

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	31JAN2011 14:17:56
Data source version	SCIA/7.04-U
Processing scope for products	20JAN2011 00:00:00 to 21JAN2011 00:00:00
Start time of first product within scope	19JAN2011 22:36:54
Stop time of last product within scope	21JAN2011 00:50:34
Total number of level 1 products	16
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	20JAN2011 00:49:10.786	20JAN2011 22:41:28.315
1	NADIR	07	09	N/A	20JAN2011 00:49:10.786	20JAN2011 22:41:28.315
2	NADIR	07	15	N/A	20JAN2011 00:49:10.786	20JAN2011 22:41:28.315
3	NADIR	07	24	N/A	20JAN2011 00:49:10.786	20JAN2011 22:41:28.315
4	NADIR	07	55	N/A	20JAN2011 00:49:10.786	20JAN2011 22:41:28.315
5	LIMB	32	09	~19 km	20JAN2011 00:36:00.149	20JAN2011 23:59:11.785
6	LIMB	32	09	~22 km	20JAN2011 00:36:00.149	20JAN2011 23:59:11.785
7	LIMB	32	09	~25 km	20JAN2011 00:36:00.149	20JAN2011 23:59:11.785
8	LIMB	32	15	~22 km	20JAN2011 00:36:00.149	20JAN2011 23:59:11.785
9	LIMB	32	15	~25 km	20JAN2011 00:36:00.149	20JAN2011 23:59:11.785
10	LIMB	32	15	~35 km	20JAN2011 00:36:00.149	20JAN2011 23:59:11.785

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	#cmpl_drk	#incmpl_drk	Decont
0	SCI_NLC_1CUDPA20110119_222011_000059993098_00346_46481_3765.N1	19JAN2011 22:36:54	19JAN2011 23:47:23	0	36	30	0	0	1	0	0	
1	SCI_NLC_1CUDPA20110120_000014_000060213098_00347_46482_3767.N1	20JAN2011 00:17:08	20JAN2011 01:27:22	0	35	31	0	0	1	0	0	
2	SCI_NLC_1CUDPA20110120_014039_000059993098_00348_46483_3771.N1	20JAN2011 01:57:21	20JAN2011 03:07:50	0	36	30	0	0	1	0	0	
3	SCI_NLC_1CUDPA20110120_032042_000060213098_00349_46484_3772.N1	20JAN2011 03:37:35	20JAN2011 04:47:50	0	35	31	0	0	1	0	0	
4	SCI_NLC_1CUDPA20110120_050106_000059993098_00350_46485_3773.N1	20JAN2011 05:17:49	20JAN2011 06:28:18	0	36	30	0	0	1	0	0	
5	SCI_NLC_1CUDPA20110120_064109_000060213098_00351_46486_3775.N1	20JAN2011 06:58:03	20JAN2011 08:08:17	0	35	31	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110120_082134_000059993098_00352_46487_3778.N1	20JAN2011 08:38:16	20JAN2011 09:48:45	0	36	30	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110120_100137_000060213098_00353_46488_3779.N1	20JAN2011 10:18:30	20JAN2011 11:28:44	0	35	31	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110120_114201_000059993098_00354_46489_3780.N1	20JAN2011 11:58:43	20JAN2011 13:09:12	0	36	30	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110120_132204_000060213098_00355_46490_3784.N1	20JAN2011 13:38:57	20JAN2011 14:49:12	0	35	31	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110120_150229_000059993098_00356_46491_3786.N1	20JAN2011 15:19:11	20JAN2011 16:29:40	0	36	30	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110120_164232_000060213098_00357_46492_3787.N1	20JAN2011 16:59:25	20JAN2011 18:09:39	0	35	31	0	0	1	0	0	
12	SCI_NLC_1CUDPA20110120_182257_000059993098_00358_46493_3794.N1	20JAN2011 18:39:38	20JAN2011 19:50:29	0	36	30	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110120_200259_000060213098_00359_46494_3795.N1	20JAN2011 20:19:52	20JAN2011 21:30:28	0	35	31	0	1	1	0	0	
14	SCI_NLC_1CUDPA20110120_214324_000059993098_00360_46495_3789.N1	20JAN2011 22:00:06	20JAN2011 23:10:35	0	36	30	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110120_232327_000060213098_00361_46496_3791.N1	20JAN2011 23:40:19	21JAN2011 00:50:34	0	35	31	0	0	1	0	0	

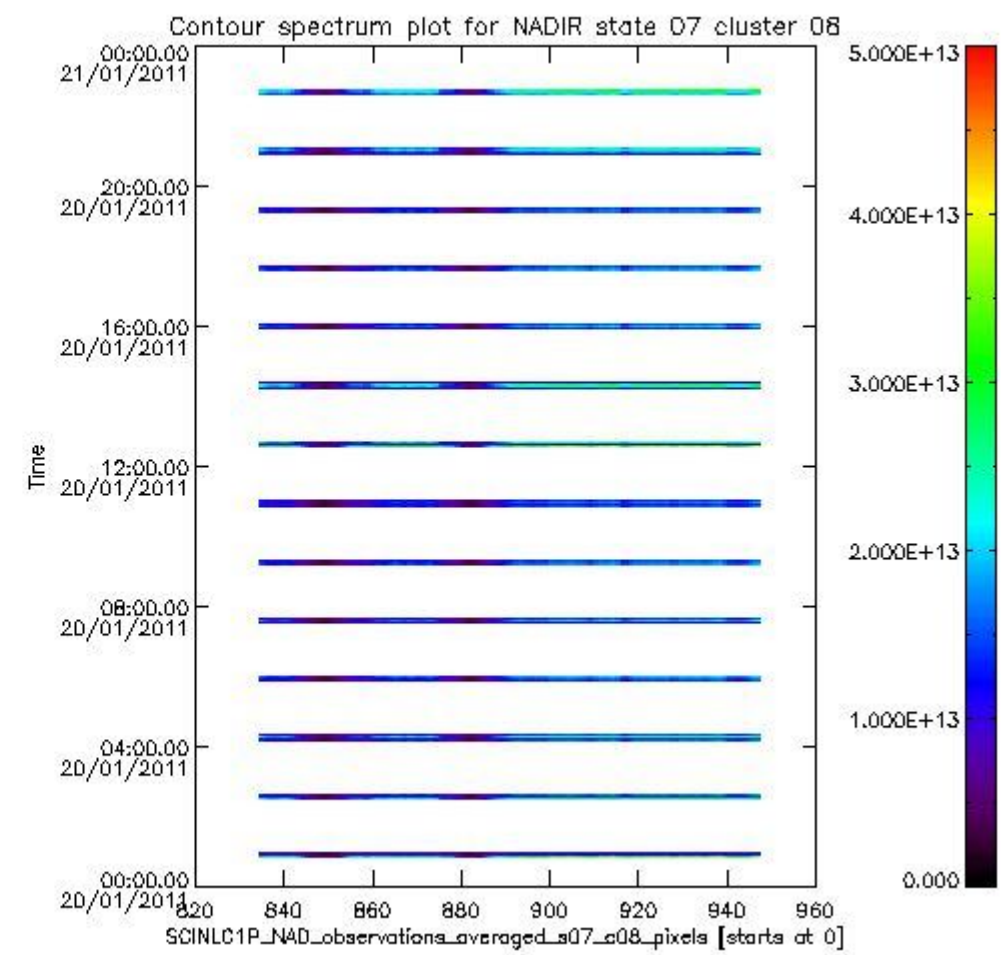
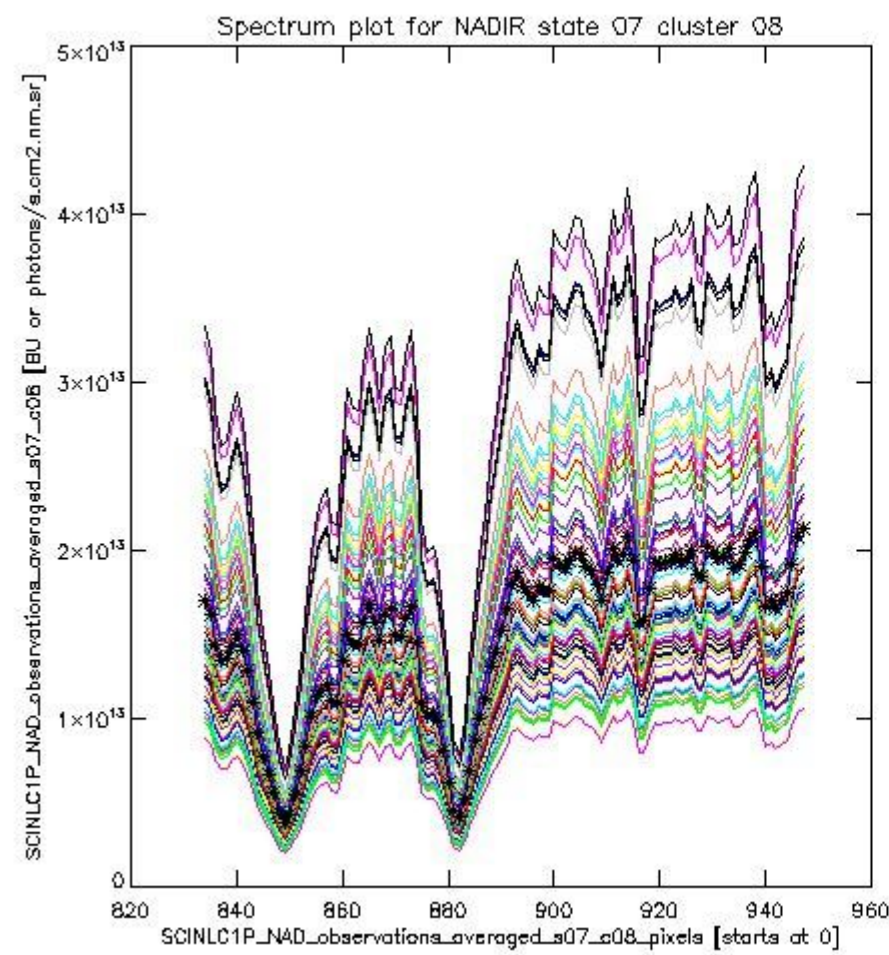
1.2 Source packet monitoring

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:

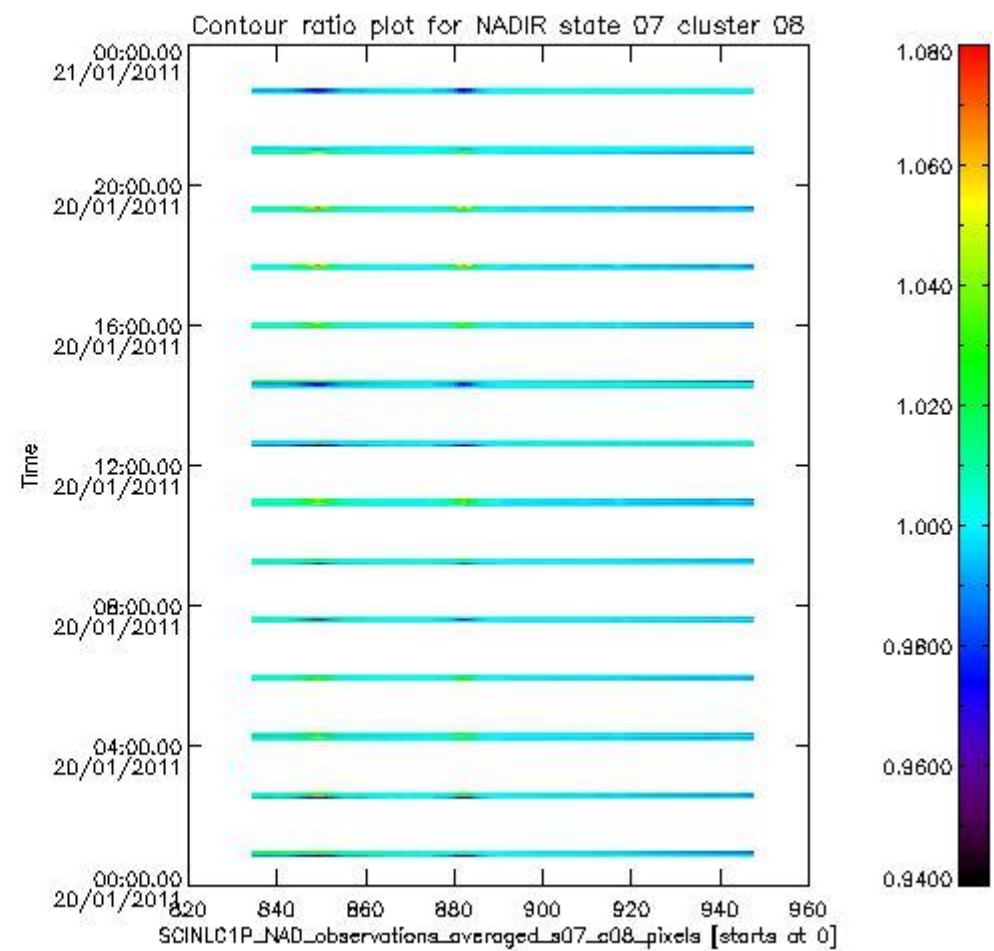
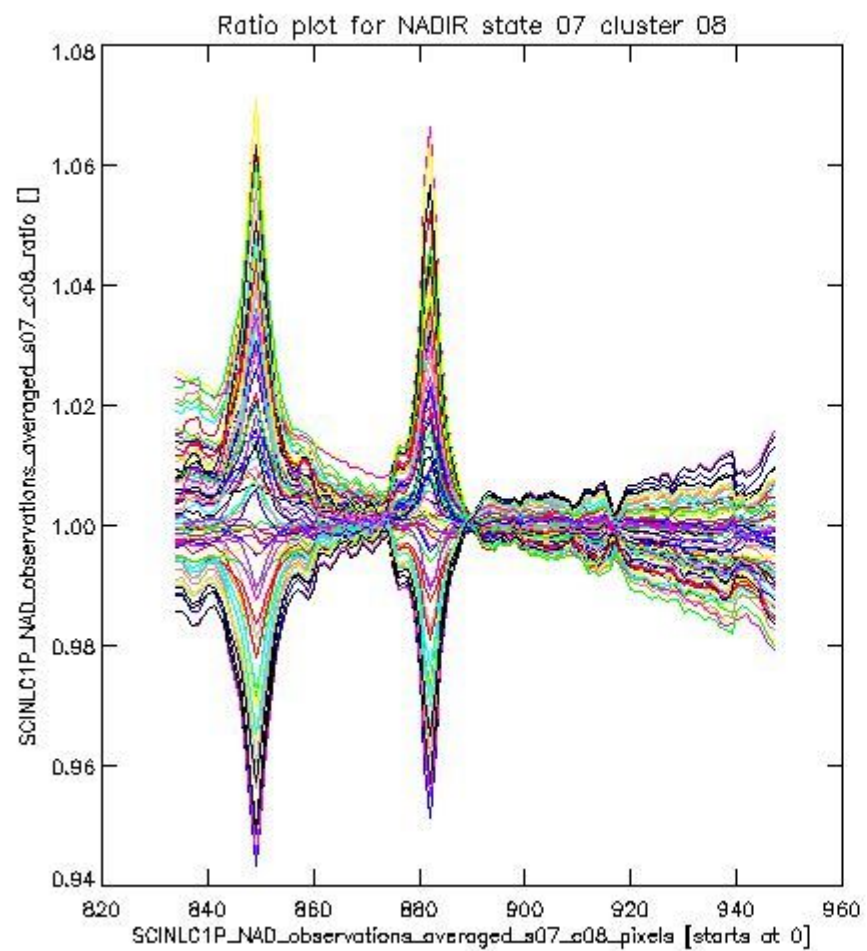
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	20JAN2011 00:49:10.786
Start time of last sample	20JAN2011 22:41:28.315
Reference period start time	21DEC2010 02:30:00.304
Reference period stop time	19JAN2011 23:18:16.676
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



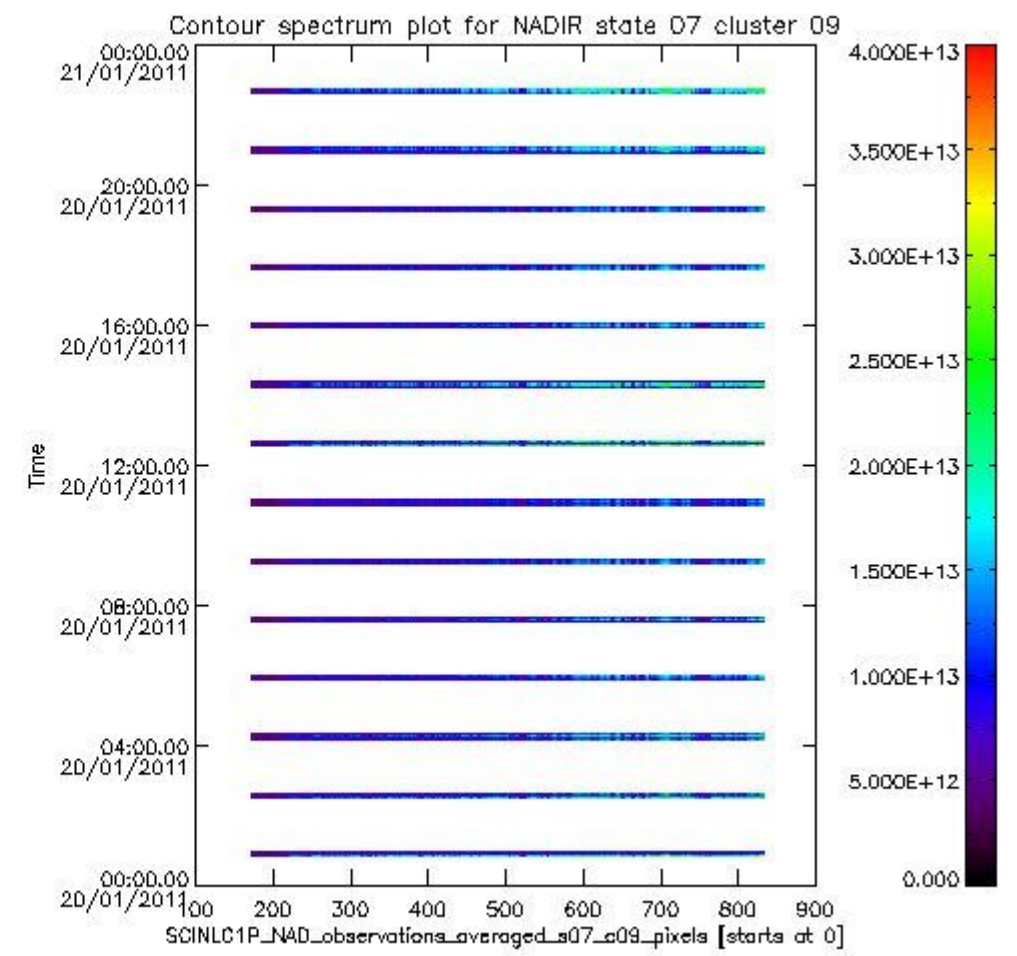
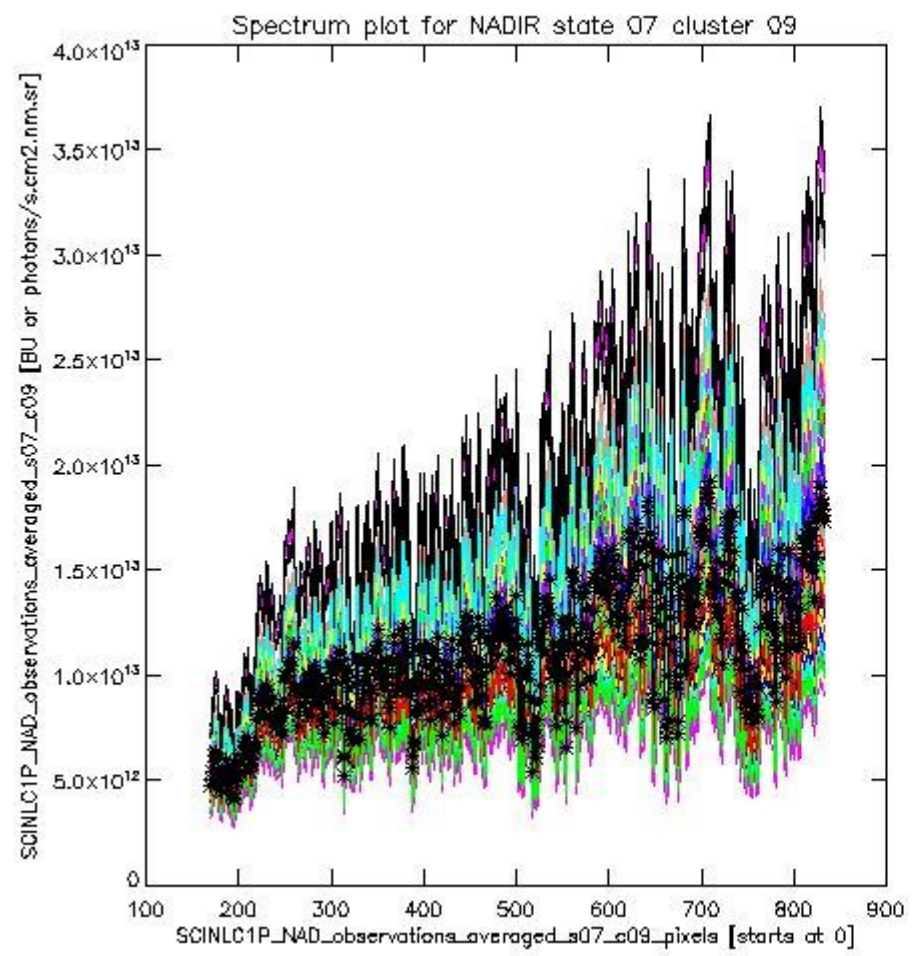
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_0.PNG



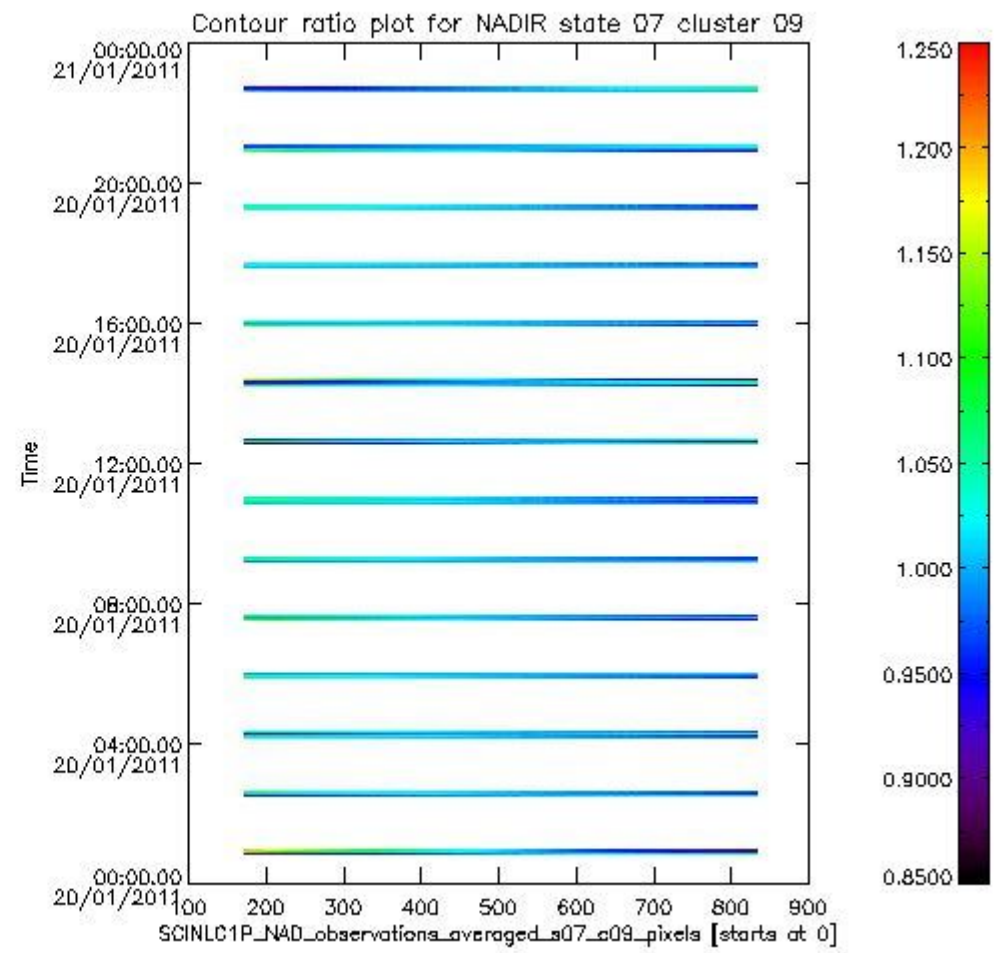
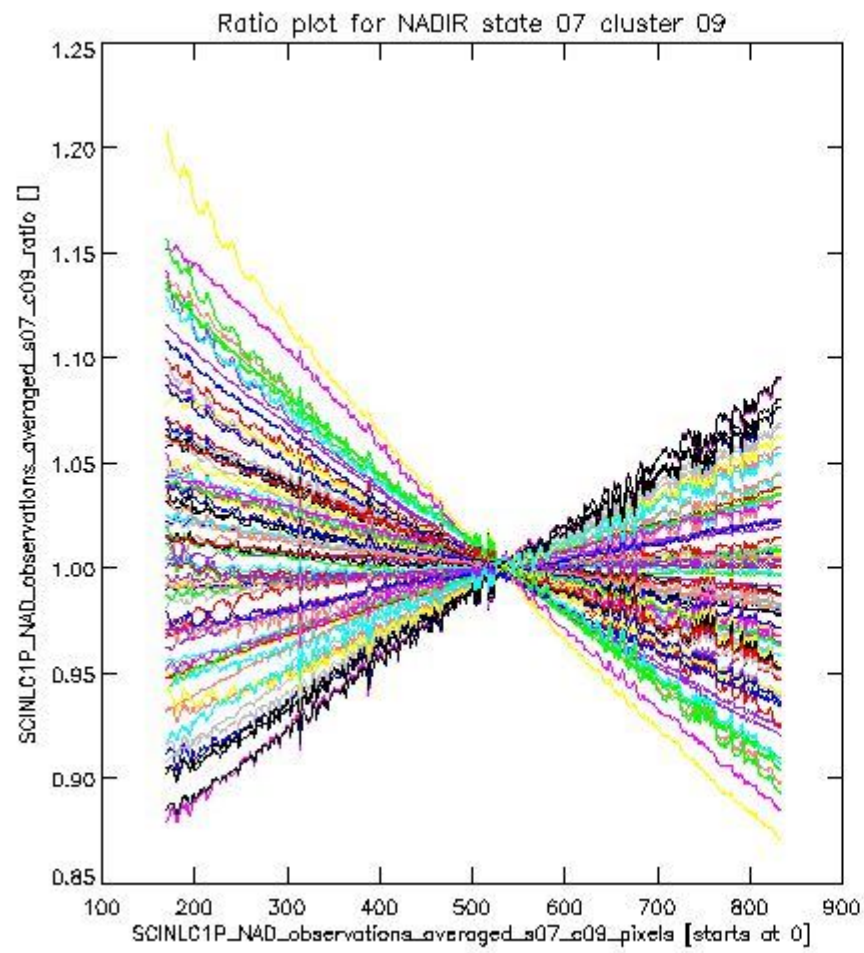
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_1.PNG

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	20JAN2011 00:49:10.786
Start time of last sample	20JAN2011 22:41:28.315
Reference period start time	21DEC2010 02:30:00.304
Reference period stop time	19JAN2011 23:18:16.676
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



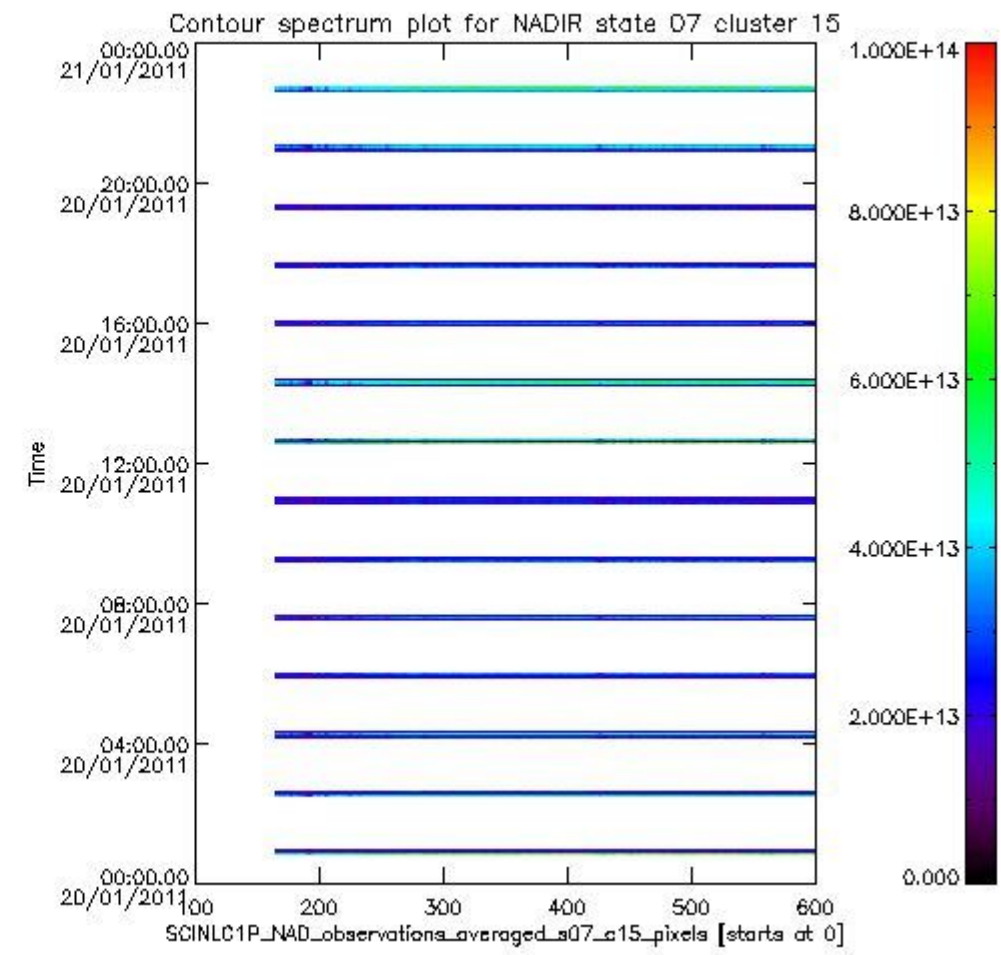
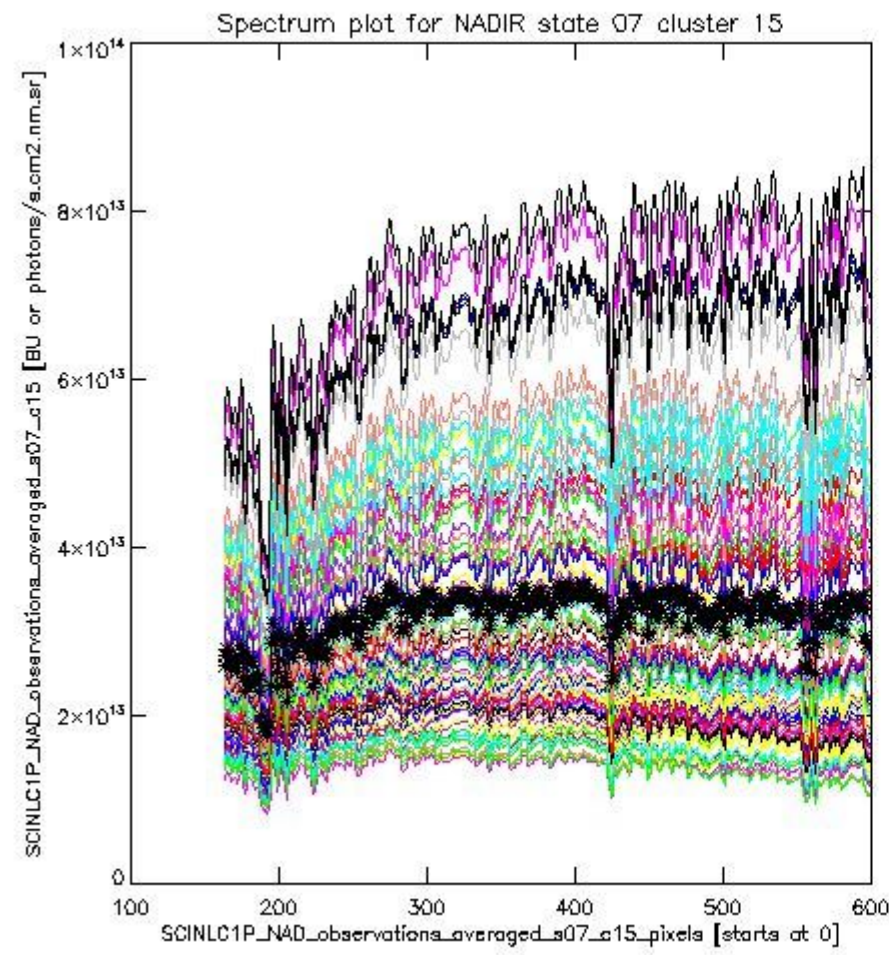
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_2.PNG



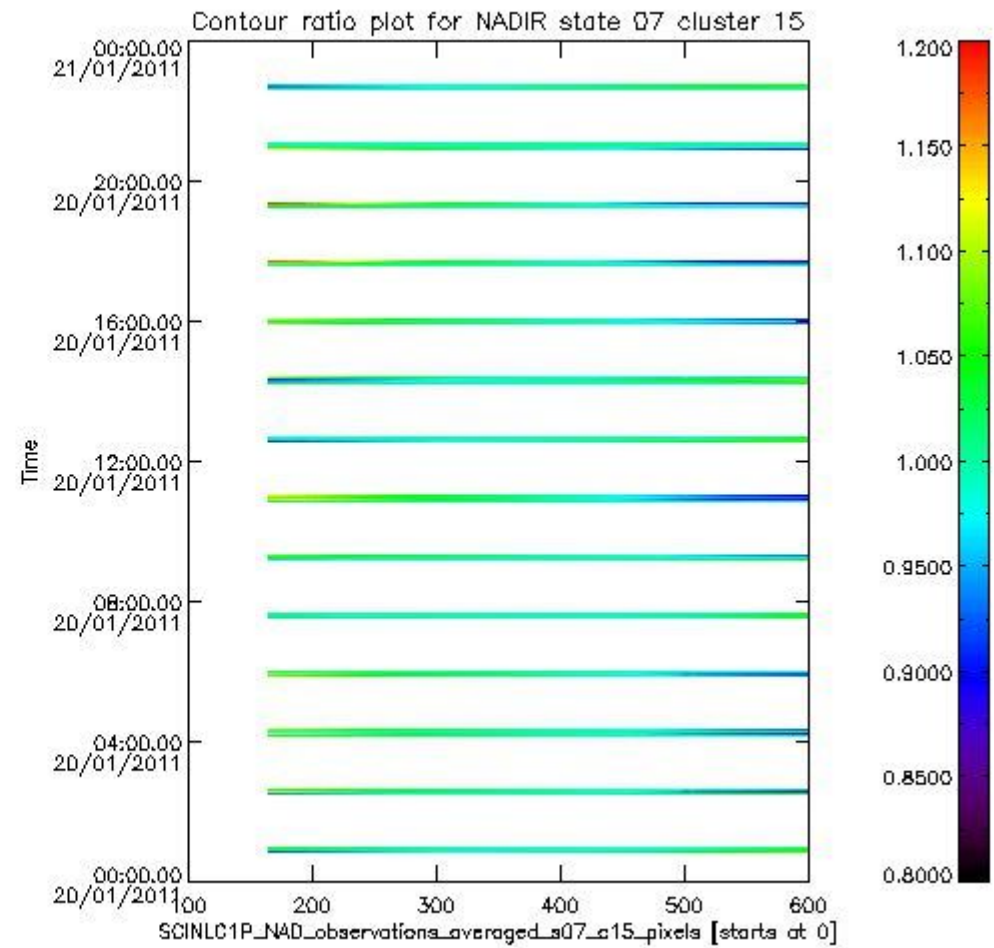
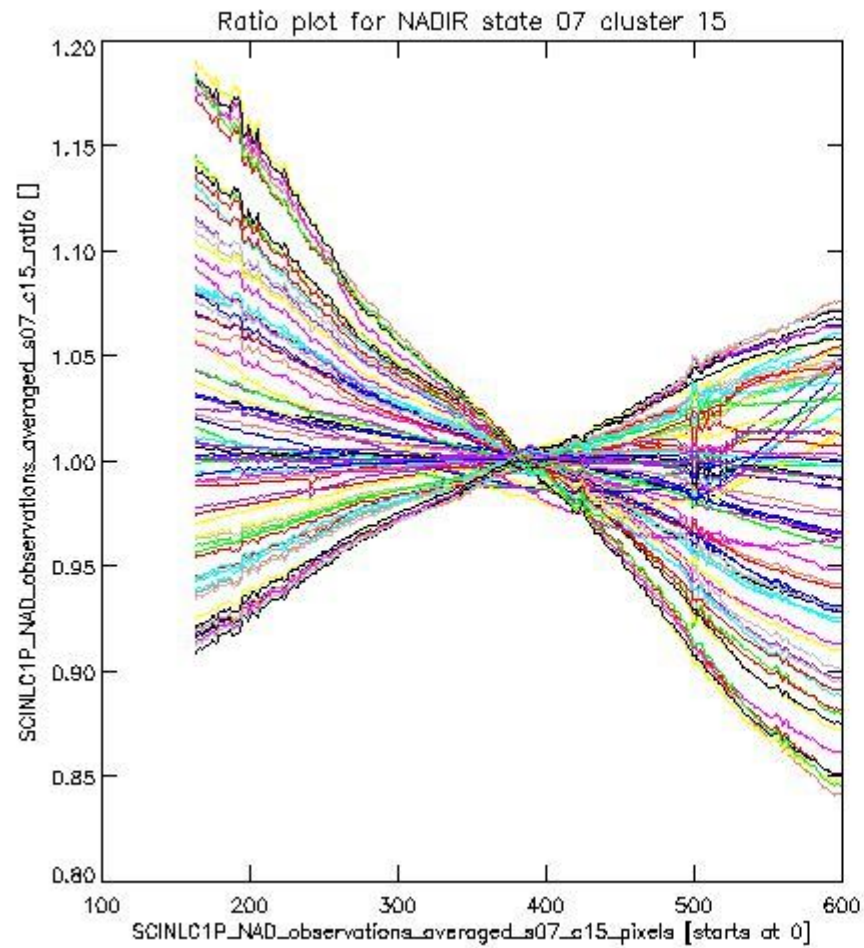
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_3.PNG

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	20JAN2011 00:49:10.786
Start time of last sample	20JAN2011 22:41:28.315
Reference period start time	21DEC2010 02:30:00.304
Reference period stop time	19JAN2011 23:18:16.676
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



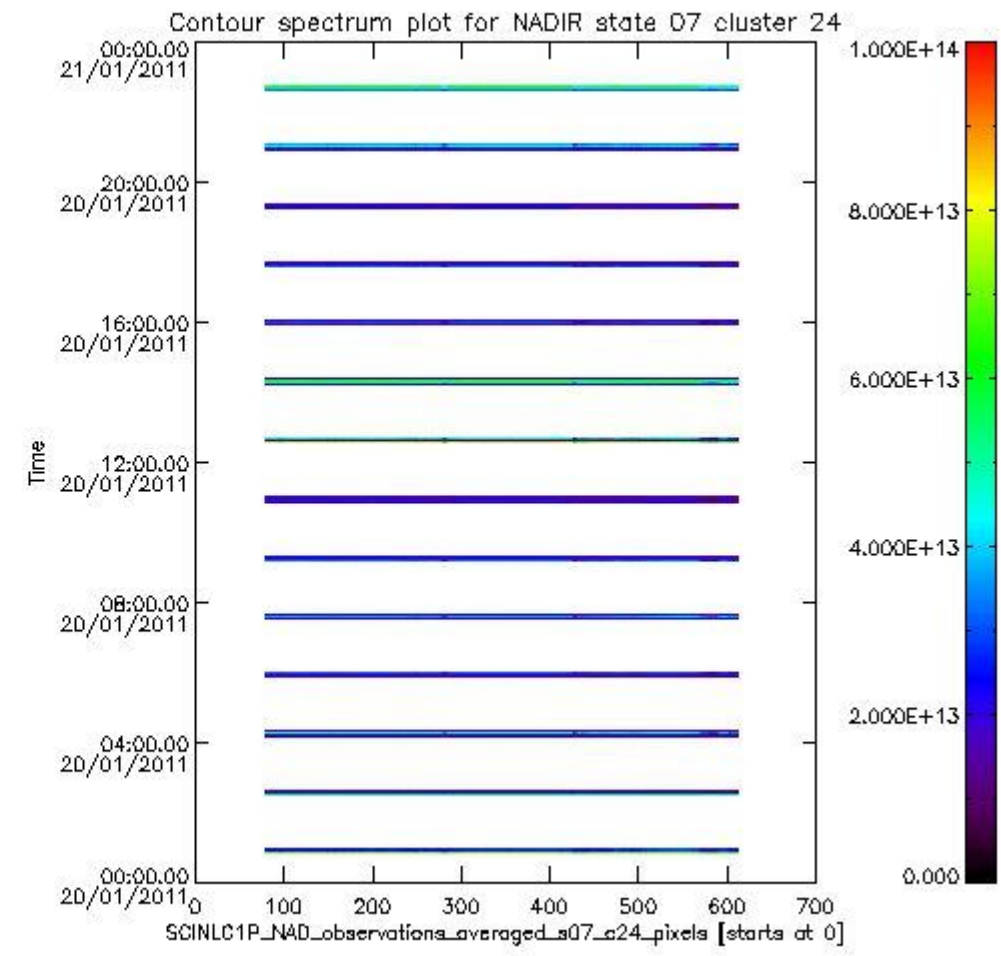
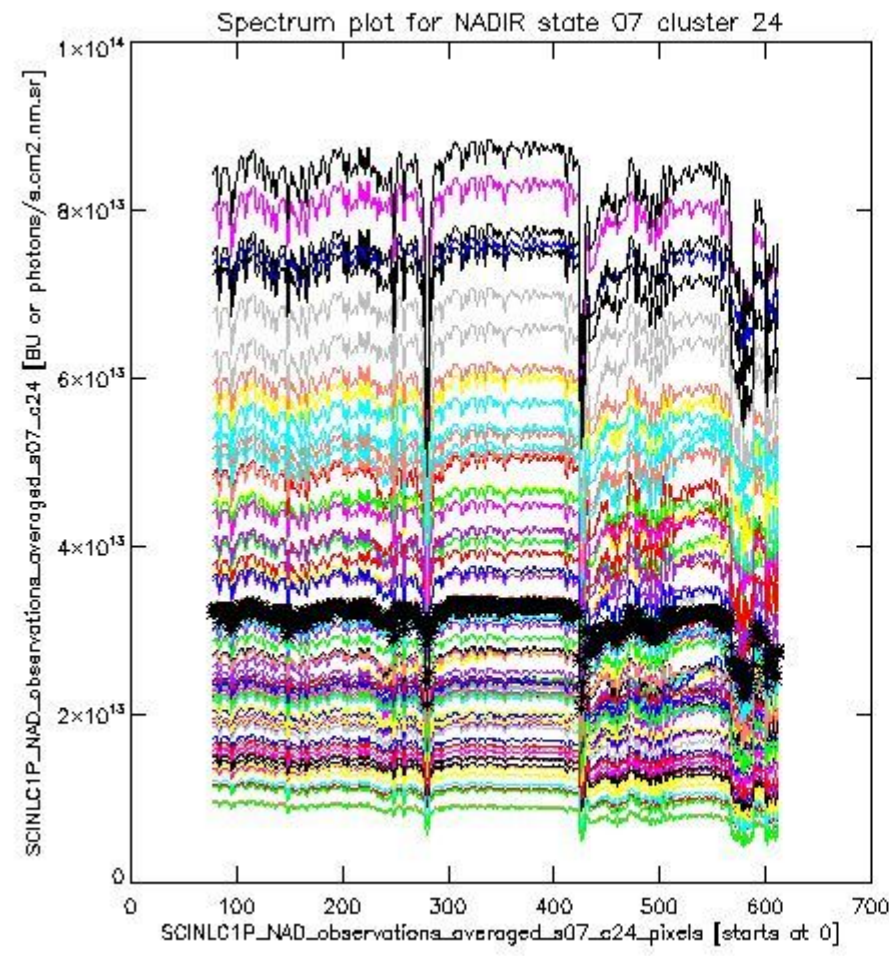
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_4.PNG



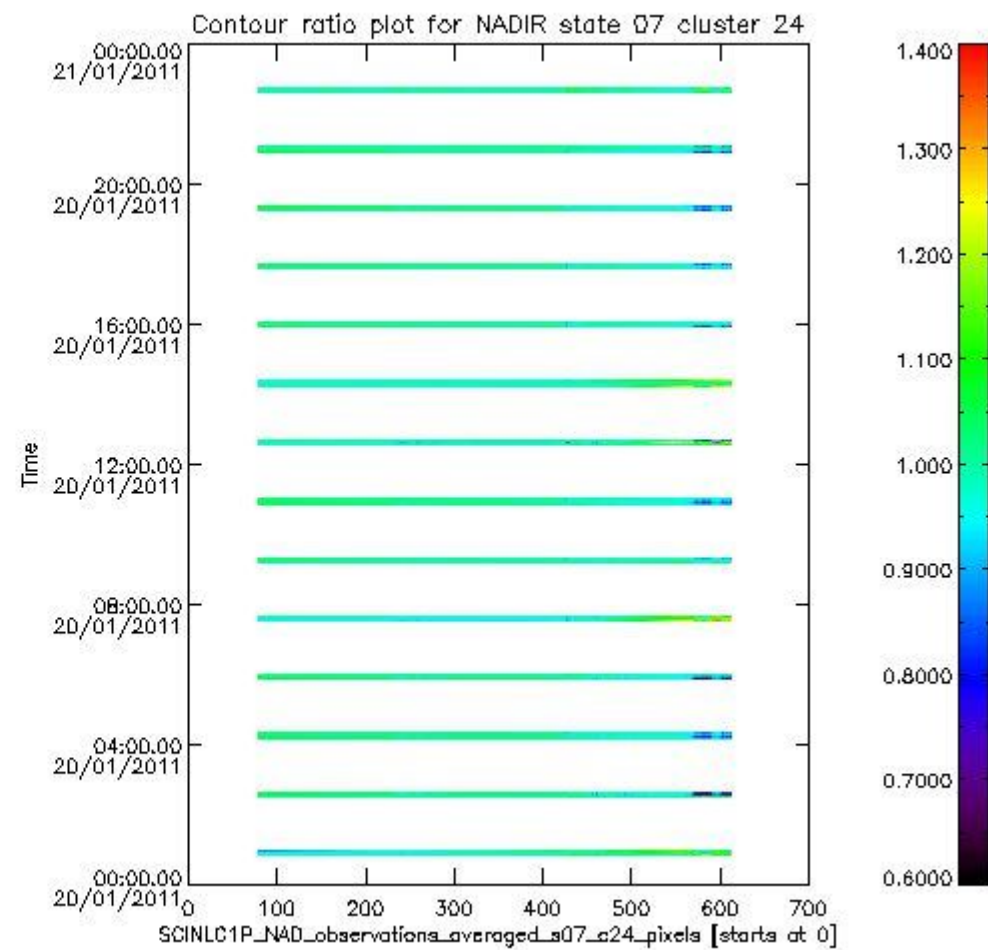
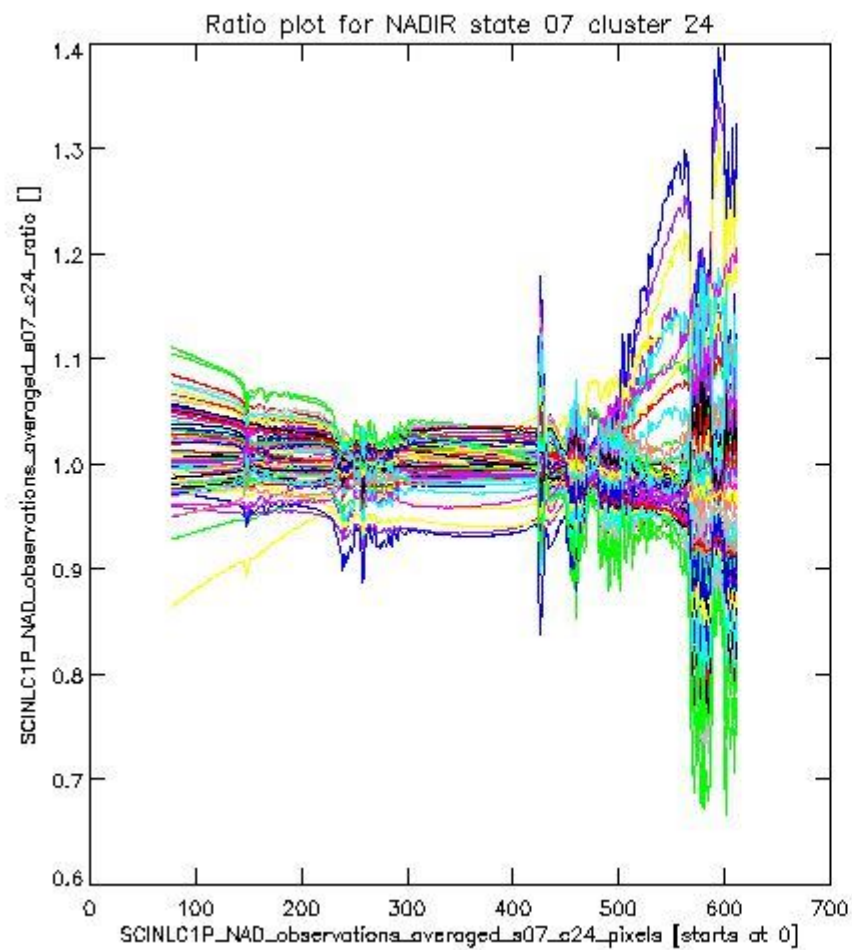
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110120_5.PNG

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	20JAN2011 00:49:10.786
Start time of last sample	20JAN2011 22:41:28.315
Reference period start time	21DEC2010 02:30:00.304
Reference period stop time	19JAN2011 23:18:16.676
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



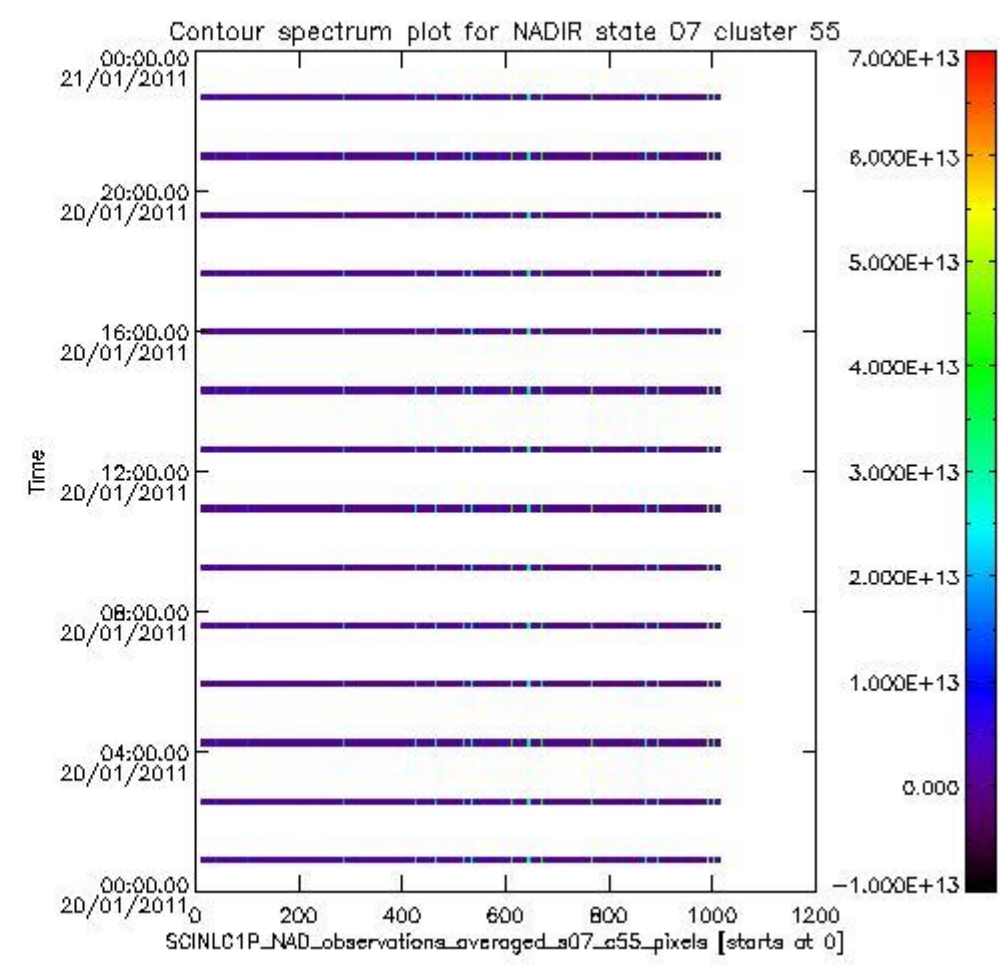
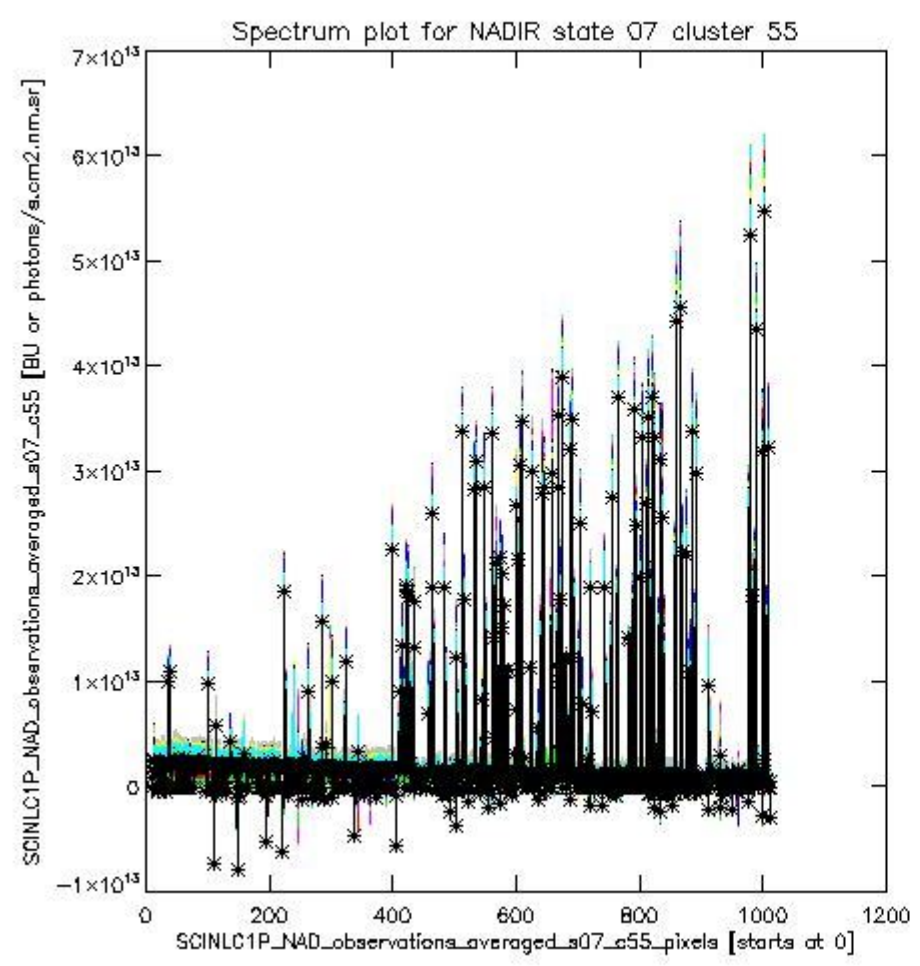
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_6.PNG



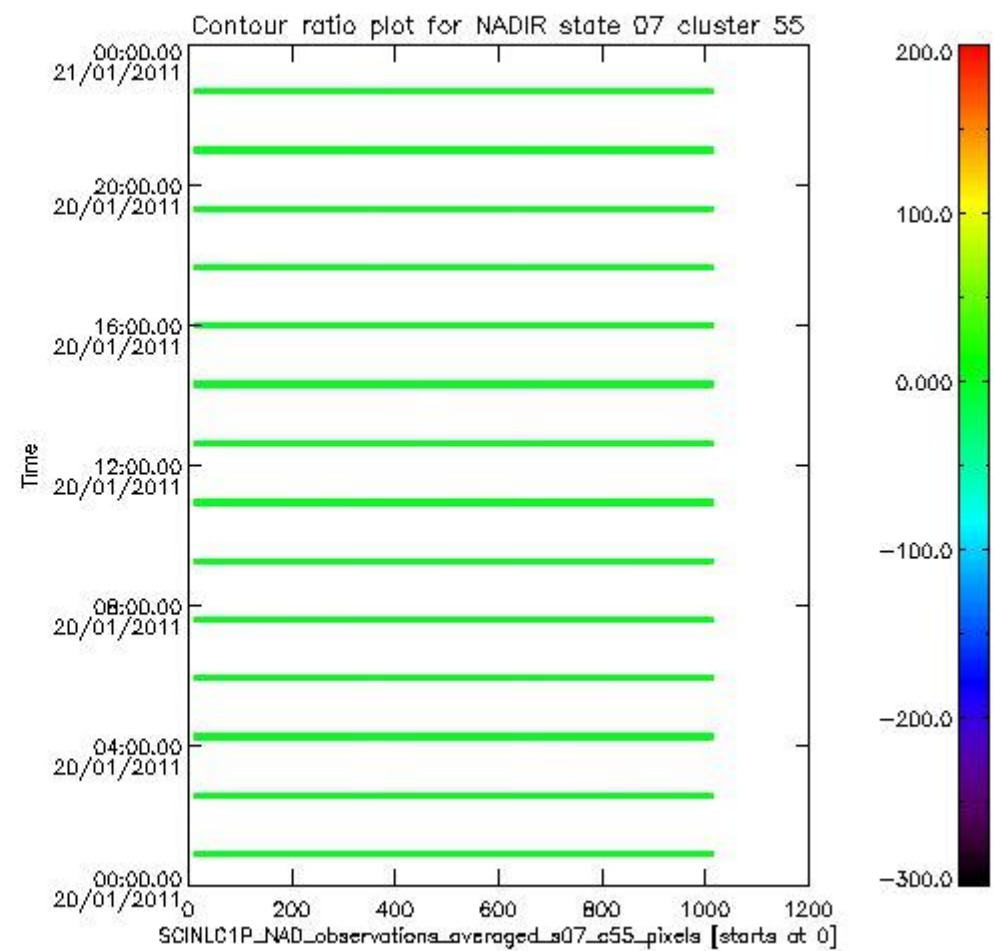
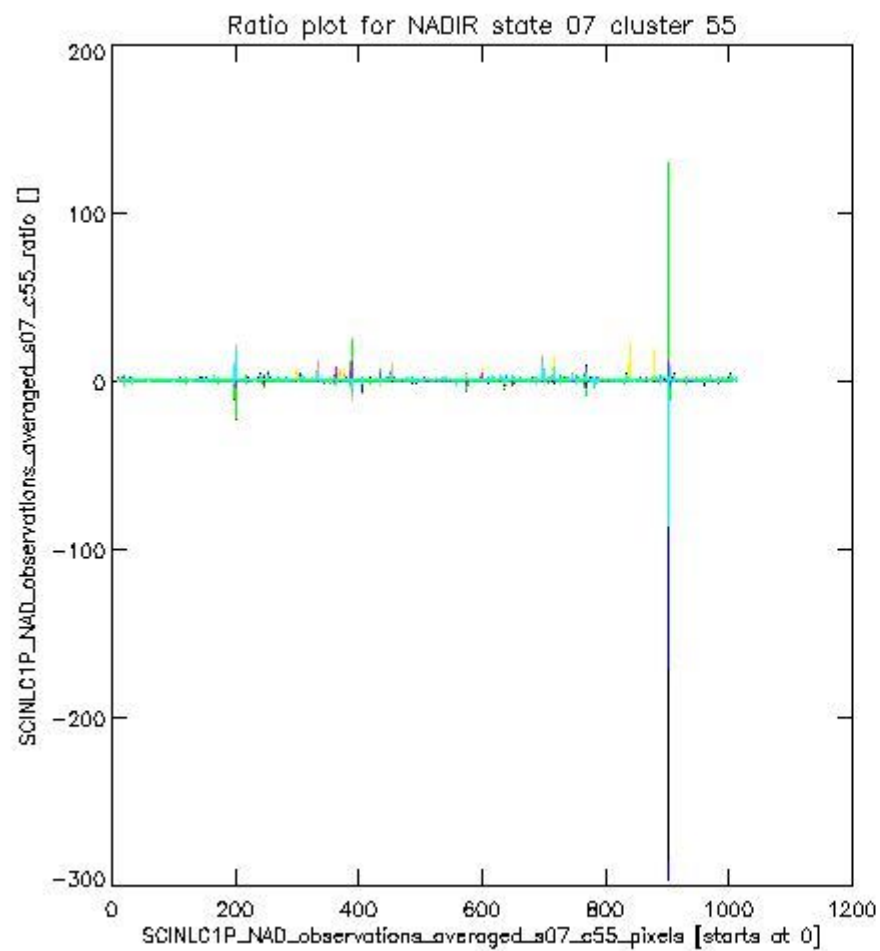
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110120_7.PNG

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	20JAN2011 00:49:10.786
Start time of last sample	20JAN2011 22:41:28.315
Reference period start time	21DEC2010 02:30:00.304
Reference period stop time	19JAN2011 23:18:16.676
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



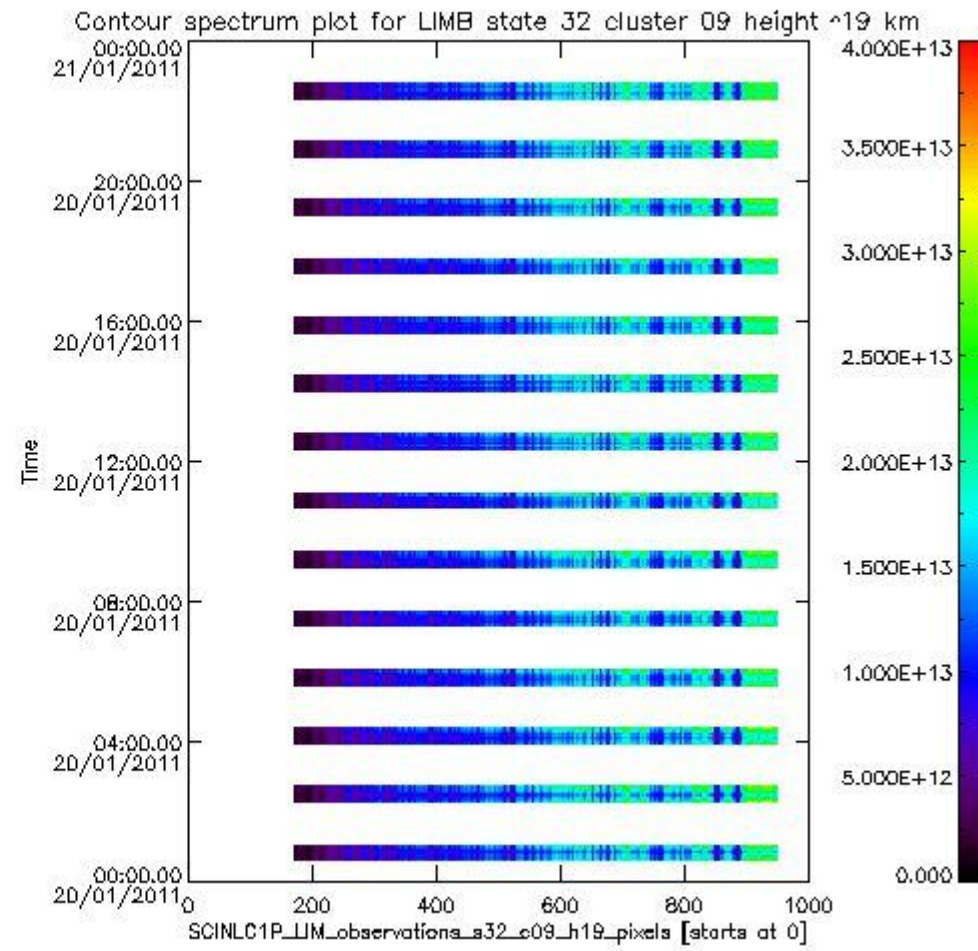
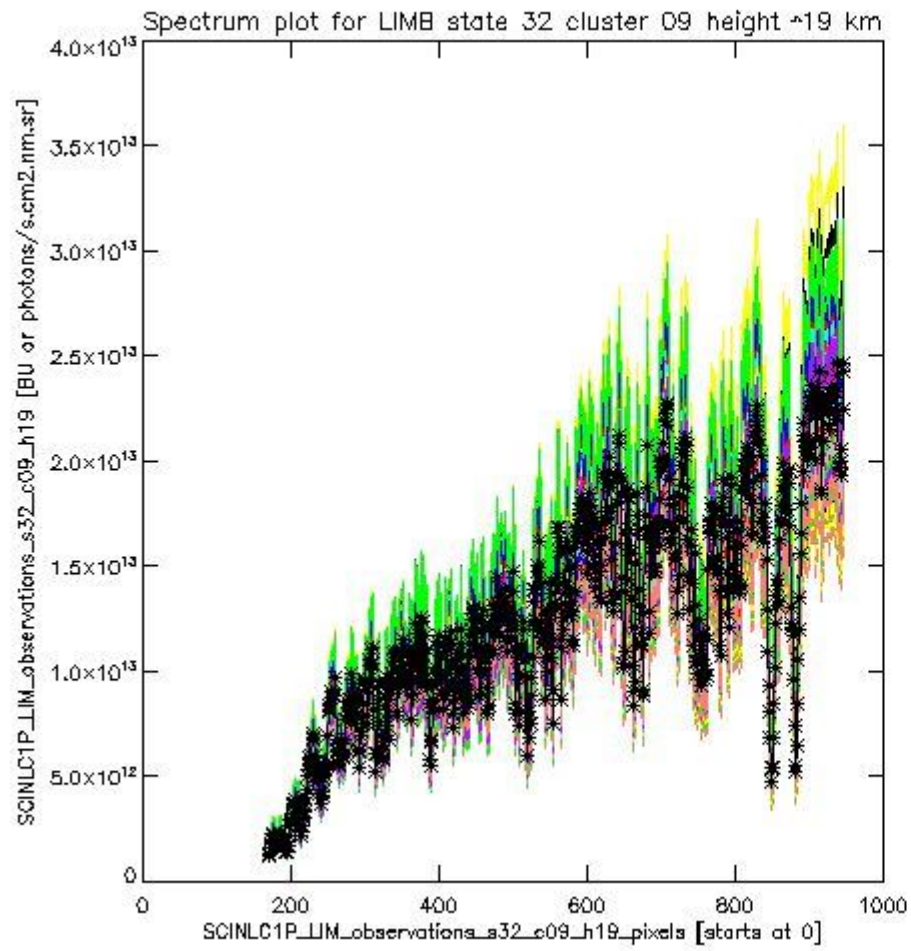
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_8.PNG



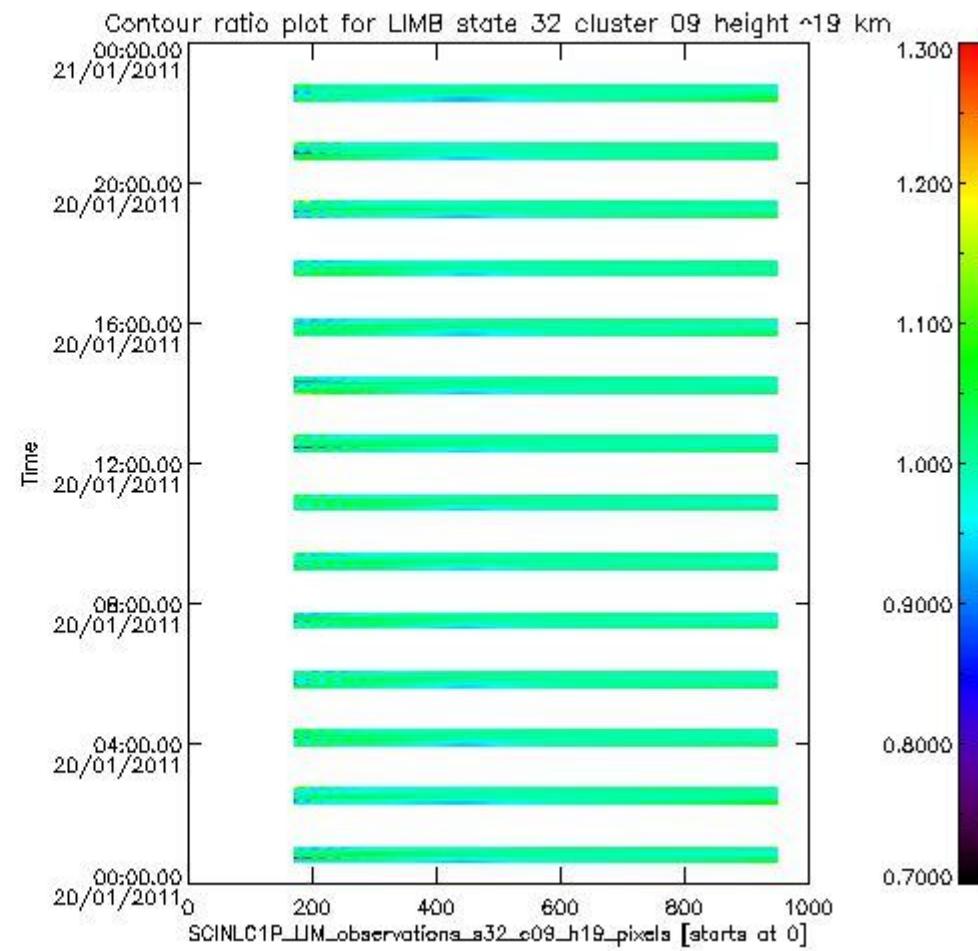
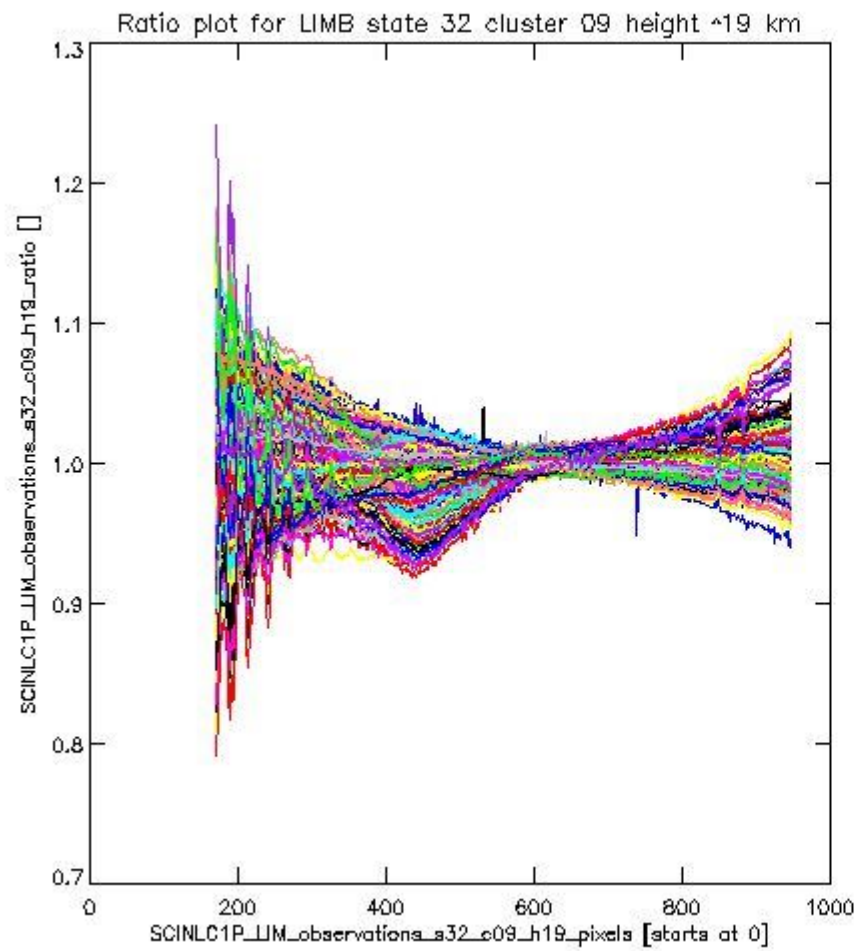
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110120_9.PNG

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	20JAN2011 00:36:00.149
Start time of last sample	20JAN2011 23:59:11.785
Reference period start time	21DEC2010 02:16:49.667
Reference period stop time	19JAN2011 23:23:30.719
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



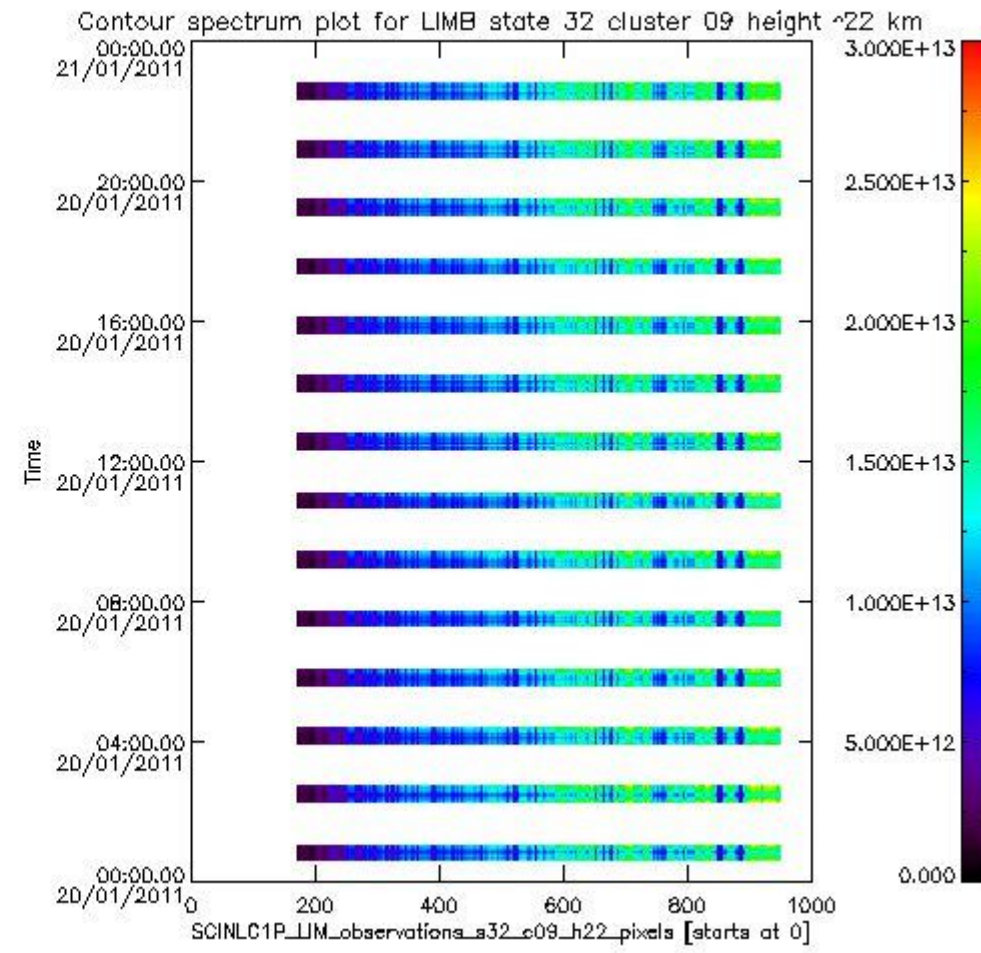
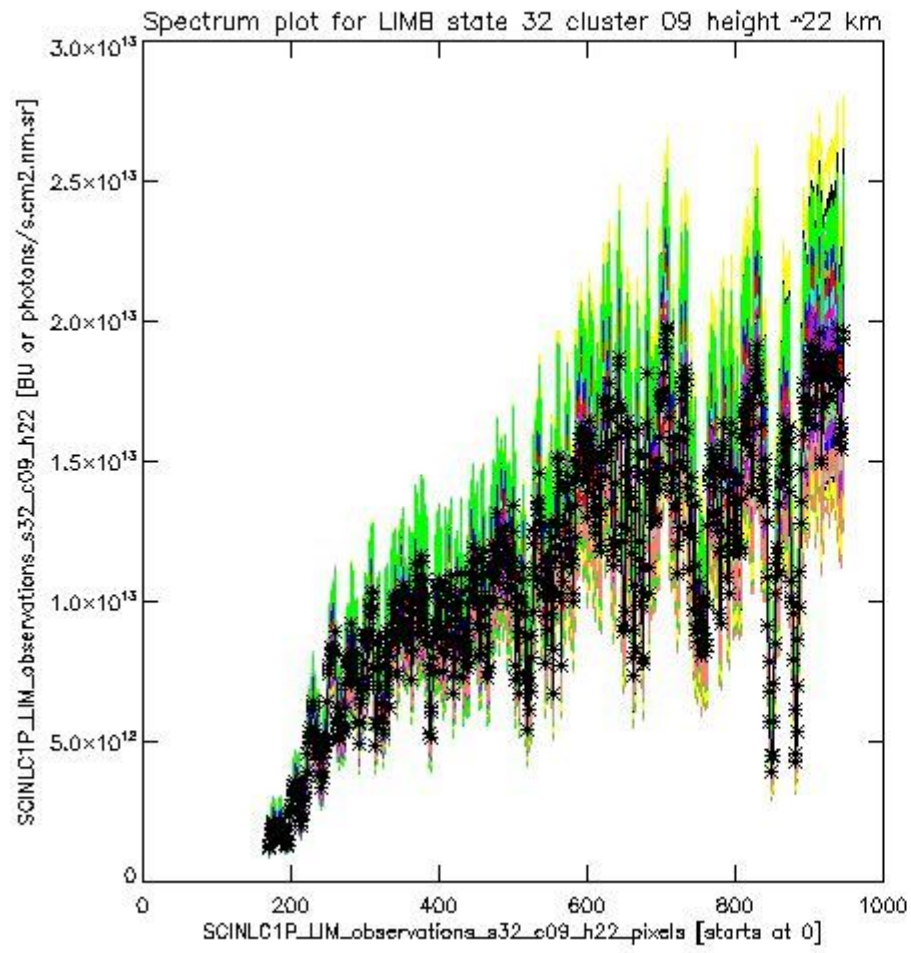
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110120_10.PNG



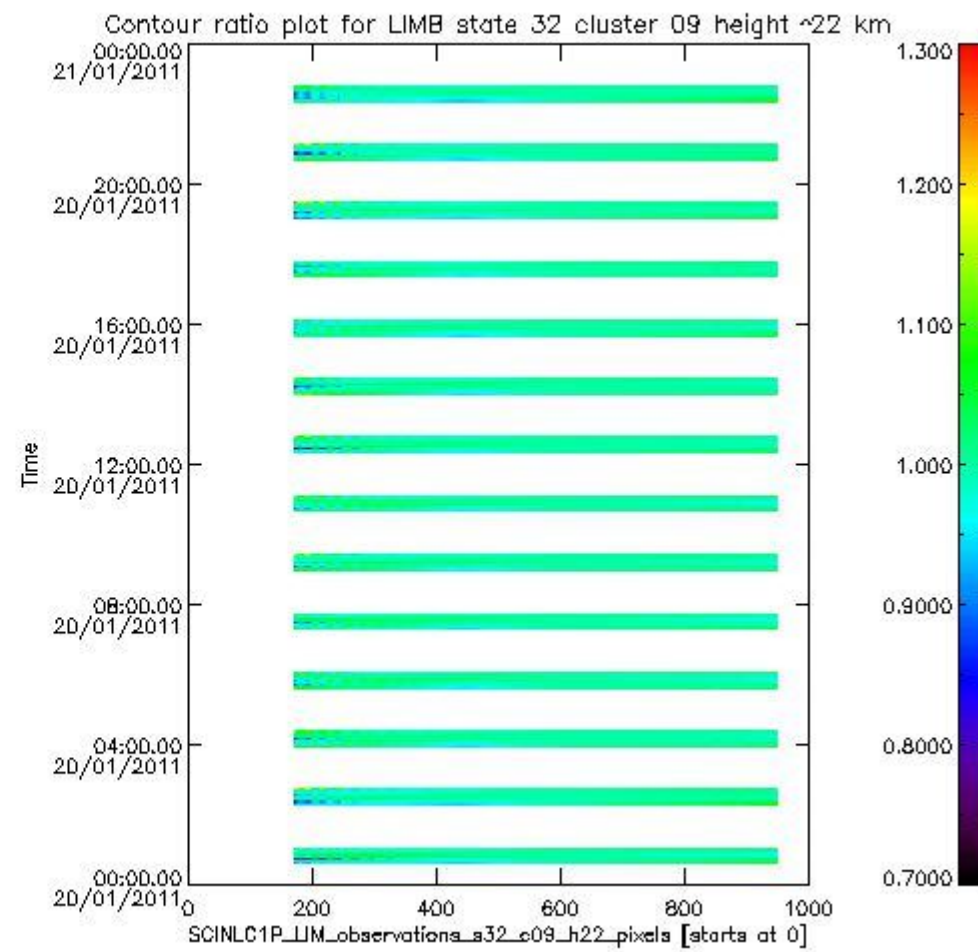
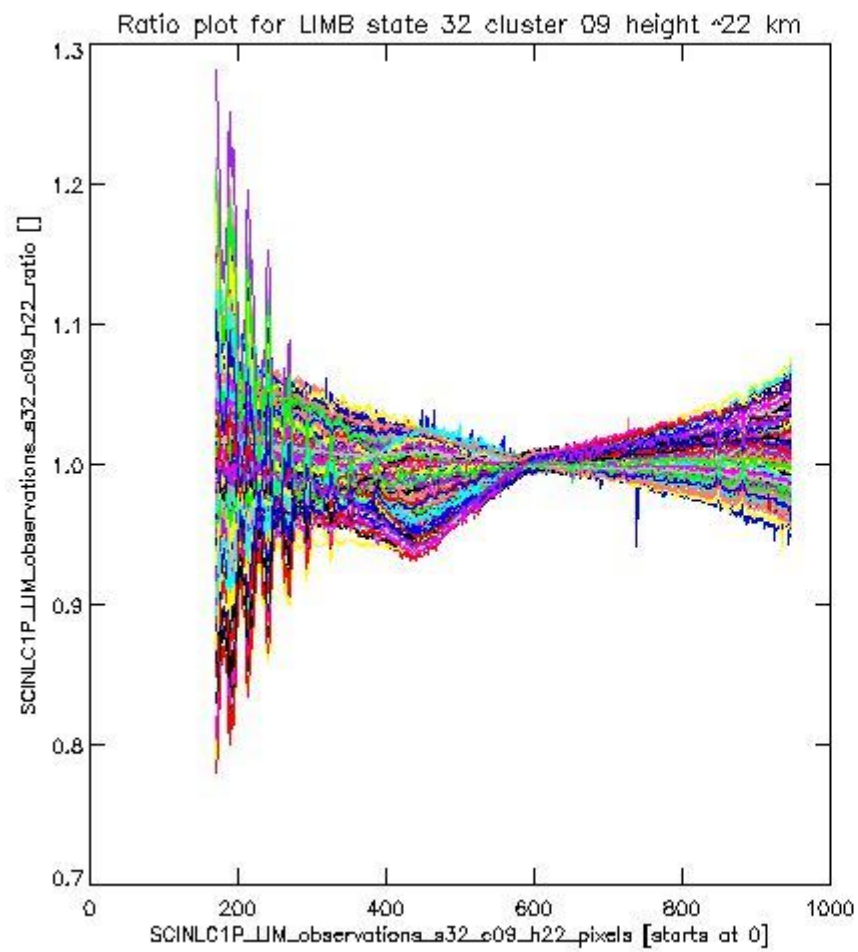
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_11.PNG

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	20JAN2011 00:36:00.149
Start time of last sample	20JAN2011 23:59:11.785
Reference period start time	21DEC2010 02:16:49.667
Reference period stop time	19JAN2011 23:23:30.719
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



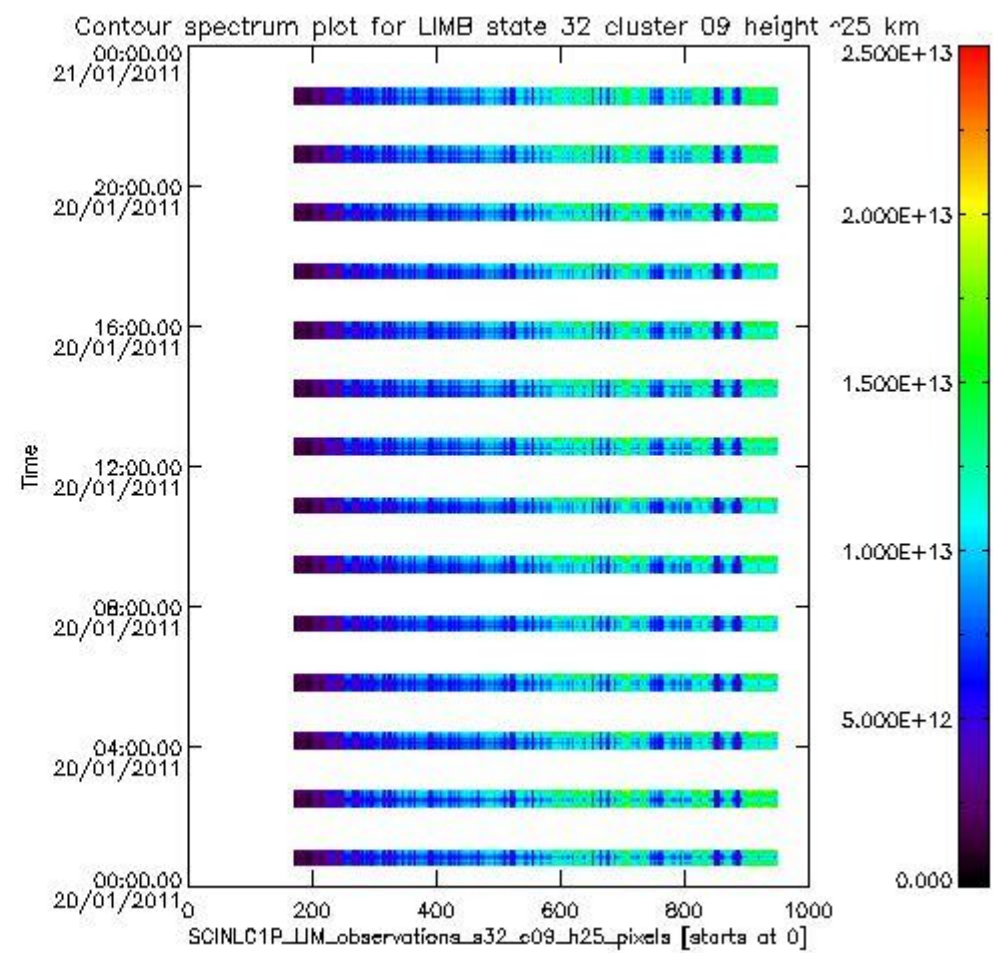
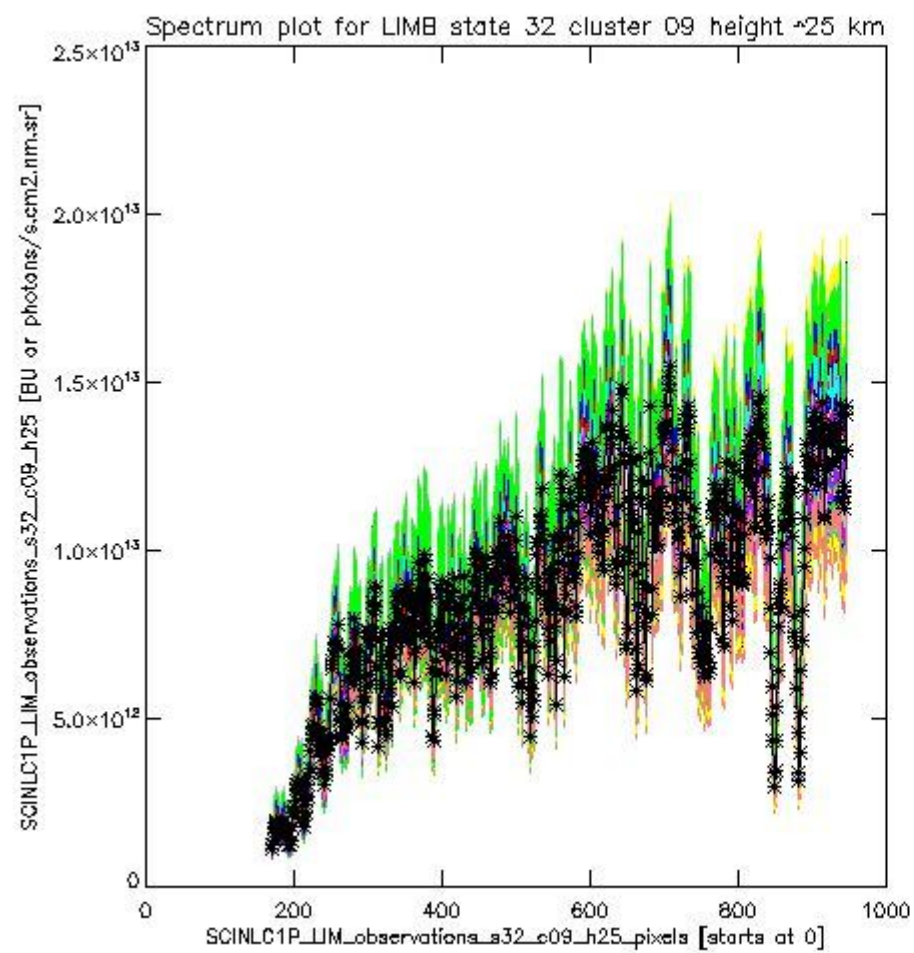
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_12.PNG



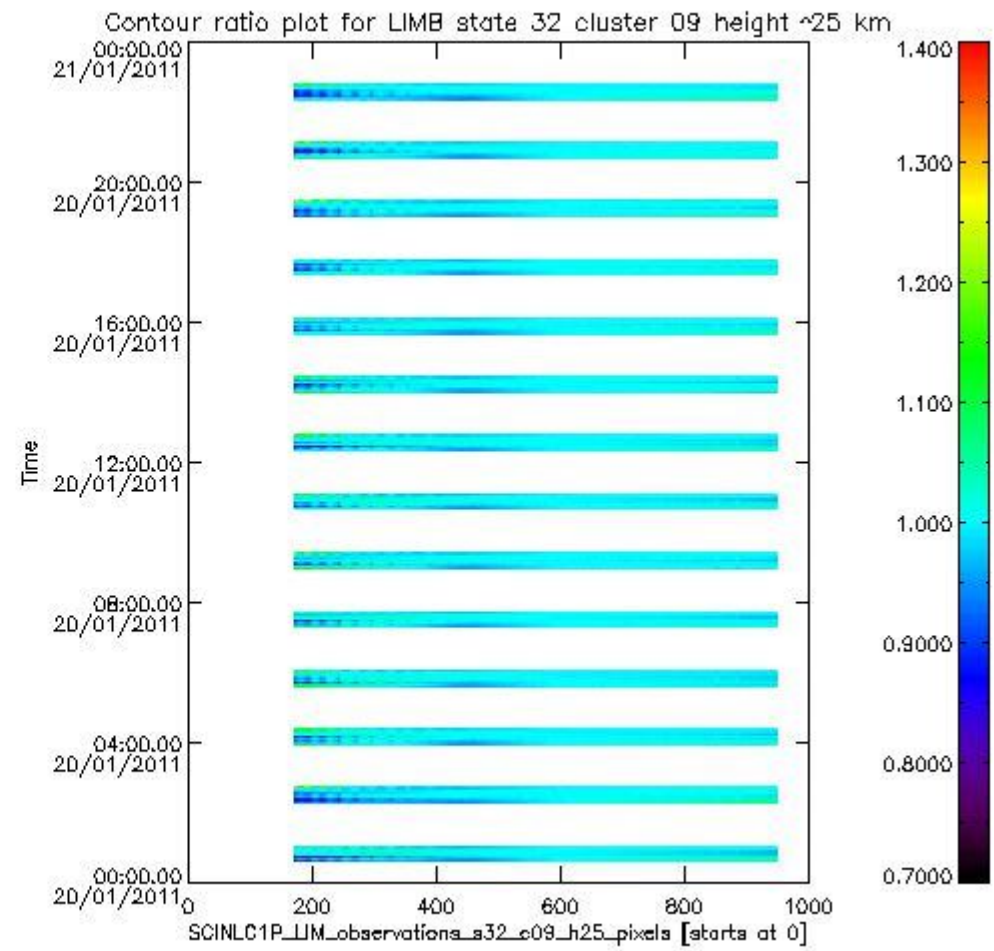
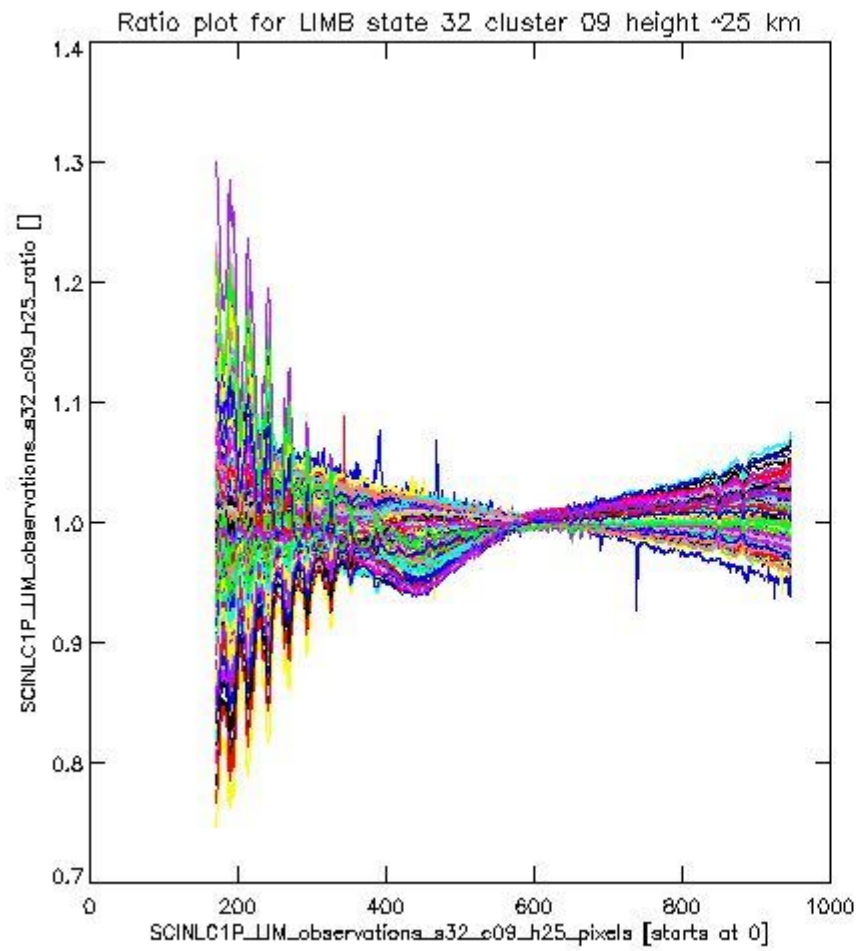
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110120_13.PNG

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	20JAN2011 00:36:00.149
Start time of last sample	20JAN2011 23:59:11.785
Reference period start time	21DEC2010 02:16:49.667
Reference period stop time	19JAN2011 23:23:30.719
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



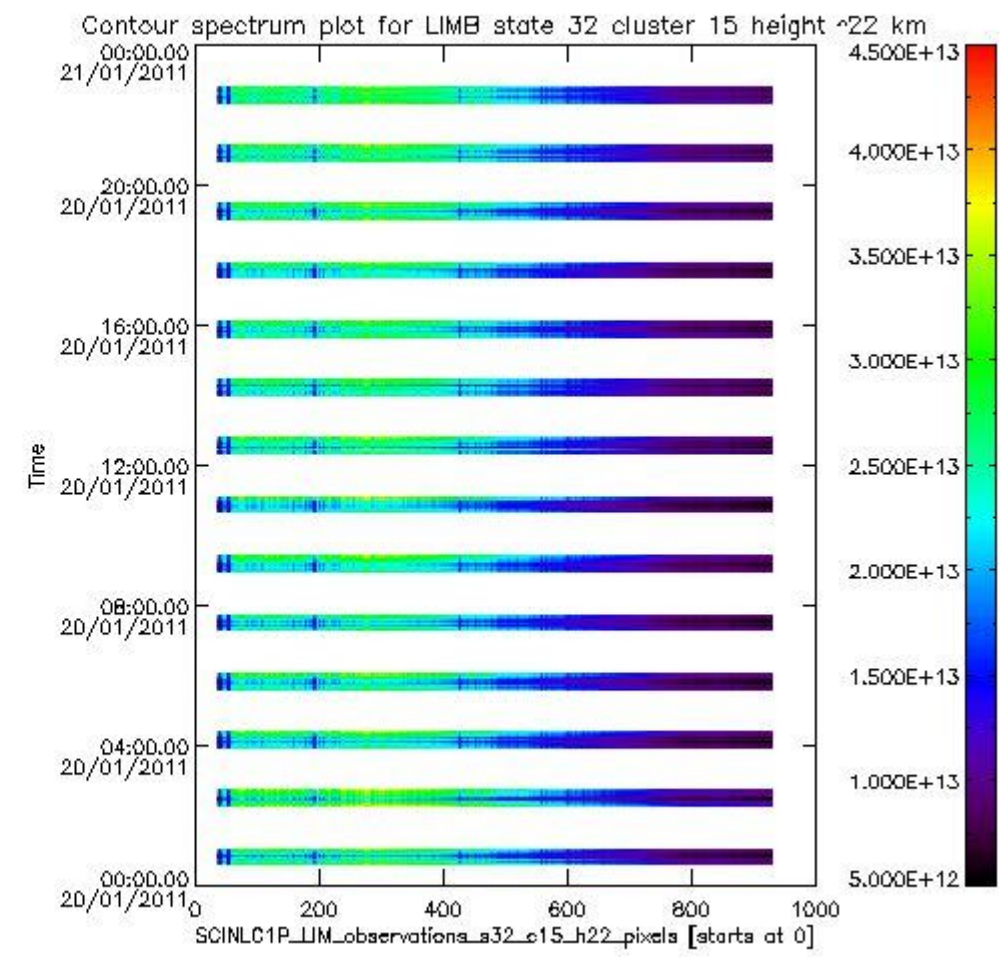
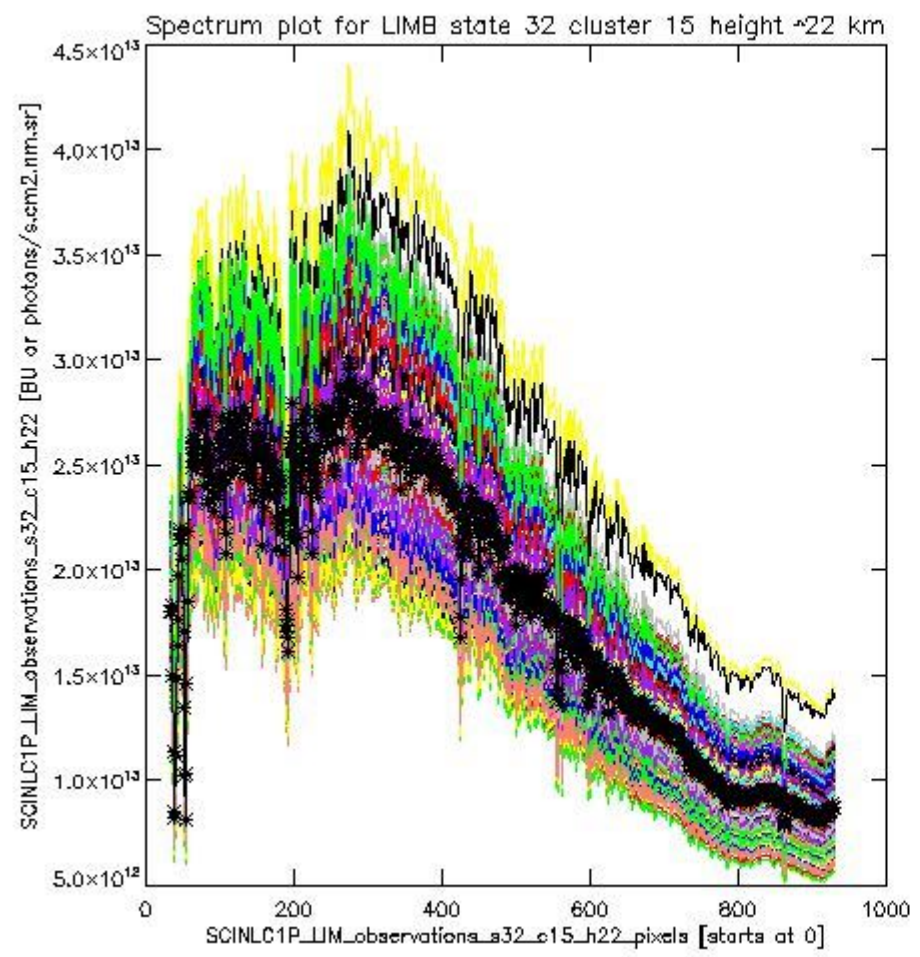
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110120_14.PNG



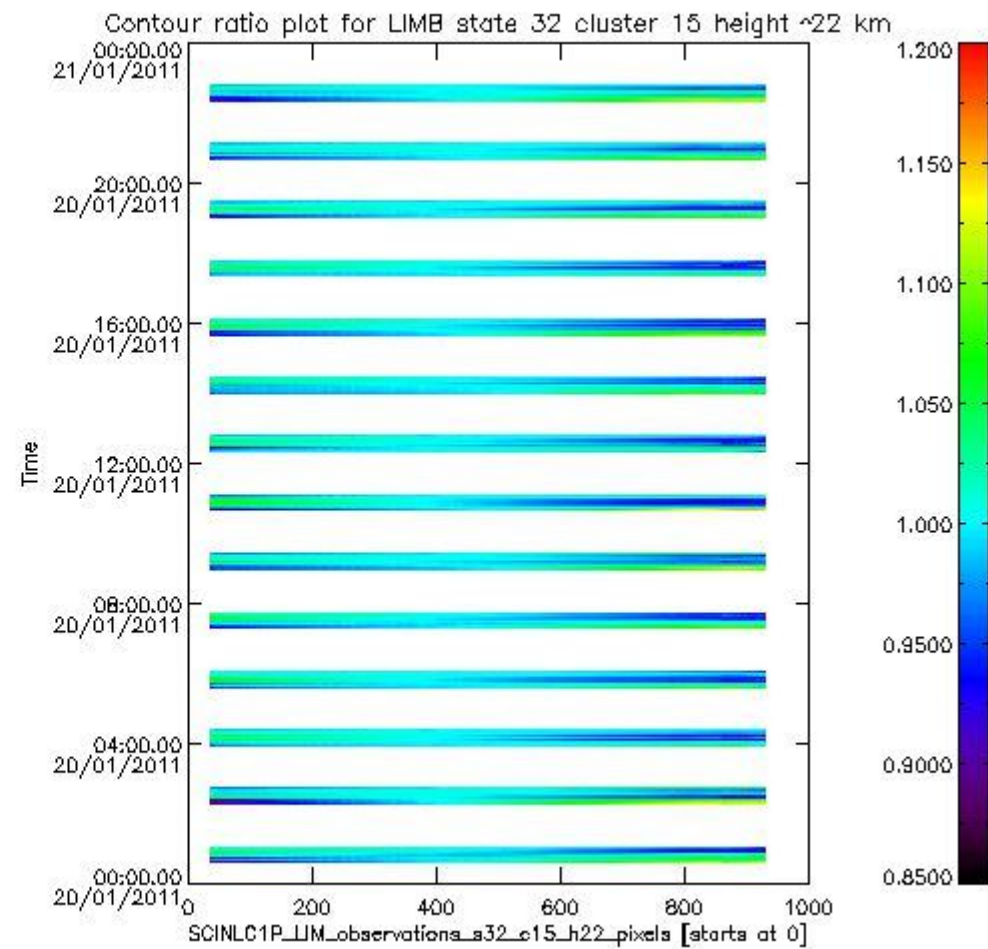
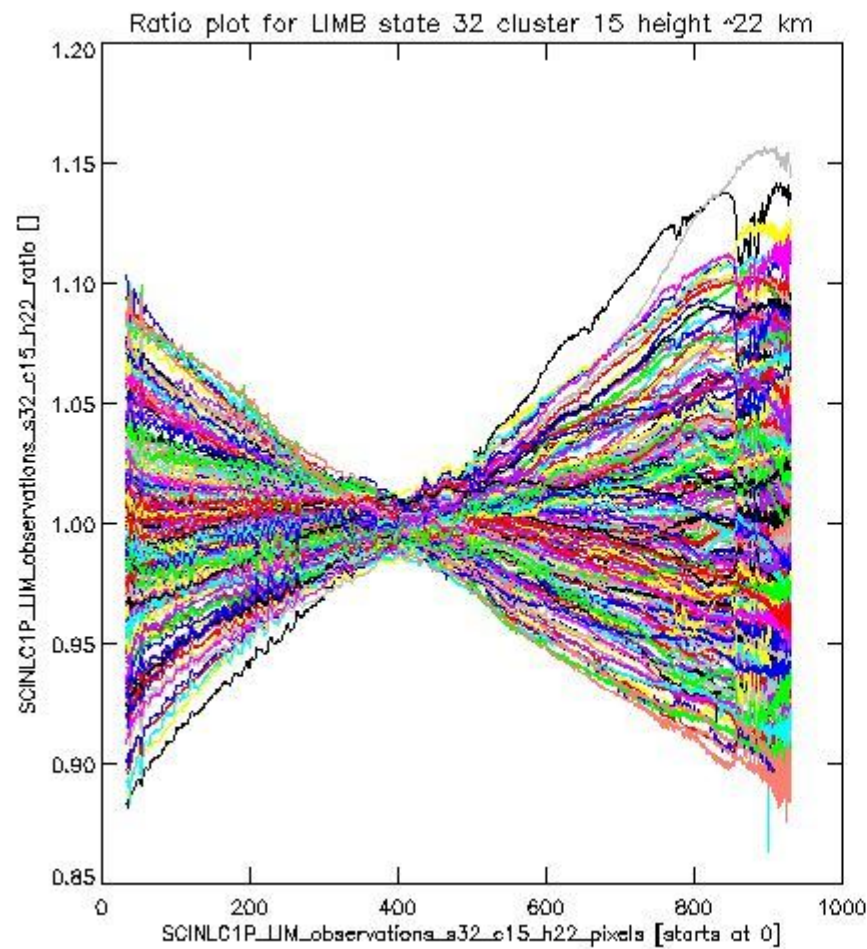
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110120_15.PNG

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	20JAN2011 00:36:00.149
Start time of last sample	20JAN2011 23:59:11.785
Reference period start time	21DEC2010 02:16:49.667
Reference period stop time	19JAN2011 23:23:30.719
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



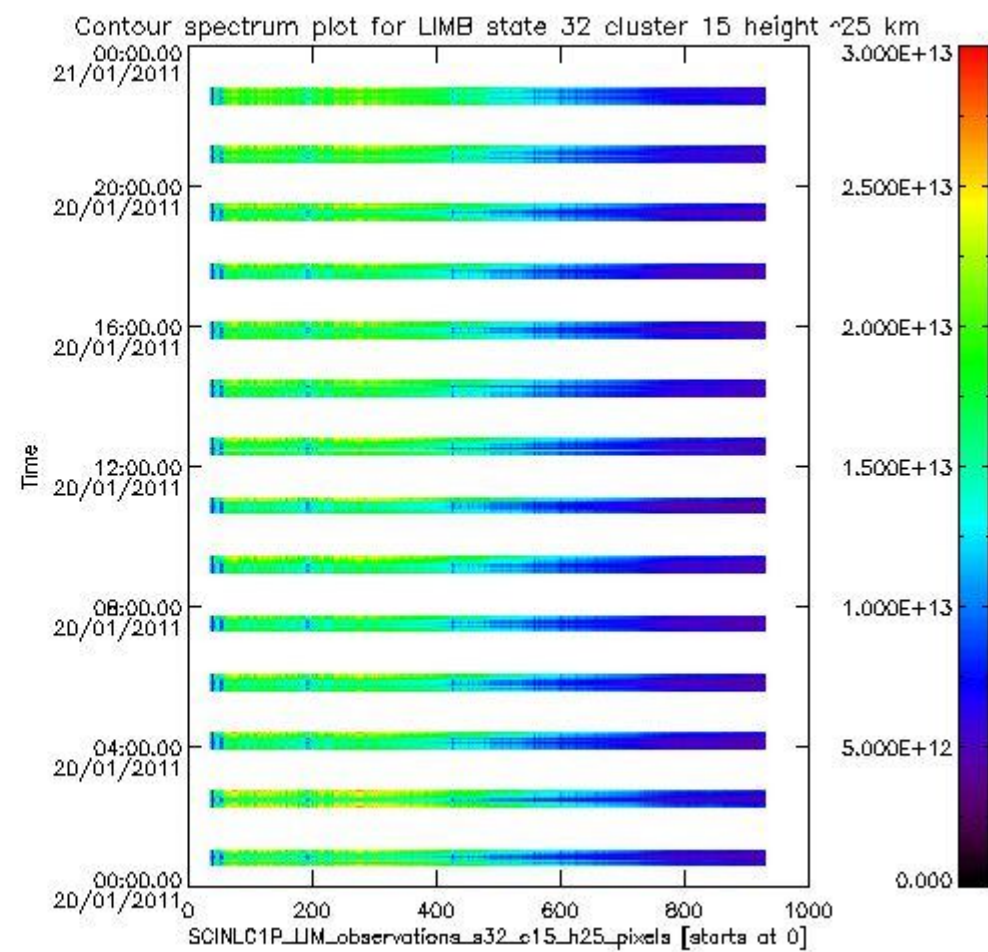
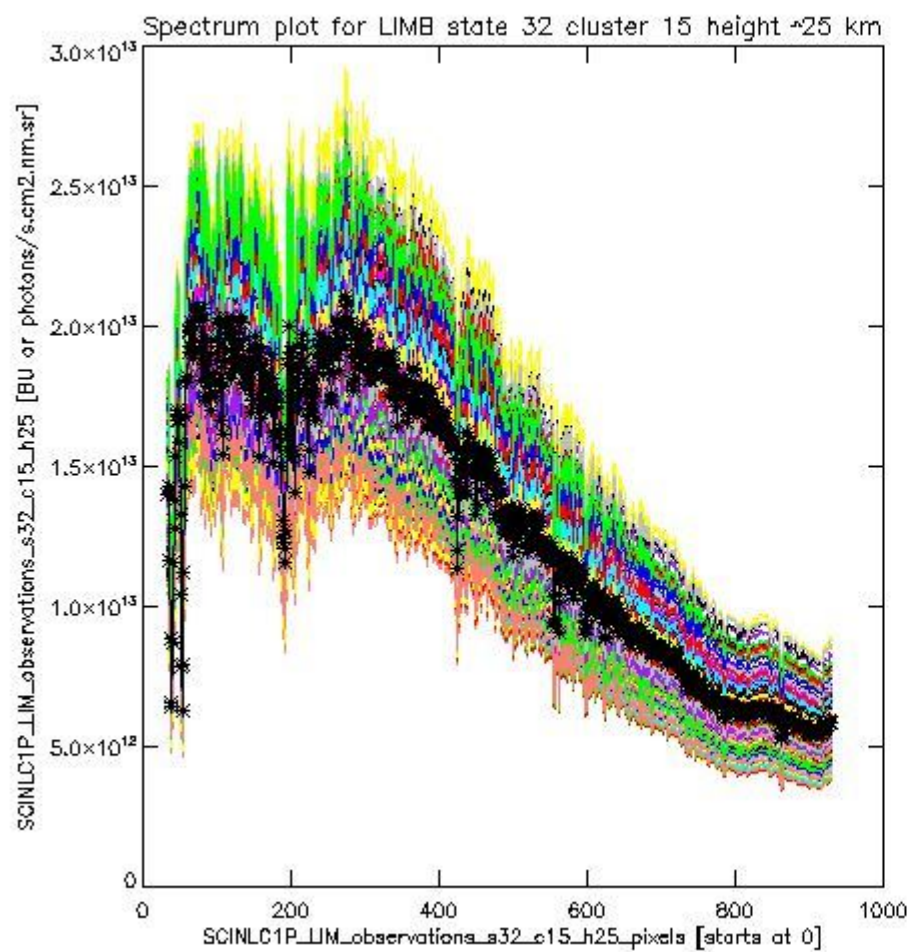
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110120_16.PNG

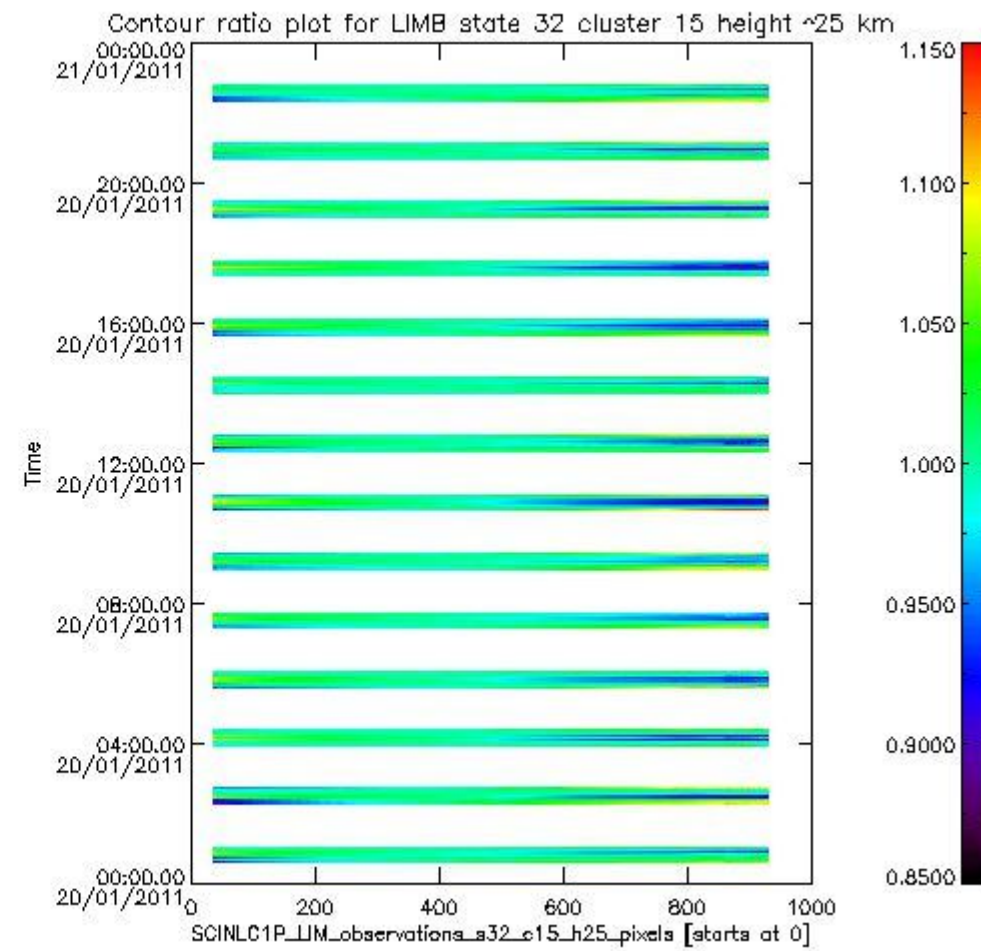
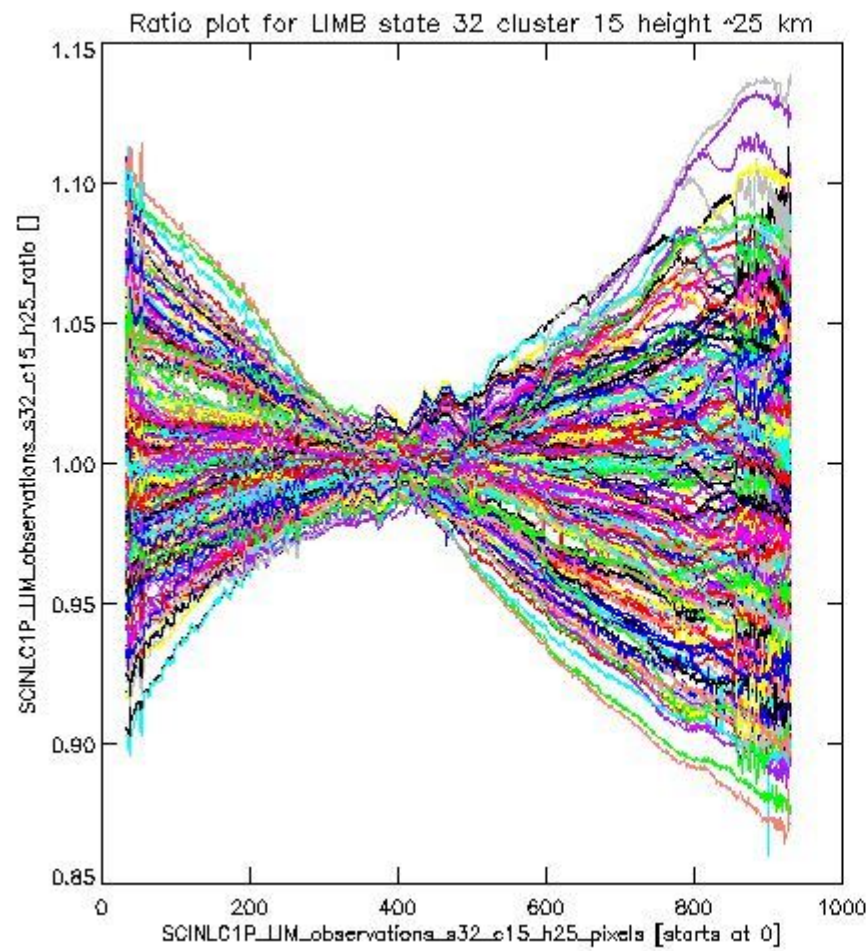


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110120_17.PNG

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	20JAN2011 00:36:00.149
Start time of last sample	20JAN2011 23:59:11.785
Reference period start time	21DEC2010 02:16:49.667
Reference period stop time	19JAN2011 23:23:30.719
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

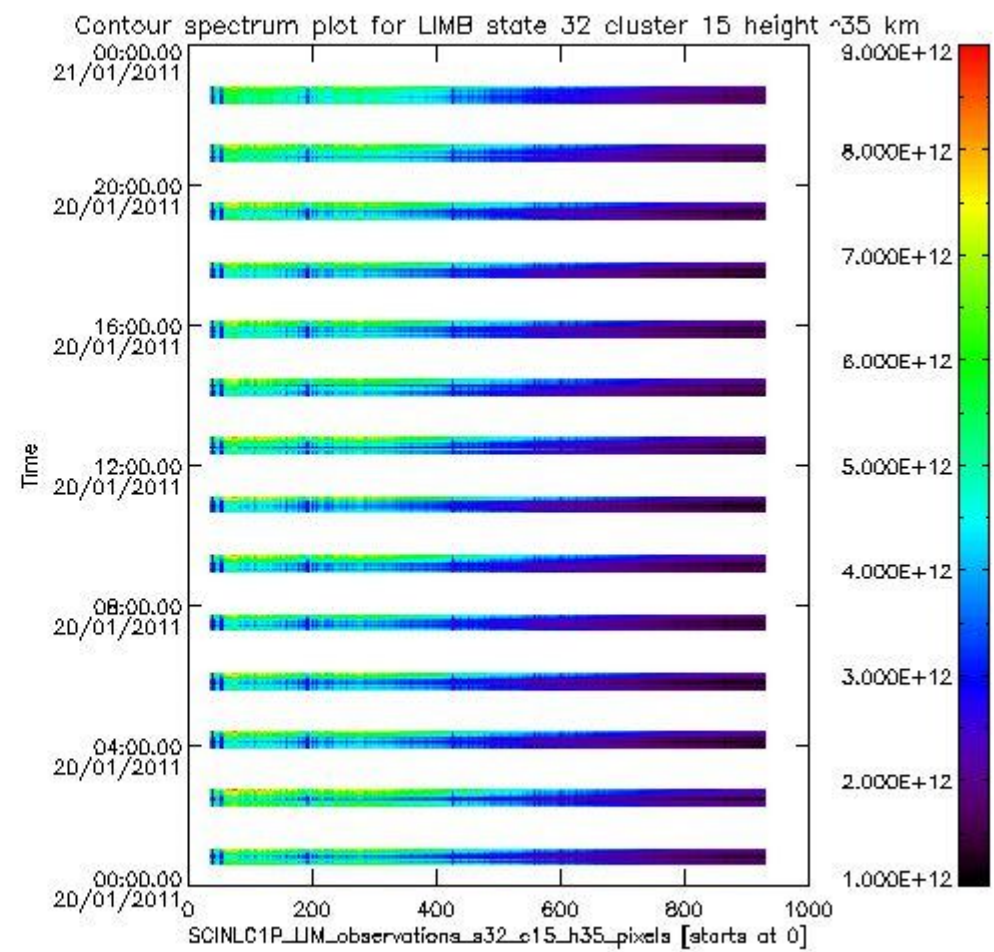
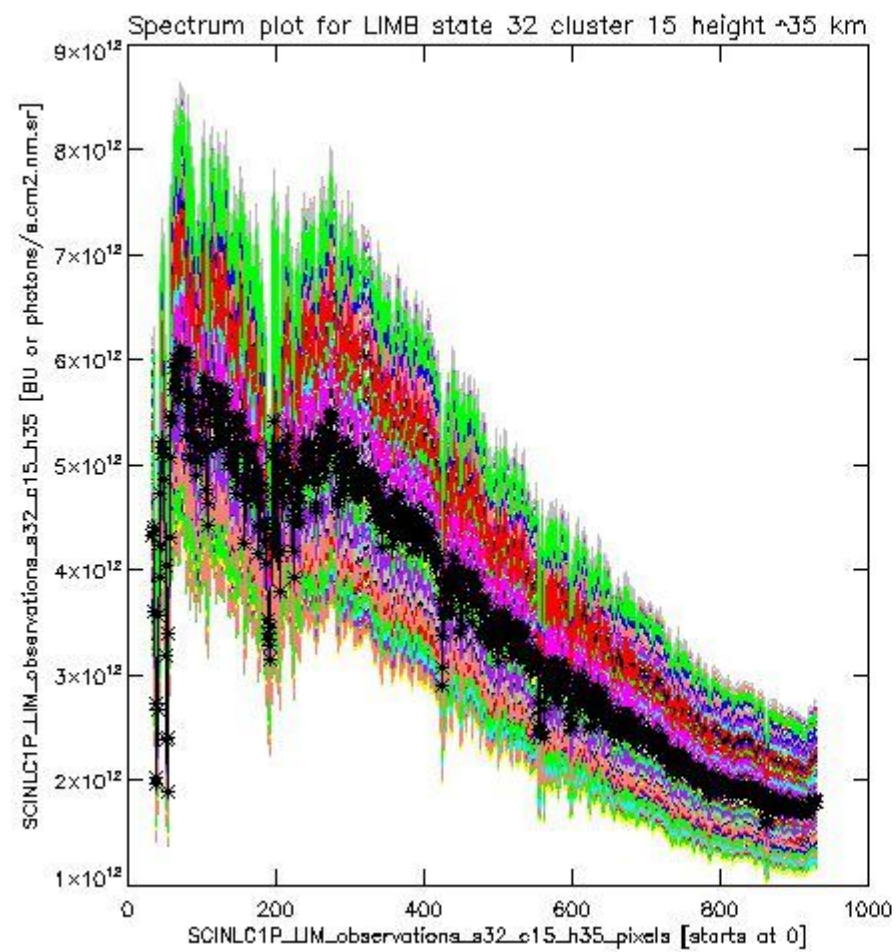




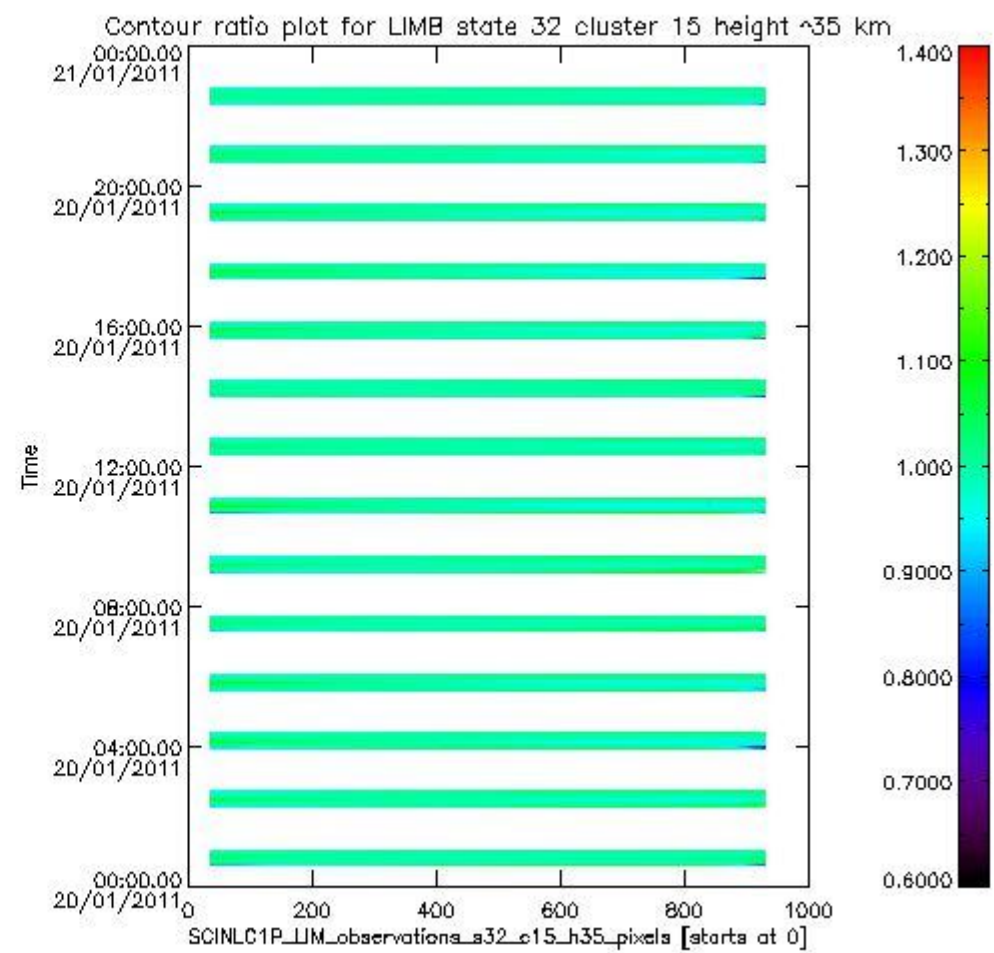
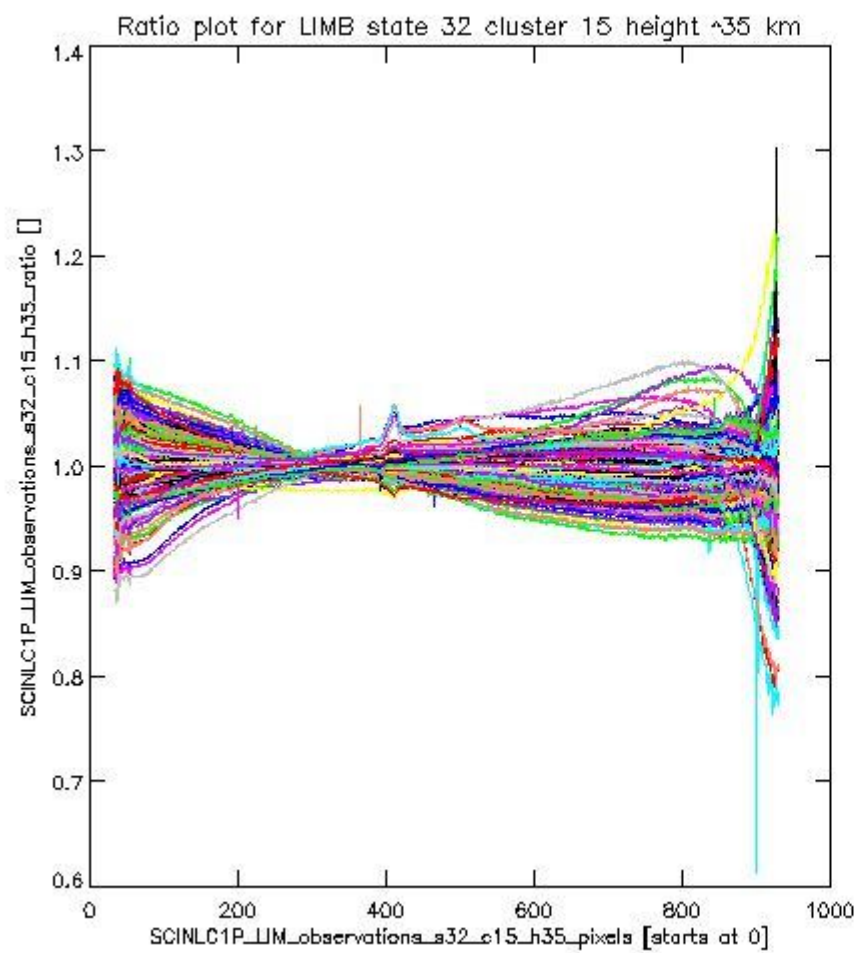
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110120_19.PNG

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:

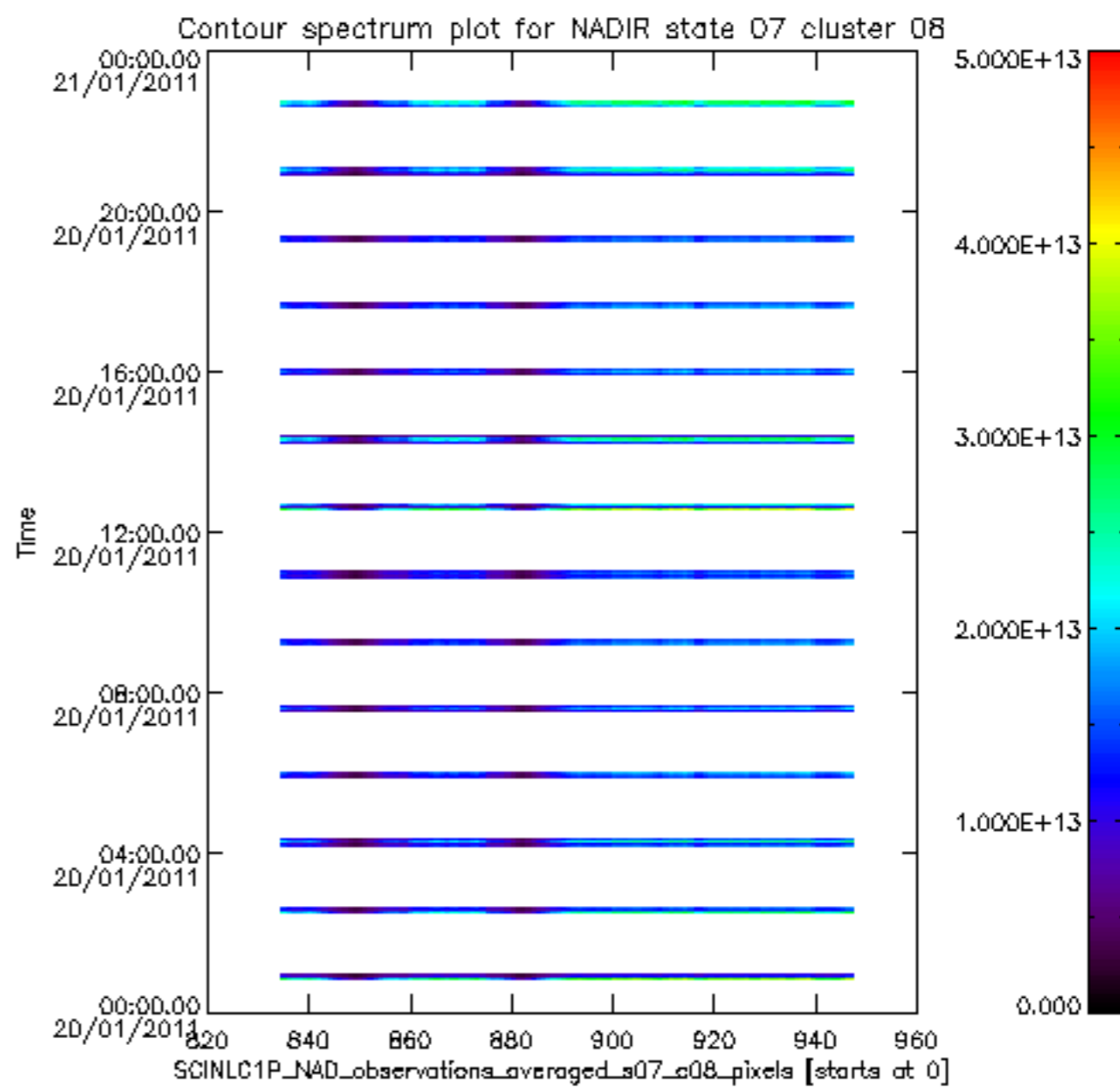
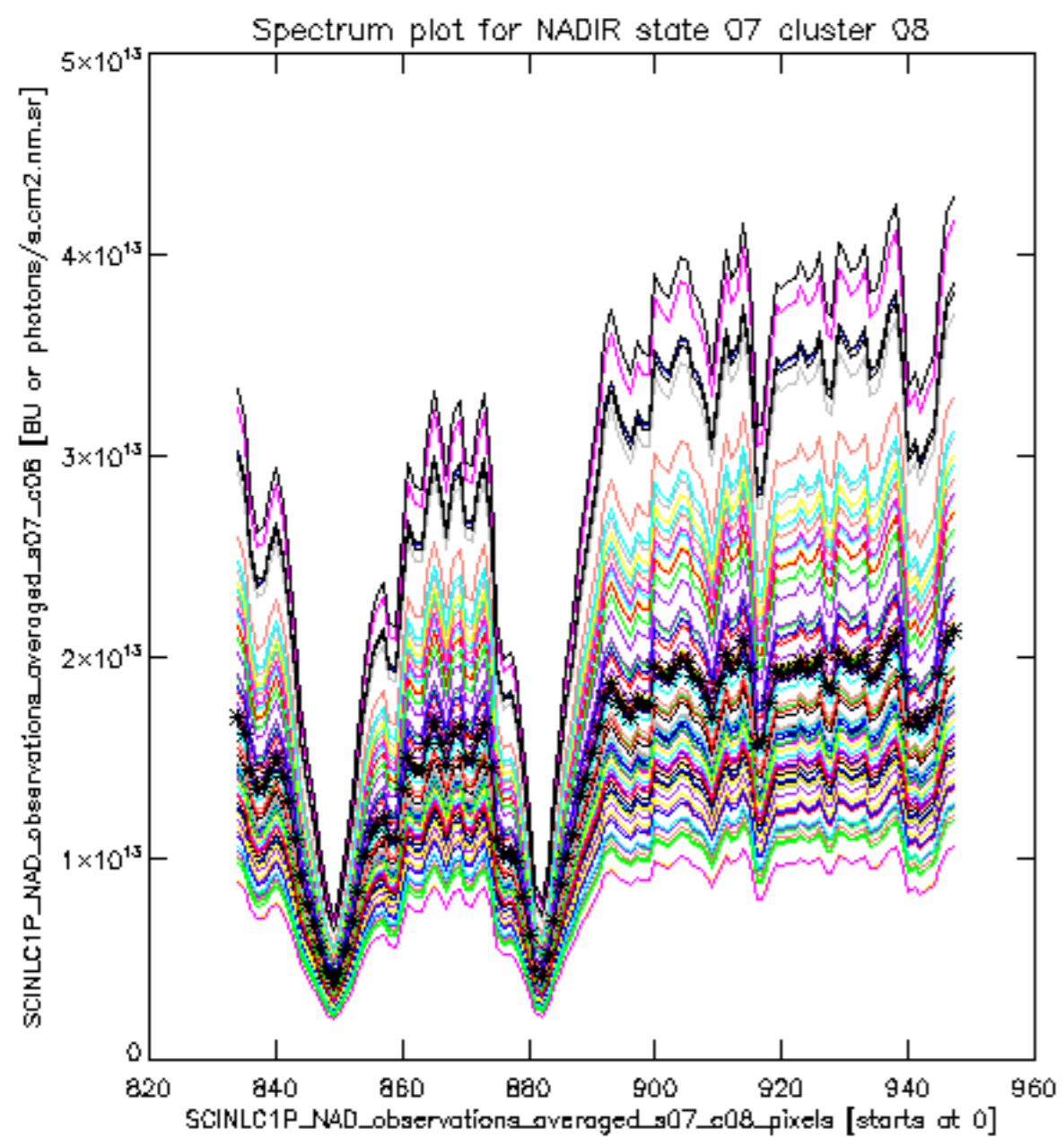
Item	Value
Start time of first sample	20JAN2011 00:36:00.149
Start time of last sample	20JAN2011 23:59:11.785
Reference period start time	21DEC2010 02:16:49.667
Reference period stop time	19JAN2011 23:23:30.719
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929

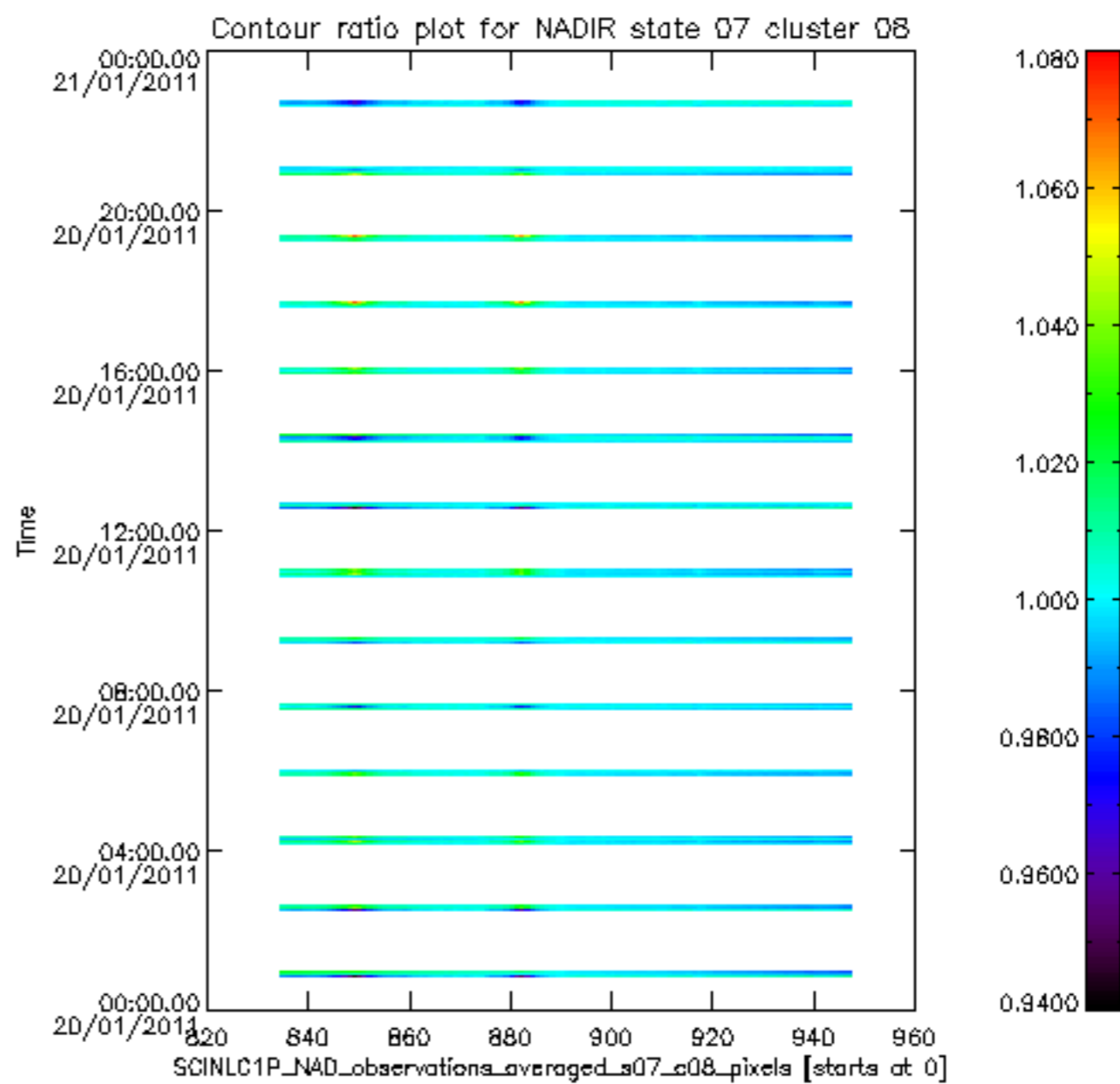
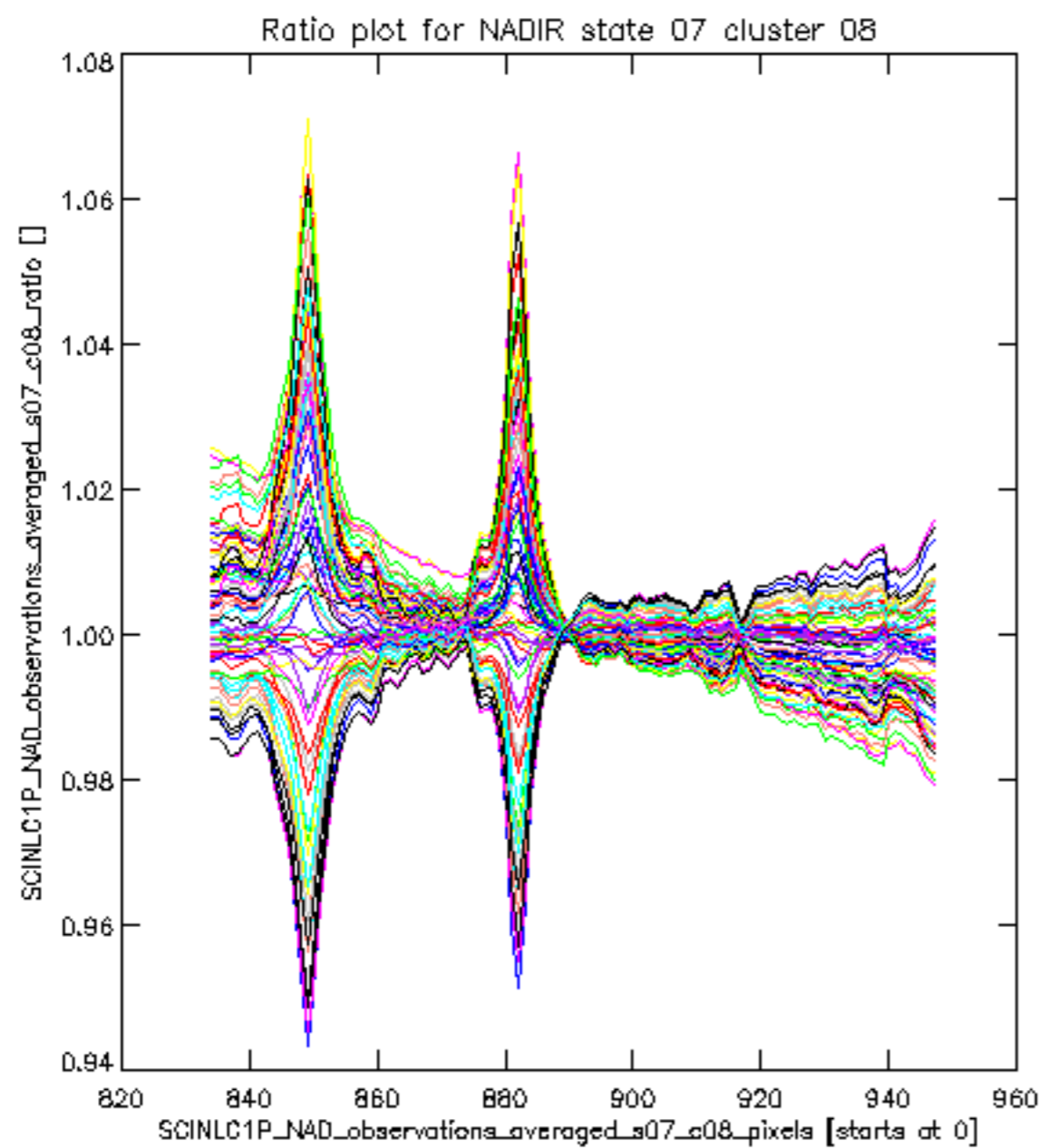


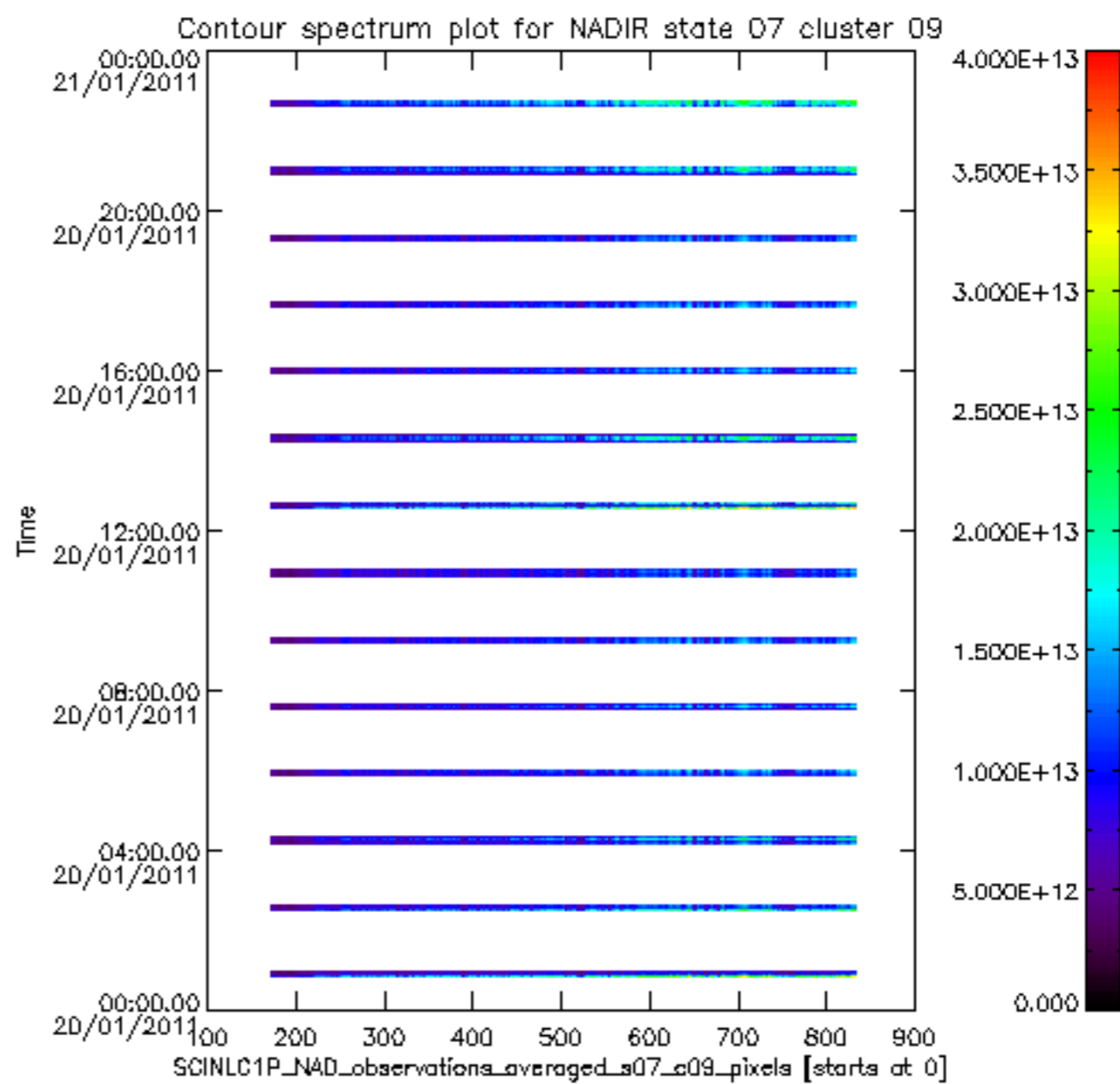
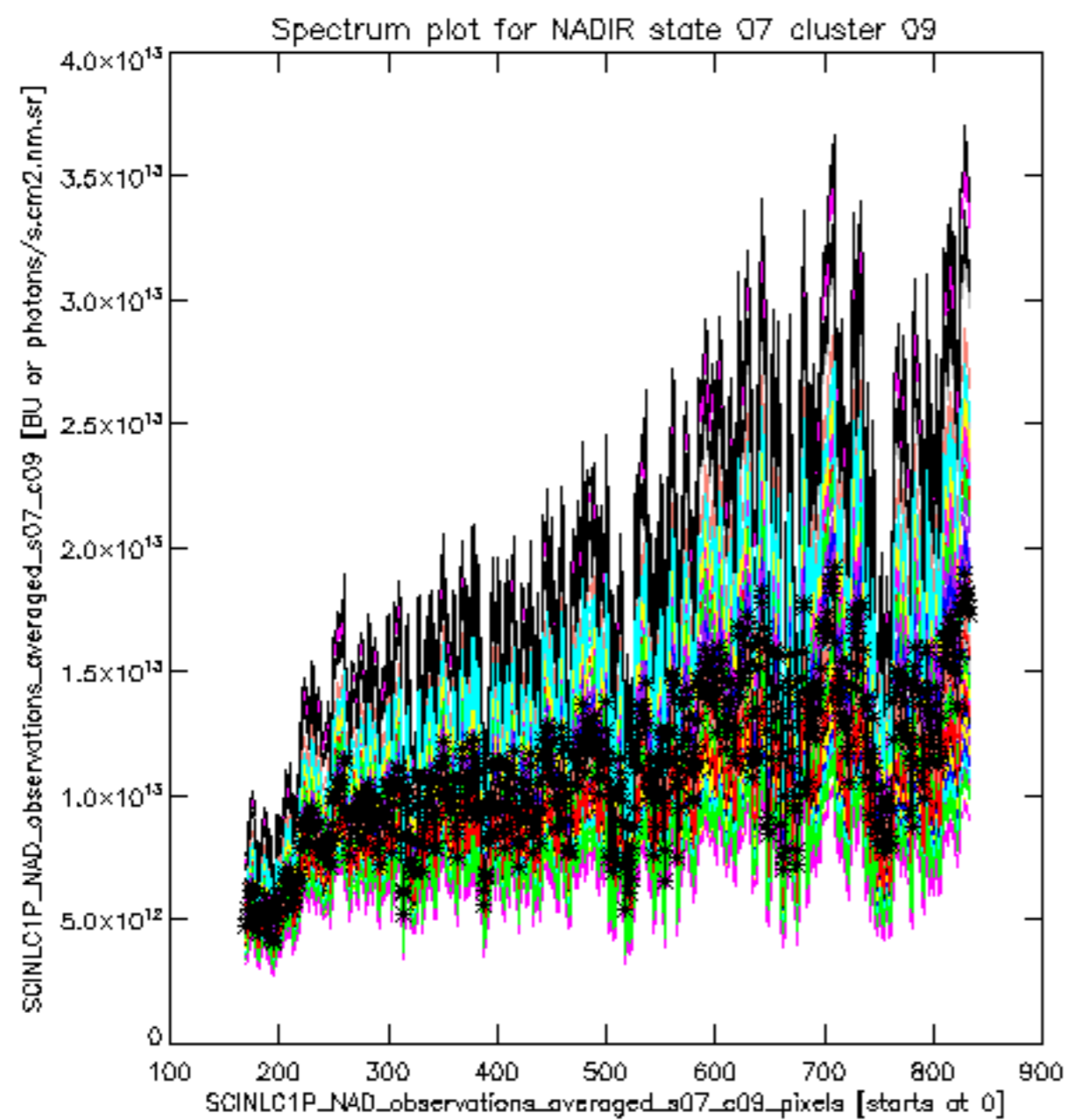
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110120_20.PNG

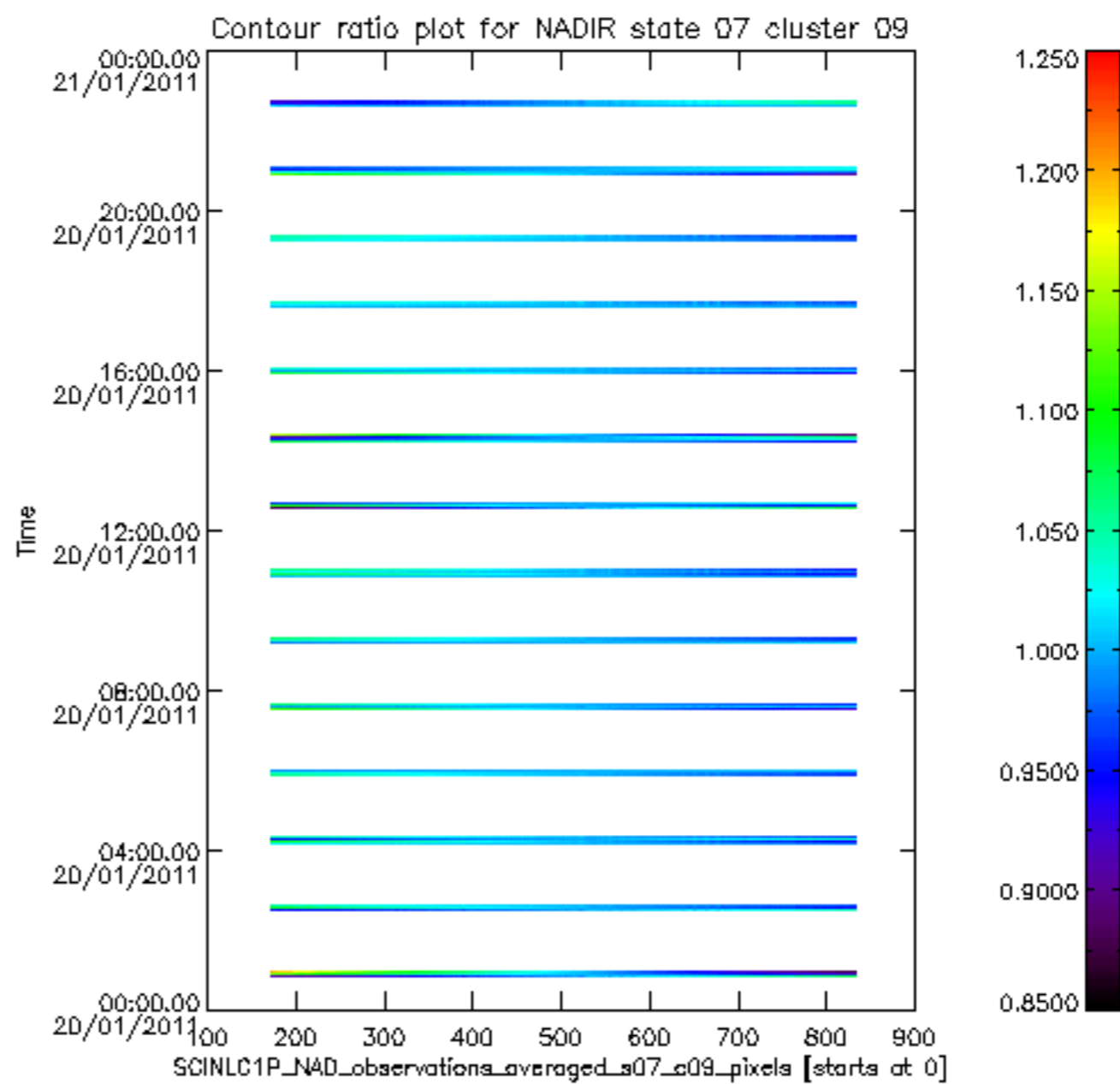
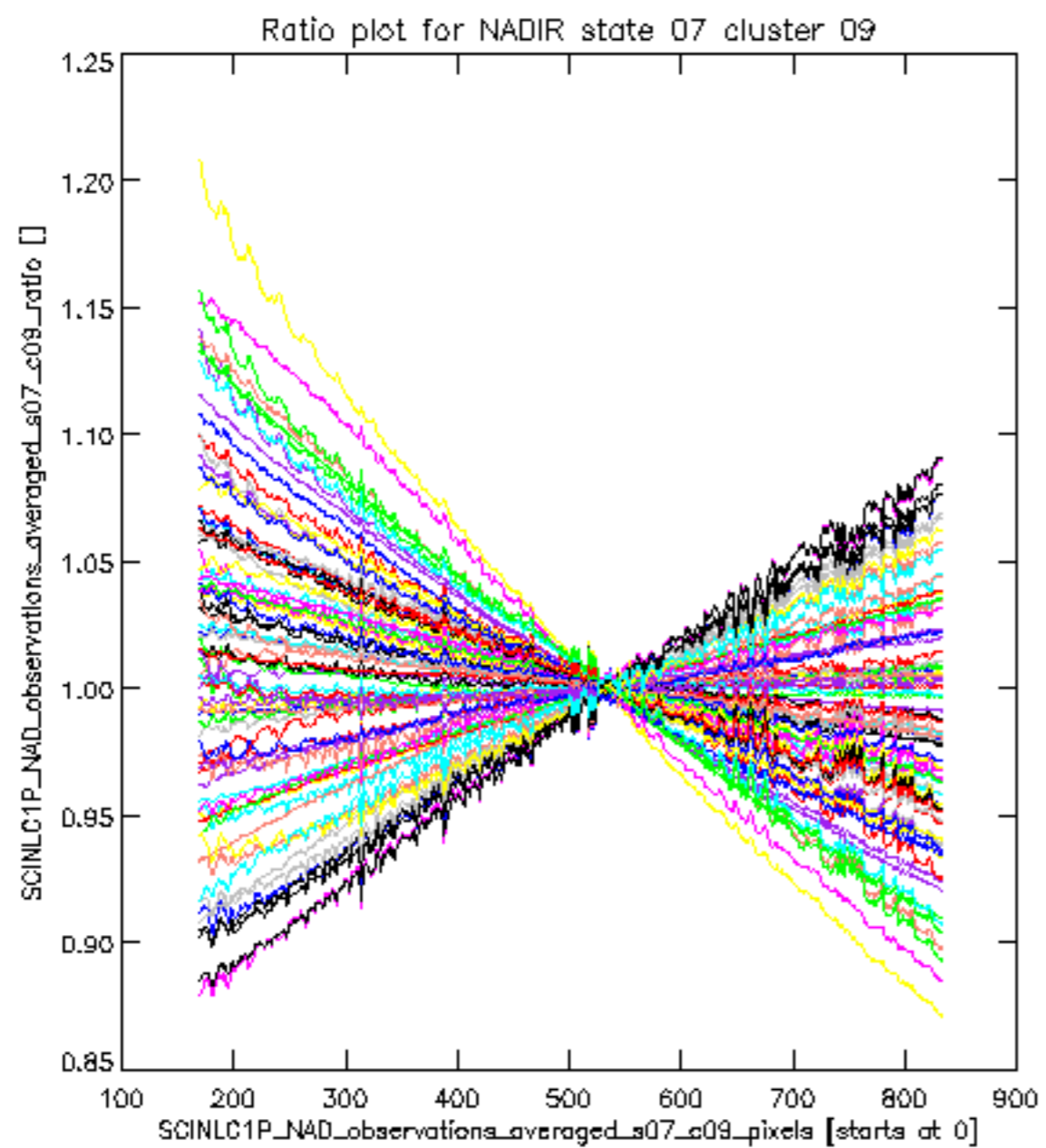


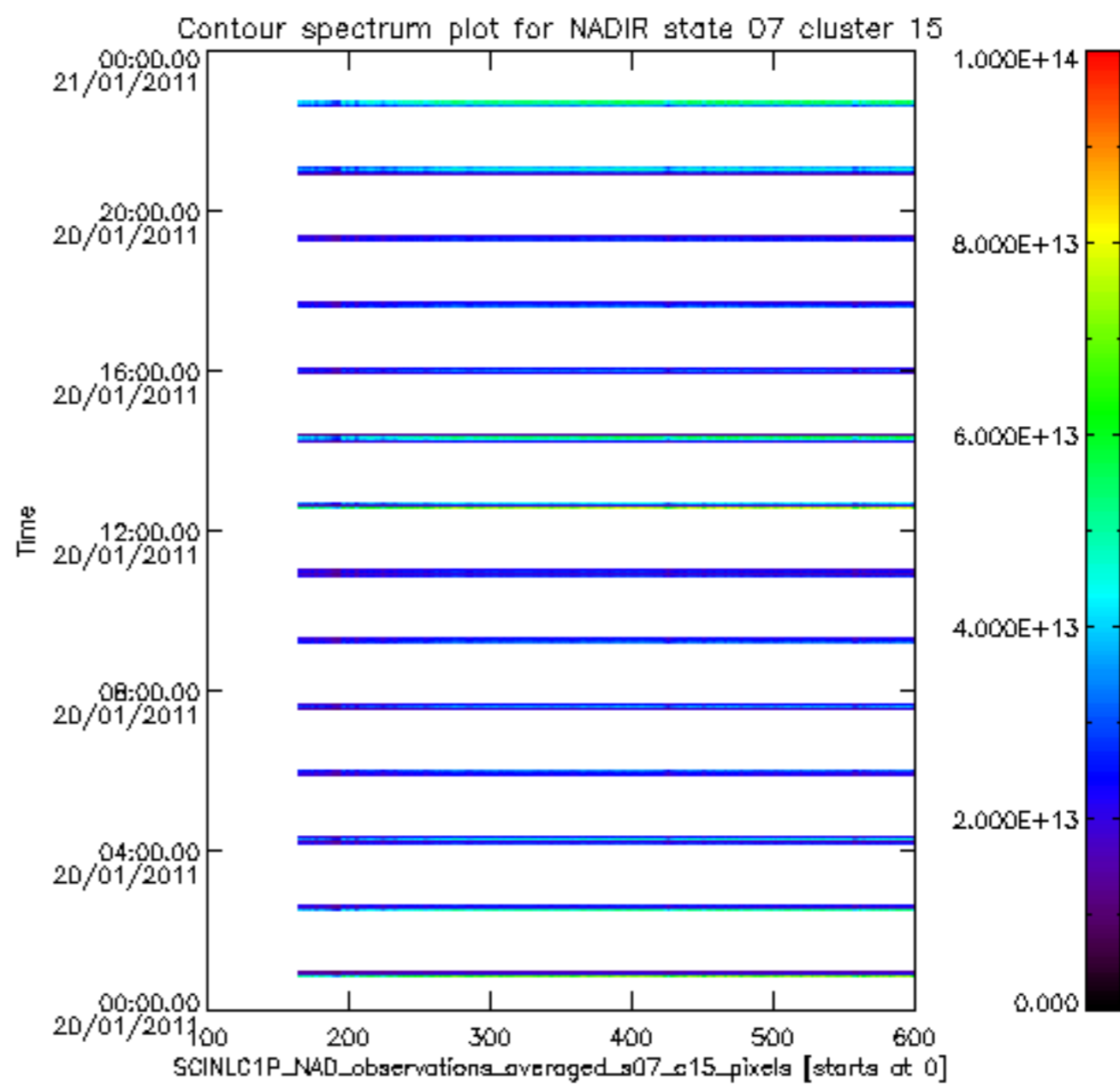
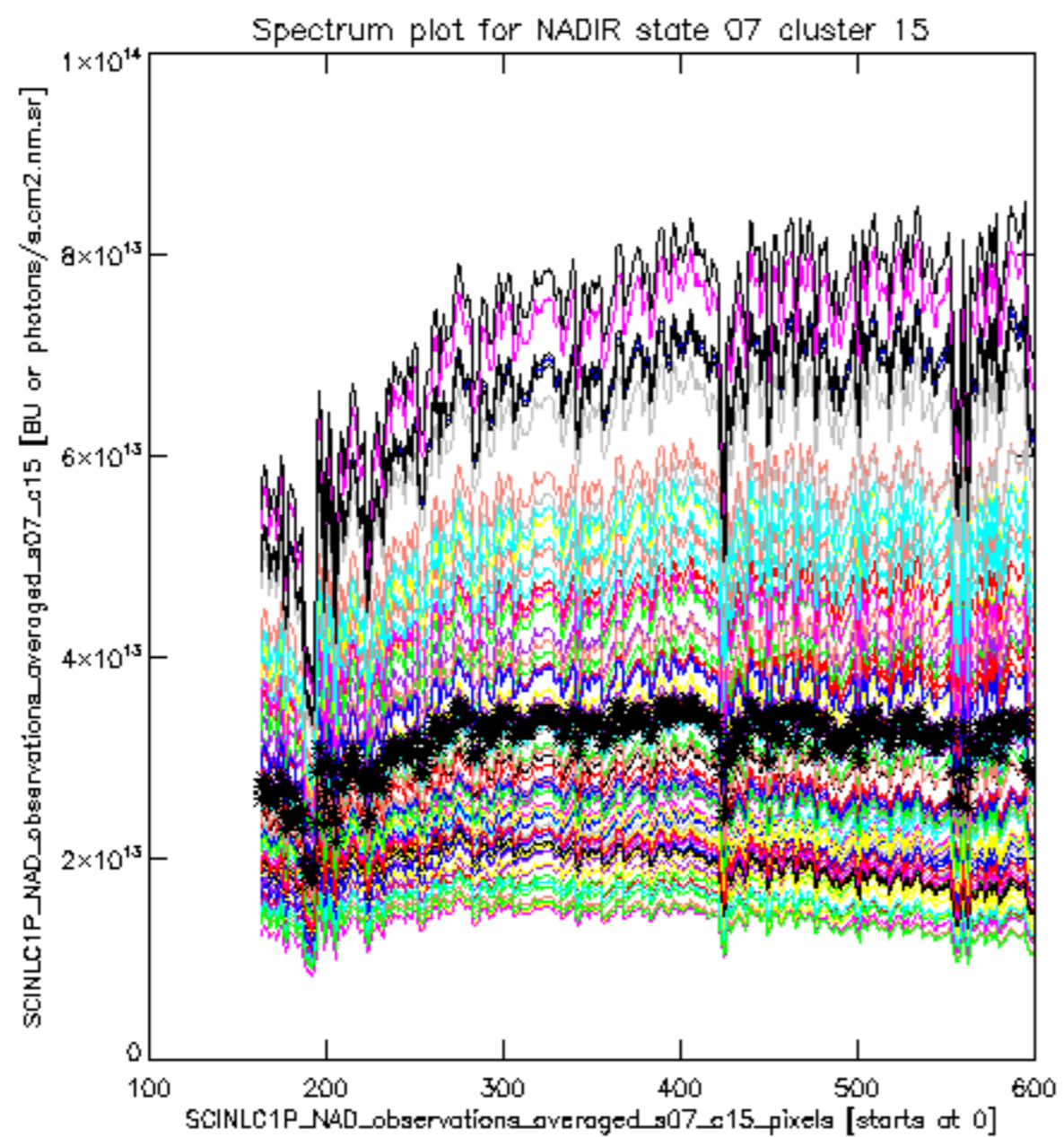
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110120_21.PNG

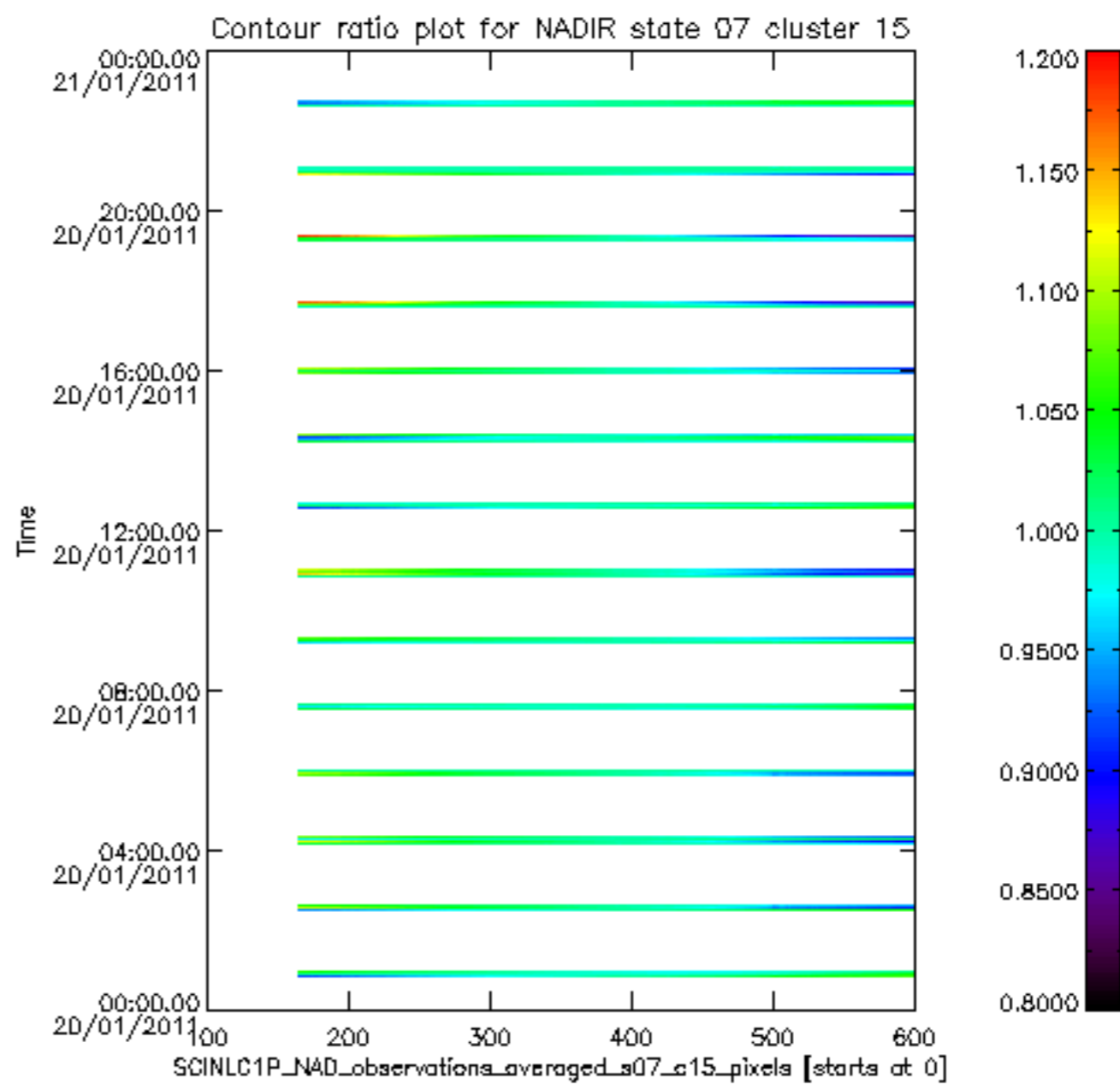
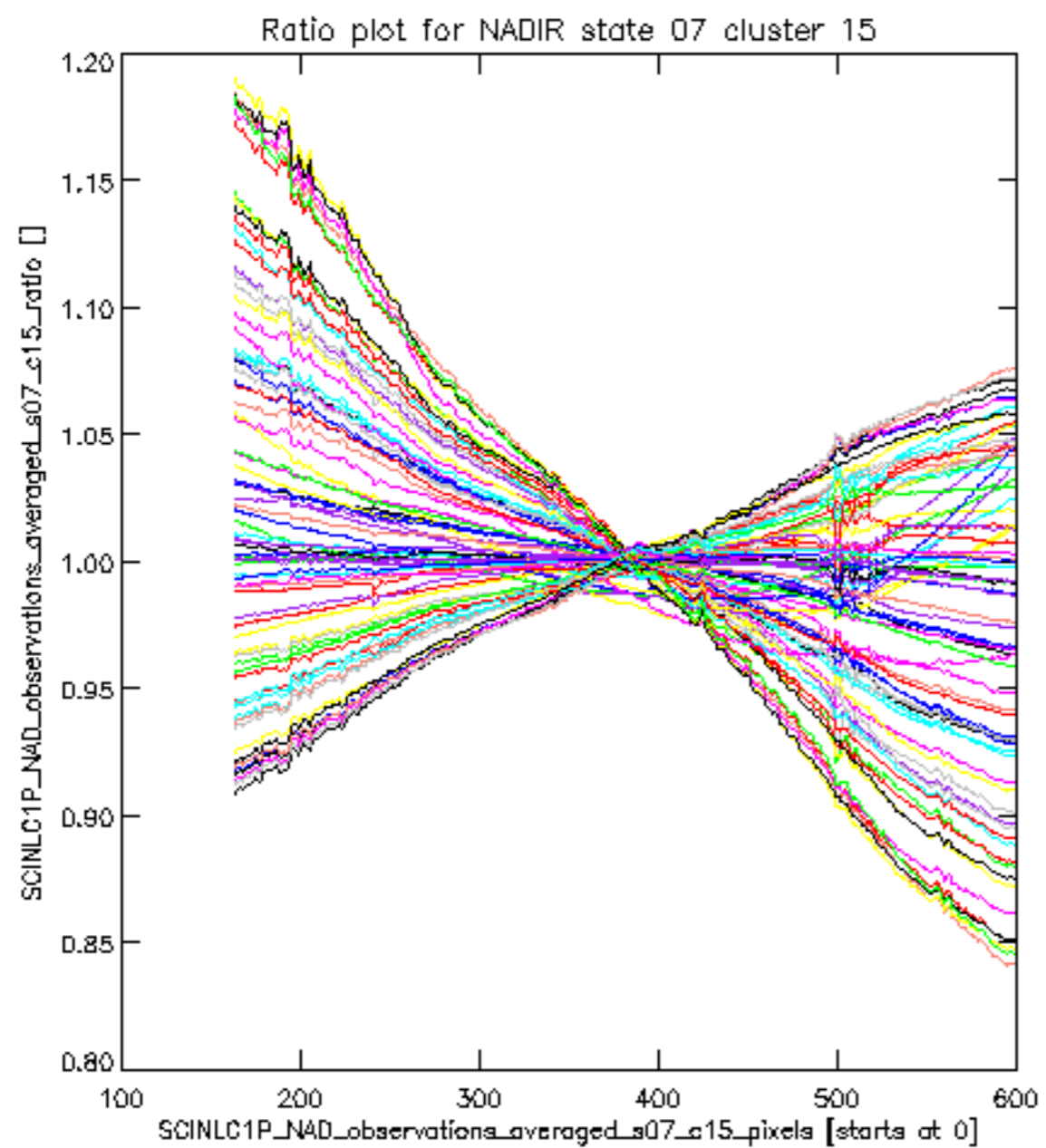


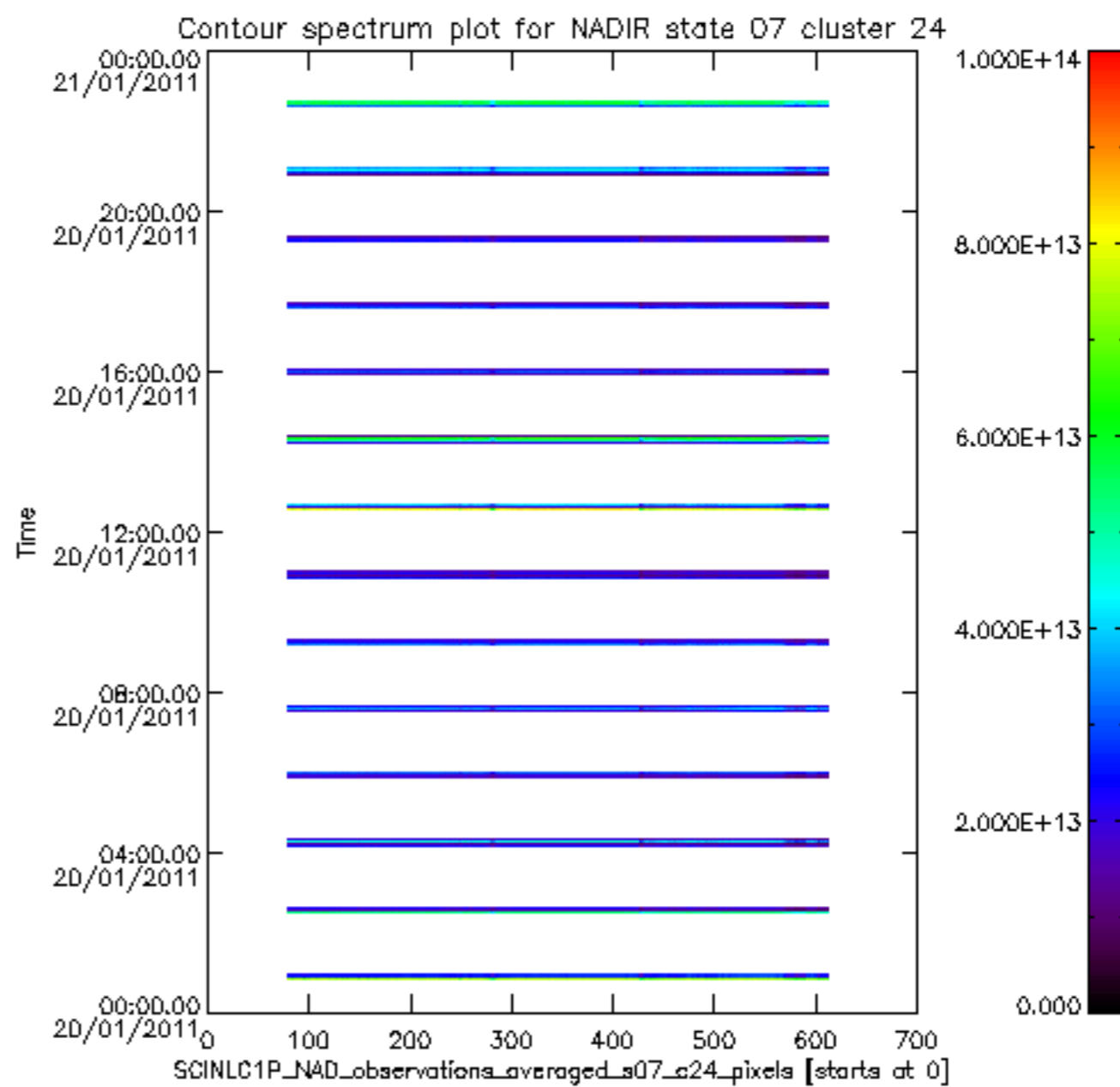
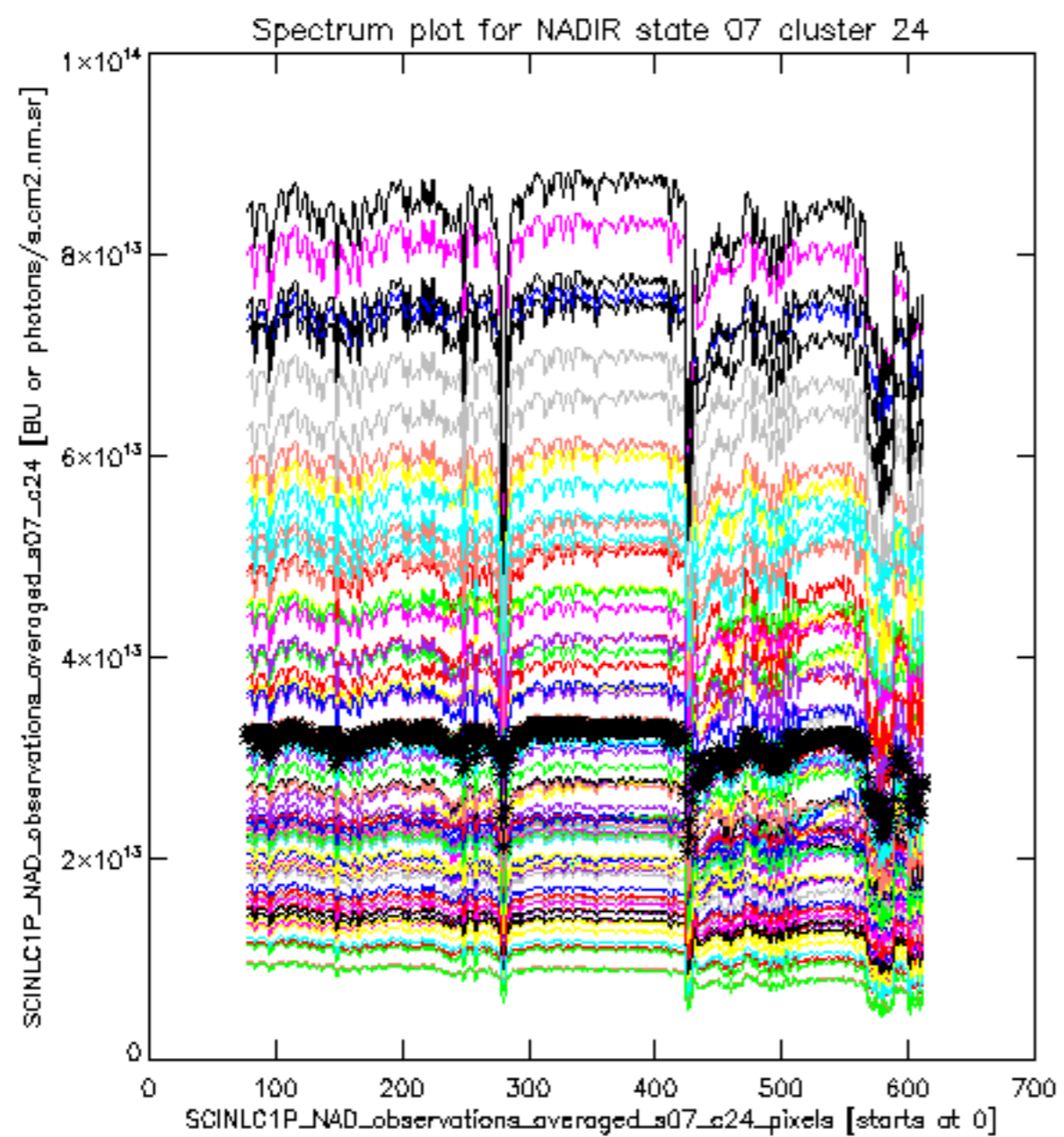


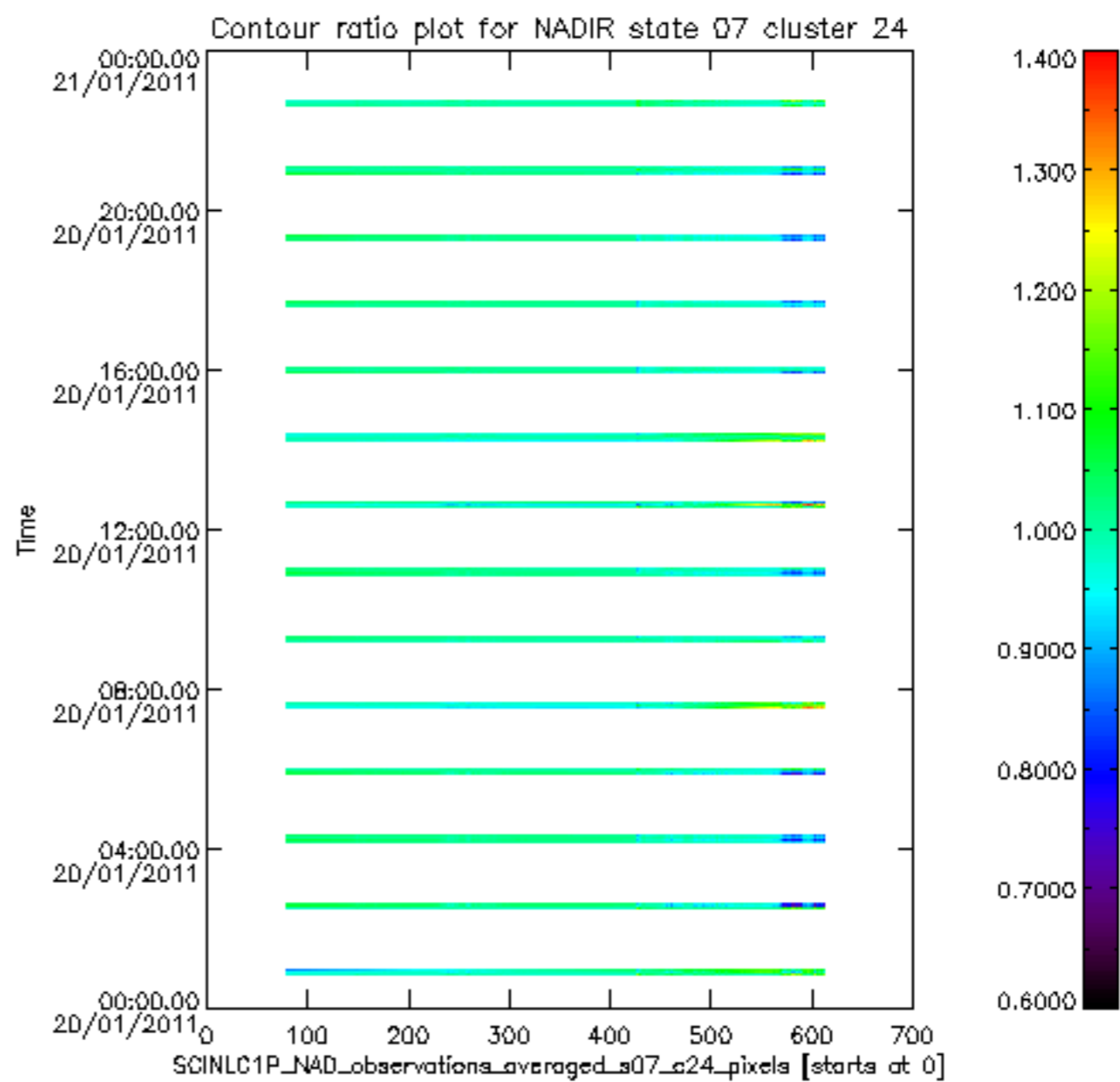
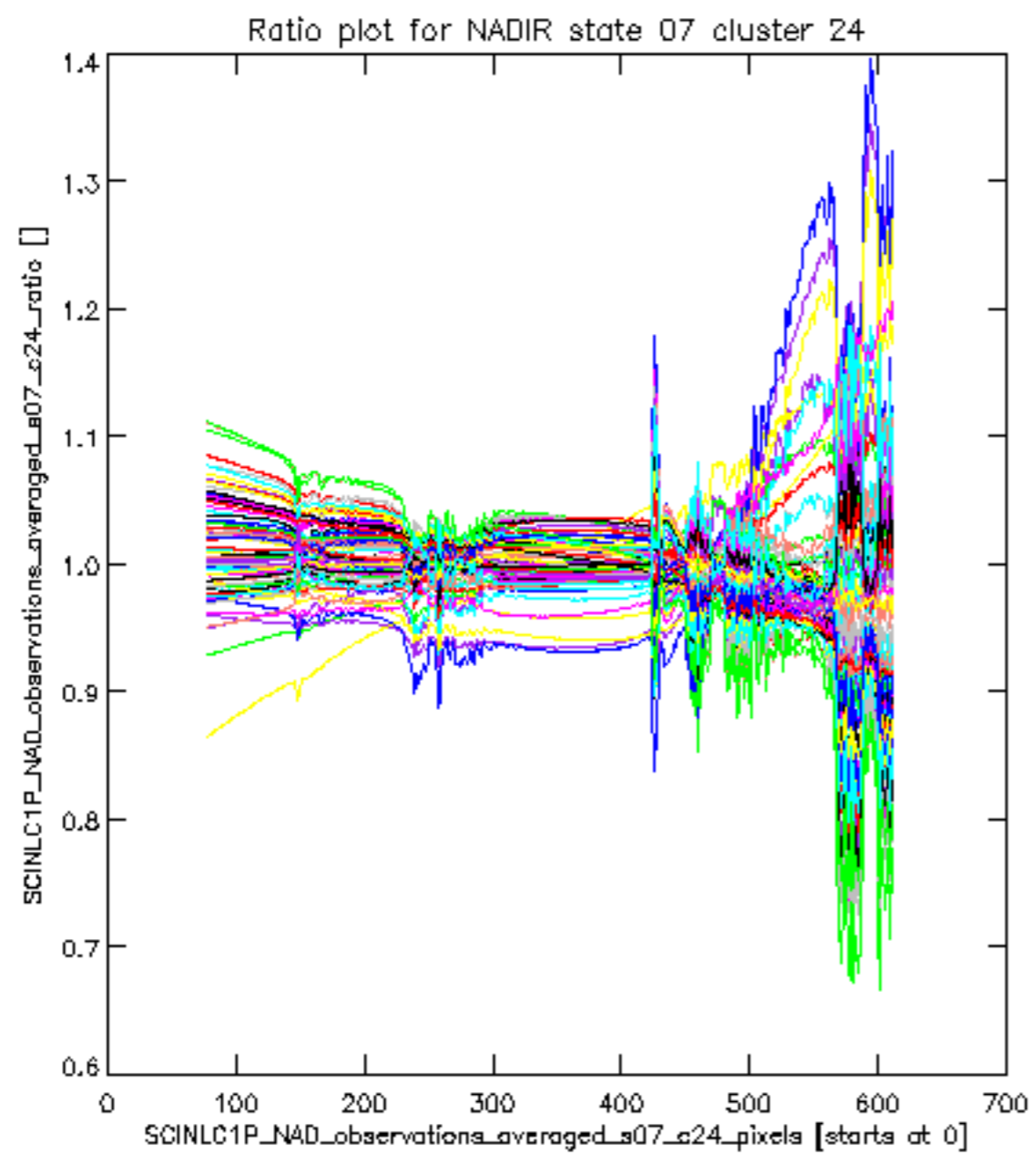




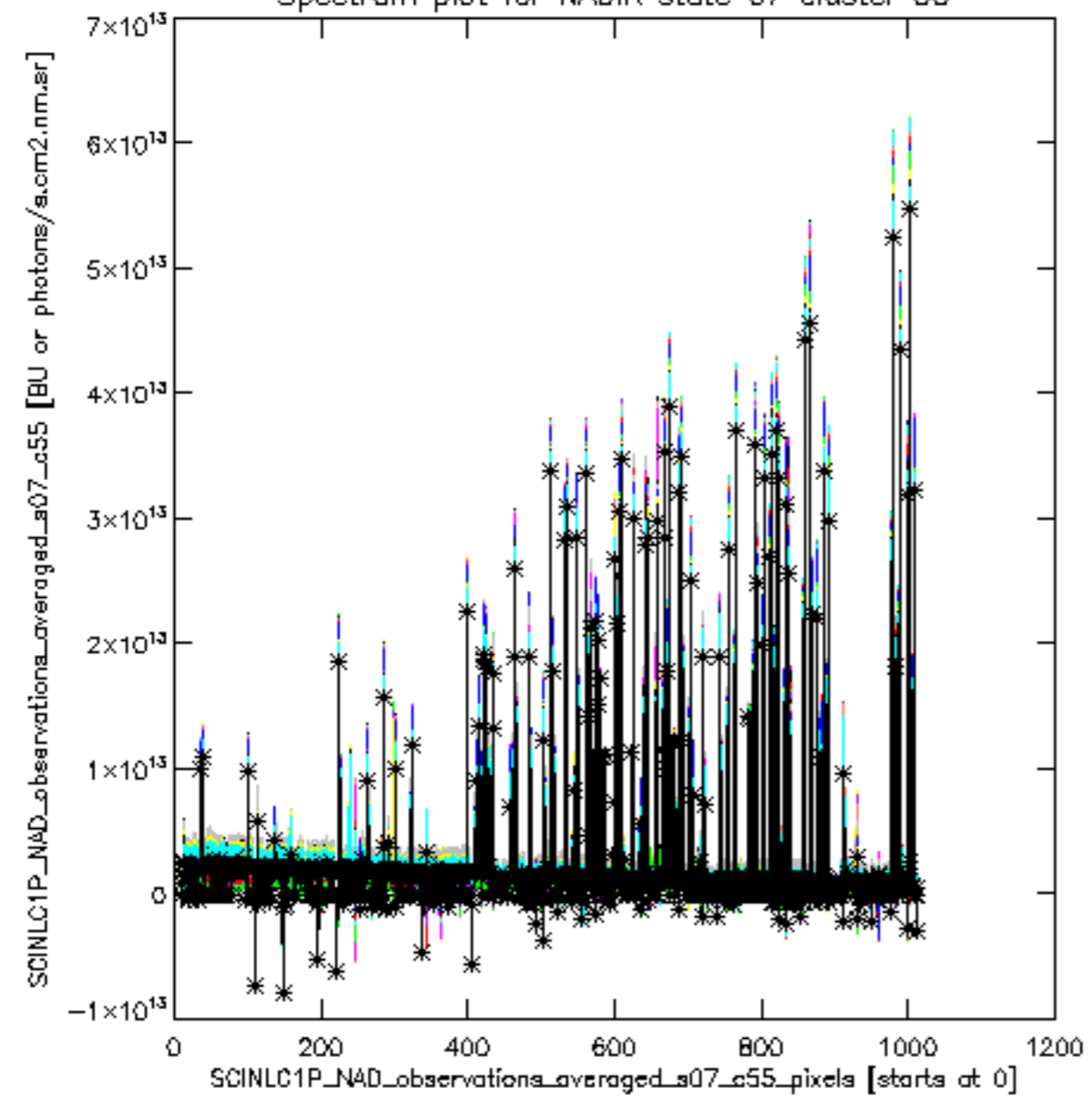








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

