

# 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	19JAN2011 06:55:30
Data source version	SCIA/7.04-U
Processing scope for products	08JAN2011 00:00:00 to 09JAN2011 00:00:00
Start time of first product within scope	07JAN2011 23:17:30
Stop time of last product within scope	08JAN2011 23:51:12
Total number of level 1 products	15
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	08JAN2011 01:29:46.791	08JAN2011 23:22:05.742
1	NADIR	07	09	N/A	08JAN2011 01:29:46.791	08JAN2011 23:22:05.742
2	NADIR	07	15	N/A	08JAN2011 01:29:46.791	08JAN2011 23:22:05.742
3	NADIR	07	24	N/A	08JAN2011 01:29:46.791	08JAN2011 23:22:05.742
4	NADIR	07	55	N/A	08JAN2011 01:29:46.791	08JAN2011 23:22:05.742
5	LIMB	32	09	~19 km	08JAN2011 00:00:01.134	08JAN2011 23:27:19.789
6	LIMB	32	09	~22 km	08JAN2011 00:00:01.134	08JAN2011 23:27:19.789
7	LIMB	32	09	~25 km	08JAN2011 00:00:01.134	08JAN2011 23:27:19.789
8	LIMB	32	15	~22 km	08JAN2011 00:00:01.134	08JAN2011 23:27:19.789
9	LIMB	32	15	~25 km	08JAN2011 00:00:01.134	08JAN2011 23:27:19.789
10	LIMB	32	15	~35 km	08JAN2011 00:00:01.134	08JAN2011 23:27:19.789

#### 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_1CUDPA20110107_225948_000060093098_00174_46309_1548.N1</a>	07JAN2011 23:17:30	08JAN2011 00:27:59	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110108_004001_000060103098_00175_46310_1549.N1</a>	08JAN2011 00:57:44	08JAN2011 02:07:58	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110108_022016_000060093098_00176_46311_1552.N1</a>	08JAN2011 02:37:57	08JAN2011 03:48:26	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110108_040029_000060103098_00177_46312_1553.N1</a>	08JAN2011 04:18:11	08JAN2011 05:28:26	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110108_054044_000060093098_00178_46313_1556.N1</a>	08JAN2011 05:58:25	08JAN2011 07:08:54	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110108_072057_000060103098_00179_46314_1557.N1</a>	08JAN2011 07:38:39	08JAN2011 08:48:54	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110108_090111_000060093098_00180_46315_1561.N1	08JAN2011 09:18:53	08JAN2011 10:29:22	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110108_104125_000060103098_00181_46316_1562.N1	08JAN2011 10:59:06	08JAN2011 12:09:21	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110108_122139_000060093098_00182_46317_1564.N1	08JAN2011 12:39:20	08JAN2011 13:49:49	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110108_140152_000060103098_00183_46318_1566.N1	08JAN2011 14:19:34	08JAN2011 15:29:49	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110108_154207_000060093098_00184_46319_1568.N1	08JAN2011 15:59:48	08JAN2011 17:10:17	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110108_172220_000060103098_00185_46320_1570.N1	08JAN2011 17:40:02	08JAN2011 18:49:43	0	34	29	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110108_190235_000060093098_00186_46321_1572.N1	08JAN2011 19:20:16	08JAN2011 20:31:05	0	36	30	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110108_204248_000060103098_00187_46322_1575.N1	08JAN2011 21:00:29	08JAN2011 22:10:44	0	35	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110108_222302_000060093098_00188_46323_1576.N1	08JAN2011 22:40:43	08JAN2011 23:51:12	0	36	30	0	0	1	0	0	

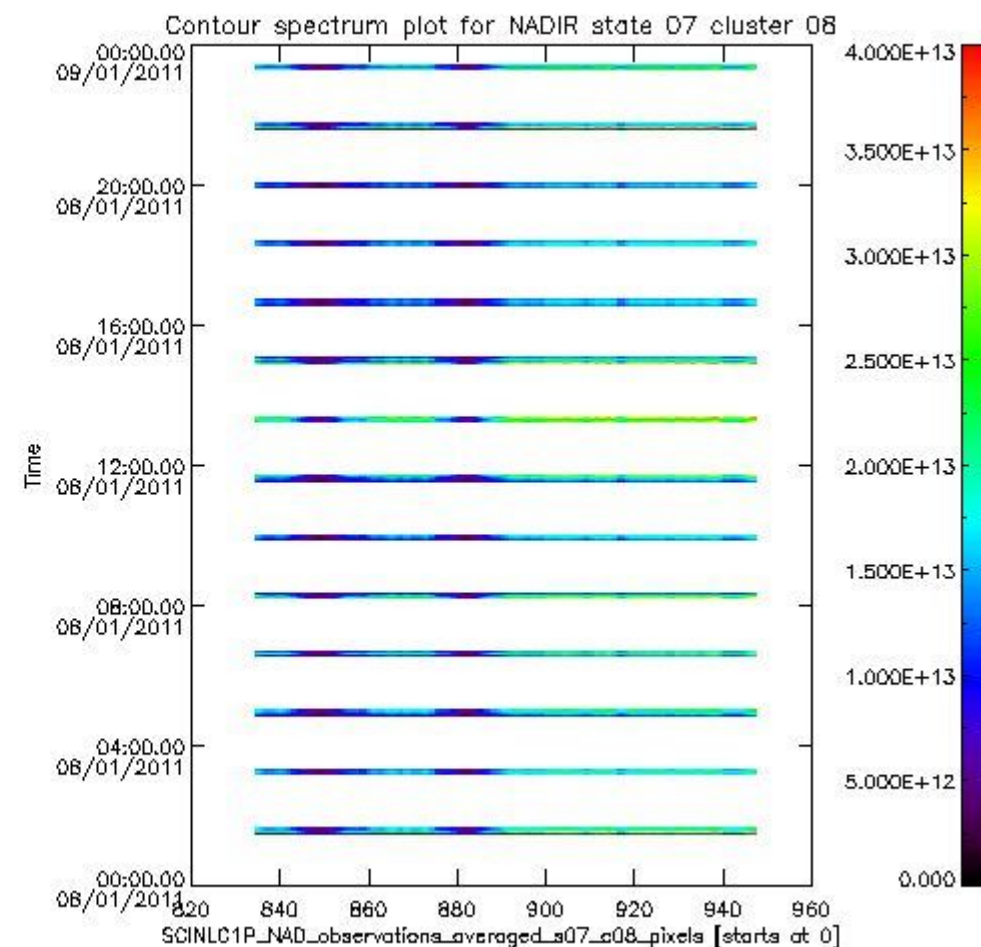
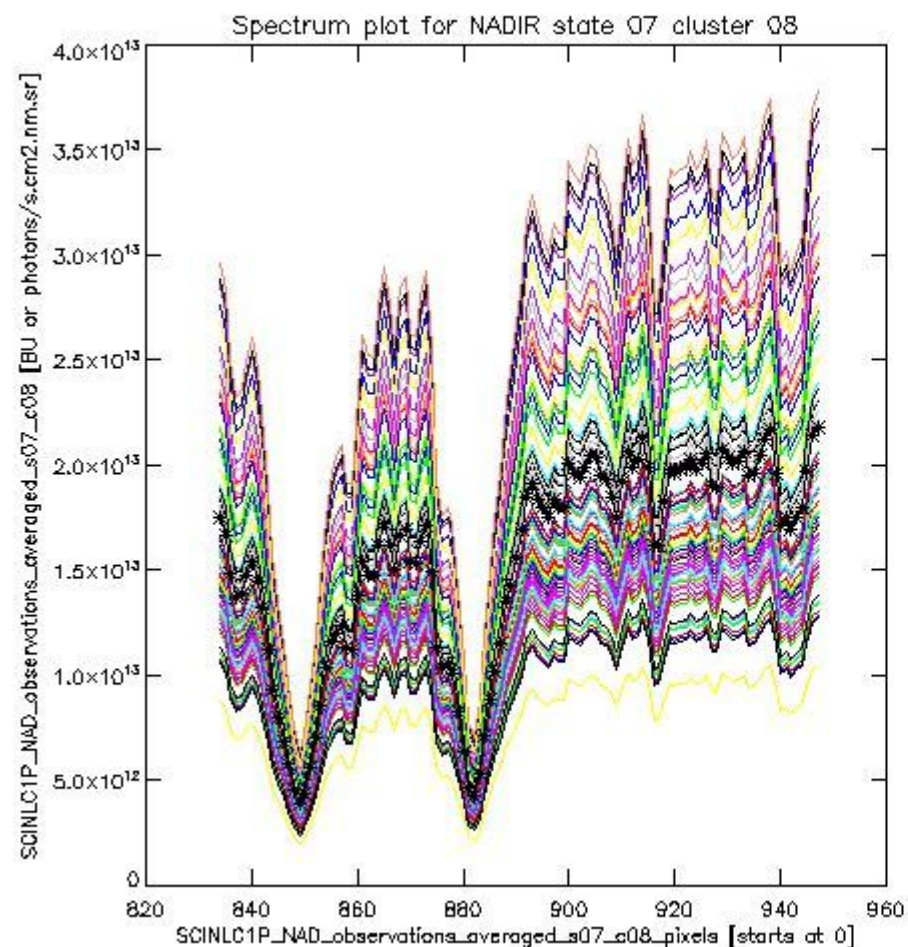
## 1.2 Source packet monitoring

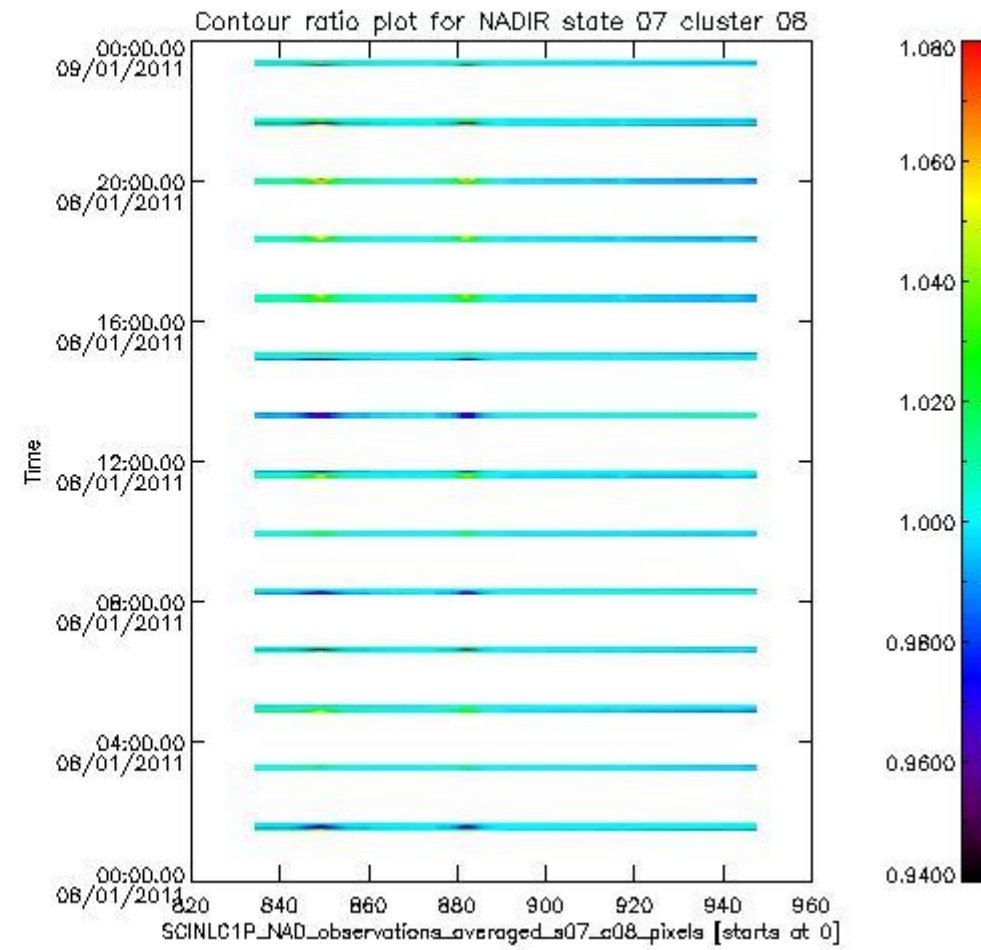
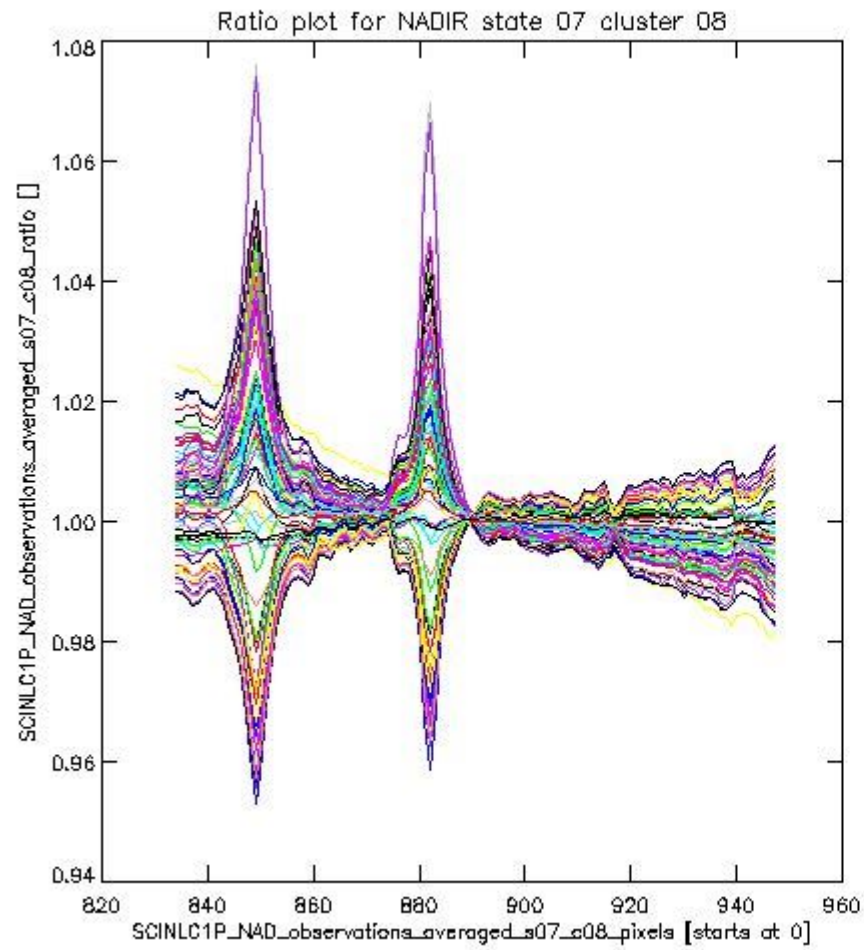
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

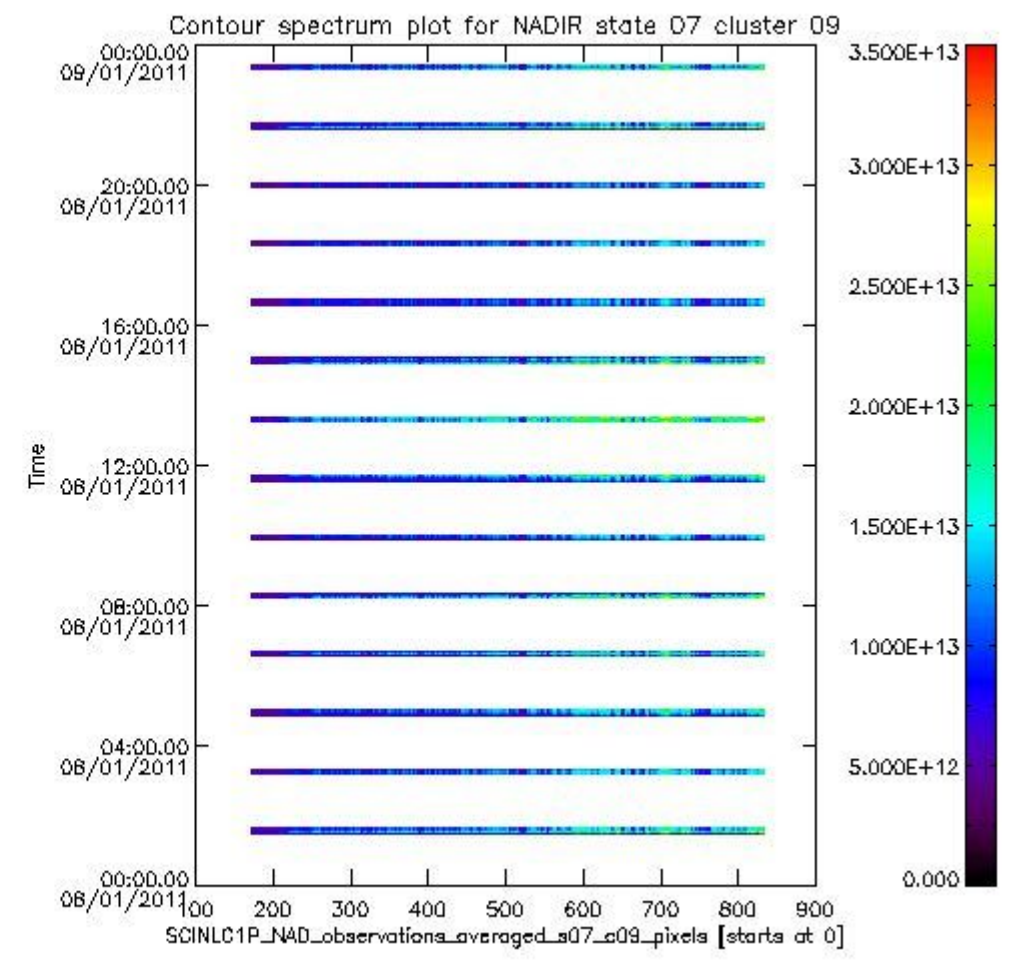
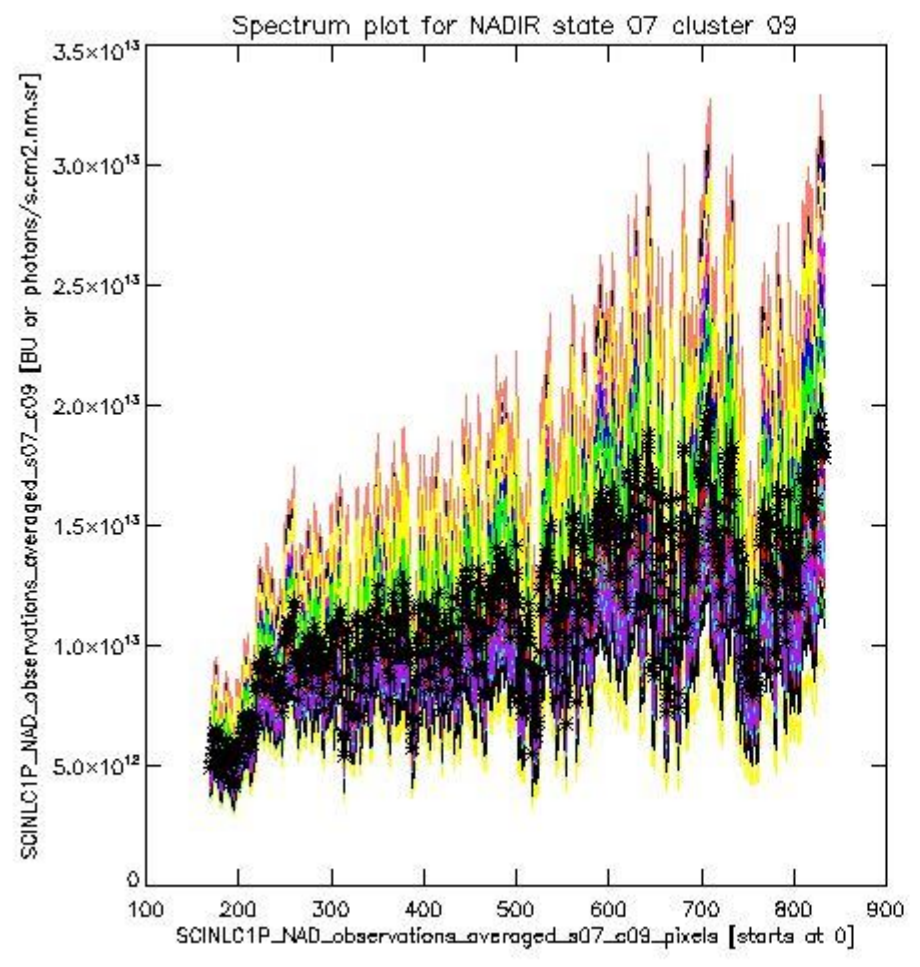
Item	Value
Start time of first sample	08JAN2011 01:29:46.791
Start time of last sample	08JAN2011 23:22:05.742
Reference period start time	09DEC2010 01:30:35.293
Reference period stop time	07JAN2011 23:58:52.571
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



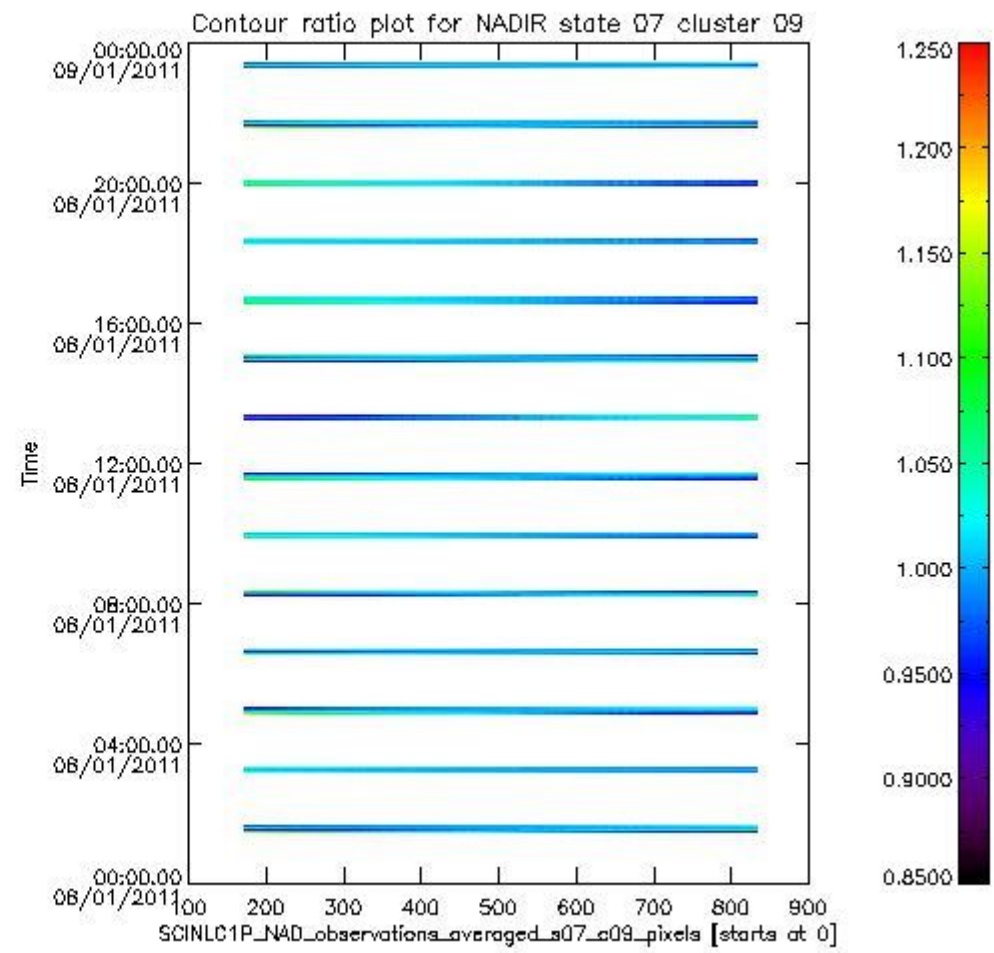
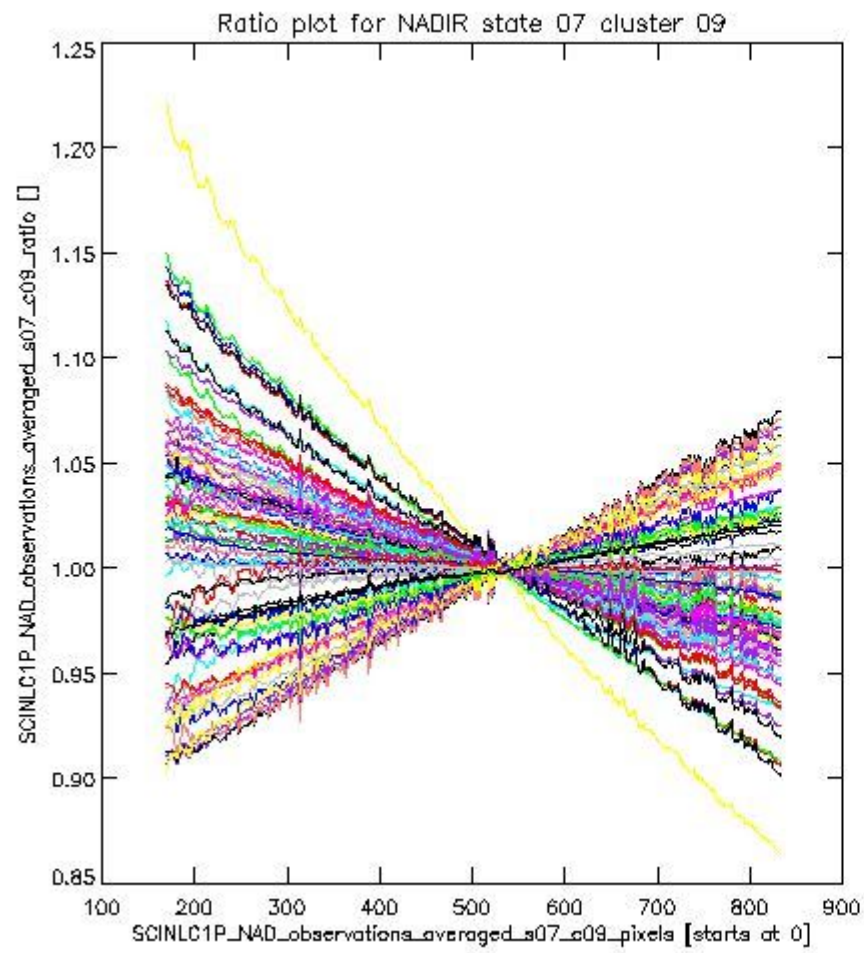


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	08JAN2011 01:29:46.791
Start time of last sample	08JAN2011 23:22:05.742
Reference period start time	09DEC2010 01:30:35.293
Reference period stop time	07JAN2011 23:58:52.571
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



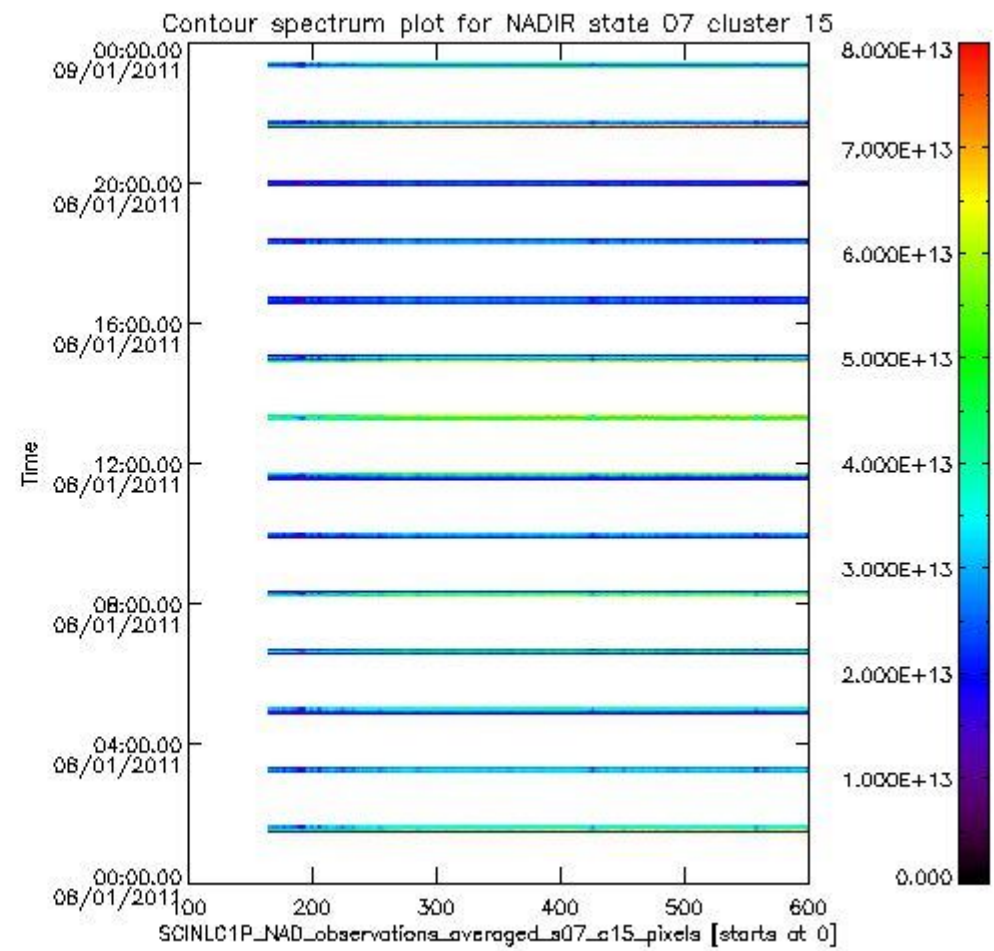
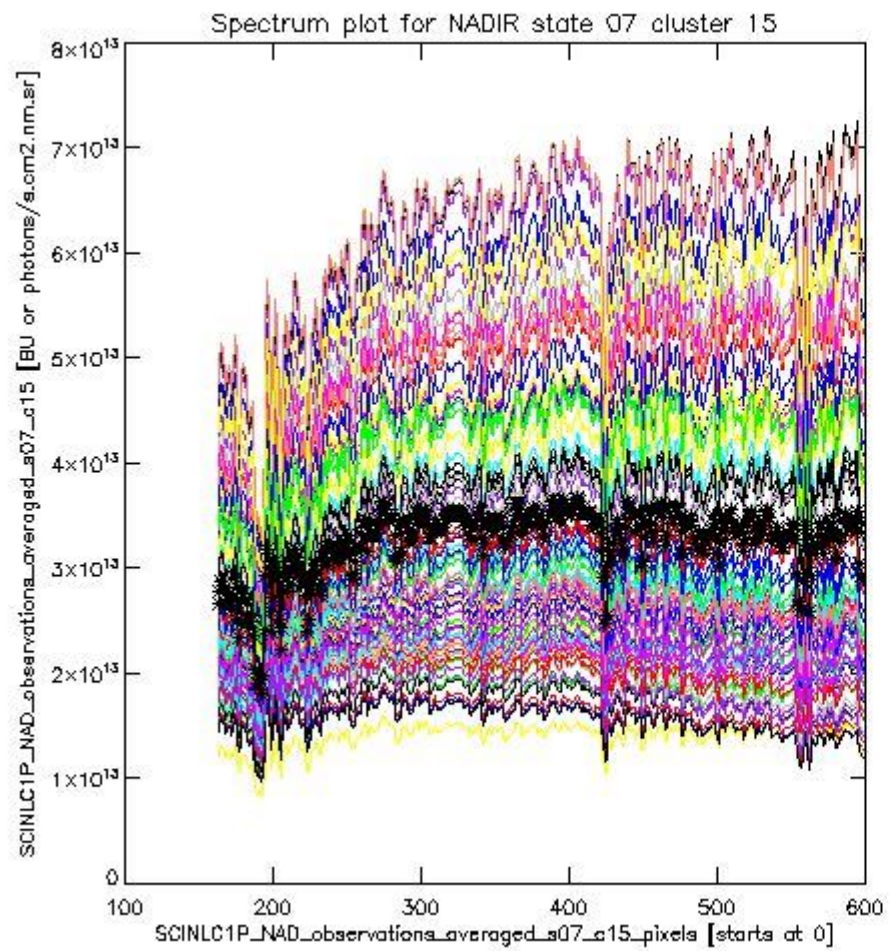
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_2.PNG



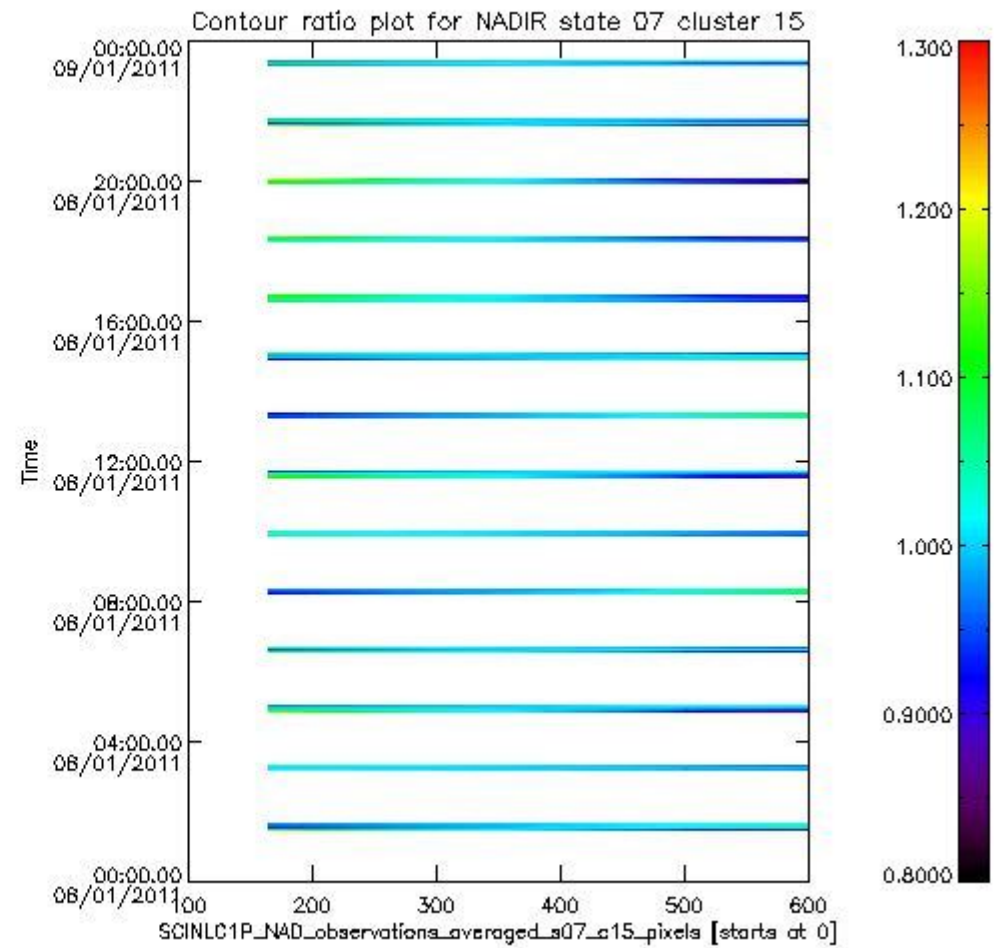
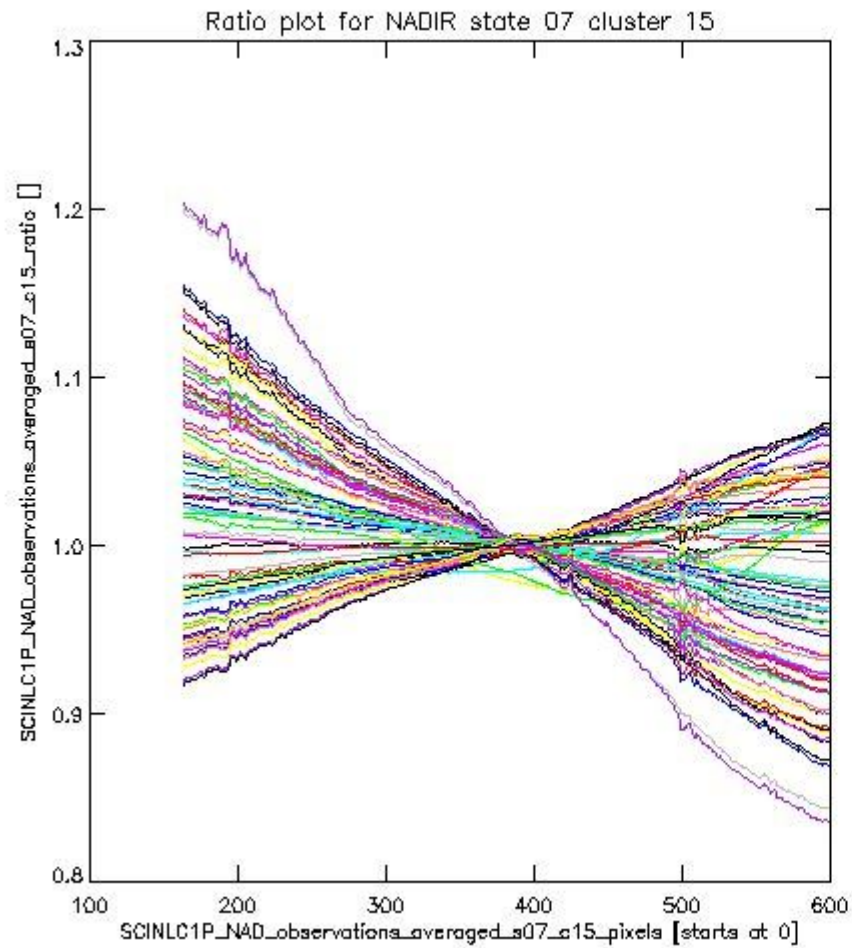
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_3.PNG

**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	08JAN2011 01:29:46.791
Start time of last sample	08JAN2011 23:22:05.742
Reference period start time	09DEC2010 01:30:35.293
Reference period stop time	07JAN2011 23:58:52.571
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



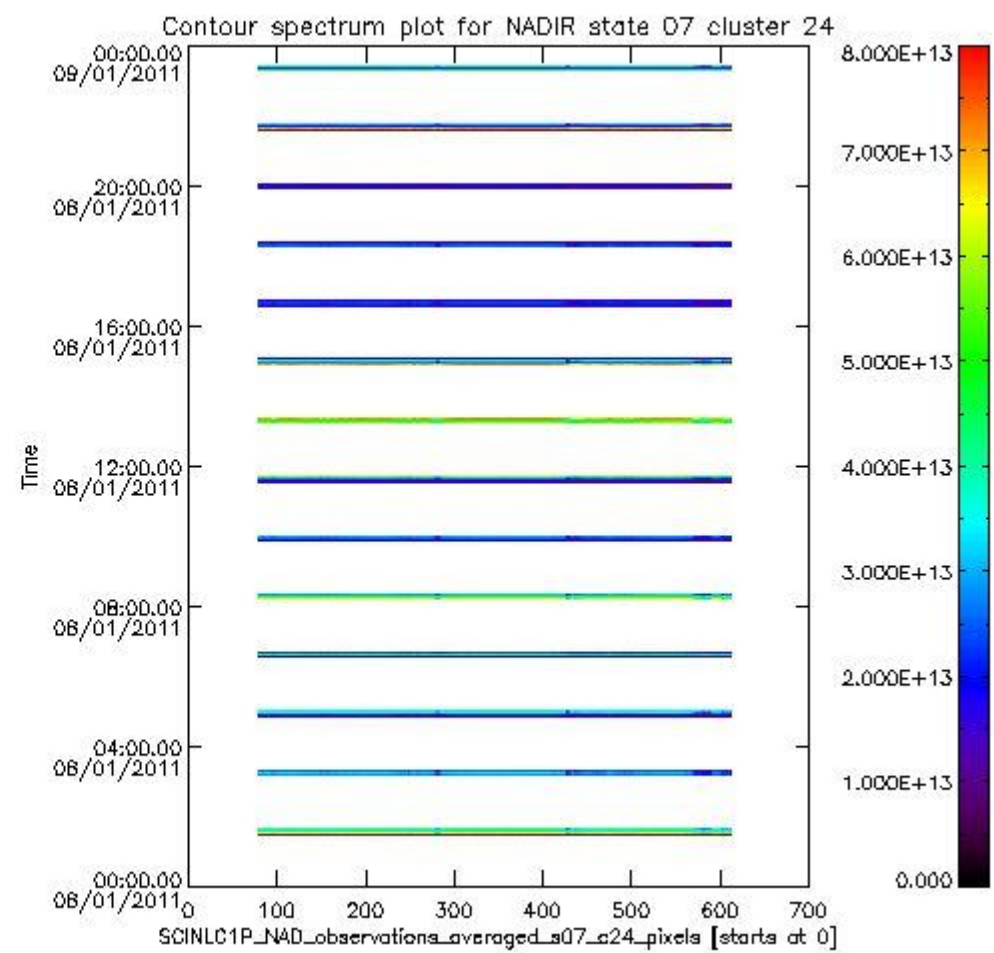
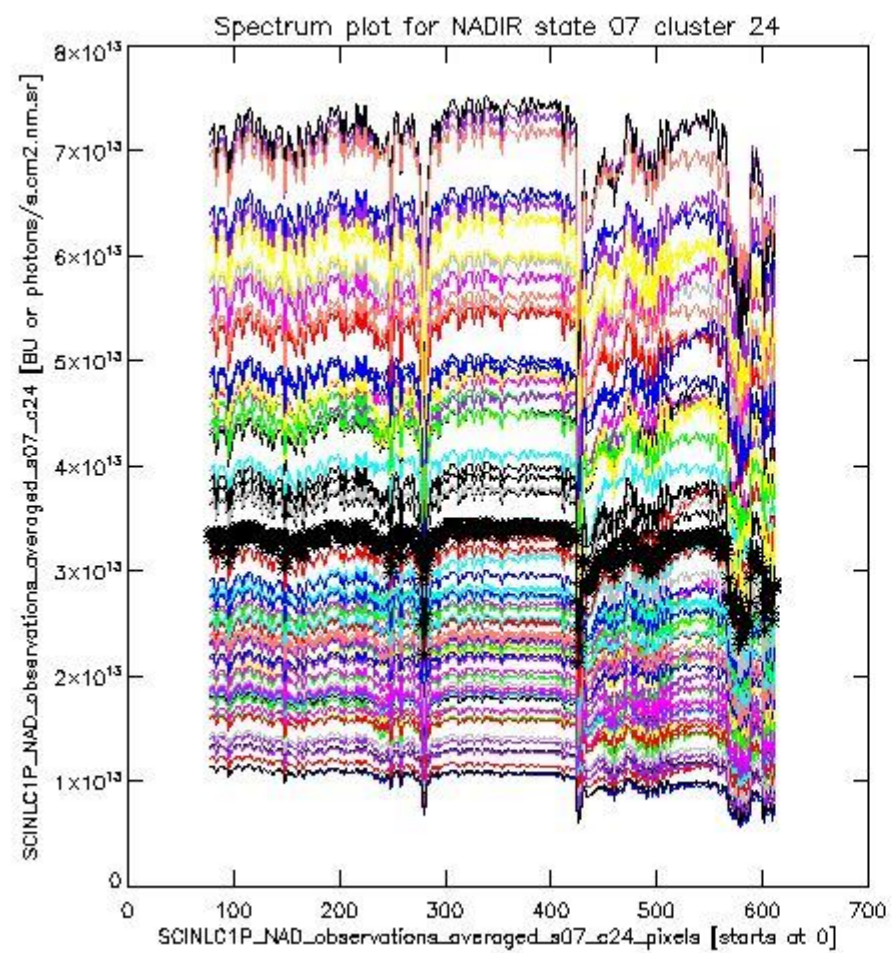
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_5.PNG

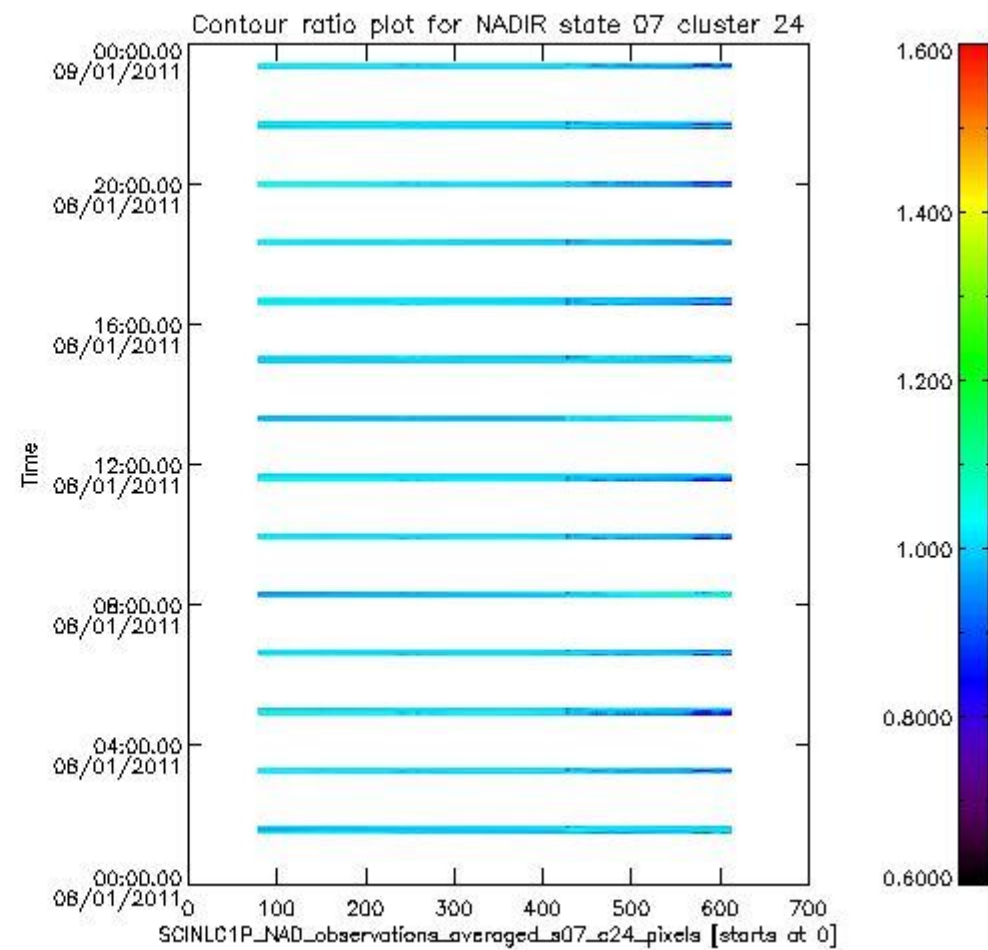
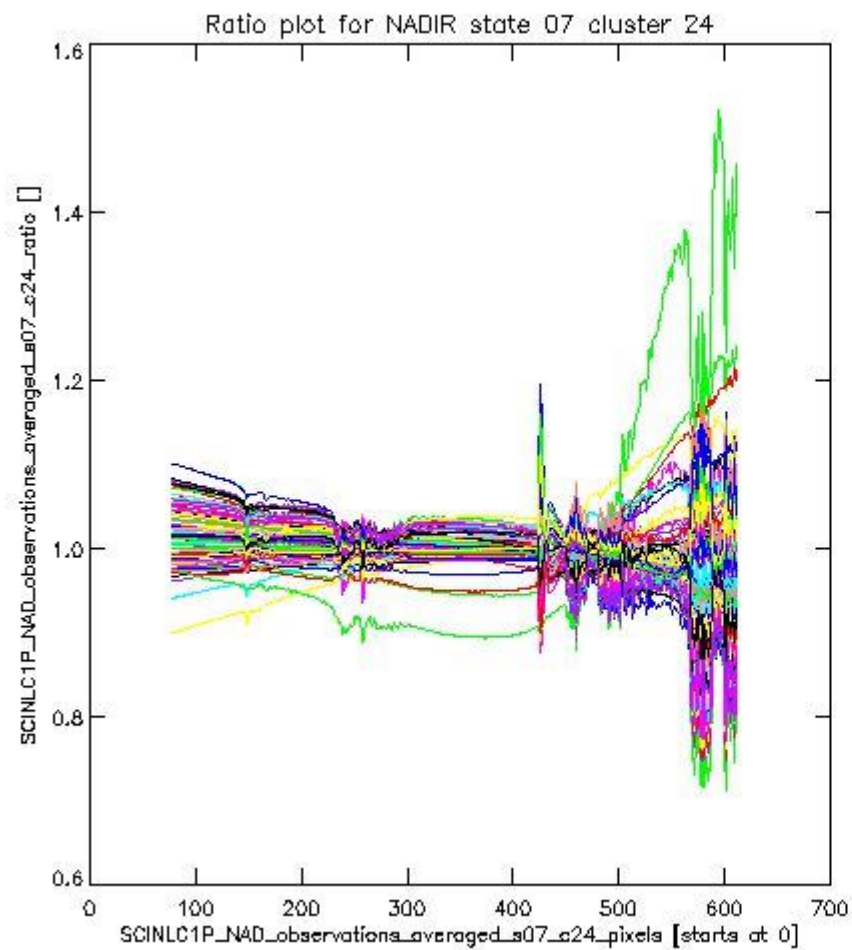
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	08JAN2011 01:29:46.791
Start time of last sample	08JAN2011 23:22:05.742
Reference period start time	09DEC2010 01:30:35.293
Reference period stop time	07JAN2011 23:58:52.571
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\_20110108\_6.PNG

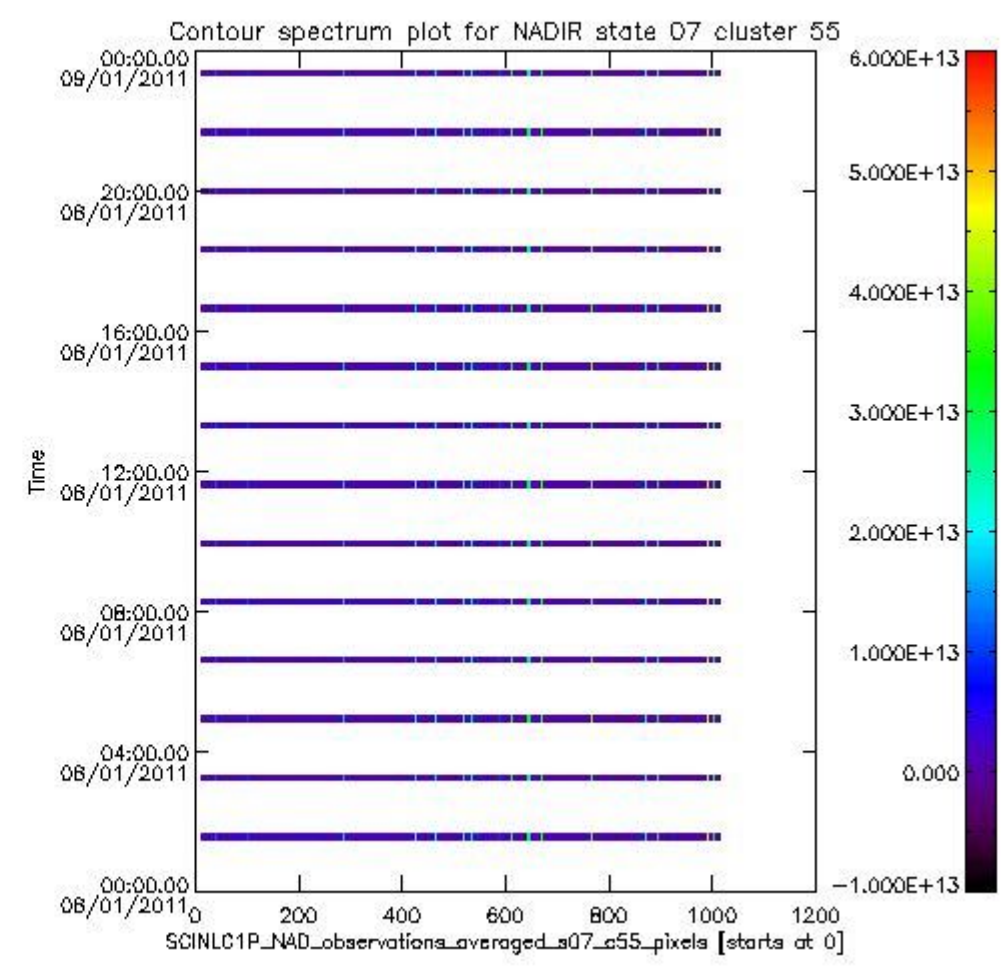
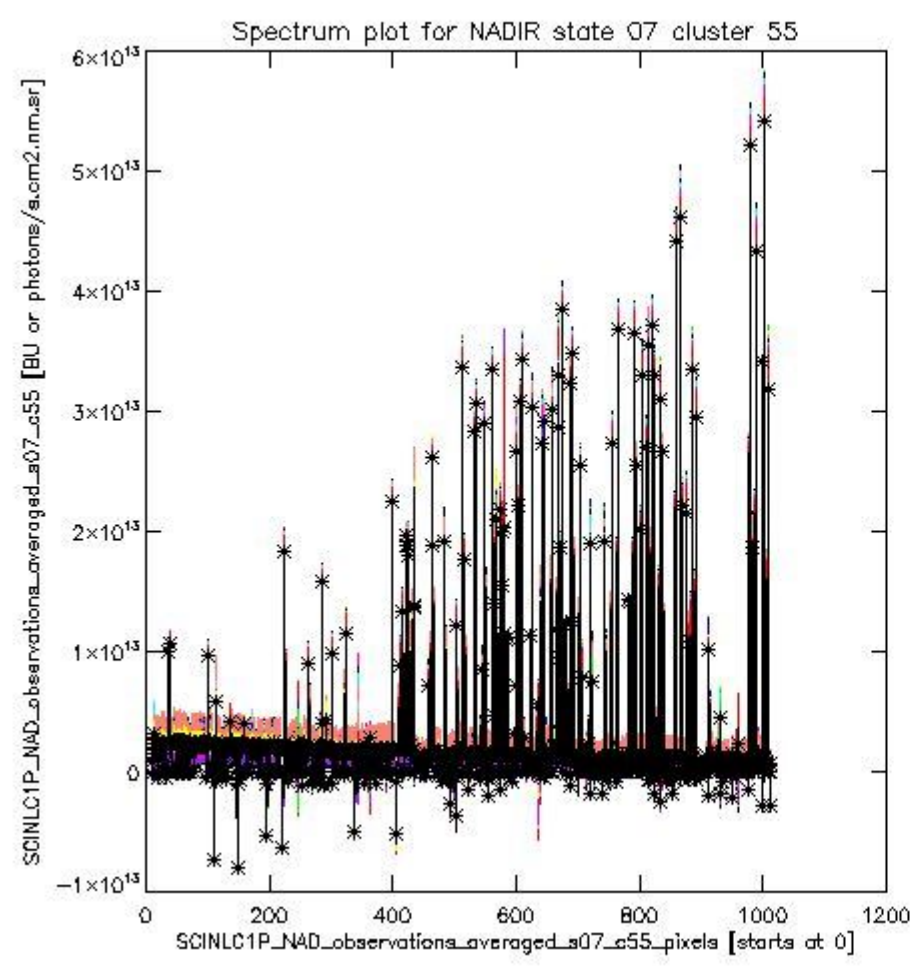




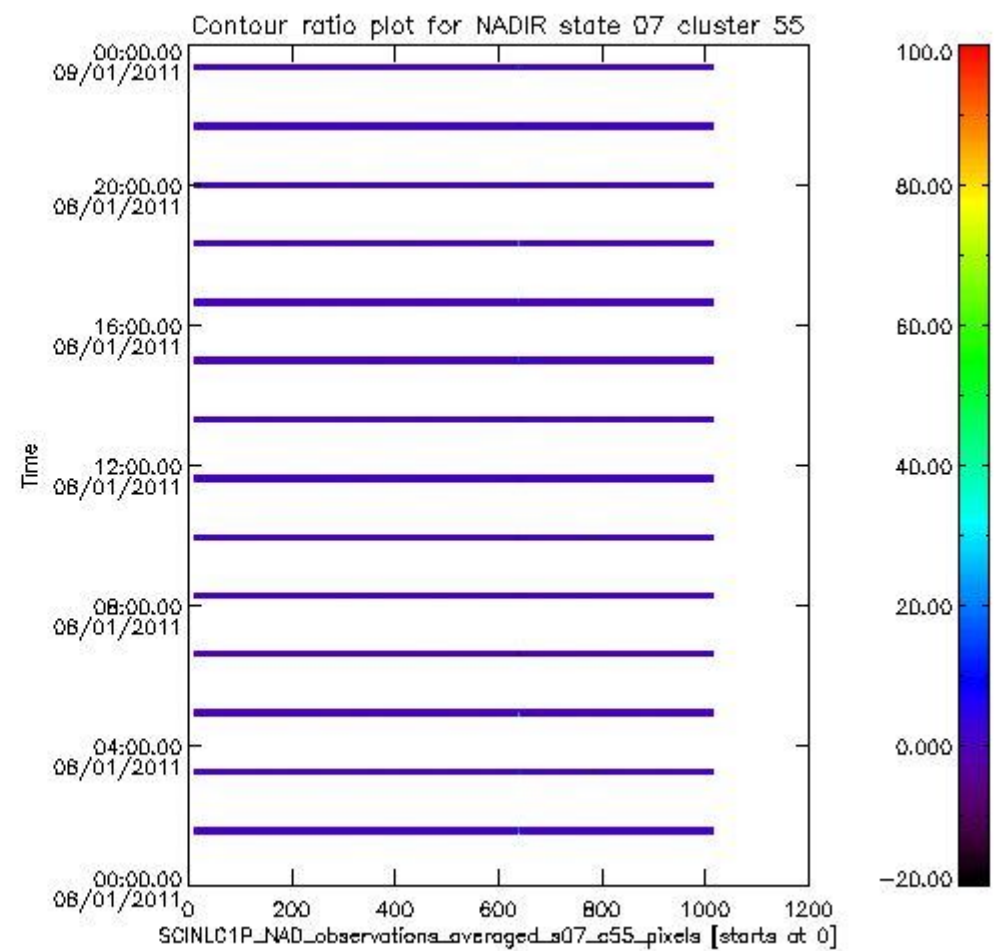
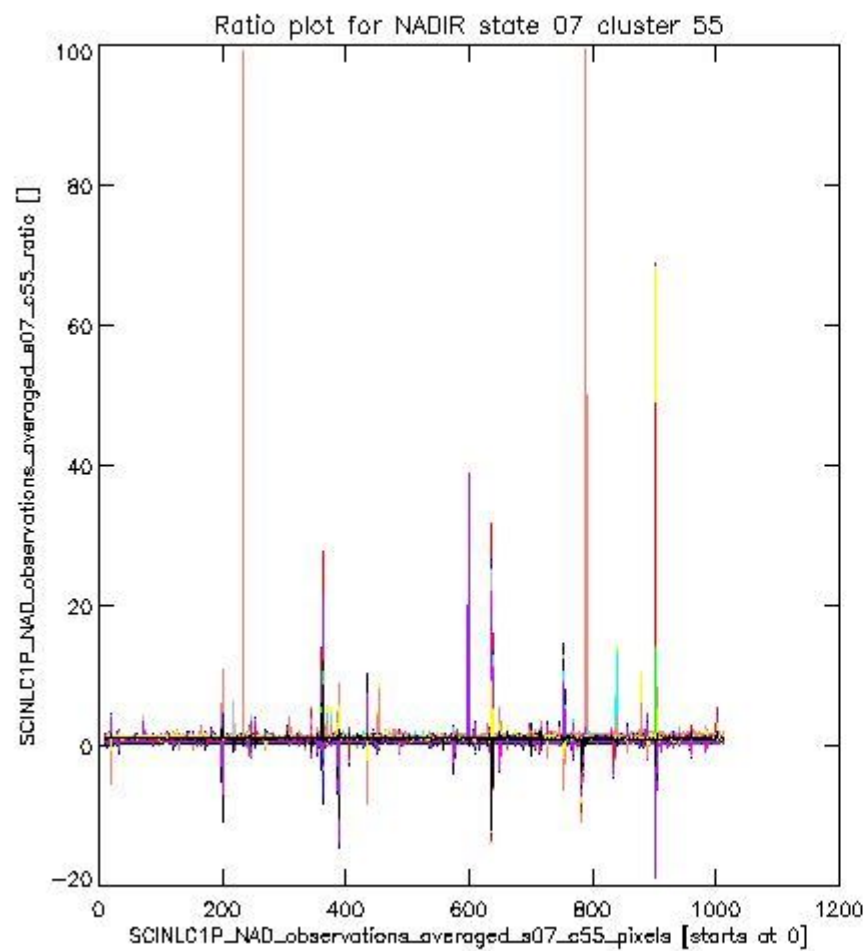
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_7.PNG

**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	08JAN2011 01:29:46.791
Start time of last sample	08JAN2011 23:22:05.742
Reference period start time	09DEC2010 01:30:35.293
Reference period stop time	07JAN2011 23:58:52.571
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



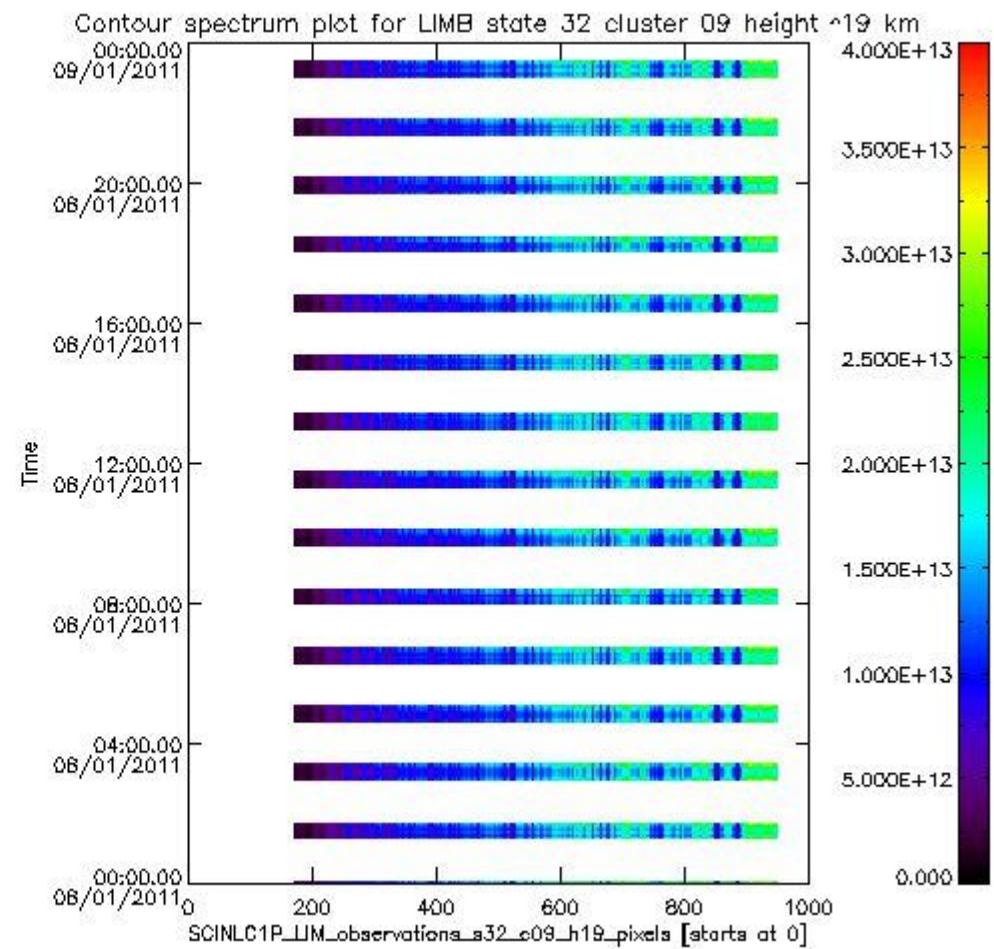
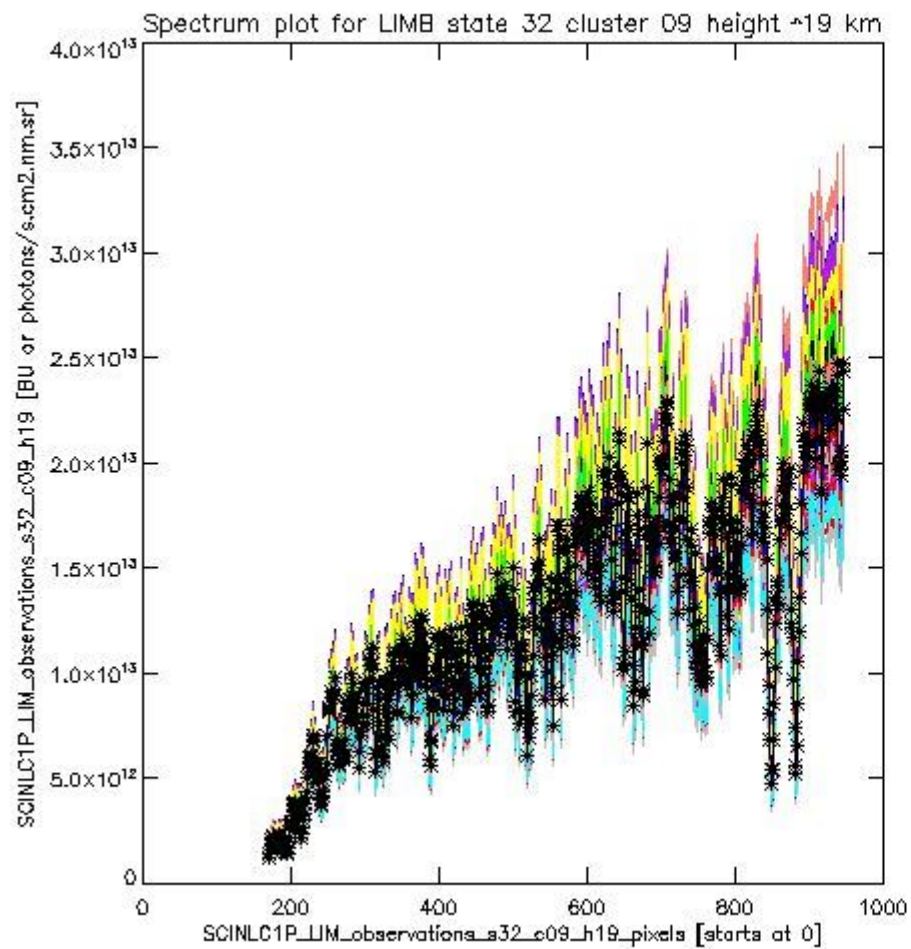
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_8.PNG



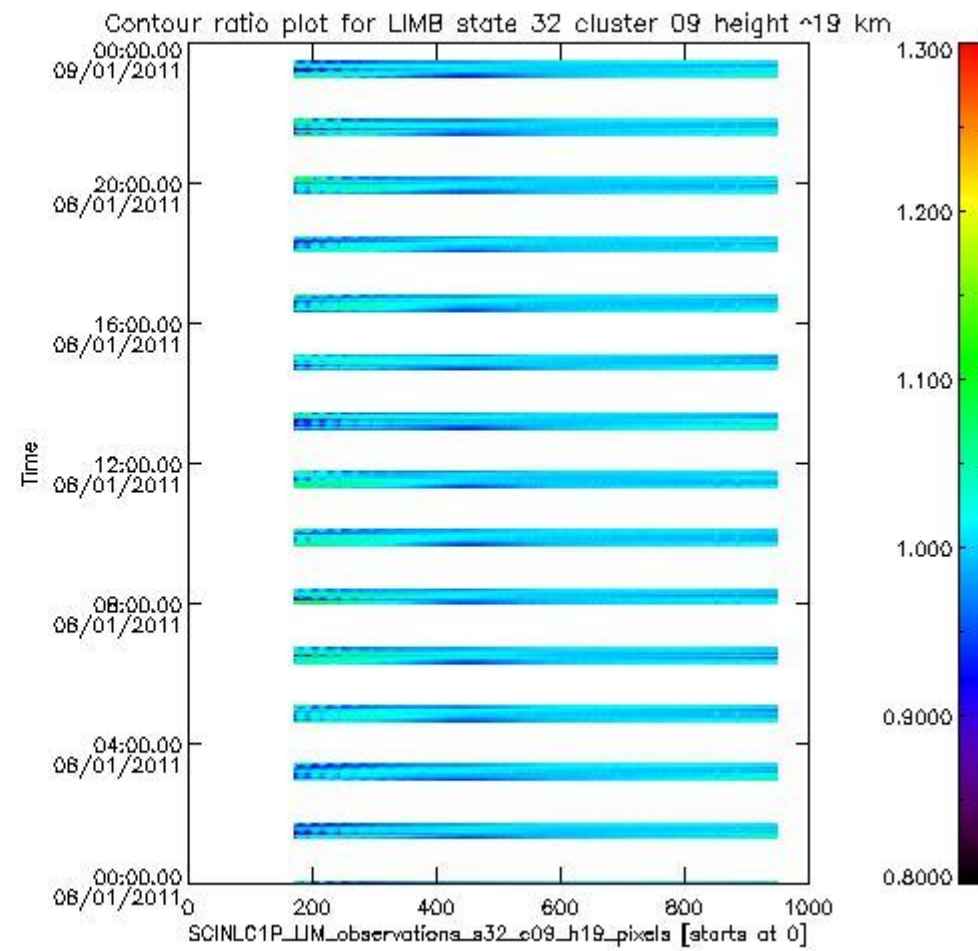
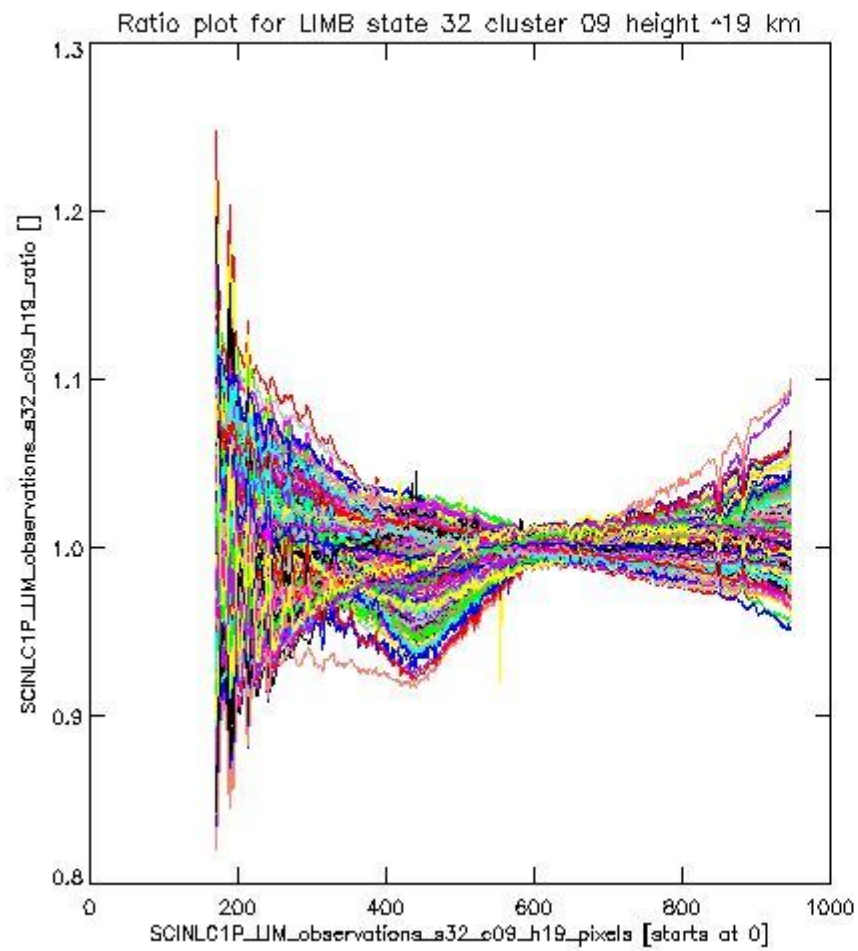
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_9.PNG

**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	08JAN2011 00:00:01.134
Start time of last sample	08JAN2011 23:27:19.789
Reference period start time	09DEC2010 00:00:34.933
Reference period stop time	07JAN2011 23:57:58.392
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



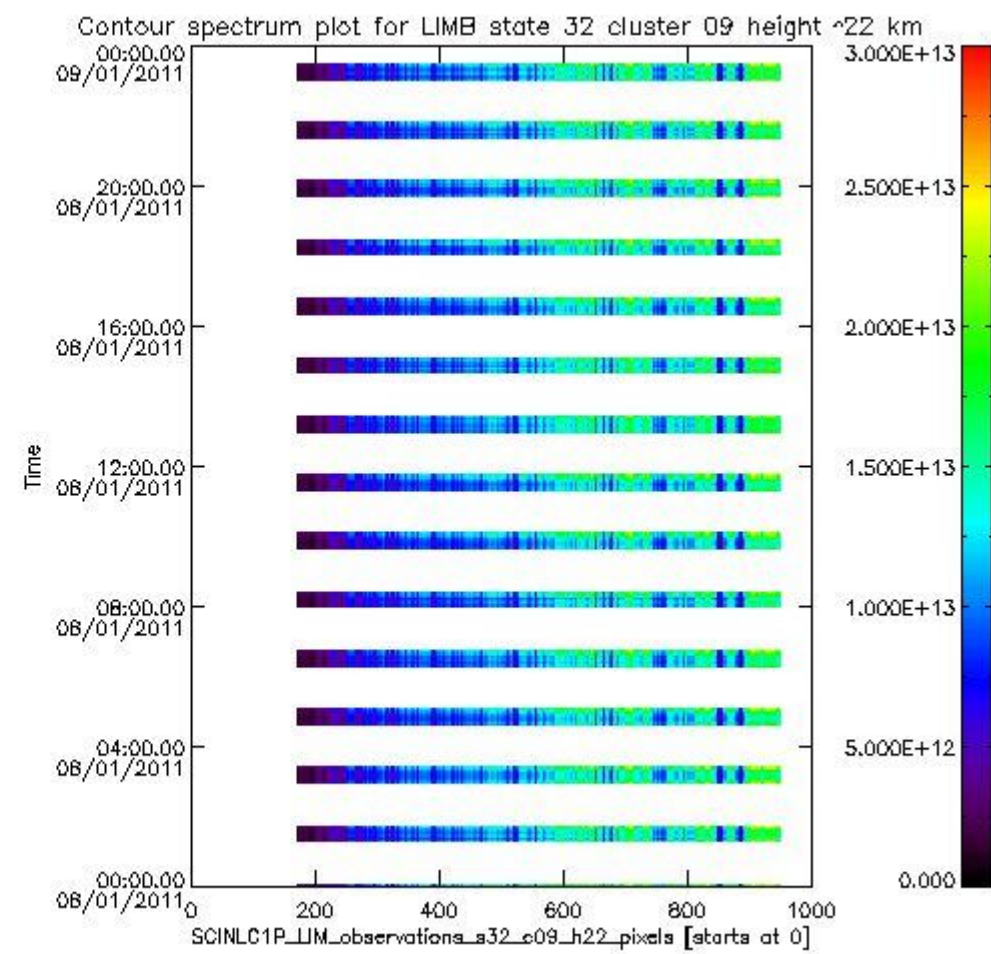
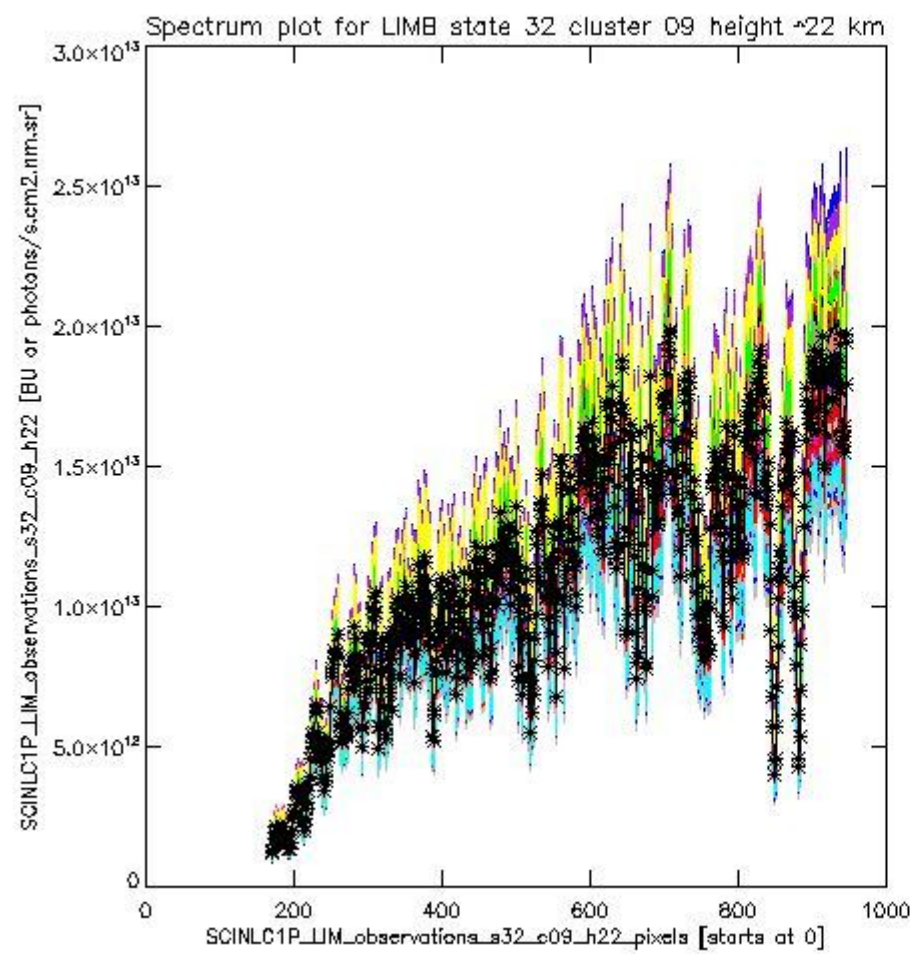
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_10.PNG



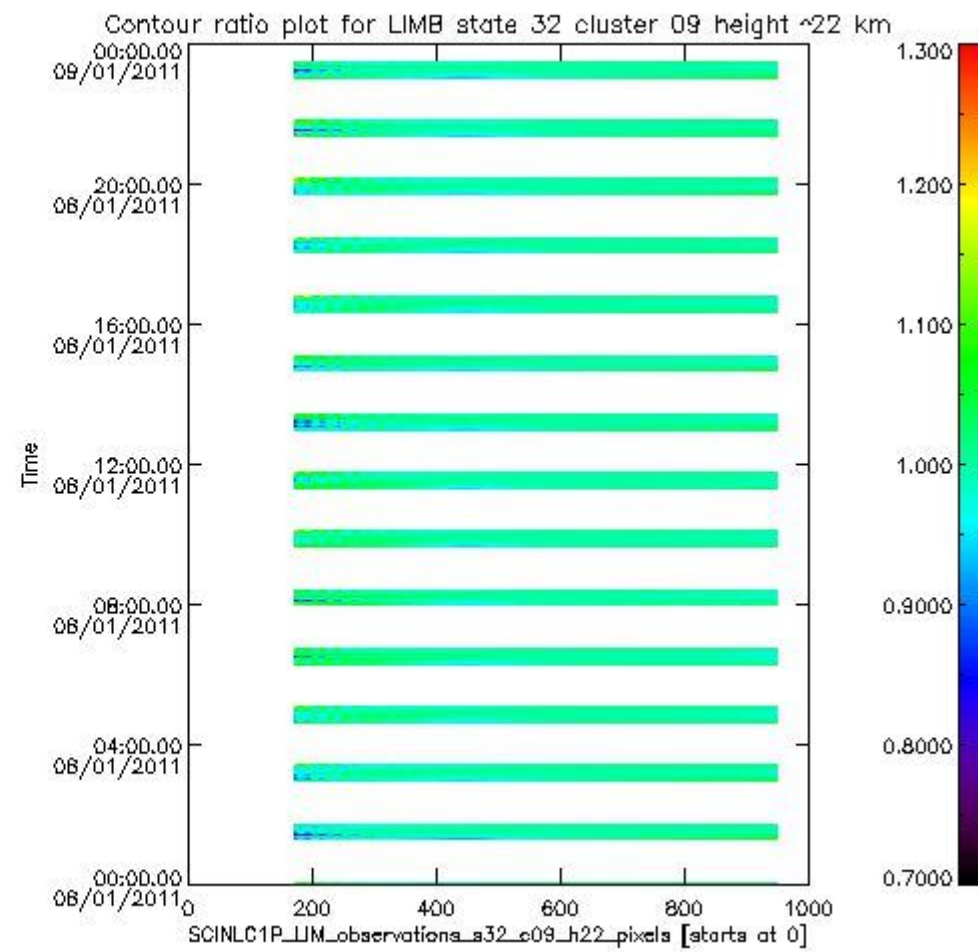
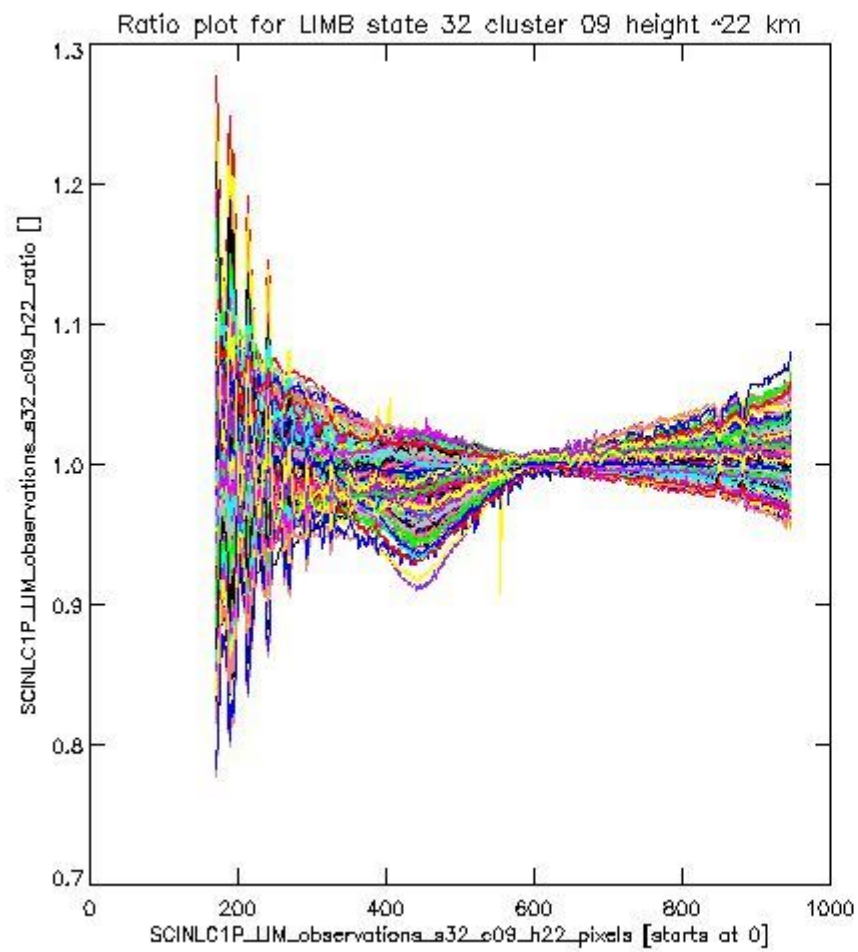
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_11.PNG

**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	08JAN2011 00:00:01.134
Start time of last sample	08JAN2011 23:27:19.789
Reference period start time	09DEC2010 00:00:34.933
Reference period stop time	07JAN2011 23:57:58.392
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



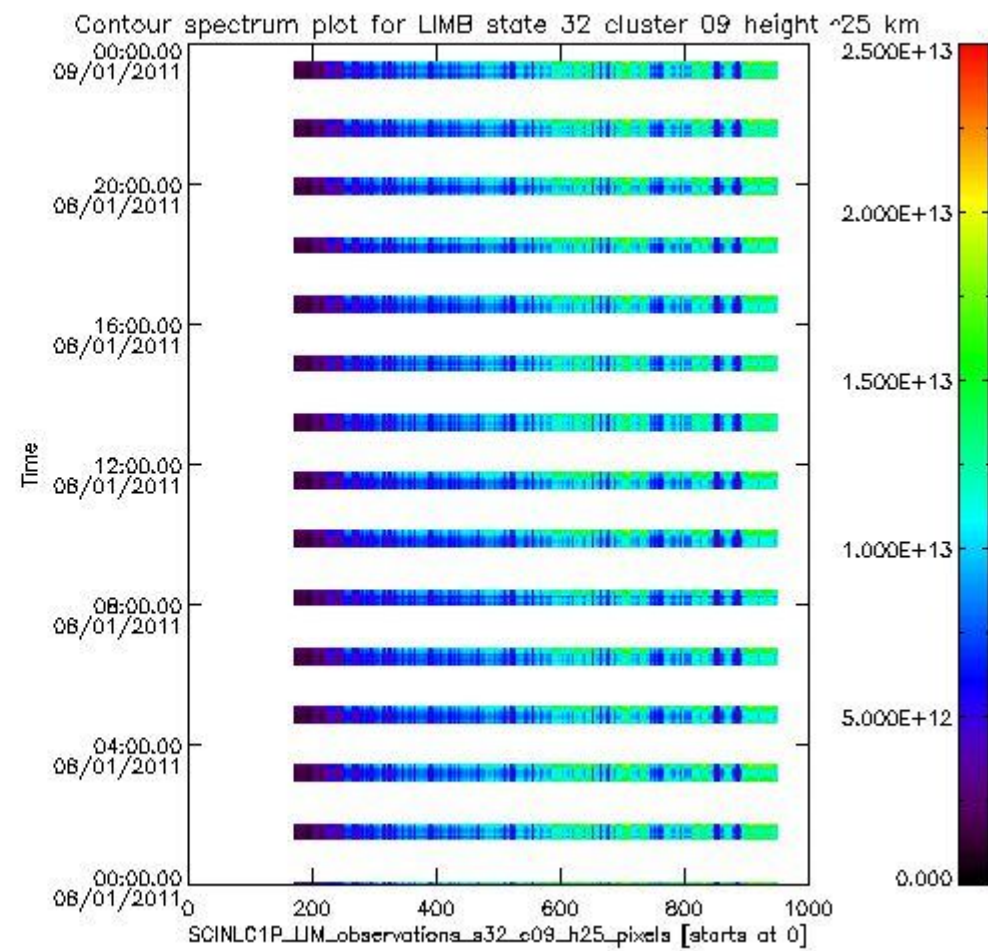
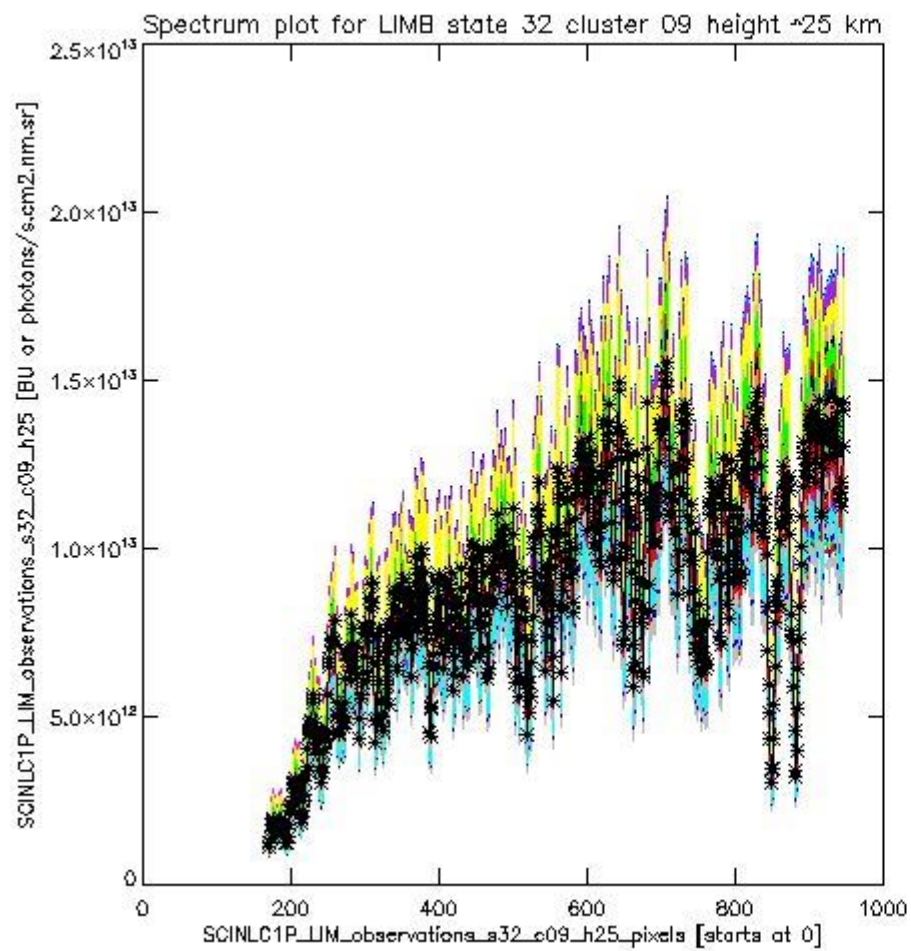
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_13.PNG

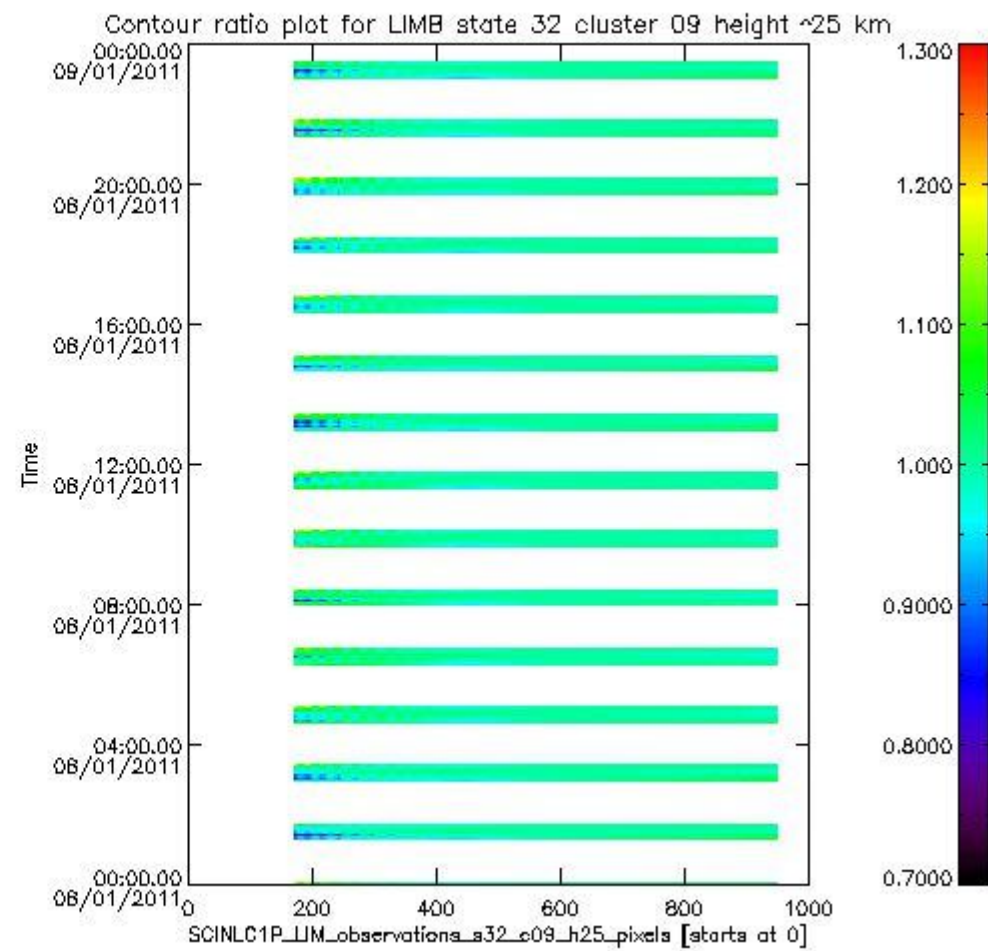
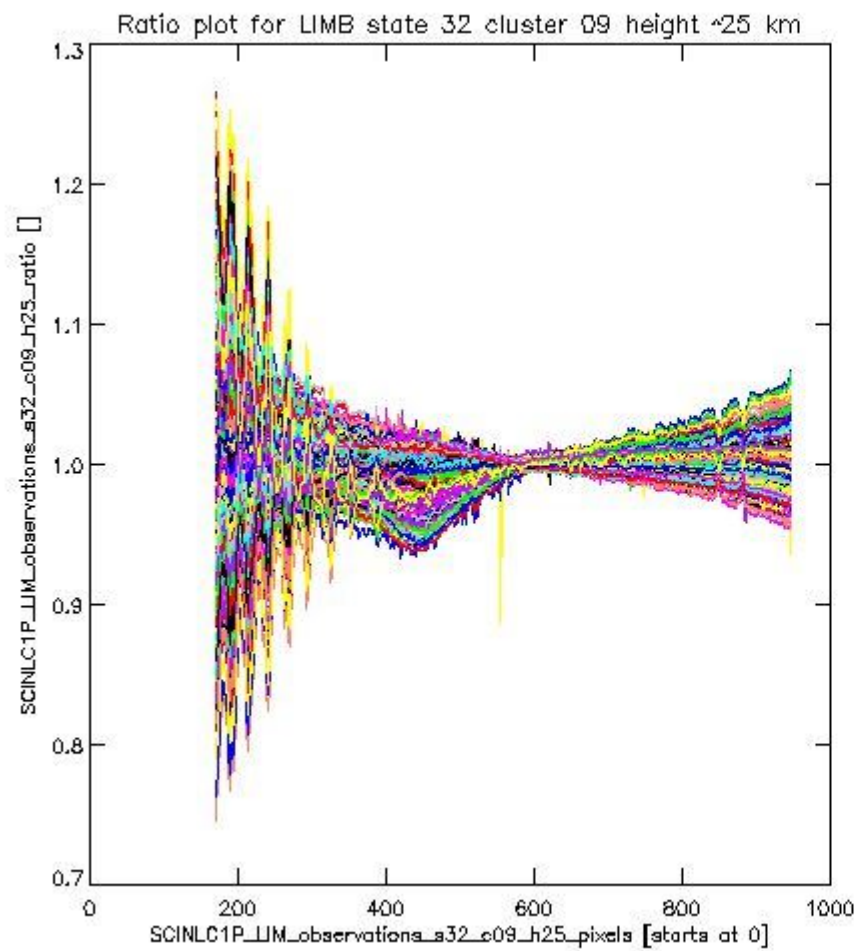
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	08JAN2011 00:00:01.134
Start time of last sample	08JAN2011 23:27:19.789
Reference period start time	09DEC2010 00:00:34.933
Reference period stop time	07JAN2011 23:57:58.392
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\_20110108\_14.PNG

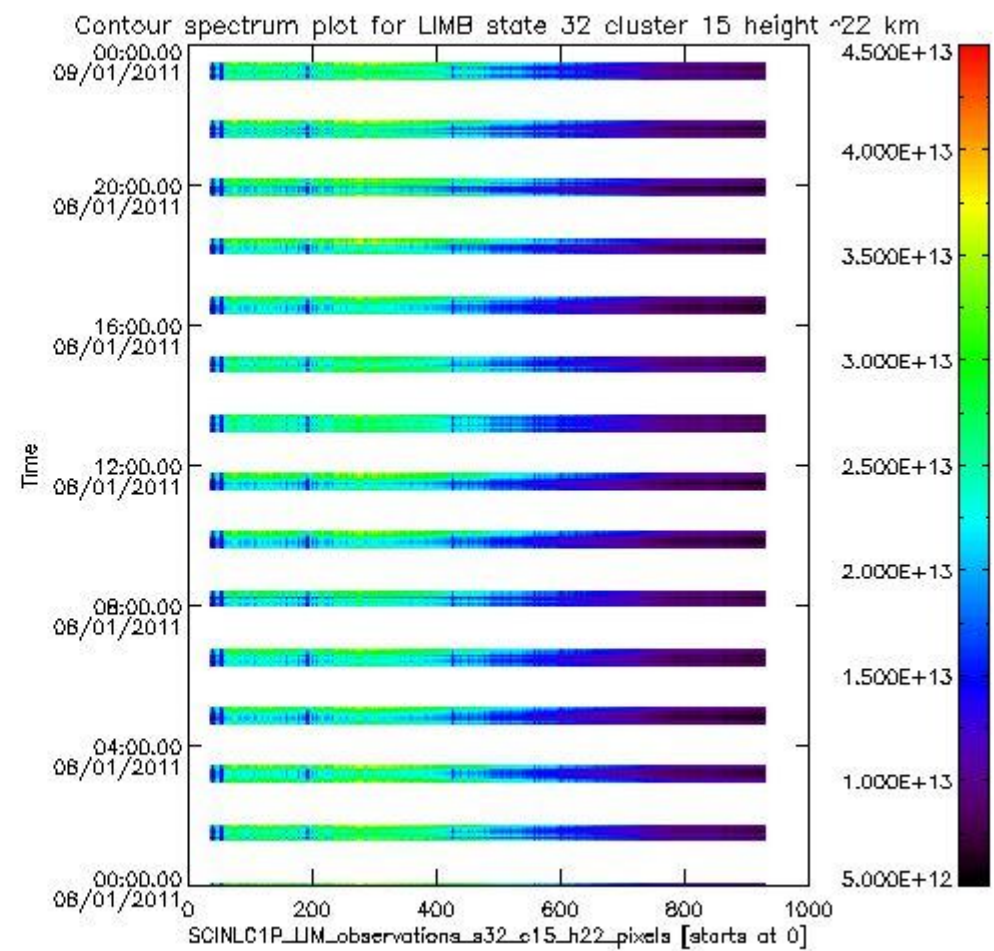
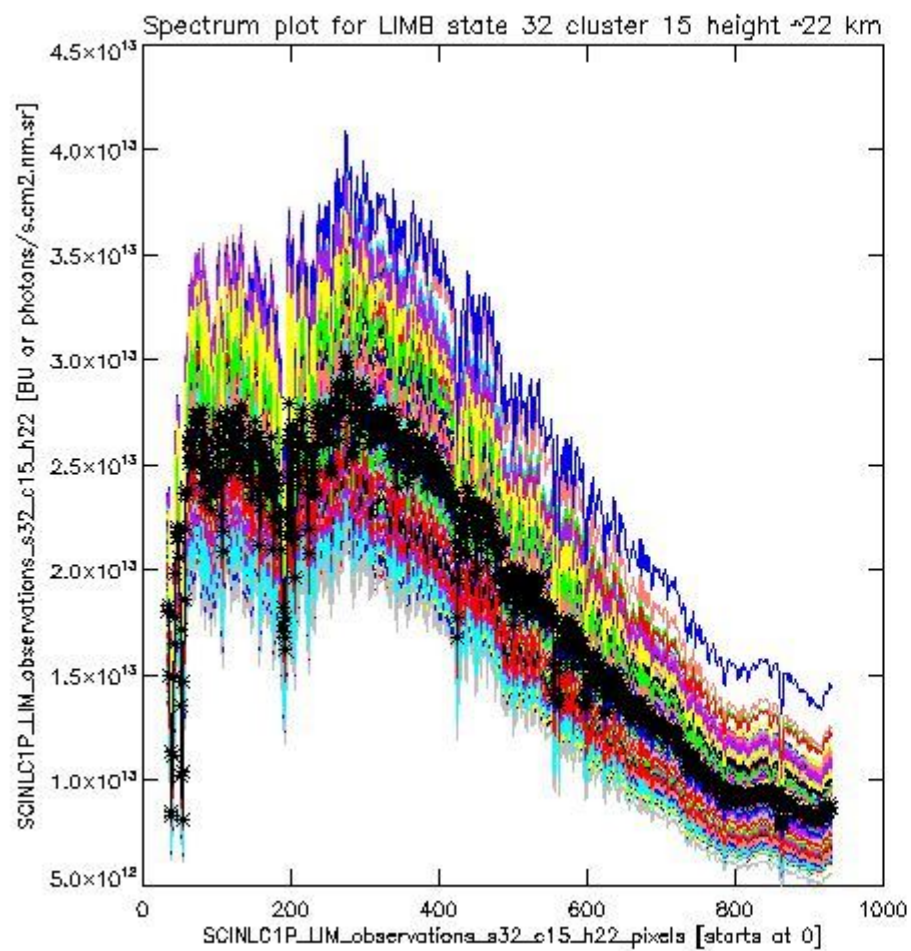




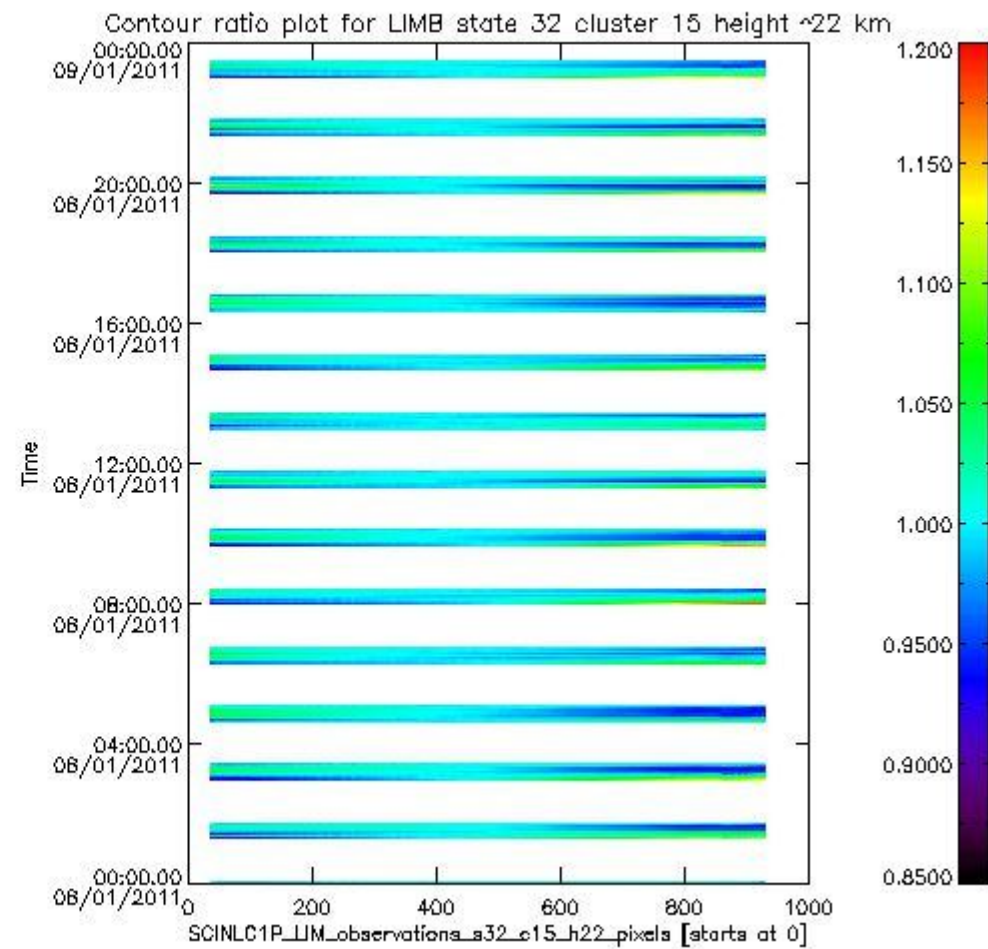
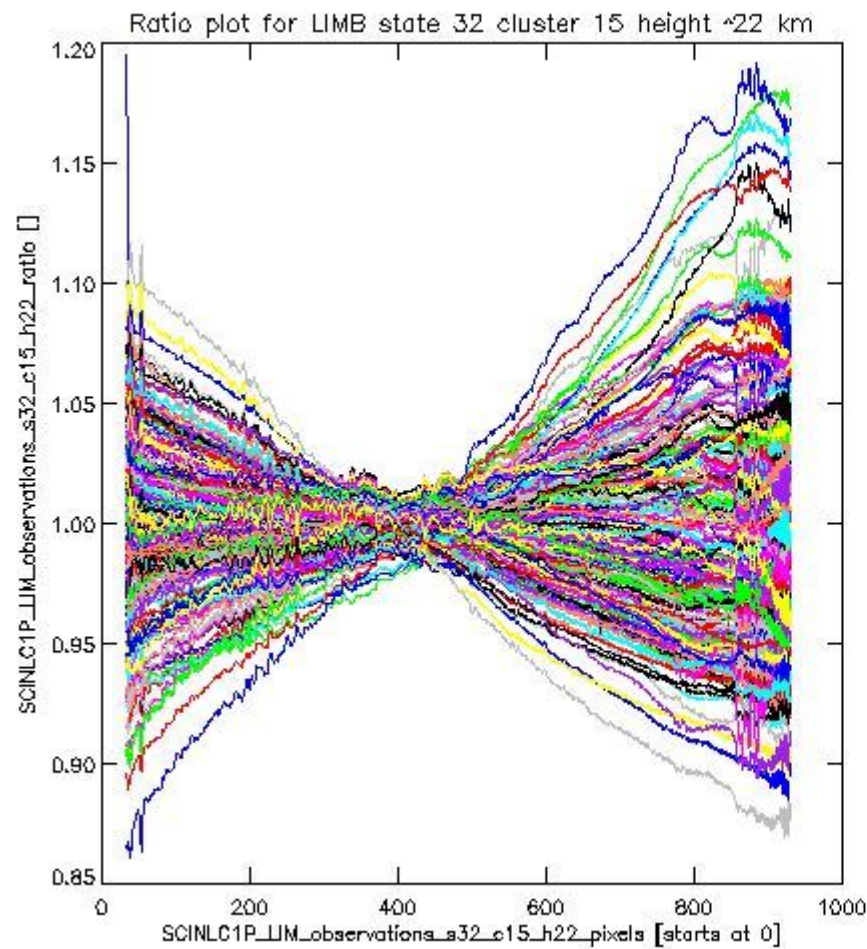
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_15.PNG

**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	08JAN2011 00:00:01.134
Start time of last sample	08JAN2011 23:27:19.789
Reference period start time	09DEC2010 00:00:34.933
Reference period stop time	07JAN2011 23:57:58.392
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



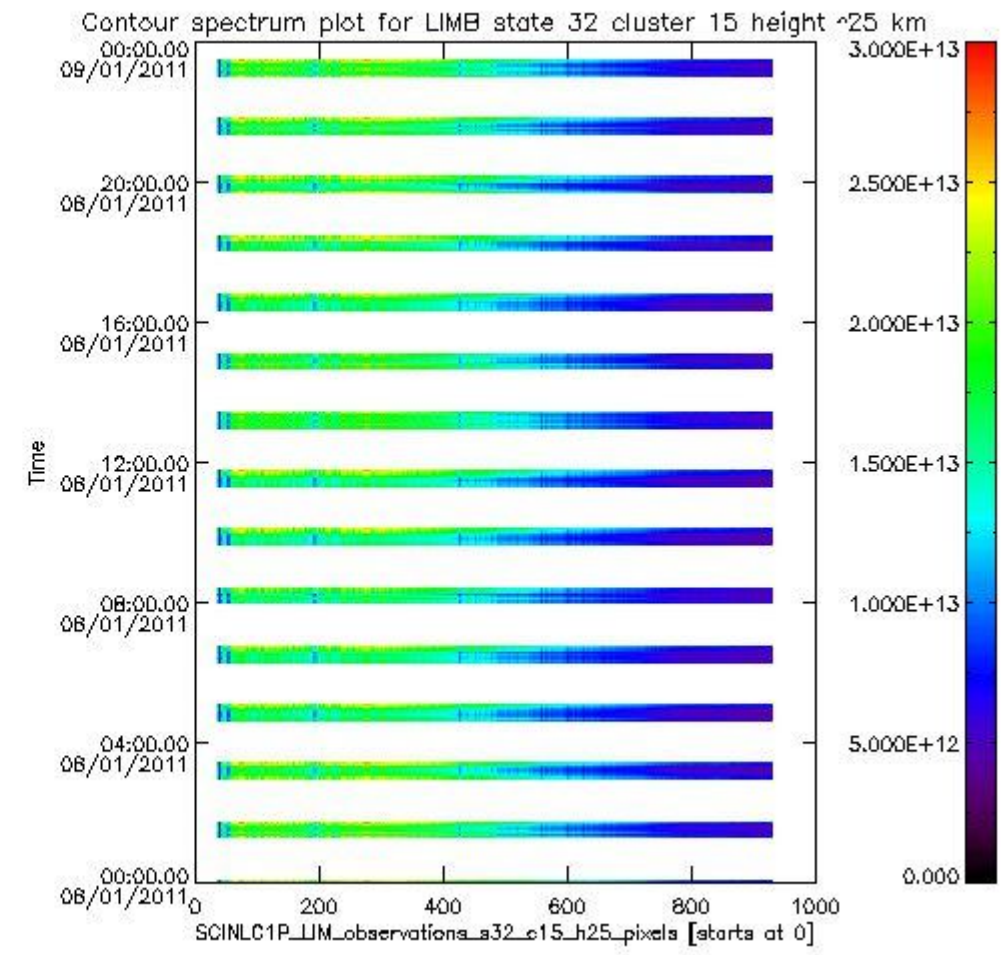
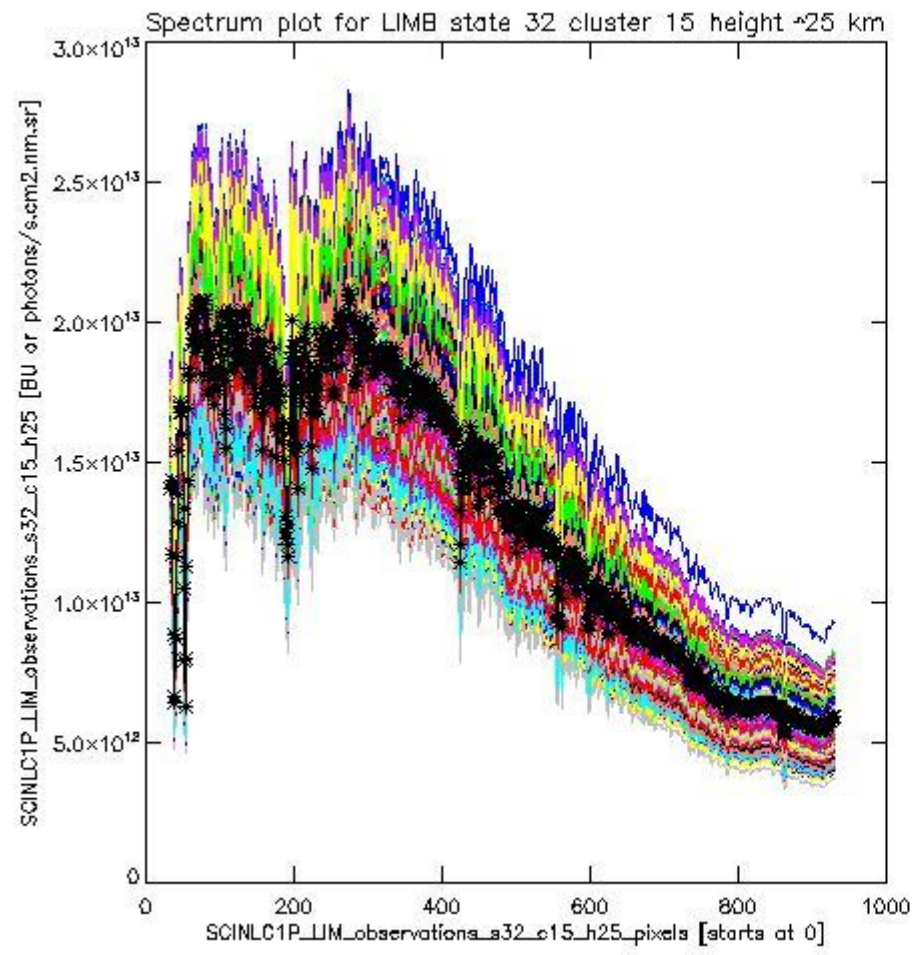
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_16.PNG



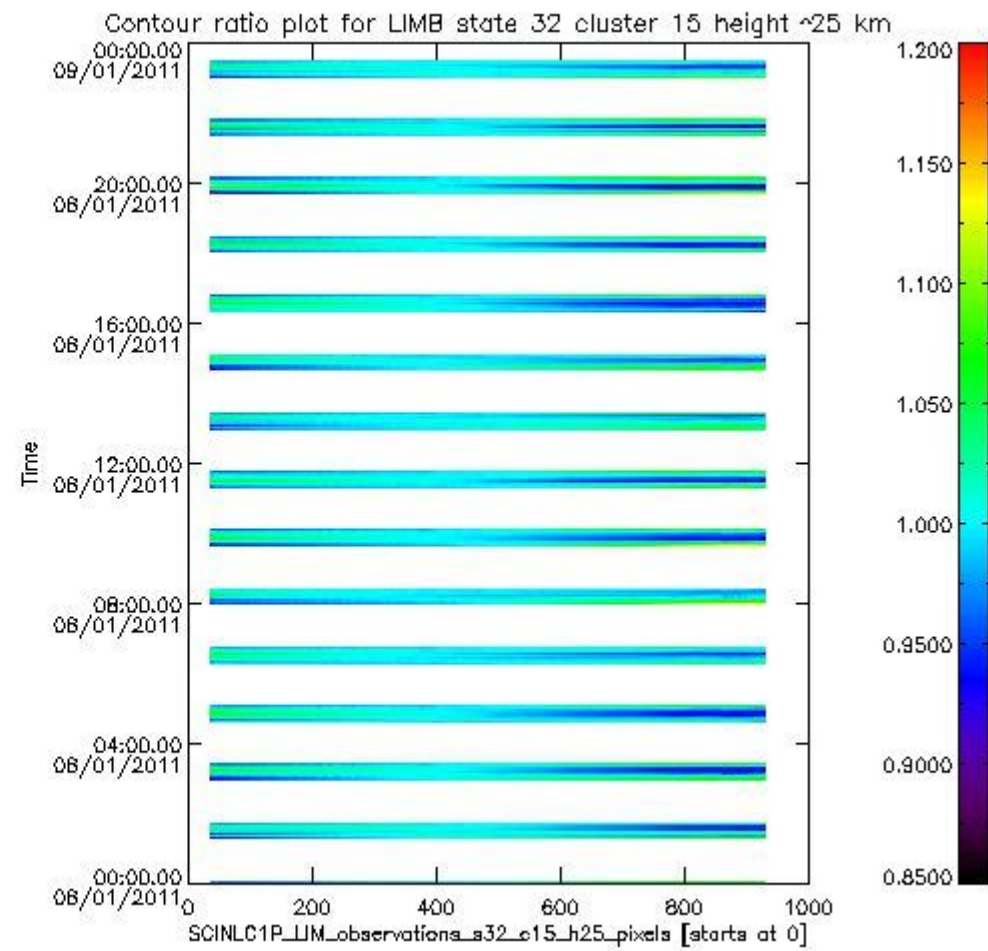
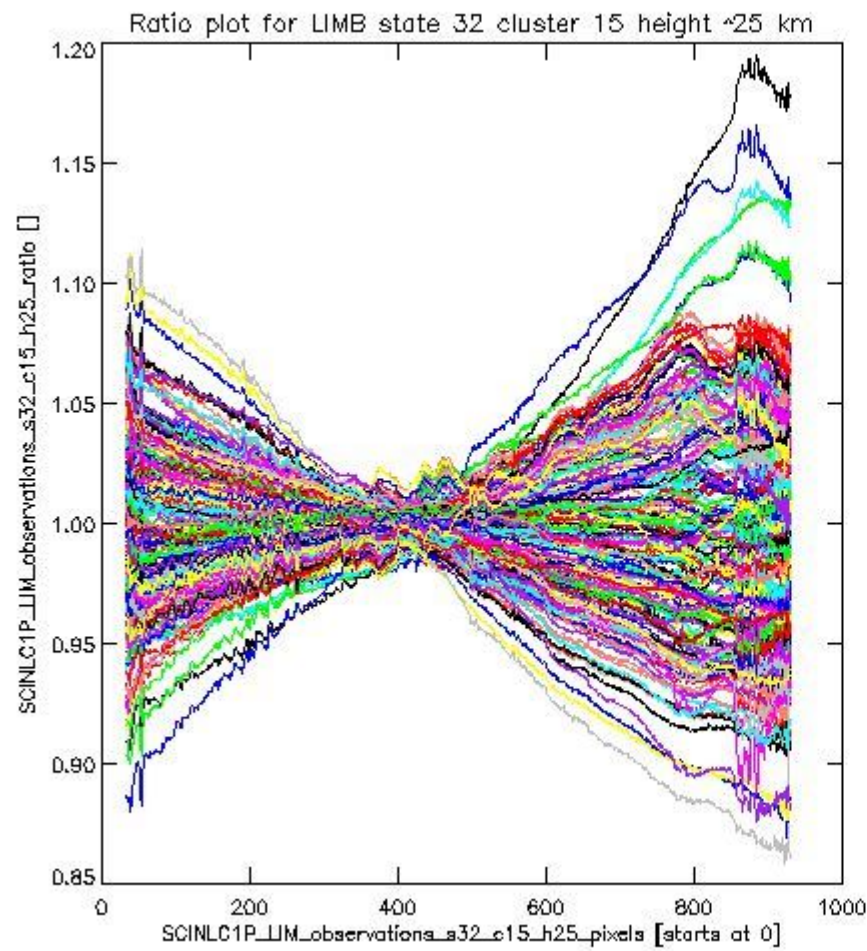
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_17.PNG

**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	08JAN2011 00:00:01.134
Start time of last sample	08JAN2011 23:27:19.789
Reference period start time	09DEC2010 00:00:34.933
Reference period stop time	07JAN2011 23:57:58.392
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



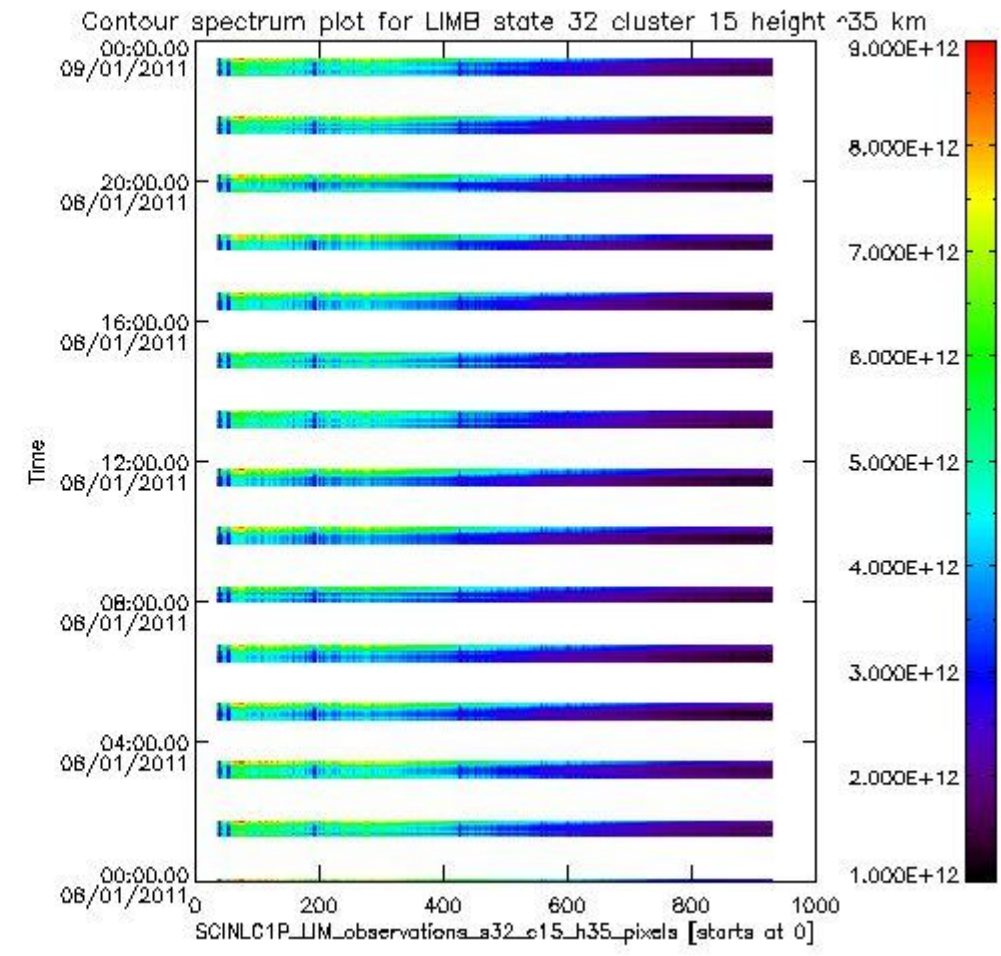
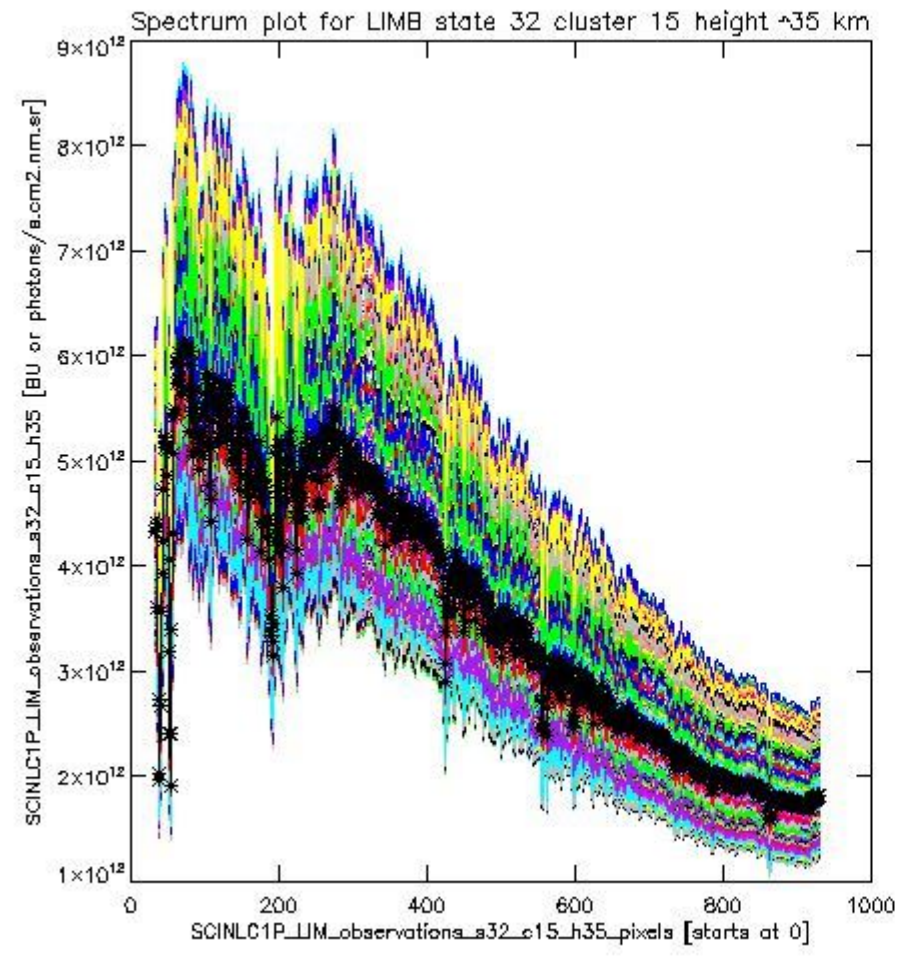
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_18.PNG



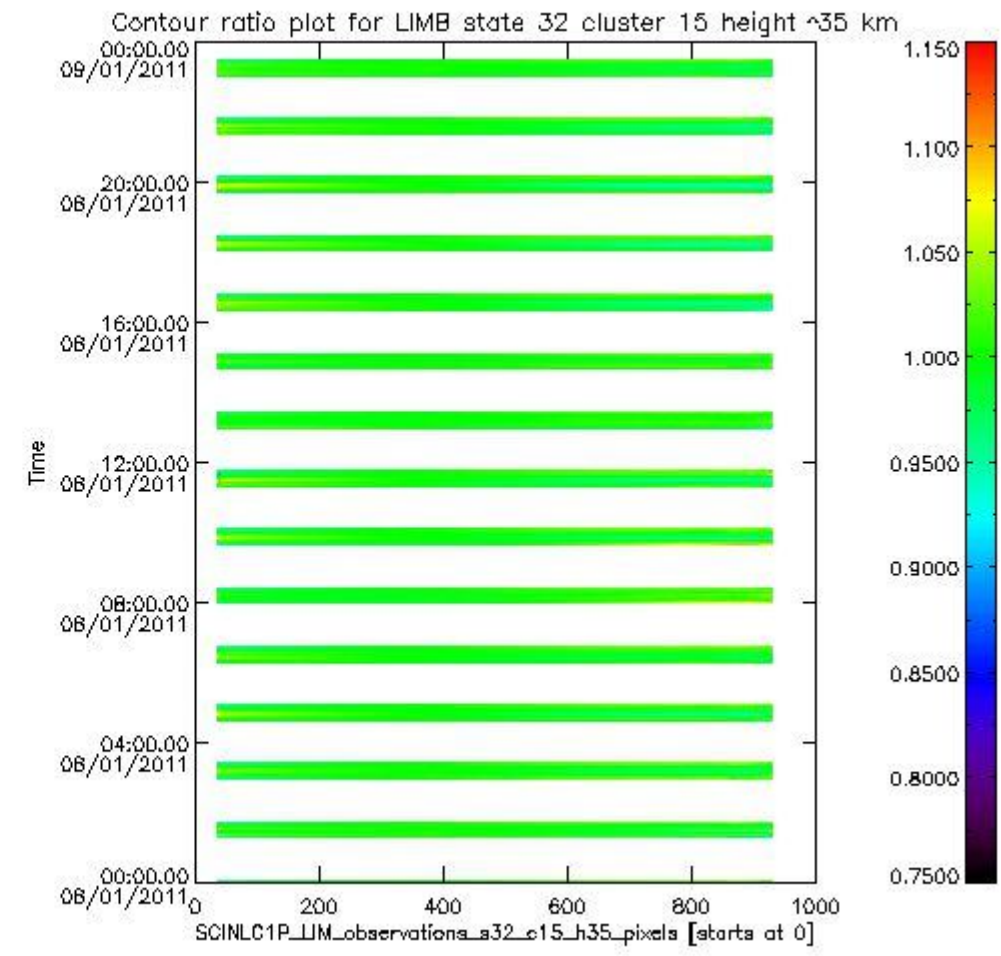
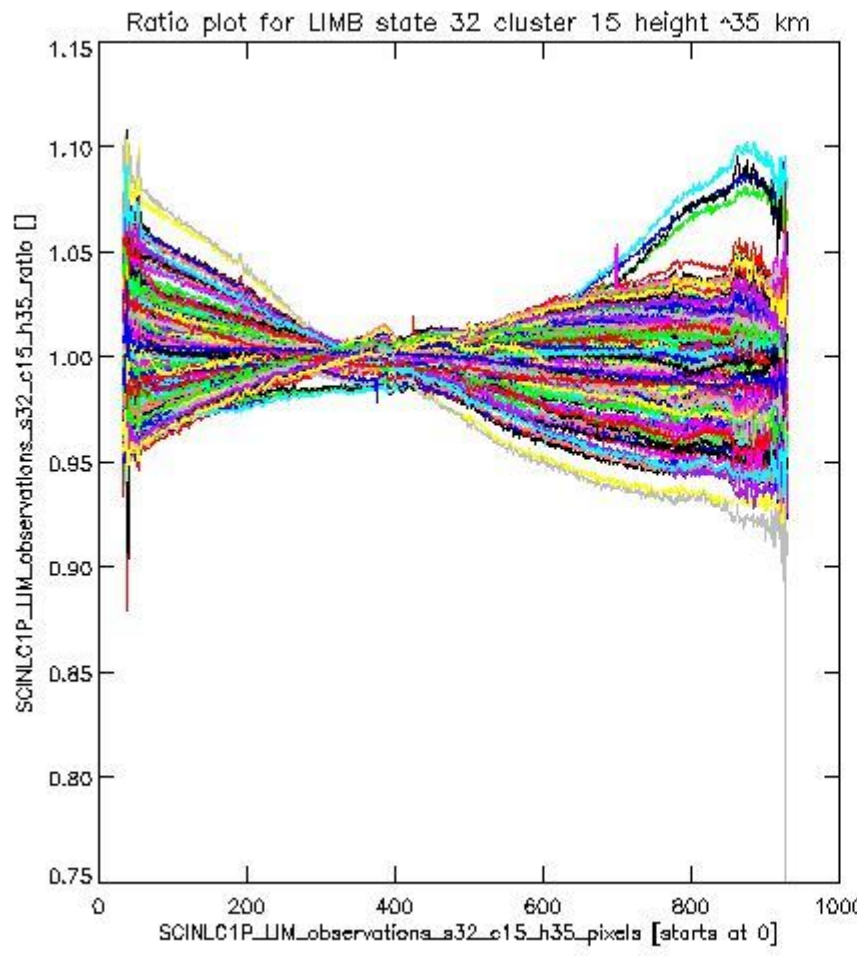
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_19.PNG

**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	08JAN2011 00:00:01.134
Start time of last sample	08JAN2011 23:27:19.789
Reference period start time	09DEC2010 00:00:34.933
Reference period stop time	07JAN2011 23:57:58.392
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\_20110108\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110108\_21.PNG

