

# 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	22MAY2011 06:55:38
Data source version	SCIA/7.04-U
Processing scope for products	09MAY2011 00:00:00 to 10MAY2011 00:00:00
Start time of first product within scope	08MAY2011 22:31:32
Stop time of last product within scope	10MAY2011 00:45:27
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	09MAY2011 00:44:57.490	09MAY2011 22:37:00.914
1	NADIR	07	09	N/A	09MAY2011 00:44:57.490	09MAY2011 22:37:00.914
2	NADIR	07	15	N/A	09MAY2011 00:44:57.490	09MAY2011 22:37:00.914
3	NADIR	07	24	N/A	09MAY2011 00:44:57.490	09MAY2011 22:37:00.914
4	NADIR	07	55	N/A	09MAY2011 00:44:57.490	09MAY2011 22:37:00.914
5	LIMB	32	09	~19 km	09MAY2011 00:29:44.115	09MAY2011 23:59:04.262
6	LIMB	32	09	~22 km	09MAY2011 00:29:44.115	09MAY2011 23:59:04.262
7	LIMB	32	09	~25 km	09MAY2011 00:29:44.115	09MAY2011 23:59:04.262
8	LIMB	32	15	~22 km	09MAY2011 00:29:44.115	09MAY2011 23:59:04.262
9	LIMB	32	15	~25 km	09MAY2011 00:29:44.115	09MAY2011 23:59:04.262
10	LIMB	32	15	~35 km	09MAY2011 00:29:44.115	09MAY2011 23:59:04.262

#### 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	#cmlprk	#incmpl_rk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110508_222547_000059803102_00188_48047_1228.N1</a>	08MAY2011 22:31:32	08MAY2011 23:41:47	0	35	31	0	0	3	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110509_000532_000060383102_00189_48048_1225.N1</a>	09MAY2011 00:11:46	09MAY2011 01:22:15	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110509_014615_000059813102_00190_48049_1224.N1</a>	09MAY2011 01:51:59	09MAY2011 03:02:14	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110509_032559_000060393102_00191_48050_1226.N1</a>	09MAY2011 03:32:13	09MAY2011 04:42:42	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110509_050642_000036623102_00192_48051_1230.N1</a>	09MAY2011 05:12:27	09MAY2011 06:06:56	0	22	30	0	0	7	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110509_060700_000084053102_00193_48052_1233.N1</a>	09MAY2011 06:08:08	09MAY2011 08:03:10	0	47	30	0	0	5	0	0	

6	SCI_NLC_1CUDPA20110509_082709_000059813102_00194_48053_1234.N1	09MAY2011 08:32:55	09MAY2011 09:43:09	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110509_100654_000060383102_00195_48054_1235.N1	09MAY2011 10:13:08	09MAY2011 11:23:37	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110509_114737_000059803102_00196_48055_1239.N1	09MAY2011 11:53:22	09MAY2011 13:03:36	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110509_132755_000060053102_00197_48056_1241.N1	09MAY2011 13:33:35	09MAY2011 14:44:04	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110509_150804_000060143102_00198_48057_1243.N1	09MAY2011 15:13:49	09MAY2011 16:24:04	0	35	31	0	0	1	0	0	
11	SCI_NLC_1CUDPA20110509_164822_000060053102_00199_48058_1244.N1	09MAY2011 16:54:03	09MAY2011 18:04:32	0	36	30	0	0	1	0	0	
12	SCI_NLC_1CUDPA20110509_182831_000060143102_00200_48059_1246.N1	09MAY2011 18:34:17	09MAY2011 19:44:41	0	35	31	0	1	1	0	0	
13	SCI_NLC_1CUDPA20110509_200849_000060053102_00201_48060_1248.N1	09MAY2011 20:14:30	09MAY2011 21:25:09	0	36	30	0	1	1	0	0	
14	SCI_NLC_1CUDPA20110509_214858_000060143102_00202_48061_1250.N1	09MAY2011 21:54:44	09MAY2011 23:04:59	0	35	31	0	0	1	0	0	
15	SCI_NLC_1CUDPA20110509_232917_000060053102_00203_48062_1252.N1	09MAY2011 23:34:58	10MAY2011 00:45:27	0	36	30	0	0	1	0	0	

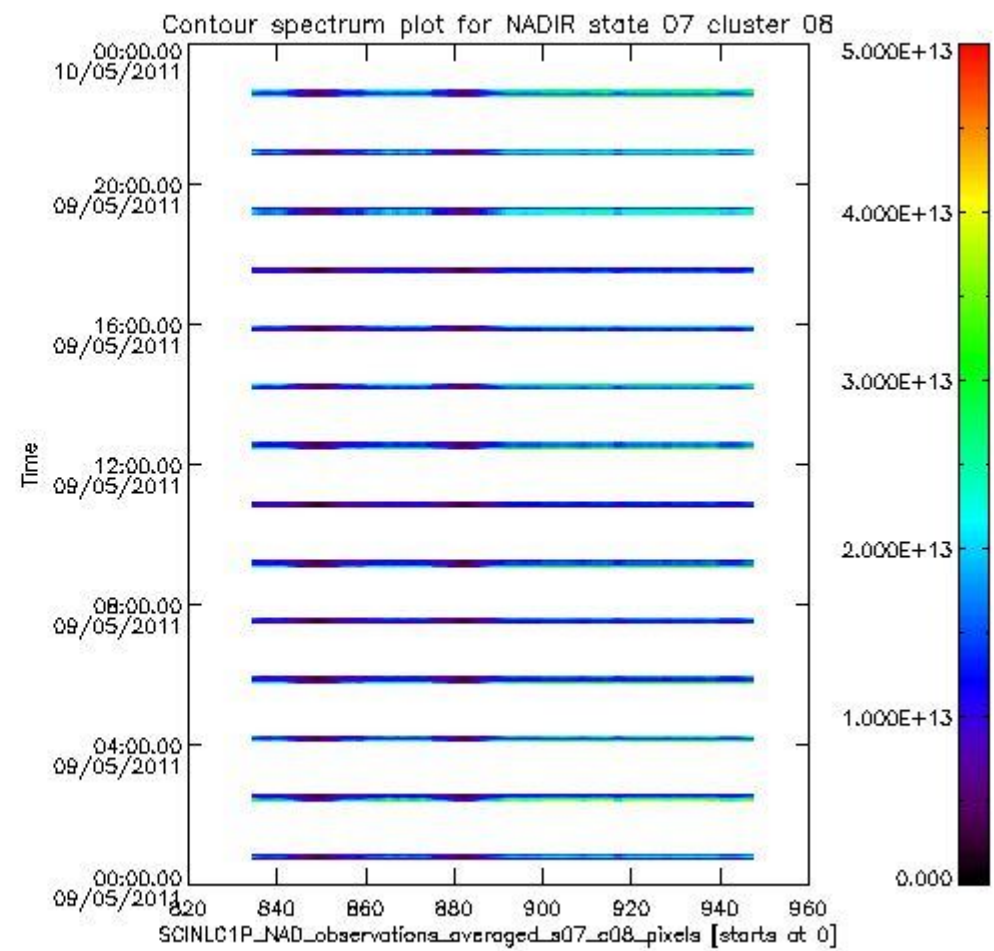
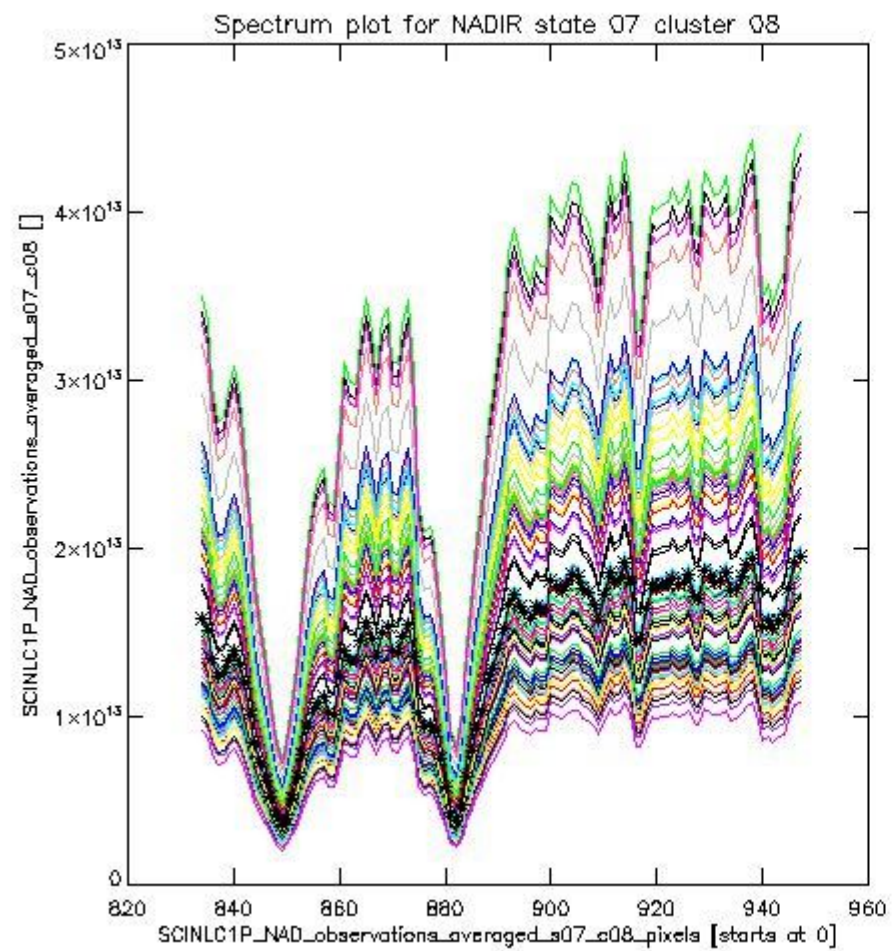
## 1.2 Source packet monitoring

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:

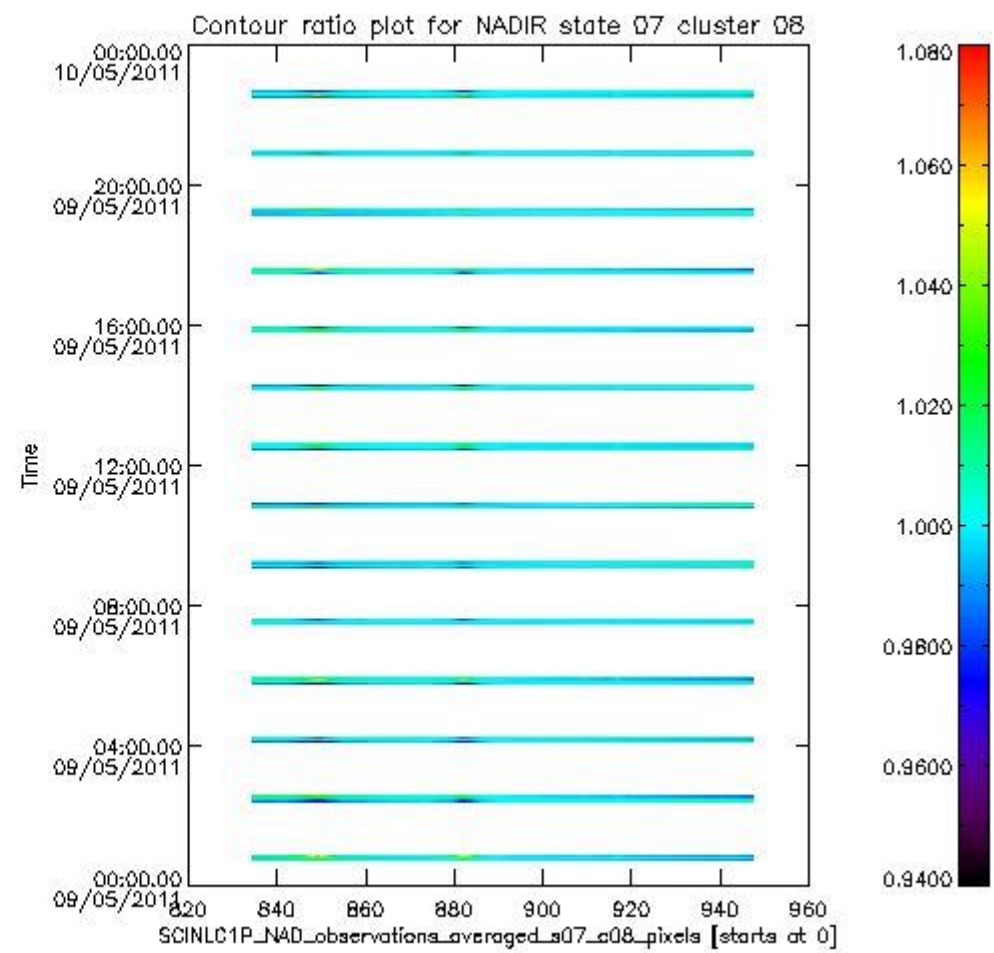
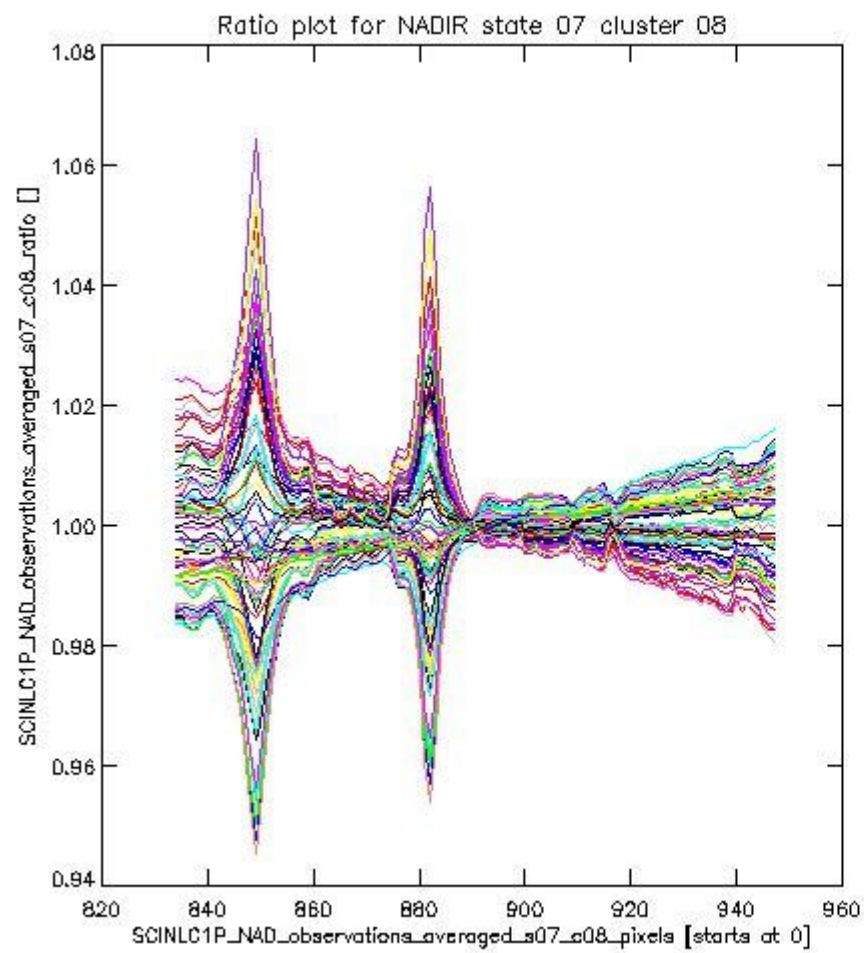
- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a 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	09MAY2011 00:44:57.490
Start time of last sample	09MAY2011 22:37:00.914
Reference period start time	09APR2011 00:45:47.911
Reference period stop time	08MAY2011 23:13:48.993
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947



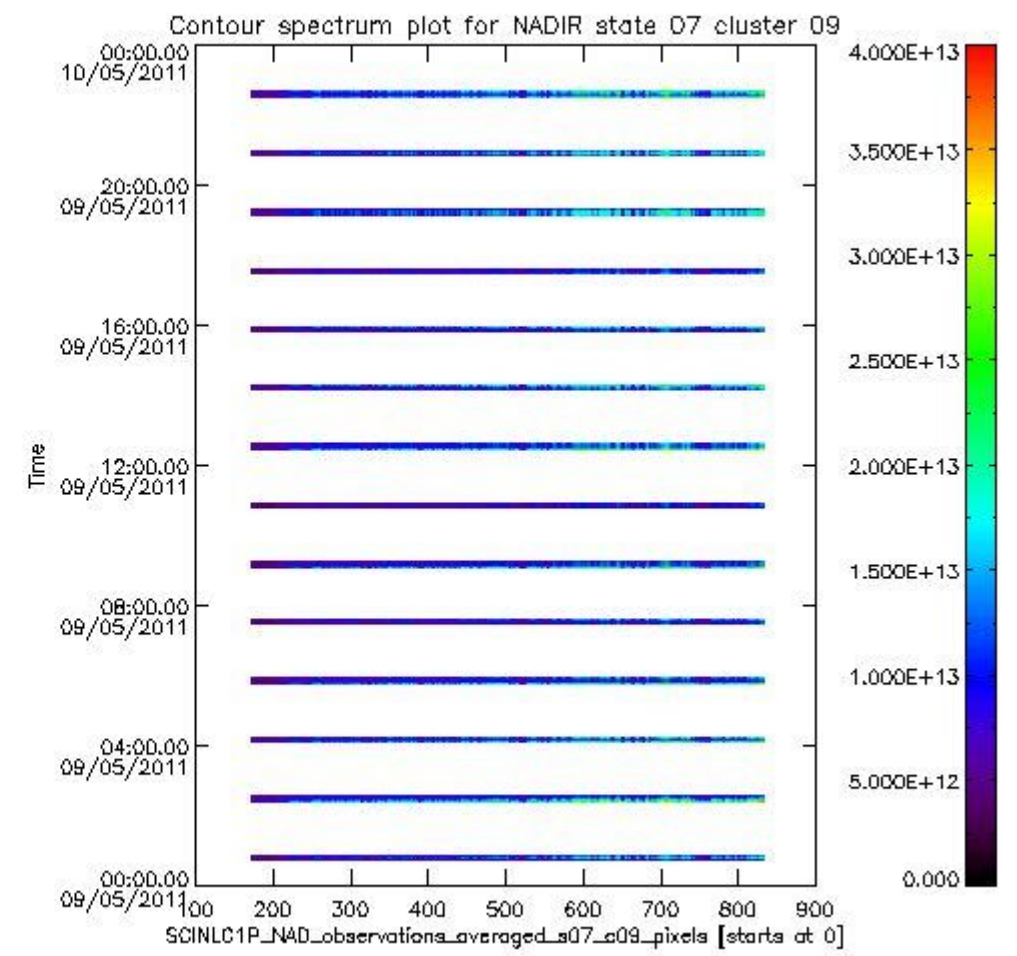
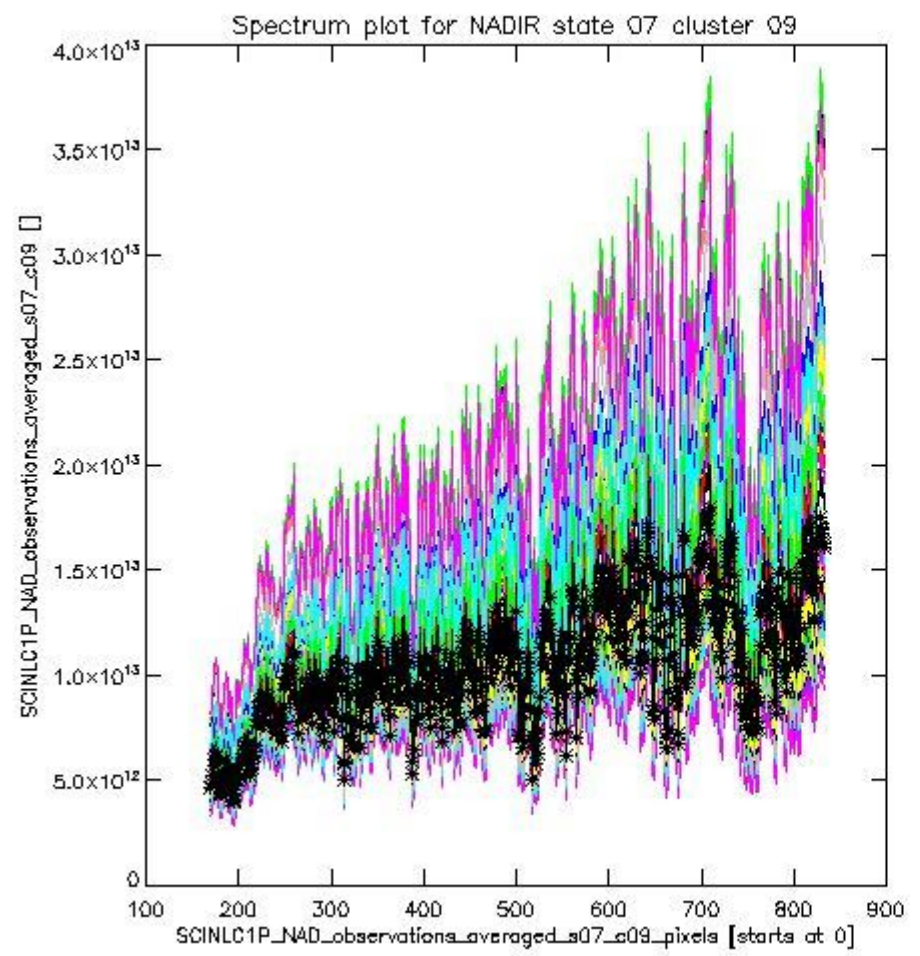
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_0.PNG



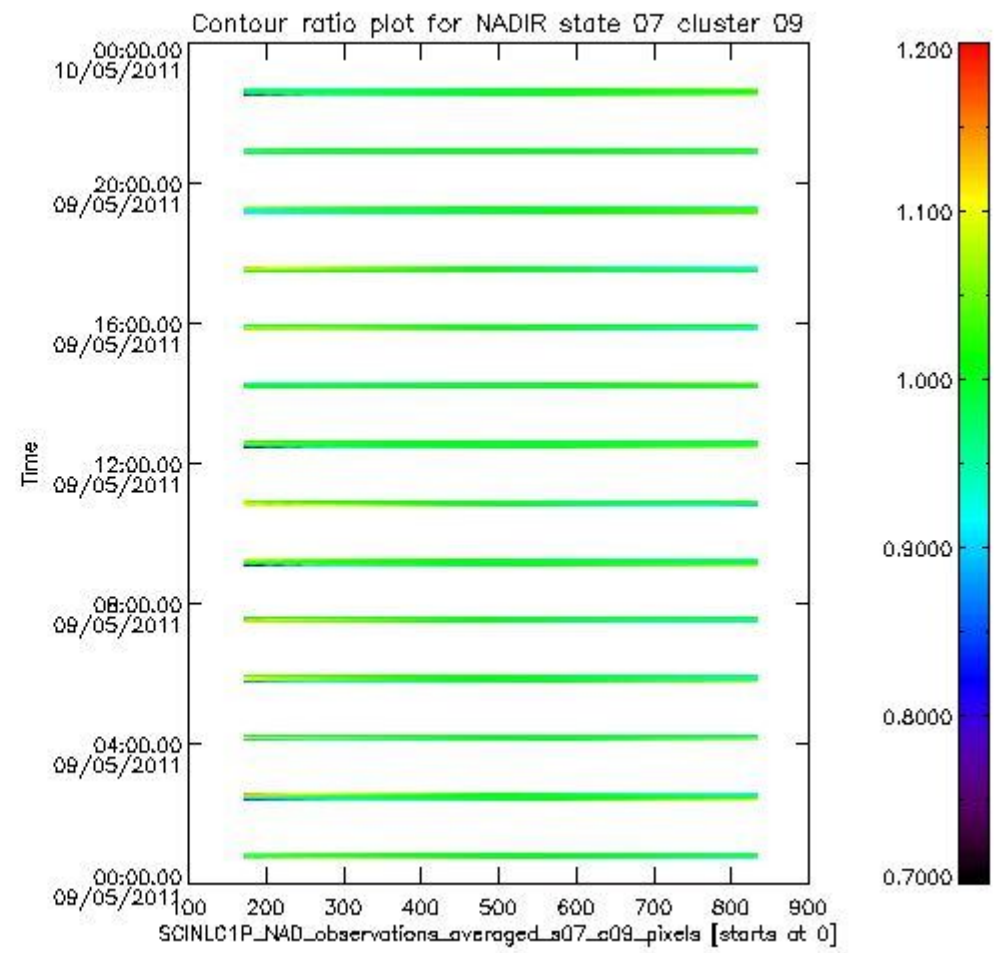
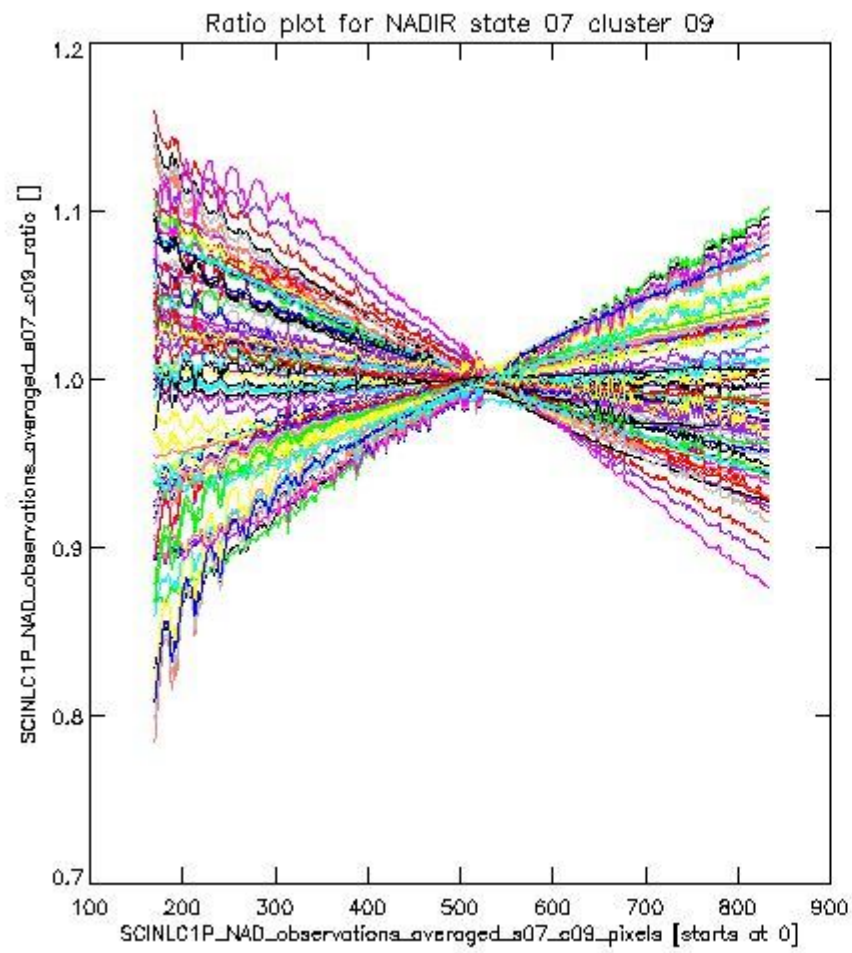
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_1.PNG

**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	09MAY2011 00:44:57.490
Start time of last sample	09MAY2011 22:37:00.914
Reference period start time	09APR2011 00:45:47.911
Reference period stop time	08MAY2011 23:13:48.993
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



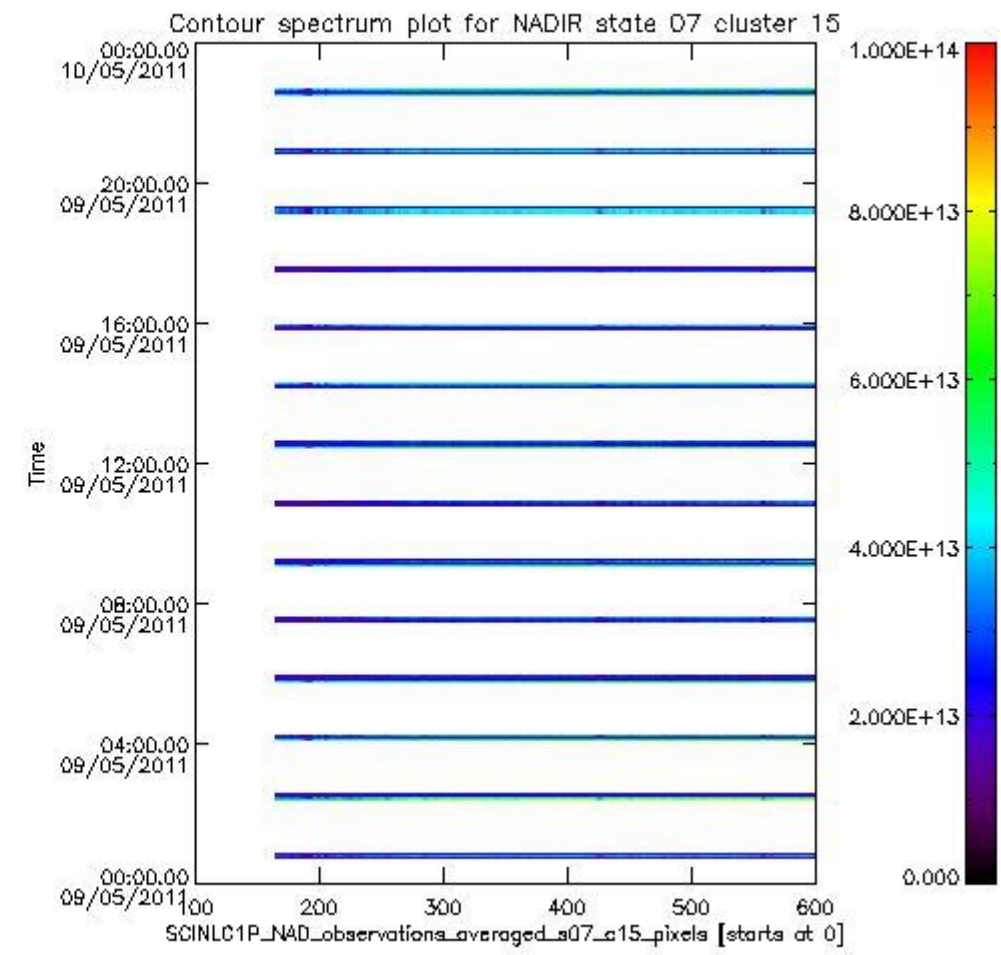
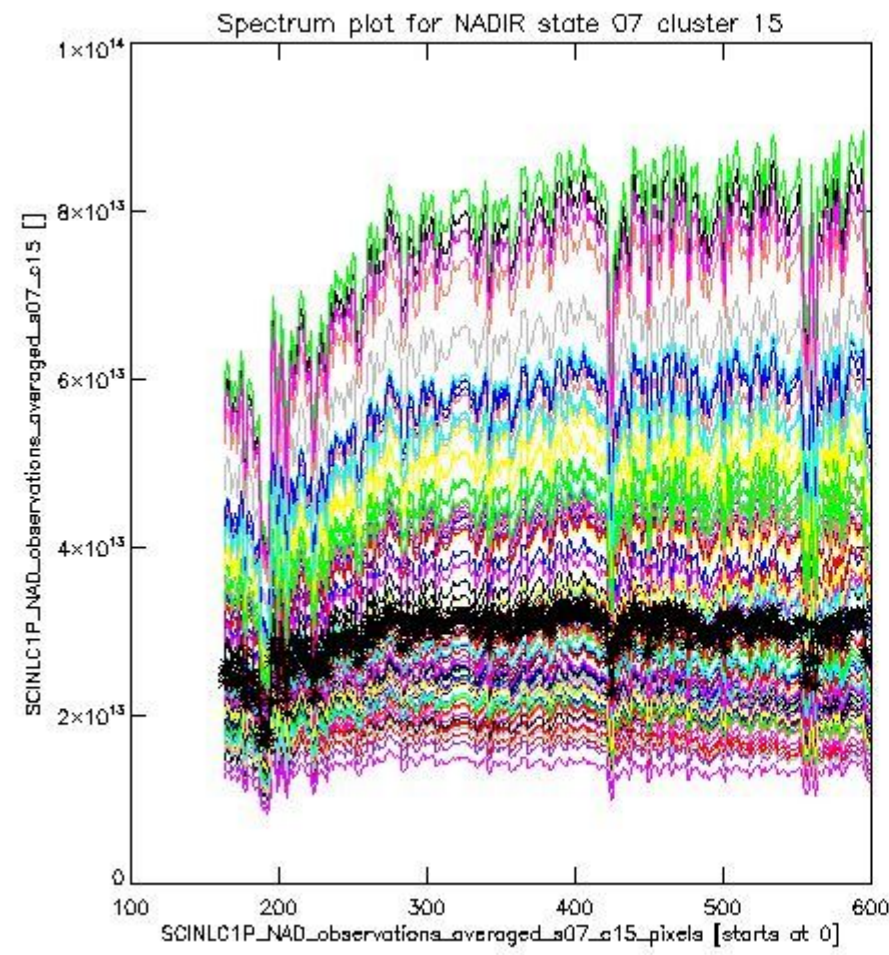
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_2.PNG



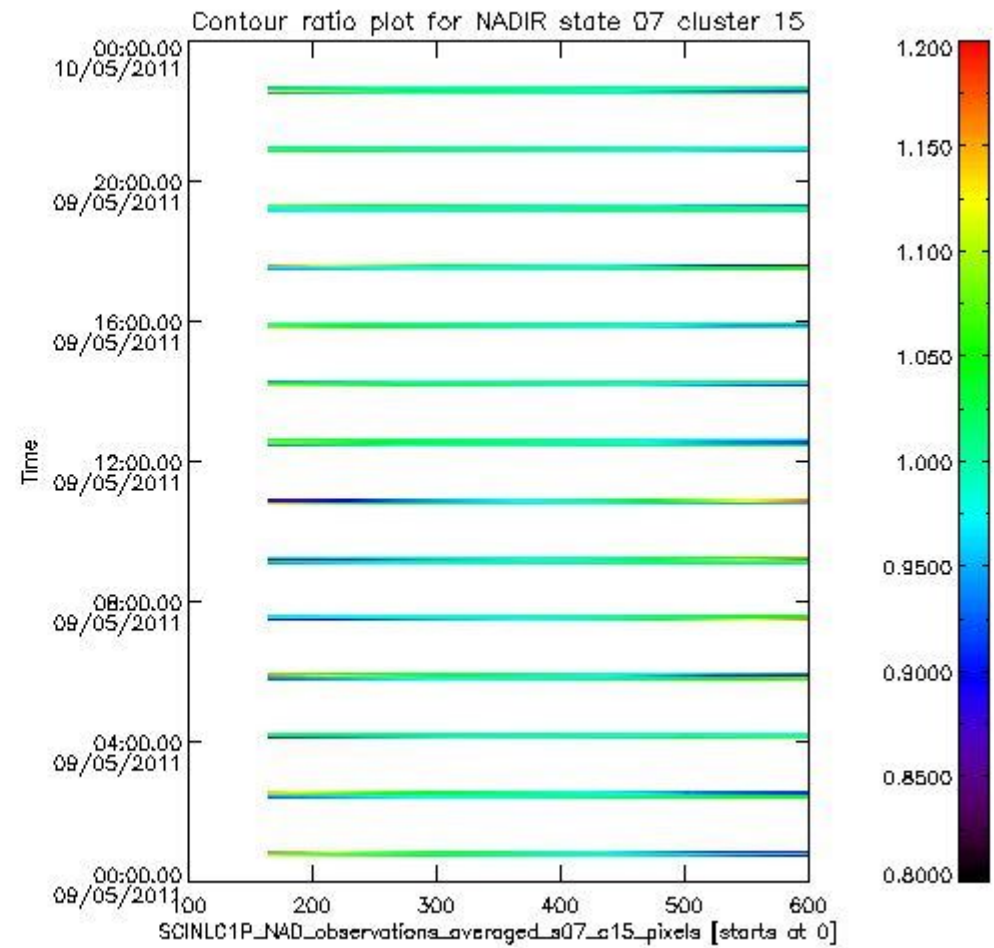
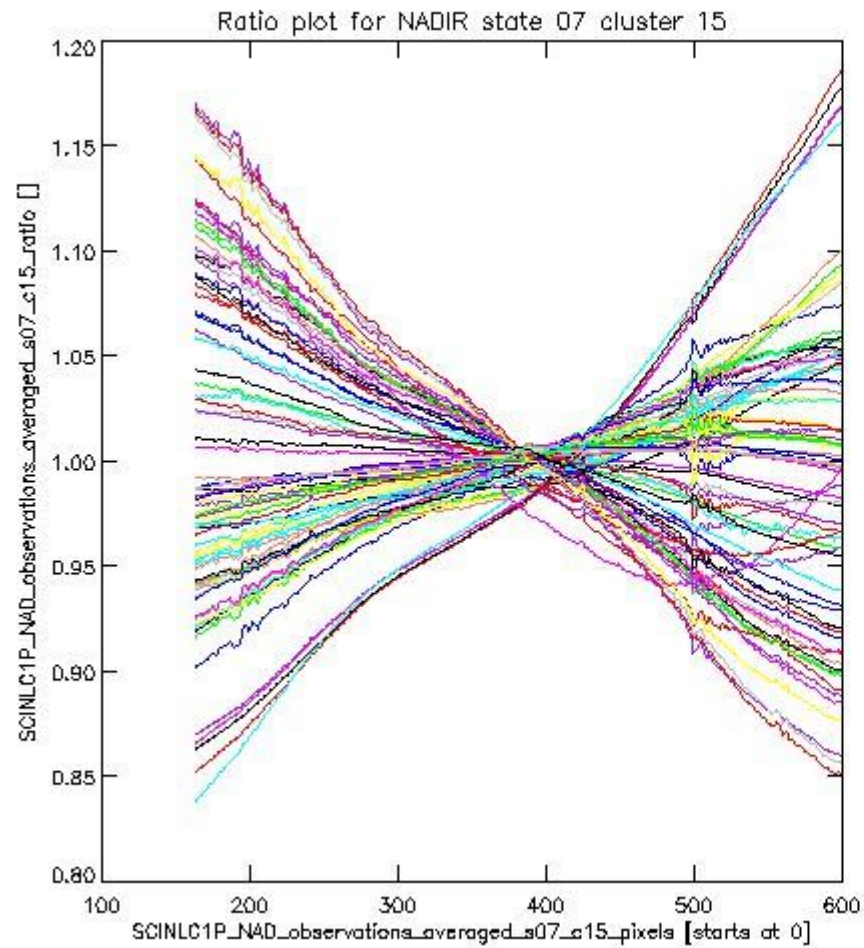
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_3.PNG

**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	09MAY2011 00:44:57.490
Start time of last sample	09MAY2011 22:37:00.914
Reference period start time	09APR2011 00:45:47.911
Reference period stop time	08MAY2011 23:13:48.993
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\_20110509\_4.PNG

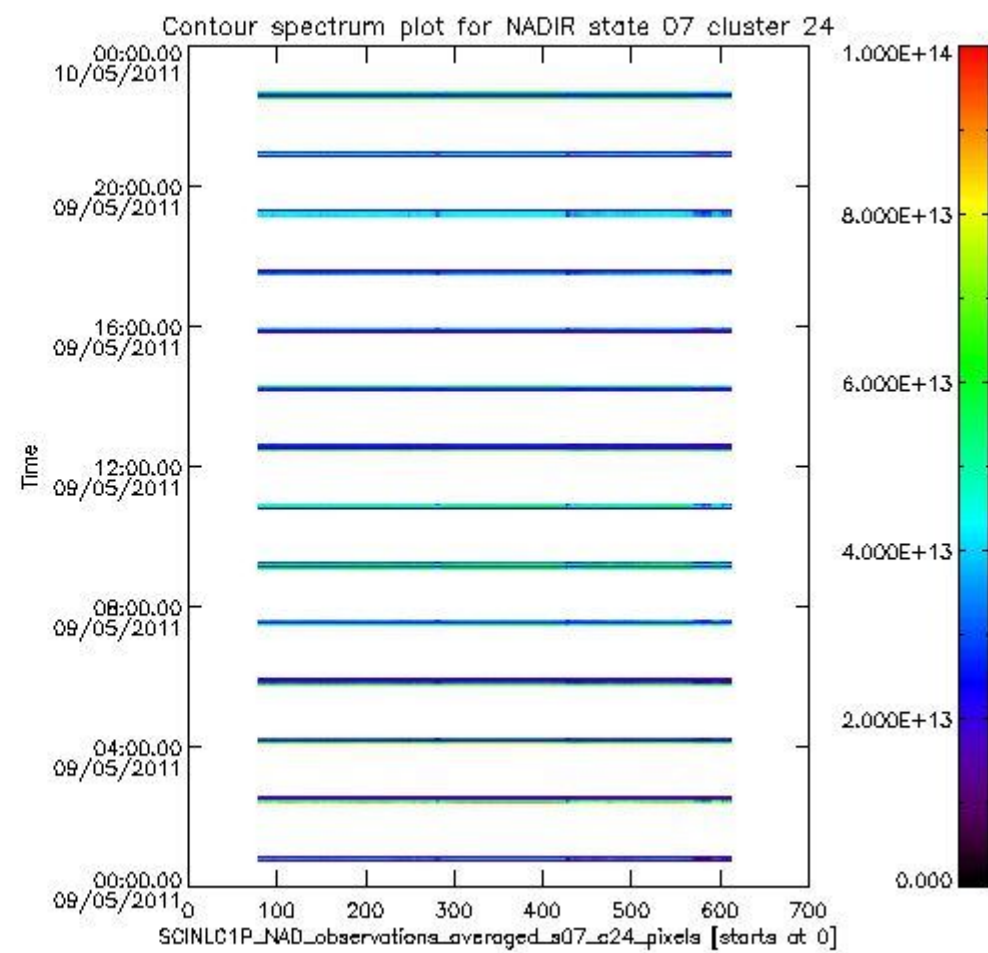
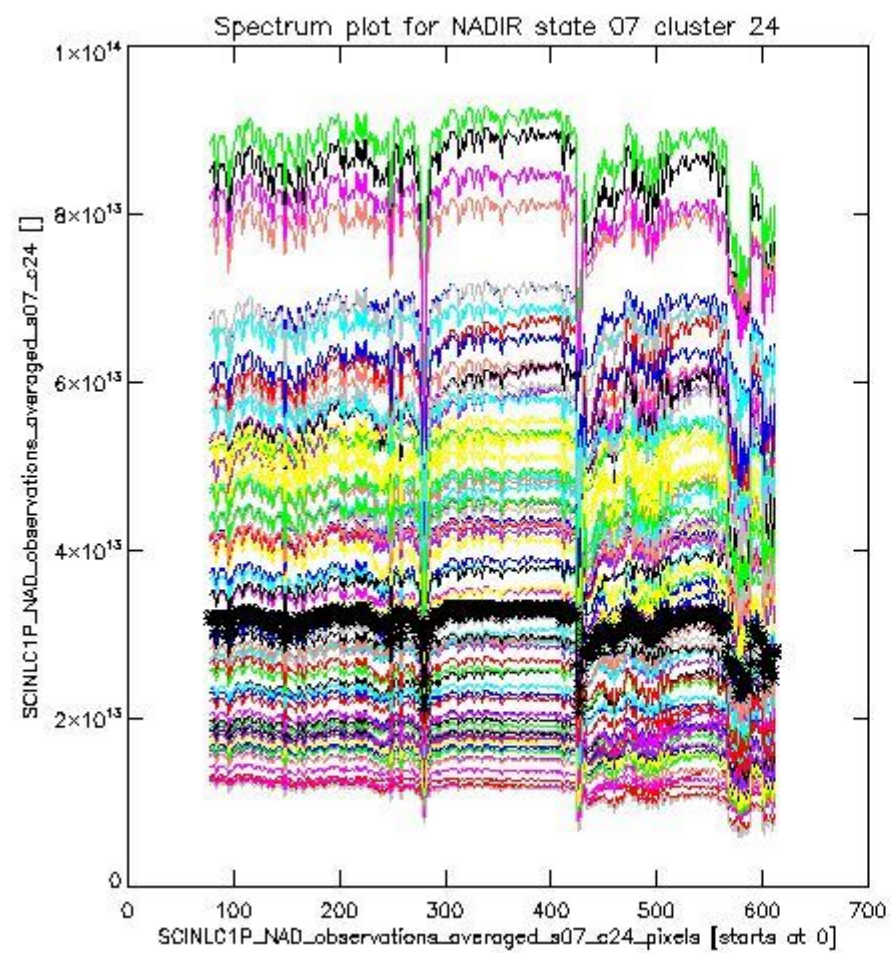


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_5.PNG

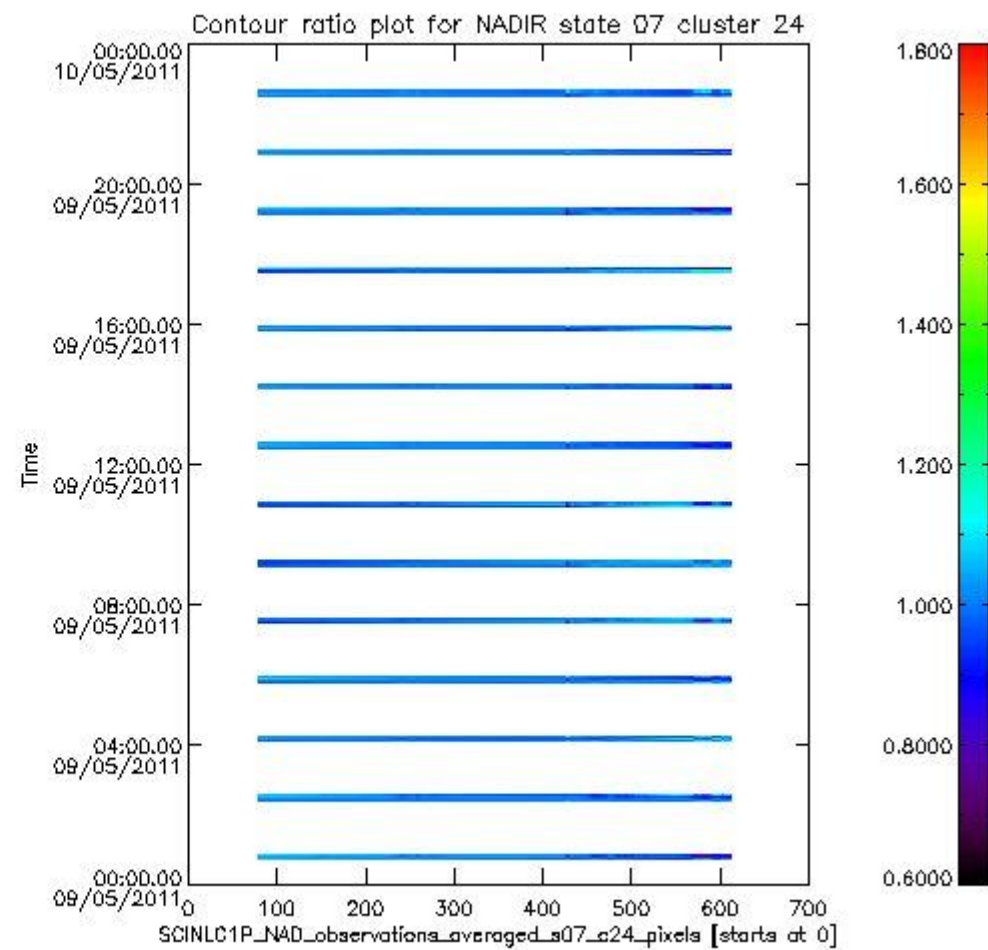
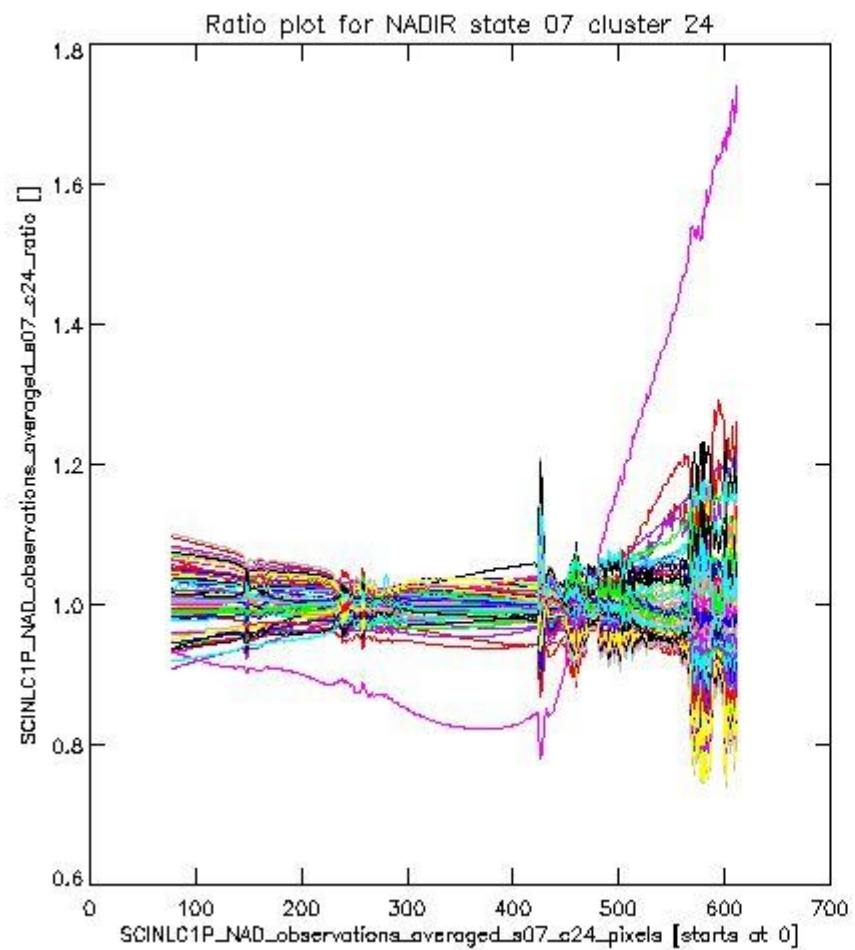
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	09MAY2011 00:44:57.490
Start time of last sample	09MAY2011 22:37:00.914
Reference period start time	09APR2011 00:45:47.911
Reference period stop time	08MAY2011 23:13:48.993
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612





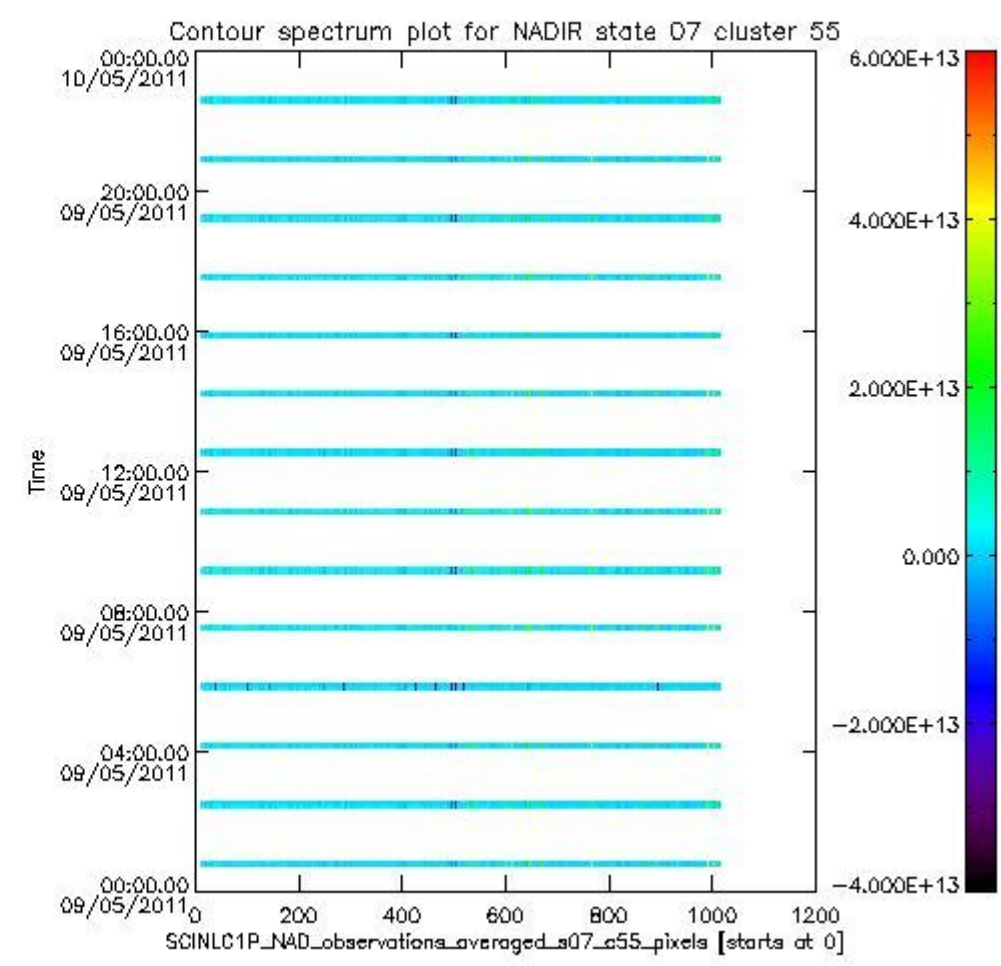
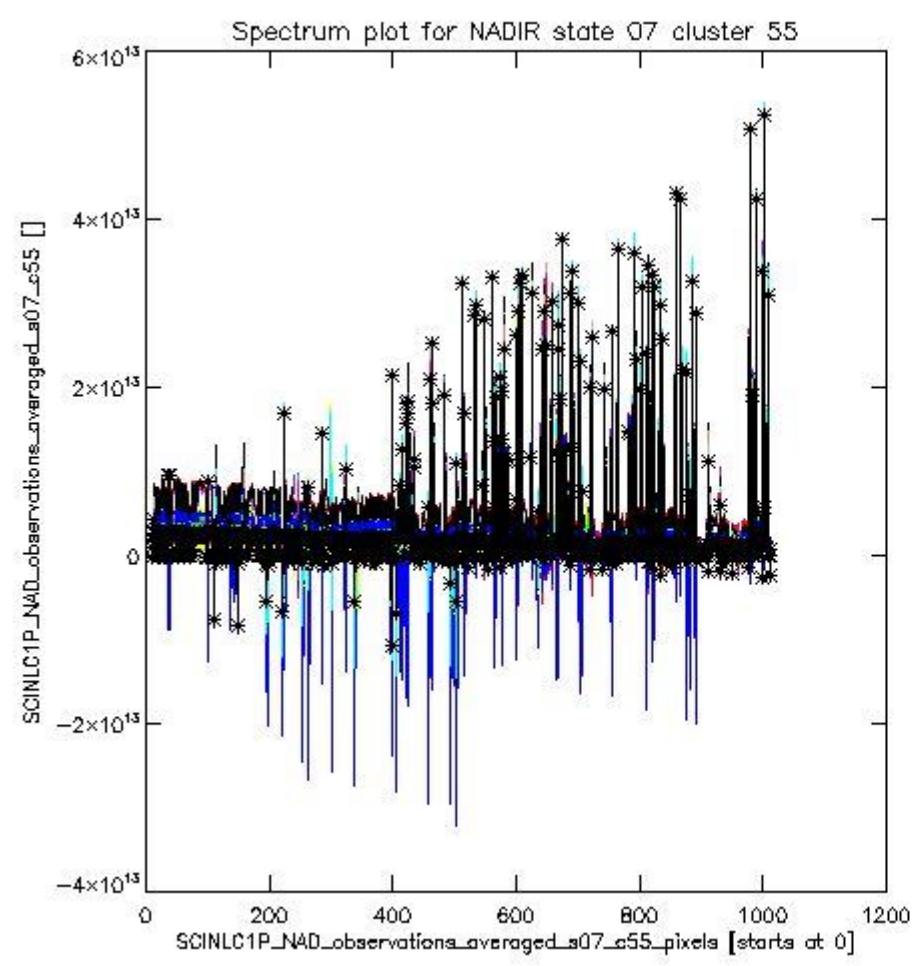
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_6.PNG



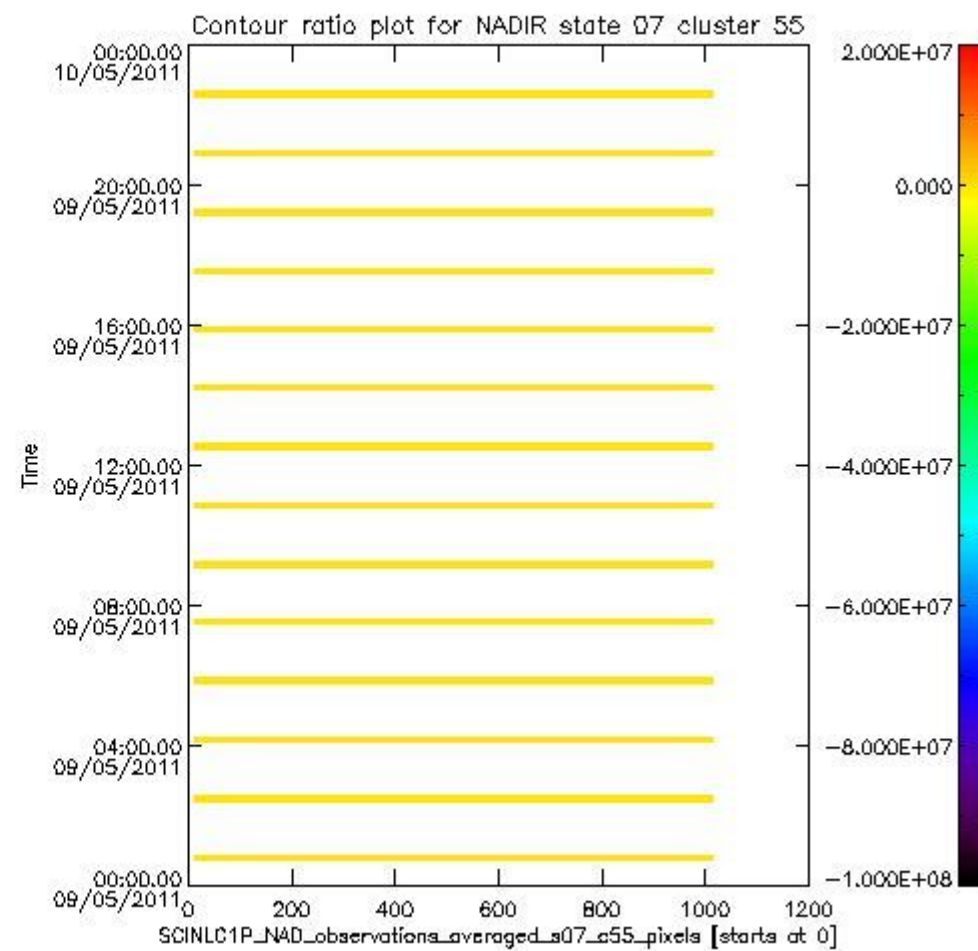
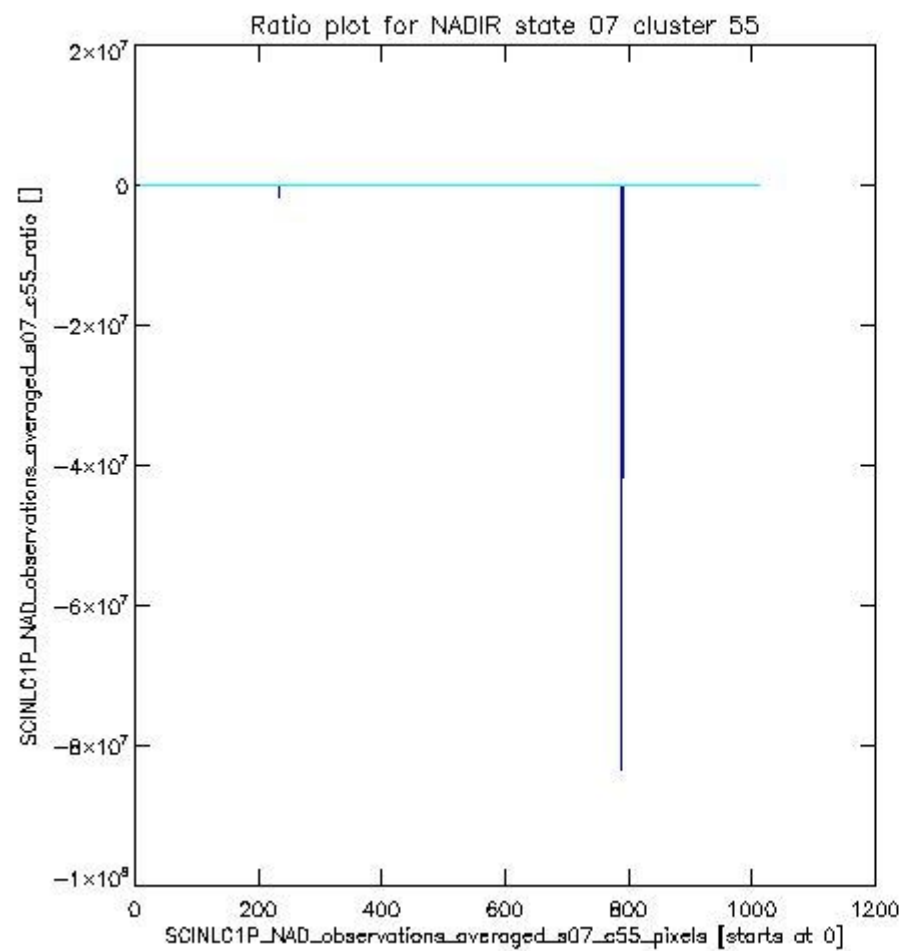
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_7.PNG

**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	09MAY2011 00:44:57.490
Start time of last sample	09MAY2011 22:37:00.914
Reference period start time	09APR2011 00:45:47.911
Reference period stop time	08MAY2011 23:13:48.993
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



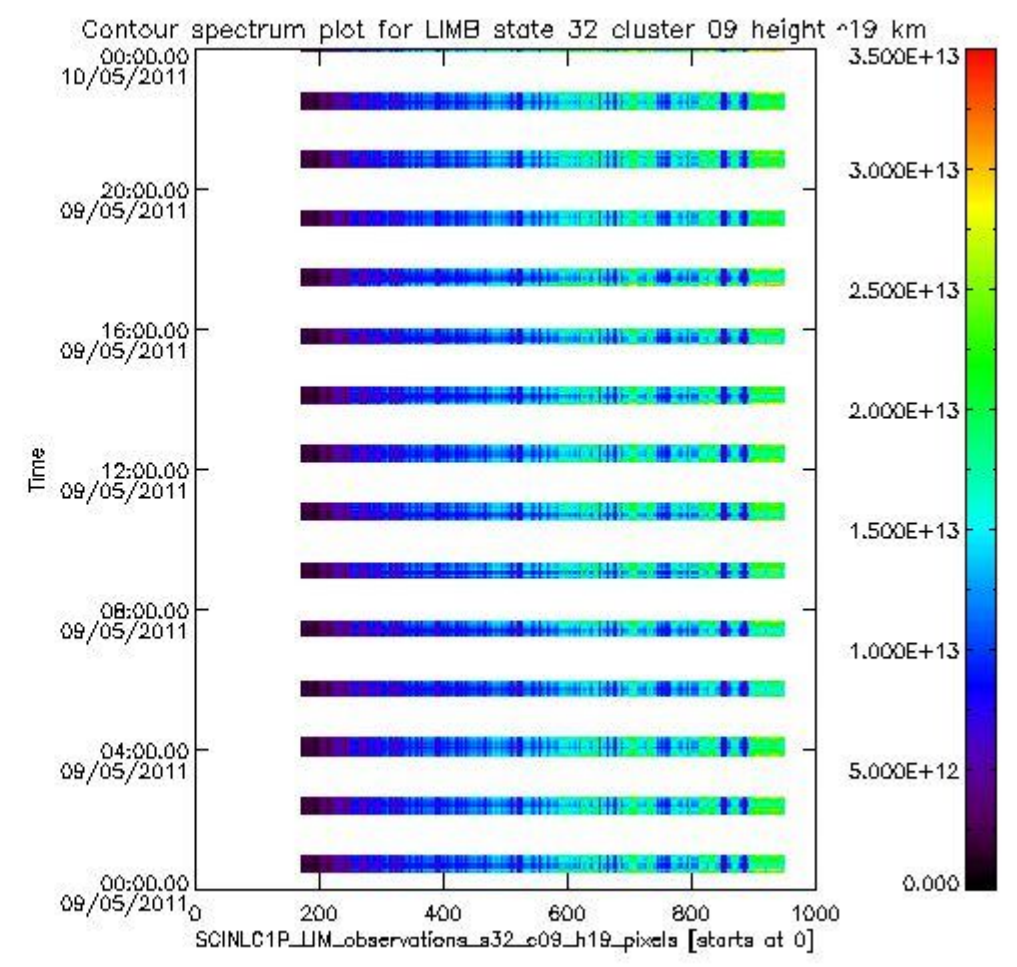
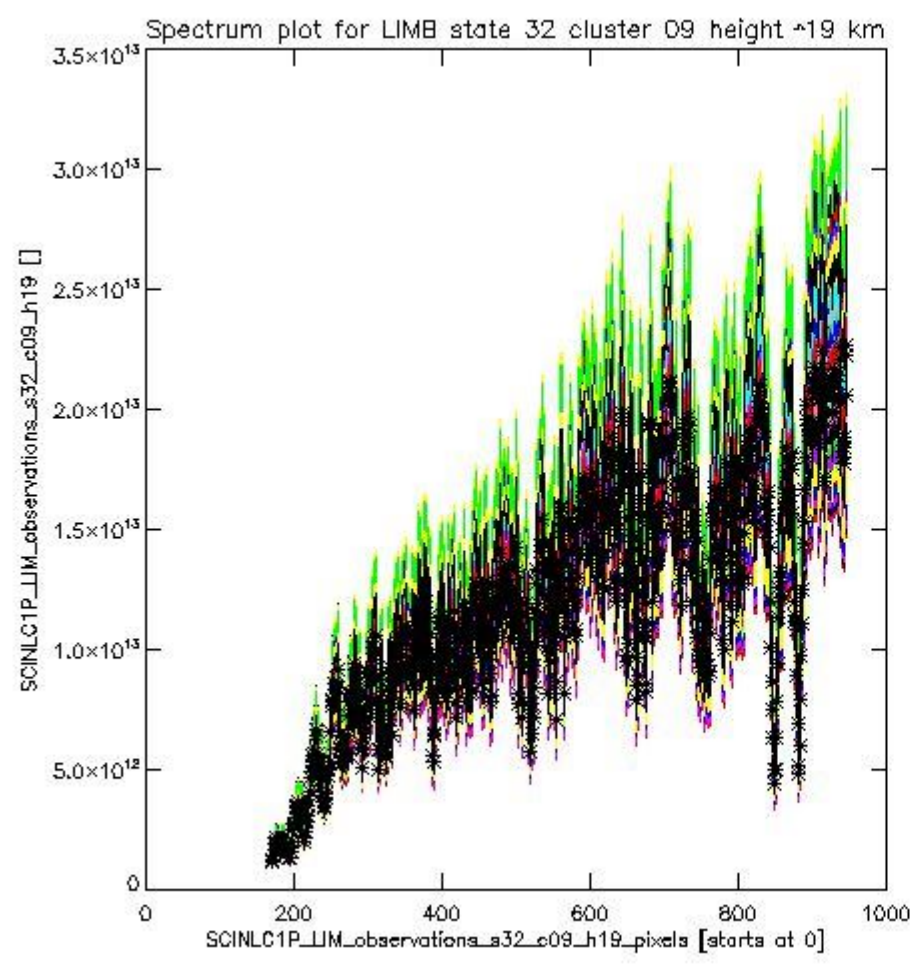
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_8.PNG



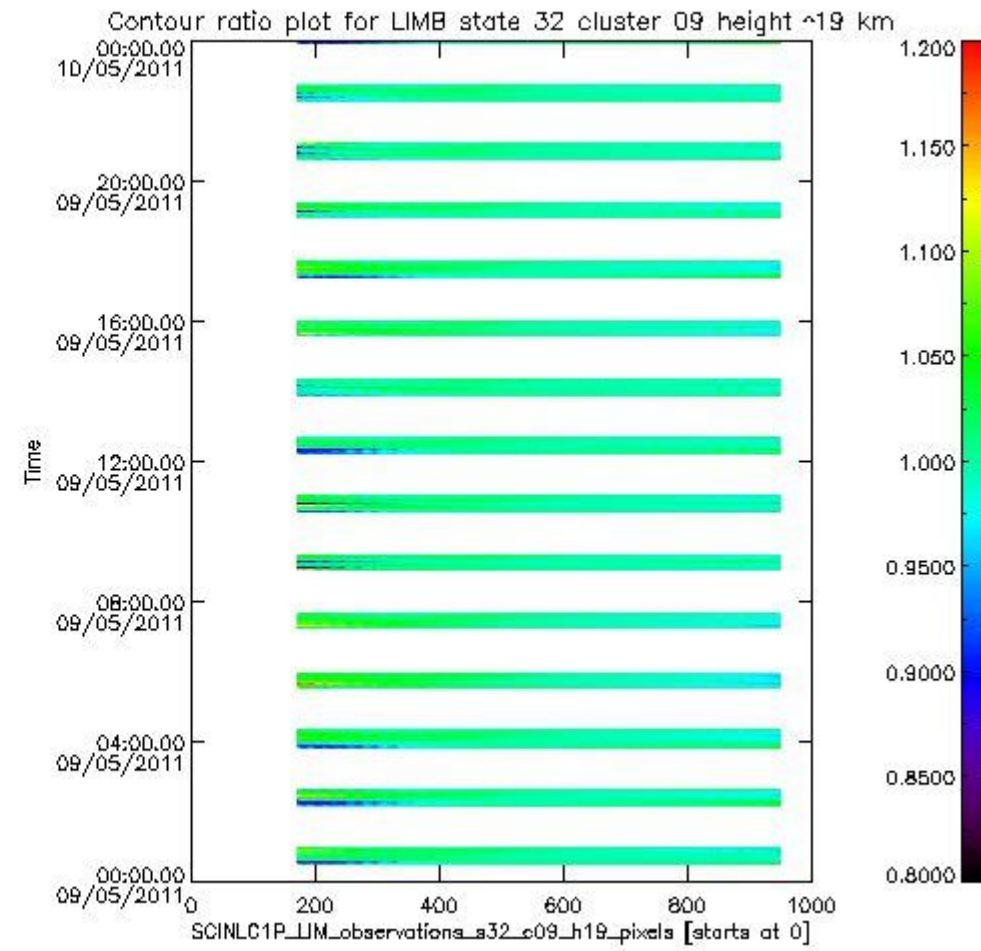
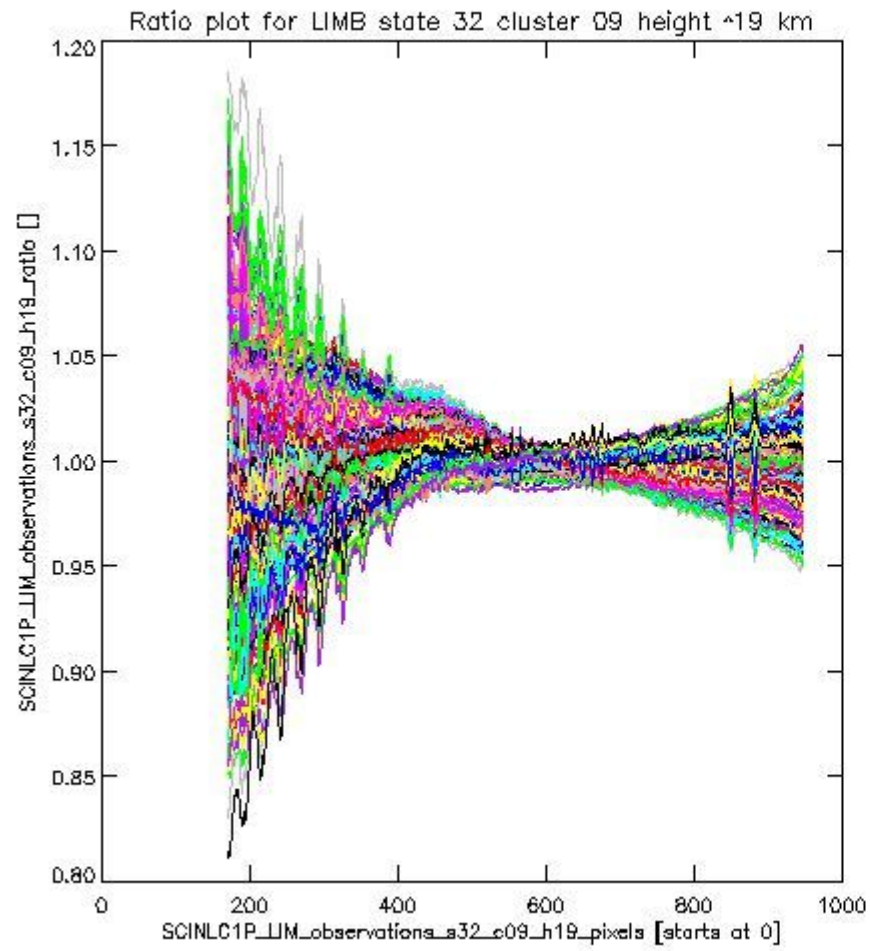
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_9.PNG

**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	09MAY2011 00:29:44.115
Start time of last sample	09MAY2011 23:59:04.262
Reference period start time	10APR2011 01:35:07.075
Reference period stop time	08MAY2011 23:17:00.298
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



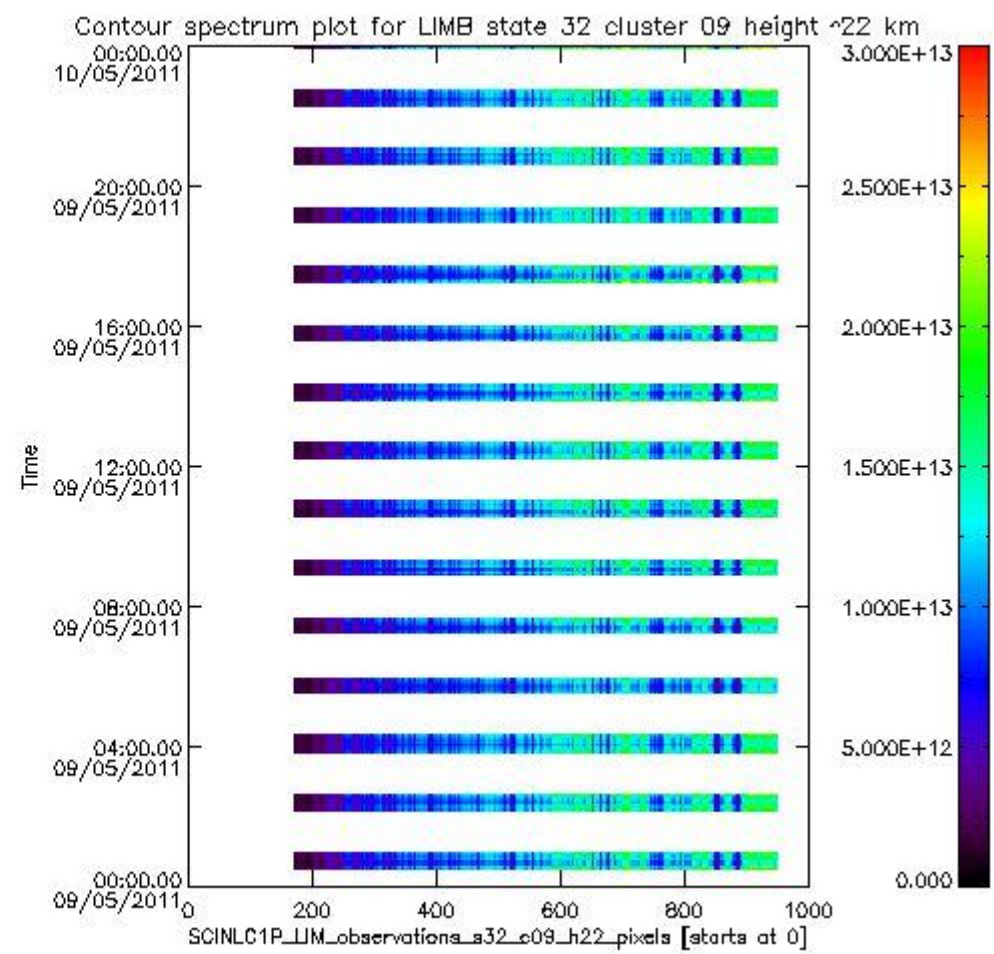
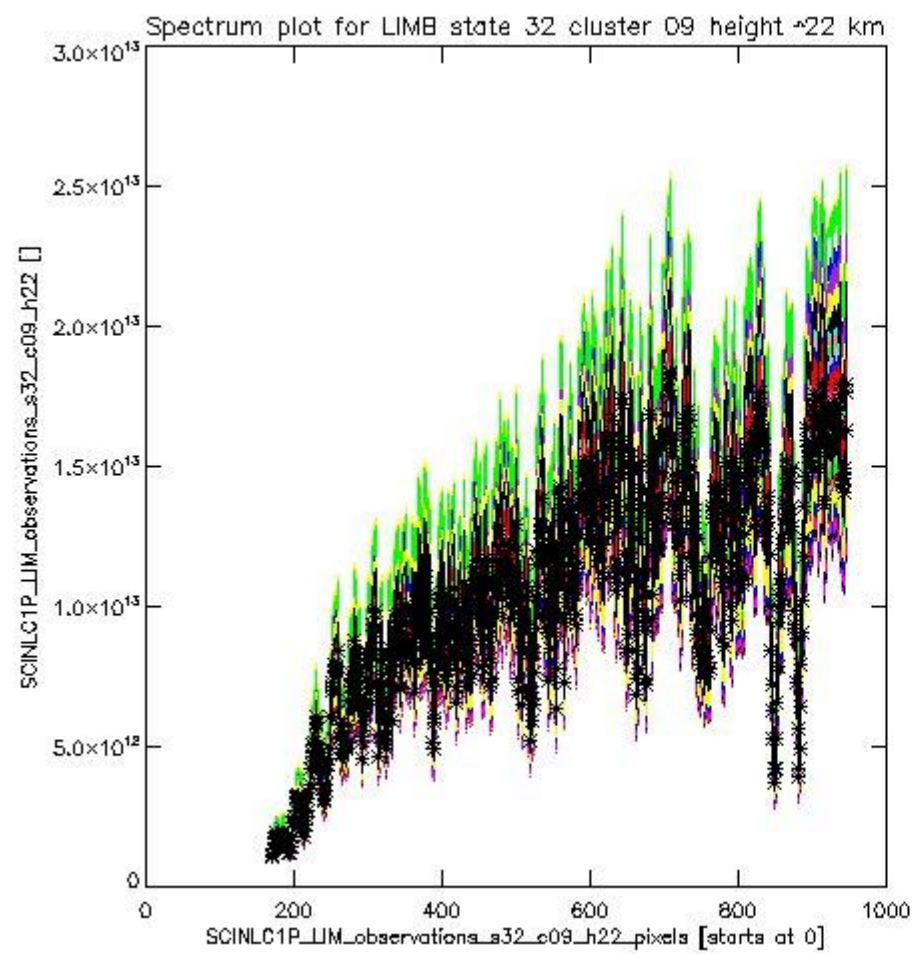
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_10.PNG



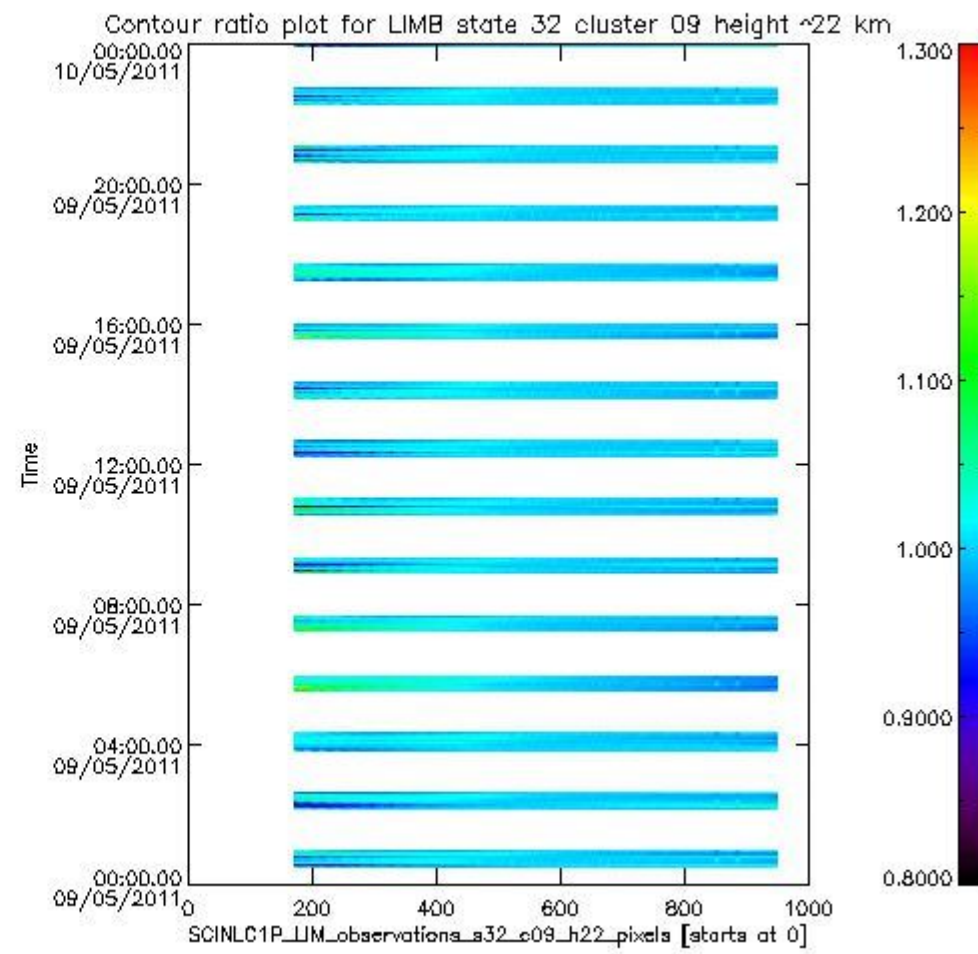
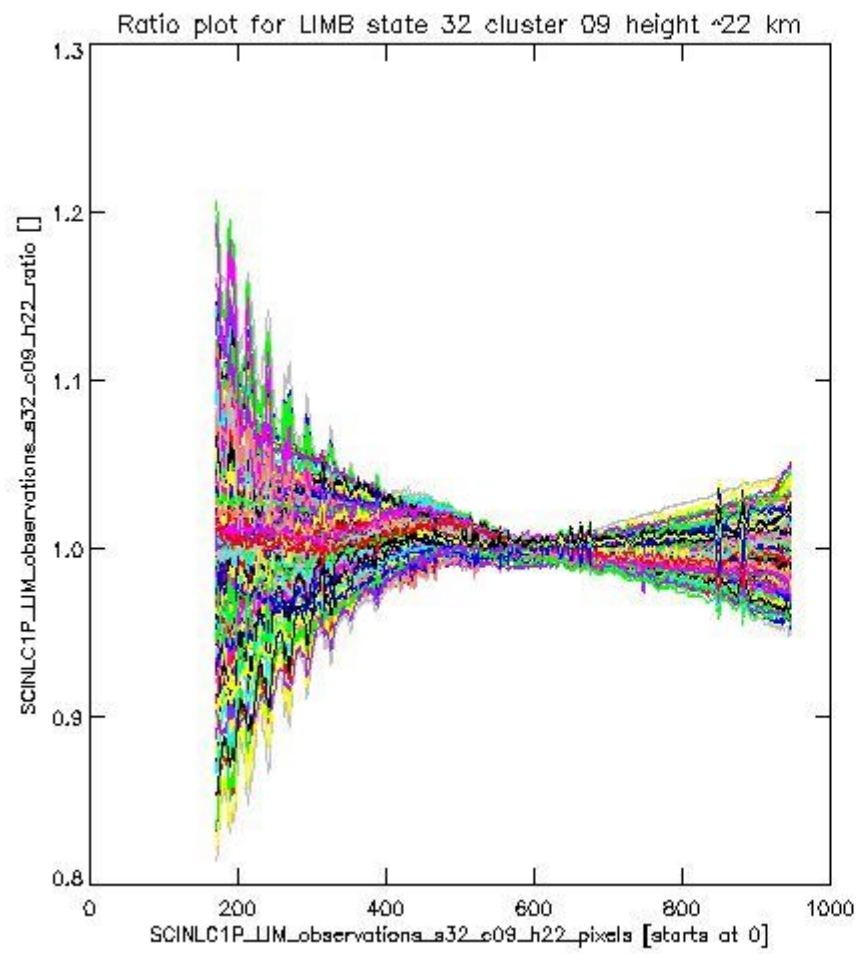
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_11.PNG

**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	09MAY2011 00:29:44.115
Start time of last sample	09MAY2011 23:59:04.262
Reference period start time	10APR2011 01:35:07.075
Reference period stop time	08MAY2011 23:17:00.298
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\_20110509\_12.PNG

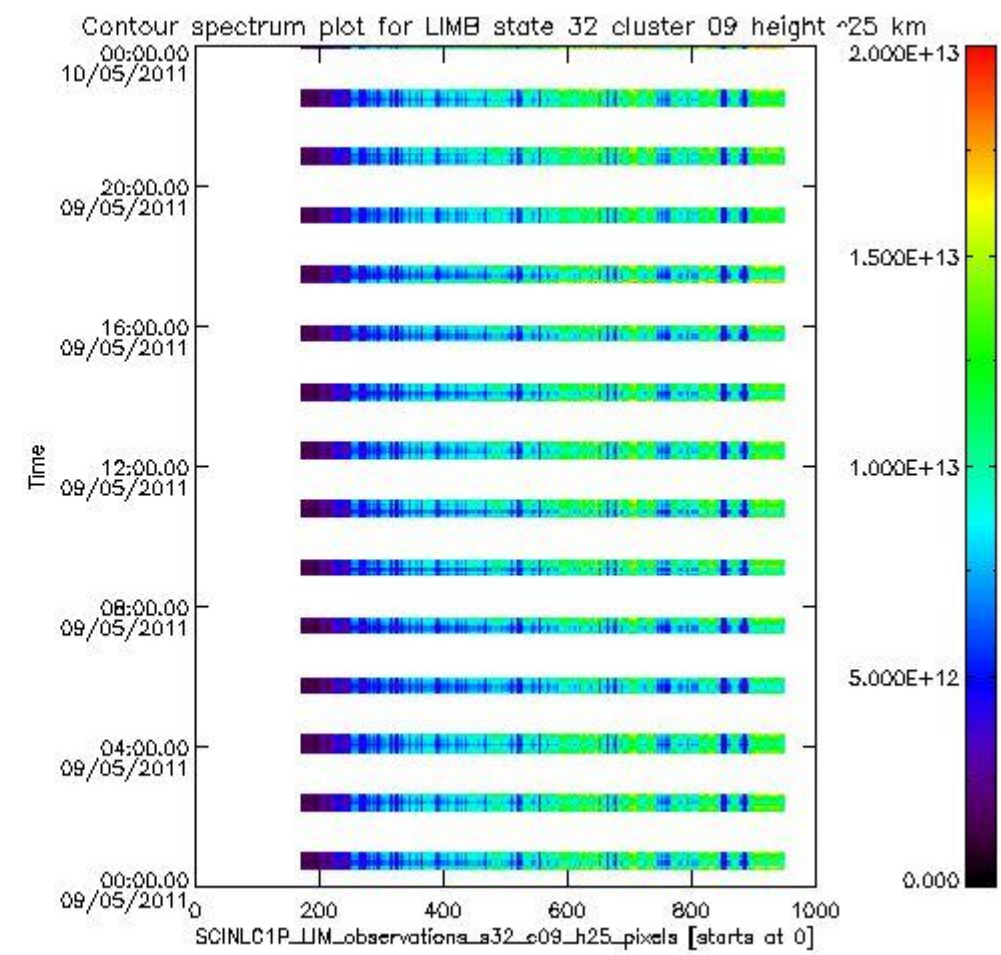
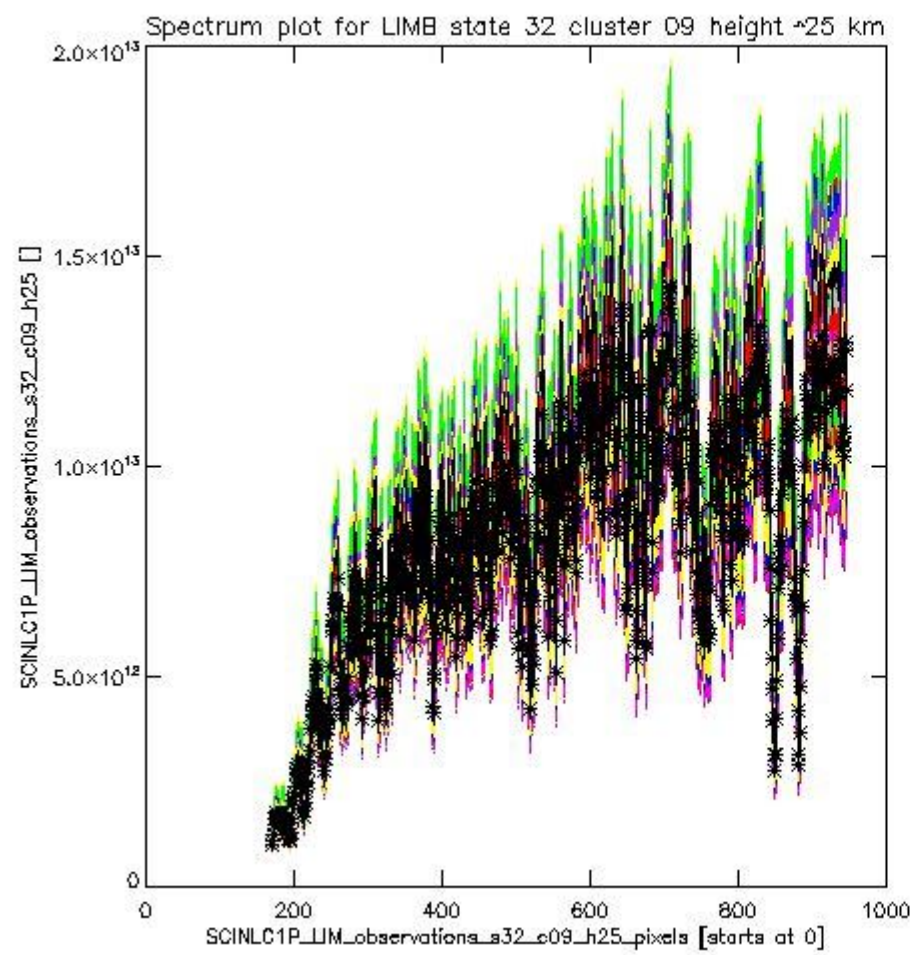


sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_13.PNG

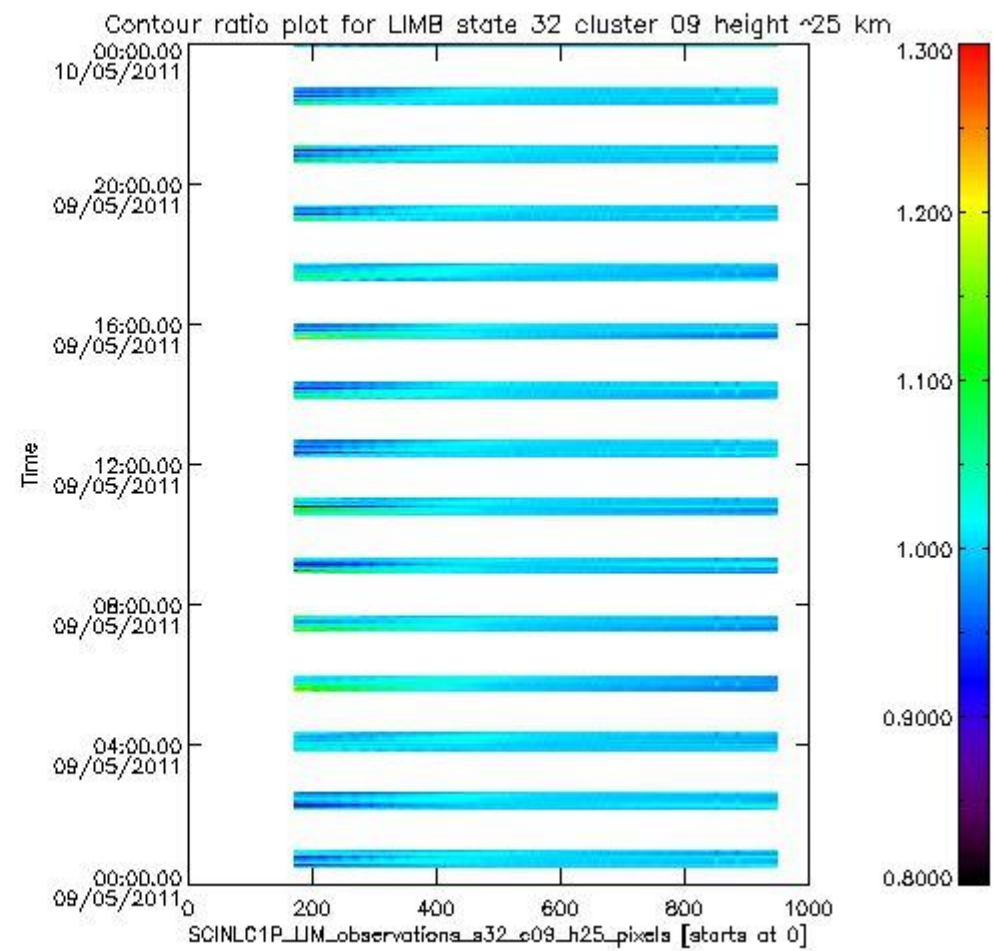
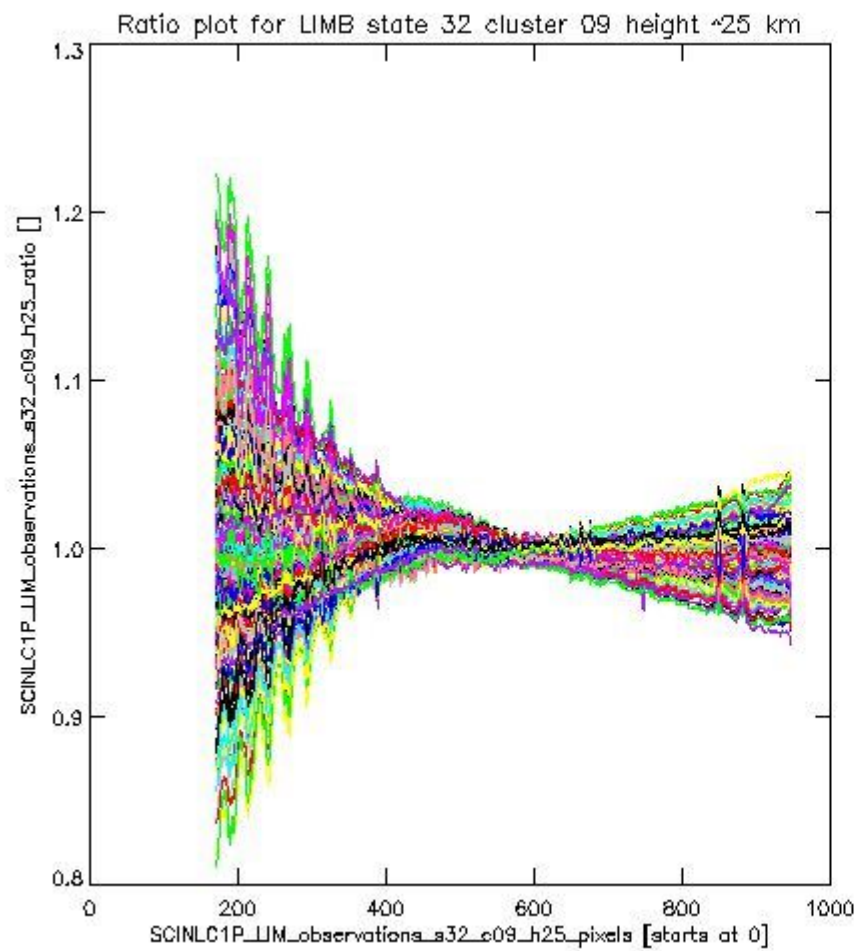
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	09MAY2011 00:29:44.115
Start time of last sample	09MAY2011 23:59:04.262
Reference period start time	10APR2011 01:35:07.075
Reference period stop time	08MAY2011 23:17:00.298
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947





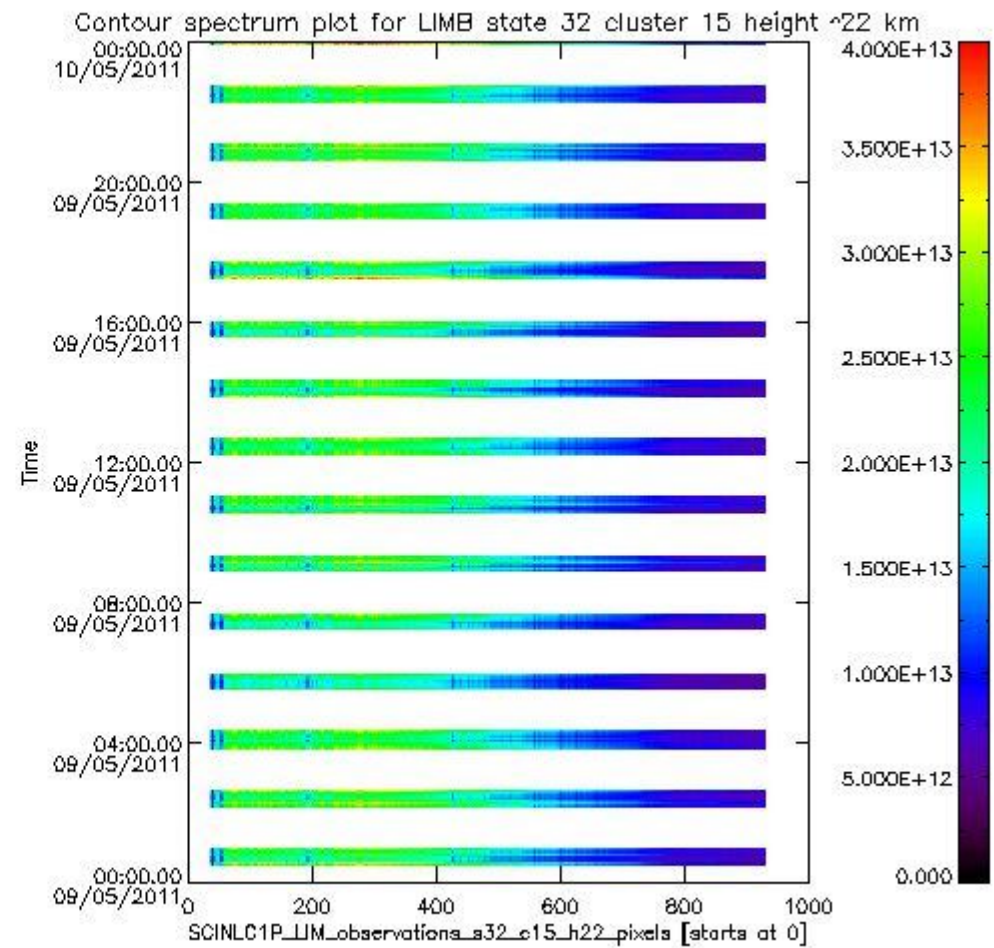
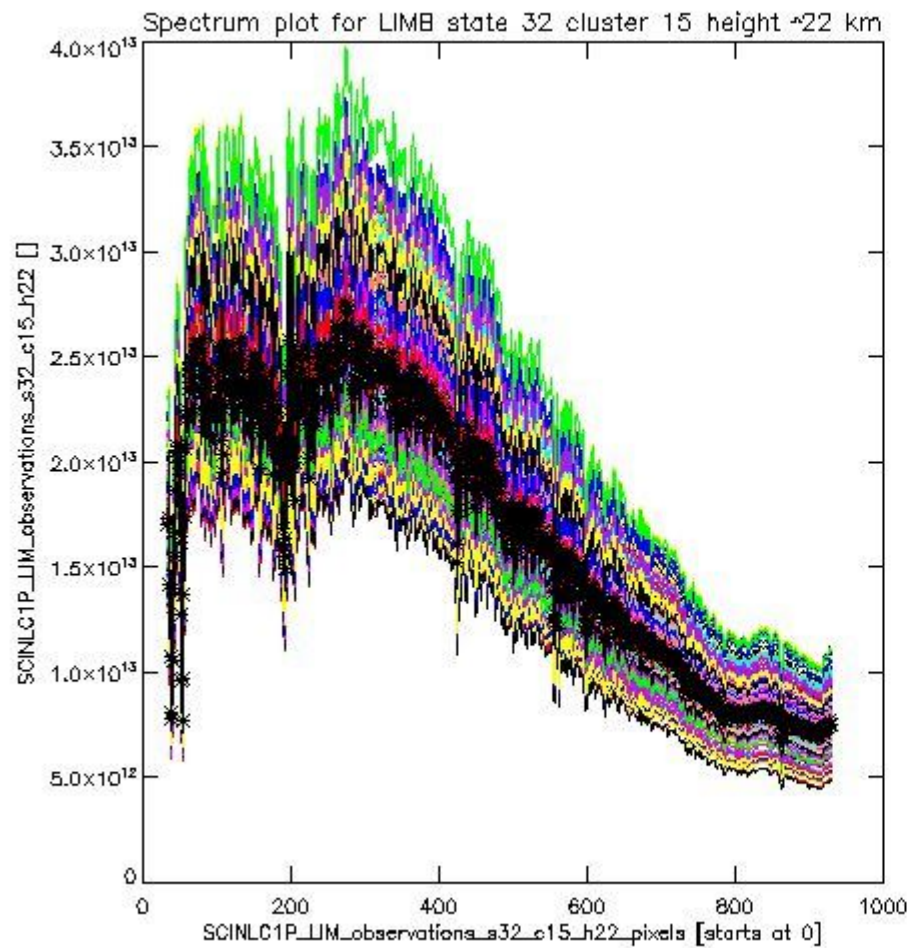
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_14.PNG



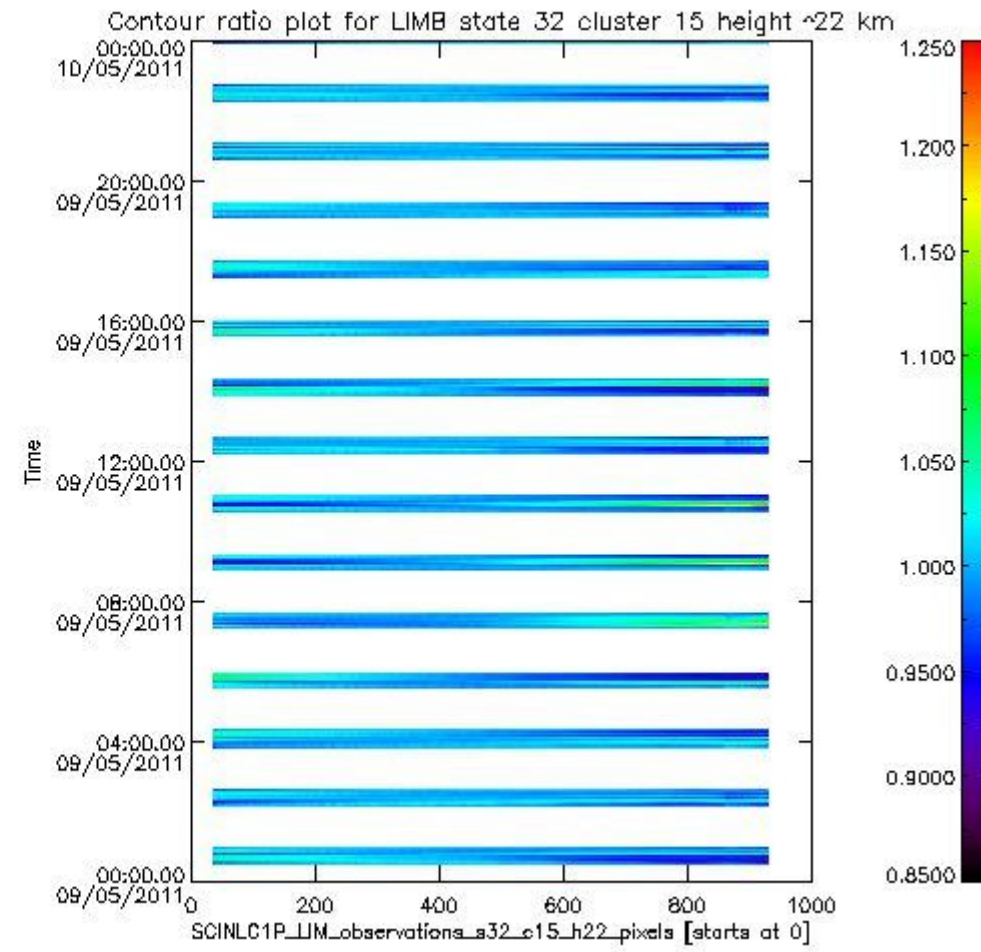
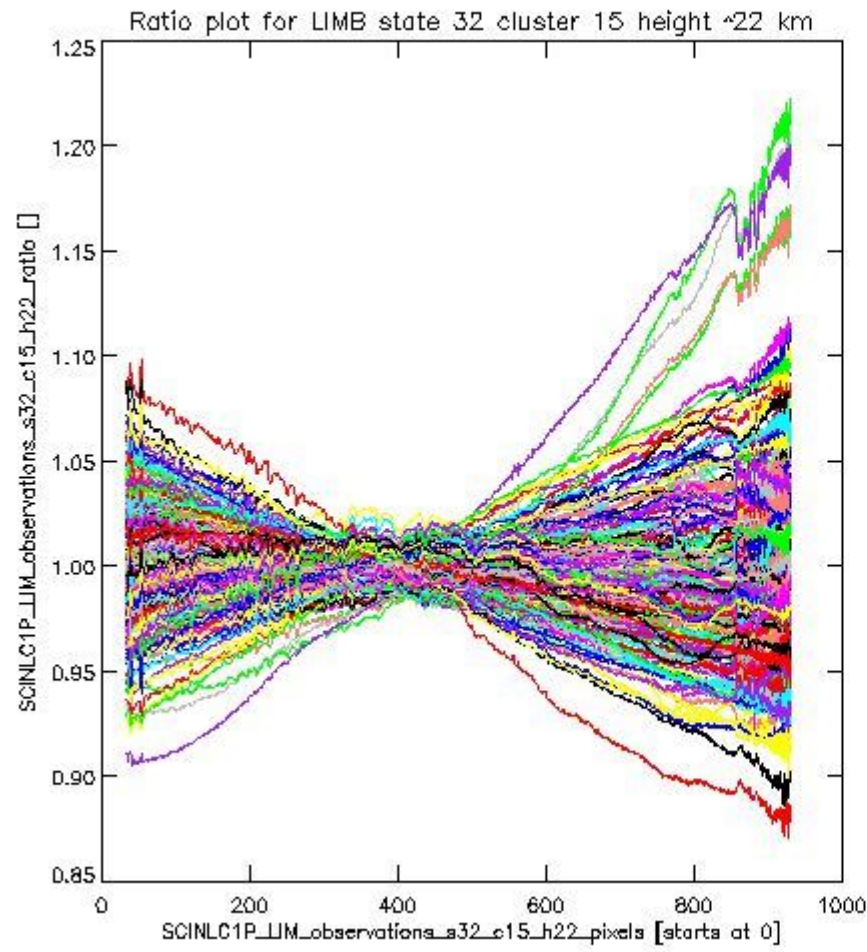
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_15.PNG

**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	09MAY2011 00:29:44.115
Start time of last sample	09MAY2011 23:59:04.262
Reference period start time	10APR2011 01:35:07.075
Reference period stop time	08MAY2011 23:17:00.298
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



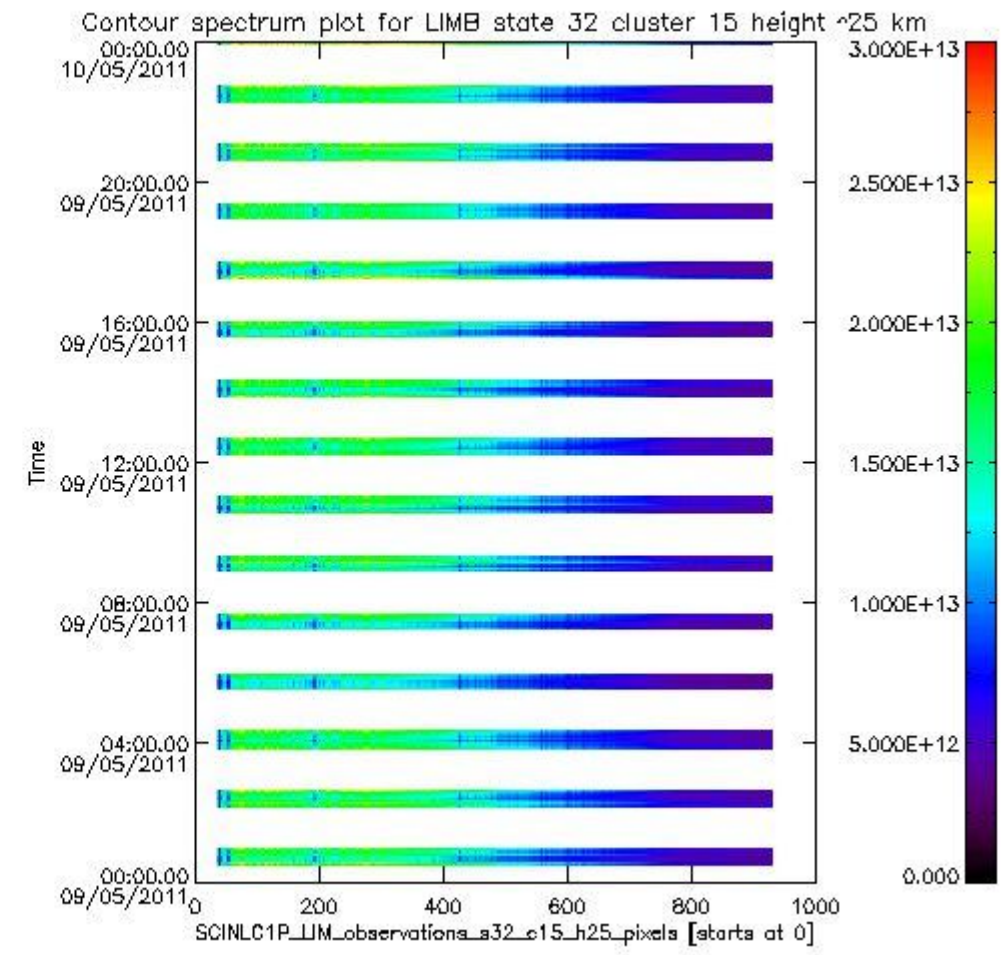
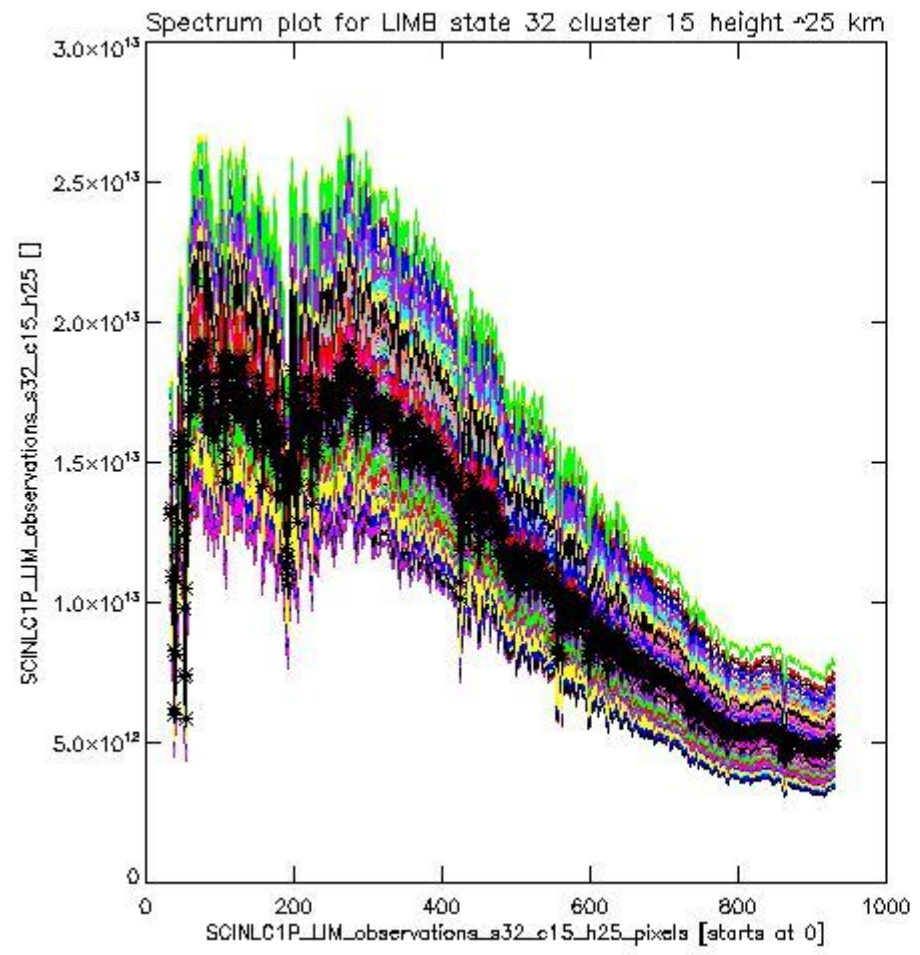
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_16.PNG



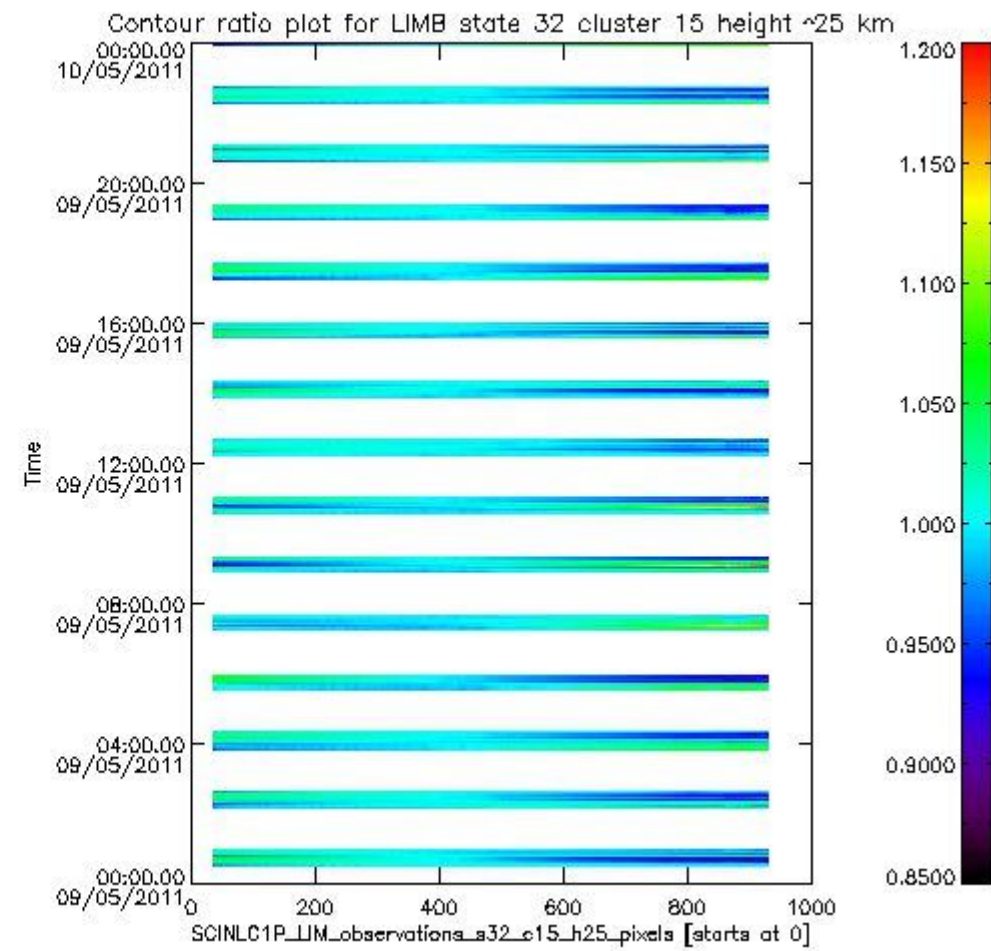
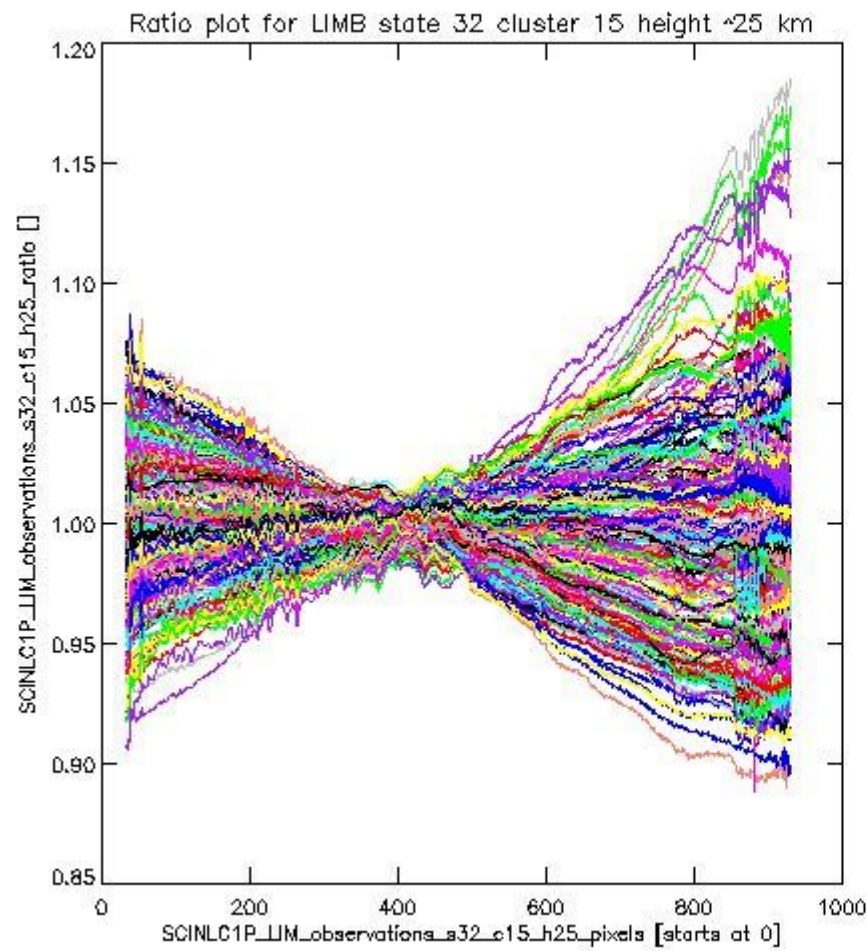
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_17.PNG

**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	09MAY2011 00:29:44.115
Start time of last sample	09MAY2011 23:59:04.262
Reference period start time	10APR2011 01:35:07.075
Reference period stop time	08MAY2011 23:17:00.298
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



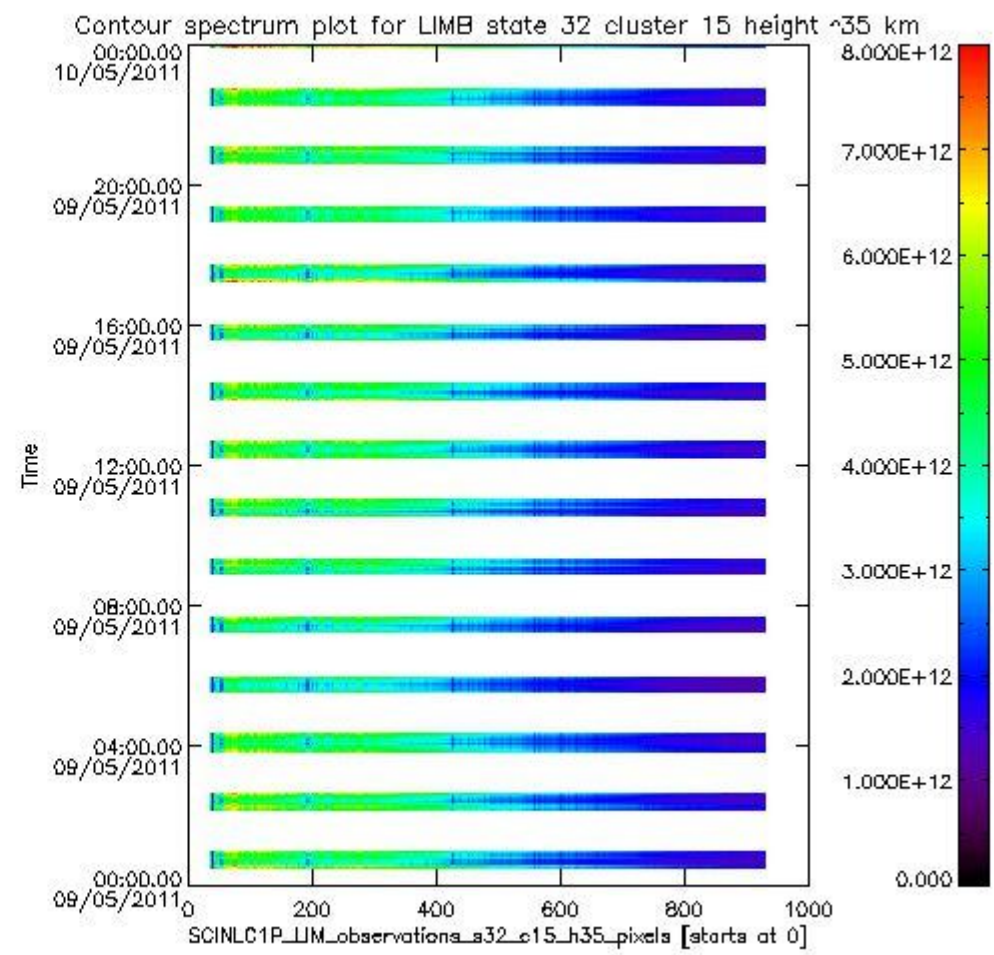
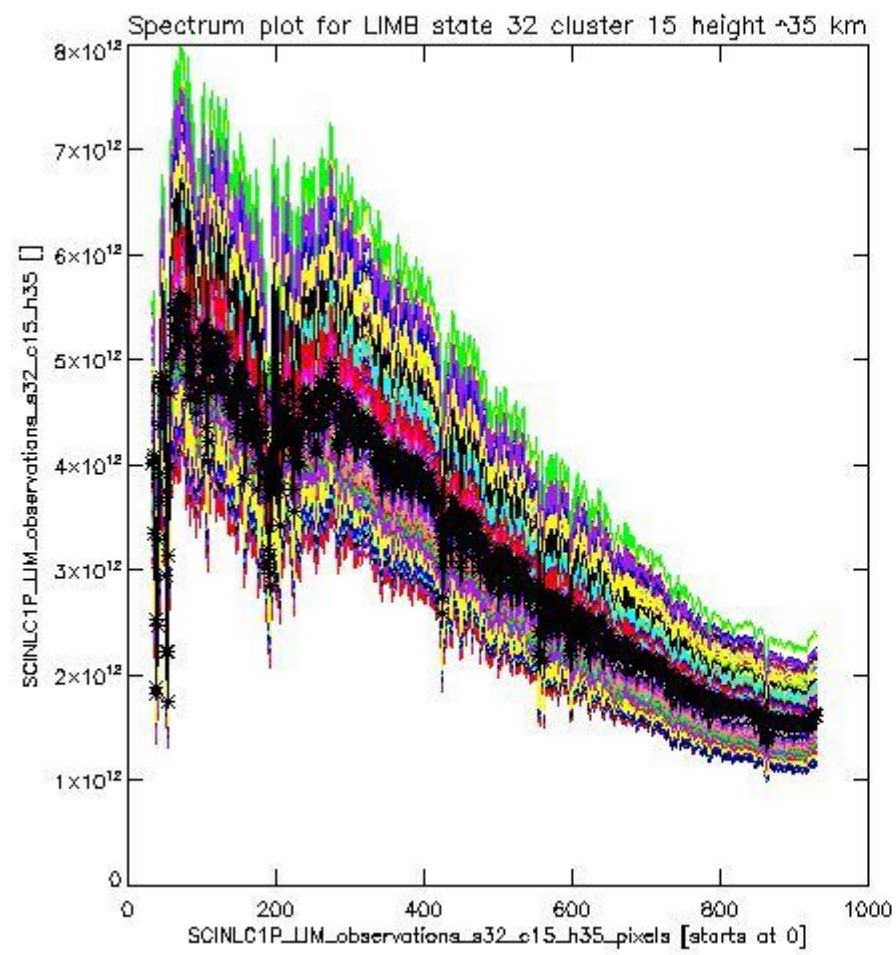
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_18.PNG



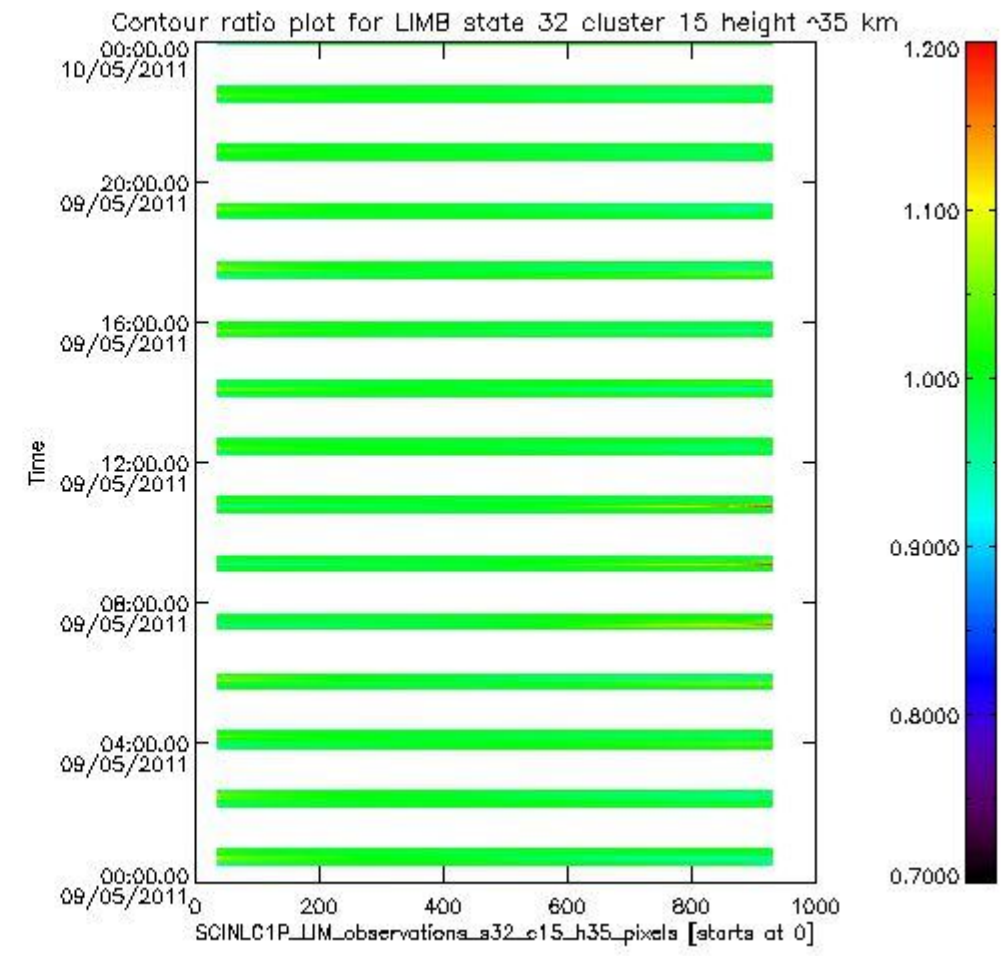
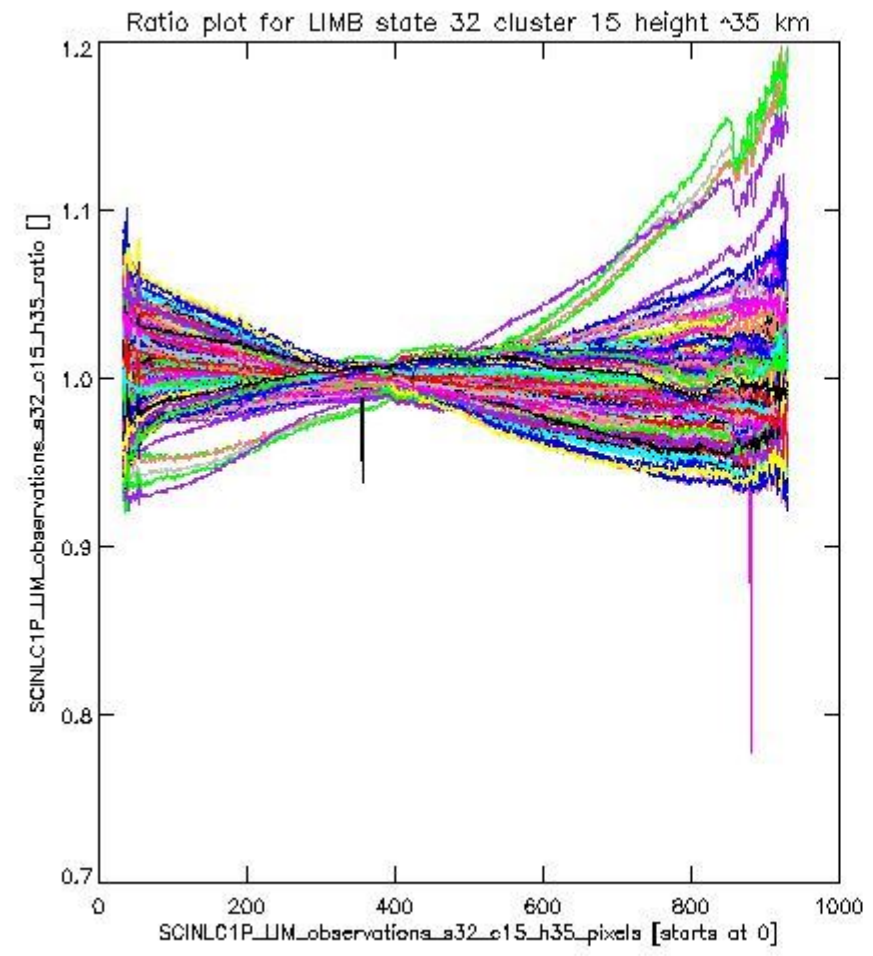
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_19.PNG

**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	09MAY2011 00:29:44.115
Start time of last sample	09MAY2011 23:59:04.262
Reference period start time	10APR2011 01:35:07.075
Reference period stop time	08MAY2011 23:17:00.298
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\_20110509\_20.PNG



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110509\_21.PNG



