

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 | 12JAN2011 06:55:34 |
| Data source version | SCIA/7.04-U |
| Processing scope for products | 01JAN2011 00:00:00 to 02JAN2011 00:00:00 |
| Start time of first product within scope | 01JAN2011 00:14:26 |
| Stop time of last product within scope | 02JAN2011 00:48:09 |
| Total number of level 1 products | 14 |
| Number of level 1 products with errors | 0 |
| SCIAL1C executable used in processing | scial1c-2.1.73-i686-pc-linux-gnu-gcc-3.3.6 |
| SCIAL1C parameters used in processing | -allcal -type all -cat 1,2,8,10,11,16,19,23 -nadircluster 8,9,15,24,55 -limbcluster 9,15 |

1.1.2 Source packet summary

The table below shows which source packets have been included into the report.

| Item | Mode | State | Cluster | Height | First start time | Last start time |
|------|-------|-------|---------|--------|------------------------|------------------------|
| 0 | NADIR | 07 | 08 | N/A | 01JAN2011 00:47:37.604 | 01JAN2011 22:39:43.169 |
| 1 | NADIR | 07 | 09 | N/A | 01JAN2011 00:47:37.604 | 01JAN2011 22:39:43.169 |
| 2 | NADIR | 07 | 15 | N/A | 01JAN2011 00:47:37.604 | 01JAN2011 22:39:43.169 |
| 3 | NADIR | 07 | 24 | N/A | 01JAN2011 00:47:37.604 | 01JAN2011 22:39:43.169 |
| 4 | NADIR | 07 | 55 | N/A | 01JAN2011 00:47:37.604 | 01JAN2011 22:39:43.169 |
| 5 | LIMB | 32 | 09 | ~19 km | 01JAN2011 00:32:24.225 | 01JAN2011 23:59:43.947 |
| 6 | LIMB | 32 | 09 | ~22 km | 01JAN2011 00:32:24.225 | 01JAN2011 23:59:43.947 |
| 7 | LIMB | 32 | 09 | ~25 km | 01JAN2011 00:32:24.225 | 01JAN2011 23:59:43.947 |
| 8 | LIMB | 32 | 15 | ~22 km | 01JAN2011 00:32:24.225 | 01JAN2011 23:59:43.947 |
| 9 | LIMB | 32 | 15 | ~25 km | 01JAN2011 00:32:24.225 | 01JAN2011 23:59:43.947 |
| 10 | LIMB | 32 | 15 | ~35 km | 01JAN2011 00:32:24.225 | 01JAN2011 23:59:43.947 |

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_1CUDPA20101231_235634_000060093098_00074_46209_1370.N1 | 01JAN2011 00:14:26 | 01JAN2011 01:24:55 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 1 | SCI_NLC_1CUDPA20110101_013647_000060103098_00075_46210_1371.N1 | 01JAN2011 01:54:40 | 01JAN2011 03:04:54 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 2 | SCI_NLC_1CUDPA20110101_045715_000060103098_00077_46212_1375.N1 | 01JAN2011 05:15:08 | 01JAN2011 06:25:22 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 3 | SCI_NLC_1CUDPA20110101_063730_000060093098_00078_46213_1372.N1 | 01JAN2011 06:55:22 | 01JAN2011 08:05:51 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 4 | SCI_NLC_1CUDPA20110101_081744_000060103098_00079_46214_1376.N1 | 01JAN2011 08:35:35 | 01JAN2011 09:45:50 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 5 | SCI_NLC_1CUDPA20110101_095758_000060093098_00080_46215_1377.N1 | 01JAN2011 10:15:49 | 01JAN2011 11:26:18 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |

| | | | | | | | | | | | | |
|----|--|--------------------|--------------------|---|----|----|---|---|---|---|---|--|
| 6 | SCI_NLC_1CUDPA20110101_113811_000060103098_00081_46216_1378.N1 | 01JAN2011 11:56:03 | 01JAN2011 13:06:18 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 7 | SCI_NLC_1CUDPA20110101_131826_000060093098_00082_46217_1379.N1 | 01JAN2011 13:36:17 | 01JAN2011 14:46:46 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 8 | SCI_NLC_1CUDPA20110101_145839_000060103098_00083_46218_1380.N1 | 01JAN2011 15:16:31 | 01JAN2011 16:26:45 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 9 | SCI_NLC_1CUDPA20110101_163854_000060093098_00084_46219_1381.N1 | 01JAN2011 16:56:45 | 01JAN2011 18:07:14 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 10 | SCI_NLC_1CUDPA20110101_181907_000060103098_00085_46220_1382.N1 | 01JAN2011 18:36:59 | 01JAN2011 19:47:32 | 0 | 35 | 31 | 0 | 1 | 2 | 0 | 0 | |
| 11 | SCI_NLC_1CUDPA20110101_195922_000060093098_00086_46221_1383.N1 | 01JAN2011 20:17:13 | 01JAN2011 21:28:01 | 0 | 36 | 30 | 0 | 1 | 1 | 0 | 0 | |
| 12 | SCI_NLC_1CUDPA20110101_213935_000060103098_00087_46222_1384.N1 | 01JAN2011 21:57:26 | 01JAN2011 23:07:41 | 0 | 35 | 31 | 0 | 0 | 1 | 0 | 0 | |
| 13 | SCI_NLC_1CUDPA20110101_231950_000060093098_00088_46223_1385.N1 | 01JAN2011 23:37:40 | 02JAN2011 00:48:09 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |

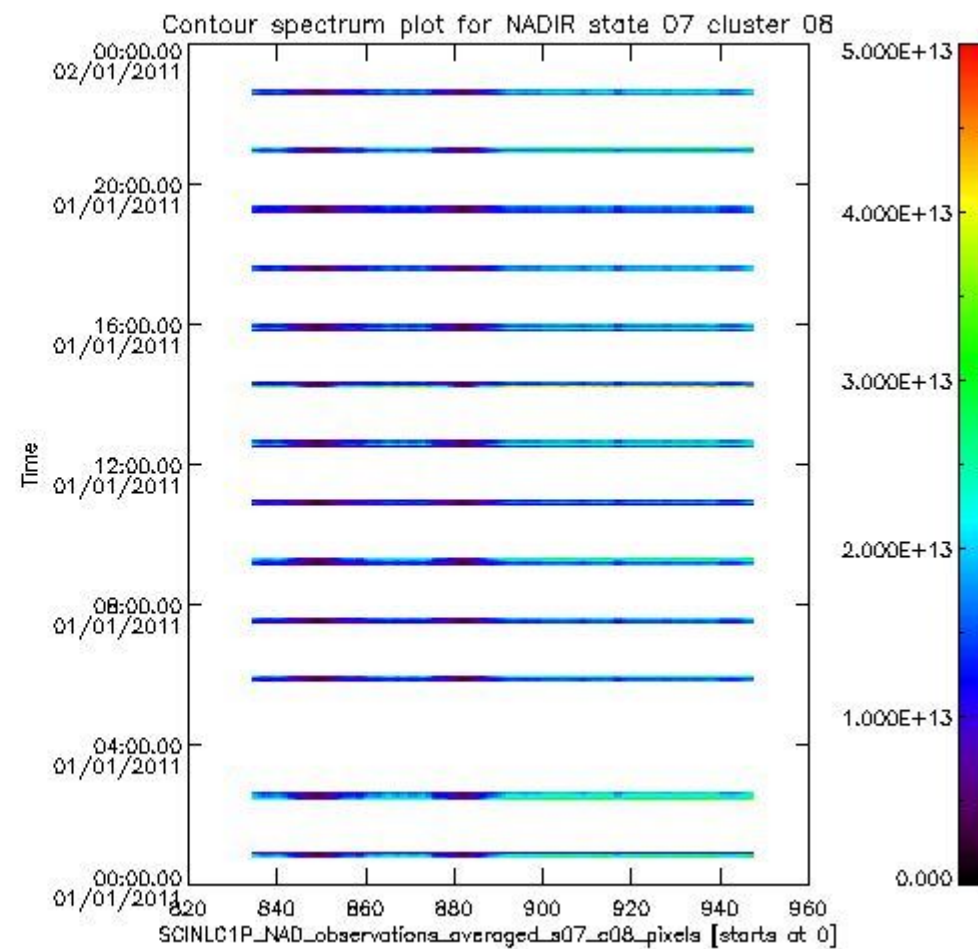
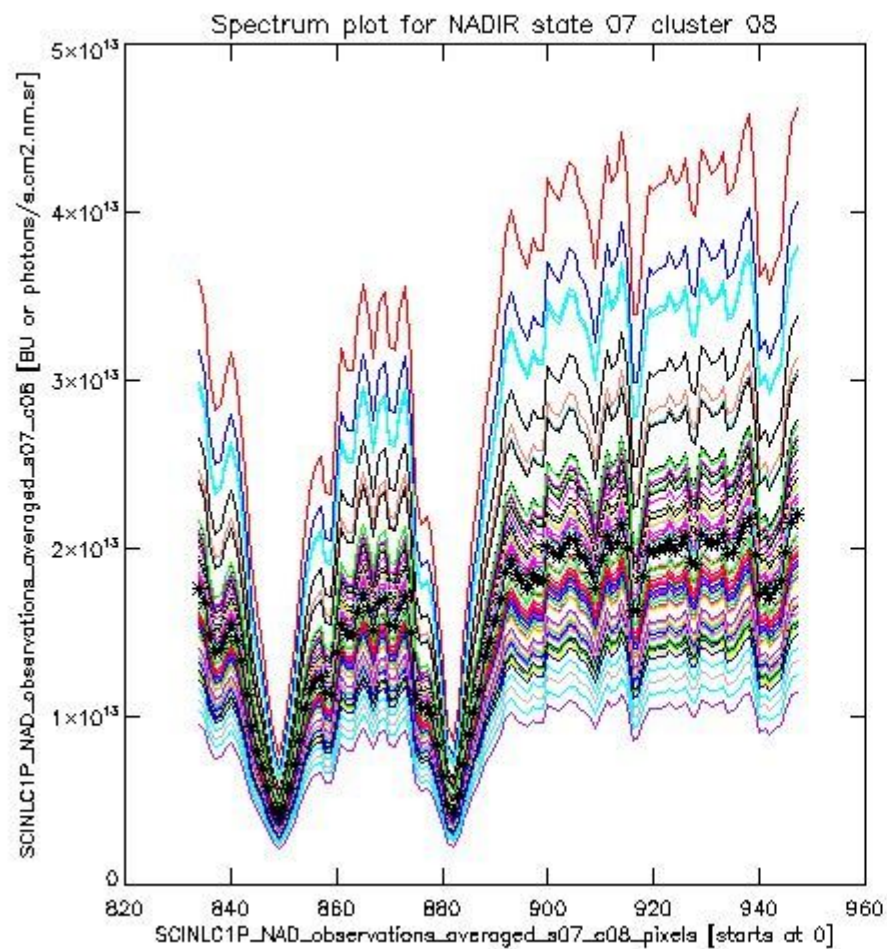
1.2 Source packet monitoring

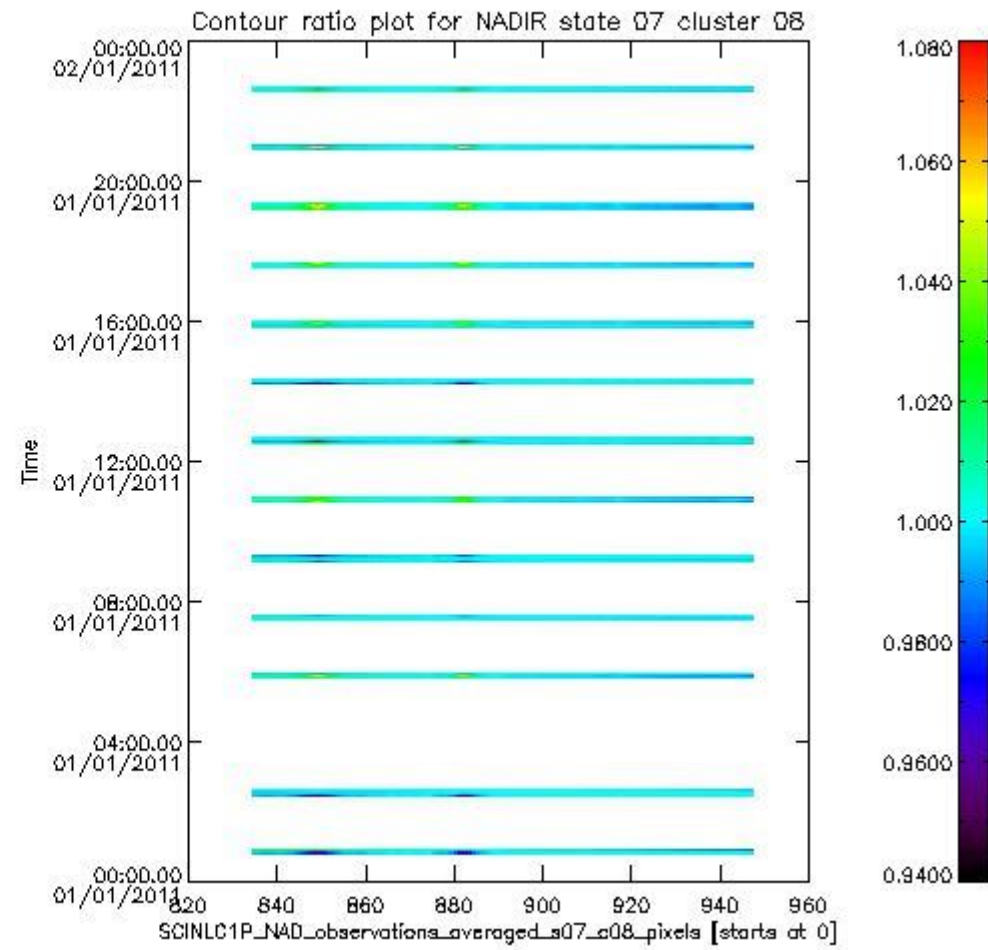
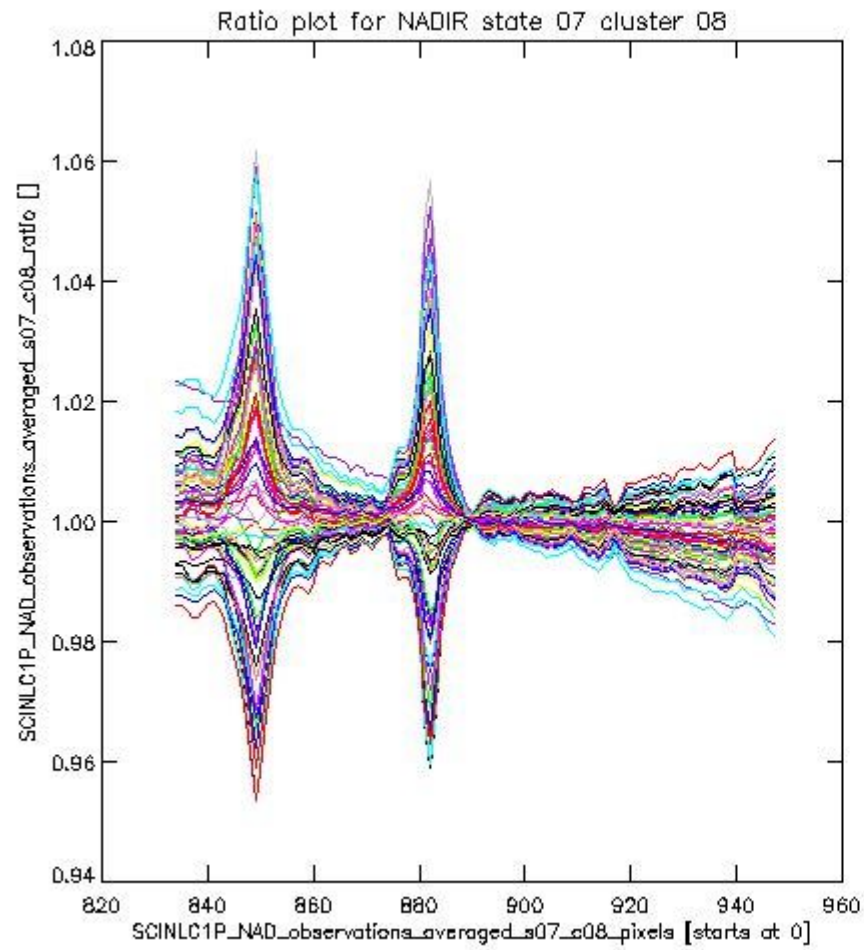
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- 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:

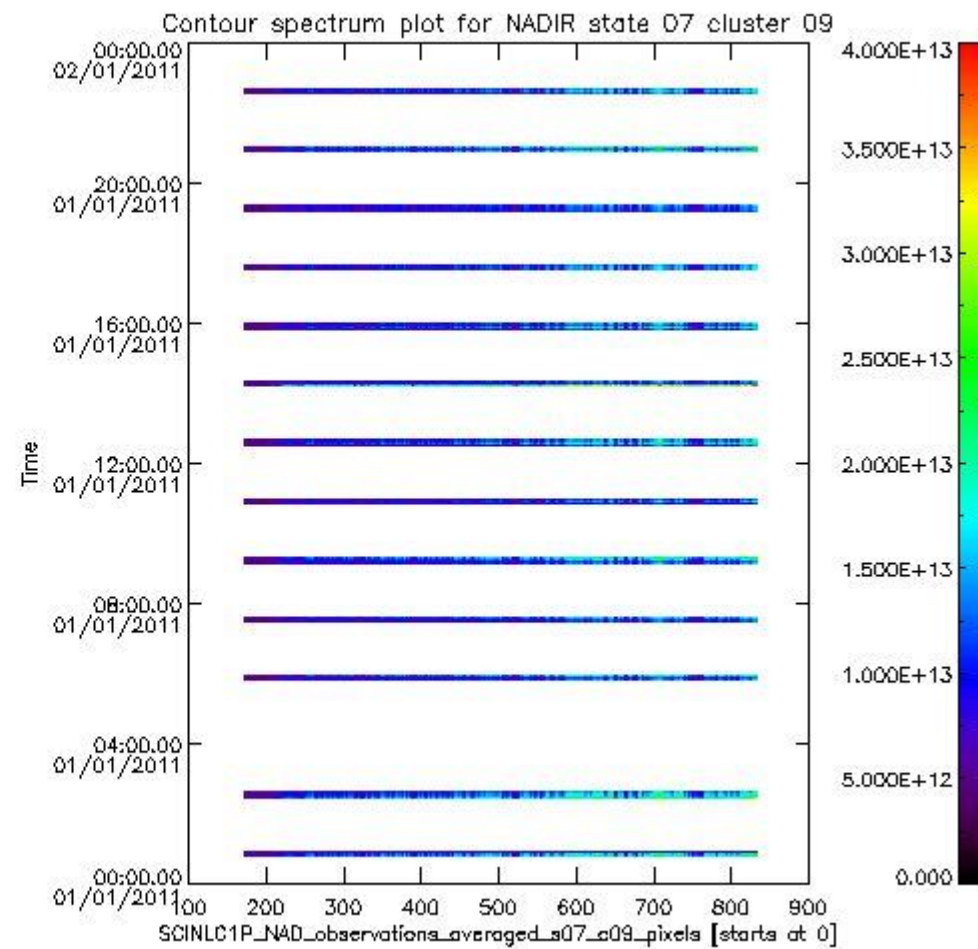
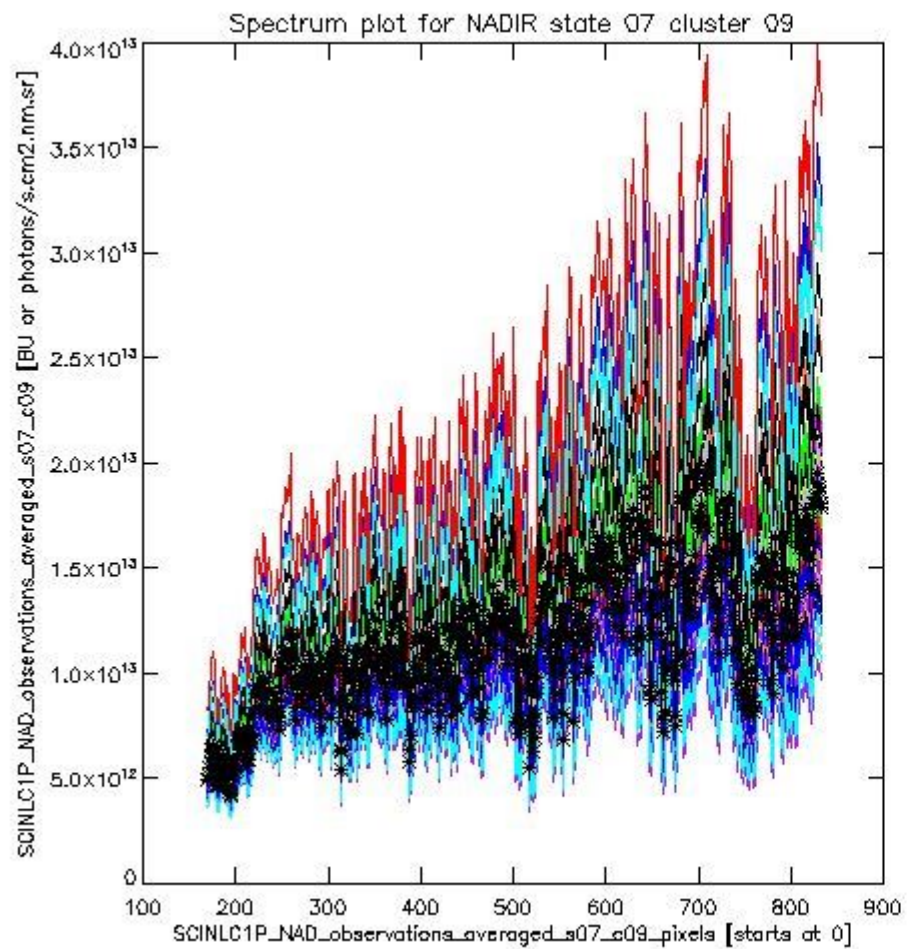
| Item | Value |
|----------------------------------|------------------------|
| Start time of first sample | 01JAN2011 00:47:37.604 |
| Start time of last sample | 01JAN2011 22:39:43.169 |
| Reference period start time | 02DEC2010 00:46:00.837 |
| Reference period stop time | 31DEC2010 23:16:28.920 |
| Channel number | 2 |
| First pixel number (starts at 0) | 834 |
| Last pixel number (starts at 0) | 947 |



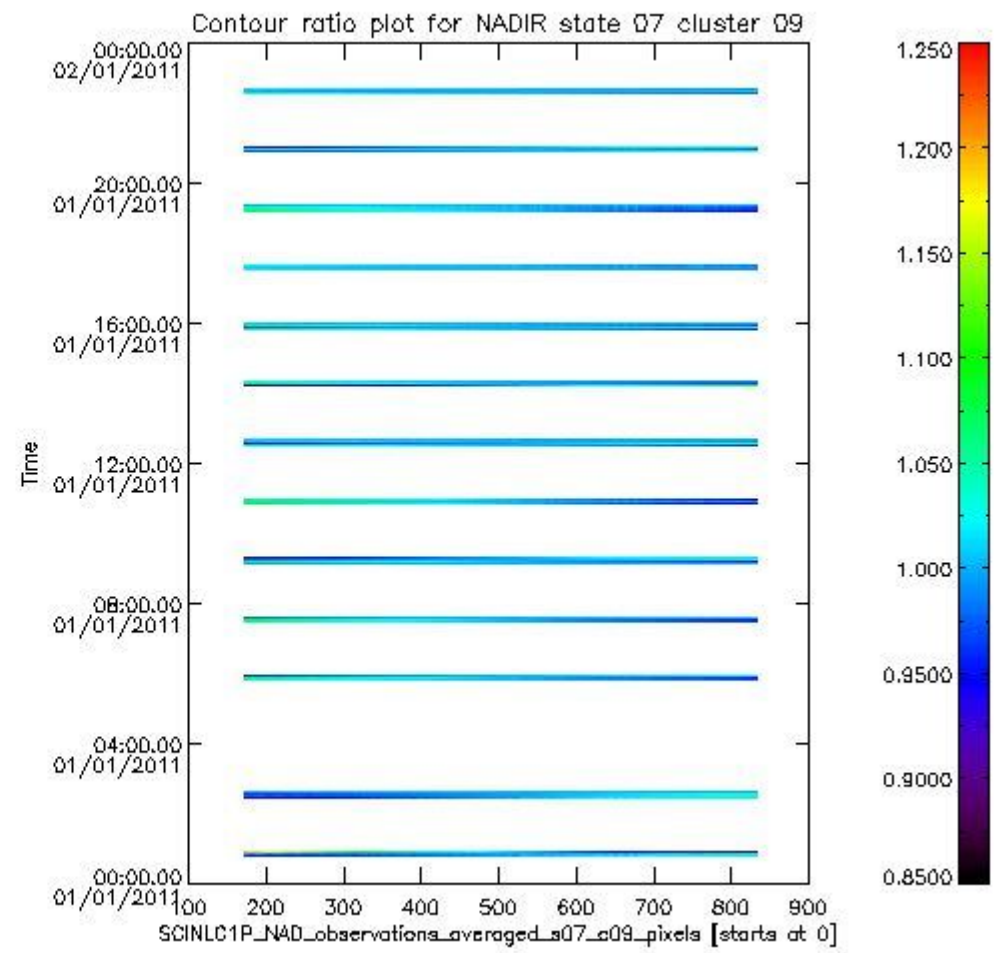
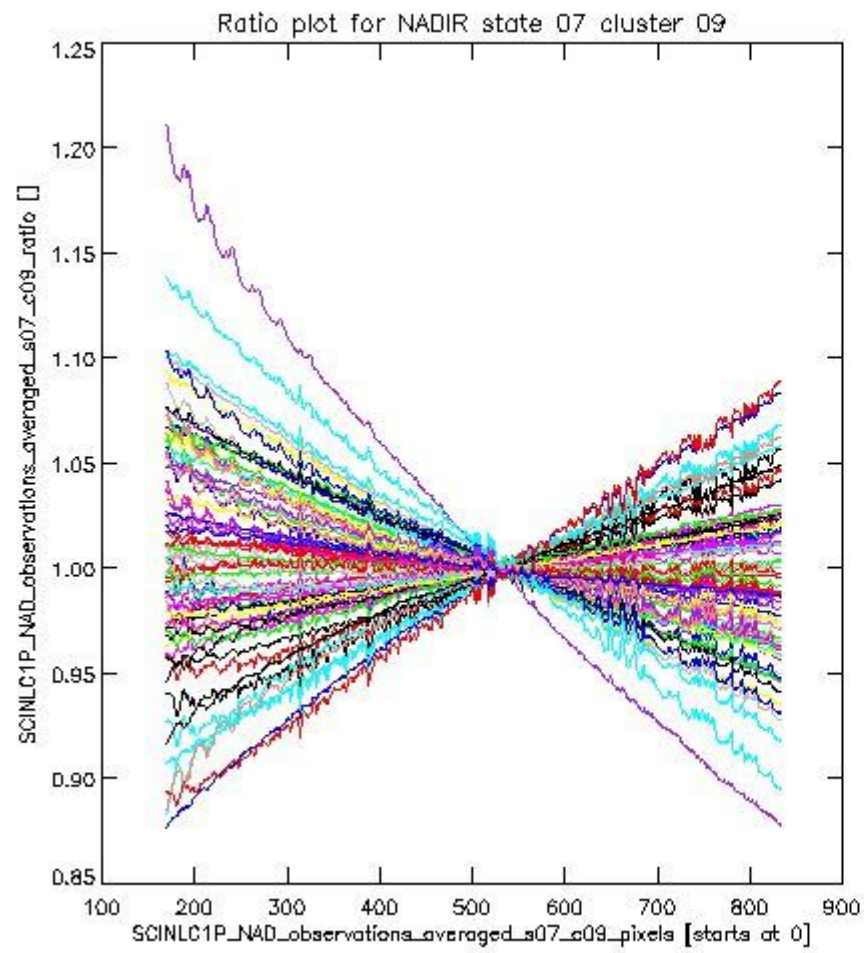


1.2.2 NADIR state 07 cluster 09 The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

| Item | Value |
|----------------------------------|------------------------|
| Start time of first sample | 01JAN2011 00:47:37.604 |
| Start time of last sample | 01JAN2011 22:39:43.169 |
| Reference period start time | 02DEC2010 00:46:00.837 |
| Reference period stop time | 31DEC2010 23:16:28.920 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 833 |



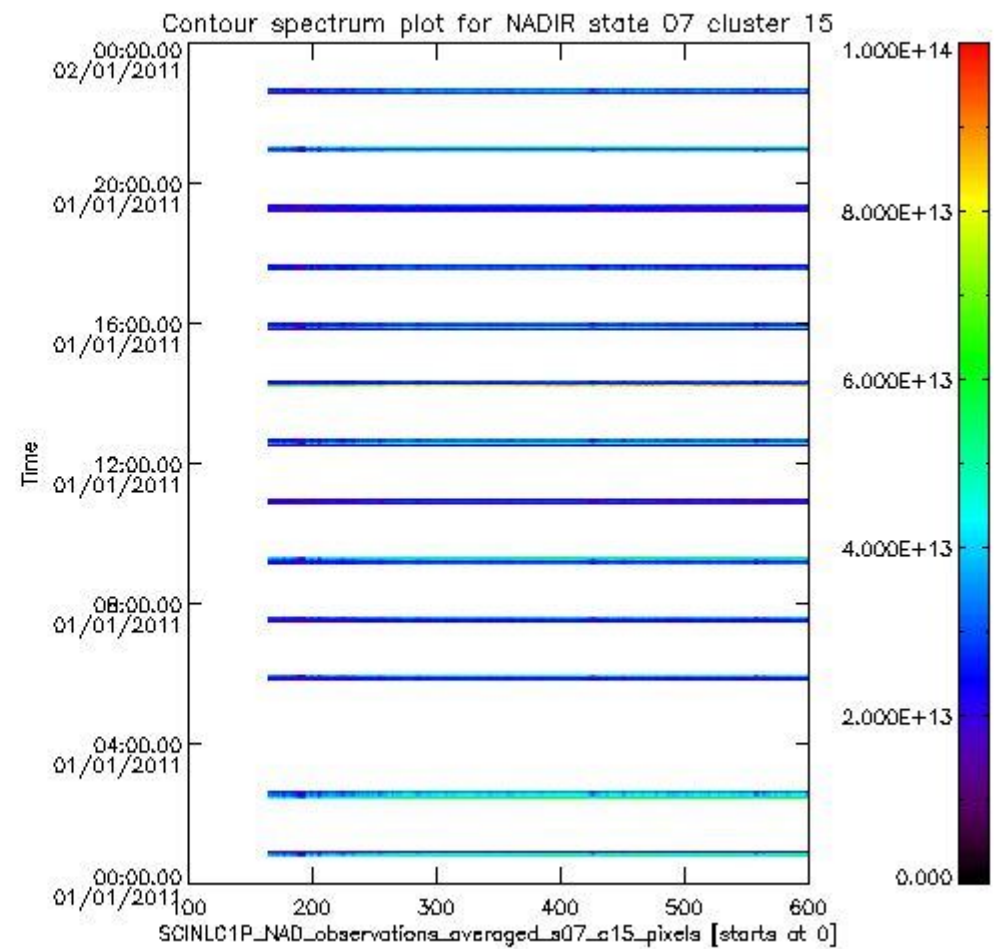
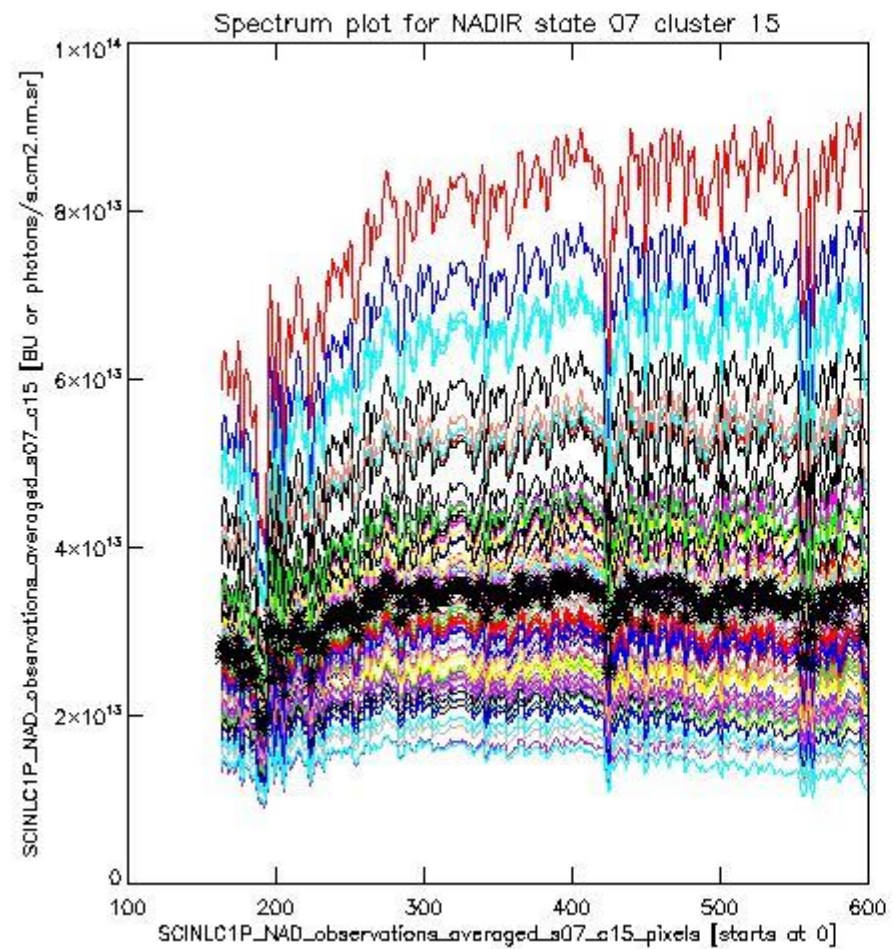
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_2.PNG



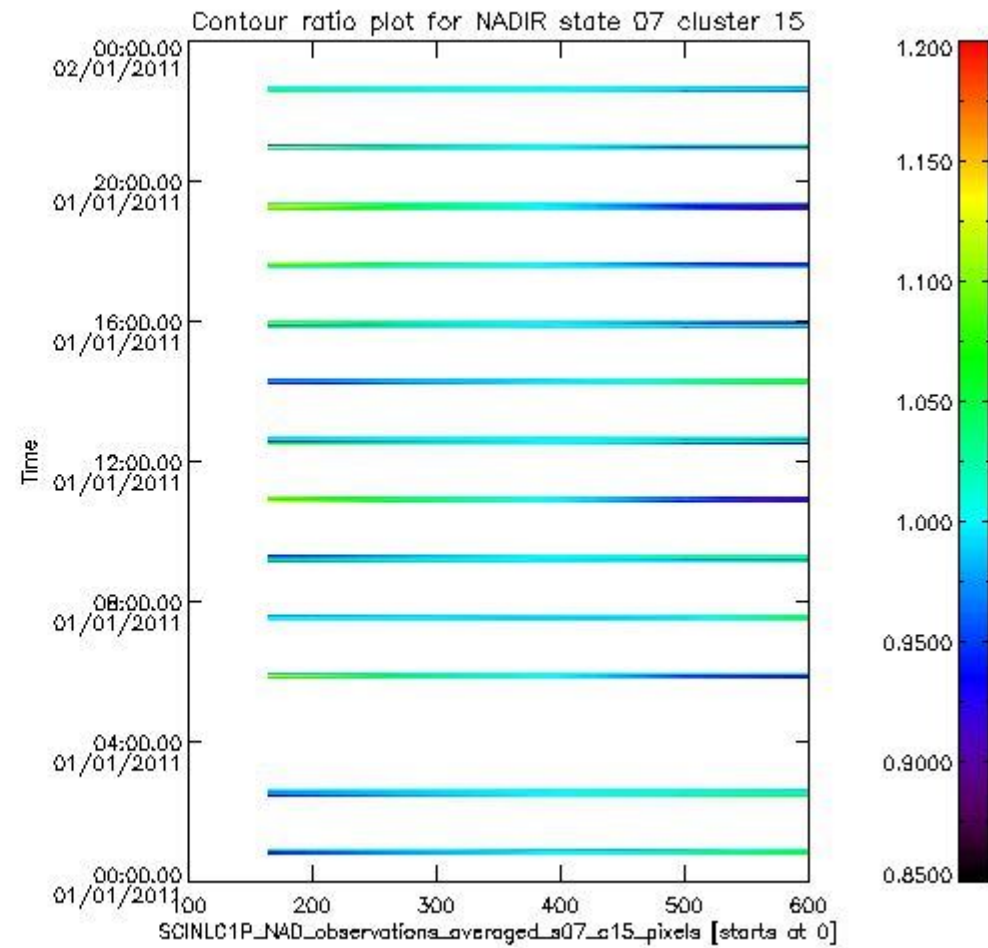
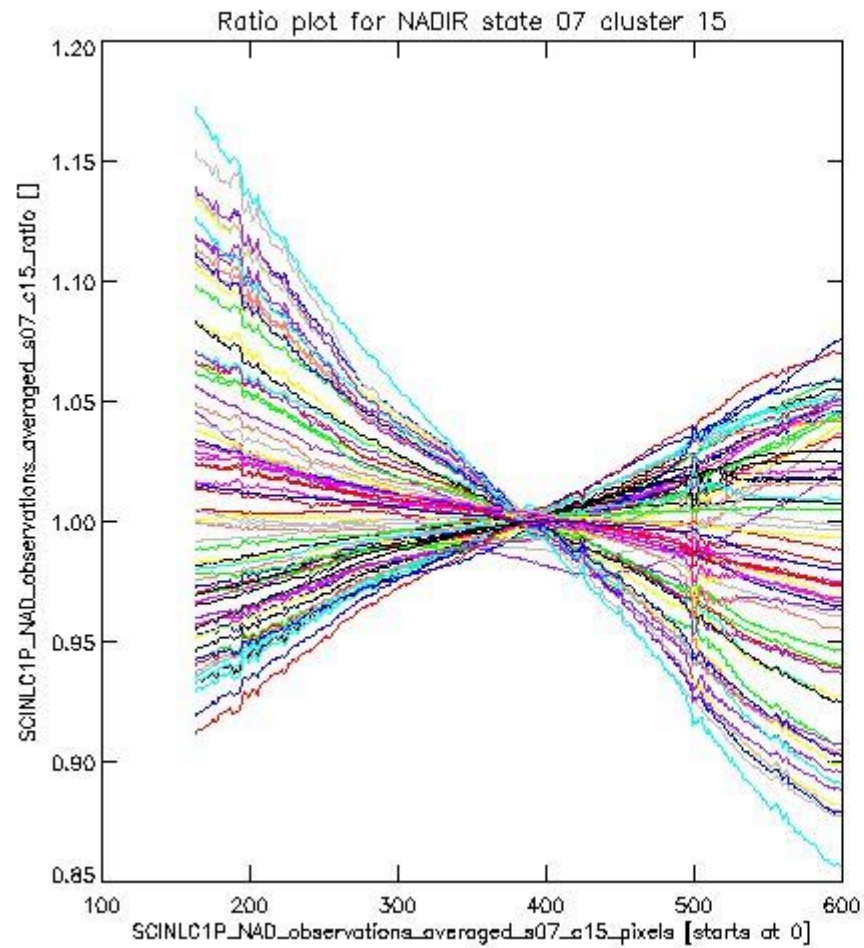
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_3.PNG

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 | 01JAN2011 00:47:37.604 |
| Start time of last sample | 01JAN2011 22:39:43.169 |
| Reference period start time | 02DEC2010 00:46:00.837 |
| Reference period stop time | 31DEC2010 23:16:28.920 |
| Channel number | 3 |
| First pixel number (starts at 0) | 163 |
| Last pixel number (starts at 0) | 598 |



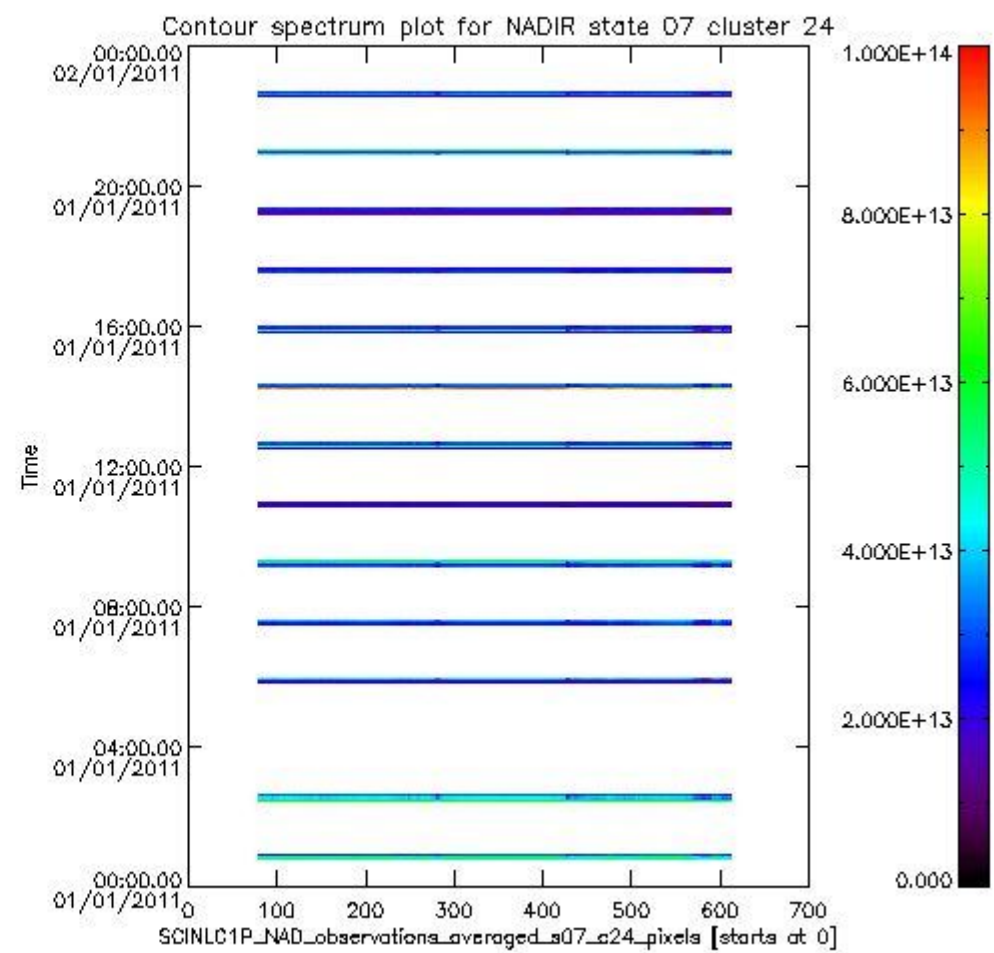
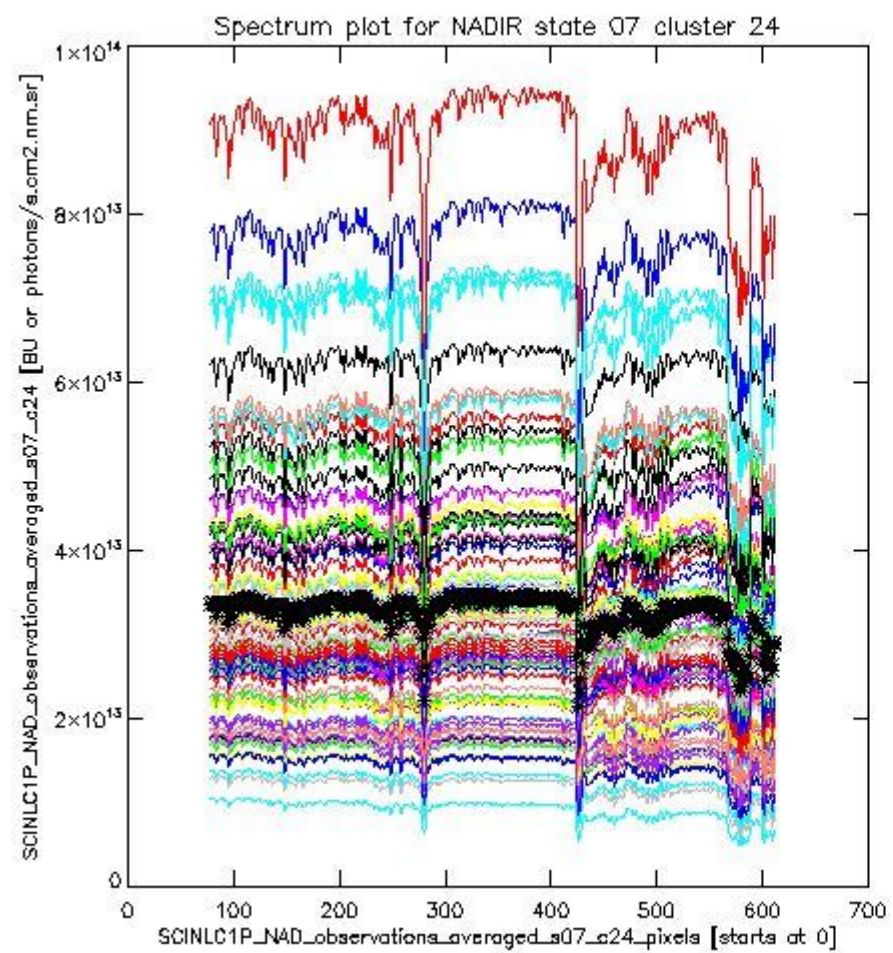
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_4.PNG



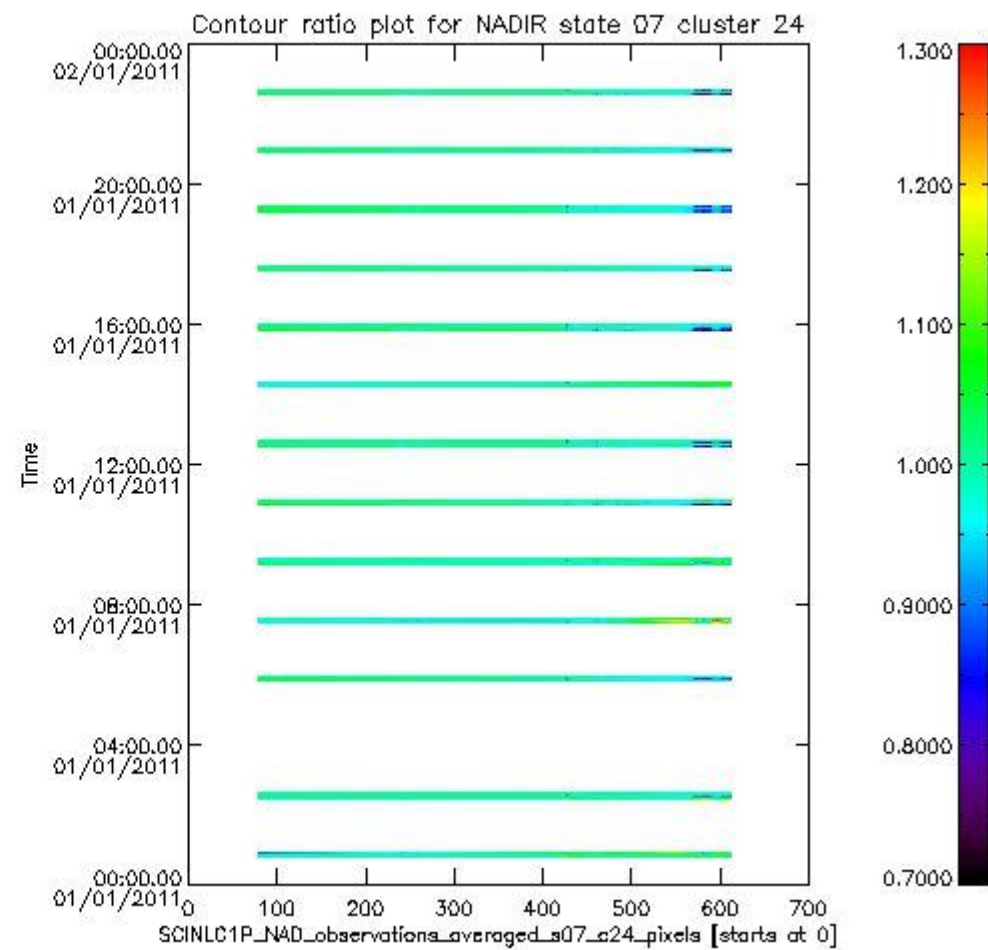
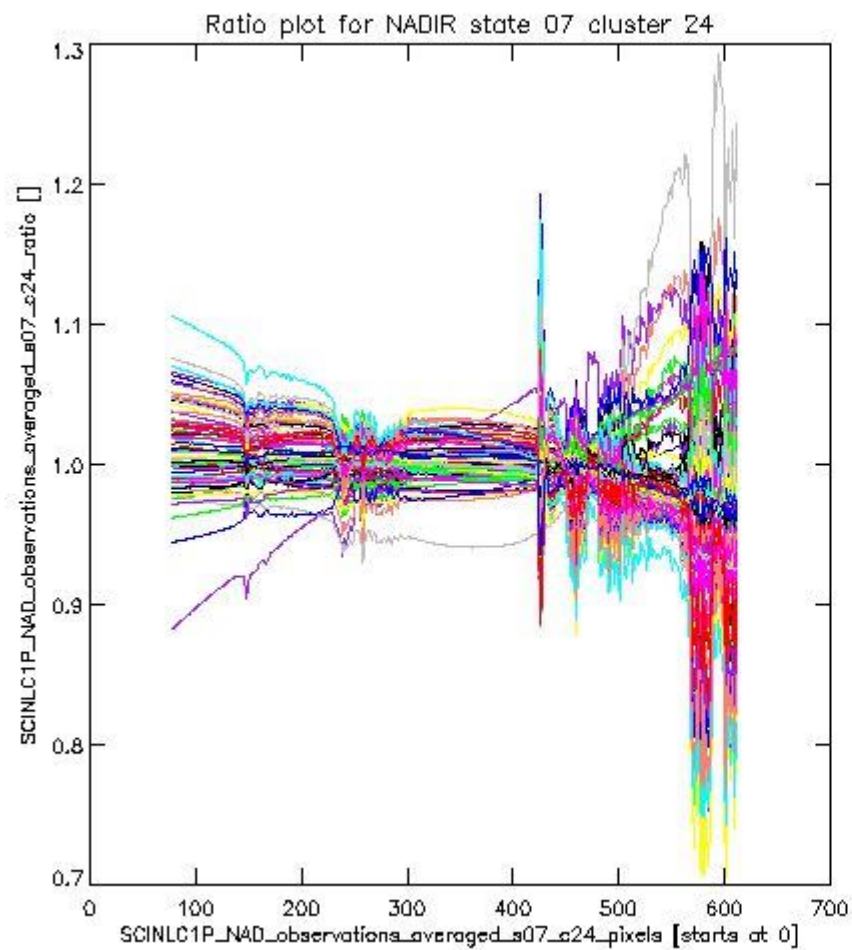
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_5.PNG

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 | 01JAN2011 00:47:37.604 |
| Start time of last sample | 01JAN2011 22:39:43.169 |
| Reference period start time | 02DEC2010 00:46:00.837 |
| Reference period stop time | 31DEC2010 23:16:28.920 |
| Channel number | 4 |
| First pixel number (starts at 0) | 78 |
| Last pixel number (starts at 0) | 612 |



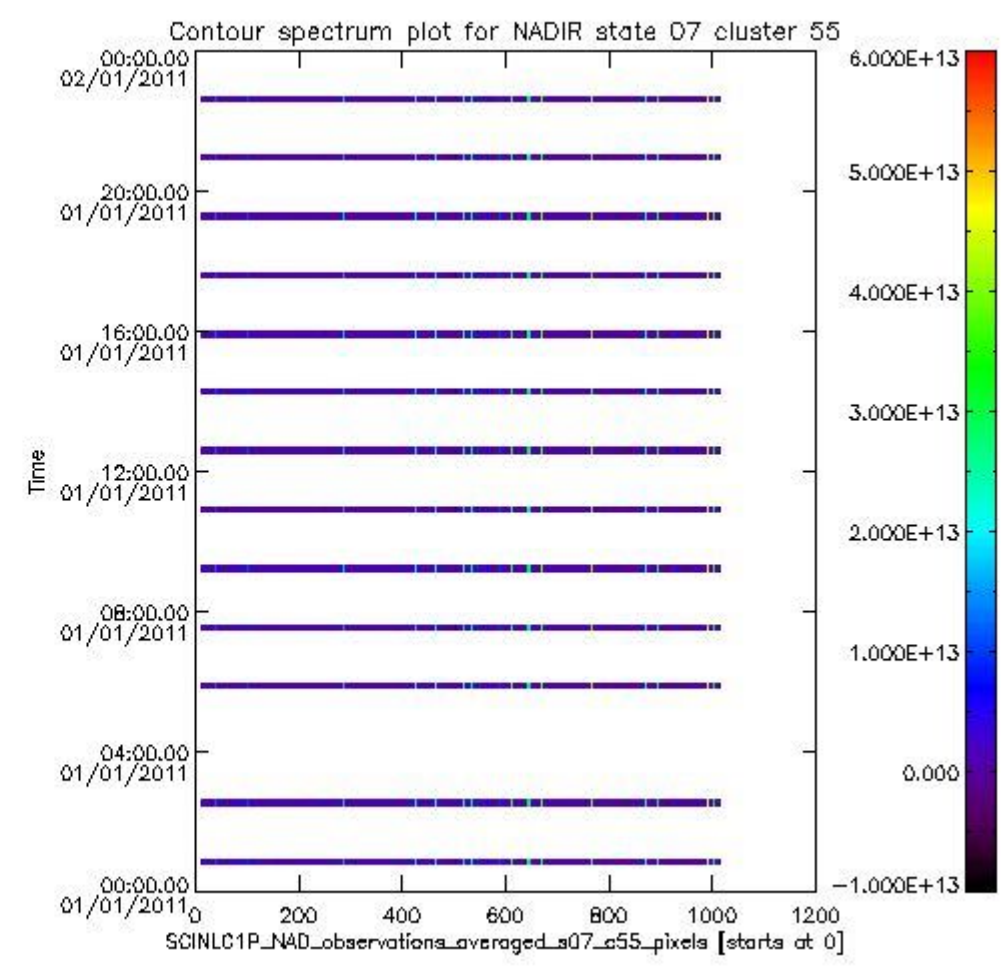
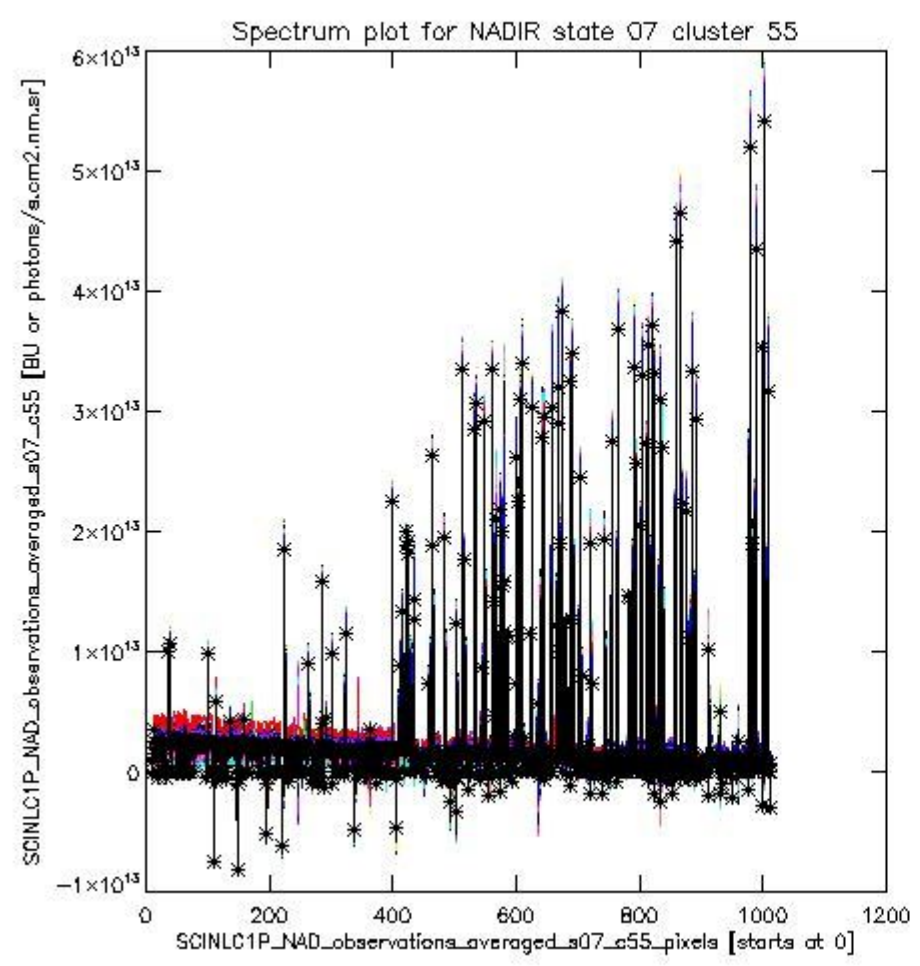
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_6.PNG



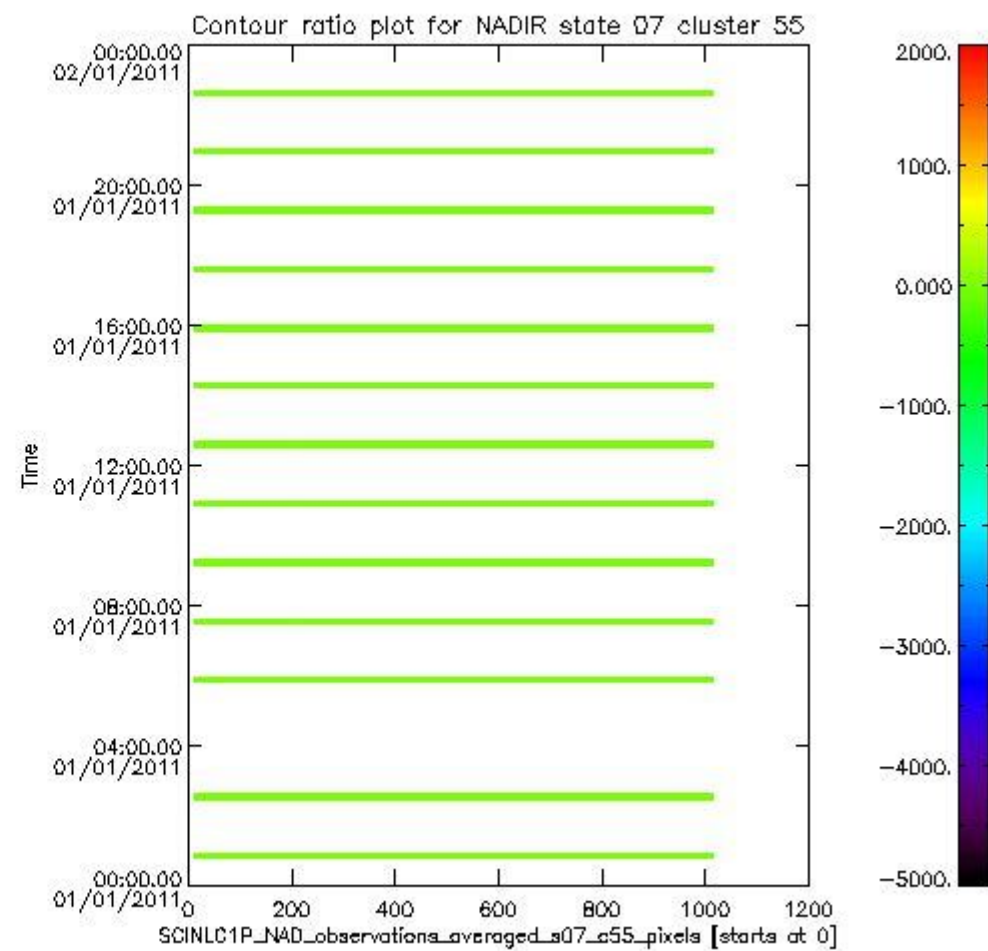
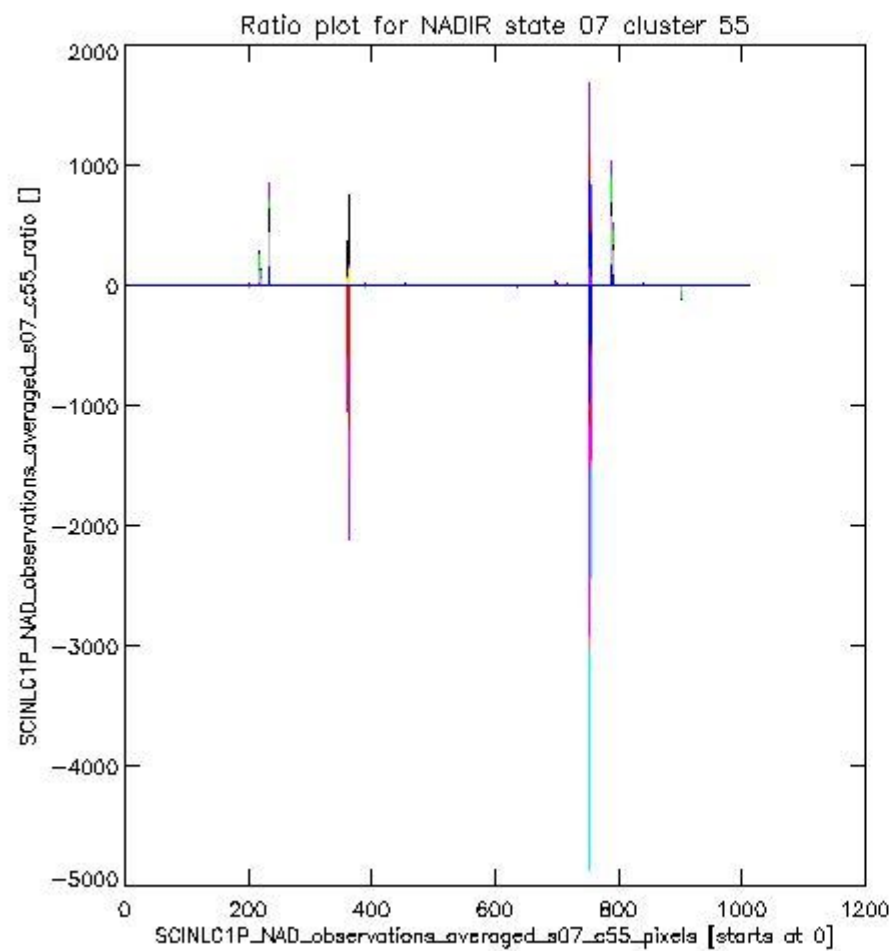
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_7.PNG

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 | 01JAN2011 00:47:37.604 |
| Start time of last sample | 01JAN2011 22:39:43.169 |
| Reference period start time | 02DEC2010 00:46:00.837 |
| Reference period stop time | 31DEC2010 23:16:28.920 |
| Channel number | 8 |
| First pixel number (starts at 0) | 10 |
| Last pixel number (starts at 0) | 1013 |



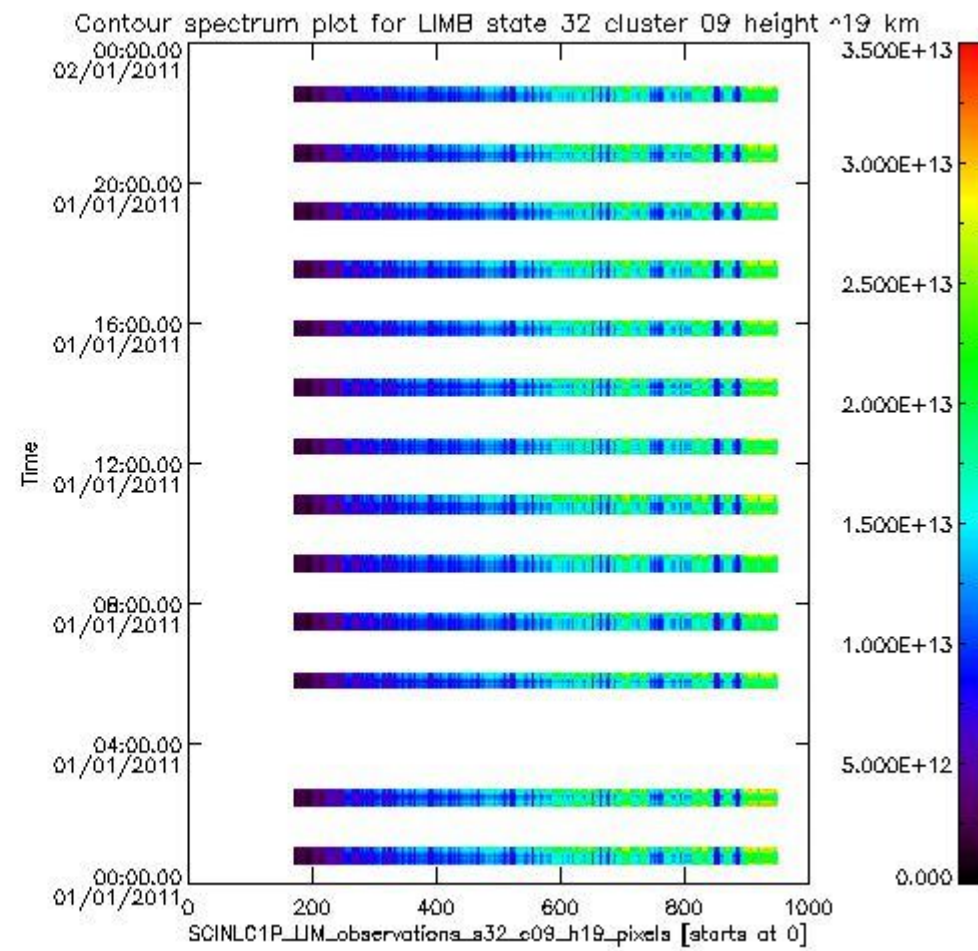
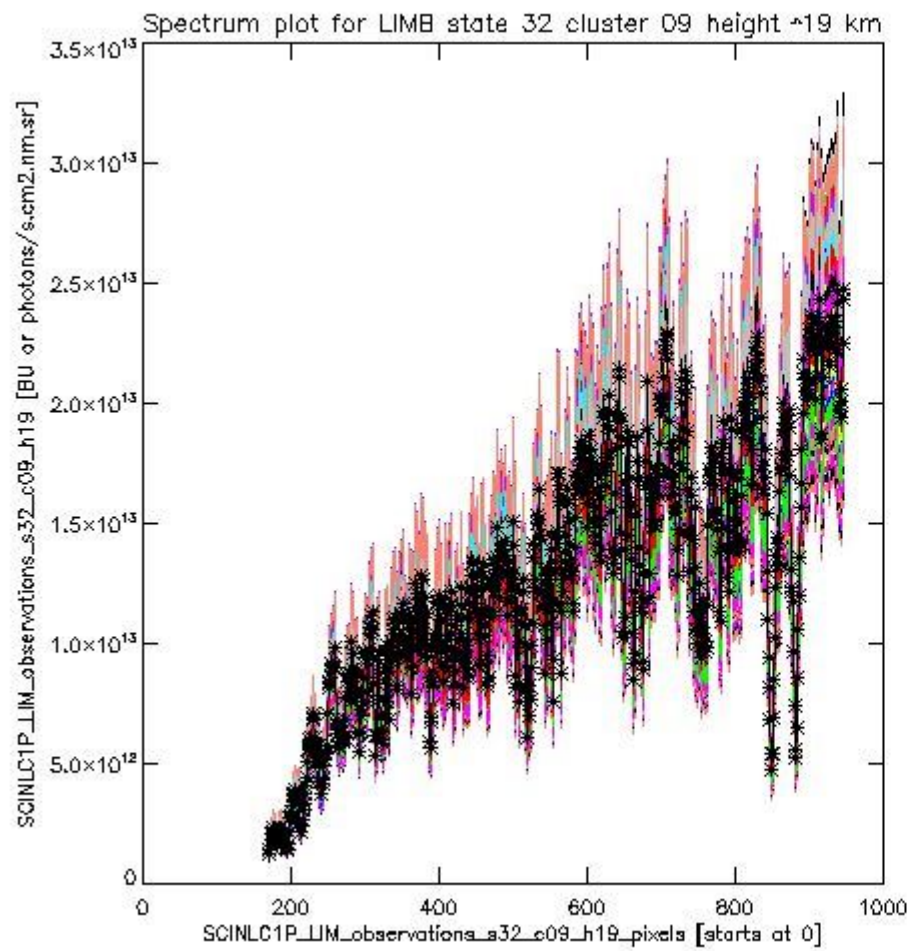
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_8.PNG



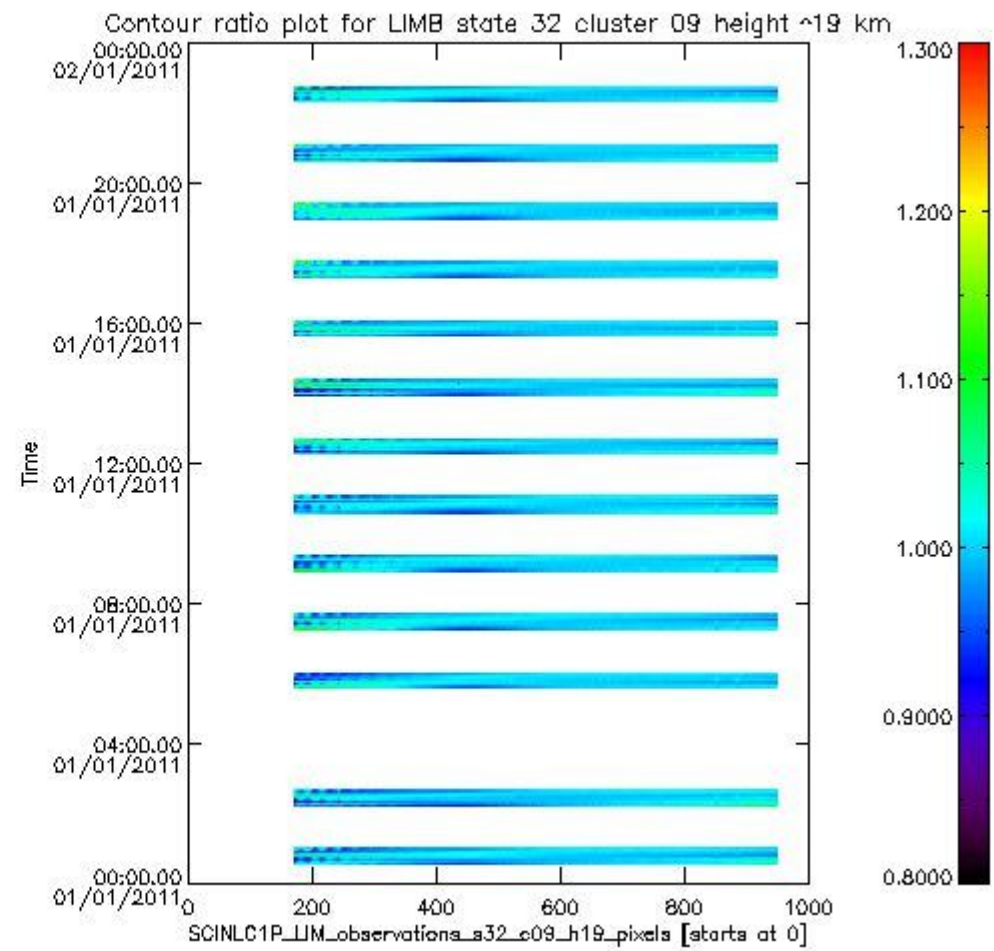
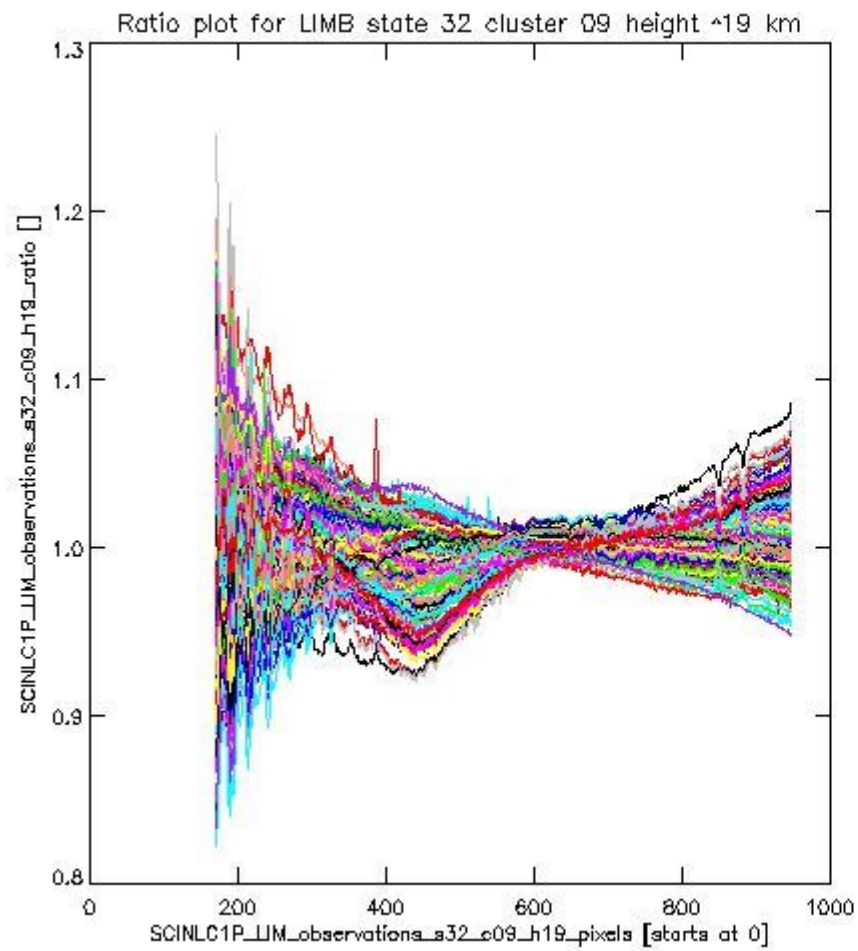
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_9.PNG

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 | 01JAN2011 00:32:24.225 |
| Start time of last sample | 01JAN2011 23:59:43.947 |
| Reference period start time | 02DEC2010 02:11:44.845 |
| Reference period stop time | 31DEC2010 23:19:40.221 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



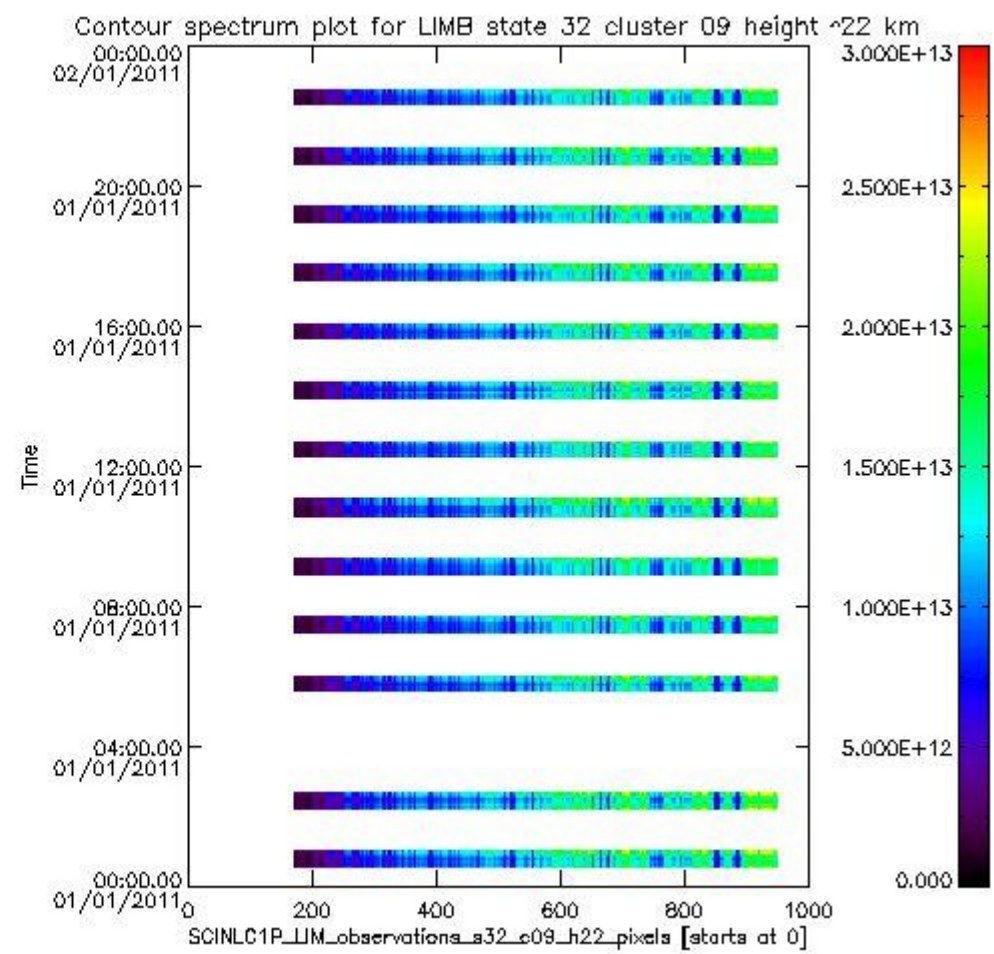
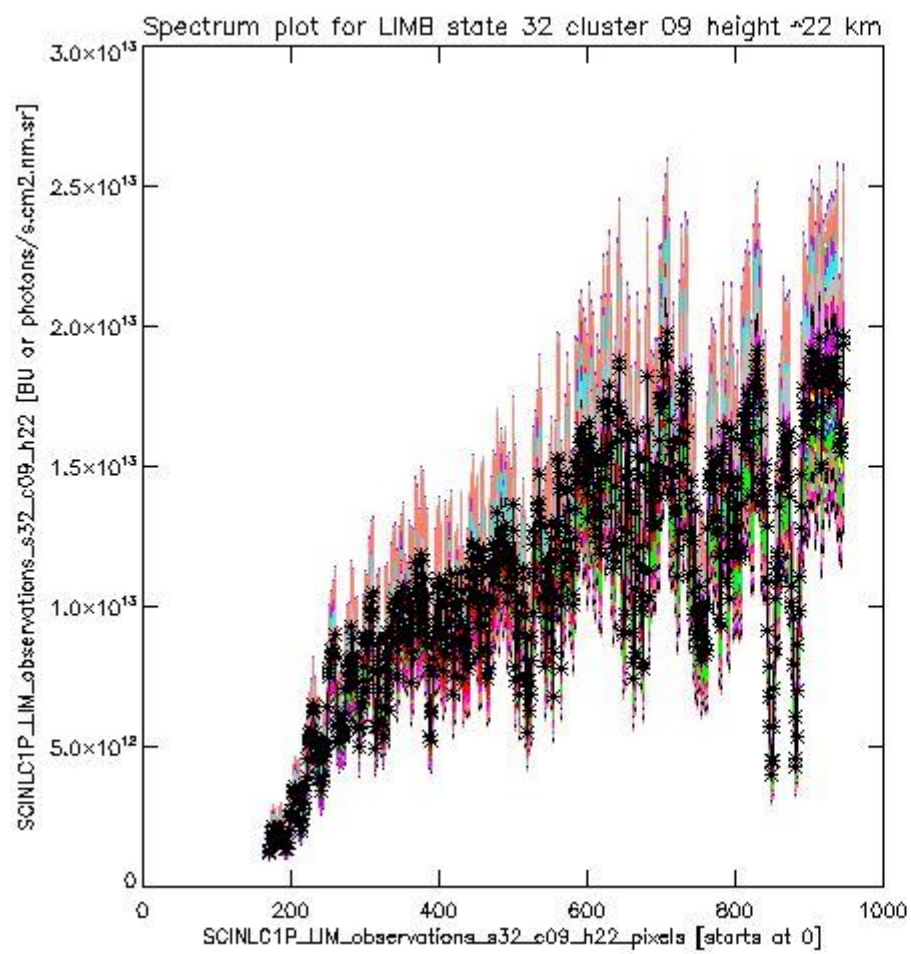
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_10.PNG



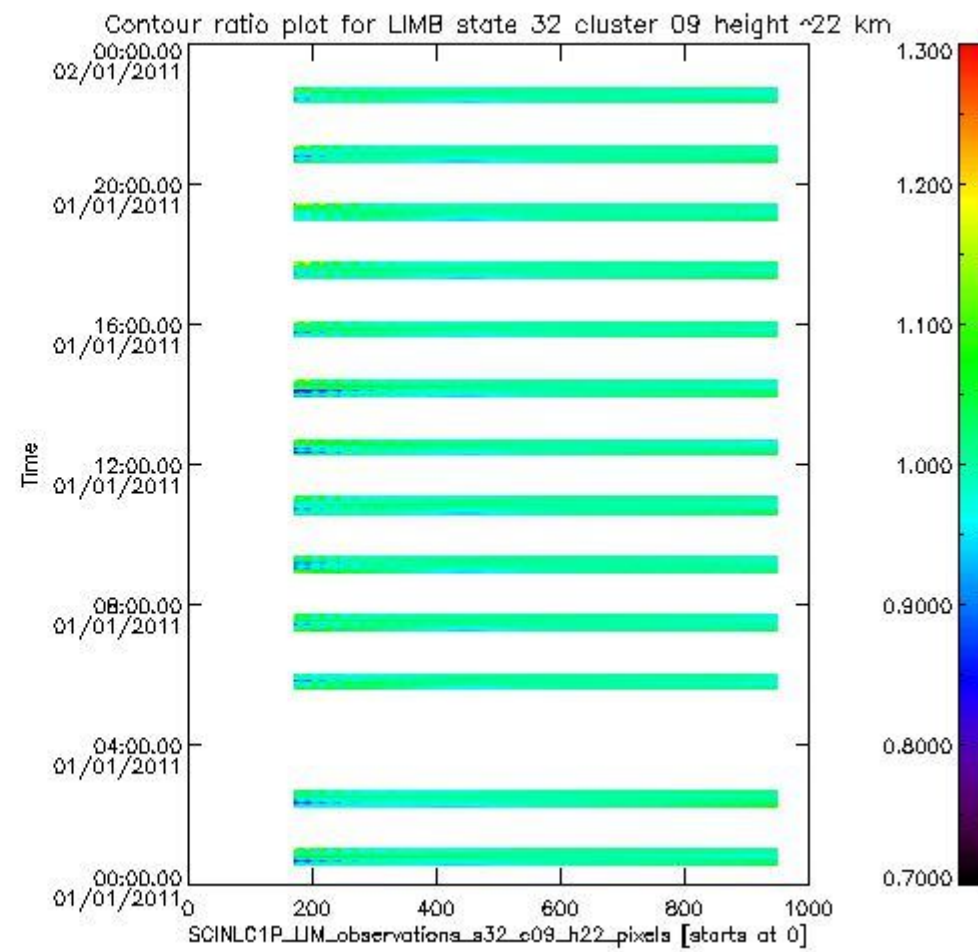
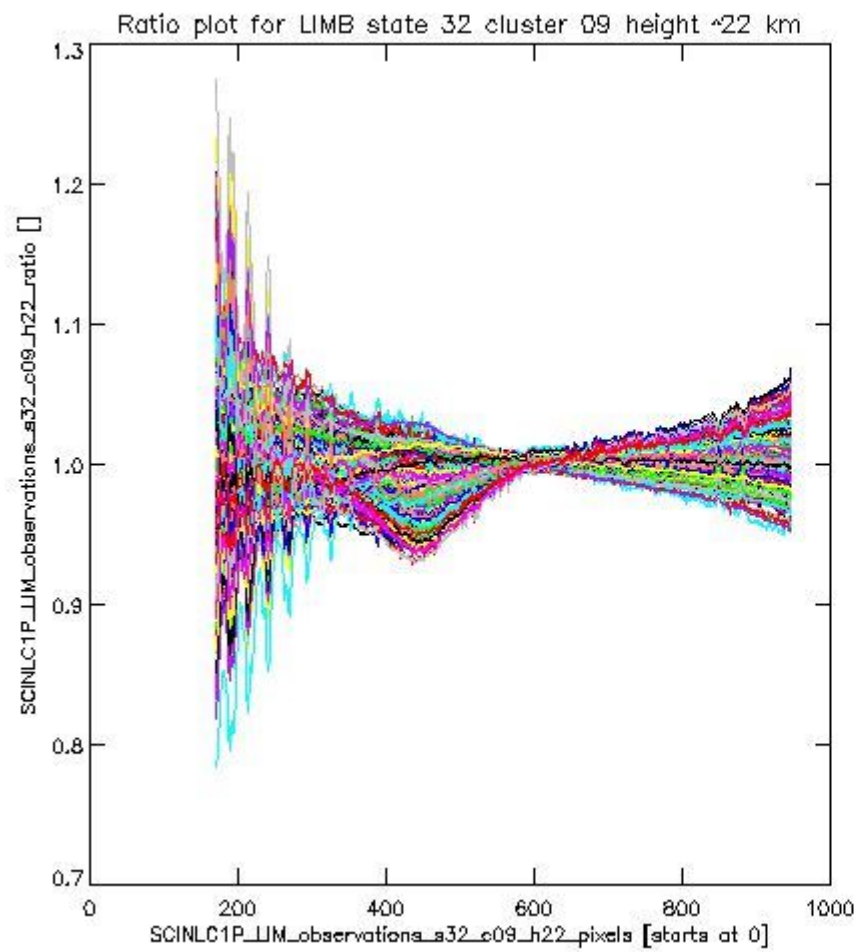
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_11.PNG

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 | 01JAN2011 00:32:24.225 |
| Start time of last sample | 01JAN2011 23:59:43.947 |
| Reference period start time | 02DEC2010 02:11:44.845 |
| Reference period stop time | 31DEC2010 23:19:40.221 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



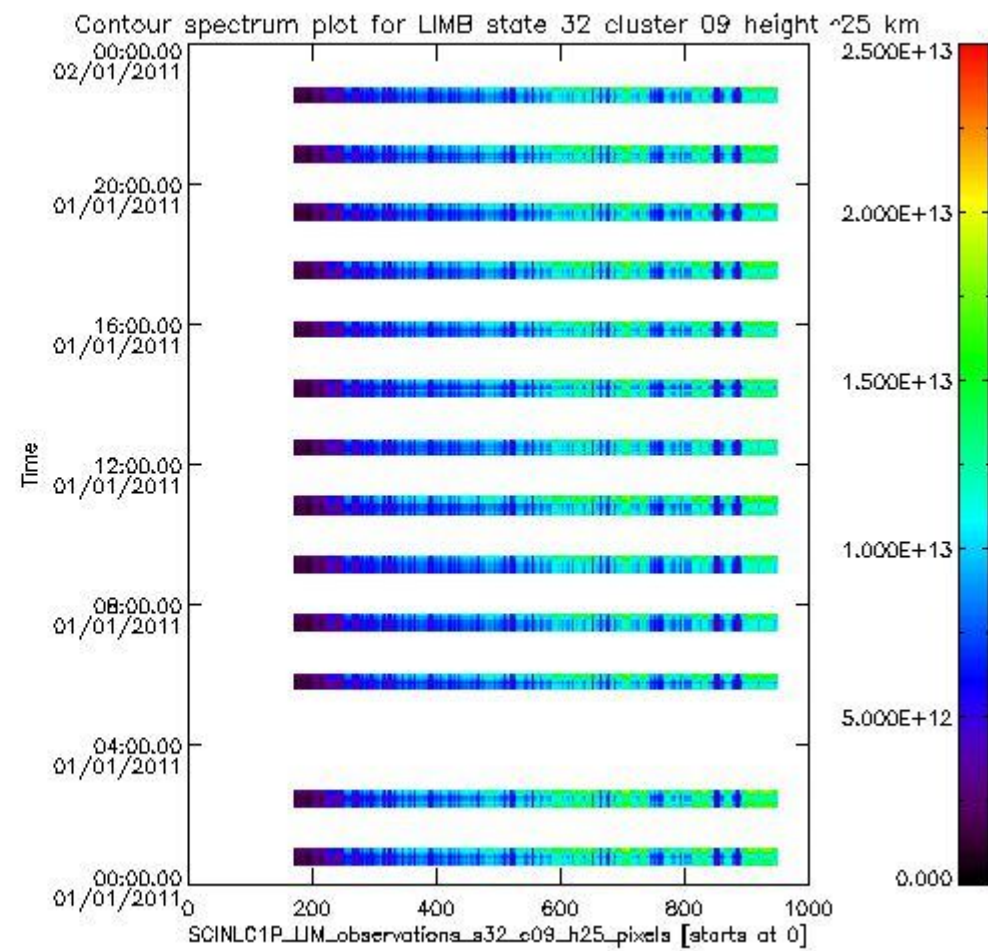
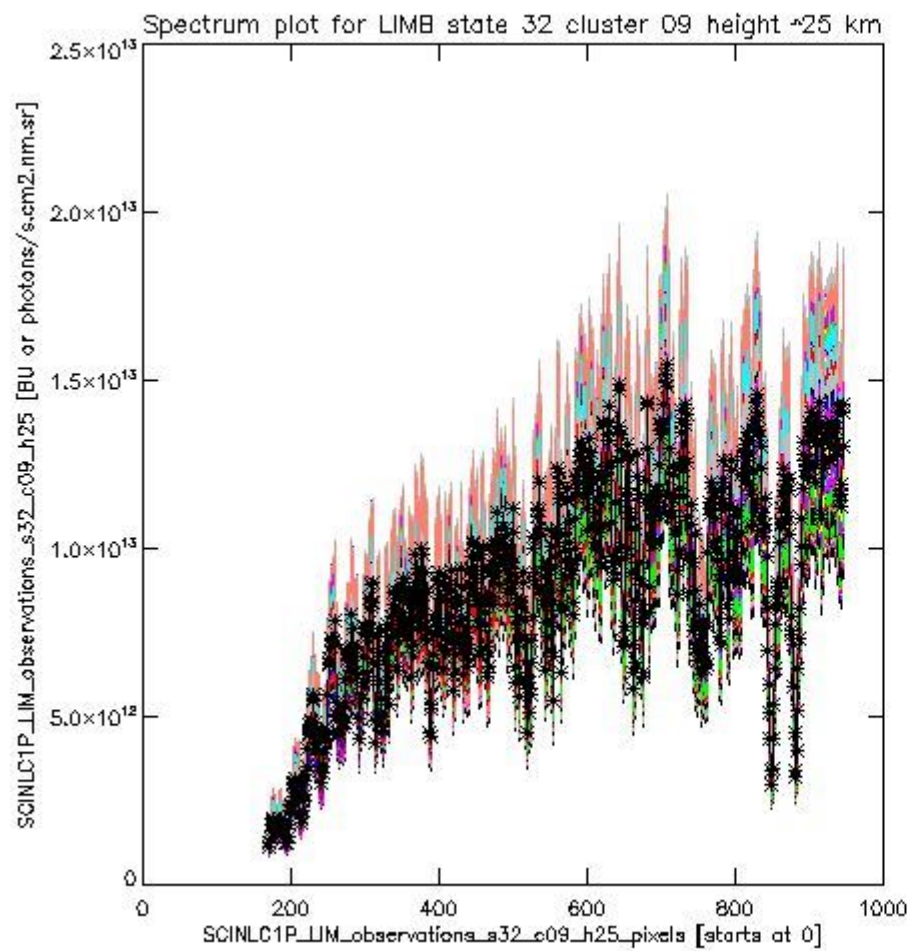
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_12.PNG



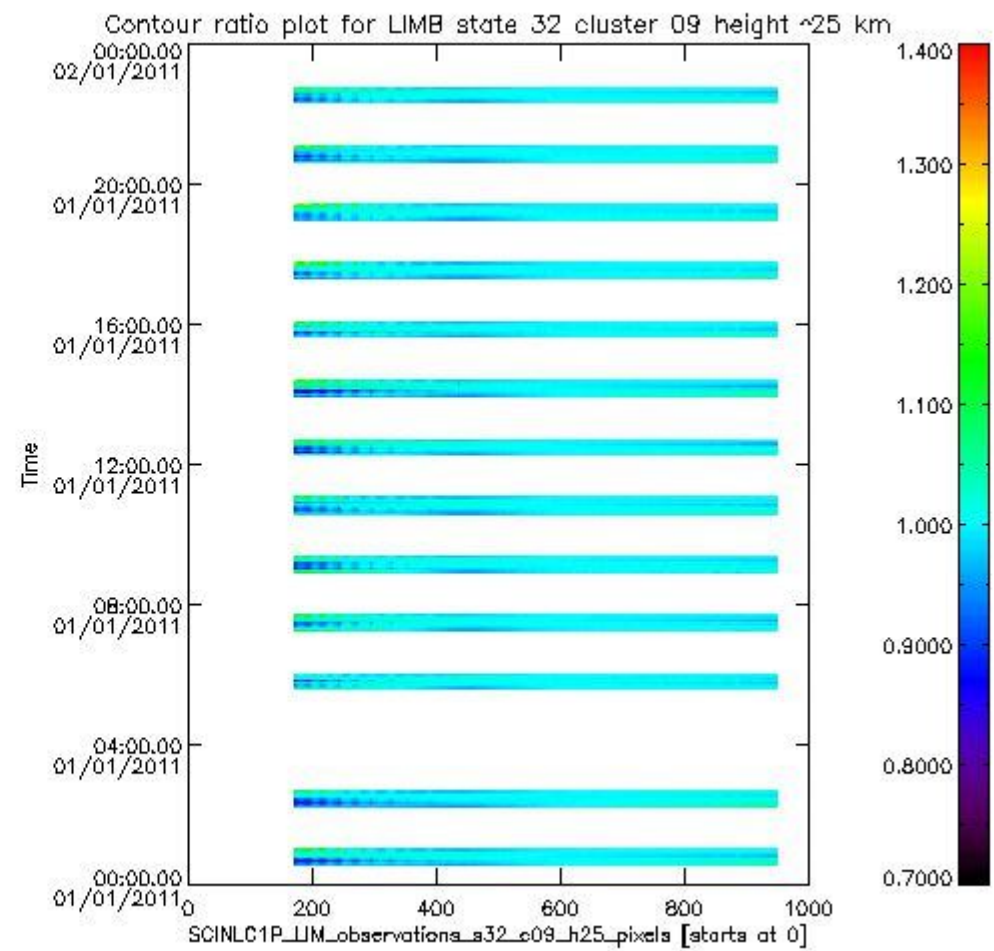
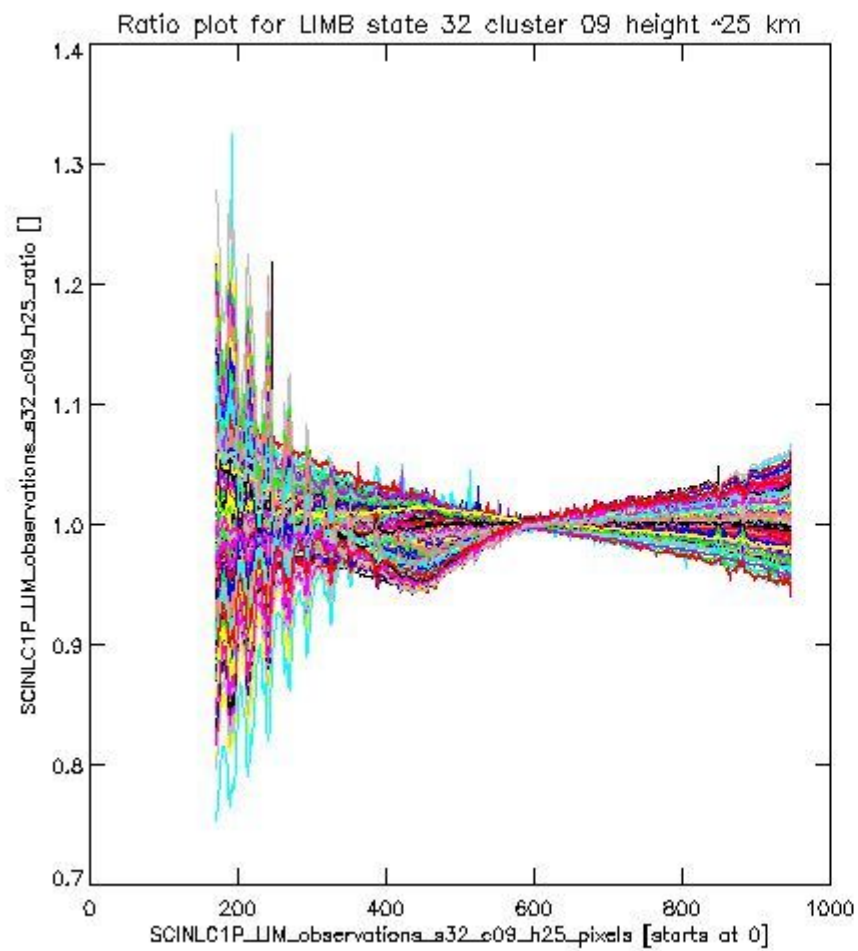
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_13.PNG

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 | 01JAN2011 00:32:24.225 |
| Start time of last sample | 01JAN2011 23:59:43.947 |
| Reference period start time | 02DEC2010 02:11:44.845 |
| Reference period stop time | 31DEC2010 23:19:40.221 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



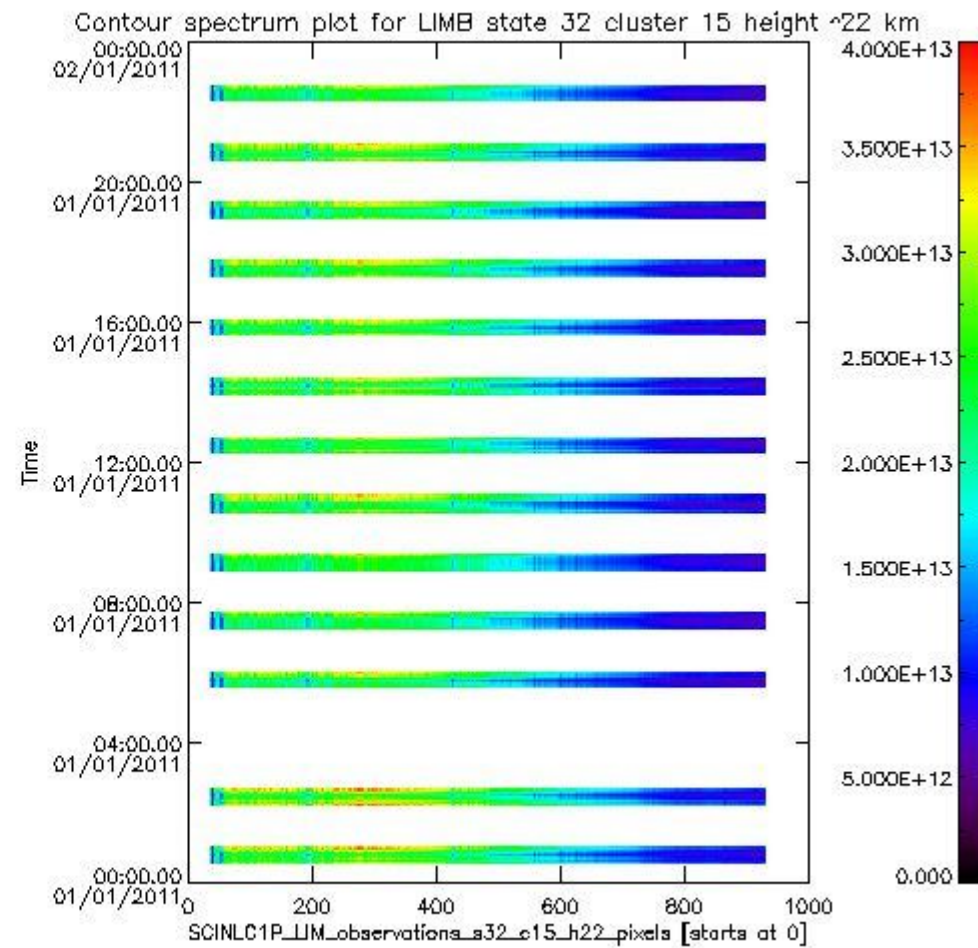
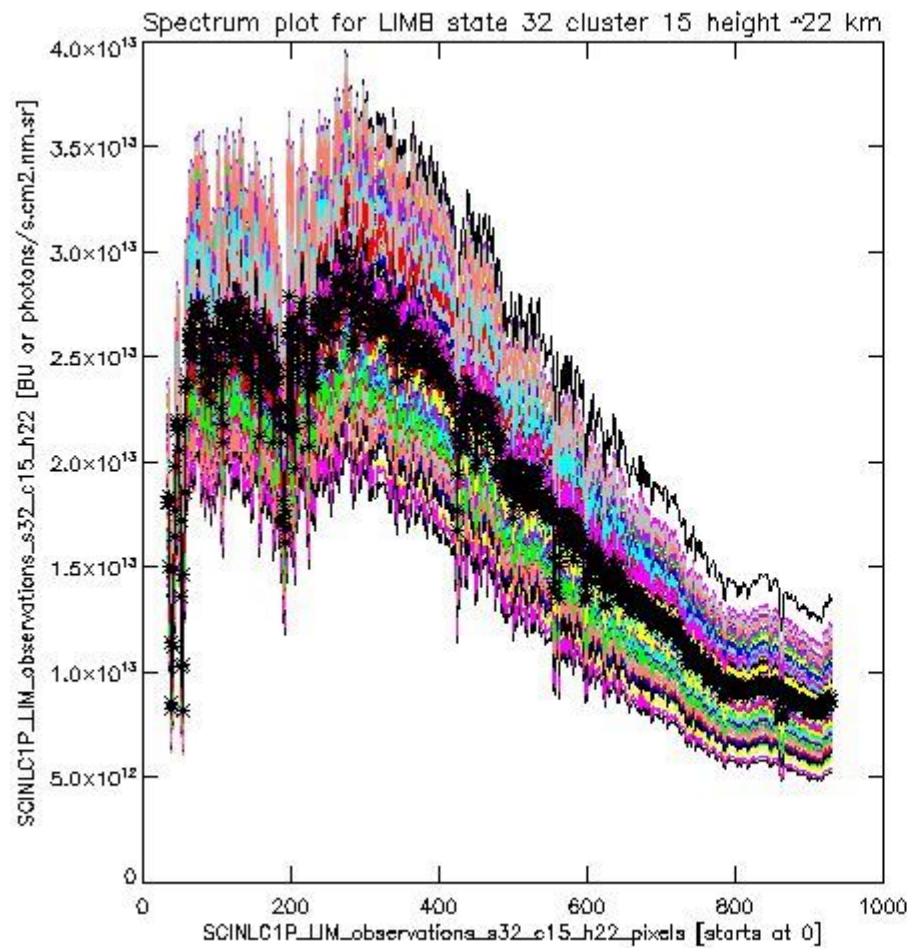
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_14.PNG



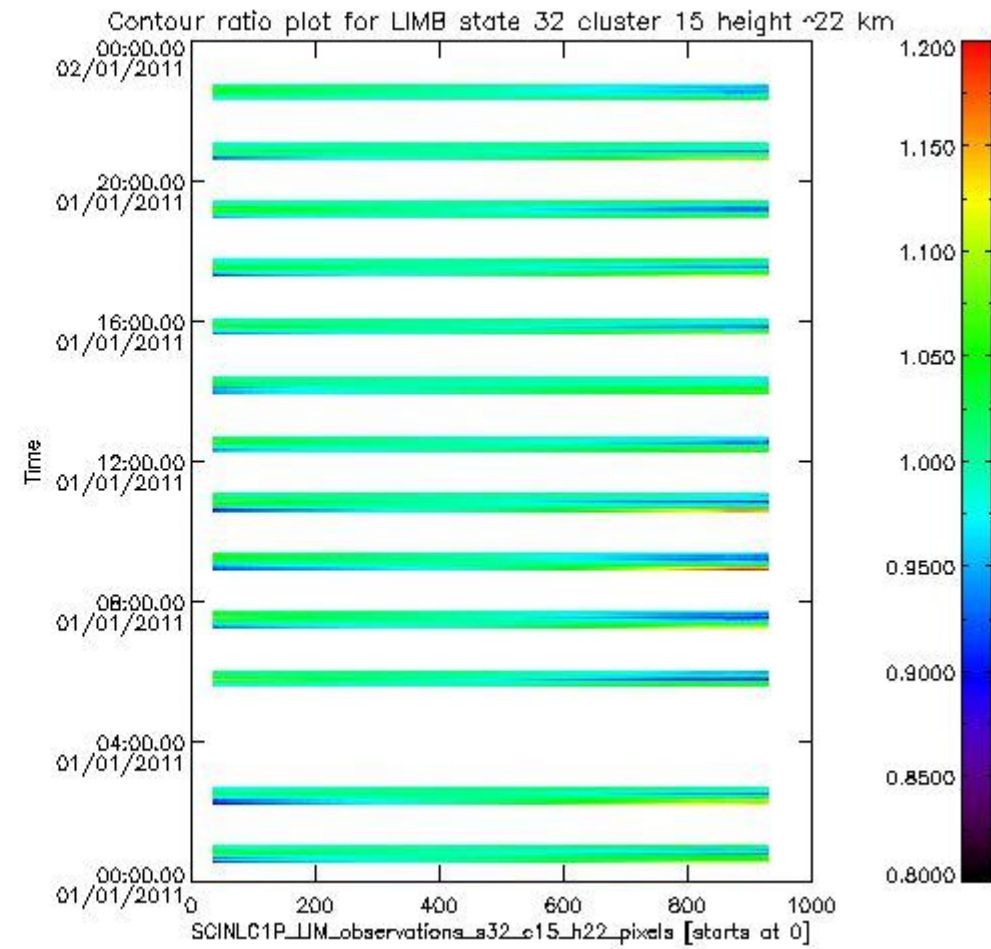
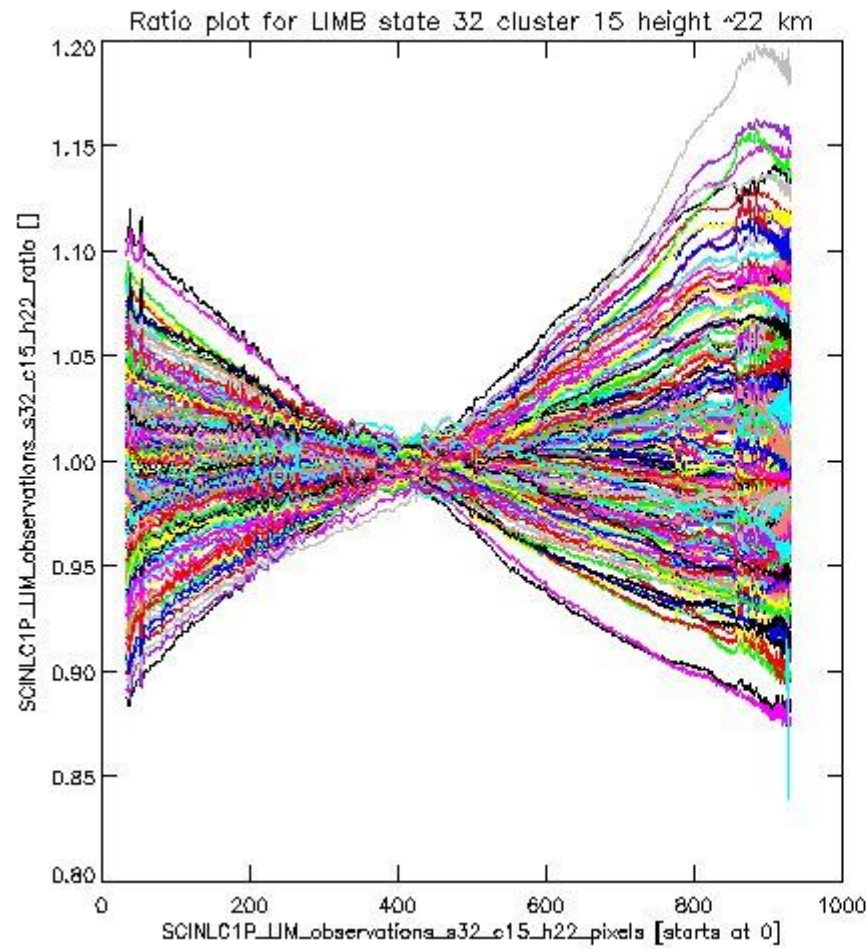
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_15.PNG

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 | 01JAN2011 00:32:24.225 |
| Start time of last sample | 01JAN2011 23:59:43.947 |
| Reference period start time | 02DEC2010 02:11:44.845 |
| Reference period stop time | 31DEC2010 23:19:40.221 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |



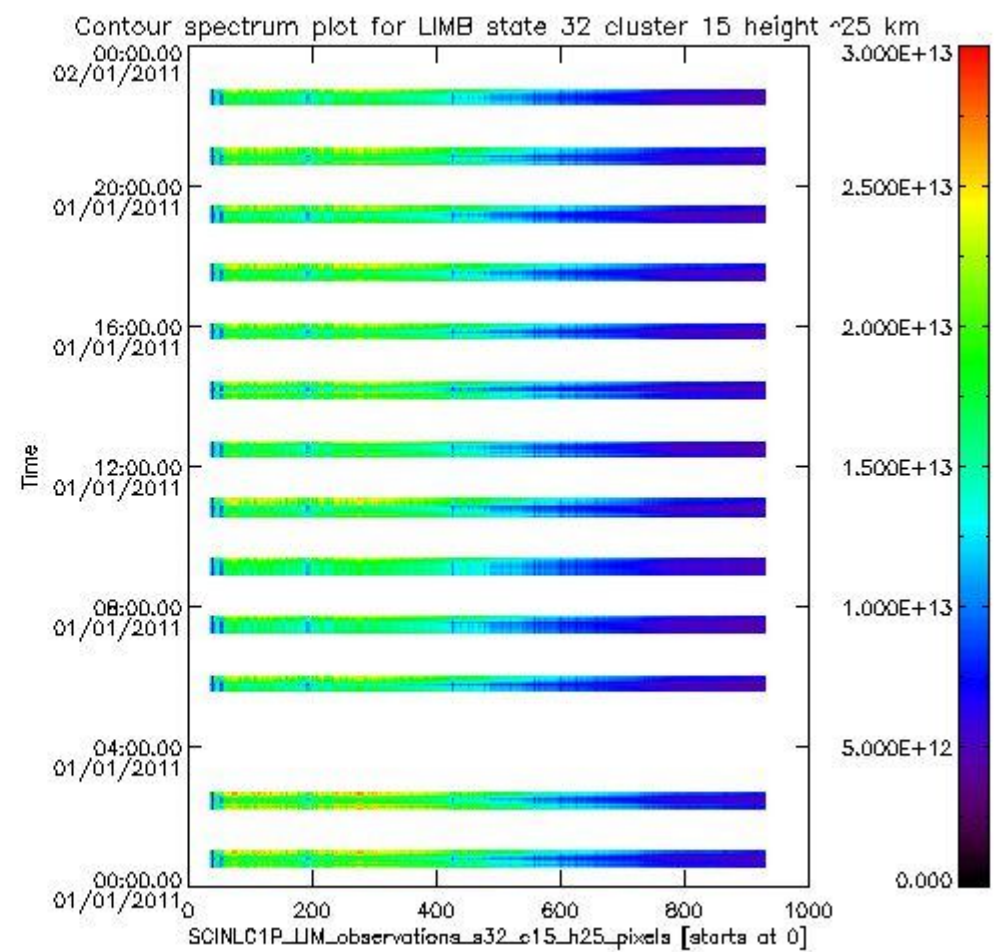
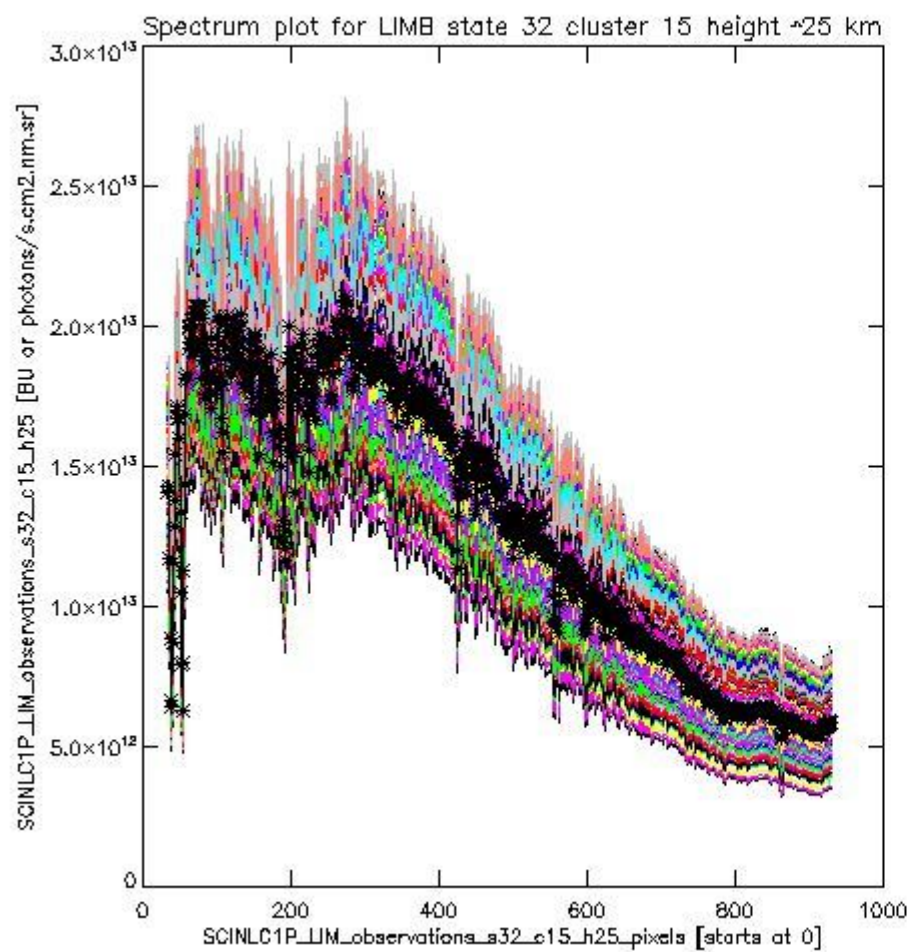
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_16.PNG



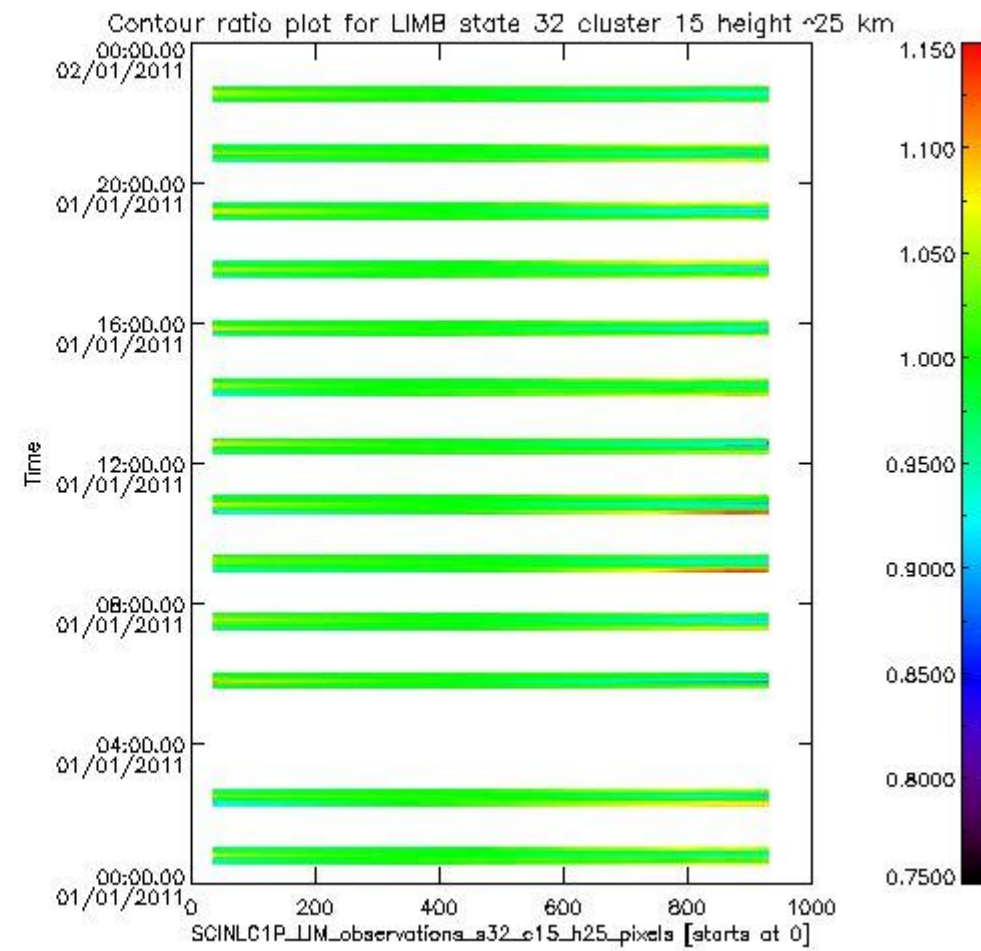
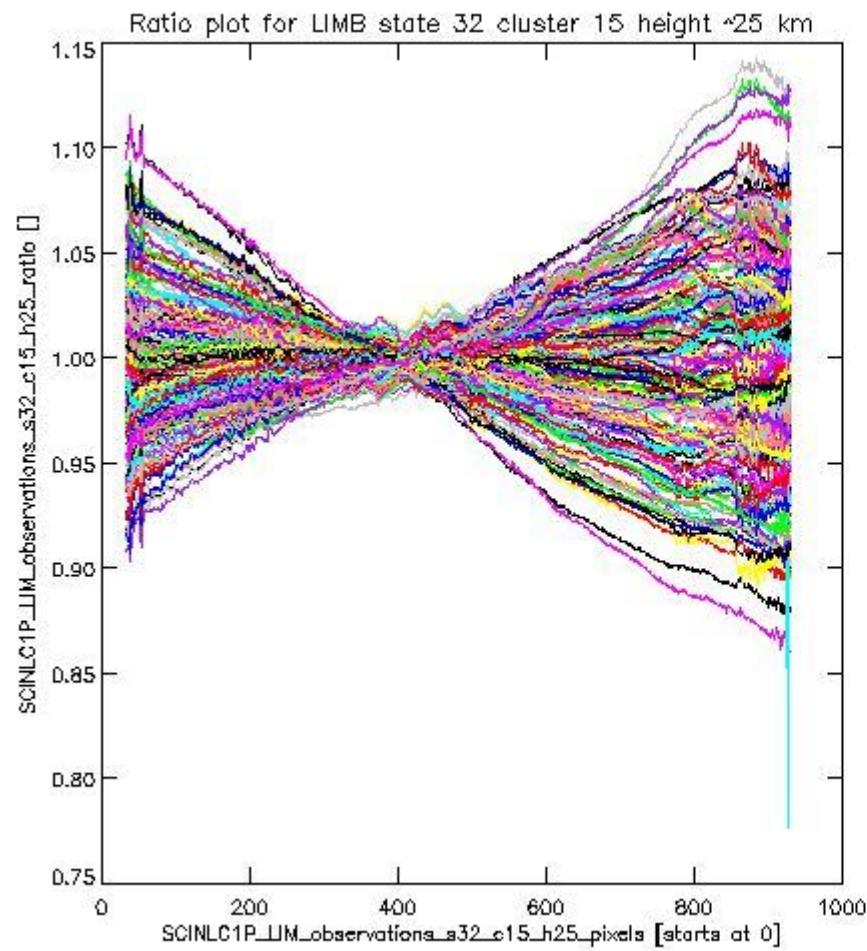
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110101_17.PNG

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 | 01JAN2011 00:32:24.225 |
| Start time of last sample | 01JAN2011 23:59:43.947 |
| Reference period start time | 02DEC2010 02:11:44.845 |
| Reference period stop time | 31DEC2010 23:19:40.221 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |



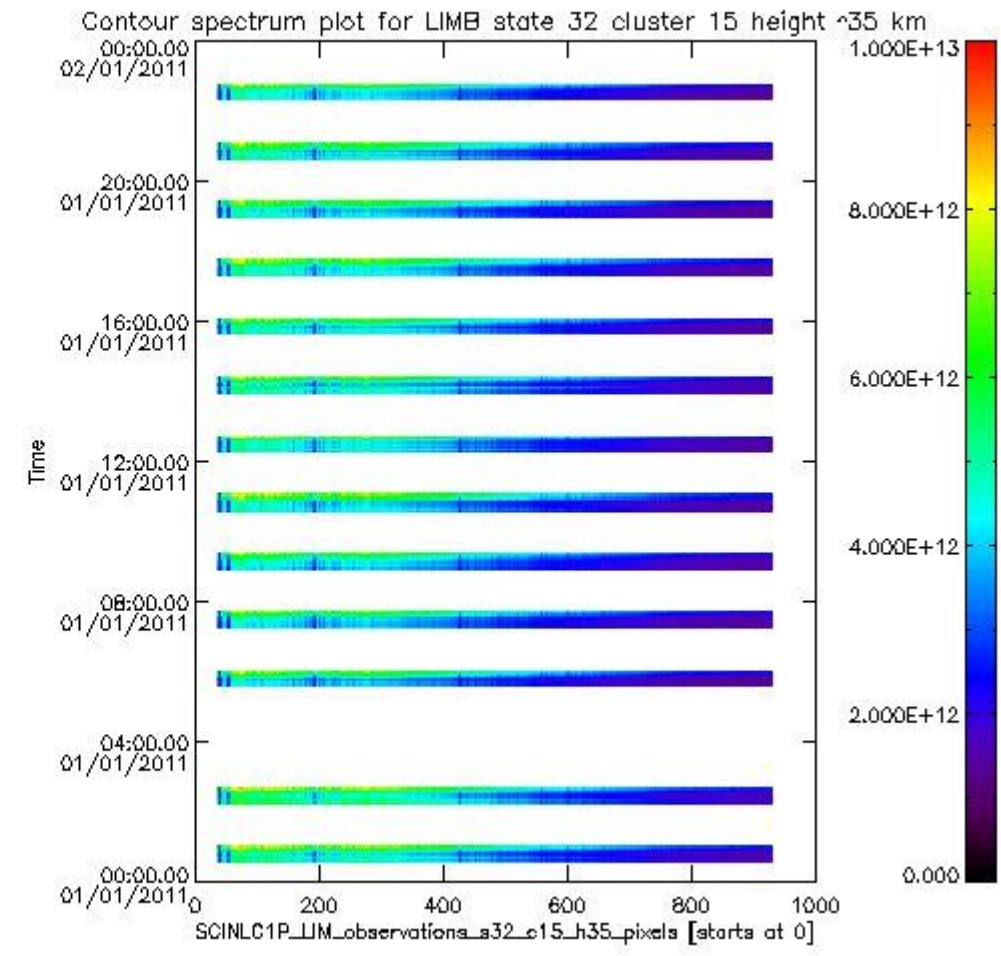
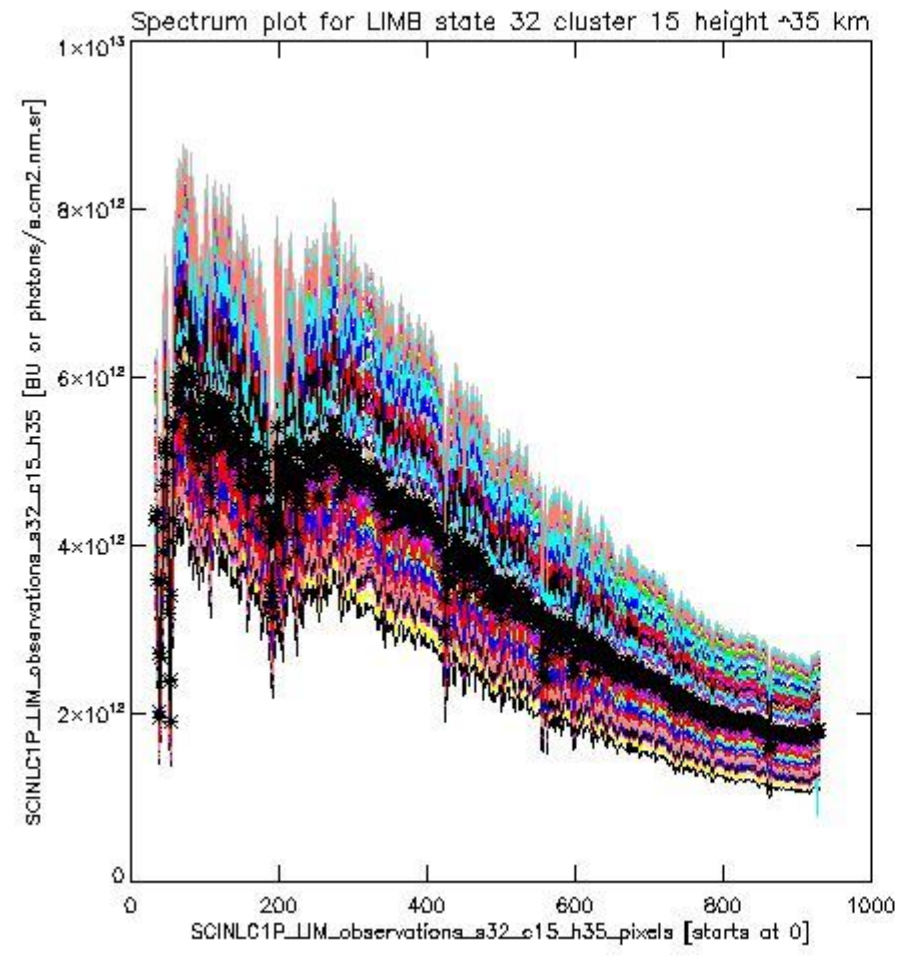
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110101_18.PNG



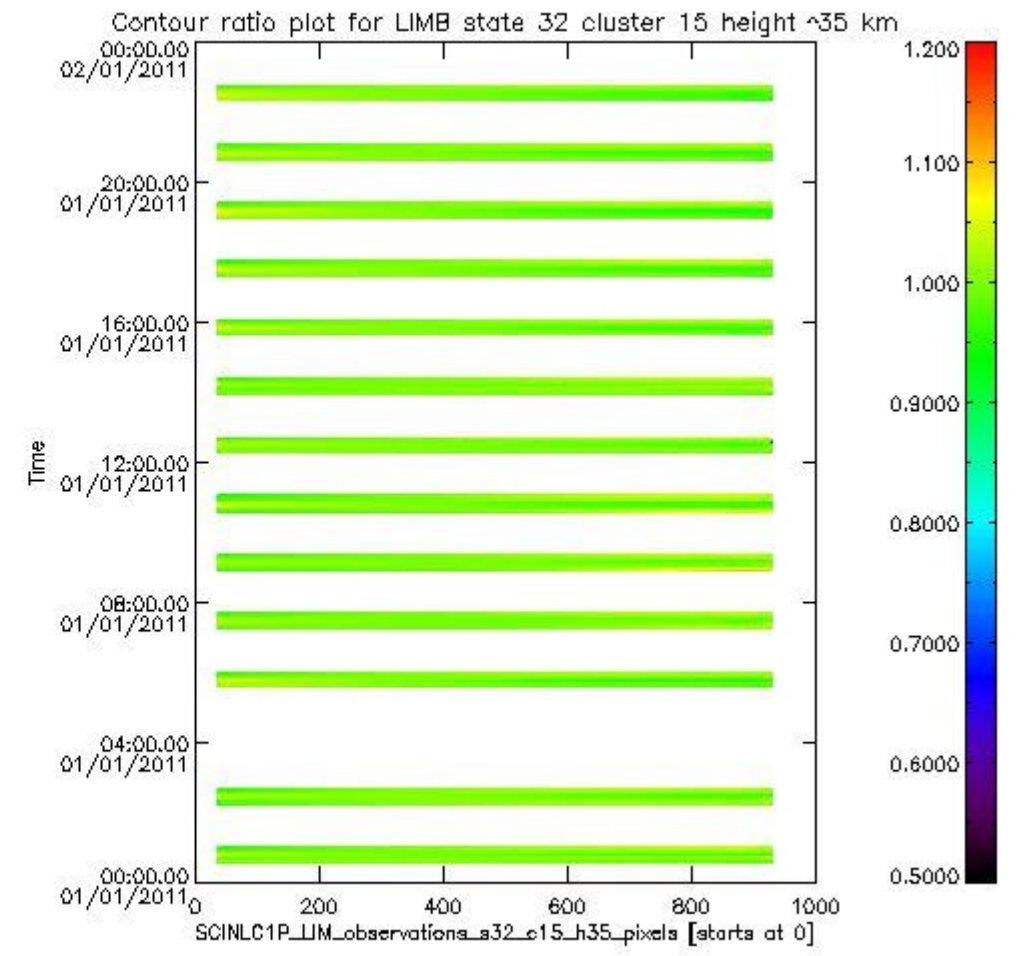
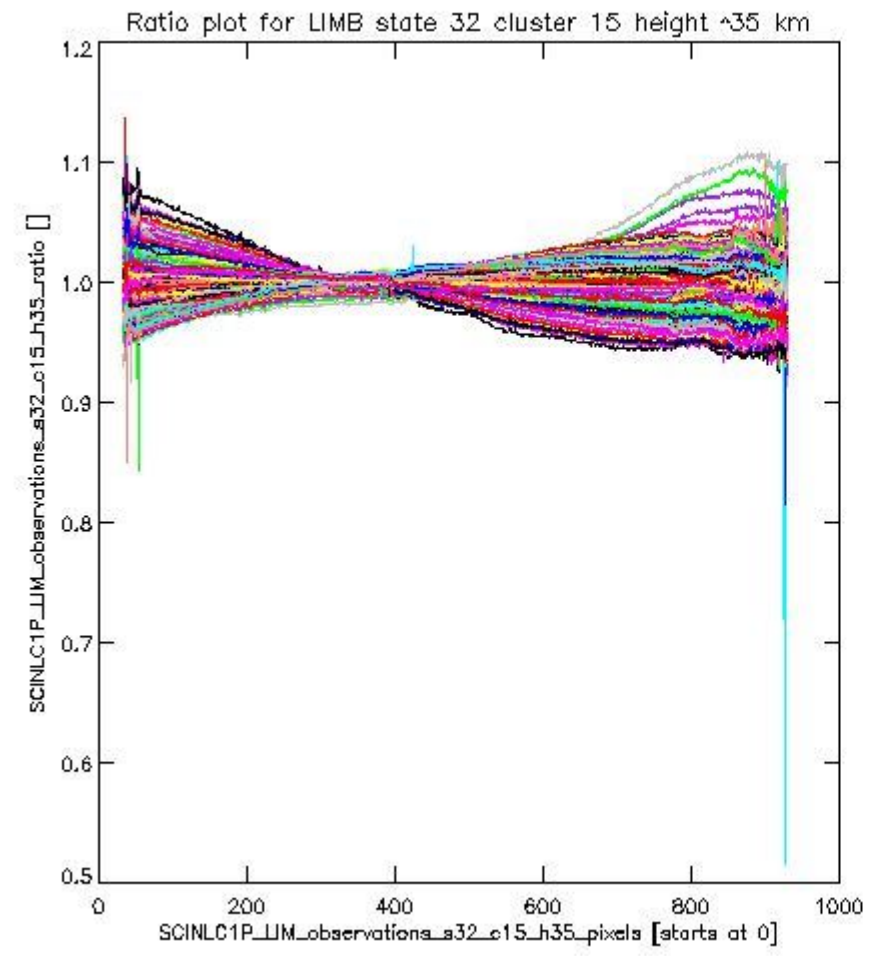
sciamachy_11b_source_packet_report_SCIA_7_04_U_20110101_19.PNG

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 | 01JAN2011 00:32:24.225 |
| Start time of last sample | 01JAN2011 23:59:43.947 |
| Reference period start time | 02DEC2010 02:11:44.845 |
| Reference period stop time | 31DEC2010 23:19:40.221 |
| 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_20110101_20.PNG



sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110101_21.PNG

