

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 | 03AUG2011 06:30:22 |
| Data source version | SCIA/7.04-U |
| Processing scope for products | 21JUL2011 00:00:00 to 22JUL2011 00:00:00 |
| Start time of first product within scope | 21JUL2011 10:36:27 |
| Stop time of last product within scope | 22JUL2011 01:08:35 |
| Total number of level 1 products | 9 |
| 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 | 21JUL2011 11:08:29.880 | 21JUL2011 22:59:28.757 |
| 1 | NADIR | 07 | 09 | N/A | 21JUL2011 11:08:29.880 | 21JUL2011 22:59:28.757 |
| 2 | NADIR | 07 | 15 | N/A | 21JUL2011 11:08:29.880 | 21JUL2011 22:59:28.757 |
| 3 | NADIR | 07 | 24 | N/A | 21JUL2011 11:08:29.880 | 21JUL2011 22:59:28.757 |
| 4 | NADIR | 07 | 55 | N/A | 21JUL2011 11:08:29.880 | 21JUL2011 22:59:28.757 |
| 5 | LIMB | 32 | 09 | ~19 km | 21JUL2011 10:55:19.244 | 21JUL2011 23:04:42.804 |
| 6 | LIMB | 32 | 09 | ~22 km | 21JUL2011 10:55:19.244 | 21JUL2011 23:04:42.804 |
| 7 | LIMB | 32 | 09 | ~25 km | 21JUL2011 10:55:19.244 | 21JUL2011 23:04:42.804 |
| 8 | LIMB | 32 | 15 | ~22 km | 21JUL2011 10:55:19.244 | 21JUL2011 23:04:42.804 |
| 9 | LIMB | 32 | 15 | ~25 km | 21JUL2011 10:55:19.244 | 21JUL2011 23:04:42.804 |
| 10 | LIMB | 32 | 15 | ~35 km | 21JUL2011 10:55:19.244 | 21JUL2011 23:04:42.804 |

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 | #cml_drk | #incml_drk | Decont |
|---|--|--------------------|--------------------|---------|--------|-------|------|------|--------|----------|------------|--------|
| 0 | SCI_NLC_1CUDPA20110721_103133_000060543104_00382_49103_0166.N1 | 21JUL2011 10:36:27 | 21JUL2011 11:46:41 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 1 | SCI_NLC_1CUDPA20110721_121641_000057163104_00383_49104_0164.N1 | 21JUL2011 12:16:41 | 21JUL2011 13:27:10 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 2 | SCI_NLC_1CUDPA20110721_135201_000060543104_00384_49105_0171.N1 | 21JUL2011 13:56:55 | 21JUL2011 15:07:10 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 3 | SCI_NLC_1CUDPA20110721_153709_000057163104_00385_49106_0172.N1 | 21JUL2011 15:37:09 | 21JUL2011 16:47:38 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 4 | SCI_NLC_1CUDPA20110721_171230_000059993104_00386_49107_0167.N1 | 21JUL2011 17:17:24 | 21JUL2011 18:43:26 | 0 | 35 | 31 | 0 | 3 | 1 | 0 | 0 | |
| 5 | SCI_NLC_1CUDPA20110721_185738_000057163104_00387_49108_0165.N1 | 21JUL2011 18:57:38 | 21JUL2011 20:08:17 | 0 | 36 | 30 | 0 | 1 | 1 | 0 | 0 | |

| | | | | | | | | | | | | |
|---|--|--------------------|--------------------|---|----|----|---|---|---|---|---|--|
| 6 | SCI_NLC_1CUDPA20110721_203258_000060543104_00388_49109_0163.N1 | 21JUL2011 20:37:52 | 21JUL2011 21:48:07 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 7 | SCI_NLC_1CUDPA20110721_221806_000057163104_00389_49110_0168.N1 | 21JUL2011 22:18:06 | 21JUL2011 23:28:35 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 8 | SCI_NLC_1CUDPA20110721_235327_000060543104_00390_49111_0169.N1 | 21JUL2011 23:58:20 | 22JUL2011 01:08:35 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |

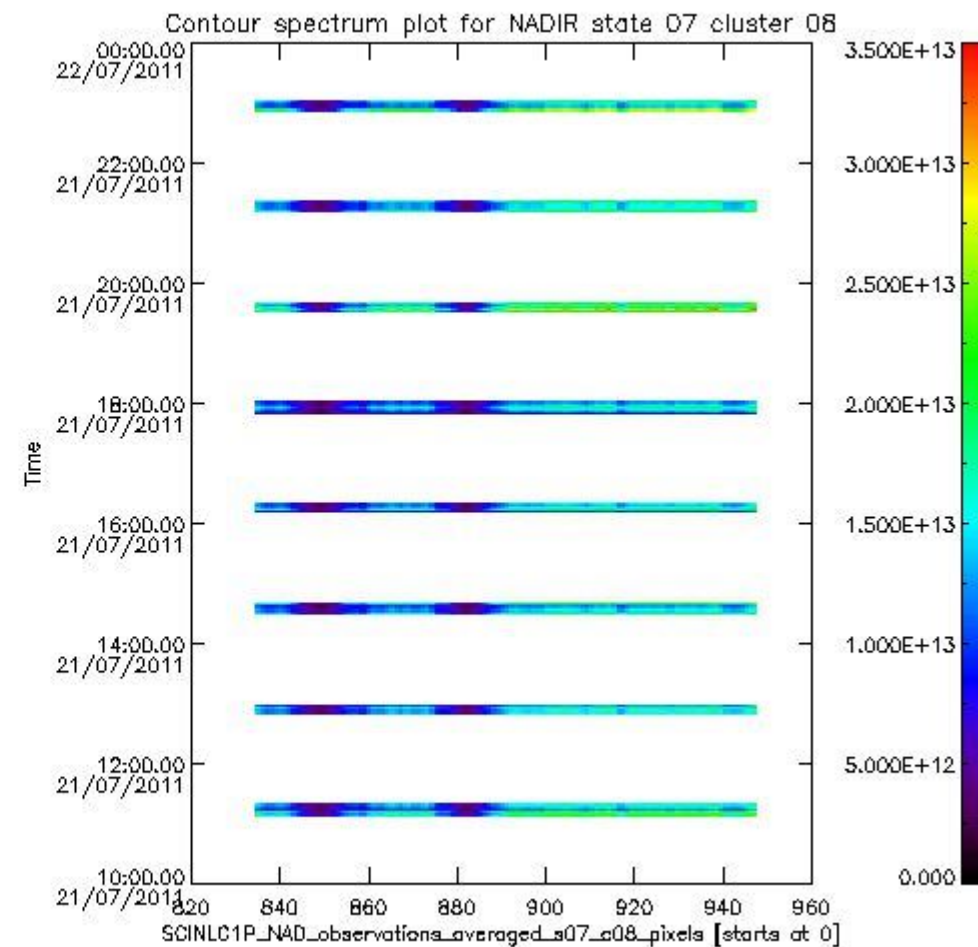
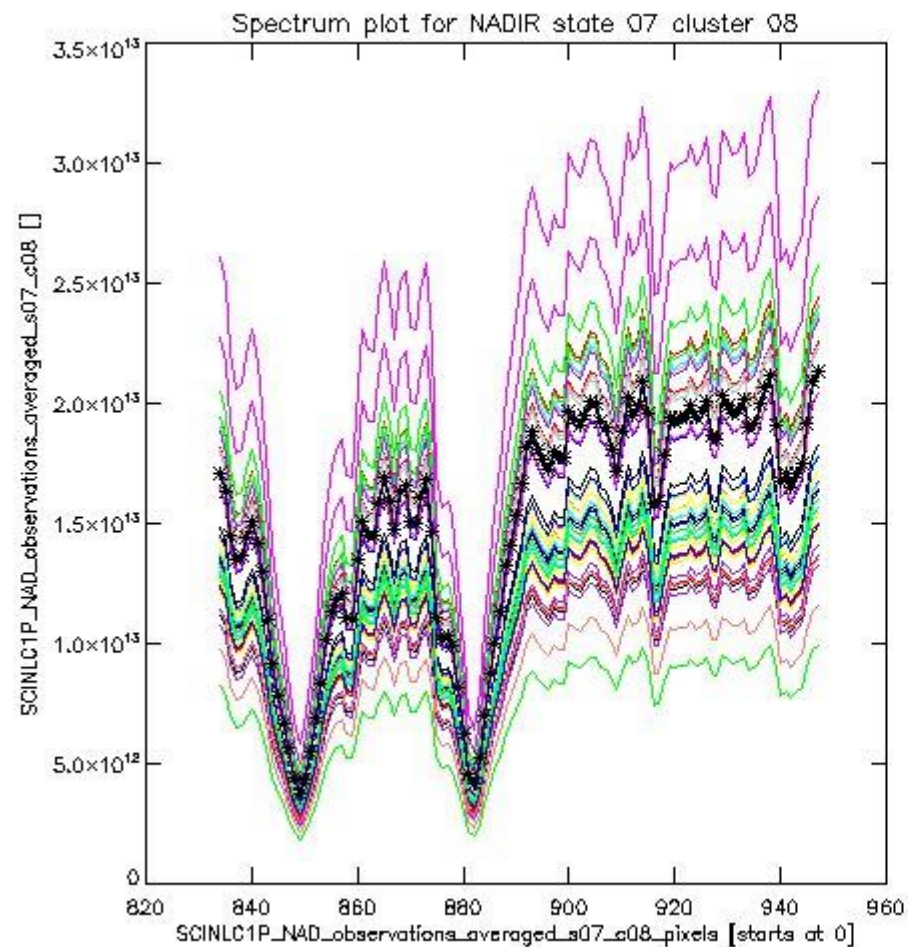
1.2 Source packet monitoring

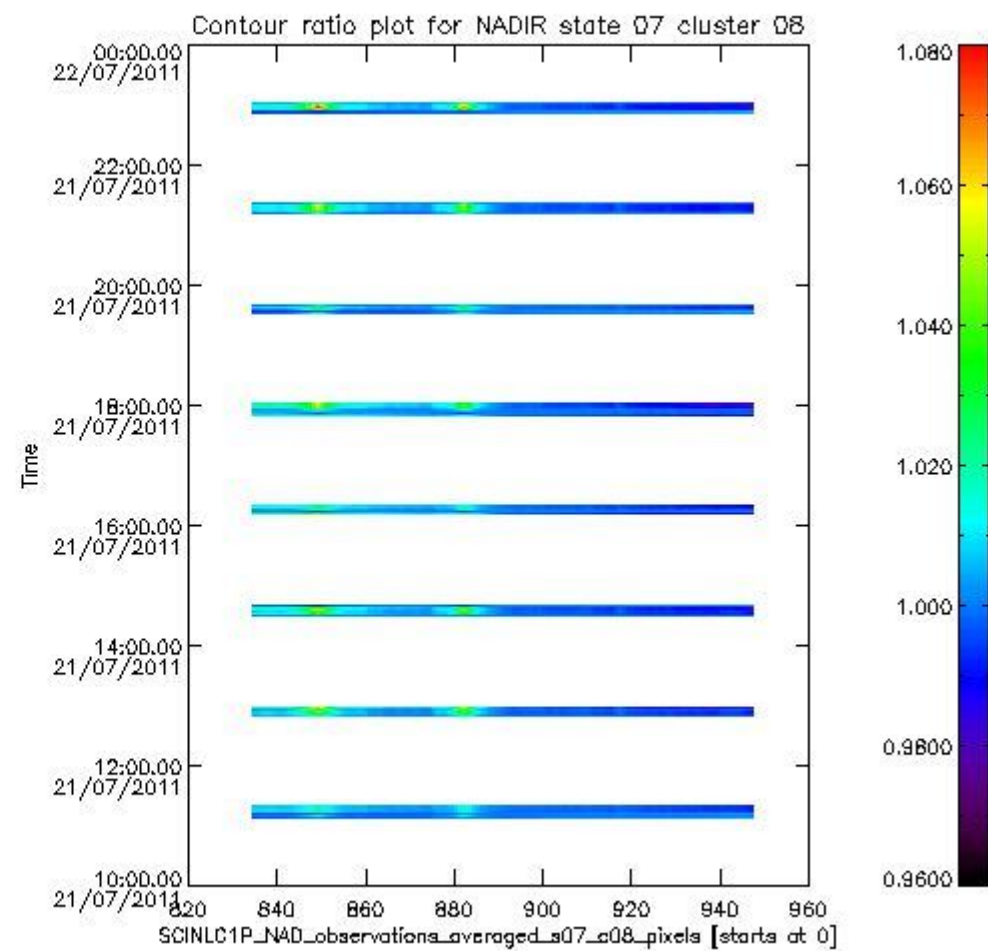
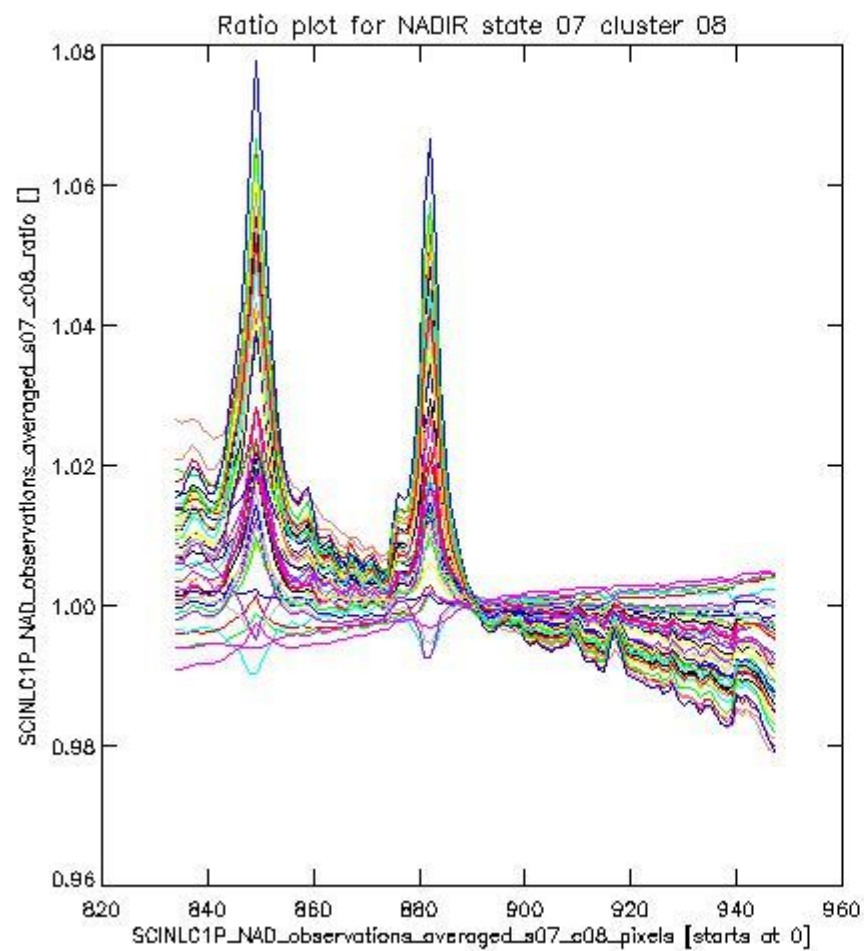
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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 | 21JUL2011 11:08:29.880 |
| Start time of last sample | 21JUL2011 22:59:28.757 |
| Reference period start time | 21JUN2011 01:07:12.288 |
| Reference period stop time | 19JUL2011 10:50:58.264 |
| Channel number | 2 |
| First pixel number (starts at 0) | 834 |
| Last pixel number (starts at 0) | 947 |

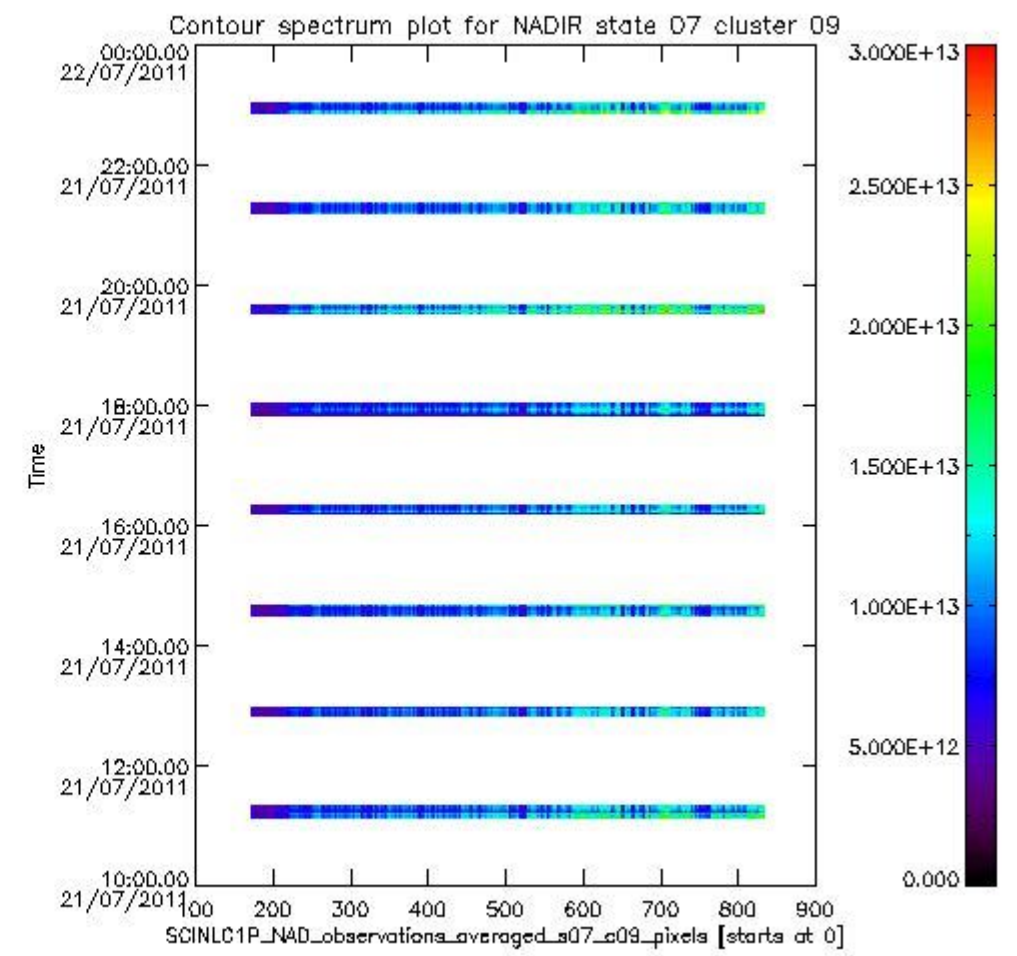
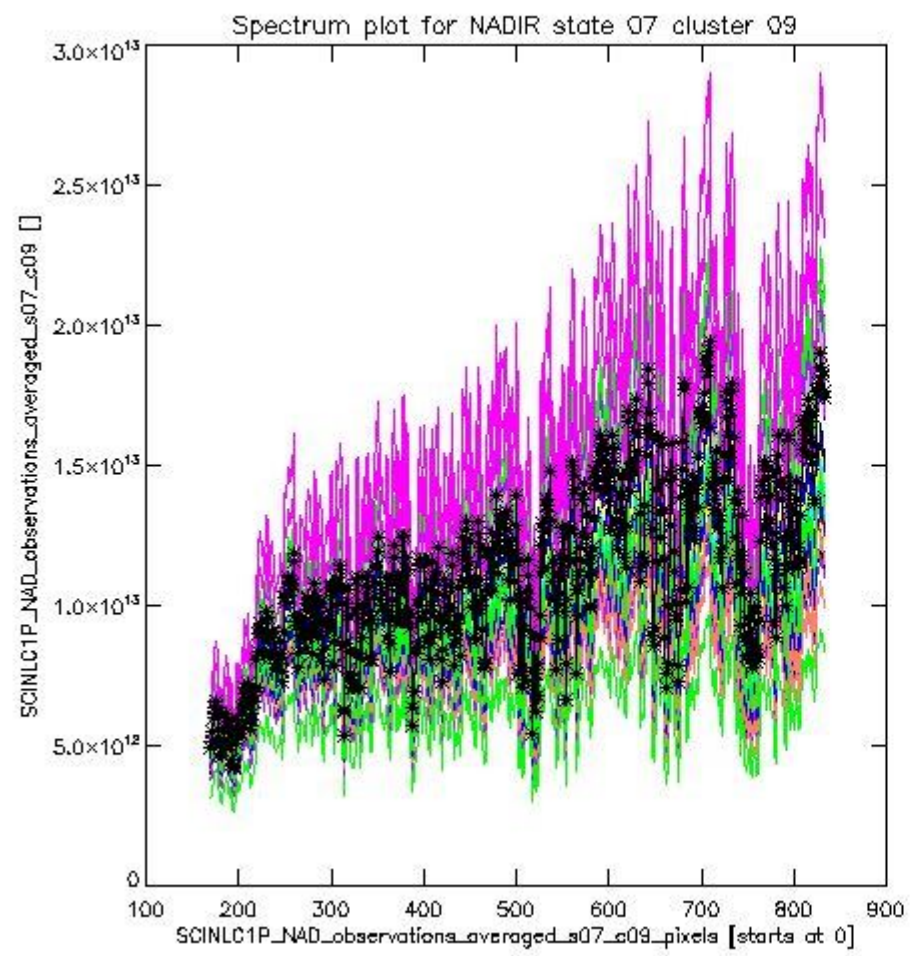




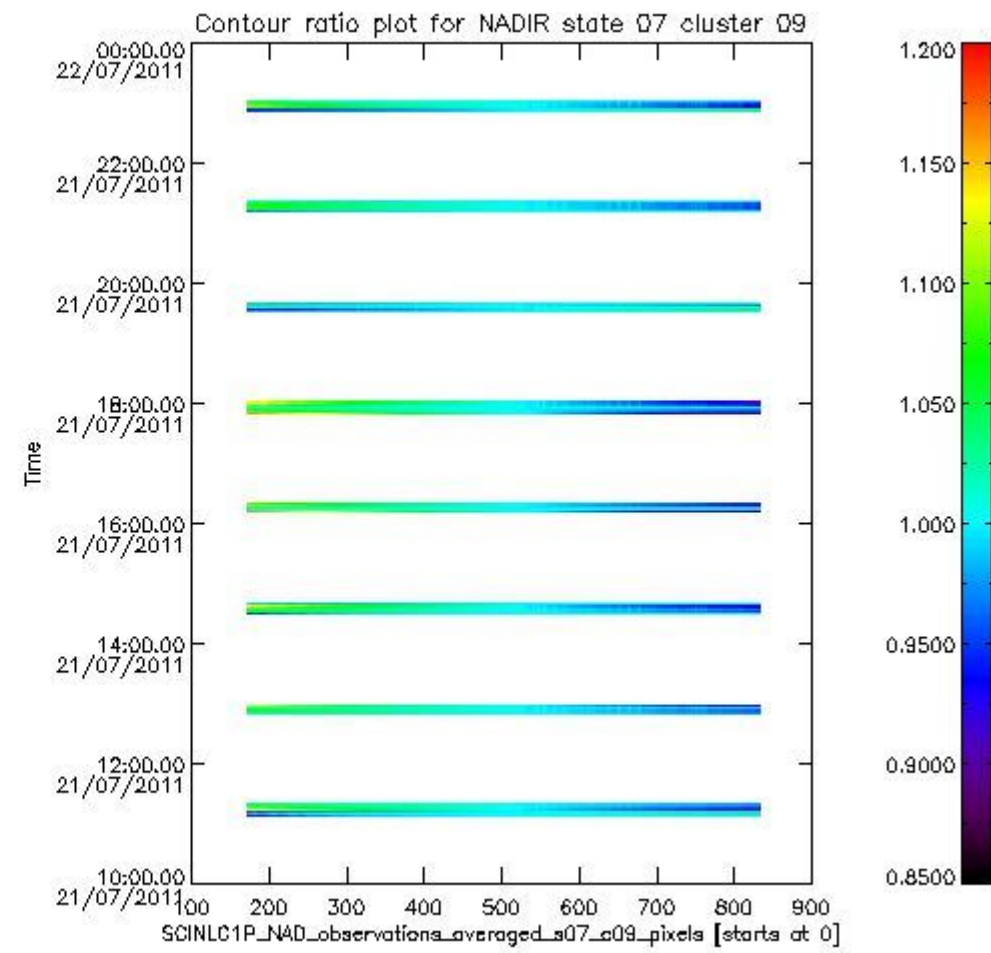
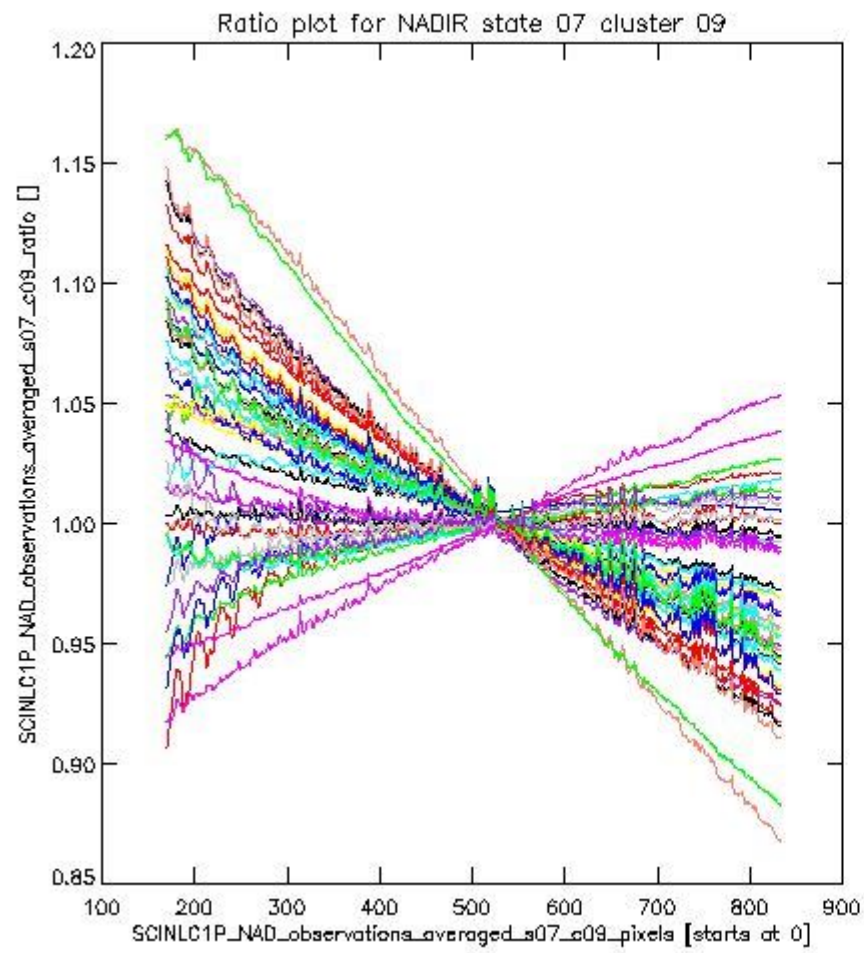
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_1.PNG

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 | 21JUL2011 11:08:29.880 |
| Start time of last sample | 21JUL2011 22:59:28.757 |
| Reference period start time | 21JUN2011 01:07:12.288 |
| Reference period stop time | 19JUL2011 10:50:58.264 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 833 |



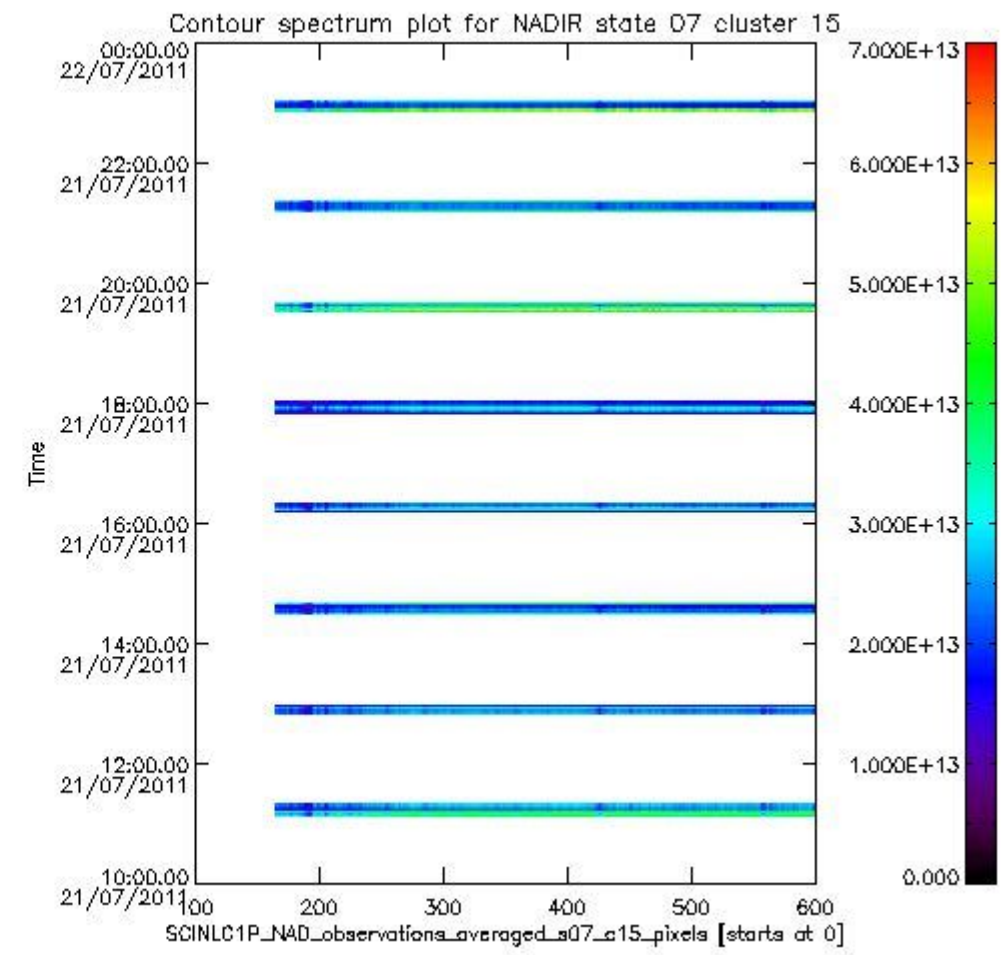
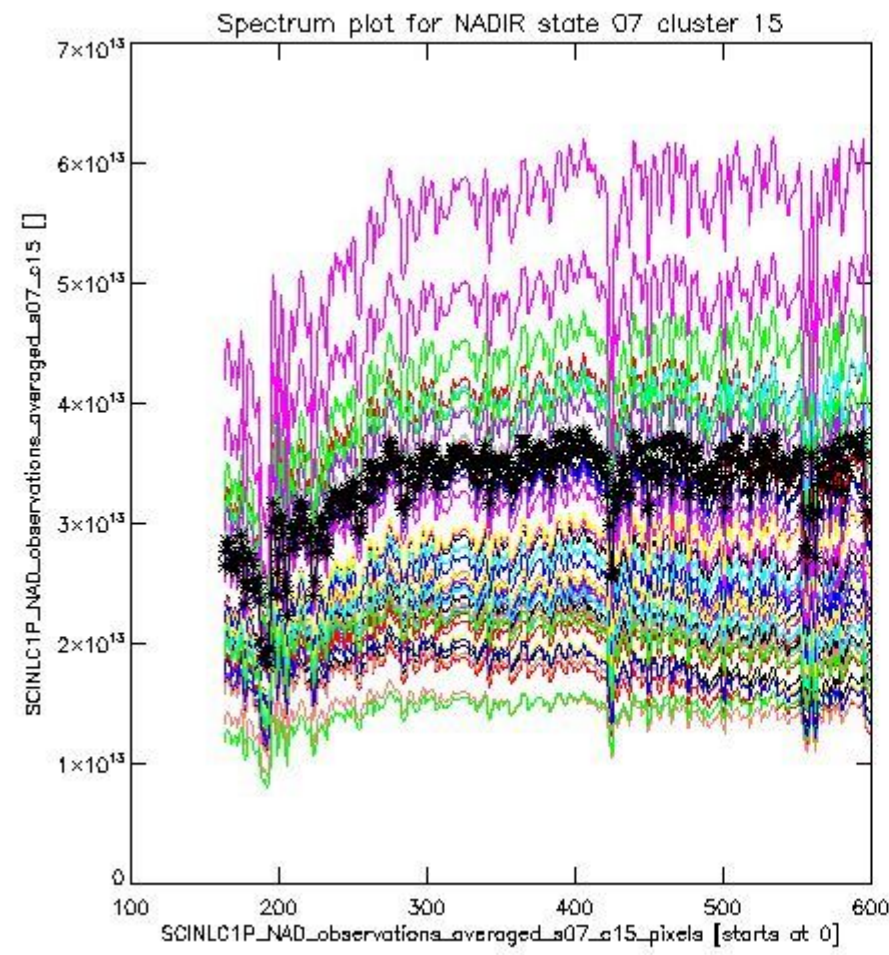
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_2.PNG



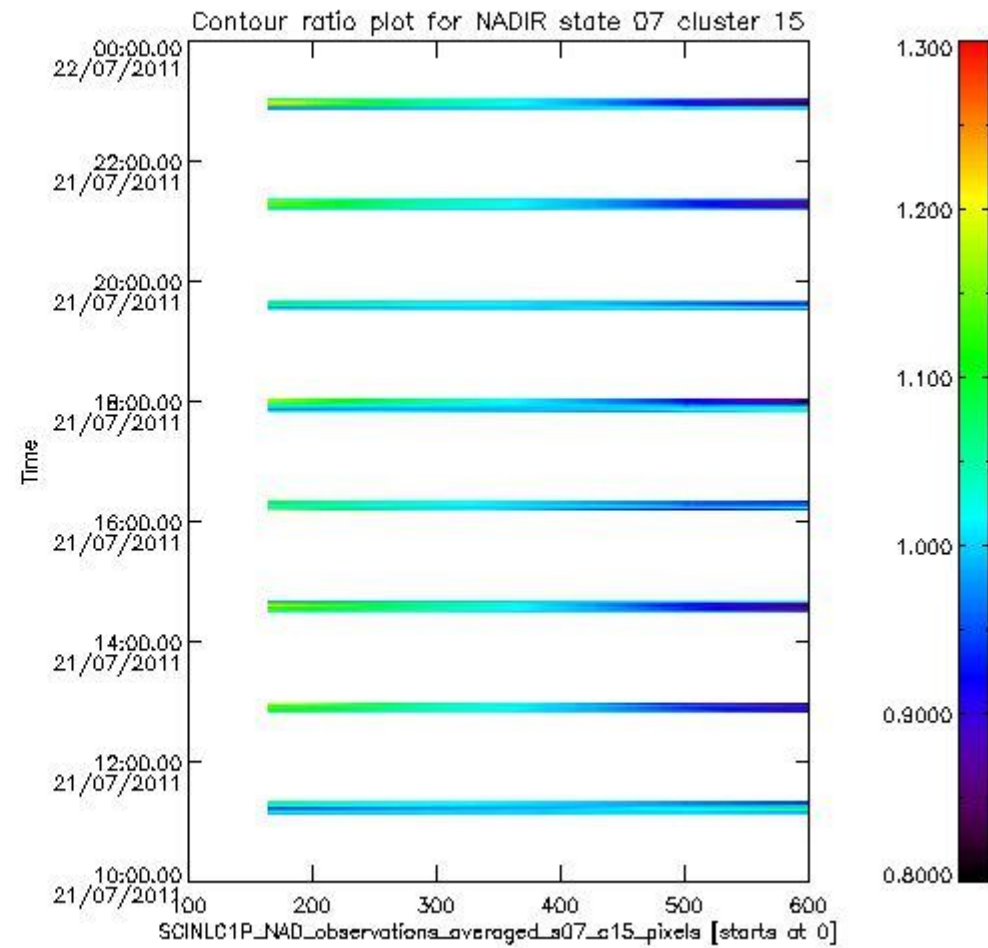
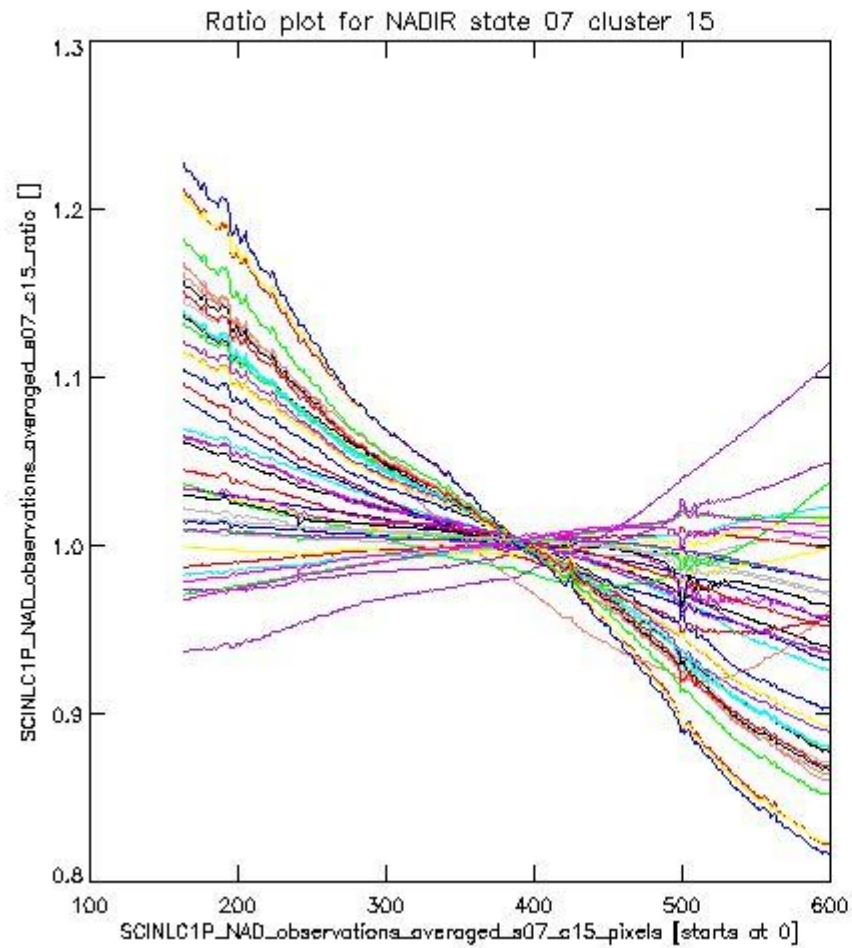
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_3.PNG

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 | 21JUL2011 11:08:29.880 |
| Start time of last sample | 21JUL2011 22:59:28.757 |
| Reference period start time | 21JUN2011 01:07:12.288 |
| Reference period stop time | 19JUL2011 10:50:58.264 |
| Channel number | 3 |
| First pixel number (starts at 0) | 163 |
| Last pixel number (starts at 0) | 598 |



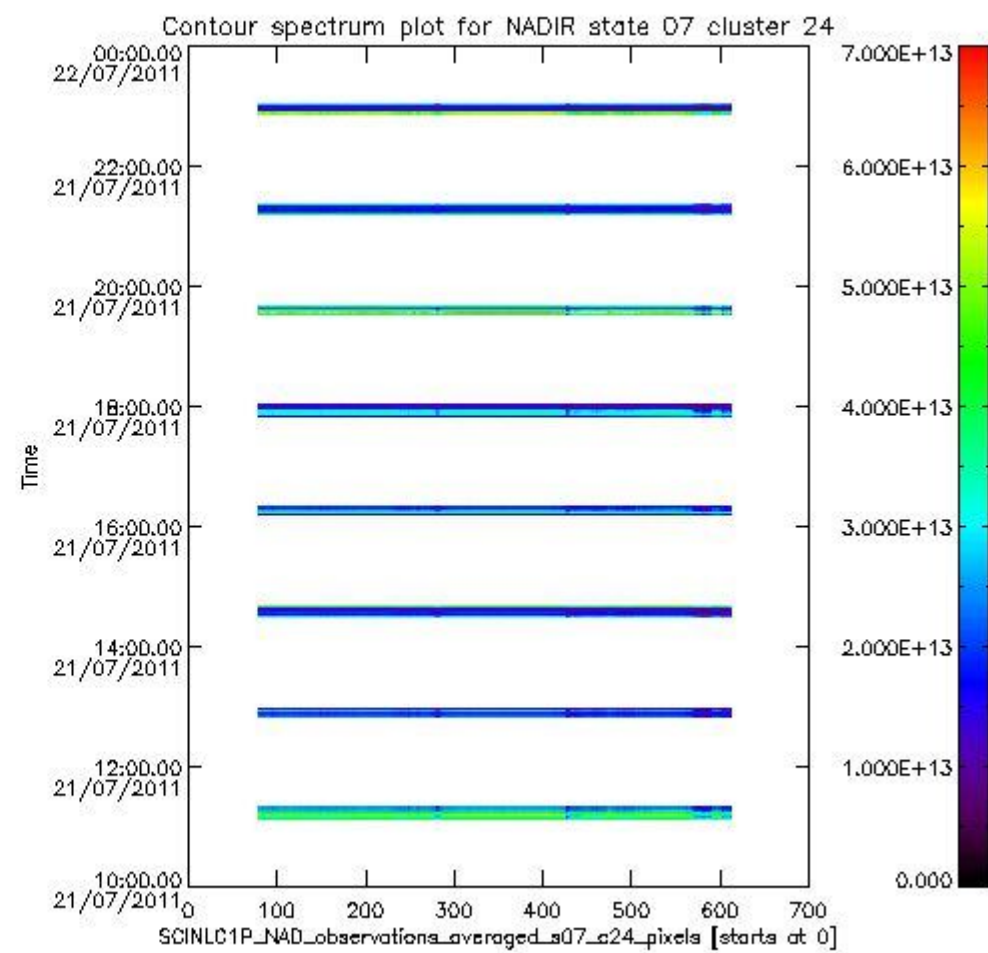
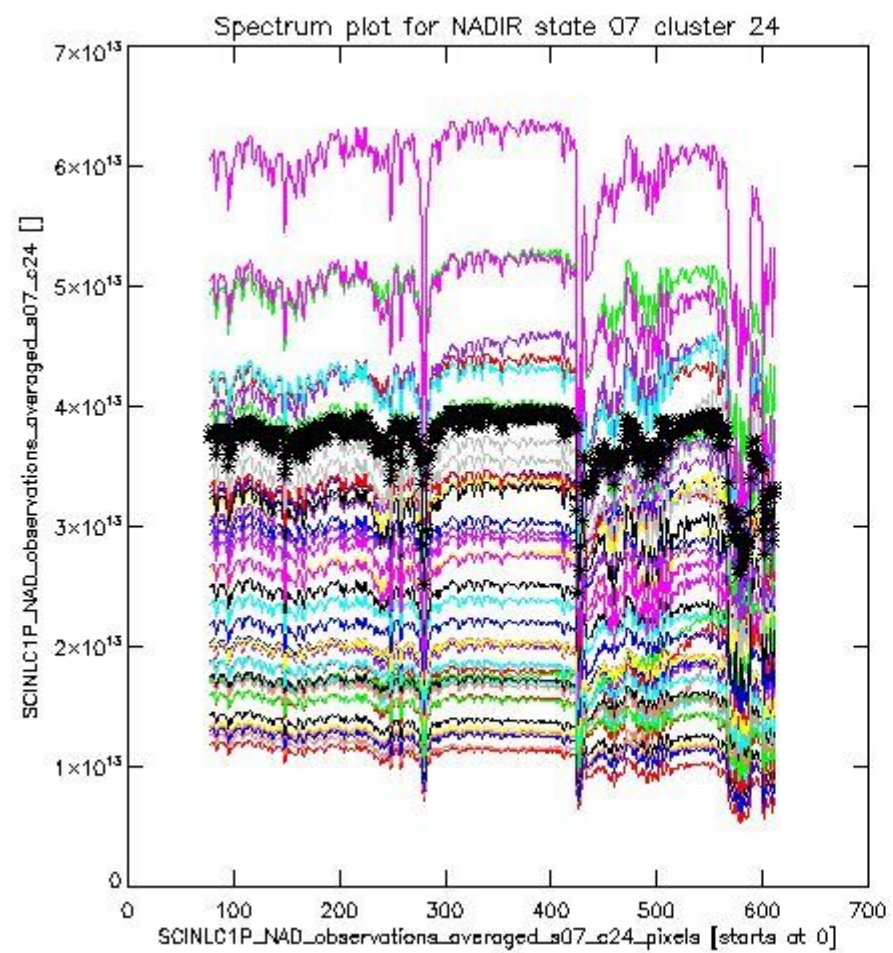
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_4.PNG



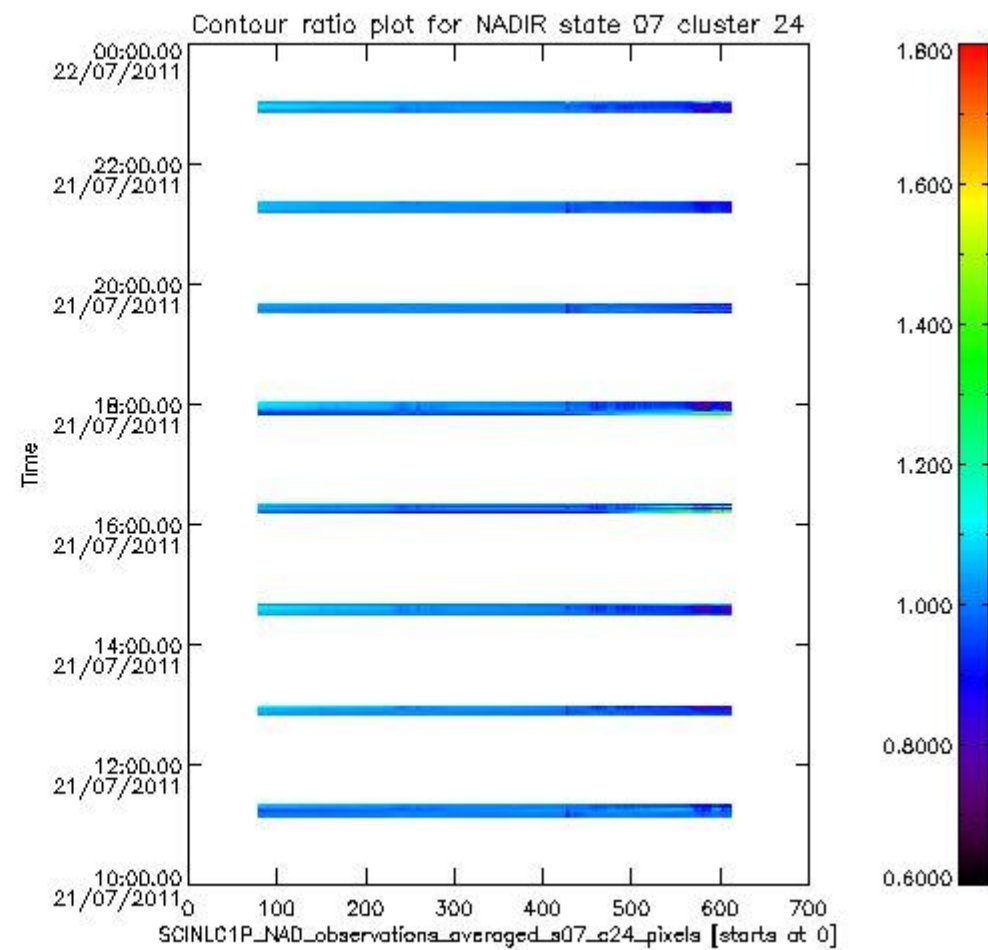
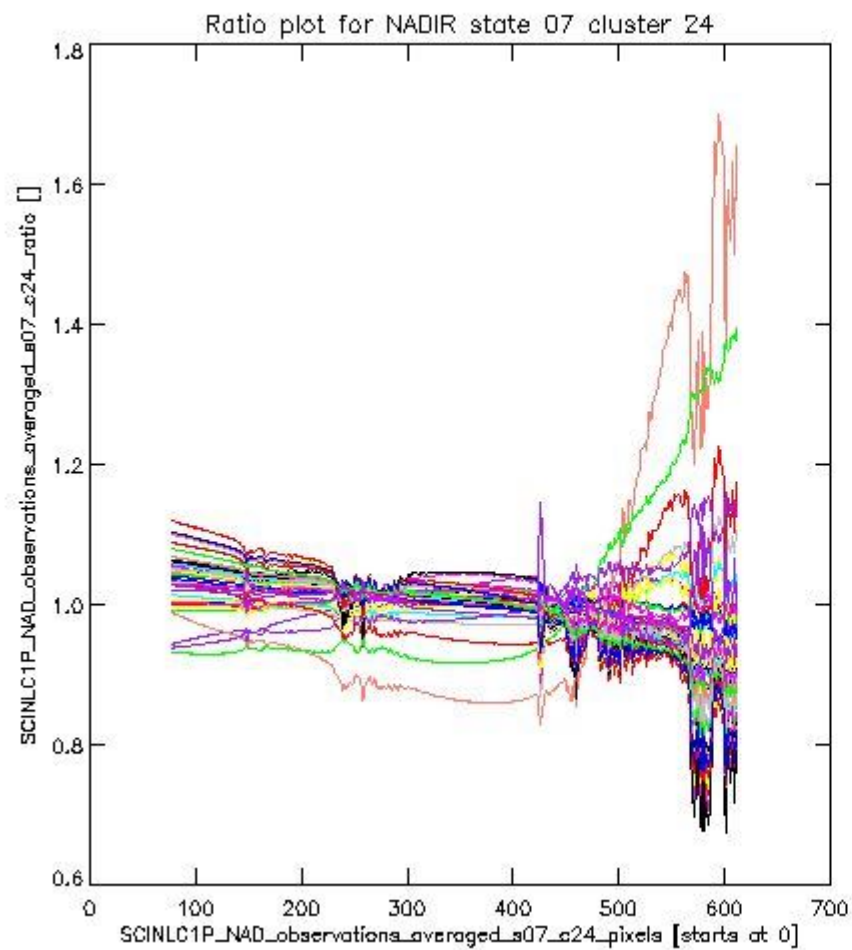
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_5.PNG

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 | 21JUL2011 11:08:29.880 |
| Start time of last sample | 21JUL2011 22:59:28.757 |
| Reference period start time | 21JUN2011 01:07:12.288 |
| Reference period stop time | 19JUL2011 10:50:58.264 |
| Channel number | 4 |
| First pixel number (starts at 0) | 78 |
| Last pixel number (starts at 0) | 612 |



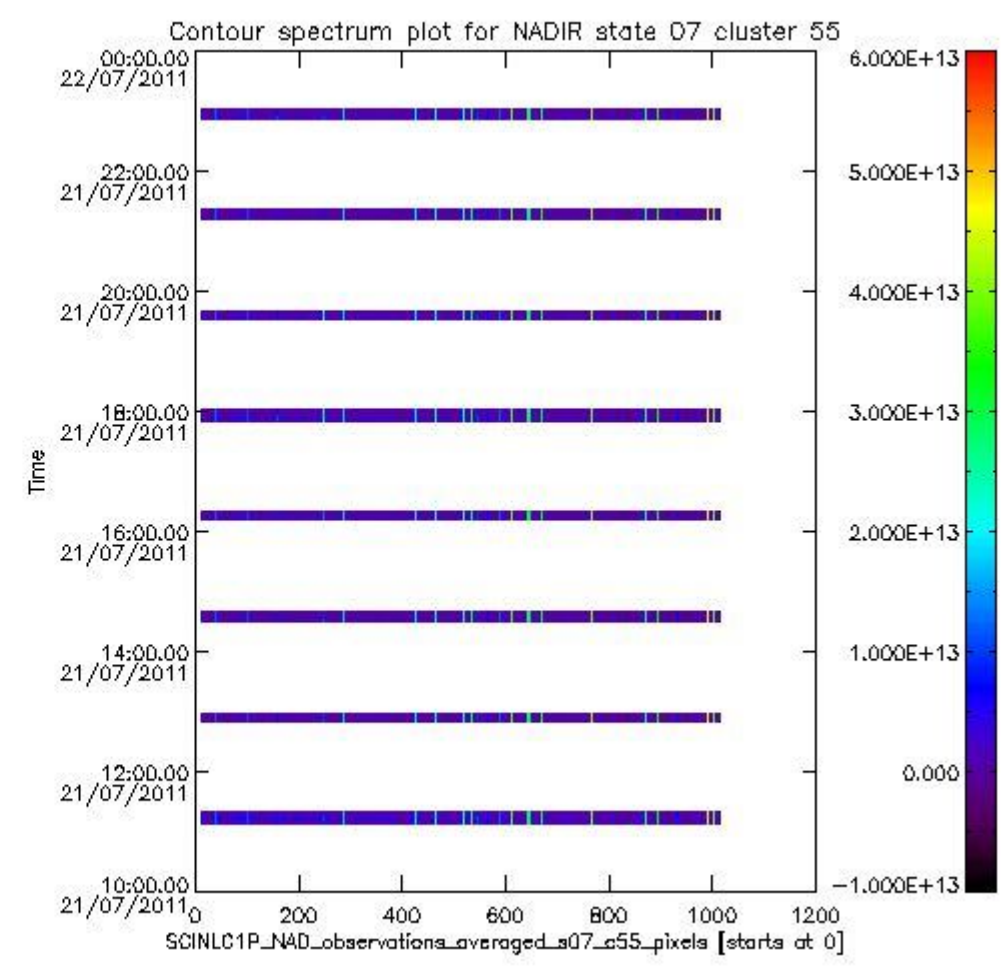
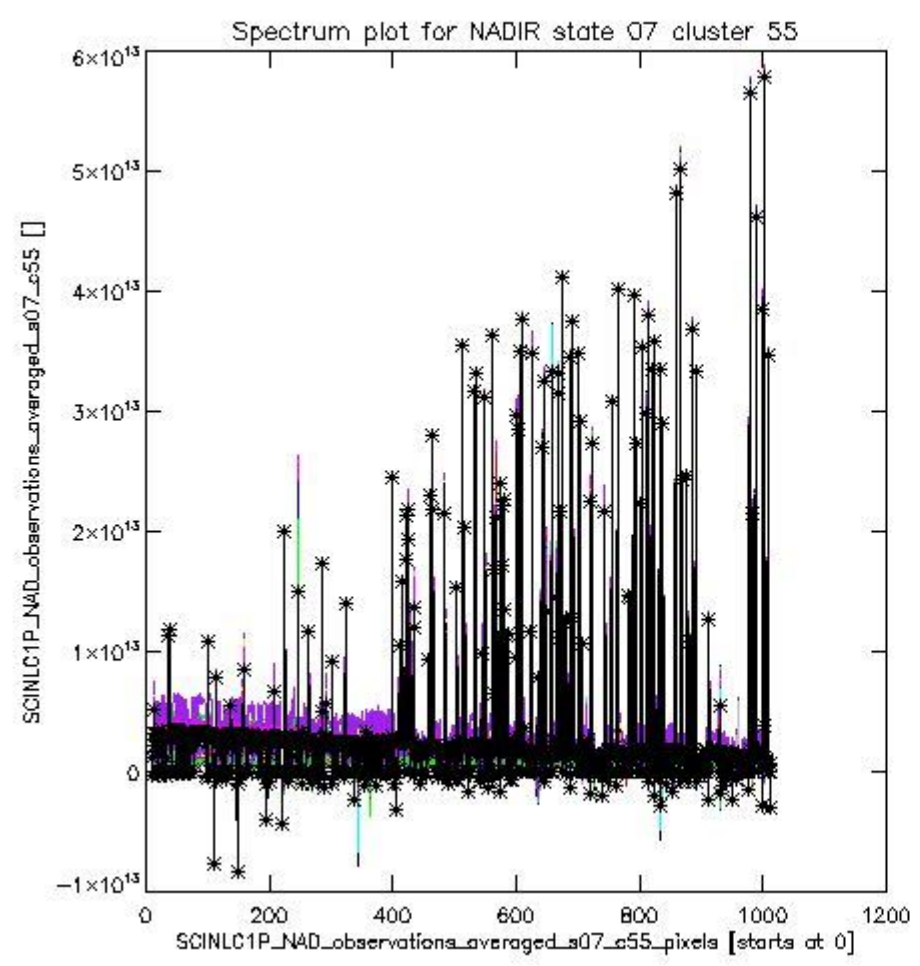
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_6.PNG



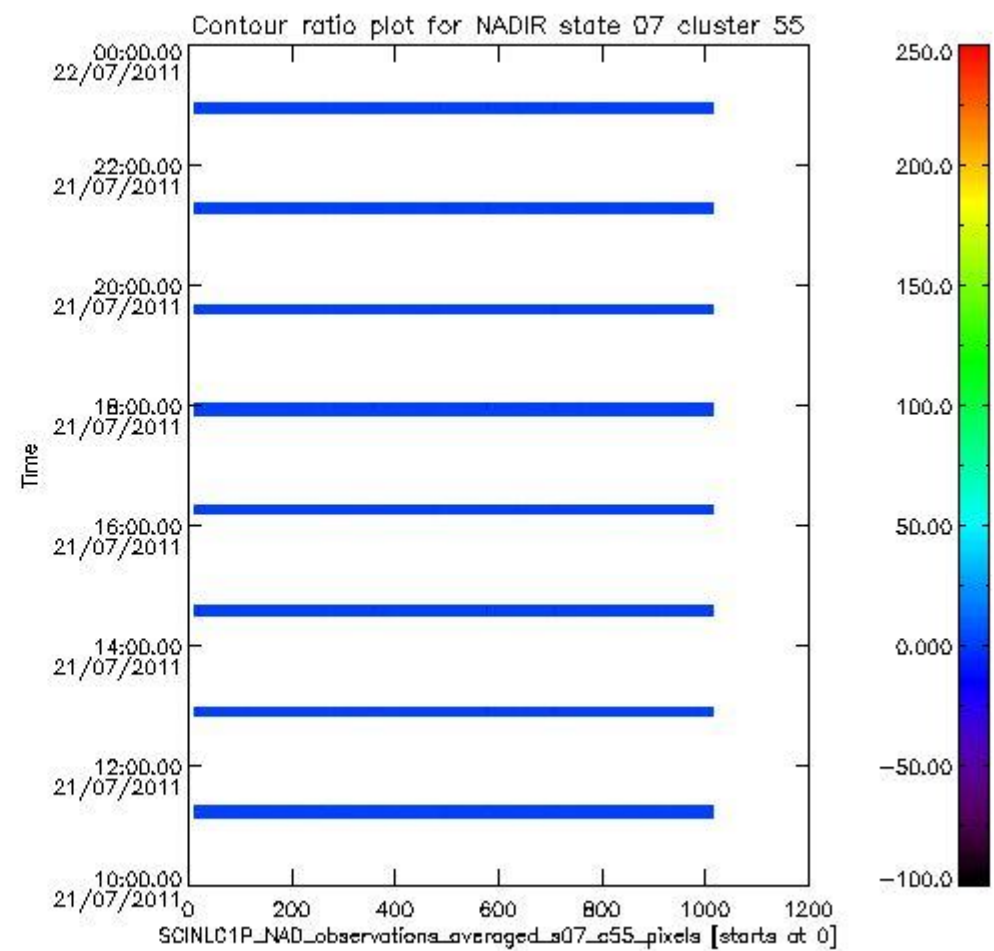
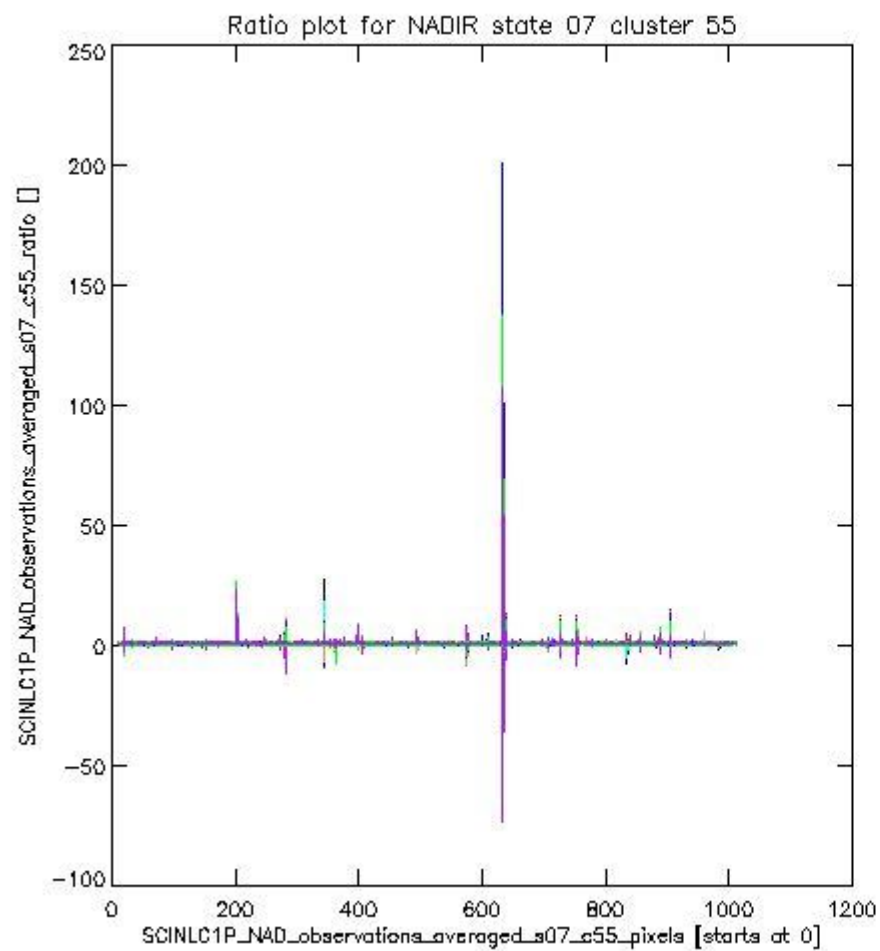
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_7.PNG

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 | 21JUL2011 11:08:29.880 |
| Start time of last sample | 21JUL2011 22:59:28.757 |
| Reference period start time | 21JUN2011 01:07:12.288 |
| Reference period stop time | 19JUL2011 10:50:58.264 |
| Channel number | 8 |
| First pixel number (starts at 0) | 10 |
| Last pixel number (starts at 0) | 1013 |



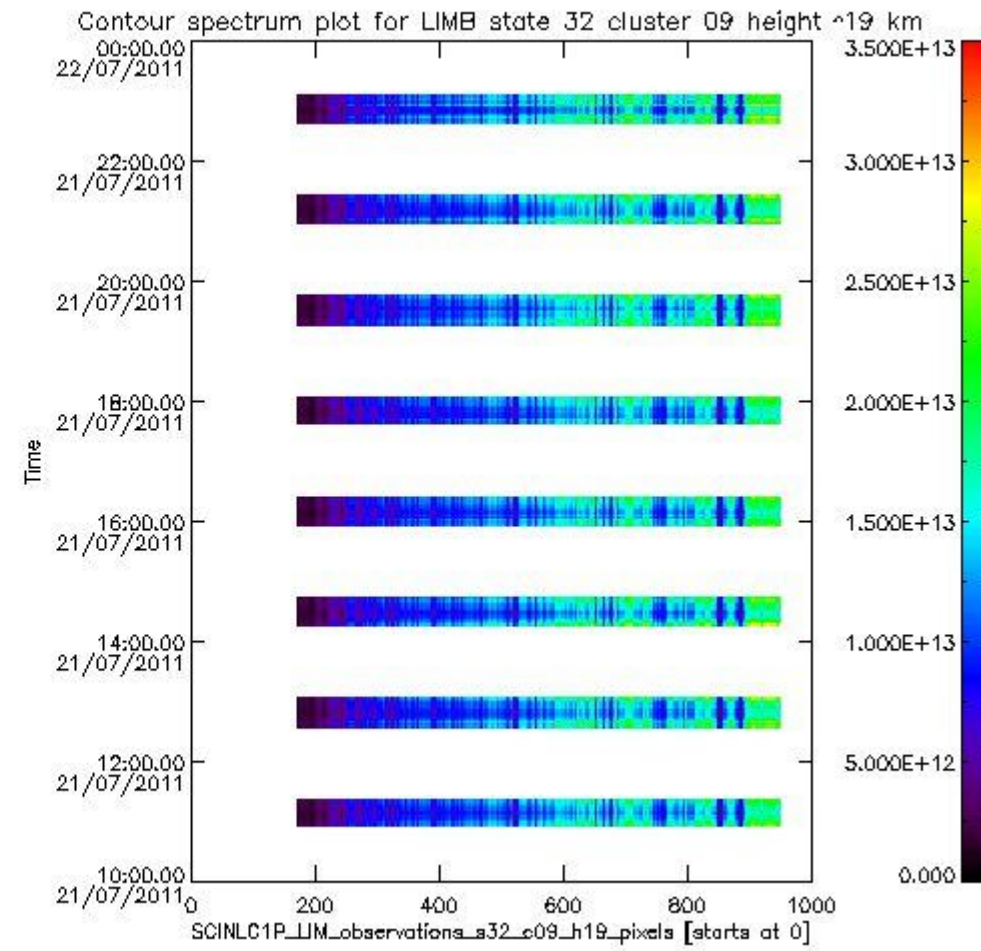
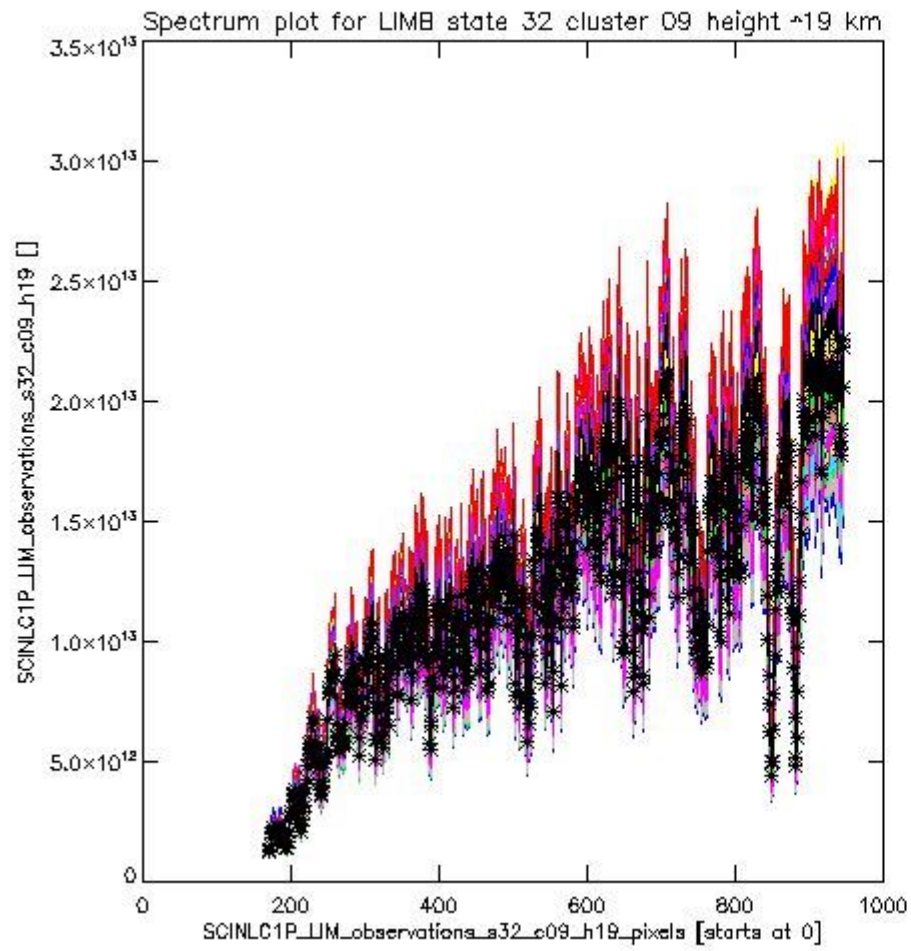
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_8.PNG



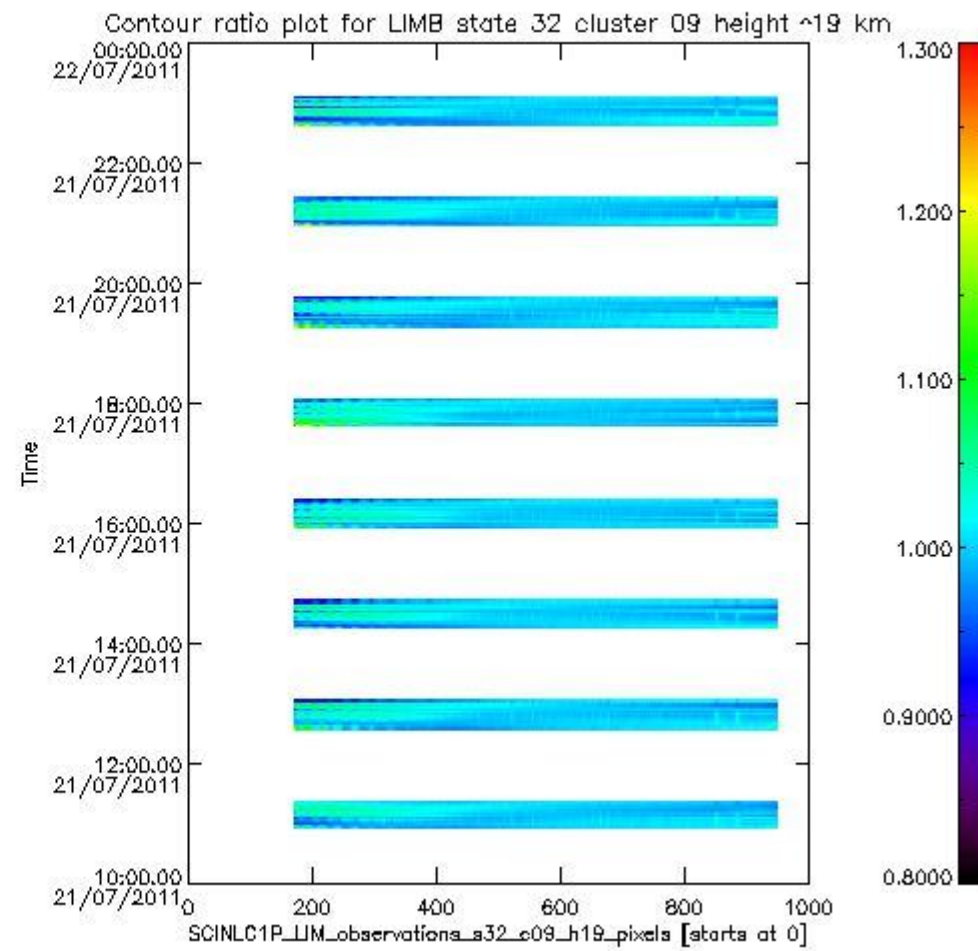
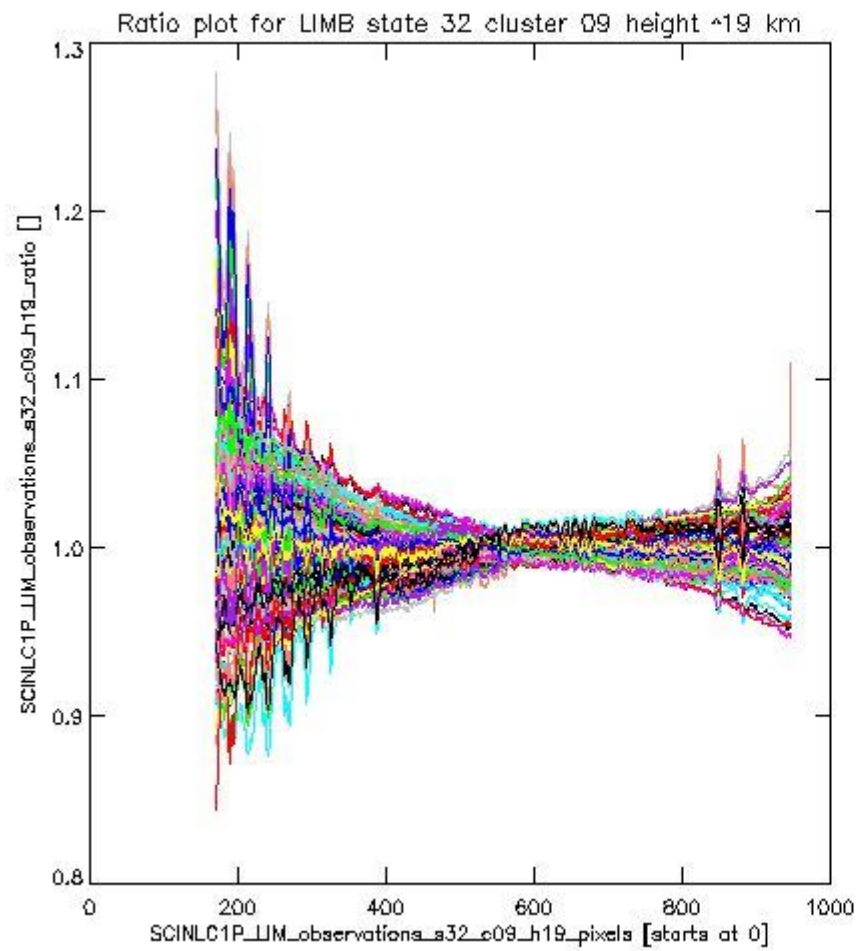
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_9.PNG

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 | 21JUL2011 10:55:19.244 |
| Start time of last sample | 21JUL2011 23:04:42.804 |
| Reference period start time | 21JUN2011 00:51:58.909 |
| Reference period stop time | 19JUL2011 10:56:12.307 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



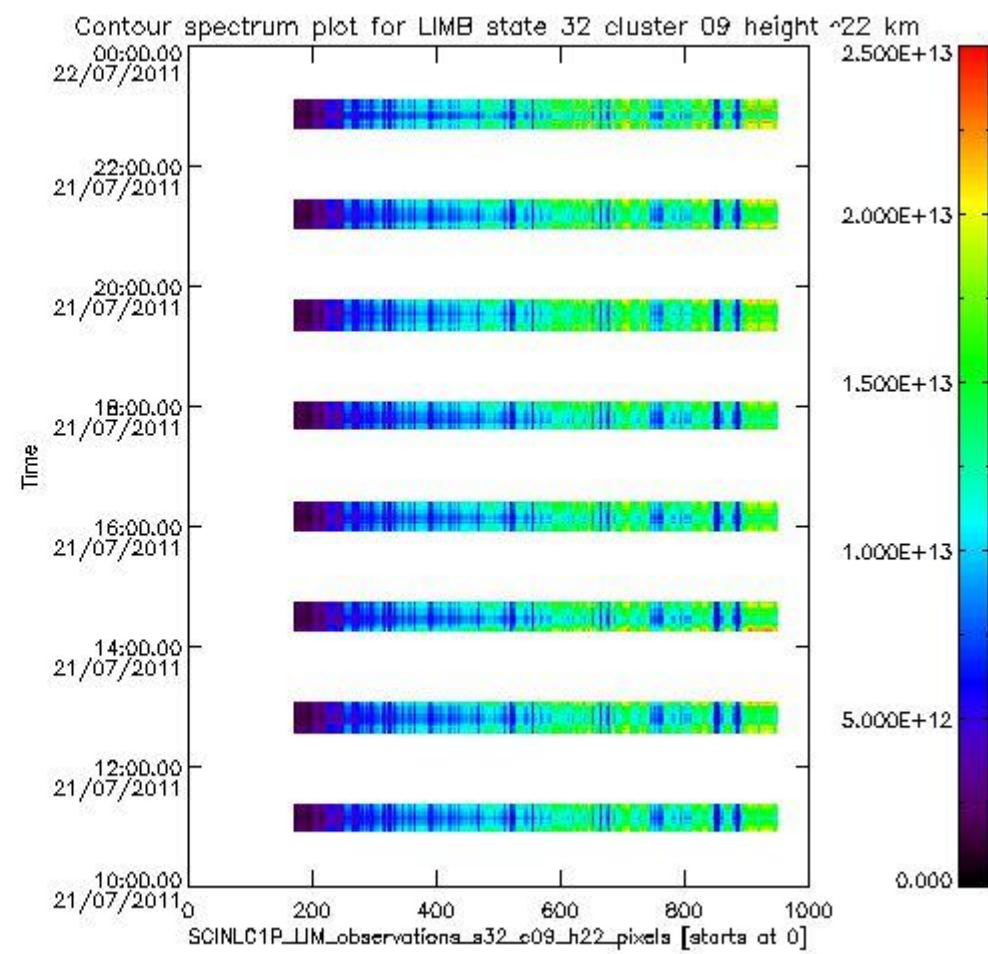
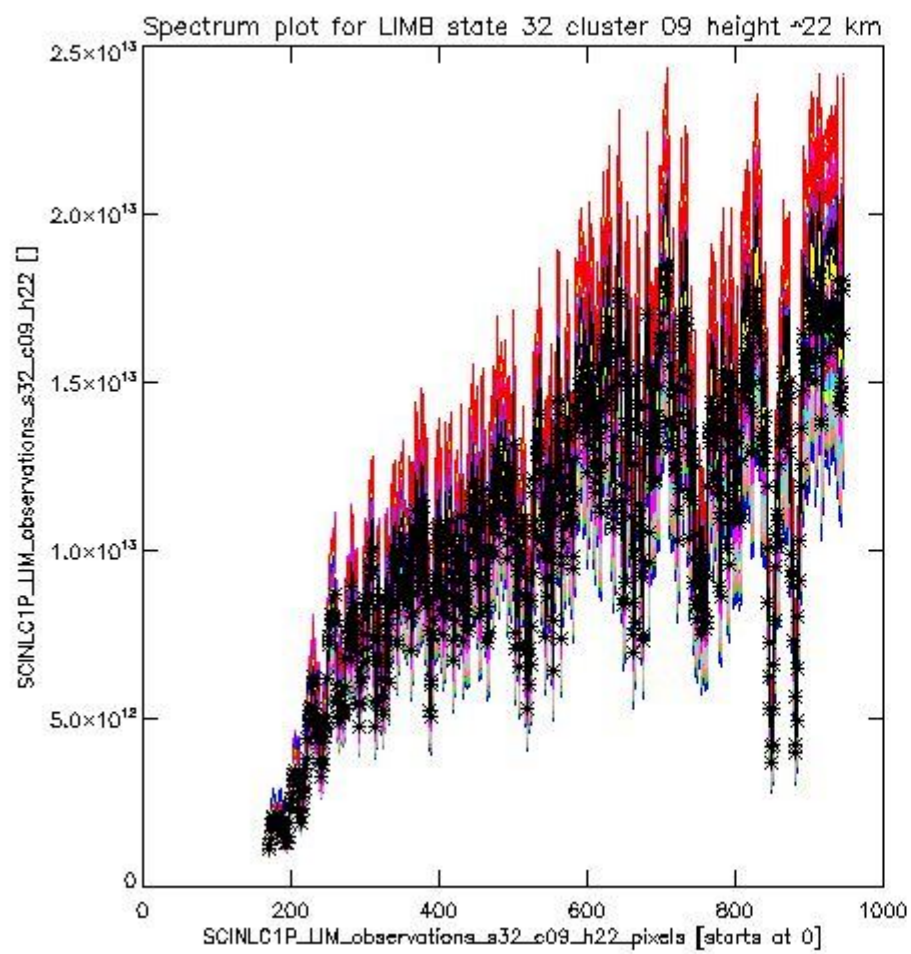
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_10.PNG



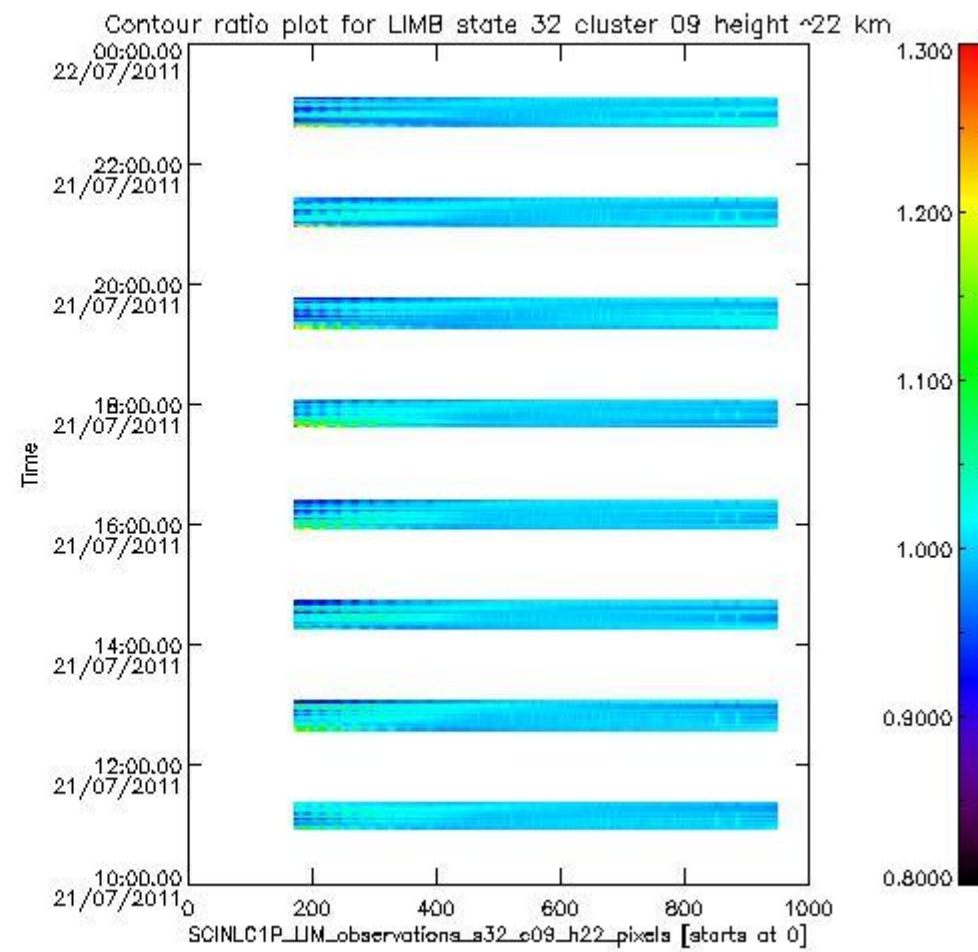
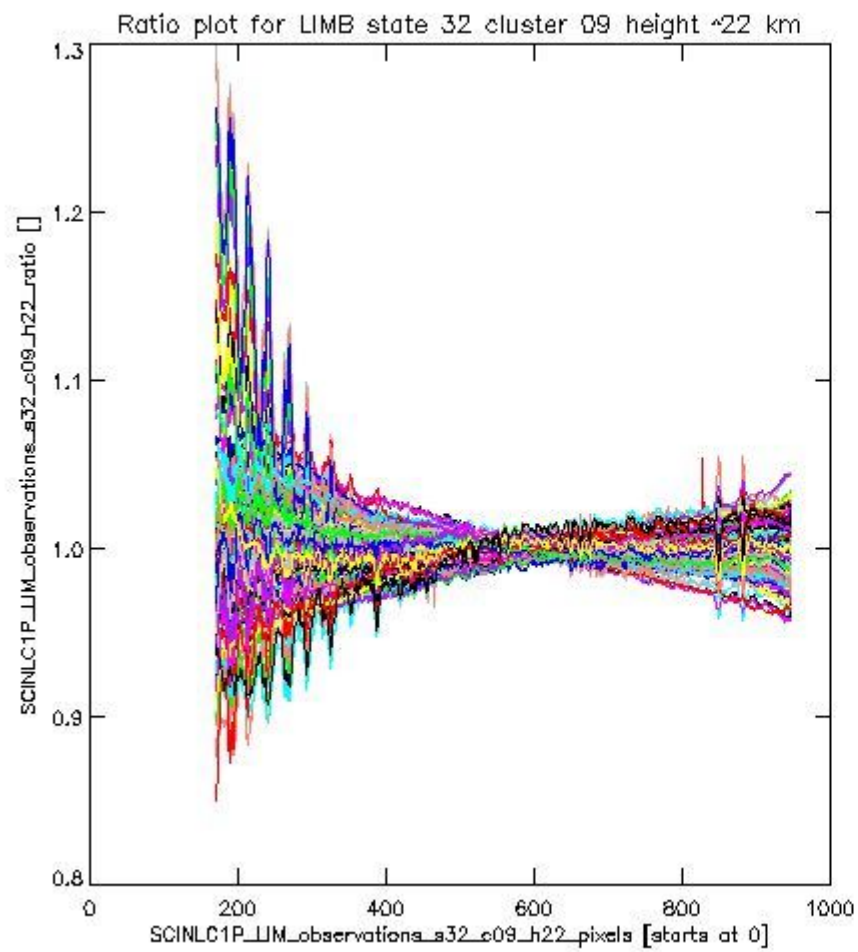
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_11.PNG

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 | 21JUL2011 10:55:19.244 |
| Start time of last sample | 21JUL2011 23:04:42.804 |
| Reference period start time | 21JUN2011 00:51:58.909 |
| Reference period stop time | 19JUL2011 10:56:12.307 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



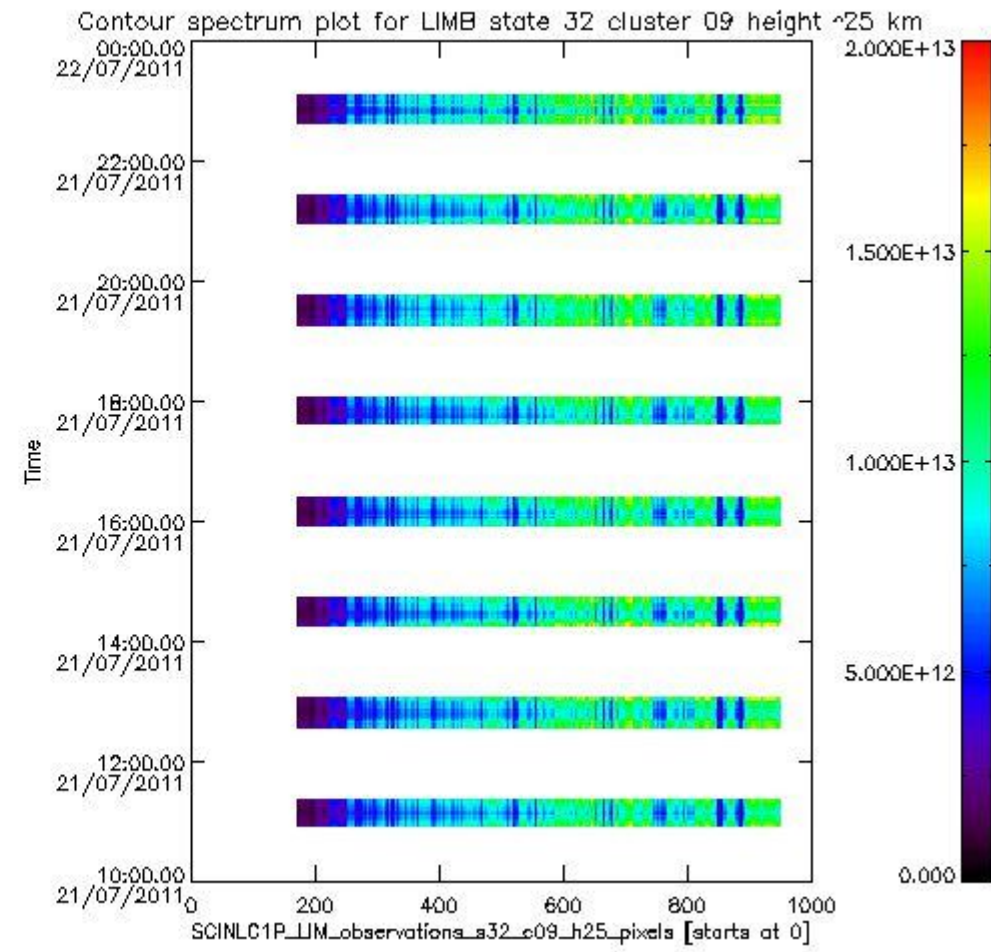
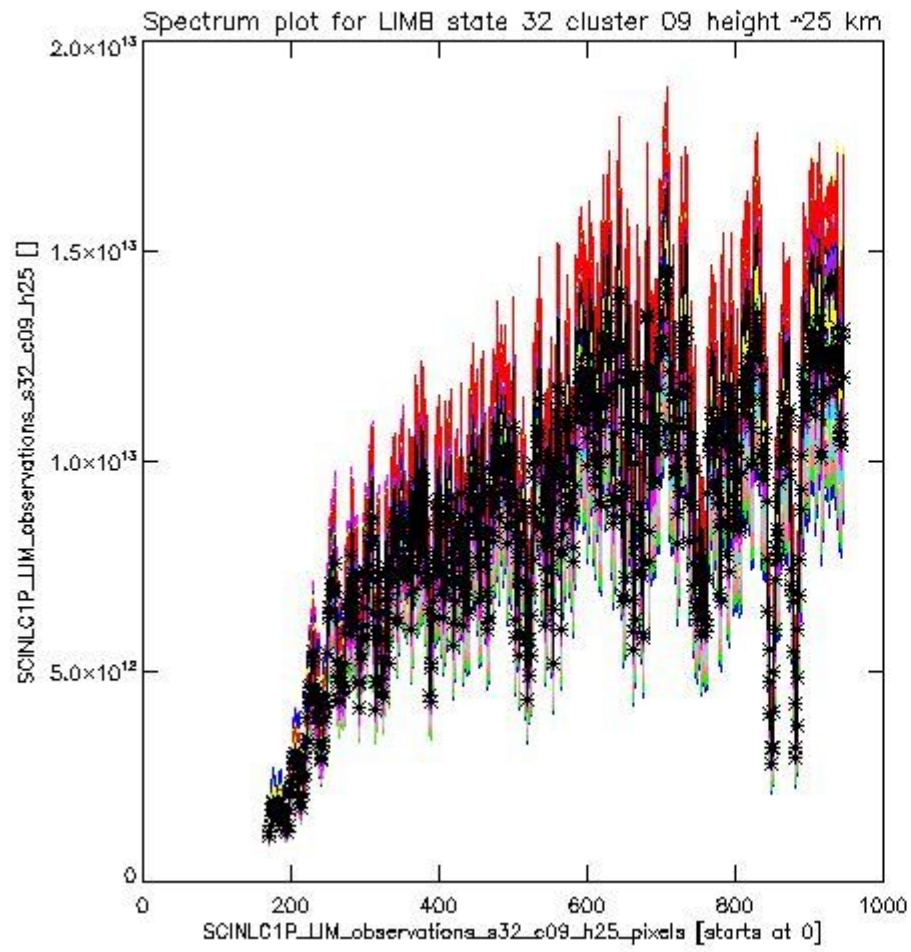
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_12.PNG



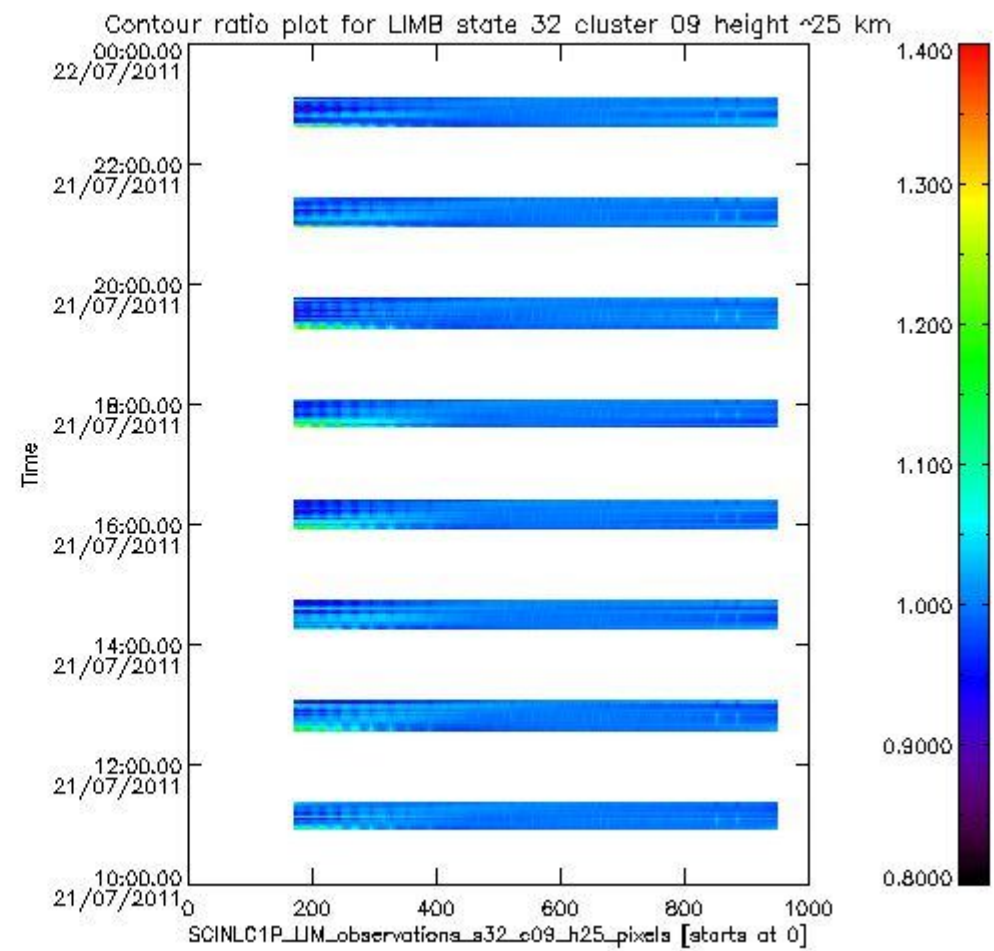
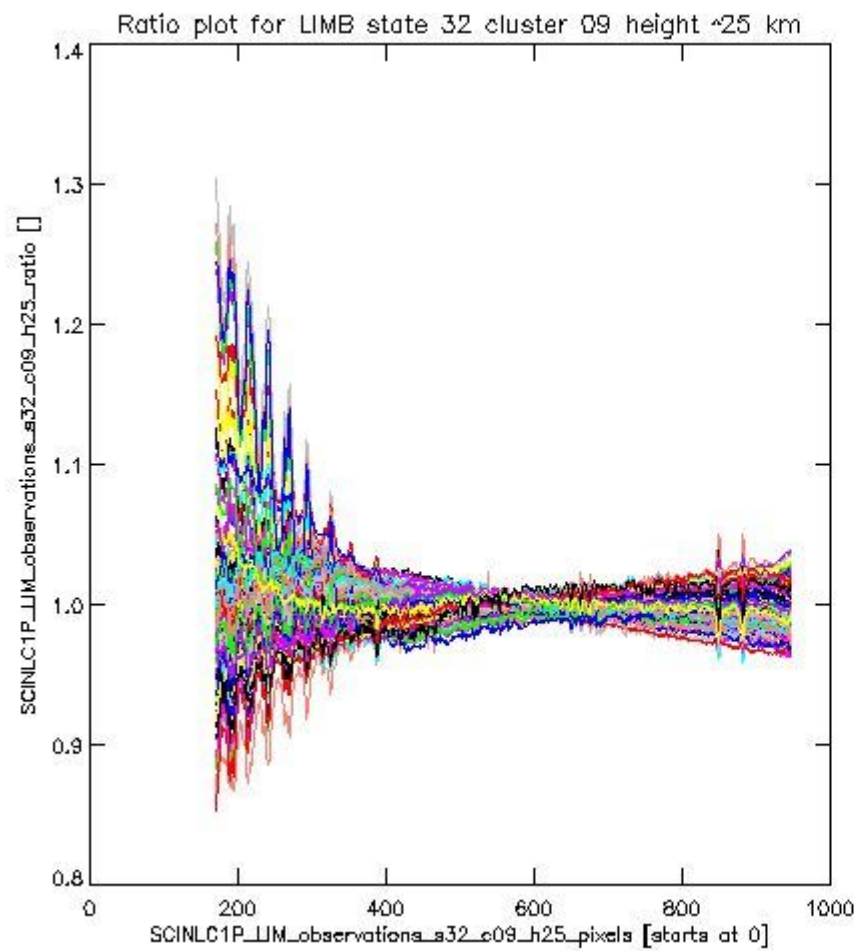
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_13.PNG

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 | 21JUL2011 10:55:19.244 |
| Start time of last sample | 21JUL2011 23:04:42.804 |
| Reference period start time | 21JUN2011 00:51:58.909 |
| Reference period stop time | 19JUL2011 10:56:12.307 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



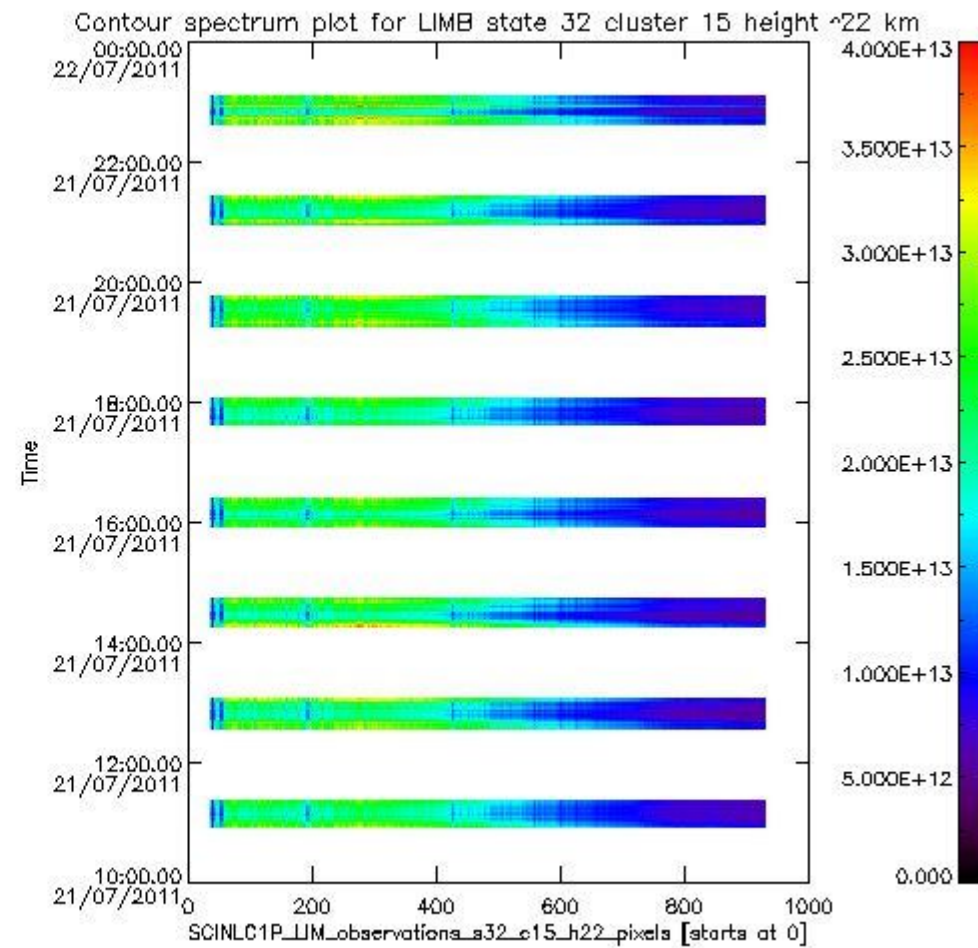
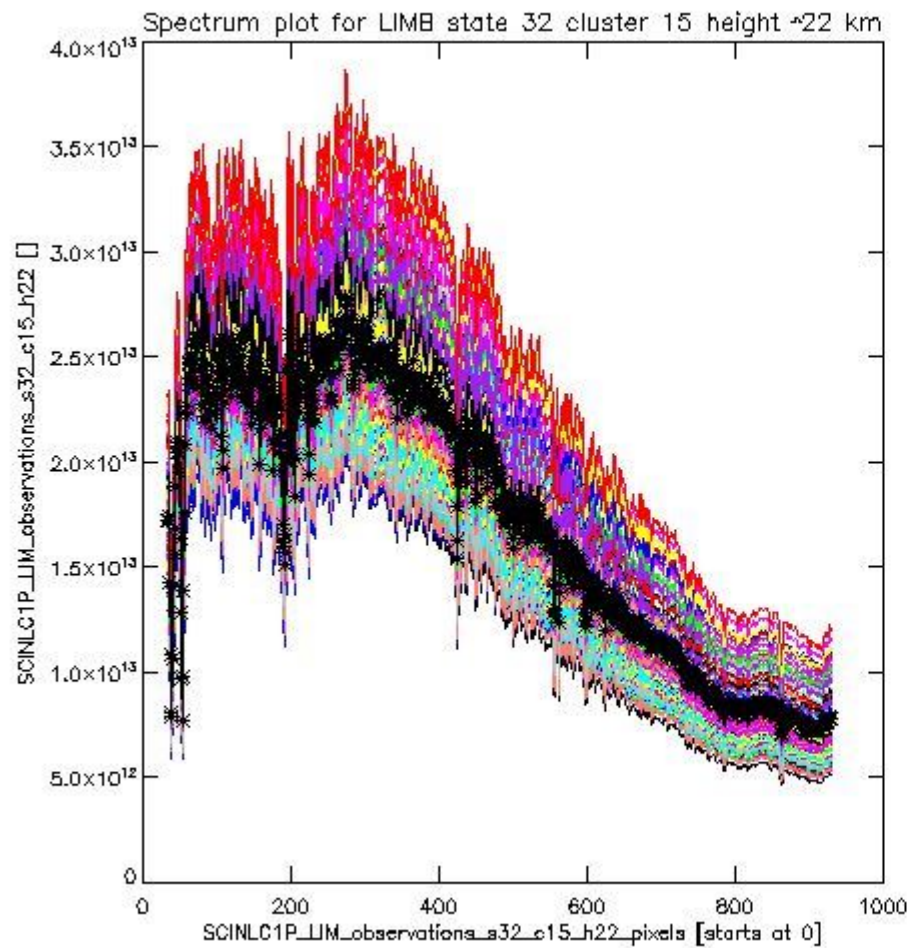
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_14.PNG



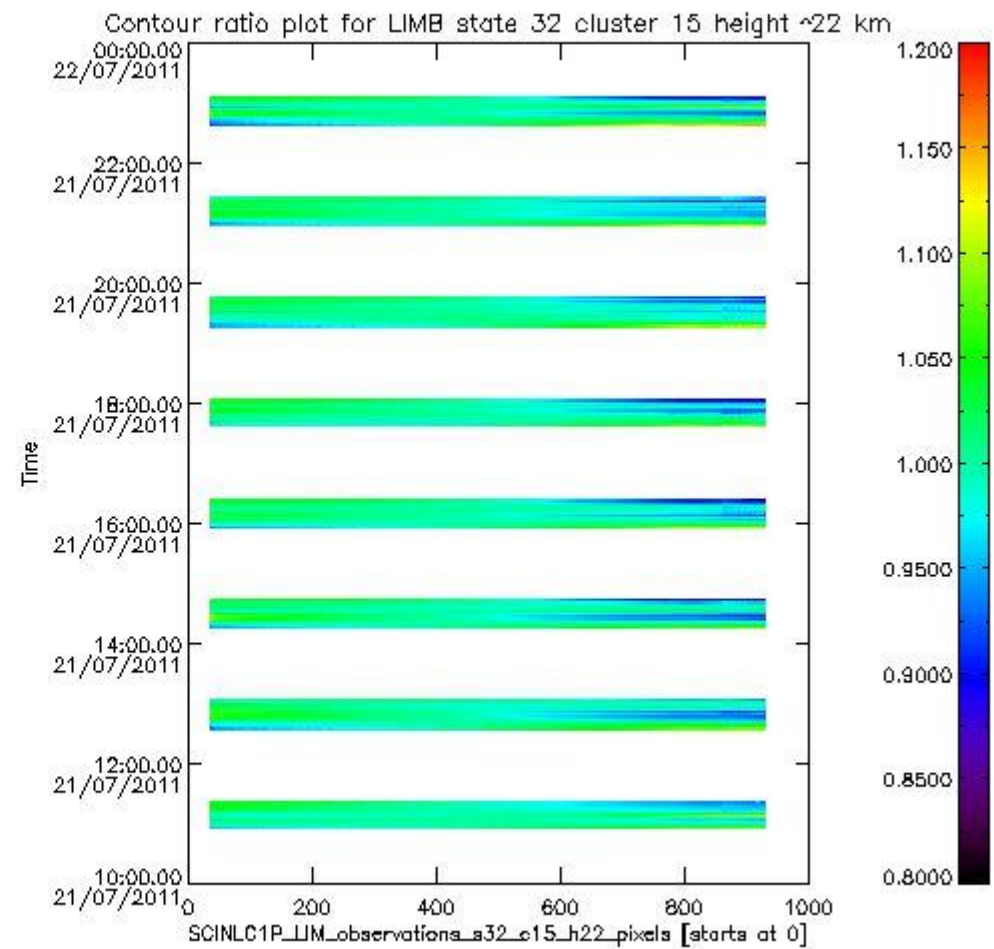
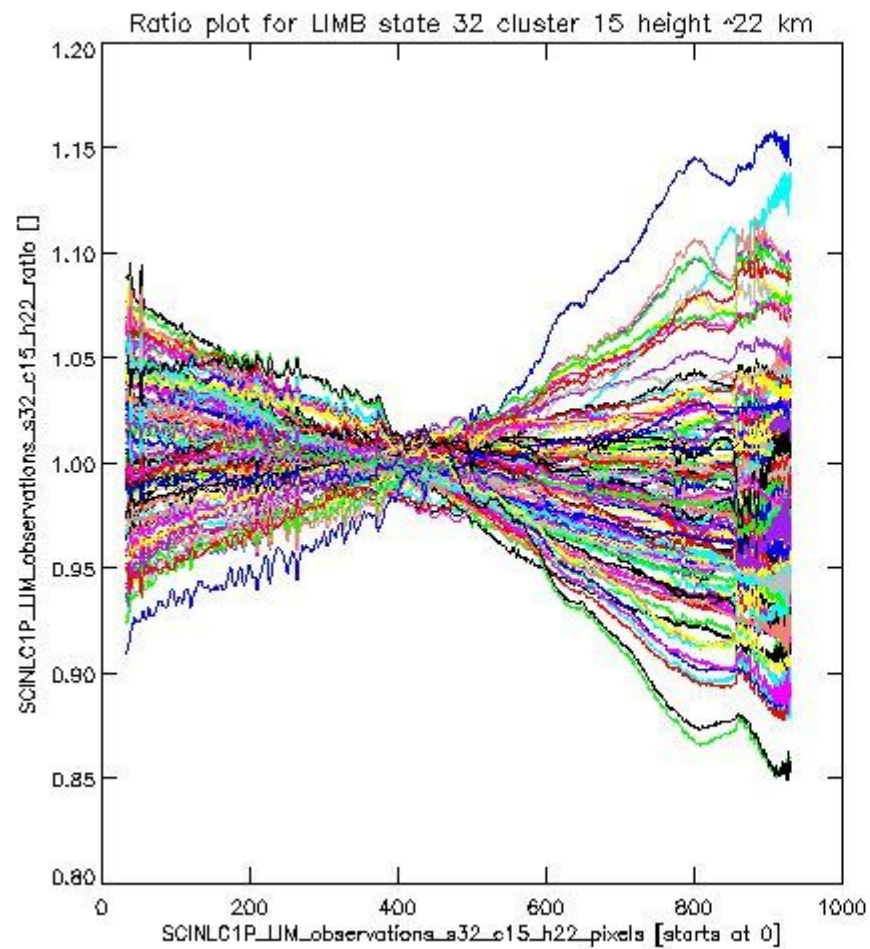
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110721_15.PNG

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 | 21JUL2011 10:55:19.244 |
| Start time of last sample | 21JUL2011 23:04:42.804 |
| Reference period start time | 21JUN2011 00:51:58.909 |
| Reference period stop time | 19JUL2011 10:56:12.307 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |



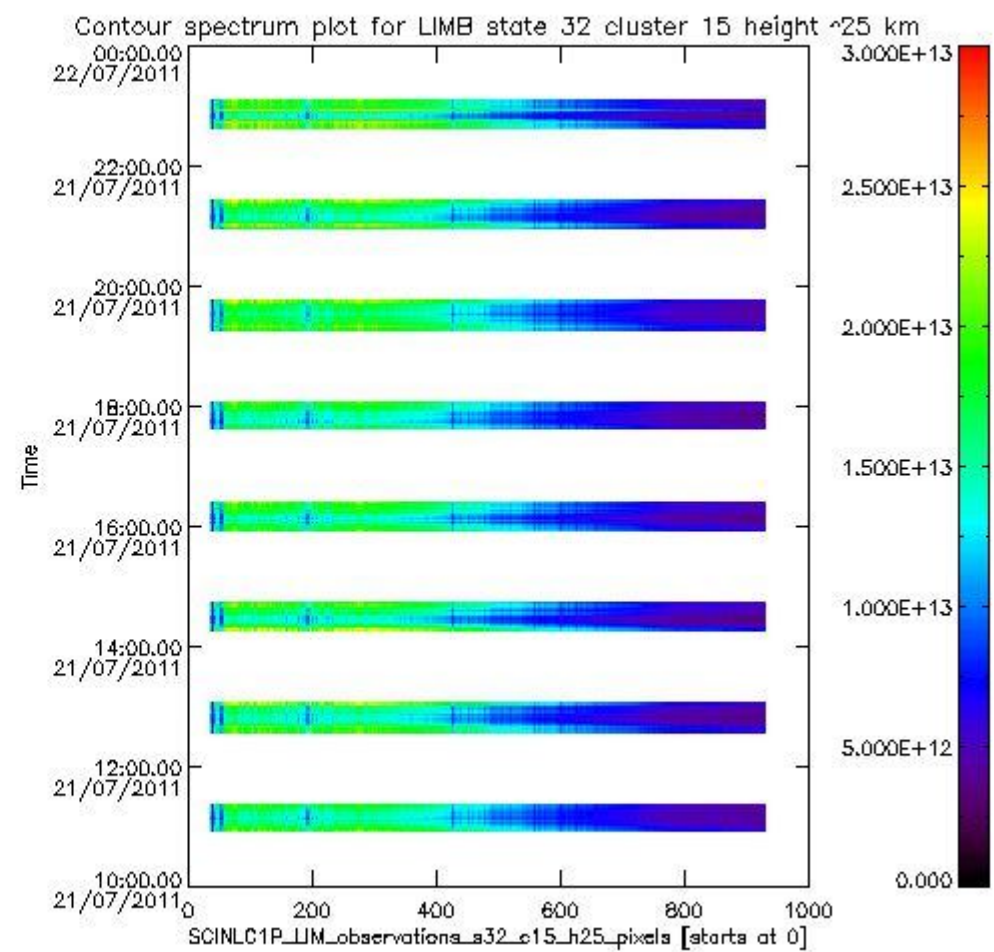
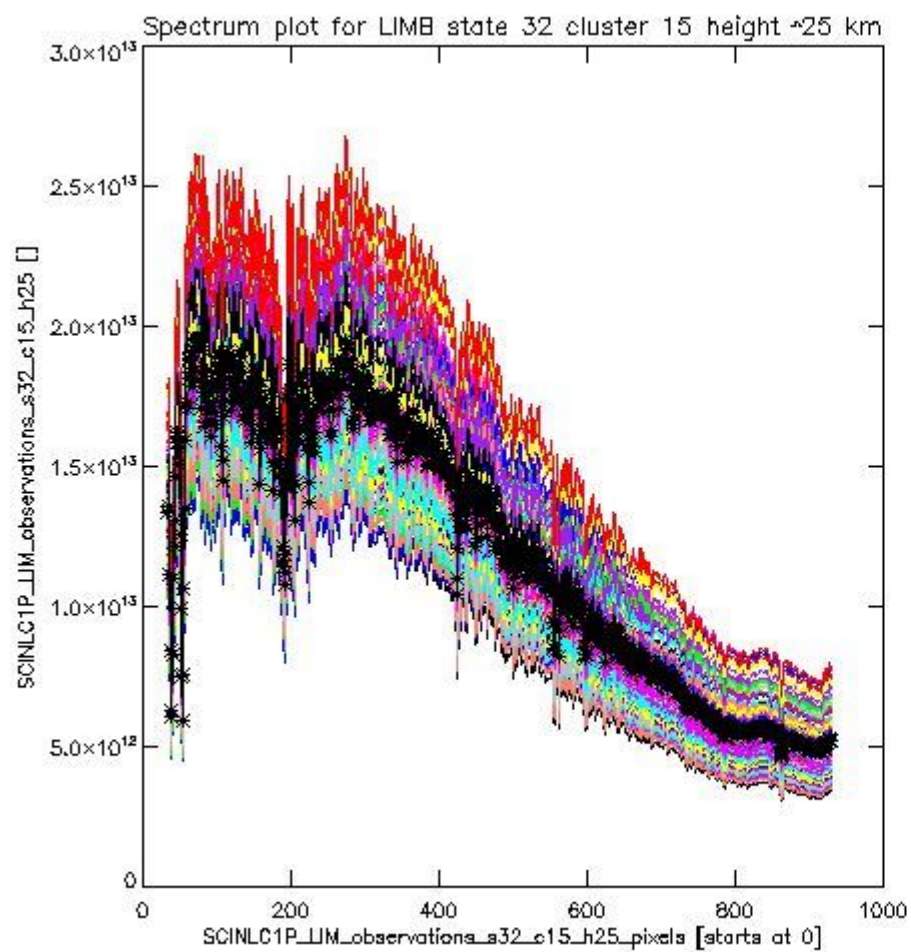
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110721_16.PNG

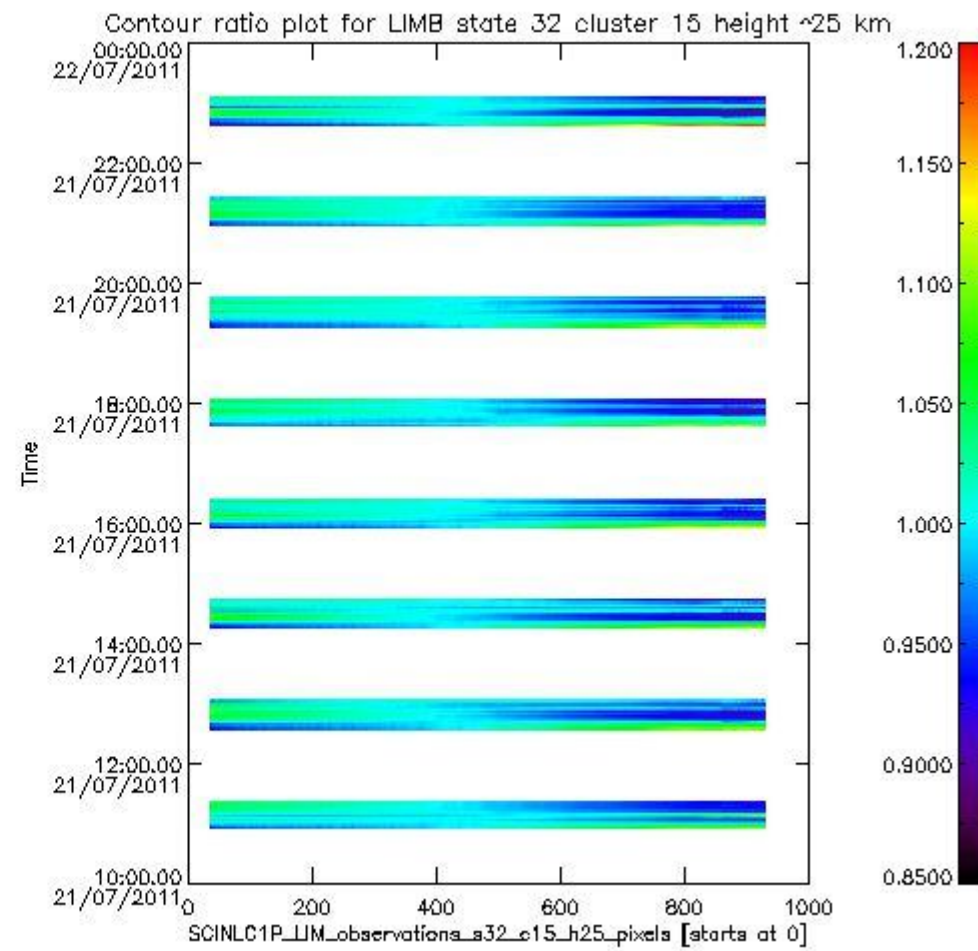
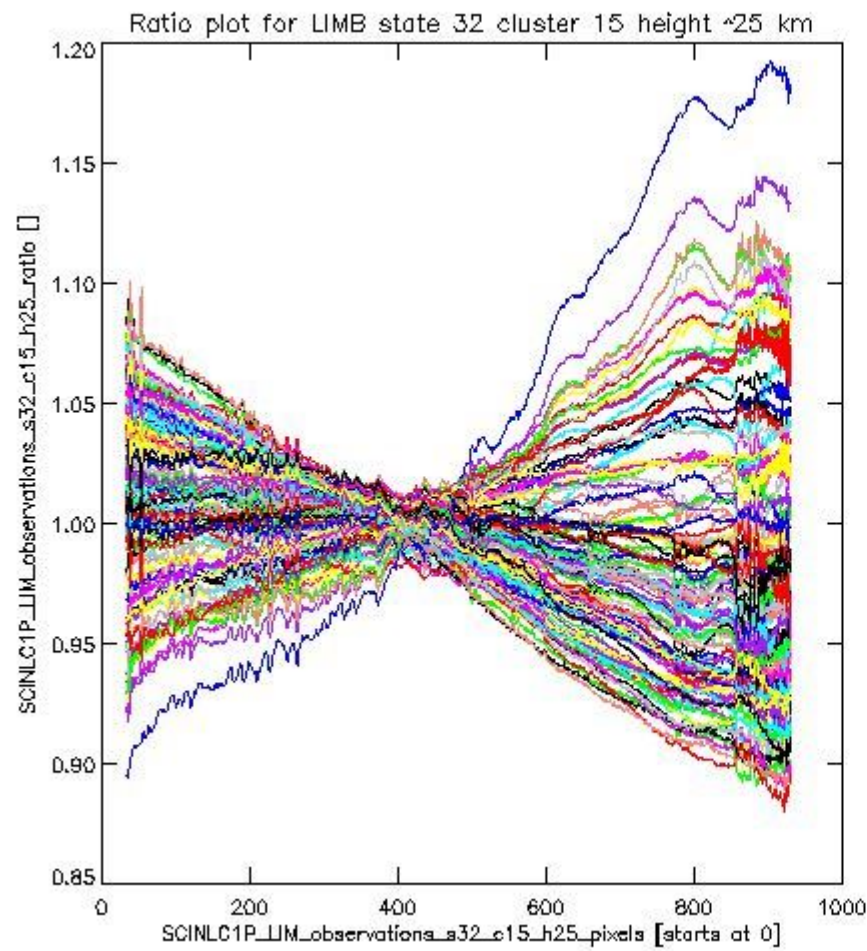


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110721_17.PNG

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 | 21JUL2011 10:55:19.244 |
| Start time of last sample | 21JUL2011 23:04:42.804 |
| Reference period start time | 21JUN2011 00:51:58.909 |
| Reference period stop time | 19JUL2011 10:56:12.307 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |

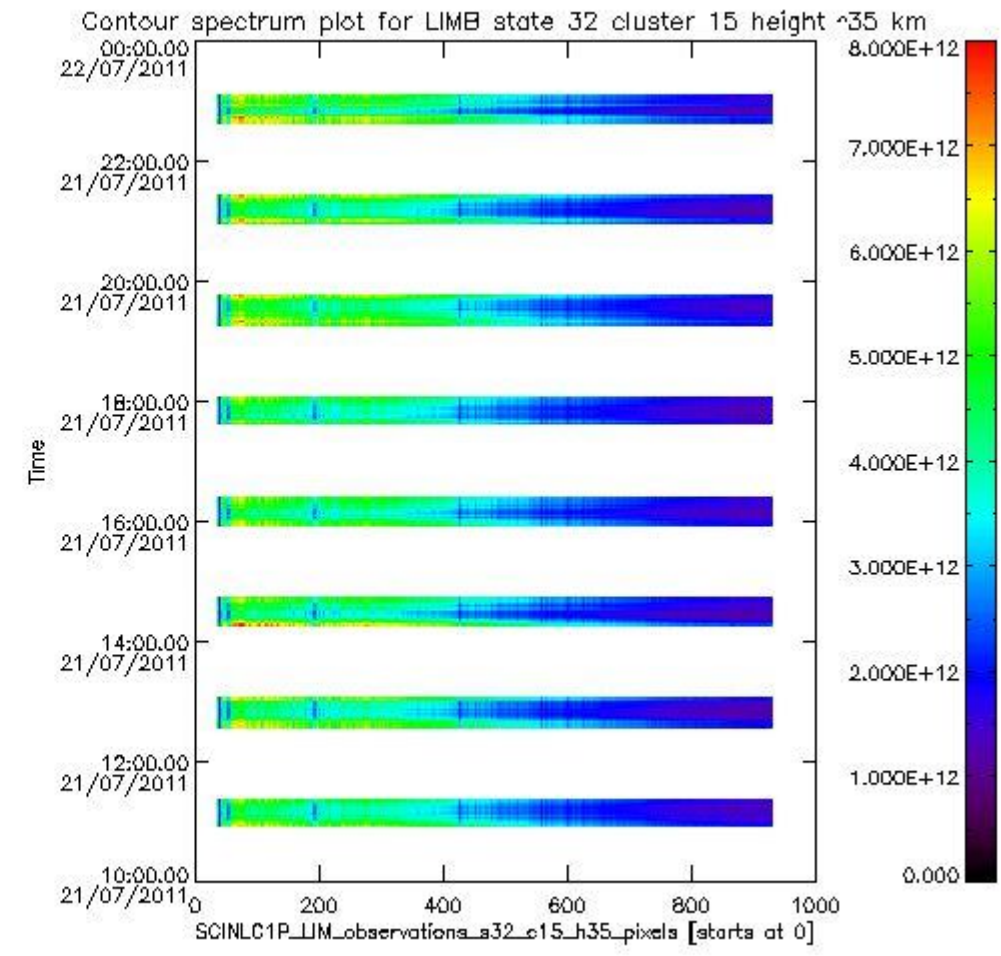
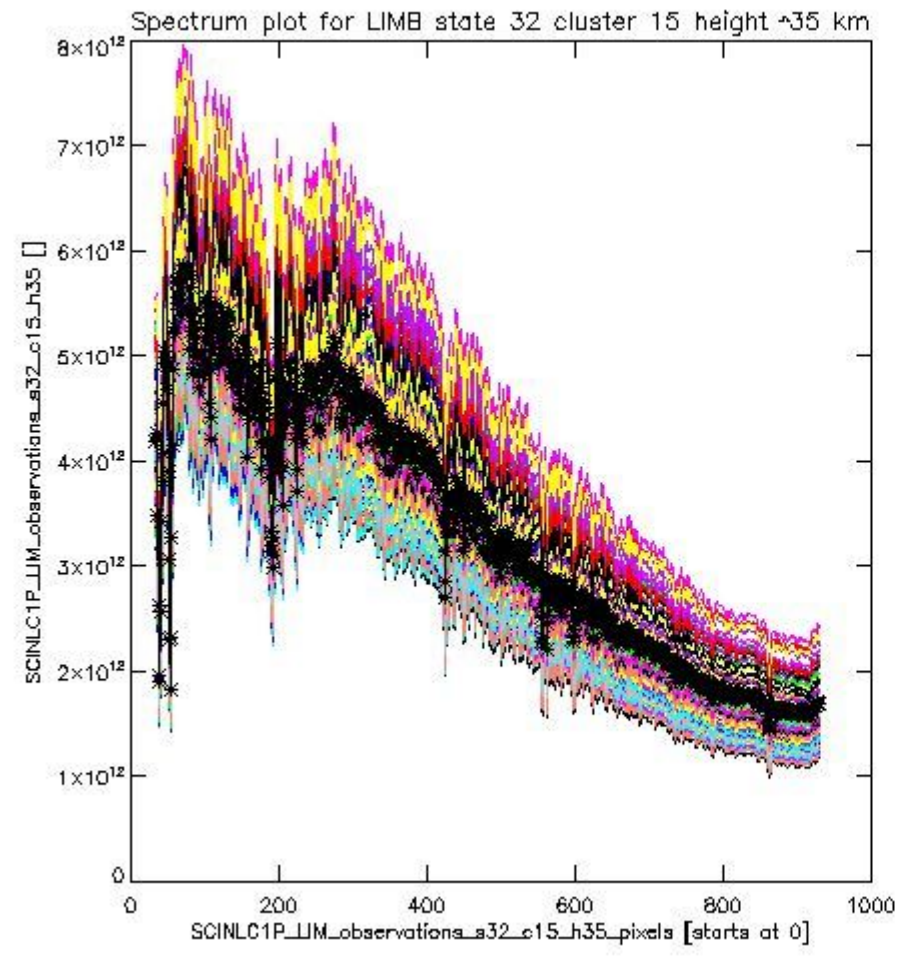




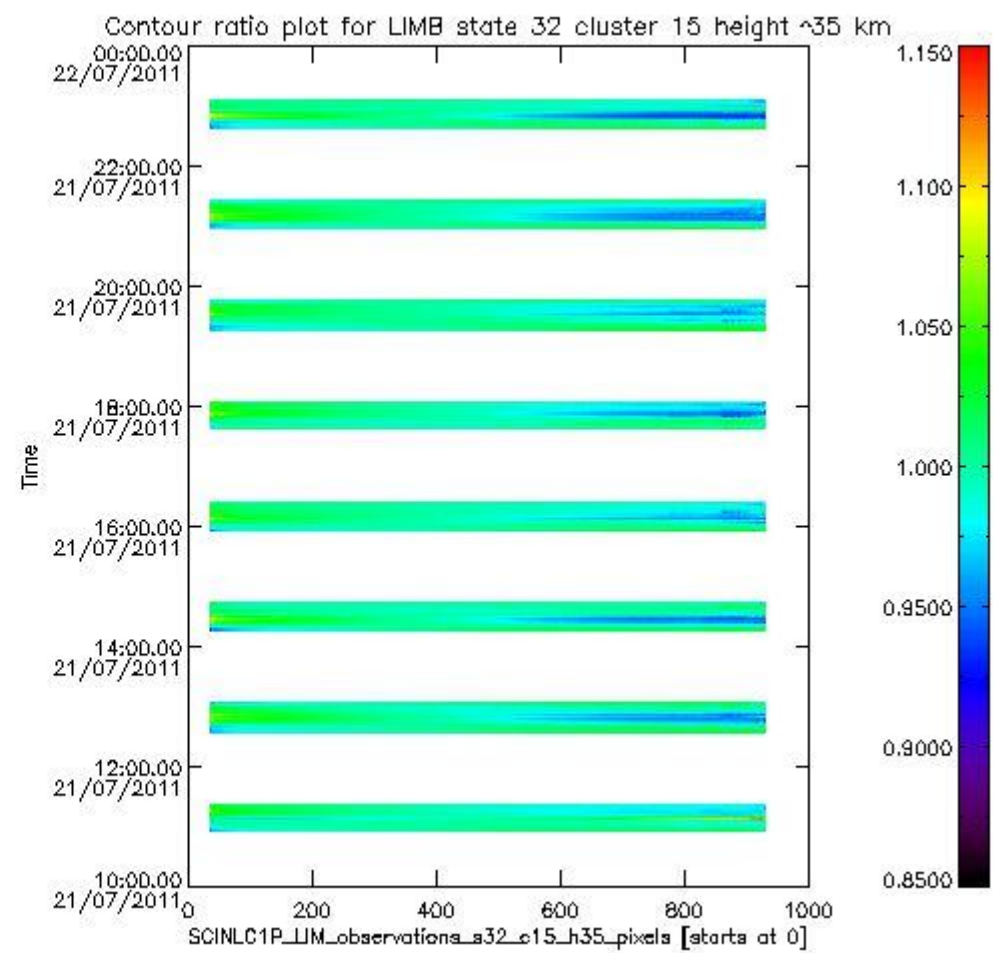
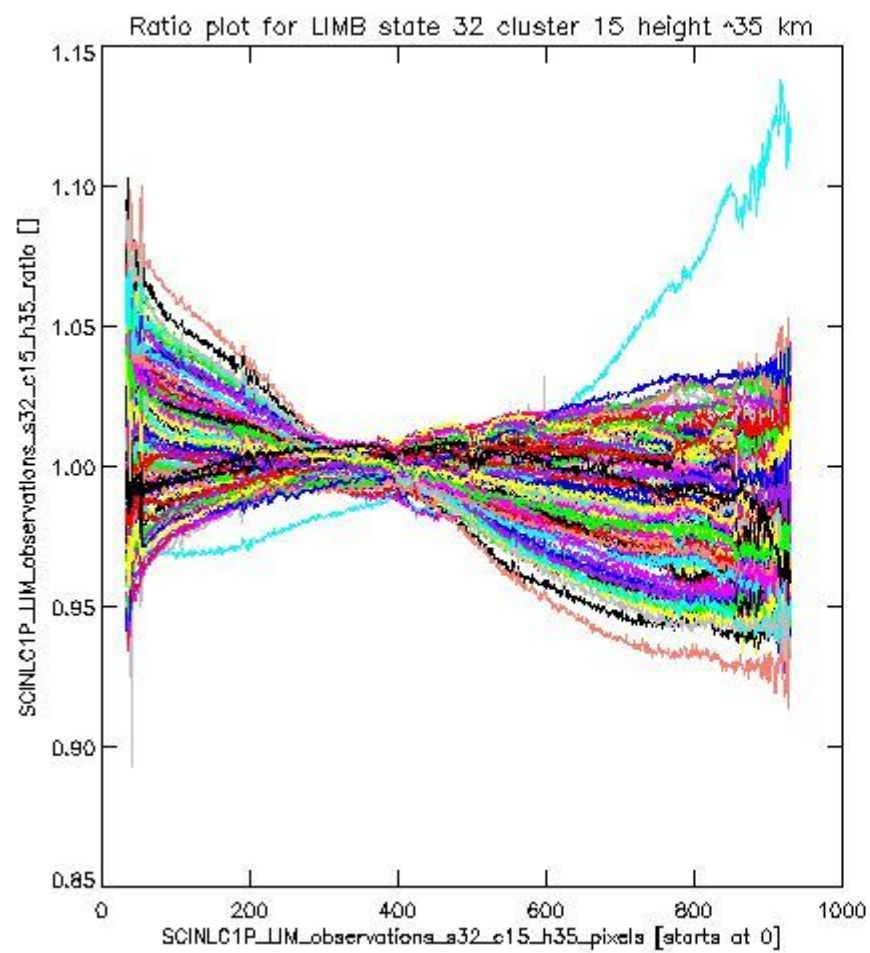
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110721_19.PNG

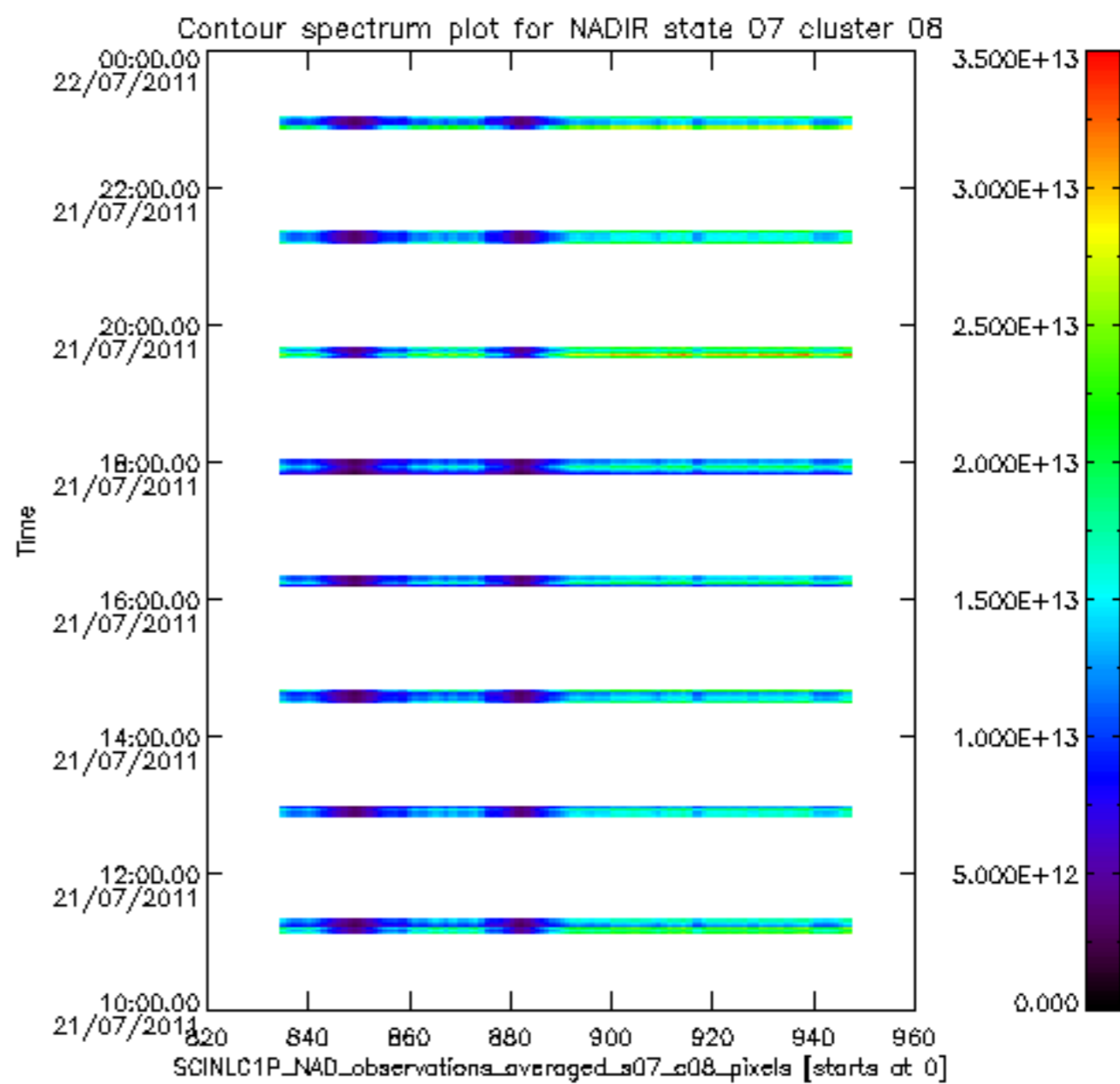
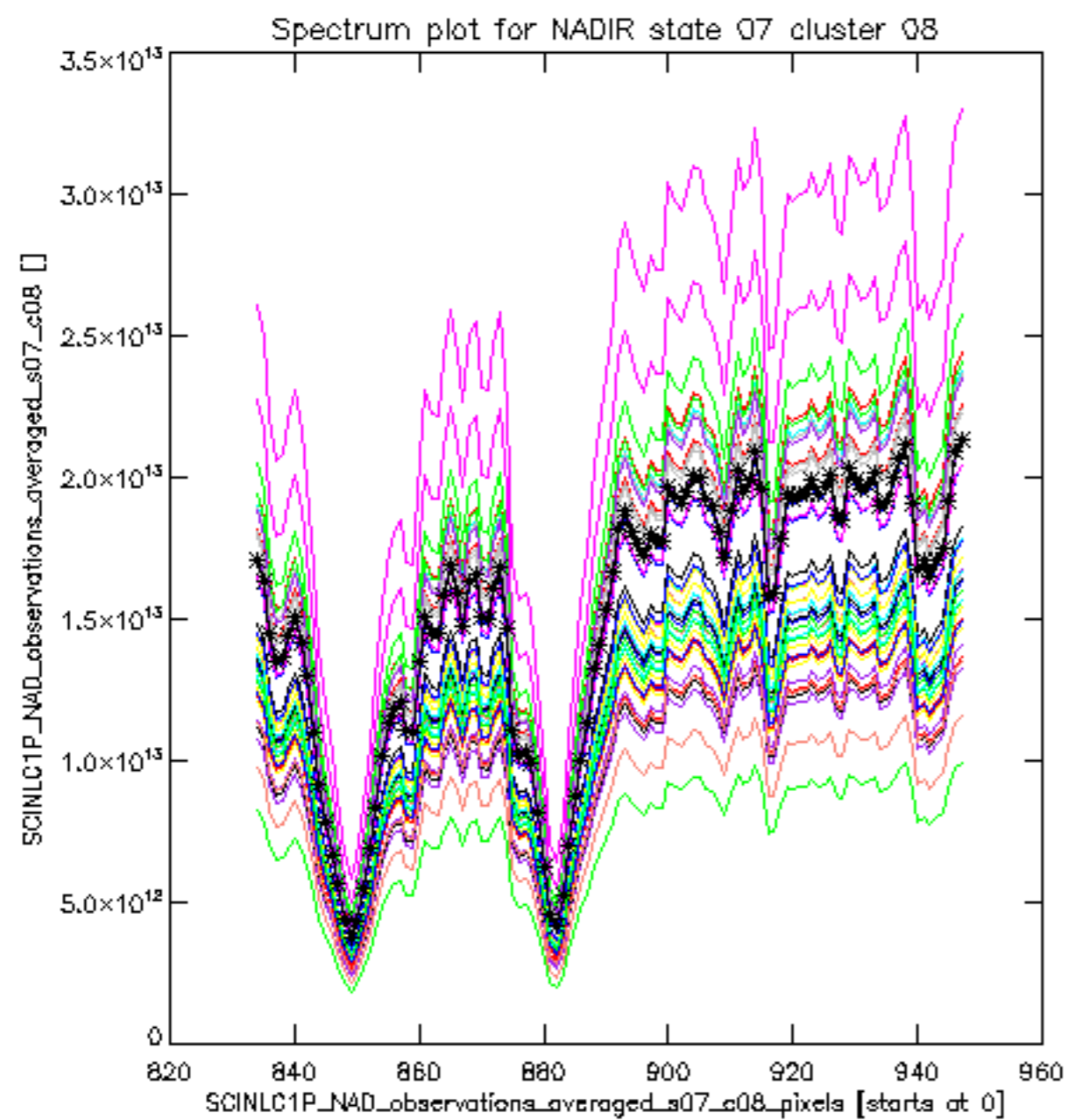
1.2.11 LIMB state 32 cluster 15 height ~35 km The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

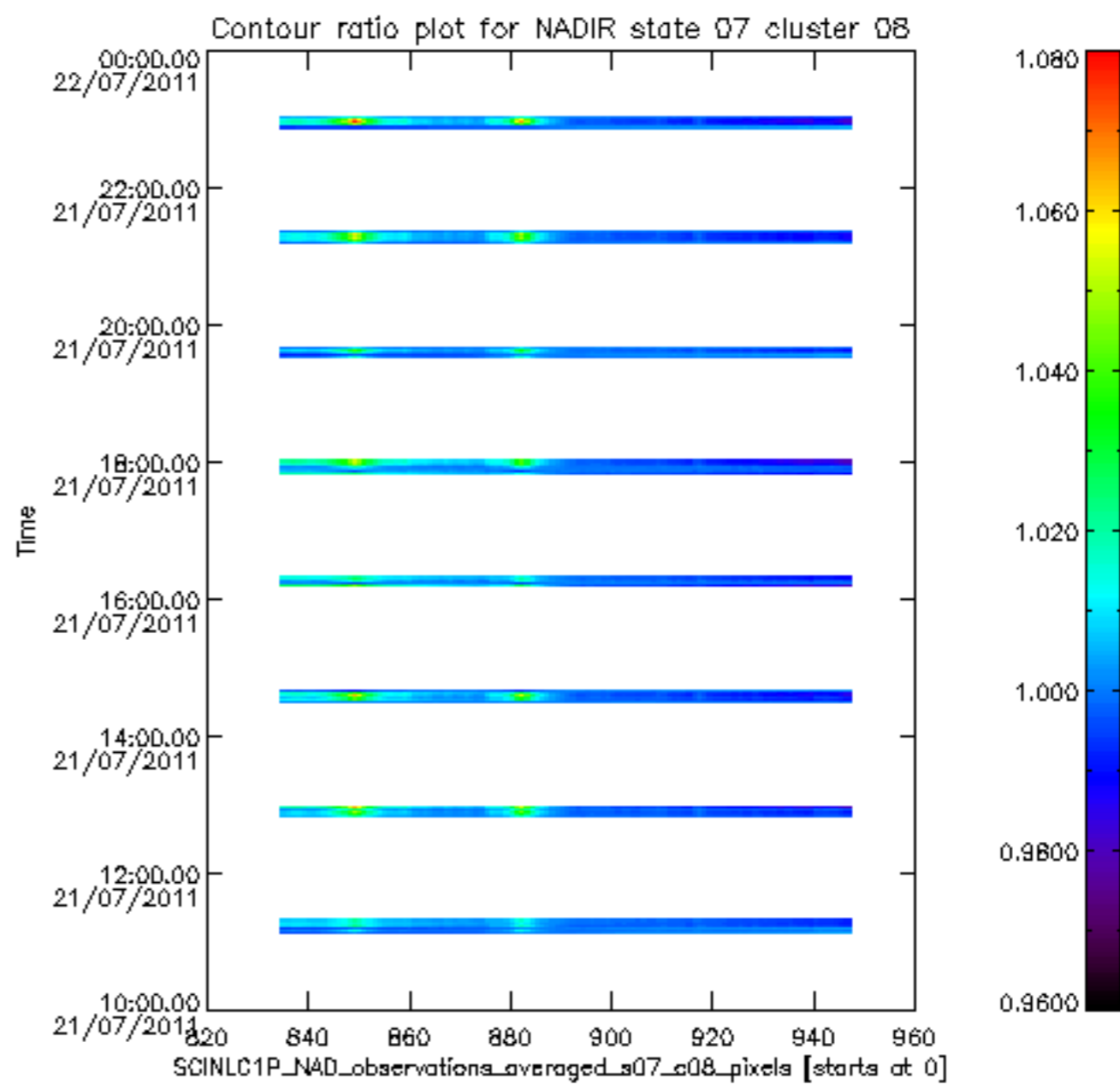
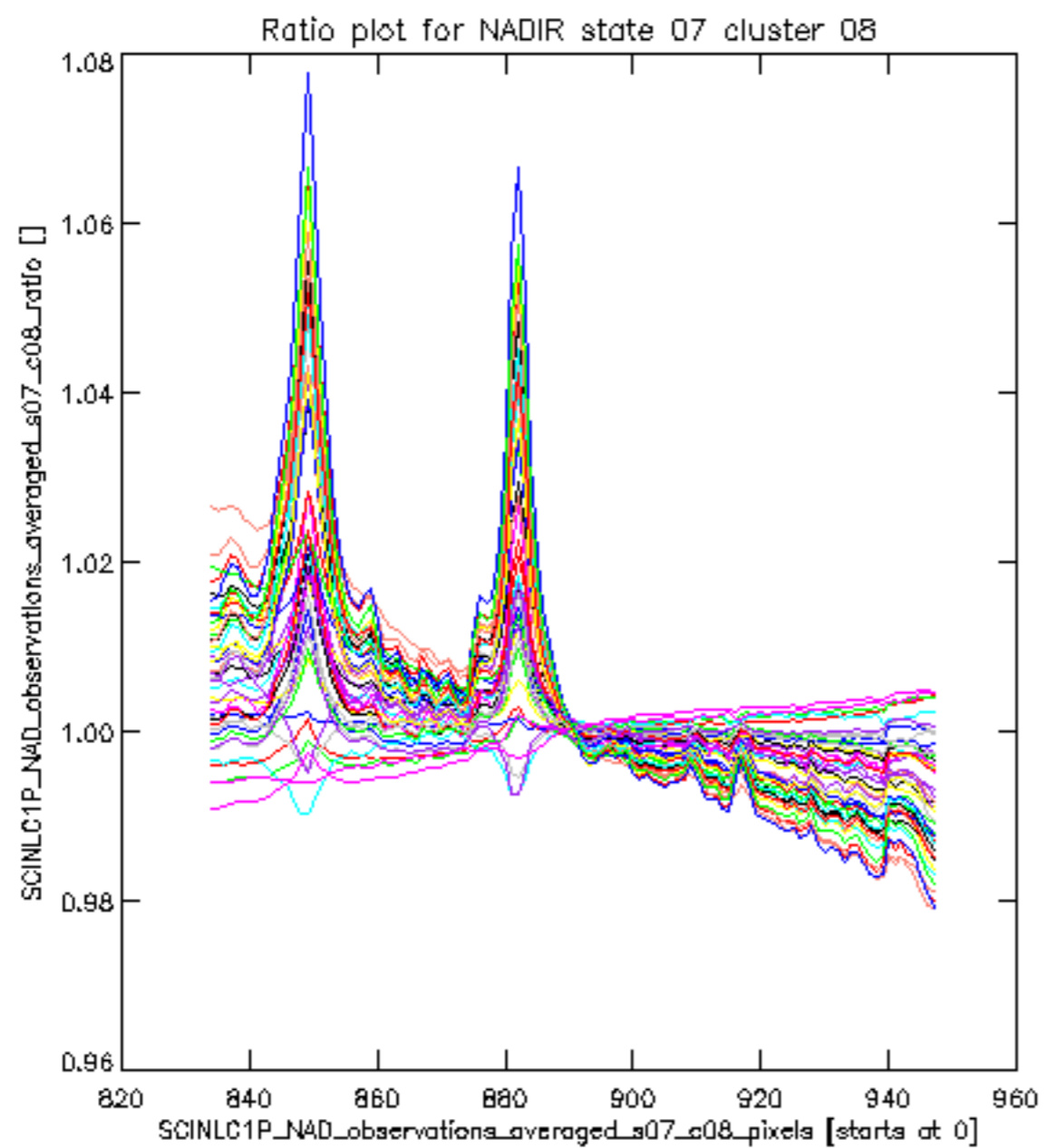
| Item | Value |
|----------------------------------|------------------------|
| Start time of first sample | 21JUL2011 10:55:19.244 |
| Start time of last sample | 21JUL2011 23:04:42.804 |
| Reference period start time | 21JUN2011 00:51:58.909 |
| Reference period stop time | 19JUL2011 10:56:12.307 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |

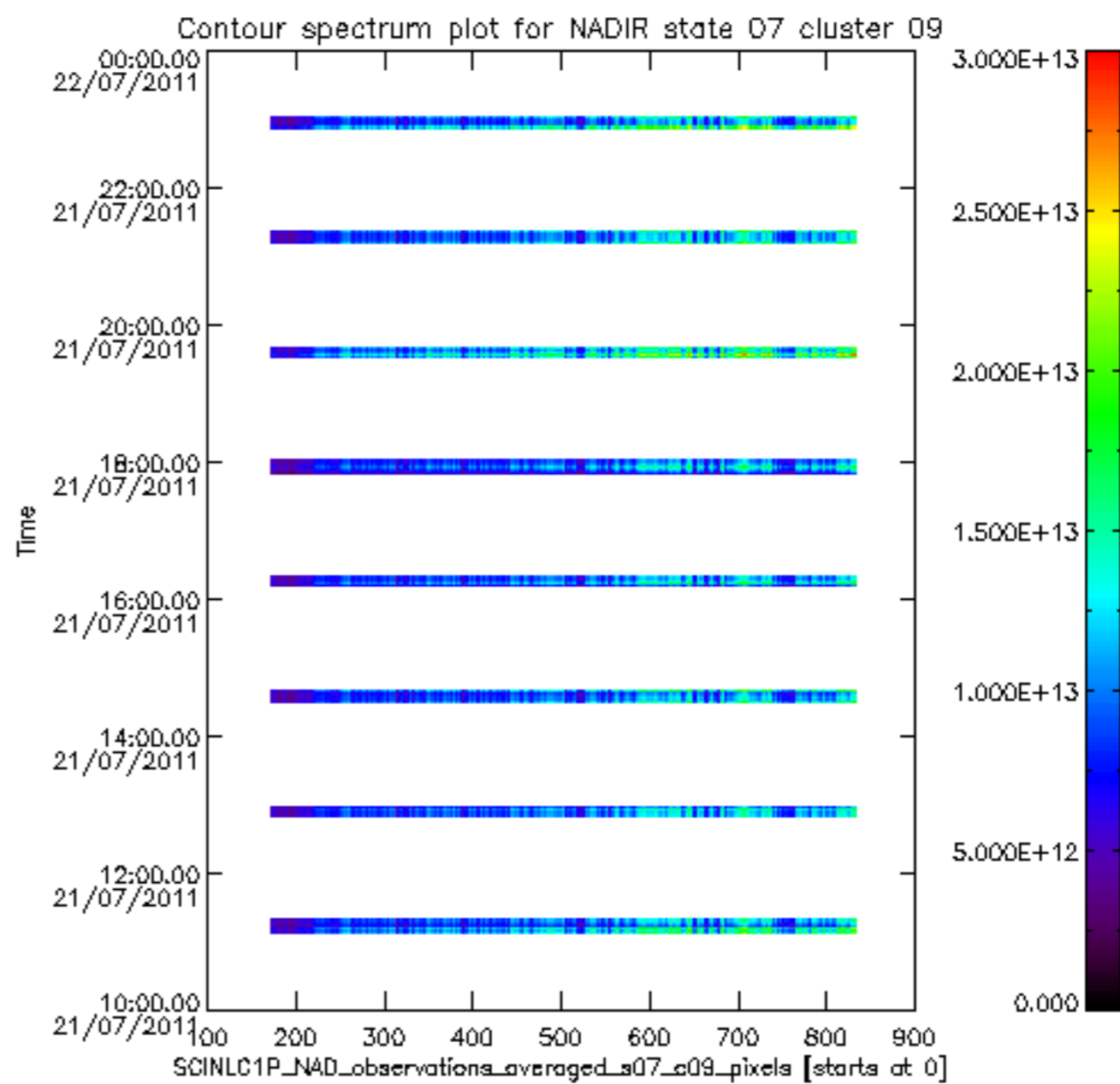
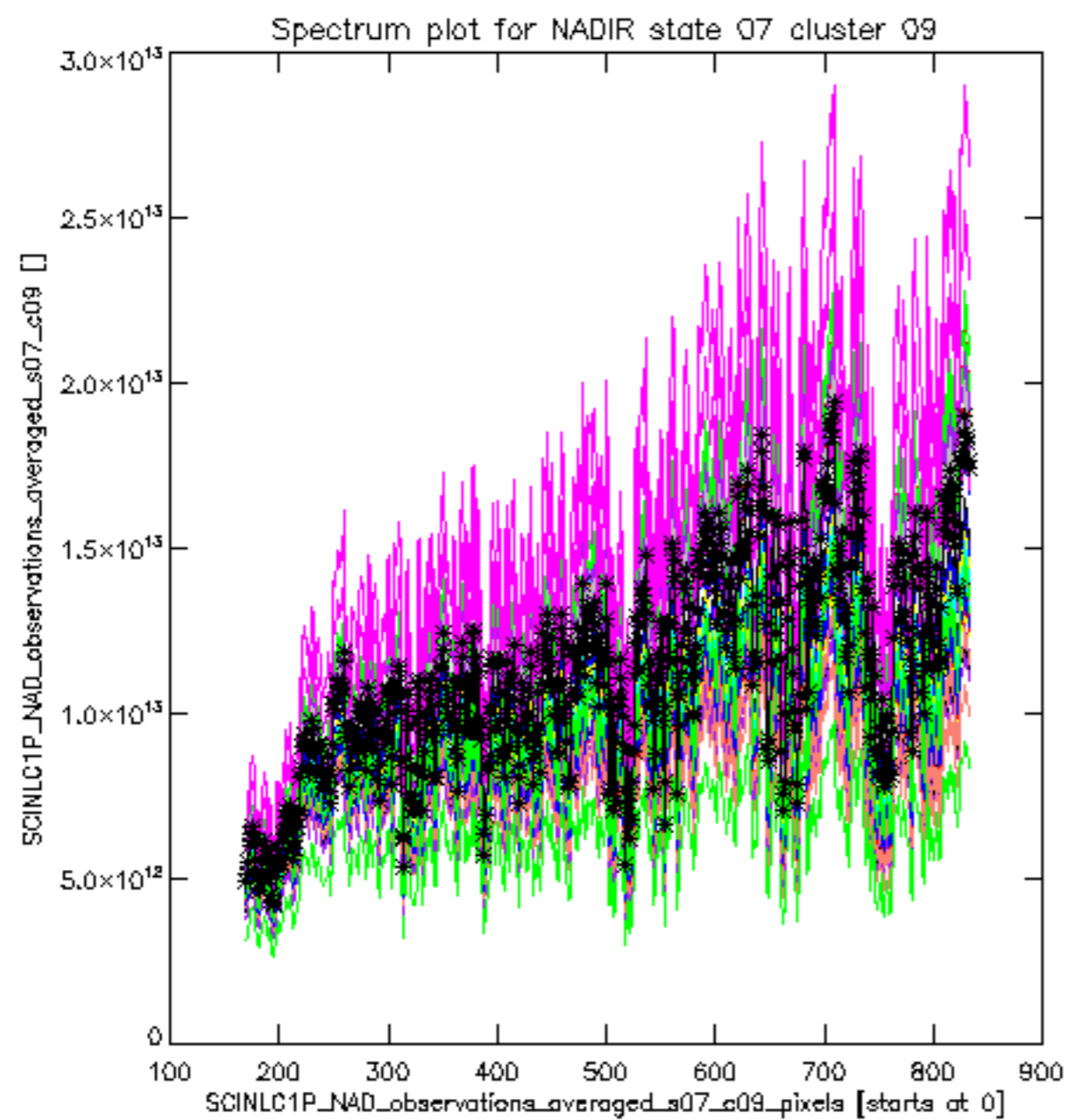


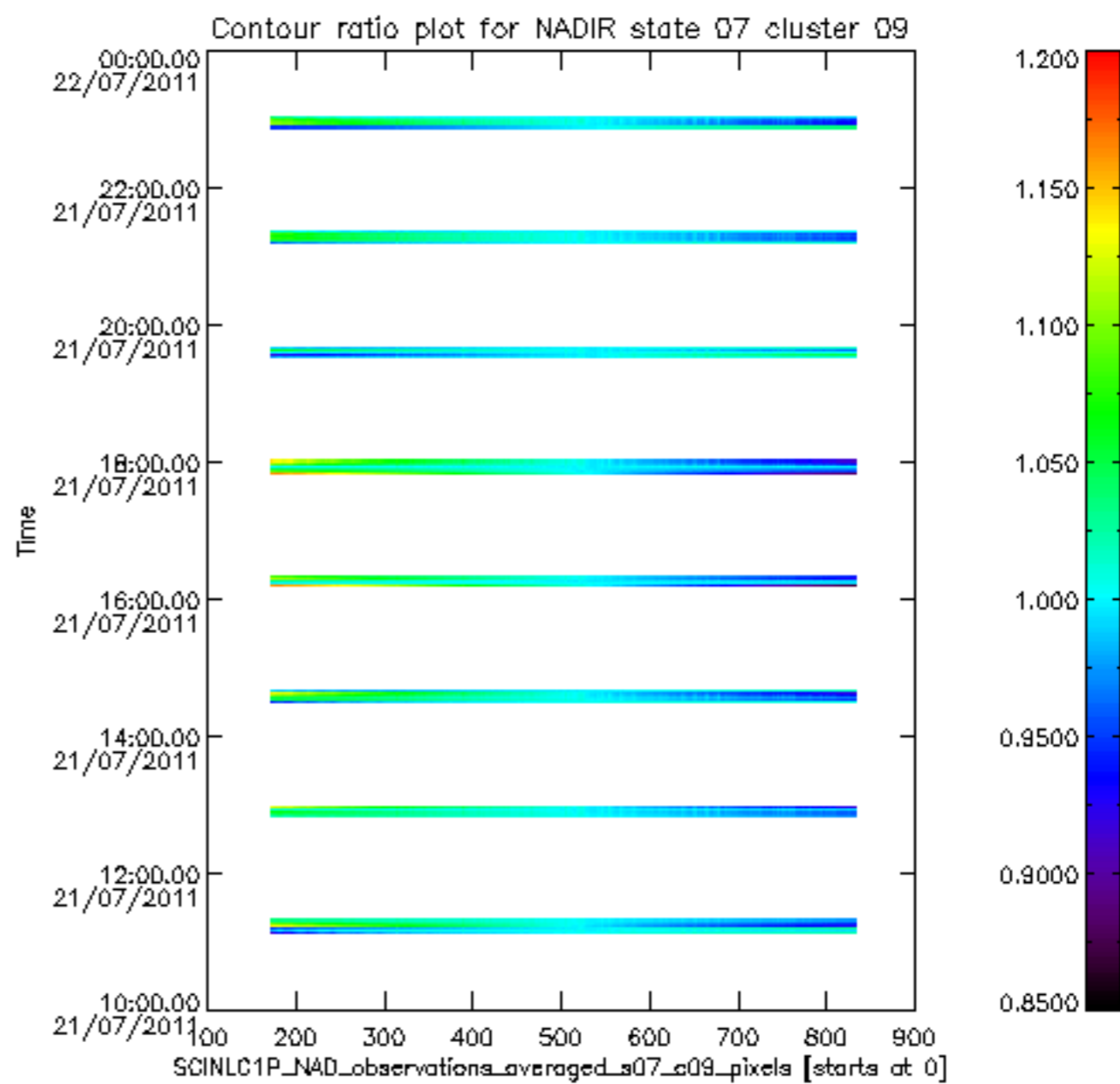
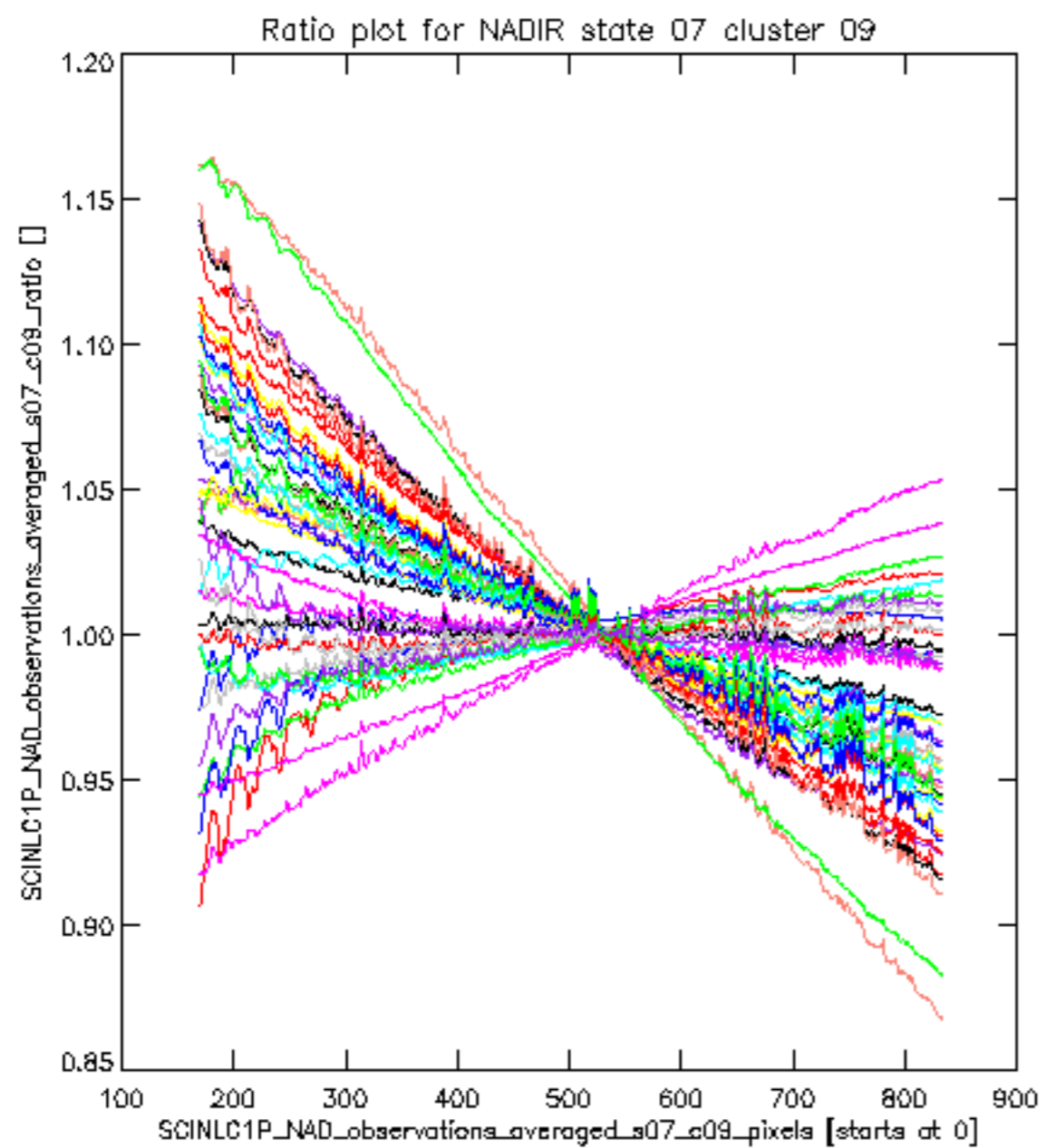
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110721_20.PNG

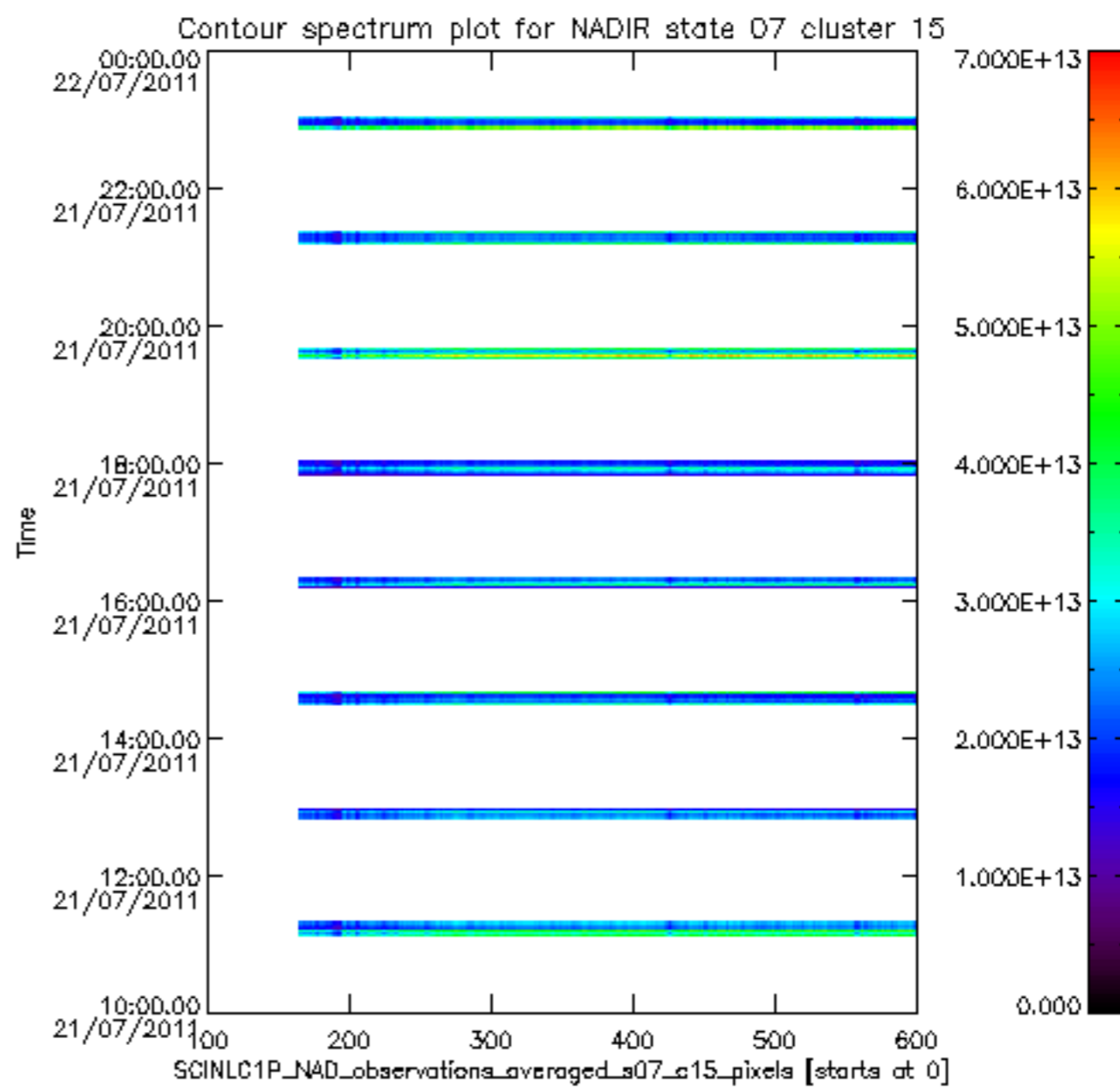
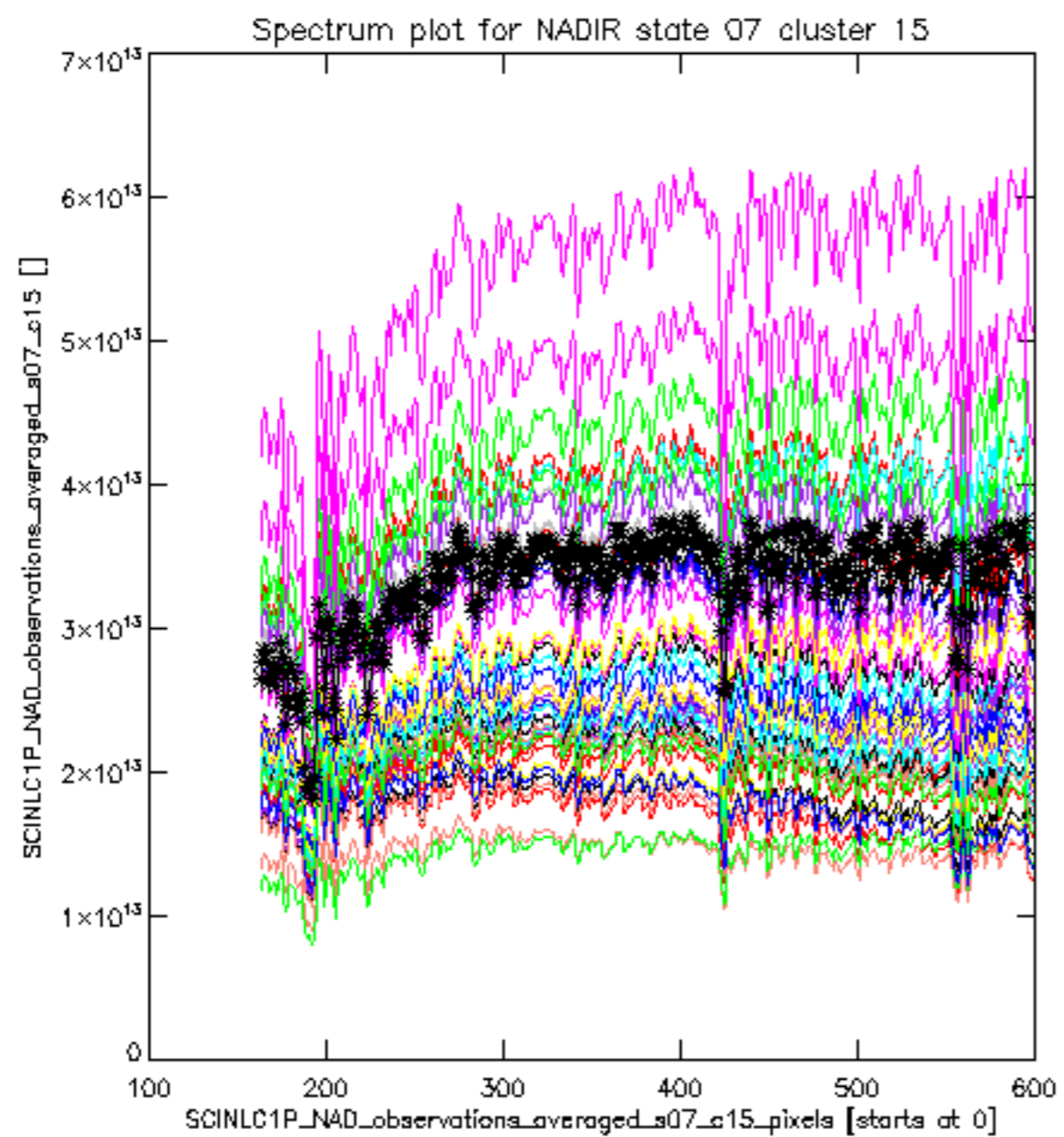


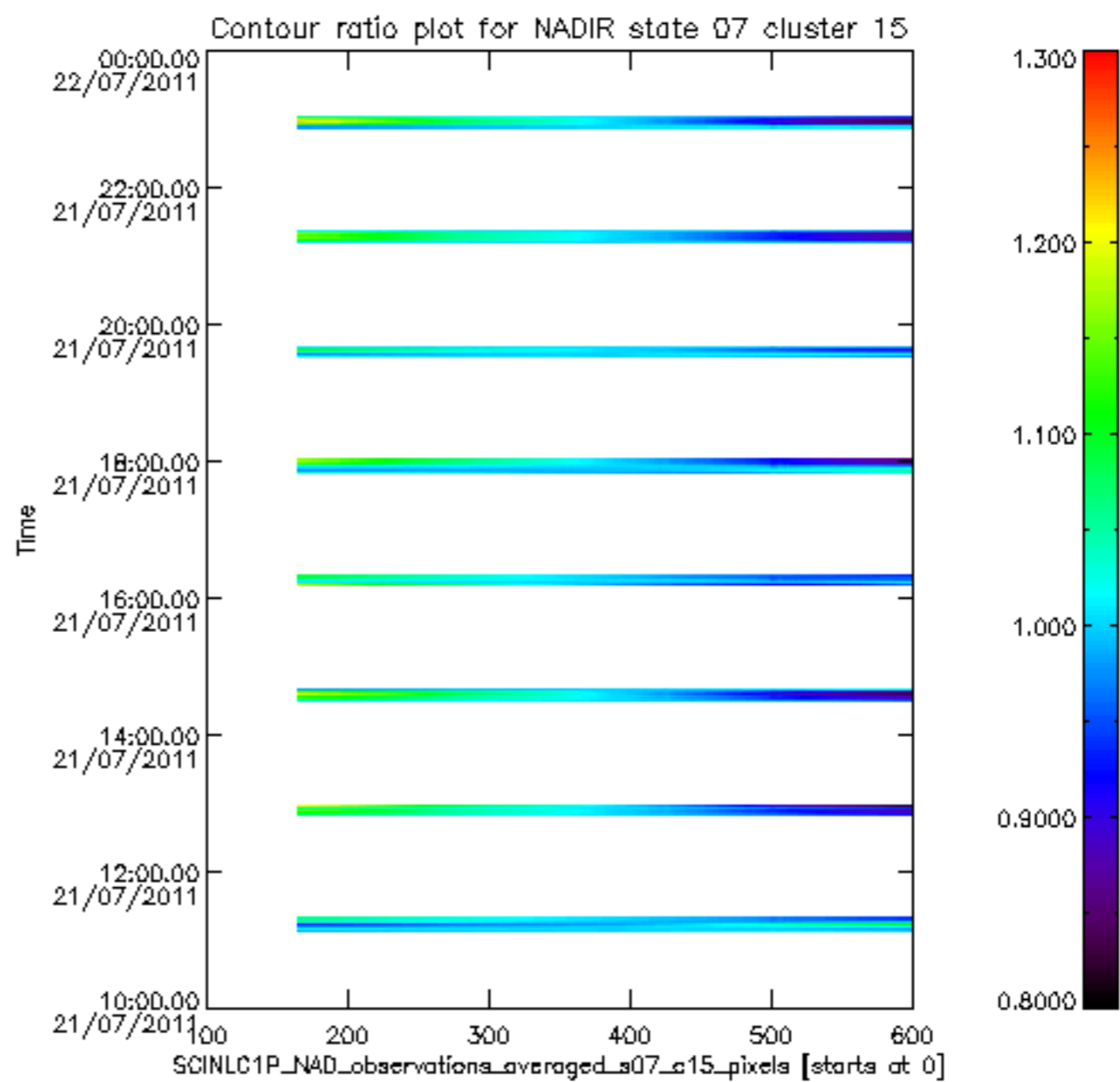
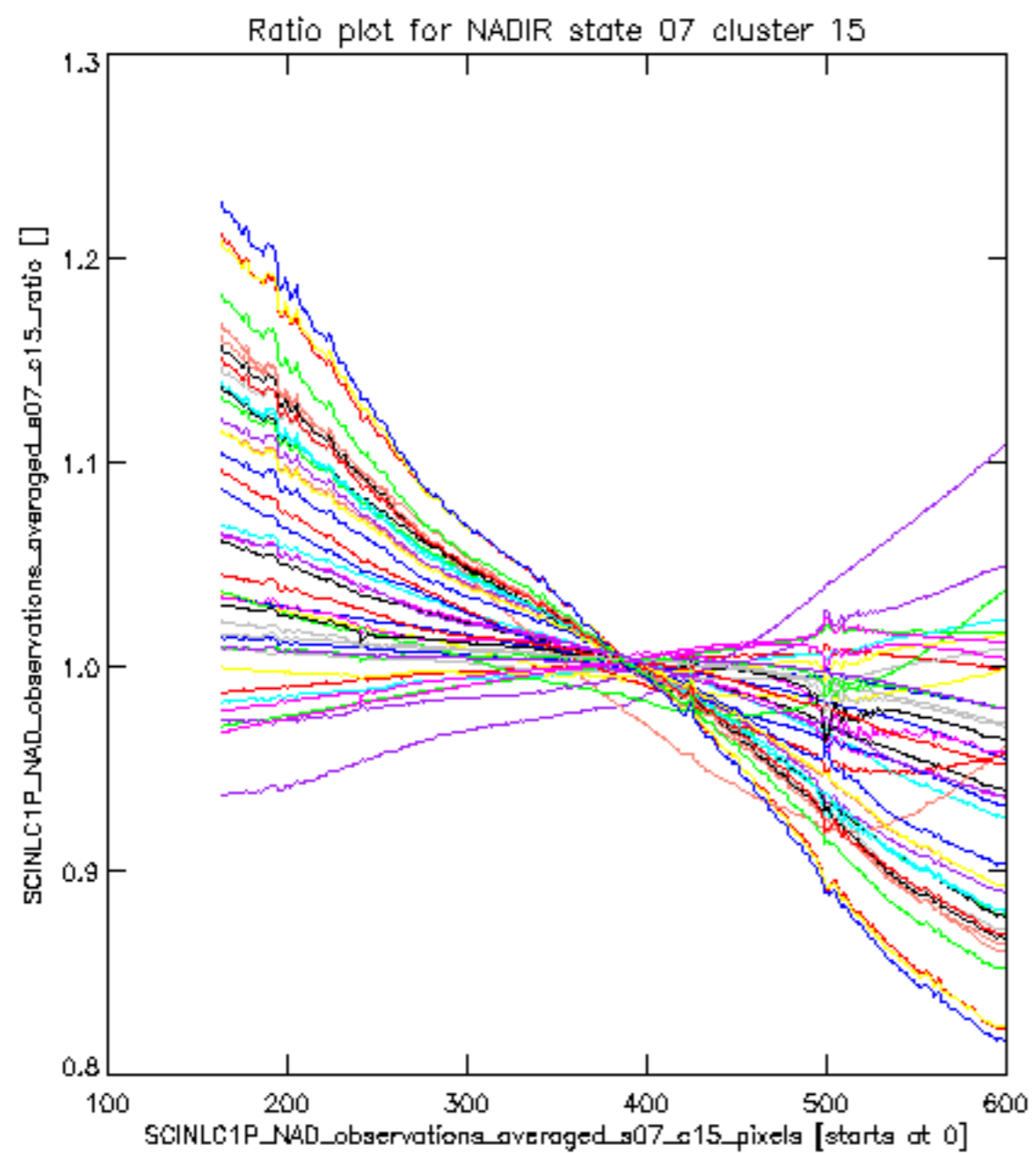


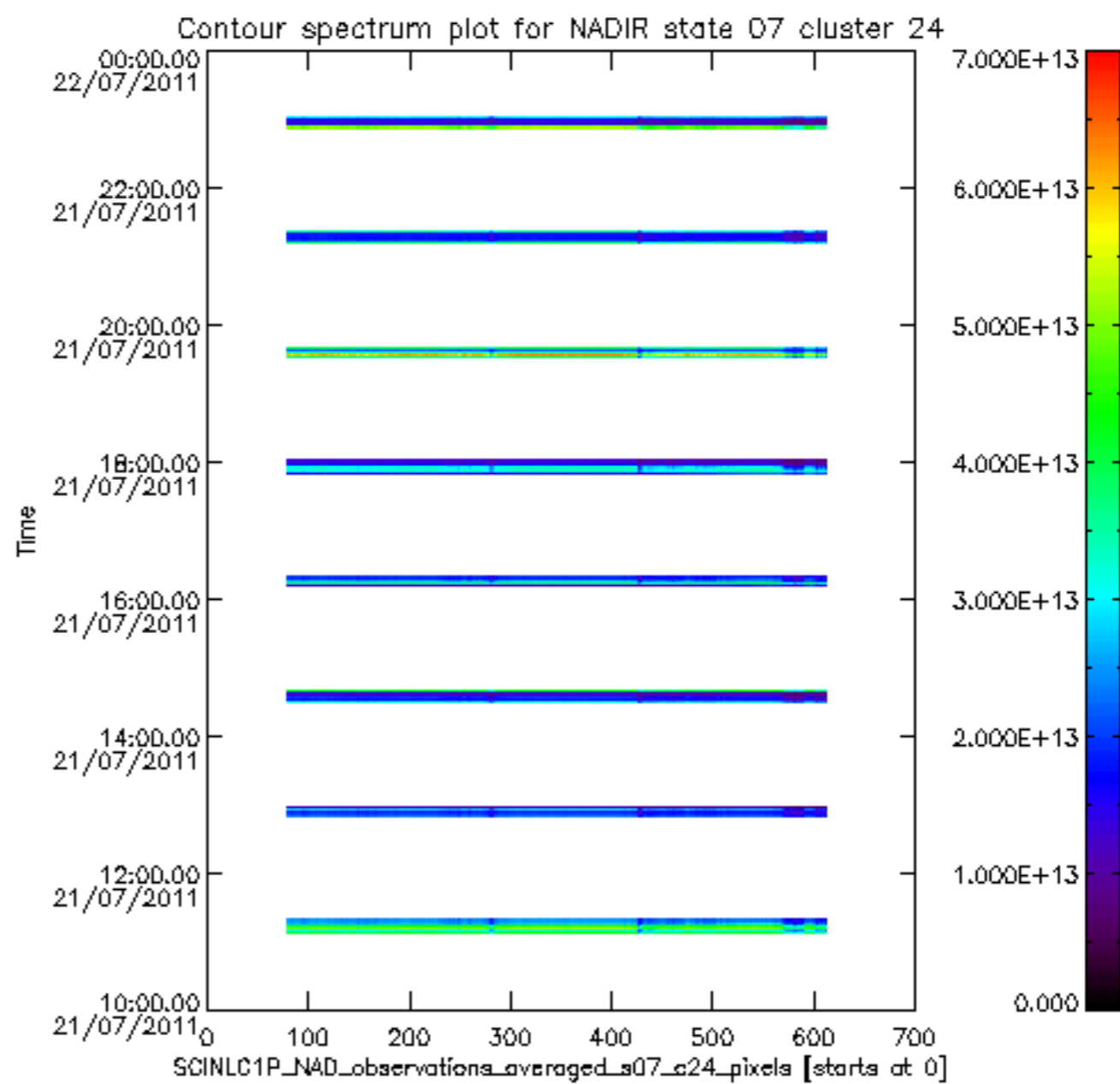
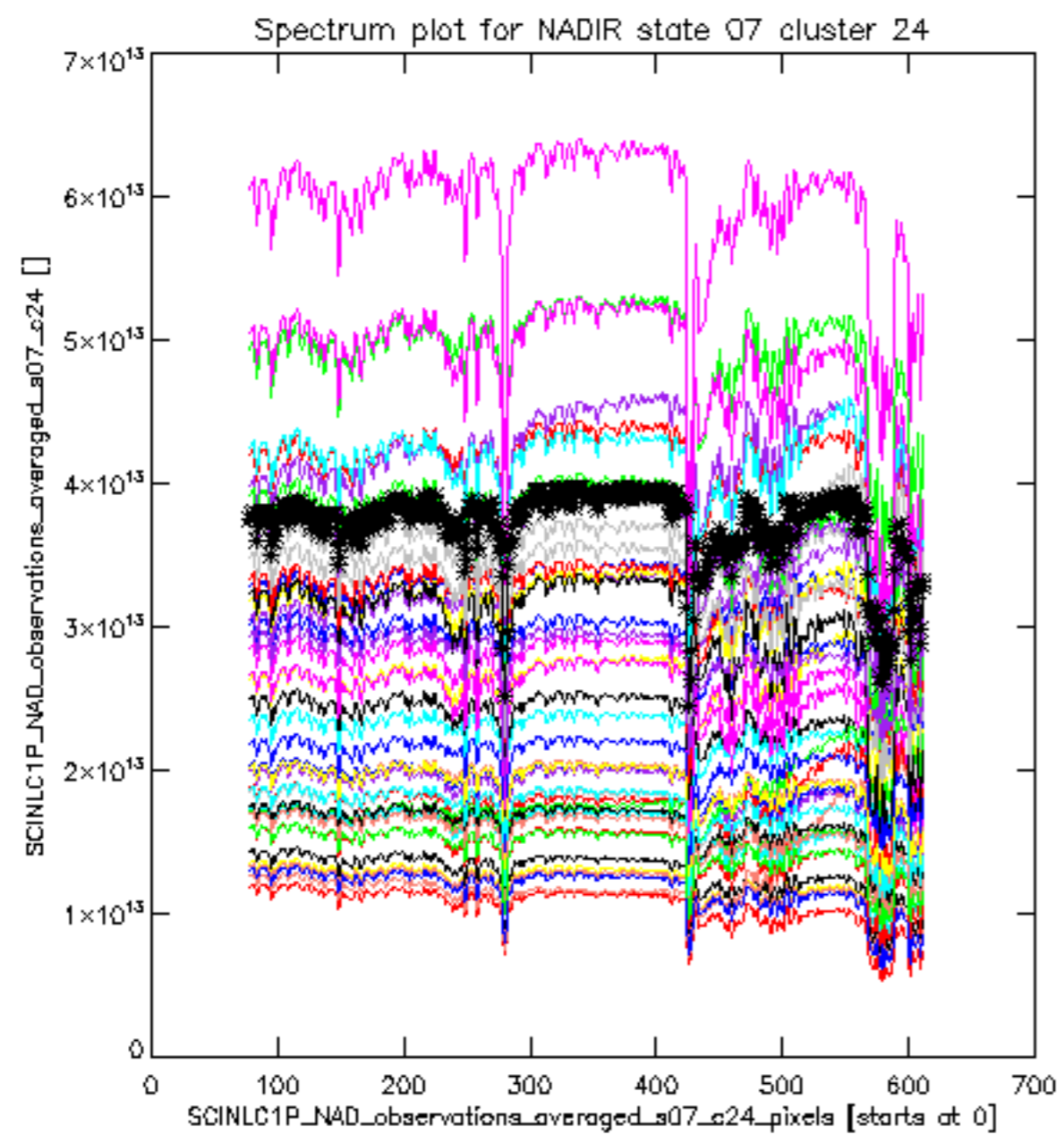


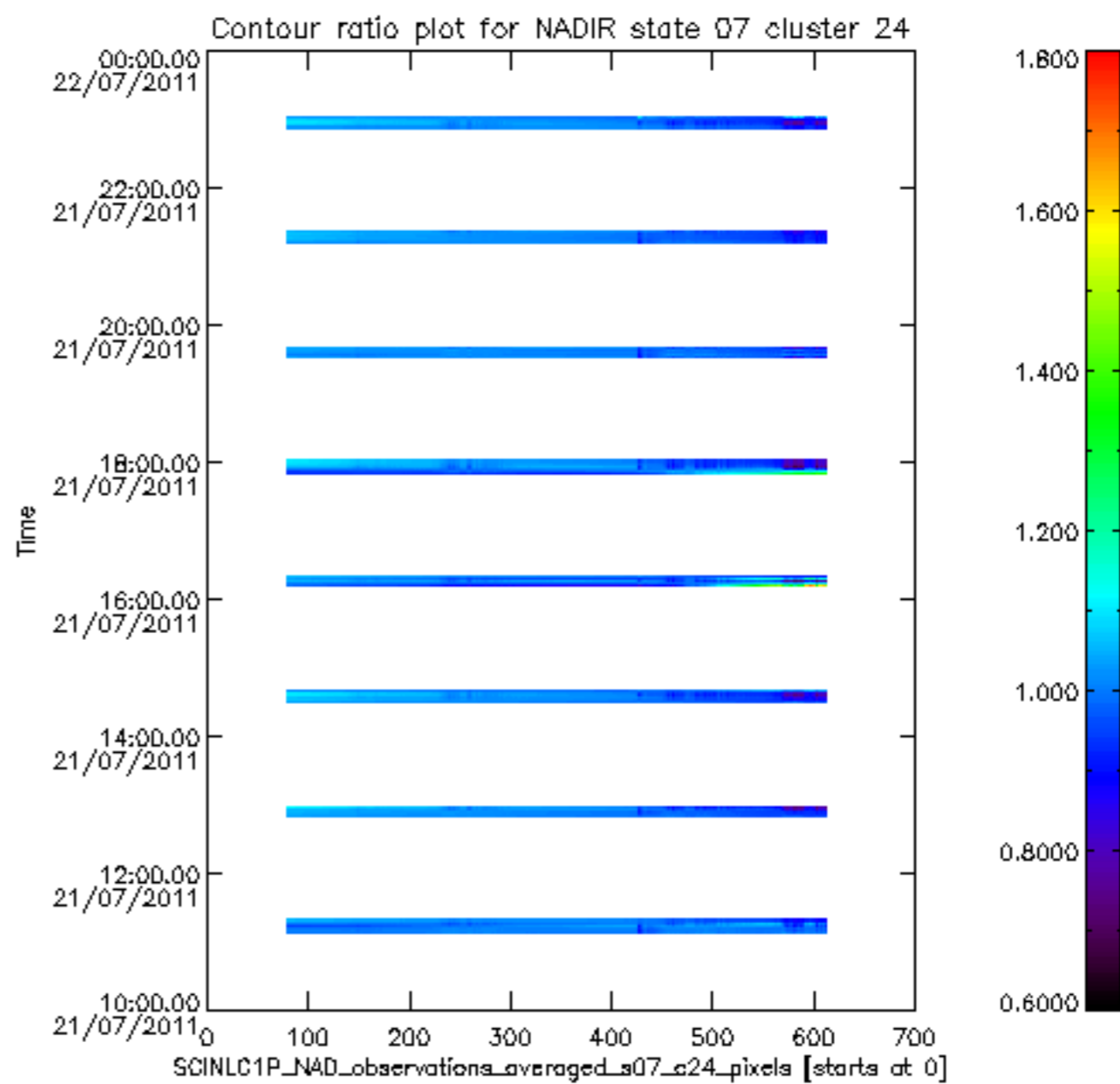
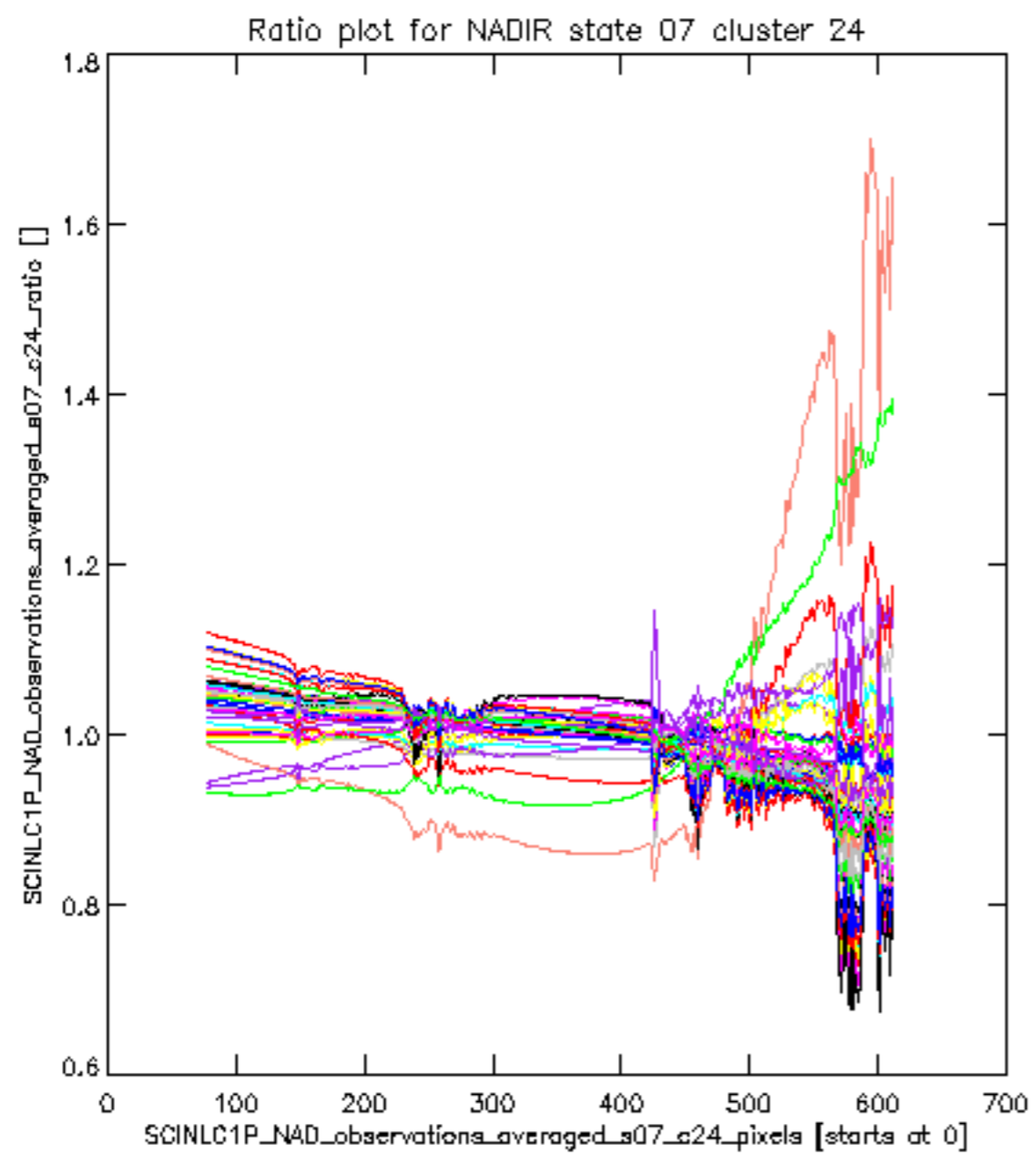




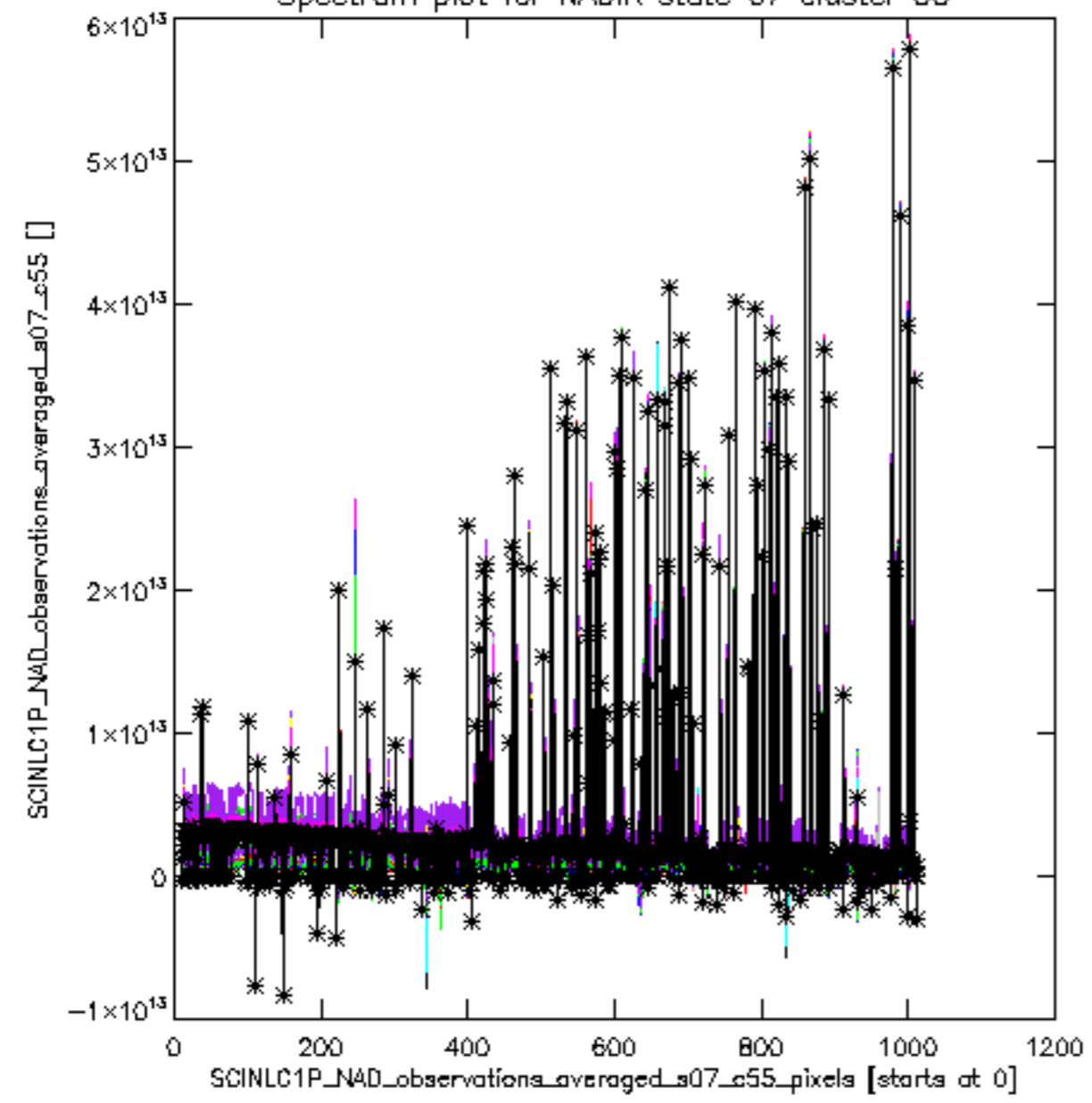








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

