

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	19MAY2011 11:15:28
Data source version	SCIA/7.04-U
Processing scope for products	05MAY2011 00:00:00 to 06MAY2011 00:00:00
Start time of first product within scope	04MAY2011 23:27:15
Stop time of last product within scope	05MAY2011 23:52:12
Total number of level 1 products	14
Number of level 1 products with errors	0
SCIAL1C executable used in processing	scial1c-2.1.73-i686-pc-linux-gnu-gcc-3.3.6
SCIAL1C parameters used in processing	-allcal -type all -cat 1,2,8,10,11,16,19,23 -nadircluster 8,9,15,24,55 -limbcluster 9,15

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	05MAY2011 00:00:25.957	05MAY2011 23:23:05.577
1	NADIR	07	09	N/A	05MAY2011 00:00:25.957	05MAY2011 23:23:05.577
2	NADIR	07	15	N/A	05MAY2011 00:00:25.957	05MAY2011 23:23:05.577
3	NADIR	07	24	N/A	05MAY2011 00:00:25.957	05MAY2011 23:23:05.577
4	NADIR	07	55	N/A	05MAY2011 00:00:25.957	05MAY2011 23:23:05.577
5	LIMB	32	09	~19 km	05MAY2011 02:56:56.786	05MAY2011 23:28:19.620
6	LIMB	32	09	~22 km	05MAY2011 02:56:56.786	05MAY2011 23:28:19.620
7	LIMB	32	09	~25 km	05MAY2011 02:56:56.786	05MAY2011 23:28:19.620
8	LIMB	32	15	~22 km	05MAY2011 02:56:56.786	05MAY2011 23:28:19.620
9	LIMB	32	15	~25 km	05MAY2011 02:56:56.786	05MAY2011 23:28:19.620
10	LIMB	32	15	~35 km	05MAY2011 02:56:56.786	05MAY2011 23:28:19.620

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	#cmlprk	#incmpl_rk	Decont
0	SCI_NLC_1CUDPA20110504_231208_000060083102_00131_47990_1109.N1	04MAY2011 23:27:15	05MAY2011 00:28:36	0	35	0	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110505_005220_000060113102_00132_47991_1105.N1	05MAY2011 01:08:24	05MAY2011 02:08:37	0	34	0	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110505_023235_000060083102_00133_47992_1106.N1	05MAY2011 02:38:59	05MAY2011 03:49:28	0	36	30	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110505_041247_000060113102_00134_47993_1118.N1	05MAY2011 04:19:12	05MAY2011 05:29:27	0	35	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110505_055302_000060083102_00135_47994_1119.N1	05MAY2011 05:59:26	05MAY2011 07:10:17	0	34	26	0	0	2	0	0	
5	SCI_NLC_1CUDPA20110505_073314_000060113102_00136_47995_1136.N1	05MAY2011 07:39:40	05MAY2011 08:50:30	0	34	26	0	0	2	0	0	

6	SCI_NLC_1CUDPA20110505_105342_000060113102_00138_47997_1135.N1	05MAY2011 11:00:07	05MAY2011 12:10:57	0	34	26	0	0	2	0	0
7	SCI_NLC_1CUDPA20110505_123357_000060083102_00139_47998_1134.N1	05MAY2011 12:40:21	05MAY2011 13:51:10	0	34	26	0	0	2	0	0
8	SCI_NLC_1CUDPA20110505_141409_000060113102_00140_47999_1130.N1	05MAY2011 14:20:34	05MAY2011 15:31:24	0	34	26	0	0	2	0	0
9	SCI_NLC_1CUDPA20110505_155424_000060083102_00141_48000_1137.N1	05MAY2011 16:00:48	05MAY2011 17:11:17	0	36	30	0	0	1	0	0
10	SCI_NLC_1CUDPA20110505_173436_000060113102_00142_48001_1140.N1	05MAY2011 17:41:02	05MAY2011 18:51:27	0	35	31	0	1	1	0	0
11	SCI_NLC_1CUDPA20110505_191451_000060083102_00143_48002_1133.N1	05MAY2011 19:21:16	05MAY2011 20:31:55	0	36	30	0	1	1	0	0
12	SCI_NLC_1CUDPA20110505_205503_000060113102_00144_48003_1124.N1	05MAY2011 21:01:29	05MAY2011 22:11:44	0	35	31	0	0	1	0	0
13	SCI_NLC_1CUDPA20110505_223518_000060083102_00145_48004_1120.N1	05MAY2011 22:41:43	05MAY2011 23:52:12	0	36	30	0	0	1	0	0

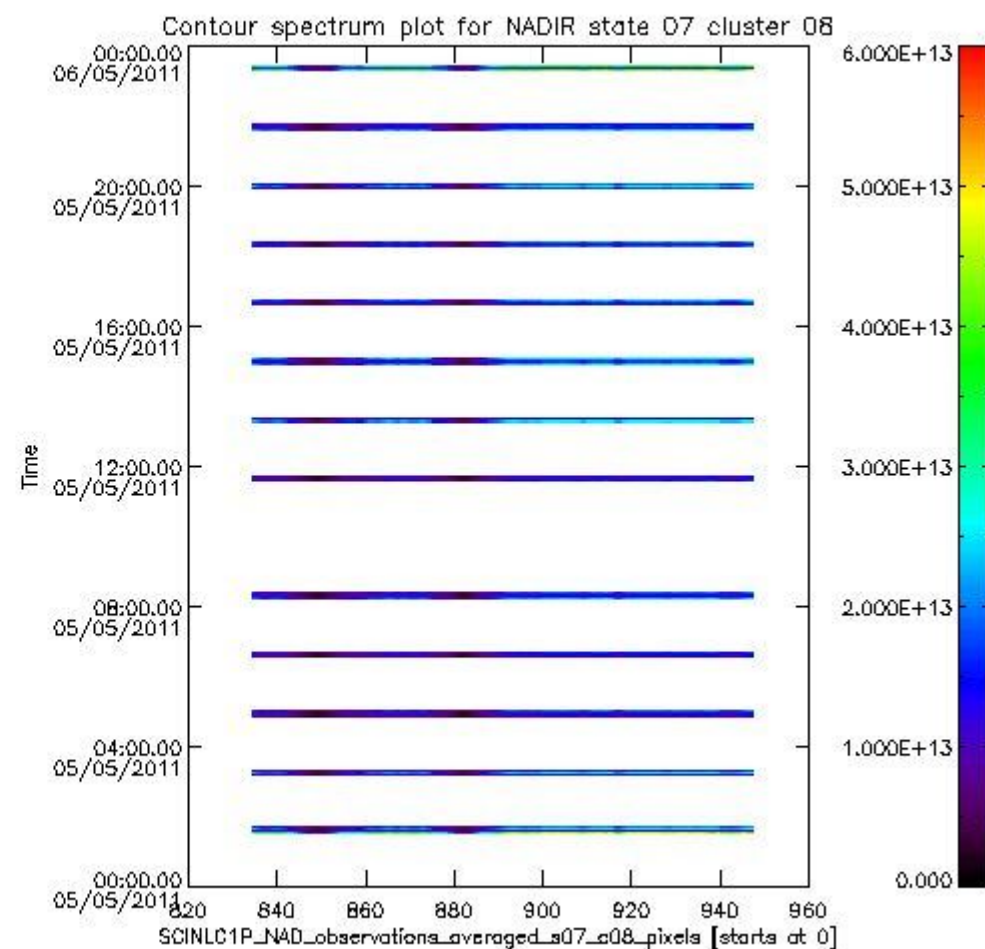
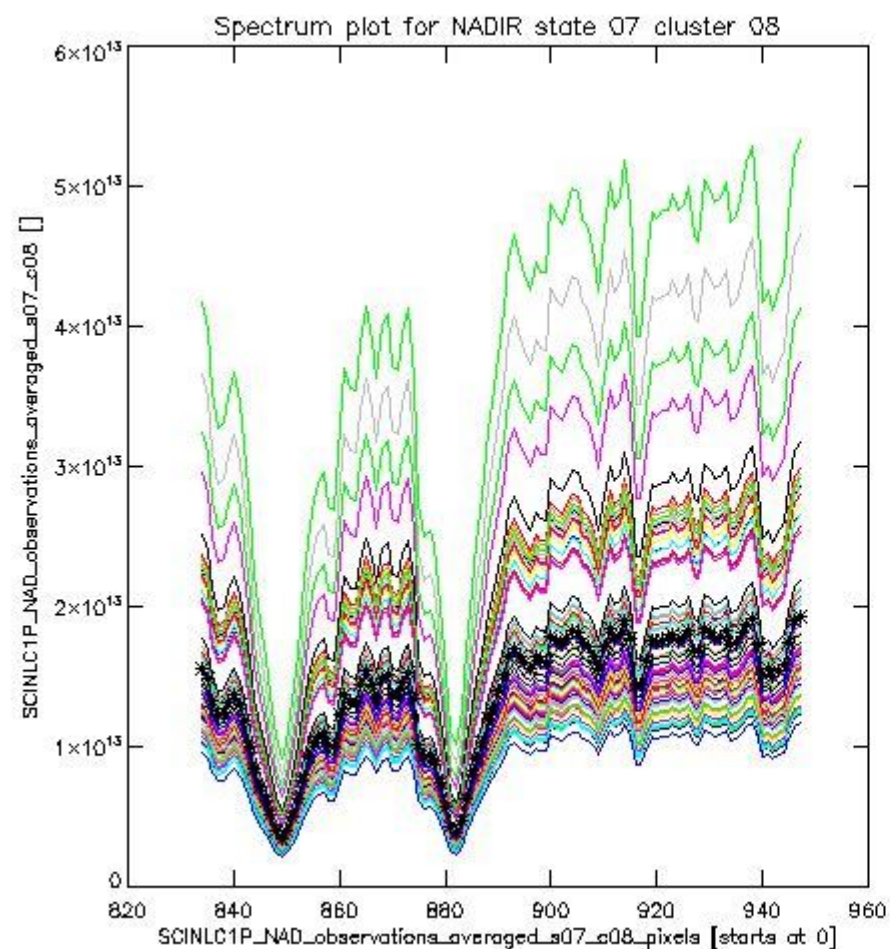
1.2 Source packet monitoring

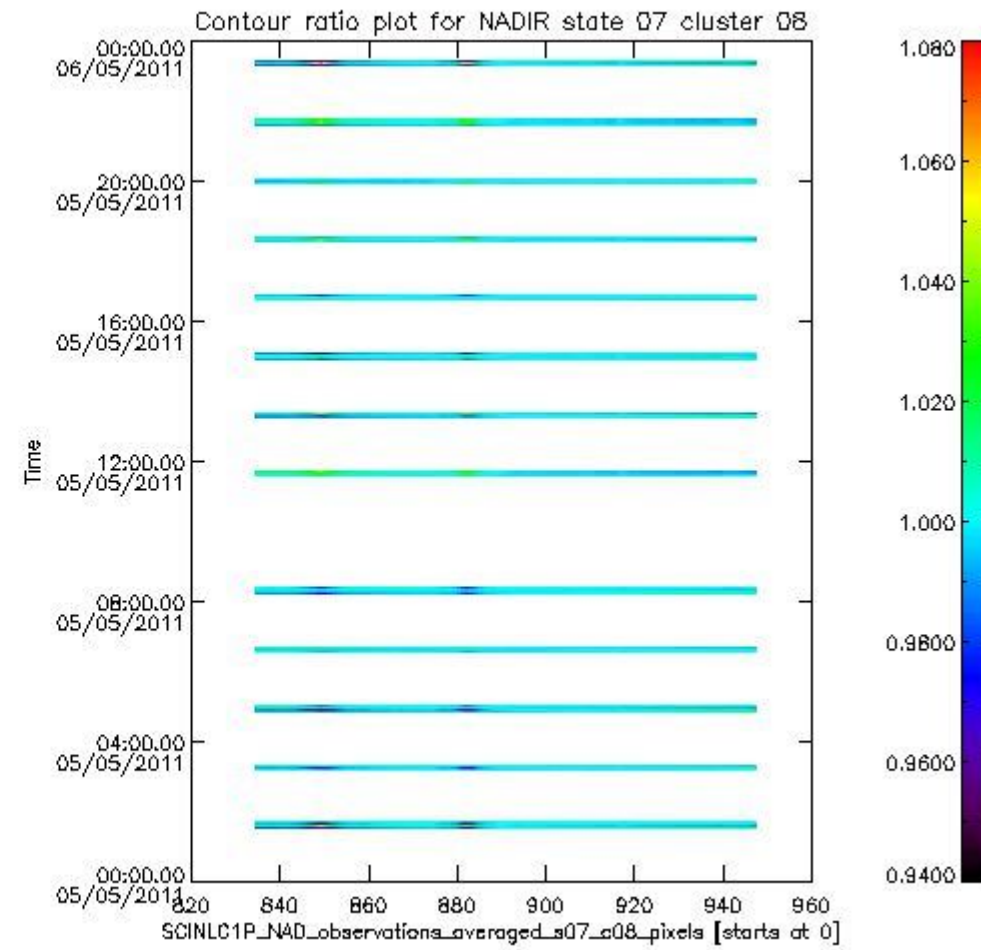
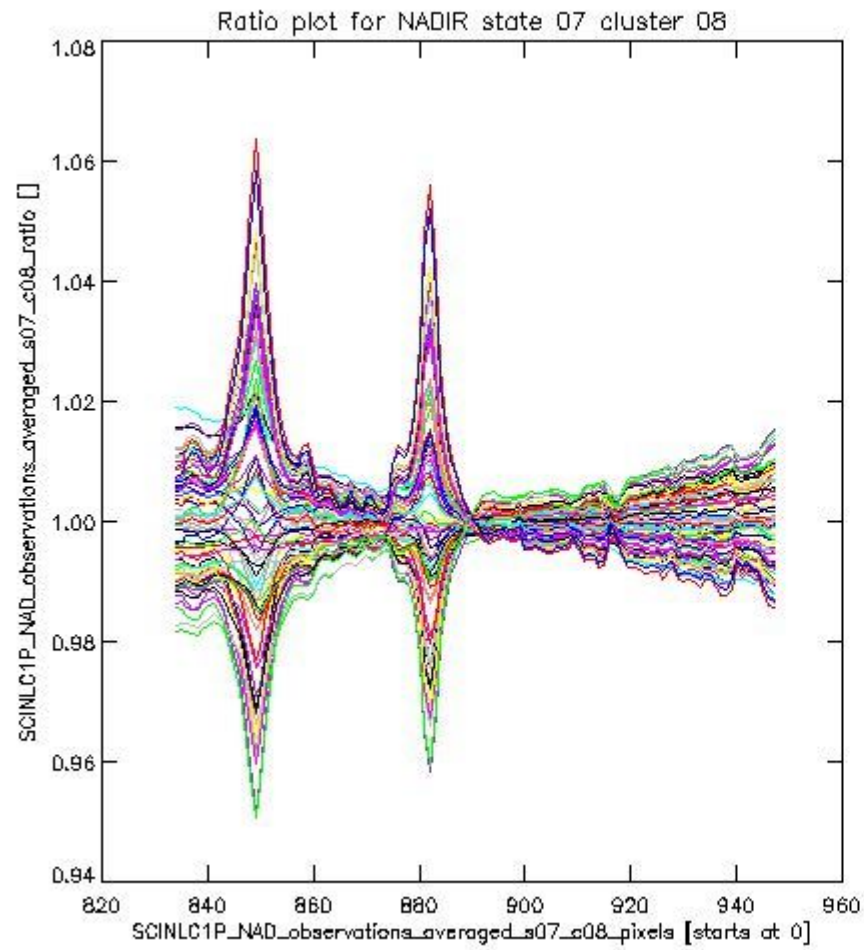
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

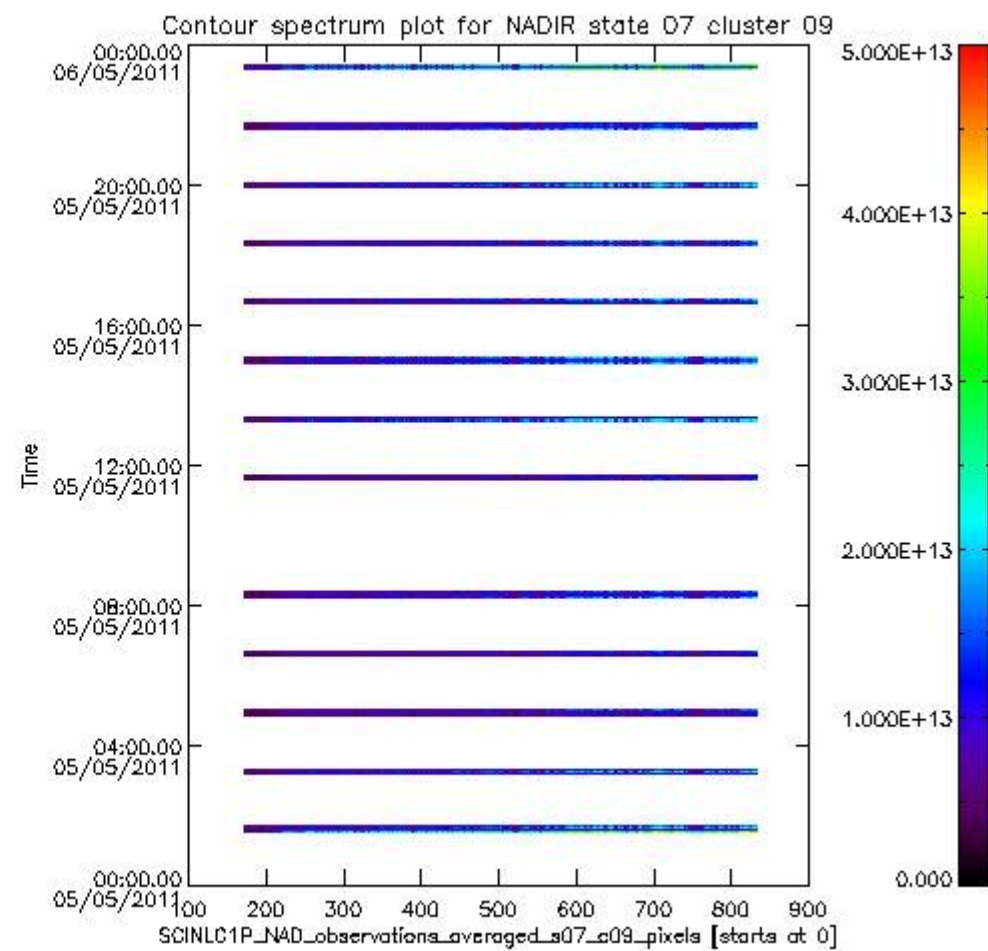
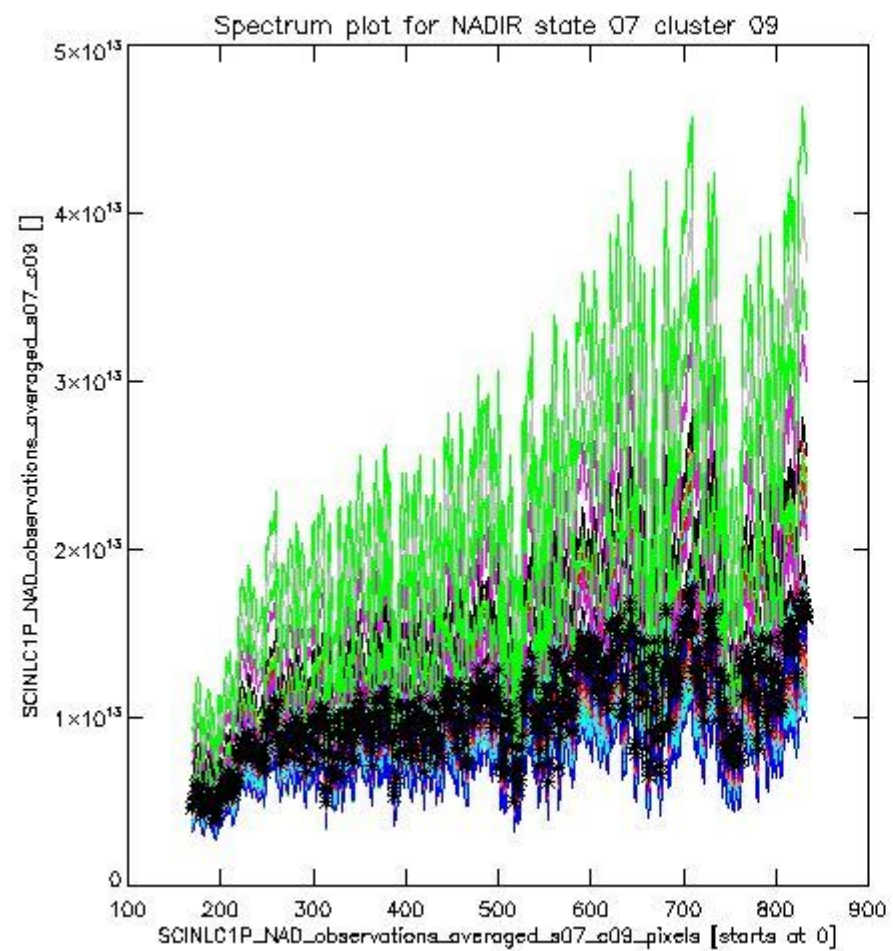
Item	Value
Start time of first sample	05MAY2011 00:00:25.957
Start time of last sample	05MAY2011 23:23:05.577
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	03MAY2011 22:57:23.101
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



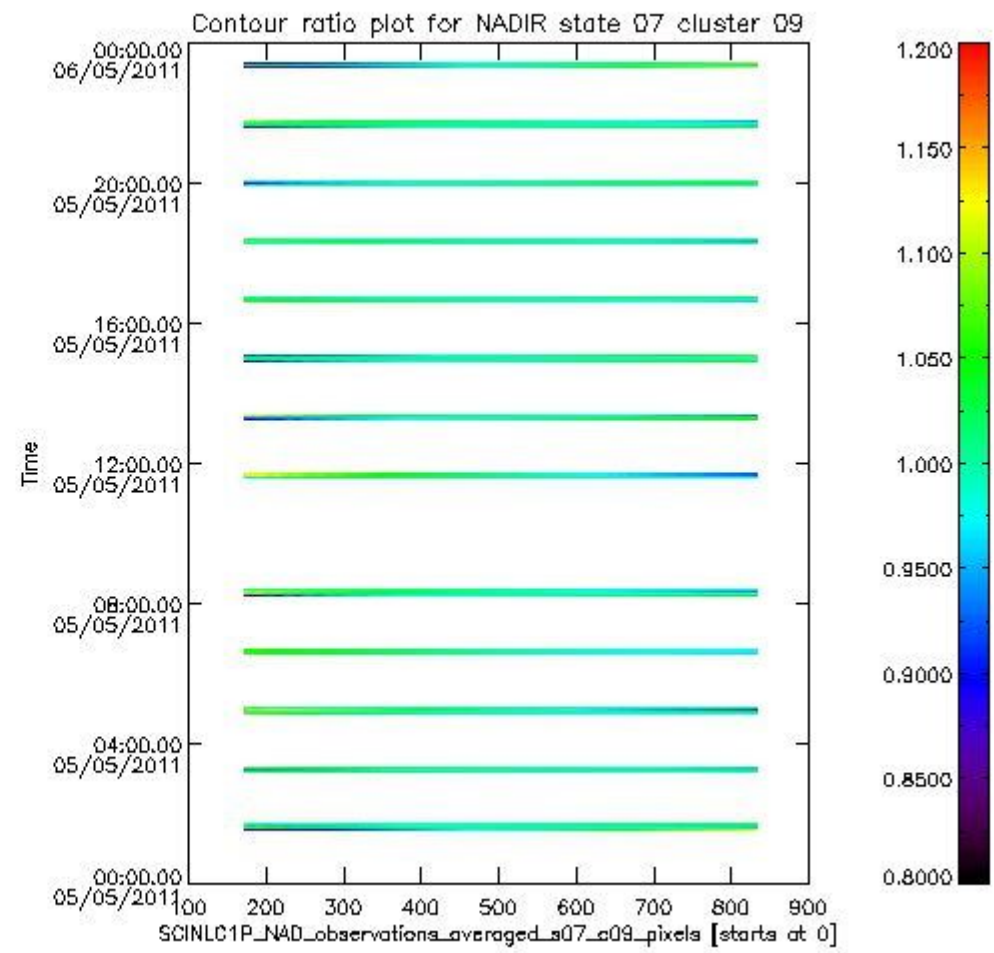
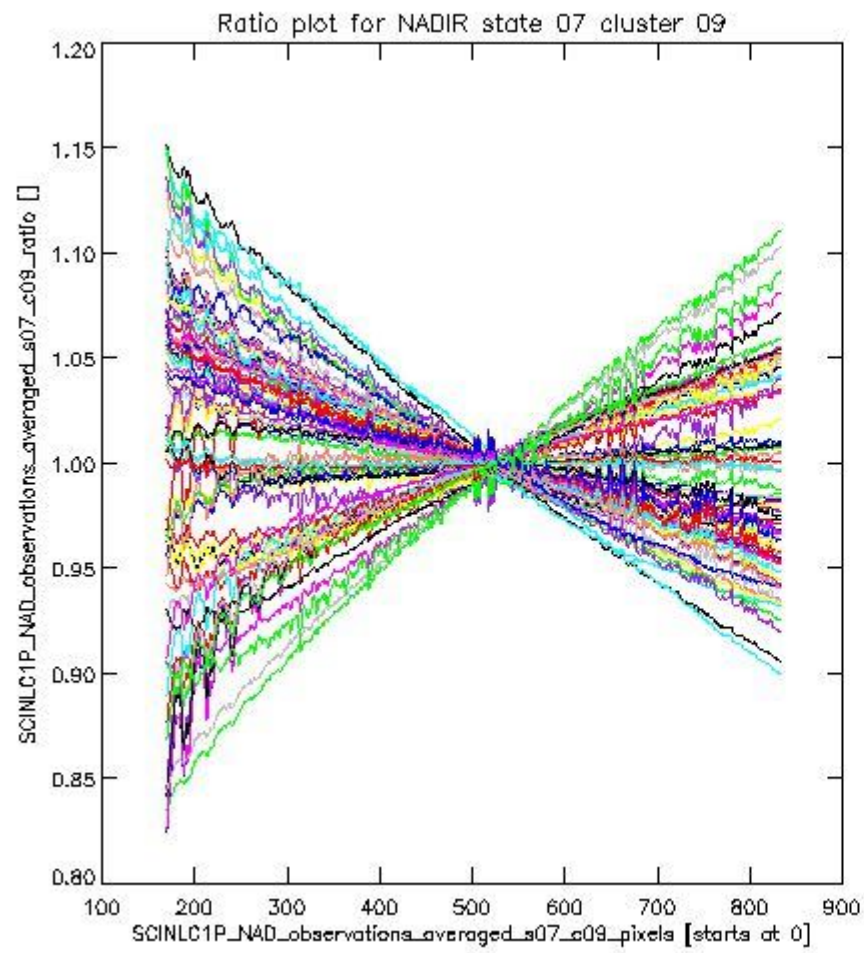


1.2.2 NADIR state 07 cluster 09 The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	05MAY2011 00:00:25.957
Start time of last sample	05MAY2011 23:23:05.577
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	03MAY2011 22:57:23.101
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



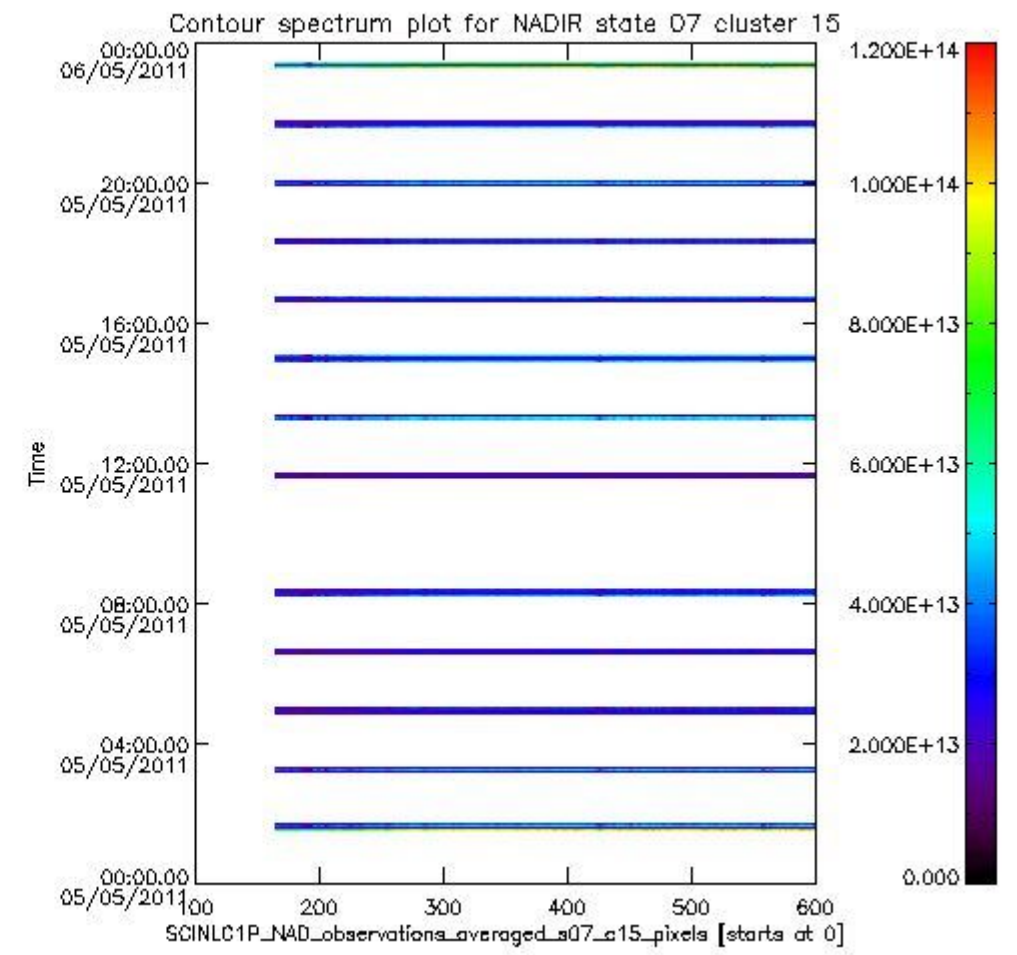
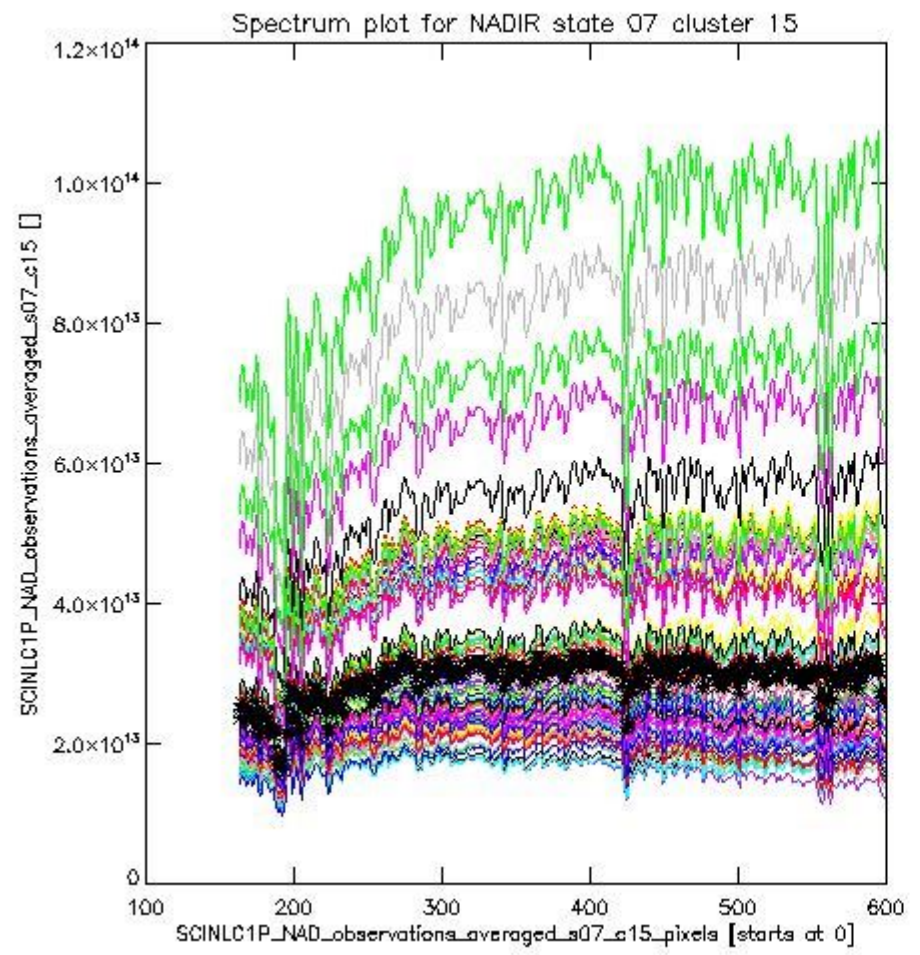
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110505_2.PNG



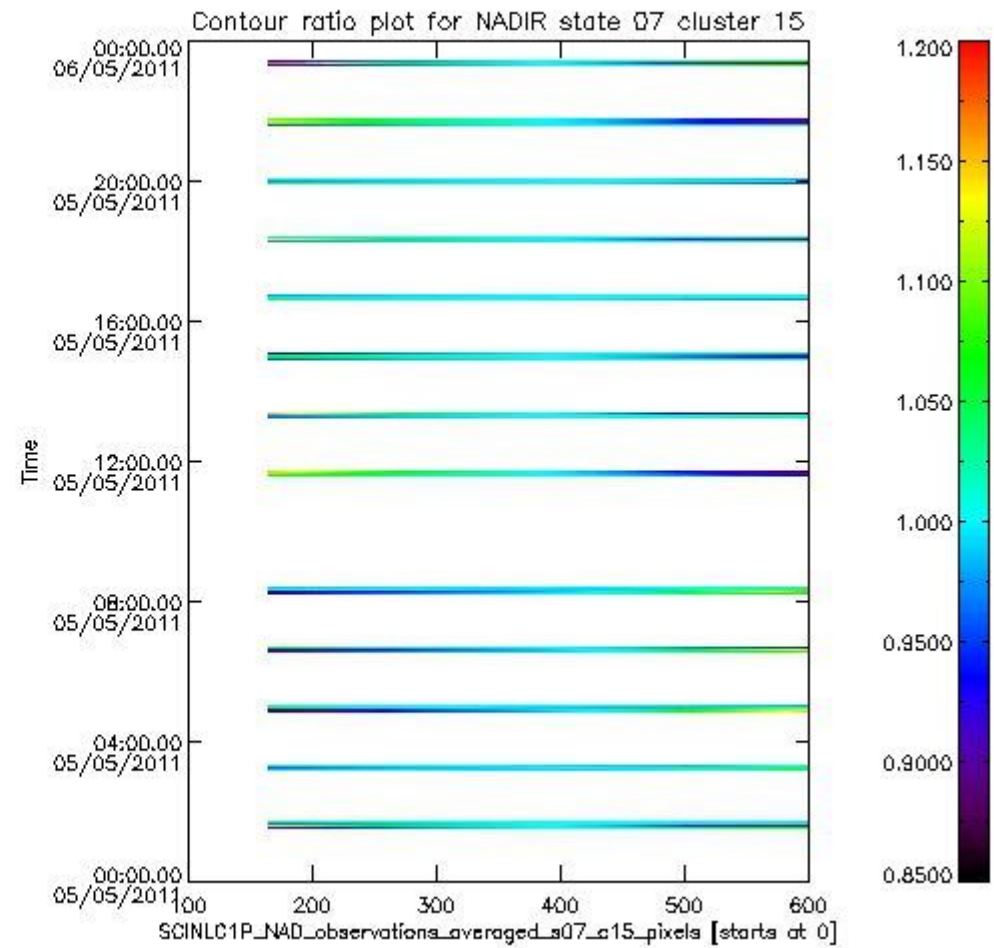
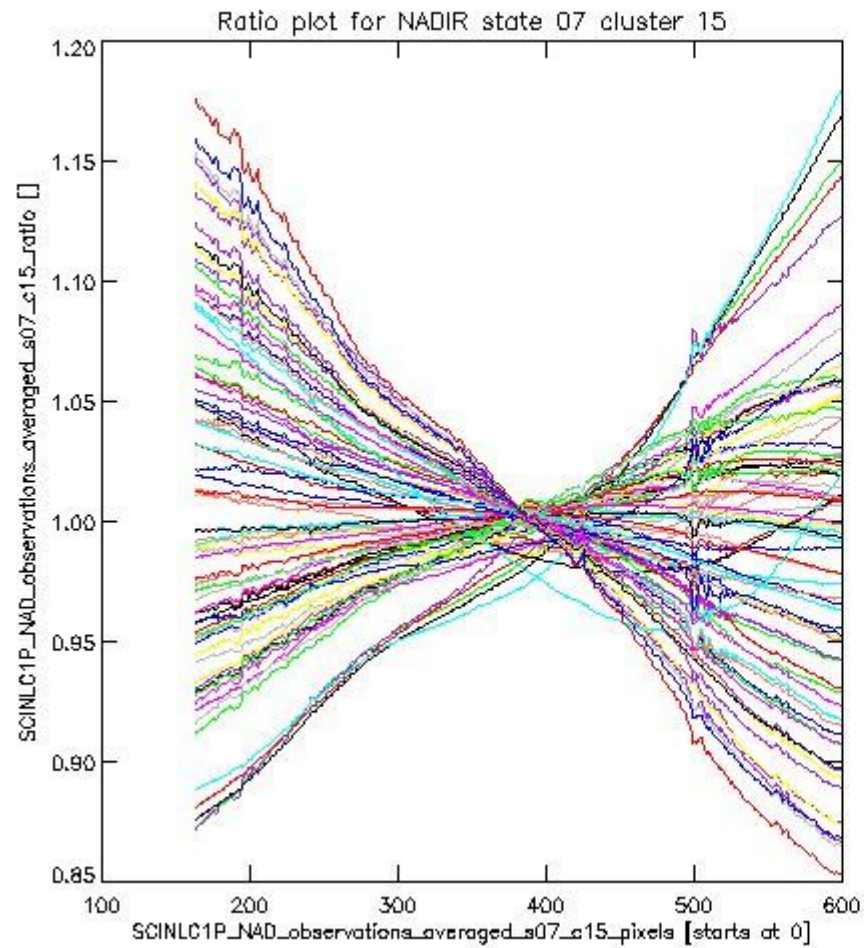
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110505_3.PNG

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	05MAY2011 00:00:25.957
Start time of last sample	05MAY2011 23:23:05.577
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	03MAY2011 22:57:23.101
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



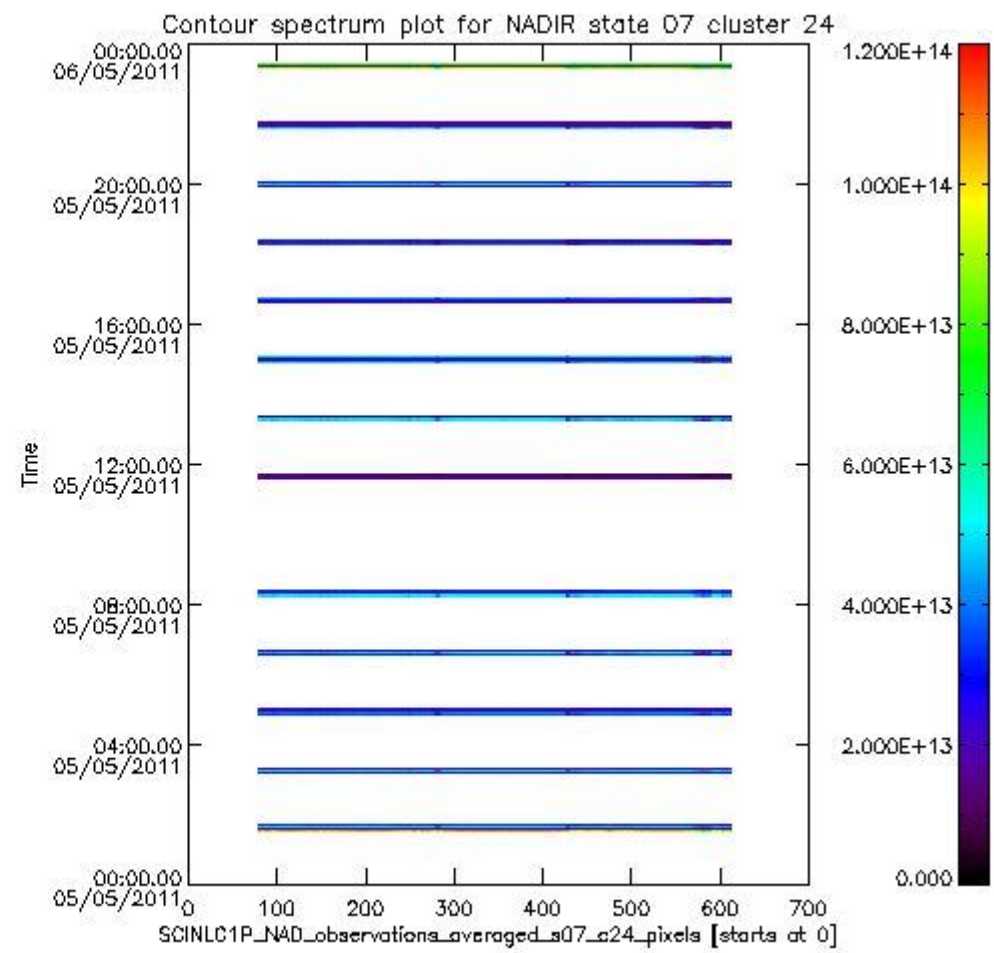
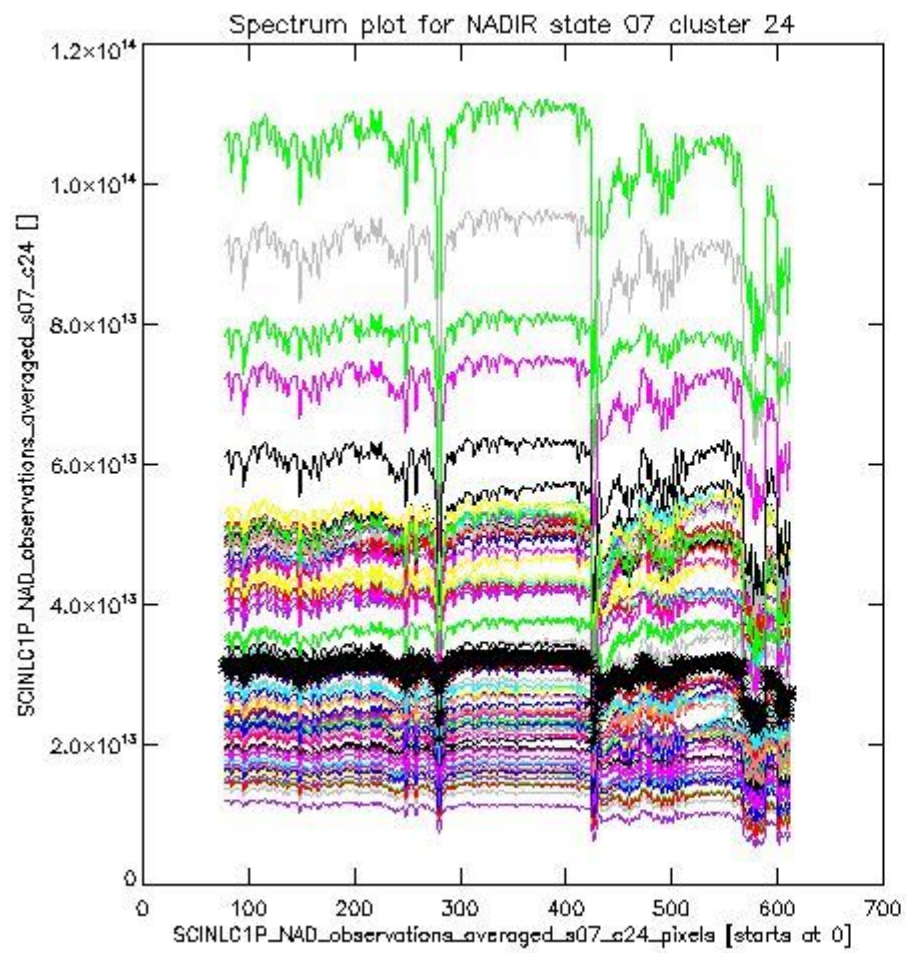
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110505_4.PNG



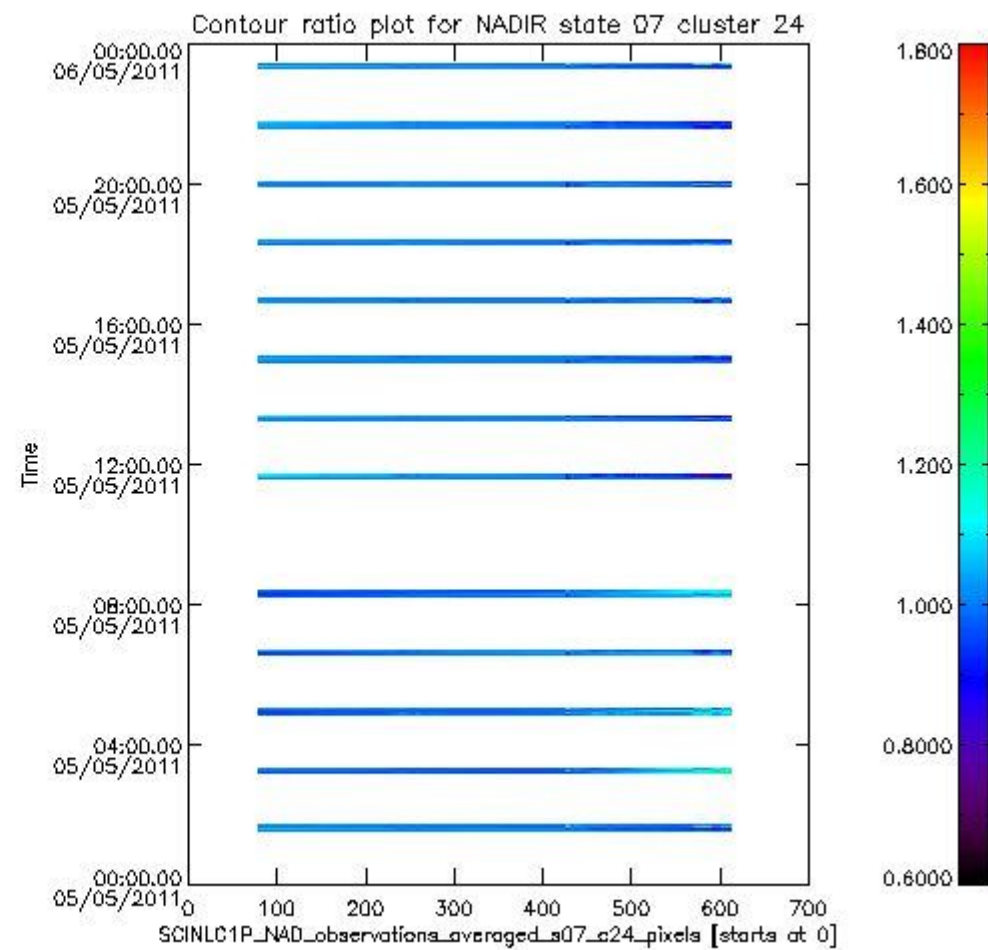
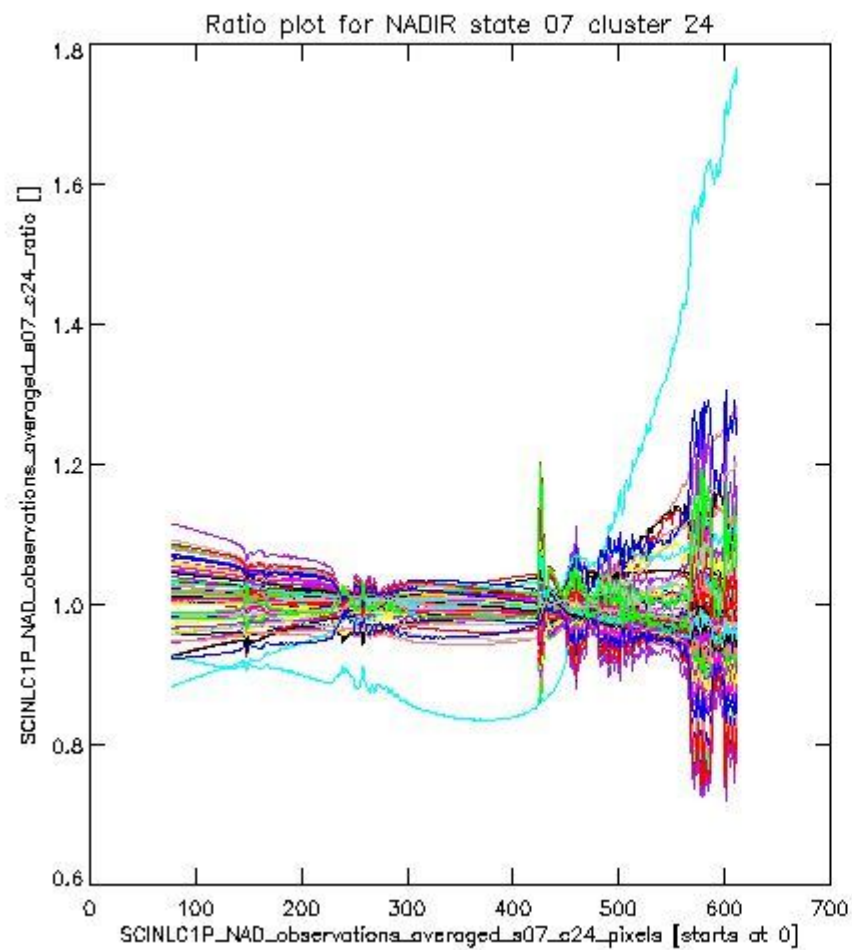
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_5.PNG

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	05MAY2011 00:00:25.957
Start time of last sample	05MAY2011 23:23:05.577
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	03MAY2011 22:57:23.101
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



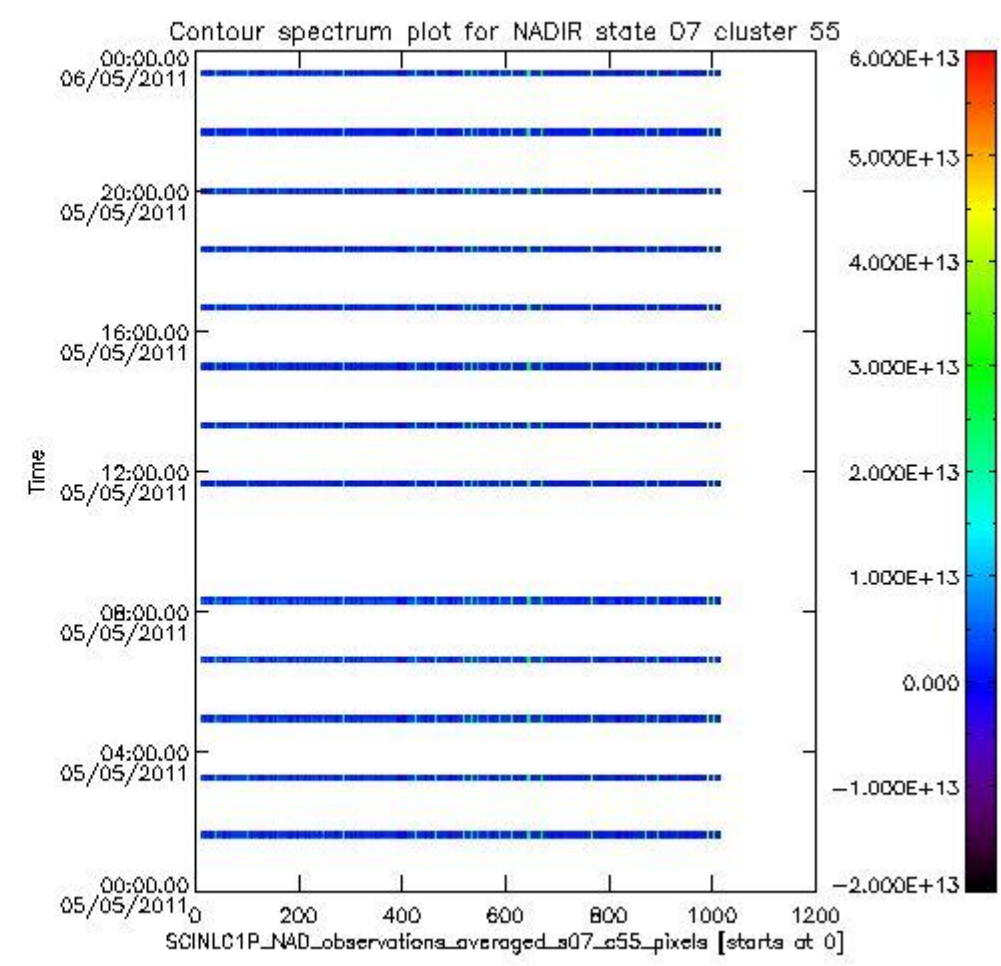
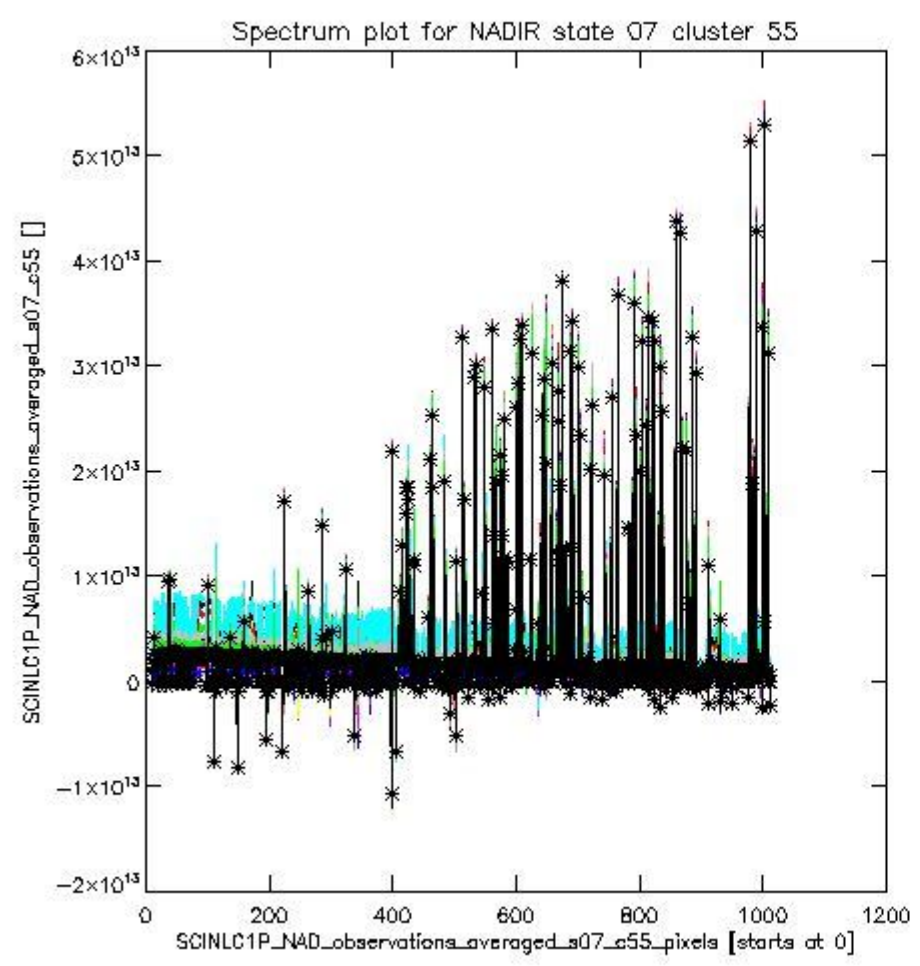
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110505_6.PNG



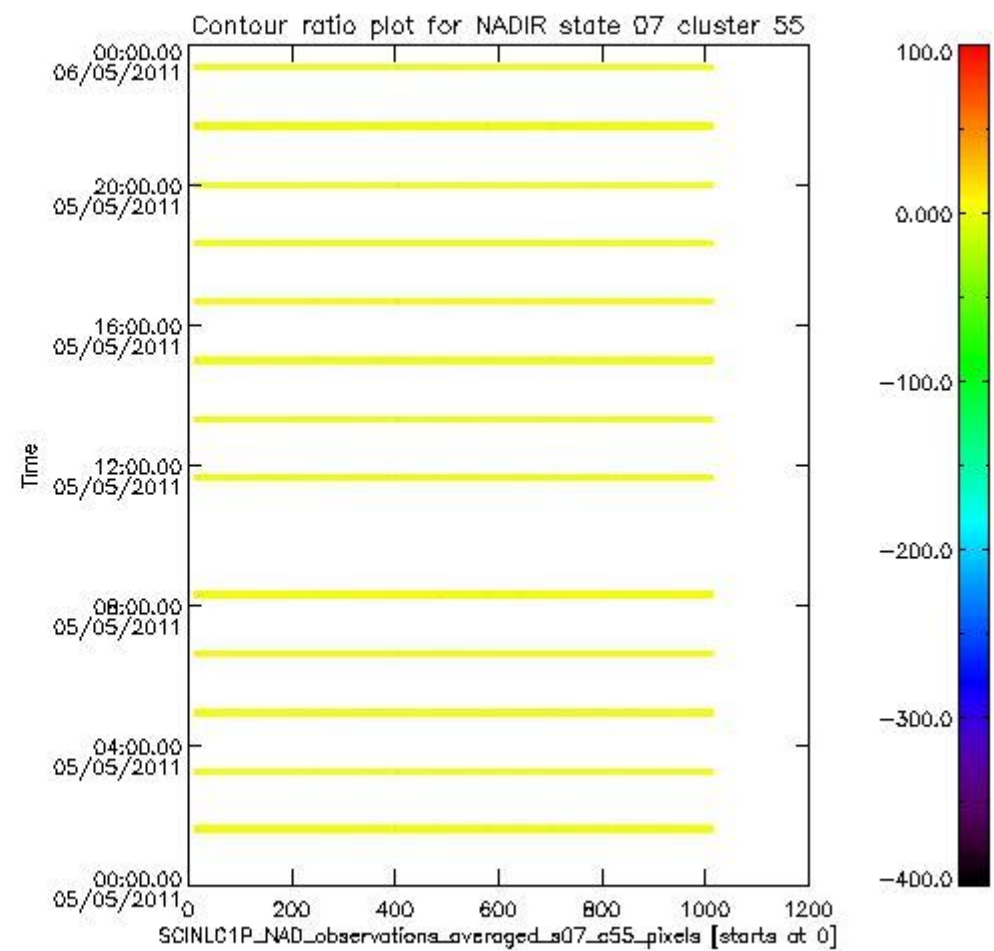
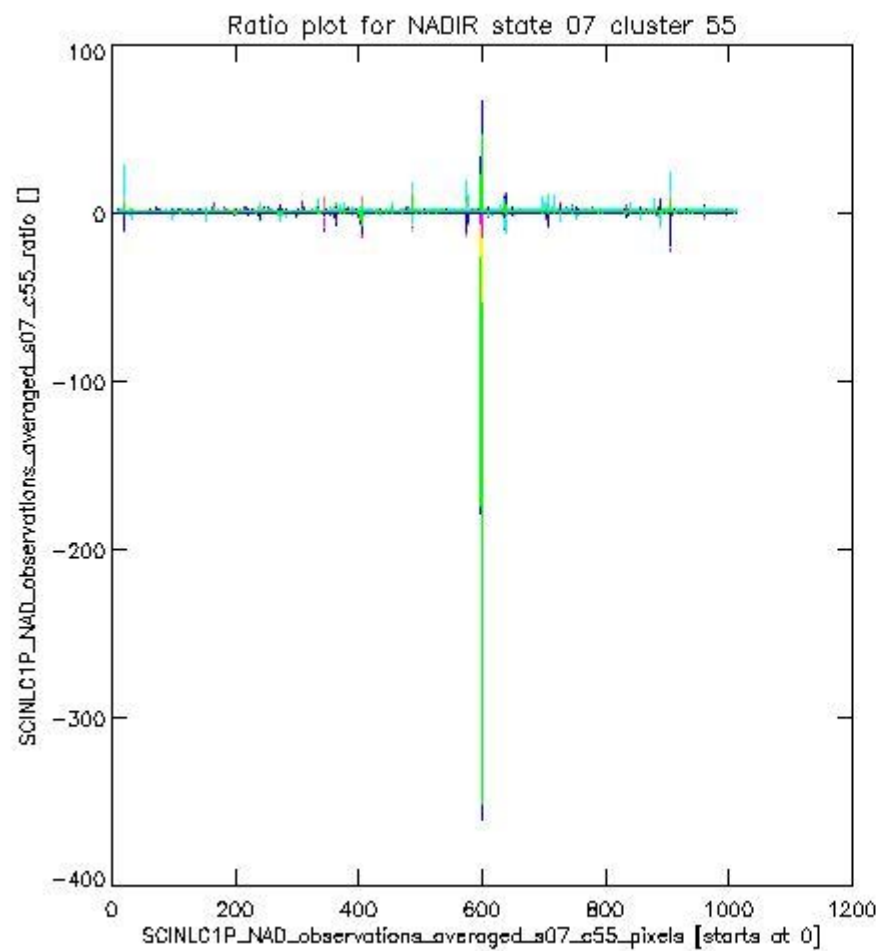
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_7.PNG

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	05MAY2011 00:00:25.957
Start time of last sample	05MAY2011 23:23:05.577
Reference period start time	05APR2011 14:55:50.791
Reference period stop time	03MAY2011 22:57:23.101
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



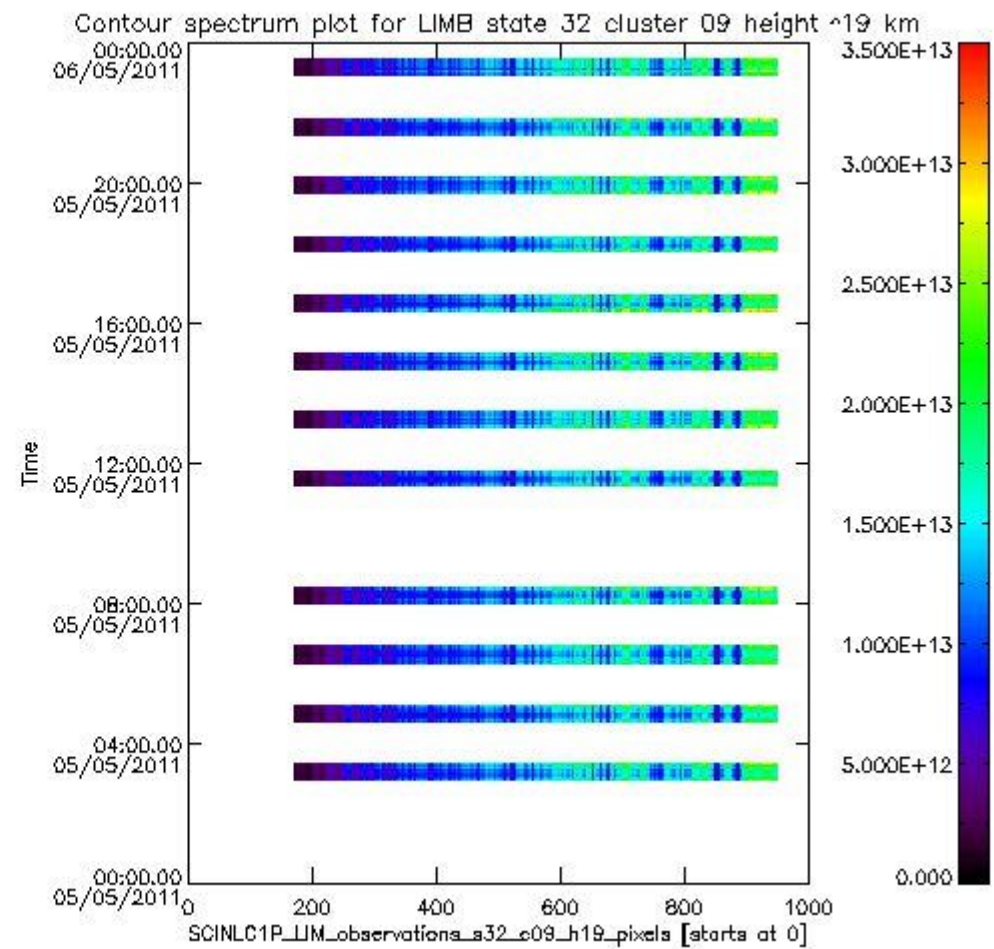
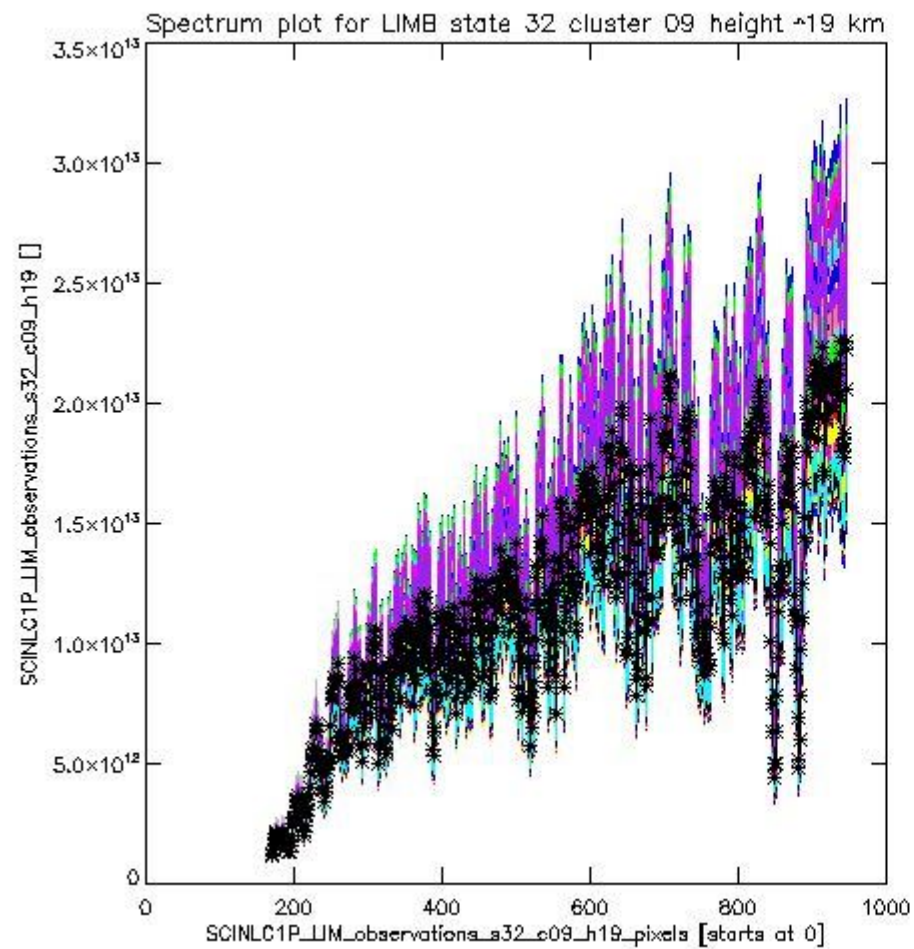
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_8.PNG



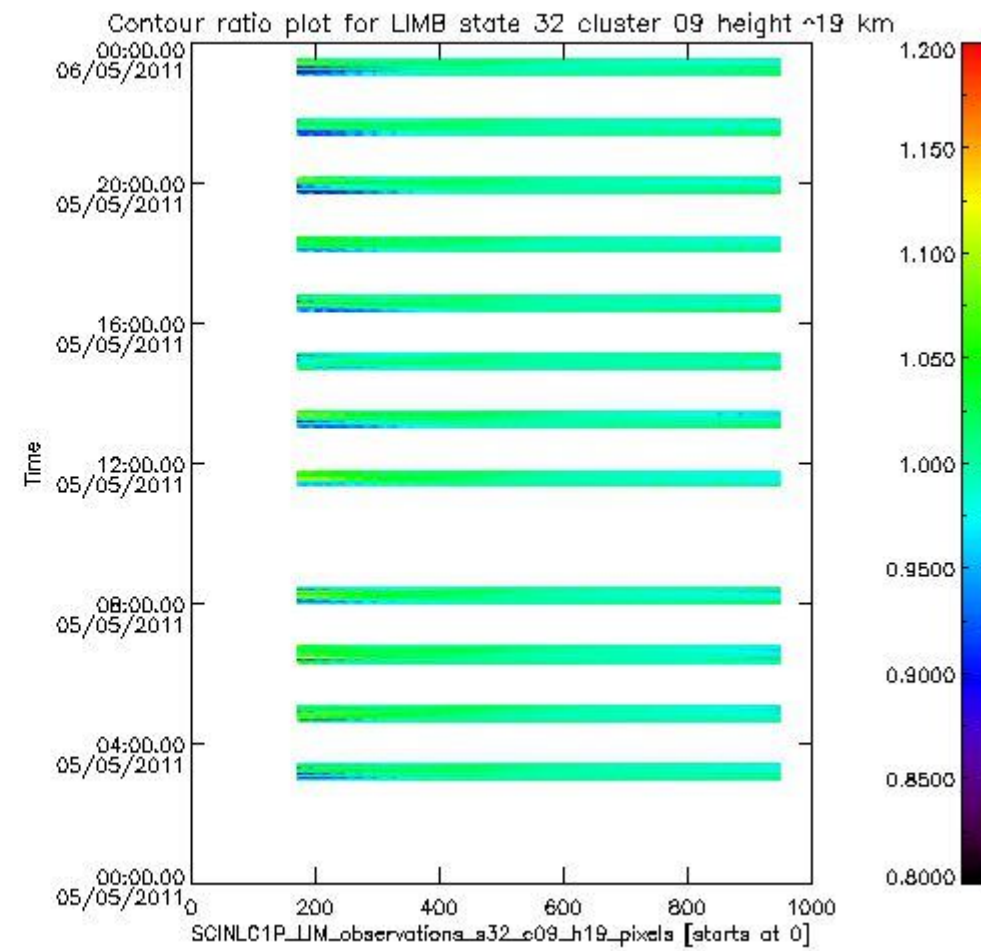
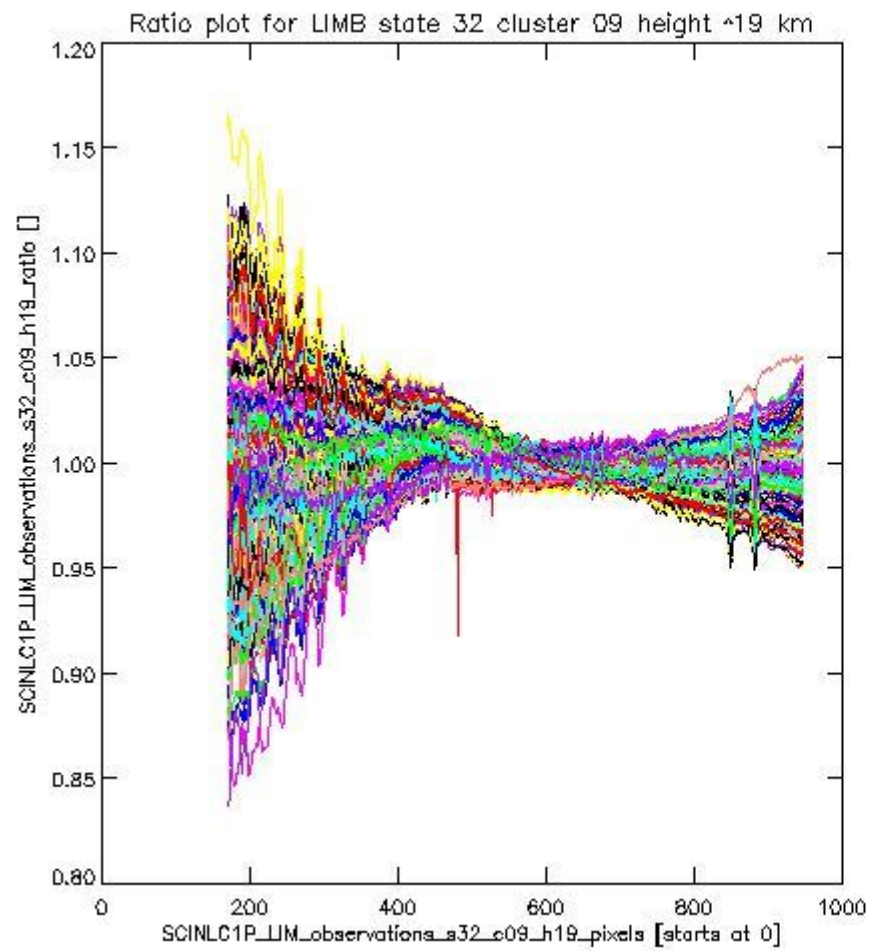
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_9.PNG

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	05MAY2011 02:56:56.786
Start time of last sample	05MAY2011 23:28:19.620
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	03MAY2011 23:00:34.402
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



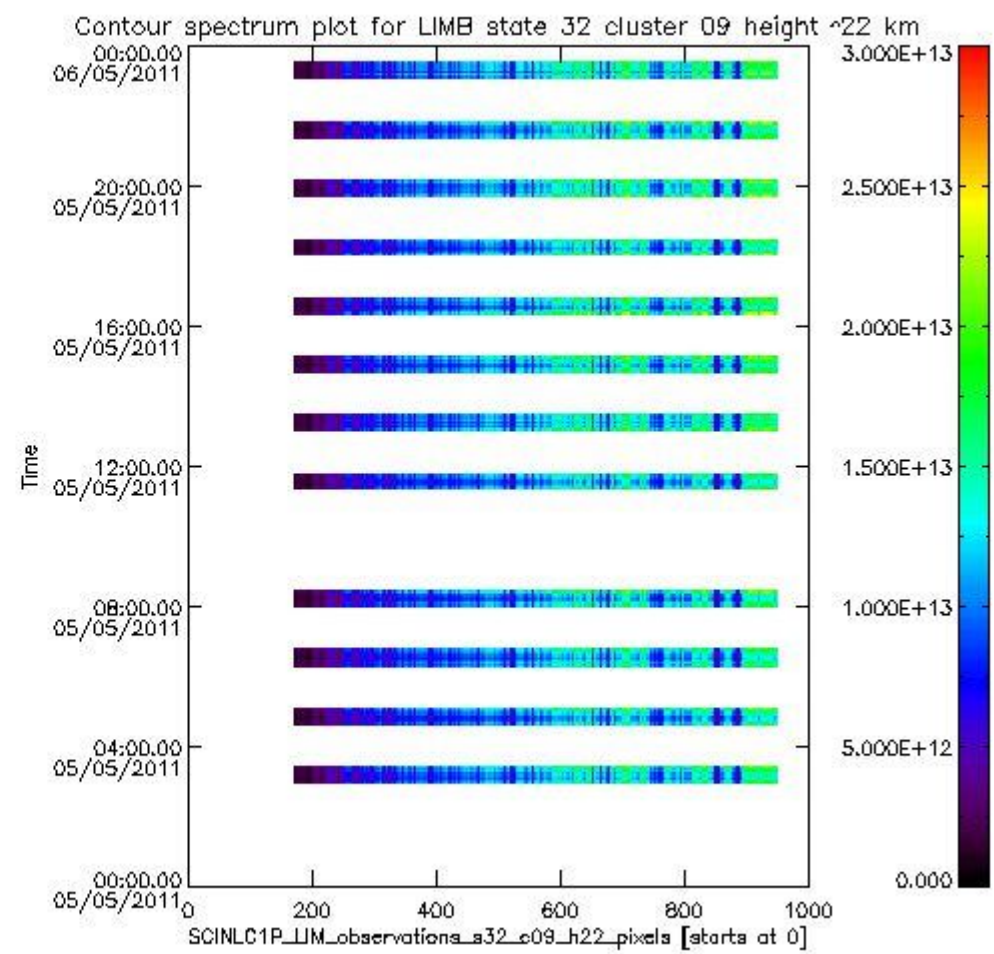
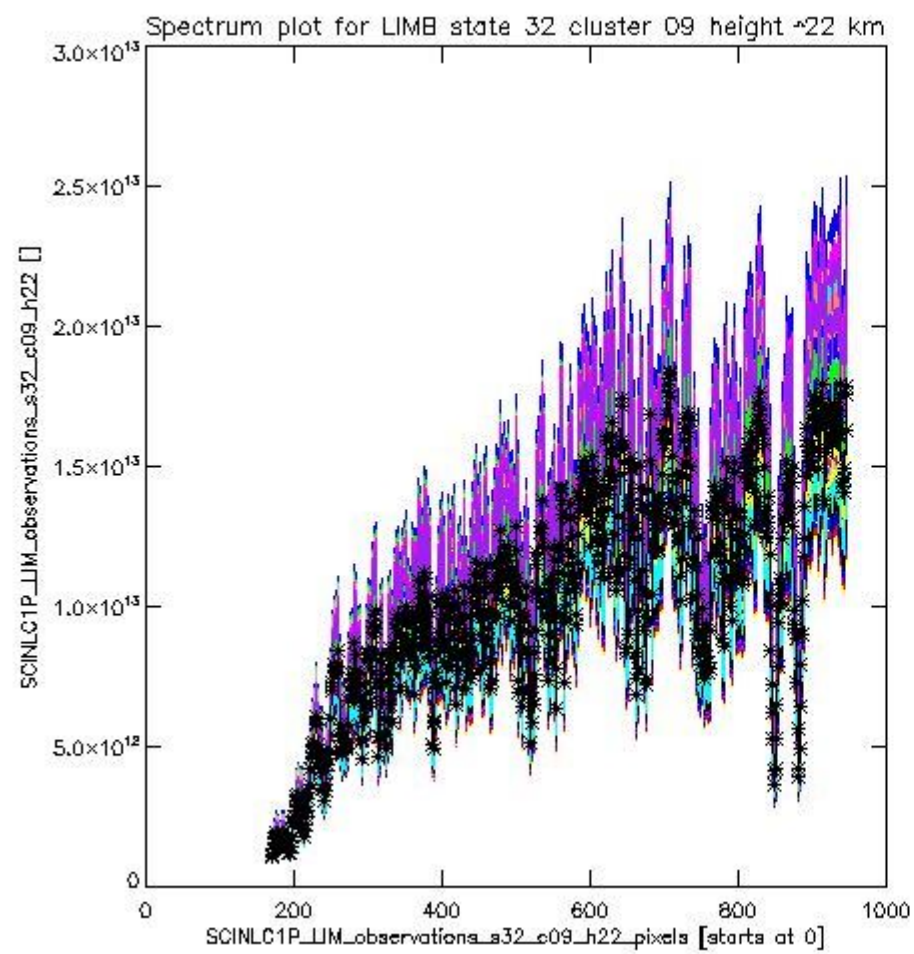
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110505_10.PNG



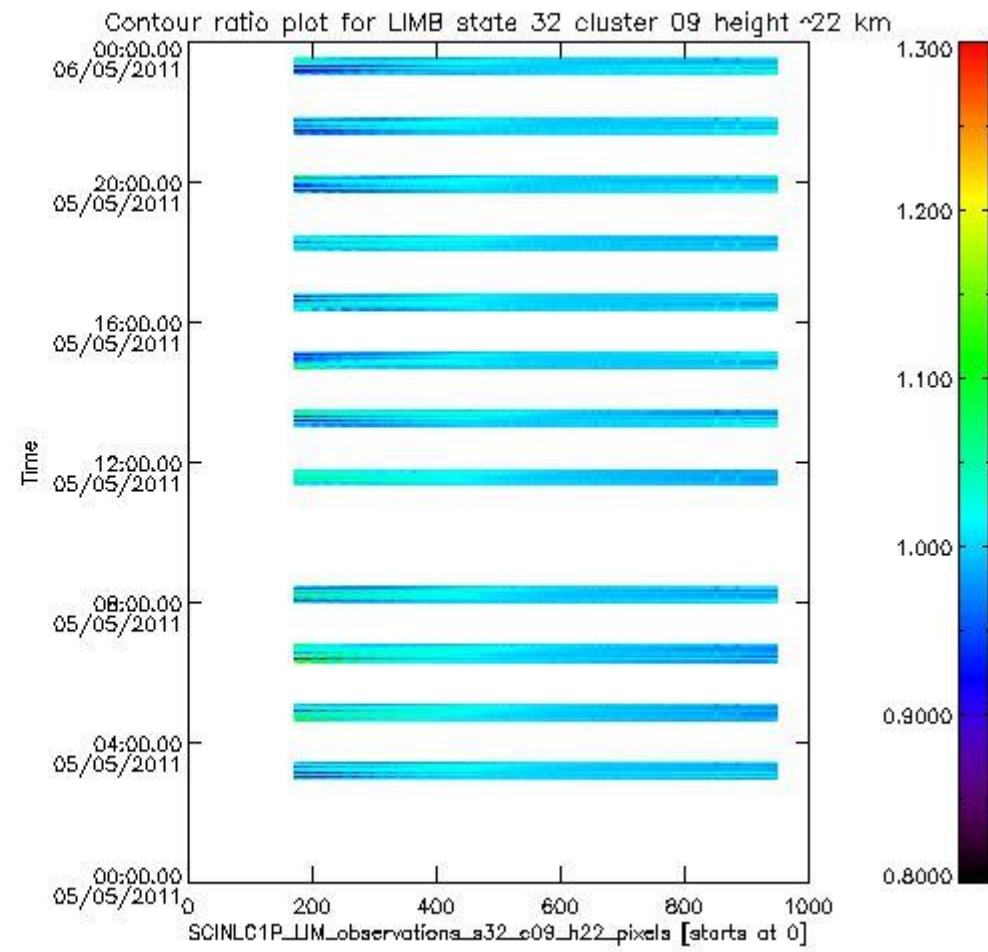
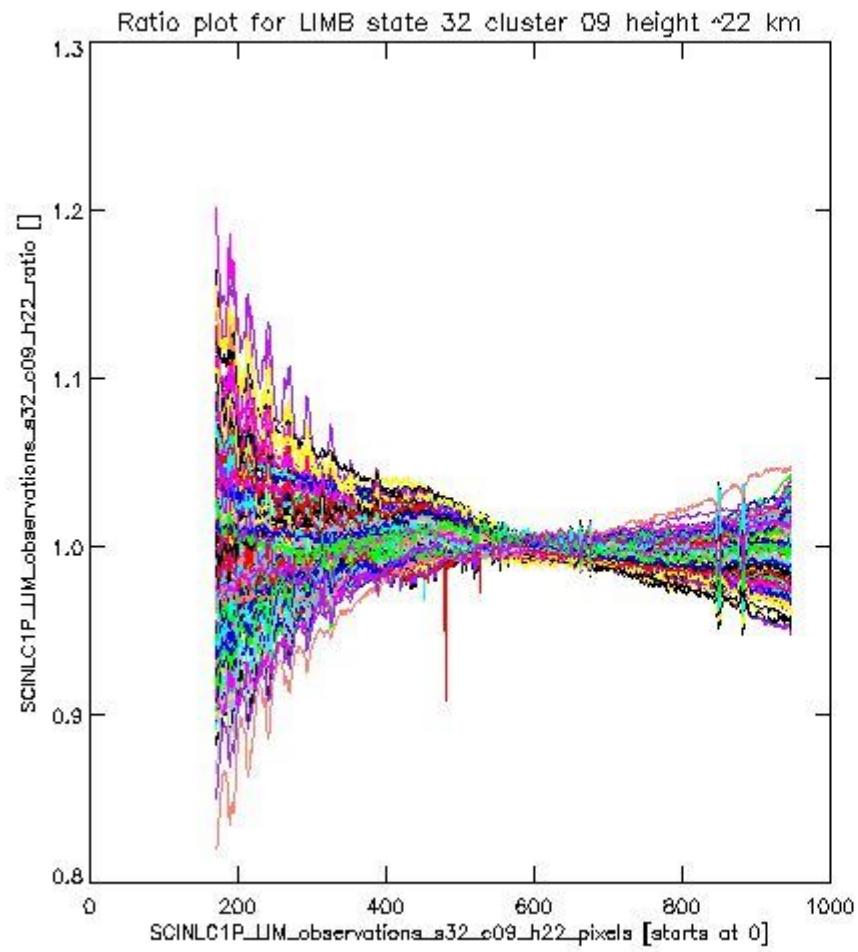
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_11.PNG

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	05MAY2011 02:56:56.786
Start time of last sample	05MAY2011 23:28:19.620
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	03MAY2011 23:00:34.402
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



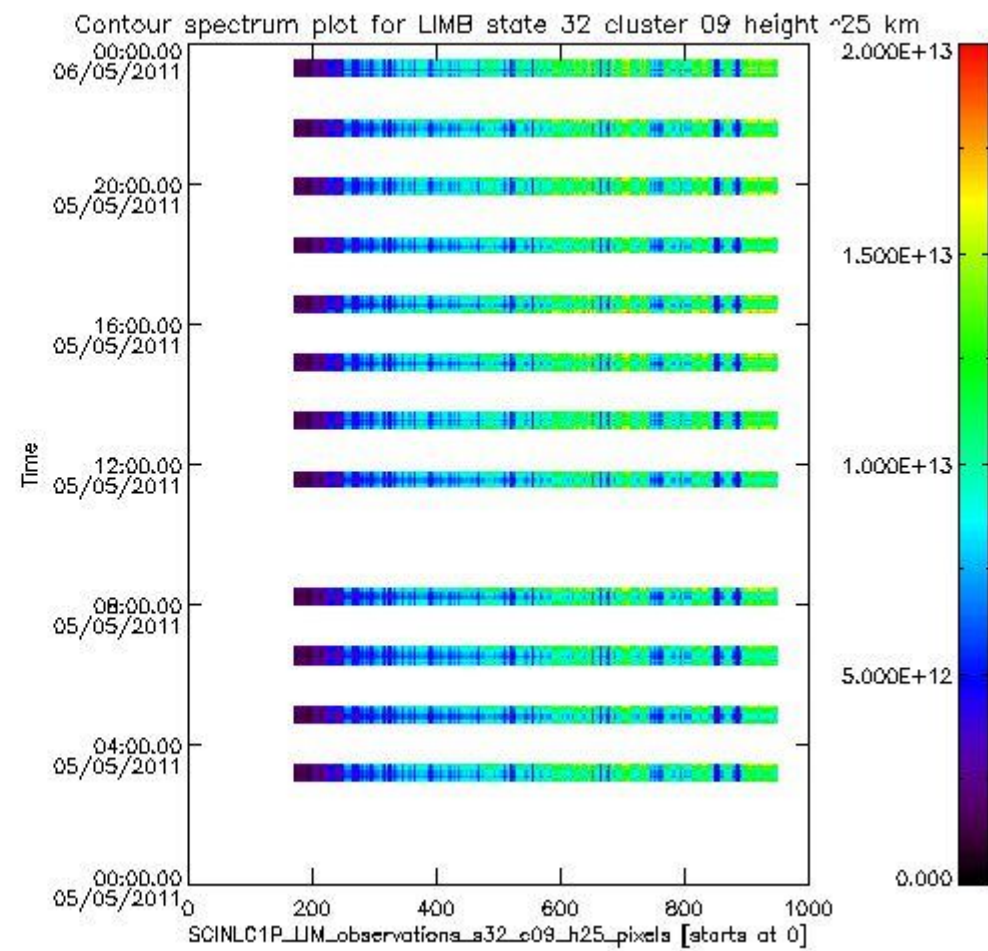
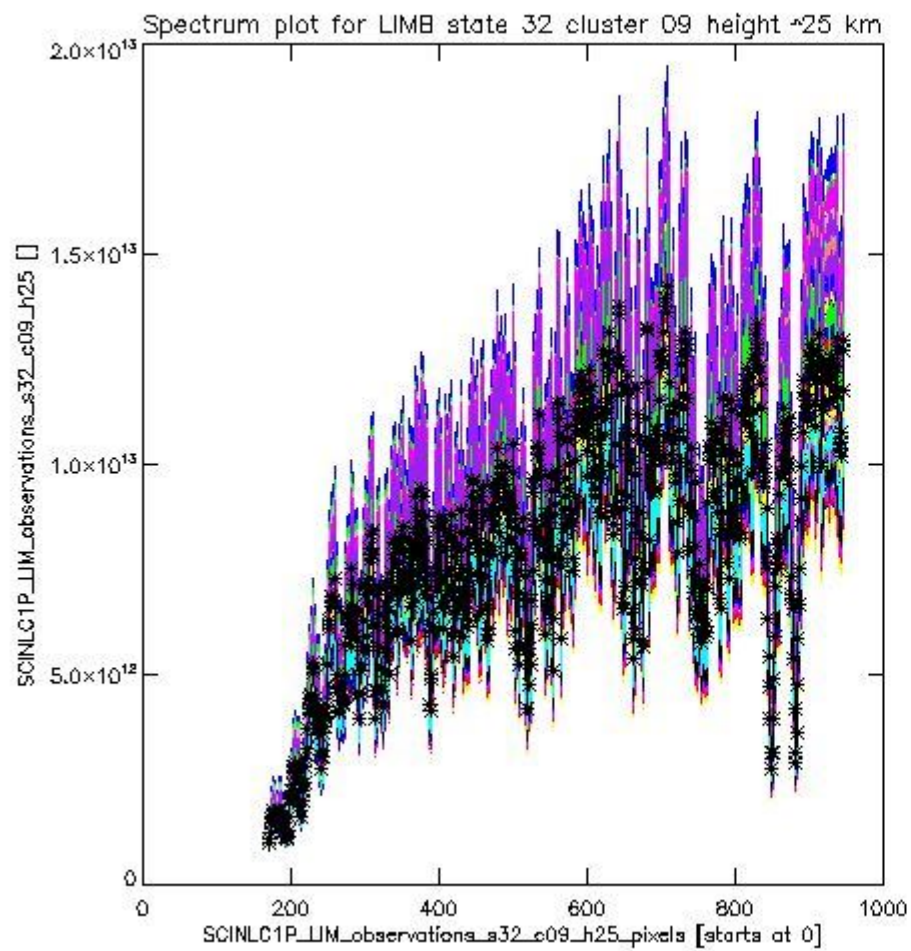
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110505_12.PNG



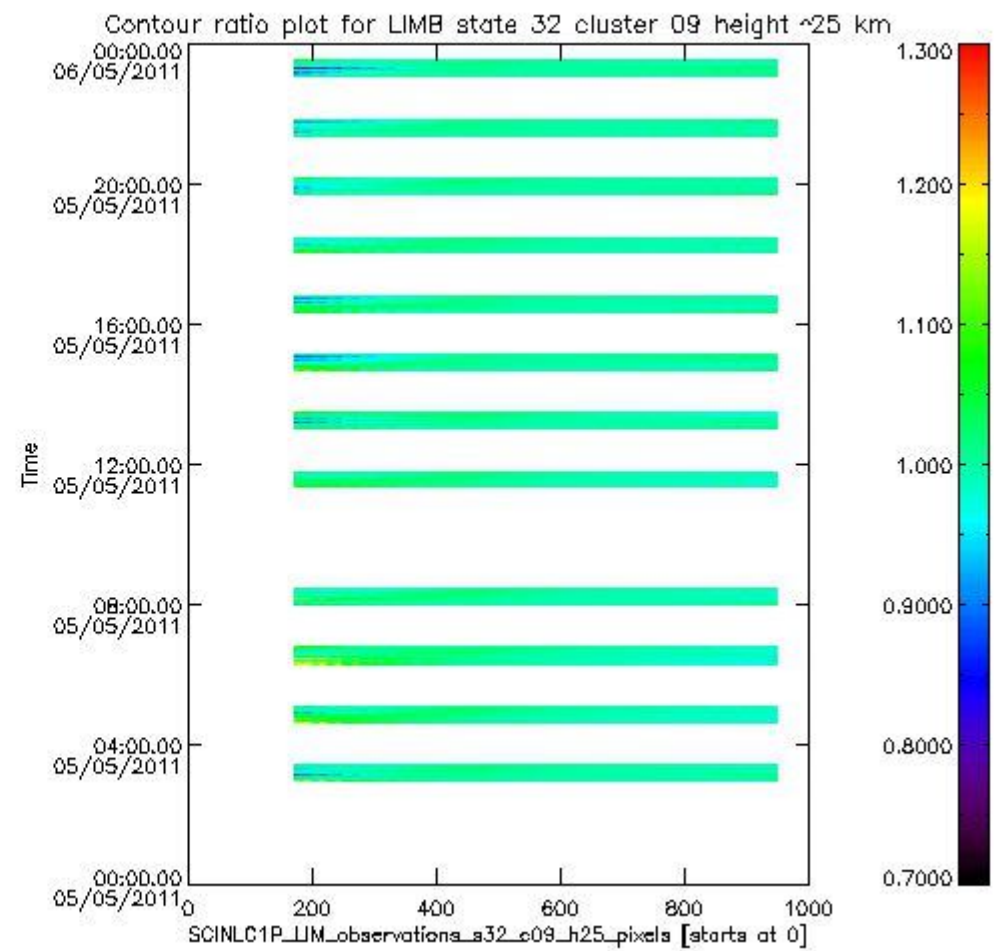
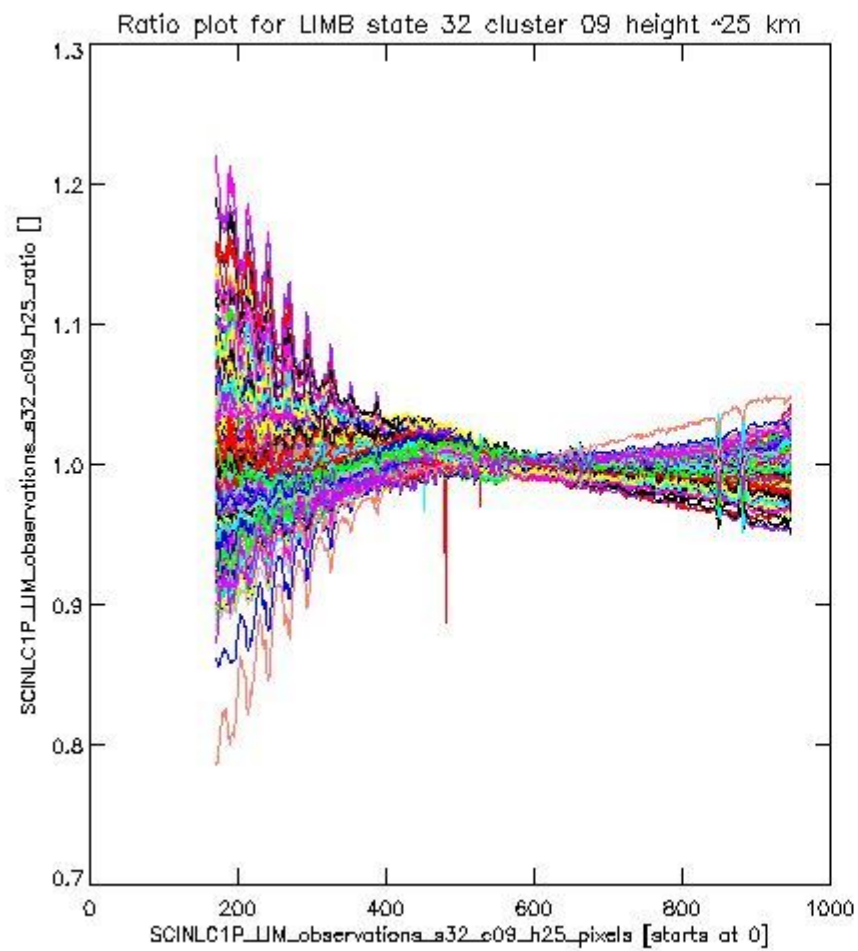
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_13.PNG

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	05MAY2011 02:56:56.786
Start time of last sample	05MAY2011 23:28:19.620
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	03MAY2011 23:00:34.402
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



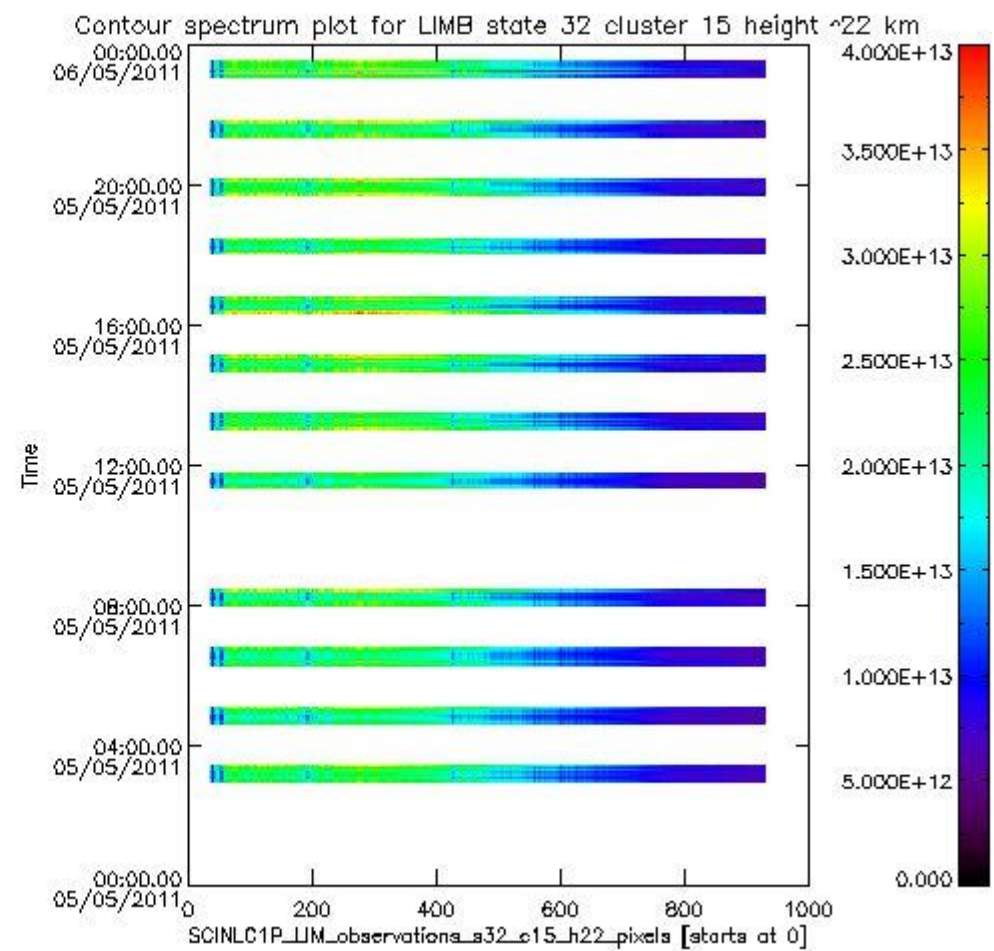
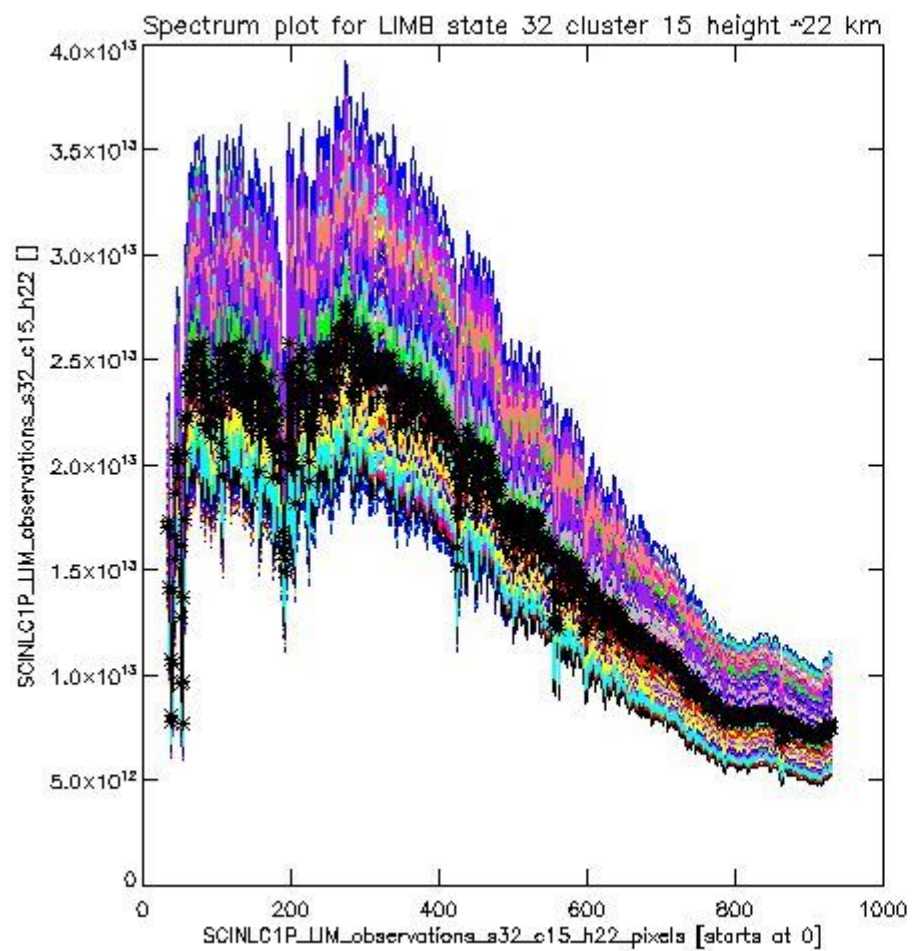
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_14.PNG



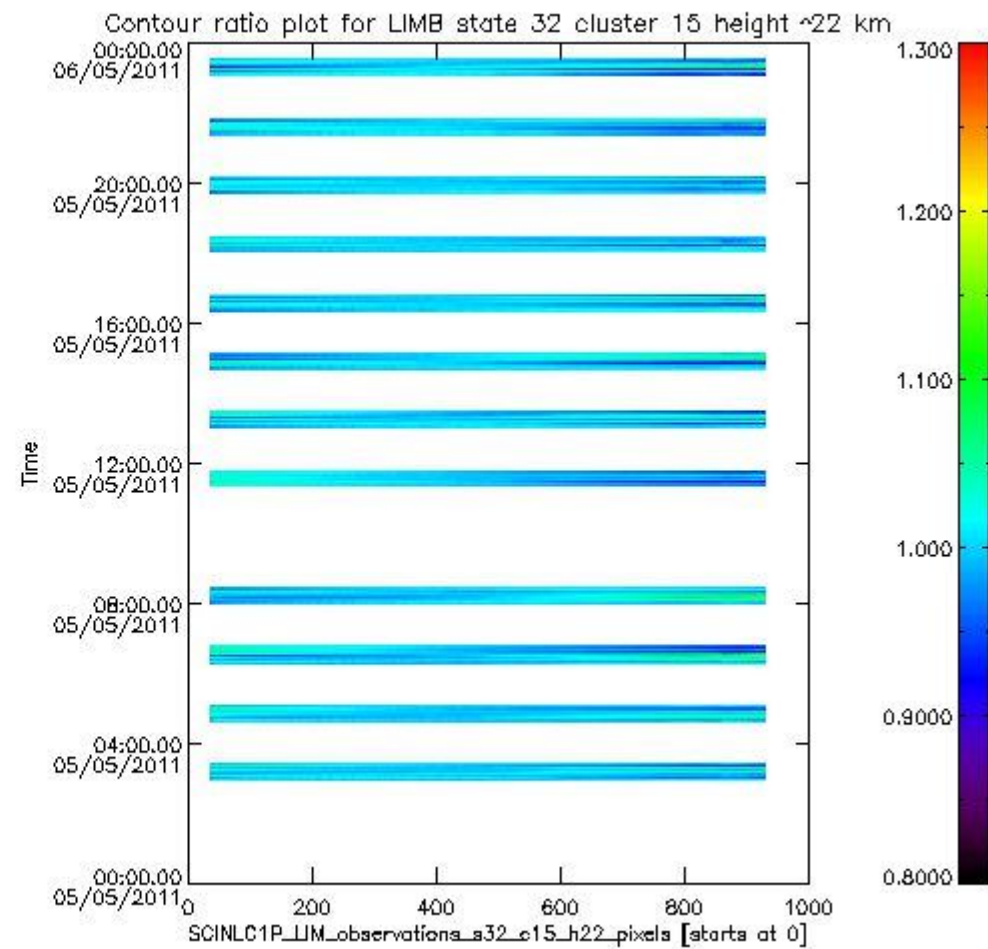
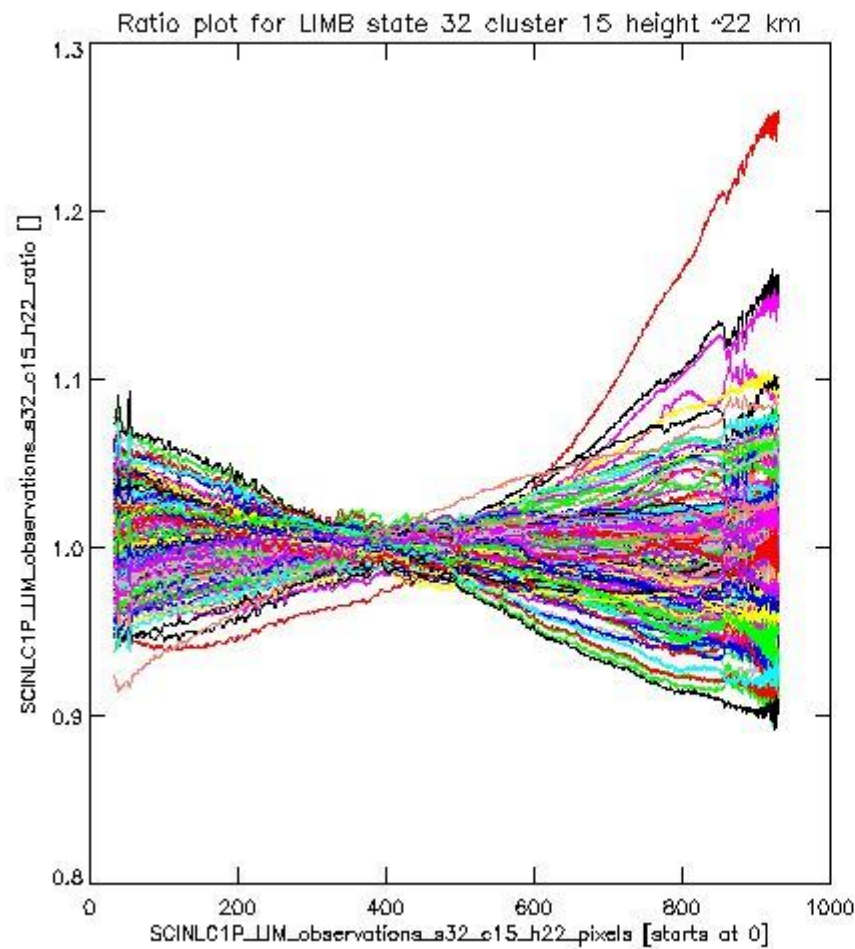
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_15.PNG

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	05MAY2011 02:56:56.786
Start time of last sample	05MAY2011 23:28:19.620
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	03MAY2011 23:00:34.402
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



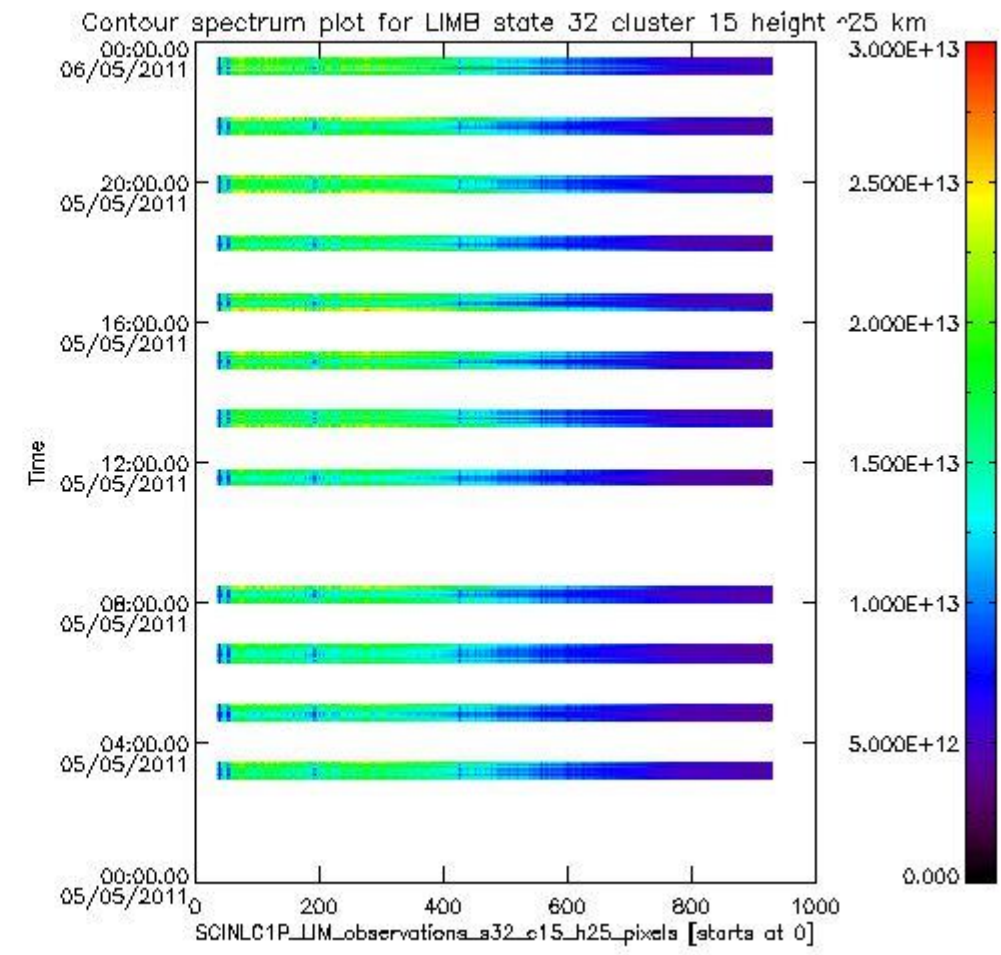
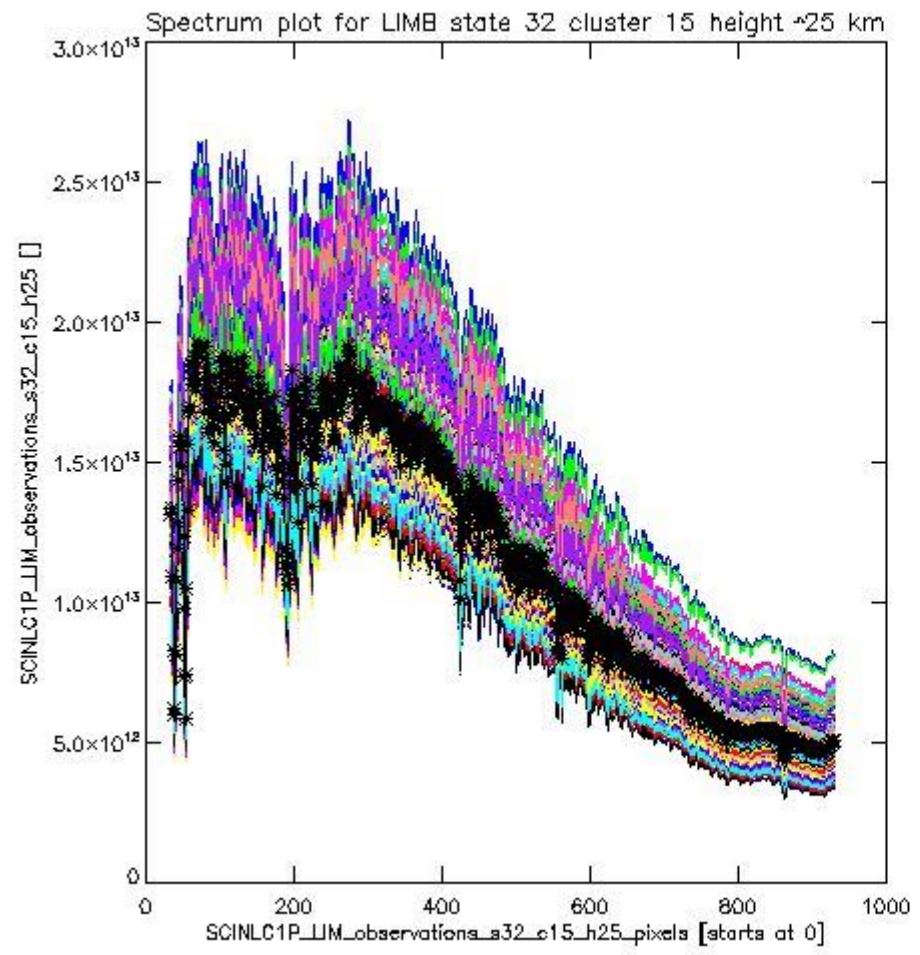
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110505_16.PNG



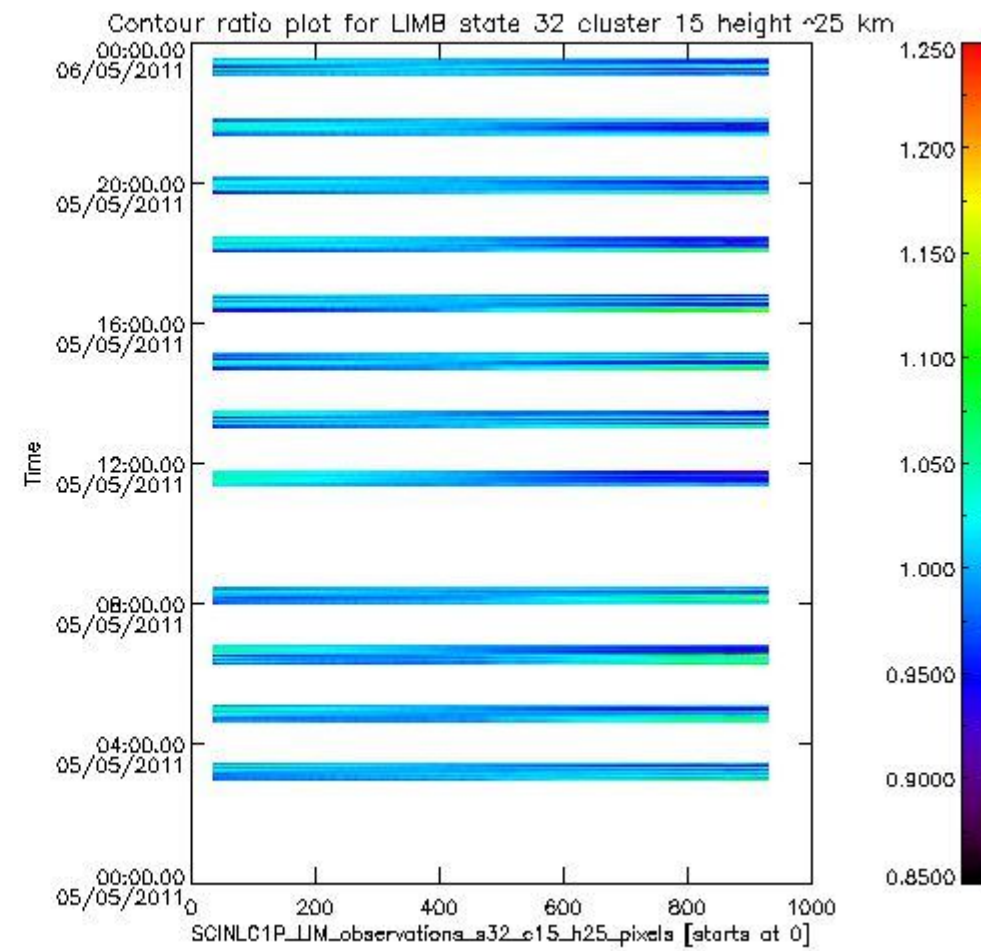
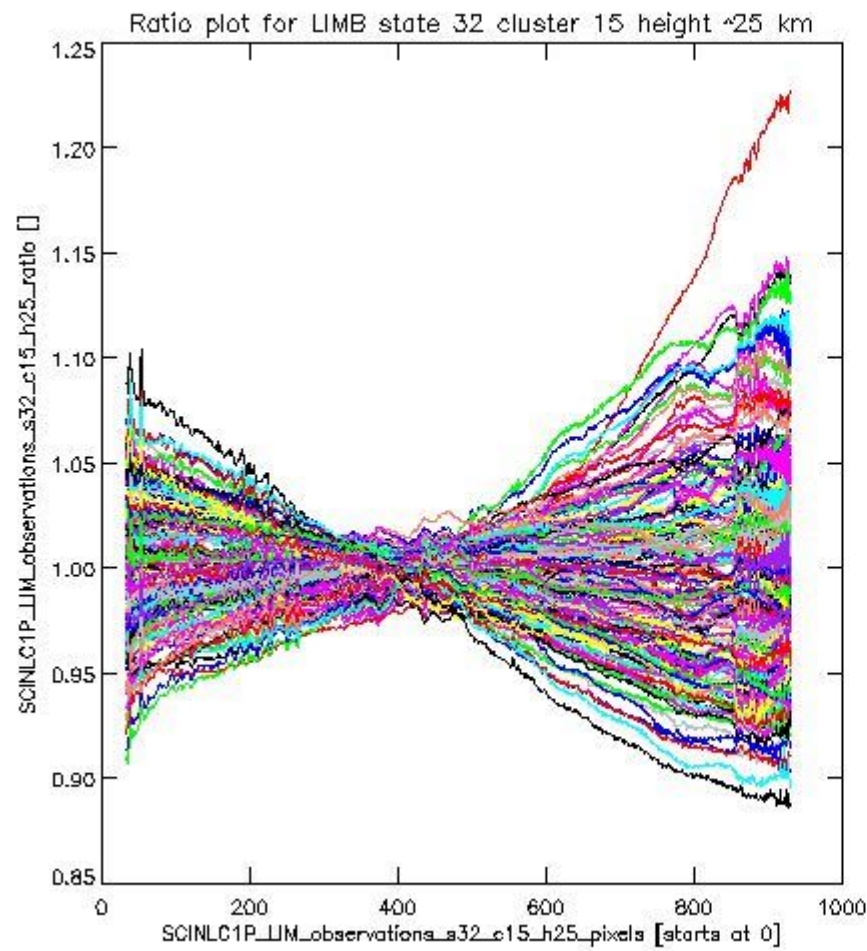
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110505_17.PNG

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	05MAY2011 02:56:56.786
Start time of last sample	05MAY2011 23:28:19.620
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	03MAY2011 23:00:34.402
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



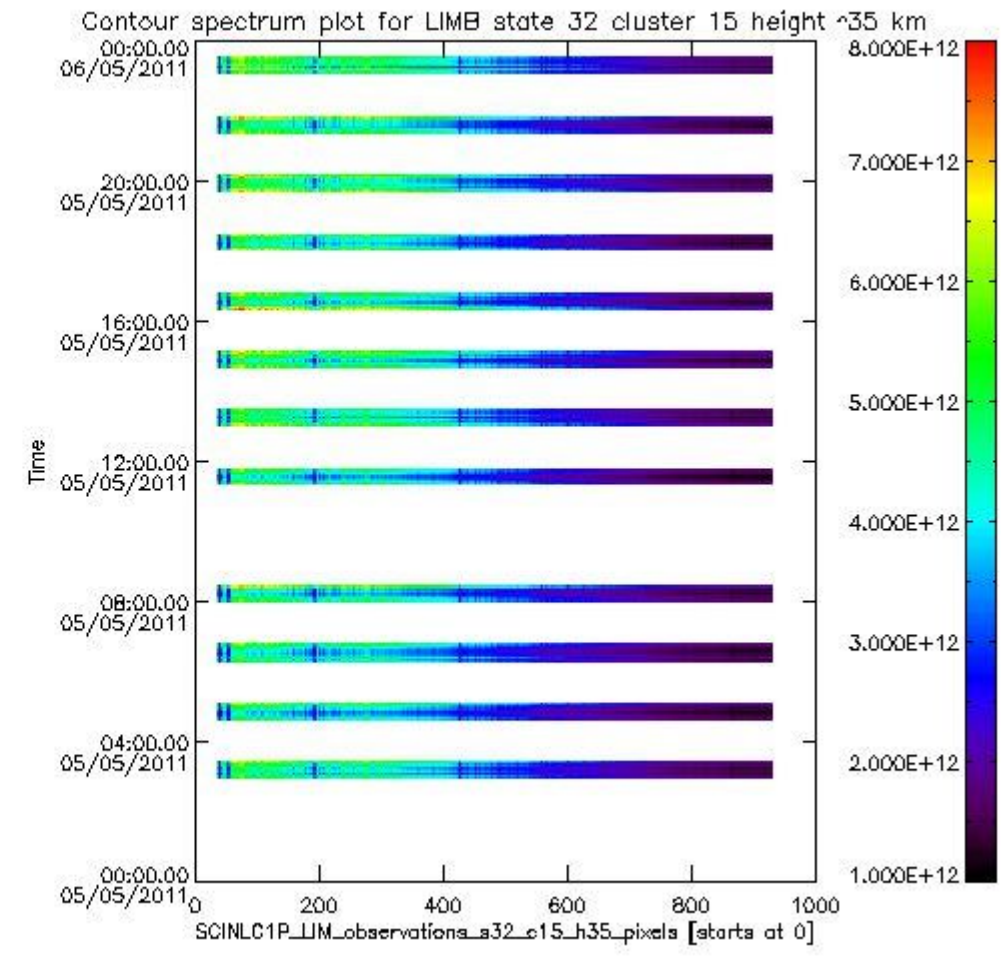
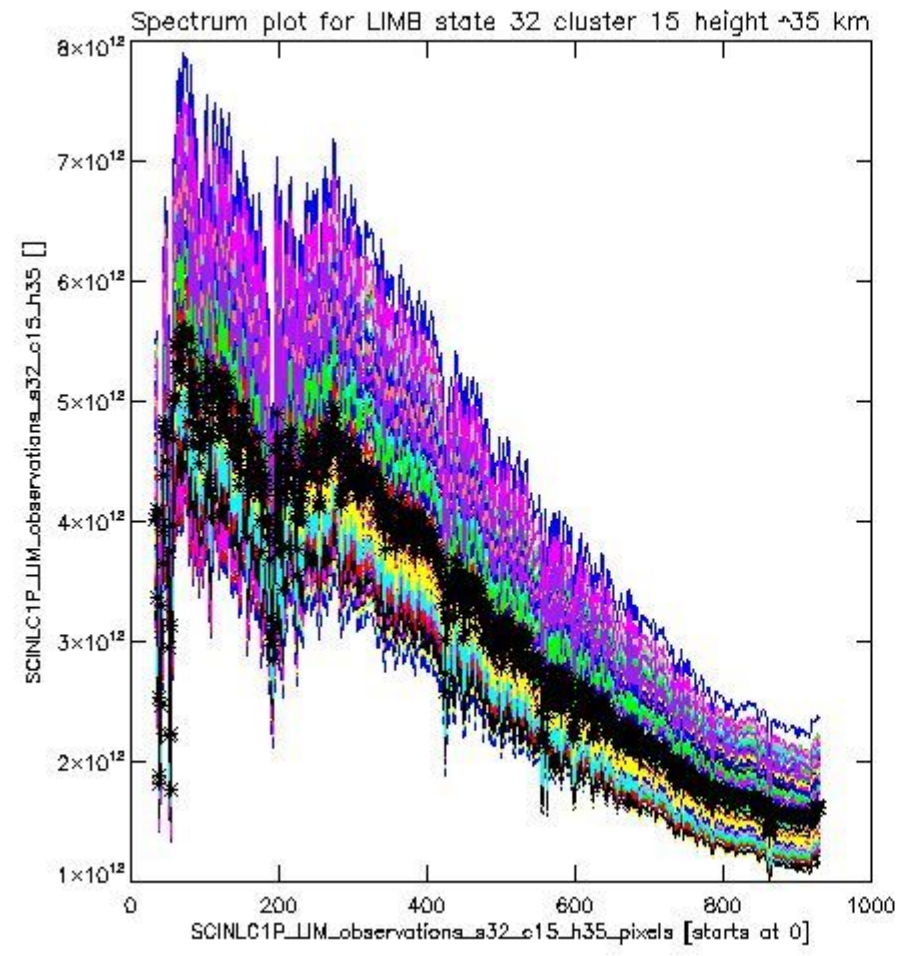
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110505_18.PNG



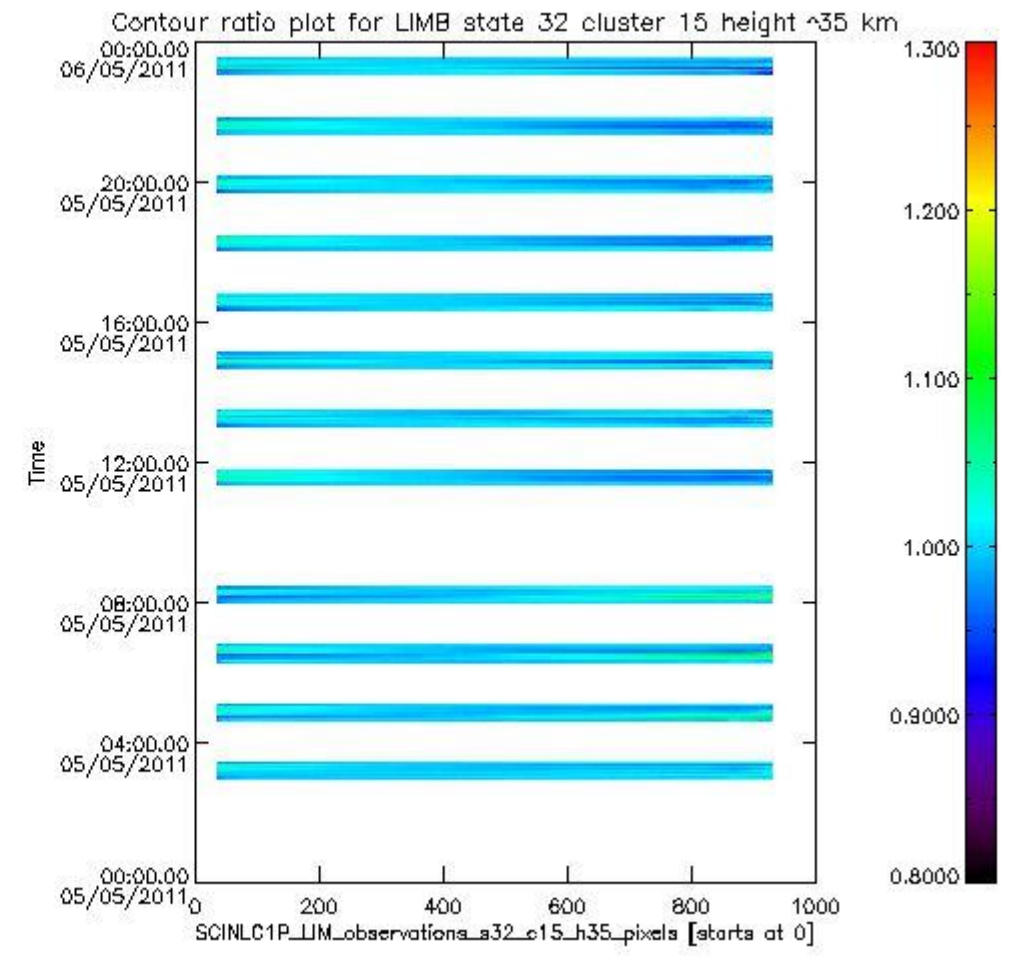
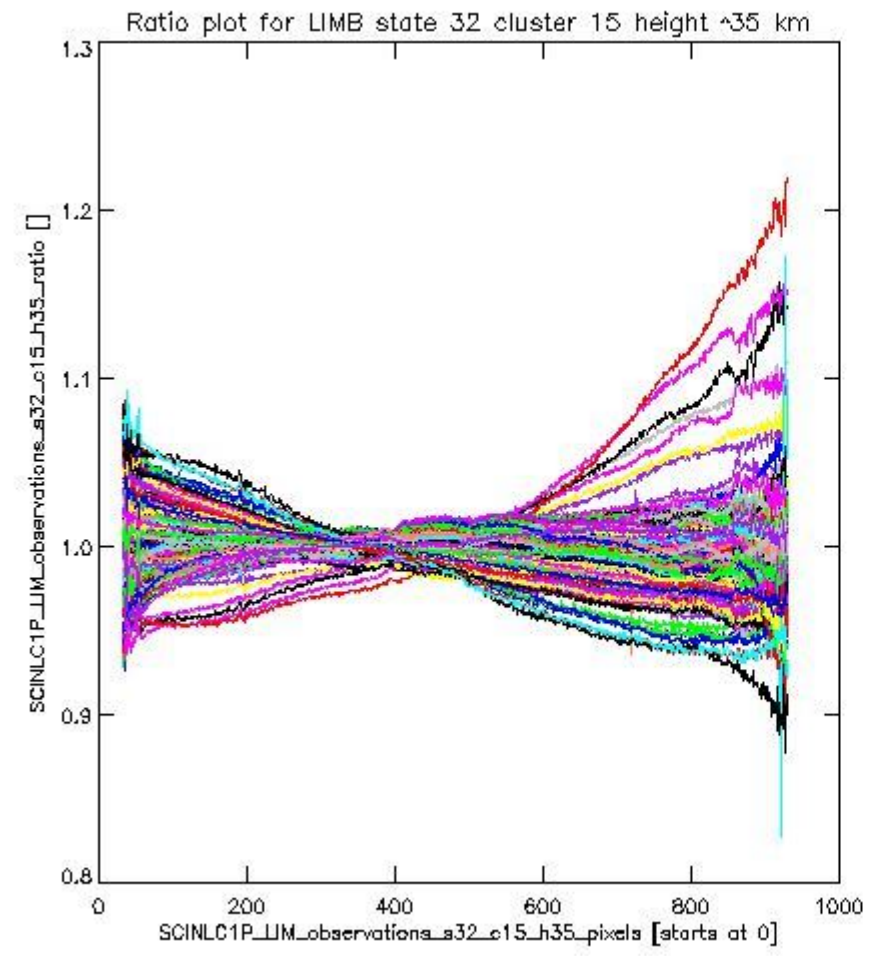
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110505_19.PNG

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:

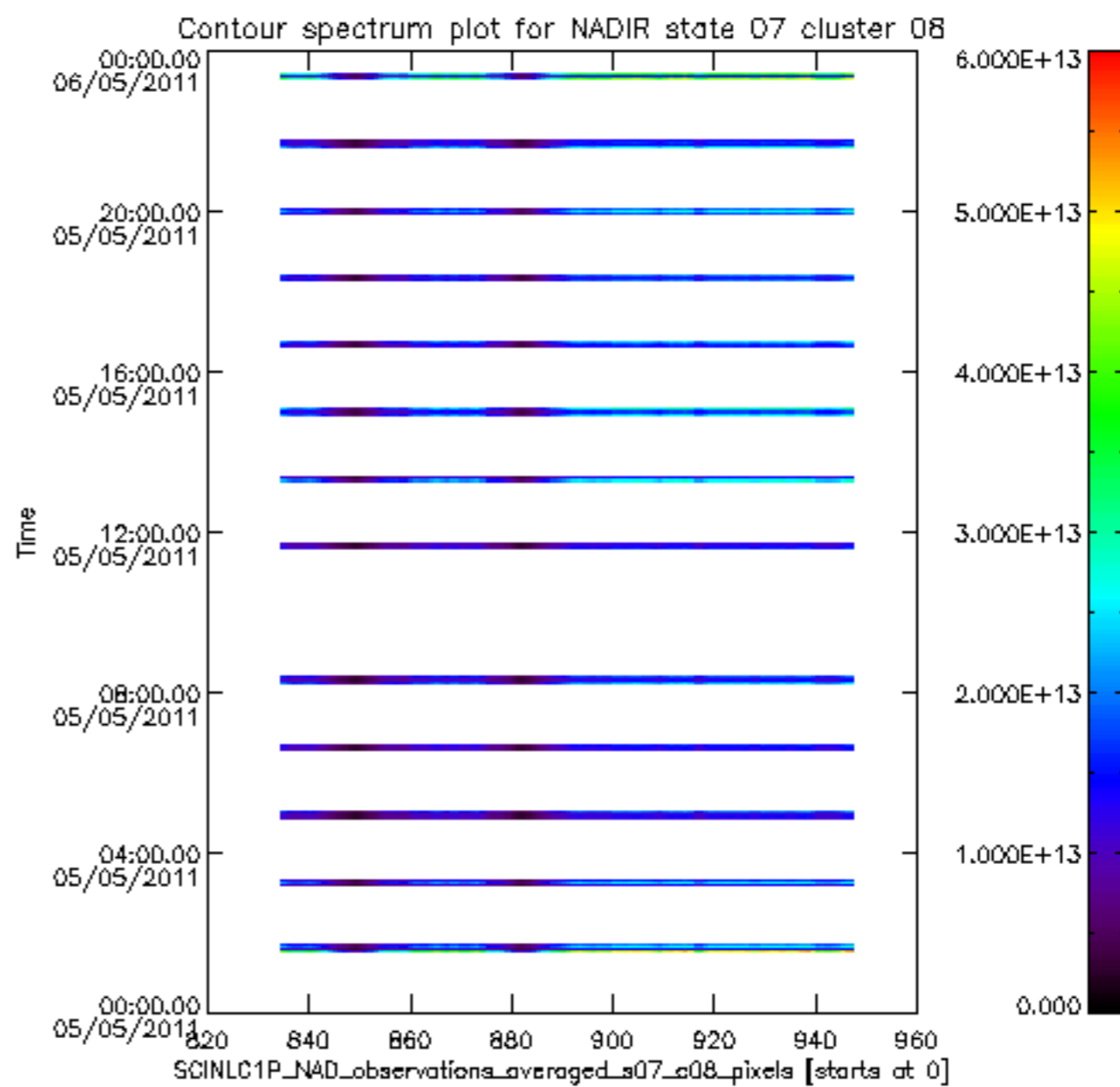
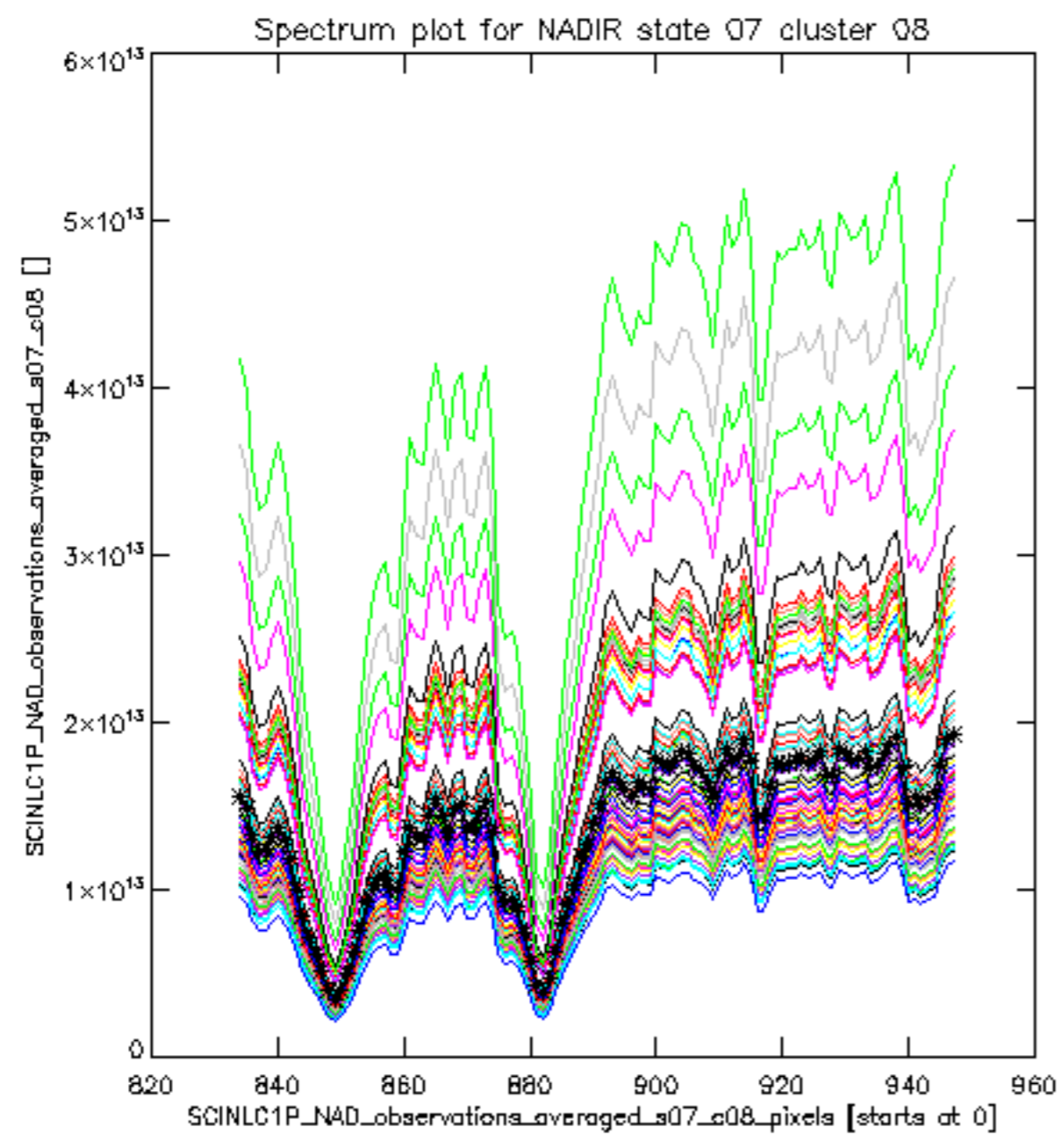
Item	Value
Start time of first sample	05MAY2011 02:56:56.786
Start time of last sample	05MAY2011 23:28:19.620
Reference period start time	05APR2011 14:40:37.412
Reference period stop time	03MAY2011 23:00:34.402
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

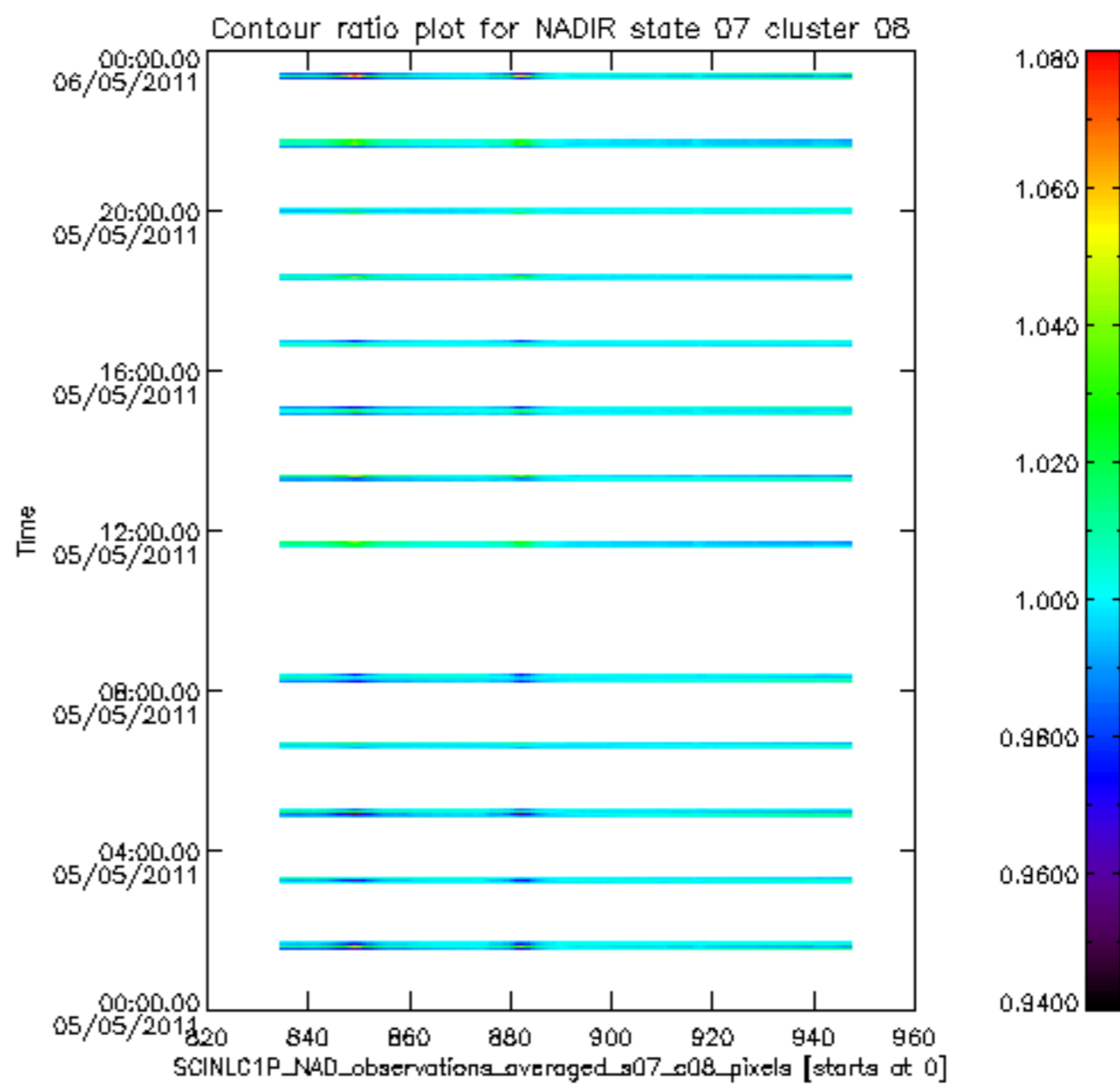
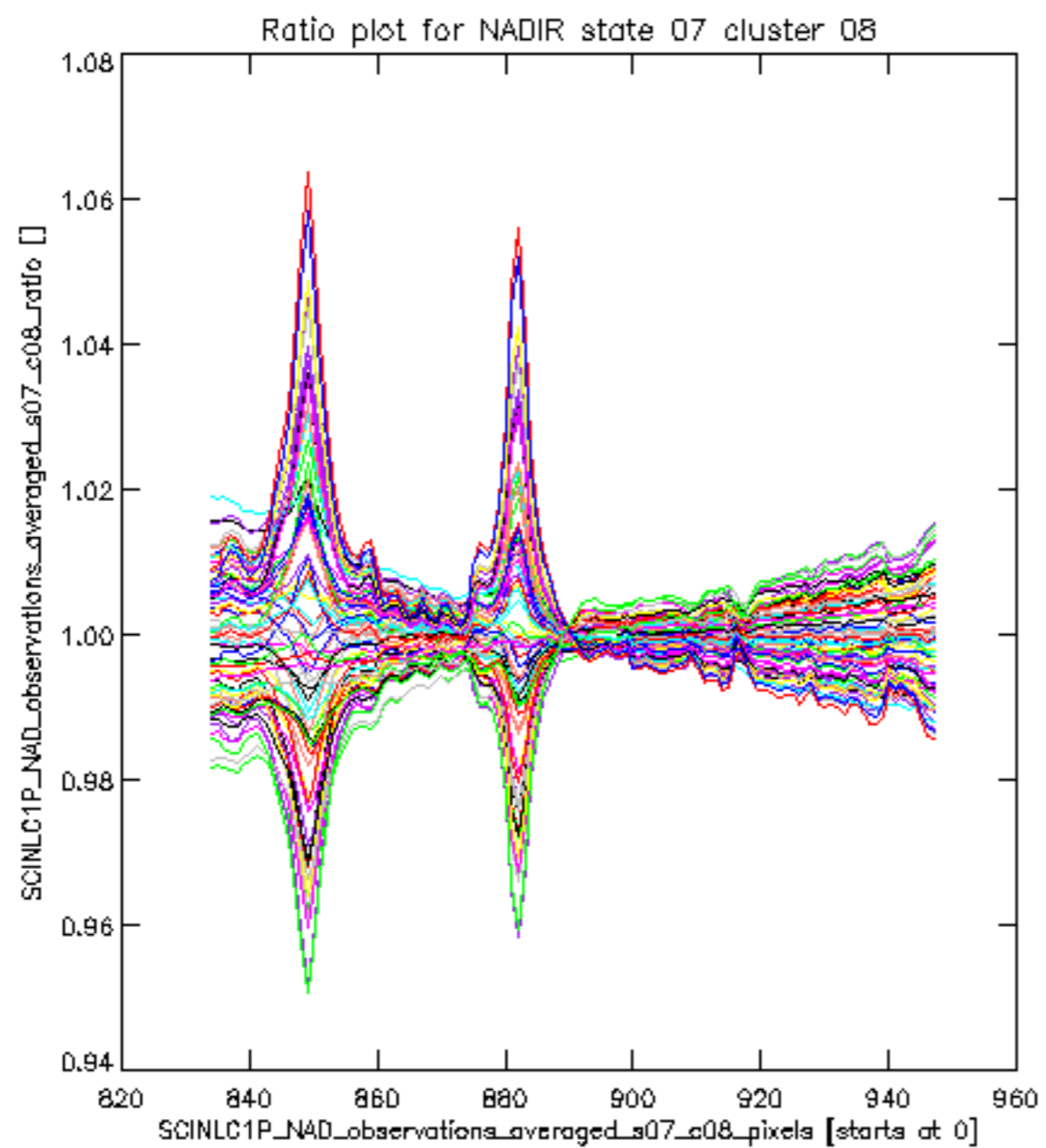


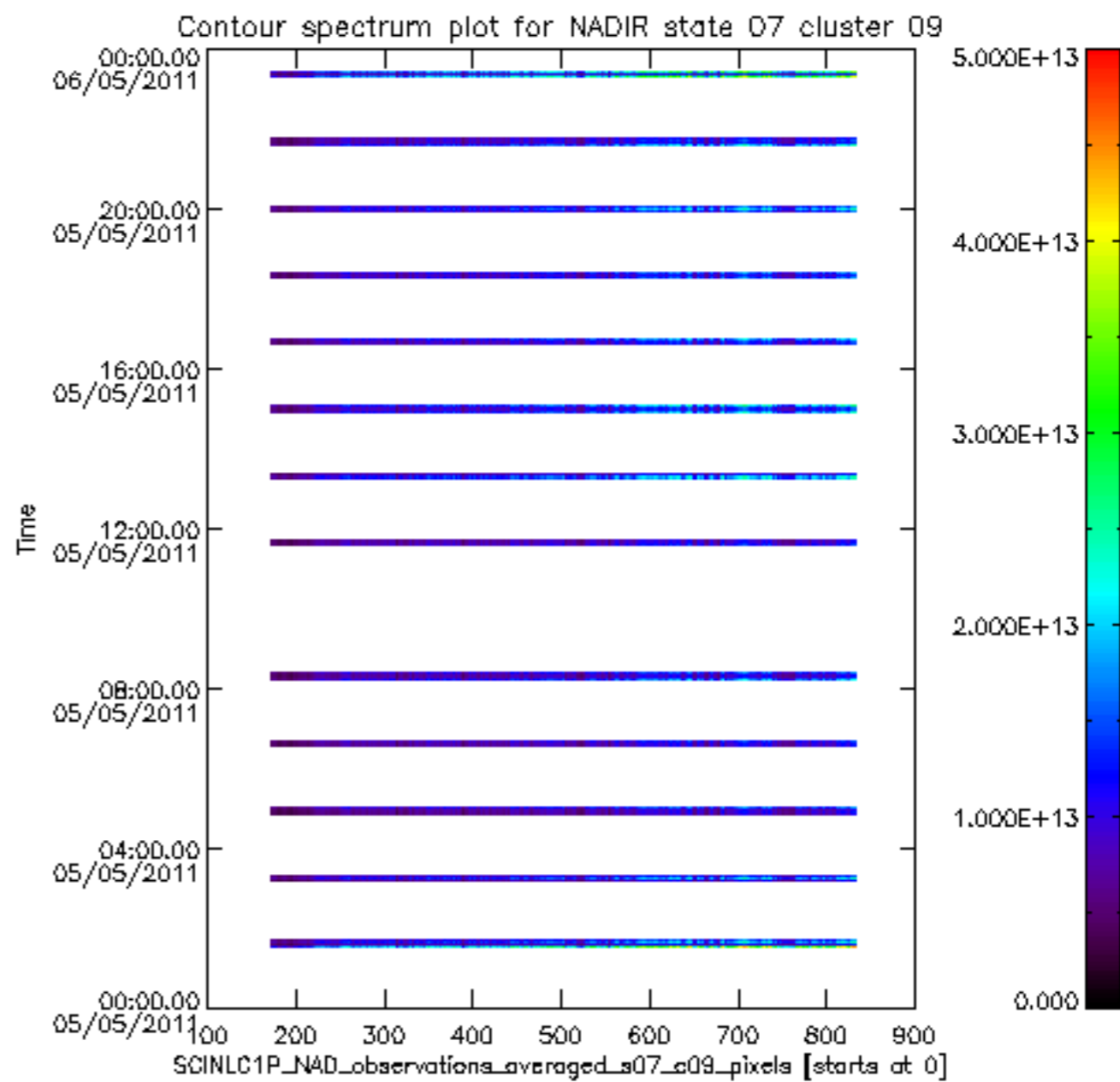
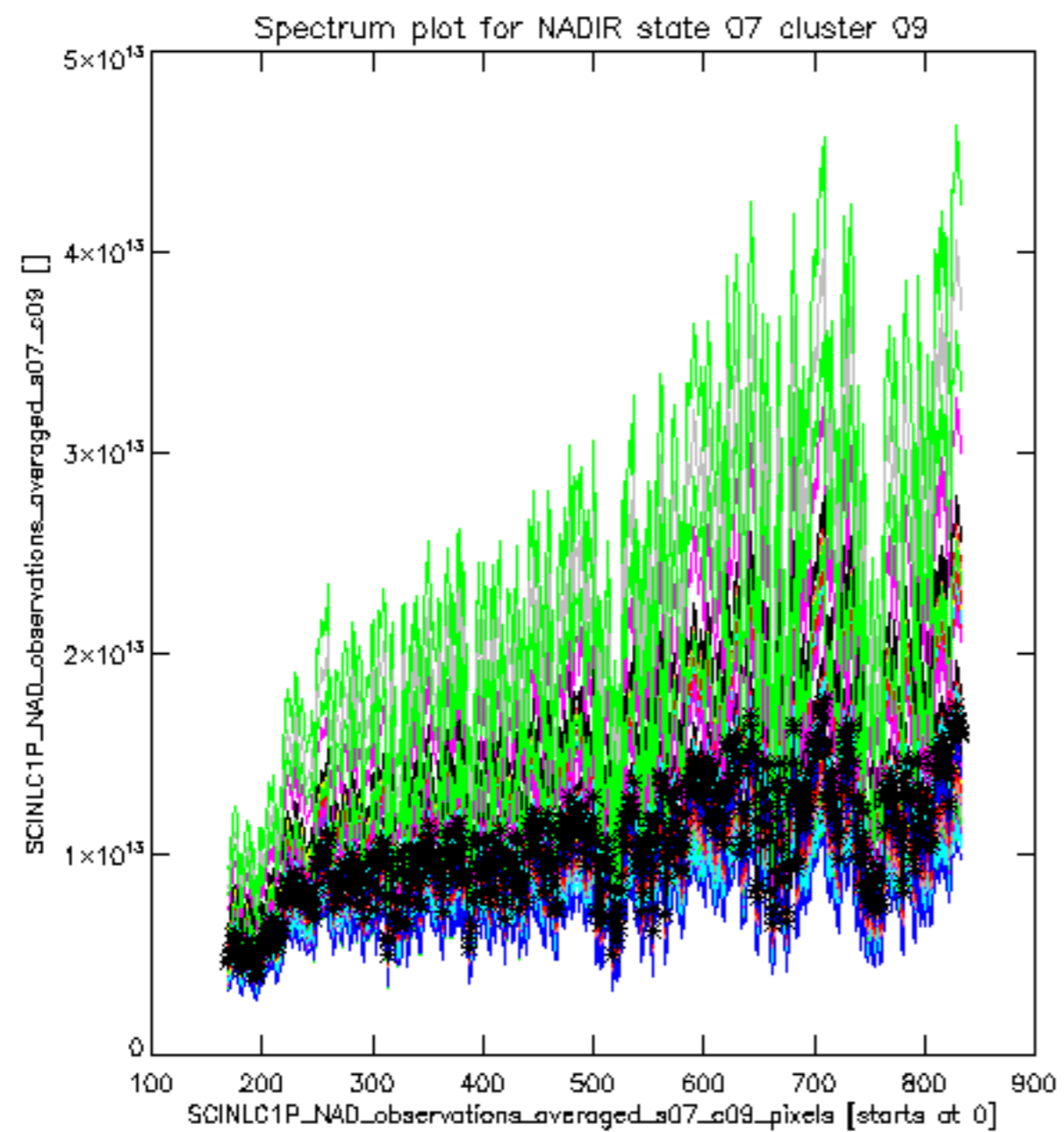
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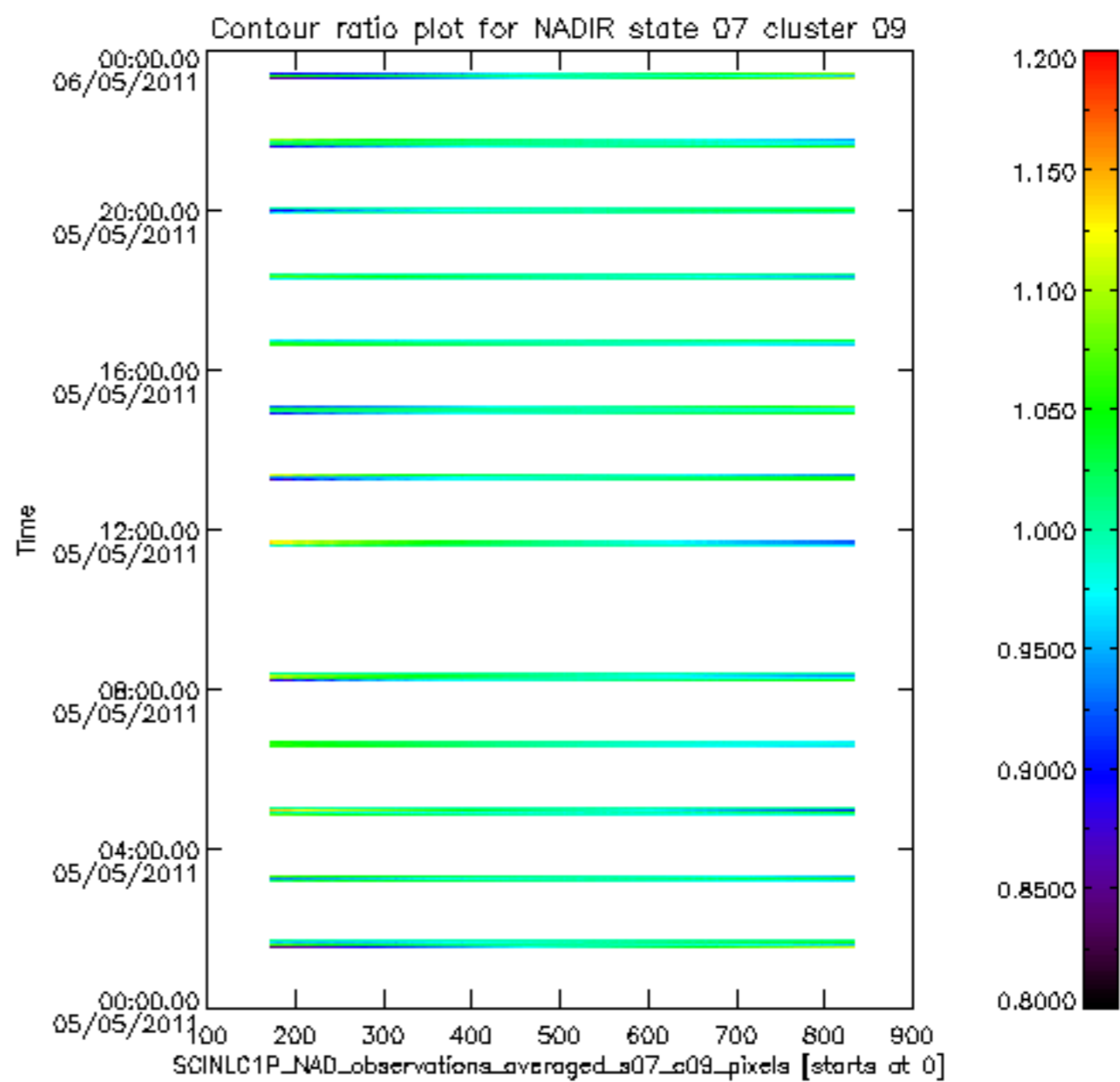
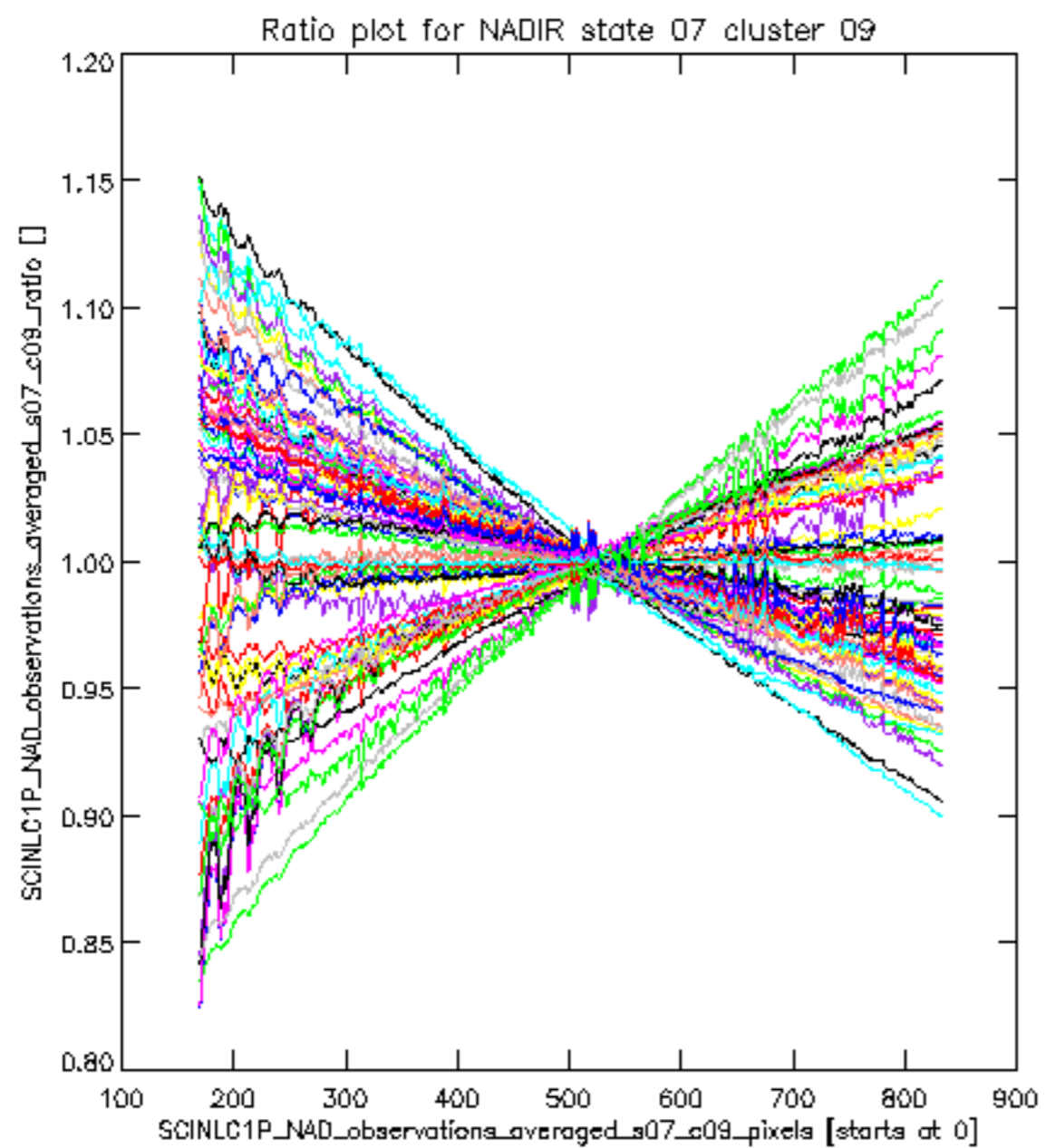


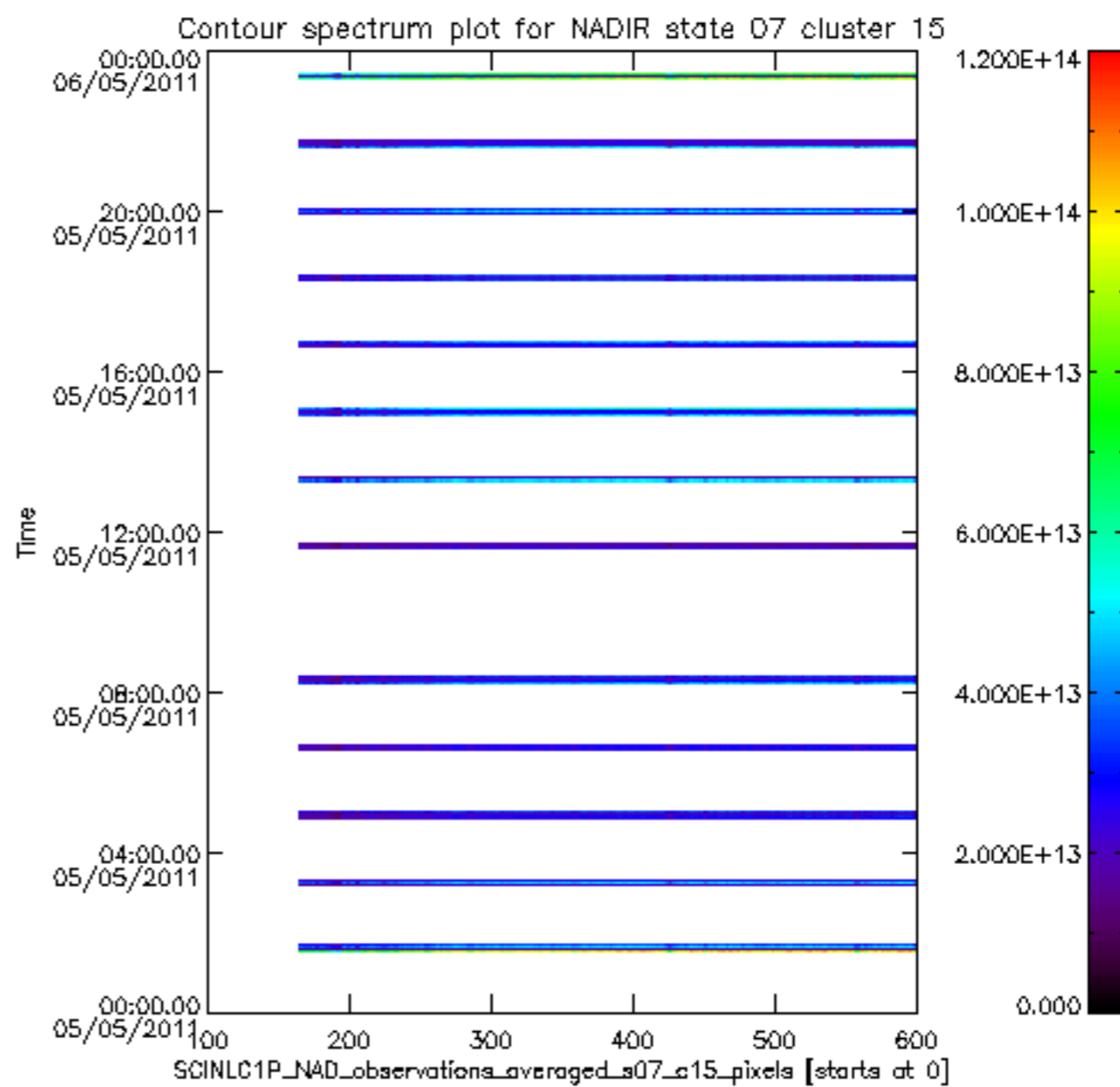
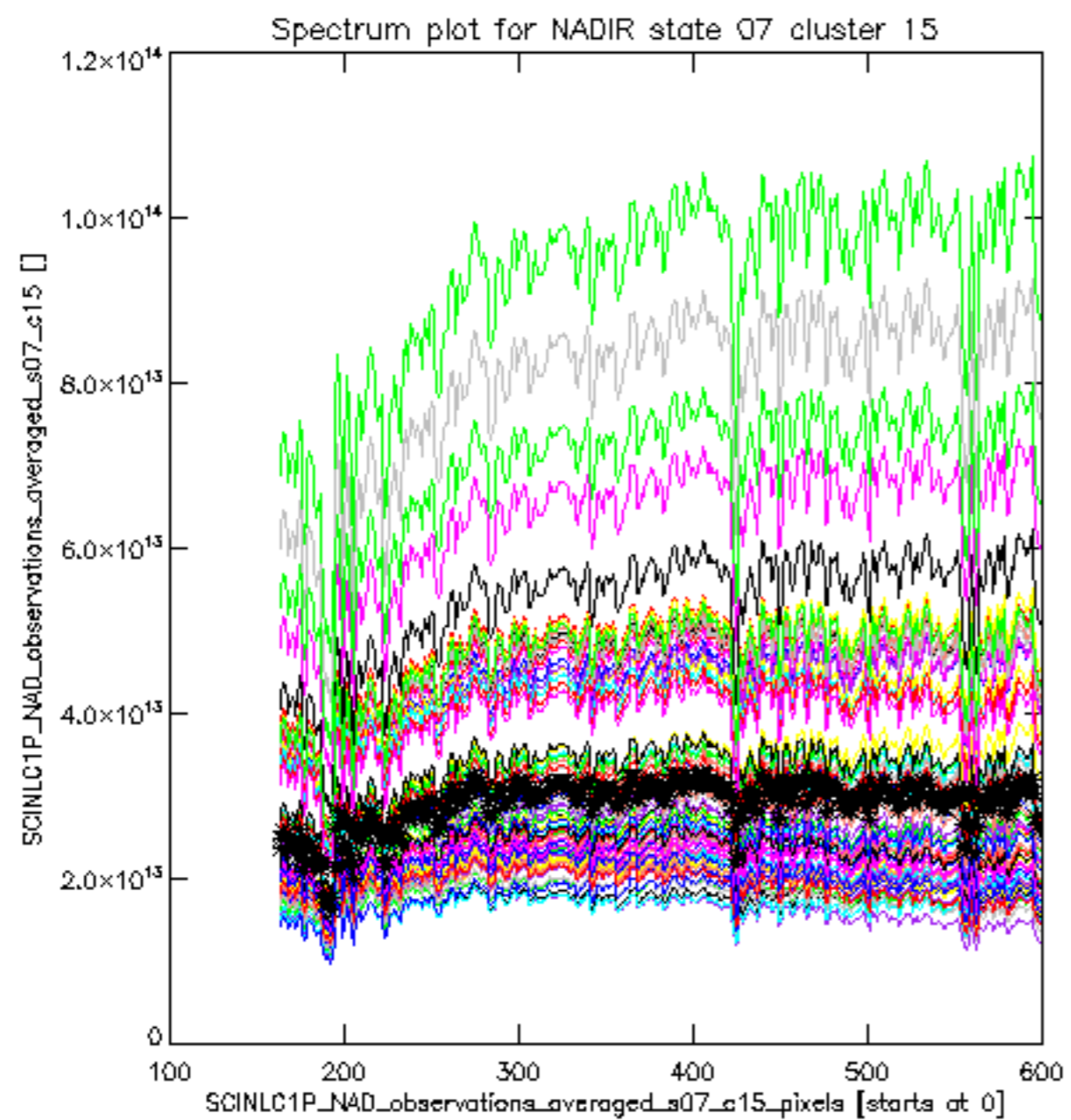
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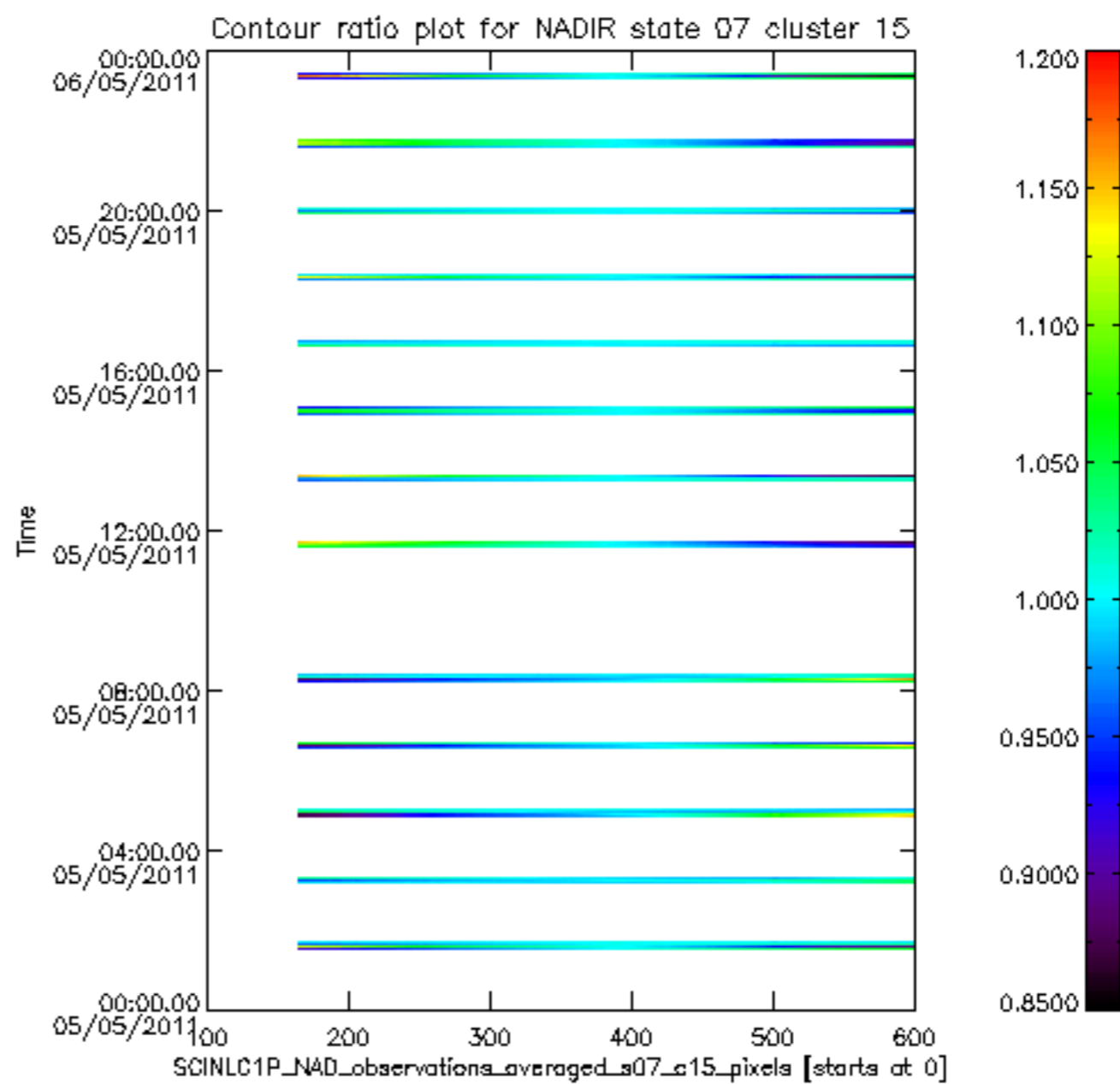
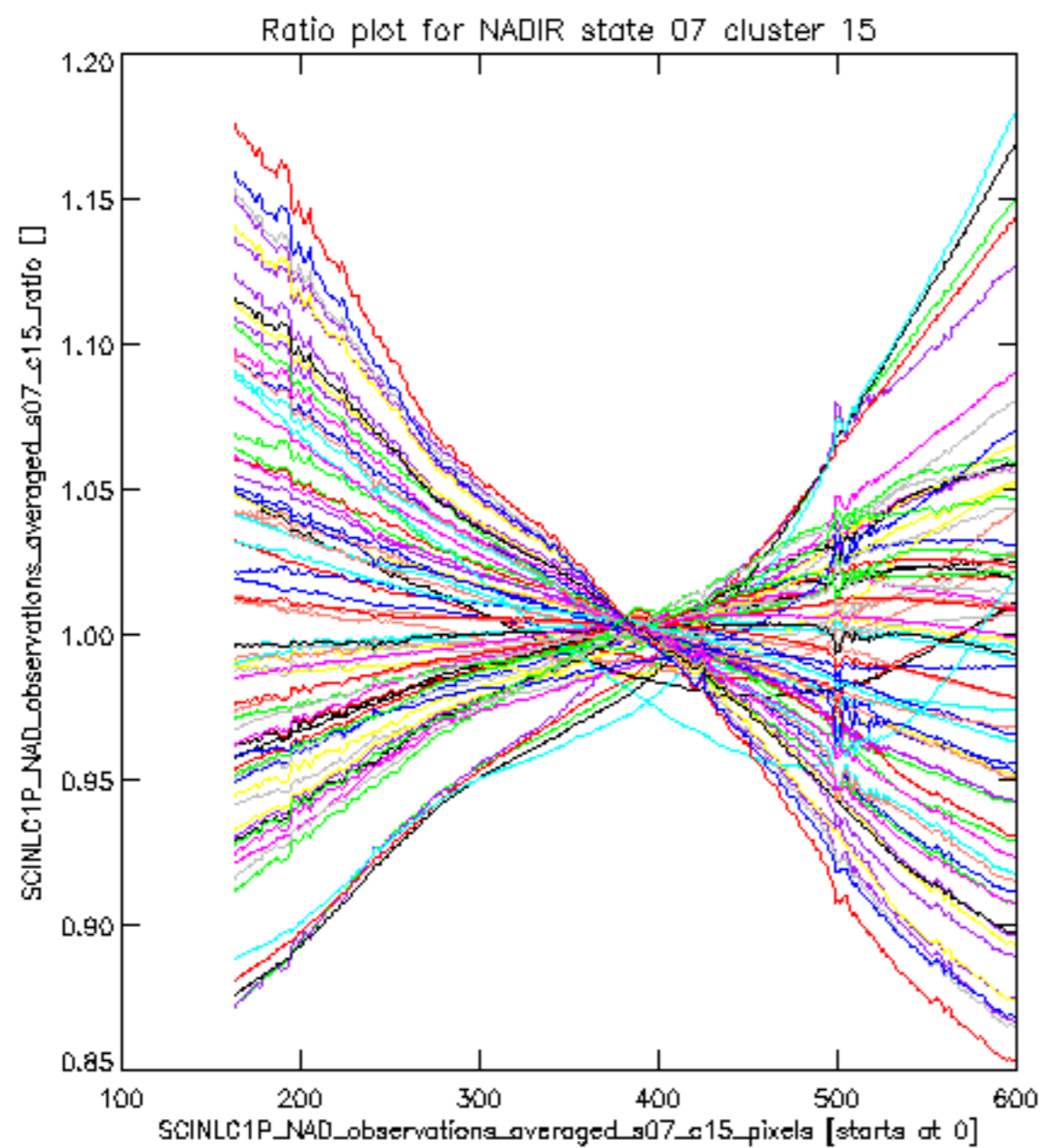


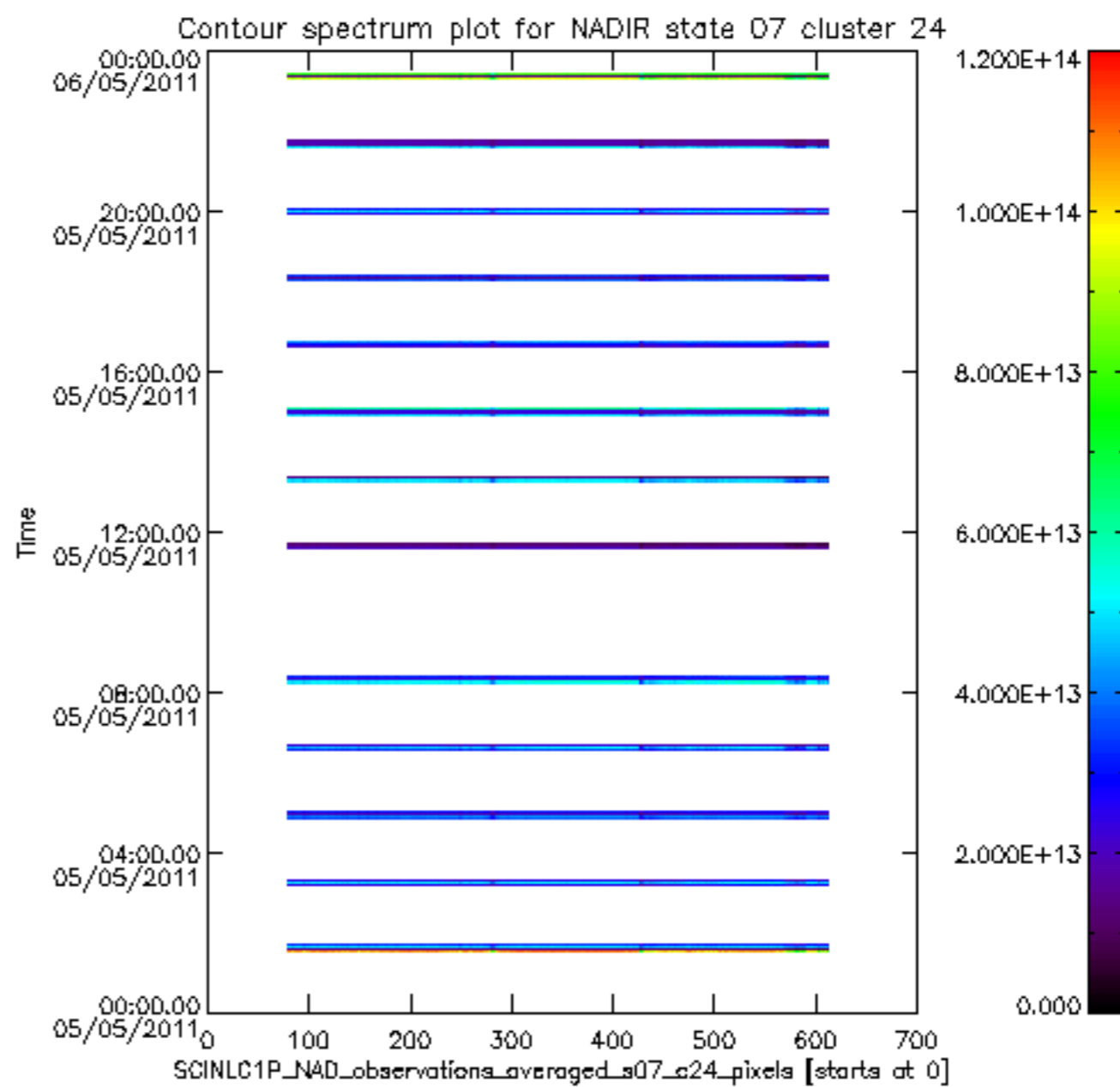
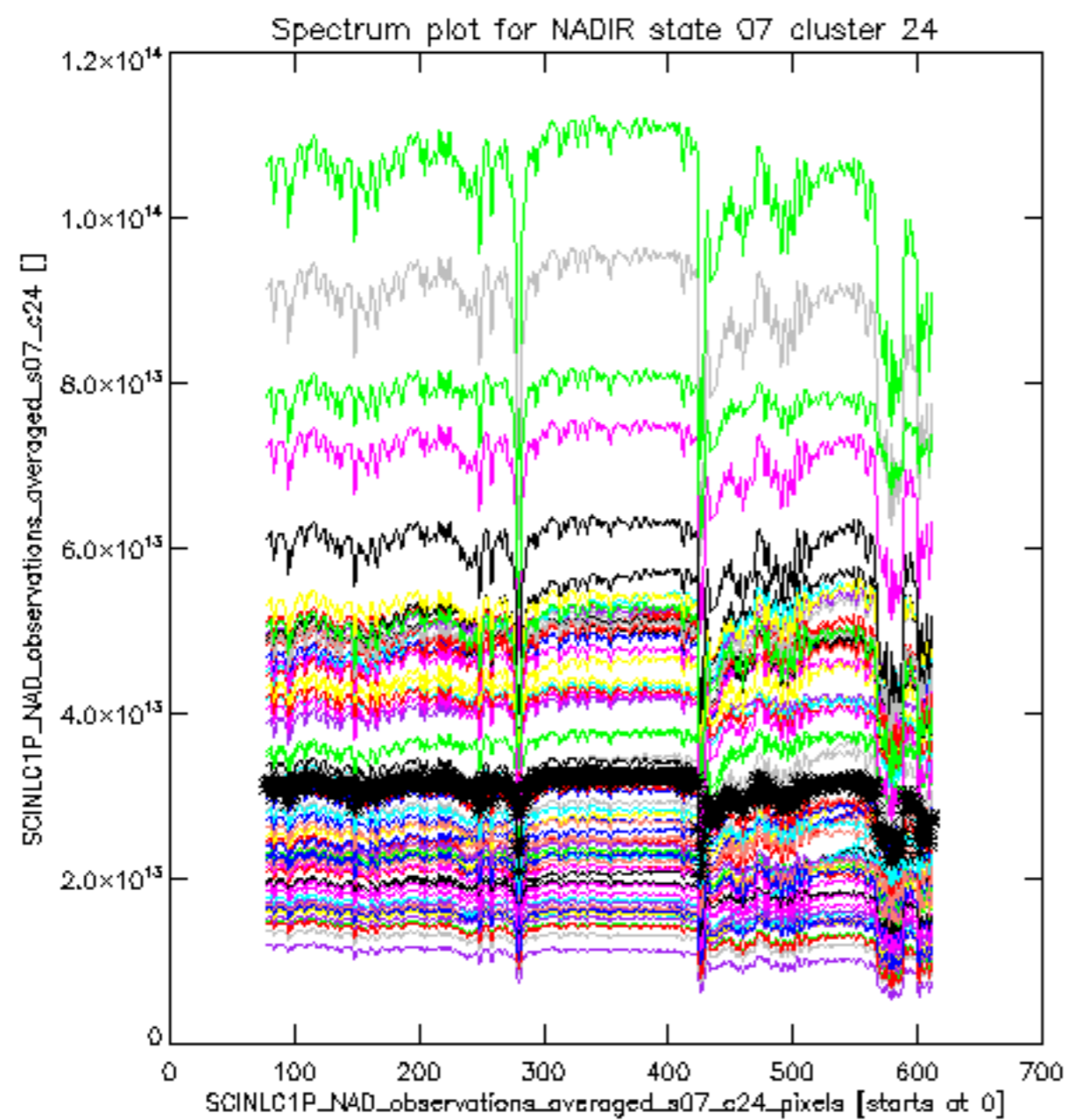


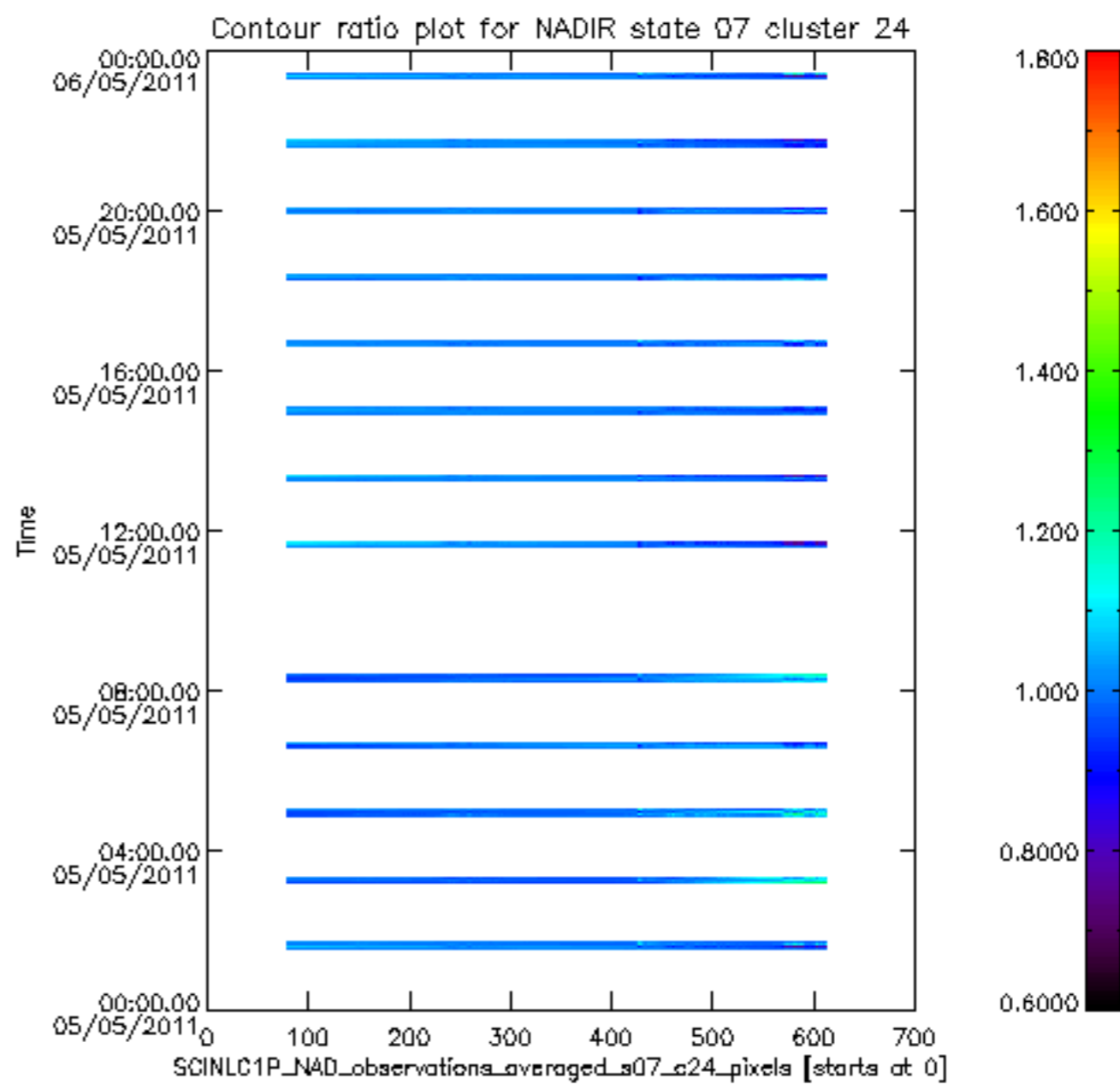
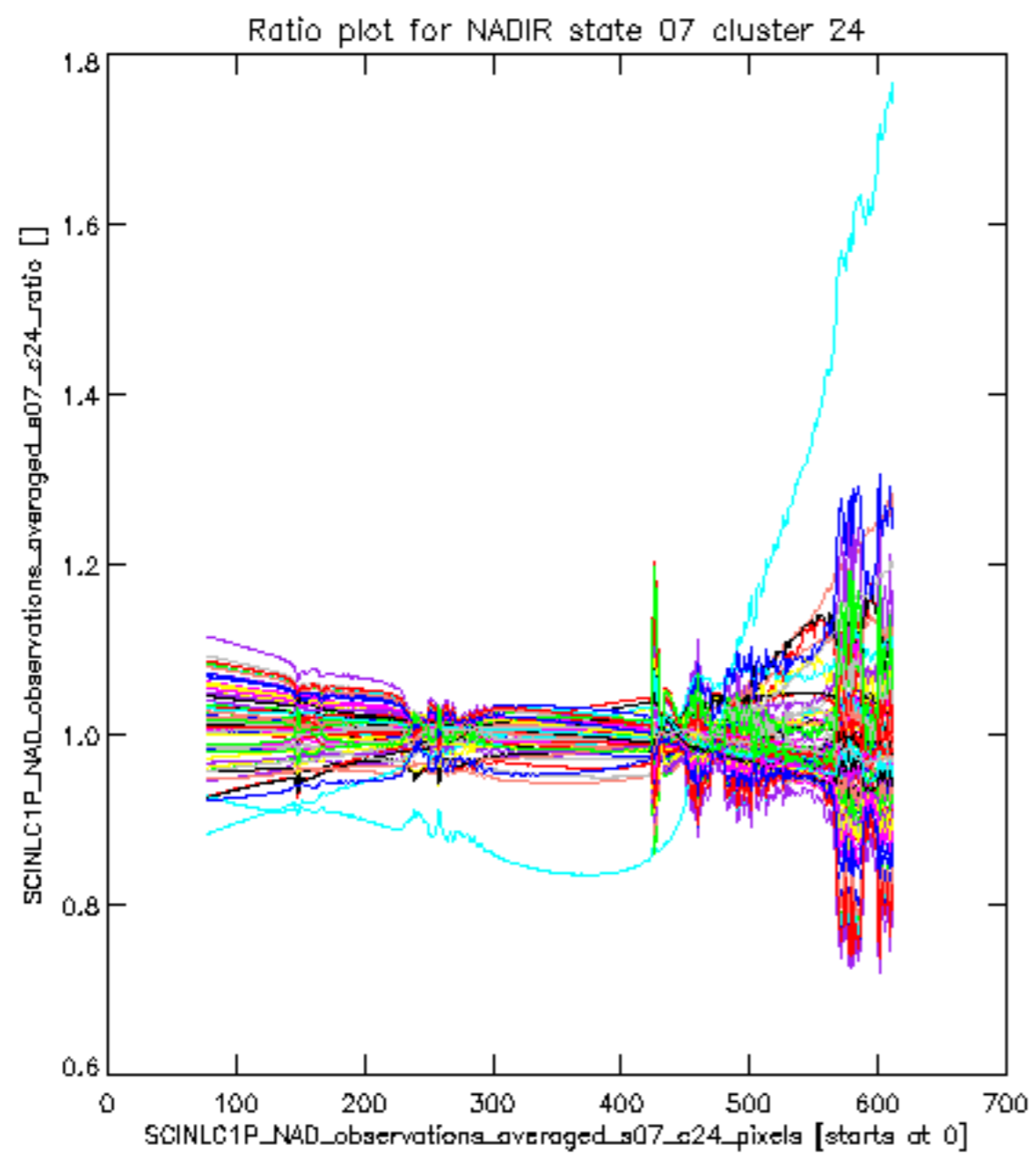




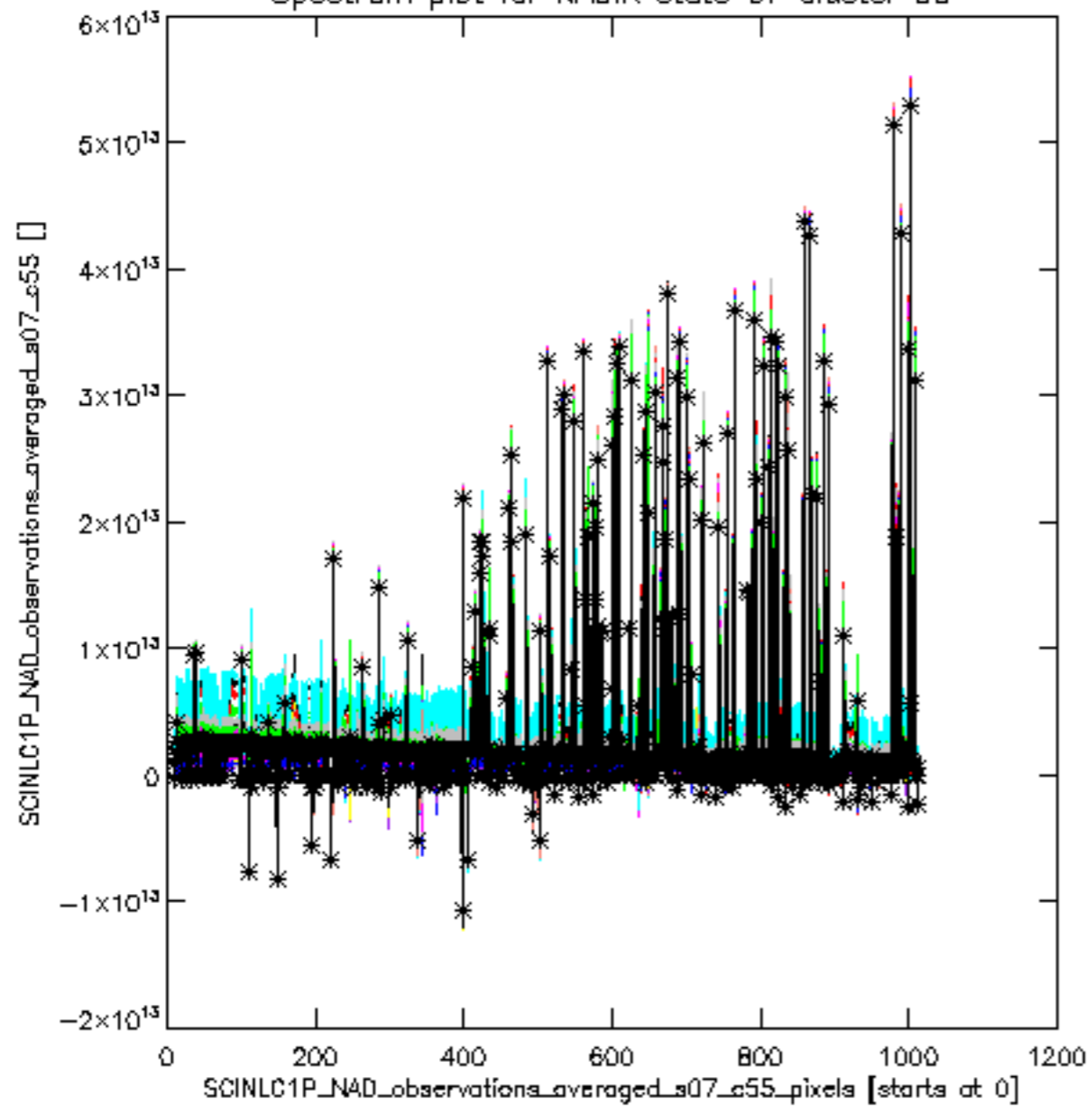








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

