

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 | 28JAN2011 06:55:31 |
| Data source version | SCIA/7.04-U |
| Processing scope for products | 17JAN2011 00:00:00 to 18JAN2011 00:00:00 |
| Start time of first product within scope | 16JAN2011 22:47:05 |
| Stop time of last product within scope | 18JAN2011 01:02:10 |
| 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 | 17JAN2011 00:59:21.464 | 17JAN2011 22:52:33.525 |
| 1 | NADIR | 07 | 09 | N/A | 17JAN2011 00:59:21.464 | 17JAN2011 22:52:33.525 |
| 2 | NADIR | 07 | 15 | N/A | 17JAN2011 00:59:21.464 | 17JAN2011 22:52:33.525 |
| 3 | NADIR | 07 | 24 | N/A | 17JAN2011 00:59:21.464 | 17JAN2011 22:52:33.525 |
| 4 | NADIR | 07 | 55 | N/A | 17JAN2011 00:59:21.464 | 17JAN2011 22:52:33.525 |
| 5 | LIMB | 32 | 09 | ~19 km | 17JAN2011 00:46:10.827 | 17JAN2011 22:55:44.825 |
| 6 | LIMB | 32 | 09 | ~22 km | 17JAN2011 00:46:10.827 | 17JAN2011 22:55:44.825 |
| 7 | LIMB | 32 | 09 | ~25 km | 17JAN2011 00:46:10.827 | 17JAN2011 22:55:44.825 |
| 8 | LIMB | 32 | 15 | ~22 km | 17JAN2011 00:46:10.827 | 17JAN2011 22:55:44.825 |
| 9 | LIMB | 32 | 15 | ~25 km | 17JAN2011 00:46:10.827 | 17JAN2011 22:55:44.825 |
| 10 | LIMB | 32 | 15 | ~35 km | 17JAN2011 00:46:10.827 | 17JAN2011 22:55:44.825 |

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 | #incmpl_drk | Decont |
|---|--|--------------------|--------------------|---------|--------|-------|------|------|--------|----------|-------------|--------|
| 0 | SCI_NLC_1CUDPA20110116_223008_000060213098_00303_46438_3108.N1 | 16JAN2011 22:47:05 | 16JAN2011 23:59:26 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 1 | SCI_NLC_1CUDPA20110117_001032_000059993098_00304_46439_3117.N1 | 17JAN2011 00:27:18 | 17JAN2011 01:39:38 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 2 | SCI_NLC_1CUDPA20110117_015035_000060213098_00305_46440_3110.N1 | 17JAN2011 02:07:32 | 17JAN2011 03:19:54 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 3 | SCI_NLC_1CUDPA20110117_033100_000059993098_00306_46441_3113.N1 | 17JAN2011 03:47:46 | 17JAN2011 05:00:05 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 4 | SCI_NLC_1CUDPA20110117_051103_000060213098_00307_46442_3115.N1 | 17JAN2011 05:28:00 | 17JAN2011 06:40:16 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 5 | SCI_NLC_1CUDPA20110117_065128_000059993098_00308_46443_3116.N1 | 17JAN2011 07:08:13 | 17JAN2011 08:20:27 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |

| | | | | | | | | | | | | |
|----|--|--------------------|--------------------|---|----|----|---|---|---|---|---|--|
| 6 | SCI_NLC_1CUDPA20110117_083130_000060213098_00309_46444_3120.N1 | 17JAN2011 08:48:27 | 17JAN2011 10:00:38 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 7 | SCI_NLC_1CUDPA20110117_101155_000059993098_00310_46445_3171.N1 | 17JAN2011 10:28:41 | 17JAN2011 11:40:49 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 8 | SCI_NLC_1CUDPA20110117_115158_000060213098_00311_46446_3172.N1 | 17JAN2011 12:08:54 | 17JAN2011 13:21:00 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 9 | SCI_NLC_1CUDPA20110117_133223_000059993098_00312_46447_3173.N1 | 17JAN2011 13:49:08 | 17JAN2011 15:01:10 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 10 | SCI_NLC_1CUDPA20110117_151225_000060213098_00313_46448_3200.N1 | 17JAN2011 15:29:22 | 17JAN2011 16:41:21 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 11 | SCI_NLC_1CUDPA20110117_165250_000059993098_00314_46449_3302.N1 | 17JAN2011 17:09:36 | 17JAN2011 18:20:33 | 0 | 34 | 30 | 0 | 1 | 1 | 0 | 0 | |
| 12 | SCI_NLC_1CUDPA20110117_183253_000060213098_00315_46450_3404.N1 | 17JAN2011 18:49:49 | 17JAN2011 20:01:41 | 0 | 34 | 30 | 0 | 1 | 2 | 0 | 0 | |
| 13 | SCI_NLC_1CUDPA20110117_201318_000059993098_00316_46451_3405.N1 | 17JAN2011 20:30:03 | 17JAN2011 21:41:51 | 0 | 34 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 14 | SCI_NLC_1CUDPA20110117_215321_000060213098_00317_46452_3407.N1 | 17JAN2011 22:10:17 | 17JAN2011 23:22:01 | 0 | 33 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 15 | SCI_NLC_1CUDPA20110117_233345_000059993098_00318_46453_3409.N1 | 17JAN2011 23:50:30 | 18JAN2011 01:02:10 | 0 | 33 | 30 | 0 | 0 | 1 | 0 | 0 | |

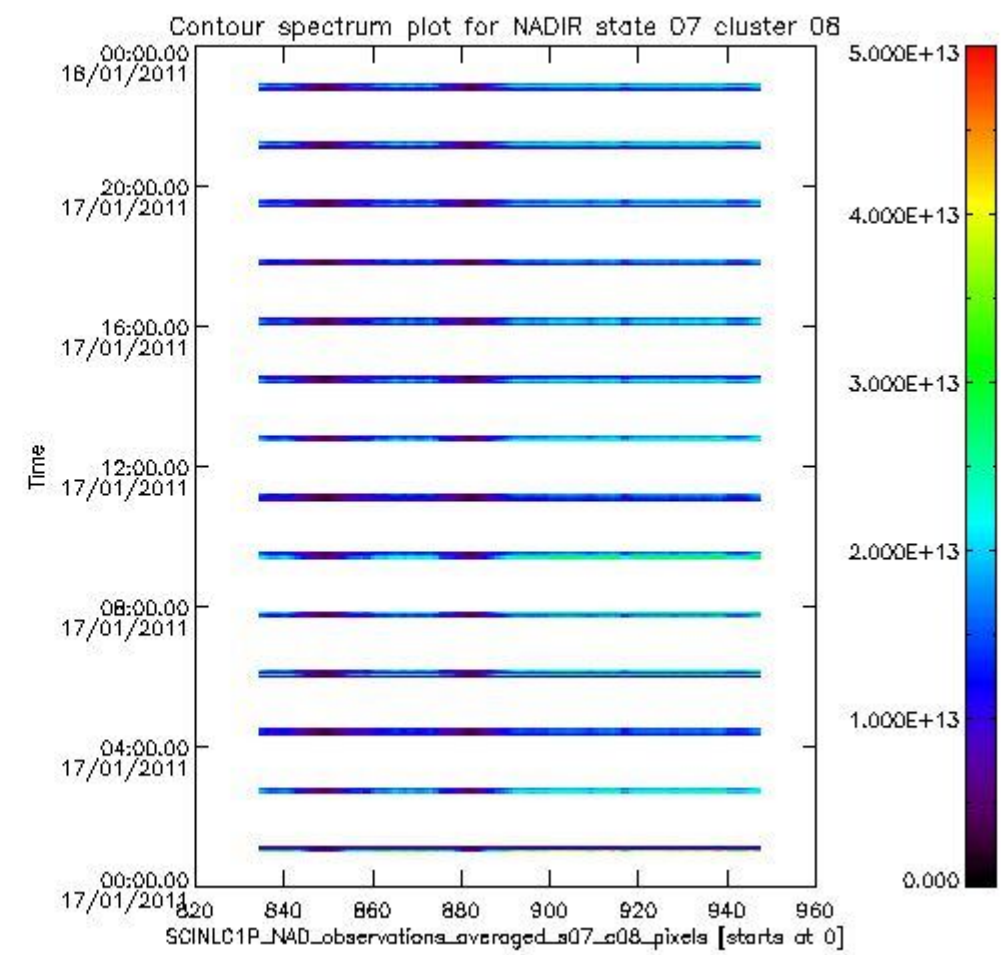
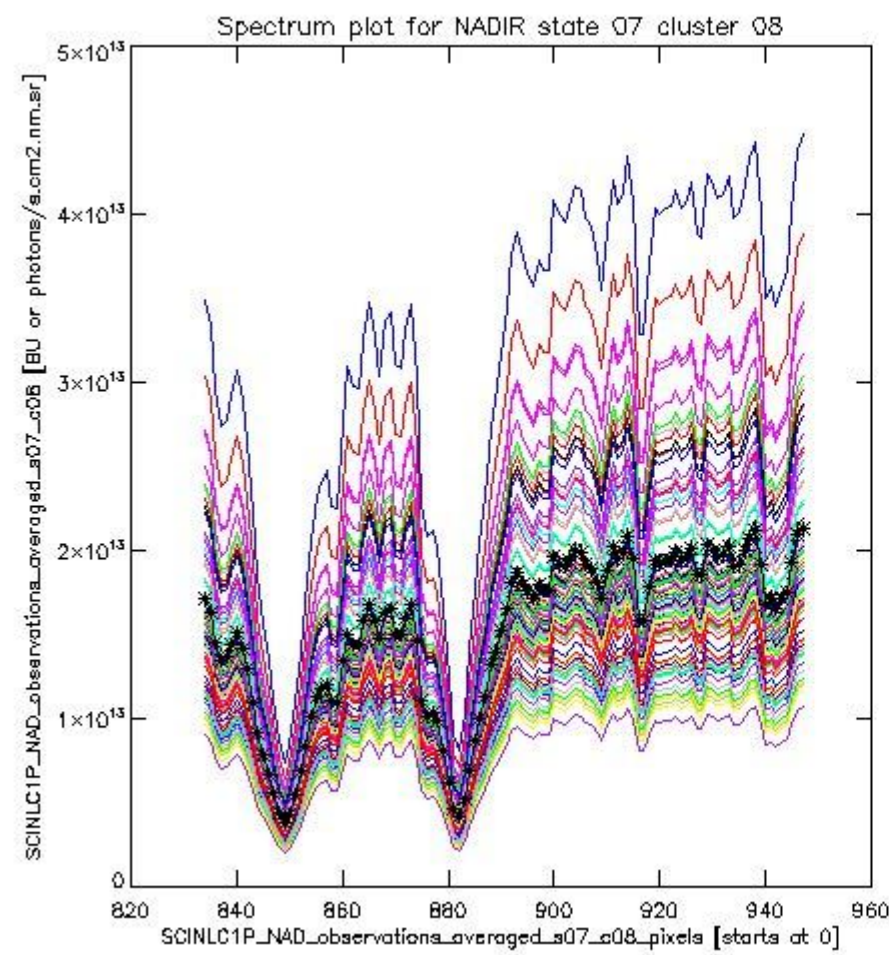
1.2 Source packet monitoring

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:

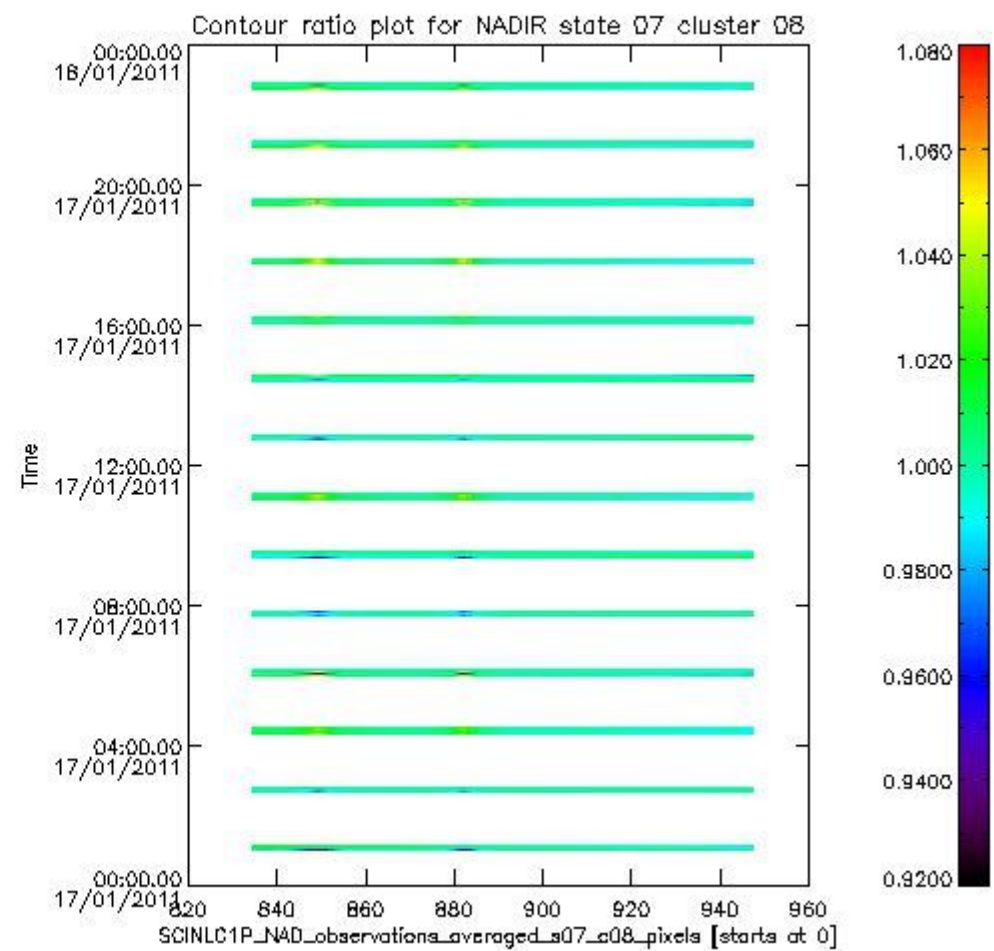
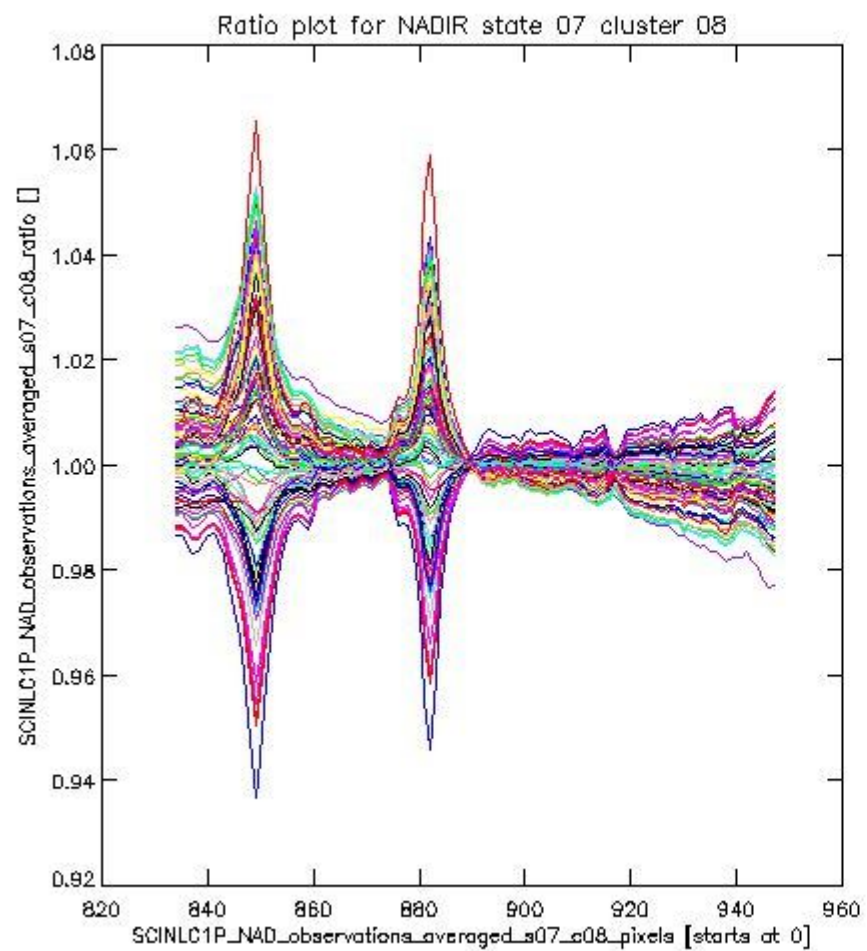
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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 | 17JAN2011 00:59:21.464 |
| Start time of last sample | 17JAN2011 22:52:33.525 |
| Reference period start time | 18DEC2010 00:59:43.395 |
| Reference period stop time | 16JAN2011 23:29:21.510 |
| Channel number | 2 |
| First pixel number (starts at 0) | 834 |
| Last pixel number (starts at 0) | 947 |



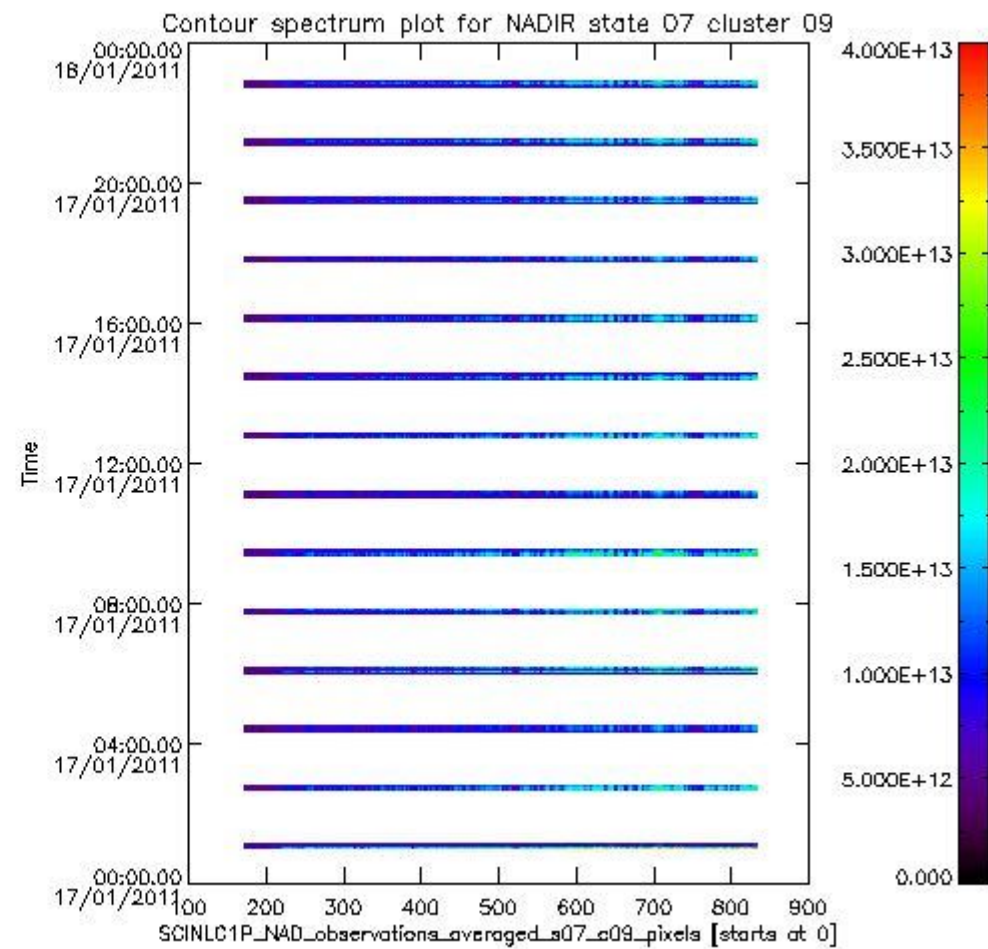
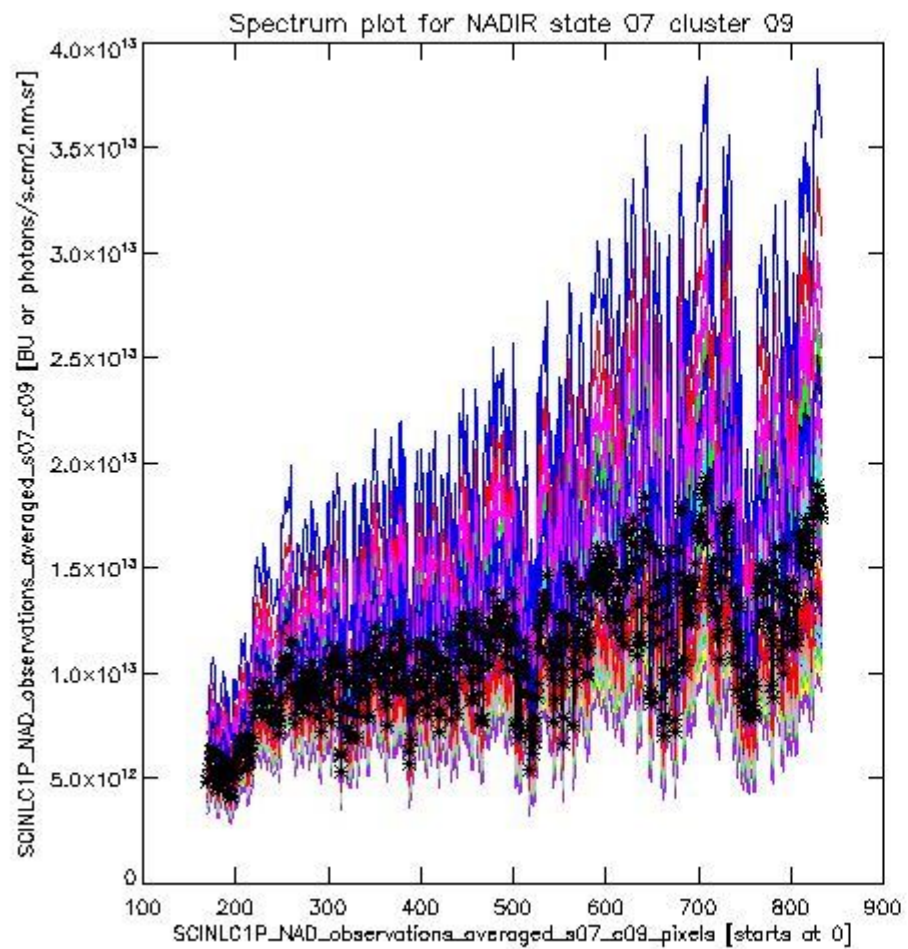
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_0.PNG



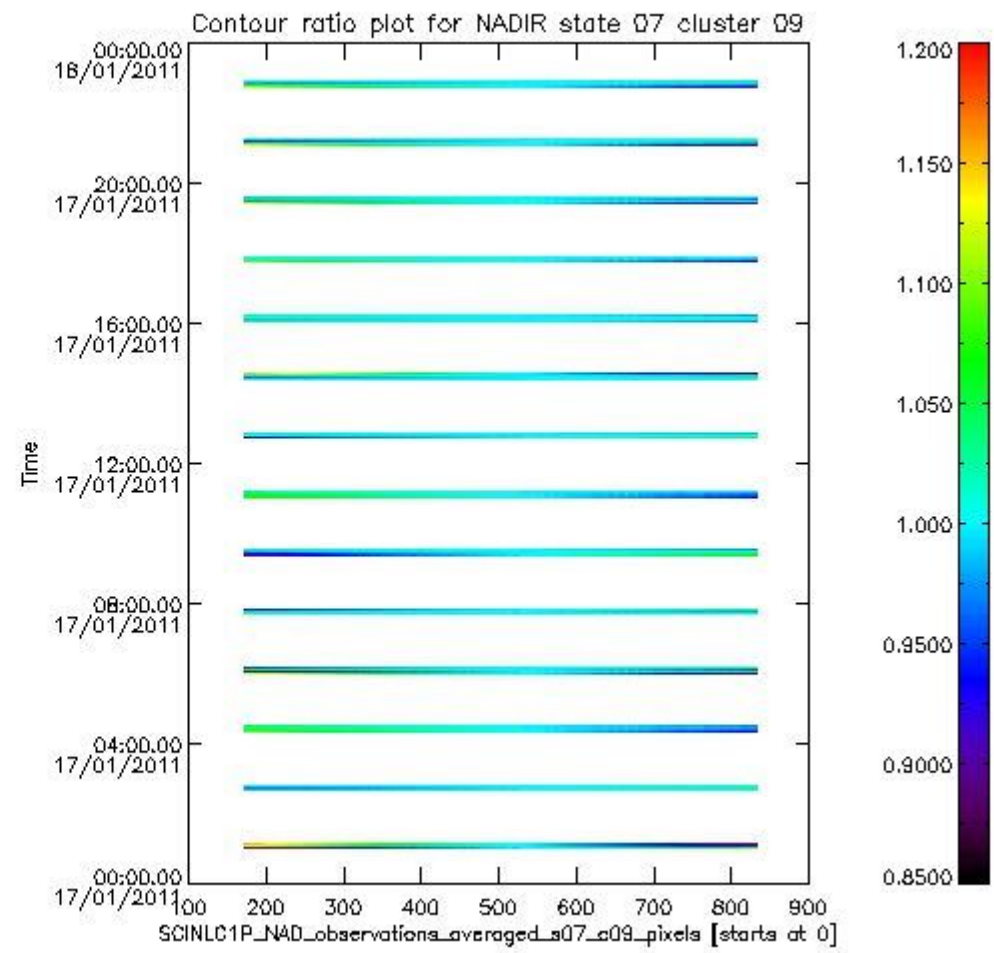
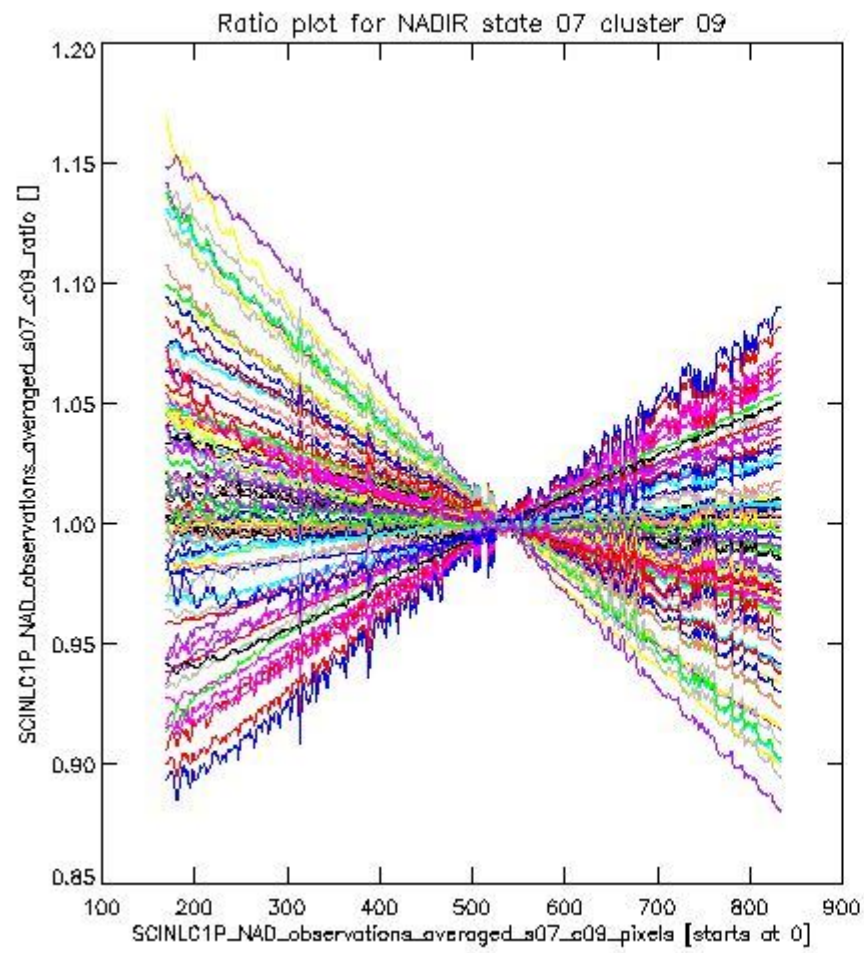
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_1.PNG

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 | 17JAN2011 00:59:21.464 |
| Start time of last sample | 17JAN2011 22:52:33.525 |
| Reference period start time | 18DEC2010 00:59:43.395 |
| Reference period stop time | 16JAN2011 23:29:21.510 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 833 |



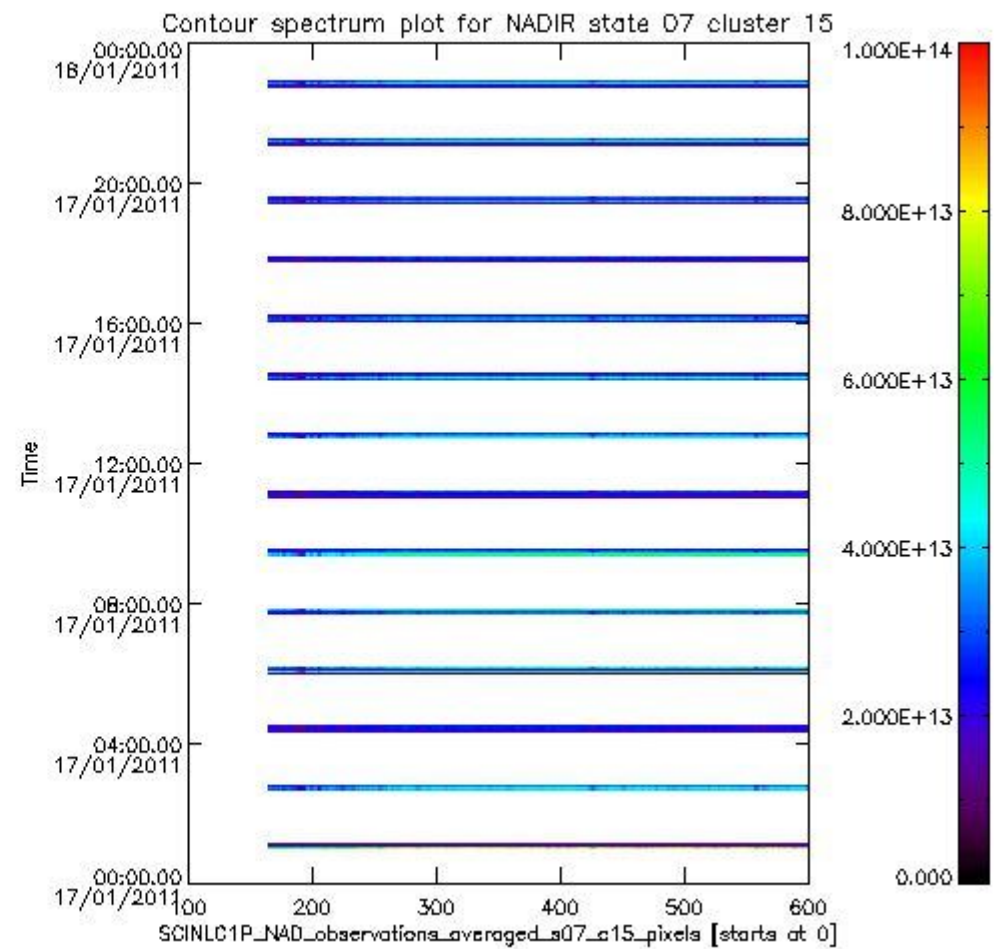
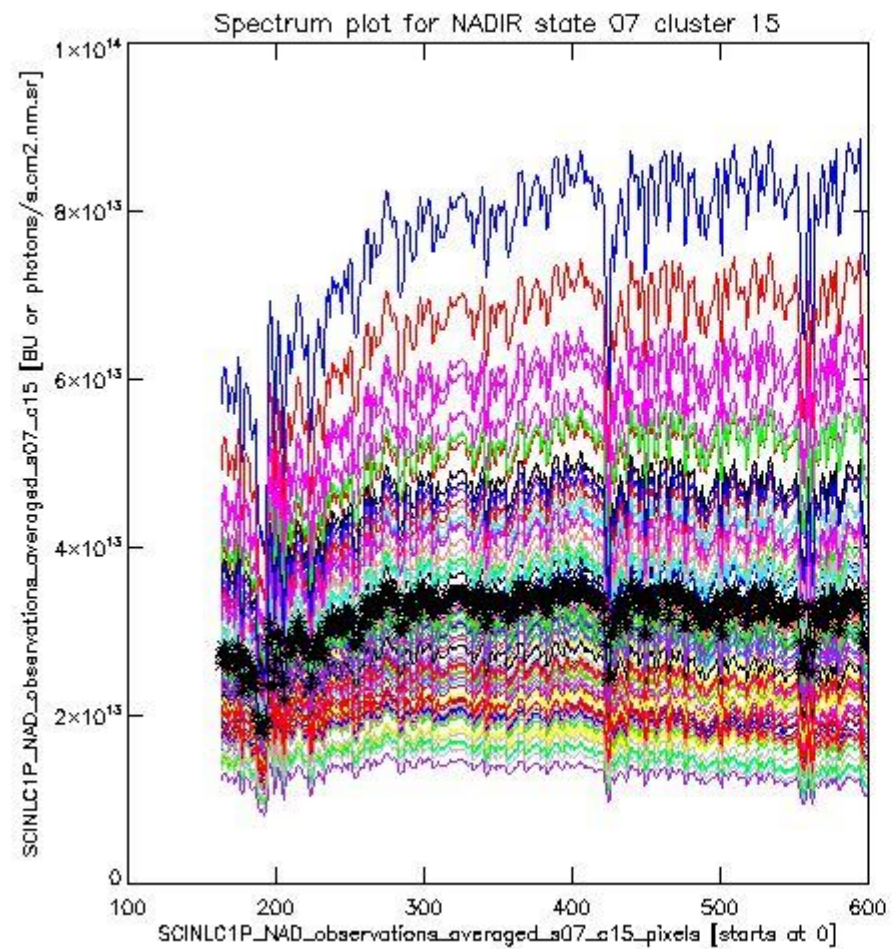
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_2.PNG



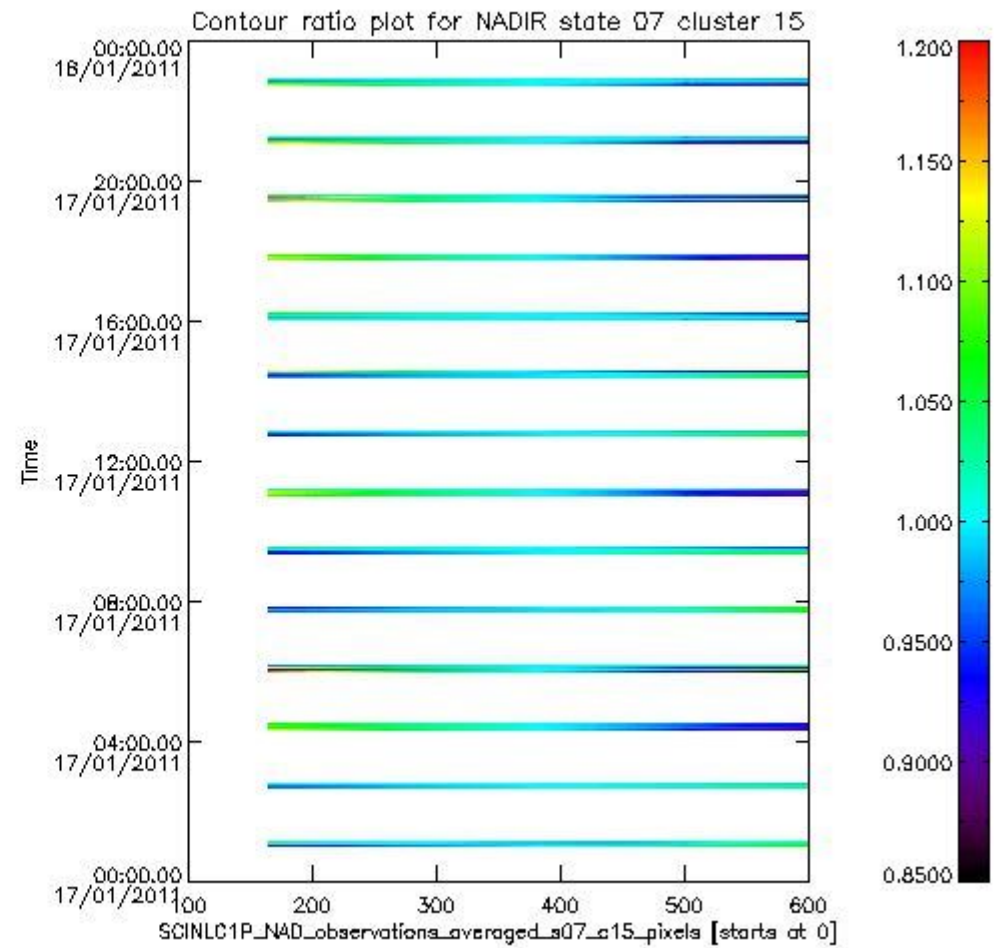
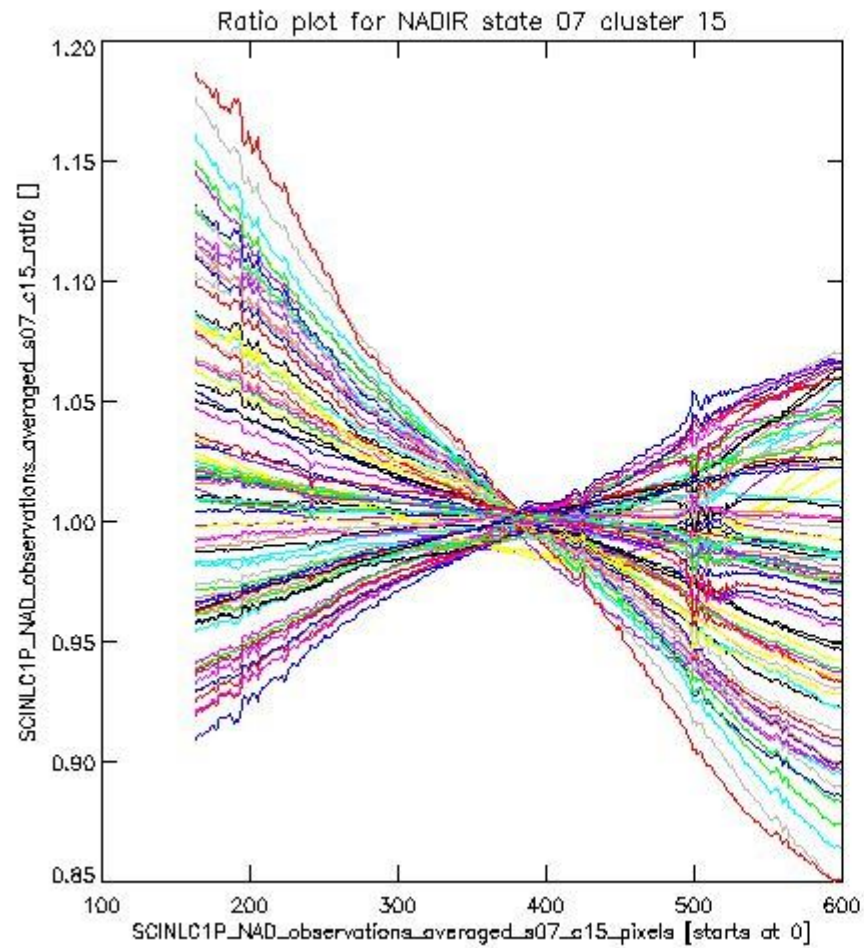
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_3.PNG

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 | 17JAN2011 00:59:21.464 |
| Start time of last sample | 17JAN2011 22:52:33.525 |
| Reference period start time | 18DEC2010 00:59:43.395 |
| Reference period stop time | 16JAN2011 23:29:21.510 |
| Channel number | 3 |
| First pixel number (starts at 0) | 163 |
| Last pixel number (starts at 0) | 598 |



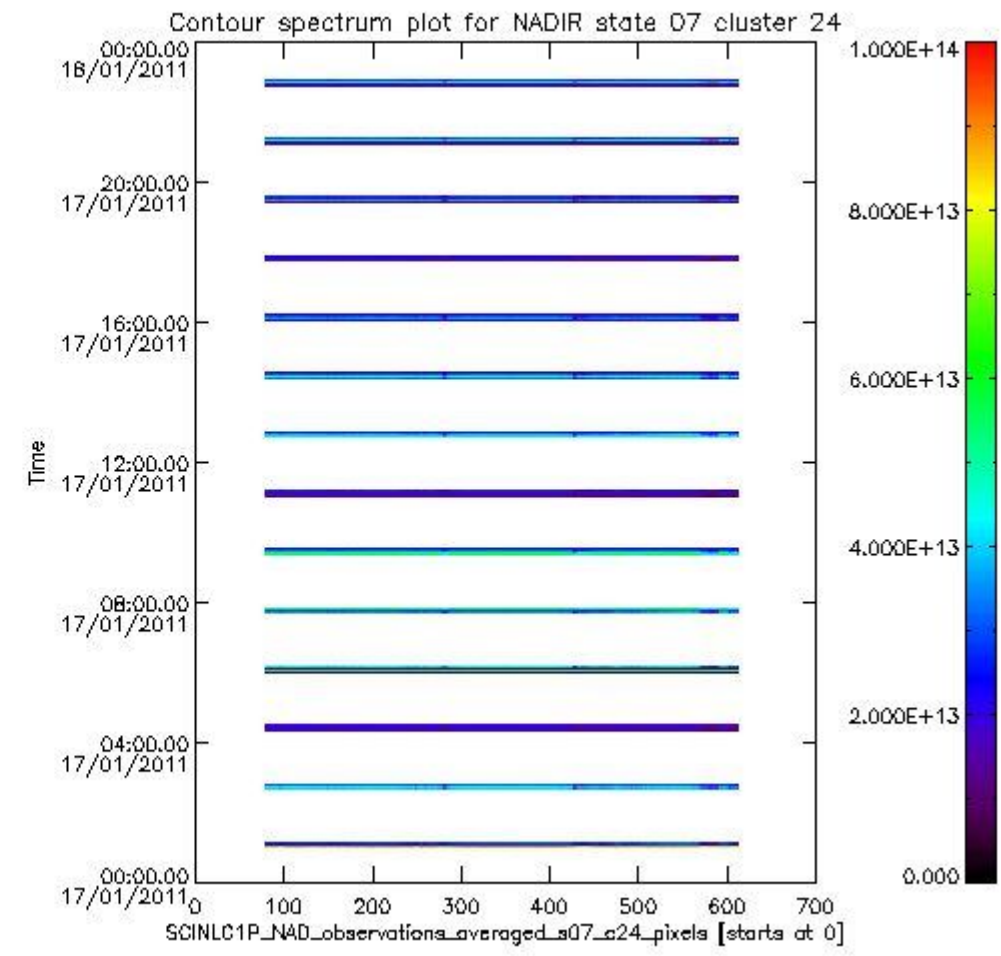
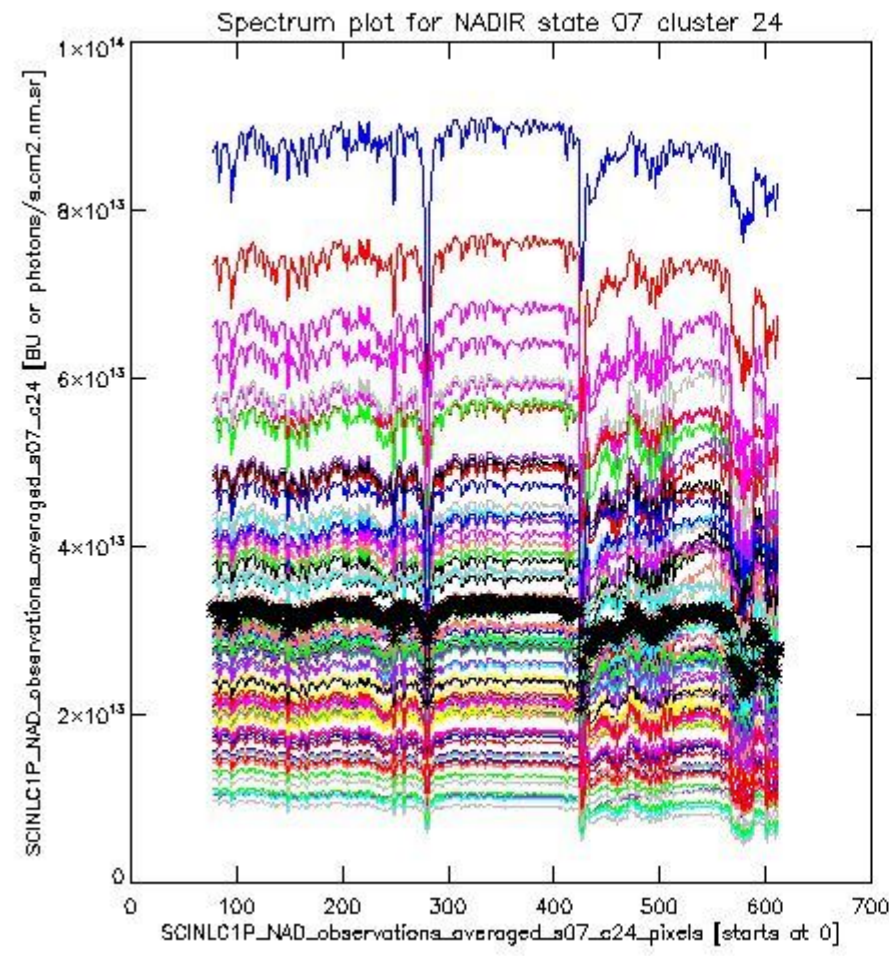
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_4.PNG



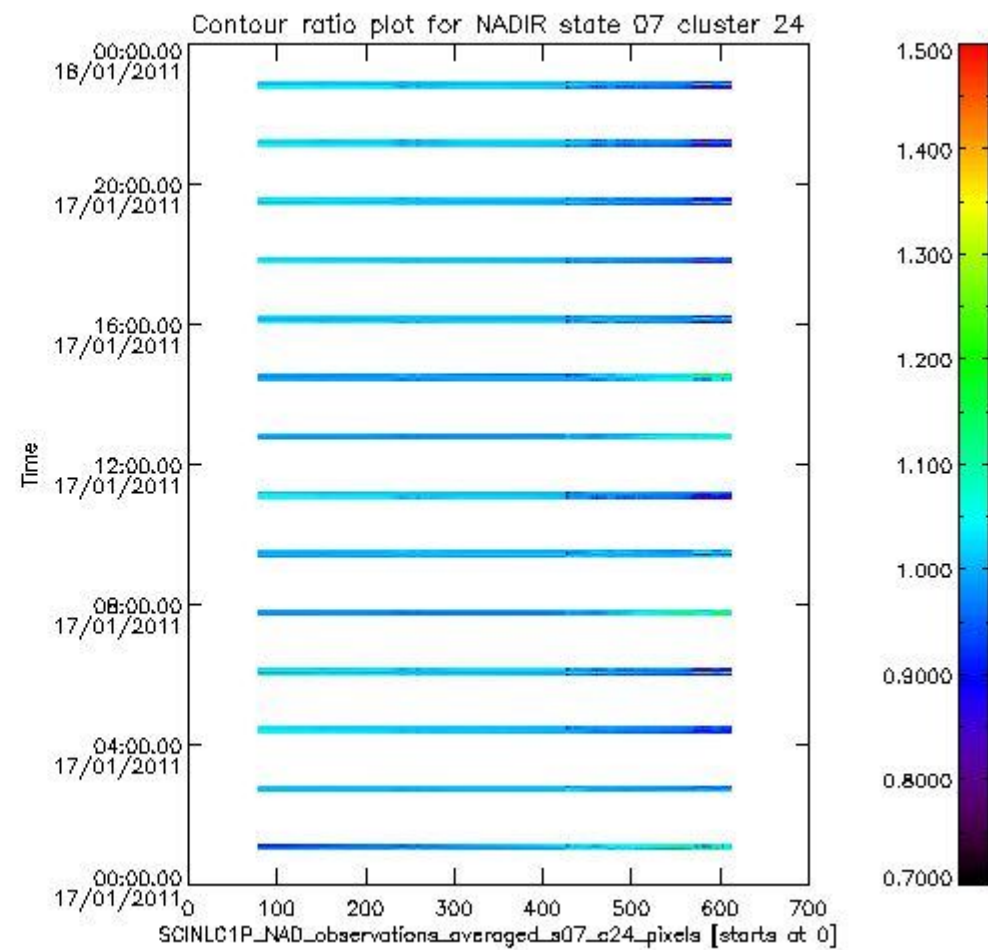
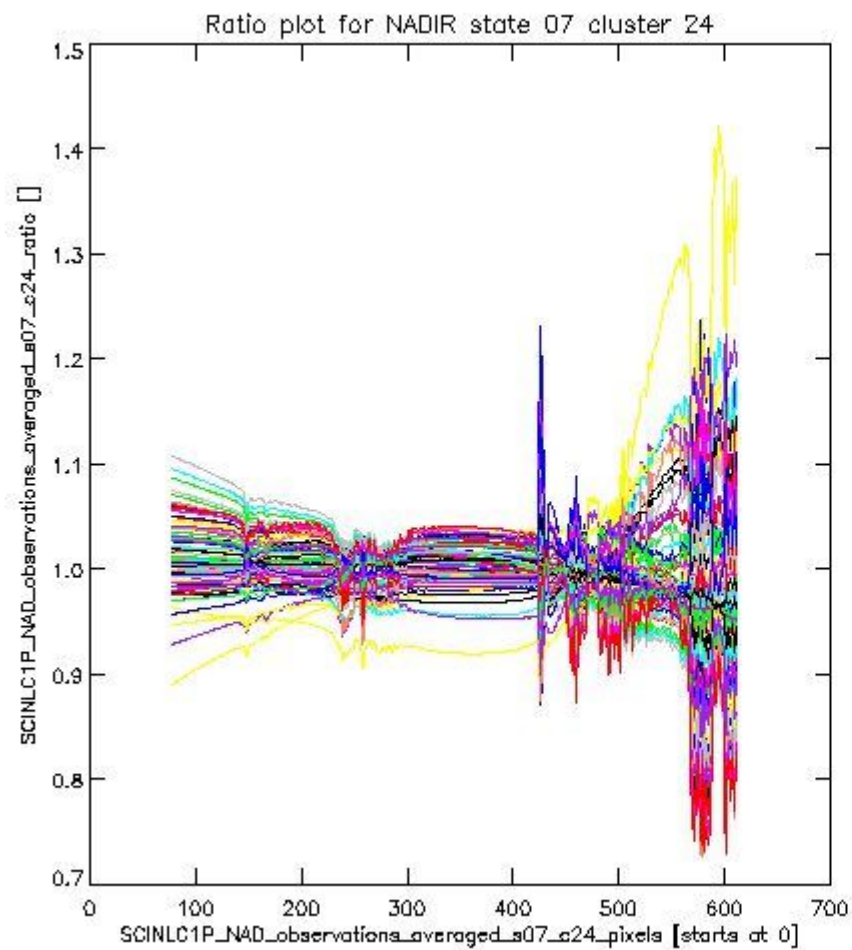
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_5.PNG

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 | 17JAN2011 00:59:21.464 |
| Start time of last sample | 17JAN2011 22:52:33.525 |
| Reference period start time | 18DEC2010 00:59:43.395 |
| Reference period stop time | 16JAN2011 23:29:21.510 |
| Channel number | 4 |
| First pixel number (starts at 0) | 78 |
| Last pixel number (starts at 0) | 612 |



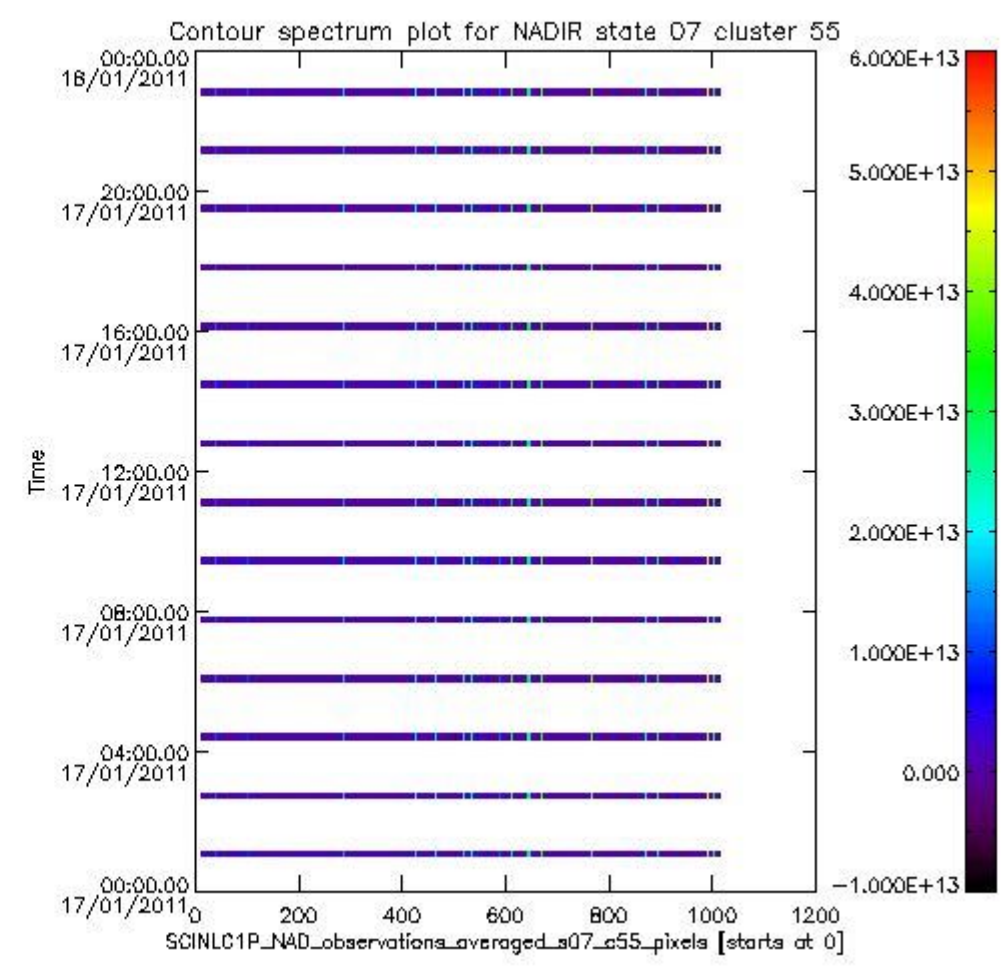
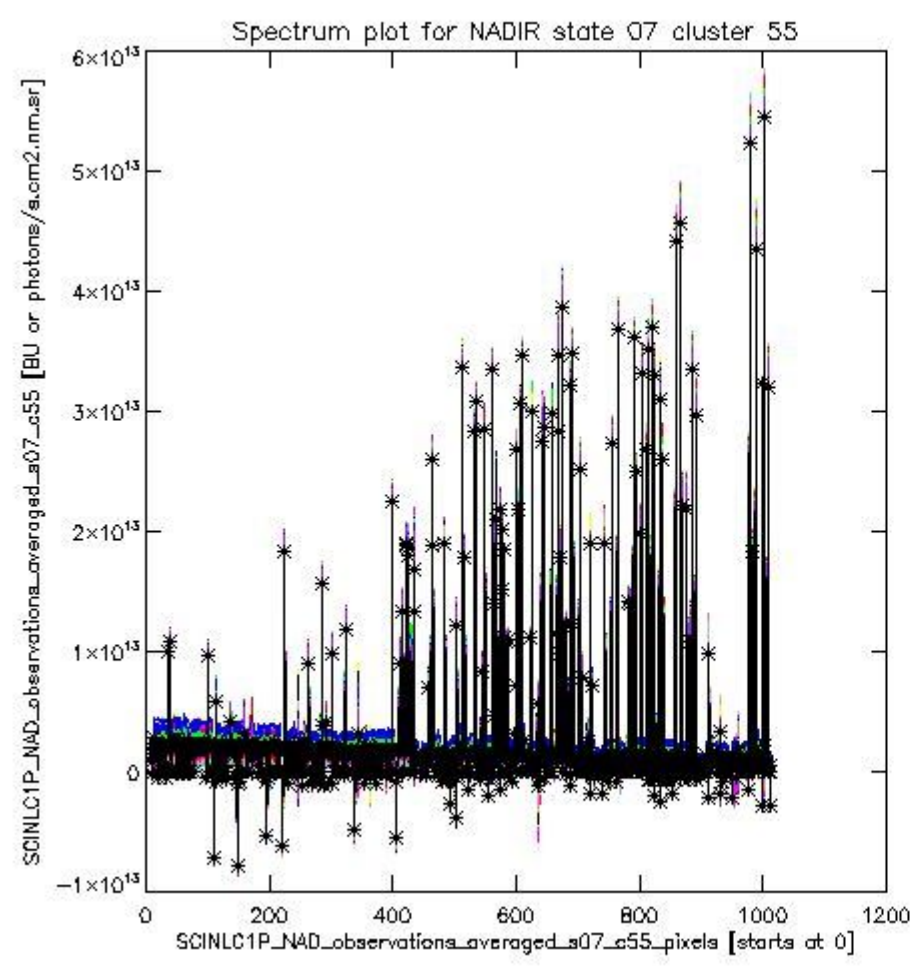
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_6.PNG



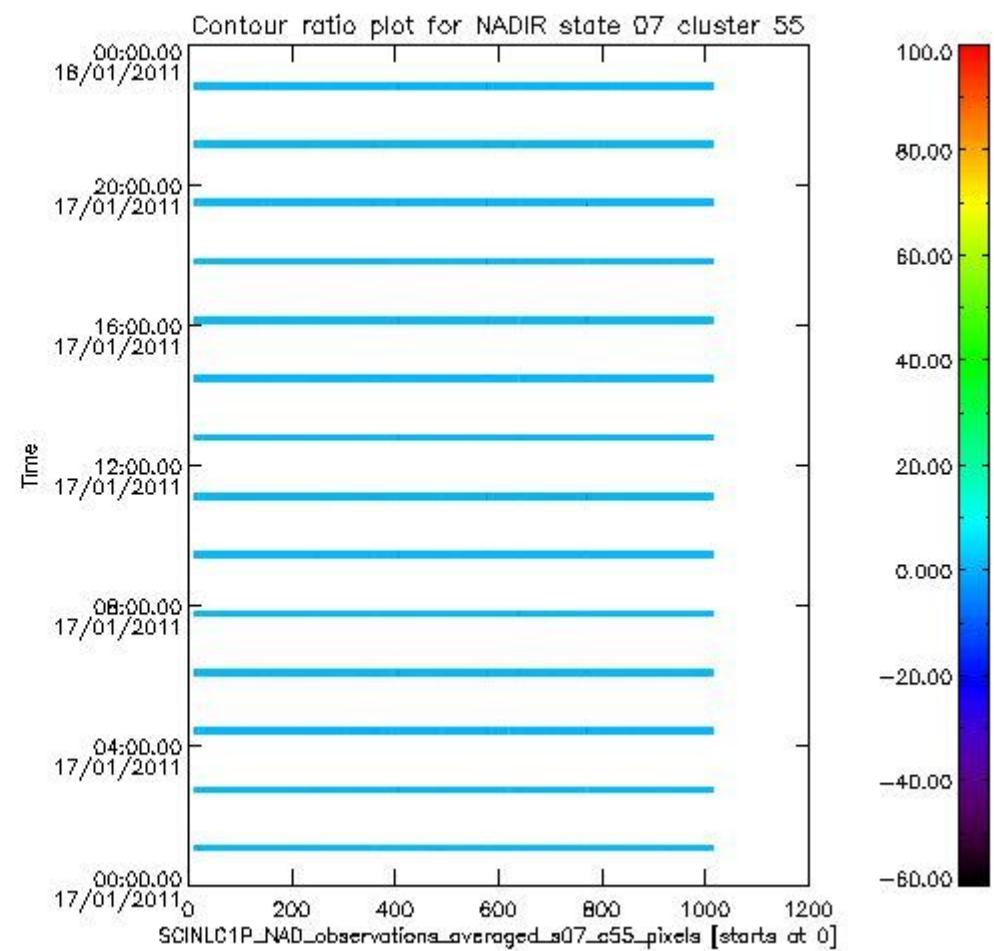
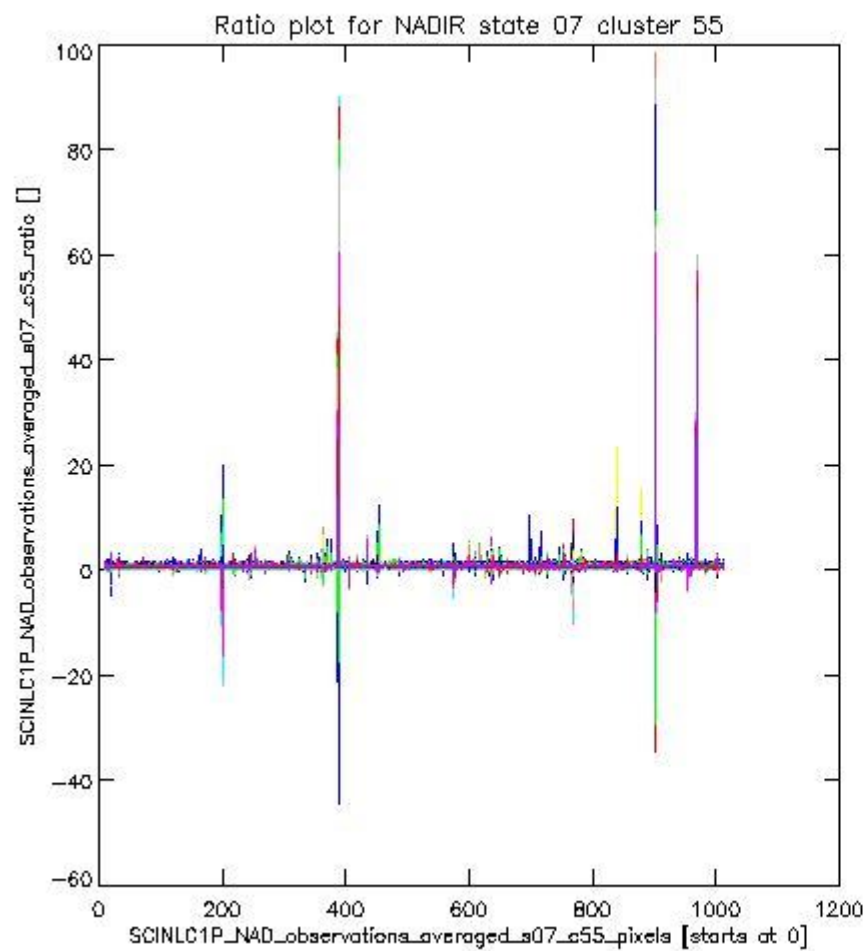
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_7.PNG

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 | 17JAN2011 00:59:21.464 |
| Start time of last sample | 17JAN2011 22:52:33.525 |
| Reference period start time | 18DEC2010 00:59:43.395 |
| Reference period stop time | 16JAN2011 23:29:21.510 |
| Channel number | 8 |
| First pixel number (starts at 0) | 10 |
| Last pixel number (starts at 0) | 1013 |



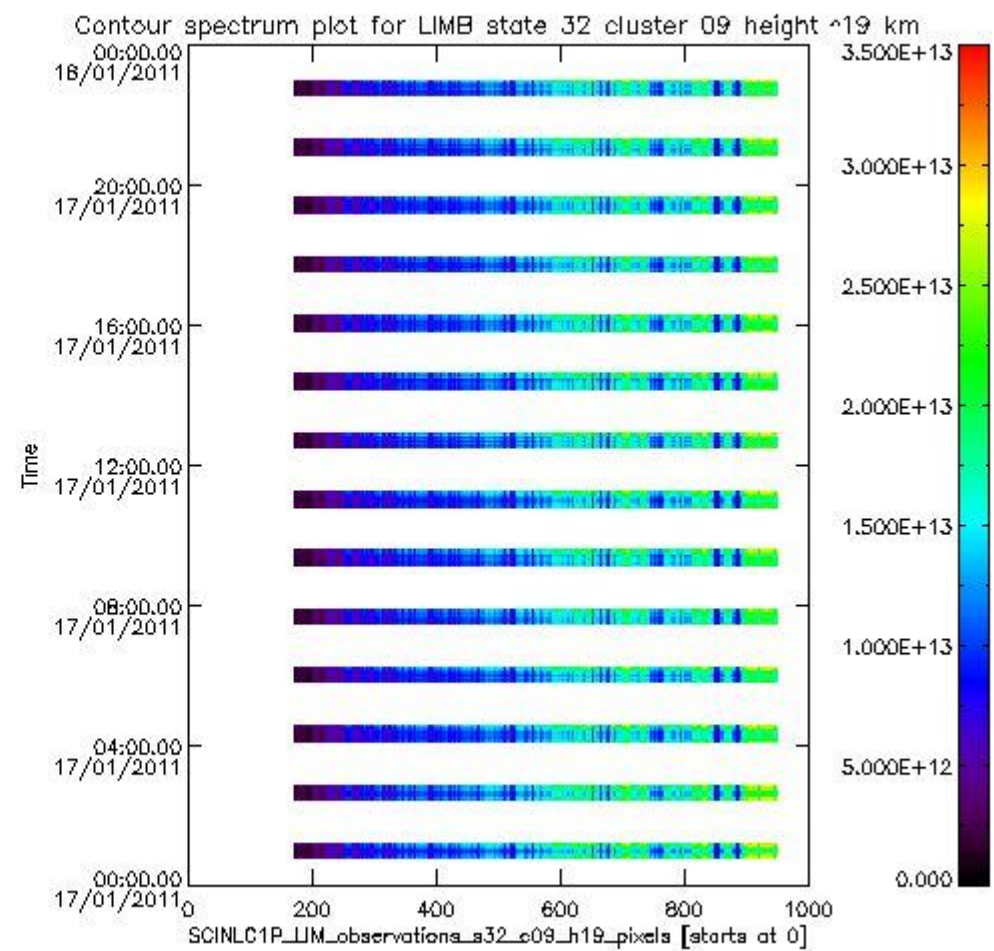
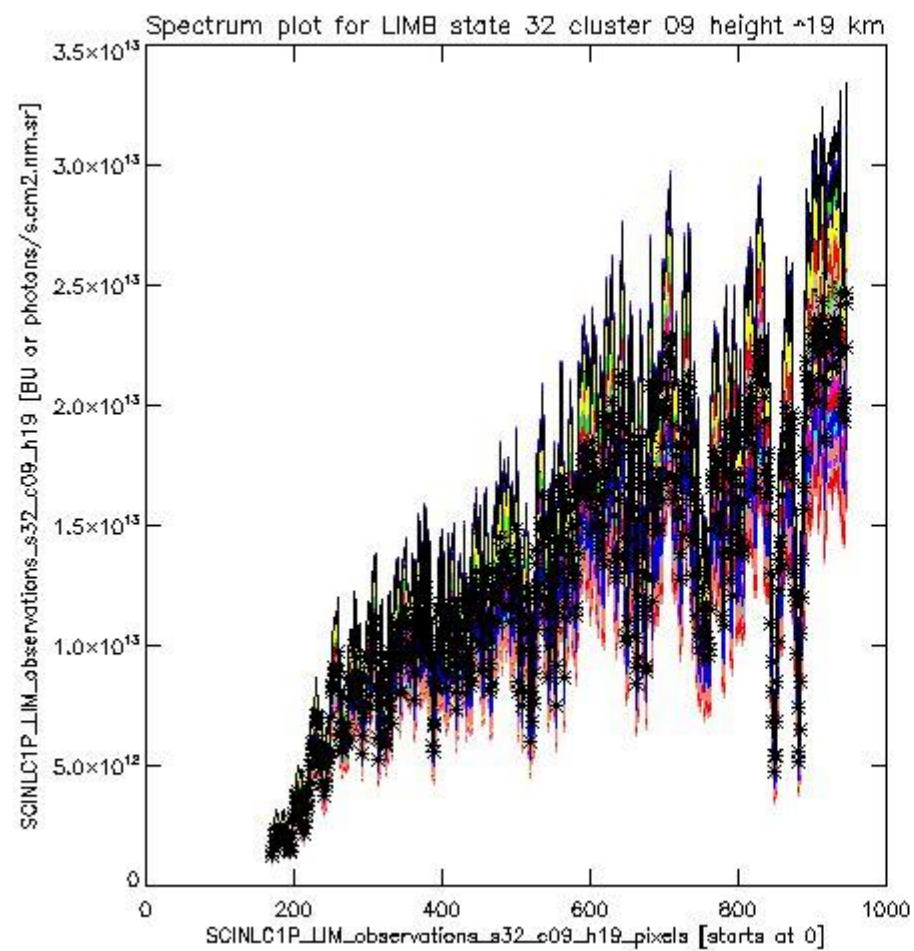
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_8.PNG



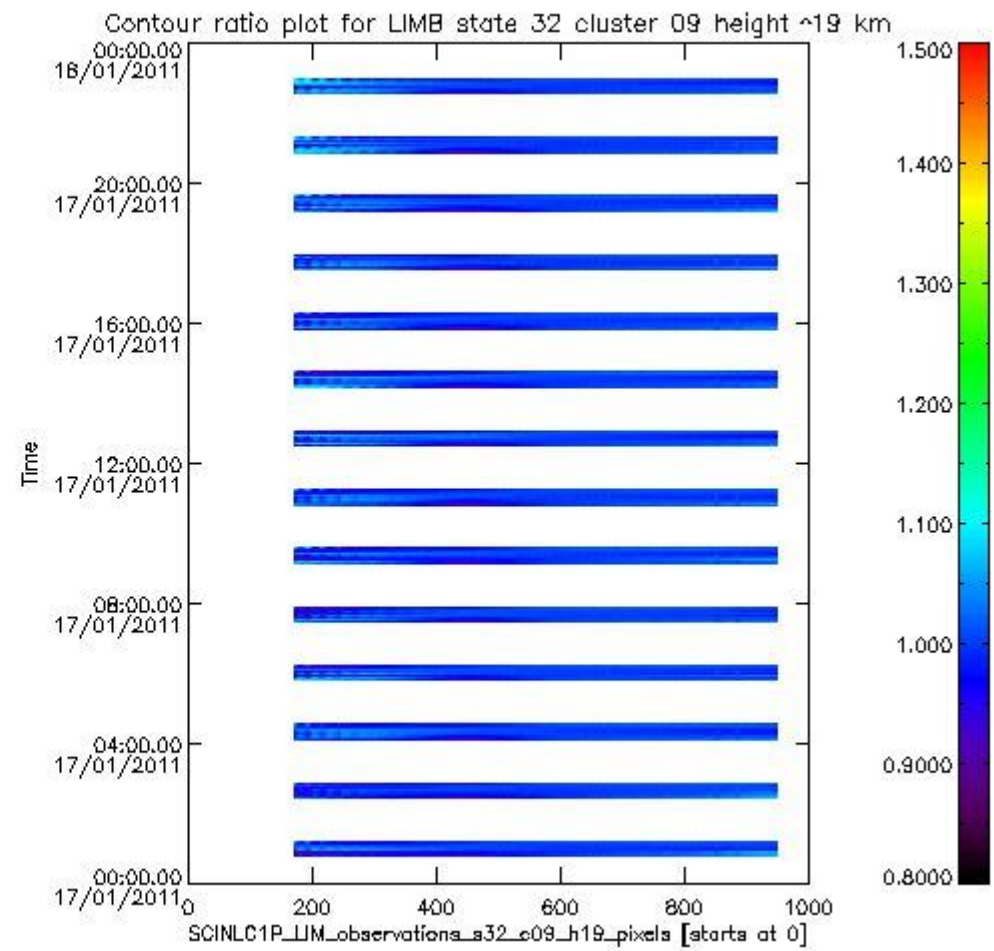
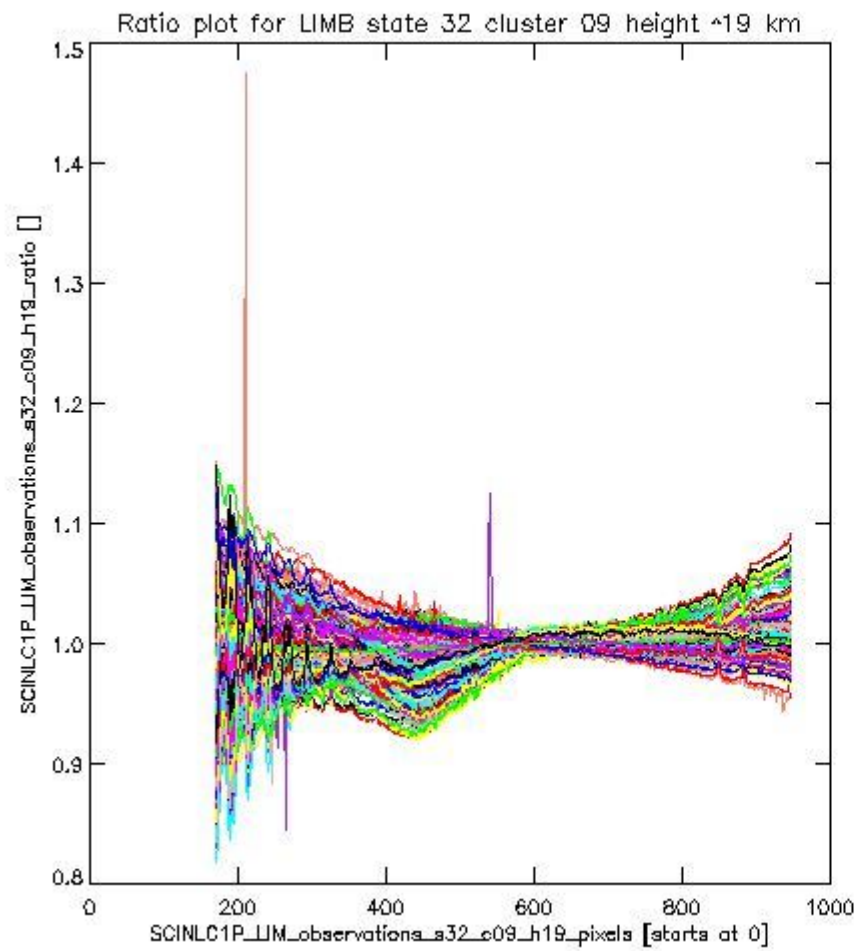
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_9.PNG

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 | 17JAN2011 00:46:10.827 |
| Start time of last sample | 17JAN2011 22:55:44.825 |
| Reference period start time | 18DEC2010 00:46:32.759 |
| Reference period stop time | 16JAN2011 23:32:32.807 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



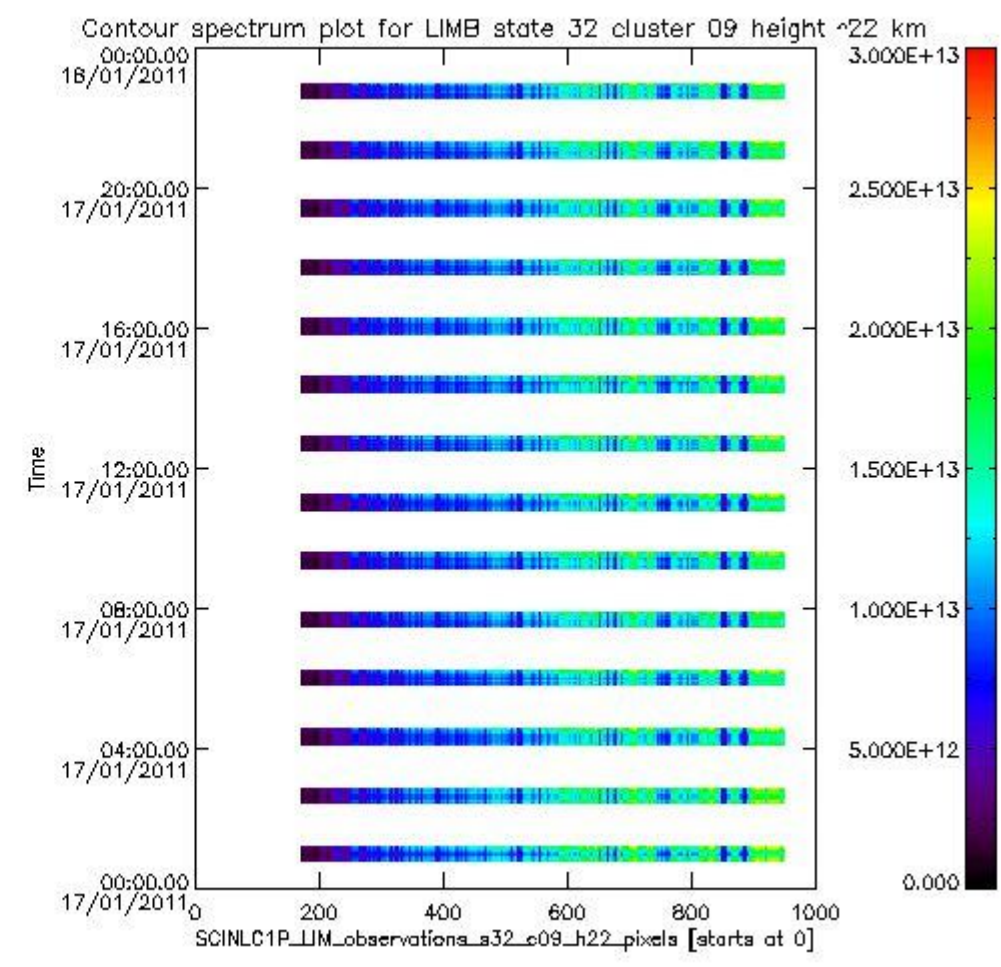
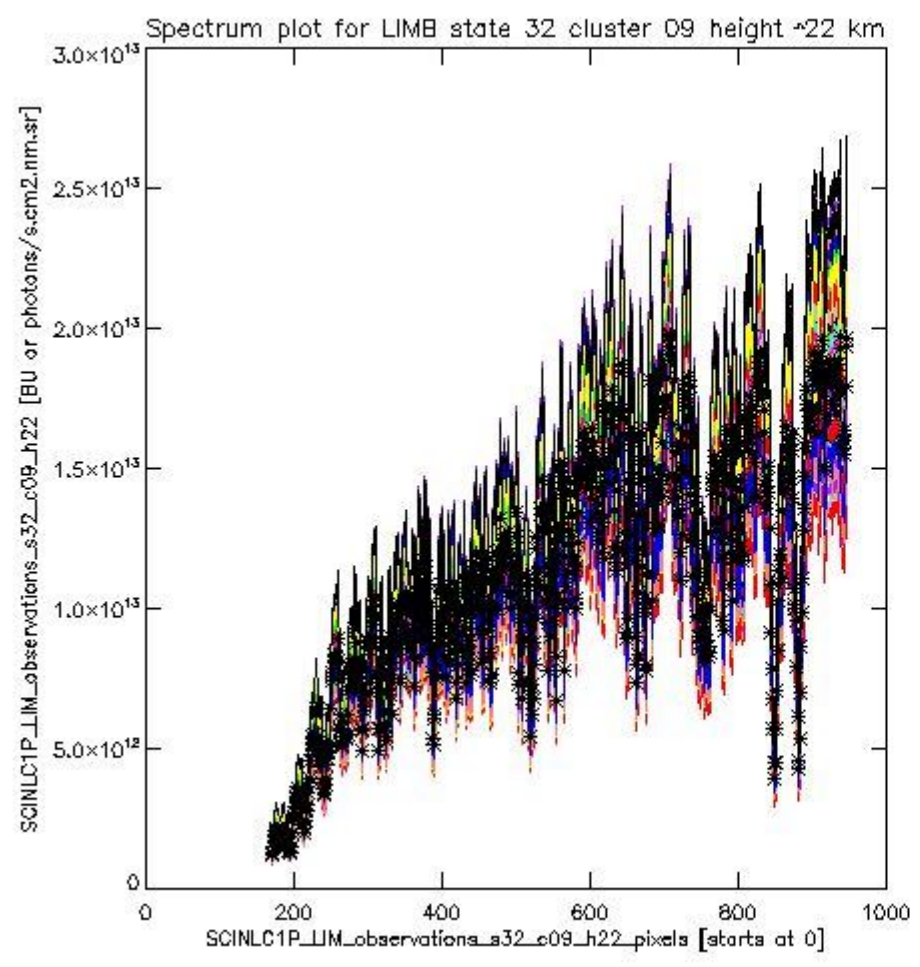
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_10.PNG



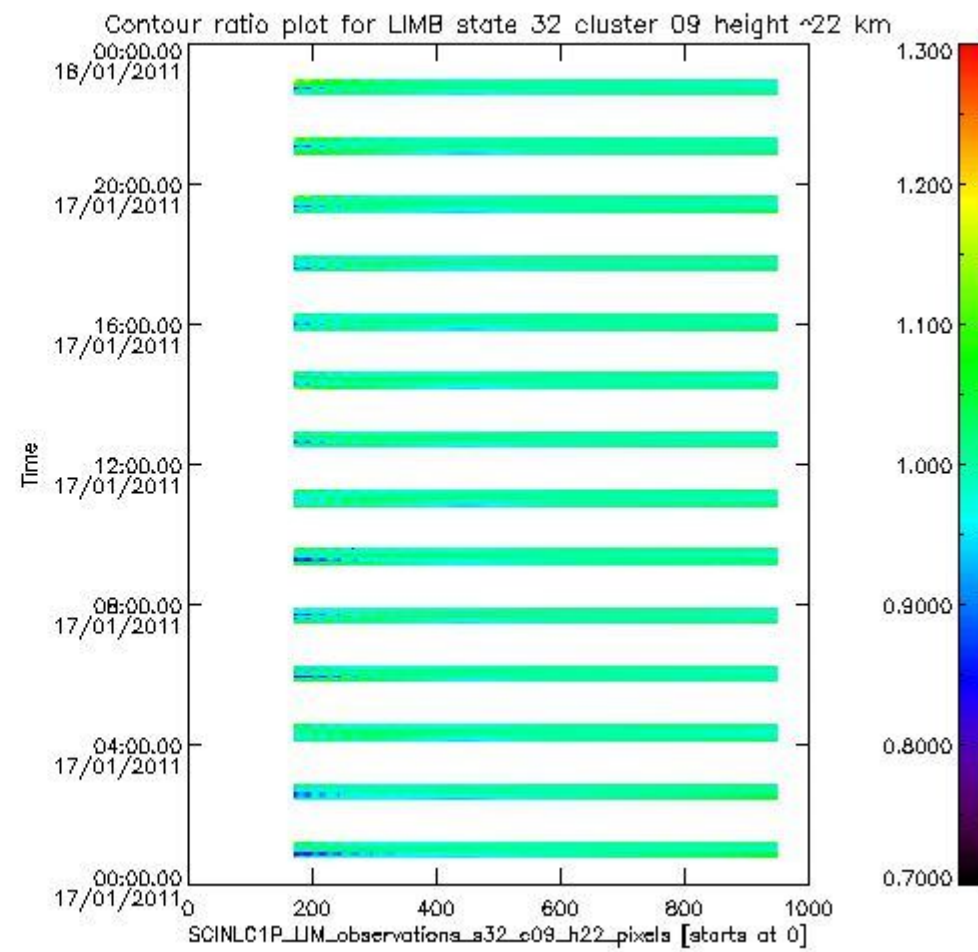
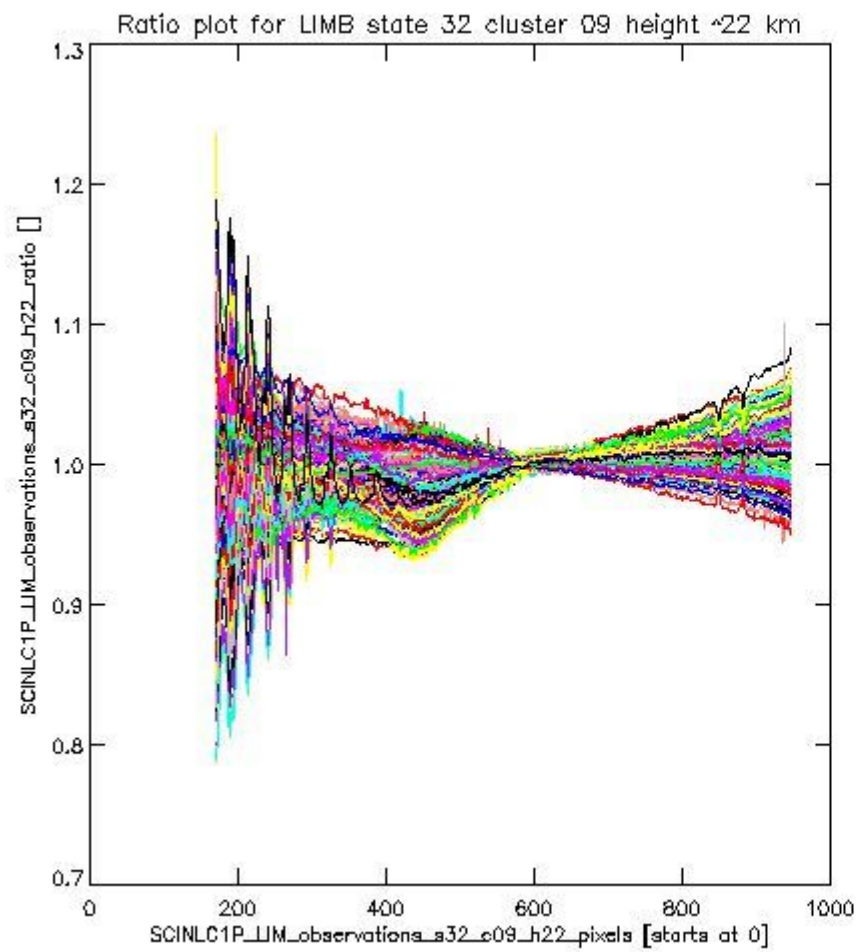
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_11.PNG

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 | 17JAN2011 00:46:10.827 |
| Start time of last sample | 17JAN2011 22:55:44.825 |
| Reference period start time | 18DEC2010 00:46:32.759 |
| Reference period stop time | 16JAN2011 23:32:32.807 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



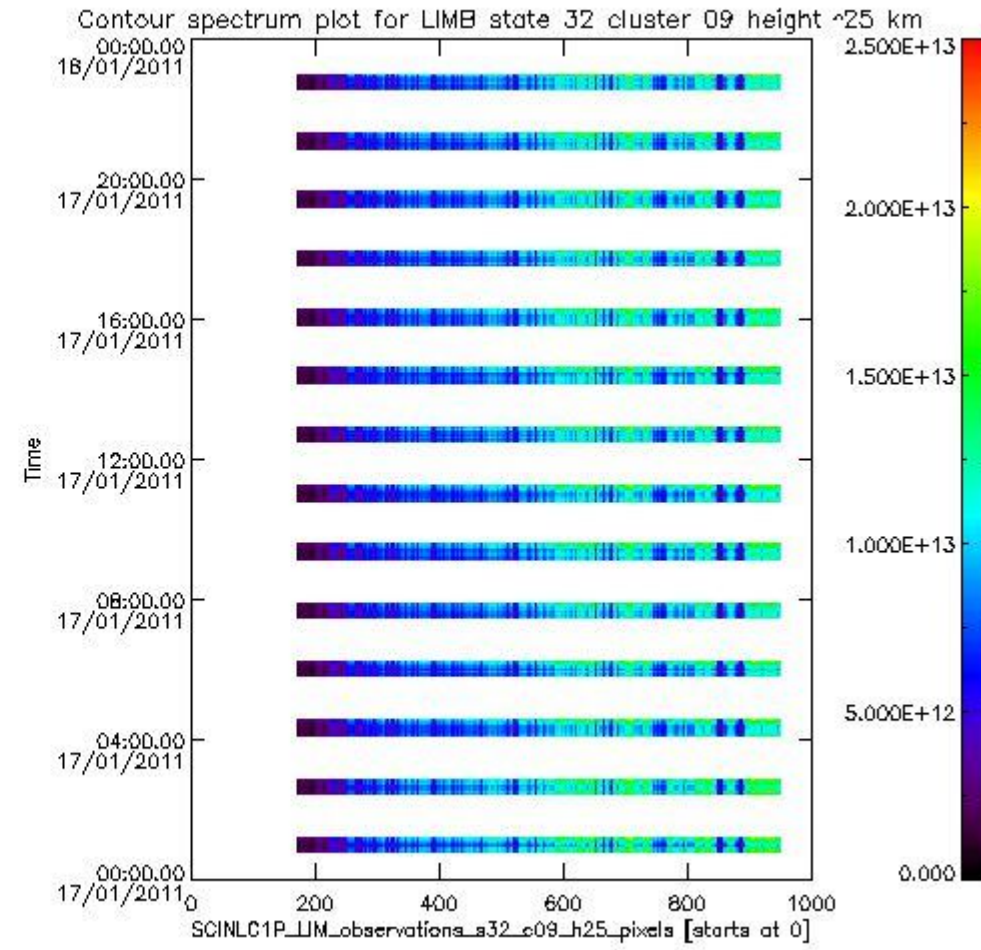
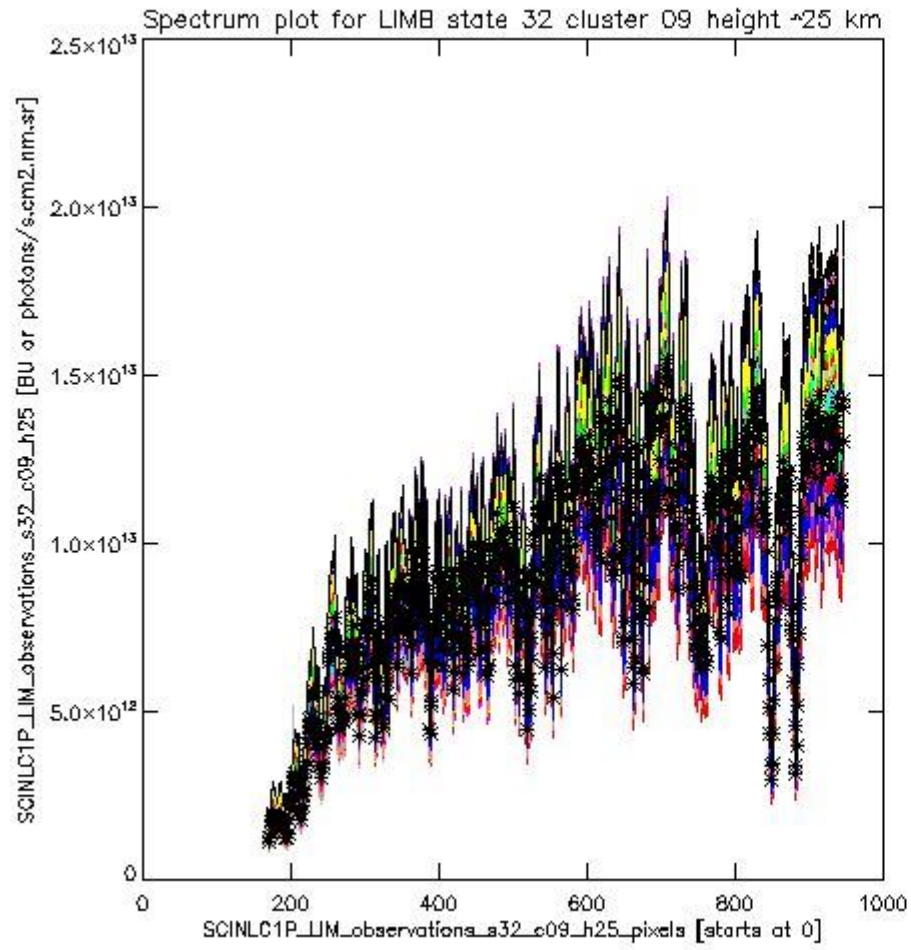
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_12.PNG



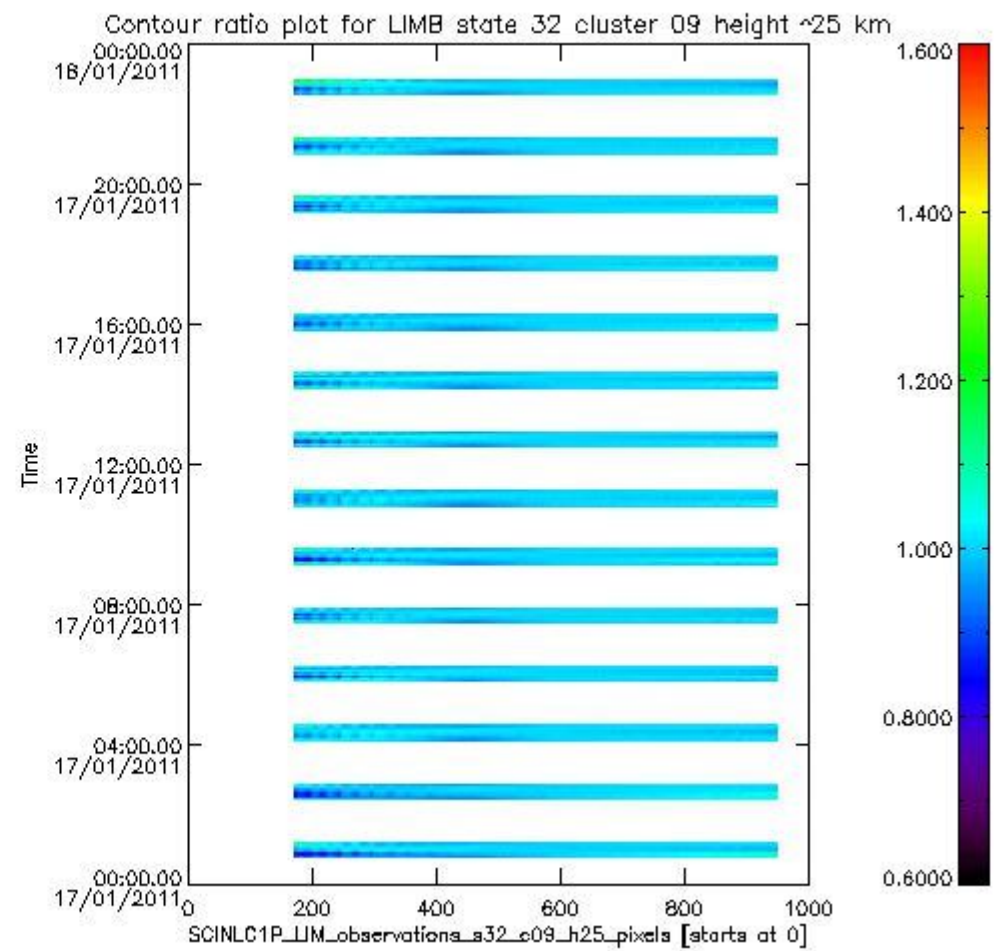
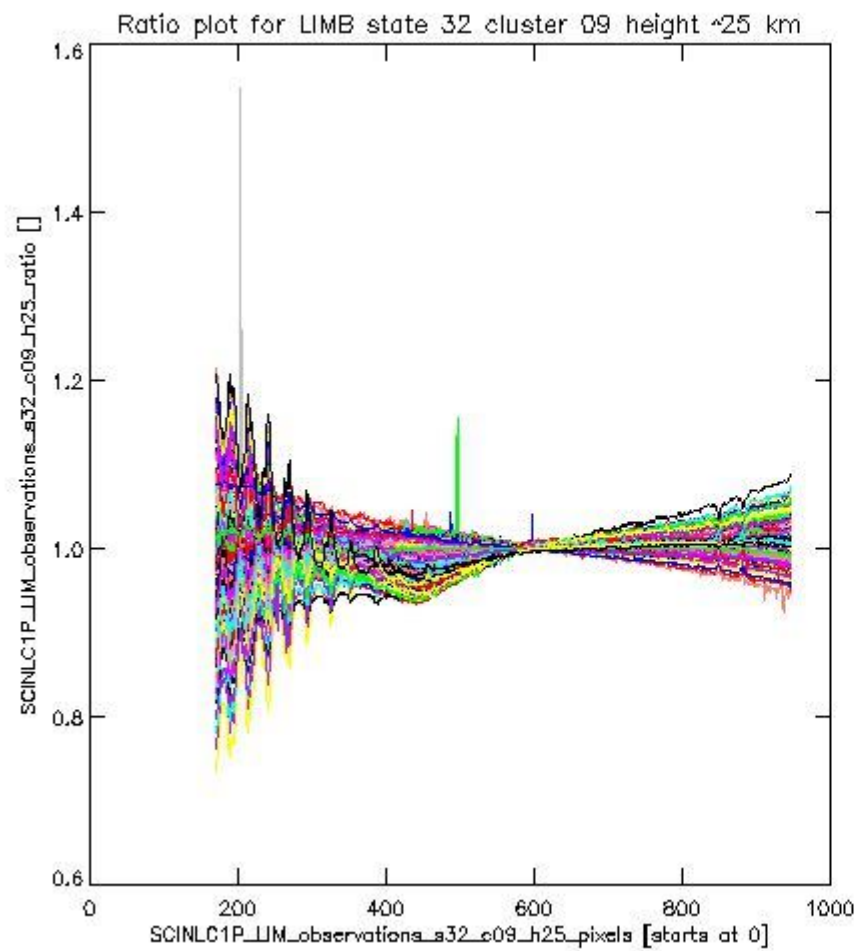
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_13.PNG

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 | 17JAN2011 00:46:10.827 |
| Start time of last sample | 17JAN2011 22:55:44.825 |
| Reference period start time | 18DEC2010 00:46:32.759 |
| Reference period stop time | 16JAN2011 23:32:32.807 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 947 |



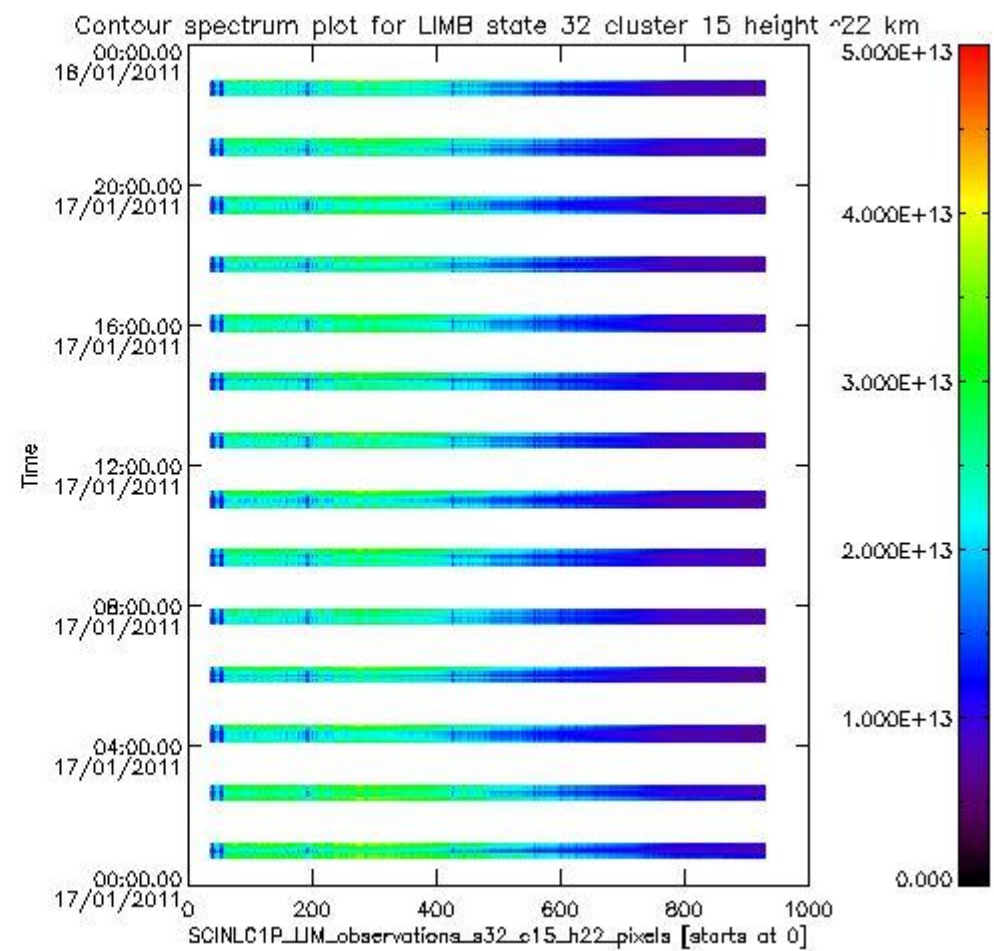
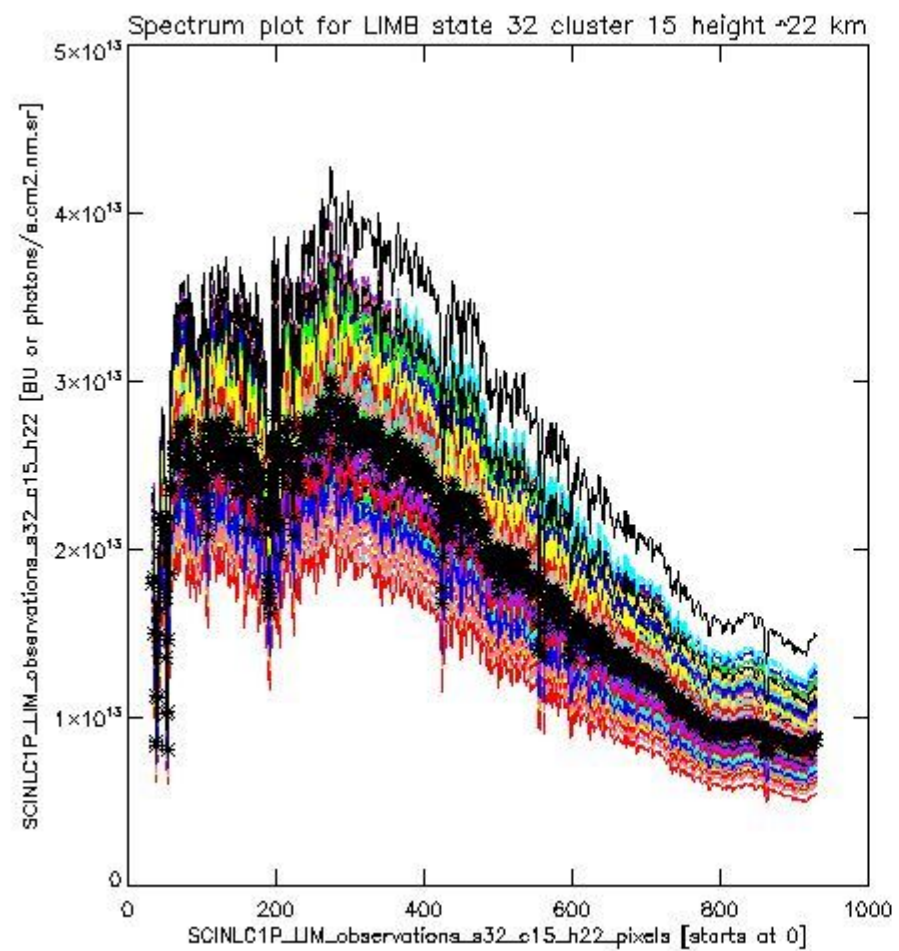
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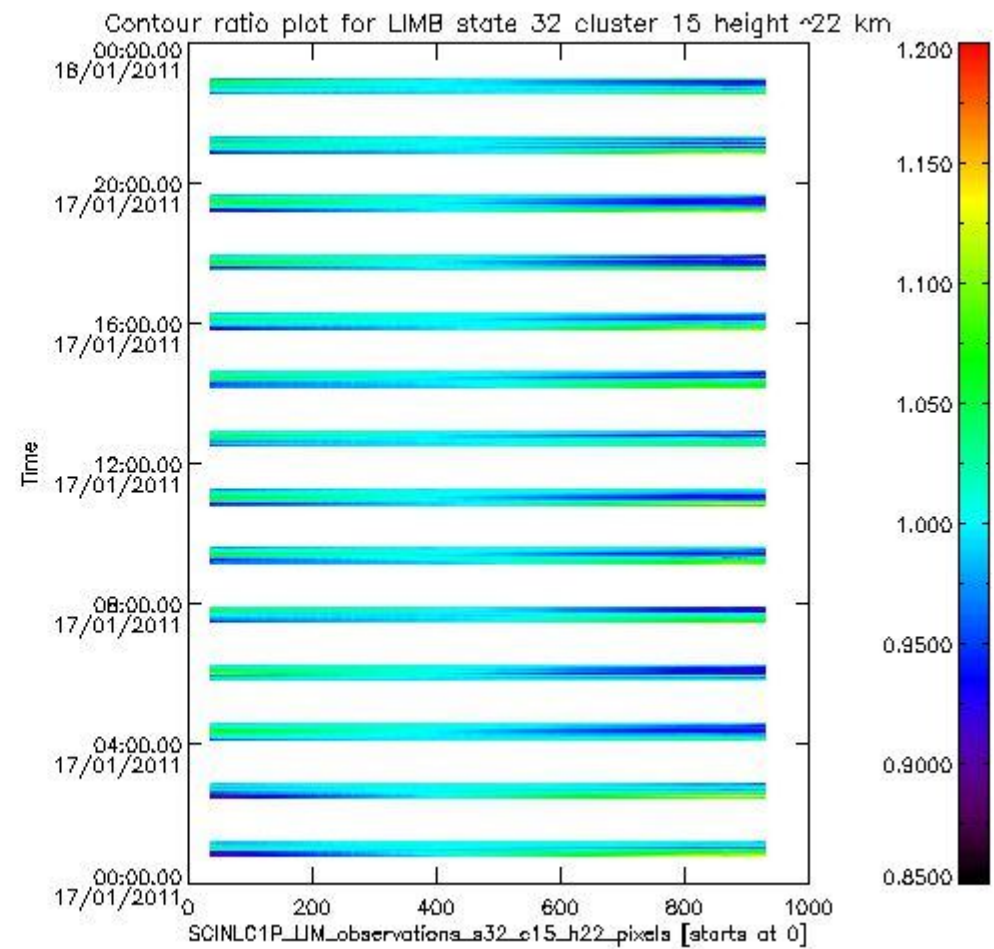
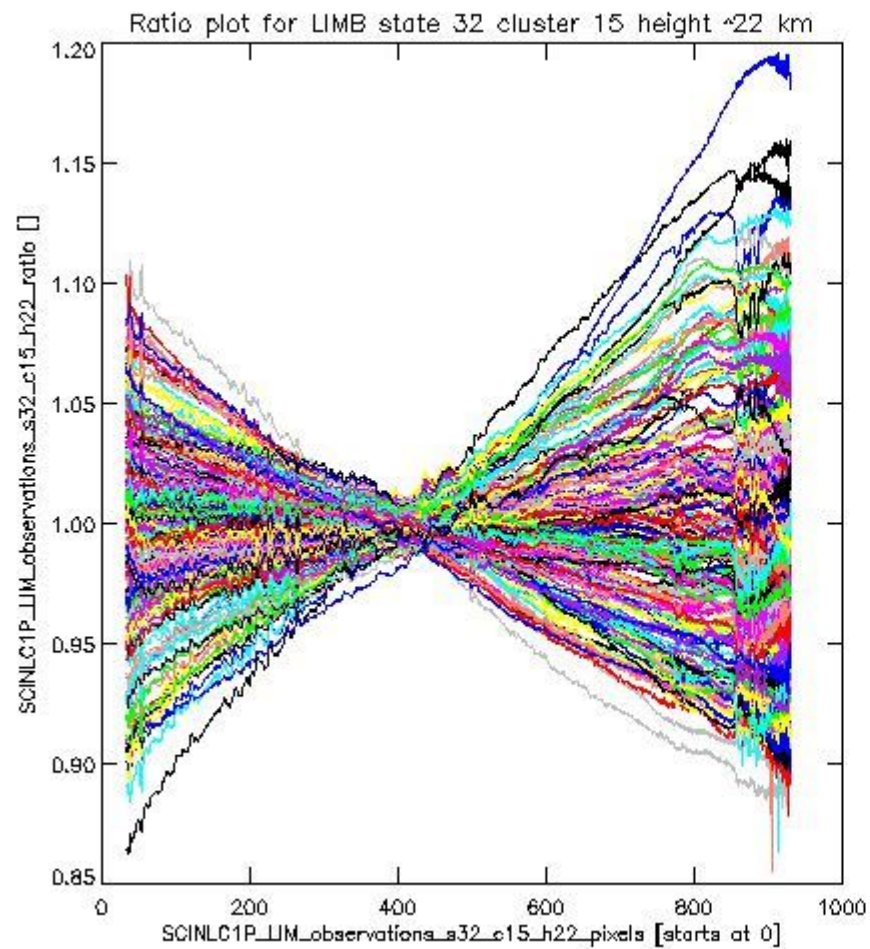
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110117_15.PNG

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 | 17JAN2011 00:46:10.827 |
| Start time of last sample | 17JAN2011 22:55:44.825 |
| Reference period start time | 18DEC2010 00:46:32.759 |
| Reference period stop time | 16JAN2011 23:32:32.807 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |



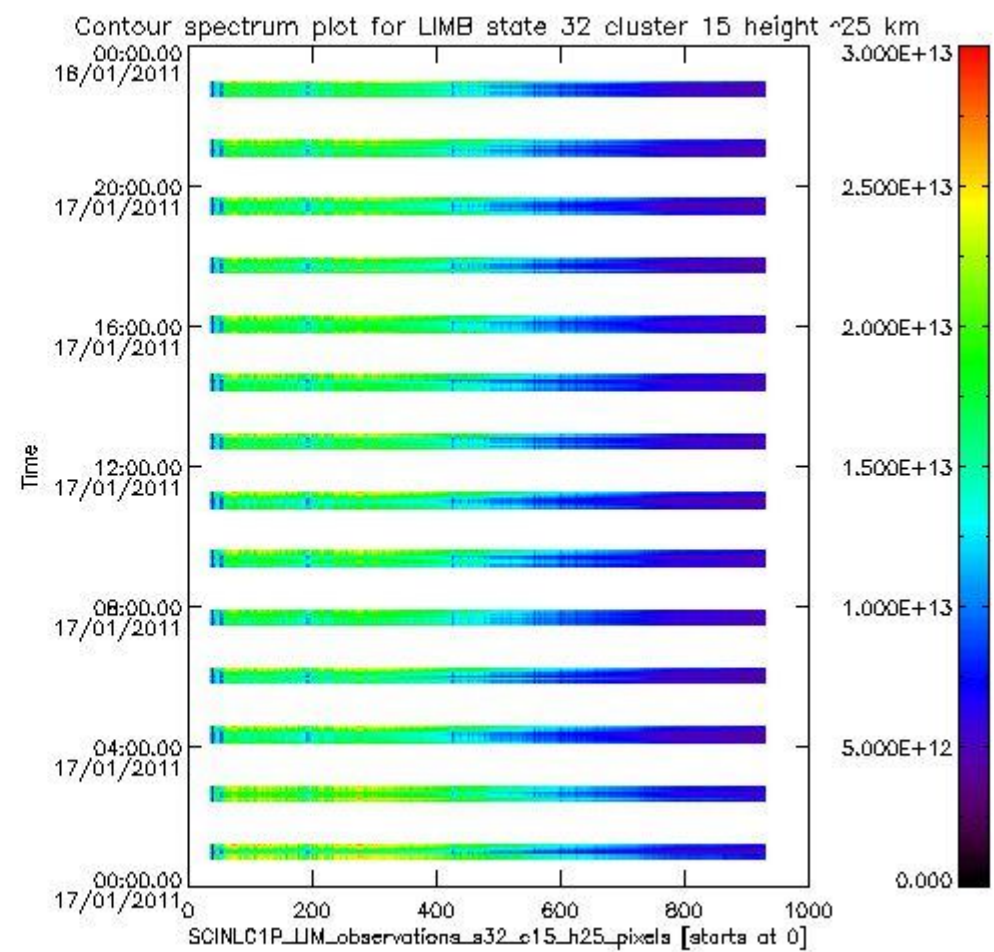
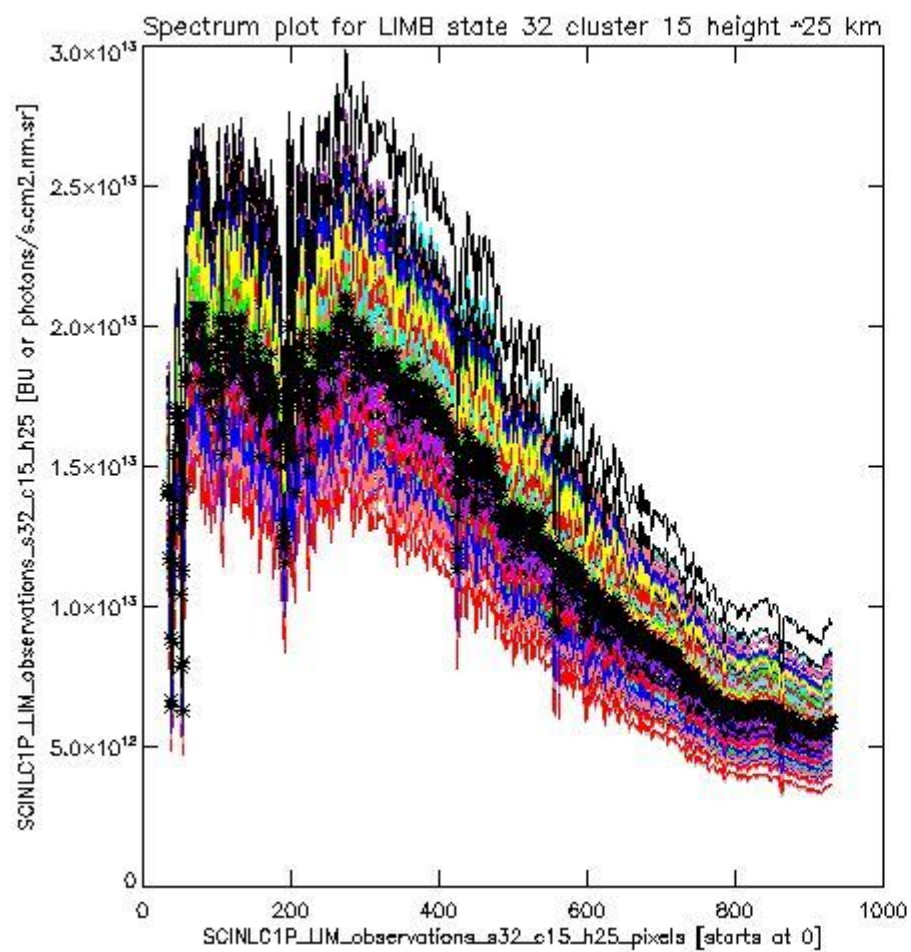
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110117_16.PNG

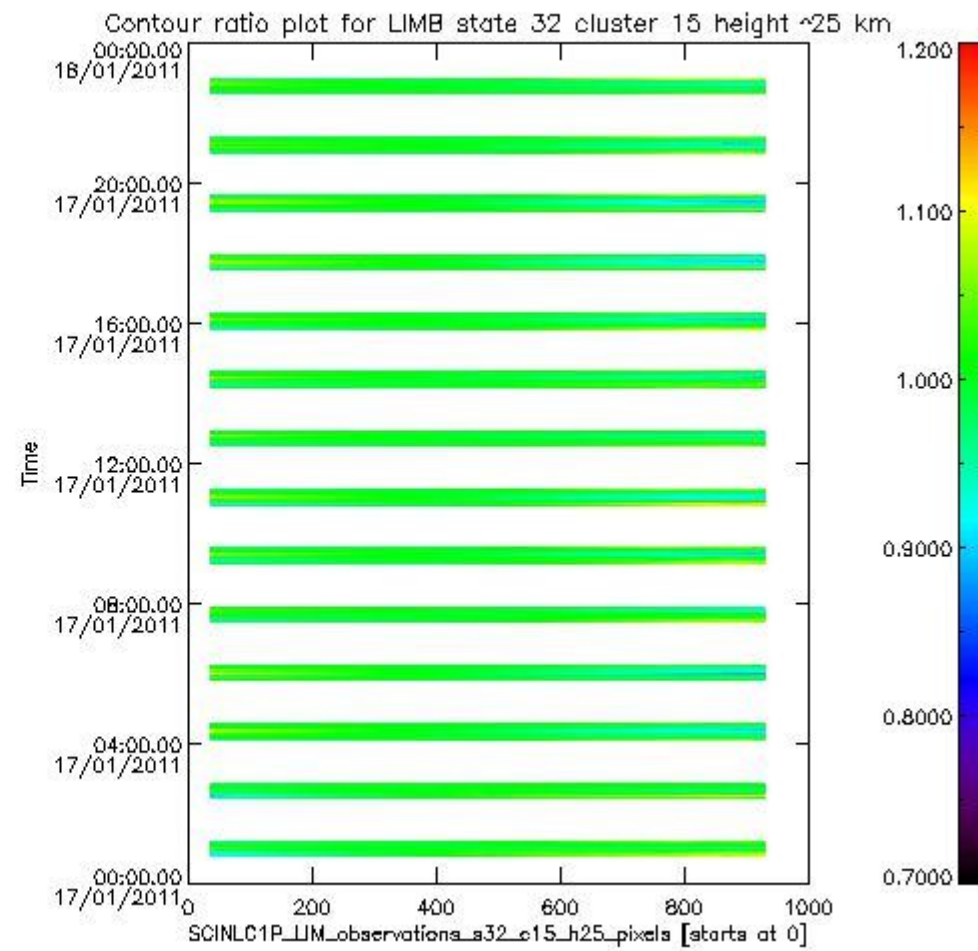
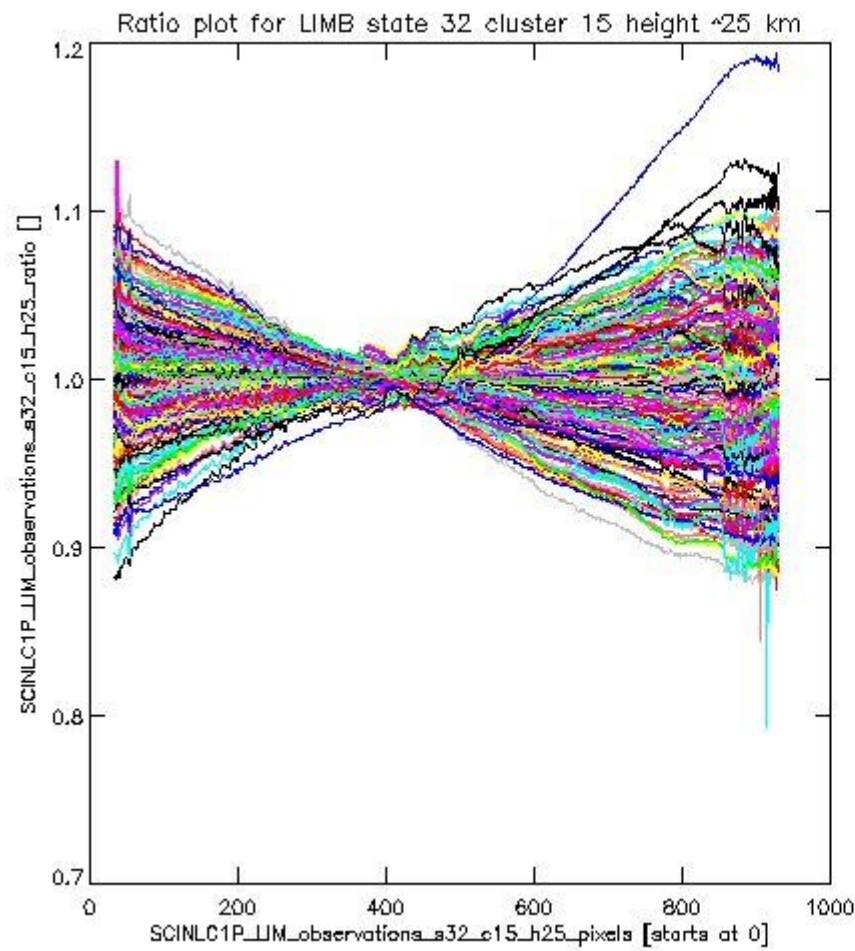


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110117_17.PNG

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 | 17JAN2011 00:46:10.827 |
| Start time of last sample | 17JAN2011 22:55:44.825 |
| Reference period start time | 18DEC2010 00:46:32.759 |
| Reference period stop time | 16JAN2011 23:32:32.807 |
| Channel number | 3 |
| First pixel number (starts at 0) | 33 |
| Last pixel number (starts at 0) | 929 |

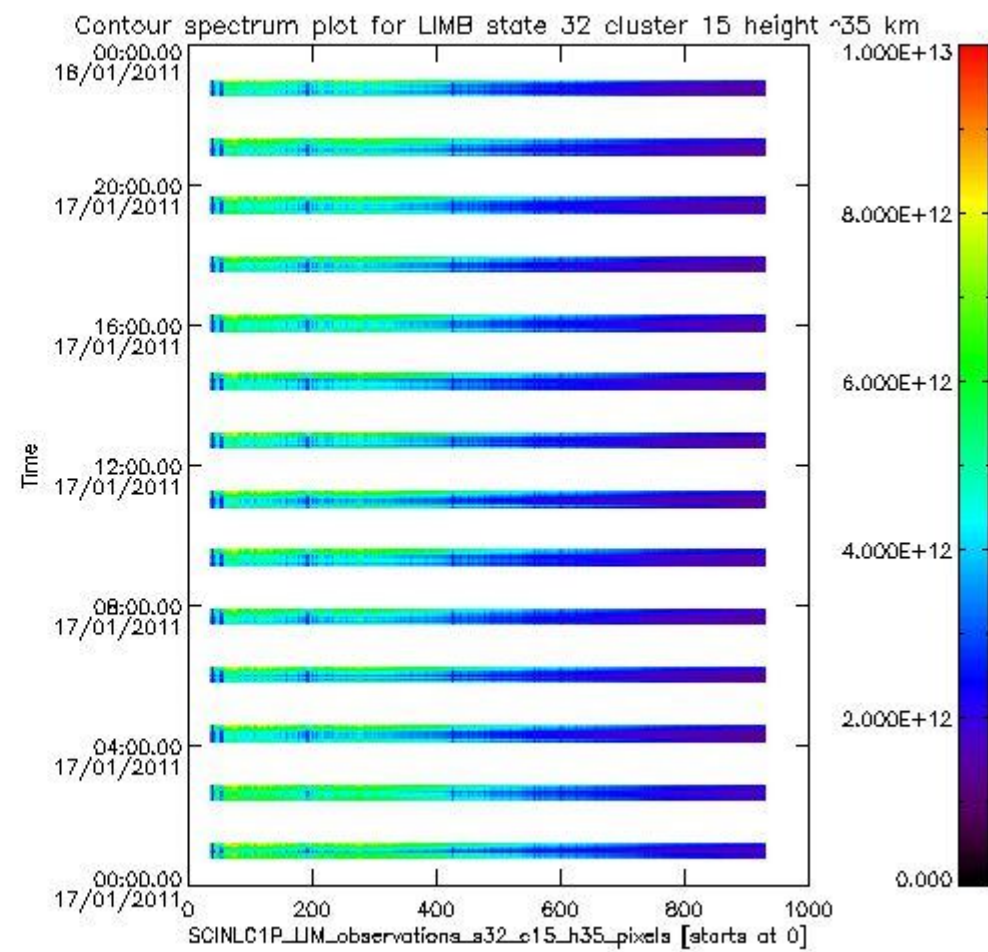
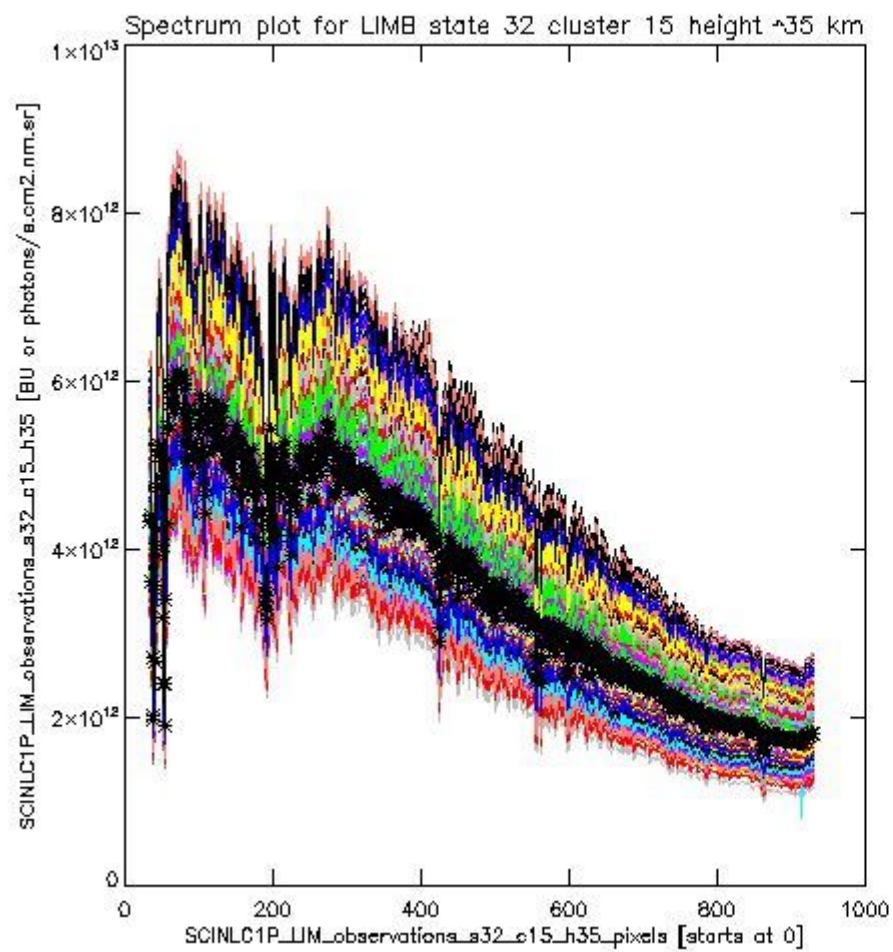


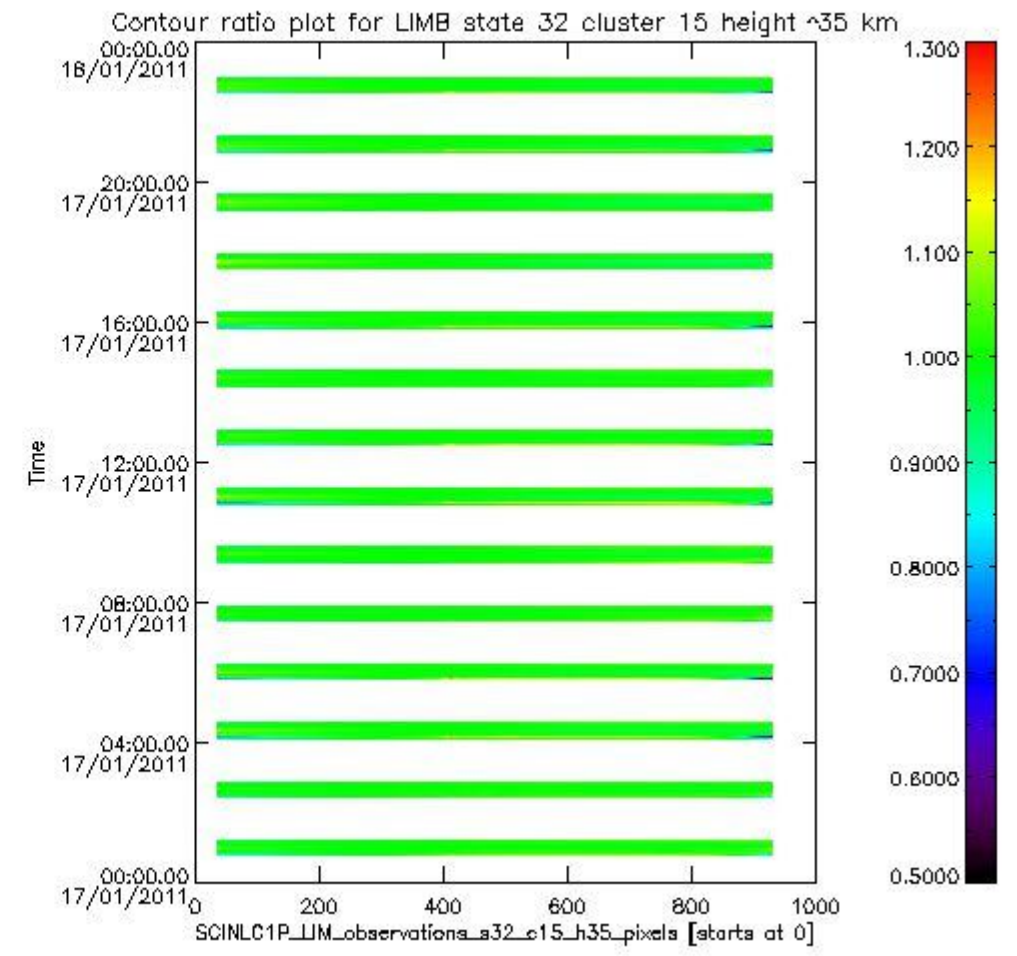
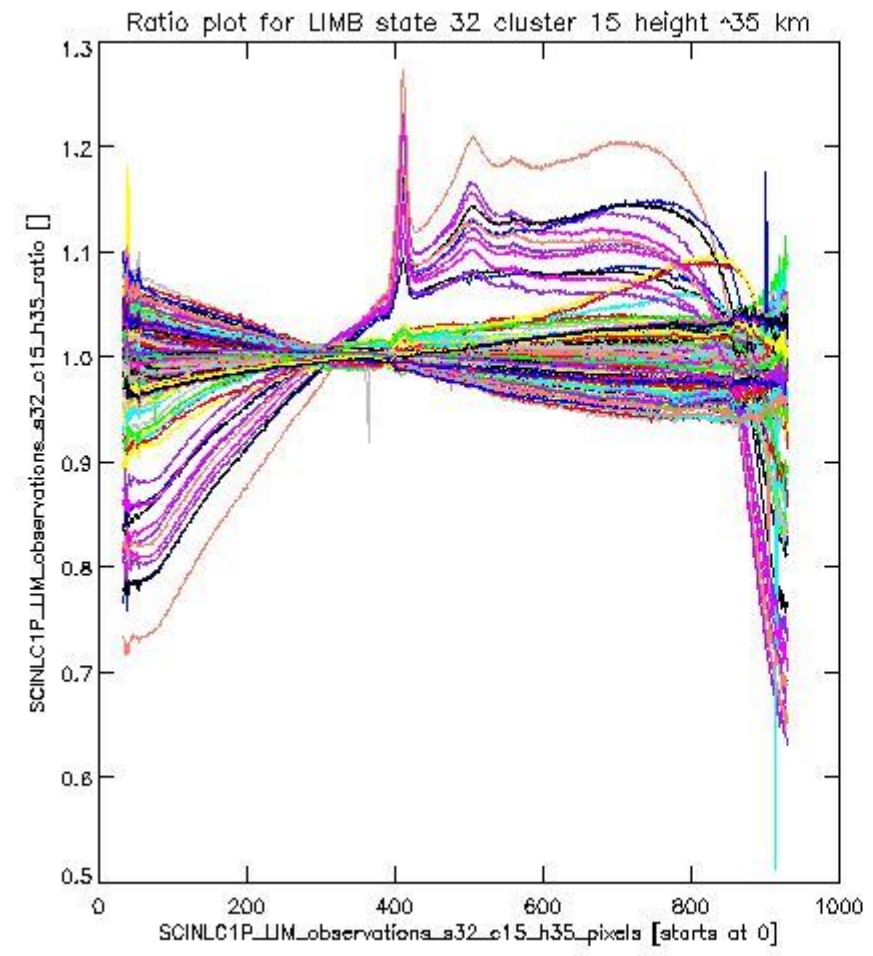


sciamachy_11b_source_packet_report_SCIA_7_04_U_20110117_19.PNG

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 | 17JAN2011 00:46:10.827 |
| Start time of last sample | 17JAN2011 22:55:44.825 |
| Reference period start time | 18DEC2010 00:46:32.759 |
| Reference period stop time | 16JAN2011 23:32:32.807 |
| 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_20110117_21.PNG

