

2. SCIAMACHY Daily Report for level 2 products

[2.1. General Info](#)

[2.2 Product Quality Indicators](#)

[2.3 ADF monitoring](#)

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	28JUL2009 06:03:33
Data source version	SCIA-OL/3.01-R
Processing scope for products	10JUL2009 00:00:00 to 11JUL2009 00:00:00
Start time of first product within scope	09JUL2009 23:02:44
Stop time of last product within scope	11JUL2009 01:01:53
Total number of level 2 products	16
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__2PRDPA20090709_230244_000030202080_00345_38475_3320.N1	09JUL2009 23:02:44	09JUL2009 23:53:05	0	GOOD
1	SCI_OL__2PRDPA20090710_003815_000033122080_00346_38476_3321.N1	10JUL2009 00:38:15	10JUL2009 01:33:28	0	GOOD
2	SCI_OL__2PRDPA20090710_021851_000033252080_00347_38477_3322.N1	10JUL2009 02:18:51	10JUL2009 03:14:17	0	GOOD
3	SCI_OL__2PRDPA20090710_035928_000033122080_00348_38478_3323.N1	10JUL2009 03:59:28	10JUL2009 04:54:40	0	GOOD
4	SCI_OL__2PRDPA20090710_054004_000033252080_00349_38479_3324.N1	10JUL2009 05:40:04	10JUL2009 06:35:29	0	GOOD
5	SCI_OL__2PRDPA20090710_072040_000033122080_00350_38480_3325.N1	10JUL2009 07:20:40	10JUL2009 08:15:53	0	GOOD
6	SCI_OL__2PRDPA20090710_090116_000033252080_00351_38481_3329.N1	10JUL2009 09:01:16	10JUL2009 09:56:41	0	GOOD
7	SCI_OL__2PRDPA20090710_104152_000033122080_00352_38482_3326.N1	10JUL2009 10:41:52	10JUL2009 11:37:05	0	GOOD
8	SCI_OL__2PRDPA20090710_122228_000033252080_00353_38483_3331.N1	10JUL2009 12:22:28	10JUL2009 13:17:53	0	GOOD
9	SCI_OL__2PRDPA20090710_140304_000033122080_00354_38484_3332.N1	10JUL2009 14:03:04	10JUL2009 14:58:17	0	GOOD
10	SCI_OL__2PRDPA20090710_154340_000033252080_00355_38485_3327.N1	10JUL2009 15:43:40	10JUL2009 16:39:05	0	GOOD
11	SCI_OL__2PRDPA20090710_172405_000033182080_00356_38486_3328.N1	10JUL2009 17:24:05	10JUL2009 18:19:24	0	GOOD
12	SCI_OL__2PRDPA20090710_190508_000033252080_00357_38487_3330.N1	10JUL2009 19:05:08	10JUL2009 20:00:34	0	GOOD
13	SCI_OL__2PRDPA20090710_204528_000033122080_00358_38488_3333.N1	10JUL2009 20:45:28	10JUL2009 21:40:41	0	GOOD
14	SCI_OL__2PRDPA20090710_222604_000033252080_00359_38489_3334.N1	10JUL2009 22:26:04	10JUL2009 23:21:30	0	GOOD
15	SCI_OL__2PRDPA20090711_000640_000033122080_00360_38490_3382.N1	11JUL2009 00:06:40	11JUL2009 01:01:53	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: 142740

Total number of cloud data DSRs with good quality flag (=0): 142740 (100.0 %)

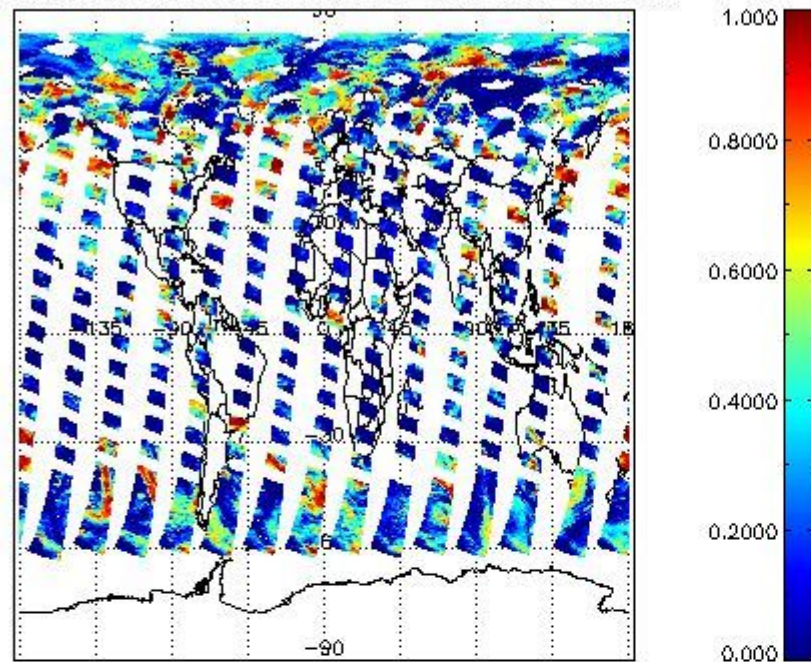
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	142740	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	142740	0.17122	0.12500	0.12500	0.25000	0.060343	s
CL_FRAC	142740	0.28074	0.20938	0.0000	1.0000	0.27914	-
CL_FRAC_ERR	142740	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	142740	5.4791	4.0000	4.0000	8.0000	1.9310	
PMD_READ_CL[0]	142740	0.16689	0.0000	0.0000	8.0000	0.93234	-
PMD_READ_CL[1]	142740	1.8768	0.0000	0.0000	8.0000	2.6801	-
CL_TOP_HEIGHT	124855	3.3510	1.1962	0.0000	17.000	3.9289	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	124855	57.040	72.859	0.0000	101.00	45.249	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	142740	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	142740	11001101	11000100	11000000	11100000	3621.3	flags
AERO_ABSO_IND	142740	4.2122	4.9038	-0.38943	20.522	2.7359	
AERO_IND_DIAG	142740	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	142740	01011001	00000000	00000000	11000000	24519.	flags

Time and geolocation plots:

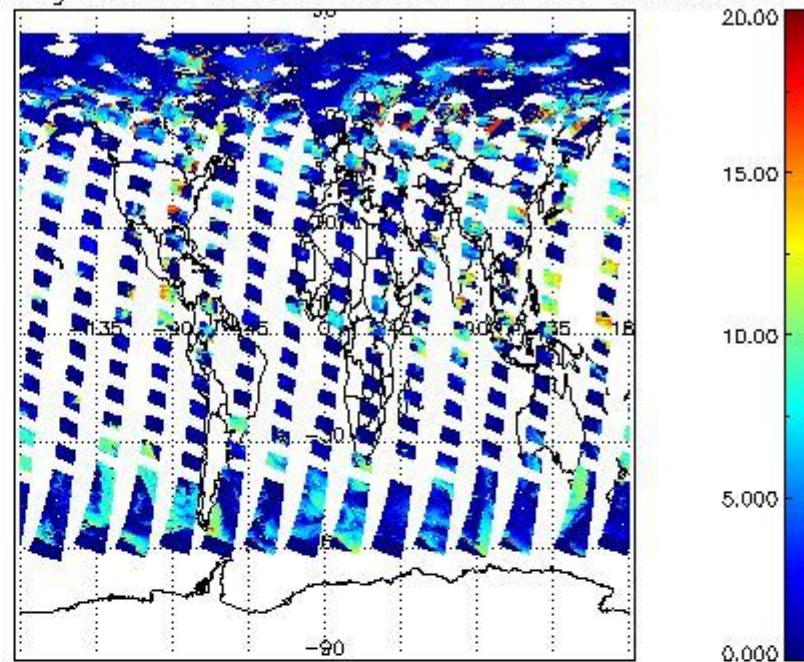
Plots are available for the following parameters:

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

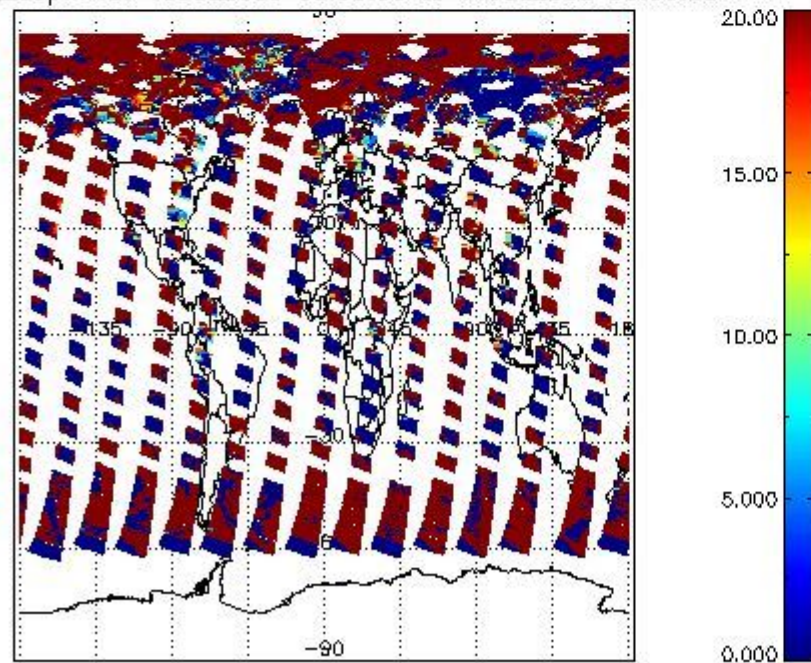
cL_frac for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



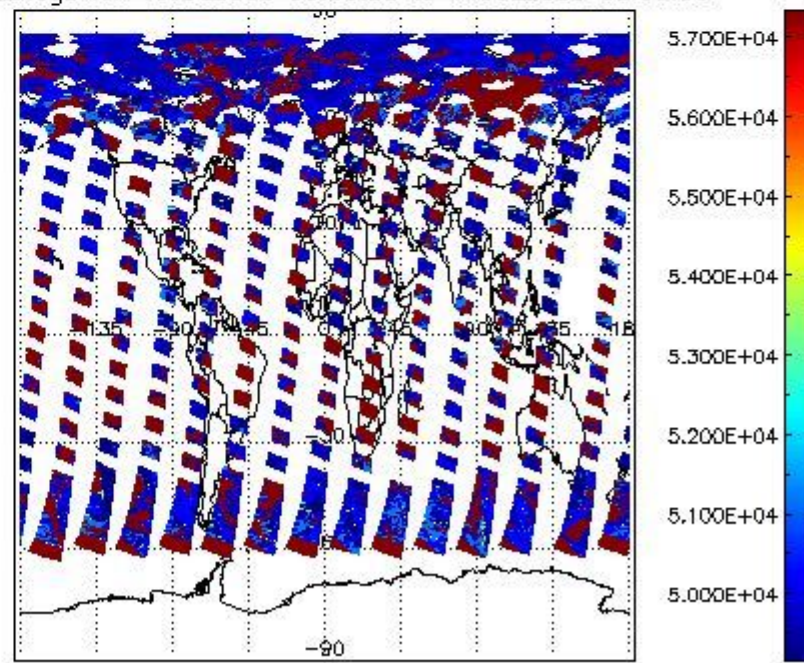
cL_top_height for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



cL_opt_depth for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



cloud_flags for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



2.2.2 Nadir

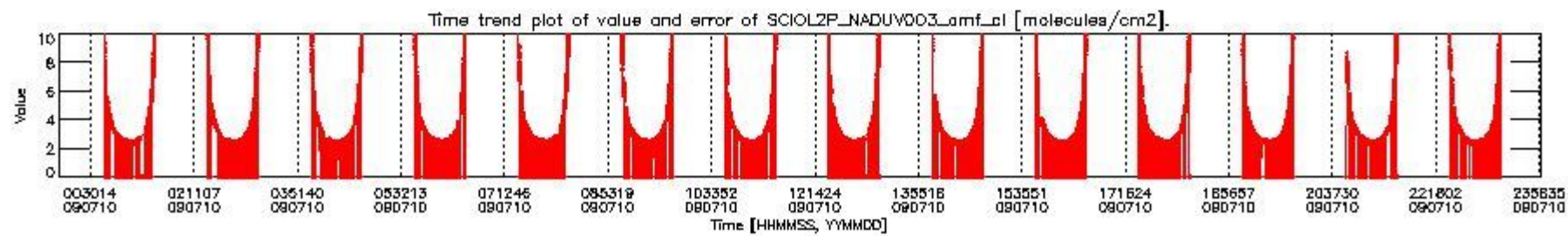
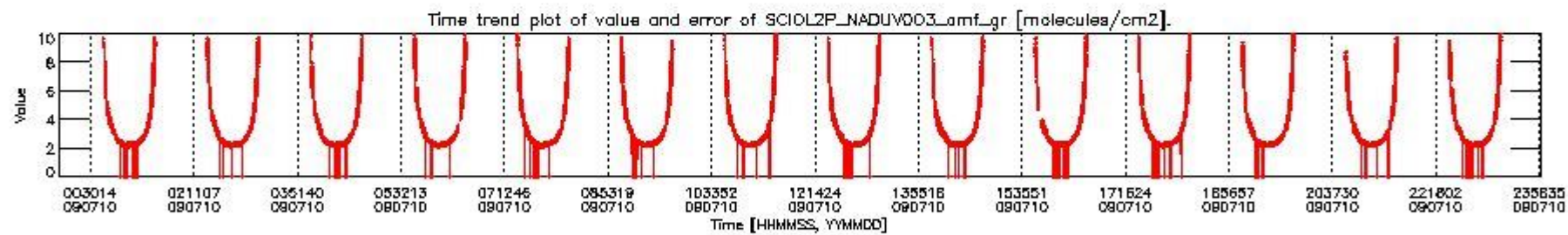
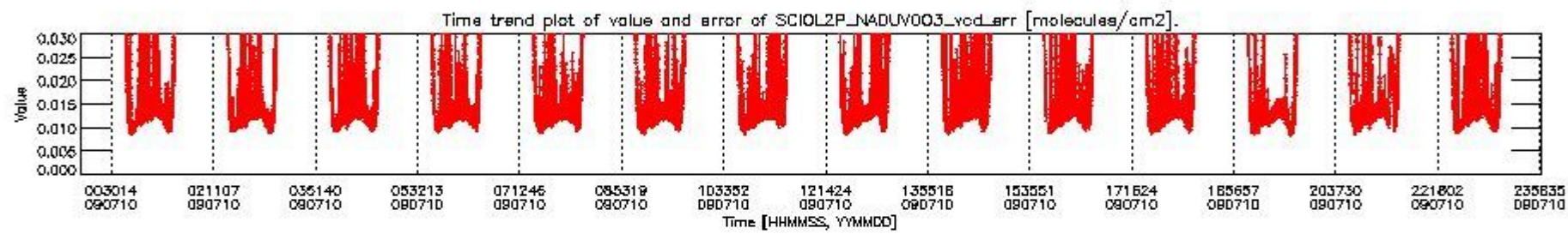
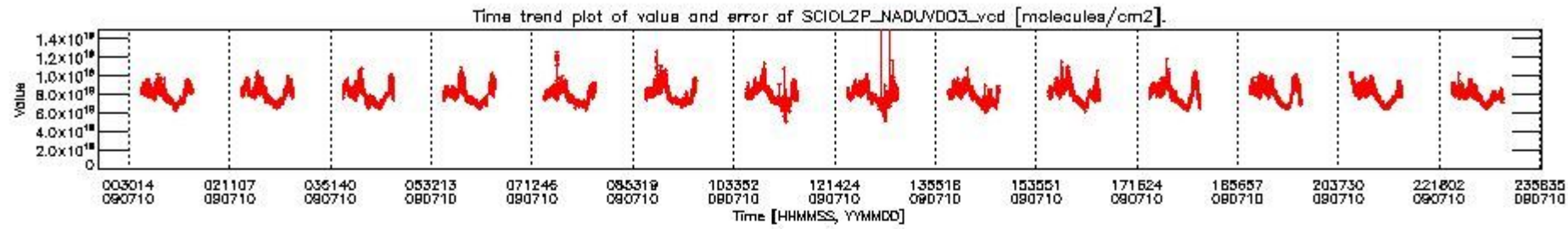
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

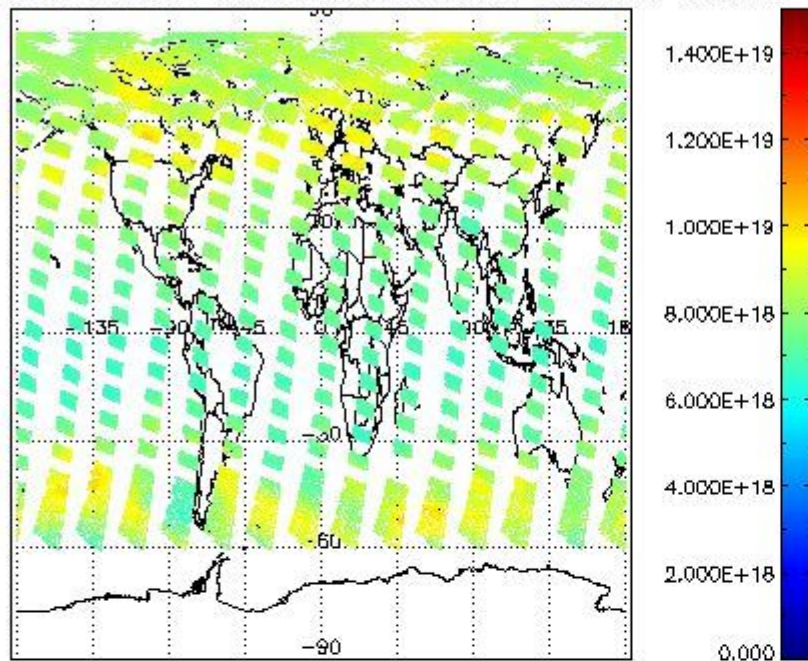
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

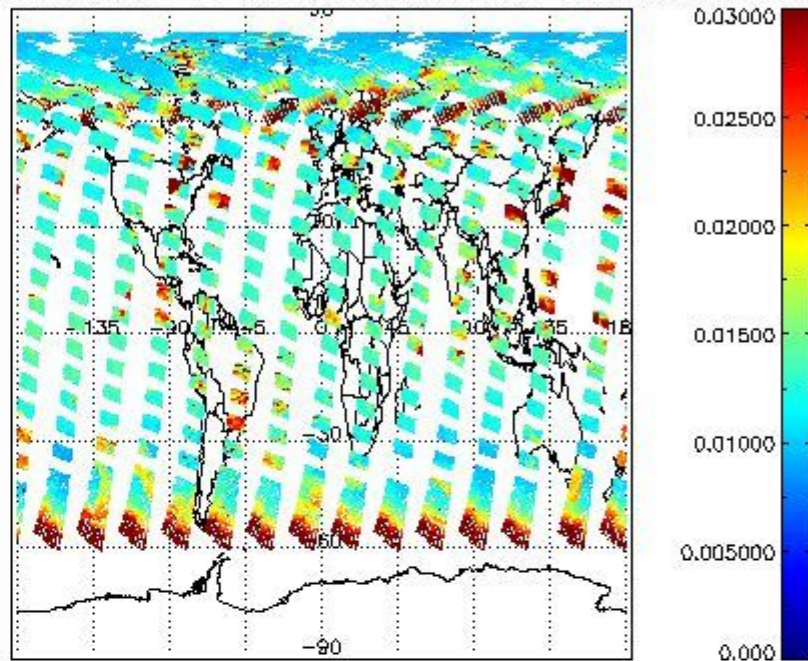
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



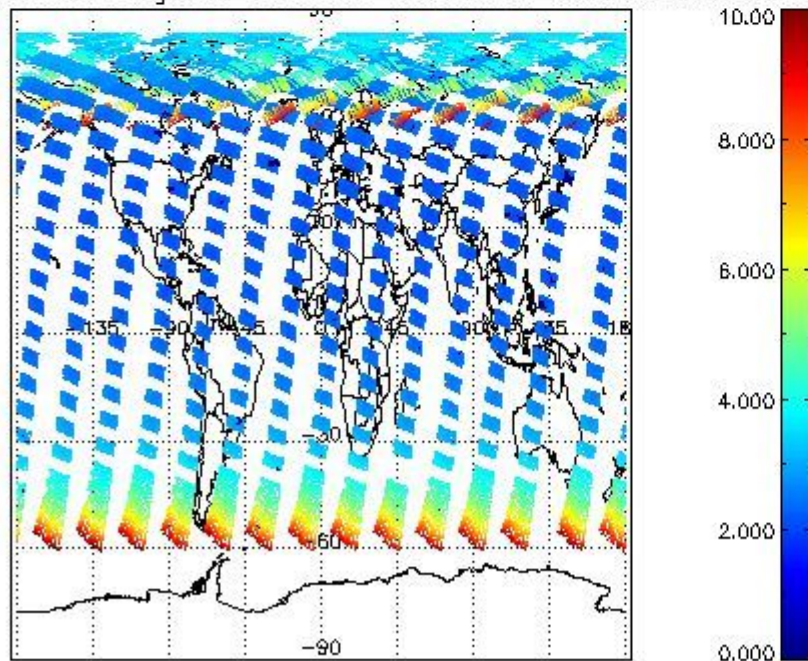
SCIOL2P_NADUV003_vcd for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



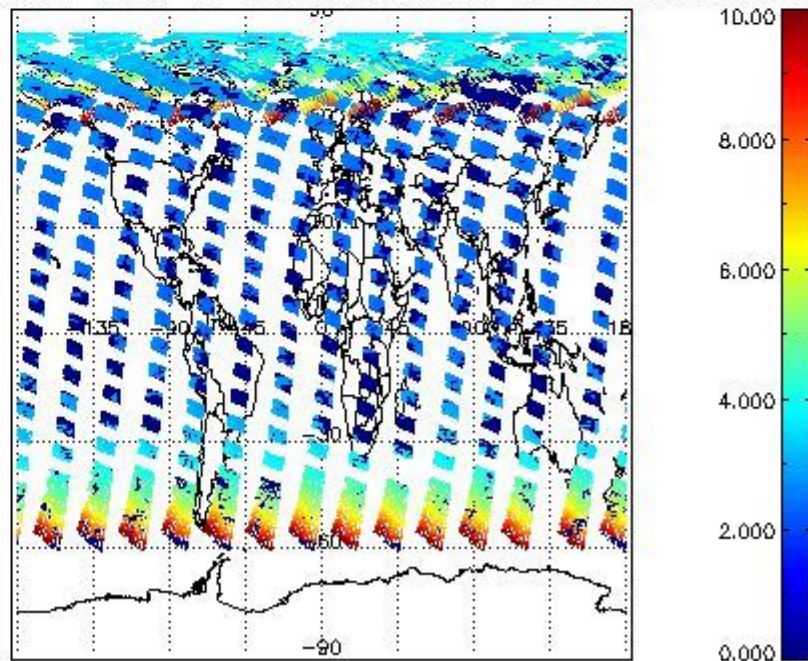
SCIOL2P_NADUV003_vcd_err for 10JUL2009 00:00:00 to 11JUL2009 00:00:00

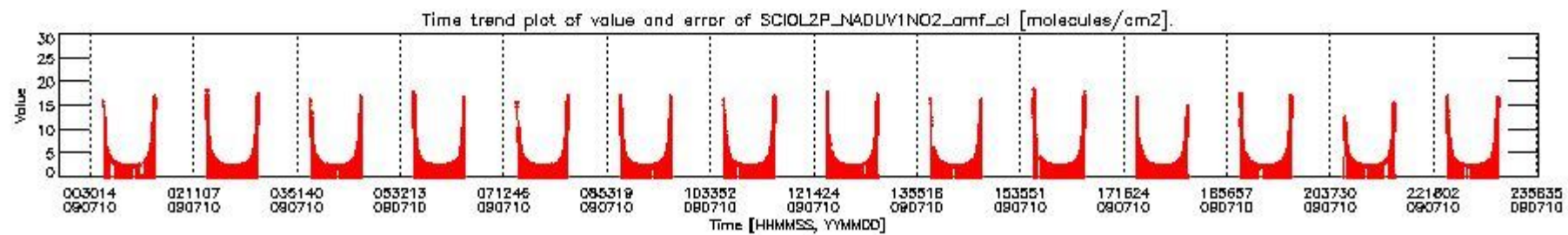
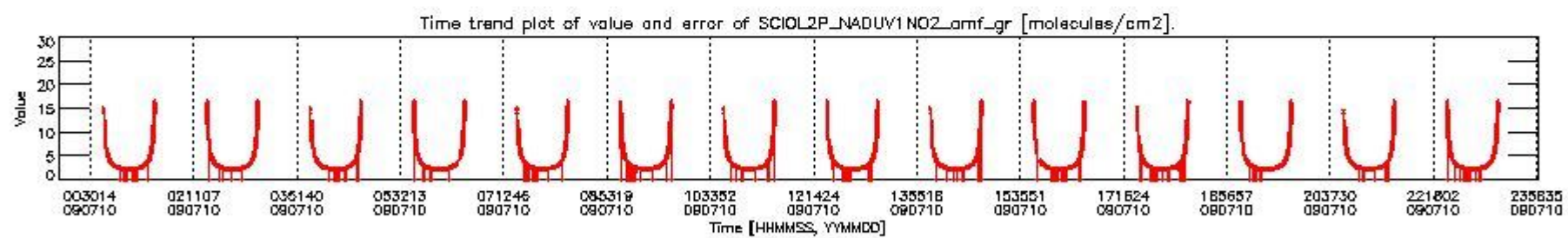
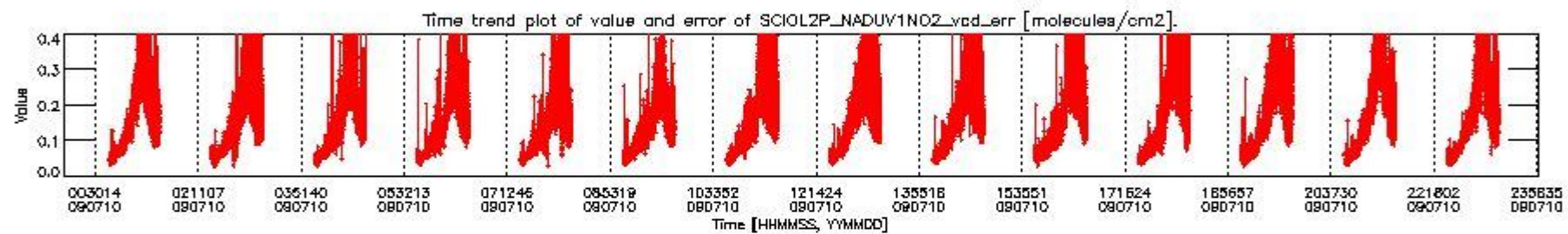
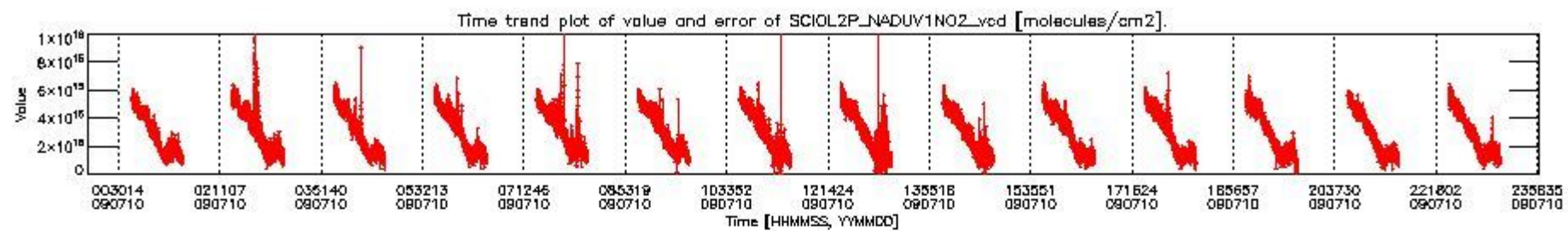


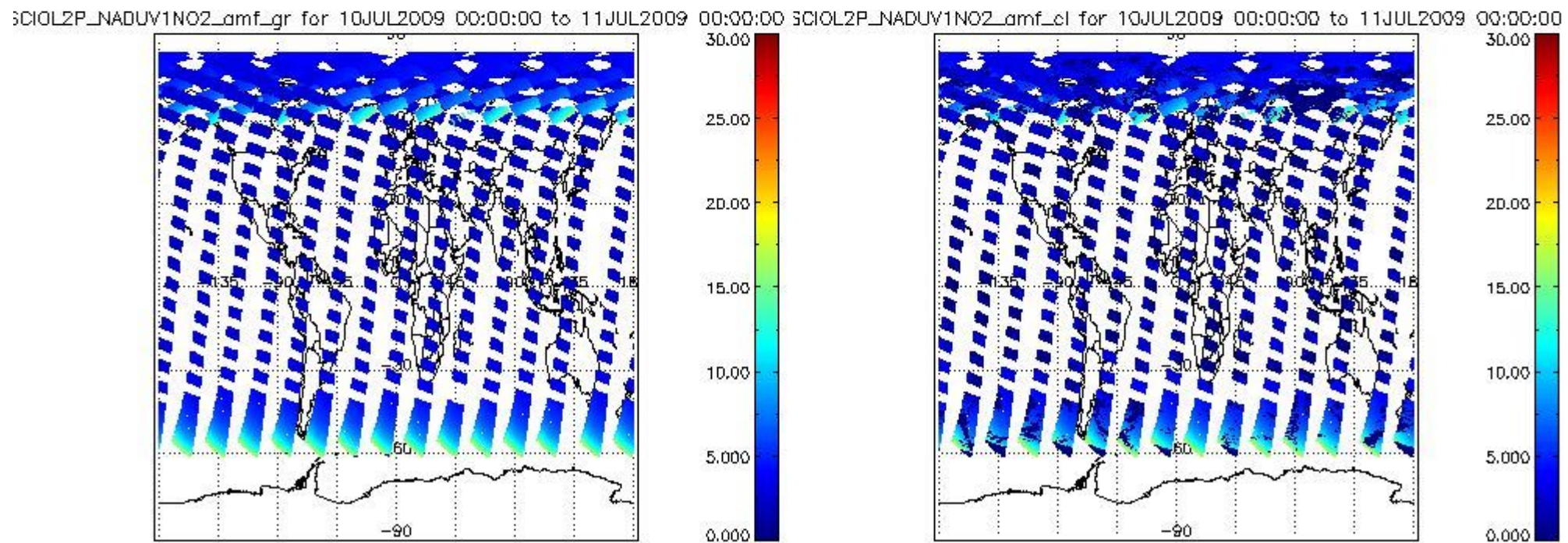
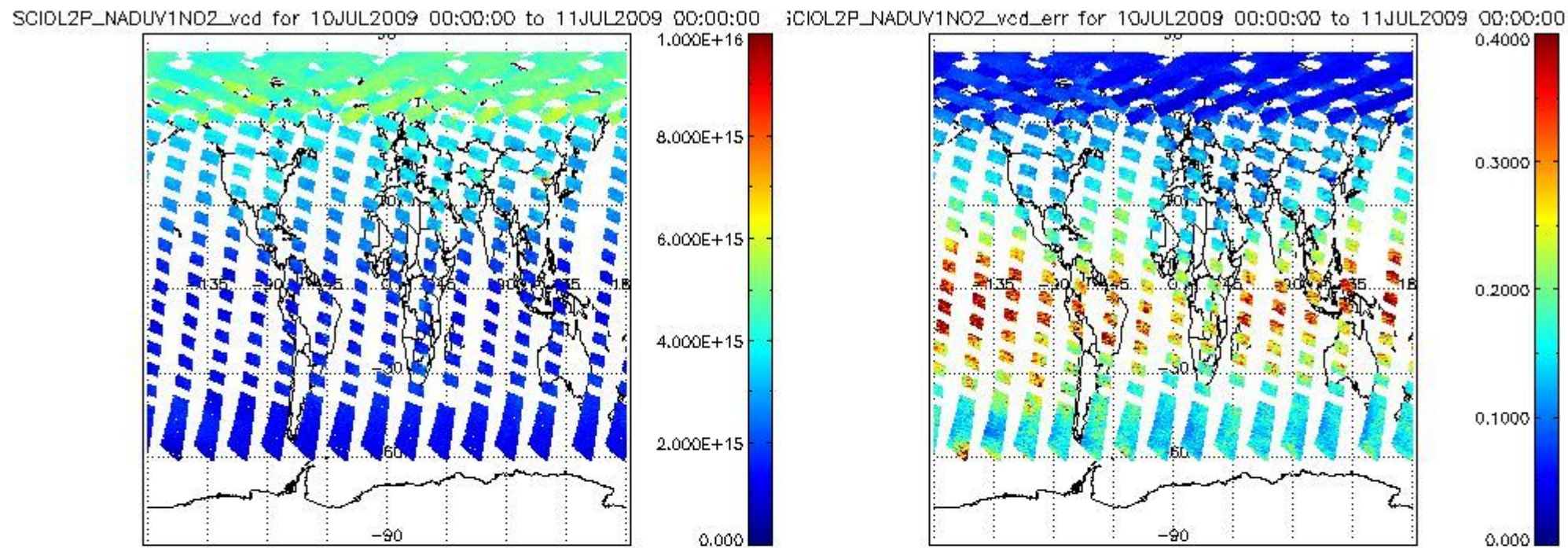
SCIOL2P_NADUV003_amf_gr for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 10JUL2009 00:00:00 to 11JUL2009 00:00:00







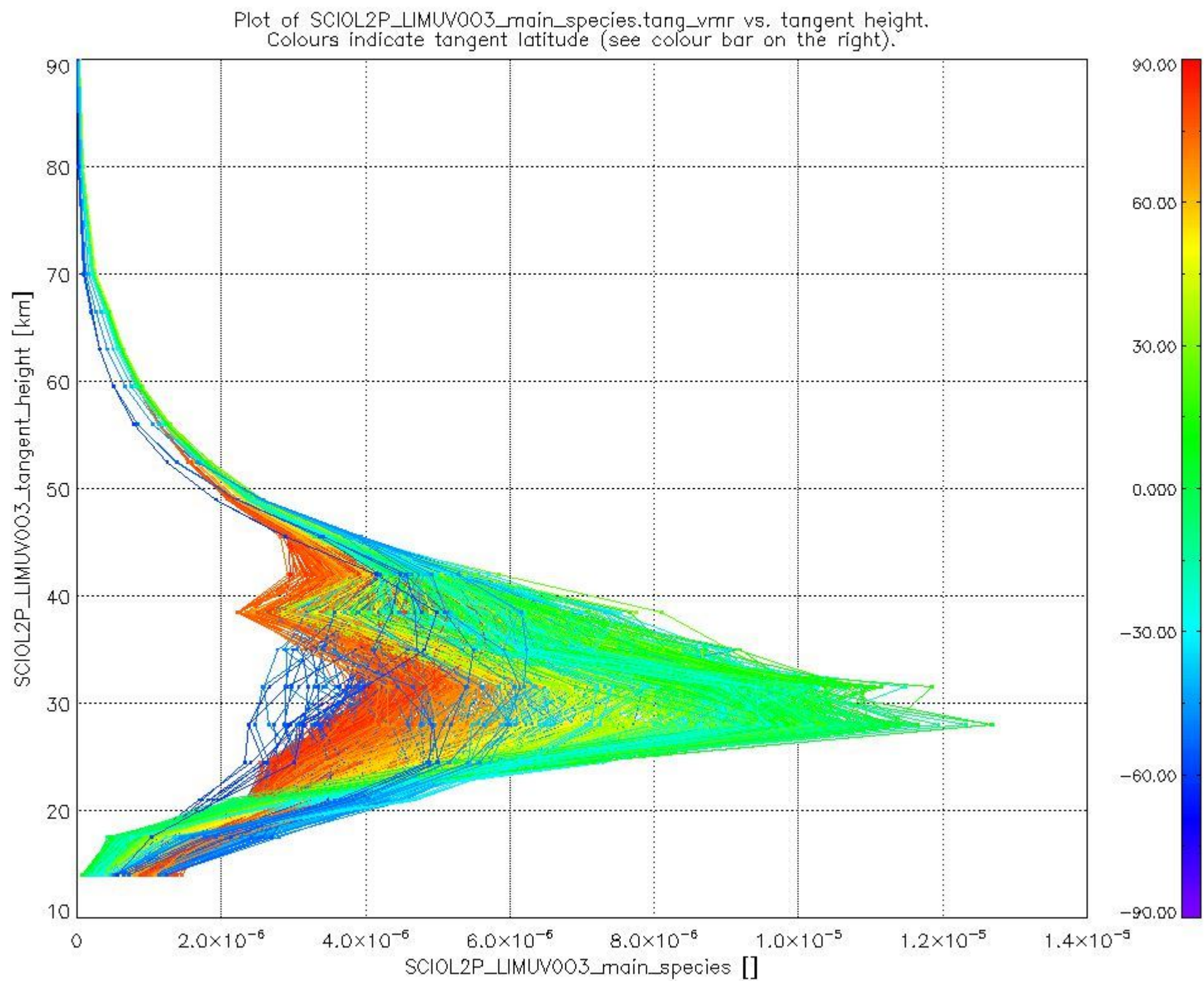
2.2.3 Limb

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

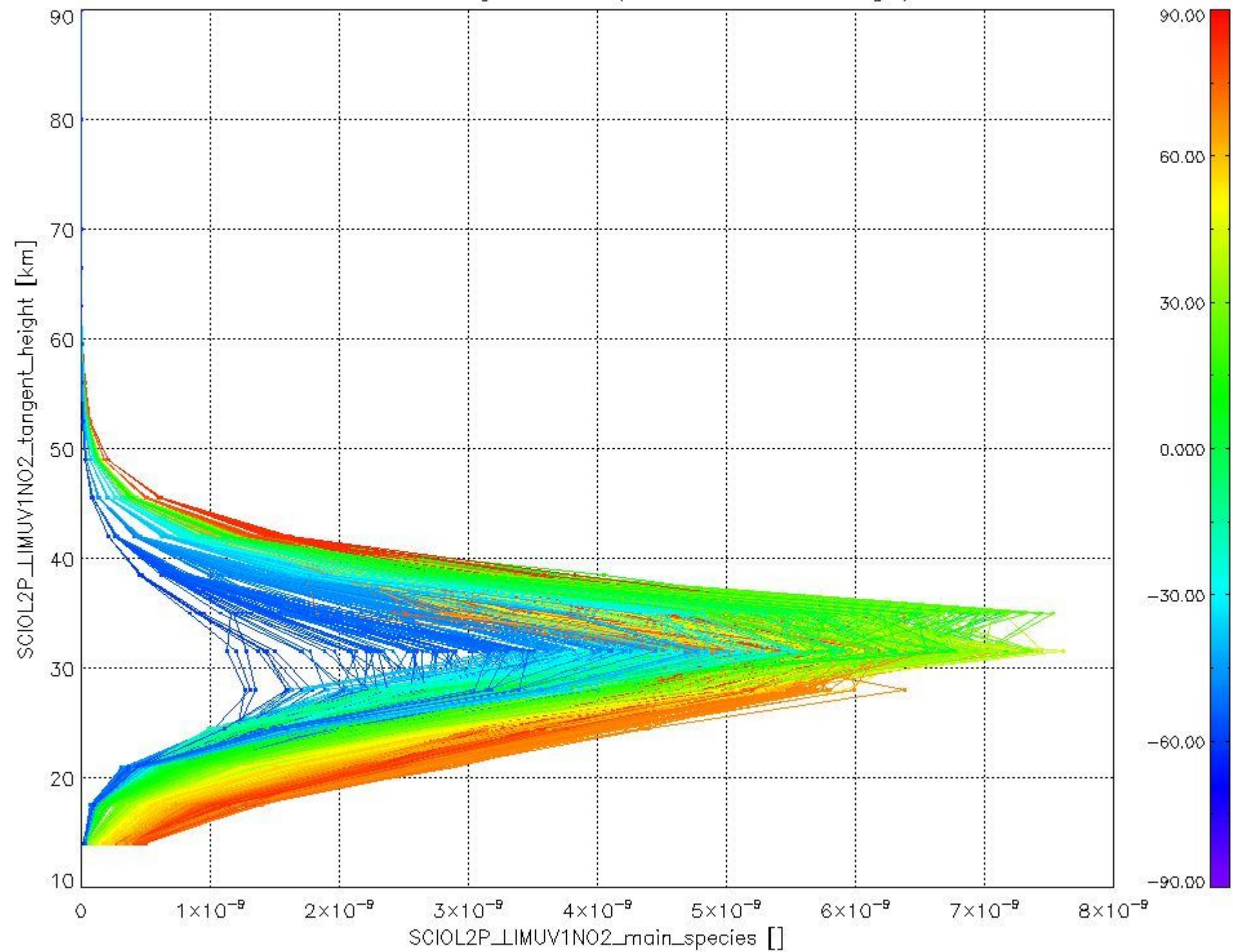
The following data items are currently included into this section:

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.



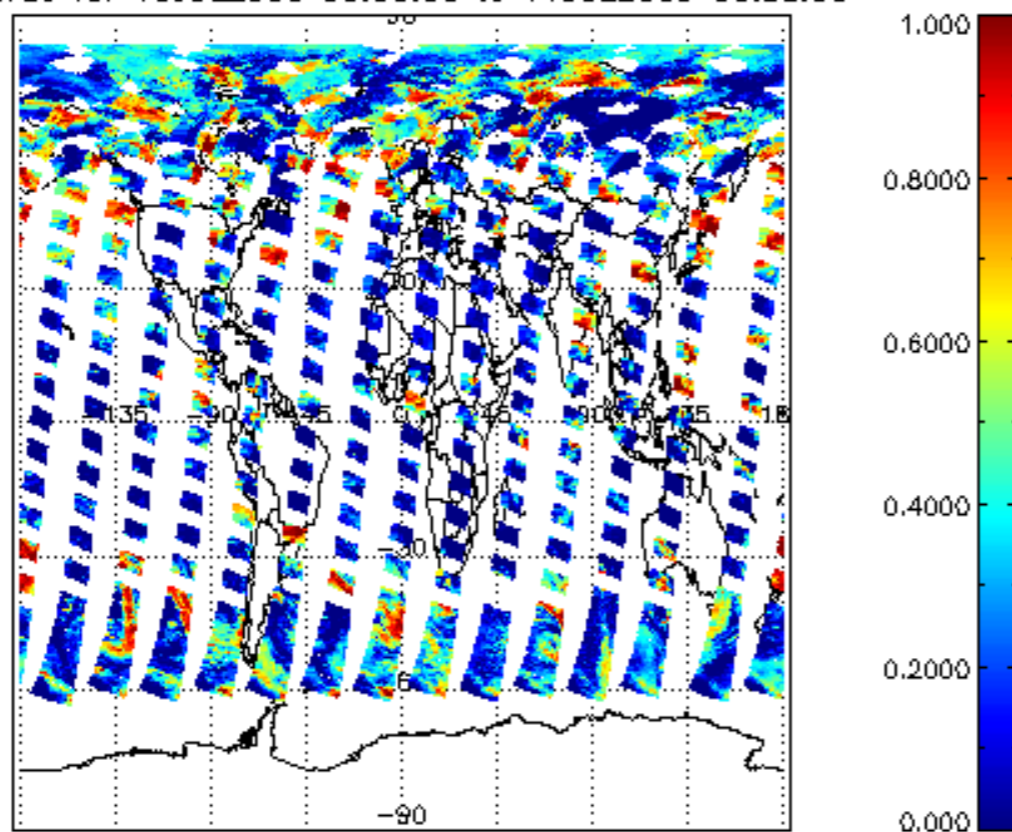
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



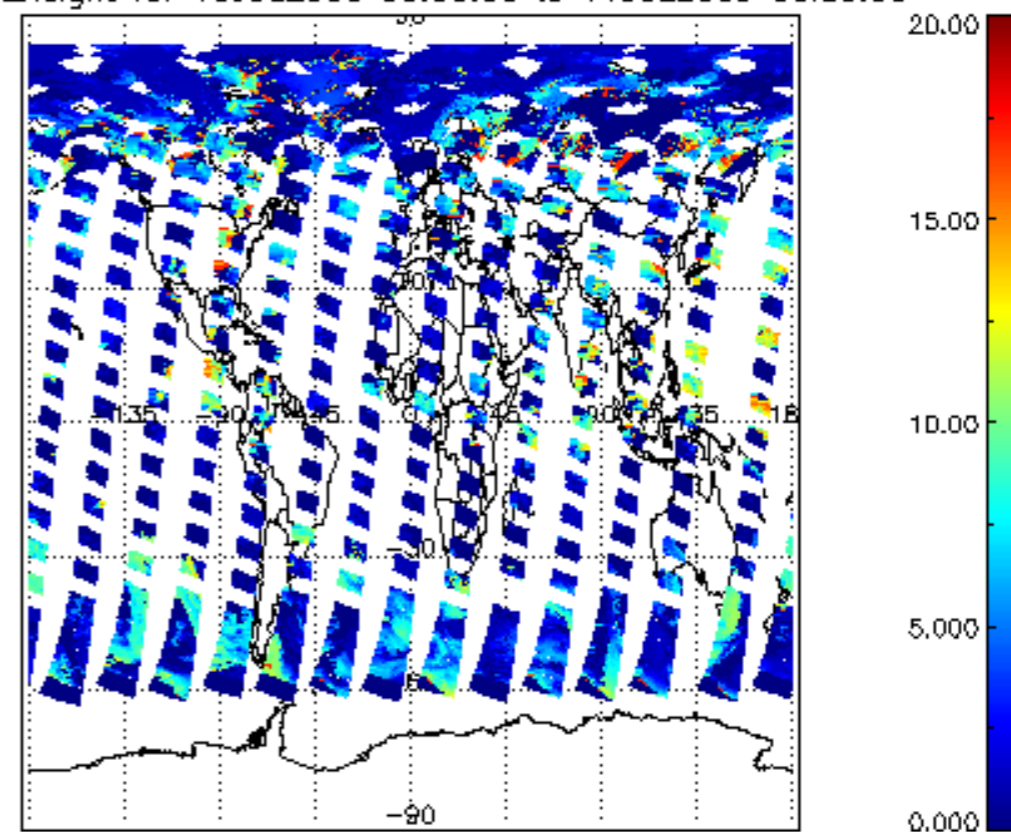
2.3 ADF monitoring

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

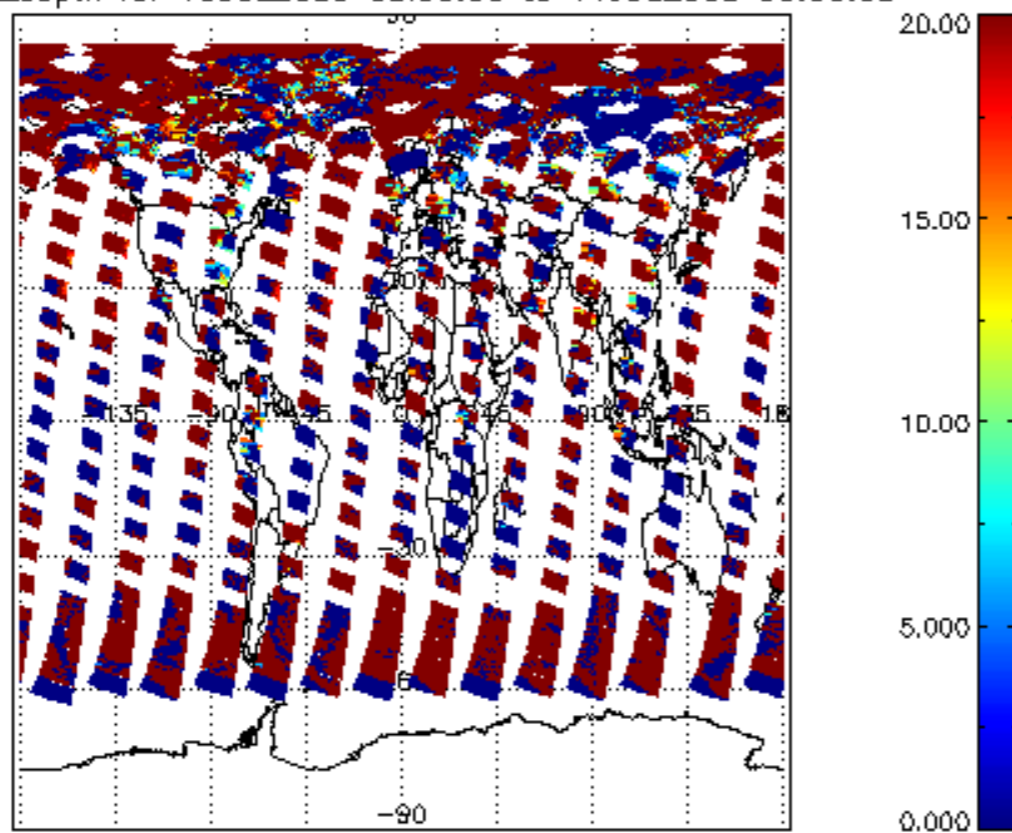
cl_frac for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



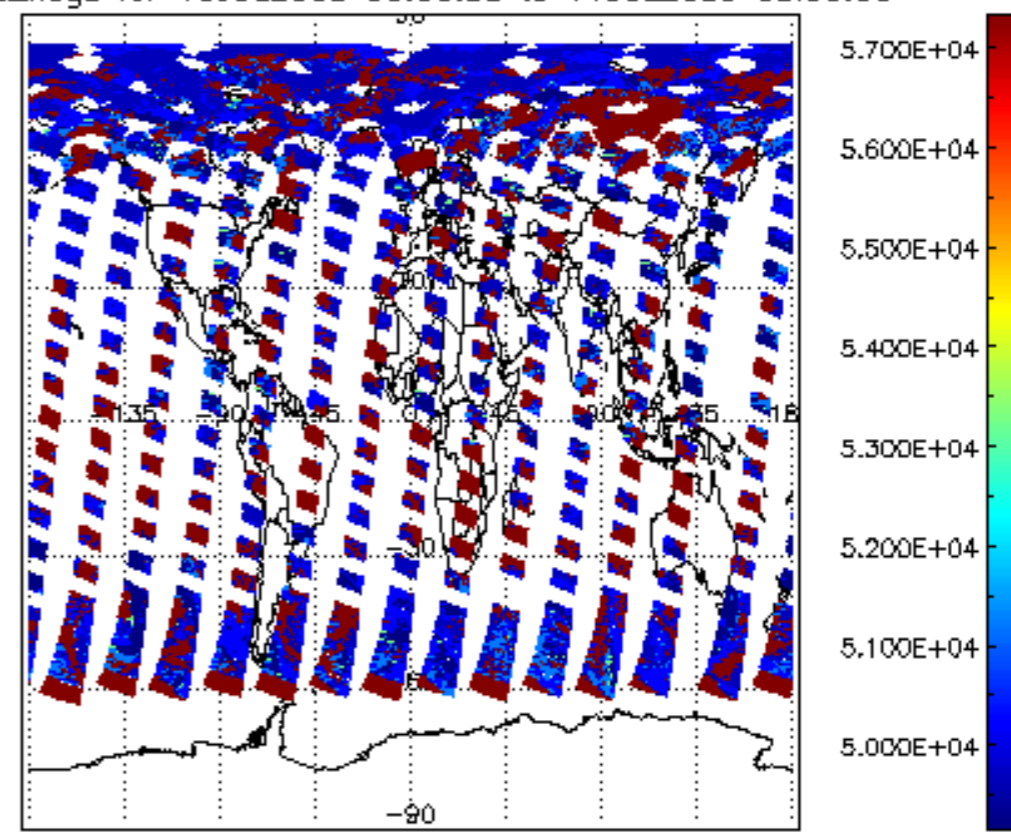
cl_top_height for 10JUL2009 00:00:00 to 11JUL2009 00:00:00

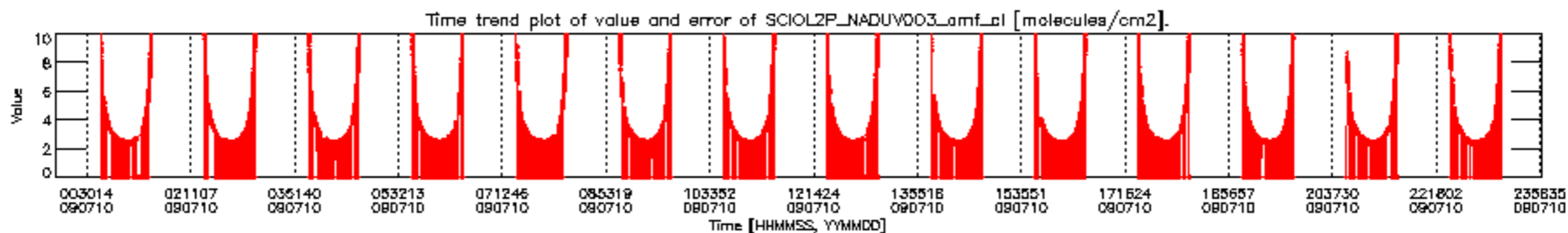
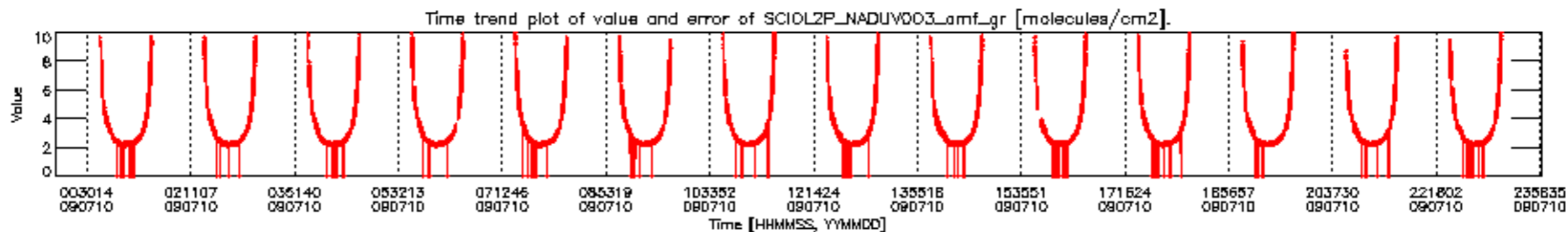
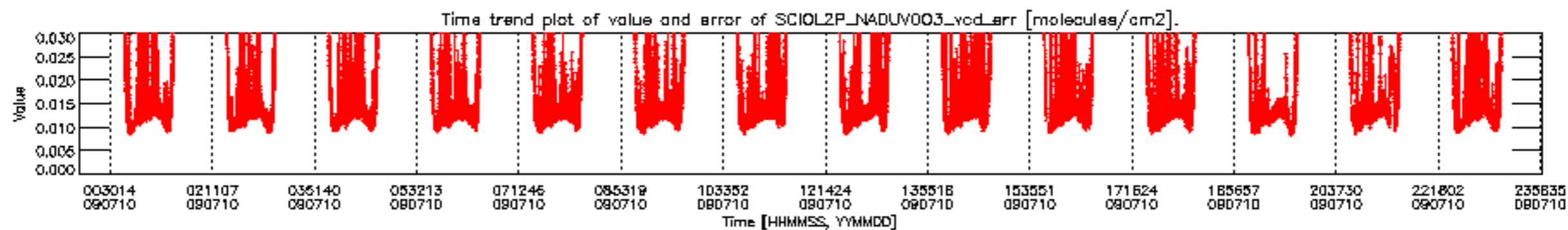
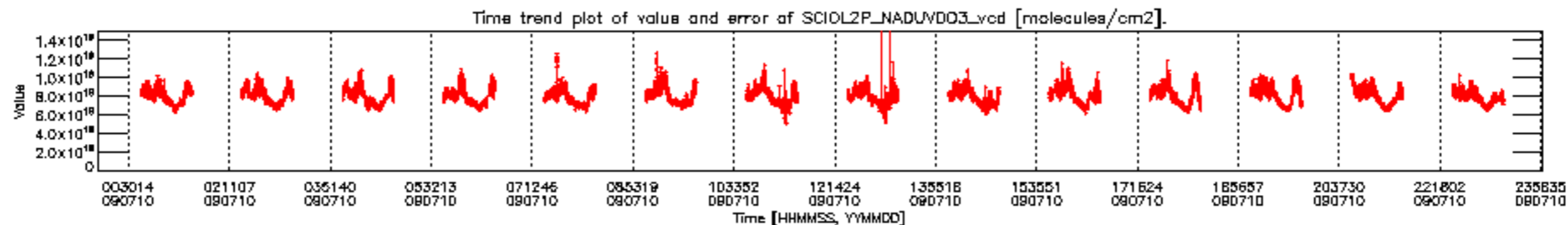


cl_lopt_depth for 10JUL2009 00:00:00 to 11JUL2009 00:00:00

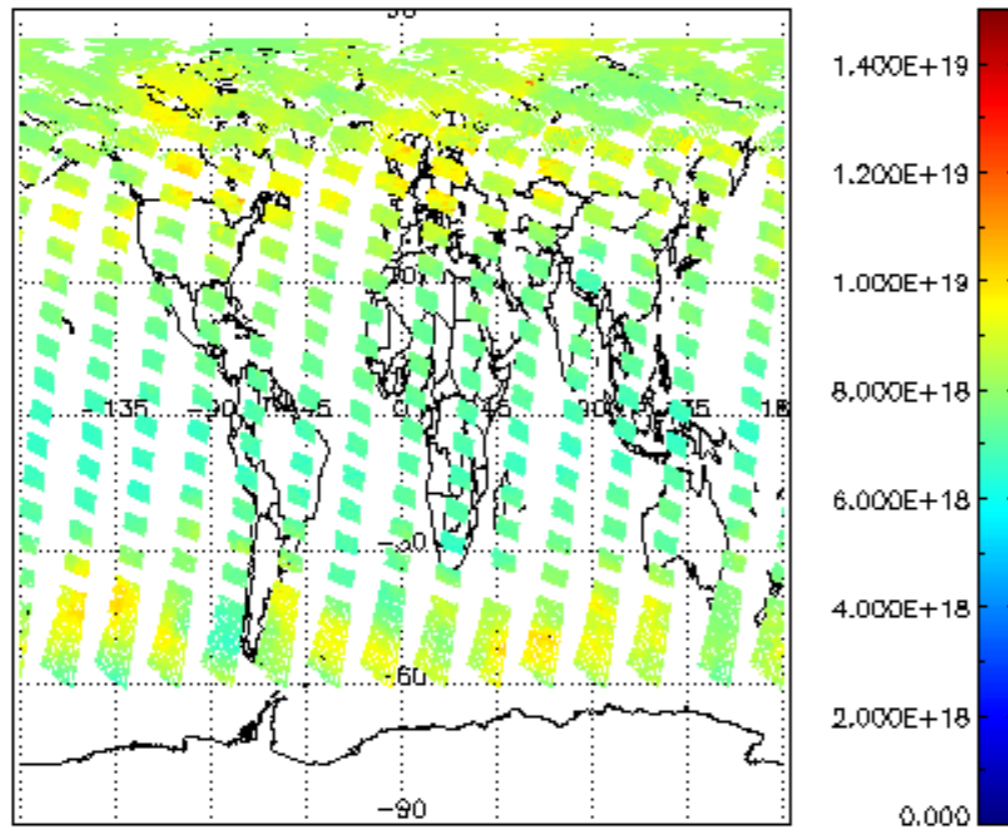


cloud_flags for 10JUL2009 00:00:00 to 11JUL2009 00:00:00

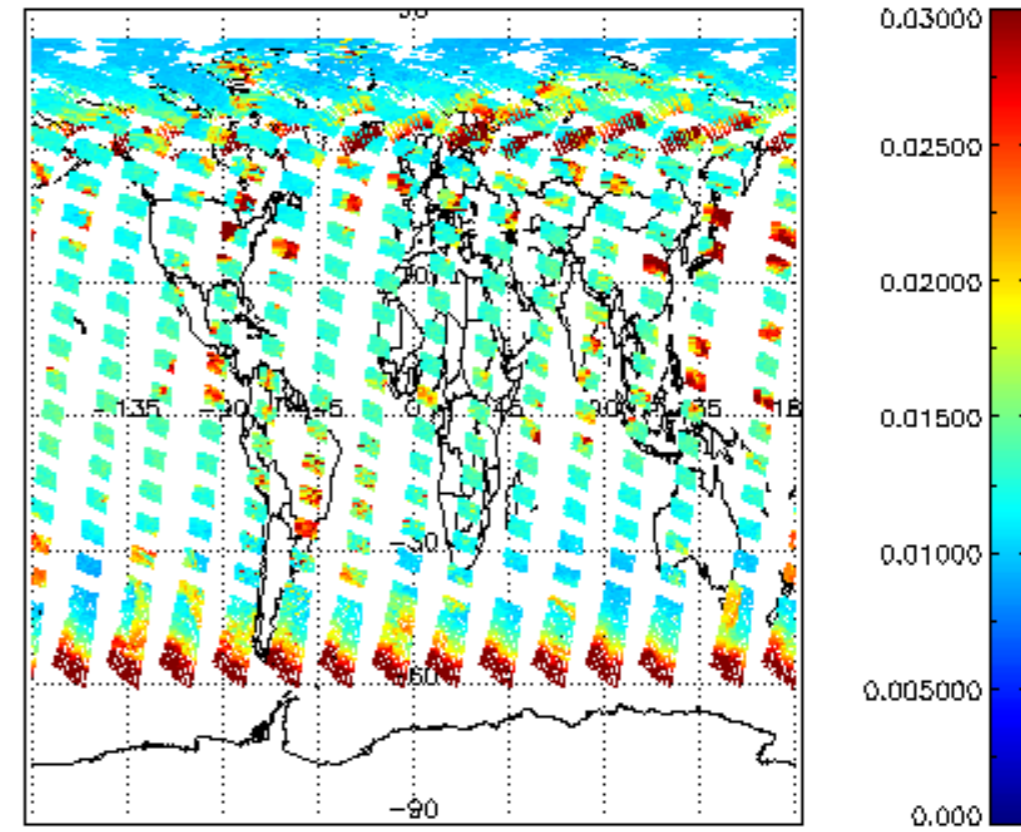




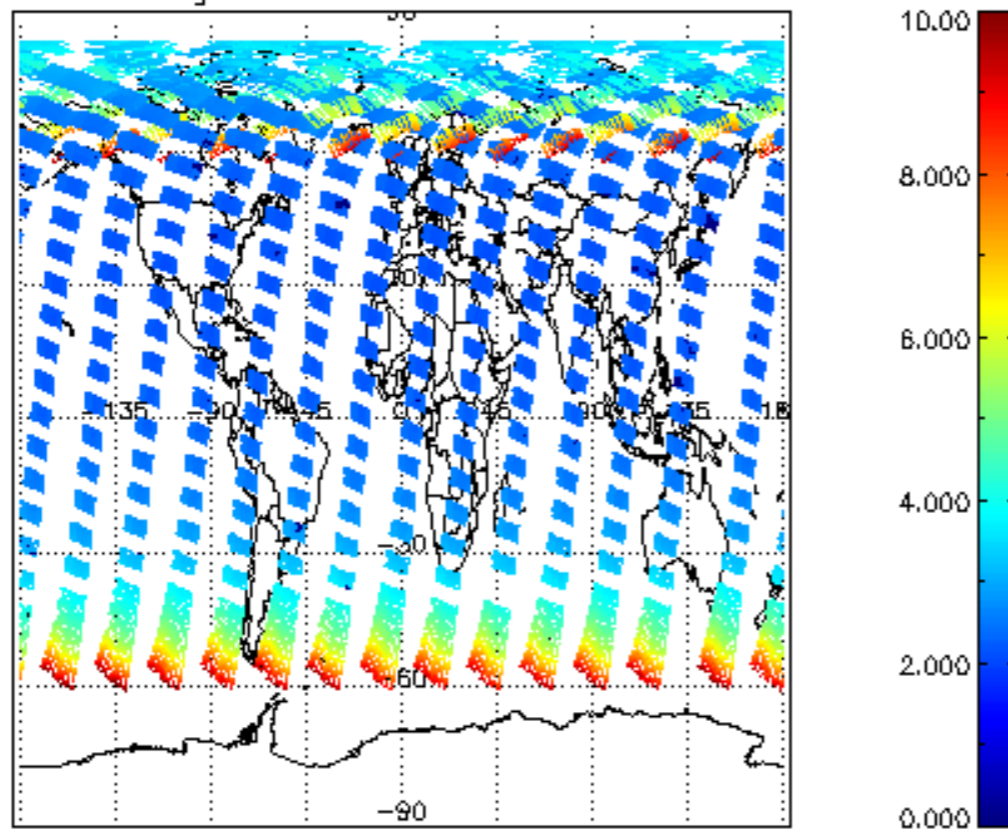
SCIOL2P_NADUV003_vcd for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



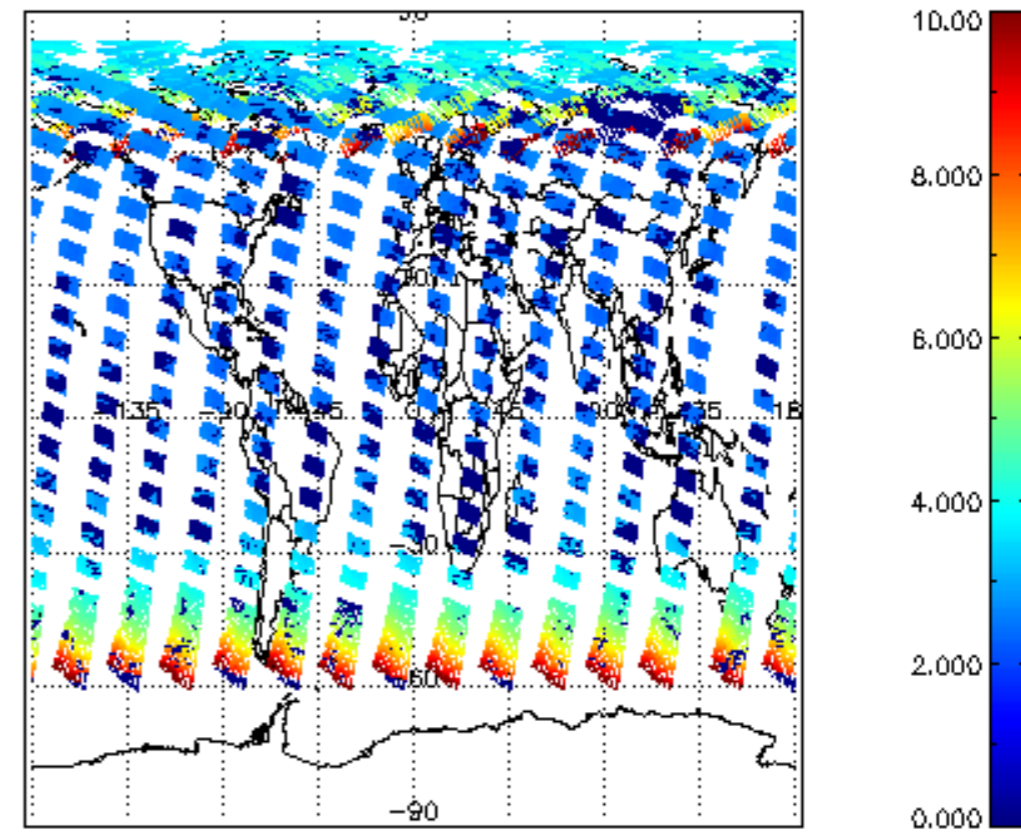
SCIOL2P_NADUV003_vcd_err for 10JUL2009 00:00:00 to 11JUL2009 00:00:00

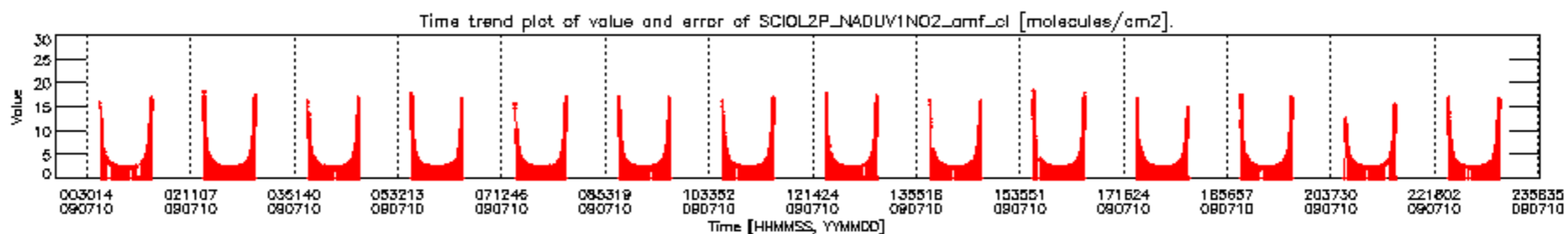
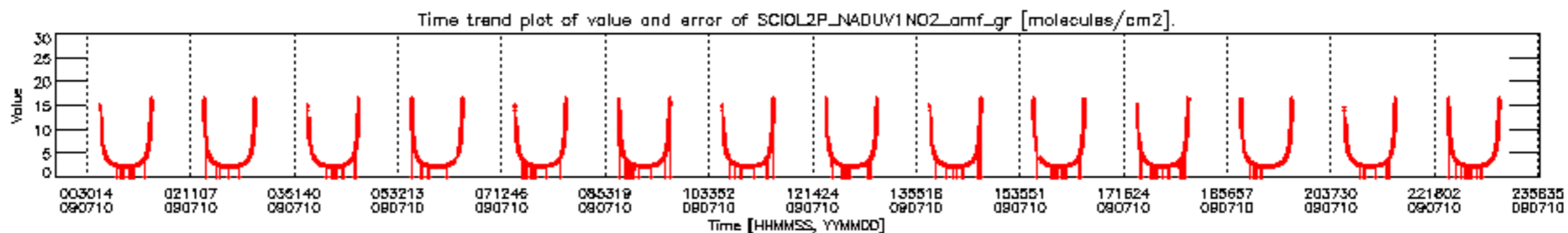
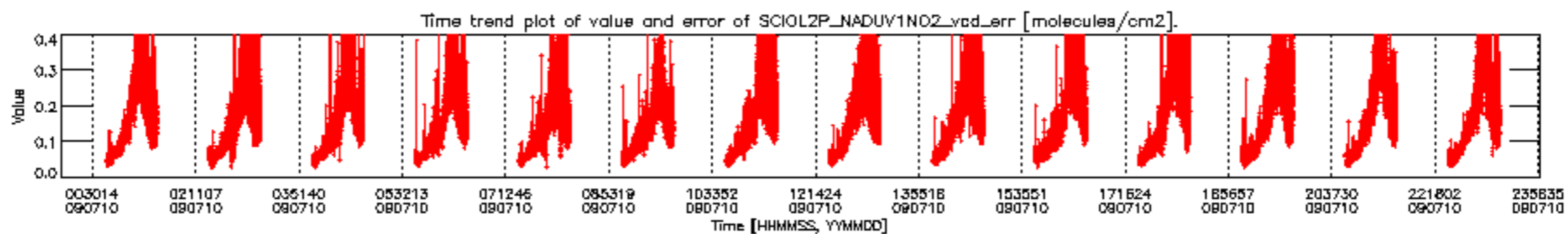
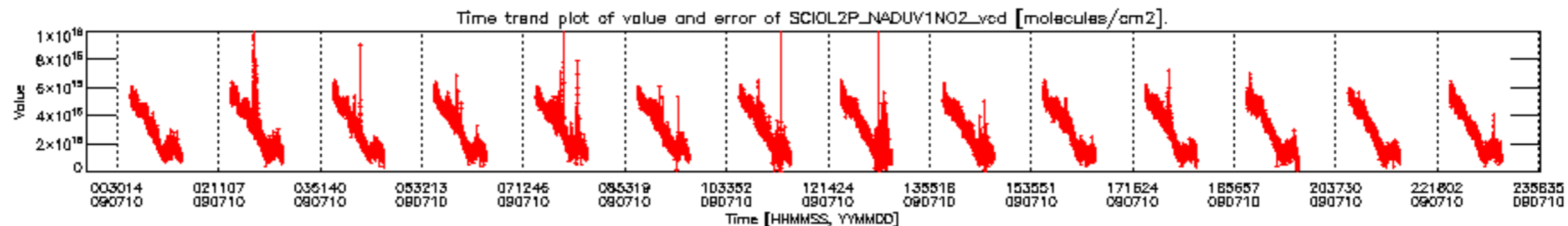


SCIOL2P_NADUV003_amf_gr for 10JUL2009 00:00:00 to 11JUL2009 00:00:00

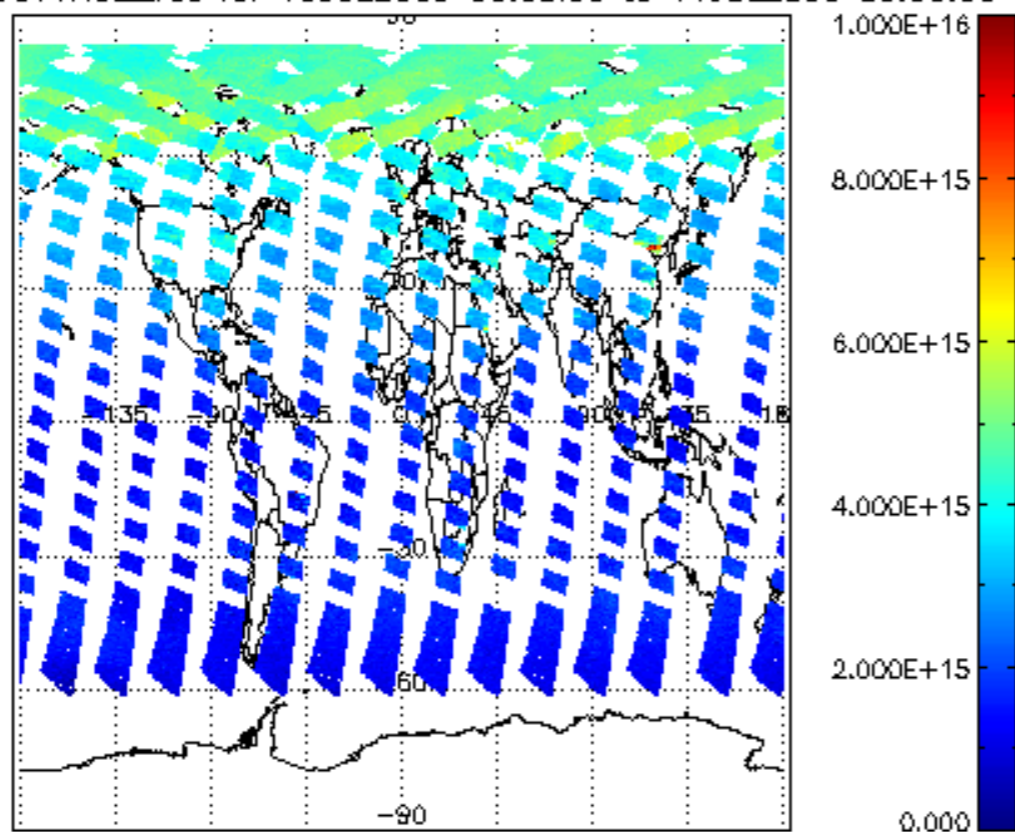


SCIOL2P_NADUV003_amf_cl for 10JUL2009 00:00:00 to 11JUL2009 00:00:00

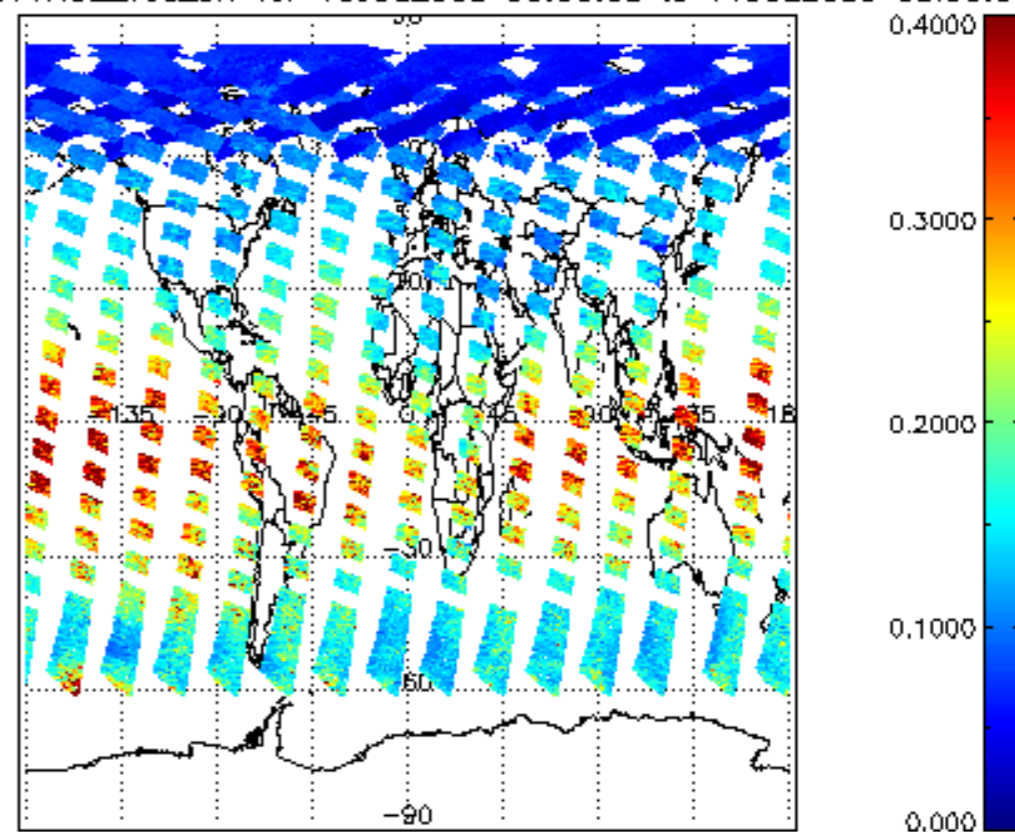




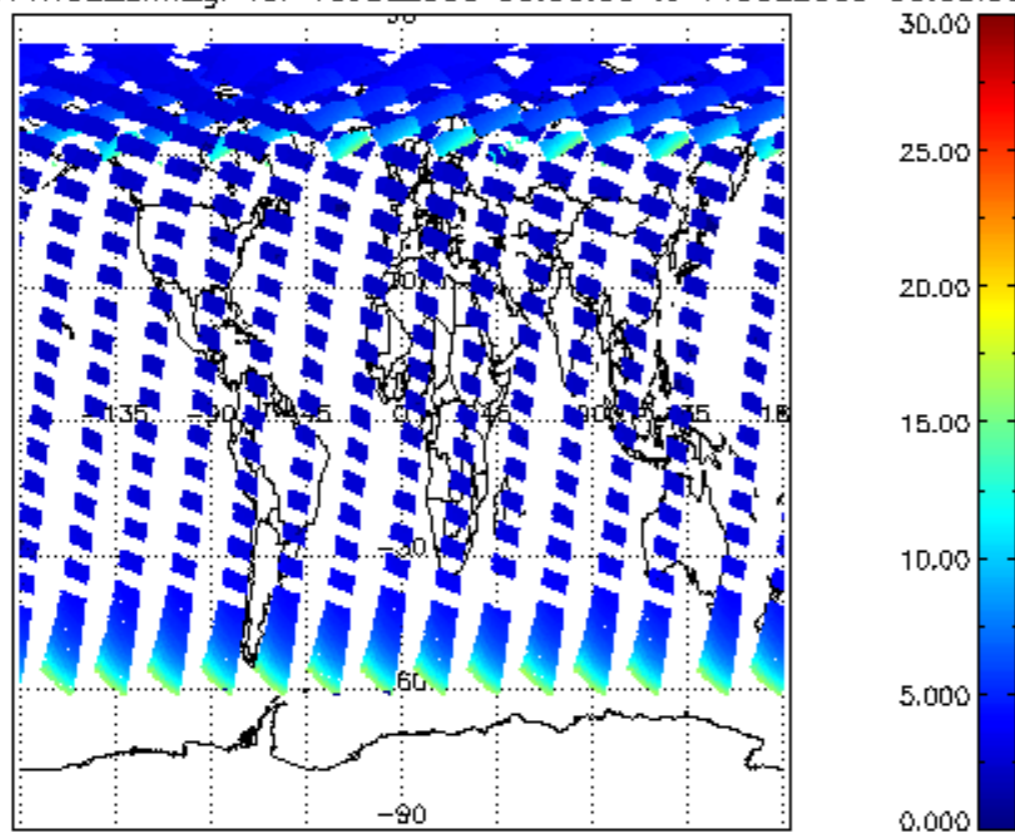
SCIOL2P_NADUV1NO2_vcd for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



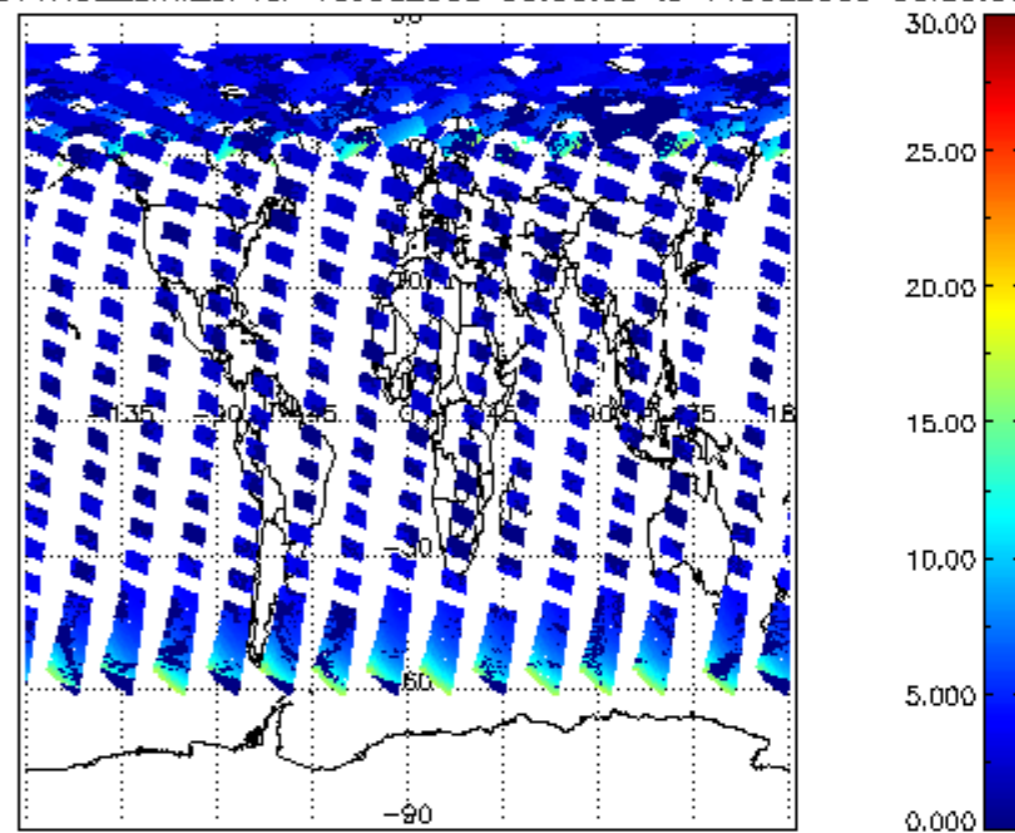
SCIOL2P_NADUV1NO2_vcd_err for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



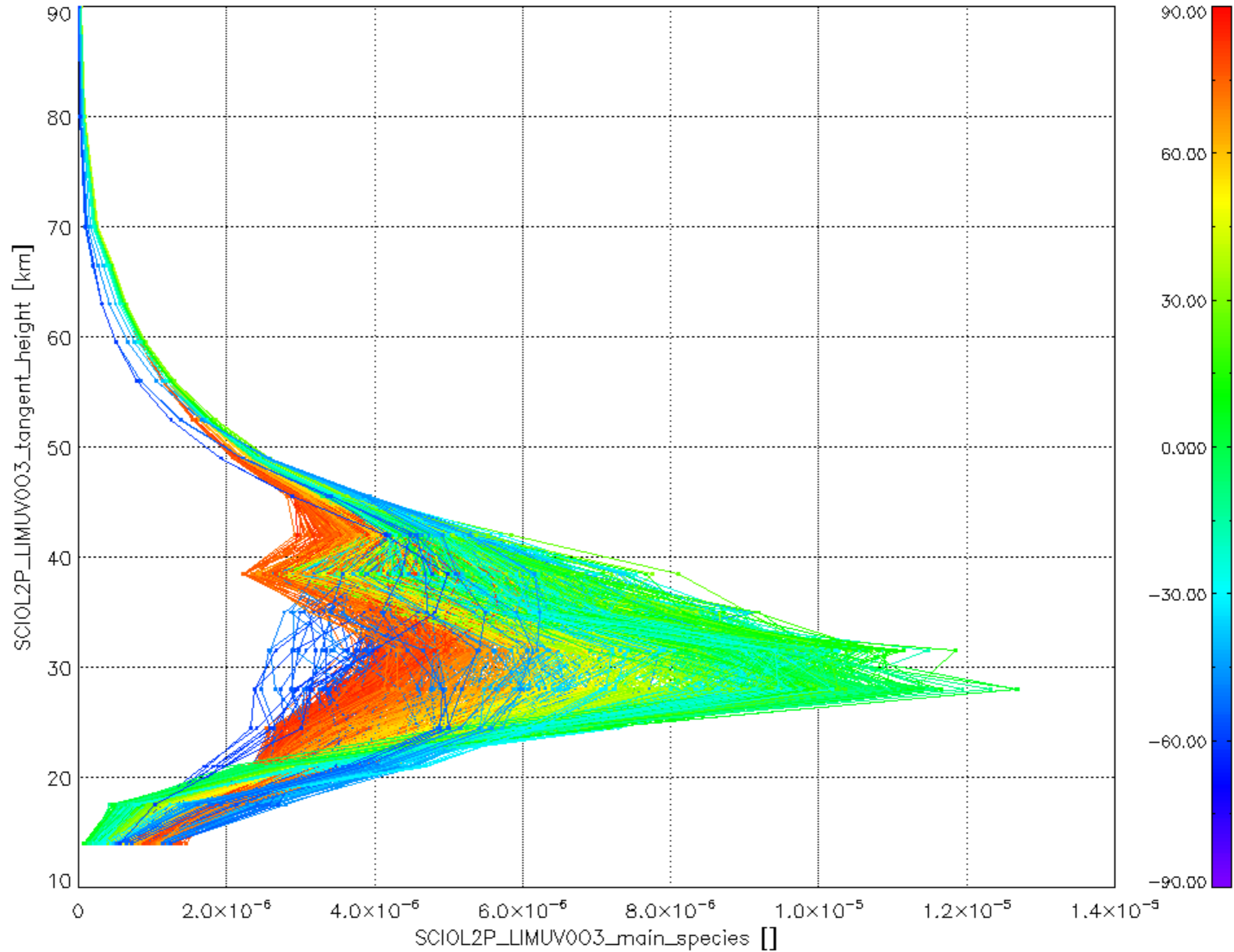
SCIOL2P_NADUV1NO2_amf_gr for 10JUL2009 00:00:00 to 11JUL2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 10JUL2009 00:00:00 to 11JUL2009 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).

