

# 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	22JUL2011 06:30:27
Data source version	SCIA/7.04-U
Processing scope for products	09JUL2011 00:00:00 to 10JUL2011 00:00:00
Start time of first product within scope	09JUL2011 01:14:30
Stop time of last product within scope	09JUL2011 17:27:06
Total number of level 1 products	10
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	09JUL2011 01:46:33.547	09JUL2011 16:57:59.855
1	NADIR	07	09	N/A	09JUL2011 01:46:33.547	09JUL2011 16:57:59.855
2	NADIR	07	15	N/A	09JUL2011 01:46:33.547	09JUL2011 16:57:59.855
3	NADIR	07	24	N/A	09JUL2011 01:46:33.547	09JUL2011 16:57:59.855
4	NADIR	07	55	N/A	09JUL2011 01:46:33.547	09JUL2011 16:57:59.855
5	LIMB	32	09	~19 km	09JUL2011 01:33:22.914	09JUL2011 17:03:13.898
6	LIMB	32	09	~22 km	09JUL2011 01:33:22.914	09JUL2011 17:03:13.898
7	LIMB	32	09	~25 km	09JUL2011 01:33:22.914	09JUL2011 17:03:13.898
8	LIMB	32	15	~22 km	09JUL2011 01:33:22.914	09JUL2011 17:03:13.898
9	LIMB	32	15	~25 km	09JUL2011 01:33:22.914	09JUL2011 17:03:13.898
10	LIMB	32	15	~35 km	09JUL2011 01:33:22.914	09JUL2011 17:03:13.898

#### 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	#noprocc	#cimpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110709_011430_000057523104_00204_48925_2934.N1</a>	09JUL2011 01:14:30	09JUL2011 02:24:45	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110709_025445_000057523104_00205_48926_2936.N1</a>	09JUL2011 02:54:45	09JUL2011 04:05:14	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110709_043459_000057523104_00206_48927_2938.N1</a>	09JUL2011 04:34:59	09JUL2011 05:45:13	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110709_061513_000057523104_00207_48928_2939.N1</a>	09JUL2011 06:15:13	09JUL2011 07:25:42	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110709_075527_000057523104_00208_48929_2941.N1</a>	09JUL2011 07:55:27	09JUL2011 09:05:42	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110709_093541_000057523104_00209_48930_2944.N1</a>	09JUL2011 09:35:41	09JUL2011 10:46:10	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110709_111555_000057523104_00210_48931_2946.N1	09JUL2011 11:15:55	09JUL2011 12:26:10	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110709_125609_000057523104_00211_48932_2948.N1	09JUL2011 12:56:09	09JUL2011 14:06:38	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110709_143623_000057523104_00212_48933_2950.N1	09JUL2011 14:36:23	09JUL2011 15:46:38	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110709_161637_000057523104_00213_48934_2951.N1	09JUL2011 16:16:37	09JUL2011 17:27:06	0	36	30	0	0	1	0	0	

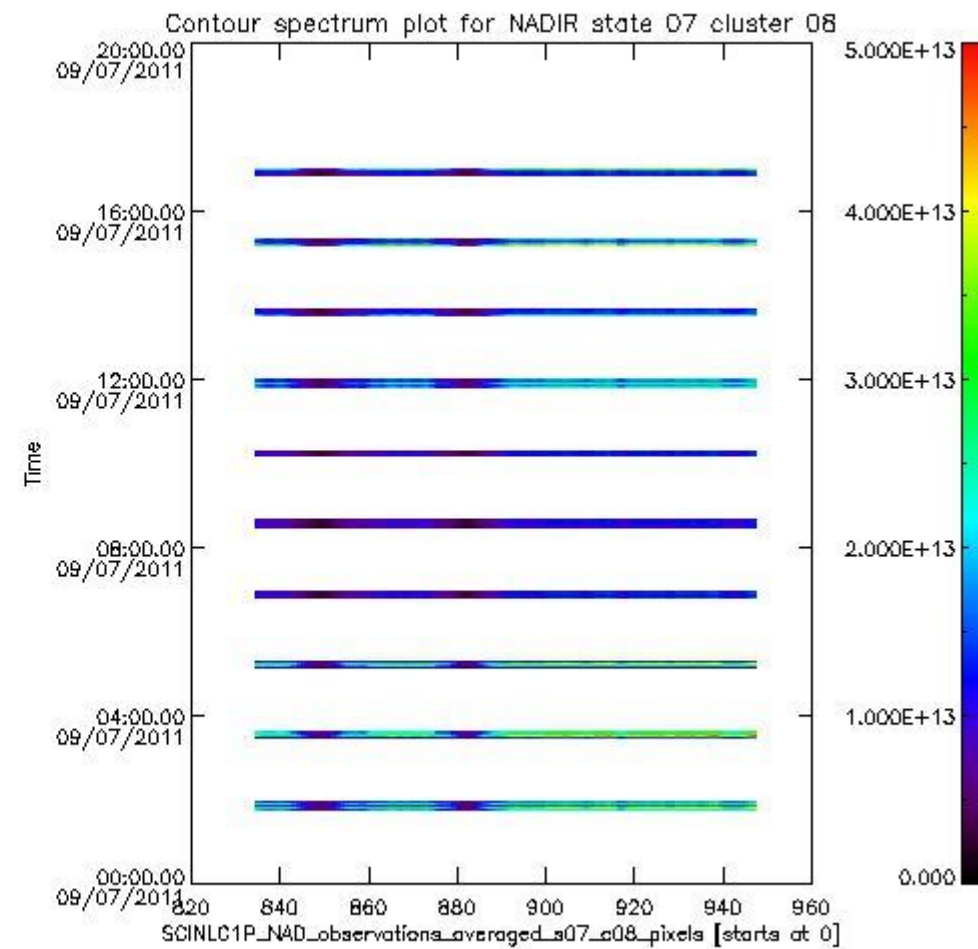
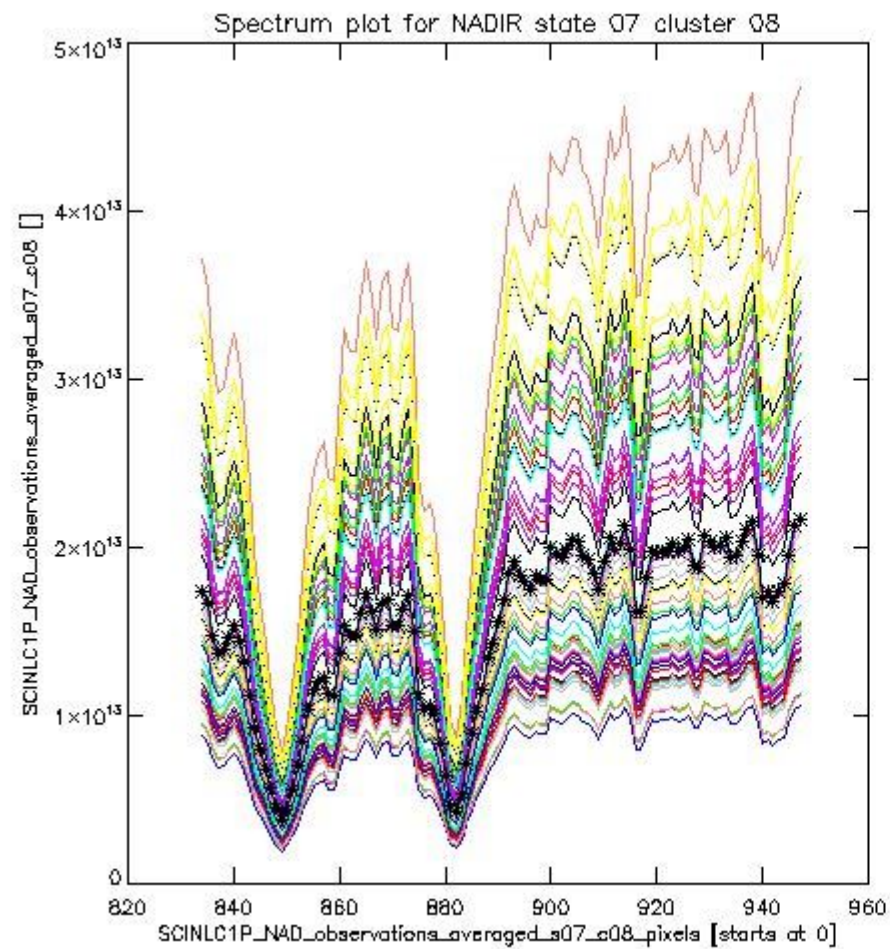
## 1.2 Source packet monitoring

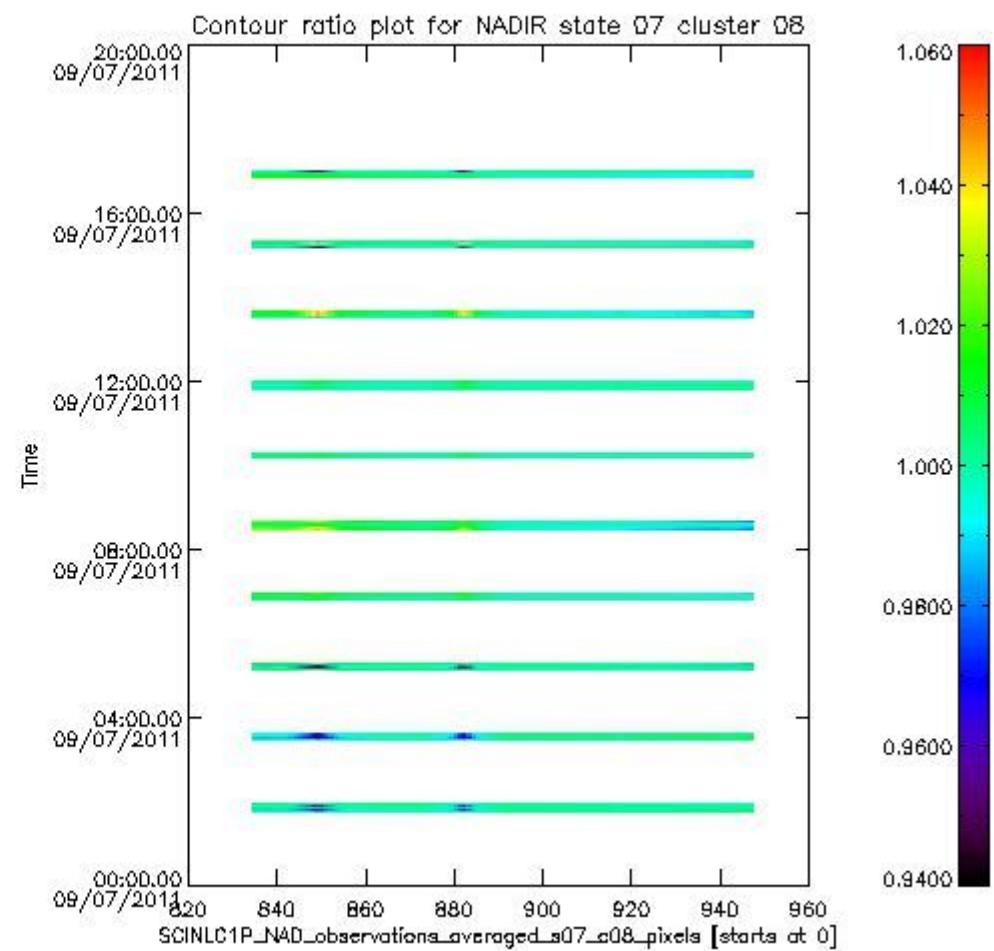
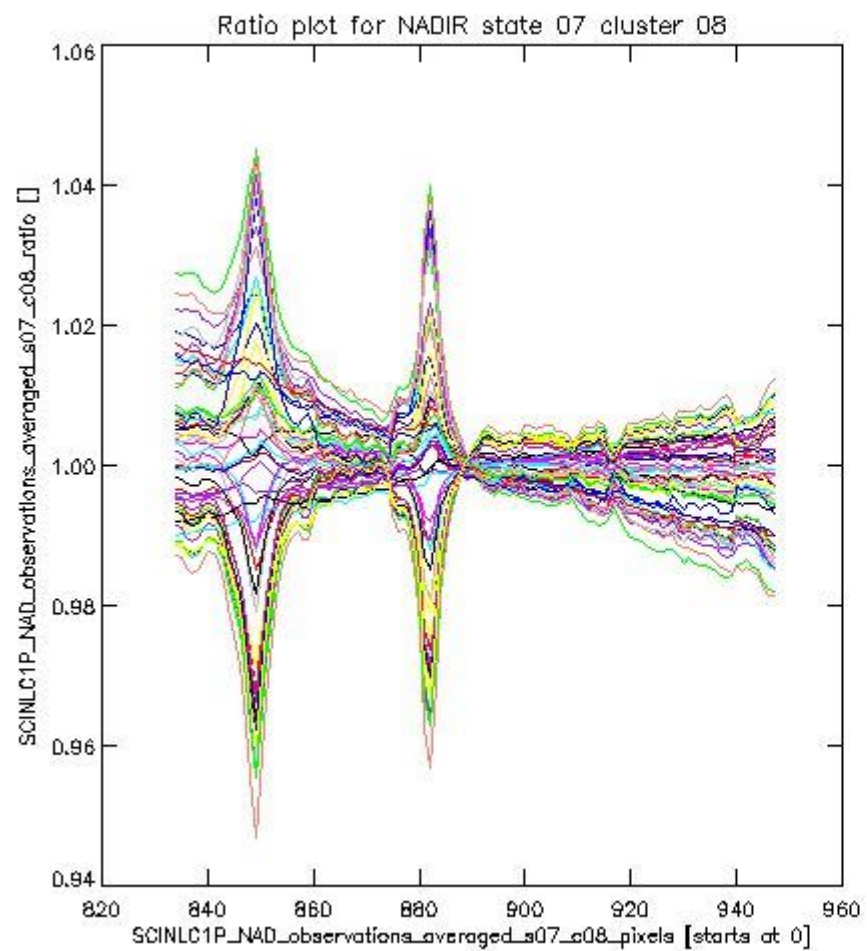
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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	09JUL2011 01:46:33.547
Start time of last sample	09JUL2011 16:57:59.855
Reference period start time	09JUN2011 00:05:58.513
Reference period stop time	08JUL2011 19:16:00.899
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



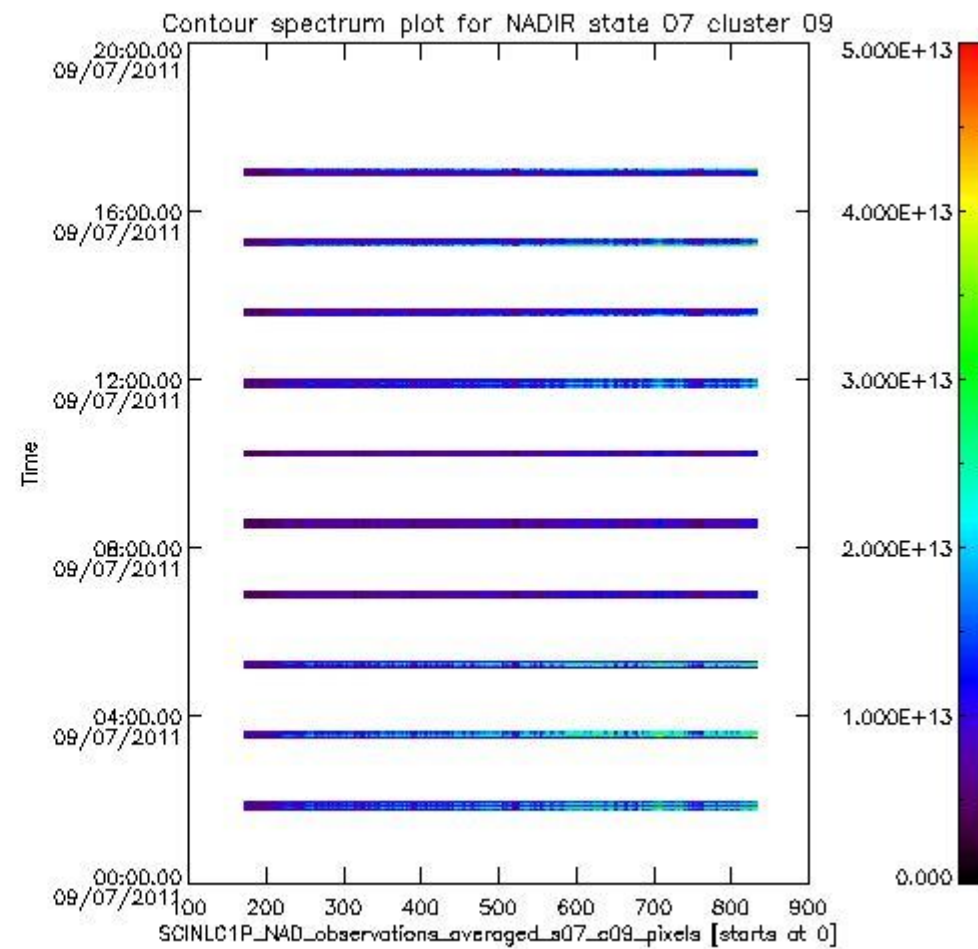
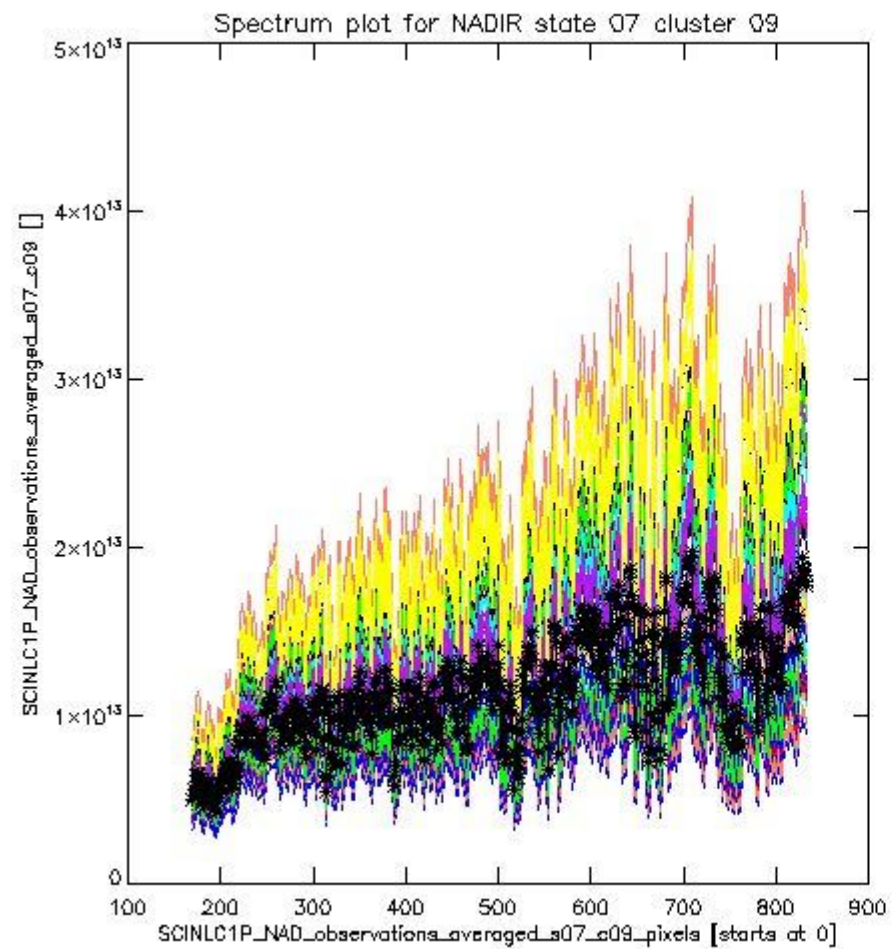


sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_1.PNG

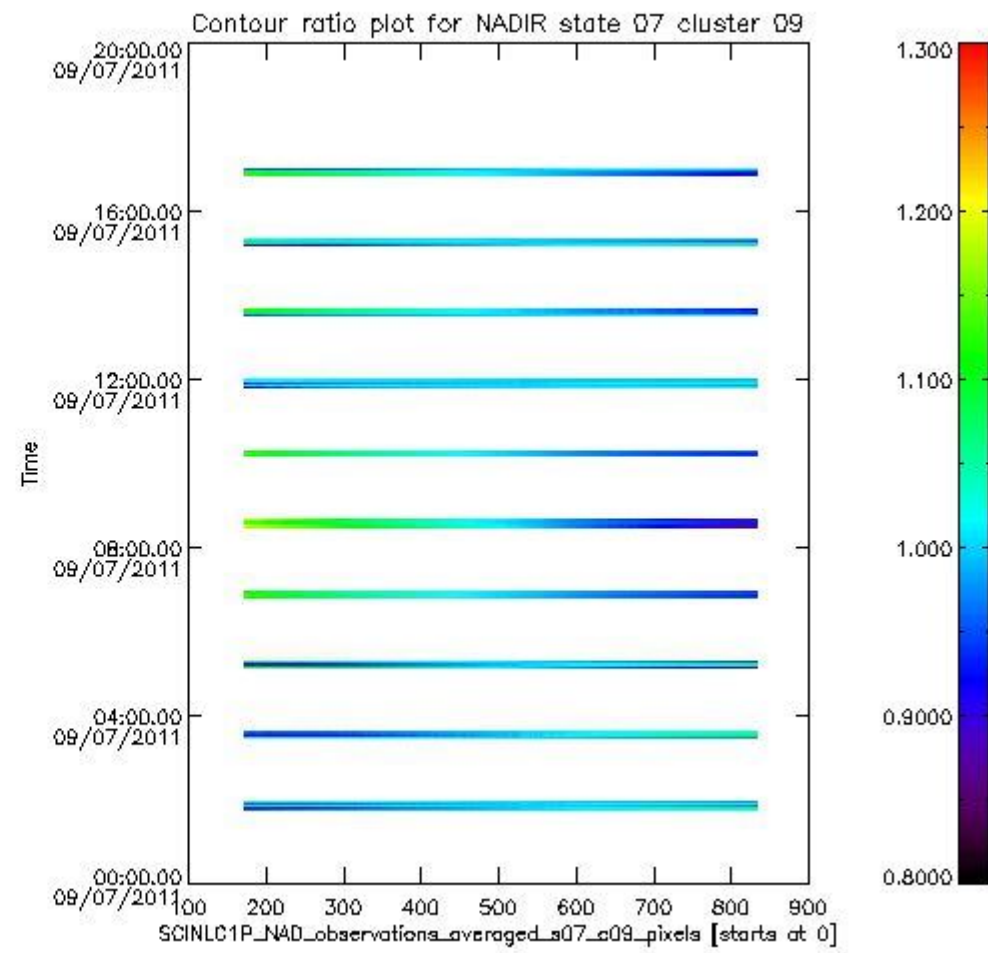
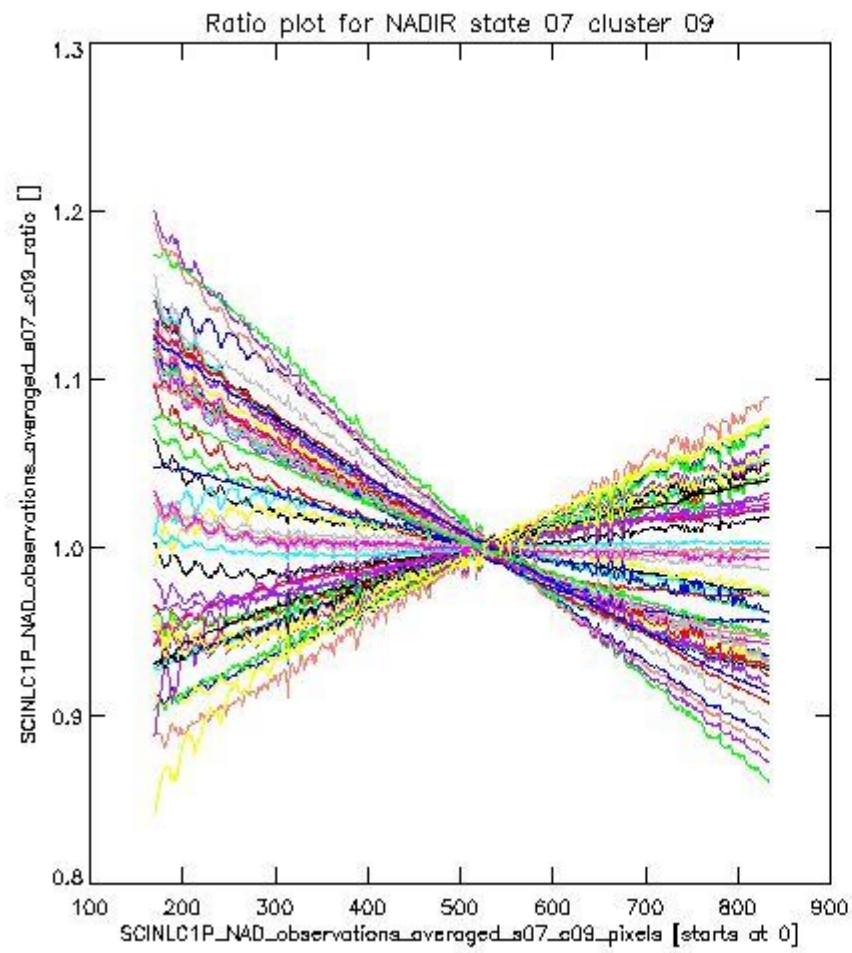
**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	09JUL2011 01:46:33.547
Start time of last sample	09JUL2011 16:57:59.855
Reference period start time	09JUN2011 00:05:58.513
Reference period stop time	08JUL2011 19:16:00.899
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833





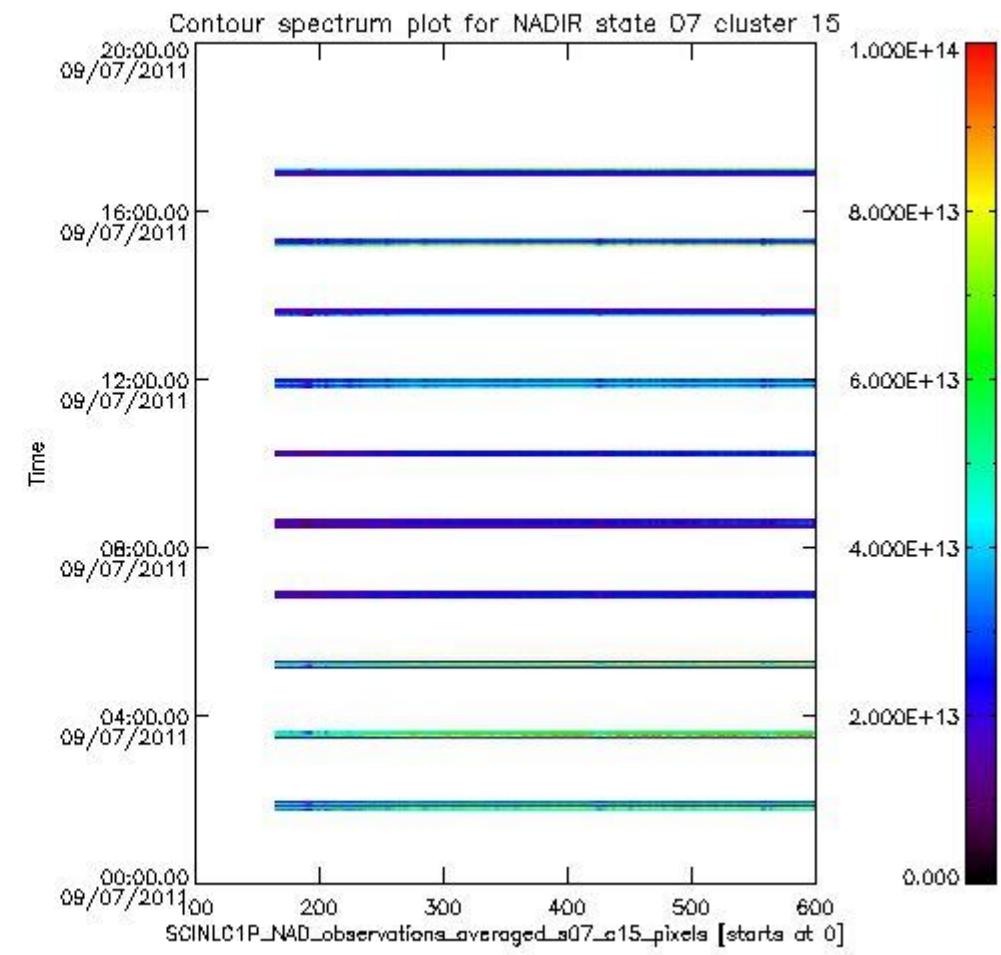
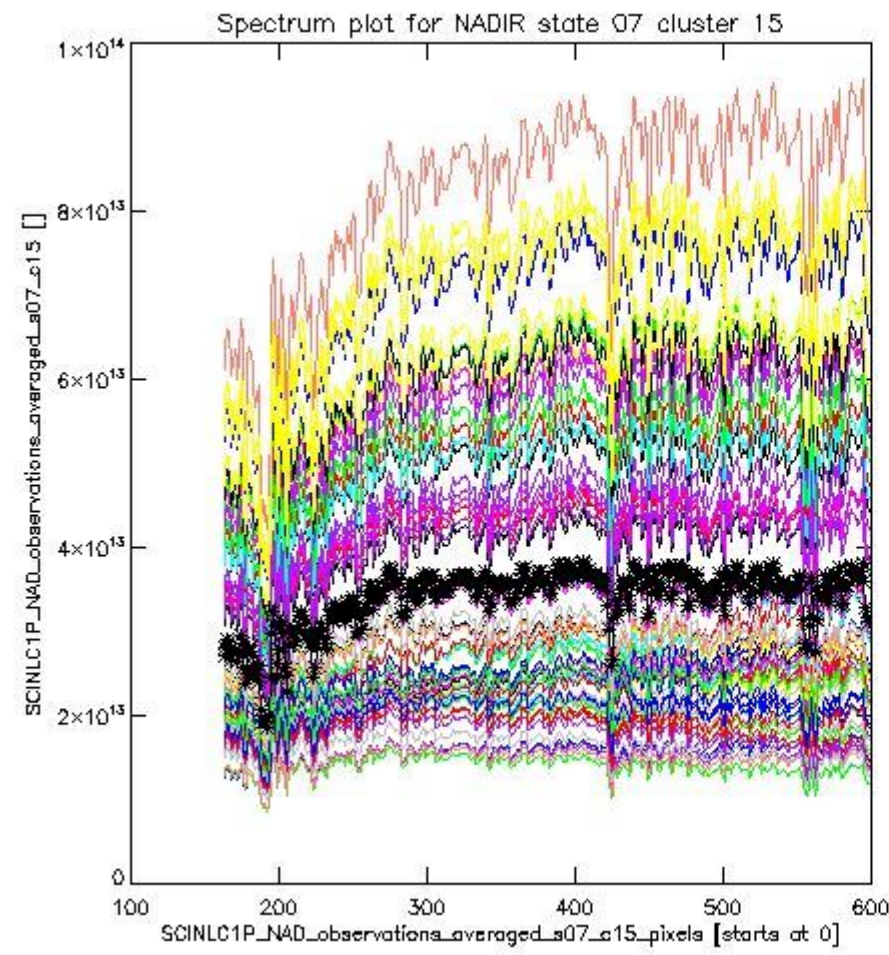
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_2.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_3.PNG

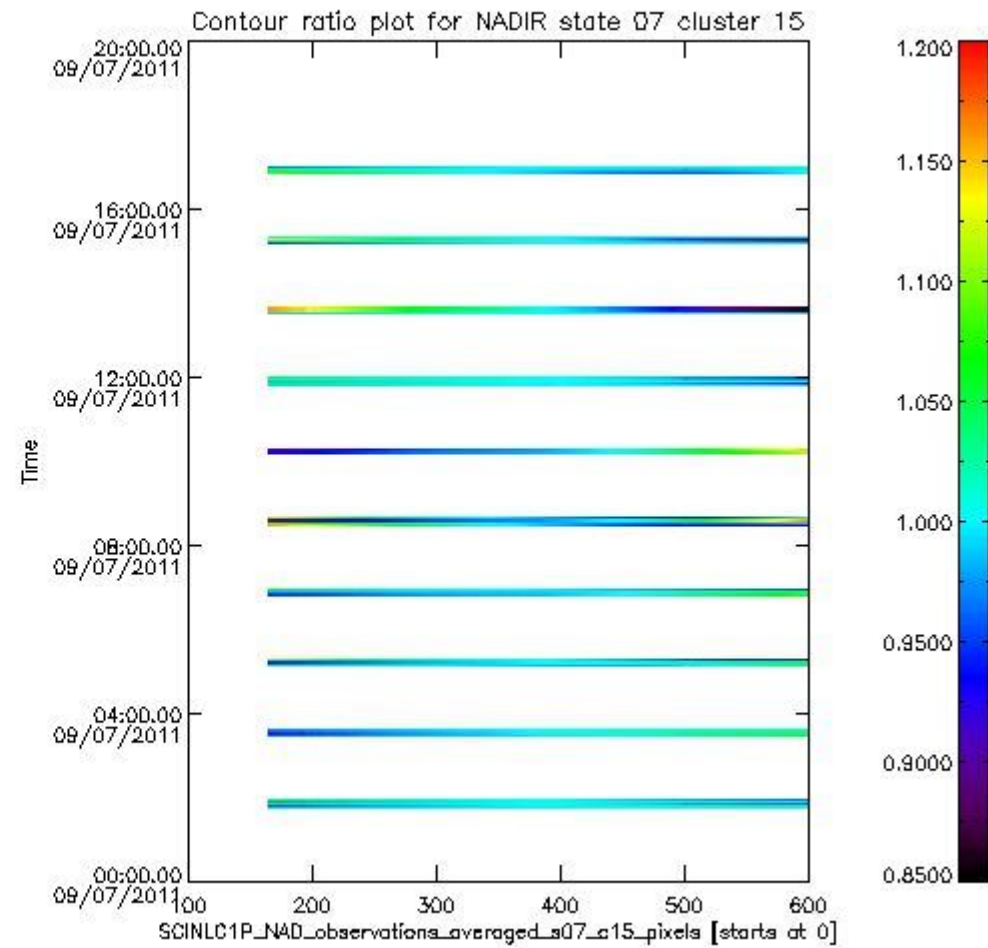
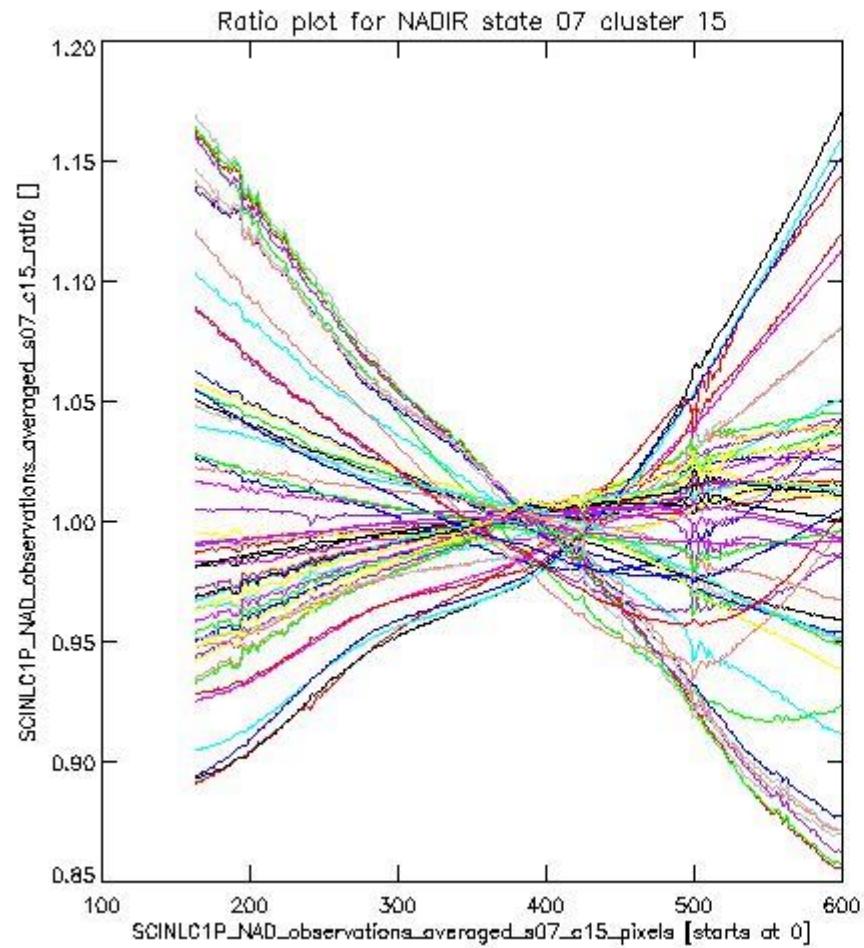
**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	09JUL2011 01:46:33.547
Start time of last sample	09JUL2011 16:57:59.855
Reference period start time	09JUN2011 00:05:58.513
Reference period stop time	08JUL2011 19:16:00.899
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\_20110709\_4.PNG

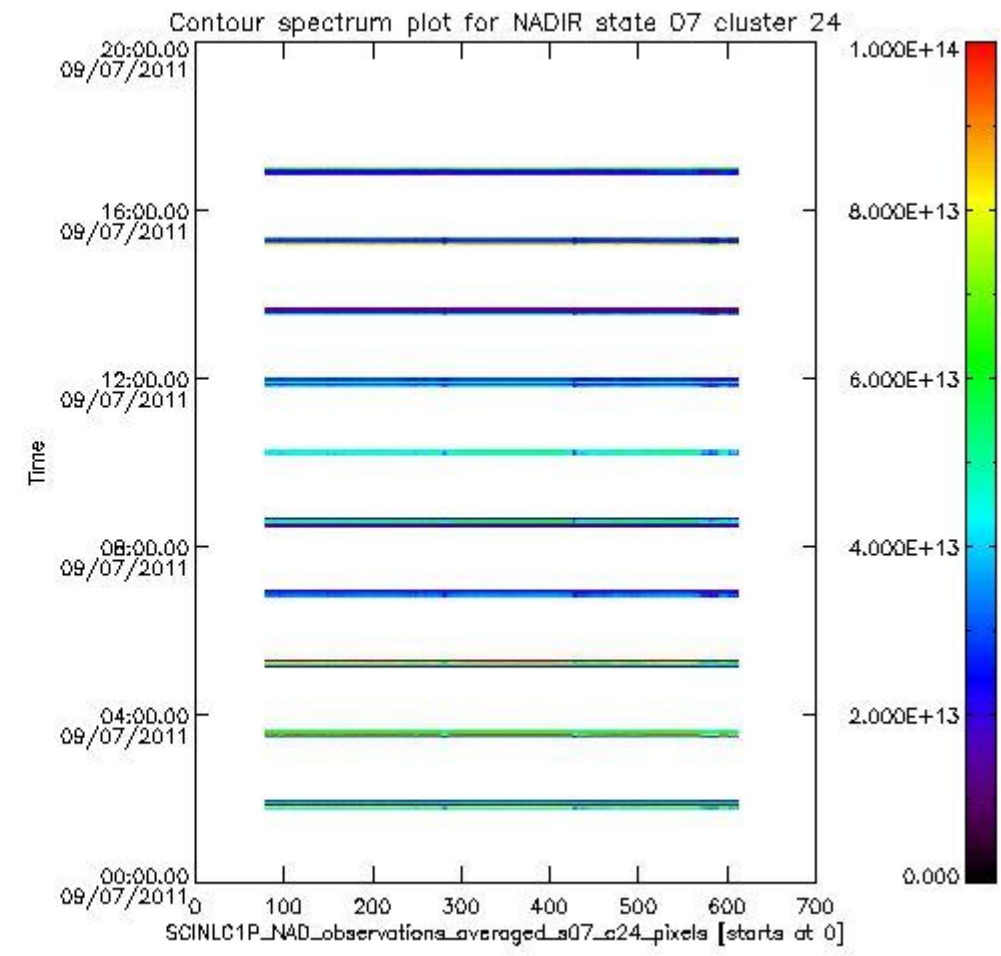
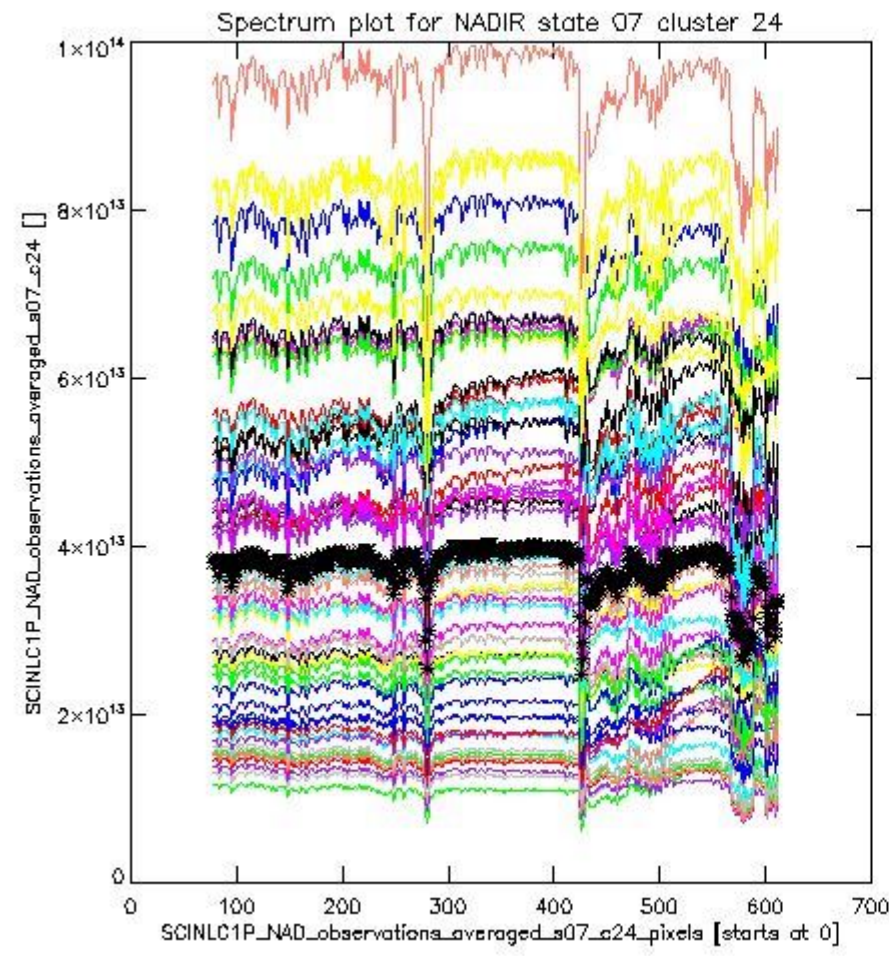




sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_5.PNG

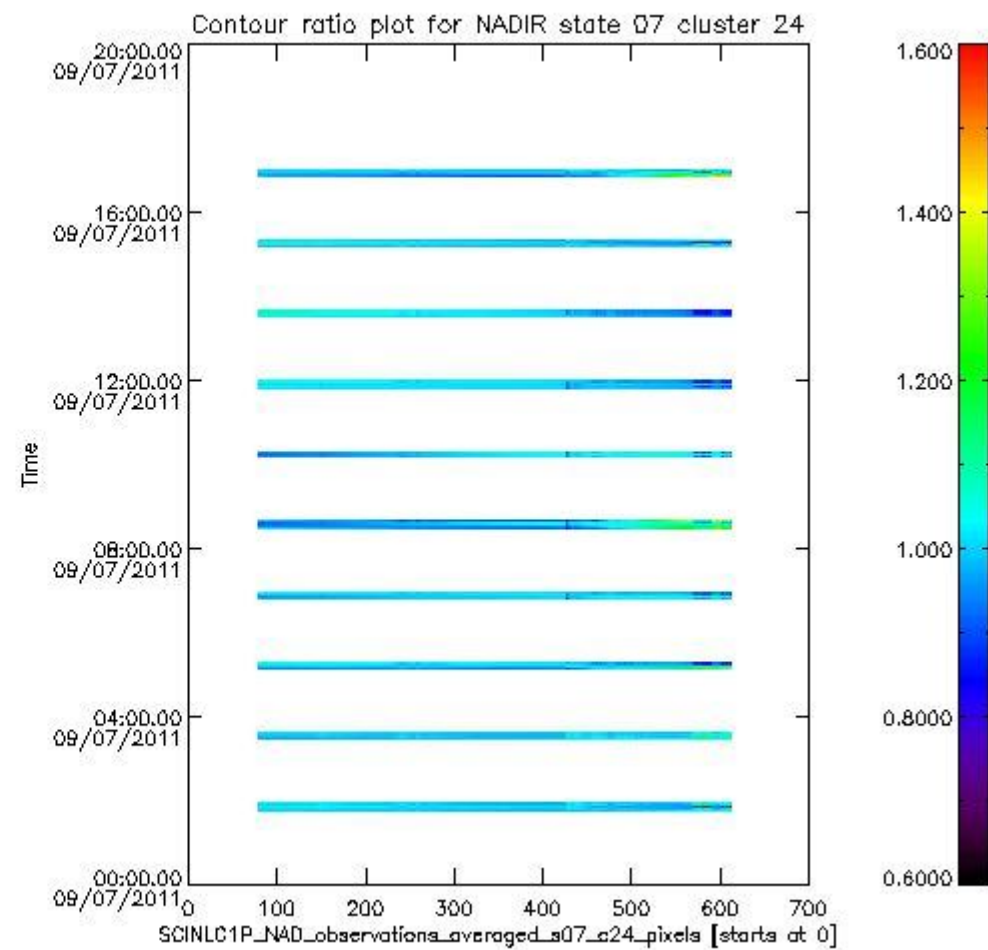
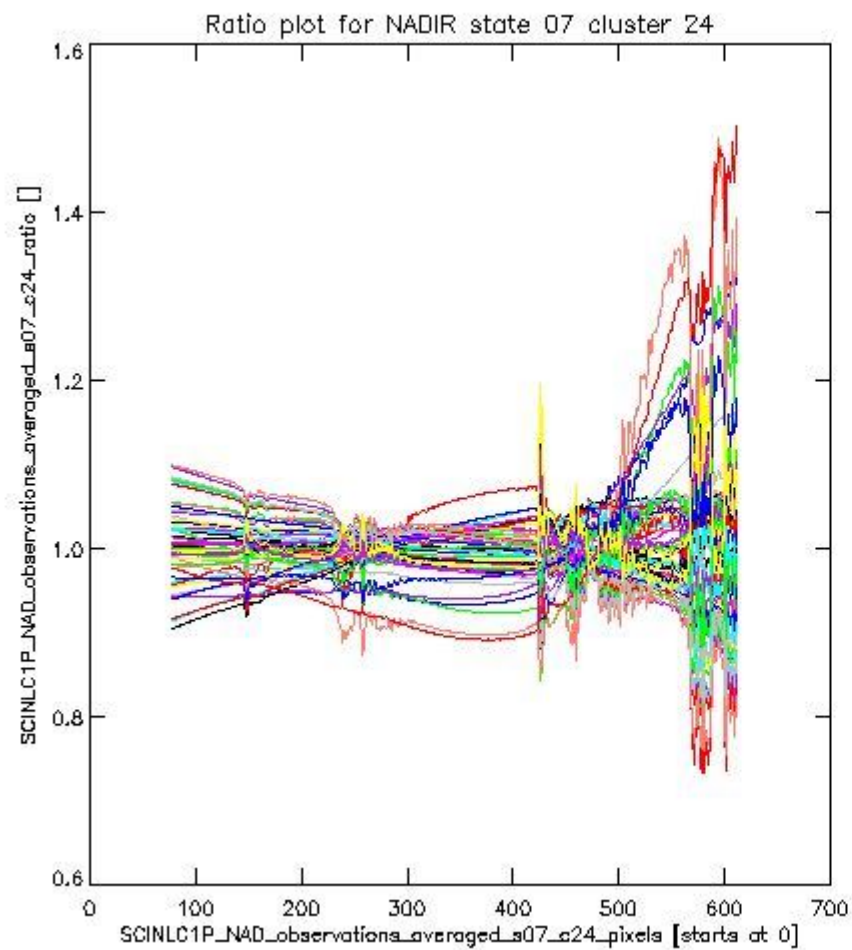
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	09JUL2011 01:46:33.547
Start time of last sample	09JUL2011 16:57:59.855
Reference period start time	09JUN2011 00:05:58.513
Reference period stop time	08JUL2011 19:16:00.899
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\_20110709\_6.PNG

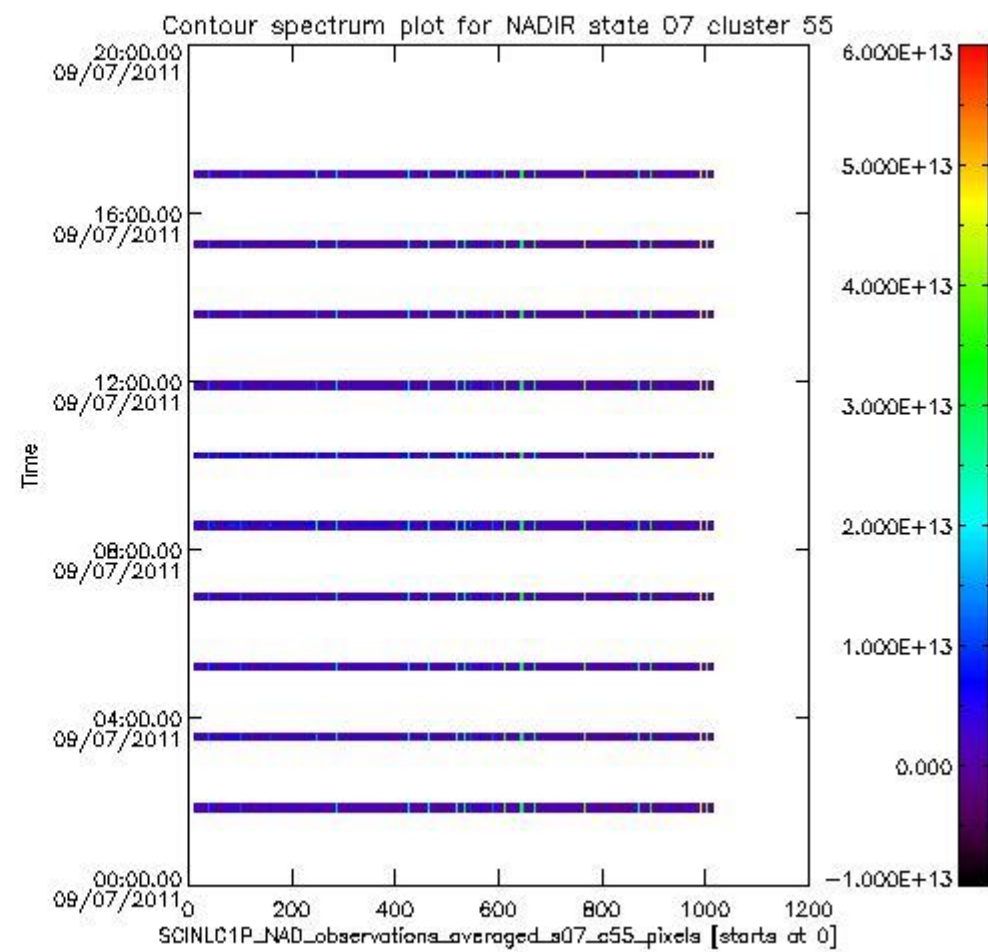
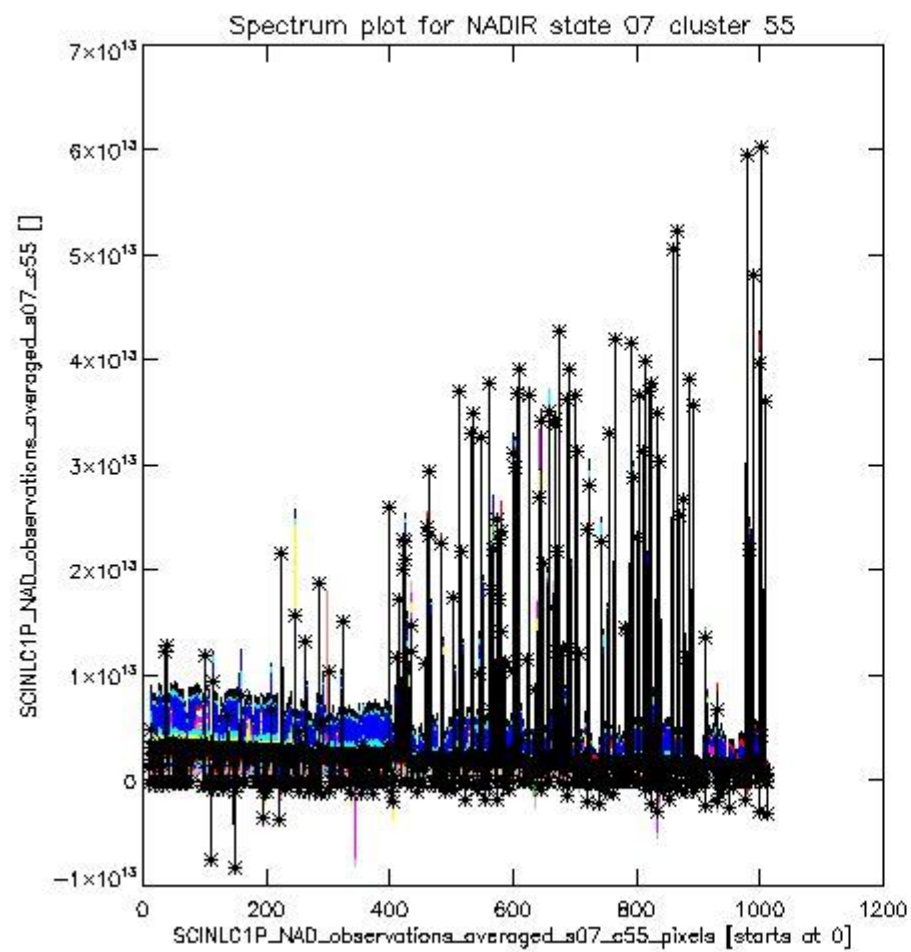




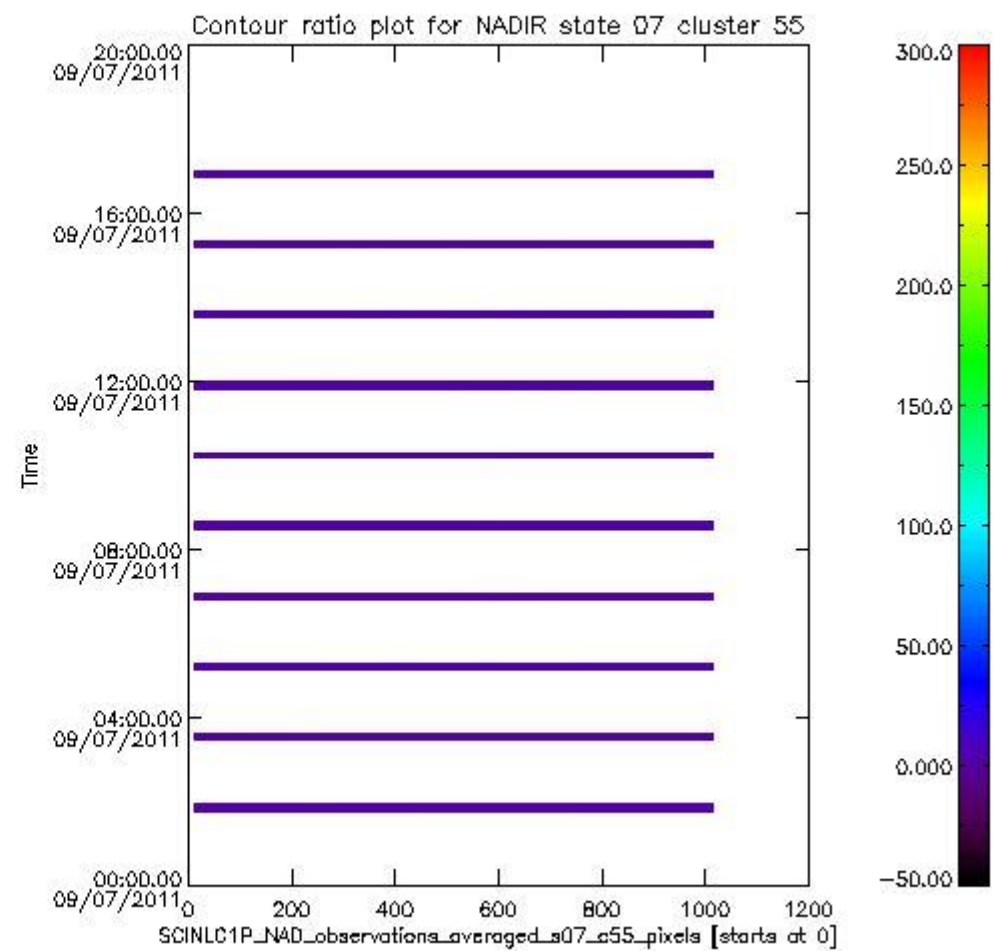
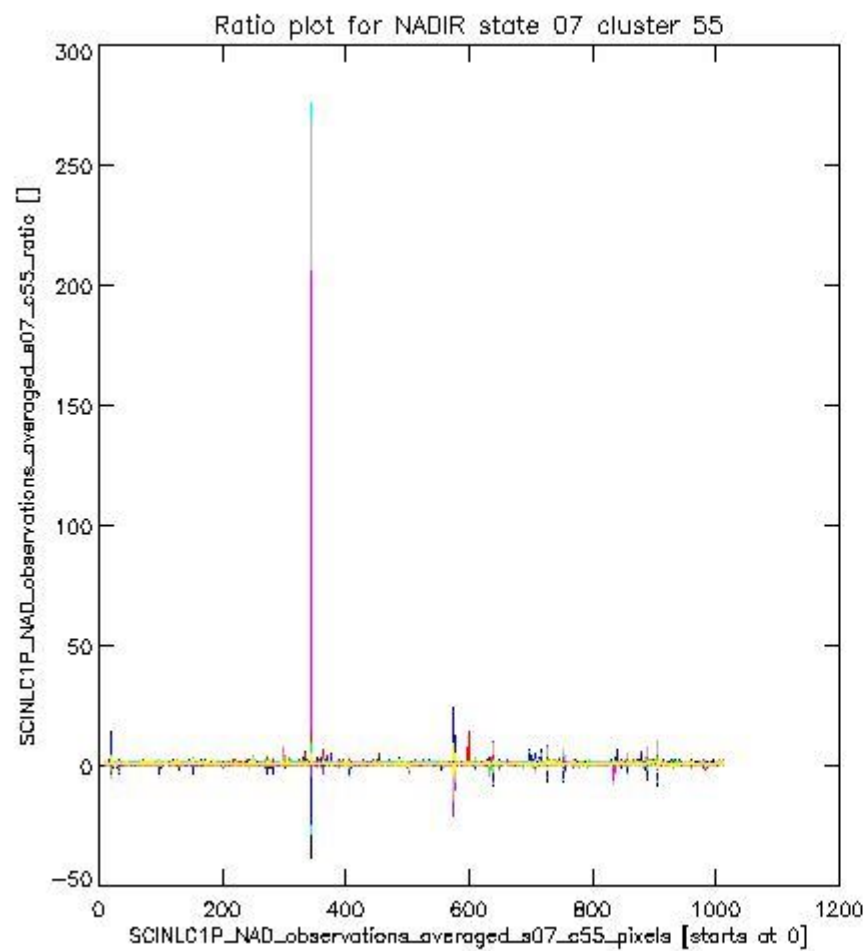
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_7.PNG

**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	09JUL2011 01:46:33.547
Start time of last sample	09JUL2011 16:57:59.855
Reference period start time	09JUN2011 00:05:58.513
Reference period stop time	08JUL2011 19:16:00.899
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\_20110709\_8.PNG

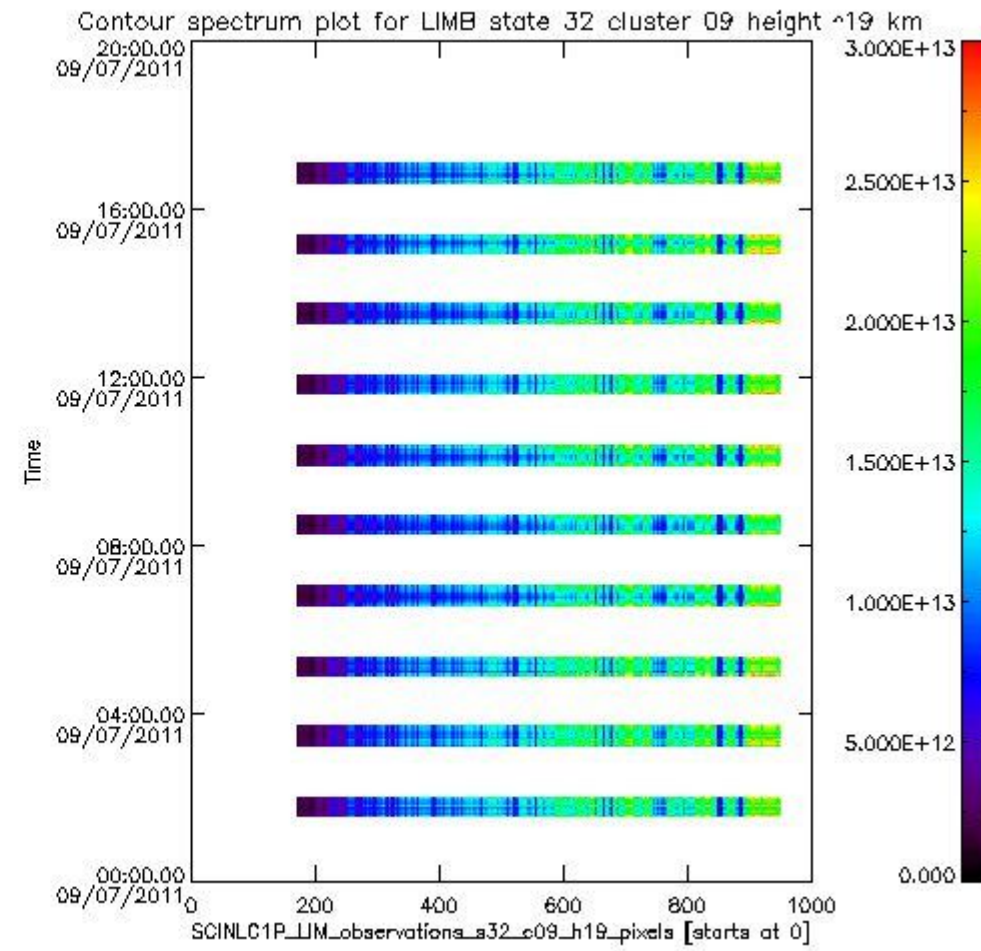
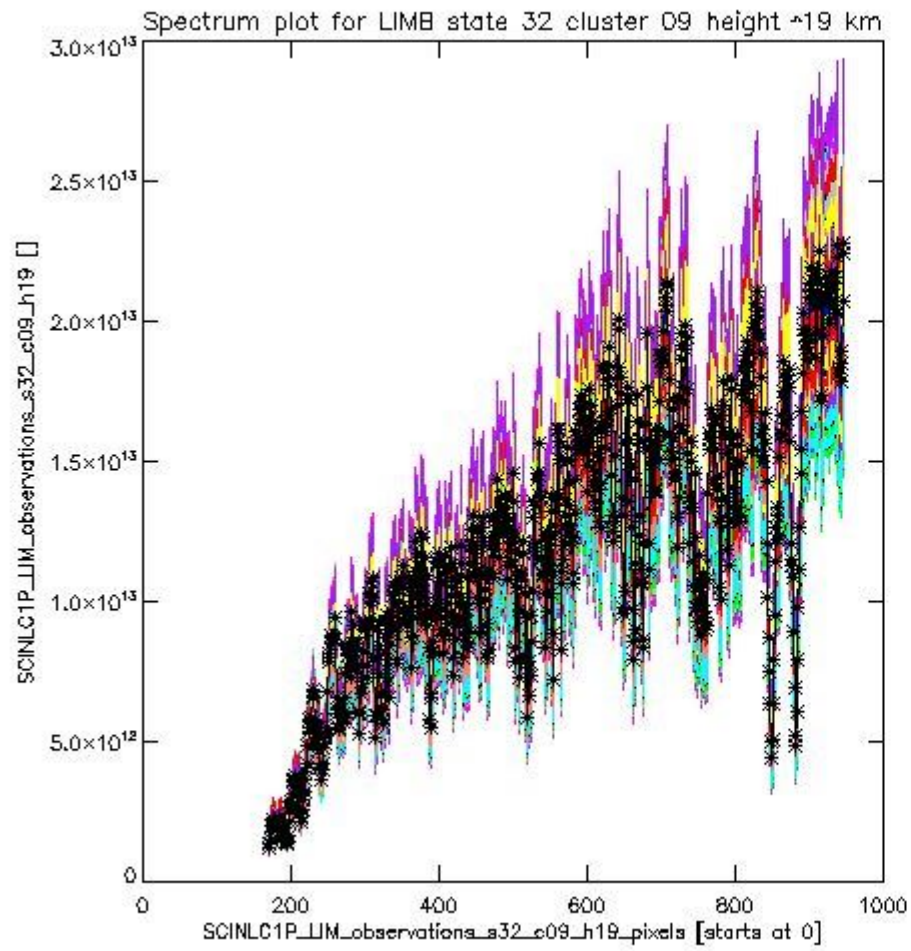


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_9.PNG

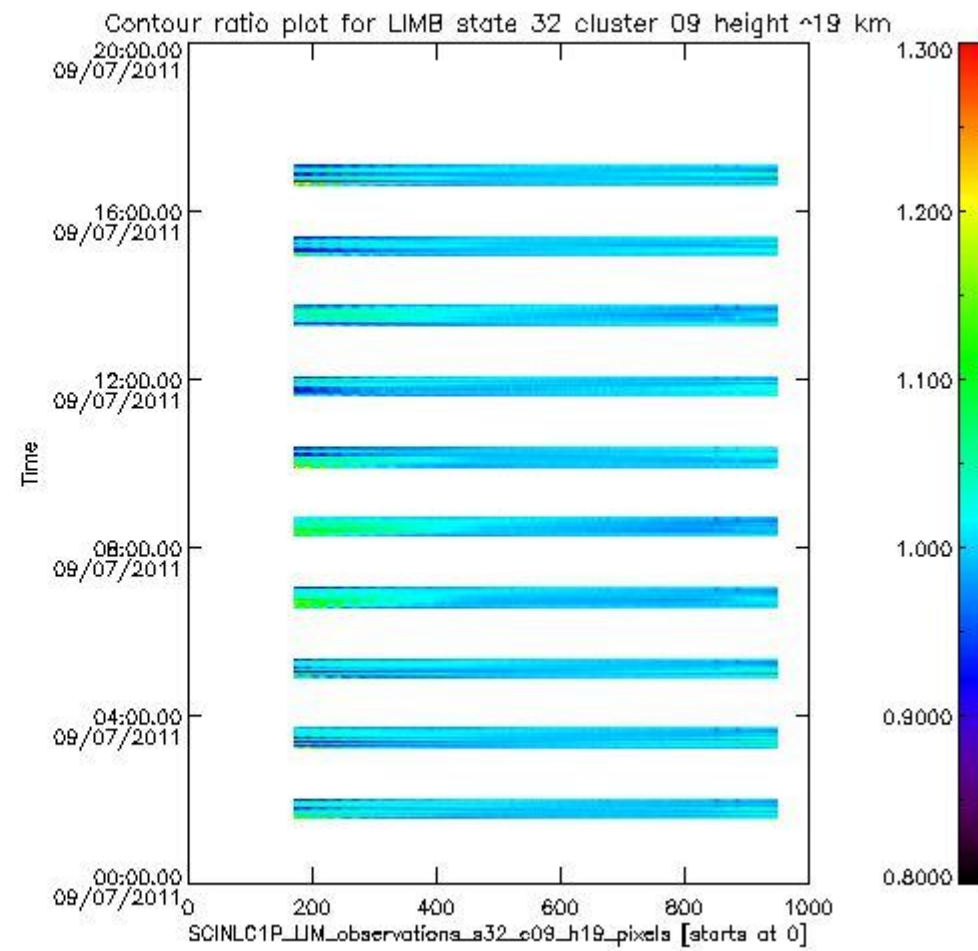
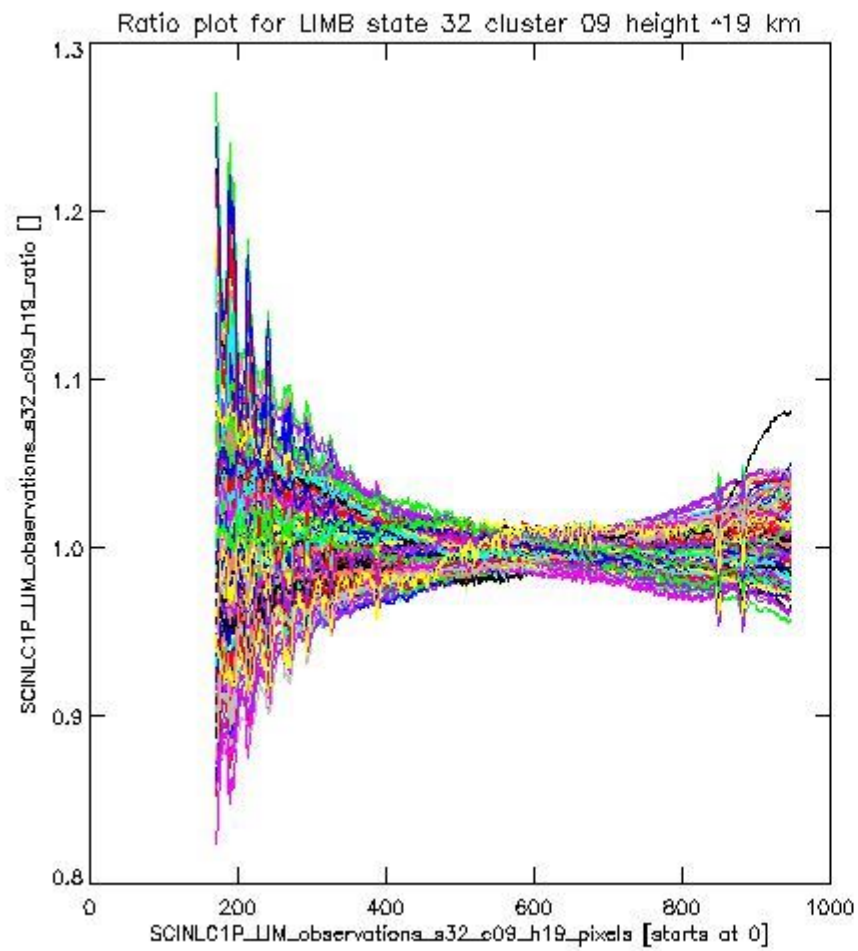
**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	09JUL2011 01:33:22.914
Start time of last sample	09JUL2011 17:03:13.898
Reference period start time	09JUN2011 00:00:58.849
Reference period stop time	08JUL2011 19:19:12.204
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





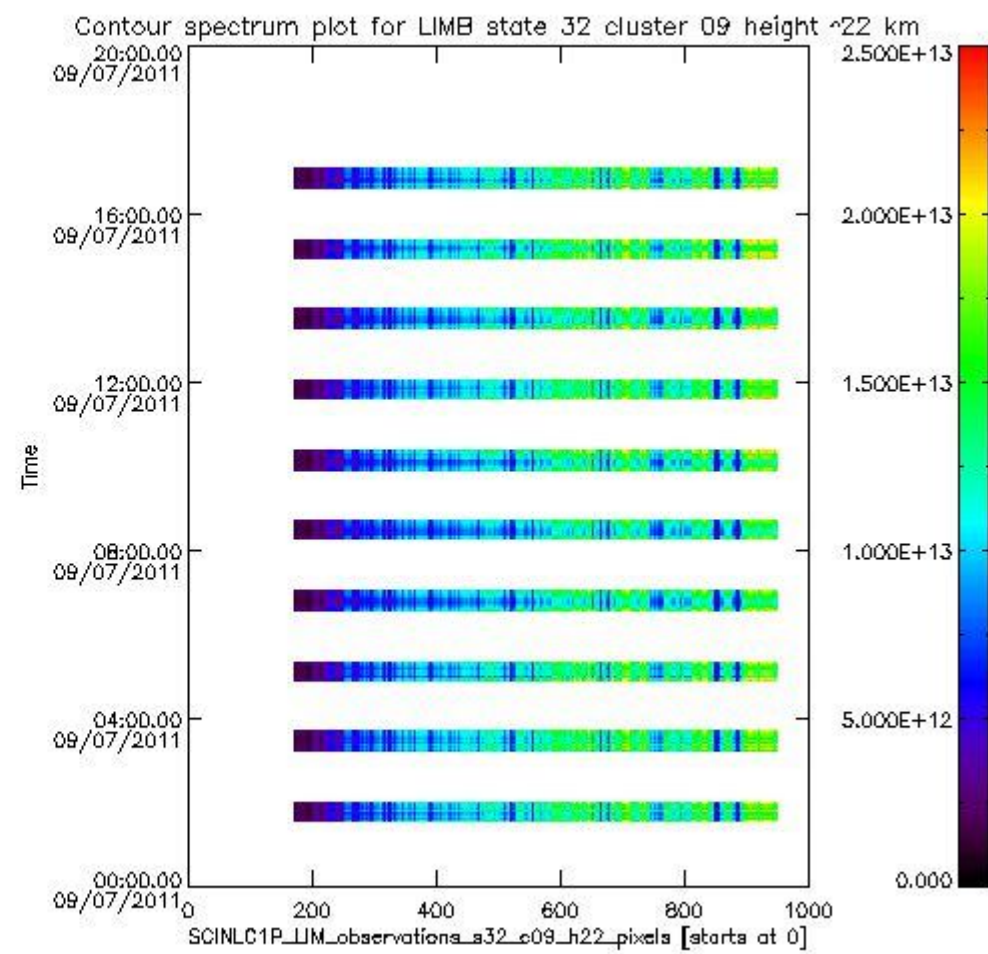
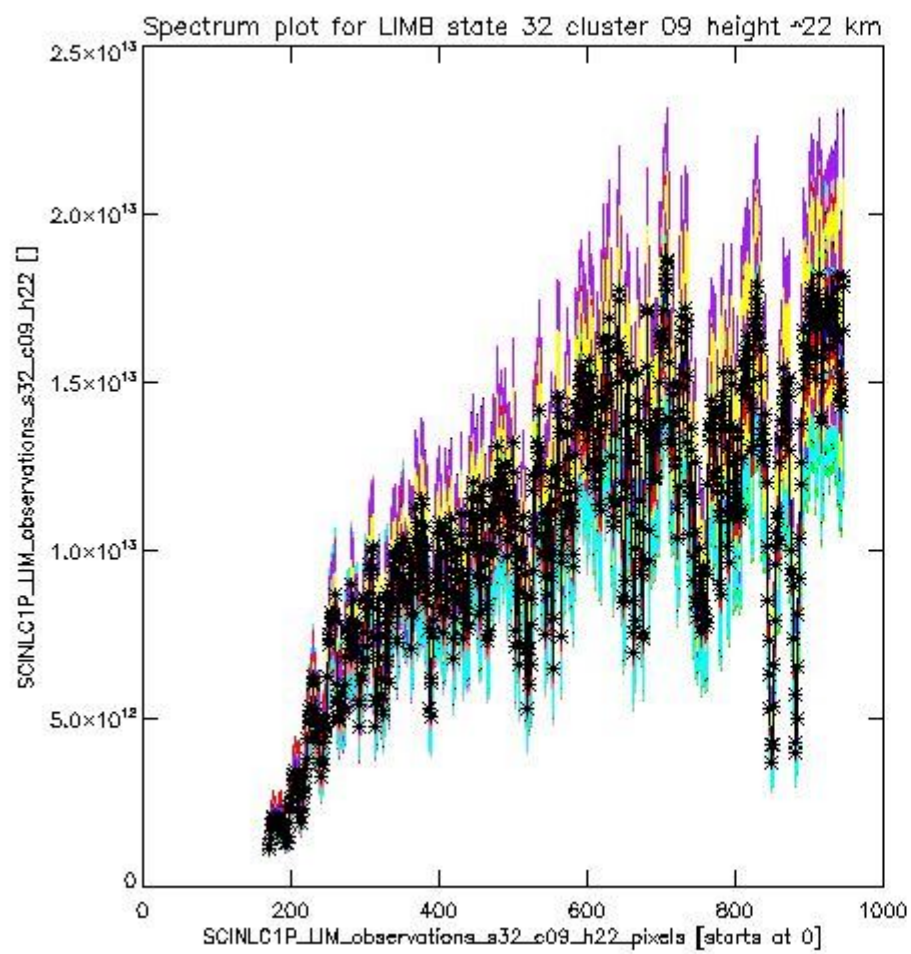
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_10.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_11.PNG

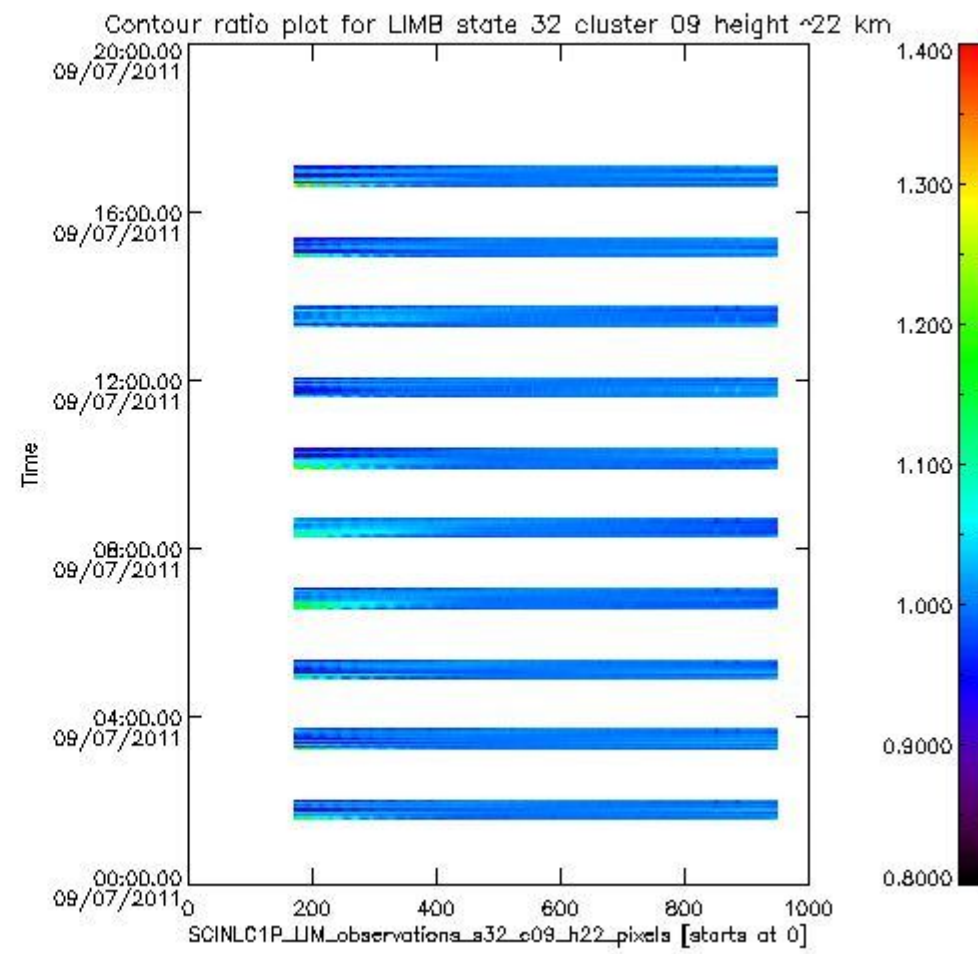
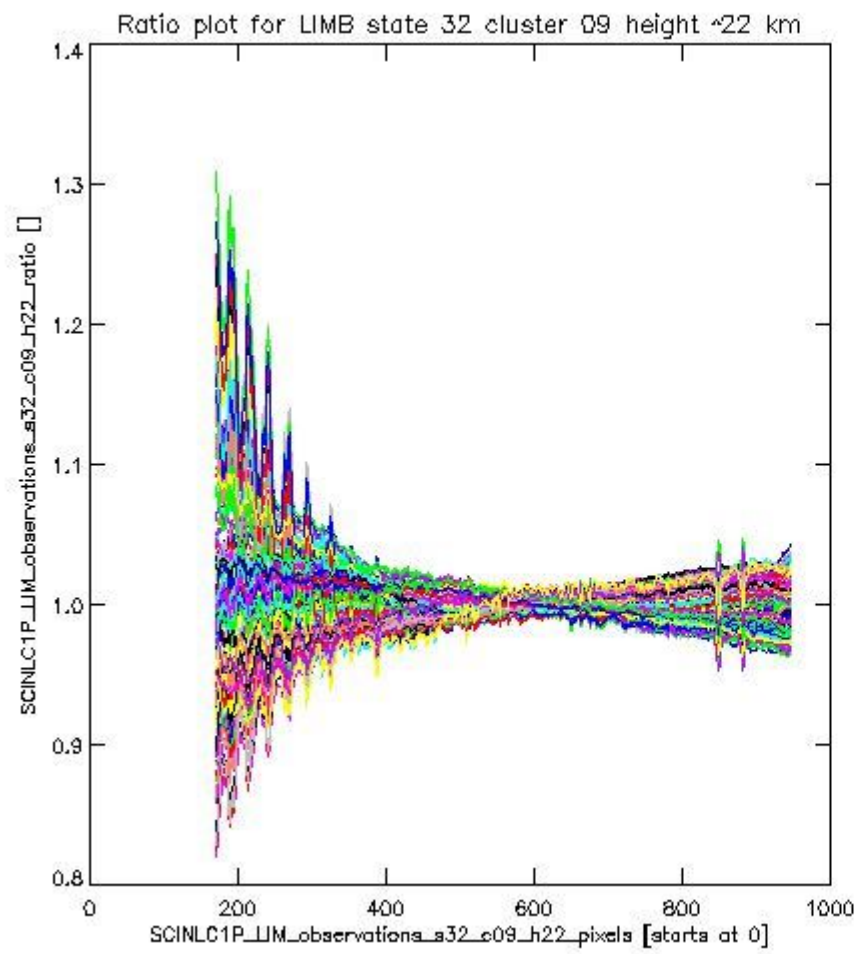
**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	09JUL2011 01:33:22.914
Start time of last sample	09JUL2011 17:03:13.898
Reference period start time	09JUN2011 00:00:58.849
Reference period stop time	08JUL2011 19:19:12.204
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\_20110709\_12.PNG

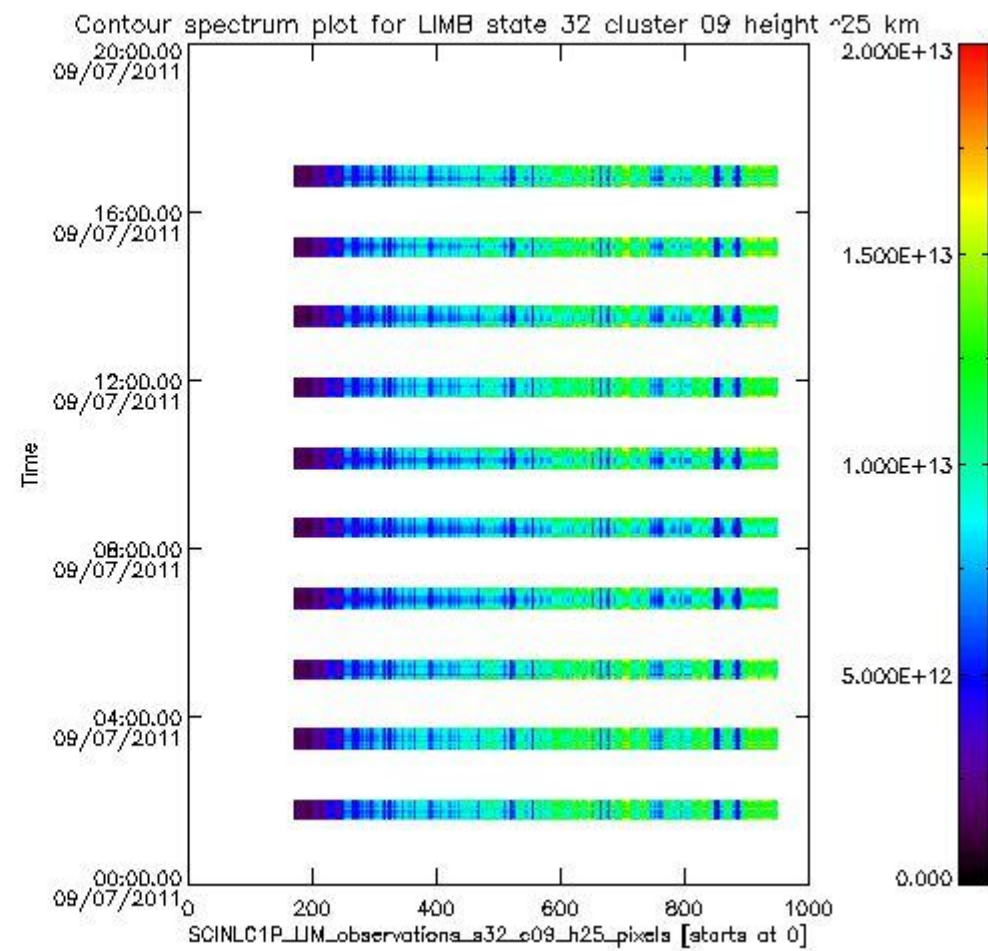
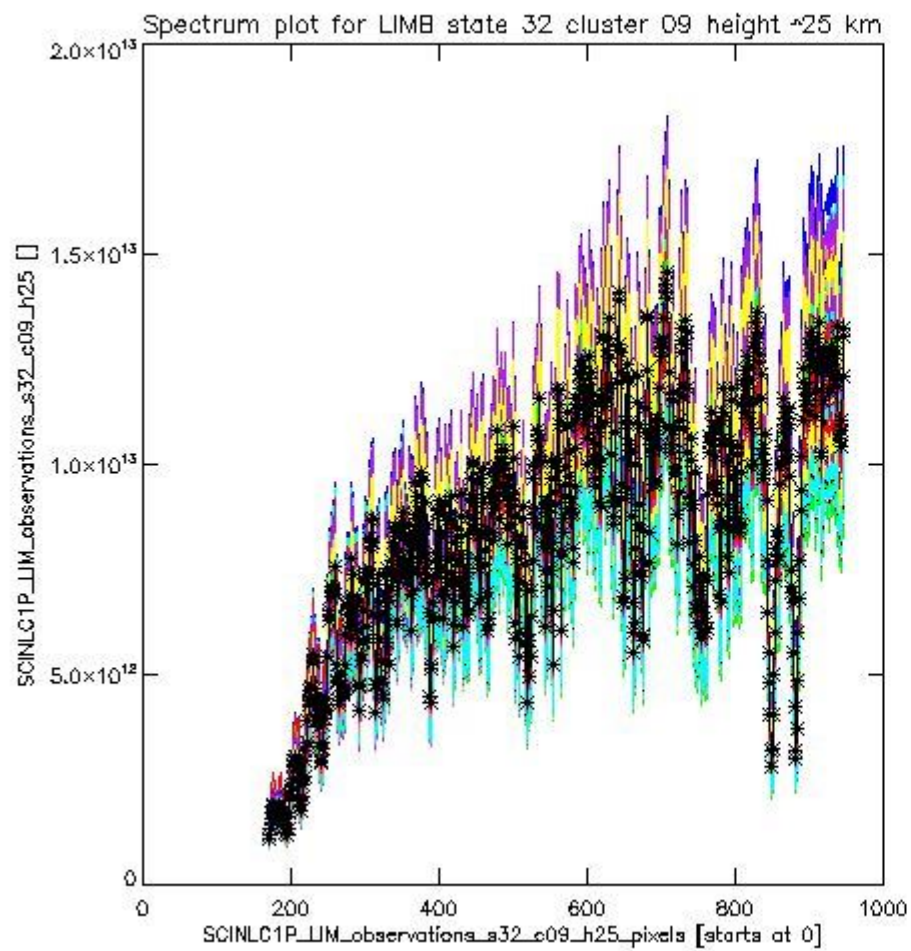




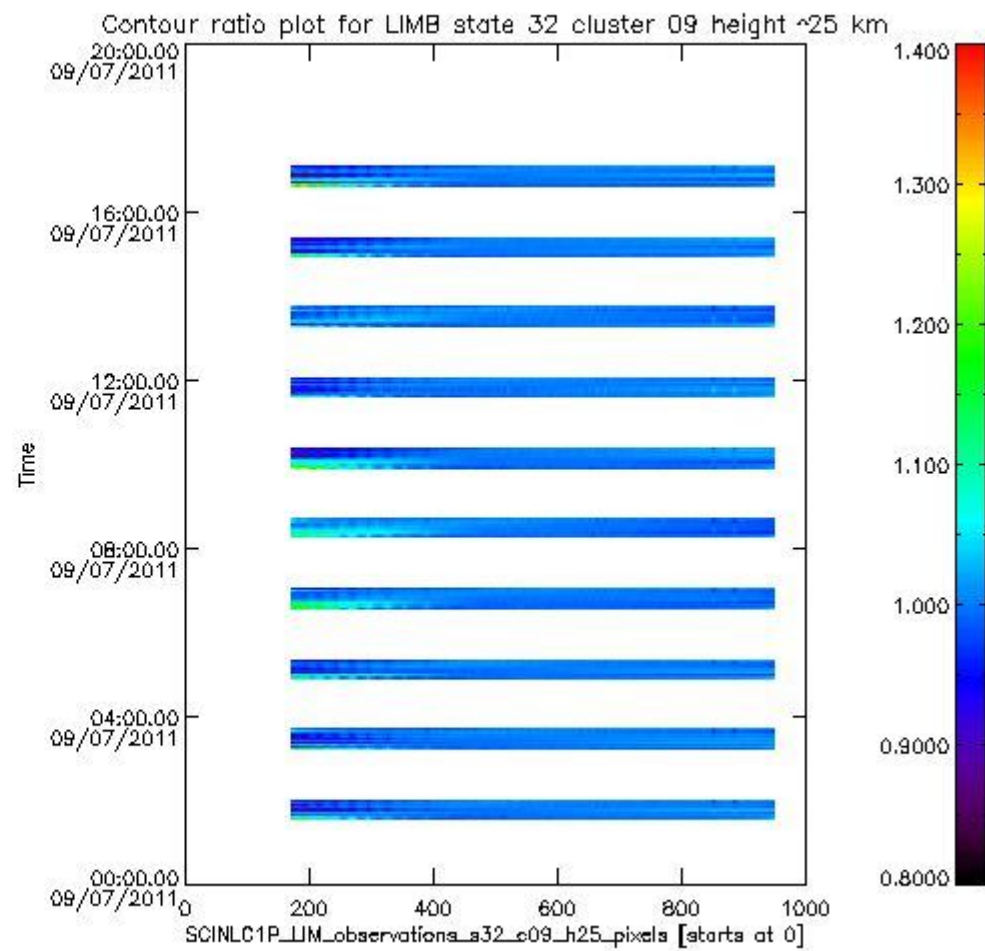
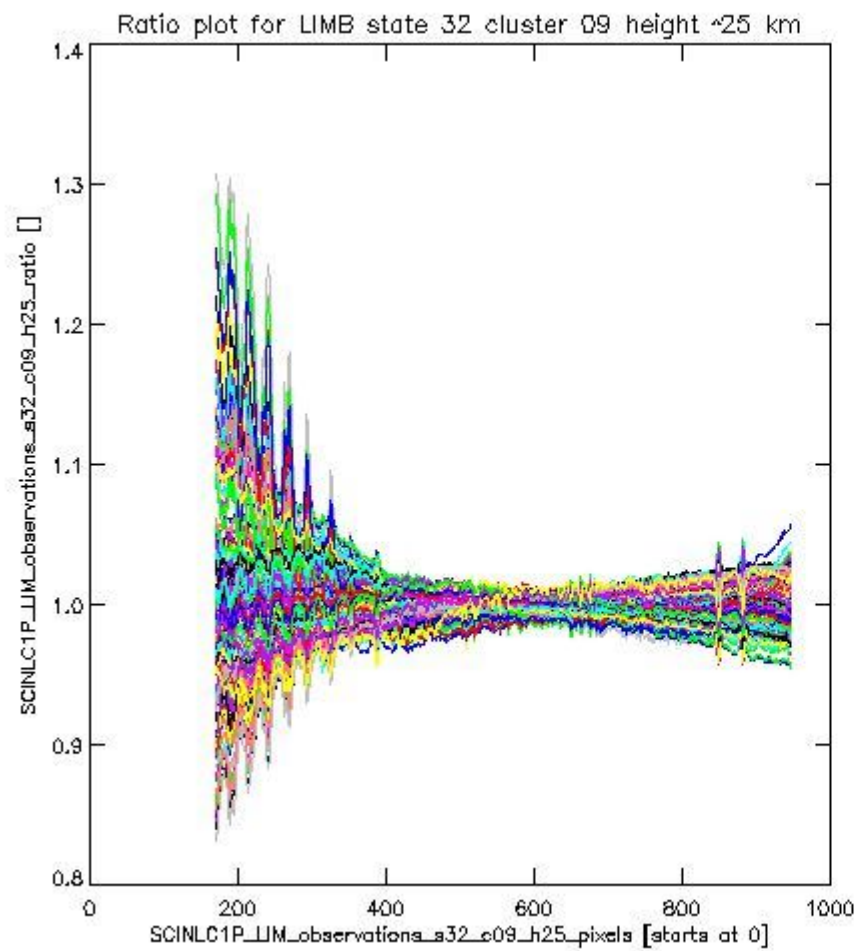
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_13.PNG

**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	09JUL2011 01:33:22.914
Start time of last sample	09JUL2011 17:03:13.898
Reference period start time	09JUN2011 00:00:58.849
Reference period stop time	08JUL2011 19:19:12.204
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\_20110709\_14.PNG

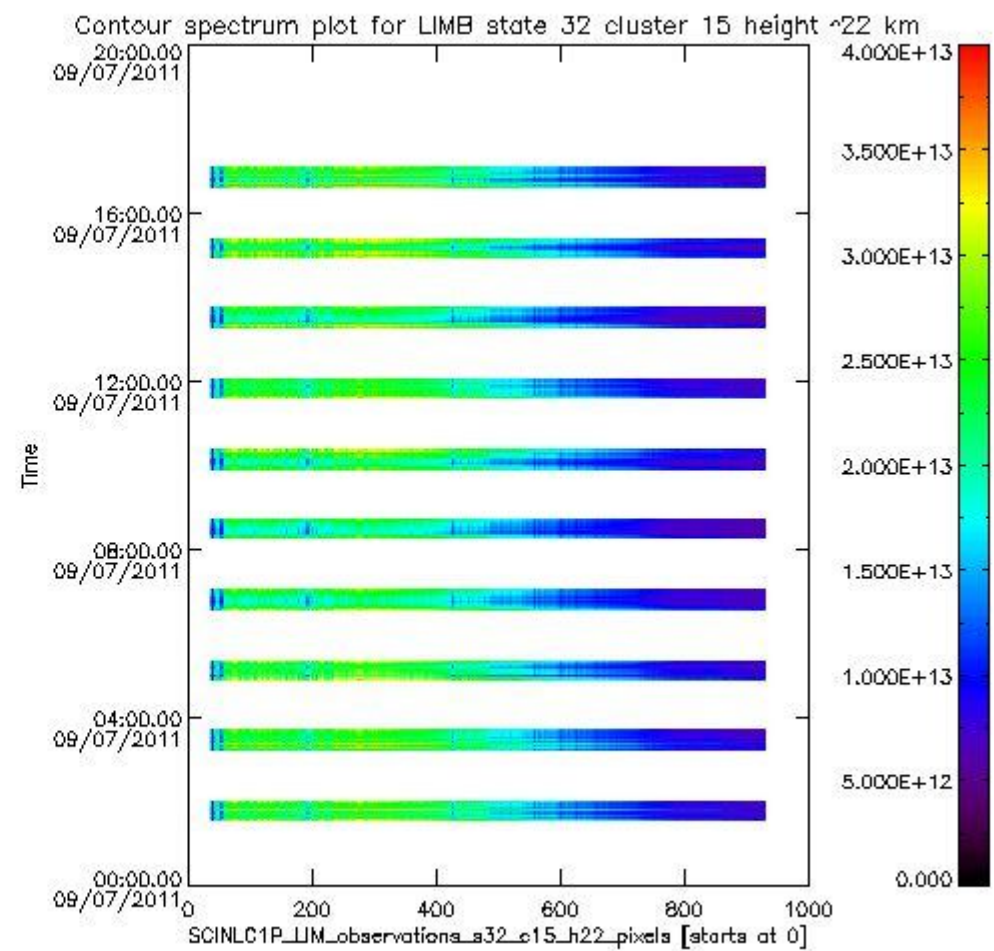
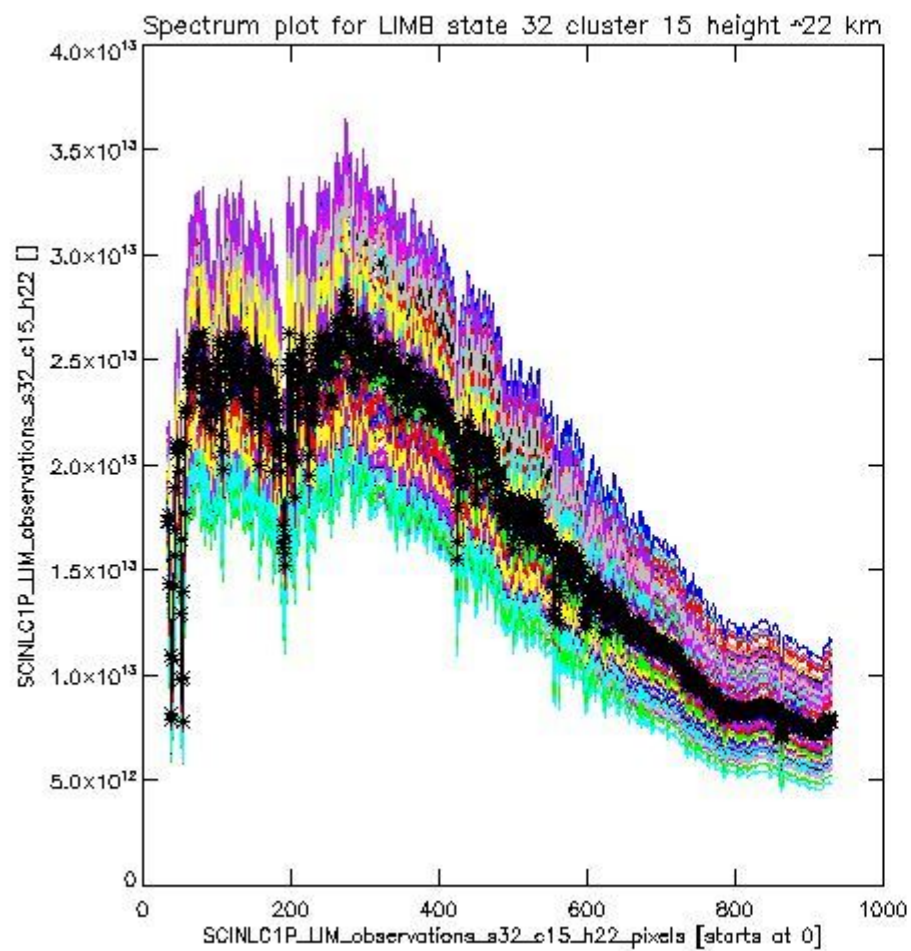


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_15.PNG

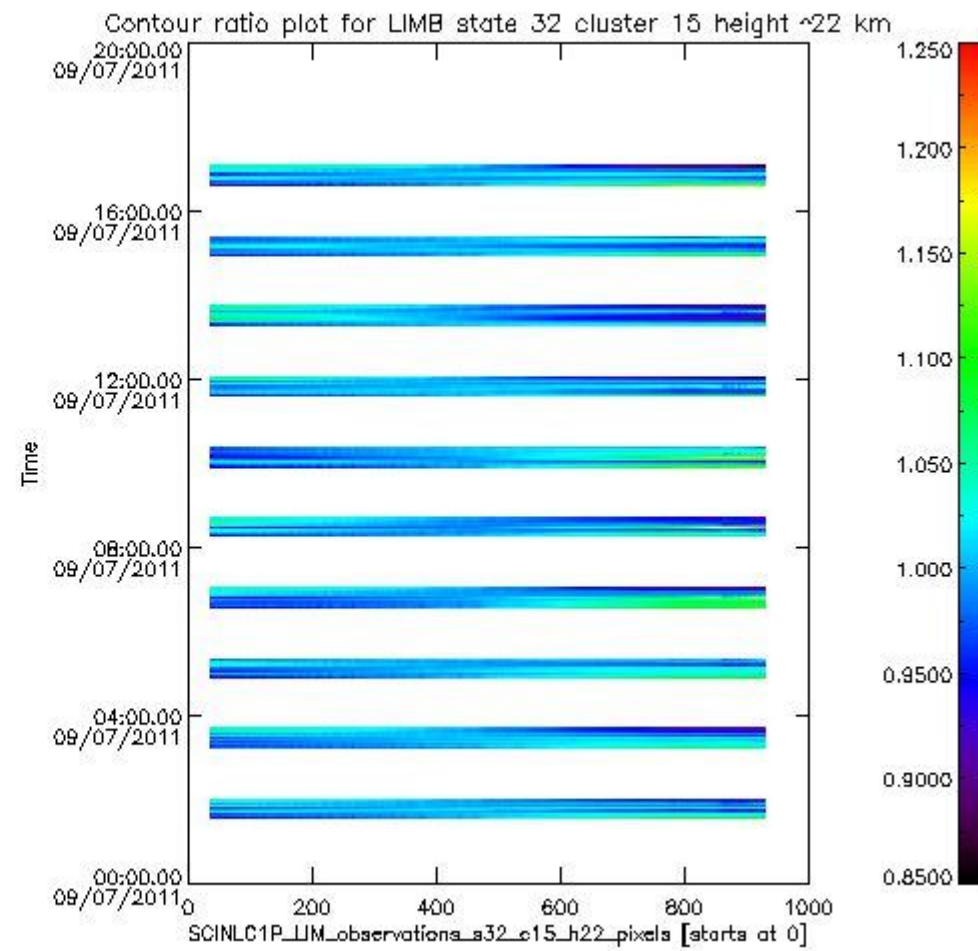
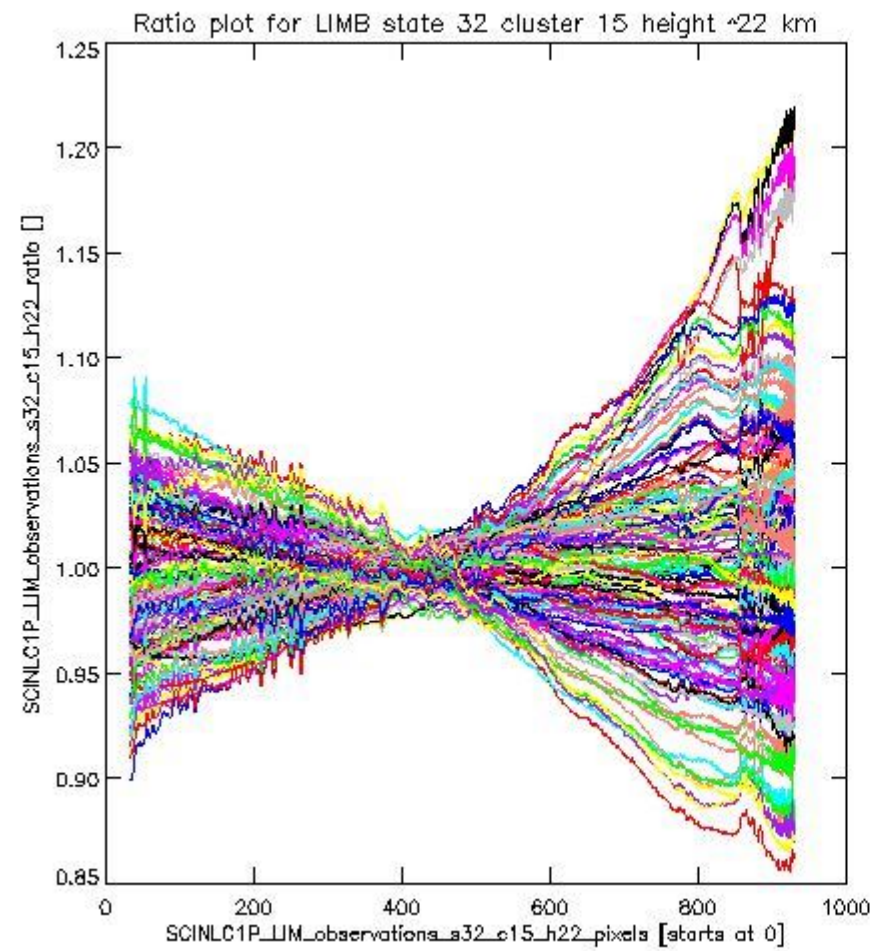
**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	09JUL2011 01:33:22.914
Start time of last sample	09JUL2011 17:03:13.898
Reference period start time	09JUN2011 00:00:58.849
Reference period stop time	08JUL2011 19:19:12.204
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





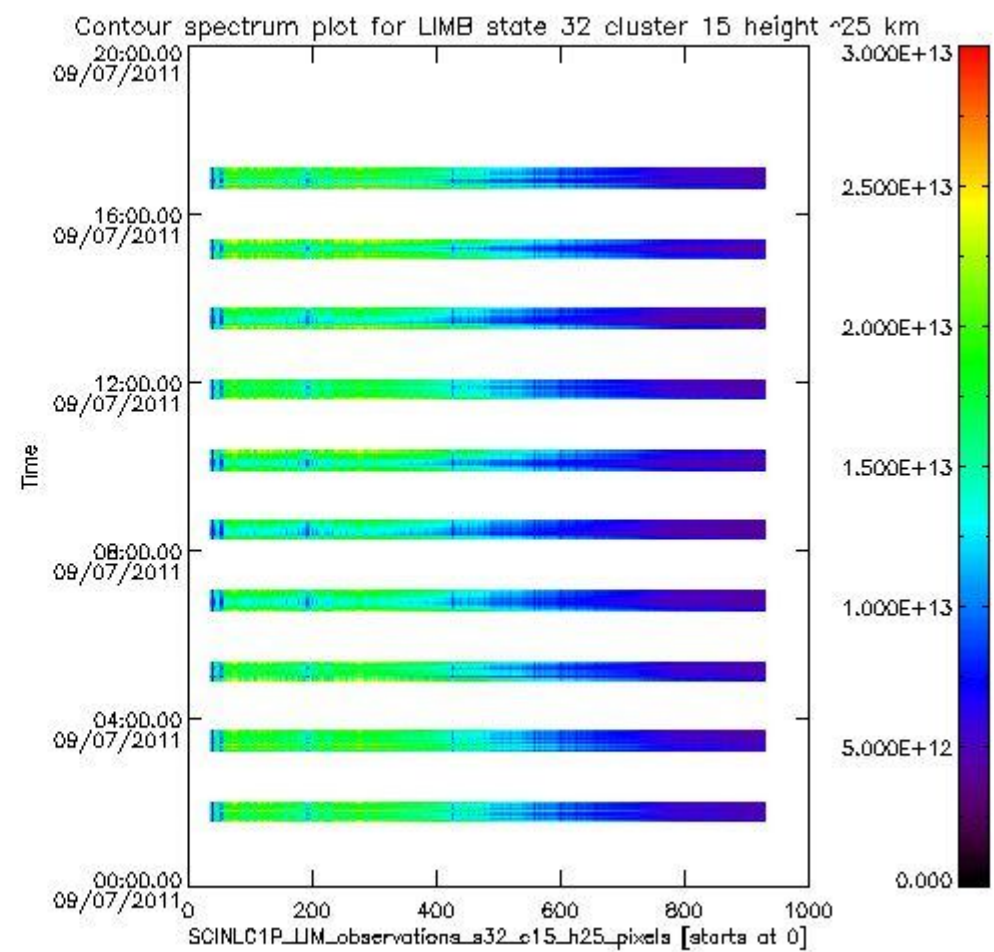
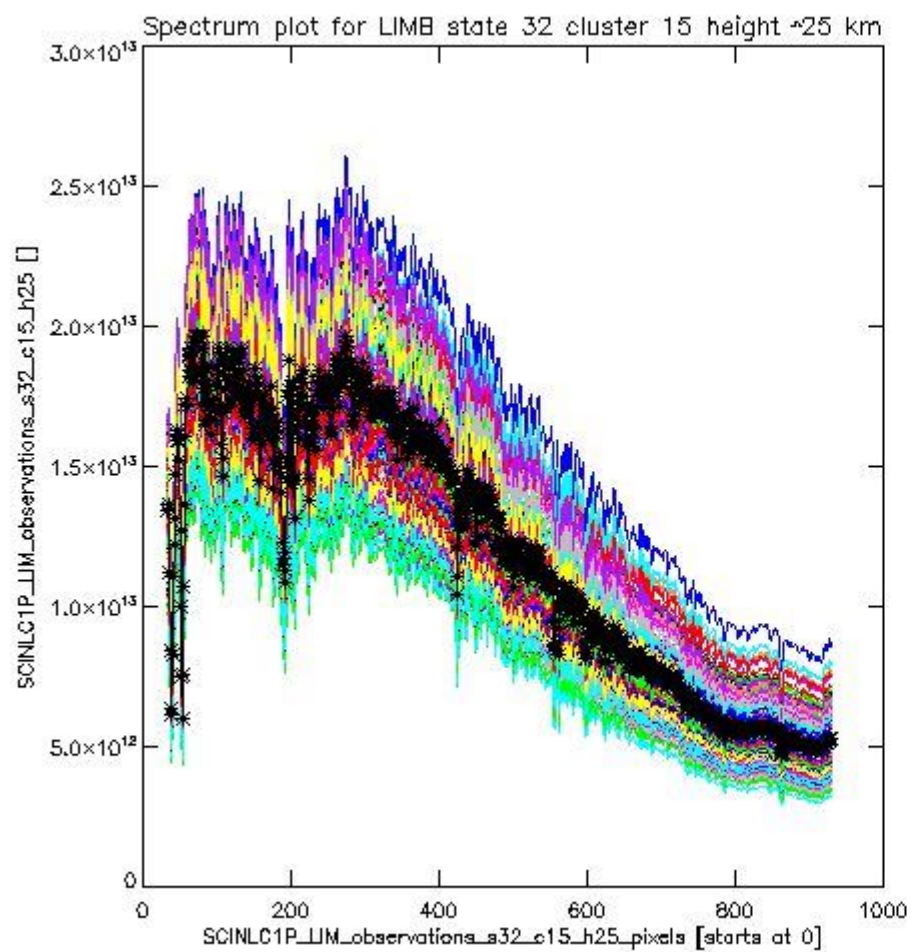
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_16.PNG



sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_17.PNG

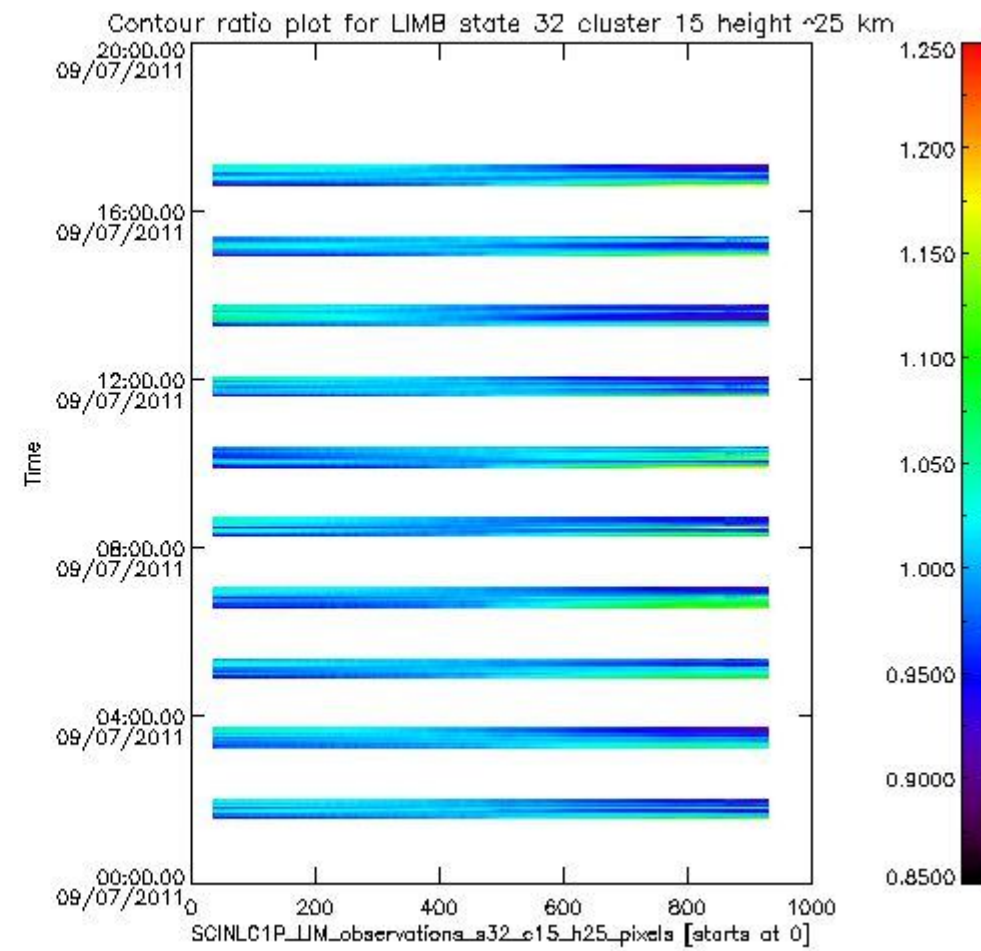
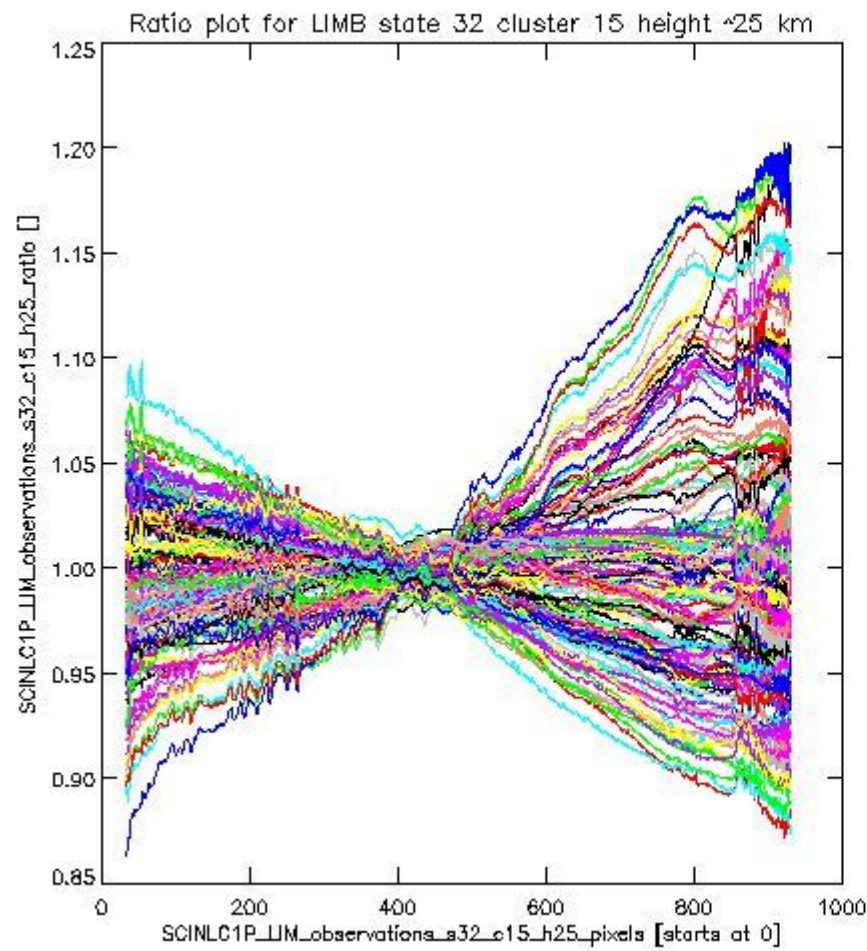
**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	09JUL2011 01:33:22.914
Start time of last sample	09JUL2011 17:03:13.898
Reference period start time	09JUN2011 00:00:58.849
Reference period stop time	08JUL2011 19:19:12.204
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\_20110709\_18.PNG

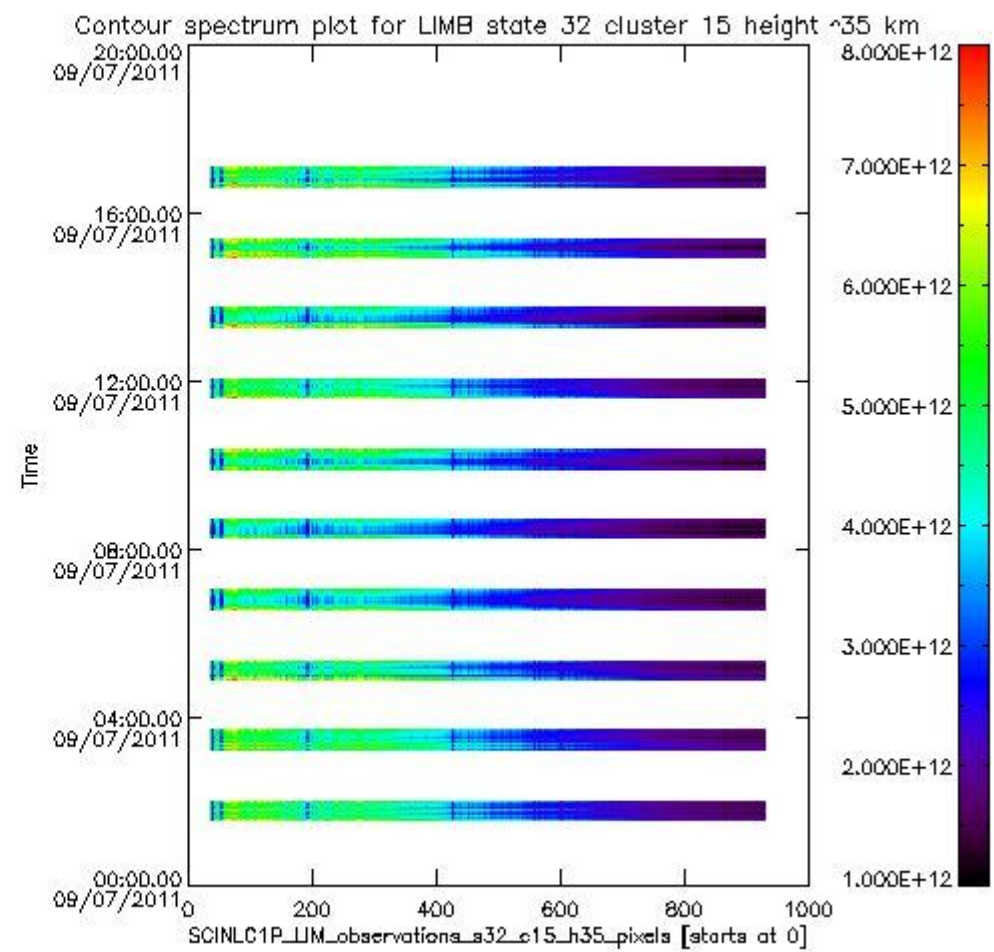
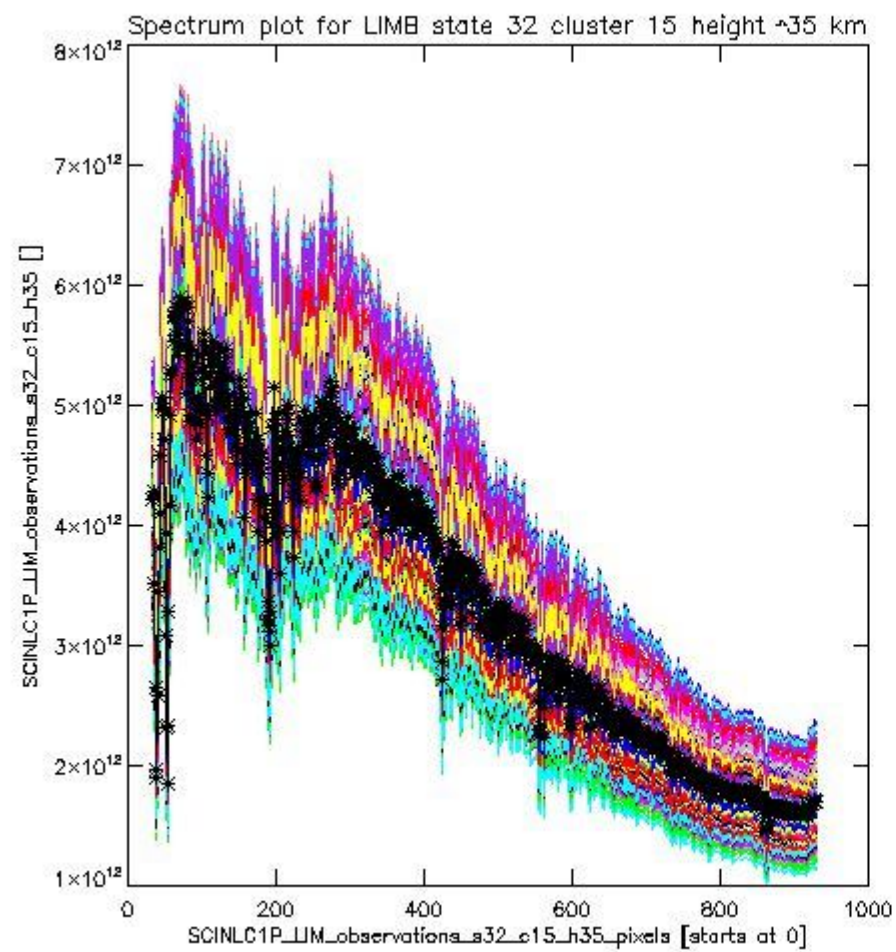


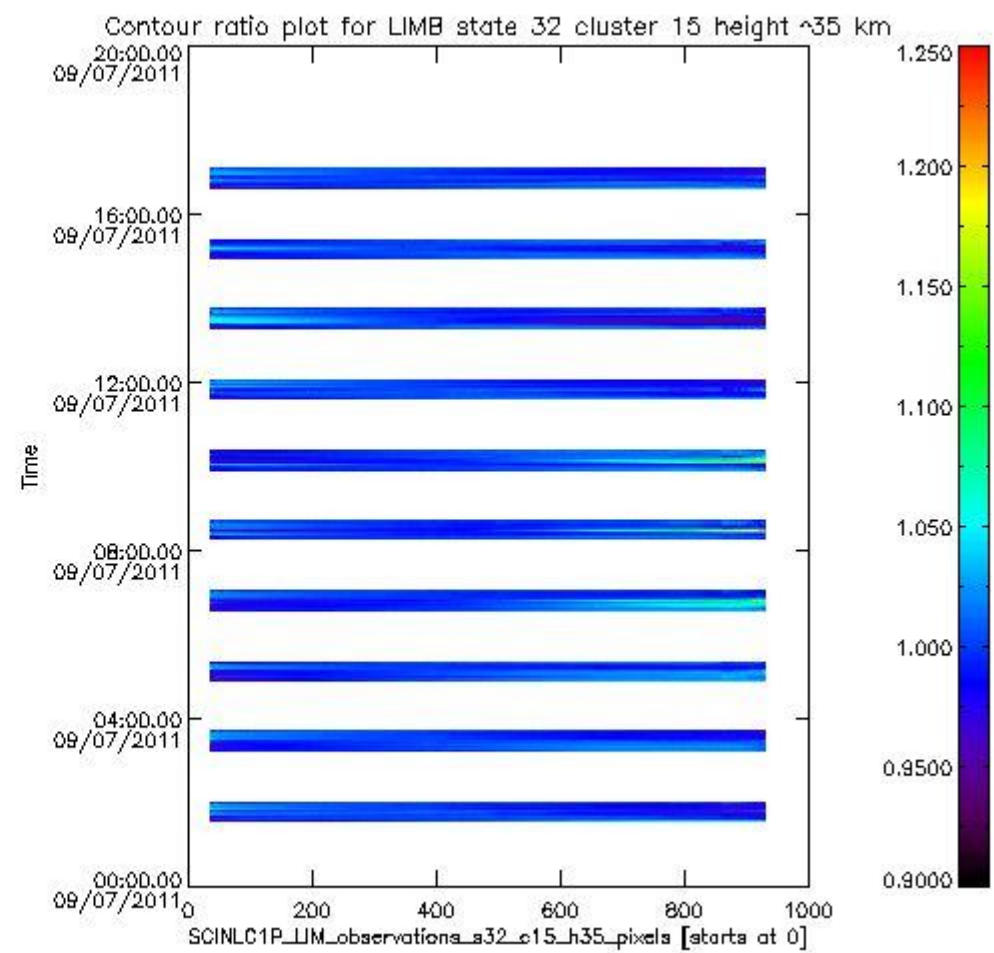
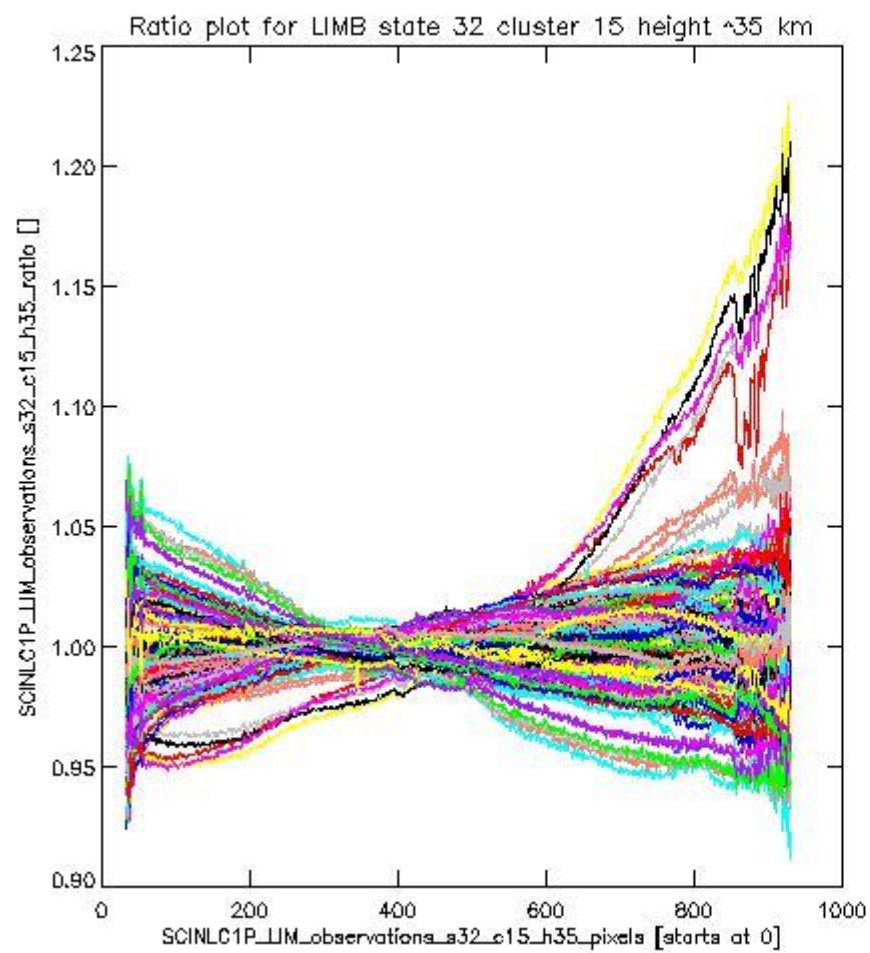


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110709\_19.PNG

**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:

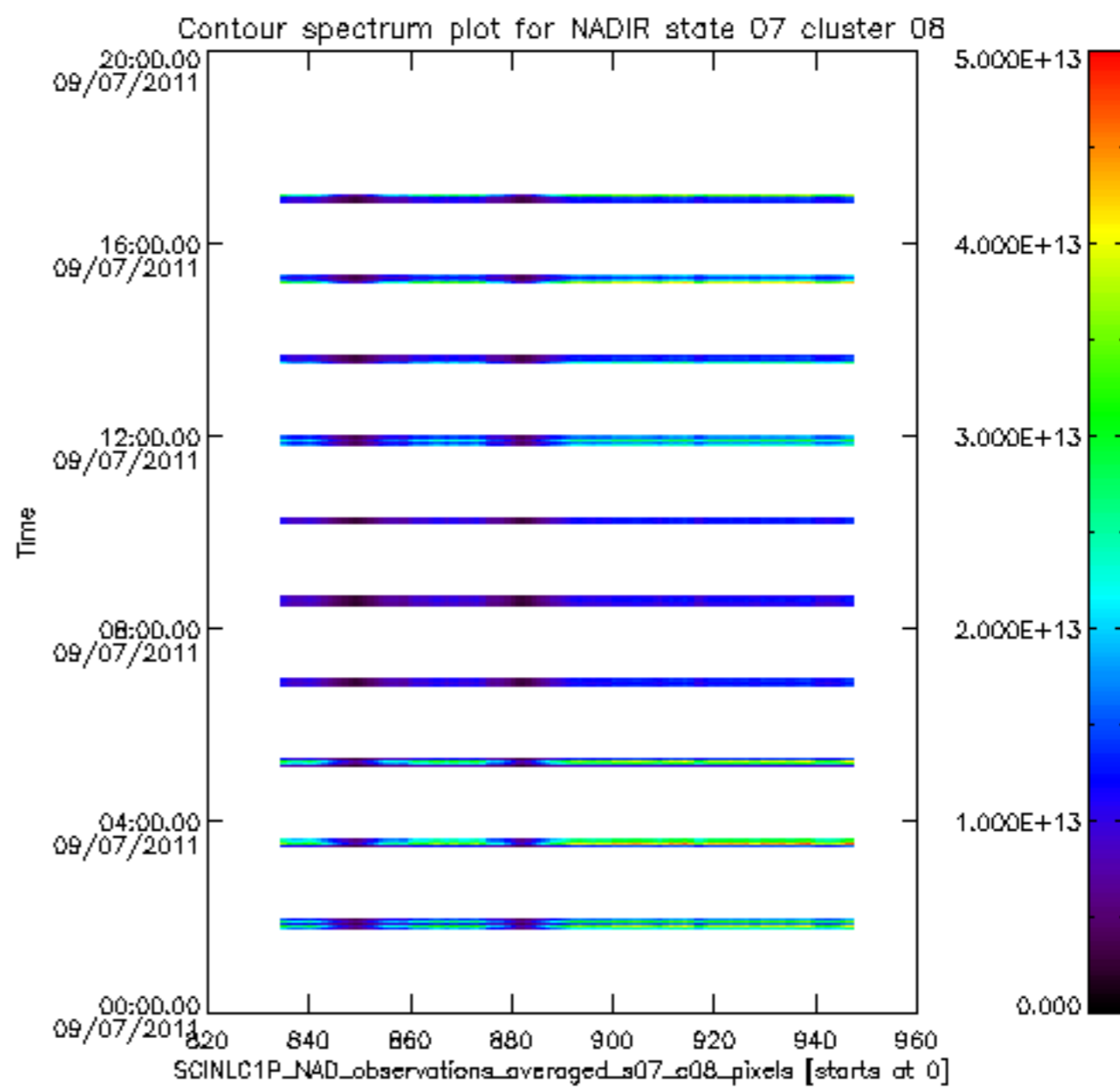
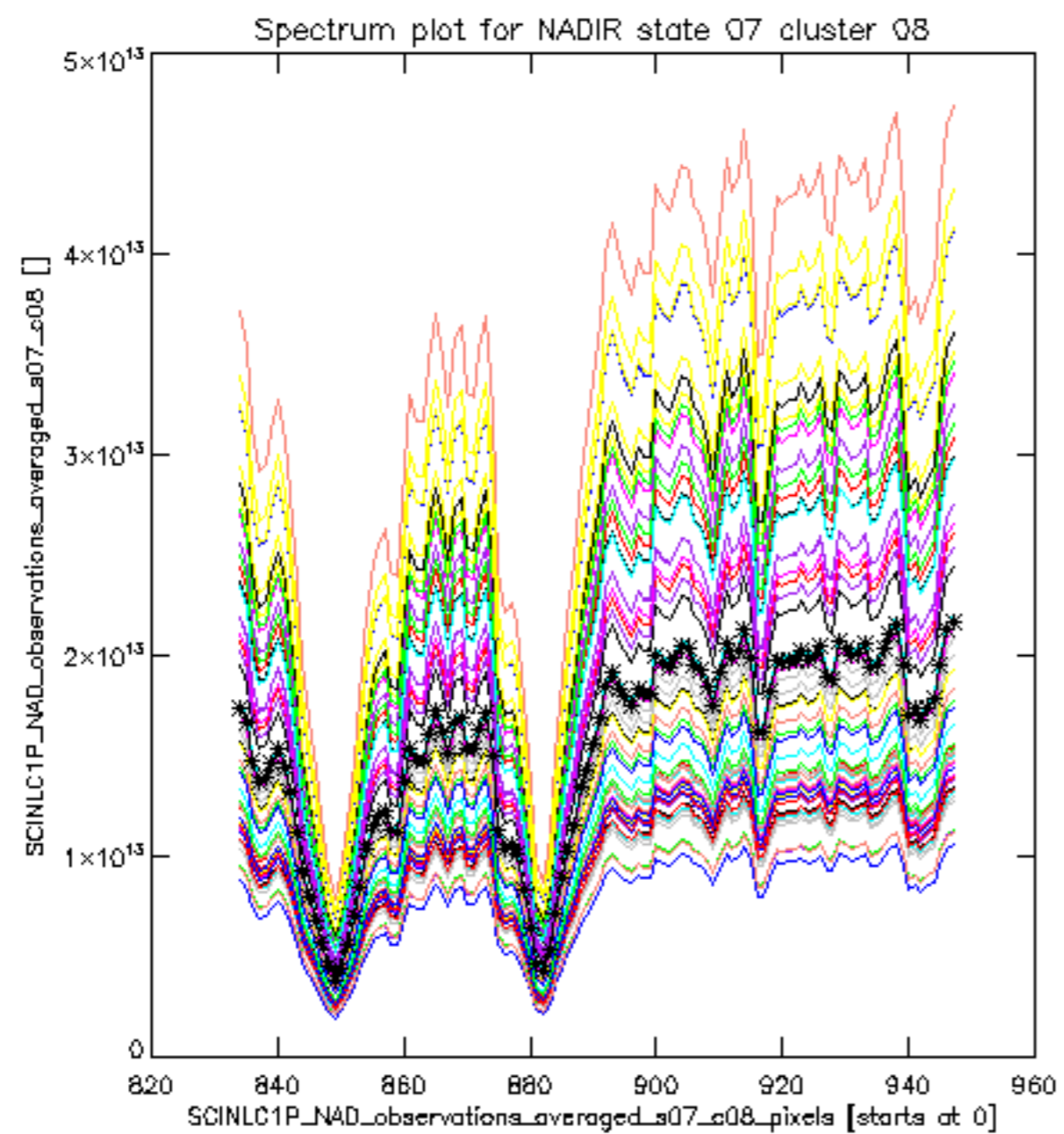
Item	Value
Start time of first sample	09JUL2011 01:33:22.914
Start time of last sample	09JUL2011 17:03:13.898
Reference period start time	09JUN2011 00:00:58.849
Reference period stop time	08JUL2011 19:19:12.204
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

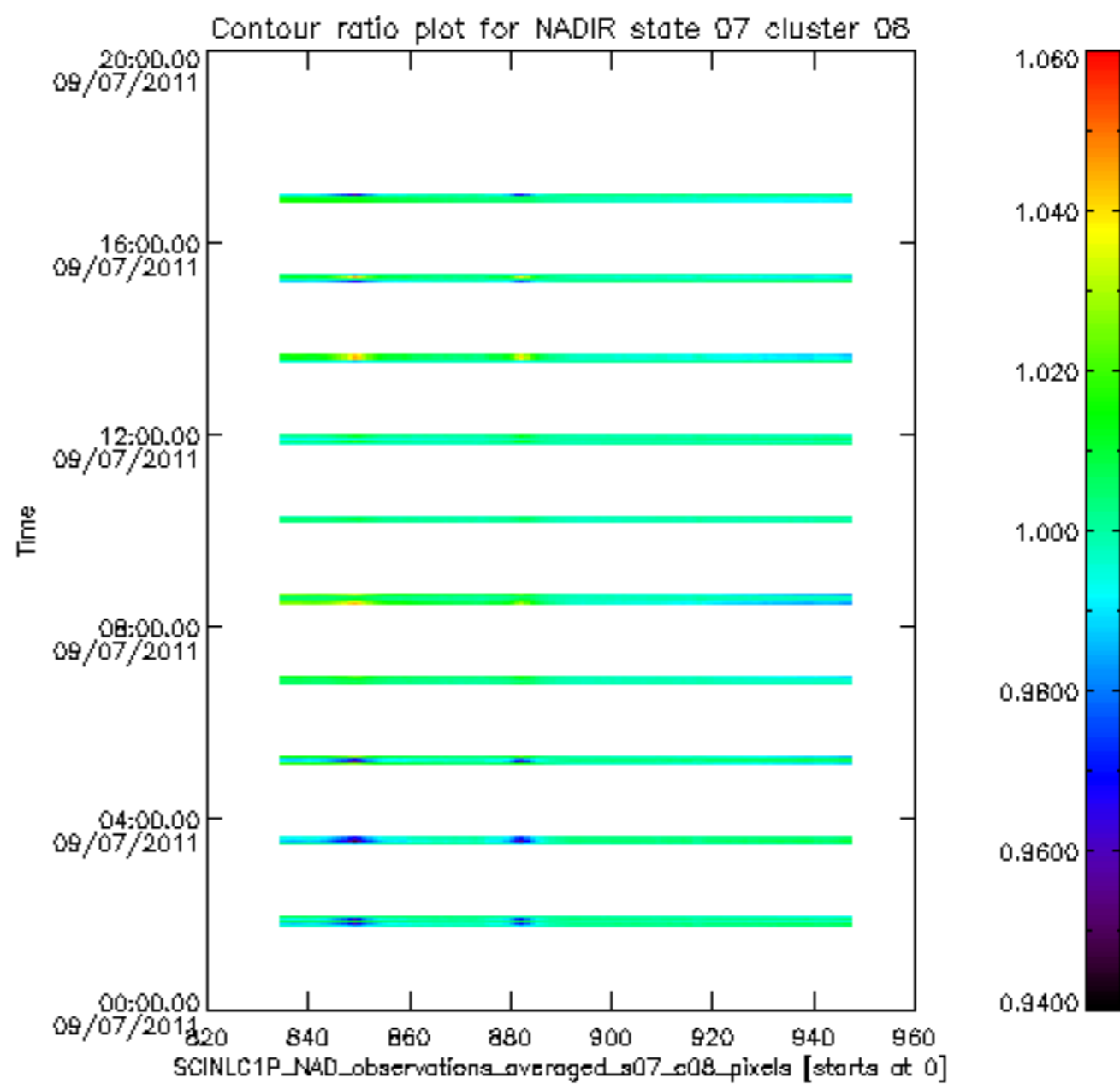
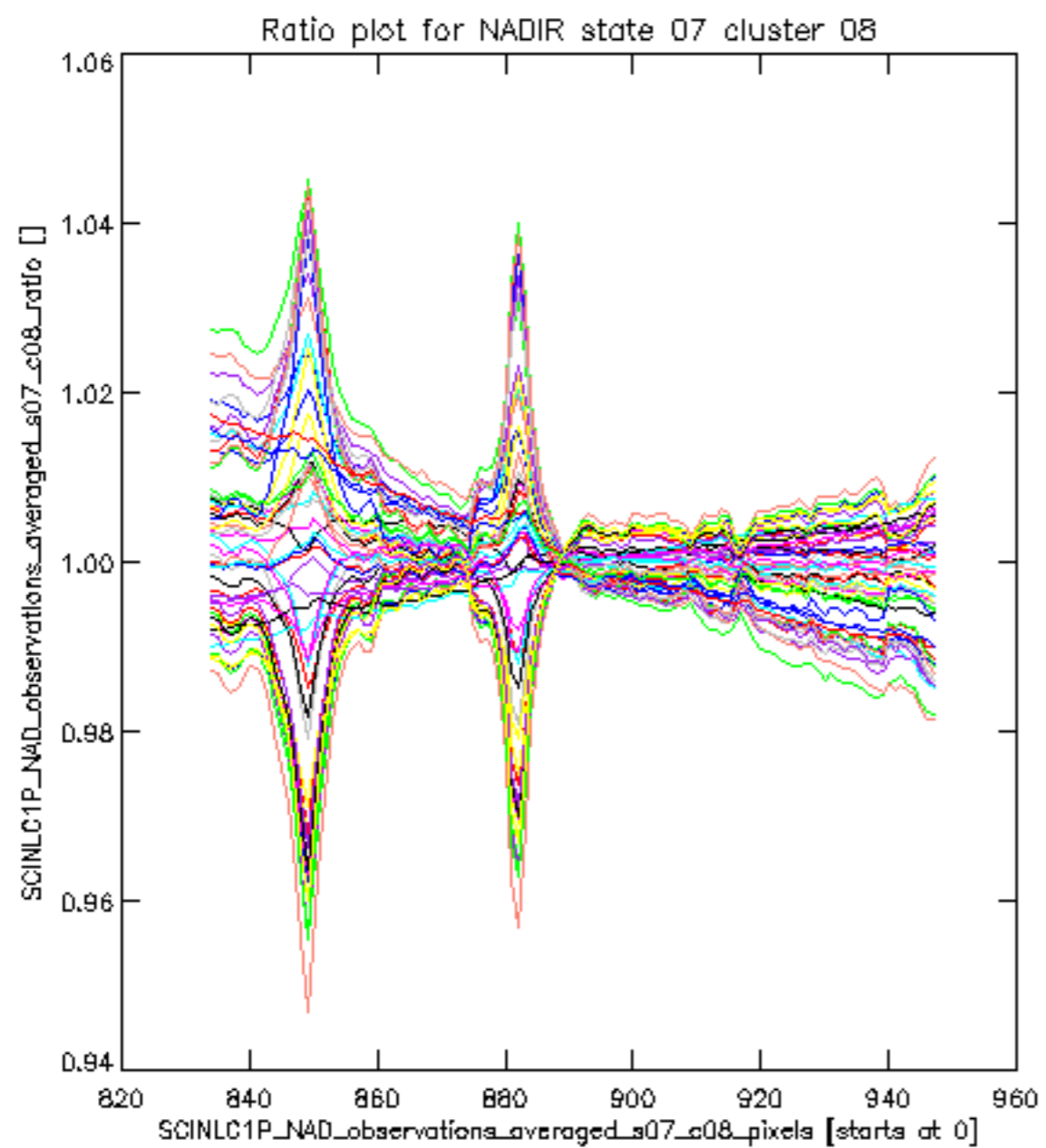


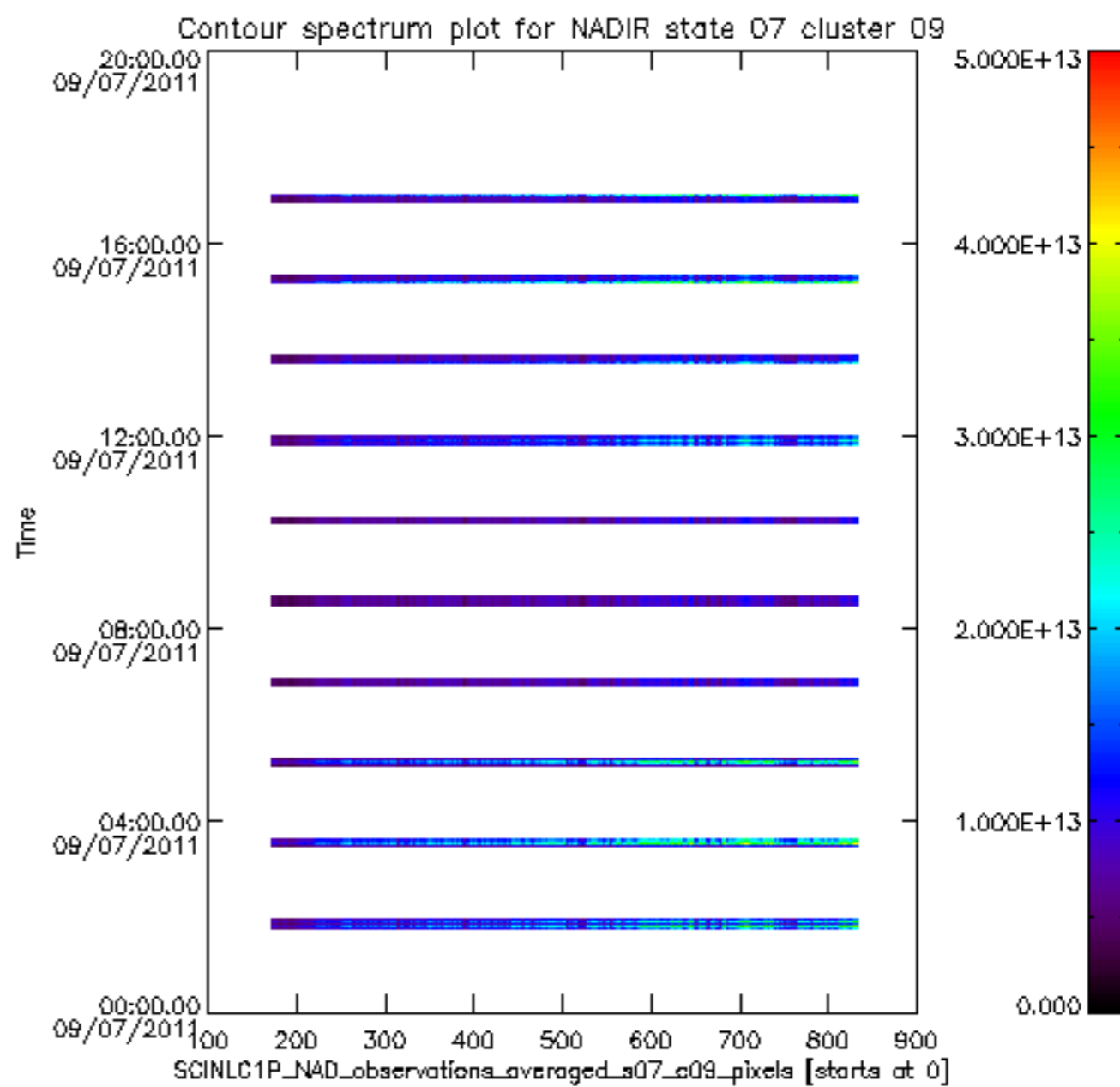
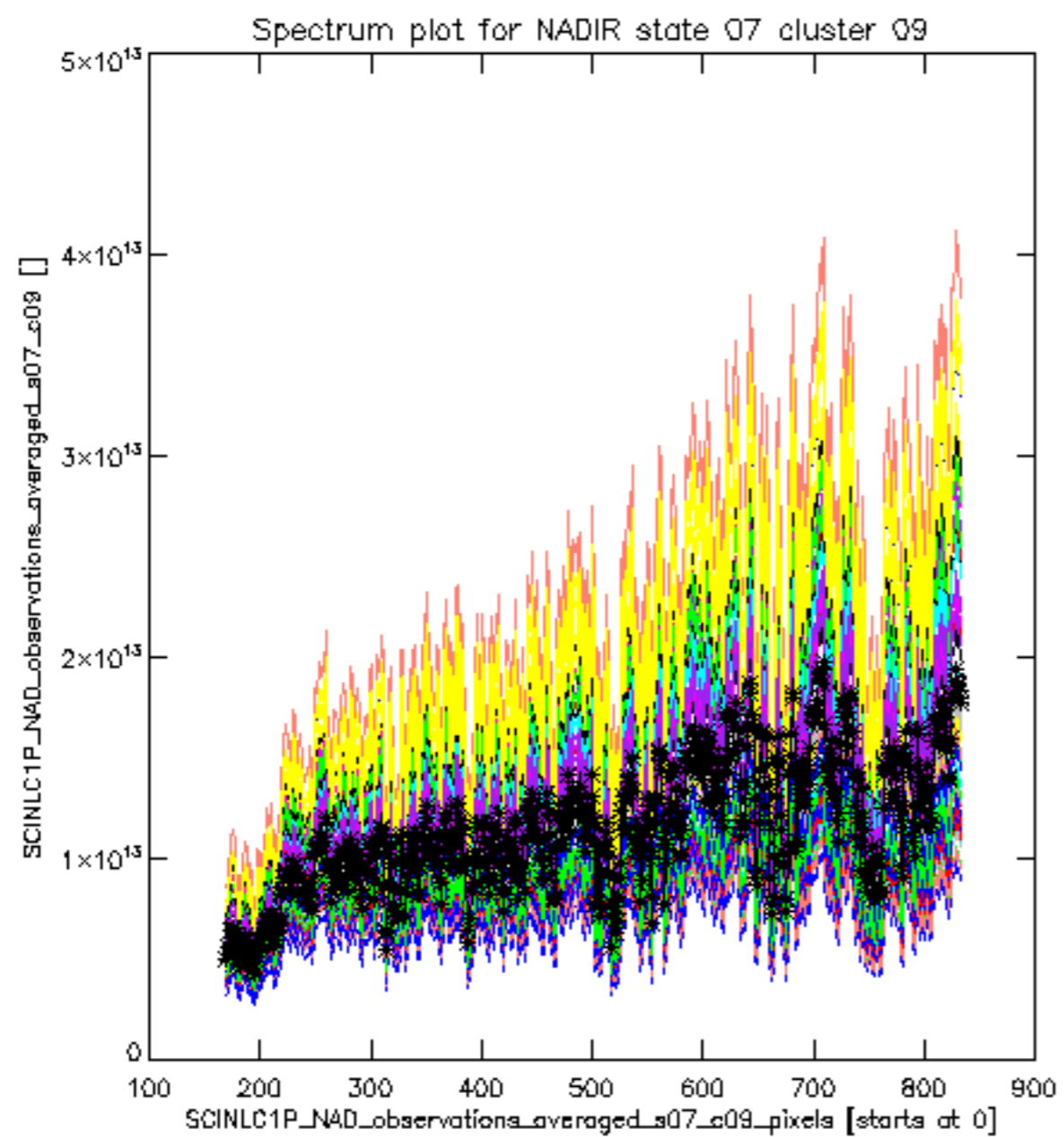


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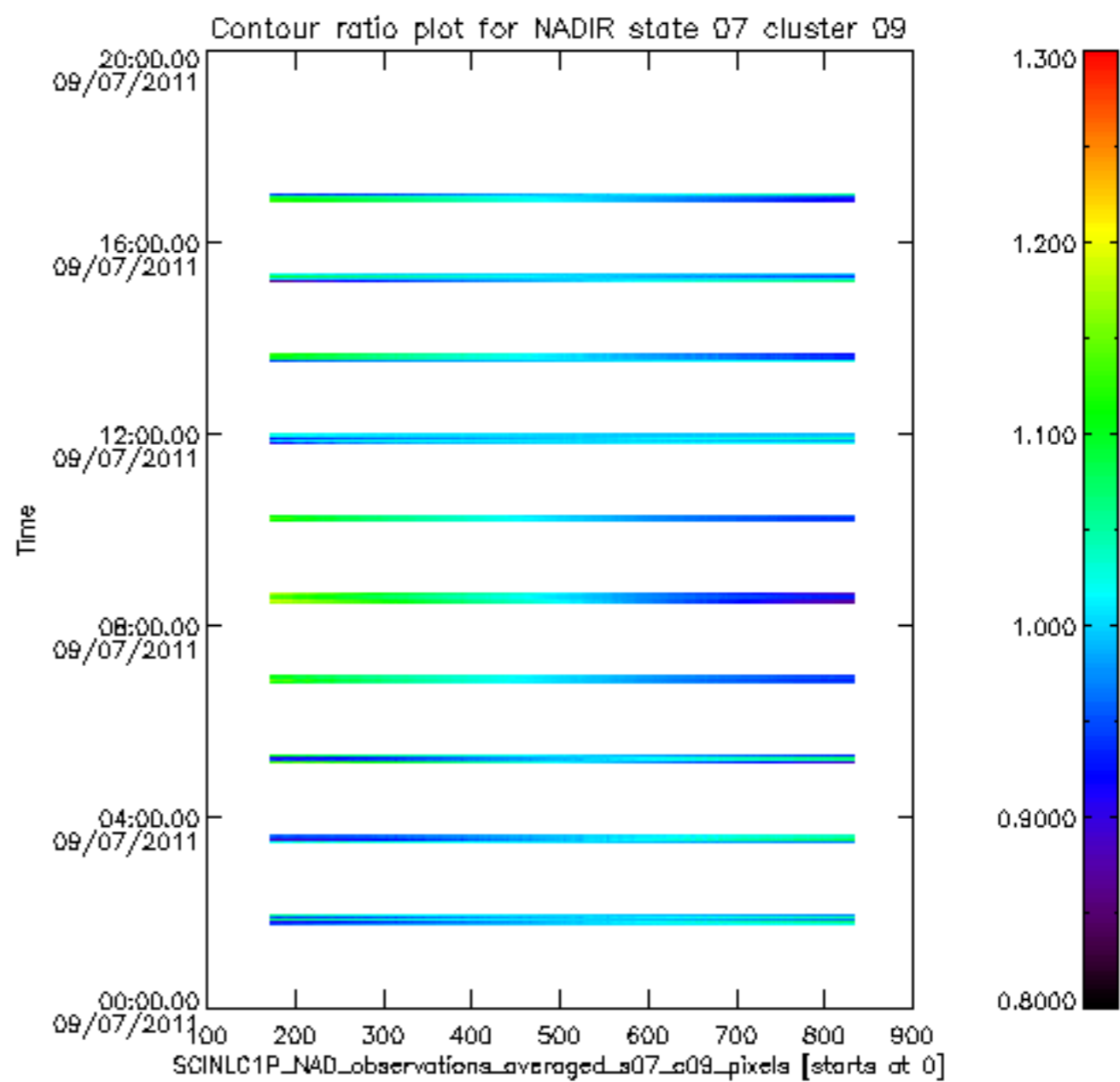
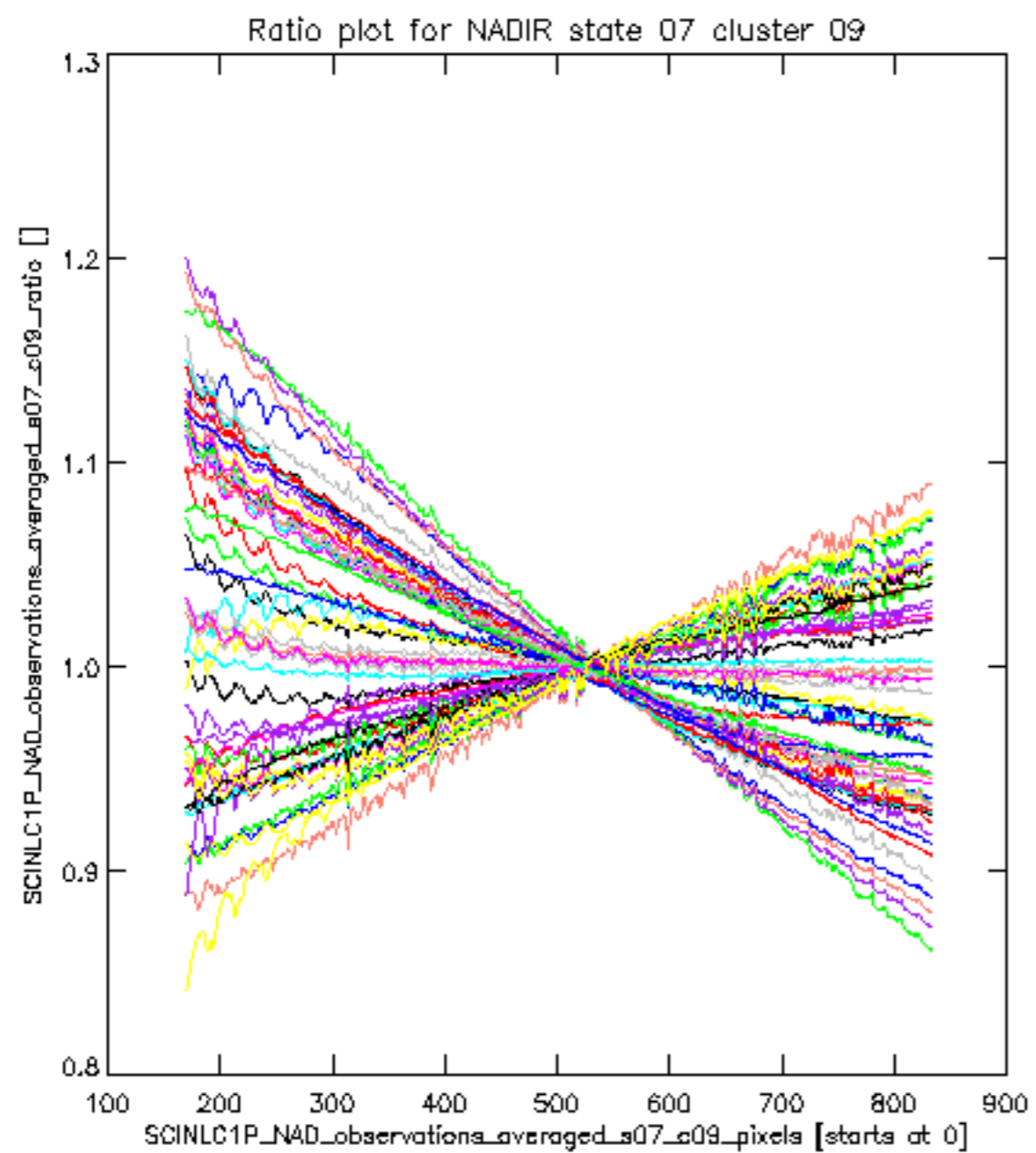


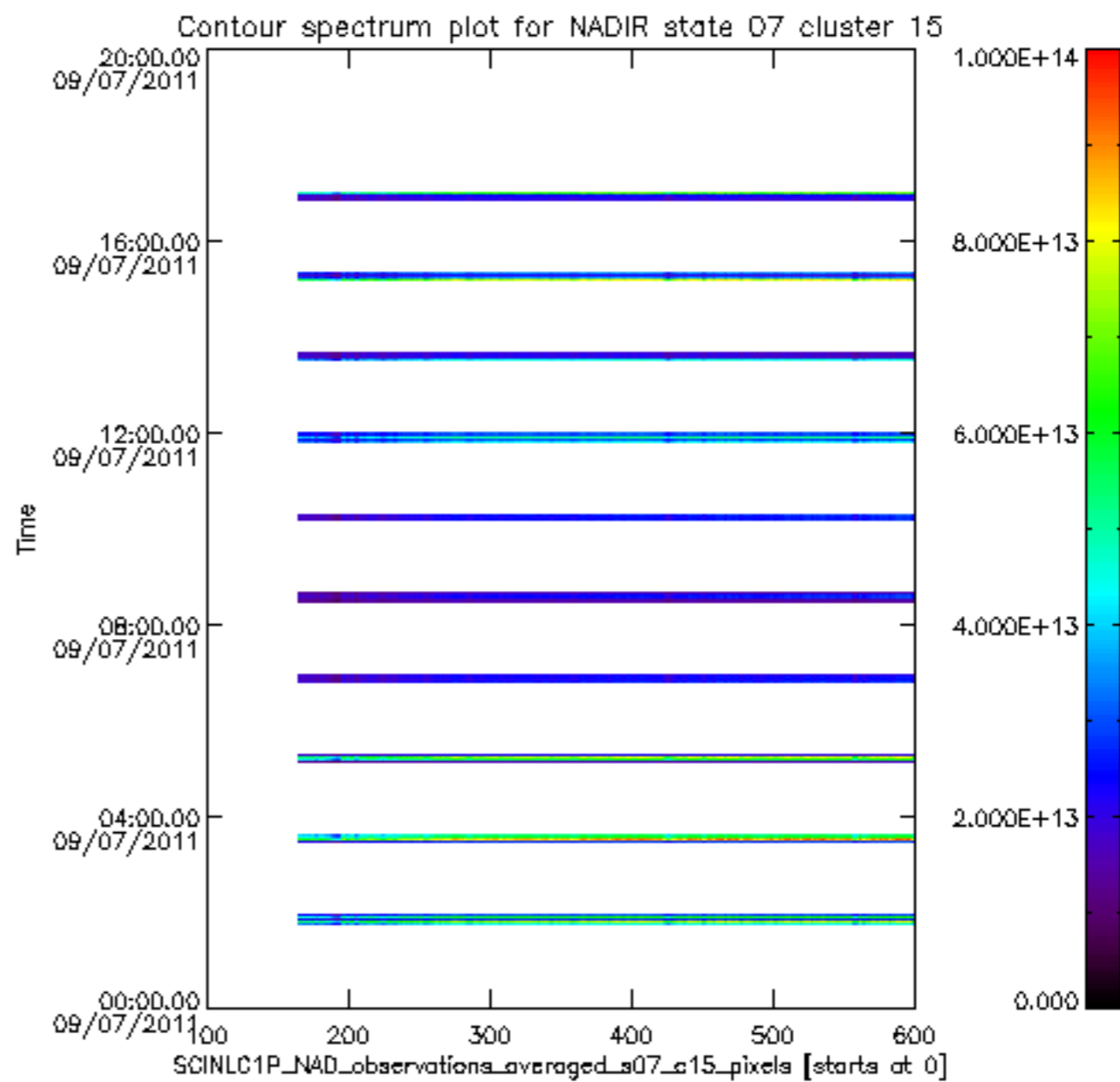
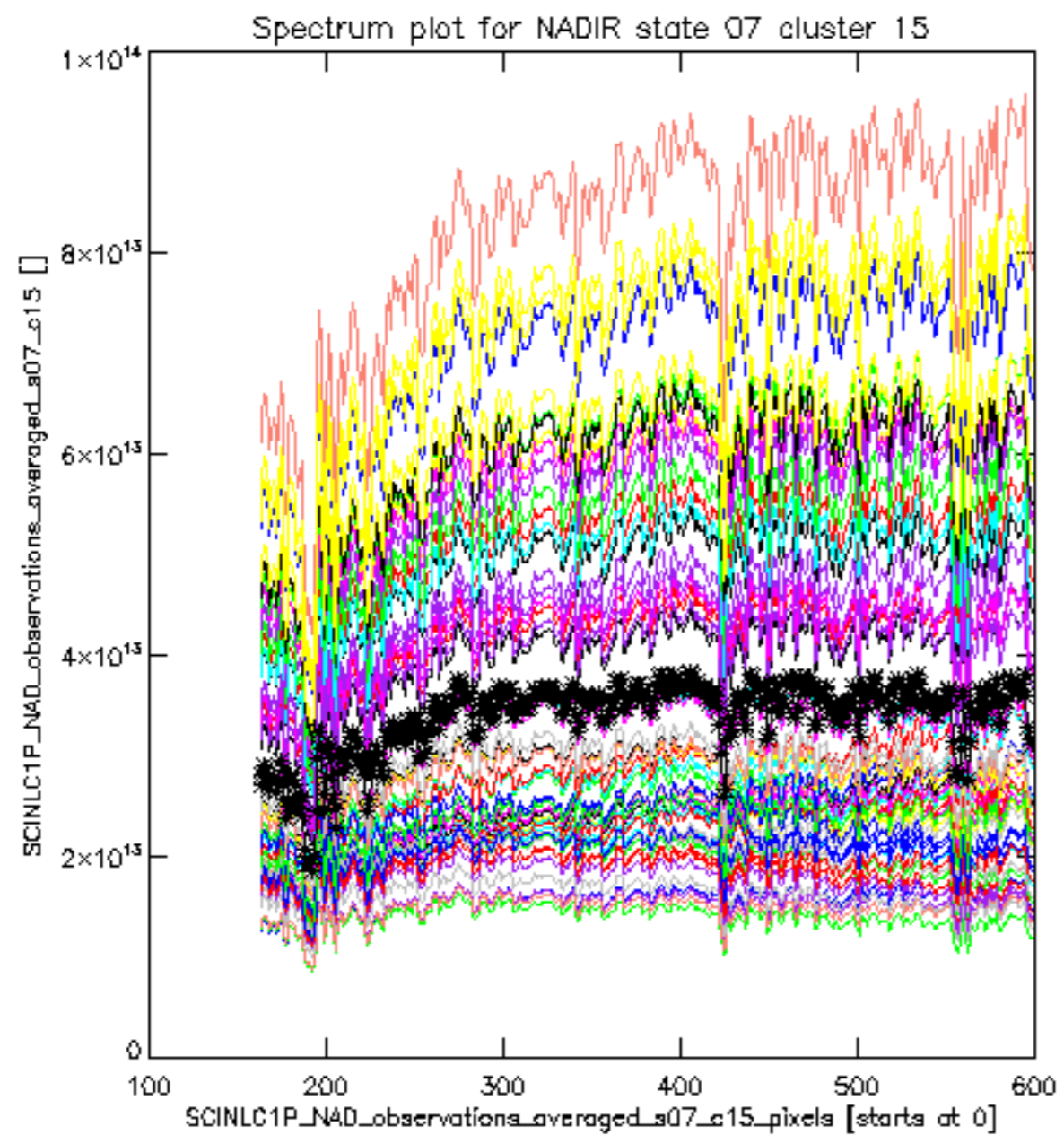


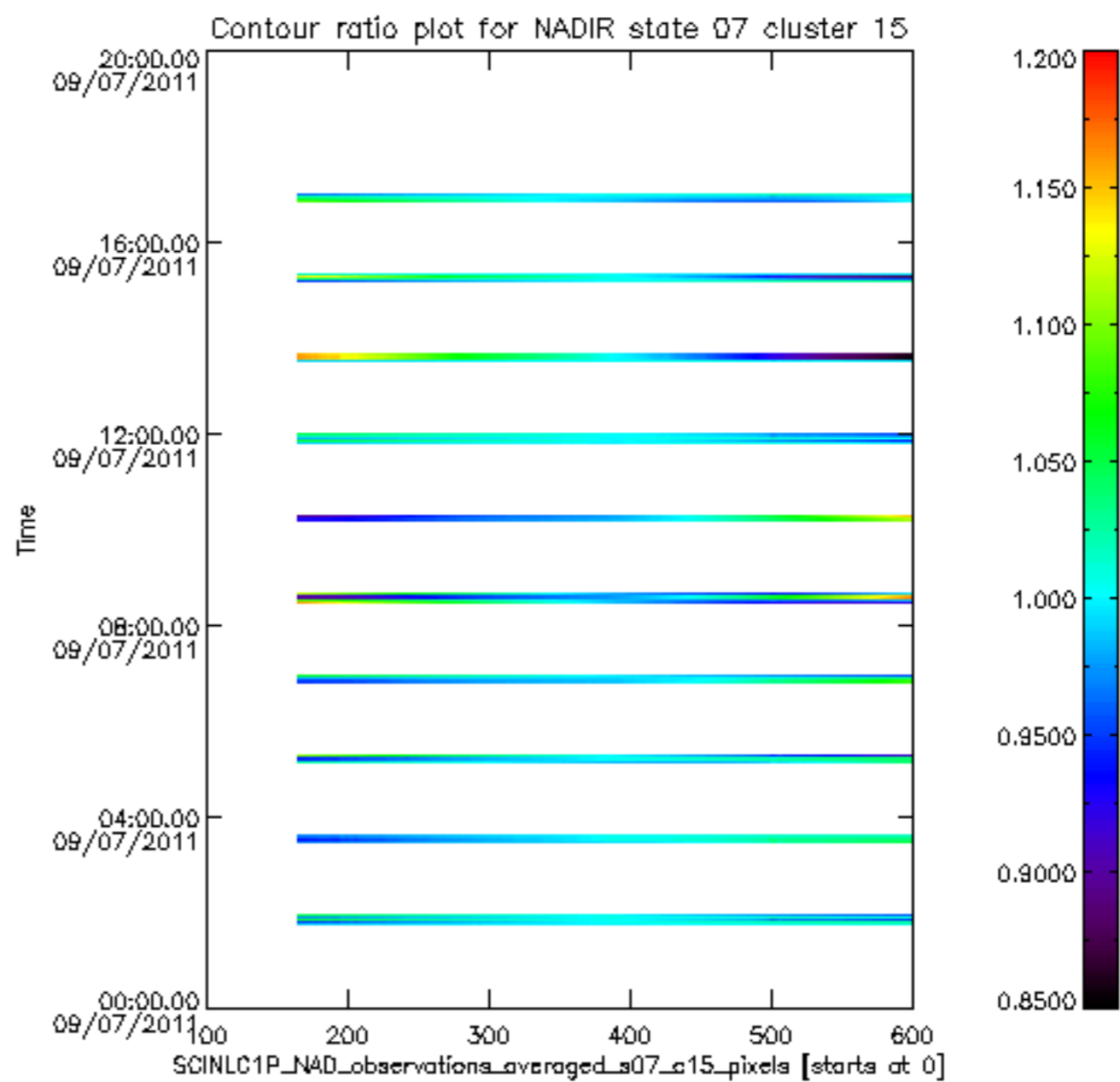
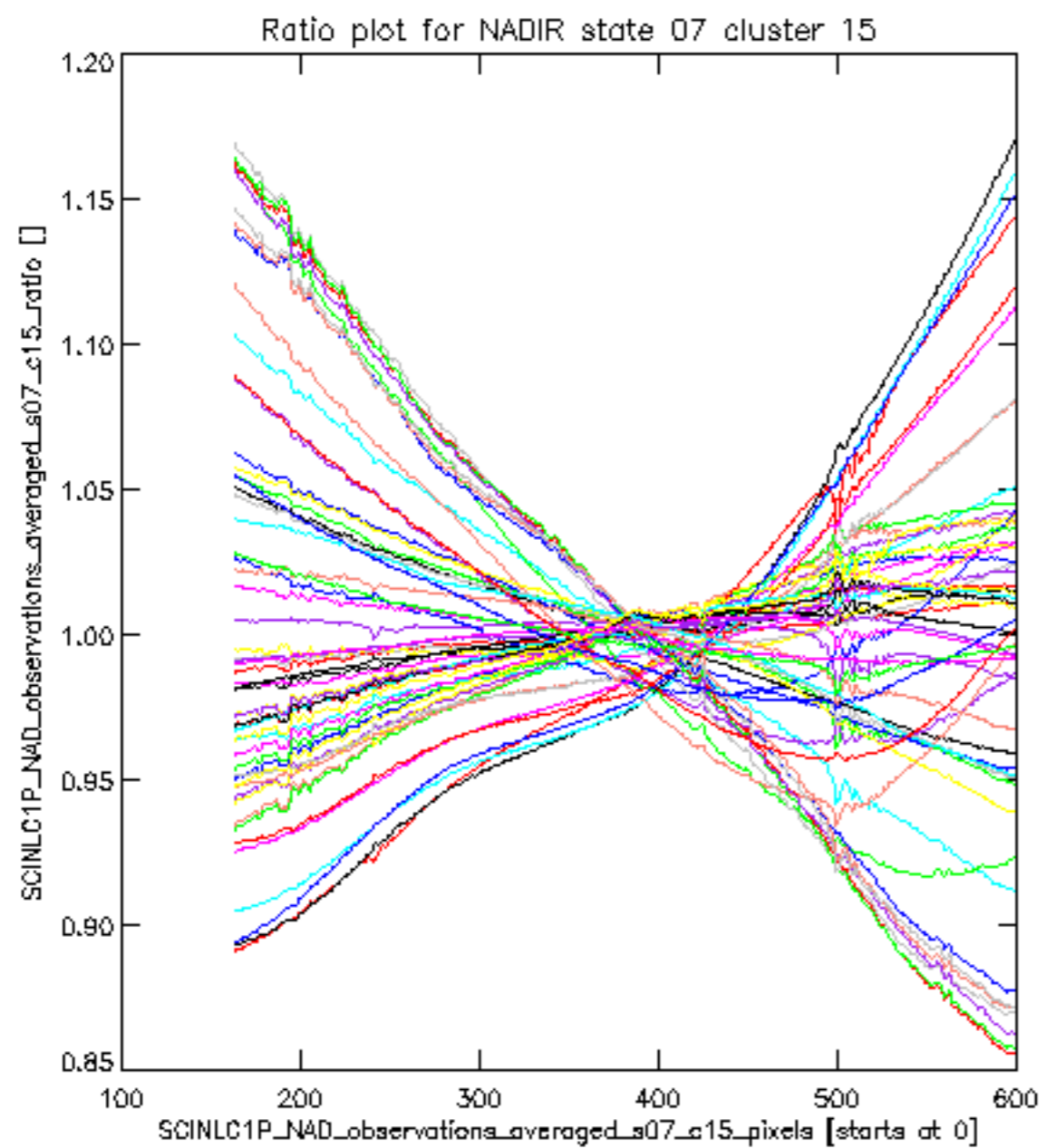




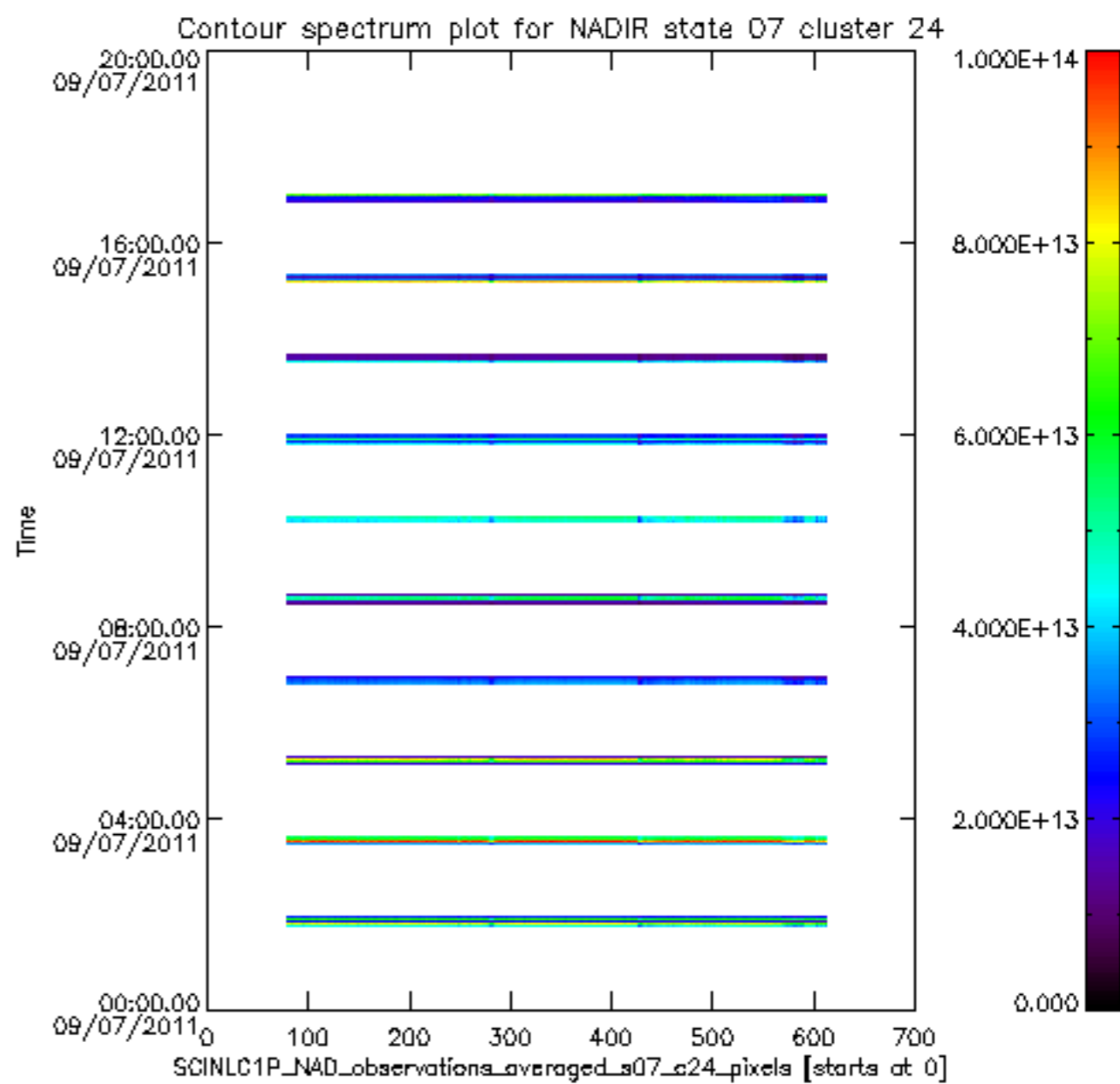
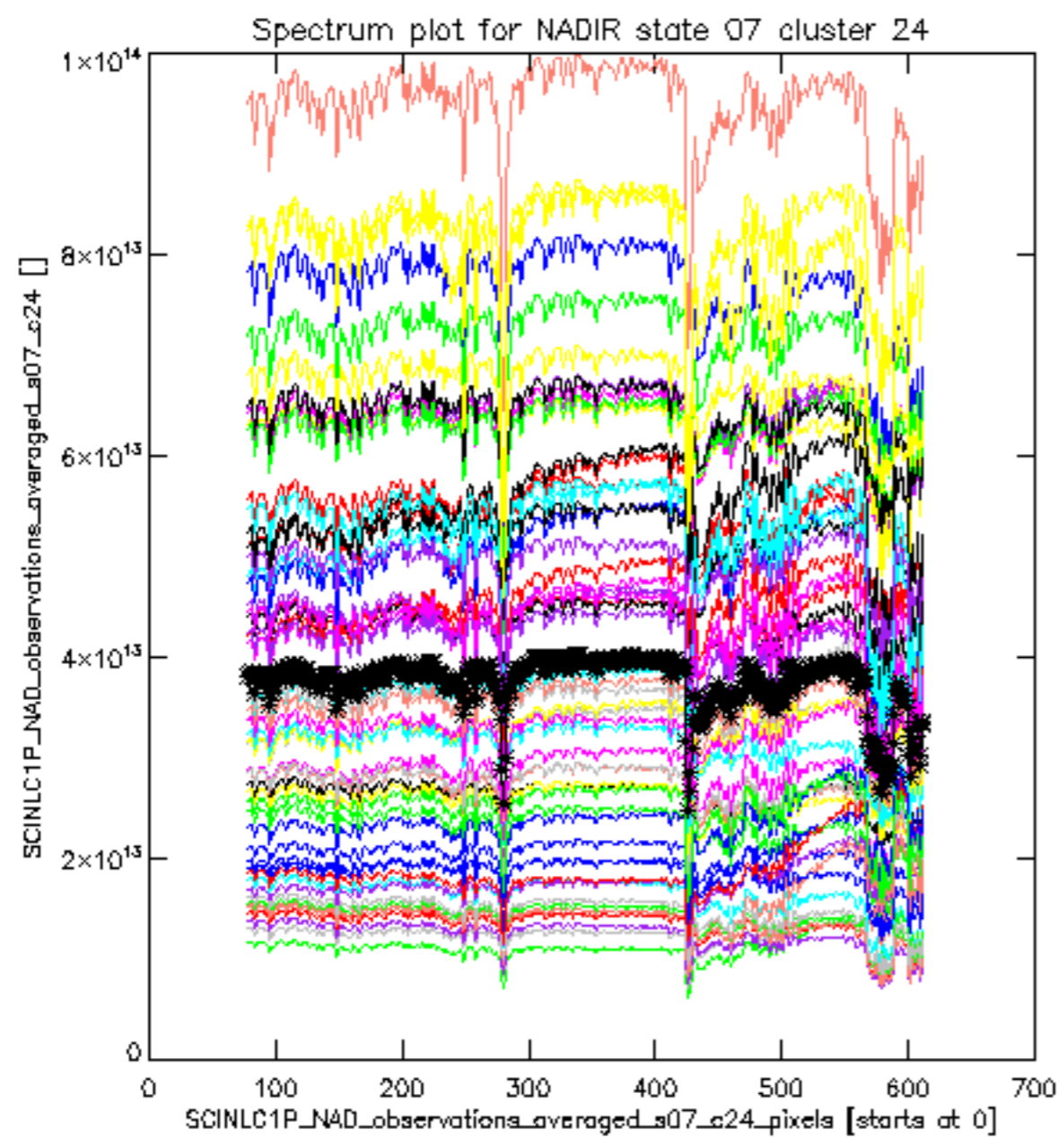


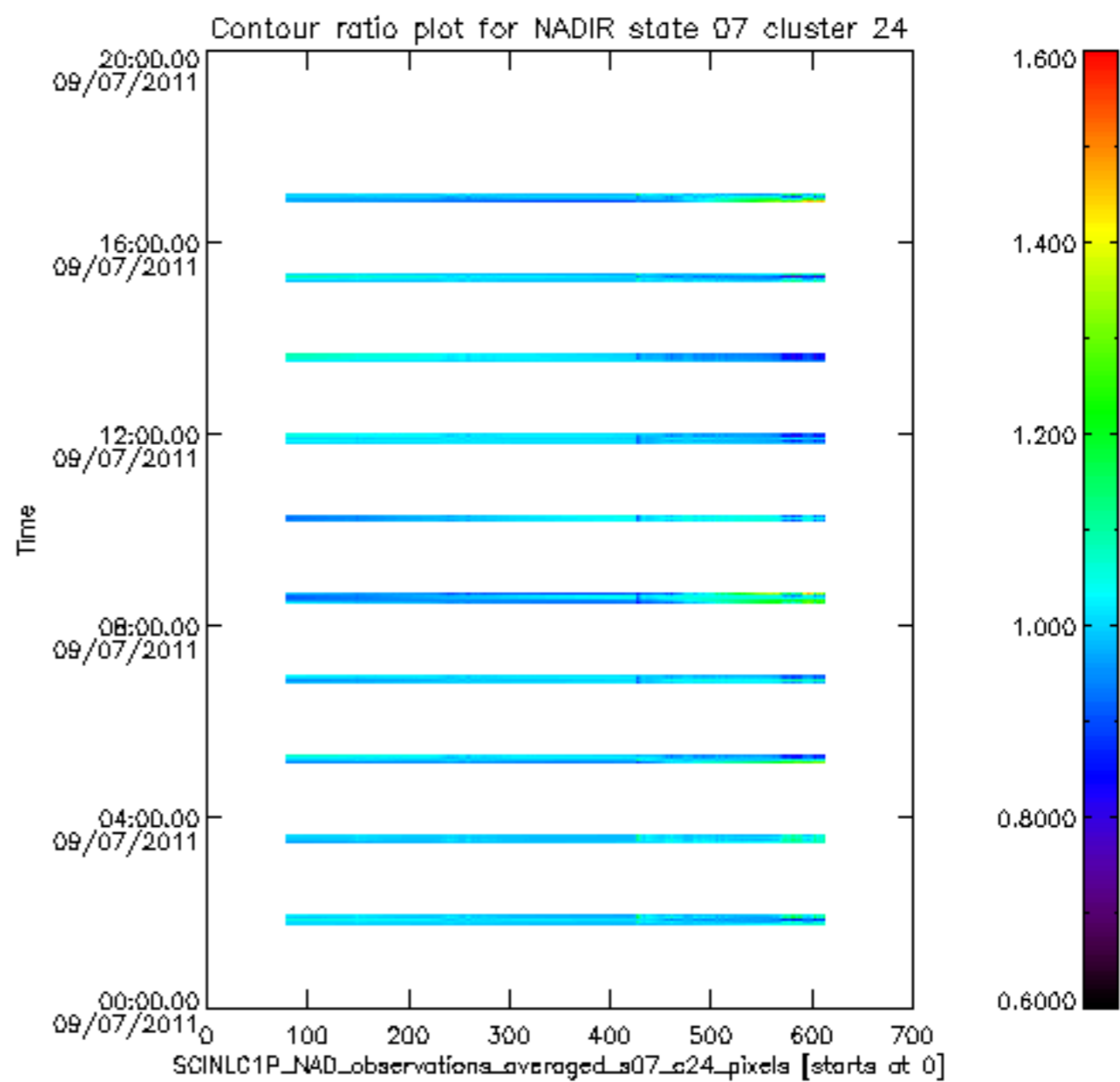
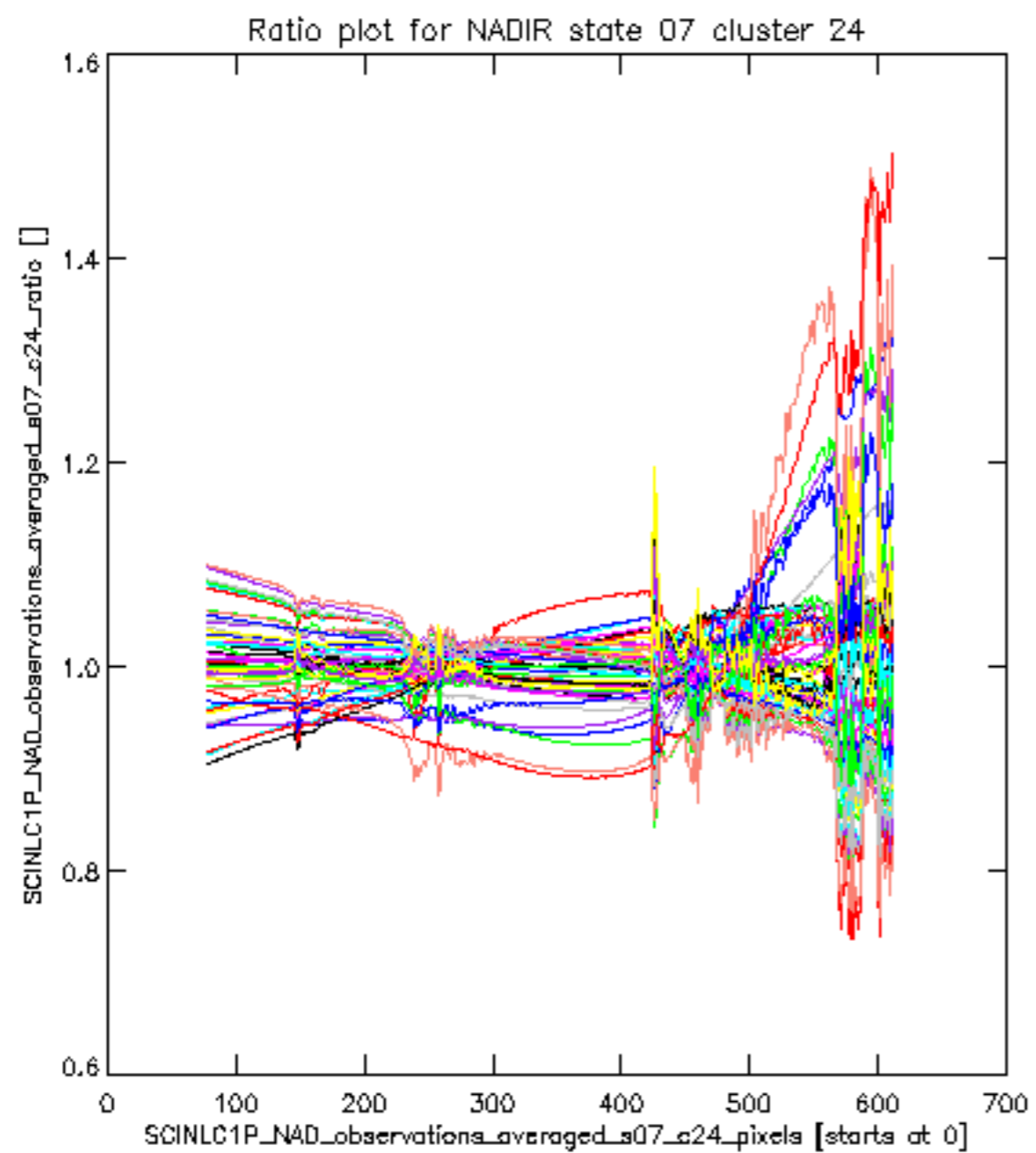




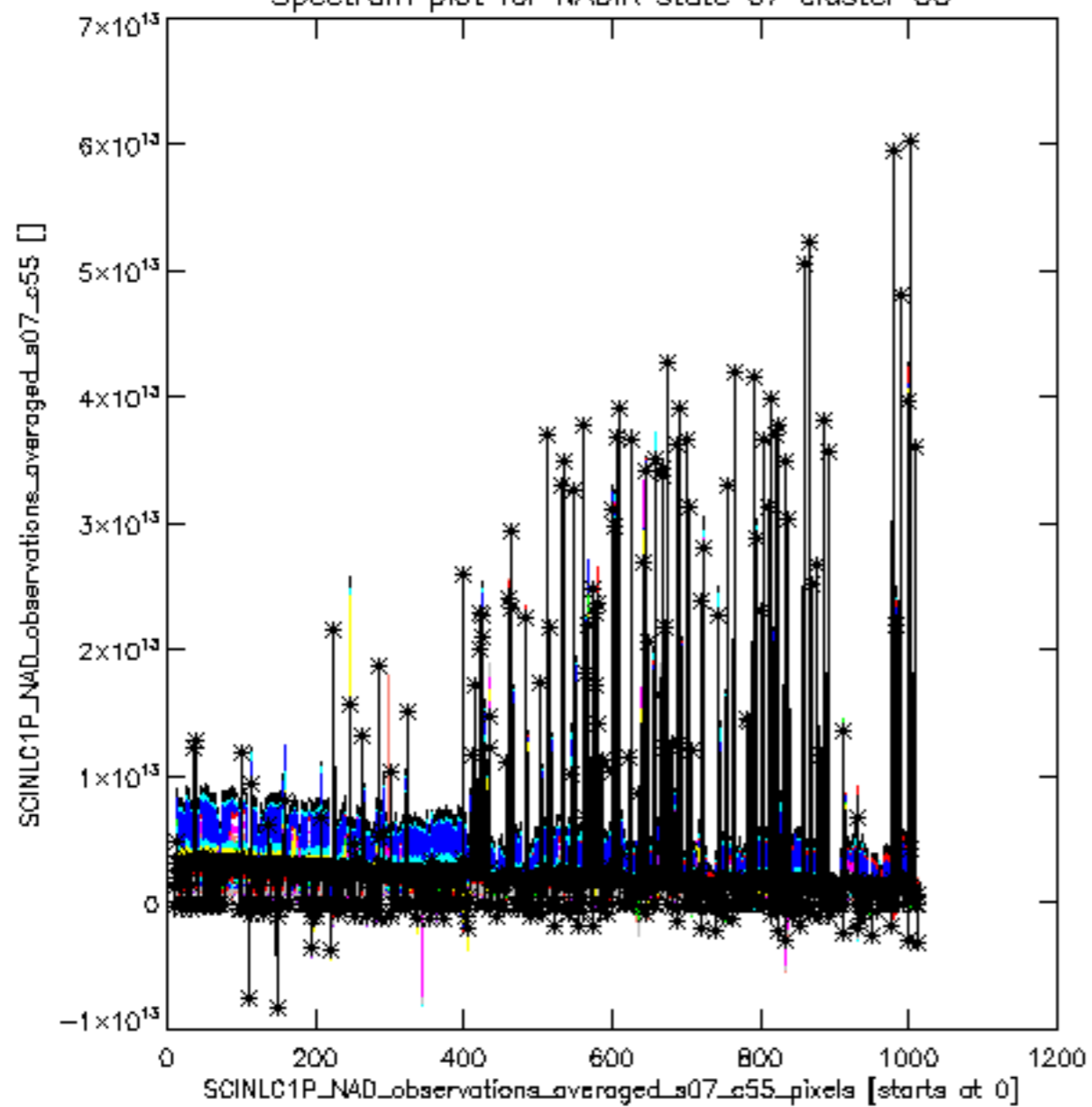








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

