

# 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	23JUL2011 06:30:33
Data source version	SCIA/7.04-U
Processing scope for products	10JUL2011 00:00:00 to 11JUL2011 00:00:00
Start time of first product within scope	10JUL2011 00:37:48
Stop time of last product within scope	10JUL2011 20:11:02
Total number of level 1 products	11
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	10JUL2011 01:09:50.769	10JUL2011 19:41:55.379
1	NADIR	07	09	N/A	10JUL2011 01:09:50.769	10JUL2011 19:41:55.379
2	NADIR	07	15	N/A	10JUL2011 01:09:50.769	10JUL2011 19:41:55.379
3	NADIR	07	24	N/A	10JUL2011 01:09:50.769	10JUL2011 19:41:55.379
4	NADIR	07	55	N/A	10JUL2011 01:09:50.769	10JUL2011 19:41:55.379
5	LIMB	32	09	~19 km	10JUL2011 00:56:40.128	10JUL2011 19:47:09.422
6	LIMB	32	09	~22 km	10JUL2011 00:56:40.128	10JUL2011 19:47:09.422
7	LIMB	32	09	~25 km	10JUL2011 00:56:40.128	10JUL2011 19:47:09.422
8	LIMB	32	15	~22 km	10JUL2011 00:56:40.128	10JUL2011 19:47:09.422
9	LIMB	32	15	~25 km	10JUL2011 00:56:40.128	10JUL2011 19:47:09.422
10	LIMB	32	15	~35 km	10JUL2011 00:56:40.128	10JUL2011 19:47:09.422

#### 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_1CUDPA20110710_003748_000057523104_00218_48939_2962.N1</a>	10JUL2011 00:37:48	10JUL2011 01:48:02	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110710_021802_000057523104_00219_48940_2964.N1</a>	10JUL2011 02:18:02	10JUL2011 03:28:31	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110710_035816_000057533104_00220_48941_2965.N1</a>	10JUL2011 03:58:16	10JUL2011 05:08:30	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110710_053830_000057533104_00221_48942_2967.N1</a>	10JUL2011 05:38:30	10JUL2011 06:48:59	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110710_071844_000057533104_00222_48943_2970.N1</a>	10JUL2011 07:18:44	10JUL2011 08:28:59	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110710_085858_000057533104_00223_48944_2972.N1</a>	10JUL2011 08:58:58	10JUL2011 10:09:27	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110710_121926_000057533104_00225_48946_3011.N1	10JUL2011 12:19:26	10JUL2011 13:29:55	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110710_135940_000057533104_00226_48947_3020.N1	10JUL2011 13:59:40	10JUL2011 15:09:55	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110710_153954_000057533104_00227_48948_3018.N1	10JUL2011 15:39:54	10JUL2011 16:50:23	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110710_172009_000057533104_00228_48949_2993.N1	10JUL2011 17:20:09	10JUL2011 18:30:38	0	33	30	0	1	1	0	0	
10	SCI_NLC_1CUDPA20110710_190023_000057533104_00229_48950_2991.N1	10JUL2011 19:00:23	10JUL2011 20:11:02	0	36	30	0	1	1	0	0	

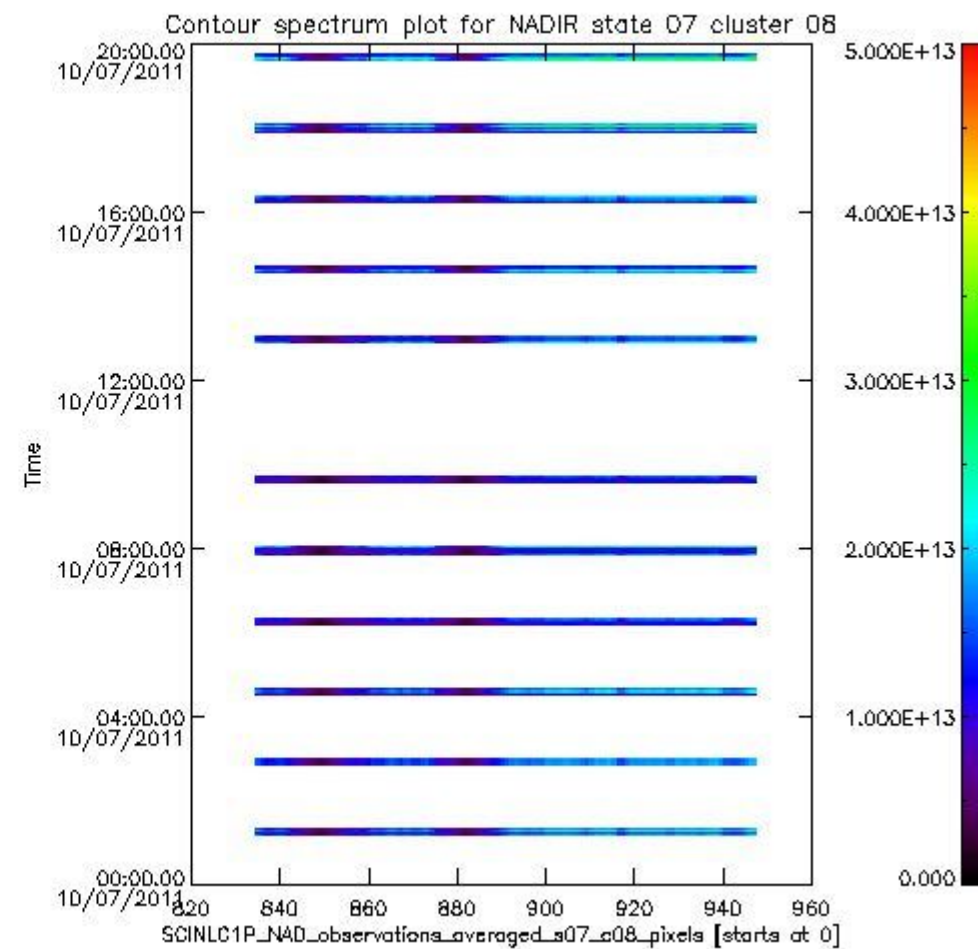
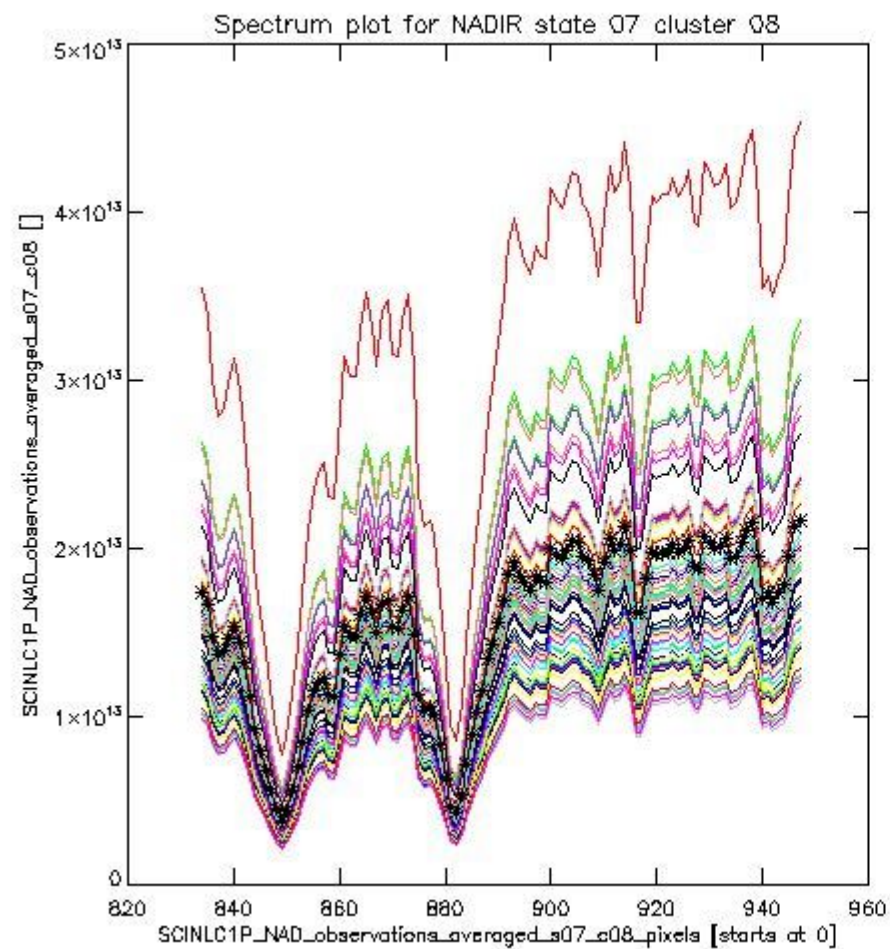
## 1.2 Source packet monitoring

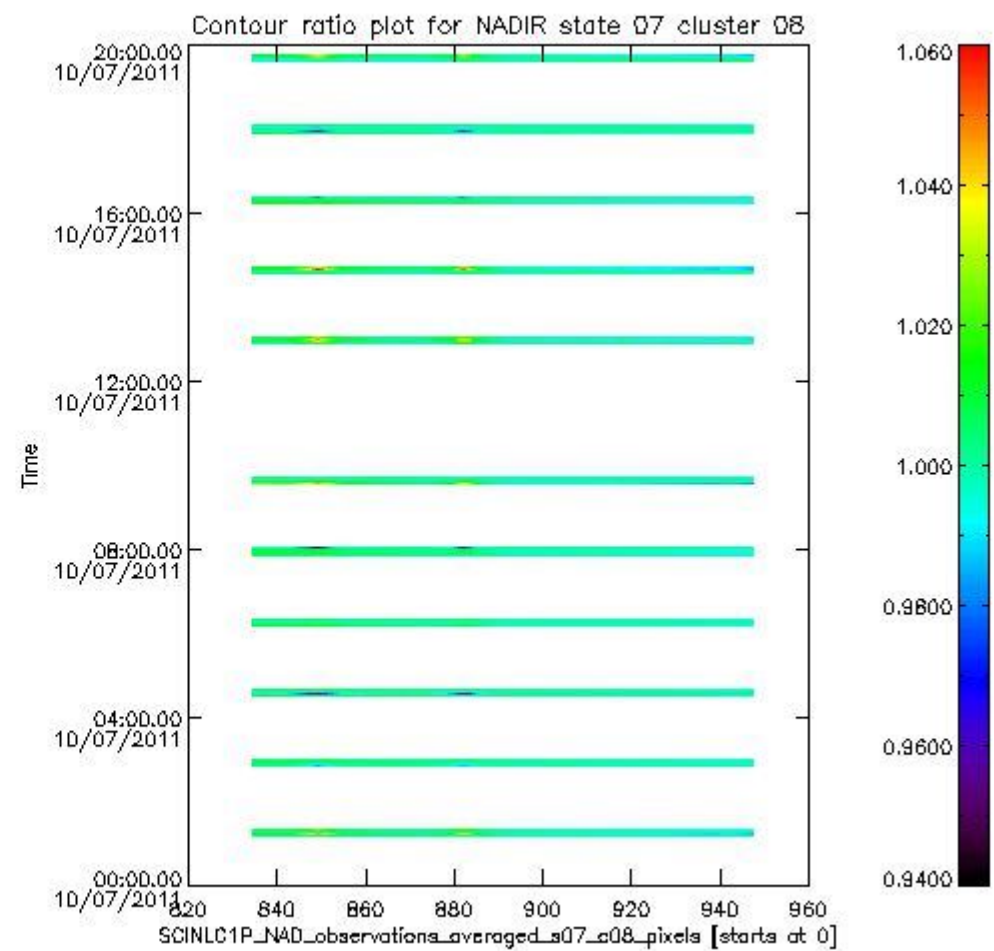
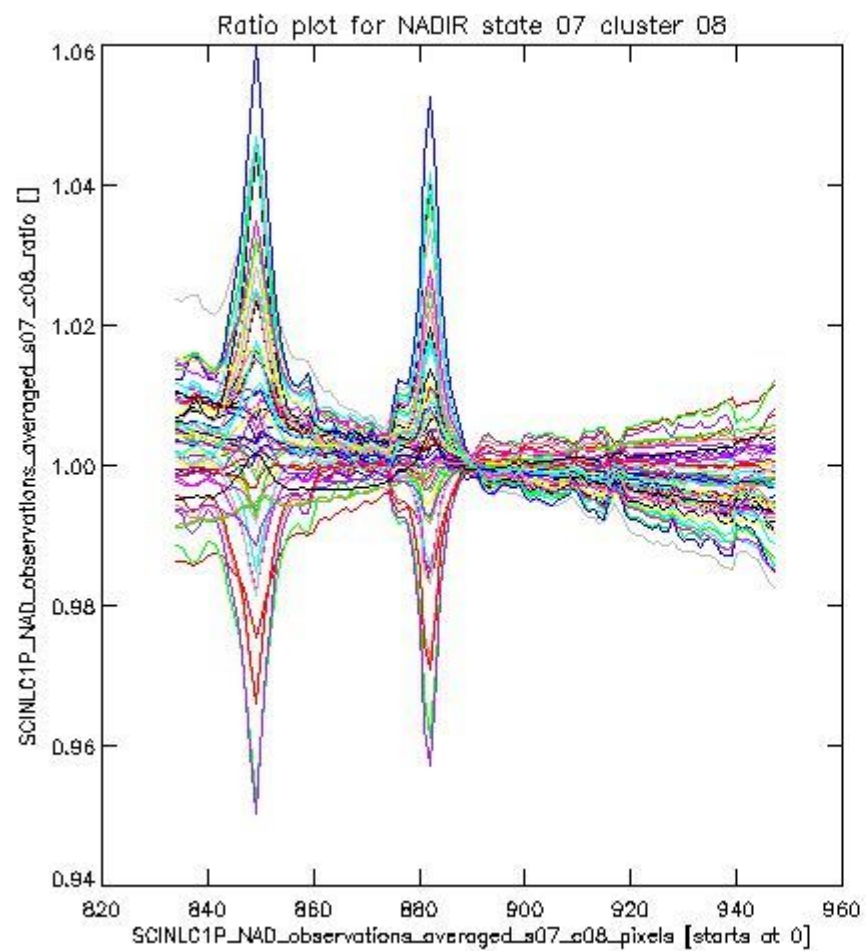
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	10JUL2011 01:09:50.769
Start time of last sample	10JUL2011 19:41:55.379
Reference period start time	10JUN2011 01:10:34.970
Reference period stop time	09JUL2011 16:57:59.855
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

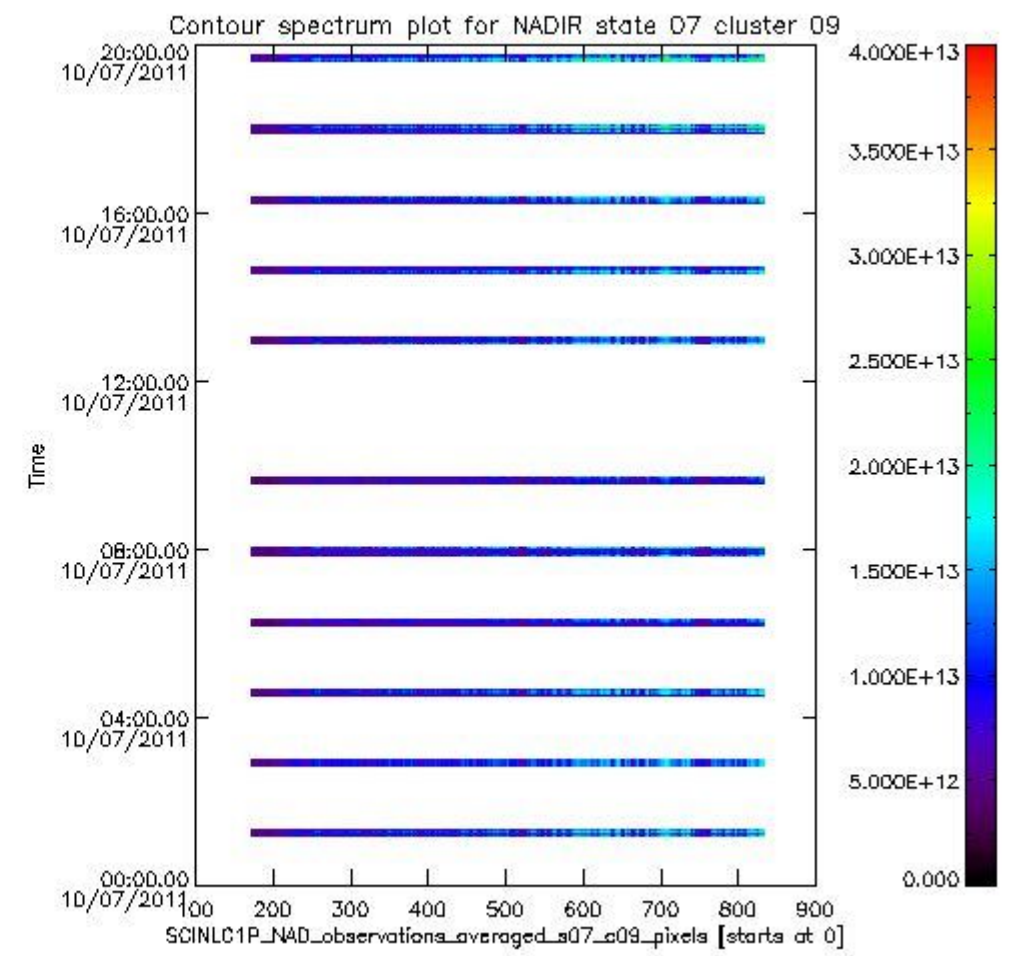
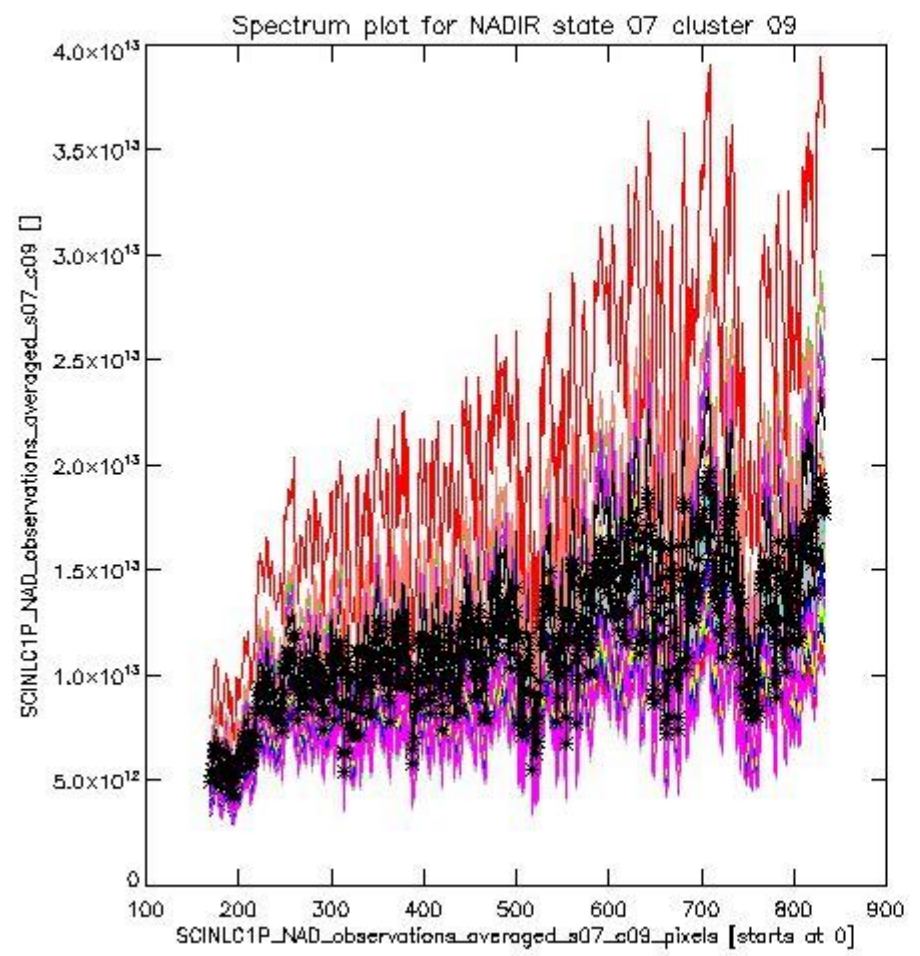




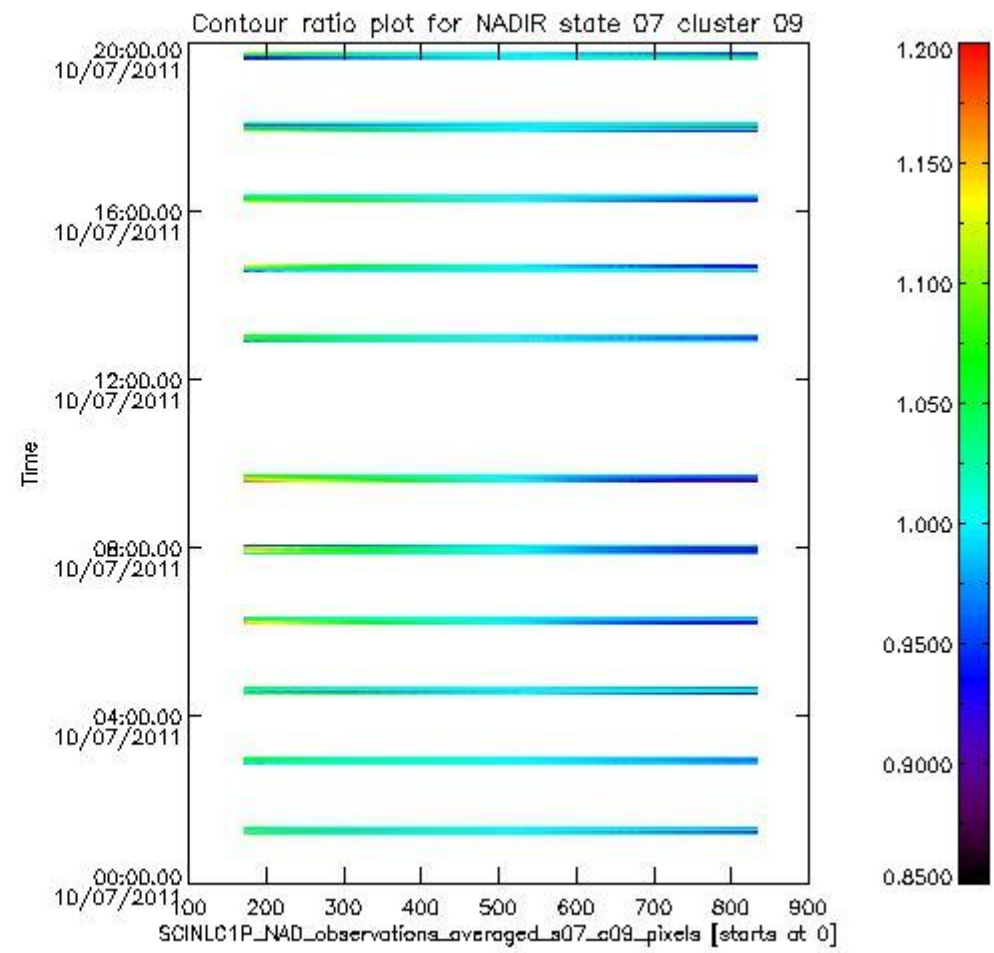
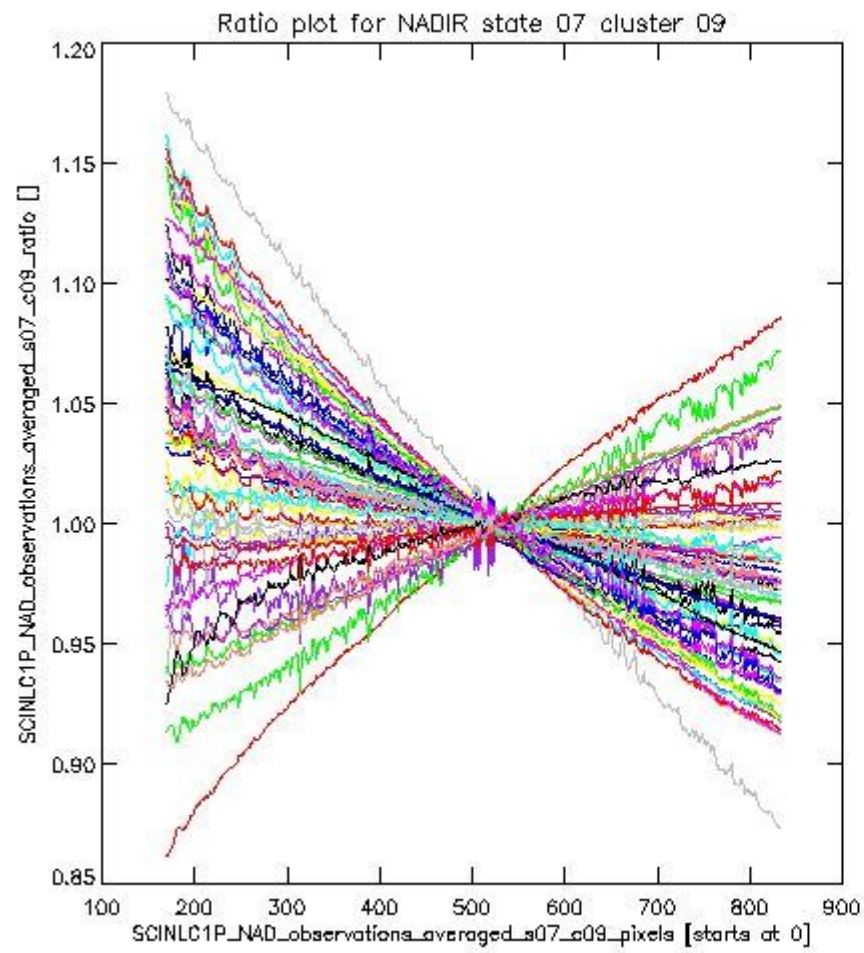
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_1.PNG

**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	10JUL2011 01:09:50.769
Start time of last sample	10JUL2011 19:41:55.379
Reference period start time	10JUN2011 01:10:34.970
Reference period stop time	09JUL2011 16:57:59.855
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



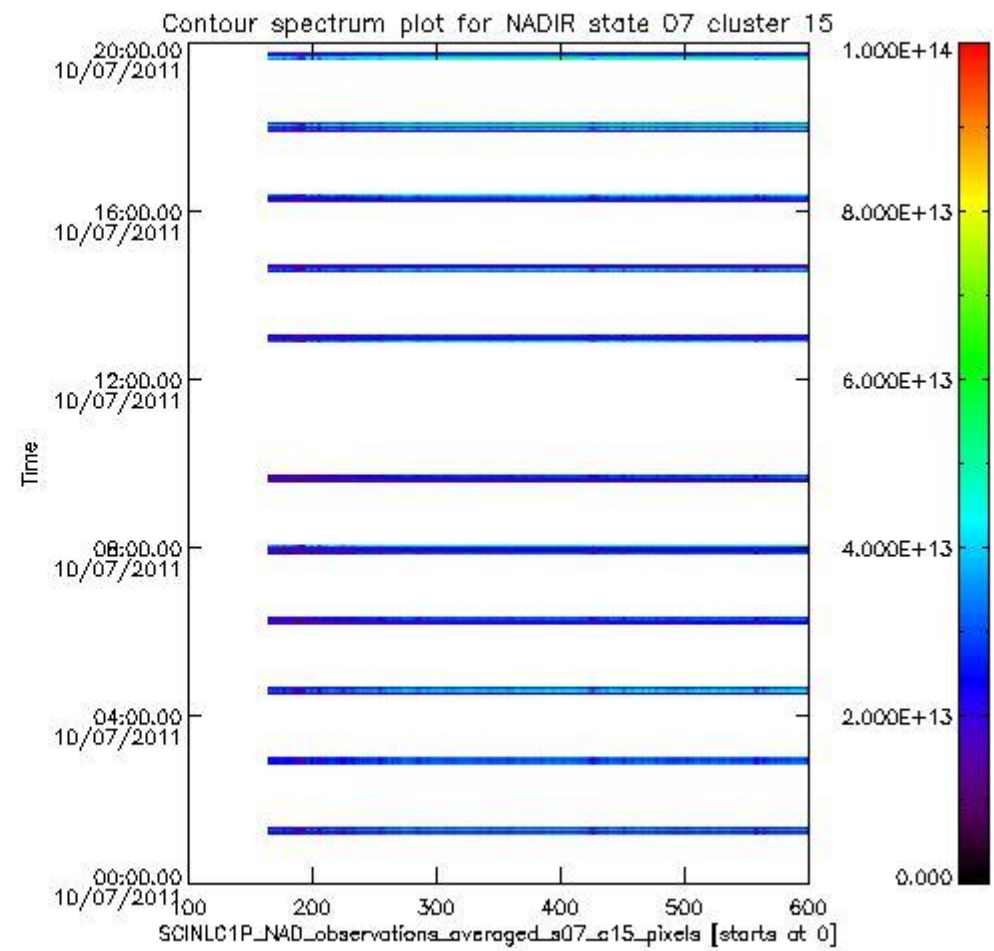
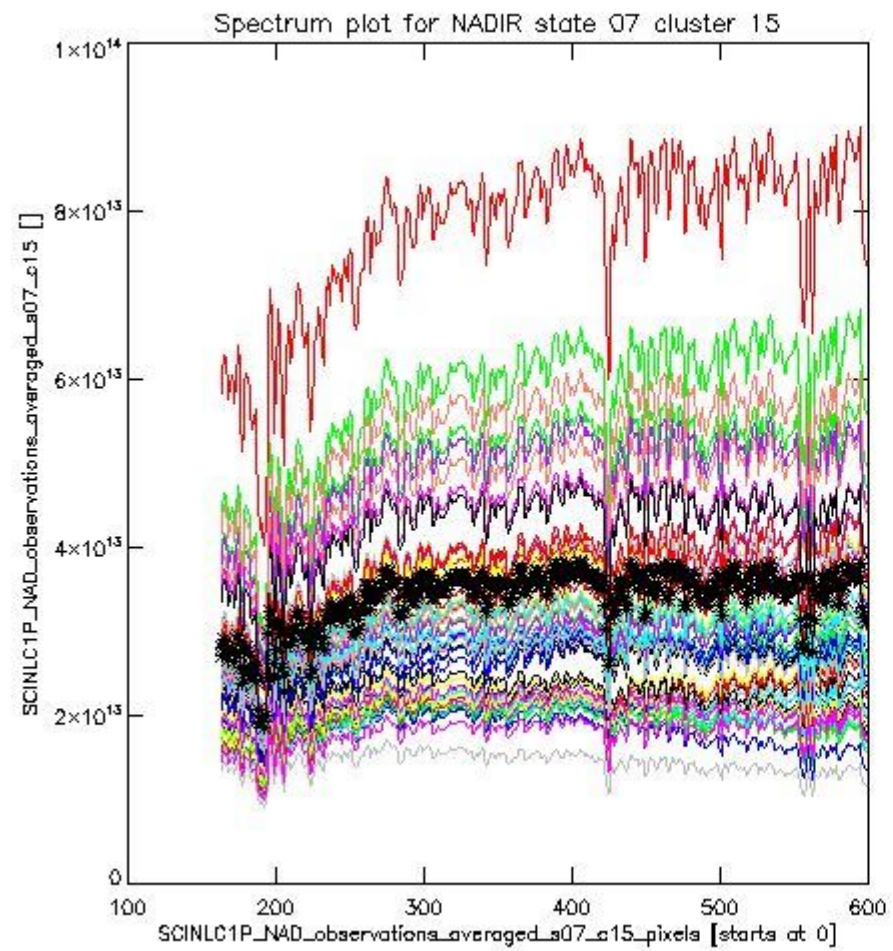
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_2.PNG



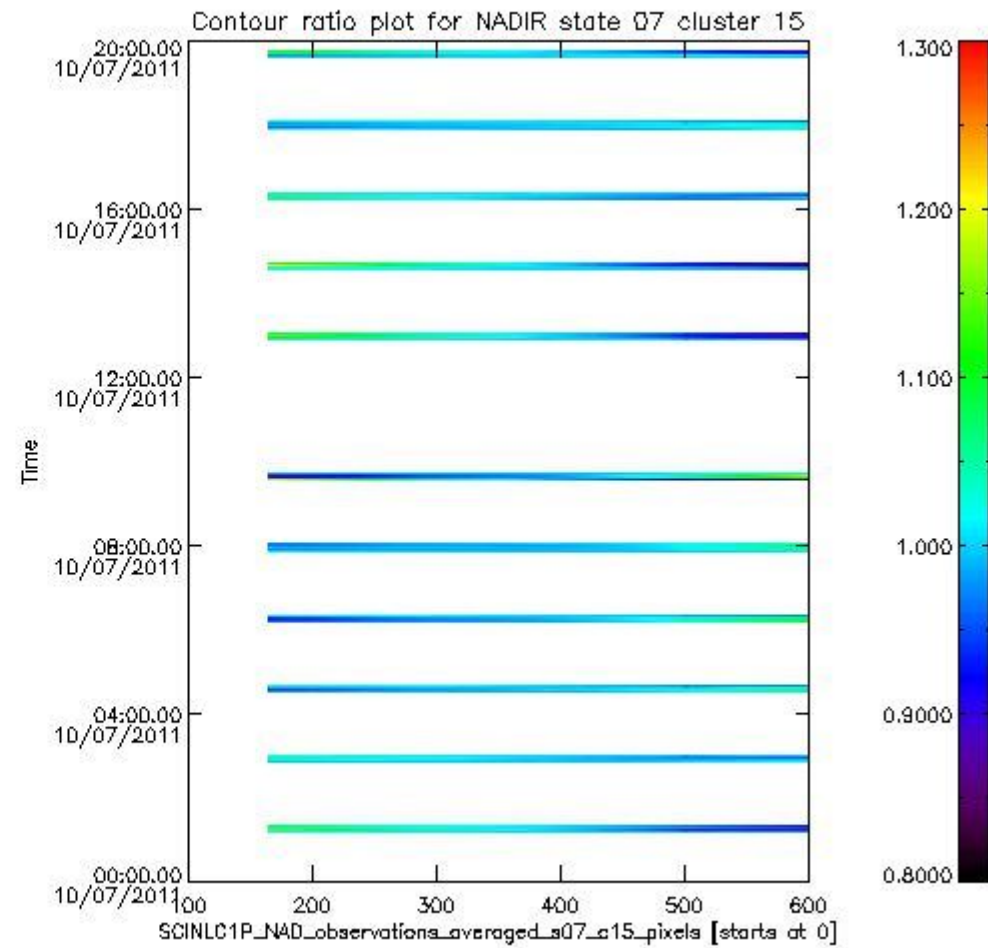
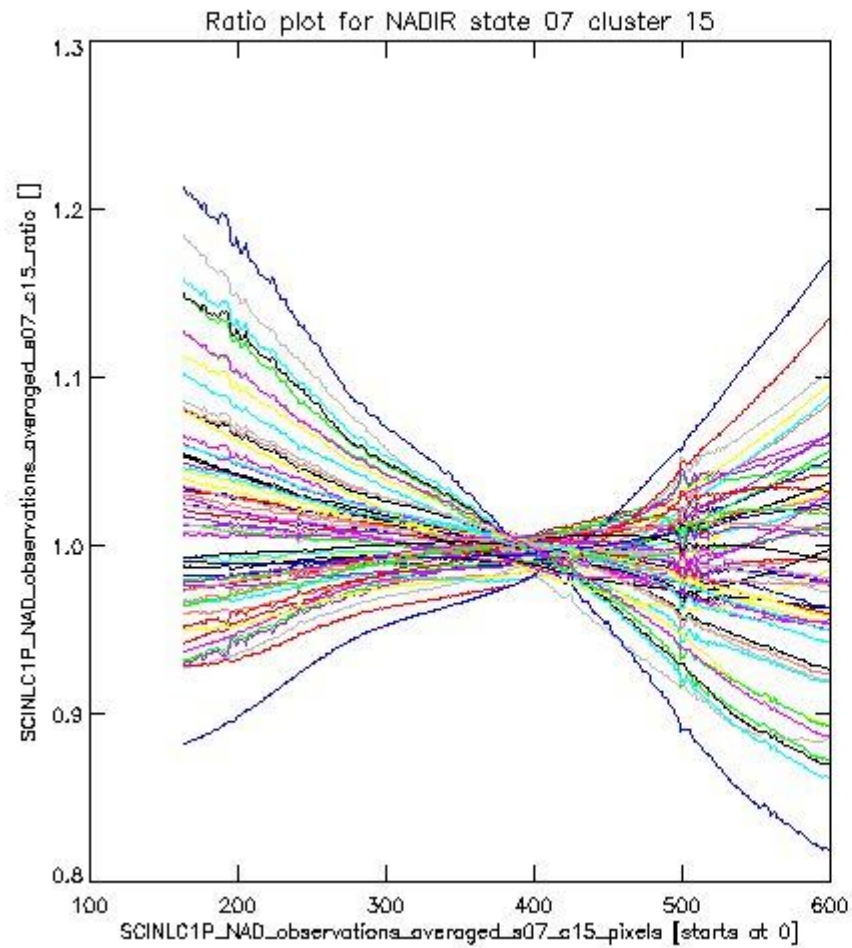
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_3.PNG

**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	10JUL2011 01:09:50.769
Start time of last sample	10JUL2011 19:41:55.379
Reference period start time	10JUN2011 01:10:34.970
Reference period stop time	09JUL2011 16:57:59.855
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



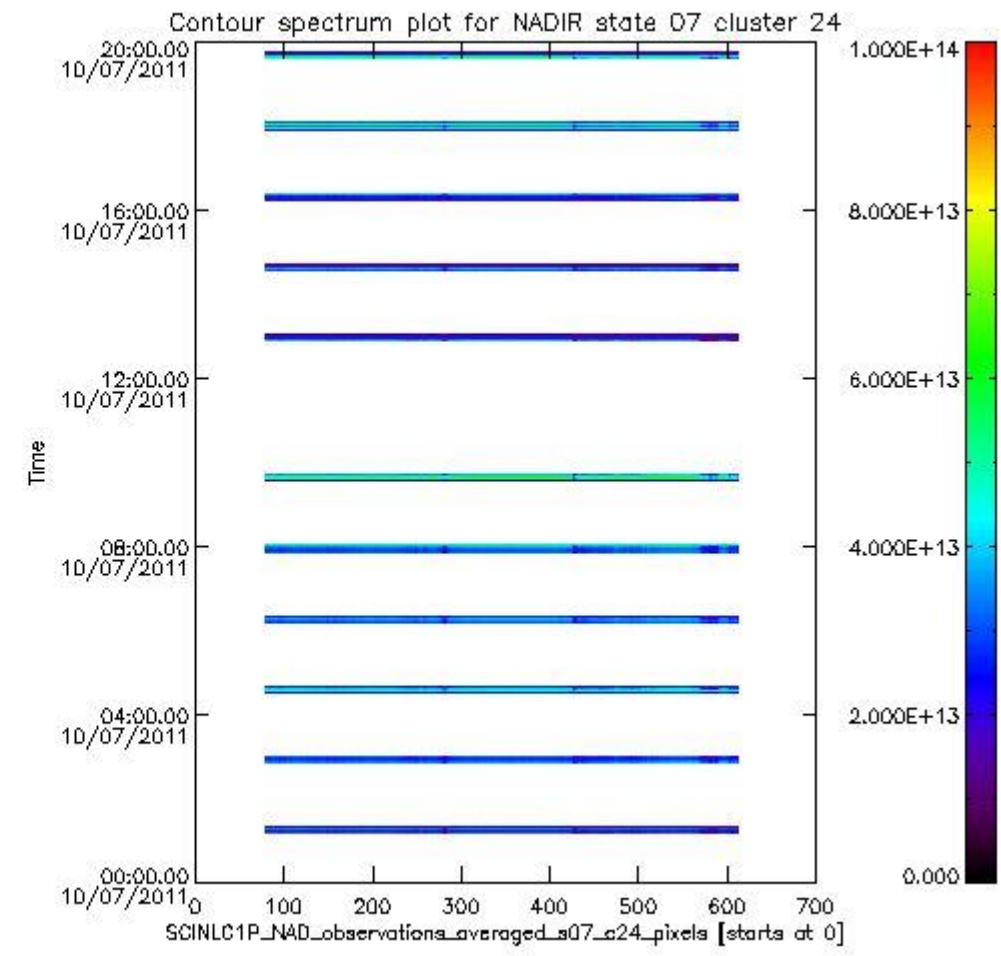
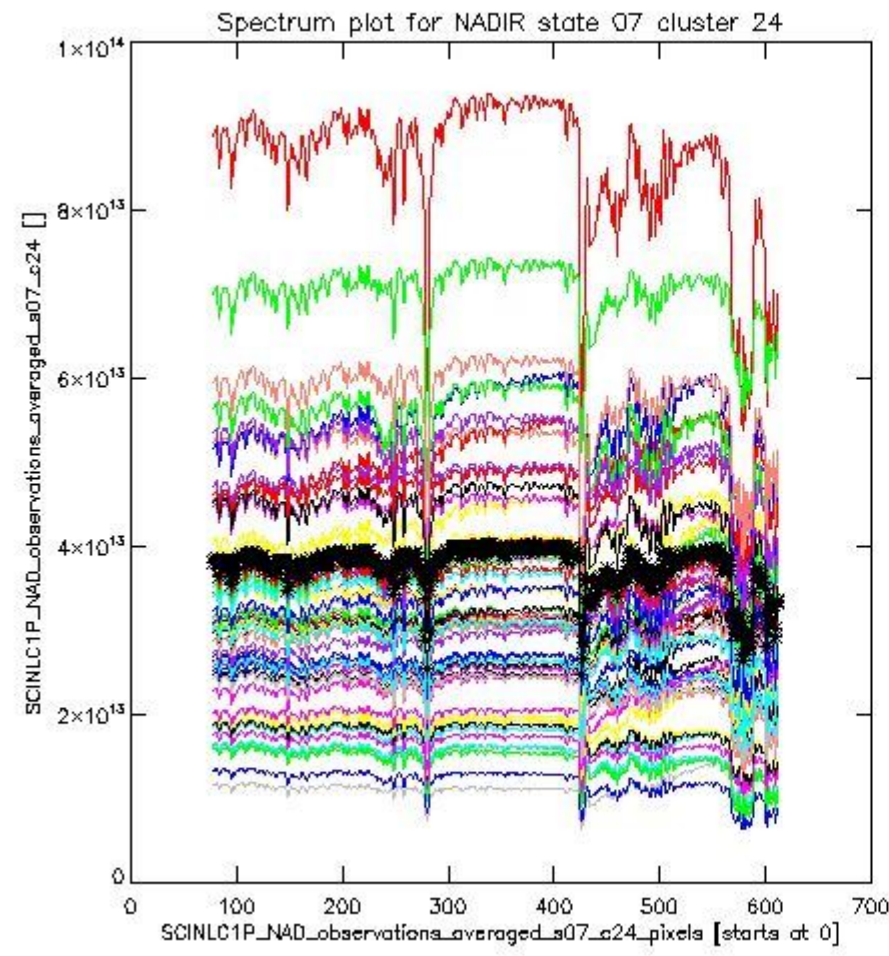
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_5.PNG

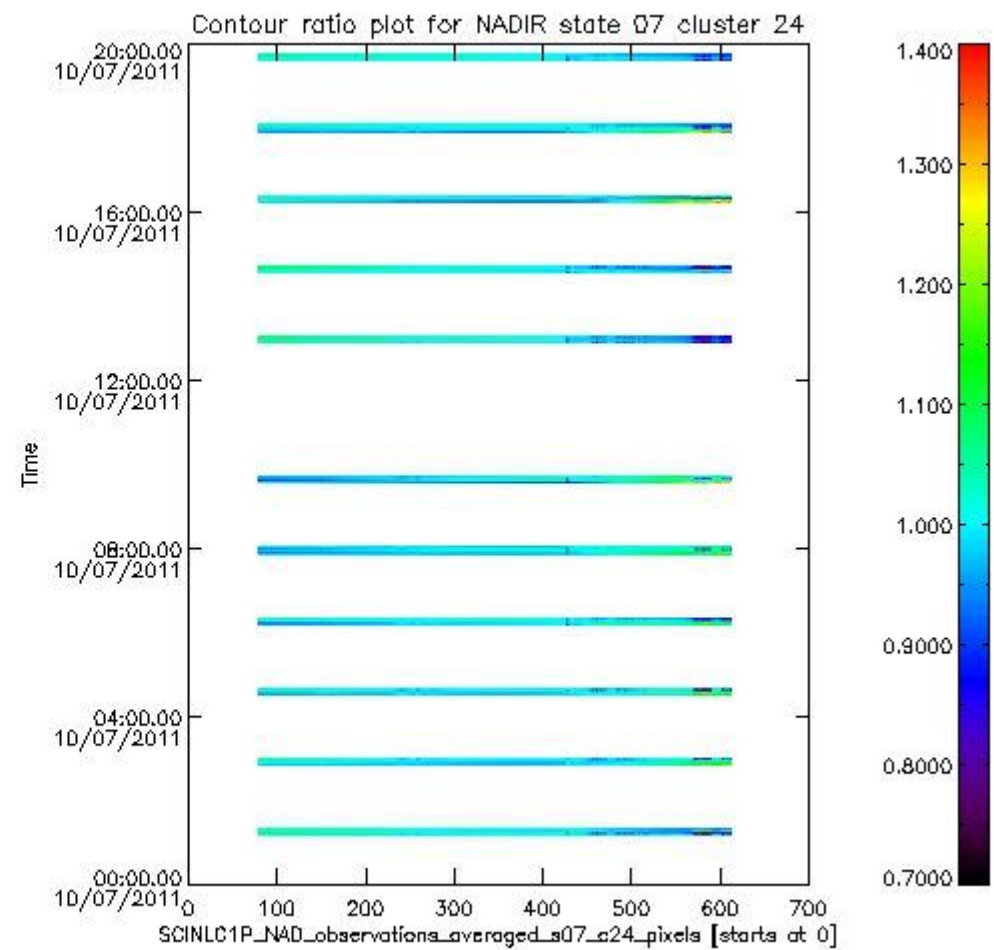
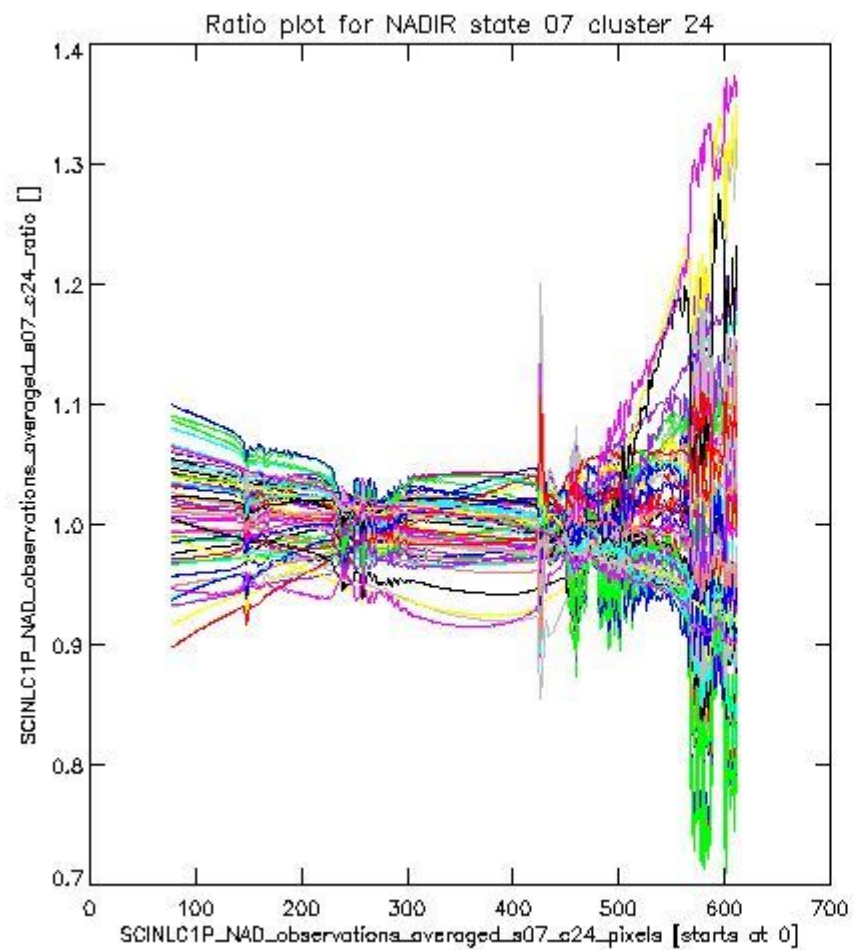
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	10JUL2011 01:09:50.769
Start time of last sample	10JUL2011 19:41:55.379
Reference period start time	10JUN2011 01:10:34.970
Reference period stop time	09JUL2011 16:57:59.855
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\_20110710\_6.PNG

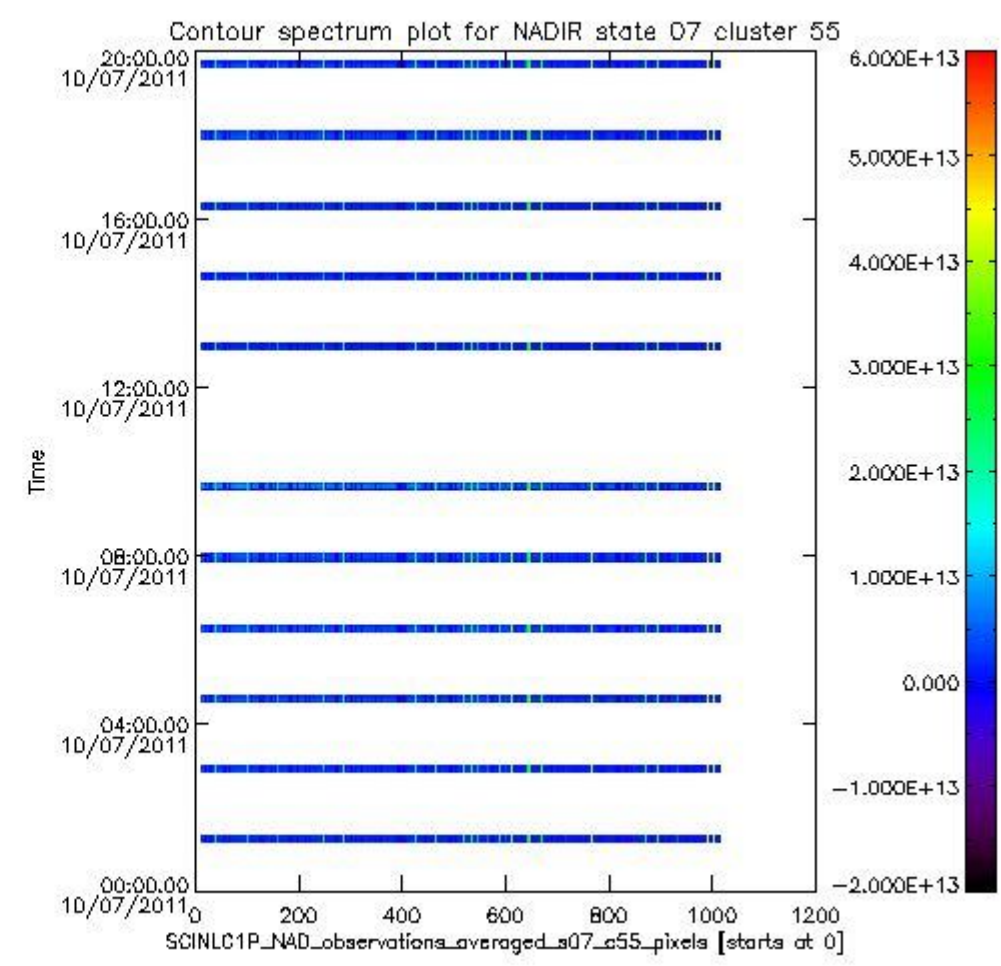
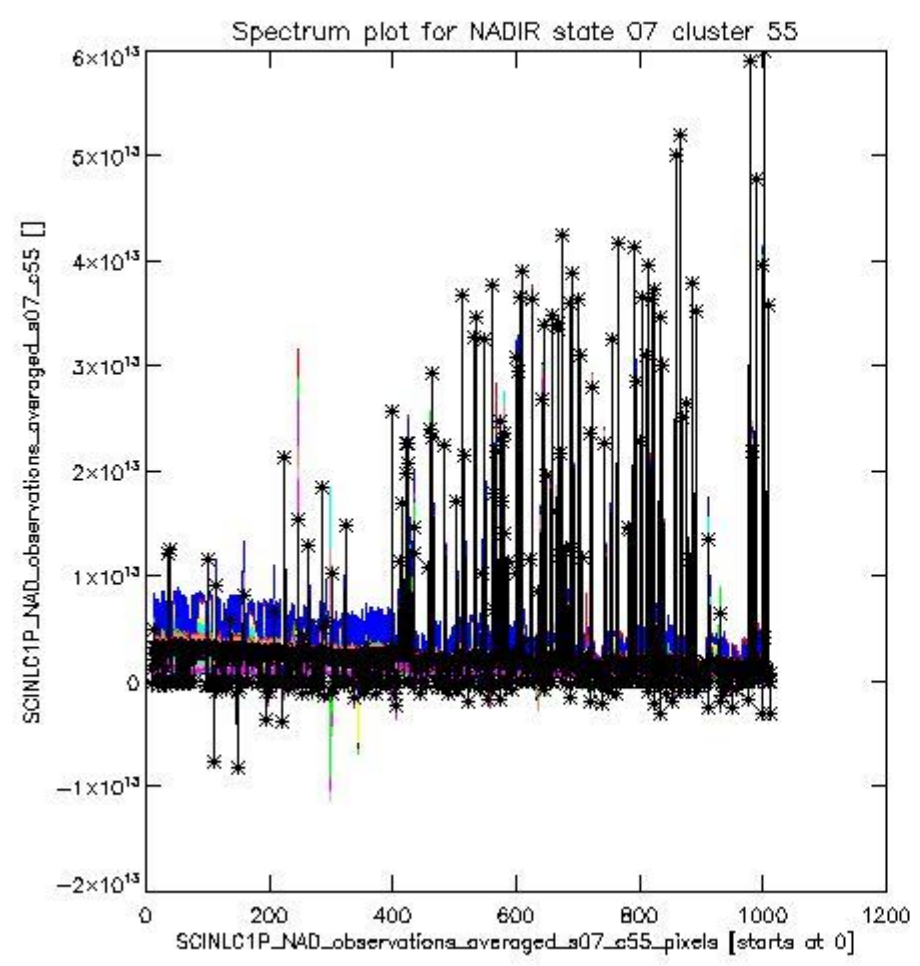




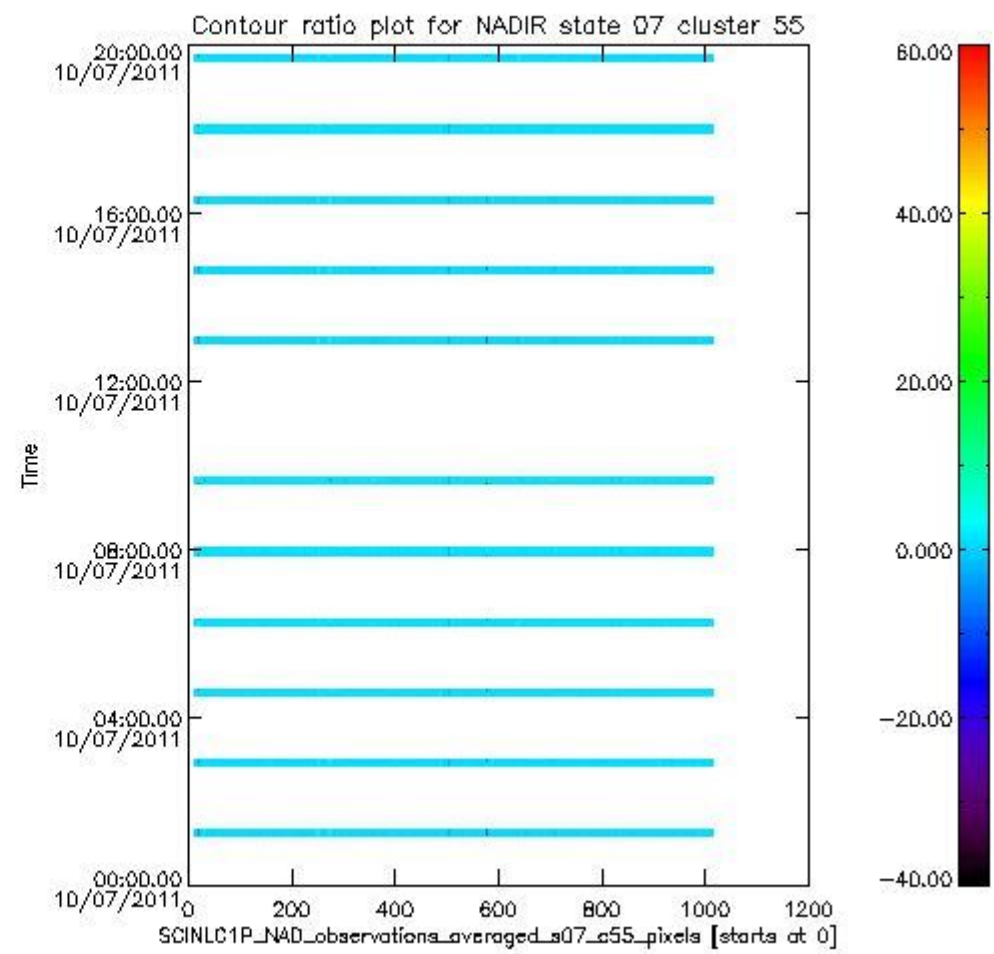
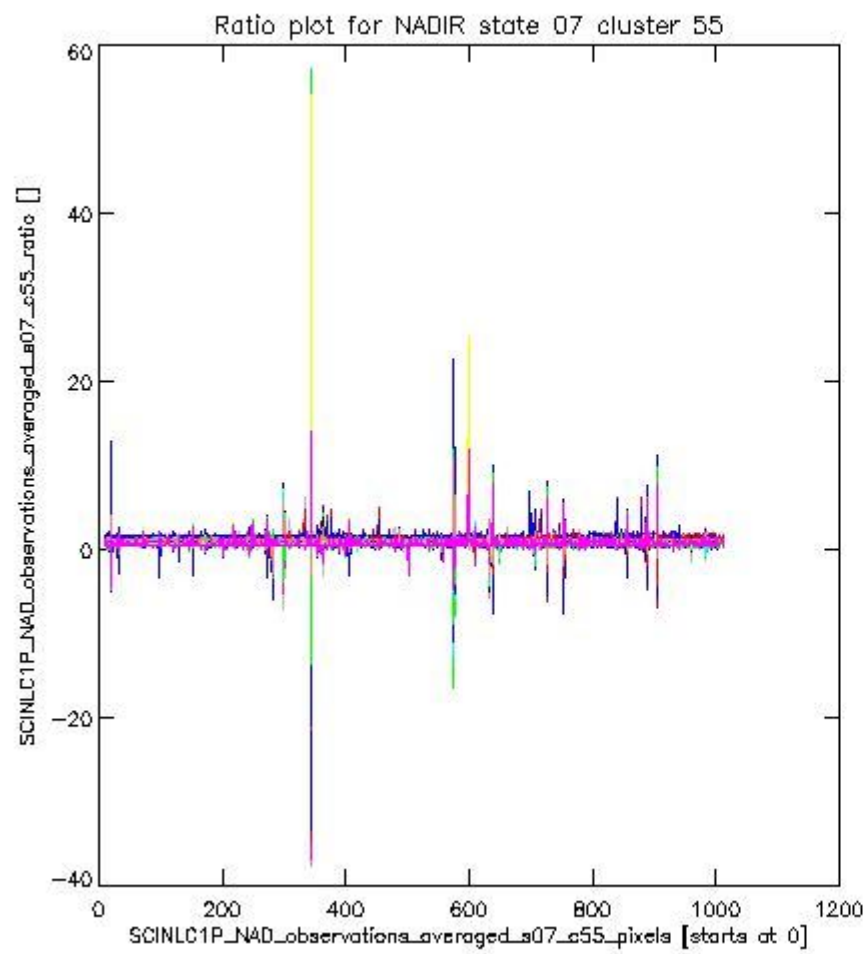
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_7.PNG

**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	10JUL2011 01:09:50.769
Start time of last sample	10JUL2011 19:41:55.379
Reference period start time	10JUN2011 01:10:34.970
Reference period stop time	09JUL2011 16:57:59.855
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



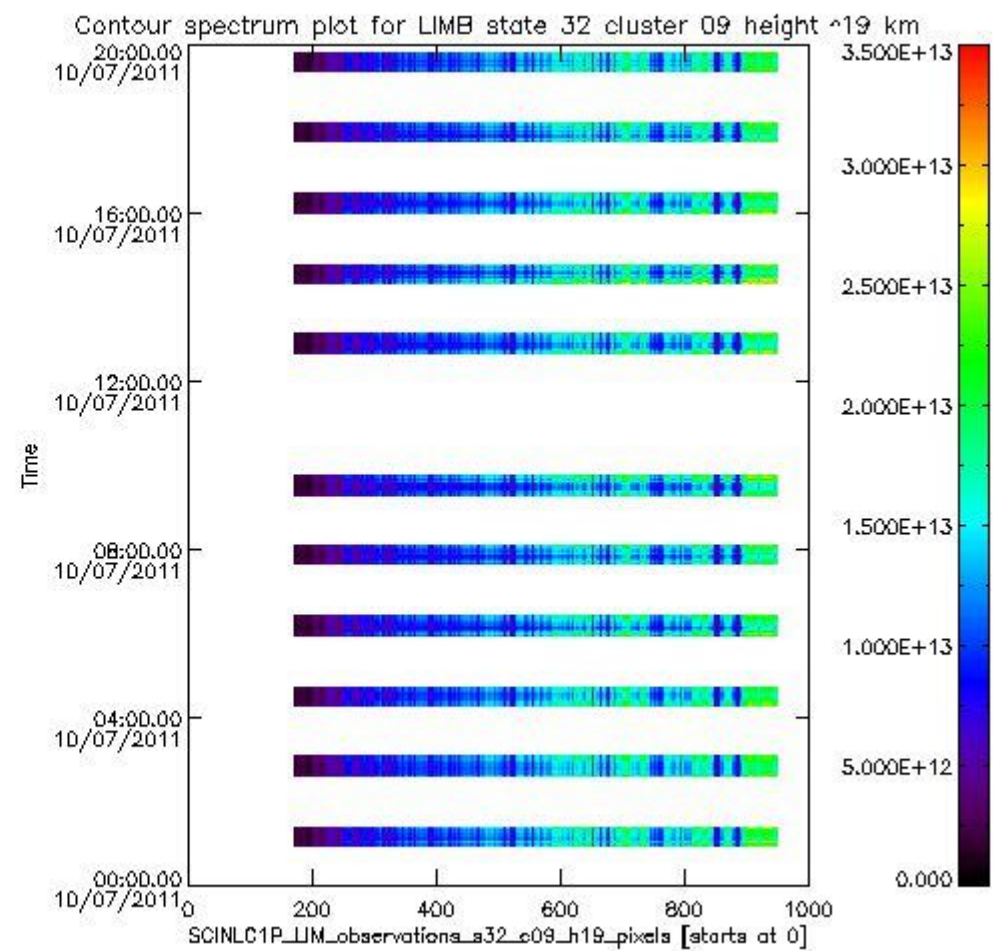
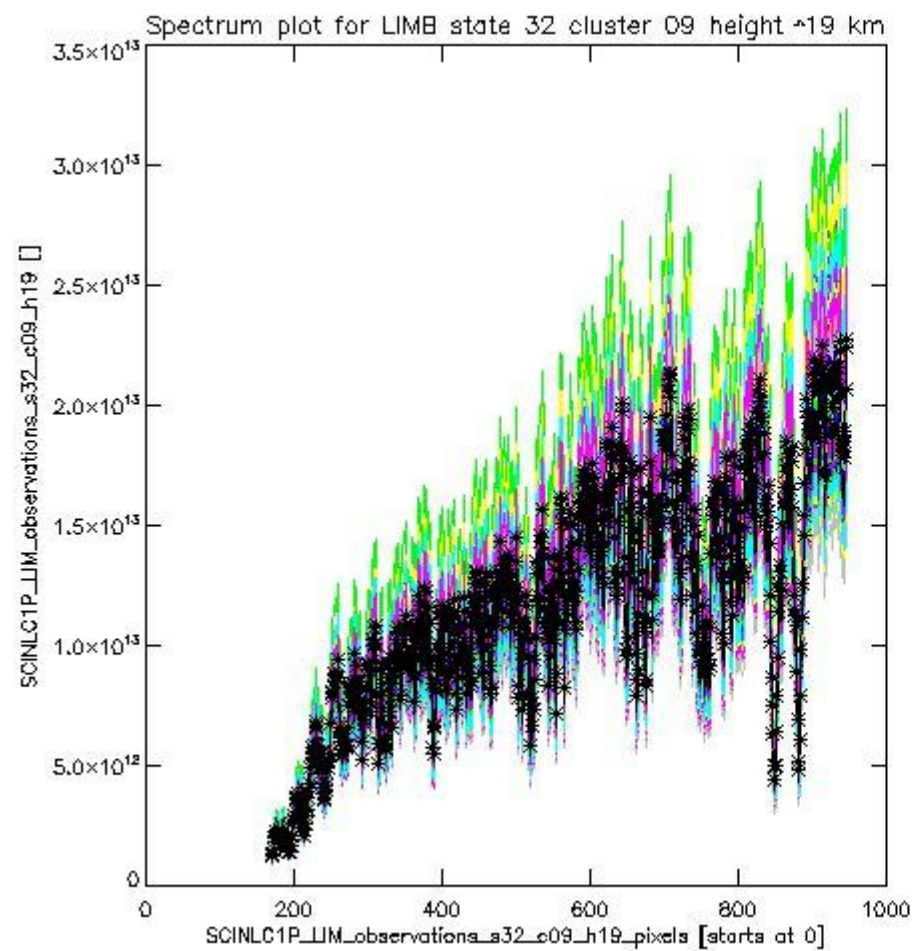
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_8.PNG



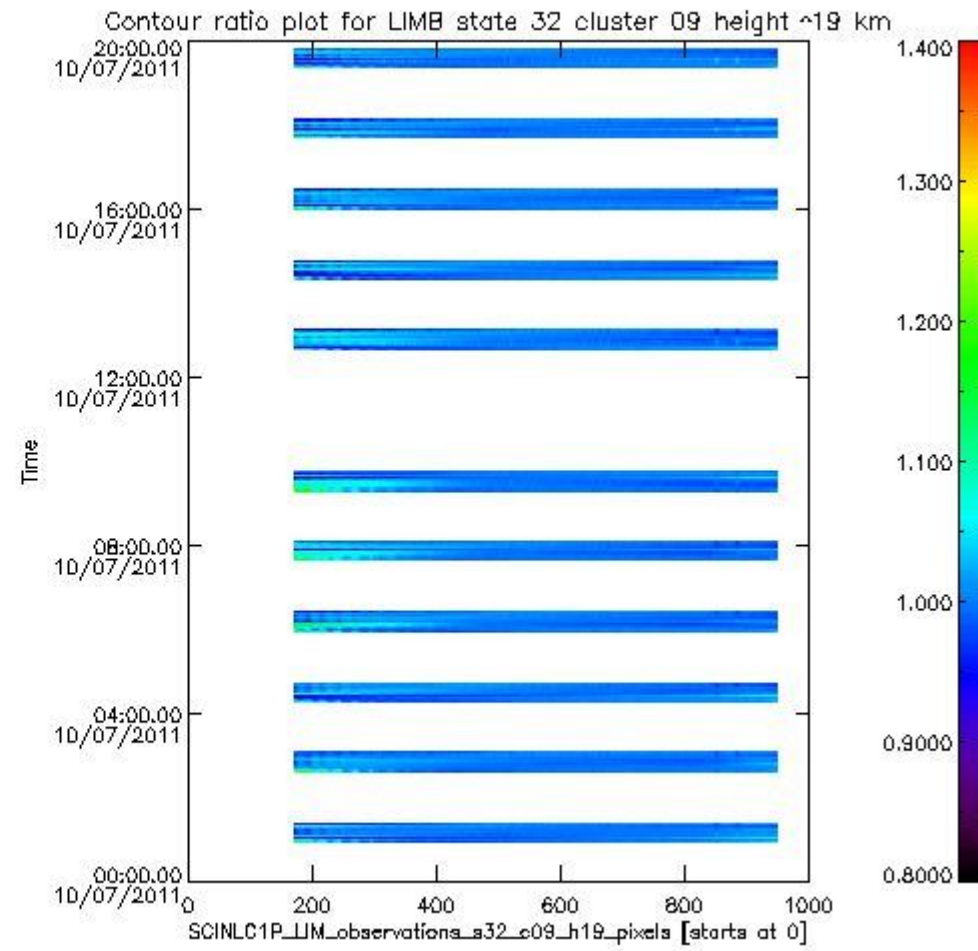
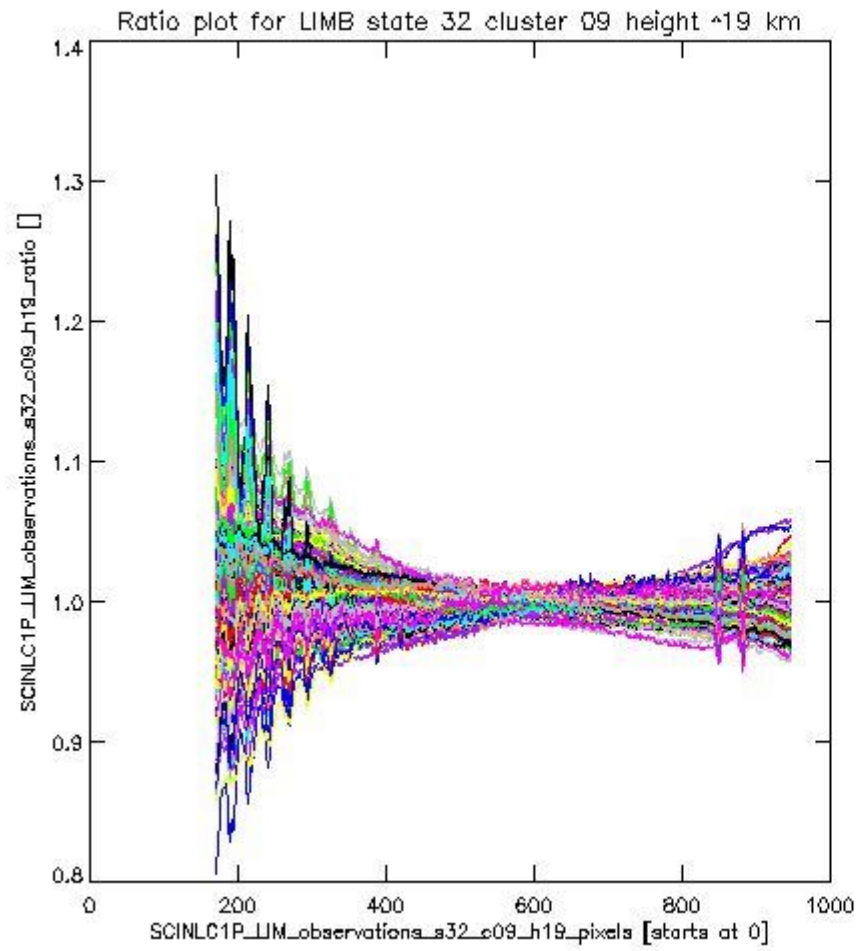
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_9.PNG

**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	10JUL2011 00:56:40.128
Start time of last sample	10JUL2011 19:47:09.422
Reference period start time	10JUN2011 00:55:21.595
Reference period stop time	09JUL2011 17:03:13.898
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



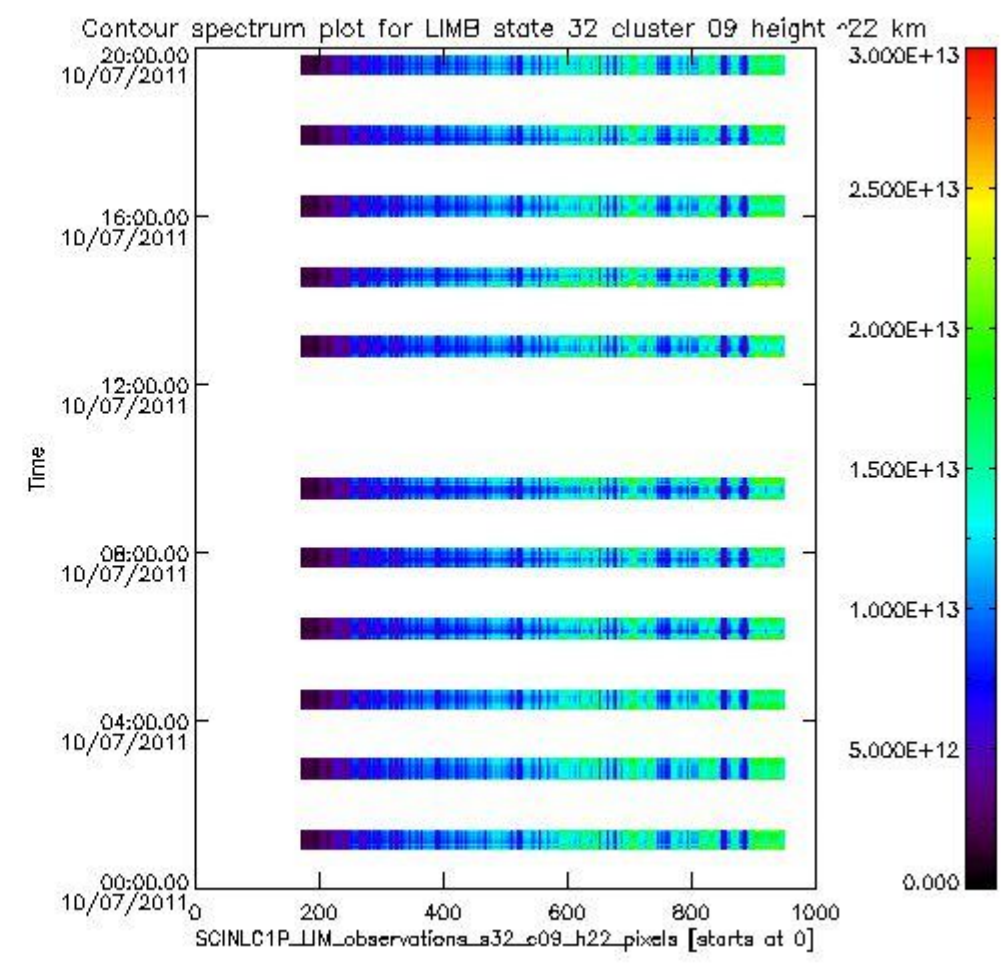
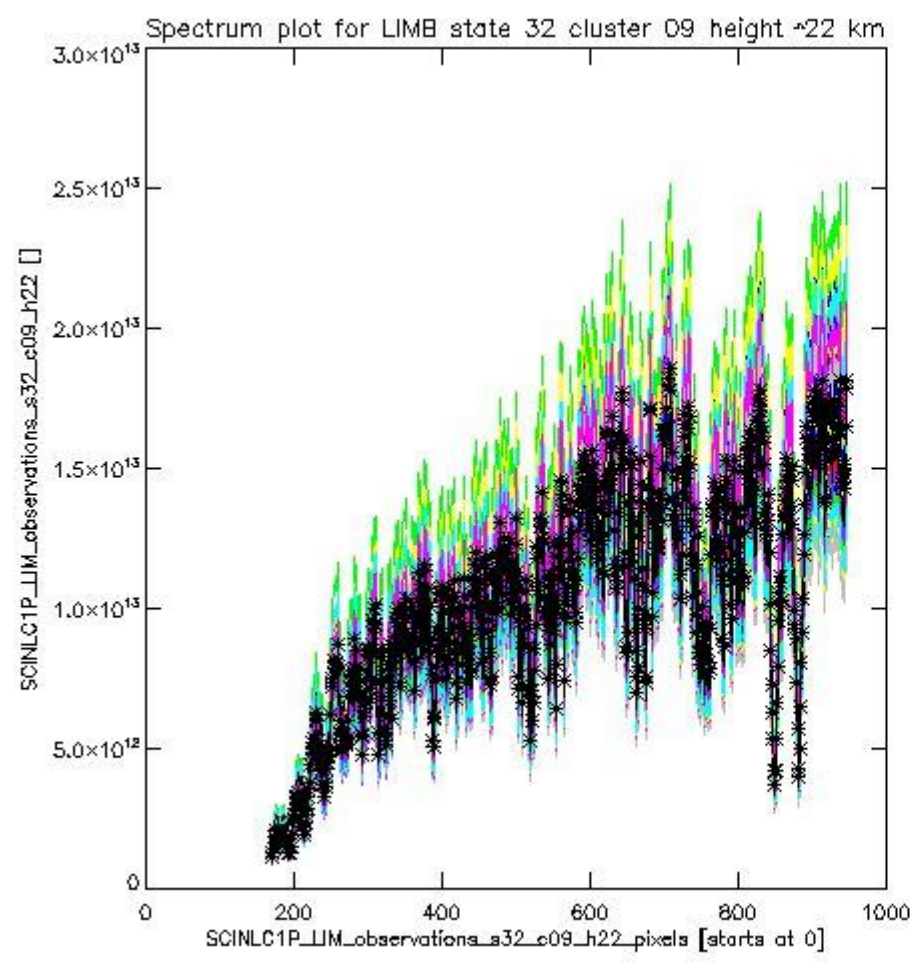
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_10.PNG



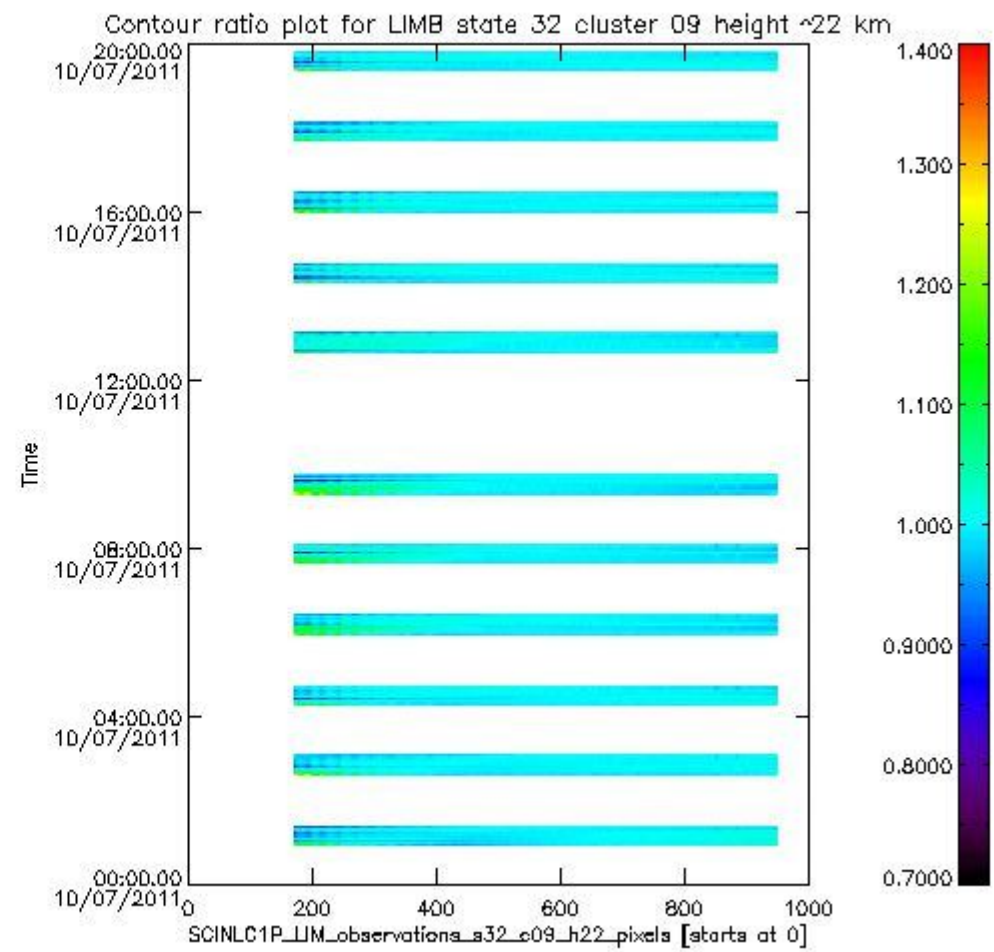
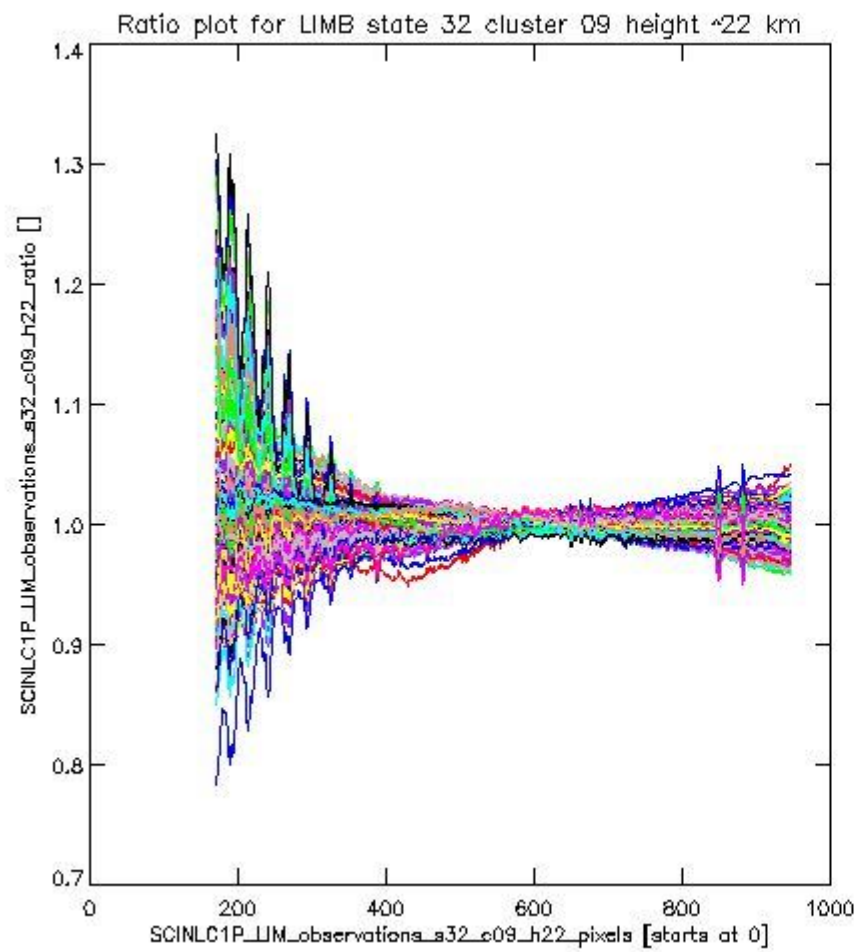
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_11.PNG

**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	10JUL2011 00:56:40.128
Start time of last sample	10JUL2011 19:47:09.422
Reference period start time	10JUN2011 00:55:21.595
Reference period stop time	09JUL2011 17:03:13.898
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



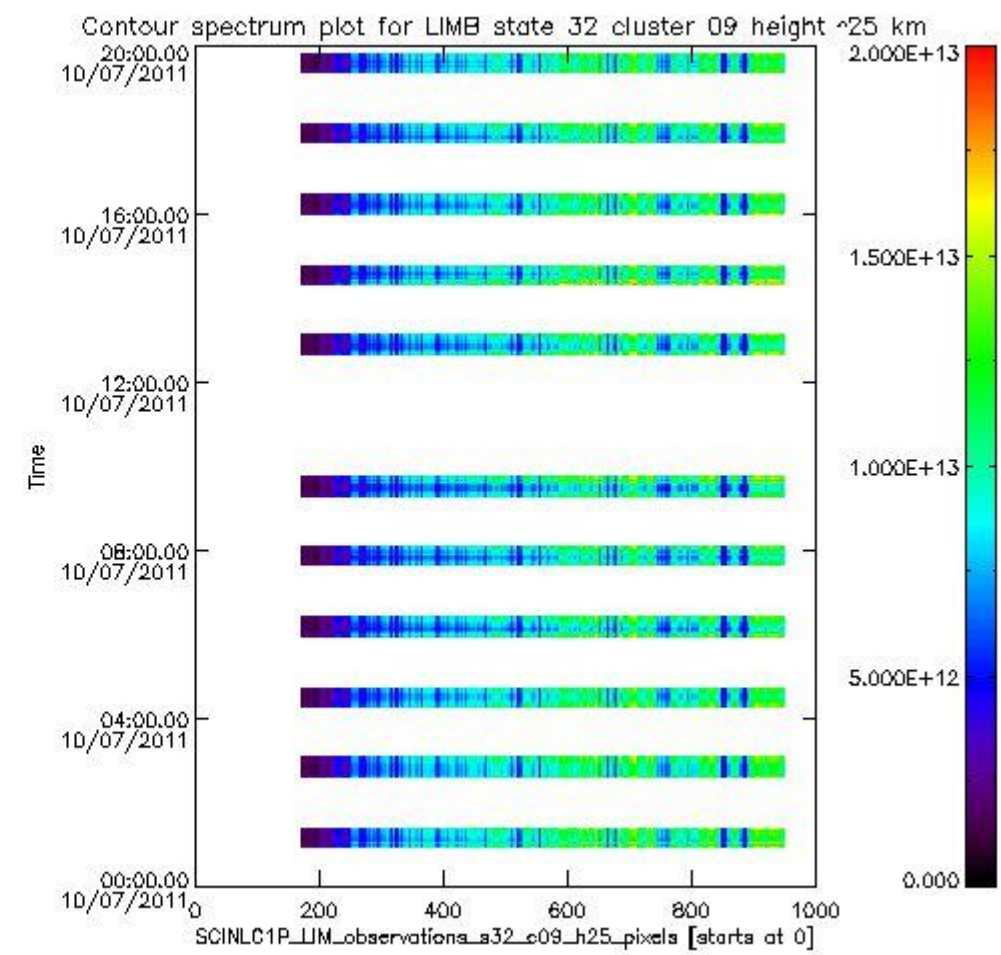
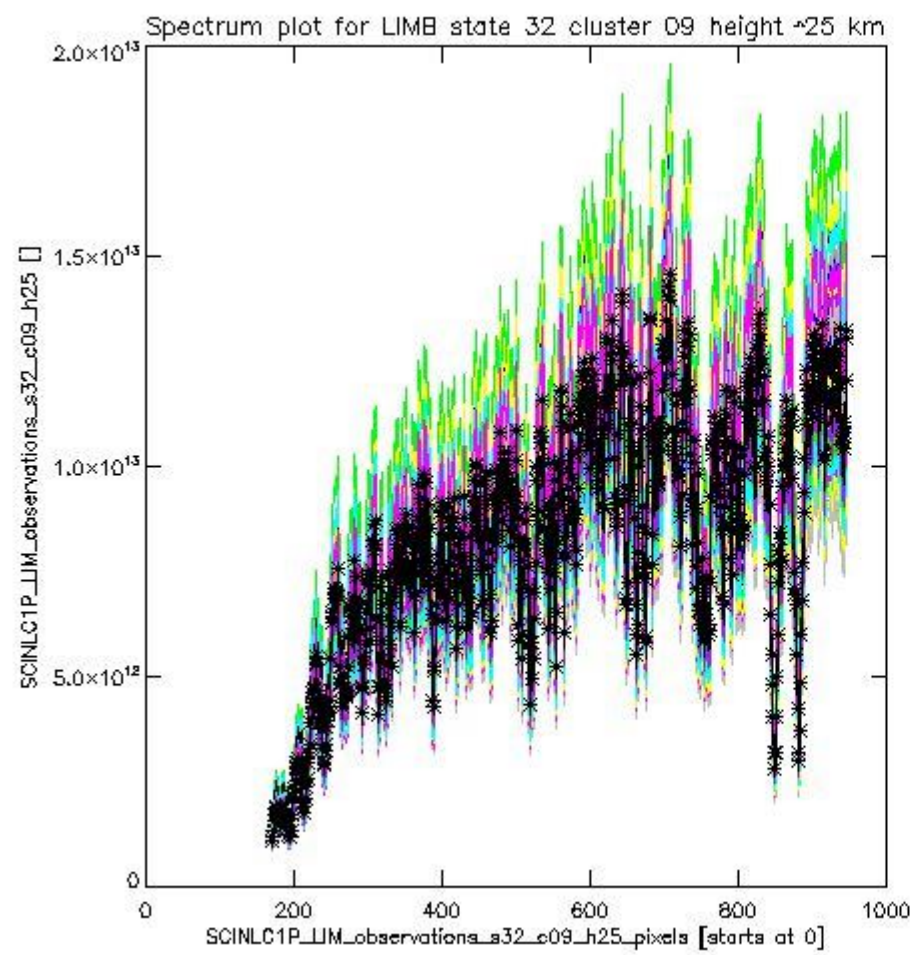
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_13.PNG

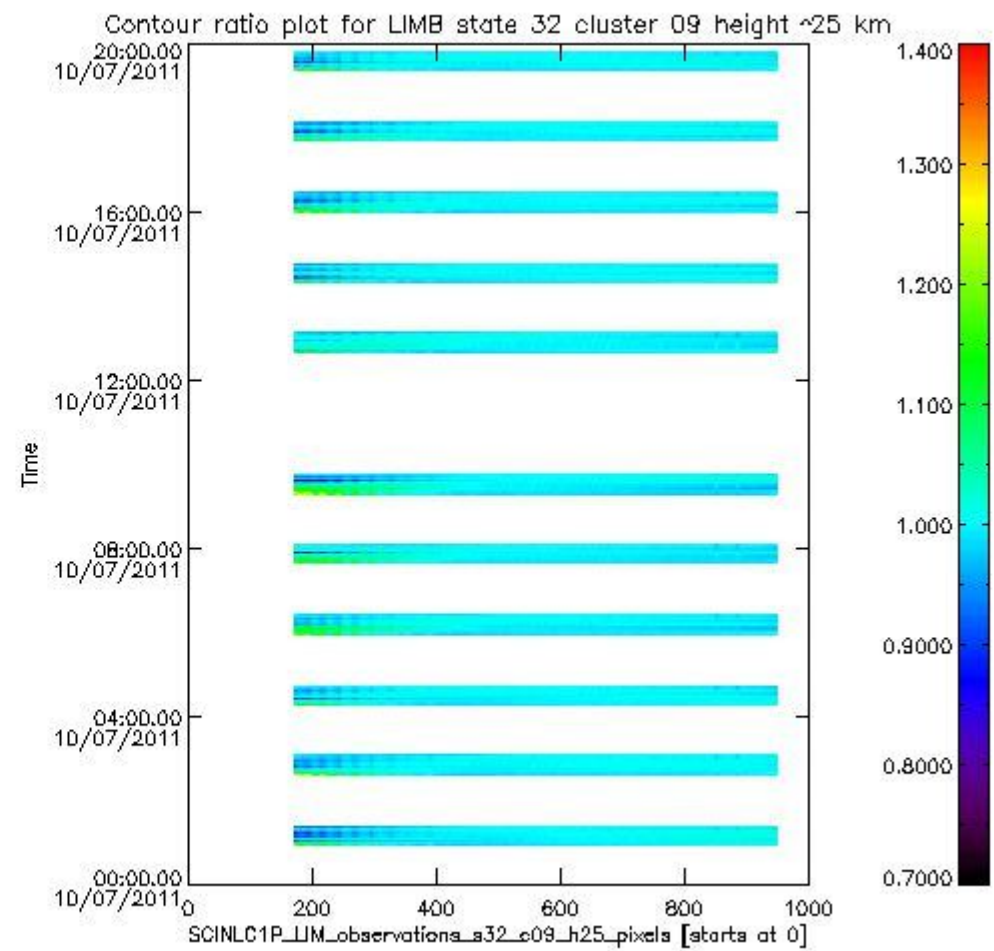
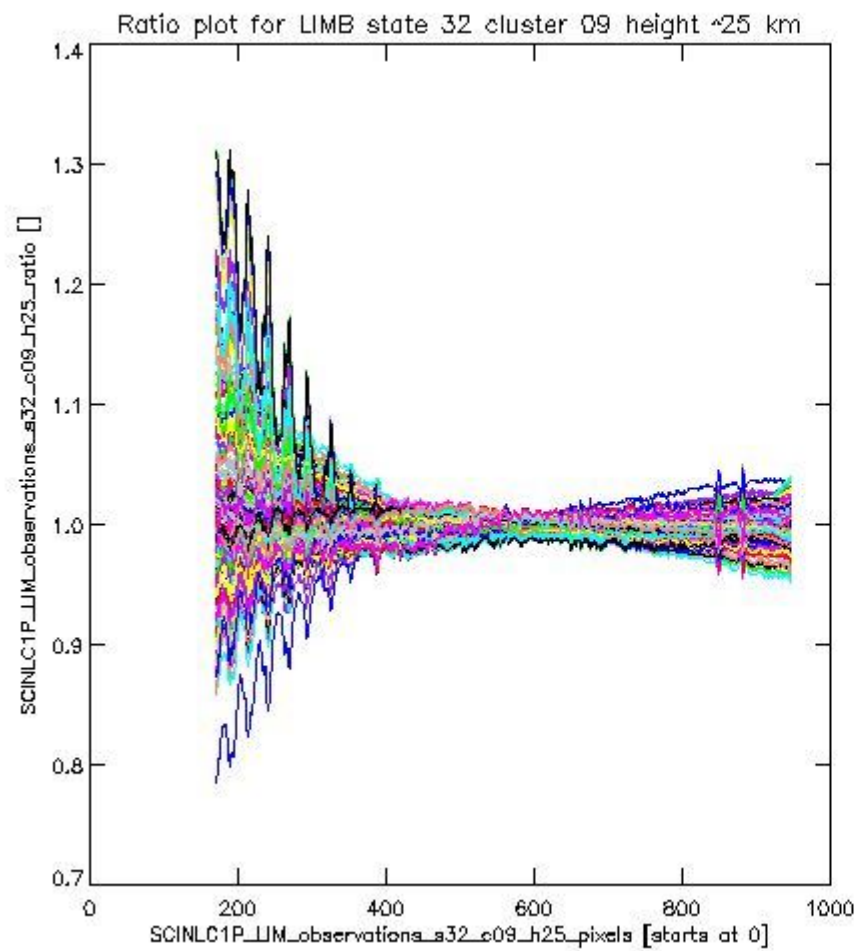
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	10JUL2011 00:56:40.128
Start time of last sample	10JUL2011 19:47:09.422
Reference period start time	10JUN2011 00:55:21.595
Reference period stop time	09JUL2011 17:03:13.898
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\_20110710\_14.PNG

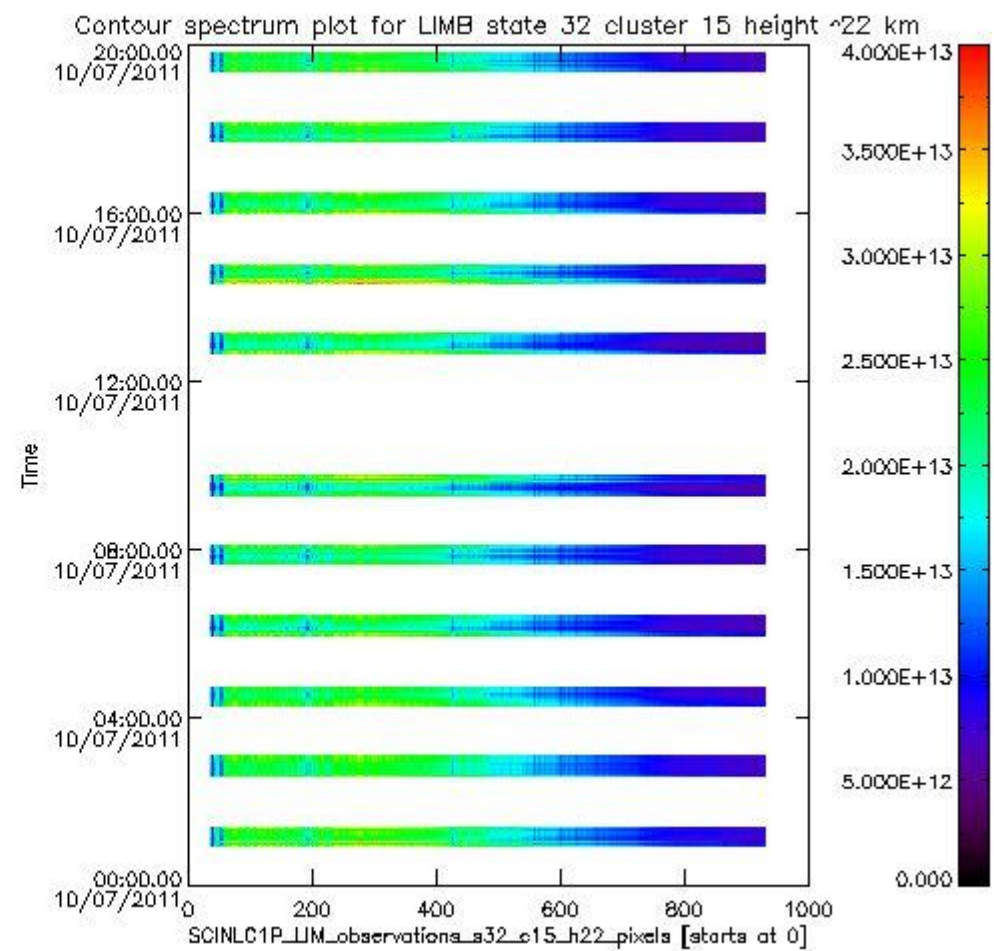
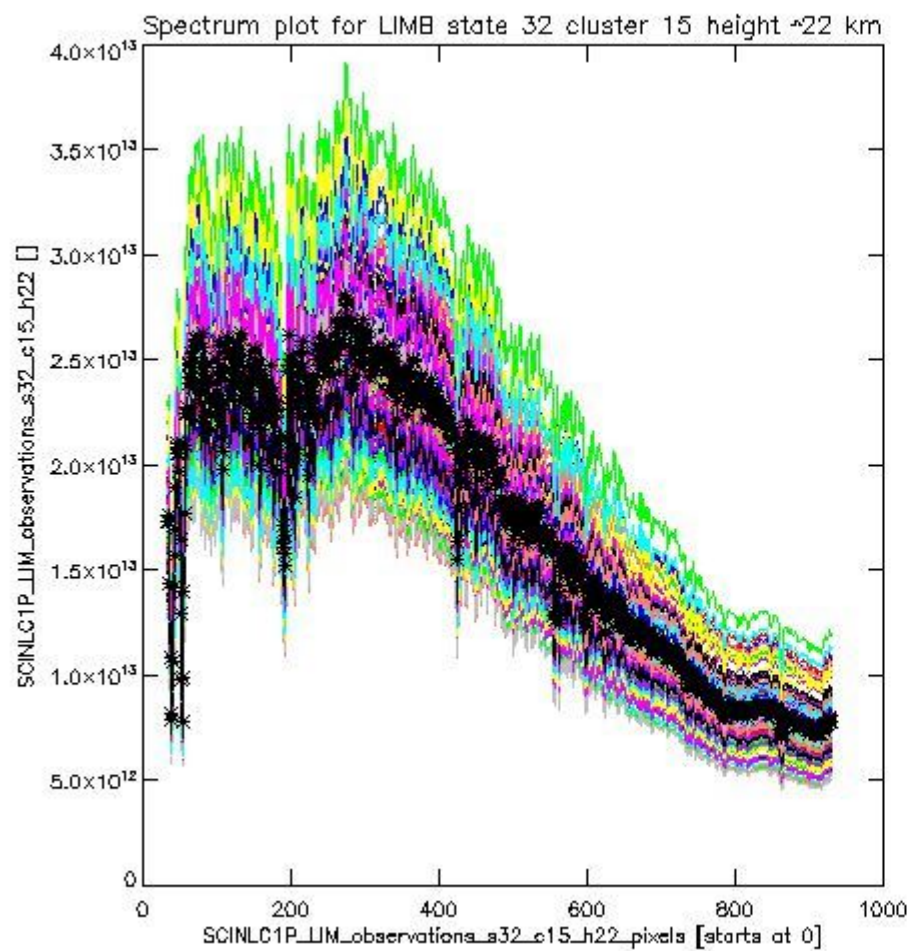




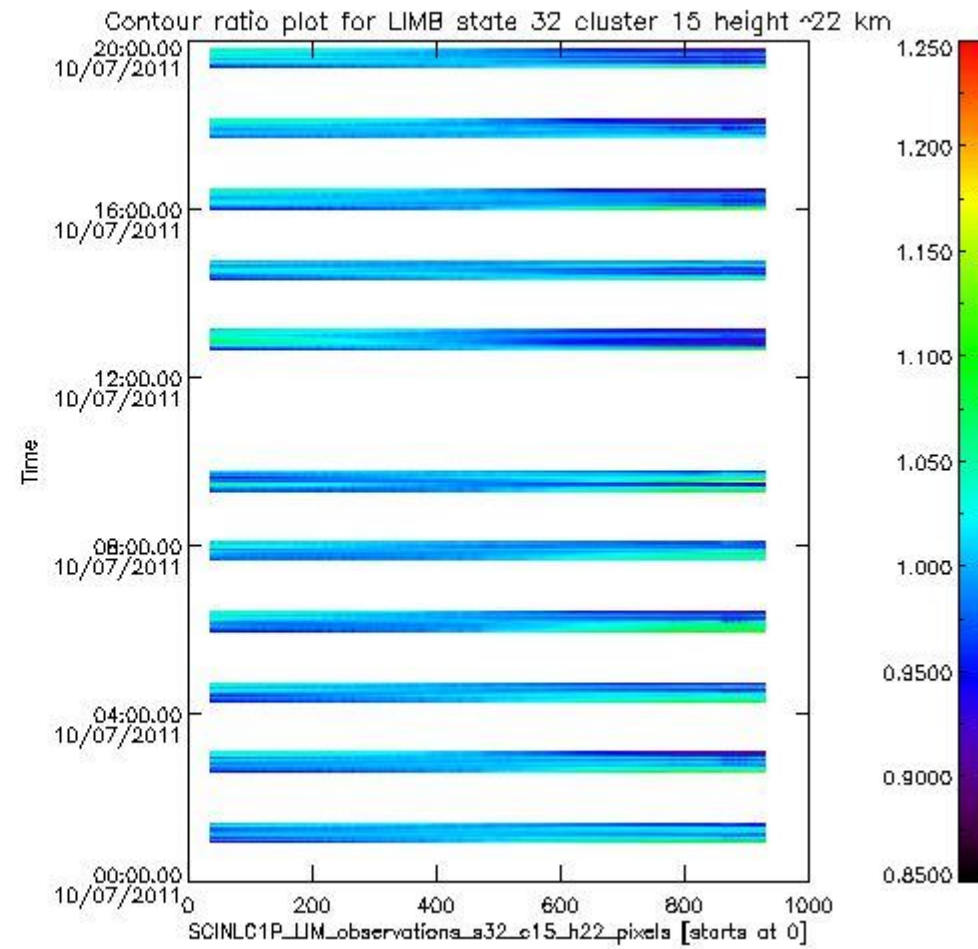
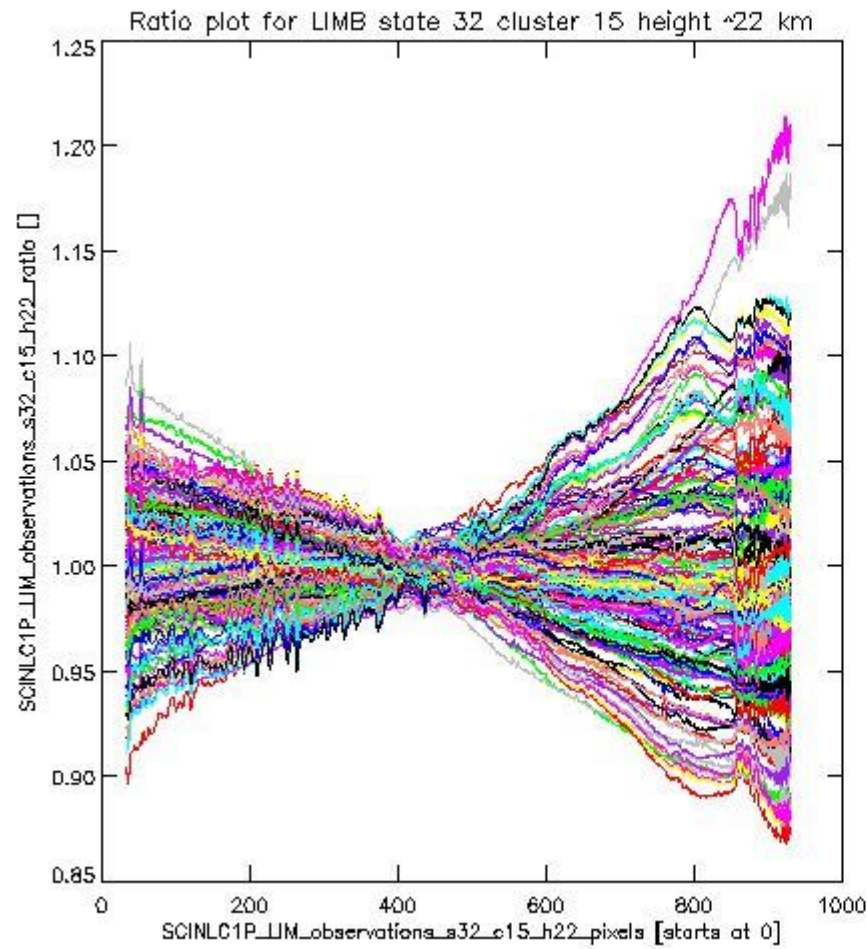
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_15.PNG

**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	10JUL2011 00:56:40.128
Start time of last sample	10JUL2011 19:47:09.422
Reference period start time	10JUN2011 00:55:21.595
Reference period stop time	09JUL2011 17:03:13.898
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



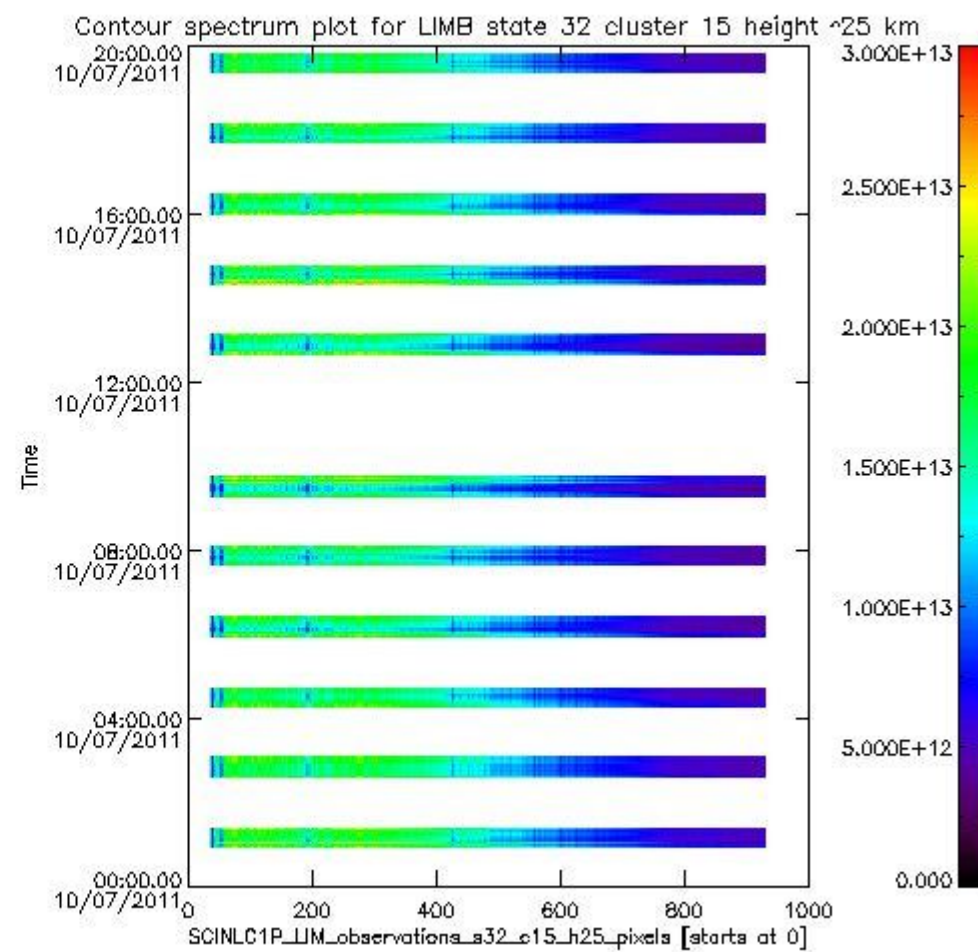
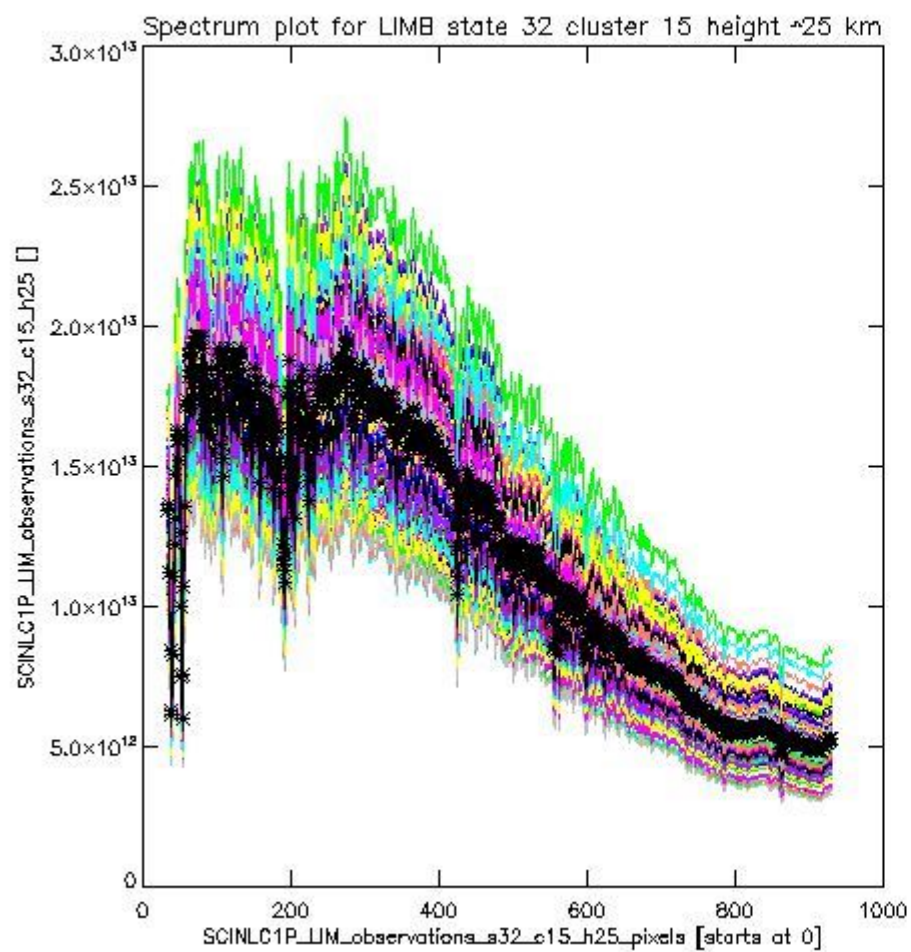
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_16.PNG



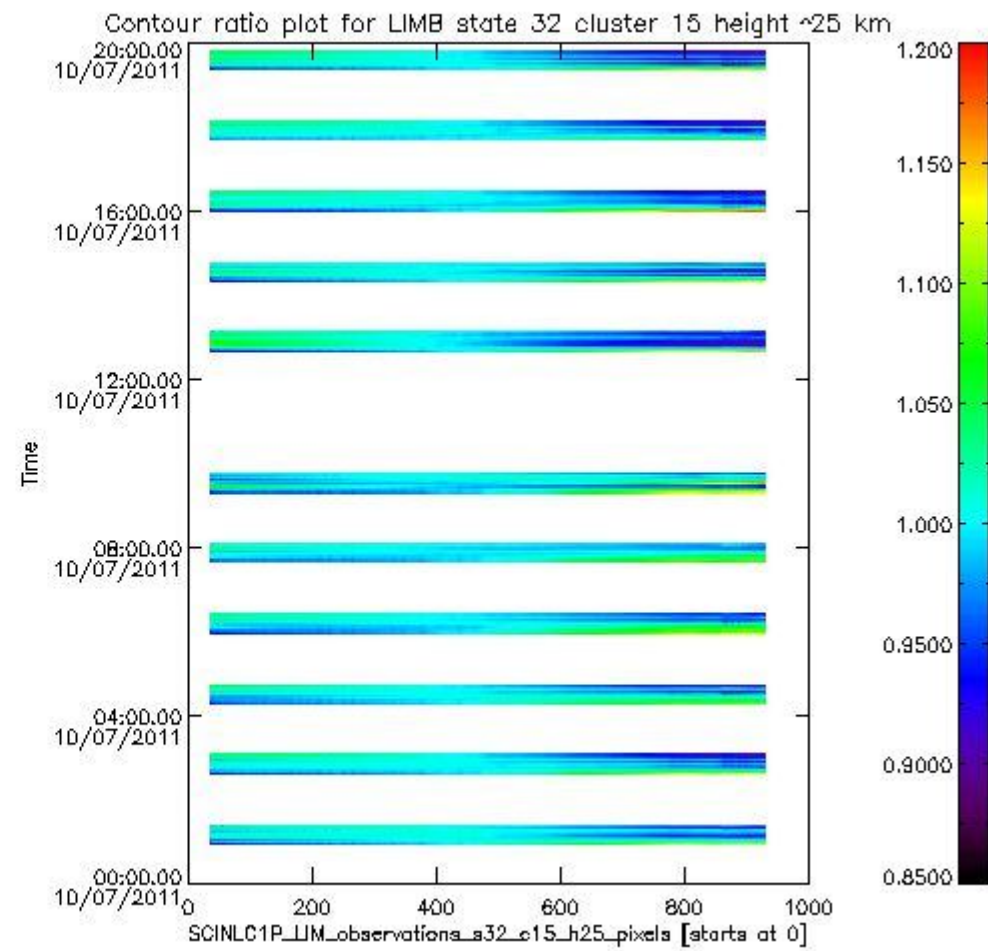
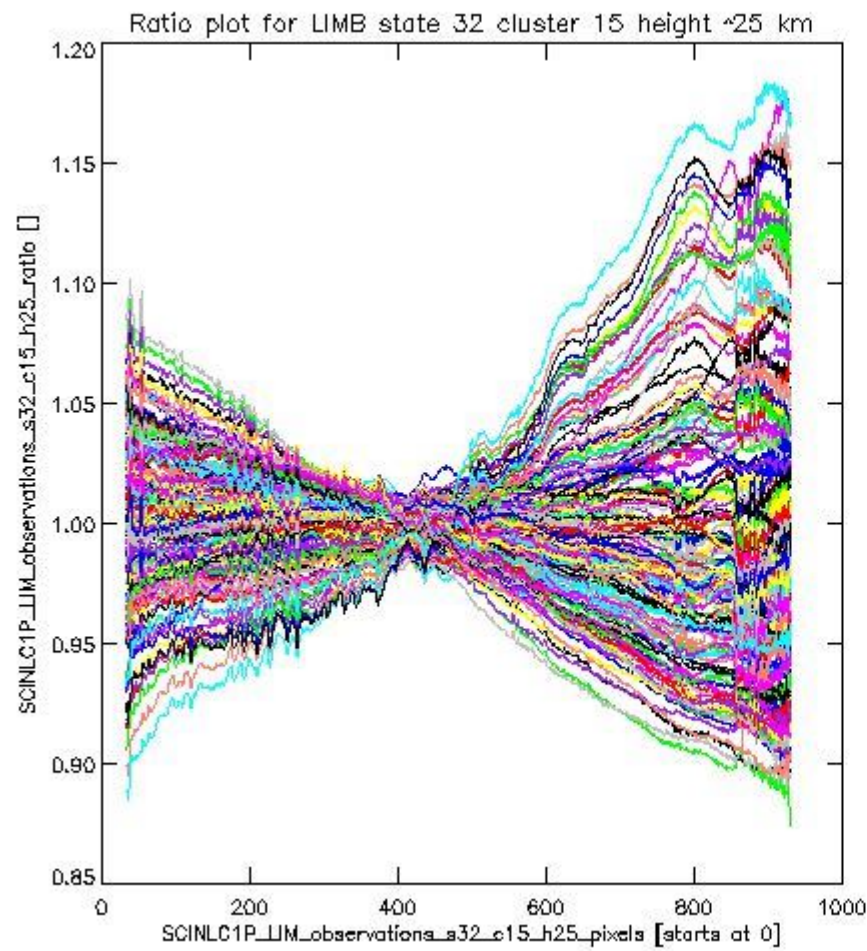
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_17.PNG

**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	10JUL2011 00:56:40.128
Start time of last sample	10JUL2011 19:47:09.422
Reference period start time	10JUN2011 00:55:21.595
Reference period stop time	09JUL2011 17:03:13.898
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



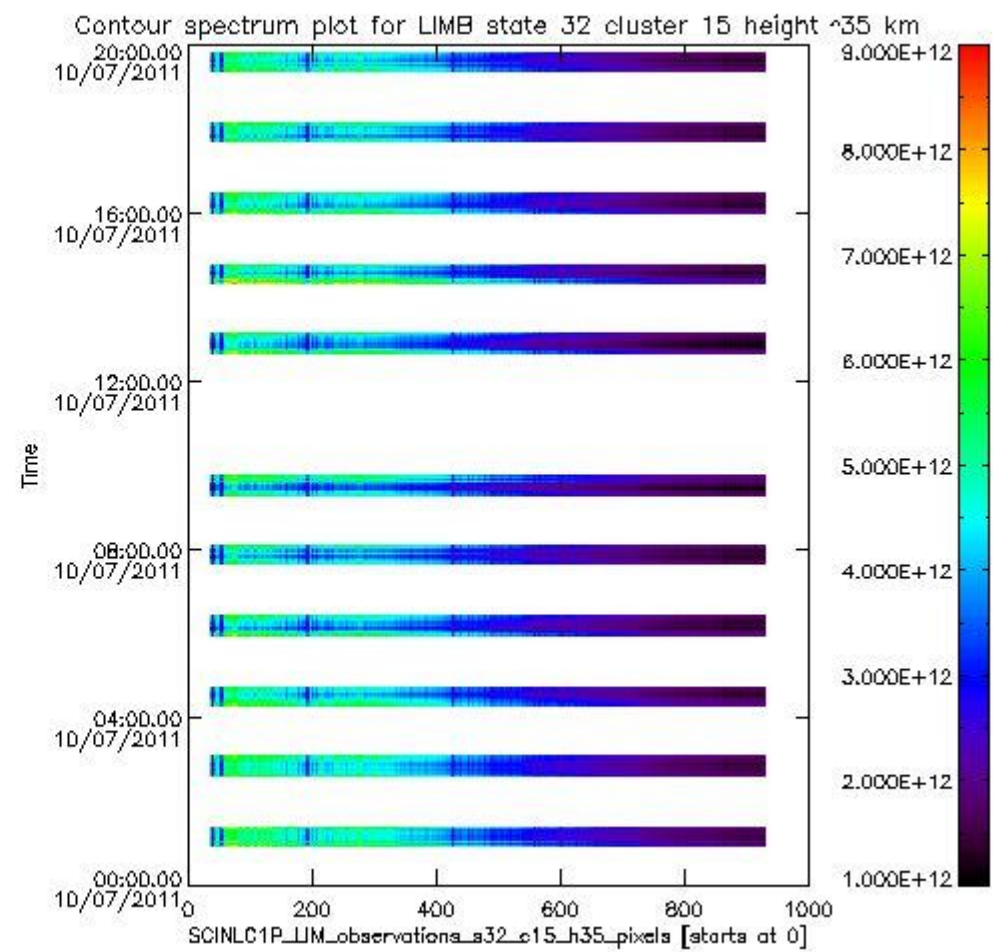
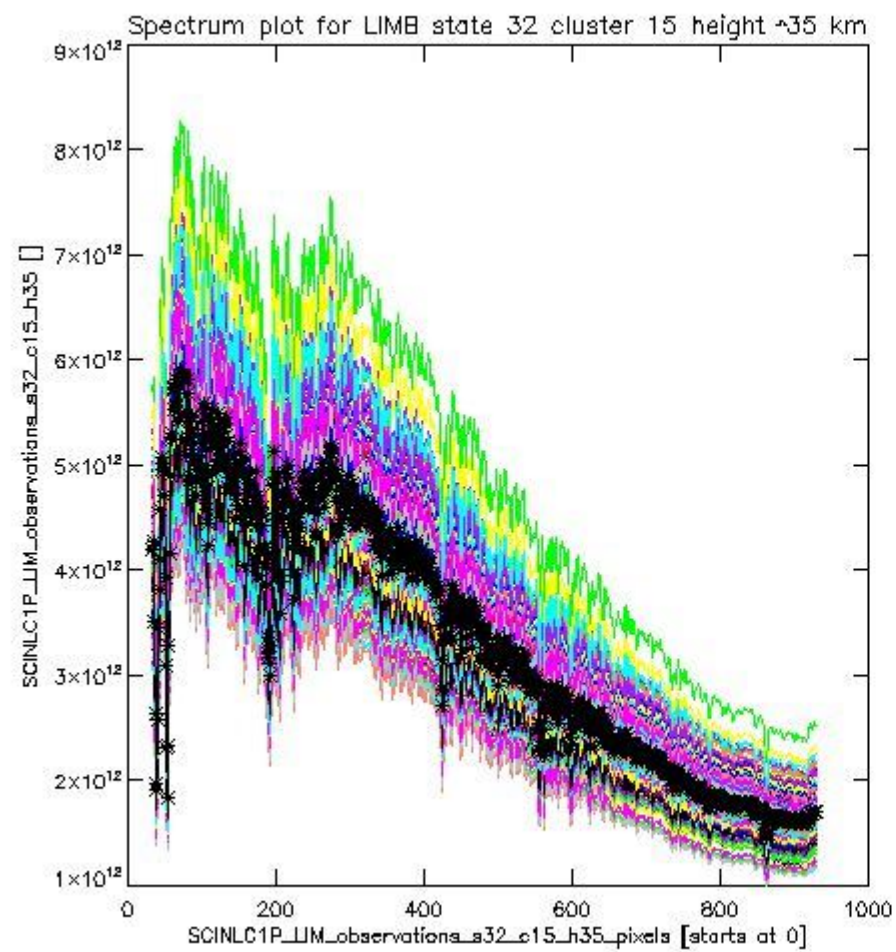
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_18.PNG



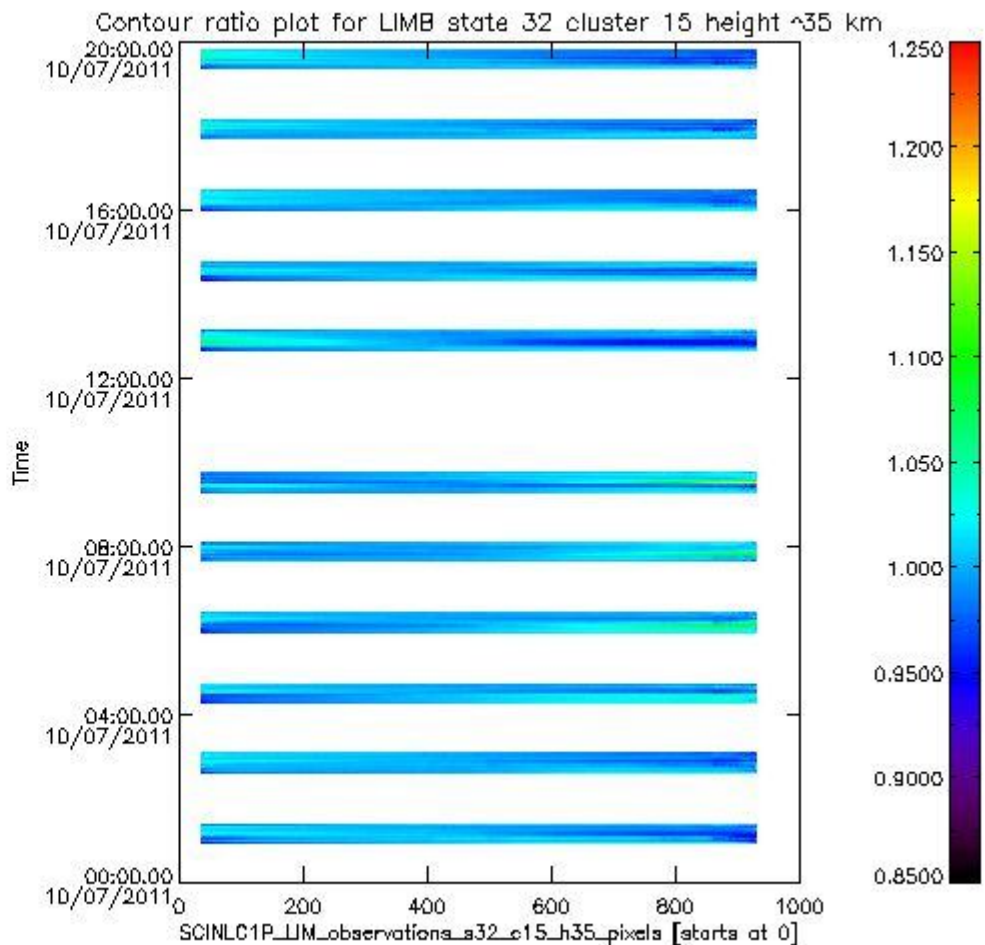
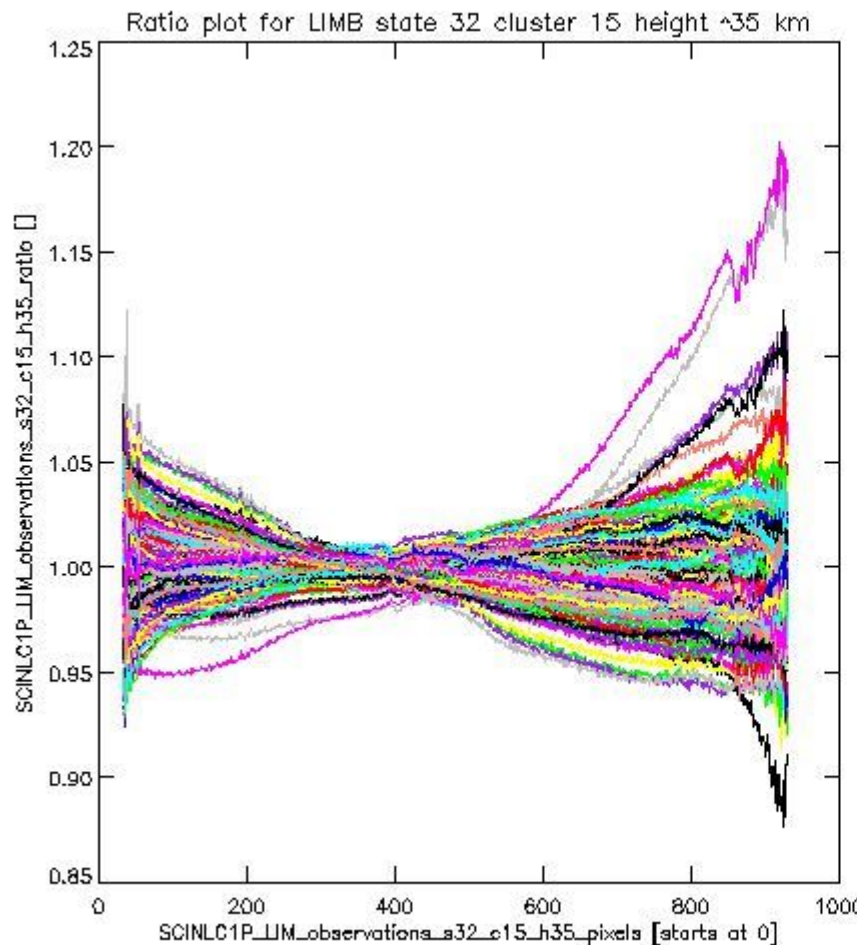
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110710\_19.PNG

**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:

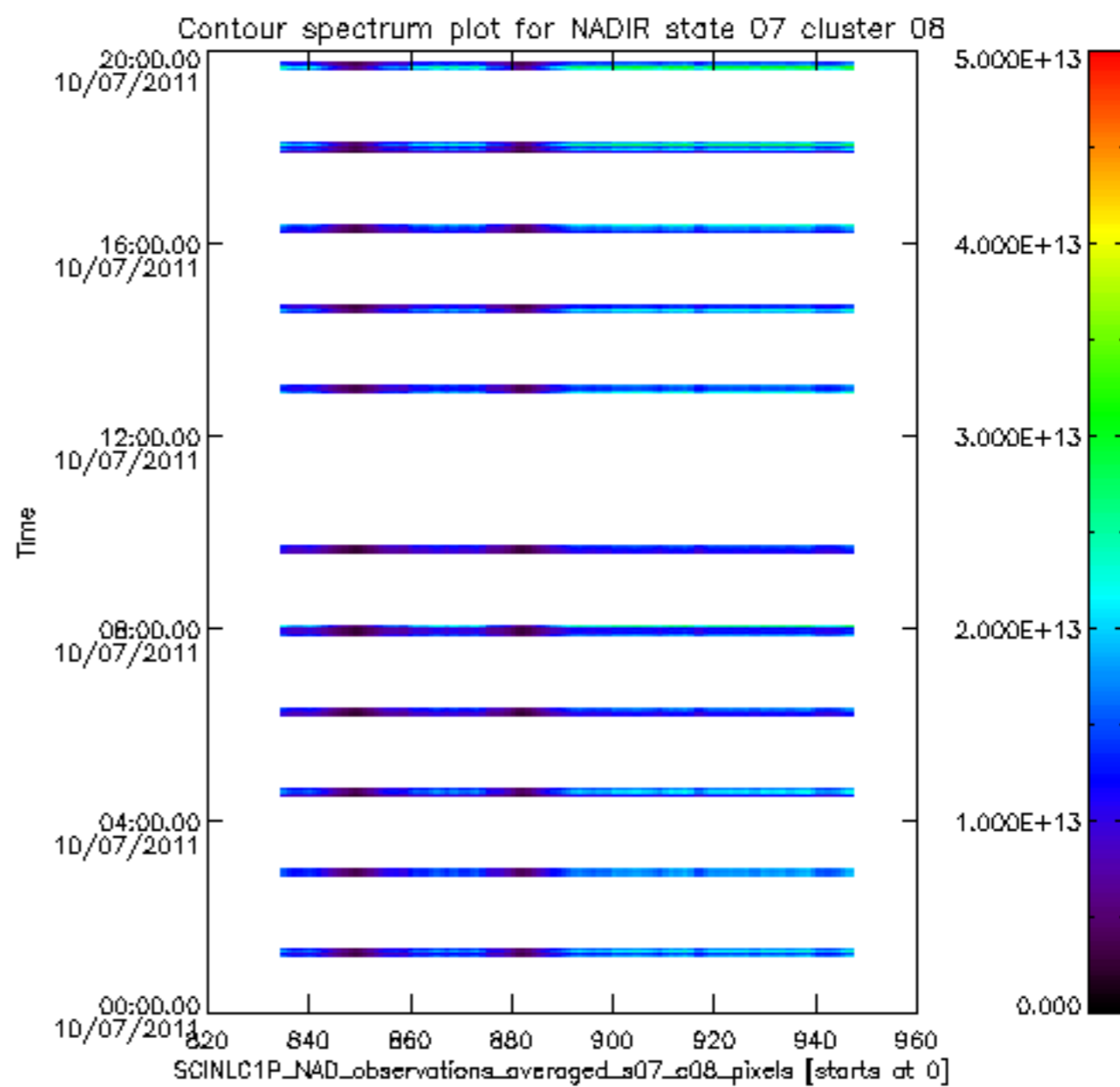
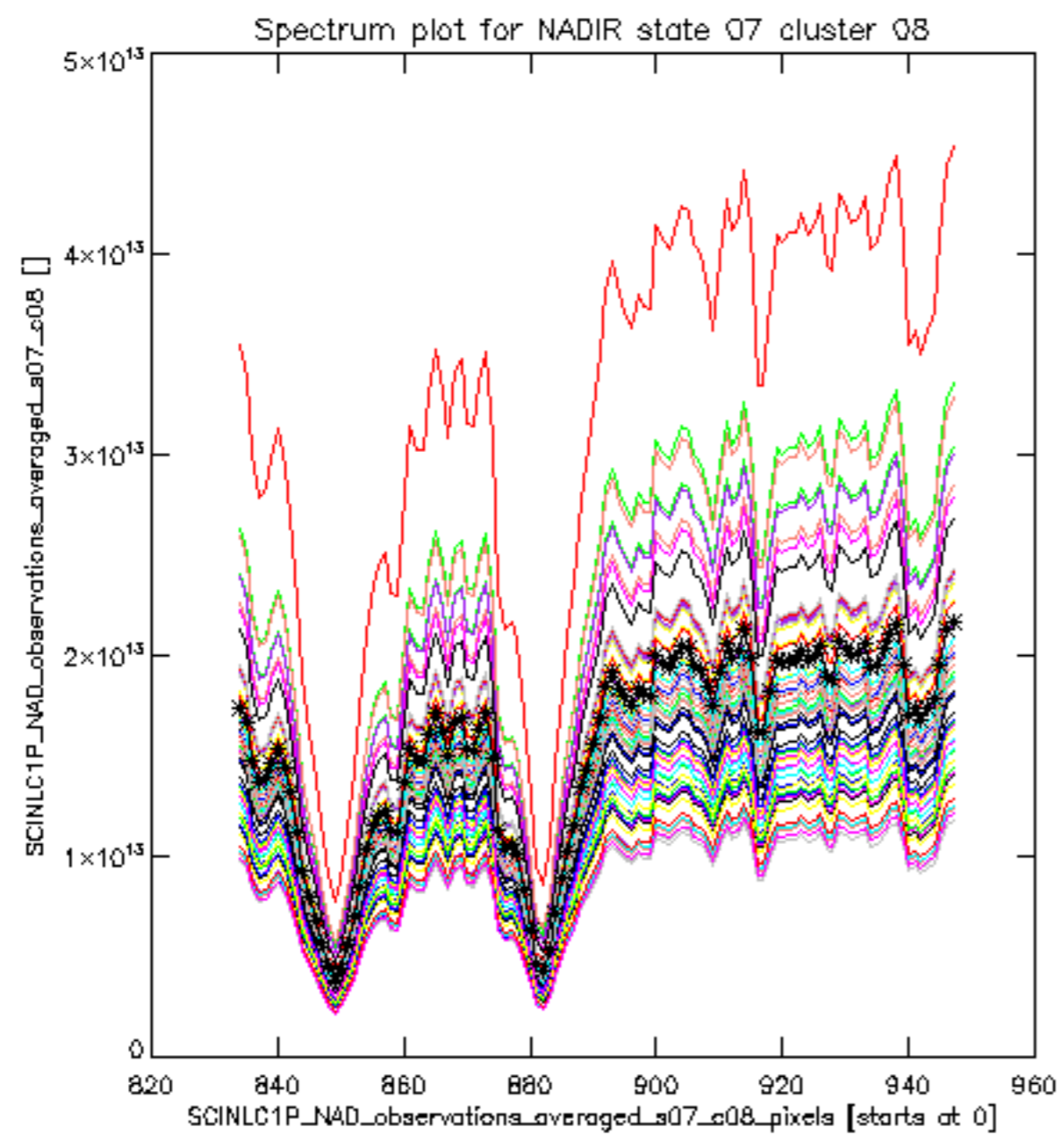
Item	Value
Start time of first sample	10JUL2011 00:56:40.128
Start time of last sample	10JUL2011 19:47:09.422
Reference period start time	10JUN2011 00:55:21.595
Reference period stop time	09JUL2011 17:03:13.898
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



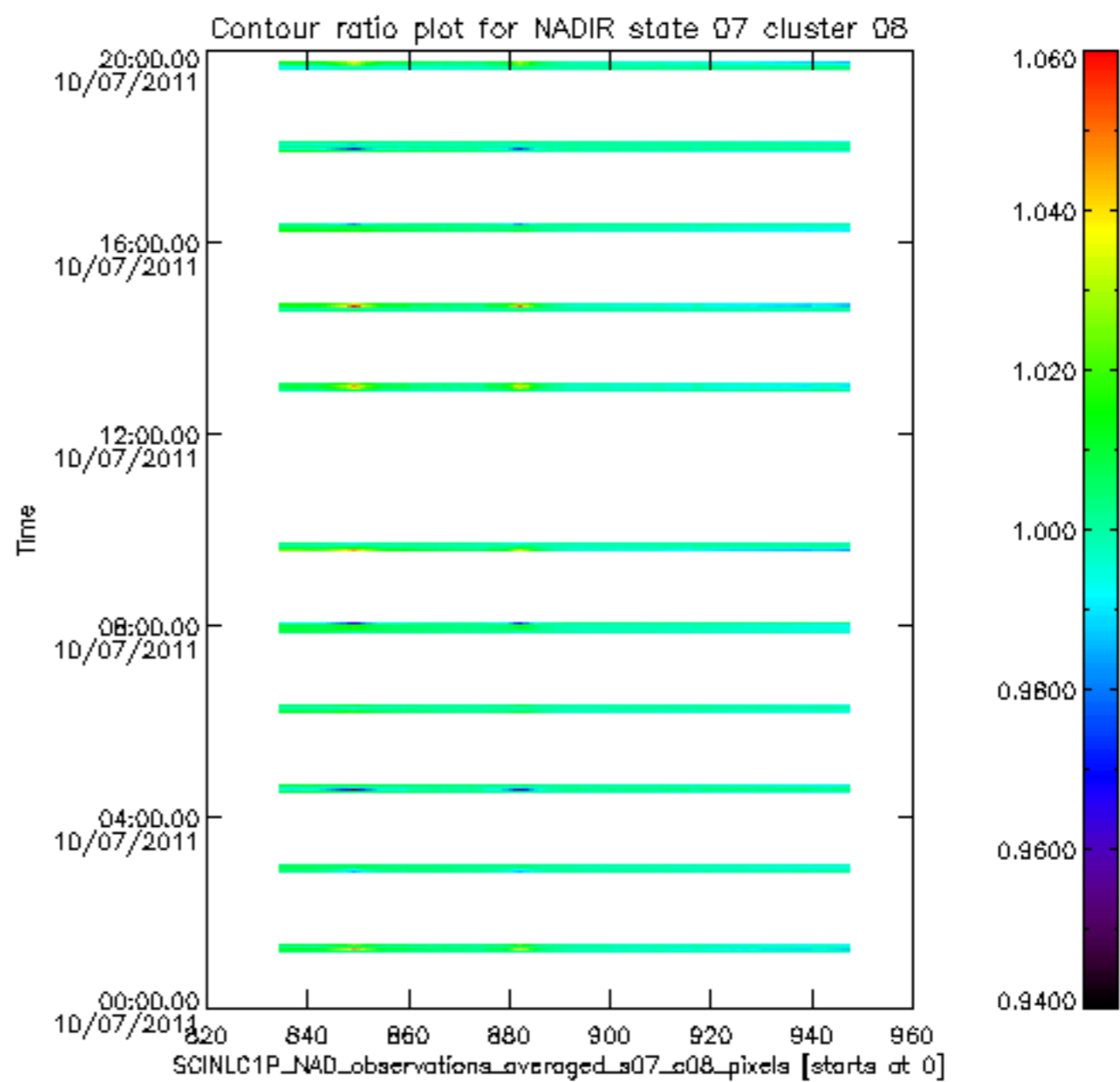
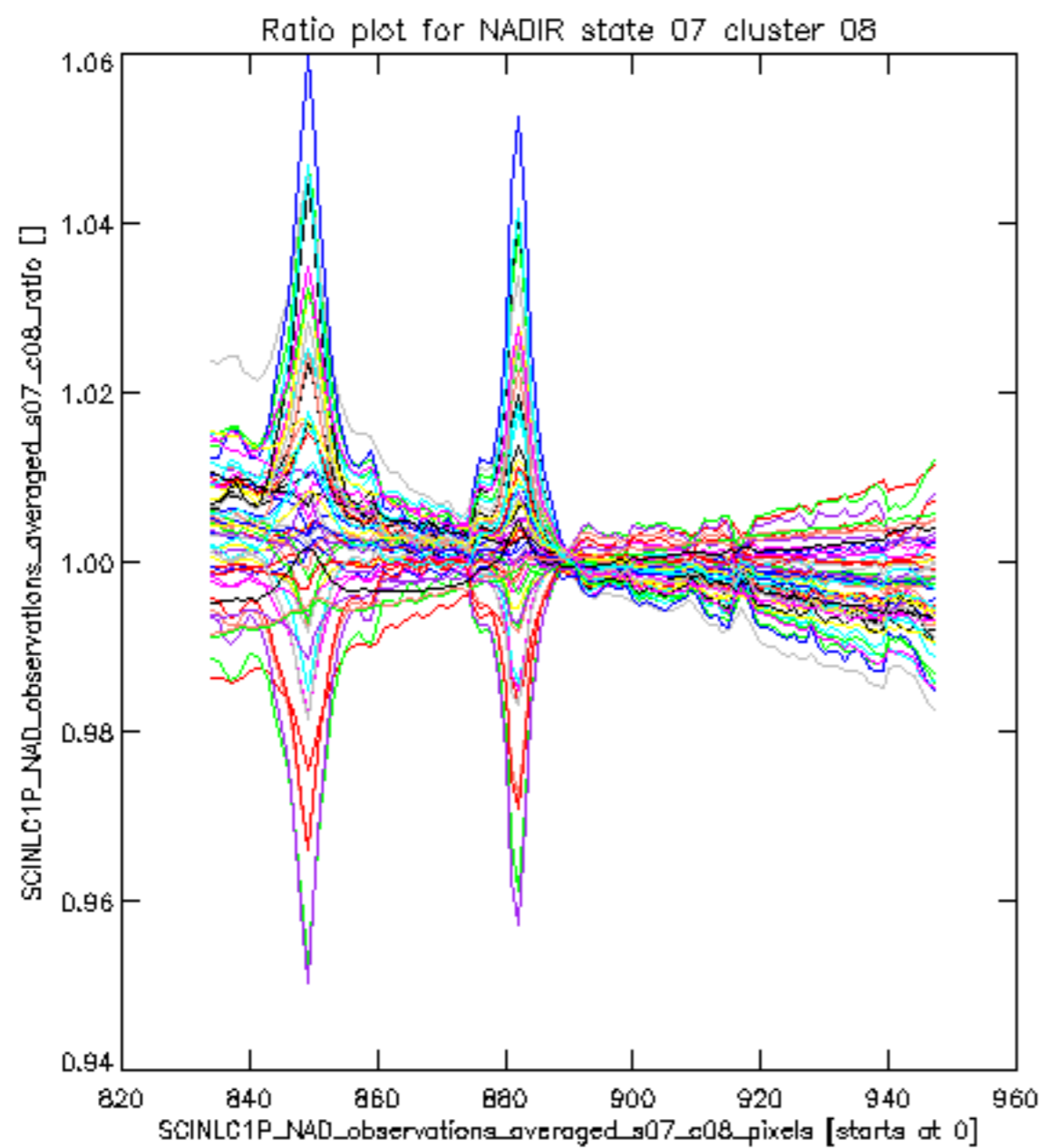
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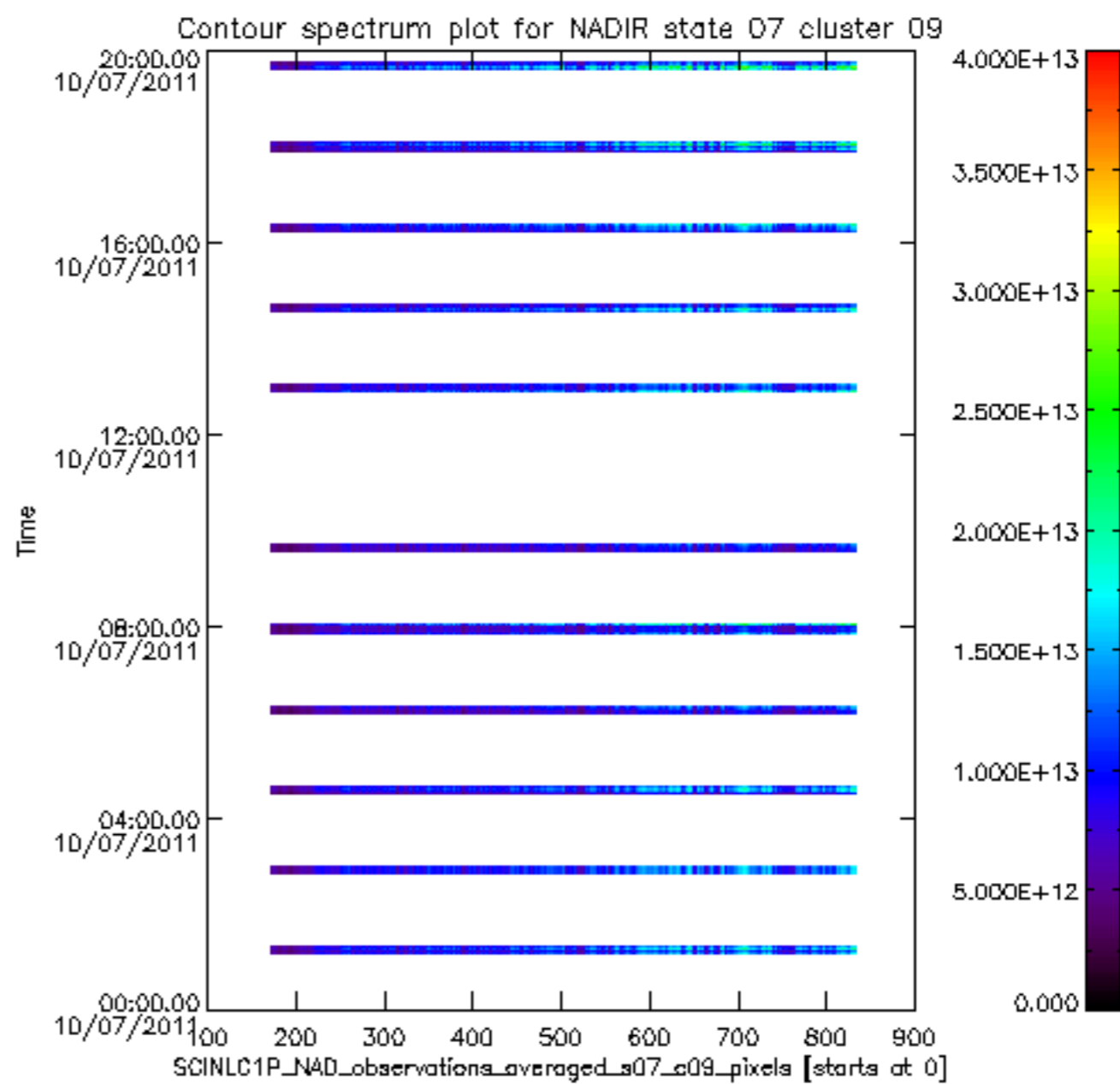
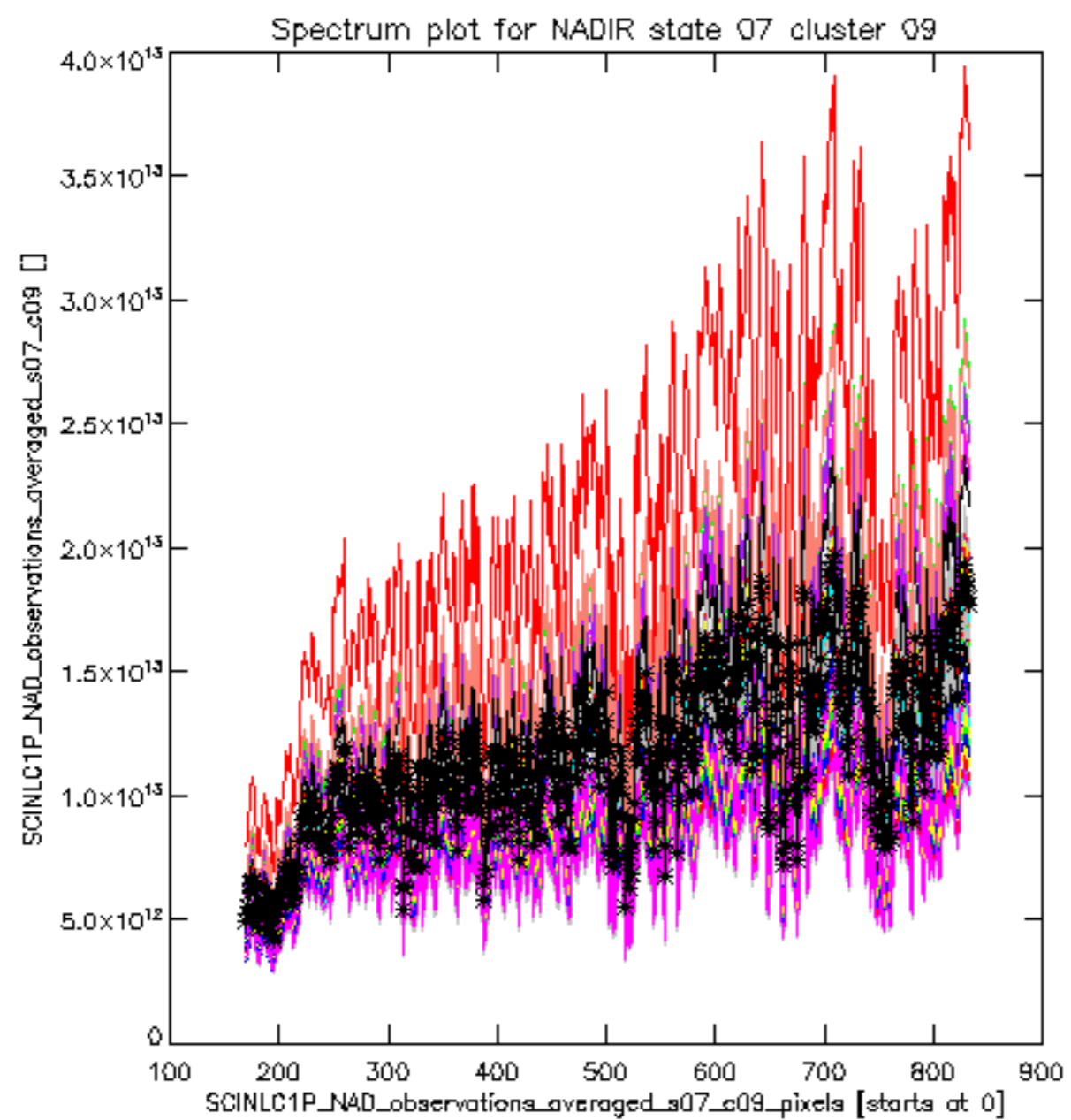


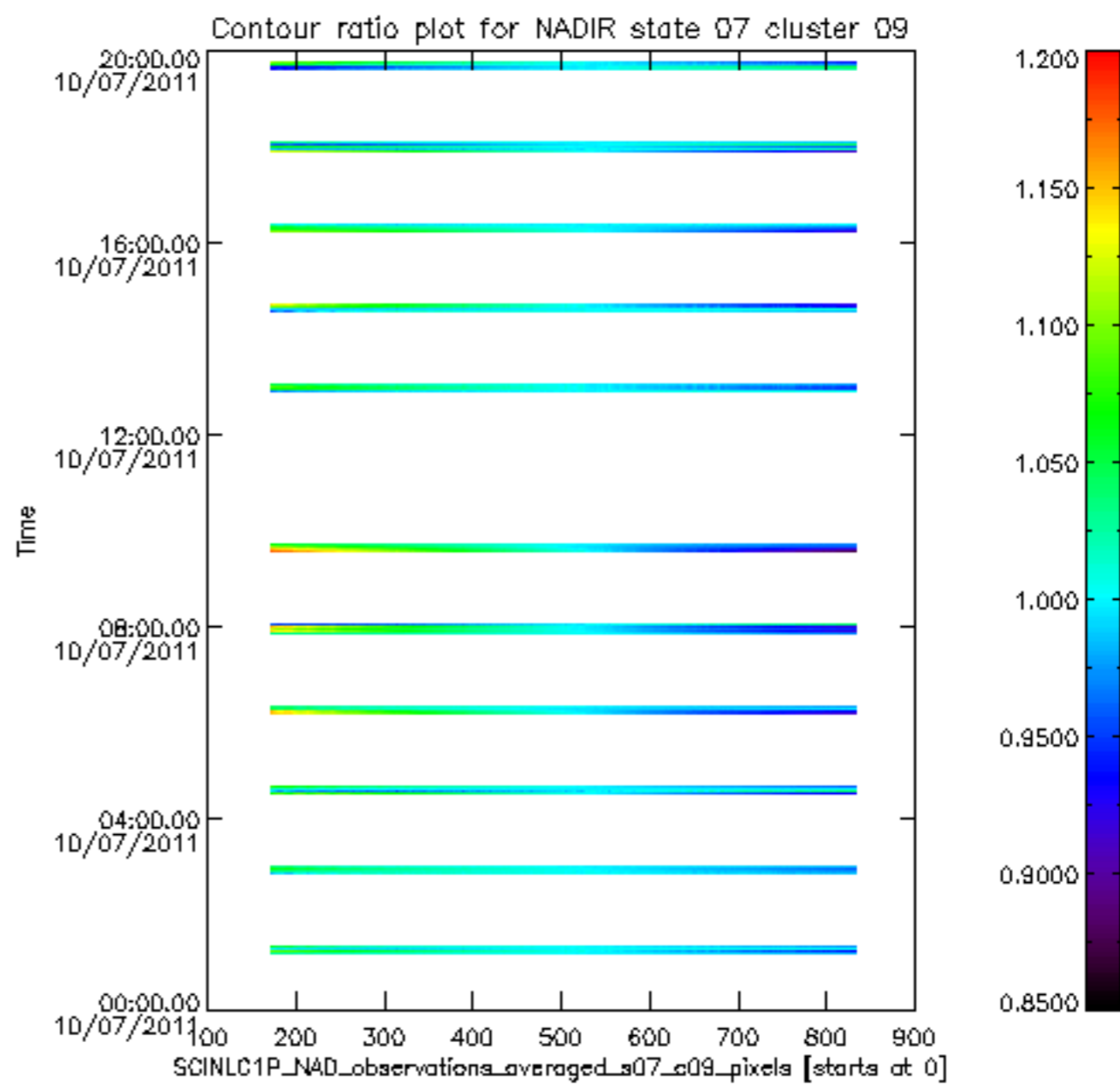
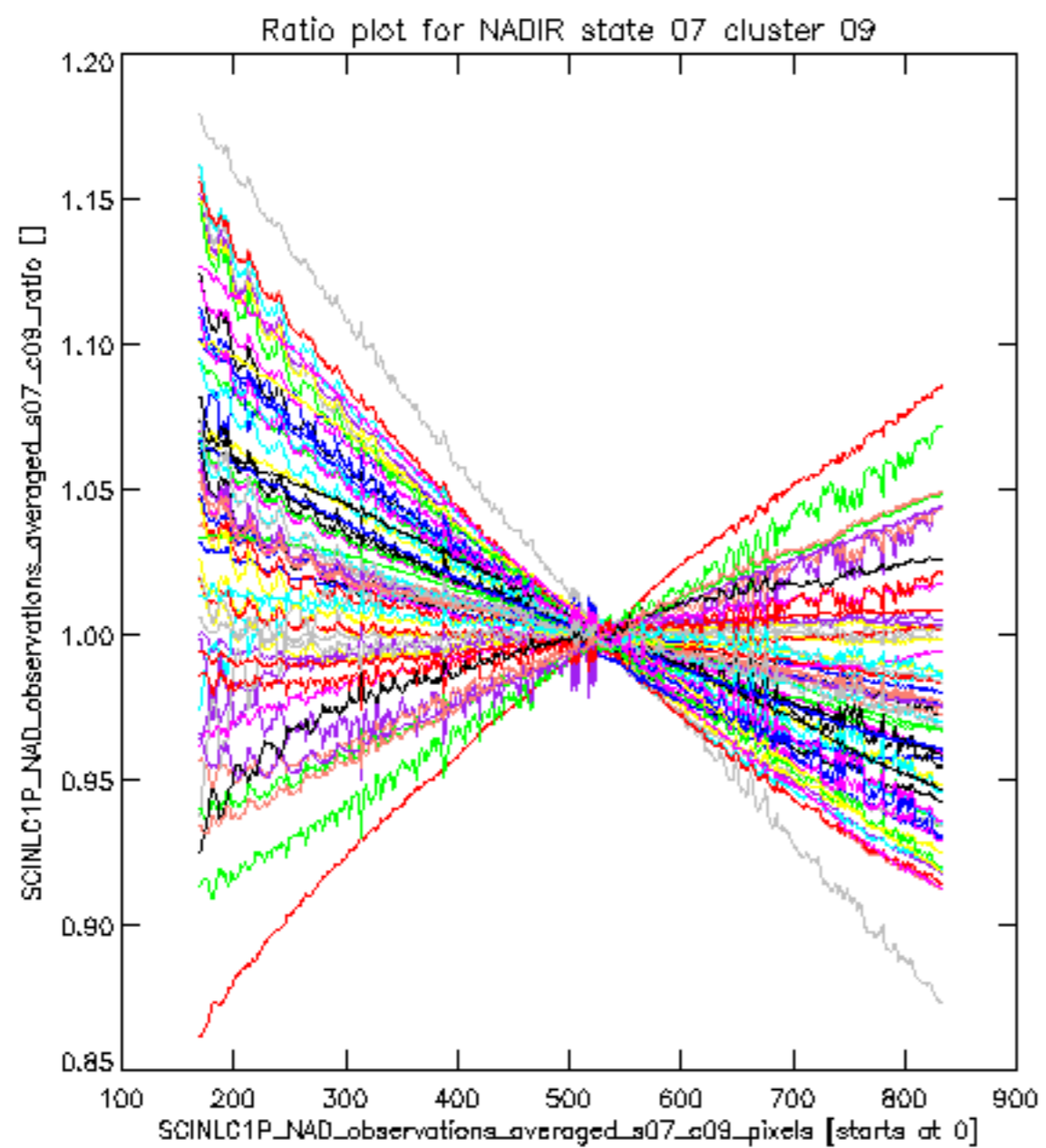
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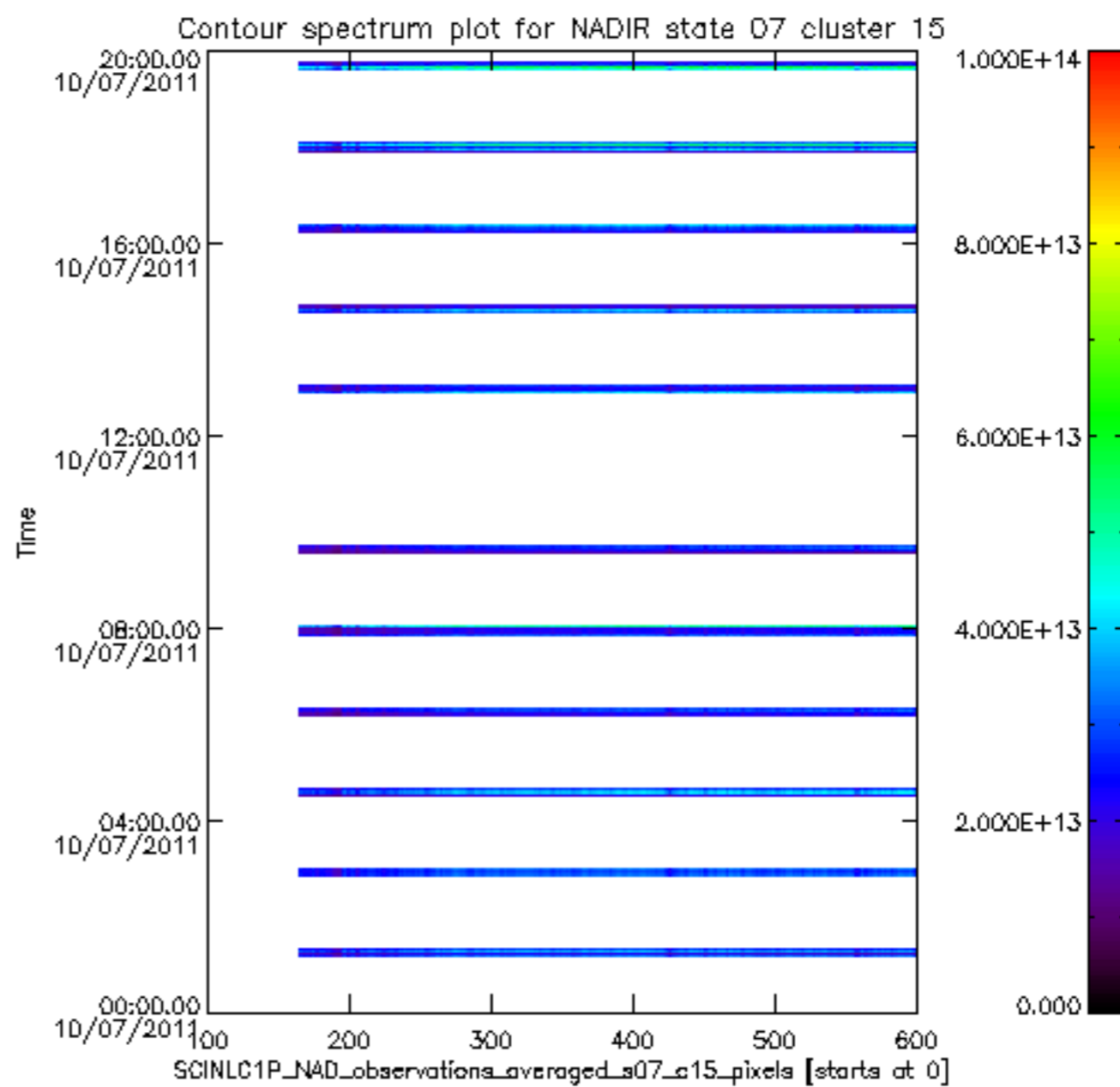
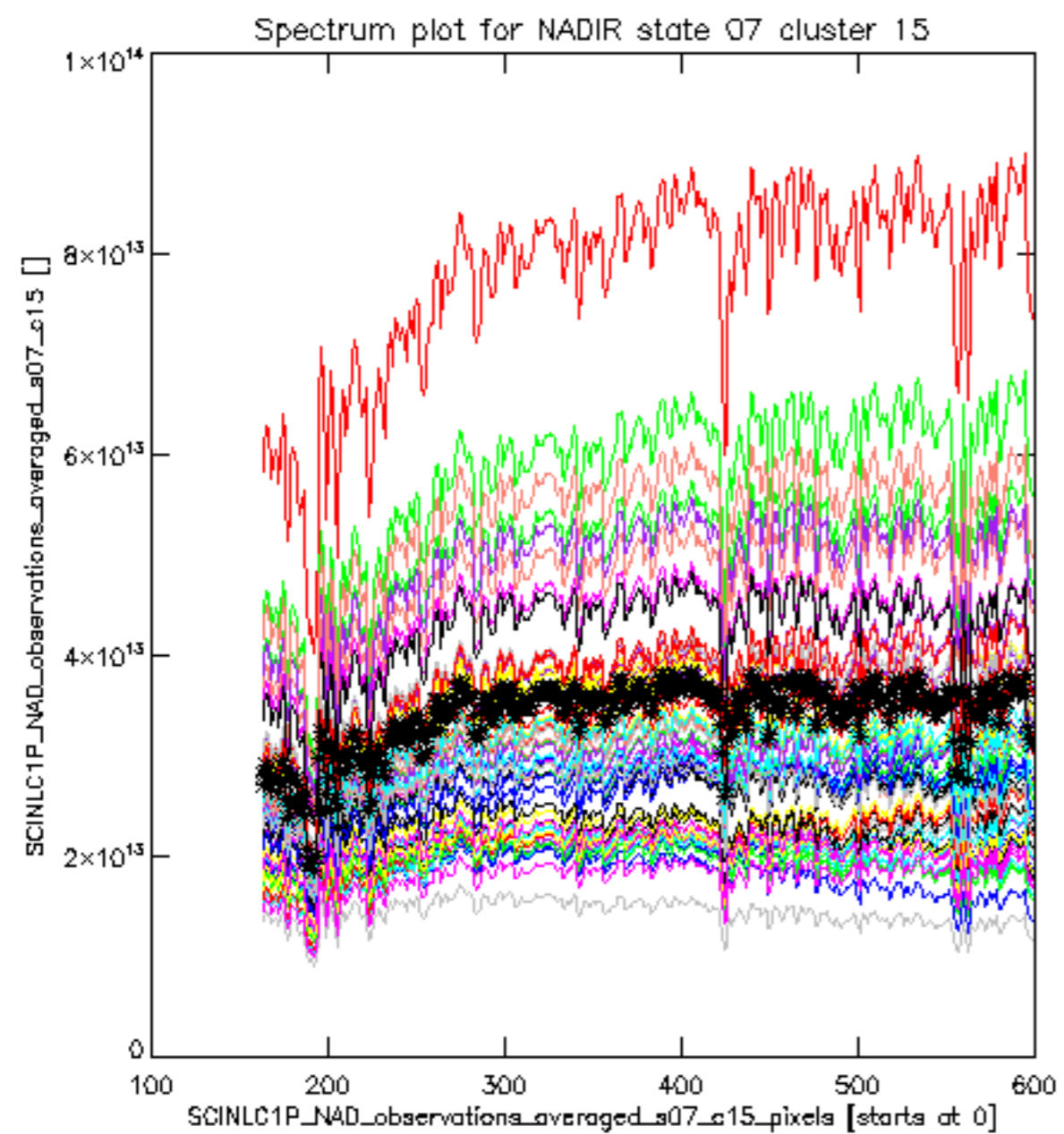


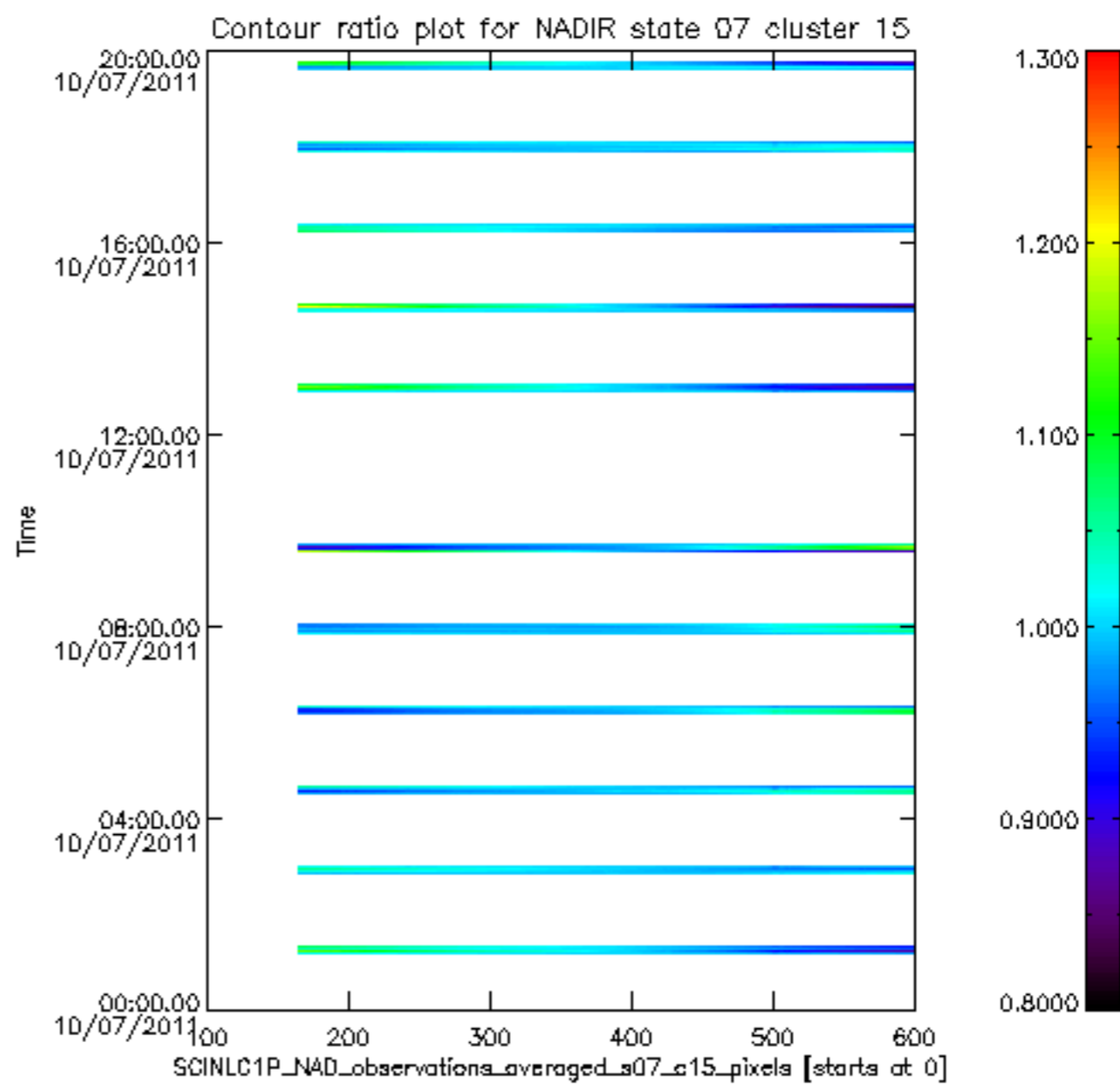
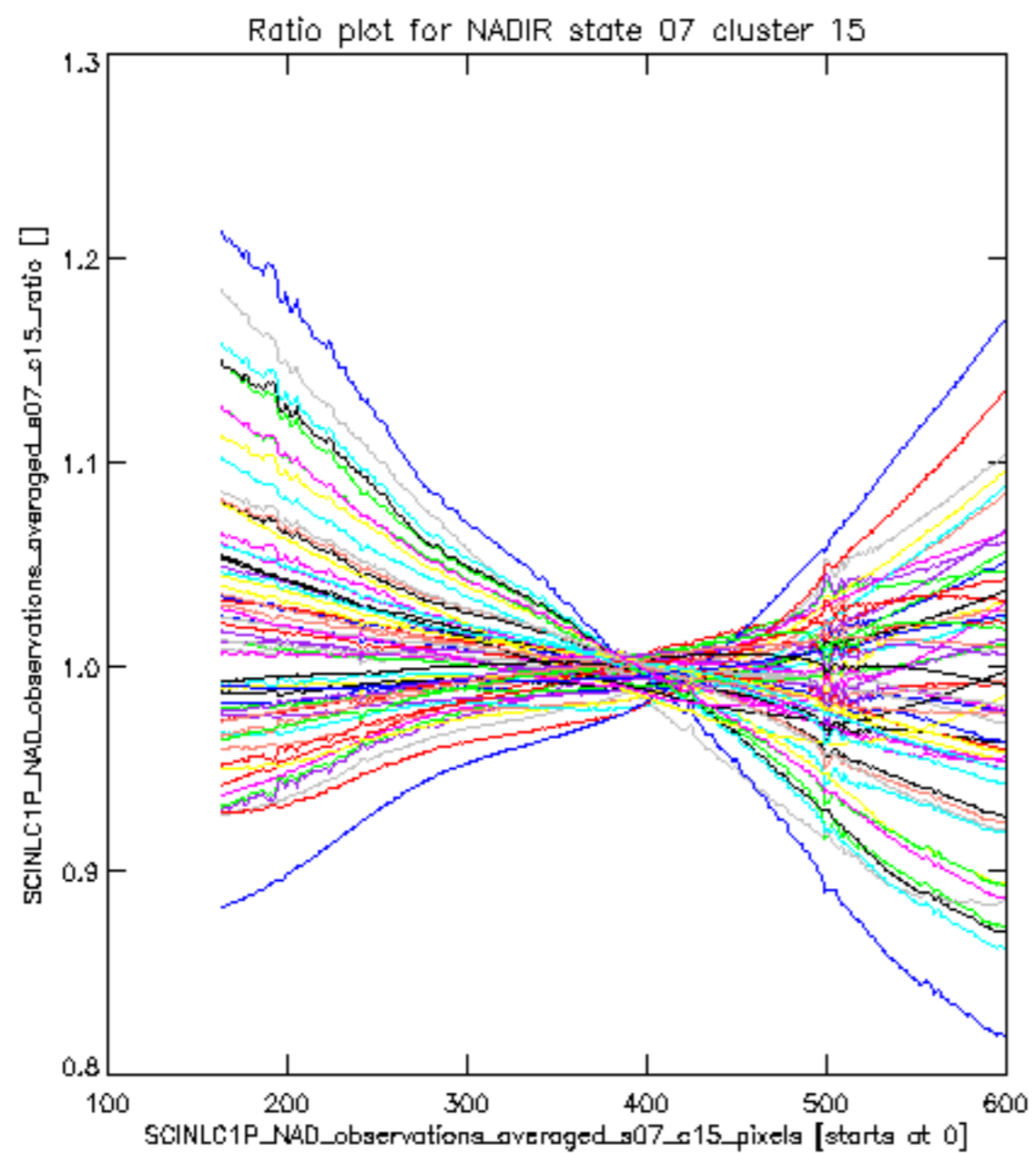


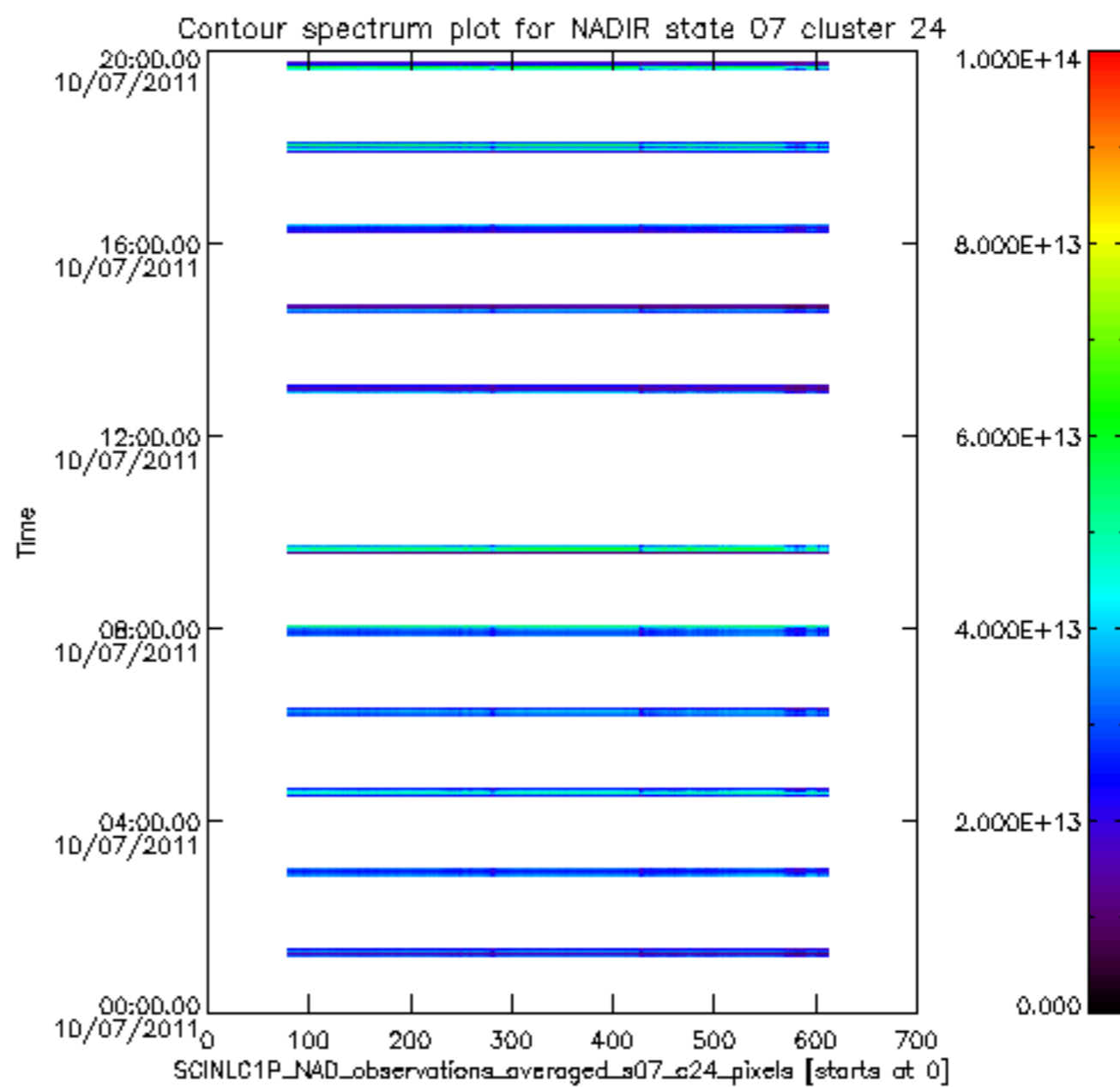
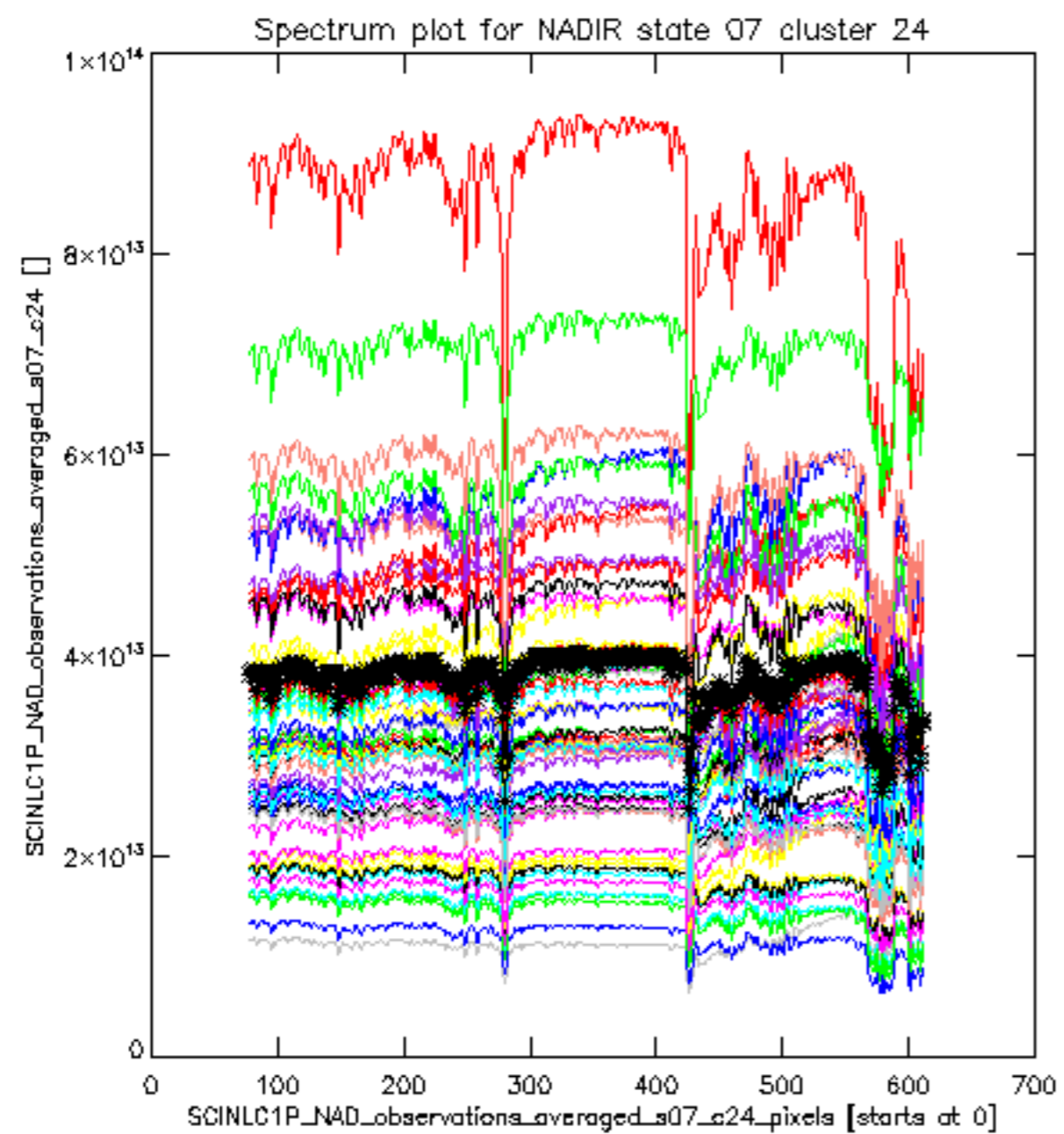


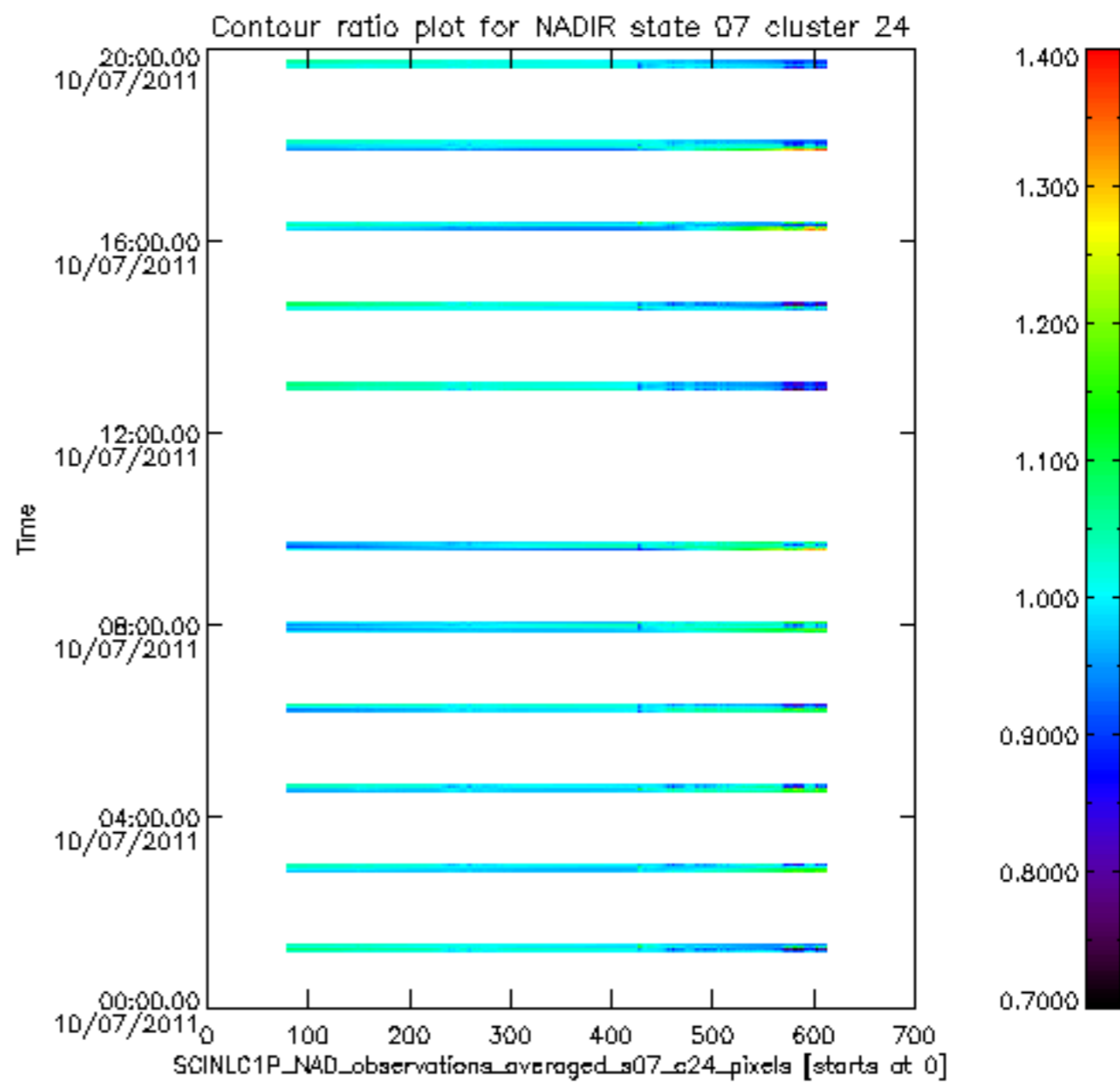
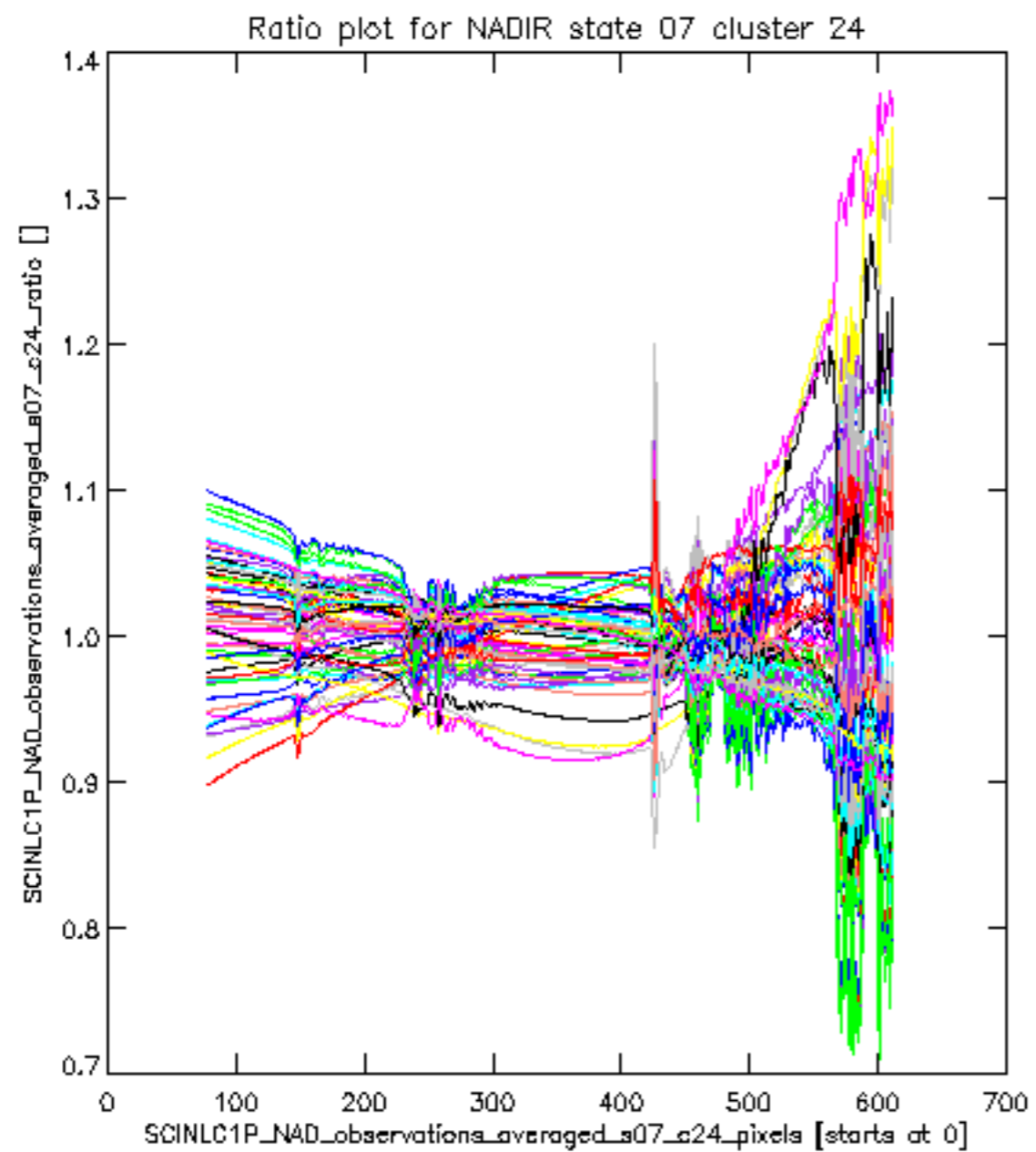




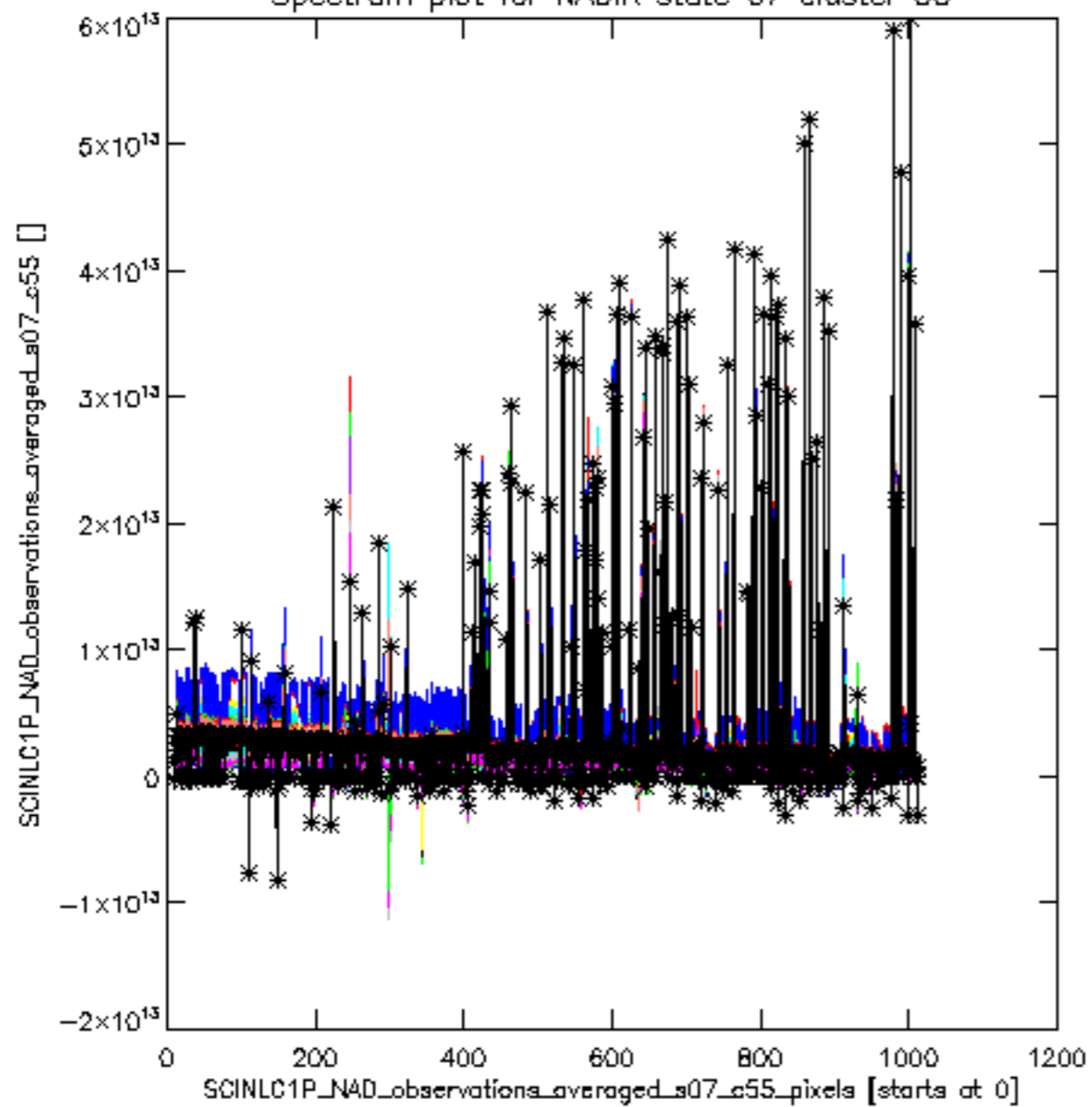








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

