

# 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	16JUN2011 12:20:31
Data source version	SCIA/7.04-U
Processing scope for products	03JUN2011 00:00:00 to 04JUN2011 00:00:00
Start time of first product within scope	03JUN2011 01:14:49
Stop time of last product within scope	04JUN2011 00:27:10
Total number of level 1 products	14
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	03JUN2011 02:07:55.354	03JUN2011 23:58:04.235
1	NADIR	07	09	N/A	03JUN2011 02:07:55.354	03JUN2011 23:58:04.235
2	NADIR	07	15	N/A	03JUN2011 02:07:55.354	03JUN2011 23:58:04.235
3	NADIR	07	24	N/A	03JUN2011 02:07:55.354	03JUN2011 23:58:04.235
4	NADIR	07	55	N/A	03JUN2011 02:07:55.354	03JUN2011 23:58:04.235
5	LIMB	32	09	~19 km	N/A	N/A
6	LIMB	32	09	~22 km	N/A	N/A
7	LIMB	32	09	~25 km	N/A	N/A
8	LIMB	32	15	~22 km	N/A	N/A
9	LIMB	32	15	~25 km	N/A	N/A
10	LIMB	32	15	~35 km	N/A	N/A

#### 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_1CUDPA20110603_011449_000008963103_00117_48407_1867.N1</a>	03JUN2011 01:14:49	03JUN2011 01:29:46	0	0	0	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110603_013412_000057473103_00118_48408_1864.N1</a>	03JUN2011 01:43:02	03JUN2011 02:44:23	0	35	0	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110603_055015_000024113103_00120_48410_1871.N1</a>	03JUN2011 05:51:11	03JUN2011 06:04:50	0	12	0	0	0	2	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110603_063453_000057473103_00121_48411_1878.N1</a>	03JUN2011 06:44:39	03JUN2011 07:44:52	0	34	0	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110603_081507_000057473103_00122_48412_1879.N1</a>	03JUN2011 08:23:57	03JUN2011 09:25:18	0	35	0	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110603_095521_000057473103_00123_48413_1897.N1</a>	03JUN2011 10:05:07	03JUN2011 11:05:19	0	34	0	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110603_113535_000057473103_00124_48414_1887.N1	03JUN2011 11:44:25	03JUN2011 12:45:46	0	35	0	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110603_131548_000057473103_00125_48415_1886.N1	03JUN2011 13:25:34	03JUN2011 14:25:47	0	34	0	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110603_145602_000057473103_00126_48416_1888.N1	03JUN2011 15:04:52	03JUN2011 16:06:13	0	35	0	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110603_163616_000057473103_00127_48417_1905.N1	03JUN2011 16:46:02	03JUN2011 17:46:14	0	34	0	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110603_181630_000057473103_00128_48418_1909.N1	03JUN2011 18:22:01	03JUN2011 19:26:50	0	35	0	0	1	1	0	0	
11	SCI_NLC_1CUDPA20110603_195644_000057473103_00129_48419_1890.N1	03JUN2011 20:02:15	03JUN2011 21:06:51	0	34	0	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110603_213658_000057473103_00130_48420_1889.N1	03JUN2011 21:45:48	03JUN2011 22:47:09	0	35	0	0	0	1	0	0	
13	SCI_NLC_1CUDPA20110603_231711_000057473103_00131_48421_1900.N1	03JUN2011 23:26:57	04JUN2011 00:27:10	0	34	0	0	0	1	0	0	

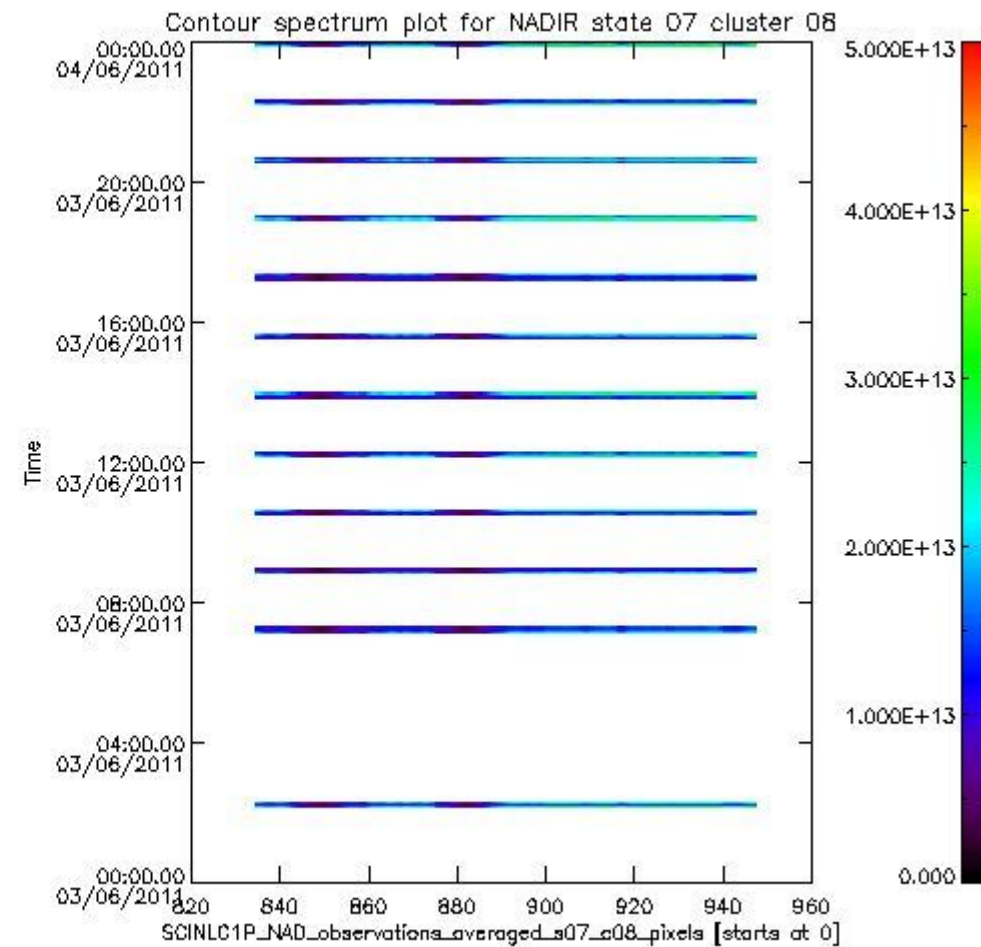
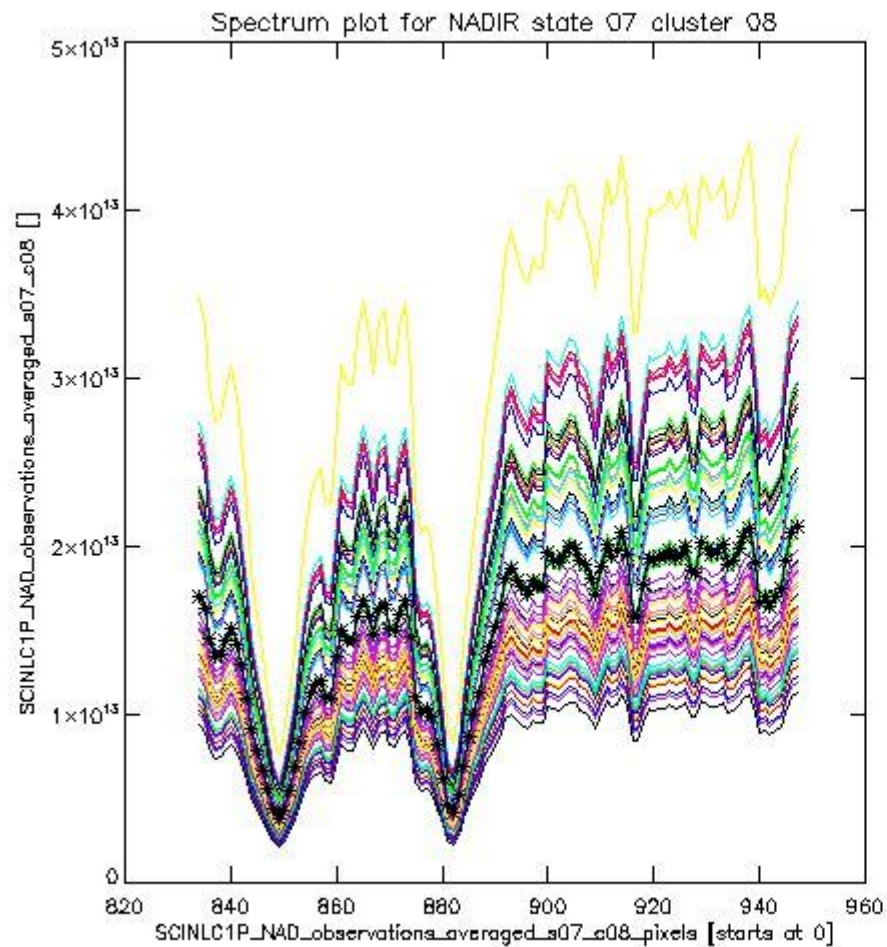
## 1.2 Source packet monitoring

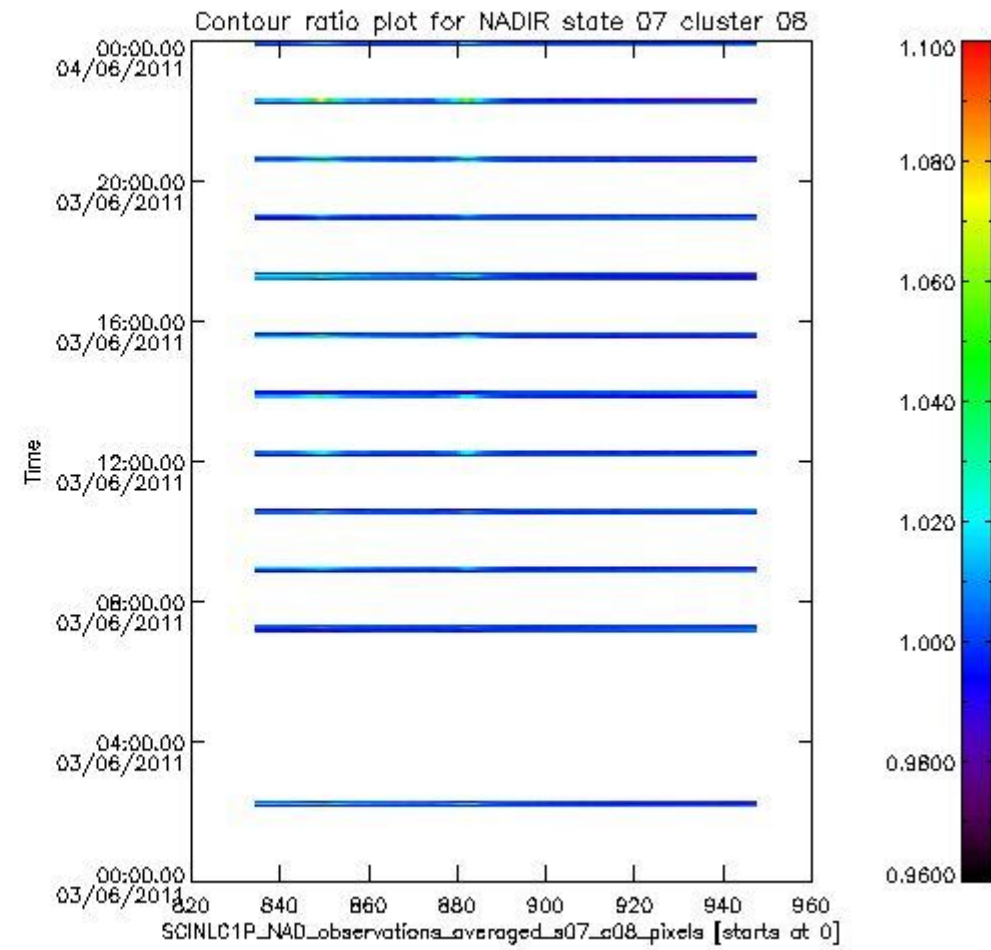
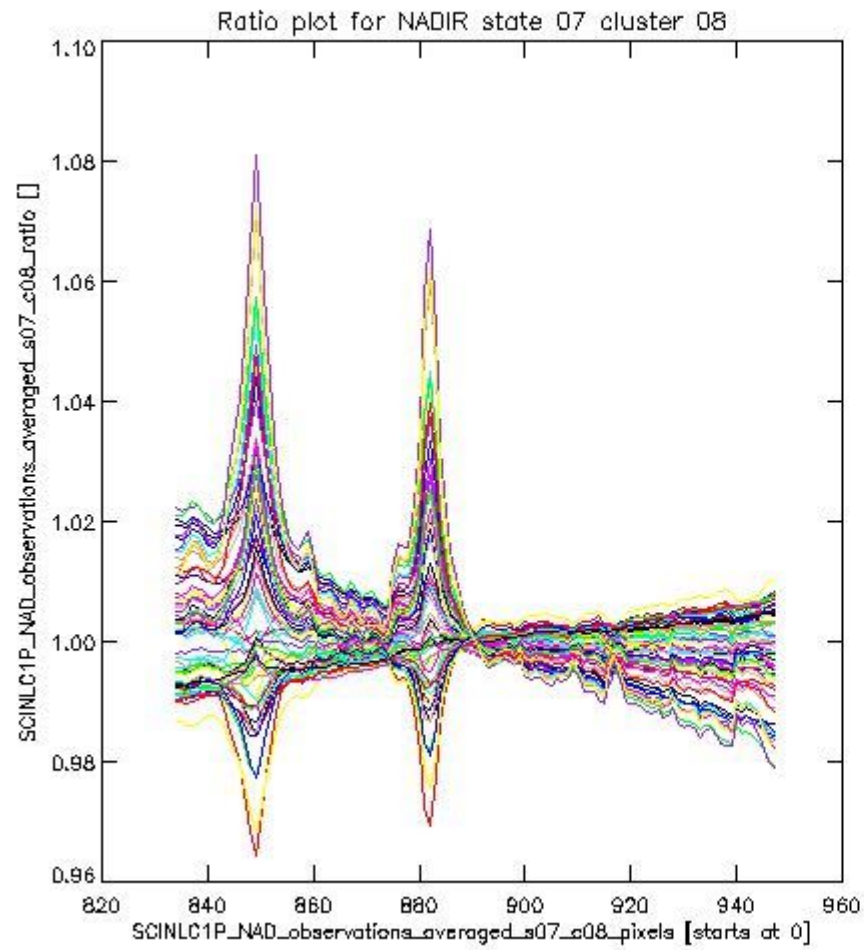
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	03JUN2011 02:07:55.354
Start time of last sample	03JUN2011 23:58:04.235
Reference period start time	04MAY2011 00:28:31.567
Reference period stop time	02JUN2011 19:34:54.831
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

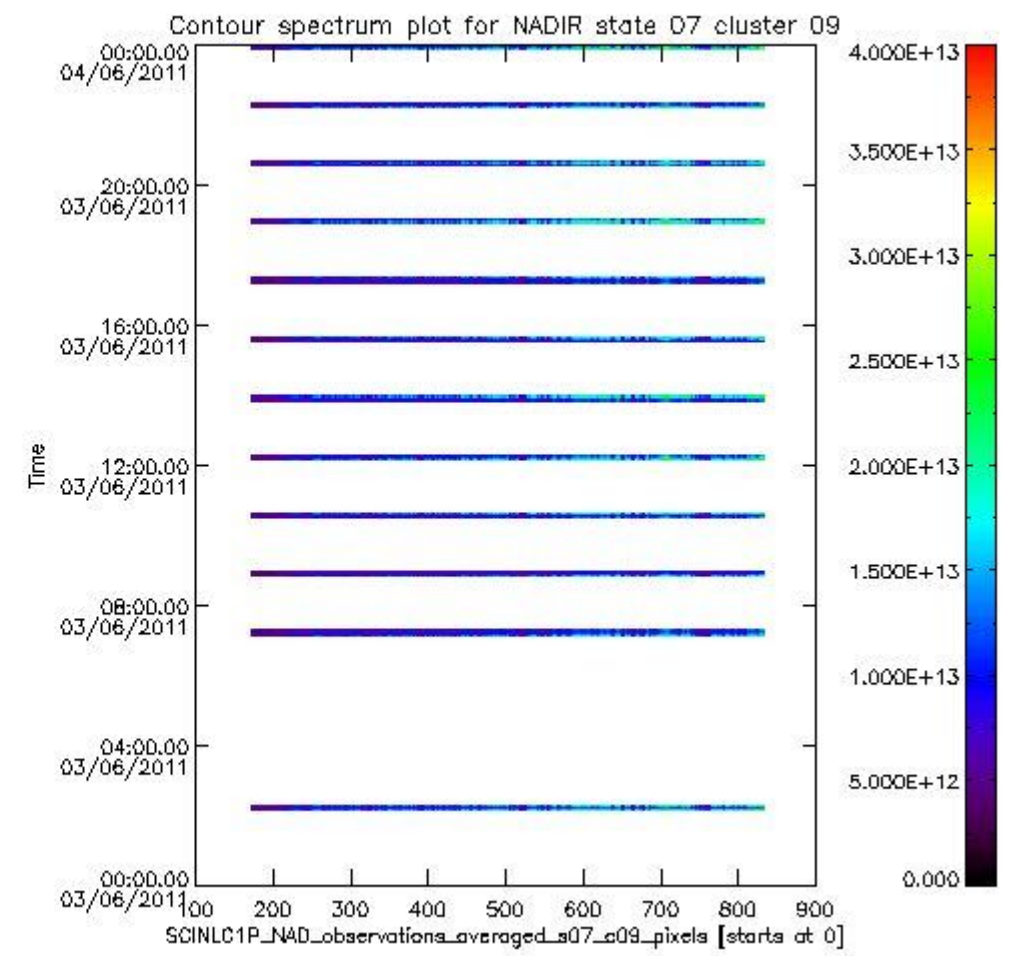
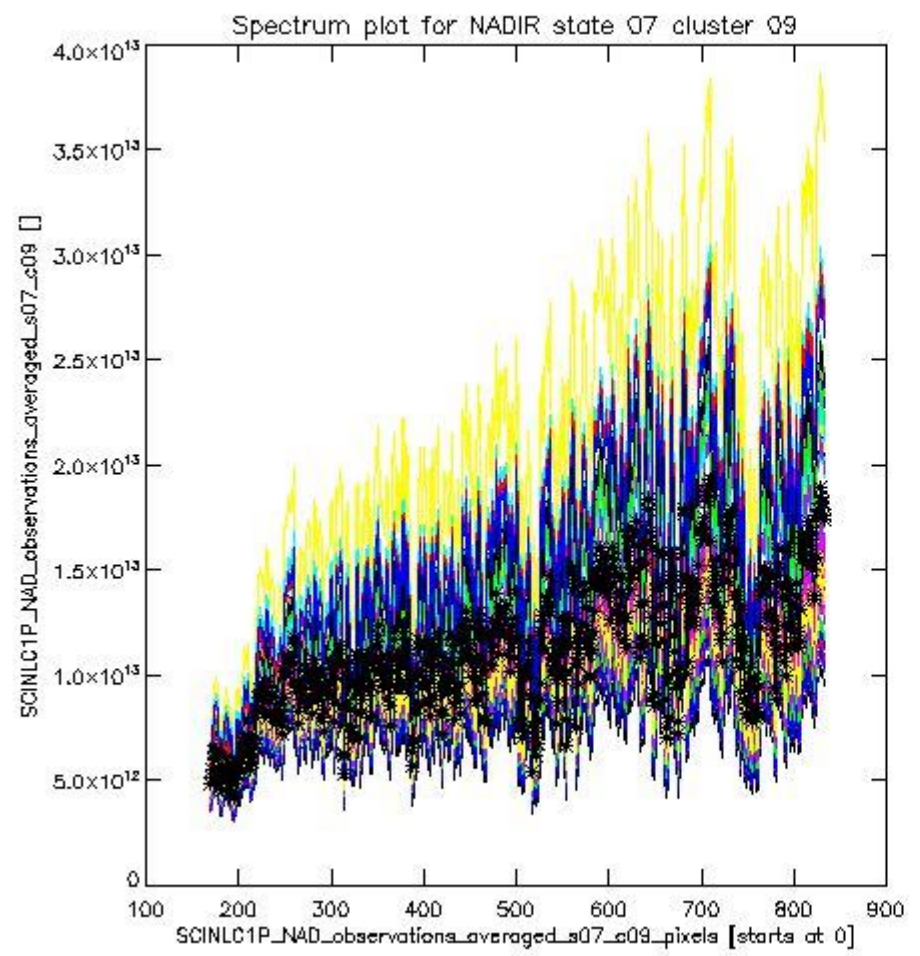




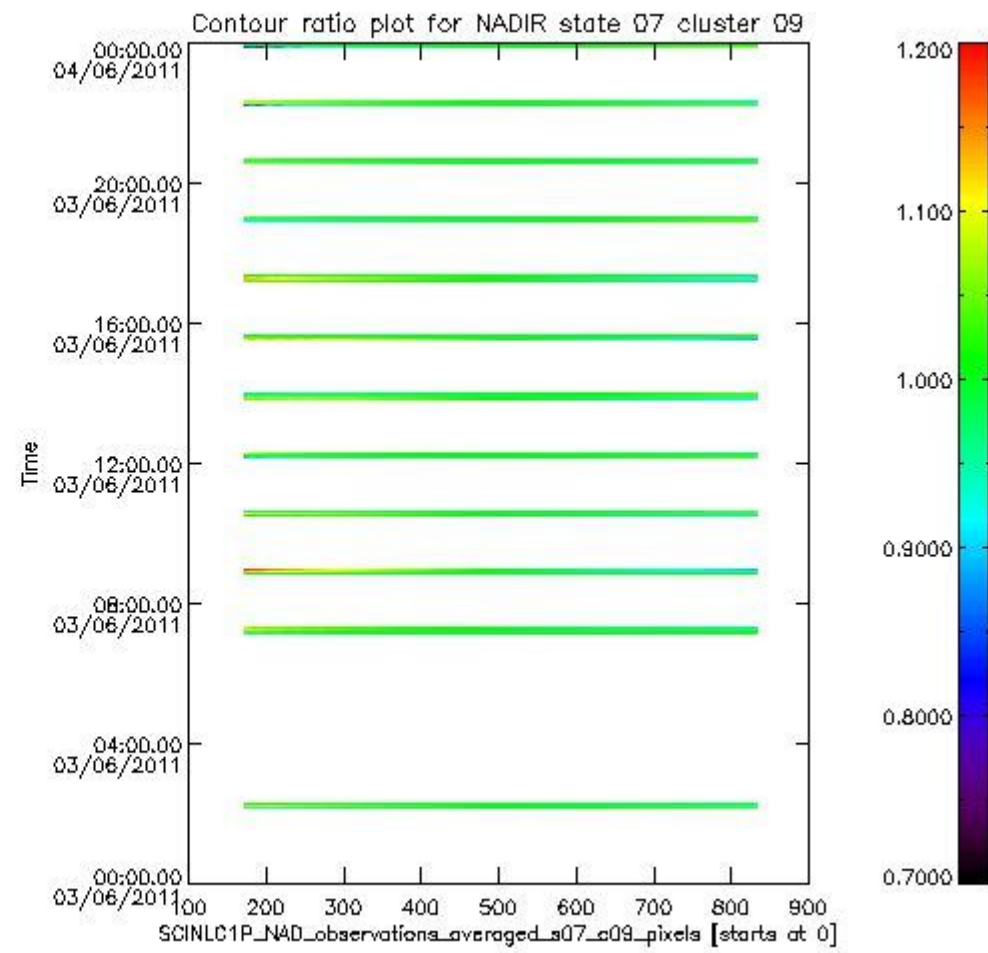
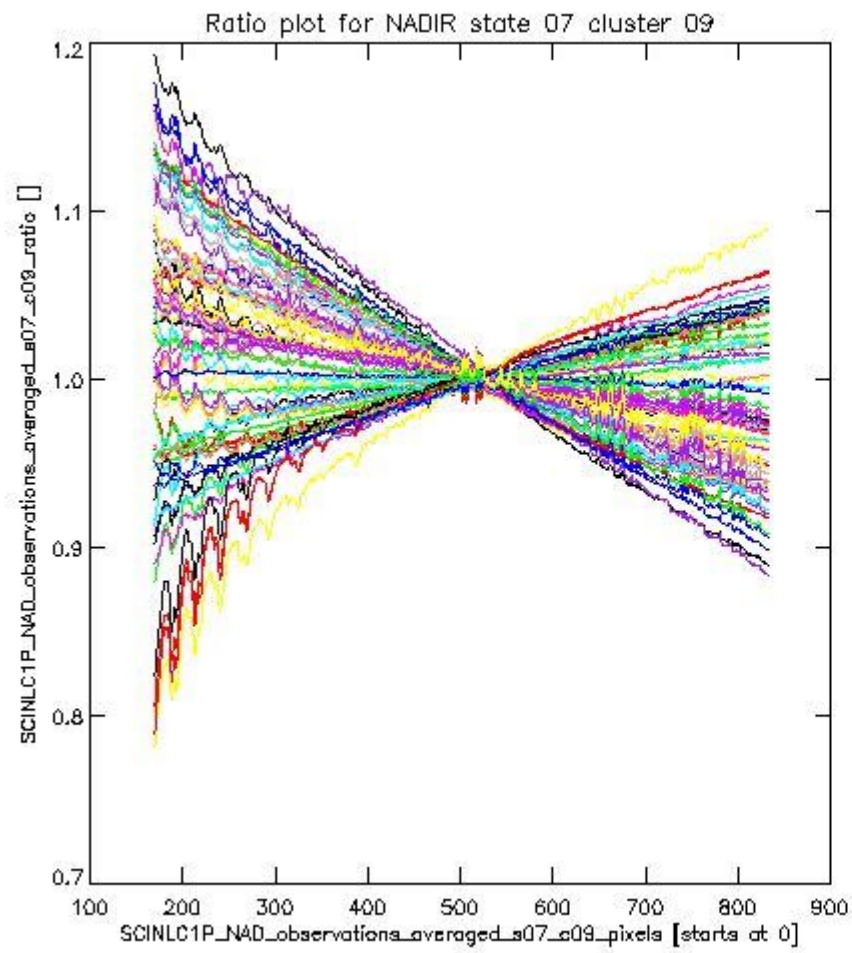
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	03JUN2011 02:07:55.354
Start time of last sample	03JUN2011 23:58:04.235
Reference period start time	04MAY2011 00:28:31.567
Reference period stop time	02JUN2011 19:34:54.831
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





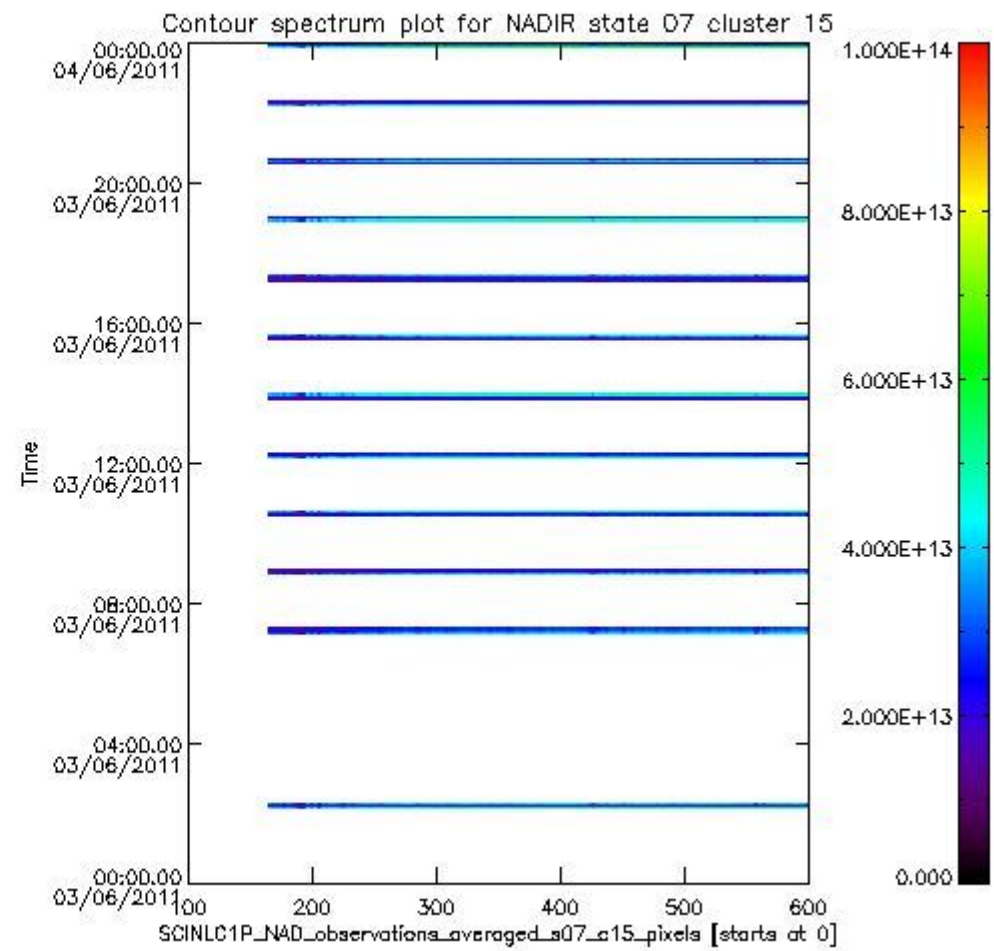
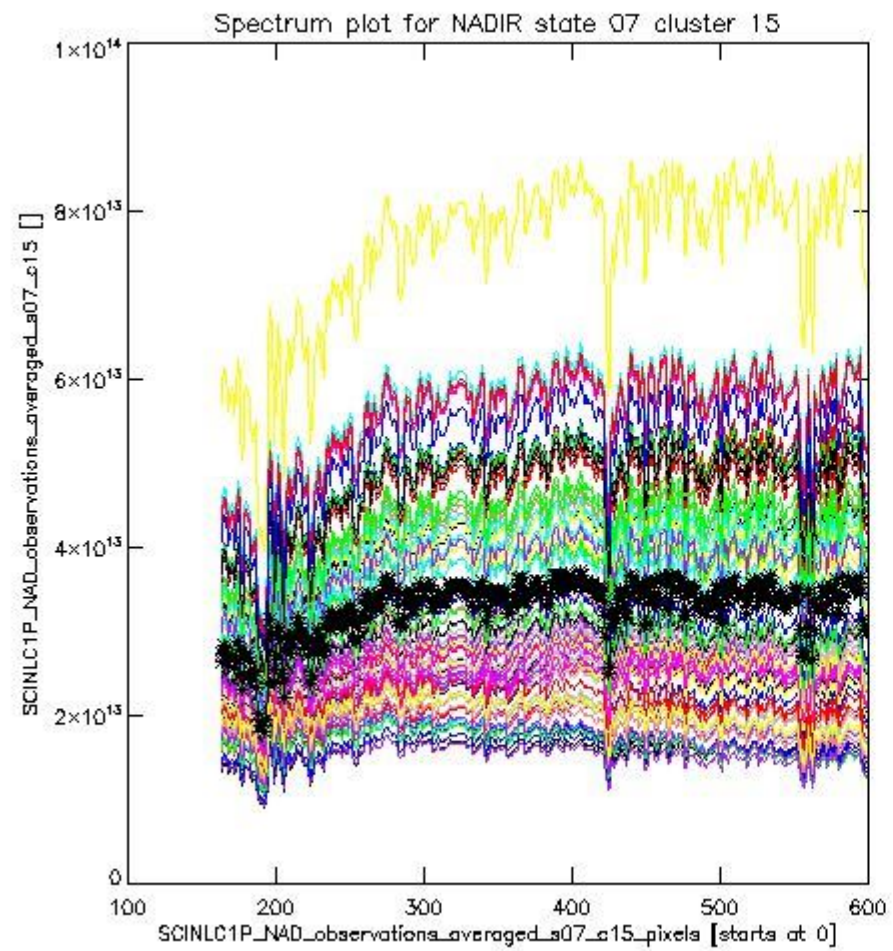
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110603\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110603\_3.PNG

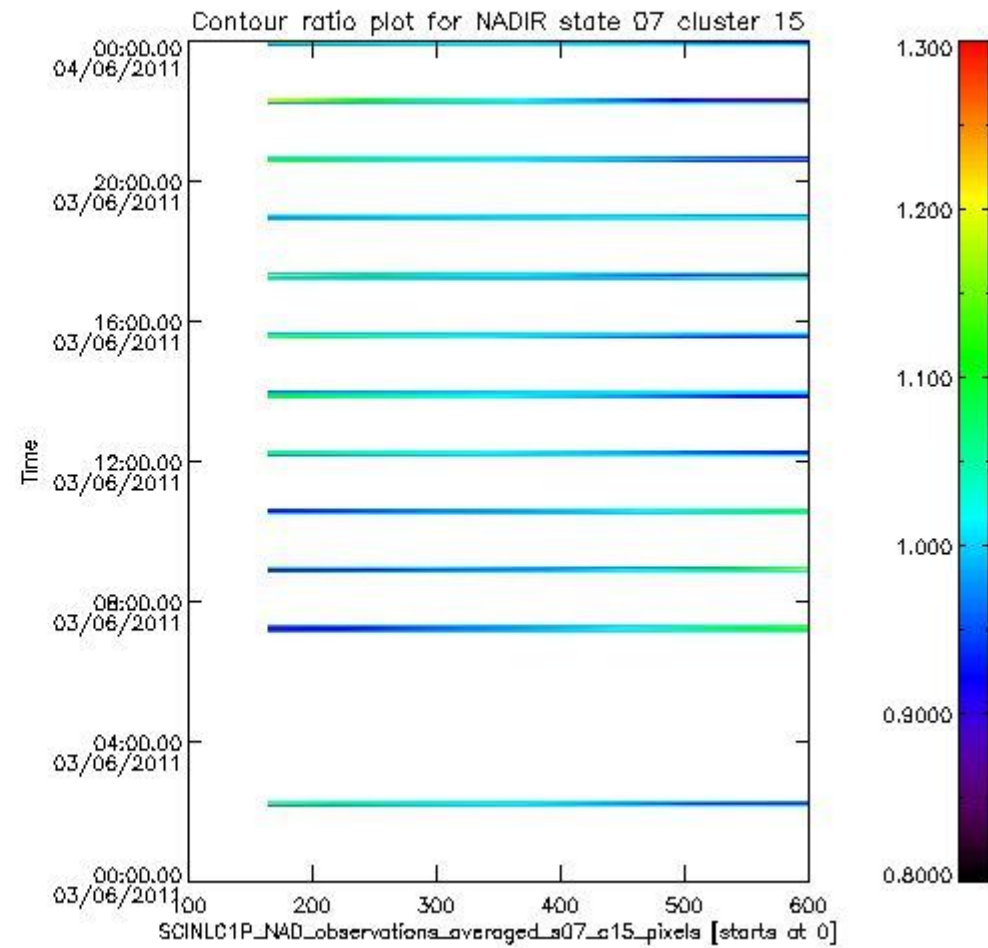
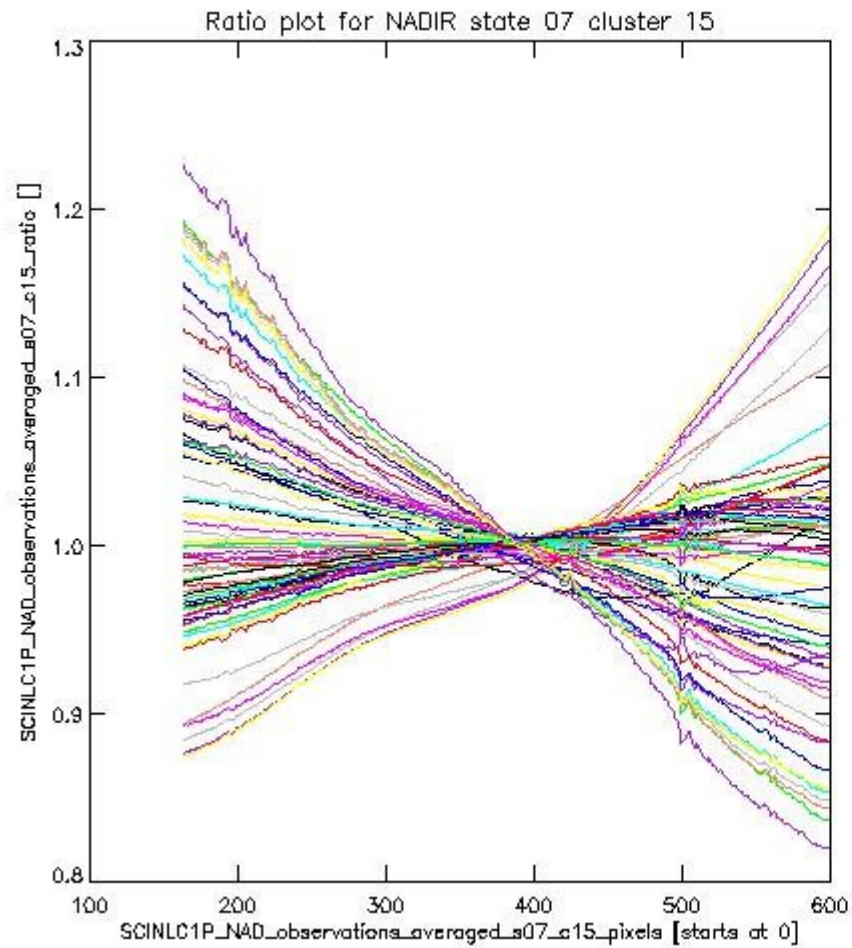
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	03JUN2011 02:07:55.354
Start time of last sample	03JUN2011 23:58:04.235
Reference period start time	04MAY2011 00:28:31.567
Reference period stop time	02JUN2011 19:34:54.831
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\_20110603\_4.PNG

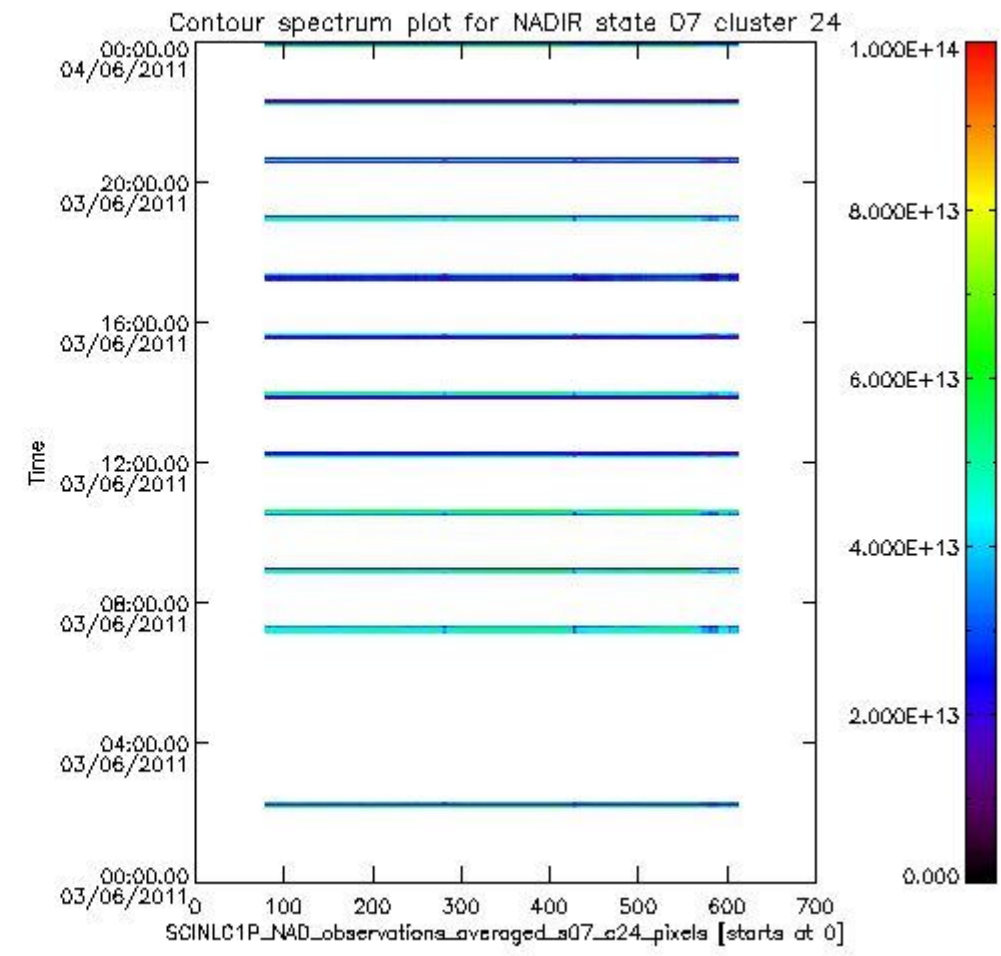
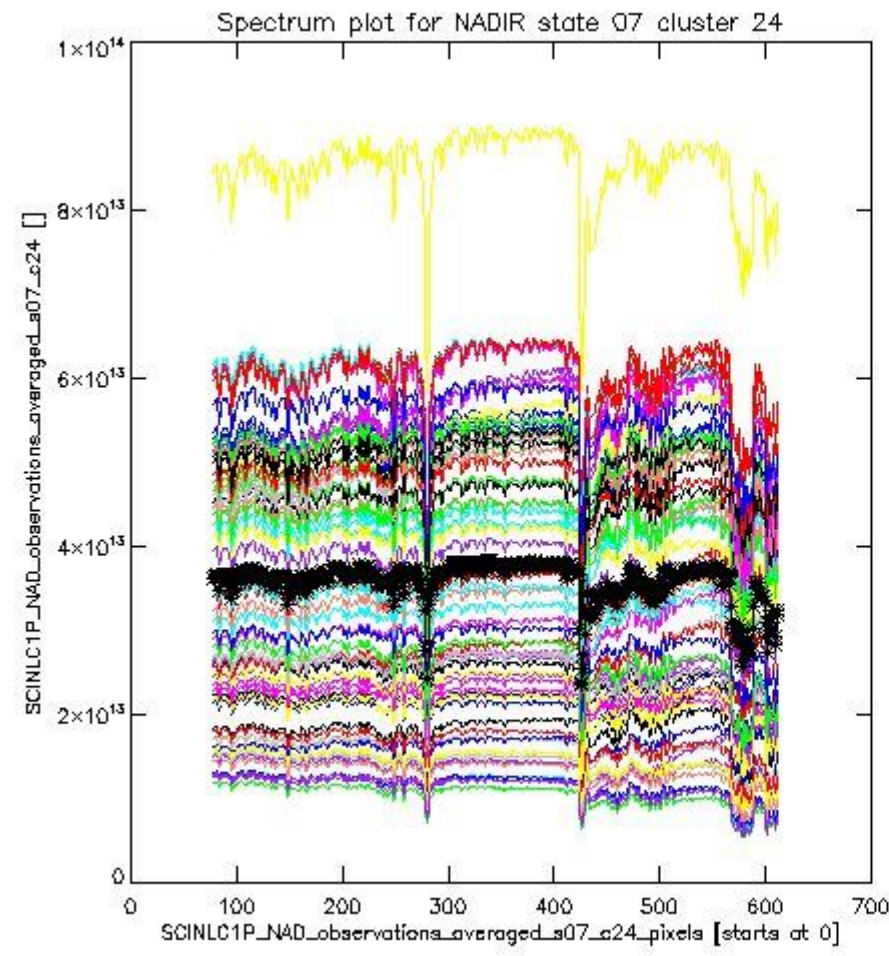




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110603\_5.PNG

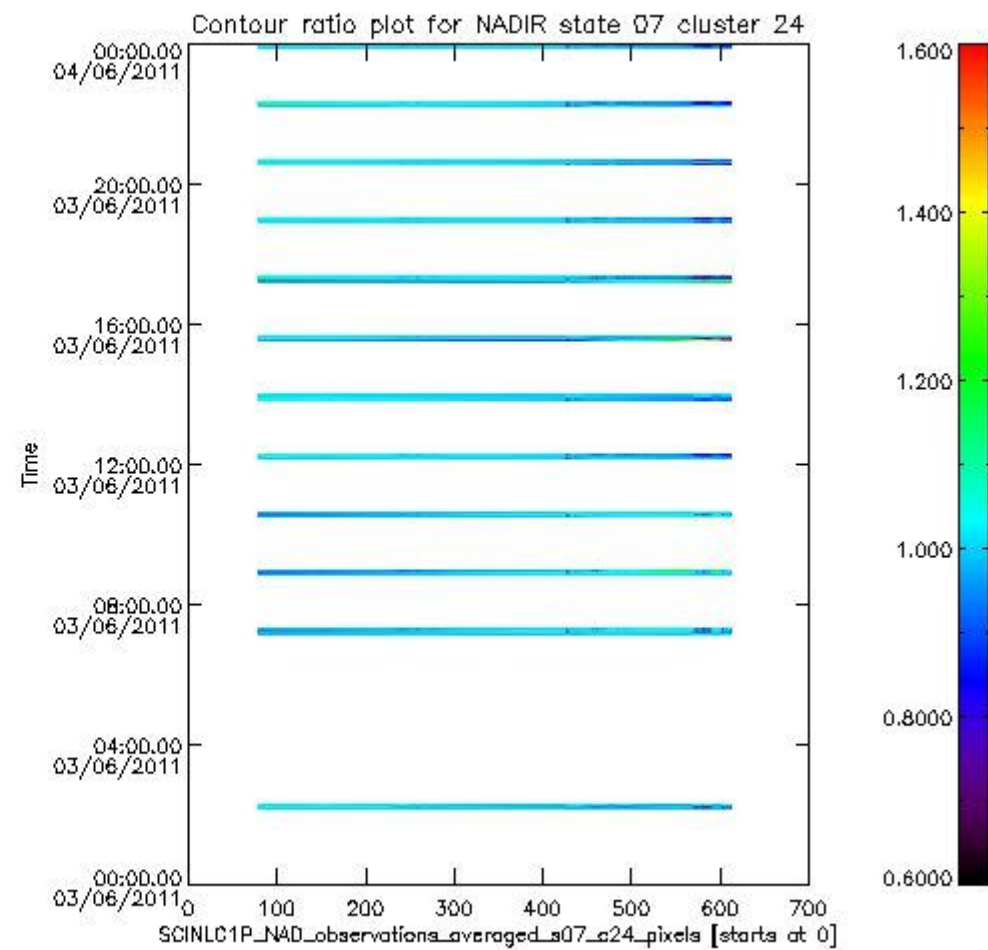
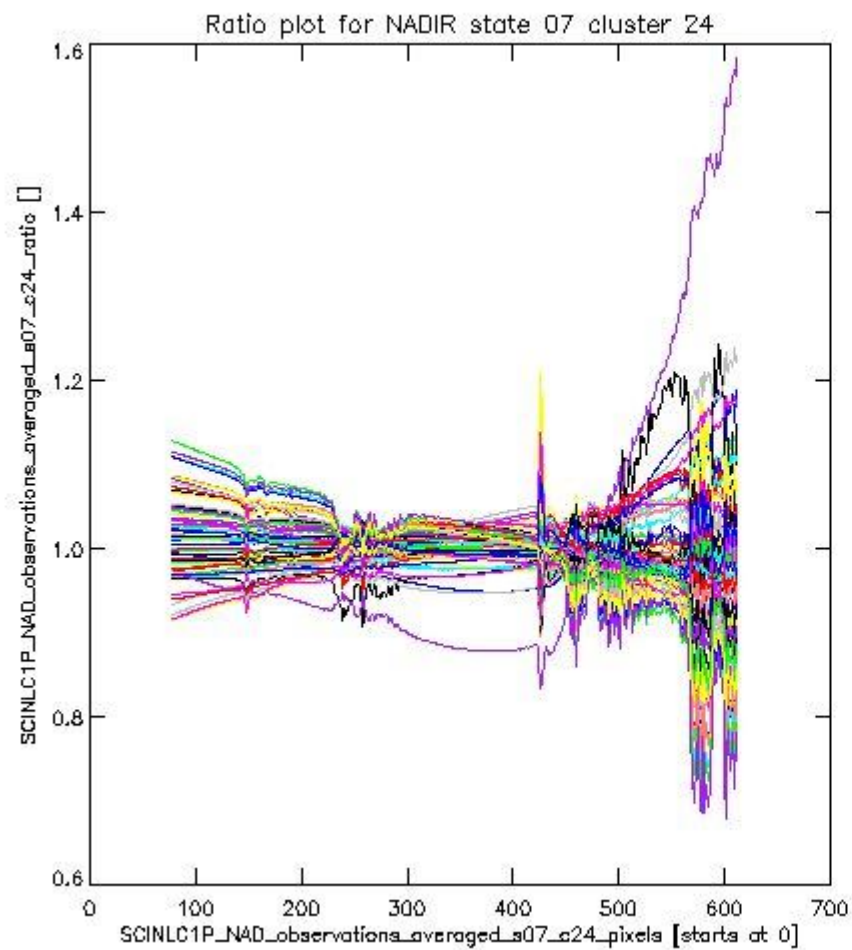
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	03JUN2011 02:07:55.354
Start time of last sample	03JUN2011 23:58:04.235
Reference period start time	04MAY2011 00:28:31.567
Reference period stop time	02JUN2011 19:34:54.831
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\_20110603\_6.PNG

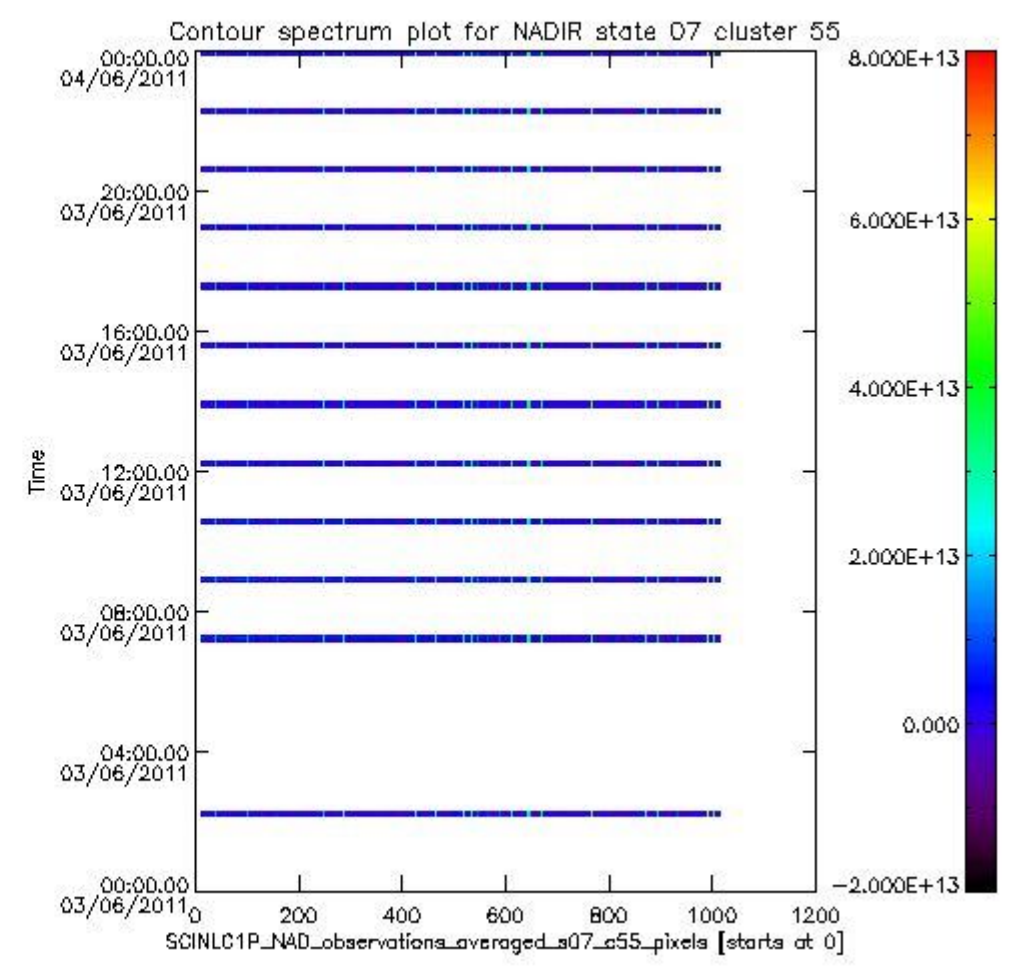
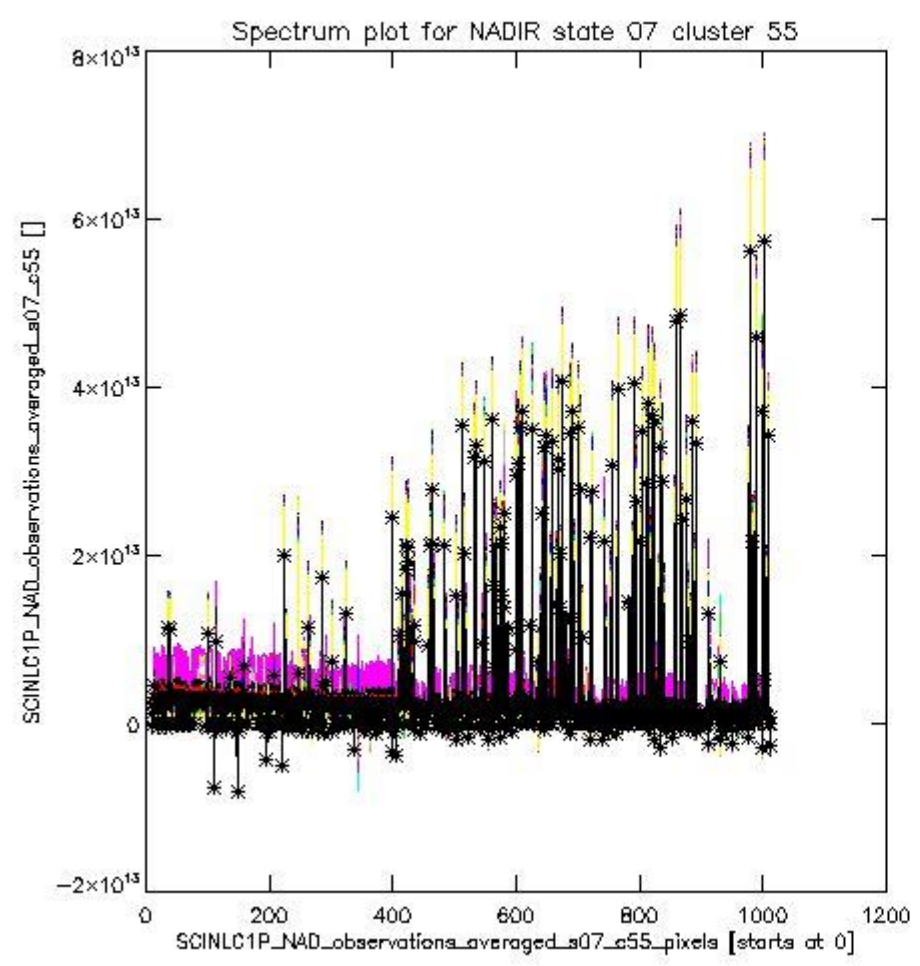




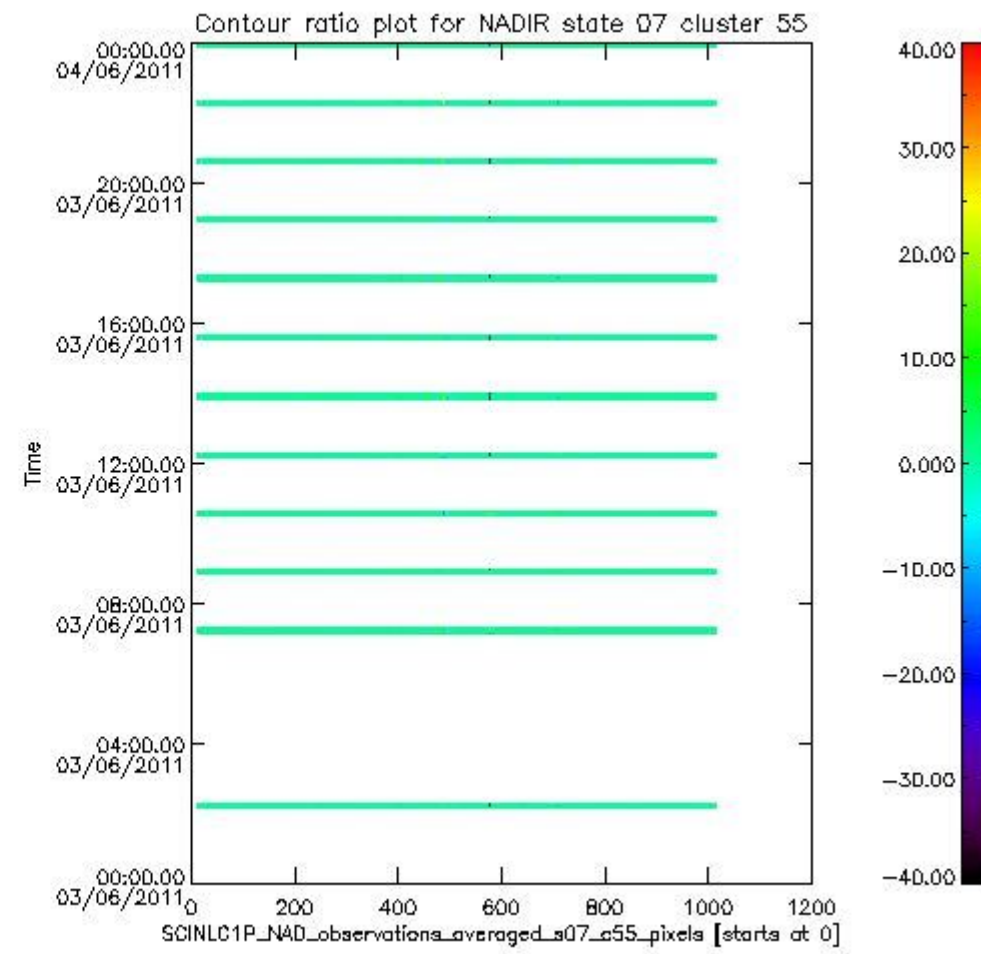
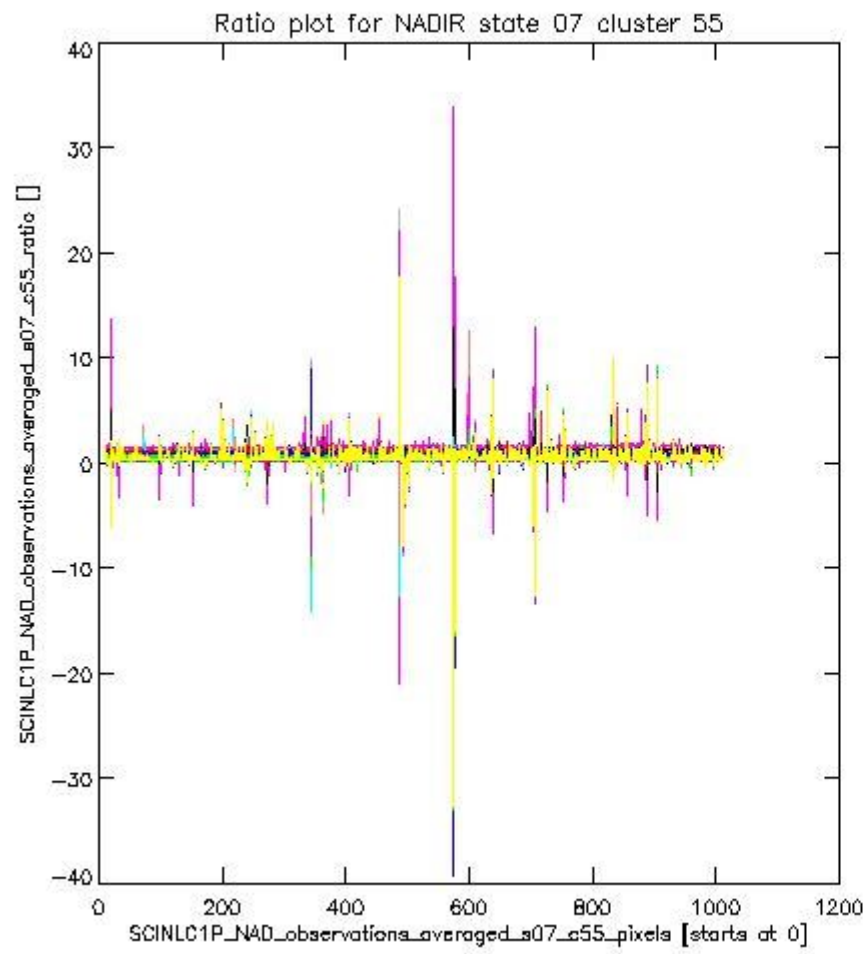
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110603\_7.PNG

**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	03JUN2011 02:07:55.354
Start time of last sample	03JUN2011 23:58:04.235
Reference period start time	04MAY2011 00:28:31.567
Reference period stop time	02JUN2011 19:34:54.831
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\_20110603\_8.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110603\_9.PNG

1.2.6 LIMB state 32 cluster 09 height ~19 km

1.2.7 LIMB state 32 cluster 09 height ~22 km

1.2.8 LIMB state 32 cluster 09 height ~25 km

1.2.9 LIMB state 32 cluster 15 height ~22 km

1.2.10 LIMB state 32 cluster 15 height ~25 km

1.2.11 LIMB state 32 cluster 15 height ~35 km



