

# 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	26JUL2011 10:27:50
Data source version	SCIA/7.04-U
Processing scope for products	13JUL2011 00:00:00 to 14JUL2011 00:00:00
Start time of first product within scope	13JUL2011 00:27:54
Stop time of last product within scope	13JUL2011 23:22:03
Total number of level 1 products	14
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	13JUL2011 00:59:57.079	13JUL2011 22:53:14.500
1	NADIR	07	09	N/A	13JUL2011 00:59:57.079	13JUL2011 22:53:14.500
2	NADIR	07	15	N/A	13JUL2011 00:59:57.079	13JUL2011 22:53:14.500
3	NADIR	07	24	N/A	13JUL2011 00:59:57.079	13JUL2011 22:53:14.500
4	NADIR	07	55	N/A	13JUL2011 00:59:57.079	13JUL2011 22:53:14.500
5	LIMB	32	09	~19 km	13JUL2011 00:46:46.443	13JUL2011 22:56:25.797
6	LIMB	32	09	~22 km	13JUL2011 00:46:46.443	13JUL2011 22:56:25.797
7	LIMB	32	09	~25 km	13JUL2011 00:46:46.443	13JUL2011 22:56:25.797
8	LIMB	32	15	~22 km	13JUL2011 00:46:46.443	13JUL2011 22:56:25.797
9	LIMB	32	15	~25 km	13JUL2011 00:46:46.443	13JUL2011 22:56:25.797
10	LIMB	32	15	~35 km	13JUL2011 00:46:46.443	13JUL2011 22:56:25.797

#### 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	#cpl_drk	#incpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110713_002754_000057543104_00261_48982_0015.N1</a>	13JUL2011 00:27:54	13JUL2011 01:38:14	0	33	30	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110713_020808_000057543104_00262_48983_0018.N1</a>	13JUL2011 02:08:08	13JUL2011 03:18:27	0	32	29	0	0	2	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110713_034822_000057553104_00263_48984_0020.N1</a>	13JUL2011 03:48:22	13JUL2011 04:58:40	0	32	30	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110713_052836_000057553104_00264_48985_0022.N1</a>	13JUL2011 05:28:36	13JUL2011 06:38:53	0	32	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110713_070851_000057553104_00265_48986_0024.N1</a>	13JUL2011 07:08:51	13JUL2011 08:19:05	0	32	30	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110713_084905_000057553104_00266_48987_0026.N1</a>	13JUL2011 08:49:05	13JUL2011 09:59:18	0	32	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110713_102919_000057553104_00267_48988_0027.N1	13JUL2011 10:29:19	13JUL2011 11:39:30	0	32	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110713_120933_000057553104_00268_48989_0030.N1	13JUL2011 12:09:33	13JUL2011 13:19:42	0	32	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110713_134947_000057553104_00269_48990_0032.N1	13JUL2011 13:49:47	13JUL2011 14:59:55	0	32	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110713_153001_000057553104_00270_48991_0034.N1	13JUL2011 15:30:01	13JUL2011 16:40:07	0	32	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110713_171015_000057553104_00271_48992_0036.N1	13JUL2011 17:10:15	13JUL2011 18:19:21	0	32	30	0	1	1	0	0	
11	SCI_NLC_1CUDPA20110713_185029_000057553104_00272_48993_0037.N1	13JUL2011 18:50:29	13JUL2011 20:00:31	0	32	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110713_203044_000057553104_00273_48994_0040.N1	13JUL2011 20:30:44	13JUL2011 21:40:43	0	32	30	0	0	1	0	0	
13	SCI_NLC_1CUDPA20110713_221058_000057553104_00274_48995_0041.N1	13JUL2011 22:10:58	13JUL2011 23:22:03	0	33	30	0	0	1	0	0	

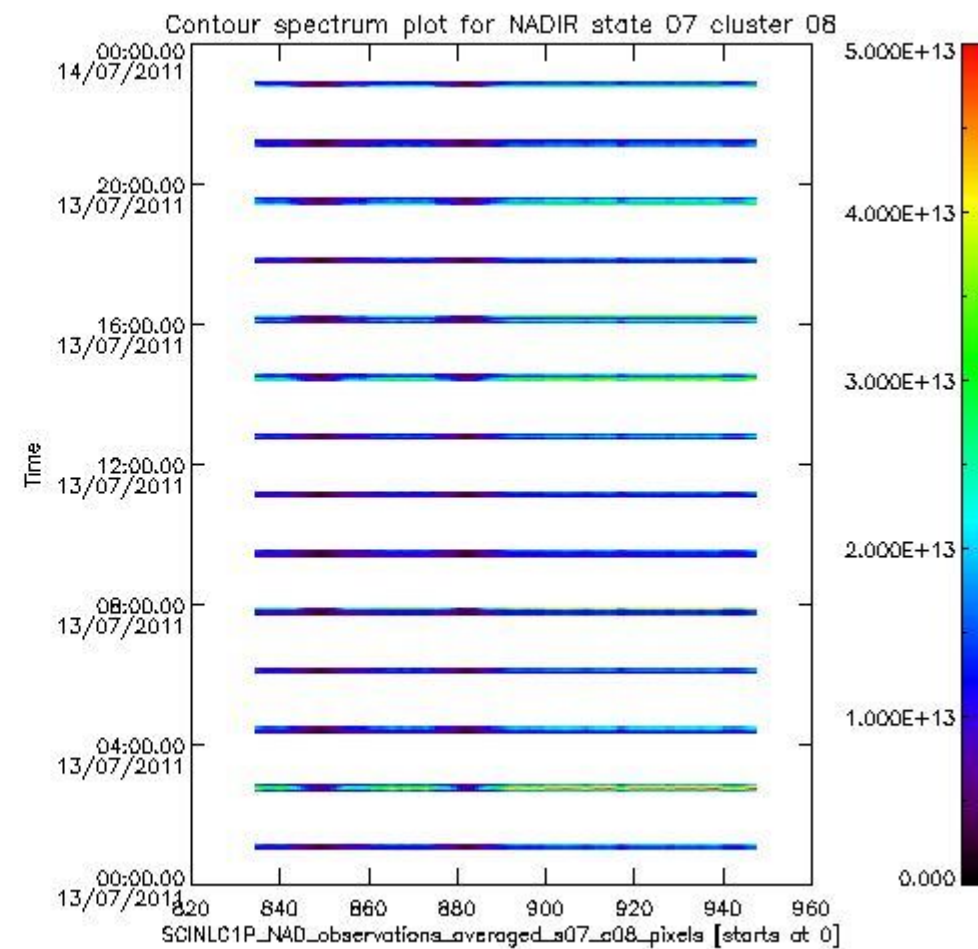
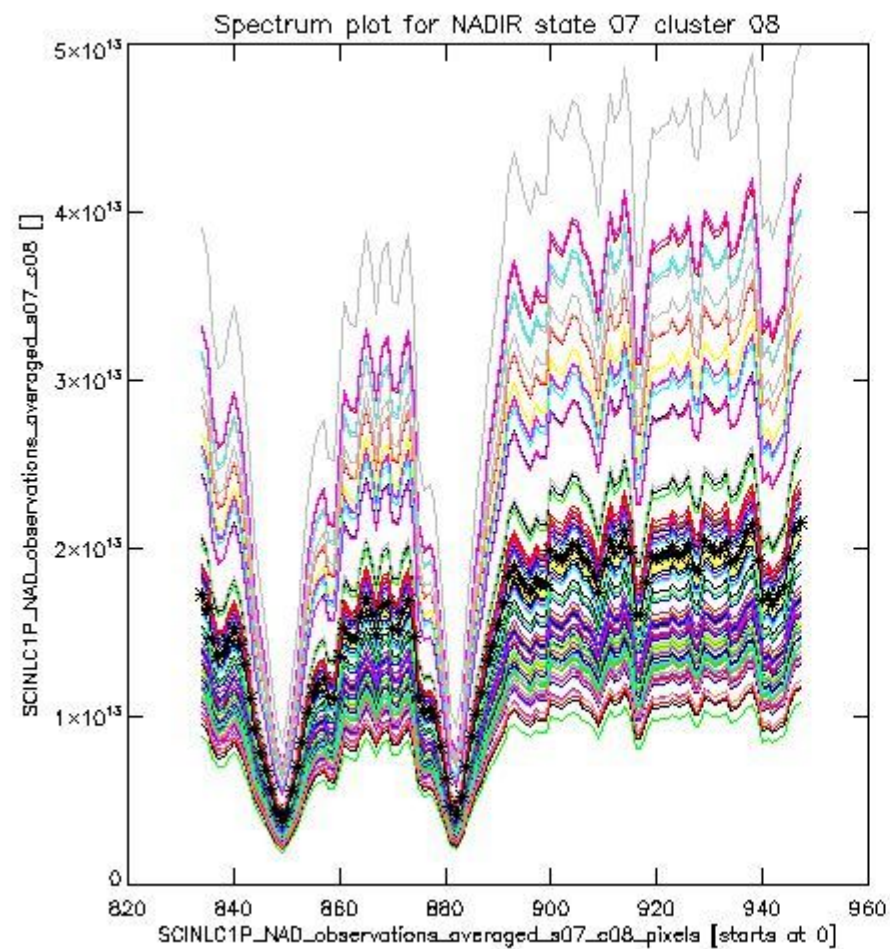
## 1.2 Source packet monitoring

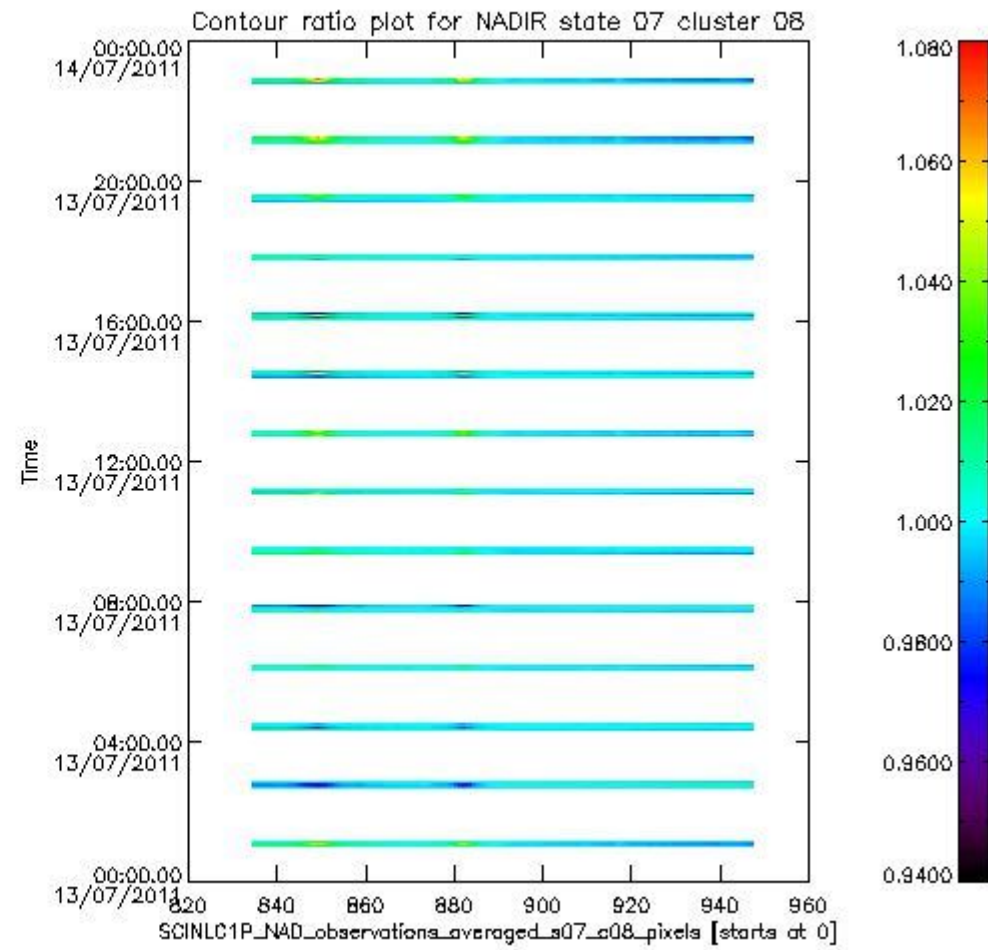
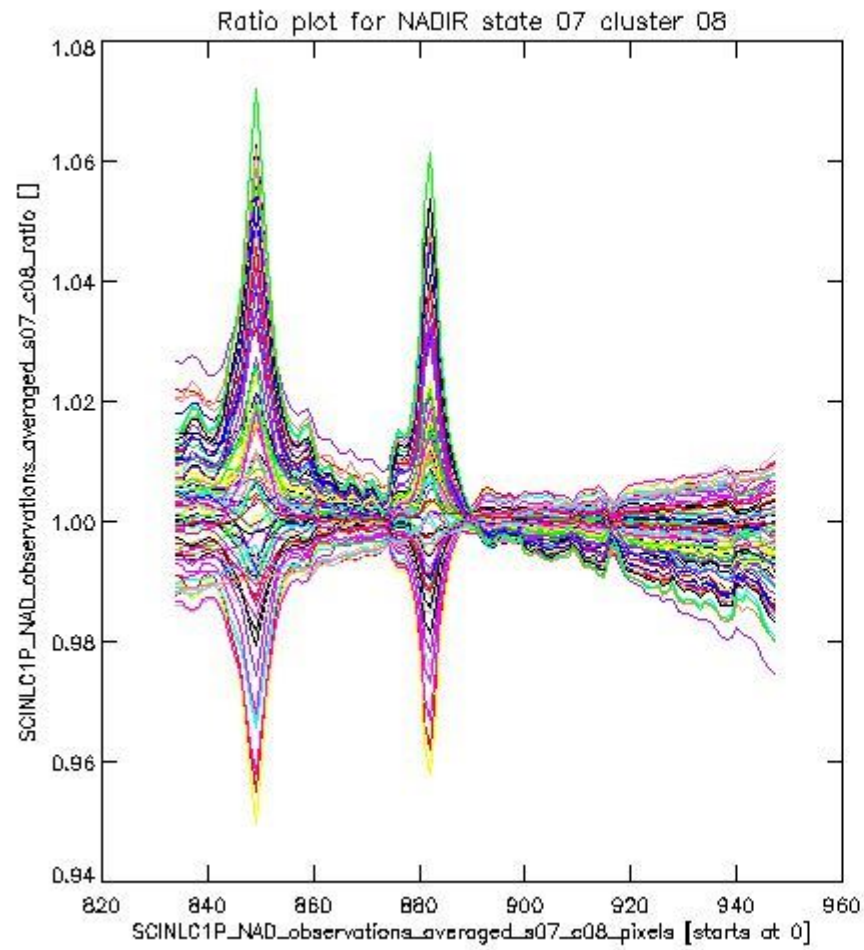
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	13JUL2011 00:59:57.079
Start time of last sample	13JUL2011 22:53:14.500
Reference period start time	13JUN2011 00:59:23.027
Reference period stop time	12JUL2011 20:09:38.644
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

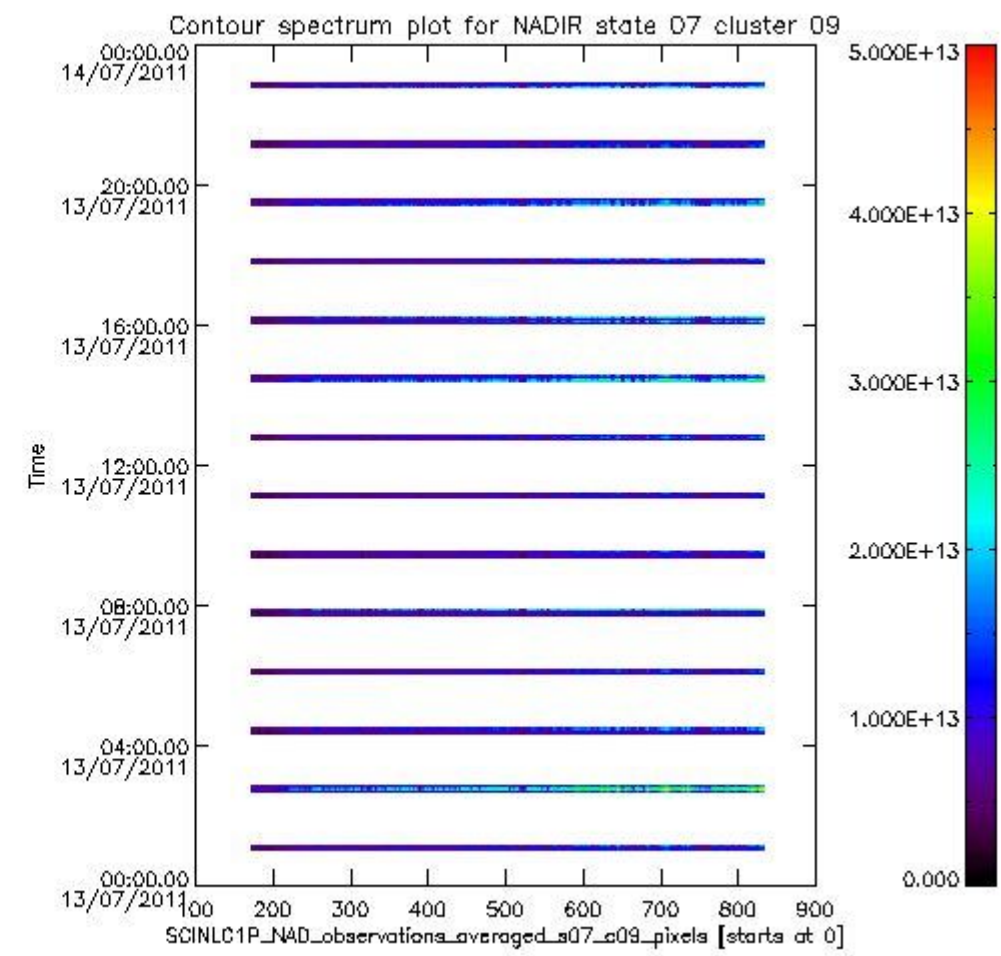
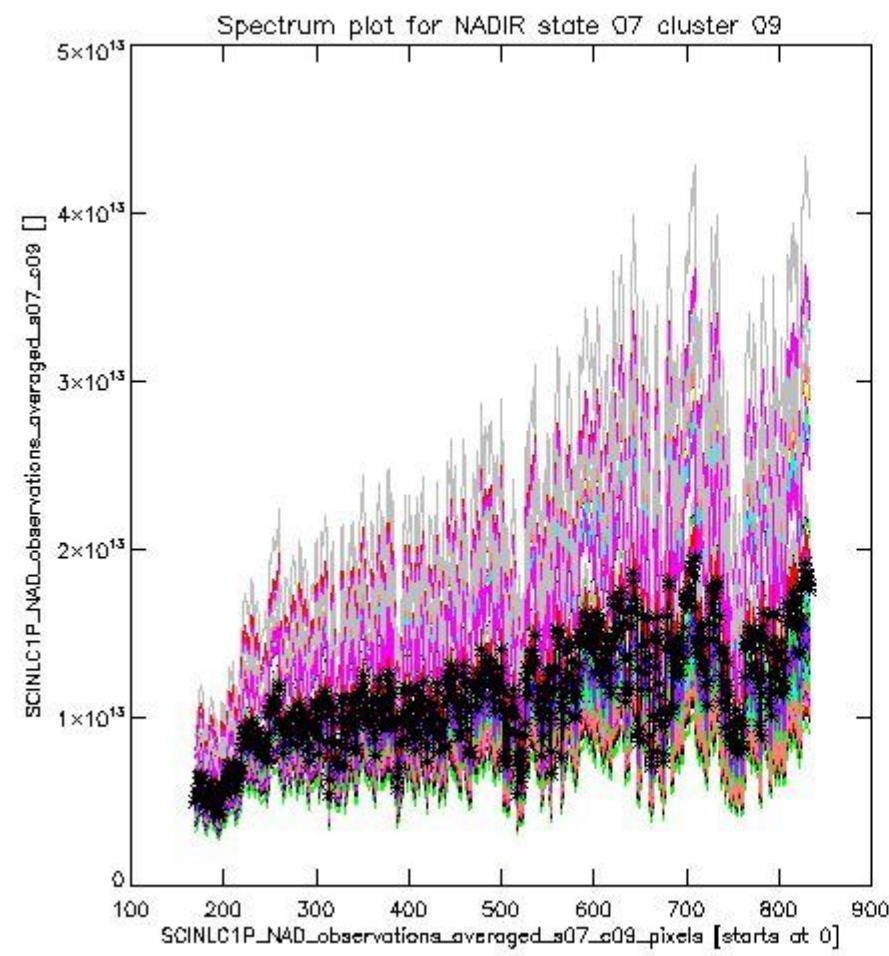




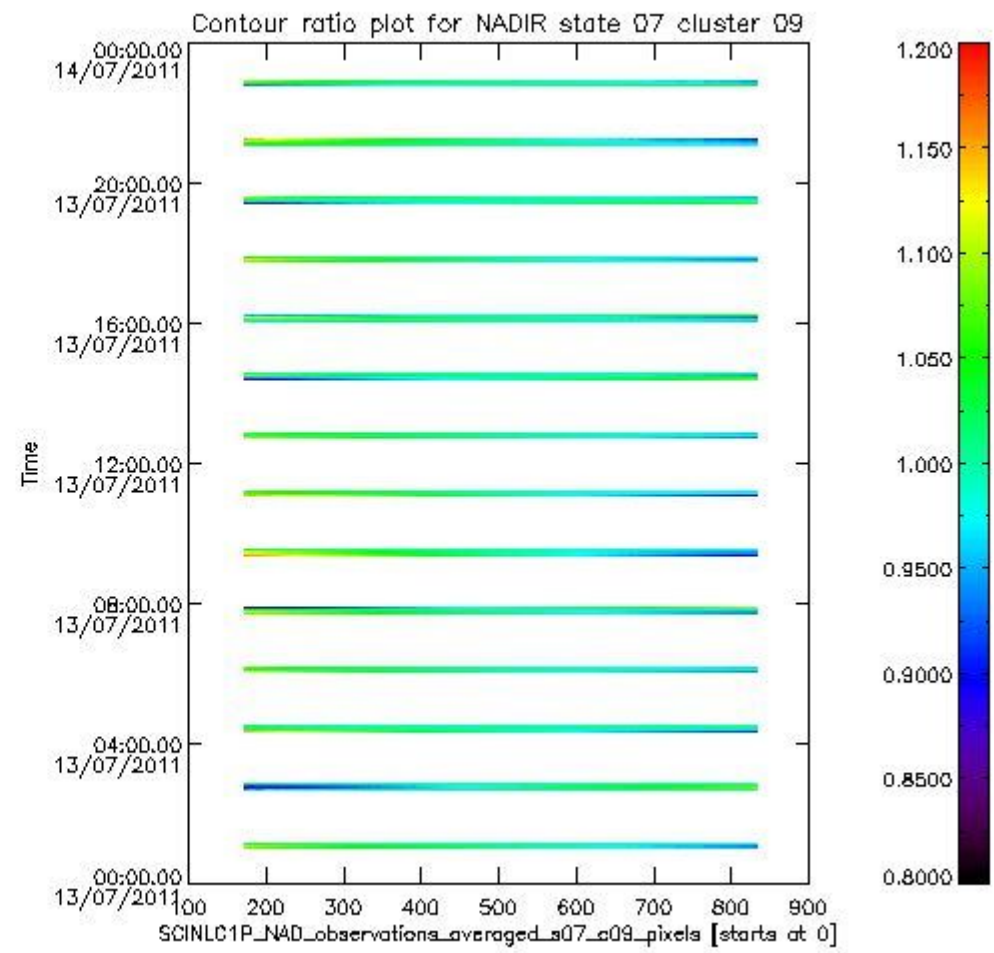
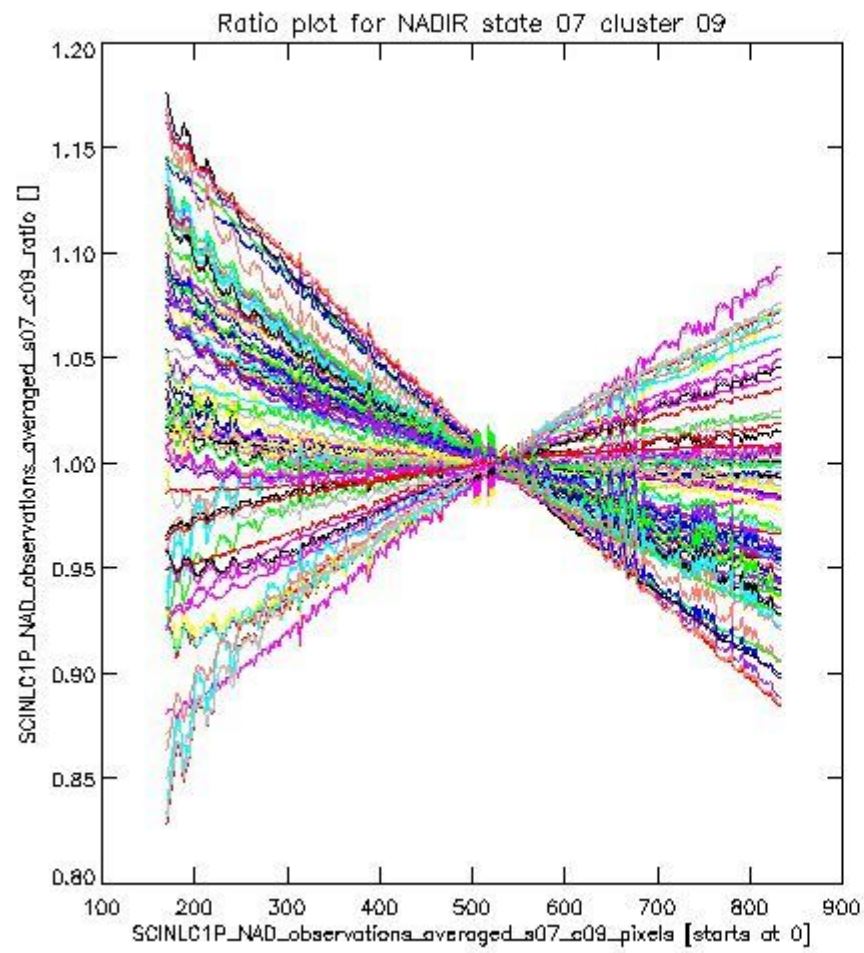
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	13JUL2011 00:59:57.079
Start time of last sample	13JUL2011 22:53:14.500
Reference period start time	13JUN2011 00:59:23.027
Reference period stop time	12JUL2011 20:09:38.644
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





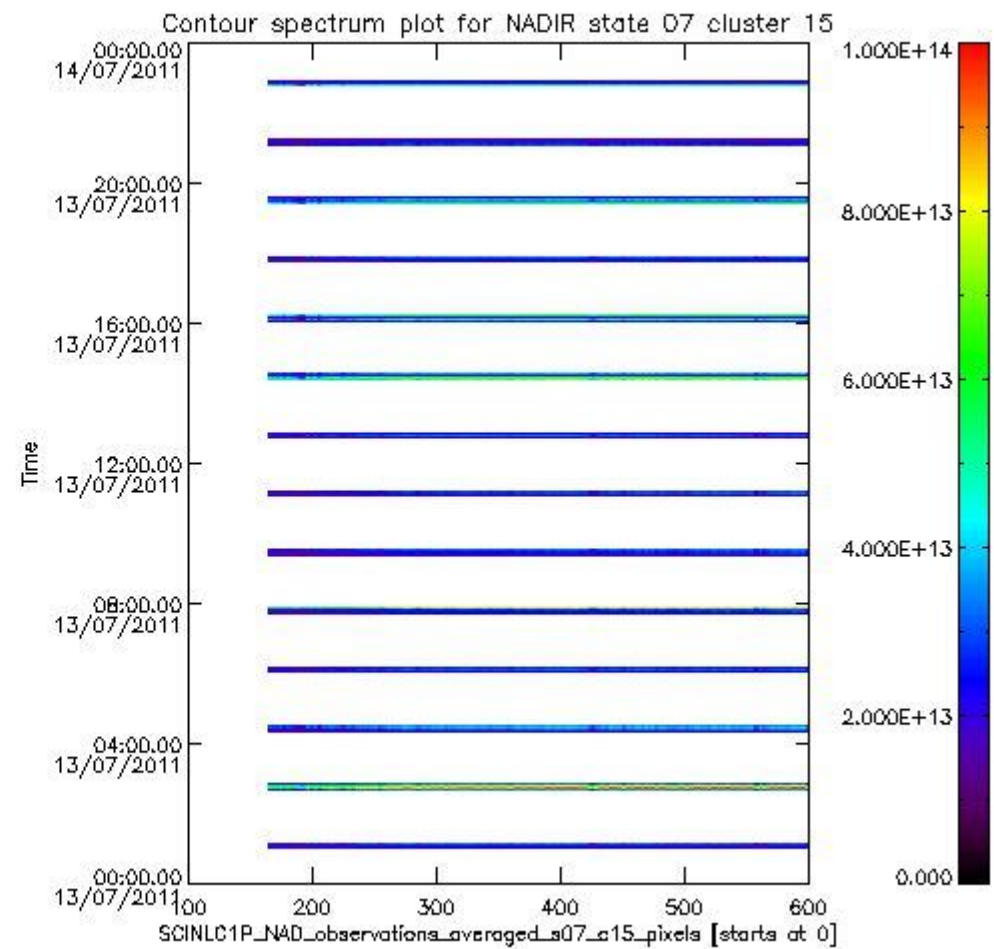
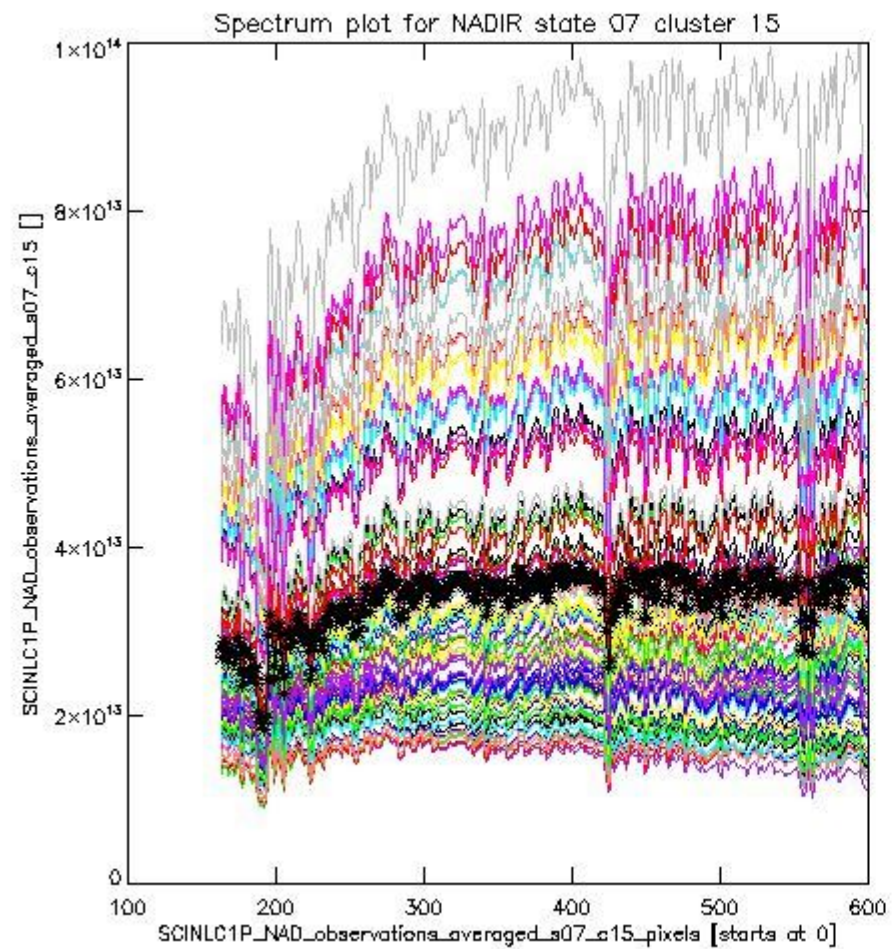
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_3.PNG

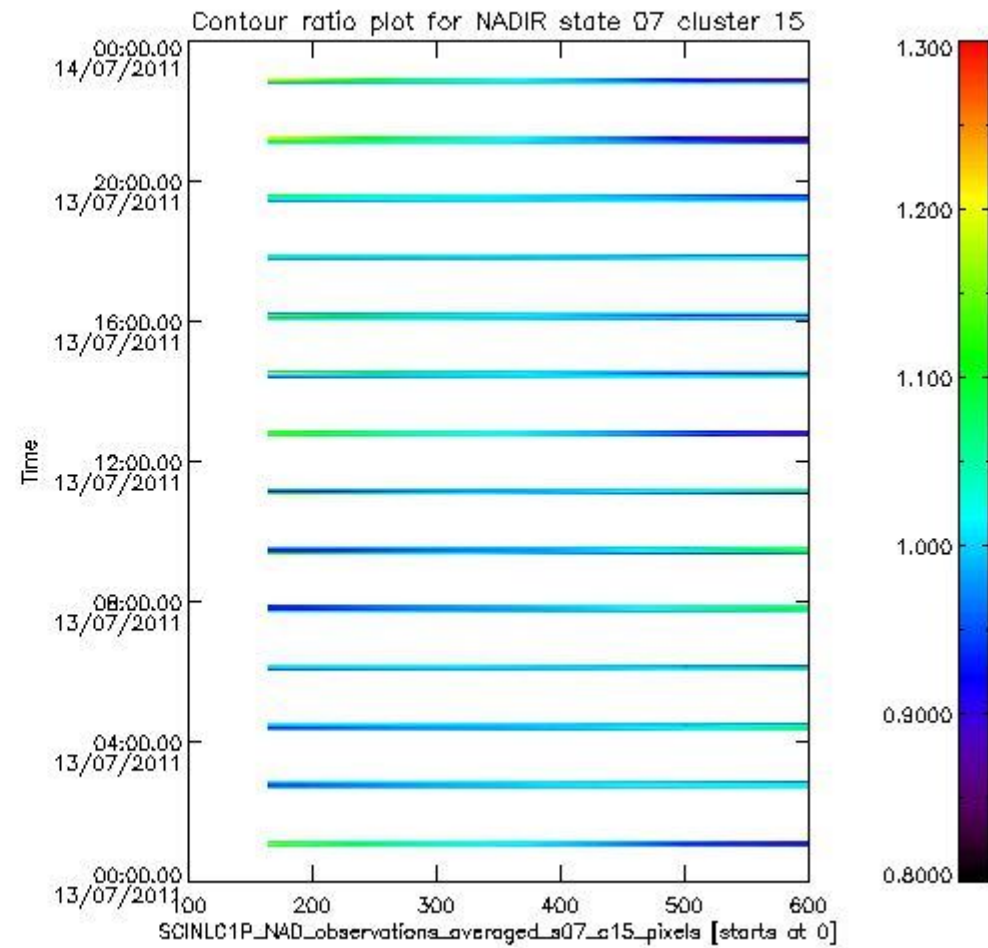
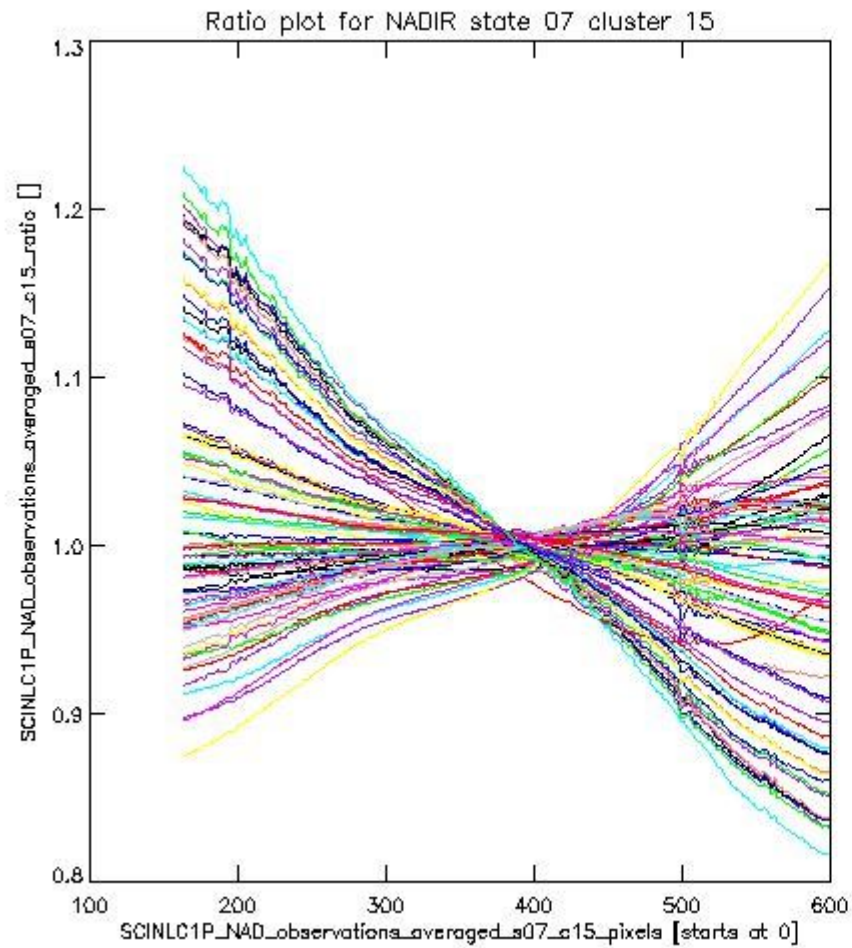
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	13JUL2011 00:59:57.079
Start time of last sample	13JUL2011 22:53:14.500
Reference period start time	13JUN2011 00:59:23.027
Reference period stop time	12JUL2011 20:09:38.644
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\_20110713\_4.PNG

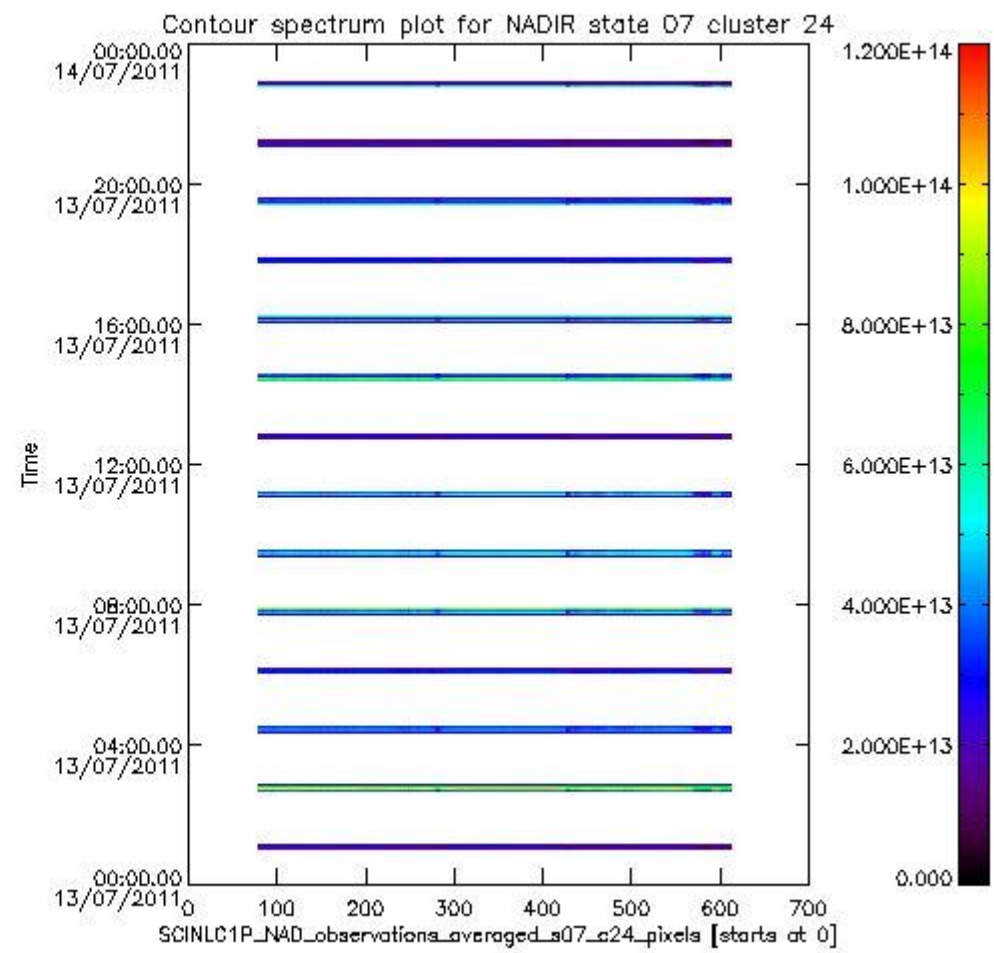
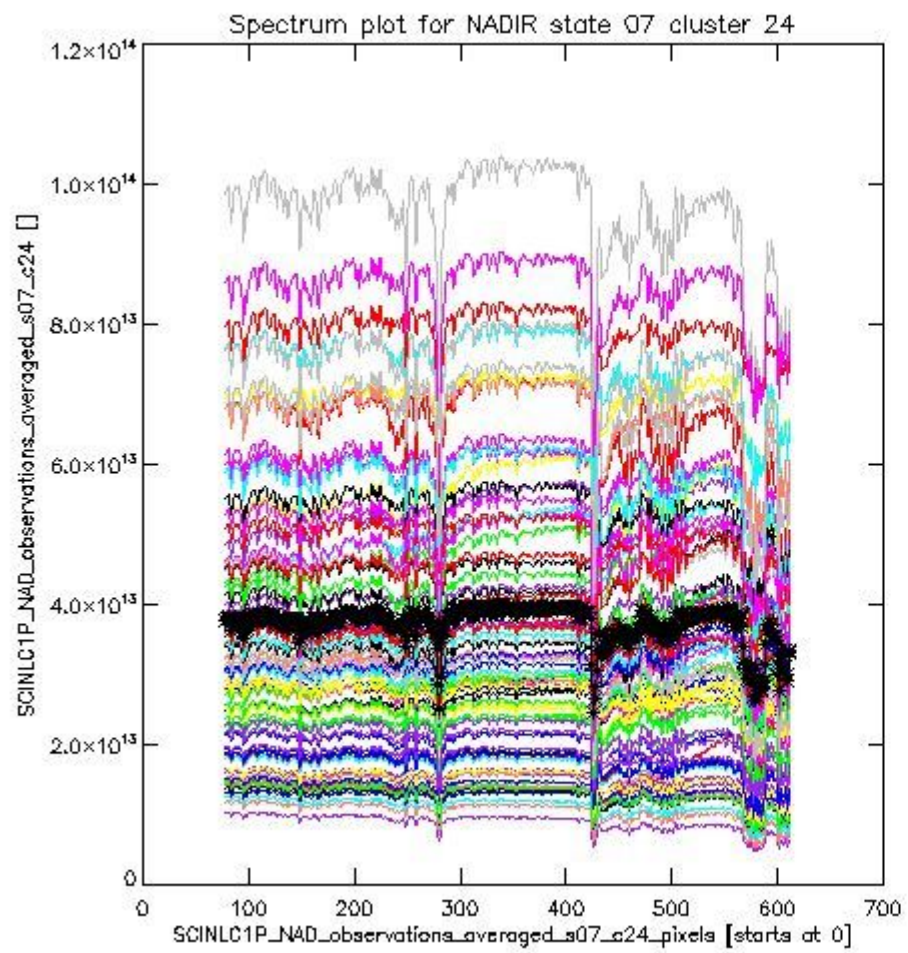




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_5.PNG

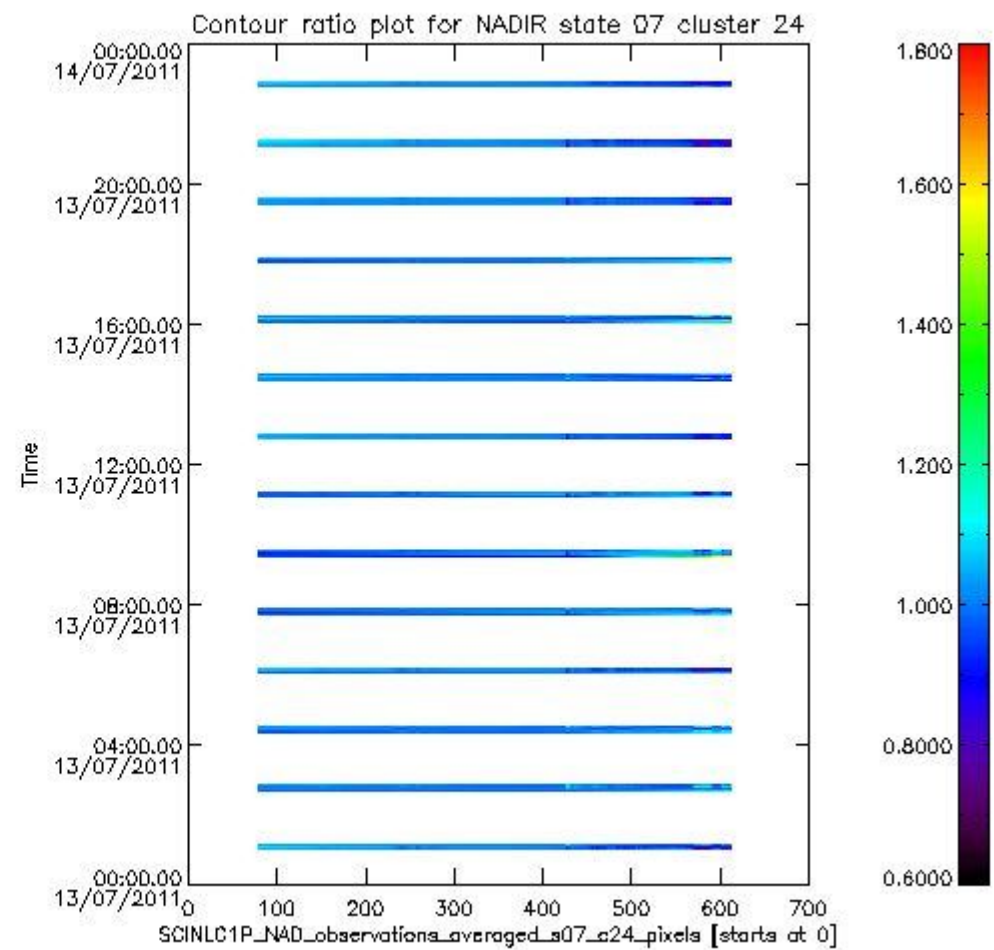
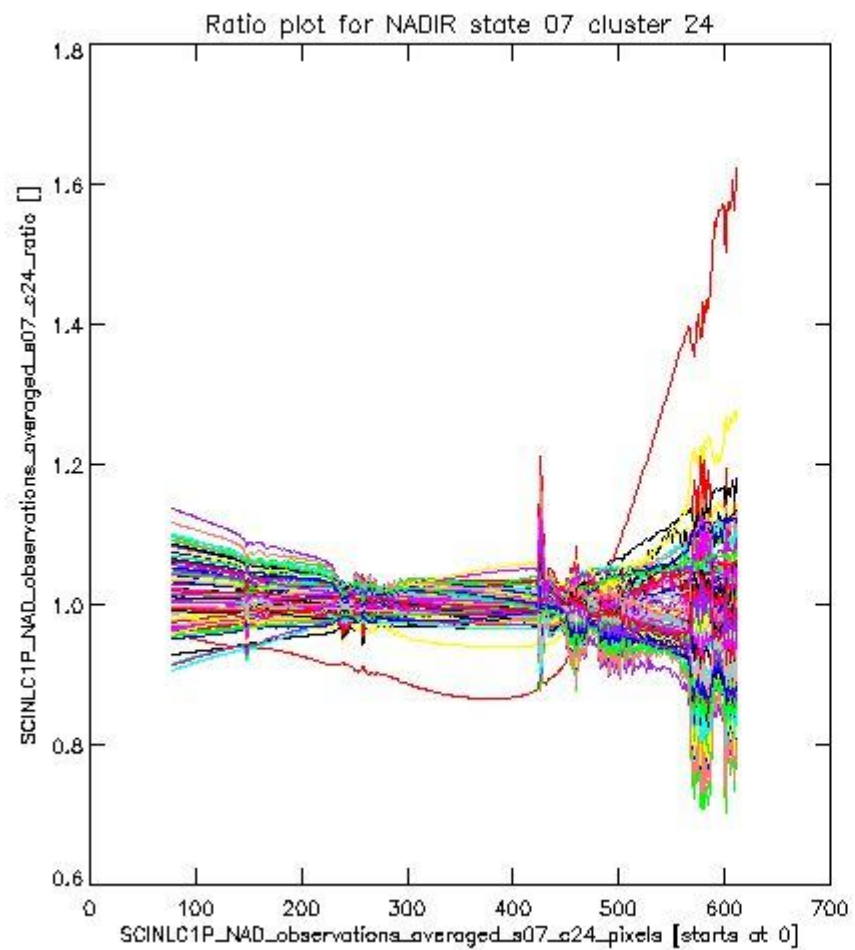
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	13JUL2011 00:59:57.079
Start time of last sample	13JUL2011 22:53:14.500
Reference period start time	13JUN2011 00:59:23.027
Reference period stop time	12JUL2011 20:09:38.644
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\_20110713\_6.PNG

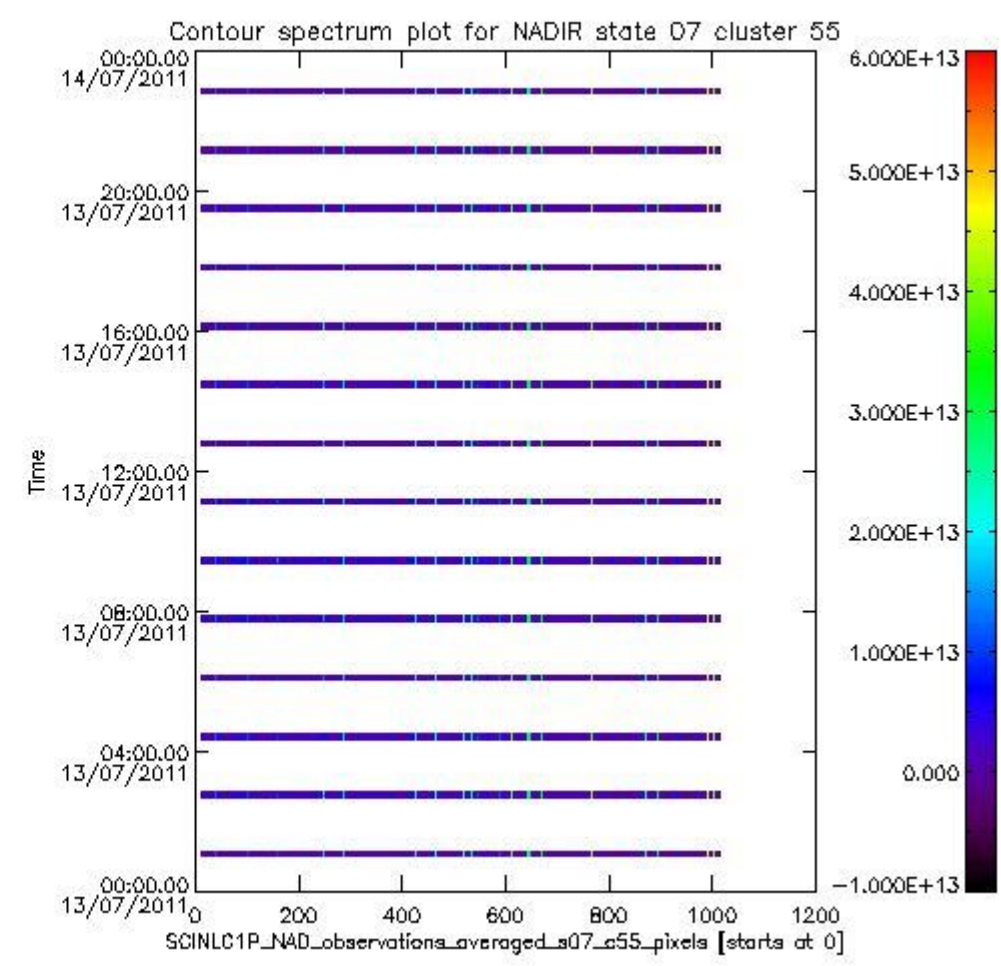
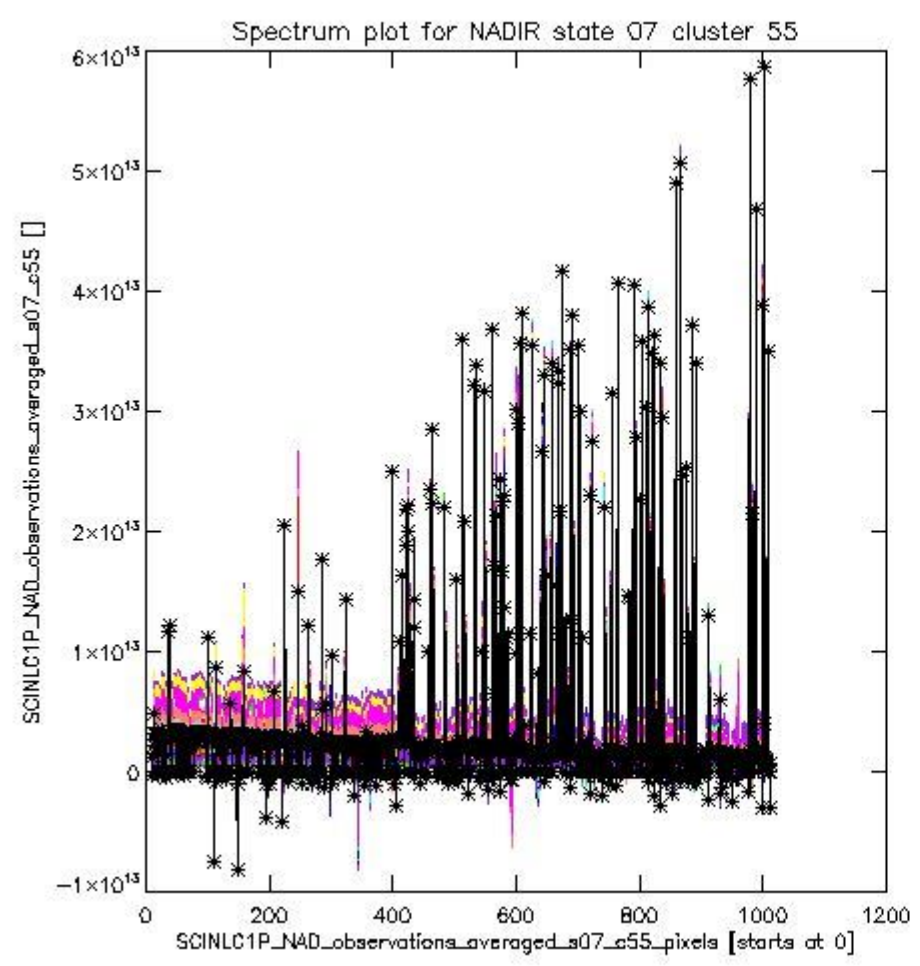




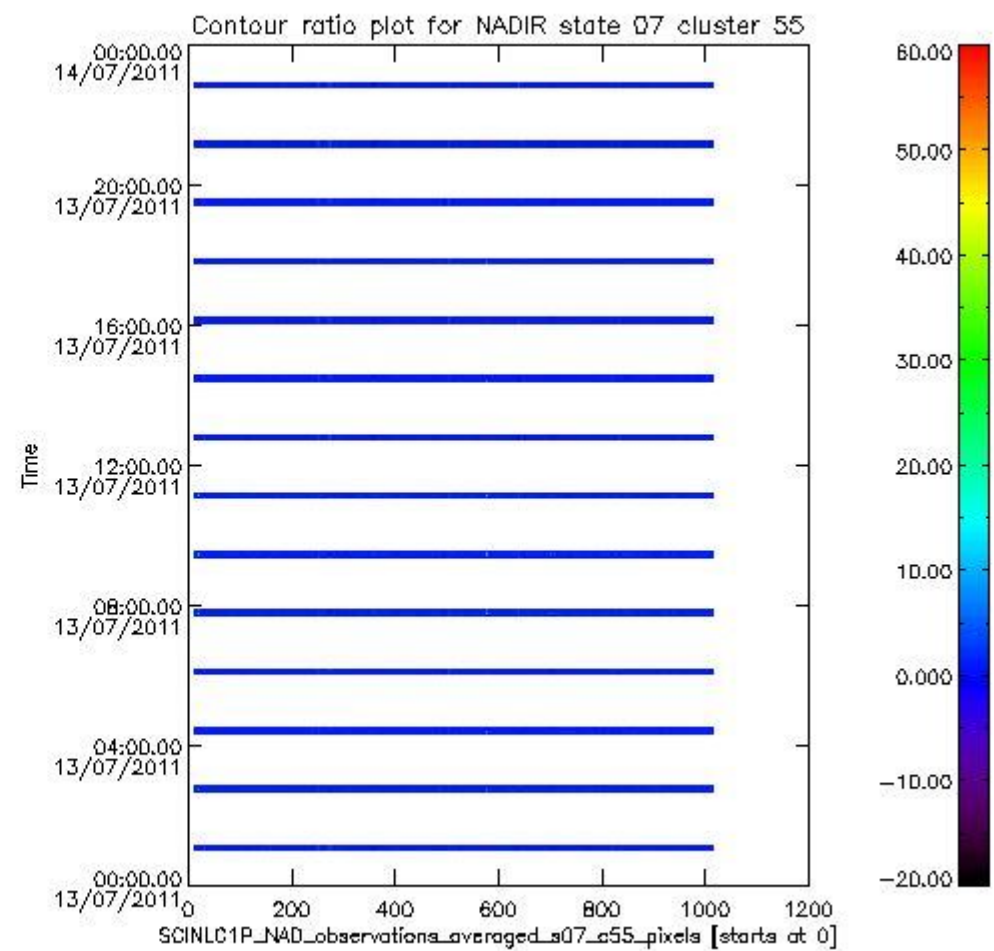
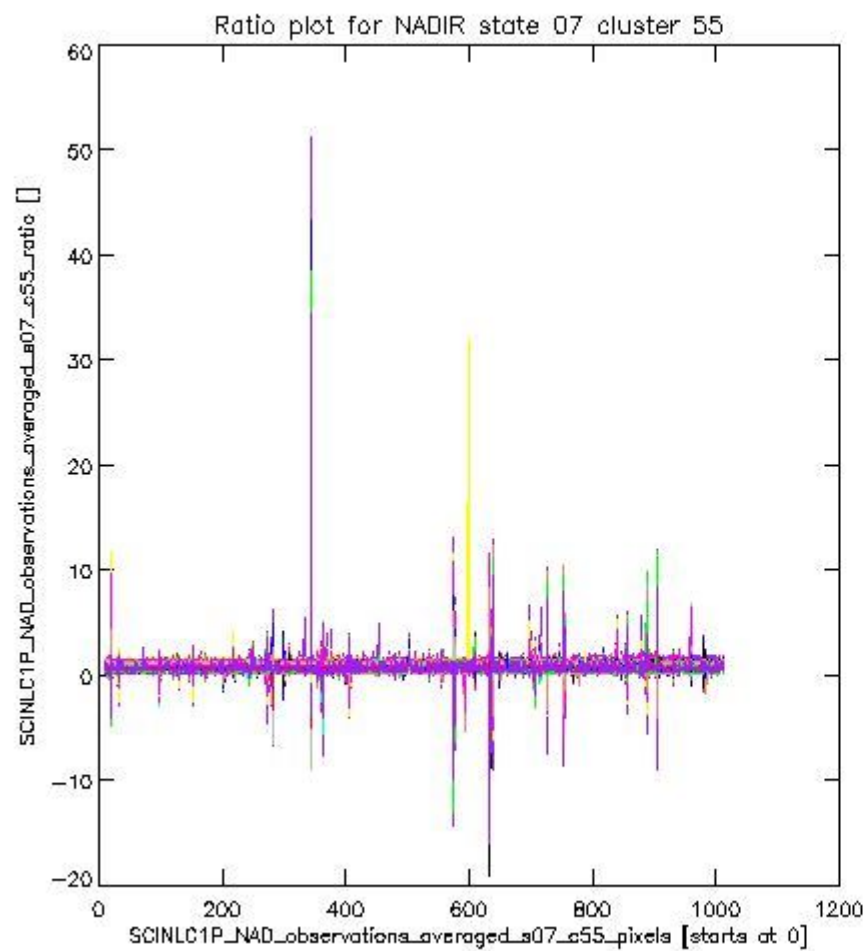
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_7.PNG

**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	13JUL2011 00:59:57.079
Start time of last sample	13JUL2011 22:53:14.500
Reference period start time	13JUN2011 00:59:23.027
Reference period stop time	12JUL2011 20:07:35.901
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\_20110713\_8.PNG

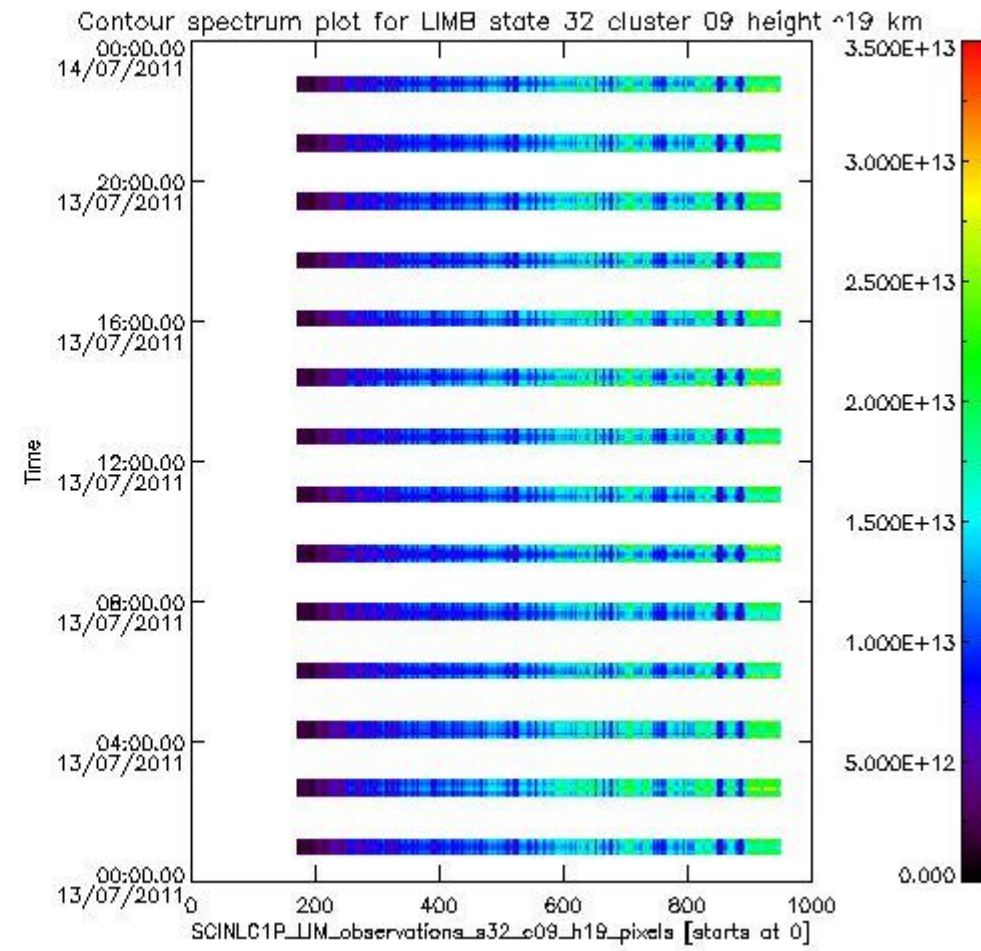
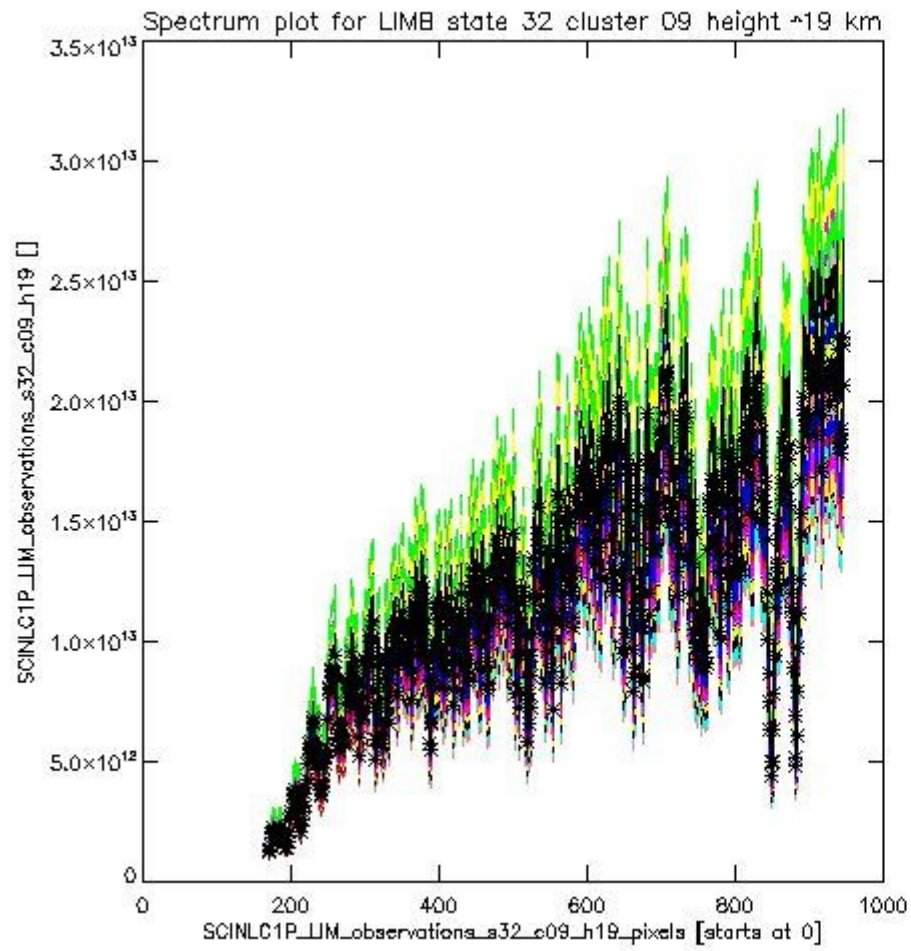


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_9.PNG

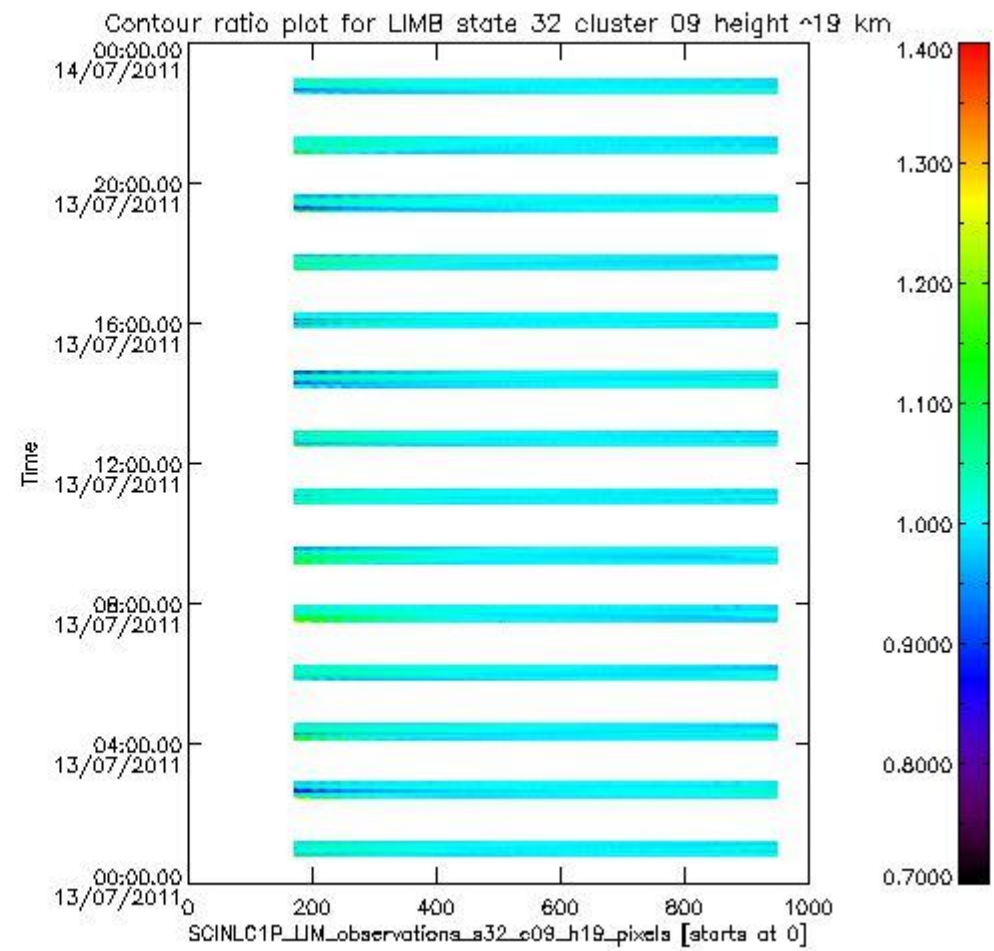
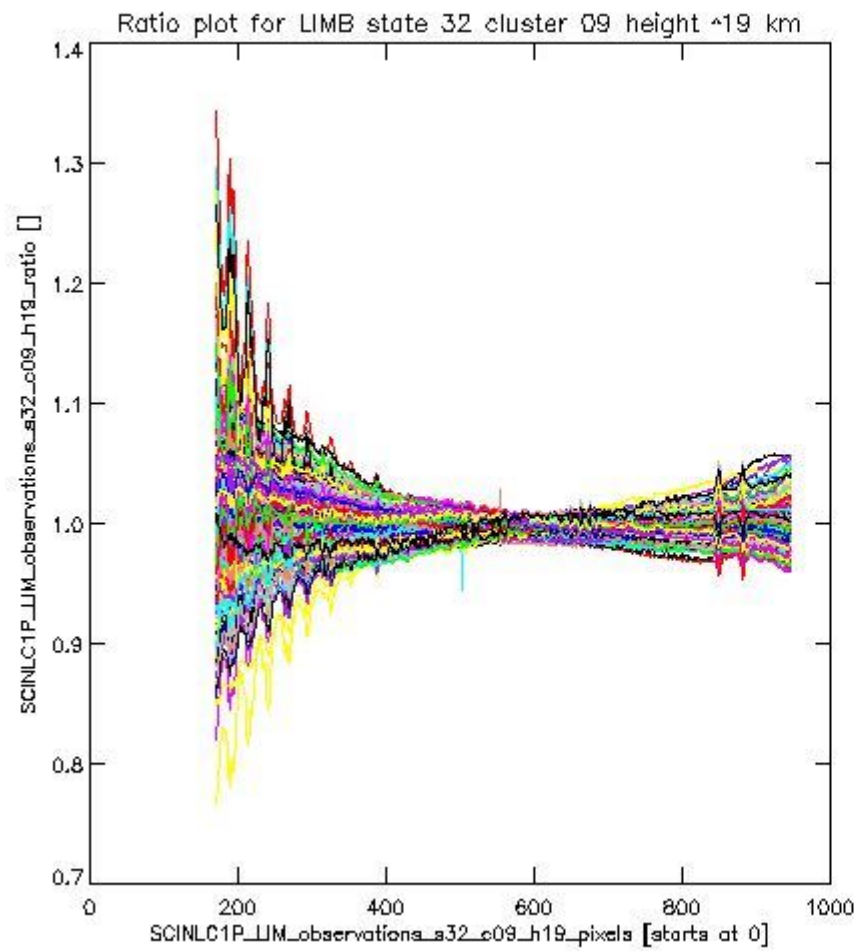
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	13JUL2011 00:46:46.443
Start time of last sample	13JUL2011 22:56:25.797
Reference period start time	13JUN2011 00:46:12.386
Reference period stop time	12JUL2011 20:12:49.944
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





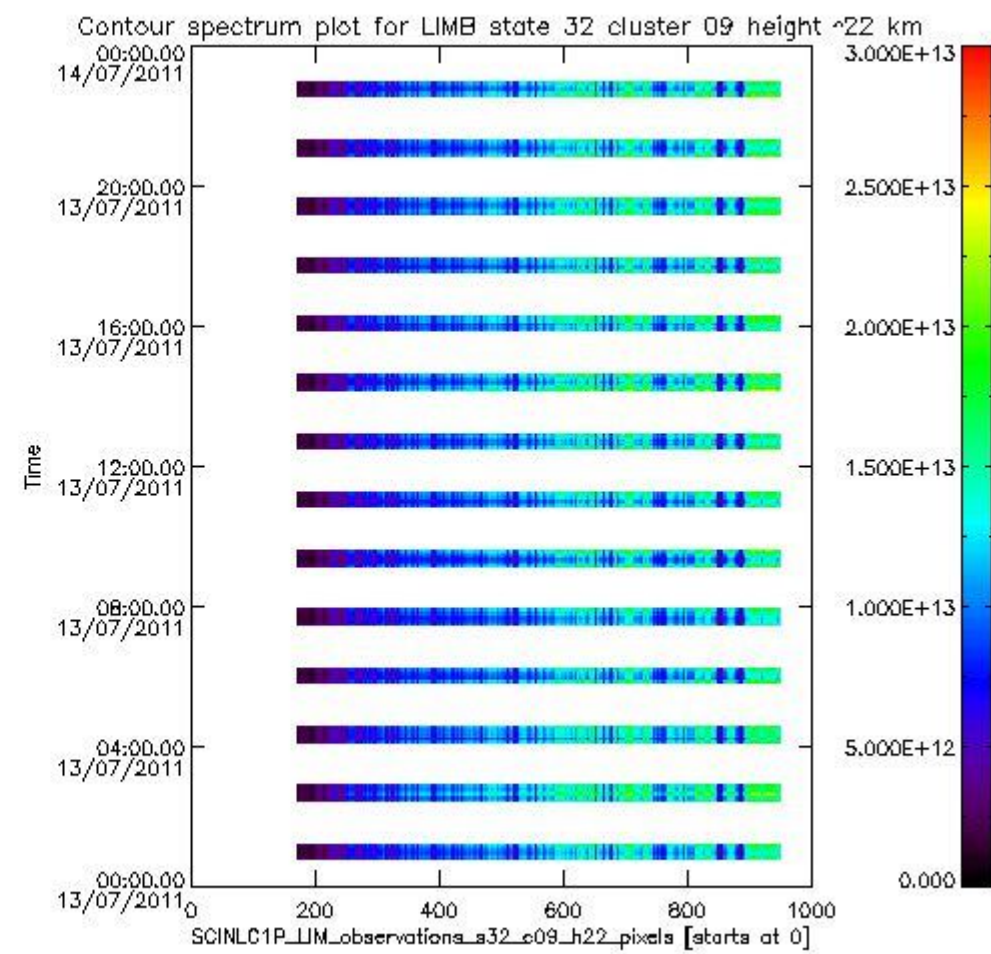
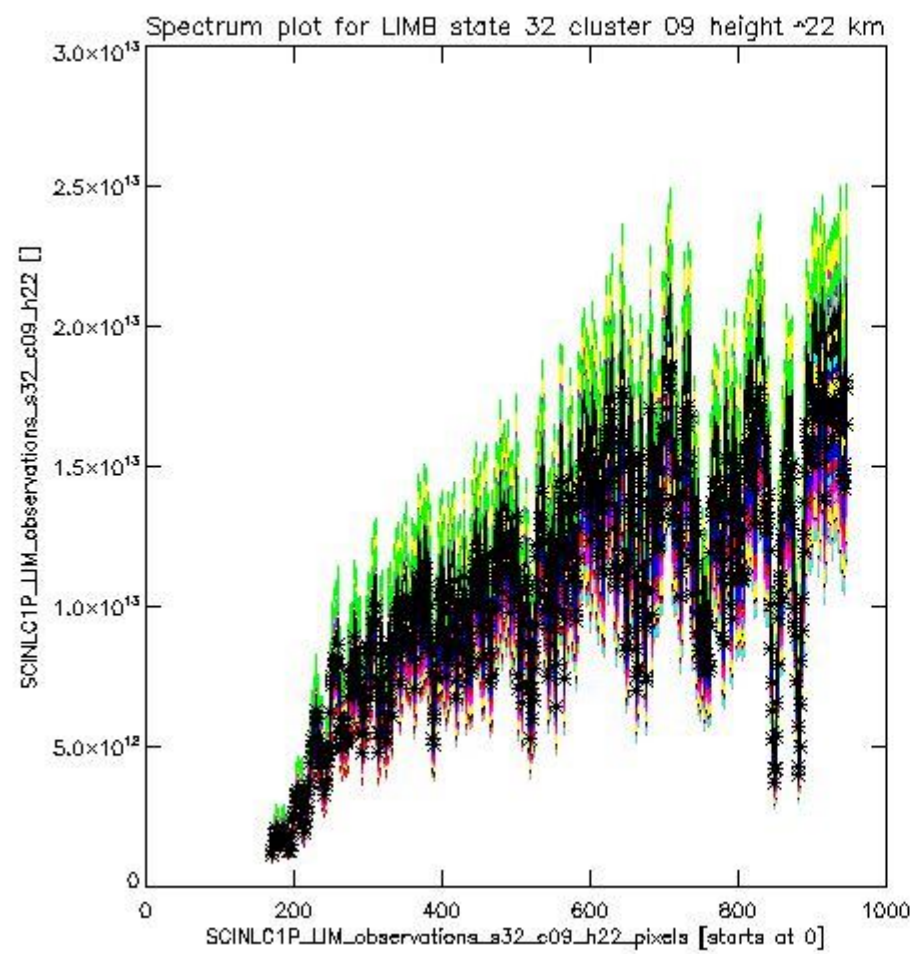
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_11.PNG

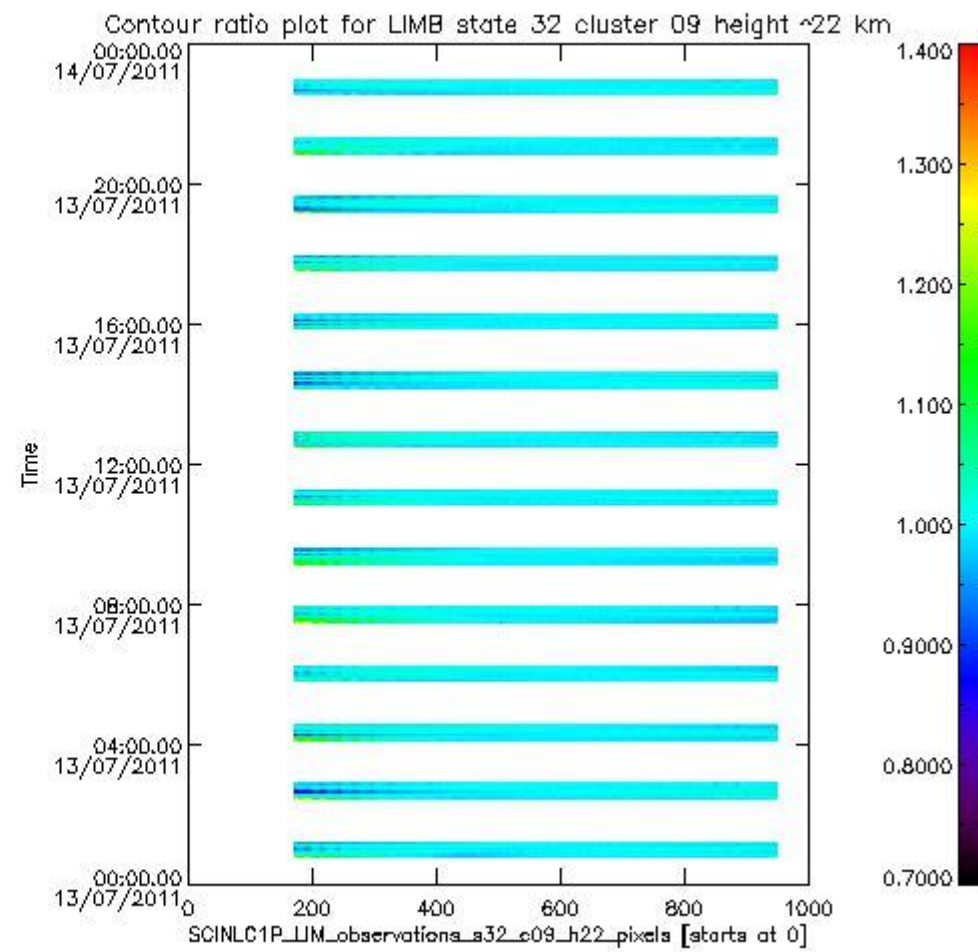
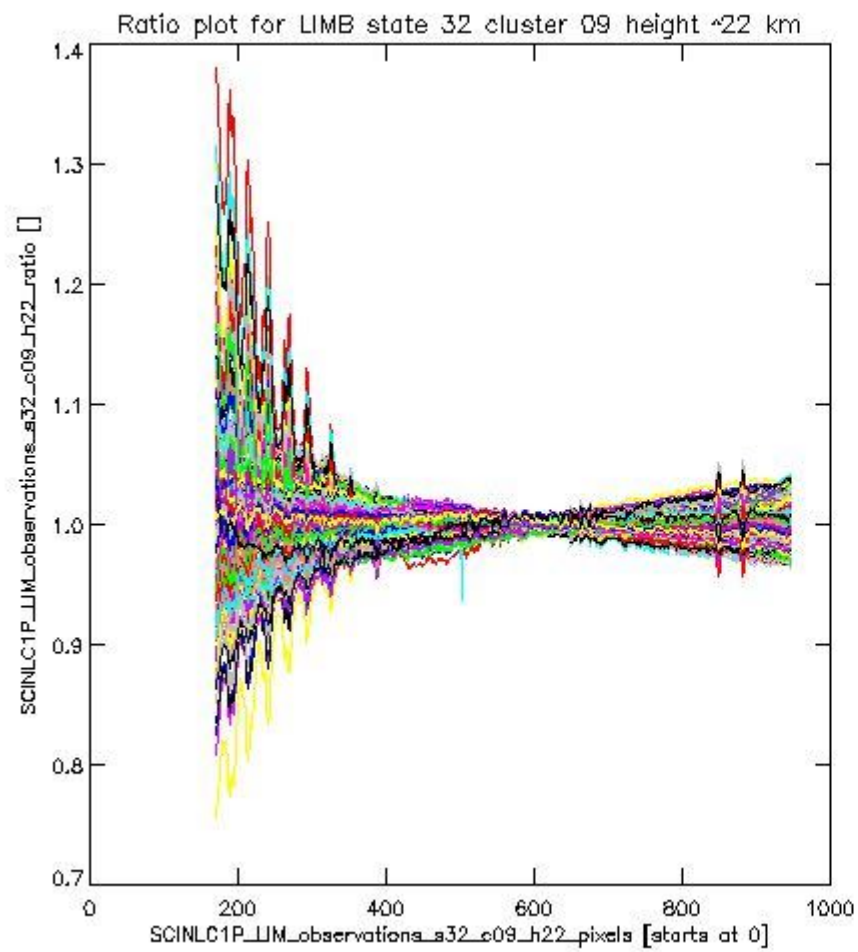
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	13JUL2011 00:46:46.443
Start time of last sample	13JUL2011 22:56:25.797
Reference period start time	13JUN2011 00:46:12.386
Reference period stop time	12JUL2011 20:12:49.944
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\_20110713\_12.PNG

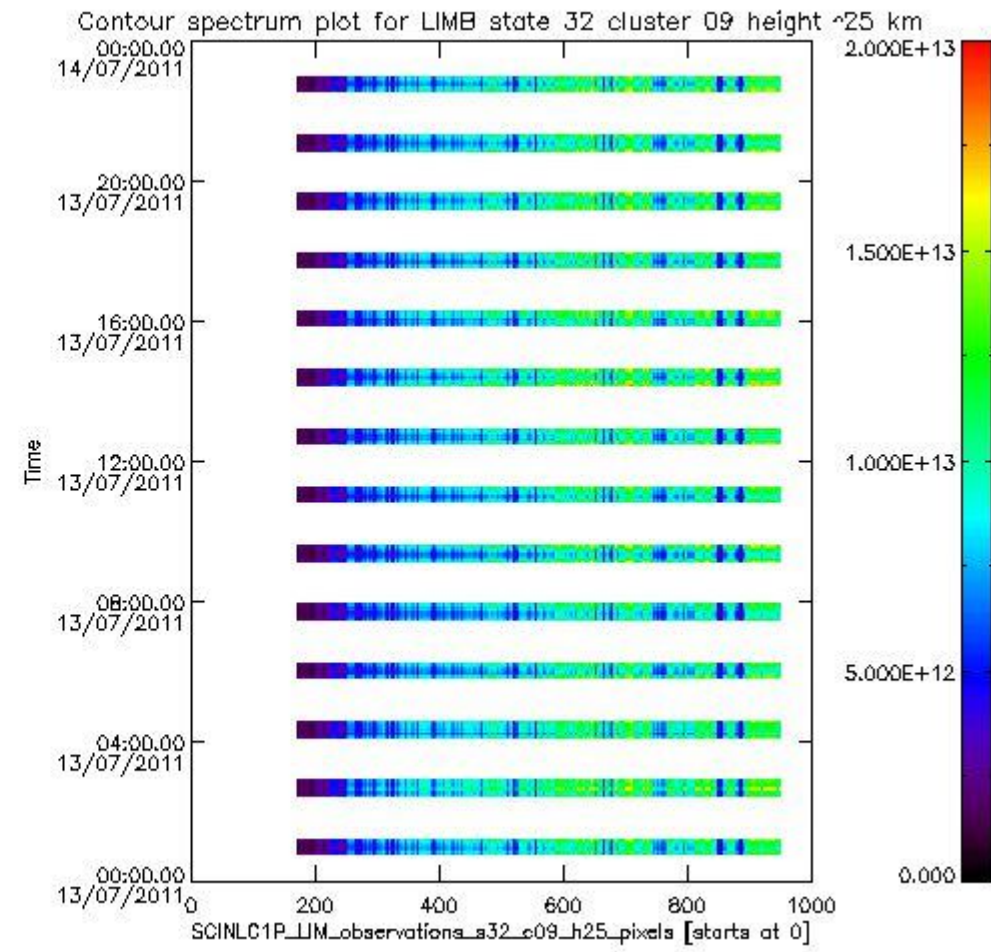
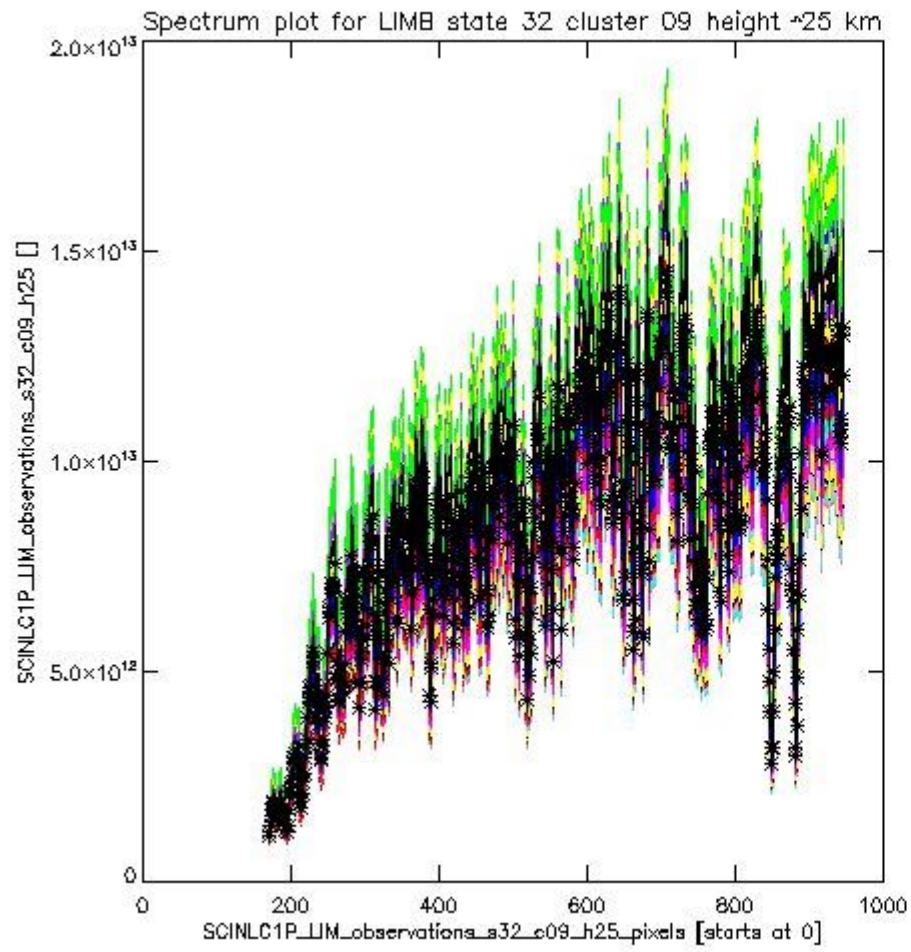




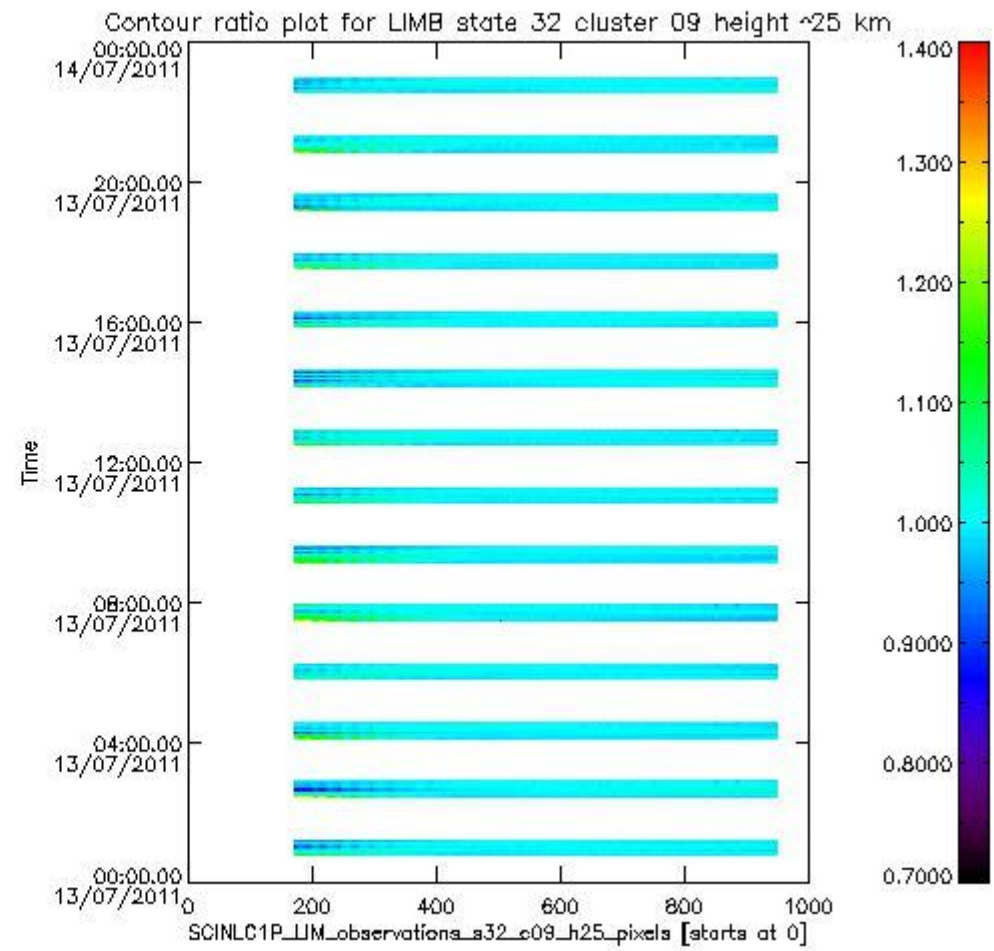
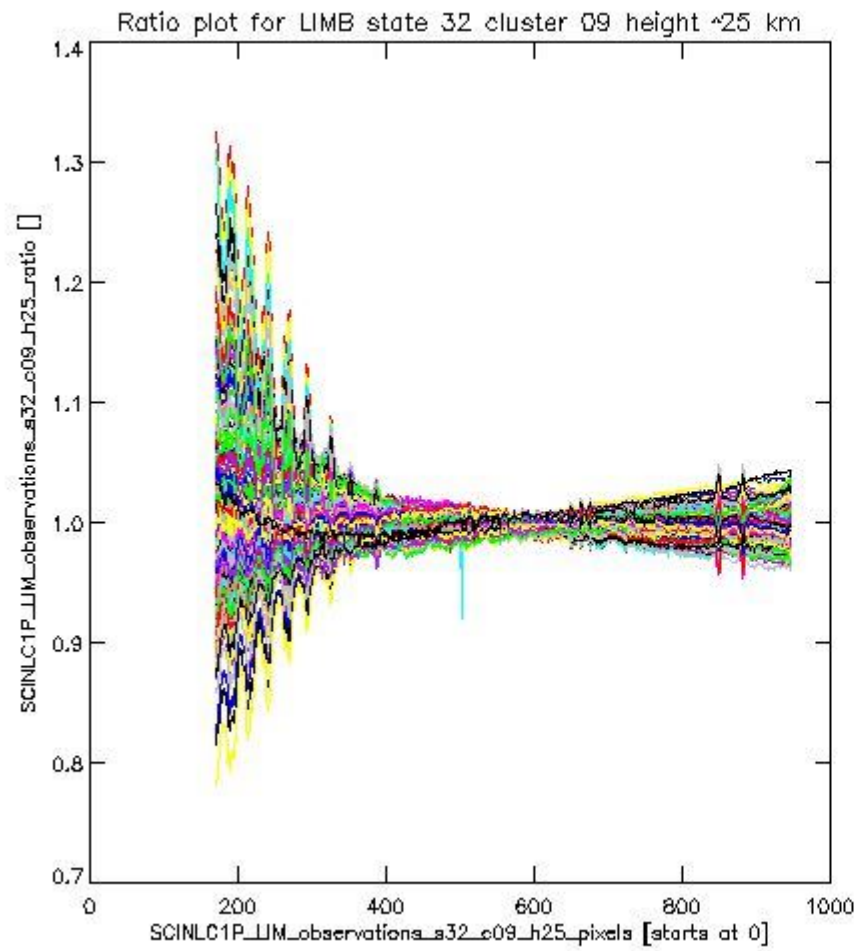
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_13.PNG

**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	13JUL2011 00:46:46.443
Start time of last sample	13JUL2011 22:56:25.797
Reference period start time	13JUN2011 00:46:12.386
Reference period stop time	12JUL2011 20:12:49.944
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\_20110713\_14.PNG

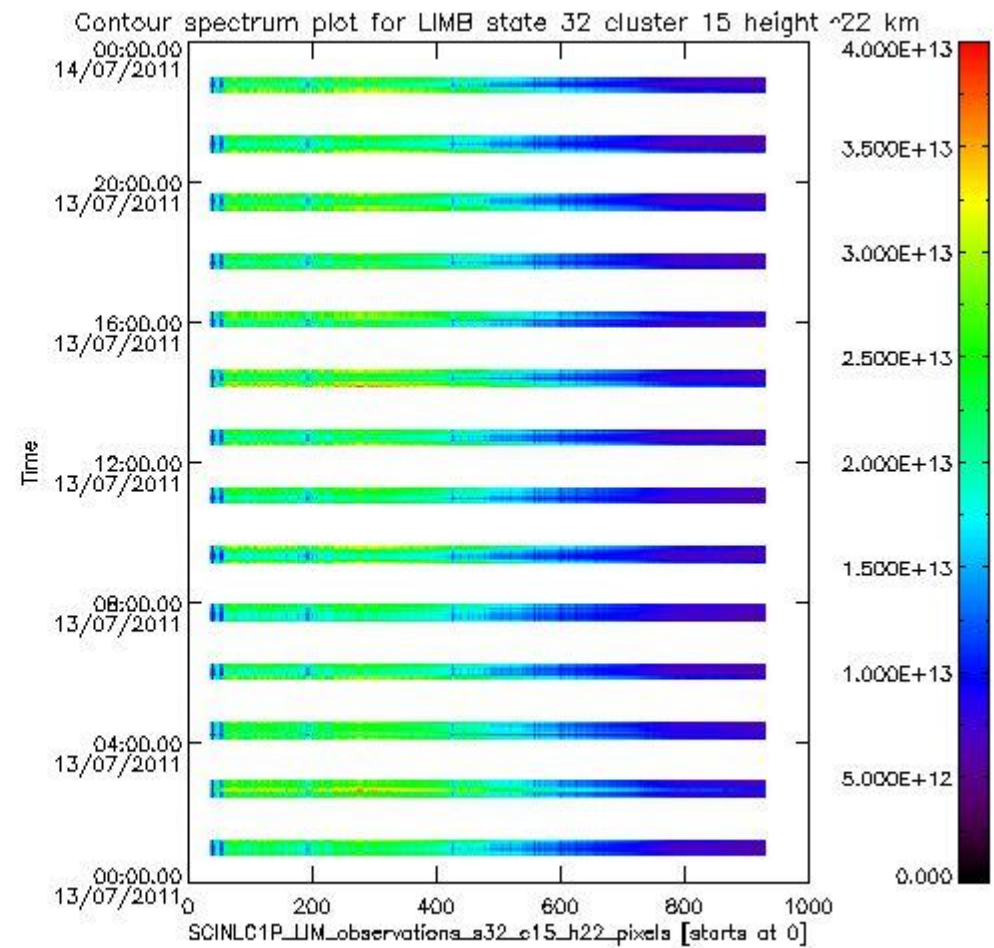
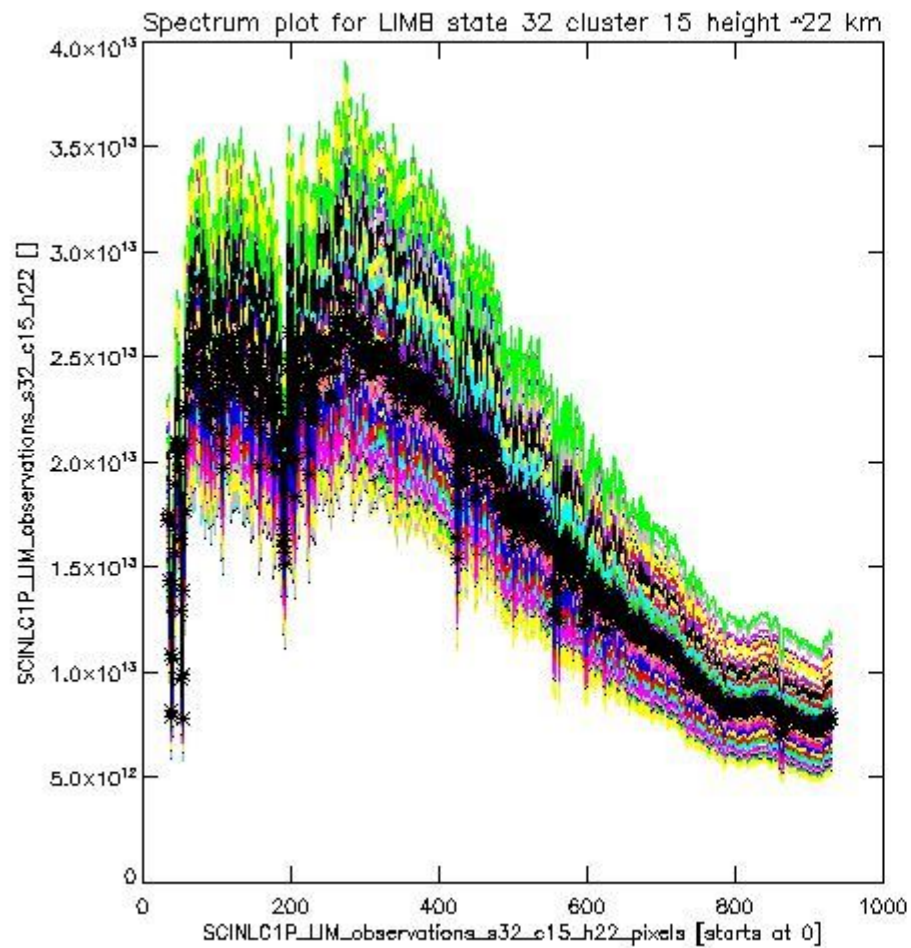


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_15.PNG

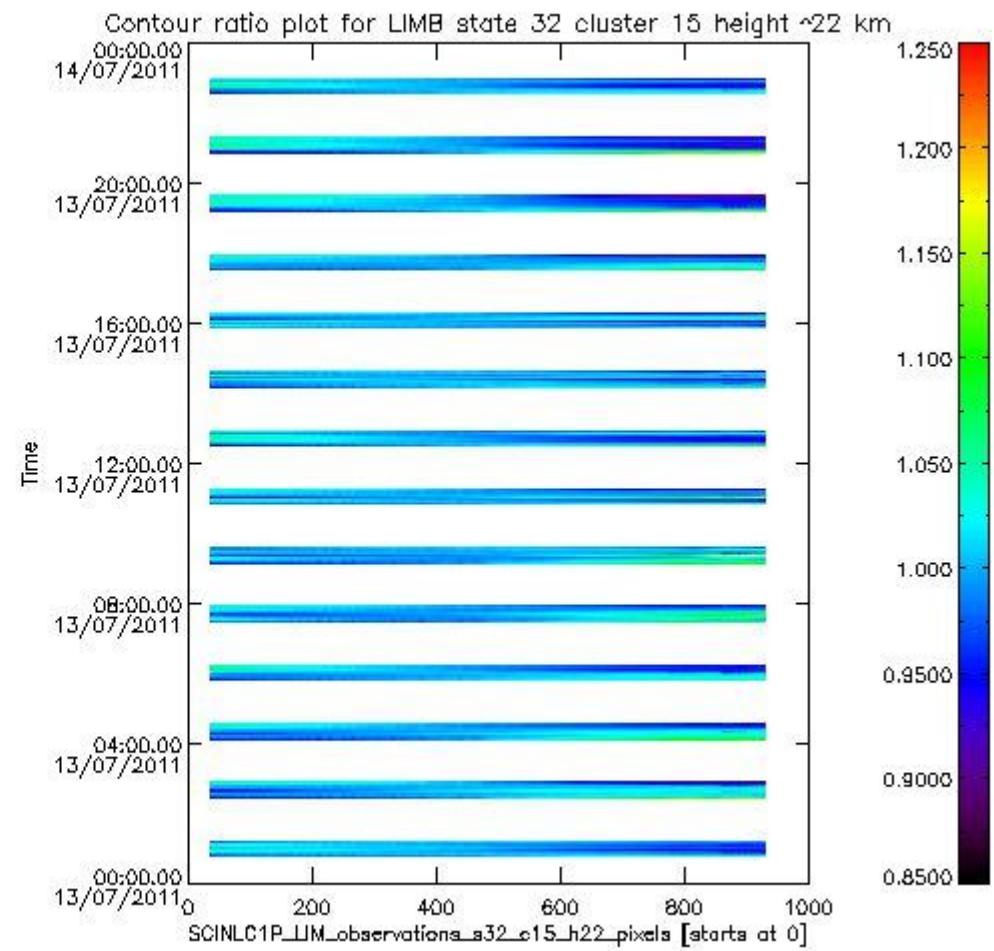
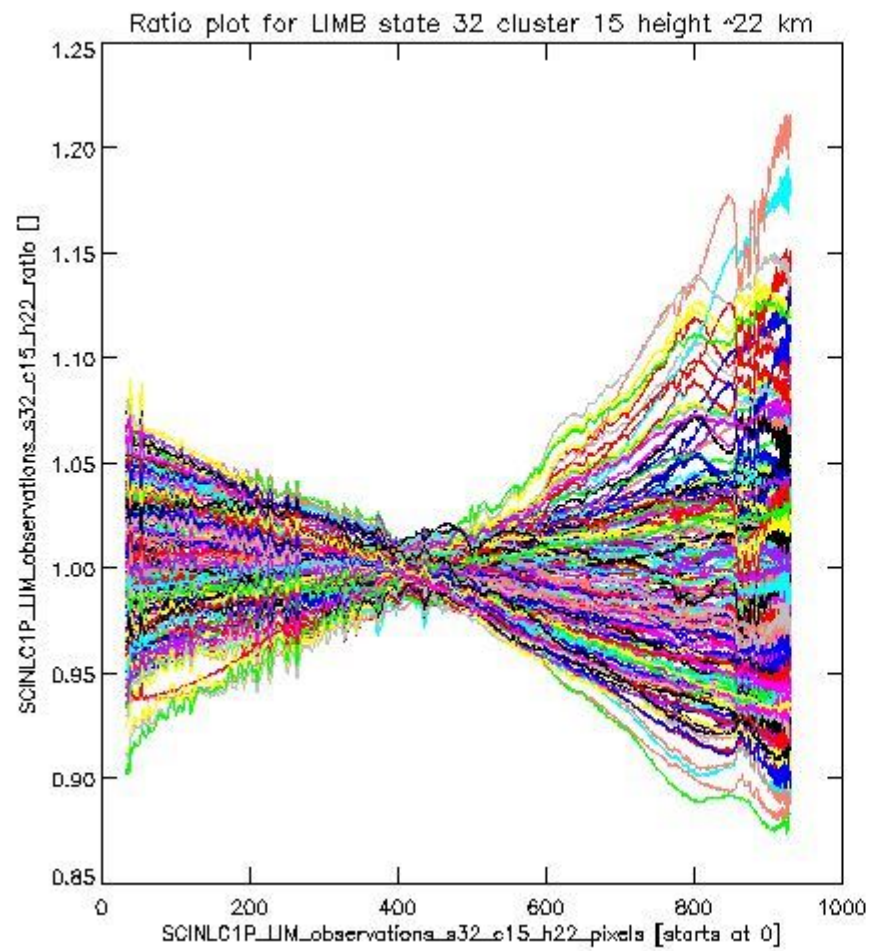
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	13JUL2011 00:46:46.443
Start time of last sample	13JUL2011 22:56:25.797
Reference period start time	13JUN2011 00:46:12.386
Reference period stop time	12JUL2011 20:12:49.944
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





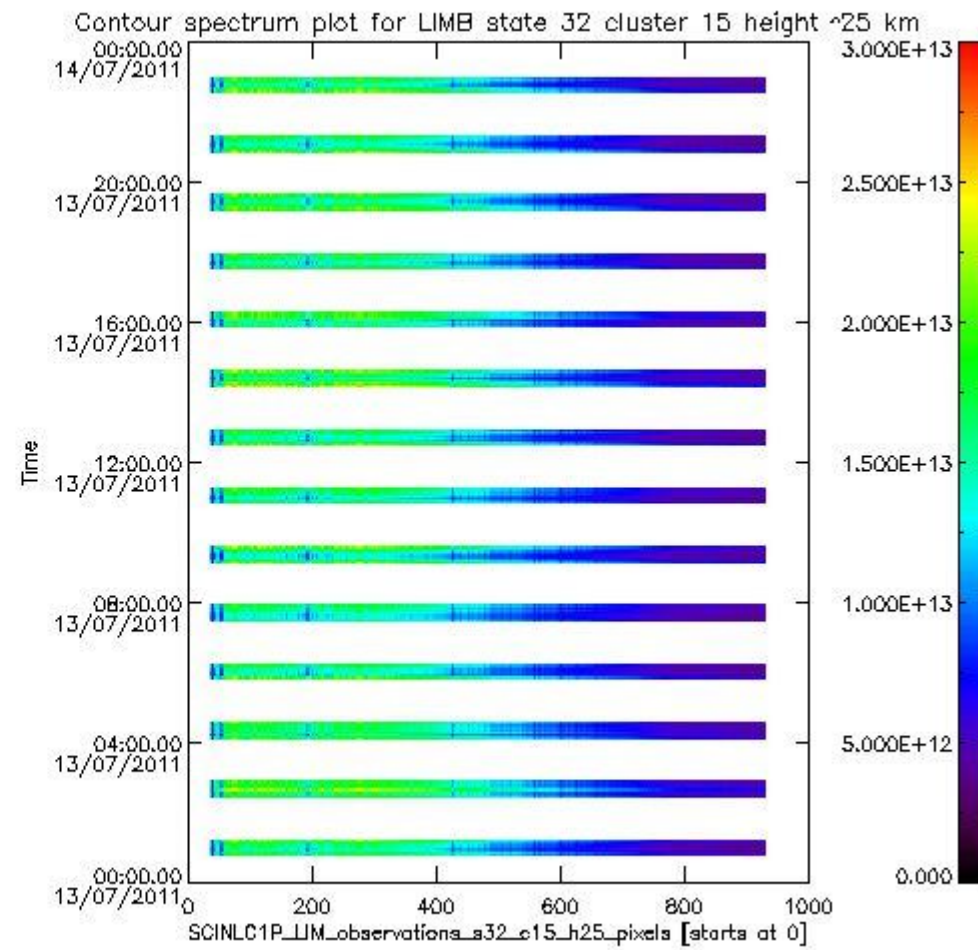
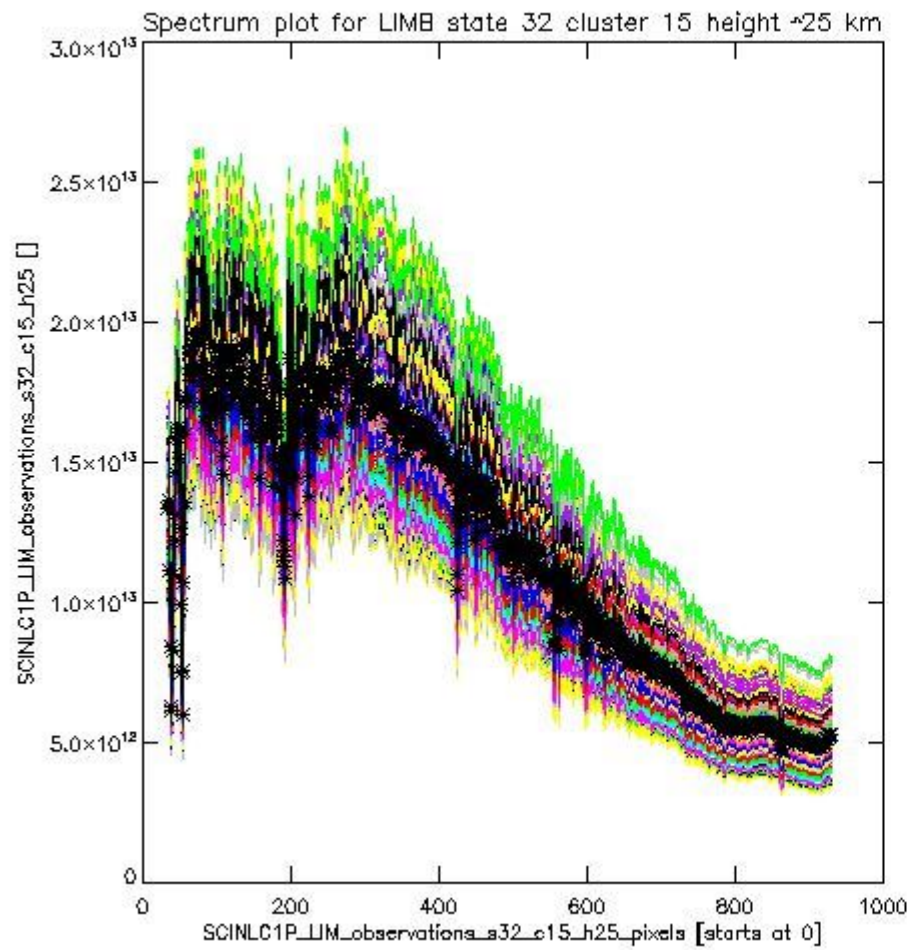
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_16.PNG



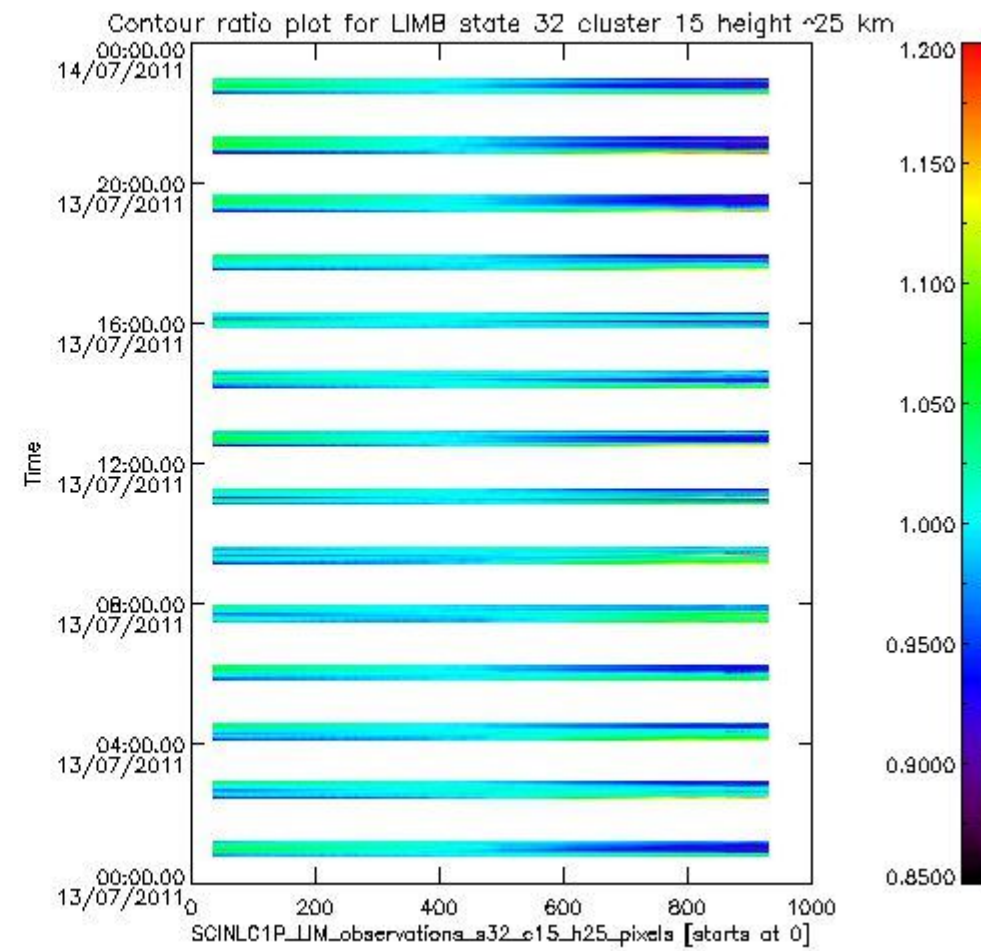
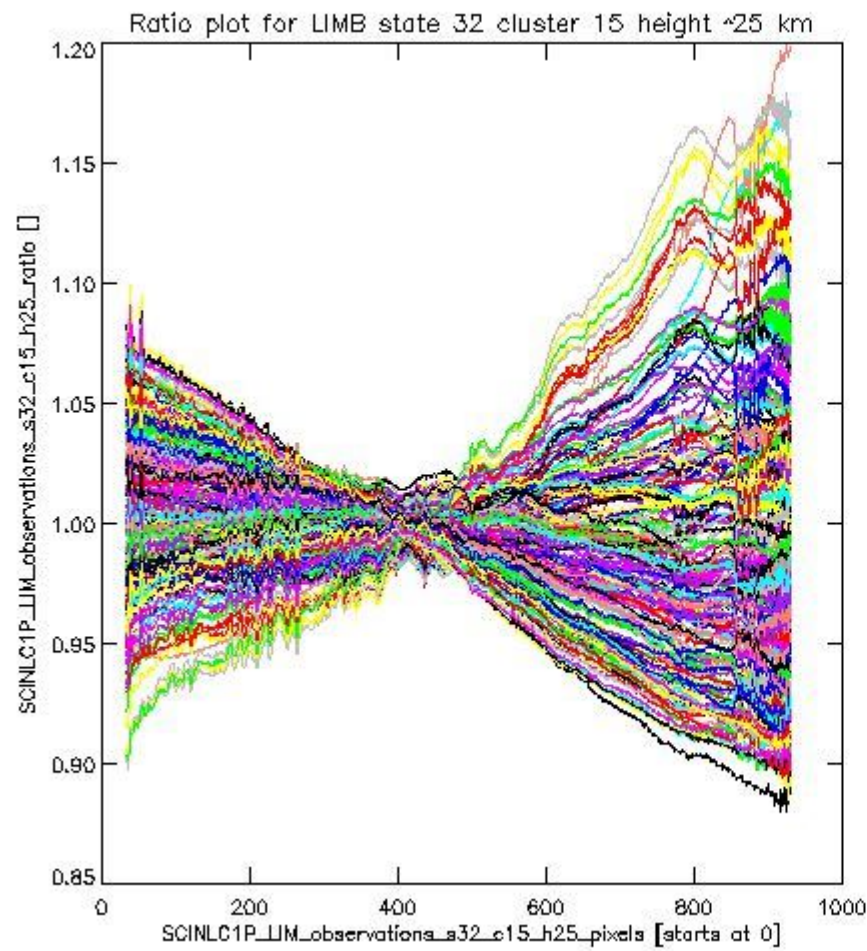
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_17.PNG

**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	13JUL2011 00:46:46.443
Start time of last sample	13JUL2011 22:56:25.797
Reference period start time	13JUN2011 00:46:12.386
Reference period stop time	12JUL2011 20:12:49.944
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



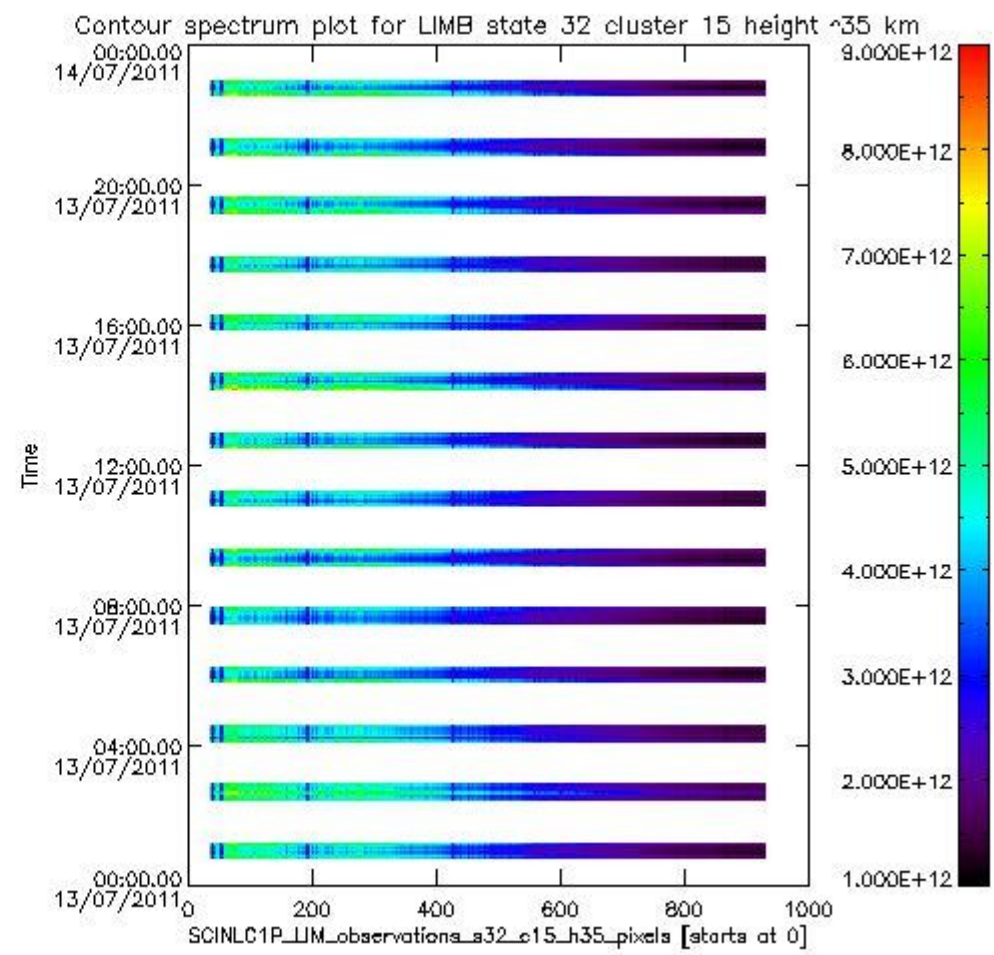
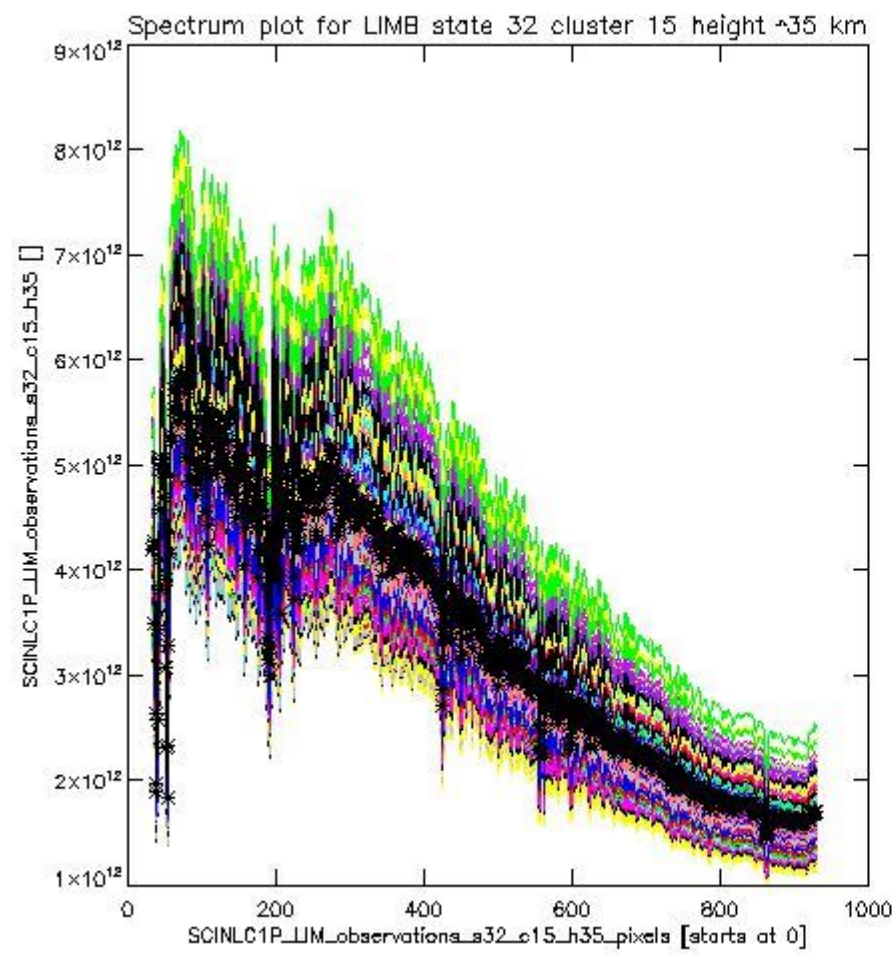


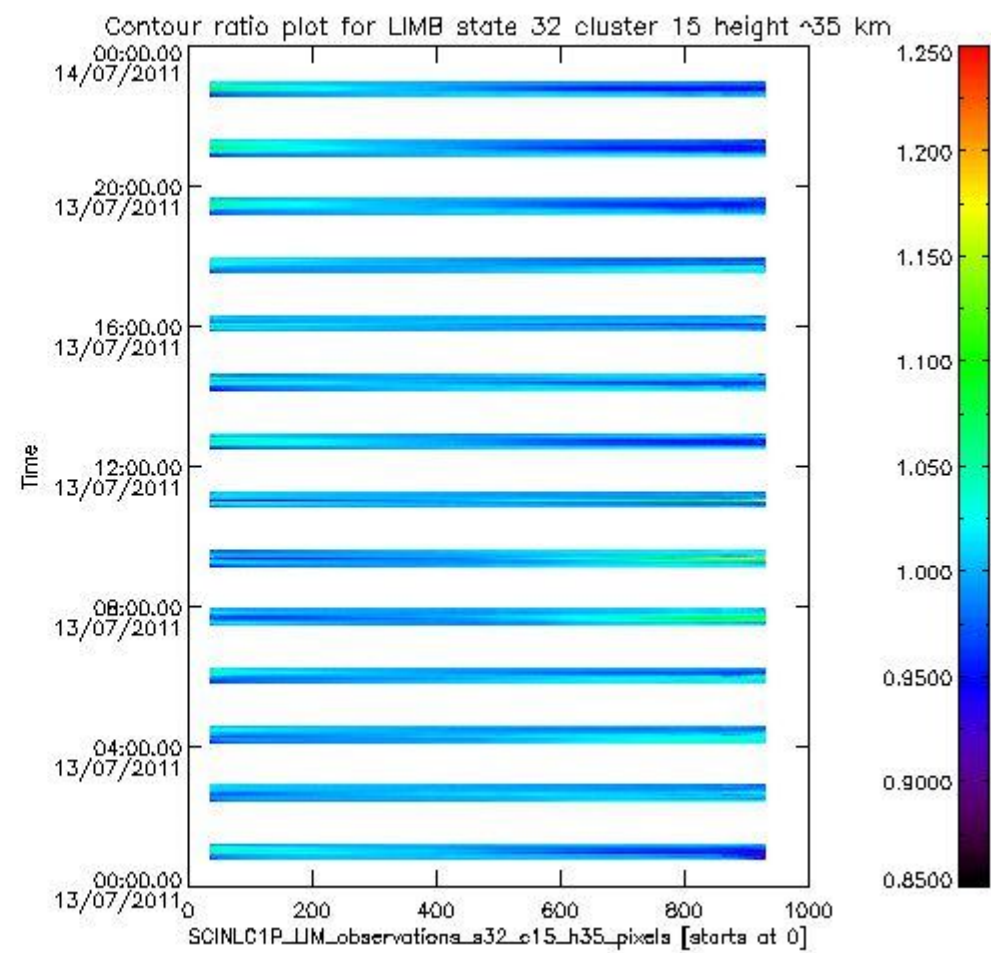
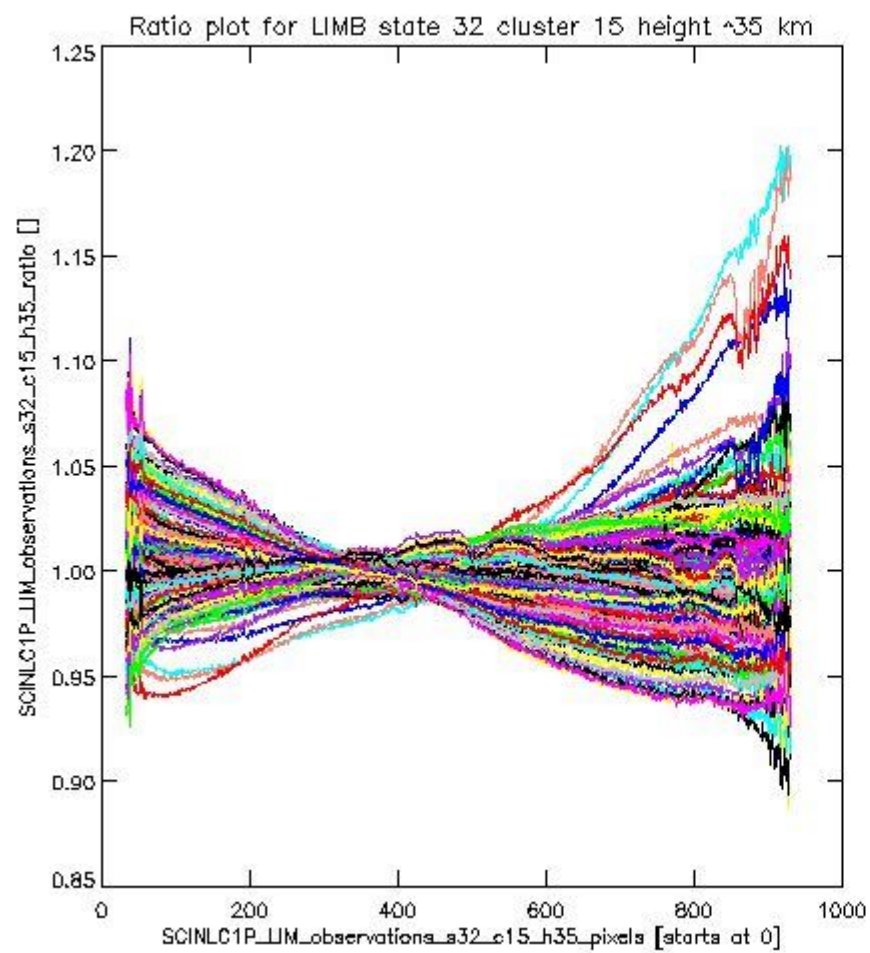


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_19.PNG

**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:

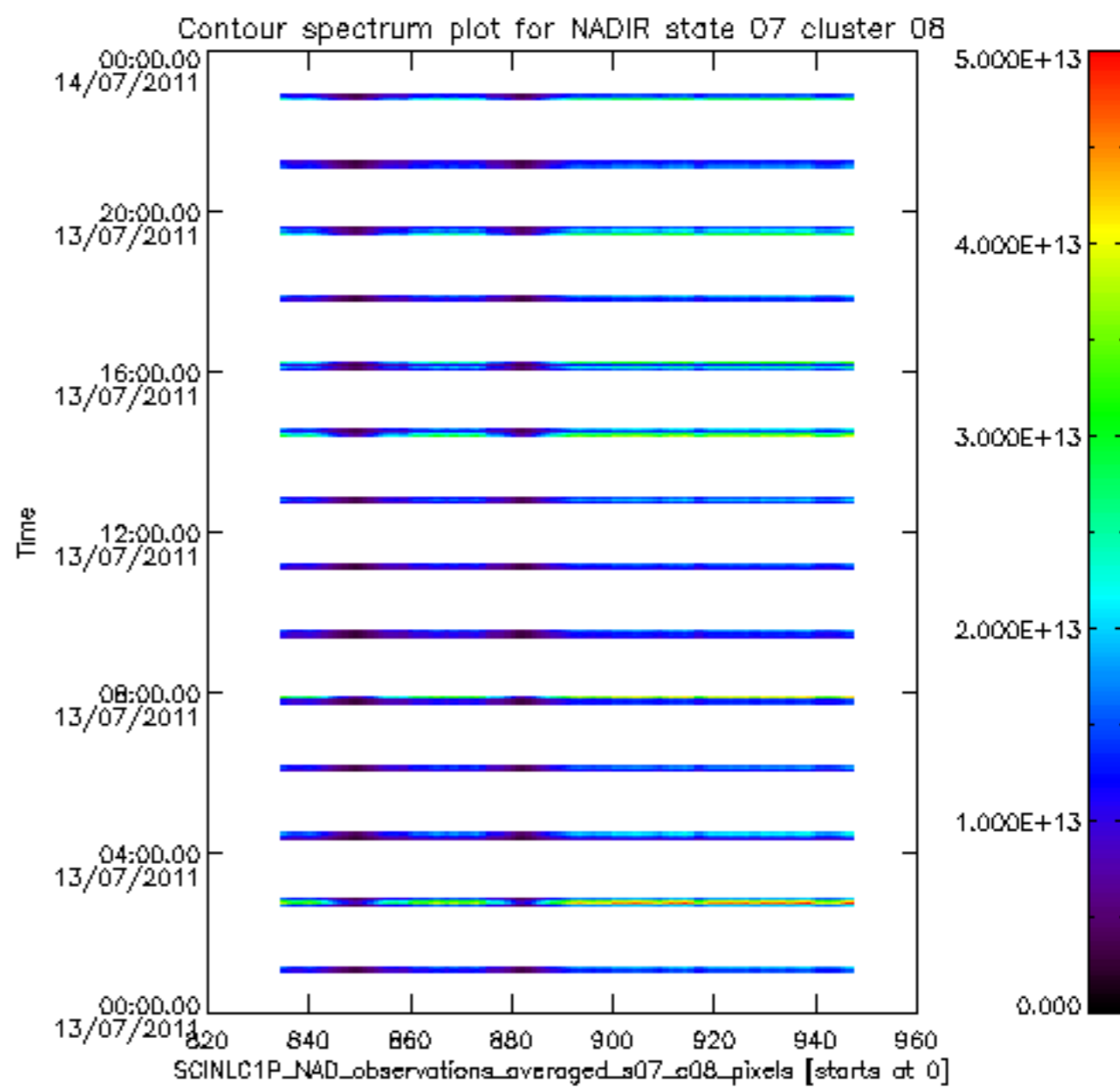
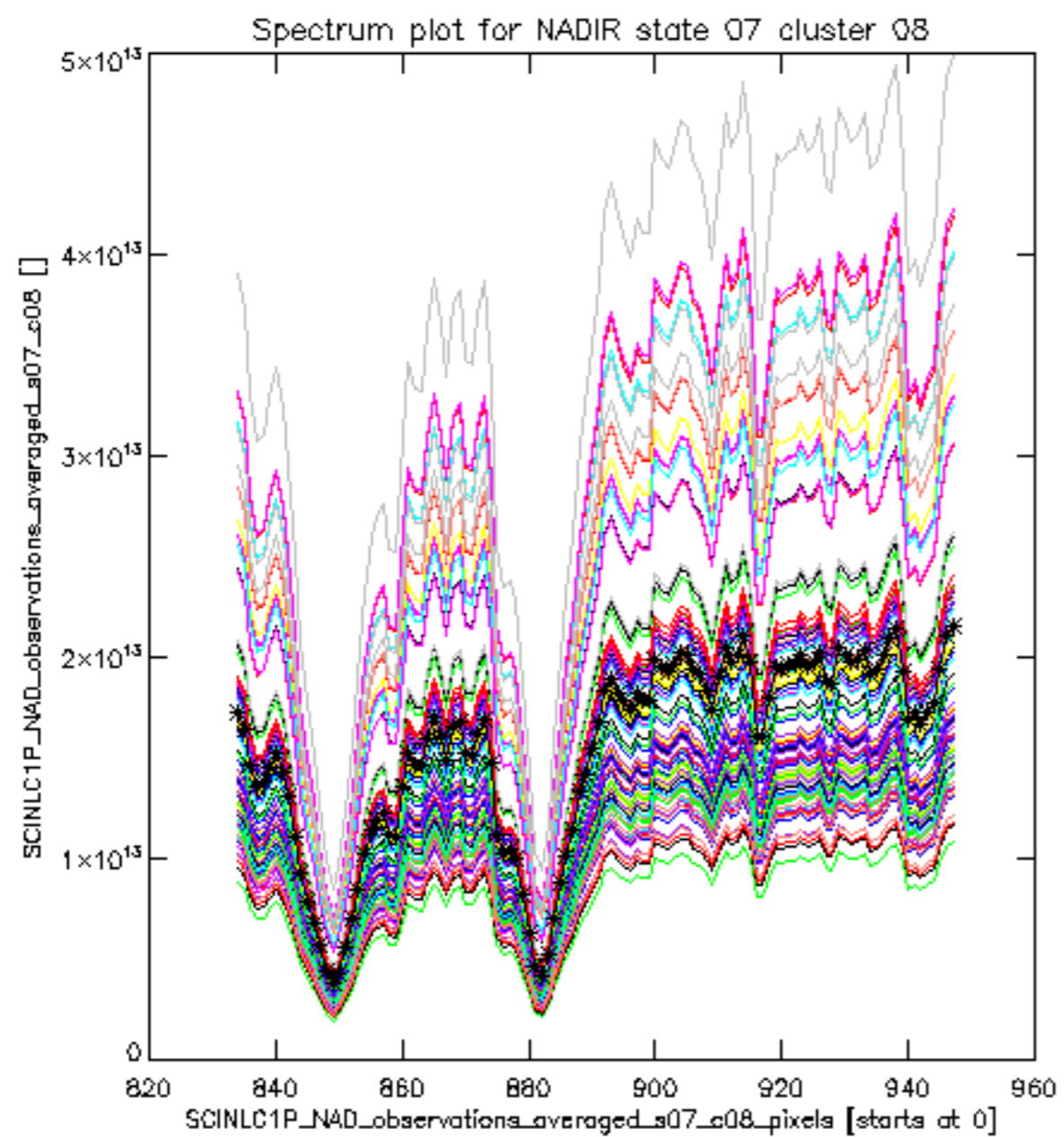
Item	Value
Start time of first sample	13JUL2011 00:46:46.443
Start time of last sample	13JUL2011 22:56:25.797
Reference period start time	13JUN2011 00:46:12.386
Reference period stop time	12JUL2011 20:12:49.944
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

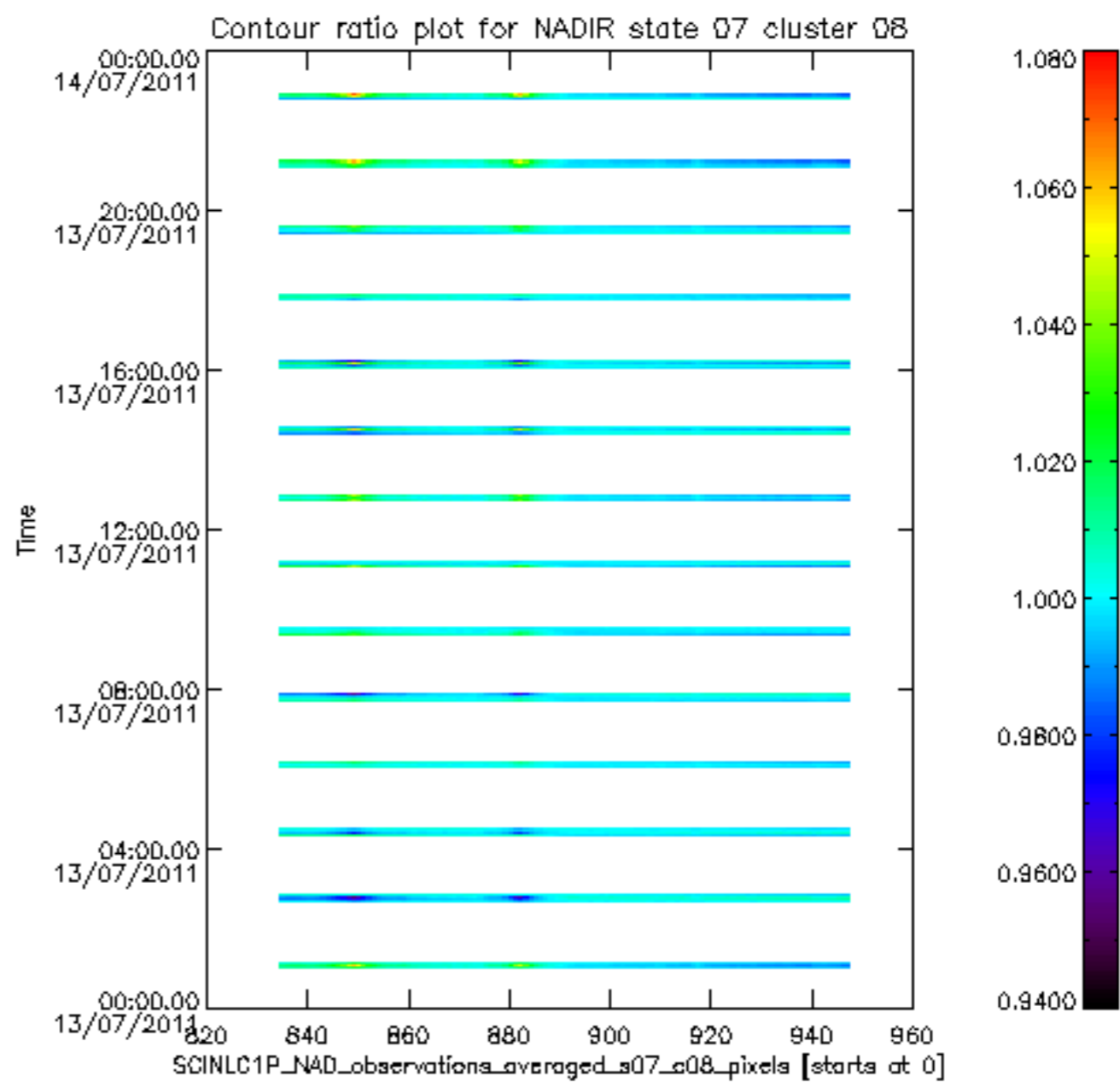
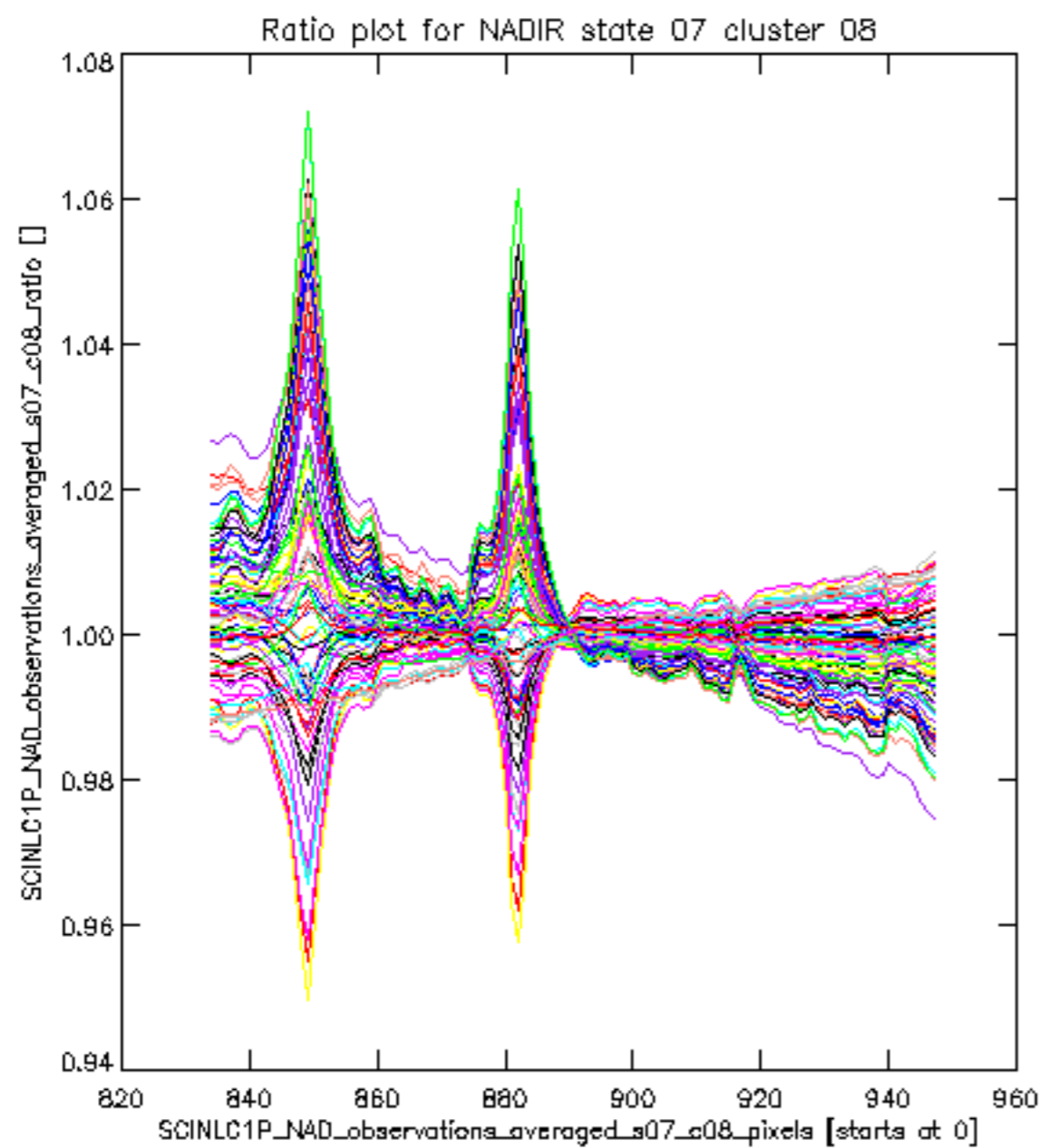


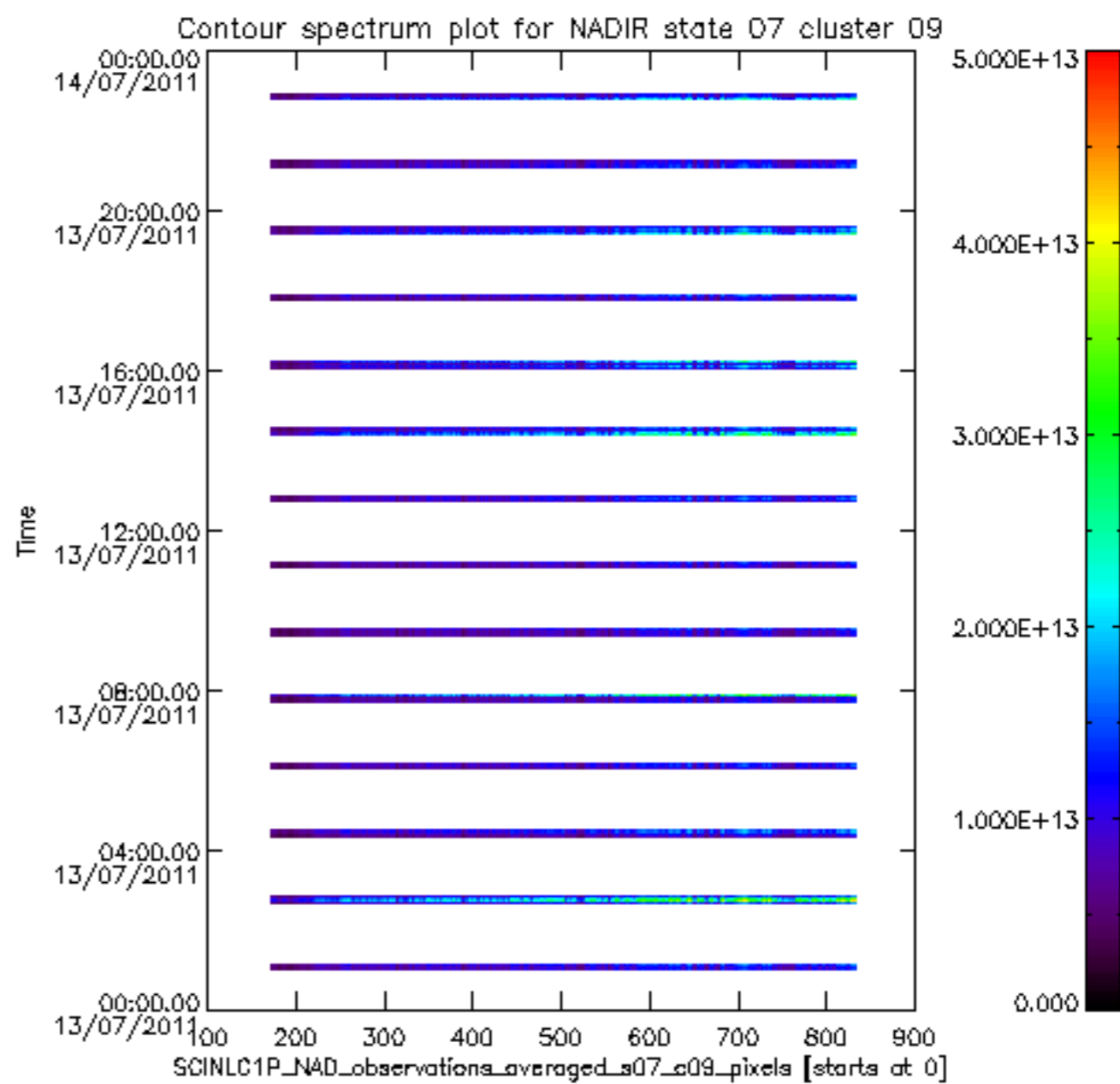
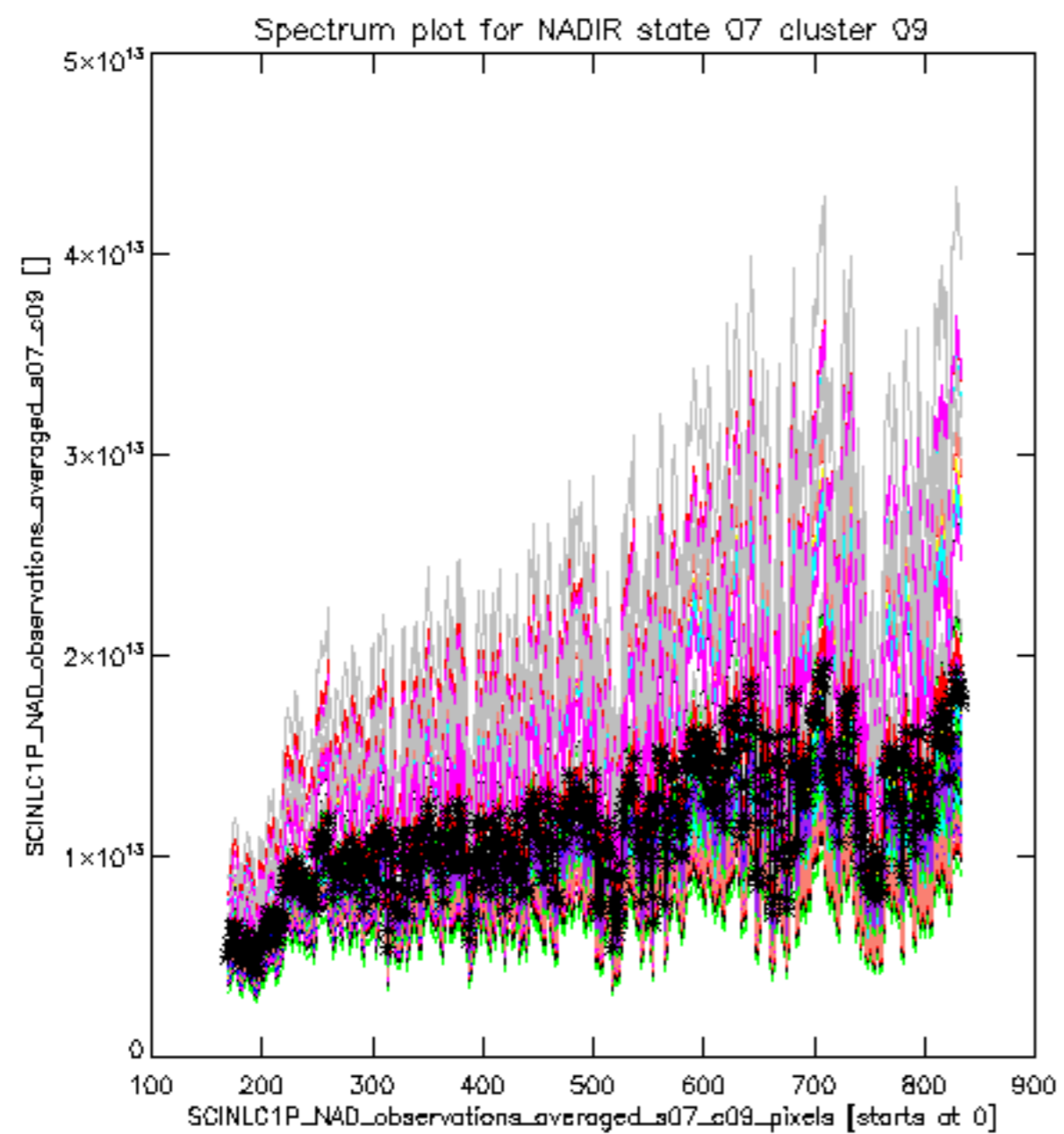


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110713\_21.PNG

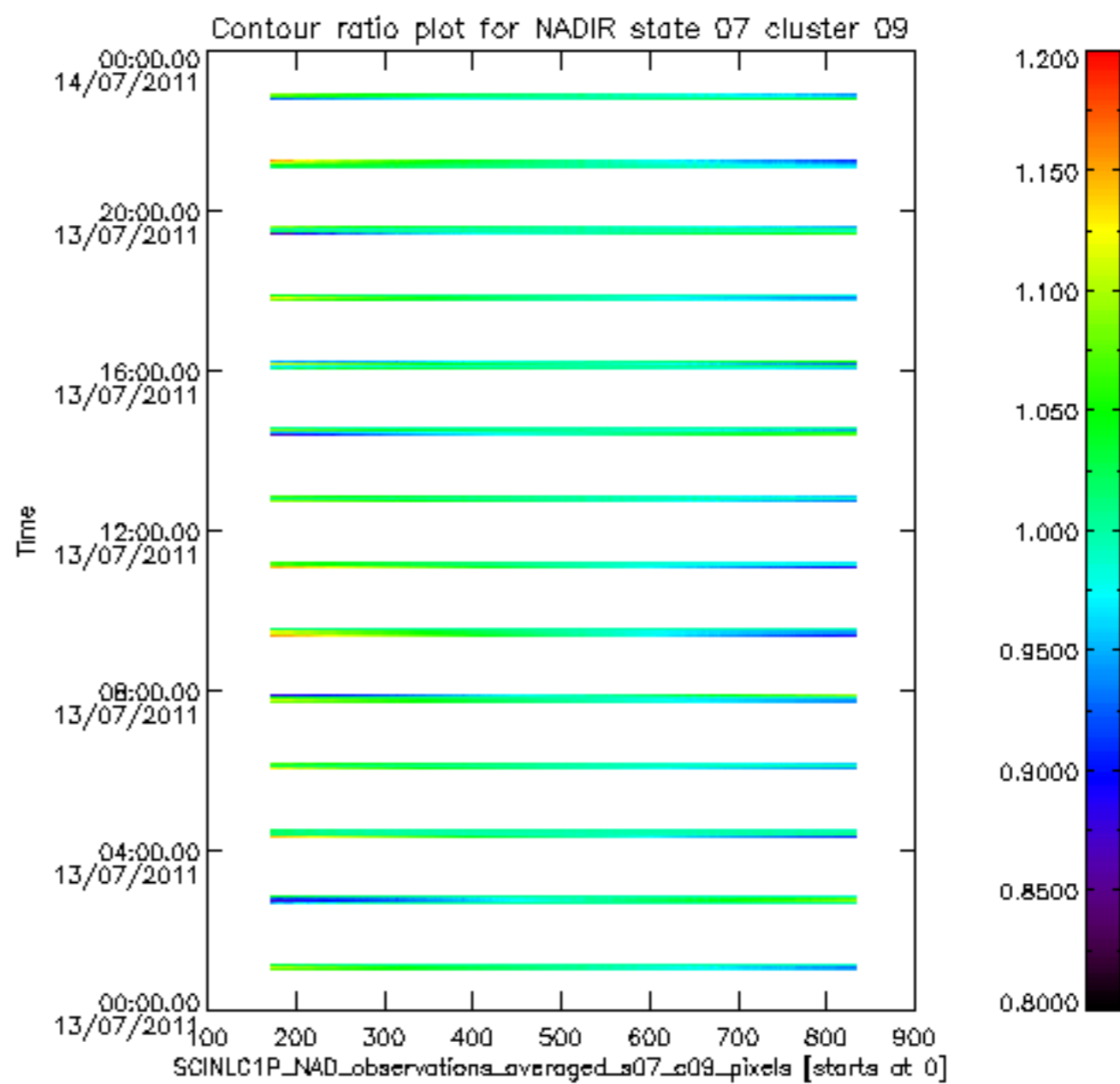
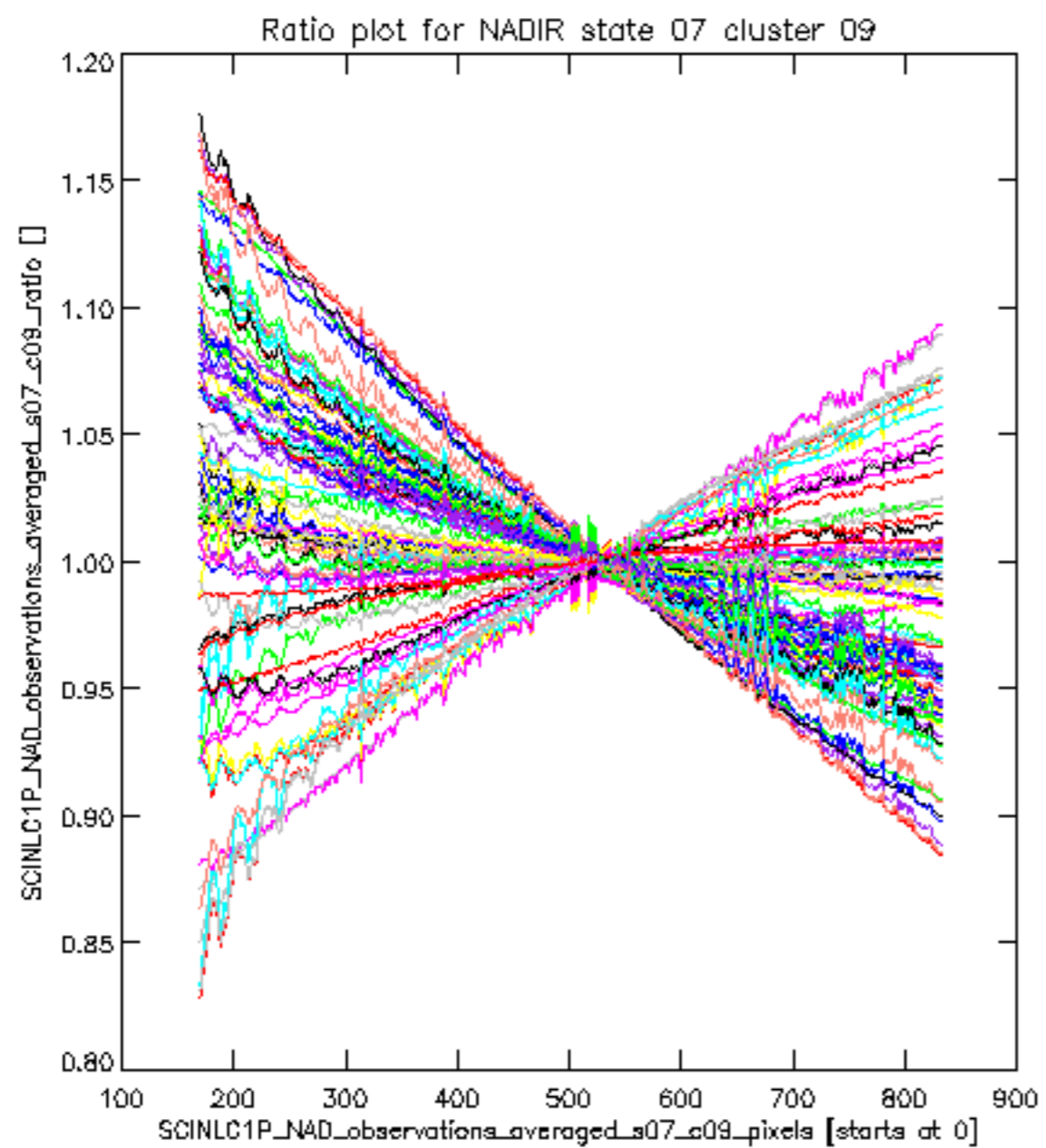


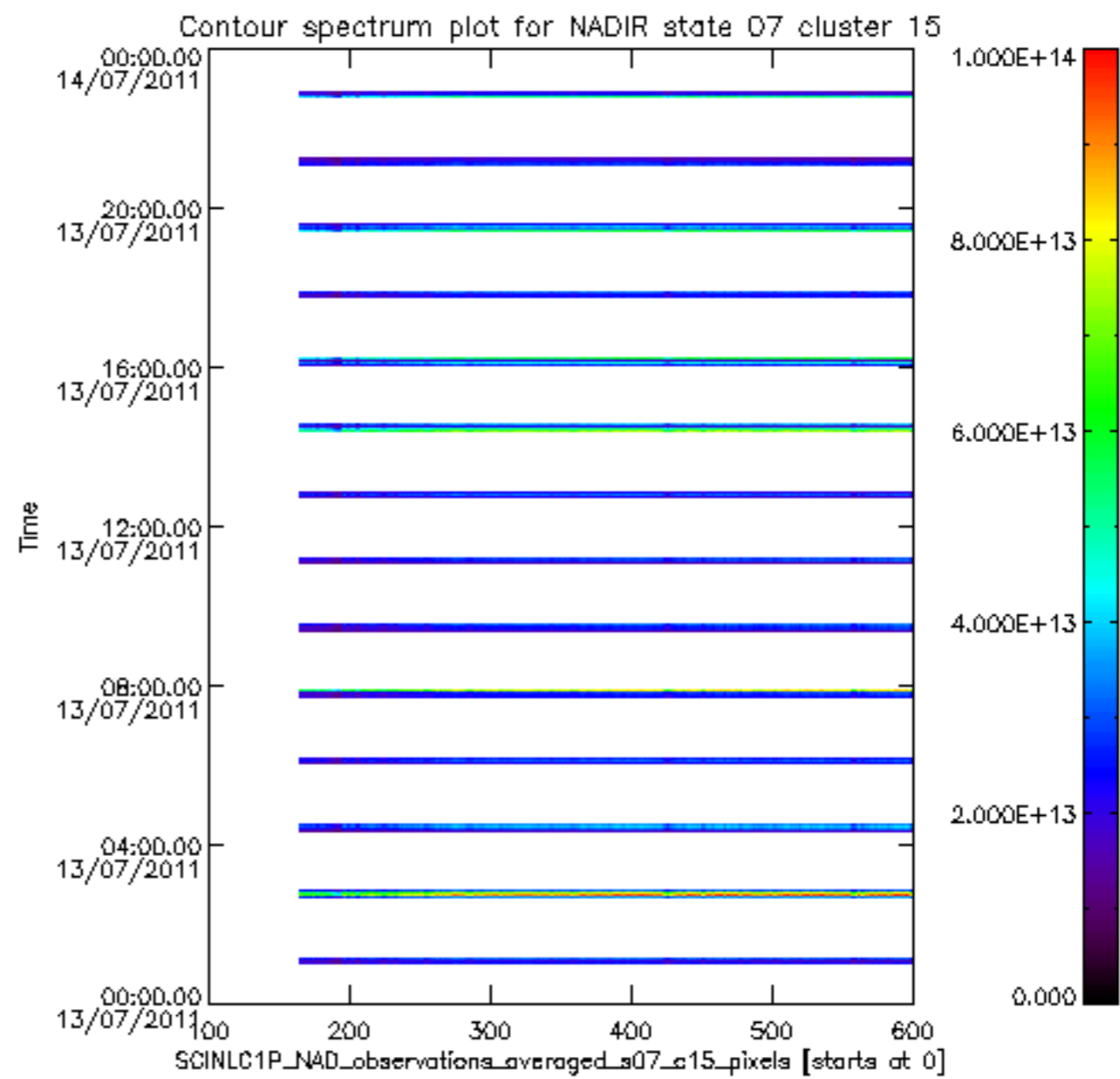
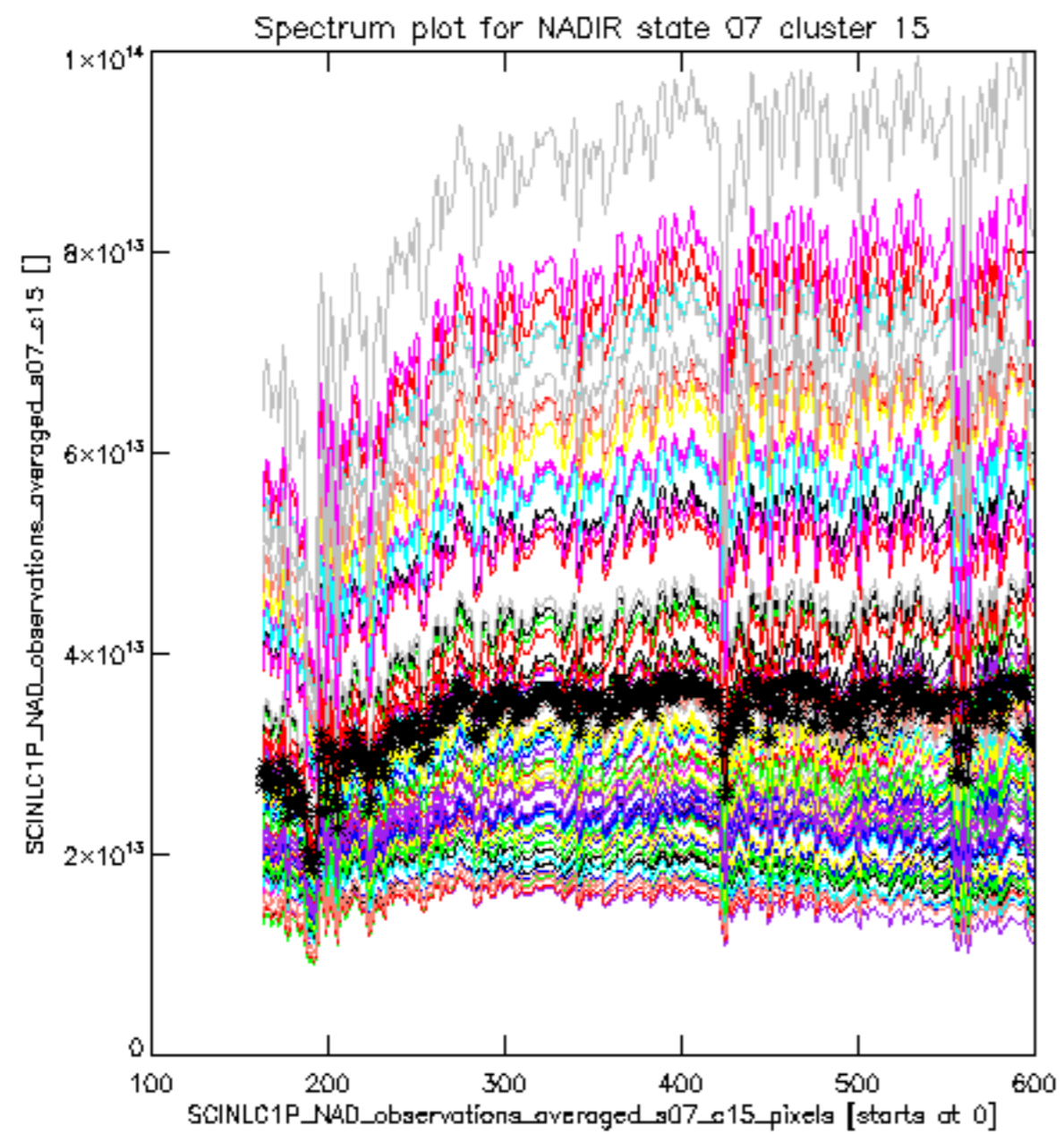


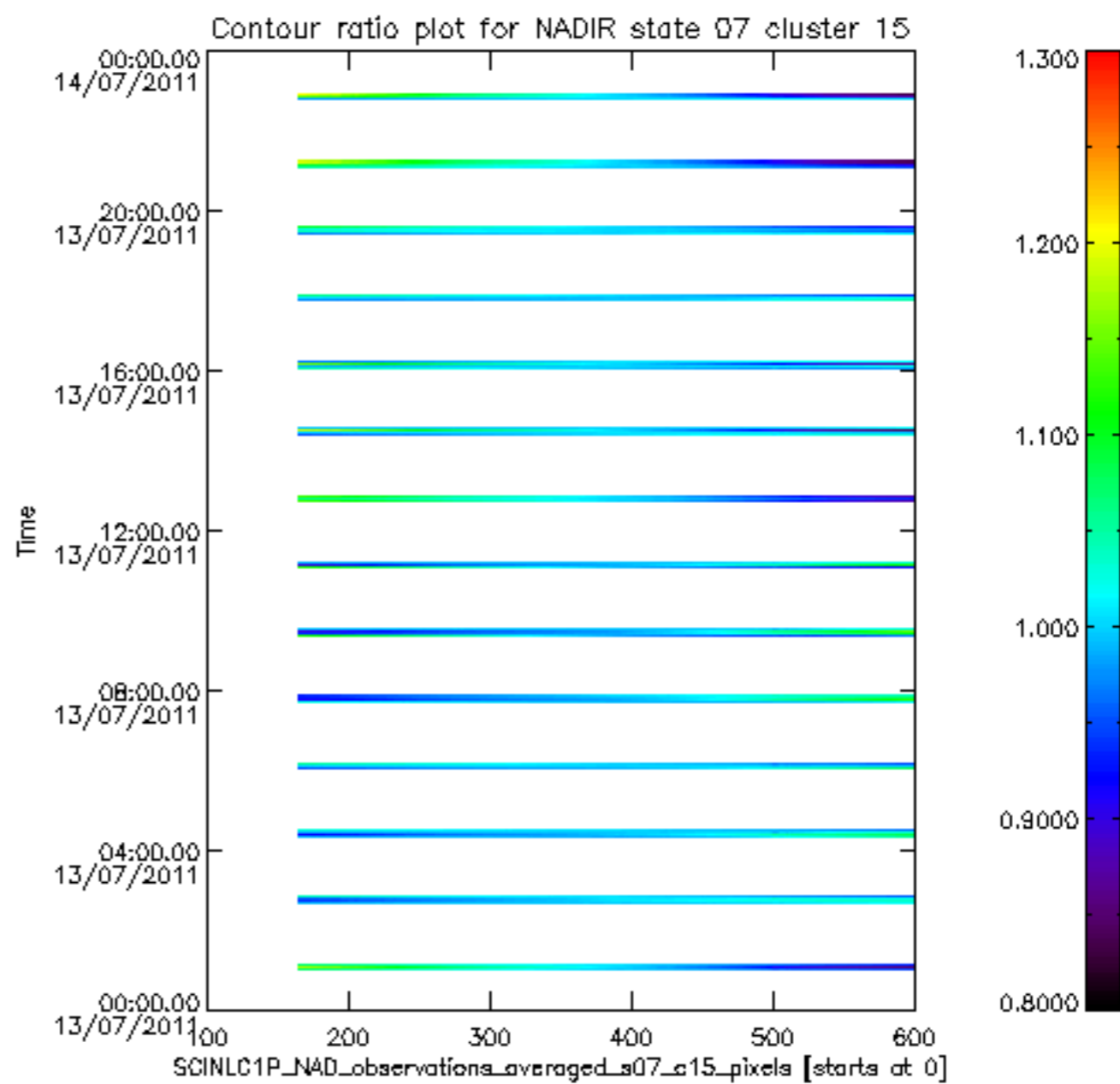
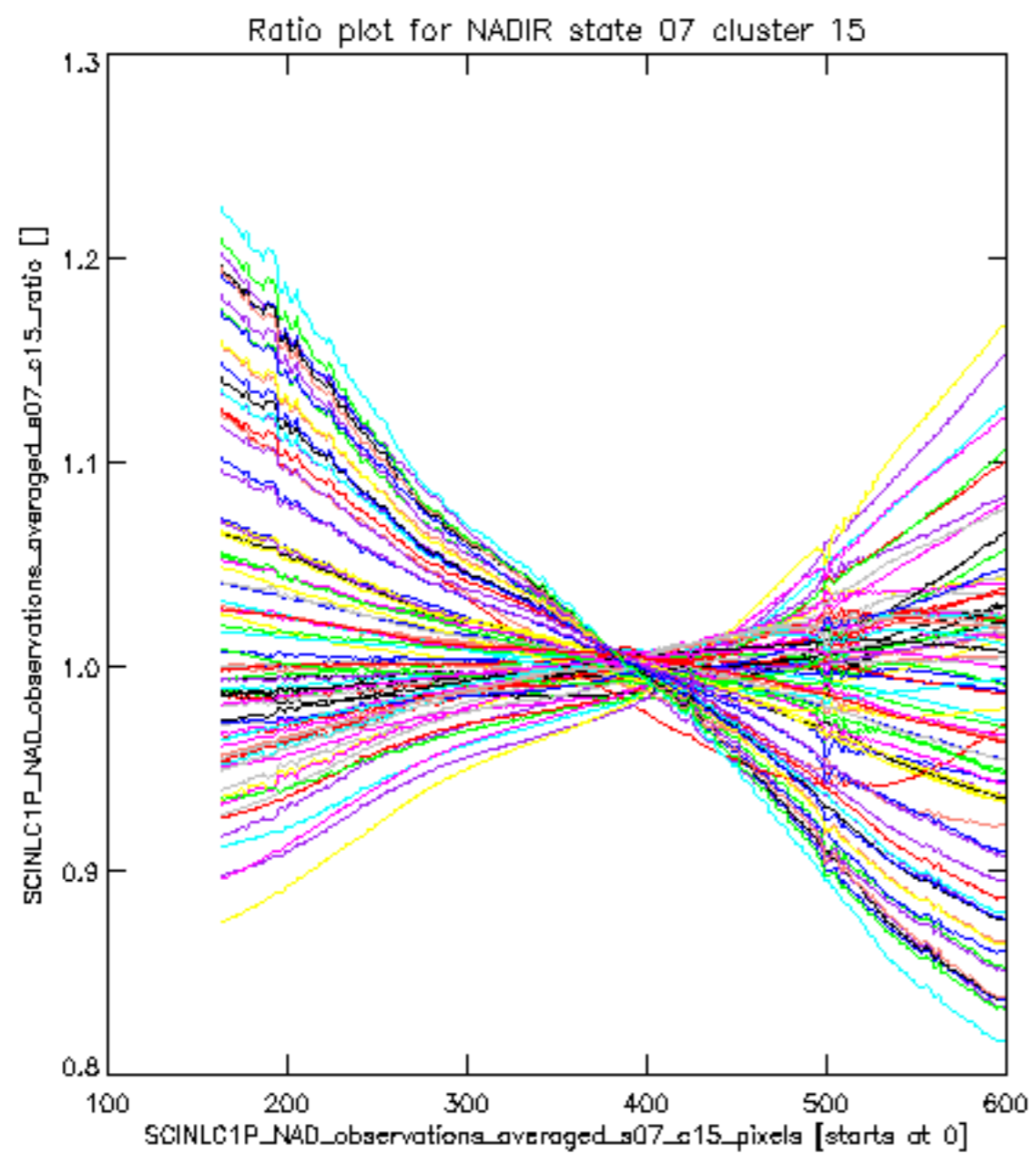




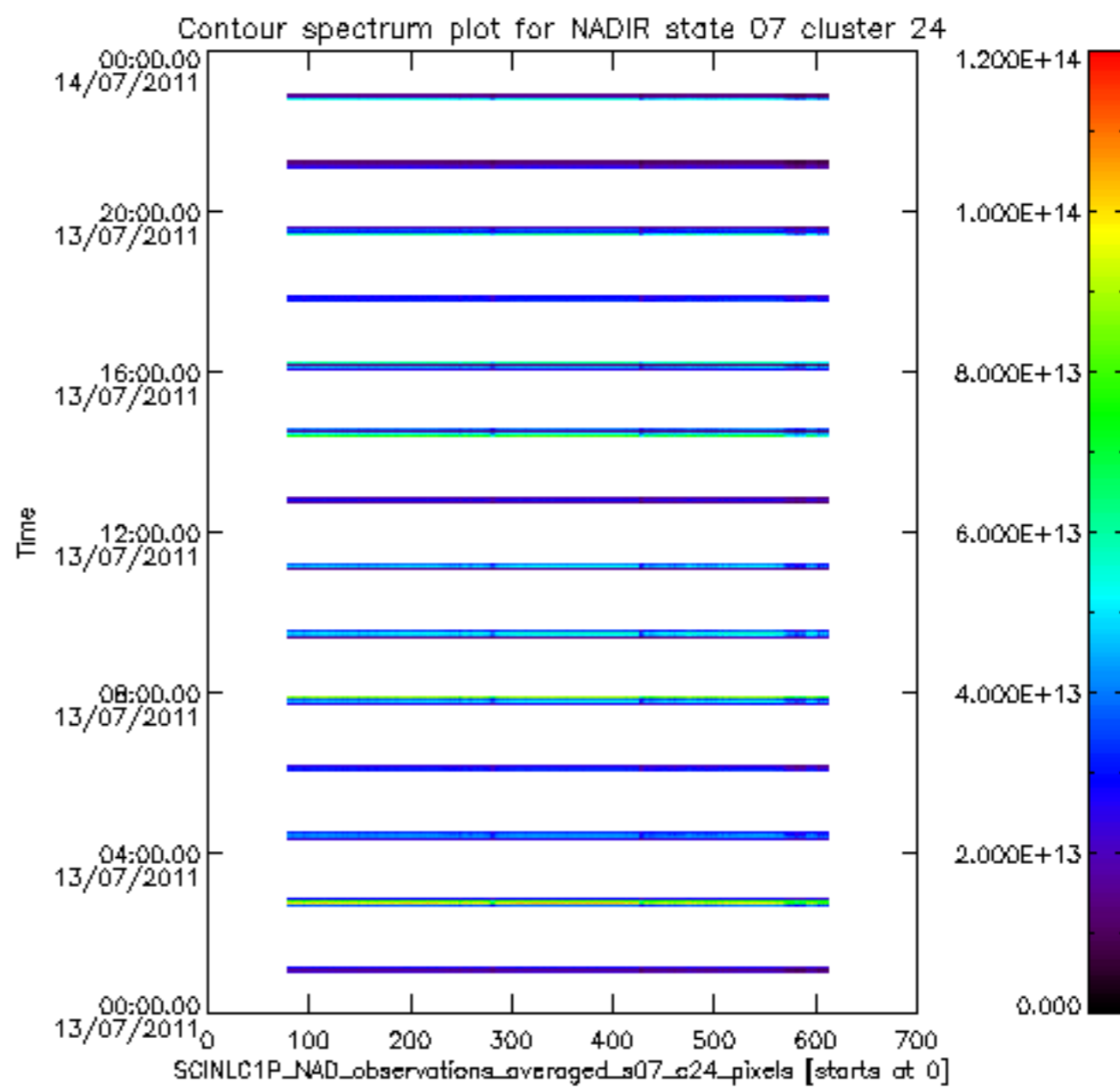
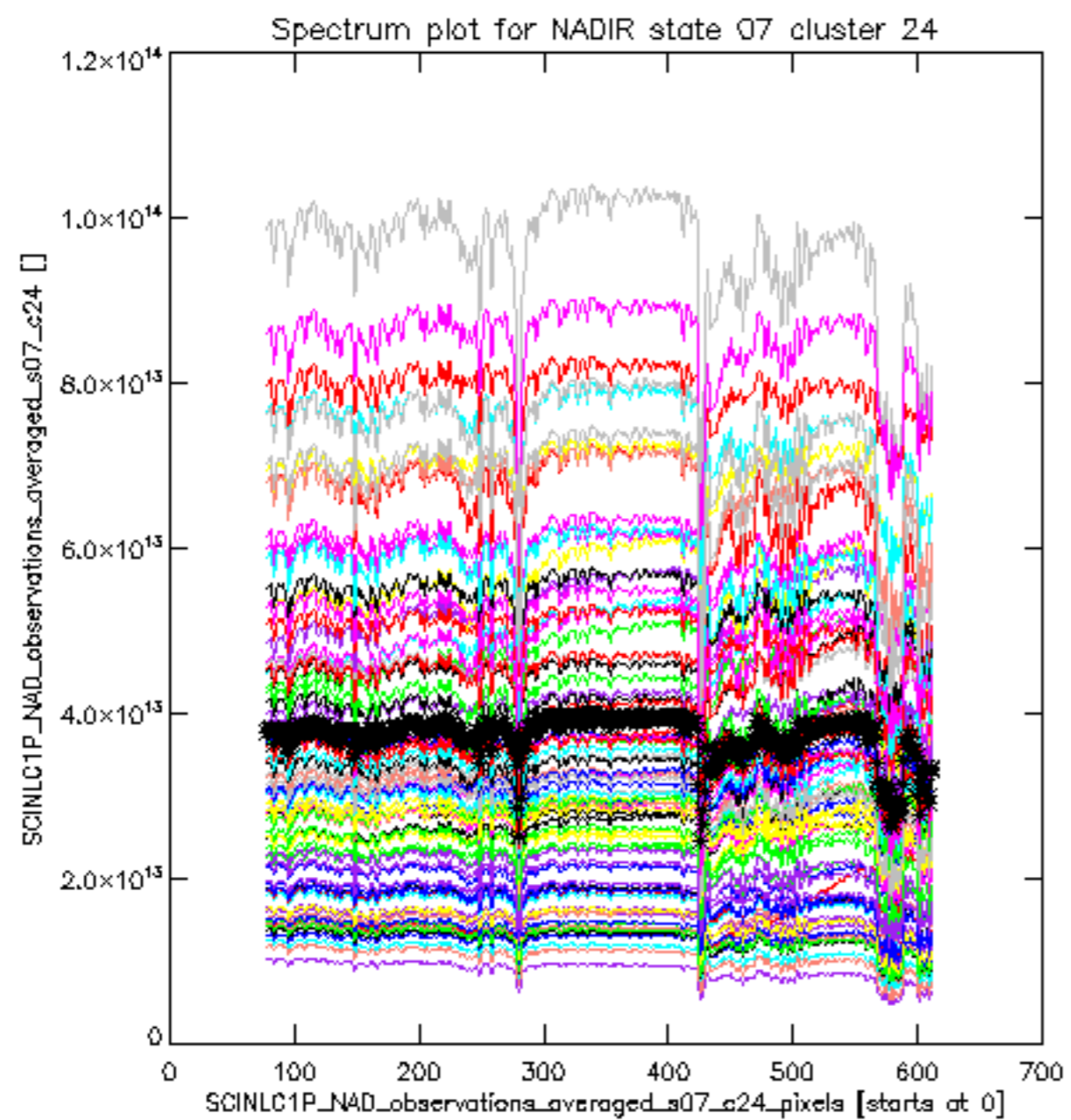


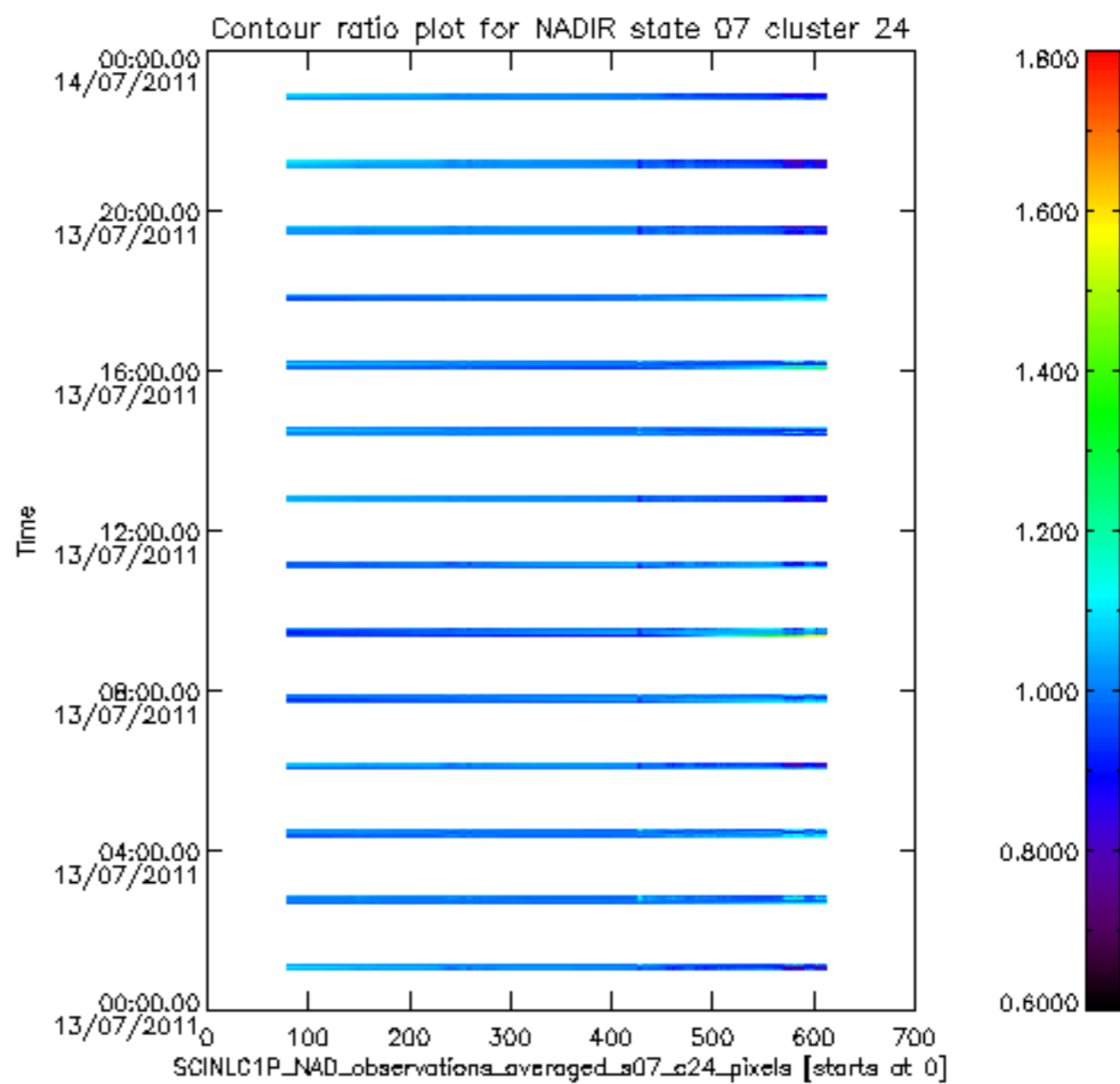
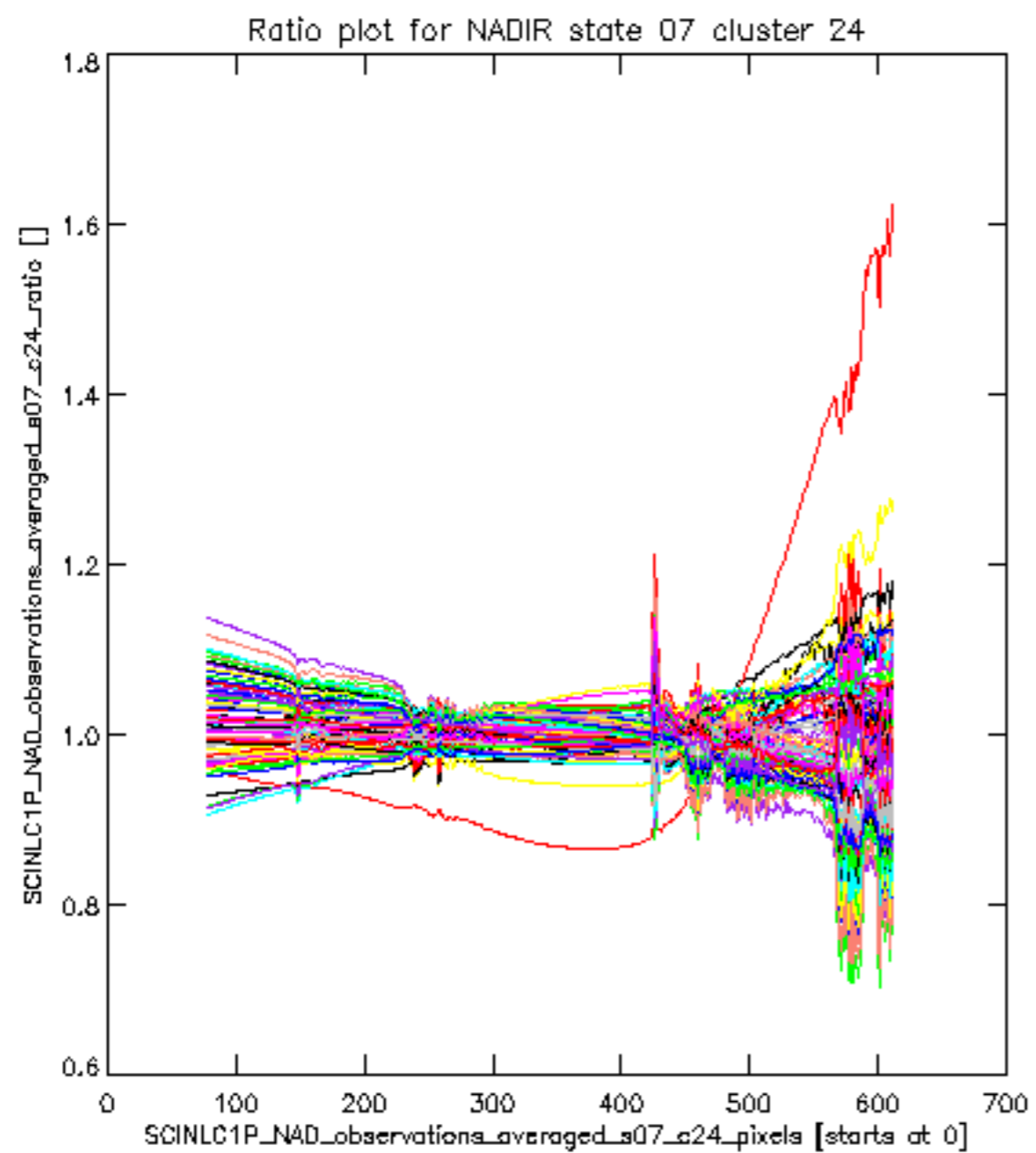




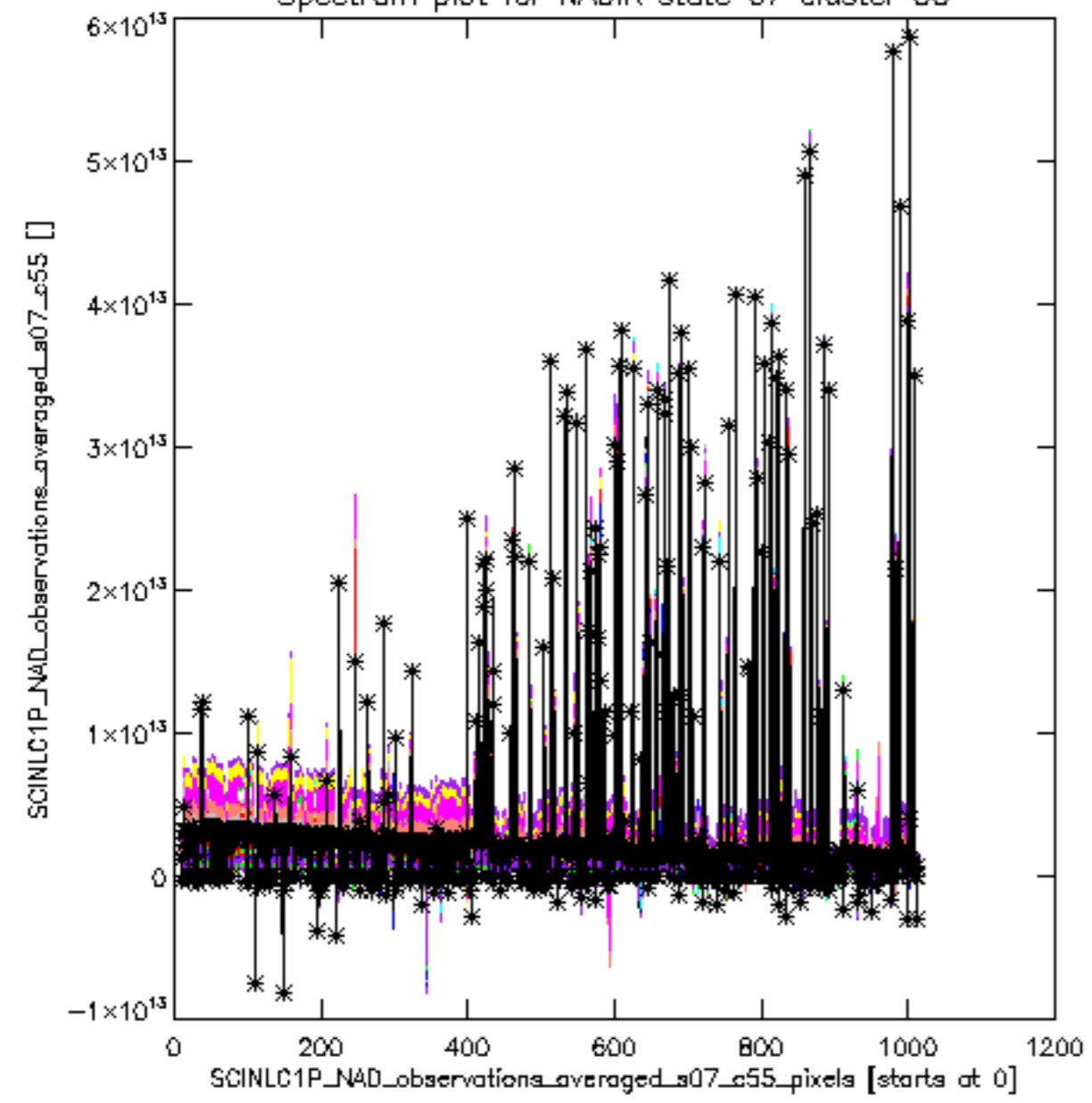








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

