

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	29MAY2011 06:55:43
Data source version	SCIA/7.04-U
Processing scope for products	16MAY2011 00:00:00 to 17MAY2011 00:00:00
Start time of first product within scope	15MAY2011 23:14:38
Stop time of last product within scope	16MAY2011 22:41:23
Total number of level 1 products	15
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	16MAY2011 01:26:54.540	16MAY2011 18:17:15.048
1	NADIR	07	09	N/A	16MAY2011 01:26:54.540	16MAY2011 18:17:15.048
2	NADIR	07	15	N/A	16MAY2011 01:26:54.540	16MAY2011 18:17:15.048
3	NADIR	07	24	N/A	16MAY2011 01:26:54.540	16MAY2011 18:17:15.048
4	NADIR	07	55	N/A	16MAY2011 01:26:54.540	16MAY2011 18:17:15.048
5	LIMB	32	09	~19 km	16MAY2011 00:00:05.891	16MAY2011 18:22:50.665
6	LIMB	32	09	~22 km	16MAY2011 00:00:05.891	16MAY2011 18:22:50.665
7	LIMB	32	09	~25 km	16MAY2011 00:00:05.891	16MAY2011 18:22:50.665
8	LIMB	32	15	~22 km	16MAY2011 00:00:05.891	16MAY2011 18:22:50.665
9	LIMB	32	15	~25 km	16MAY2011 00:00:05.891	16MAY2011 18:22:50.665
10	LIMB	32	15	~35 km	16MAY2011 00:00:05.891	16MAY2011 18:22:50.665

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	#cmlpl_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110515_230852_000060493102_00289_48148_1441.N1	15MAY2011 23:14:38	16MAY2011 00:25:24	0	33	30	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110516_004945_000059703102_00290_48149_1440.N1	16MAY2011 00:54:51	16MAY2011 02:05:29	0	33	30	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110516_022919_000060493102_00291_48150_1518.N1	16MAY2011 02:35:05	16MAY2011 03:45:35	0	33	30	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110516_041013_000059703102_00292_48151_1519.N1	16MAY2011 04:15:19	16MAY2011 05:25:41	0	33	30	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110516_054947_000060493102_00293_48152_1520.N1	16MAY2011 05:55:33	16MAY2011 07:05:47	0	32	29	0	0	2	0	0	
5	SCI_NLC_1CUDPA20110516_073040_000059703102_00294_48153_1458.N1	16MAY2011 07:35:47	16MAY2011 08:45:52	0	32	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110516_091014_000060493102_00295_48154_1459.N1	16MAY2011 09:16:00	16MAY2011 10:25:58	0	32	30	0	0	1	0	0
7	SCI_NLC_1CUDPA20110516_105107_000059703102_00296_48155_1460.N1	16MAY2011 10:56:14	16MAY2011 12:07:11	0	33	30	0	0	1	0	0
8	SCI_NLC_1CUDPA20110516_123042_000060493102_00297_48156_1521.N1	16MAY2011 12:36:28	16MAY2011 13:47:16	0	33	30	0	0	1	0	0
9	SCI_NLC_1CUDPA20110516_141135_000059703102_00298_48157_1476.N1	16MAY2011 14:16:41	16MAY2011 15:27:21	0	33	30	0	0	1	0	0
10	SCI_NLC_1CUDPA20110516_155109_000060493102_00299_48158_1474.N1	16MAY2011 15:56:55	16MAY2011 17:07:26	0	33	30	0	0	1	0	0
11	SCI_NLC_1CUDPA20110516_173202_000059993102_00300_48159_1469.N1	16MAY2011 17:37:09	16MAY2011 19:02:58	0	28	28	0	10	1	0	0
12	SCI_NLC_1CUDPA20110516_191723_000056793102_00301_48160_1468.N1	16MAY2011 19:17:23	16MAY2011 20:47:47	0	0	4	0	4	1	0	0
13	SCI_NLC_1CUDPA20110516_205205_000060103102_00302_48161_1466.N1	16MAY2011 20:57:36	16MAY2011 22:16:54	0	0	4	0	2	1	0	0
14	SCI_NLC_1CUDPA20110516_223220_000060333102_00303_48162_1464.N1	16MAY2011 22:37:50	16MAY2011 22:41:23	0	0	4	0	0	1	0	0

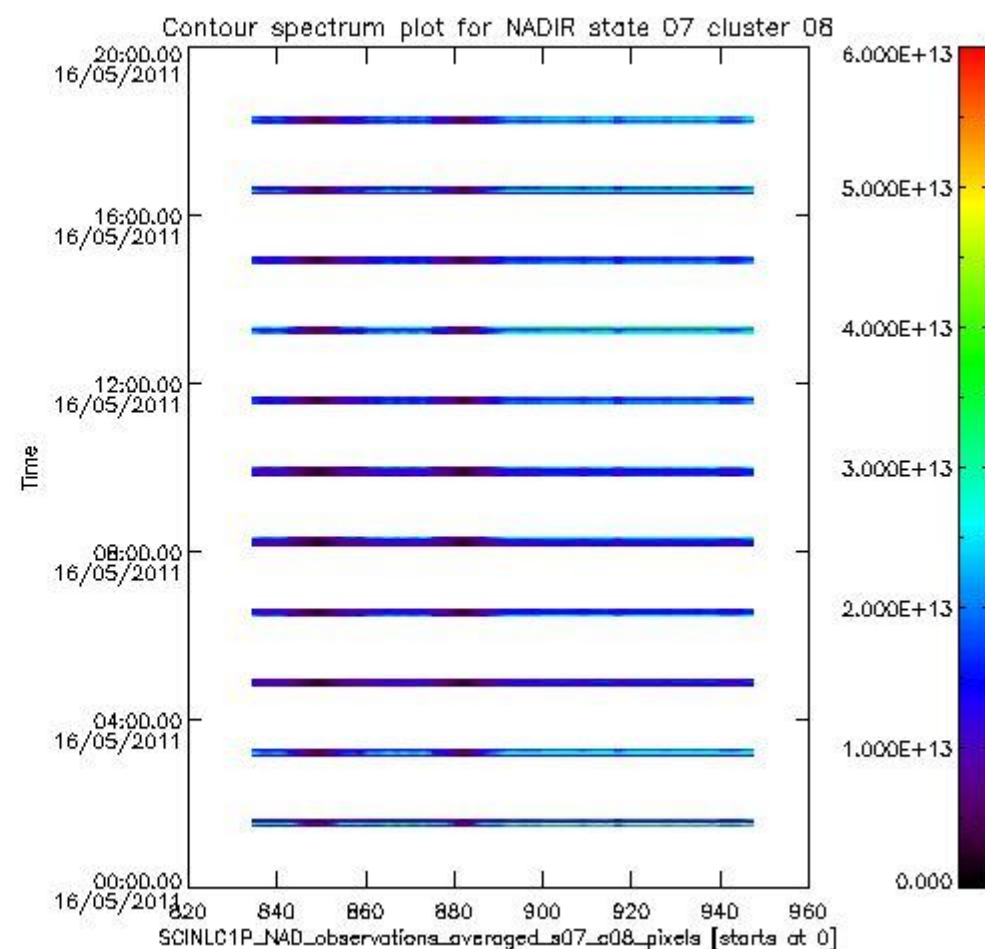
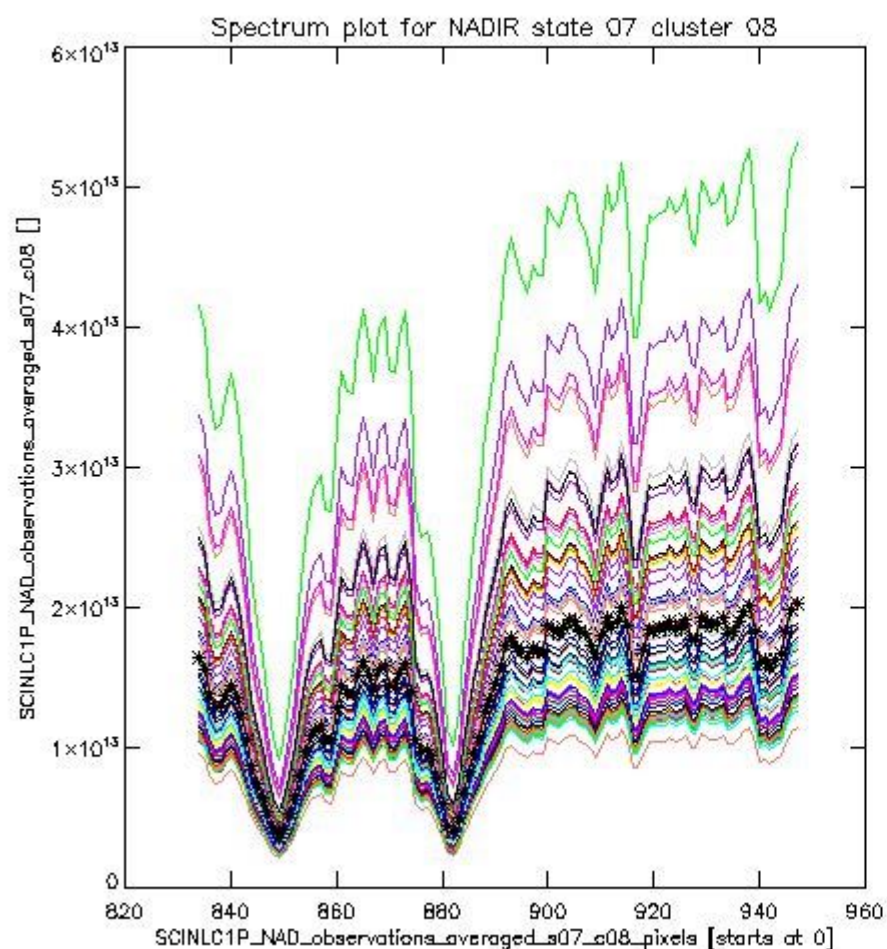
1.2 Source packet monitoring

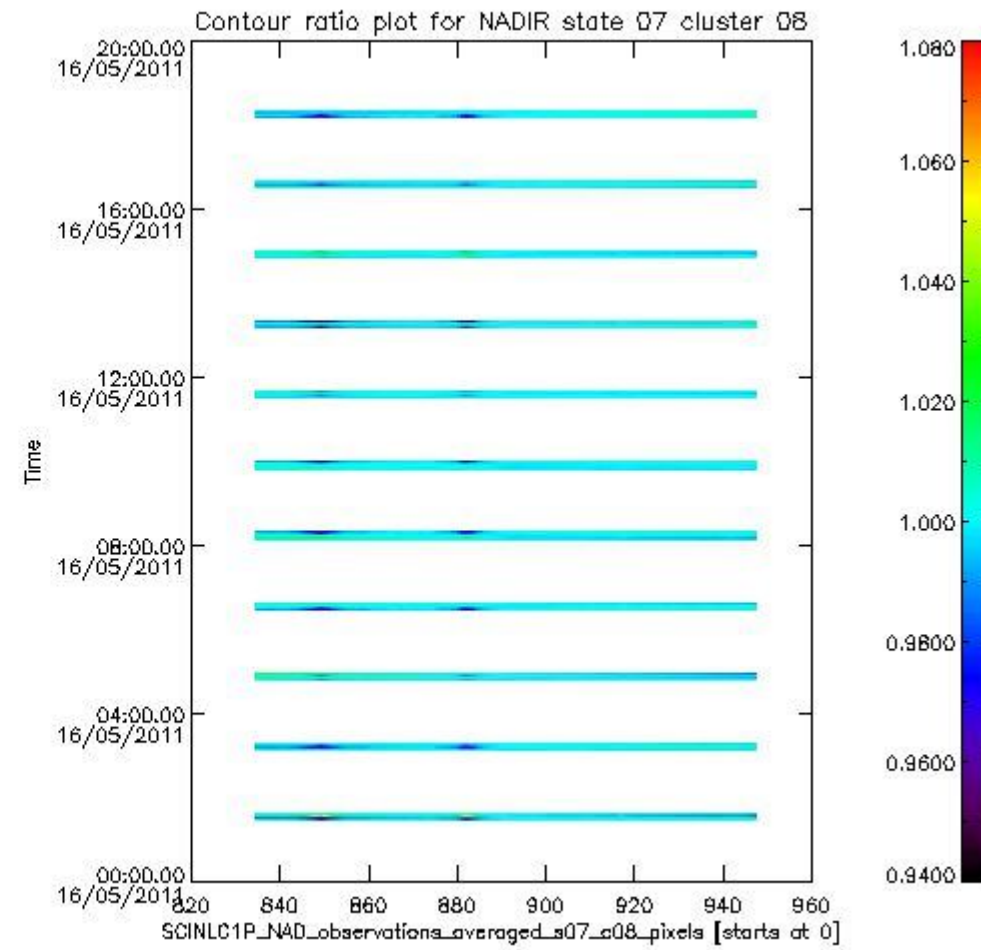
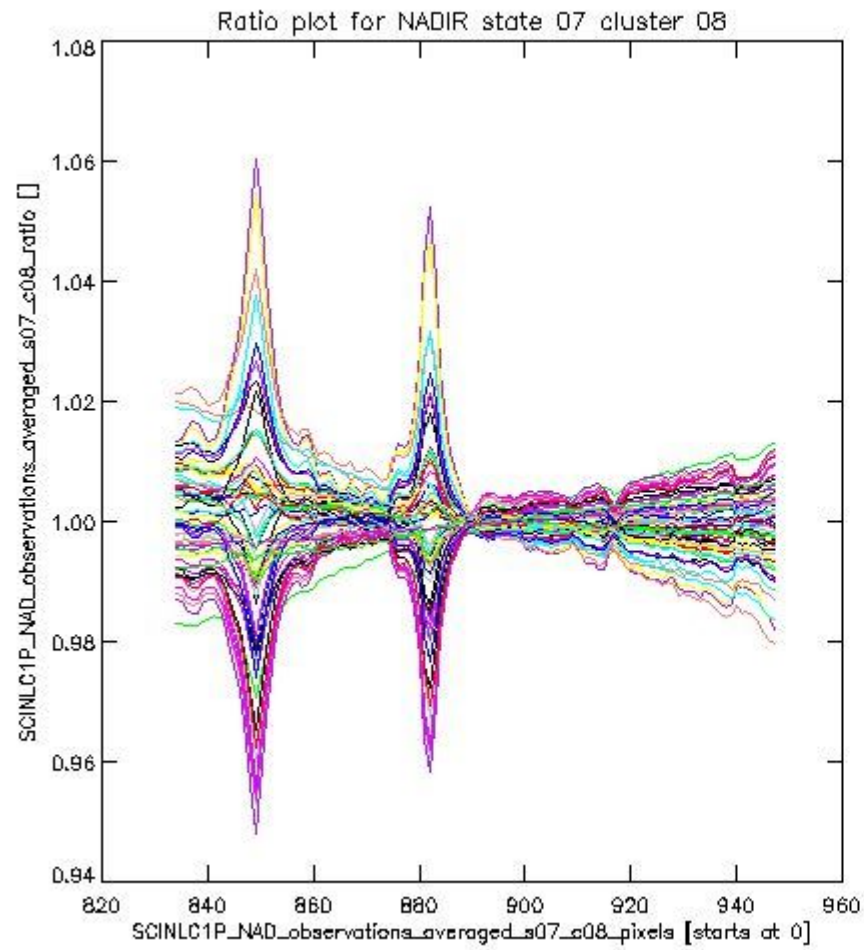
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

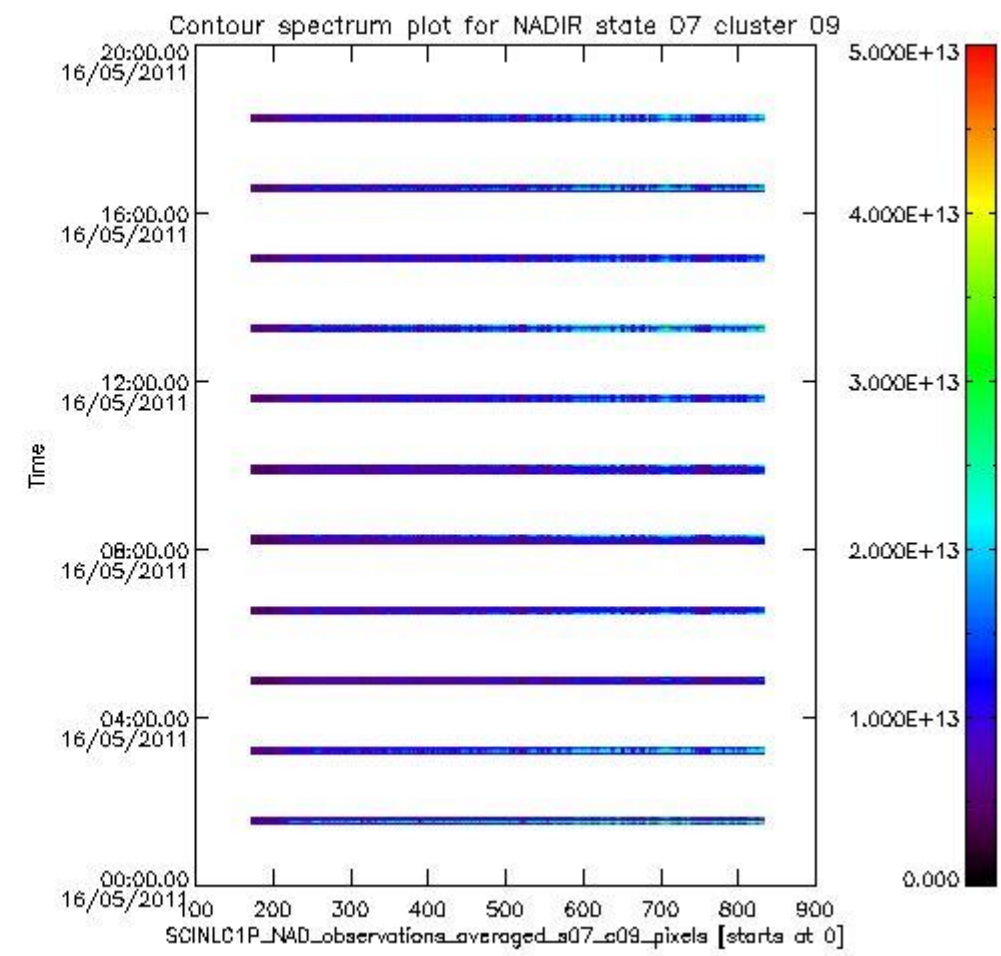
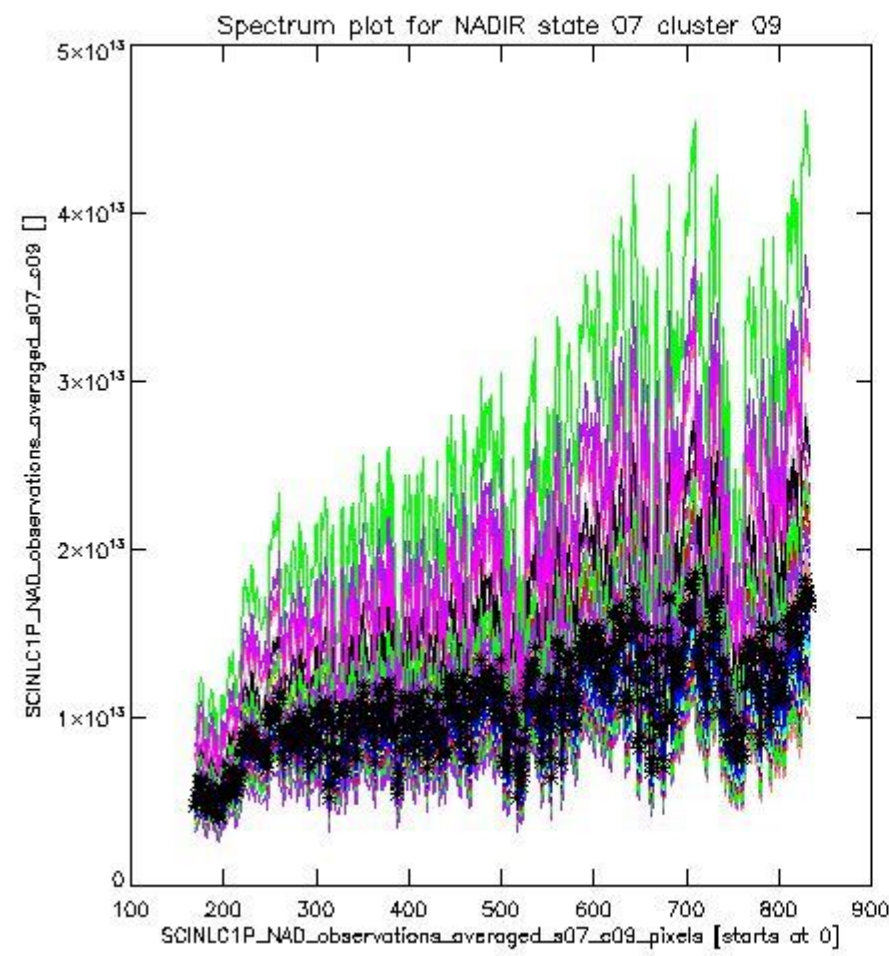
Item	Value
Start time of first sample	16MAY2011 01:26:54.540
Start time of last sample	16MAY2011 18:17:15.048
Reference period start time	16APR2011 03:08:56.083
Reference period stop time	15MAY2011 23:56:54.590
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



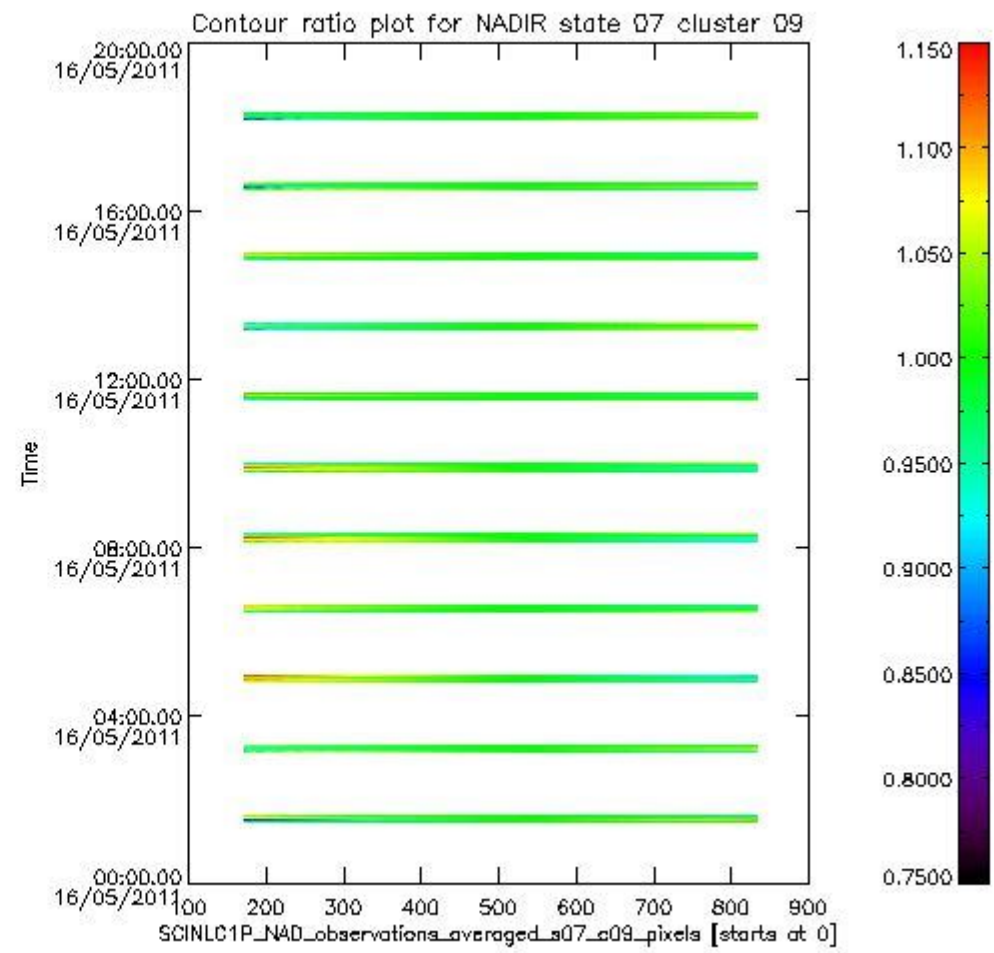
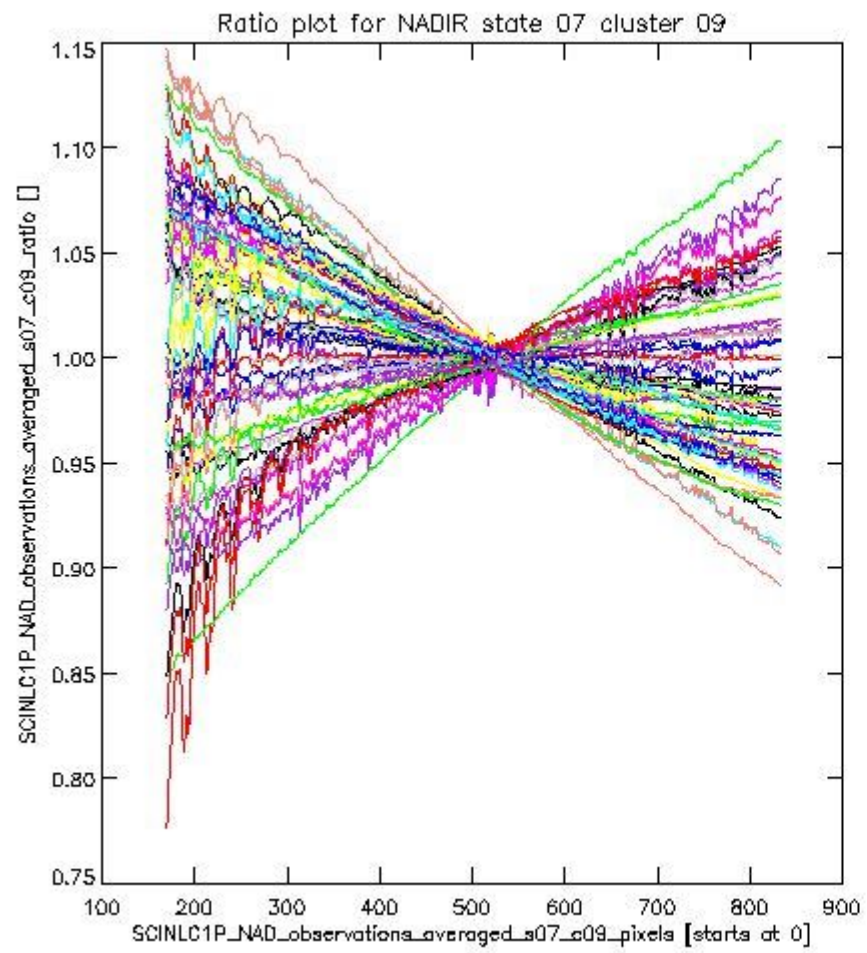


1.2.2 NADIR state 07 cluster 09 The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	16MAY2011 01:26:54.540
Start time of last sample	16MAY2011 18:17:15.048
Reference period start time	16APR2011 03:08:56.083
Reference period stop time	15MAY2011 23:56:54.590
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



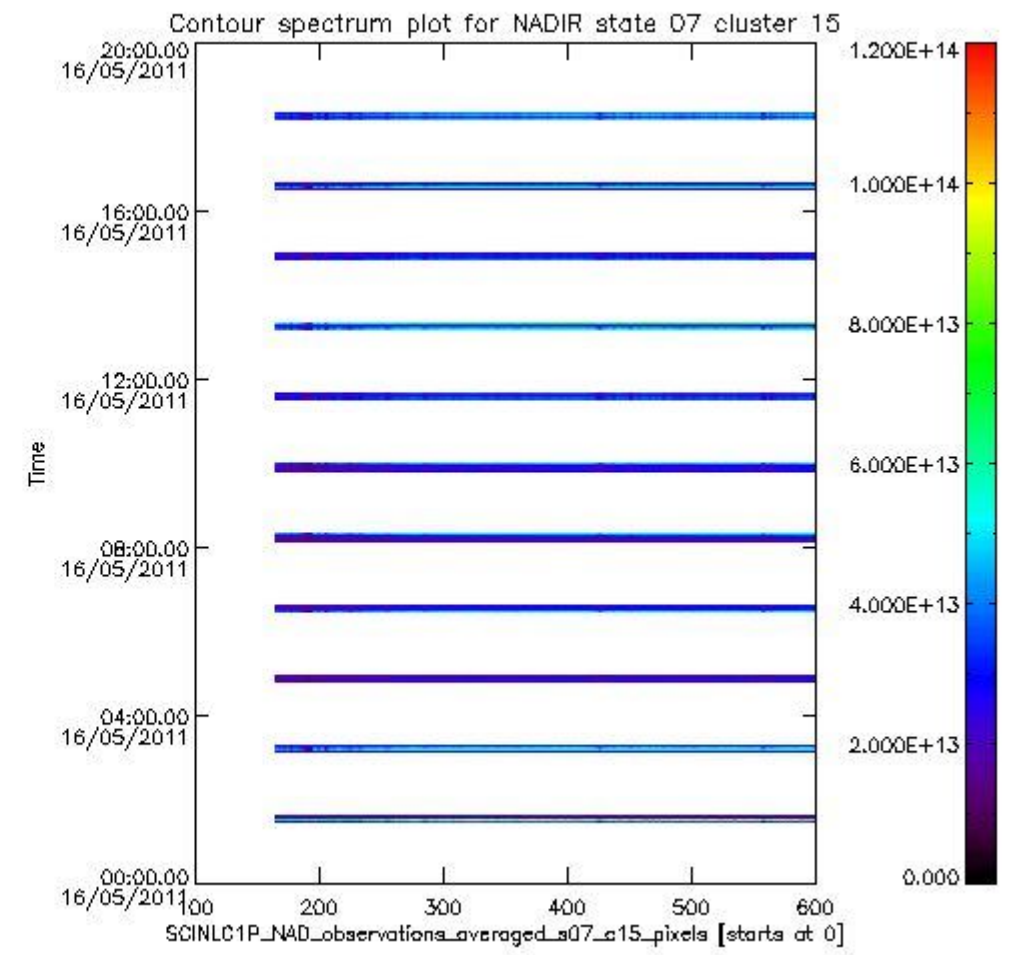
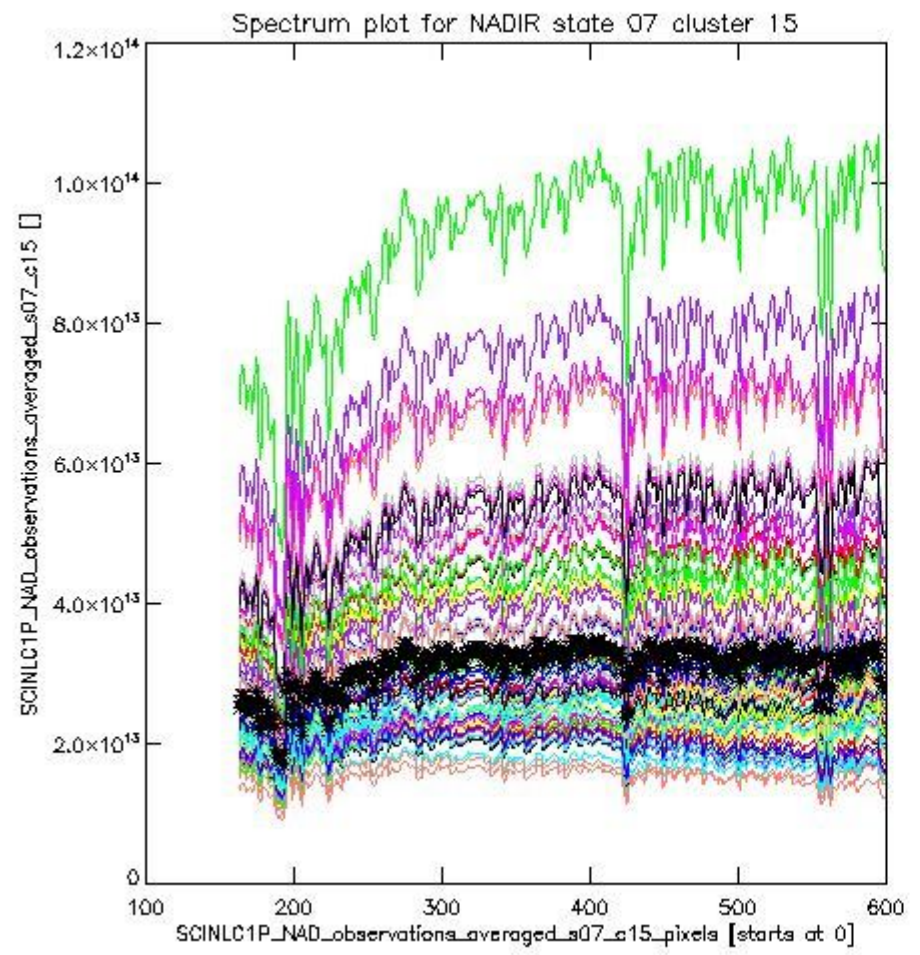
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_2.PNG



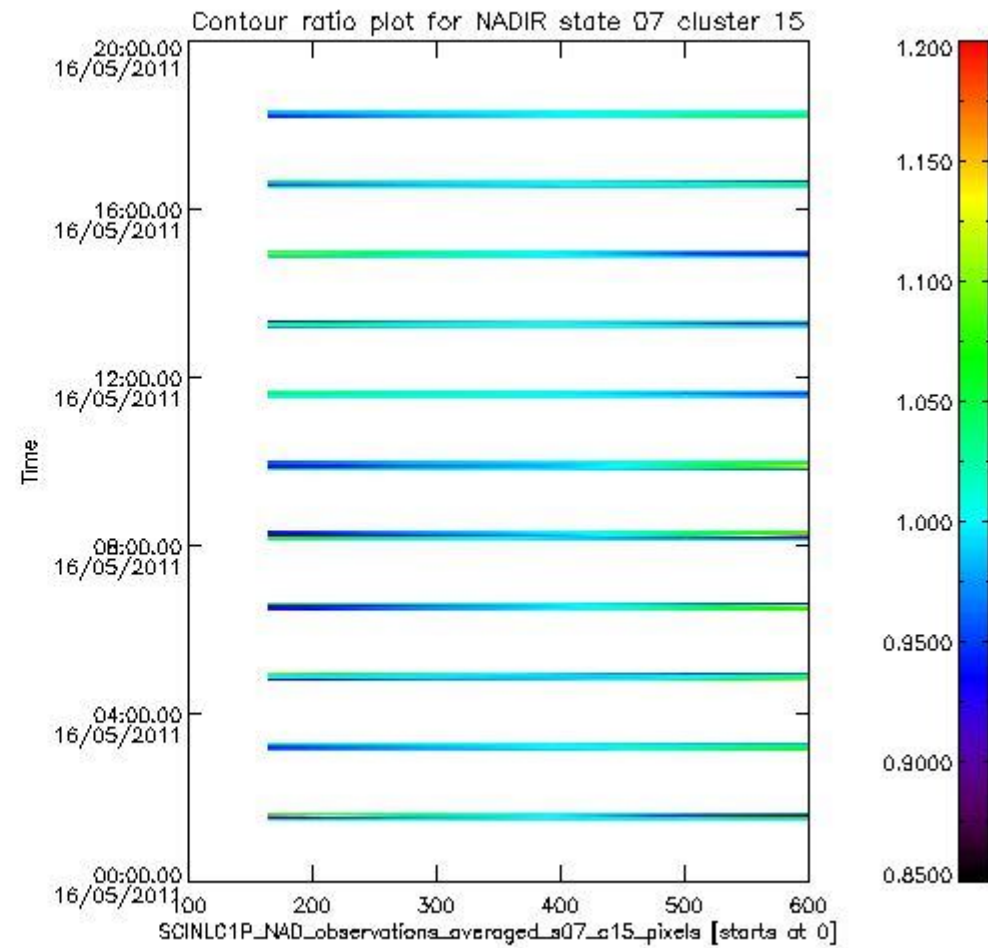
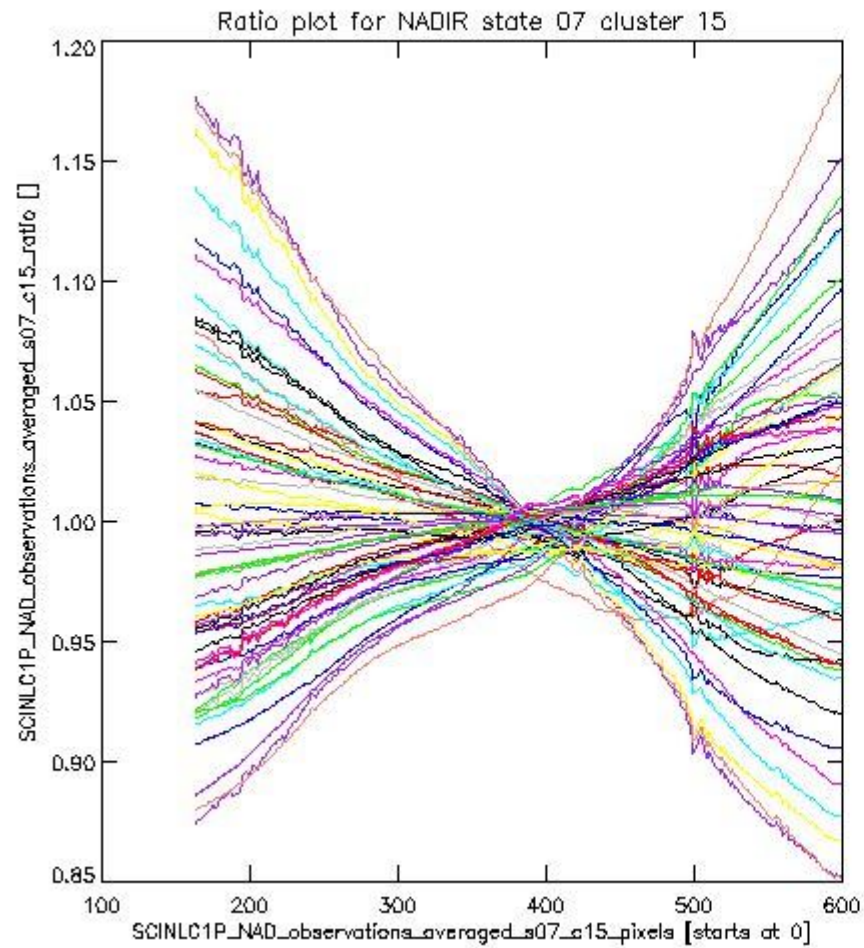
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_3.PNG

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	16MAY2011 01:26:54.540
Start time of last sample	16MAY2011 18:17:15.048
Reference period start time	16APR2011 03:08:56.083
Reference period stop time	15MAY2011 23:56:54.590
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



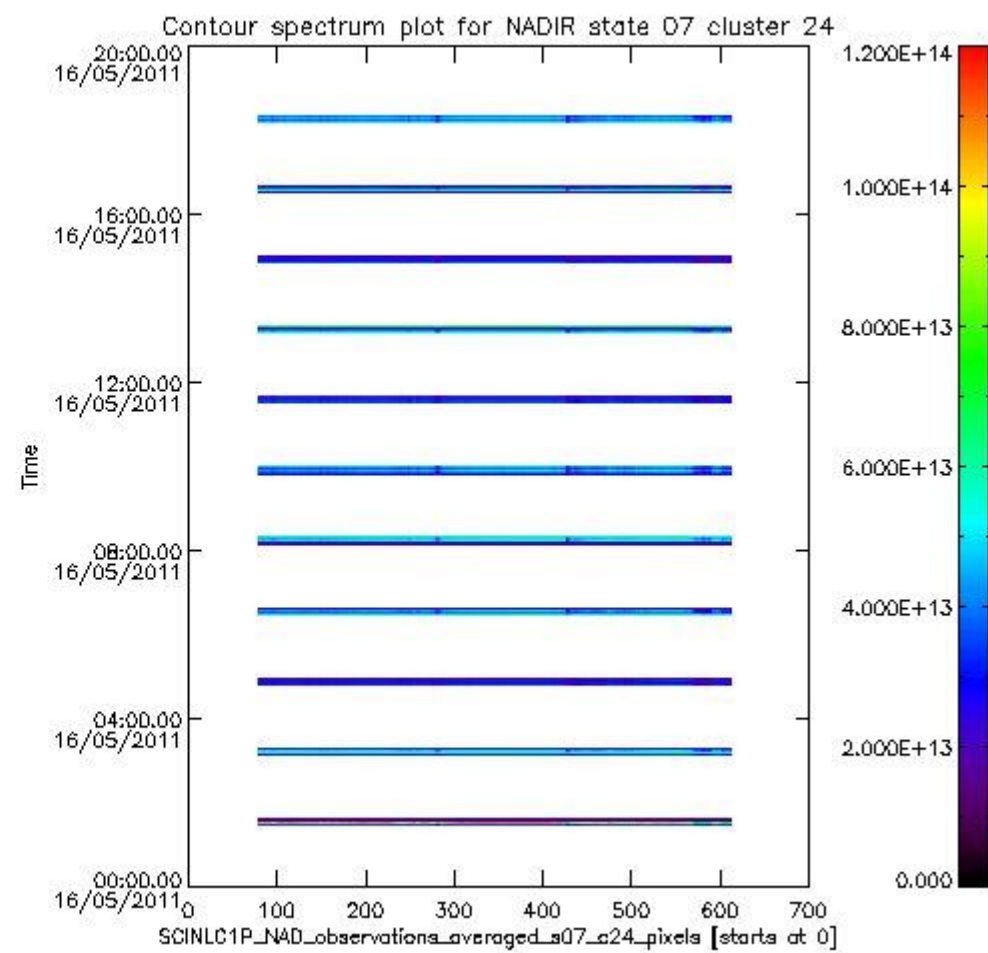
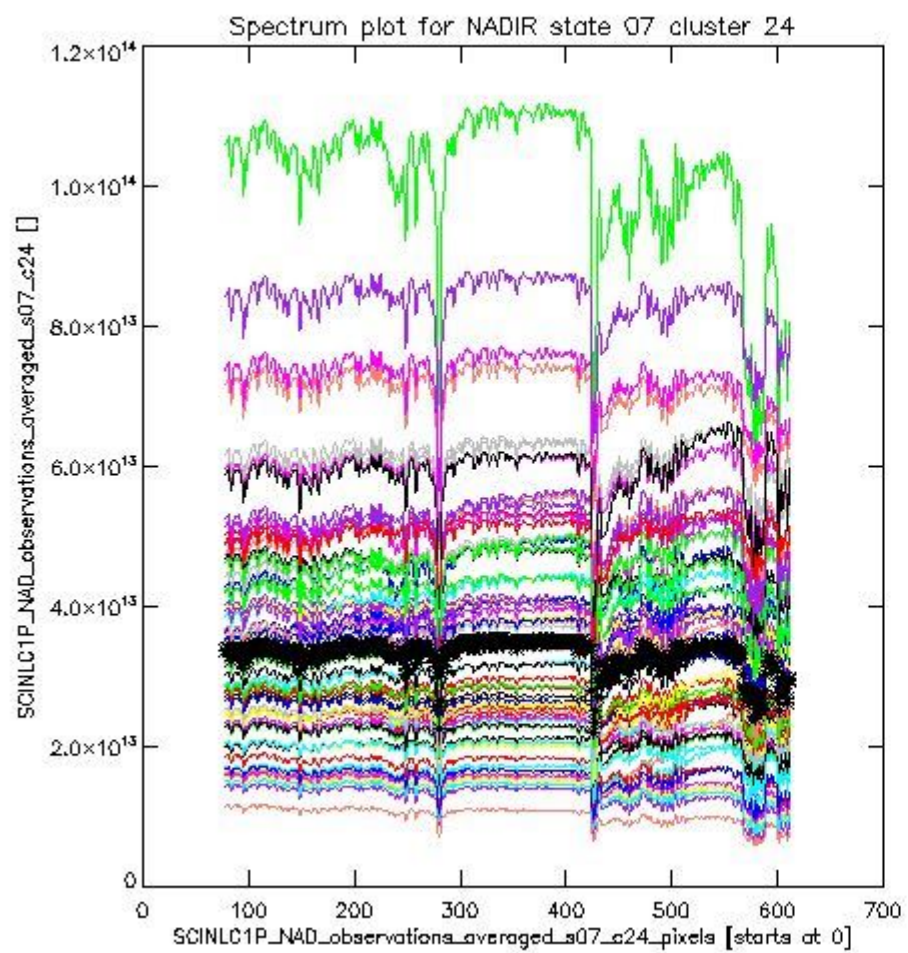
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_4.PNG



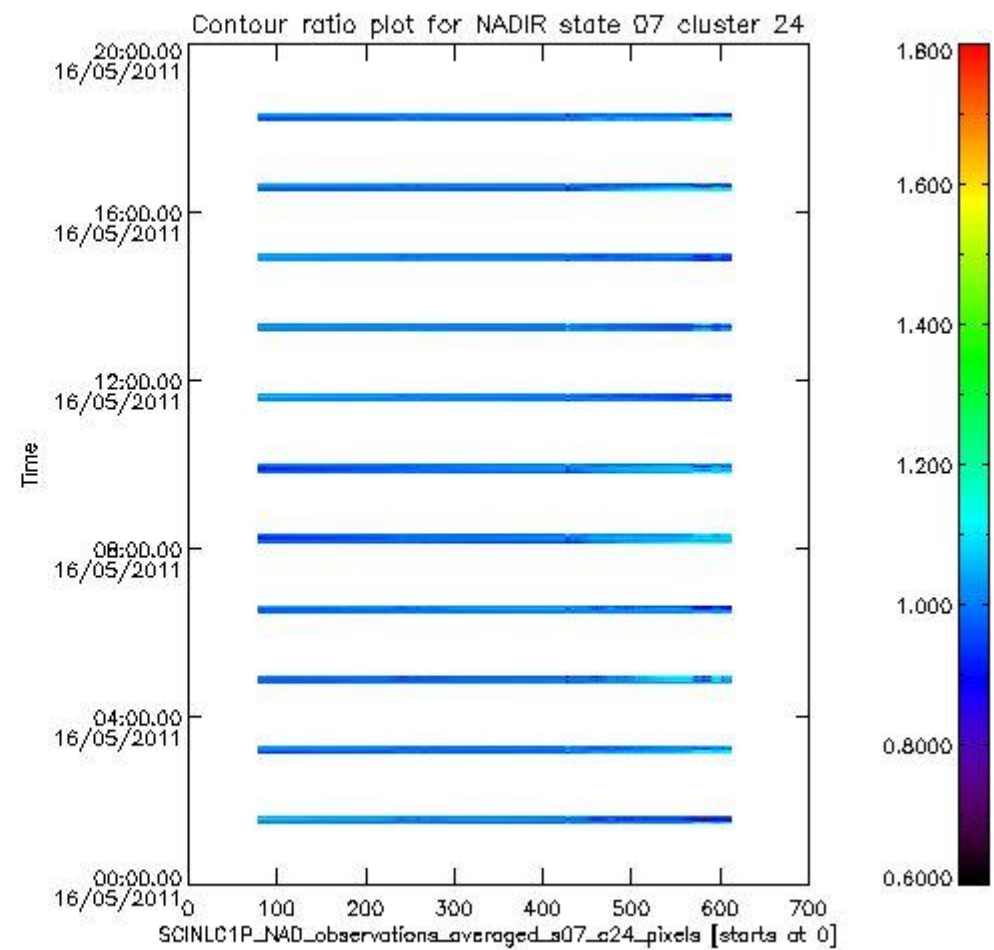
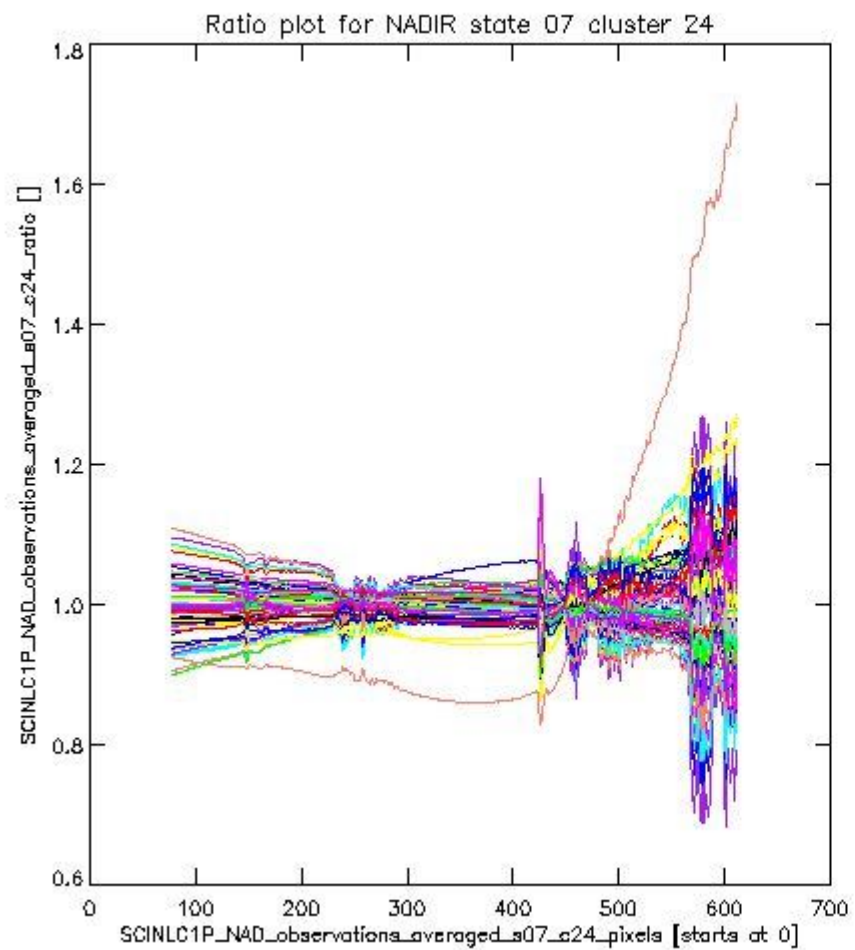
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110516_5.PNG

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	16MAY2011 01:26:54.540
Start time of last sample	16MAY2011 18:17:15.048
Reference period start time	16APR2011 03:08:56.083
Reference period stop time	15MAY2011 23:56:54.590
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



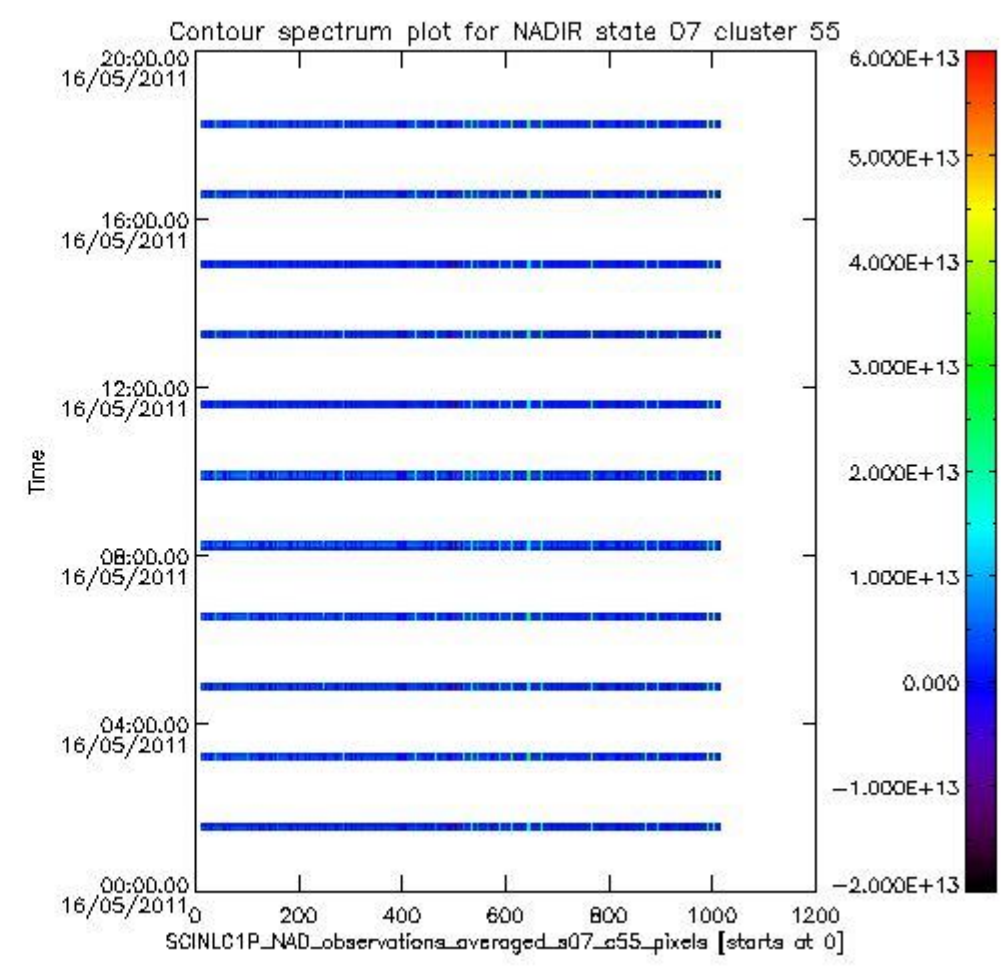
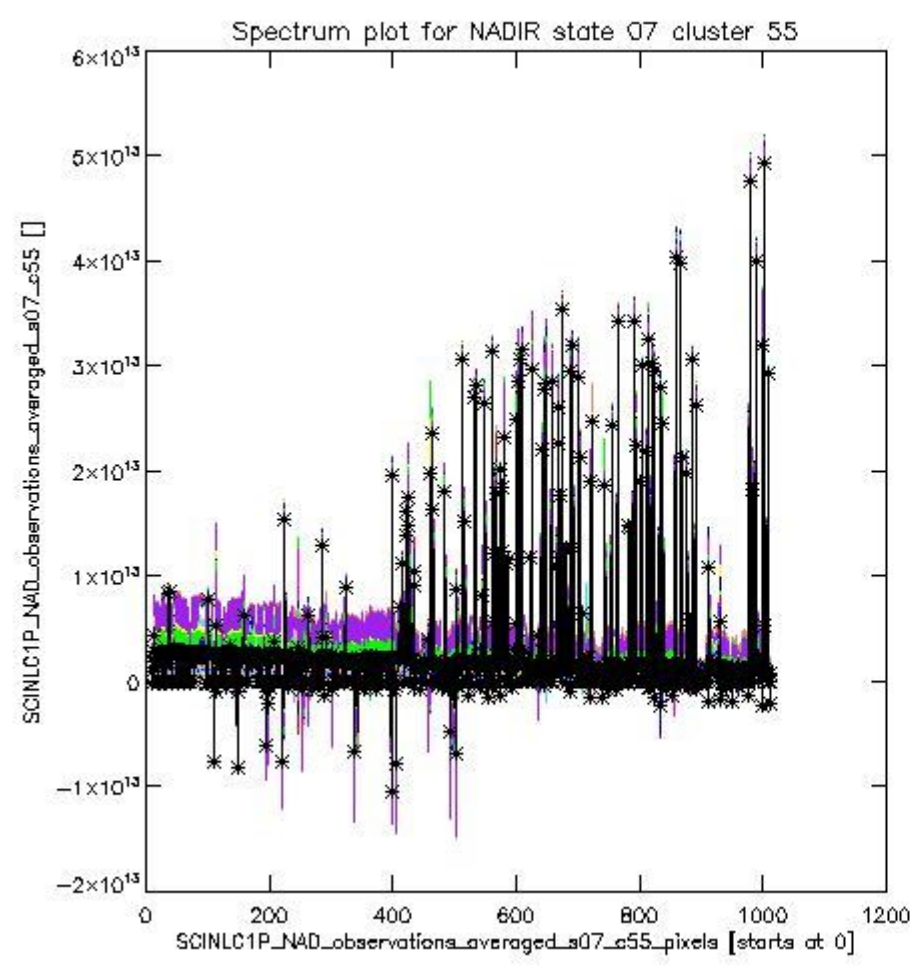
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_6.PNG



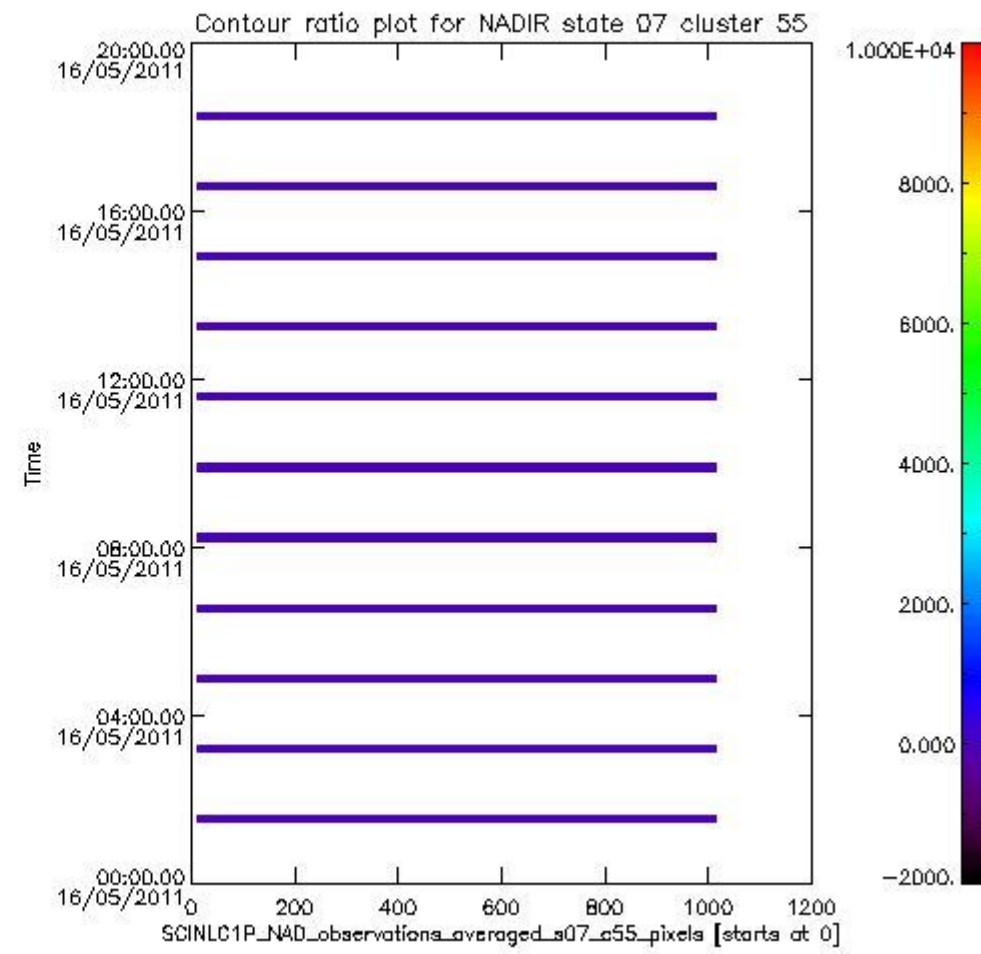
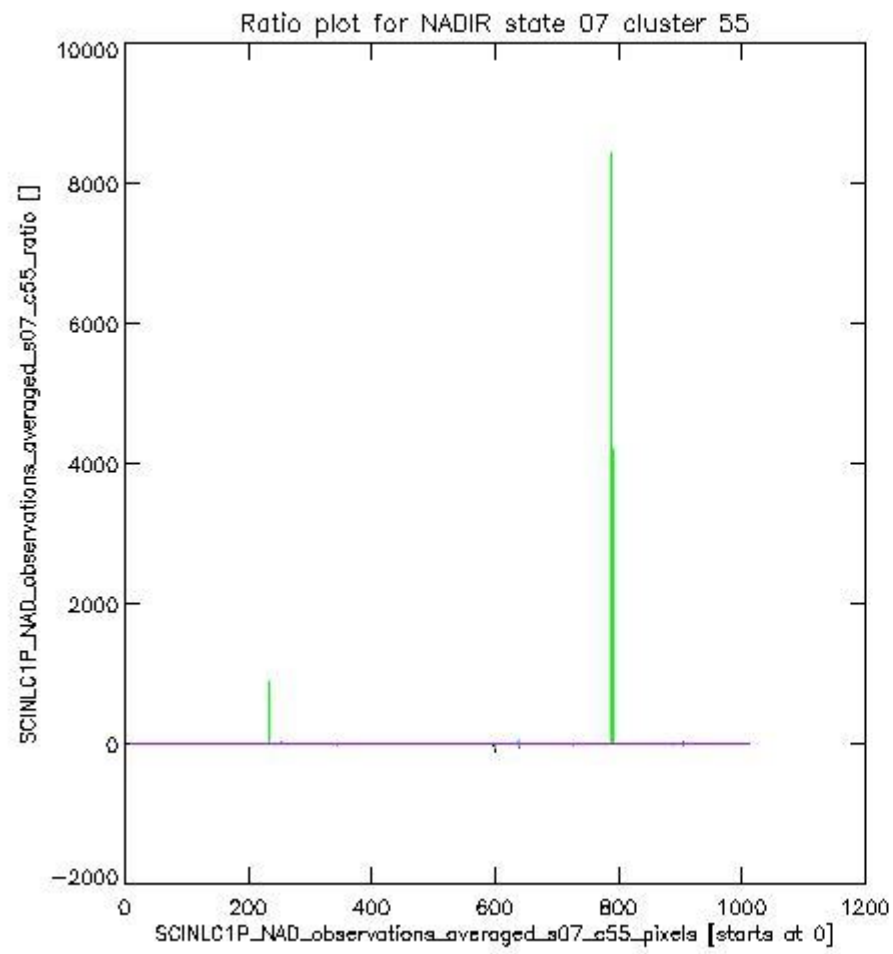
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110516_7.PNG

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	16MAY2011 01:26:54.540
Start time of last sample	16MAY2011 18:17:15.048
Reference period start time	16APR2011 03:08:56.083
Reference period stop time	15MAY2011 23:56:54.590
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



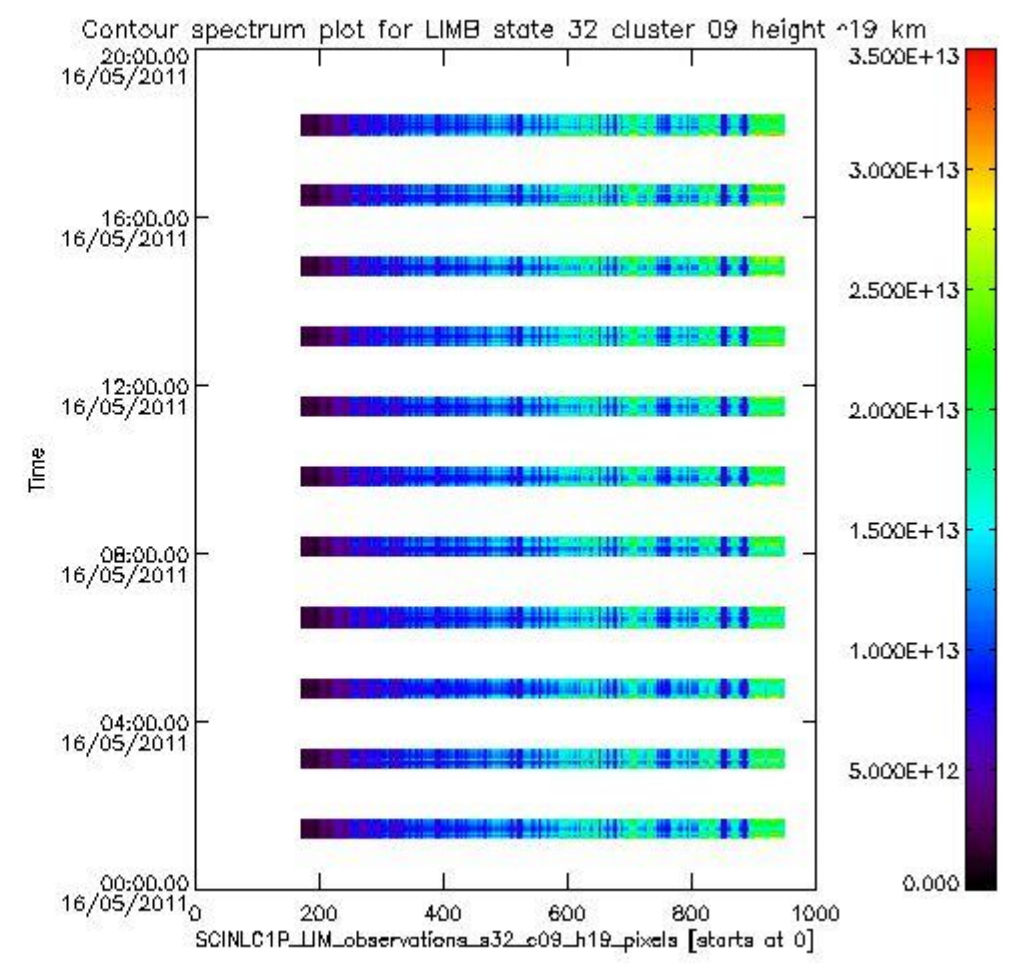
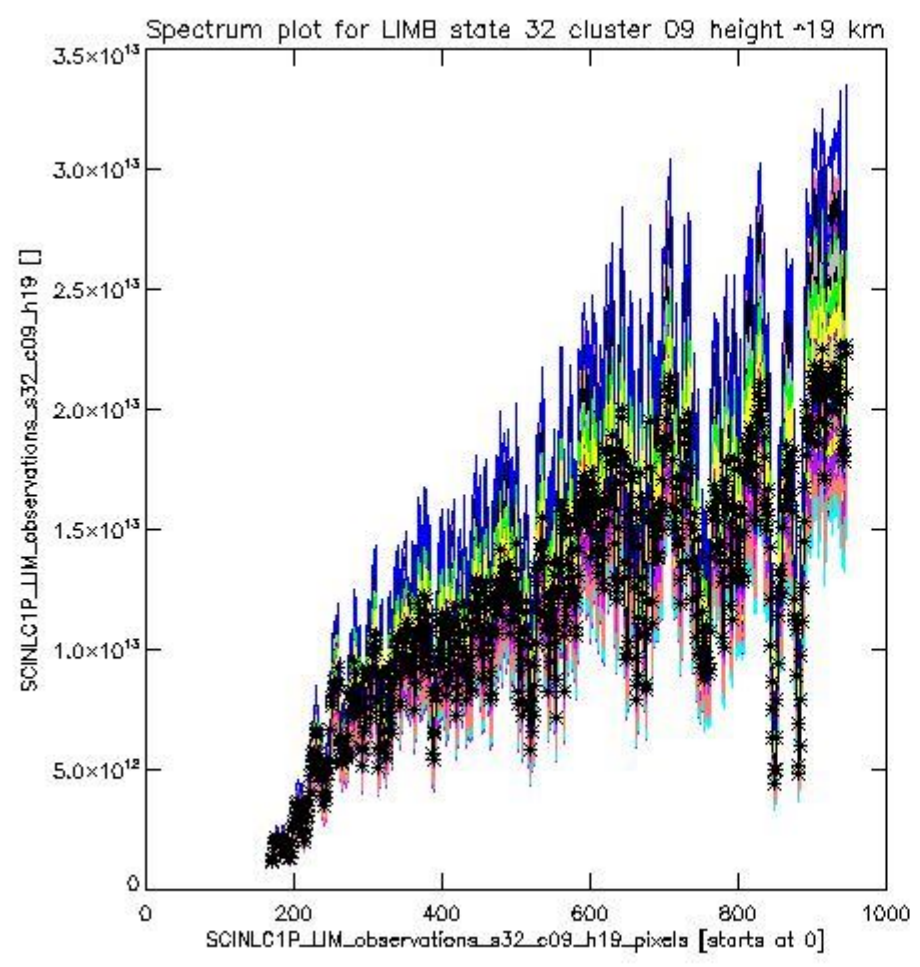
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_8.PNG



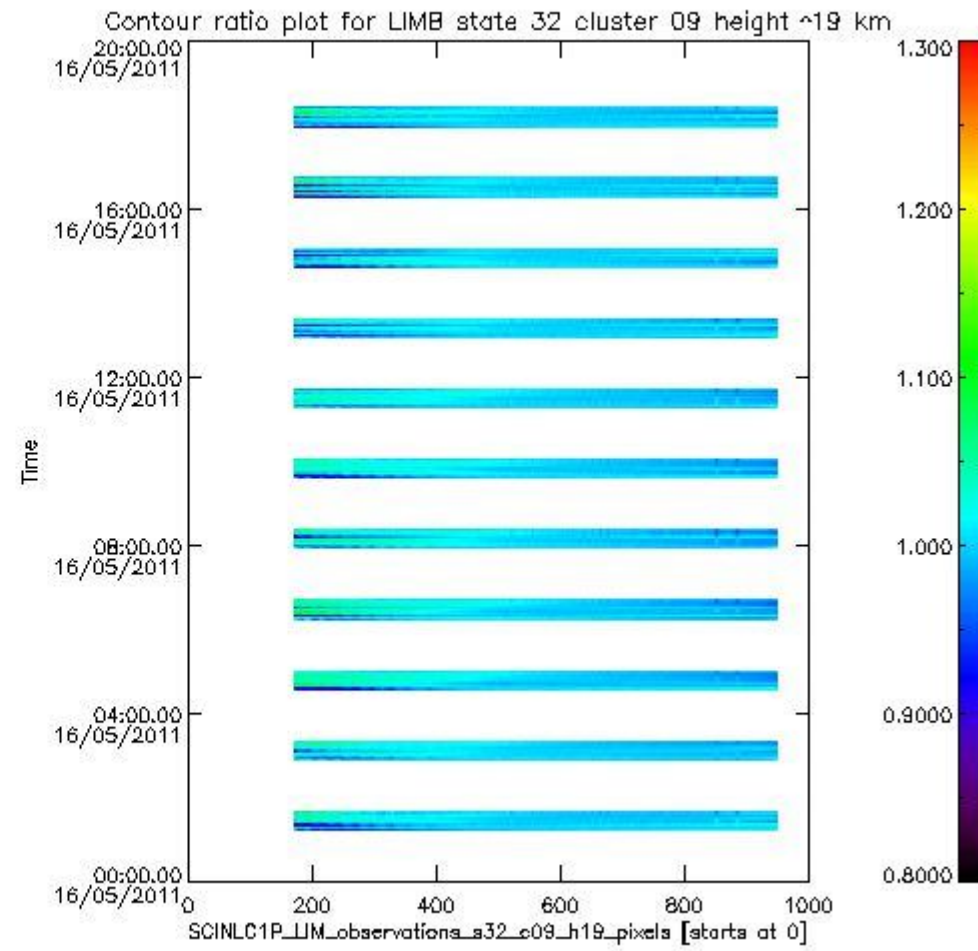
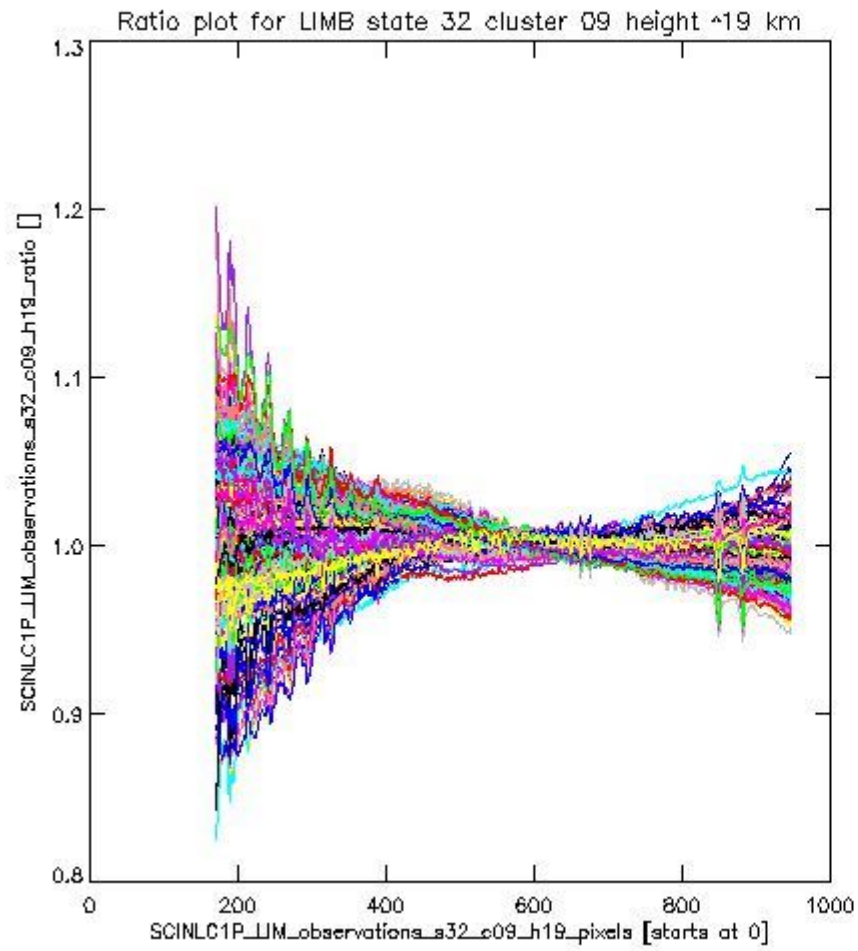
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110516_9.PNG

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	16MAY2011 00:00:05.891
Start time of last sample	16MAY2011 18:22:50.665
Reference period start time	16APR2011 00:01:53.980
Reference period stop time	15MAY2011 23:58:03.153
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



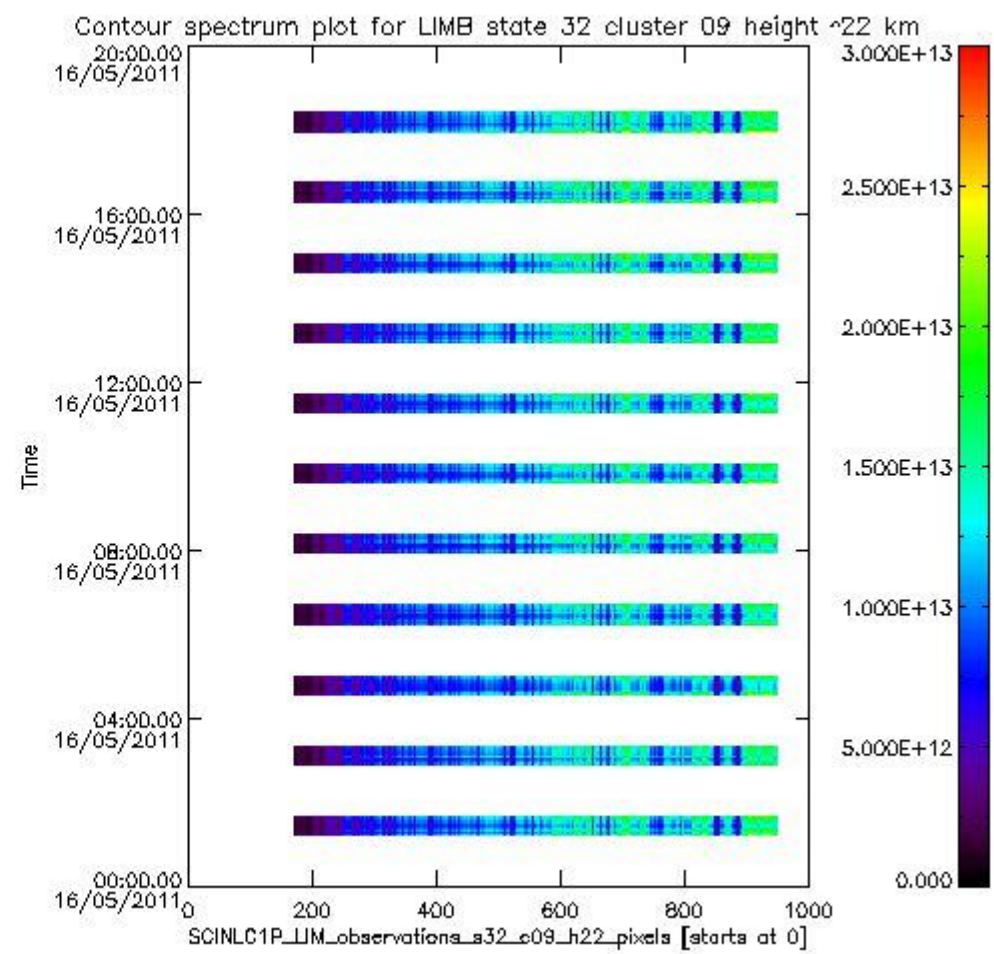
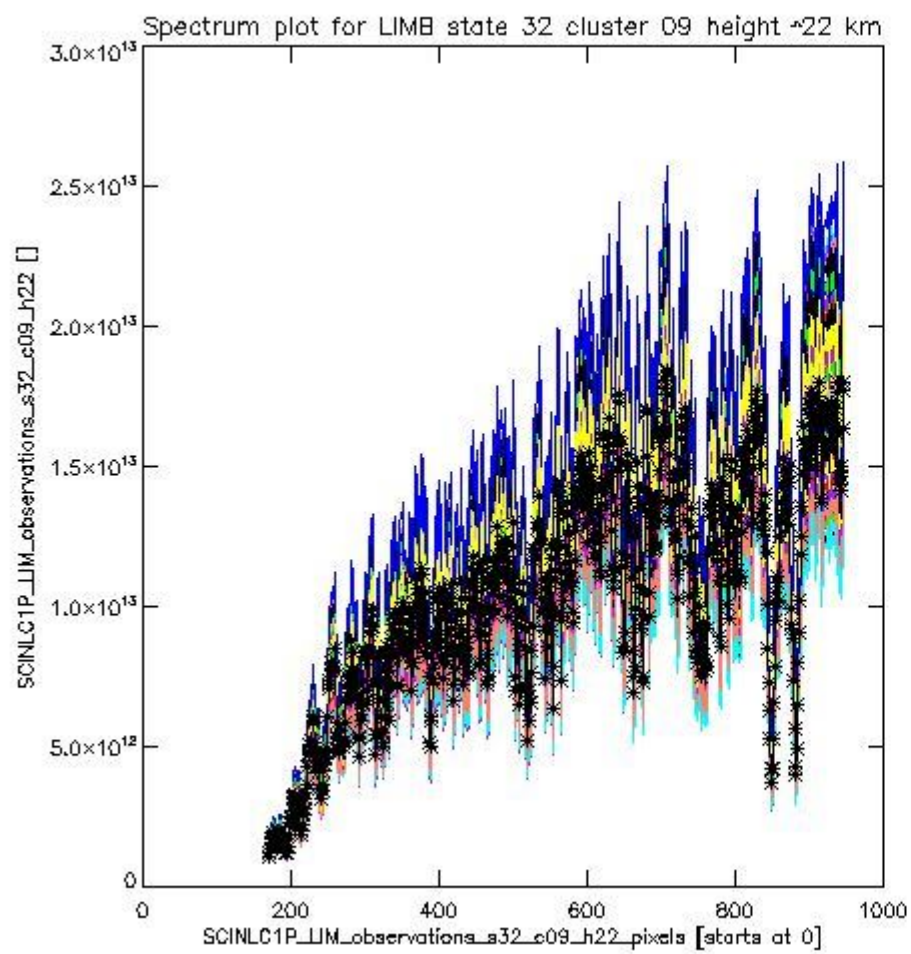
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_10.PNG



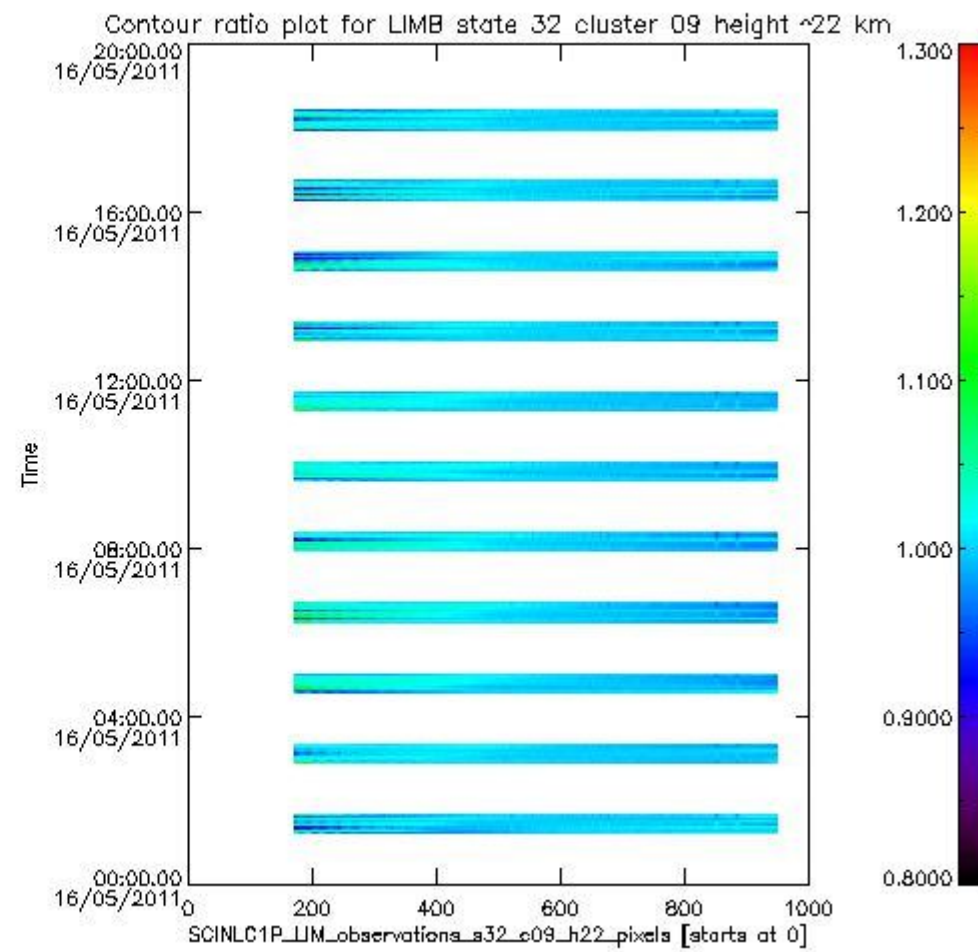
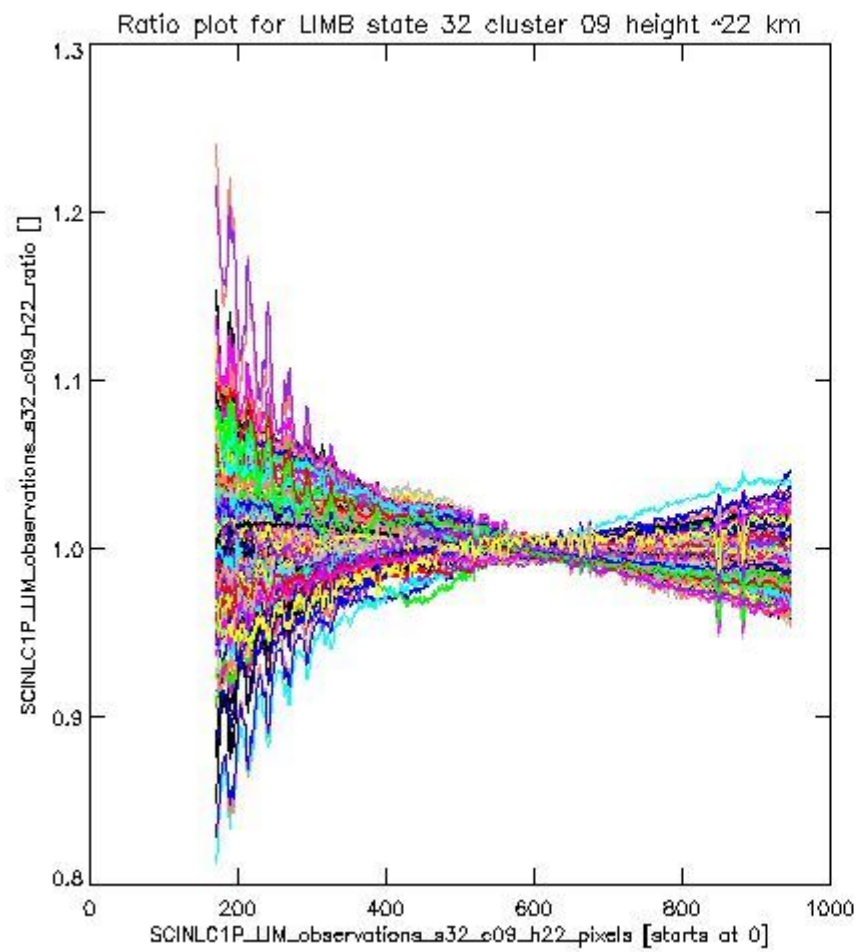
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_11.PNG

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	16MAY2011 00:00:05.891
Start time of last sample	16MAY2011 18:22:50.665
Reference period start time	16APR2011 00:01:53.980
Reference period stop time	15MAY2011 23:58:03.153
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



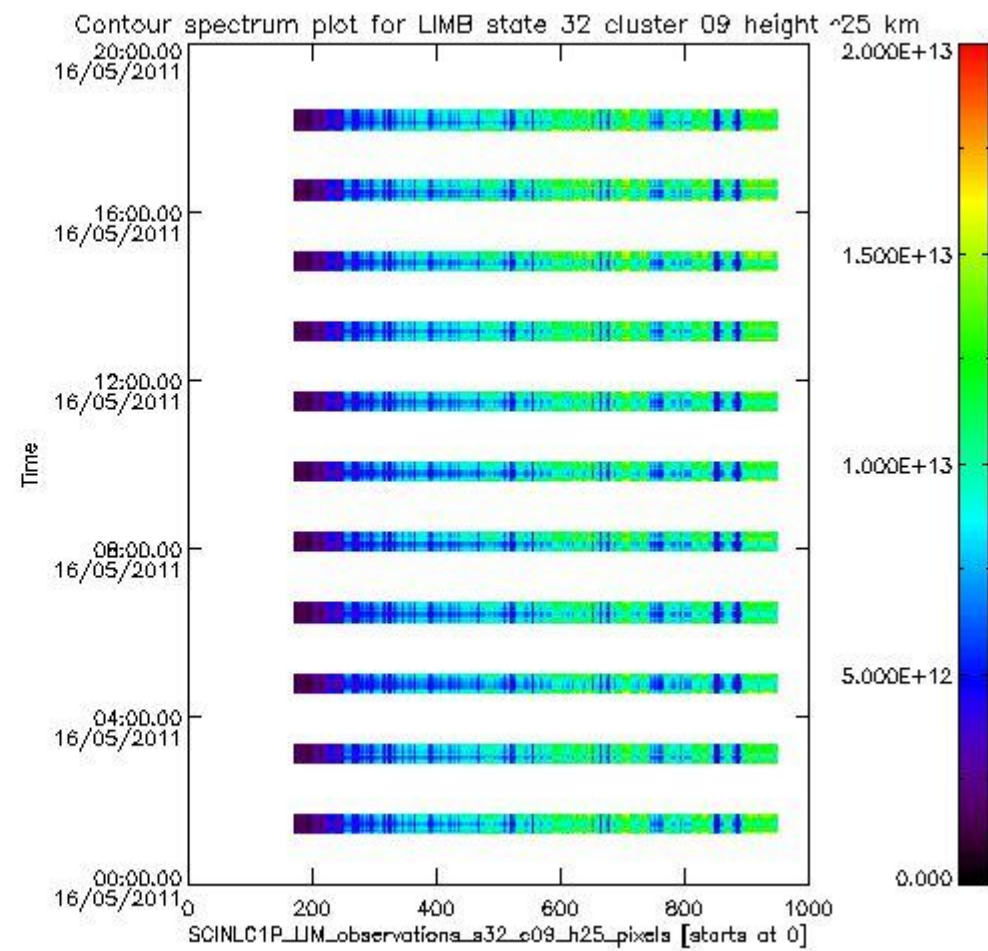
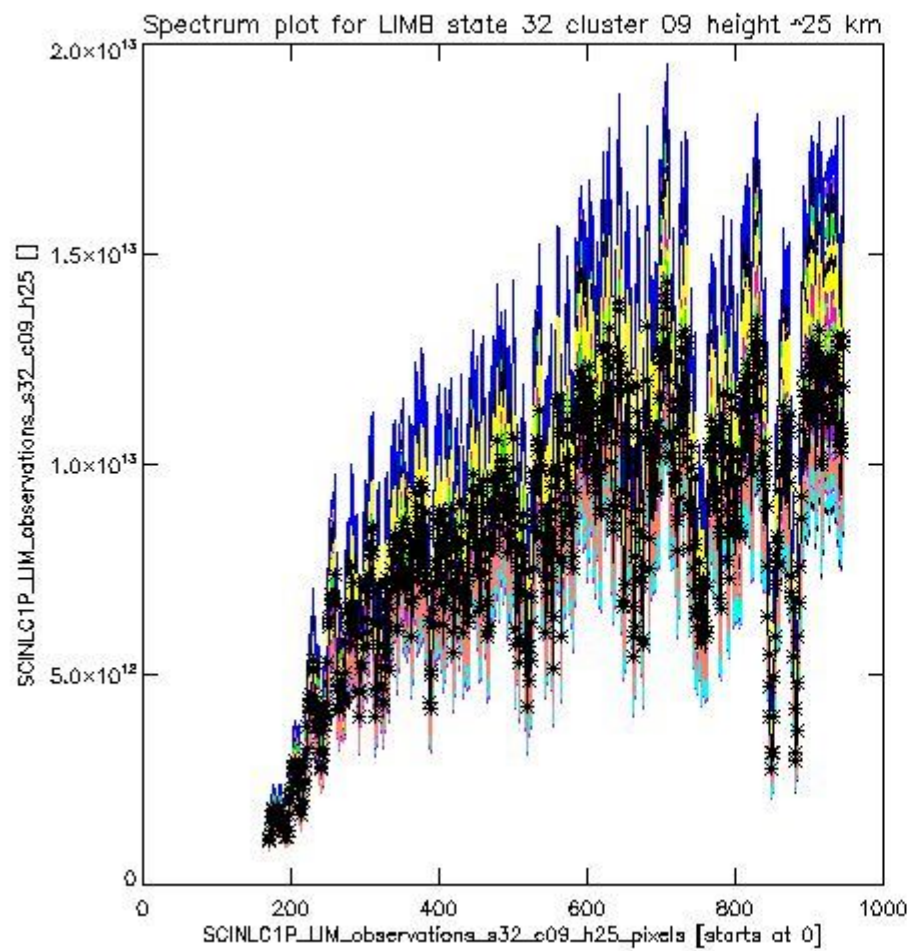
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_12.PNG



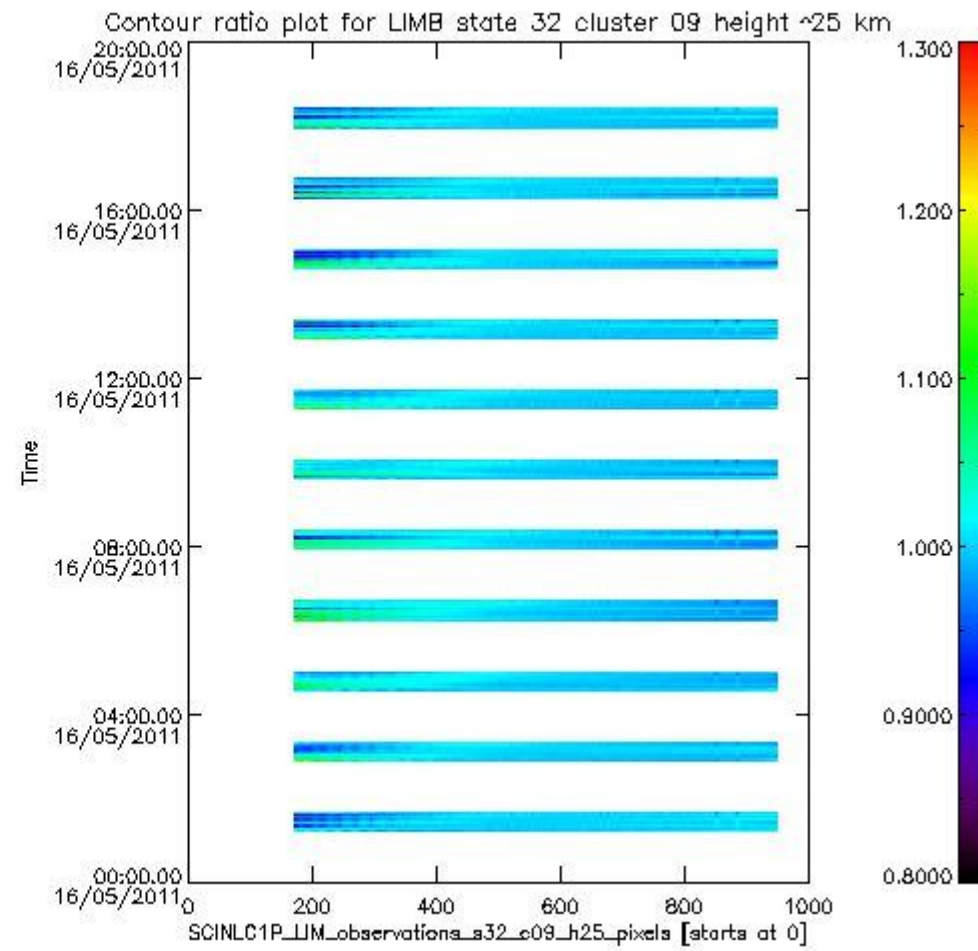
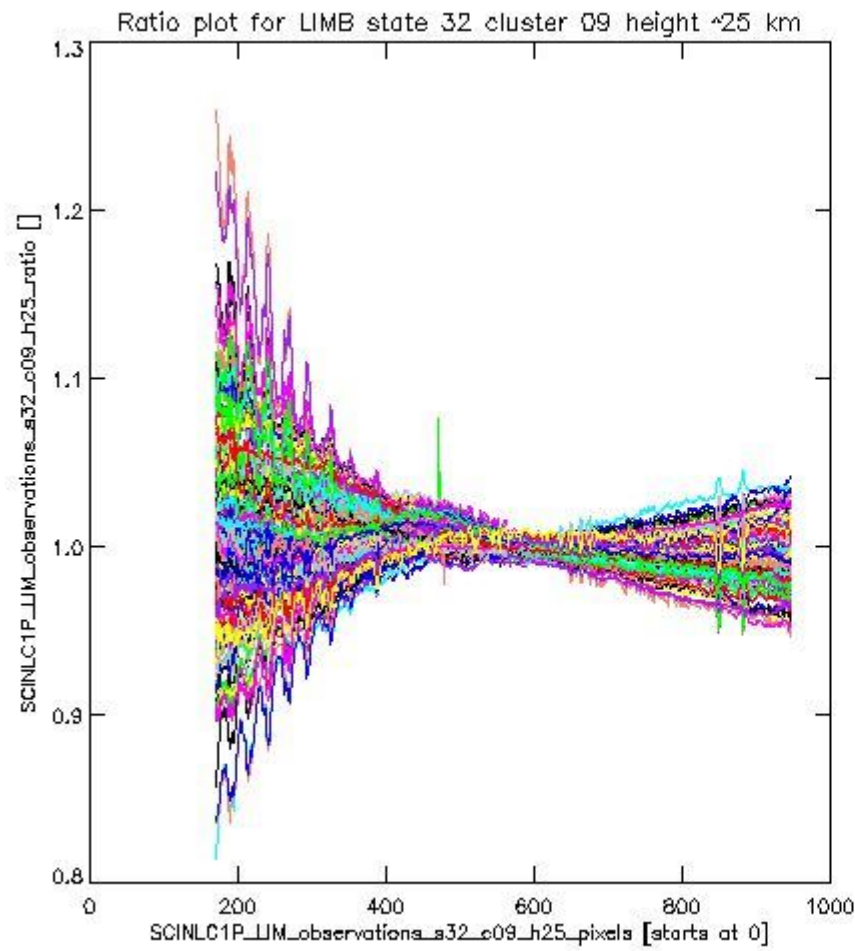
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110516_13.PNG

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	16MAY2011 00:00:05.891
Start time of last sample	16MAY2011 18:22:50.665
Reference period start time	16APR2011 00:01:53.980
Reference period stop time	15MAY2011 23:58:03.153
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



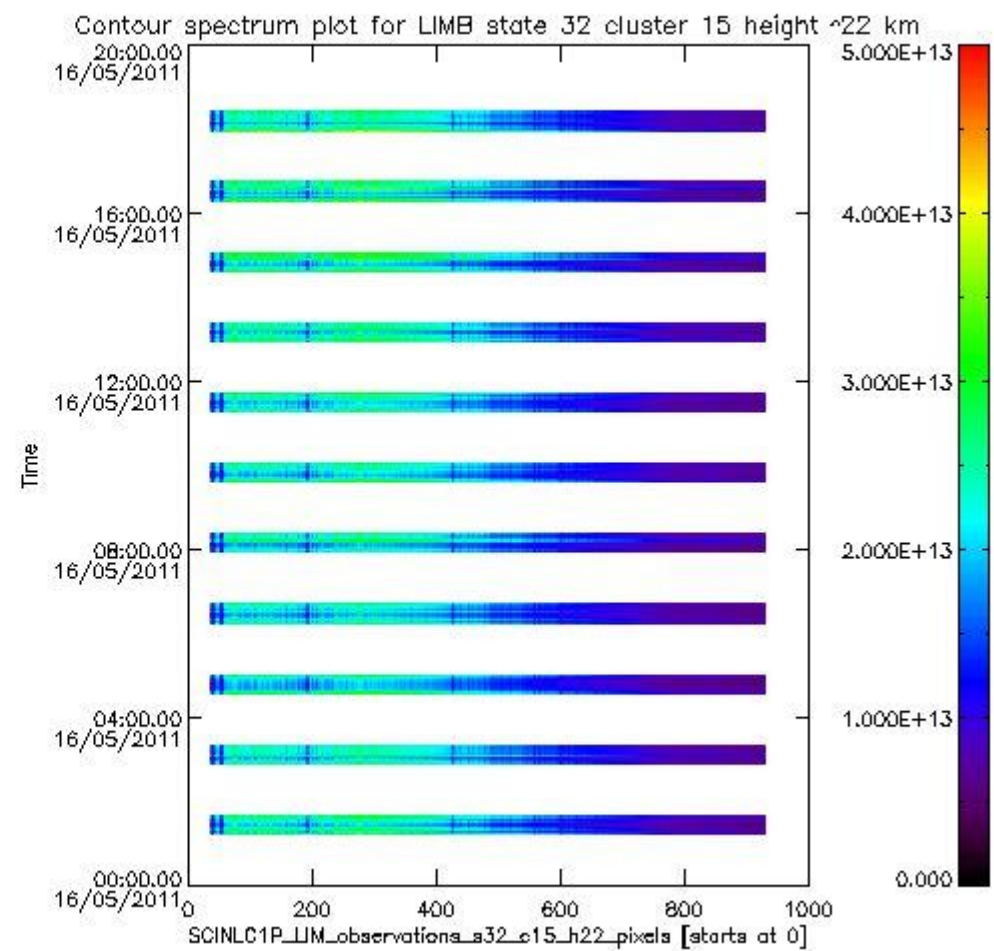
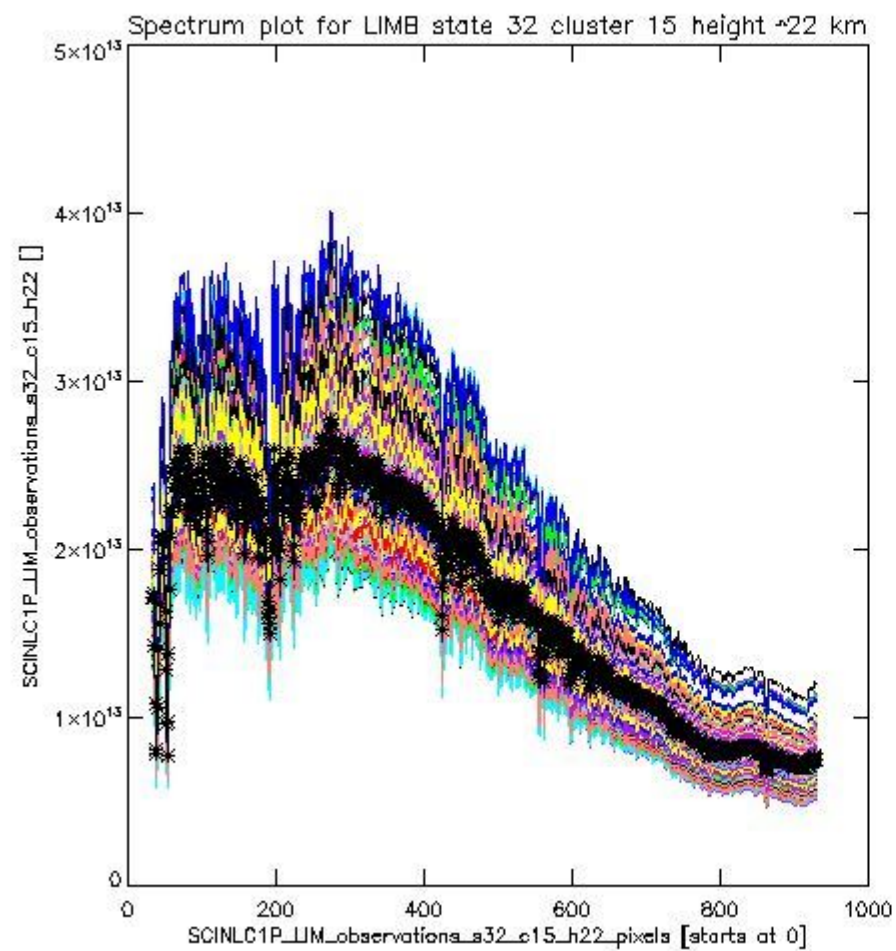
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110516_14.PNG



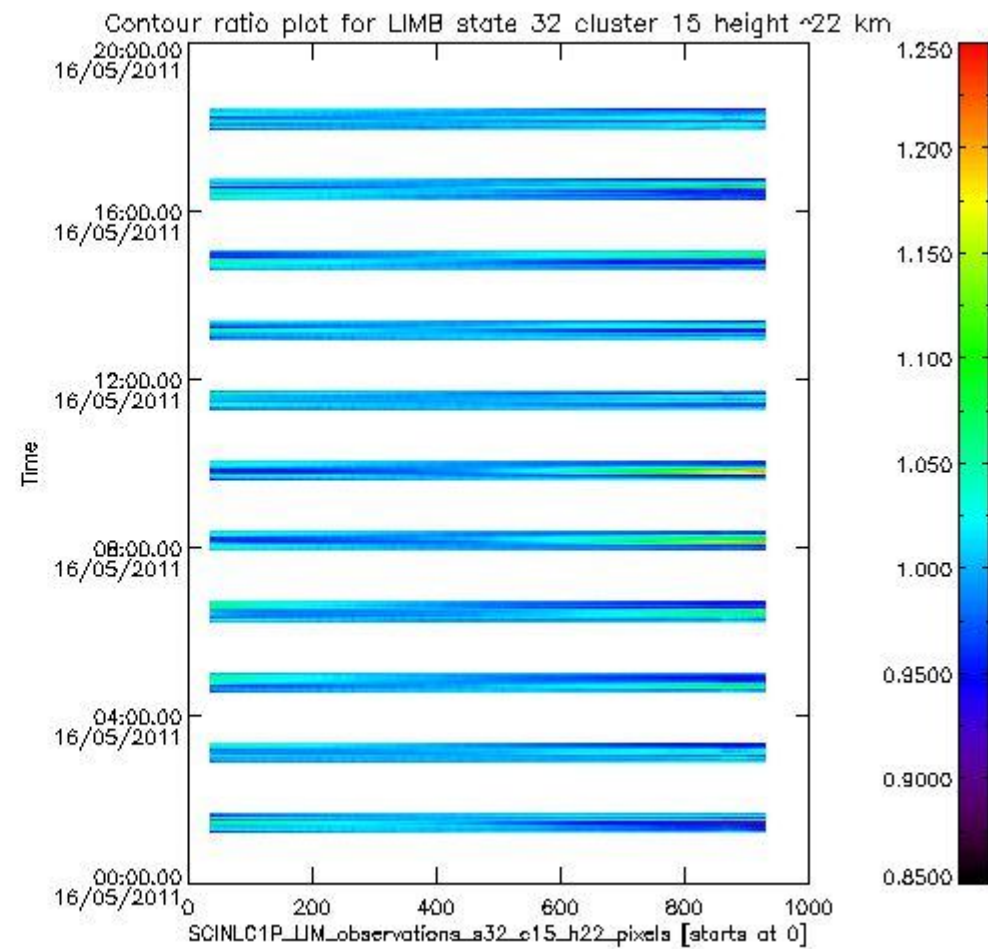
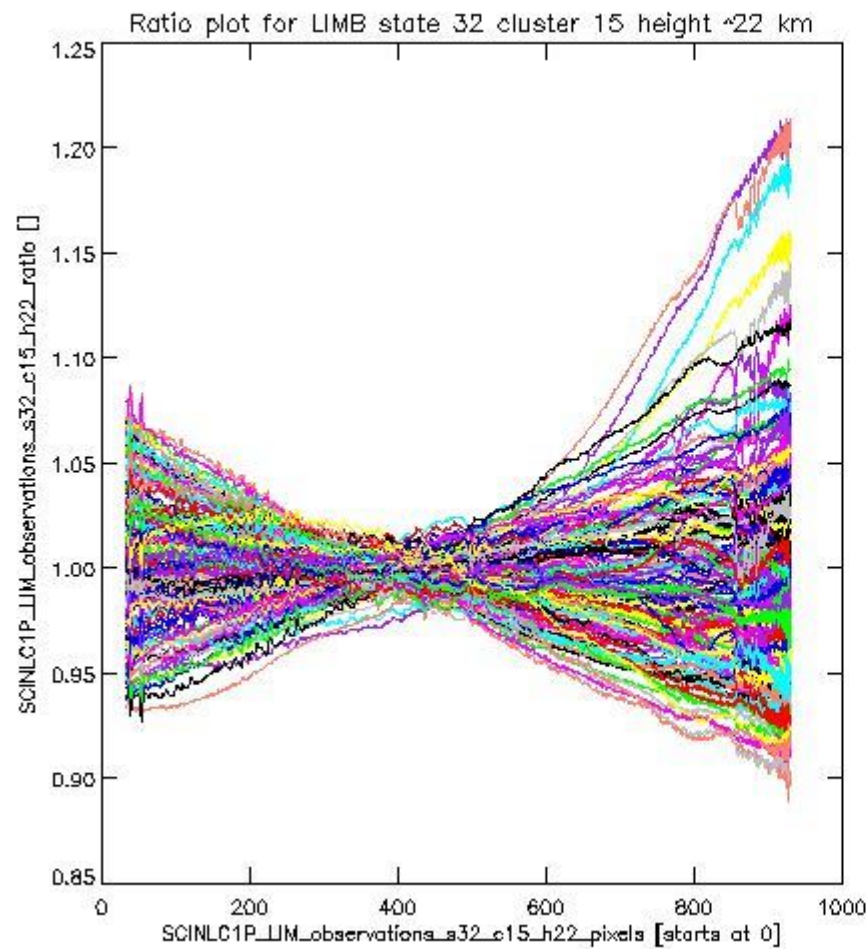
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110516_15.PNG

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	16MAY2011 00:00:05.891
Start time of last sample	16MAY2011 18:22:50.665
Reference period start time	16APR2011 00:01:53.980
Reference period stop time	15MAY2011 23:58:03.153
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



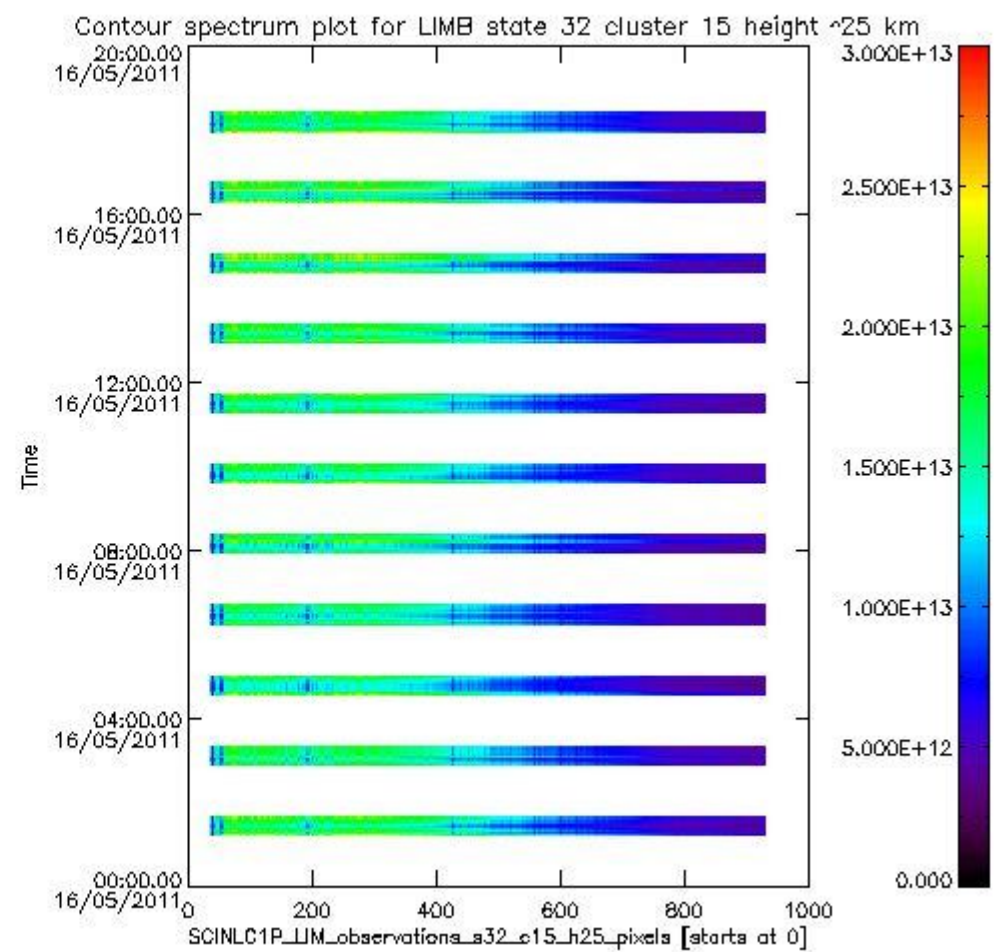
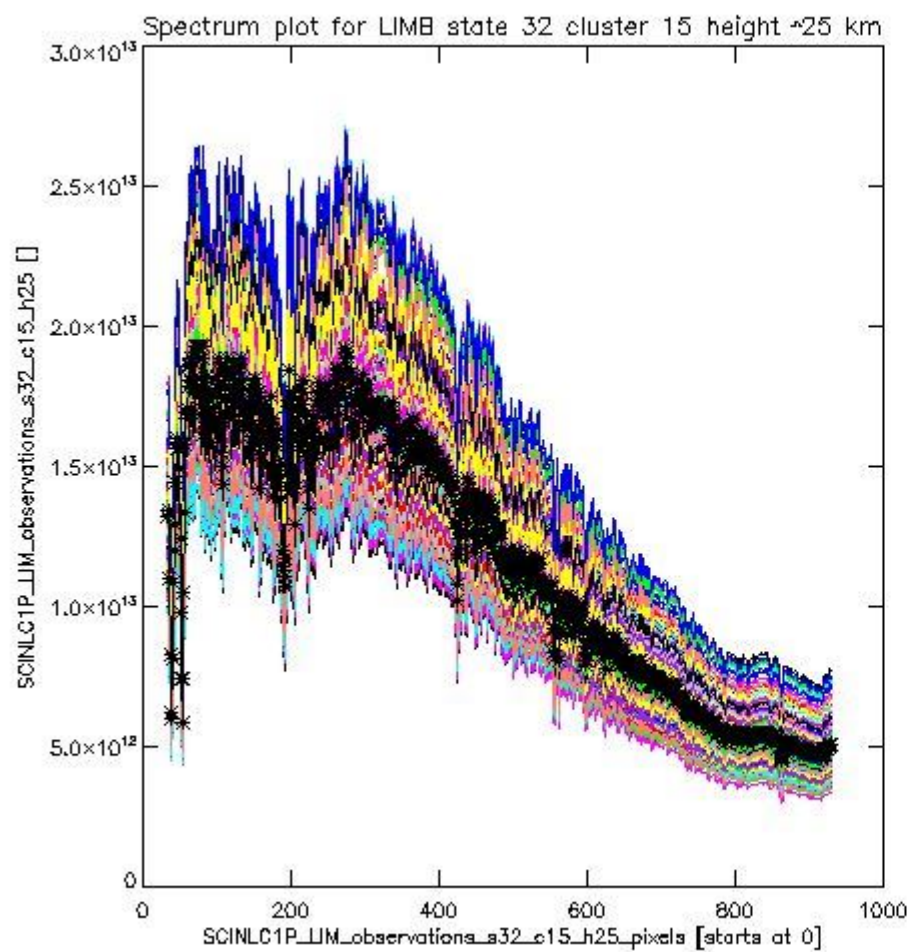
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_16.PNG

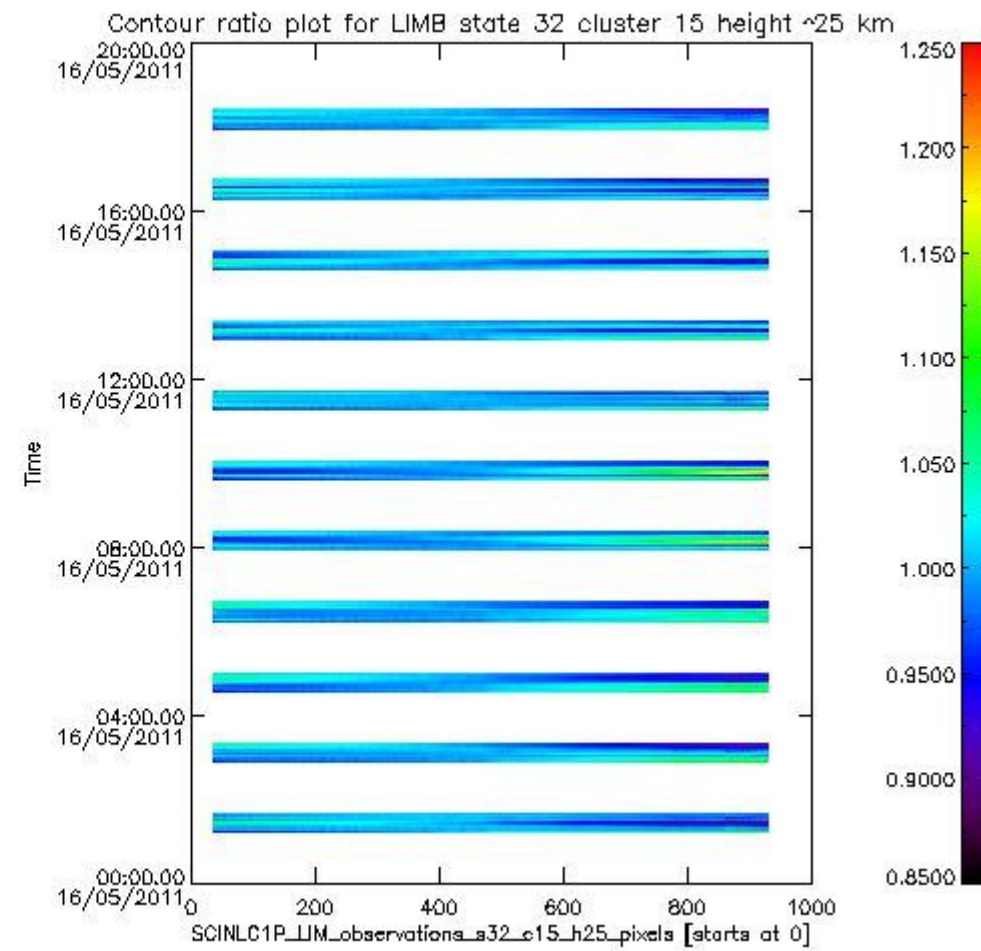
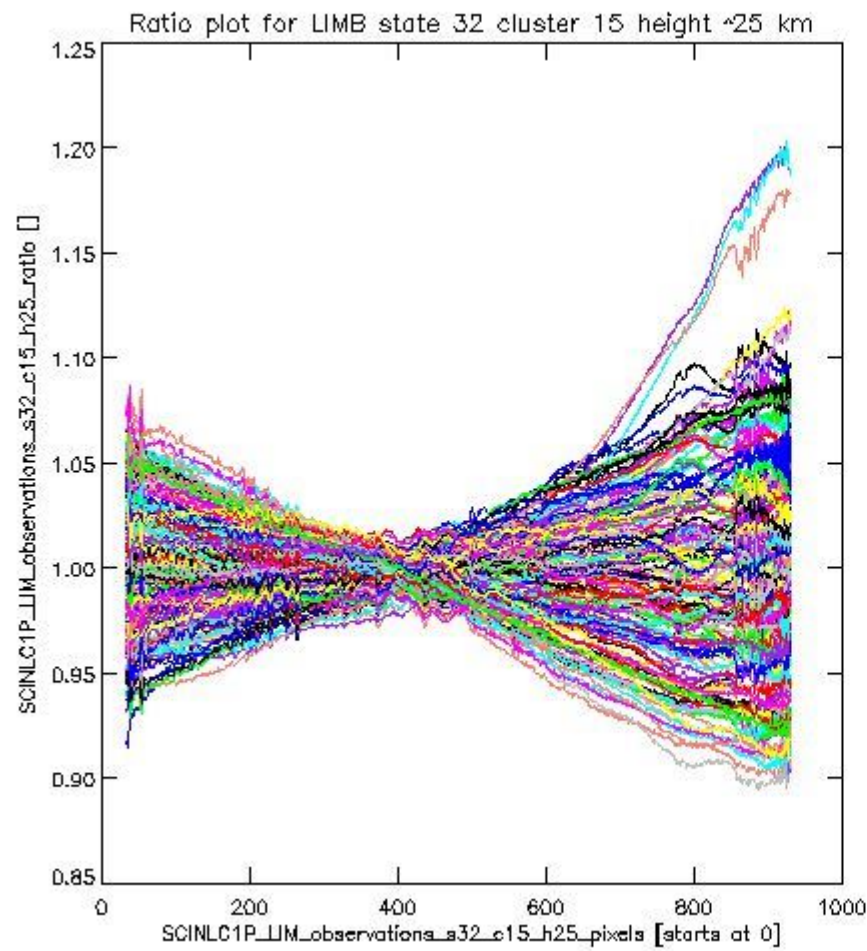


sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110516_17.PNG

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	16MAY2011 00:00:05.891
Start time of last sample	16MAY2011 18:22:50.665
Reference period start time	16APR2011 00:01:53.980
Reference period stop time	15MAY2011 23:58:03.153
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

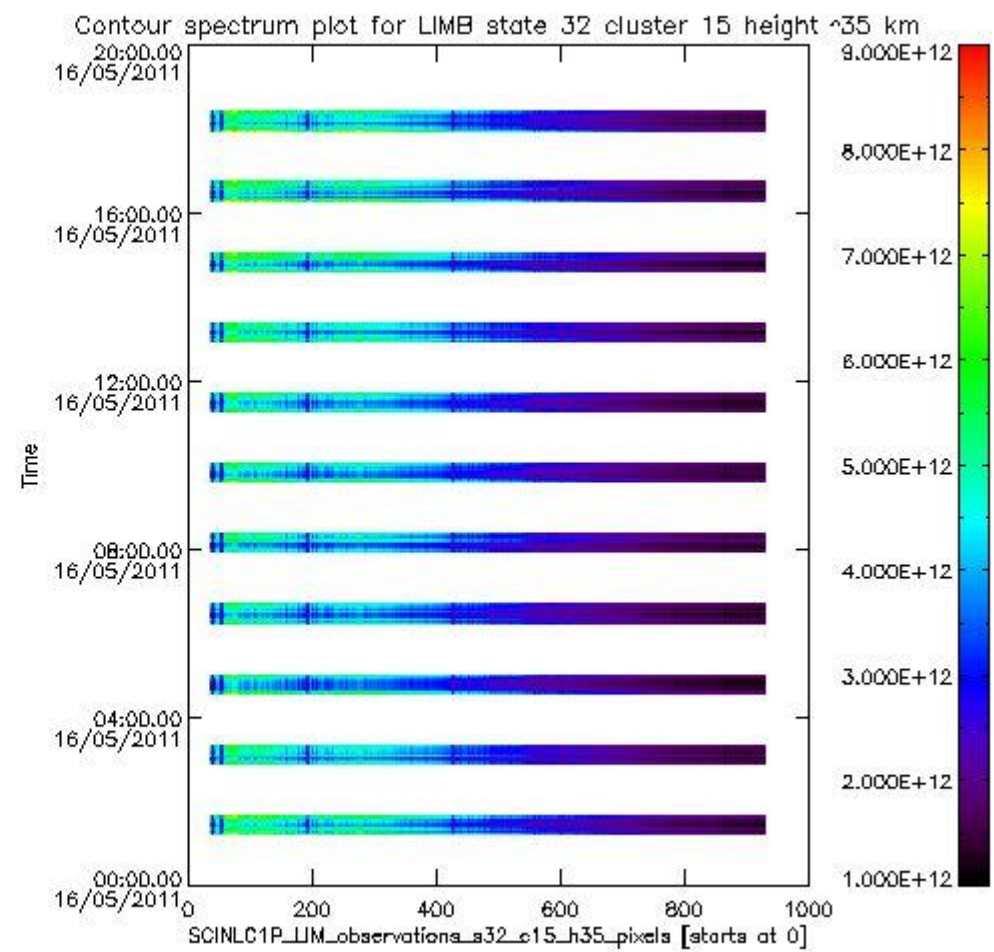
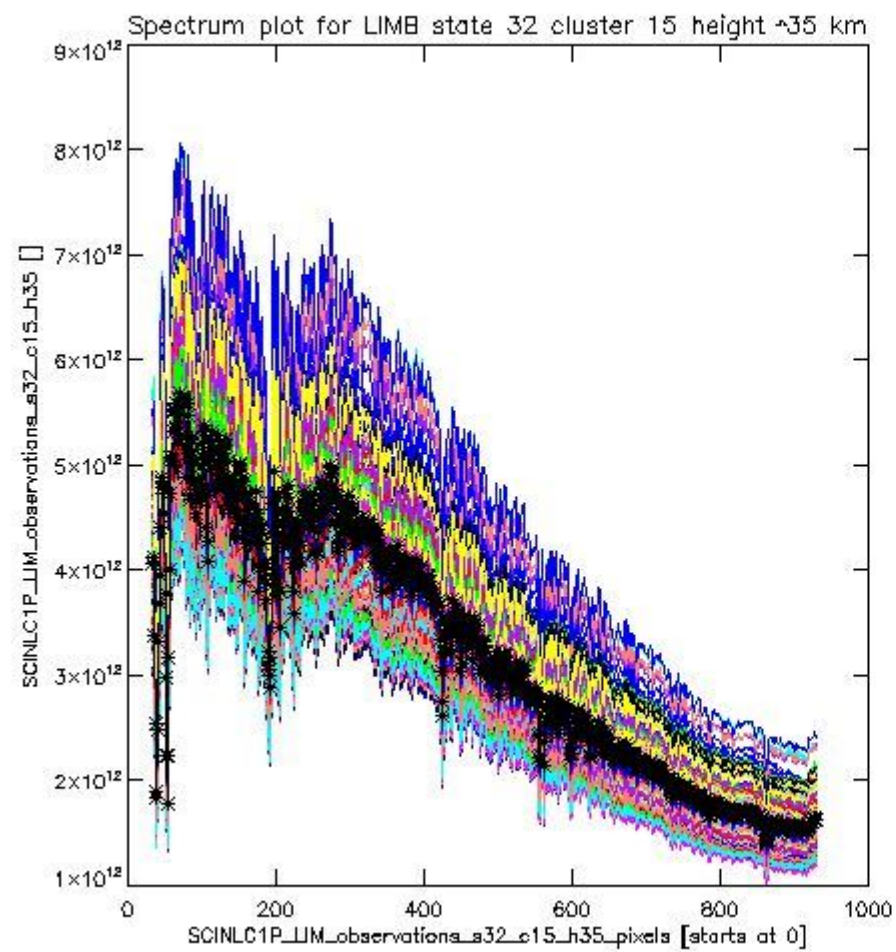


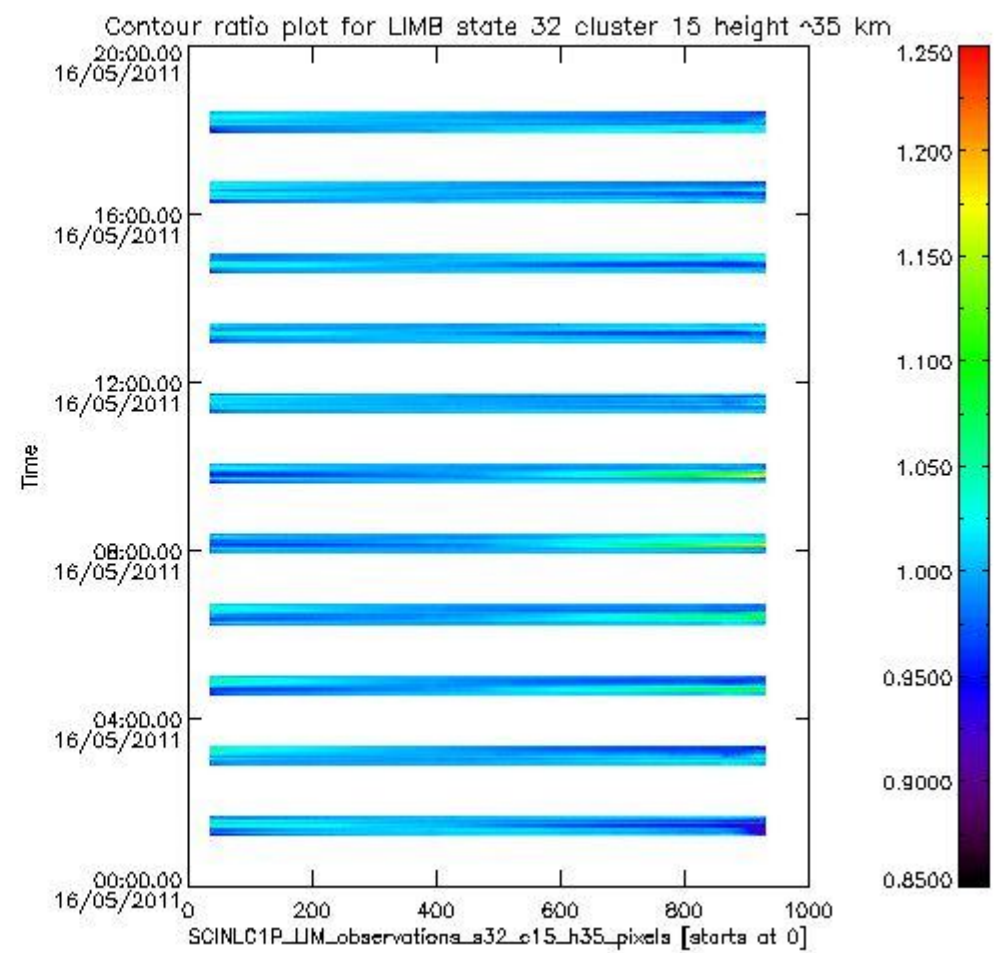
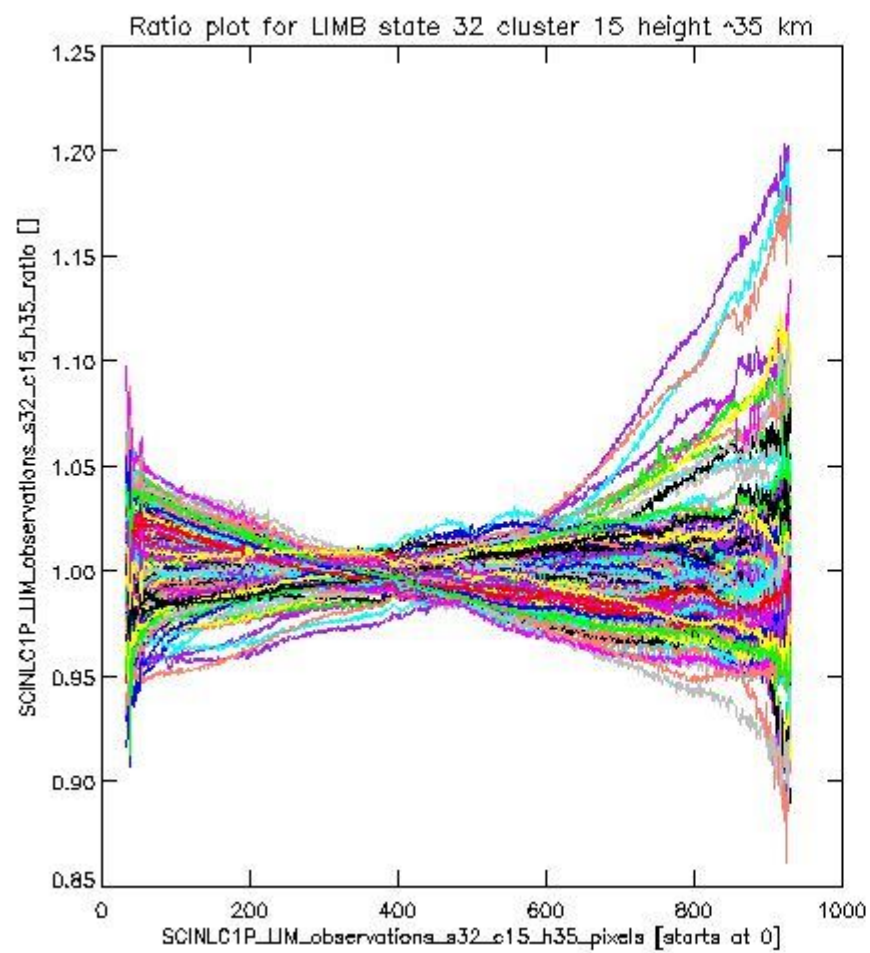


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110516_19.PNG

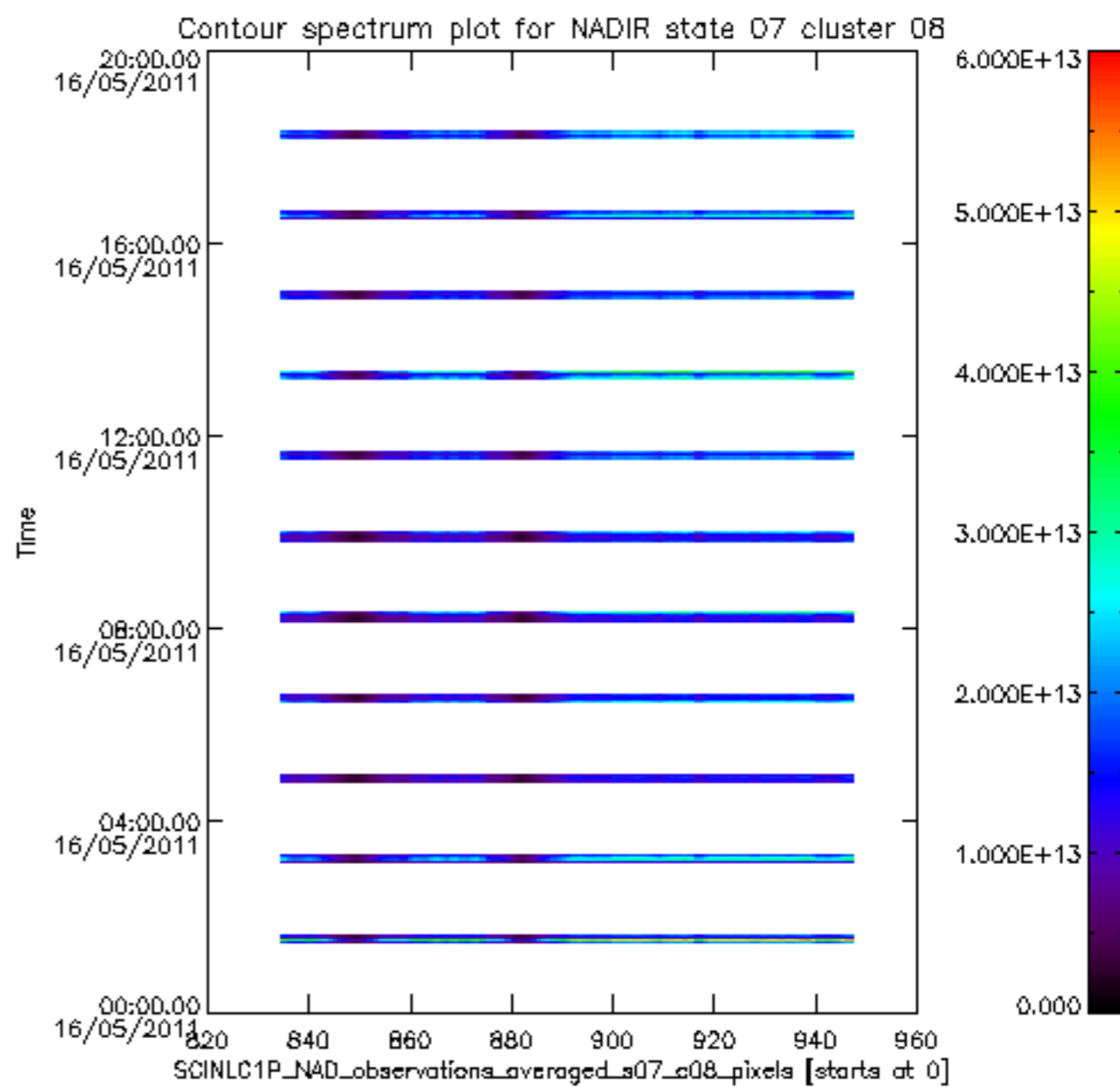
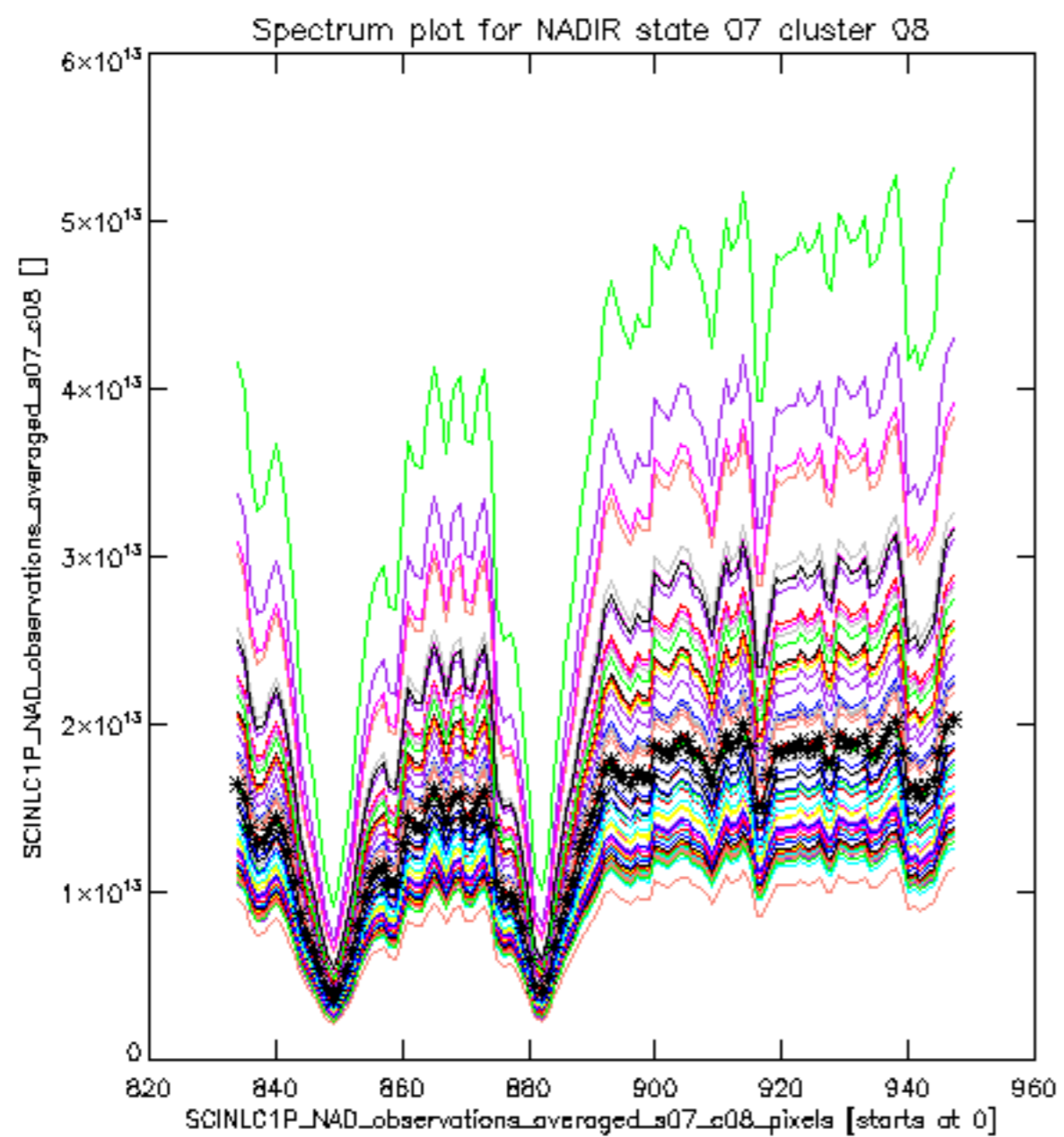
1.2.11 LIMB state 32 cluster 15 height ~35 km The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

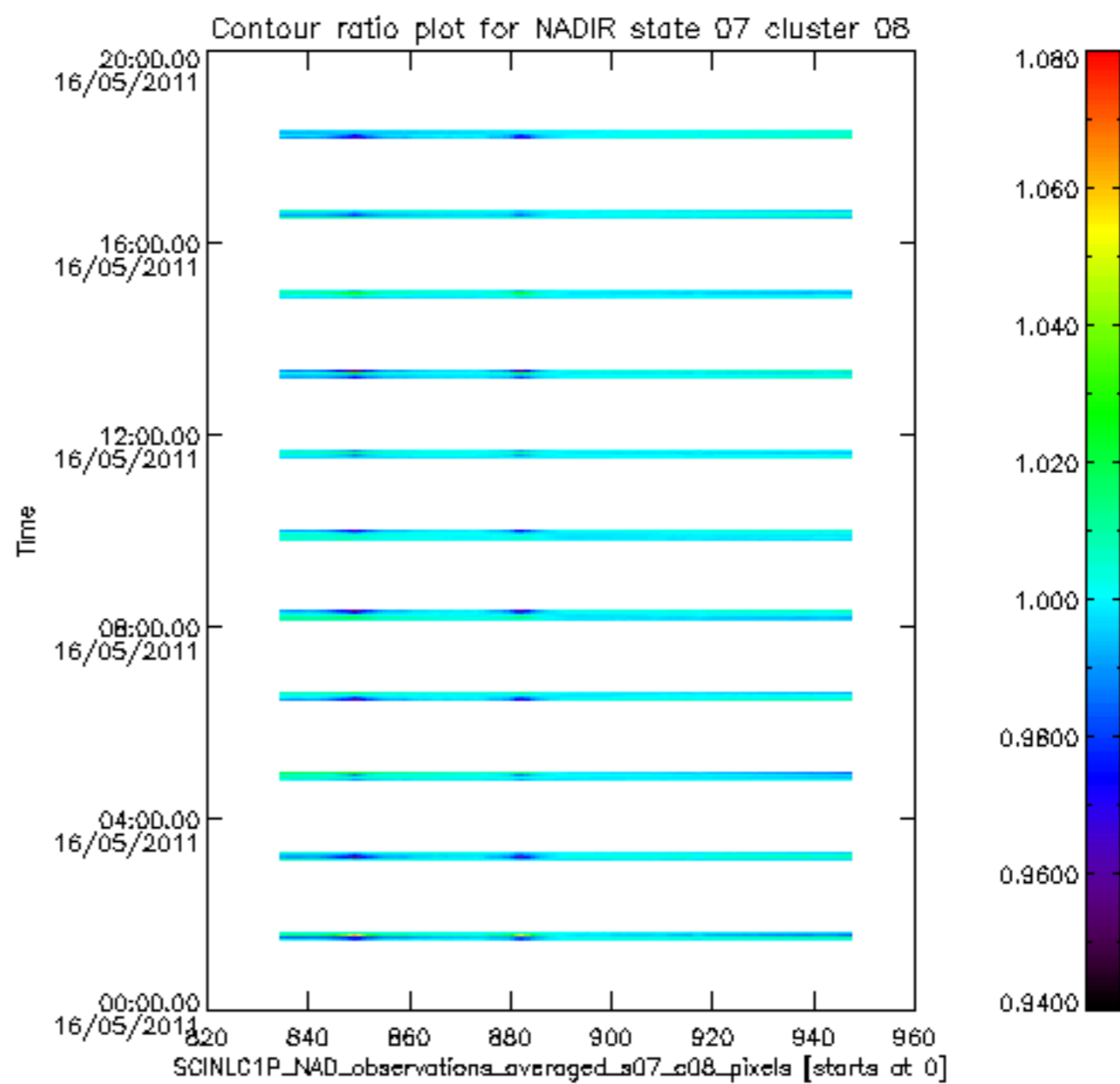
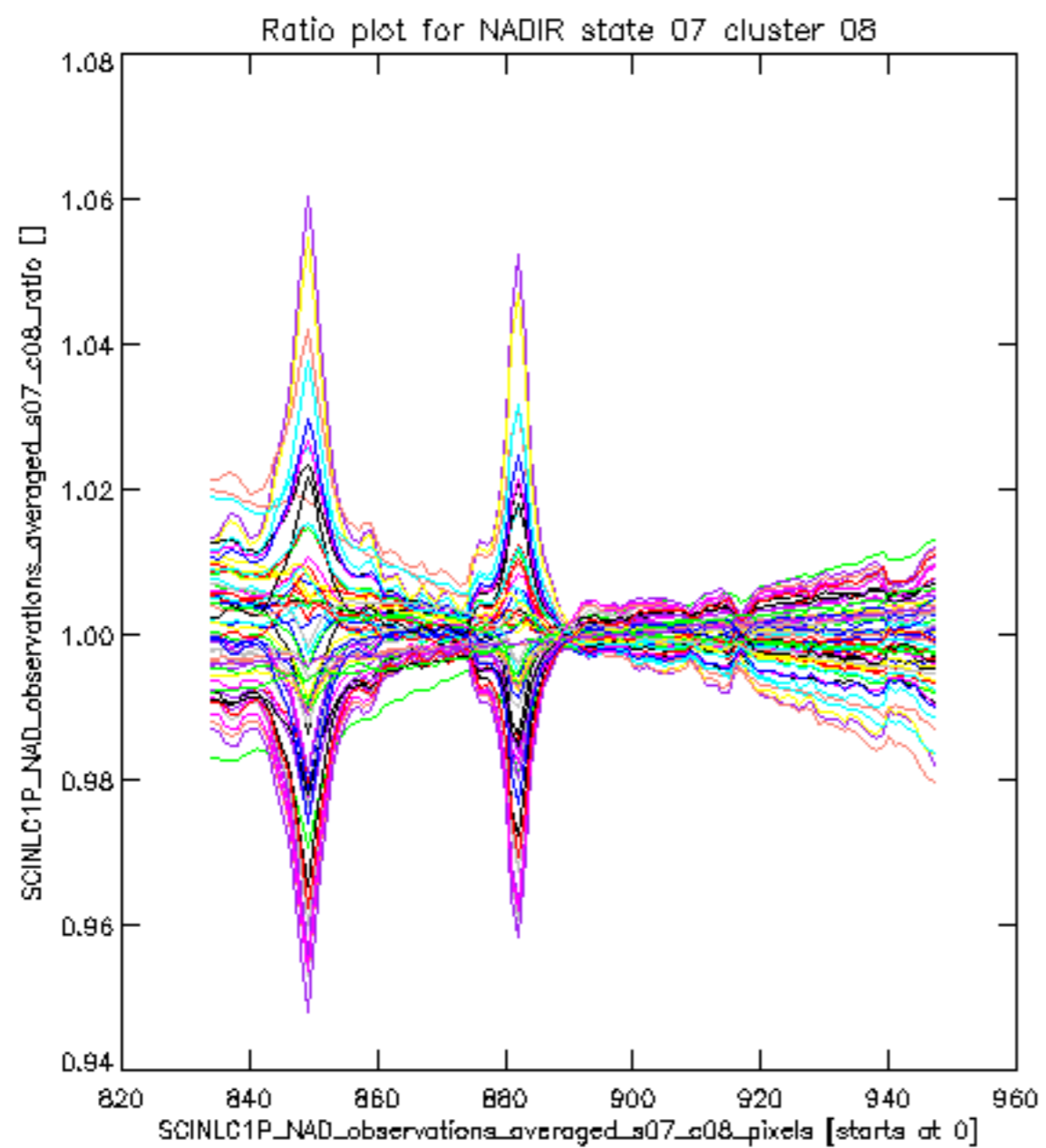
Item	Value
Start time of first sample	16MAY2011 00:00:05.891
Start time of last sample	16MAY2011 18:22:50.665
Reference period start time	16APR2011 02:55:45.447
Reference period stop time	15MAY2011 23:58:03.153
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

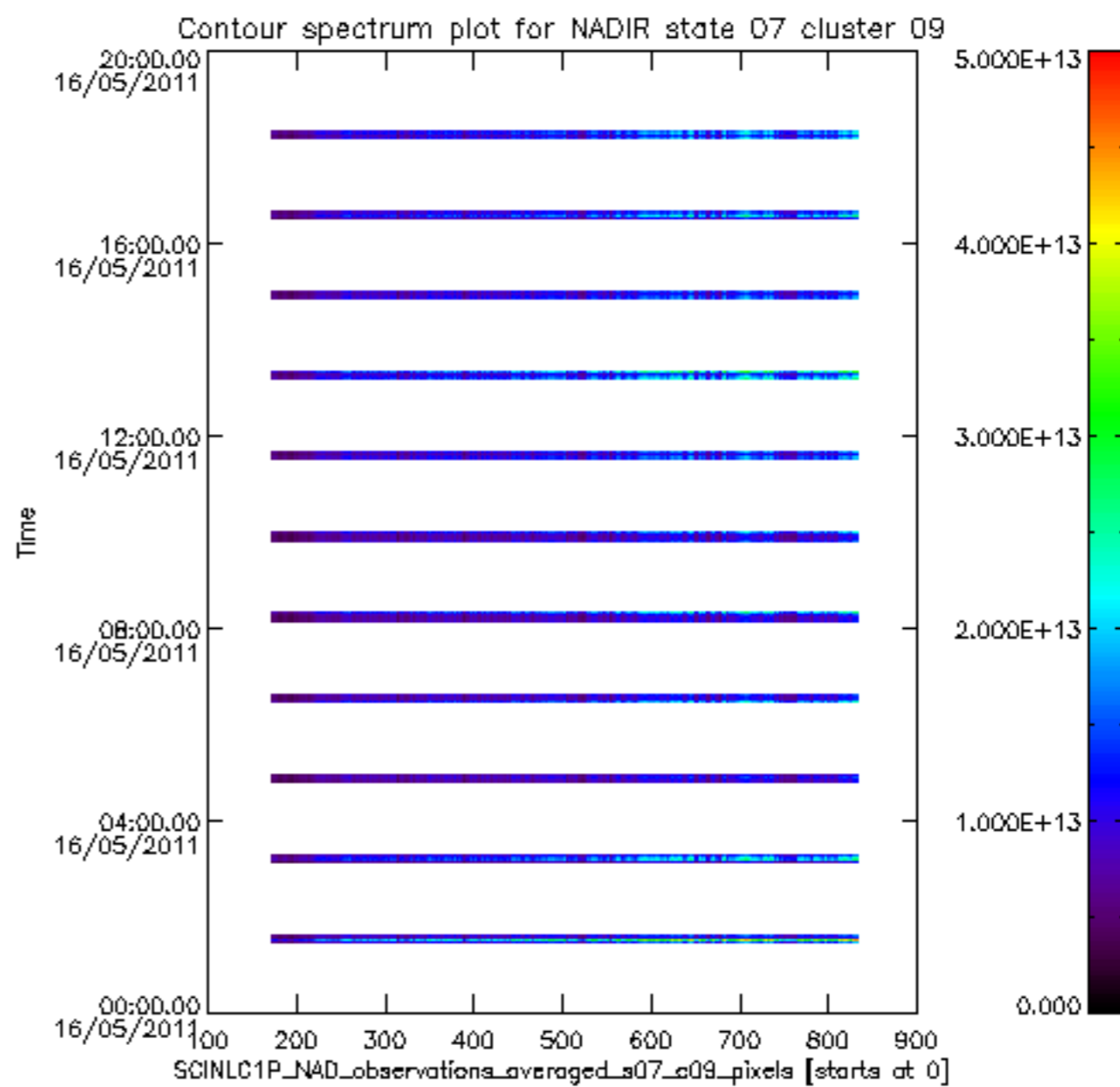
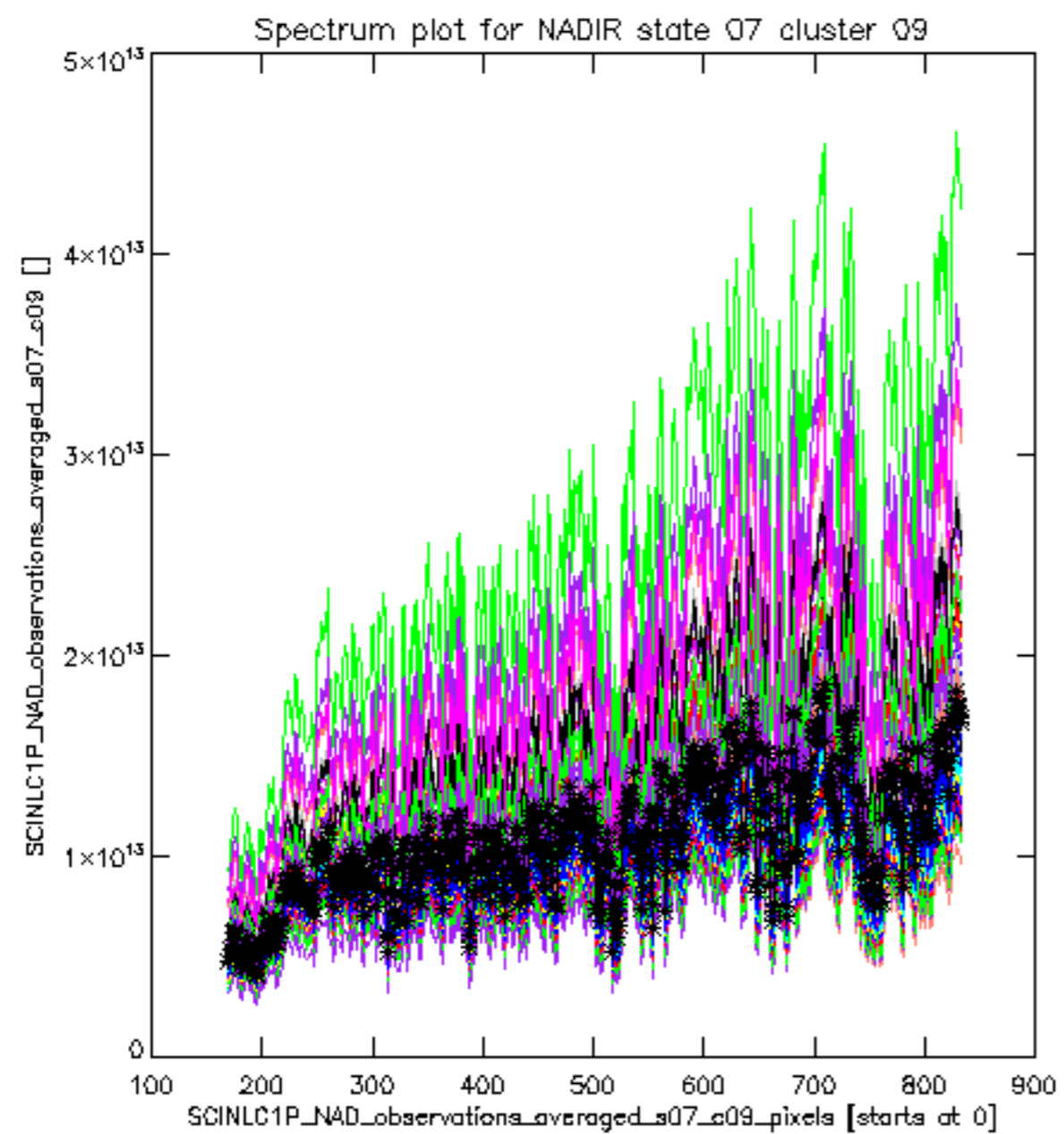


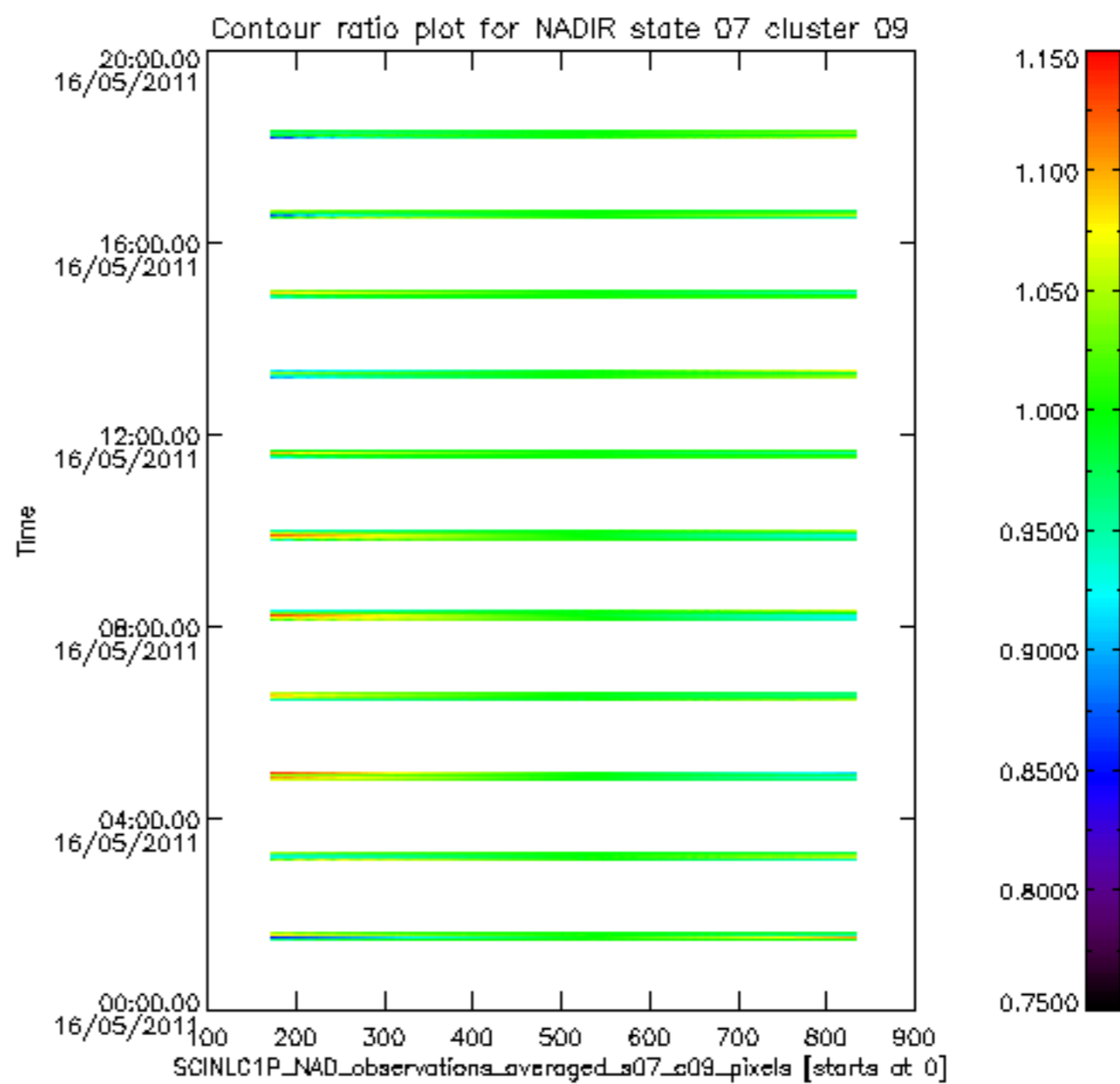
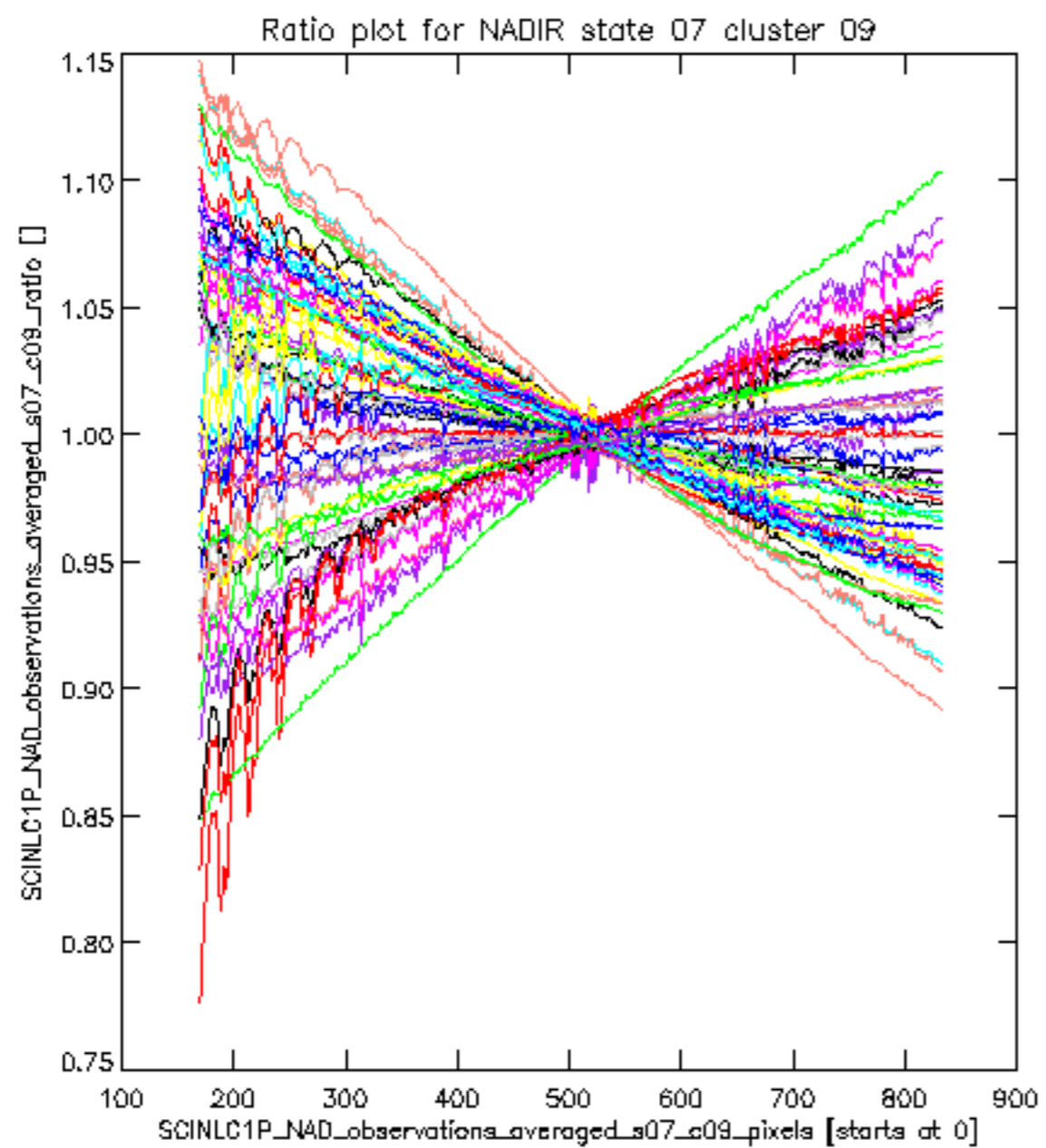


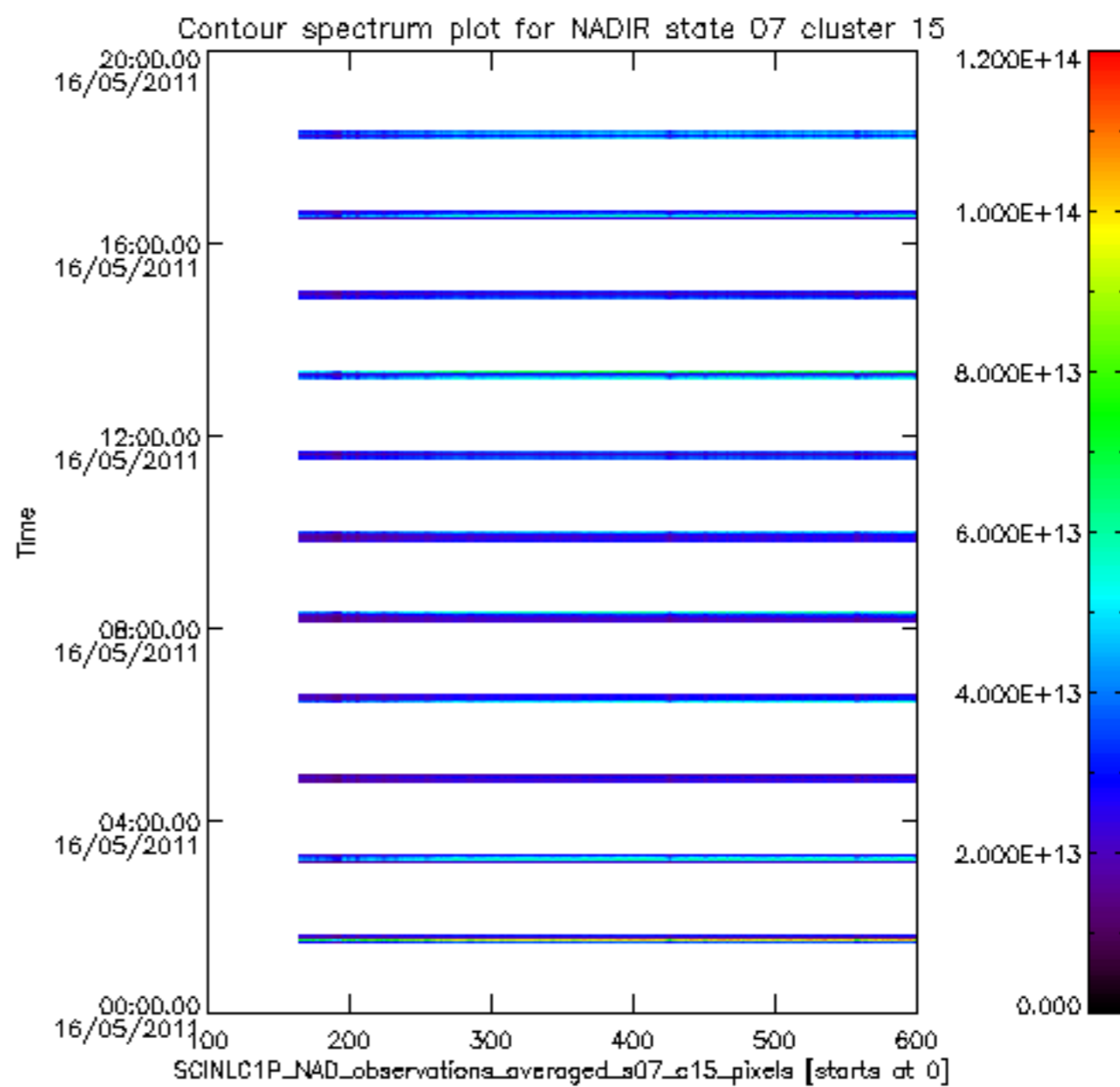
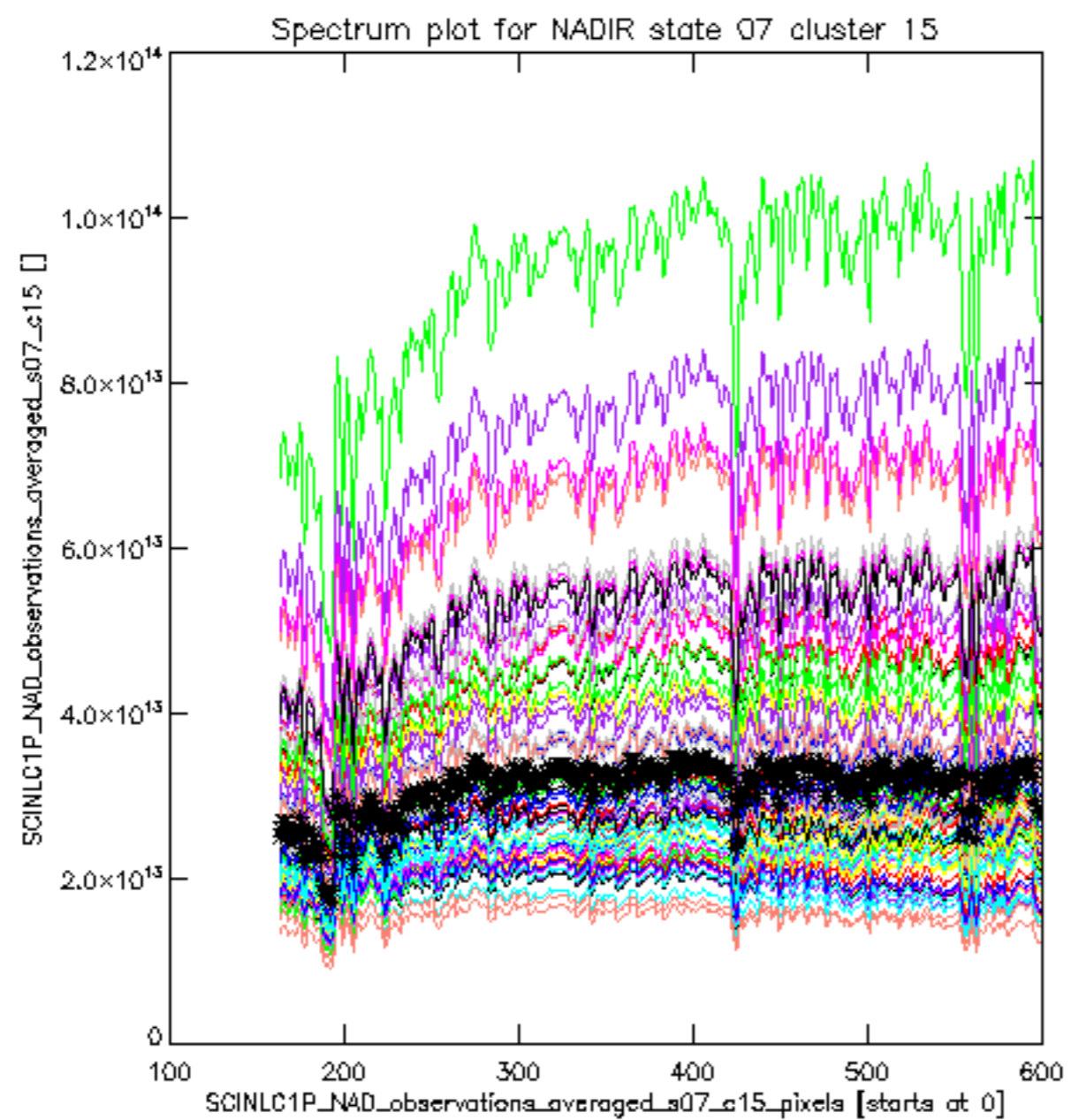
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110516_21.PNG

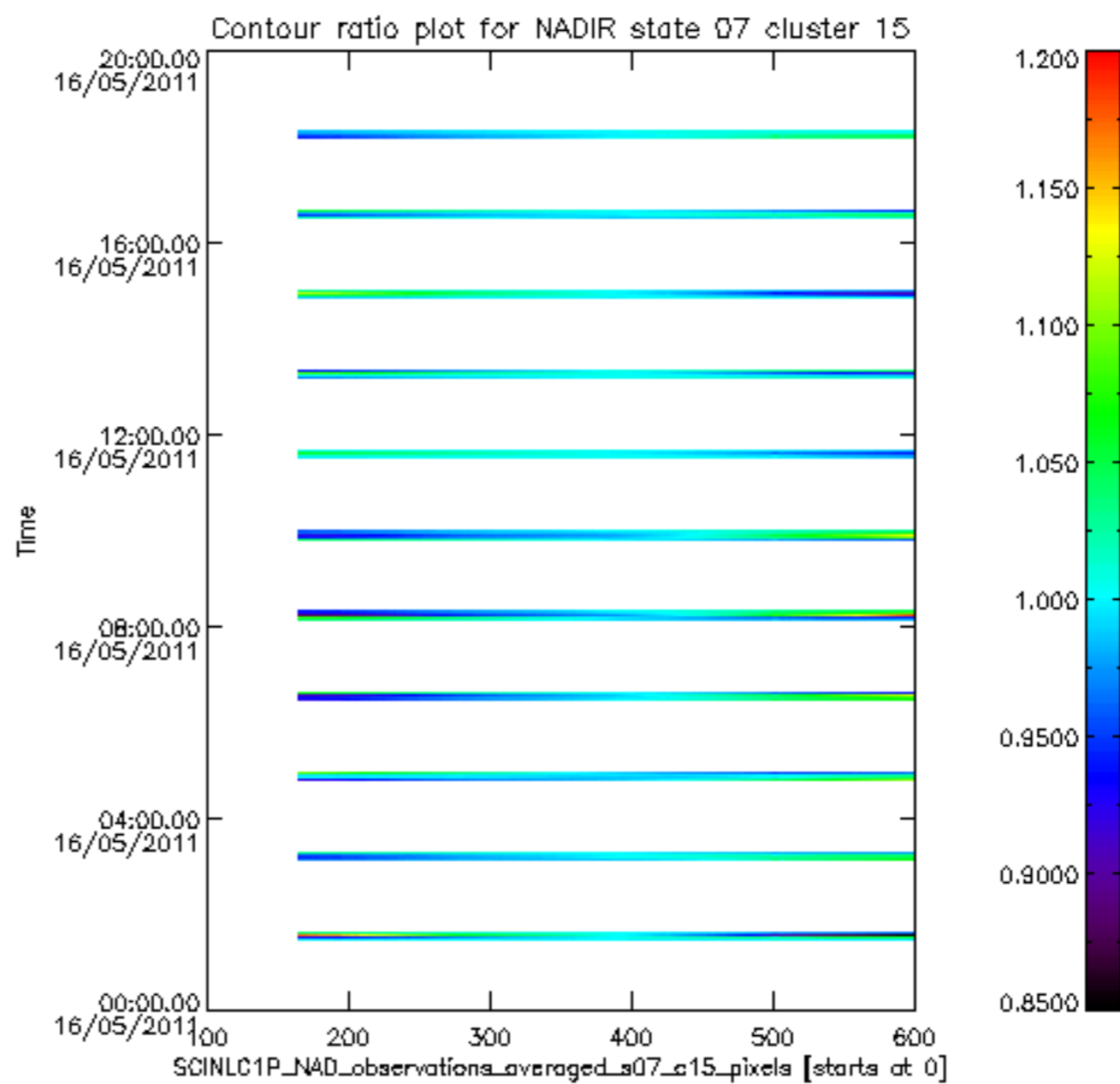
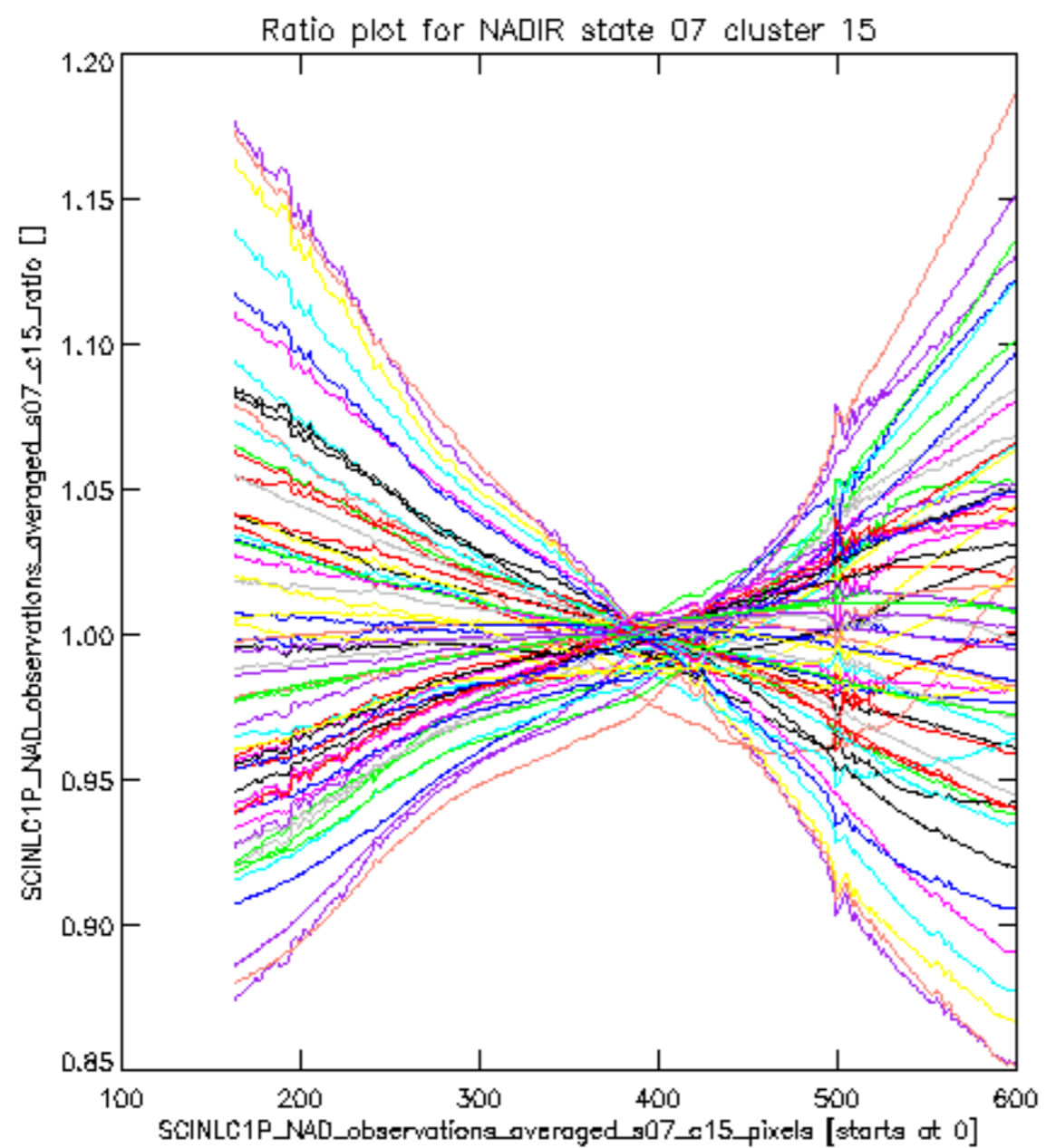


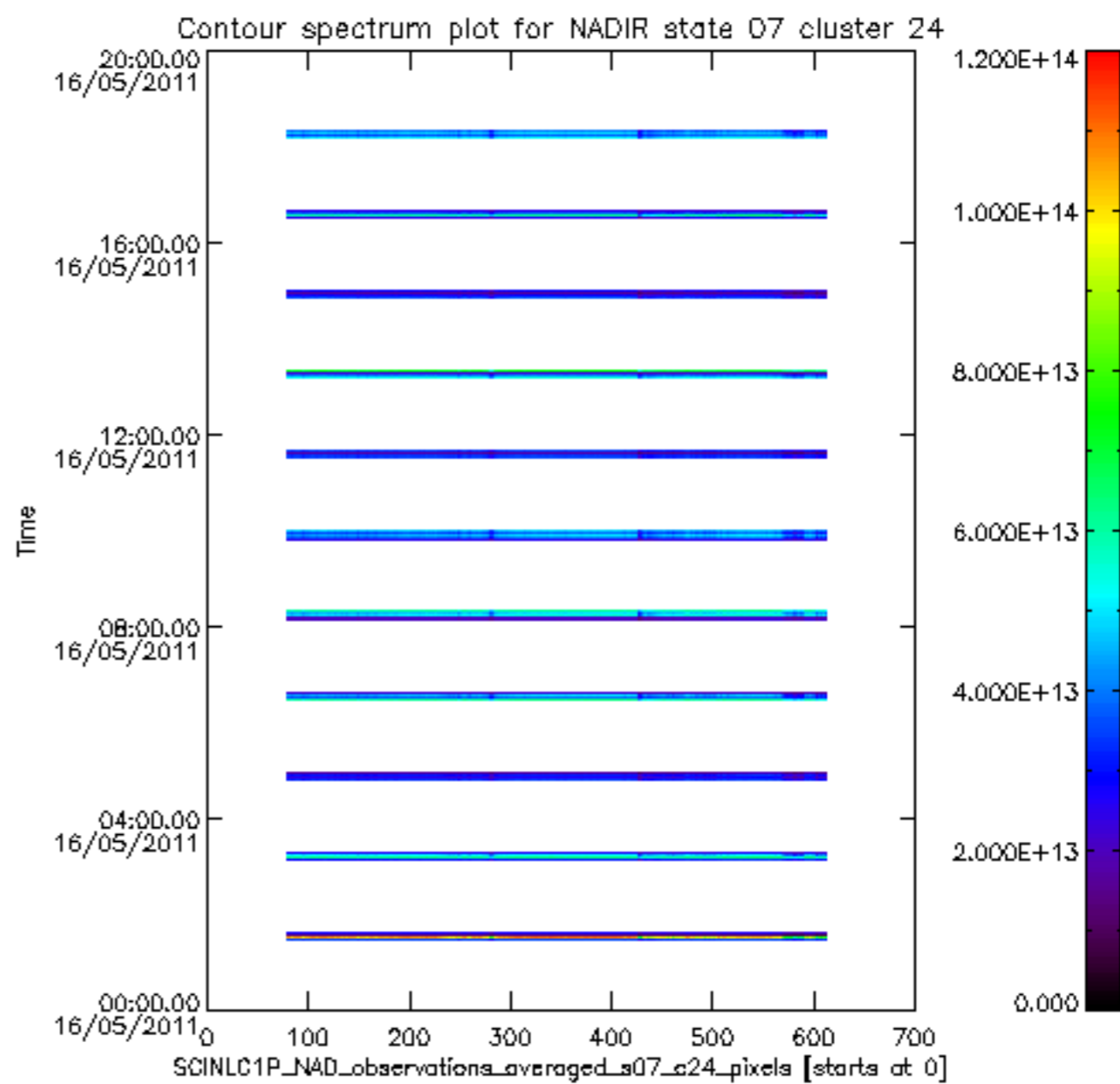
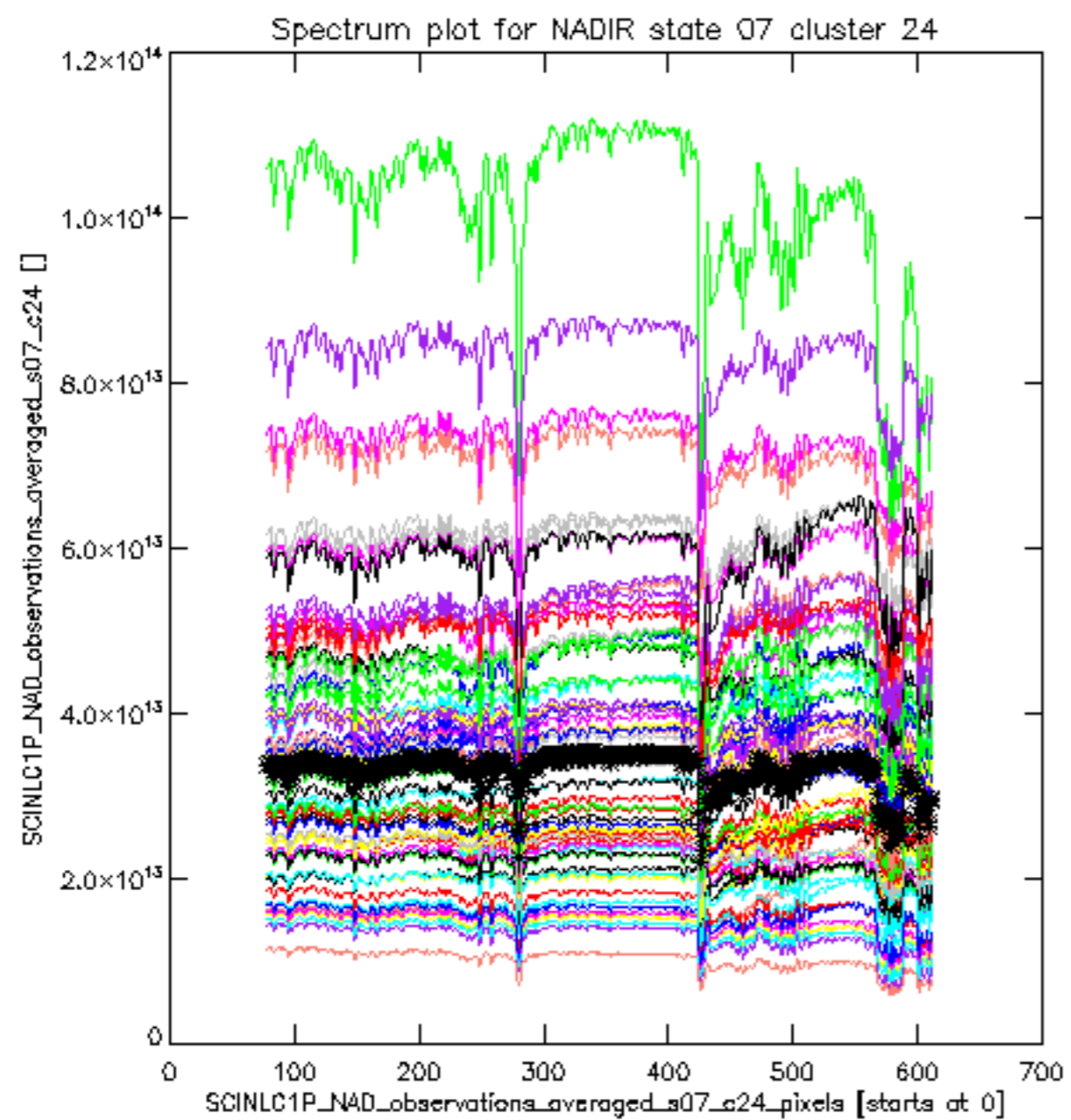


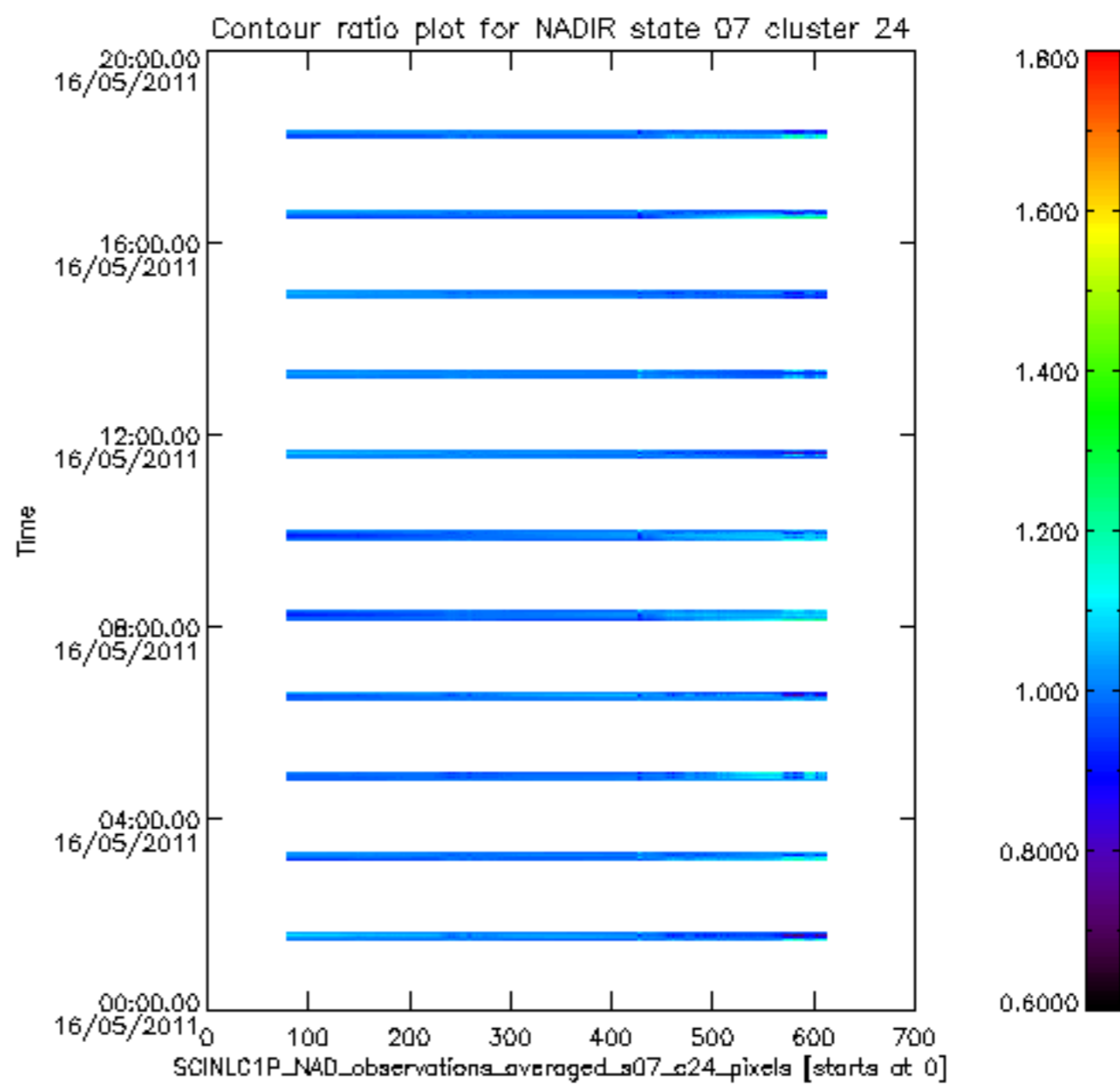
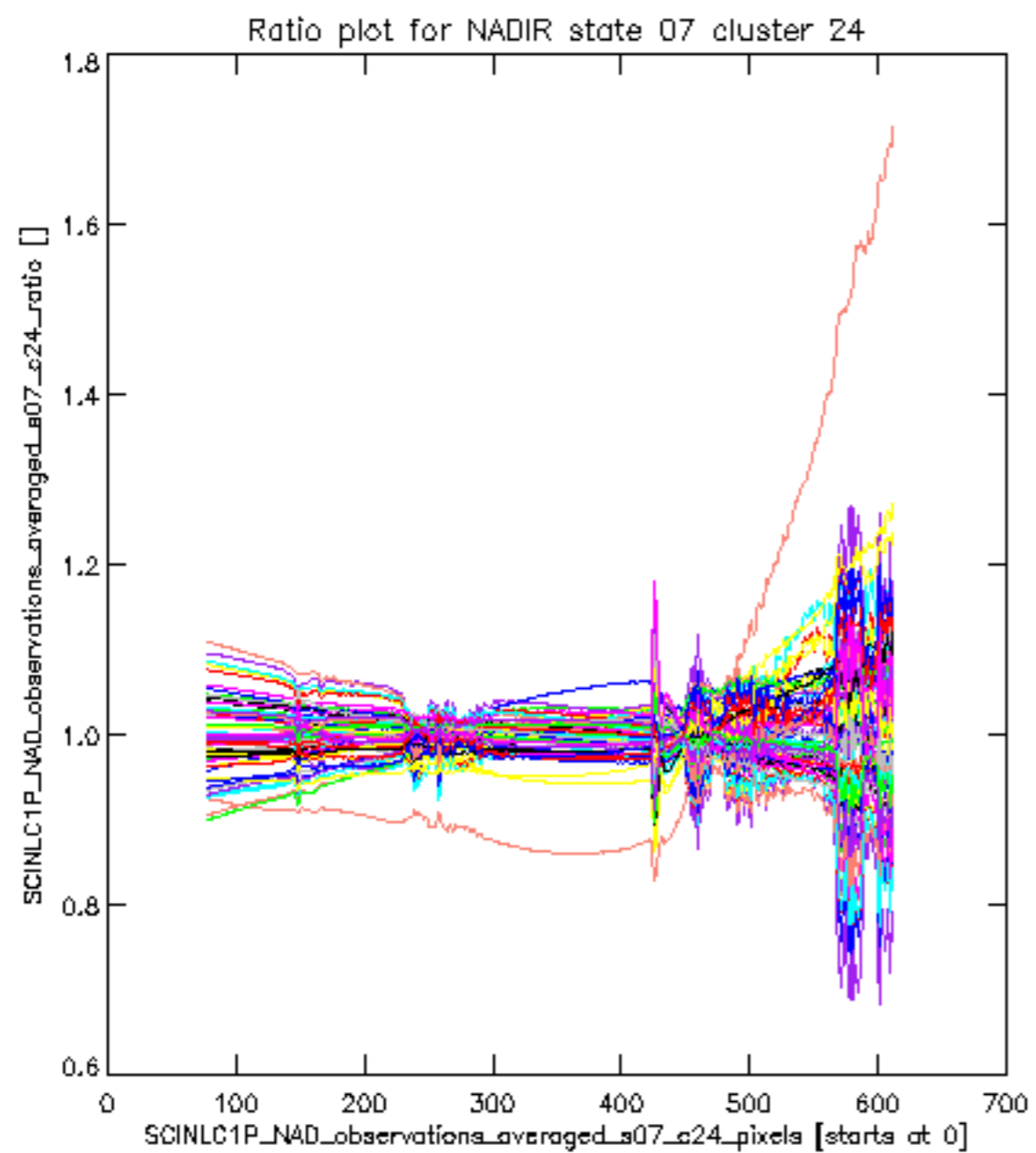




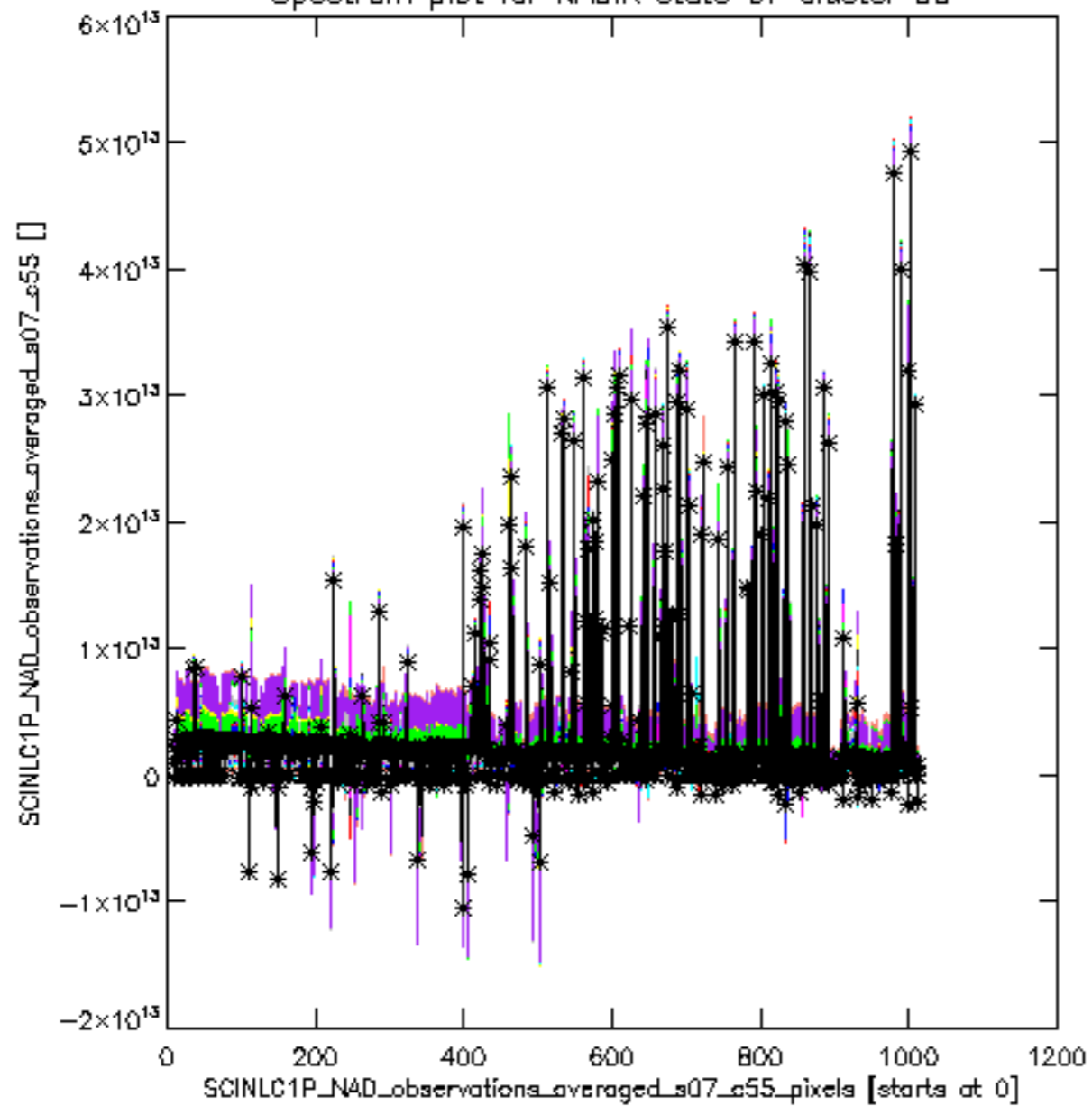








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

