

# 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	20JUL2011 06:30:29
Data source version	SCIA/7.04-U
Processing scope for products	07JUL2011 00:00:00 to 08JUL2011 00:00:00
Start time of first product within scope	07JUL2011 00:47:42
Stop time of last product within scope	07JUL2011 13:39:35
Total number of level 1 products	8
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	07JUL2011 01:20:54.028	07JUL2011 13:11:37.635
1	NADIR	07	09	N/A	07JUL2011 01:20:54.028	07JUL2011 13:11:37.635
2	NADIR	07	15	N/A	07JUL2011 01:20:54.028	07JUL2011 13:11:37.635
3	NADIR	07	24	N/A	07JUL2011 01:20:54.028	07JUL2011 13:11:37.635
4	NADIR	07	55	N/A	07JUL2011 01:20:54.028	07JUL2011 13:11:37.635
5	LIMB	32	09	~19 km	07JUL2011 01:05:40.649	07JUL2011 13:14:48.940
6	LIMB	32	09	~22 km	07JUL2011 01:05:40.649	07JUL2011 13:14:48.940
7	LIMB	32	09	~25 km	07JUL2011 01:05:40.649	07JUL2011 13:14:48.940
8	LIMB	32	15	~22 km	07JUL2011 01:05:40.649	07JUL2011 13:14:48.940
9	LIMB	32	15	~25 km	07JUL2011 01:05:40.649	07JUL2011 13:14:48.940
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	#noproduct	#cpl_drk	#incpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110707_004742_000057503104_00175_48896_2874.N1</a>	07JUL2011 00:47:42	07JUL2011 01:58:11	0	36	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110707_022756_000057513104_00176_48897_2876.N1</a>	07JUL2011 02:27:56	07JUL2011 03:38:11	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110707_040811_000057513104_00177_48898_2877.N1</a>	07JUL2011 04:08:11	07JUL2011 05:18:40	0	36	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110707_054825_000057513104_00178_48899_2880.N1</a>	07JUL2011 05:48:25	07JUL2011 06:58:39	0	35	31	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110707_072839_000057513104_00179_48900_2882.N1</a>	07JUL2011 07:28:39	07JUL2011 08:39:08	0	36	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110707_090853_000057513104_00180_48901_2884.N1</a>	07JUL2011 09:08:53	07JUL2011 10:19:07	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110707_104907_000057513104_00181_48902_2886.N1	07JUL2011 10:49:07	07JUL2011 11:59:36	0	36	29	0	0	2	0	0	
7	SCI_NLC_1CUDPA20110707_122921_000057513104_00182_48903_2887.N1	07JUL2011 12:29:21	07JUL2011 13:39:35	0	35	31	0	0	1	0	0	

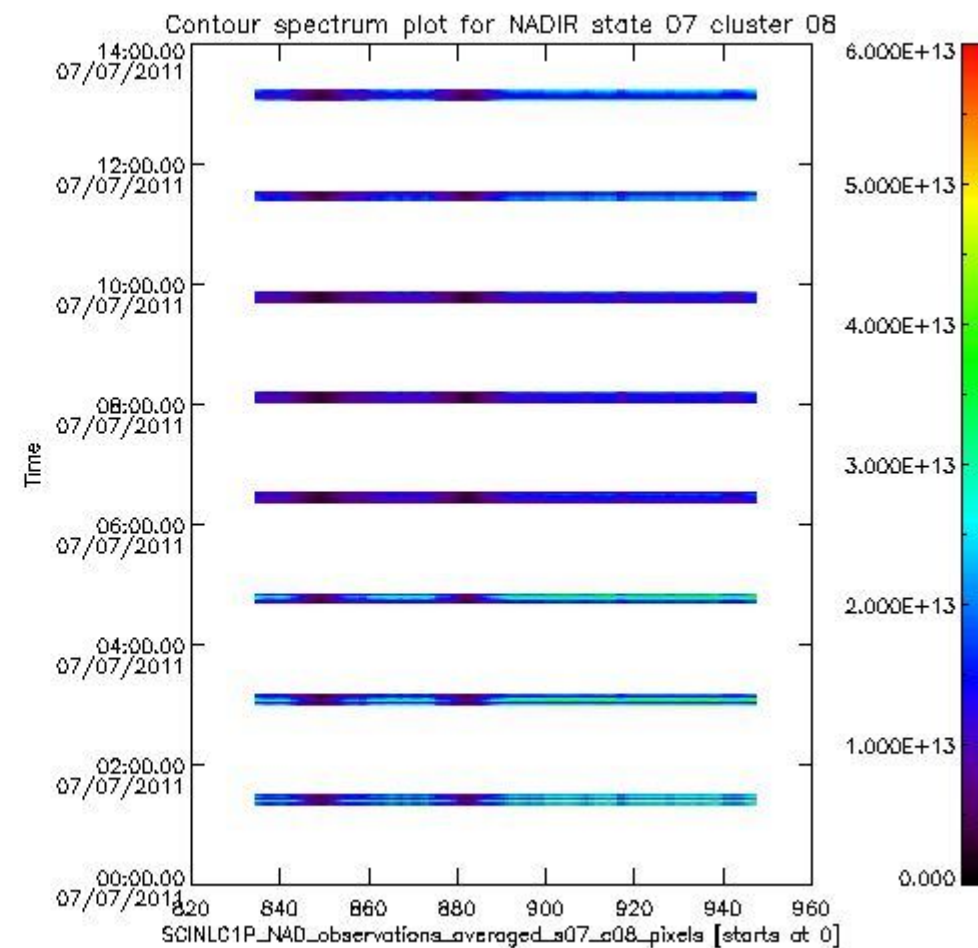
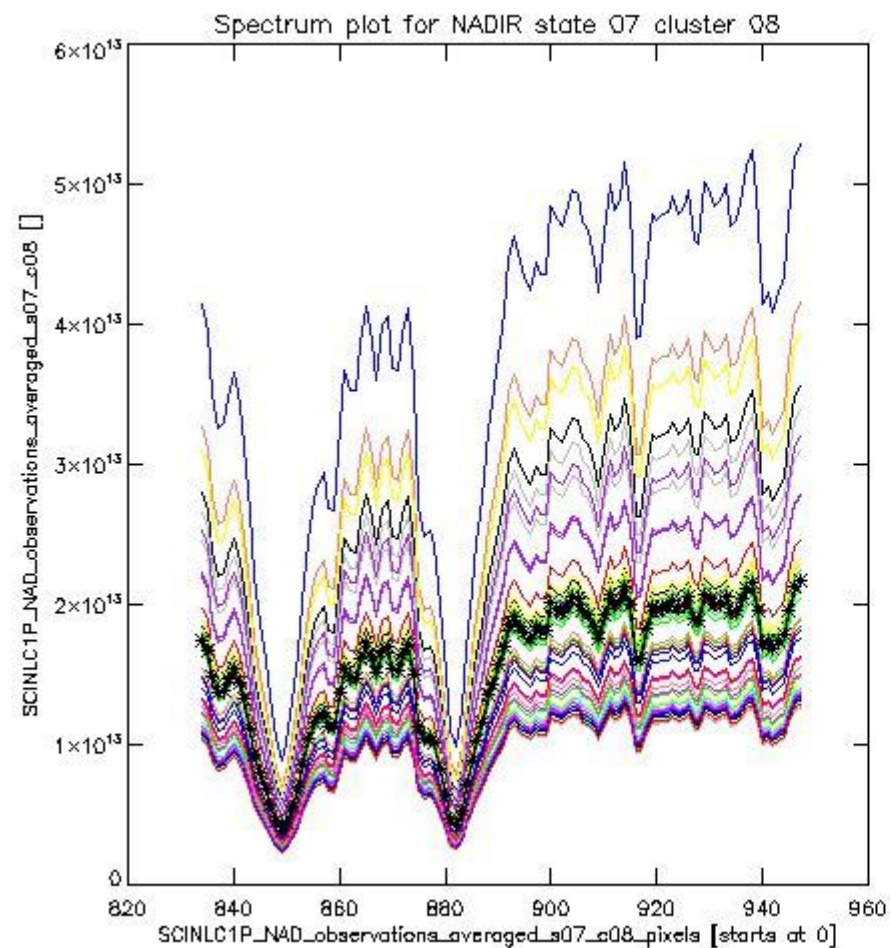
## 1.2 Source packet monitoring

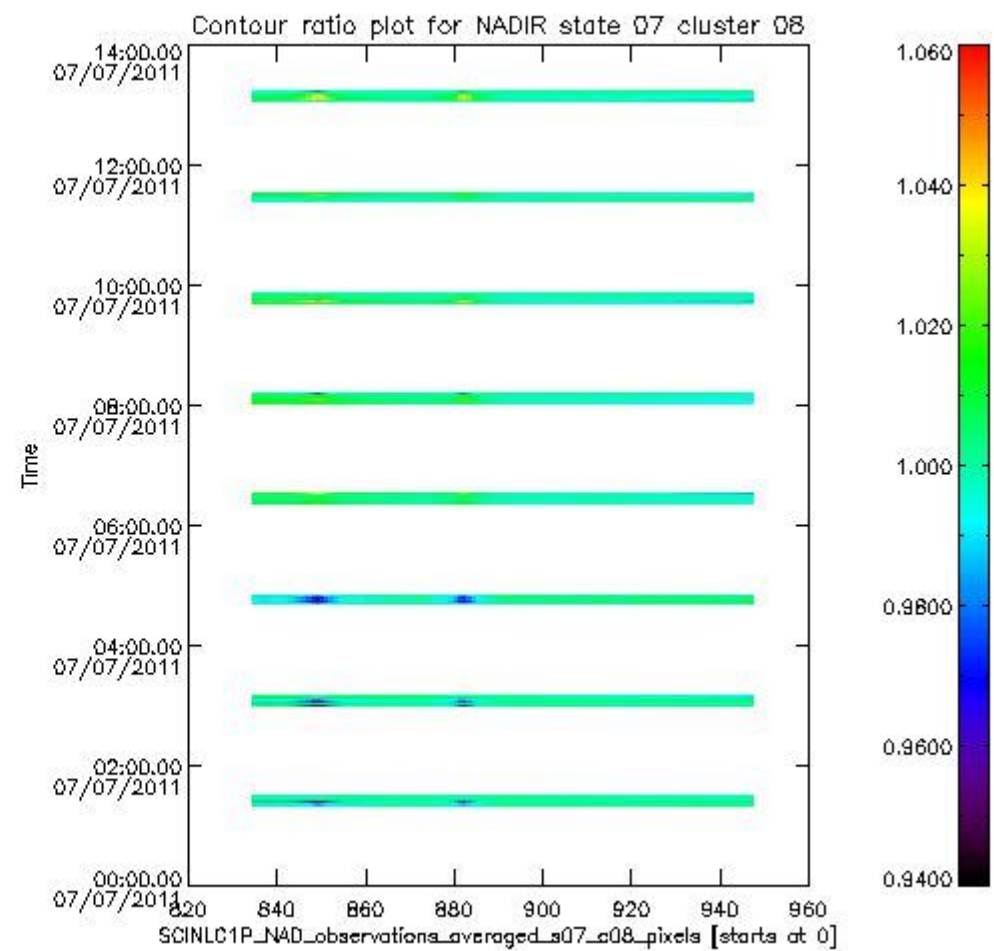
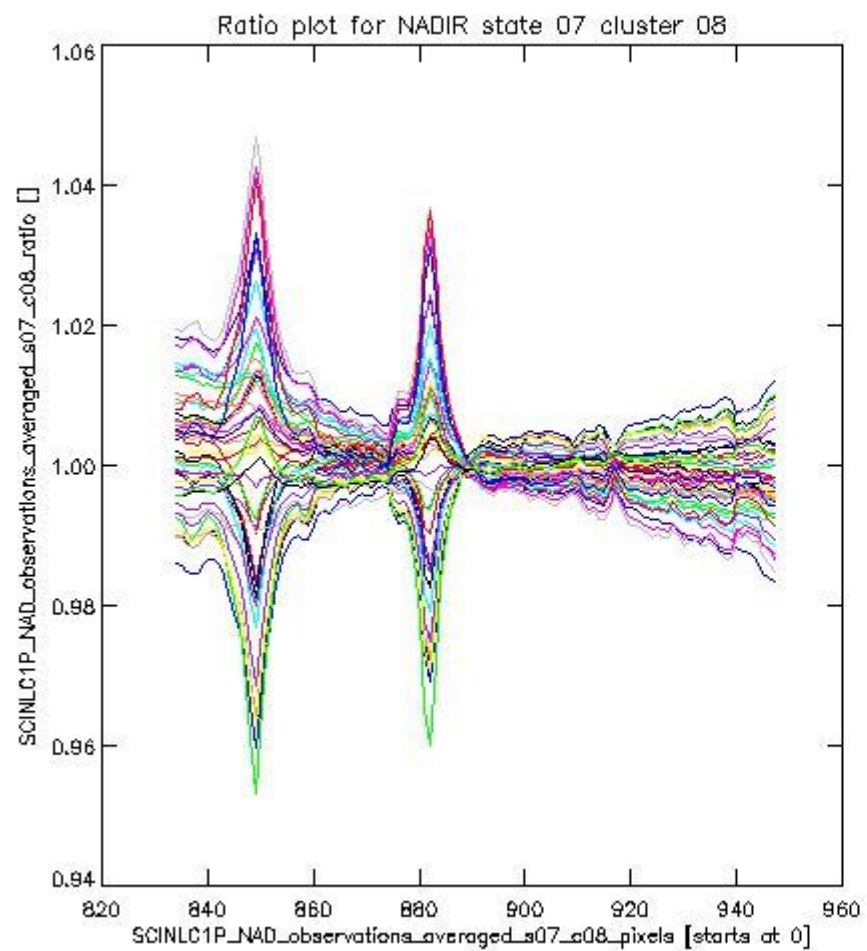
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	07JUL2011 01:20:54.028
Start time of last sample	07JUL2011 13:11:37.635
Reference period start time	07JUN2011 01:19:30.585
Reference period stop time	06JUL2011 18:48:18.557
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

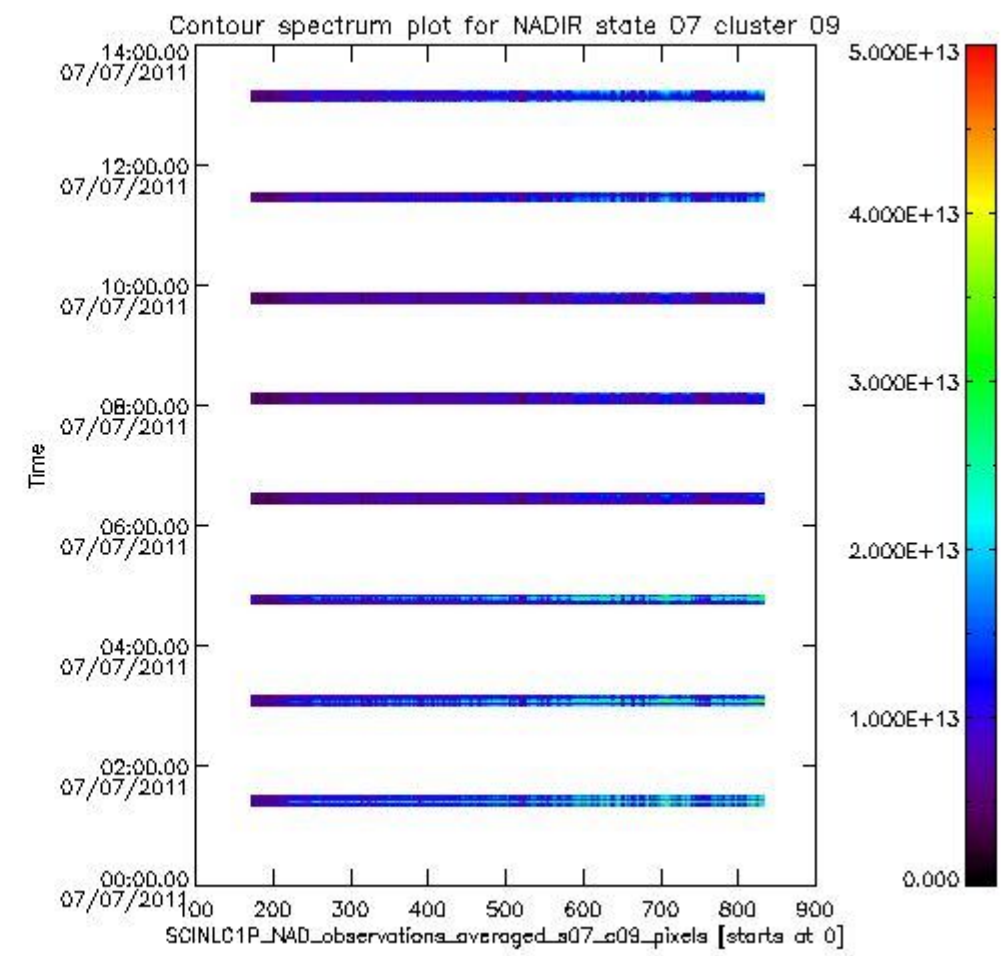
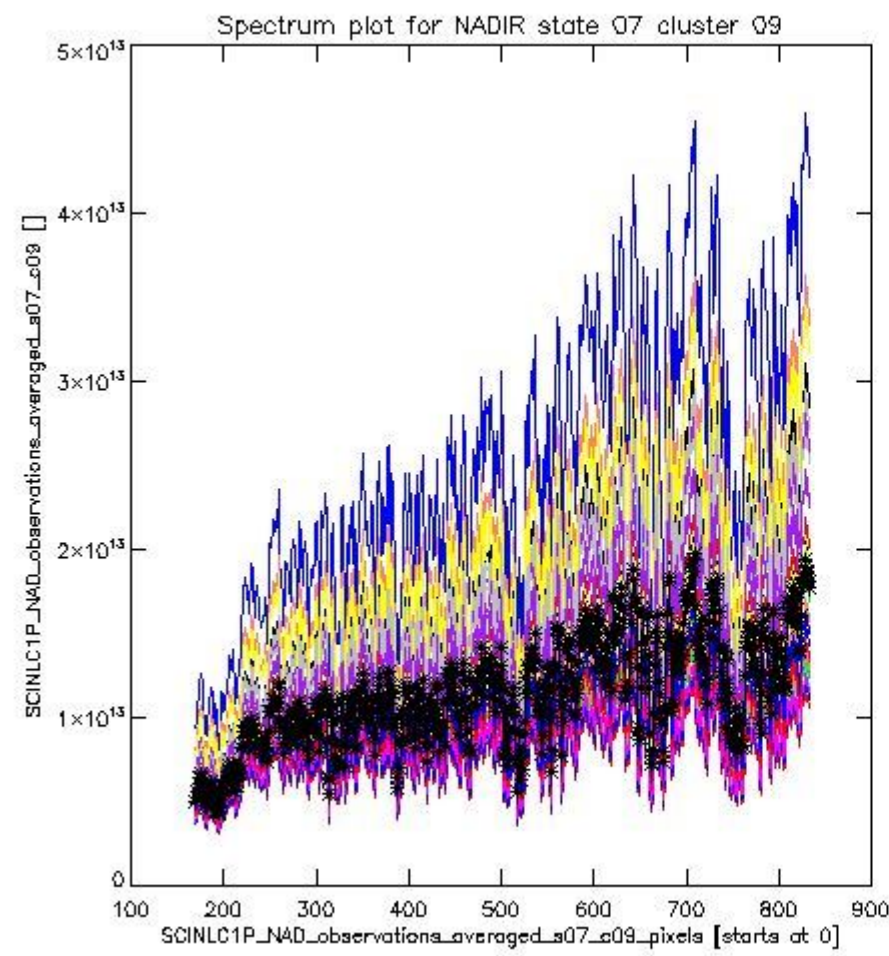




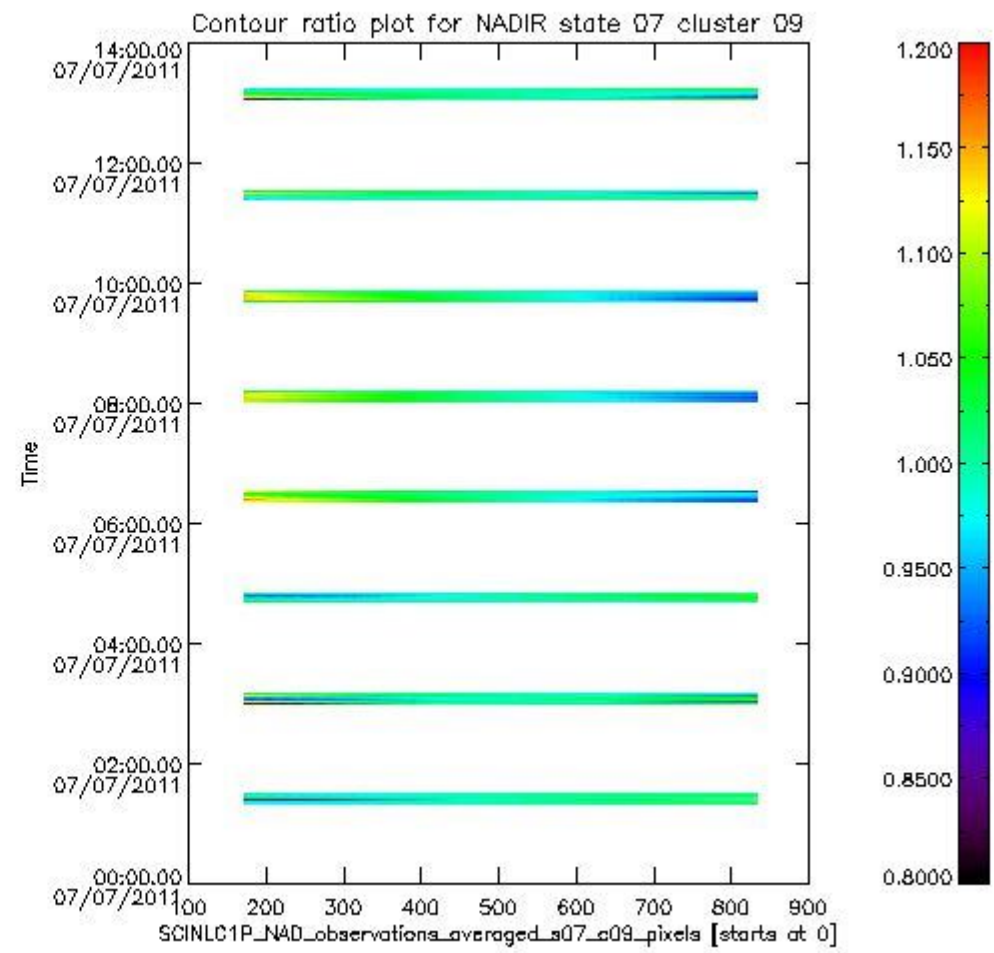
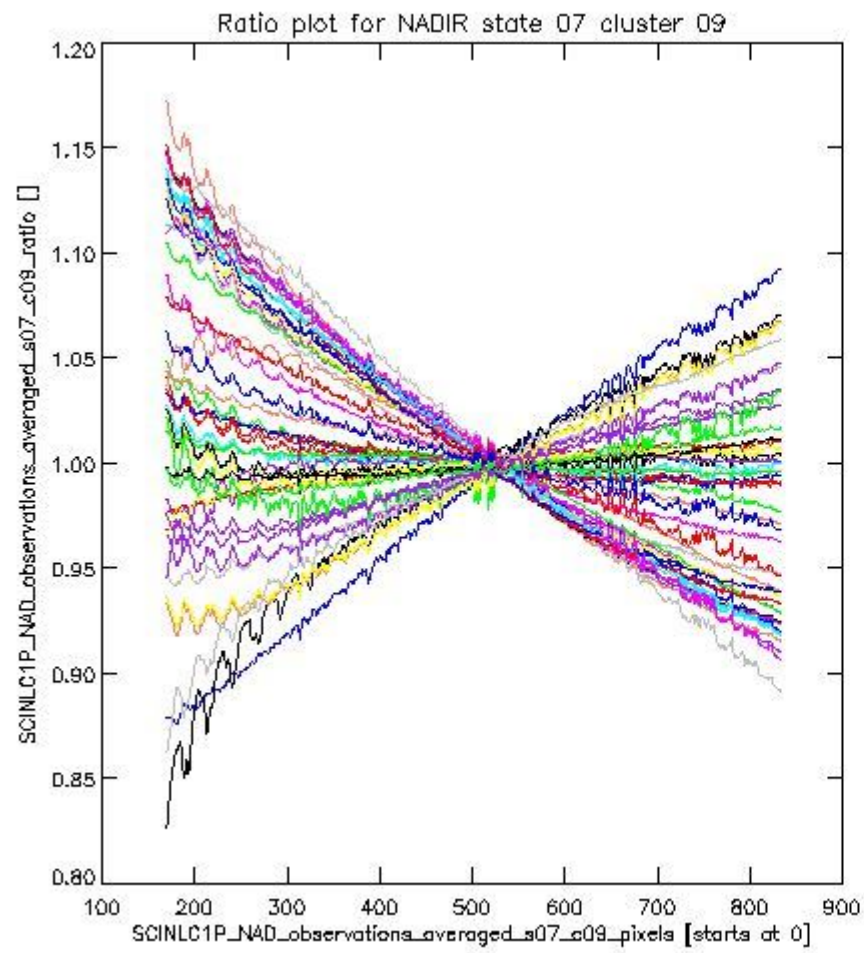
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_1.PNG

**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	07JUL2011 01:20:54.028
Start time of last sample	07JUL2011 13:11:37.635
Reference period start time	07JUN2011 01:19:30.585
Reference period stop time	06JUL2011 18:48:18.557
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



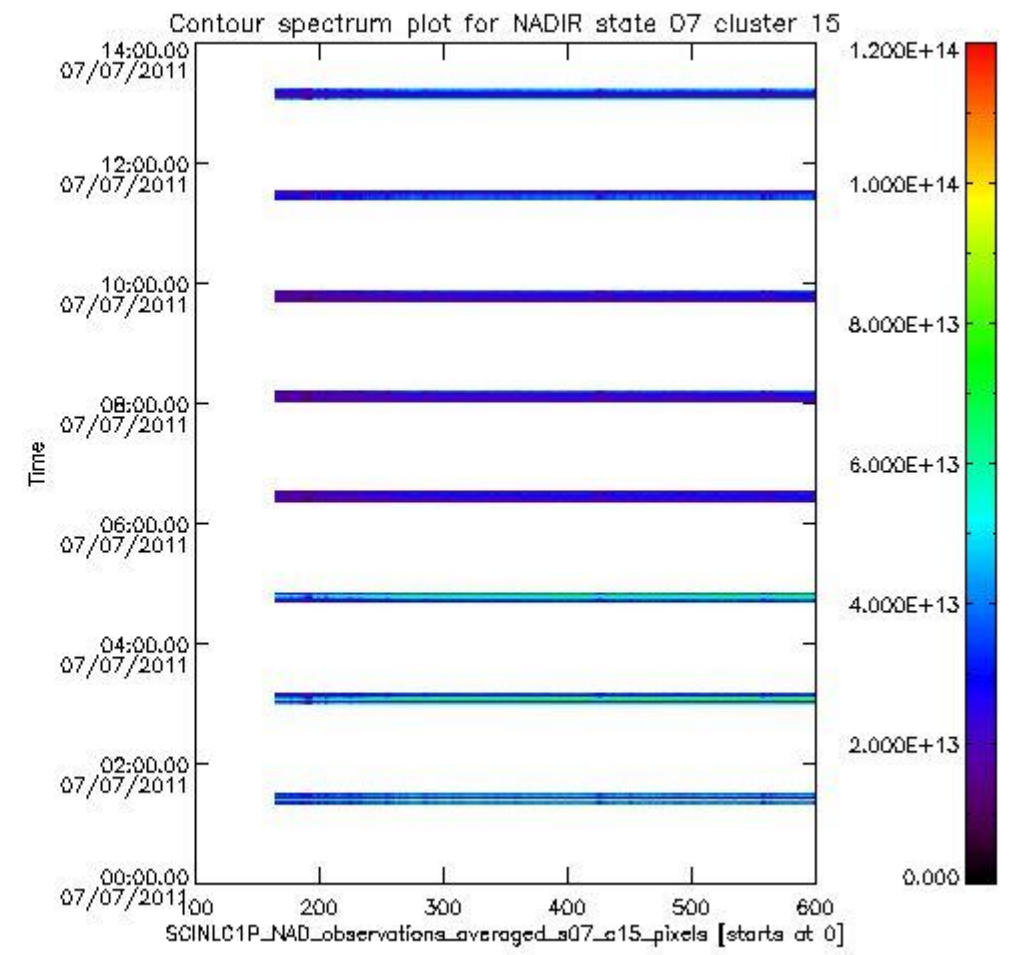
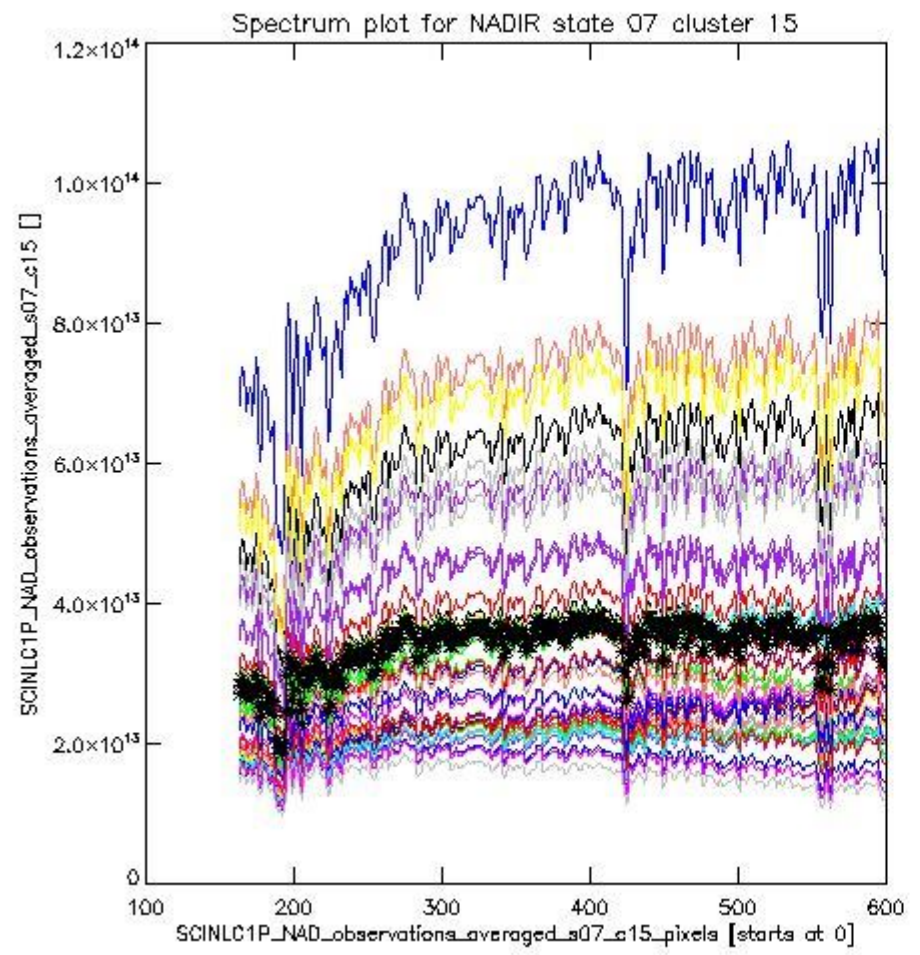
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_2.PNG



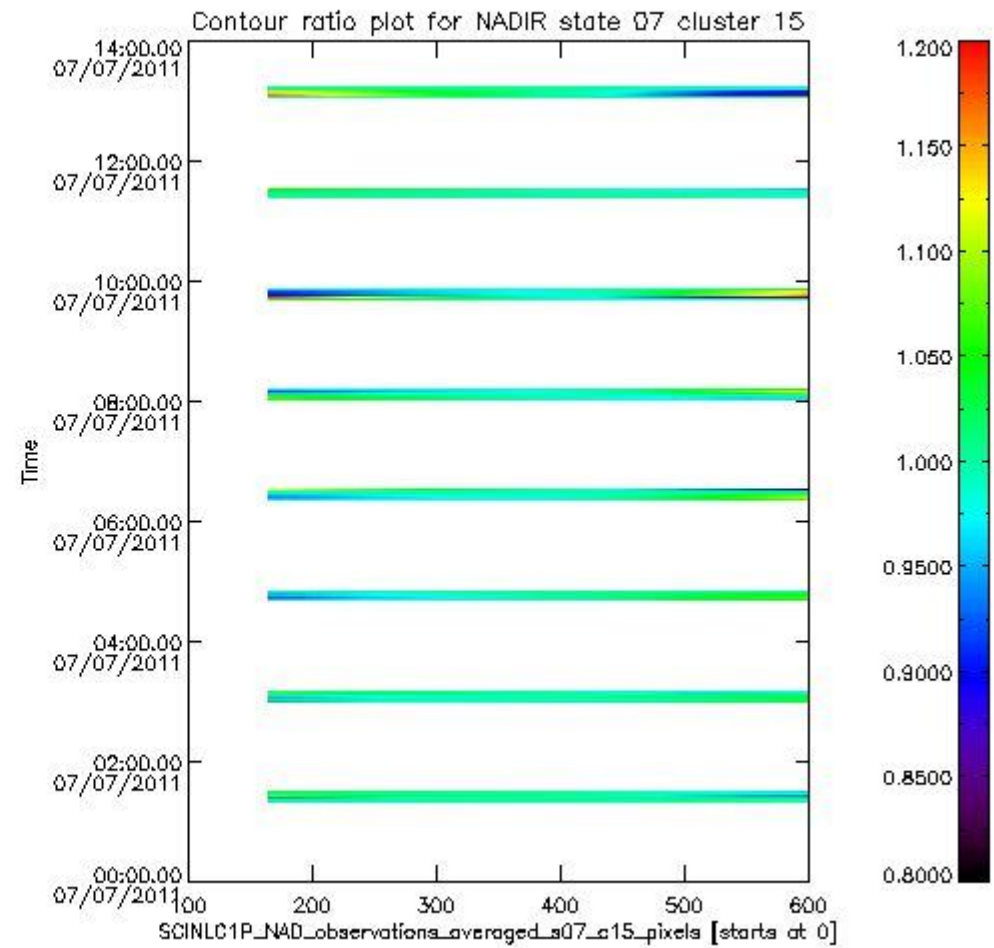
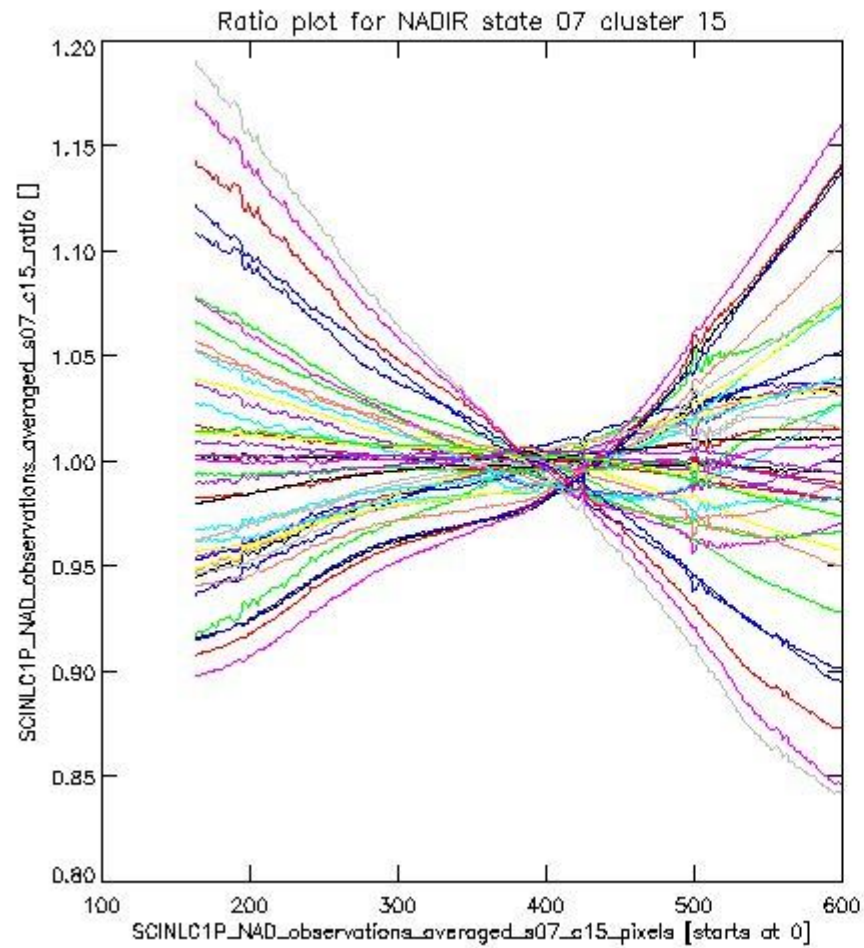
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_3.PNG

**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	07JUL2011 01:20:54.028
Start time of last sample	07JUL2011 13:11:37.635
Reference period start time	07JUN2011 01:19:30.585
Reference period stop time	06JUL2011 18:48:18.557
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



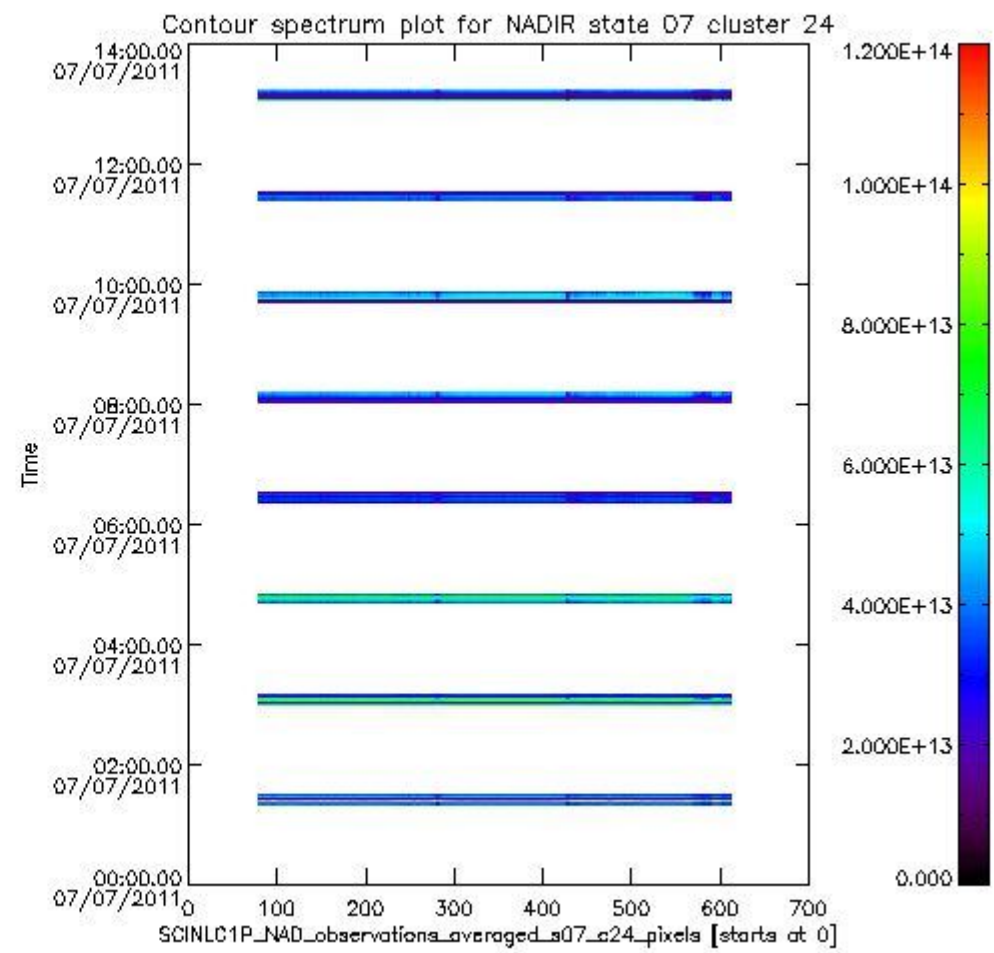
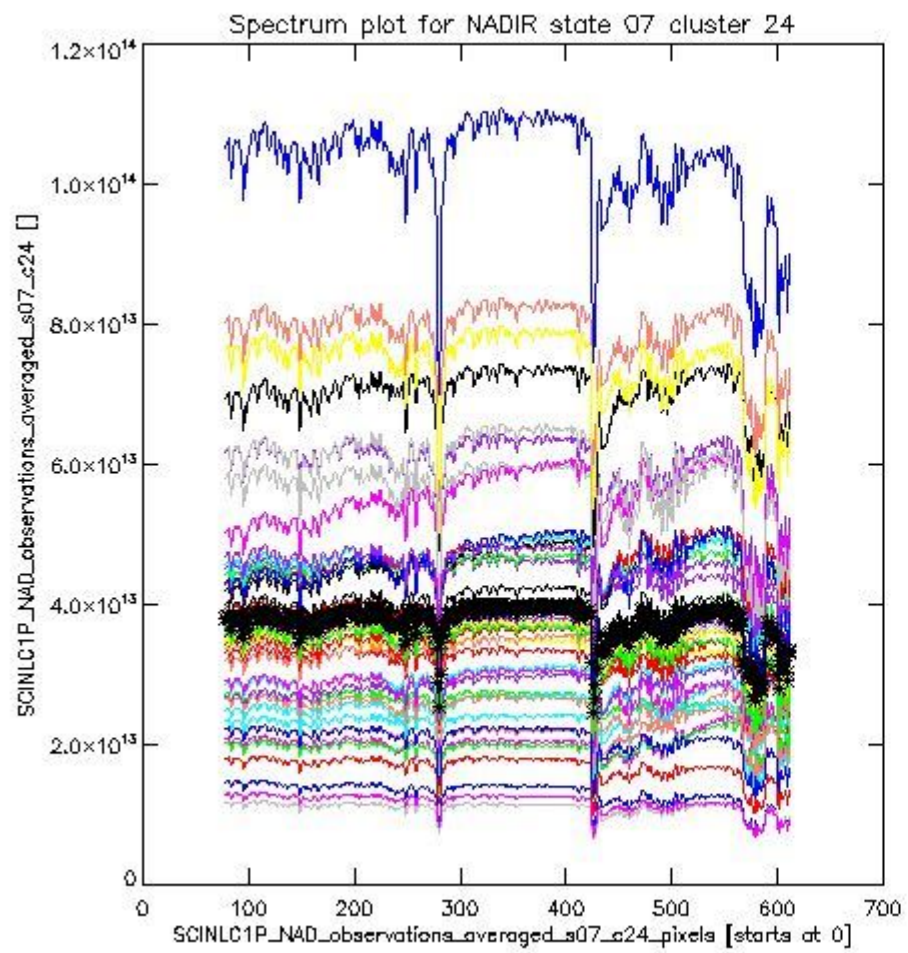
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_5.PNG

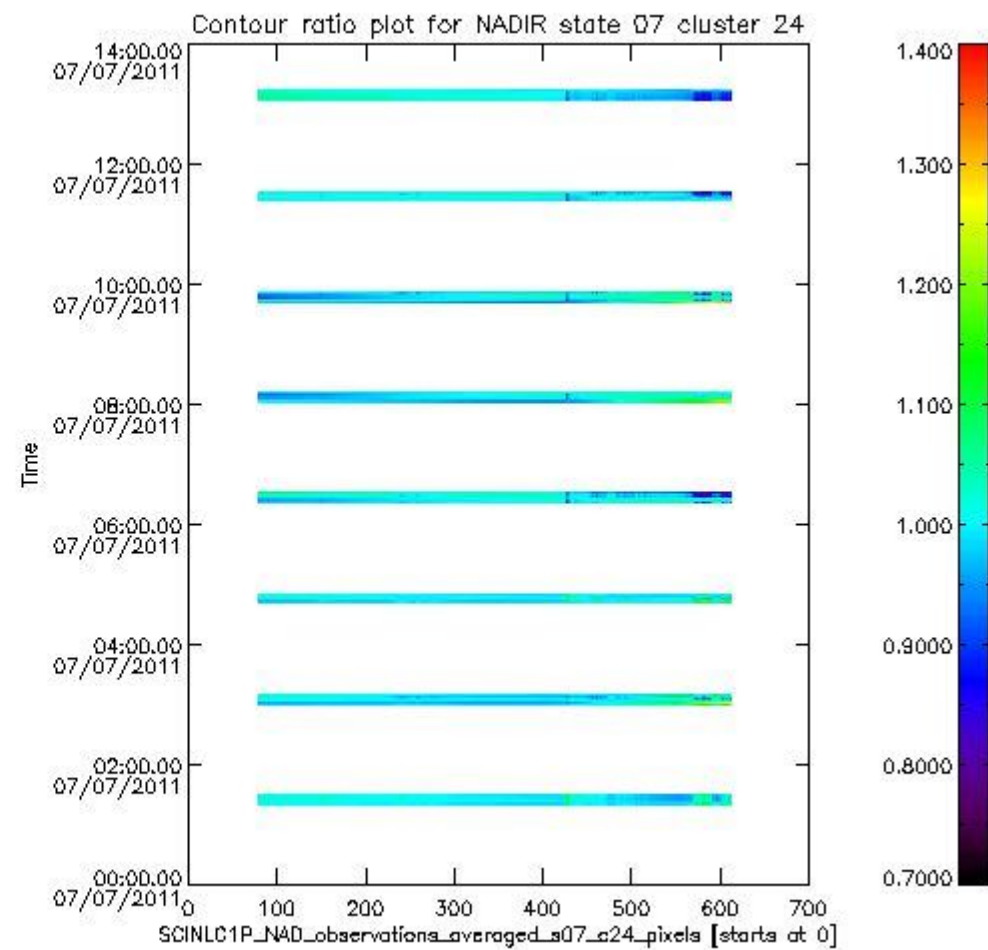
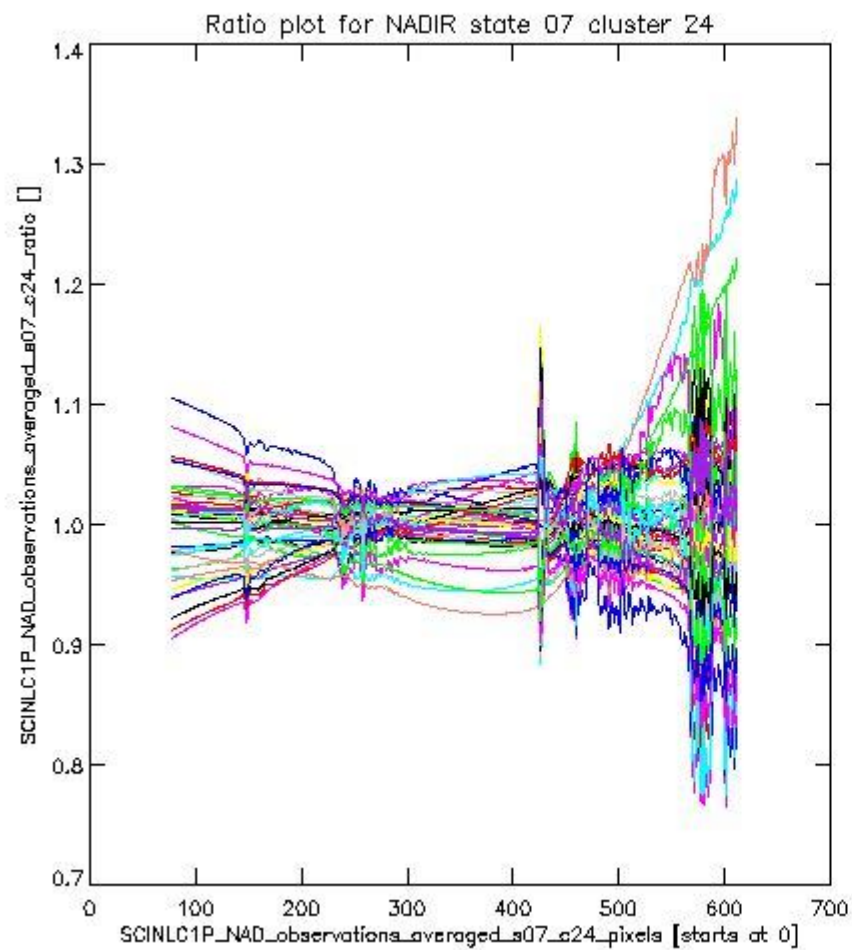
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	07JUL2011 01:20:54.028
Start time of last sample	07JUL2011 13:11:37.635
Reference period start time	07JUN2011 01:19:30.585
Reference period stop time	06JUL2011 18:48:18.557
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\_20110707\_6.PNG

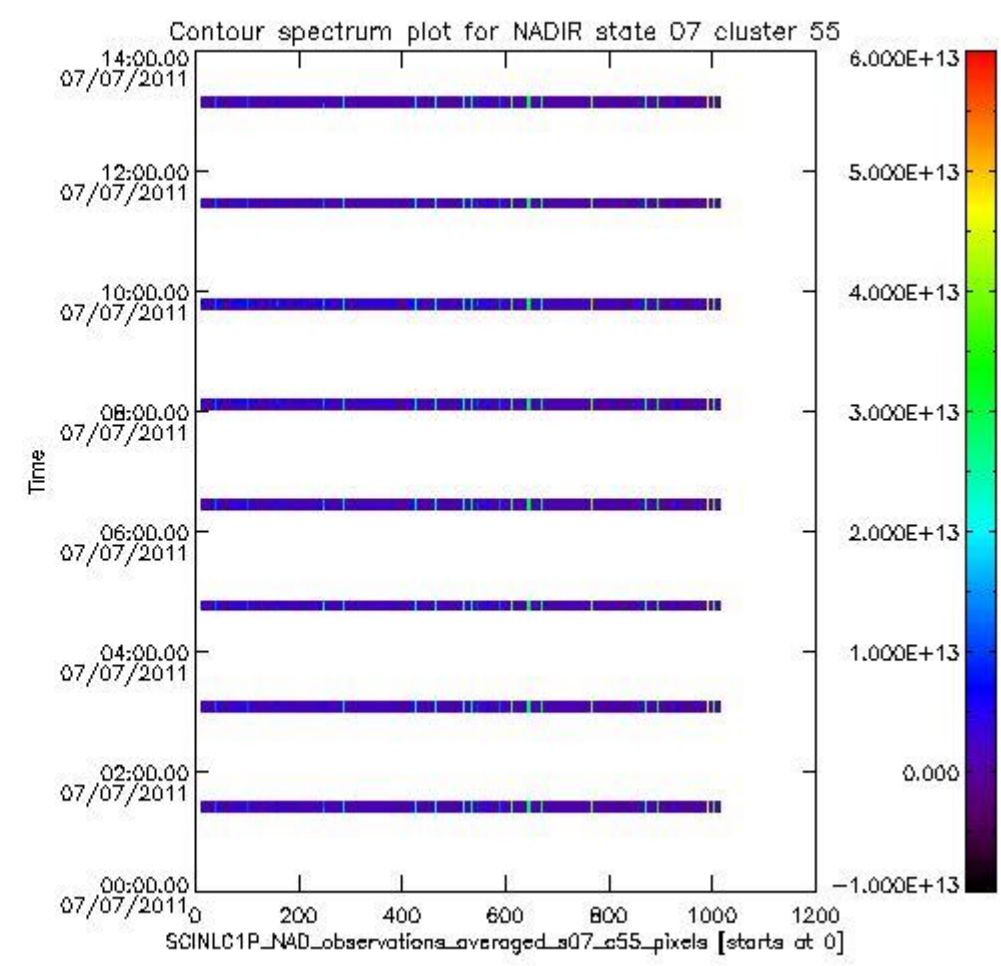
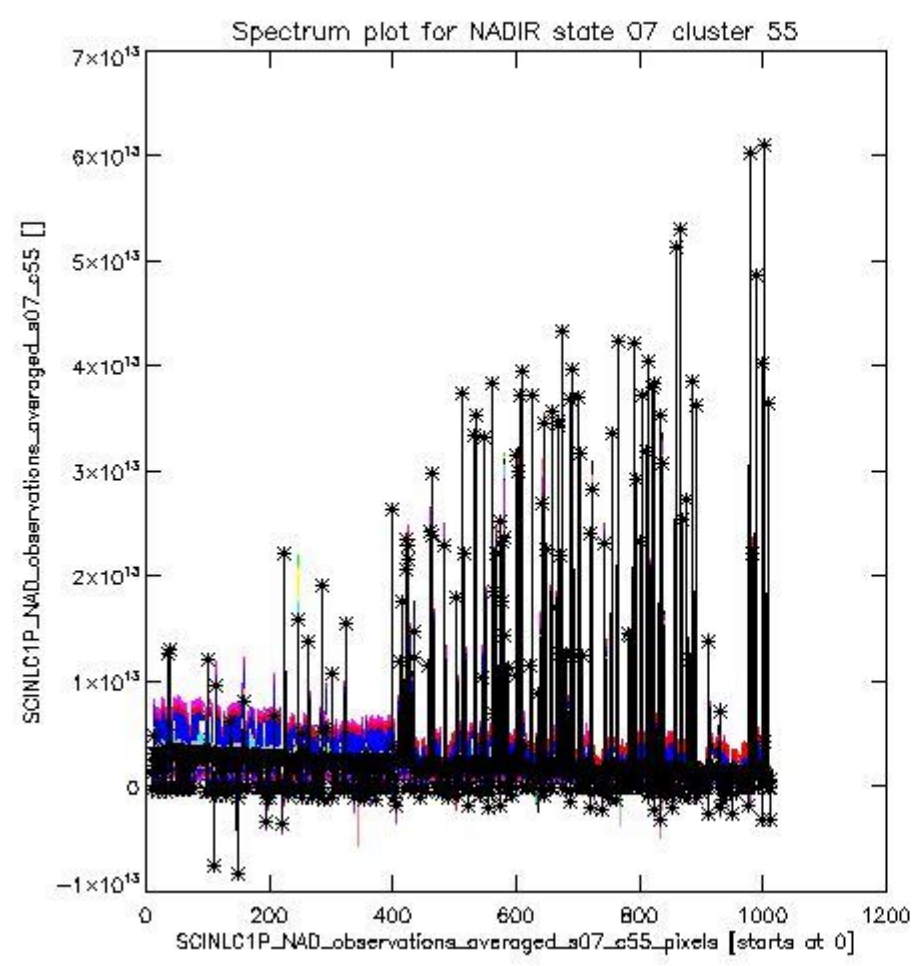




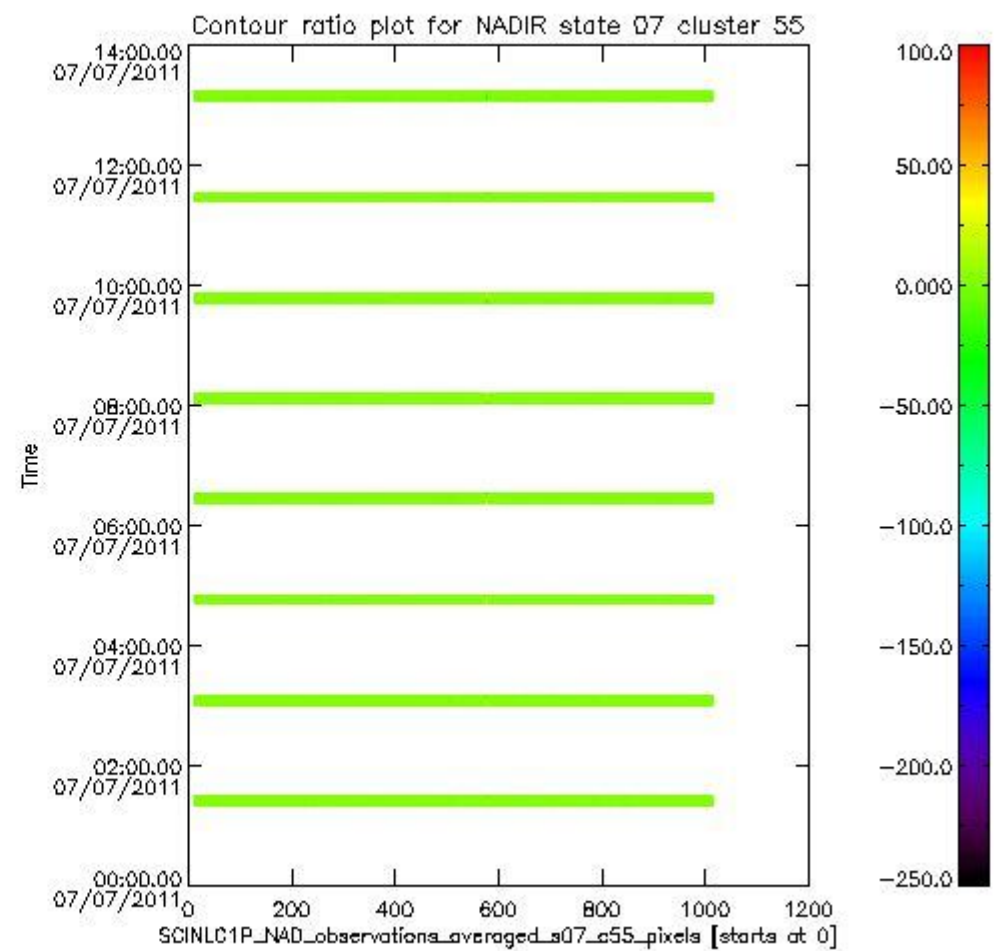
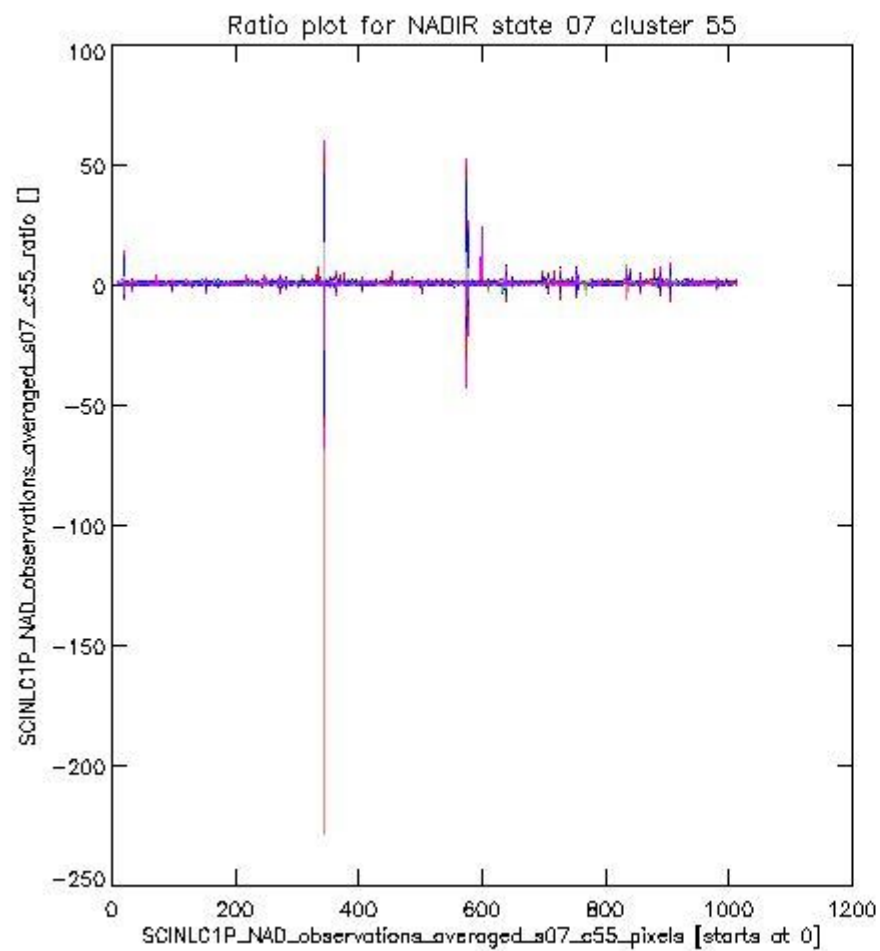
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_7.PNG

**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	07JUL2011 01:20:54.028
Start time of last sample	07JUL2011 13:11:37.635
Reference period start time	07JUN2011 01:19:30.585
Reference period stop time	06JUL2011 18:48:18.557
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



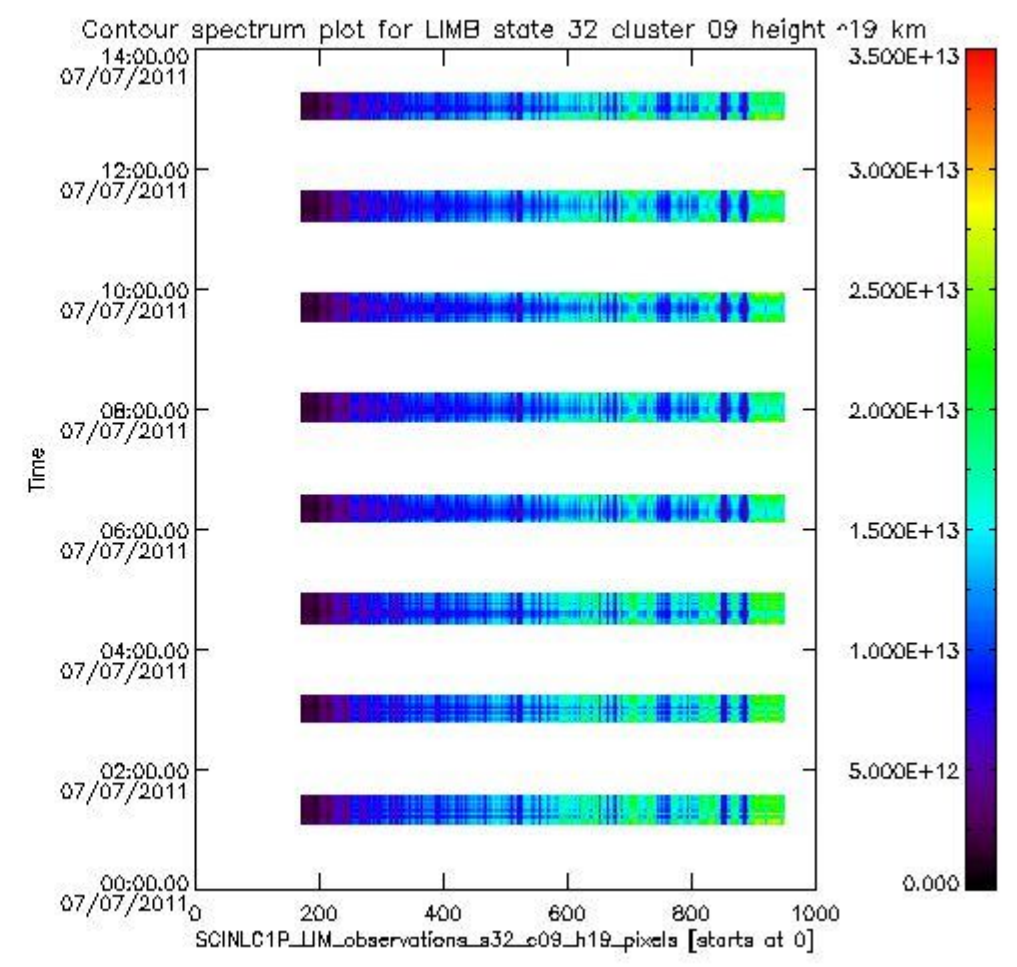
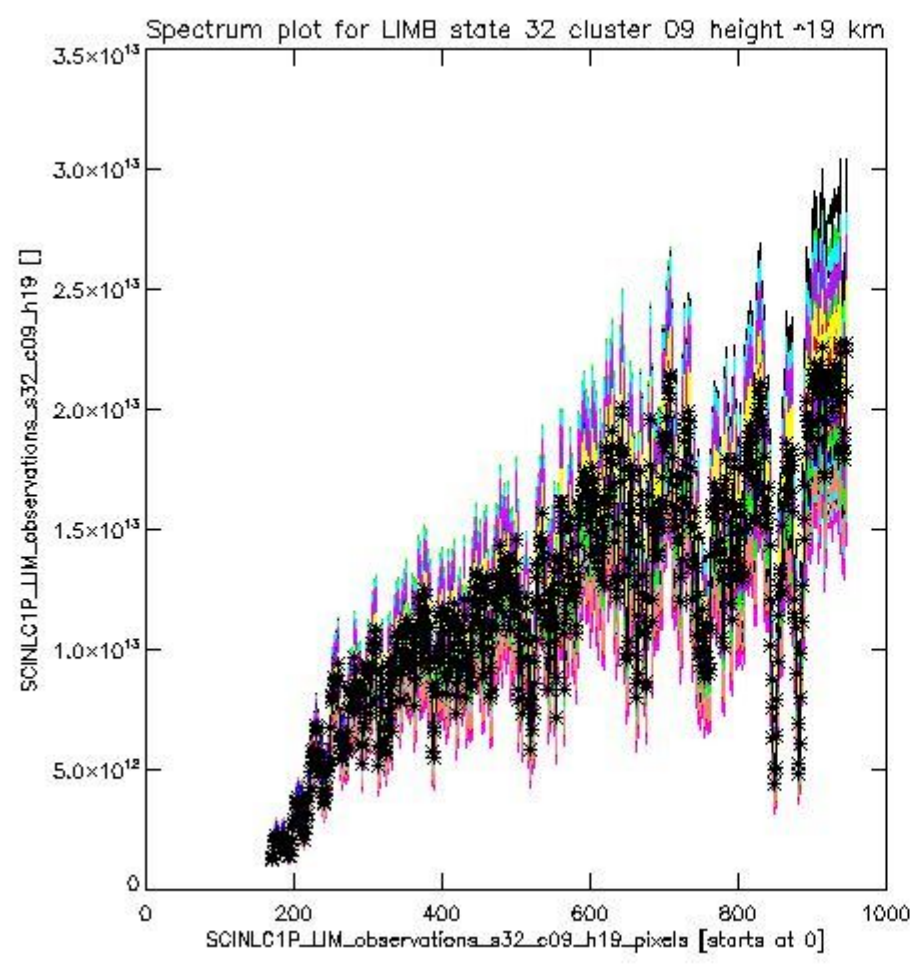
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_8.PNG



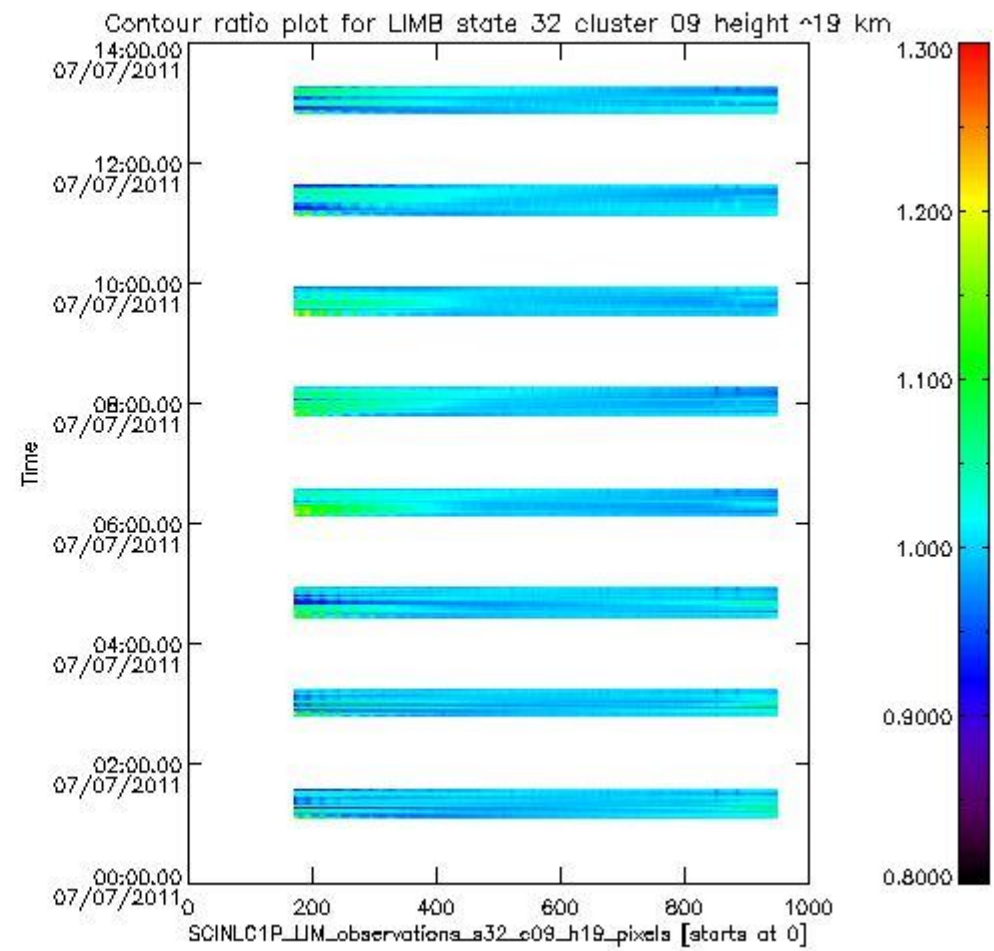
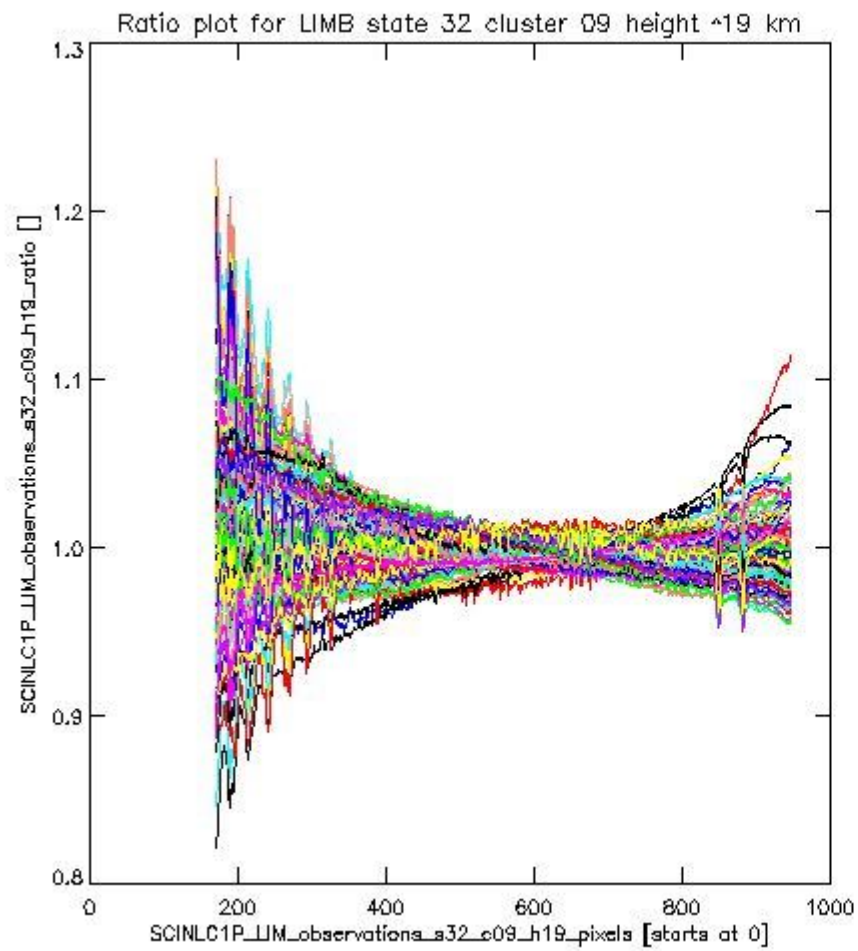
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_9.PNG

**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	07JUL2011 01:05:40.649
Start time of last sample	07JUL2011 13:14:48.940
Reference period start time	07JUN2011 01:06:19.948
Reference period stop time	06JUL2011 18:53:32.604
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



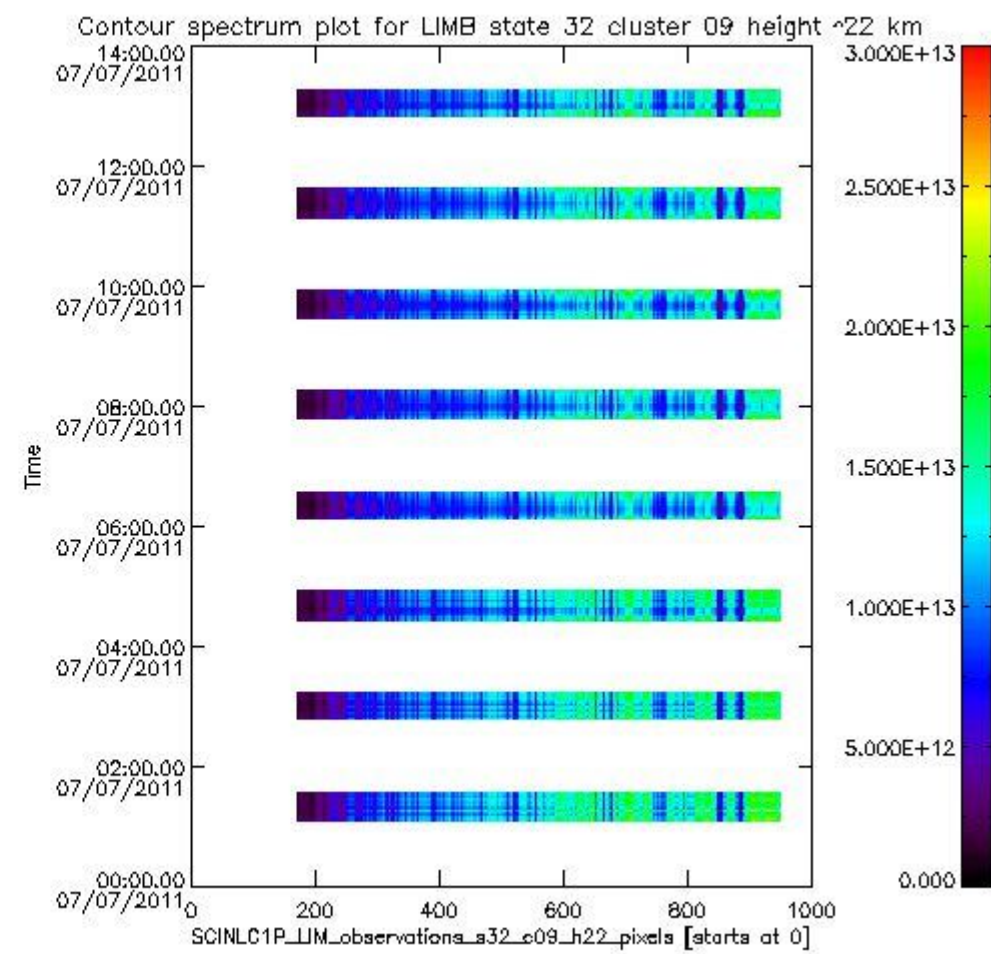
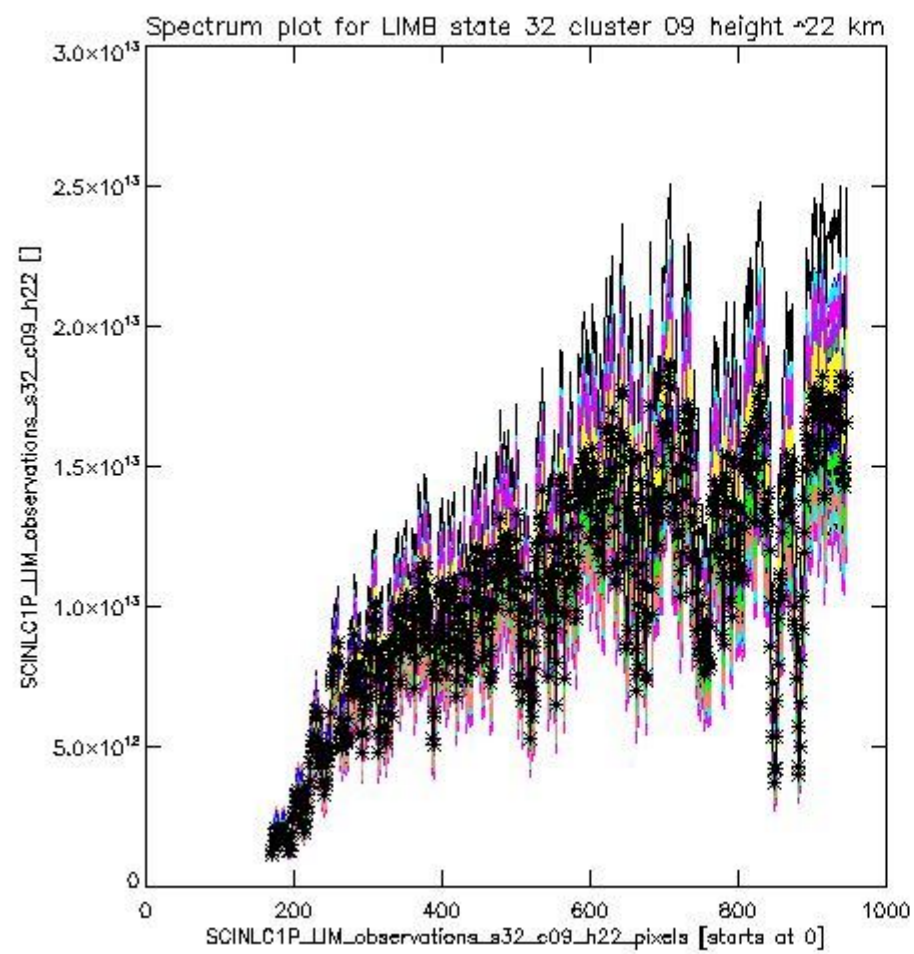
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_10.PNG



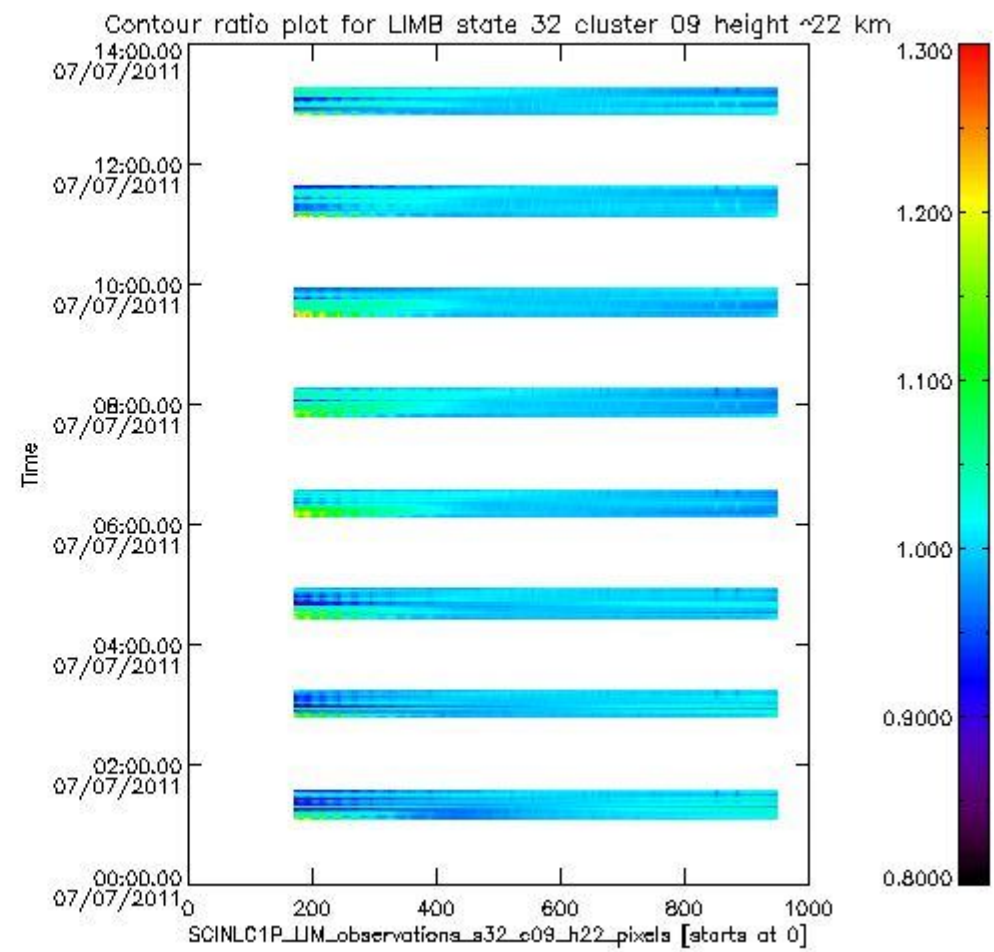
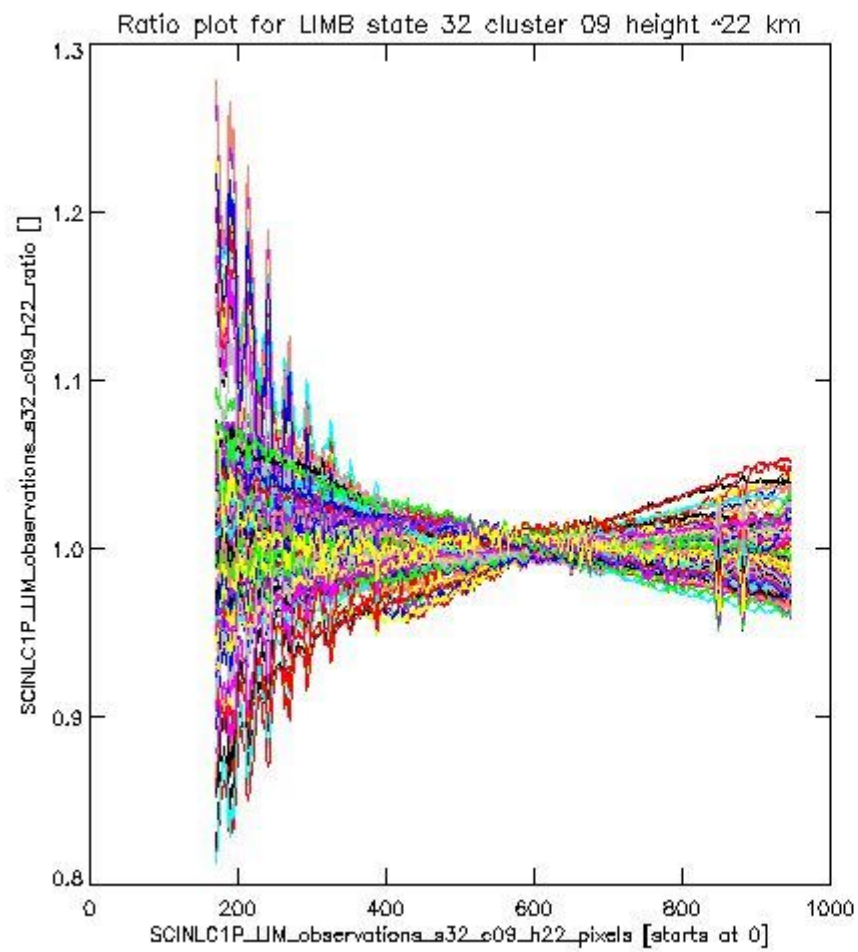
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_11.PNG

**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	07JUL2011 01:05:40.649
Start time of last sample	07JUL2011 13:14:48.940
Reference period start time	07JUN2011 01:06:19.948
Reference period stop time	06JUL2011 18:53:32.604
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



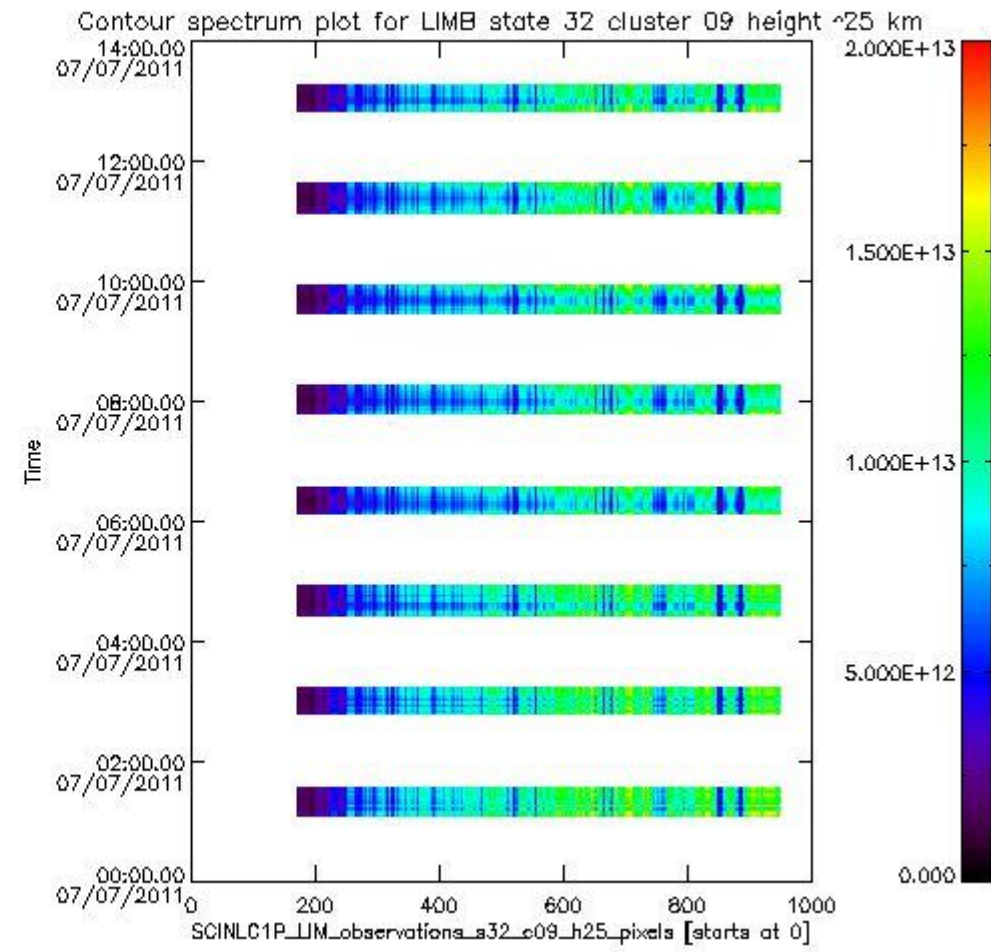
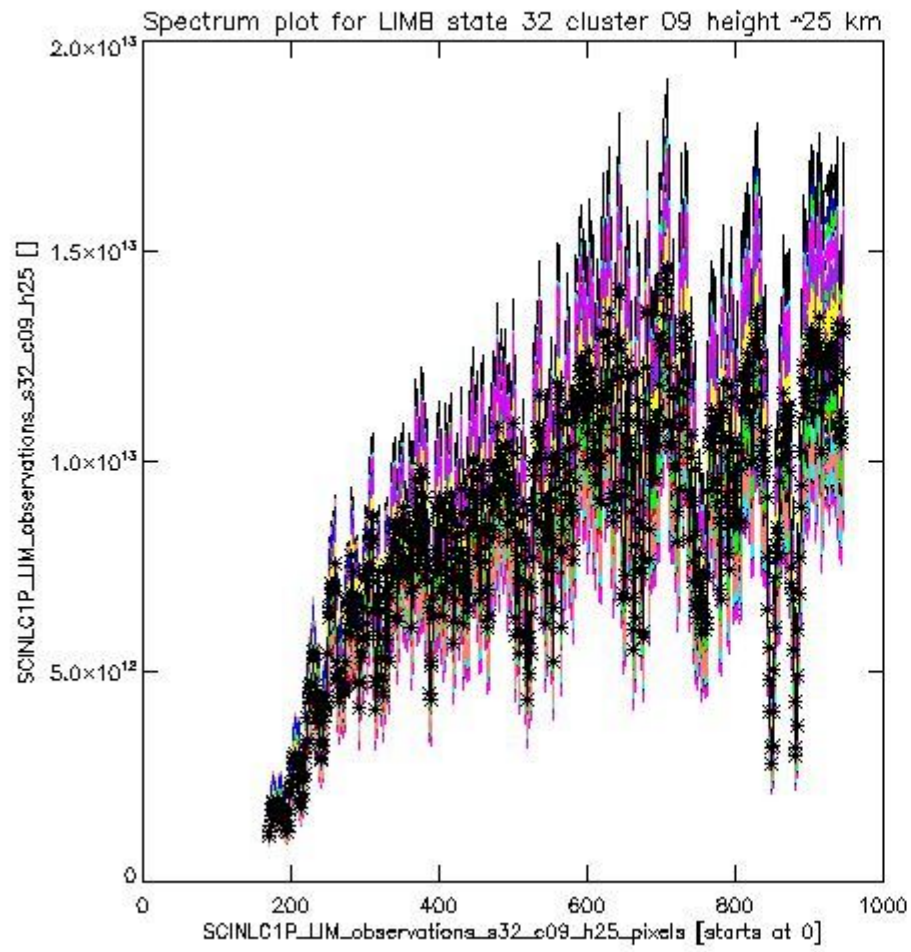
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_13.PNG

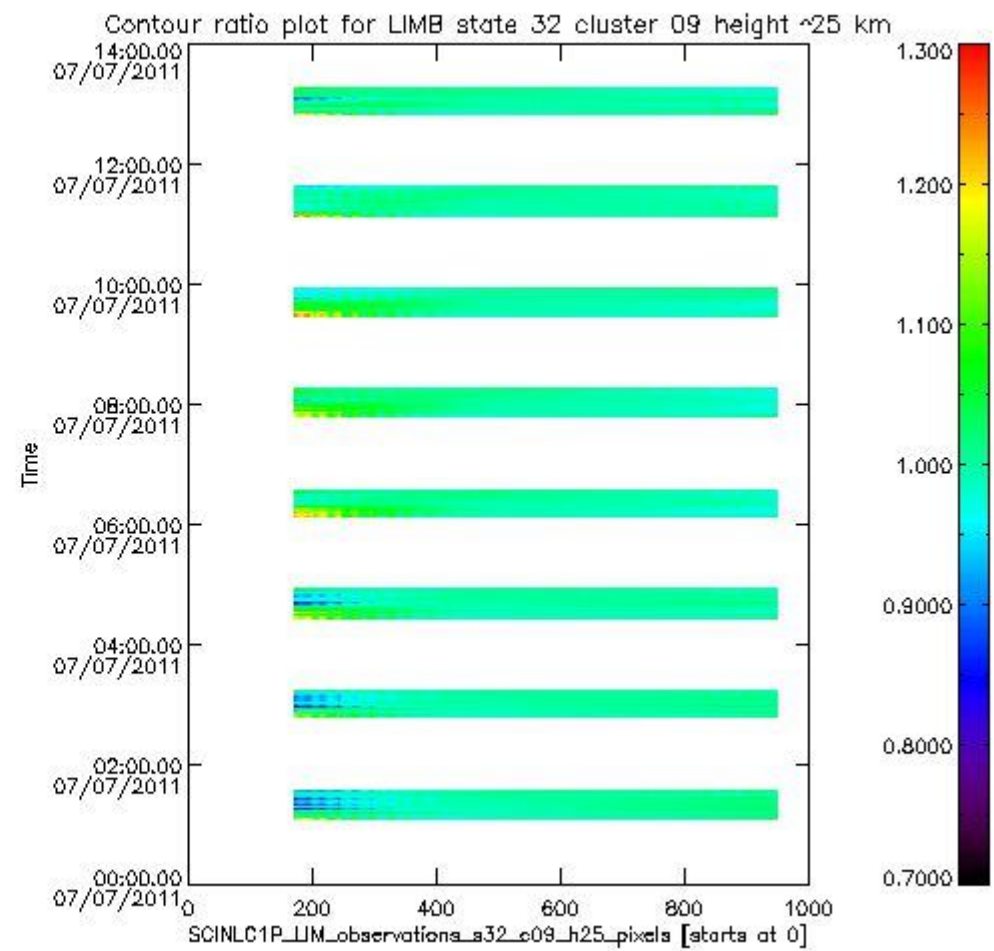
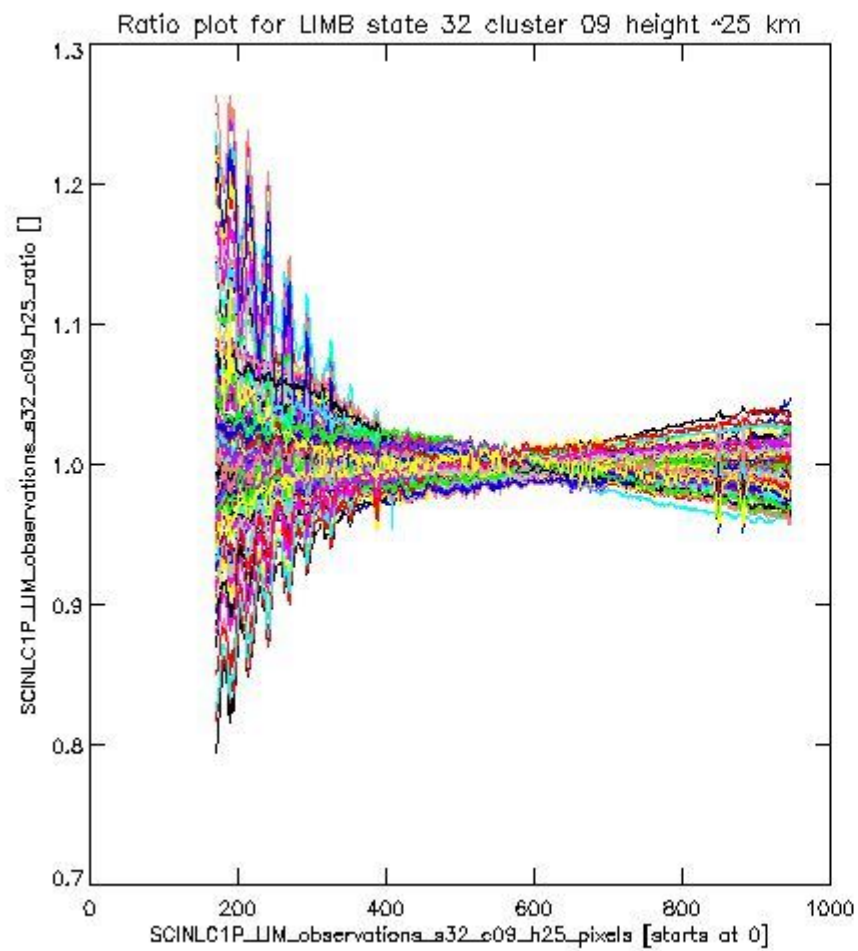
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	07JUL2011 01:05:40.649
Start time of last sample	07JUL2011 13:14:48.940
Reference period start time	07JUN2011 01:06:19.948
Reference period stop time	06JUL2011 18:53:32.604
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\_20110707\_14.PNG

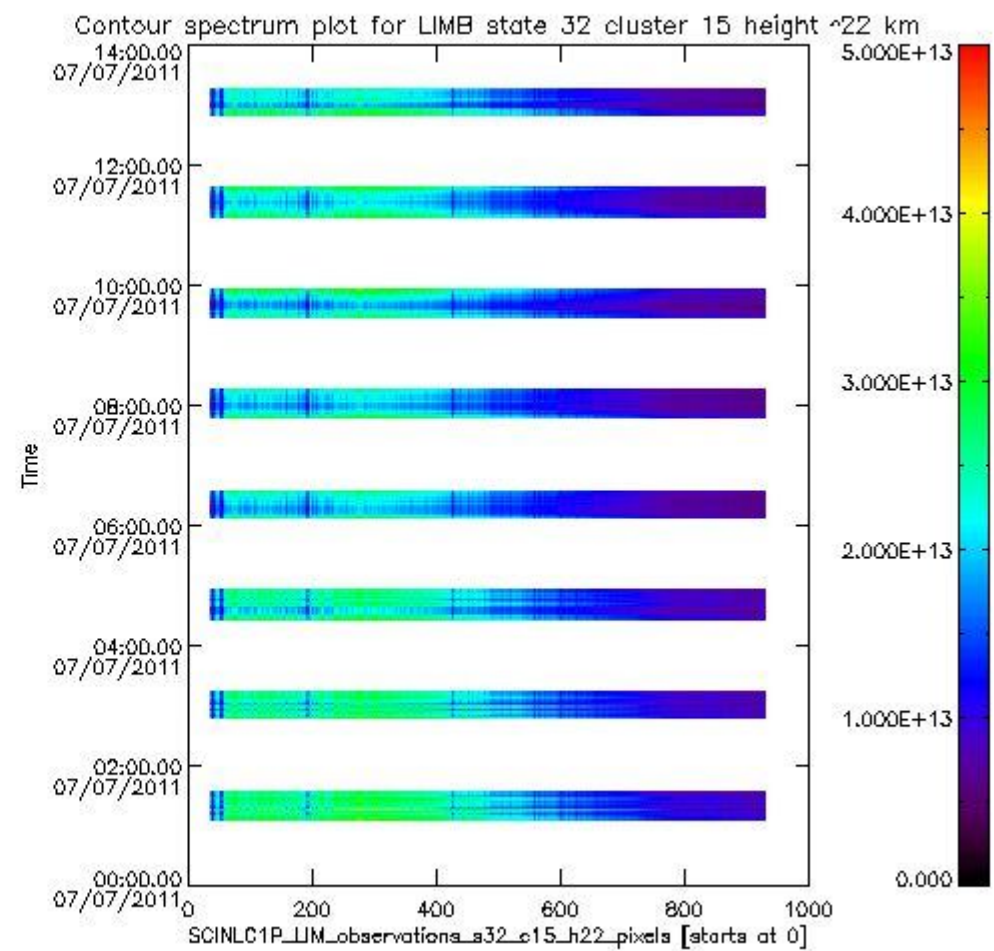
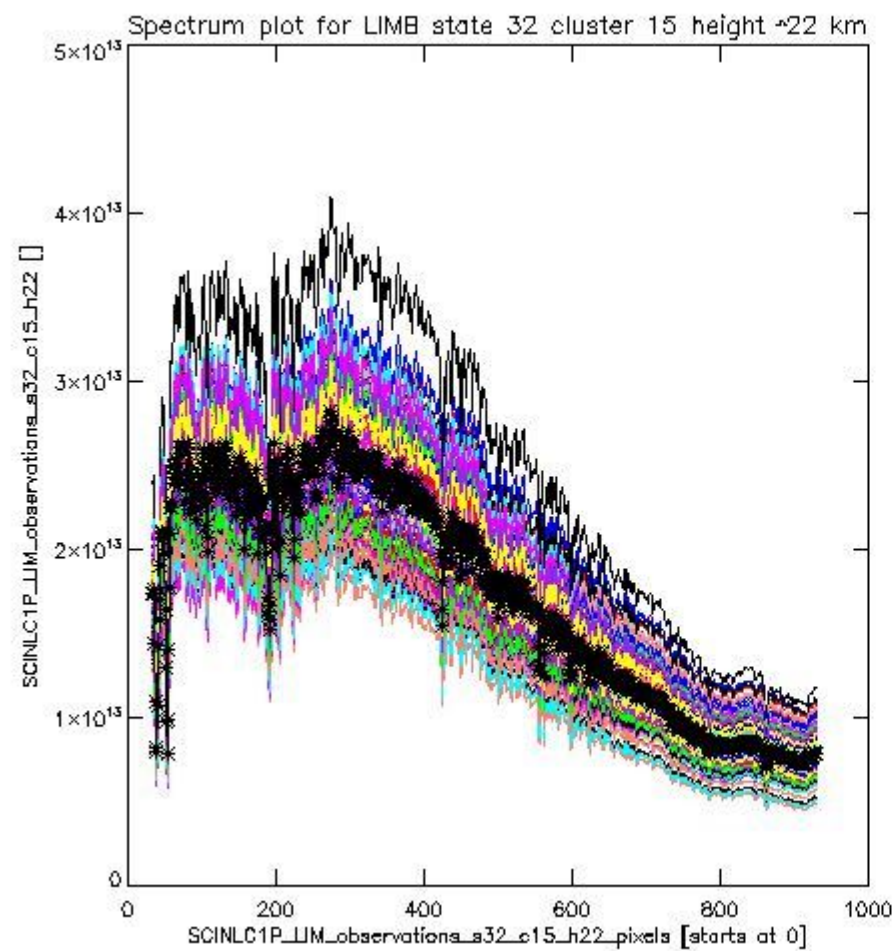




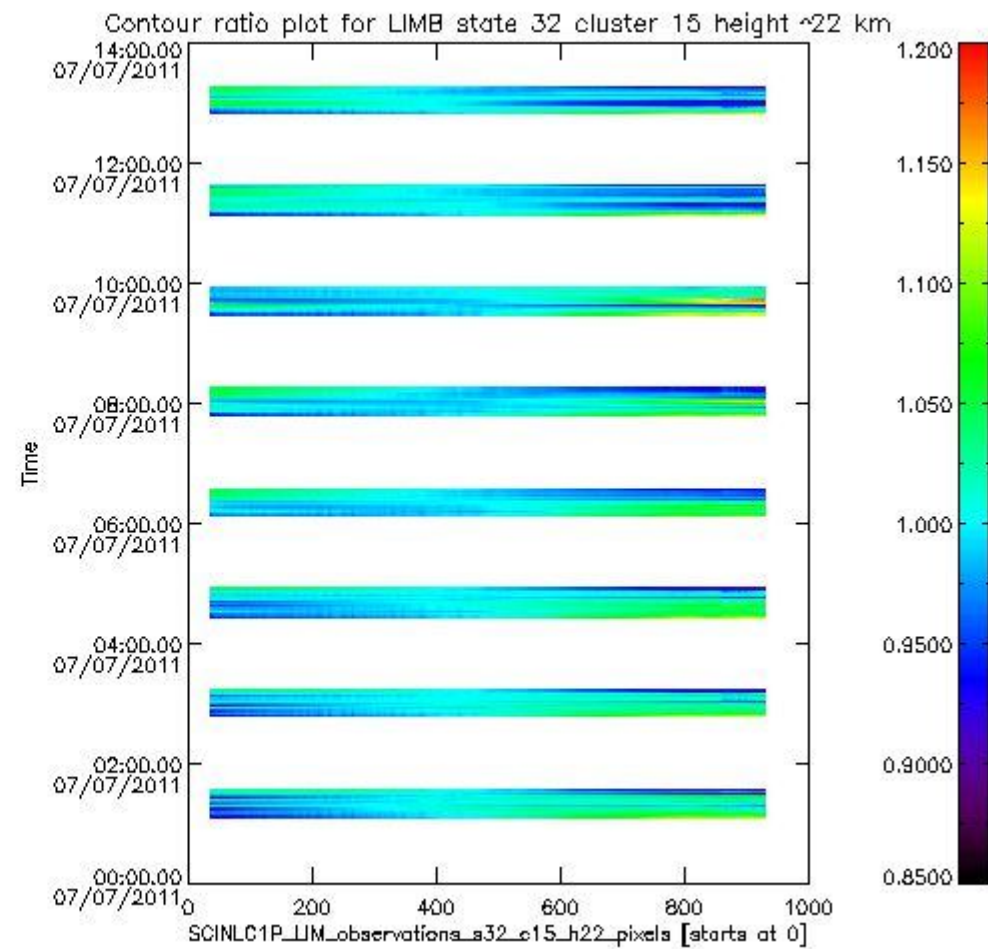
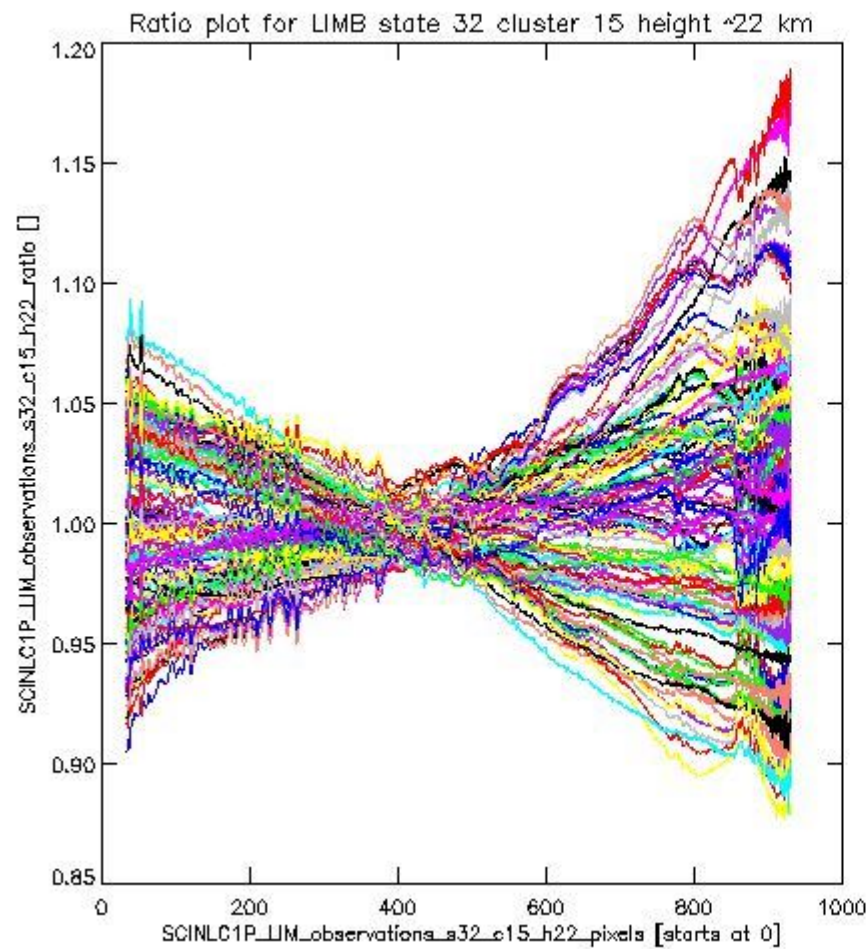
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_15.PNG

**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	07JUL2011 01:05:40.649
Start time of last sample	07JUL2011 13:14:48.940
Reference period start time	07JUN2011 01:06:19.948
Reference period stop time	06JUL2011 18:53:32.604
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



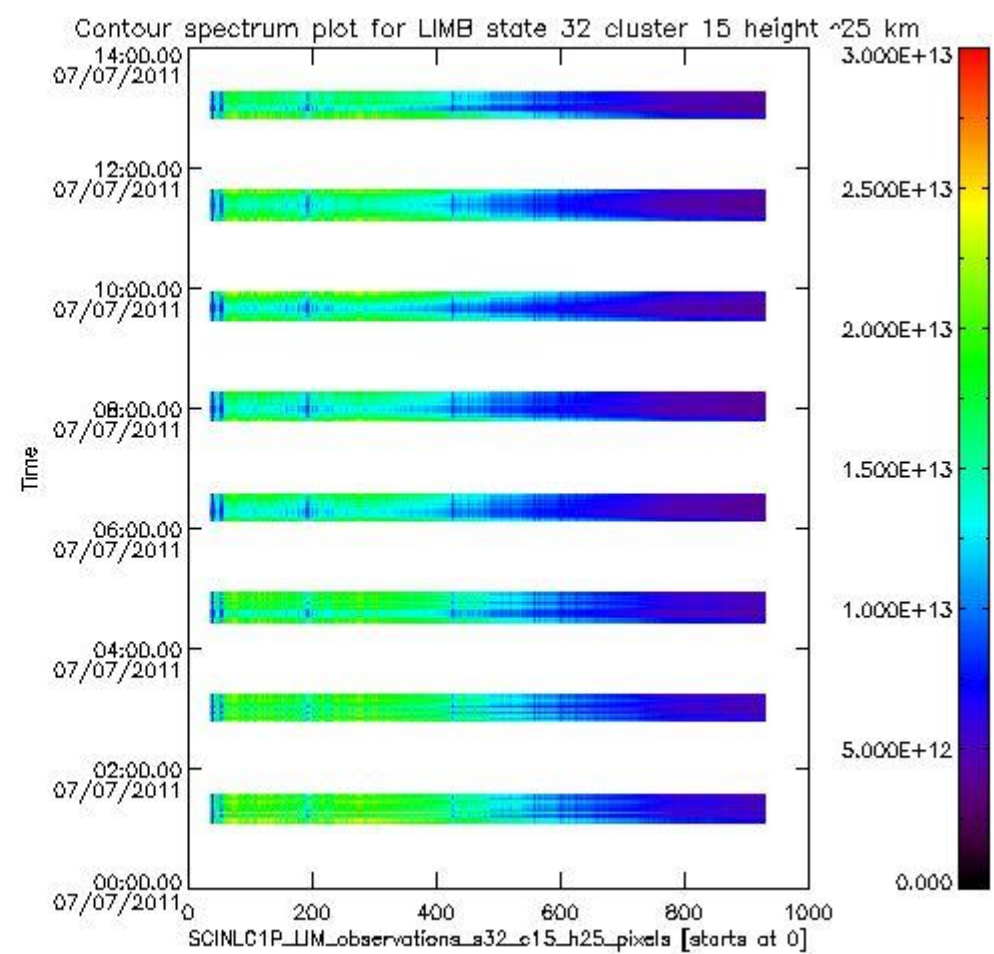
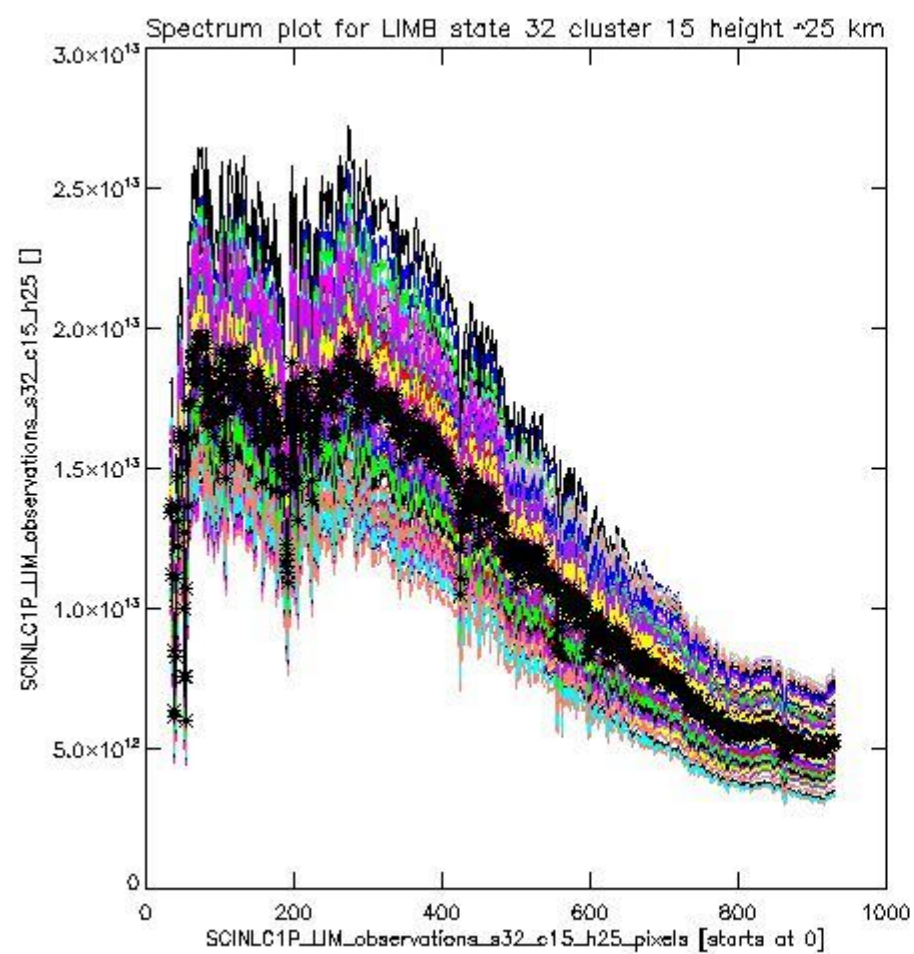
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_16.PNG



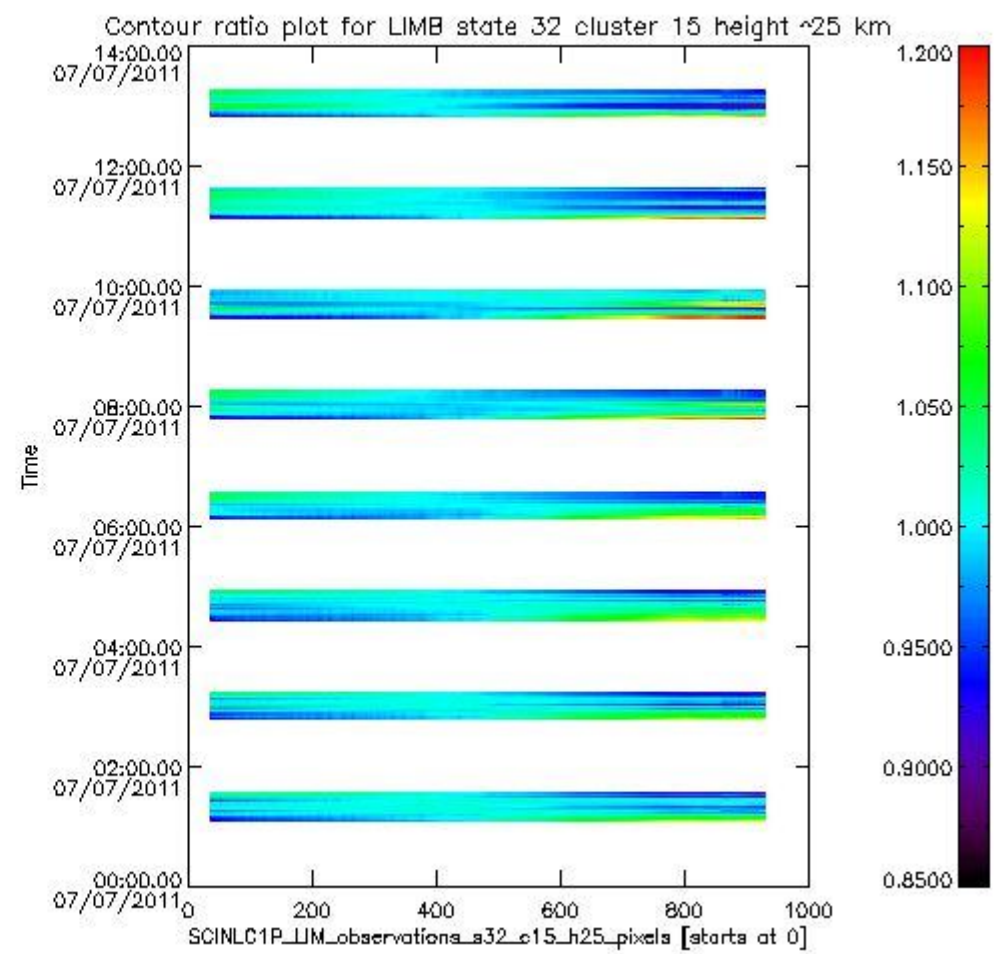
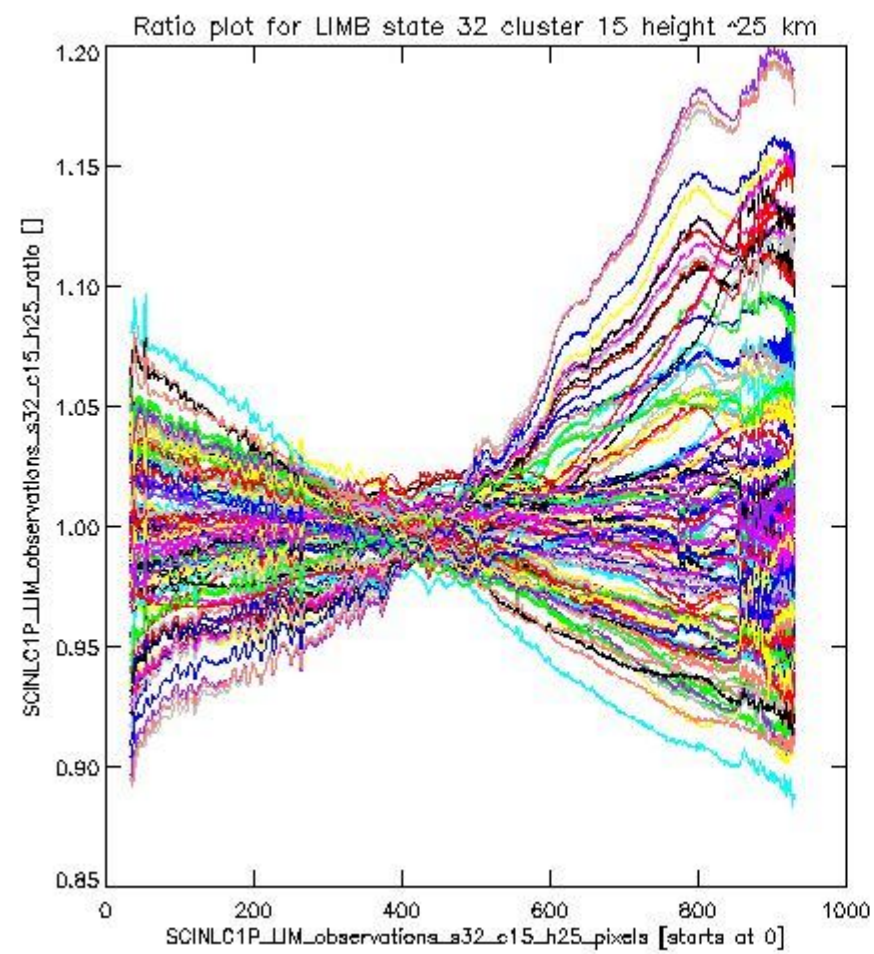
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_17.PNG

**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	07JUL2011 01:05:40.649
Start time of last sample	07JUL2011 13:14:48.940
Reference period start time	07JUN2011 01:06:19.948
Reference period stop time	06JUL2011 18:53:32.604
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

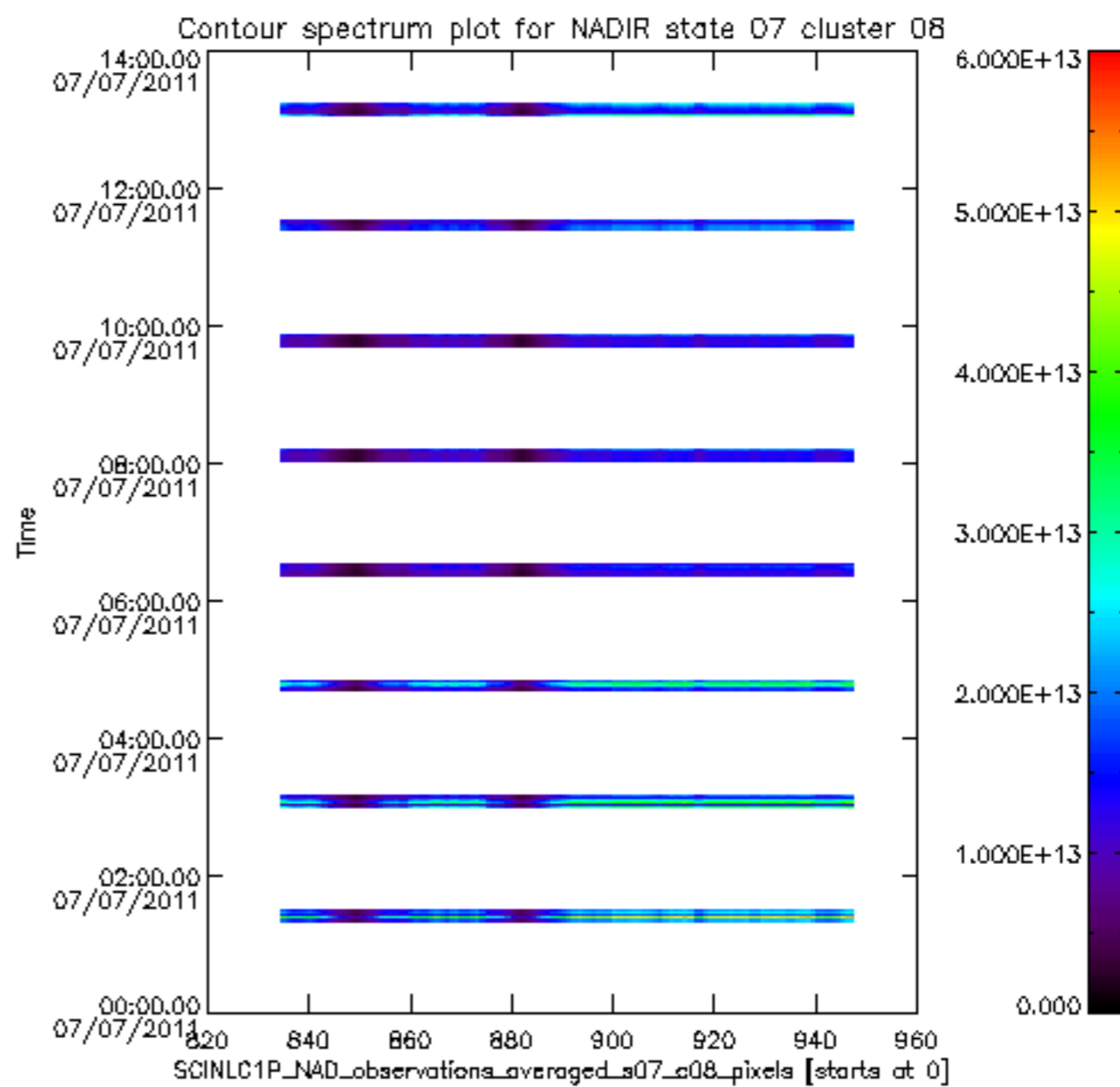
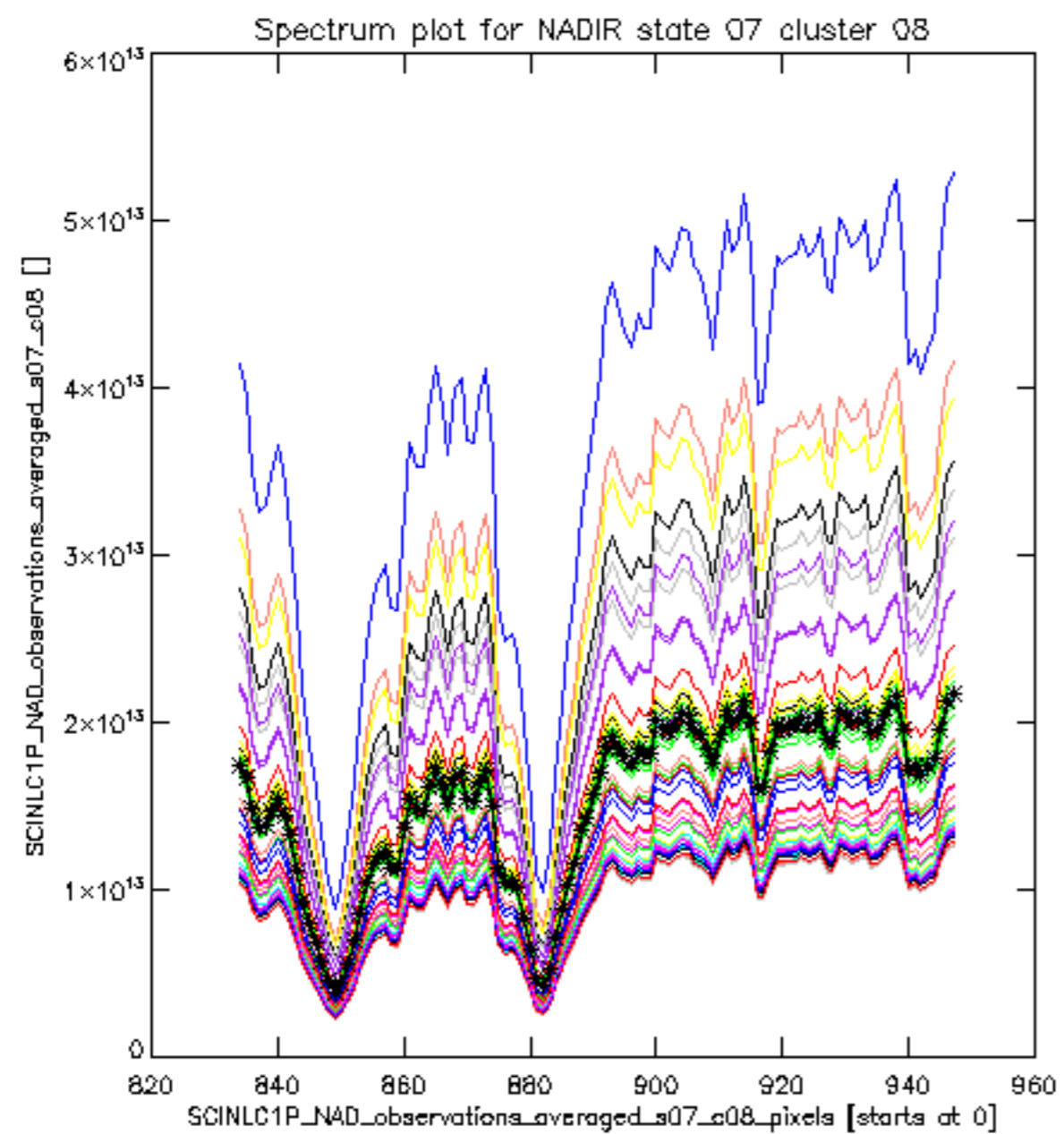


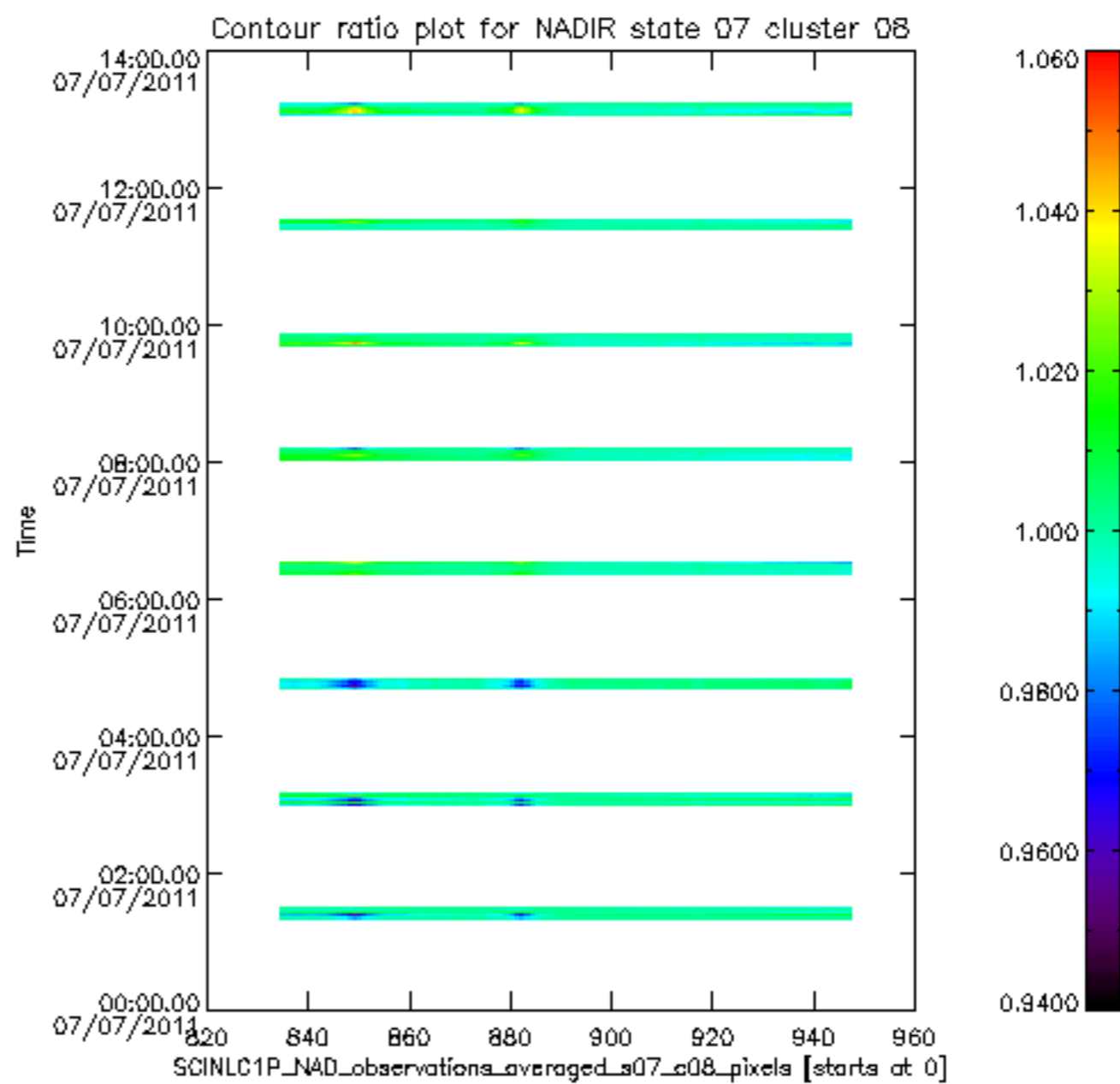
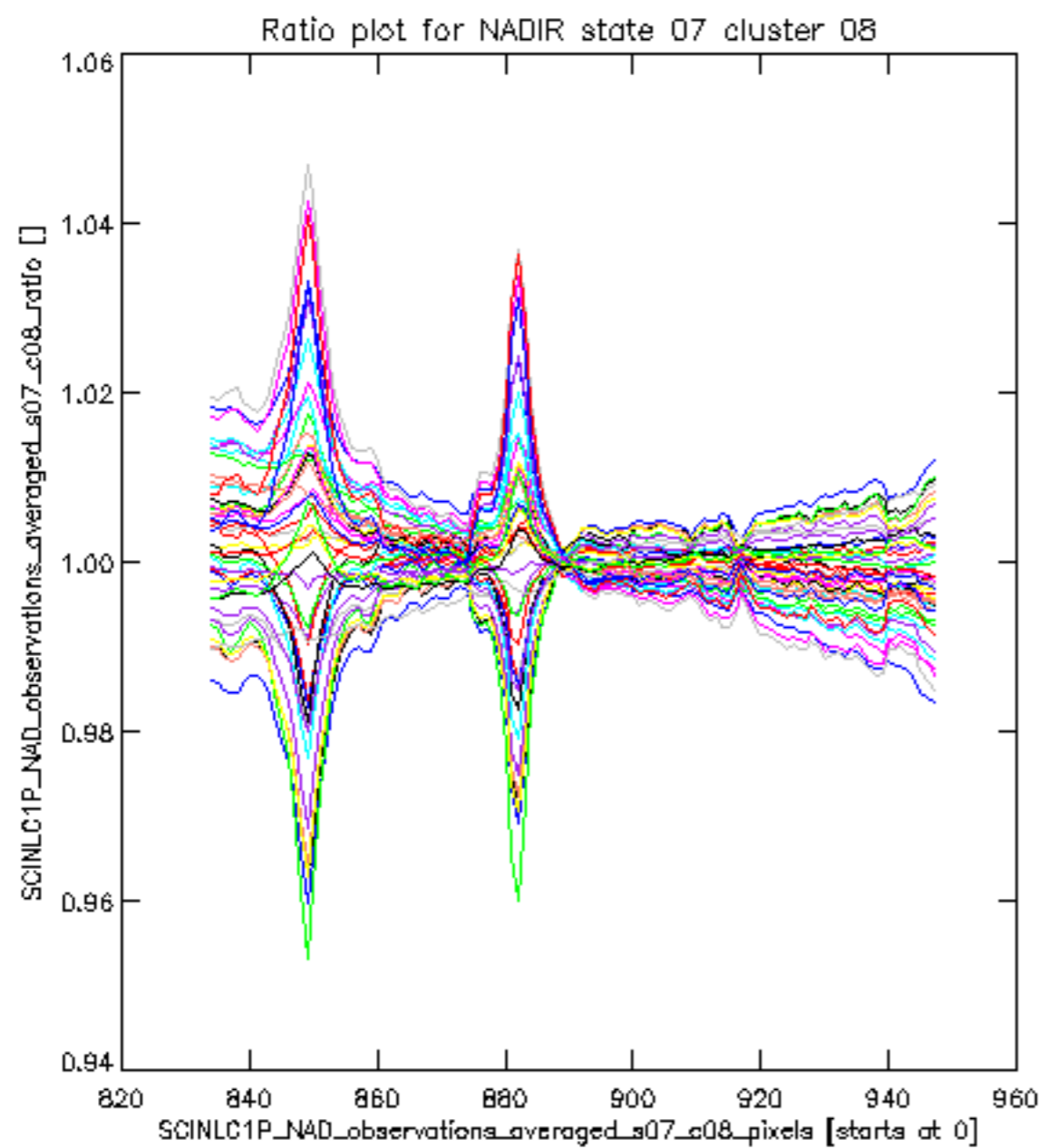
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_18.PNG

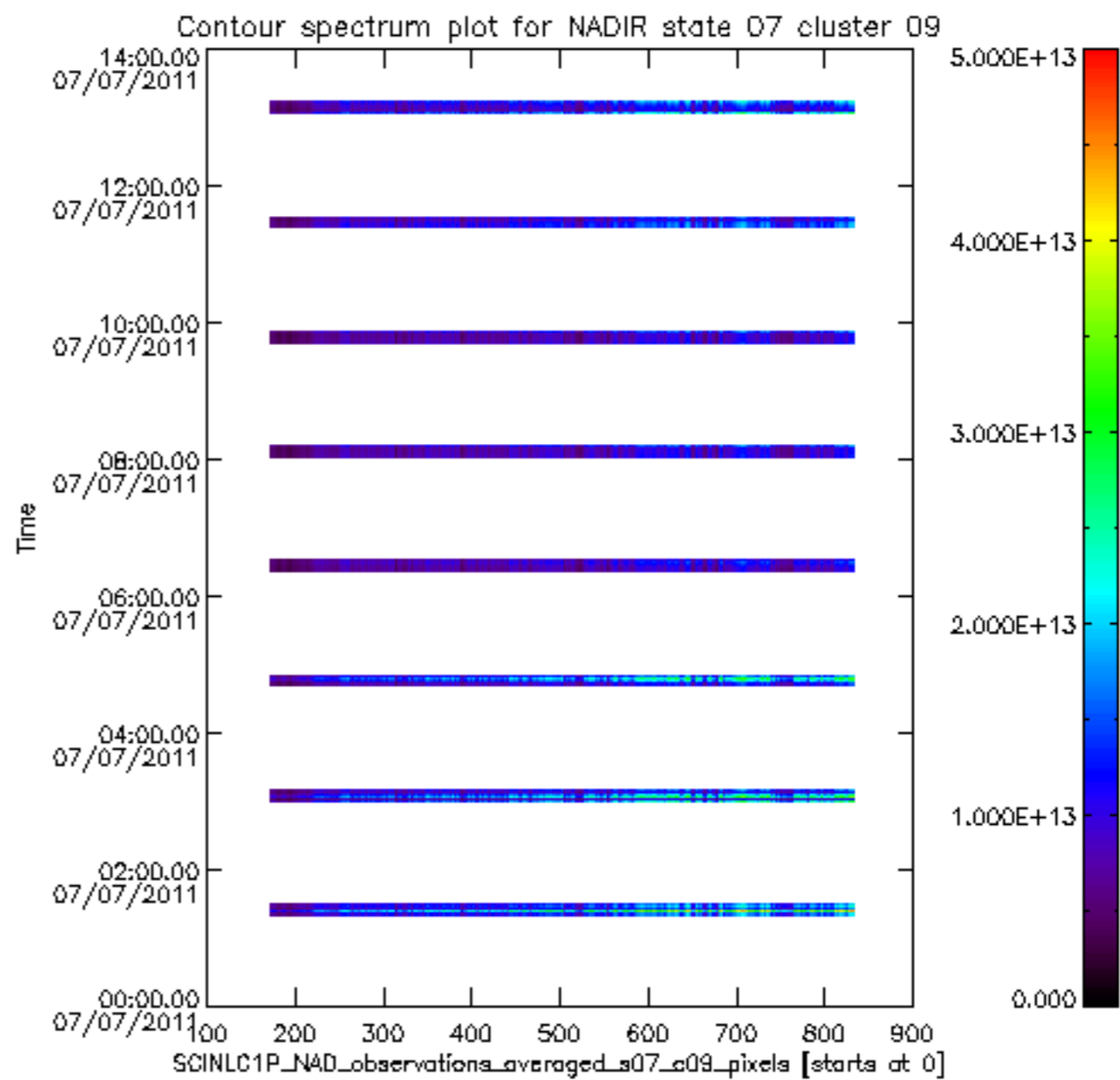
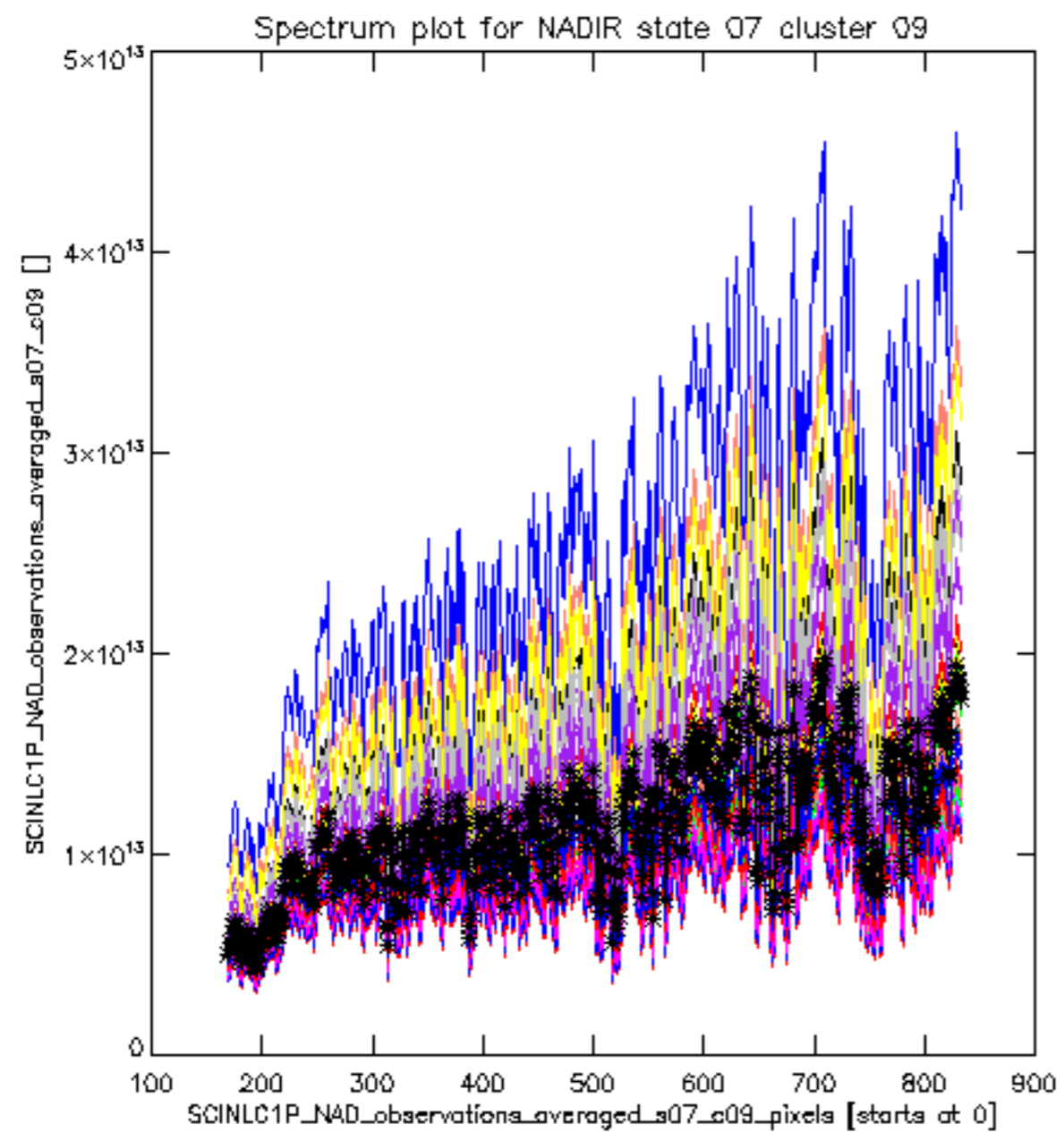


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110707\_19.PNG

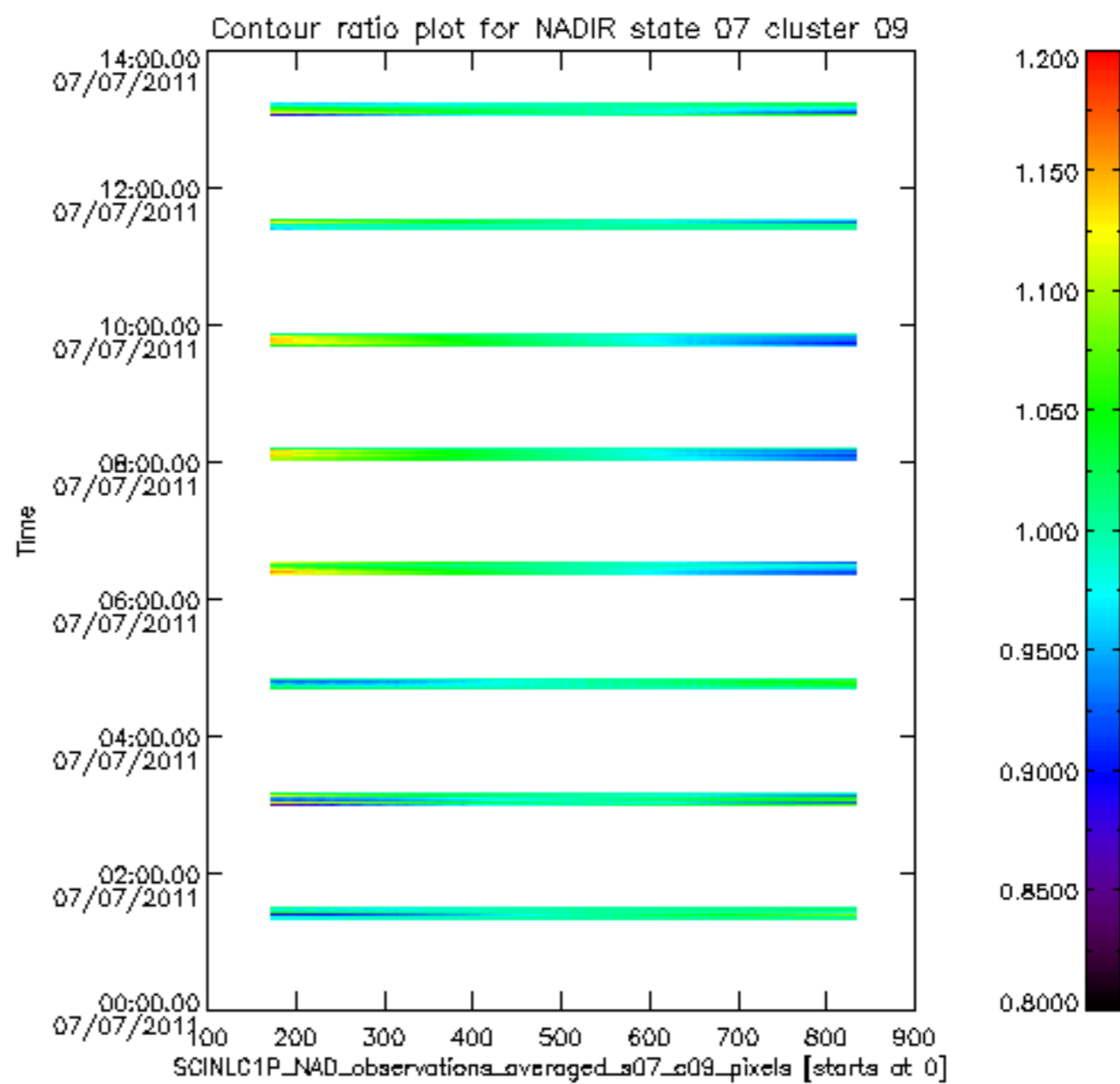
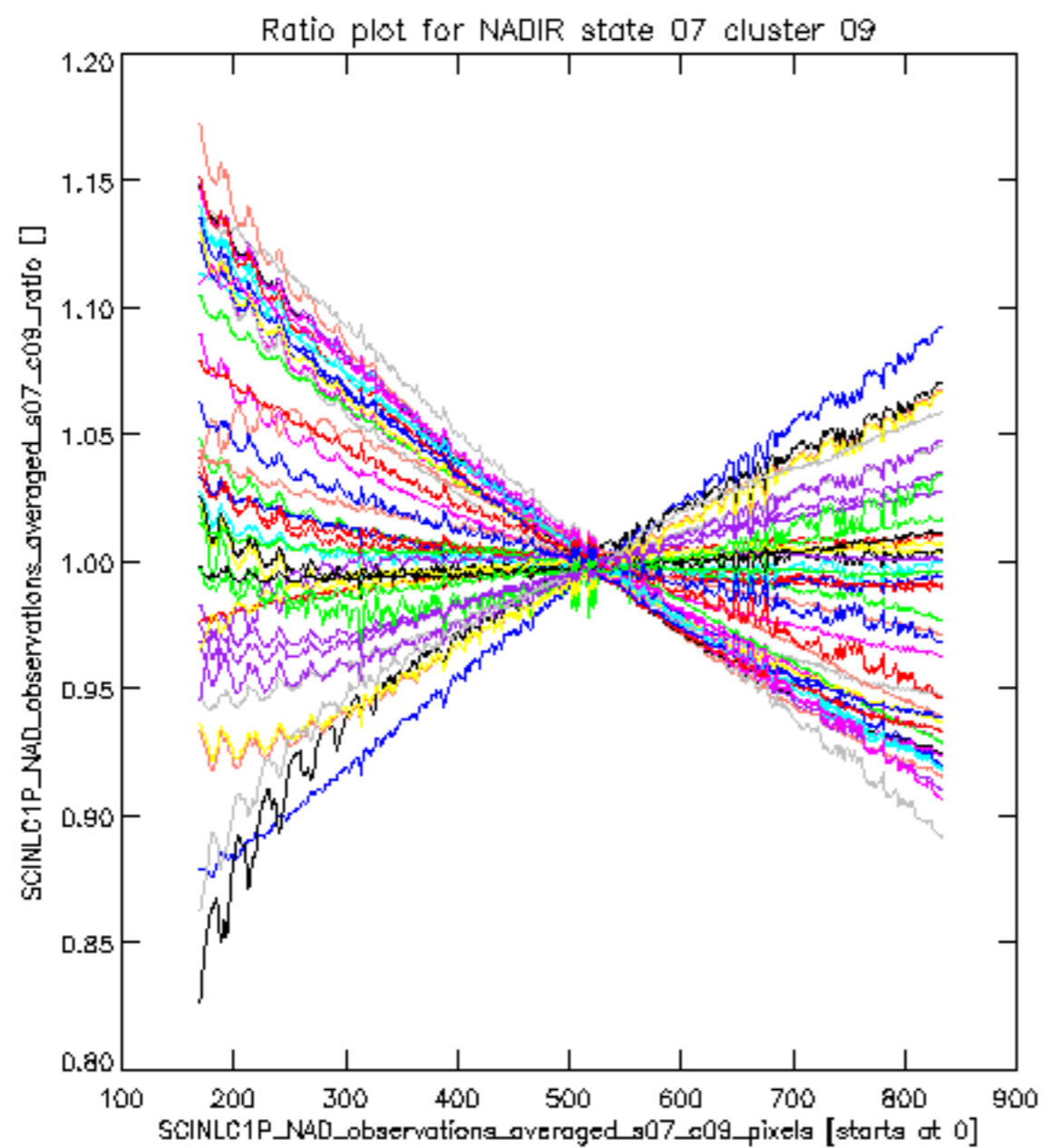
1.2.11 LIMB state 32 cluster 15 height ~35 km

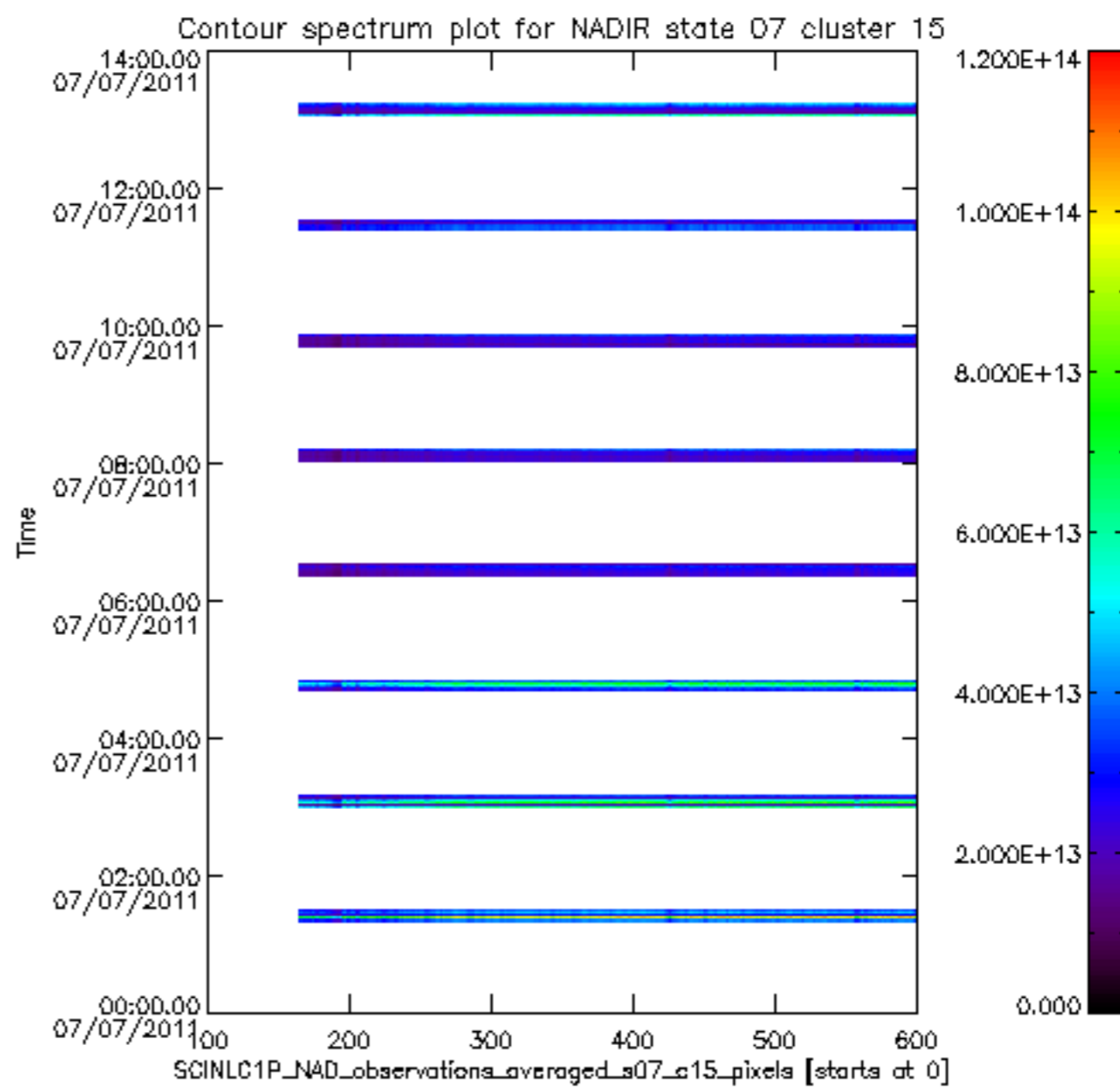
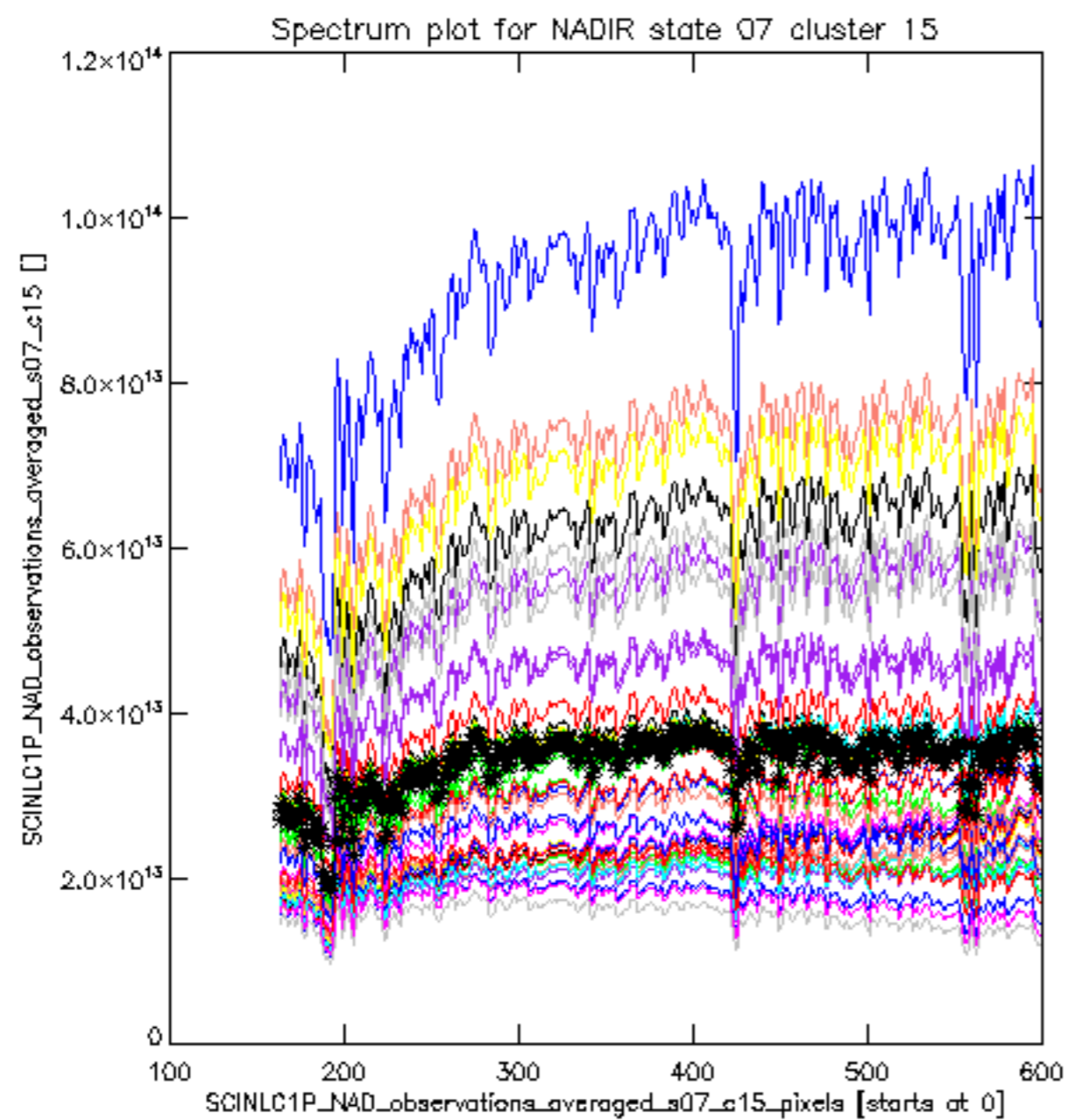


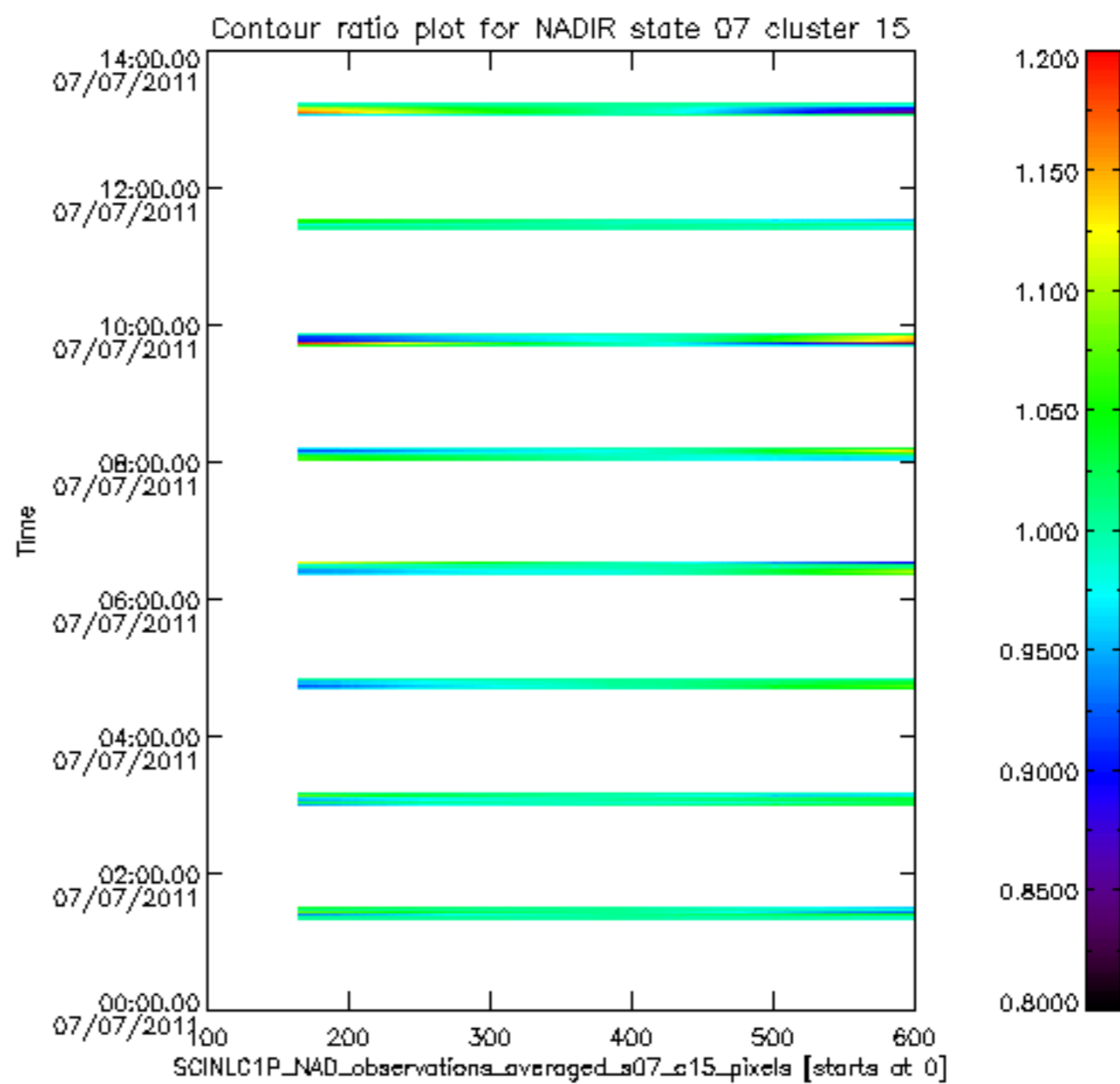
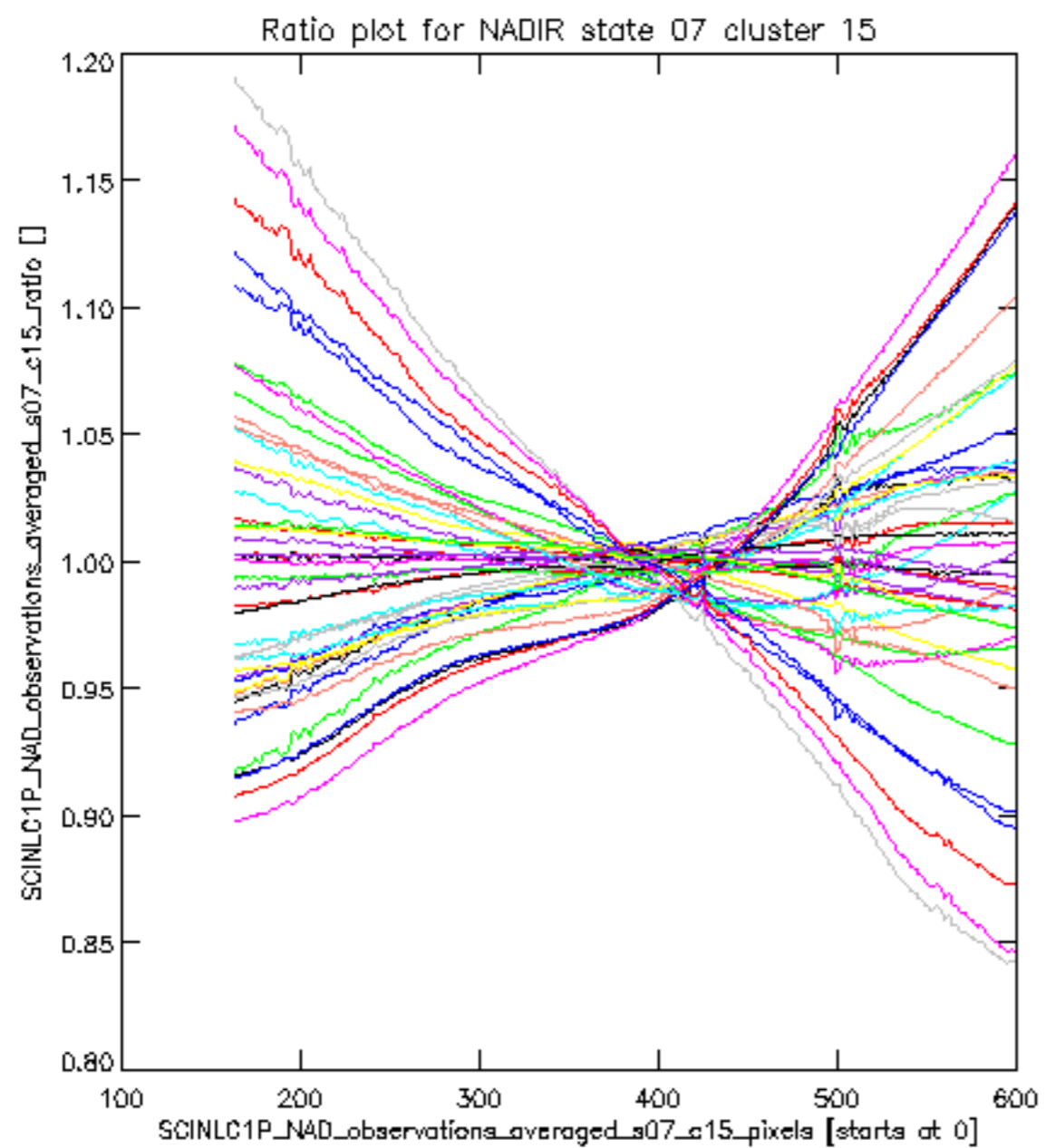


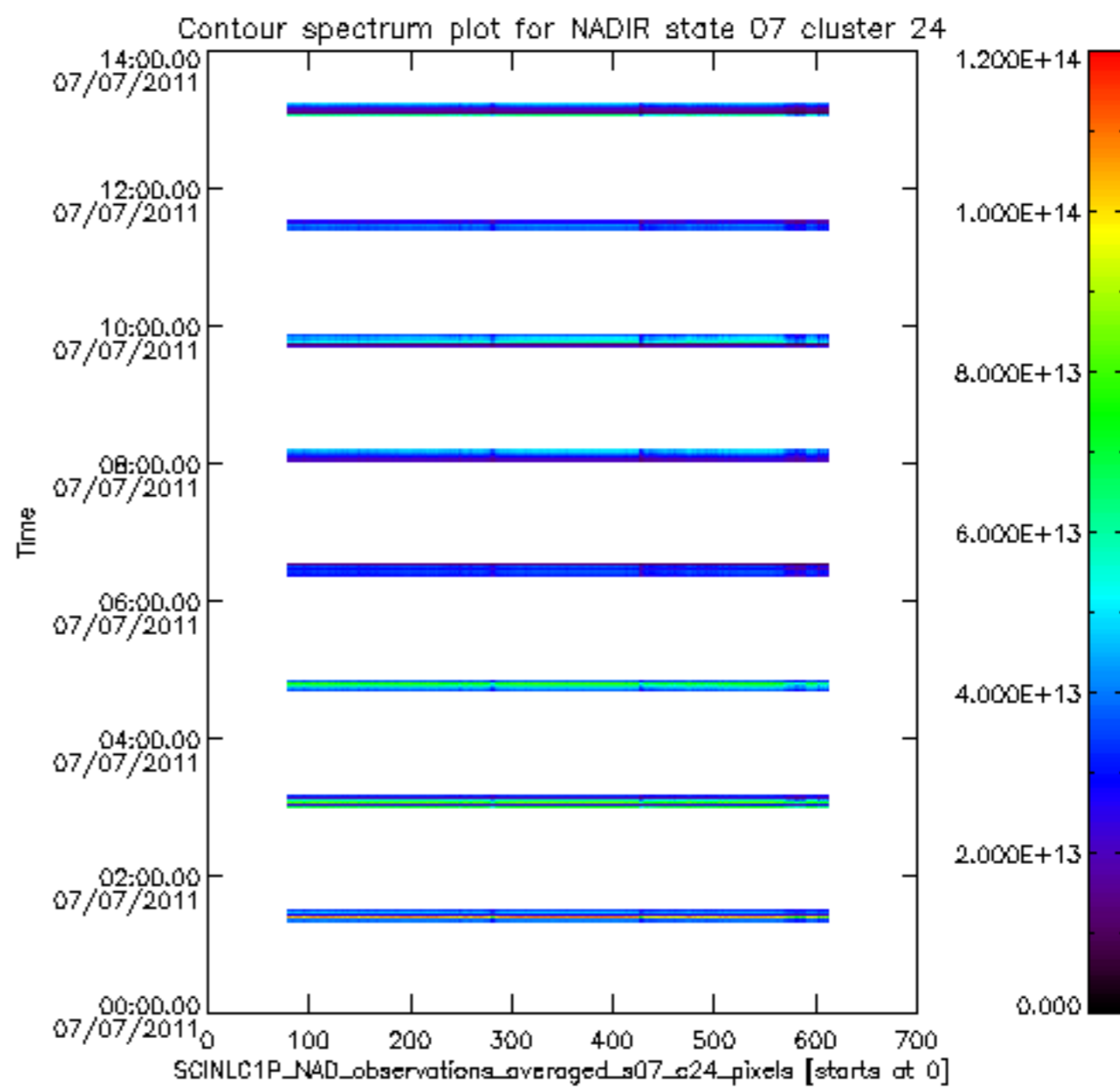
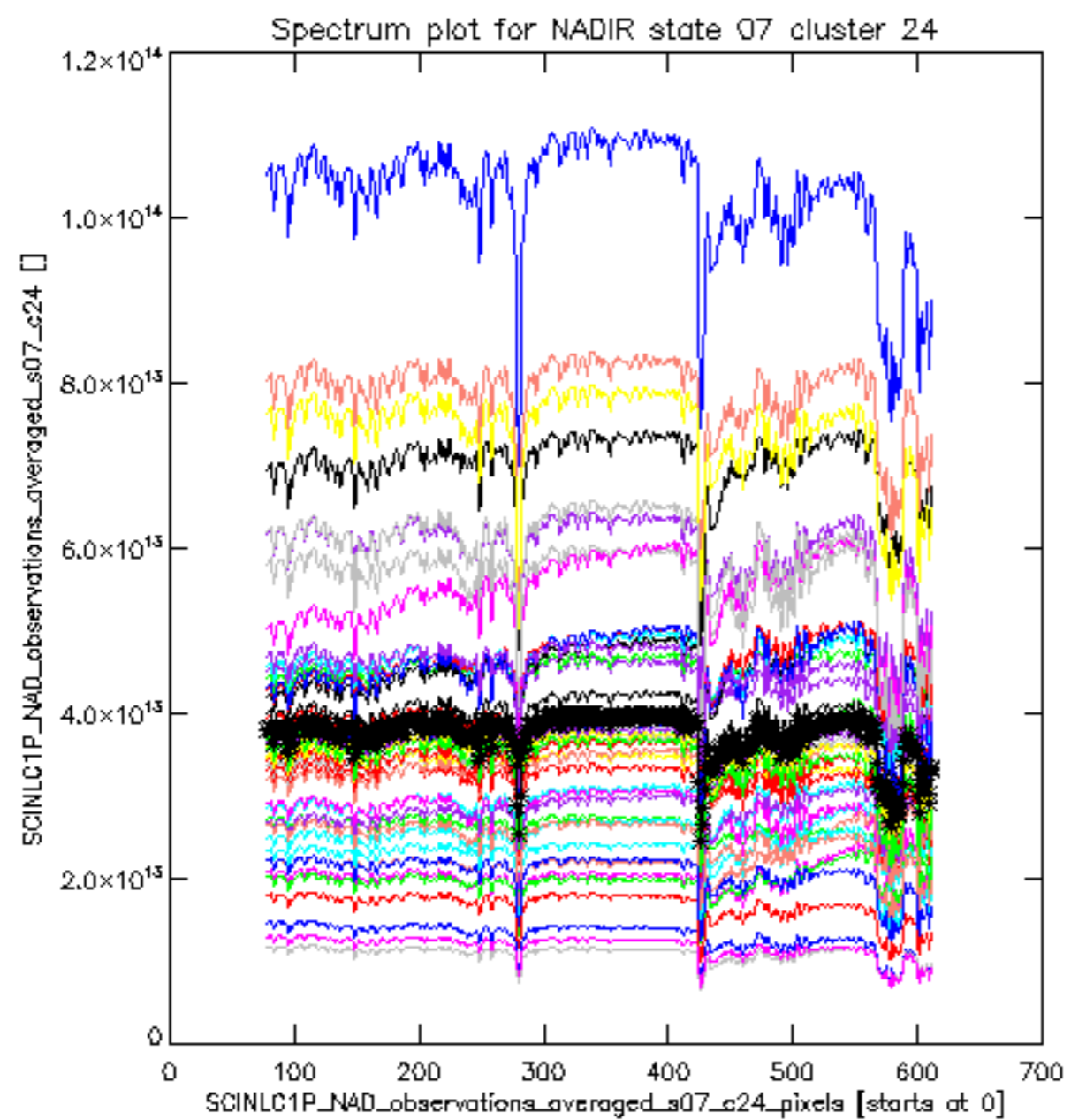


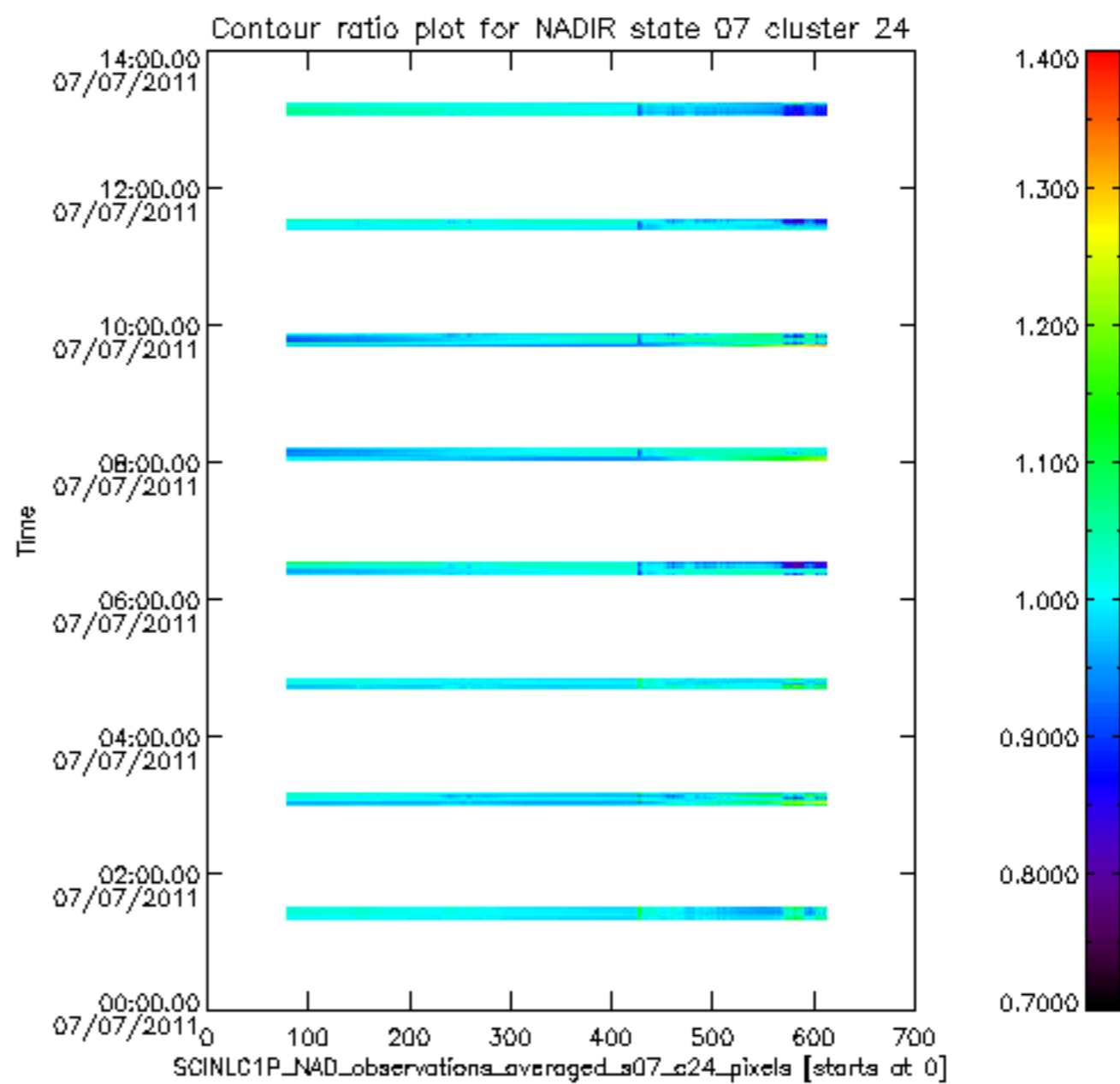
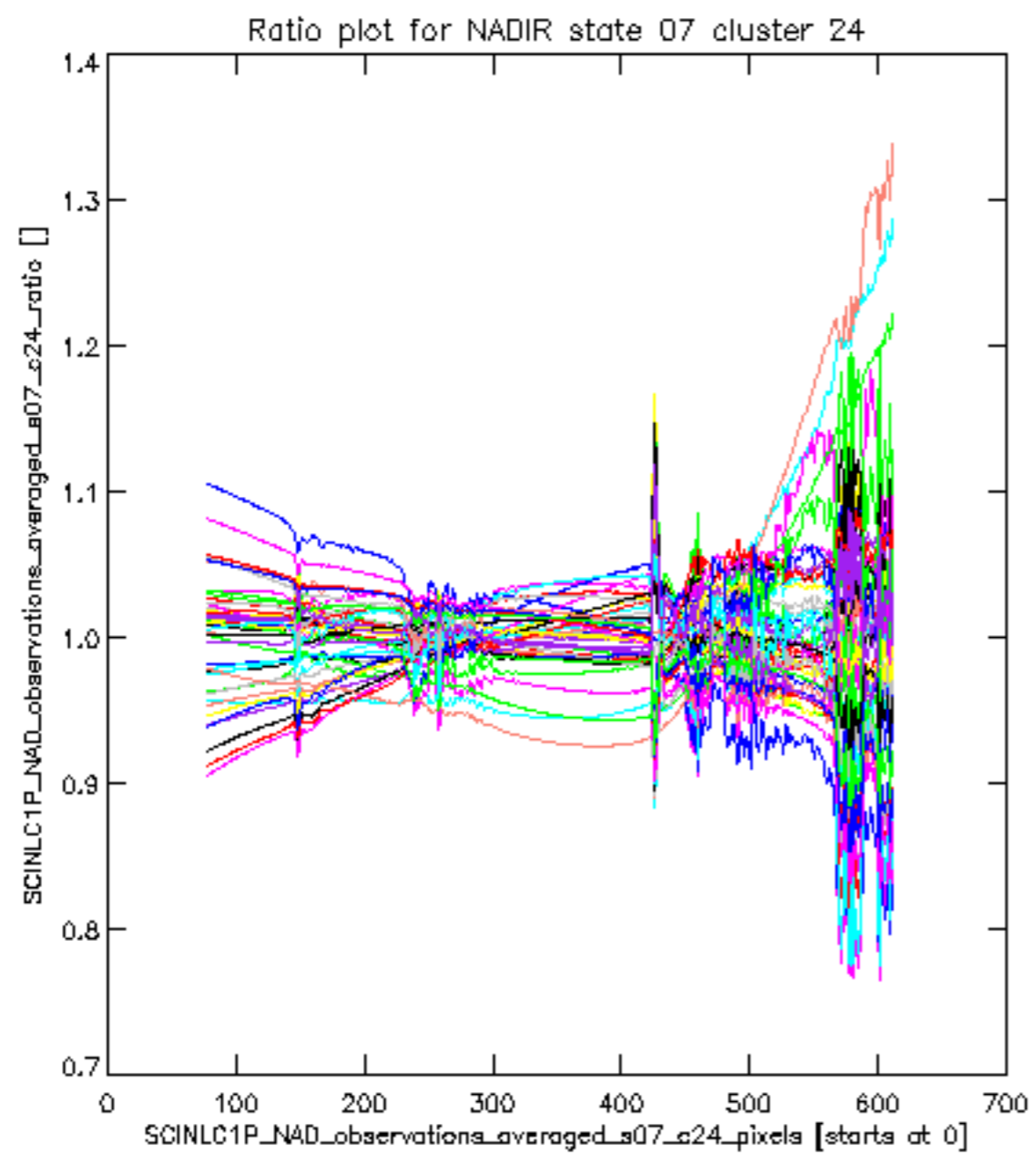




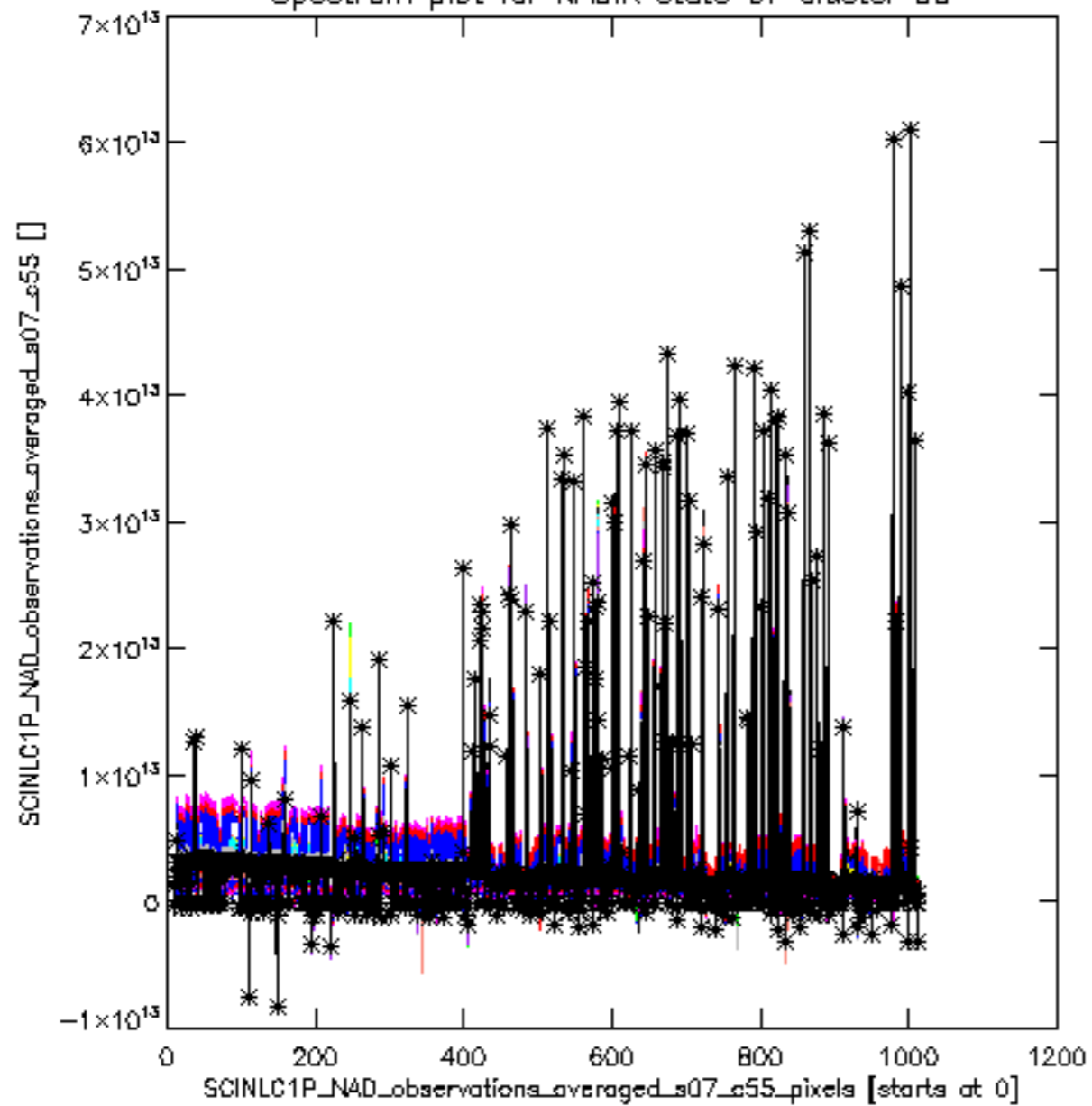








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

