

# 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	13JUN2011 06:55:39
Data source version	SCIA/7.04-U
Processing scope for products	31MAY2011 00:00:00 to 01JUN2011 00:00:00
Start time of first product within scope	31MAY2011 00:04:11
Stop time of last product within scope	01JUN2011 00:37:53
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	31MAY2011 00:37:22.593	31MAY2011 22:29:27.248
1	NADIR	07	09	N/A	31MAY2011 00:37:22.593	31MAY2011 22:29:27.248
2	NADIR	07	15	N/A	31MAY2011 00:37:22.593	31MAY2011 22:29:27.248
3	NADIR	07	24	N/A	31MAY2011 00:37:22.593	31MAY2011 22:29:27.248
4	NADIR	07	55	N/A	31MAY2011 00:37:22.593	31MAY2011 22:29:27.248
5	LIMB	32	09	~19 km	31MAY2011 00:22:09.214	31MAY2011 23:59:41.666
6	LIMB	32	09	~22 km	31MAY2011 00:22:09.214	31MAY2011 23:59:41.666
7	LIMB	32	09	~25 km	31MAY2011 00:22:09.214	31MAY2011 23:59:41.666
8	LIMB	32	15	~22 km	31MAY2011 00:22:09.214	31MAY2011 23:59:41.666
9	LIMB	32	15	~25 km	31MAY2011 00:22:09.214	31MAY2011 23:59:41.666
10	LIMB	32	15	~35 km	31MAY2011 00:22:09.214	31MAY2011 23:59:41.666

#### 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	#cmlprk	#incmpl_rk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110531_000411_000057413103_00074_48364_1775.N1</a>	31MAY2011 00:04:11	31MAY2011 01:14:40	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110531_014425_000057413103_00075_48365_1771.N1</a>	31MAY2011 01:44:25	31MAY2011 02:54:39	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110531_032438_000057413103_00076_48366_1772.N1</a>	31MAY2011 03:24:38	31MAY2011 04:35:07	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110531_050452_000057413103_00077_48367_1779.N1</a>	31MAY2011 05:04:52	31MAY2011 06:15:07	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110531_064506_000057413103_00078_48368_1780.N1</a>	31MAY2011 06:45:06	31MAY2011 07:55:35	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110531_082520_000057413103_00079_48369_1783.N1</a>	31MAY2011 08:25:20	31MAY2011 09:35:35	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110531_100534_000057413103_00080_48370_1784.N1	31MAY2011 10:05:34	31MAY2011 11:16:03	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110531_114548_000057413103_00081_48371_1787.N1	31MAY2011 11:45:48	31MAY2011 12:56:02	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110531_132601_000057413103_00082_48372_1789.N1	31MAY2011 13:26:01	31MAY2011 14:36:30	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110531_150615_000057413103_00083_48373_1797.N1	31MAY2011 15:06:15	31MAY2011 16:16:30	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110531_164629_000057413103_00084_48374_1793.N1	31MAY2011 16:46:29	31MAY2011 17:56:58	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110531_182643_000057413103_00085_48375_1795.N1	31MAY2011 18:26:43	31MAY2011 19:37:06	0	35	31	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110531_200657_000057413103_00086_48376_1796.N1	31MAY2011 20:06:57	31MAY2011 21:17:35	0	36	30	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110531_214710_000057413103_00087_48377_1799.N1	31MAY2011 21:47:10	31MAY2011 22:57:25	0	35	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110531_232724_000057413103_00088_48378_1800.N1	31MAY2011 23:27:24	01JUN2011 00:37:53	0	36	30	0	0	1	0	0	

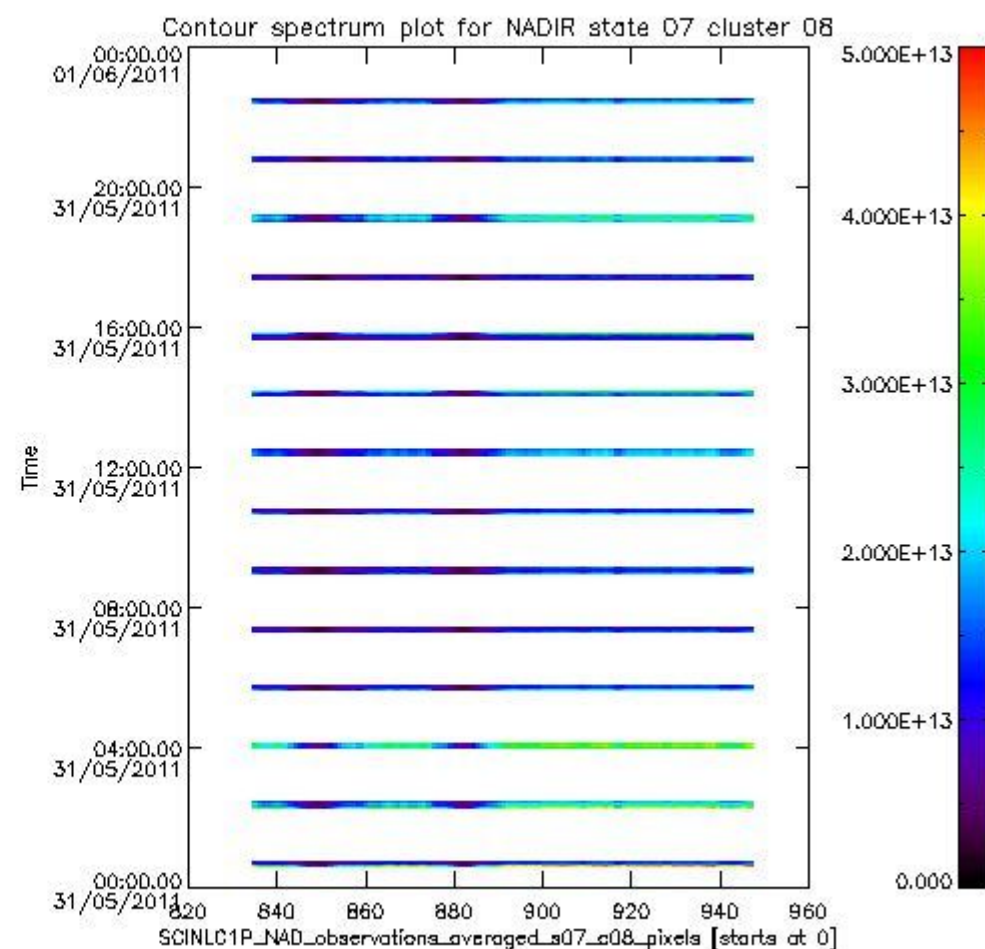
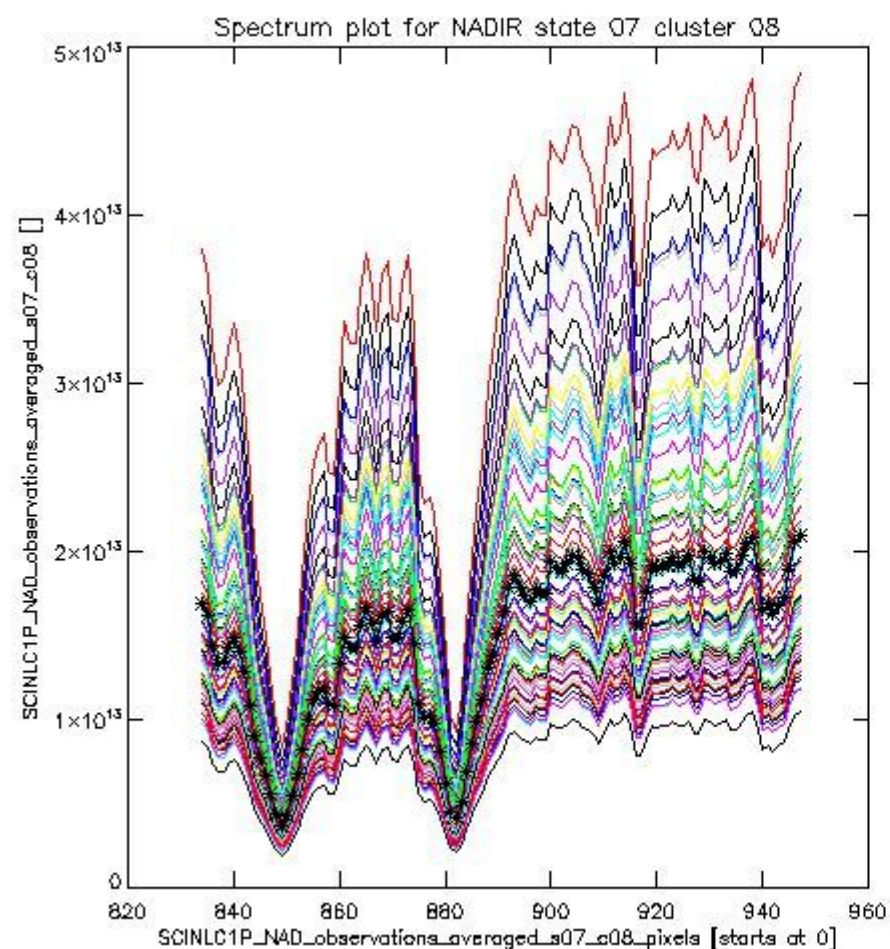
## 1.2 Source packet monitoring

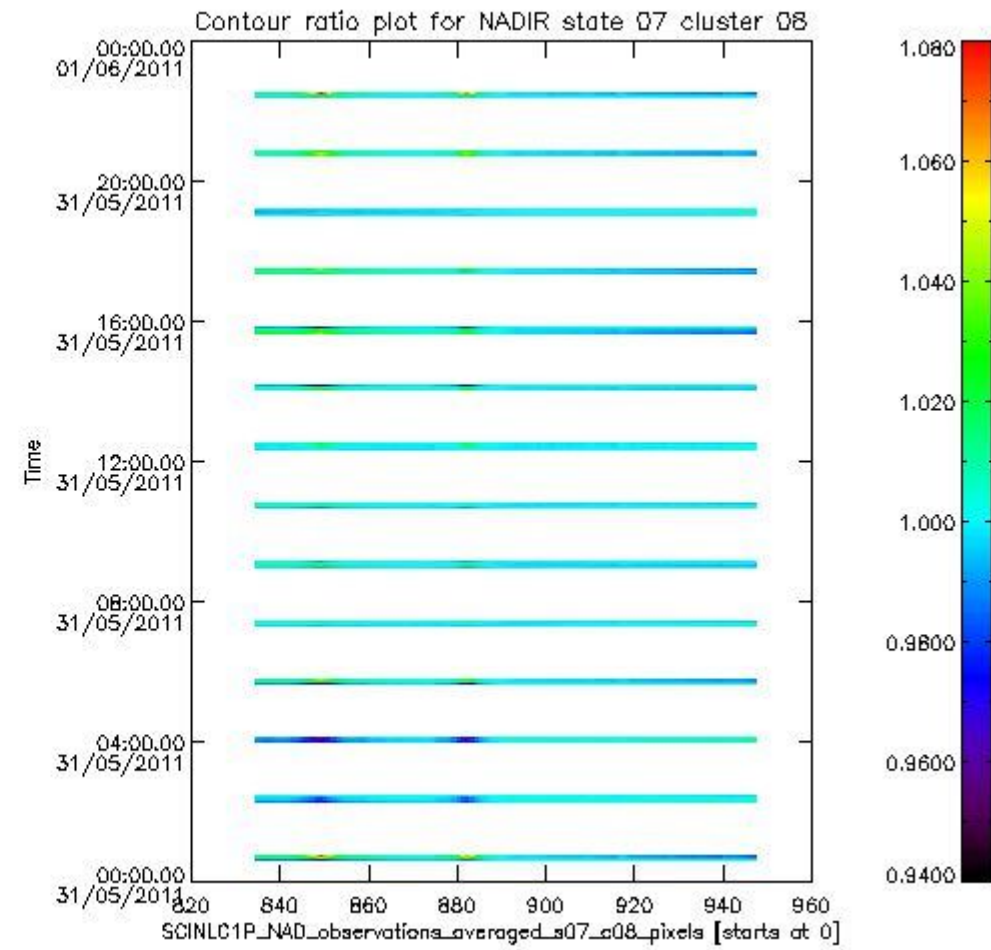
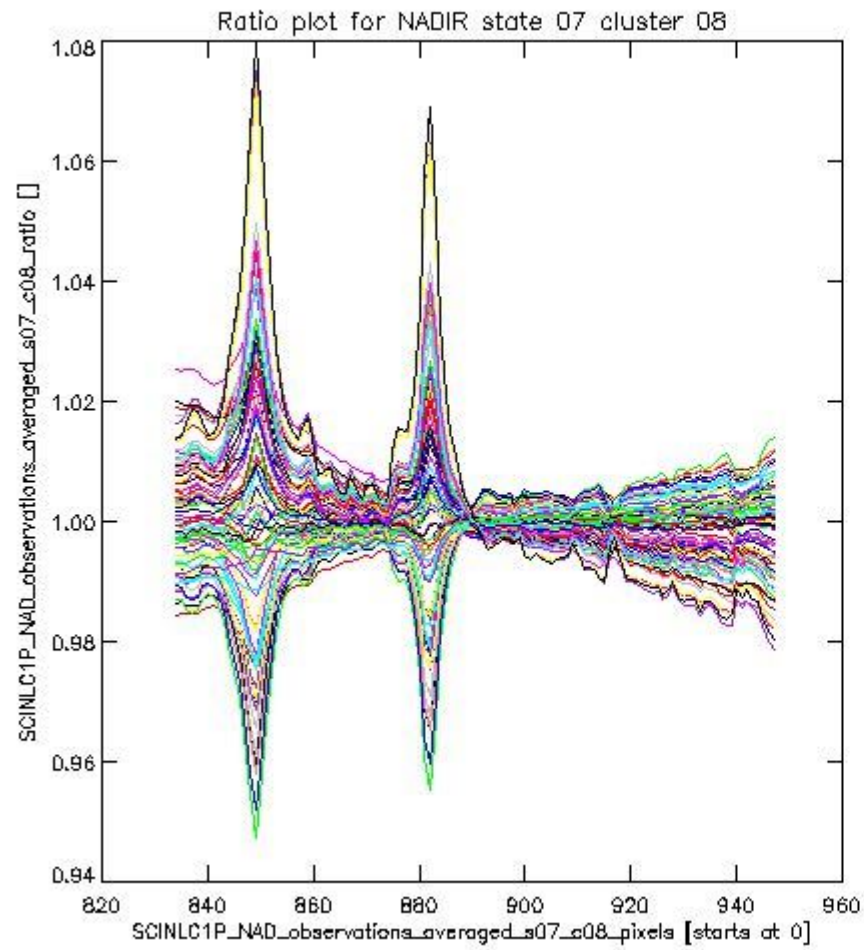
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

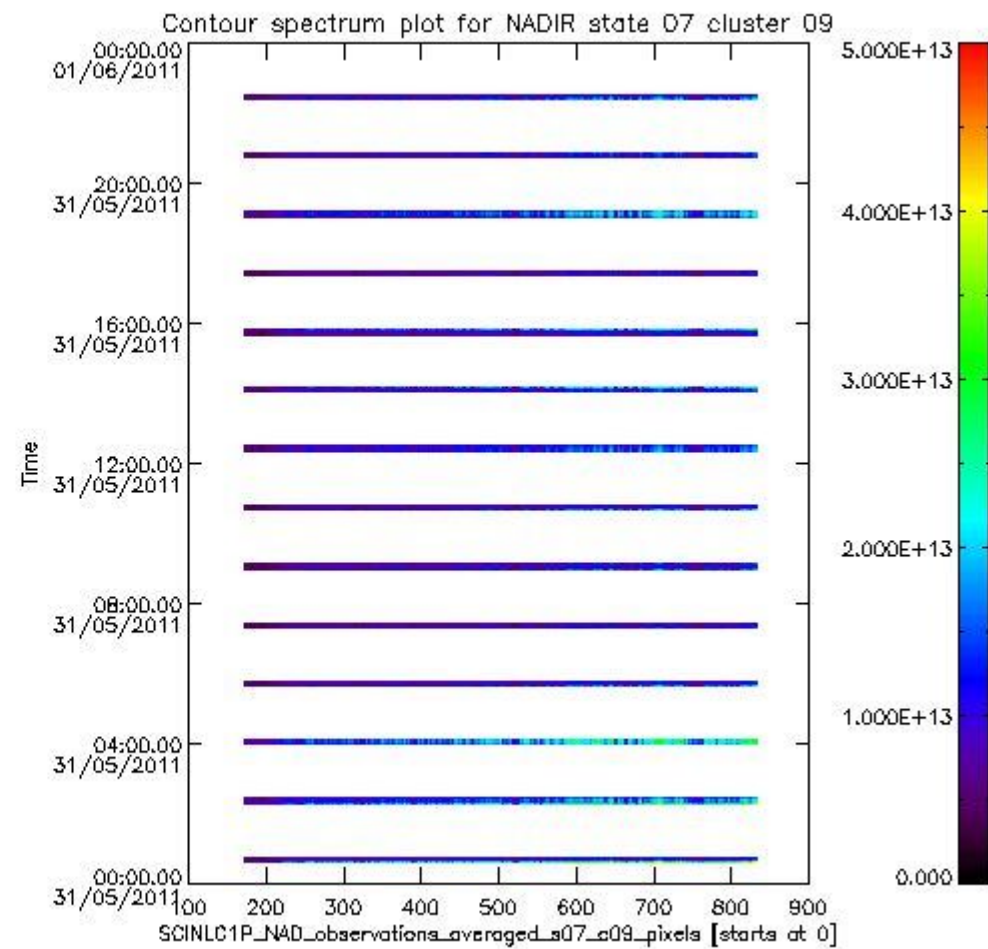
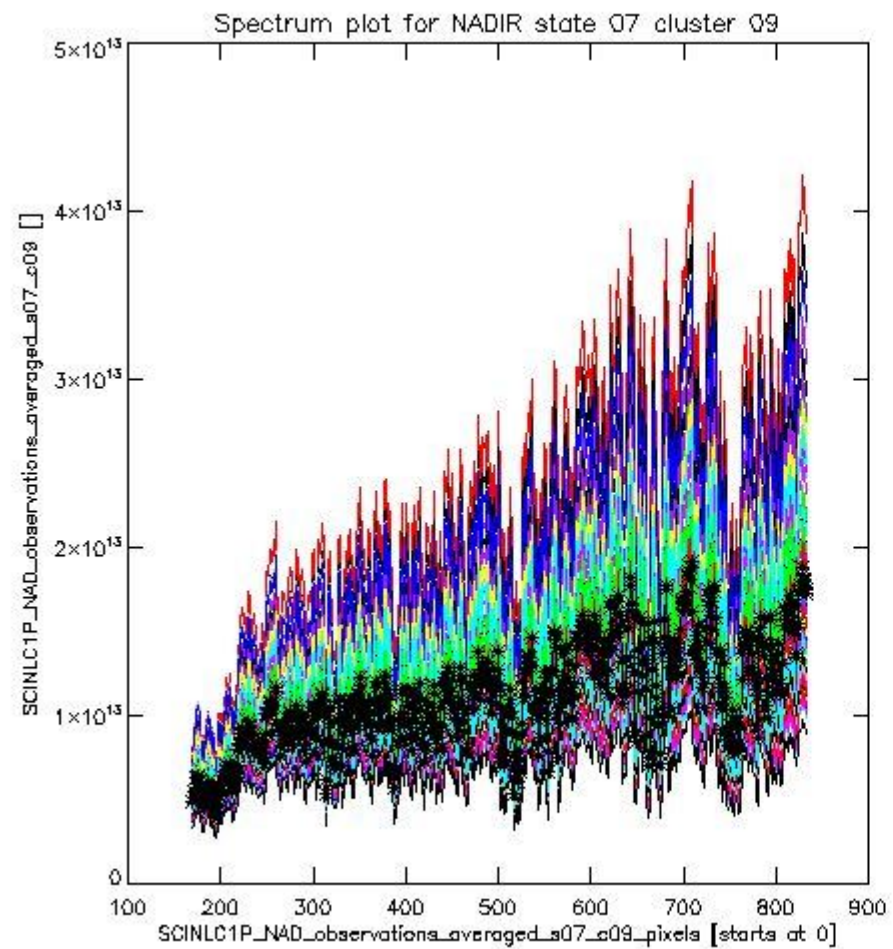
Item	Value
Start time of first sample	31MAY2011 00:37:22.593
Start time of last sample	31MAY2011 22:29:27.248
Reference period start time	01MAY2011 00:37:35.499
Reference period stop time	30MAY2011 23:06:13.995
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



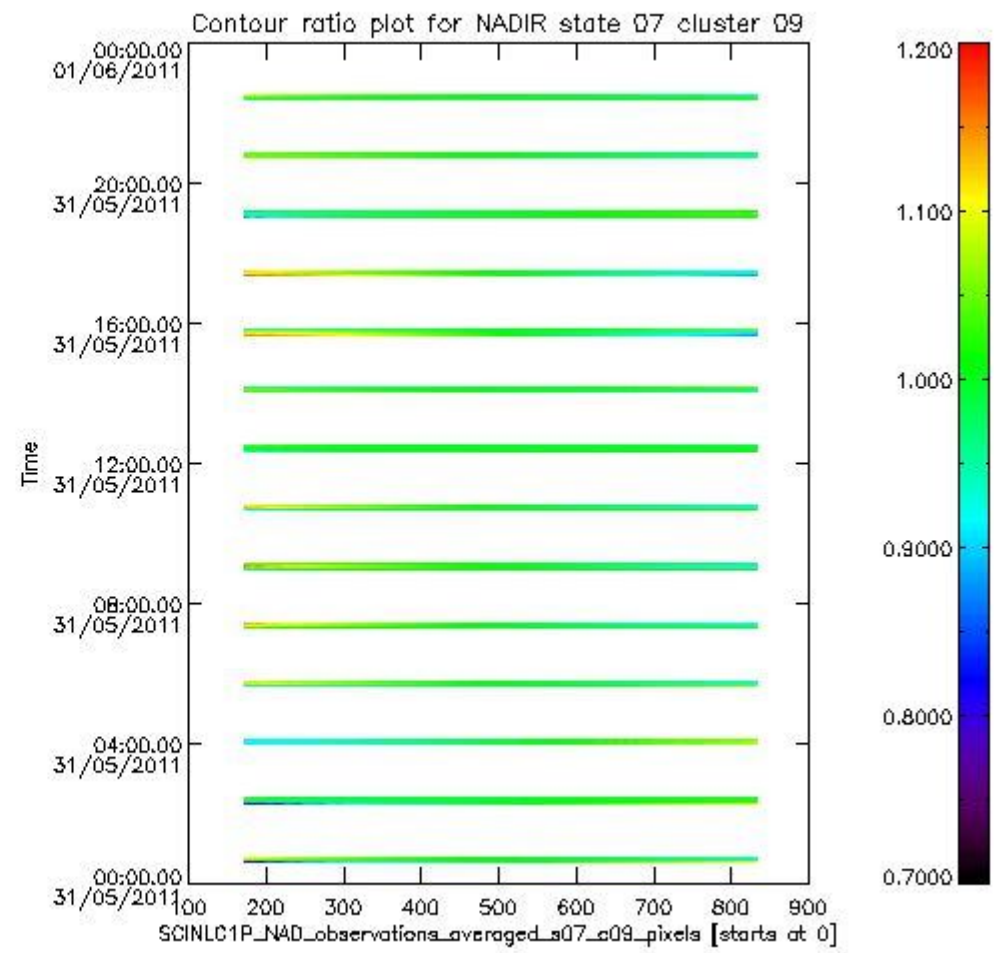
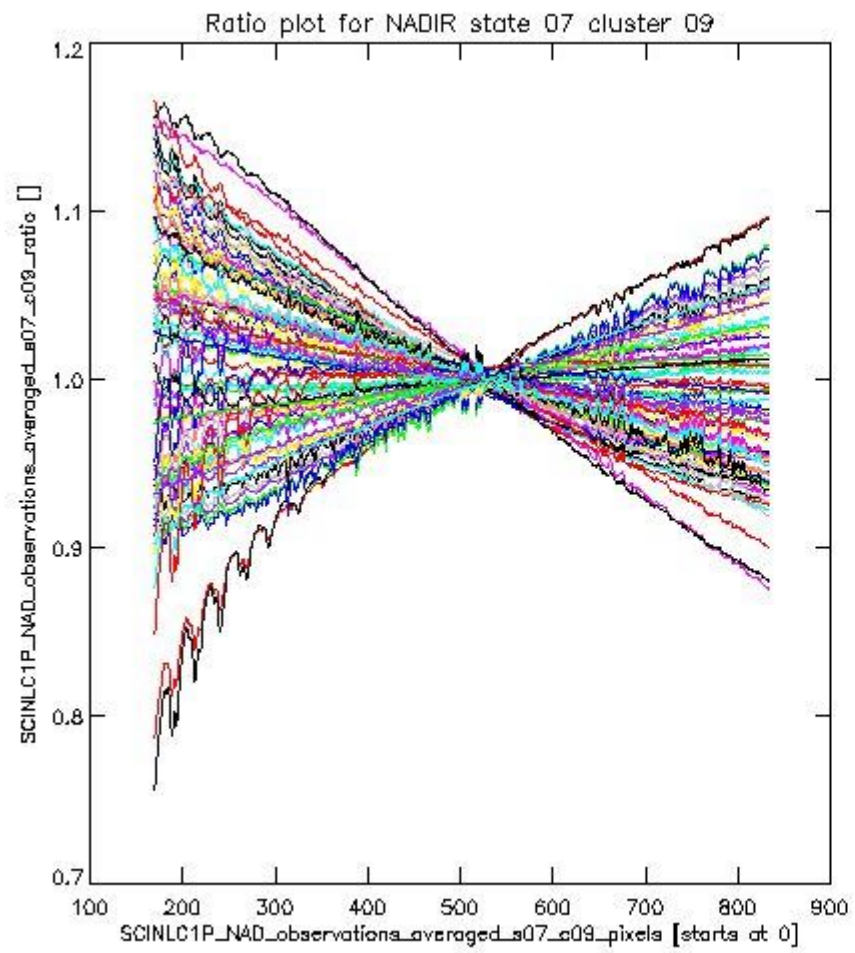


**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	31MAY2011 00:37:22.593
Start time of last sample	31MAY2011 22:29:27.248
Reference period start time	01MAY2011 00:37:35.499
Reference period stop time	30MAY2011 23:06:13.995
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



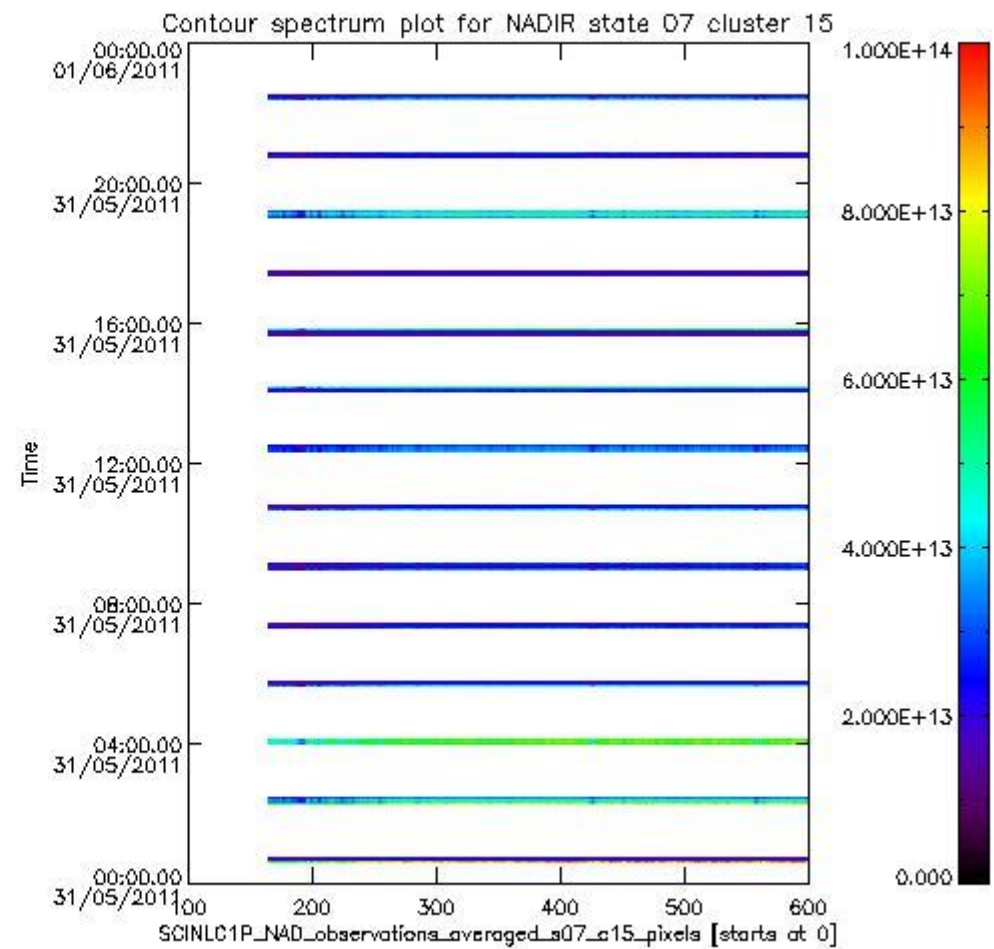
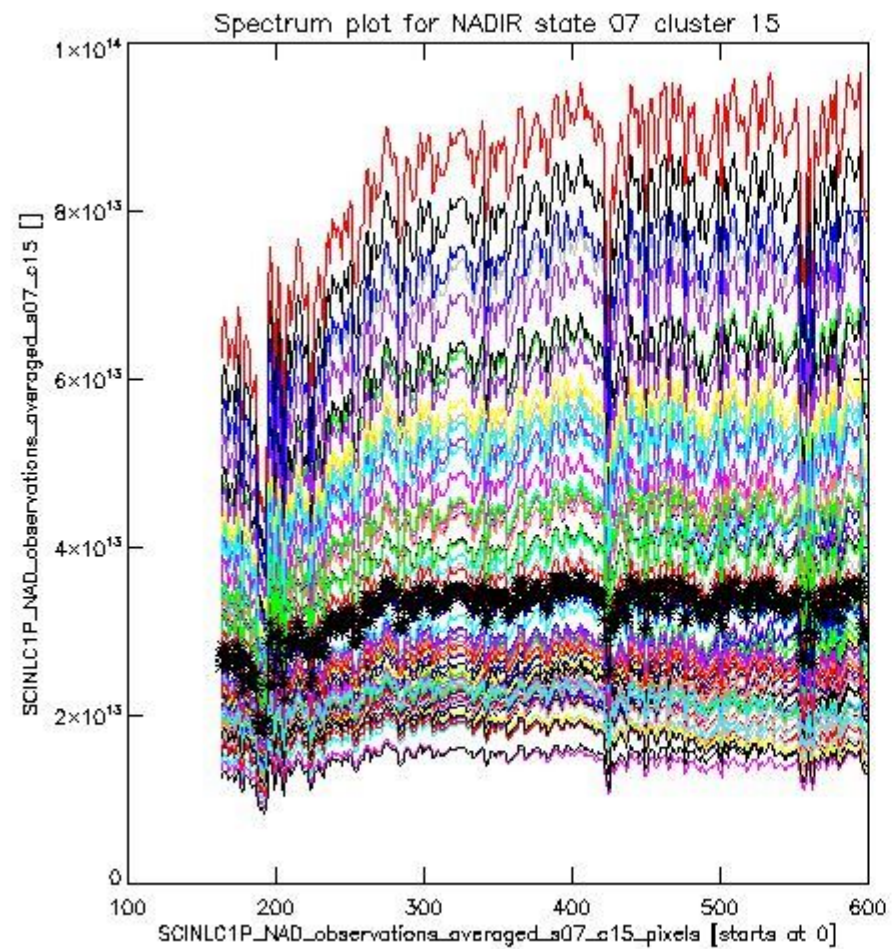
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_2.PNG



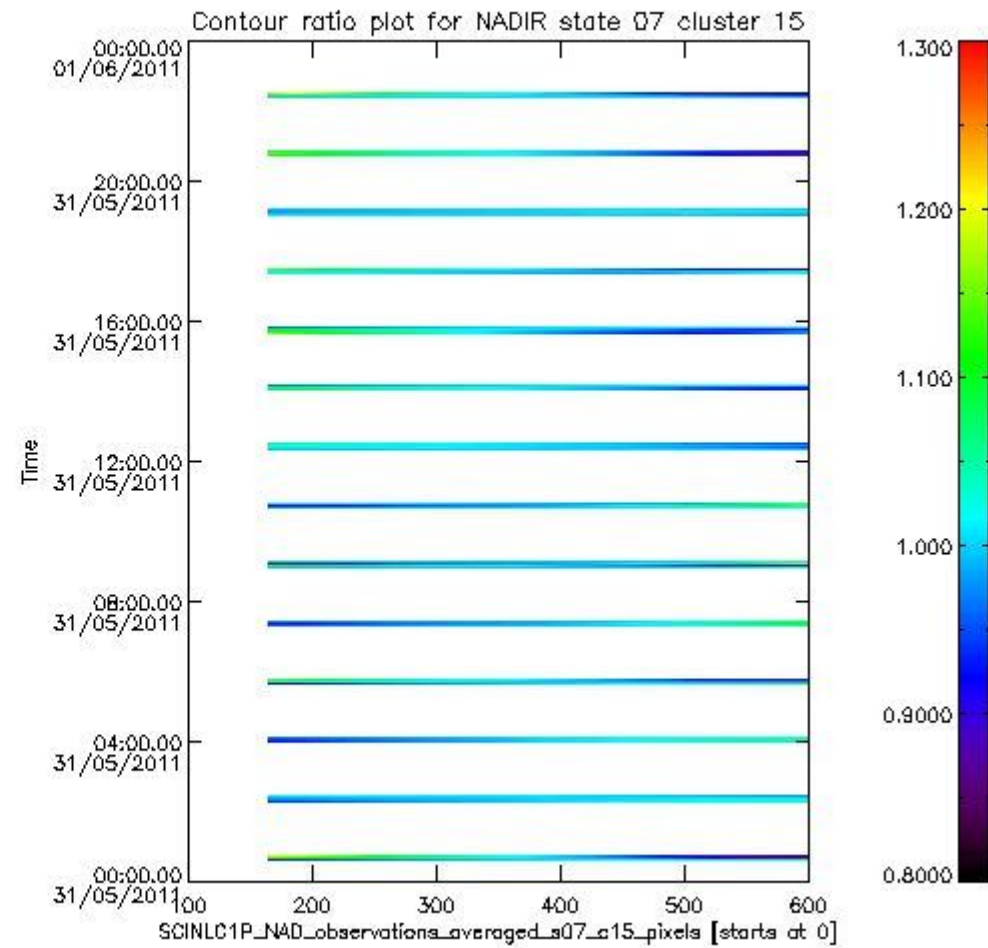
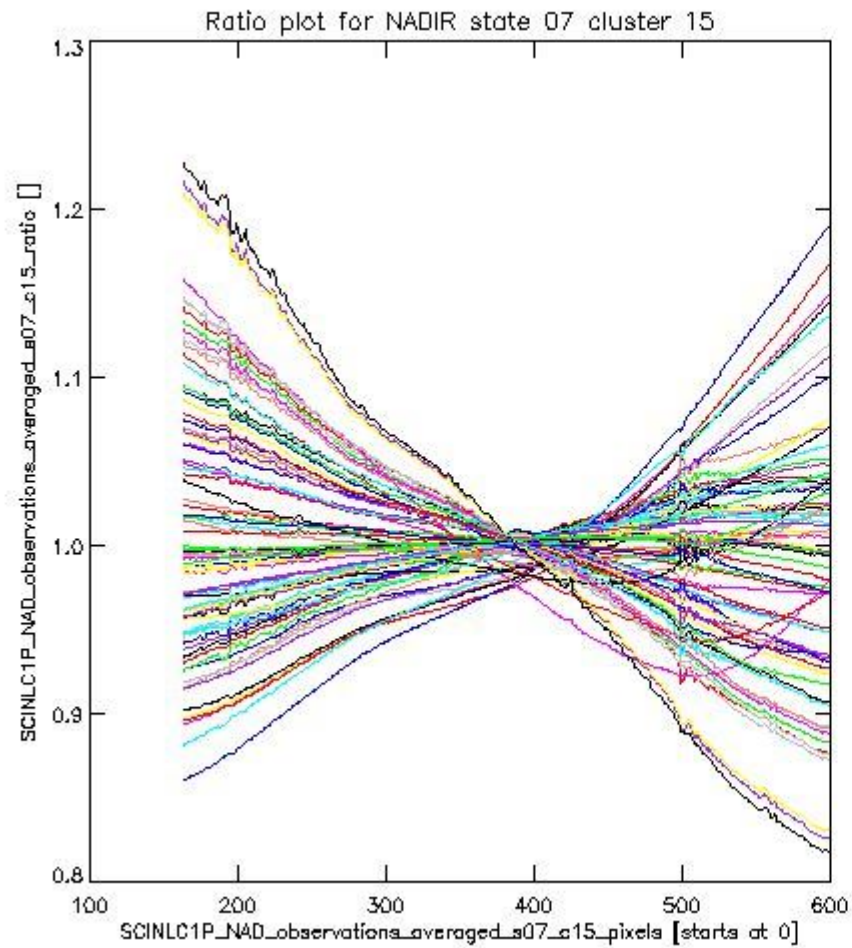
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_3.PNG

**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	31MAY2011 00:37:22.593
Start time of last sample	31MAY2011 22:29:27.248
Reference period start time	01MAY2011 00:37:35.499
Reference period stop time	30MAY2011 23:06:13.995
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



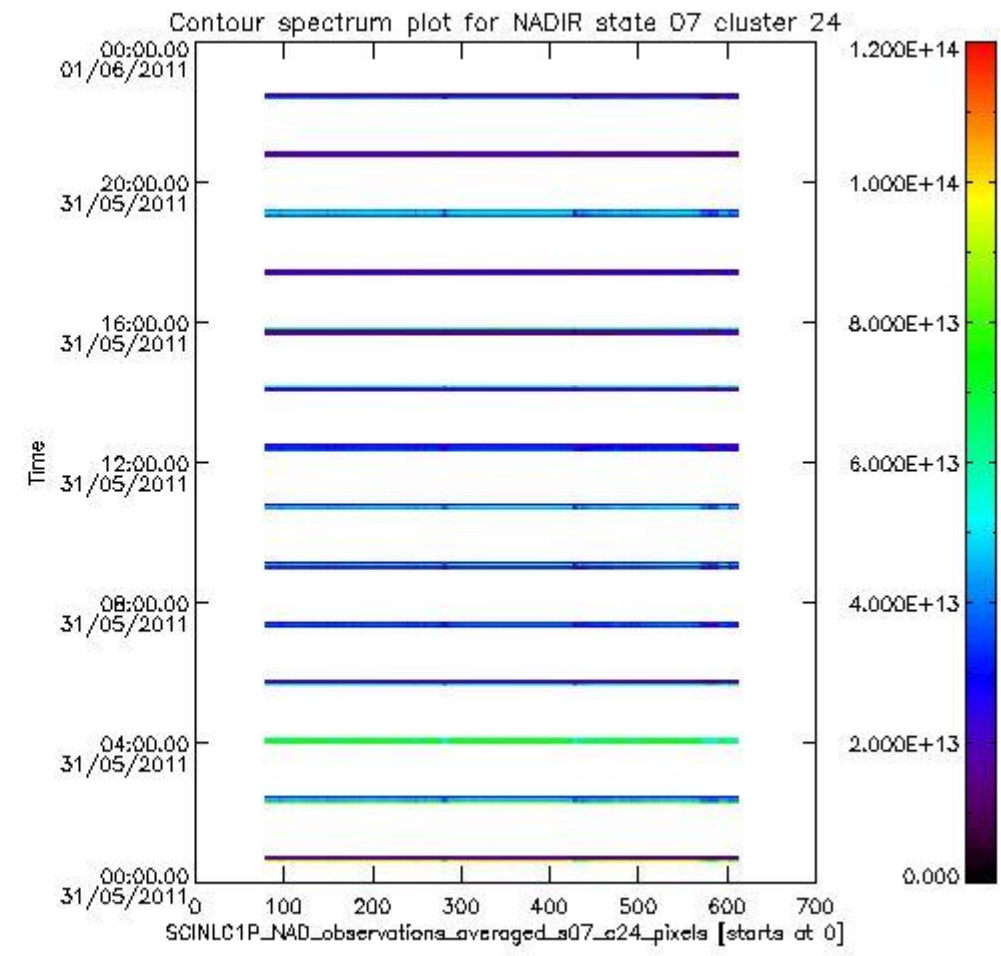
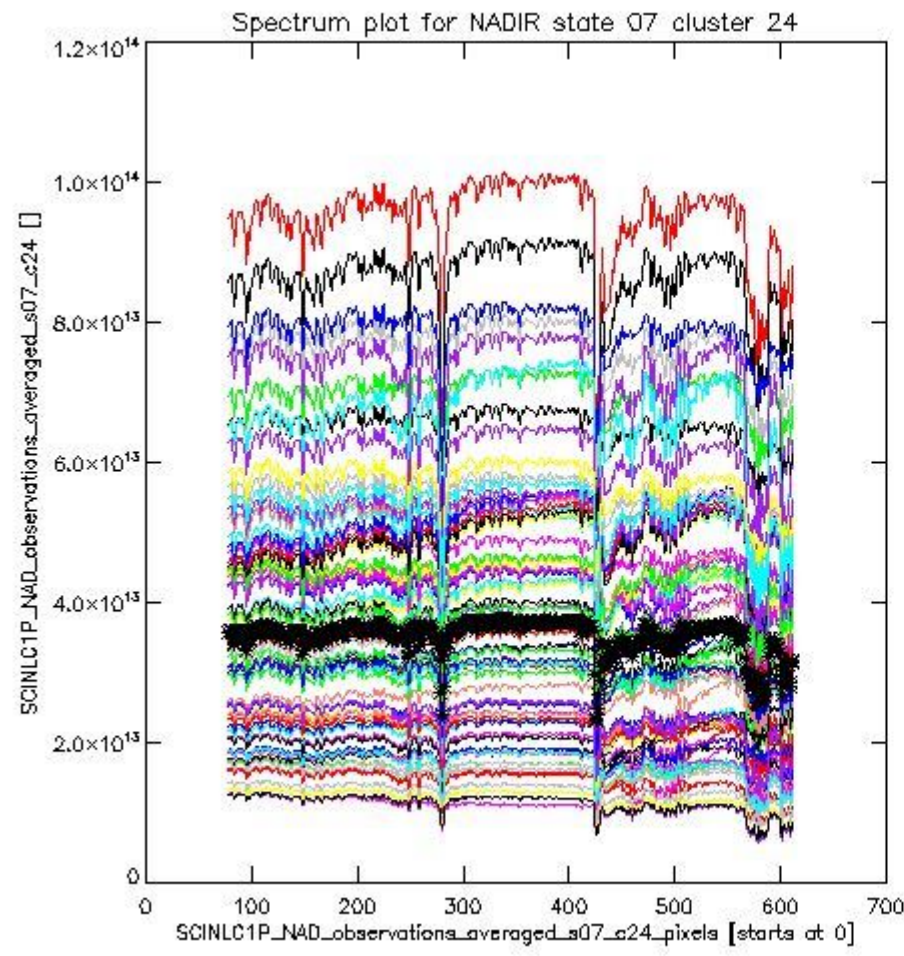
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_5.PNG

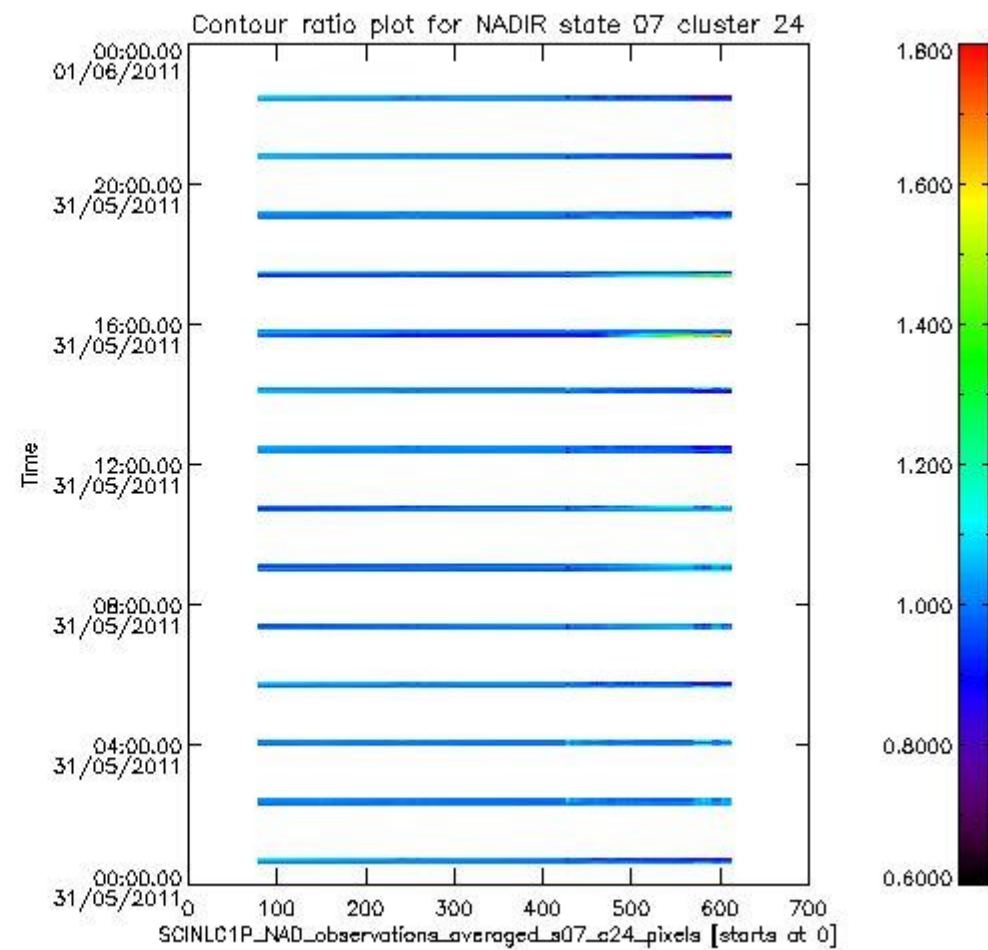
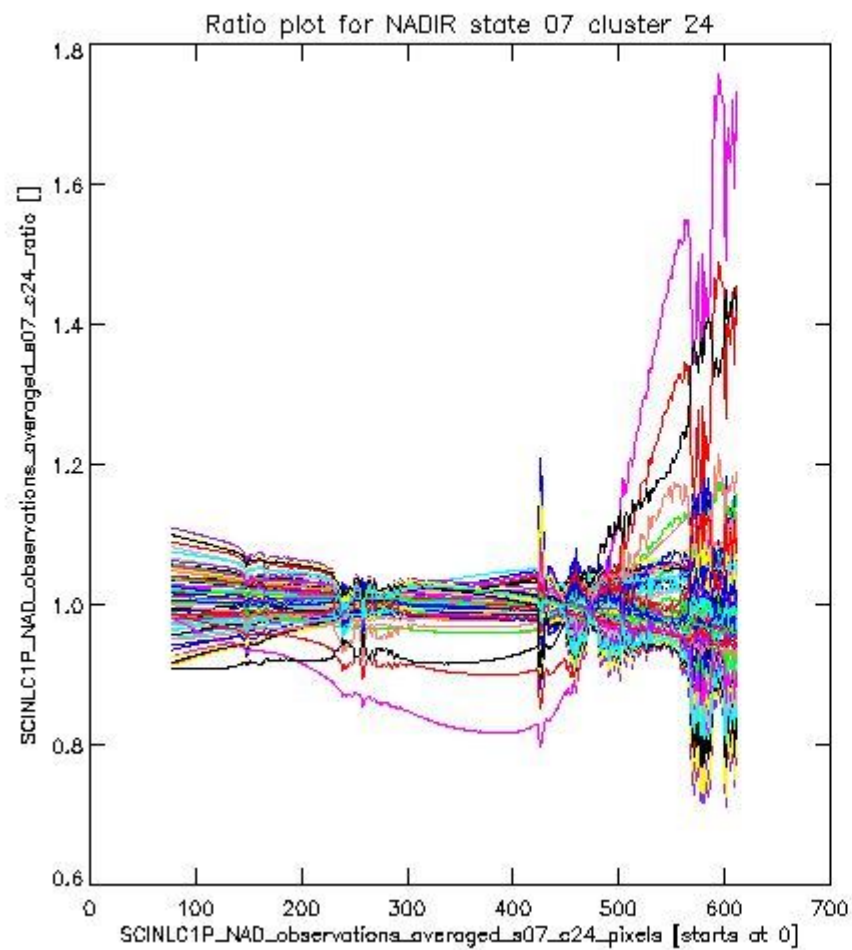
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	31MAY2011 00:37:22.593
Start time of last sample	31MAY2011 22:29:27.248
Reference period start time	01MAY2011 00:37:35.499
Reference period stop time	30MAY2011 23:06:13.995
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\_20110531\_6.PNG

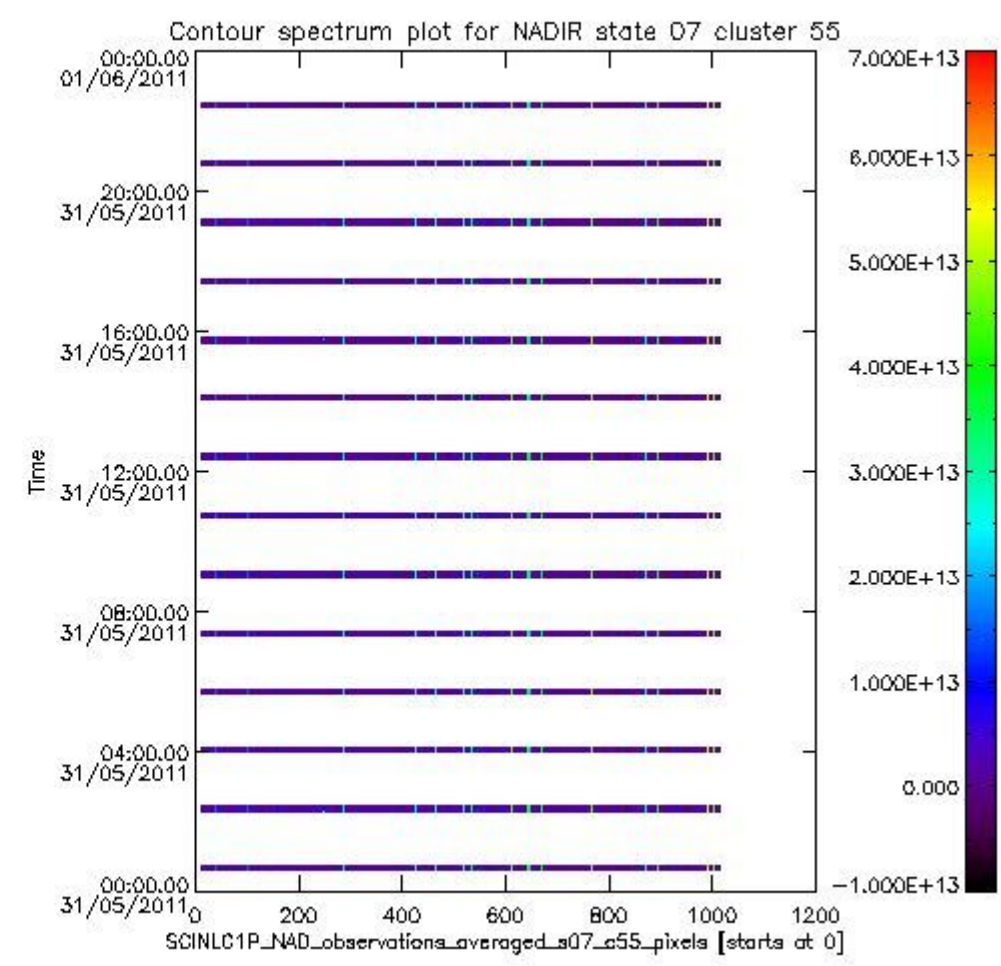
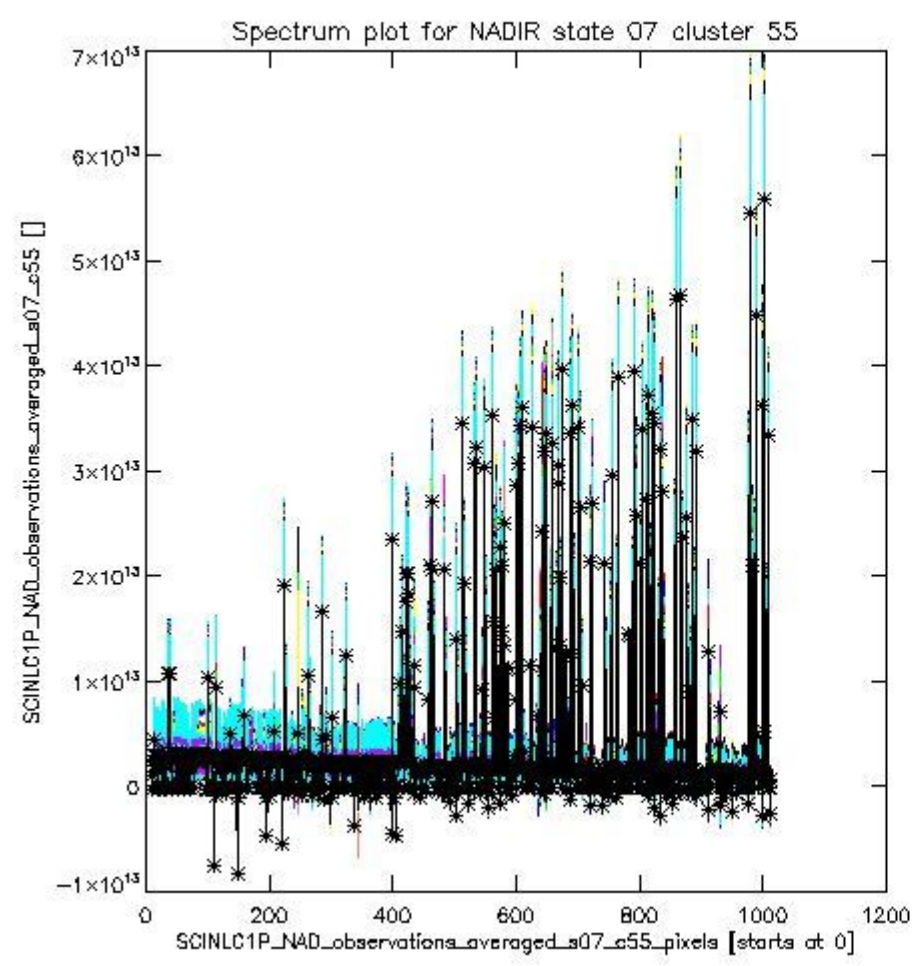




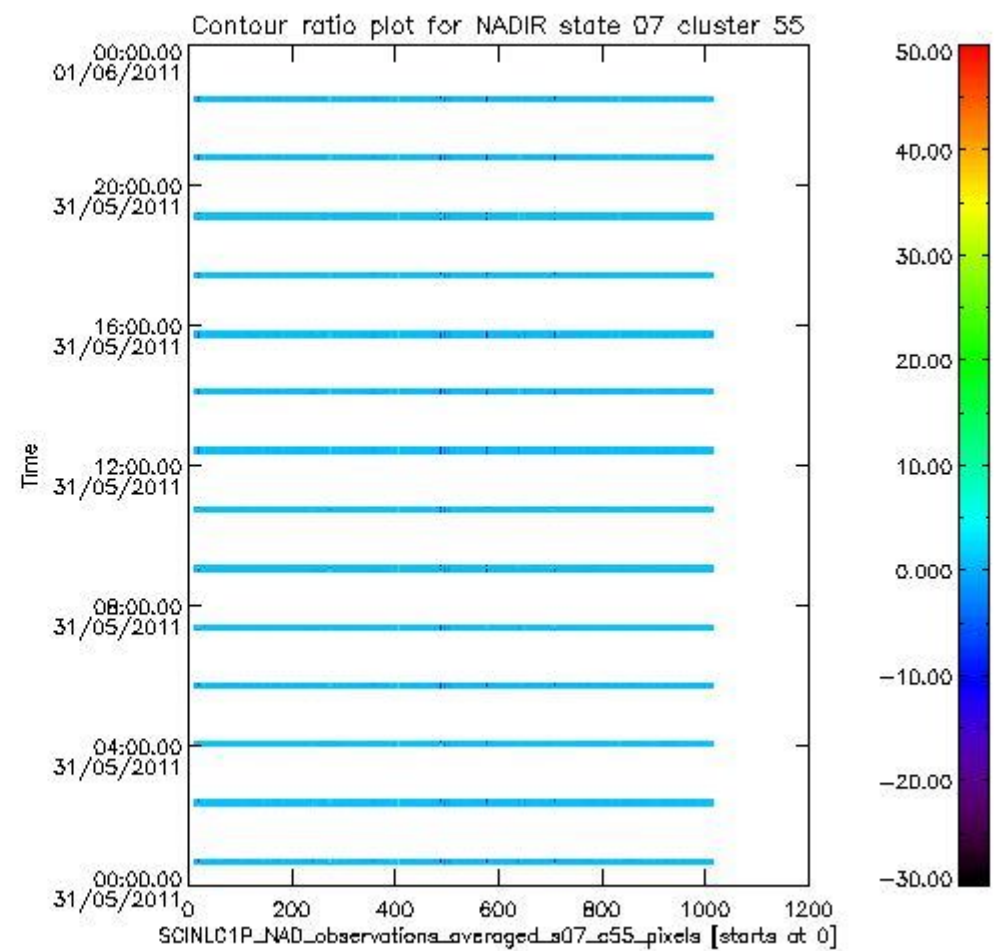
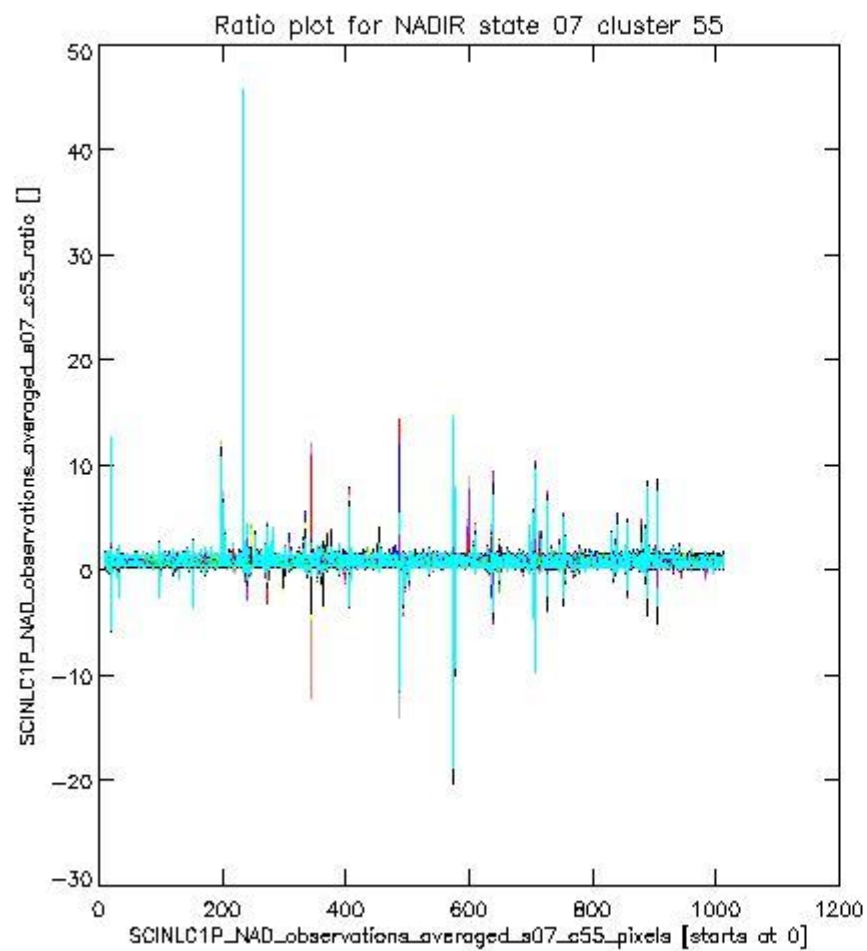
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_7.PNG

**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	31MAY2011 00:37:22.593
Start time of last sample	31MAY2011 22:29:27.248
Reference period start time	01MAY2011 00:37:35.499
Reference period stop time	30MAY2011 23:06:13.995
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



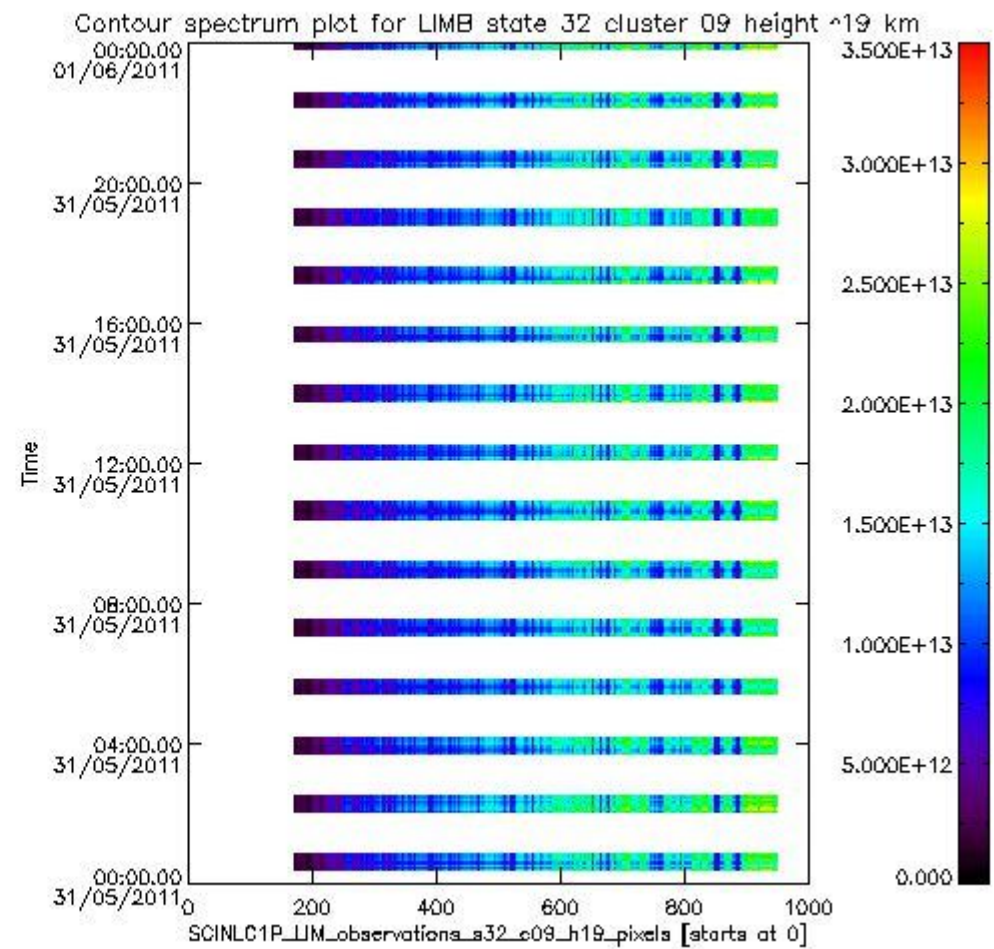
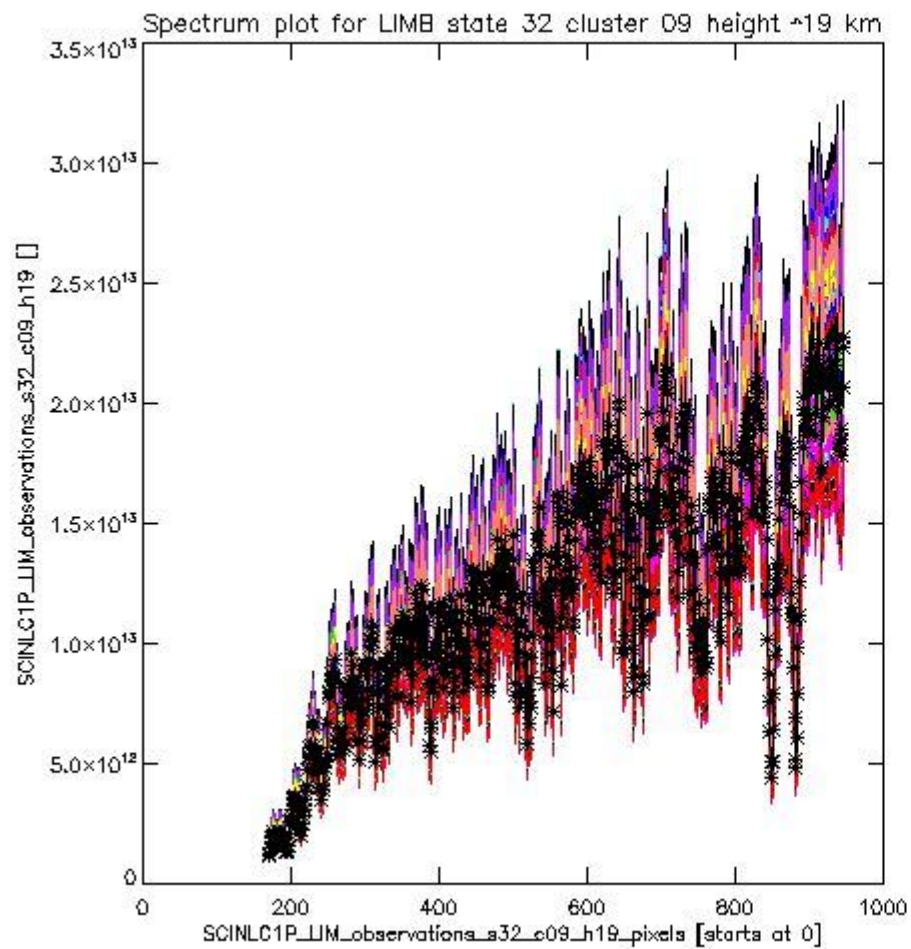
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_8.PNG



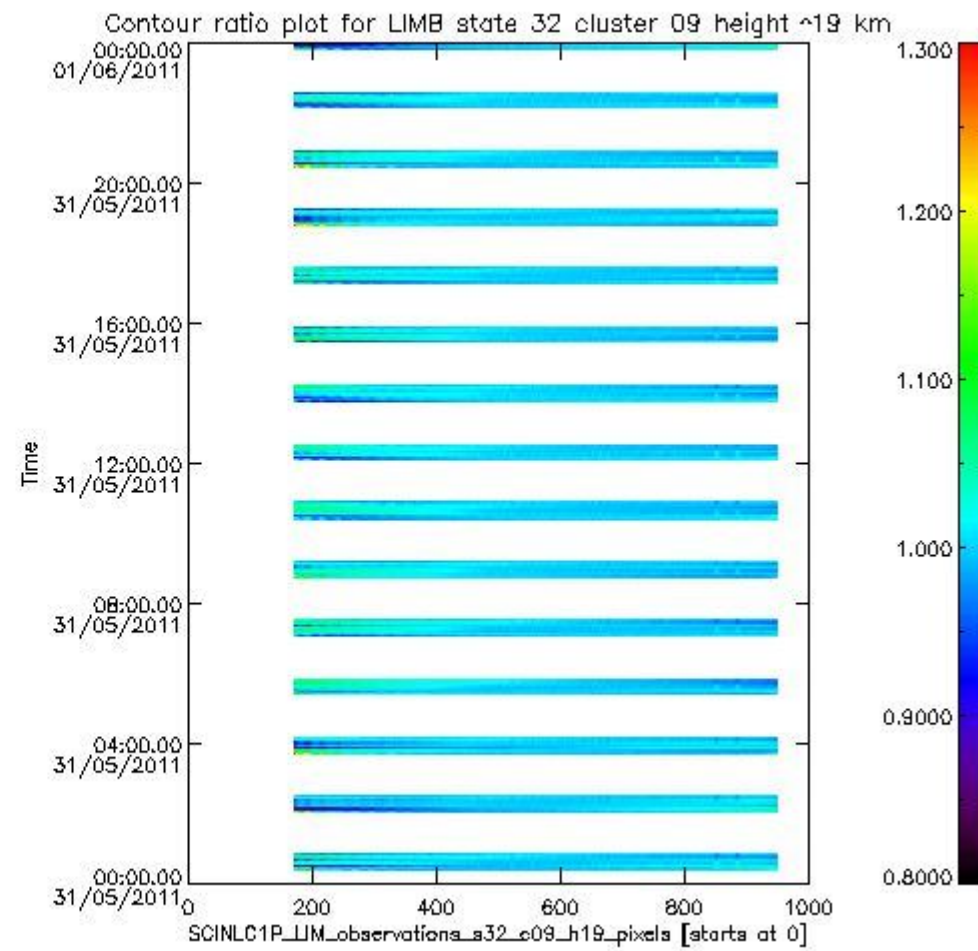
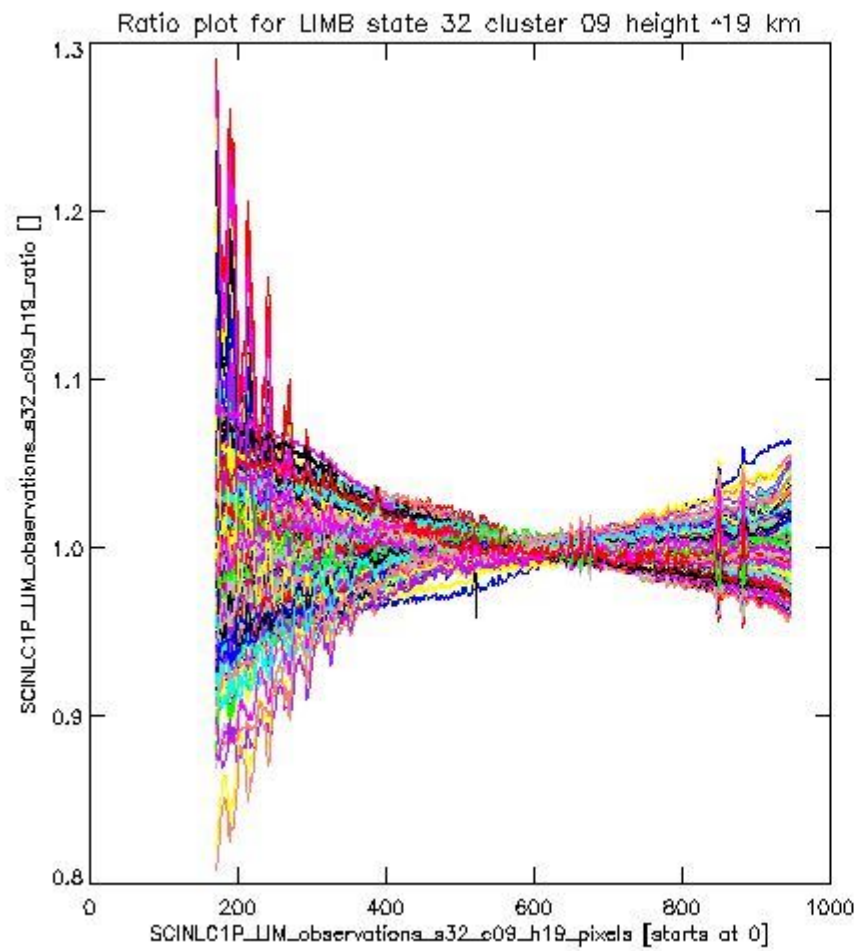
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_9.PNG

**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	31MAY2011 00:22:09.214
Start time of last sample	31MAY2011 23:59:41.666
Reference period start time	01MAY2011 00:24:24.866
Reference period stop time	30MAY2011 23:09:25.299
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



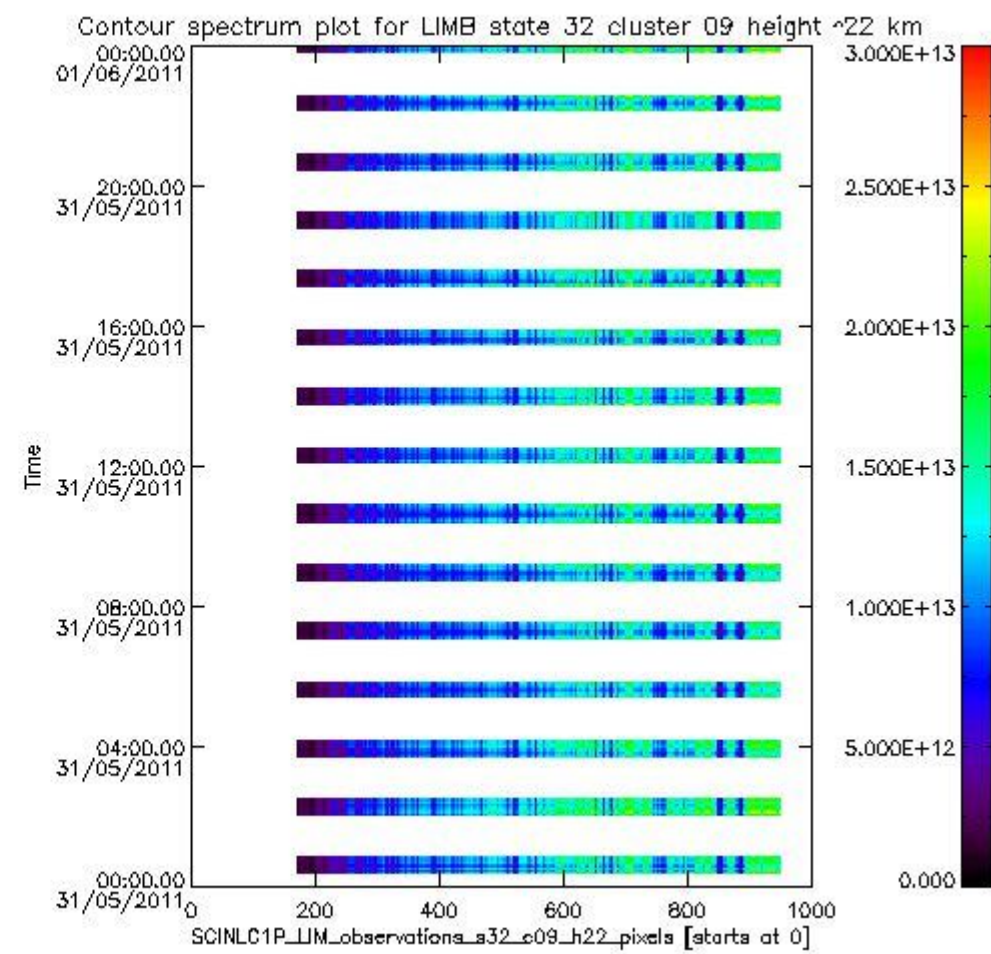
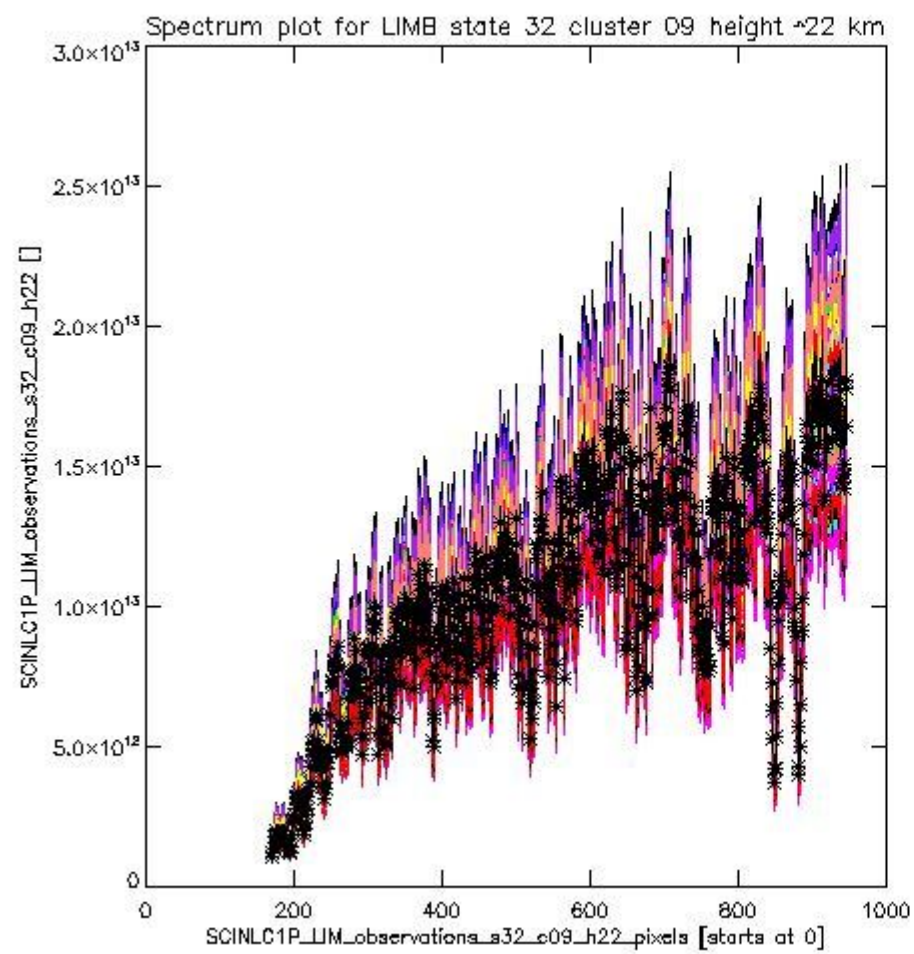
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_10.PNG



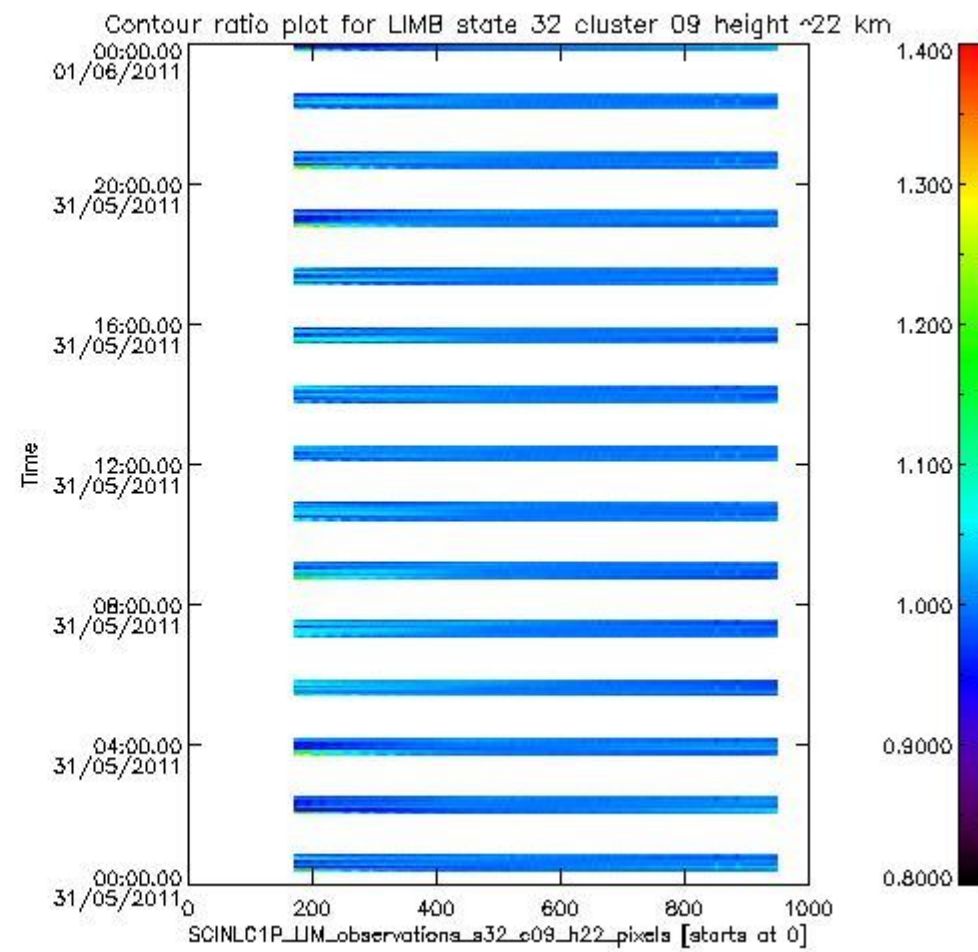
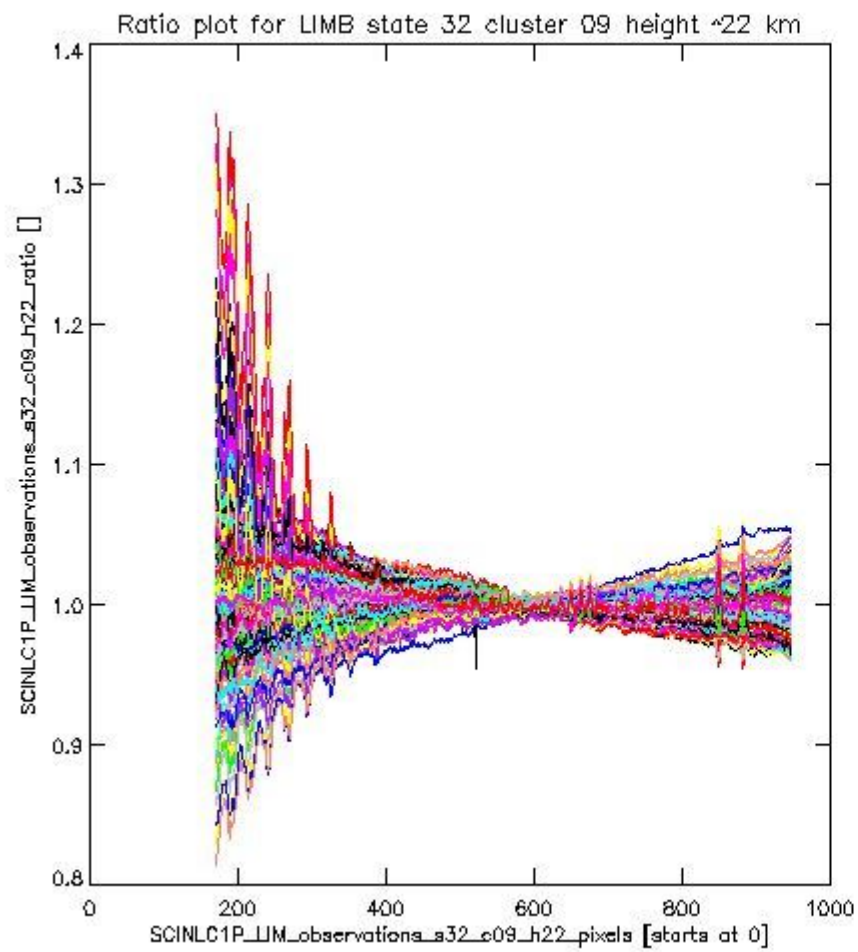
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_11.PNG

**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	31MAY2011 00:22:09.214
Start time of last sample	31MAY2011 23:59:41.666
Reference period start time	01MAY2011 00:24:24.866
Reference period stop time	30MAY2011 23:09:25.299
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



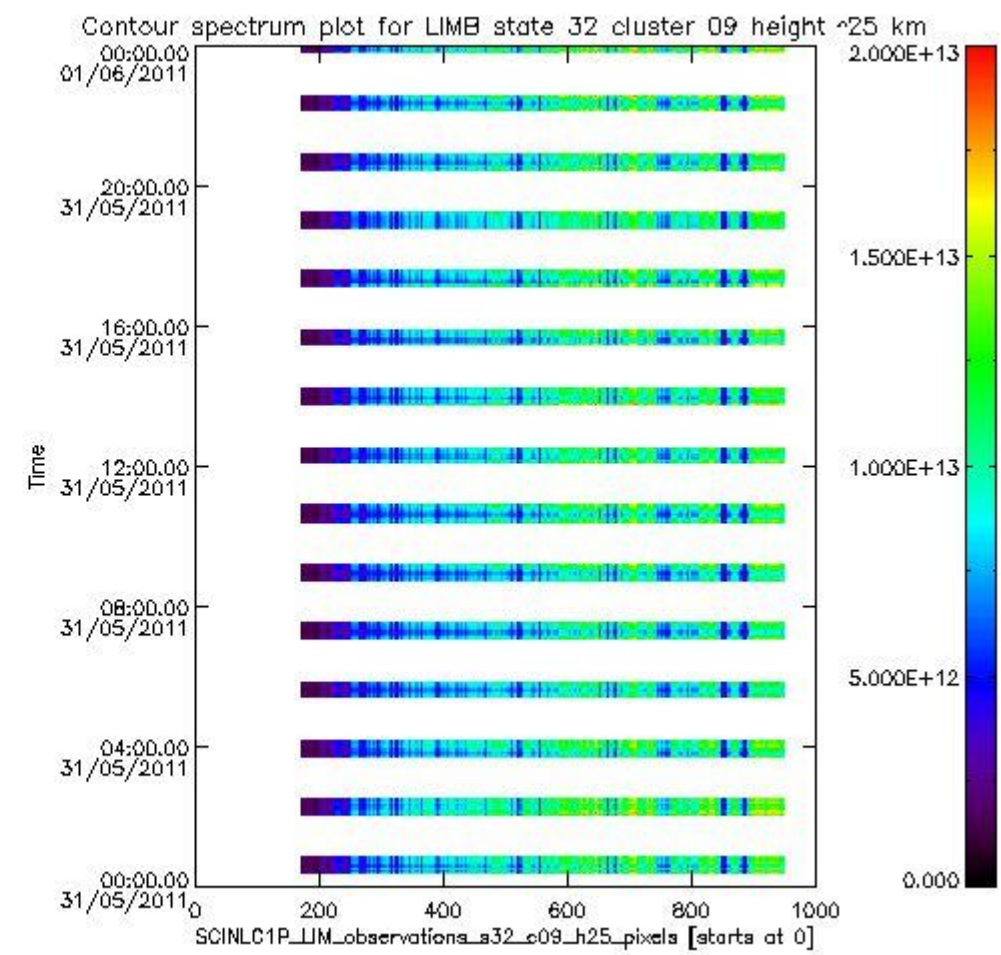
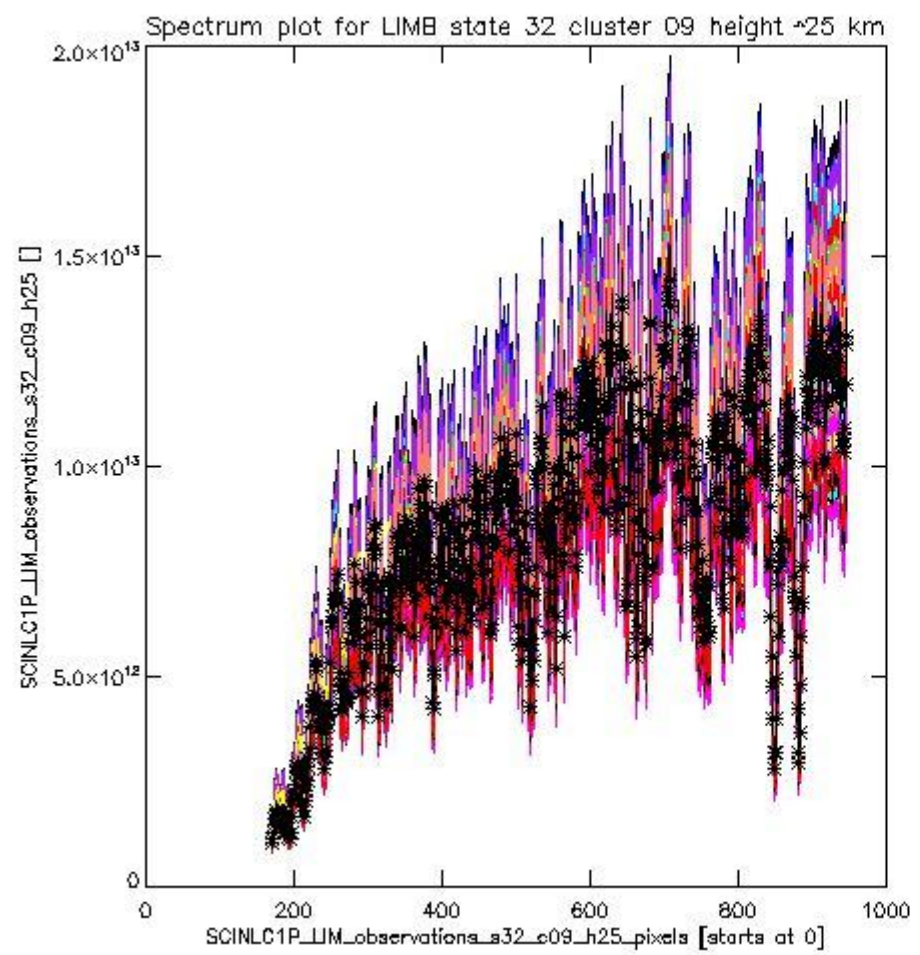
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_13.PNG

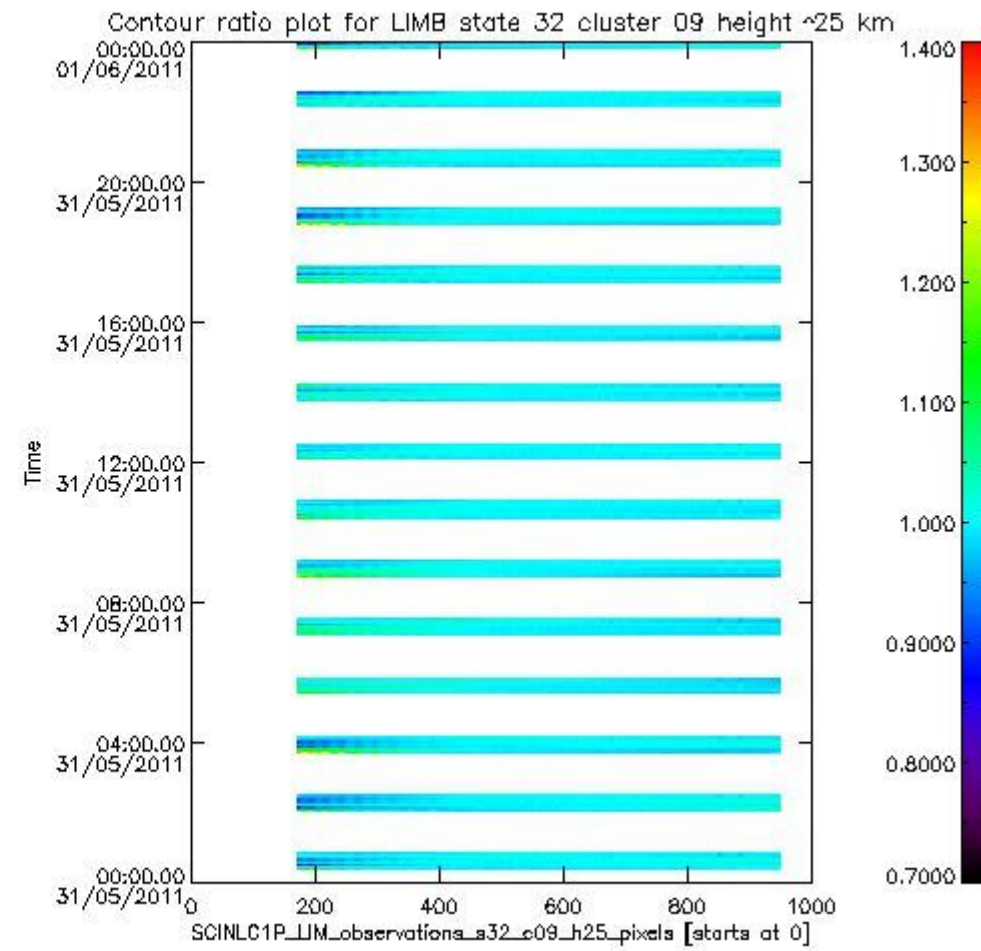
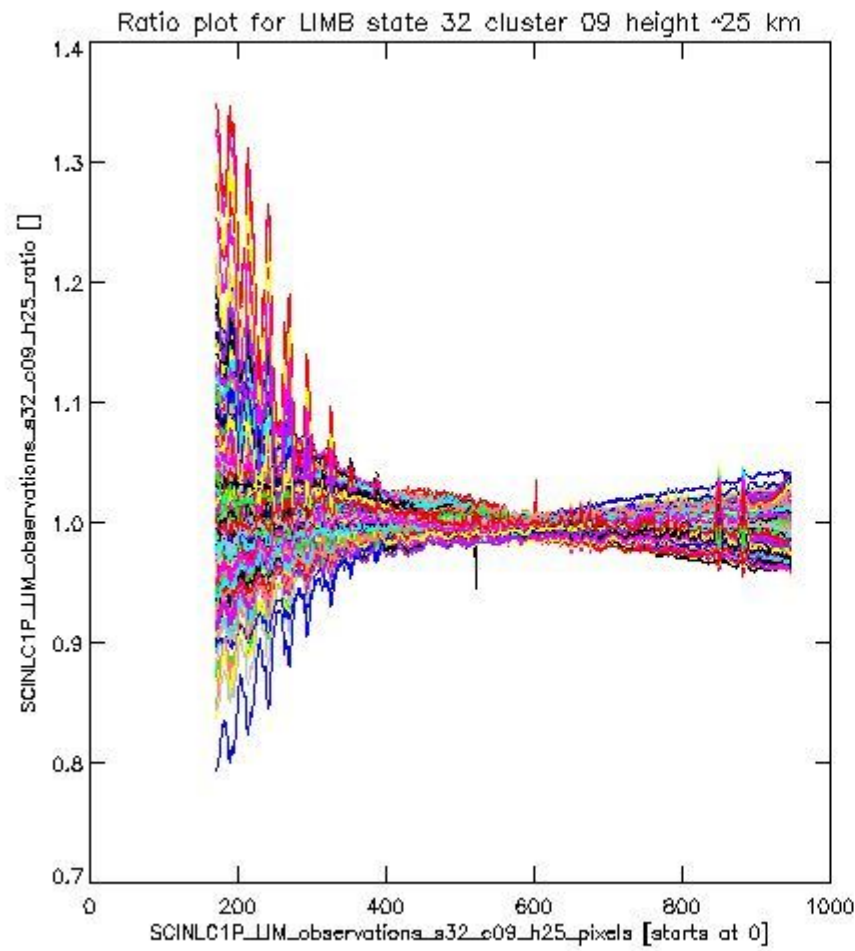
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	31MAY2011 00:22:09.214
Start time of last sample	31MAY2011 23:59:41.666
Reference period start time	01MAY2011 00:24:24.866
Reference period stop time	30MAY2011 23:09:25.299
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\_20110531\_14.PNG

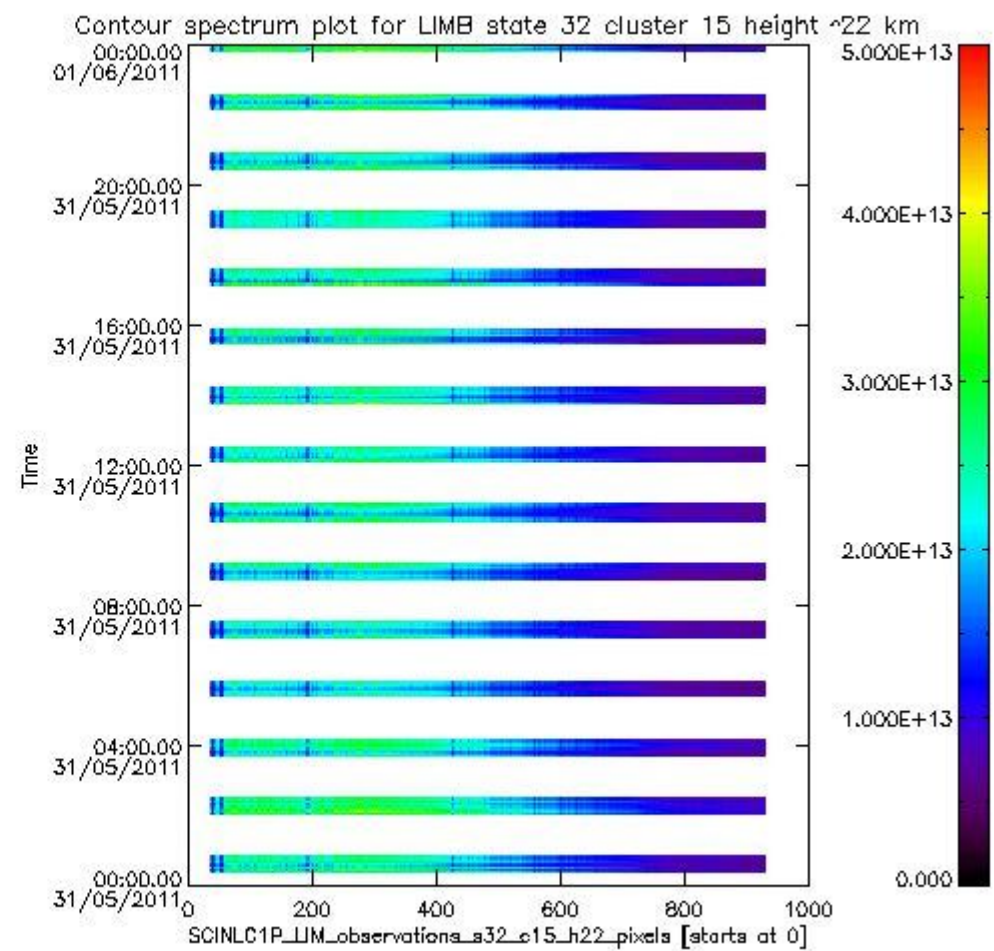
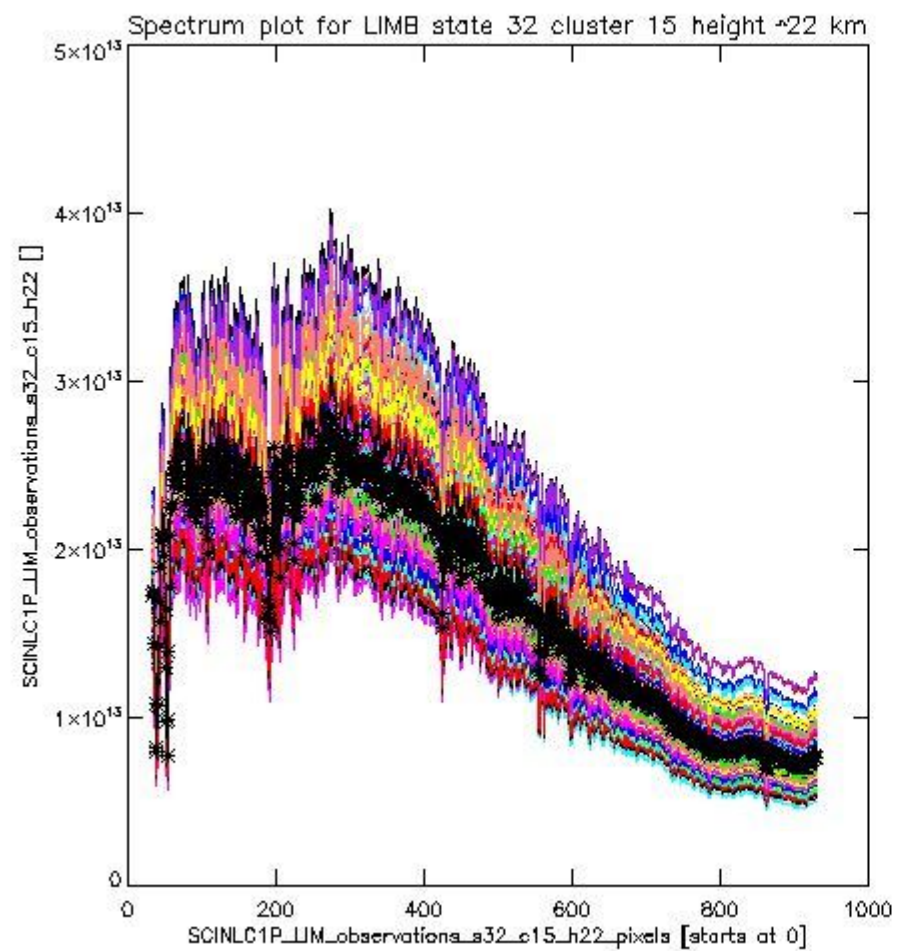




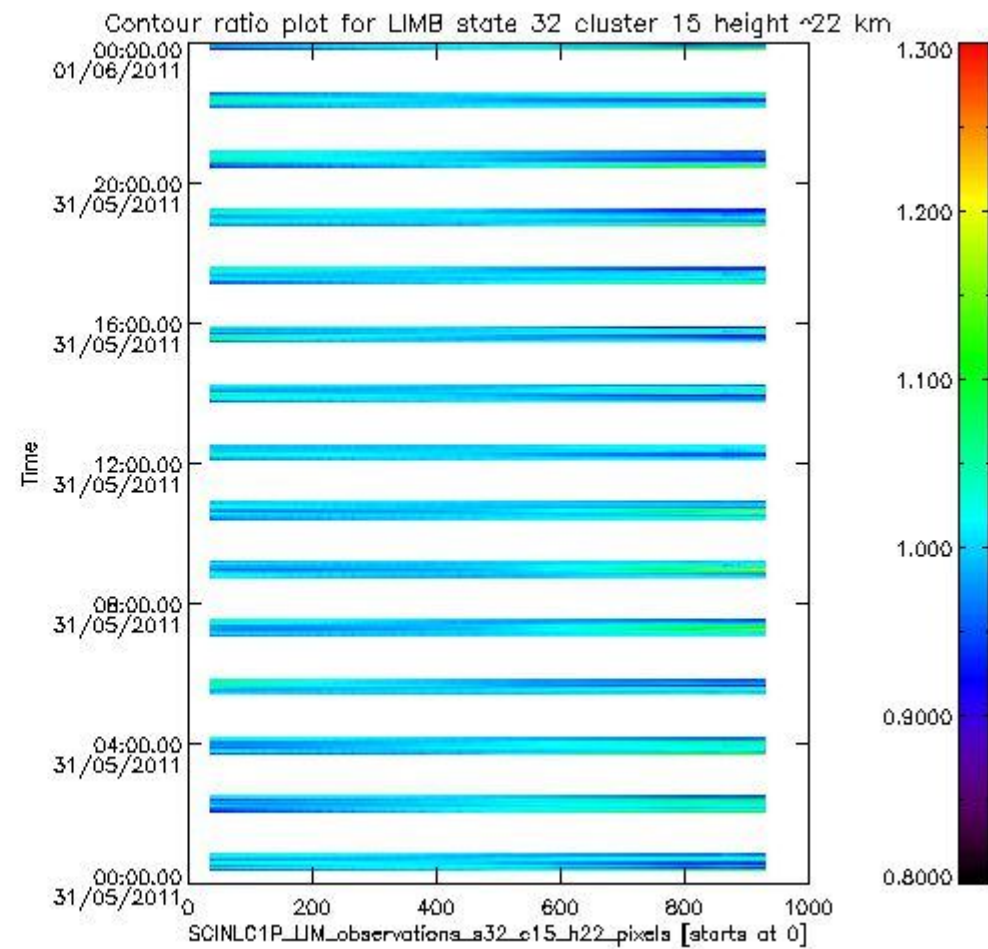
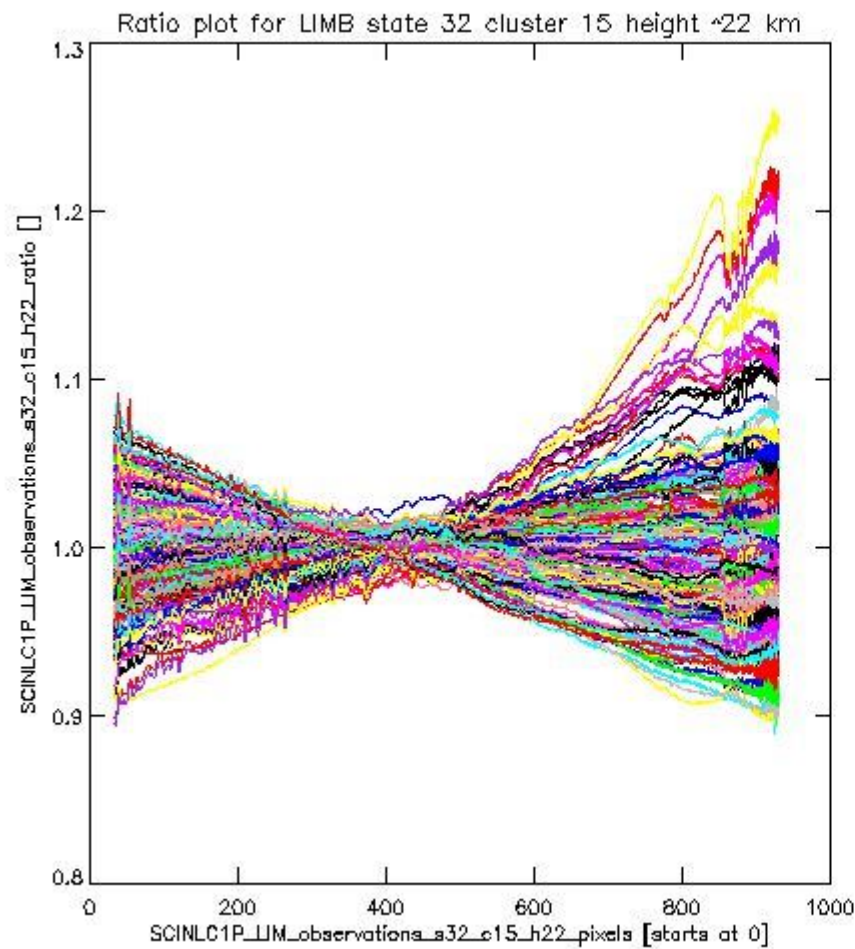
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_15.PNG

**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	31MAY2011 00:22:09.214
Start time of last sample	31MAY2011 23:59:41.666
Reference period start time	01MAY2011 00:24:24.866
Reference period stop time	30MAY2011 23:09:25.299
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



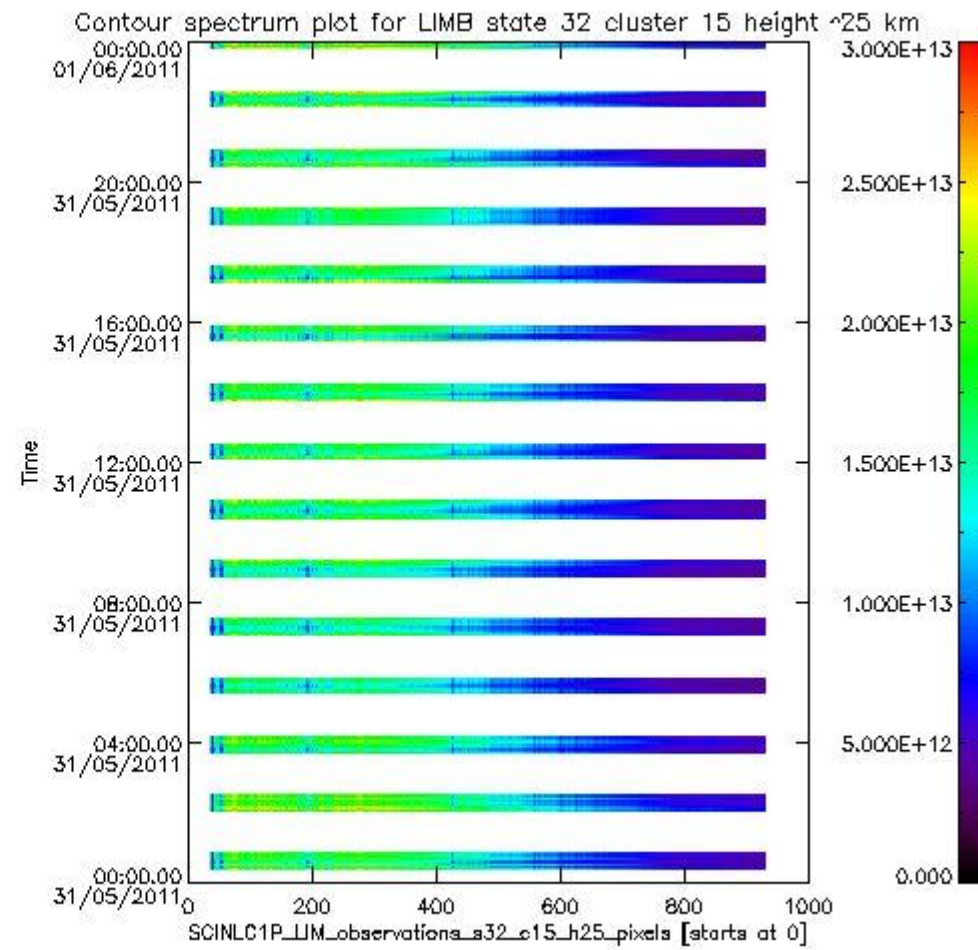
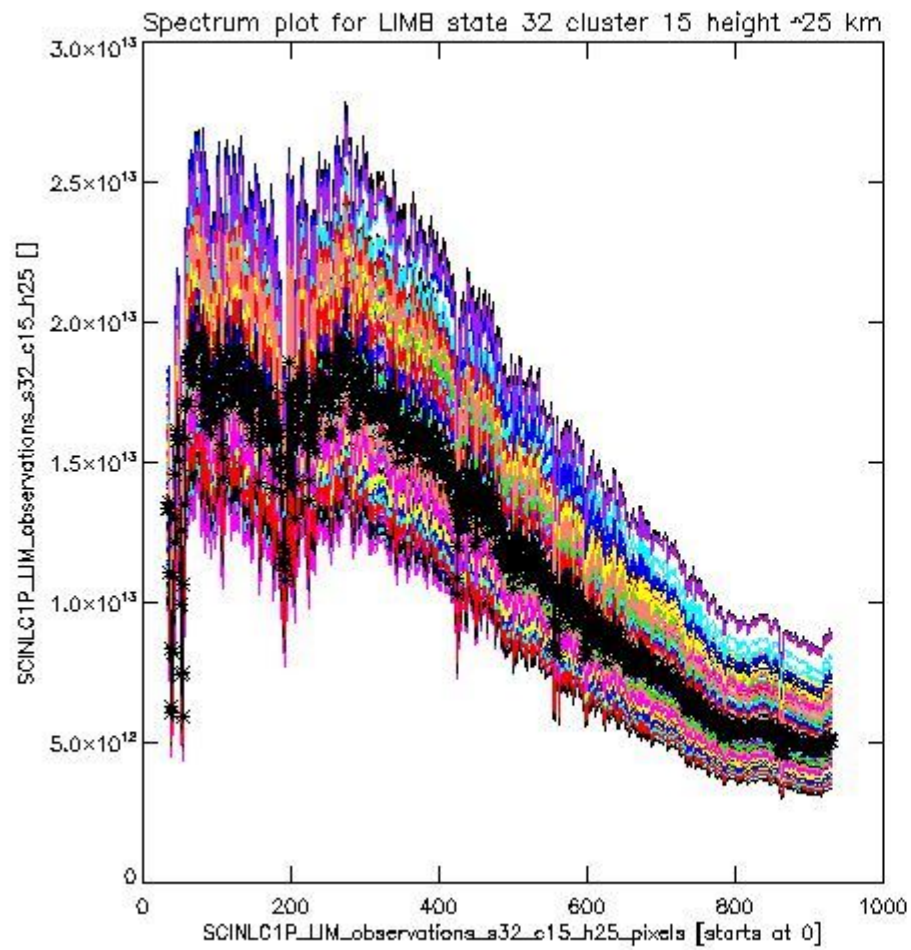
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_16.PNG

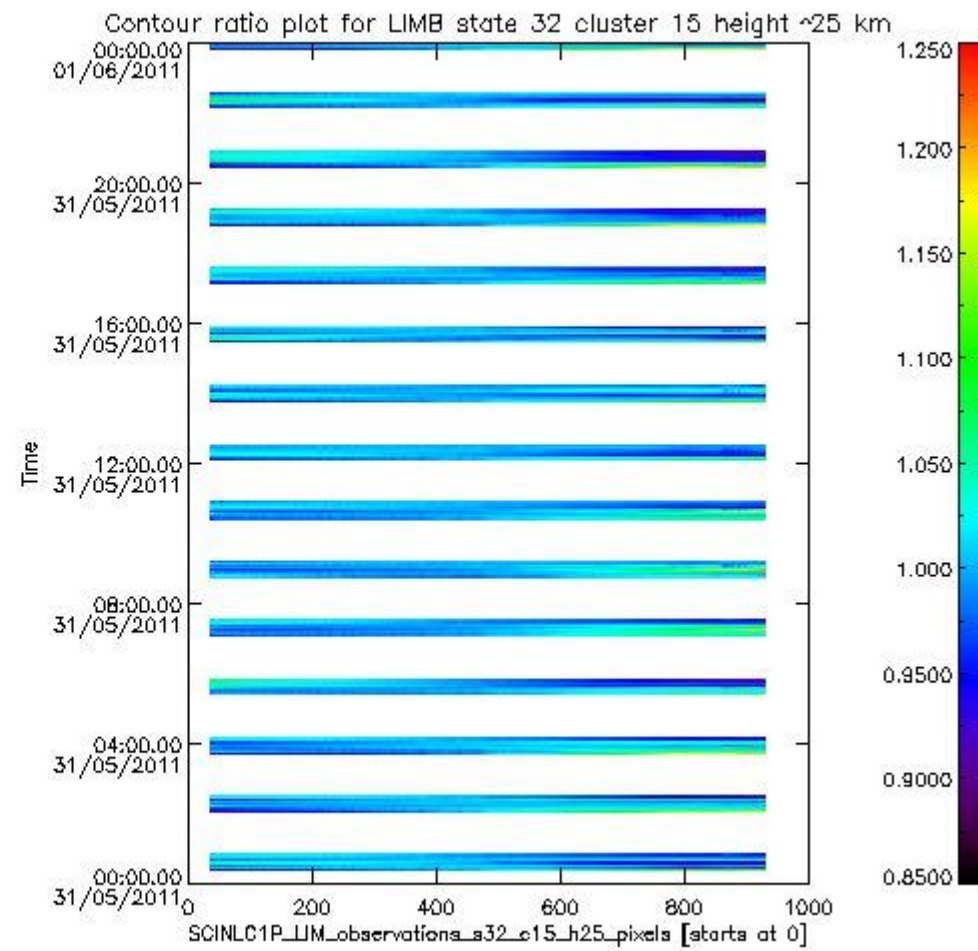
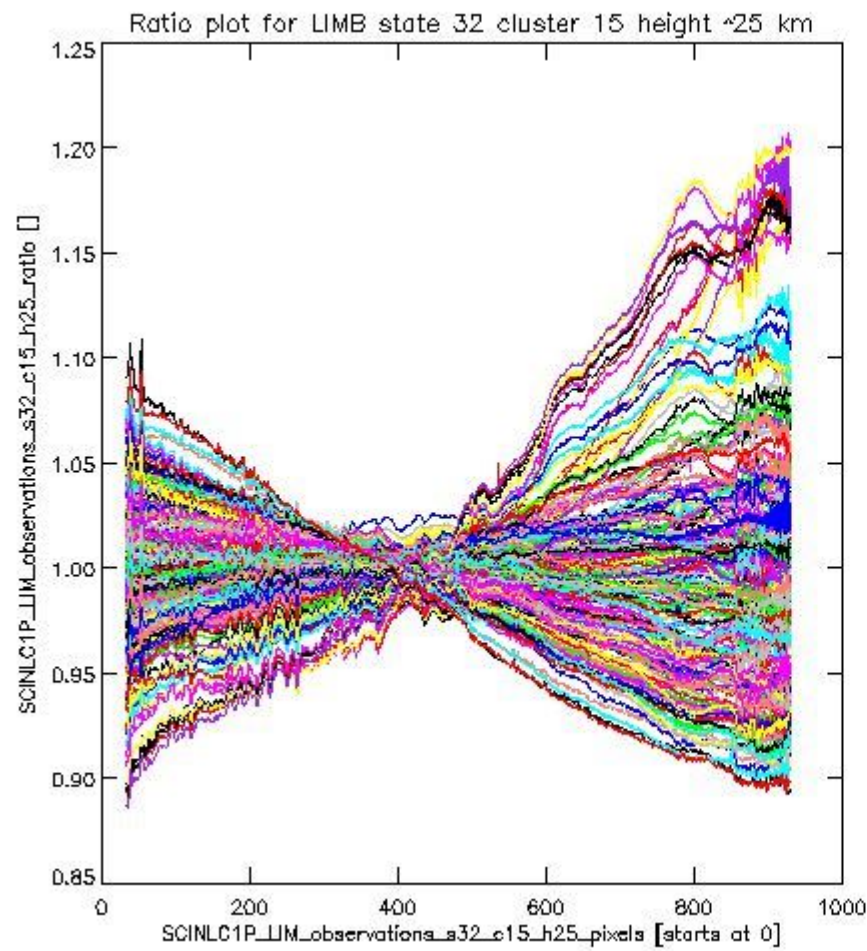


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110531\_17.PNG

**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	31MAY2011 00:22:09.214
Start time of last sample	31MAY2011 23:59:41.666
Reference period start time	01MAY2011 00:24:24.866
Reference period stop time	30MAY2011 23:09:25.299
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\_20110531\_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	31MAY2011 00:22:09.214
Start time of last sample	31MAY2011 23:59:41.666
Reference period start time	01MAY2011 00:24:24.866
Reference period stop time	30MAY2011 23:09:25.299
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

