

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	05JUN2009 17:54:47
Data source version	SCIA-OL/3.01-R
Processing scope for products	07MAY2009 00:00:00 to 08MAY2009 00:00:00
Start time of first product within scope	06MAY2009 23:10:56
Stop time of last product within scope	07MAY2009 23:34:34
Total number of level 2 products	14
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__2PRDPA20090506_231056_000032962078_00431_37559_2409.N1	06MAY2009 23:10:56	07MAY2009 00:05:52	0	GOOD
1	SCI_OL__2PRDPA20090507_005132_000033562078_00432_37560_2410.N1	07MAY2009 00:51:32	07MAY2009 01:47:28	0	GOOD
2	SCI_OL__2PRDPA20090507_023207_000033492078_00433_37561_2411.N1	07MAY2009 02:32:07	07MAY2009 03:27:56	0	GOOD
3	SCI_OL__2PRDPA20090507_041243_000033412078_00434_37562_2412.N1	07MAY2009 04:12:43	07MAY2009 05:08:24	0	GOOD
4	SCI_OL__2PRDPA20090507_055319_000033332078_00435_37563_2413.N1	07MAY2009 05:53:19	07MAY2009 06:48:52	0	GOOD
5	SCI_OL__2PRDPA20090507_073354_000033252078_00436_37564_2414.N1	07MAY2009 07:33:54	07MAY2009 08:29:20	0	GOOD
6	SCI_OL__2PRDPA20090507_105505_000033092078_00438_37566_2415.N1	07MAY2009 10:55:05	07MAY2009 11:50:15	0	GOOD
7	SCI_OL__2PRDPA20090507_123541_000033012078_00439_37567_2416.N1	07MAY2009 12:35:41	07MAY2009 13:30:42	0	GOOD
8	SCI_OL__2PRDPA20090507_141617_000033612078_00440_37568_2417.N1	07MAY2009 14:16:17	07MAY2009 15:12:18	0	GOOD
9	SCI_OL__2PRDPA20090507_155652_000033532078_00441_37569_2418.N1	07MAY2009 15:56:52	07MAY2009 16:52:46	0	GOOD
10	SCI_OL__2PRDPA20090507_173744_000033392078_00442_37570_2419.N1	07MAY2009 17:37:44	07MAY2009 18:33:23	0	GOOD
11	SCI_OL__2PRDPA20090507_191820_000033202078_00443_37571_2420.N1	07MAY2009 19:18:20	07MAY2009 20:13:40	0	GOOD
12	SCI_OL__2PRDPA20090507_205839_000033272078_00444_37572_2421.N1	07MAY2009 20:58:39	07MAY2009 21:54:07	0	GOOD
13	SCI_OL__2PRDPA20090507_223915_000033192078_00445_37573_2422.N1	07MAY2009 22:39:15	07MAY2009 23:34:34	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: 120120

Total number of cloud data DSRs with good quality flag (=0): 120120 (100.0 %)

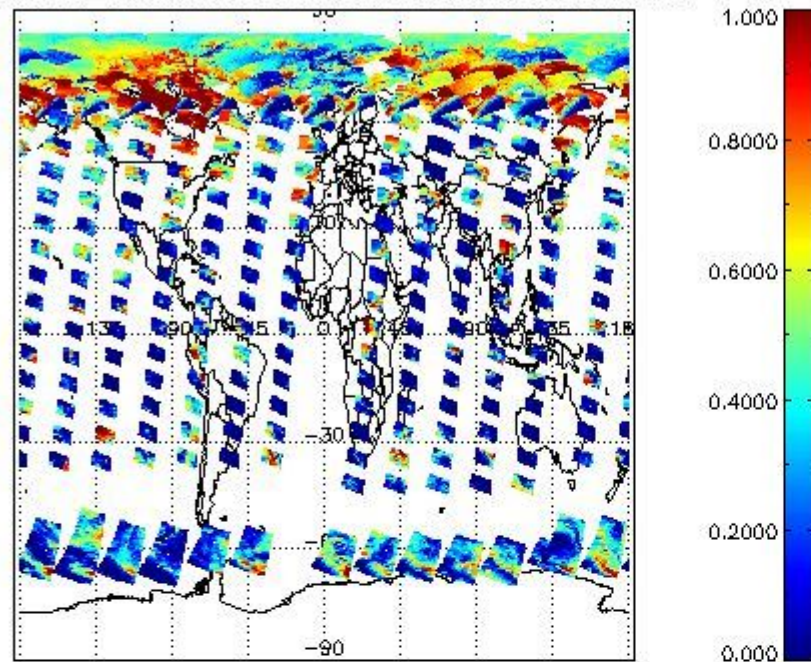
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	120120	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	120120	0.17424	0.12500	0.12500	0.25000	0.061078	s
CL_FRAC	120120	0.35609	0.32114	0.0000	1.0000	0.31007	-
CL_FRAC_ERR	120120	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	120120	5.5758	4.0000	4.0000	8.0000	1.9545	
PMD_READ_CL[0]	120120	0.32345	0.0000	0.0000	8.0000	1.2826	-
PMD_READ_CL[1]	120120	1.6966	0.0000	0.0000	8.0000	2.7503	-
CL_TOP_HEIGHT	105161	2.6484	1.1110	0.0000	17.000	3.3349	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	105161	58.415	71.741	0.0000	101.00	43.932	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	120120	11100000	11100000	11100000	11100000	0.0000	flags. Bit definition = 0: low or high cloud; 1: ice or water cloud; 2: thick or thin cloud; 3-15: not used
CLOUD_FLAGS	120120	11001100	11000100	11000000	11100000	3545.8	flags
AERO_ABSO_IND	120120	3.4261	4.2593	-0.65776	16.528	2.4679	
AERO_IND_DIAG	120120	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	120120	01011010	00000000	00000000	11000000	24534.	flags

Time and geolocation plots:

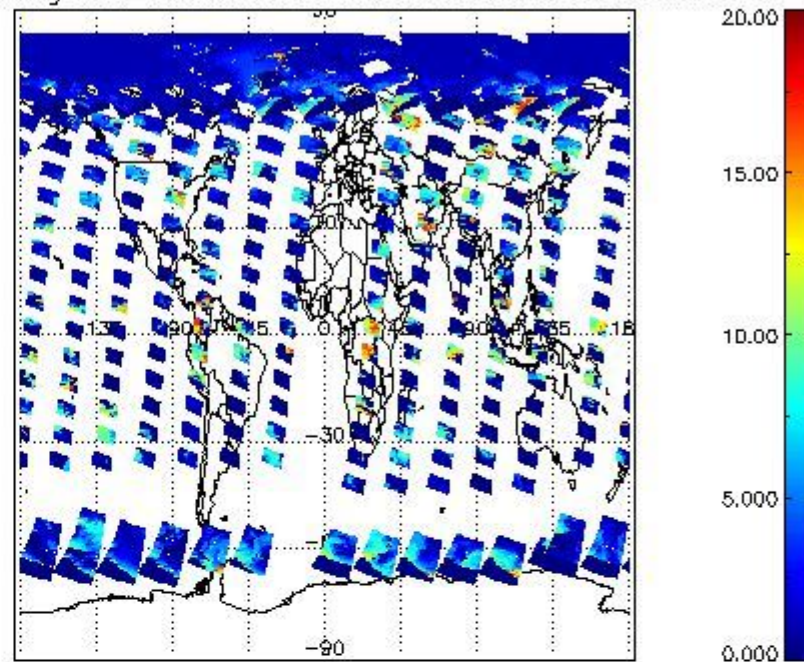
Plots are available for the following parameters:

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

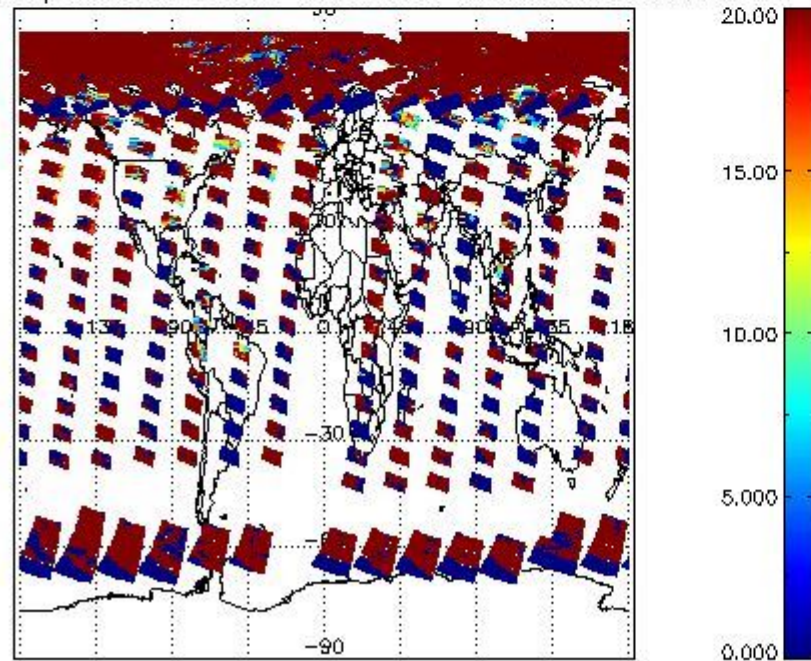
cL_frac for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



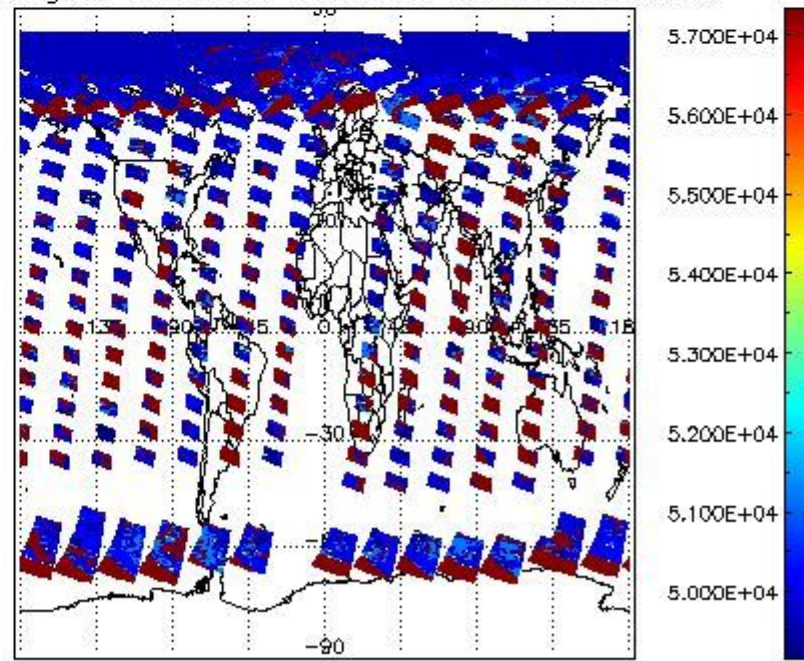
cL_top_height for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



cL_opt_depth for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



cloud_flags for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



2.2.2 Nadir

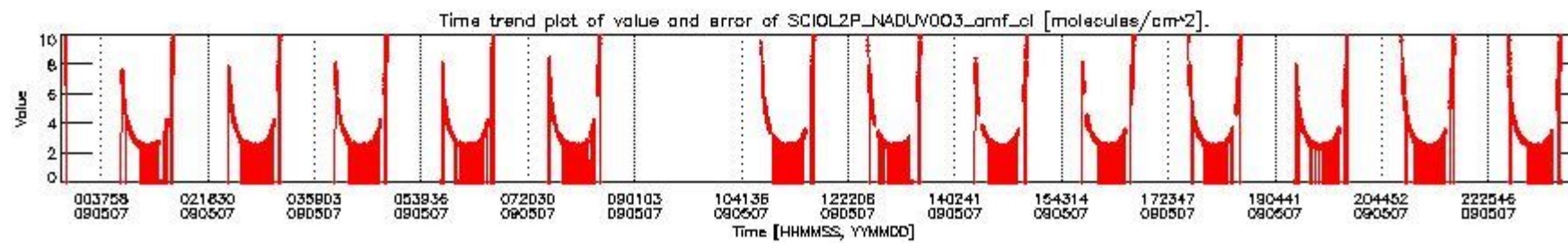
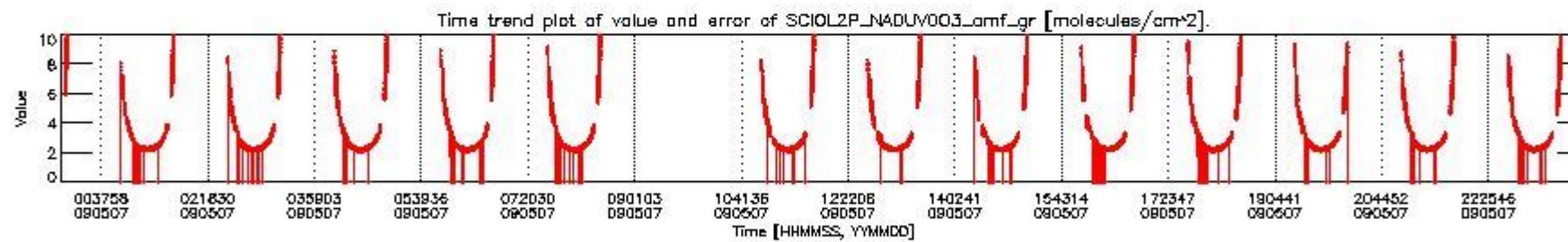
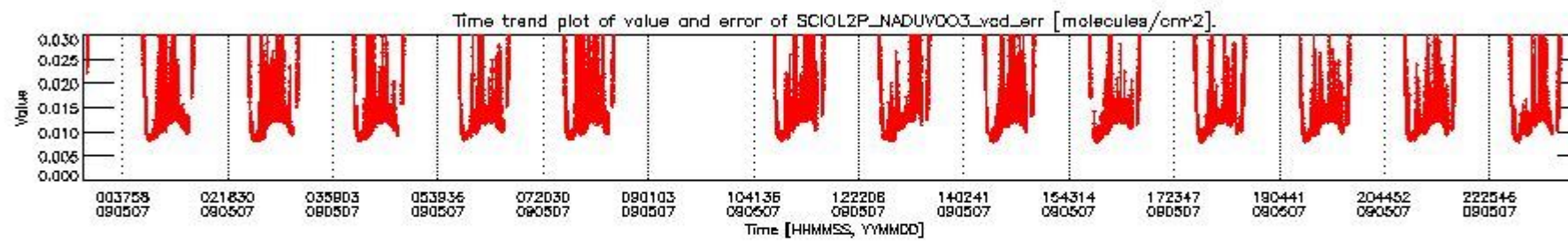
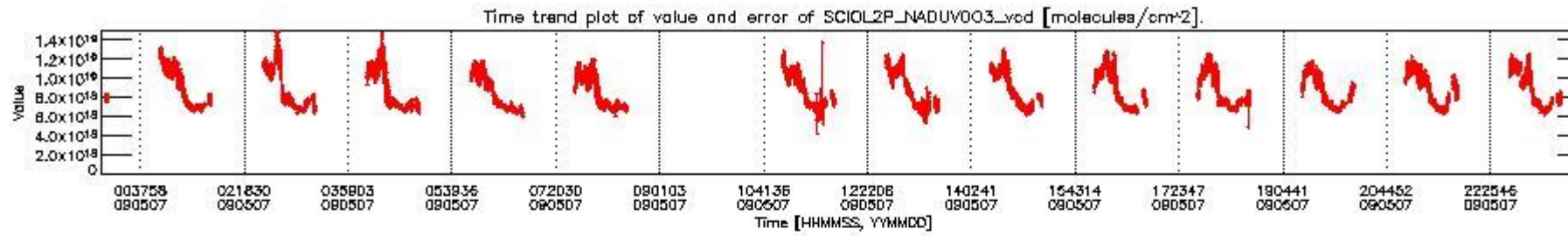
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

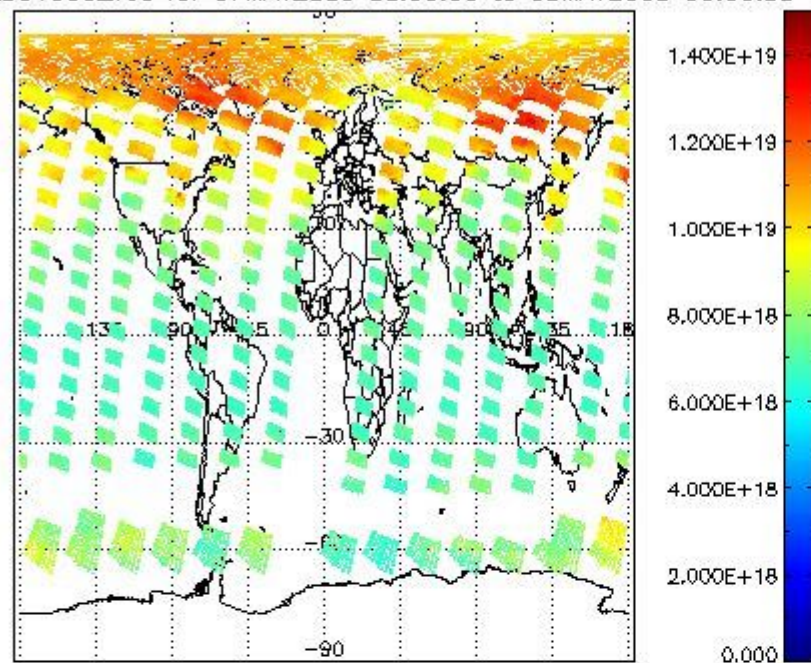
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

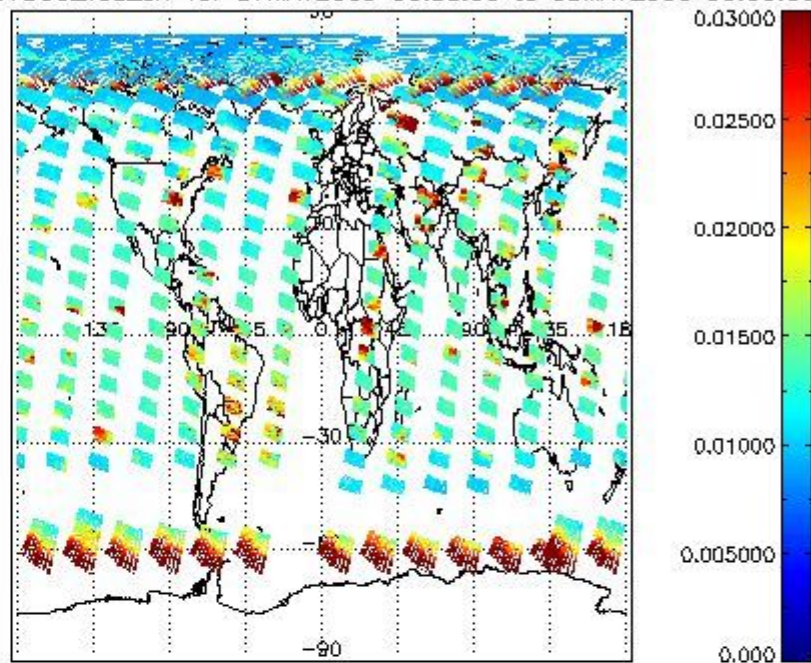
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



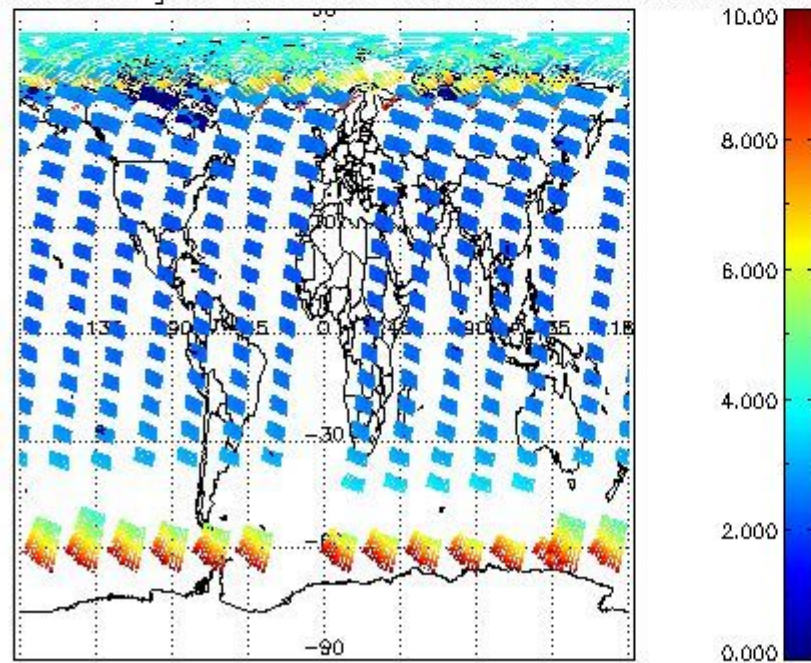
SCIOL2P_NADUV003_vcd for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



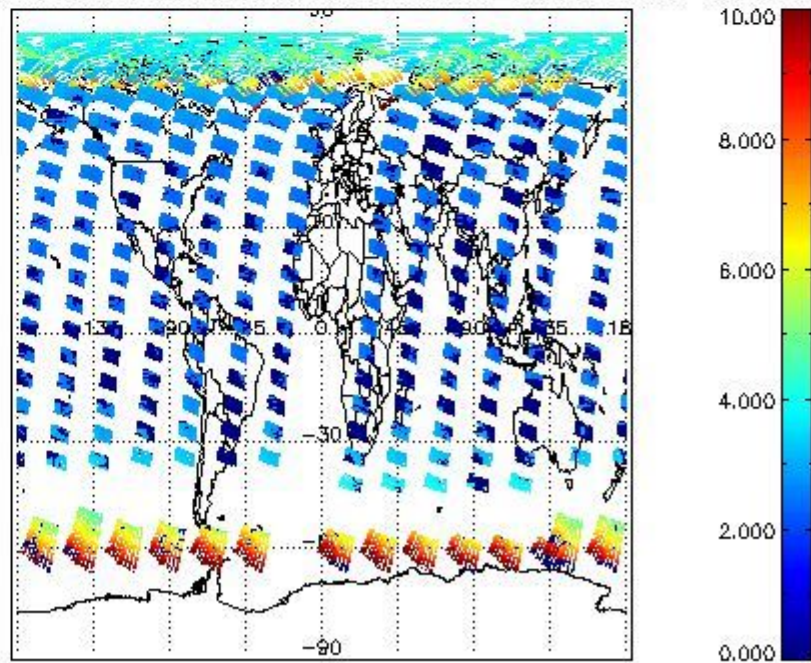
SCIOL2P_NADUV003_vcd_err for 07MAY2009 00:00:00 to 08MAY2009 00:00:00

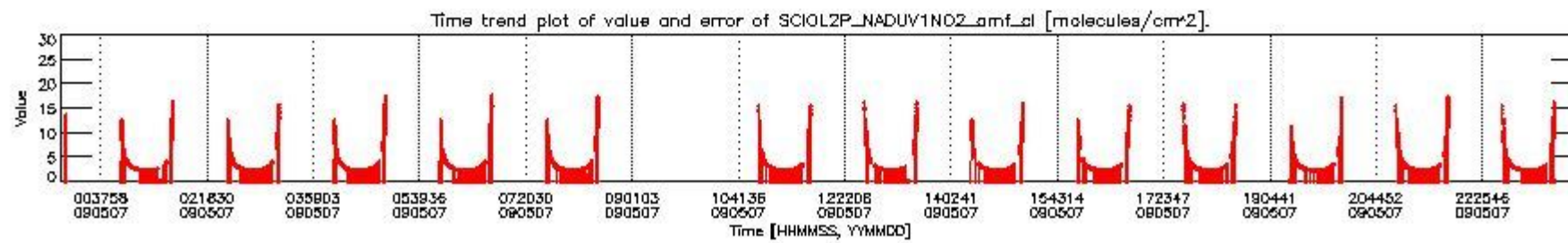
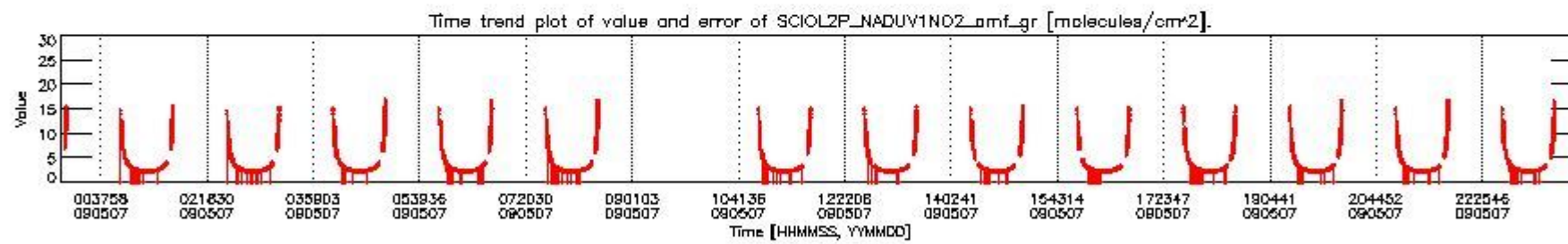
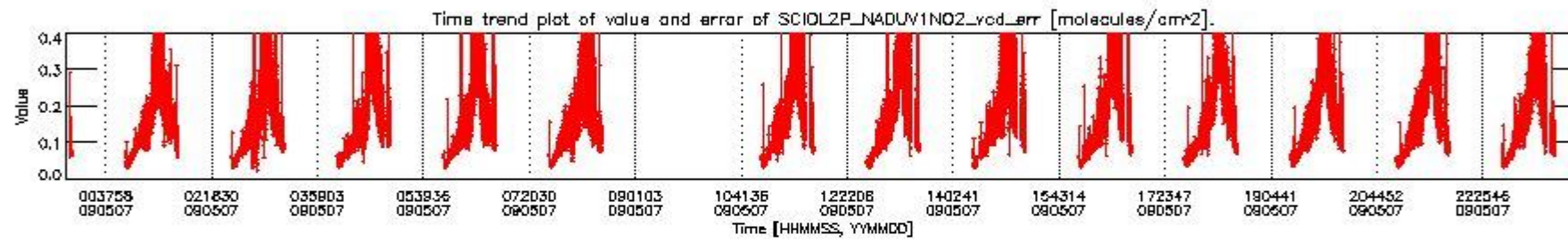
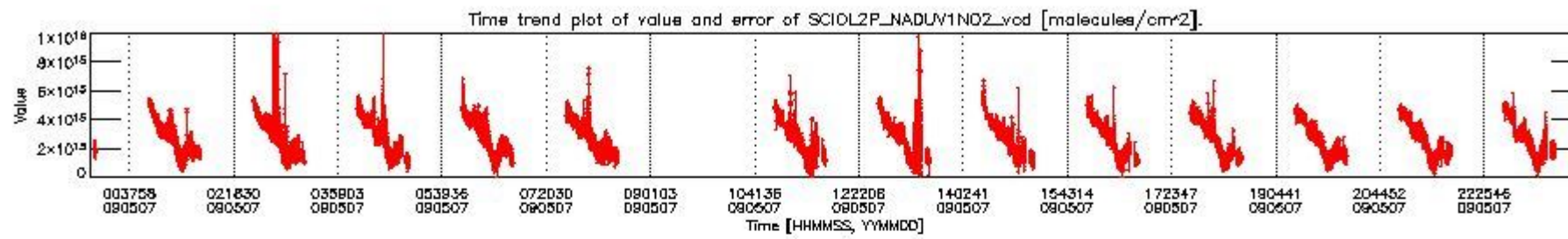


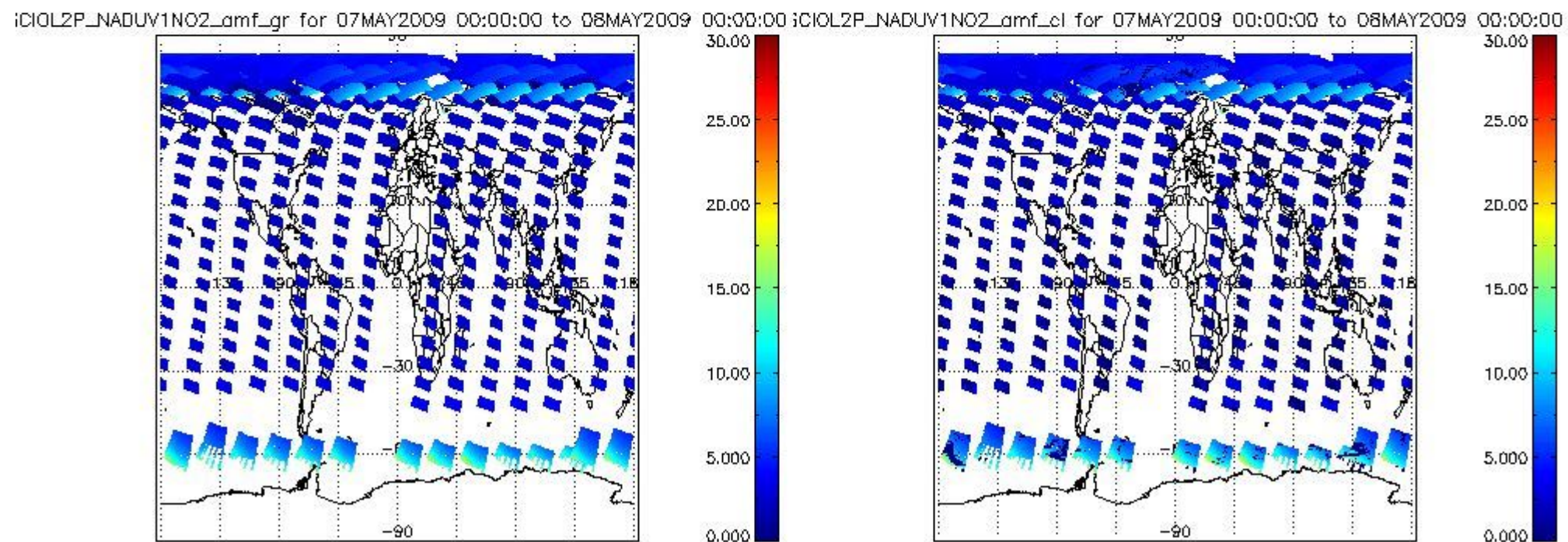
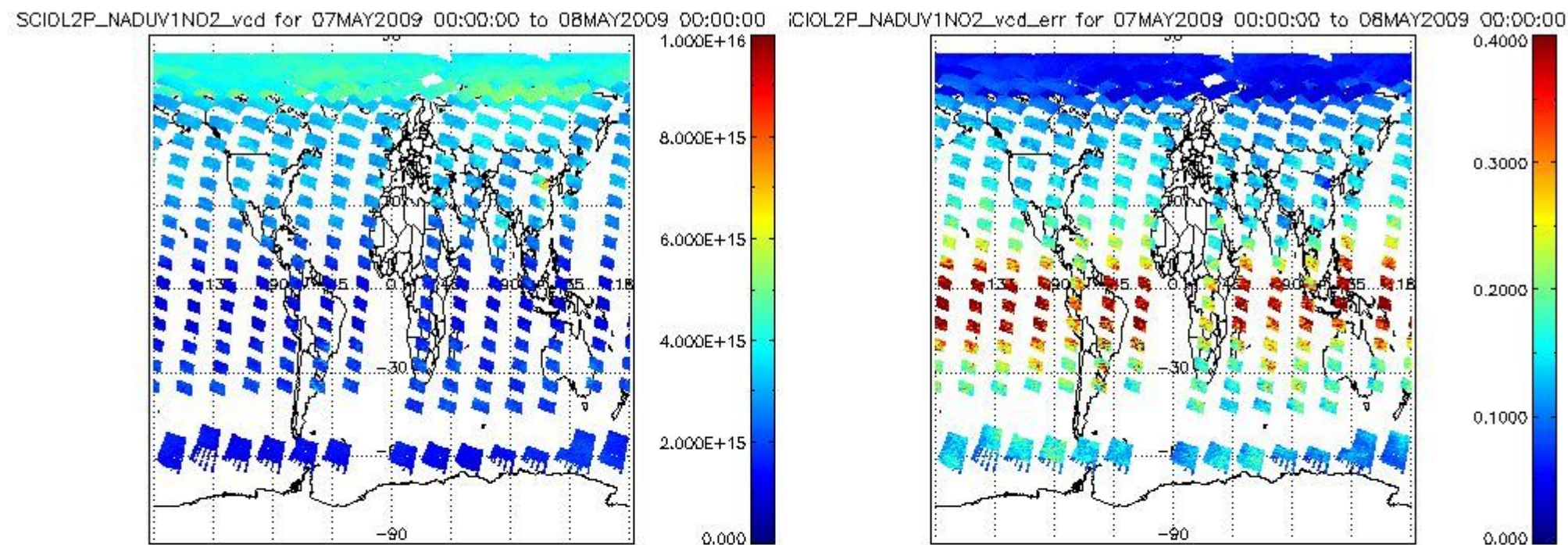
SCIOL2P_NADUV003_amf_gr for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 07MAY2009 00:00:00 to 08MAY2009 00:00:00







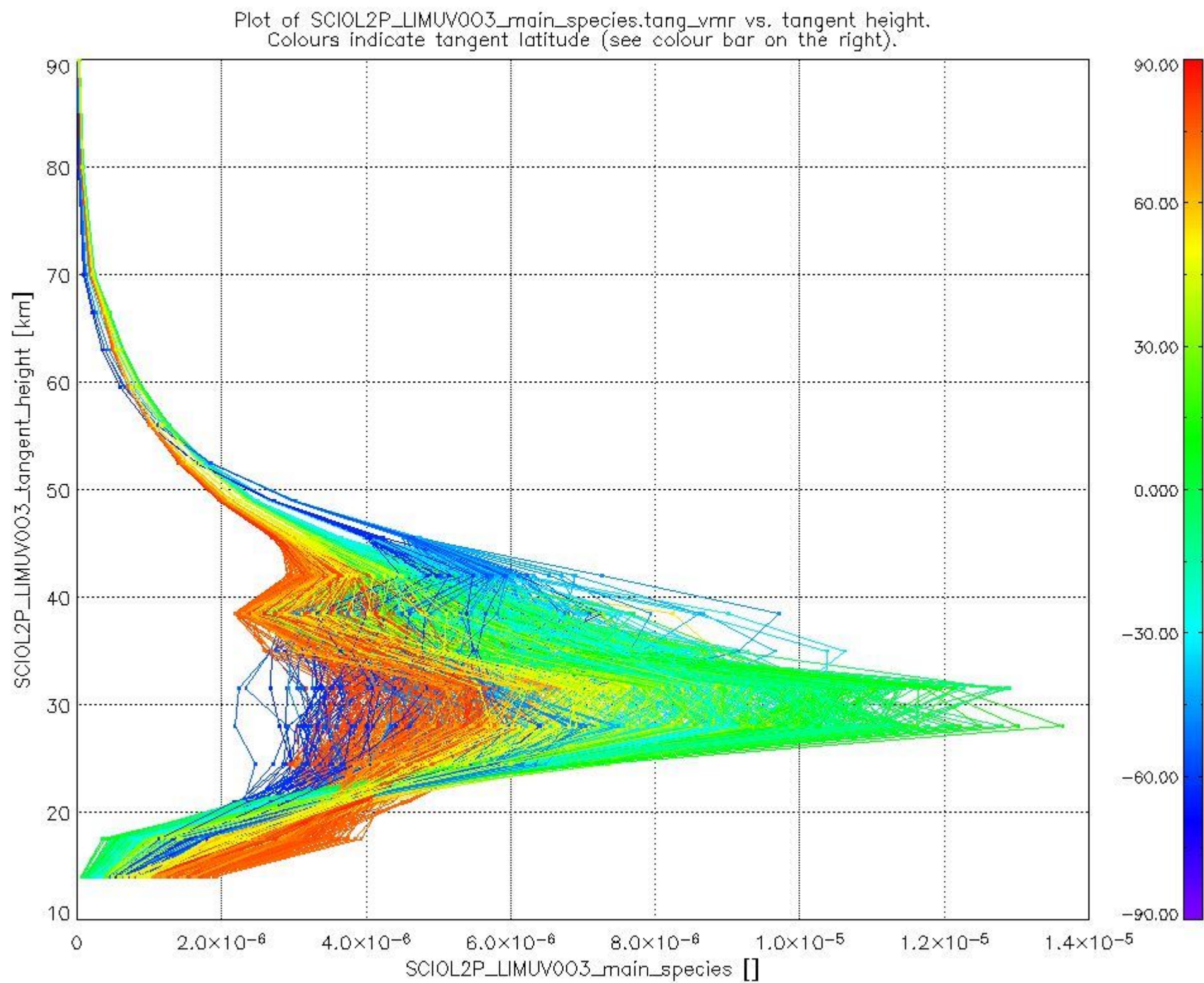
2.2.3 Limb

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

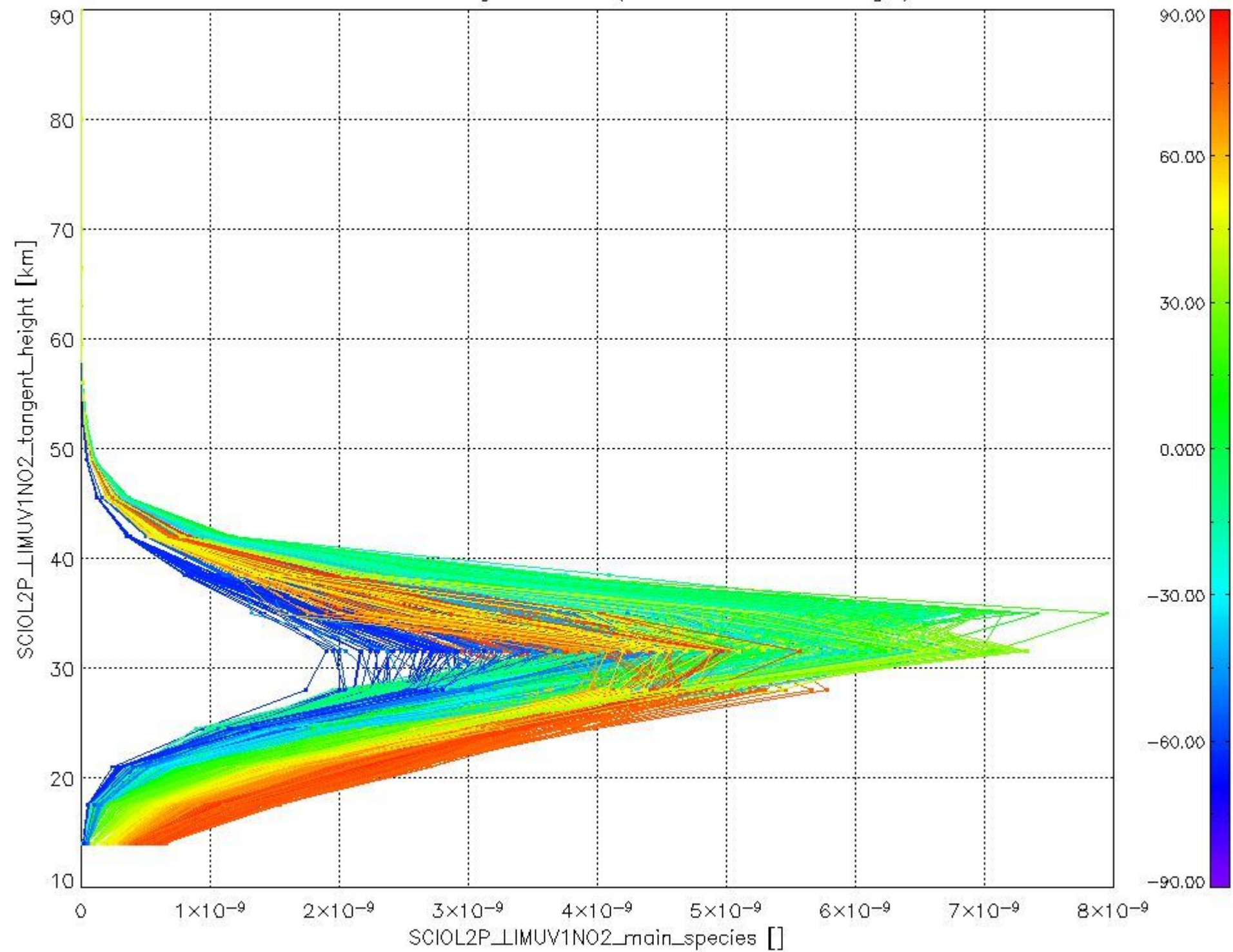
The following data items are currently included into this section:

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.



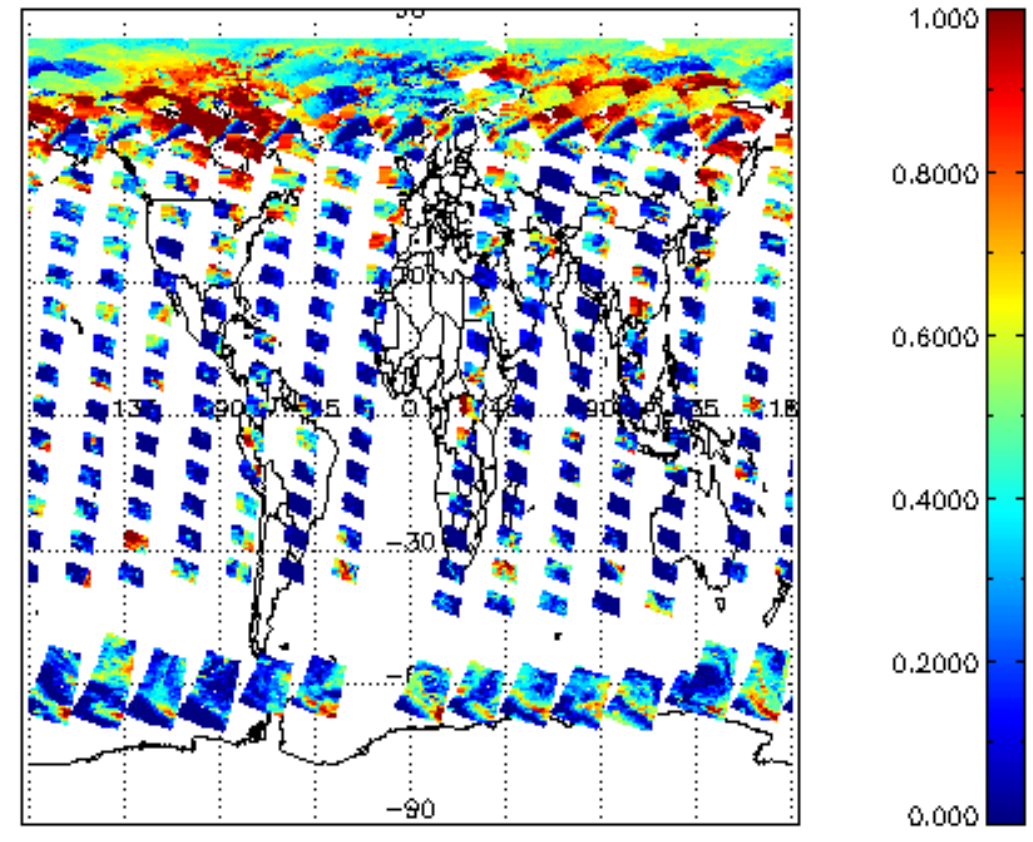
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



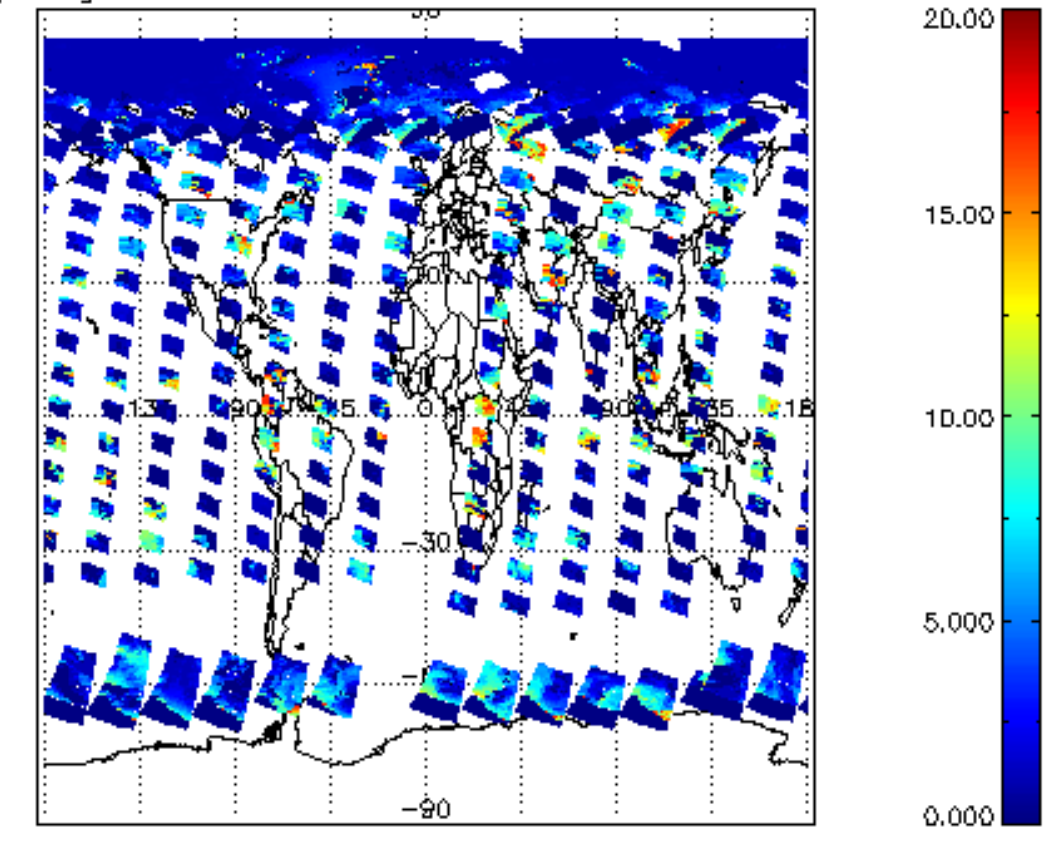
2.3 ADF monitoring

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

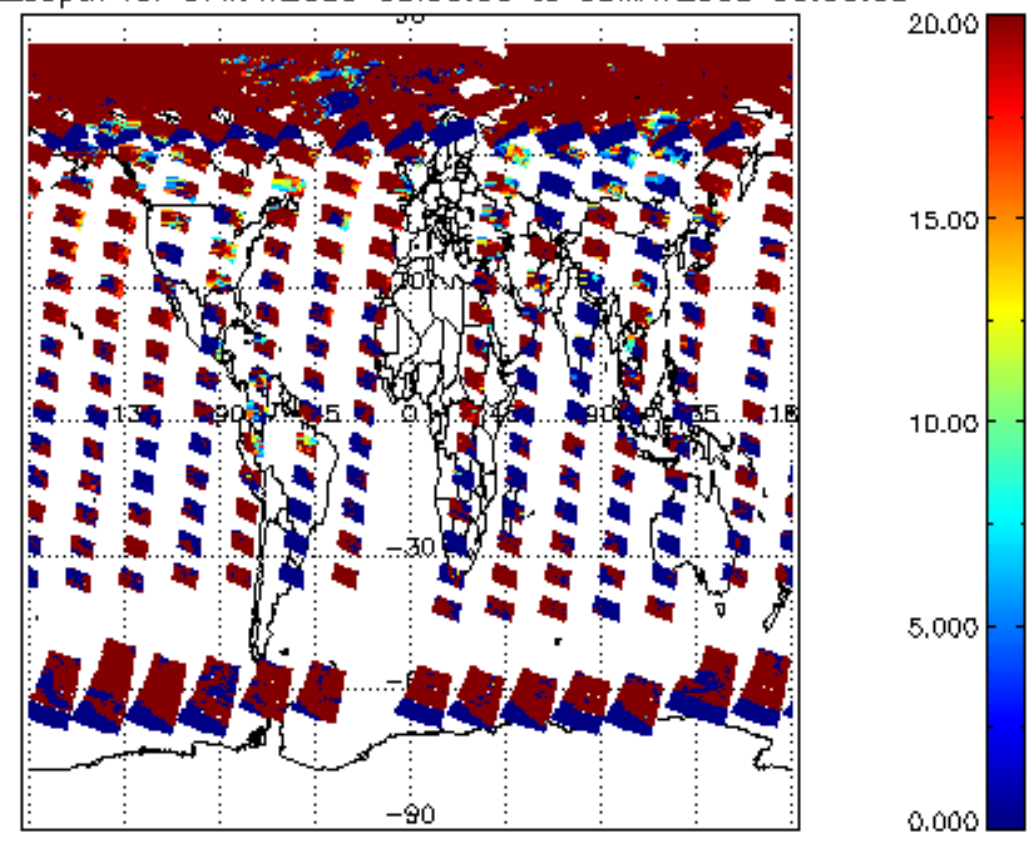
cl_frac for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



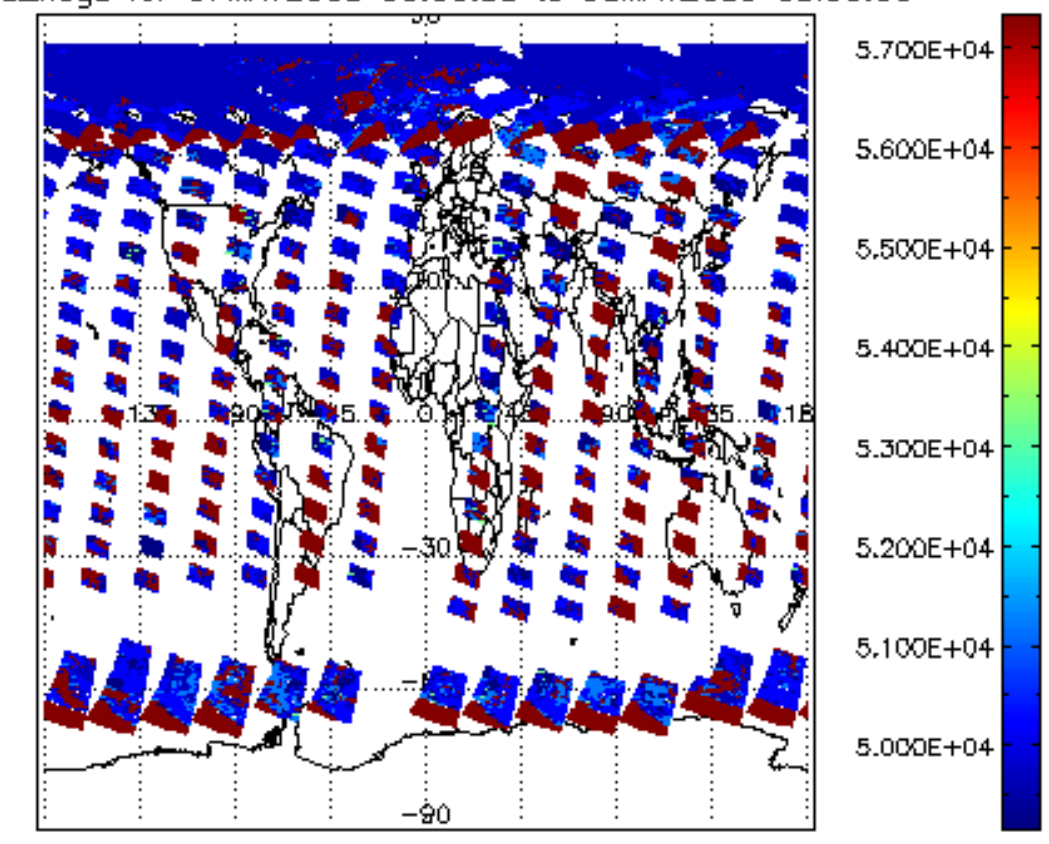
cl_top_height for 07MAY2009 00:00:00 to 08MAY2009 00:00:00

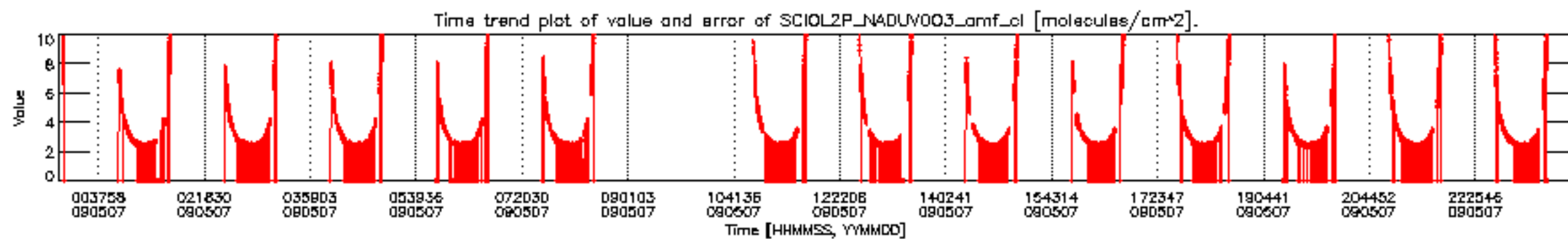
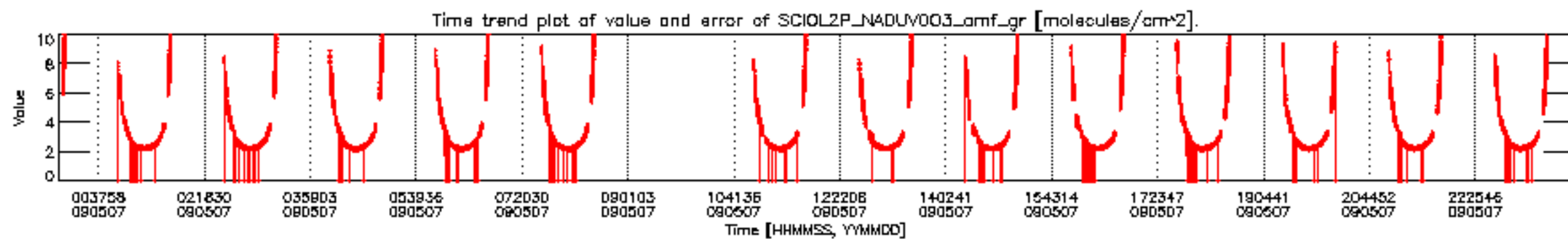
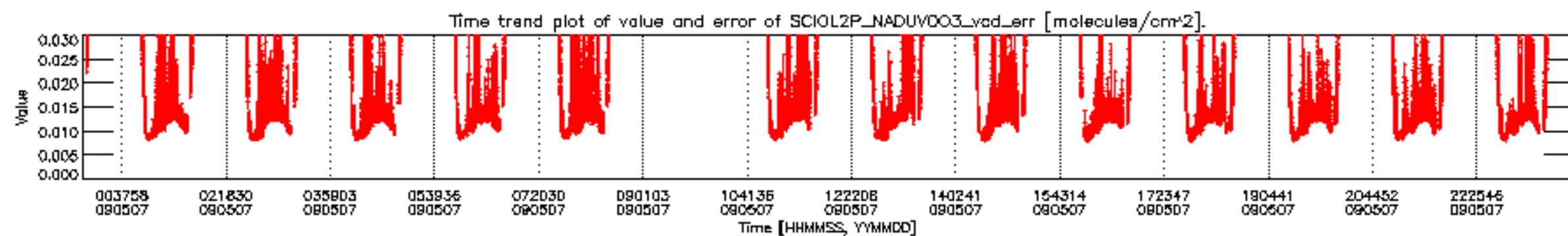
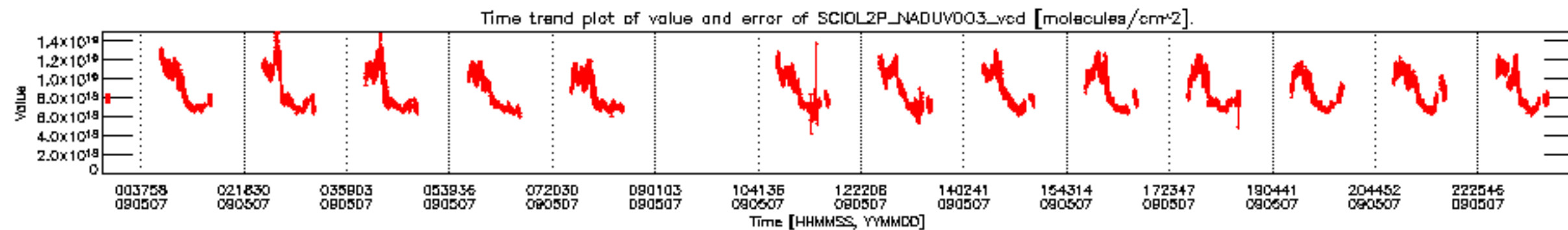


cl_opt_depth for 07MAY2009 00:00:00 to 08MAY2009 00:00:00

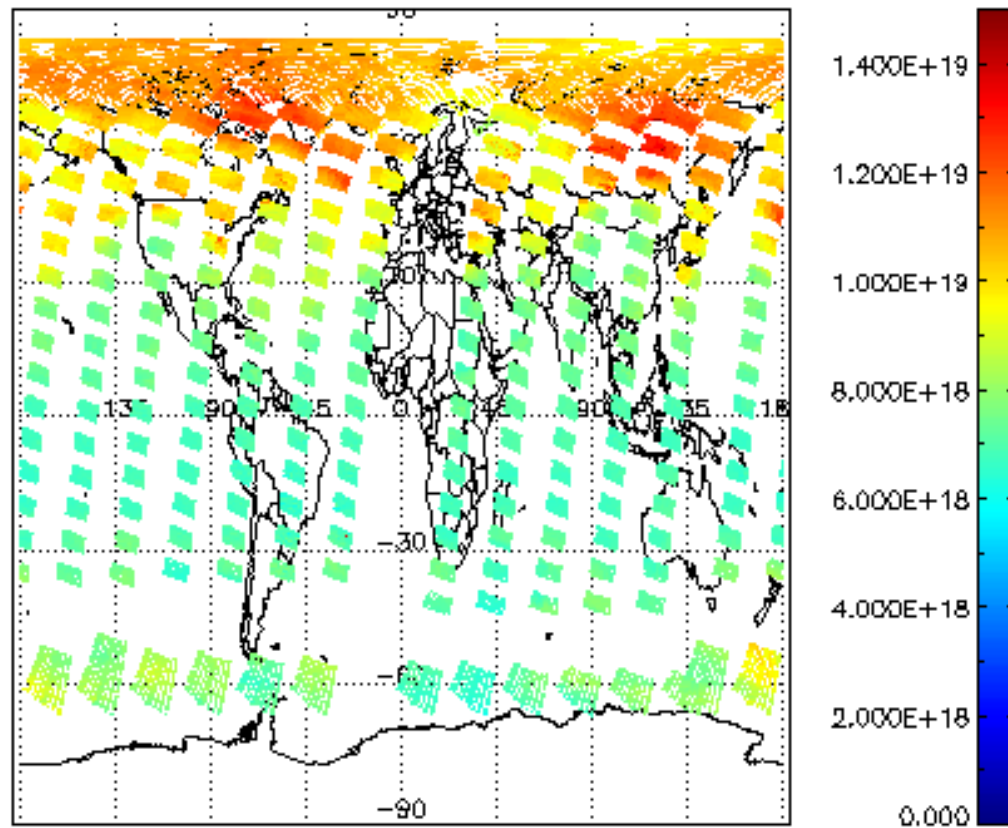


cloud_flags for 07MAY2009 00:00:00 to 08MAY2009 00:00:00

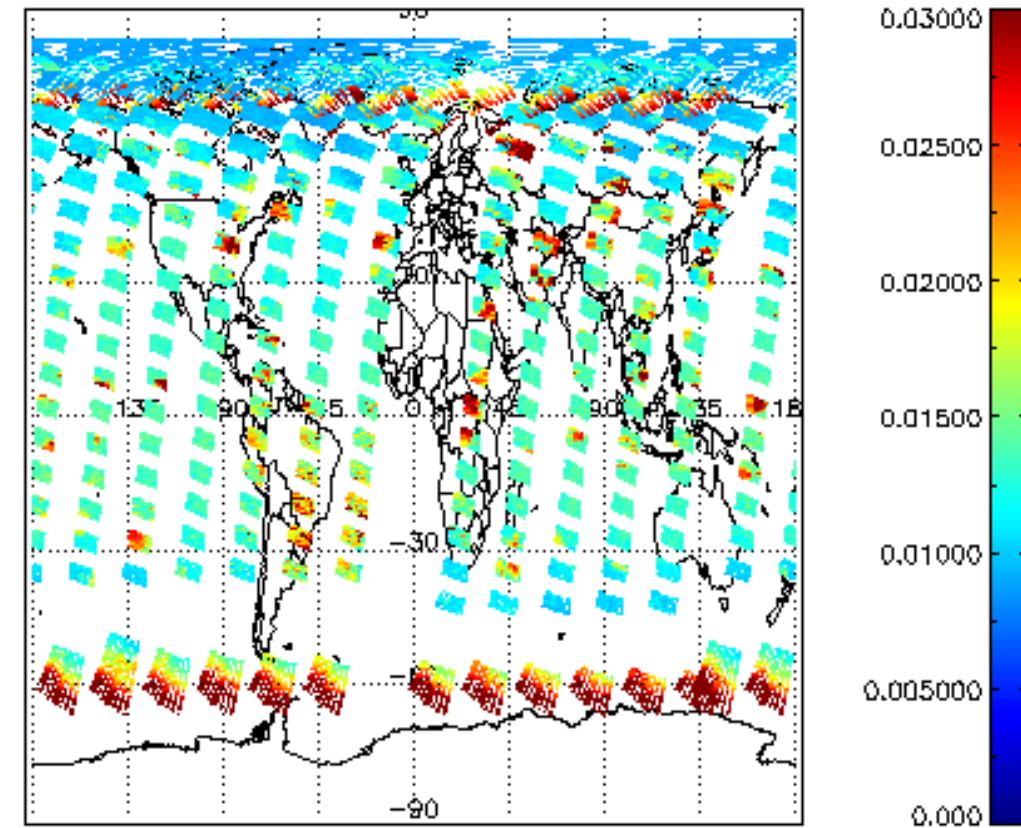




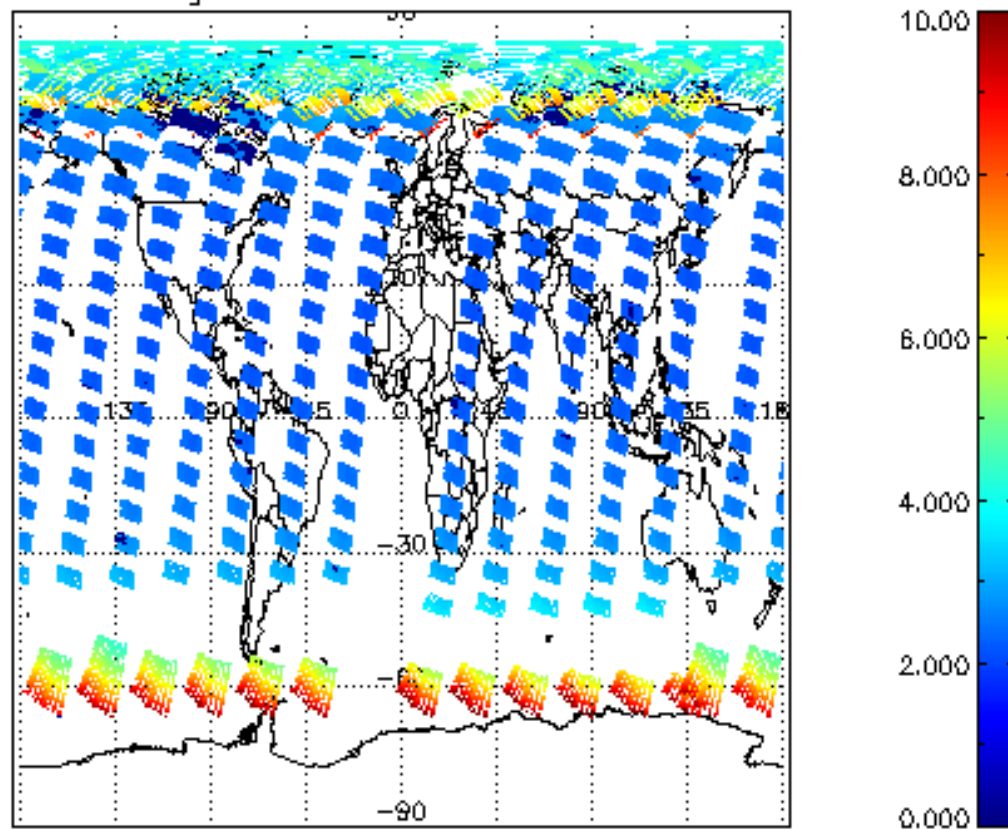
SCIOL2P_NADUV003_vcd for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



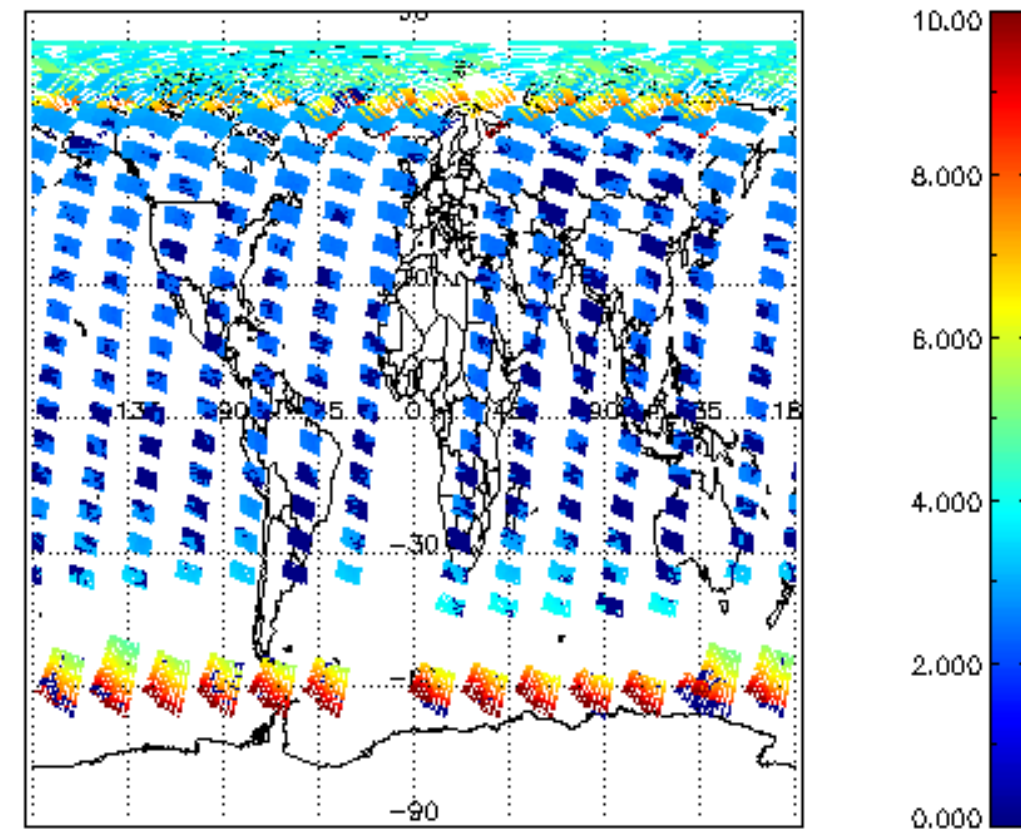
SCIOL2P_NADUV003_vcd_err for 07MAY2009 00:00:00 to 08MAY2009 00:00:00

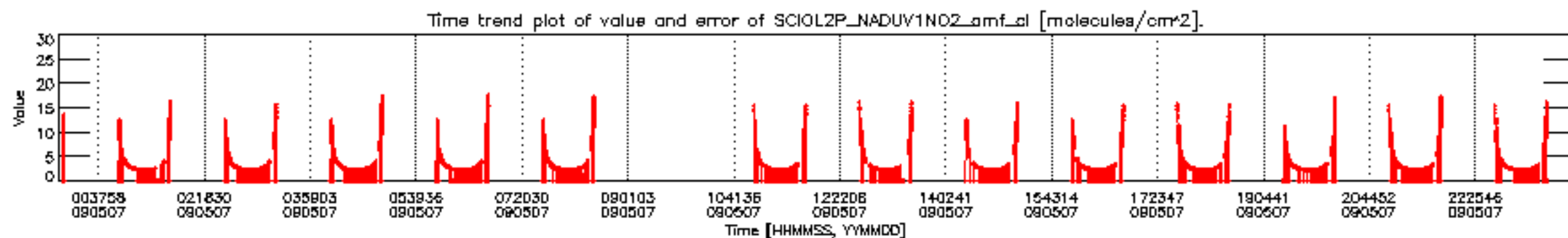
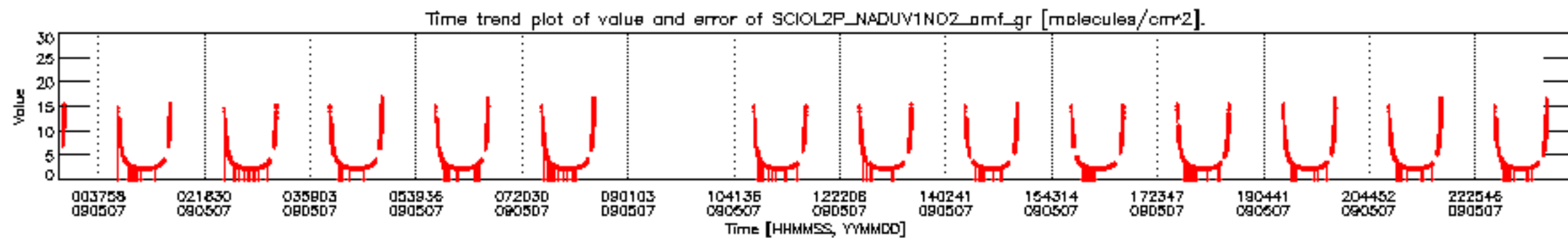
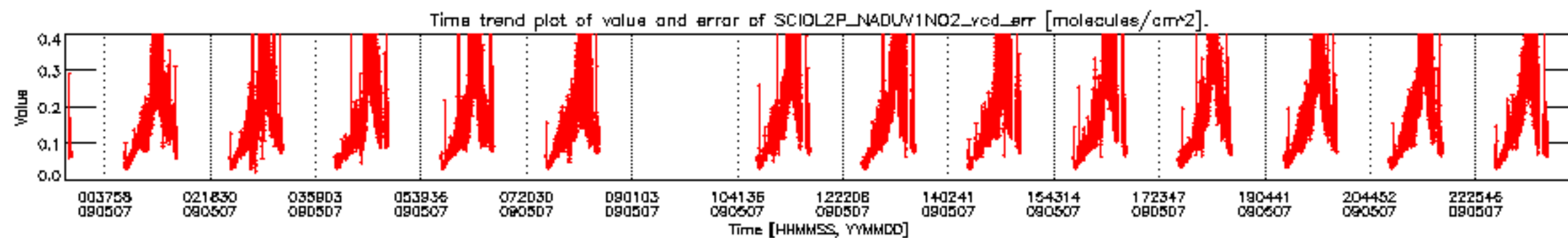
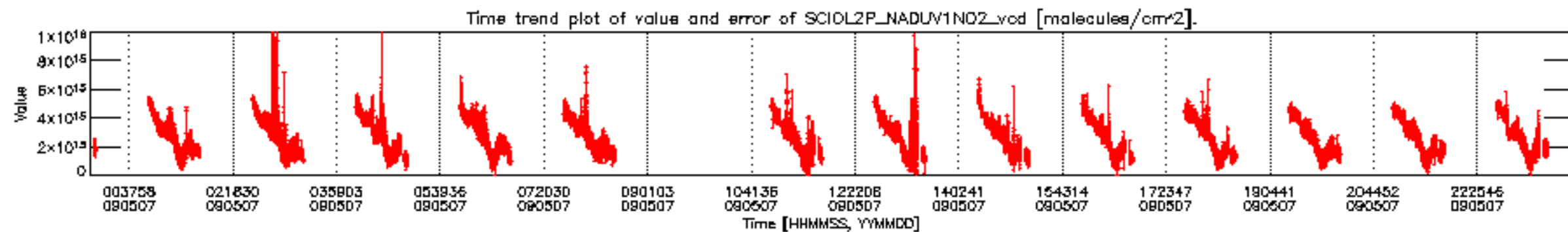


SCIOL2P_NADUV003_amf_gr for 07MAY2009 00:00:00 to 08MAY2009 00:00:00

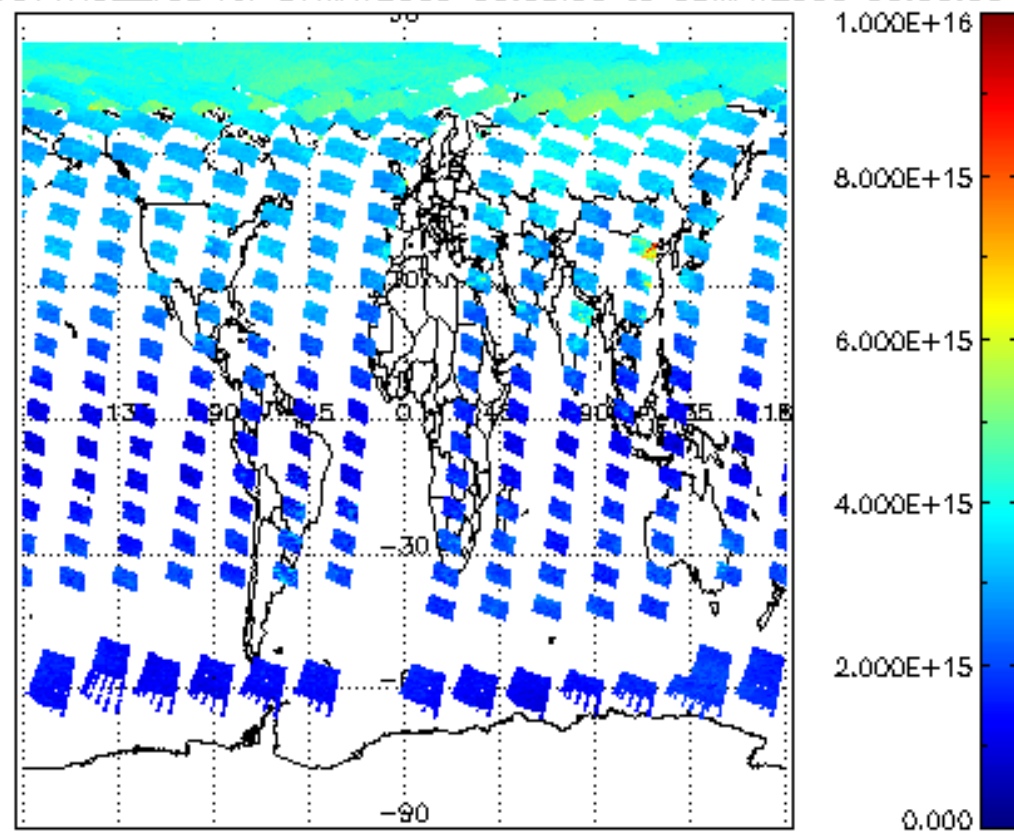


SCIOL2P_NADUV003_amf_cl for 07MAY2009 00:00:00 to 08MAY2009 00:00:00

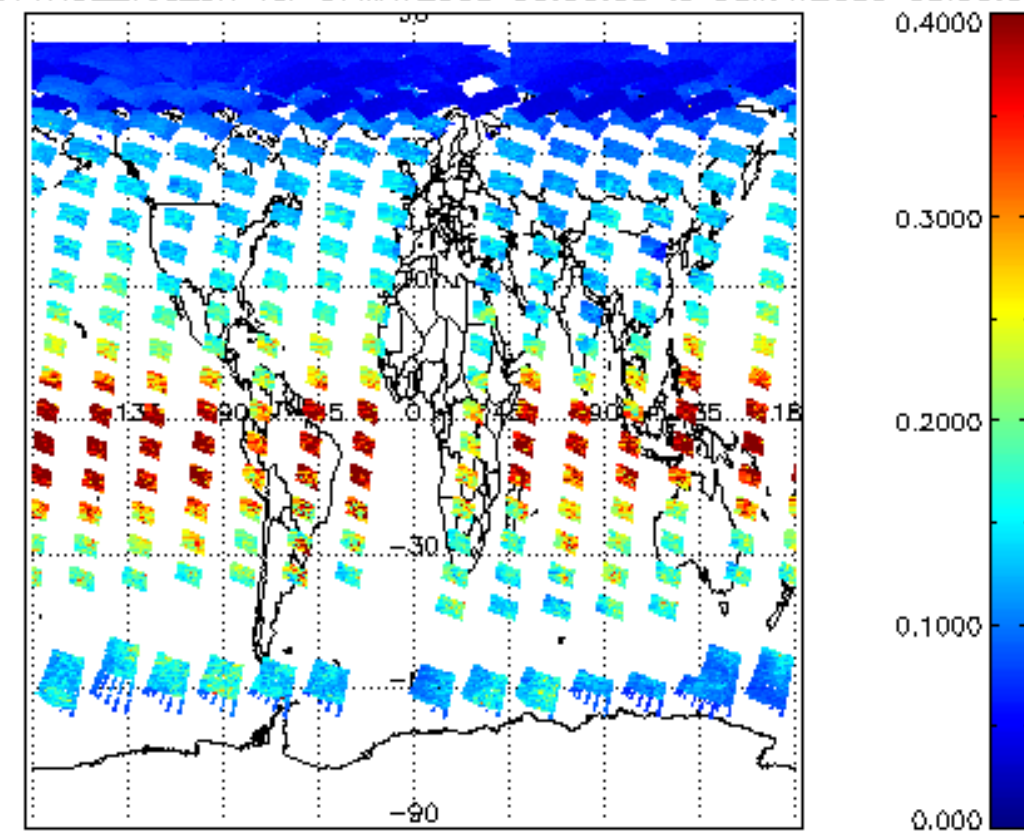




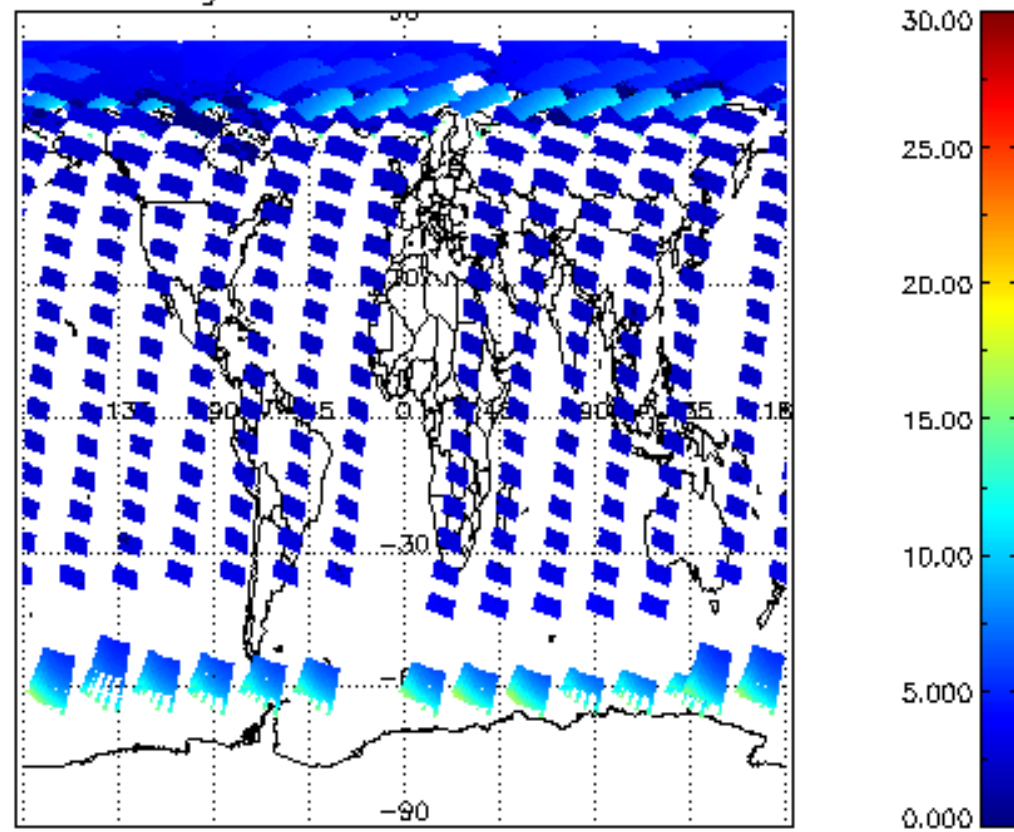
SCIOL2P_NADUV1NO2_vcd for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



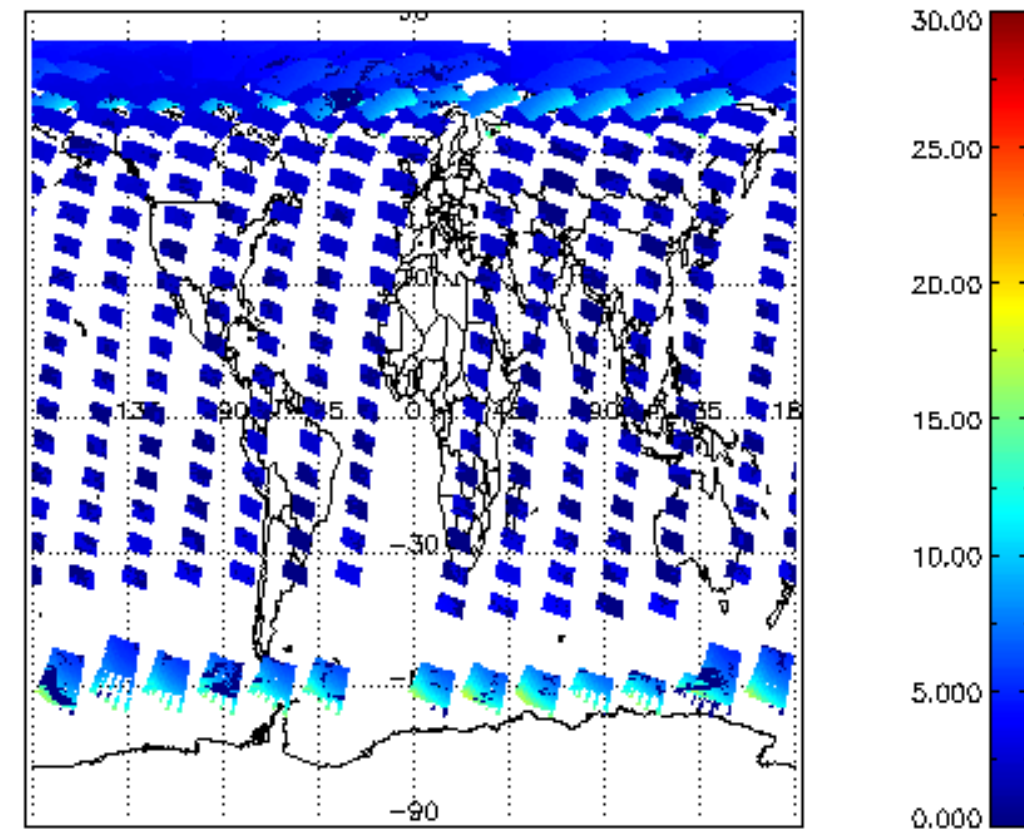
iCIOL2P_NADUV1NO2_vcd_err for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



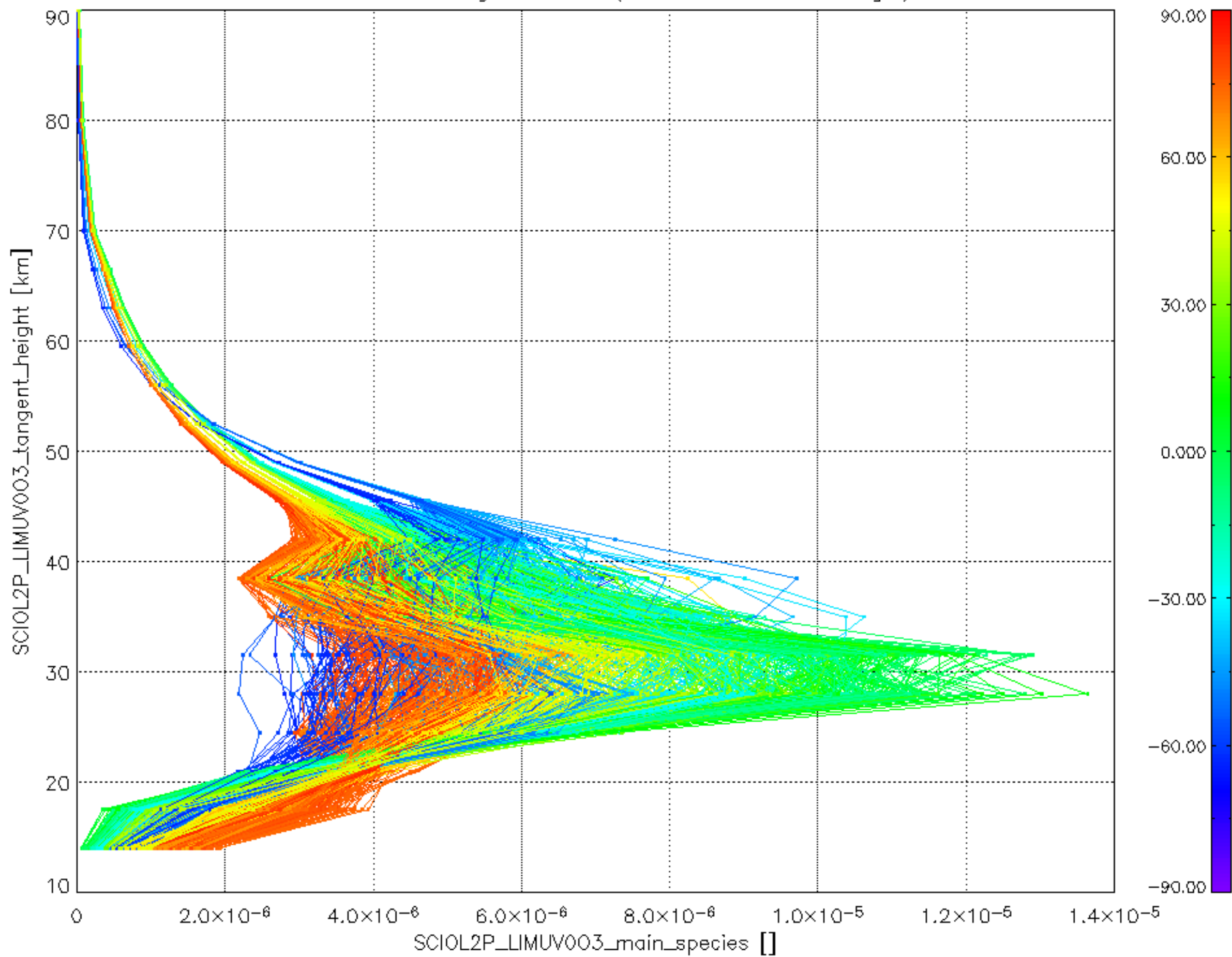
iCIOL2P_NADUV1NO2_amf_gr for 07MAY2009 00:00:00 to 08MAY2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 07MAY2009 00:00:00 to 08MAY2009 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_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

