

# 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	01AUG2011 06:30:29
Data source version	SCIA/7.04-U
Processing scope for products	19JUL2011 00:00:00 to 20JUL2011 00:00:00
Start time of first product within scope	19JUL2011 07:14:47
Stop time of last product within scope	19JUL2011 11:20:05
Total number of level 1 products	3
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	19JUL2011 09:01:24.623	19JUL2011 10:50:58.264
1	NADIR	07	09	N/A	19JUL2011 09:01:24.623	19JUL2011 10:50:58.264
2	NADIR	07	15	N/A	19JUL2011 09:01:24.623	19JUL2011 10:50:58.264
3	NADIR	07	24	N/A	19JUL2011 09:01:24.623	19JUL2011 10:50:58.264
4	NADIR	07	55	N/A	19JUL2011 09:01:24.623	19JUL2011 10:50:58.264
5	LIMB	32	09	~19 km	19JUL2011 08:48:13.982	19JUL2011 10:56:12.307
6	LIMB	32	09	~22 km	19JUL2011 08:48:13.982	19JUL2011 10:56:12.307
7	LIMB	32	09	~25 km	19JUL2011 08:48:13.982	19JUL2011 10:56:12.307
8	LIMB	32	15	~22 km	19JUL2011 08:48:13.982	19JUL2011 10:56:12.307
9	LIMB	32	15	~25 km	19JUL2011 08:48:13.982	19JUL2011 10:56:12.307
10	LIMB	32	15	~35 km	19JUL2011 08:48:13.982	19JUL2011 10:56:12.307

#### 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_1CUDPA20110719_071447_000041753104_00351_49072_0105.N1</a>	19JUL2011 07:14:47	19JUL2011 08:24:23	0	0	0	0	0	2	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110719_082426_000060543104_00352_49073_0134.N1</a>	19JUL2011 08:29:22	19JUL2011 09:39:36	0	35	31	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110719_100936_000057153104_00353_49074_0132.N1</a>	19JUL2011 10:09:36	19JUL2011 11:20:05	0	36	30	0	0	1	0	0	

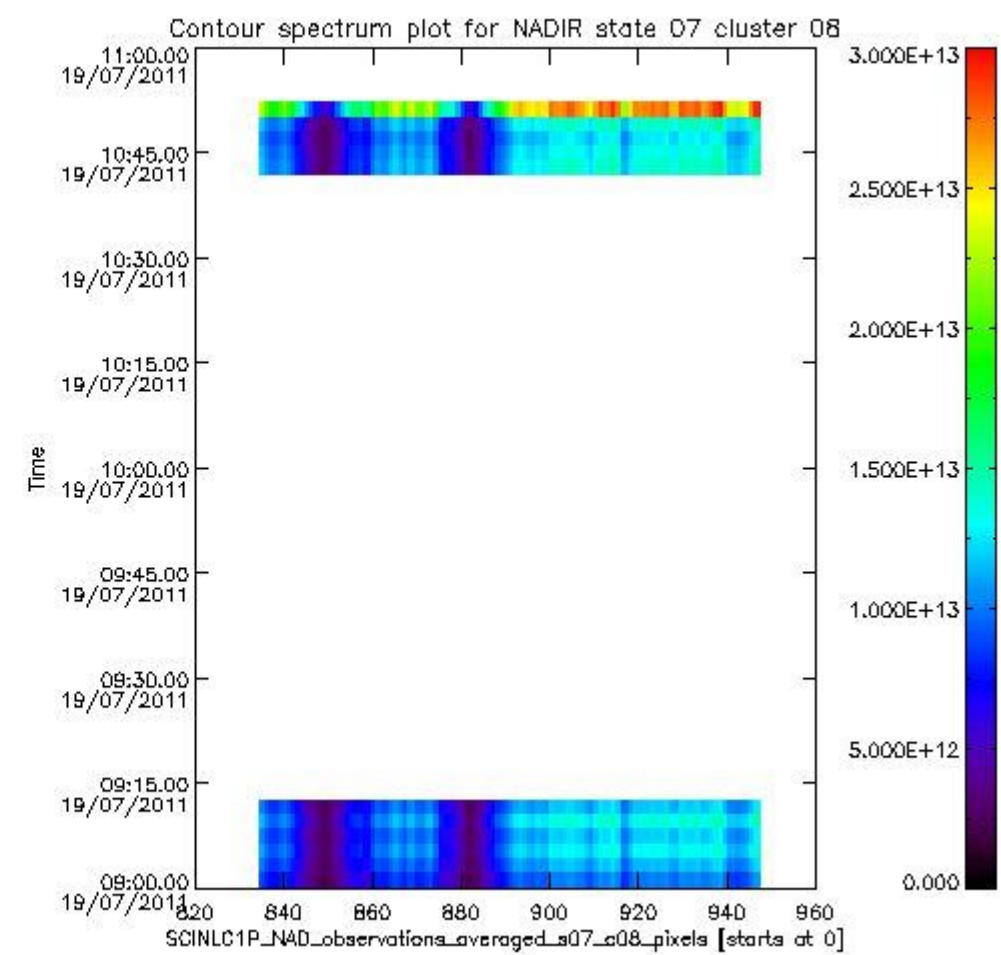
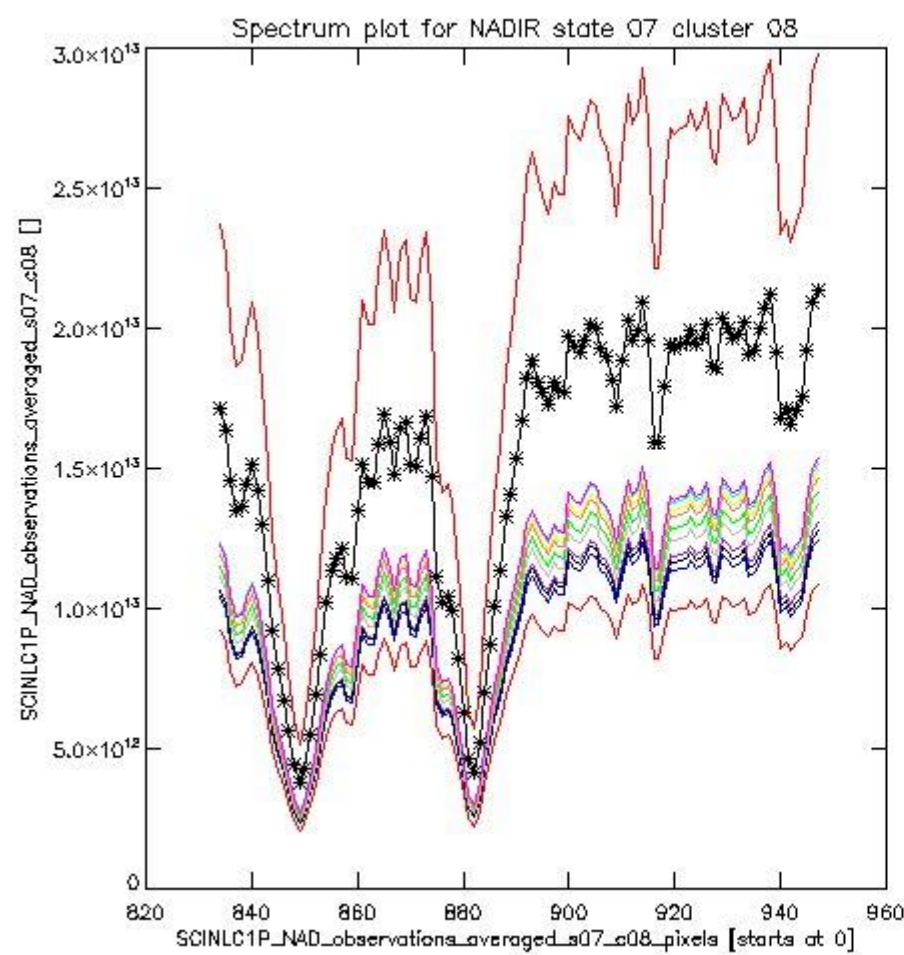
## 1.2 Source packet monitoring

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

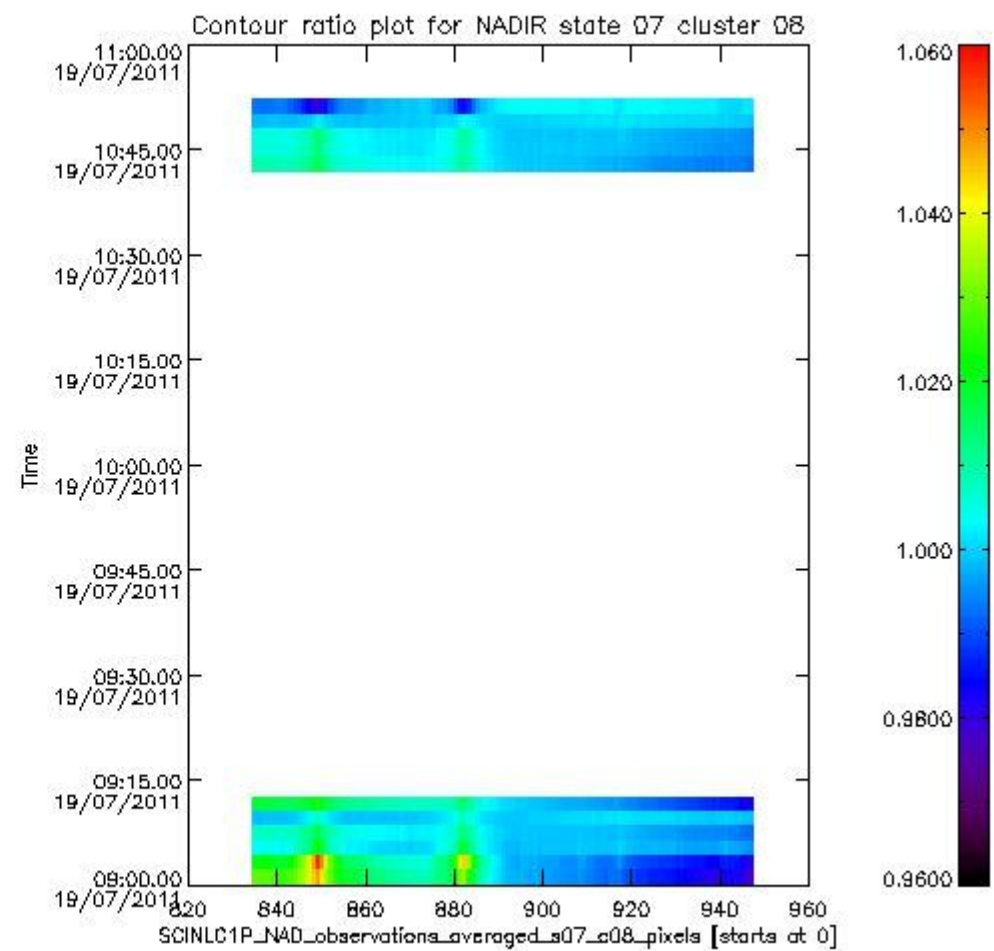
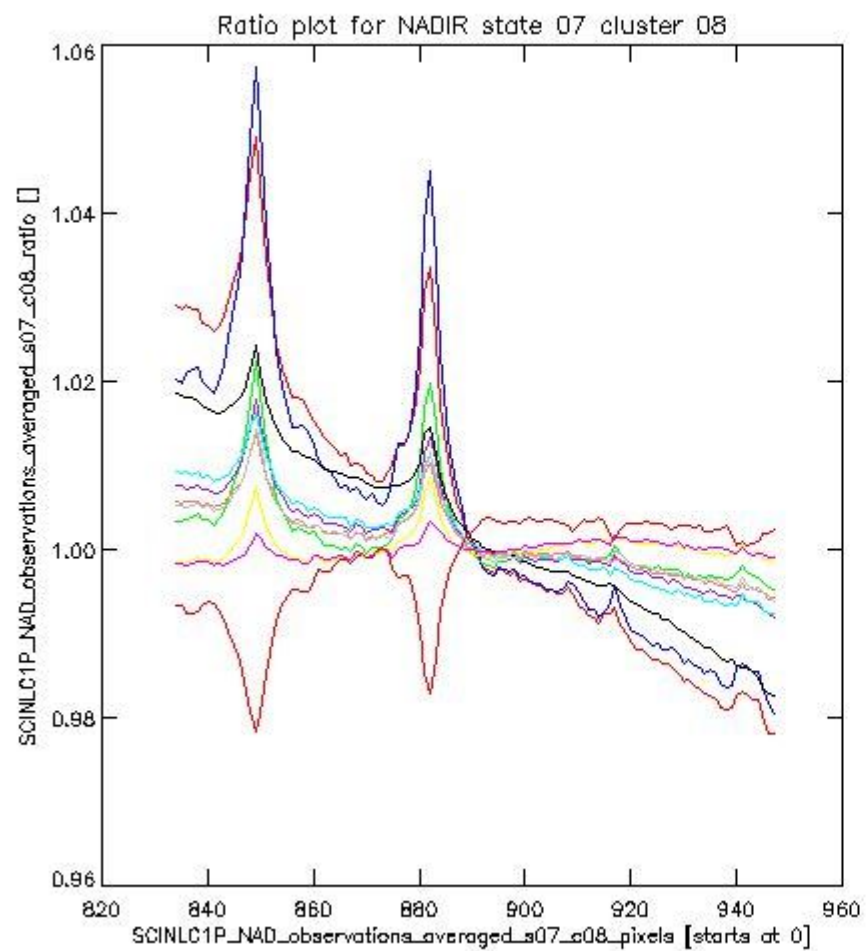
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	19JUL2011 09:01:24.623
Start time of last sample	19JUL2011 10:50:58.264
Reference period start time	19JUN2011 00:39:43.988
Reference period stop time	16JUL2011 14:22:11.685
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



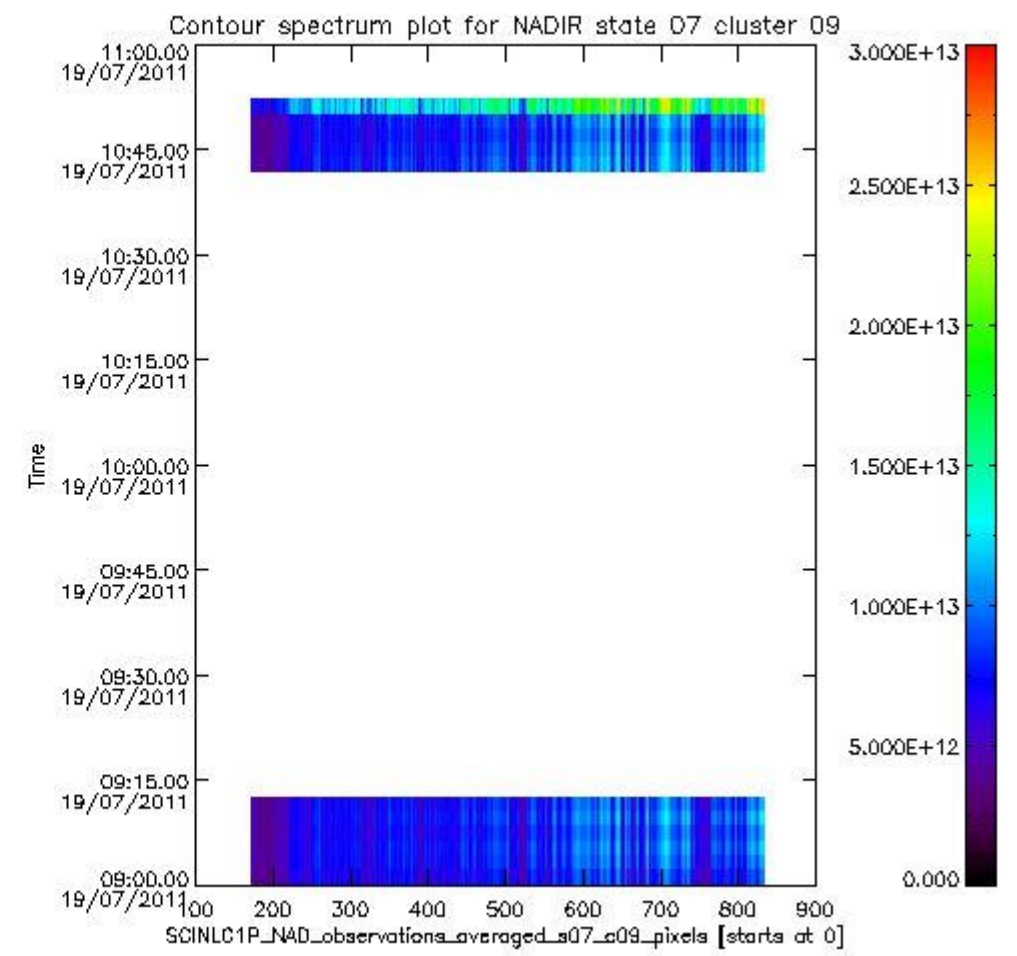
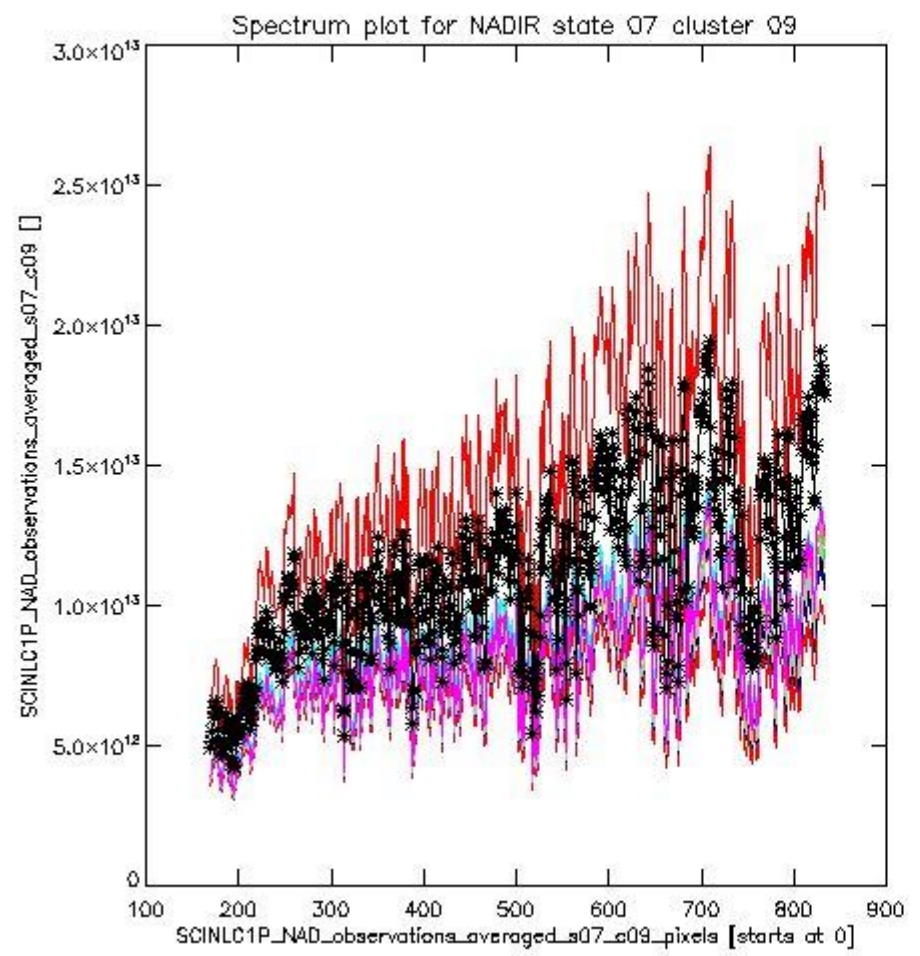
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_0.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_1.PNG

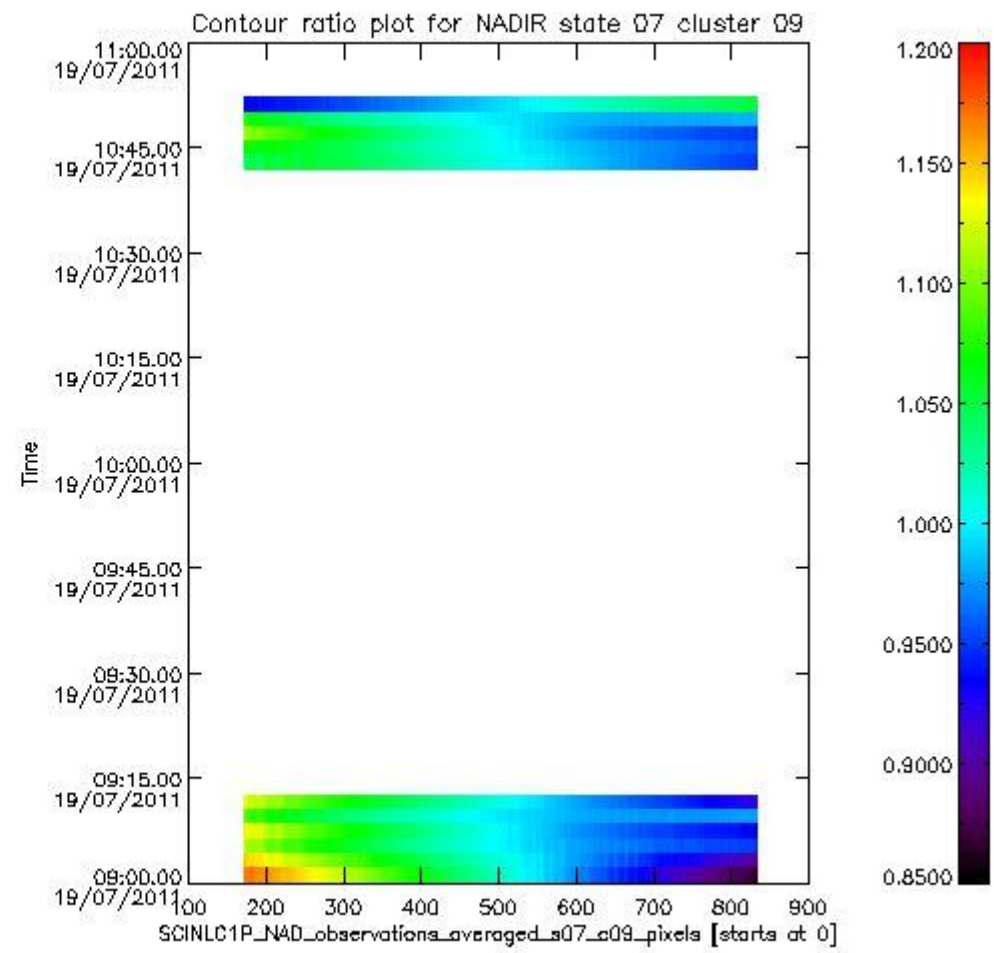
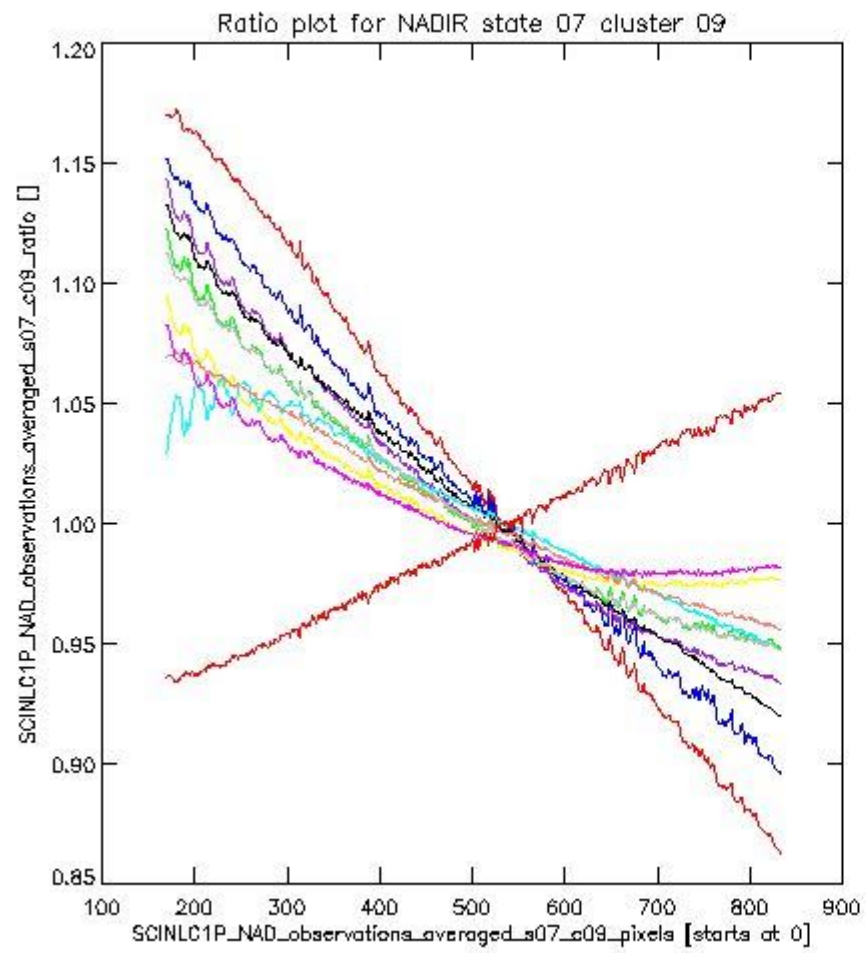
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	19JUL2011 09:01:24.623
Start time of last sample	19JUL2011 10:50:58.264
Reference period start time	19JUN2011 00:39:43.988
Reference period stop time	16JUL2011 14:22:11.685
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\_20110719\_2.PNG

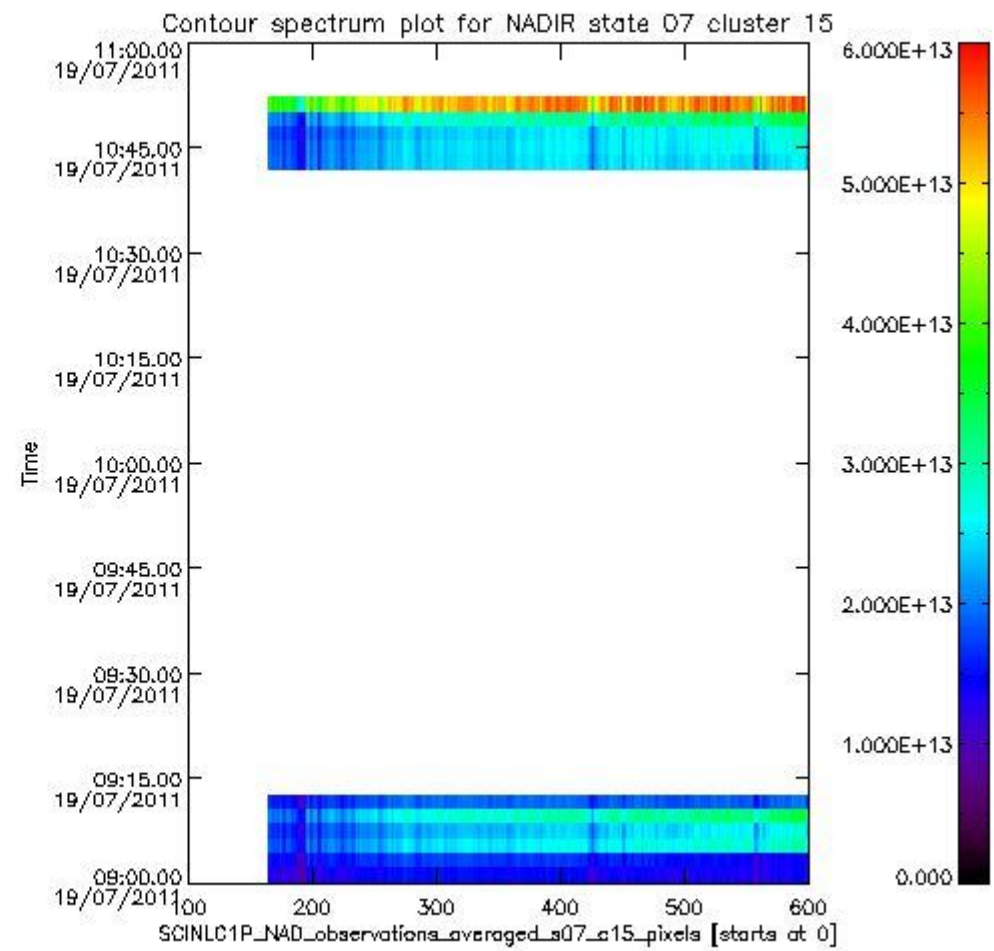
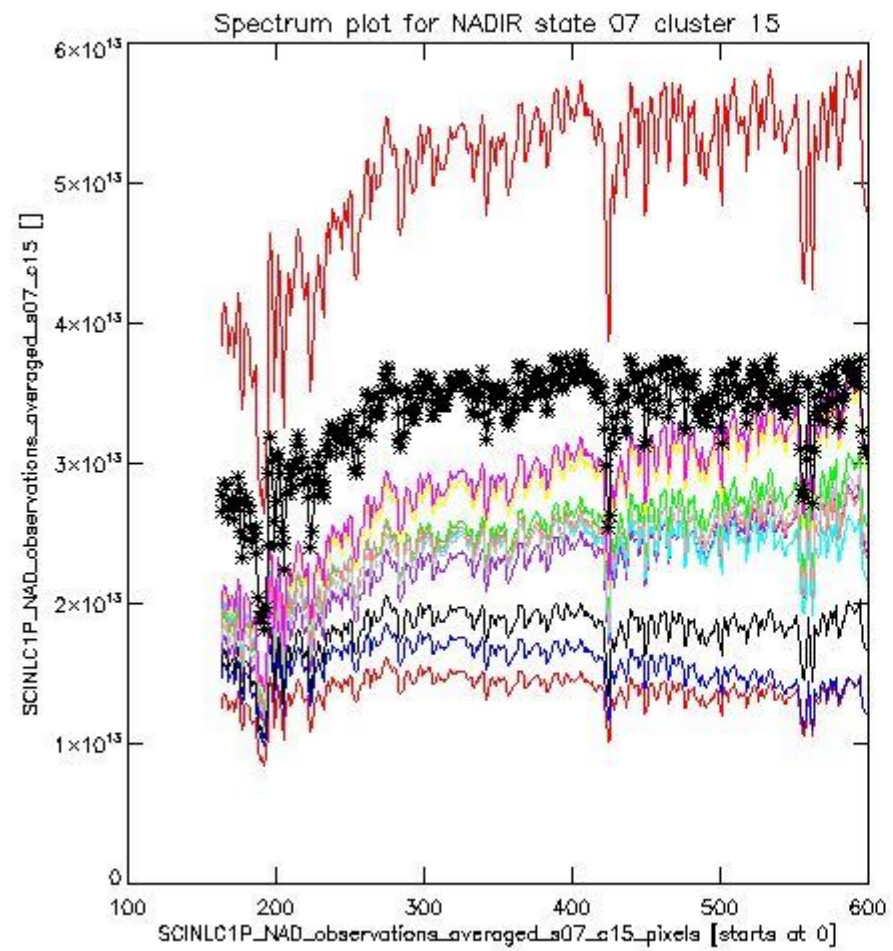




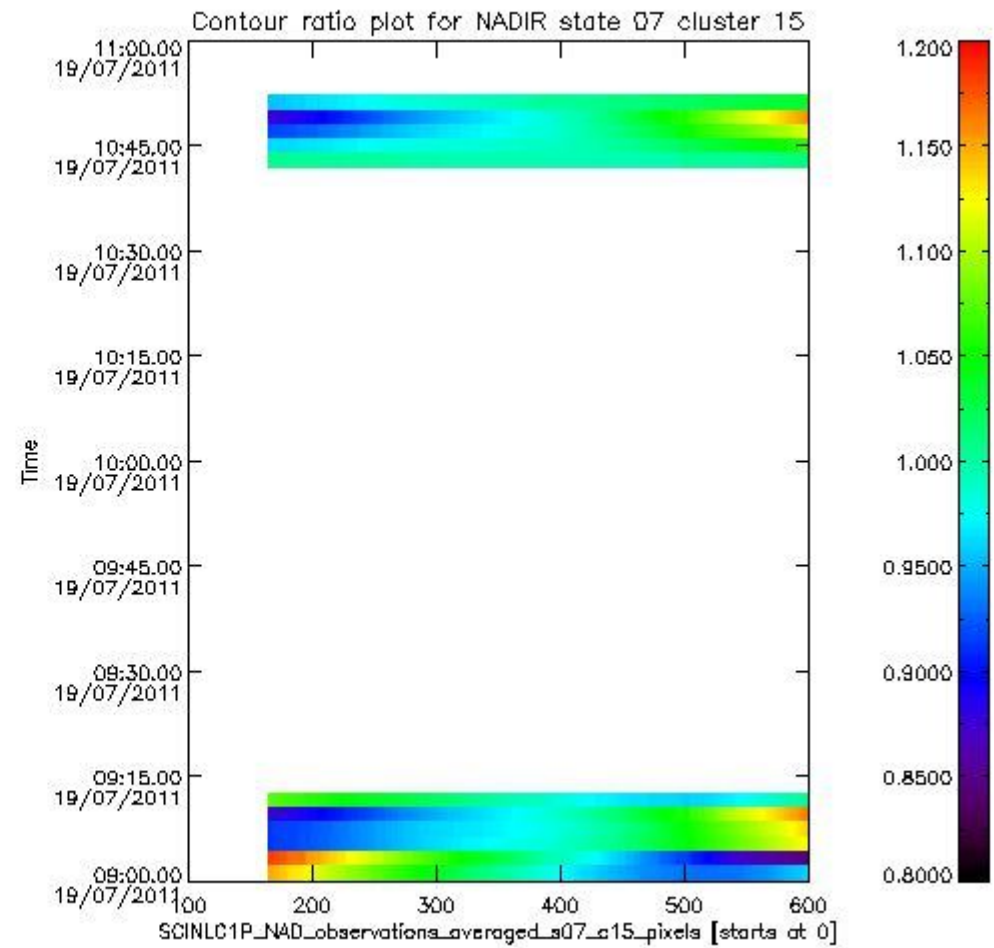
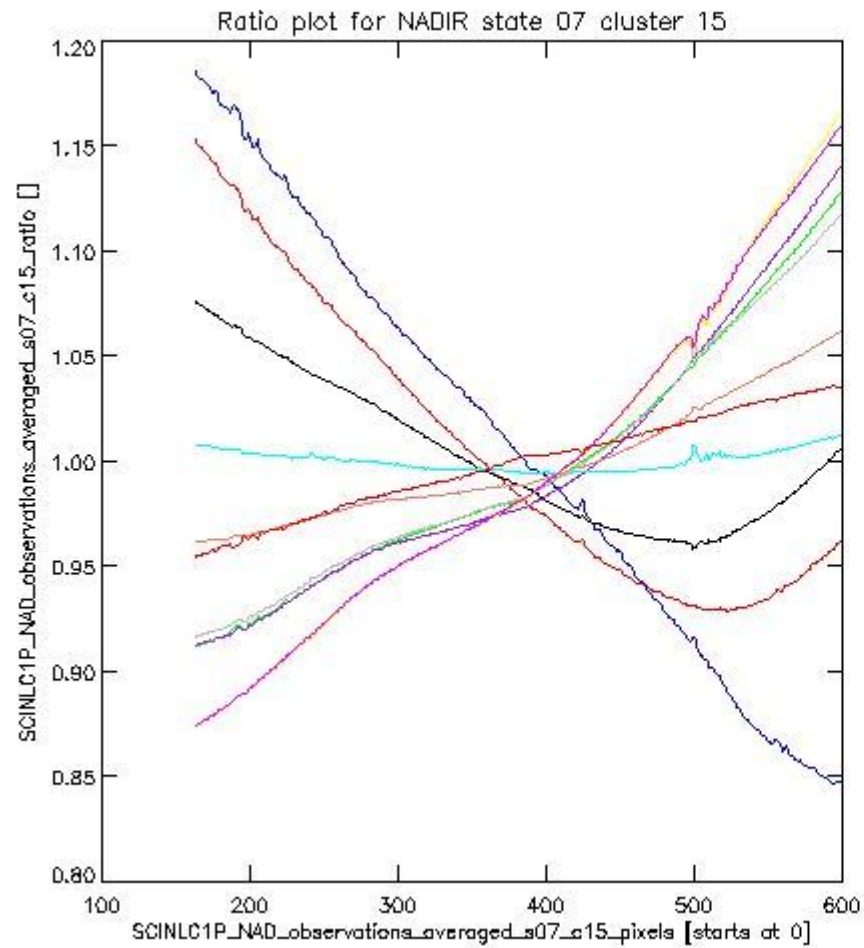
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_3.PNG

**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	19JUL2011 09:01:24.623
Start time of last sample	19JUL2011 10:50:58.264
Reference period start time	19JUN2011 00:39:43.988
Reference period stop time	16JUL2011 14:22:11.685
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



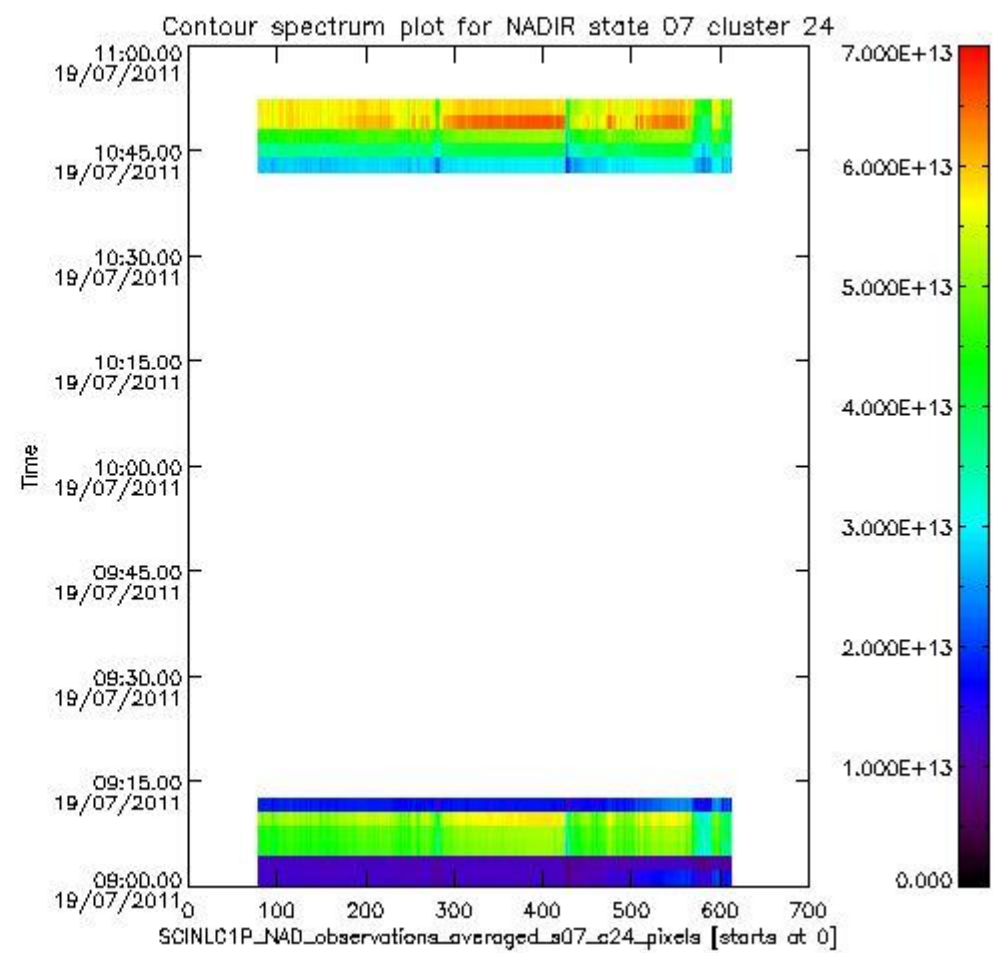
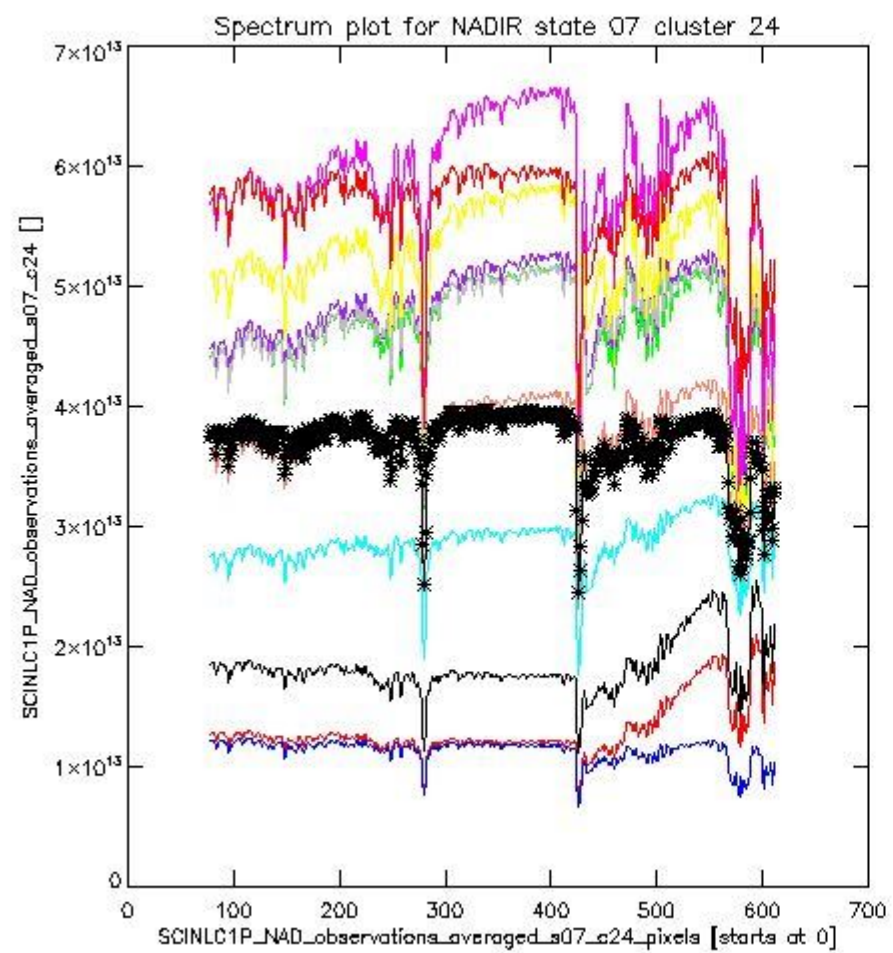
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_5.PNG

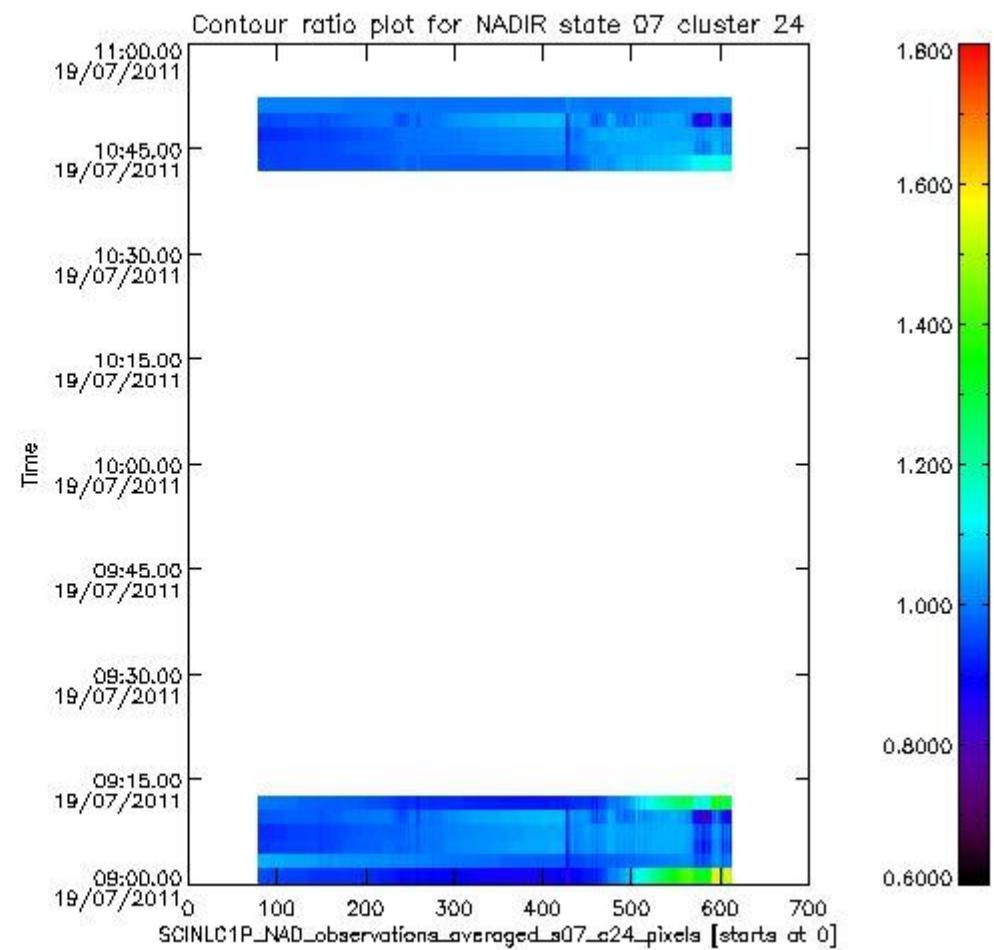
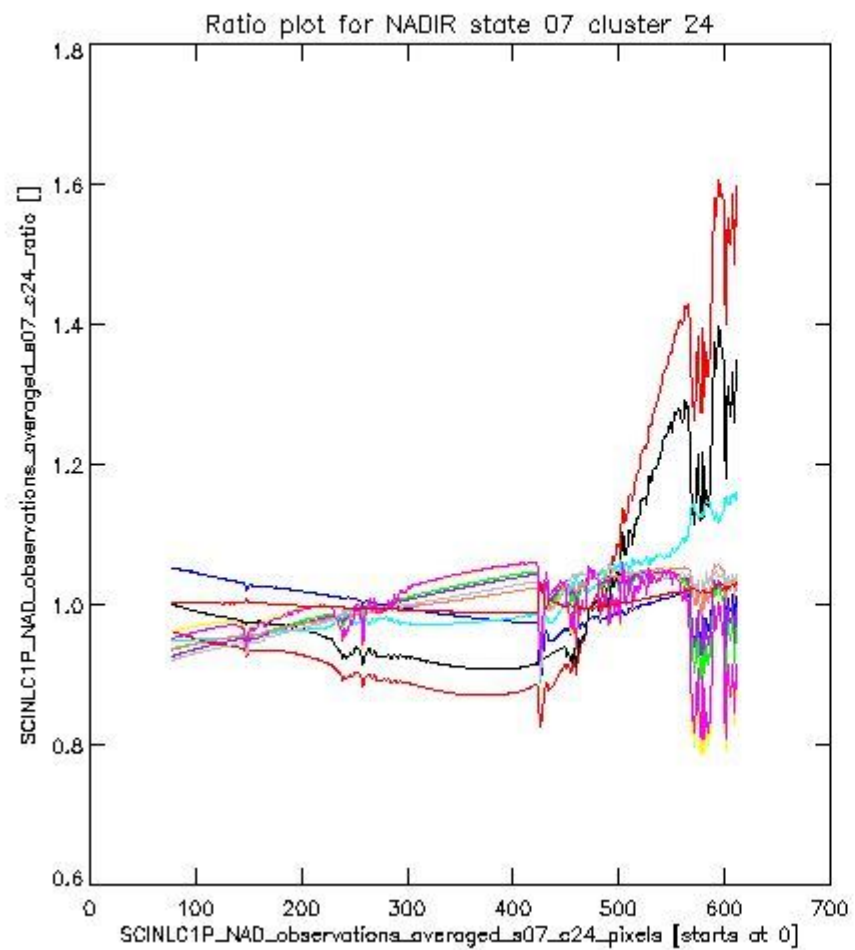
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	19JUL2011 09:01:24.623
Start time of last sample	19JUL2011 10:50:58.264
Reference period start time	19JUN2011 00:39:43.988
Reference period stop time	16JUL2011 14:22:11.685
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\_20110719\_6.PNG

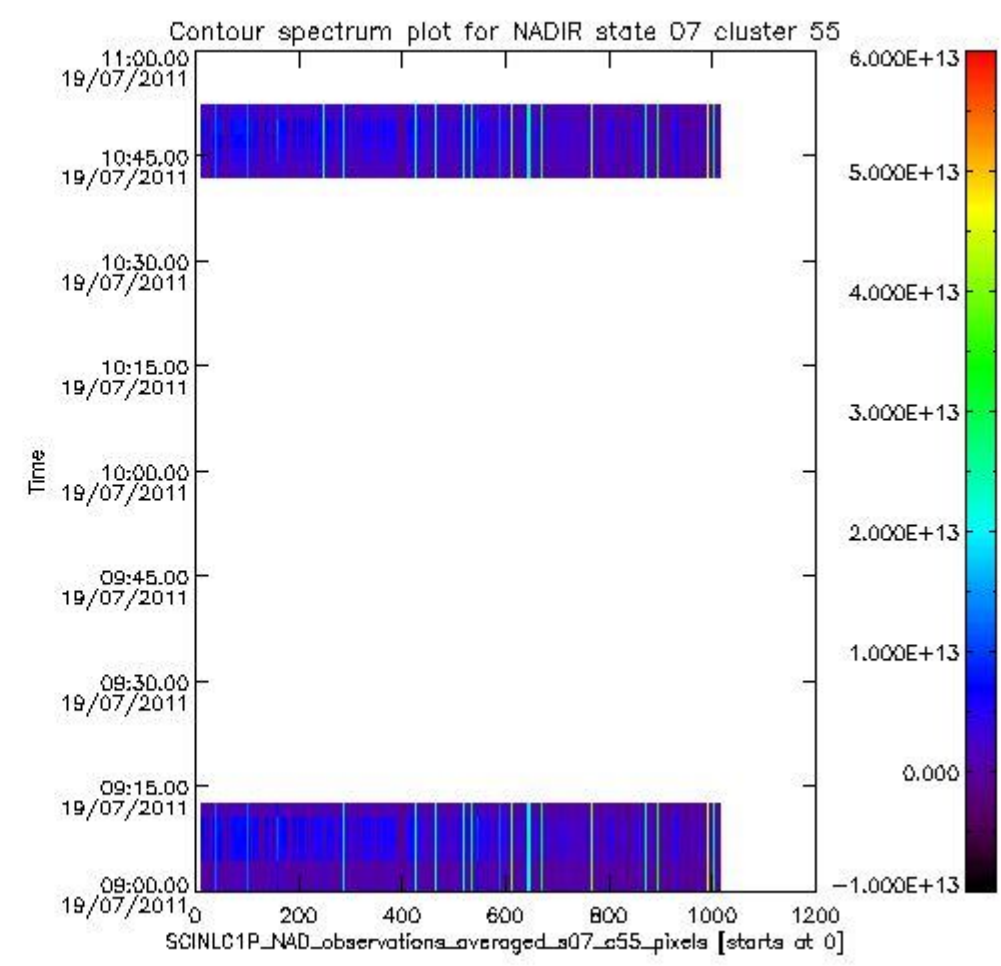
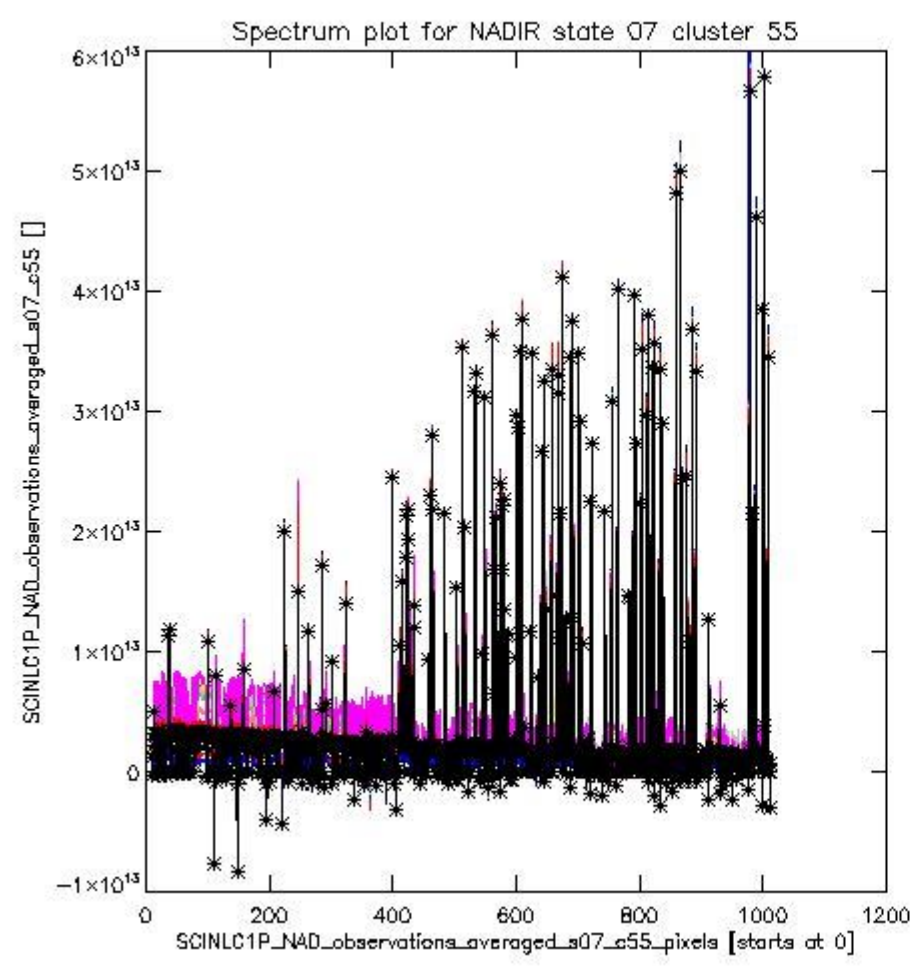




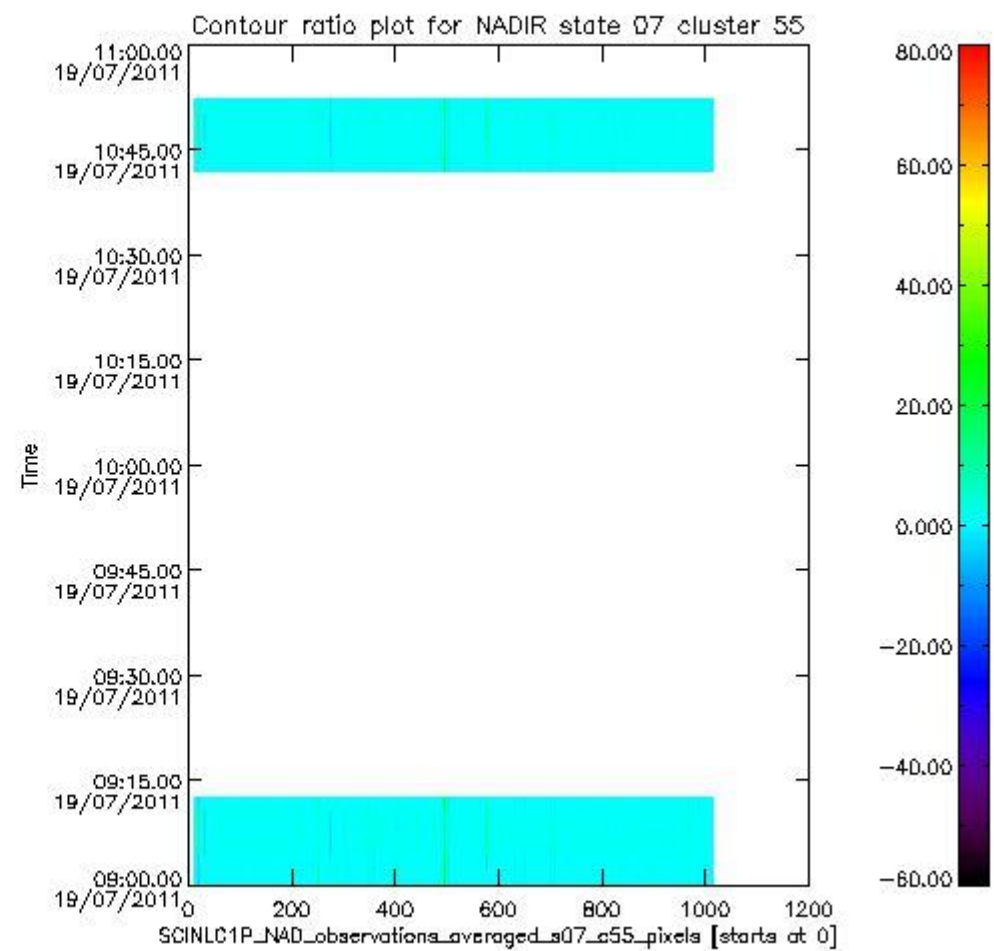
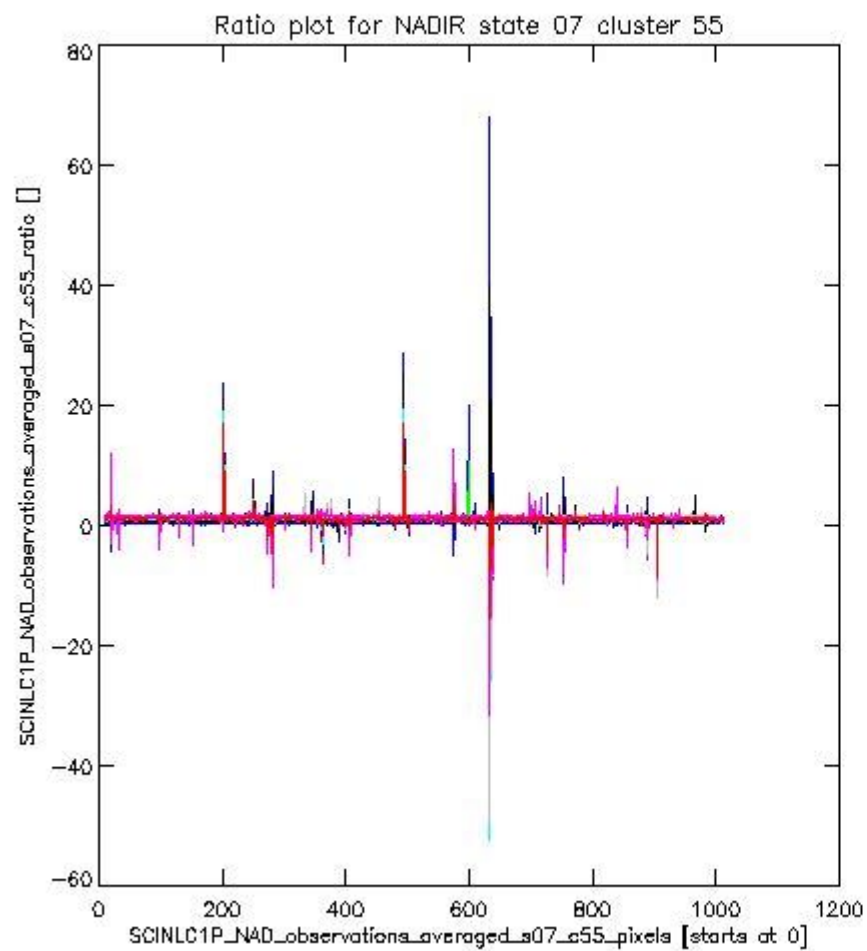
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_7.PNG

**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	19JUL2011 09:01:24.623
Start time of last sample	19JUL2011 10:50:58.264
Reference period start time	19JUN2011 00:39:43.988
Reference period stop time	16JUL2011 14:22:11.685
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



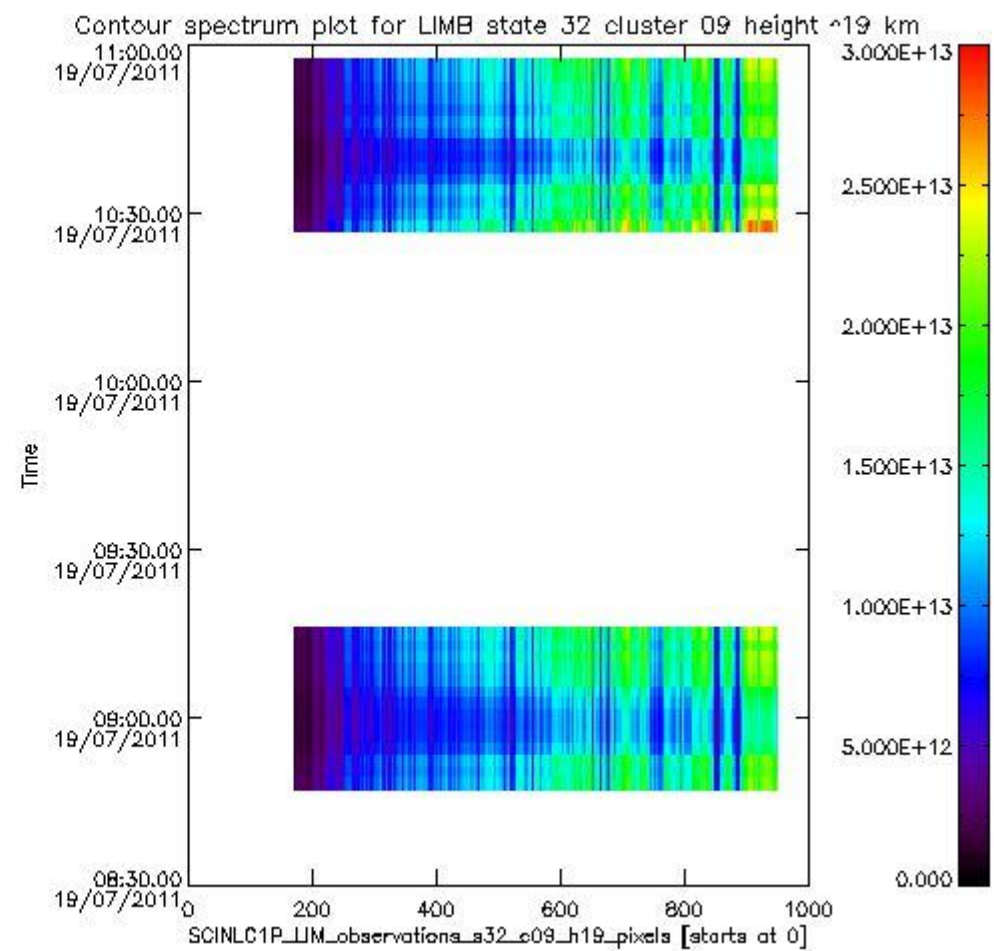
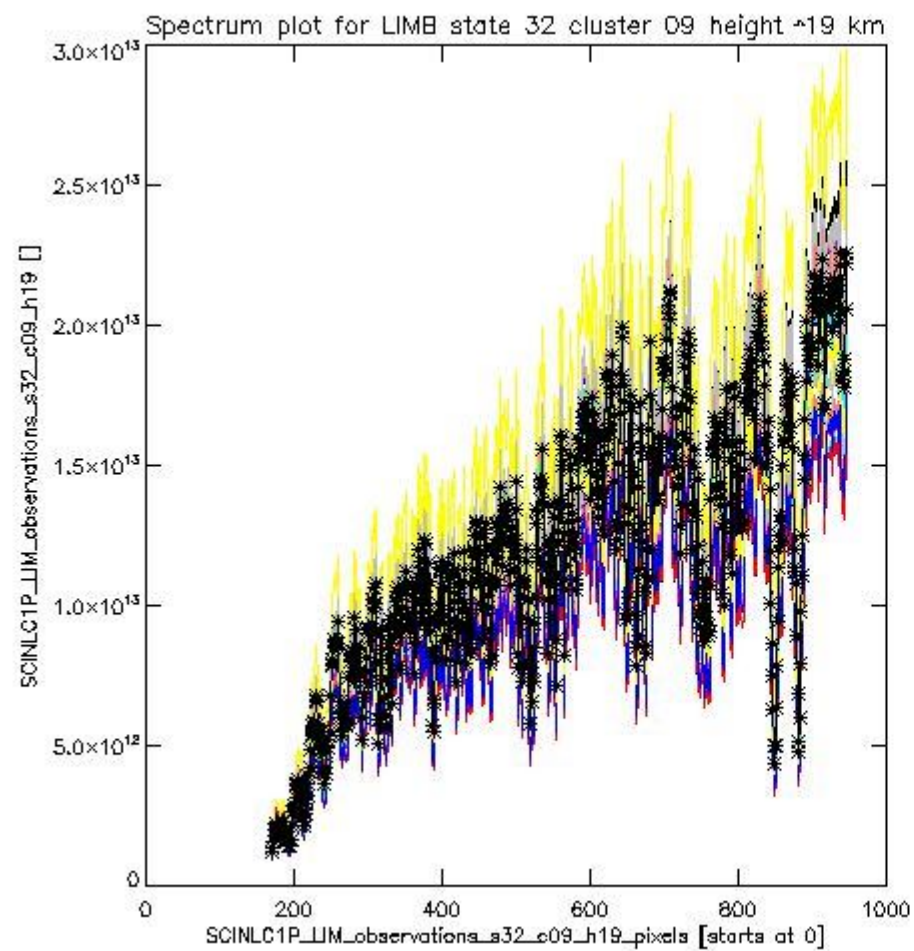
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_8.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_9.PNG

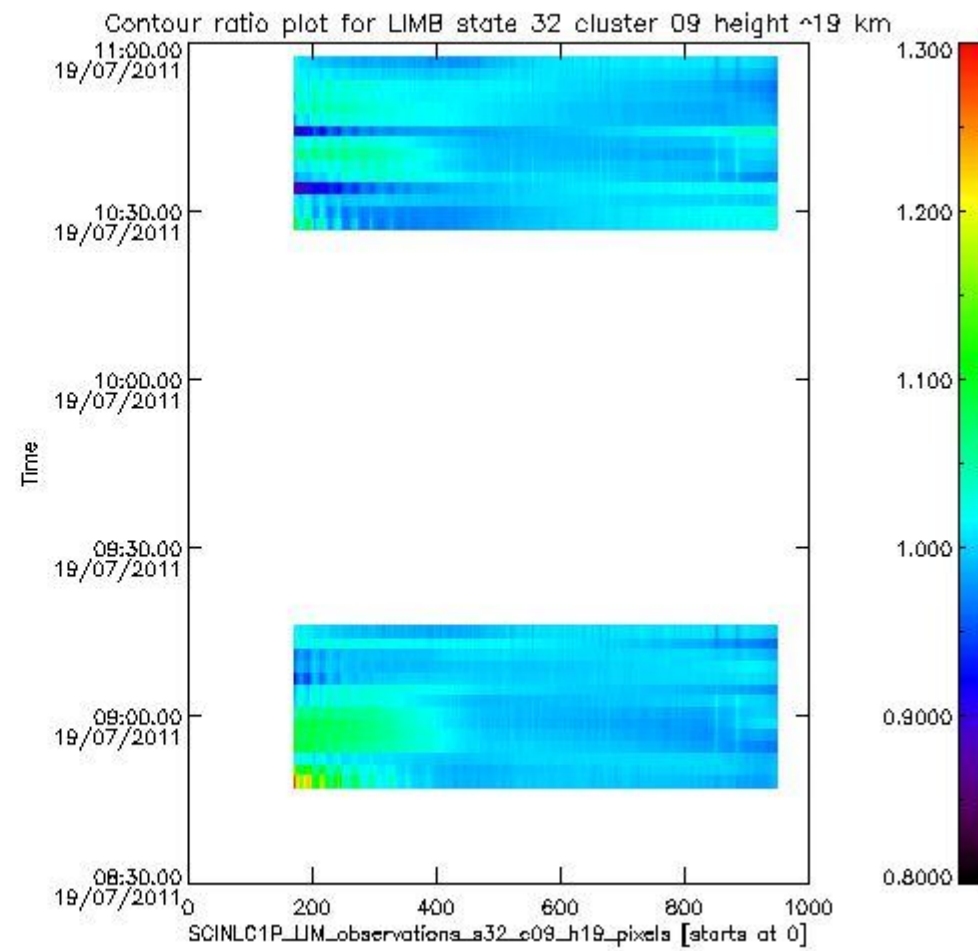
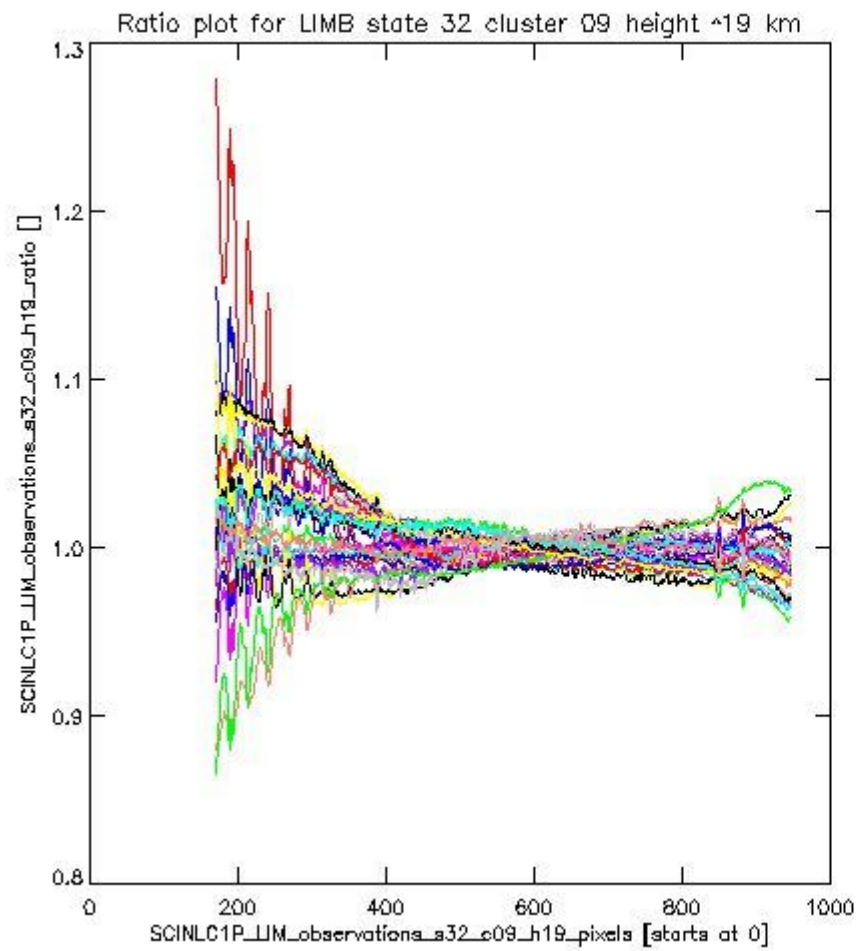
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	19JUL2011 08:48:13.982
Start time of last sample	19JUL2011 10:56:12.307
Reference period start time	19JUN2011 02:05:27.703
Reference period stop time	16JUL2011 15:44:15.542
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\_20110719\_10.PNG

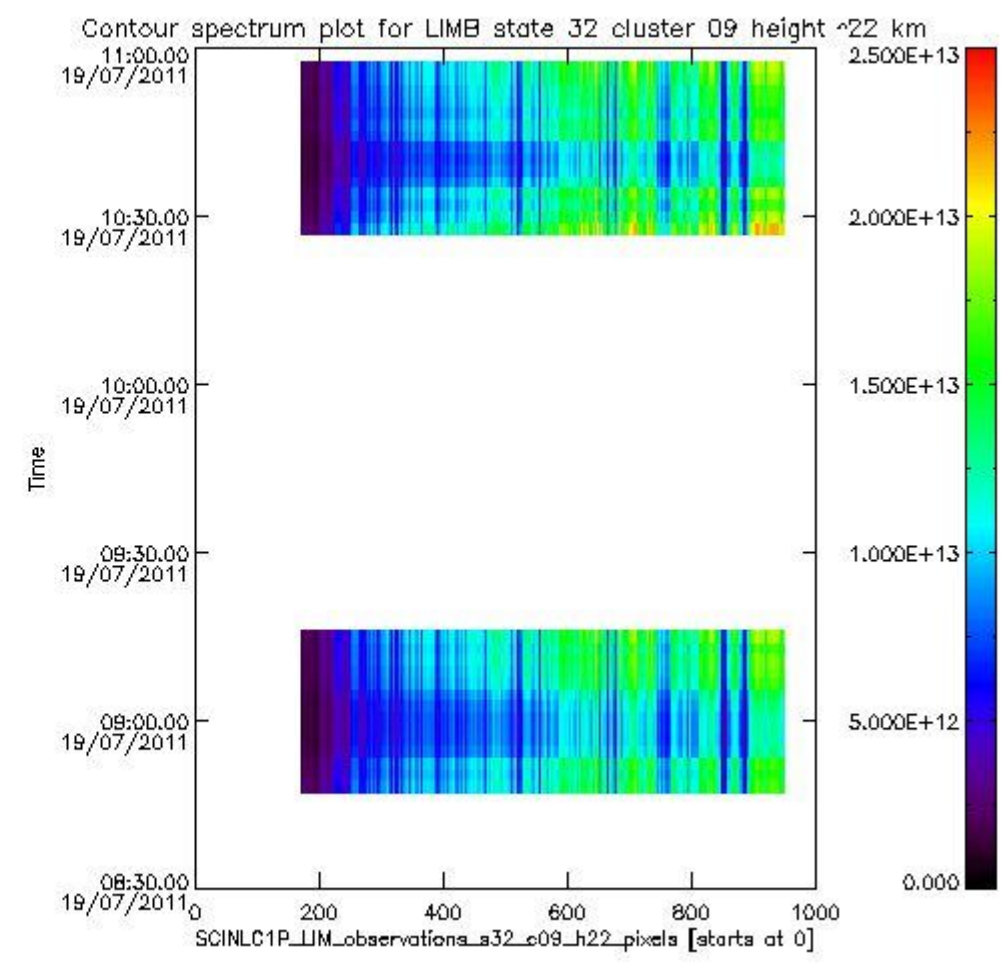
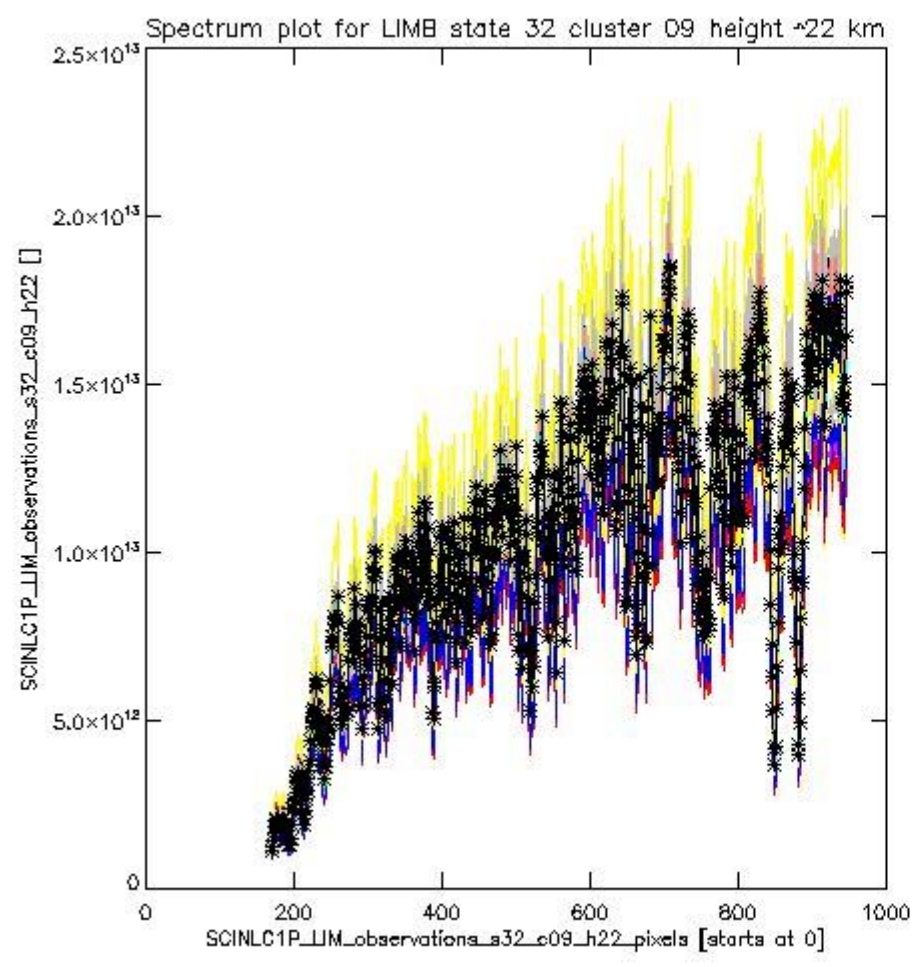




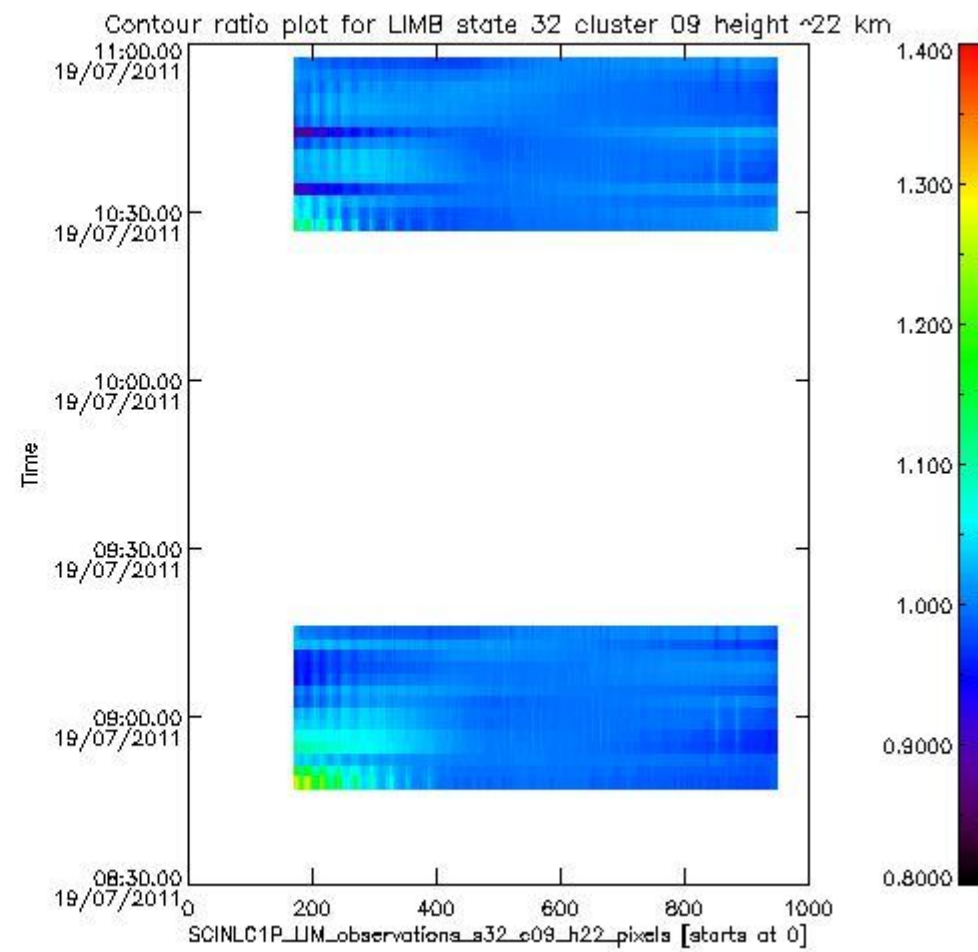
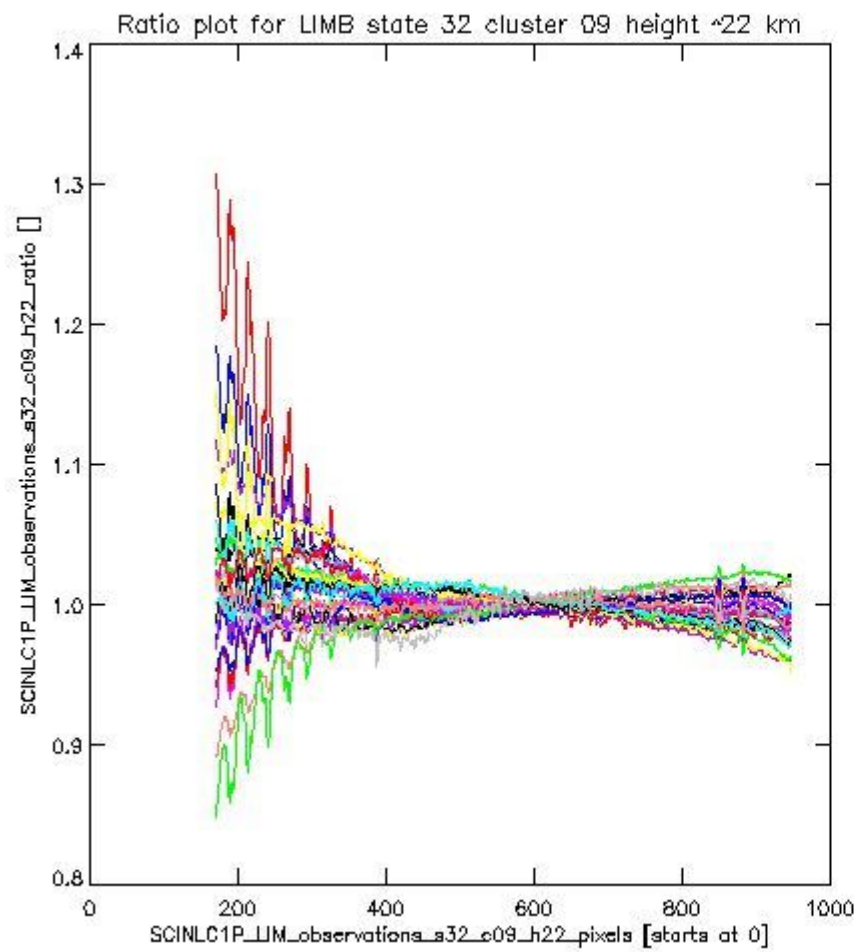
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_11.PNG

**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	19JUL2011 08:48:13.982
Start time of last sample	19JUL2011 10:56:12.307
Reference period start time	19JUN2011 02:05:27.703
Reference period stop time	16JUL2011 15:44:15.542
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



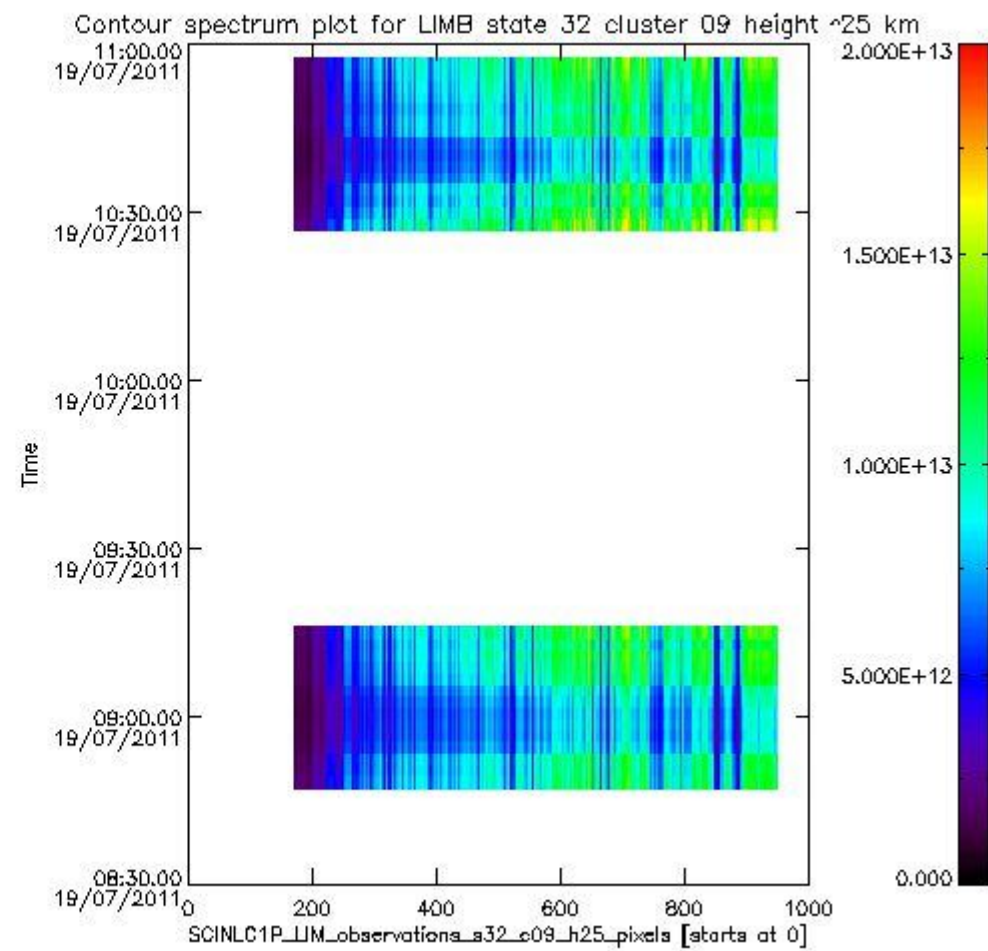
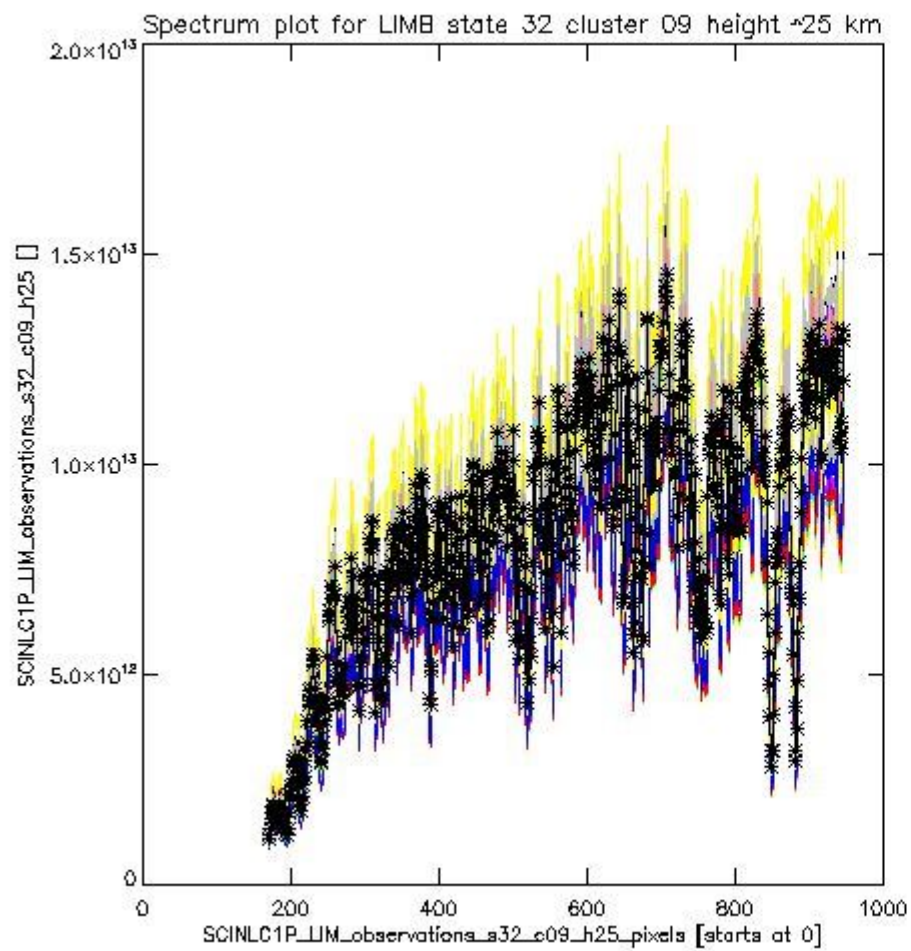
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_13.PNG

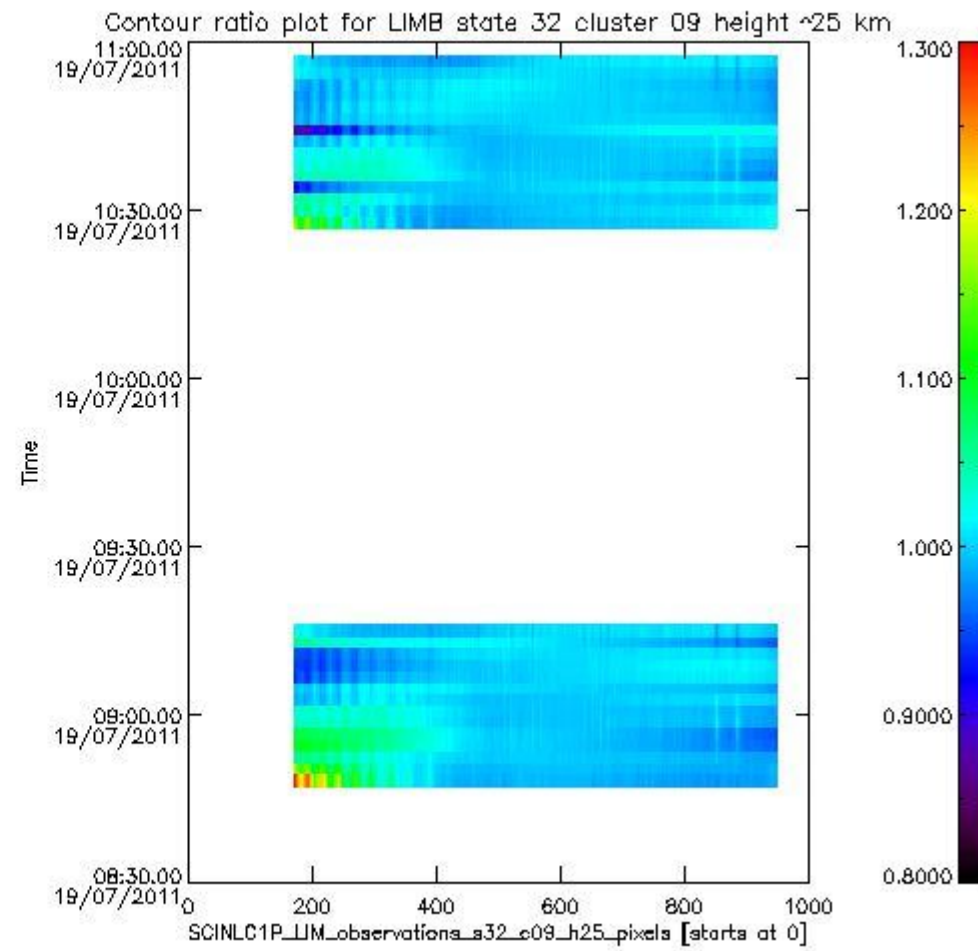
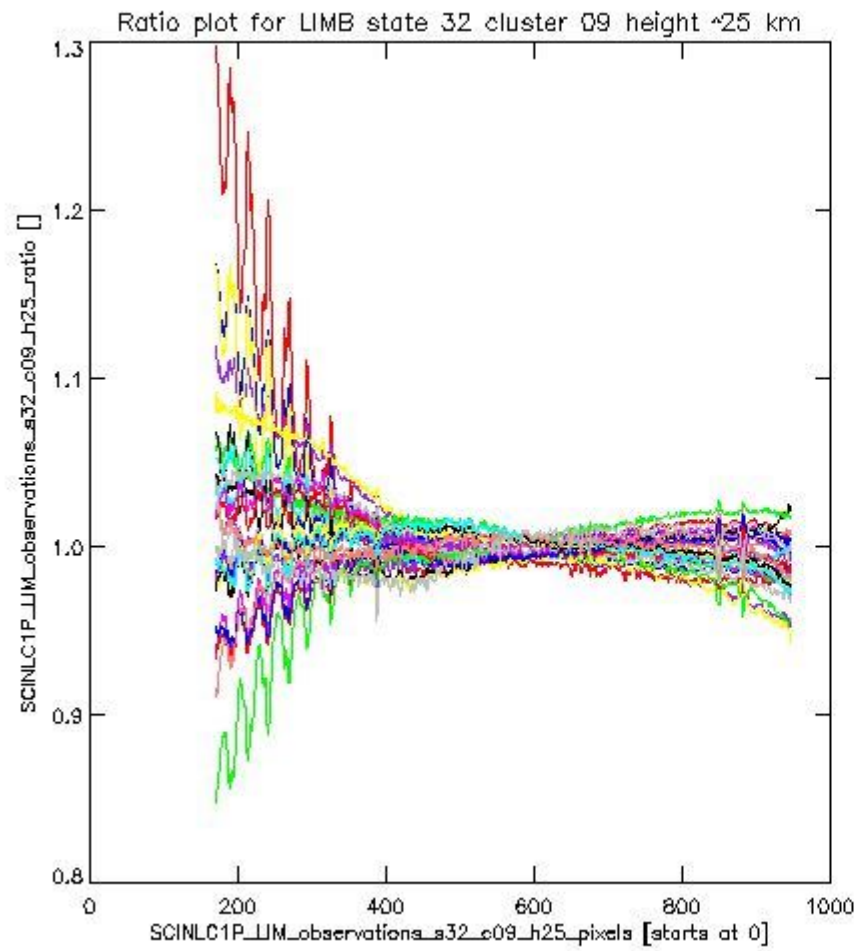
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	19JUL2011 08:48:13.982
Start time of last sample	19JUL2011 10:56:12.307
Reference period start time	19JUN2011 02:05:27.703
Reference period stop time	16JUL2011 15:44:15.542
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\_20110719\_14.PNG

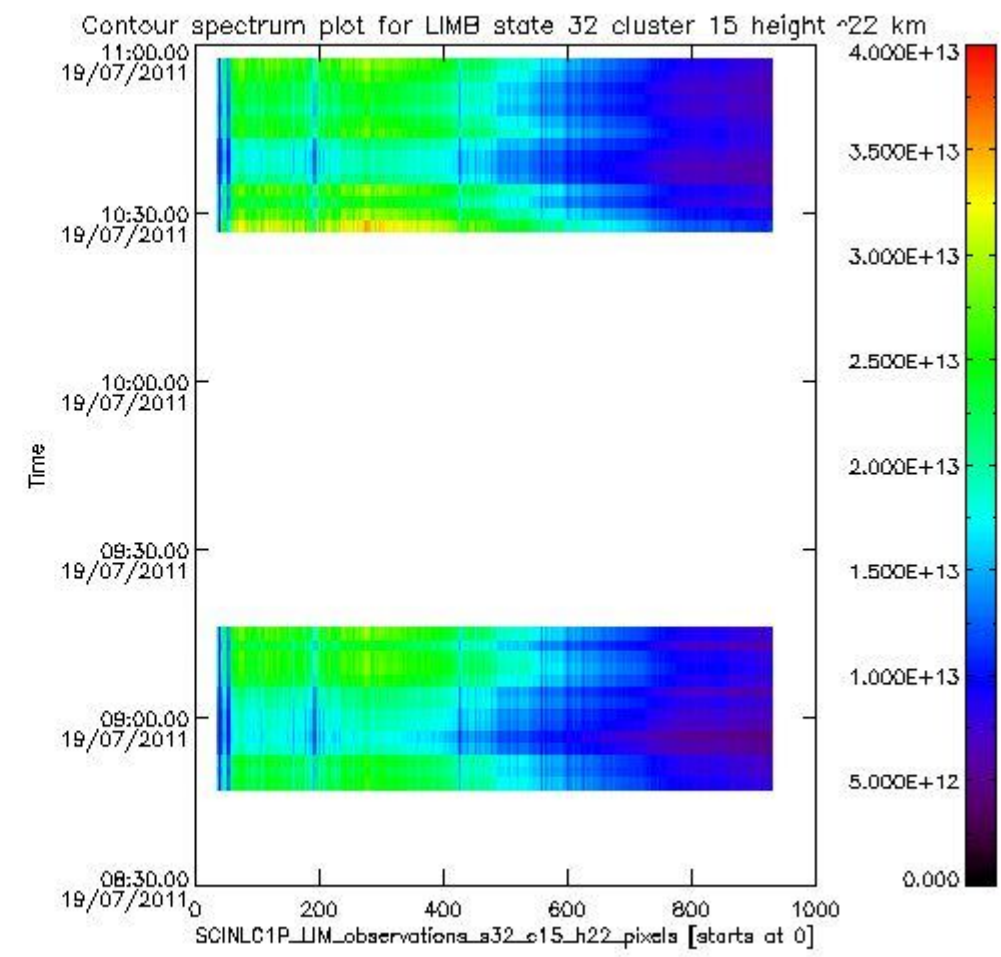
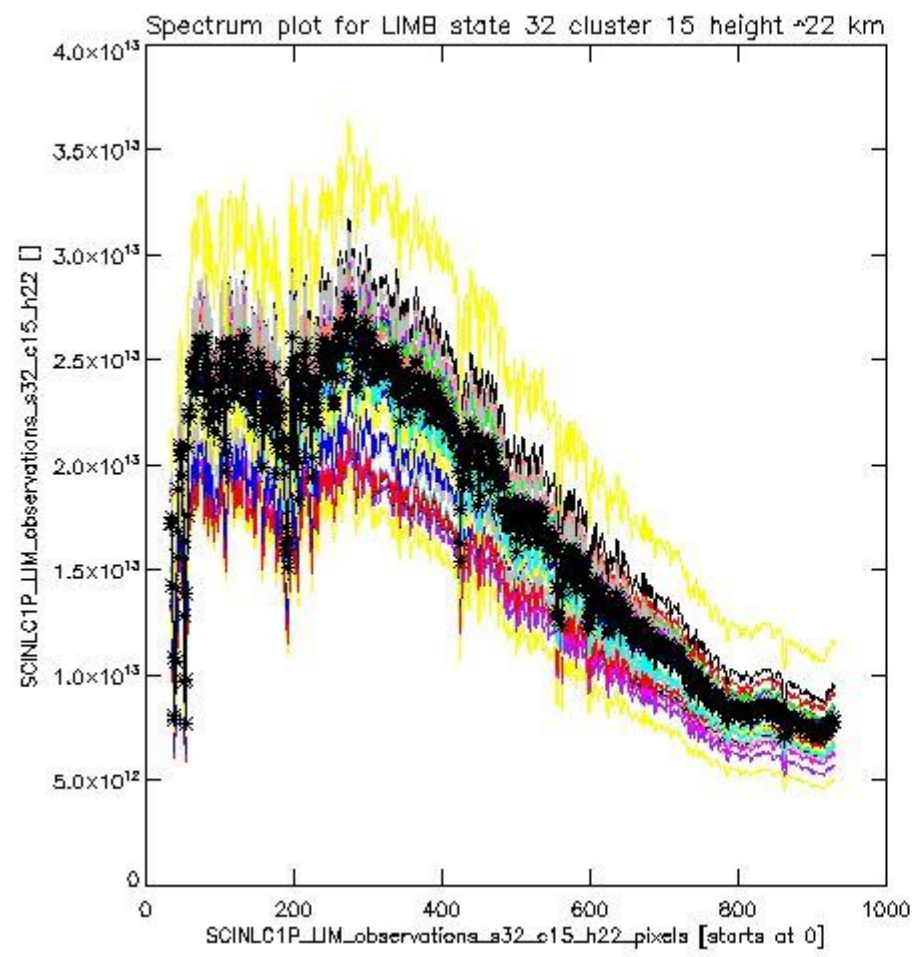




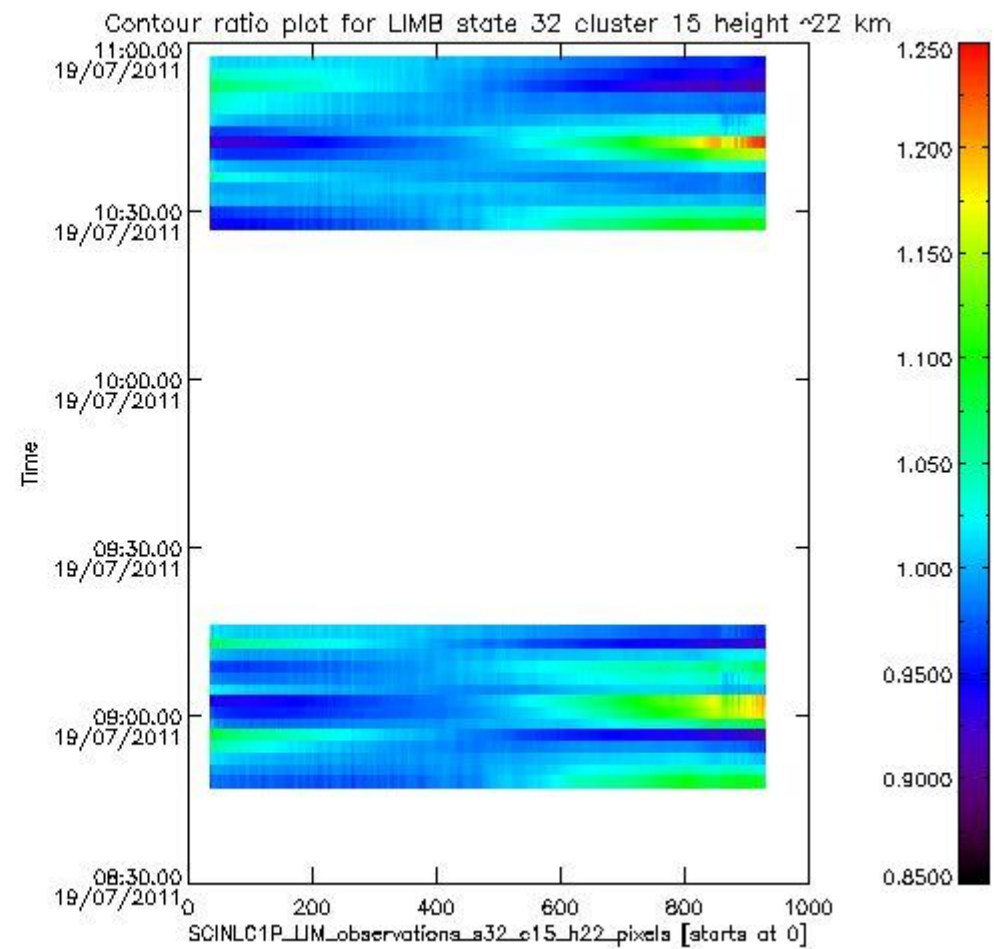
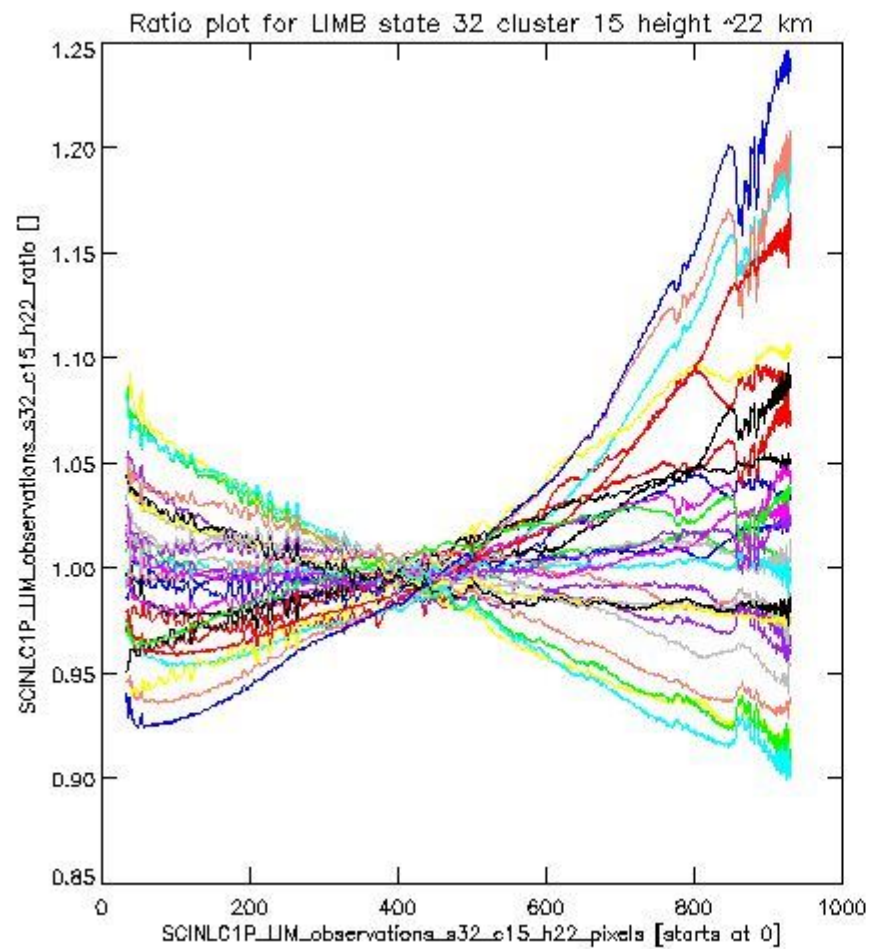
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_15.PNG

**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	19JUL2011 08:48:13.982
Start time of last sample	19JUL2011 10:56:12.307
Reference period start time	19JUN2011 02:05:27.703
Reference period stop time	16JUL2011 15:44:15.542
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\_20110719\_16.PNG

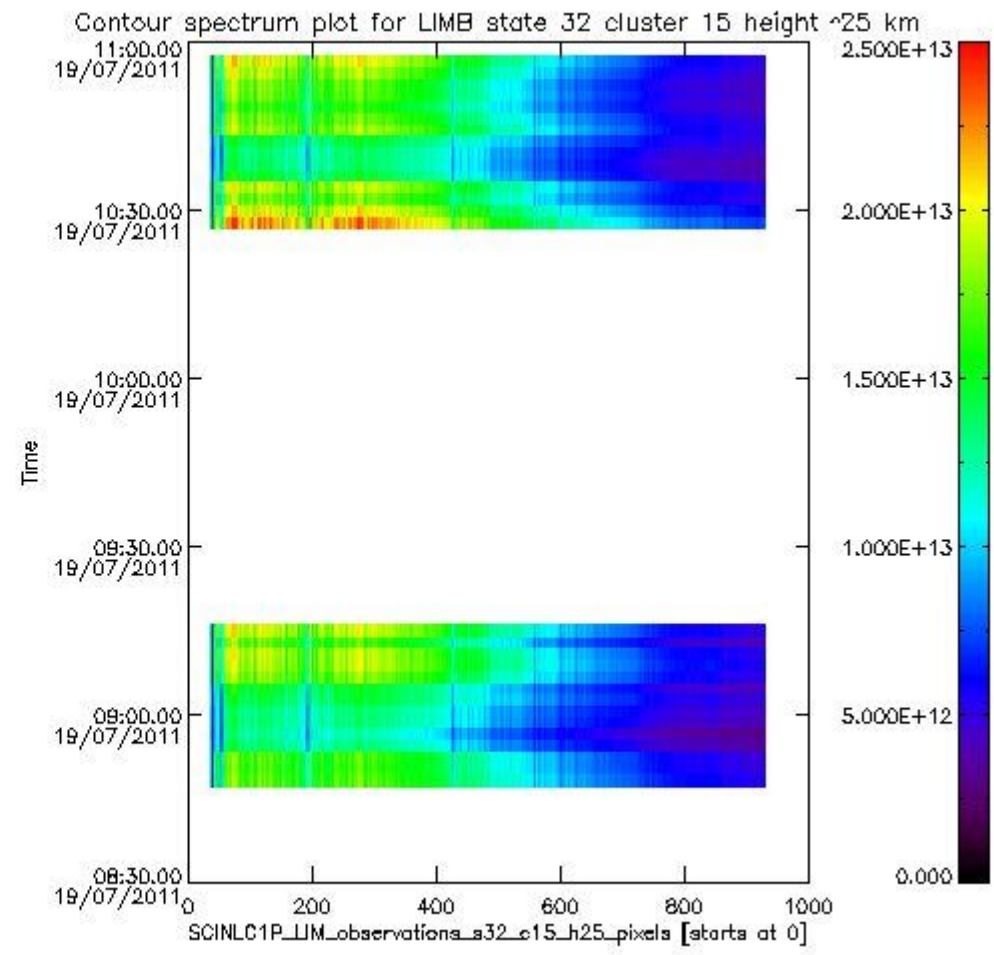
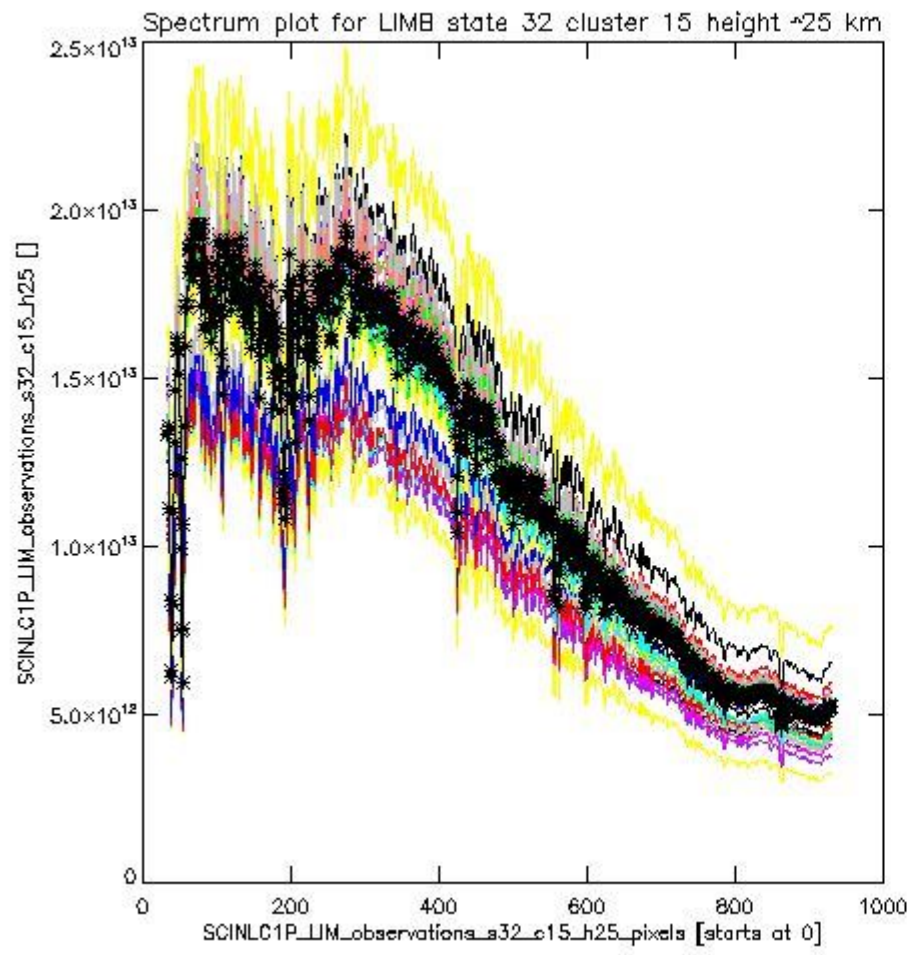


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_17.PNG

**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:

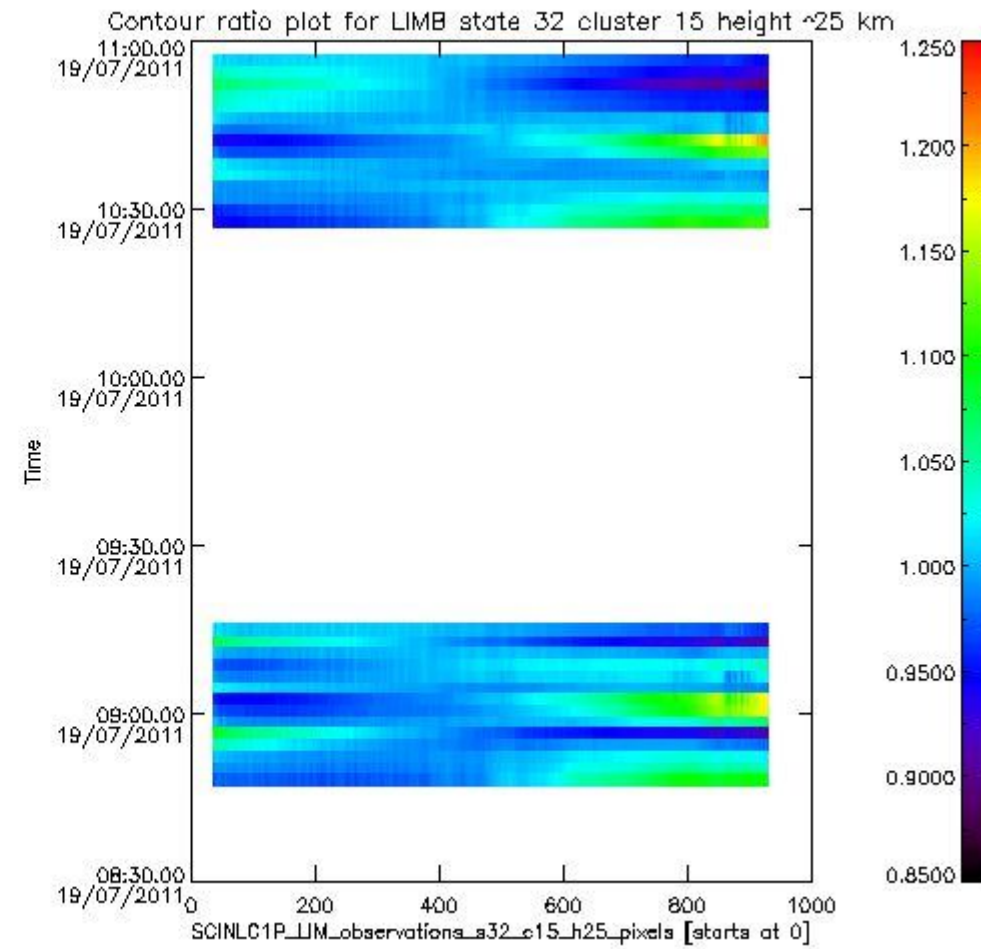
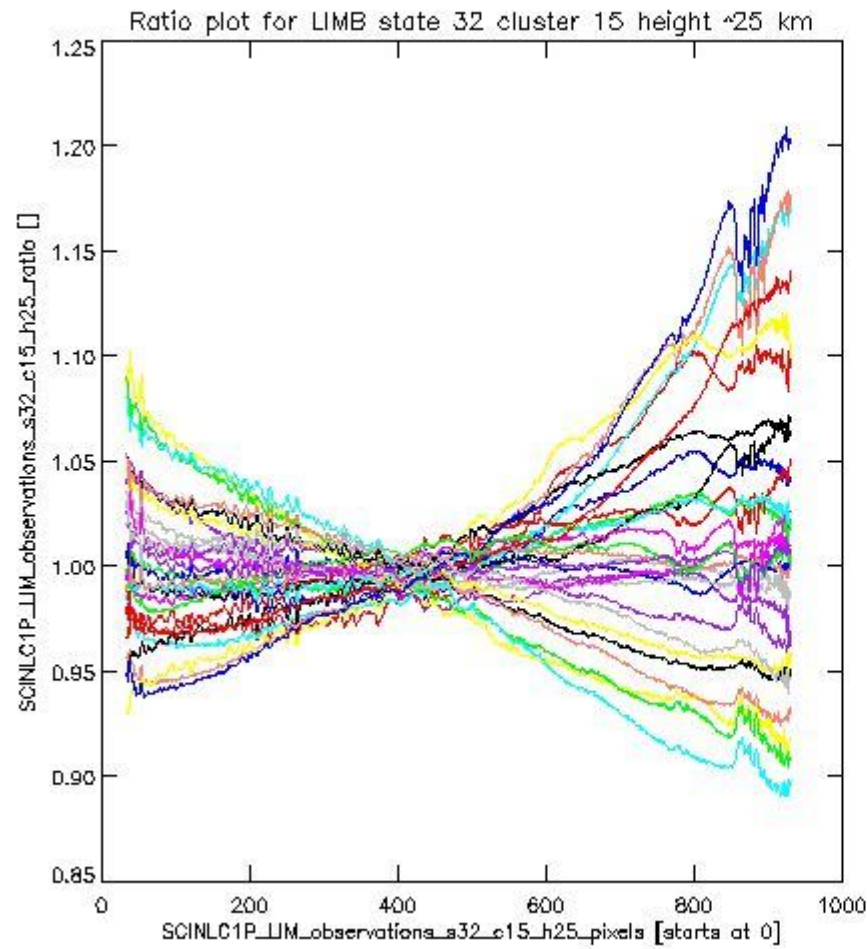
Item	Value
Start time of first sample	19JUL2011 08:48:13.982
Start time of last sample	19JUL2011 10:56:12.307
Reference period start time	19JUN2011 02:05:27.703
Reference period stop time	16JUL2011 15:44:15.542
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_18.PNG

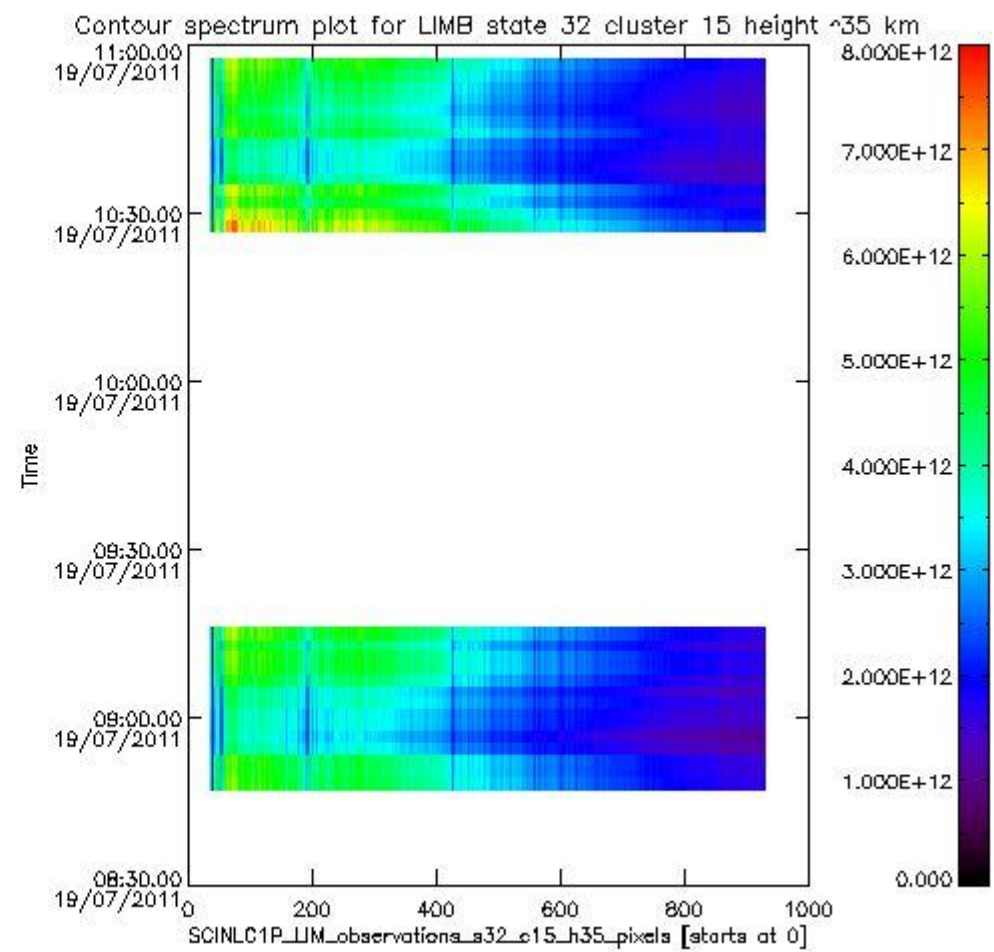
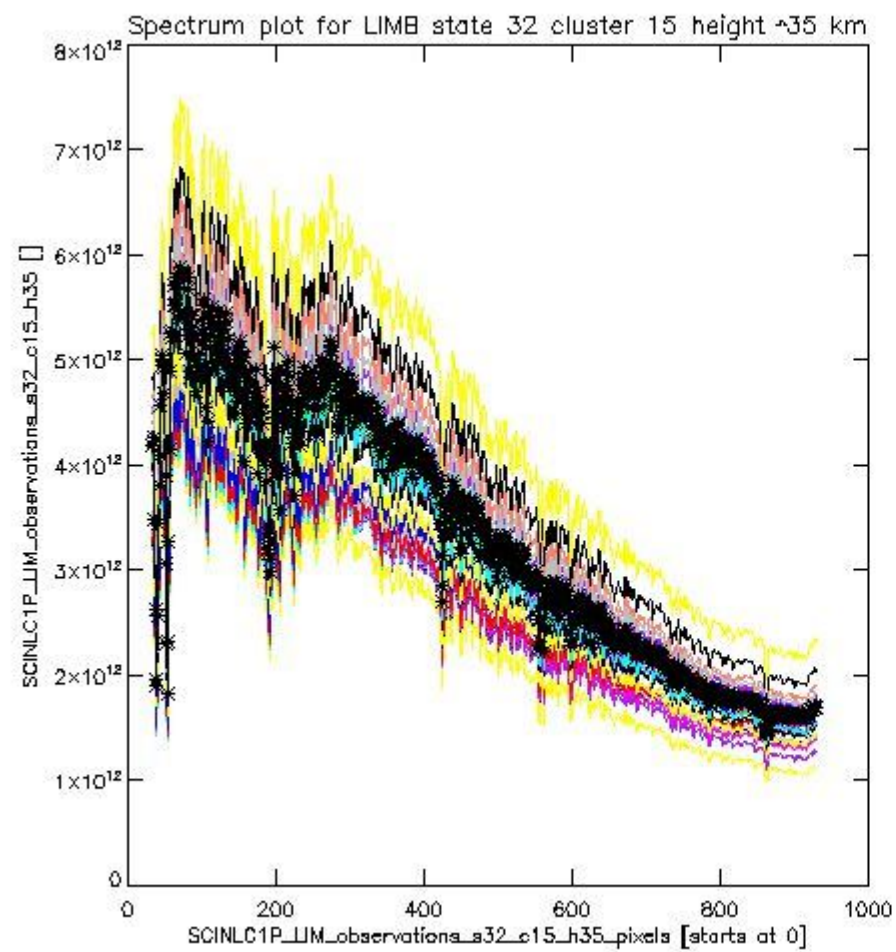




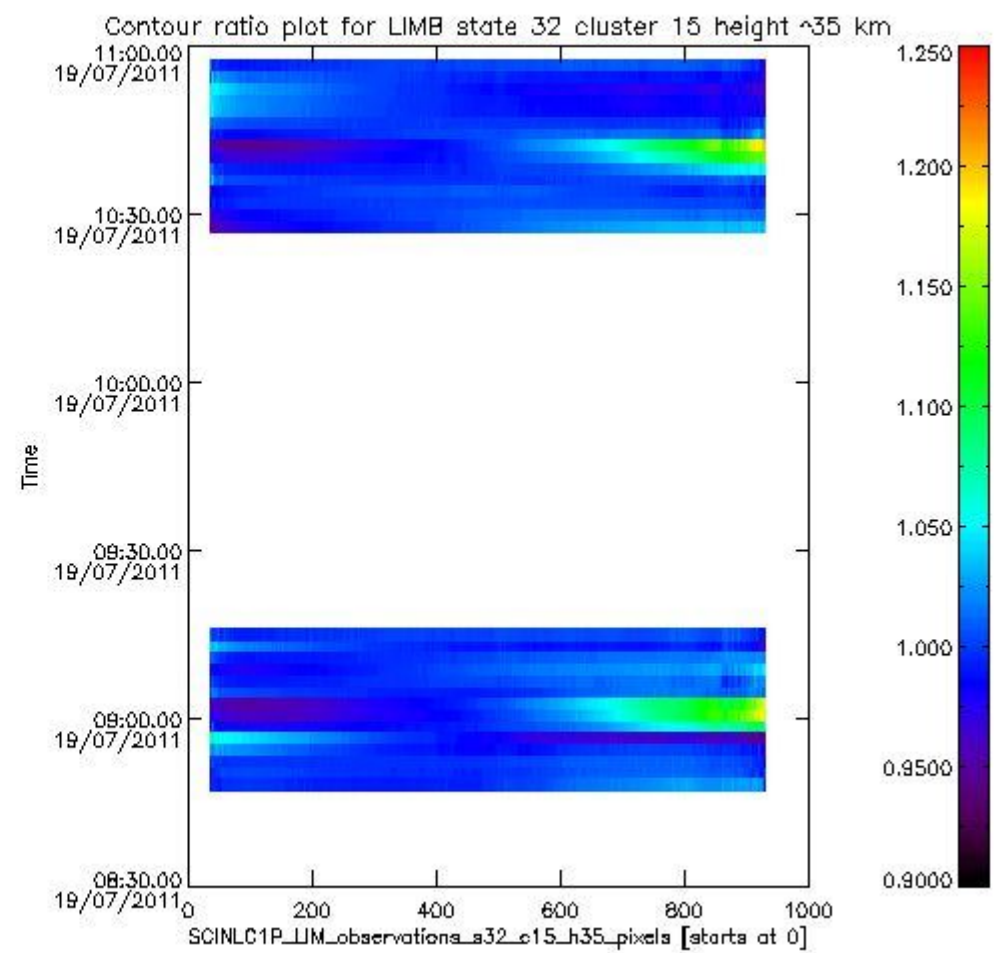
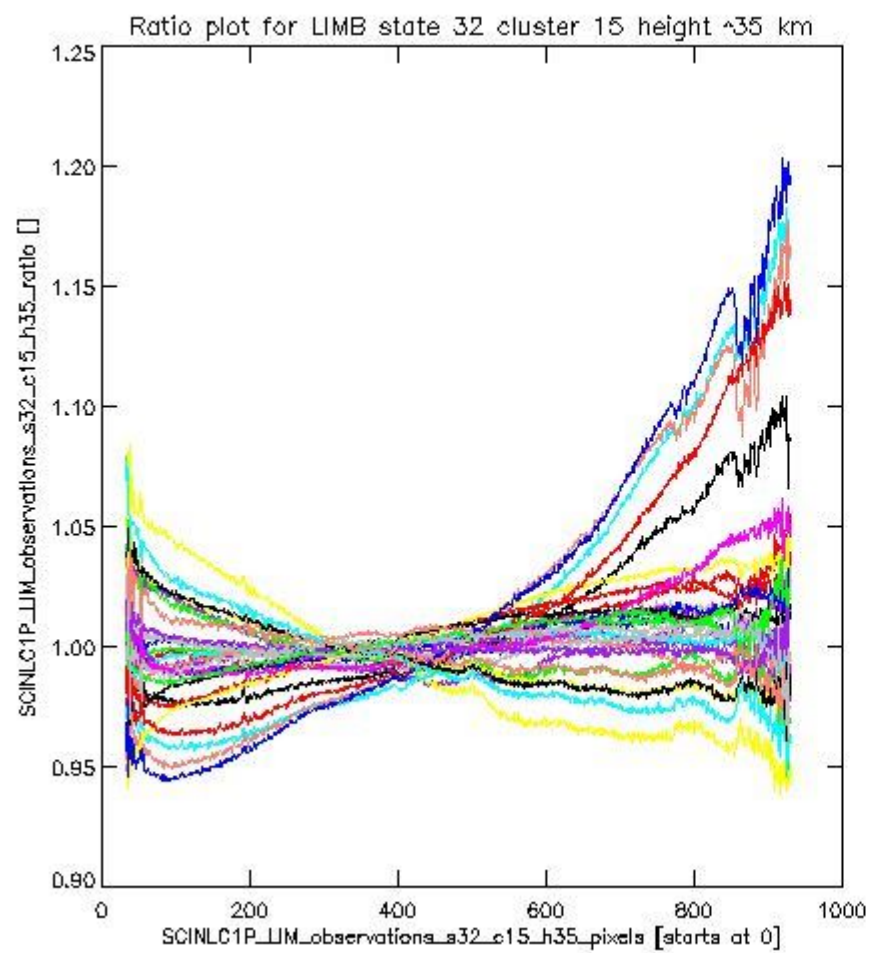
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_19.PNG

**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:

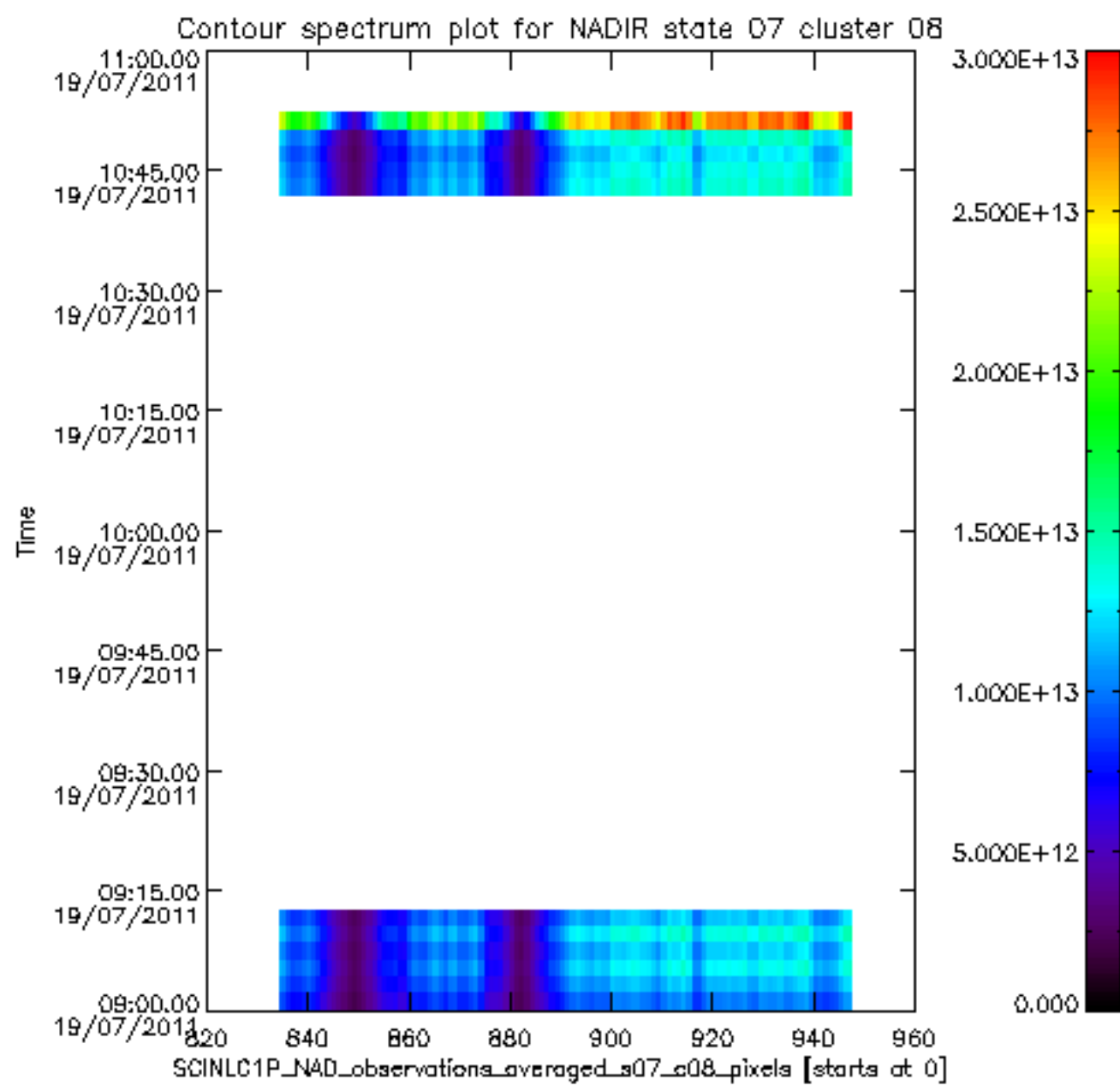
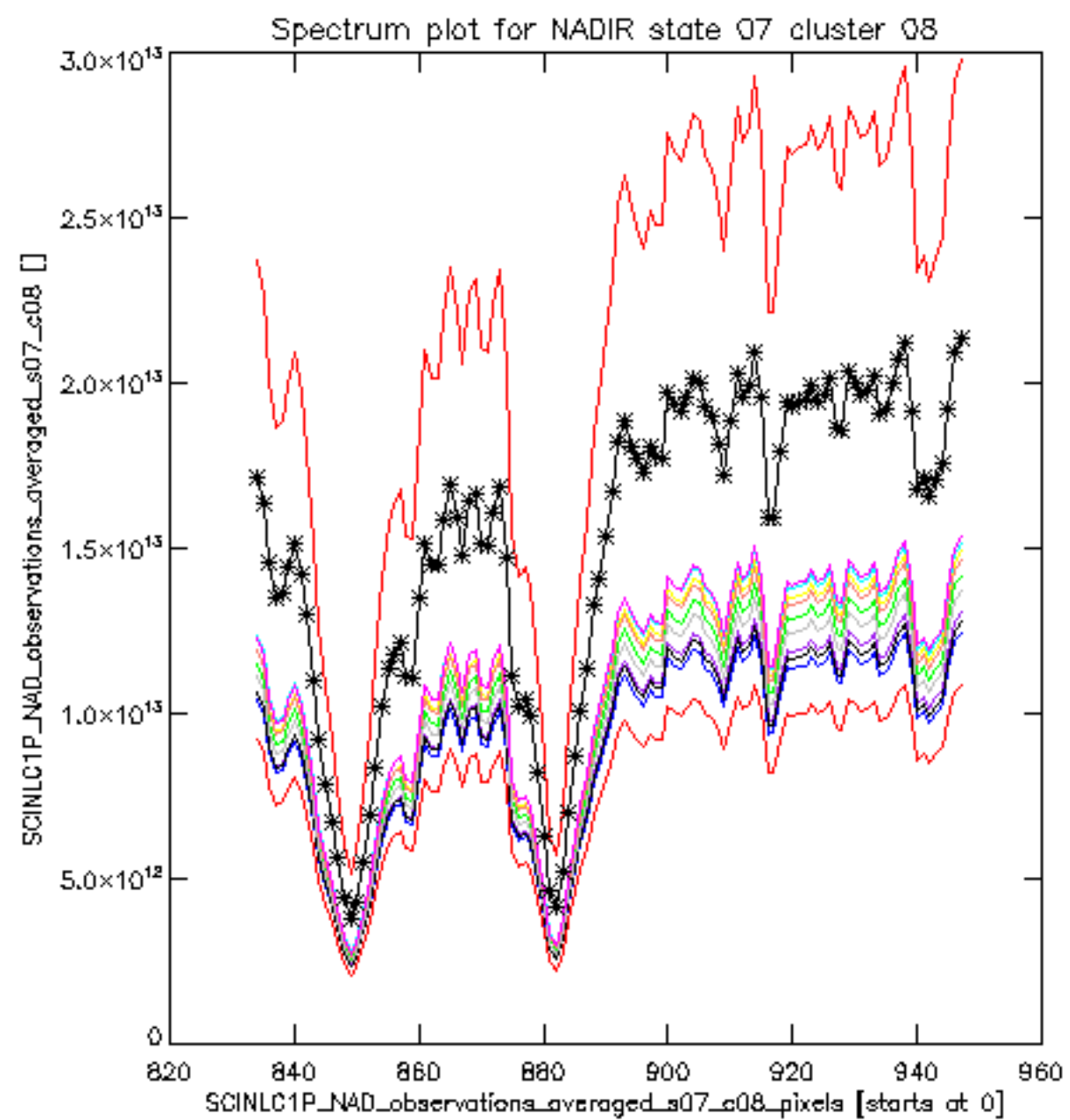
Item	Value
Start time of first sample	19JUL2011 08:48:13.982
Start time of last sample	19JUL2011 10:56:12.307
Reference period start time	19JUN2011 02:05:27.703
Reference period stop time	16JUL2011 15:44:15.542
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



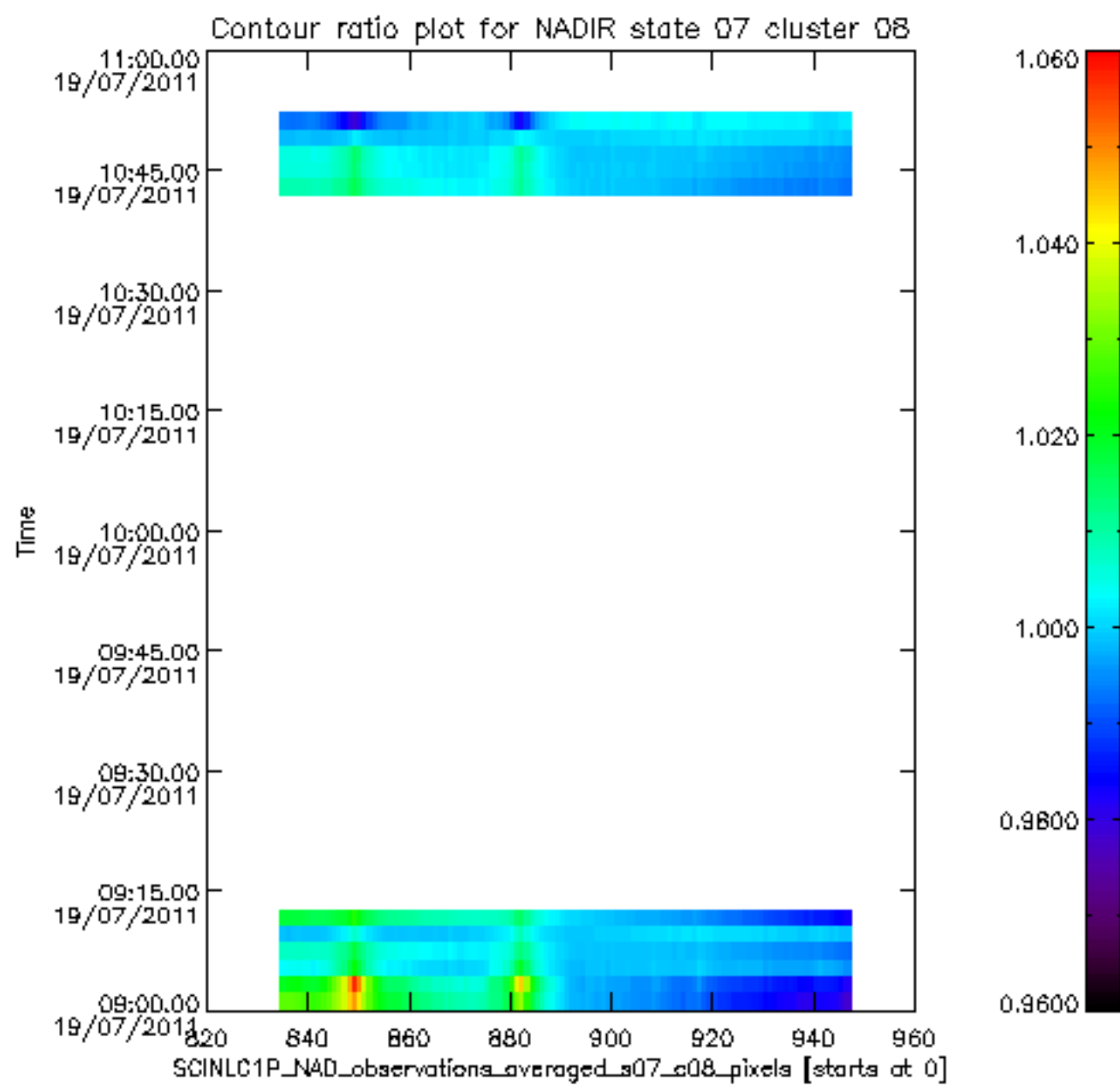
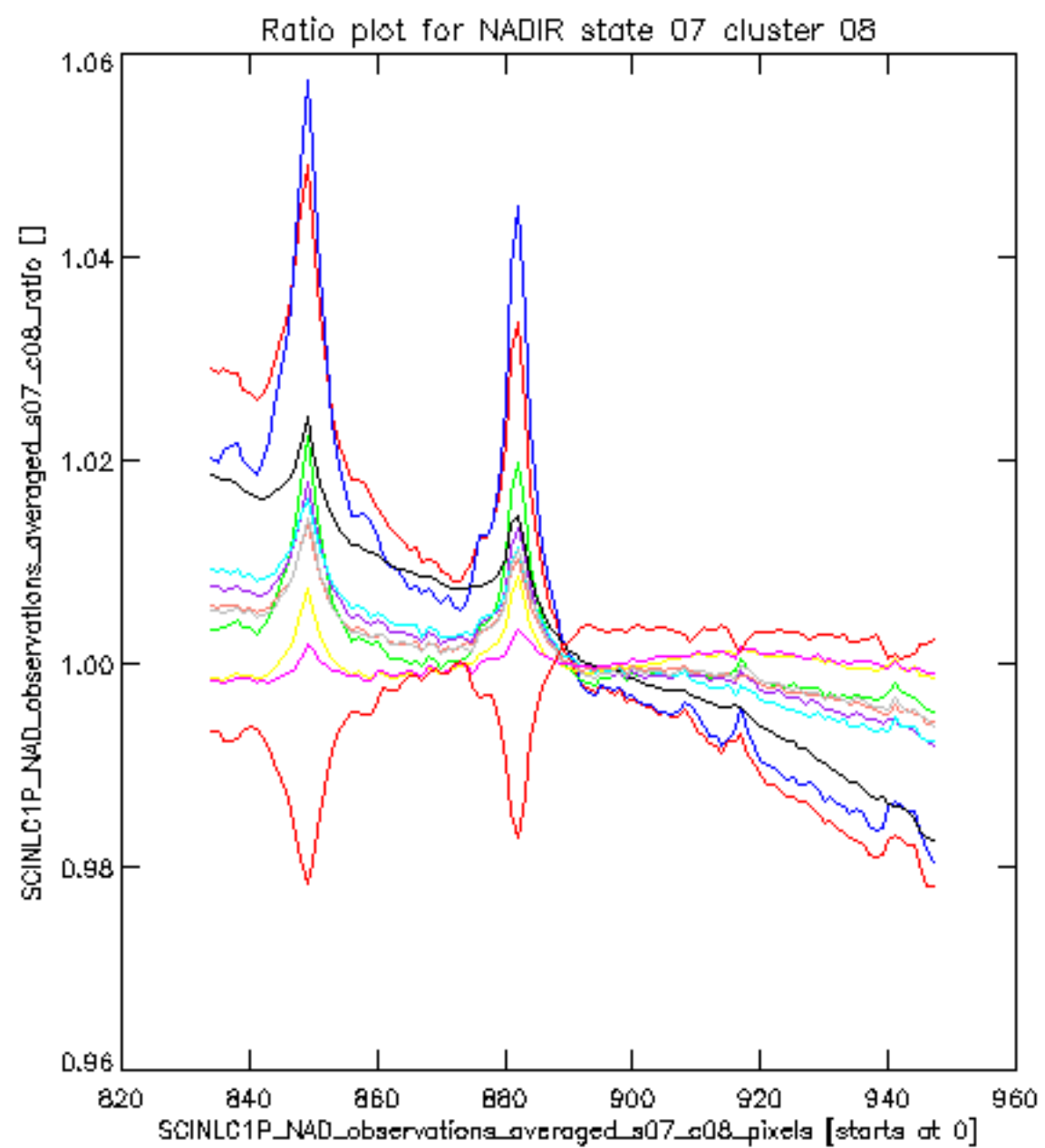
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_20.PNG

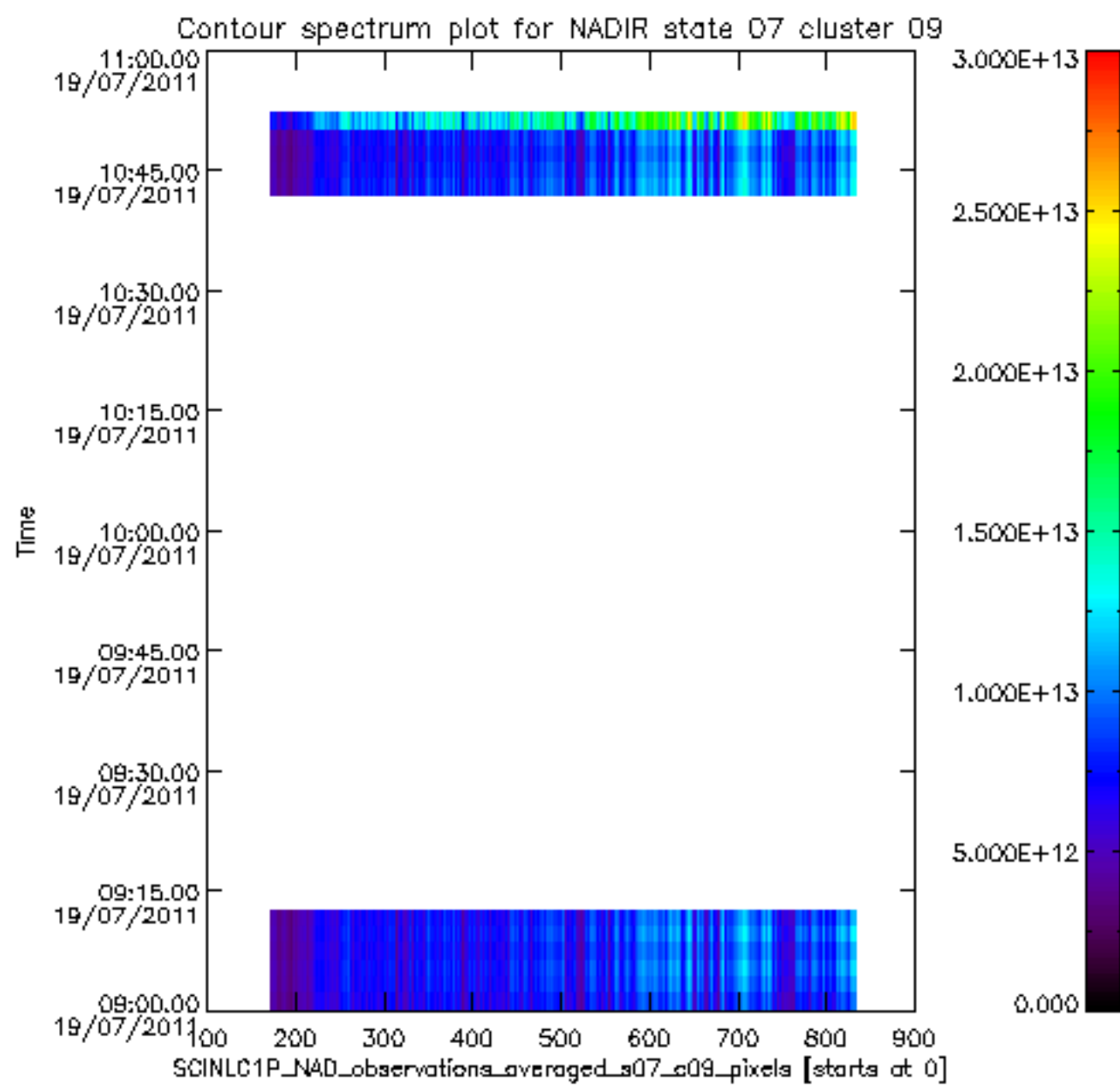
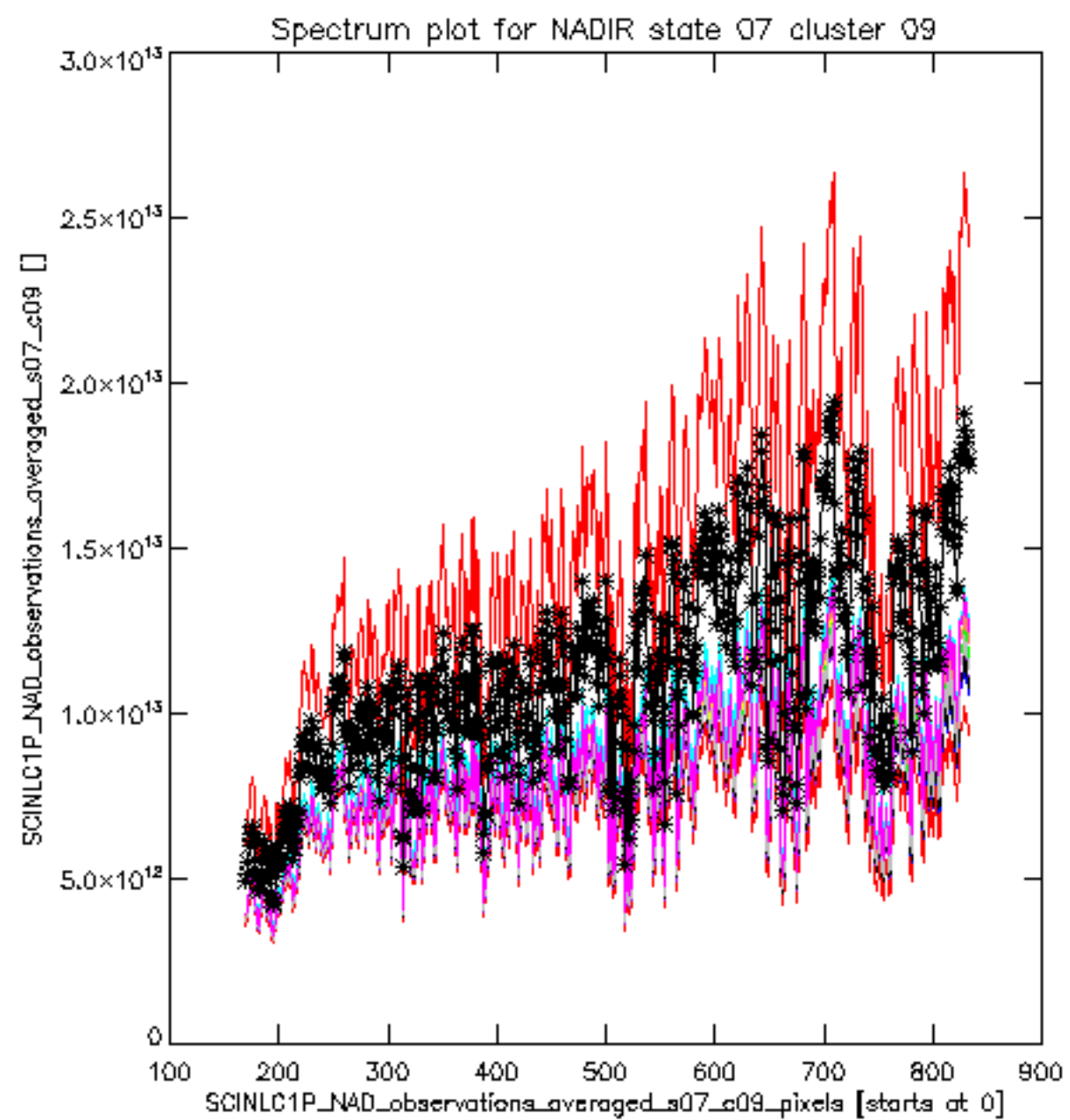


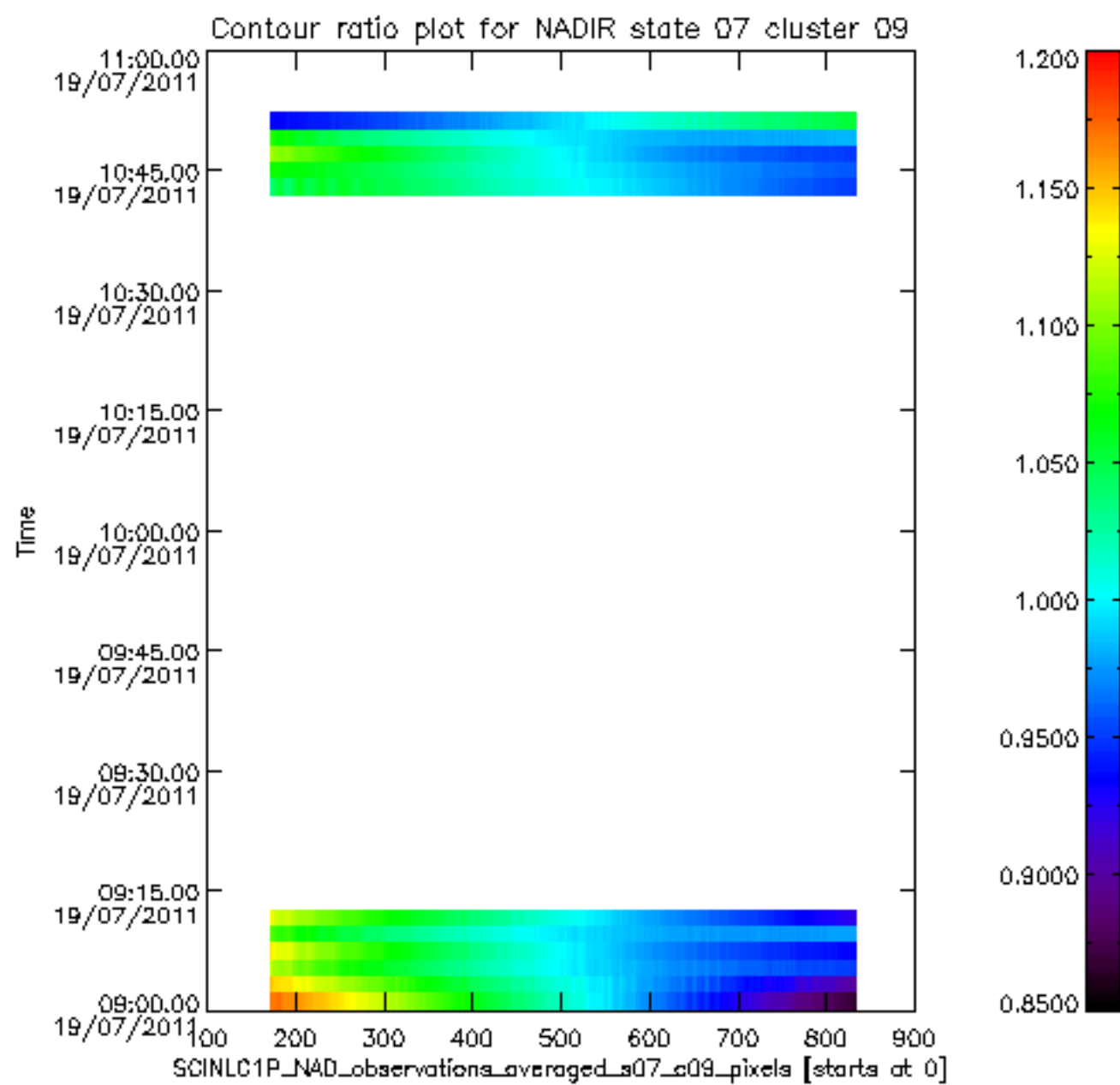
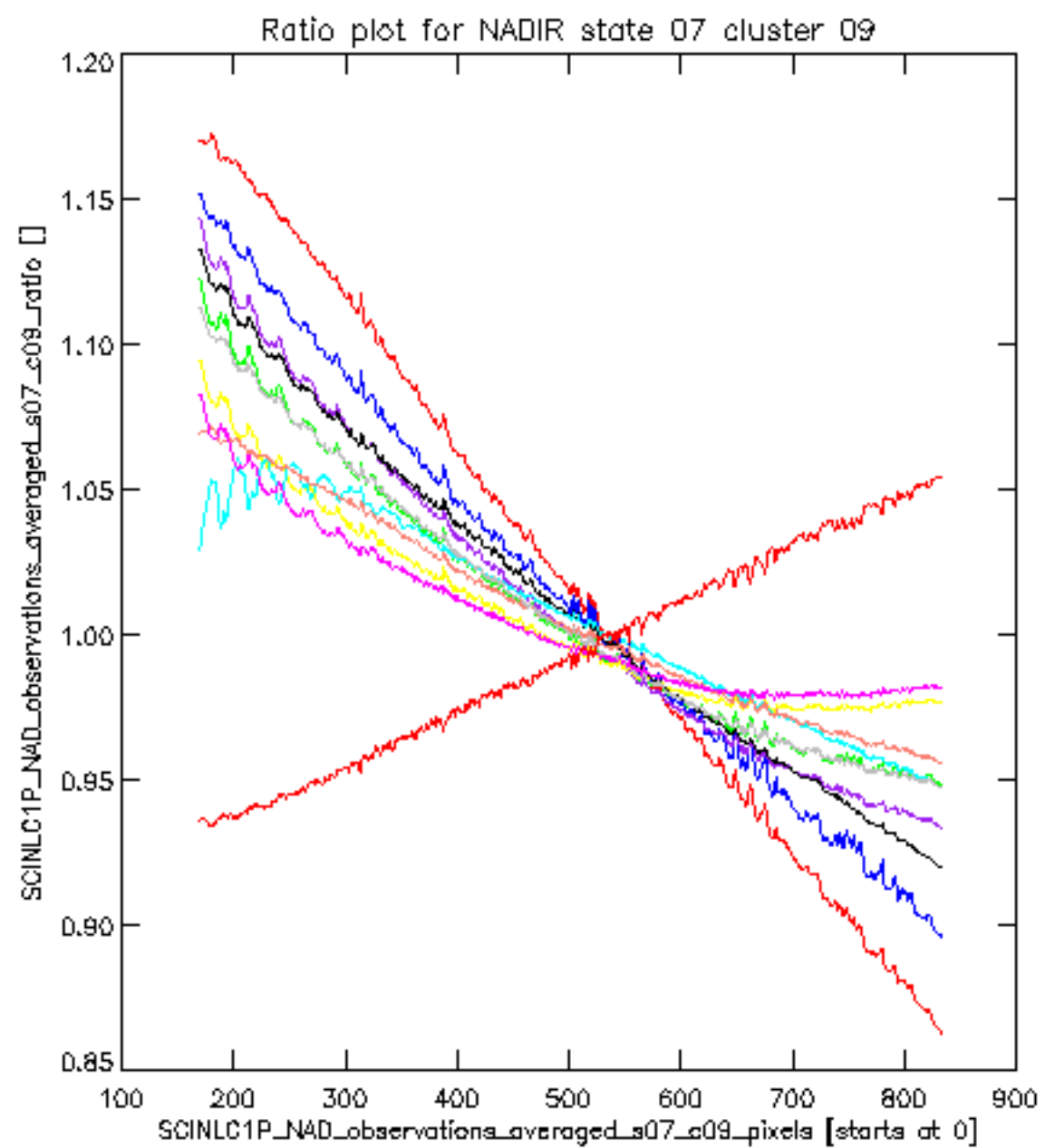
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110719\_21.PNG

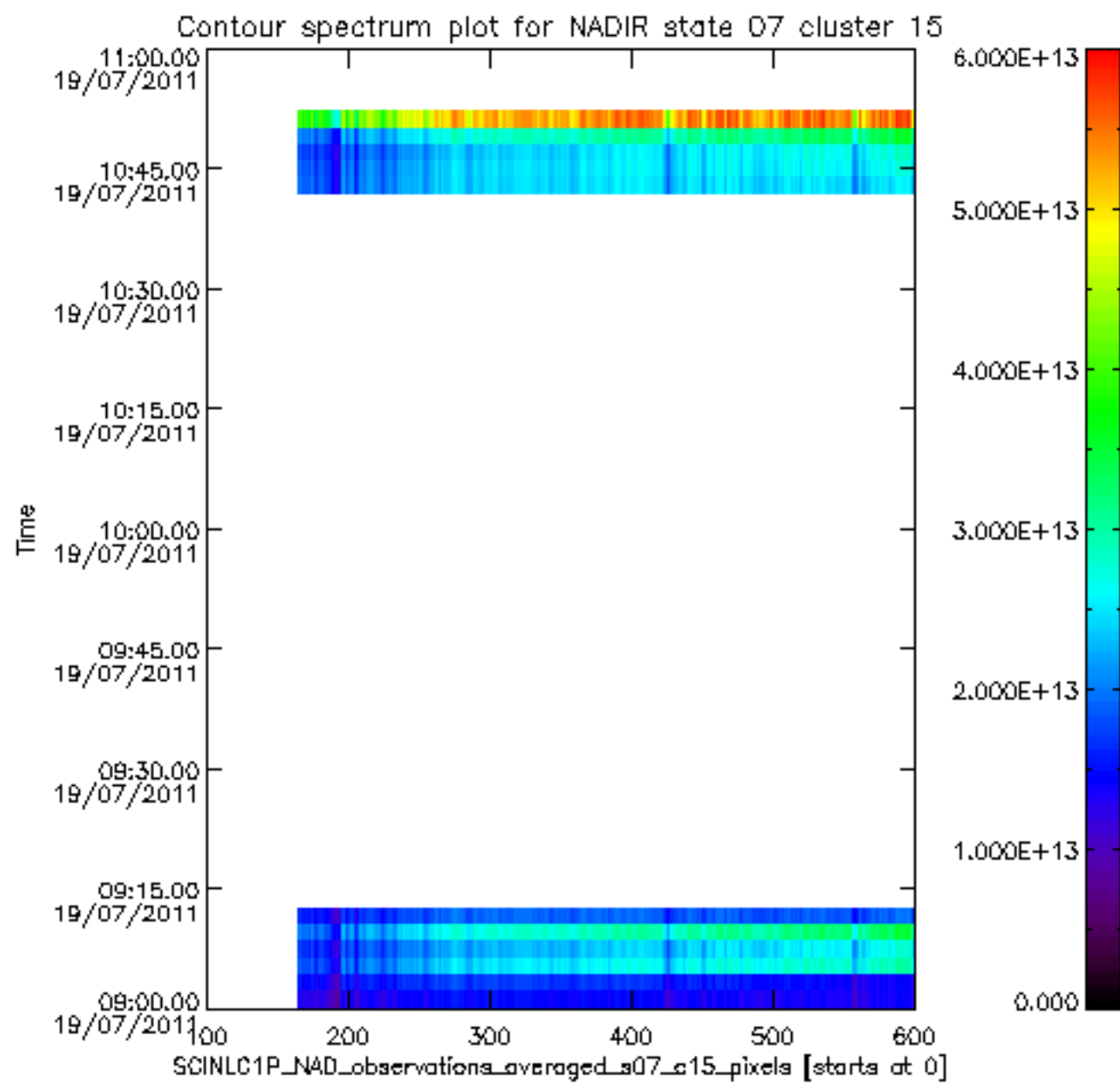
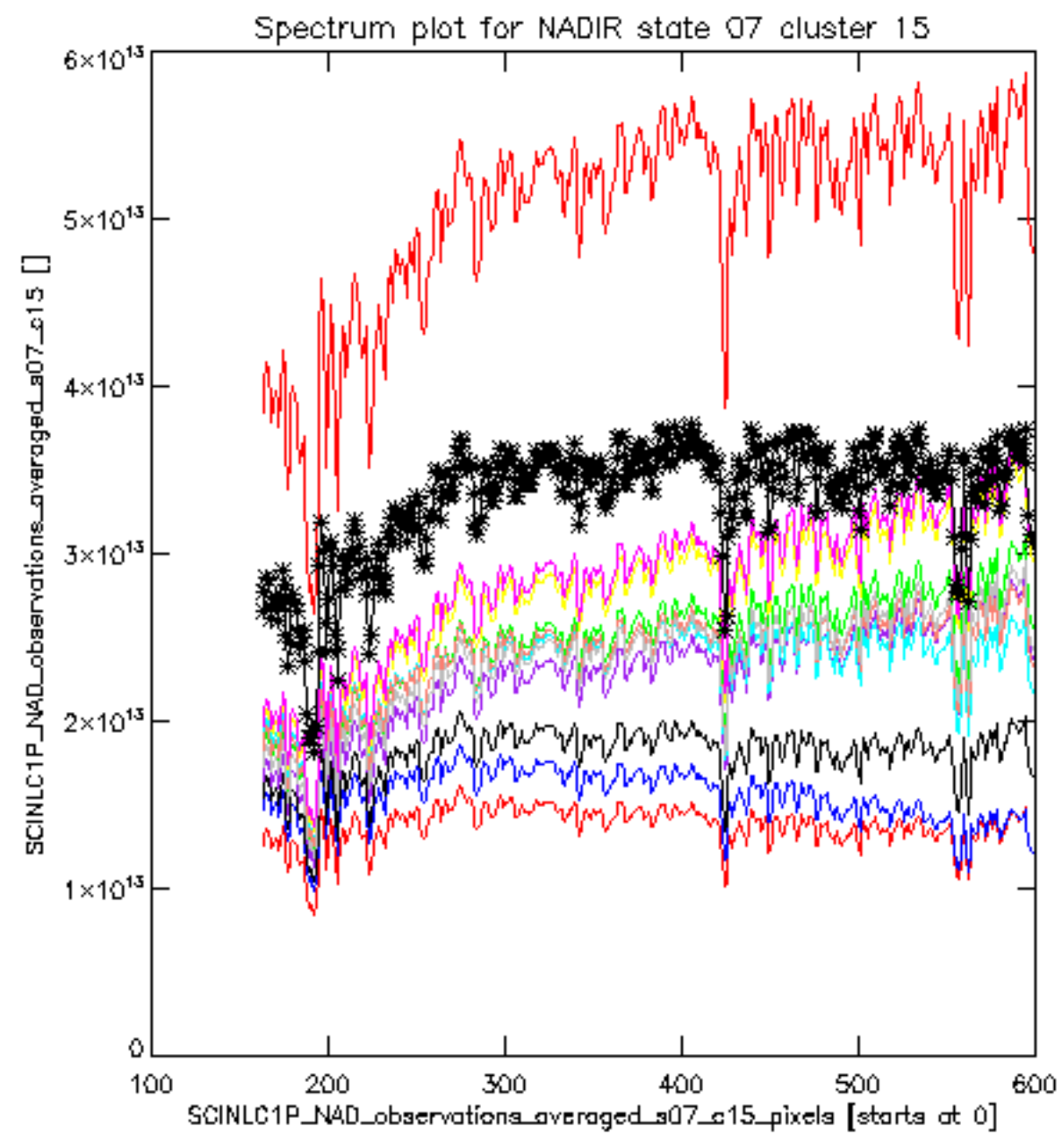




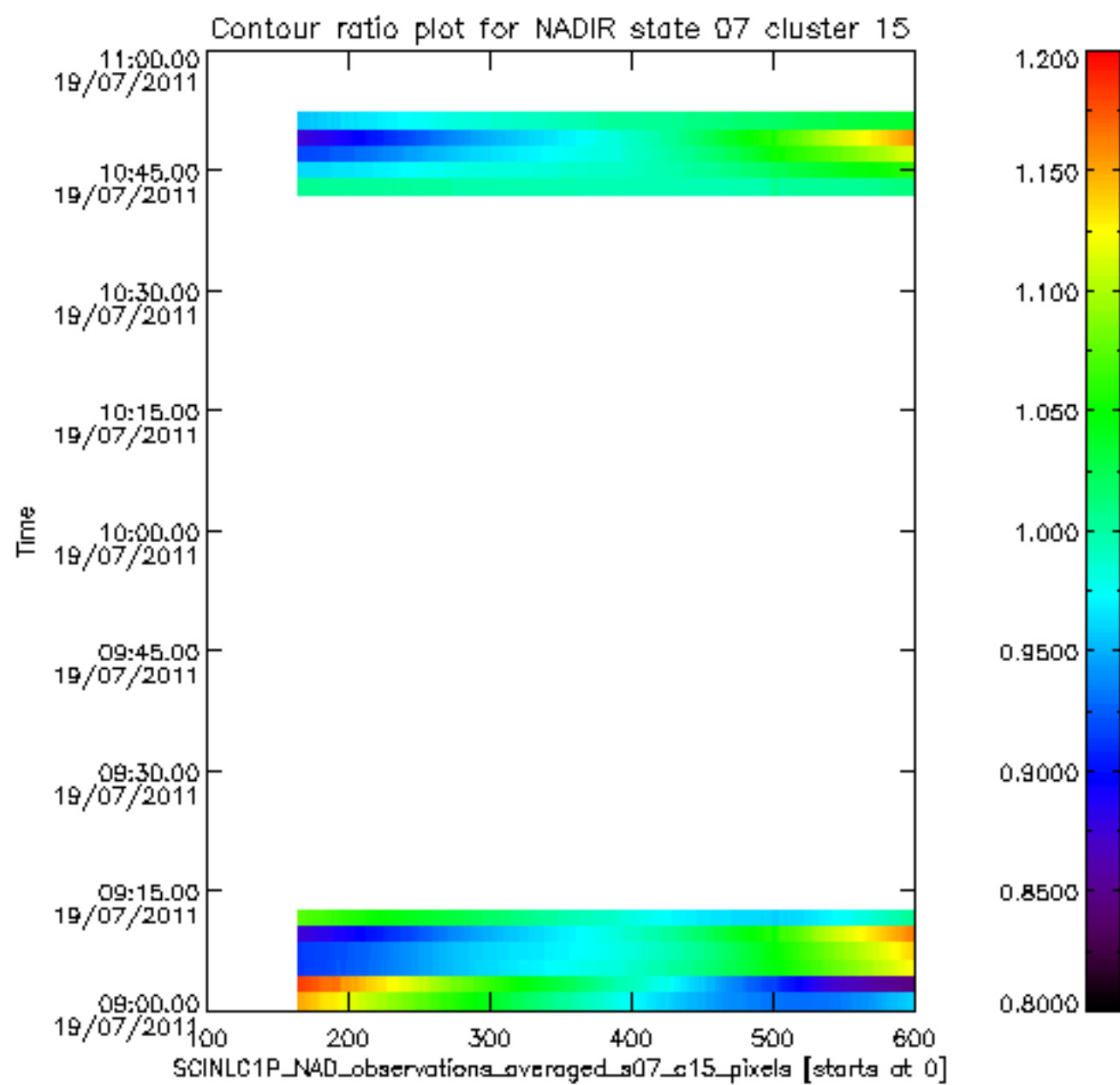
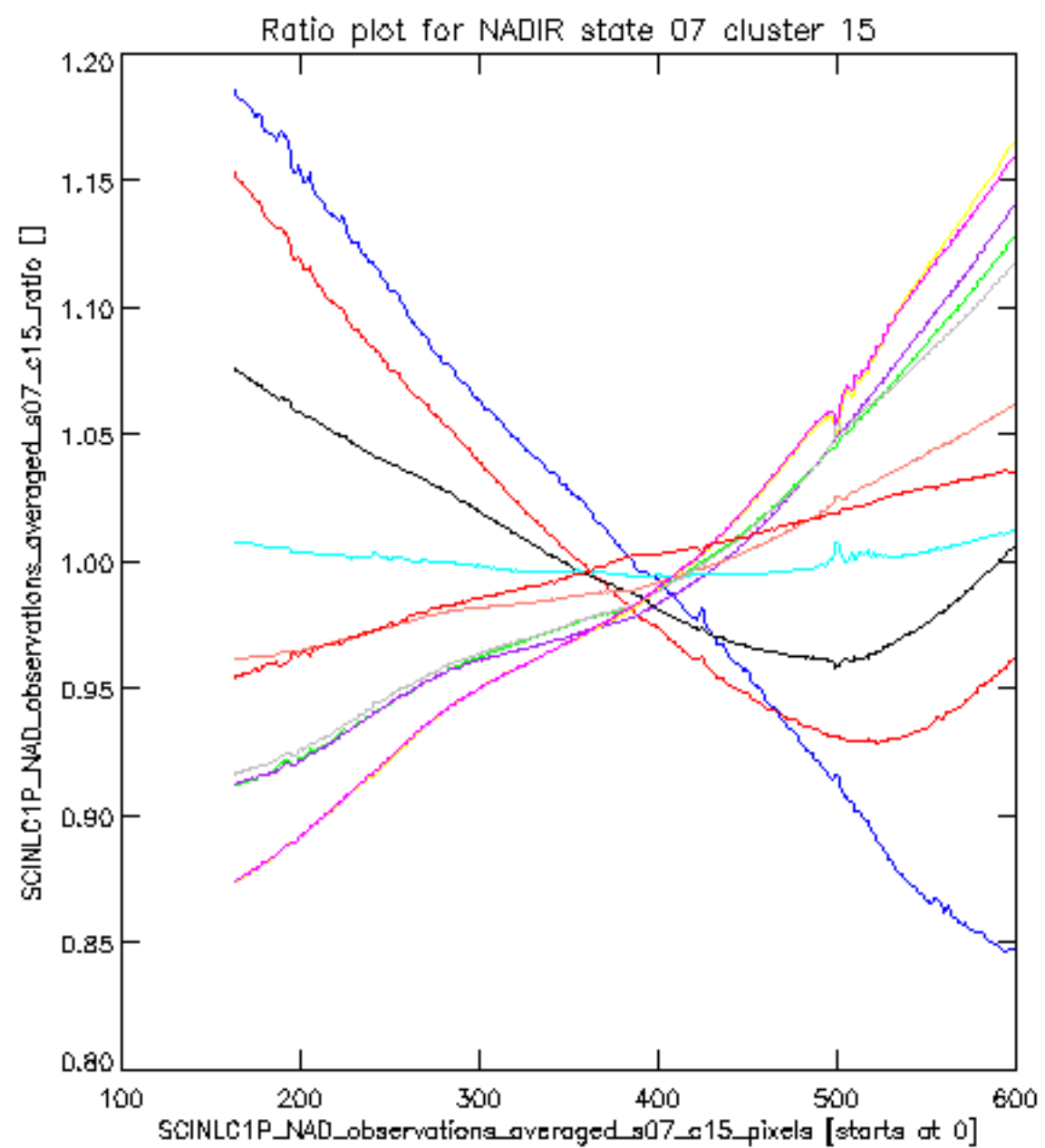


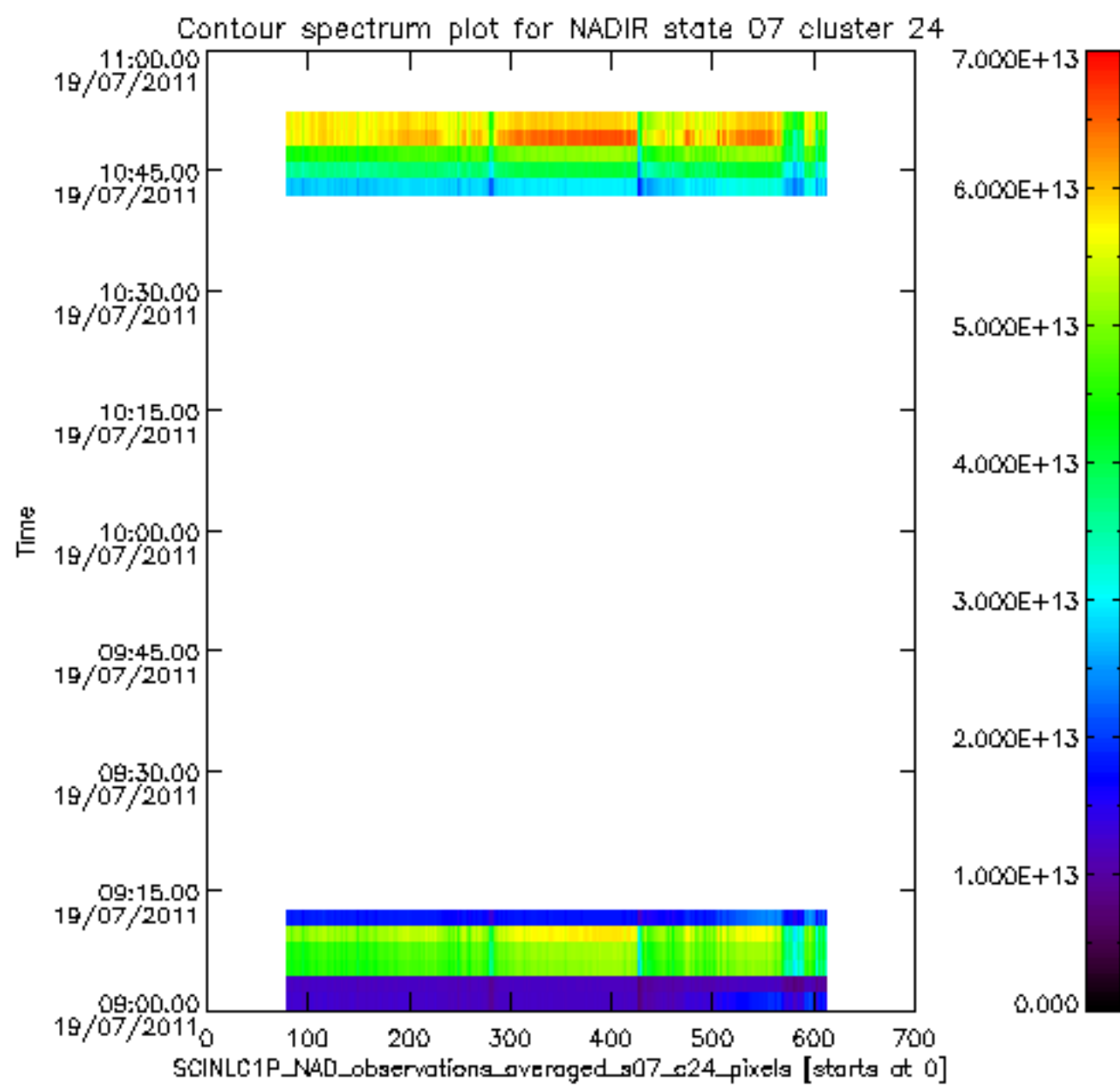
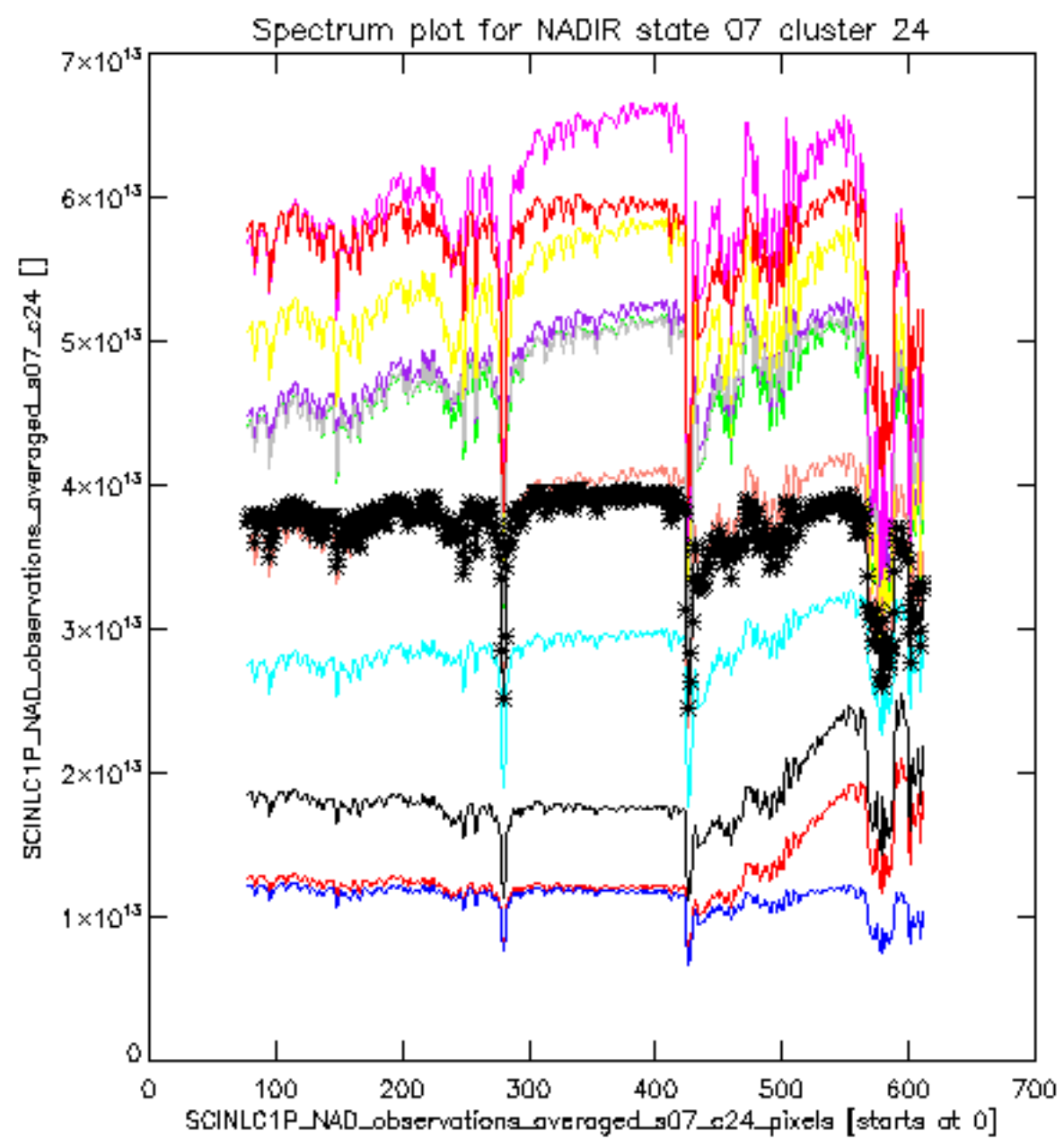


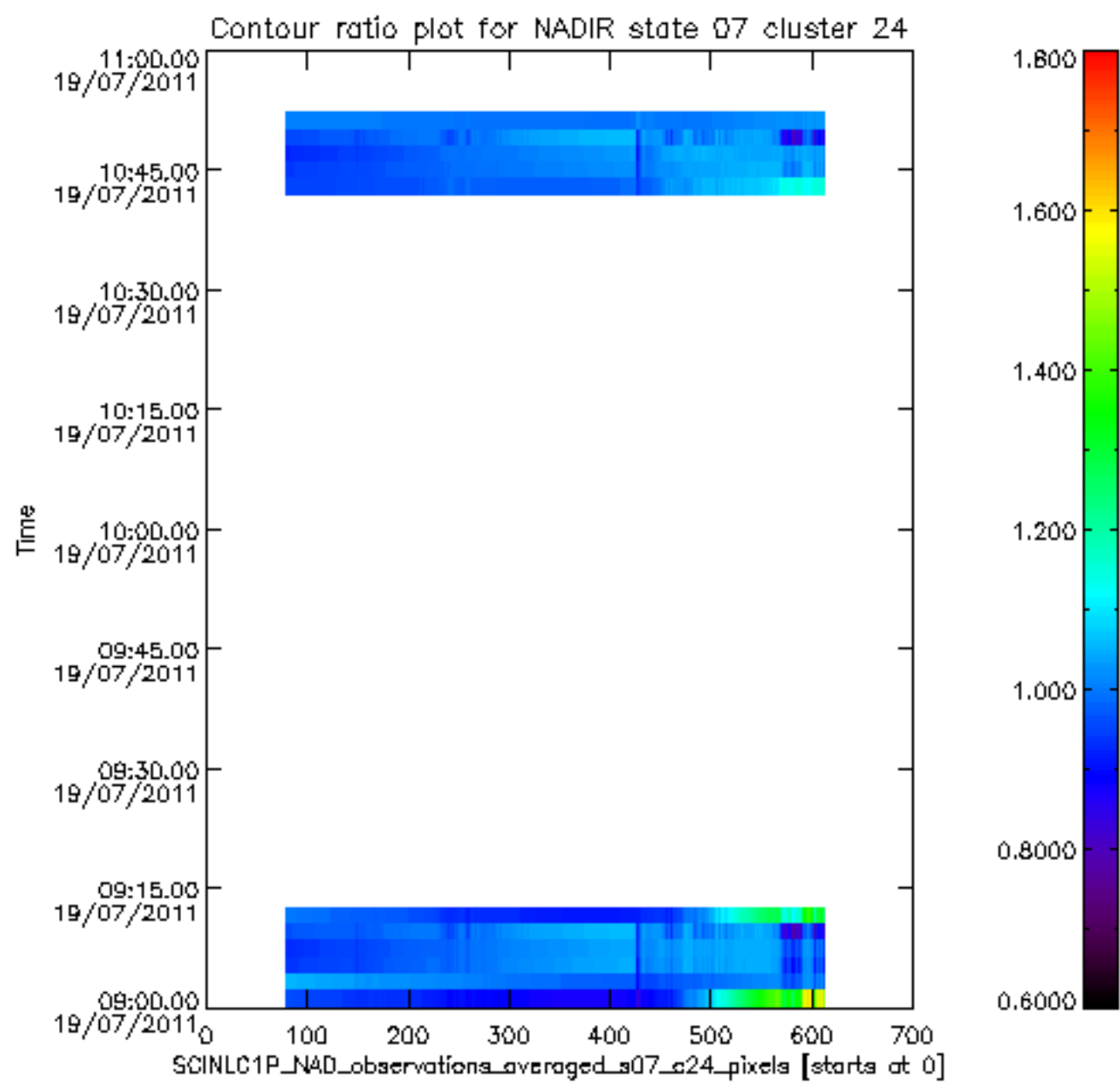
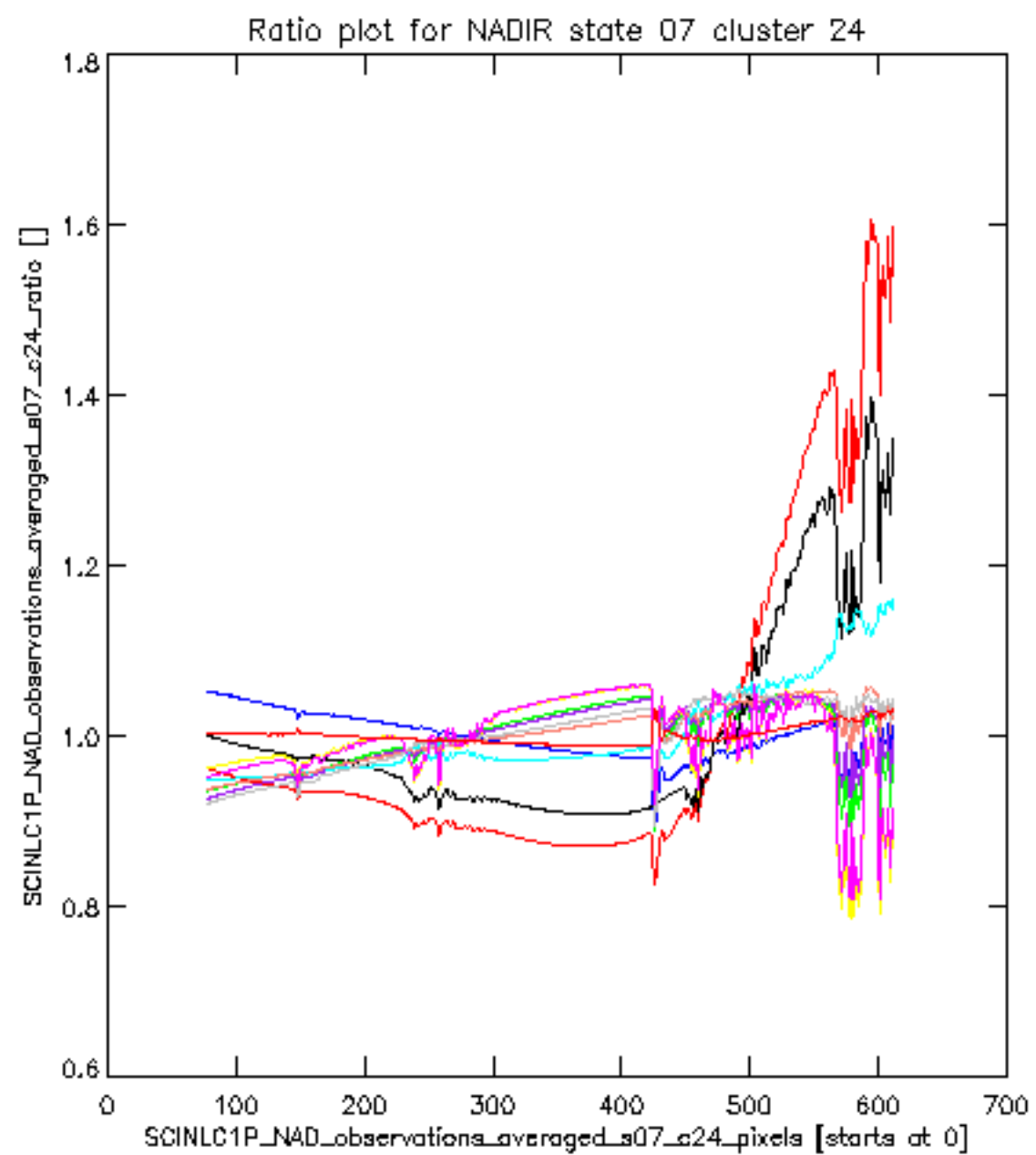




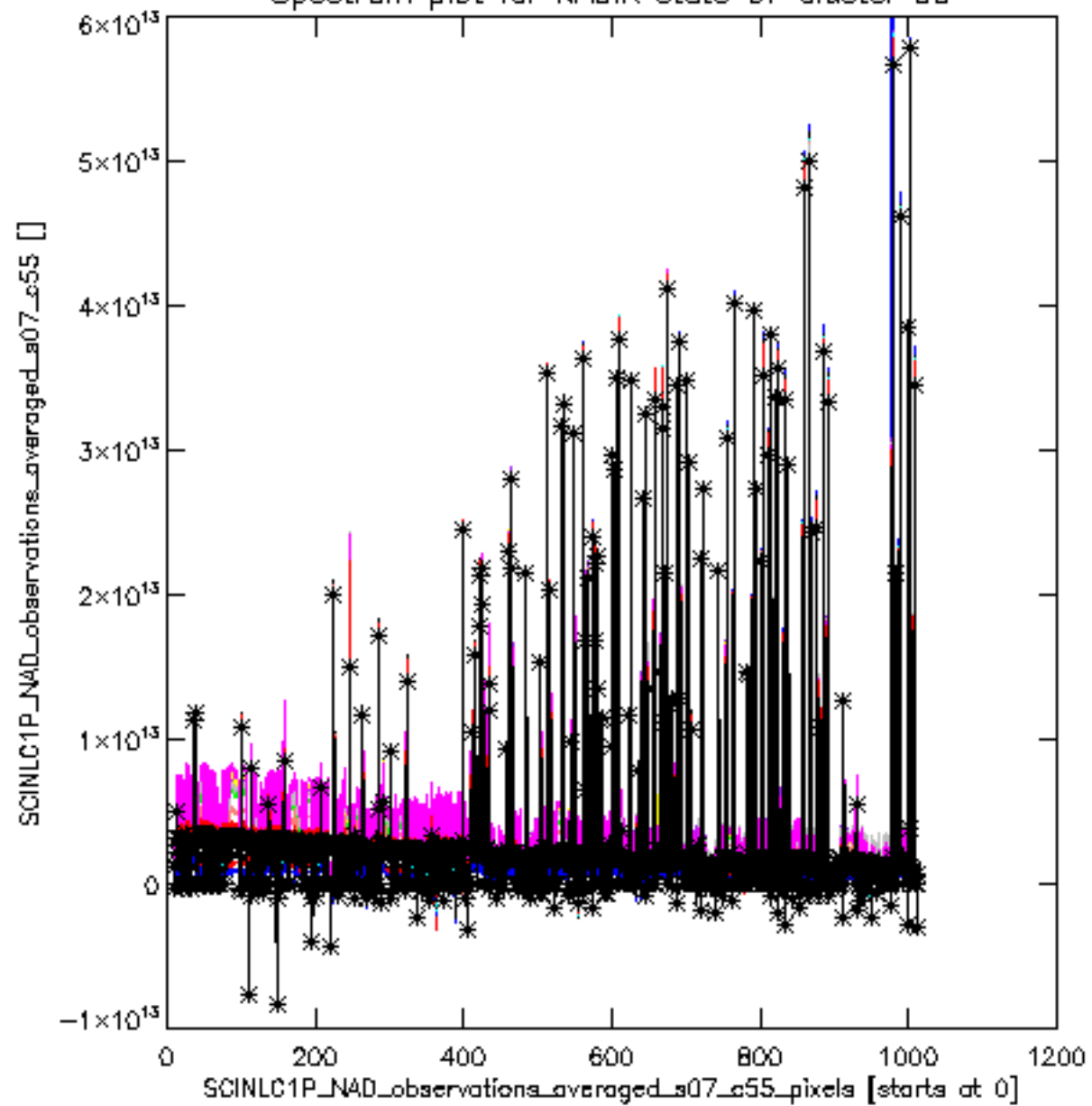








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

