

1. SCIAMACHY Level 1B source packet monitoring report

[1.1. General Info](#)

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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 | 25JAN2011 06:55:29 |
| Data source version | SCIA/7.04-U |
| Processing scope for products | 14JAN2011 00:00:00 to 15JAN2011 00:00:00 |
| Start time of first product within scope | 13JAN2011 22:57:14 |
| Stop time of last product within scope | 15JAN2011 01:10:32 |
| 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 | 14JAN2011 01:09:56.279 | 14JAN2011 23:02:21.273 |
| 1 | NADIR | 07 | 09 | N/A | 14JAN2011 01:09:56.279 | 14JAN2011 23:02:21.273 |
| 2 | NADIR | 07 | 15 | N/A | 14JAN2011 01:09:56.279 | 14JAN2011 23:02:21.273 |
| 3 | NADIR | 07 | 24 | N/A | 14JAN2011 01:09:56.279 | 14JAN2011 23:02:21.273 |
| 4 | NADIR | 07 | 55 | N/A | 14JAN2011 01:09:56.279 | 14JAN2011 23:02:21.273 |
| 5 | LIMB | 32 | 09 | ~19 km | N/A | N/A |
| 6 | LIMB | 32 | 09 | ~22 km | N/A | N/A |
| 7 | LIMB | 32 | 09 | ~25 km | N/A | N/A |
| 8 | LIMB | 32 | 15 | ~22 km | N/A | N/A |
| 9 | LIMB | 32 | 15 | ~25 km | N/A | N/A |
| 10 | LIMB | 32 | 15 | ~35 km | N/A | N/A |

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_1CUDPA20110113_224024_000059993098_00260_46395_1785.N1 | 13JAN2011 22:57:14 | 14JAN2011 00:07:43 | 0 | 36 | 30 | 0 | 0 | 1 | 0 | 0 | |
| 1 | SCI_NLC_1CUDPA20110114_002027_000060213098_00261_46396_1779.N1 | 14JAN2011 00:47:07 | 14JAN2011 01:47:20 | 0 | 34 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 2 | SCI_NLC_1CUDPA20110114_020052_000059993098_00262_46397_1780.N1 | 14JAN2011 02:26:25 | 14JAN2011 03:27:46 | 0 | 35 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 3 | SCI_NLC_1CUDPA20110114_034055_000060213098_00263_46398_1782.N1 | 14JAN2011 04:07:34 | 14JAN2011 05:07:47 | 0 | 34 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 4 | SCI_NLC_1CUDPA20110114_052120_000059993098_00264_46399_1784.N1 | 14JAN2011 05:46:52 | 14JAN2011 06:48:13 | 0 | 35 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 5 | SCI_NLC_1CUDPA20110114_070123_000060213098_00265_46400_1786.N1 | 14JAN2011 07:28:02 | 14JAN2011 08:28:15 | 0 | 34 | 0 | 0 | 0 | 1 | 0 | 0 | |

| | | | | | | | | | | | | |
|----|--|--------------------|--------------------|---|----|---|---|---|---|---|---|--|
| 6 | SCI_NLC_1CUDPA20110114_084147_000059993098_00266_46401_1788.N1 | 14JAN2011 09:07:20 | 14JAN2011 10:08:41 | 0 | 35 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 7 | SCI_NLC_1CUDPA20110114_102150_000060213098_00267_46402_1790.N1 | 14JAN2011 10:48:29 | 14JAN2011 11:48:42 | 0 | 34 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 8 | SCI_NLC_1CUDPA20110114_120215_000059993098_00268_46403_1792.N1 | 14JAN2011 12:27:47 | 14JAN2011 13:29:08 | 0 | 35 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 9 | SCI_NLC_1CUDPA20110114_134218_000060213098_00269_46404_1793.N1 | 14JAN2011 14:08:57 | 14JAN2011 15:09:09 | 0 | 34 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 10 | SCI_NLC_1CUDPA20110114_152243_000059993098_00270_46405_1795.N1 | 14JAN2011 15:48:15 | 14JAN2011 16:49:36 | 0 | 35 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 11 | SCI_NLC_1CUDPA20110114_170245_000060213098_00271_46406_1797.N1 | 14JAN2011 17:25:21 | 14JAN2011 18:29:58 | 0 | 34 | 0 | 0 | 1 | 1 | 0 | 0 | |
| 12 | SCI_NLC_1CUDPA20110114_184310_000059993098_00272_46407_1799.N1 | 14JAN2011 19:05:35 | 14JAN2011 20:10:24 | 0 | 35 | 0 | 0 | 1 | 1 | 0 | 0 | |
| 13 | SCI_NLC_1CUDPA20110114_202313_000060213098_00273_46408_1801.N1 | 14JAN2011 20:49:52 | 14JAN2011 21:50:05 | 0 | 34 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 14 | SCI_NLC_1CUDPA20110114_220338_000059993098_00274_46409_1803.N1 | 14JAN2011 22:29:10 | 14JAN2011 23:30:31 | 0 | 35 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 15 | SCI_NLC_1CUDPA20110114_234341_000060213098_00275_46410_1805.N1 | 15JAN2011 00:10:19 | 15JAN2011 01:10:32 | 0 | 34 | 0 | 0 | 0 | 1 | 0 | 0 | |

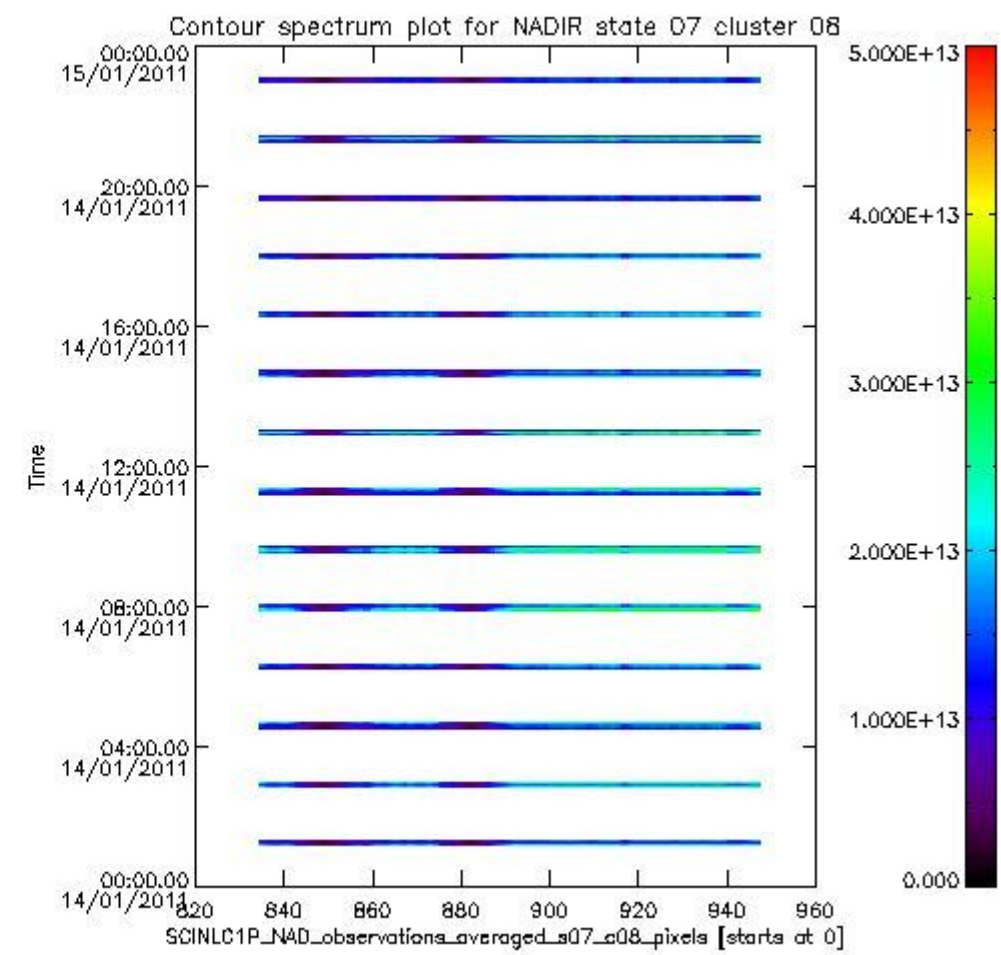
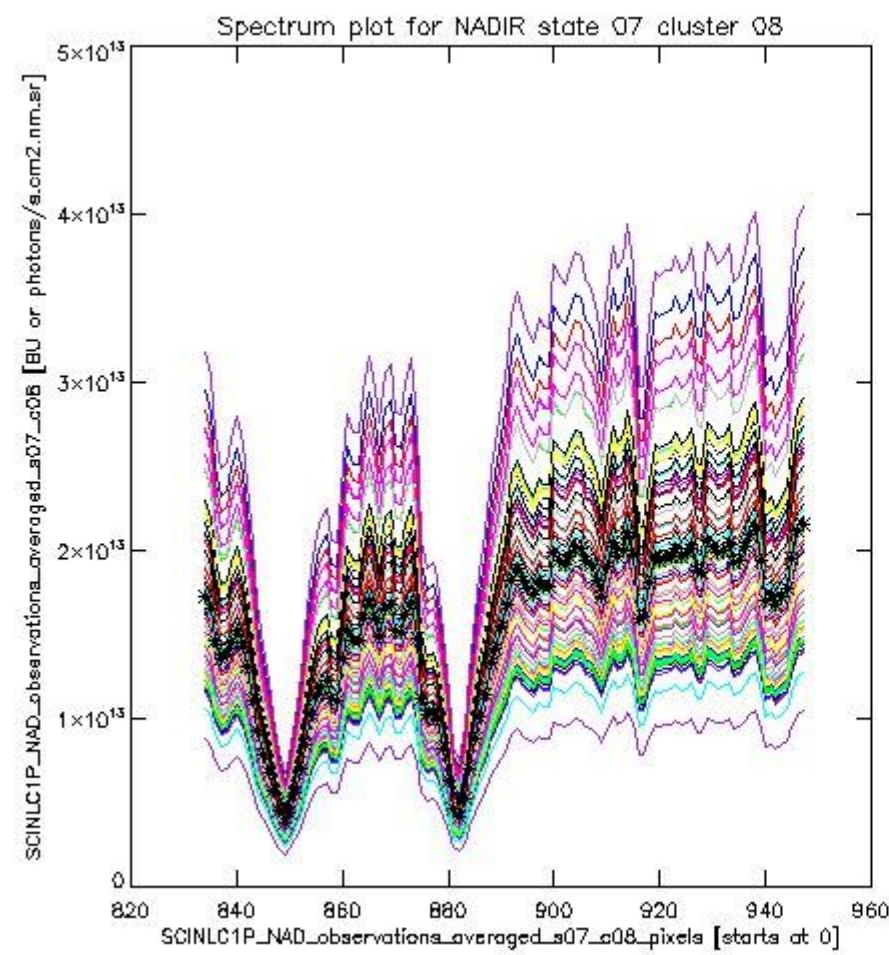
1.2 Source packet monitoring

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:

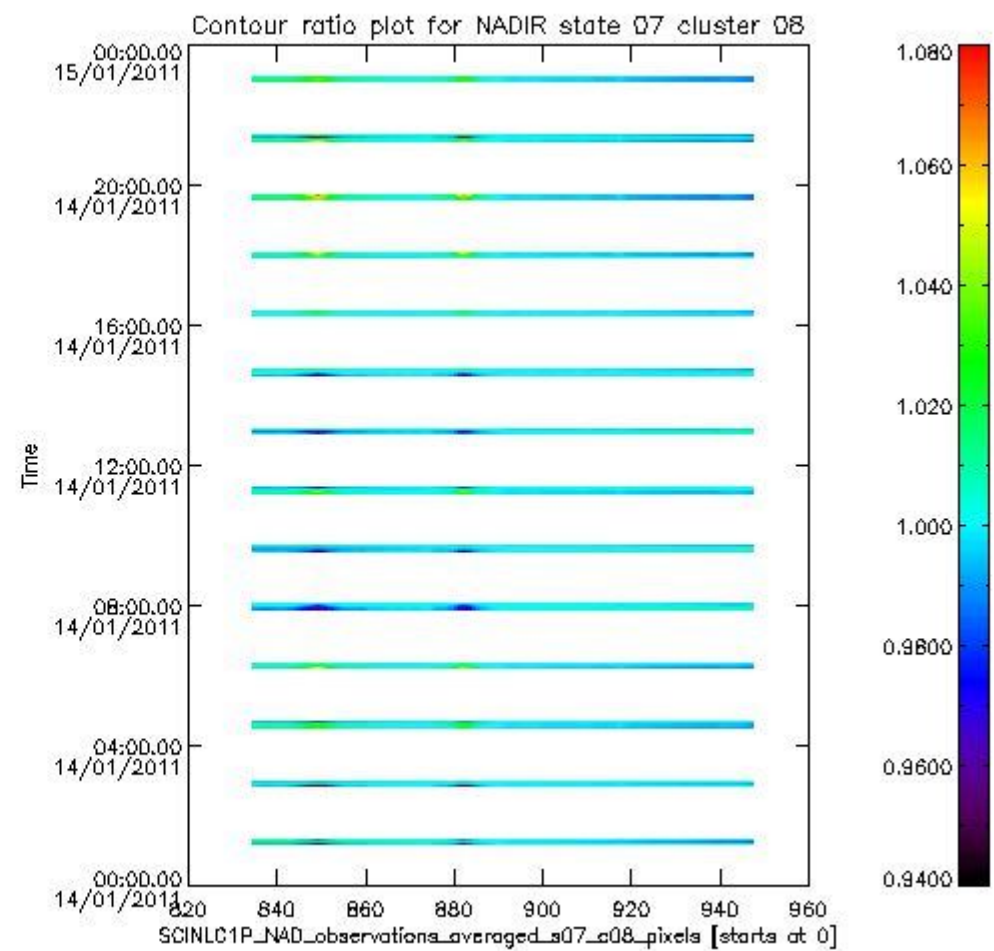
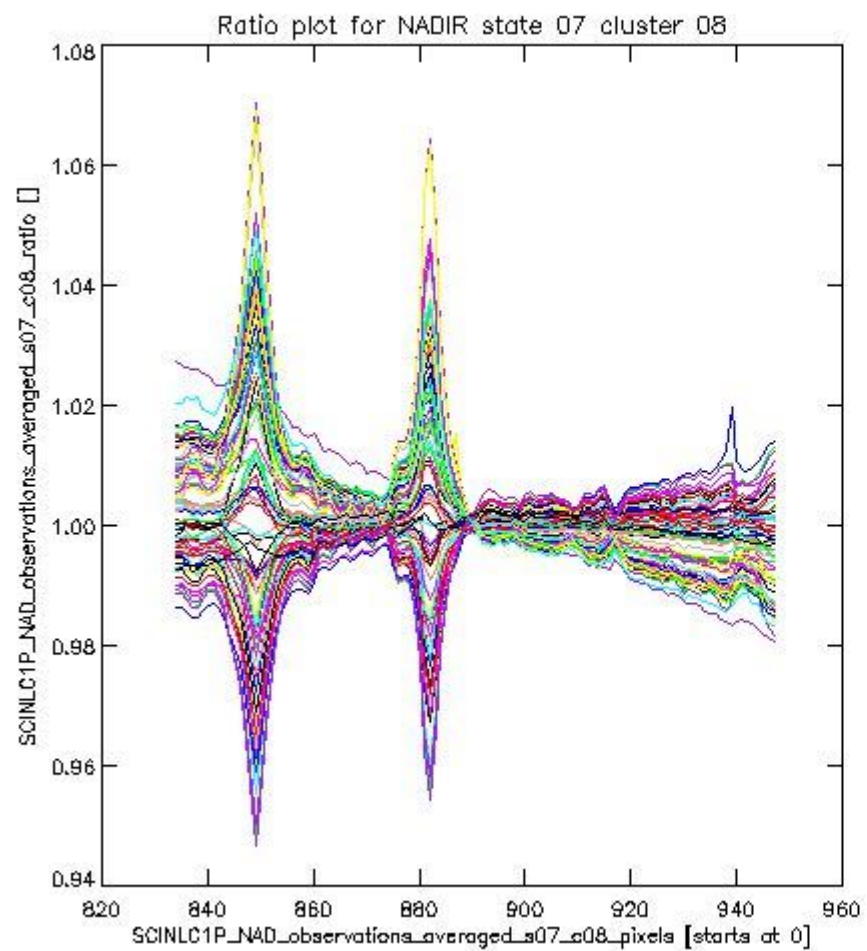
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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 | 14JAN2011 01:09:56.279 |
| Start time of last sample | 14JAN2011 23:02:21.273 |
| Reference period start time | 15DEC2010 01:11:13.113 |
| Reference period stop time | 13JAN2011 23:38:36.813 |
| Channel number | 2 |
| First pixel number (starts at 0) | 834 |
| Last pixel number (starts at 0) | 947 |



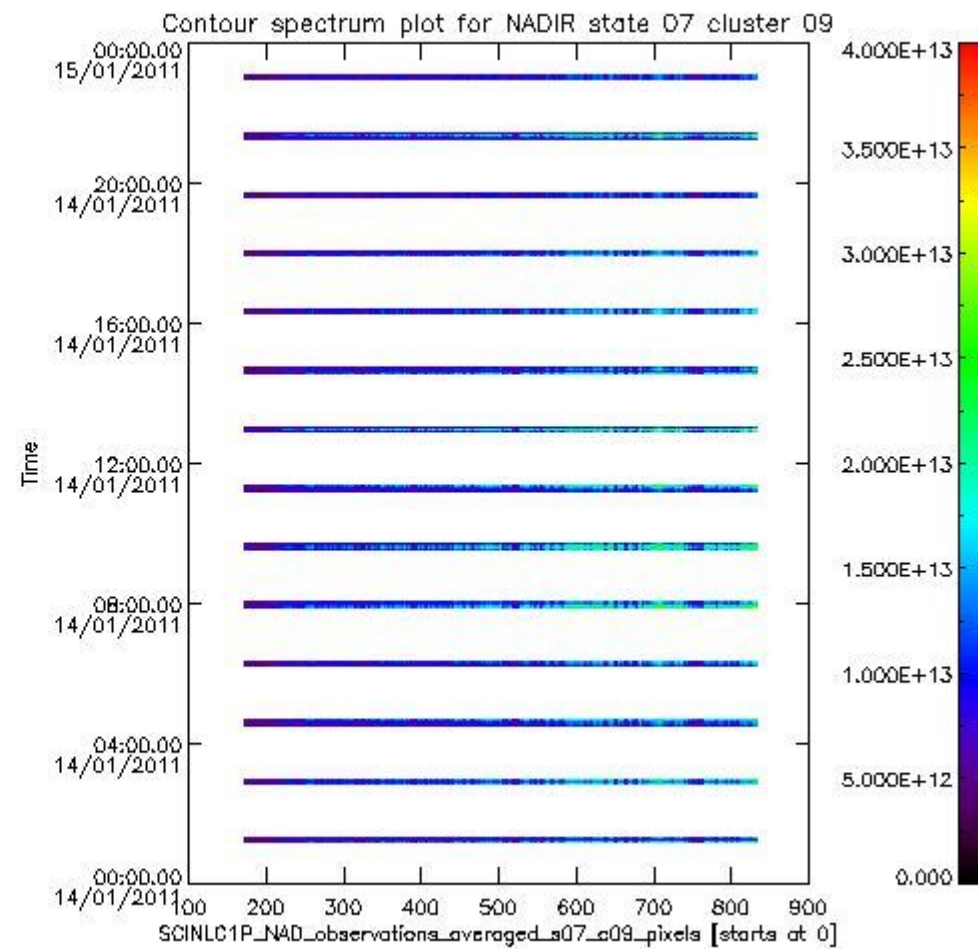
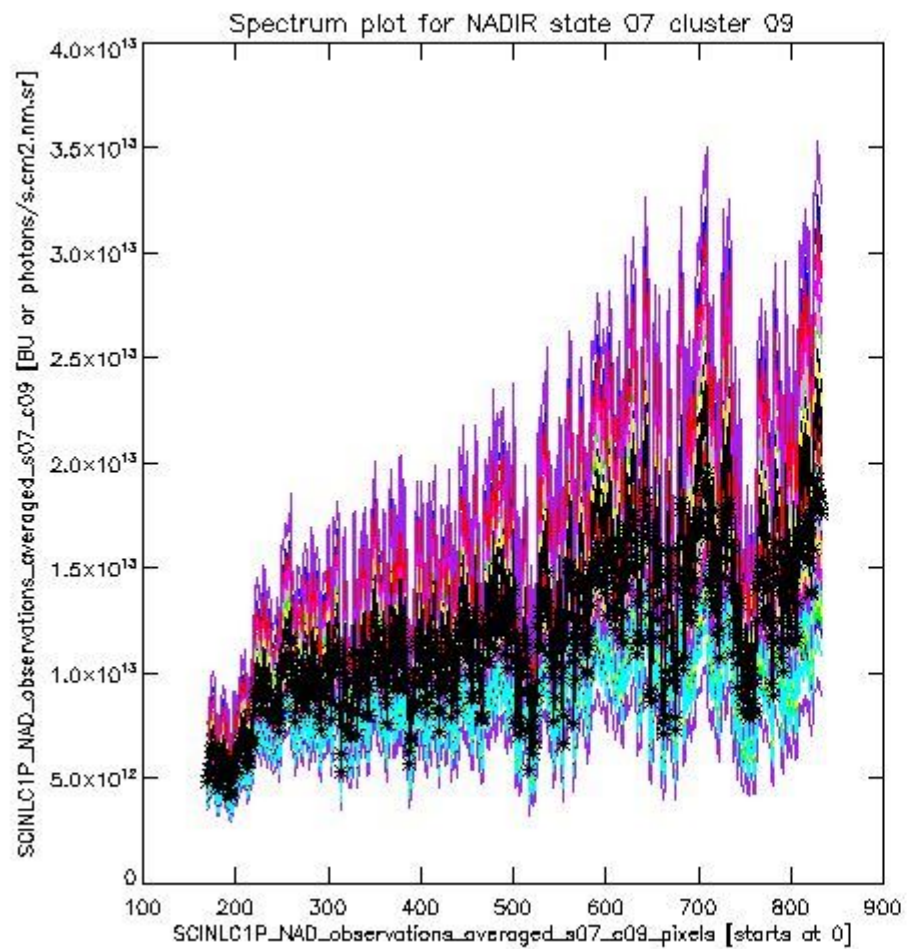
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110114_0.PNG



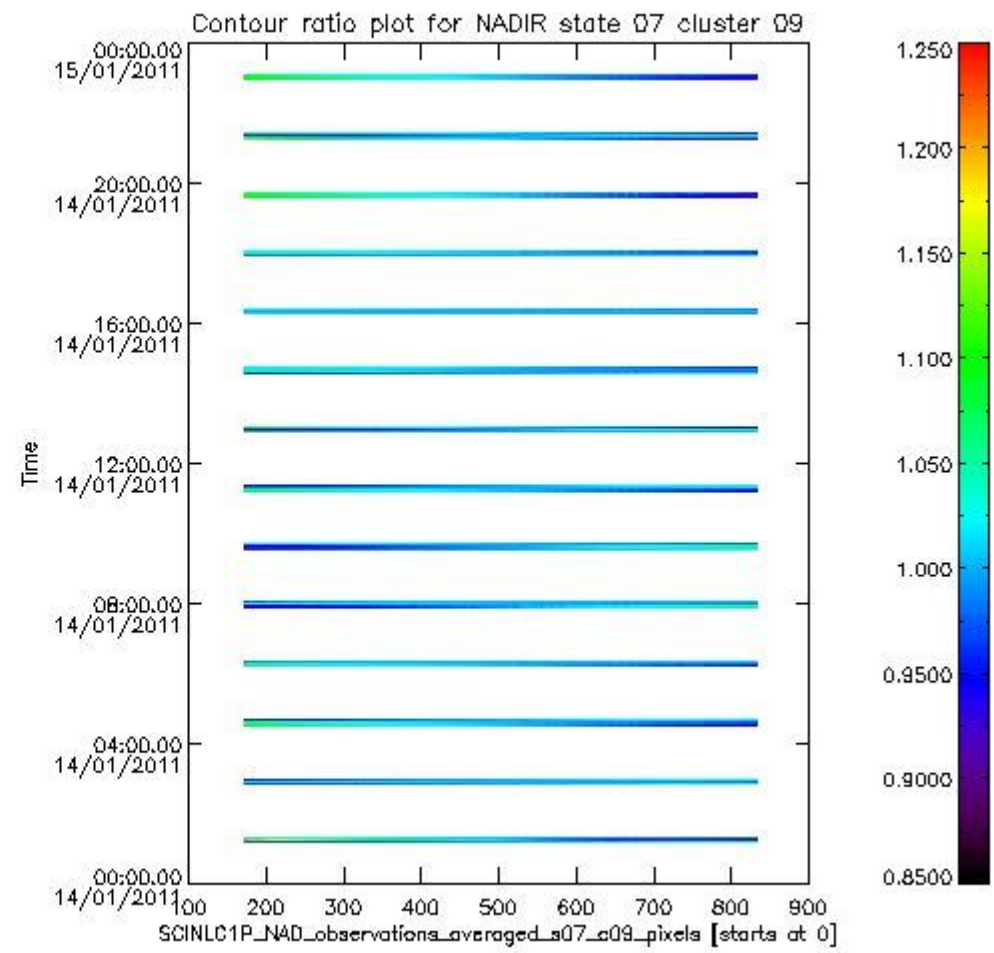
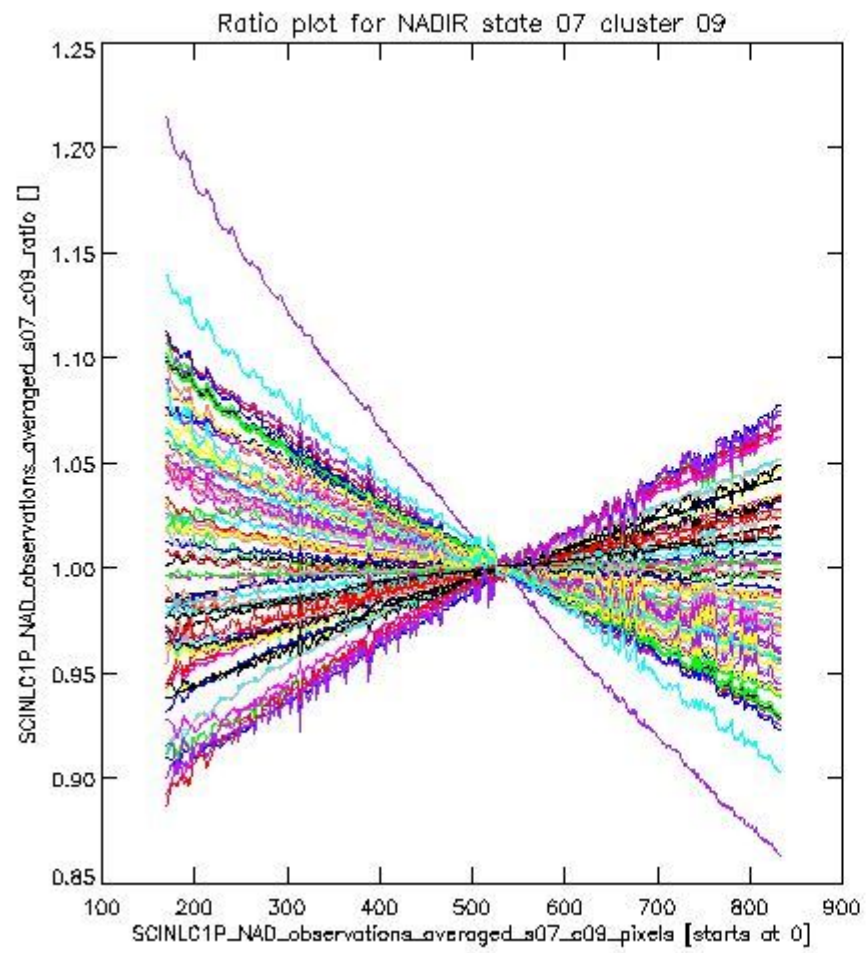
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110114_1.PNG

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 | 14JAN2011 01:09:56.279 |
| Start time of last sample | 14JAN2011 23:02:21.273 |
| Reference period start time | 15DEC2010 01:11:13.113 |
| Reference period stop time | 13JAN2011 23:38:36.813 |
| Channel number | 2 |
| First pixel number (starts at 0) | 170 |
| Last pixel number (starts at 0) | 833 |



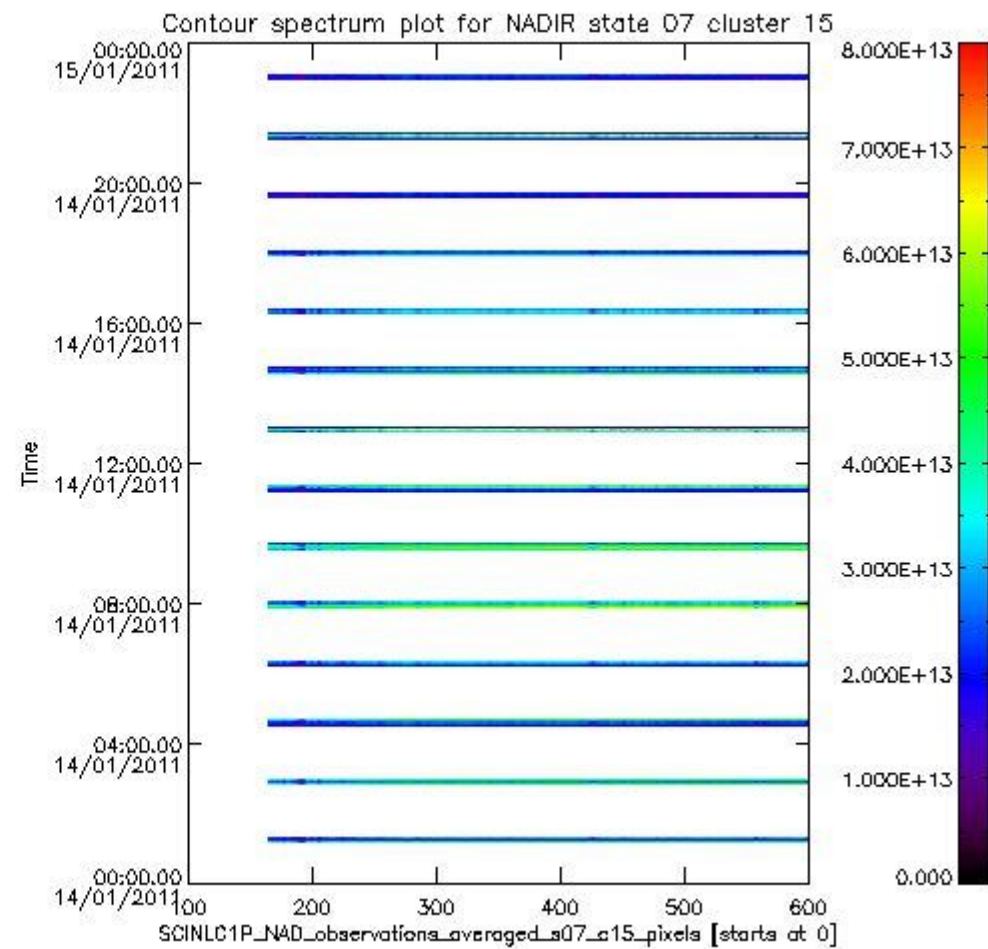
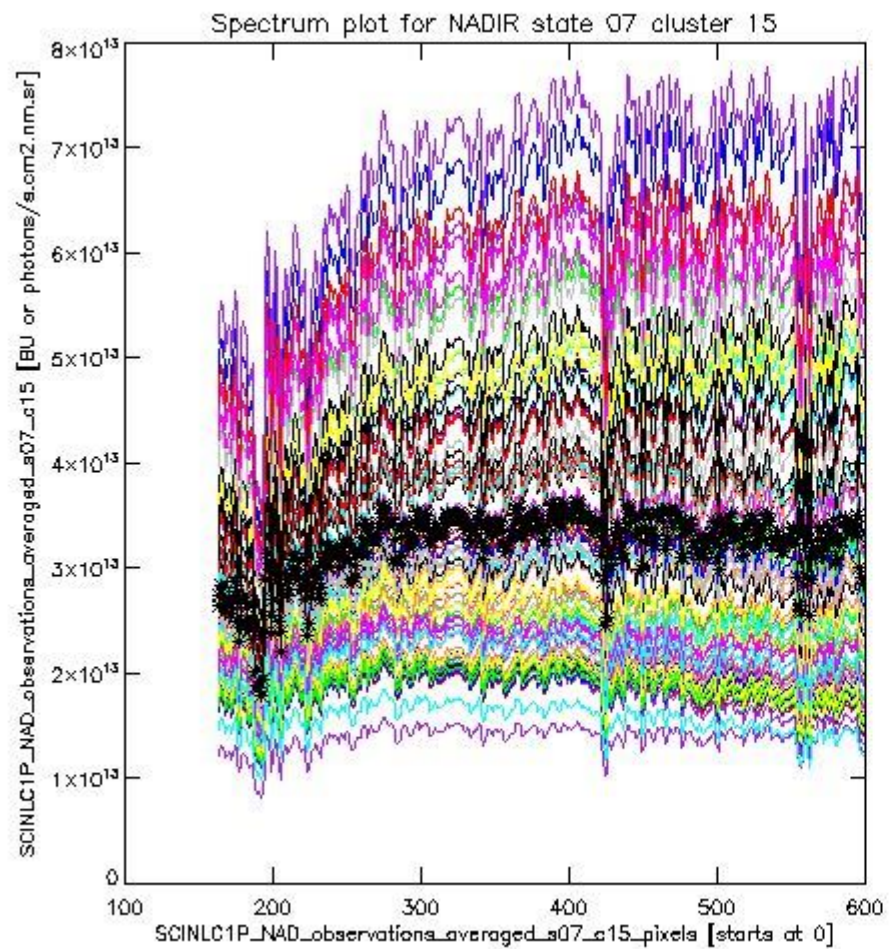
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110114_2.PNG



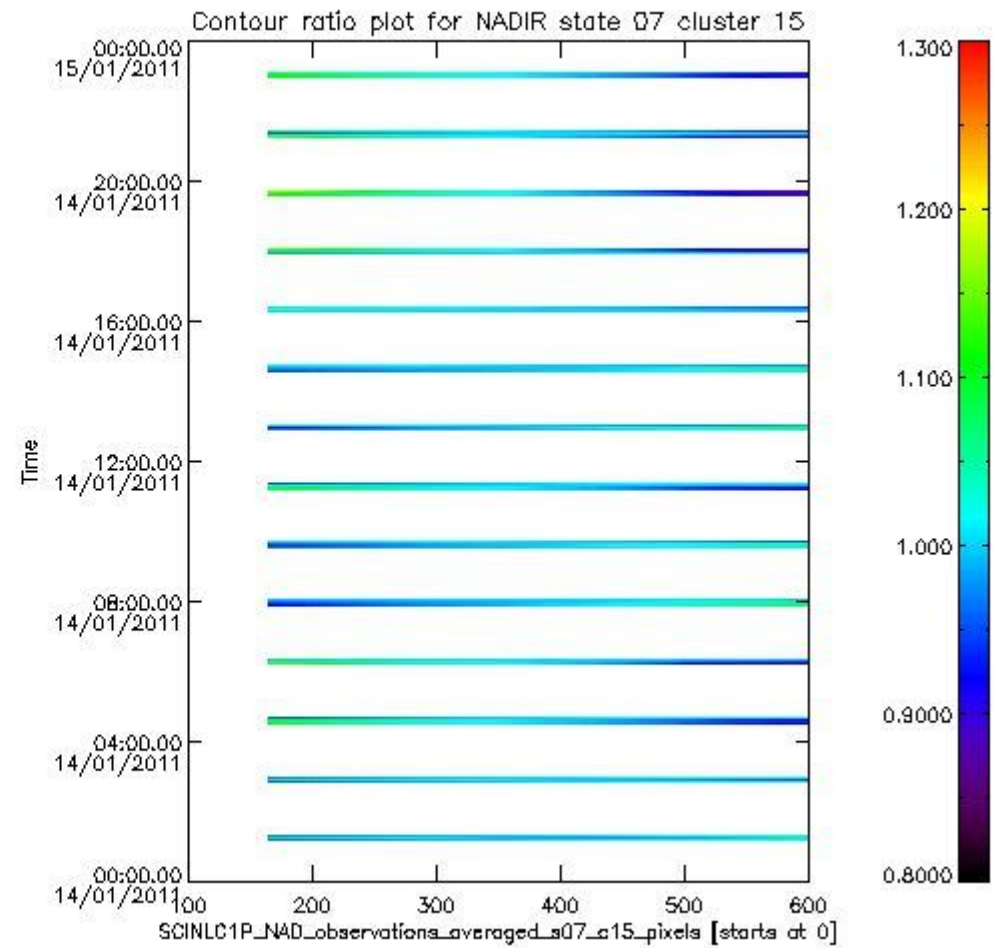
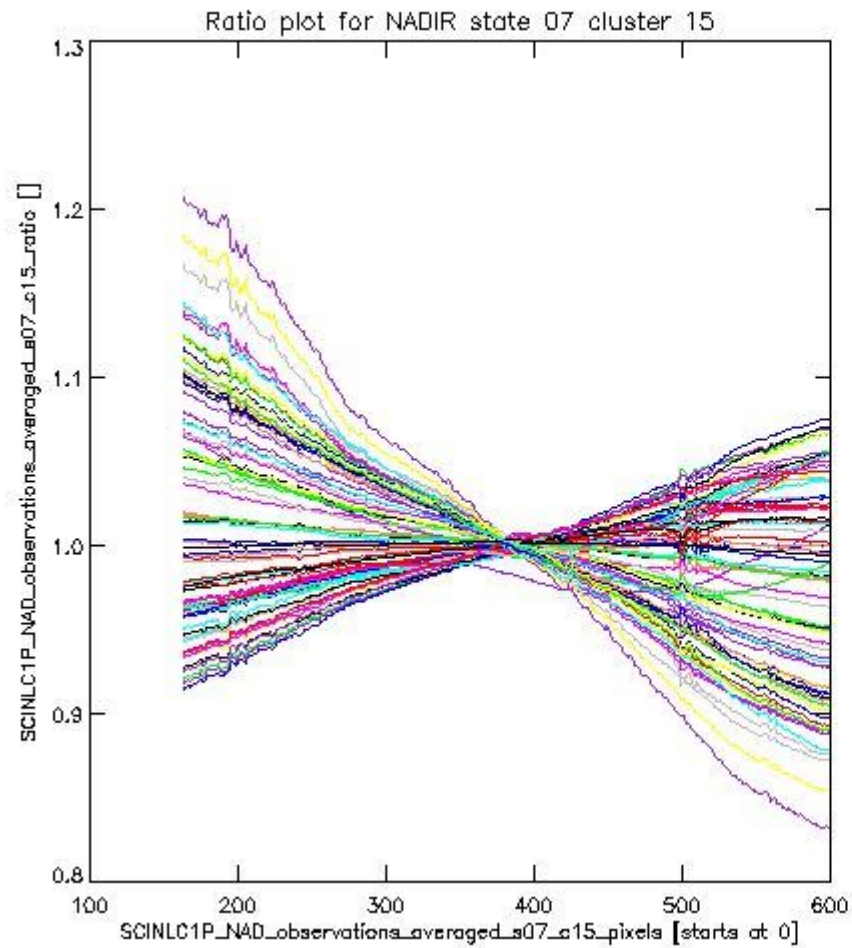
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110114_3.PNG

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 | 14JAN2011 01:09:56.279 |
| Start time of last sample | 14JAN2011 23:02:21.273 |
| Reference period start time | 15DEC2010 01:11:13.113 |
| Reference period stop time | 13JAN2011 23:38:36.813 |
| Channel number | 3 |
| First pixel number (starts at 0) | 163 |
| Last pixel number (starts at 0) | 598 |



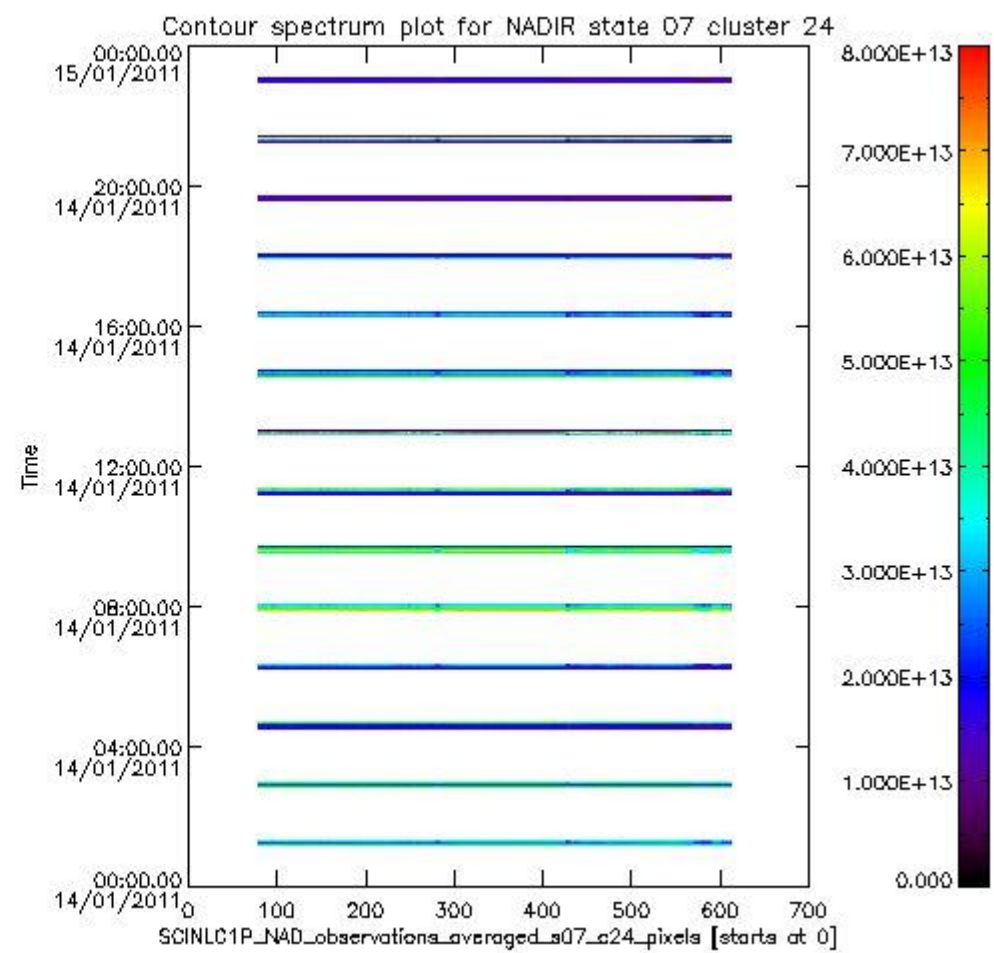
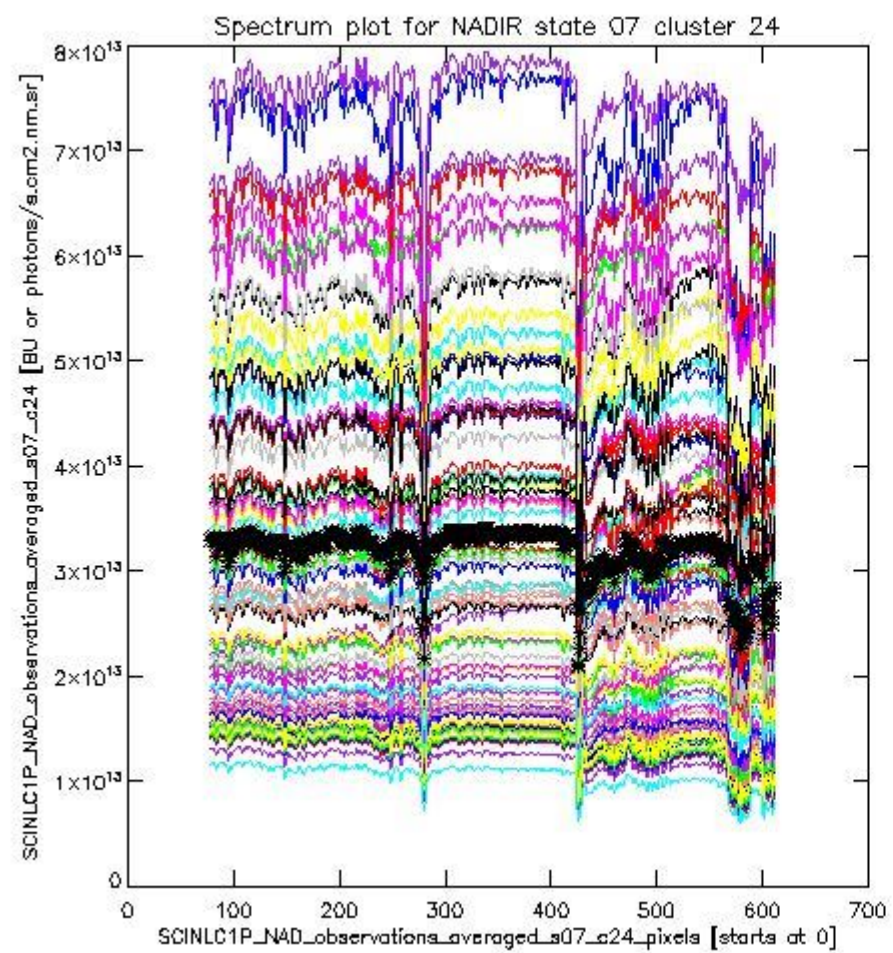
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110114_4.PNG



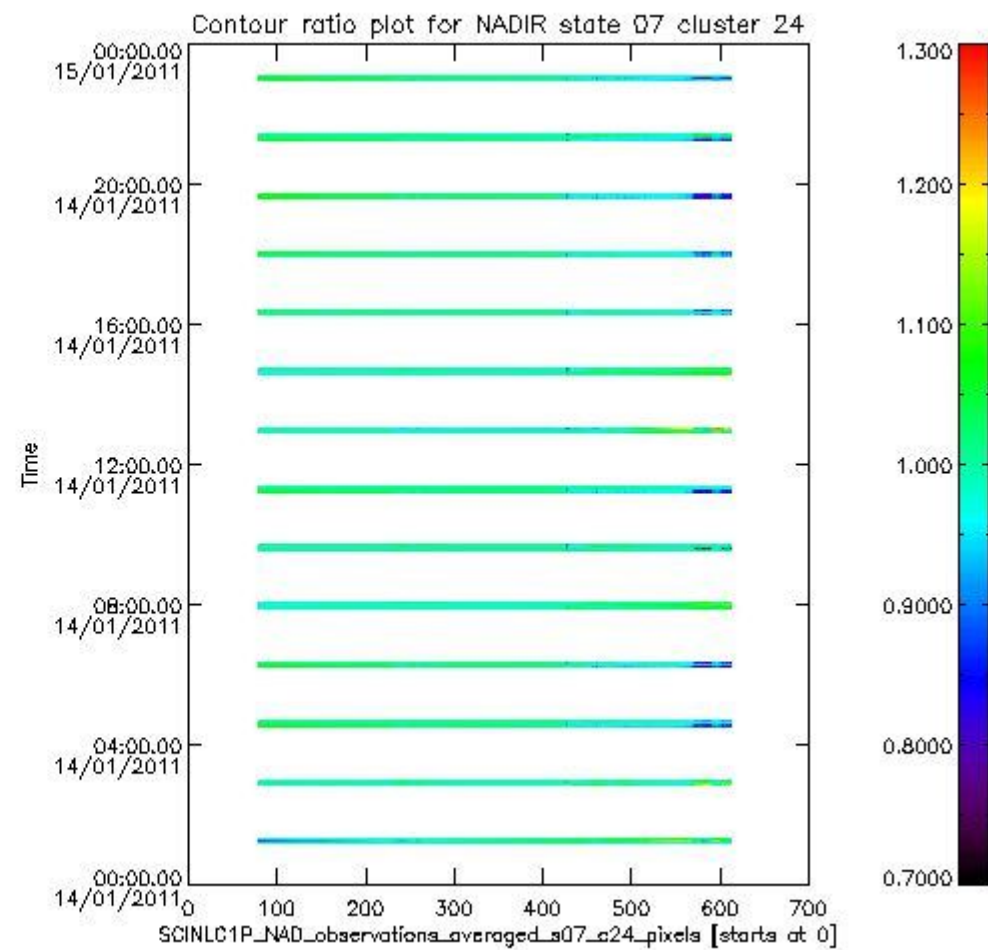
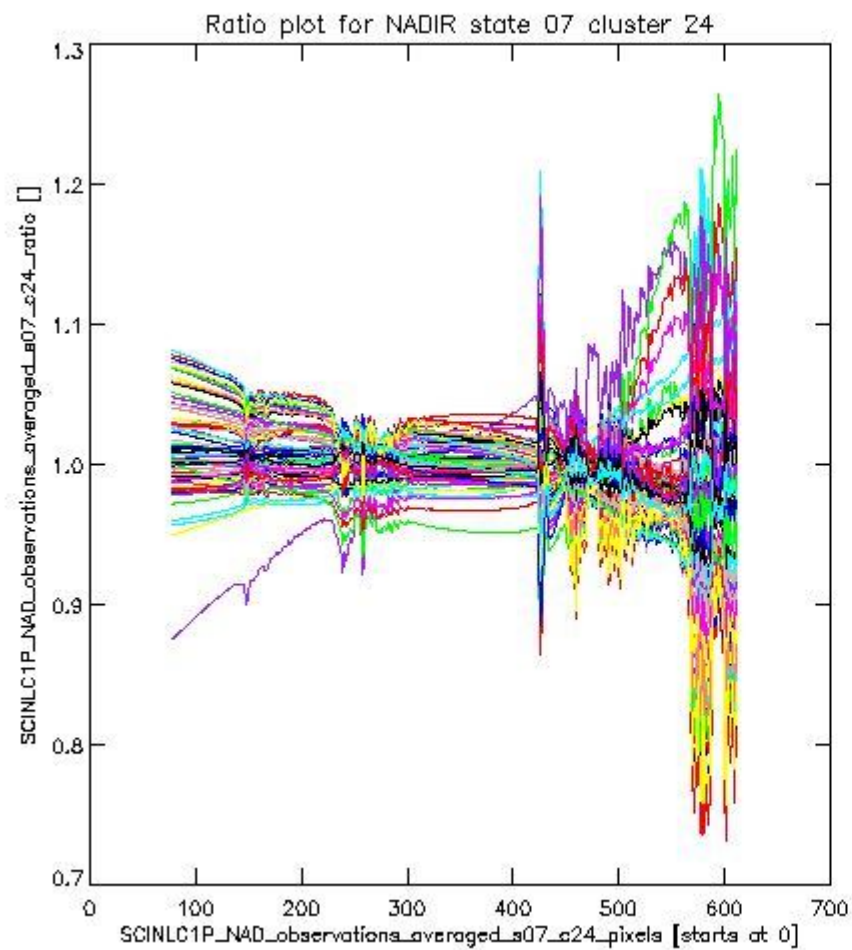
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110114_5.PNG

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 | 14JAN2011 01:09:56.279 |
| Start time of last sample | 14JAN2011 23:02:21.273 |
| Reference period start time | 15DEC2010 01:11:13.113 |
| Reference period stop time | 13JAN2011 23:38:36.813 |
| Channel number | 4 |
| First pixel number (starts at 0) | 78 |
| Last pixel number (starts at 0) | 612 |



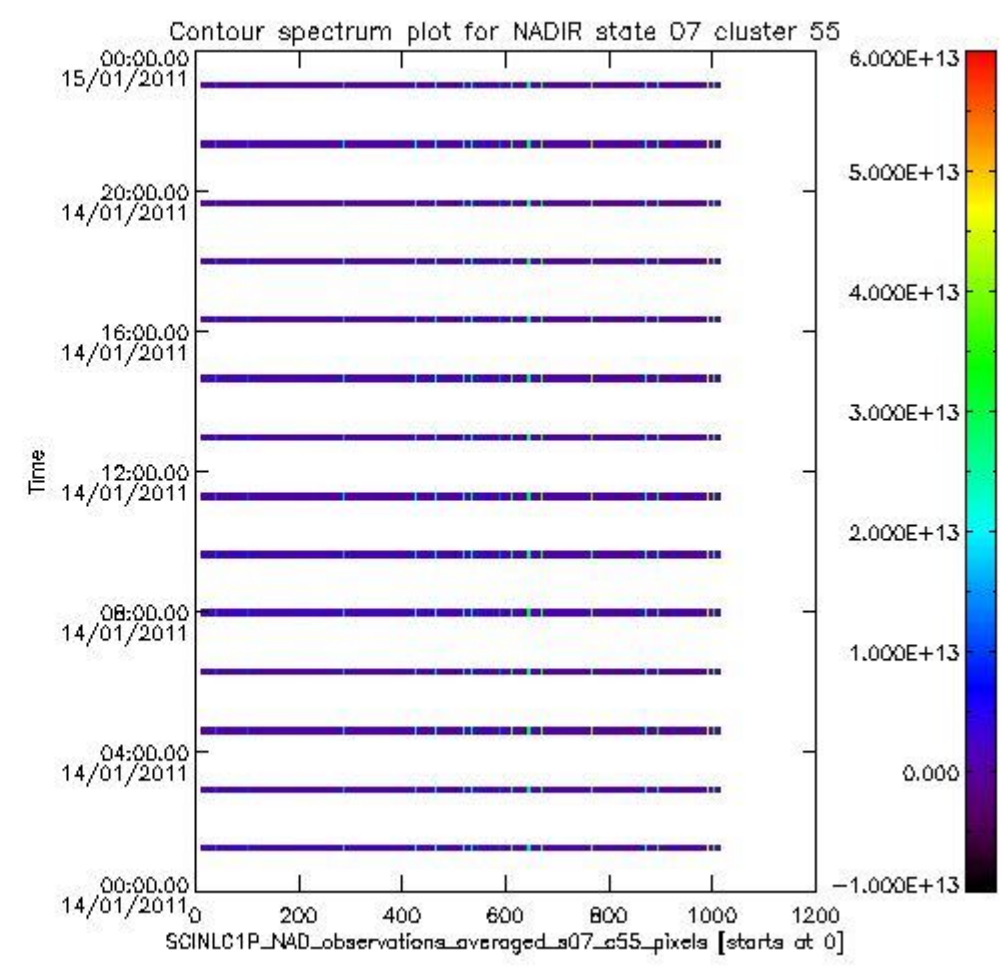
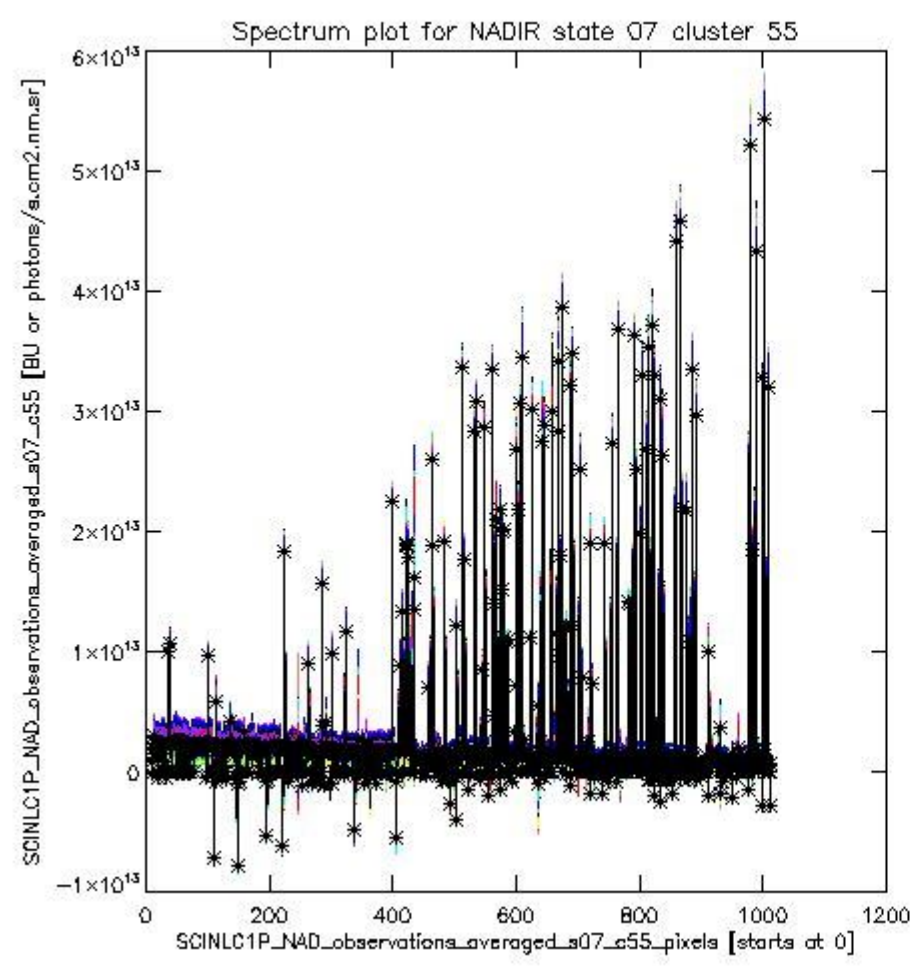
sciamachy_i1b_source_packet_report_SCIA_7_04_U_20110114_6.PNG



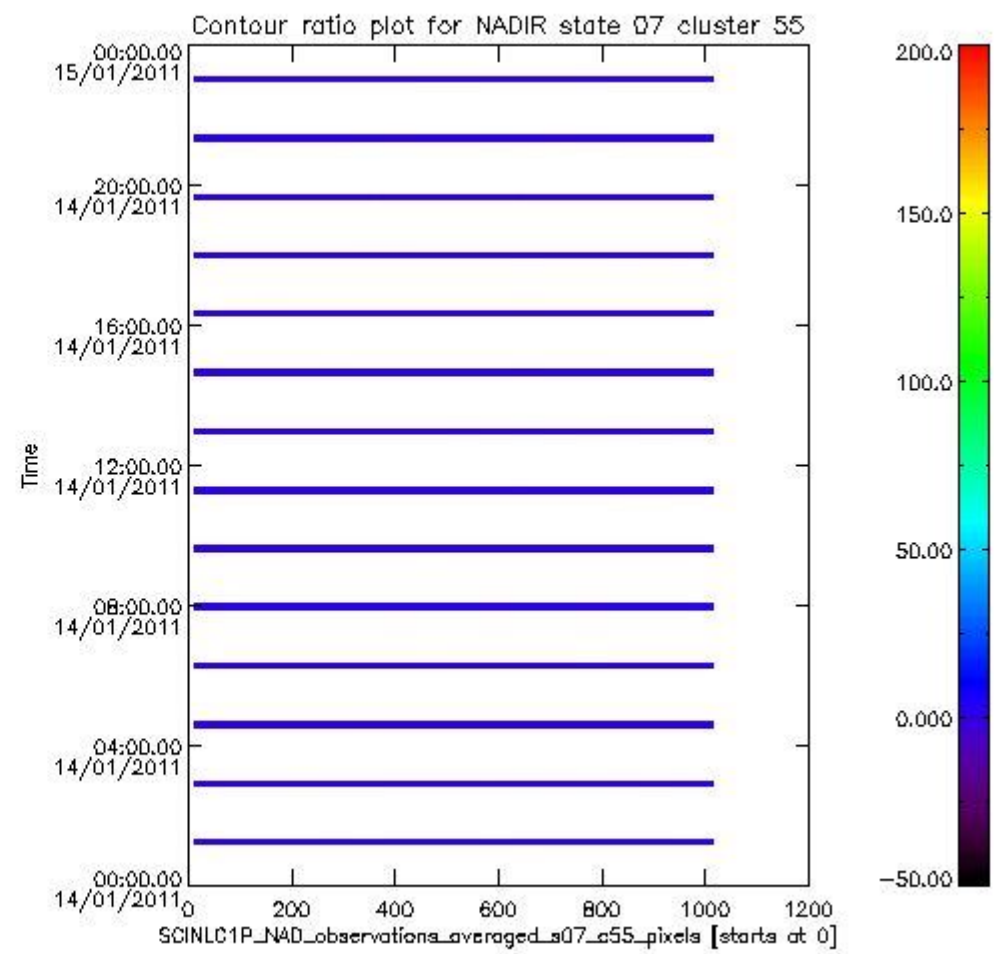
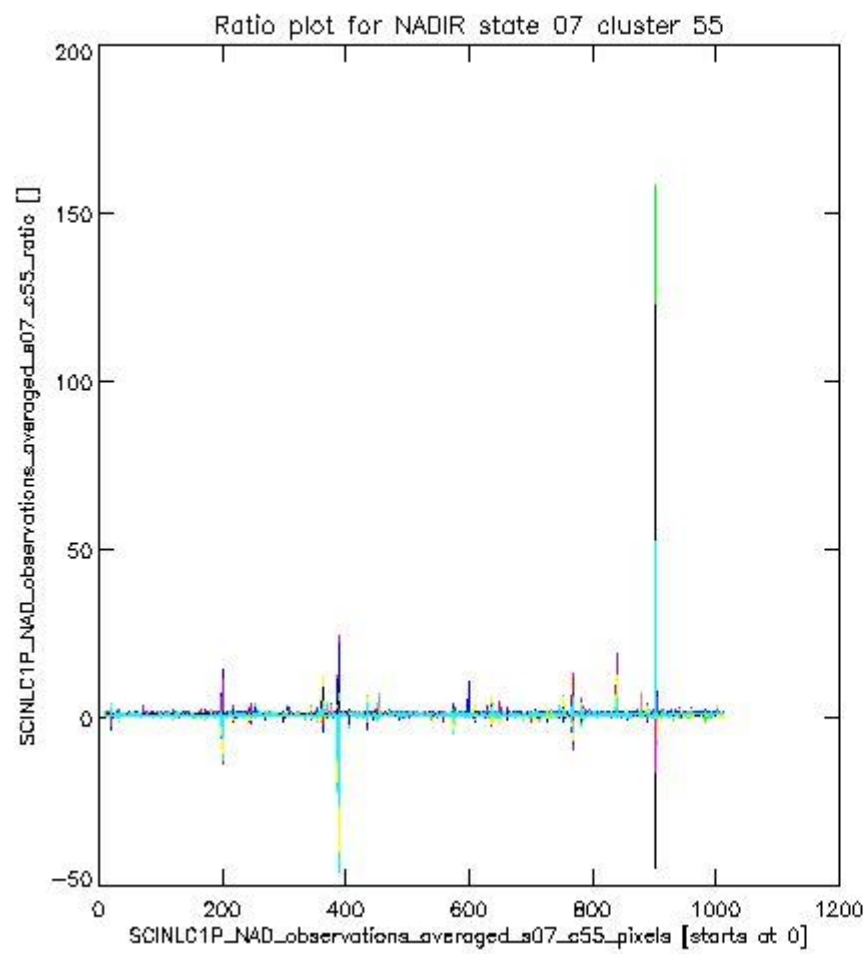
sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110114_7.PNG

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 | 14JAN2011 01:09:56.279 |
| Start time of last sample | 14JAN2011 23:02:21.273 |
| Reference period start time | 15DEC2010 01:11:13.113 |
| Reference period stop time | 13JAN2011 23:38:36.813 |
| 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_20110114_8.PNG



sciamachy_l1b_source_packet_report_SCIA_7_04_U_20110114_9.PNG

1.2.6 LIMB state 32 cluster 09 height ~19 km

1.2.7 LIMB state 32 cluster 09 height ~22 km

1.2.8 LIMB state 32 cluster 09 height ~25 km

1.2.9 LIMB state 32 cluster 15 height ~22 km

1.2.10 LIMB state 32 cluster 15 height ~25 km

1.2.11 LIMB state 32 cluster 15 height ~35 km

