

2. SCIAMACHY Daily Report for level 2 products

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2.1 General Info

This report contains a daily analysis on parameters extracted from SCIAMACHY level 2 data (The SCI_OL__2P product).

2.1.1 Report summary

The table below shows general characteristics of the data that are included into this report.

Item	Value
Report version	1.6 (28-07-2008)
Time of report generation	04AUG2009 16:04:48
Data source version	SCIA-OL/3.01-R
Processing scope for products	16JUL2009 00:00:00 to 17JUL2009 00:00:00
Start time of first product within scope	15JUL2009 23:09:21
Stop time of last product within scope	16JUL2009 23:33:12
Total number of level 2 products	15
Number of level 2 products with errors	0

2.1.2 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	Prod err	Fit summary
0	SCI_OL__2PRDPA20090715_230921_000033252080_00431_38561_3405.N1	15JUL2009 23:09:21	16JUL2009 00:04:47	0	GOOD
1	SCI_OL__2PRDPA20090716_004957_000033122080_00432_38562_3406.N1	16JUL2009 00:49:57	16JUL2009 01:45:10	0	GOOD
2	SCI_OL__2PRDPA20090716_023033_000033252080_00433_38563_3408.N1	16JUL2009 02:30:33	16JUL2009 03:25:59	0	GOOD
3	SCI_OL__2PRDPA20090716_041109_000033122080_00434_38564_3407.N1	16JUL2009 04:11:09	16JUL2009 05:06:22	0	GOOD
4	SCI_OL__2PRDPA20090716_055145_000033252080_00435_38565_3409.N1	16JUL2009 05:51:45	16JUL2009 06:47:11	0	GOOD
5	SCI_OL__2PRDPA20090716_073222_000033122080_00436_38566_3410.N1	16JUL2009 07:32:22	16JUL2009 08:27:34	0	GOOD
6	SCI_OL__2PRDPA20090716_091258_000033252080_00437_38567_3411.N1	16JUL2009 09:12:58	16JUL2009 10:08:23	0	GOOD
7	SCI_OL__2PRDPA20090716_105334_000033122080_00438_38568_3412.N1	16JUL2009 10:53:34	16JUL2009 11:48:47	0	GOOD
8	SCI_OL__2PRDPA20090716_123410_000033252080_00439_38569_3413.N1	16JUL2009 12:34:10	16JUL2009 13:29:35	0	GOOD
9	SCI_OL__2PRDPA20090716_141446_000033122080_00440_38570_3414.N1	16JUL2009 14:14:46	16JUL2009 15:09:59	0	GOOD
10	SCI_OL__2PRDPA20090716_155522_000033252080_00441_38571_3415.N1	16JUL2009 15:55:22	16JUL2009 16:50:47	0	GOOD
11	SCI_OL__2PRDPA20090716_173615_000033122080_00442_38572_3422.N1	16JUL2009 17:36:15	16JUL2009 18:31:28	0	GOOD
12	SCI_OL__2PRDPA20090716_191651_000033252080_00443_38573_3423.N1	16JUL2009 19:16:51	16JUL2009 20:12:16	0	GOOD
13	SCI_OL__2PRDPA20090716_205710_000033122080_00444_38574_3419.N1	16JUL2009 20:57:10	16JUL2009 21:52:23	0	GOOD
14	SCI_OL__2PRDPA20090716_223746_000033252080_00445_38575_3424.N1	16JUL2009 22:37:46	16JUL2009 23:33:12	0	GOOD

2.2 Product Quality Indicators

2.2.1 Cloud parameters

This is a new section that shows information about the cloud parameters estimation, in particular cloud fractions and cloud top height. IMPORTANT NOTE: The contents and layout of this section are still being validated. Please use with caution.

General statistics:

Total number of cloud data DSRs: 144923

Total number of cloud data DSRs with good quality flag (=0): 144923 (100.0 %)

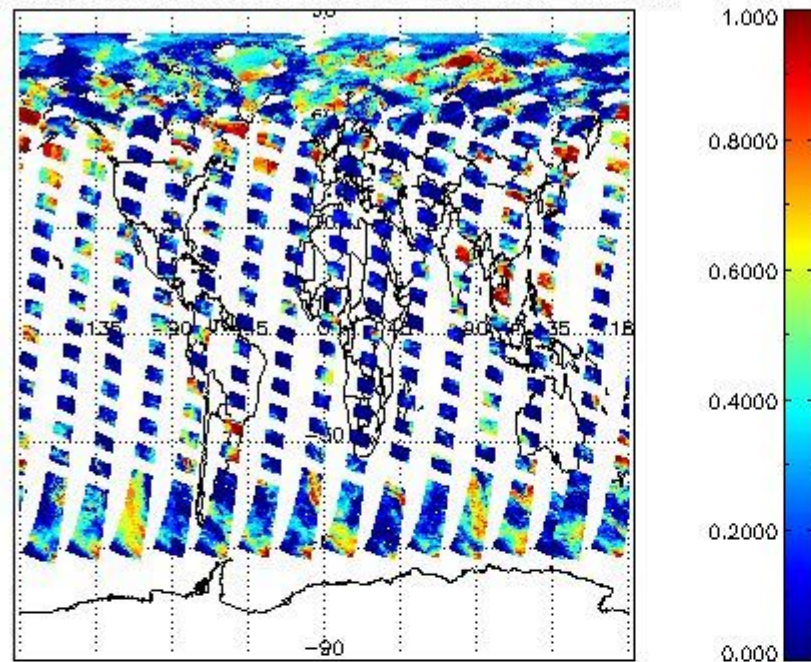
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	144923	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	144923	0.17052	0.12500	0.12500	0.25000	0.060151	s
CL_FRAC	144923	0.27233	0.19498	0.0000	1.0000	0.27461	-
CL_FRAC_ERR	144923	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	144923	5.4568	4.0000	4.0000	8.0000	1.9248	
PMD_READ_CL[0]	144923	0.14522	0.0000	0.0000	8.0000	0.87495	-
PMD_READ_CL[1]	144923	1.9476	0.0000	0.0000	8.0000	2.6872	-
CL_TOP_HEIGHT	126009	3.2224	1.2423	0.0000	17.000	3.8219	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	126009	56.395	69.798	0.0000	101.00	45.635	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	144923	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	144923	11001101	11000100	11000000	11100000	3643.4	flags
AERO_ABSO_IND	144923	4.2226	4.9669	-5.4656	27.573	2.7902	
AERO_IND_DIAG	144923	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	144923	01011000	00000000	00000000	11000000	24495.	flags

Time and geolocation plots:

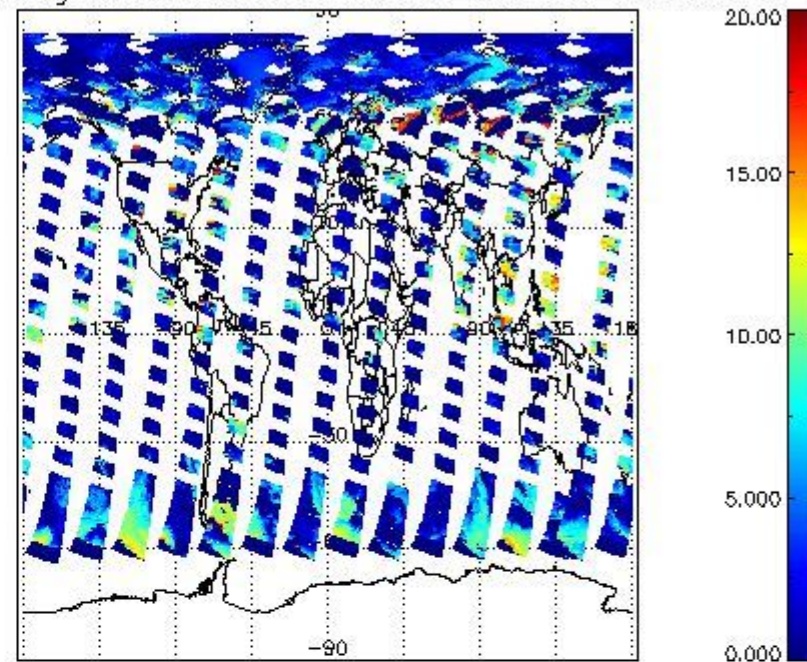
Plots are available for the following parameters:

Number	Data item ID
0	cl_frac
1	cl_top_height
2	cl_opt_depth
3	cloud_flags

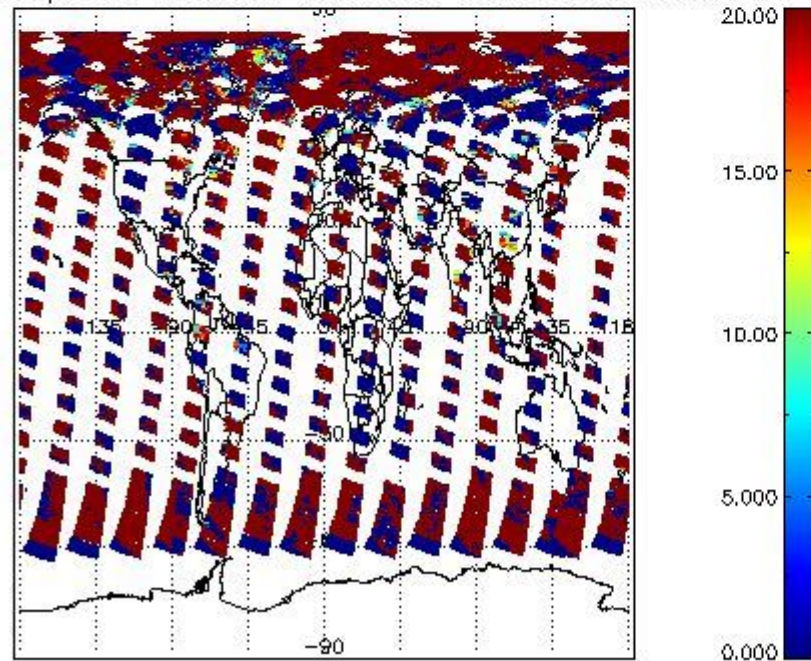
cL_frac for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



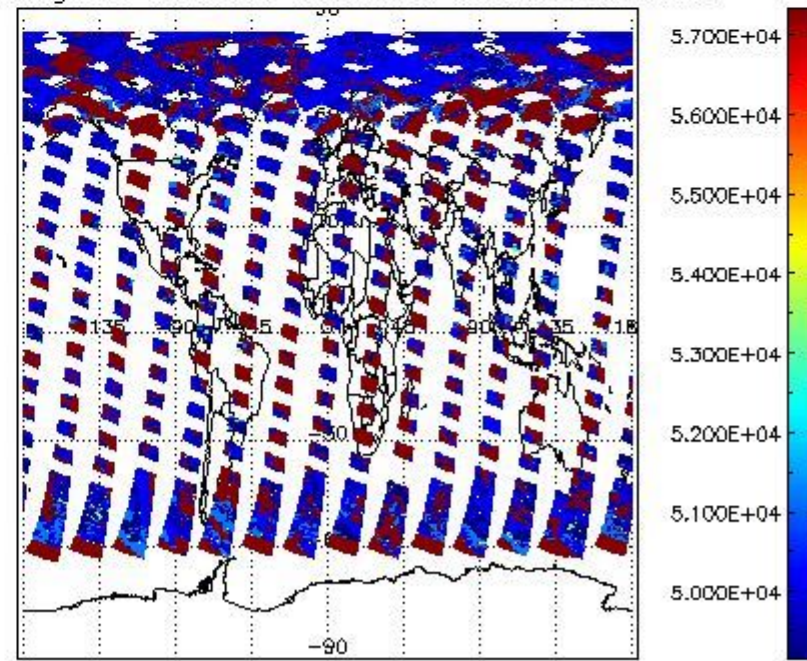
cL_top_height for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



cL_opt_depth for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



cloud_flags for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



2.2.2 Nadir

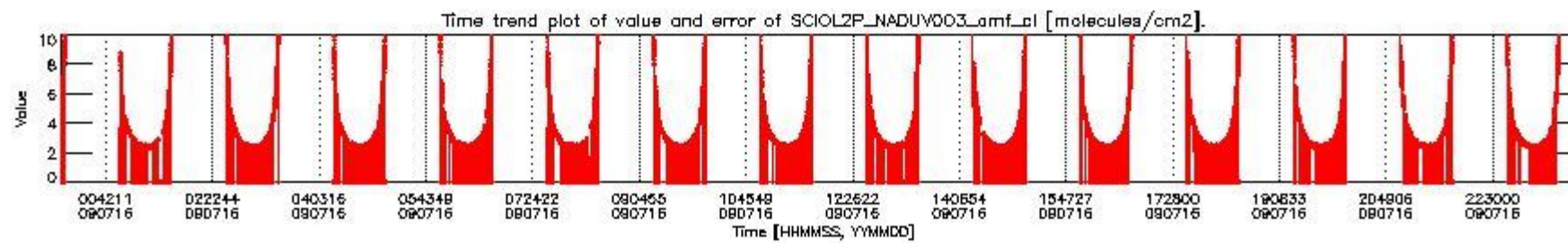
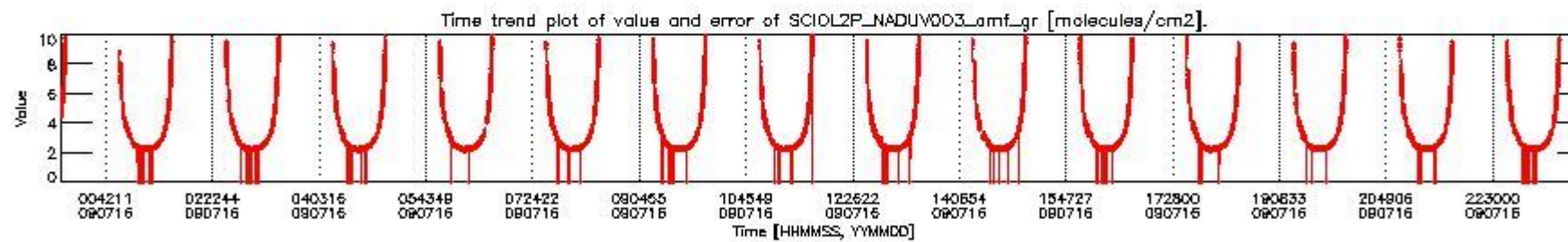
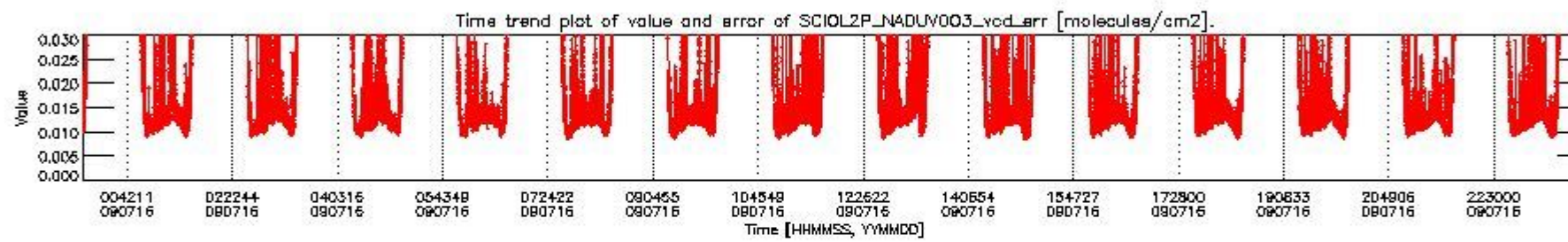
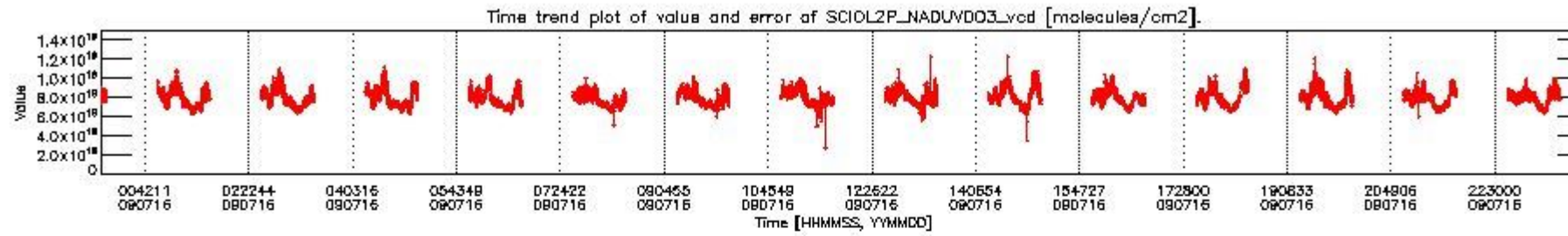
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

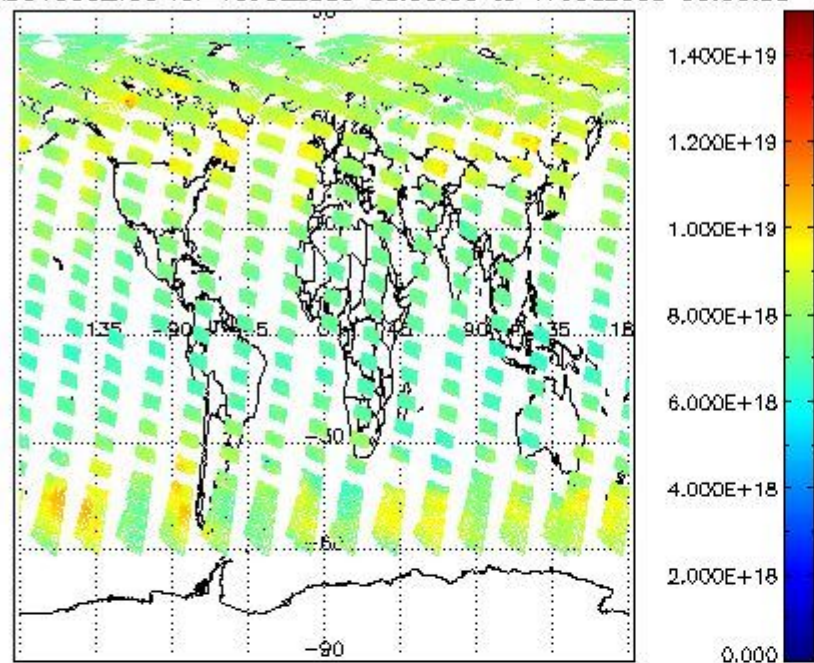
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

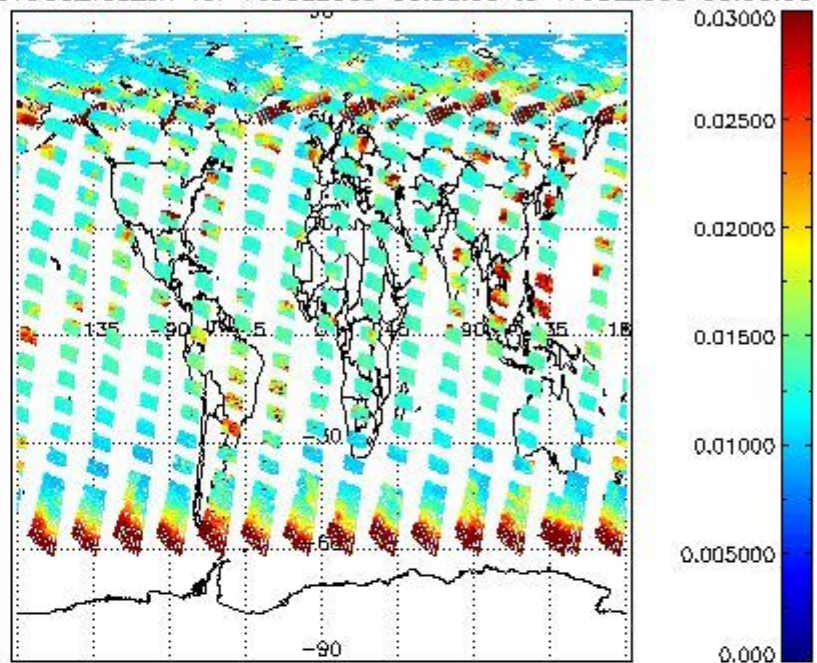
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the MPH.



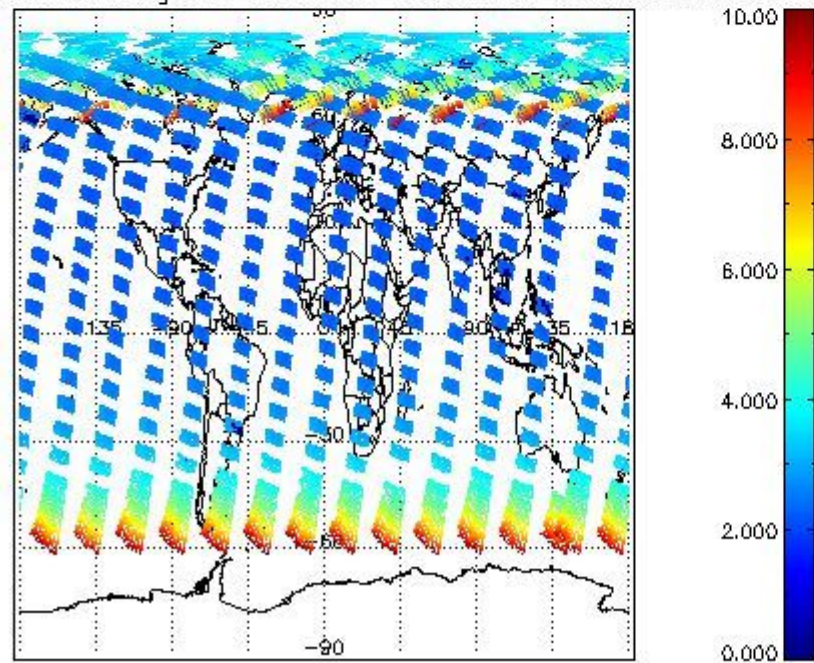
SCIOL2P_NADUV003_vcd for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



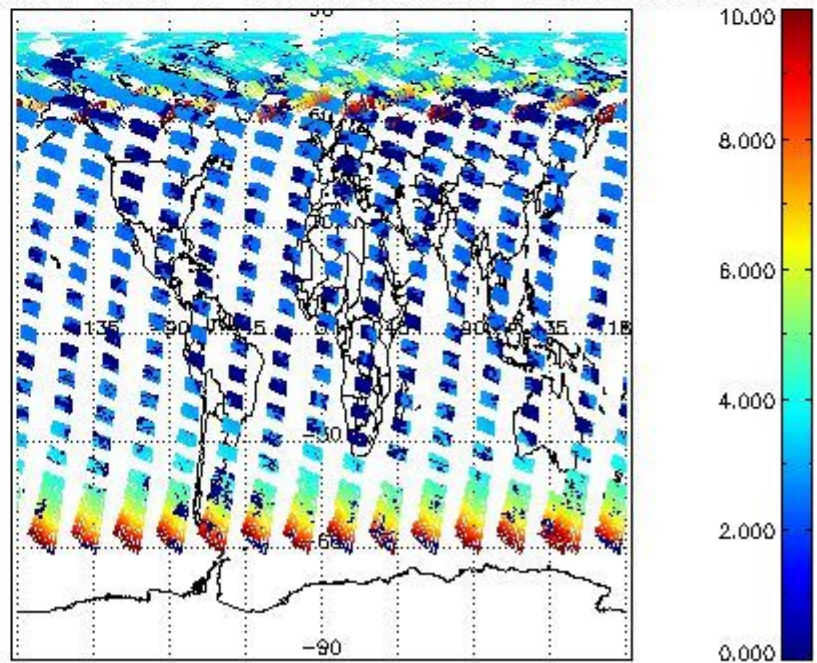
SCIOL2P_NADUV003_vcd_err for 16JUL2009 00:00:00 to 17JUL2009 00:00:00

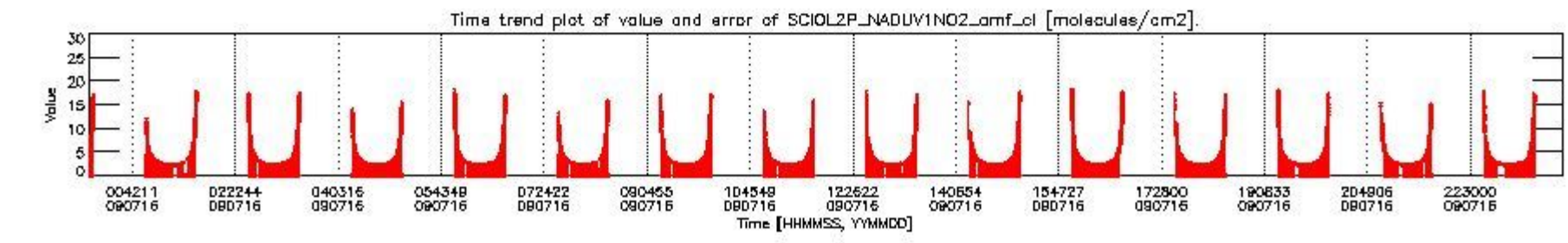
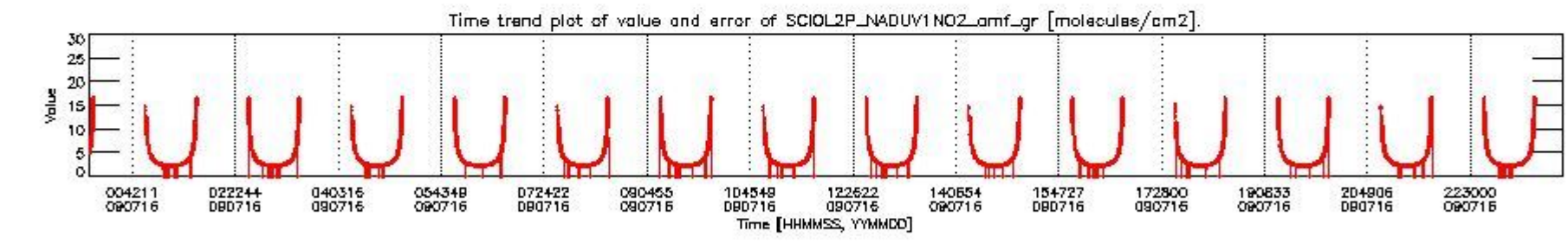
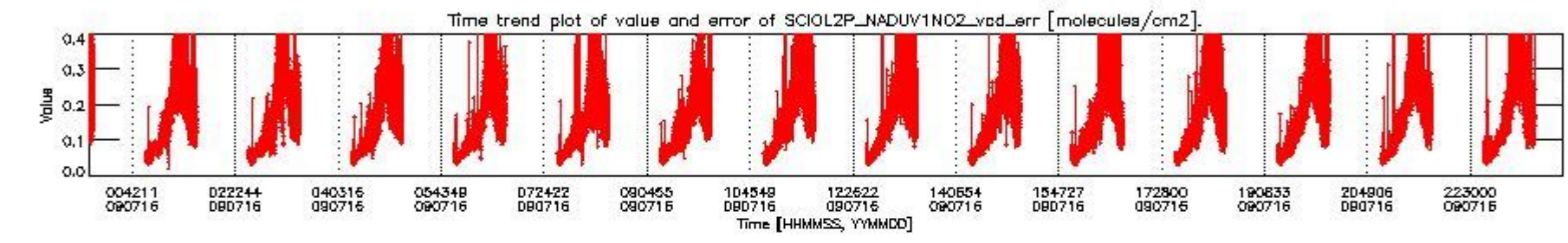
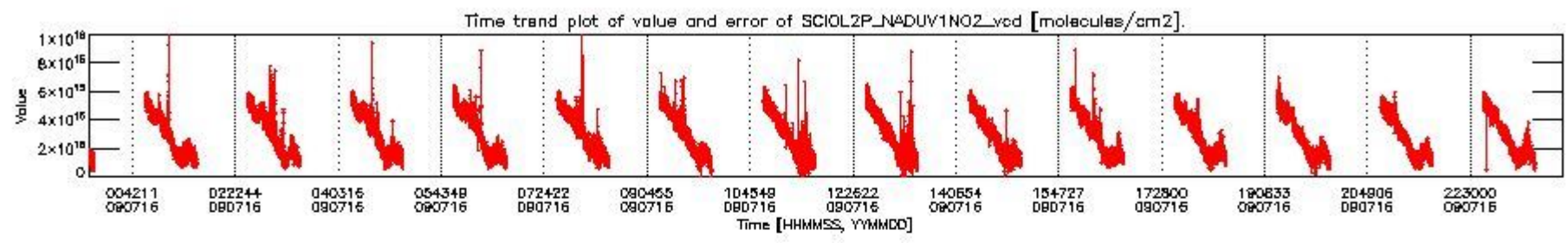


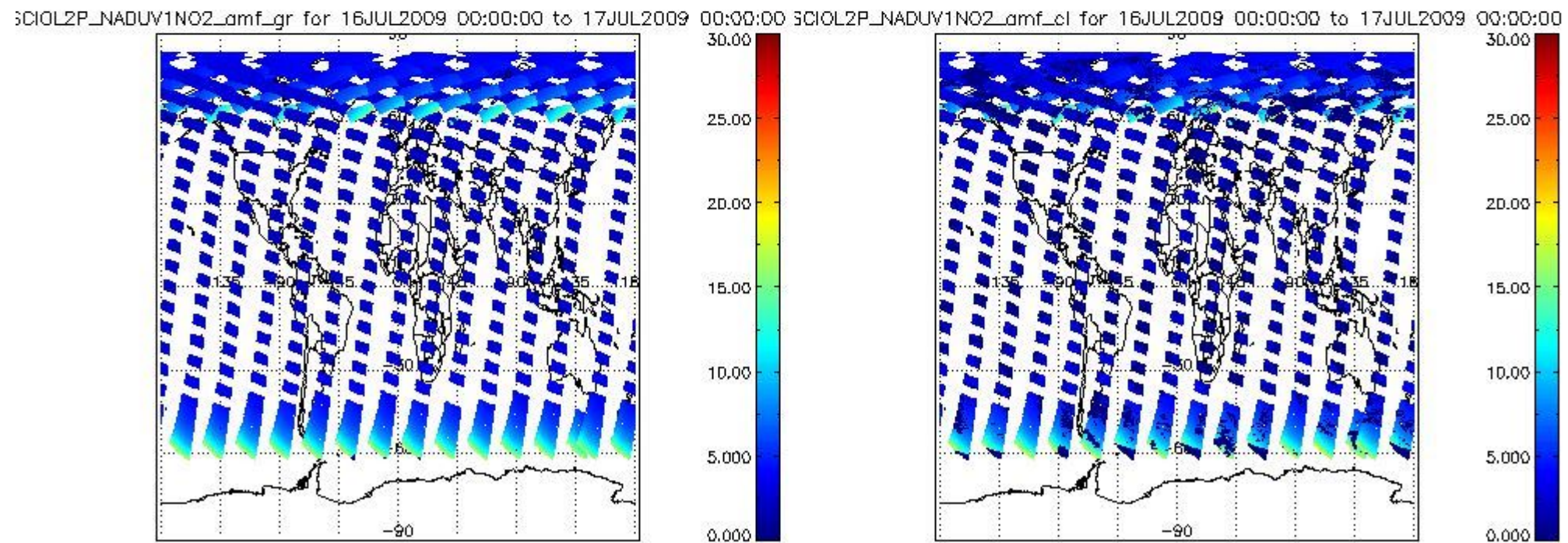
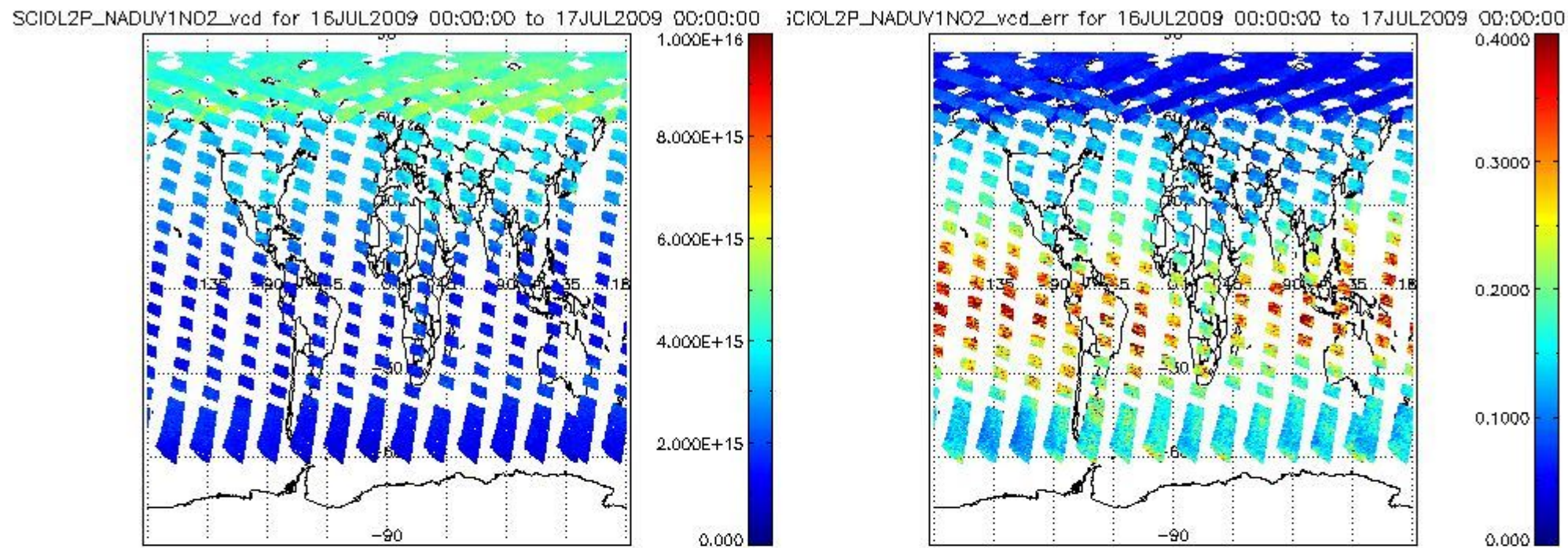
SCIOL2P_NADUV003_amf_gr for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 16JUL2009 00:00:00 to 17JUL2009 00:00:00







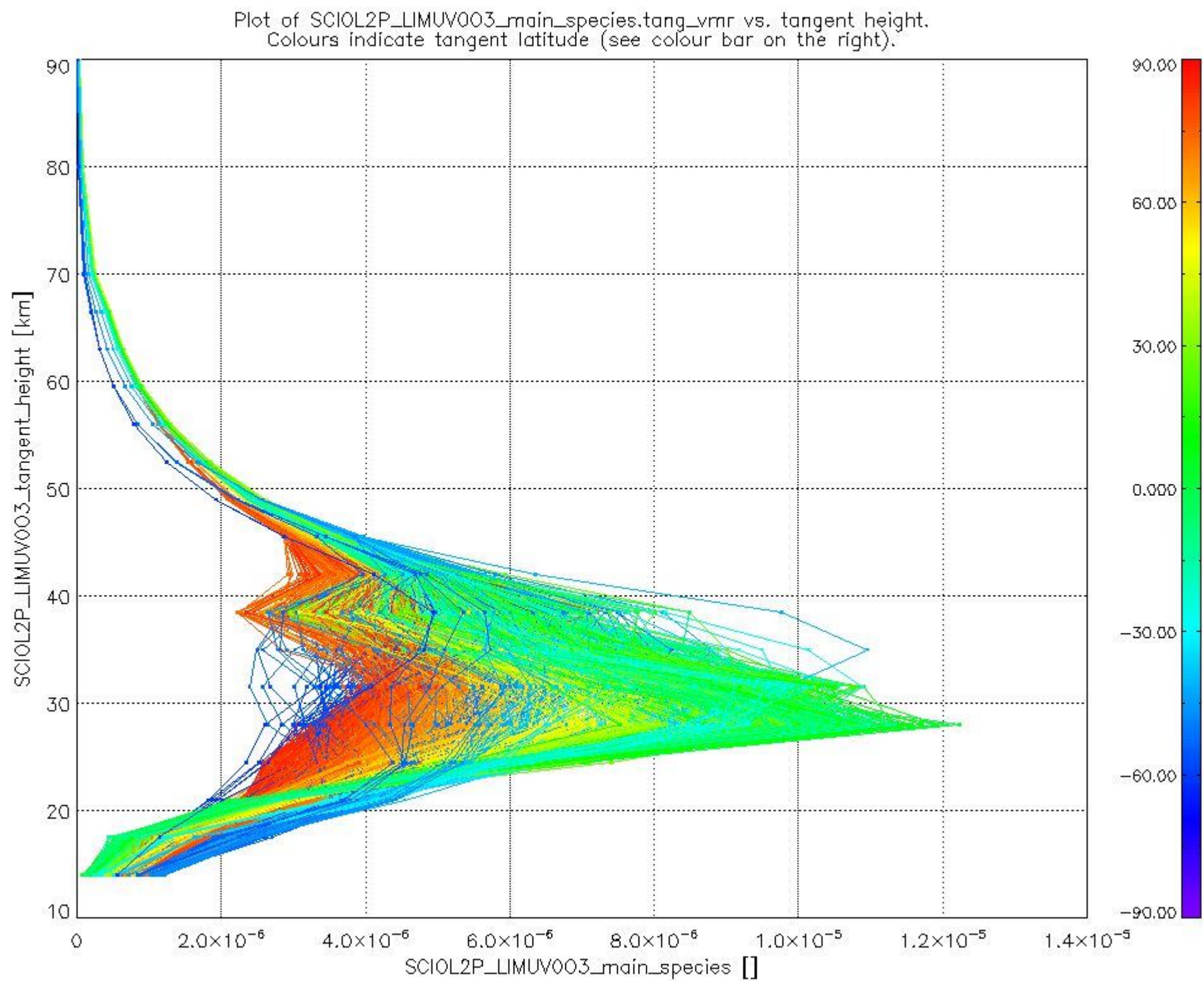
2.2.3 Limb

This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

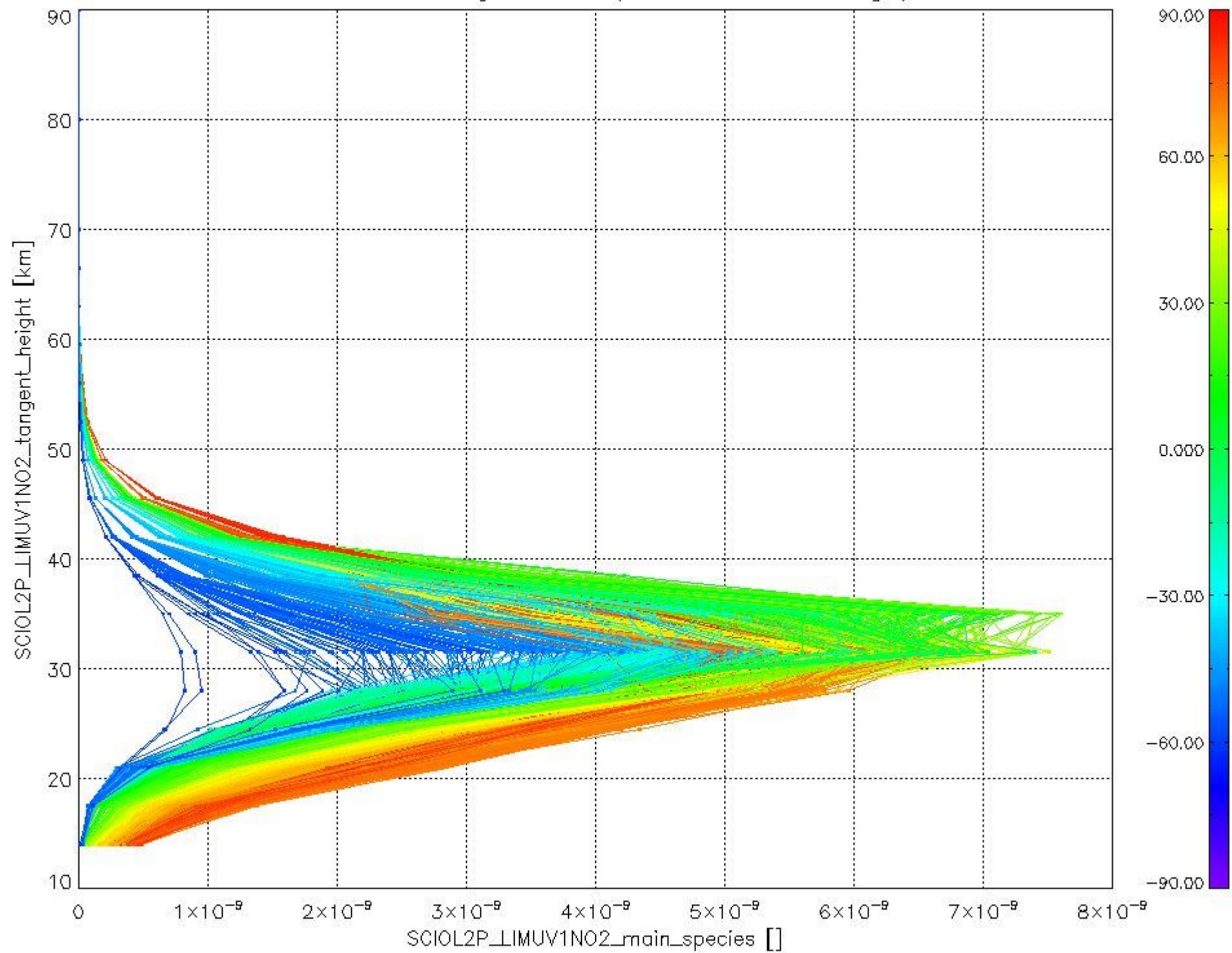
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.



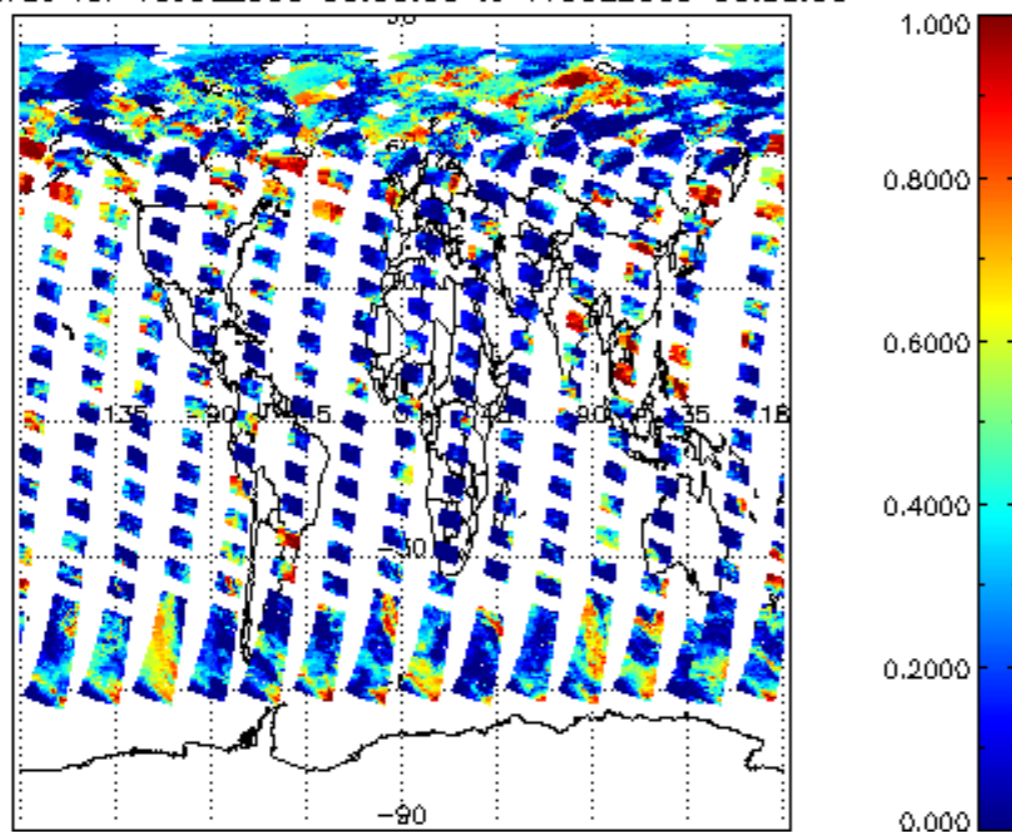
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



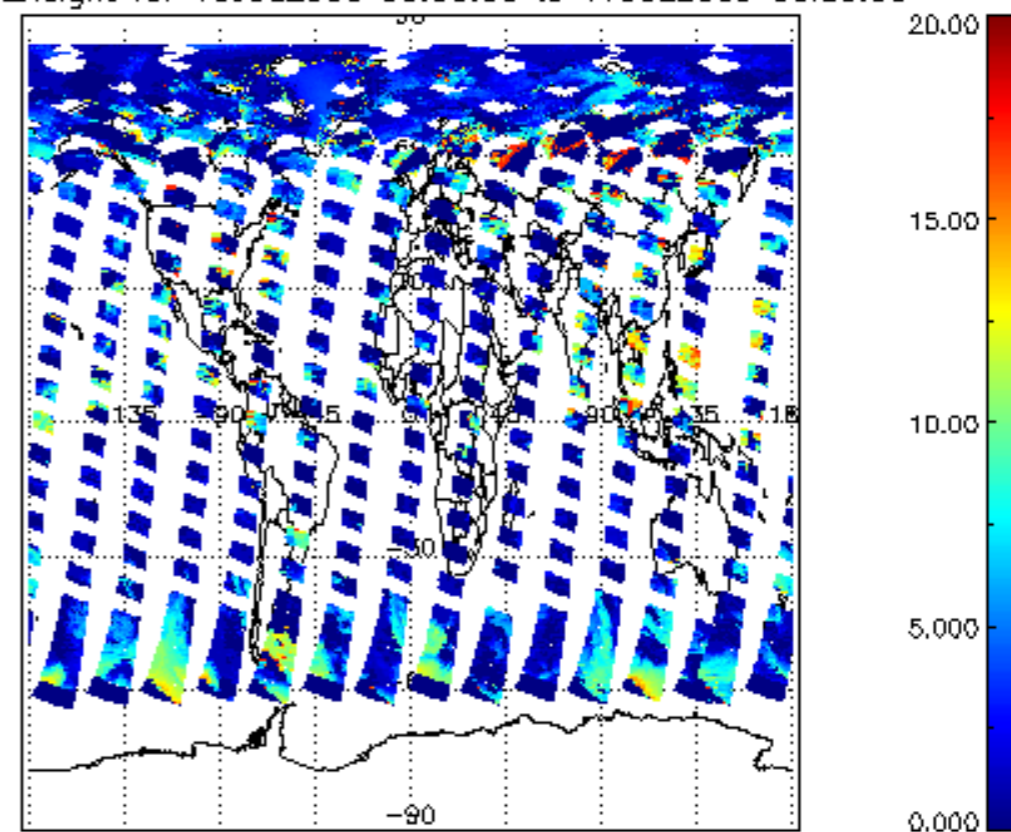
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN__AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

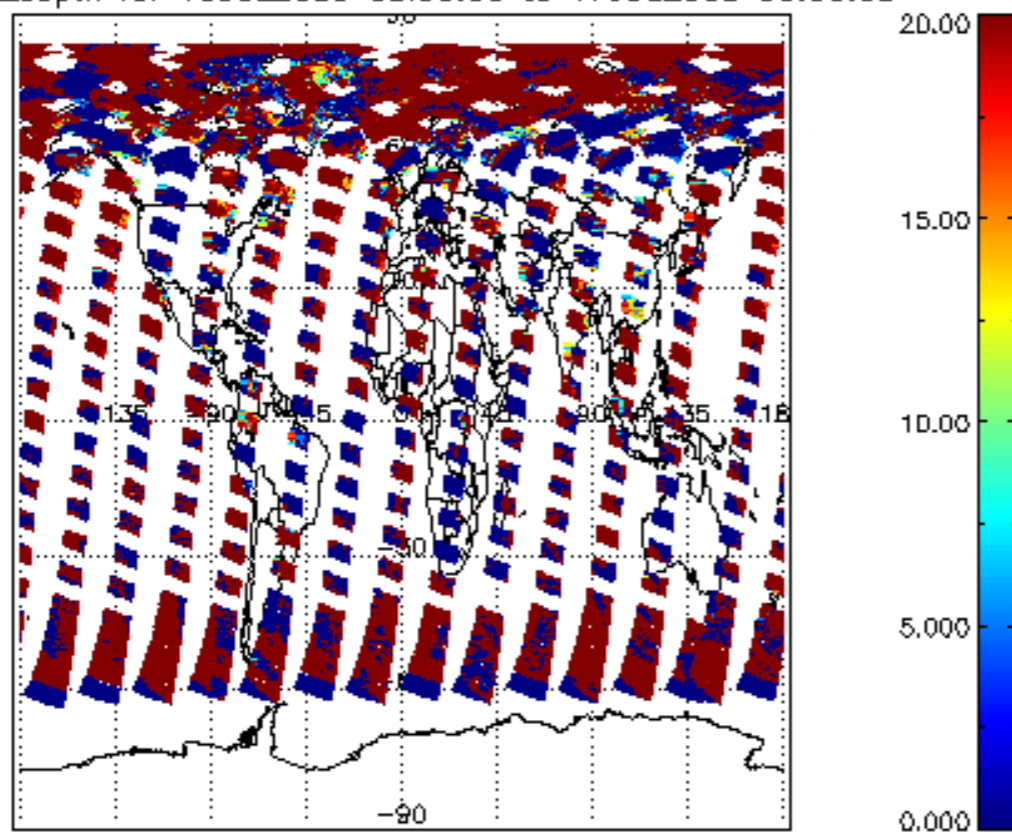
cl_frac for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



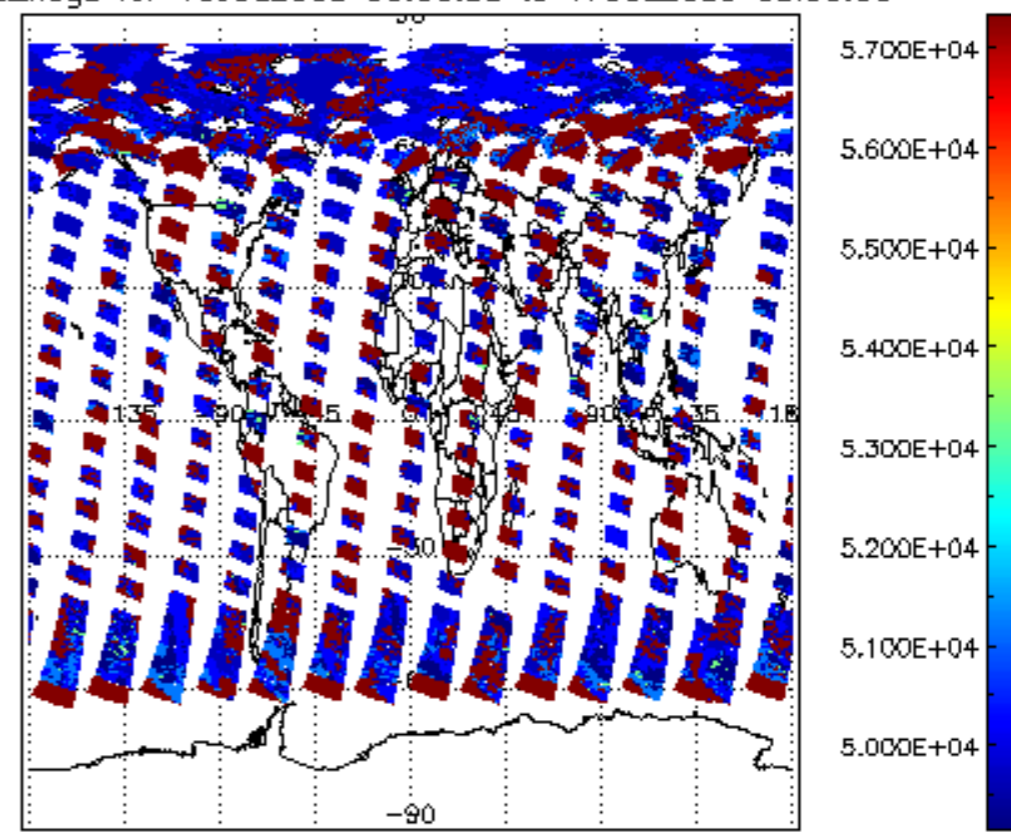
cl_top_height for 16JUL2009 00:00:00 to 17JUL2009 00:00:00

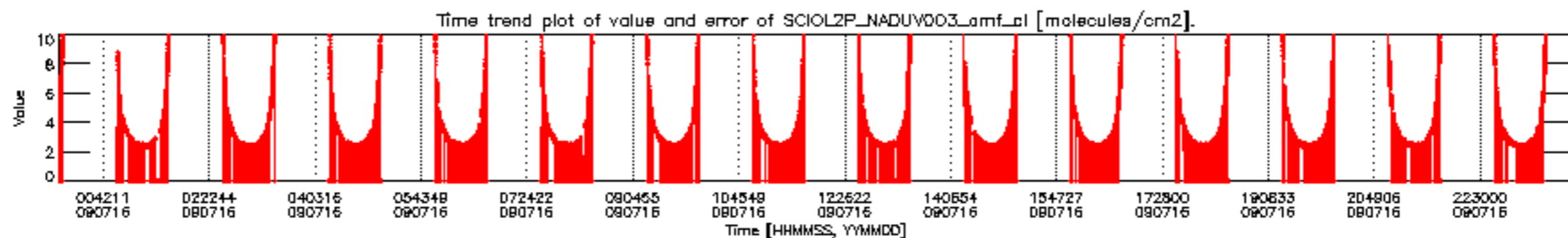
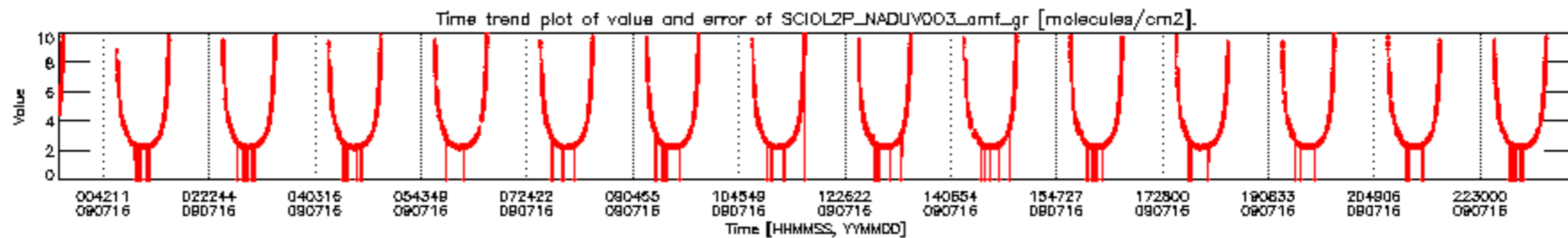
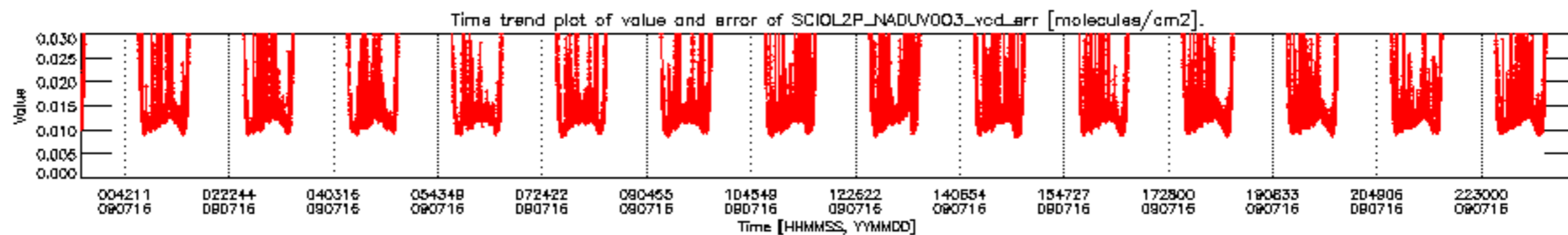
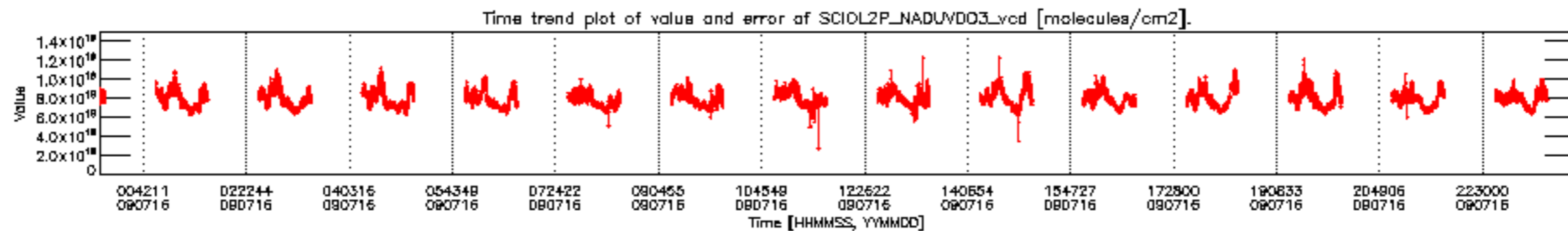


cl_lopt_depth for 16JUL2009 00:00:00 to 17JUL2009 00:00:00

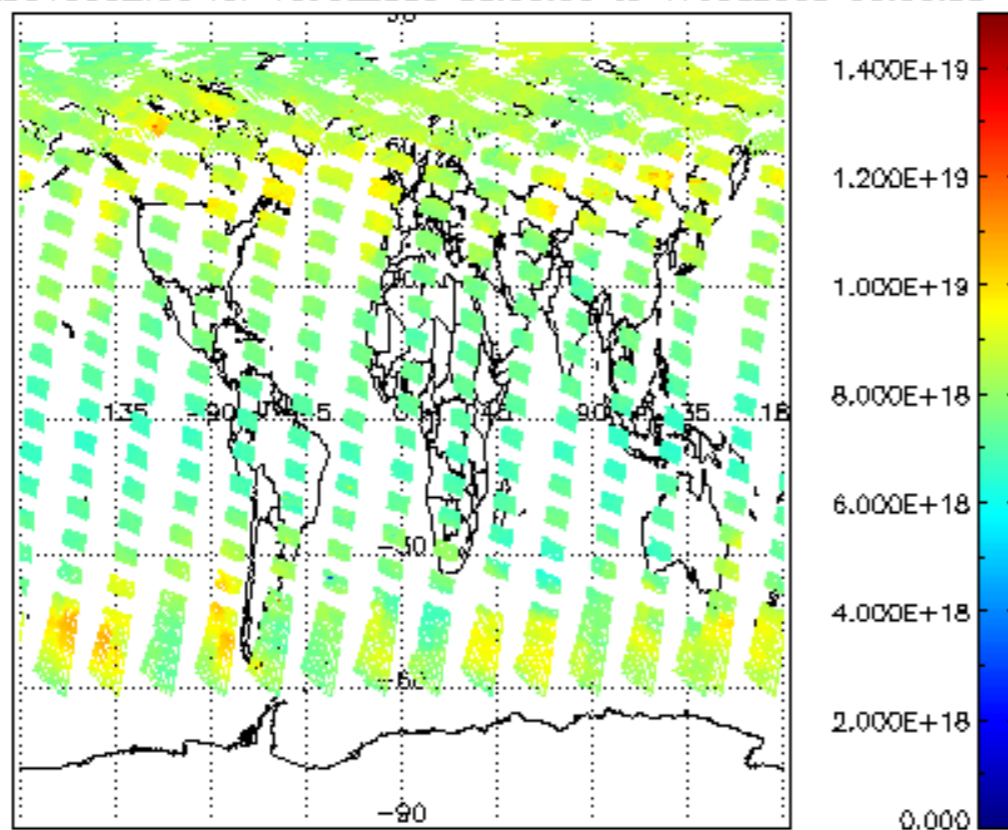


cloud_flags for 16JUL2009 00:00:00 to 17JUL2009 00:00:00

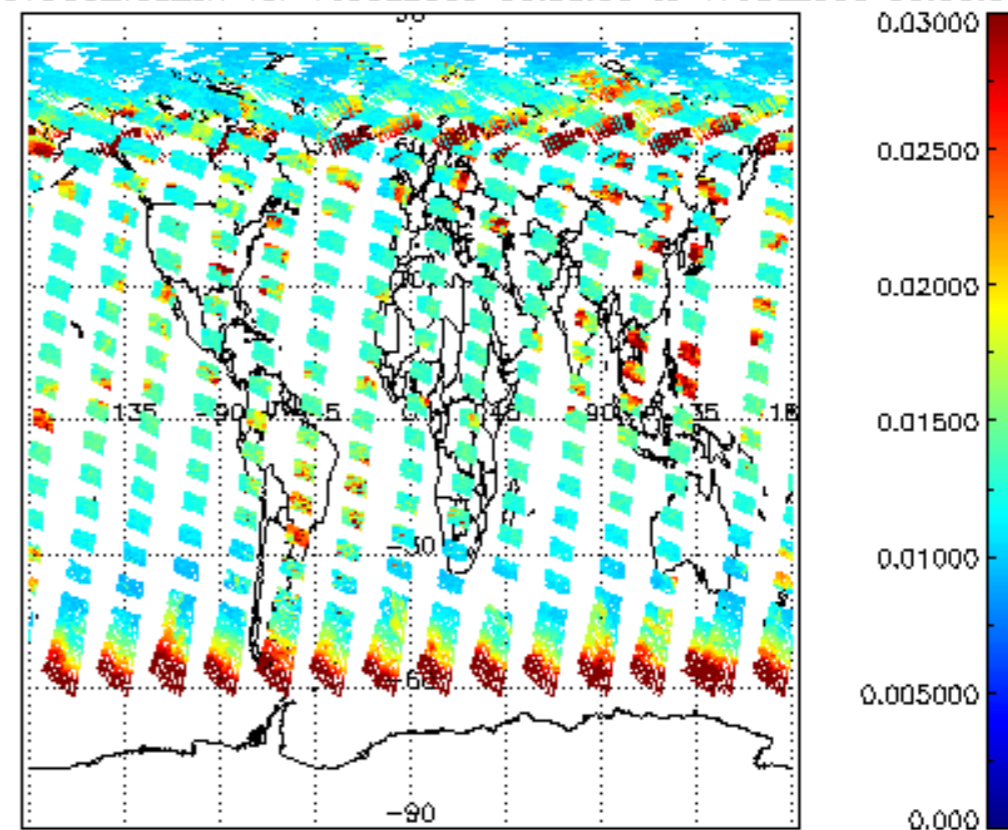




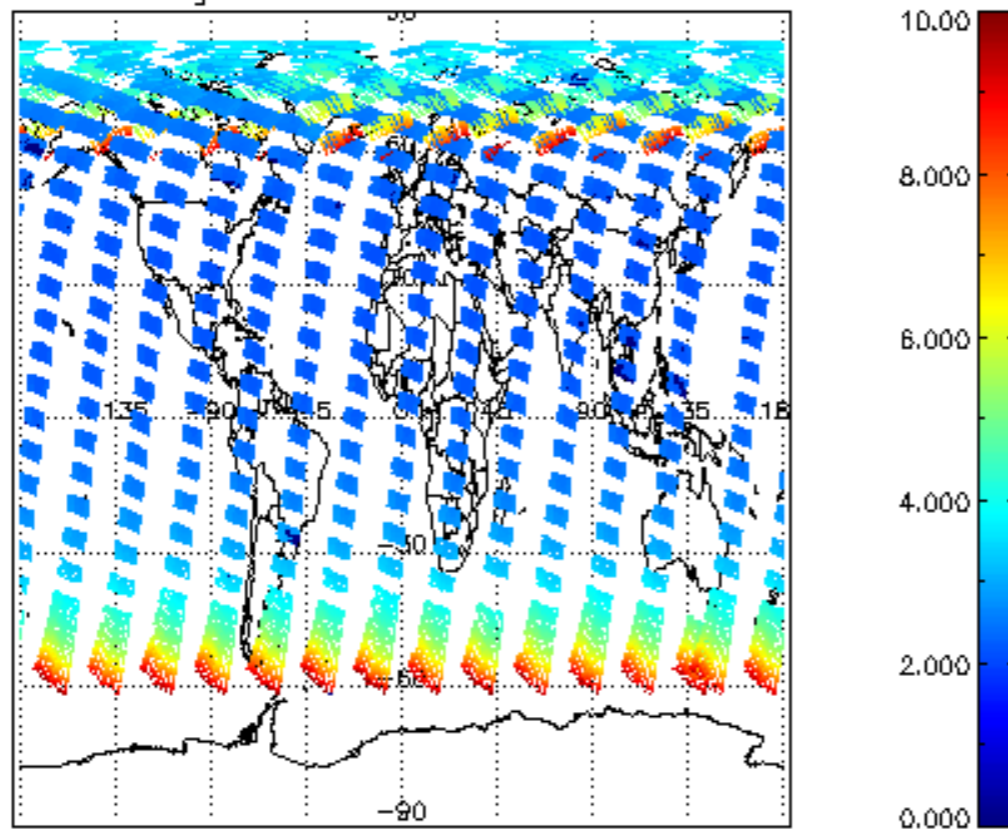
SCIOL2P_NADUV003_vcd for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



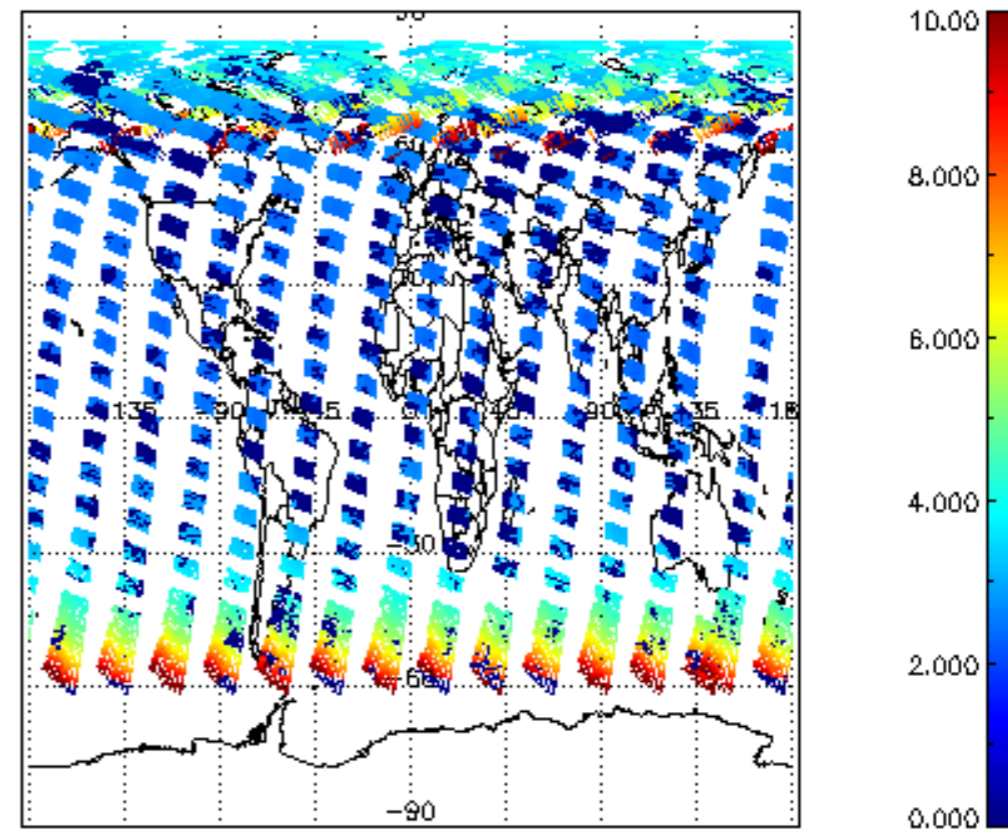
SCIOL2P_NADUV003_vcd_err for 16JUL2009 00:00:00 to 17JUL2009 00:00:00

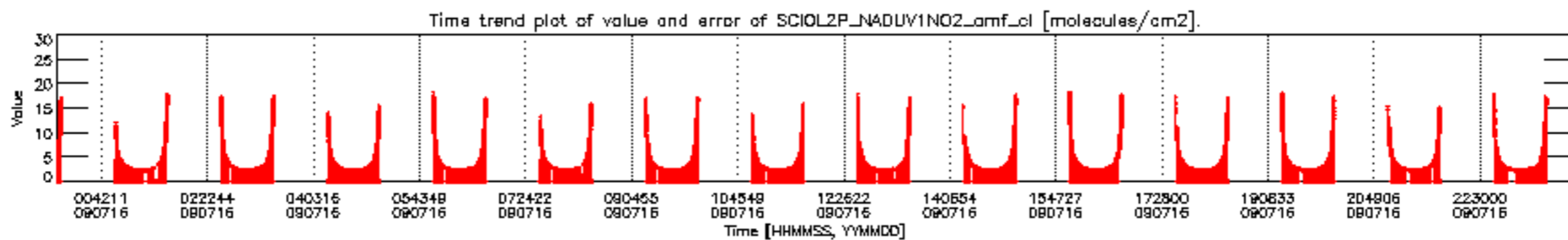
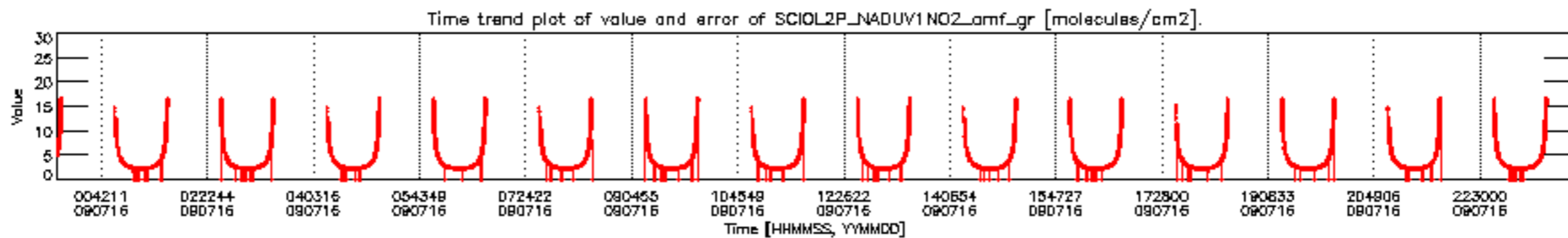
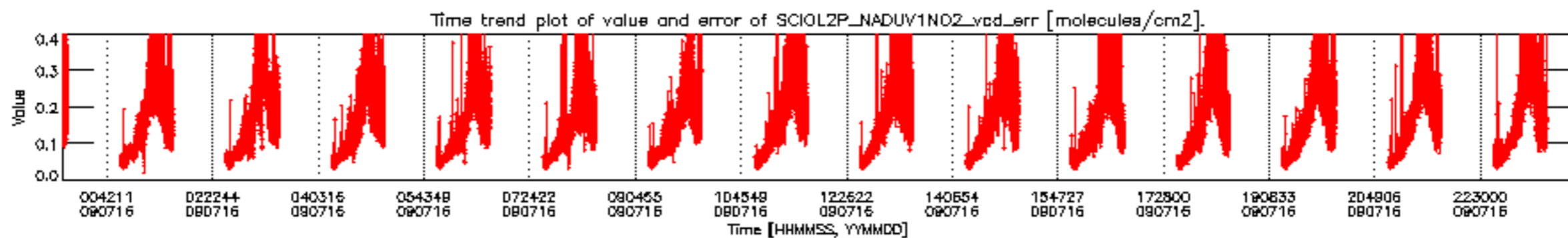
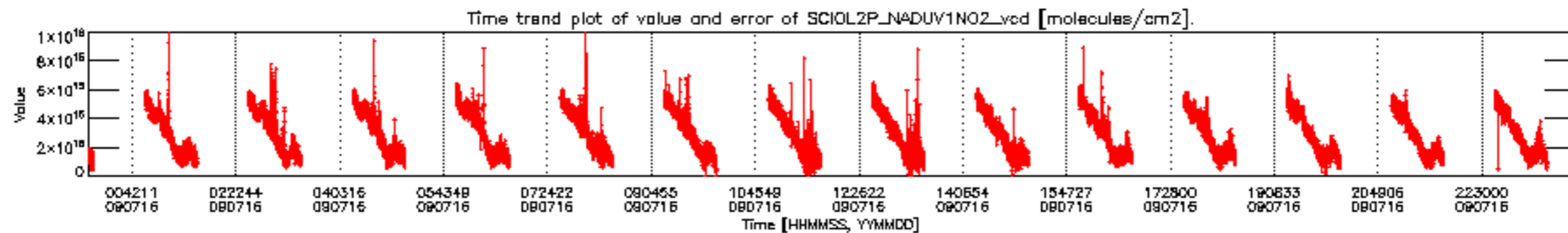


SCIOL2P_NADUV003_amf_gr for 16JUL2009 00:00:00 to 17JUL2009 00:00:00

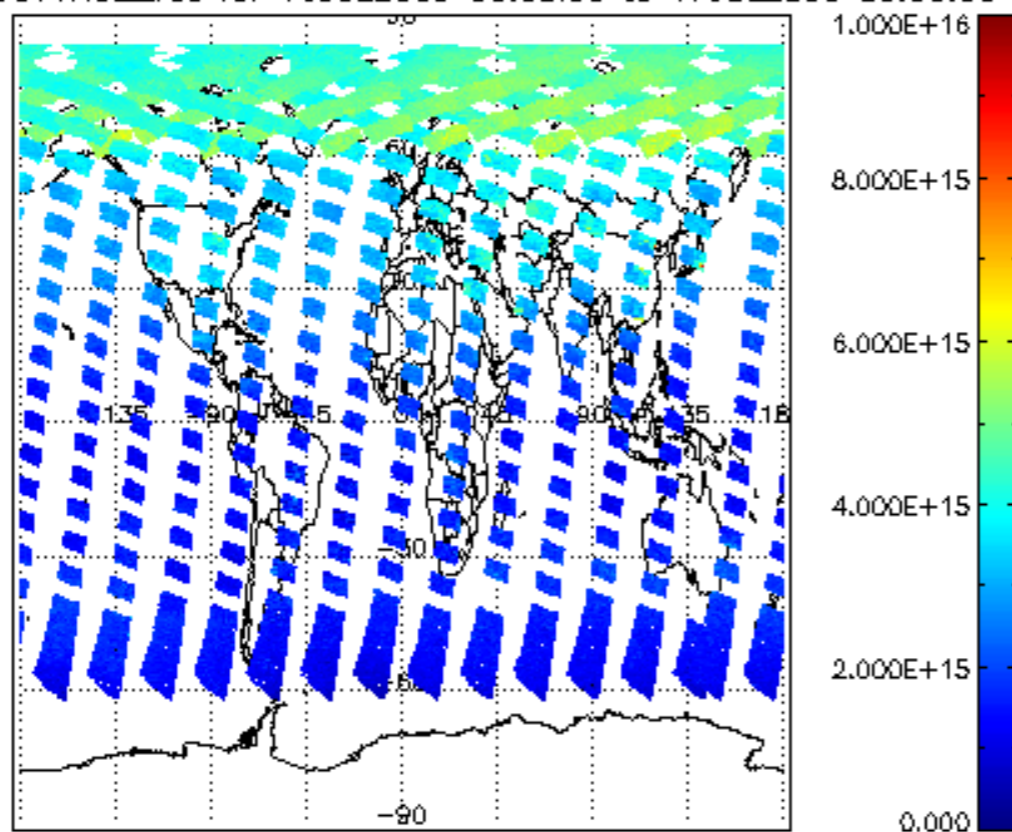


SCIOL2P_NADUV003_amf_cl for 16JUL2009 00:00:00 to 17JUL2009 00:00:00

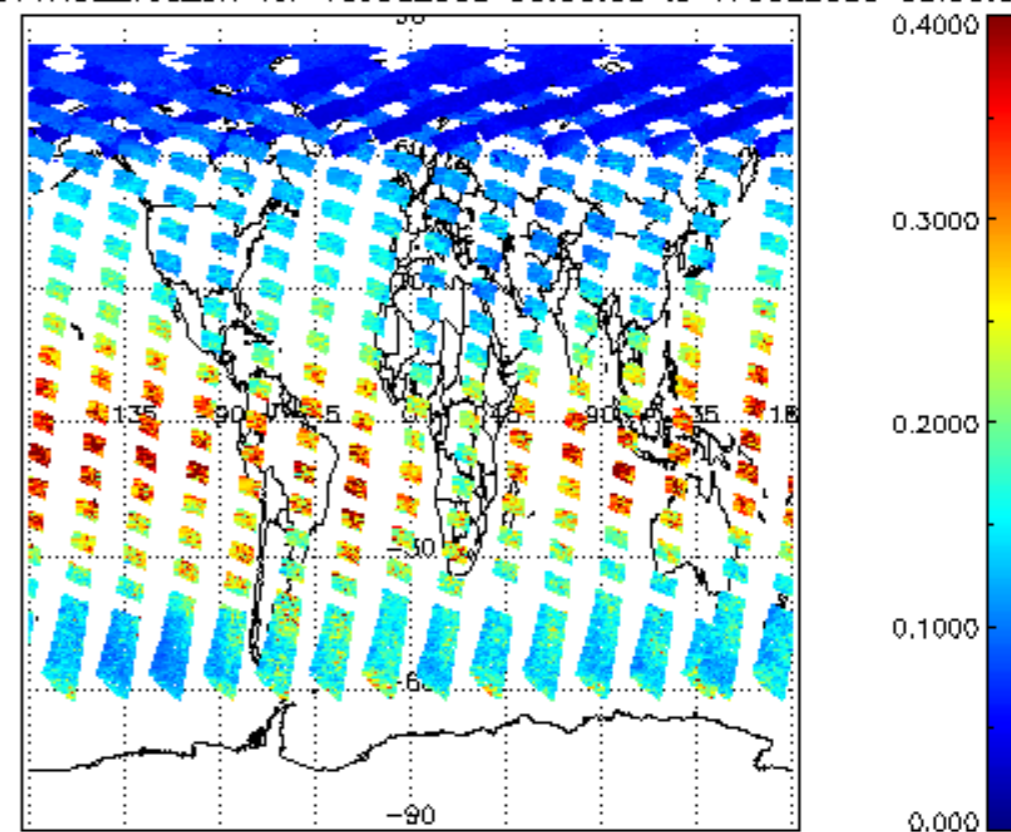




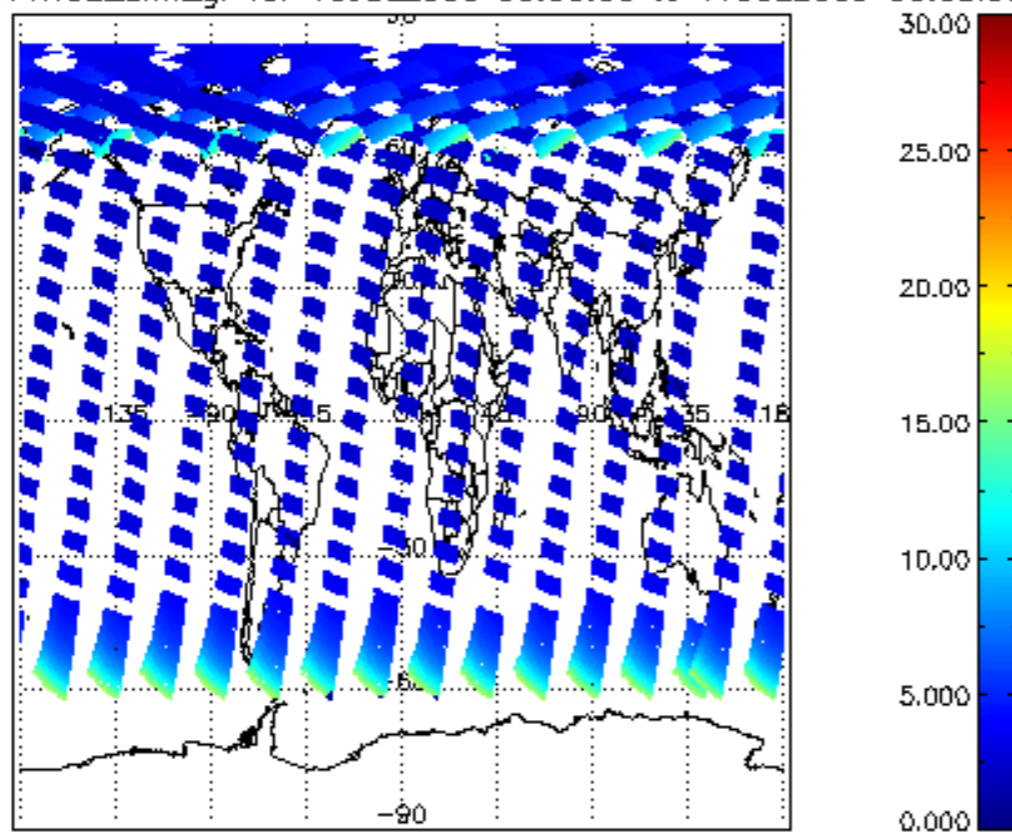
SCIOL2P_NADUV1NO2_vcd for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



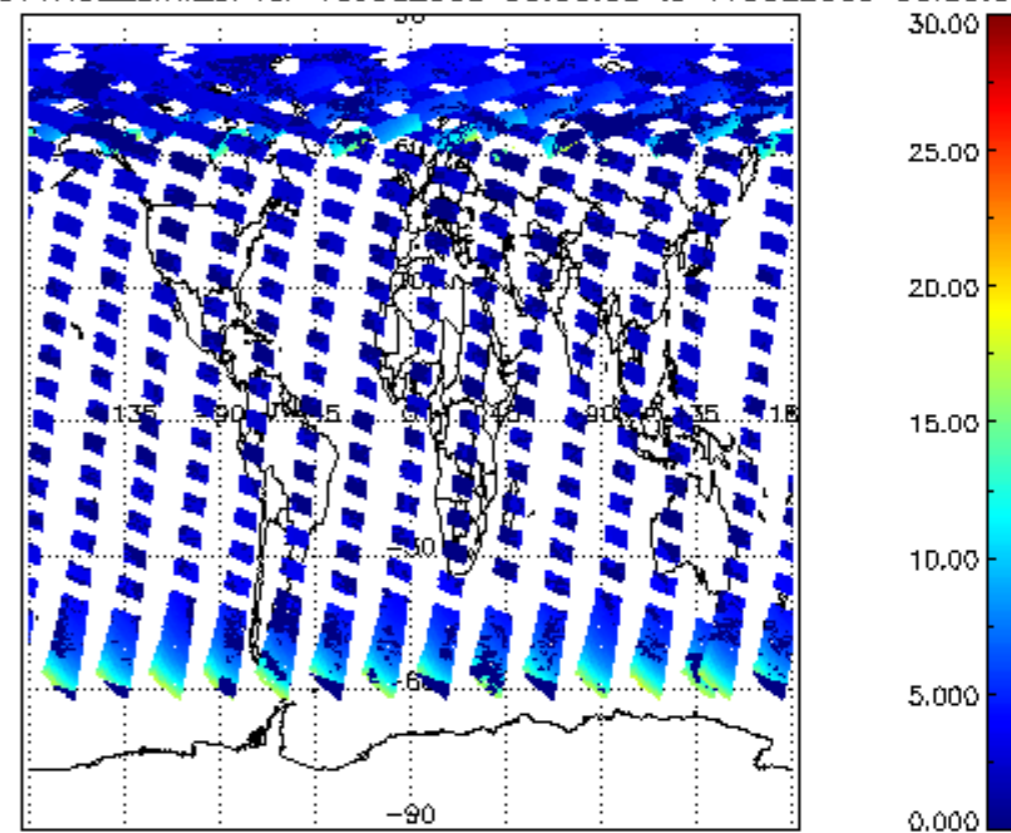
SCIOL2P_NADUV1NO2_vcd_err for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



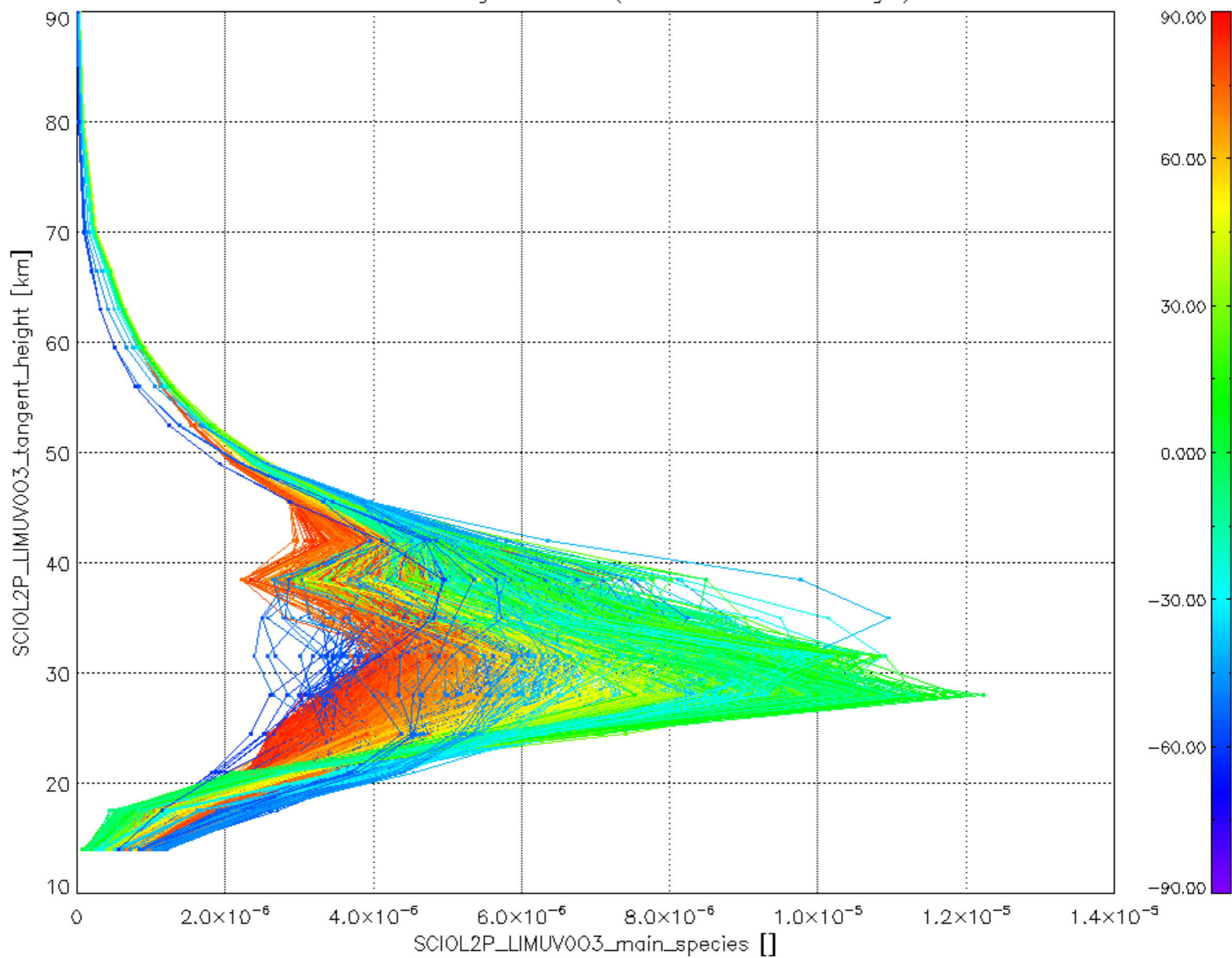
SCIOL2P_NADUV1NO2_amf_gr for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 16JUL2009 00:00:00 to 17JUL2009 00:00:00



Plot of SCIOL2P_LIMUV003_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



Plot of SCIOL2P_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

