

# 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	07JUL2011 06:30:38
Data source version	SCIA/7.04-U
Processing scope for products	24JUN2011 00:00:00 to 25JUN2011 00:00:00
Start time of first product within scope	23JUN2011 22:43:47
Stop time of last product within scope	25JUN2011 00:57:31
Total number of level 1 products	16
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	24JUN2011 00:56:04.122	24JUN2011 22:48:25.394
1	NADIR	07	09	N/A	24JUN2011 00:56:04.122	24JUN2011 22:48:25.394
2	NADIR	07	15	N/A	24JUN2011 00:56:04.122	24JUN2011 22:48:25.394
3	NADIR	07	24	N/A	24JUN2011 00:56:04.122	24JUN2011 22:48:25.394
4	NADIR	07	55	N/A	24JUN2011 00:56:04.122	24JUN2011 22:48:25.394
5	LIMB	32	09	~19 km	24JUN2011 00:42:53.485	24JUN2011 22:53:39.437
6	LIMB	32	09	~22 km	24JUN2011 00:42:53.485	24JUN2011 22:53:39.437
7	LIMB	32	09	~25 km	24JUN2011 00:42:53.485	24JUN2011 22:53:39.437
8	LIMB	32	15	~22 km	24JUN2011 00:42:53.485	24JUN2011 22:53:39.437
9	LIMB	32	15	~25 km	24JUN2011 00:42:53.485	24JUN2011 22:53:39.437
10	LIMB	32	15	~35 km	24JUN2011 00:42:53.485	24JUN2011 22:53:39.437

#### 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_1CUDPA20110623_224347_000057443103_00418_48708_2476.N1</a>	23JUN2011 22:43:47	23JUN2011 23:54:16	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110624_002401_000057443103_00419_48709_2477.N1</a>	24JUN2011 00:24:01	24JUN2011 01:34:16	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110624_020415_000057443103_00420_48710_2478.N1</a>	24JUN2011 02:04:15	24JUN2011 03:14:44	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110624_034429_000057443103_00421_48711_2479.N1</a>	24JUN2011 03:44:29	24JUN2011 04:54:44	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110624_052443_000057443103_00422_48712_2481.N1</a>	24JUN2011 05:24:43	24JUN2011 06:35:12	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110624_070457_000057443103_00423_48713_2482.N1</a>	24JUN2011 07:04:57	24JUN2011 08:15:12	0	35	31	0	0	1	0	0	

6	<a href="#">SCI_NLC_1CUDPA20110624_084511_000057443103_00424_48714_2483.N1</a>	24JUN2011 08:45:11	24JUN2011 09:55:40	0	36	30	0	0	1	0	0	
7	<a href="#">SCI_NLC_1CUDPA20110624_102525_000057443103_00425_48715_2487.N1</a>	24JUN2011 10:25:25	24JUN2011 11:35:40	0	35	31	0	0	1	0	0	
8	<a href="#">SCI_NLC_1CUDPA20110624_120539_000057443103_00426_48716_2488.N1</a>	24JUN2011 12:05:39	24JUN2011 13:16:08	0	36	30	0	0	1	0	0	
9	<a href="#">SCI_NLC_1CUDPA20110624_134553_000057443103_00427_48717_2491.N1</a>	24JUN2011 13:45:53	24JUN2011 14:56:07	0	35	31	0	0	1	0	0	
10	<a href="#">SCI_NLC_1CUDPA20110624_152607_000057443103_00428_48718_2493.N1</a>	24JUN2011 15:26:07	24JUN2011 16:36:36	0	36	30	0	0	1	0	0	
11	<a href="#">SCI_NLC_1CUDPA20110624_170621_000057443103_00429_48719_2495.N1</a>	24JUN2011 17:06:21	24JUN2011 18:16:45	0	35	31	0	1	1	0	0	
12	<a href="#">SCI_NLC_1CUDPA20110624_184635_000057443103_00430_48720_2497.N1</a>	24JUN2011 18:46:35	24JUN2011 19:57:13	0	36	30	0	1	1	0	0	
13	<a href="#">SCI_NLC_1CUDPA20110624_202649_000057443103_00431_48721_2499.N1</a>	24JUN2011 20:26:49	24JUN2011 21:37:03	0	35	31	0	0	1	0	0	
14	<a href="#">SCI_NLC_1CUDPA20110624_220703_000057443104_00001_48722_2501.N1</a>	24JUN2011 22:07:03	24JUN2011 23:17:32	0	36	30	0	0	1	0	0	
15	<a href="#">SCI_NLC_1CUDPA20110624_234717_000057443104_00002_48723_2502.N1</a>	24JUN2011 23:47:17	25JUN2011 00:57:31	0	35	31	0	0	1	0	0	

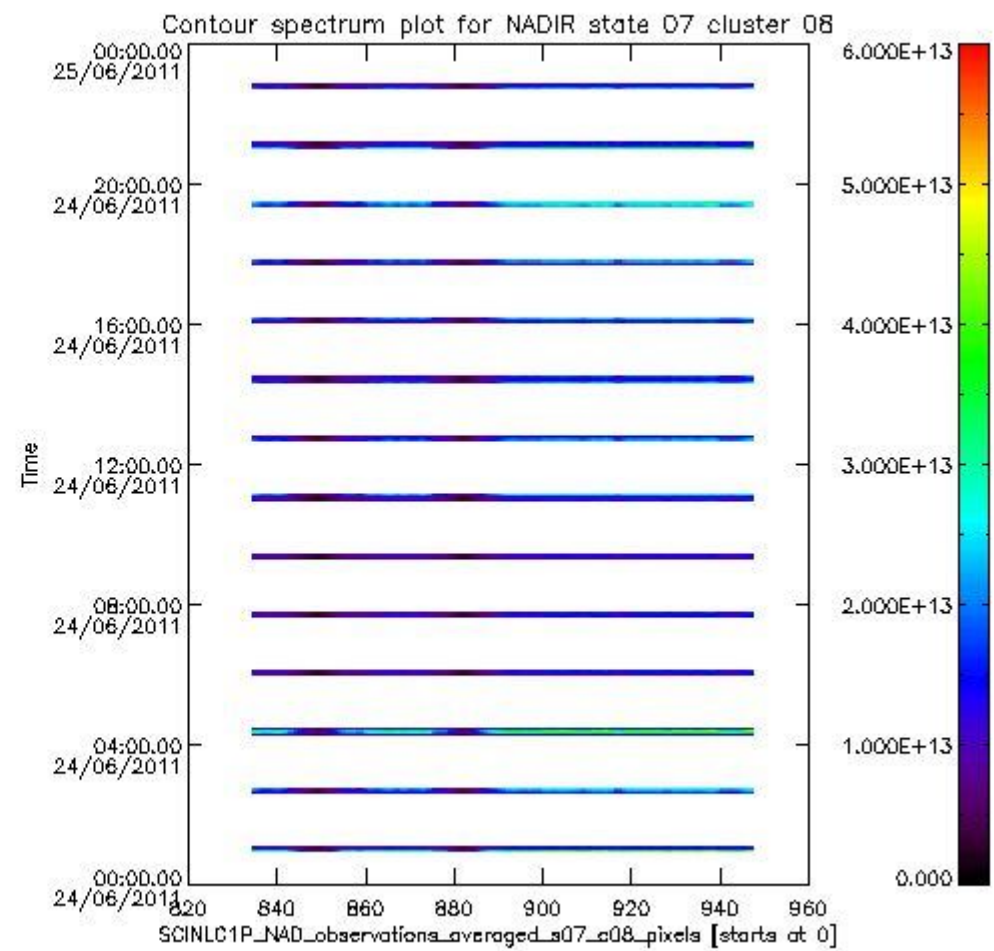
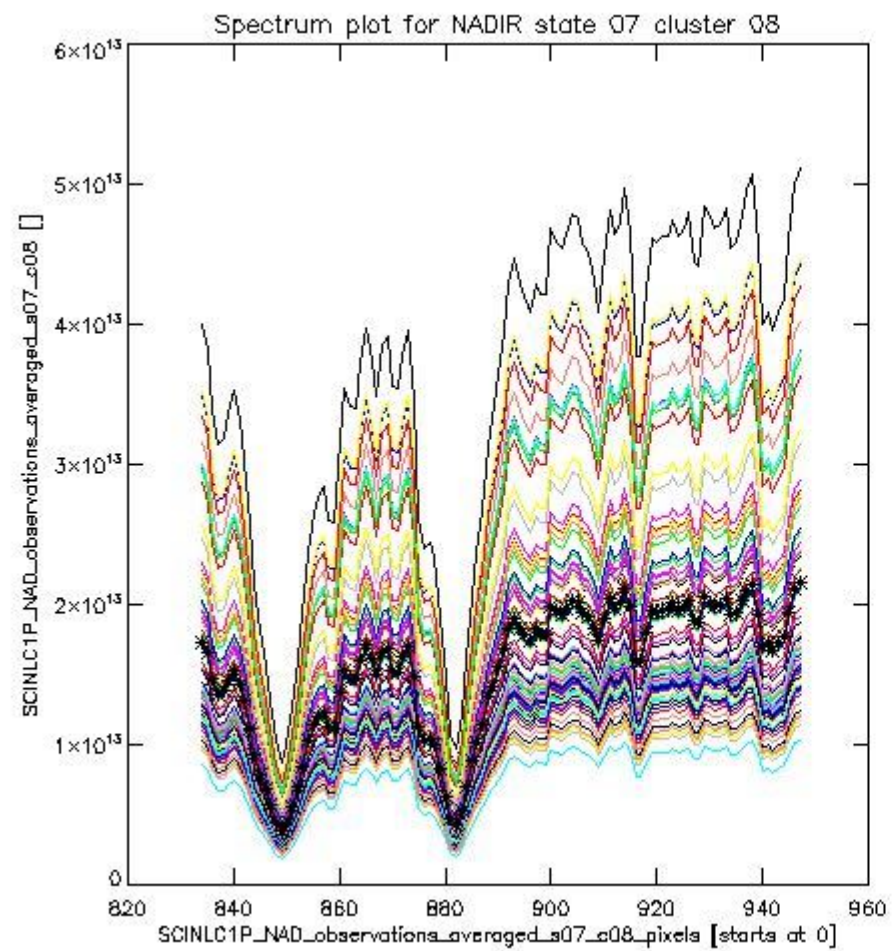
## 1.2 Source packet monitoring

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:

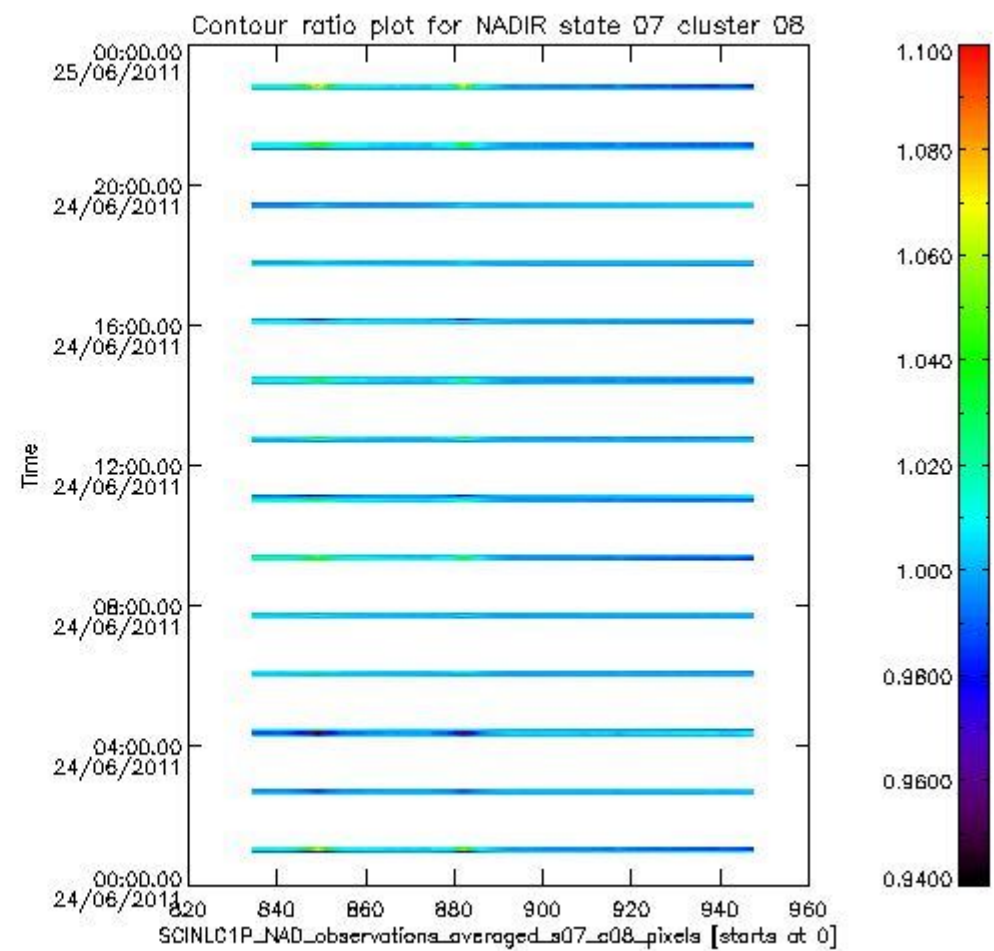
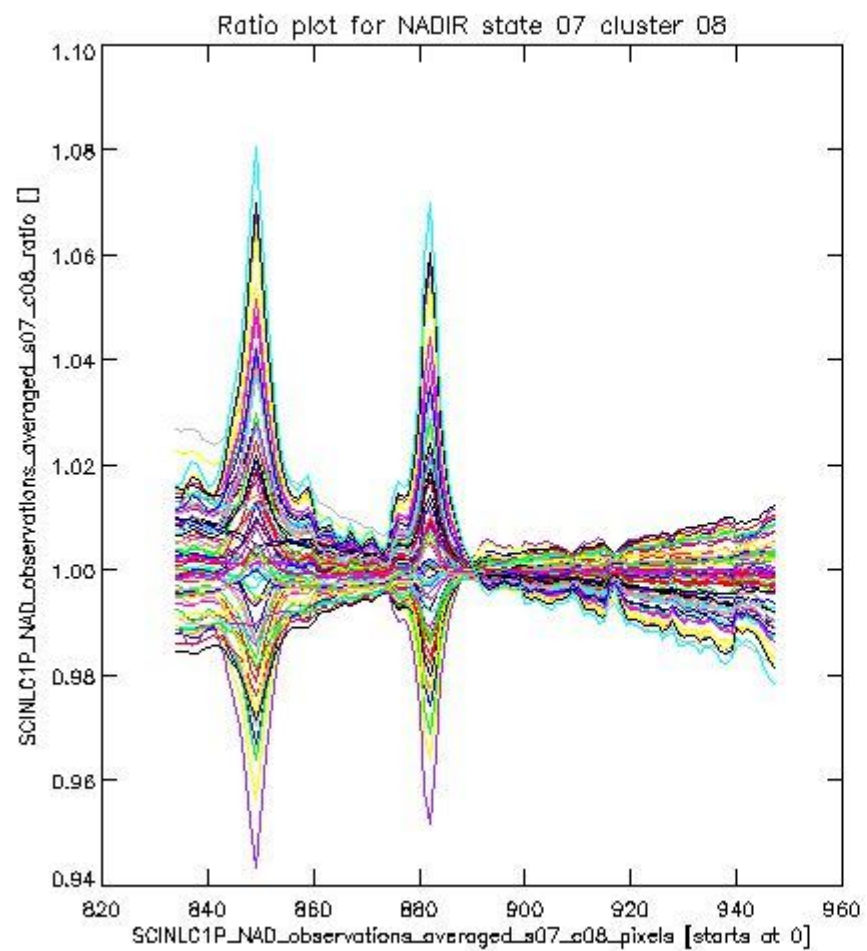
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	24JUN2011 00:56:04.122
Start time of last sample	24JUN2011 22:48:25.394
Reference period start time	25MAY2011 04:18:04.516
Reference period stop time	23JUN2011 23:25:09.742
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



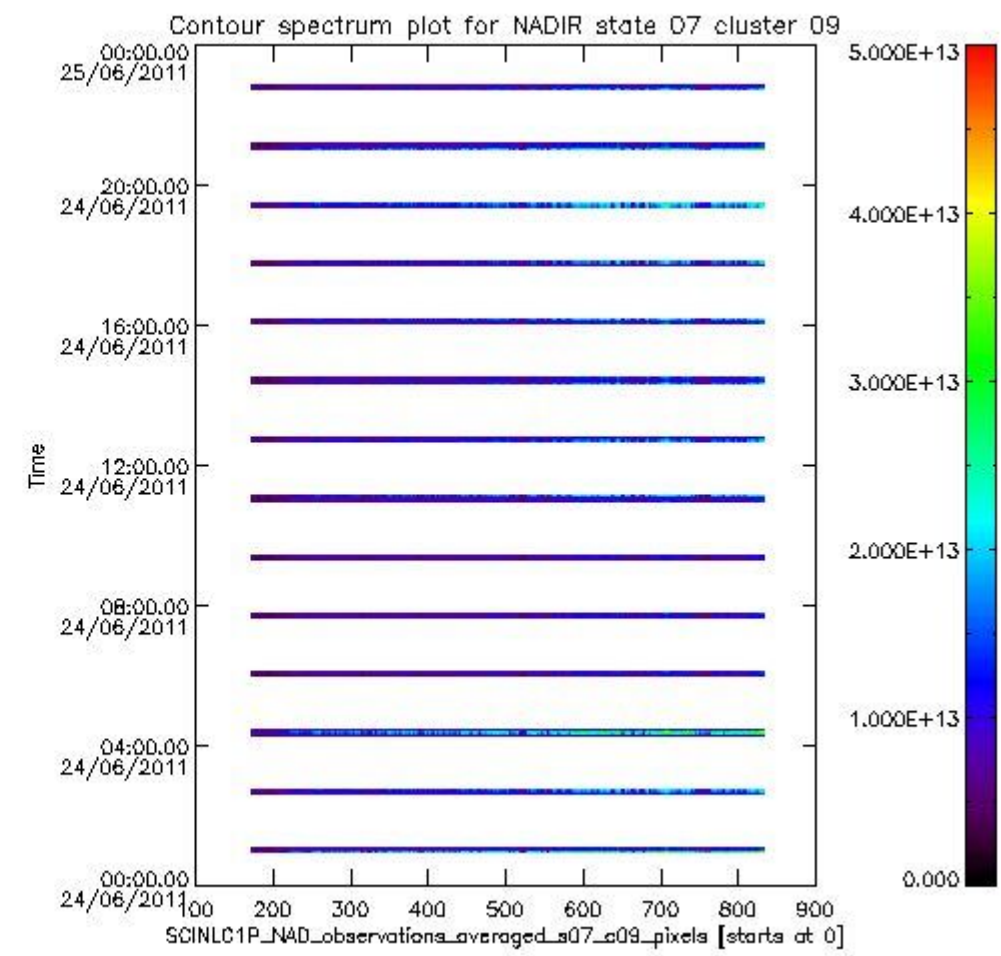
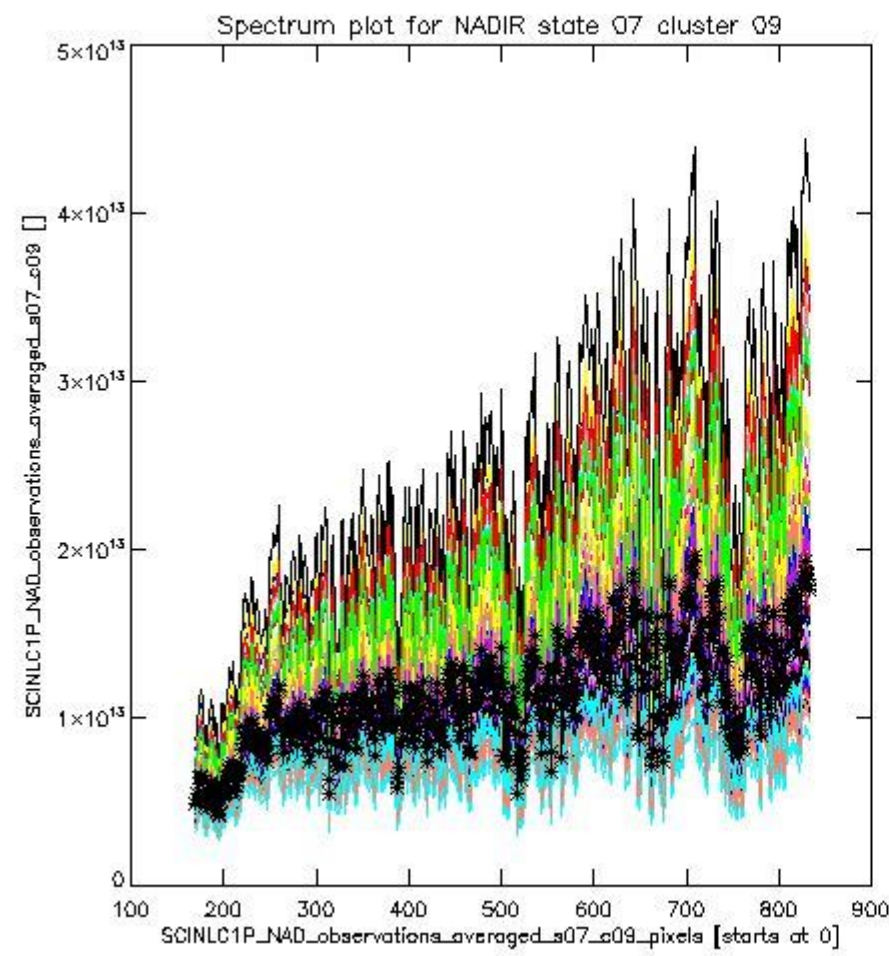
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_0.PNG



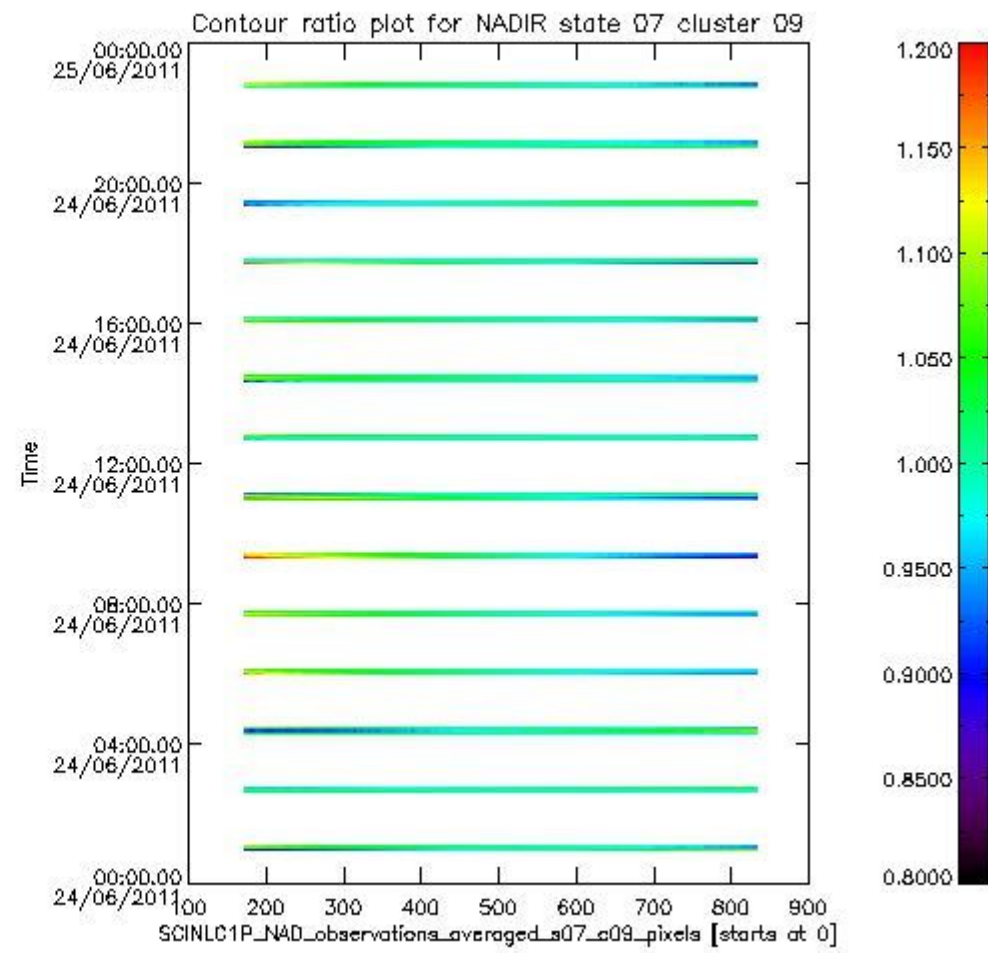
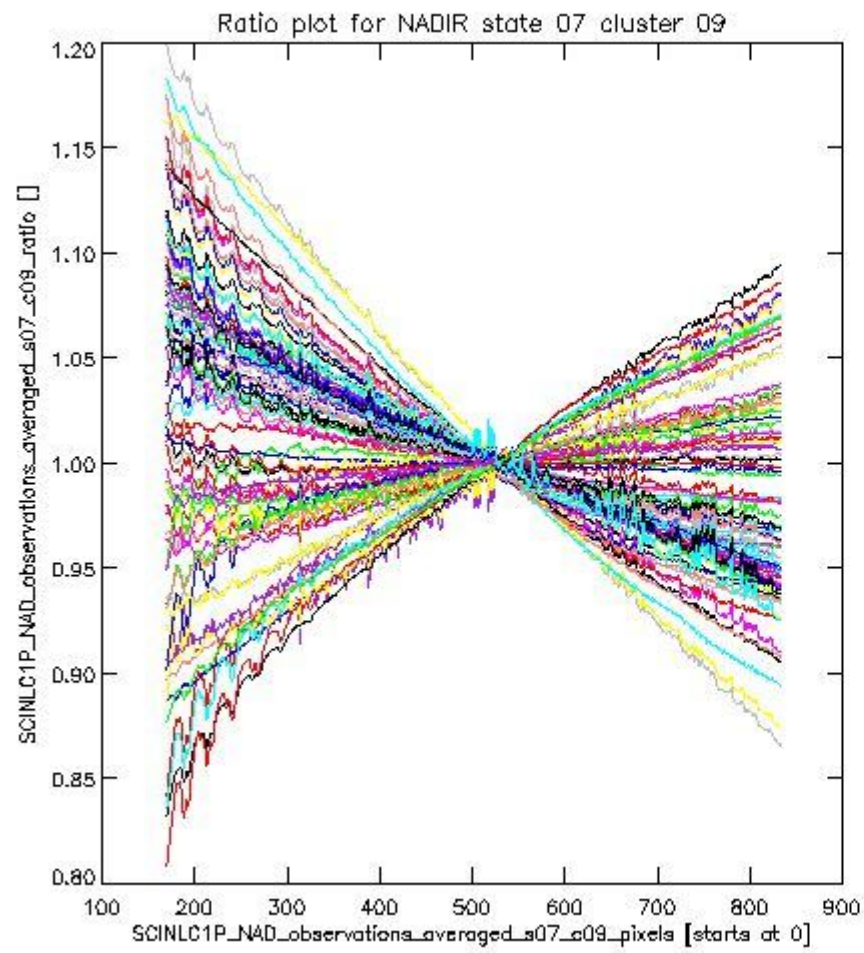
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_1.PNG

**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	24JUN2011 00:56:04.122
Start time of last sample	24JUN2011 22:48:25.394
Reference period start time	25MAY2011 04:18:04.516
Reference period stop time	23JUN2011 23:25:09.742
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



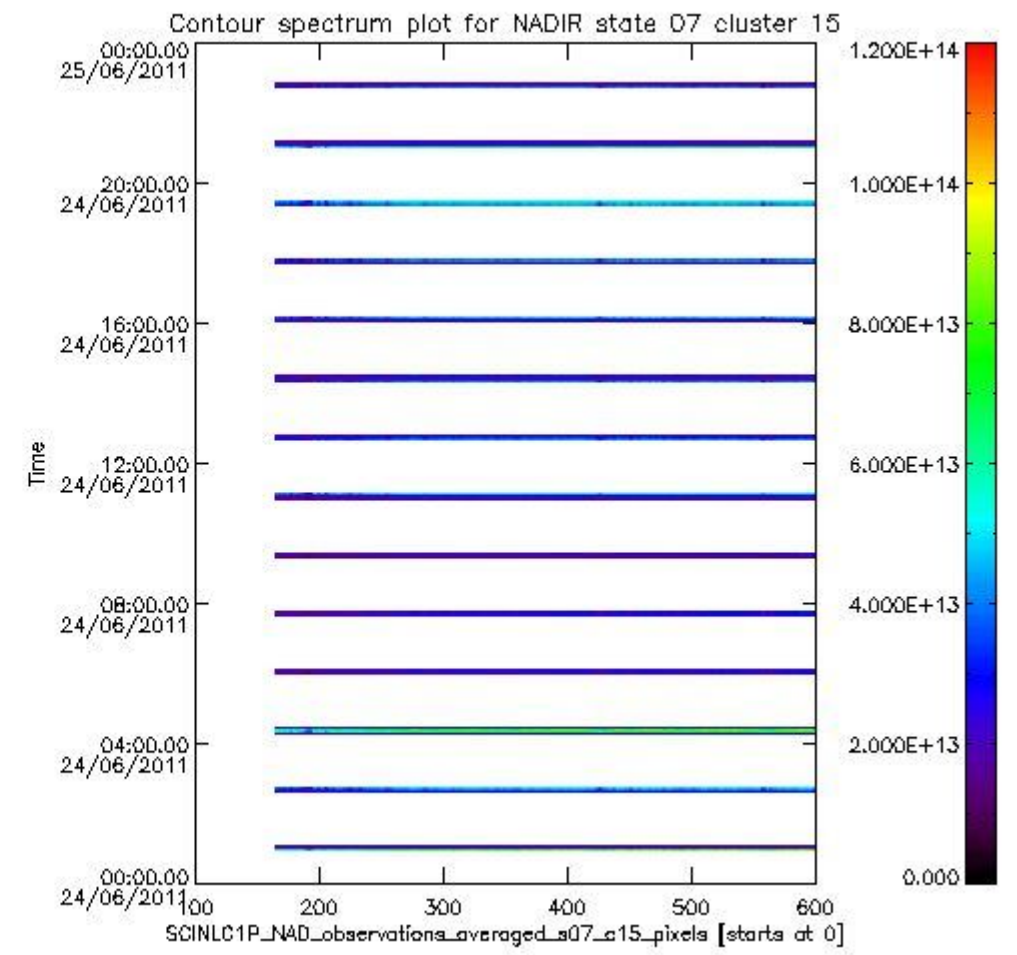
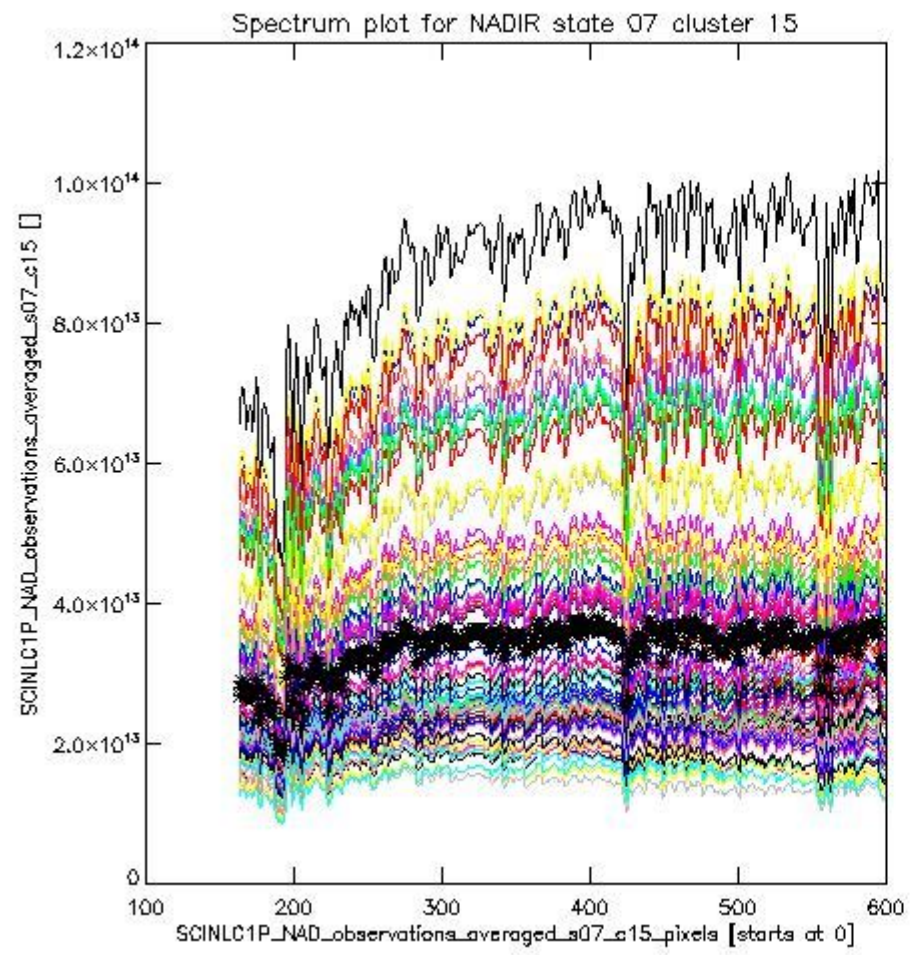
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_2.PNG



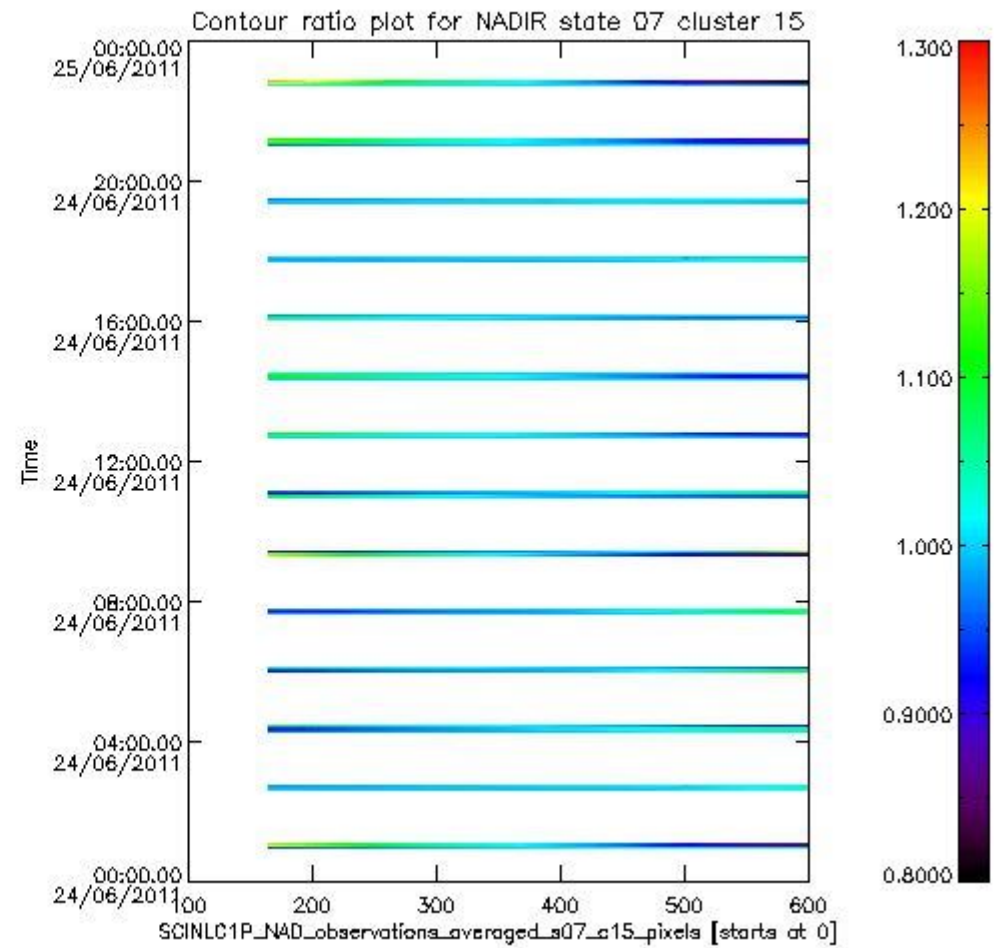
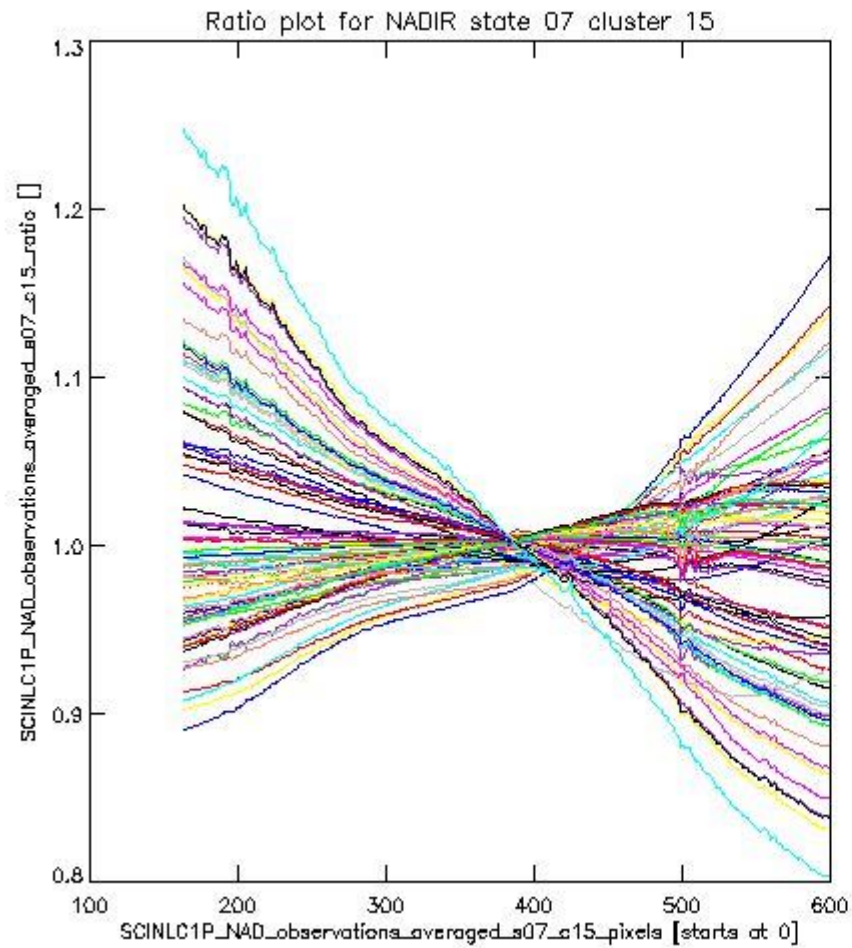
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_3.PNG

**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	24JUN2011 00:56:04.122
Start time of last sample	24JUN2011 22:48:25.394
Reference period start time	25MAY2011 04:18:04.516
Reference period stop time	23JUN2011 23:25:09.742
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\_20110624\_4.PNG

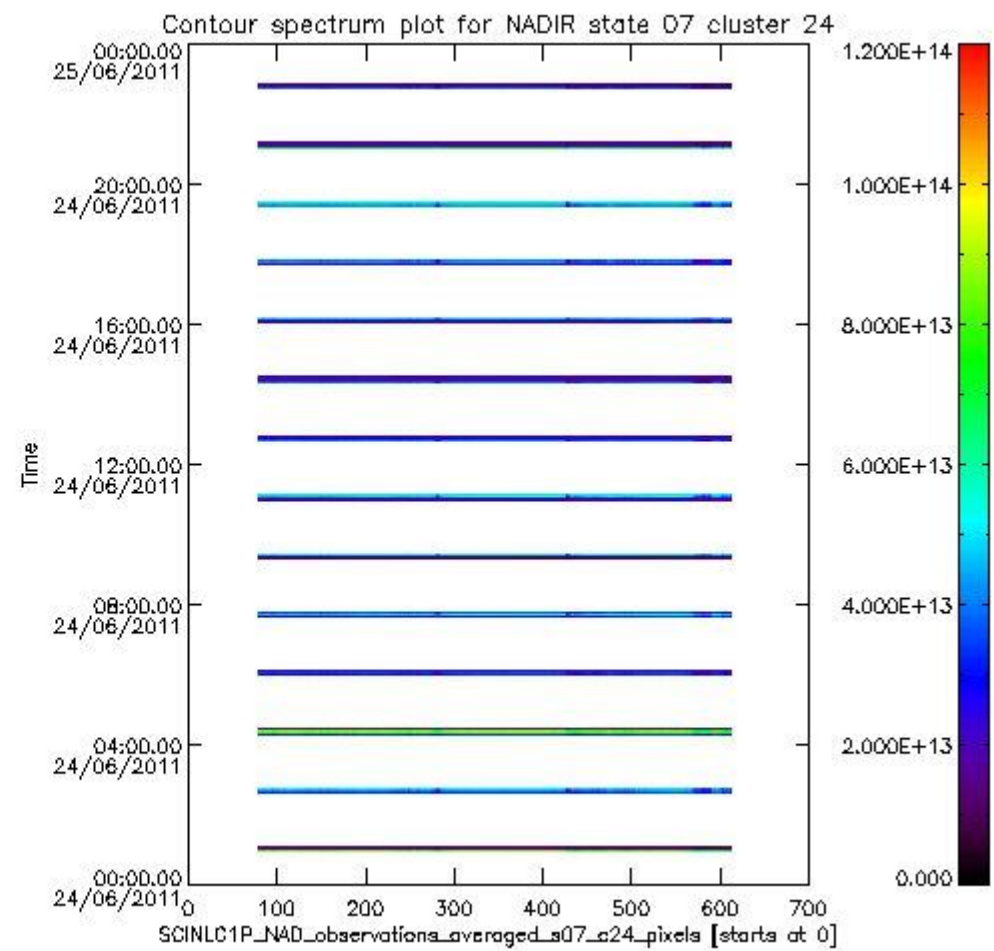
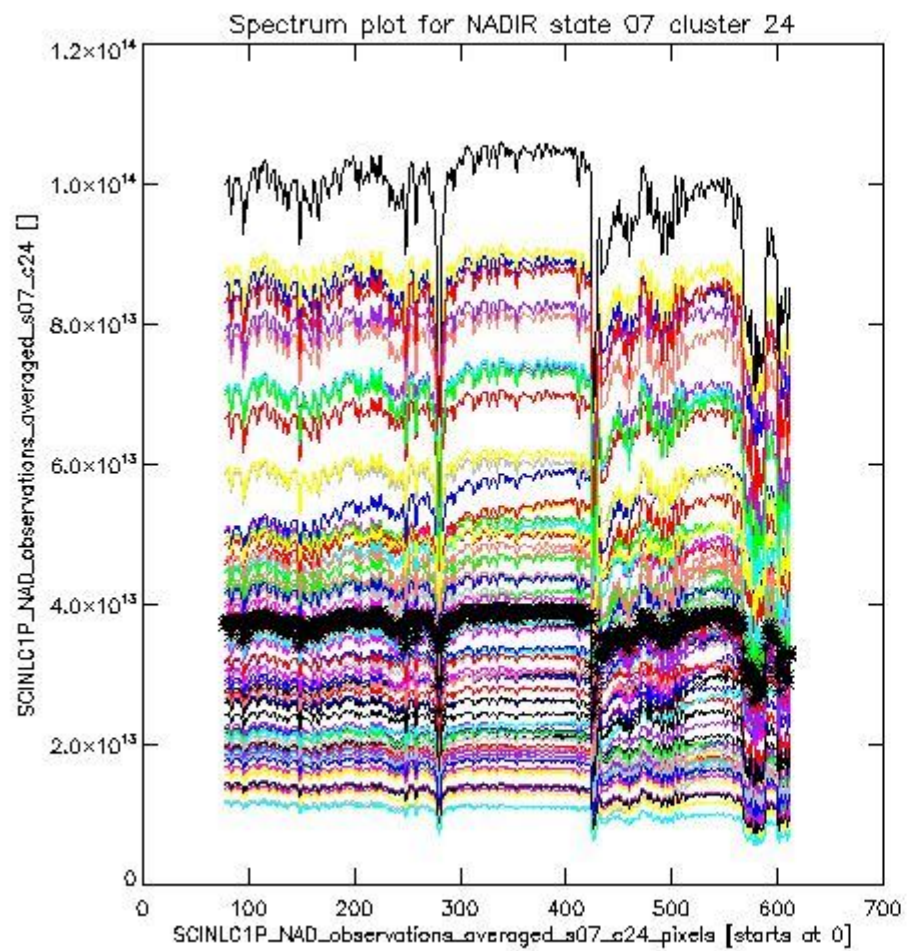


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_5.PNG

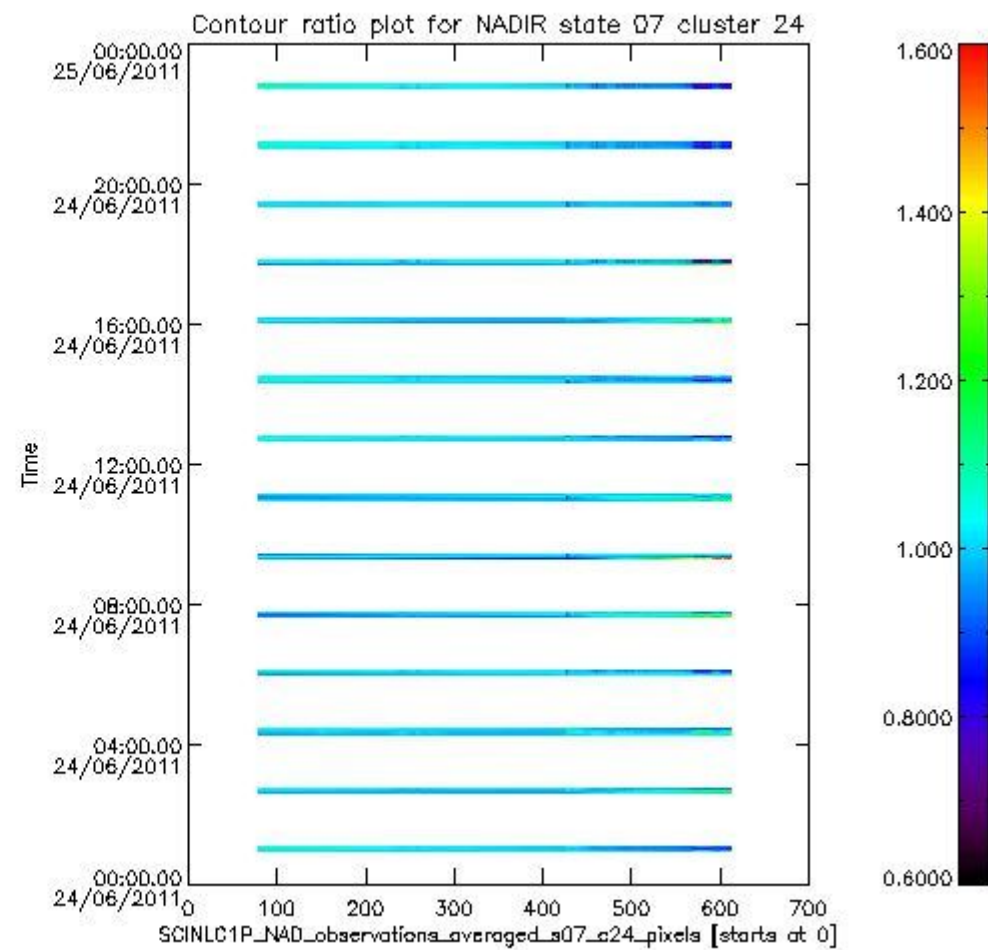
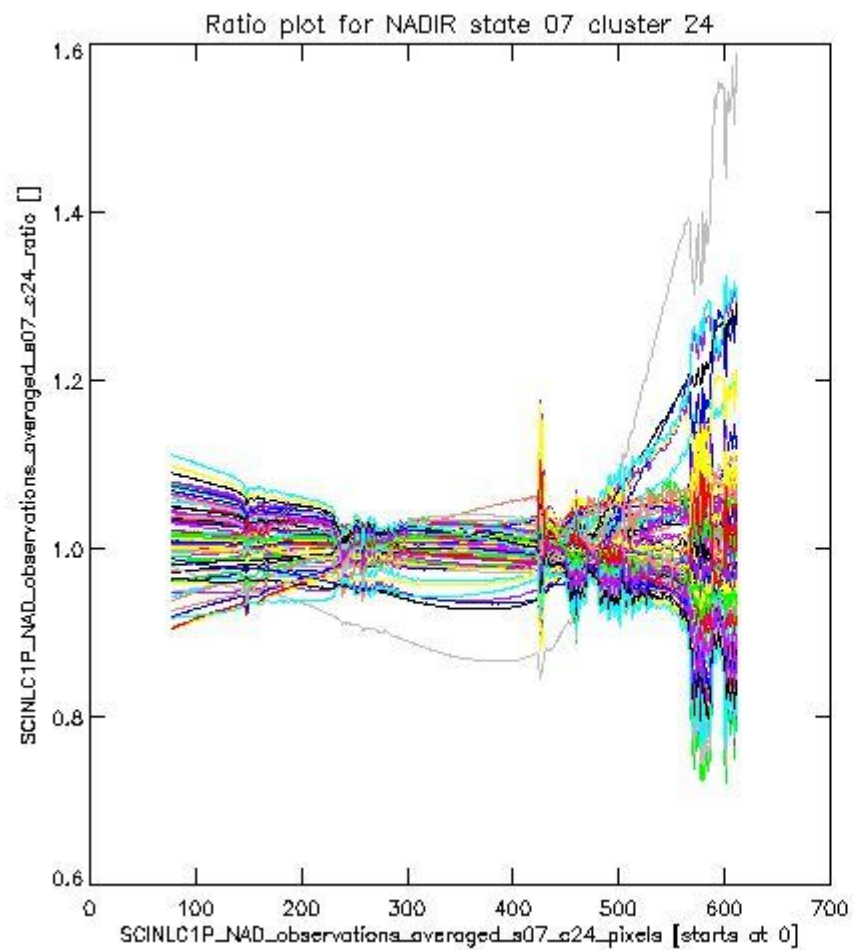
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	24JUN2011 00:56:04.122
Start time of last sample	24JUN2011 22:48:25.394
Reference period start time	25MAY2011 04:18:04.516
Reference period stop time	23JUN2011 23:25:09.742
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612





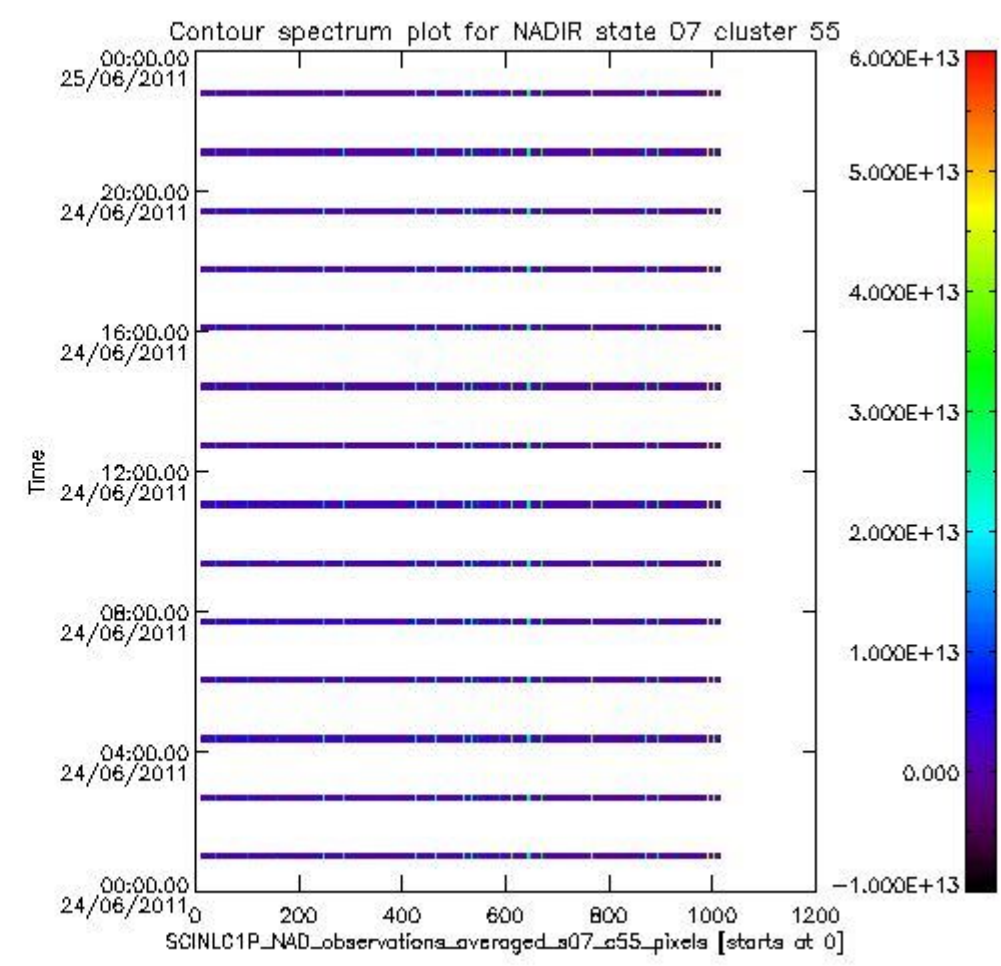
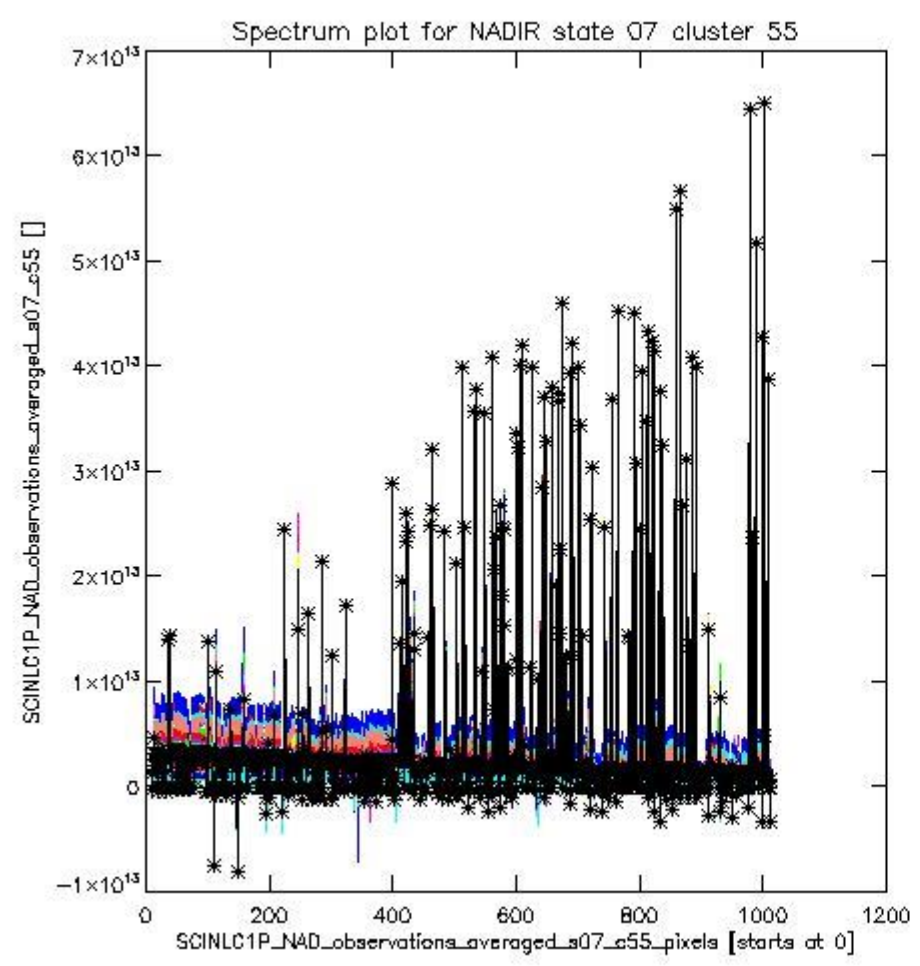
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_6.PNG



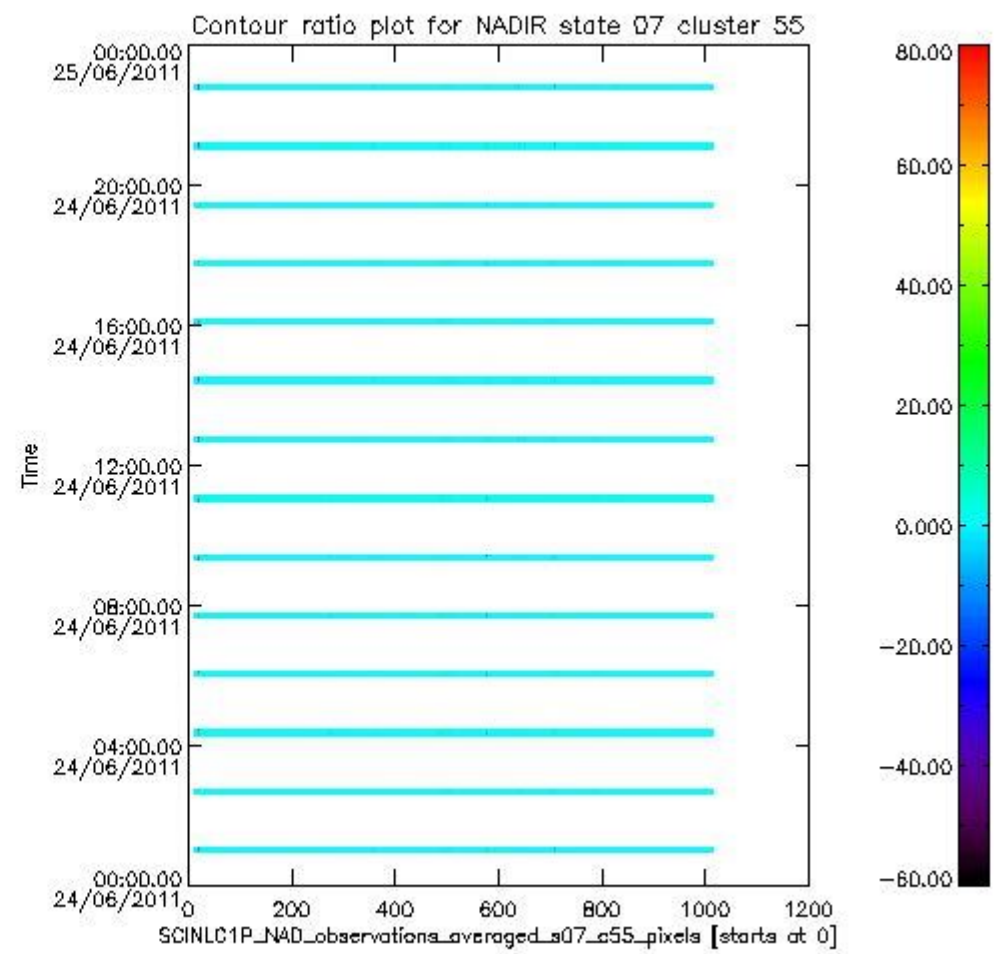
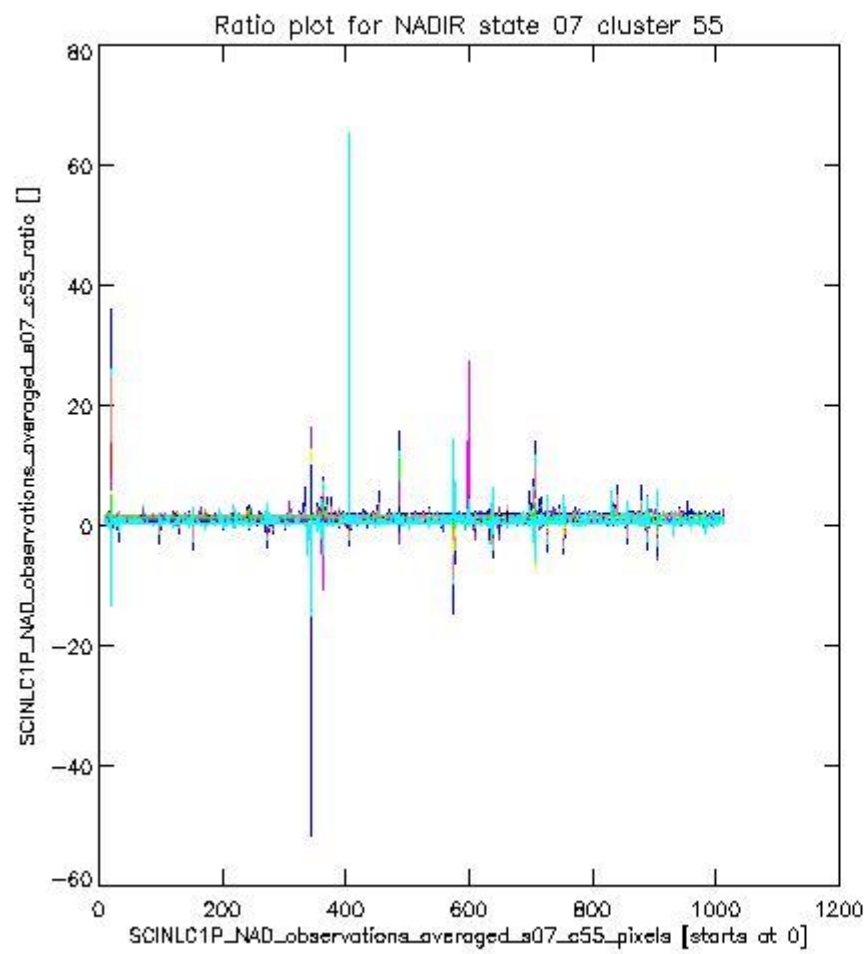
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_7.PNG

**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	24JUN2011 00:56:04.122
Start time of last sample	24JUN2011 22:48:25.394
Reference period start time	25MAY2011 04:18:04.516
Reference period stop time	23JUN2011 23:25:09.742
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



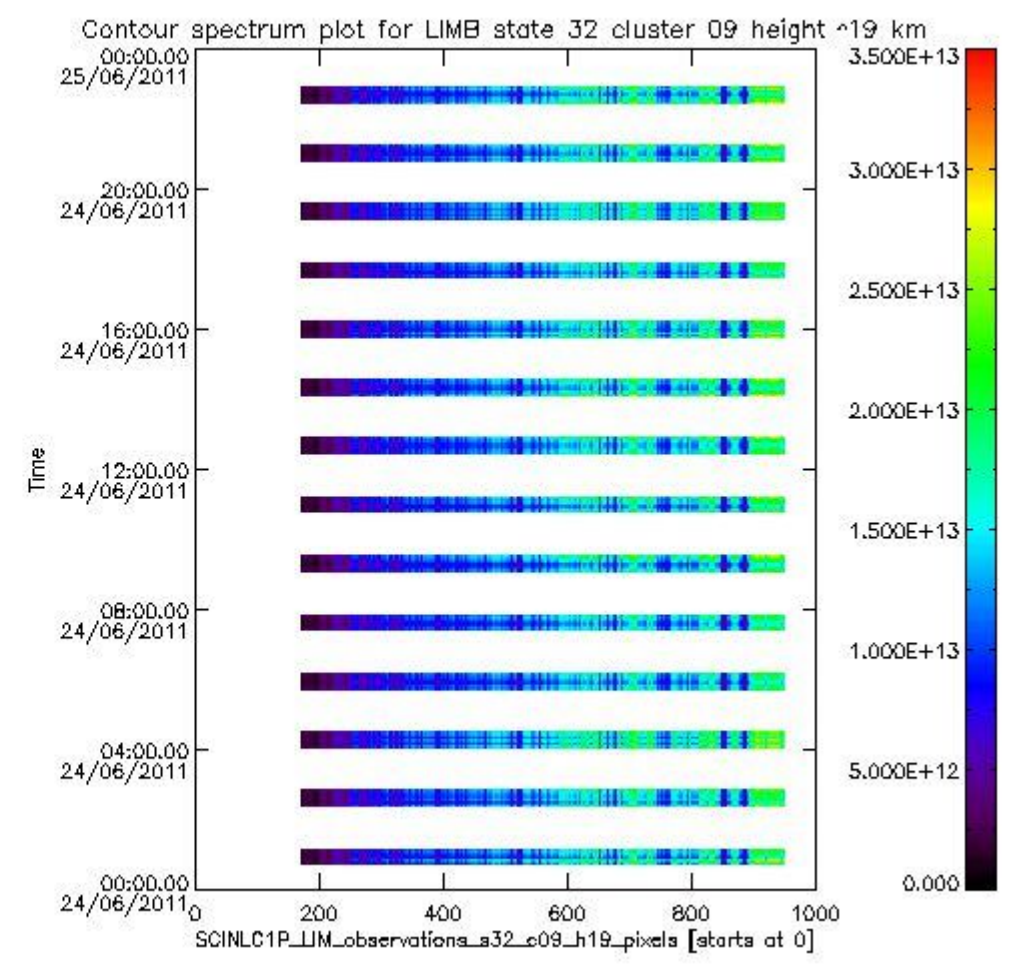
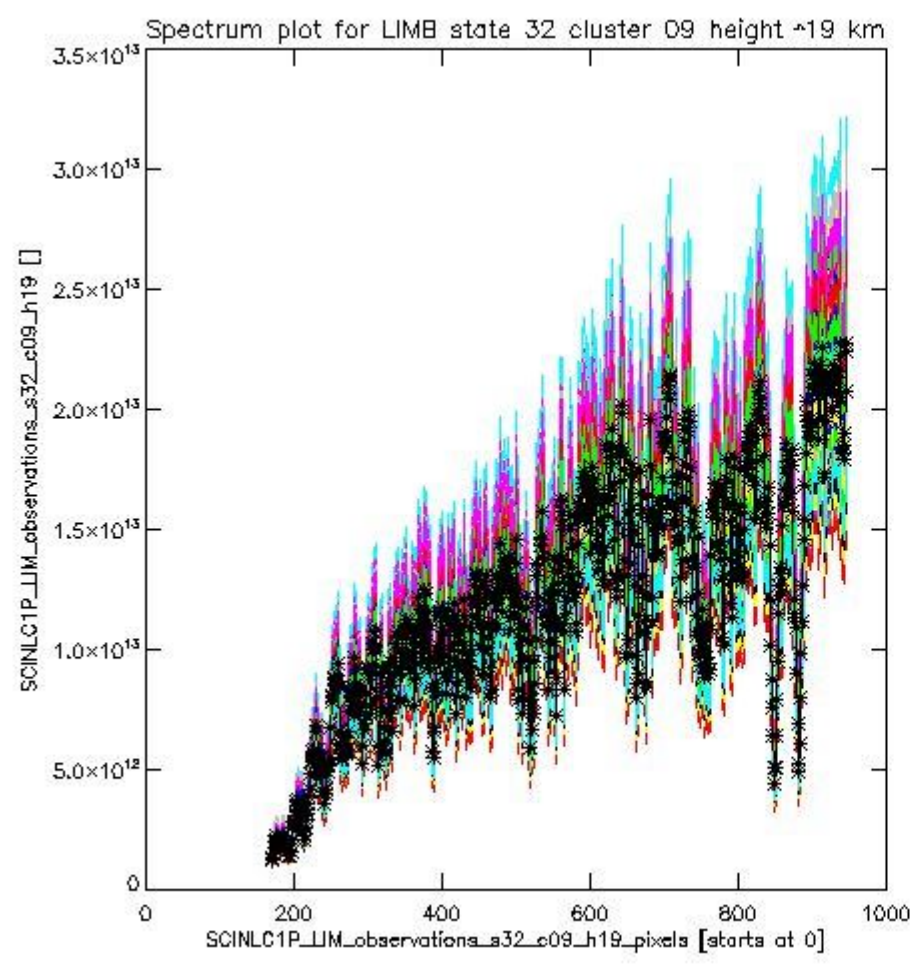
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_8.PNG



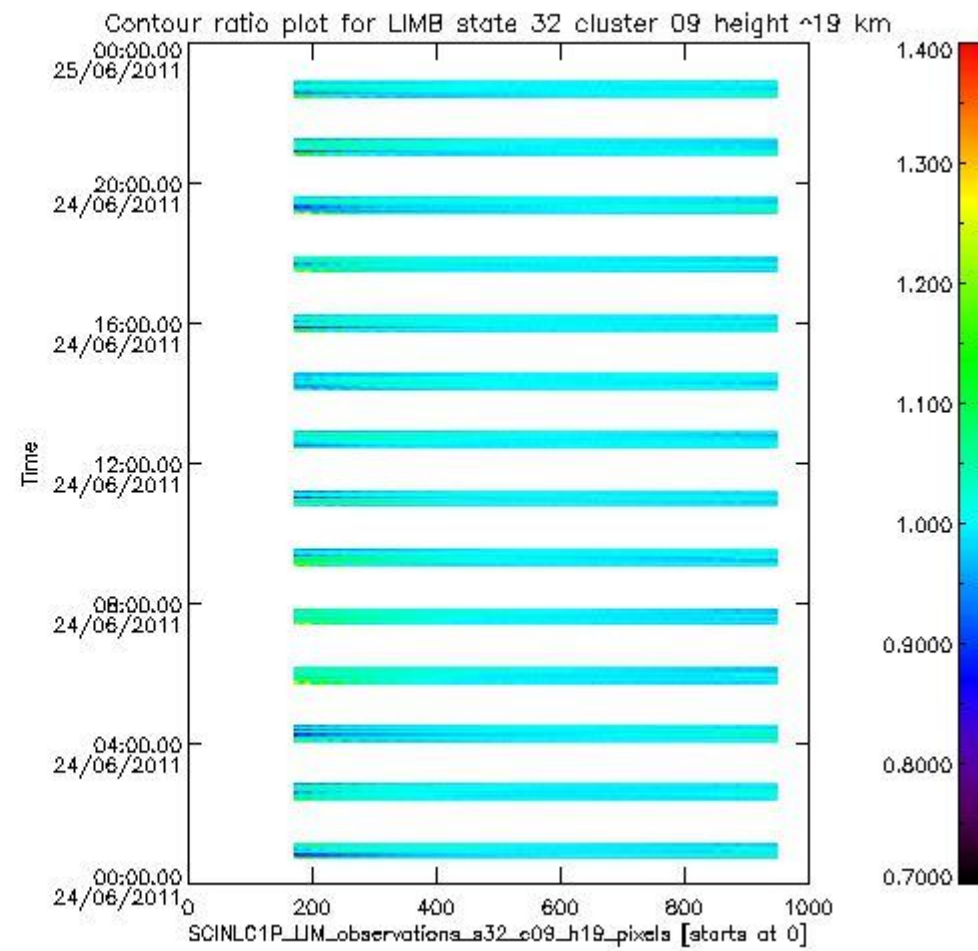
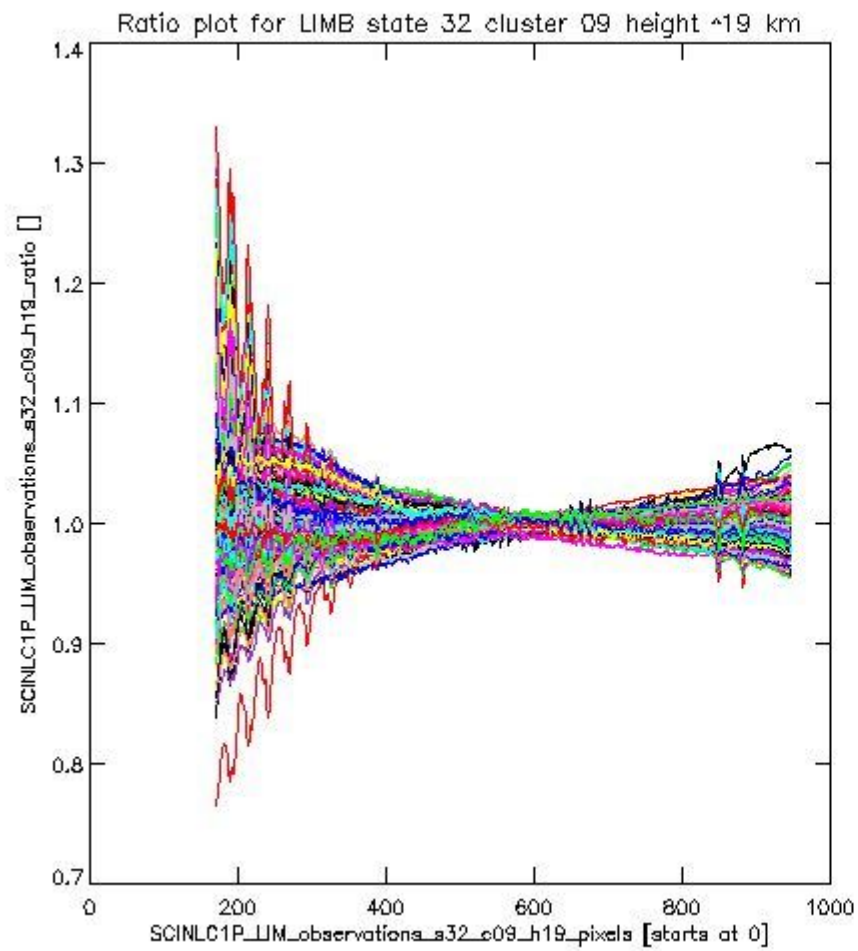
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_9.PNG

**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	24JUN2011 00:42:53.485
Start time of last sample	24JUN2011 22:53:39.437
Reference period start time	25MAY2011 00:42:23.644
Reference period stop time	23JUN2011 23:30:23.785
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



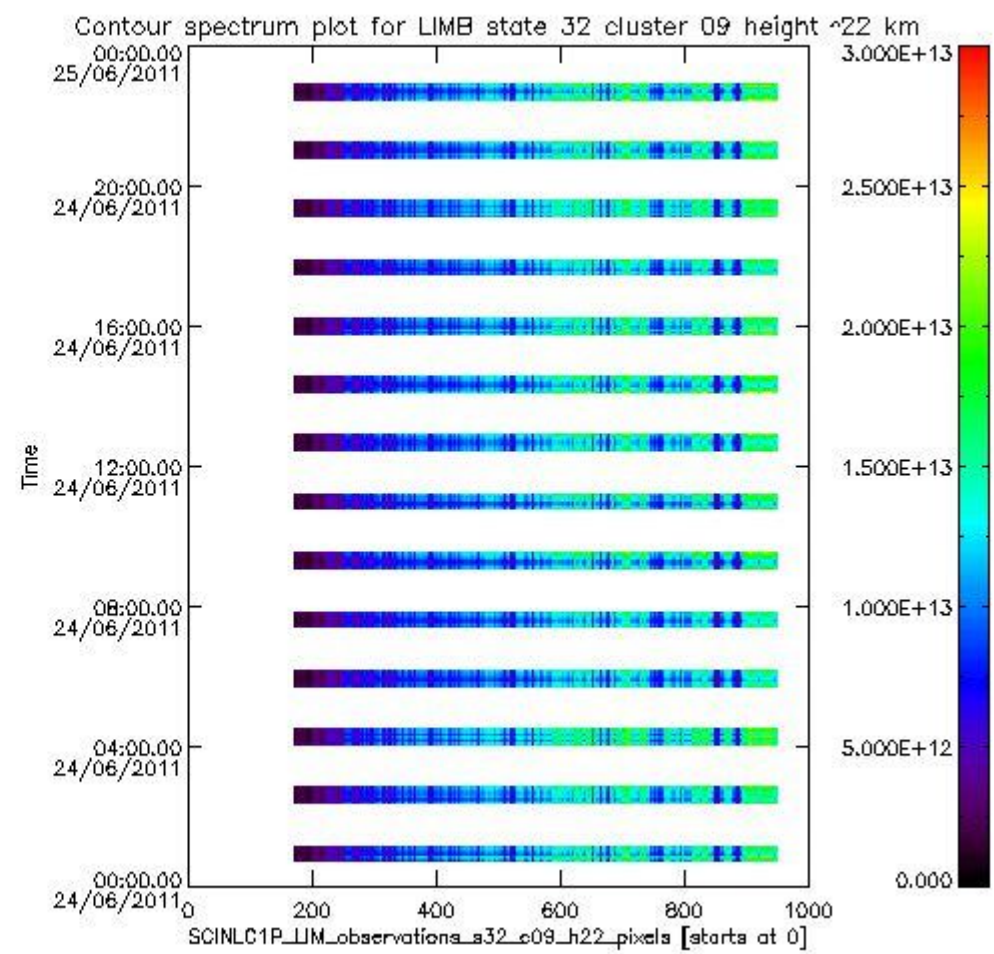
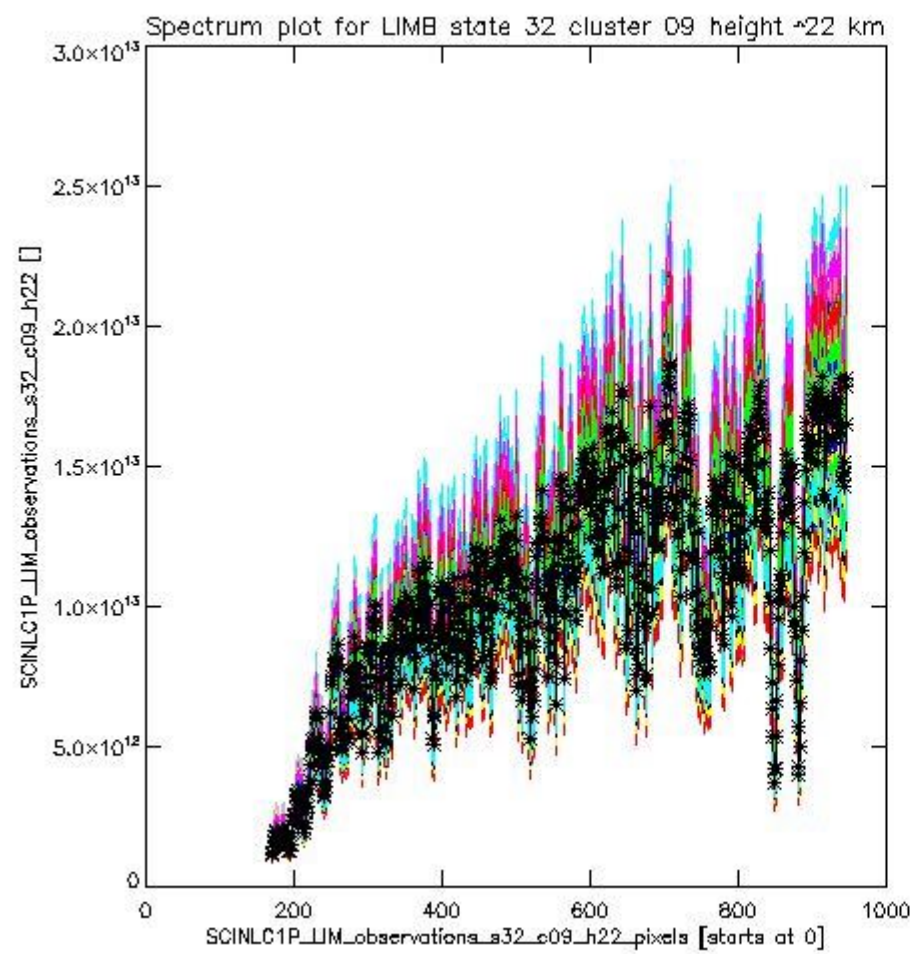
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_10.PNG



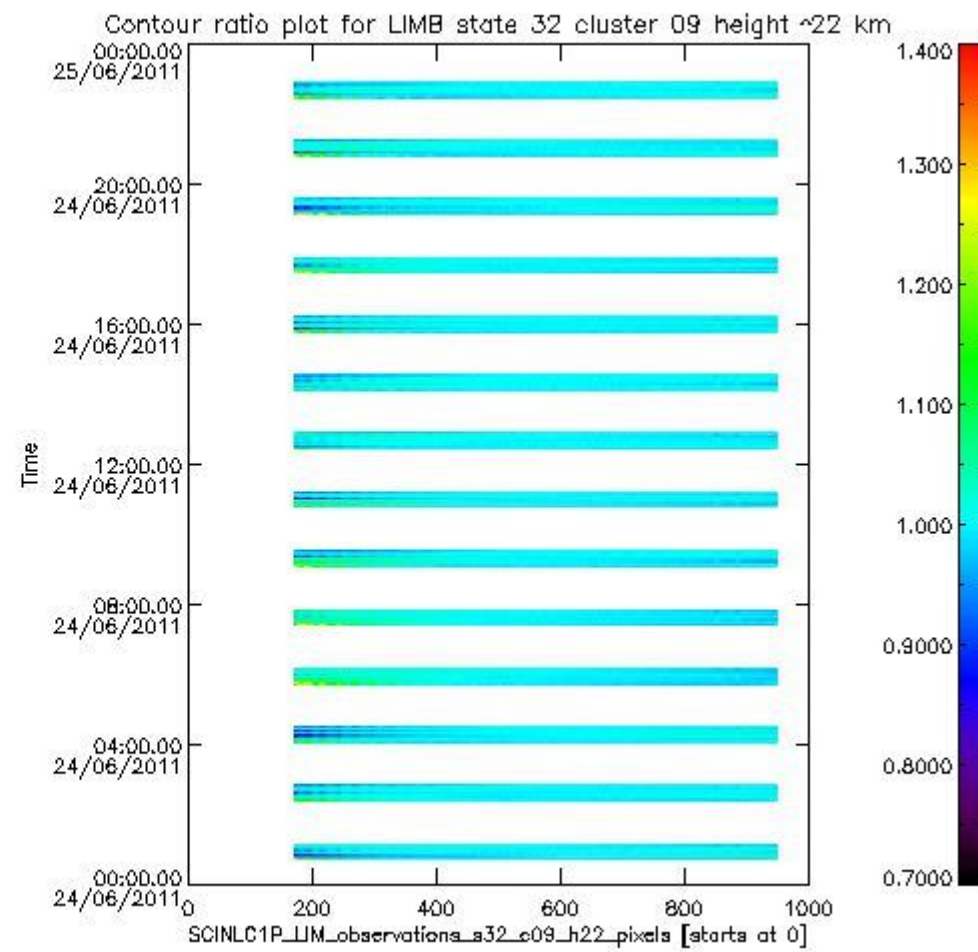
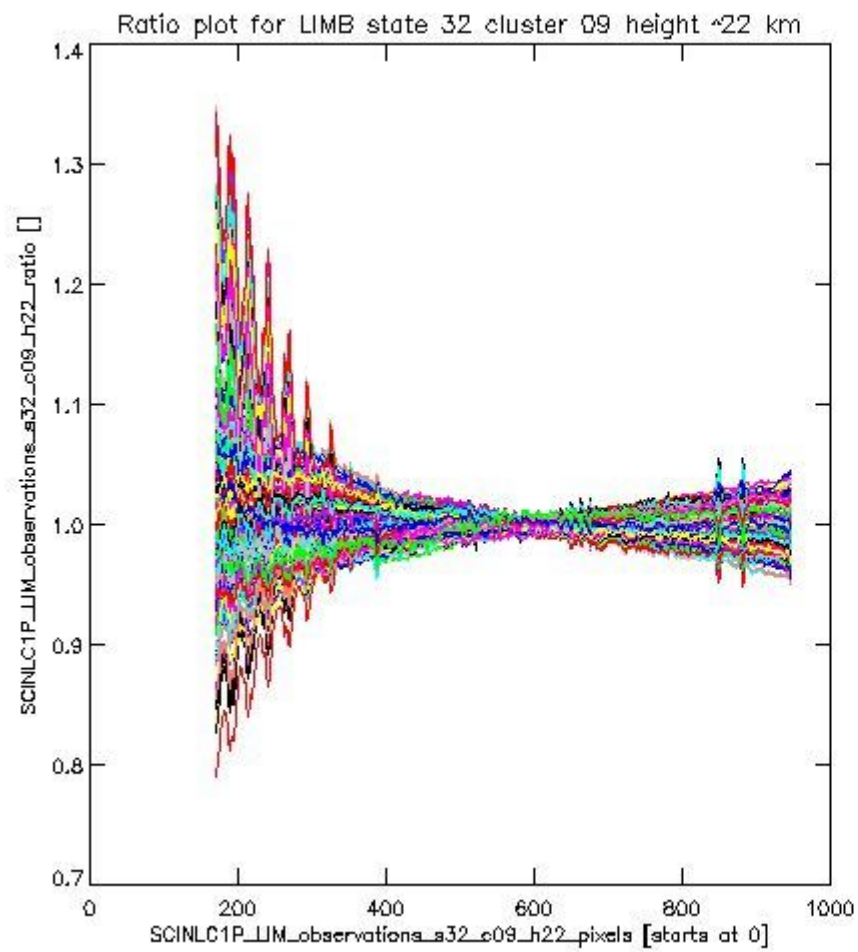
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_11.PNG

**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	24JUN2011 00:42:53.485
Start time of last sample	24JUN2011 22:53:39.437
Reference period start time	25MAY2011 00:42:23.644
Reference period stop time	23JUN2011 23:30:23.785
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\_20110624\_12.PNG

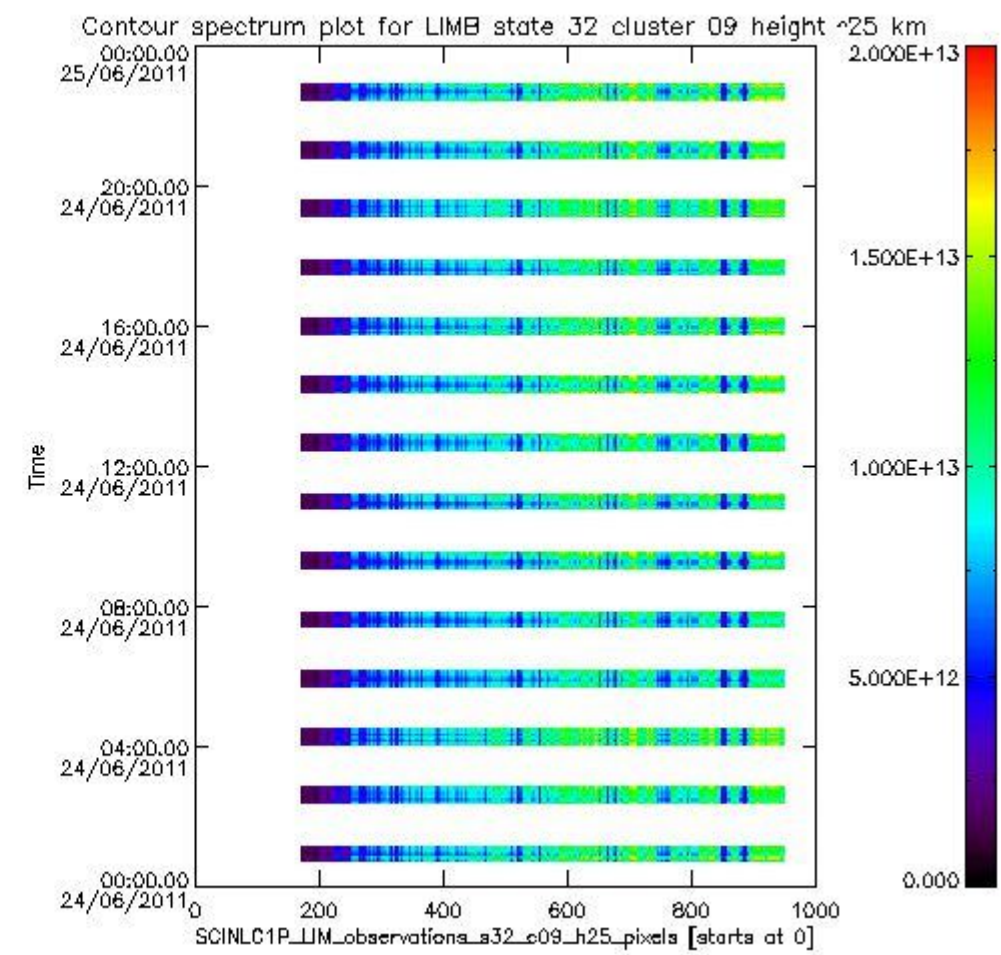
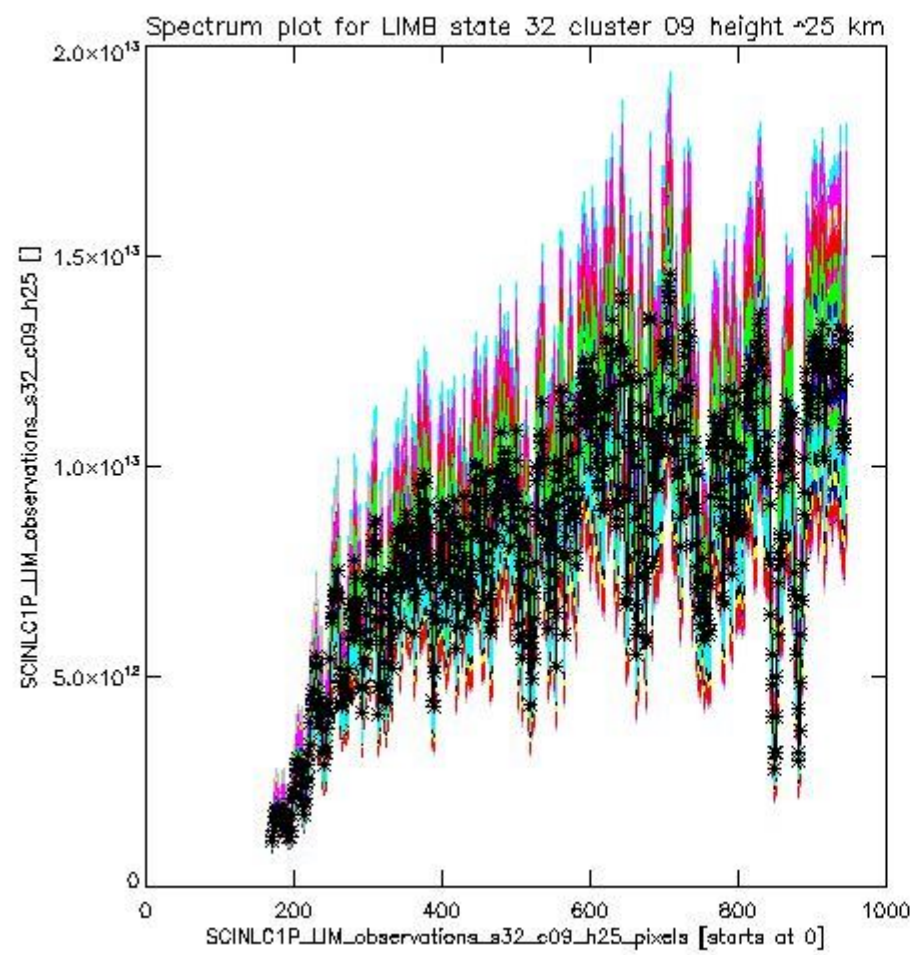


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_13.PNG

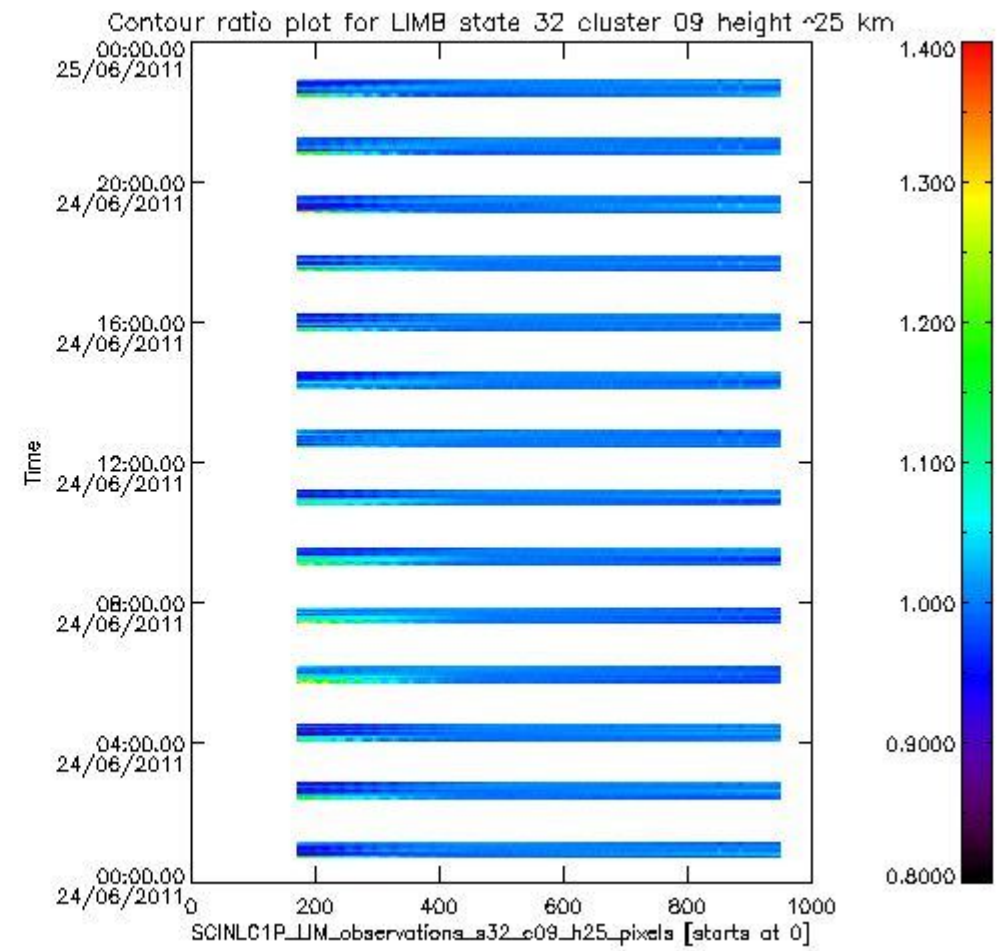
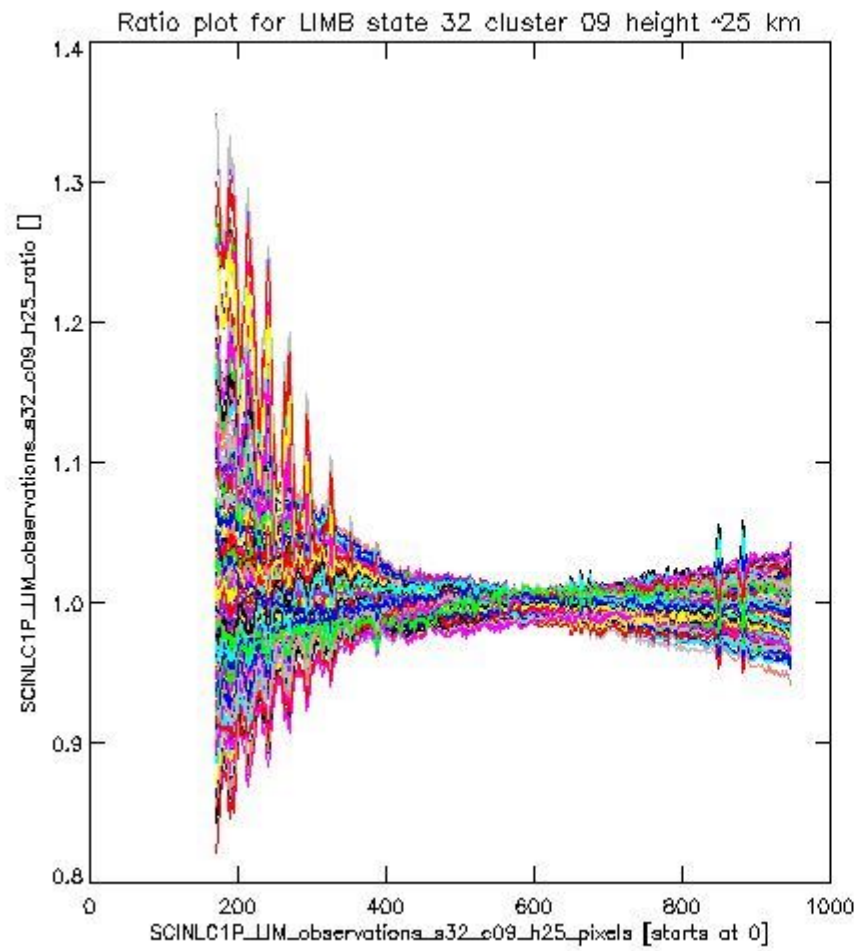
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	24JUN2011 00:42:53.485
Start time of last sample	24JUN2011 22:53:39.437
Reference period start time	25MAY2011 00:42:23.644
Reference period stop time	23JUN2011 23:30:23.785
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





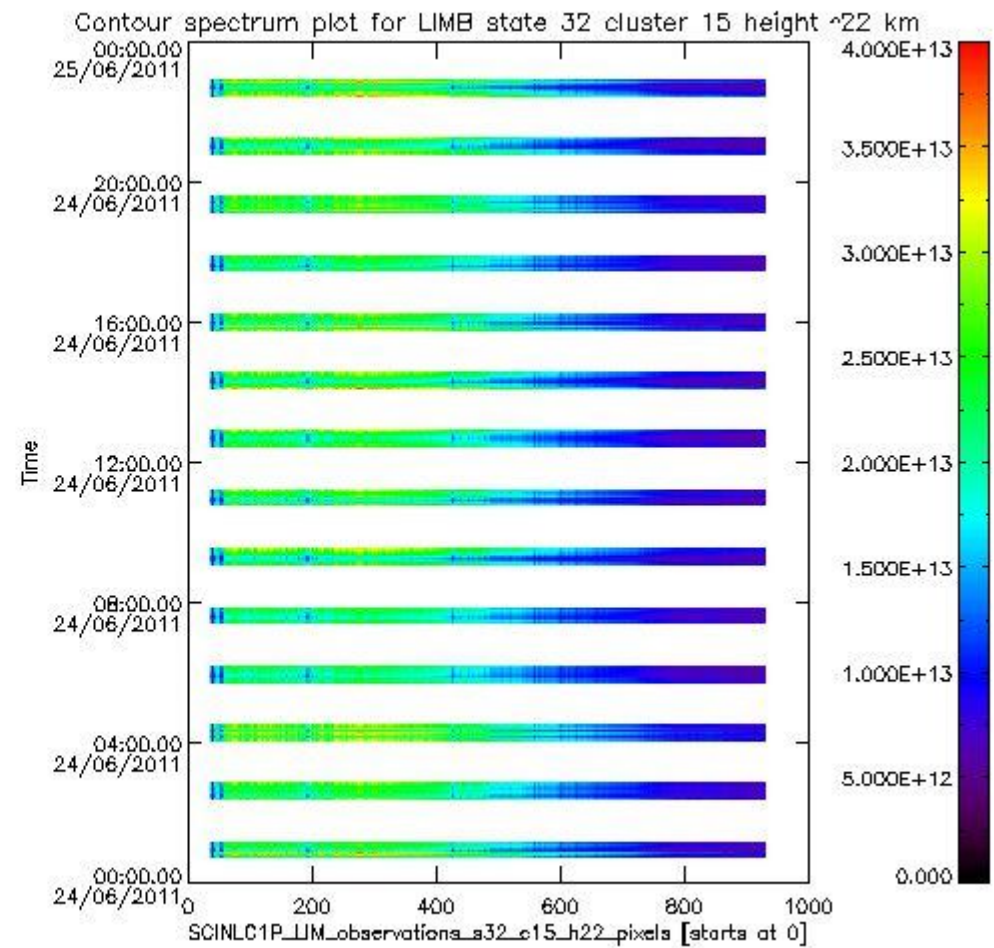
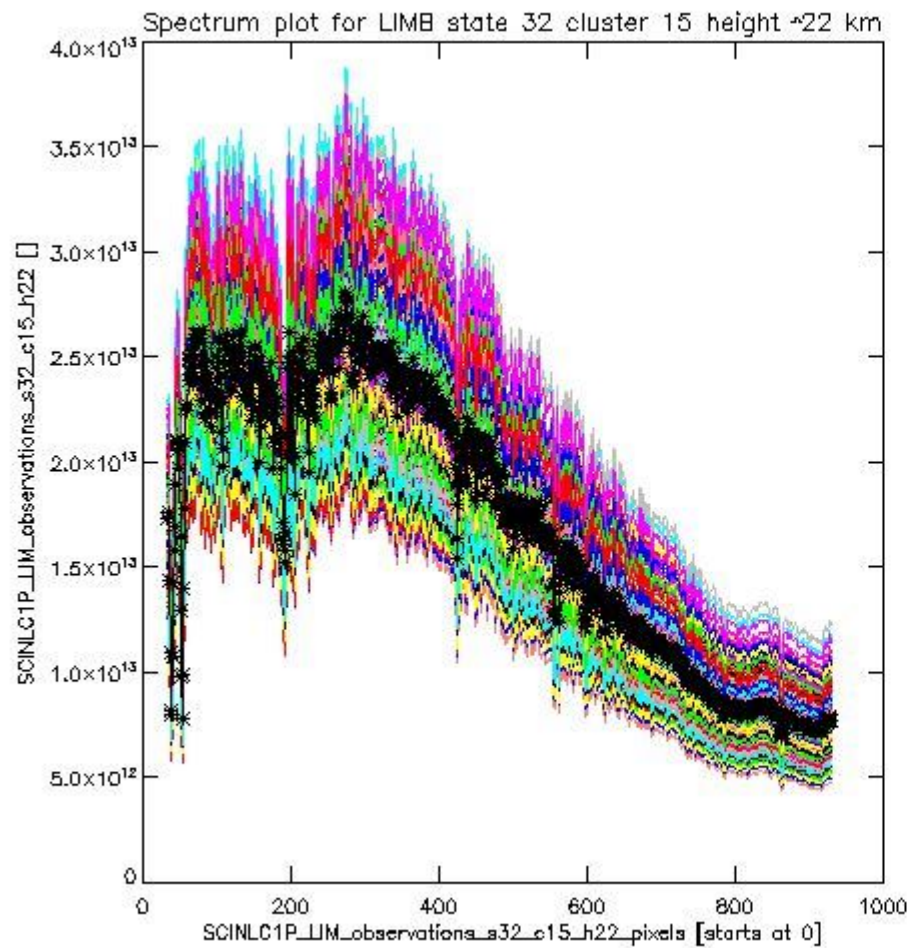
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_14.PNG



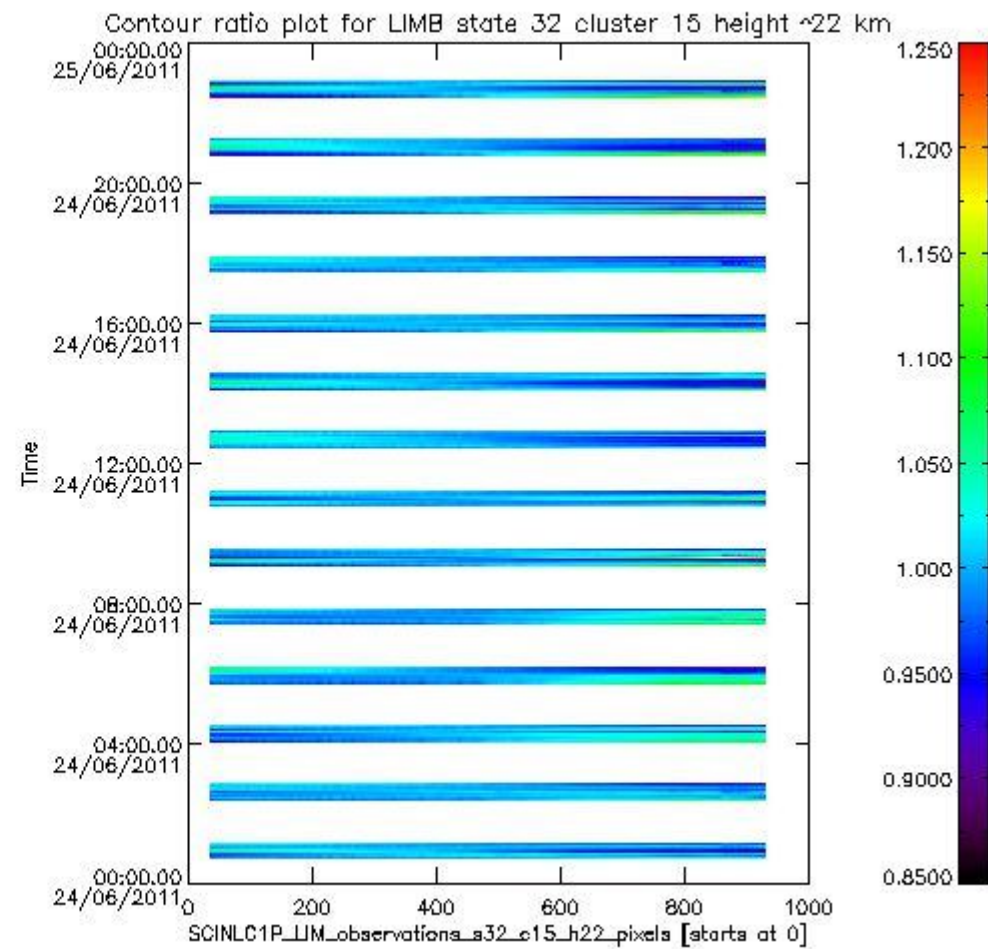
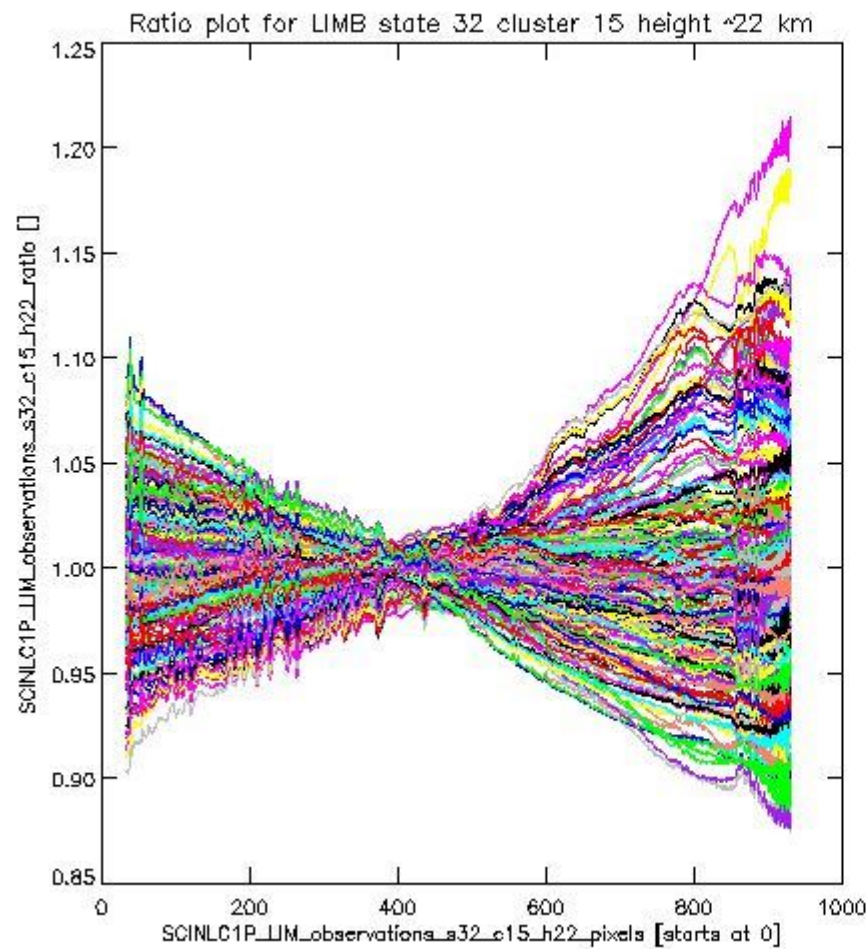
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_15.PNG

**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	24JUN2011 00:42:53.485
Start time of last sample	24JUN2011 22:53:39.437
Reference period start time	25MAY2011 00:42:23.644
Reference period stop time	23JUN2011 23:30:23.785
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



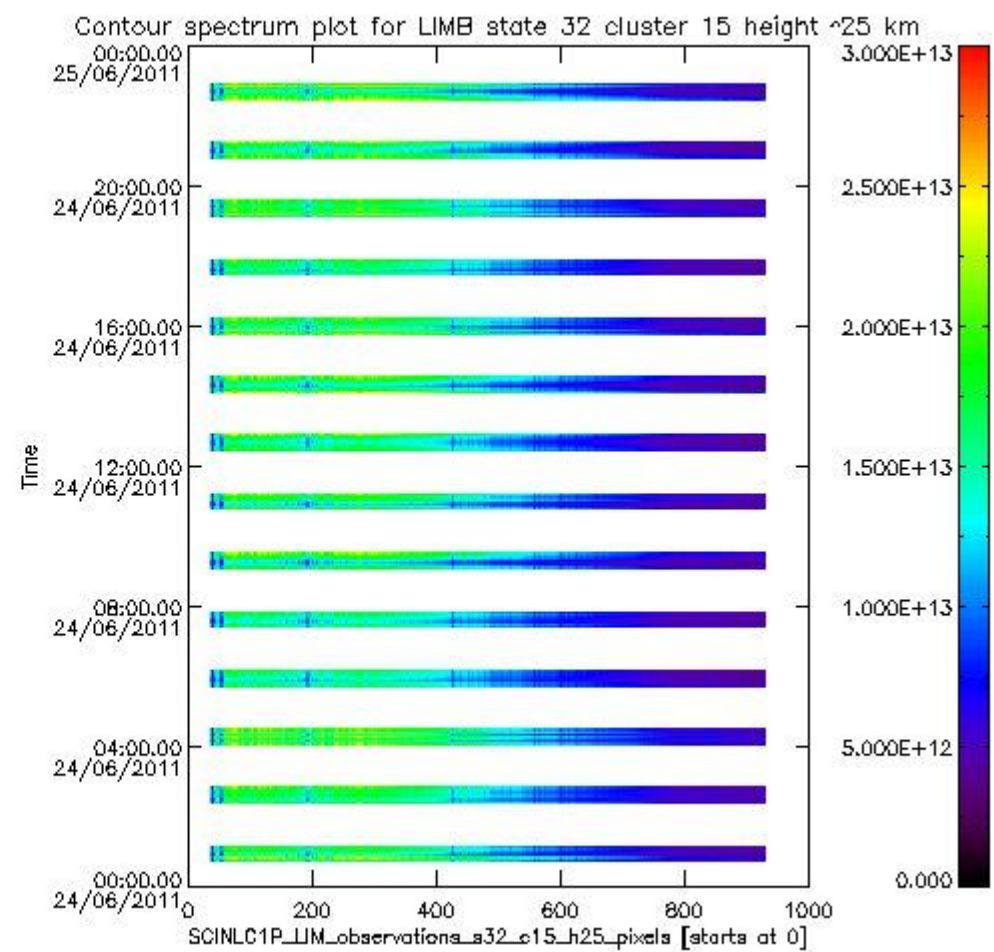
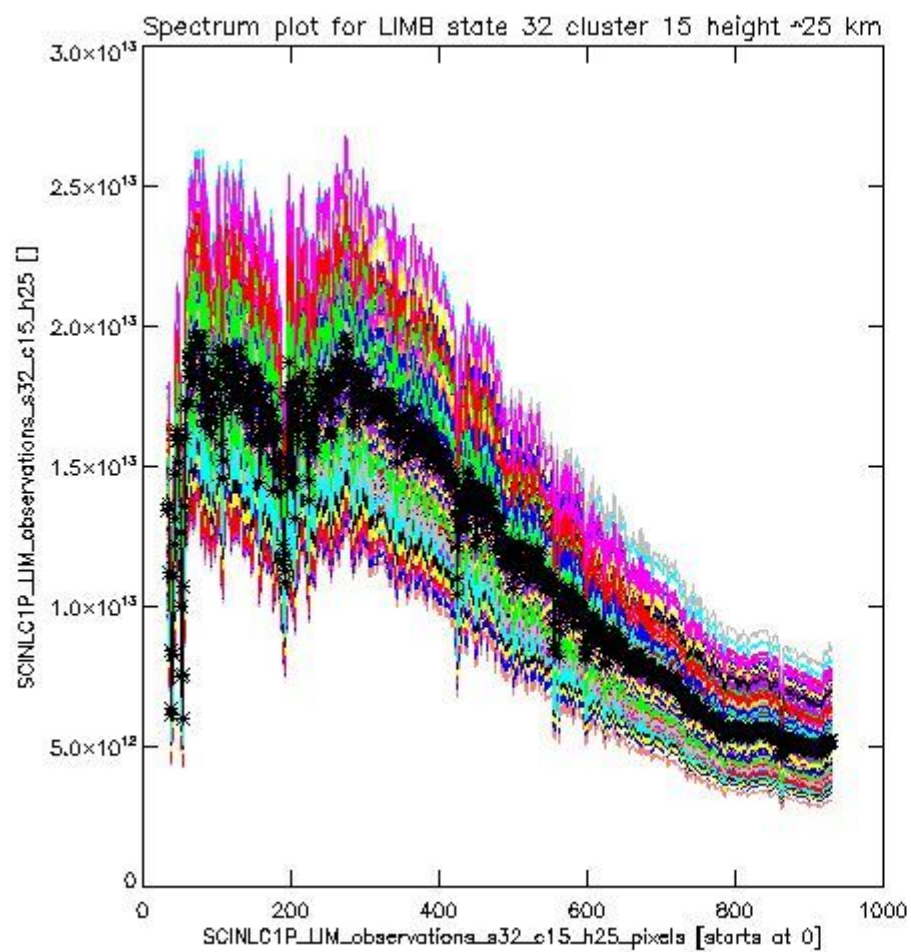
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_16.PNG



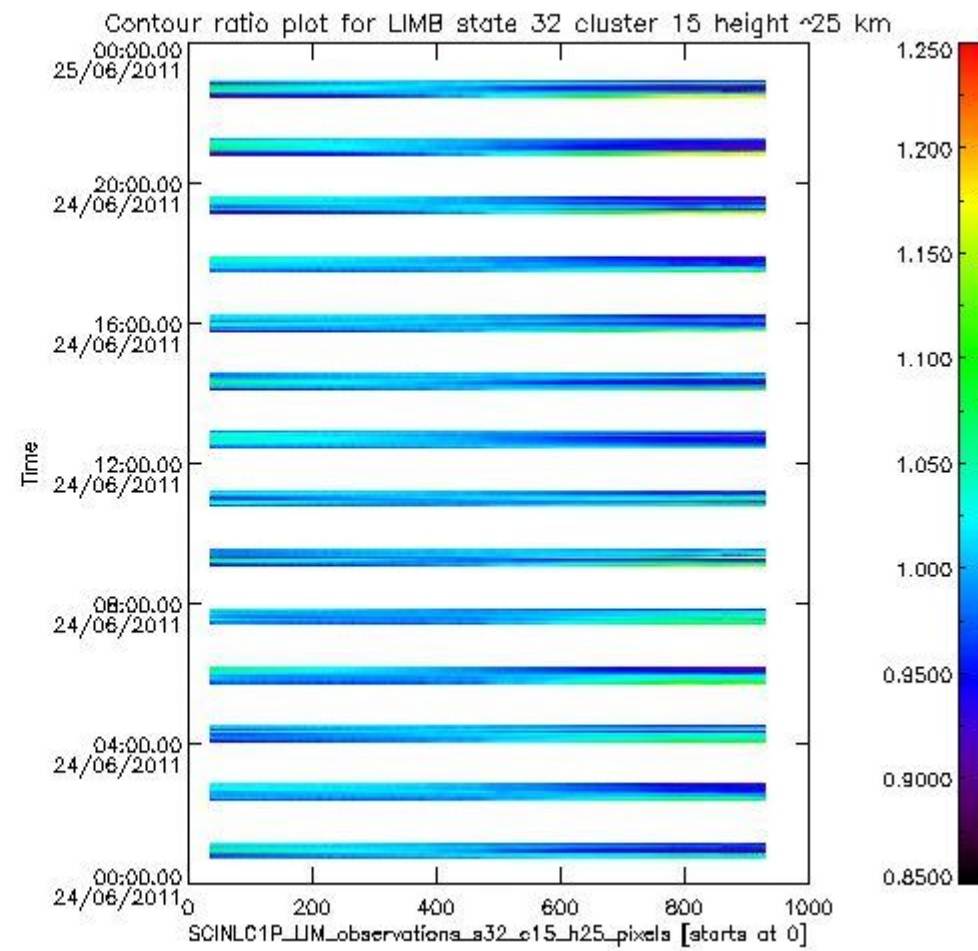
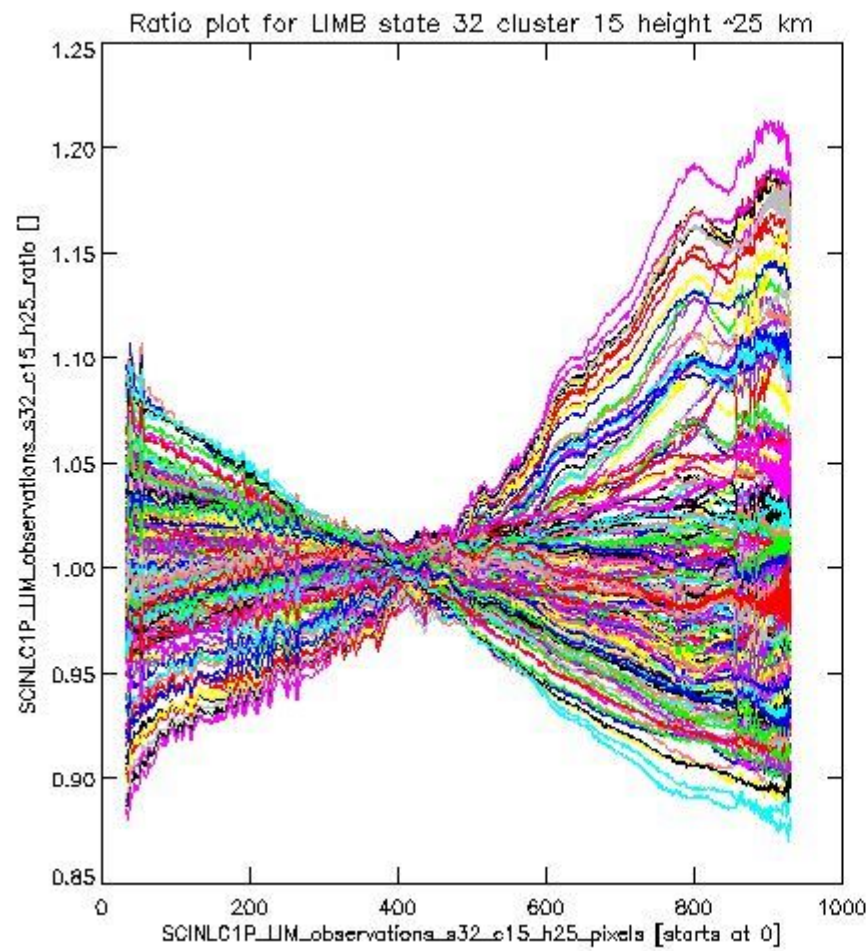
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_17.PNG

**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	24JUN2011 00:42:53.485
Start time of last sample	24JUN2011 22:53:39.437
Reference period start time	25MAY2011 00:42:23.644
Reference period stop time	23JUN2011 23:30:23.785
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



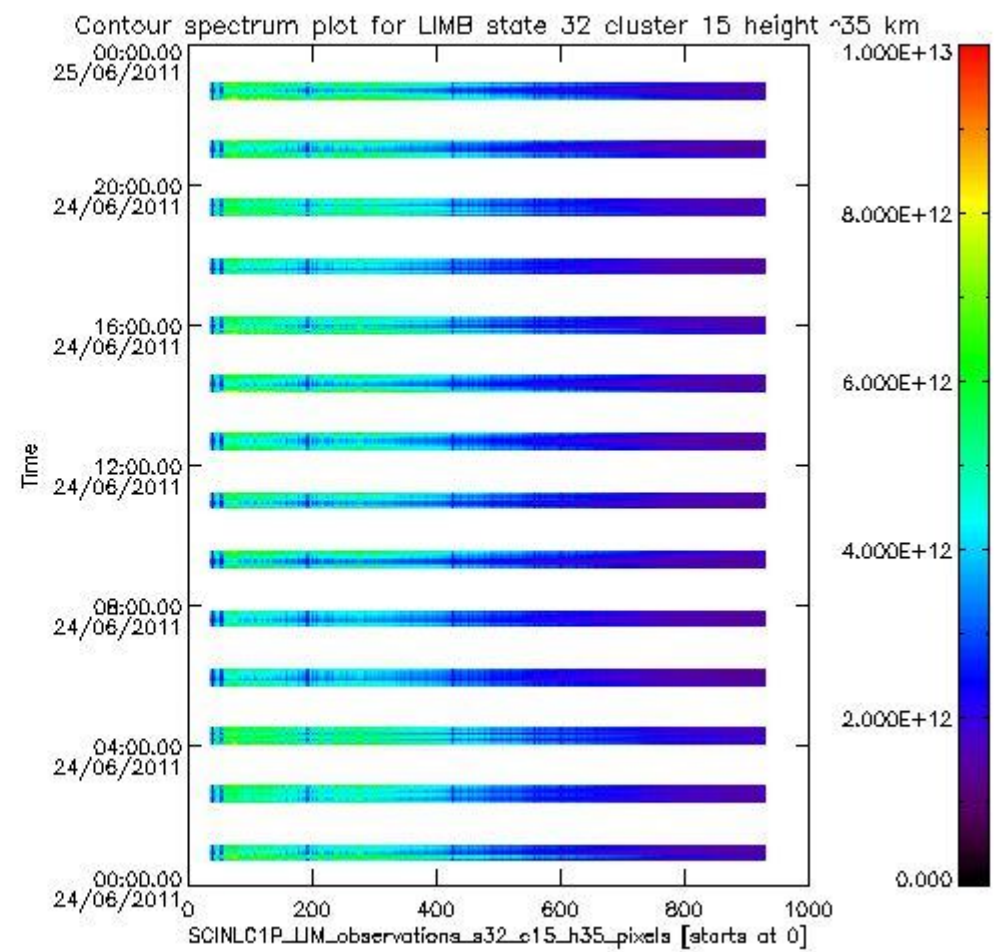
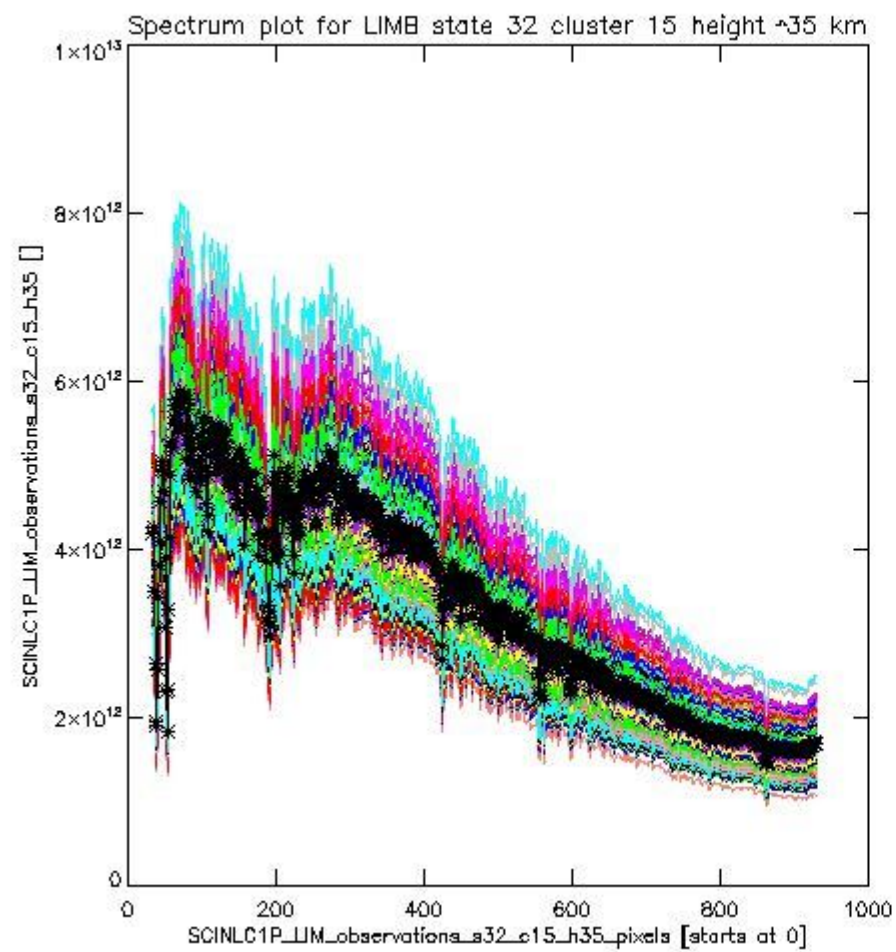
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_18.PNG

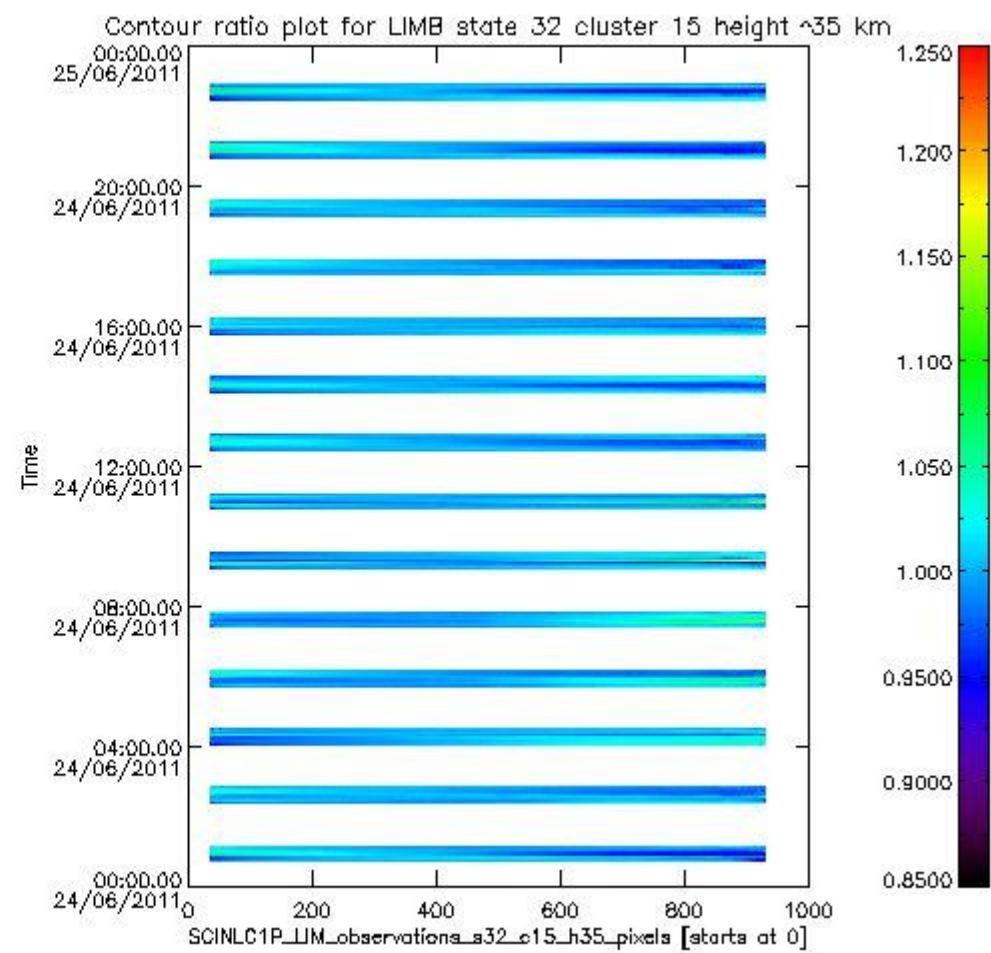
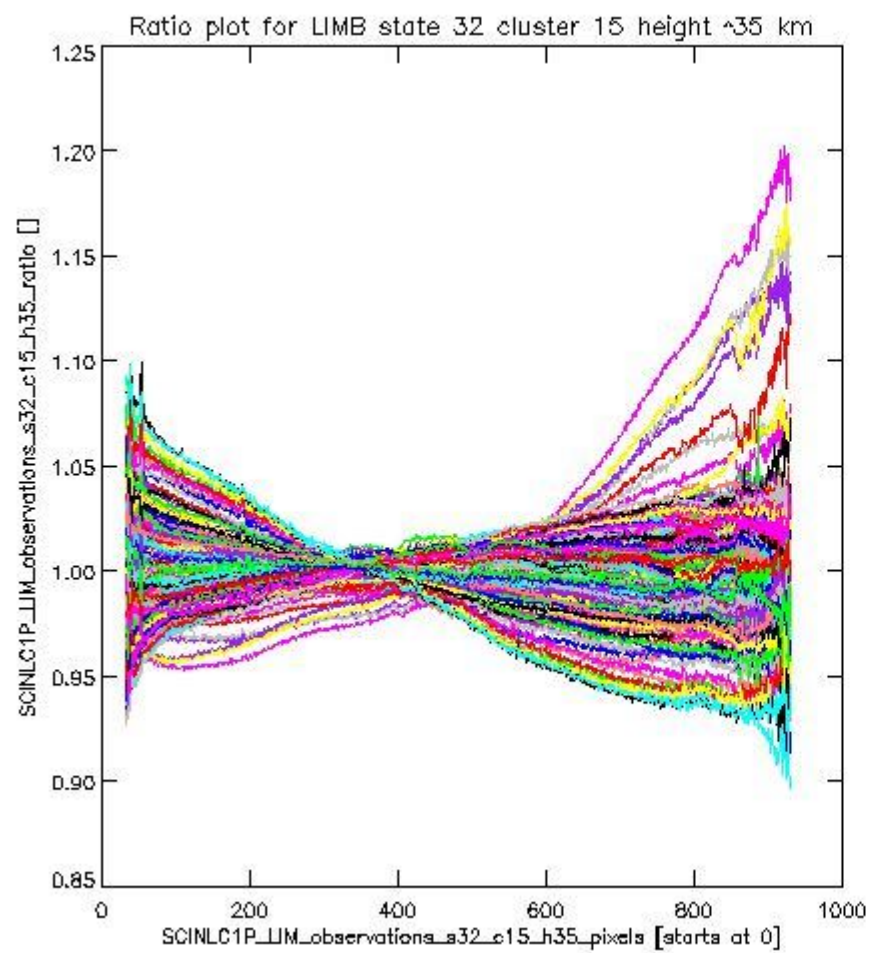


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_19.PNG

**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:

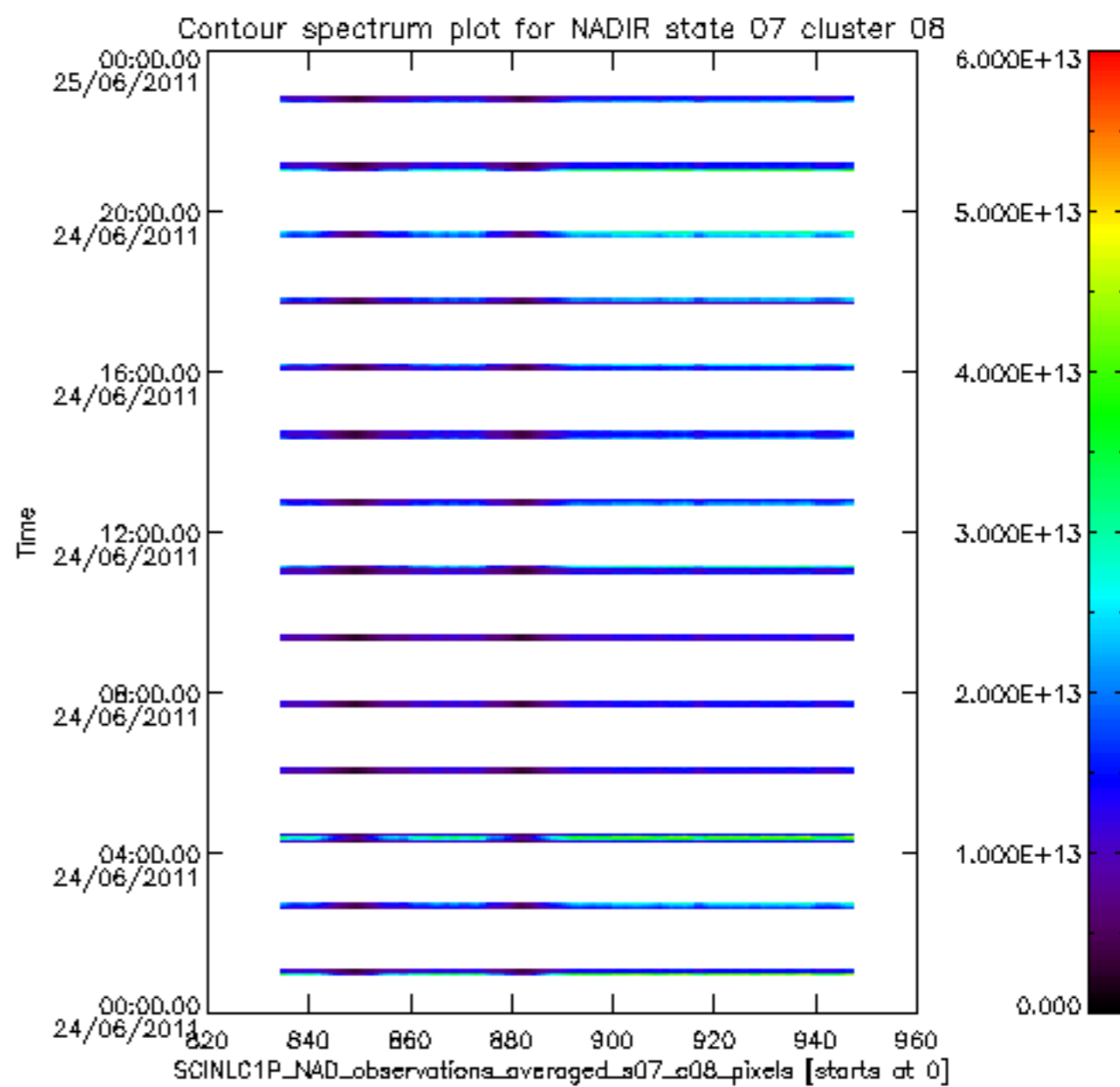
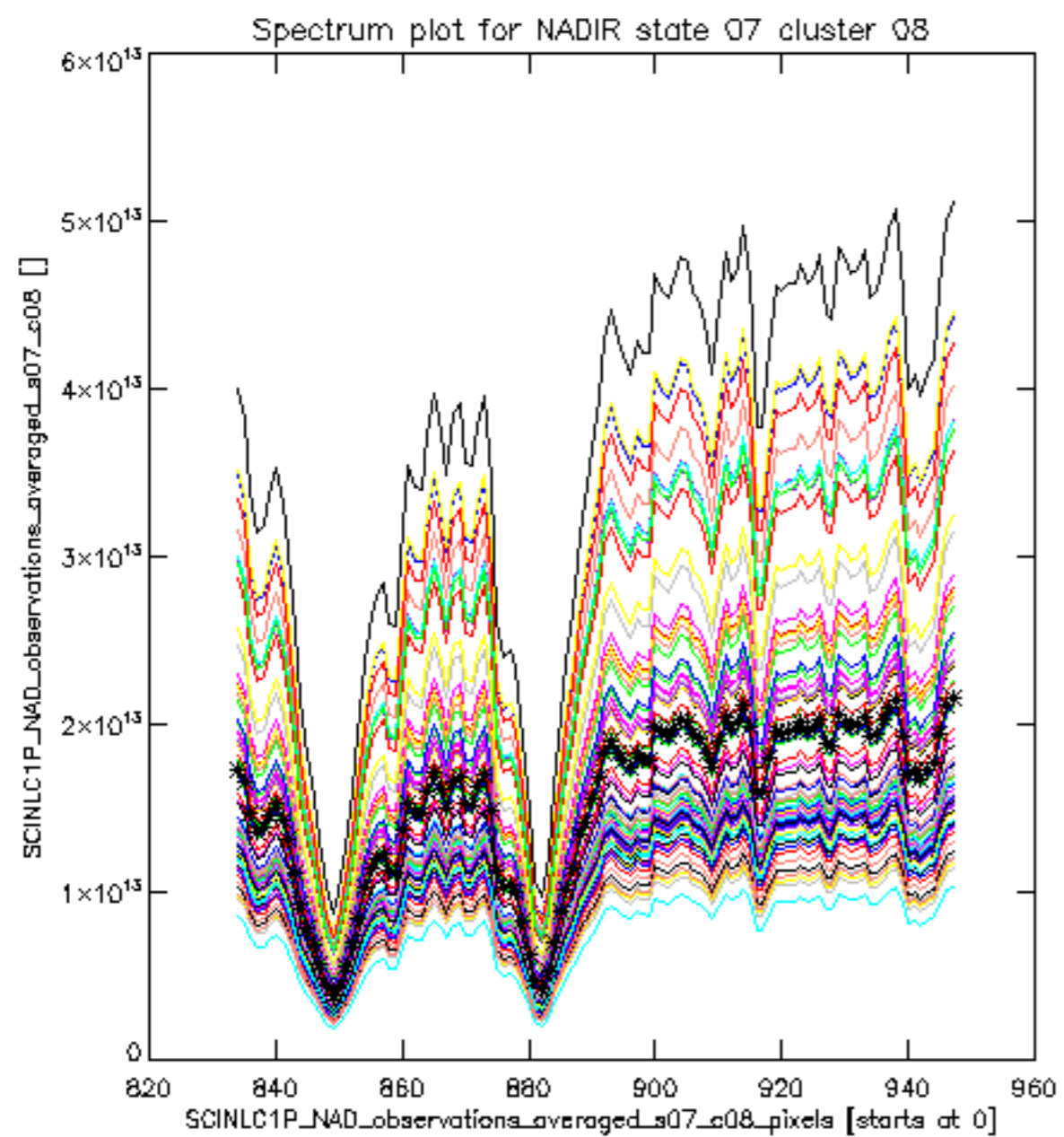
Item	Value
Start time of first sample	24JUN2011 00:42:53.485
Start time of last sample	24JUN2011 22:53:39.437
Reference period start time	25MAY2011 00:42:23.644
Reference period stop time	23JUN2011 23:30:23.785
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

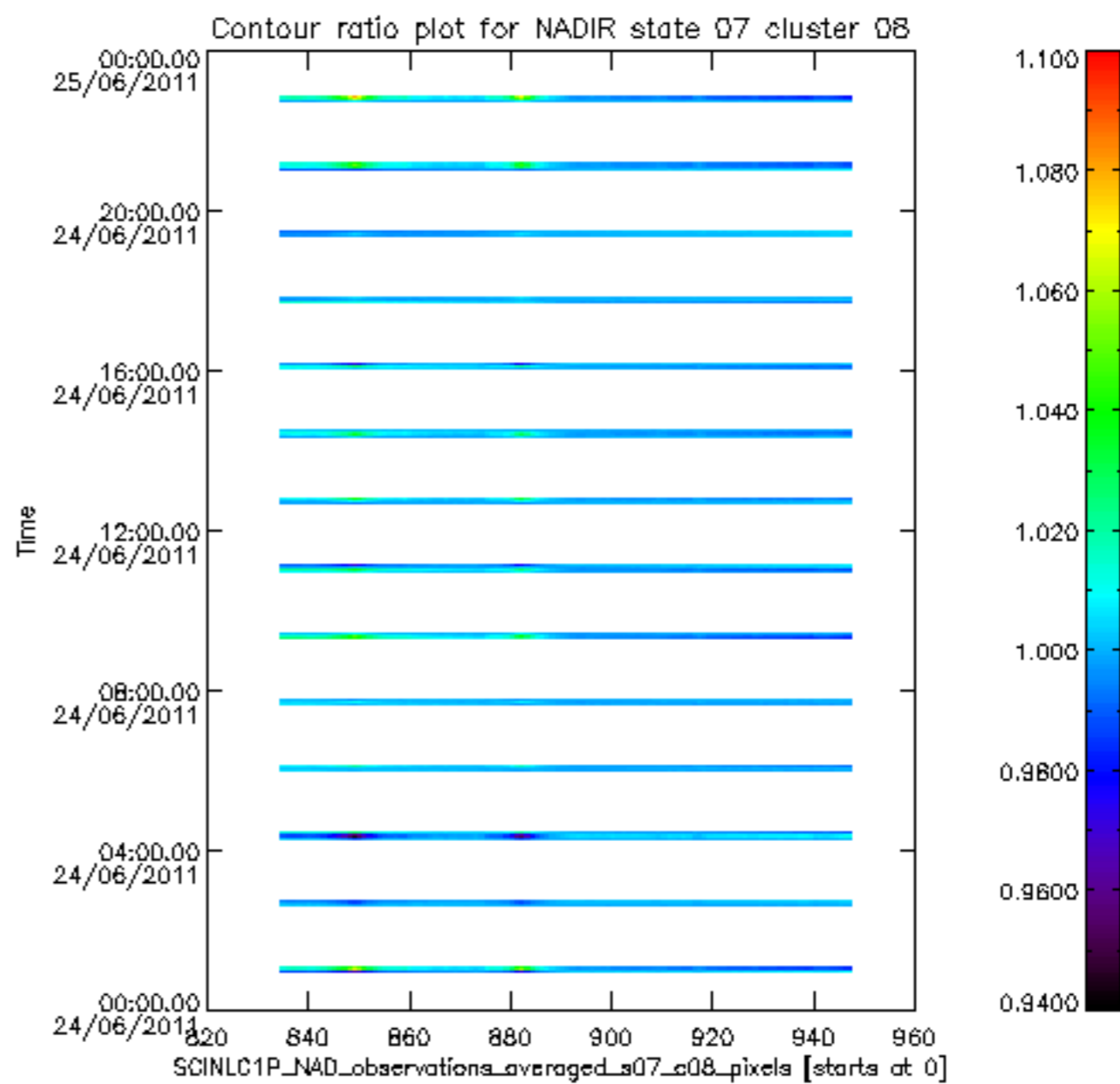
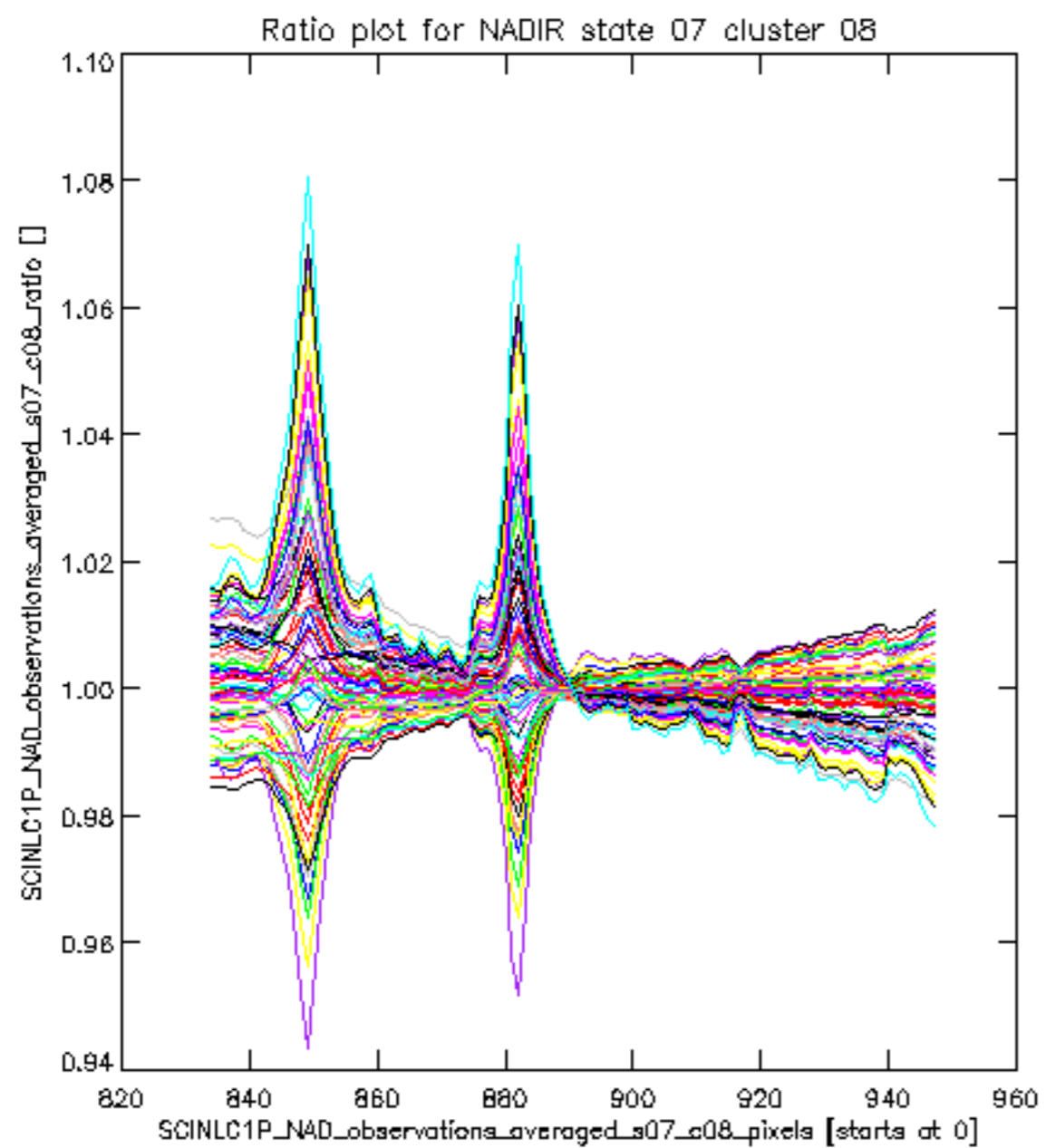


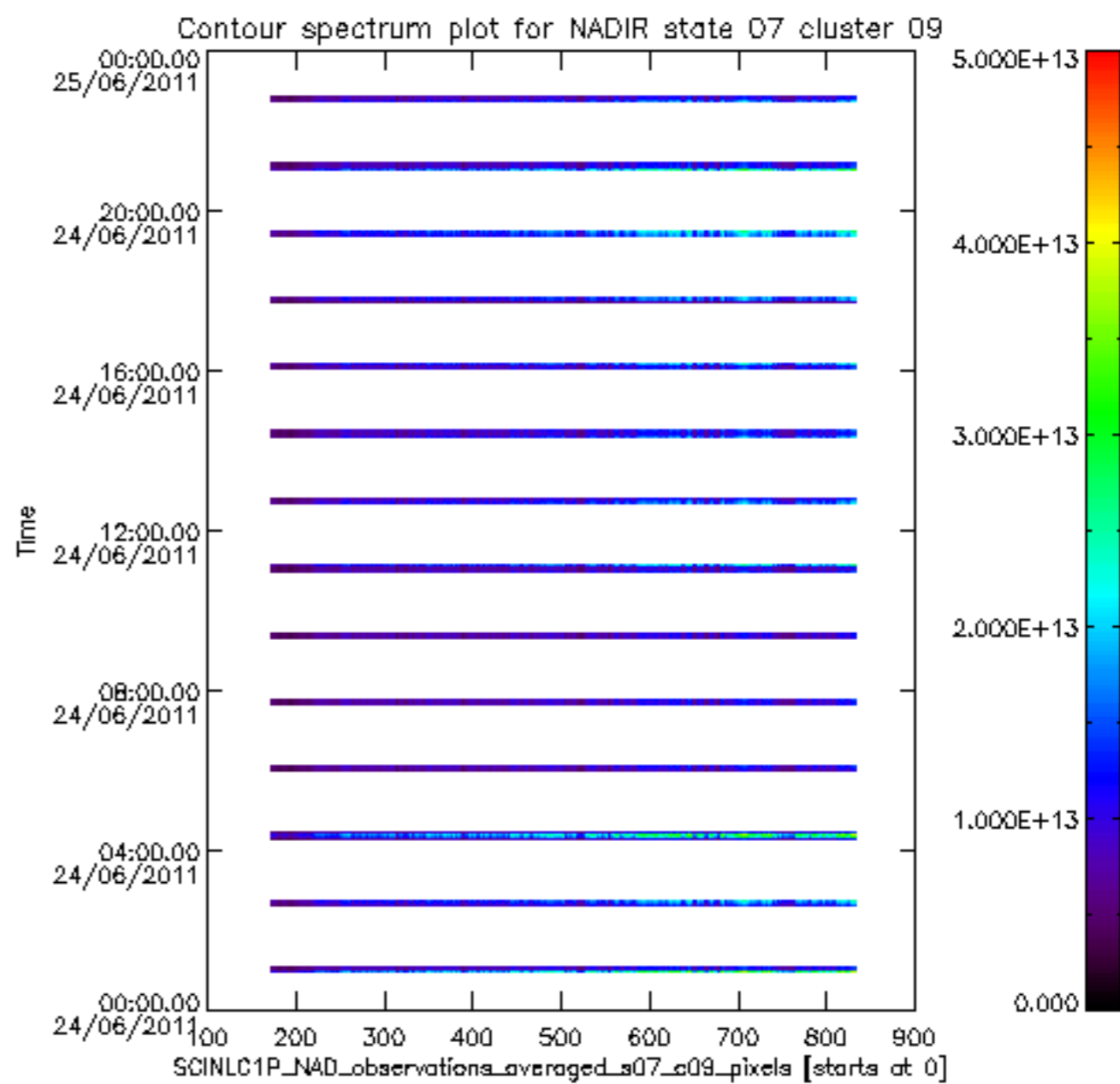
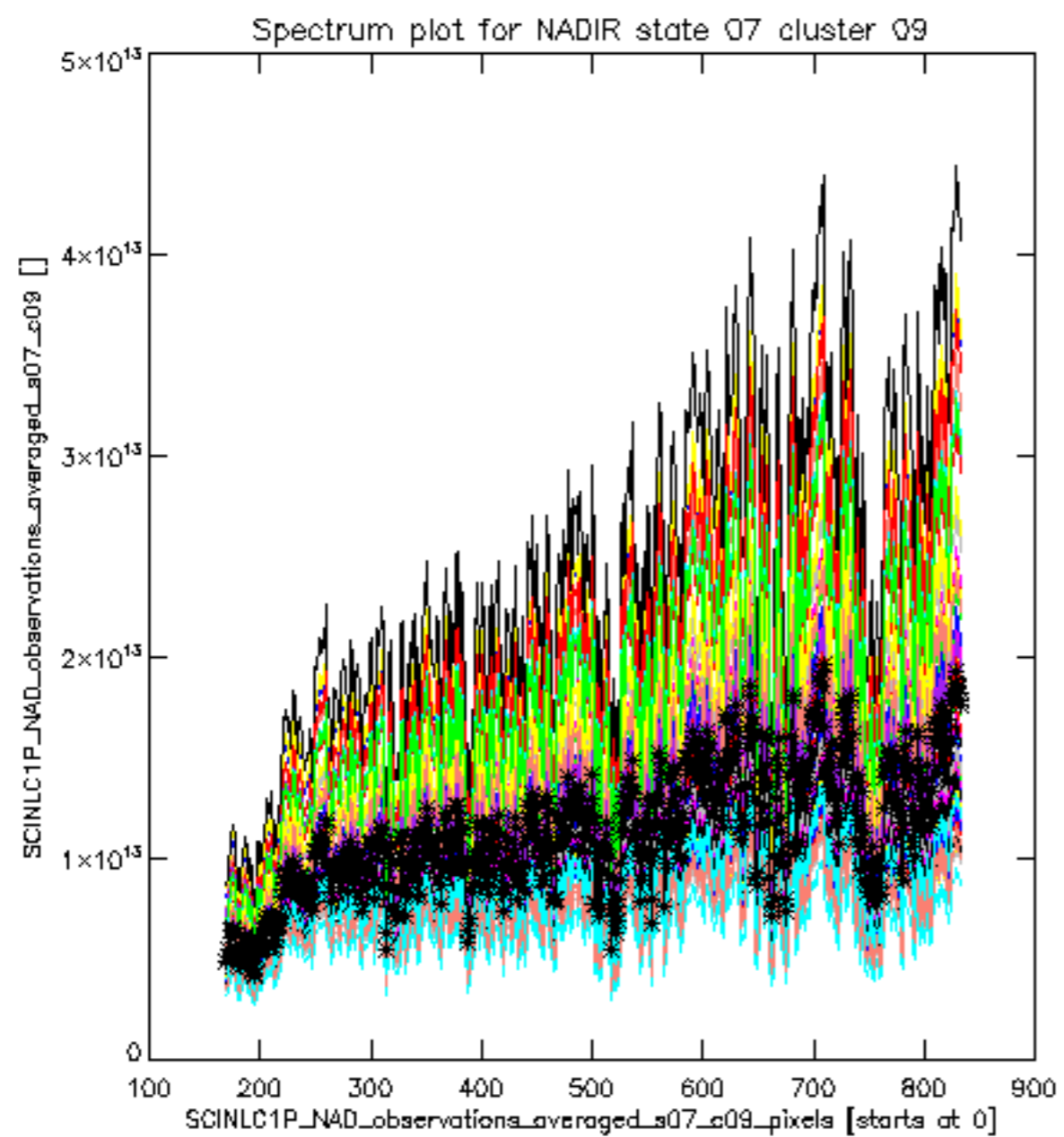


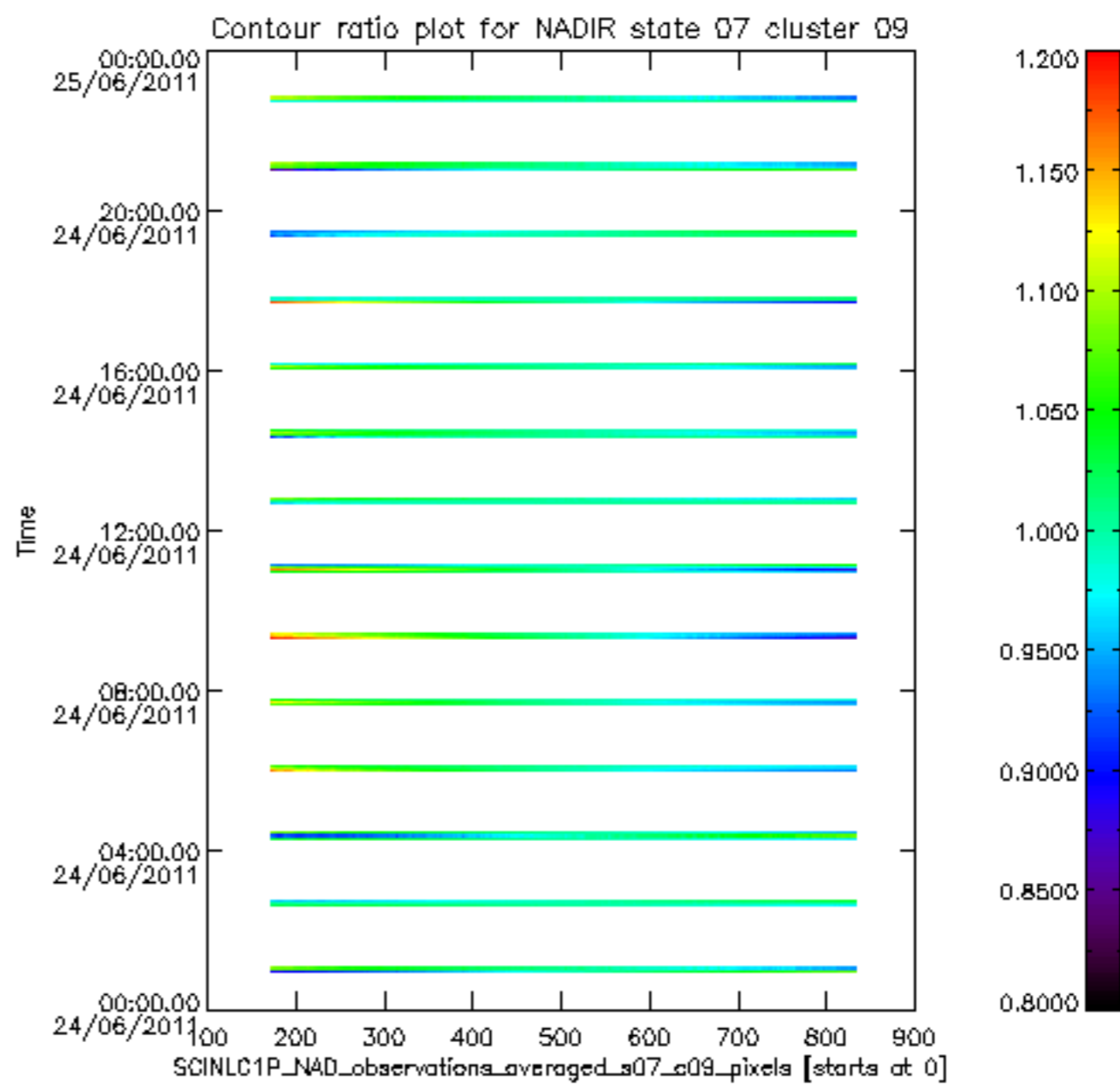
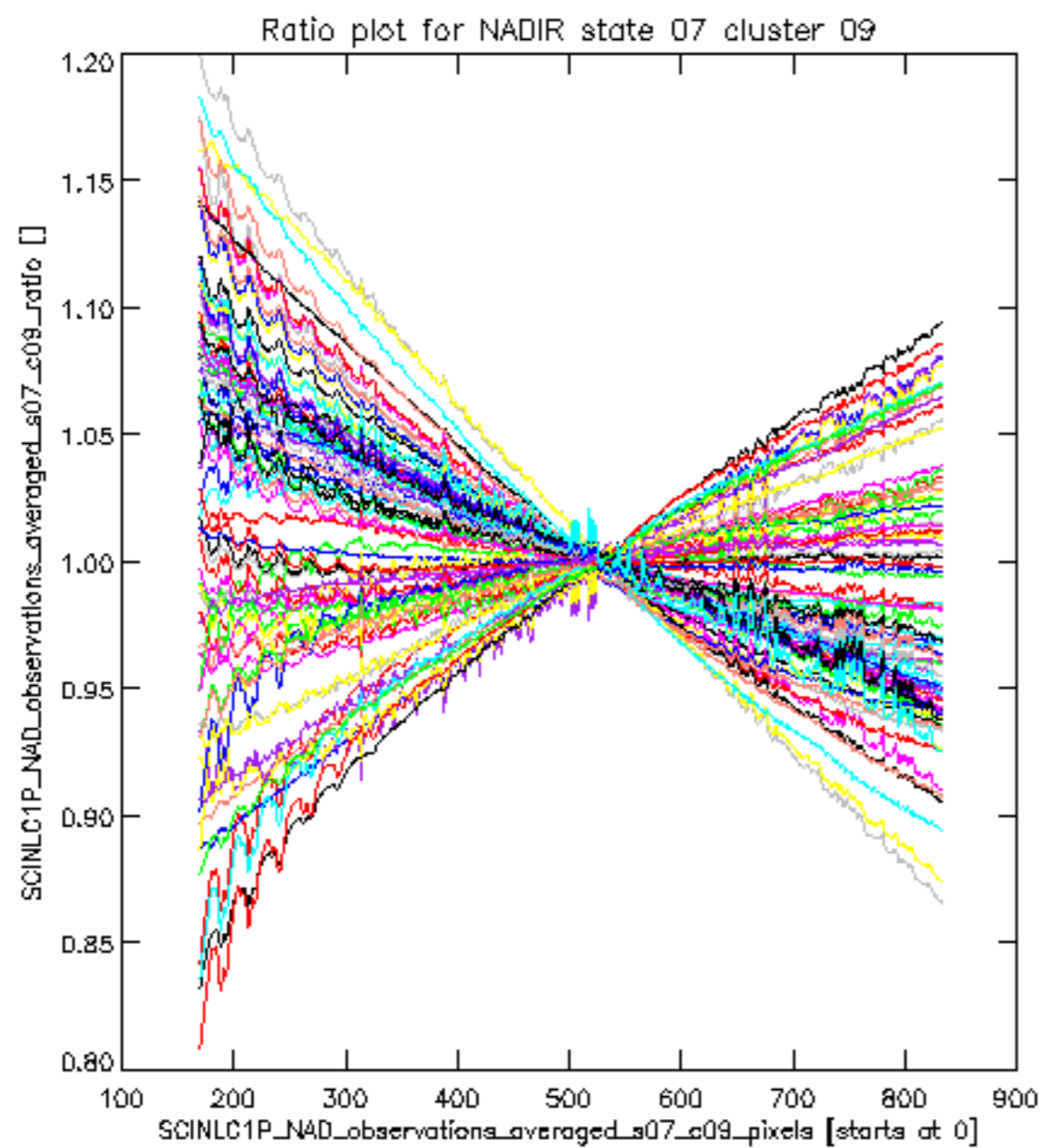
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110624\_21.PNG

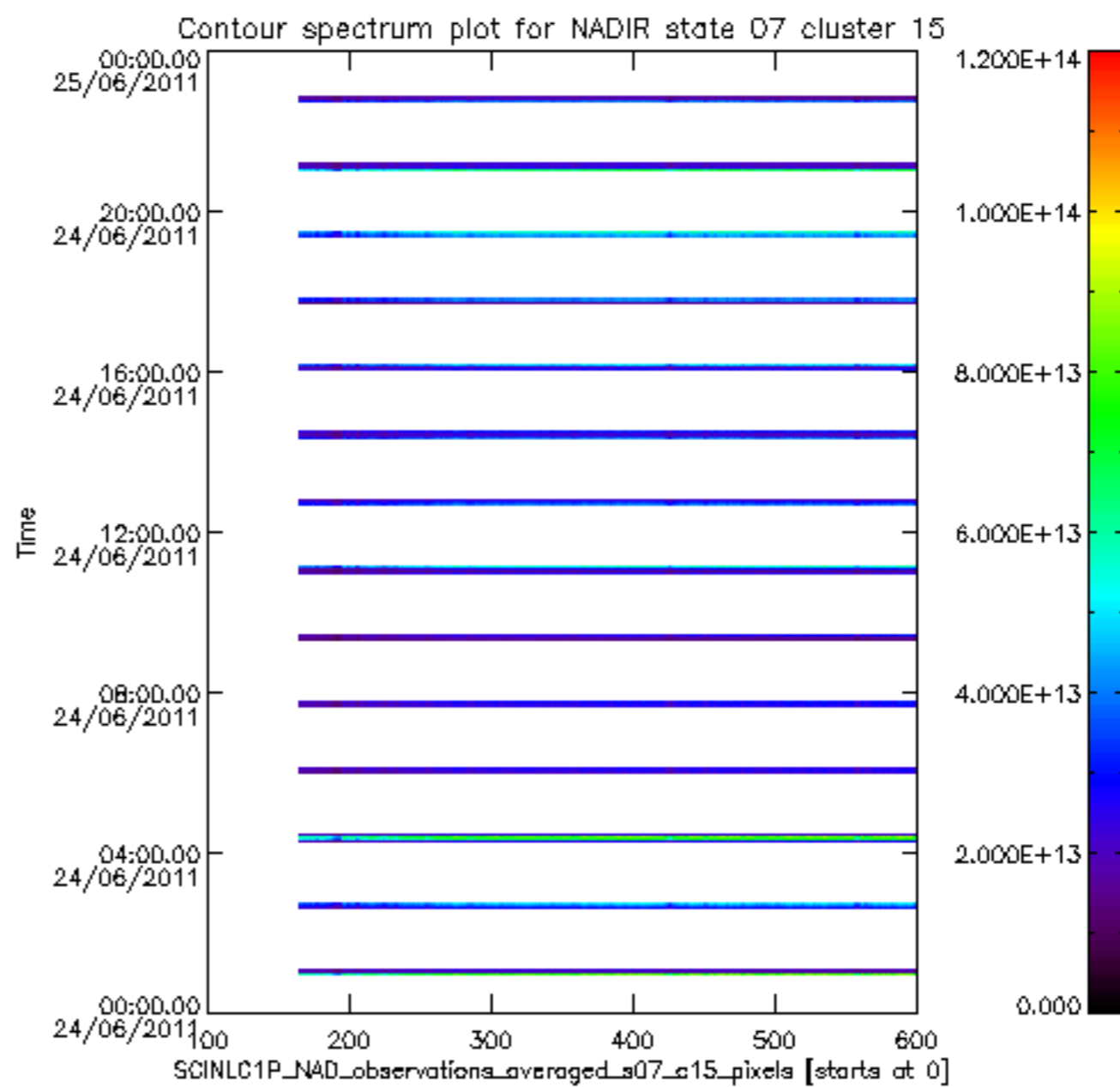
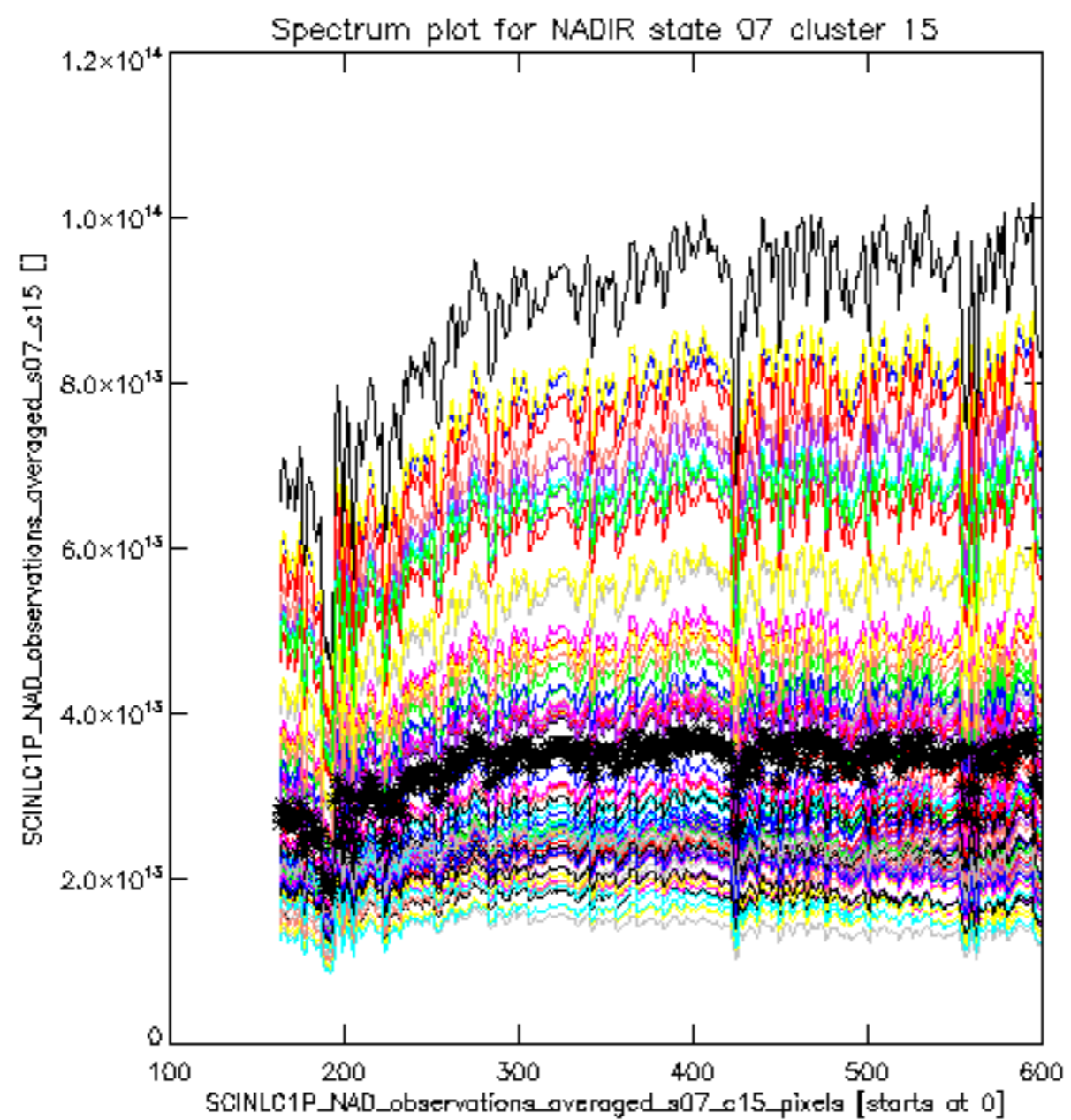


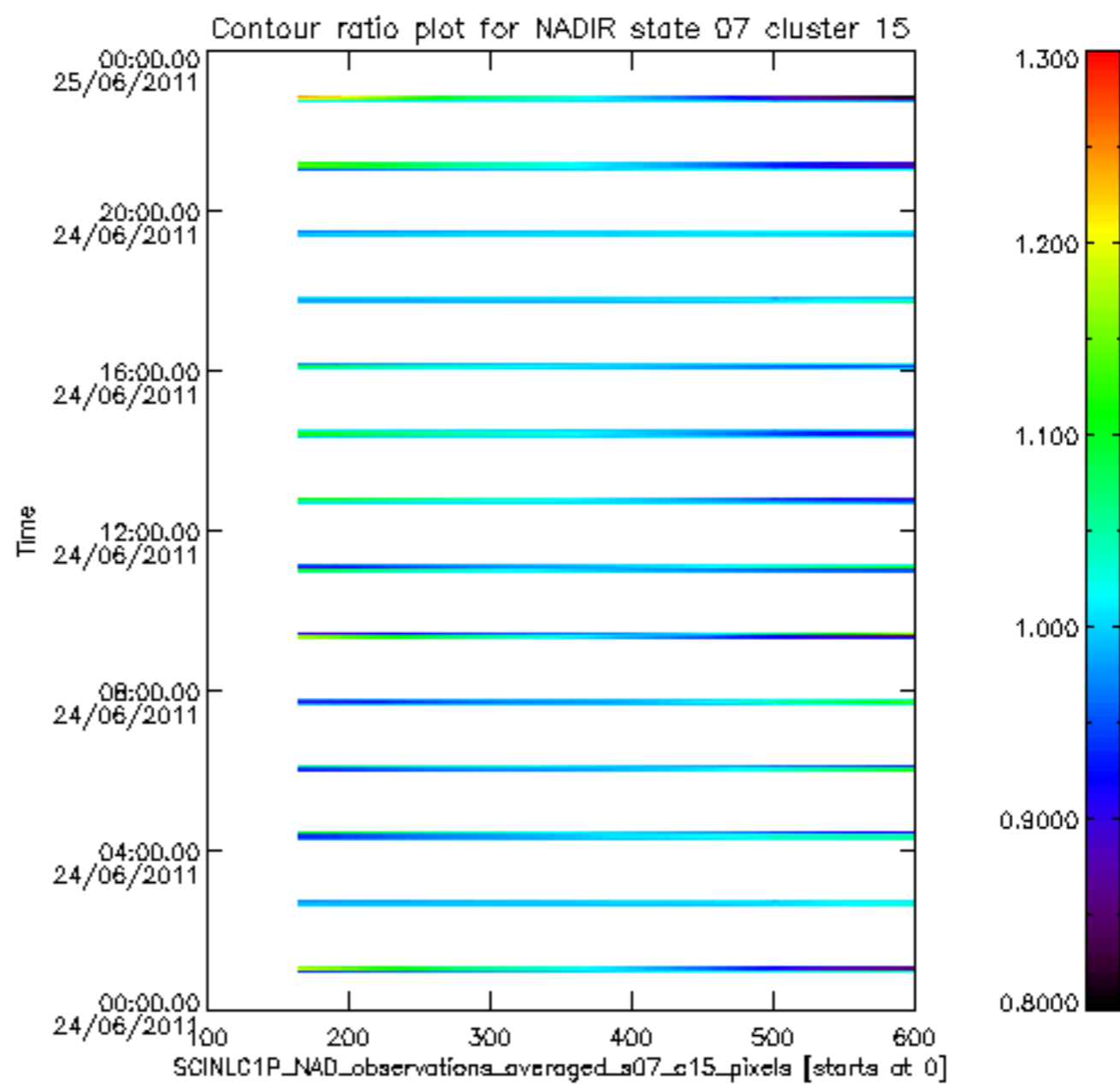
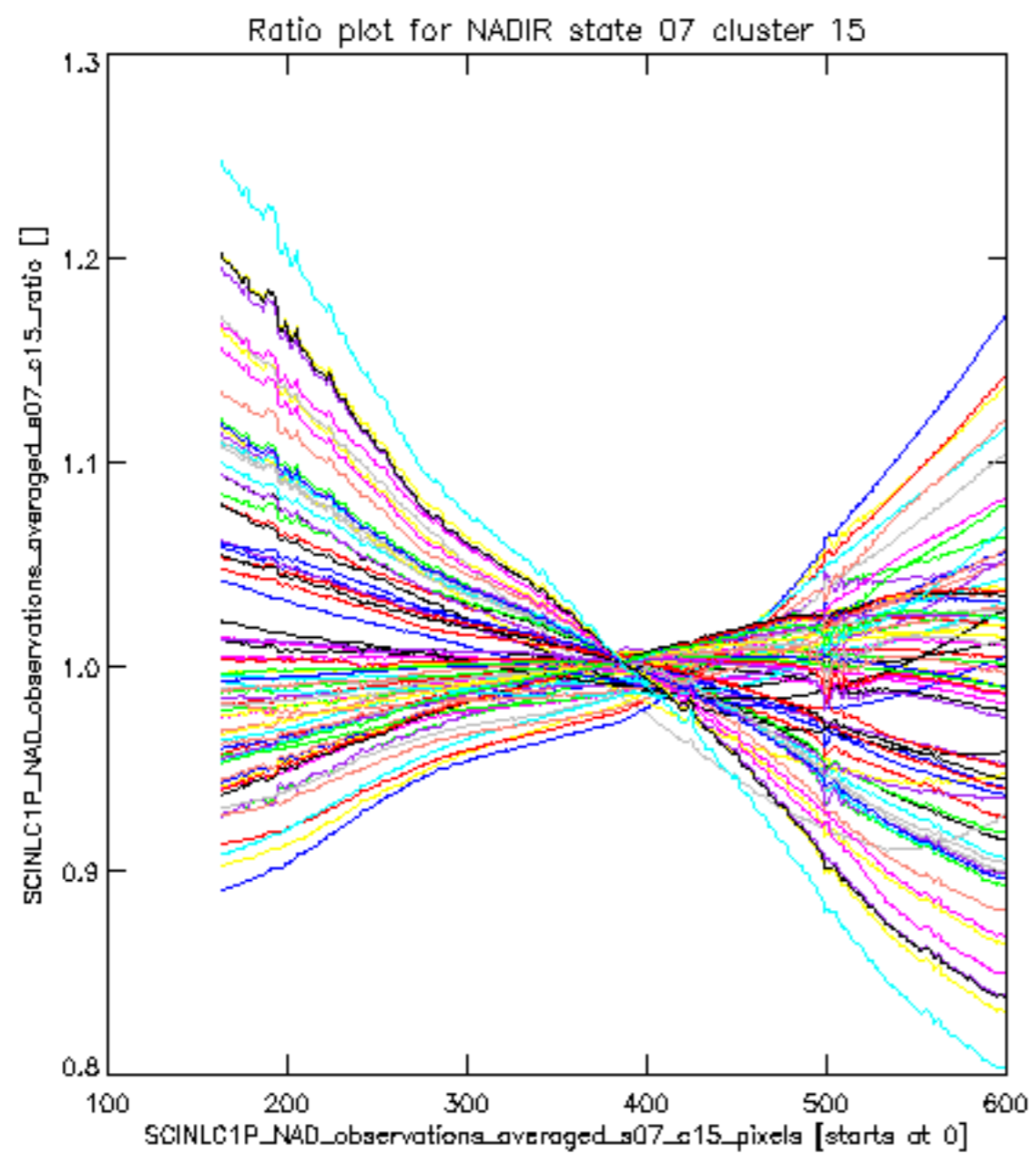


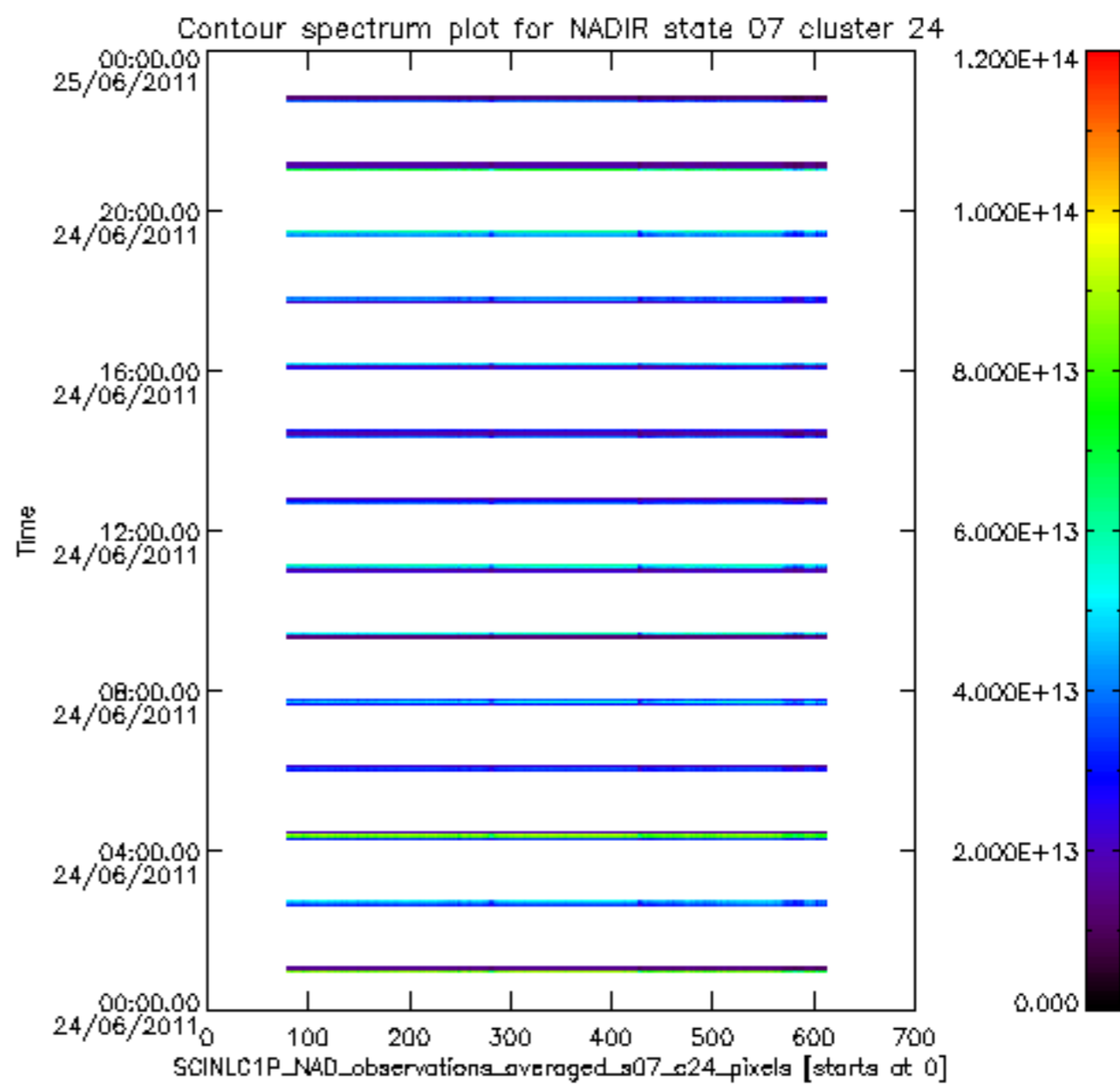
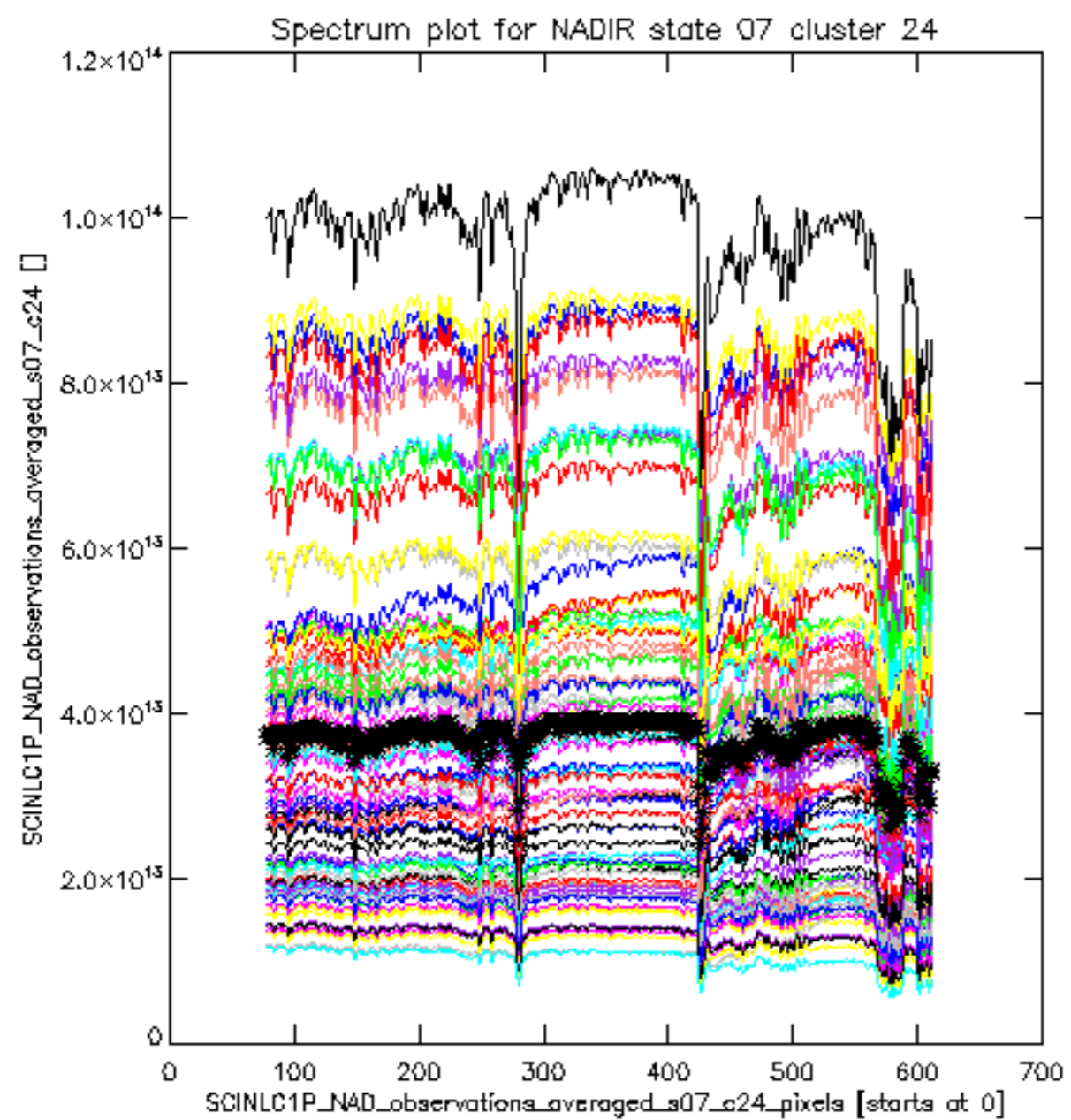


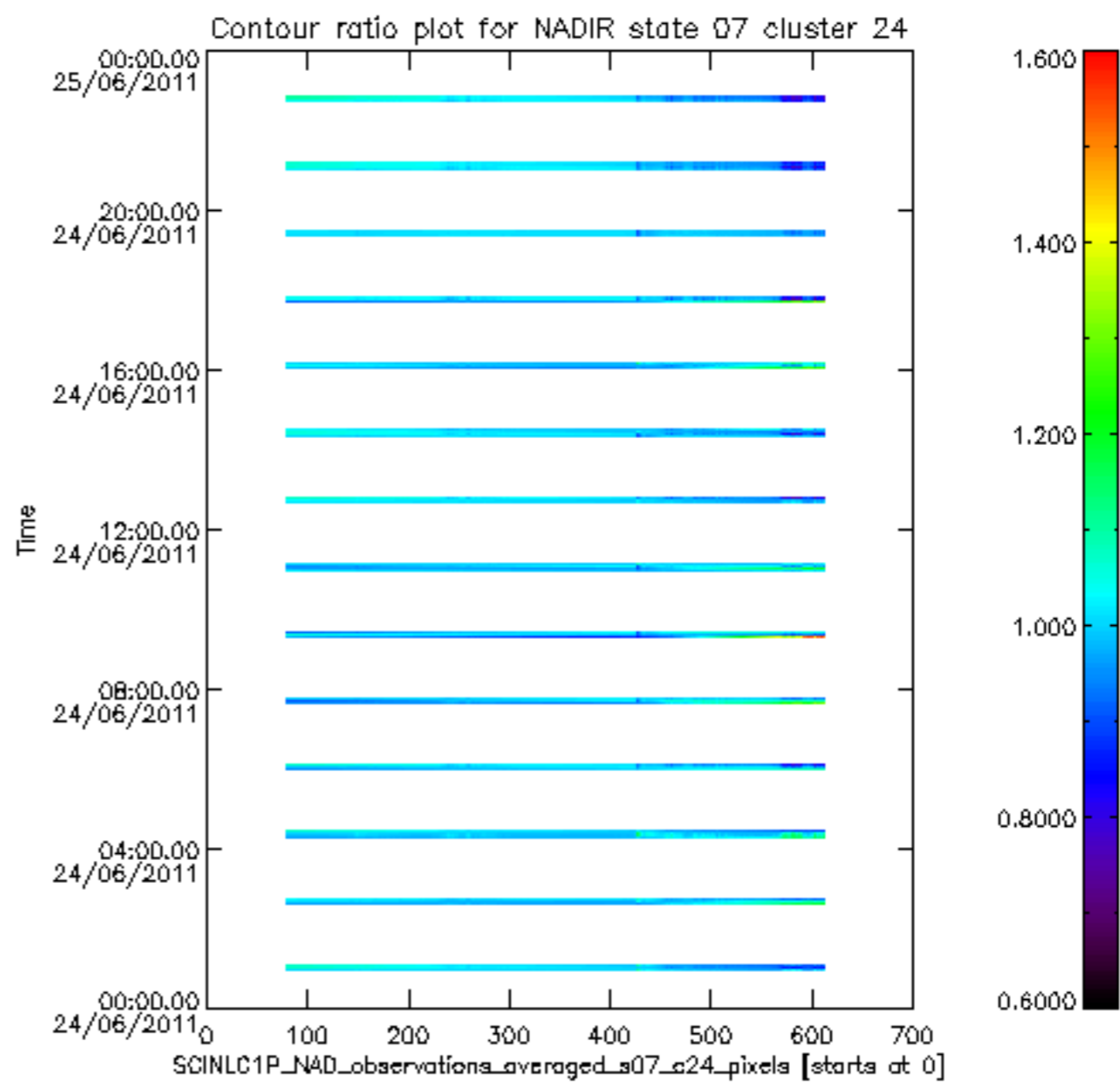
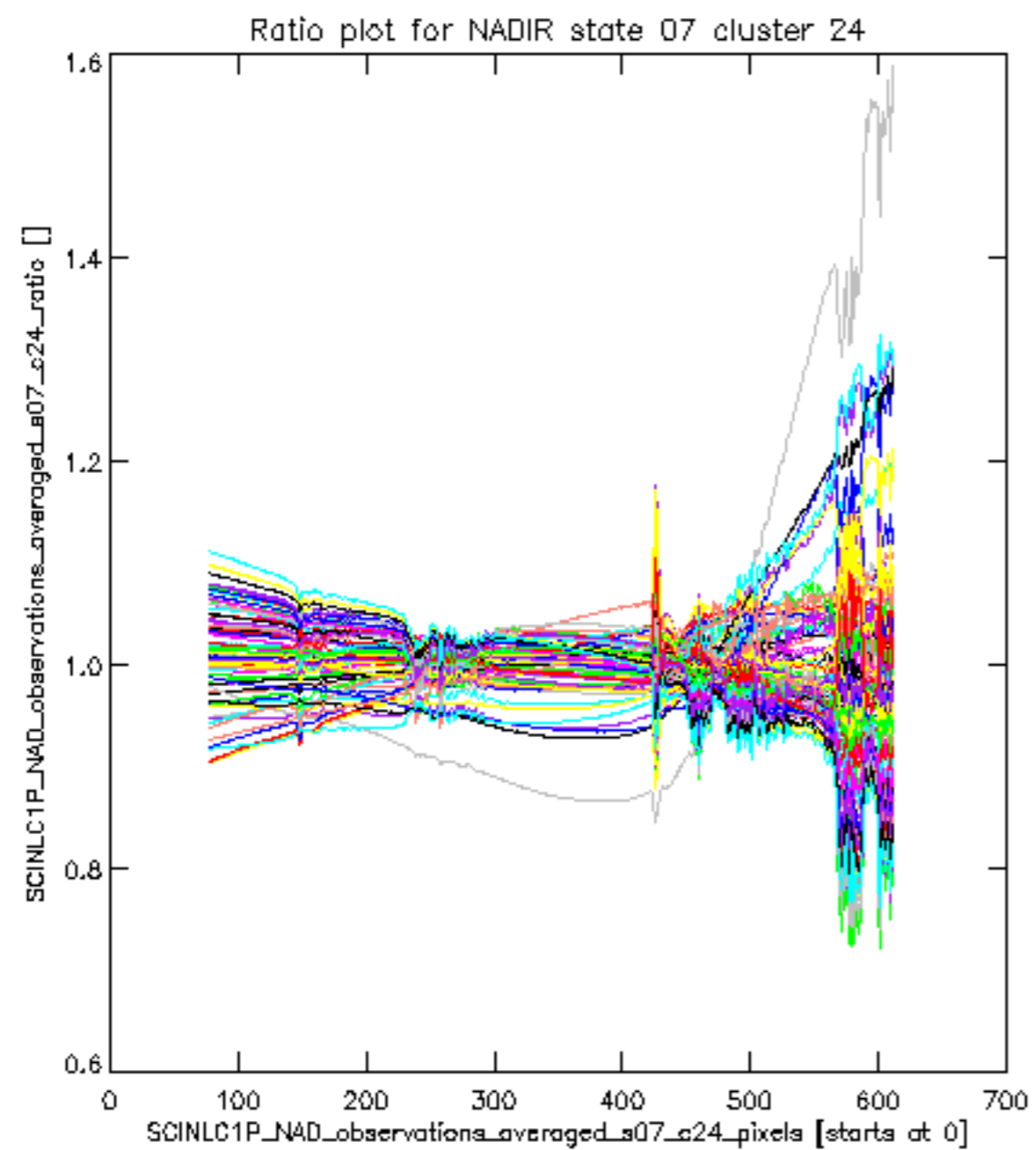






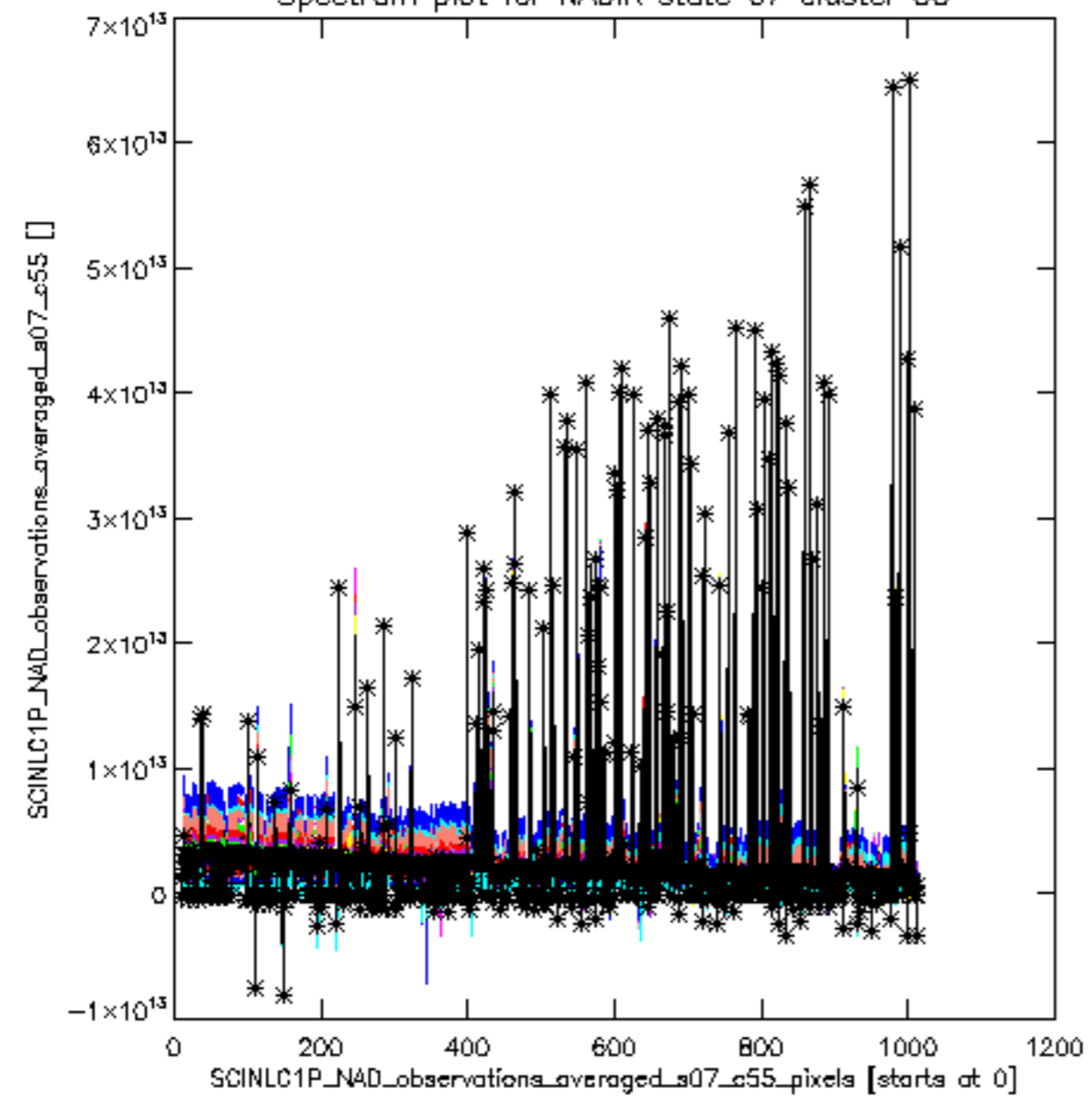








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

