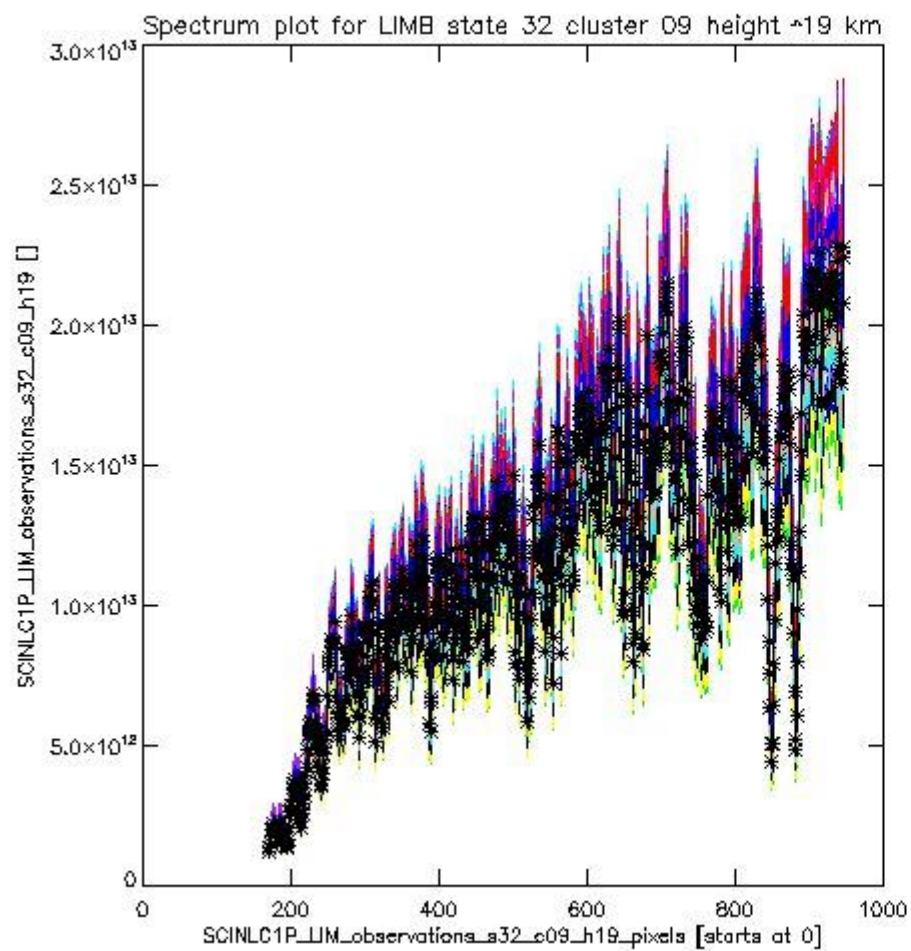
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_8.PNG



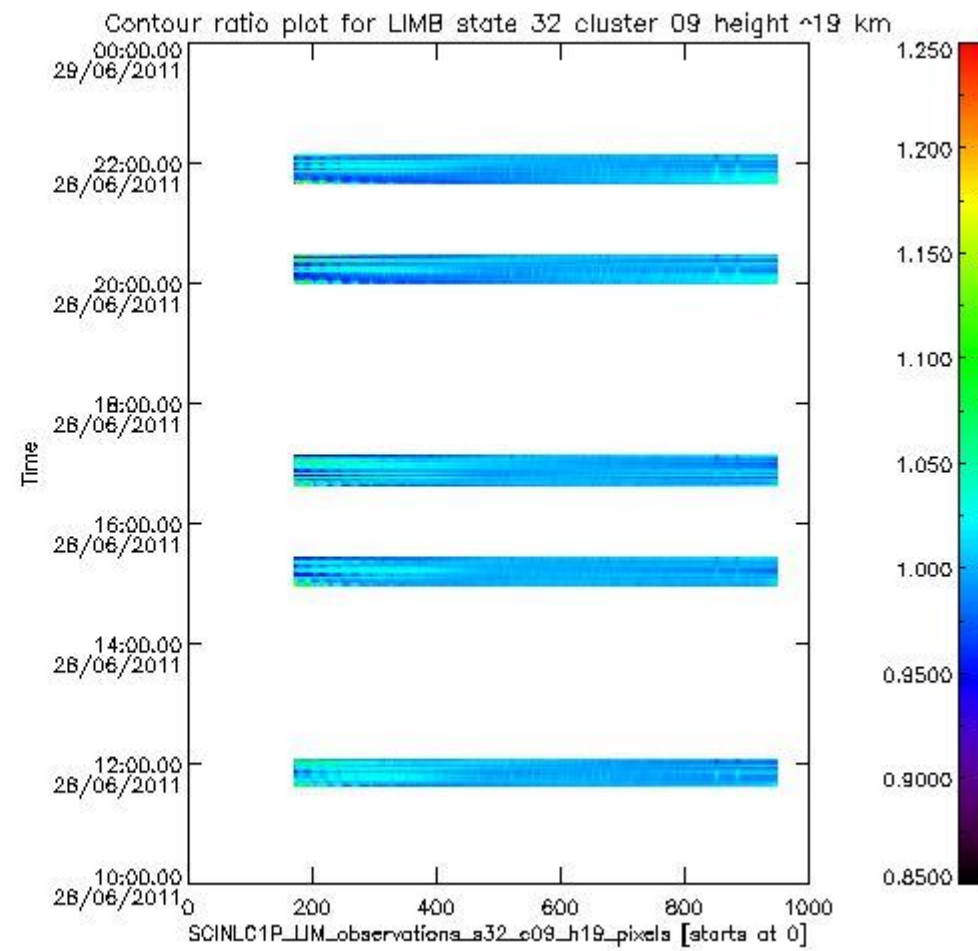
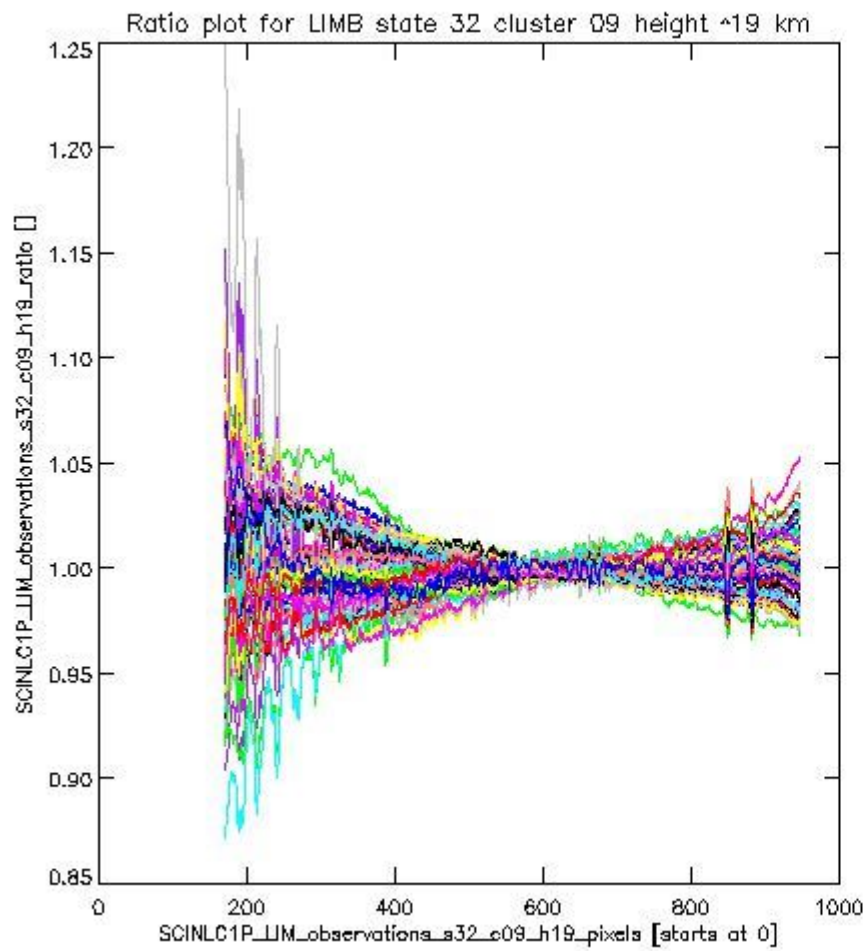
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_9.PNG

**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	28JUN2011 11:37:48.671
Start time of last sample	28JUN2011 22:05:48.442
Reference period start time	29MAY2011 00:00:28.817
Reference period stop time	27JUN2011 06:00:12.404
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



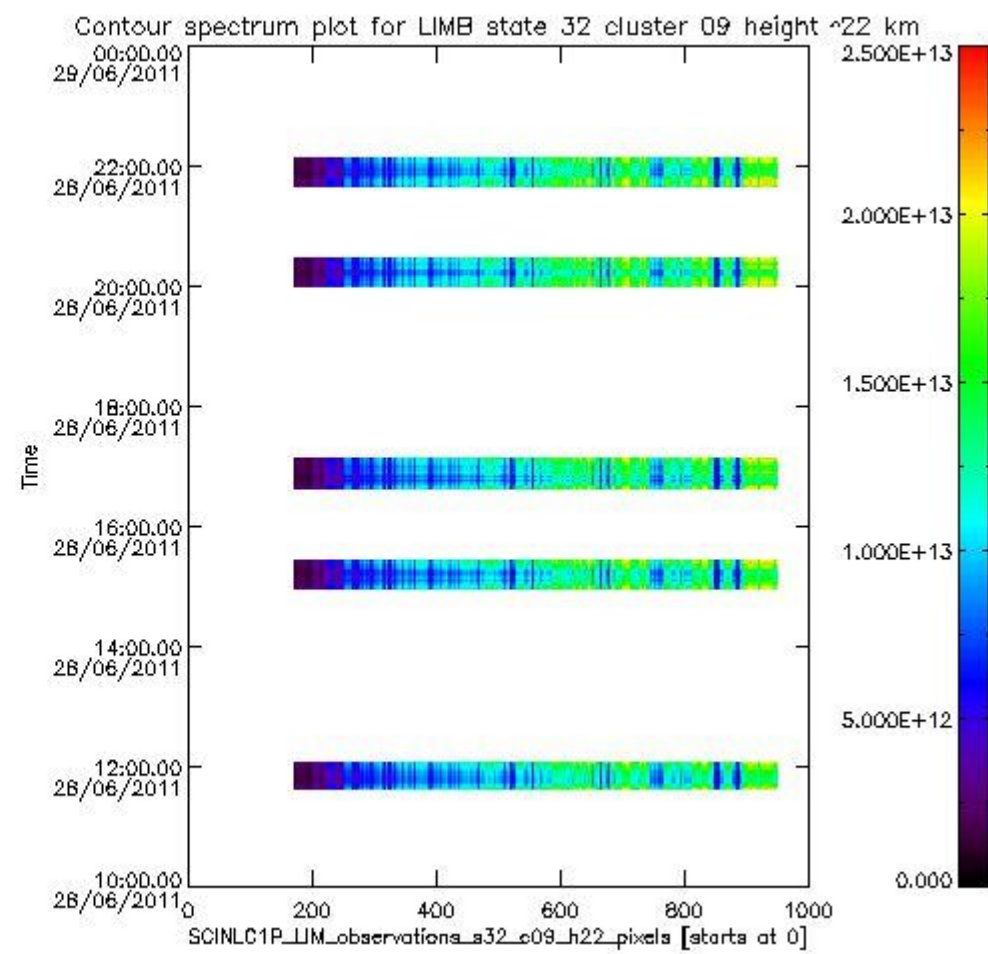
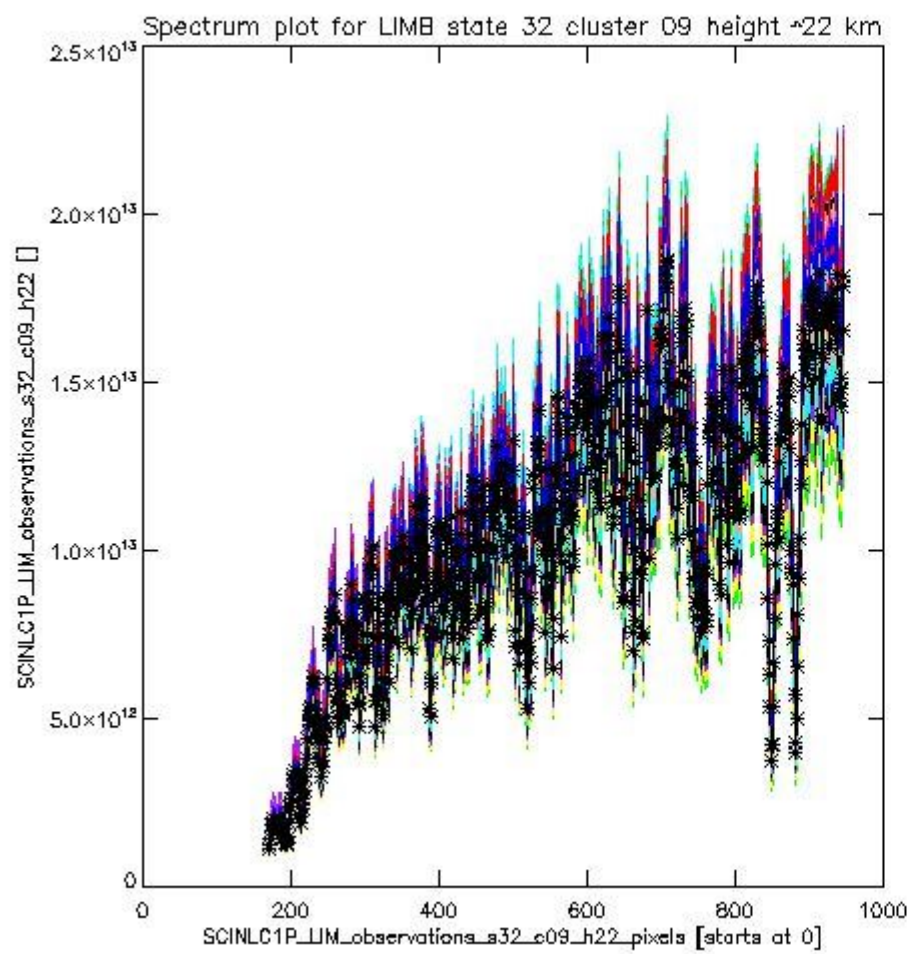
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_10.PNG



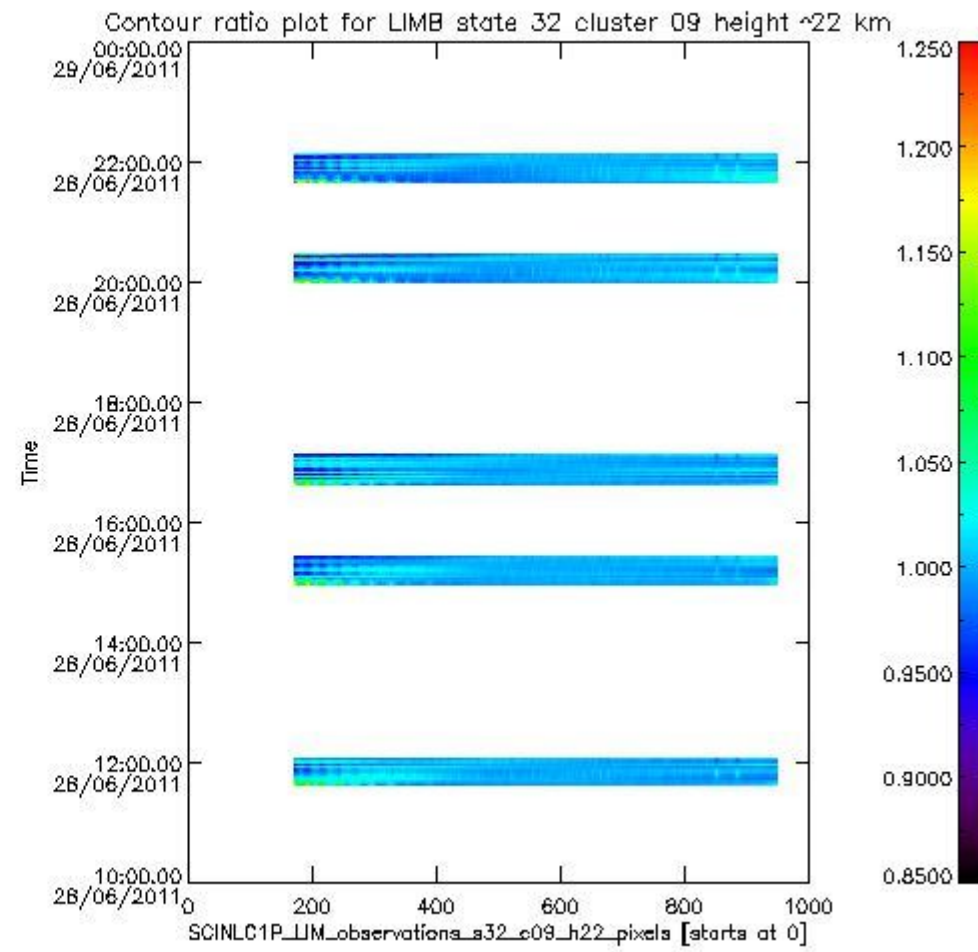
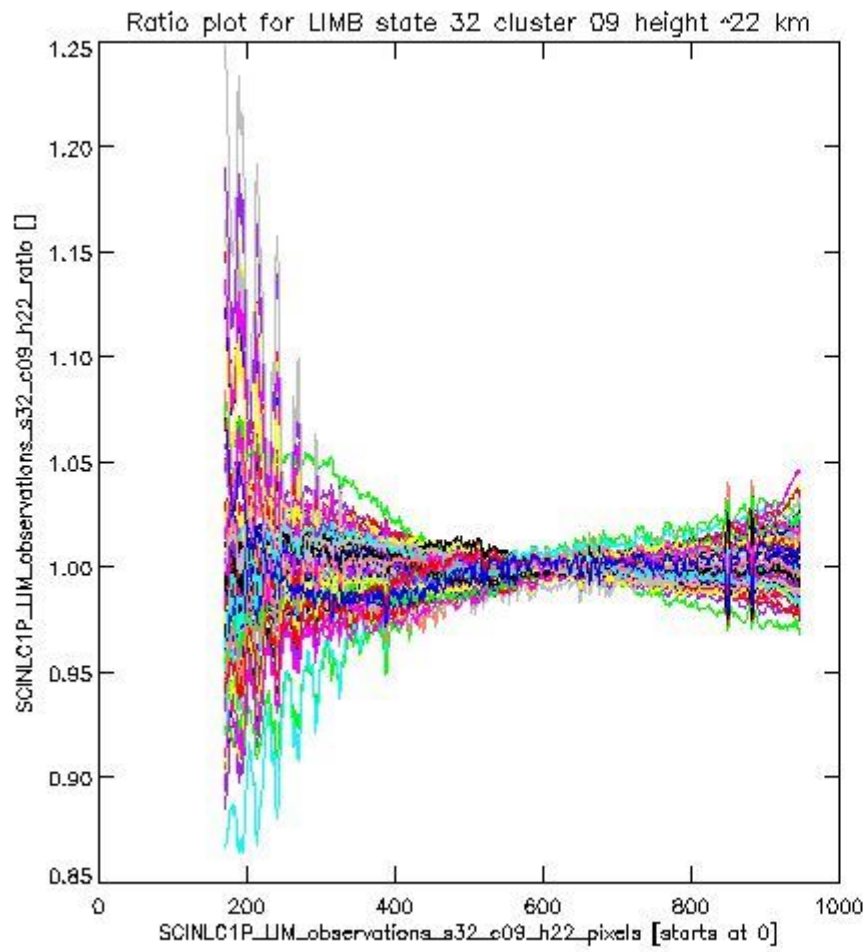
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_11.PNG

**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	28JUN2011 11:37:48.671
Start time of last sample	28JUN2011 22:05:48.442
Reference period start time	29MAY2011 00:00:28.817
Reference period stop time	27JUN2011 06:00:12.404
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



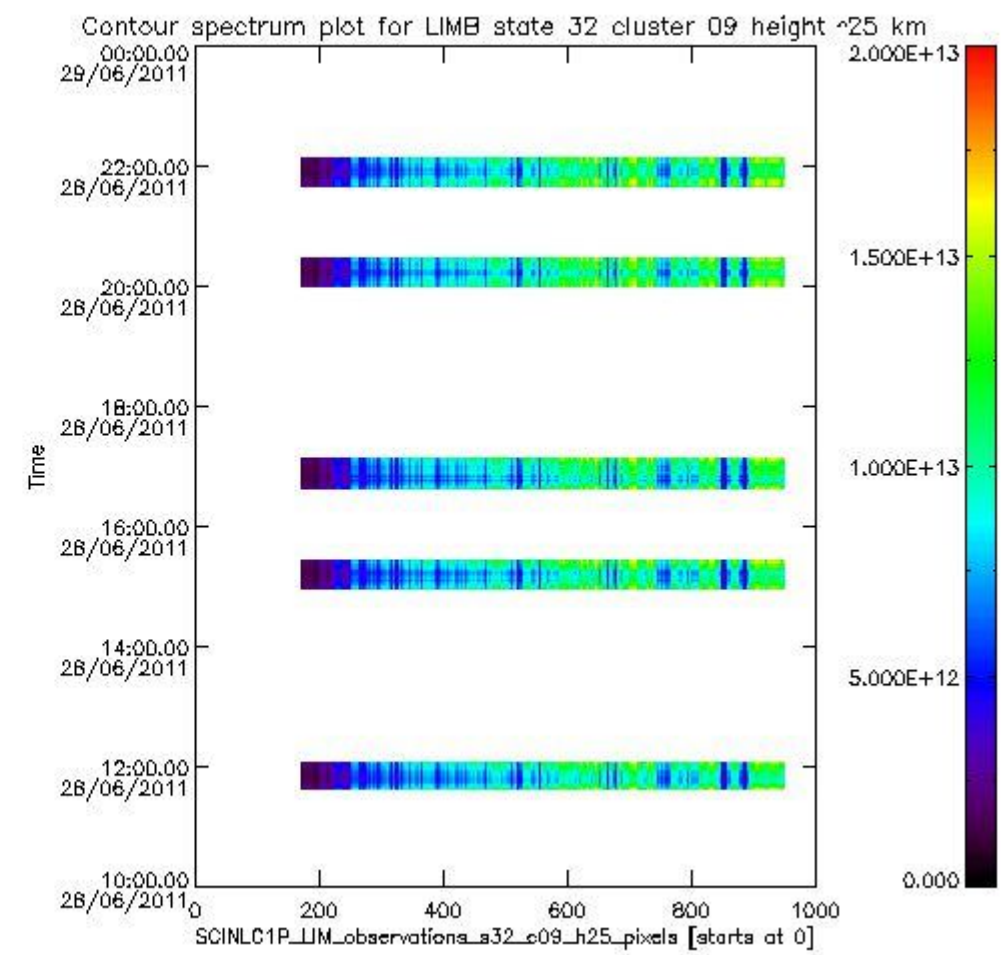
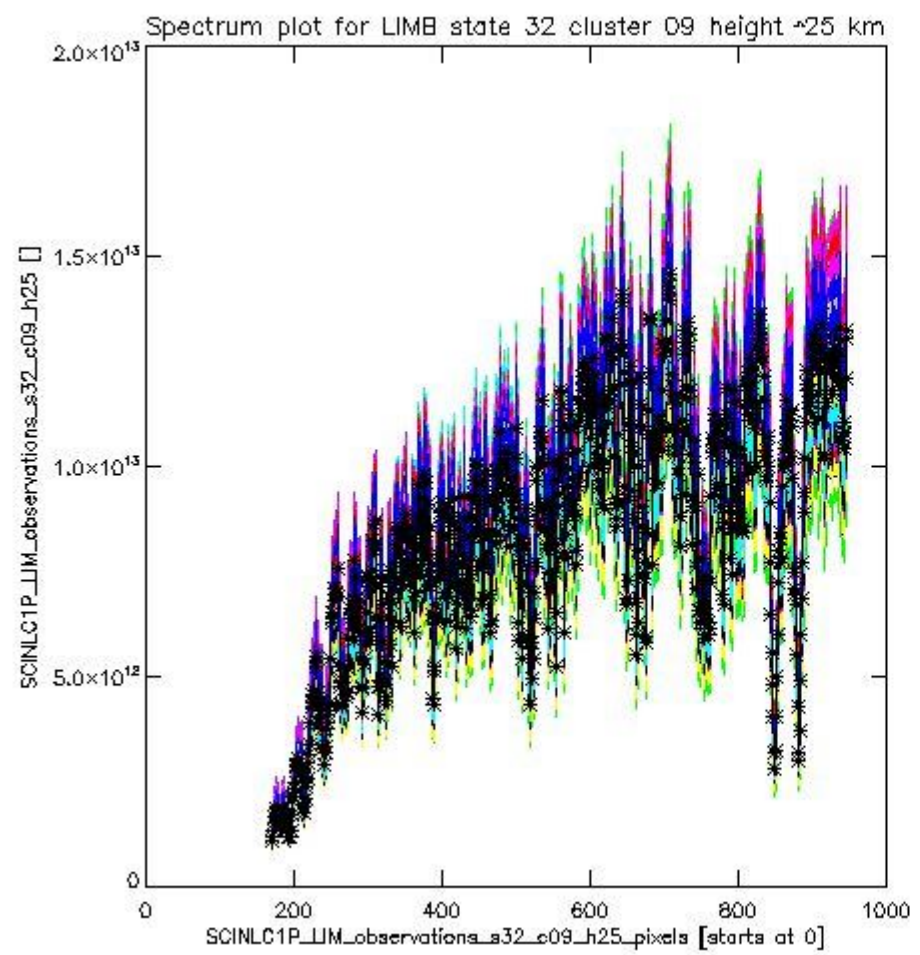
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_13.PNG

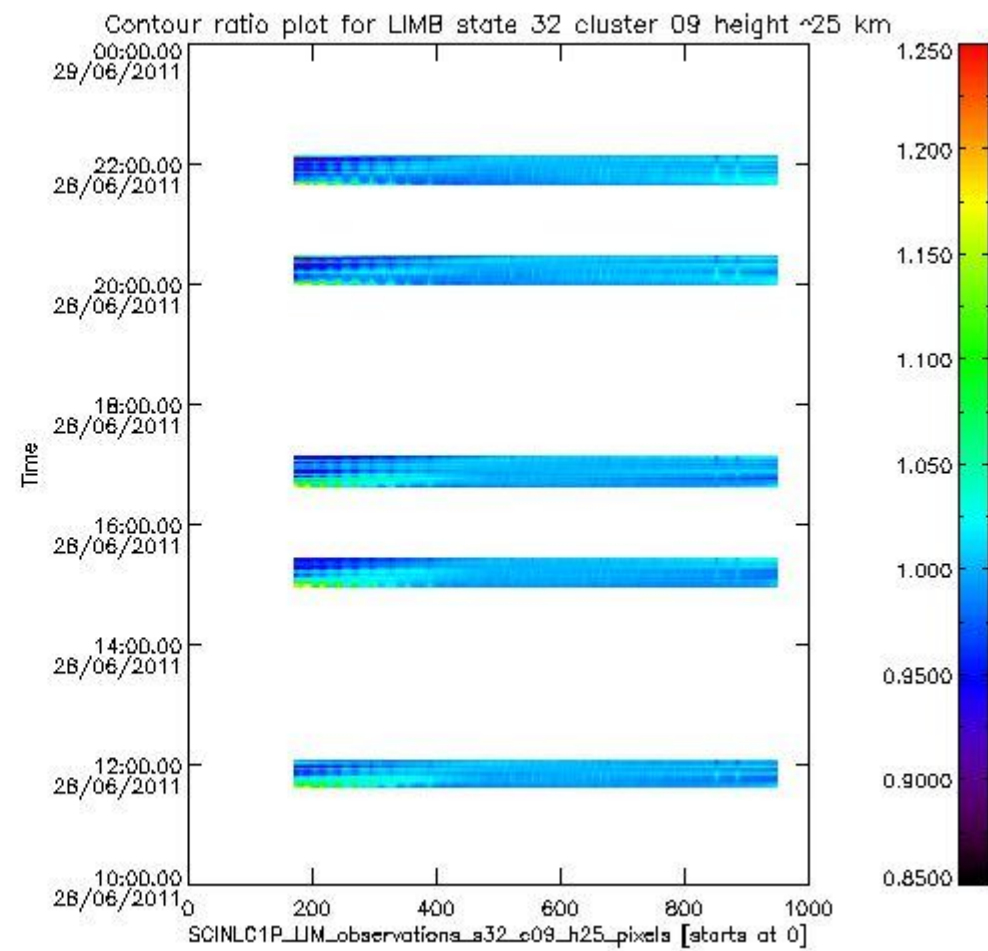
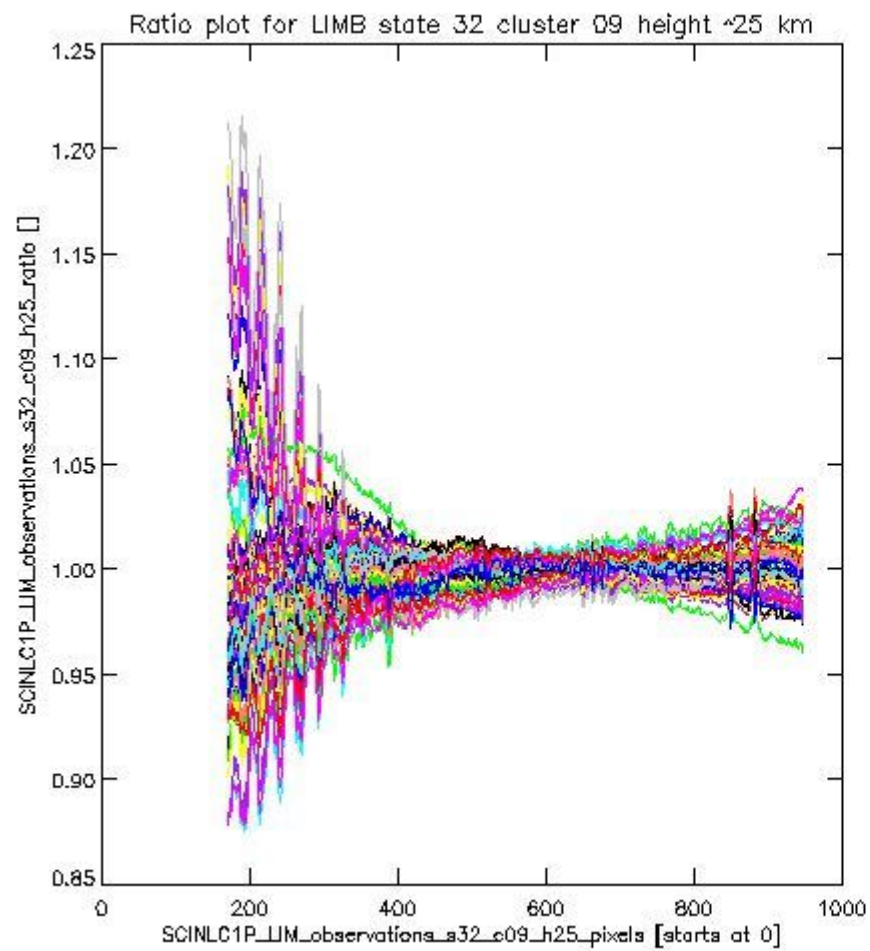
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	28JUN2011 11:37:48.671
Start time of last sample	28JUN2011 22:05:48.442
Reference period start time	29MAY2011 00:00:28.817
Reference period stop time	27JUN2011 06:00:12.404
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\_20110628\_14.PNG

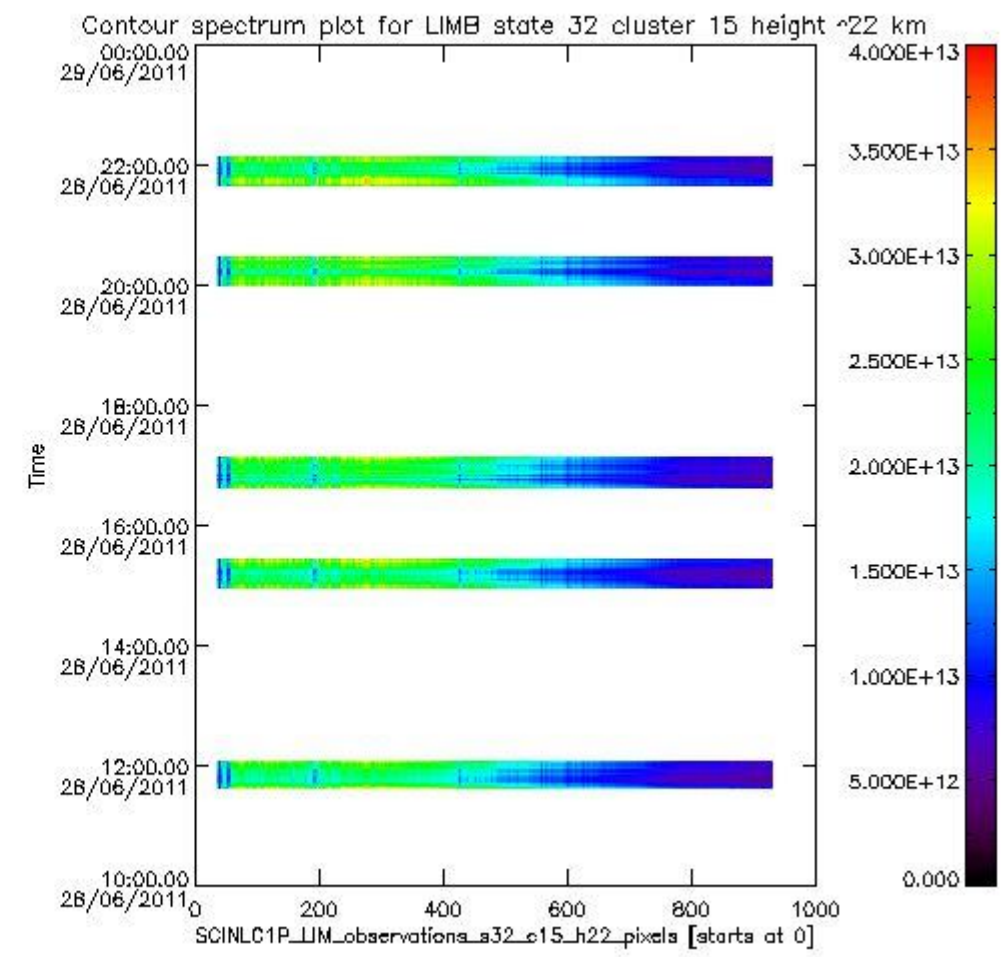
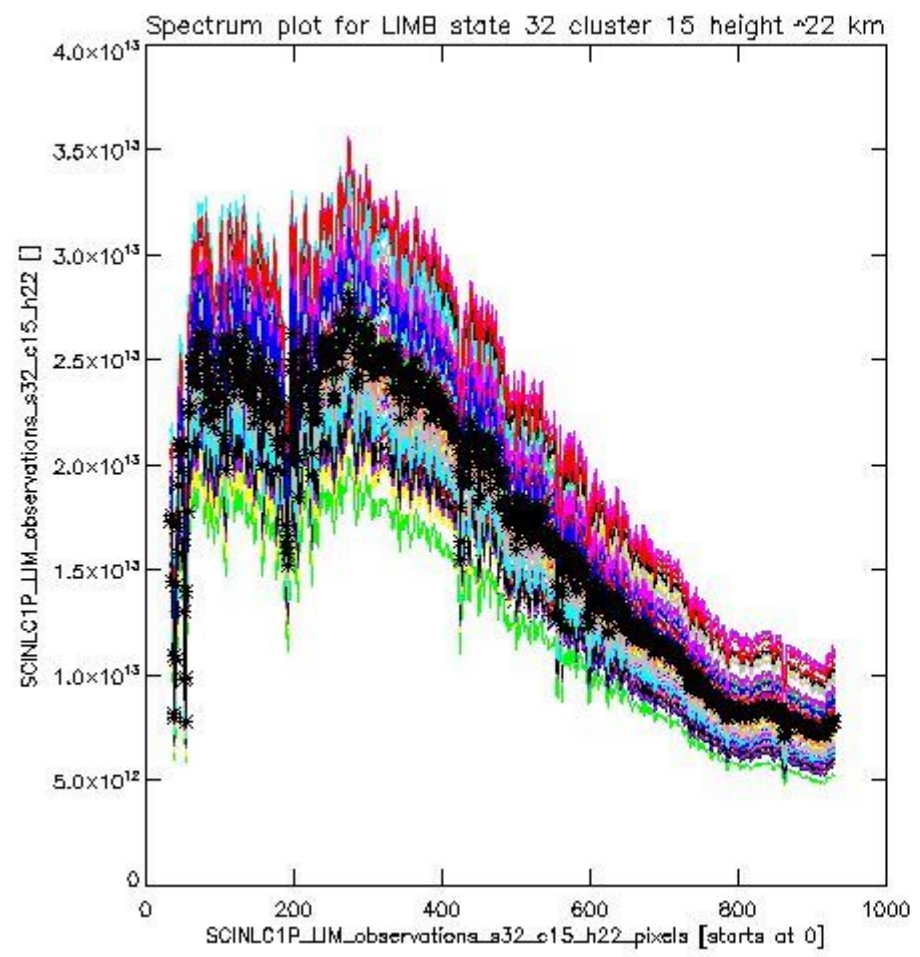




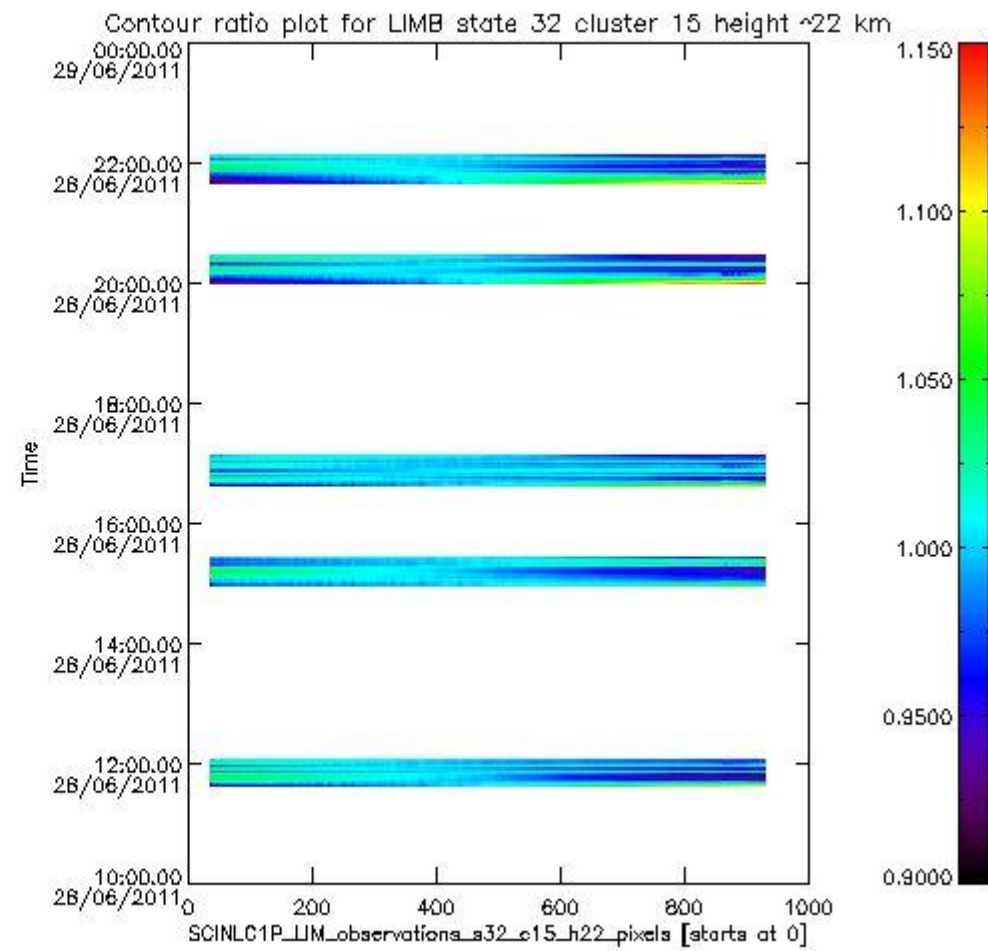
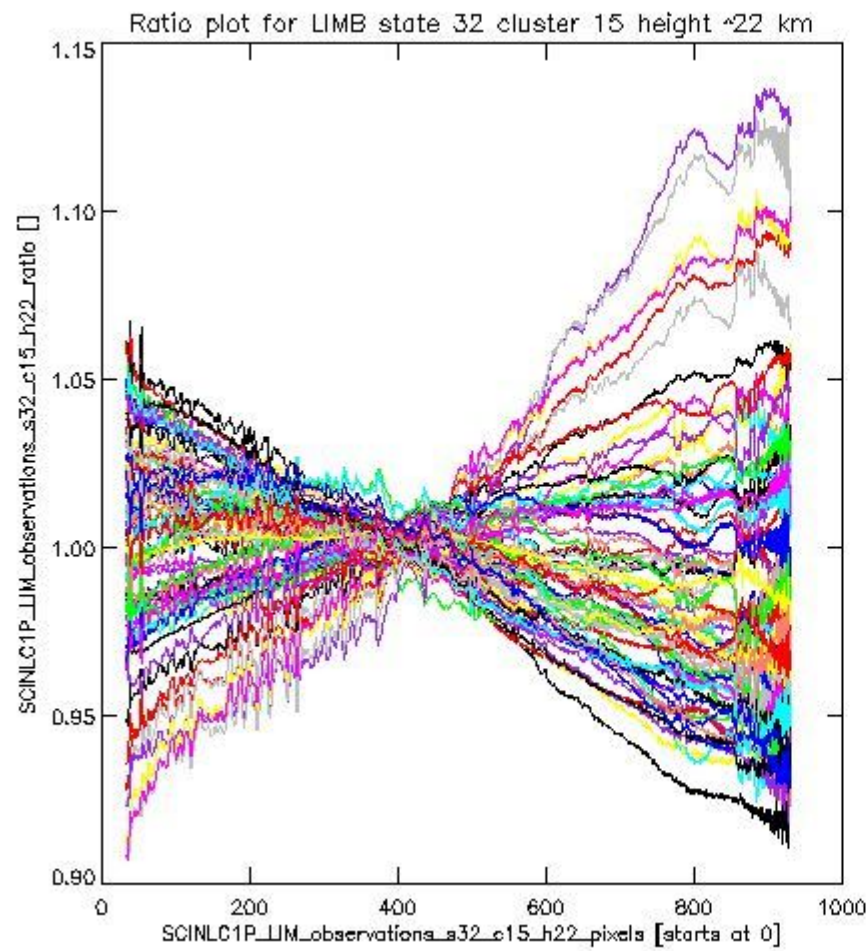
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_15.PNG

**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	28JUN2011 11:37:48.671
Start time of last sample	28JUN2011 22:05:48.442
Reference period start time	29MAY2011 00:00:28.817
Reference period stop time	27JUN2011 06:00:12.404
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



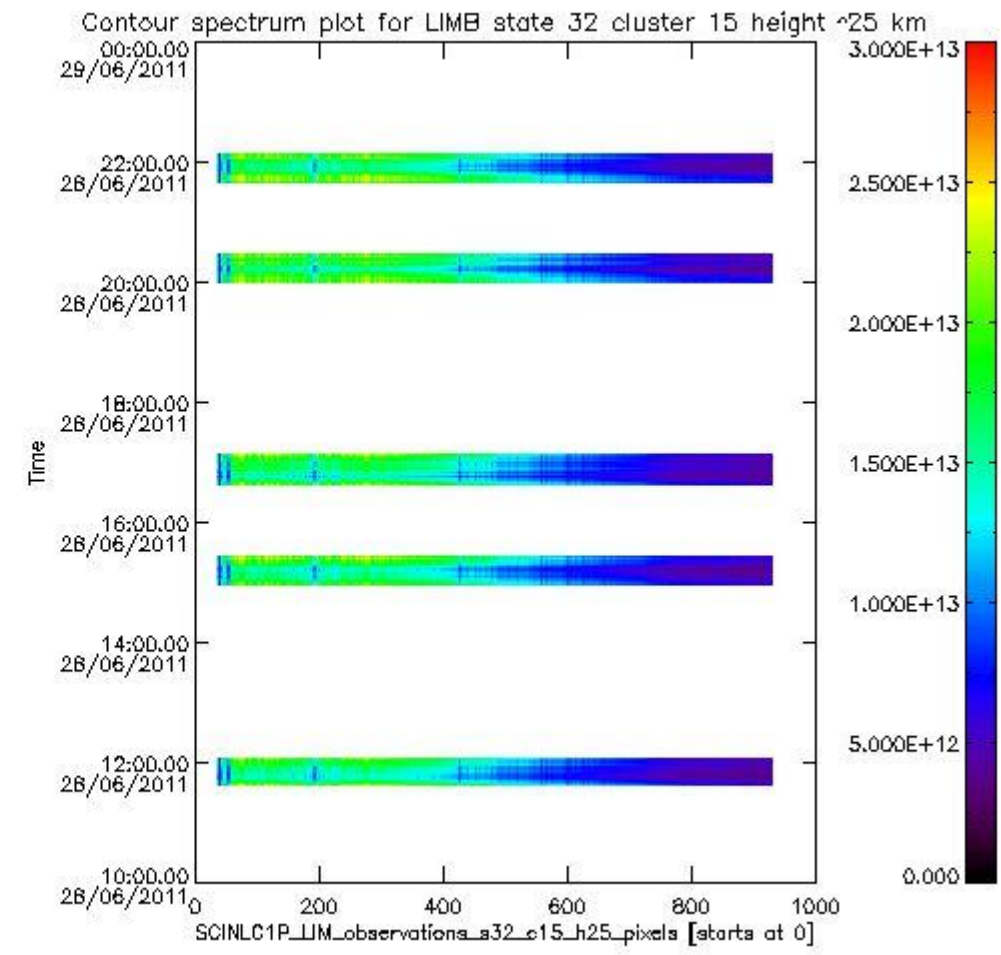
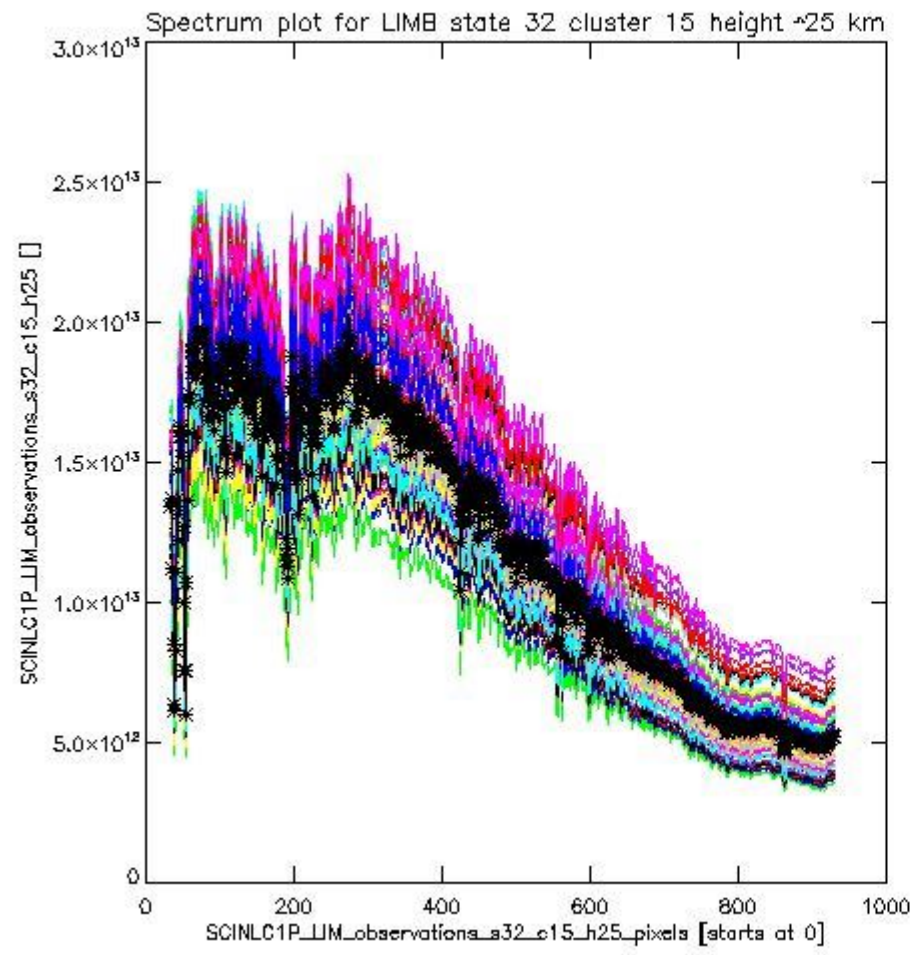
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_16.PNG



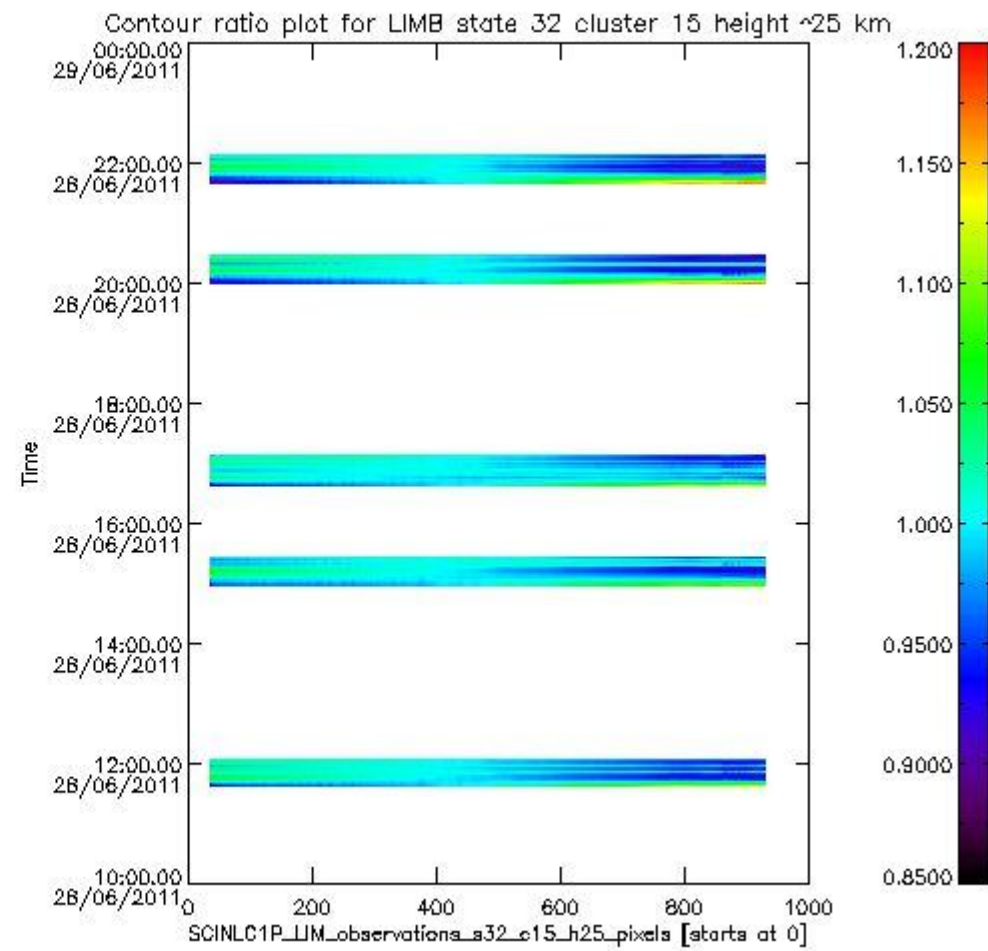
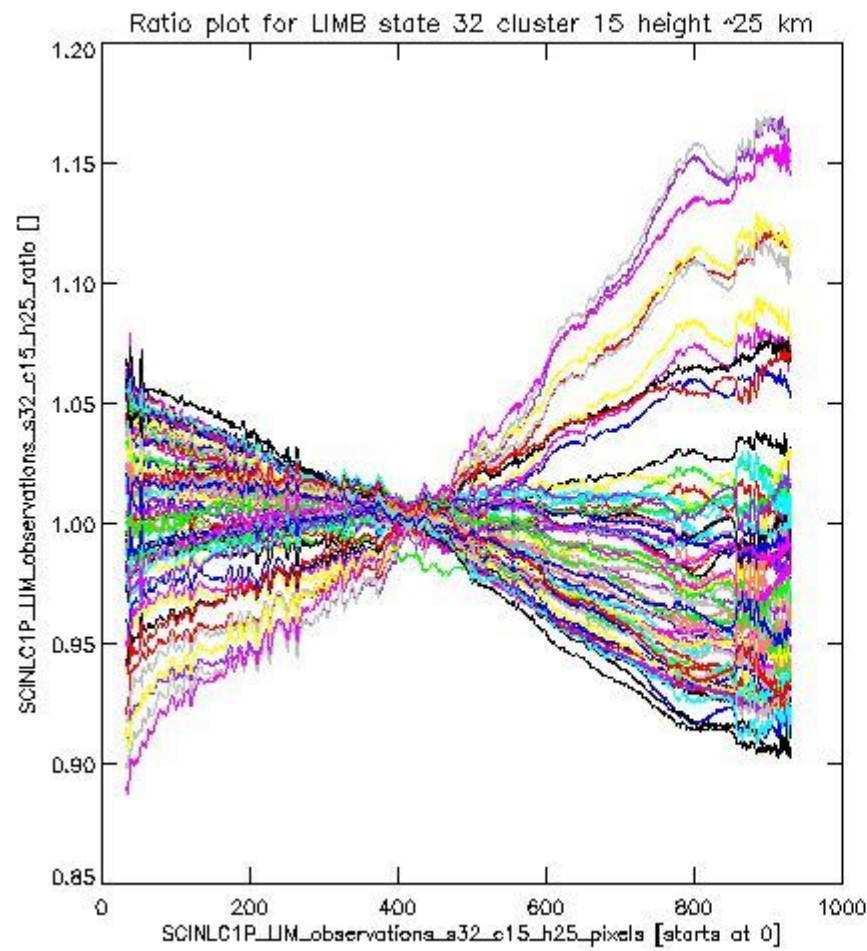
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_17.PNG

**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	28JUN2011 11:37:48.671
Start time of last sample	28JUN2011 22:05:48.442
Reference period start time	29MAY2011 00:00:28.817
Reference period stop time	27JUN2011 06:00:12.404
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



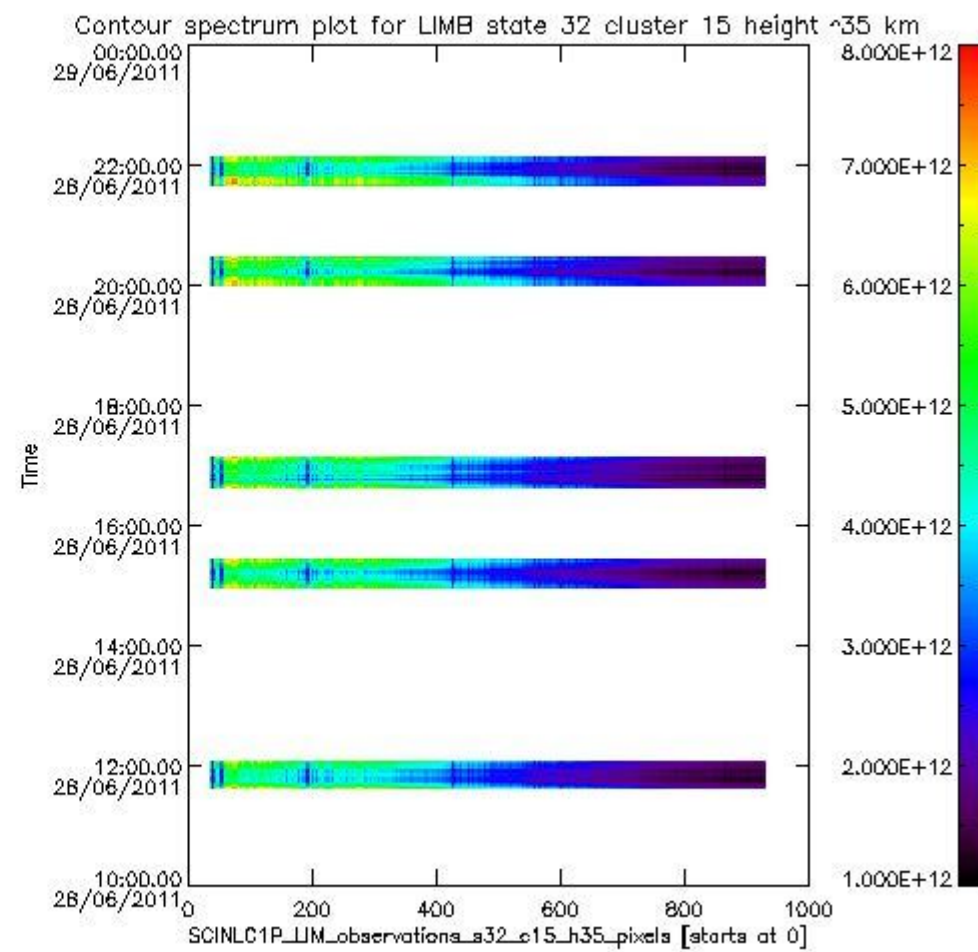
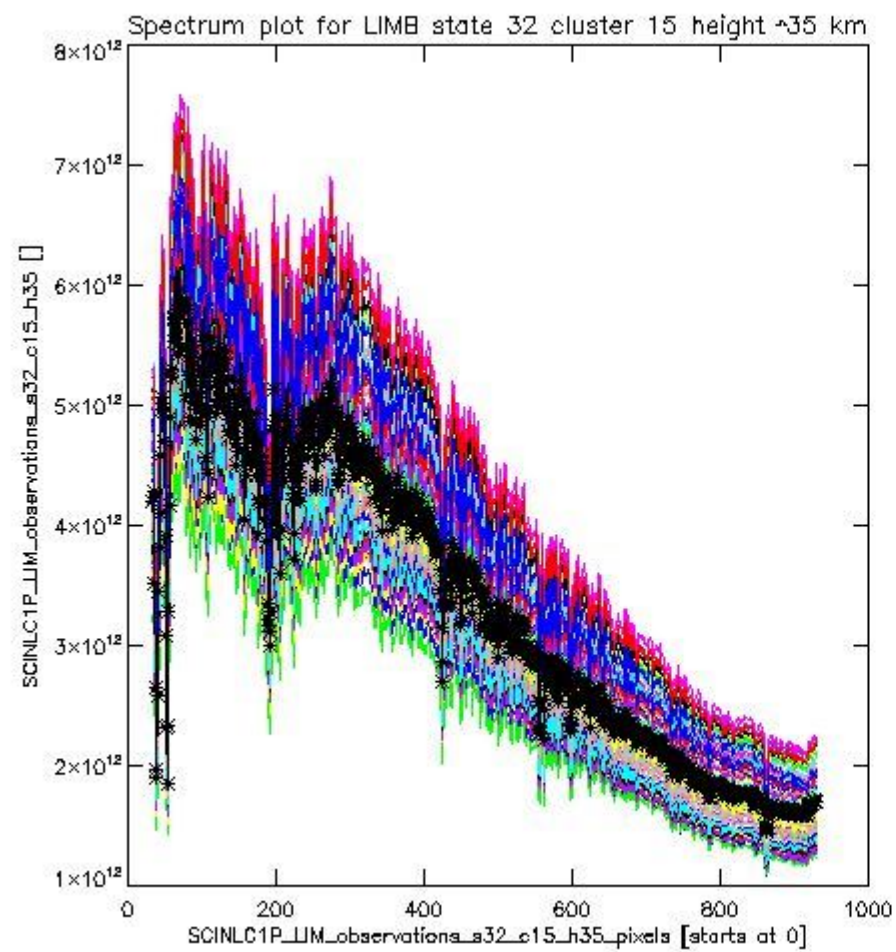
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_18.PNG

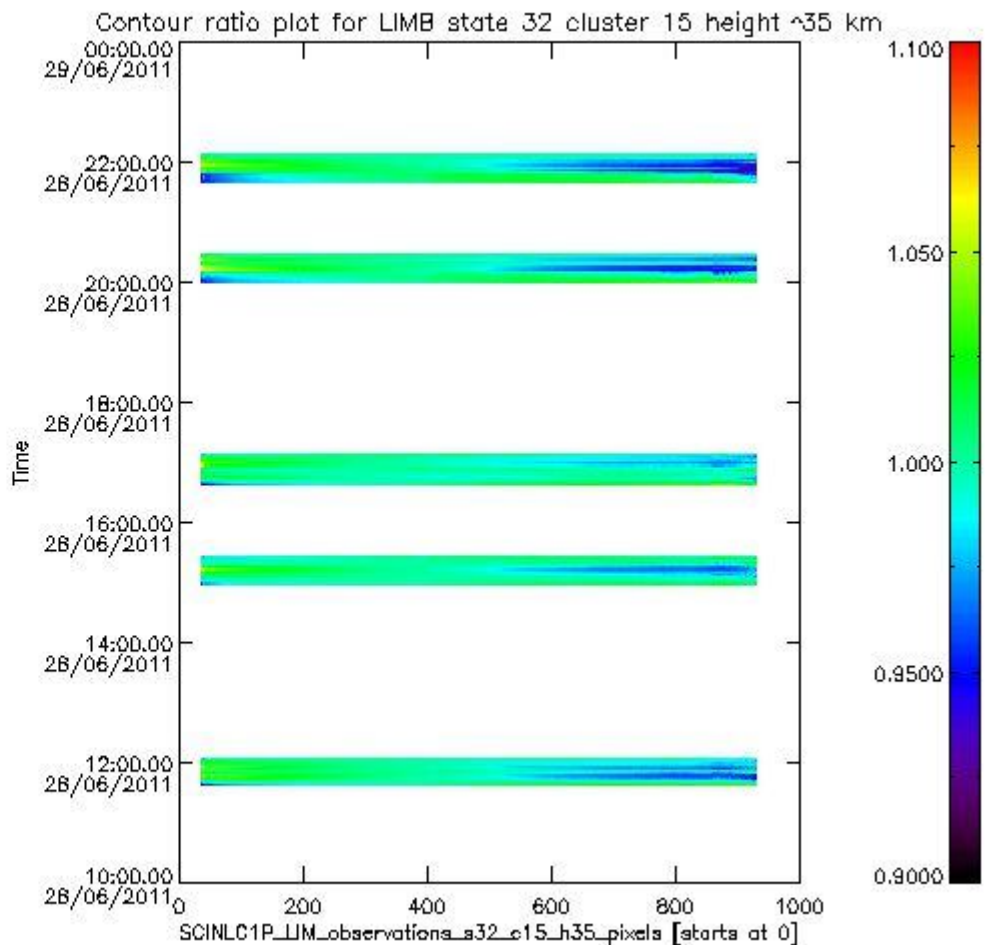
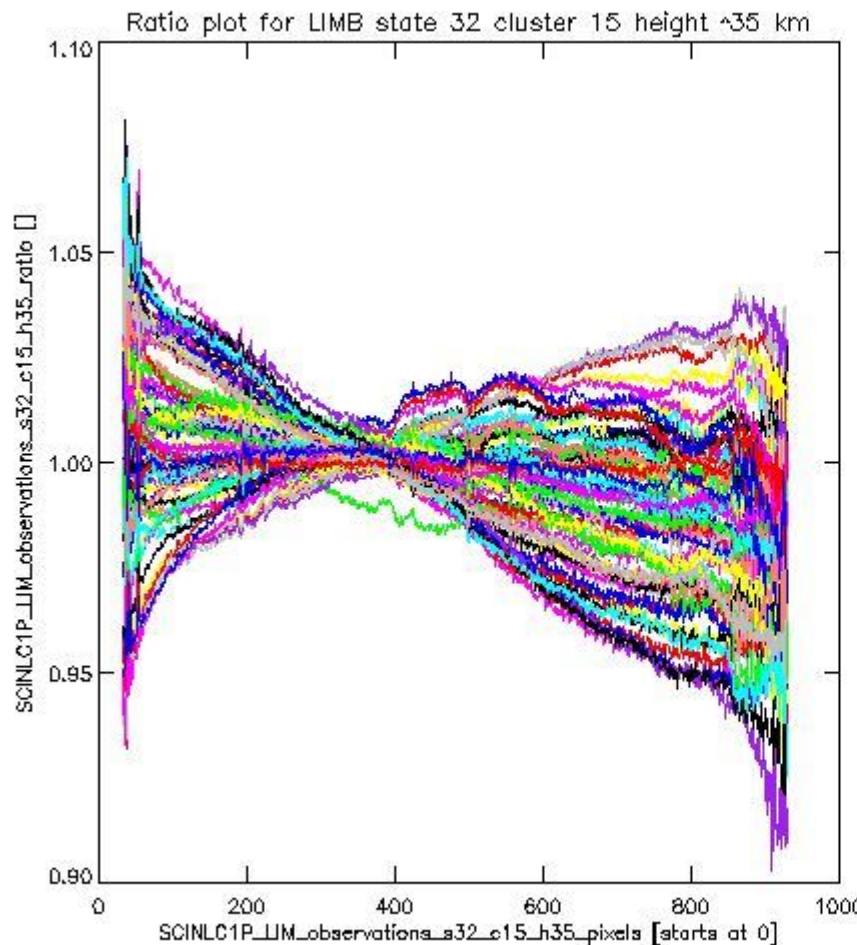


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110628\_19.PNG

**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	28JUN2011 11:37:48.671
Start time of last sample	28JUN2011 22:05:48.442
Reference period start time	29MAY2011 00:00:28.817
Reference period stop time	27JUN2011 06:00:12.404
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\_20110628\_21.PNG

