

# 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	11JUN2011 06:55:41
Data source version	SCIA/7.04-U
Processing scope for products	29MAY2011 00:00:00 to 30MAY2011 00:00:00
Start time of first product within scope	28MAY2011 23:37:31
Stop time of last product within scope	30MAY2011 00:10:59
Total number of level 1 products	13
Number of level 1 products with errors	0
SCIAL1C executable used in processing	scial1c-2.1.73-i686-pc-linux-gnu-gcc-3.3.6
SCIAL1C parameters used in processing	-allcal -type all -cat 1,2,8,10,11,16,19,23 -nadircluster 8,9,15,24,55 -limbcluster 9,15

#### 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	29MAY2011 00:09:33.969	29MAY2011 23:43:00.804
1	NADIR	07	09	N/A	29MAY2011 00:09:33.969	29MAY2011 23:43:00.804
2	NADIR	07	15	N/A	29MAY2011 00:09:33.969	29MAY2011 23:43:00.804
3	NADIR	07	24	N/A	29MAY2011 00:09:33.969	29MAY2011 23:43:00.804
4	NADIR	07	55	N/A	29MAY2011 00:09:33.969	29MAY2011 23:43:00.804
5	LIMB	32	09	~19 km	29MAY2011 00:00:28.817	29MAY2011 23:46:12.109
6	LIMB	32	09	~22 km	29MAY2011 00:00:28.817	29MAY2011 23:46:12.109
7	LIMB	32	09	~25 km	29MAY2011 00:00:28.817	29MAY2011 23:46:12.109
8	LIMB	32	15	~22 km	29MAY2011 00:00:28.817	29MAY2011 23:46:12.109
9	LIMB	32	15	~25 km	29MAY2011 00:00:28.817	29MAY2011 23:46:12.109
10	LIMB	32	15	~35 km	29MAY2011 00:00:28.817	29MAY2011 23:46:12.109

#### 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	#cmlpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110528_233731_000057413103_00045_48335_1747.N1</a>	28MAY2011 23:37:31	29MAY2011 00:47:46	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110529_011745_000057413103_00046_48336_1713.N1</a>	29MAY2011 01:17:45	29MAY2011 02:28:14	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110529_025758_000057423103_00047_48337_1719.N1</a>	29MAY2011 02:57:58	29MAY2011 04:08:13	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110529_043812_000057413103_00048_48338_1721.N1</a>	29MAY2011 04:38:12	29MAY2011 05:48:41	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110529_061826_000057413103_00049_48339_1722.N1</a>	29MAY2011 06:18:26	29MAY2011 07:28:41	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110529_075840_000057413103_00050_48340_1724.N1</a>	29MAY2011 07:58:40	29MAY2011 09:09:09	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110529_093854_000057413103_00051_48341_1725.N1	29MAY2011 09:38:54	29MAY2011 10:49:08	0	35	31	0	0	1	0	0
7	SCI_NLC_1CUDPA20110529_143935_000057413103_00054_48344_1726.N1	29MAY2011 14:39:35	29MAY2011 15:50:04	0	36	30	0	0	1	0	0
8	SCI_NLC_1CUDPA20110529_161949_000057413103_00055_48345_1728.N1	29MAY2011 16:19:49	29MAY2011 17:30:03	0	35	31	0	0	1	0	0
9	SCI_NLC_1CUDPA20110529_180003_000057413103_00056_48346_1730.N1	29MAY2011 18:00:03	29MAY2011 19:10:41	0	36	30	0	1	1	0	0
10	SCI_NLC_1CUDPA20110529_194017_000057413103_00057_48347_1732.N1	29MAY2011 19:40:17	29MAY2011 20:50:40	0	35	31	0	1	1	0	0
11	SCI_NLC_1CUDPA20110529_212030_000057413103_00058_48348_1741.N1	29MAY2011 21:20:30	29MAY2011 22:30:59	0	36	30	0	0	1	0	0
12	SCI_NLC_1CUDPA20110529_230044_000057413103_00059_48349_1742.N1	29MAY2011 23:00:44	30MAY2011 00:10:59	0	35	31	0	0	1	0	0

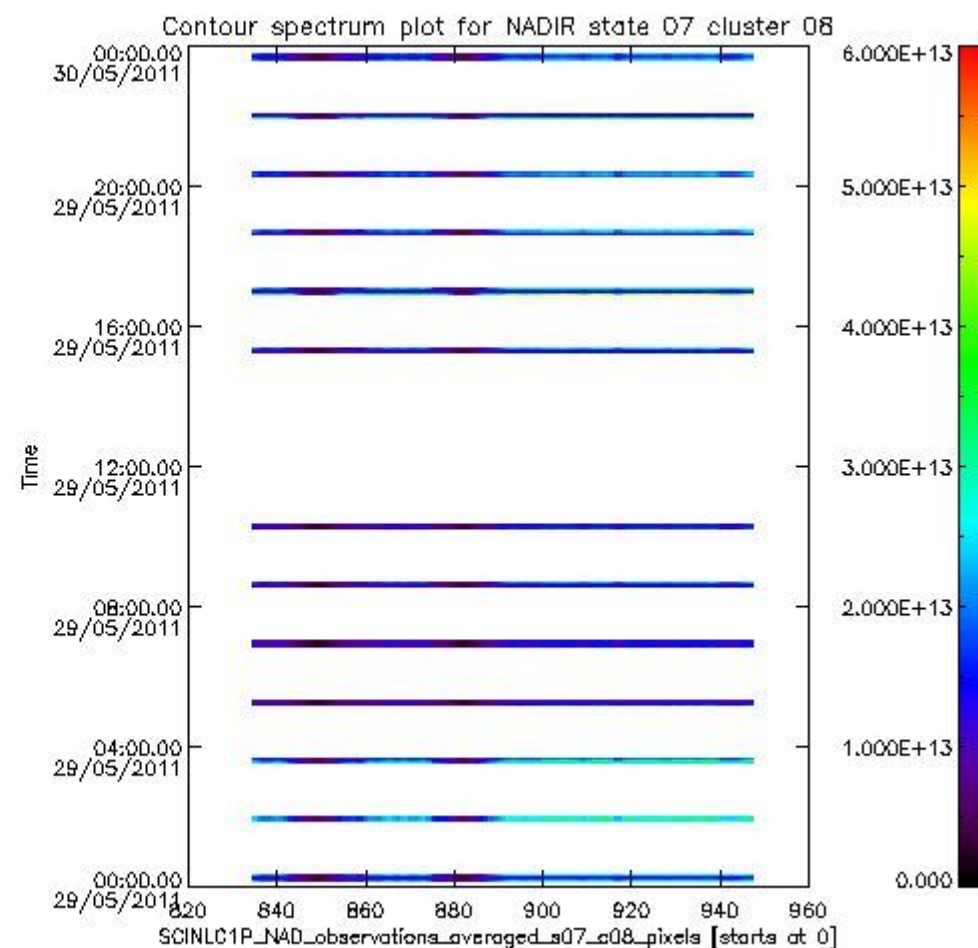
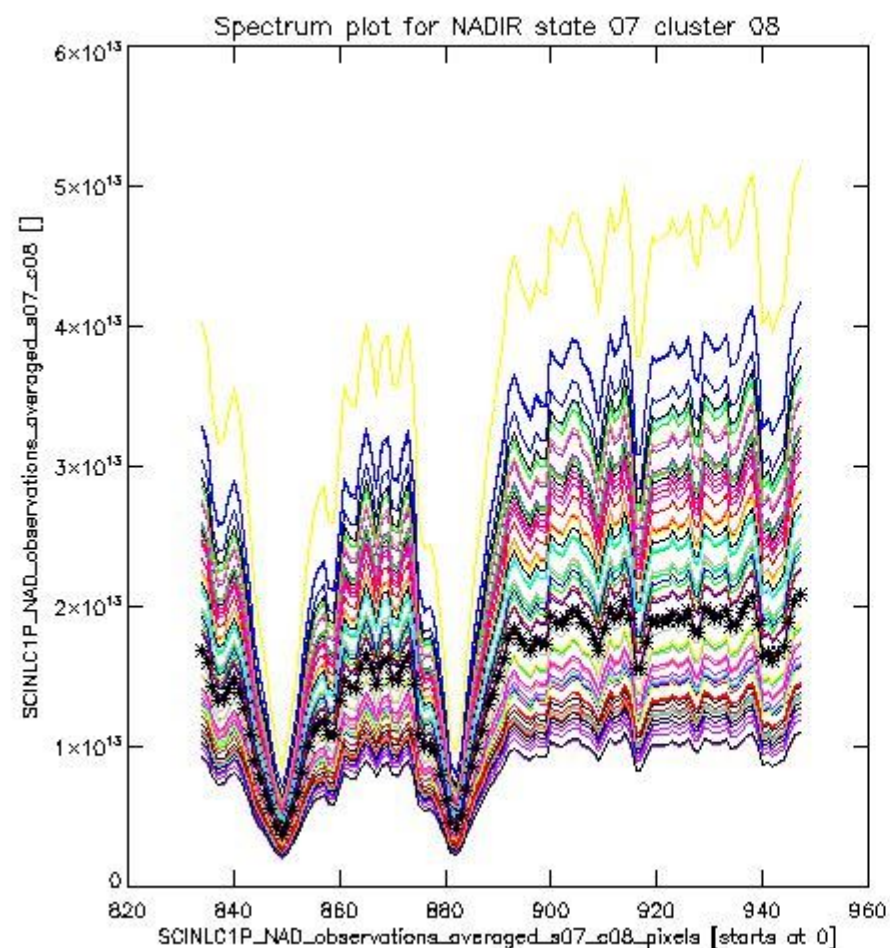
## 1.2 Source packet monitoring

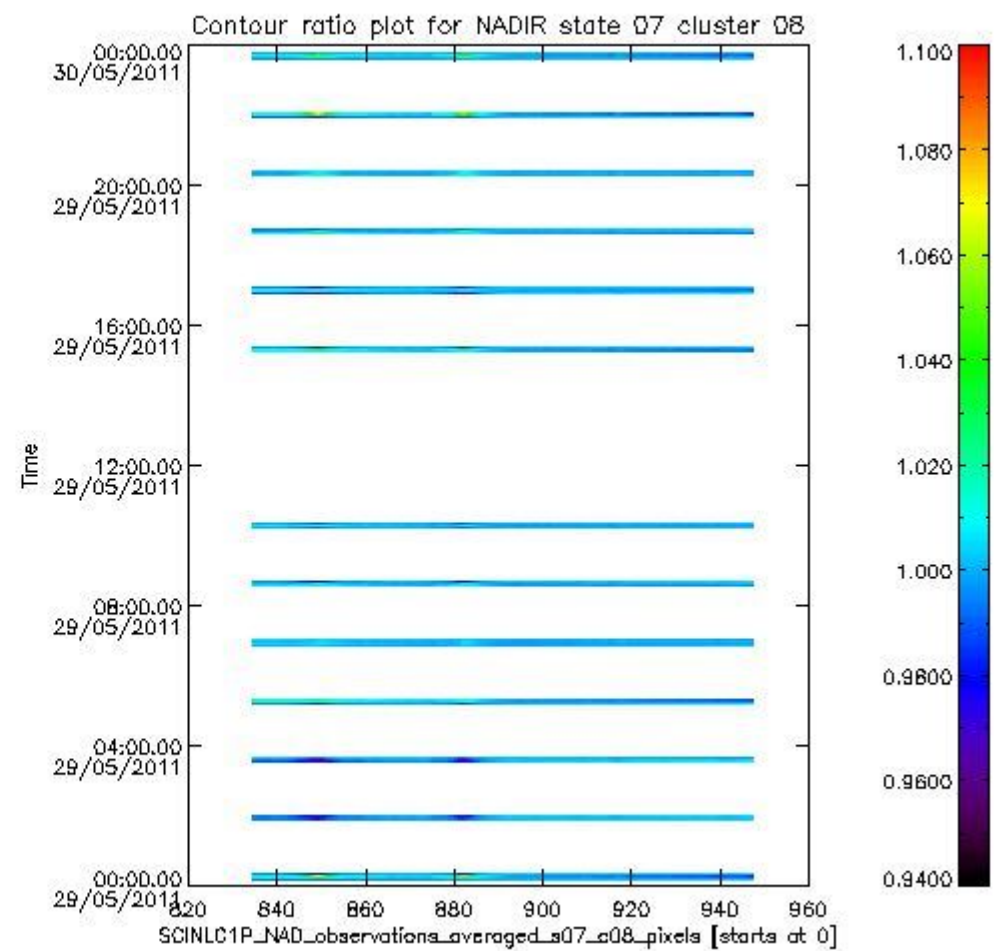
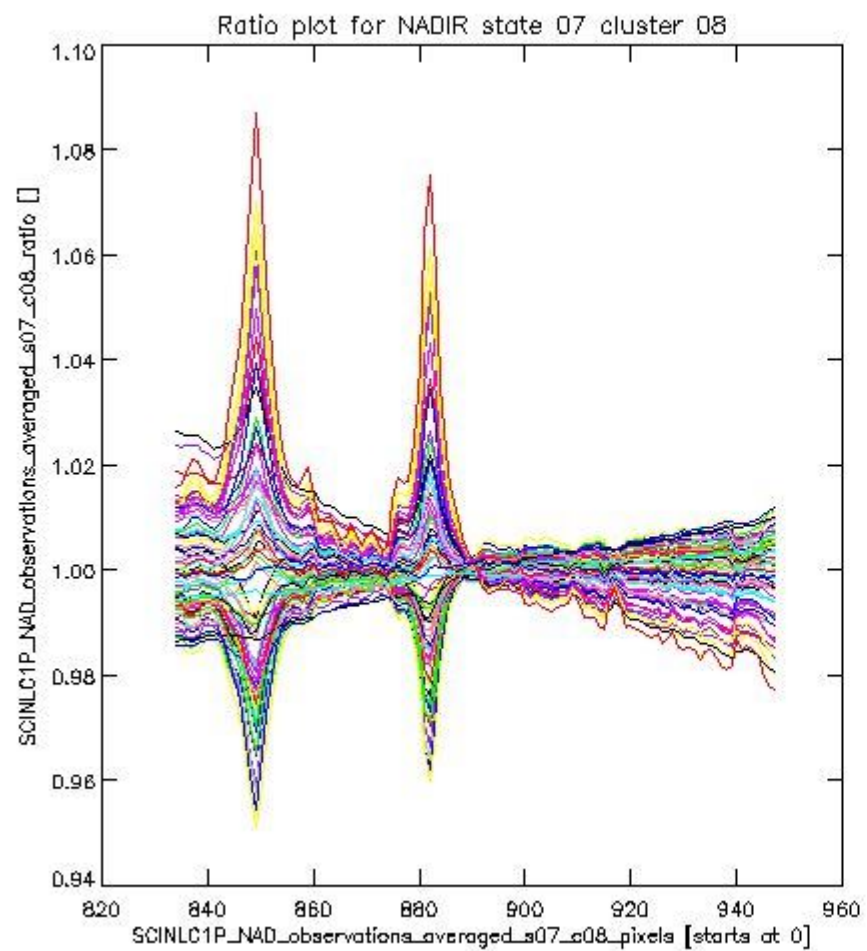
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	29MAY2011 00:09:33.969
Start time of last sample	29MAY2011 23:43:00.804
Reference period start time	29APR2011 00:12:07.988
Reference period stop time	28MAY2011 22:38:39.765
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



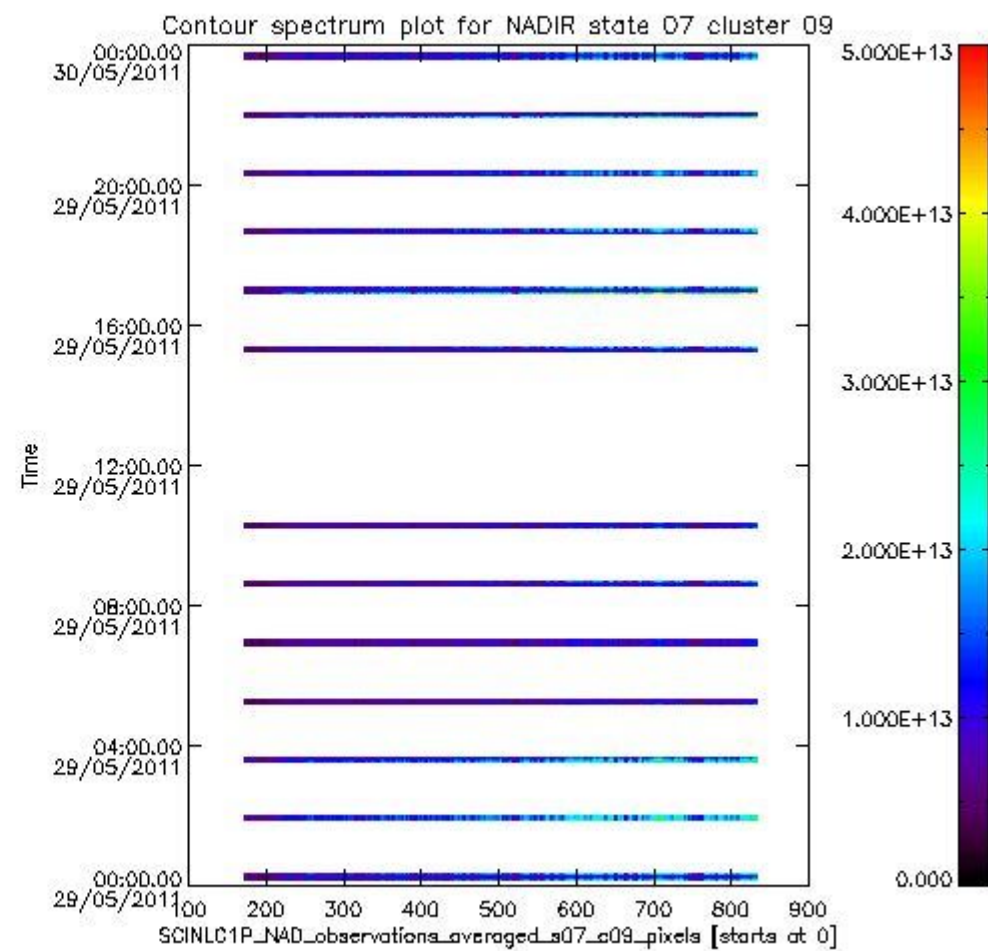
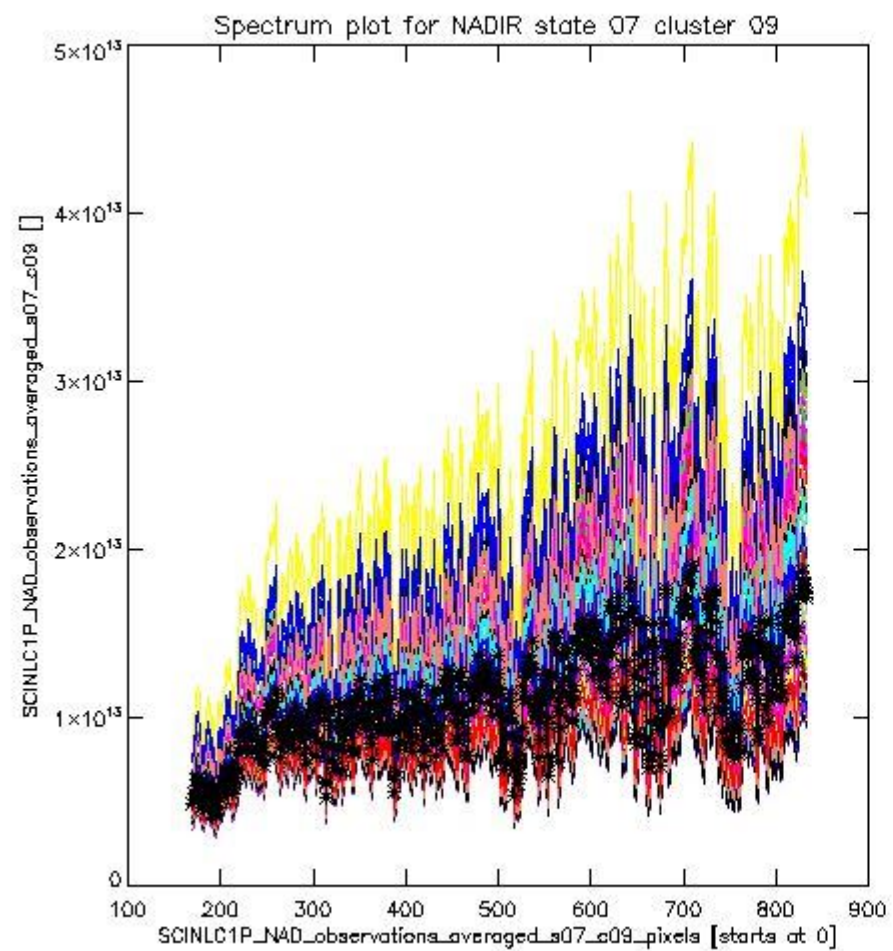


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_1.PNG

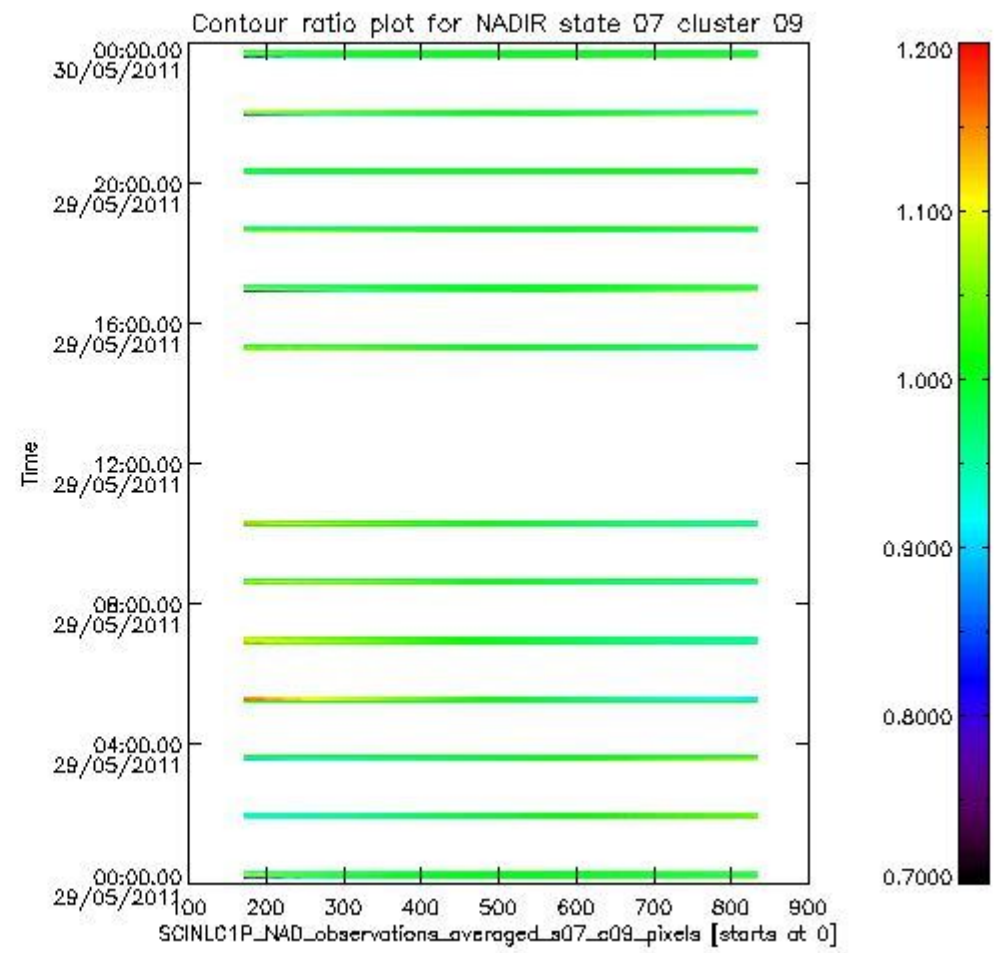
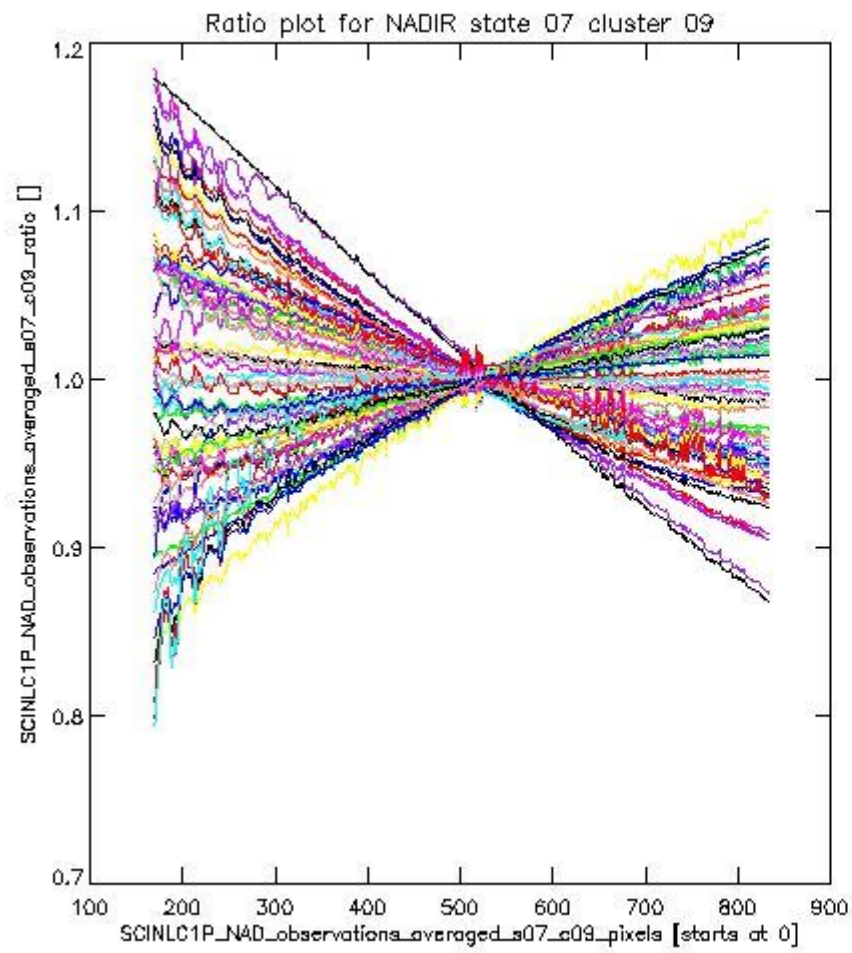
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	29MAY2011 00:09:33.969
Start time of last sample	29MAY2011 23:43:00.804
Reference period start time	29APR2011 00:12:07.988
Reference period stop time	28MAY2011 22:38:39.765
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





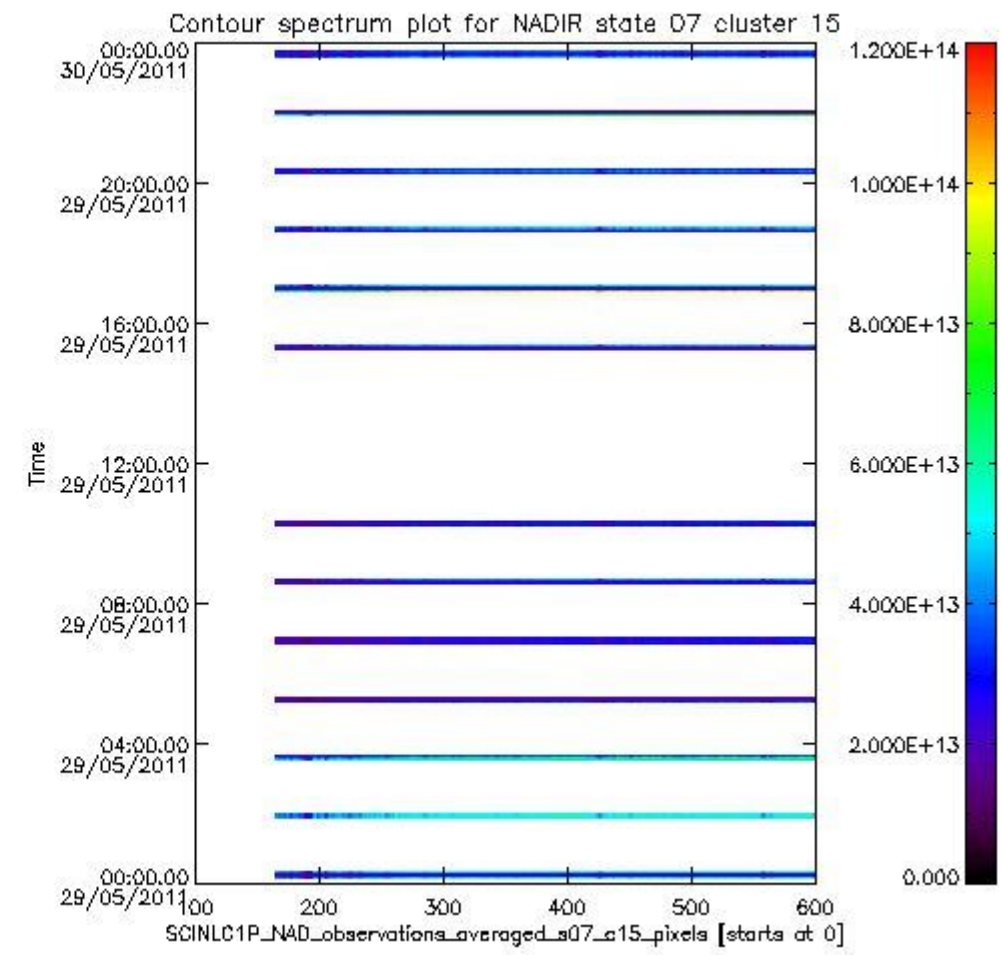
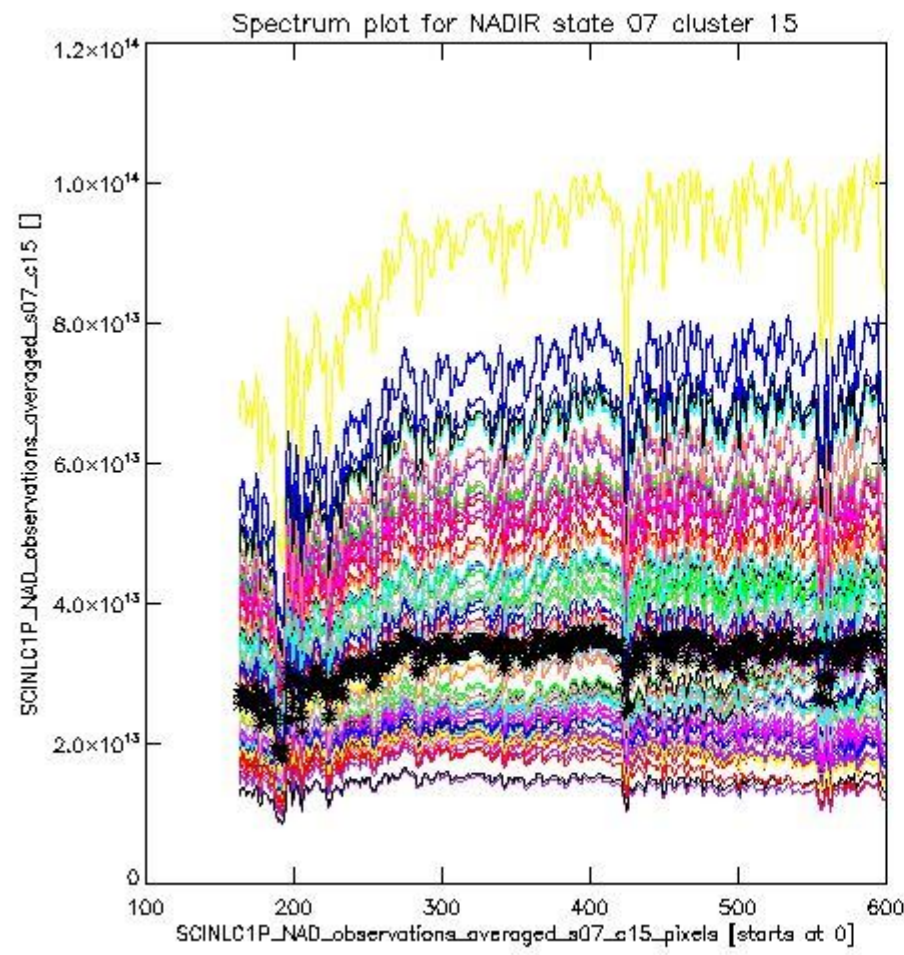
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_3.PNG

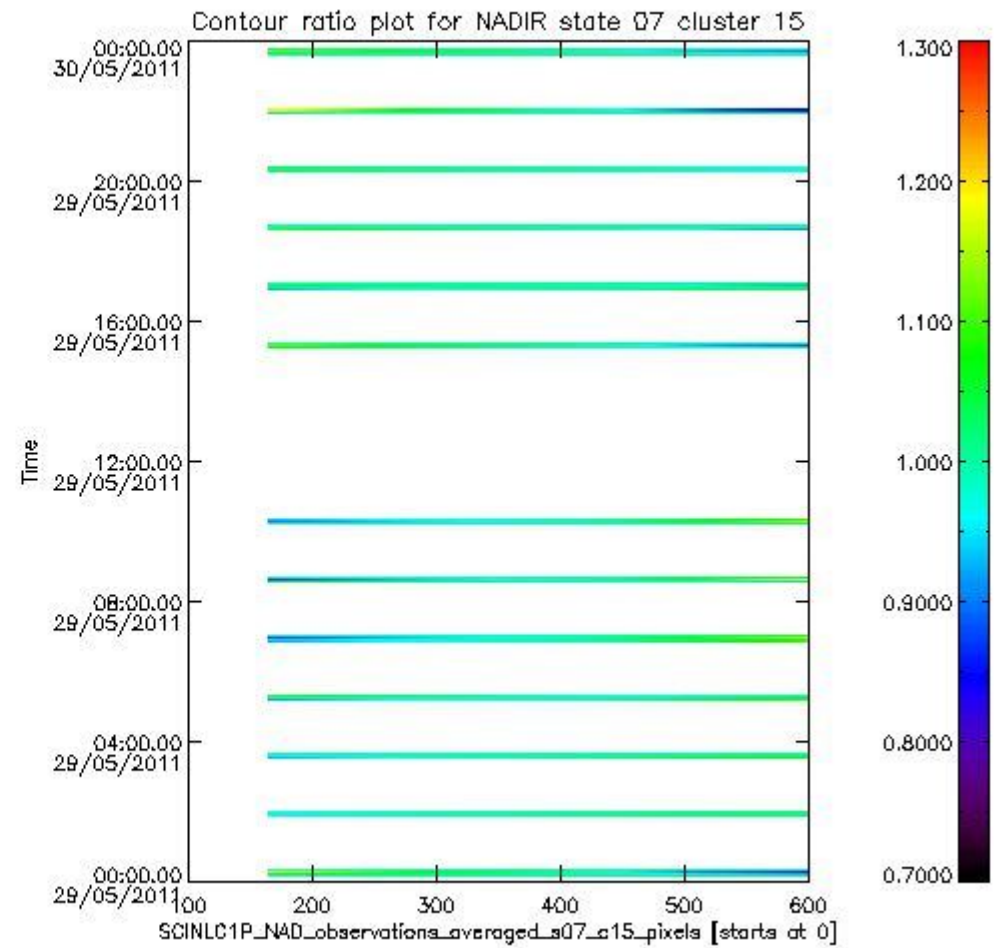
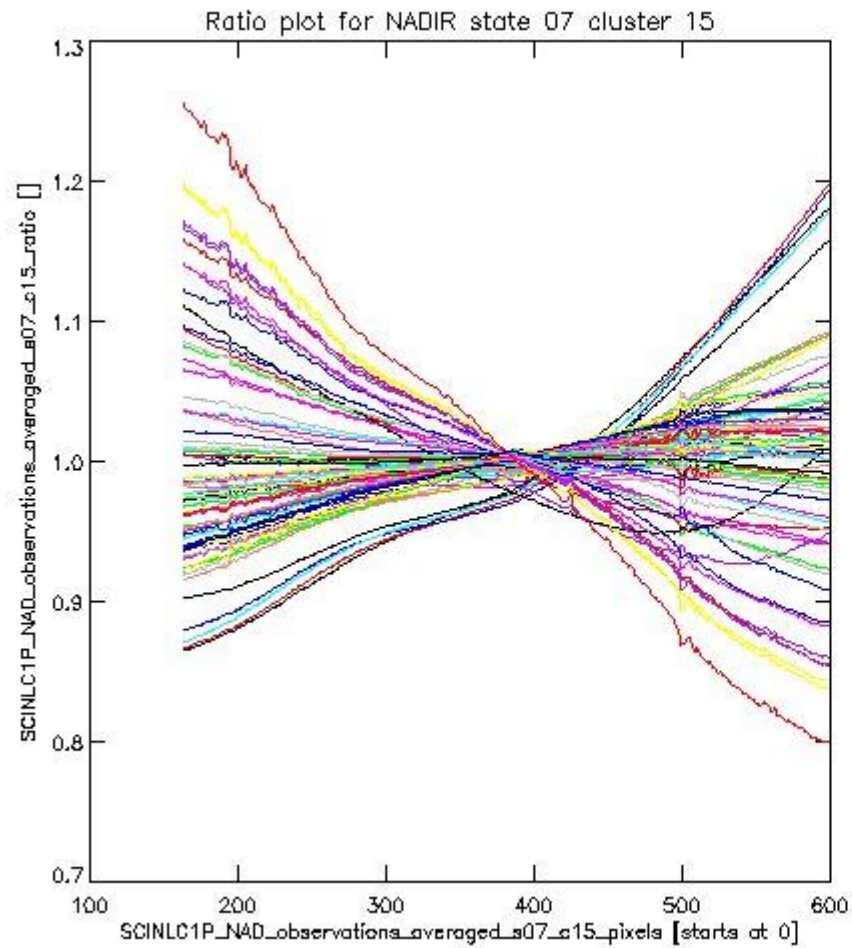
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	29MAY2011 00:09:33.969
Start time of last sample	29MAY2011 23:43:00.804
Reference period start time	29APR2011 00:12:07.988
Reference period stop time	28MAY2011 22:38:39.765
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\_20110529\_4.PNG

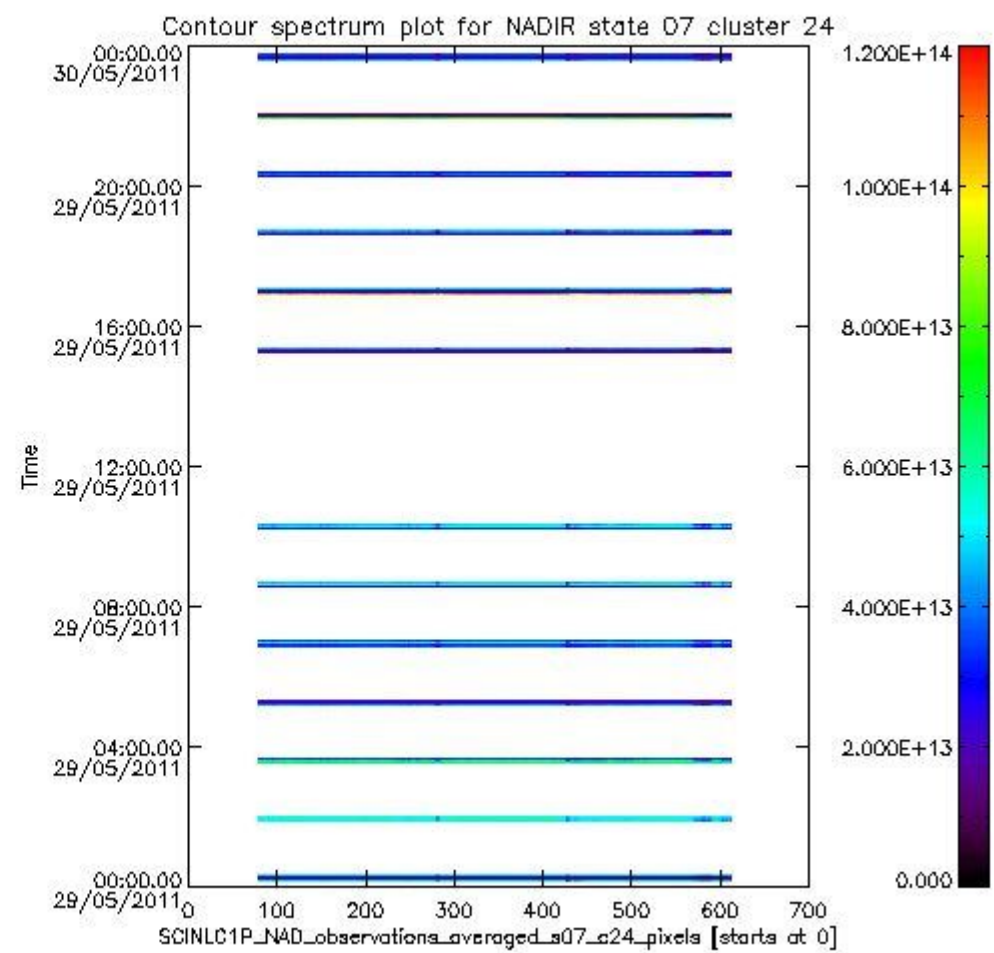
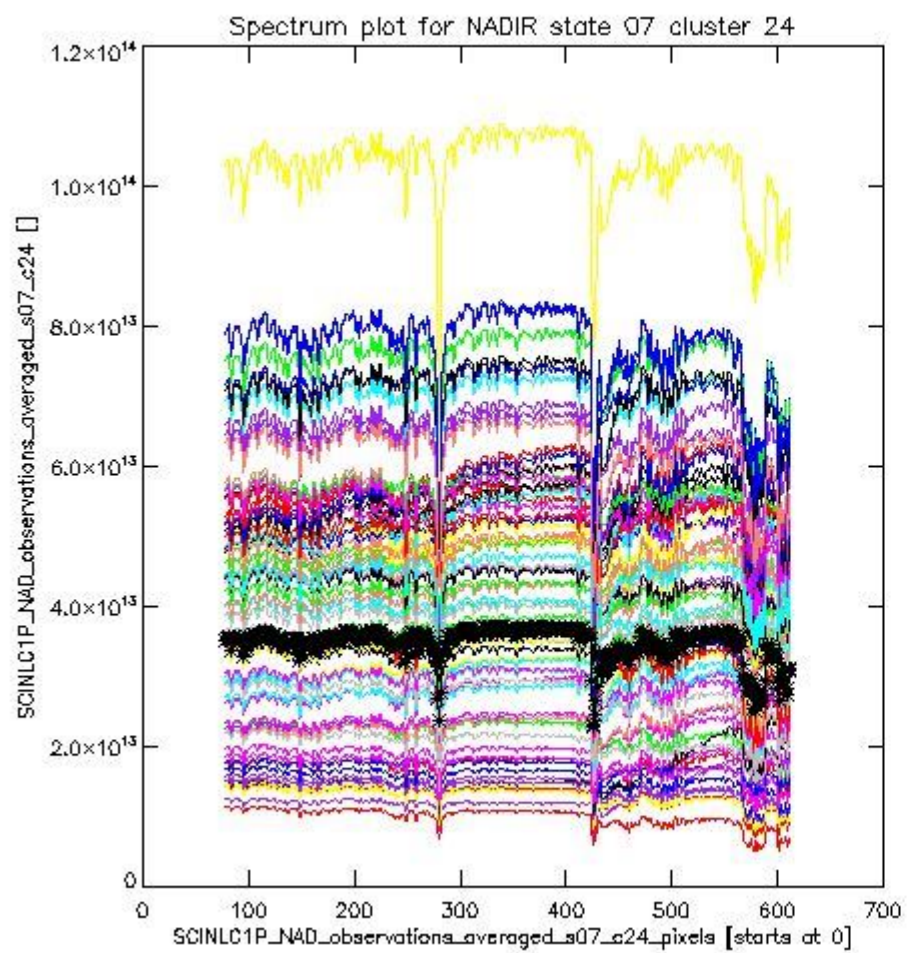




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_5.PNG

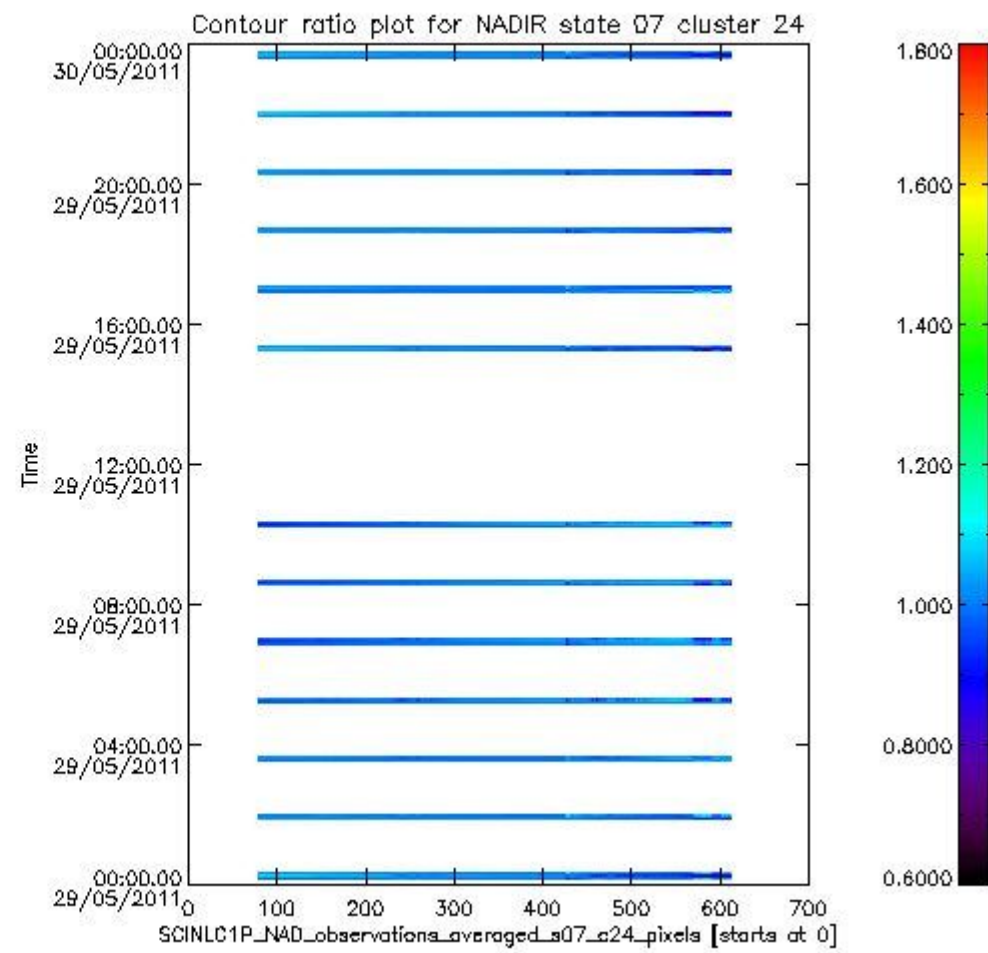
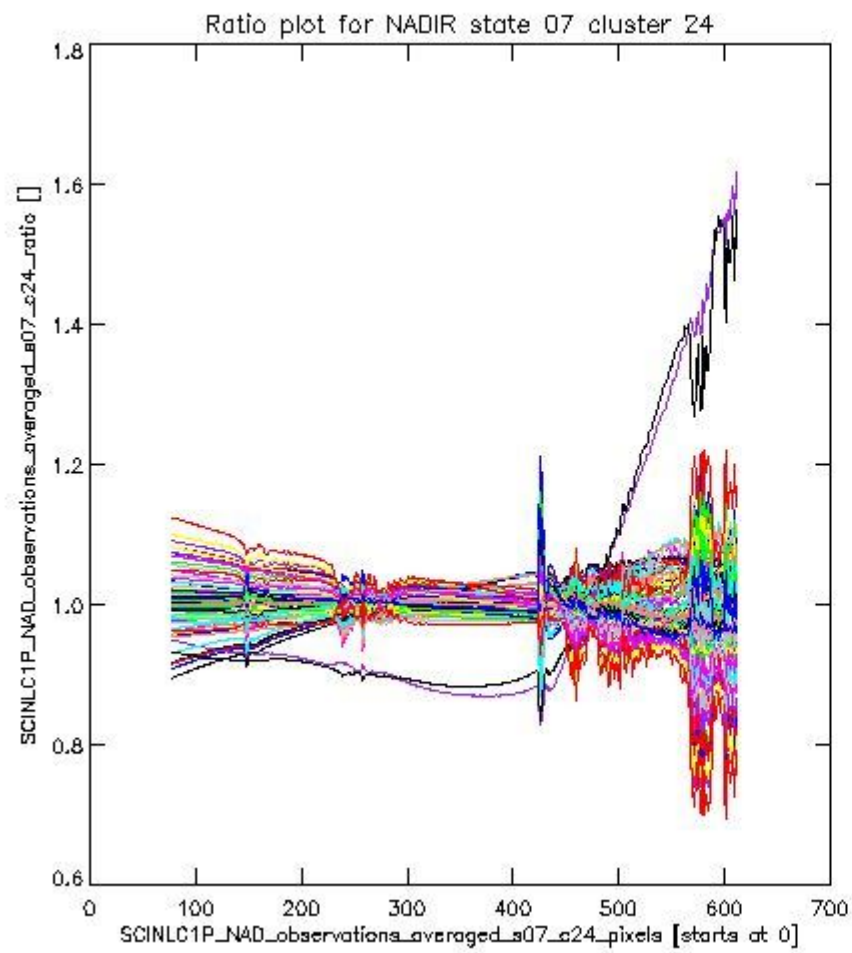
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	29MAY2011 00:09:33.969
Start time of last sample	29MAY2011 23:43:00.804
Reference period start time	29APR2011 00:12:07.988
Reference period stop time	28MAY2011 22:38:39.765
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\_20110529\_6.PNG

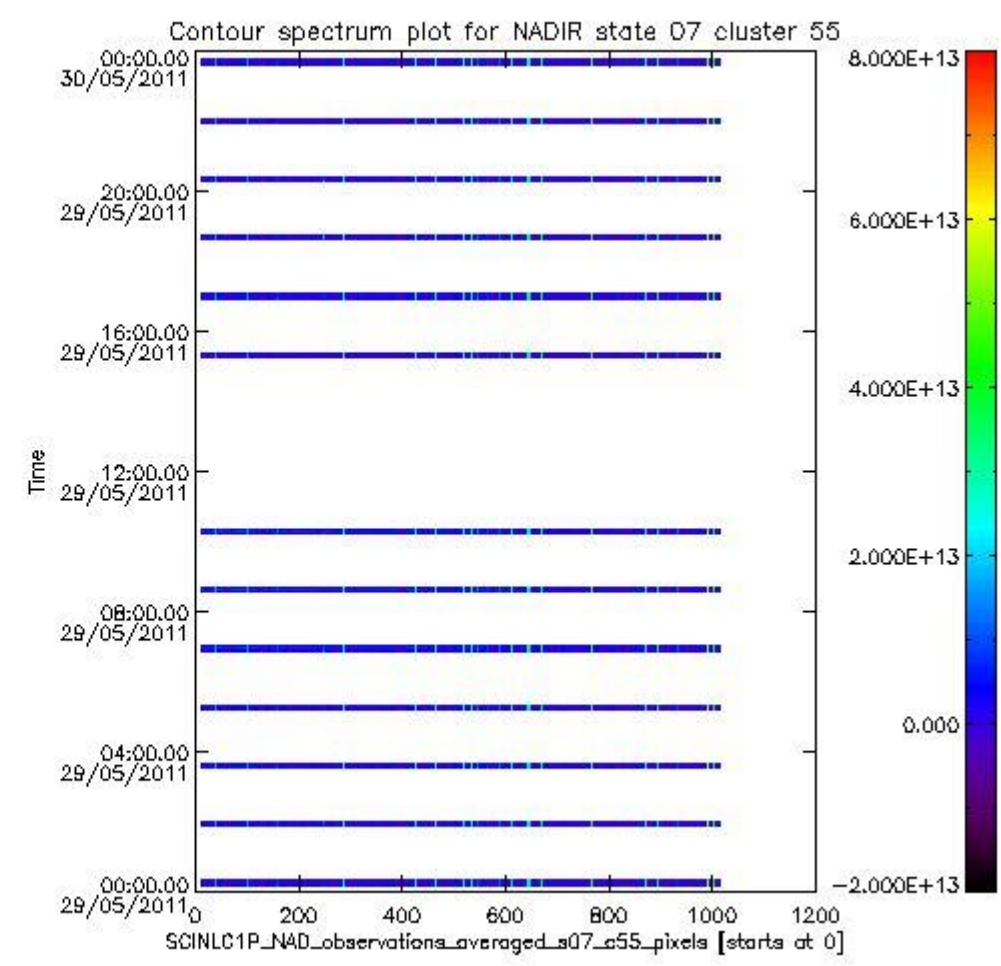
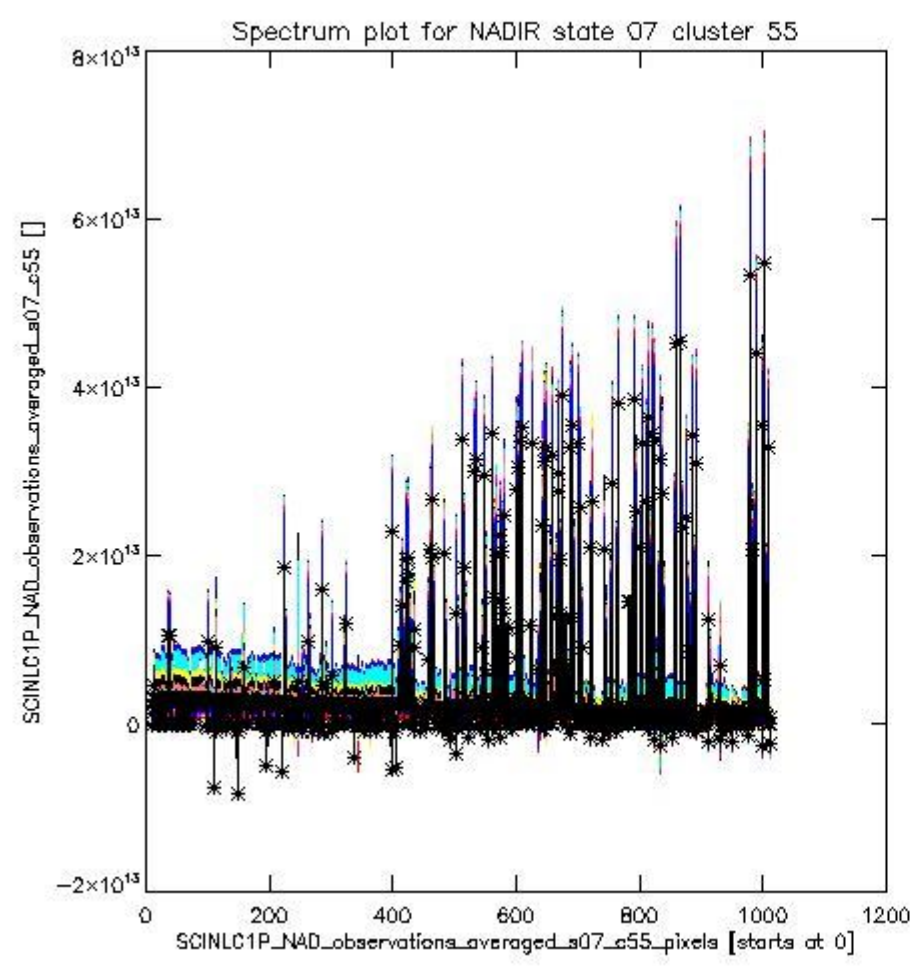




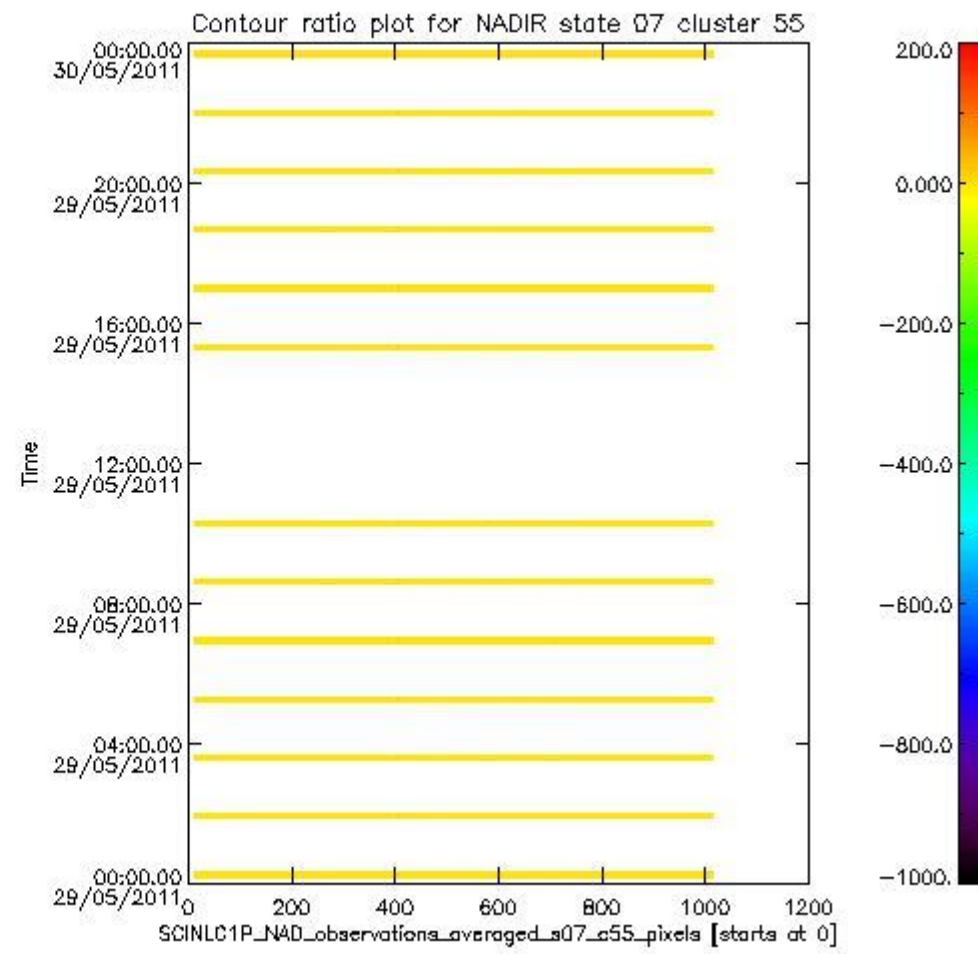
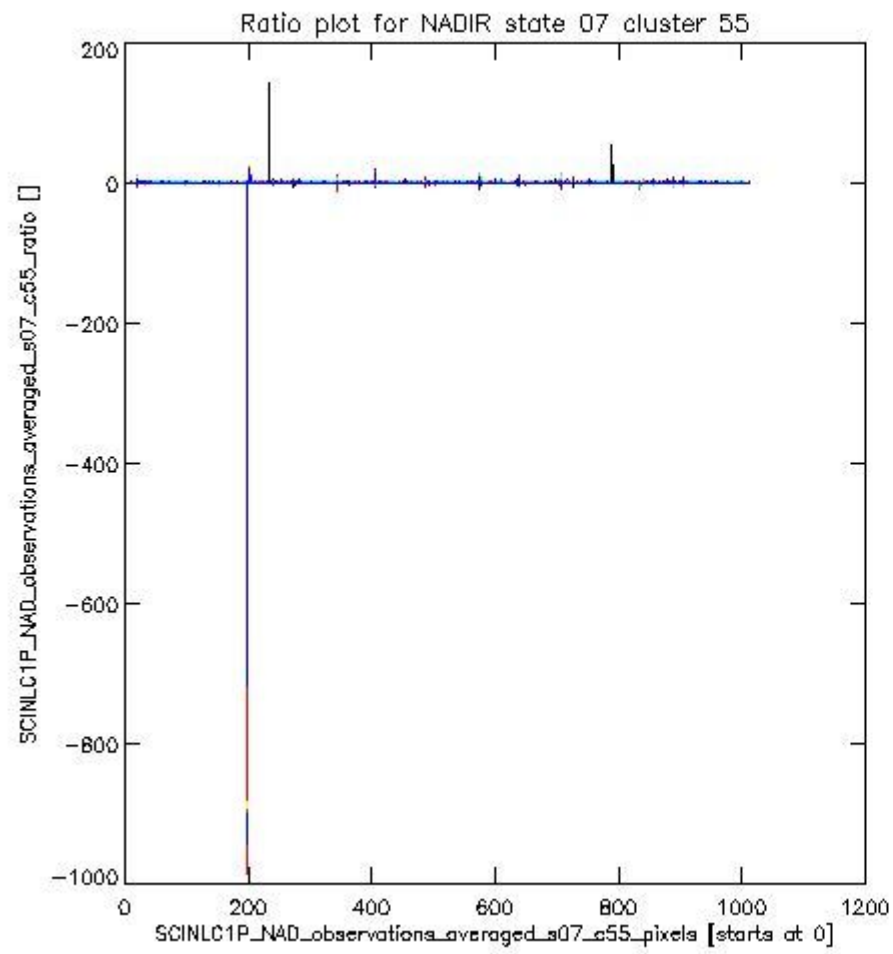
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_7.PNG

**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	29MAY2011 00:09:33.969
Start time of last sample	29MAY2011 23:43:00.804
Reference period start time	29APR2011 00:12:07.988
Reference period stop time	28MAY2011 22:38:39.765
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_8.PNG

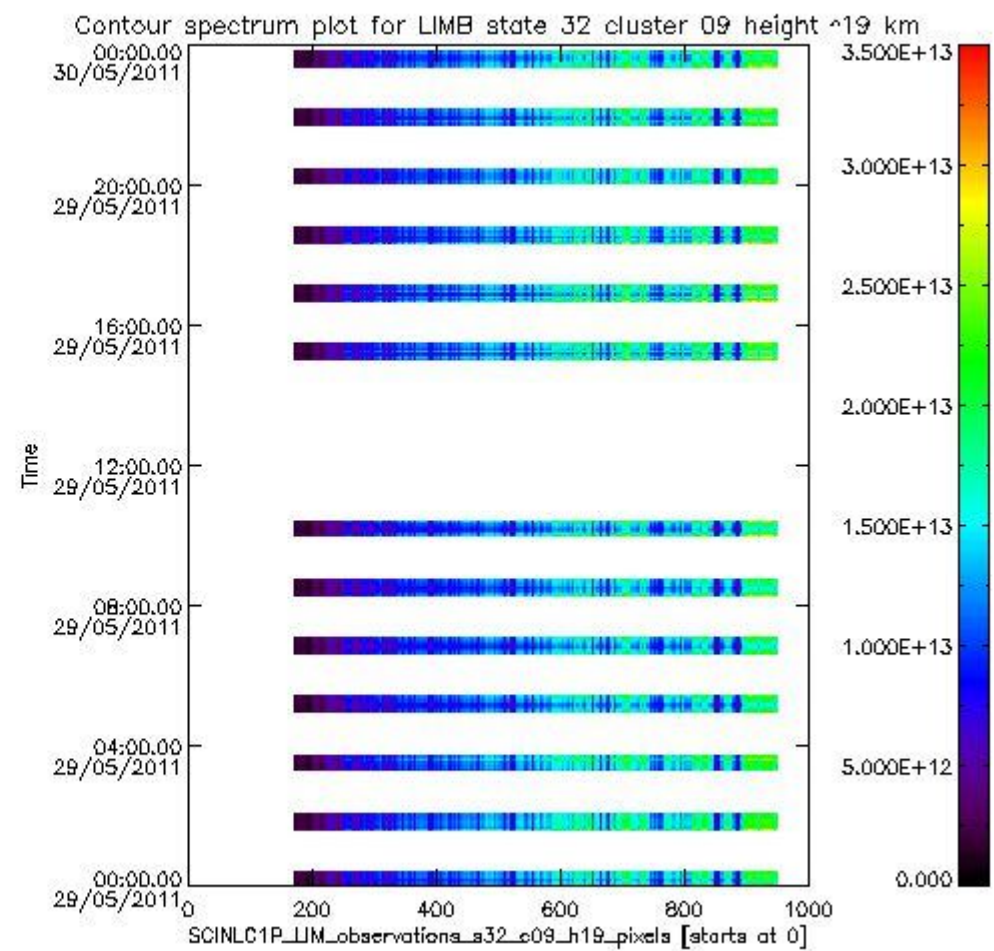
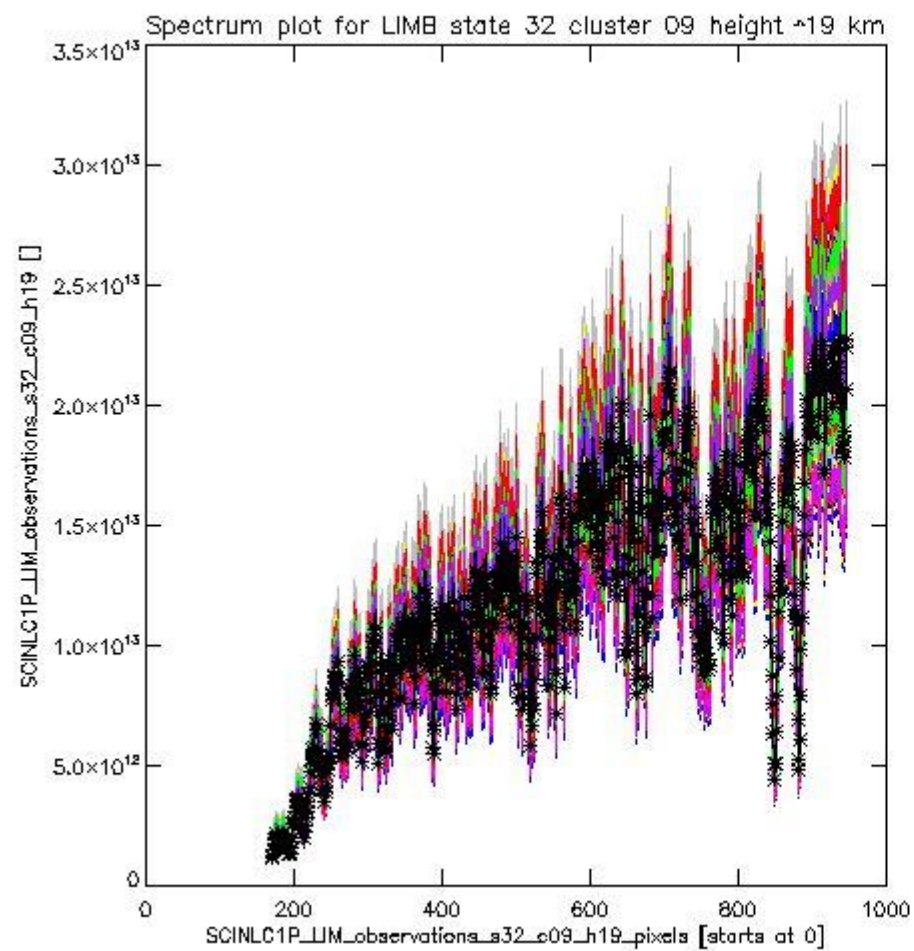


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_9.PNG

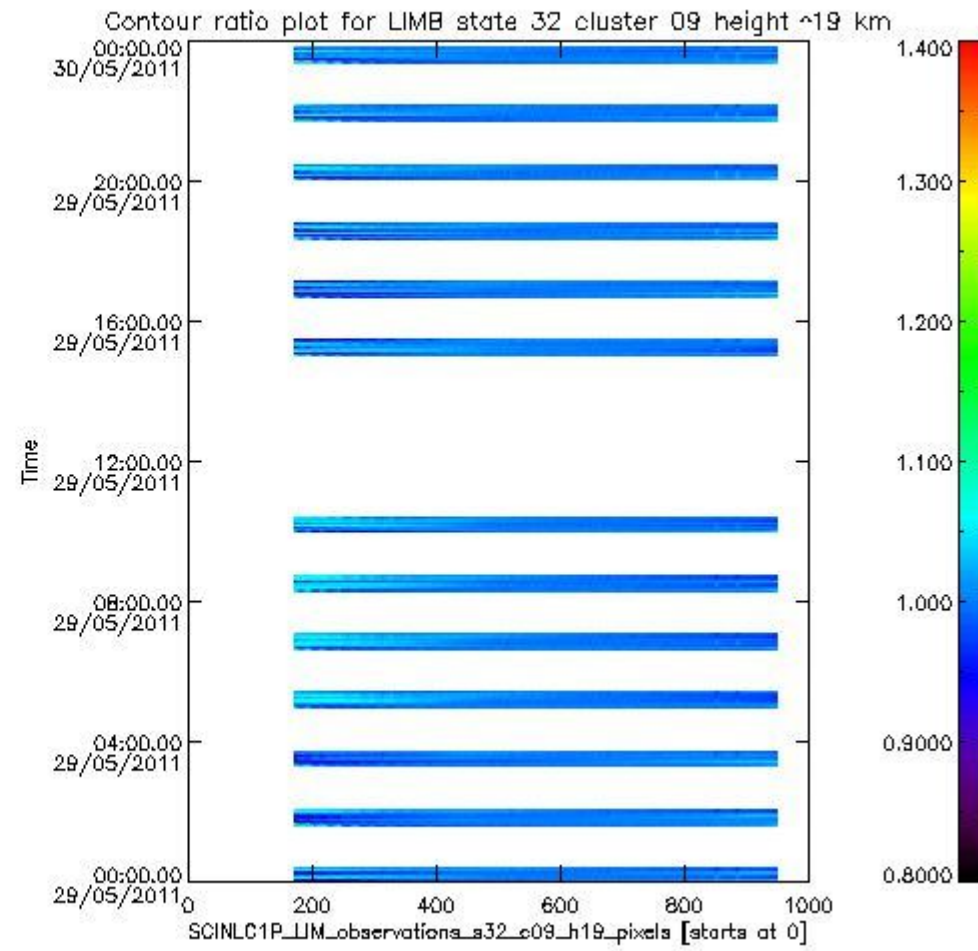
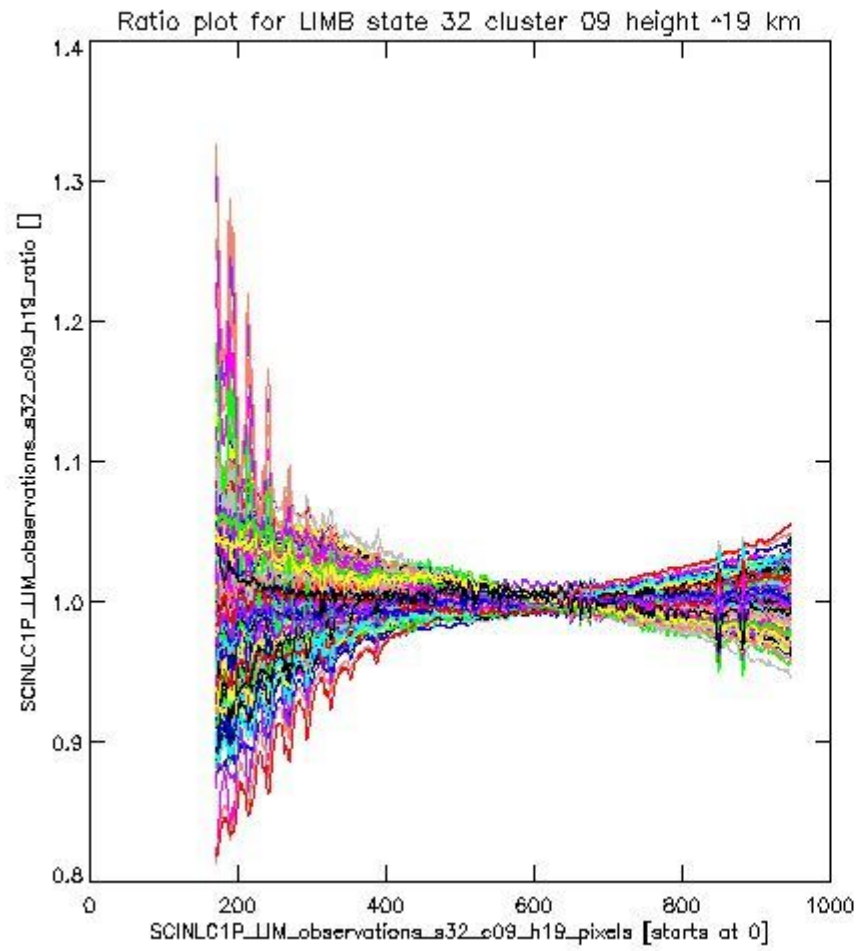
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	29MAY2011 00:00:28.817
Start time of last sample	29MAY2011 23:46:12.109
Reference period start time	29APR2011 00:01:00.093
Reference period stop time	28MAY2011 23:58:26.071
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





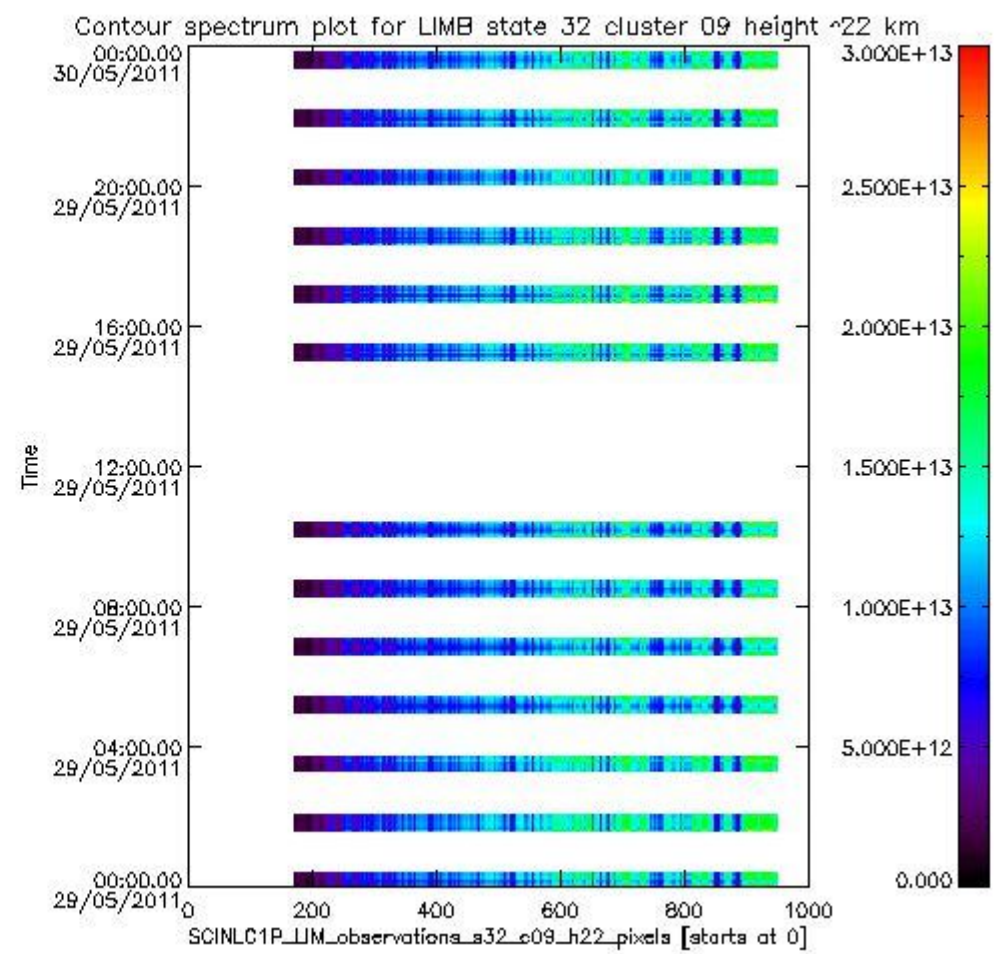
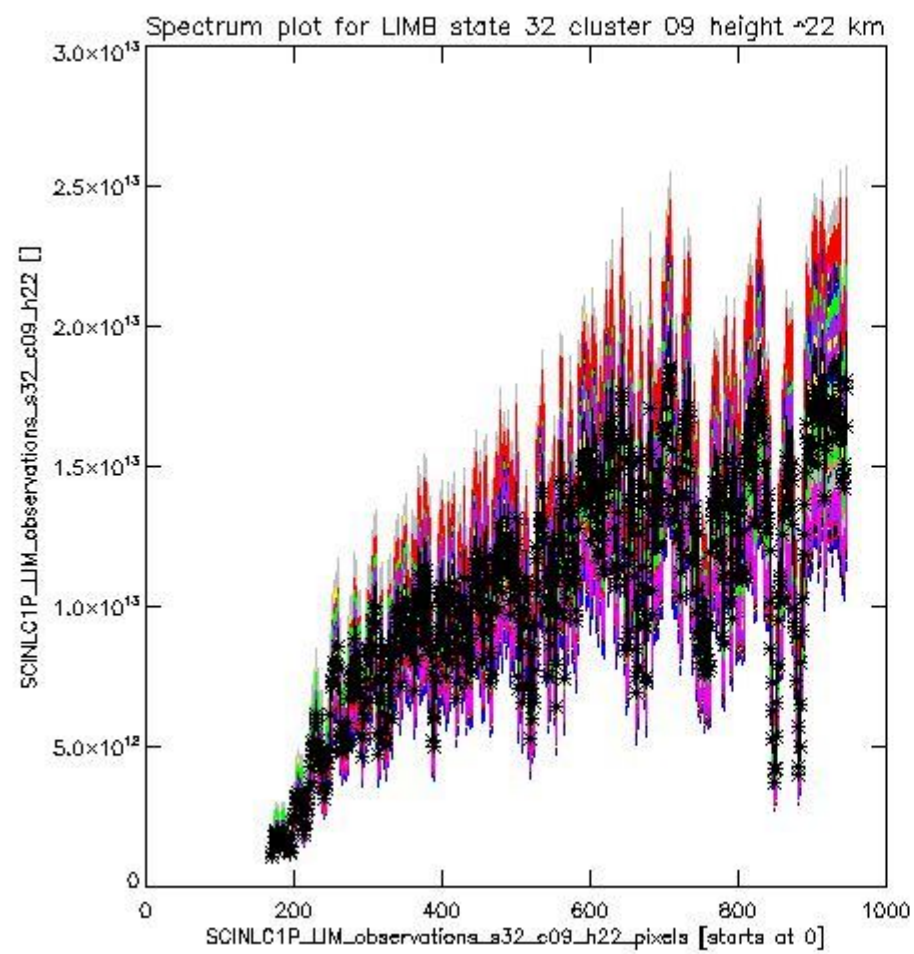
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_10.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_11.PNG

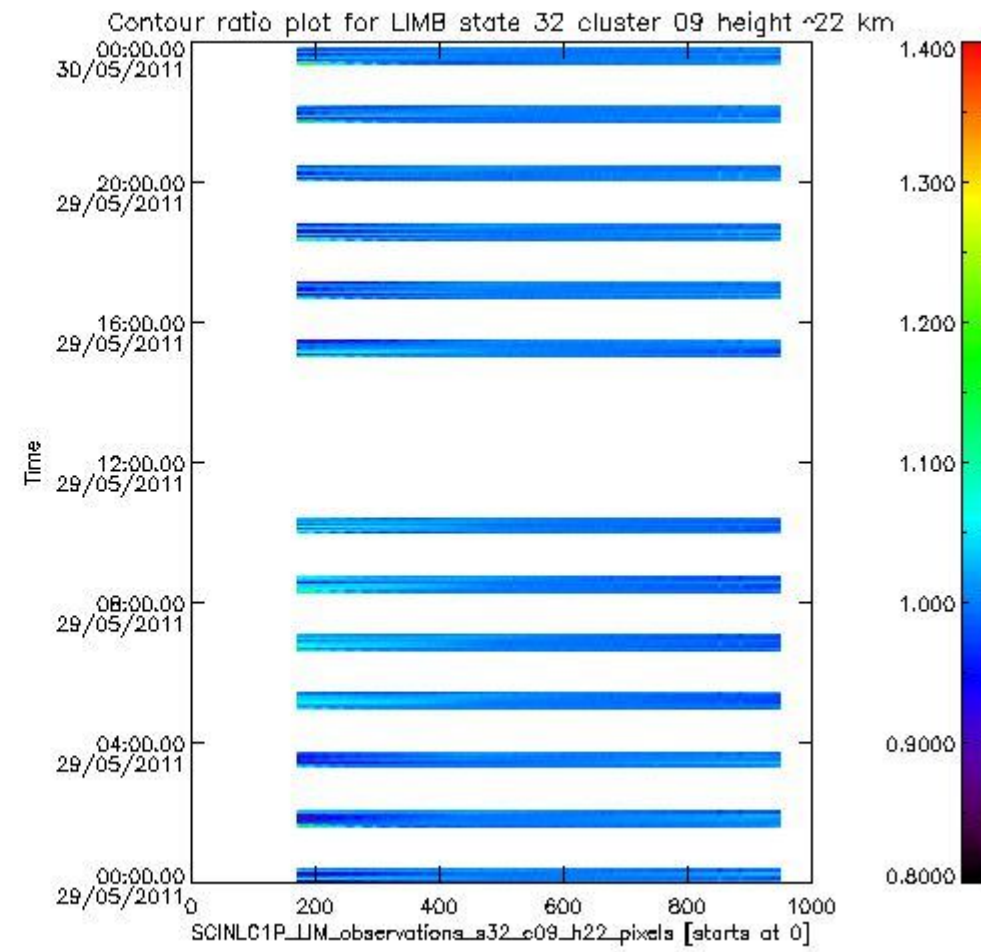
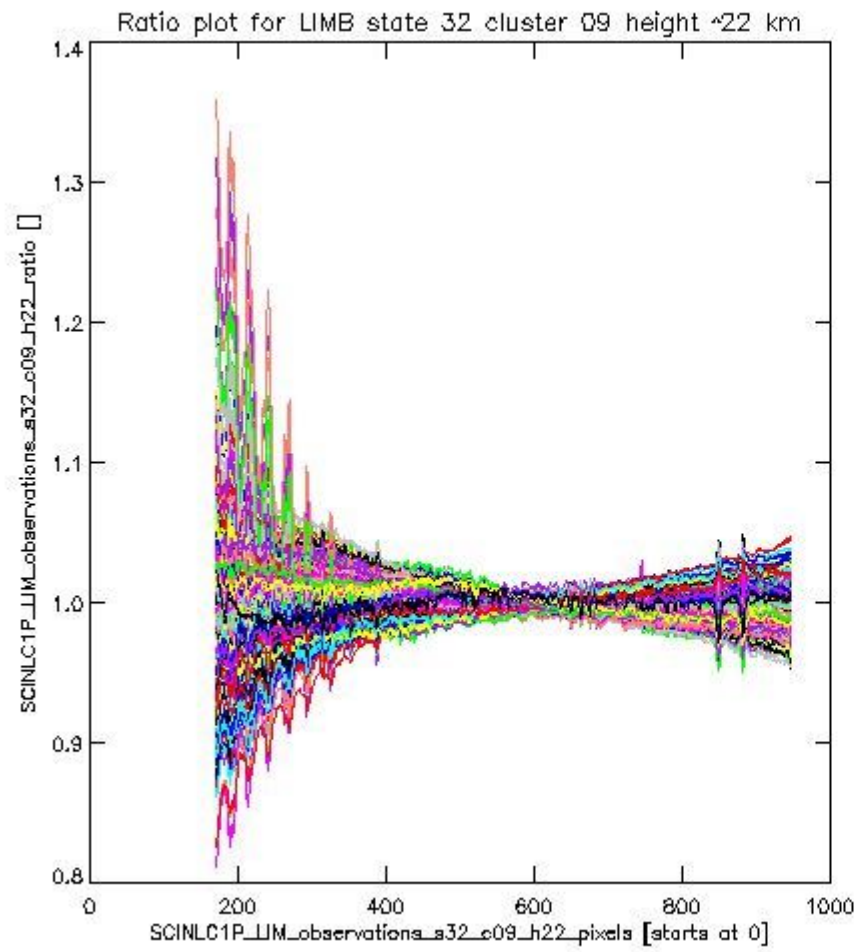
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	29MAY2011 00:00:28.817
Start time of last sample	29MAY2011 23:46:12.109
Reference period start time	29APR2011 00:01:00.093
Reference period stop time	28MAY2011 23:58:26.071
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\_20110529\_12.PNG

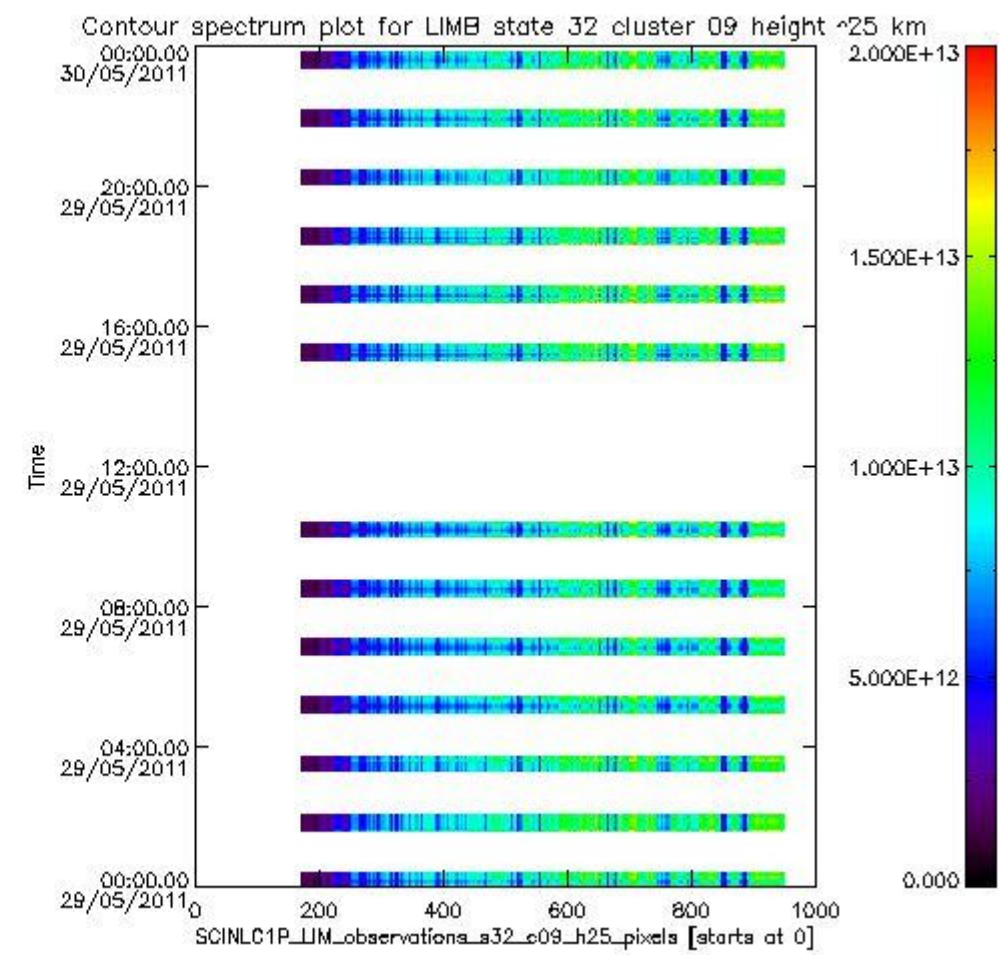
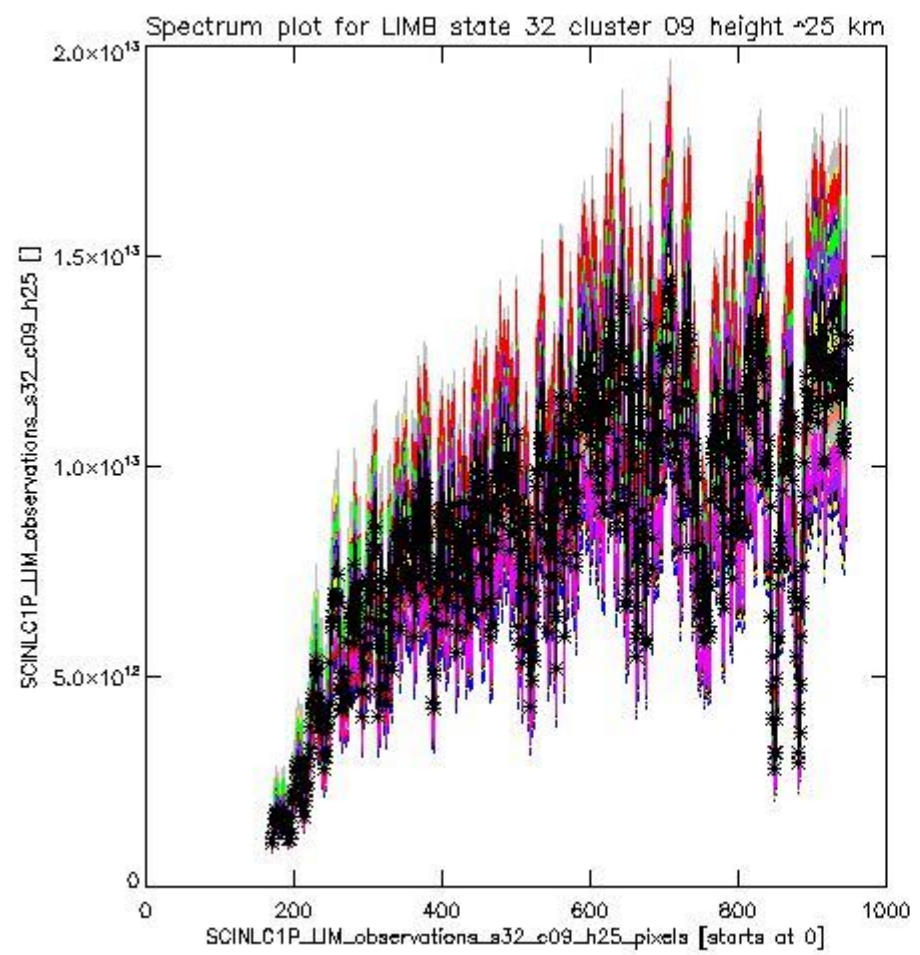




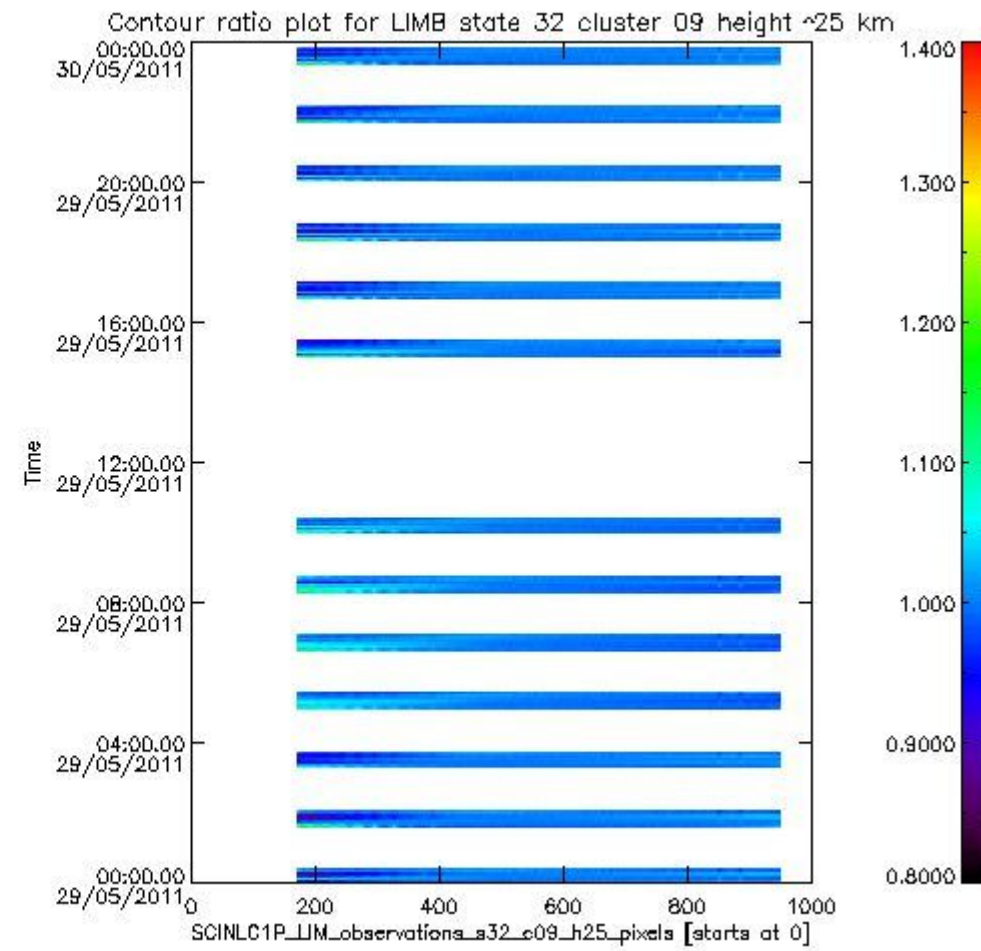
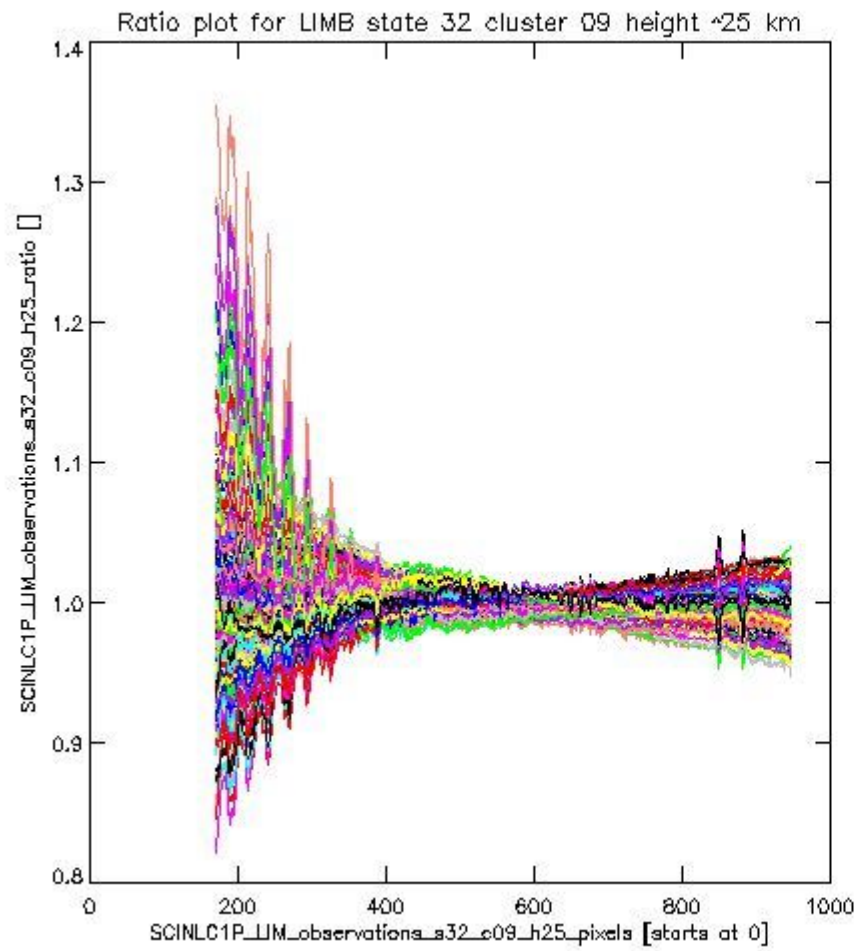
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_13.PNG

**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	29MAY2011 00:00:28.817
Start time of last sample	29MAY2011 23:46:12.109
Reference period start time	29APR2011 00:01:00.093
Reference period stop time	28MAY2011 23:58:26.071
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\_20110529\_14.PNG

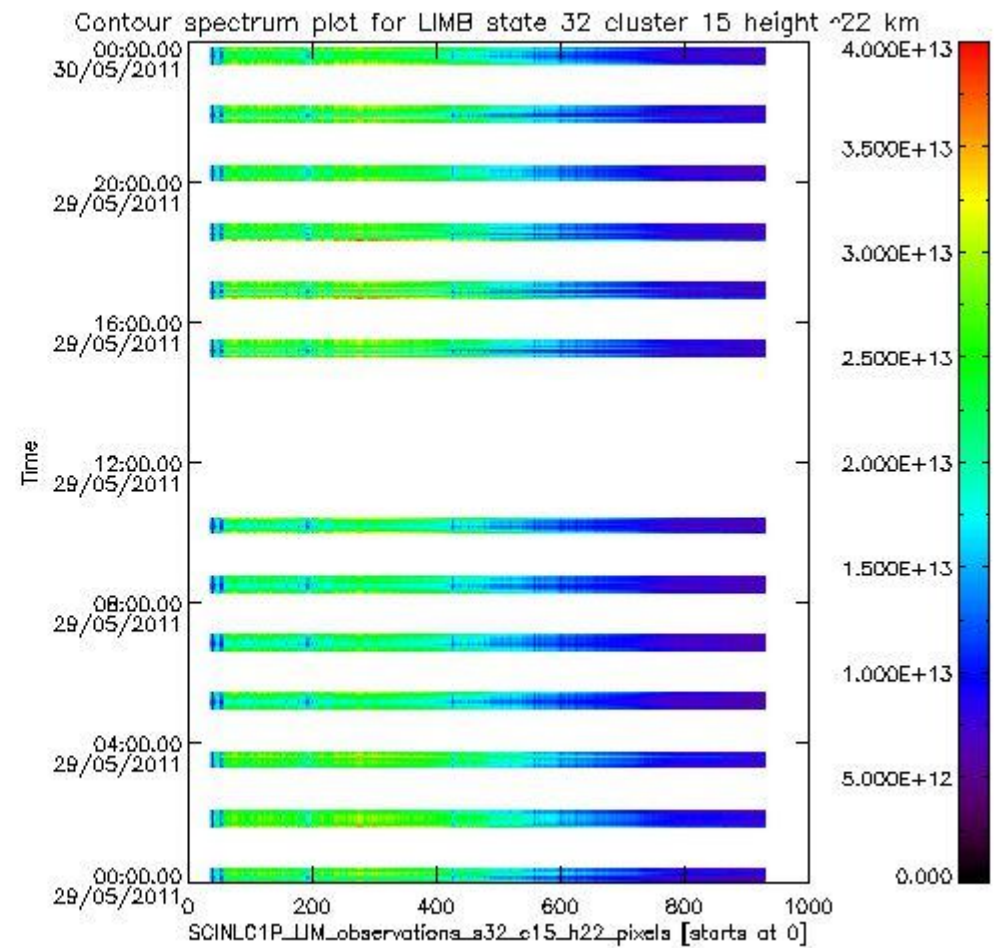
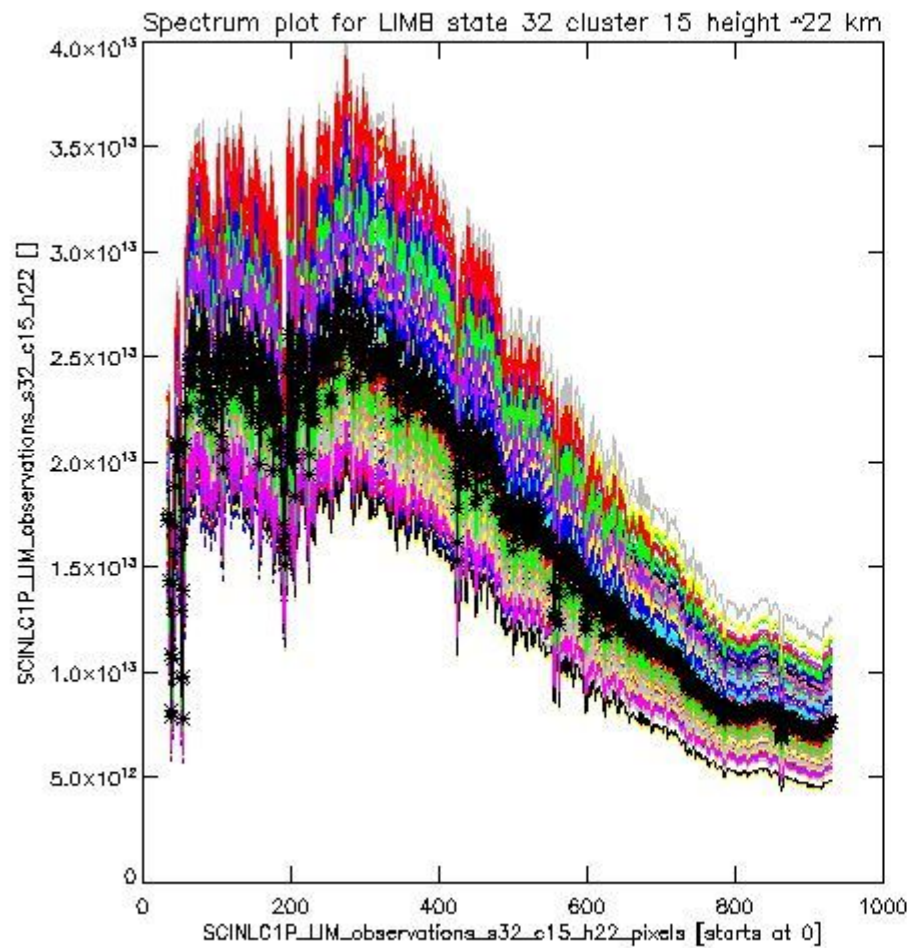


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_15.PNG

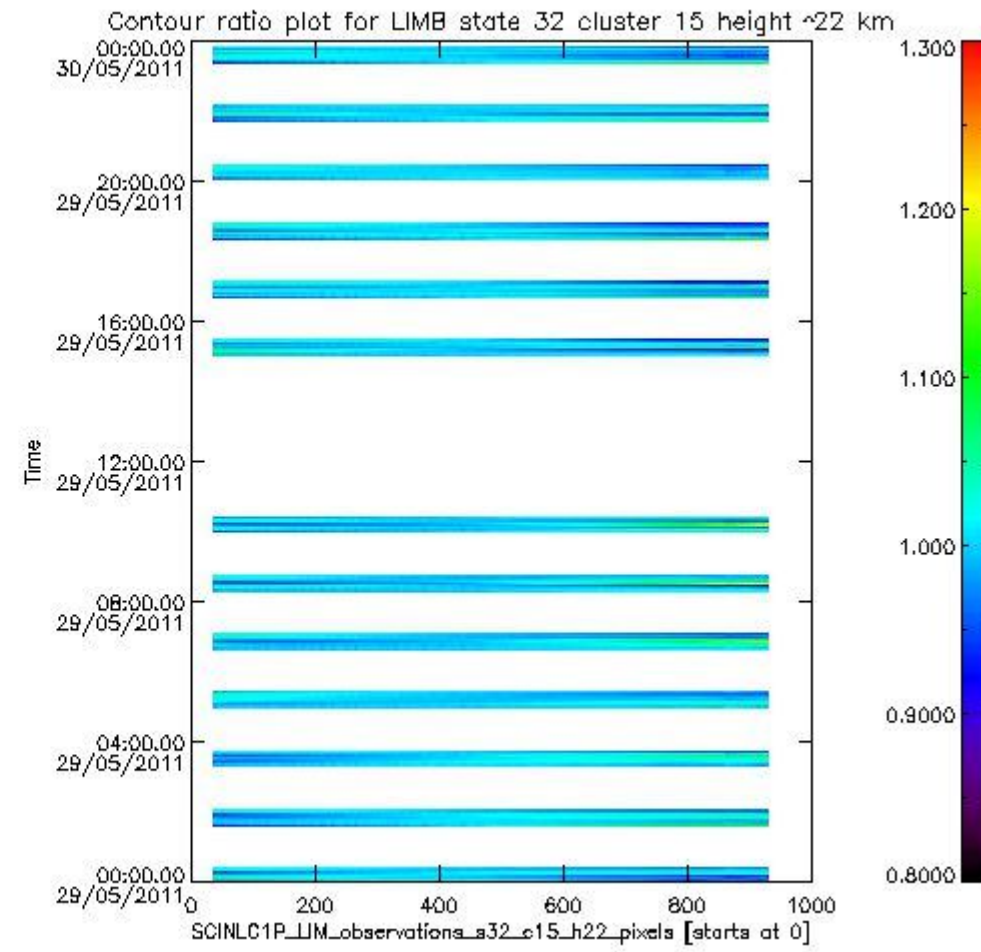
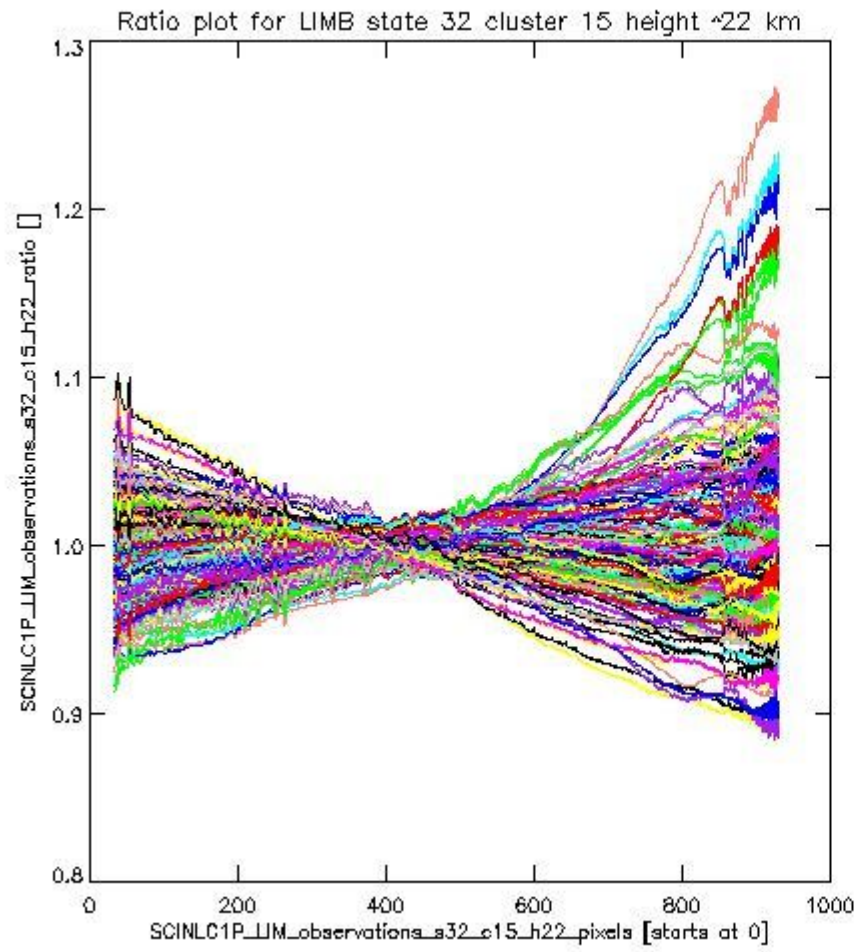
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	29MAY2011 00:00:28.817
Start time of last sample	29MAY2011 23:46:12.109
Reference period start time	29APR2011 00:01:00.093
Reference period stop time	28MAY2011 23:58:26.071
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





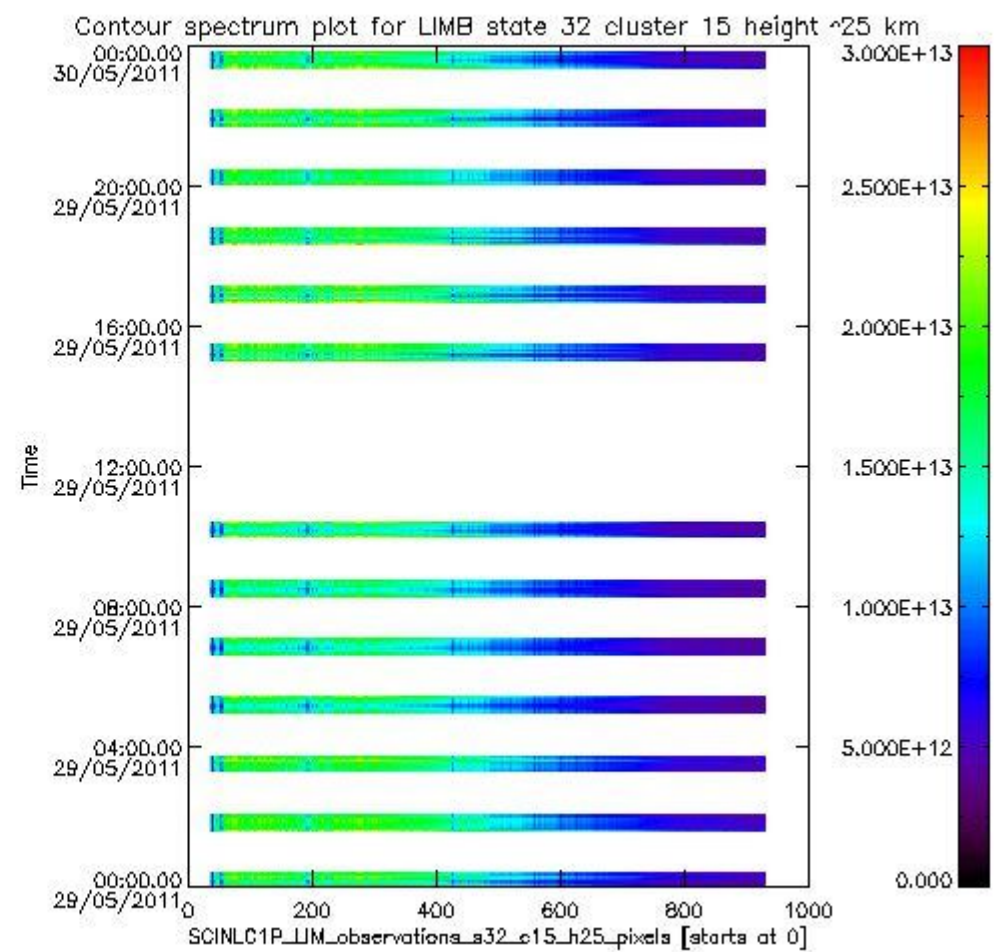
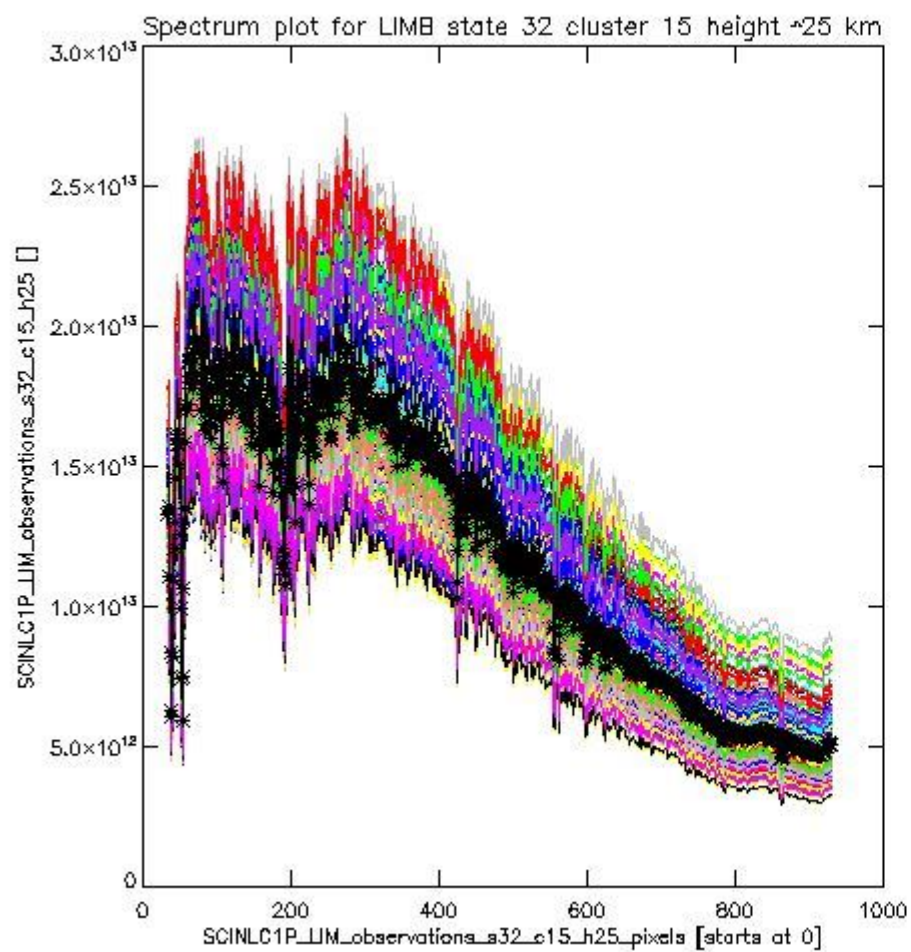
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_17.PNG

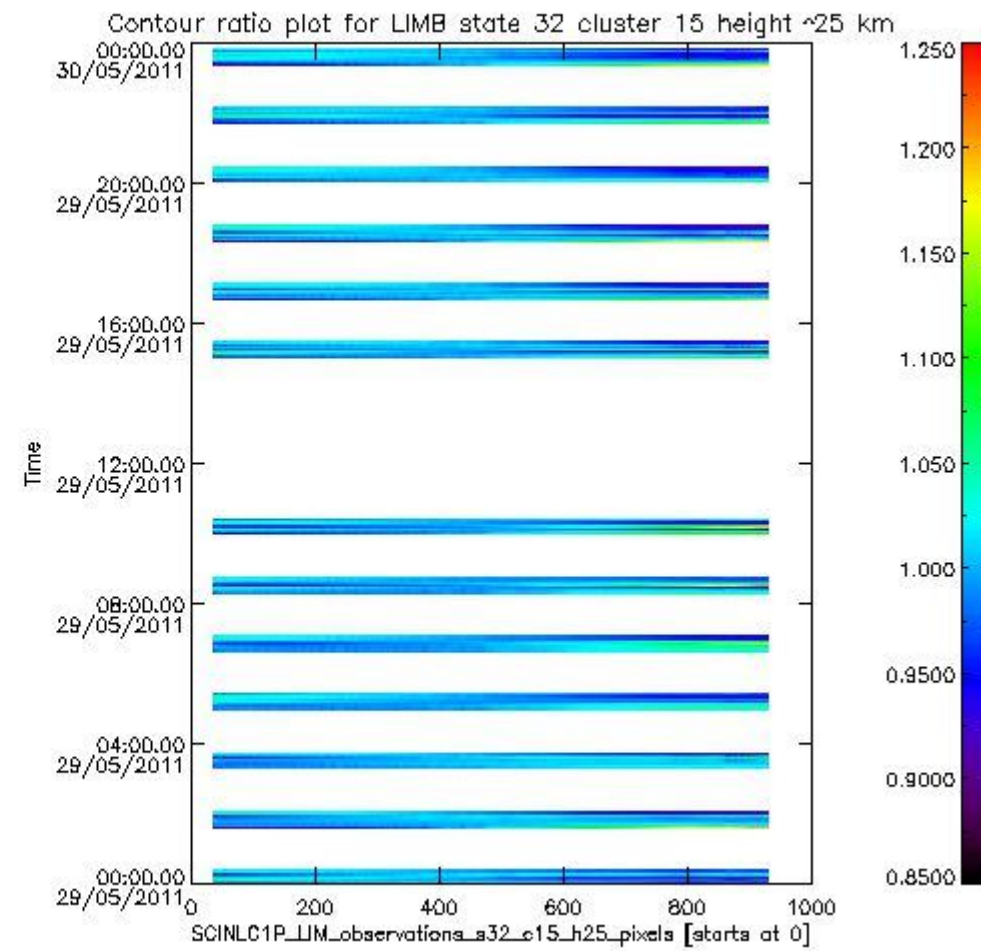
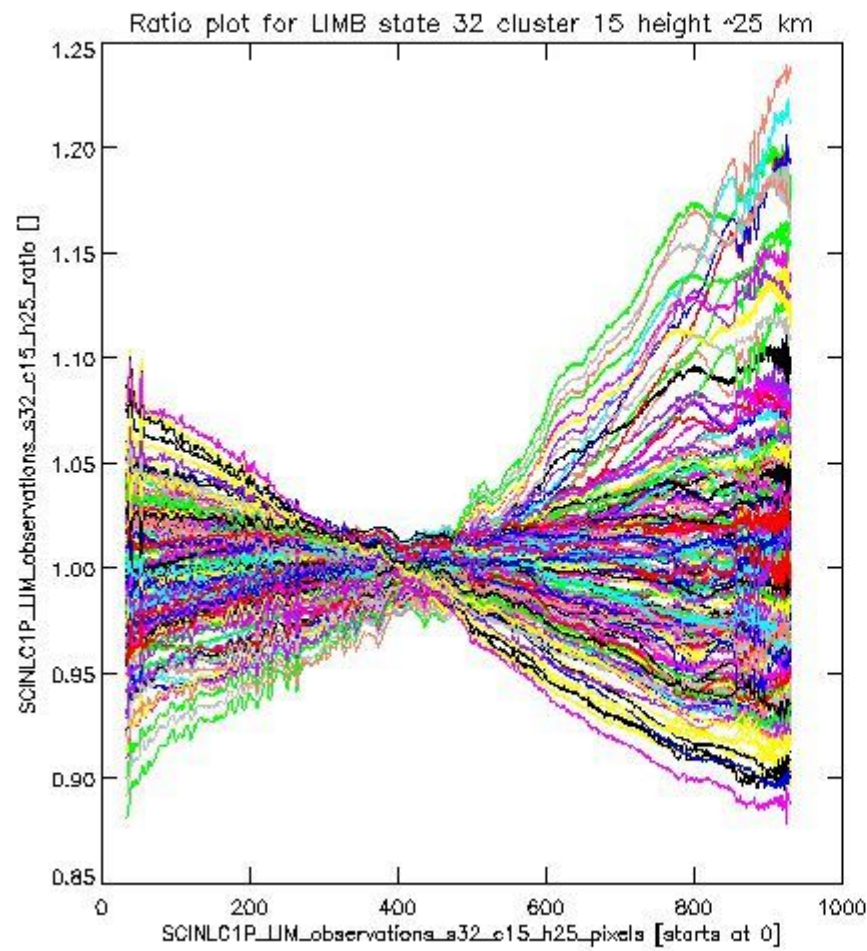
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	29MAY2011 00:00:28.817
Start time of last sample	29MAY2011 23:46:12.109
Reference period start time	29APR2011 00:01:00.093
Reference period stop time	28MAY2011 23:58:26.071
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\_20110529\_18.PNG

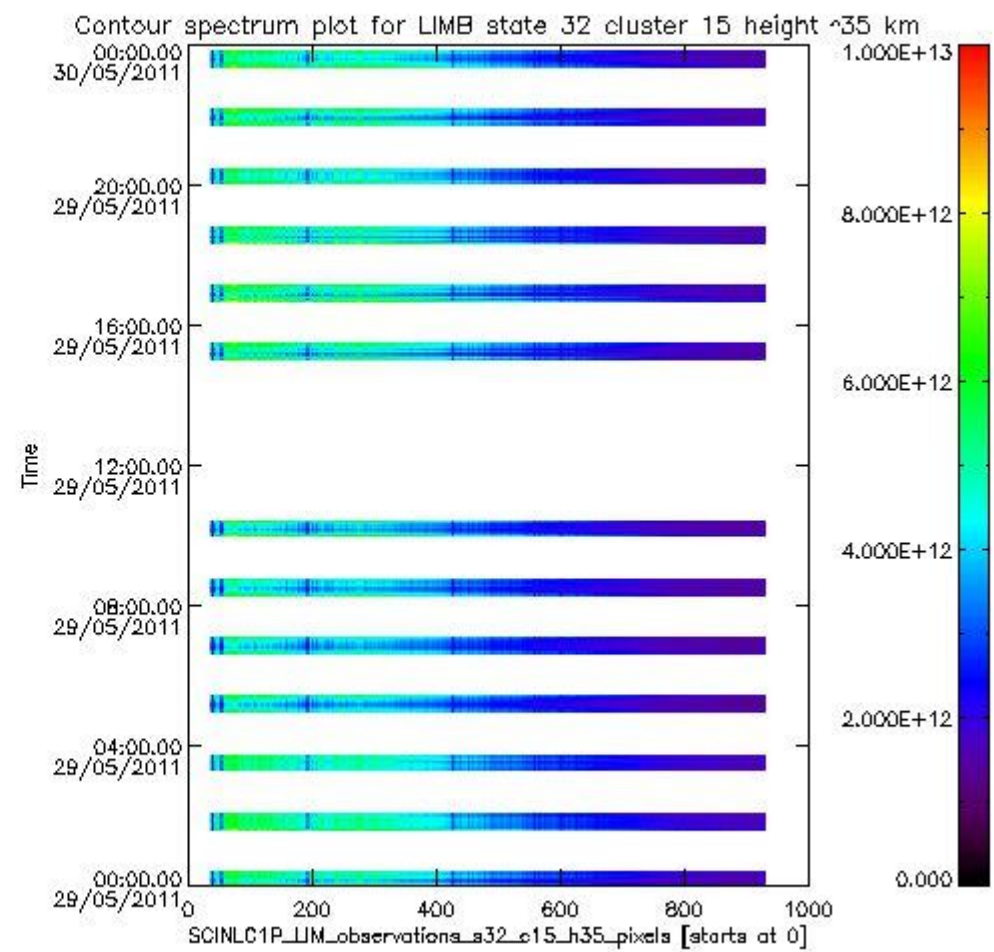
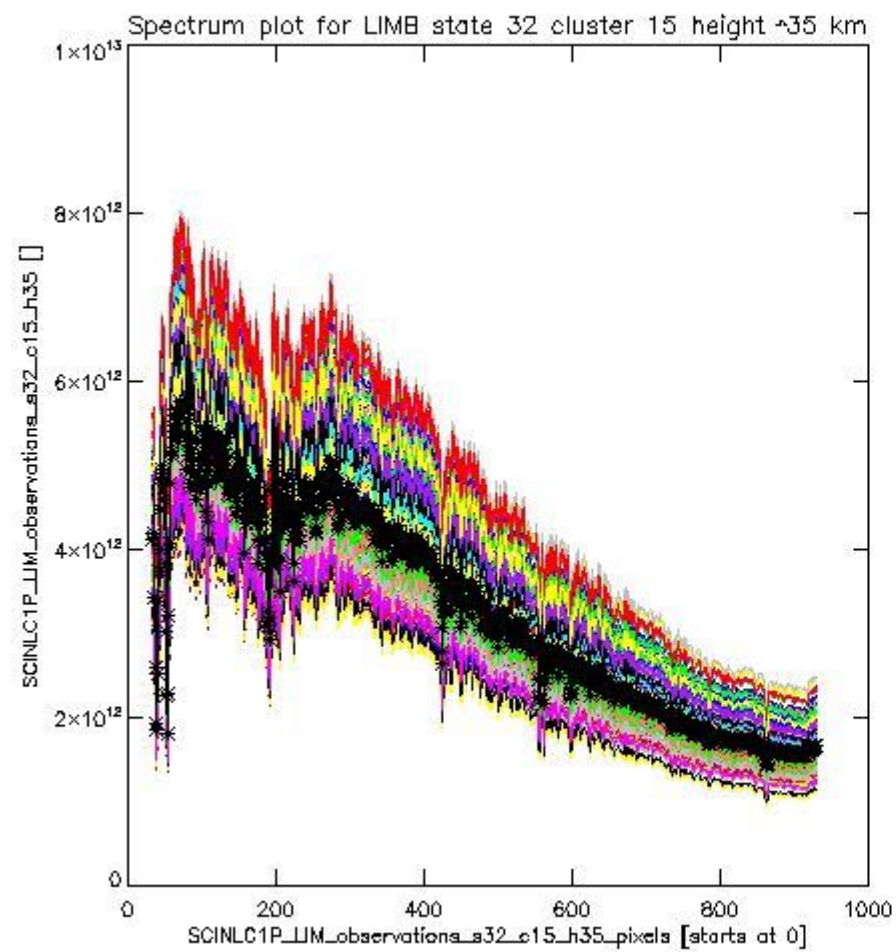


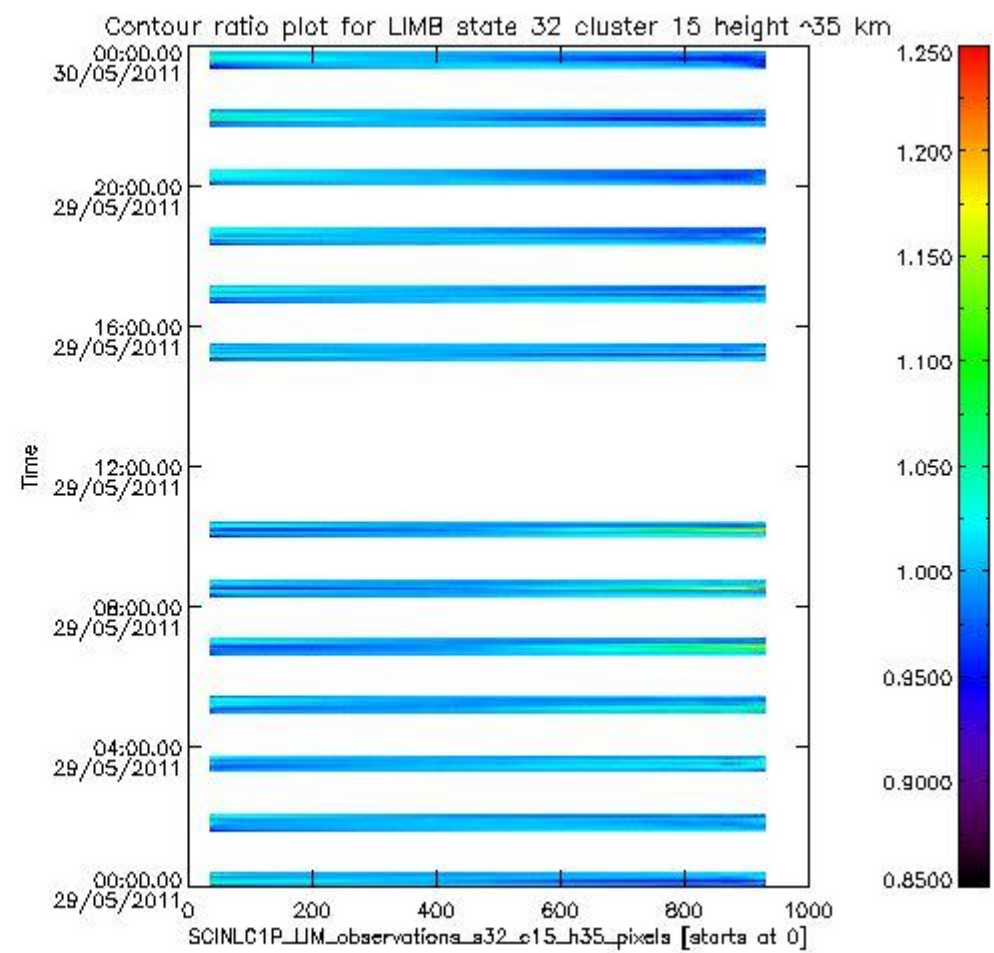
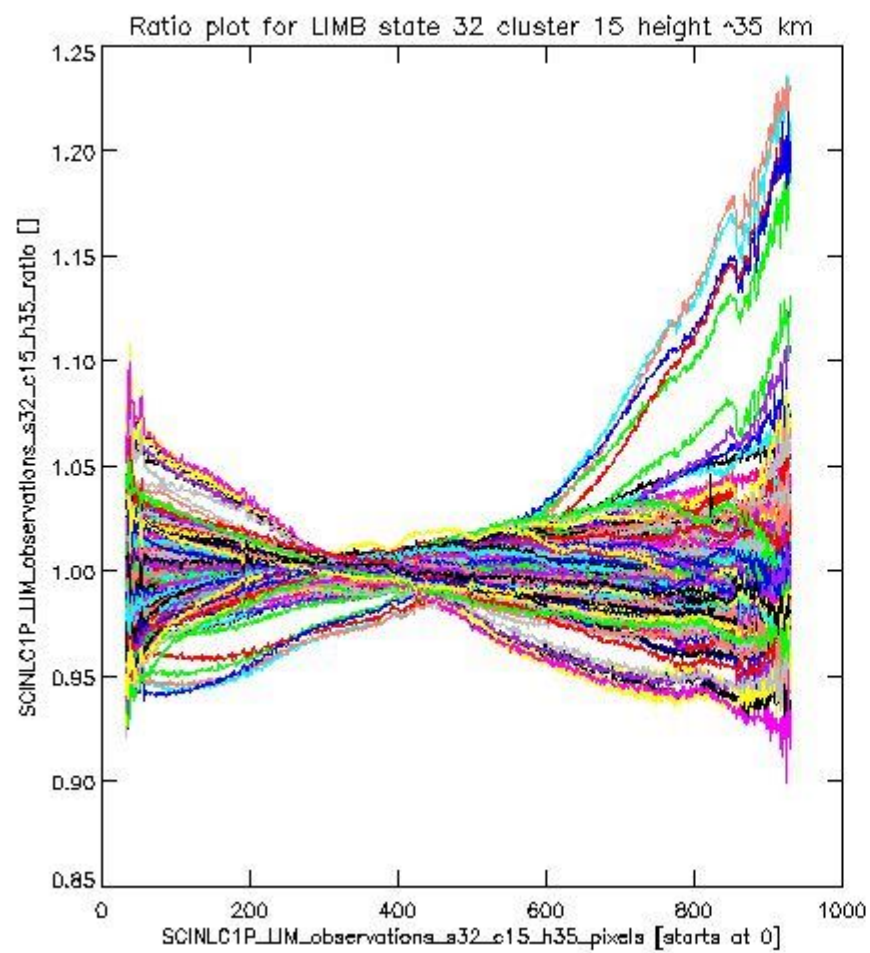


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110529\_19.PNG

**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	29MAY2011 00:00:28.817
Start time of last sample	29MAY2011 23:46:12.109
Reference period start time	29APR2011 00:01:00.093
Reference period stop time	28MAY2011 23:58:26.071
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\_20110529\_21.PNG



