

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	25JUL2009 06:04:06
Data source version	SCIA-OL/3.01-R
Processing scope for products	07JUL2009 00:00:00 to 08JUL2009 00:00:00
Start time of first product within scope	06JUL2009 22:56:09
Stop time of last product within scope	08JUL2009 00:56:16
Total number of level 2 products	13
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__2PRDPA20090706_225609_000030812080_00302_38432_3271.N1	06JUL2009 22:56:09	06JUL2009 23:47:31	0	GOOD
1	SCI_OL__2PRDPA20090707_003623_000030812080_00303_38433_3272.N1	07JUL2009 00:36:23	07JUL2009 01:27:44	0	GOOD
2	SCI_OL__2PRDPA20090707_021302_000033122080_00304_38434_3273.N1	07JUL2009 02:13:02	07JUL2009 03:08:15	0	GOOD
3	SCI_OL__2PRDPA20090707_035338_000033252080_00305_38435_3274.N1	07JUL2009 03:53:38	07JUL2009 04:49:04	0	GOOD
4	SCI_OL__2PRDPA20090707_053415_000033122080_00306_38436_3288.N1	07JUL2009 05:34:15	07JUL2009 06:29:27	0	GOOD
5	SCI_OL__2PRDPA20090707_071451_000033252080_00307_38437_3285.N1	07JUL2009 07:14:51	07JUL2009 08:10:16	0	GOOD
6	SCI_OL__2PRDPA20090707_085527_000033122080_00308_38438_3289.N1	07JUL2009 08:55:27	07JUL2009 09:50:39	0	GOOD
7	SCI_OL__2PRDPA20090707_121639_000033122080_00310_38440_3290.N1	07JUL2009 12:16:39	07JUL2009 13:11:51	0	GOOD
8	SCI_OL__2PRDPA20090707_135714_000033252080_00311_38441_3291.N1	07JUL2009 13:57:14	07JUL2009 14:52:40	0	GOOD
9	SCI_OL__2PRDPA20090707_153751_000033122080_00312_38442_3292.N1	07JUL2009 15:37:51	07JUL2009 16:33:03	0	GOOD
10	SCI_OL__2PRDPA20090707_203939_000033252080_00315_38445_3293.N1	07JUL2009 20:39:39	07JUL2009 21:35:04	0	GOOD
11	SCI_OL__2PRDPA20090707_222015_000033122080_00316_38446_3294.N1	07JUL2009 22:20:15	07JUL2009 23:15:28	0	GOOD
12	SCI_OL__2PRDPA20090708_000051_000033252080_00317_38447_3295.N1	08JUL2009 00:00:51	08JUL2009 00:56:16	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: 113620

Total number of cloud data DSRs with good quality flag (=0): 113620 (100.0 %)

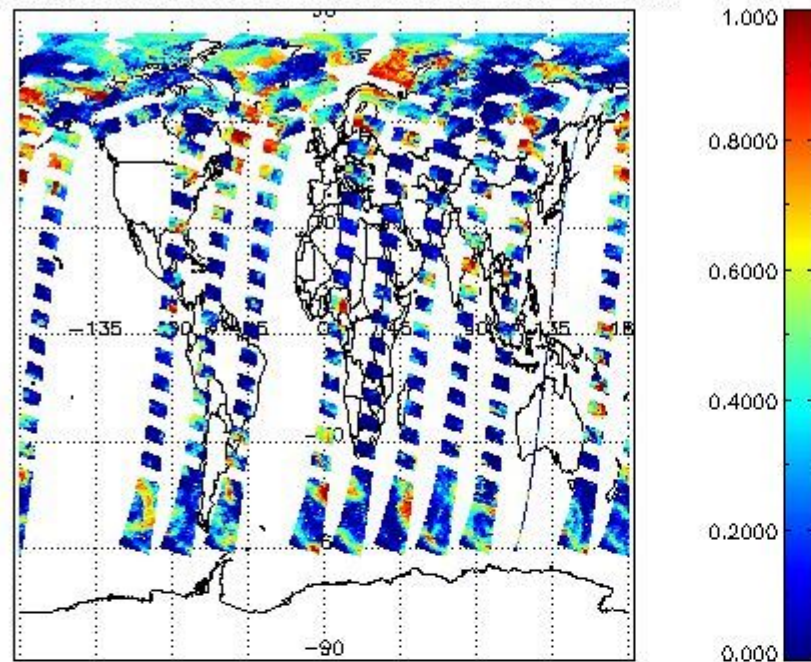
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	113620	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	113620	0.17849	0.12500	0.12500	0.25000	0.061847	s
CL_FRAC	113620	0.26874	0.19684	0.0000	1.0000	0.27164	-
CL_FRAC_ERR	113620	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	113620	5.7117	4.0000	4.0000	8.0000	1.9791	
PMD_READ_CL[0]	113620	0.16309	0.0000	0.0000	8.0000	0.97893	-
PMD_READ_CL[1]	113620	1.9775	0.0000	0.0000	8.0000	2.8039	-
CL_TOP_HEIGHT	98932	3.1038	1.1000	0.0000	17.000	3.8181	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	98932	54.982	56.501	0.0000	101.00	45.592	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	113620	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	113620	11001101	11000100	11000000	11100000	3667.5	flags
AERO_ABSO_IND	113620	4.2611	4.8891	-1.0810	16.614	2.6996	
AERO_IND_DIAG	113620	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	113620	01100000	11000000	00000000	11000000	24576.	flags

Time and geolocation plots:

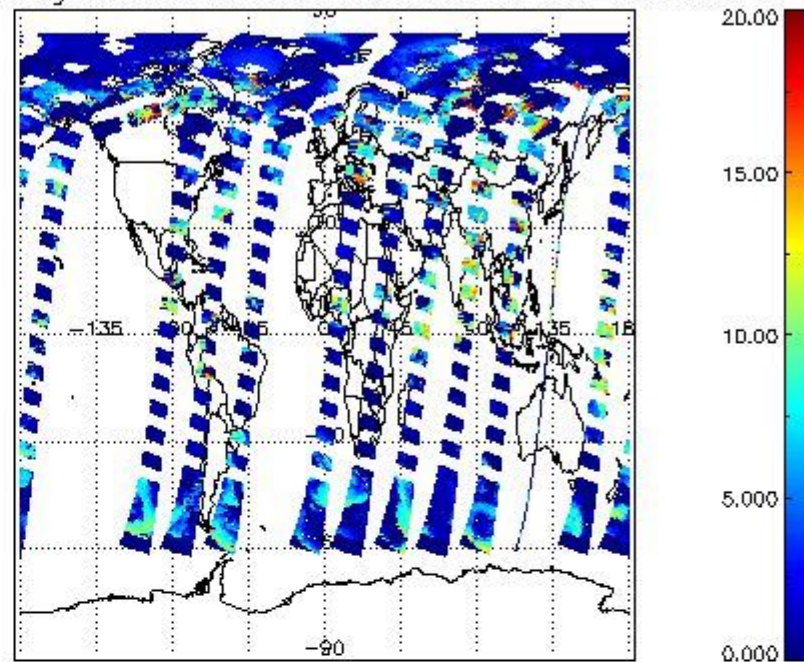
Plots are available for the following parameters:

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

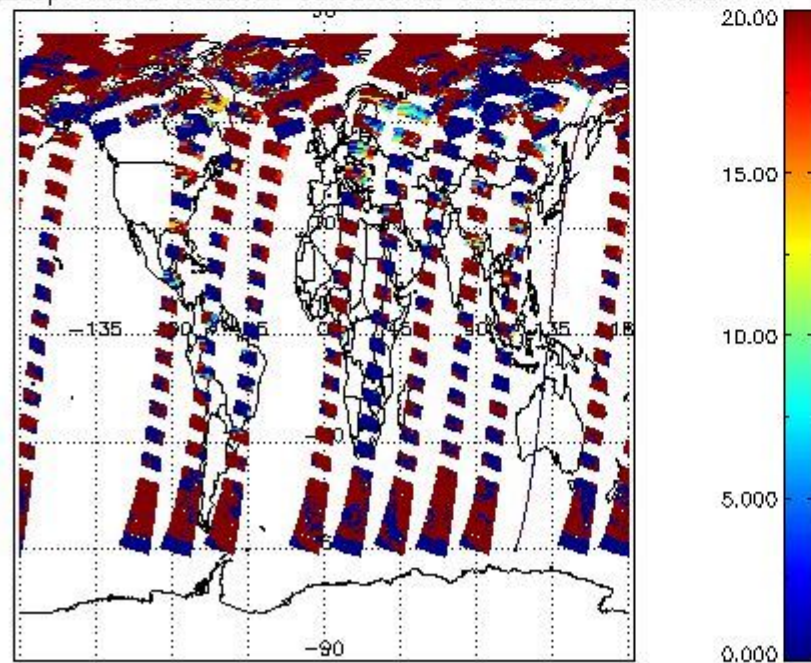
cL_frac for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



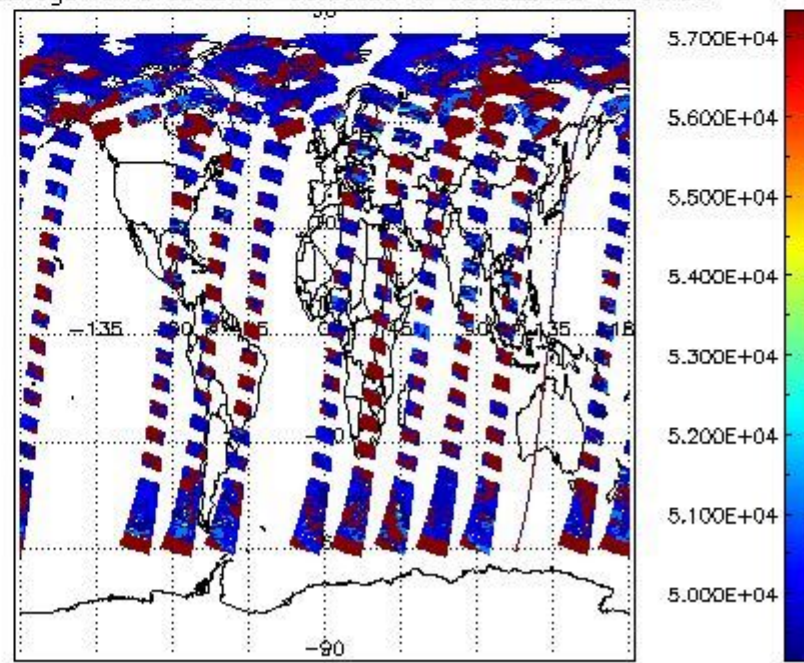
cL_top_height for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



cL_opt_depth for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



cloud_flags for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



2.2.2 Nadir

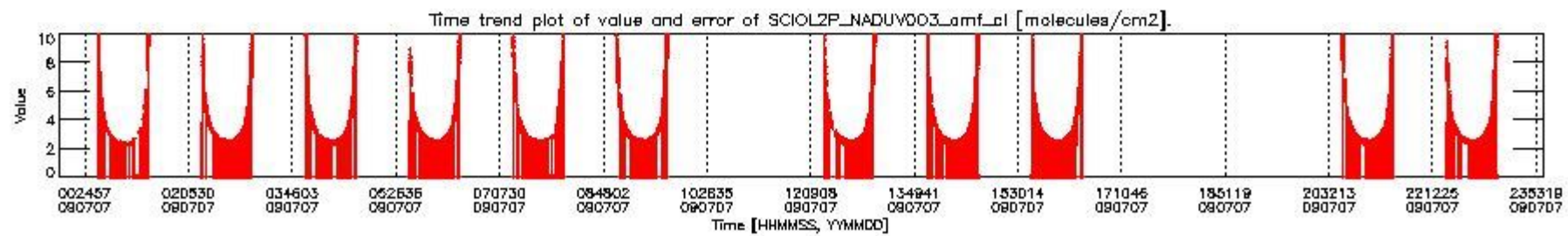
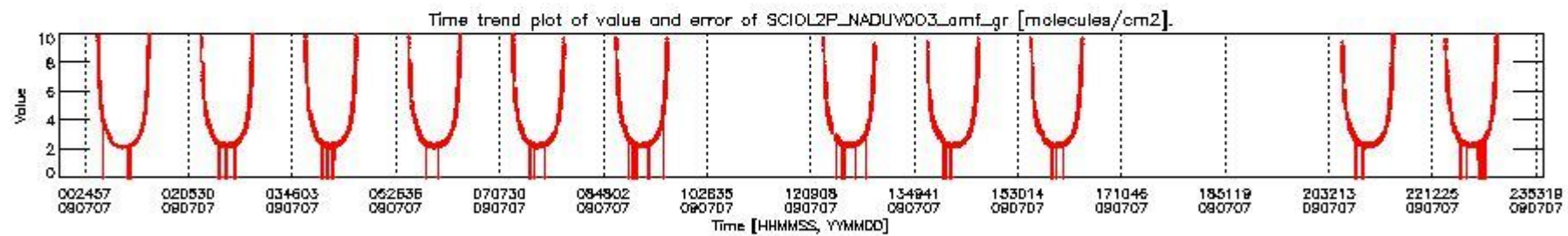
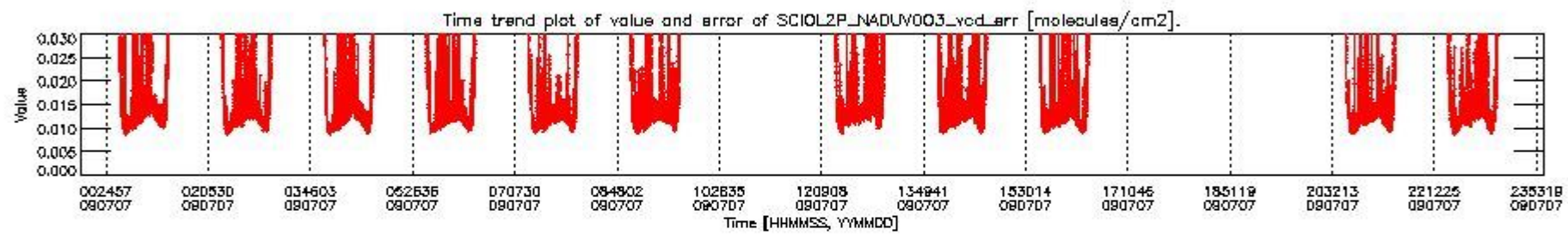
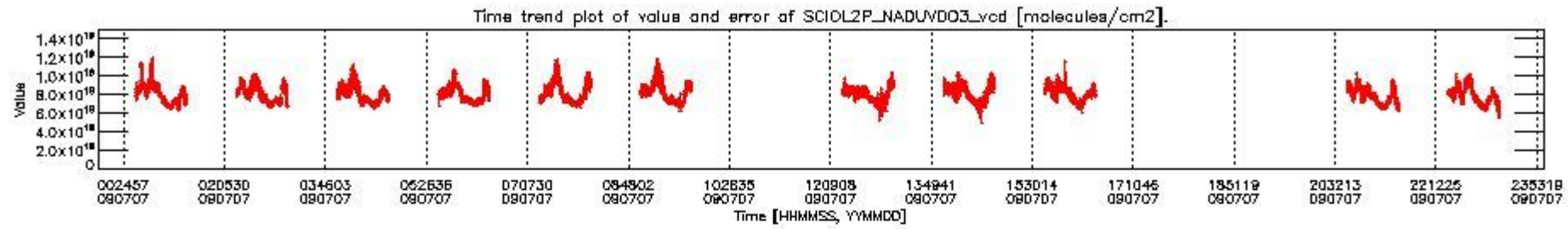
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

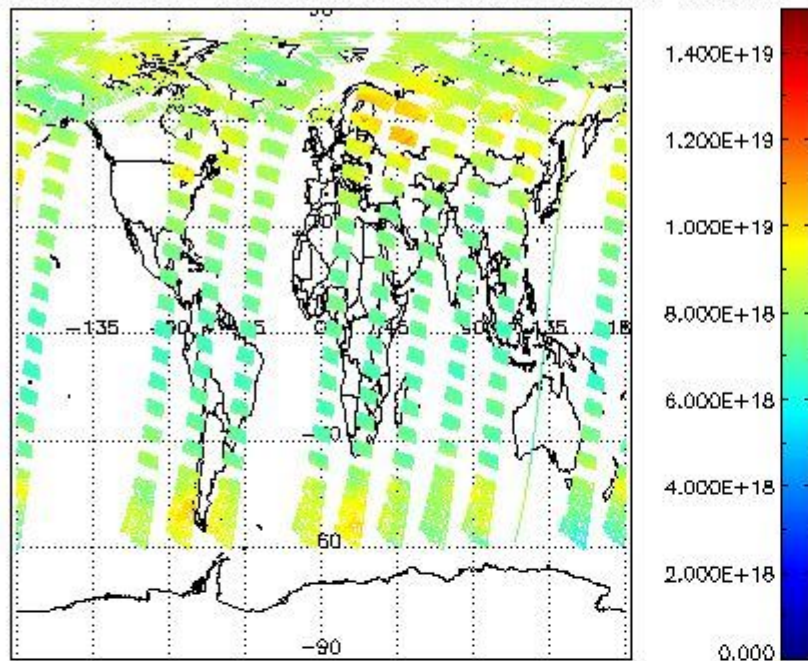
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

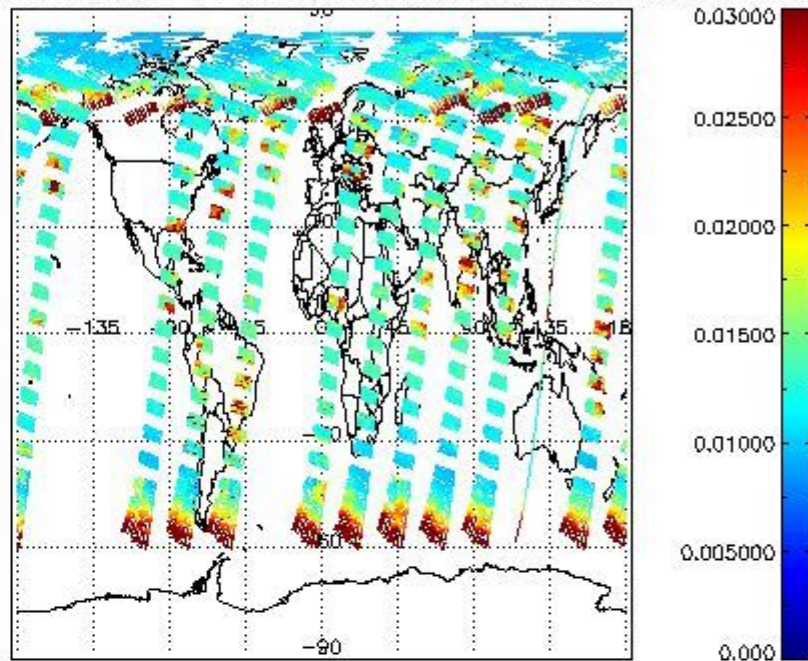
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



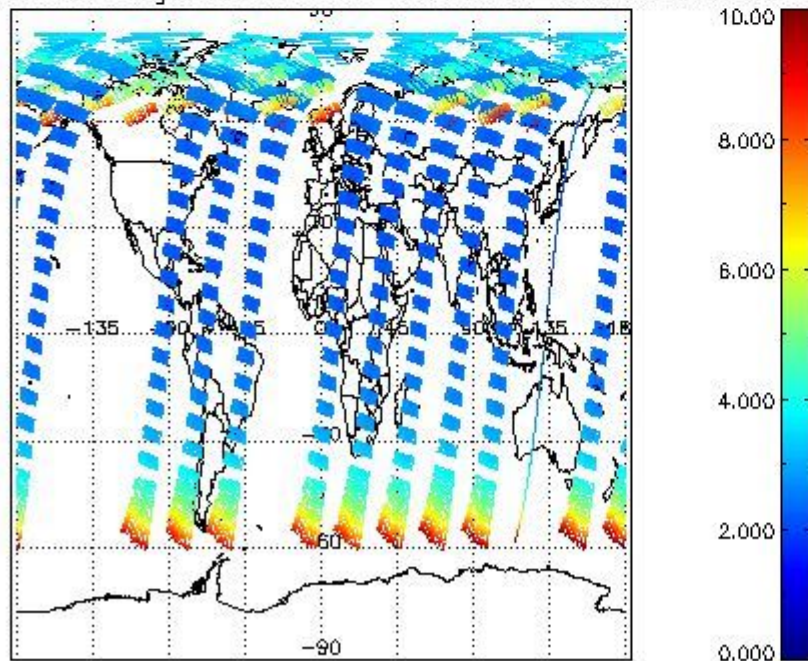
SCIOL2P_NADUV003_vcd for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



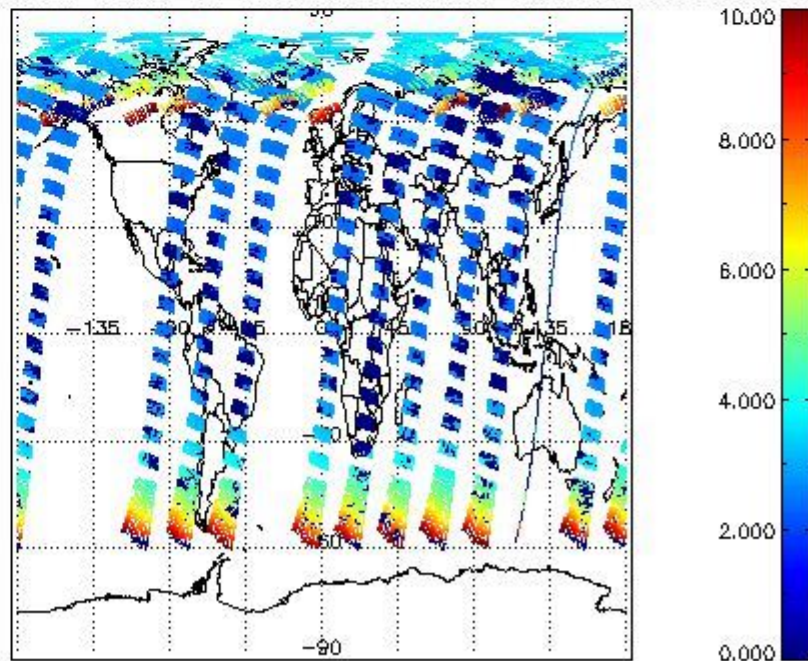
SCIOL2P_NADUV003_vcd_err for 07JUL2009 00:00:00 to 08JUL2009 00:00:00

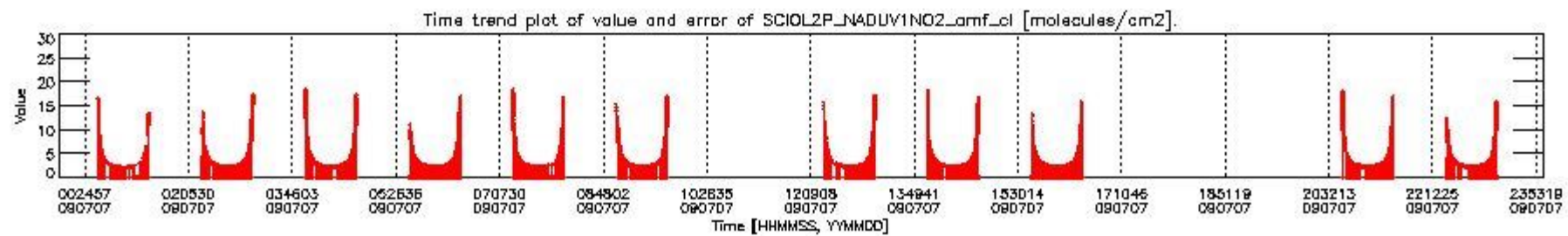
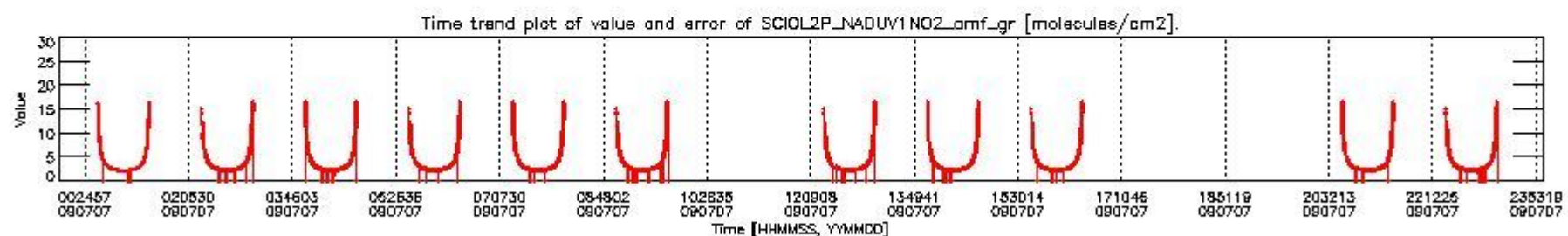
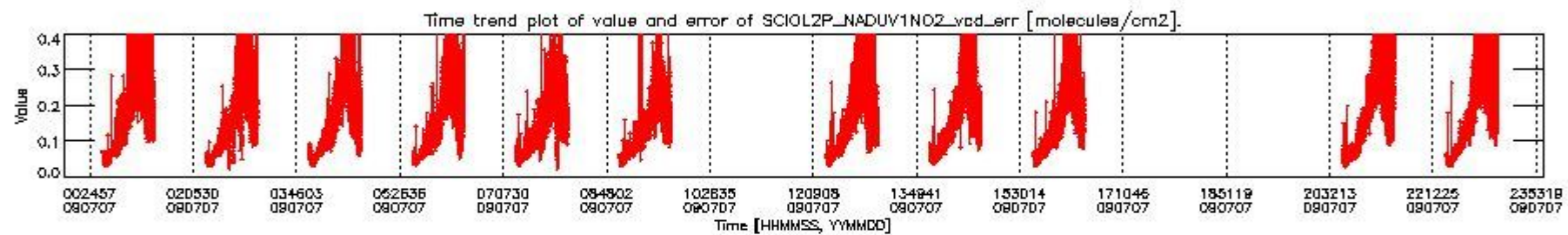
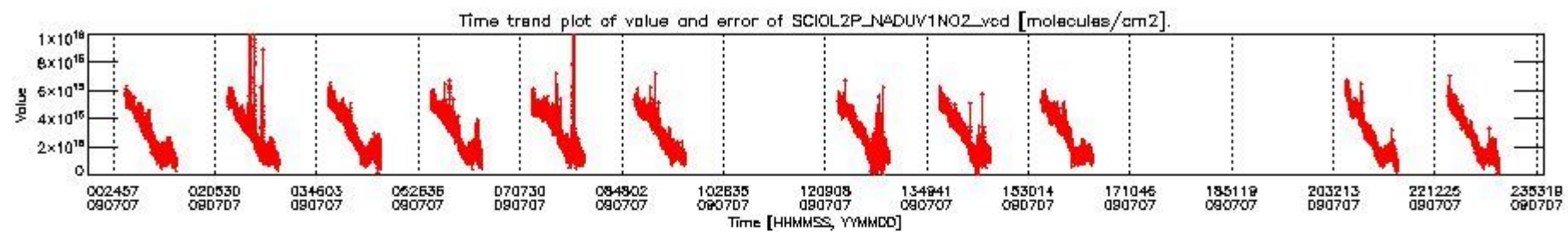


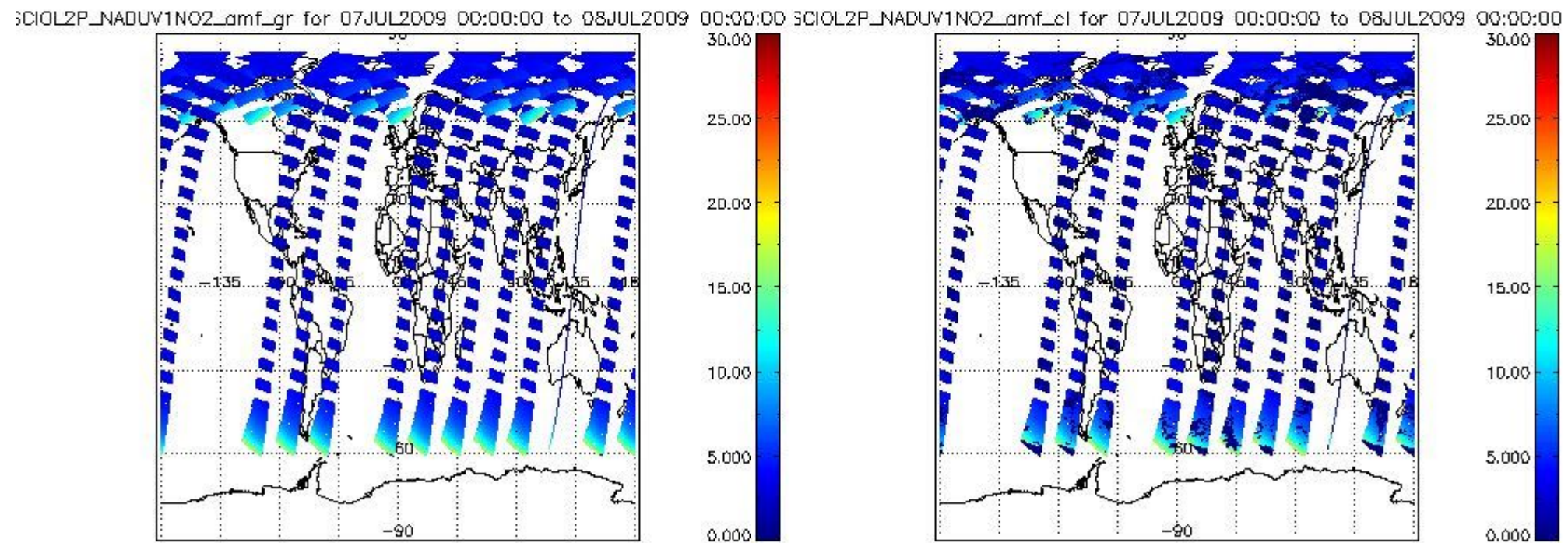
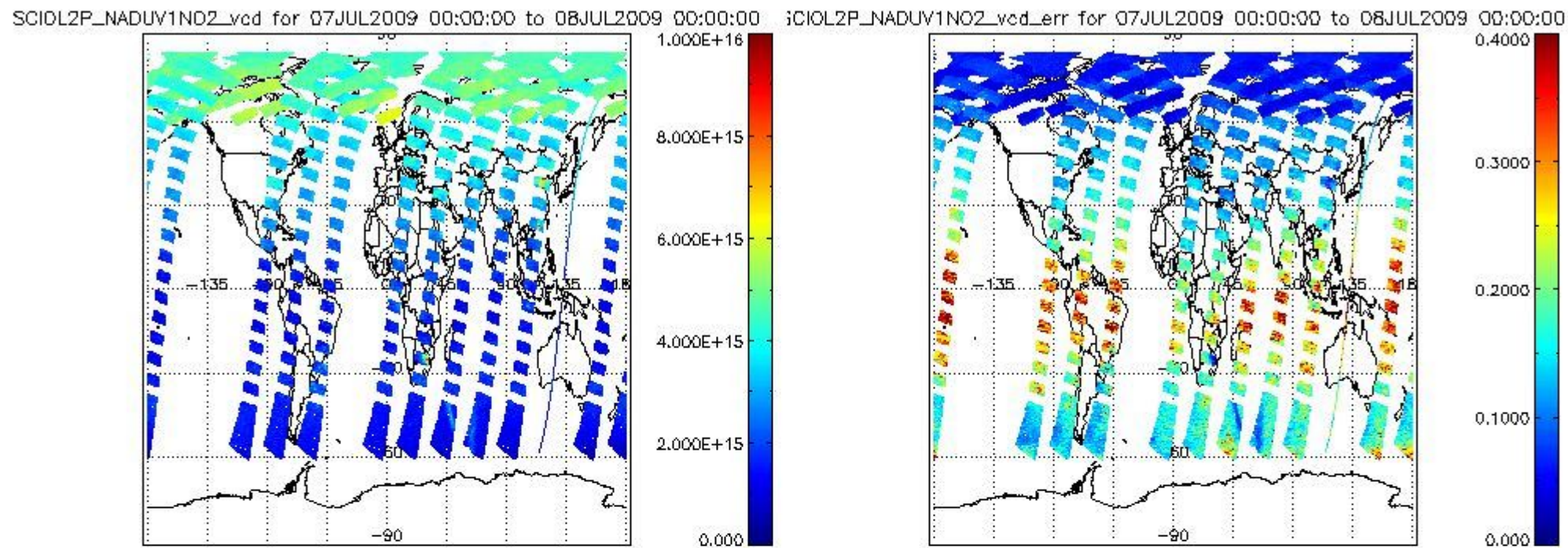
SCIOL2P_NADUV003_amf_gr for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 07JUL2009 00:00:00 to 08JUL2009 00:00:00







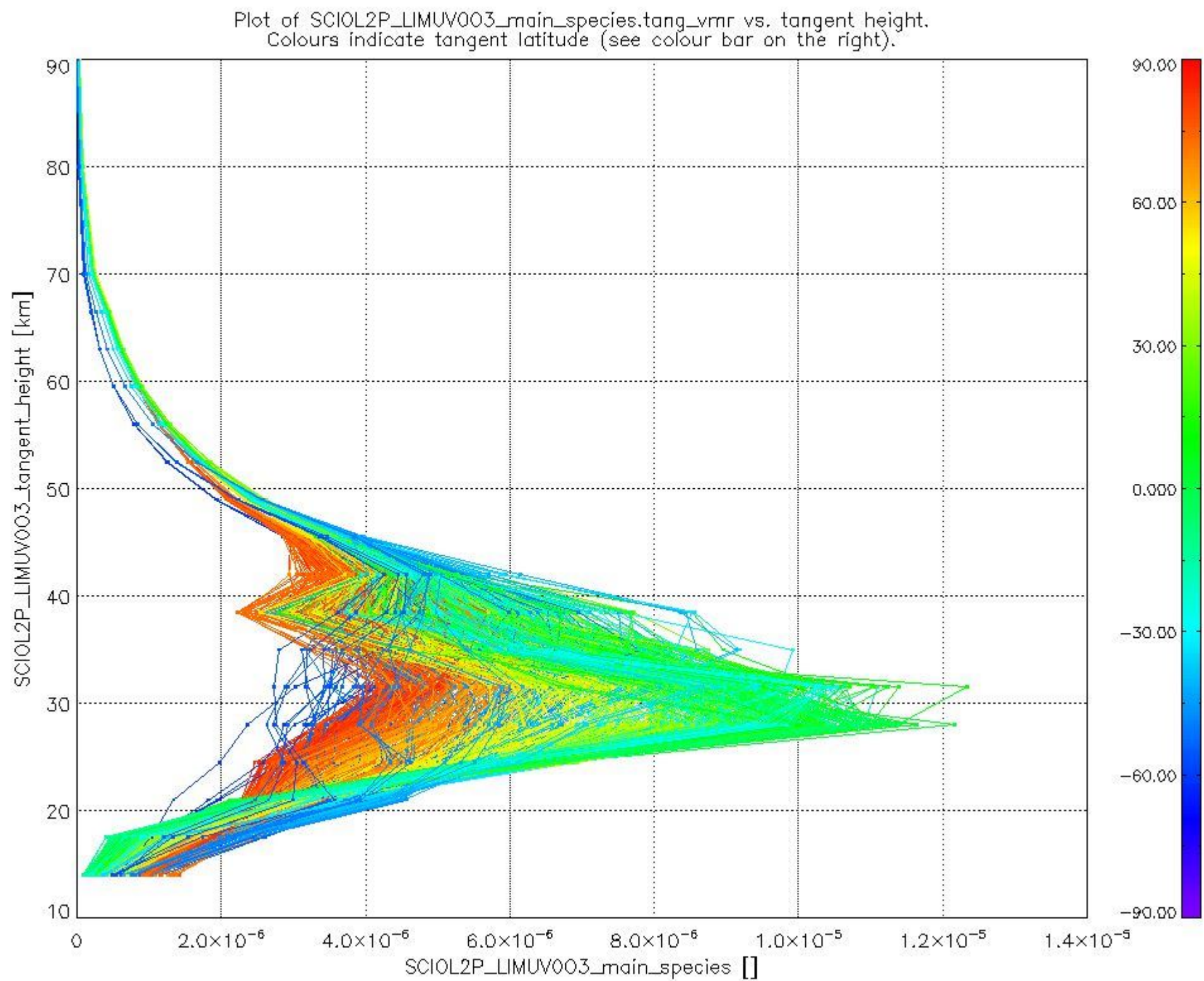
2.2.3 Limb

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

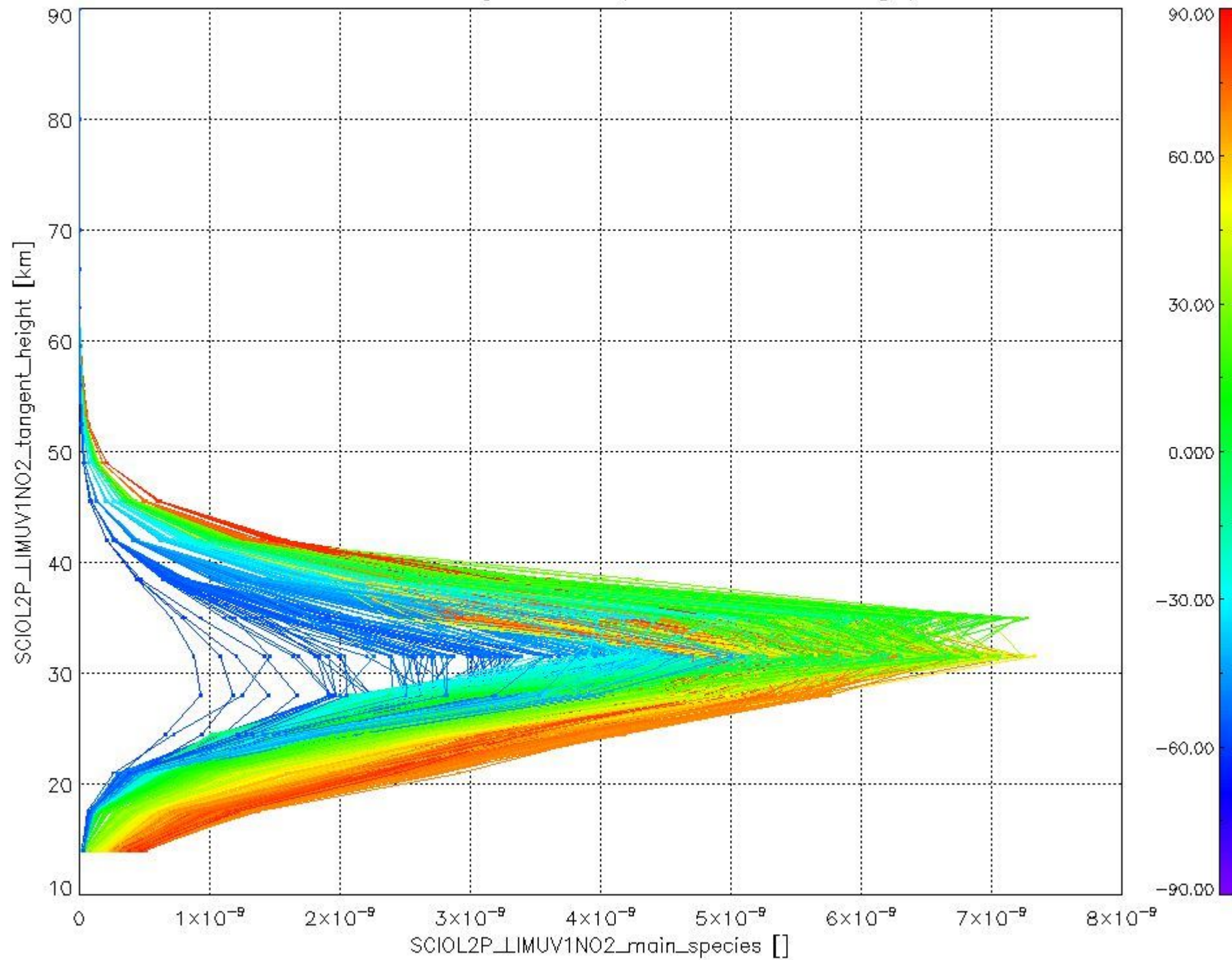
The following data items are currently included into this section:

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.



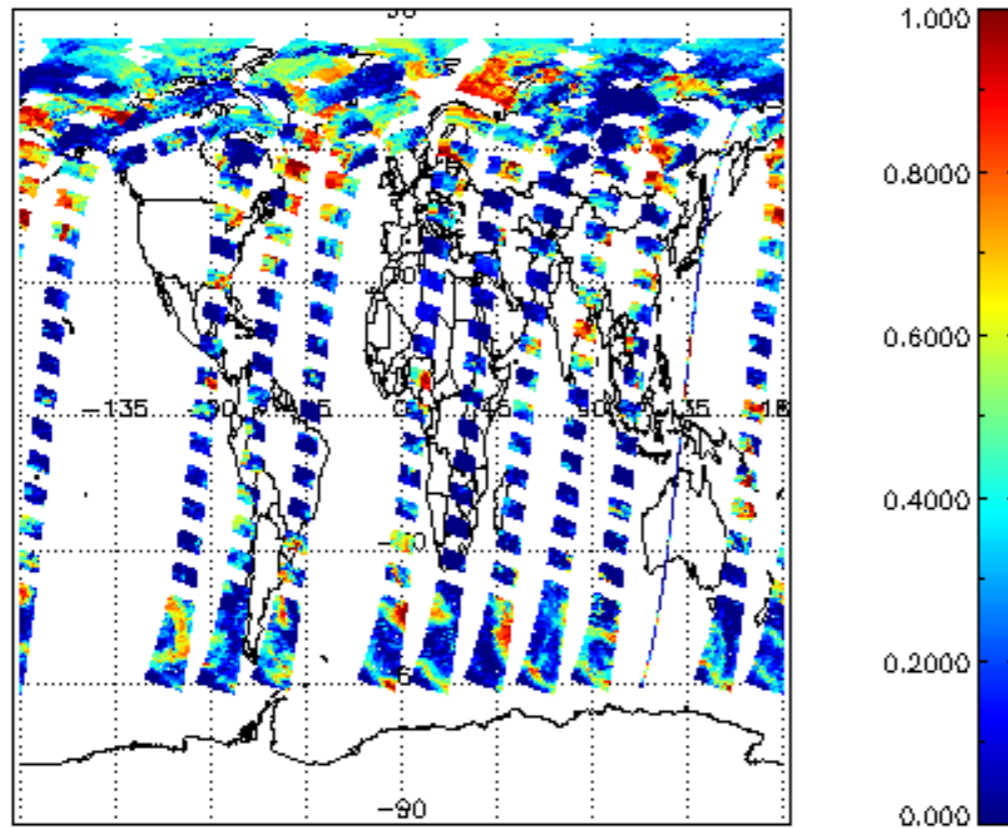
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



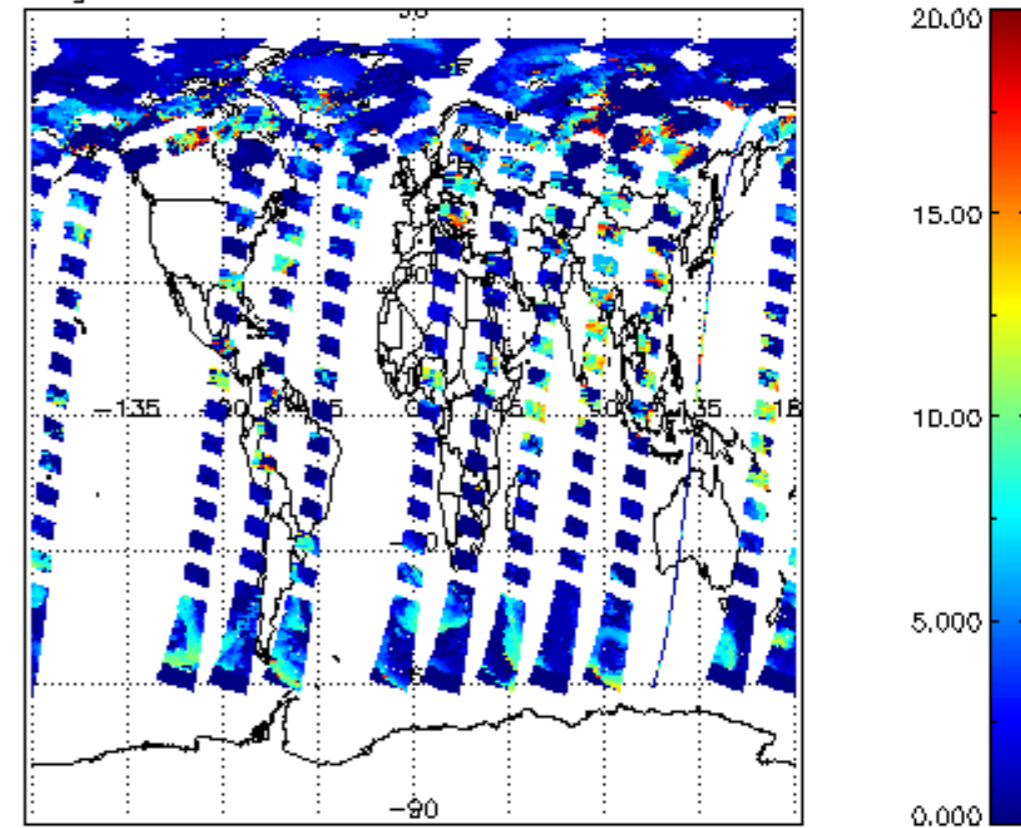
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

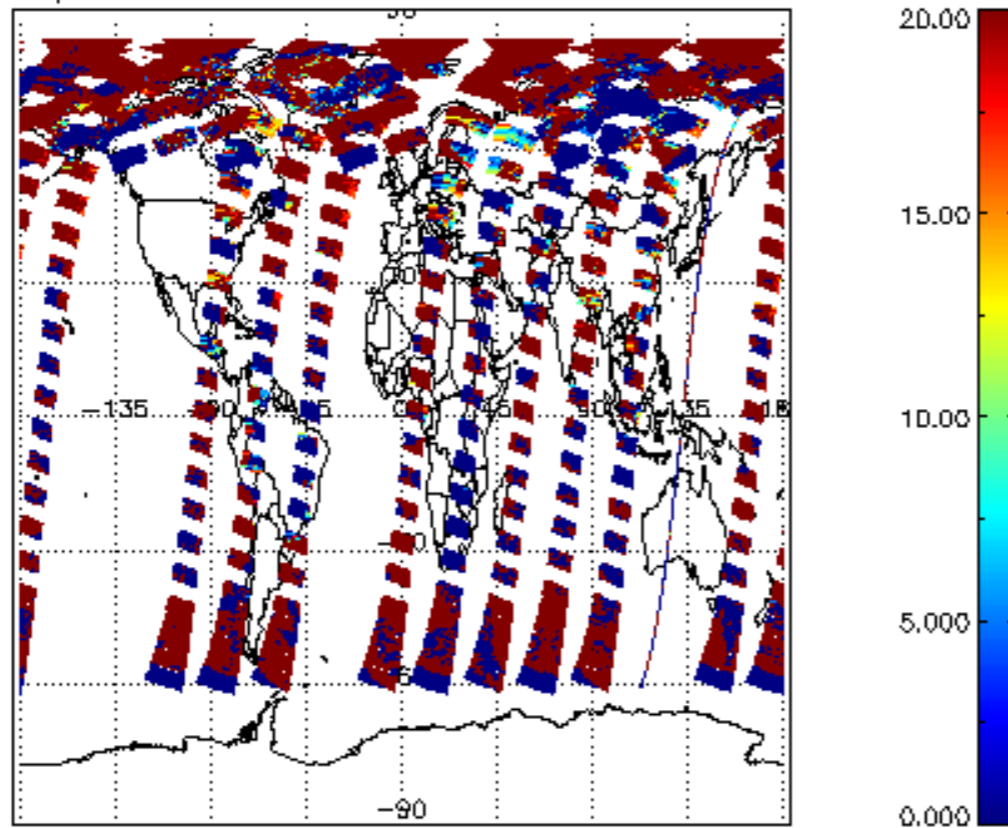
cl_frac for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



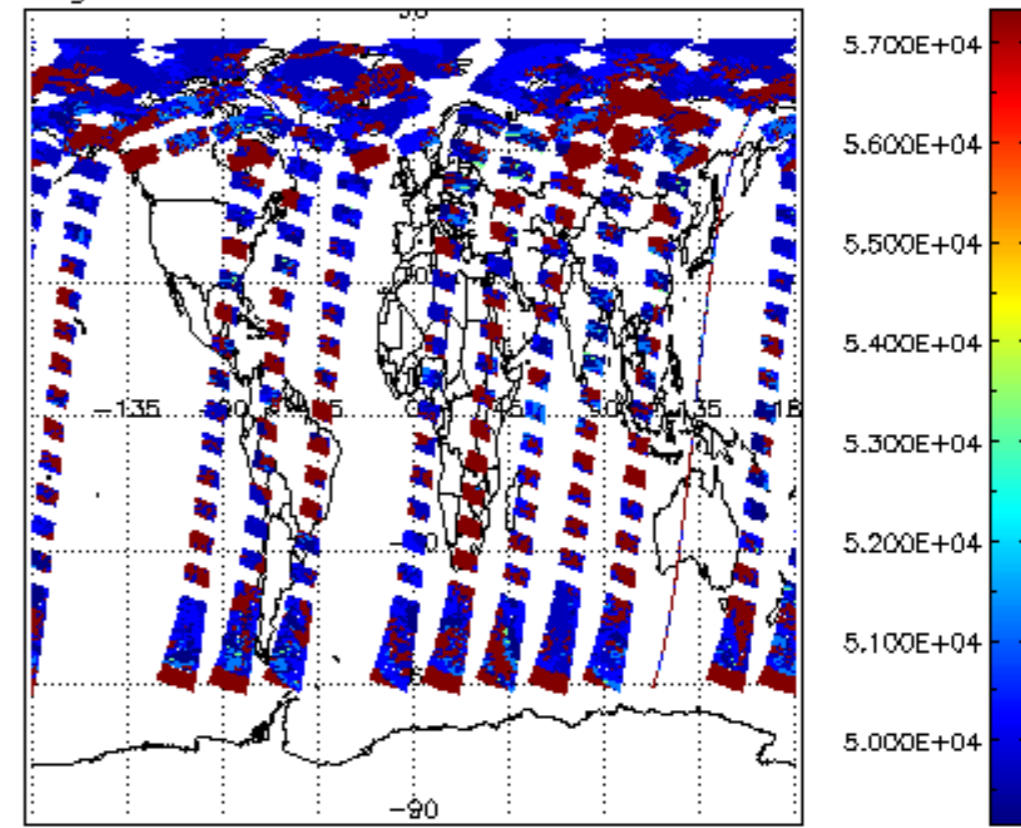
cl_top_height for 07JUL2009 00:00:00 to 08JUL2009 00:00:00

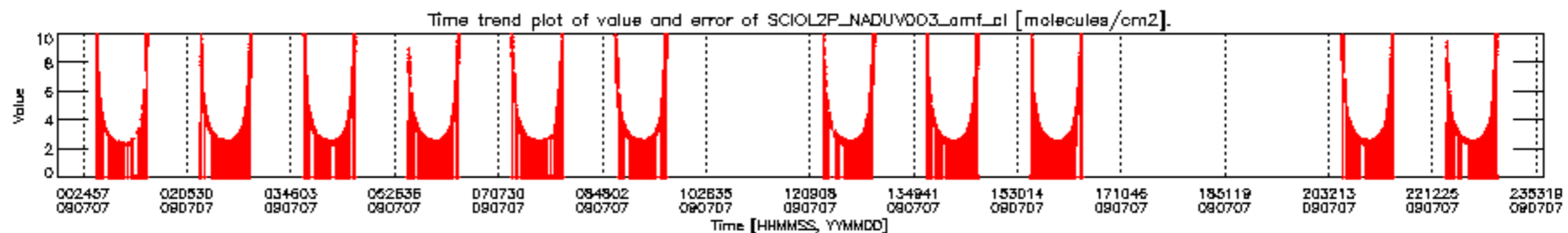
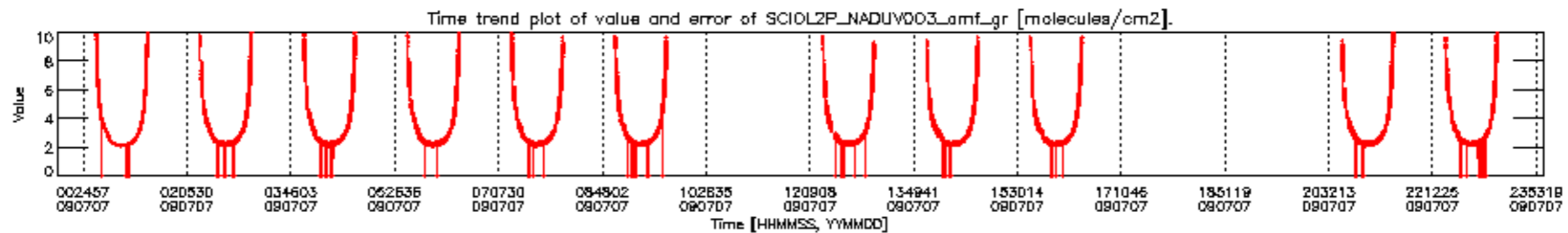
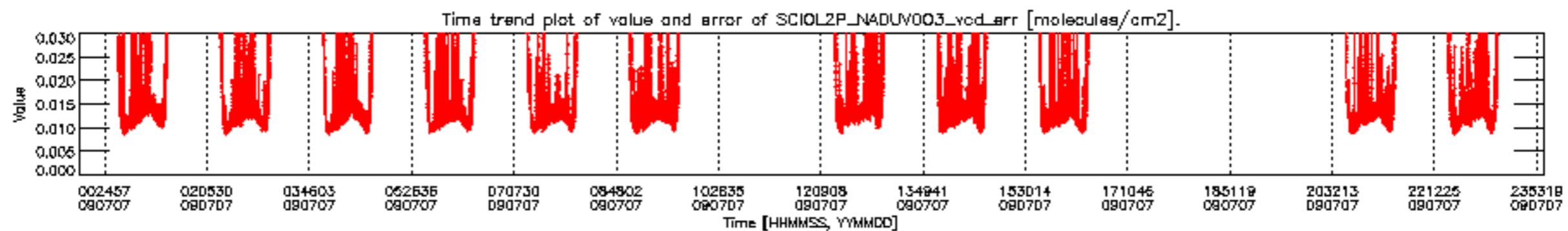
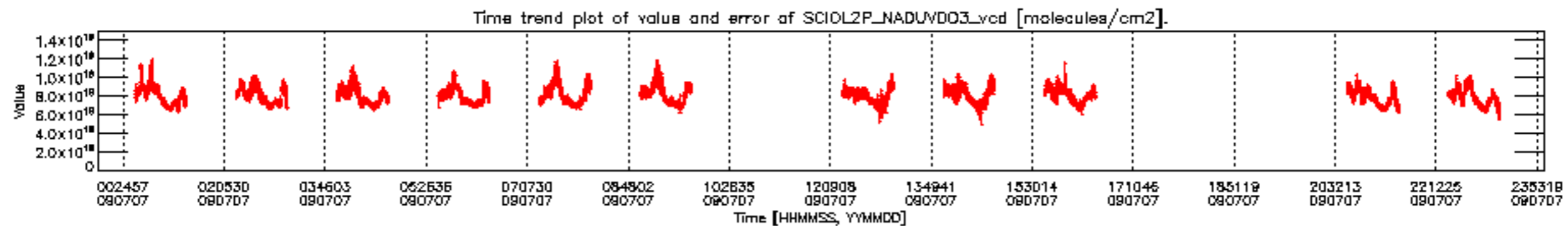


cl_lopt_depth for 07JUL2009 00:00:00 to 08JUL2009 00:00:00

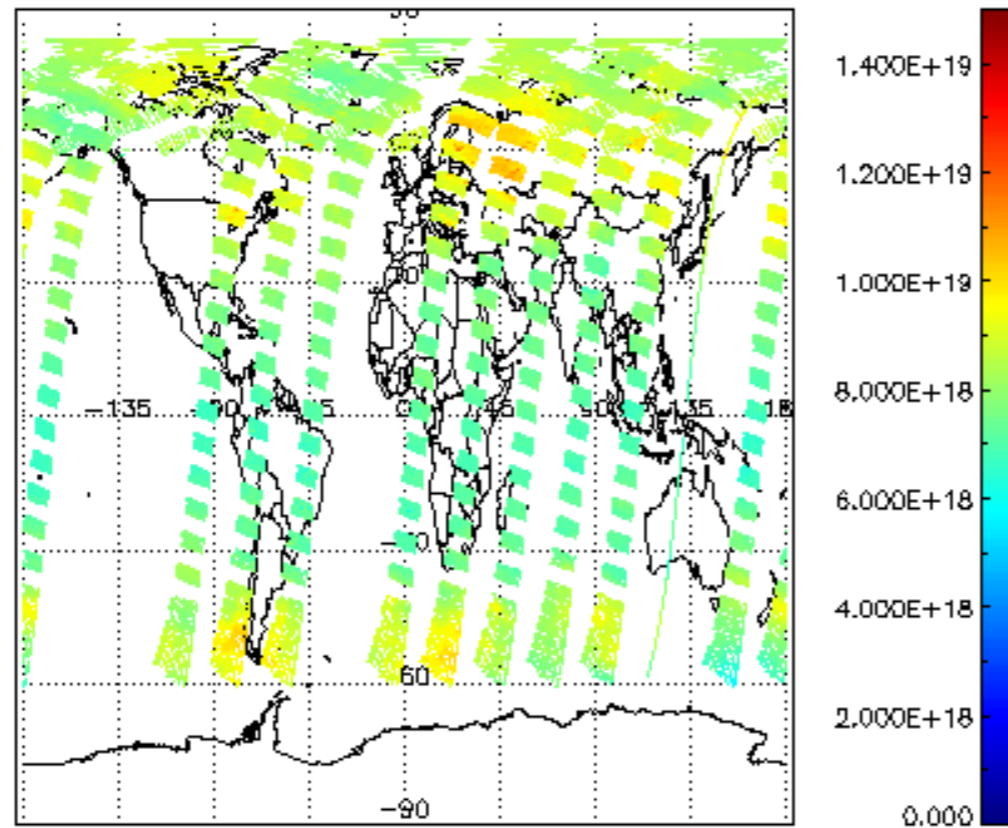


cloud_flags for 07JUL2009 00:00:00 to 08JUL2009 00:00:00

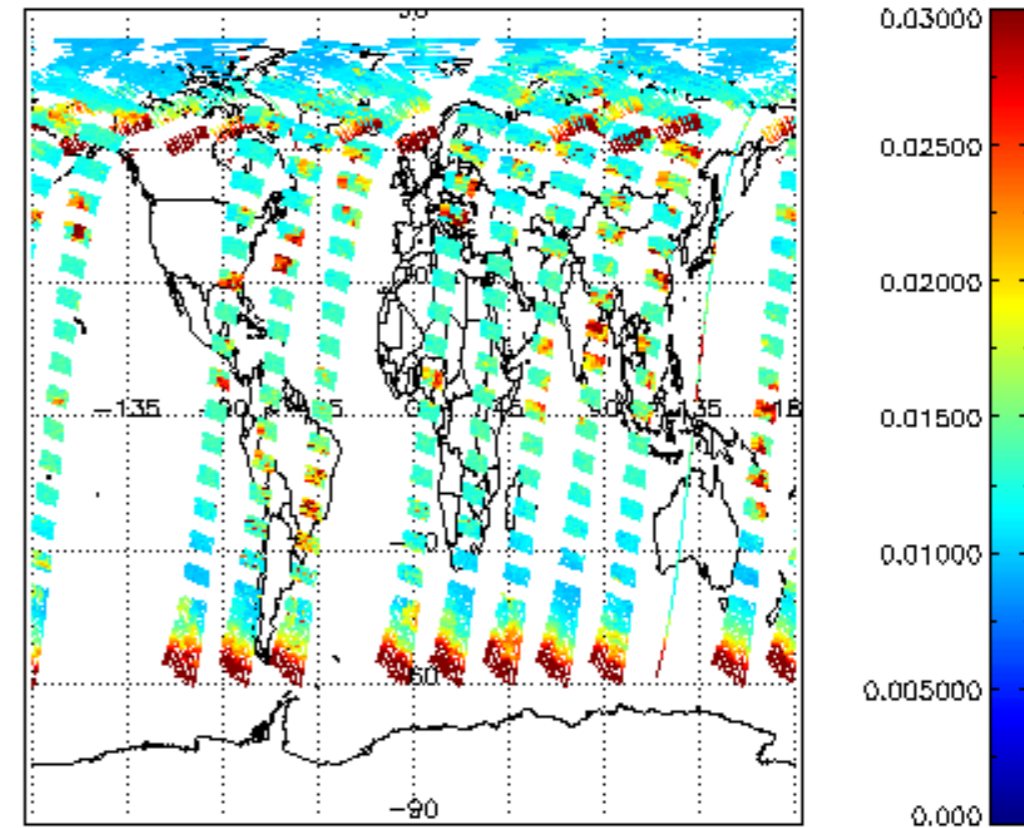




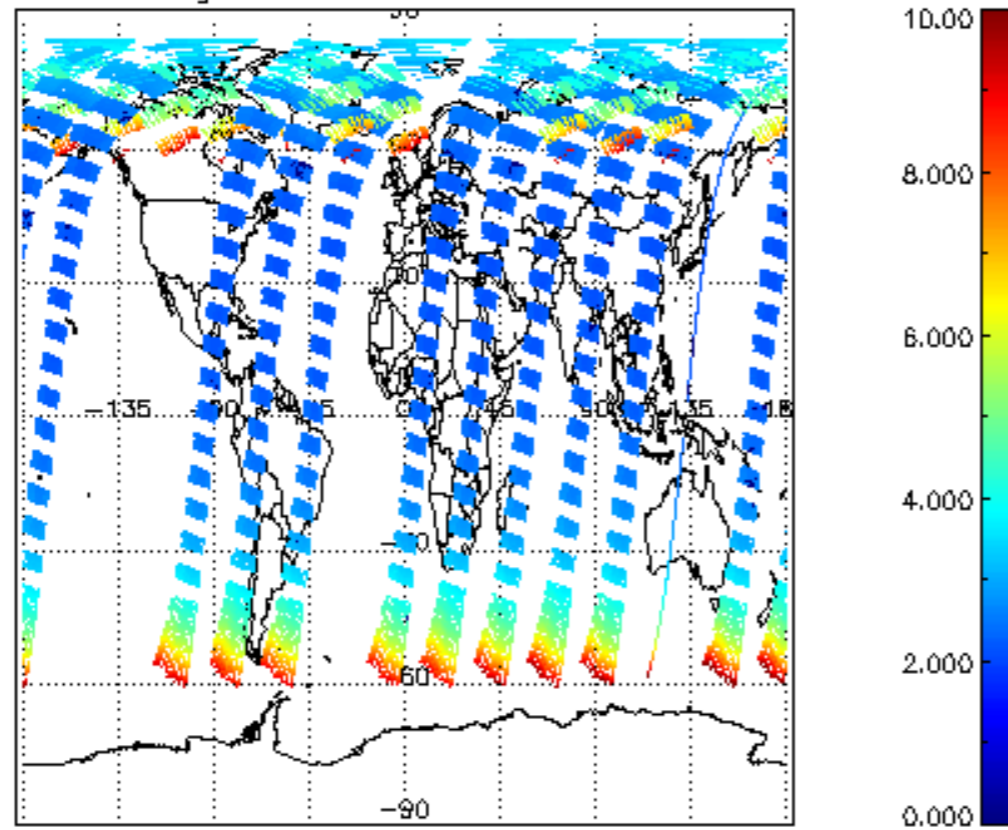
SCIOL2P_NADUV003_vcd for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



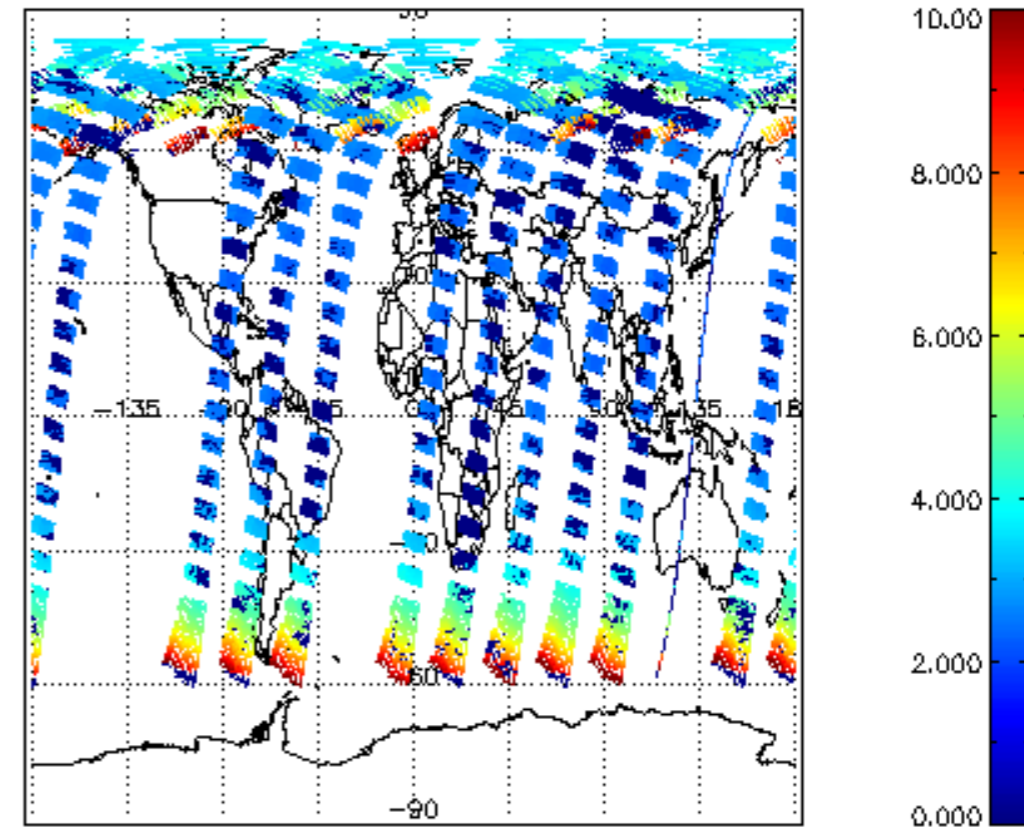
SCIOL2P_NADUV003_vcd_err for 07JUL2009 00:00:00 to 08JUL2009 00:00:00

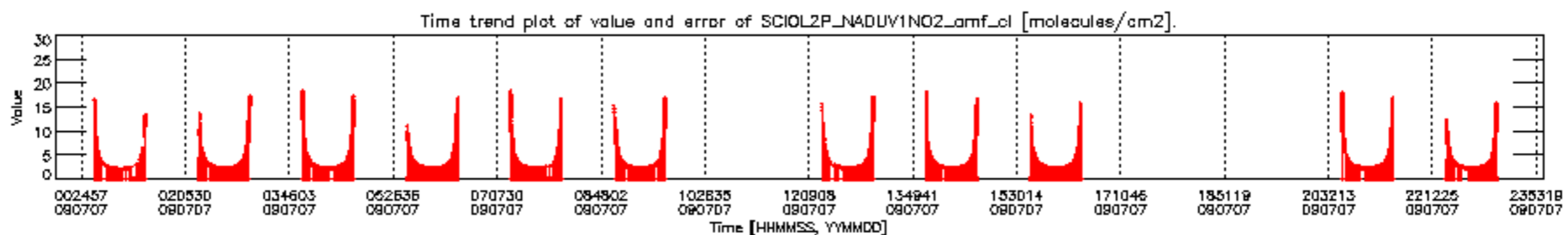
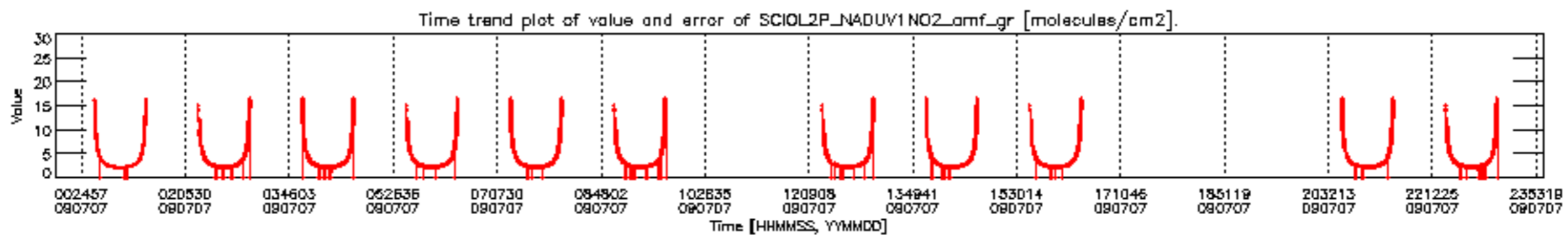
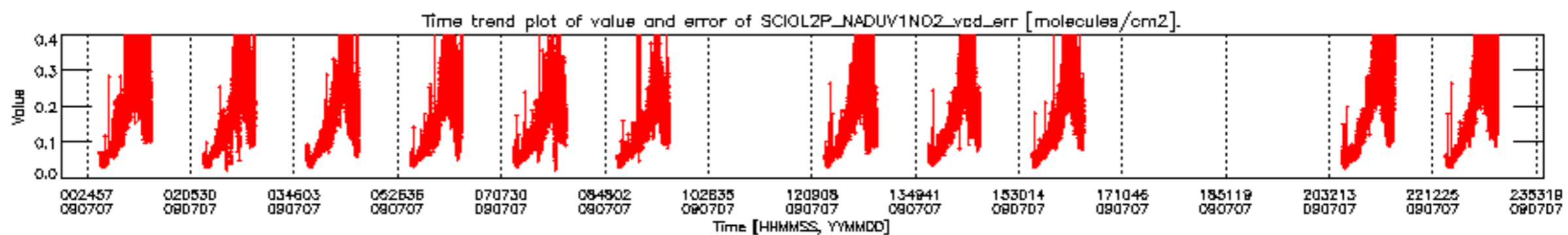
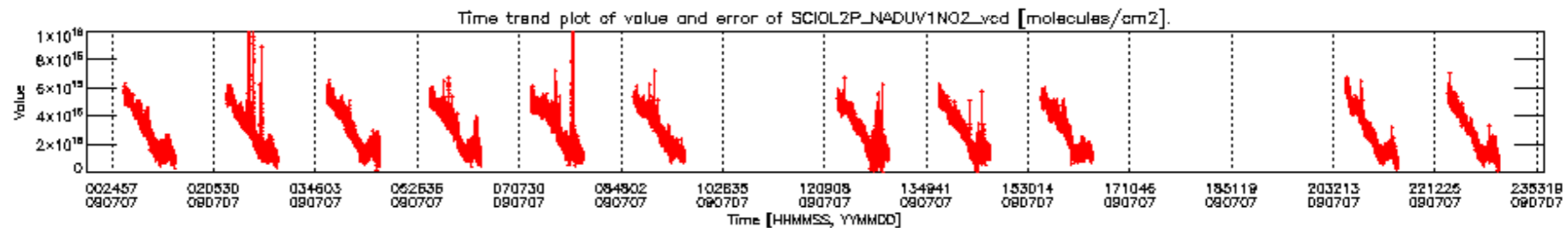


SCIOL2P_NADUV003_amf_gr for 07JUL2009 00:00:00 to 08JUL2009 00:00:00

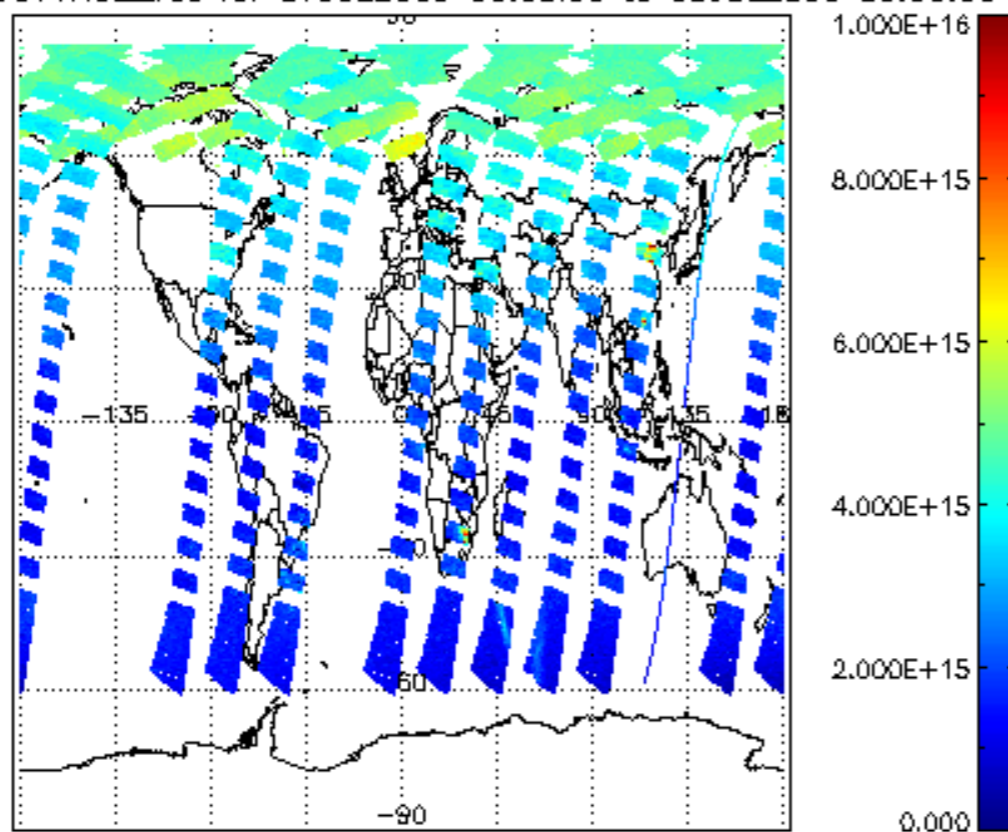


SCIOL2P_NADUV003_amf_cl for 07JUL2009 00:00:00 to 08JUL2009 00:00:00

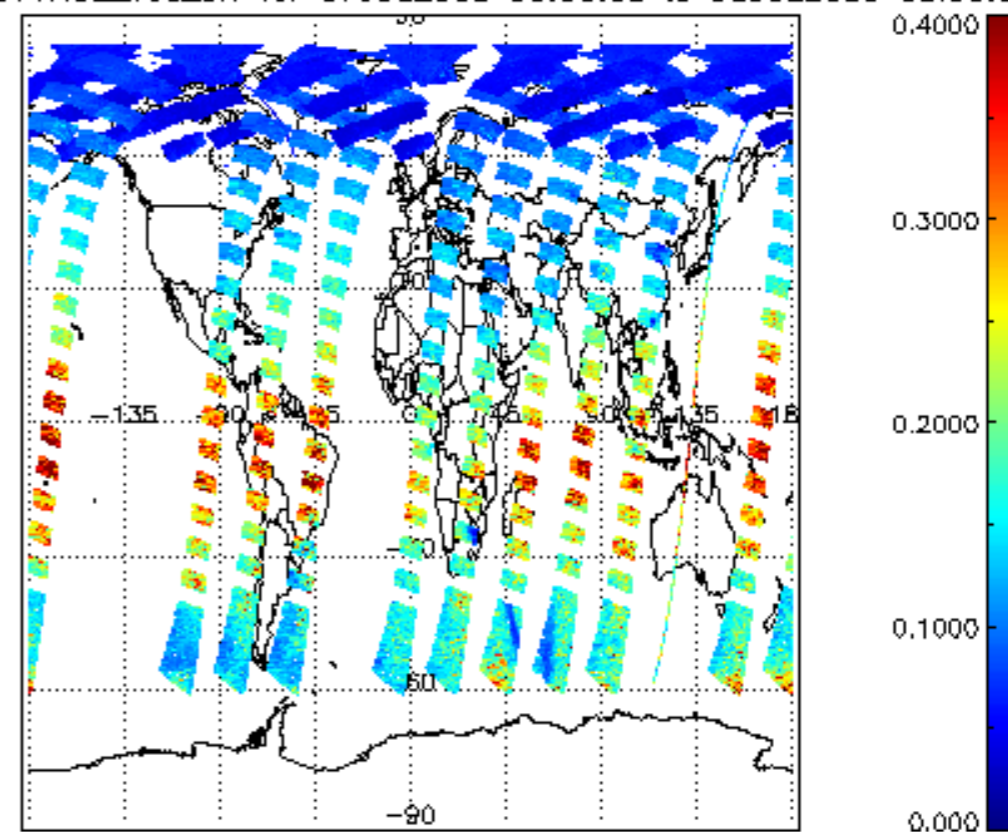




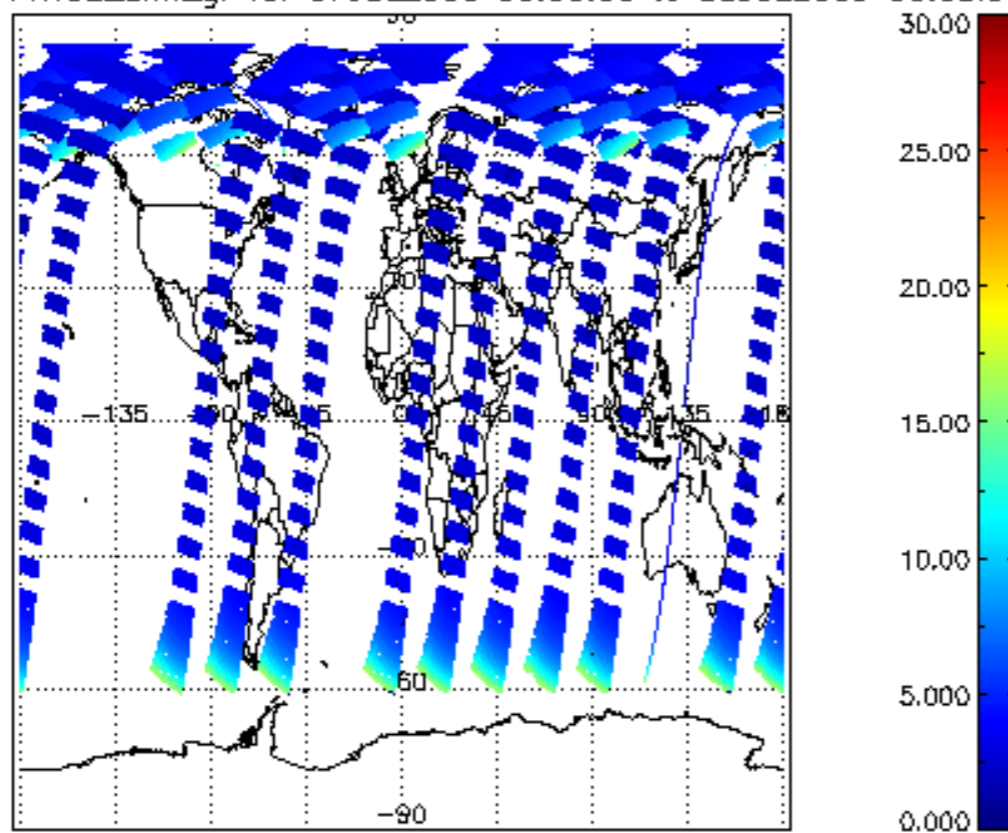
SCIOL2P_NADUV1NO2_vcd for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



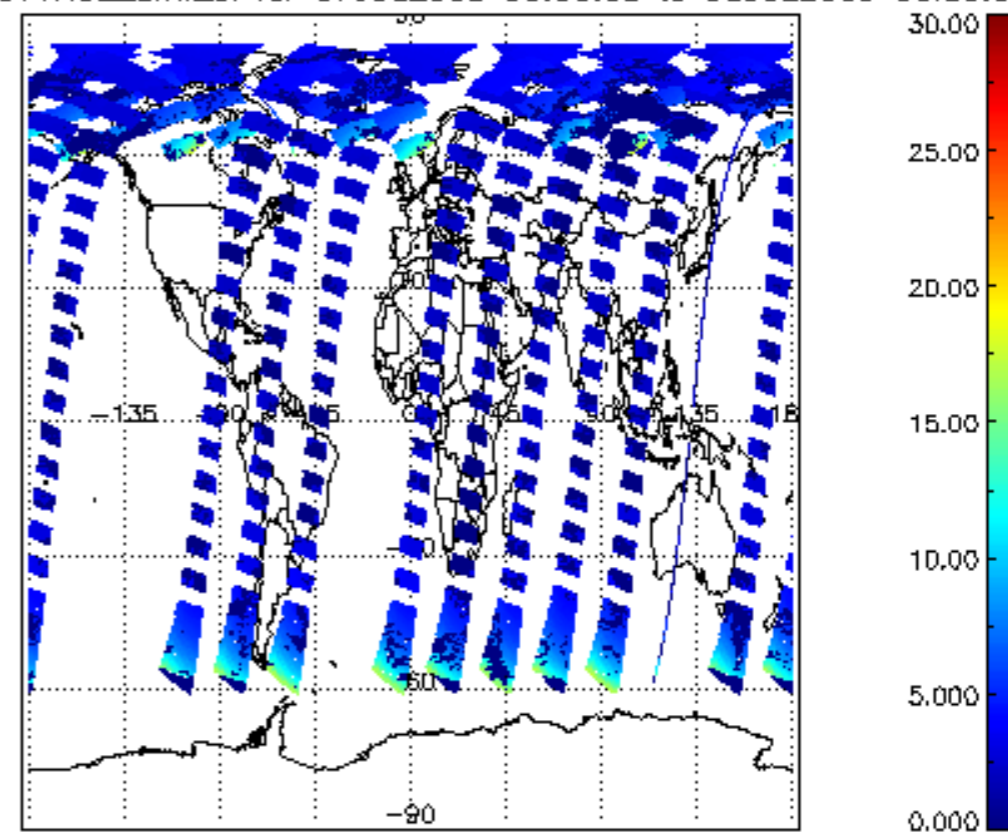
SCIOL2P_NADUV1NO2_vcd_err for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



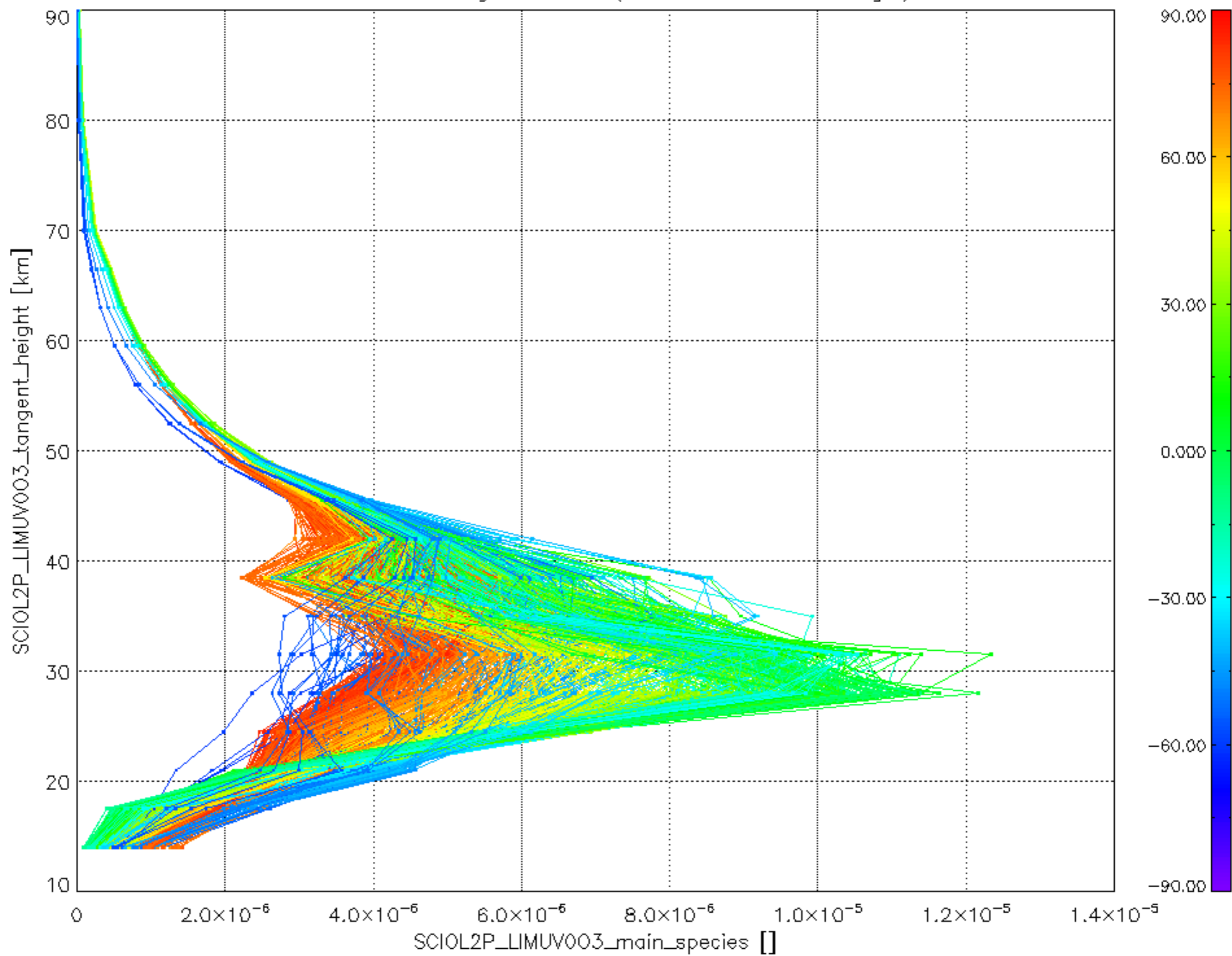
SCIOL2P_NADUV1NO2_amf_gr for 07JUL2009 00:00:00 to 08JUL2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 07JUL2009 00:00:00 to 08JUL2009 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).

