

# 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	24JUN2011 06:30:43
Data source version	SCIA/7.04-U
Processing scope for products	11JUN2011 00:00:00 to 12JUN2011 00:00:00
Start time of first product within scope	11JUN2011 00:00:38
Stop time of last product within scope	12JUN2011 00:33:56
Total number of level 1 products	15
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	11JUN2011 00:33:49.161	11JUN2011 23:57:57.601
1	NADIR	07	09	N/A	11JUN2011 00:33:49.161	11JUN2011 23:57:57.601
2	NADIR	07	15	N/A	11JUN2011 00:33:49.161	11JUN2011 23:57:57.601
3	NADIR	07	24	N/A	11JUN2011 00:33:49.161	11JUN2011 23:57:57.601
4	NADIR	07	55	N/A	11JUN2011 00:33:49.161	11JUN2011 23:57:57.601
5	LIMB	32	09	~19 km	11JUN2011 00:18:35.786	11JUN2011 23:59:06.160
6	LIMB	32	09	~22 km	11JUN2011 00:18:35.786	11JUN2011 23:59:06.160
7	LIMB	32	09	~25 km	11JUN2011 00:18:35.786	11JUN2011 23:59:06.160
8	LIMB	32	15	~22 km	11JUN2011 00:18:35.786	11JUN2011 23:59:06.160
9	LIMB	32	15	~25 km	11JUN2011 00:18:35.786	11JUN2011 23:59:06.160
10	LIMB	32	15	~35 km	11JUN2011 00:18:35.786	11JUN2011 23:59:06.160

#### 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	#cml_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110611_000038_000057403103_00232_48522_2118.N1</a>	11JUN2011 00:00:38	11JUN2011 01:11:07	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110611_014051_000057413103_00233_48523_2117.N1</a>	11JUN2011 01:40:51	11JUN2011 02:51:06	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110611_032105_000057413103_00234_48524_2121.N1</a>	11JUN2011 03:21:05	11JUN2011 04:31:34	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110611_050119_000057413103_00235_48525_2122.N1</a>	11JUN2011 05:01:19	11JUN2011 06:11:34	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110611_064133_000057413103_00236_48526_2127.N1</a>	11JUN2011 06:41:33	11JUN2011 07:52:02	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110611_082147_000057413103_00237_48527_2125.N1</a>	11JUN2011 08:21:47	11JUN2011 09:32:02	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110611_100201_000057413103_00238_48528_2128.N1	11JUN2011 10:02:01	11JUN2011 11:12:30	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110611_114215_000057413103_00239_48529_2130.N1	11JUN2011 11:42:15	11JUN2011 12:52:29	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110611_132228_000057413103_00240_48530_2133.N1	11JUN2011 13:22:28	11JUN2011 14:32:57	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110611_150242_000057413103_00241_48531_2134.N1	11JUN2011 15:02:42	11JUN2011 16:12:57	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110611_164256_000057413103_00242_48532_2136.N1	11JUN2011 16:42:56	11JUN2011 17:53:25	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110611_182310_000057413103_00243_48533_2139.N1	11JUN2011 18:23:10	11JUN2011 19:33:45	0	33	31	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110611_200324_000057413103_00244_48534_2140.N1	11JUN2011 20:03:24	11JUN2011 21:14:02	0	36	30	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110611_214338_000057413103_00245_48535_2142.N1	11JUN2011 21:43:38	11JUN2011 22:53:53	0	35	31	0	0	1	0	0	
14	SCI_NLC_1CUDPA20110611_232352_000057413103_00246_48536_2184.N1	11JUN2011 23:23:52	12JUN2011 00:33:56	0	31	31	0	0	1	0	0	

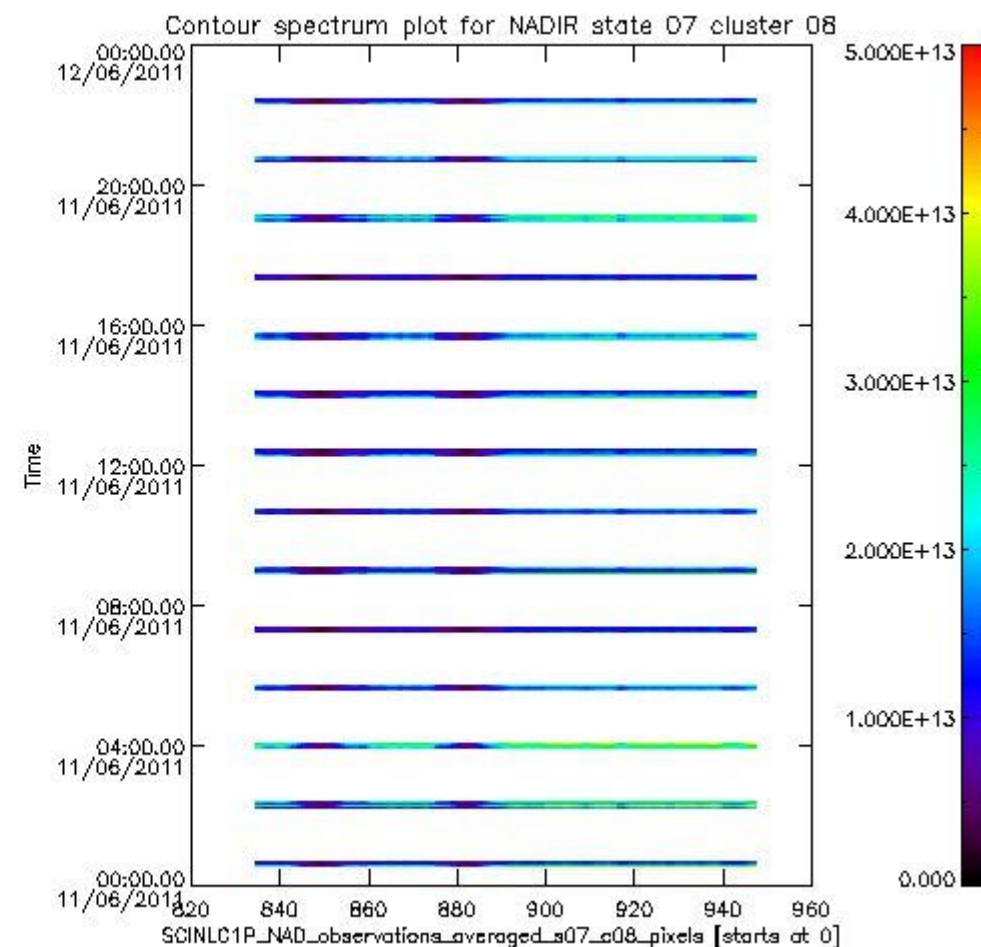
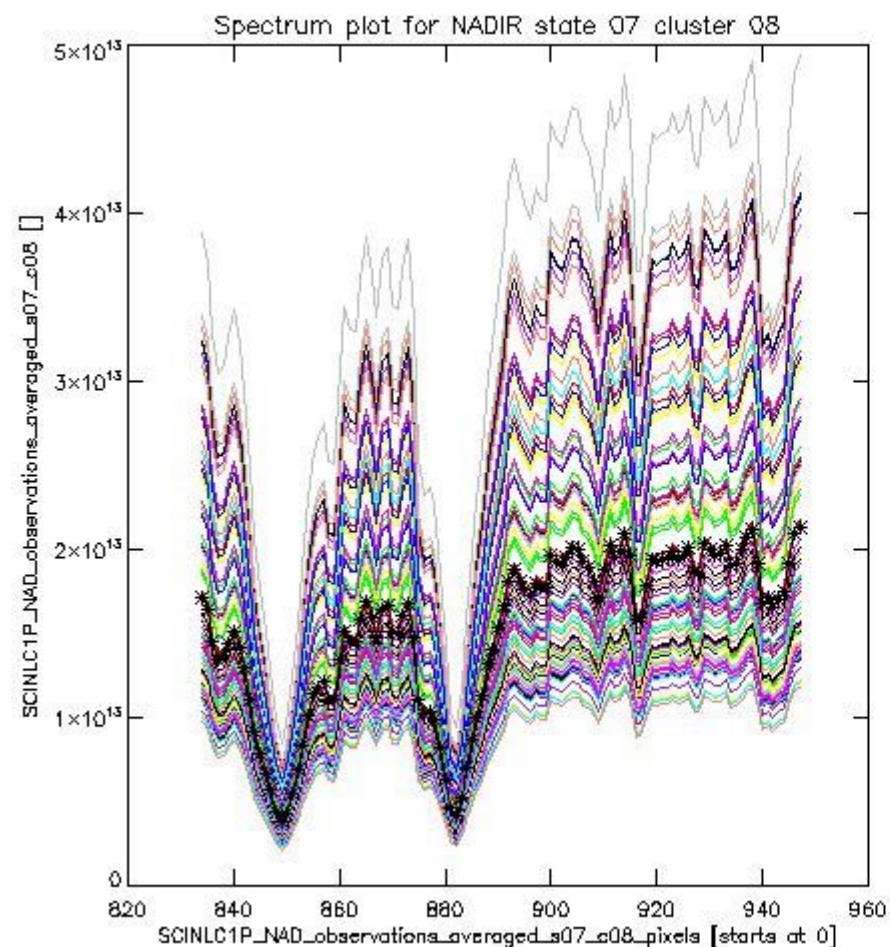
## 1.2 Source packet monitoring

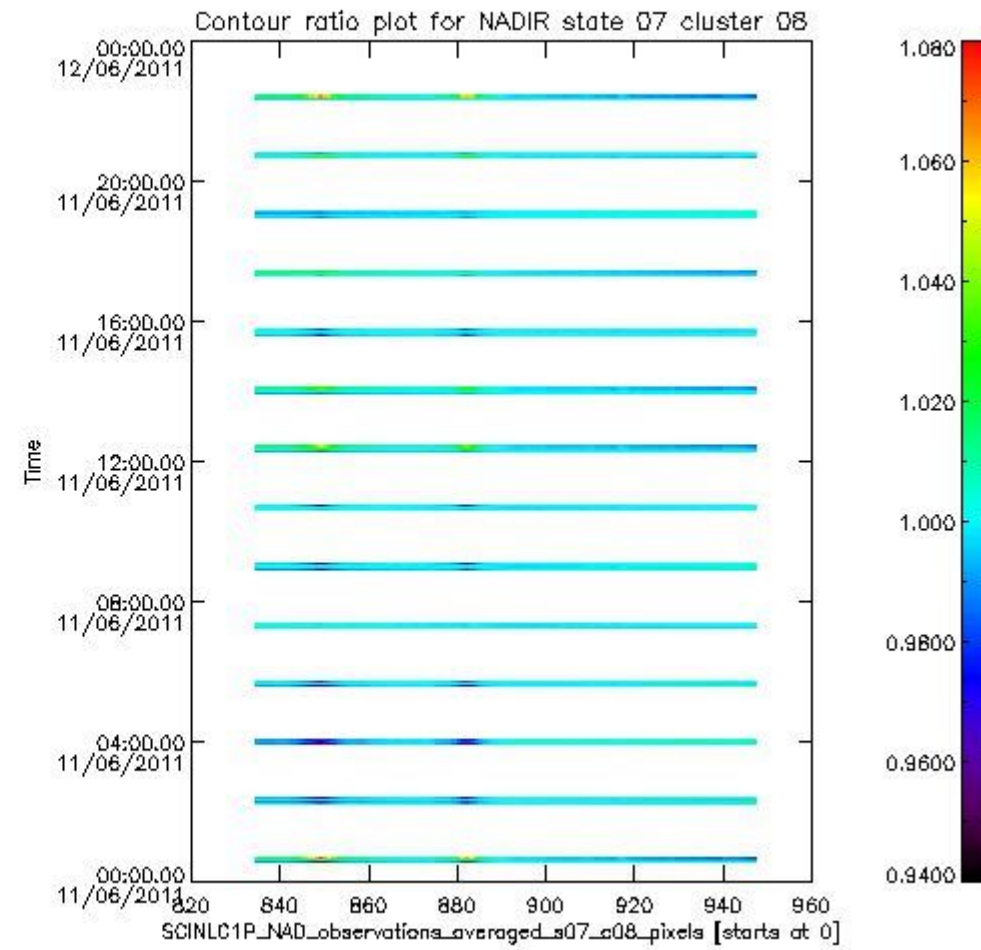
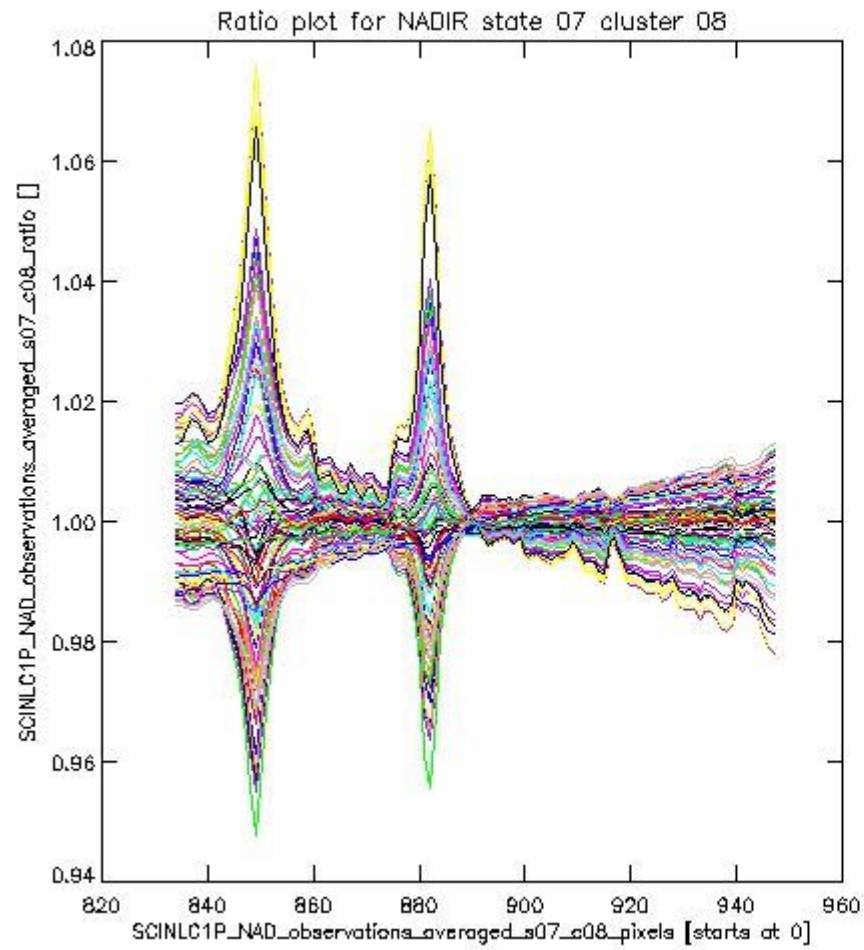
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	11JUN2011 00:33:49.161
Start time of last sample	11JUN2011 23:57:57.601
Reference period start time	12MAY2011 00:33:38.546
Reference period stop time	10JUN2011 23:02:40.496
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

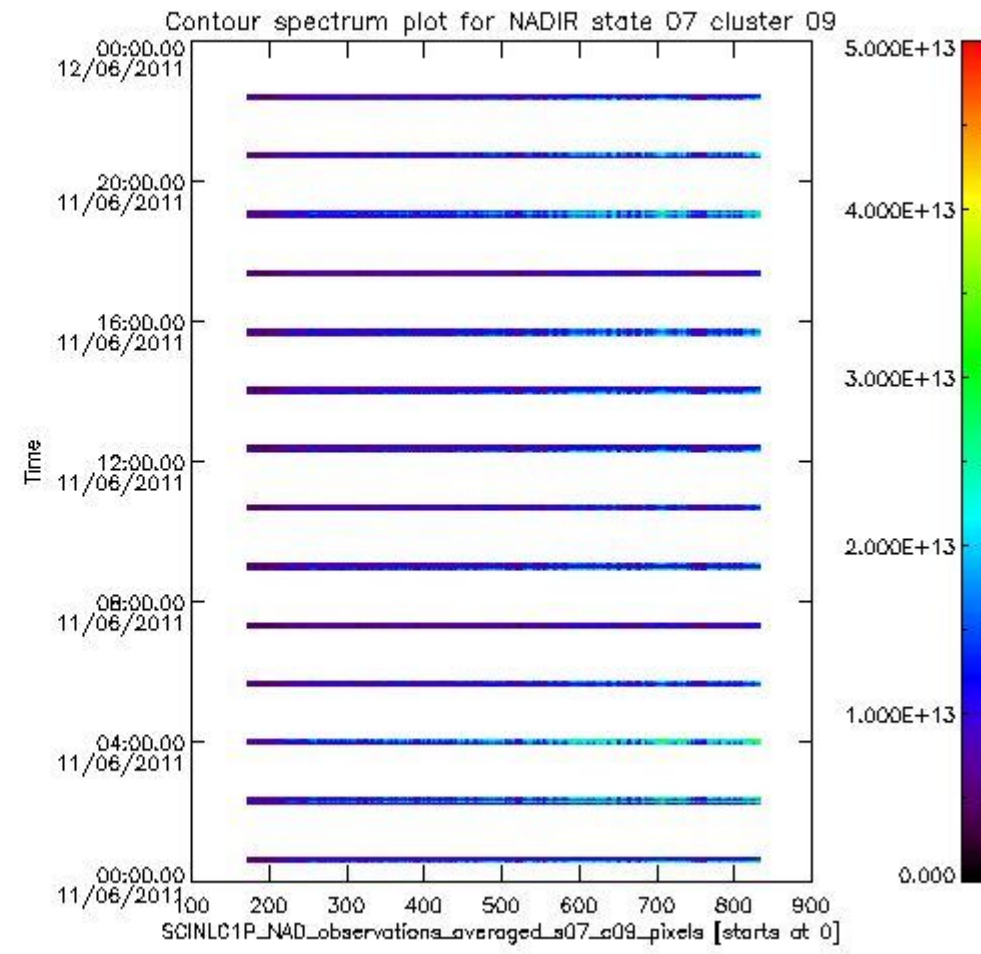
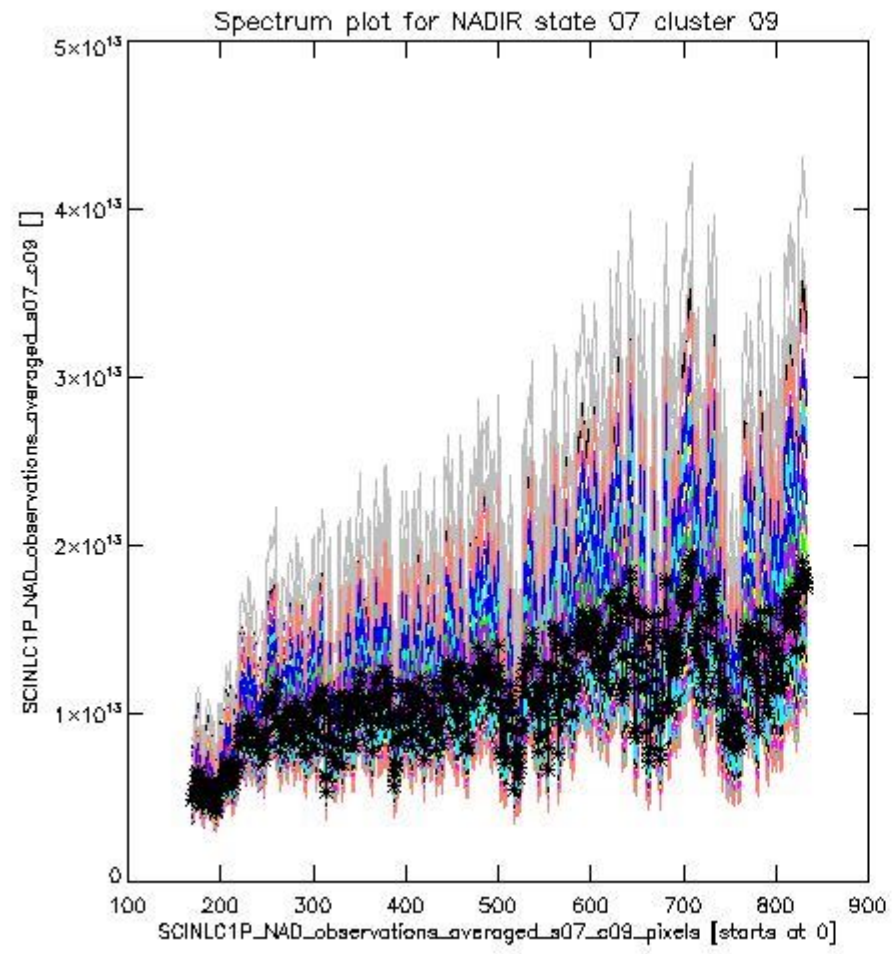




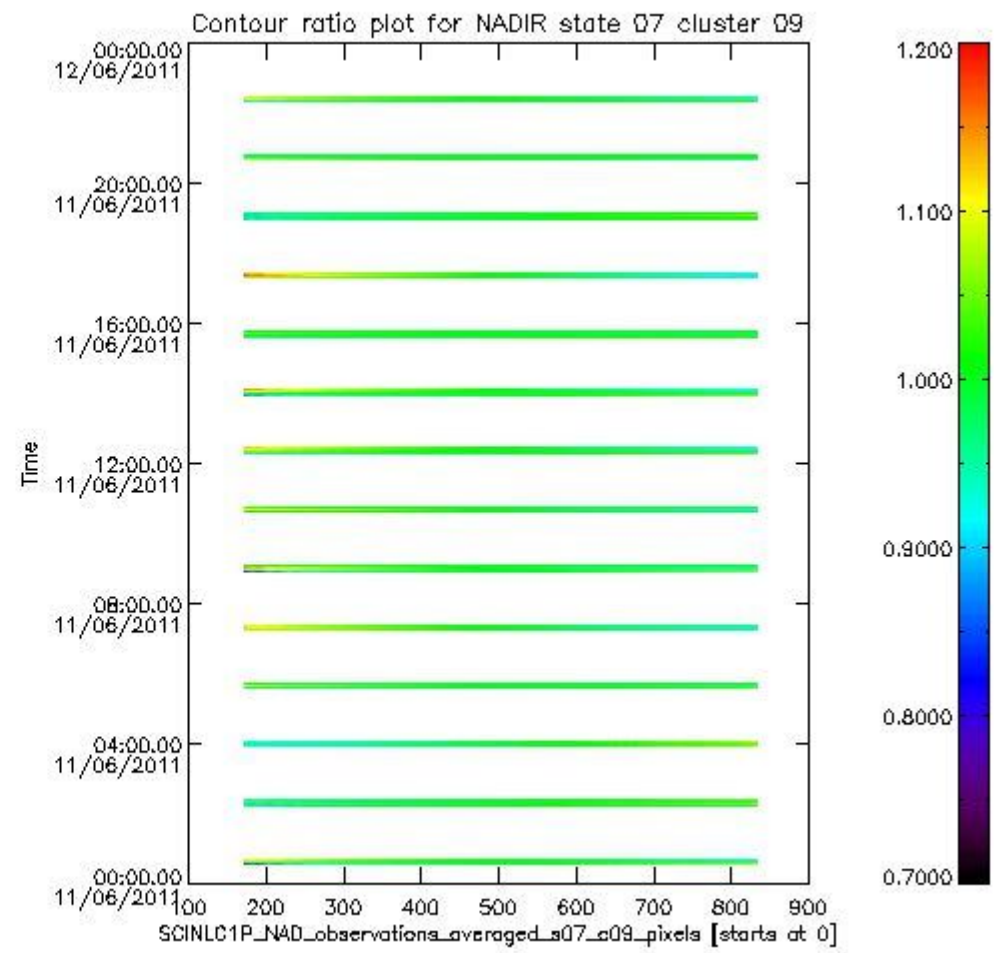
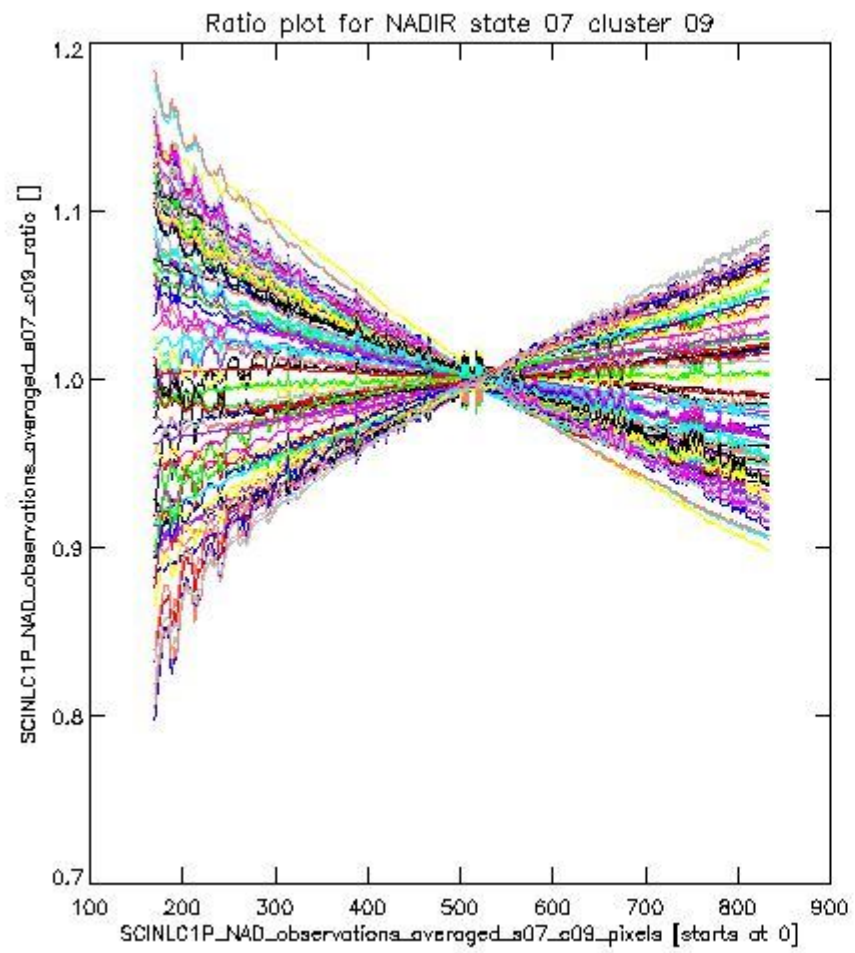
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	11JUN2011 00:33:49.161
Start time of last sample	11JUN2011 23:57:57.601
Reference period start time	12MAY2011 00:33:38.546
Reference period stop time	10JUN2011 23:02:40.496
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





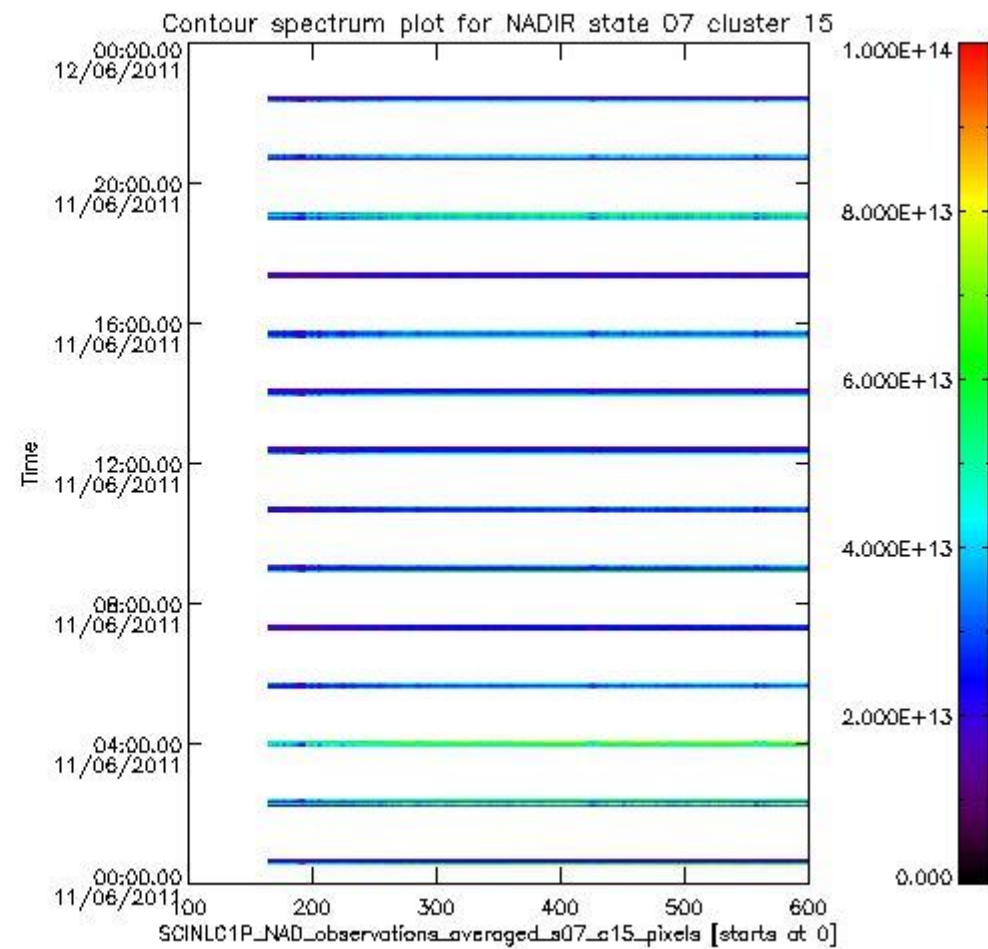
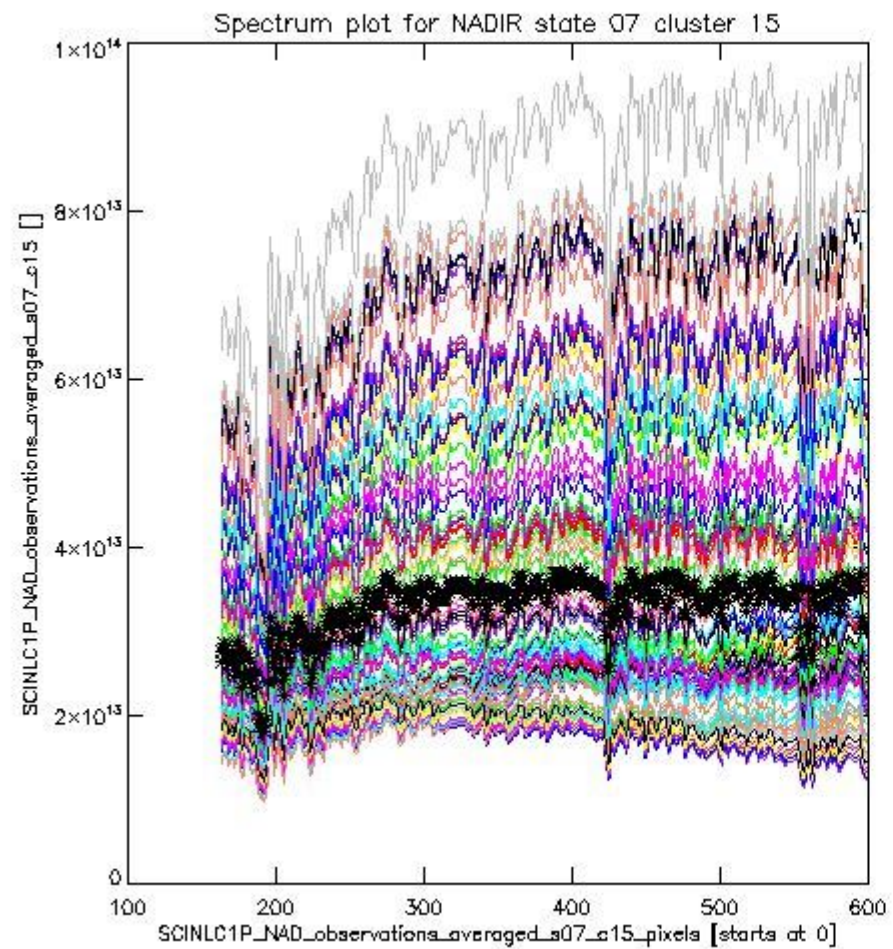
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_3.PNG

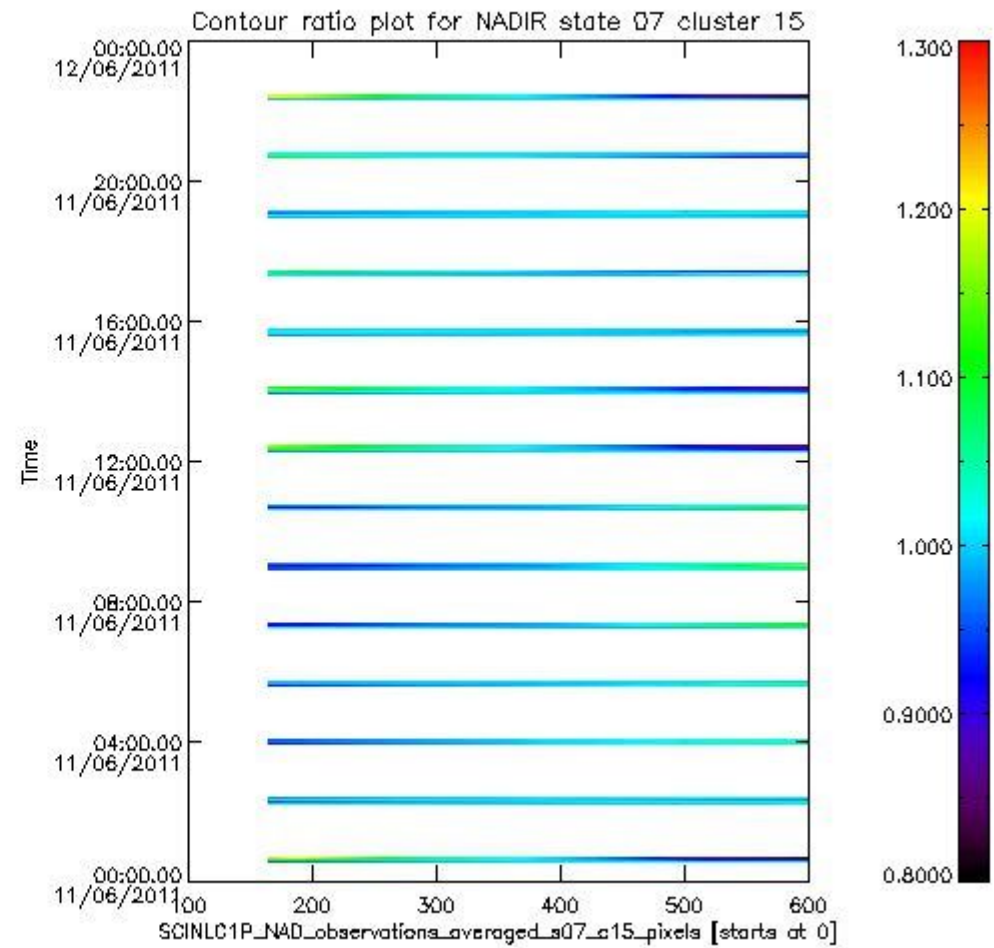
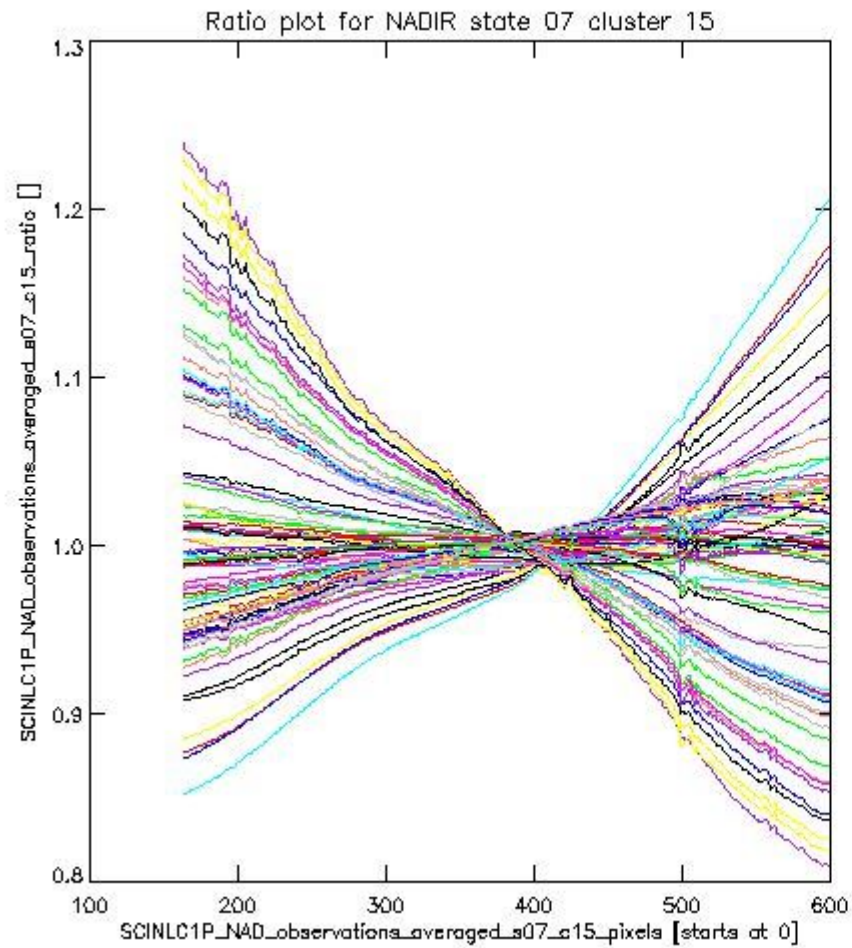
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	11JUN2011 00:33:49.161
Start time of last sample	11JUN2011 23:57:57.601
Reference period start time	12MAY2011 00:33:38.546
Reference period stop time	10JUN2011 23:02:40.496
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\_20110611\_4.PNG

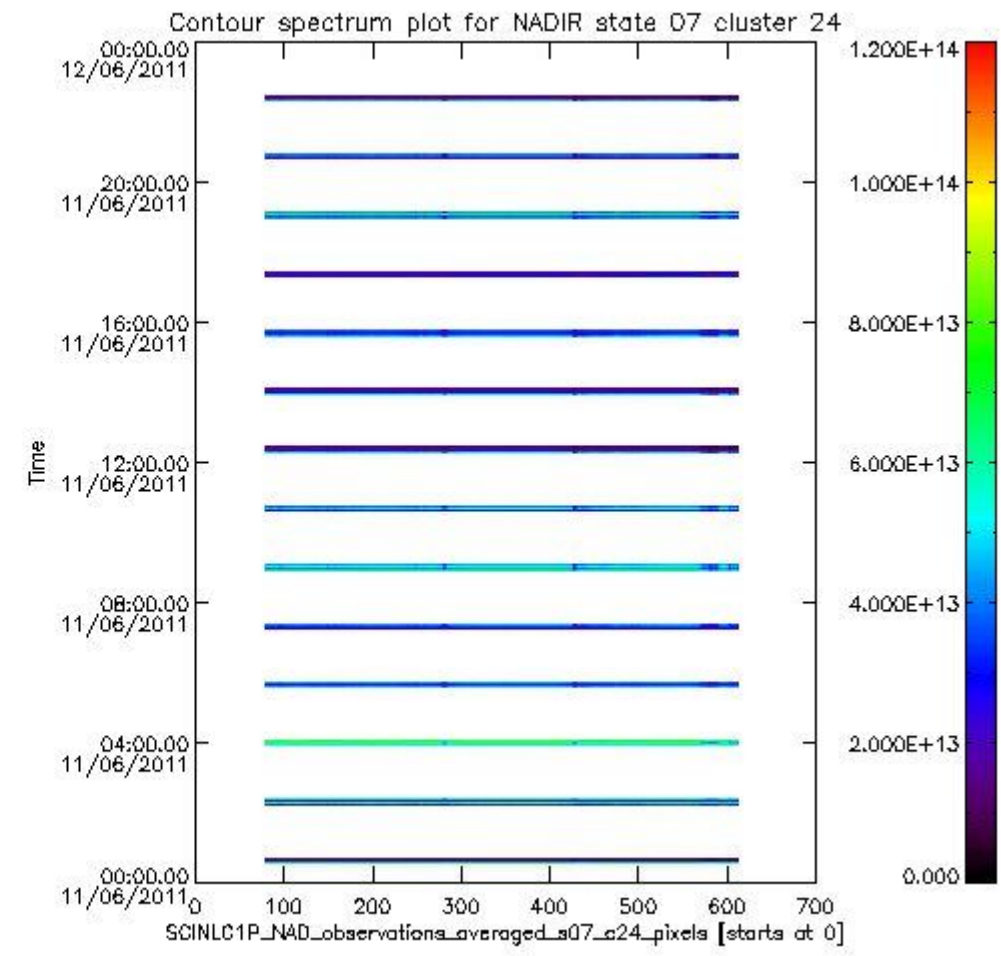
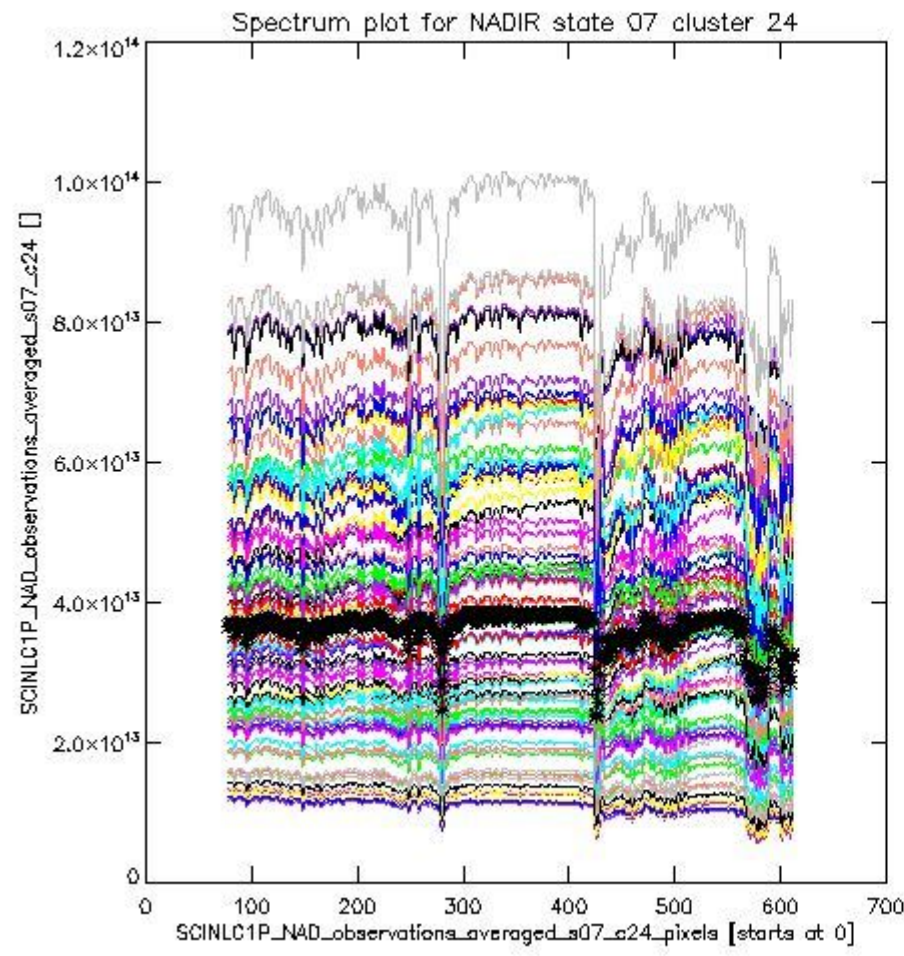




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_5.PNG

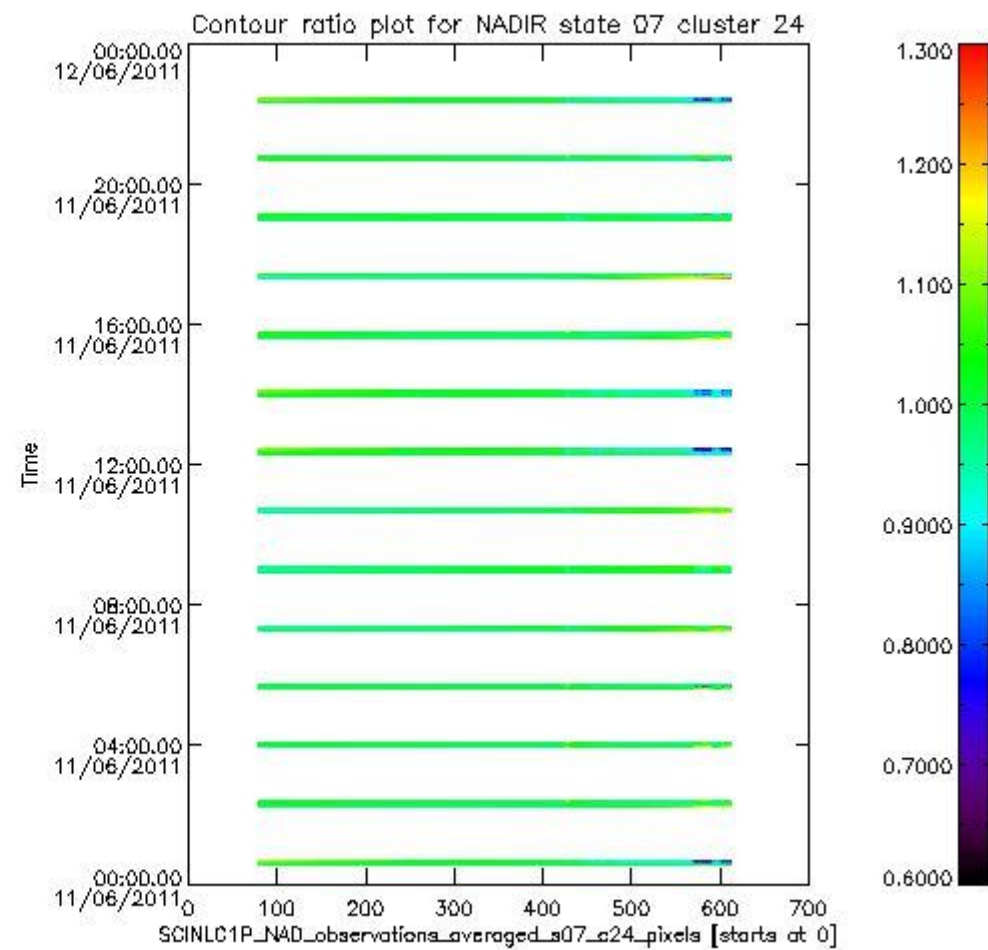
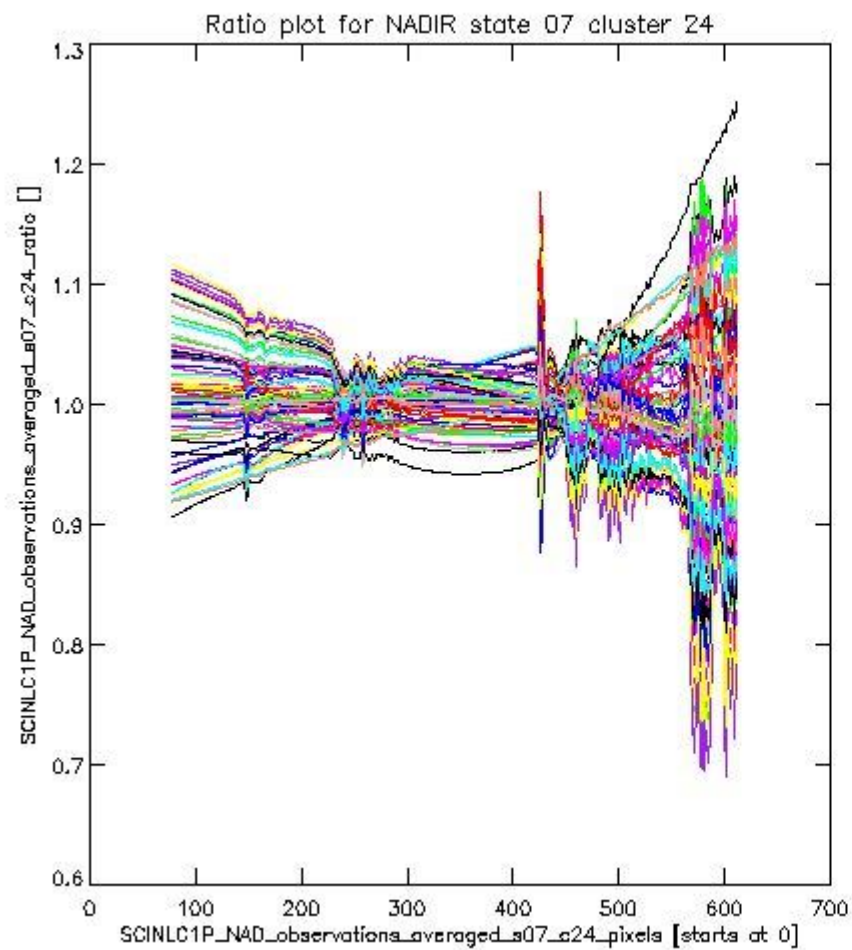
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	11JUN2011 00:33:49.161
Start time of last sample	11JUN2011 23:57:57.601
Reference period start time	12MAY2011 00:33:38.546
Reference period stop time	10JUN2011 23:02:40.496
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



sciamachy\_i1b\_source\_packet\_report\_SCI\_A\_7\_04\_U\_20110611\_6.PNG

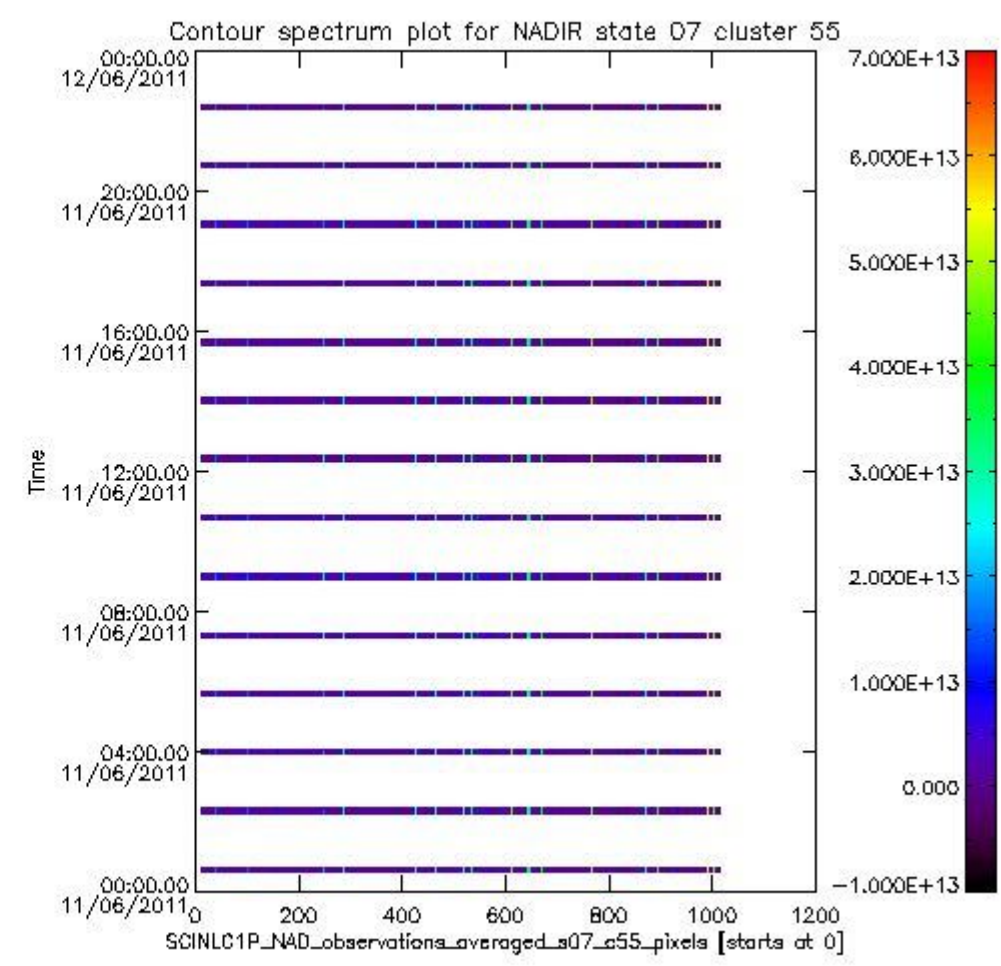
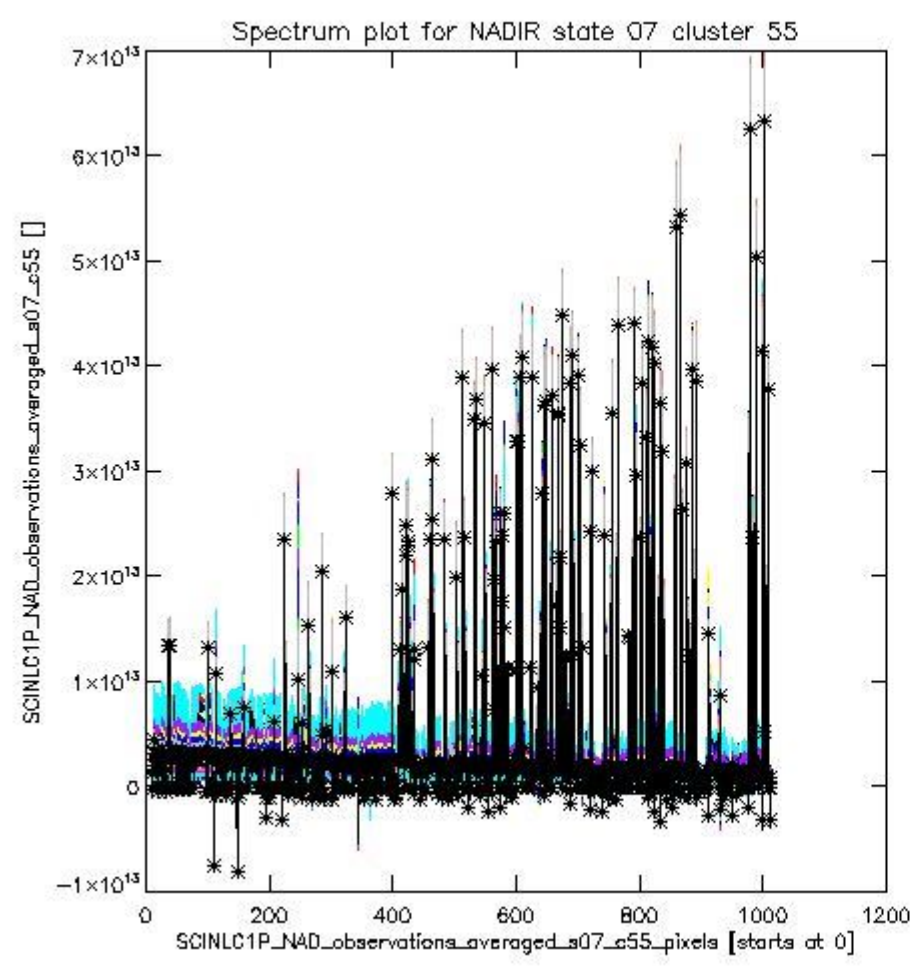




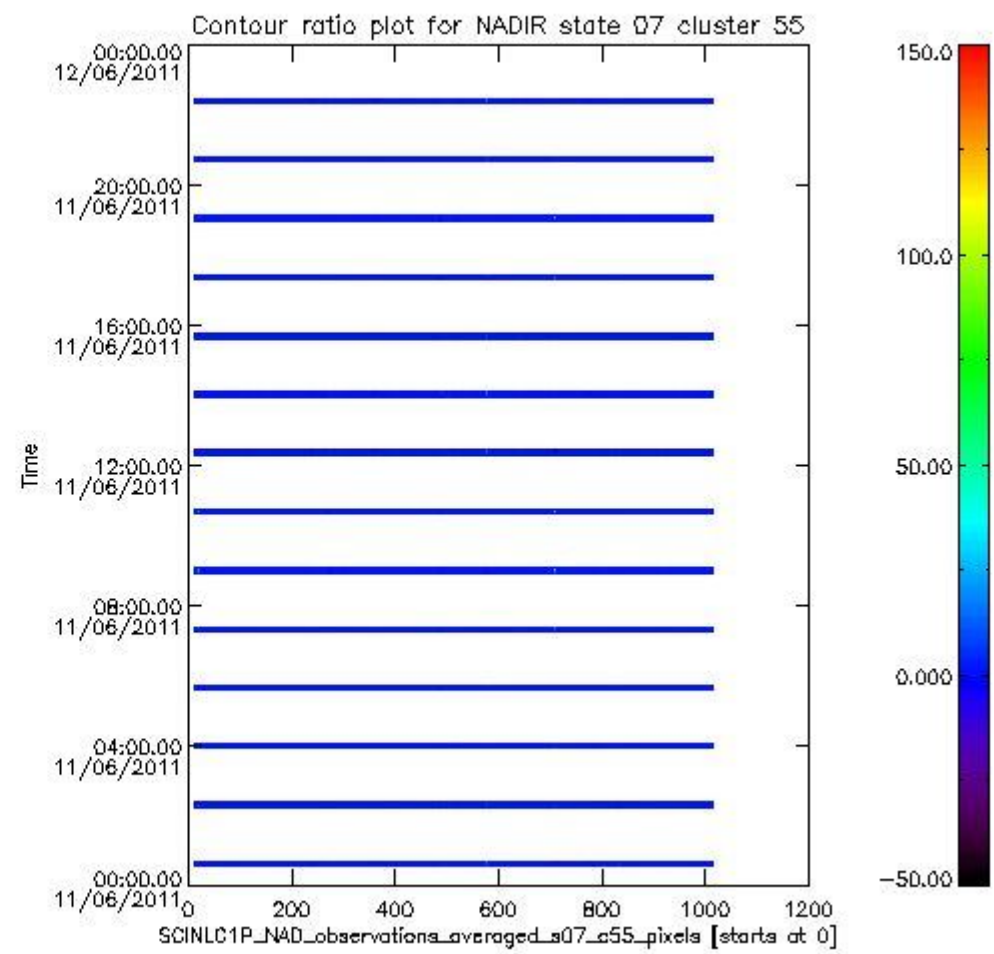
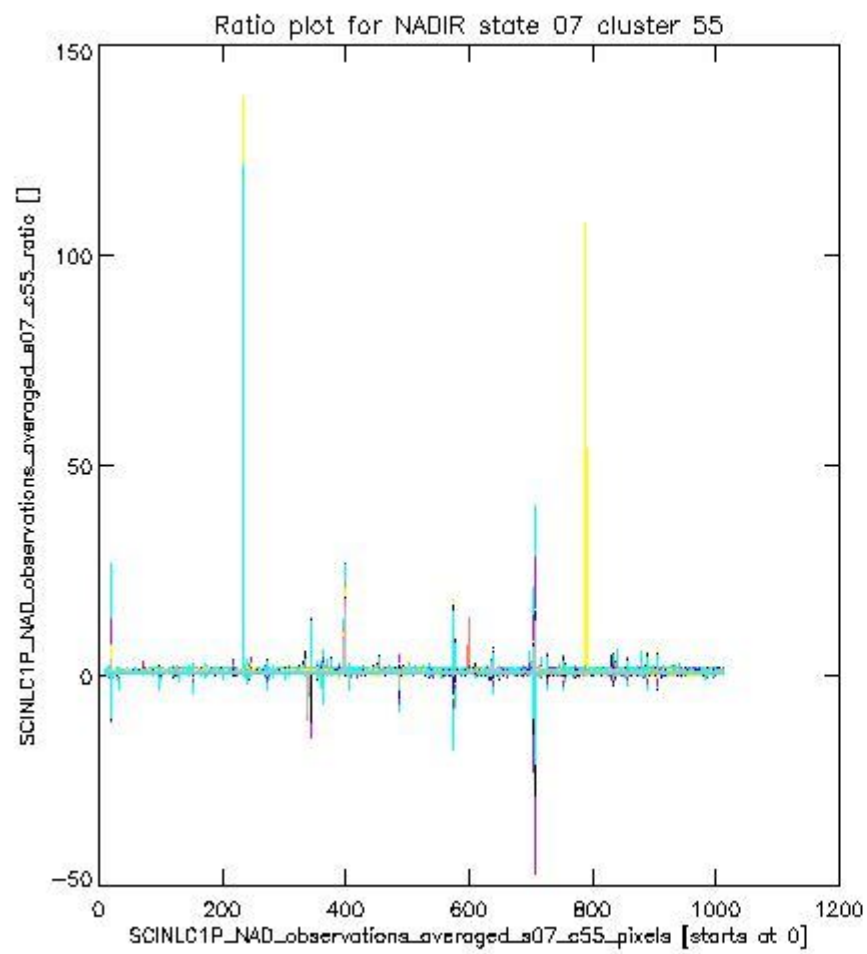
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_7.PNG

**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	11JUN2011 00:33:49.161
Start time of last sample	11JUN2011 23:57:57.601
Reference period start time	12MAY2011 00:33:38.546
Reference period stop time	10JUN2011 23:02:40.496
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\_20110611\_8.PNG

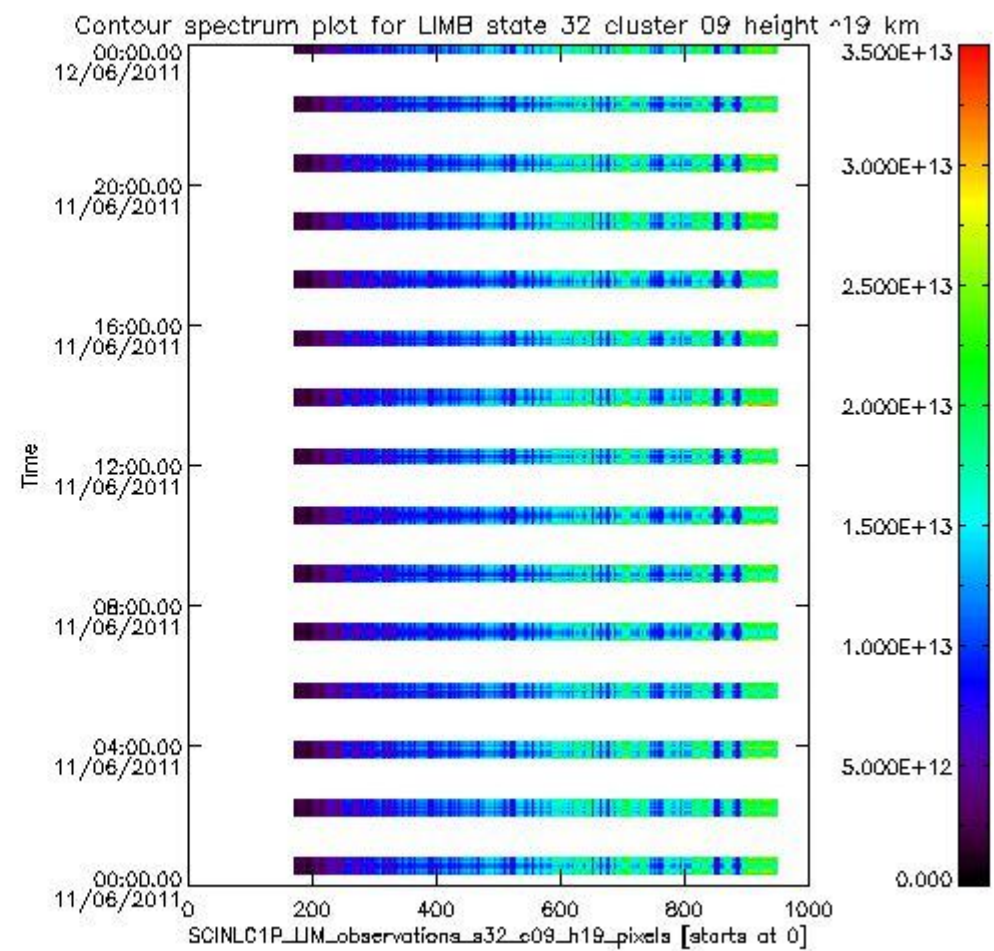
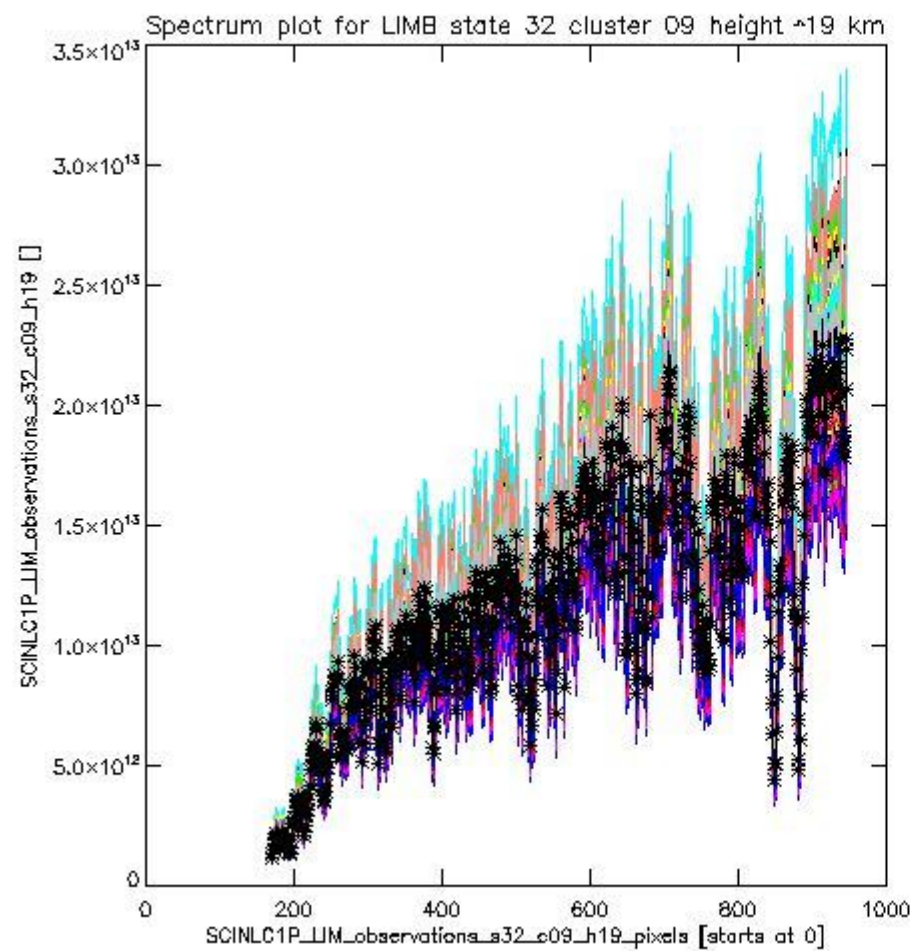


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_9.PNG

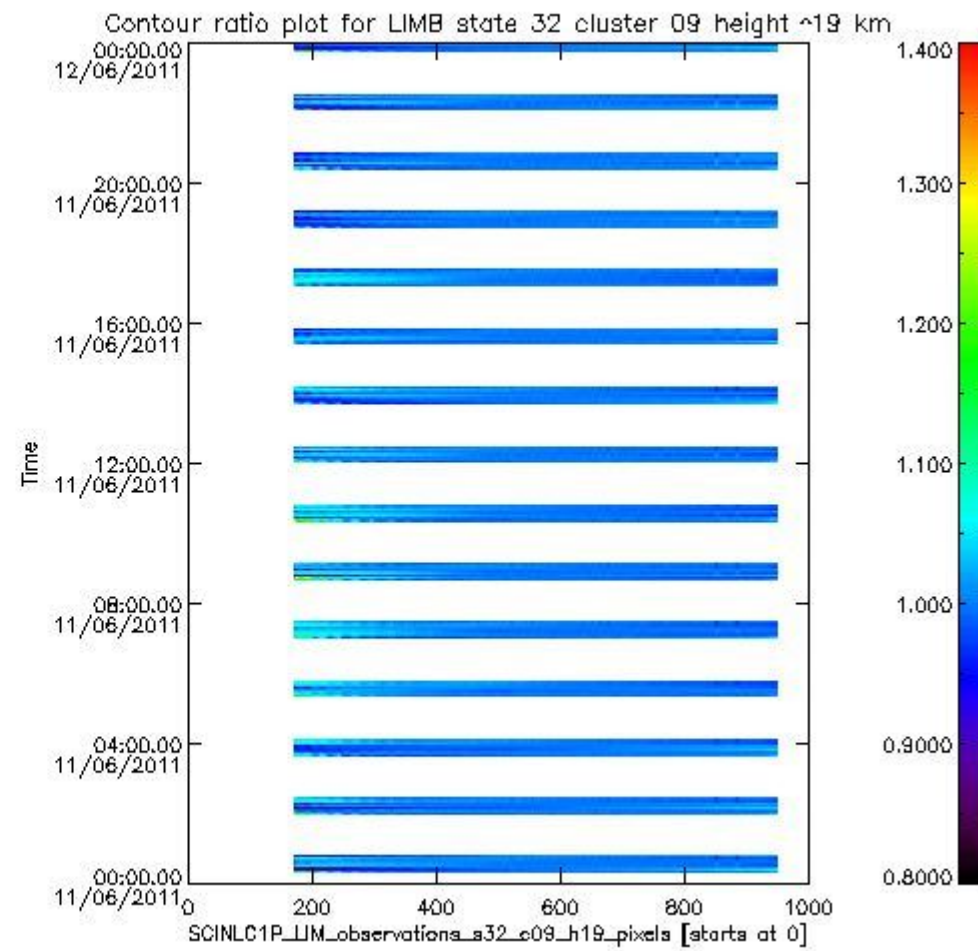
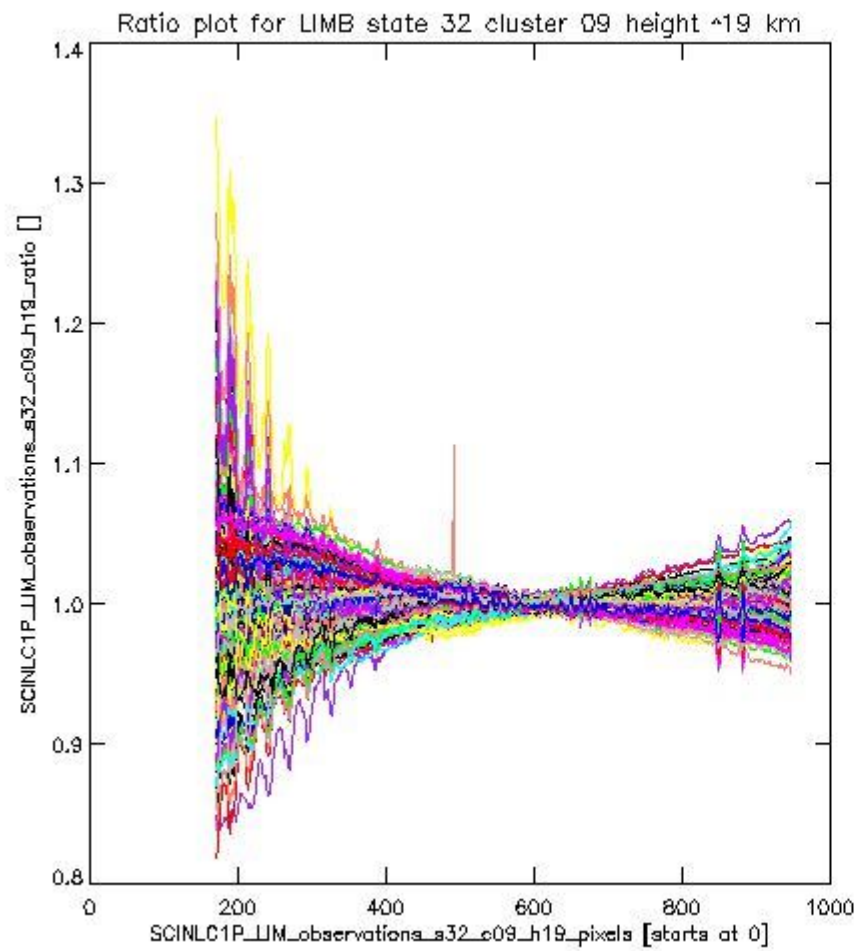
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	11JUN2011 00:18:35.786
Start time of last sample	11JUN2011 23:59:06.160
Reference period start time	12MAY2011 00:20:27.909
Reference period stop time	10JUN2011 23:05:51.801
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





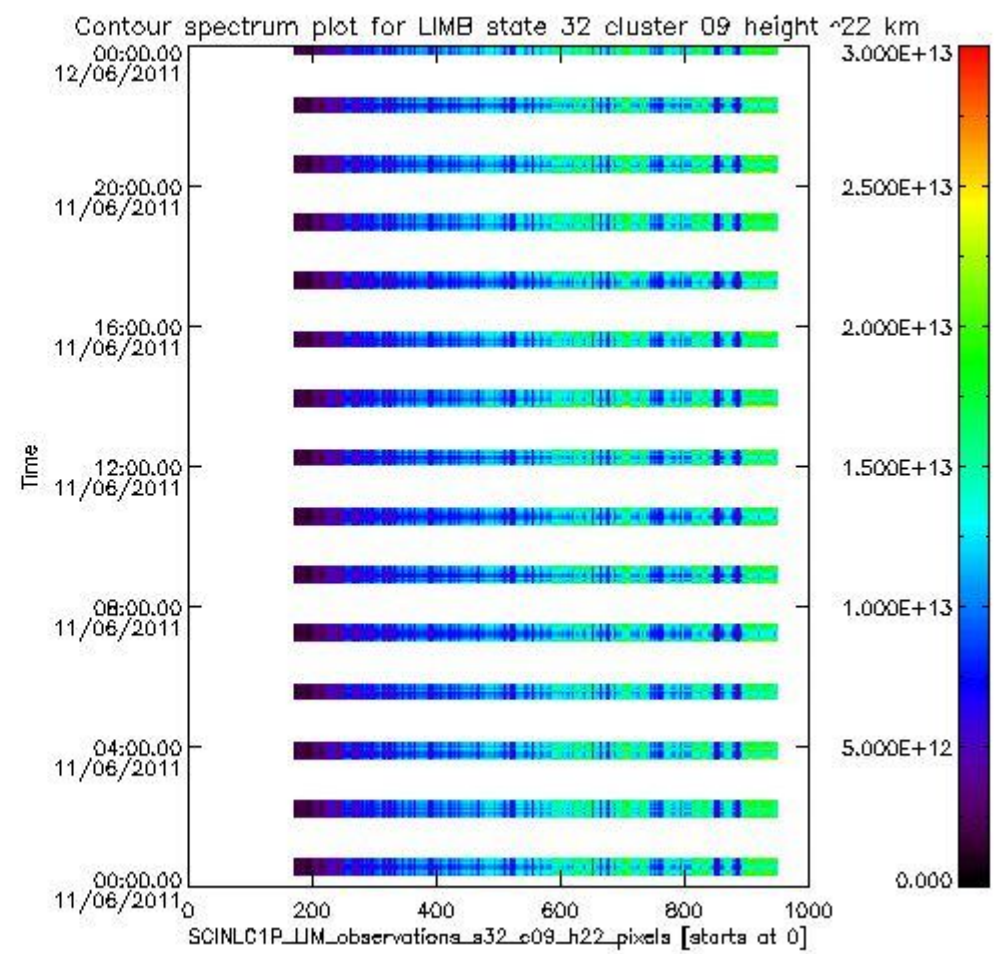
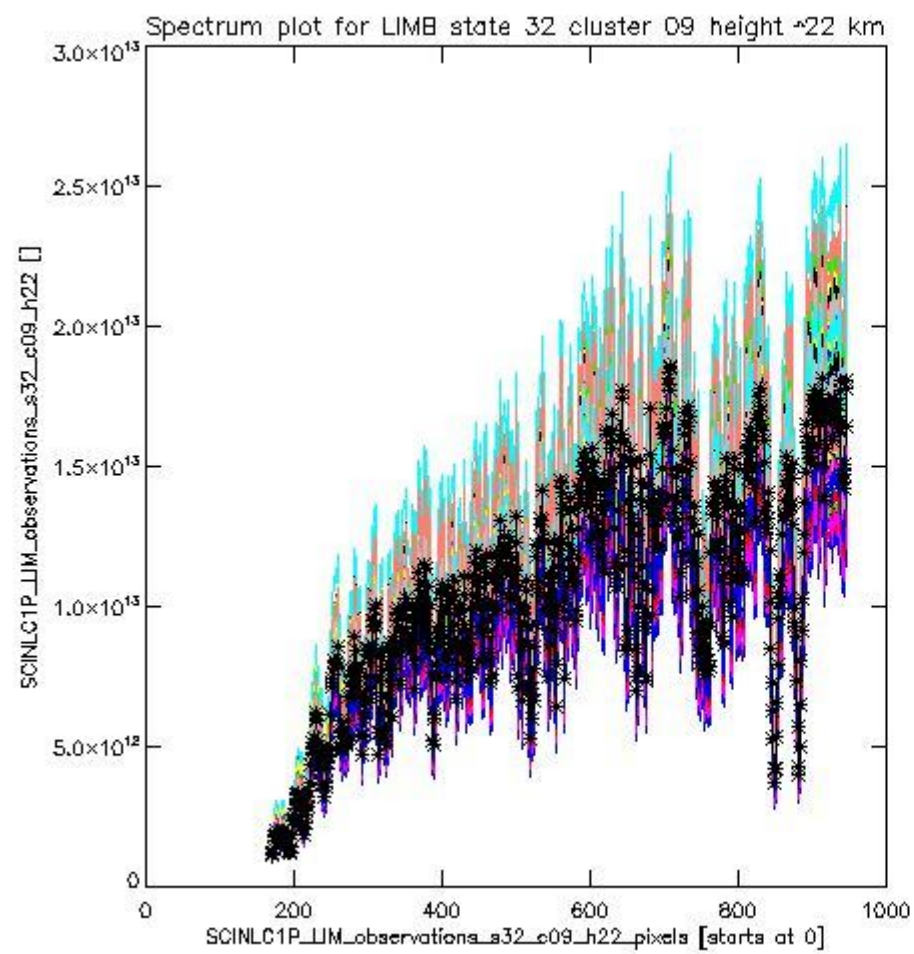
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_11.PNG

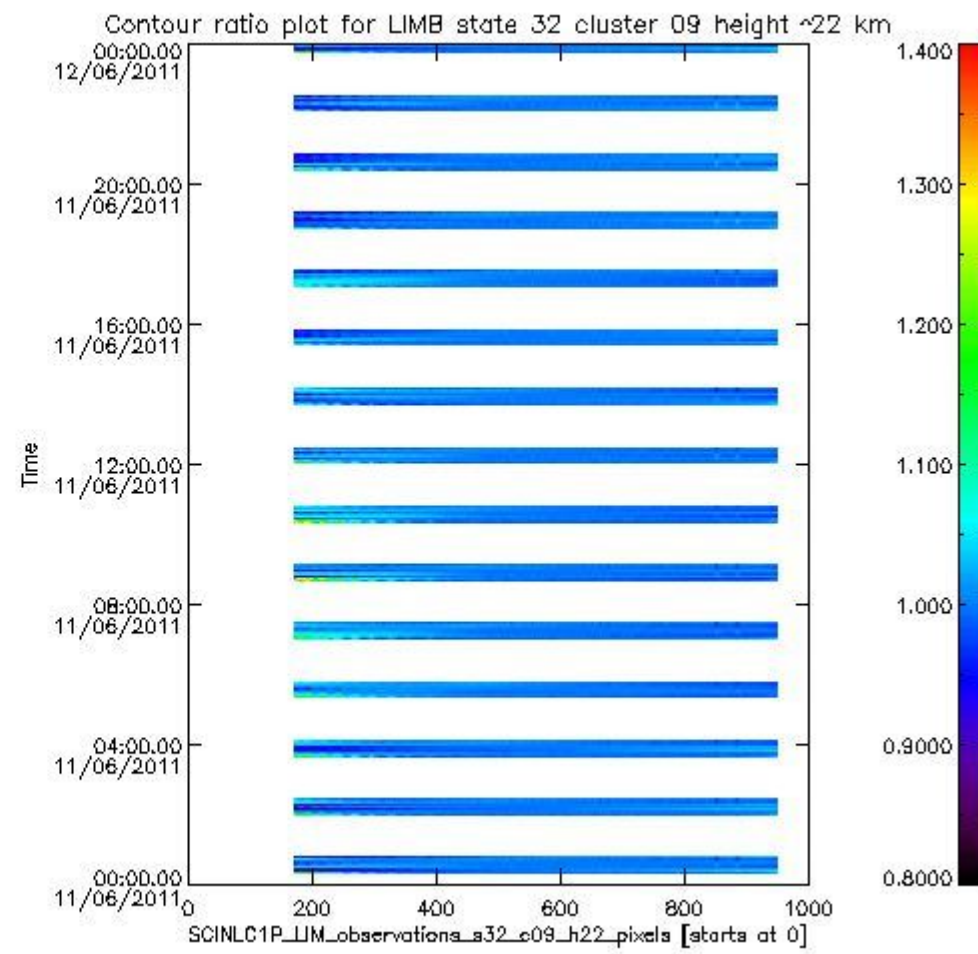
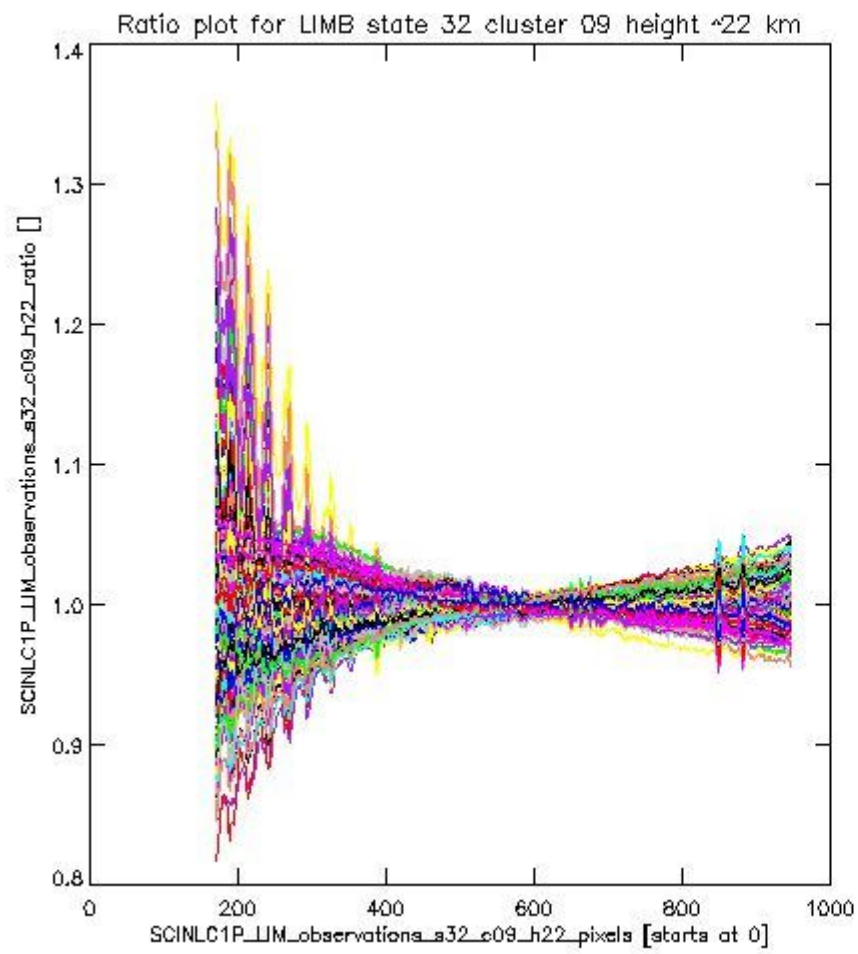
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	11JUN2011 00:18:35.786
Start time of last sample	11JUN2011 23:59:06.160
Reference period start time	12MAY2011 00:20:27.909
Reference period stop time	10JUN2011 23:05:51.801
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\_20110611\_12.PNG

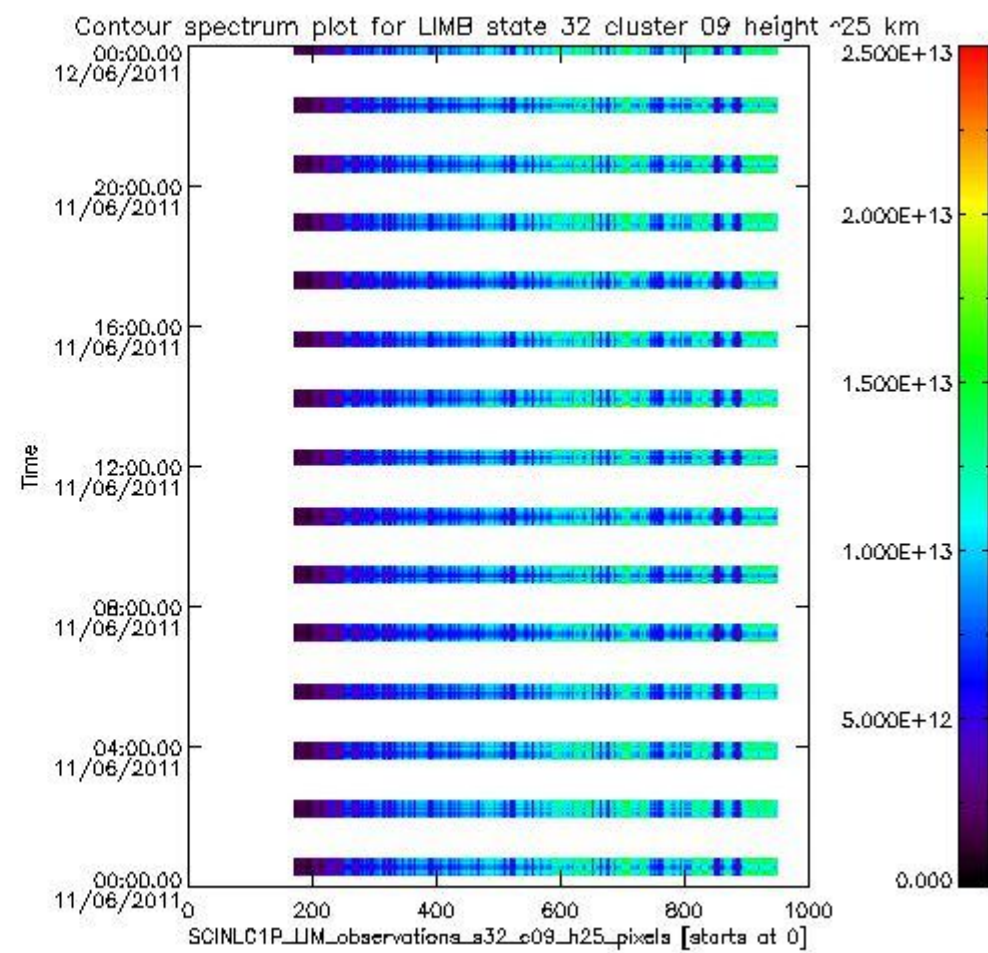
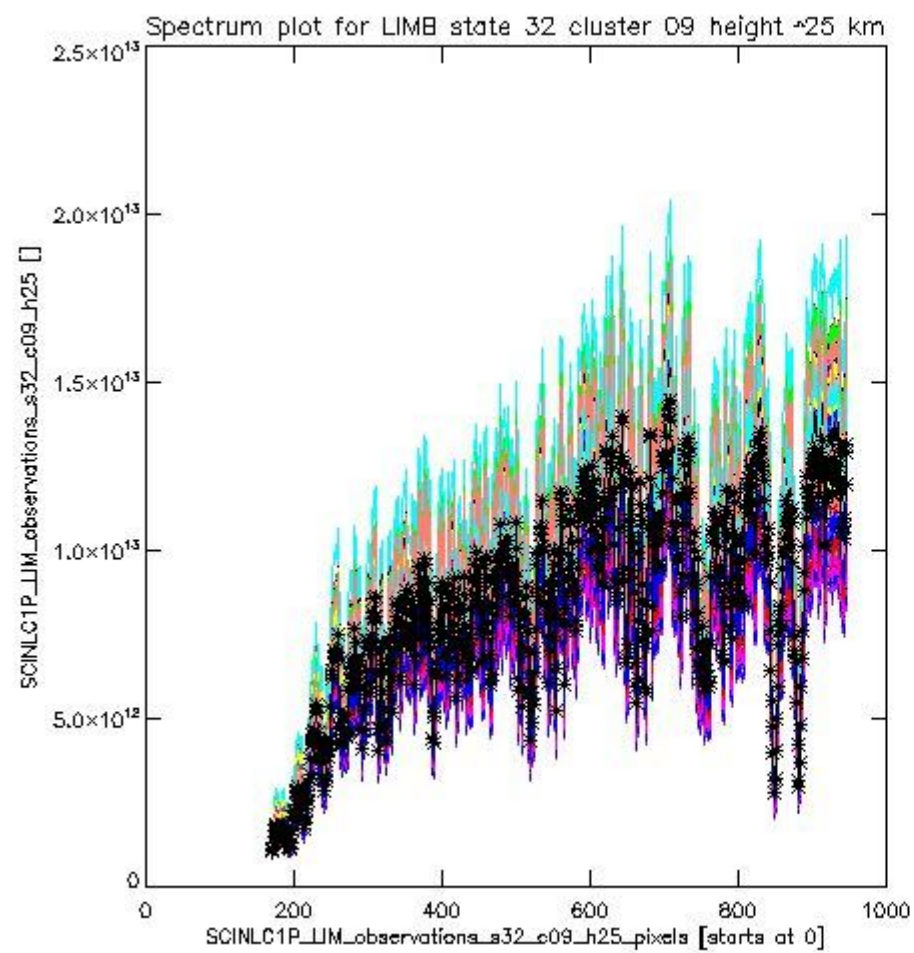




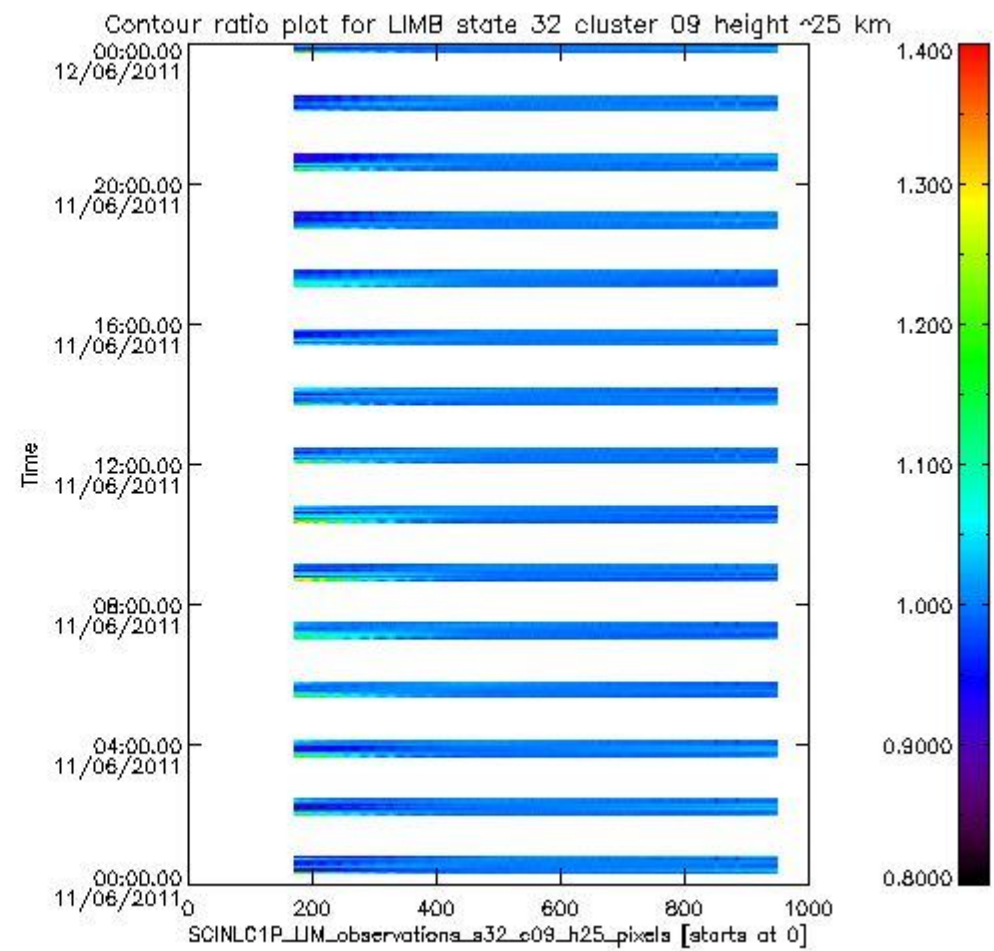
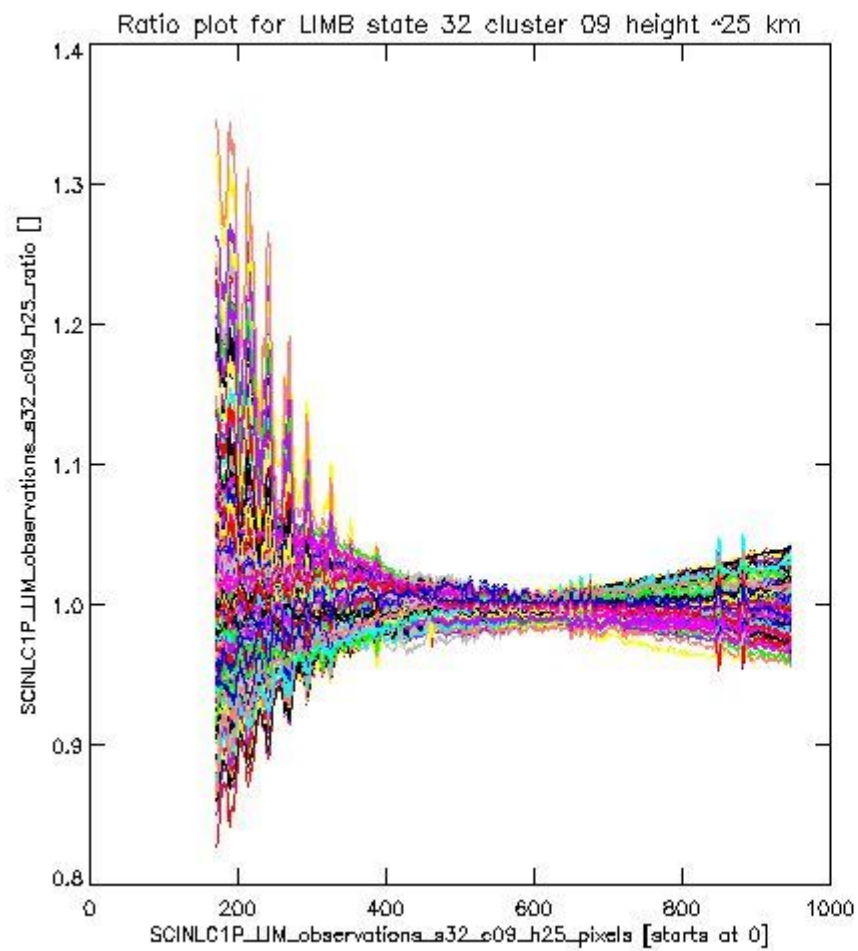
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_13.PNG

**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	11JUN2011 00:18:35.786
Start time of last sample	11JUN2011 23:59:06.160
Reference period start time	12MAY2011 00:20:27.909
Reference period stop time	10JUN2011 23:05:51.801
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\_20110611\_14.PNG

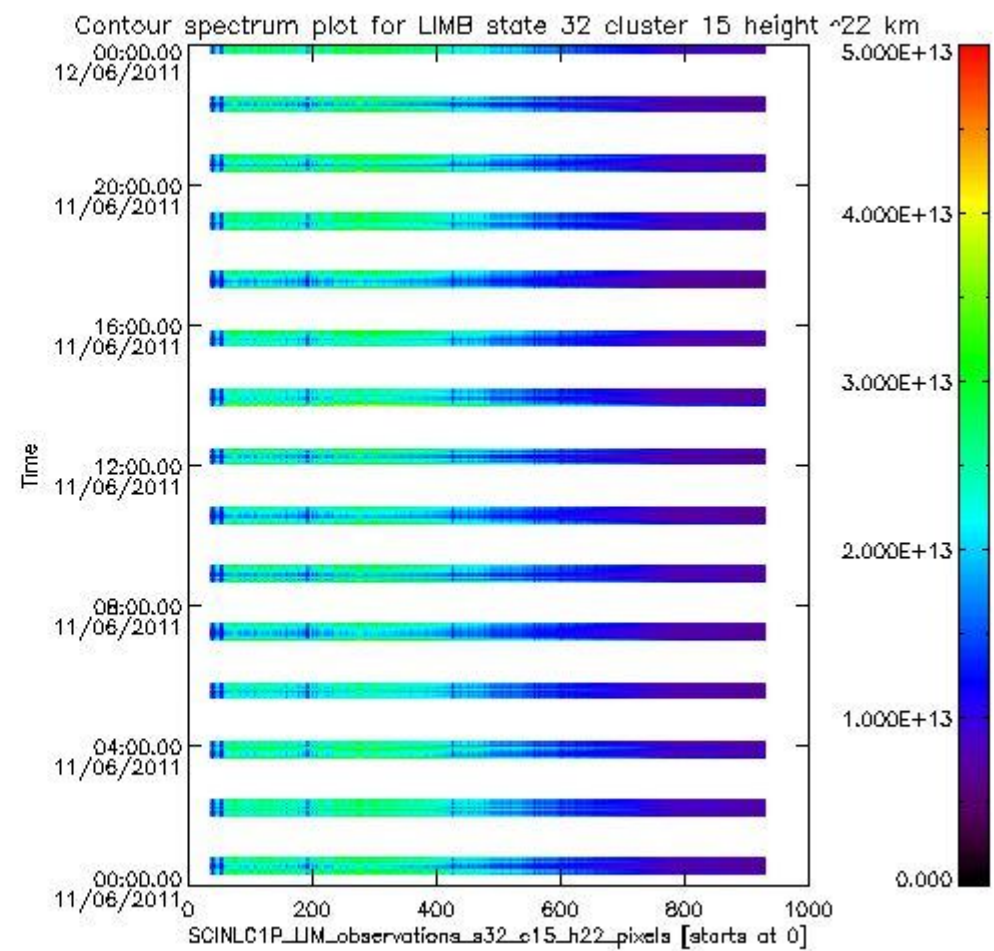
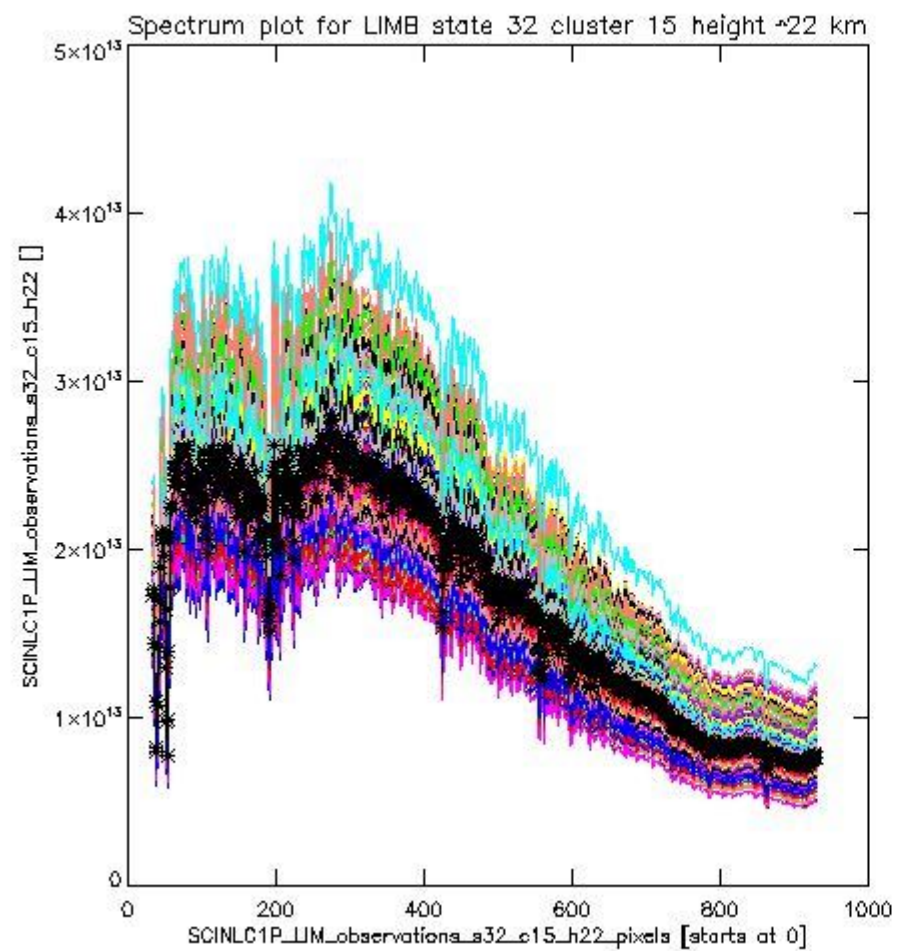


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_15.PNG

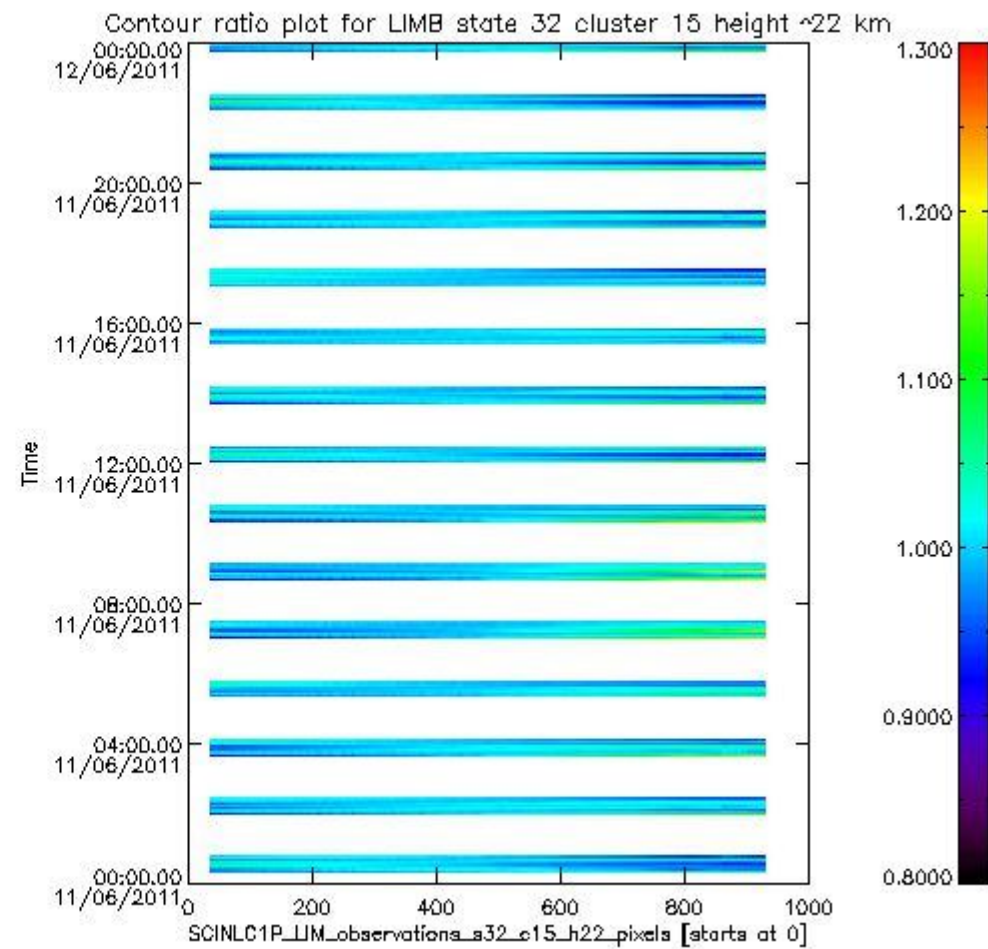
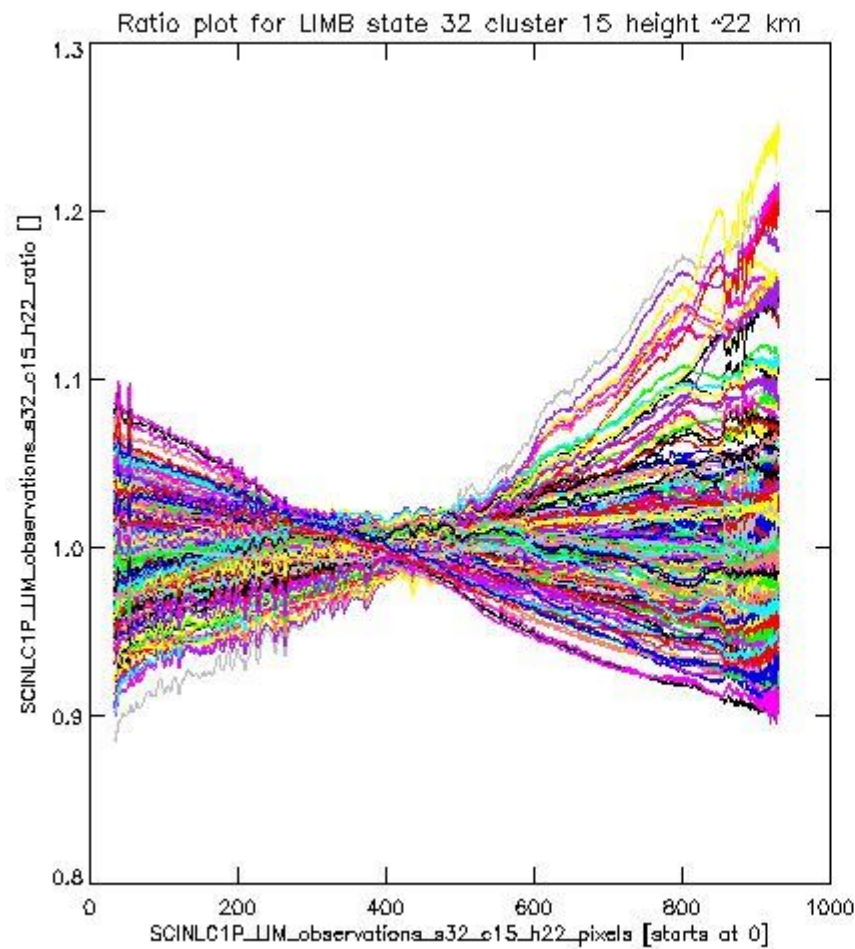
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	11JUN2011 00:18:35.786
Start time of last sample	11JUN2011 23:59:06.160
Reference period start time	12MAY2011 00:20:27.909
Reference period stop time	10JUN2011 23:05:51.801
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





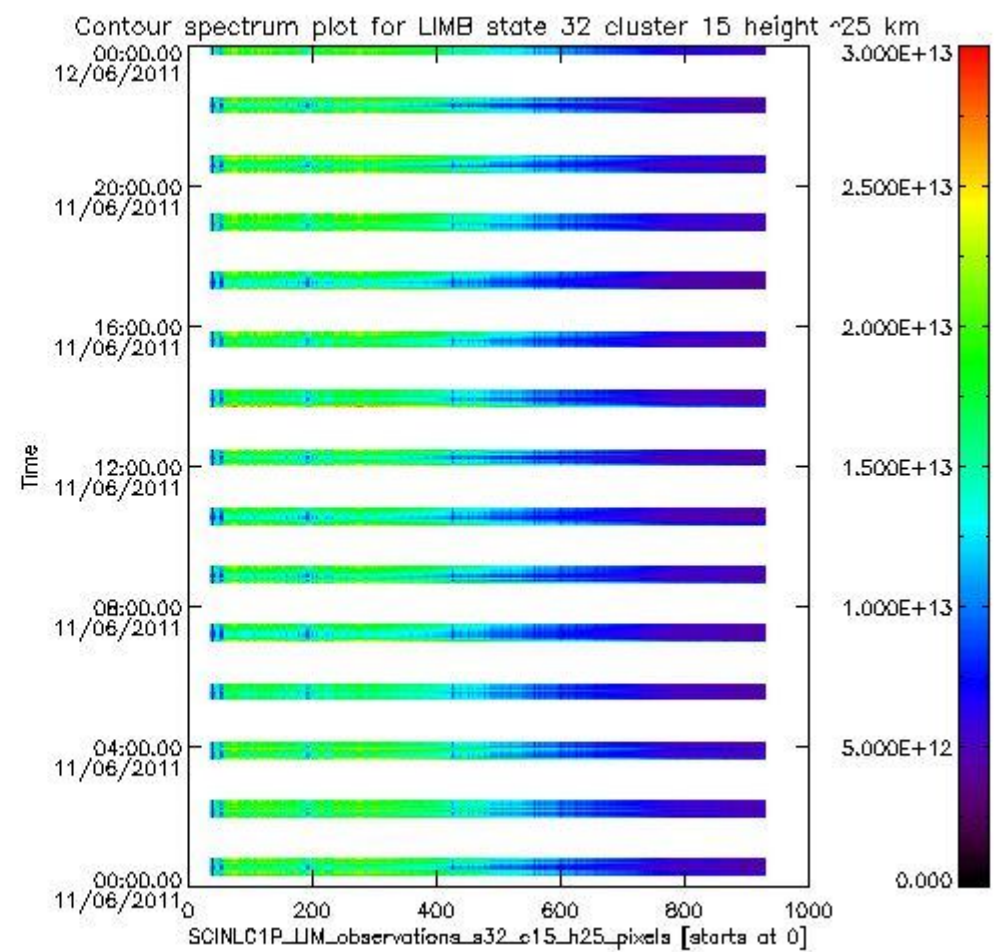
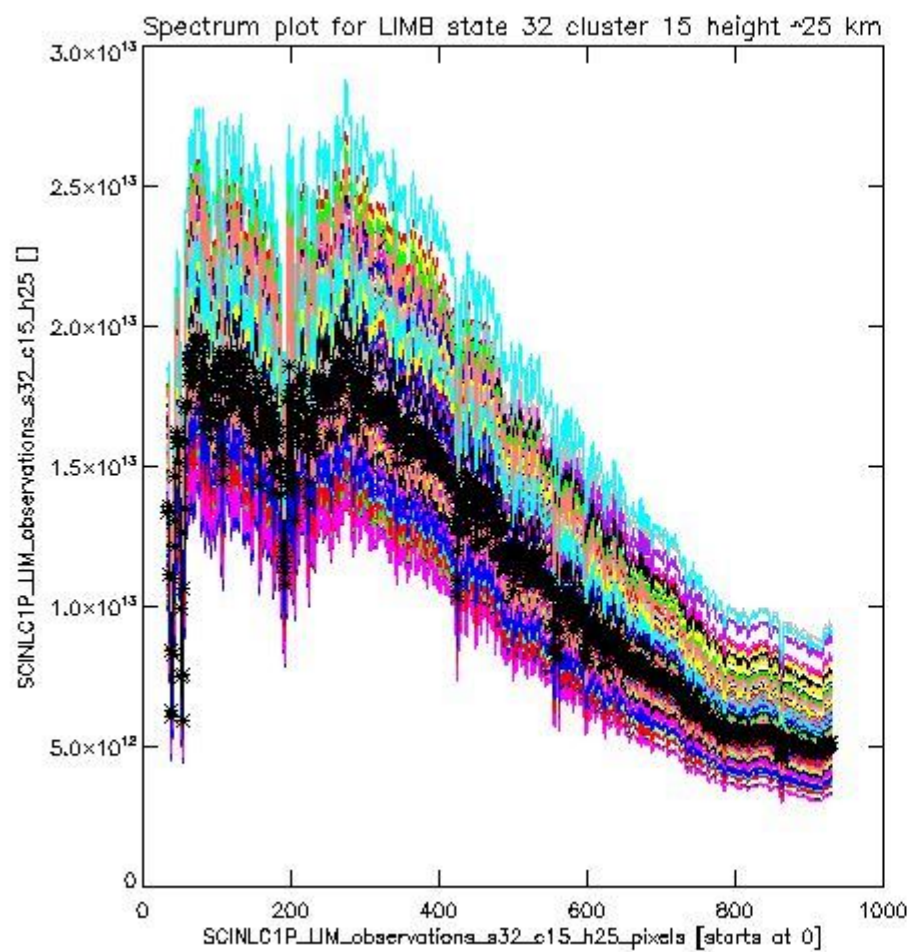
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_17.PNG

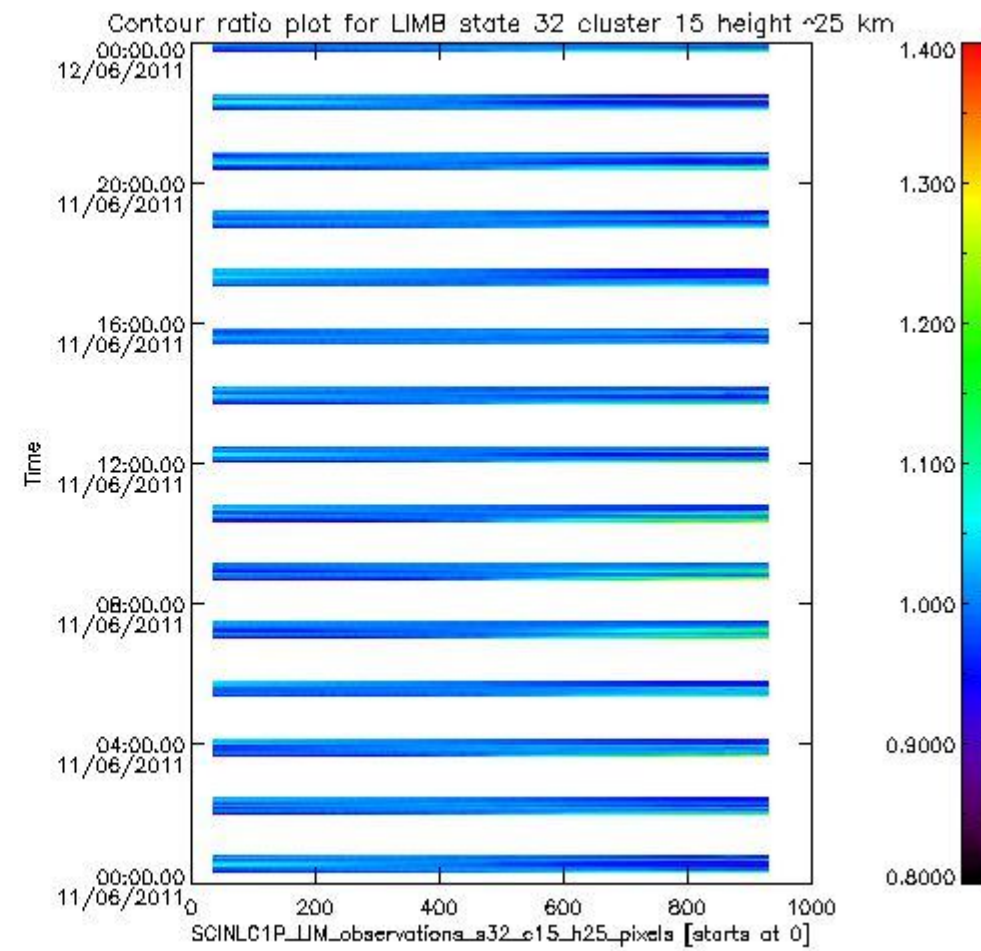
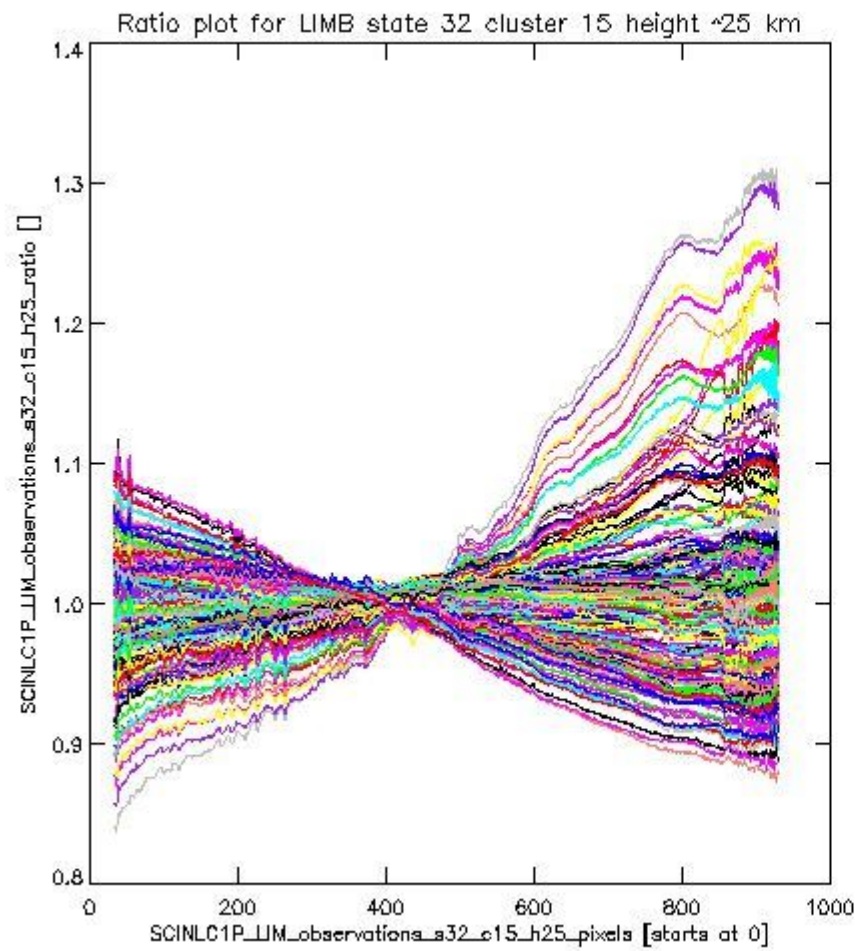
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	11JUN2011 00:18:35.786
Start time of last sample	11JUN2011 23:59:06.160
Reference period start time	12MAY2011 00:20:27.909
Reference period stop time	10JUN2011 23:05:51.801
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\_20110611\_18.PNG

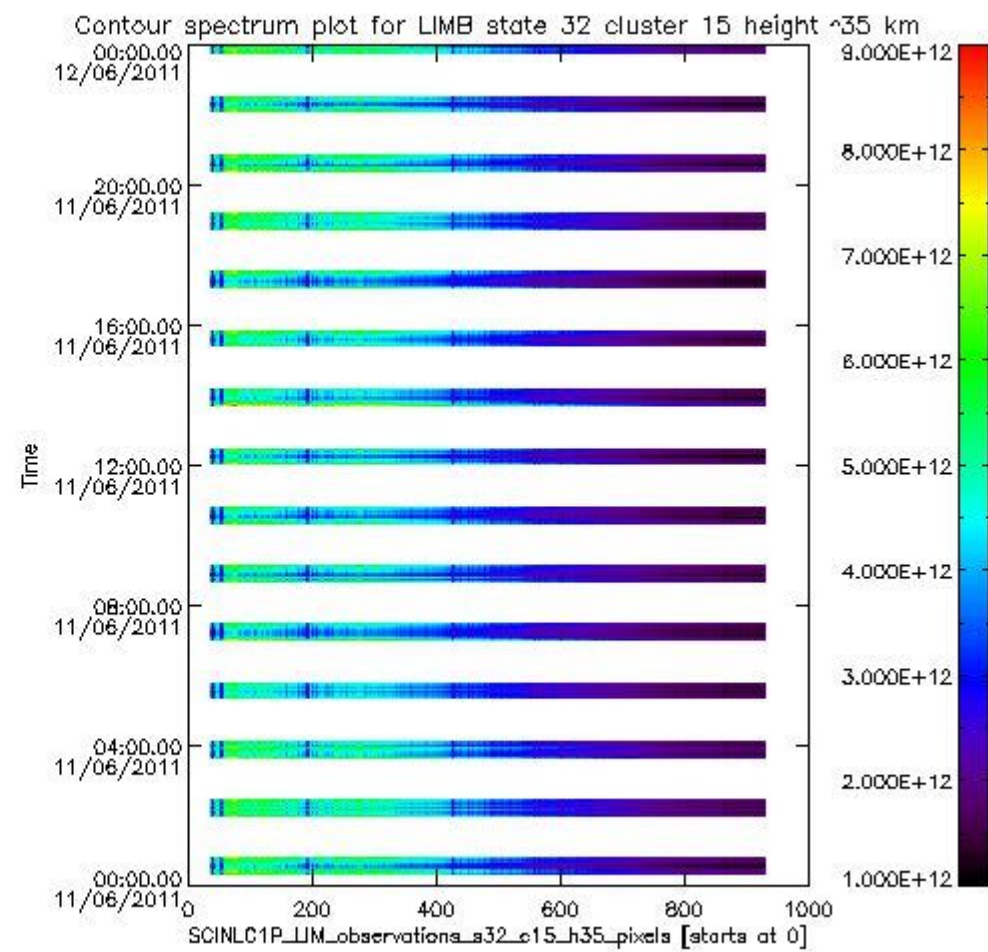
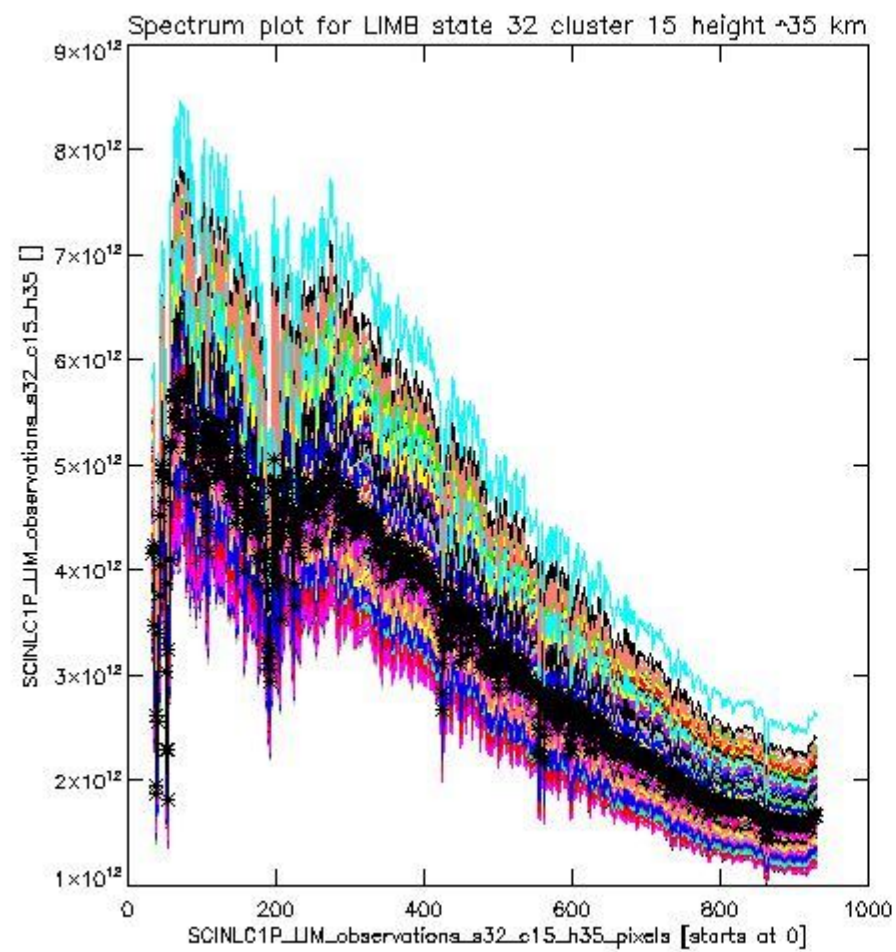


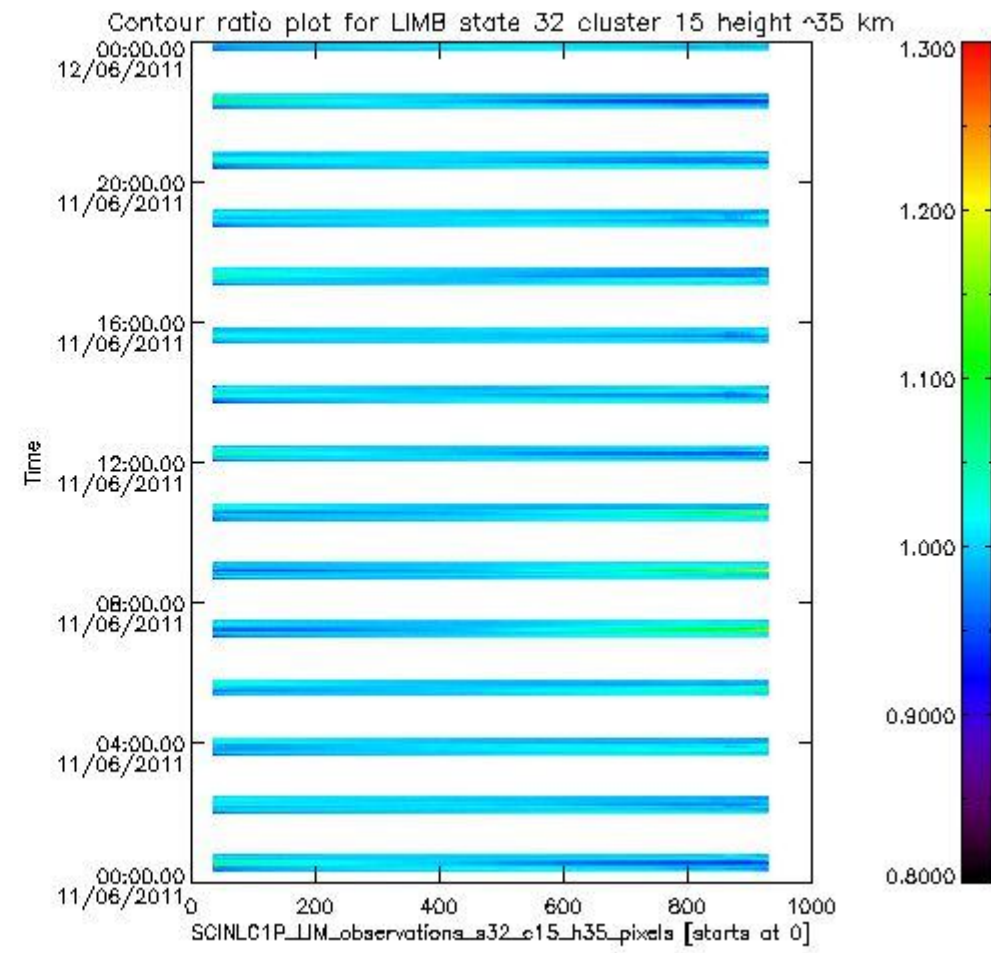
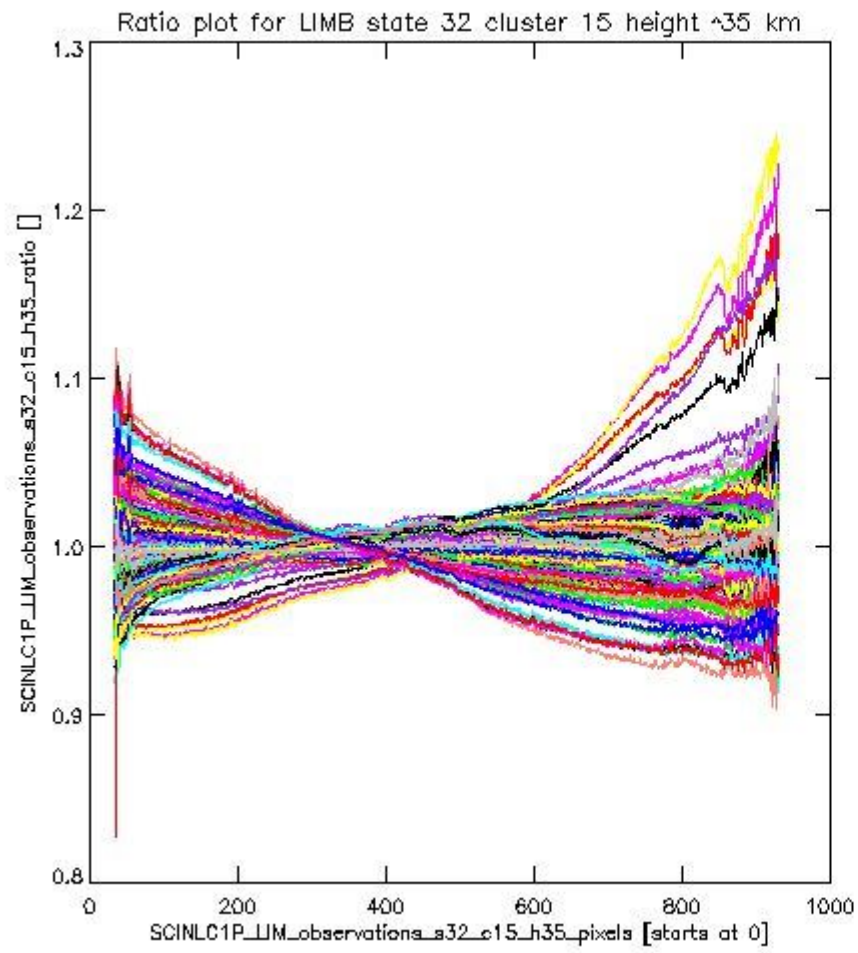


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110611\_19.PNG

**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	11JUN2011 00:18:35.786
Start time of last sample	11JUN2011 23:59:06.160
Reference period start time	12MAY2011 00:20:27.909
Reference period stop time	10JUN2011 23:05:51.801
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\_20110611\_21.PNG



