

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 | 16MAR2011 06:55:42 |
| Data source version | SCIA/7.04-U |
| Processing scope for products | 05MAR2011 00:00:00 to 06MAR2011 00:00:00 |
| Start time of first product within scope | 05MAR2011 00:00:07 |
| Stop time of last product within scope | 06MAR2011 00:33:45 |
| 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 | 05MAR2011 00:33:18.244 | 05MAR2011 23:58:30.387 |
| 1 | NADIR | 07 | 09 | N/A | 05MAR2011 00:33:18.244 | 05MAR2011 23:58:30.387 |
| 2 | NADIR | 07 | 15 | N/A | 05MAR2011 00:33:18.244 | 05MAR2011 23:58:30.387 |
| 3 | NADIR | 07 | 24 | N/A | 05MAR2011 00:33:18.244 | 05MAR2011 23:58:30.387 |
| 4 | NADIR | 07 | 55 | N/A | 05MAR2011 00:33:18.244 | 05MAR2011 23:58:30.387 |
| 5 | LIMB | 32 | 09 | ~19 km | 05MAR2011 00:18:04.861 | 05MAR2011 23:59:38.946 |
| 6 | LIMB | 32 | 09 | ~22 km | 05MAR2011 00:18:04.861 | 05MAR2011 12:27:09.339 |
| 7 | LIMB | 32 | 09 | ~25 km | 05MAR2011 00:18:04.861 | 05MAR2011 23:59:38.946 |
| 8 | LIMB | 32 | 15 | ~22 km | 05MAR2011 00:18:04.861 | 05MAR2011 12:27:09.339 |
| 9 | LIMB | 32 | 15 | ~25 km | 05MAR2011 00:18:04.861 | 05MAR2011 23:59:38.946 |
| 10 | LIMB | 32 | 15 | ~35 km | 05MAR2011 00:18:04.861 | 05MAR2011 12:27:09.339 |

1.1.3 Summary per product

The following table shows a summary for each product used in this report.

Products are linked to a corresponding server directory for view/download. Note: Link access may be restricted by security settings of your internet browser or firewall.

| # | Product name | Start time | Stop time | ProdErr | #nadir | #limb | #occ | #mon | #noprocc | #cmpl_drk | #incmpl_drk | Decont |
|---|--|--------------------|--------------------|---------|--------|-------|------|------|----------|-----------|-------------|--------|
| 0 | SCI_NLC_1CUDPA20110304_234858_000059653100_00117_47114_5138.N1 | 05MAR2011 00:00:07 | 05MAR2011 01:10:36 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 1 | SCI_NLC_1CUDPA20110305_012827_000060533100_00118_47115_5141.N1 | 05MAR2011 01:40:20 | 05MAR2011 02:50:35 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 2 | SCI_NLC_1CUDPA20110305_030925_000059653100_00119_47116_5142.N1 | 05MAR2011 03:20:34 | 05MAR2011 04:31:03 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 3 | SCI_NLC_1CUDPA20110305_044854_000060543100_00120_47117_5145.N1 | 05MAR2011 05:00:47 | 05MAR2011 06:11:02 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 4 | SCI_NLC_1CUDPA20110305_062952_000059653100_00121_47118_5147.N1 | 05MAR2011 06:41:01 | 05MAR2011 07:51:30 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 5 | SCI_NLC_1CUDPA20110305_080921_000060533100_00122_47119_5148.N1 | 05MAR2011 08:21:14 | 05MAR2011 09:31:29 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |

| | | | | | | | | | | | | |
|----|--|--------------------|--------------------|---|----|----|---|---|---|---|---|--|
| 6 | SCI_NLC_1CUDPA20110305_095018_000059653100_00123_47120_5151.N1 | 05MAR2011 10:01:28 | 05MAR2011 11:11:57 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 7 | SCI_NLC_1CUDPA20110305_112948_000060533100_00124_47121_5153.N1 | 05MAR2011 11:41:41 | 05MAR2011 12:51:56 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 8 | SCI_NLC_1CUDPA20110305_131045_000059653100_00125_47122_5154.N1 | 05MAR2011 13:21:55 | 05MAR2011 14:32:24 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 9 | SCI_NLC_1CUDPA20110305_145015_000060543100_00126_47123_5157.N1 | 05MAR2011 15:02:08 | 05MAR2011 16:12:23 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 10 | SCI_NLC_1CUDPA20110305_163112_000059653100_00127_47124_5158.N1 | 05MAR2011 16:42:22 | 05MAR2011 17:52:51 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 11 | SCI_NLC_1CUDPA20110305_181042_000060533100_00128_47125_5160.N1 | 05MAR2011 18:22:35 | 05MAR2011 19:33:10 | 0 | 35 | 31 | 0 | 1 | 1 | 0 | 0 | |
| 12 | SCI_NLC_1CUDPA20110305_195139_000059653100_00129_47126_5162.N1 | 05MAR2011 20:02:49 | 05MAR2011 21:13:38 | 0 | 36 | 30 | 0 | 1 | 1 | 0 | 0 | |
| 13 | SCI_NLC_1CUDPA20110305_213108_000060533100_00130_47127_5166.N1 | 05MAR2011 21:43:03 | 05MAR2011 22:53:17 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 14 | SCI_NLC_1CUDPA20110305_231206_000059653100_00131_47128_5167.N1 | 05MAR2011 23:23:16 | 06MAR2011 00:33:45 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |

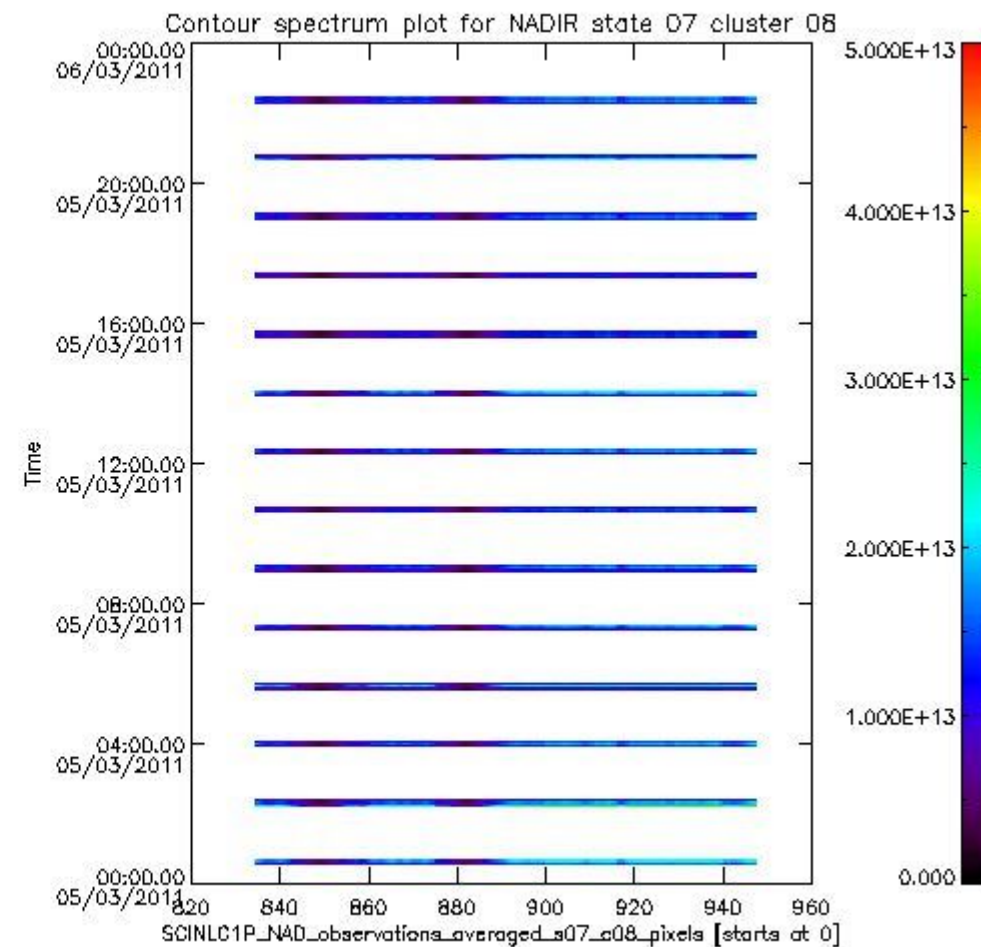
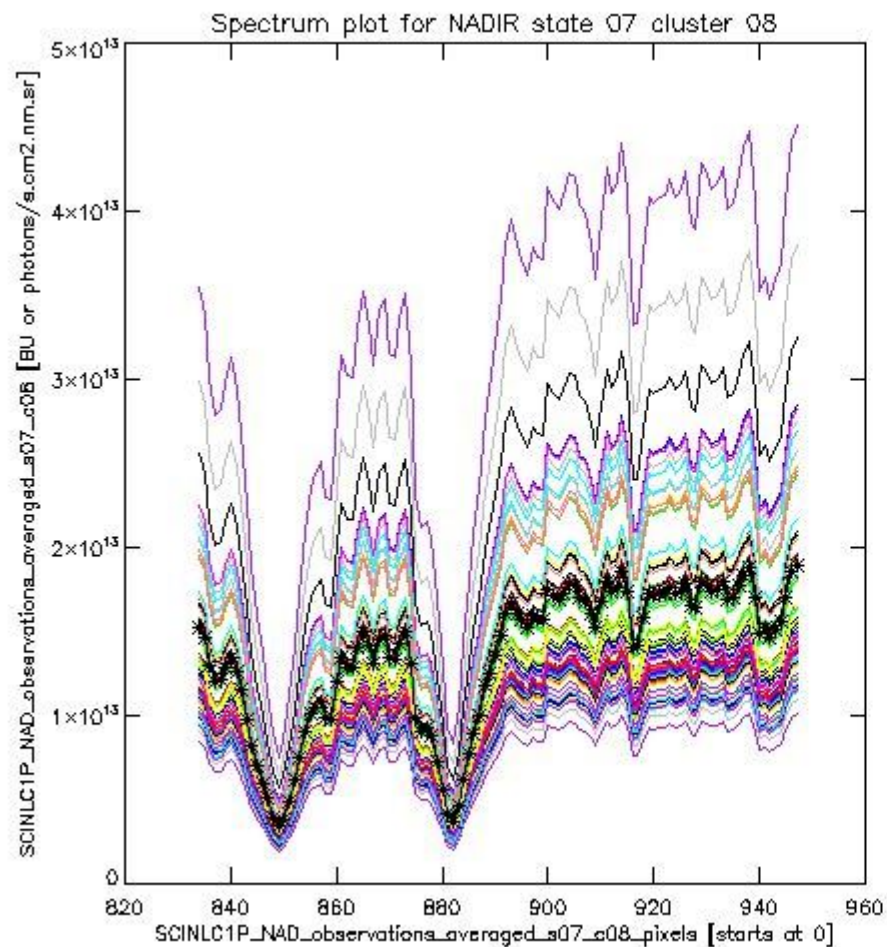
1.2 Source packet monitoring

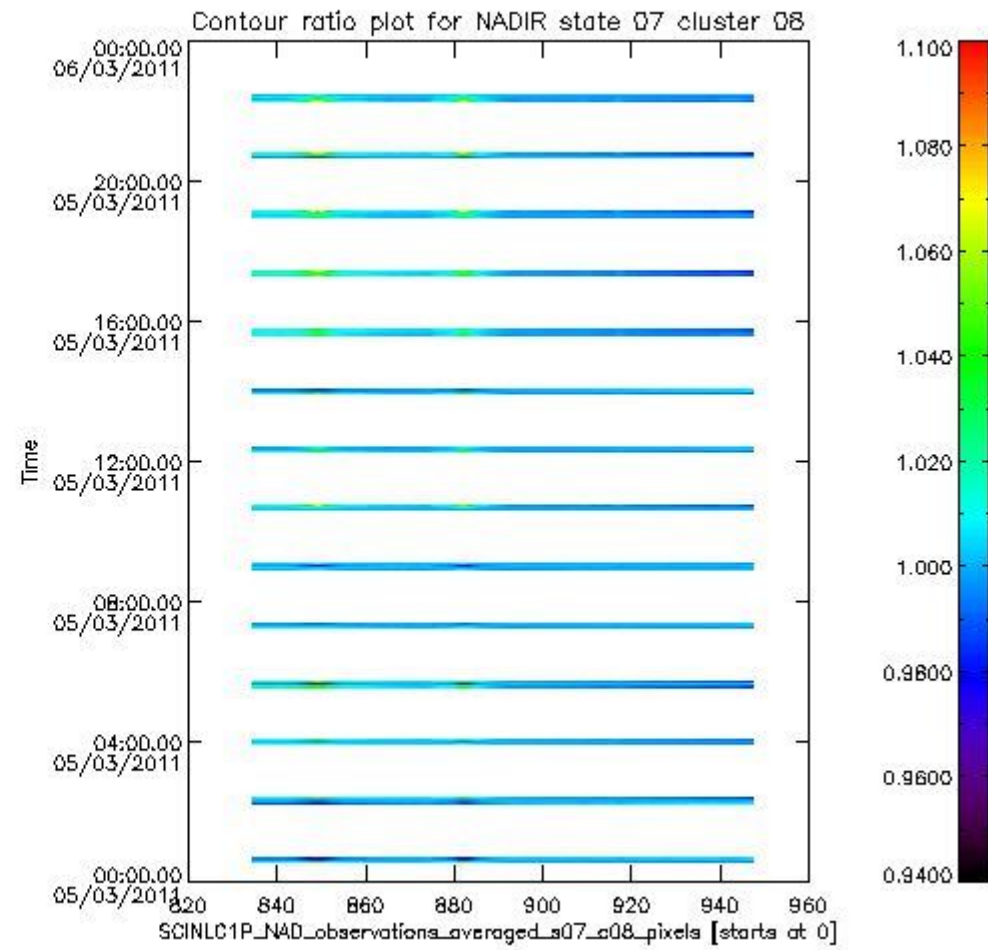
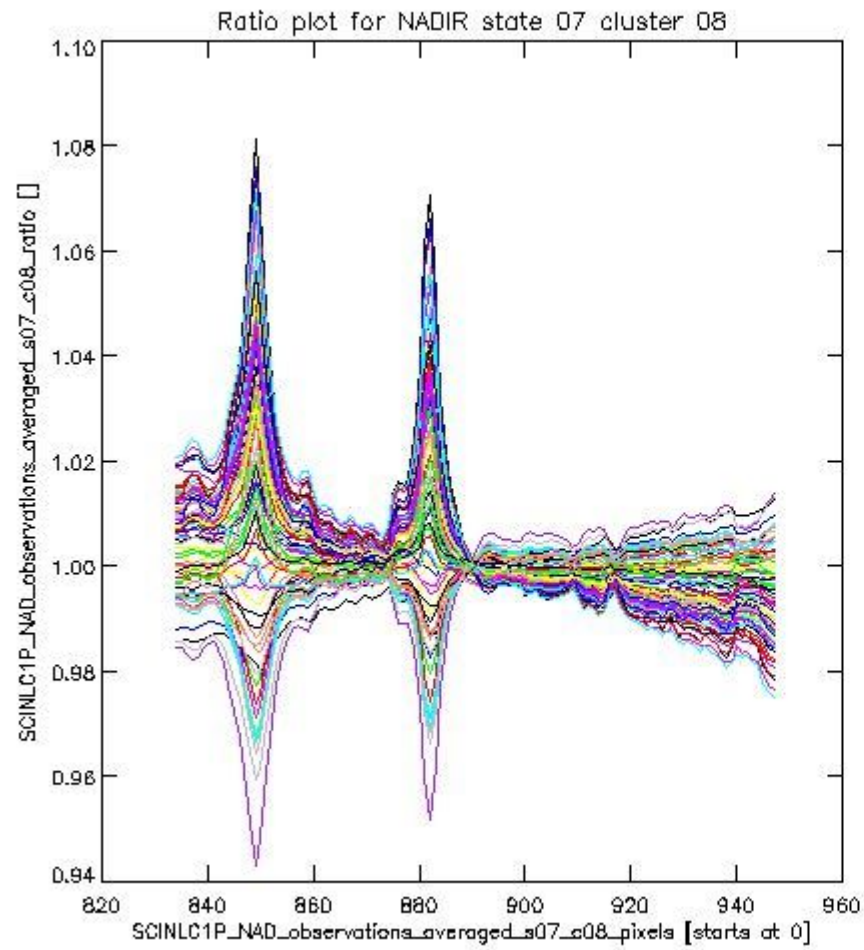
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

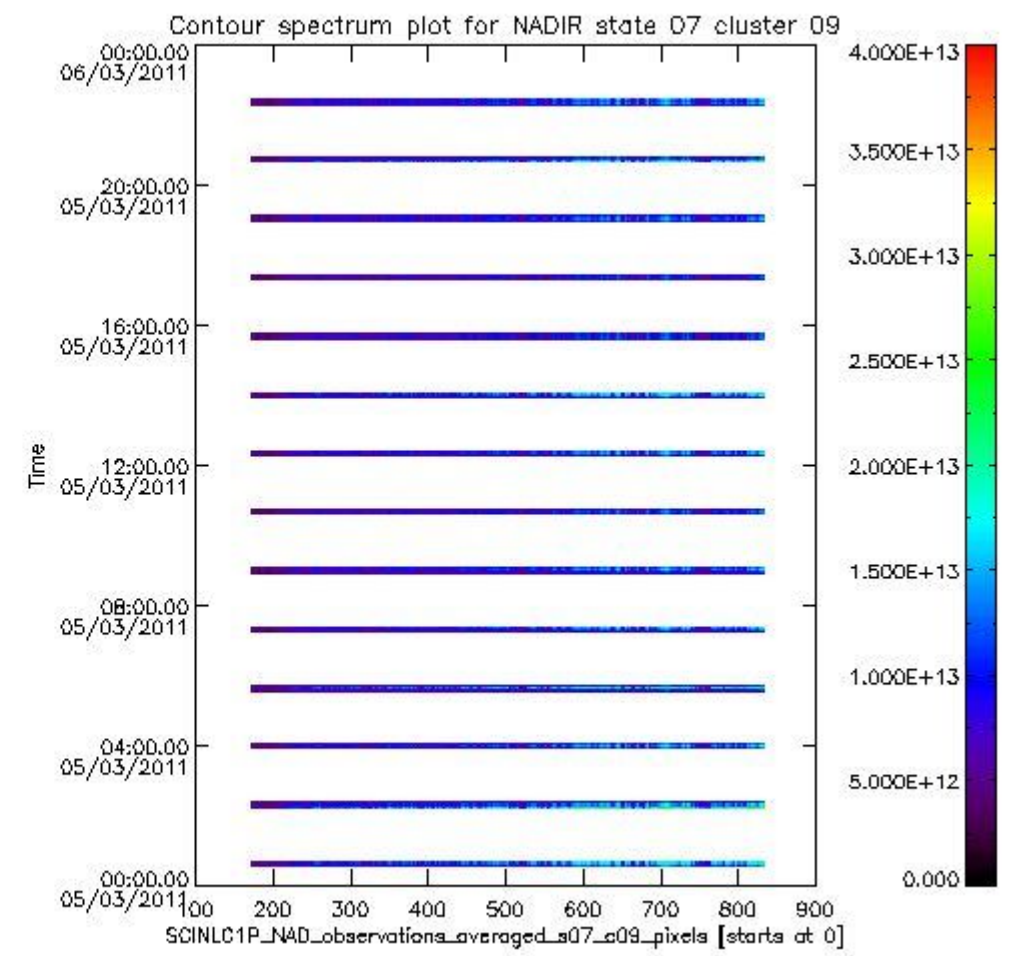
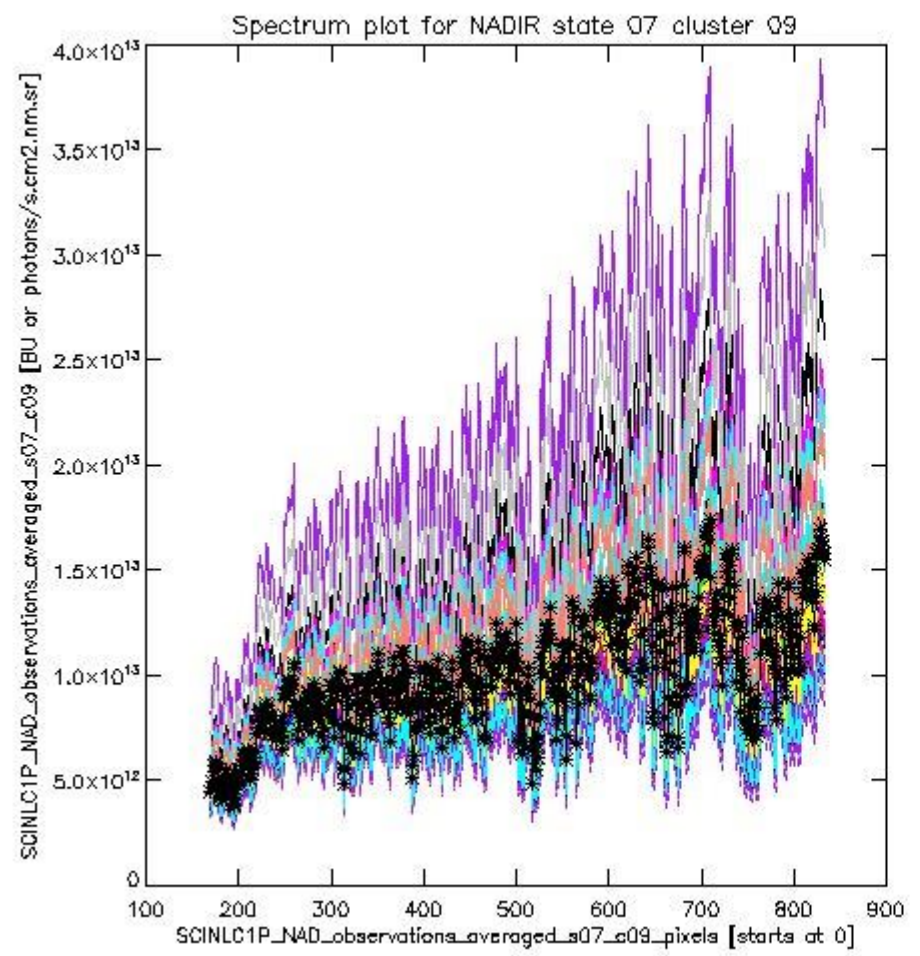
| Item | Value |
|----------------------------------|------------------------|
| Start time of first sample | 05MAR2011 00:33:18.244 |
| Start time of last sample | 05MAR2011 23:58:30.387 |
| Reference period start time | 03FEB2011 00:36:00.495 |
| Reference period stop time | 04MAR2011 23:02:09.915 |
| Channel number | 2 |
| First pixel number (starts at 0) | 834 |
| Last pixel number (starts at 0) | 947 |



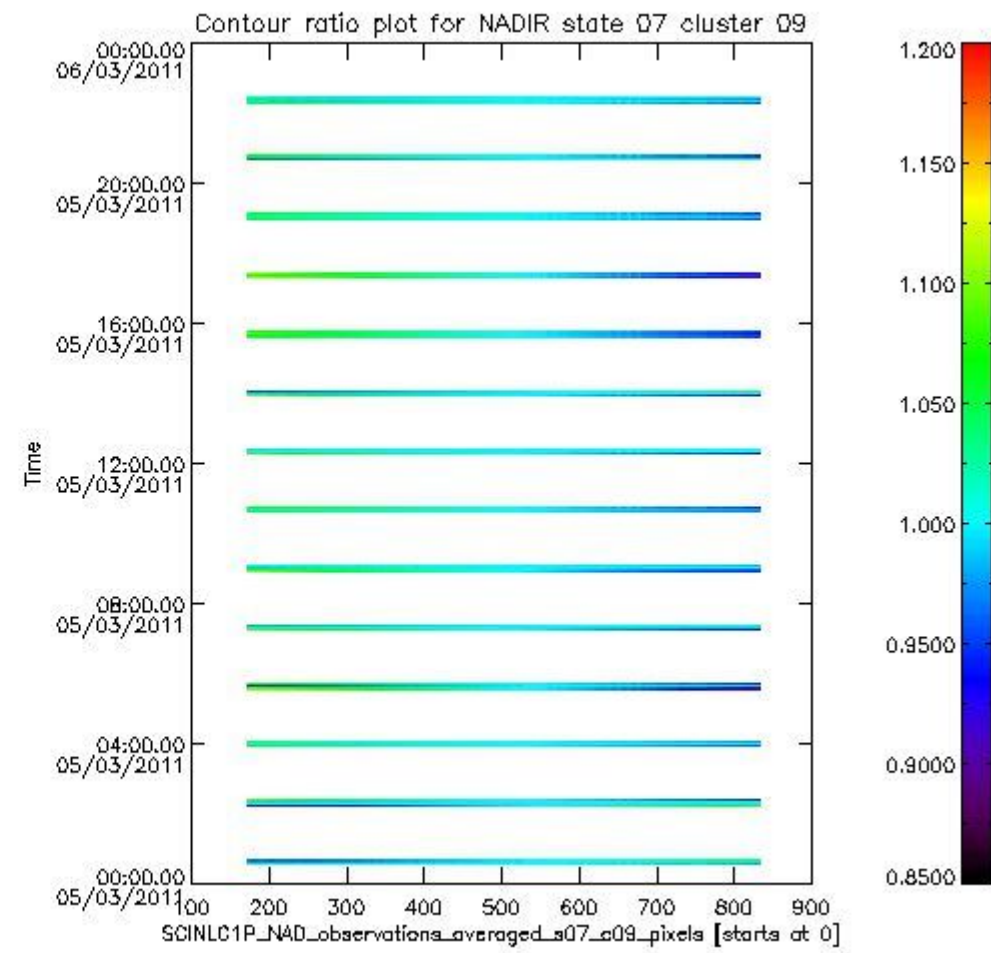
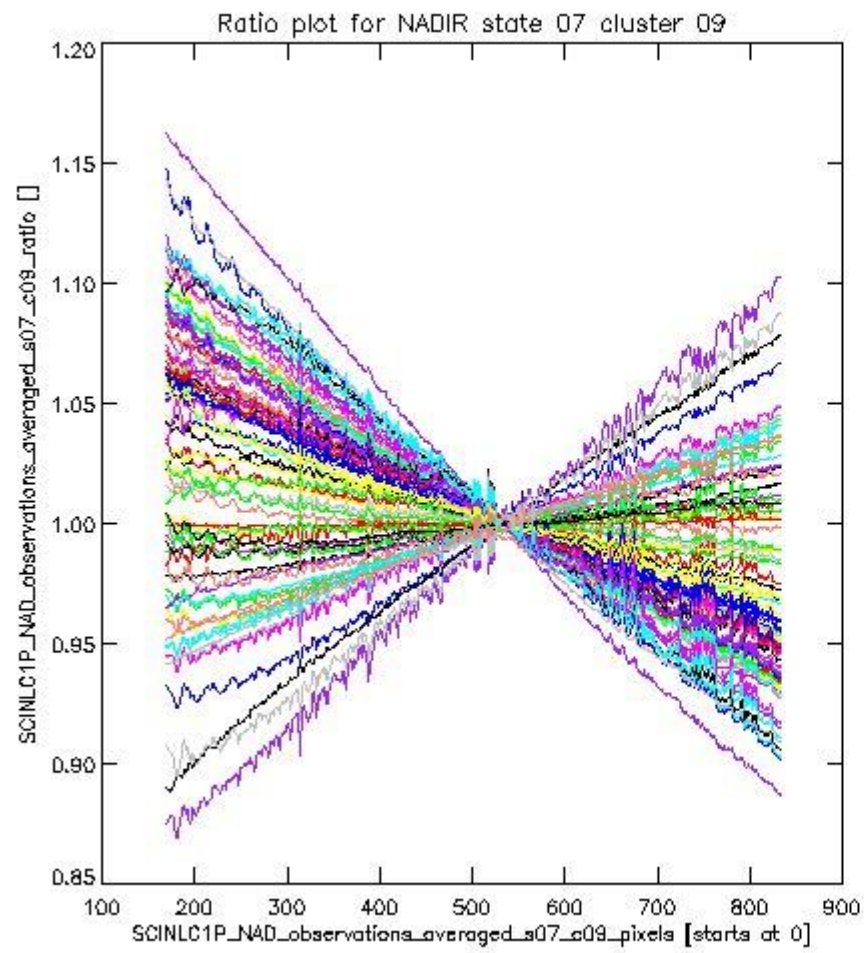


1.2.2 NADIR state 07 cluster 09 The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

| Item | Value |
|----------------------------------|------------------------|
| Start time of first sample | 05MAR2011 00:33:18.244 |
| Start time of last sample | 05MAR2011 23:58:30.387 |
| Reference period start time | 03FEB2011 00:36:00.495 |
| Reference period stop time | 04MAR2011 23:02:09.915 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 833 |



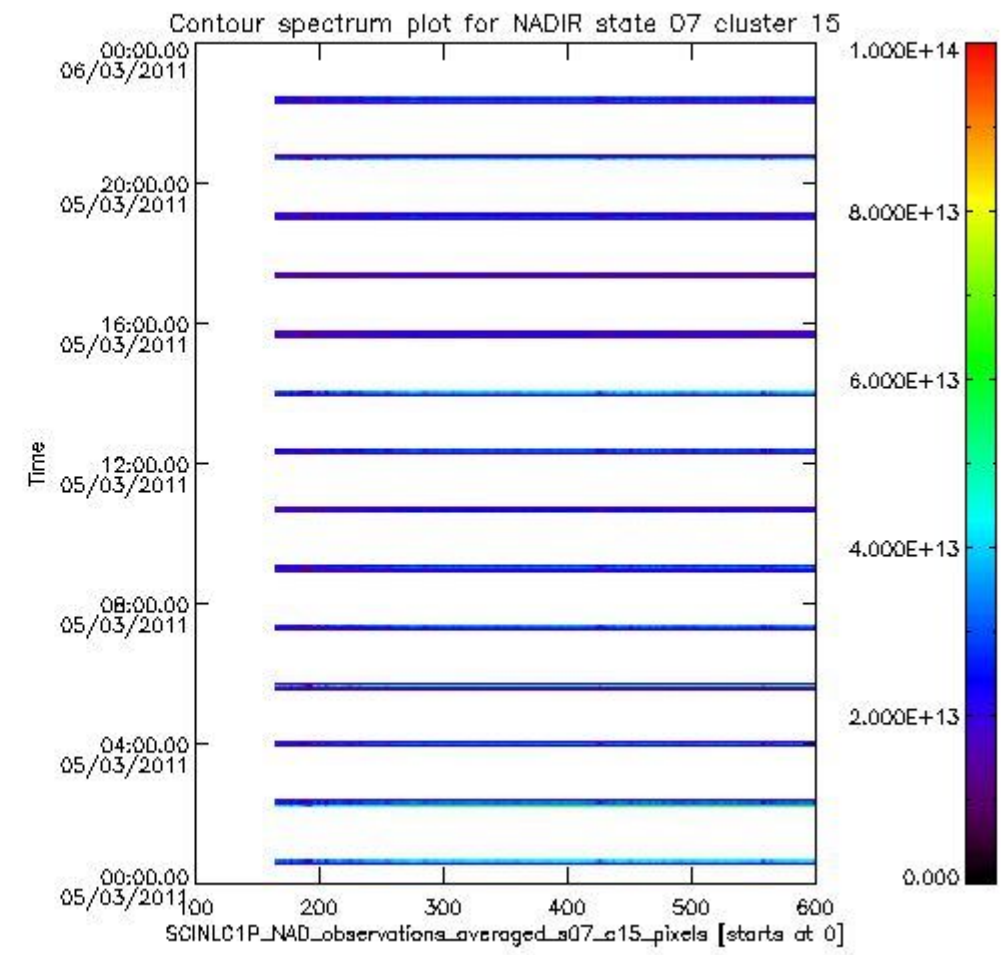
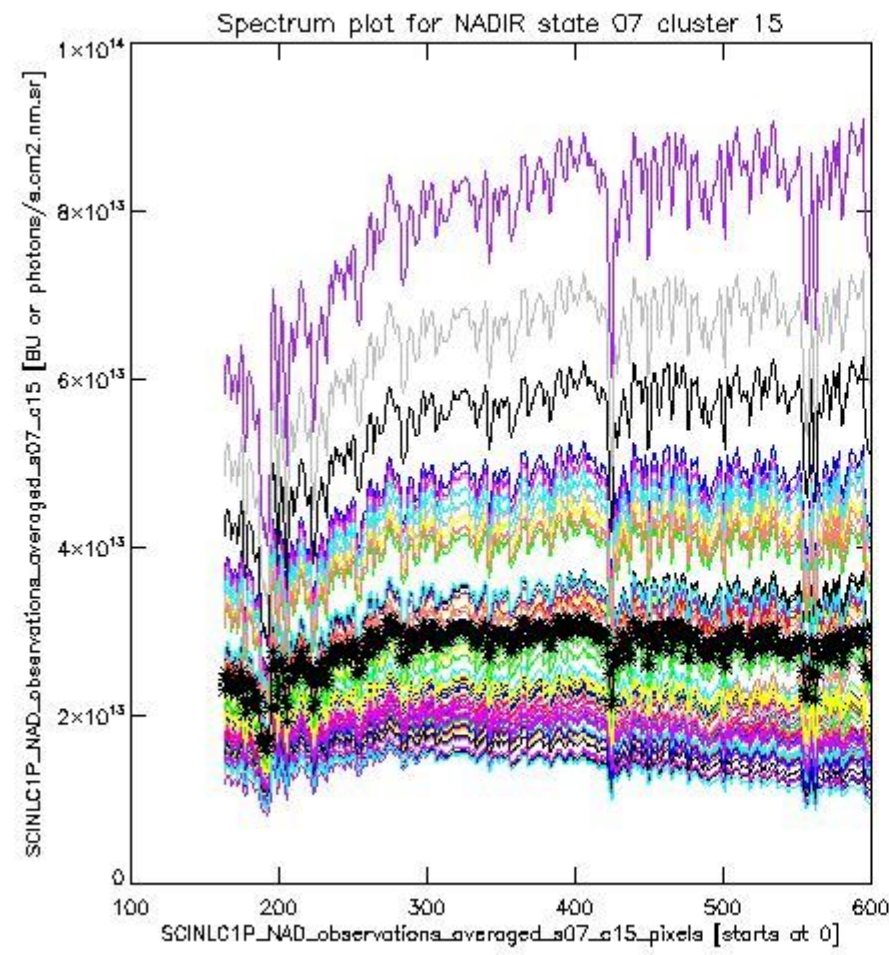
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_2.PNG



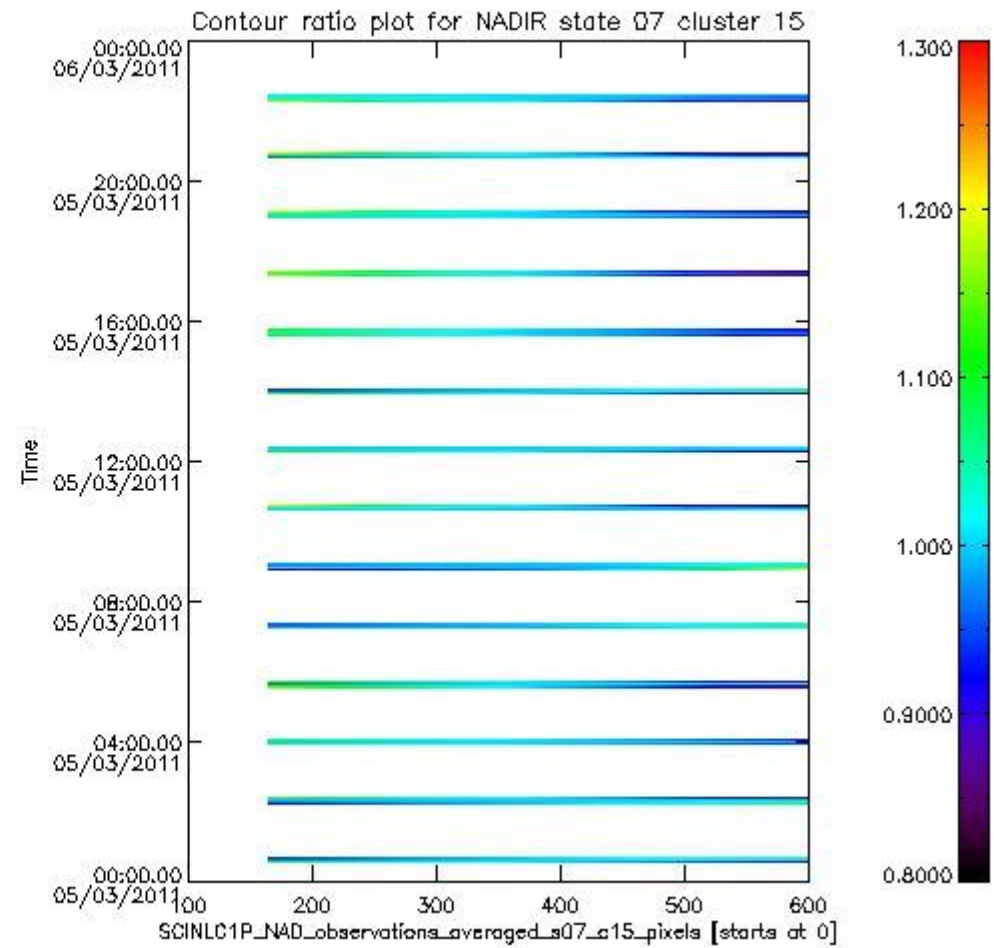
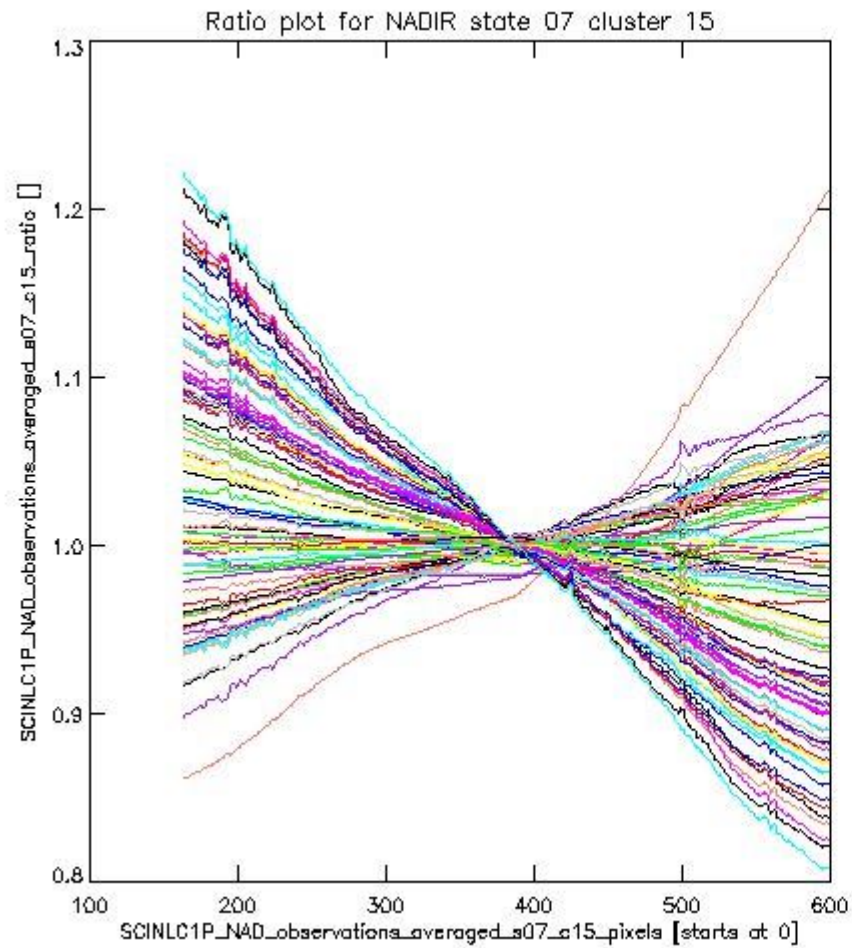
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_3.PNG

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 | 05MAR2011 00:33:18.244 |
| Start time of last sample | 05MAR2011 23:58:30.387 |
| Reference period start time | 03FEB2011 00:36:00.495 |
| Reference period stop time | 04MAR2011 23:02:09.915 |
| Channel number | 3 |
| First pixel number (starts at 0) | 163 |
| Last pixel number (starts at 0) | 598 |



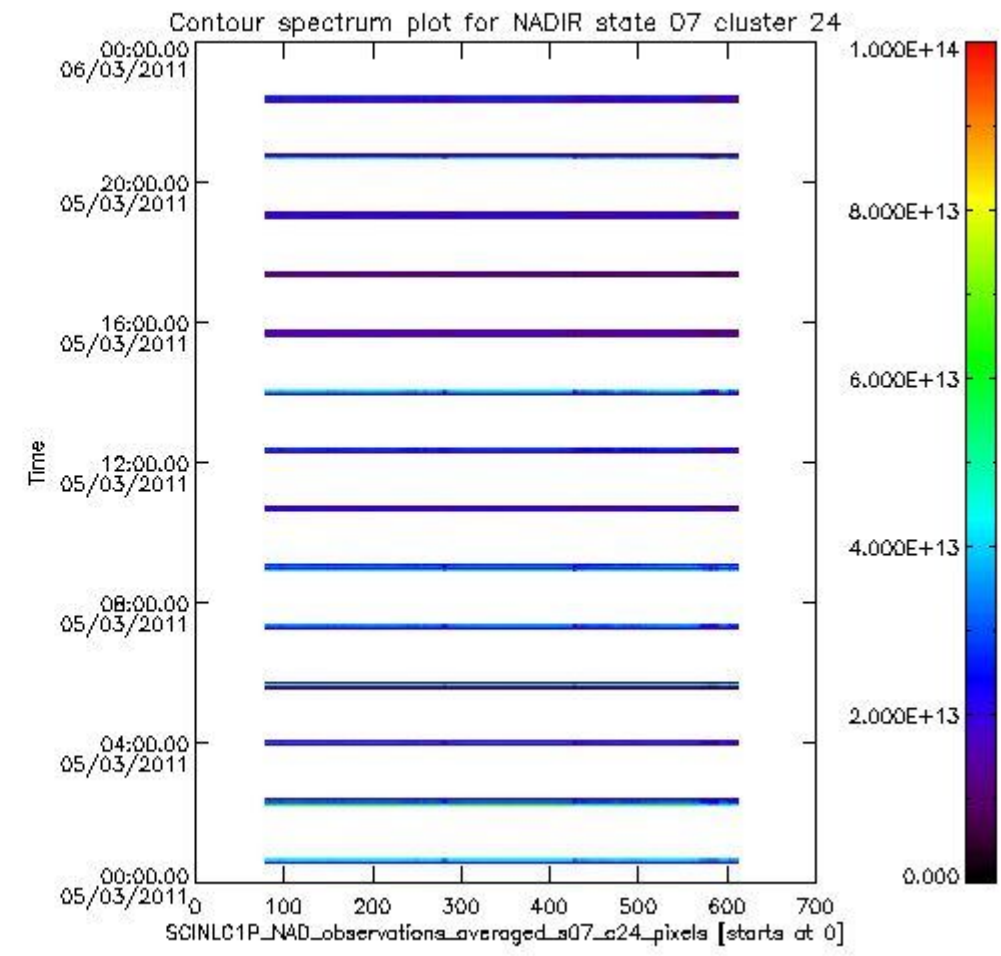
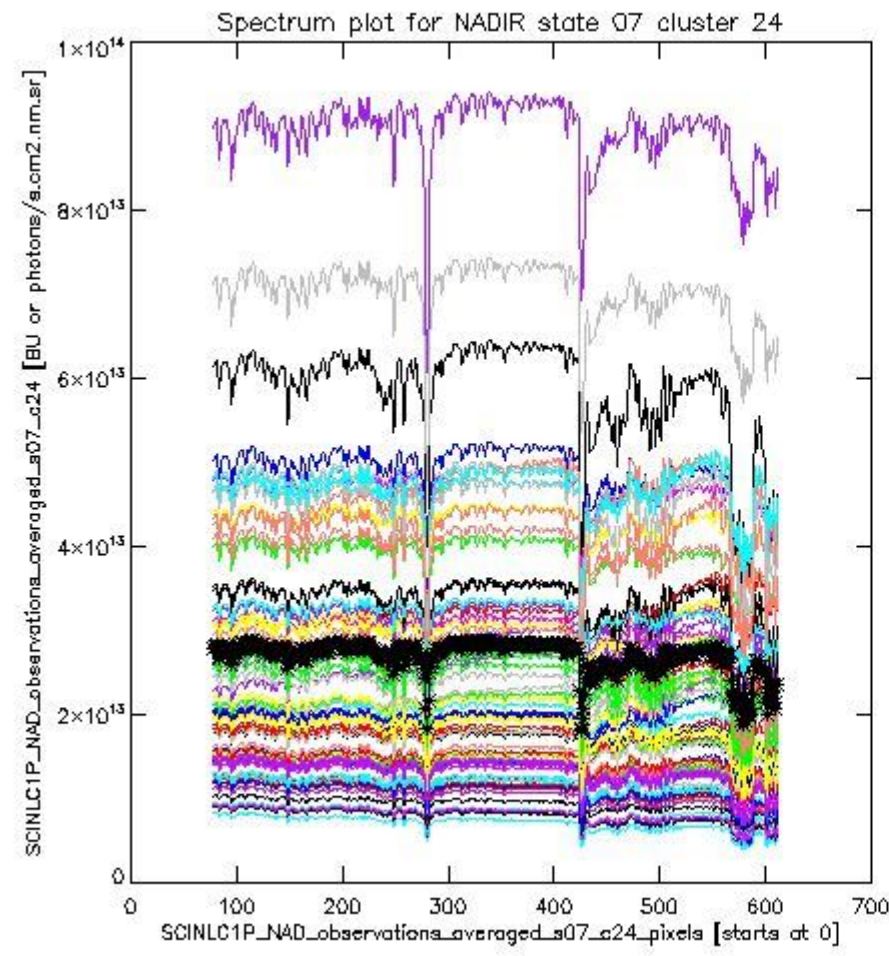
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_4.PNG



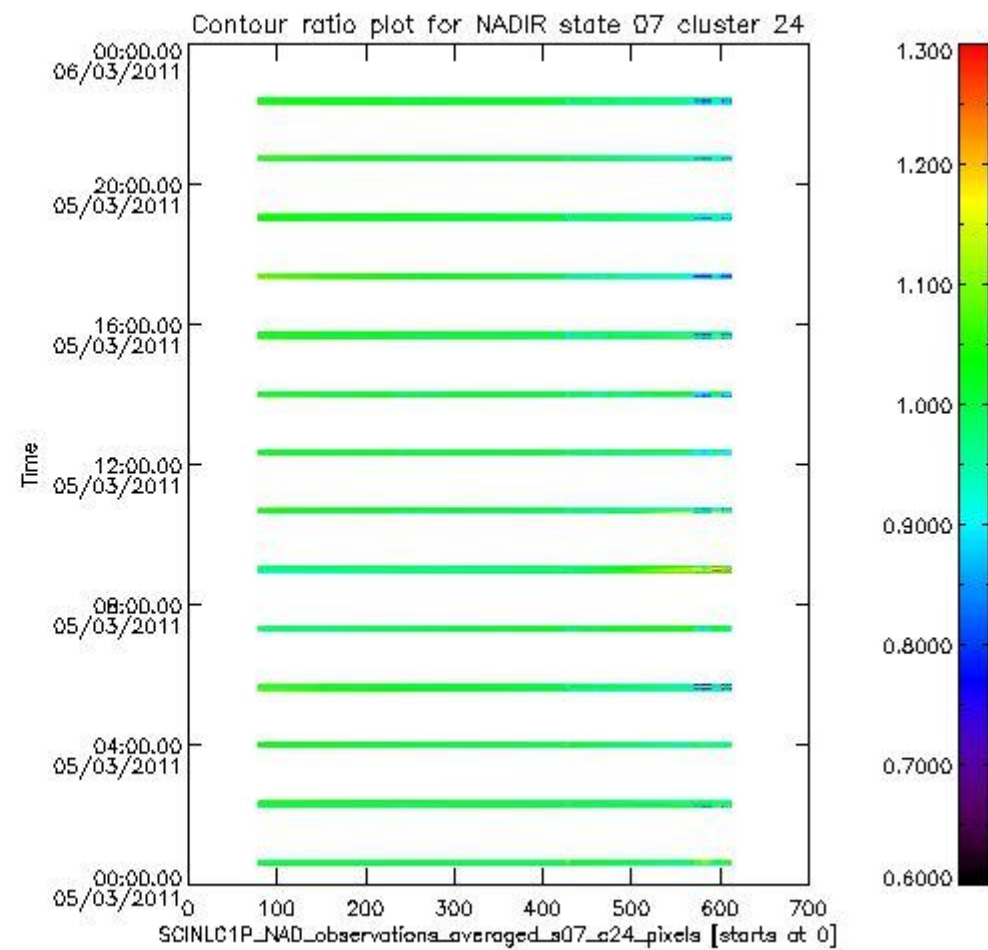
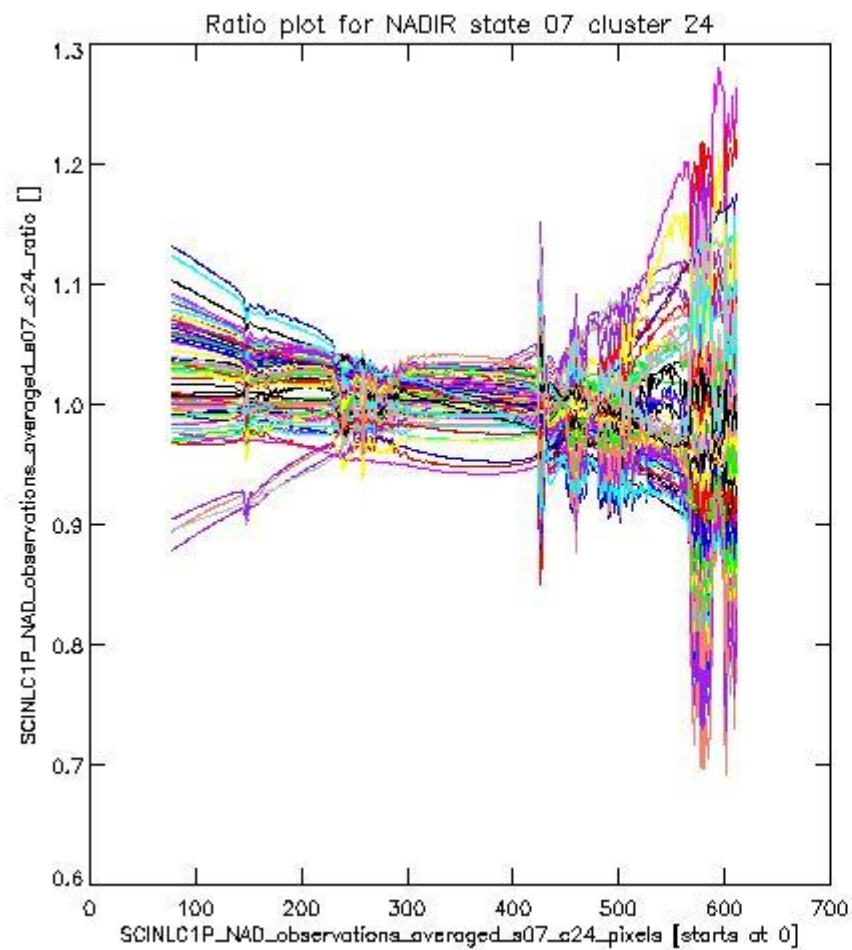
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_5.PNG

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 | 05MAR2011 00:33:18.244 |
| Start time of last sample | 05MAR2011 23:58:30.387 |
| Reference period start time | 03FEB2011 00:36:00.495 |
| Reference period stop time | 04MAR2011 23:02:09.915 |
| Channel number | 4 |
| First pixel number (starts at 0) | 78 |
| Last pixel number (starts at 0) | 612 |



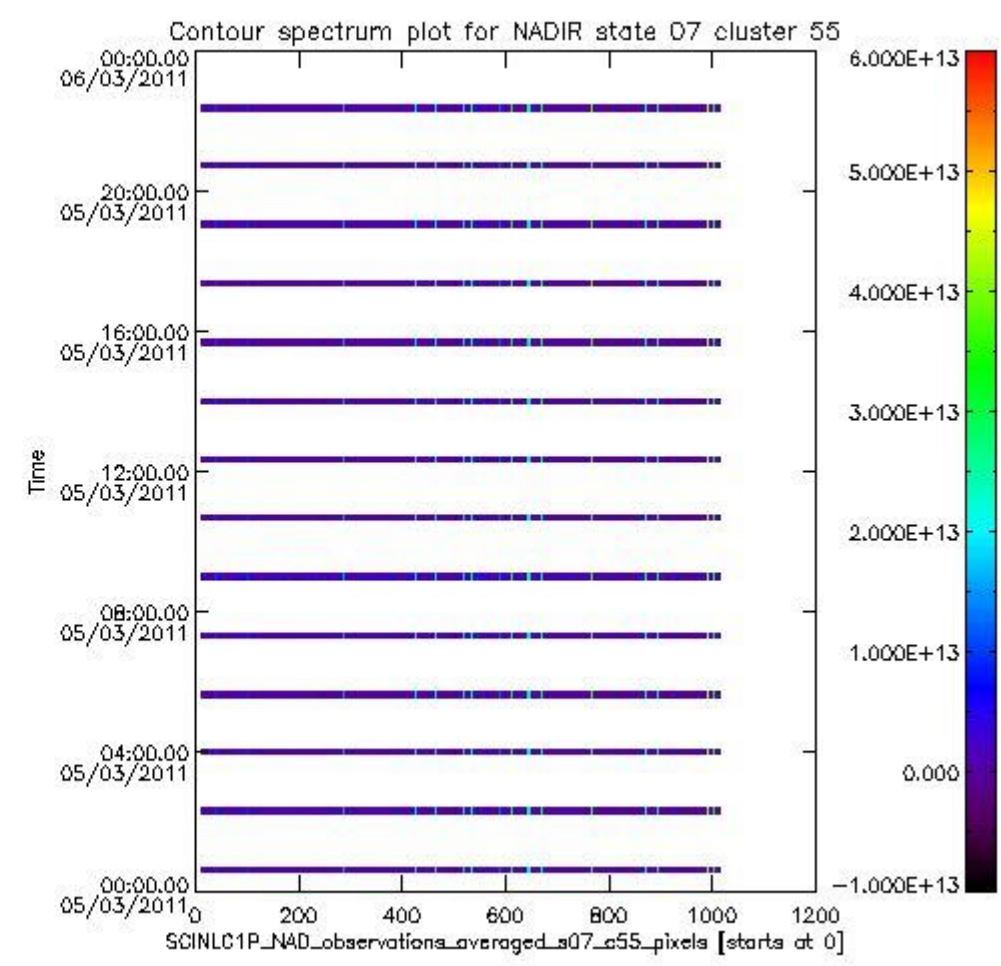
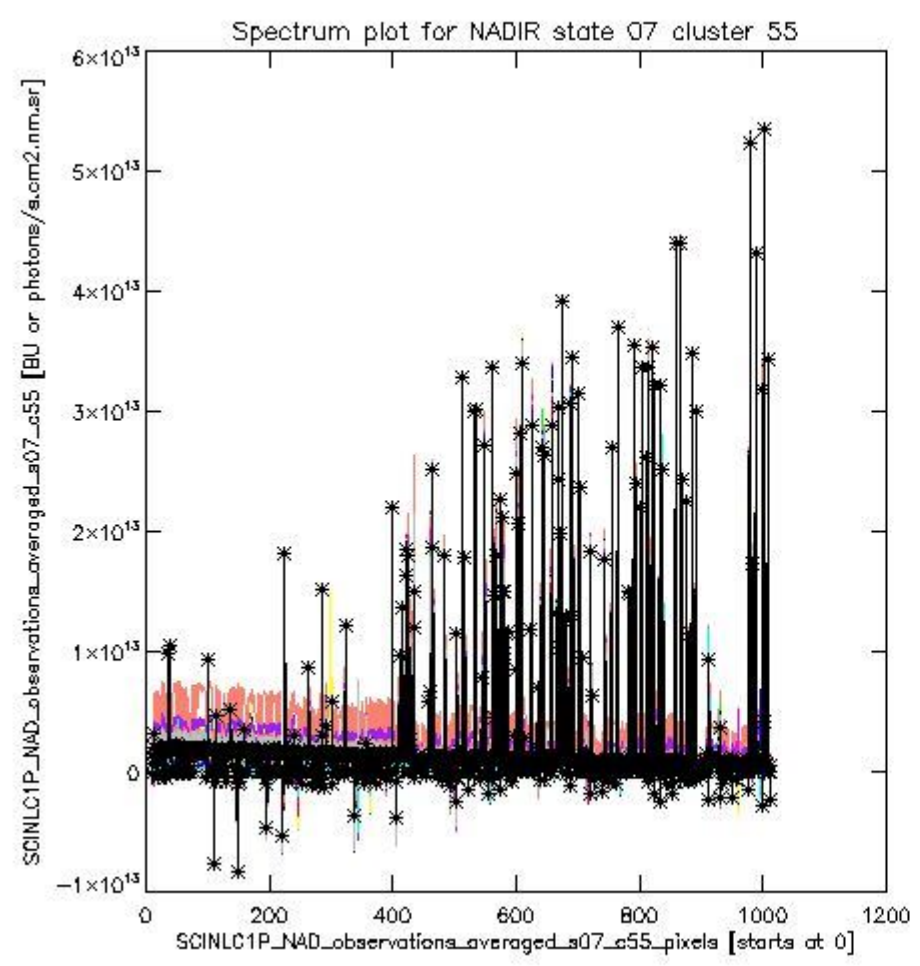
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_6.PNG



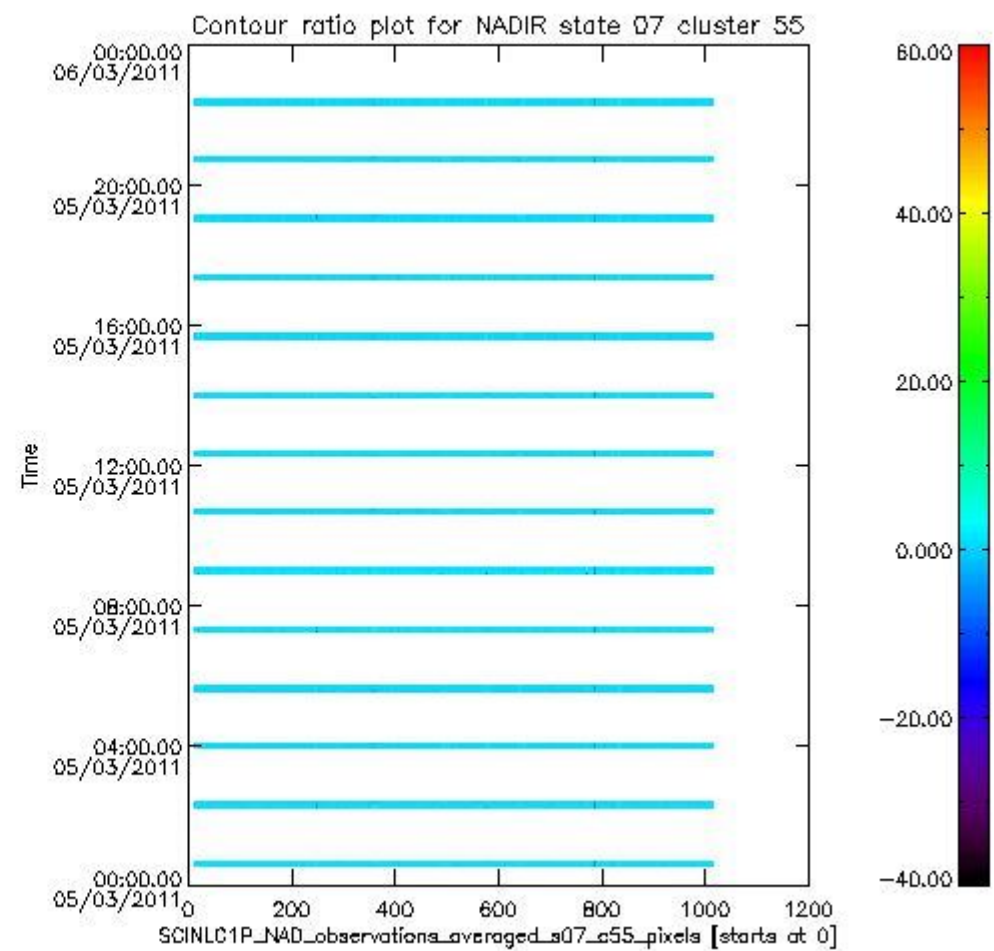
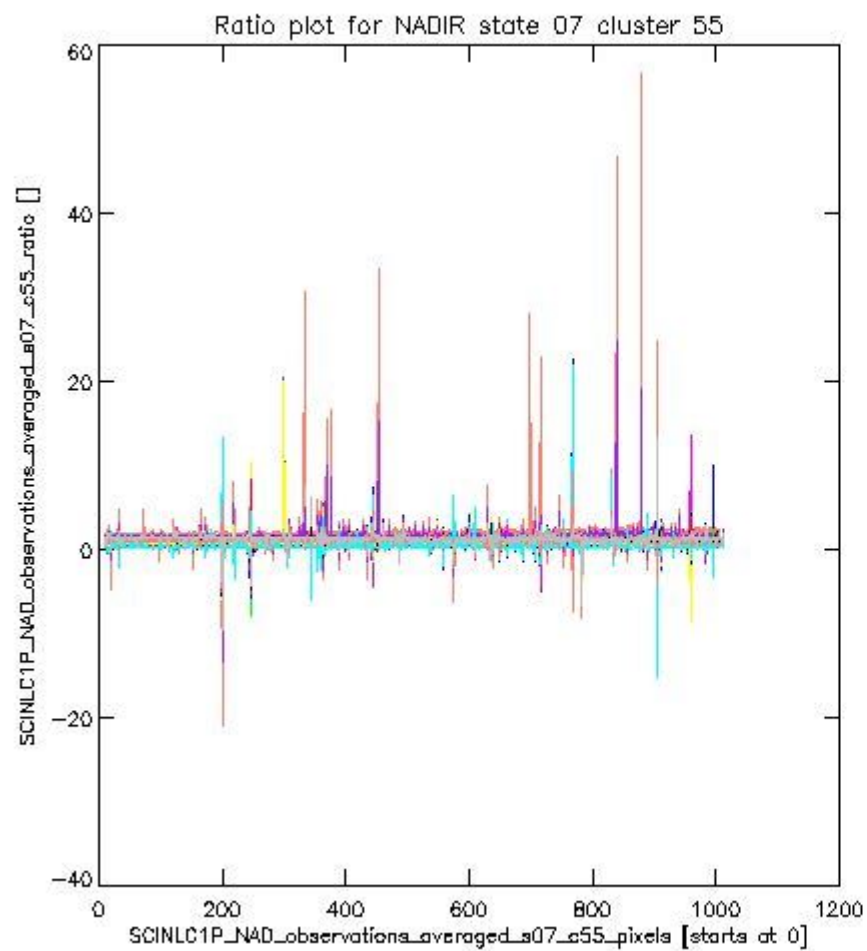
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_7.PNG

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 | 05MAR2011 00:33:18.244 |
| Start time of last sample | 05MAR2011 23:58:30.387 |
| Reference period start time | 03FEB2011 00:36:00.495 |
| Reference period stop time | 04MAR2011 23:02:09.915 |
| Channel number | 8 |
| First pixel number (starts at 0) | 10 |
| Last pixel number (starts at 0) | 1013 |



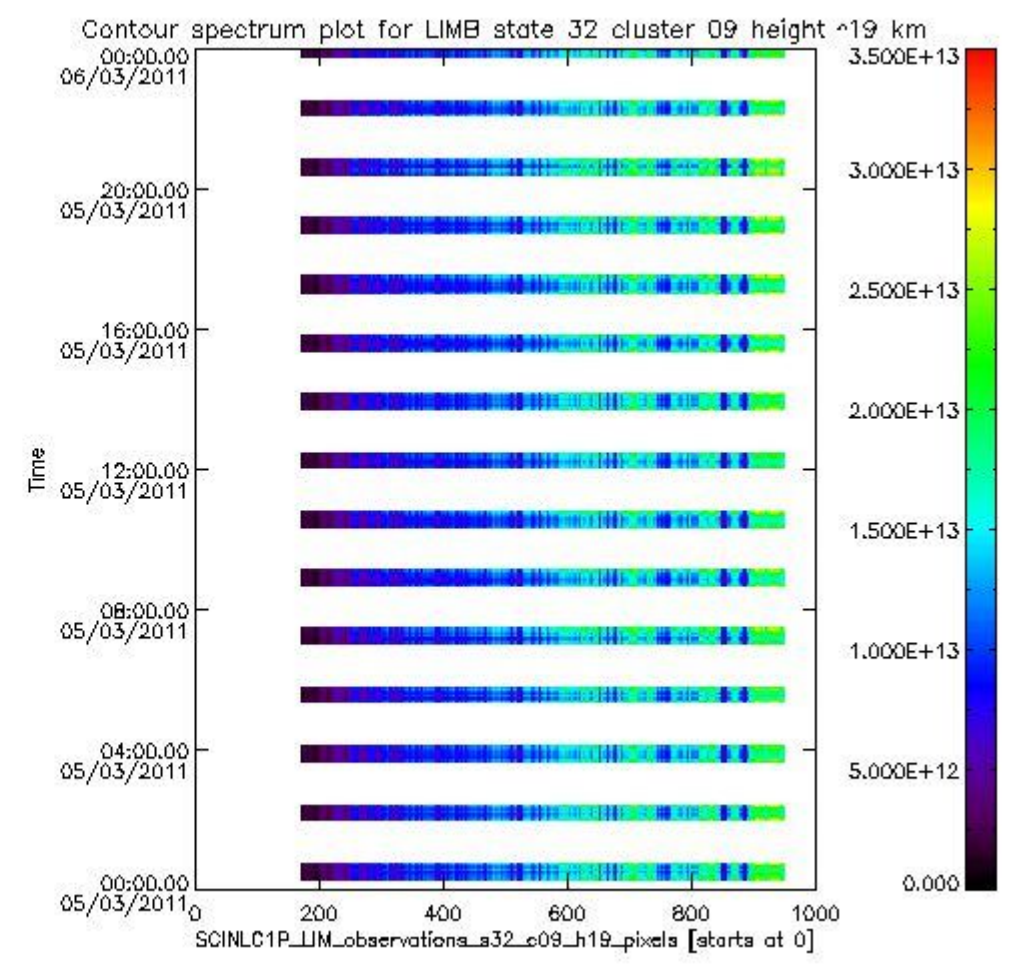
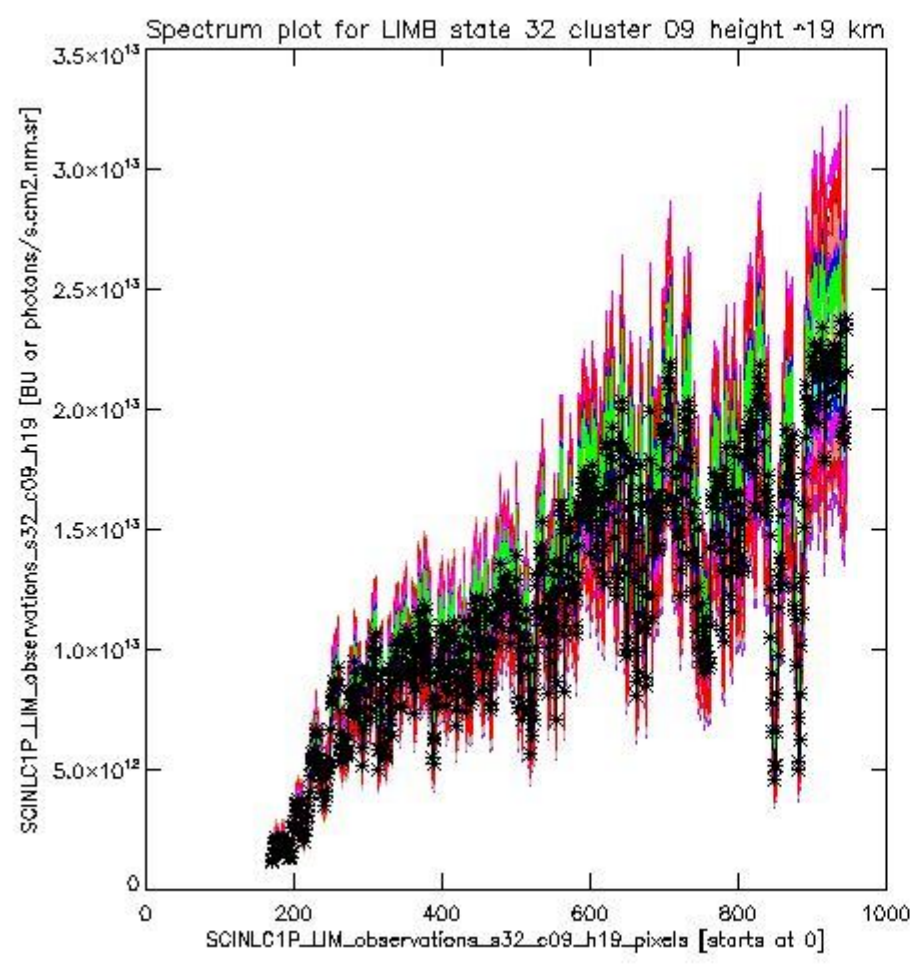
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_8.PNG



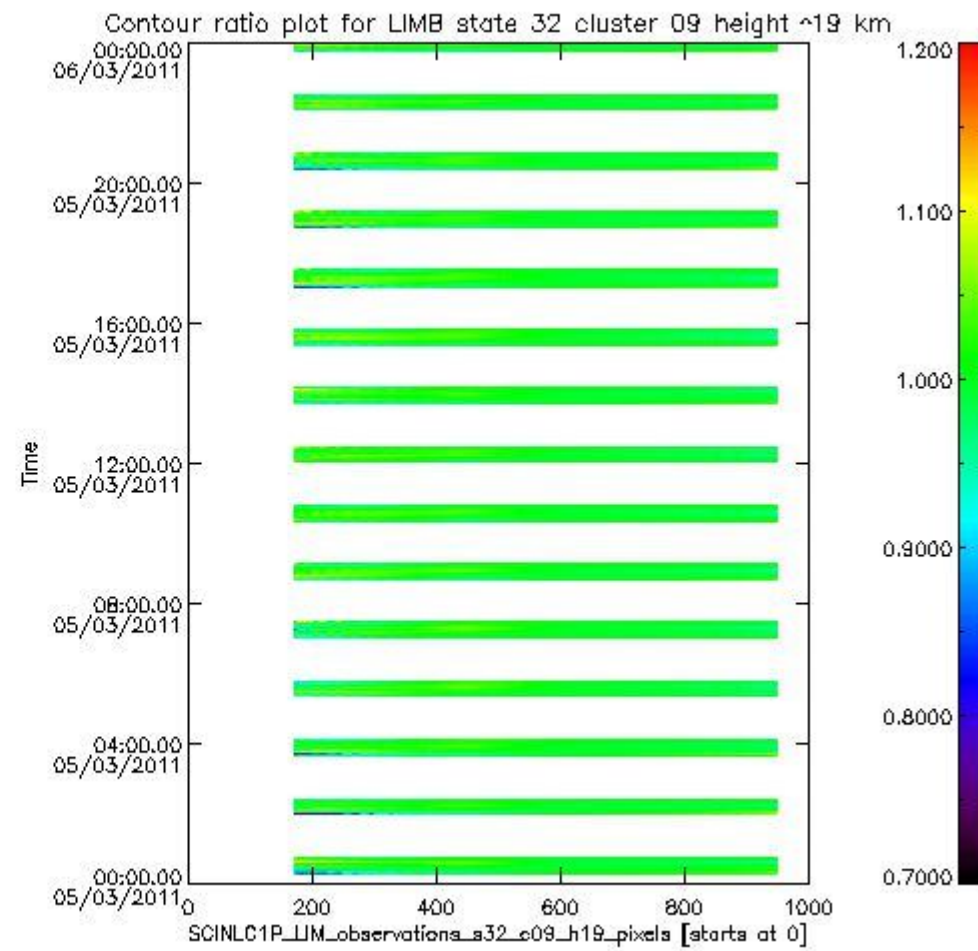
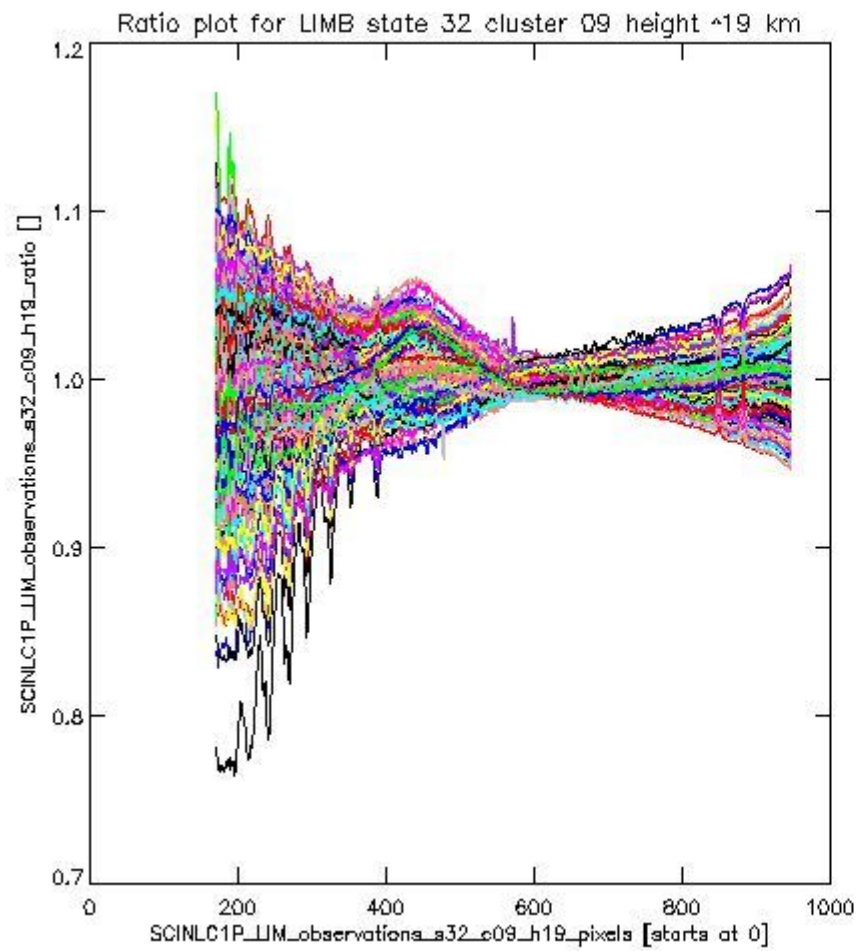
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_9.PNG

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 | 05MAR2011 00:18:04.861 |
| Start time of last sample | 05MAR2011 23:59:38.946 |
| Reference period start time | 03FEB2011 00:20:47.116 |
| Reference period stop time | 04MAR2011 23:05:21.216 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



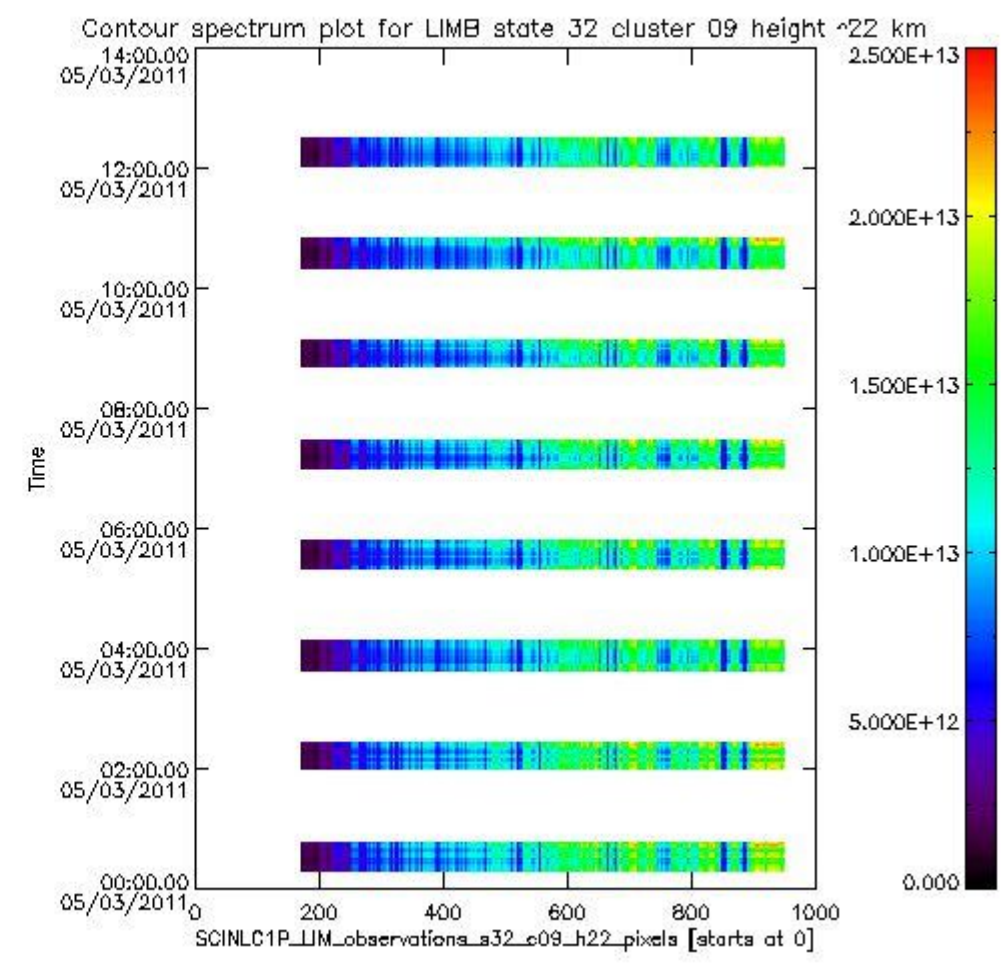
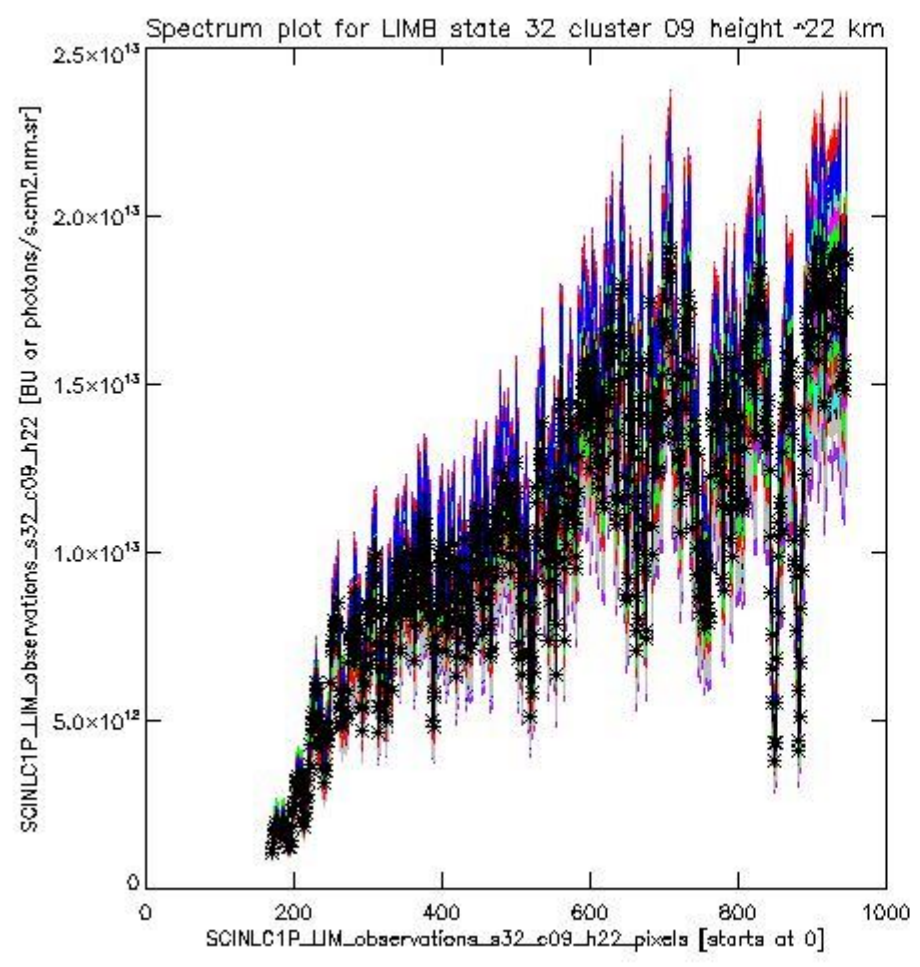
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_10.PNG



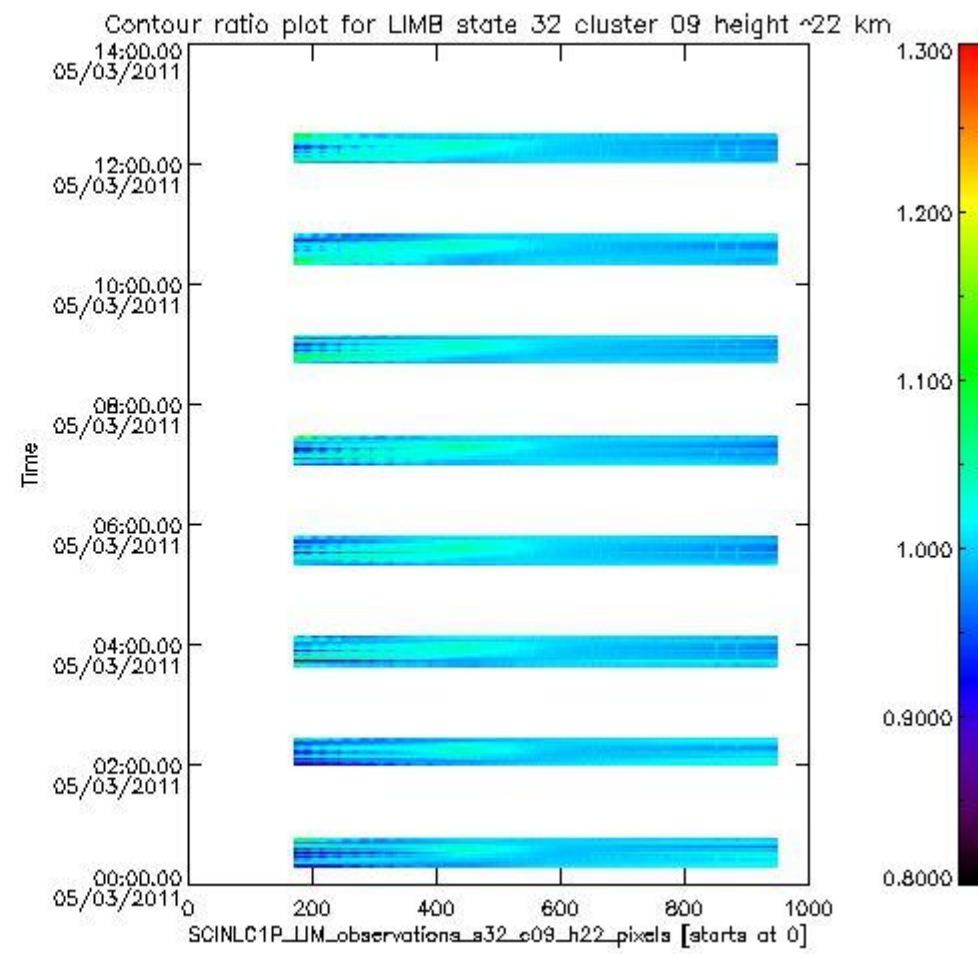
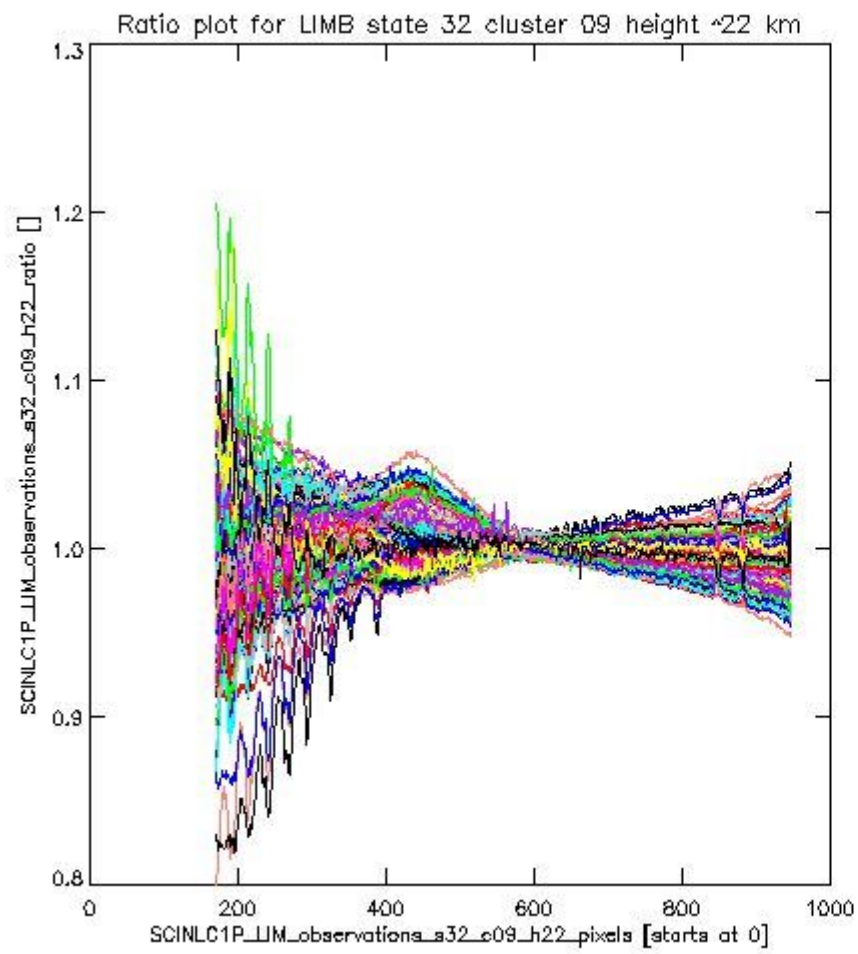
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_11.PNG

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 | 05MAR2011 00:18:04.861 |
| Start time of last sample | 05MAR2011 12:27:09.339 |
| Reference period start time | 03FEB2011 00:20:47.116 |
| Reference period stop time | 04MAR2011 23:05:21.216 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



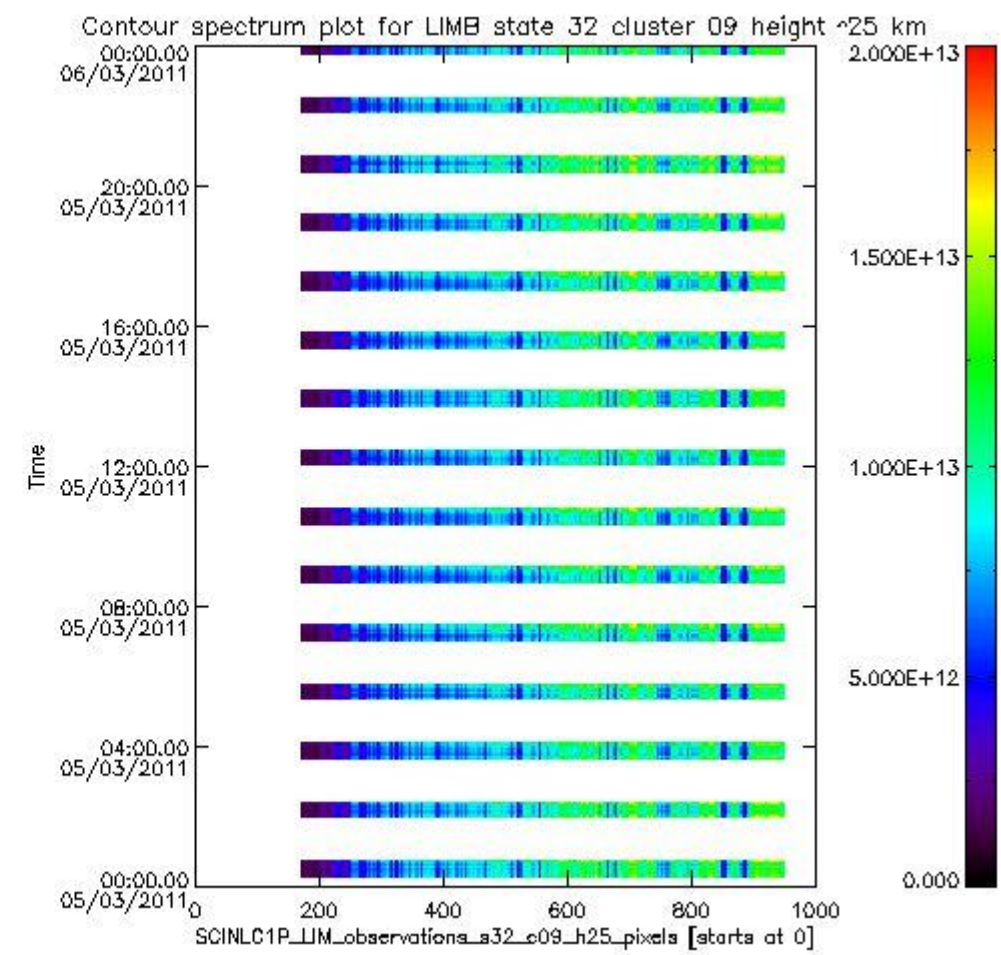
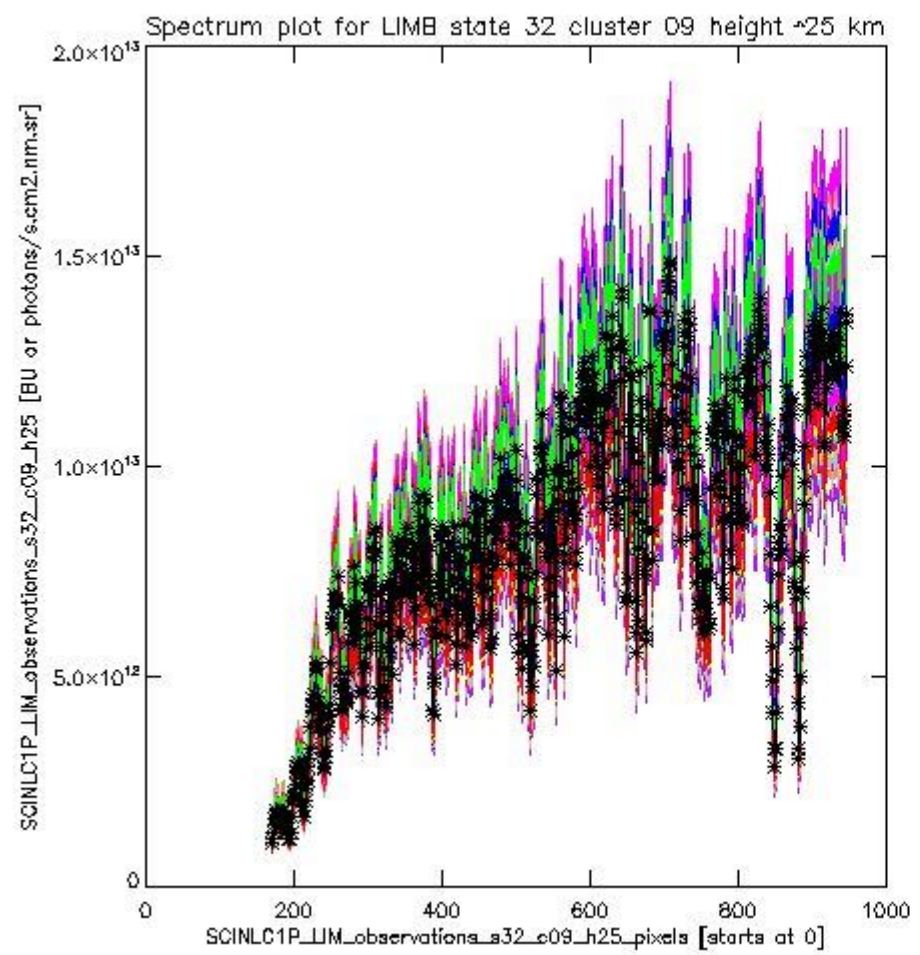
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_12.PNG



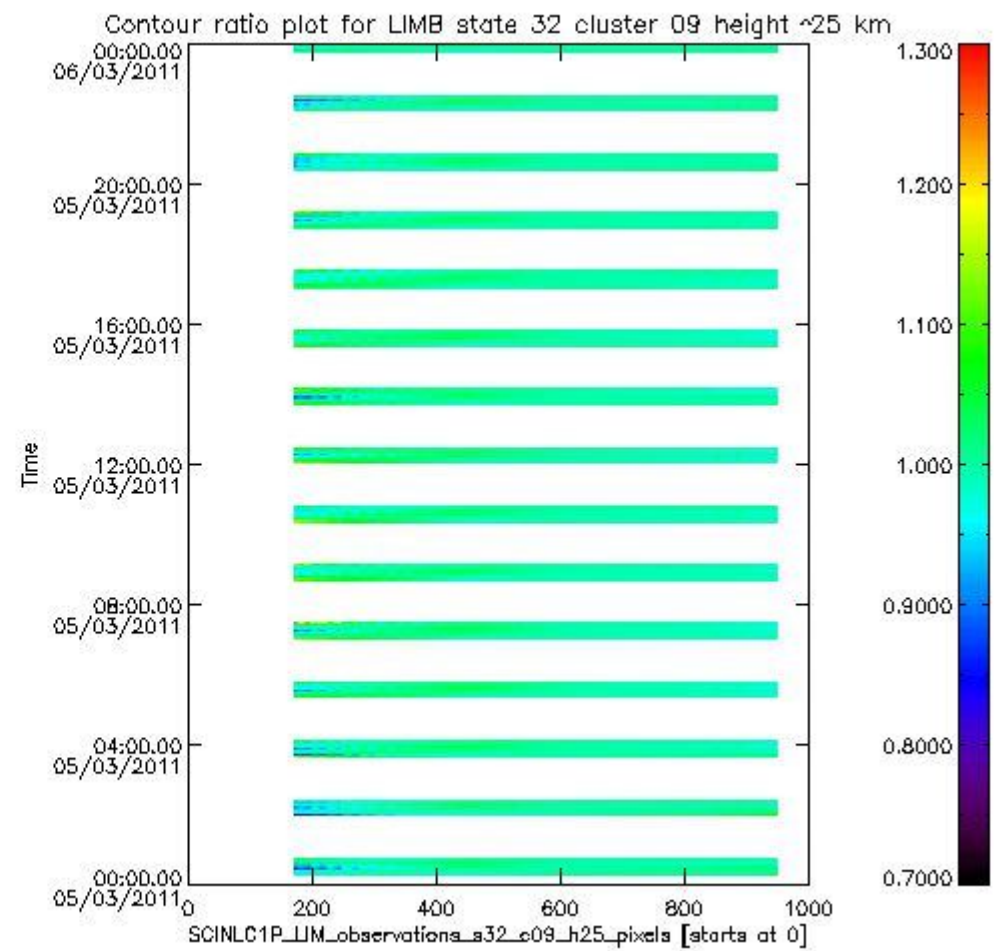
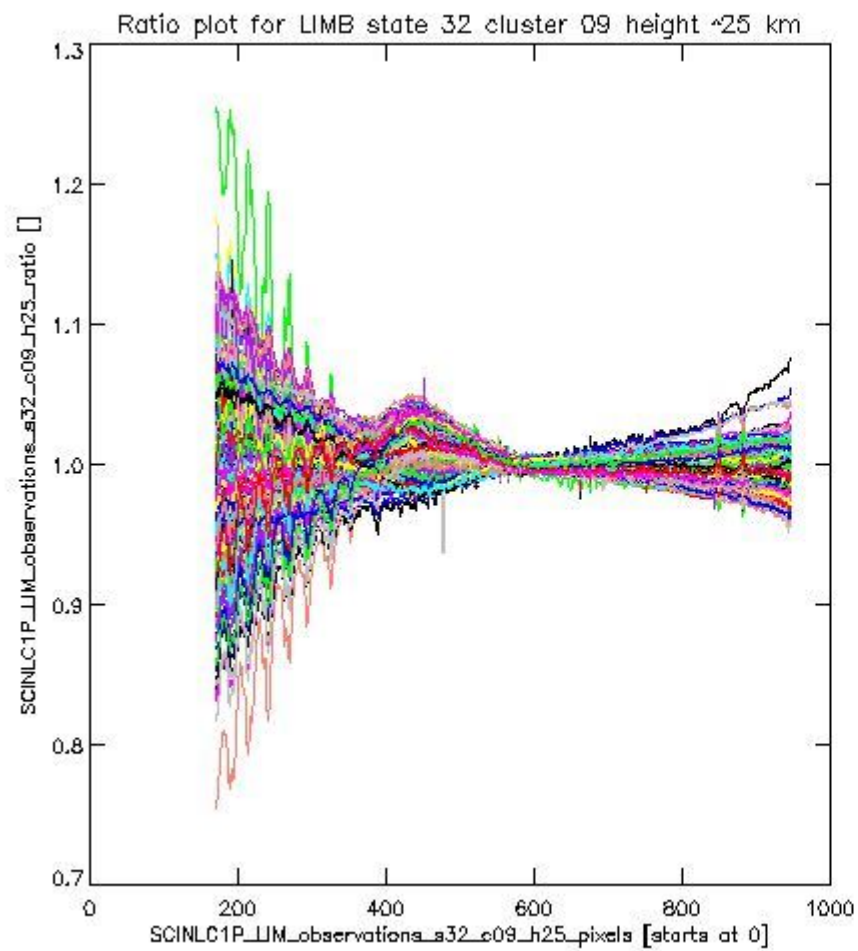
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_13.PNG

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 | 05MAR2011 00:18:04.861 |
| Start time of last sample | 05MAR2011 23:59:38.946 |
| Reference period start time | 03FEB2011 00:20:47.116 |
| Reference period stop time | 04MAR2011 23:05:21.216 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



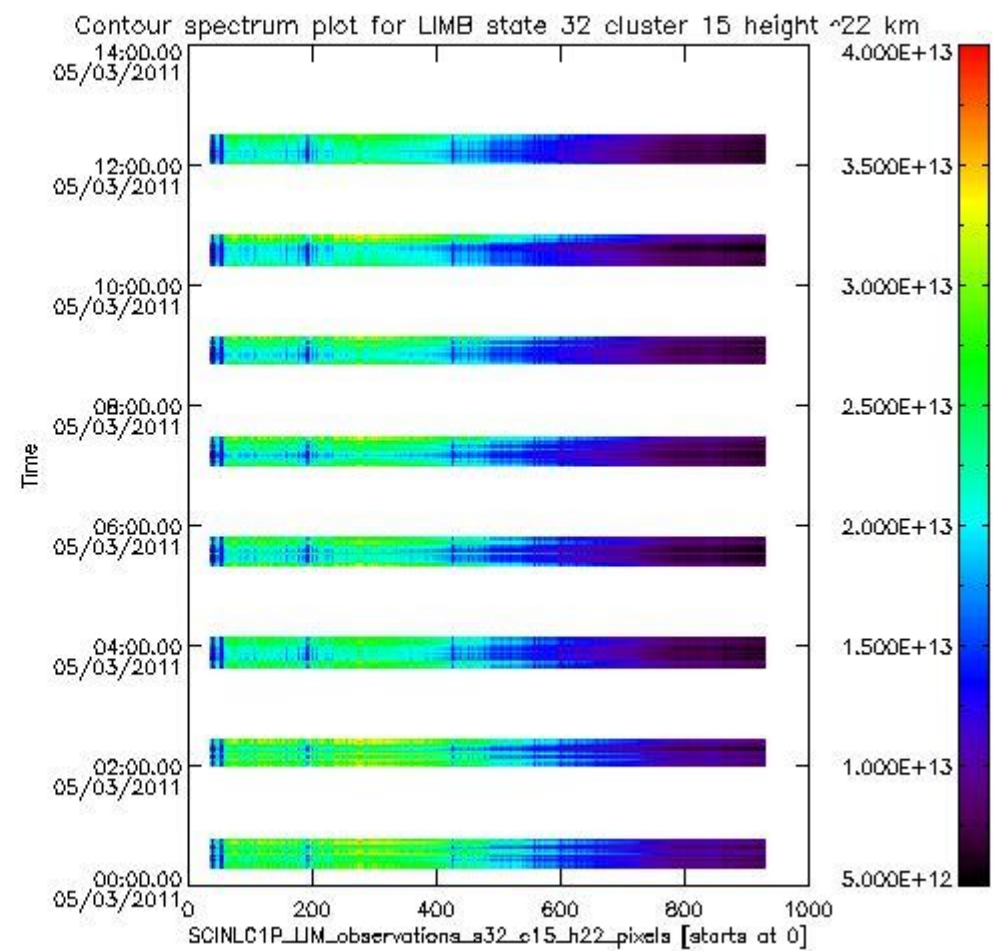
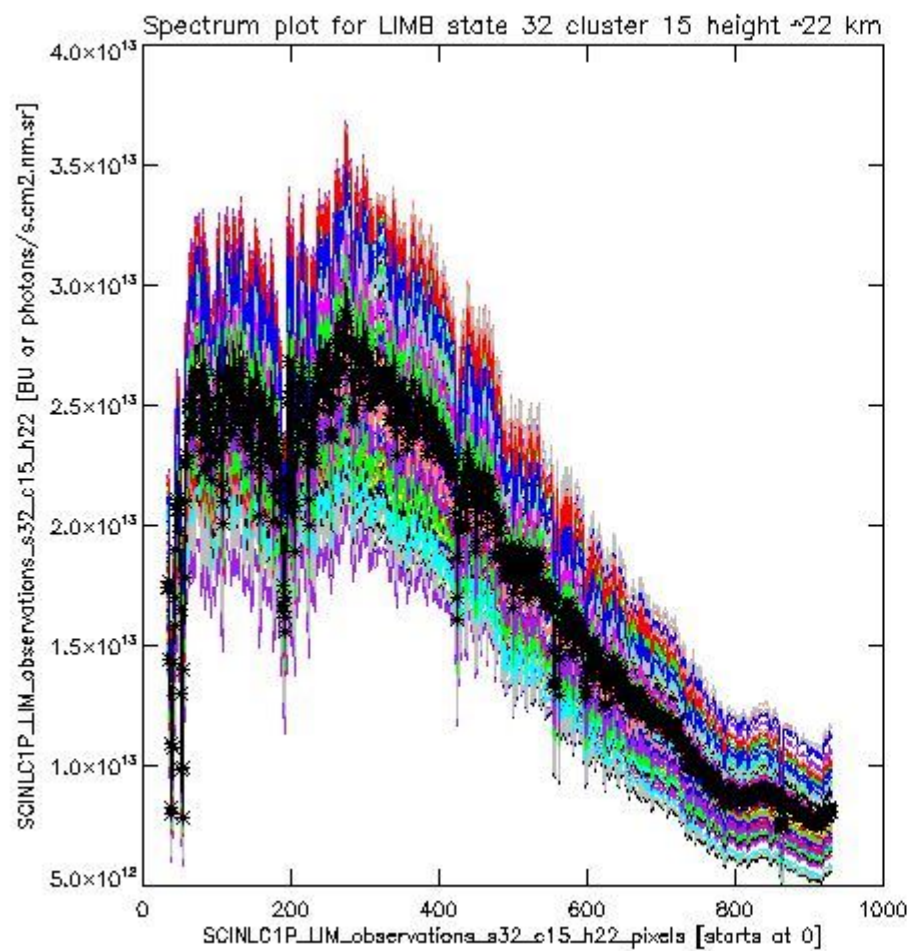
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_14.PNG



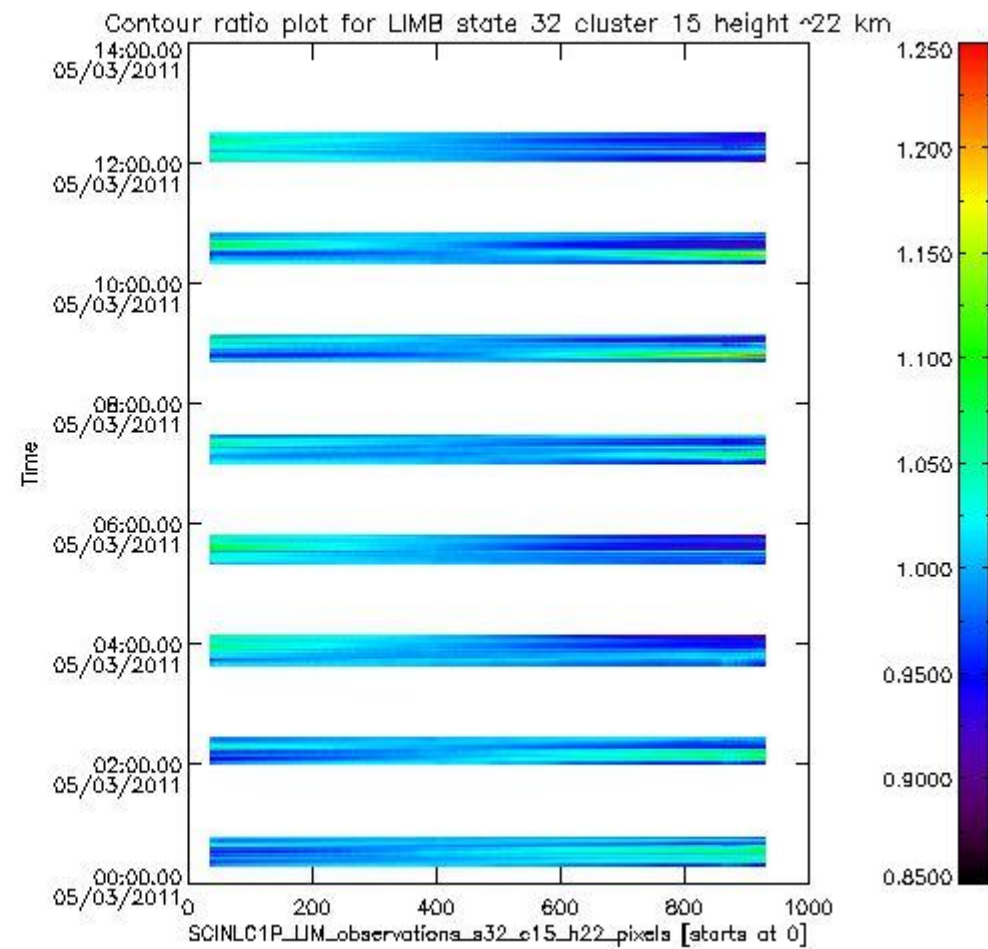
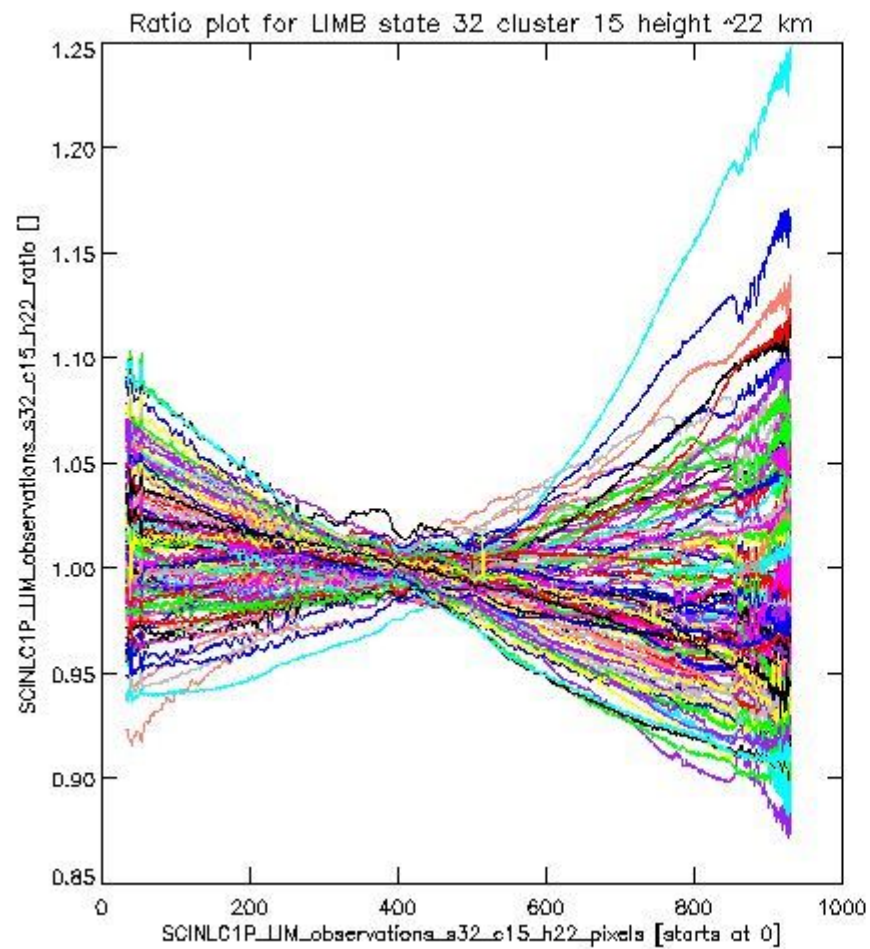
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_15.PNG

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 | 05MAR2011 00:18:04.861 |
| Start time of last sample | 05MAR2011 12:27:09.339 |
| Reference period start time | 03FEB2011 00:20:47.116 |
| Reference period stop time | 04MAR2011 23:05:21.216 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |



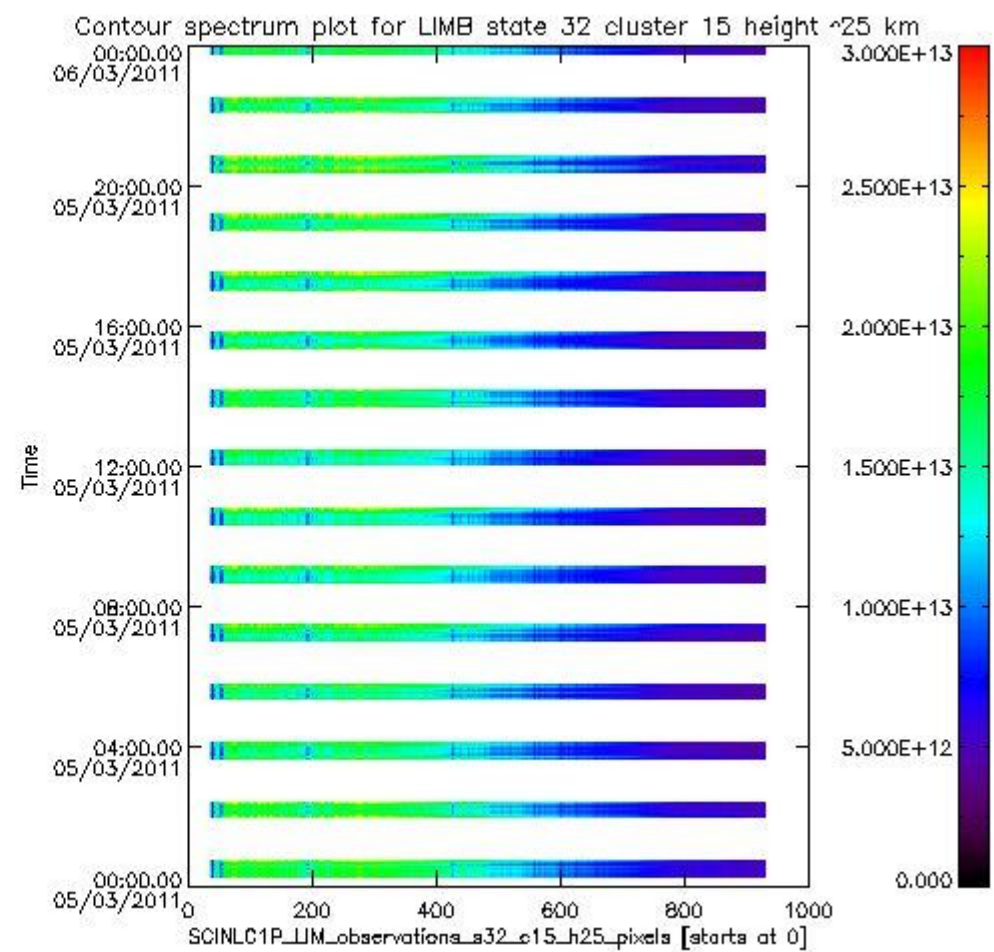
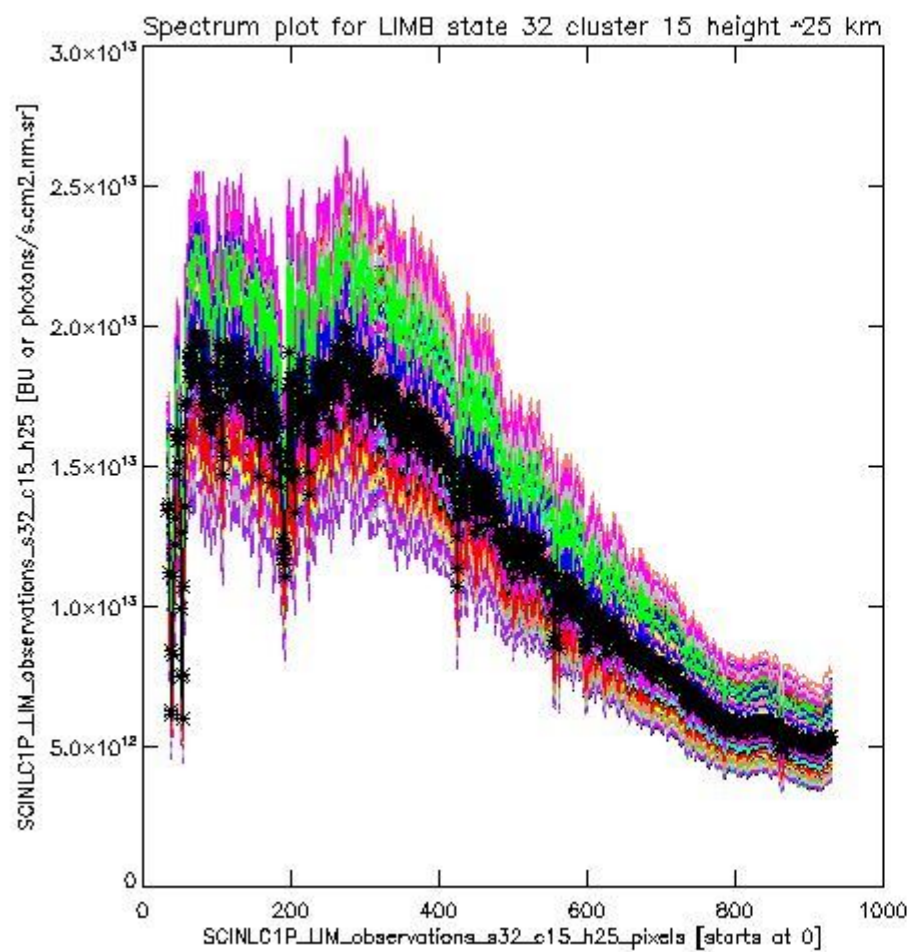
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_16.PNG



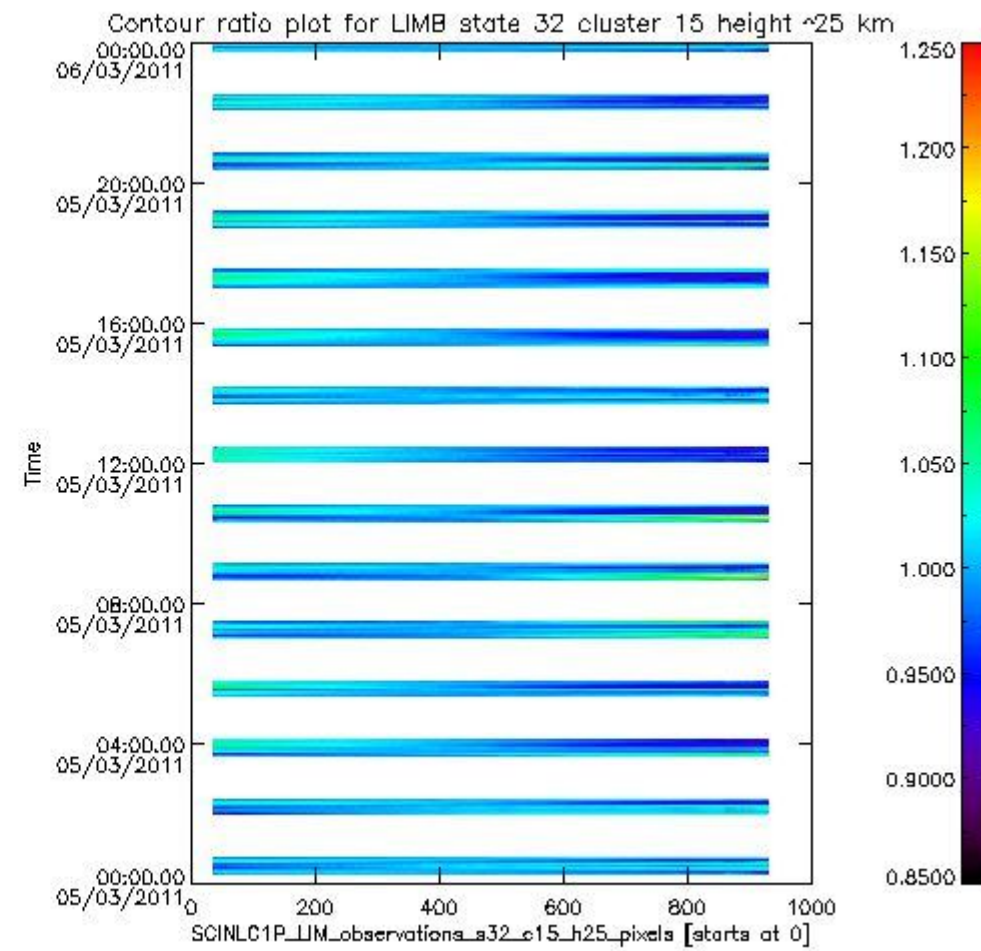
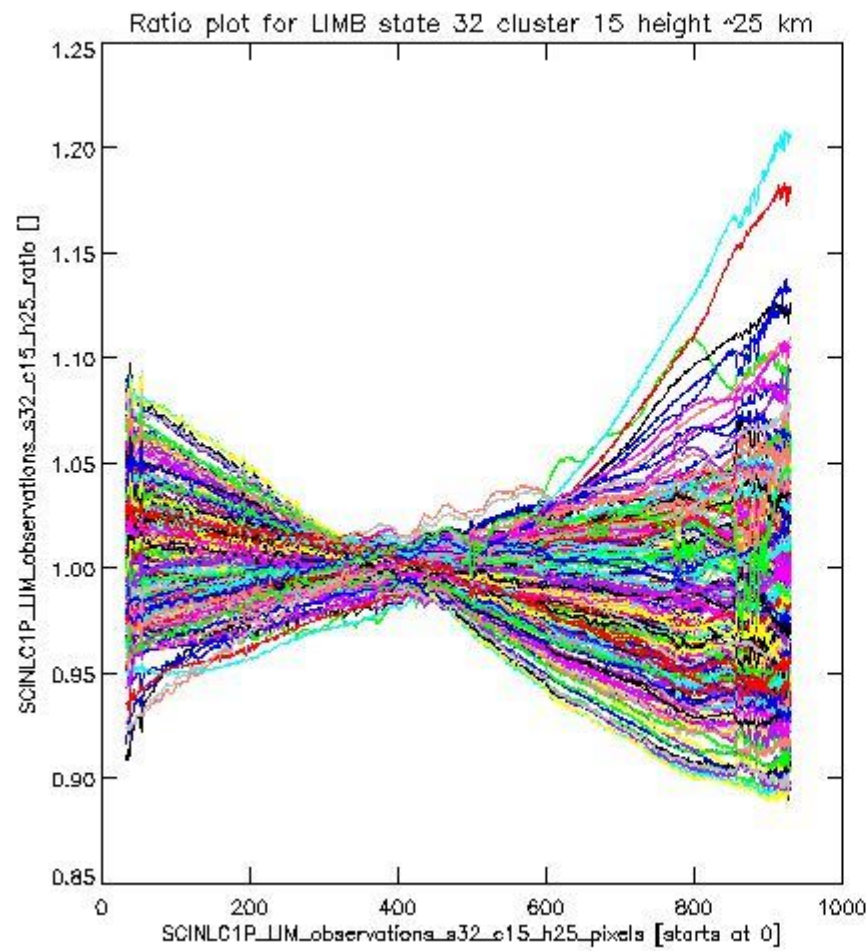
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110305_17.PNG

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 | 05MAR2011 00:18:04.861 |
| Start time of last sample | 05MAR2011 23:59:38.946 |
| Reference period start time | 03FEB2011 00:20:47.116 |
| Reference period stop time | 04MAR2011 23:05:21.216 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |



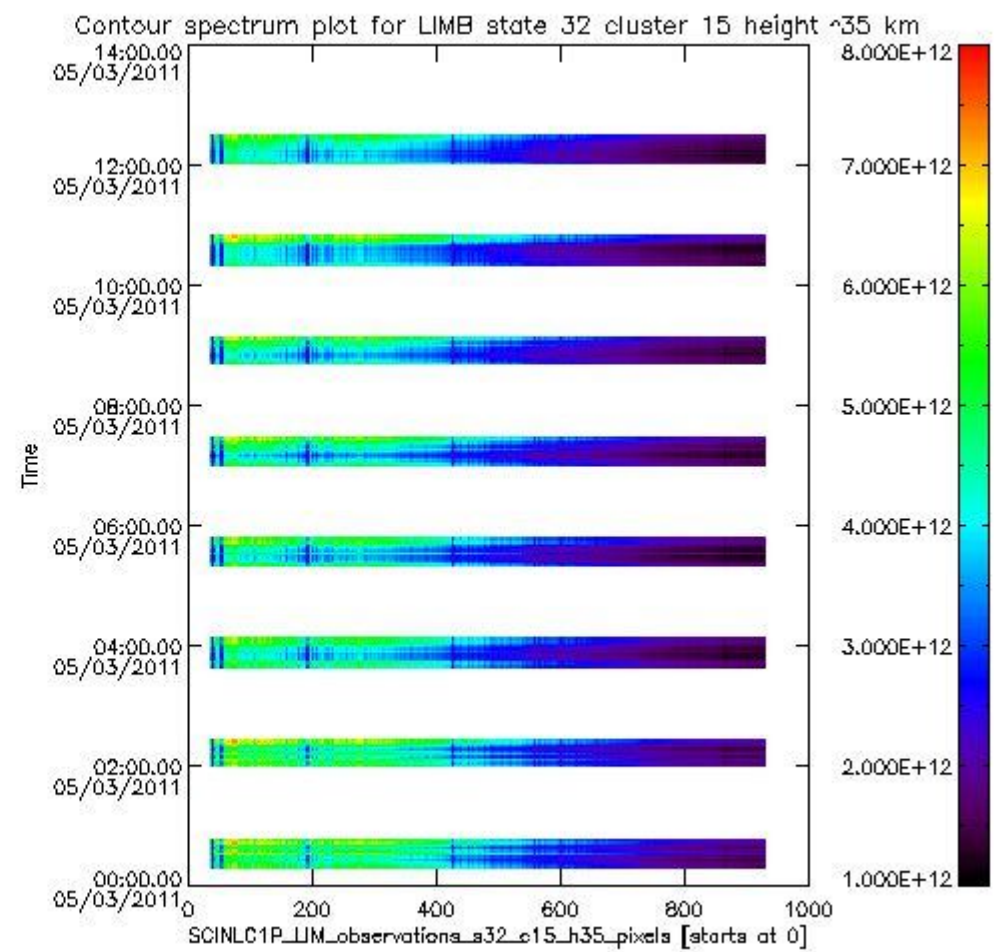
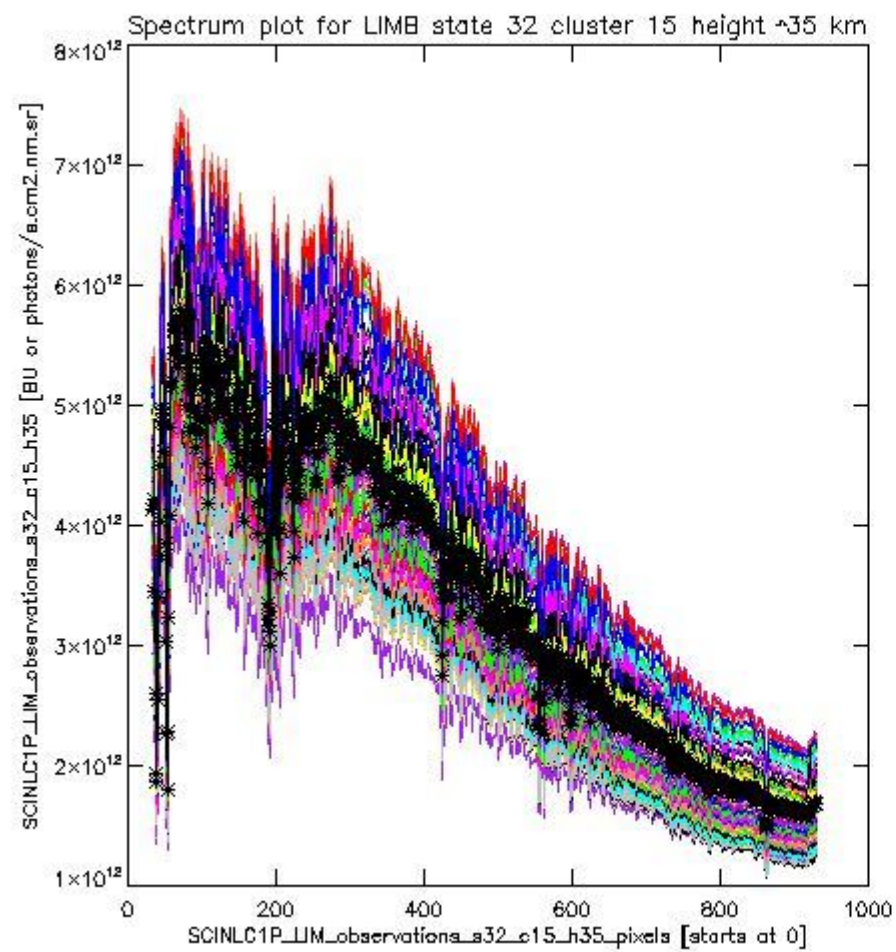
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110305_18.PNG

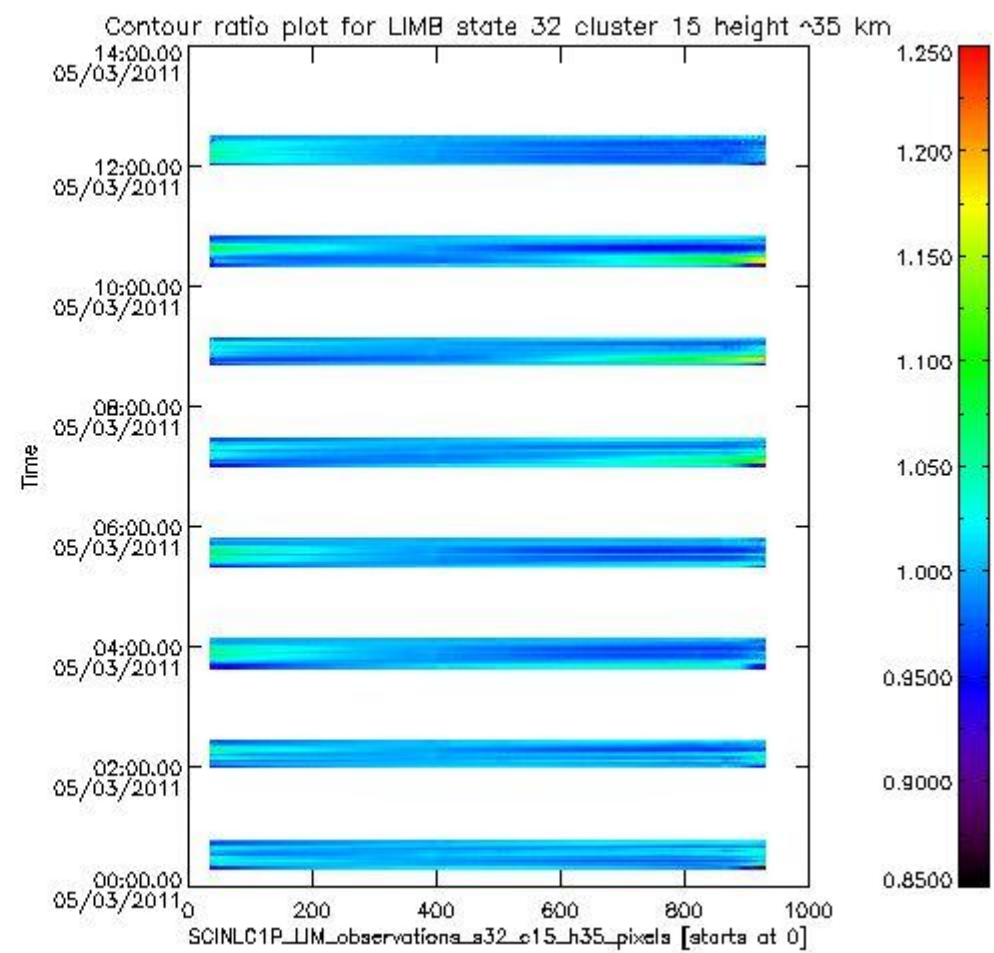
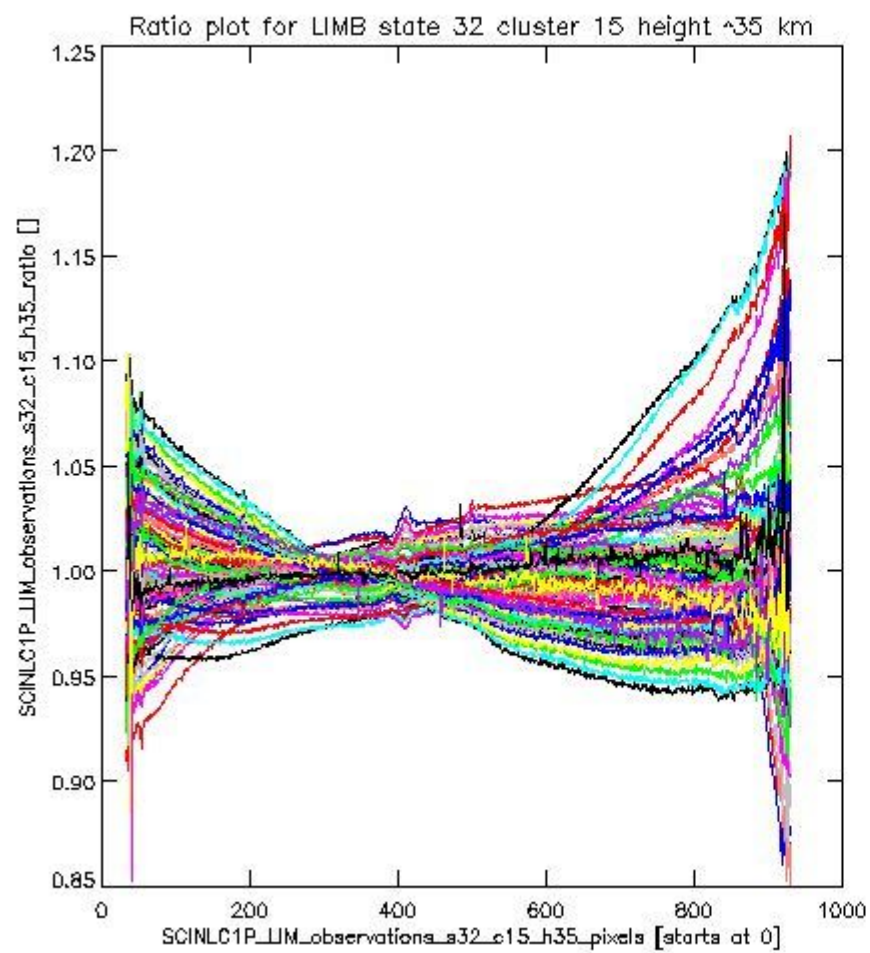


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110305_19.PNG

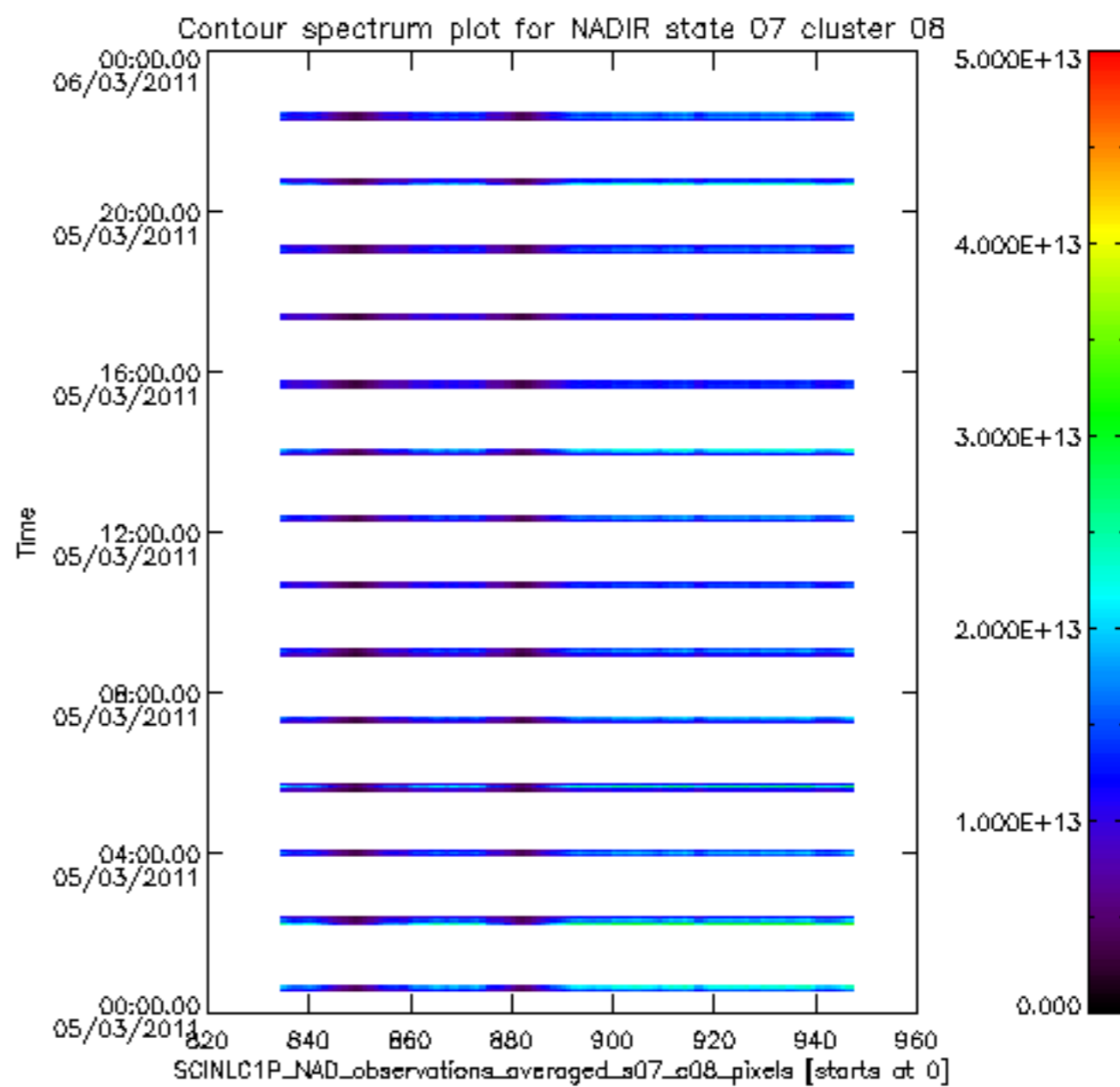
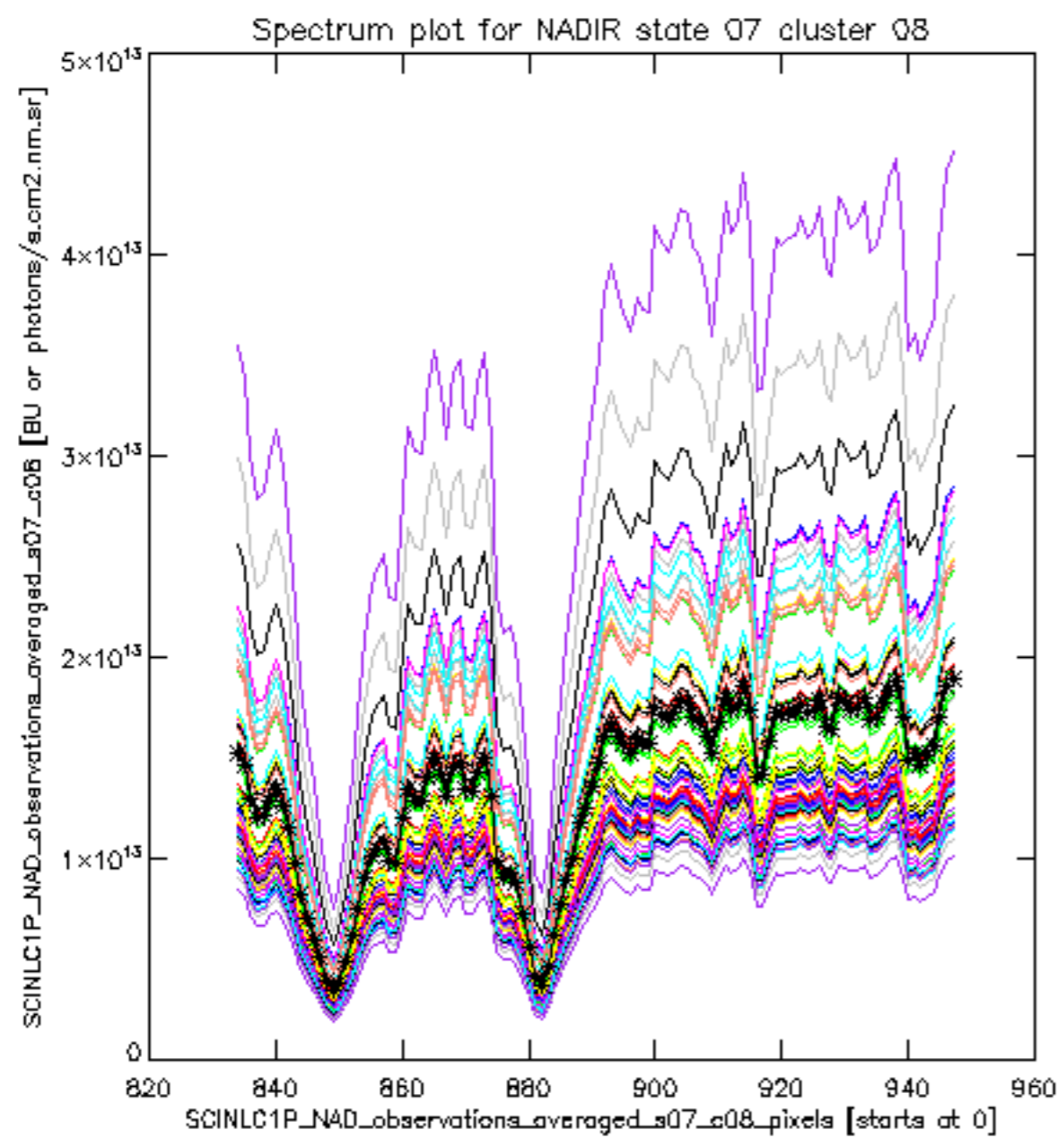
1.2.11 LIMB state 32 cluster 15 height ~35 km The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

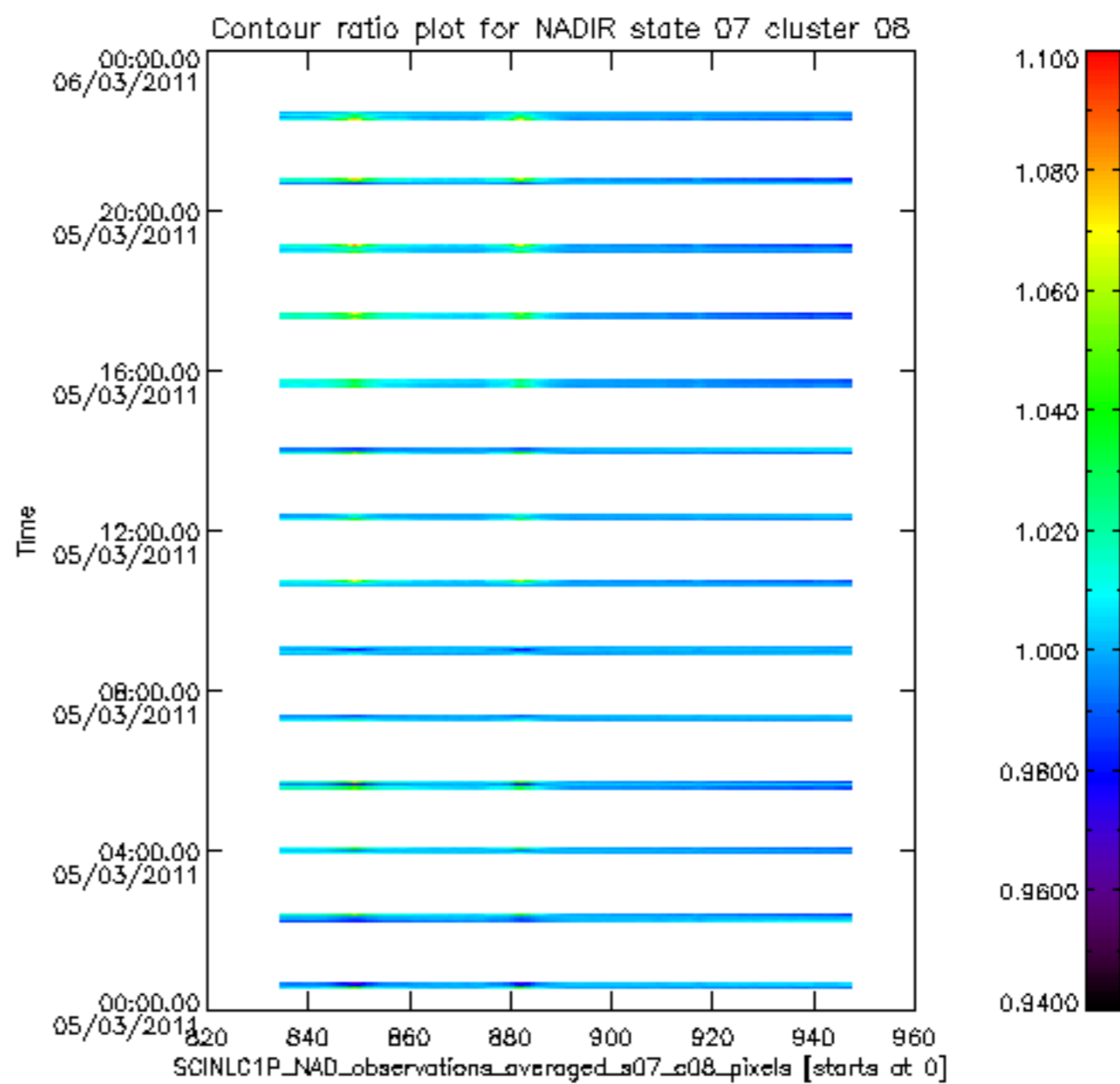
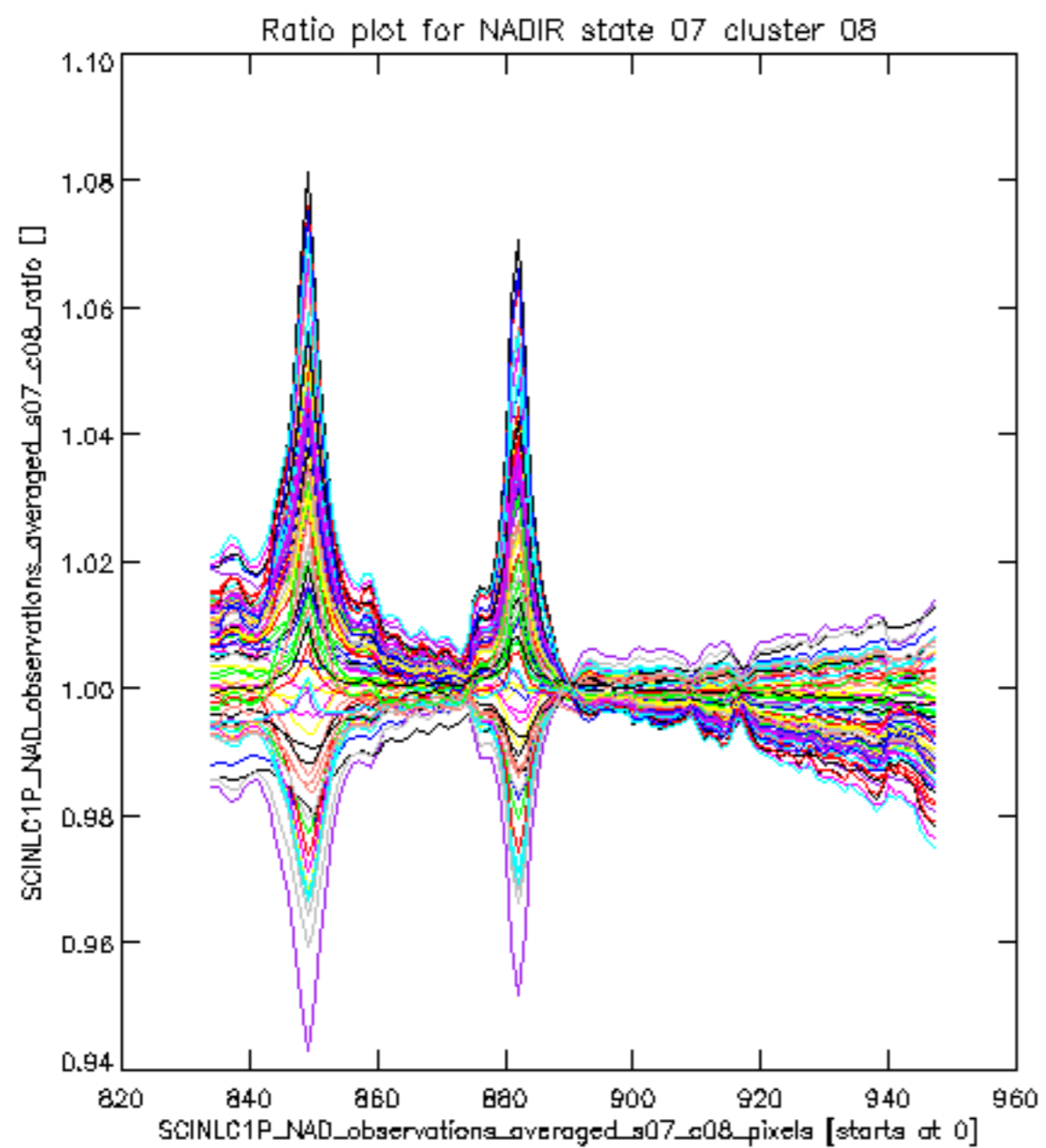
| Item | Value |
|----------------------------------|------------------------|
| Start time of first sample | 05MAR2011 00:18:04.861 |
| Start time of last sample | 05MAR2011 12:27:09.339 |
| Reference period start time | 03FEB2011 00:20:47.116 |
| Reference period stop time | 04MAR2011 23:05:21.216 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |

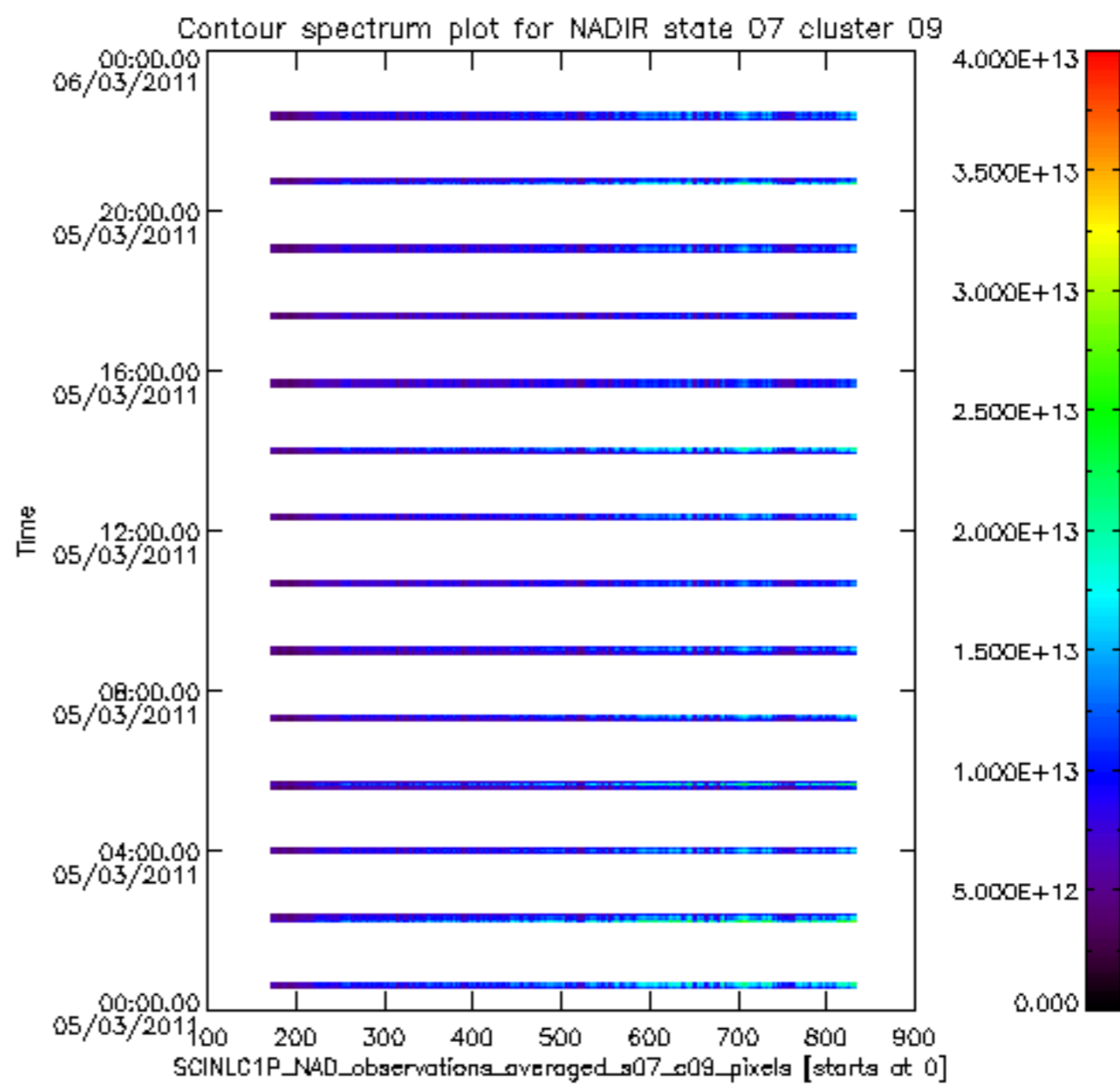
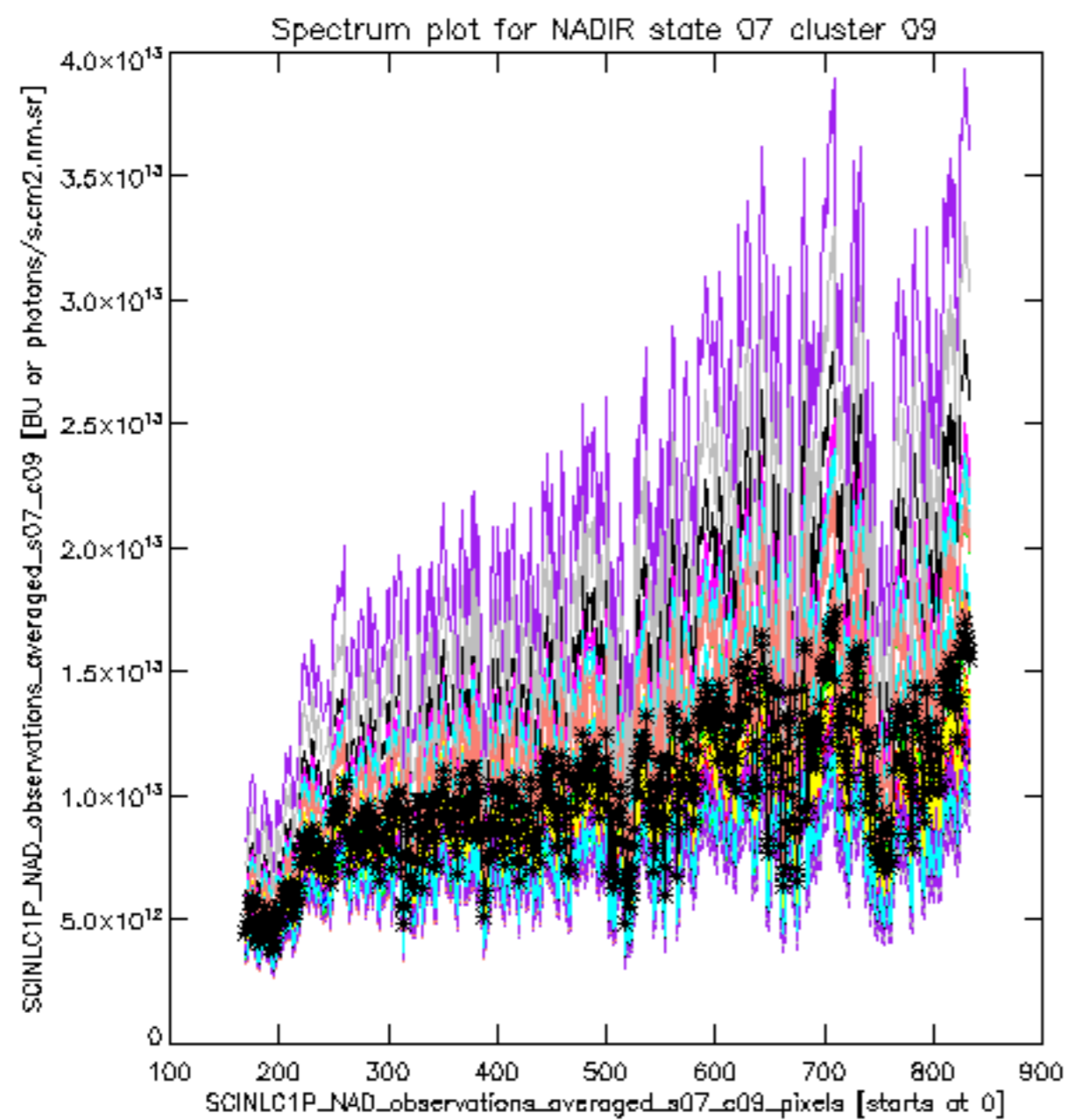


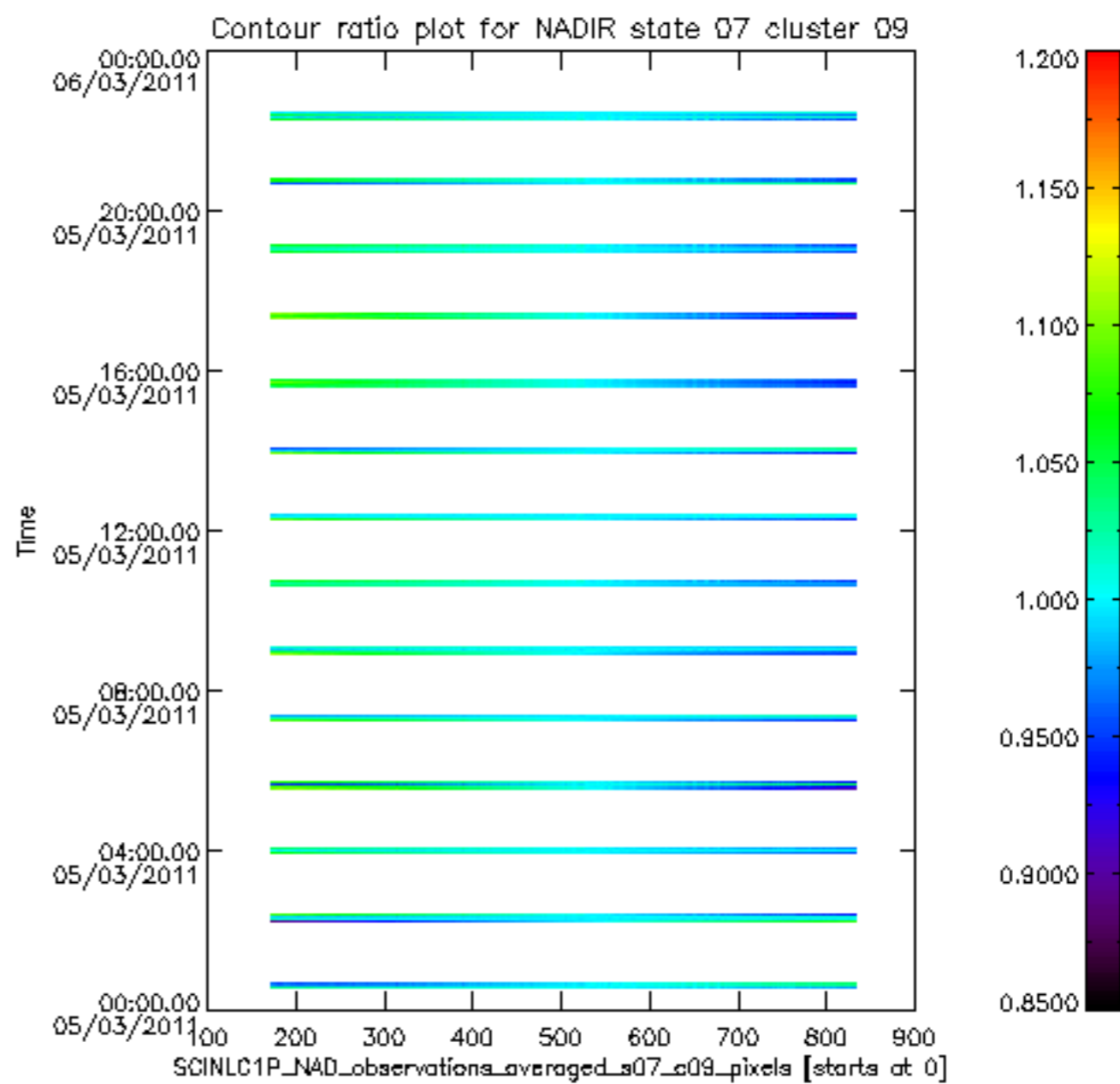
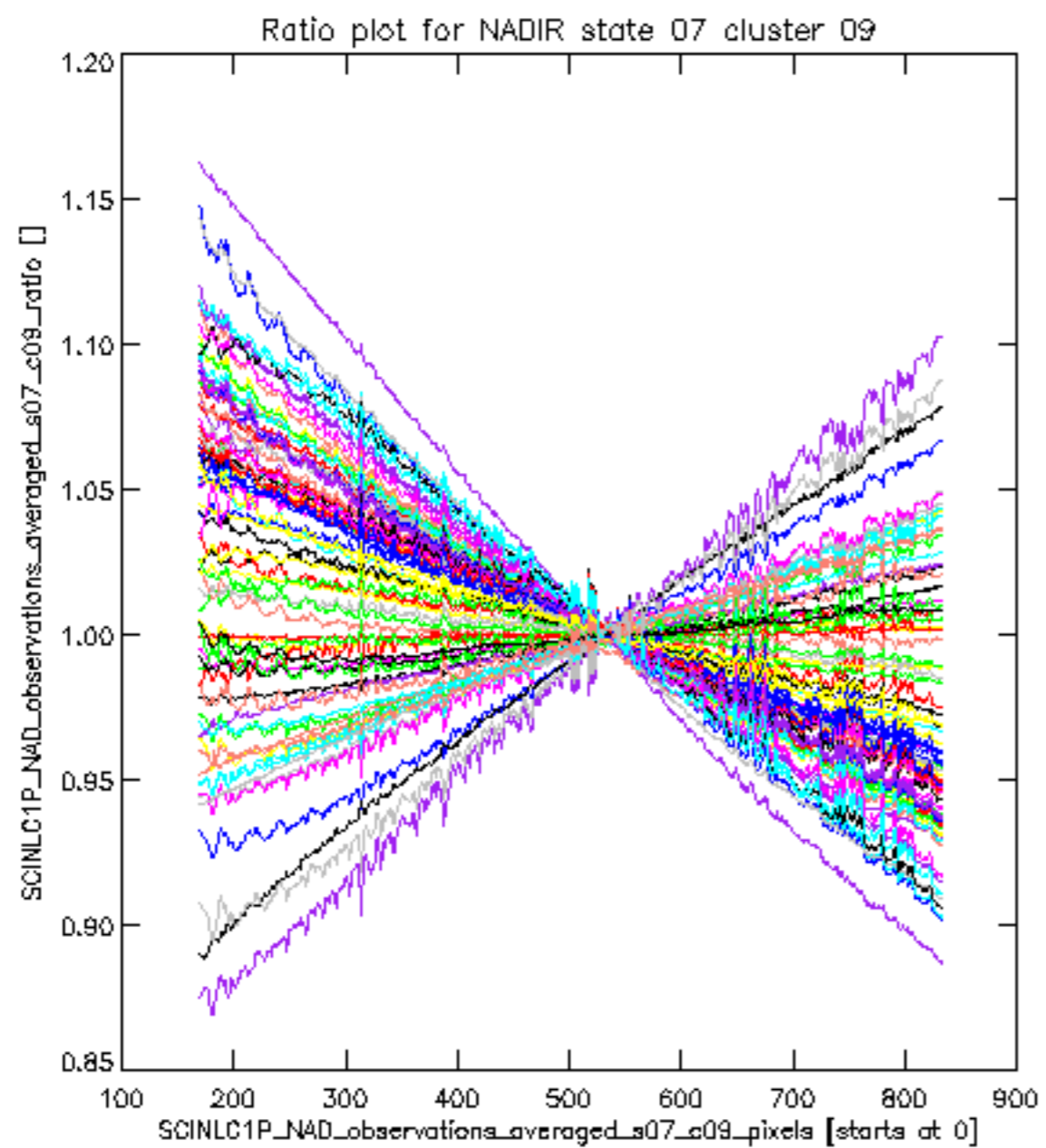


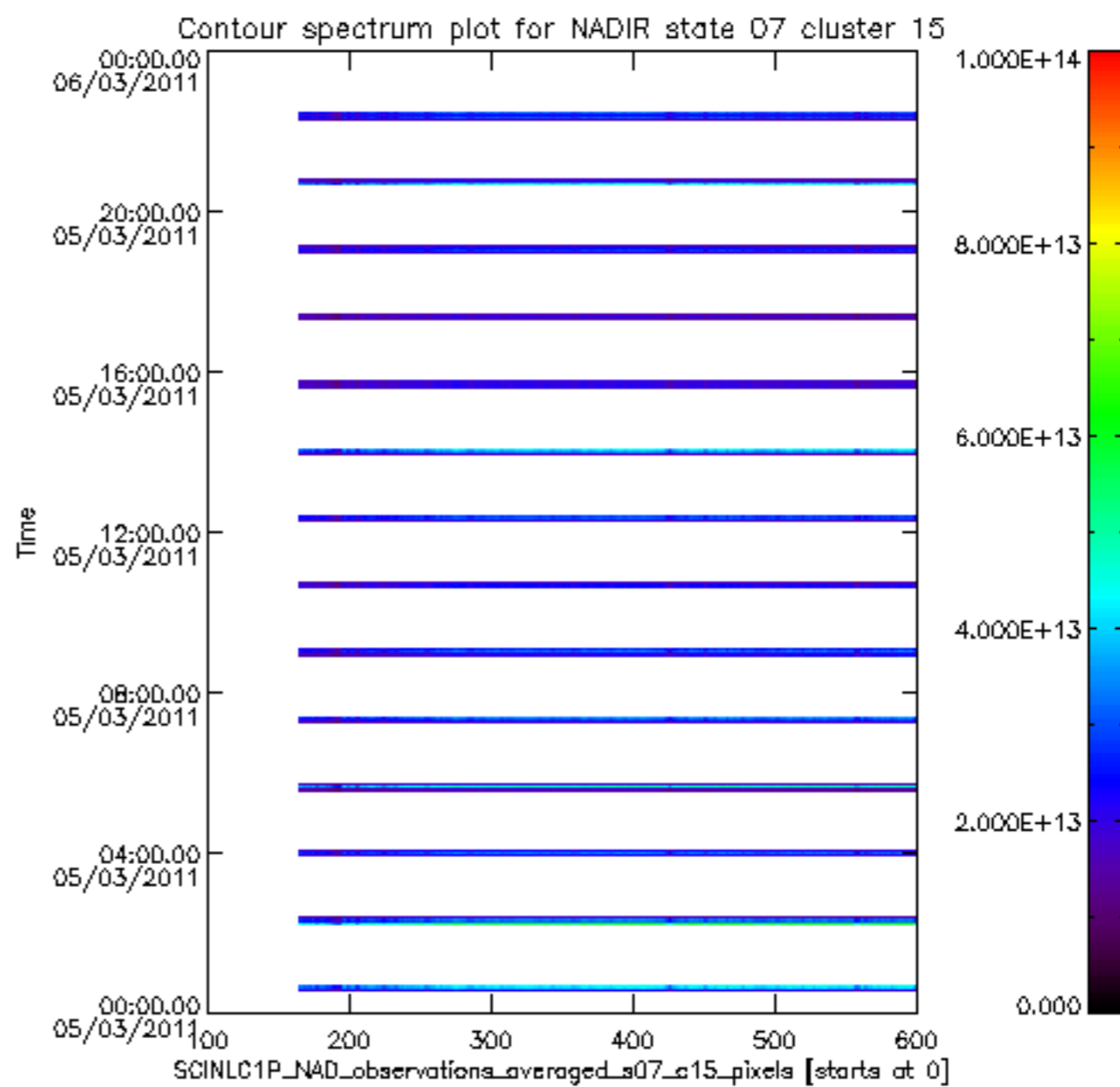
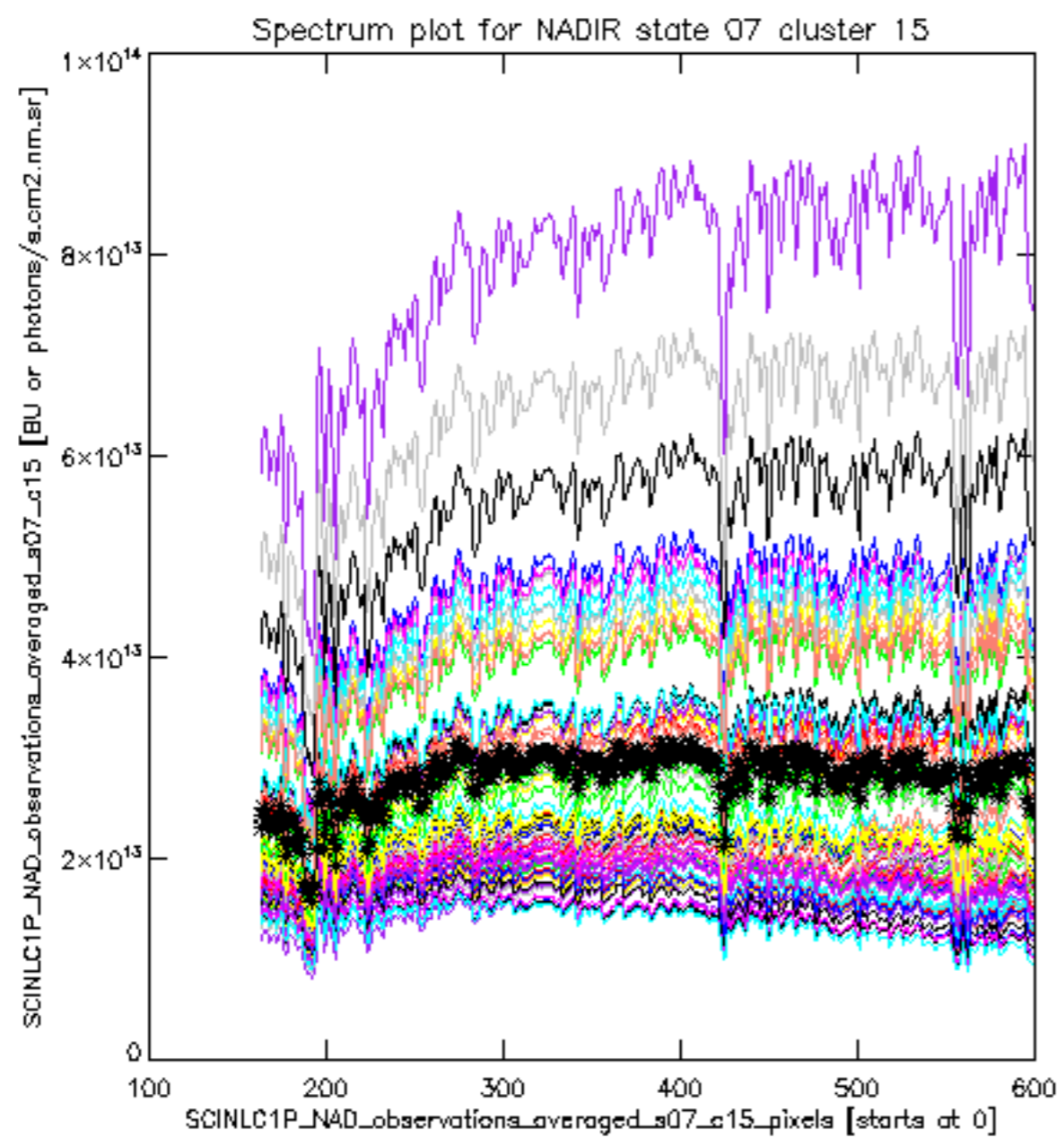
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110305_21.PNG

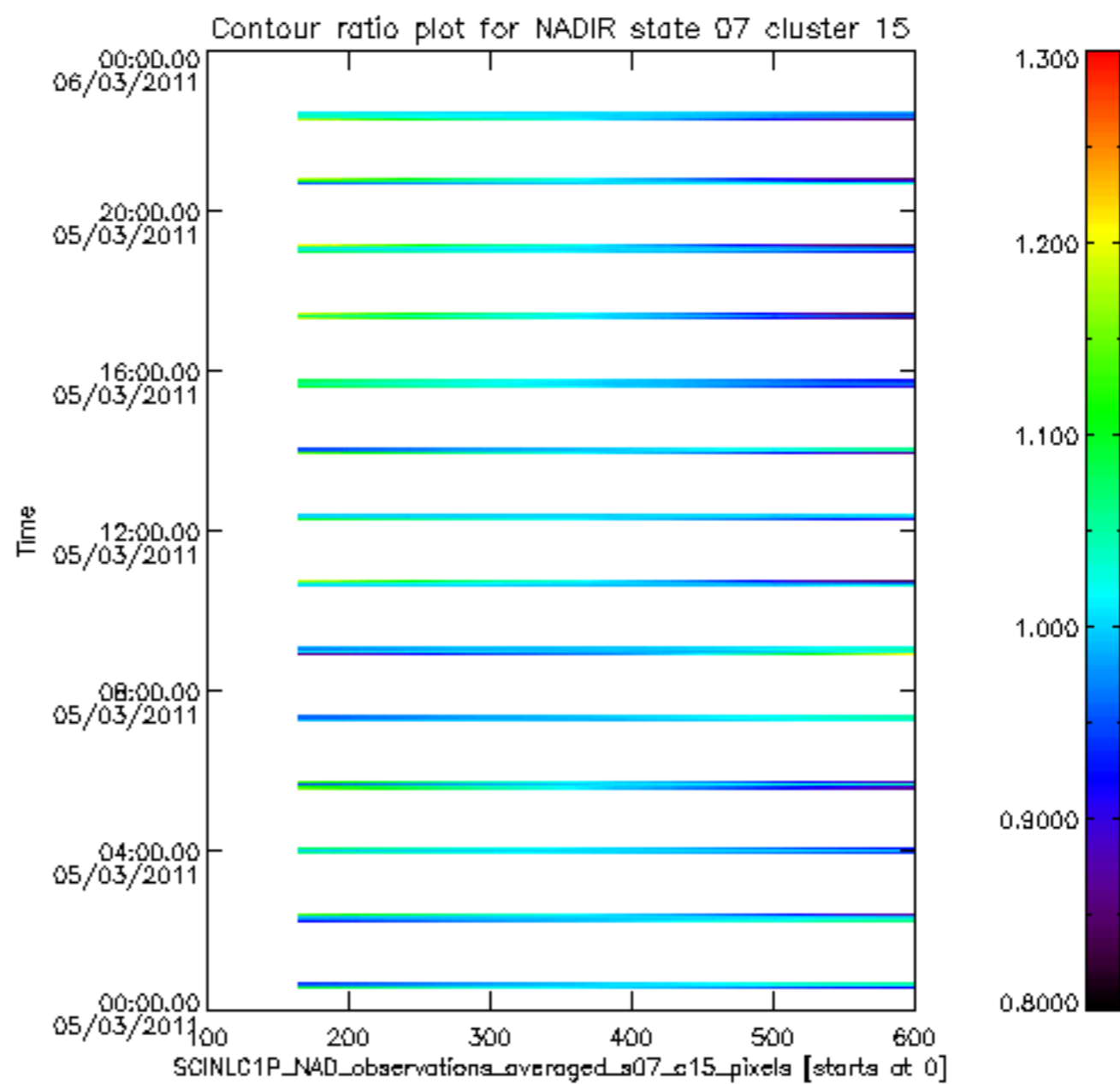
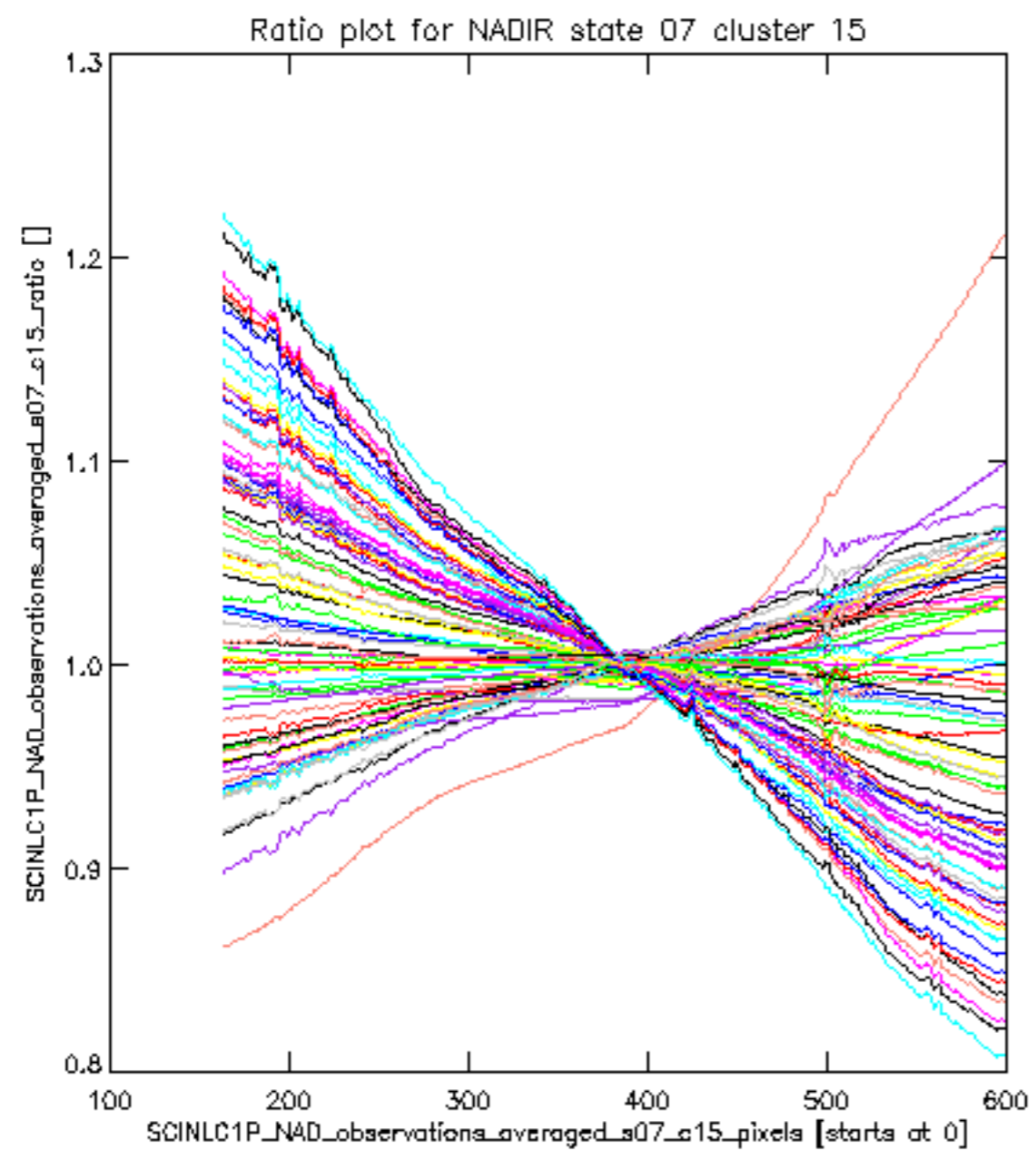


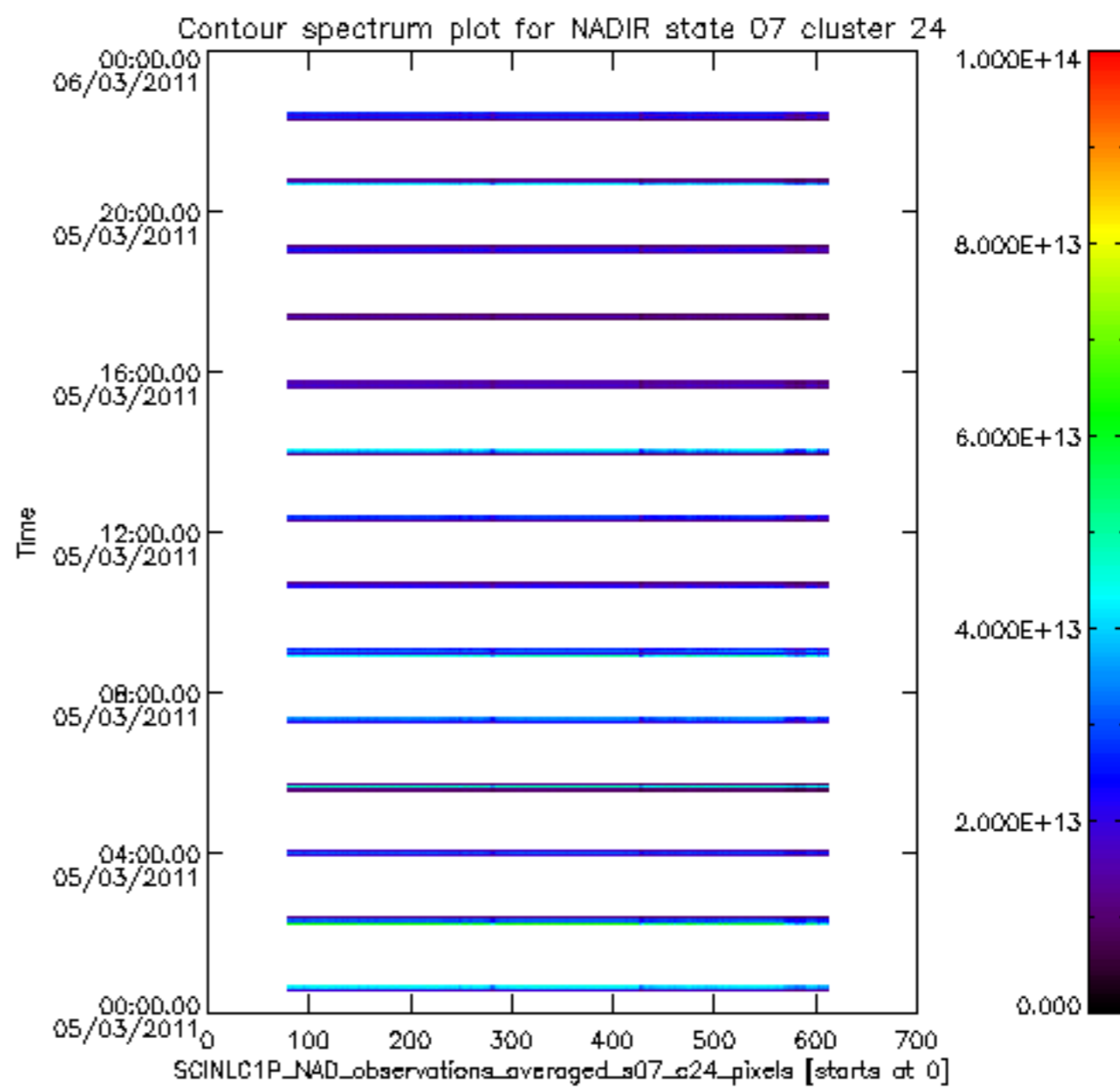
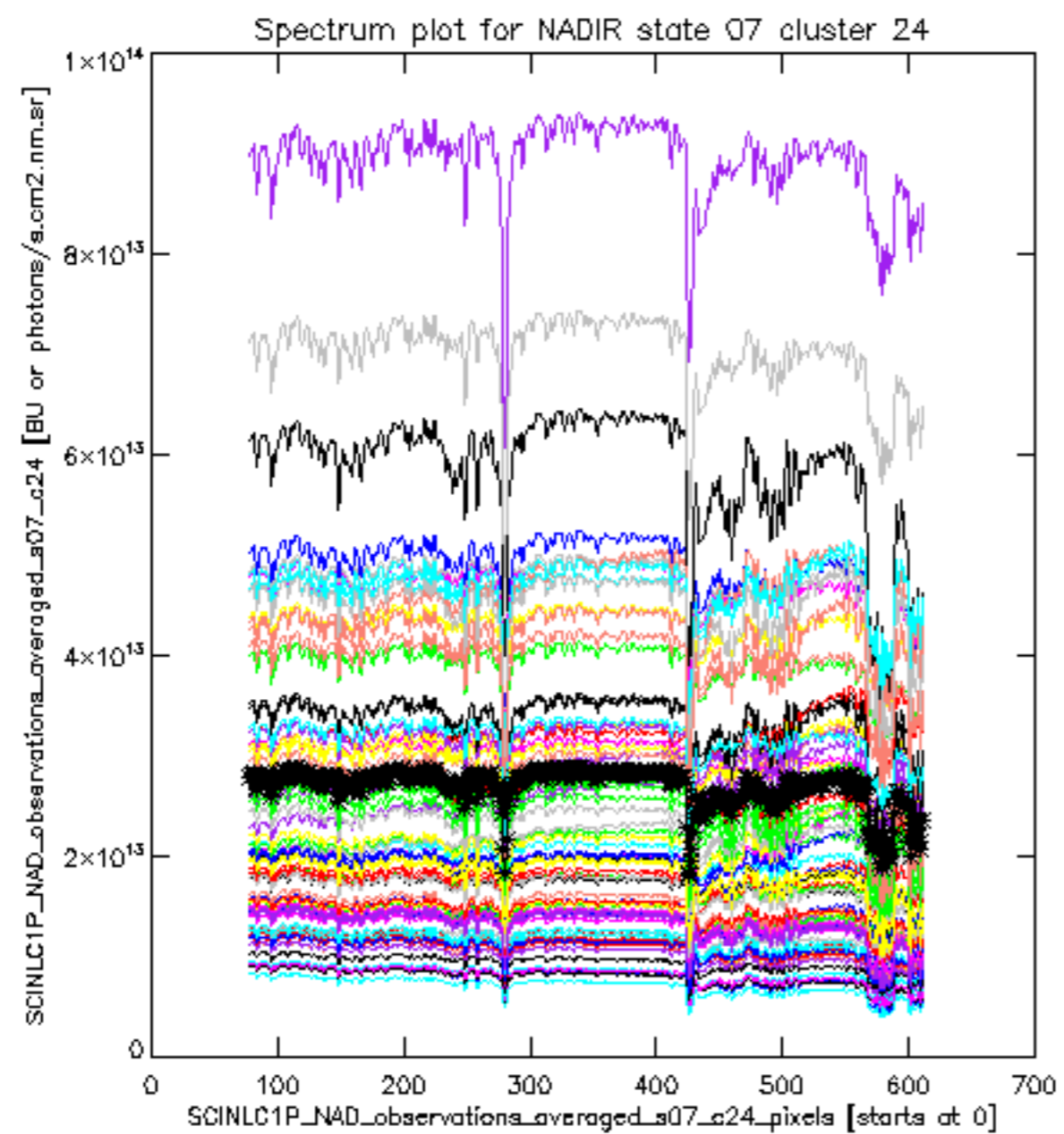


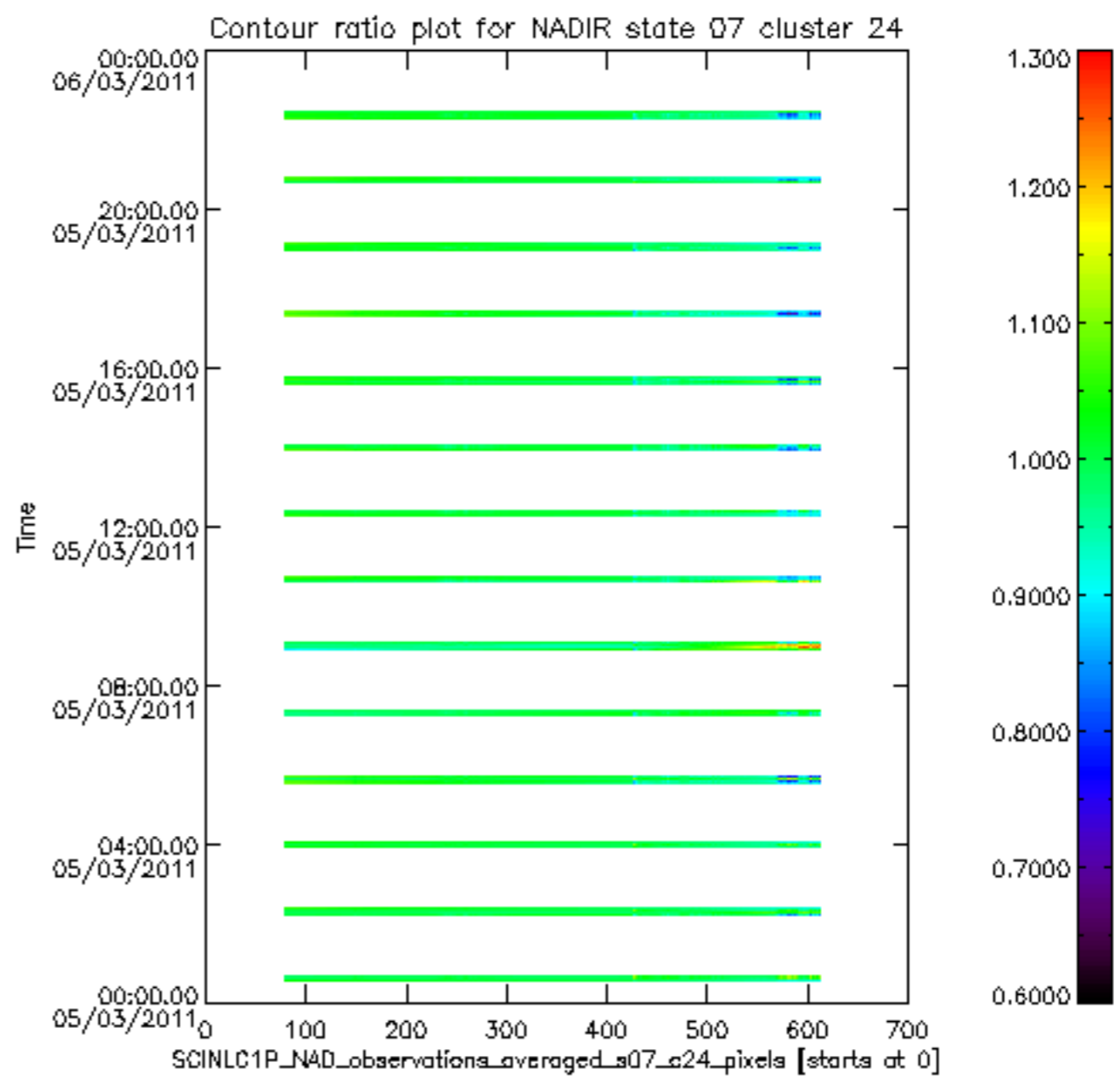
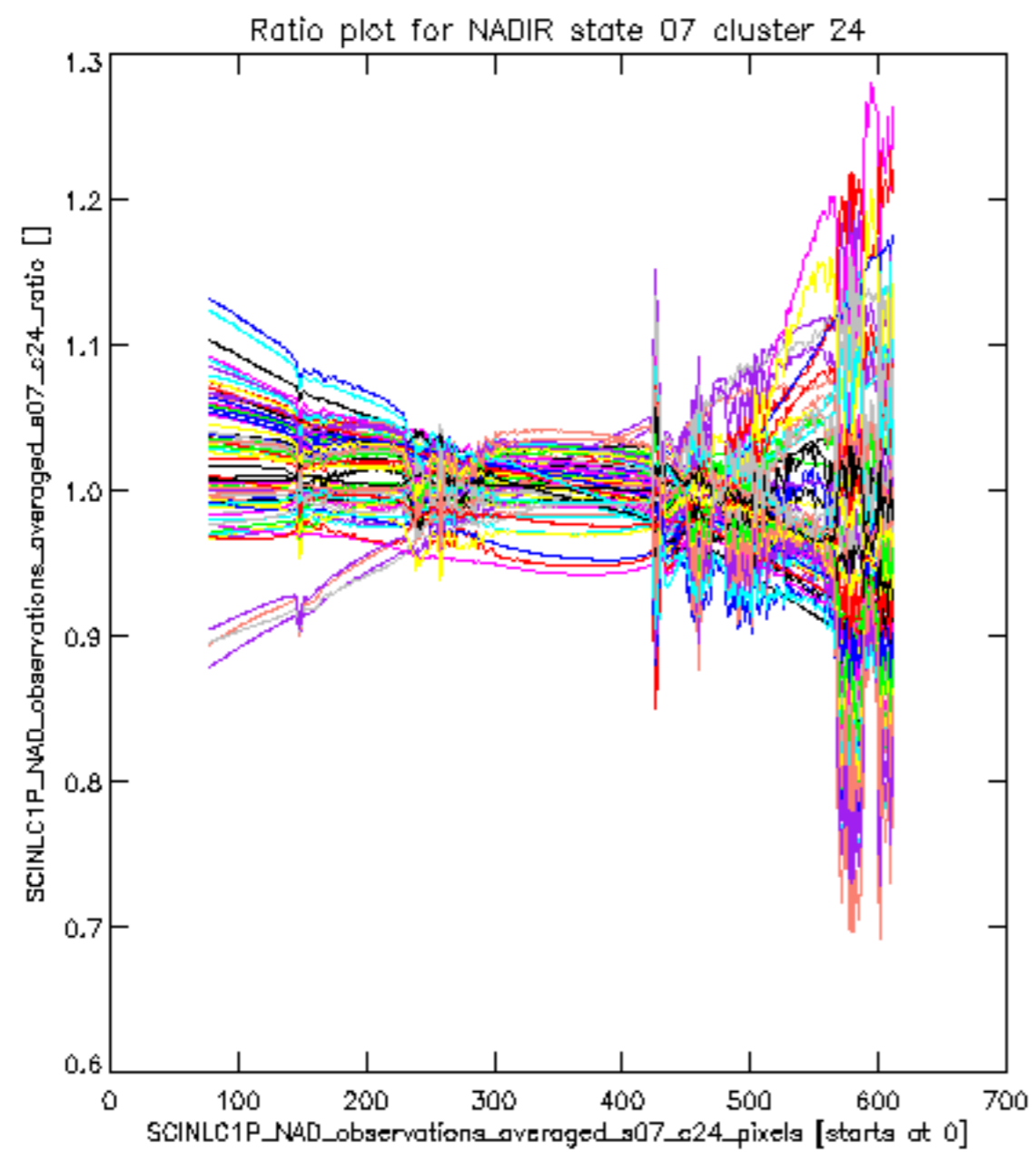




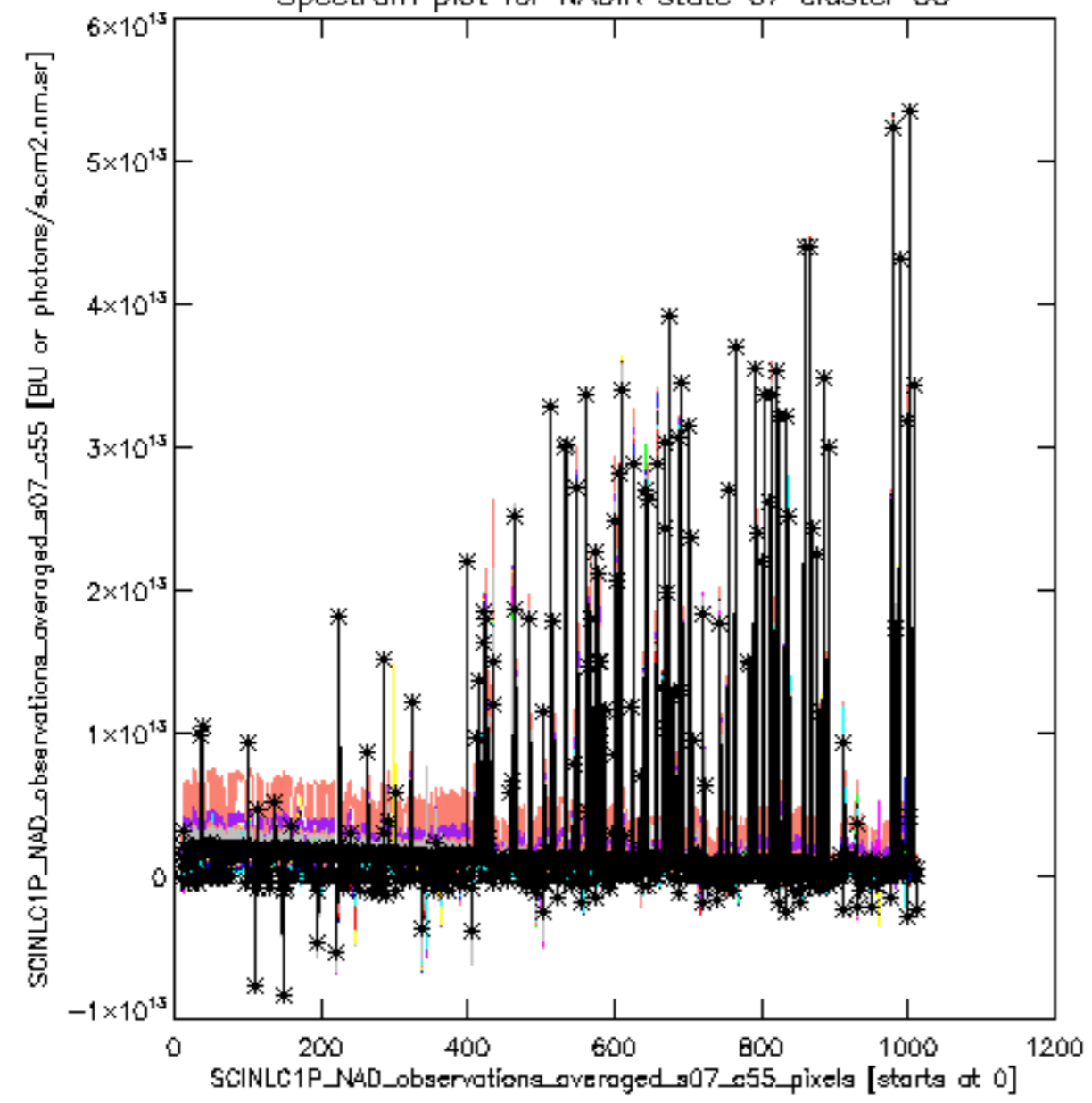








Spectrum plot for NADIR state 07 cluster 55



Contour spectrum plot for NADIR state 07 cluster 55

