

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	16MAR2009 09:58:02
Data source version	SCIA-OL/3.01-R
Processing scope for products	02JAN2008 00:00:00 to 03JAN2008 00:00:00
Start time of first product within scope	01JAN2008 23:55:23
Stop time of last product within scope	03JAN2008 00:19:09
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__2PRDPA20080101_235523_000033252064_00417_30531_0359.N1	01JAN2008 23:55:23	02JAN2008 00:50:48	0	GOOD
1	SCI_OL__2PRDPA20080102_013707_000032692064_00418_30532_0363.N1	02JAN2008 01:37:07	02JAN2008 02:31:37	0	GOOD
2	SCI_OL__2PRDPA20080102_031634_000033252064_00419_30533_0364.N1	02JAN2008 03:16:34	02JAN2008 04:12:00	0	GOOD
3	SCI_OL__2PRDPA20080102_045819_000032692064_00420_30534_0361.N1	02JAN2008 04:58:19	02JAN2008 05:52:48	0	GOOD
4	SCI_OL__2PRDPA20080102_081930_000032692064_00422_30536_0400.N1	02JAN2008 08:19:30	02JAN2008 09:14:00	0	GOOD
5	SCI_OL__2PRDPA20080102_095857_000033252064_00423_30537_0408.N1	02JAN2008 09:58:57	02JAN2008 10:54:23	0	GOOD
6	SCI_OL__2PRDPA20080102_114042_000032692064_00424_30538_0427.N1	02JAN2008 11:40:42	02JAN2008 12:35:11	0	GOOD
7	SCI_OL__2PRDPA20080102_132009_000033252064_00425_30539_0428.N1	02JAN2008 13:20:09	02JAN2008 14:15:34	0	GOOD
8	SCI_OL__2PRDPA20080102_150153_000032692064_00426_30540_0432.N1	02JAN2008 15:01:53	02JAN2008 15:56:23	0	GOOD
9	SCI_OL__2PRDPA20080102_164121_000033252064_00427_30541_0434.N1	02JAN2008 16:41:21	02JAN2008 17:36:46	0	GOOD
10	SCI_OL__2PRDPA20080102_182126_000033252064_00428_30542_0436.N1	02JAN2008 18:21:26	02JAN2008 19:16:52	0	GOOD
11	SCI_OL__2PRDPA20080102_200202_000033812064_00429_30543_0437.N1	02JAN2008 20:02:02	02JAN2008 20:58:24	0	GOOD
12	SCI_OL__2PRDPA20080102_214416_000032692064_00430_30544_0439.N1	02JAN2008 21:44:16	02JAN2008 22:38:46	0	GOOD
13	SCI_OL__2PRDPA20080102_232344_000033252064_00431_30545_0441.N1	02JAN2008 23:23:44	03JAN2008 00:19:09	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: 140939

Total number of cloud data DSRs with good quality flag (=0): 140939 (100.0 %)

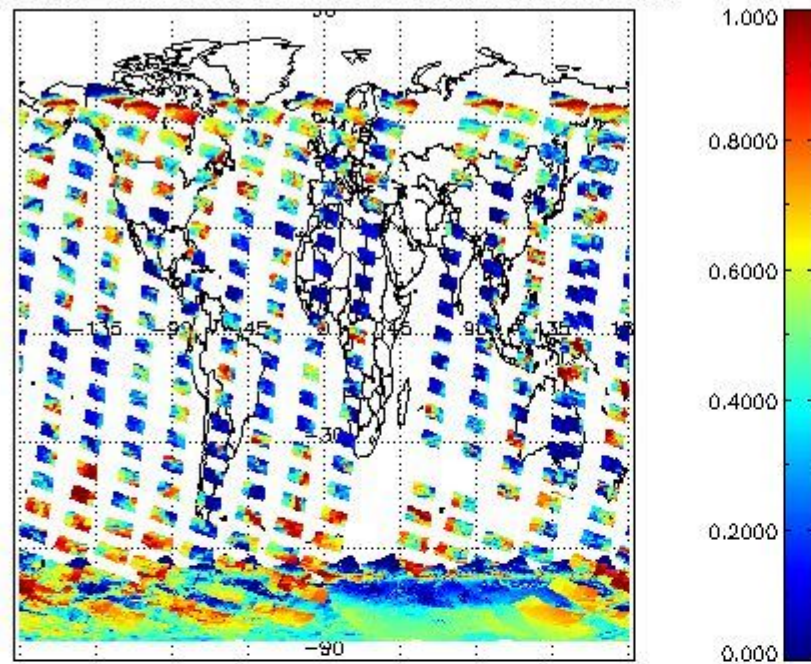
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	140939	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	140939	0.17021	0.12500	0.12500	0.25000	0.060062	s
CL_FRAC	140939	0.42203	0.43264	0.0000	1.0000	0.27329	-
CL_FRAC_ERR	140939	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	140939	5.4468	4.0000	4.0000	8.0000	1.9220	
PMD_READ_CL[0]	140939	0.21516	0.0000	0.0000	8.0000	1.0532	-
PMD_READ_CL[1]	140939	0.59667	0.0000	0.0000	8.0000	1.6717	-
CL_TOP_HEIGHT	120161	4.1916	3.3120	0.0000	17.000	3.6776	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	120161	54.645	44.095	0.0000	101.00	39.884	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	140939	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	140939	11001001	11000100	11000000	11100000	3100.0	flags
AERO_ABSO_IND	140939	2.5904	2.8639	-1.0766	15.636	1.9335	
AERO_IND_DIAG	140939	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	140939	01010111	00000000	00000000	11000000	24478.	flags

Time and geolocation plots:

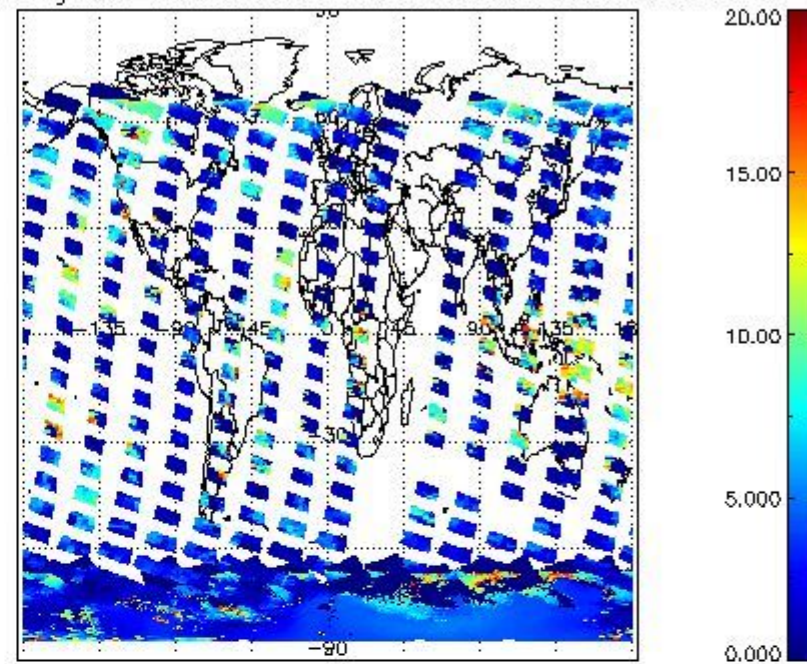
Plots are available for the following parameters:

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

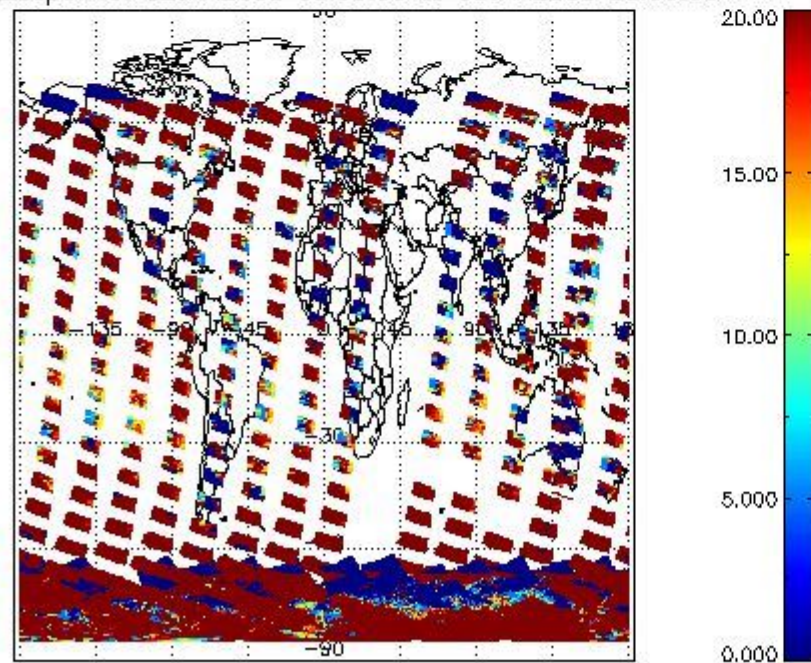
cL_frac for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



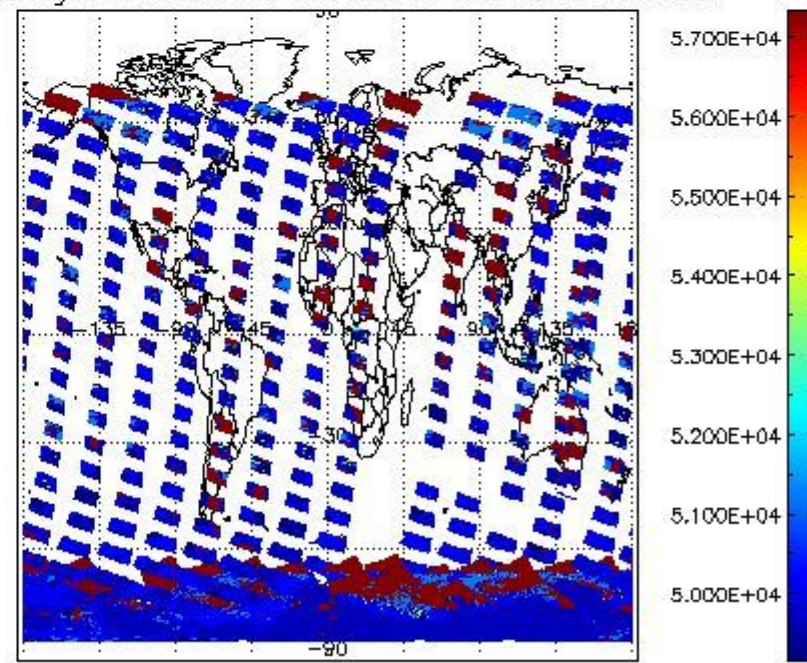
cL_top_height for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



cLopt_depth for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



cloud_flags for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



2.2.2 Nadir

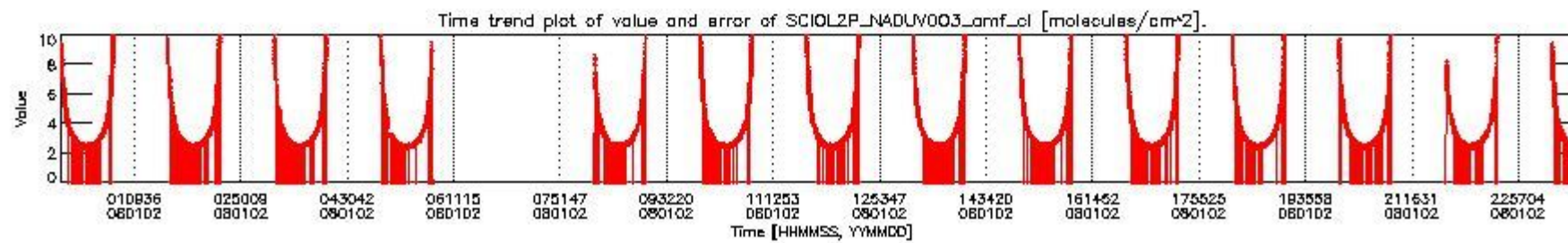
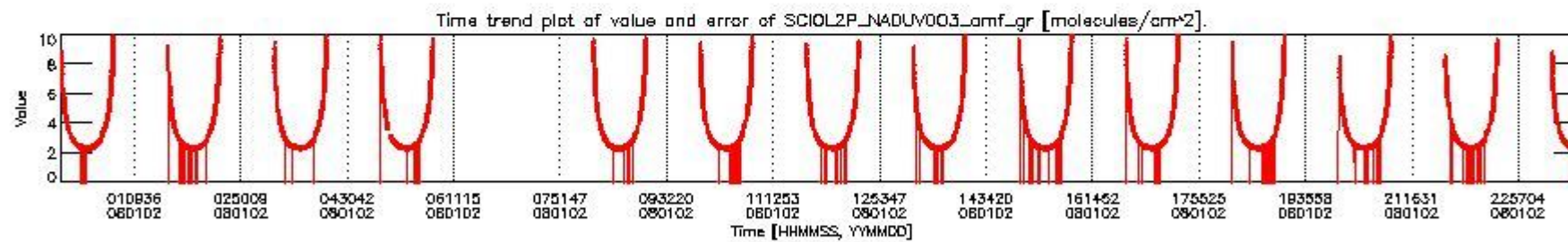
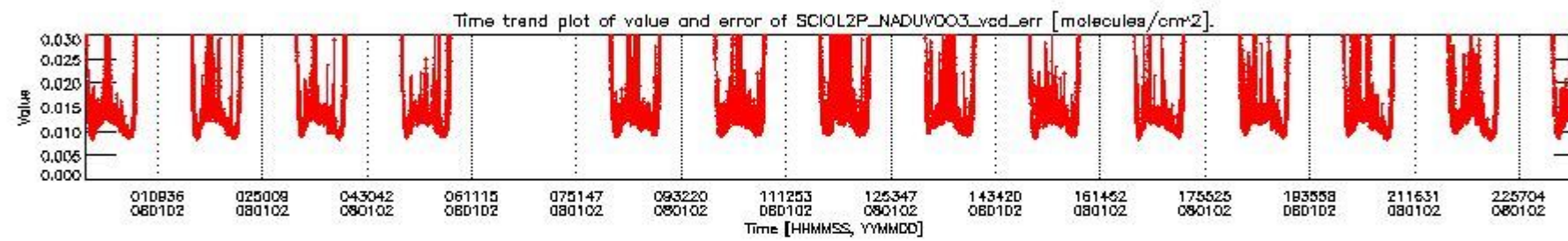
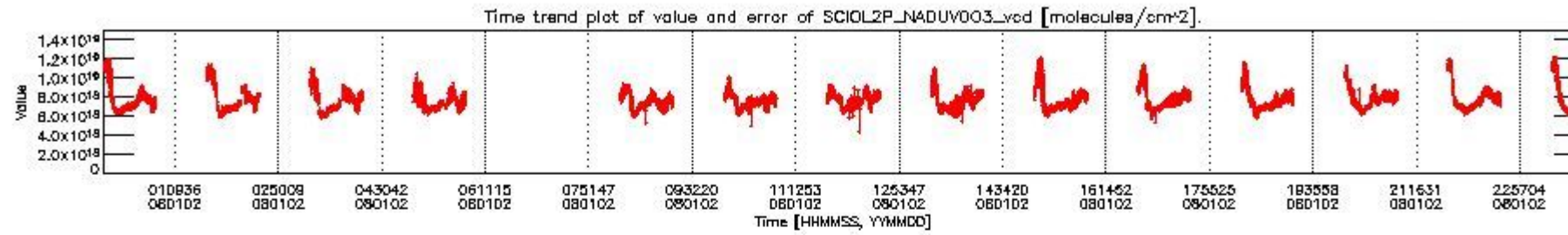
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

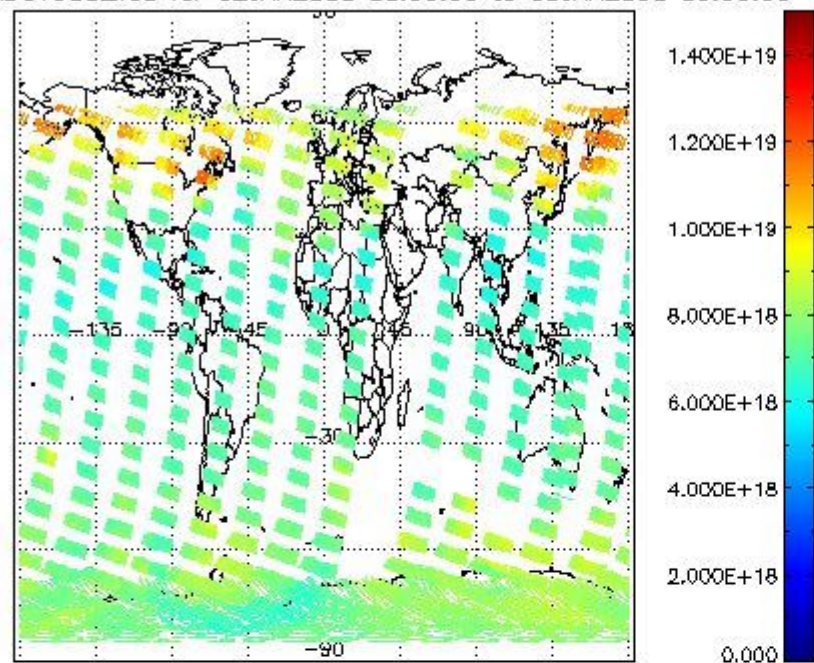
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

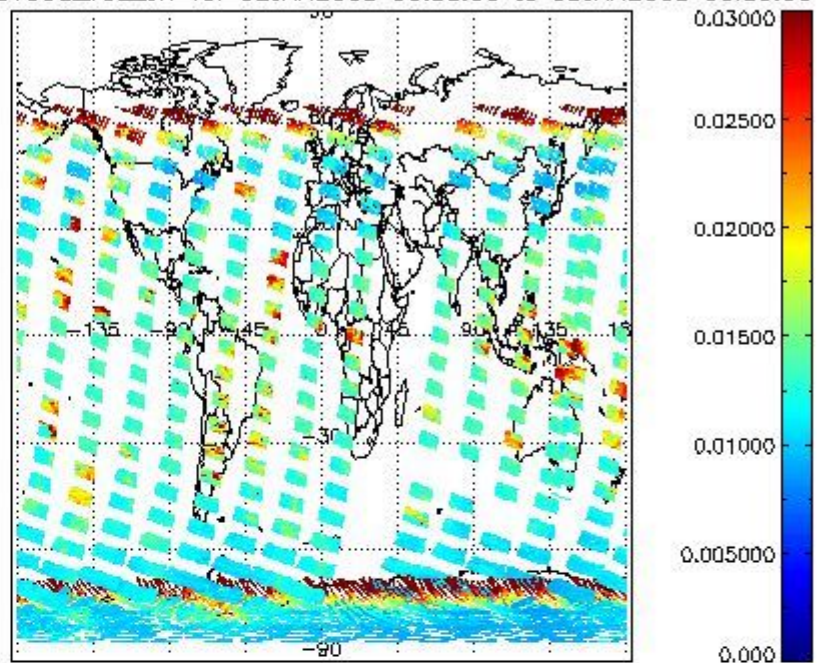
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



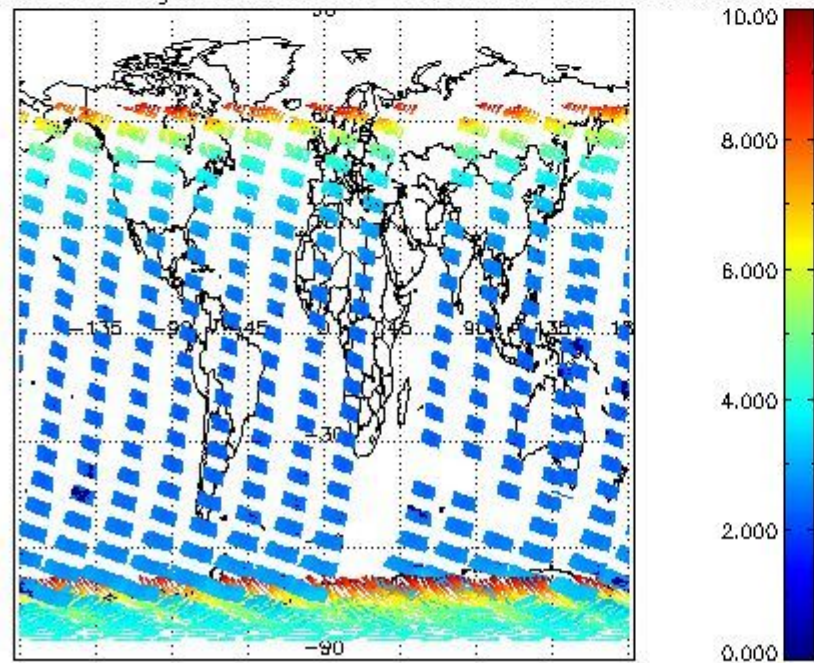
SCIOL2P_NADUV003_vcd for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



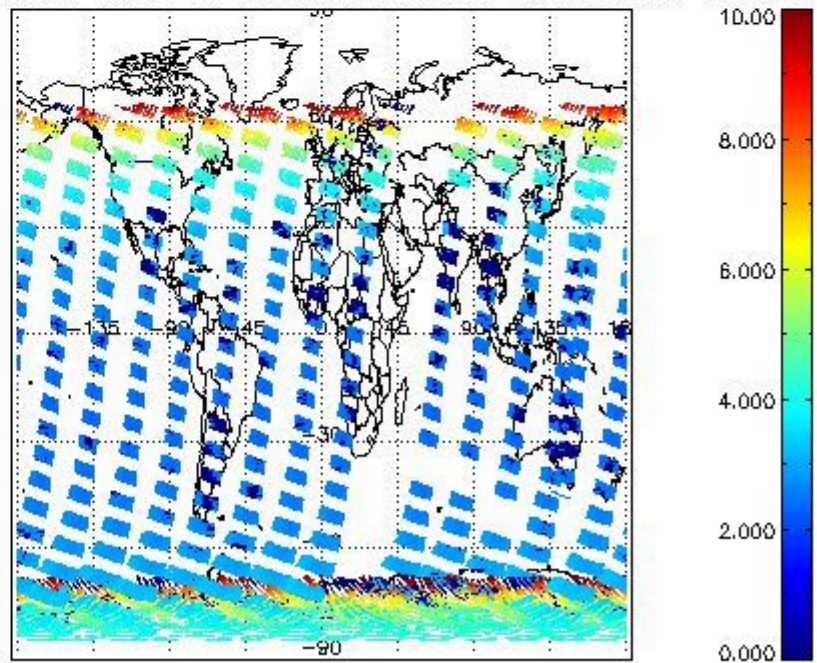
SCIOL2P_NADUV003_vcd_err for 02JAN2008 00:00:00 to 03JAN2008 00:00:00

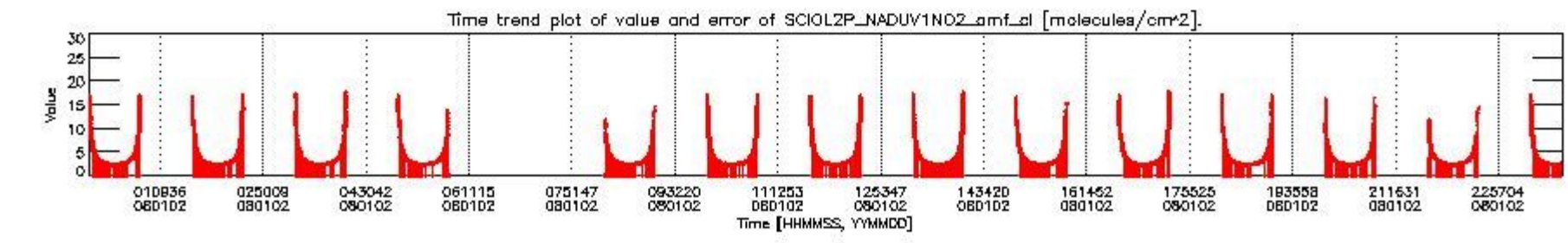
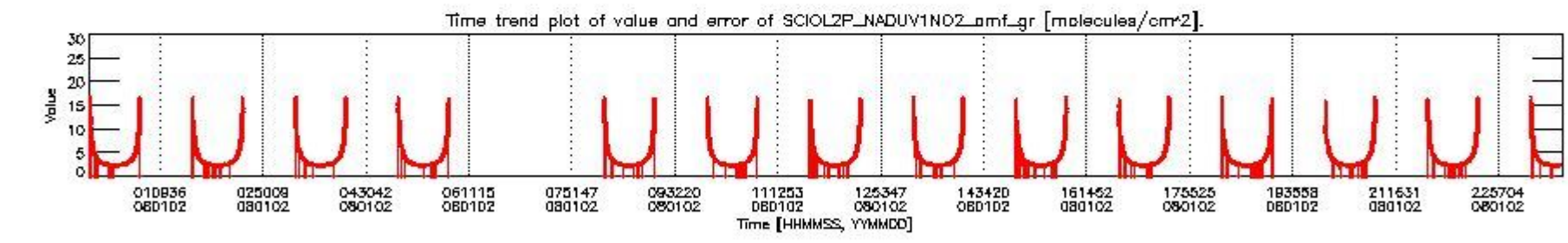
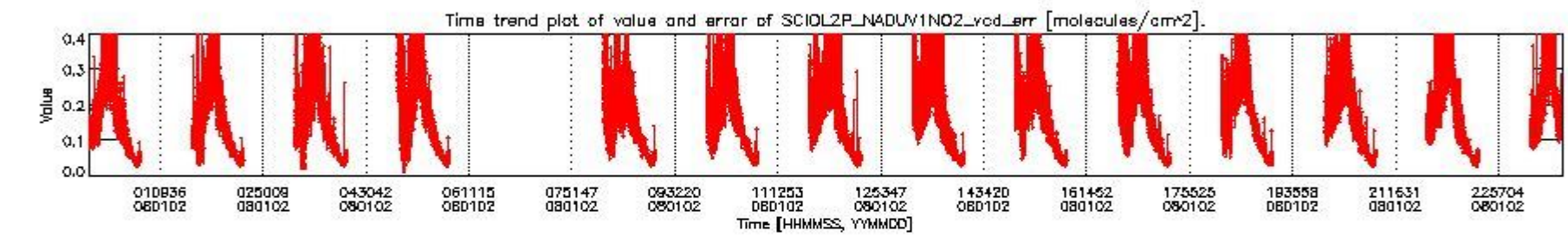
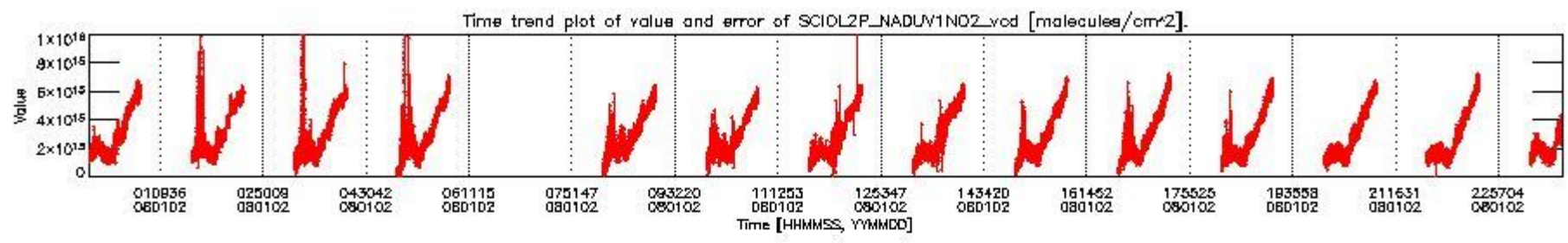


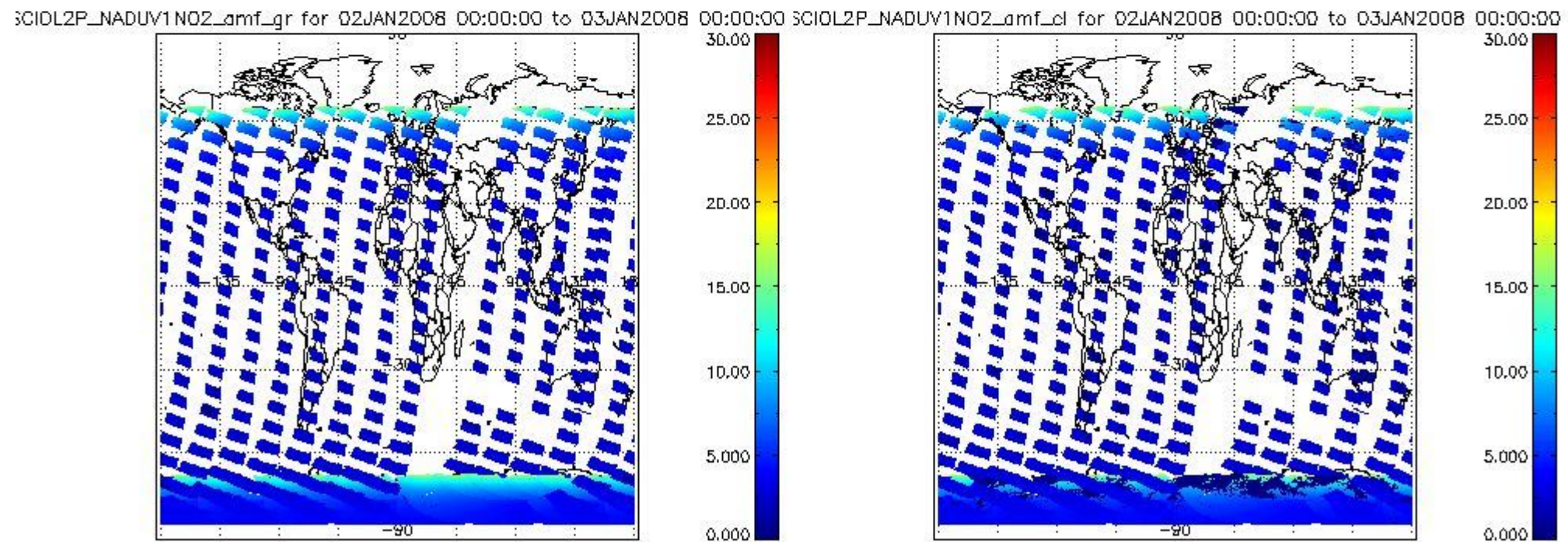
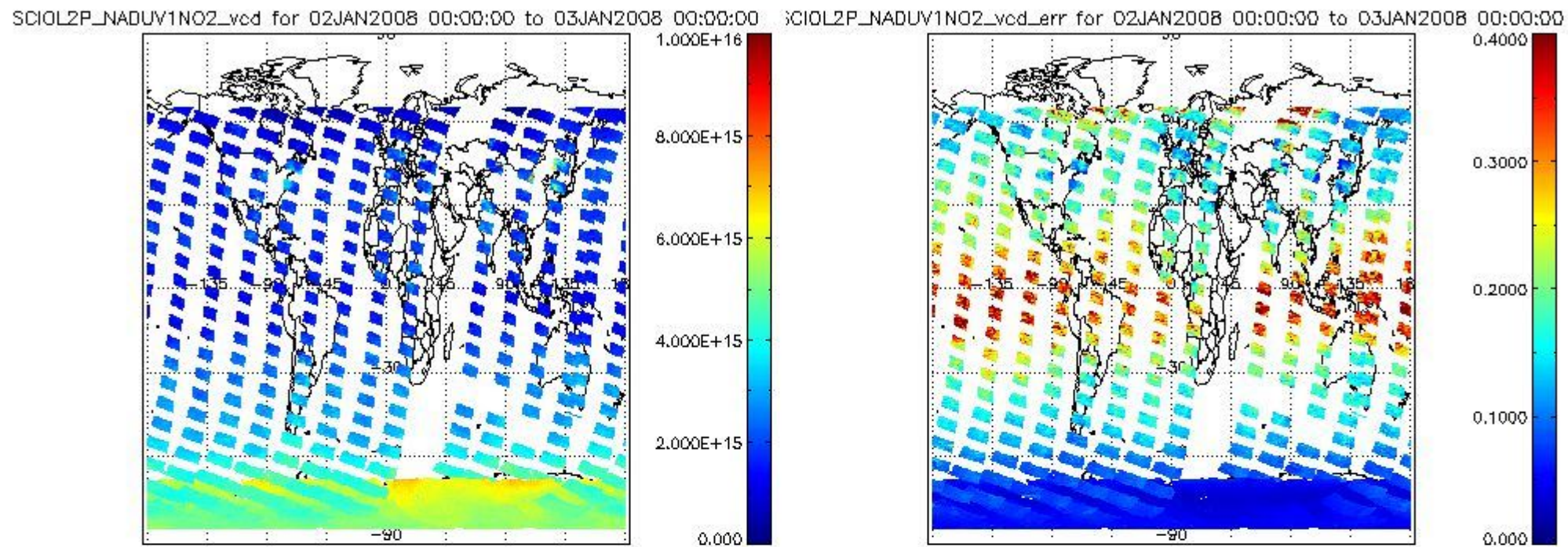
SCIOL2P_NADUV003_amf_gr for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 02JAN2008 00:00:00 to 03JAN2008 00:00:00







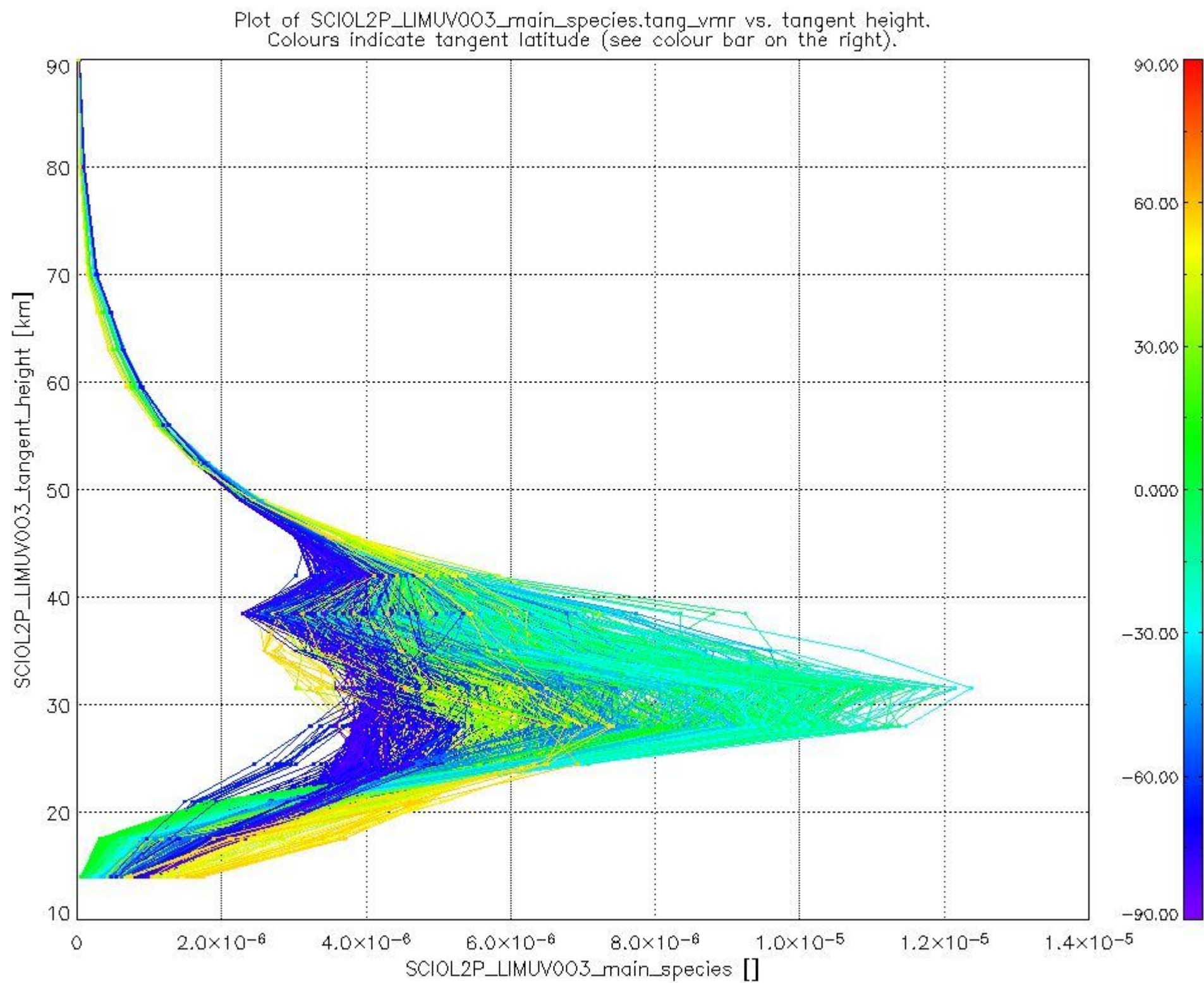
2.2.3 Limb

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

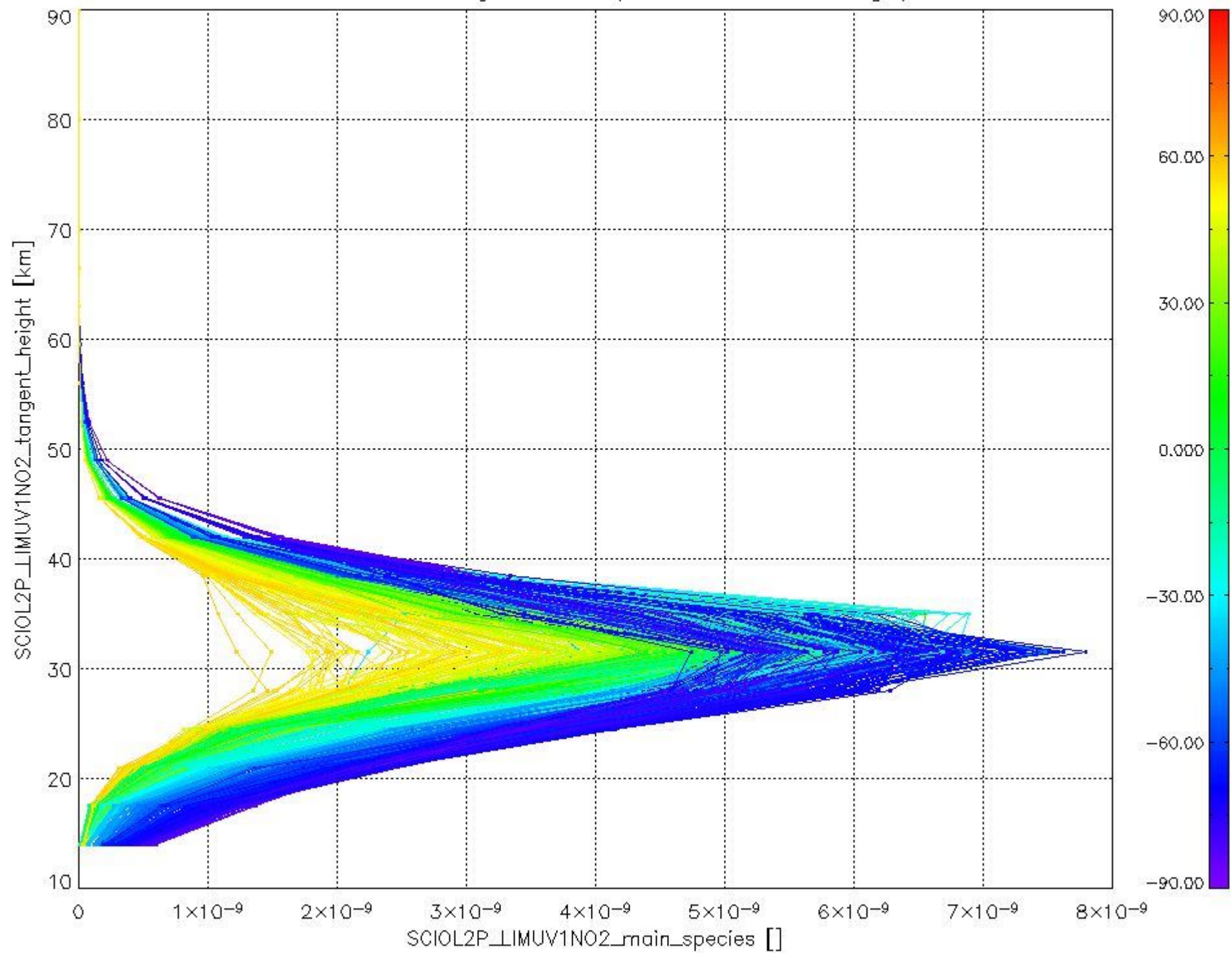
The following data items are currently included into this section:

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.



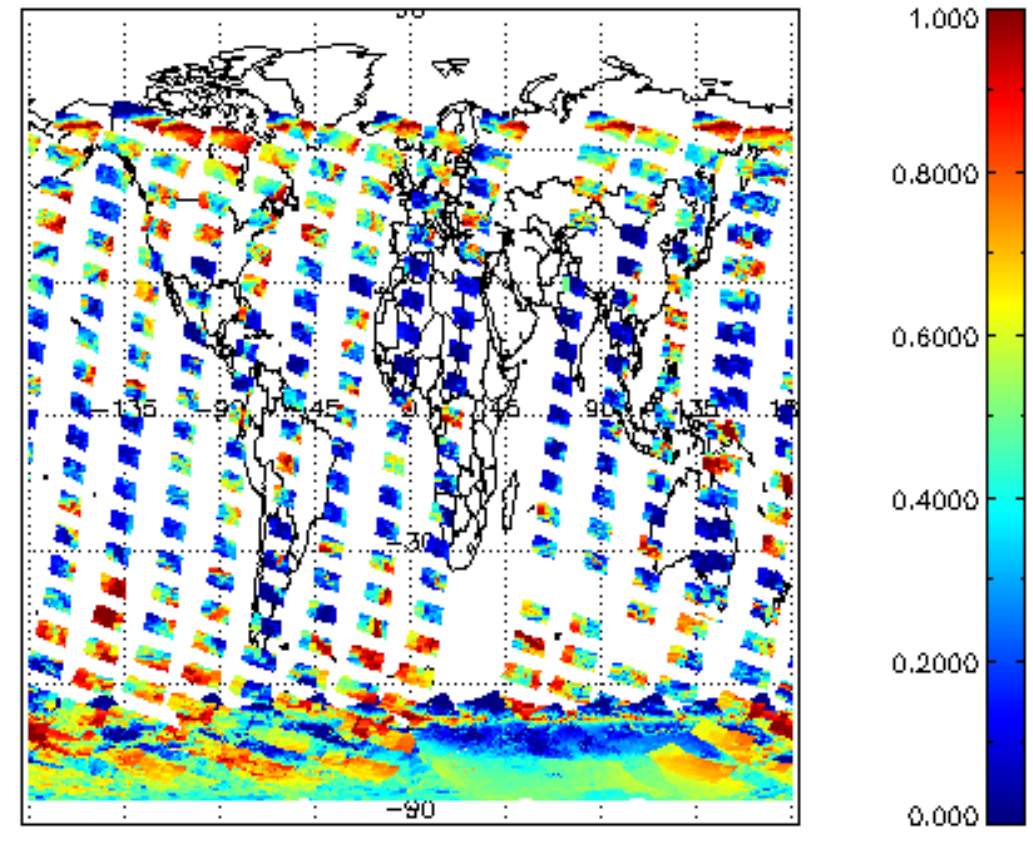
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



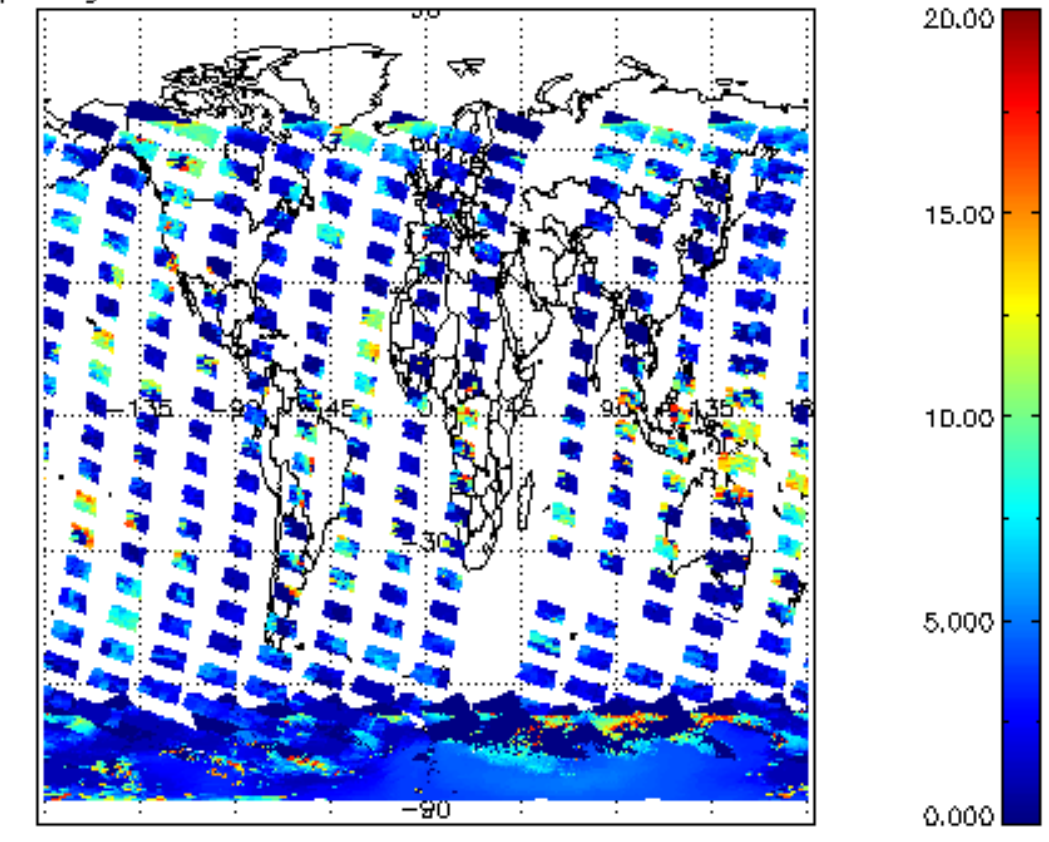
2.3 ADF monitoring

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

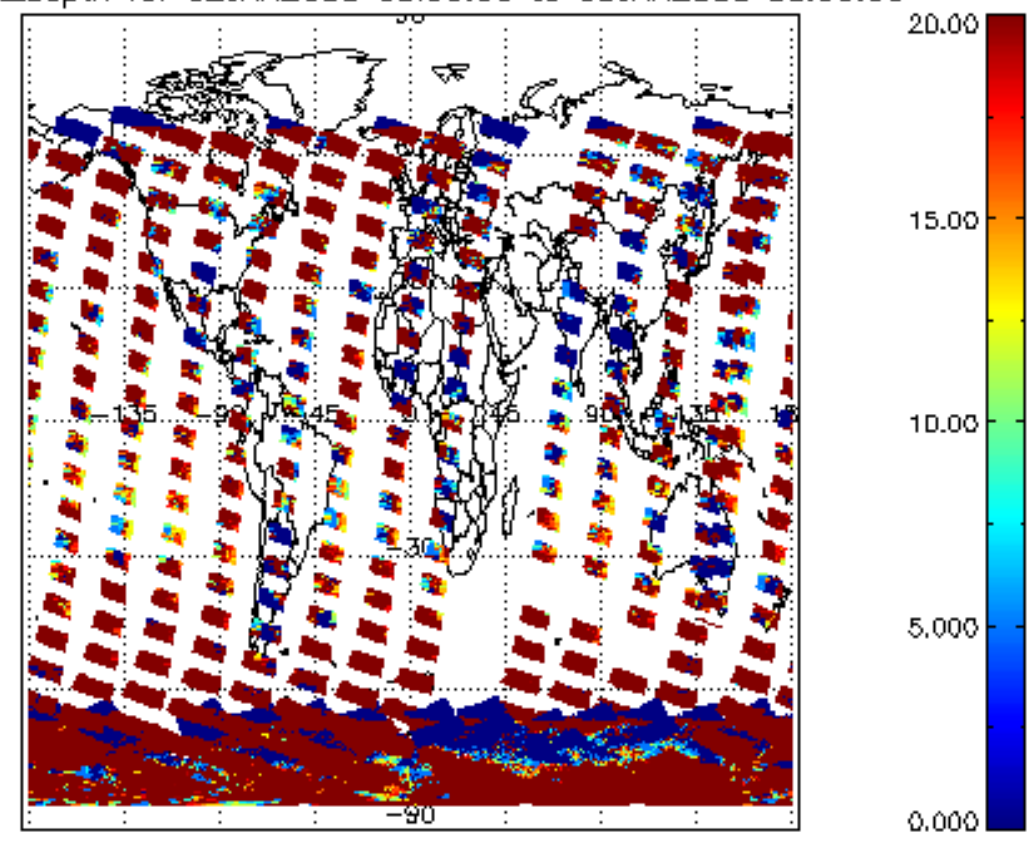
cL_frac for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



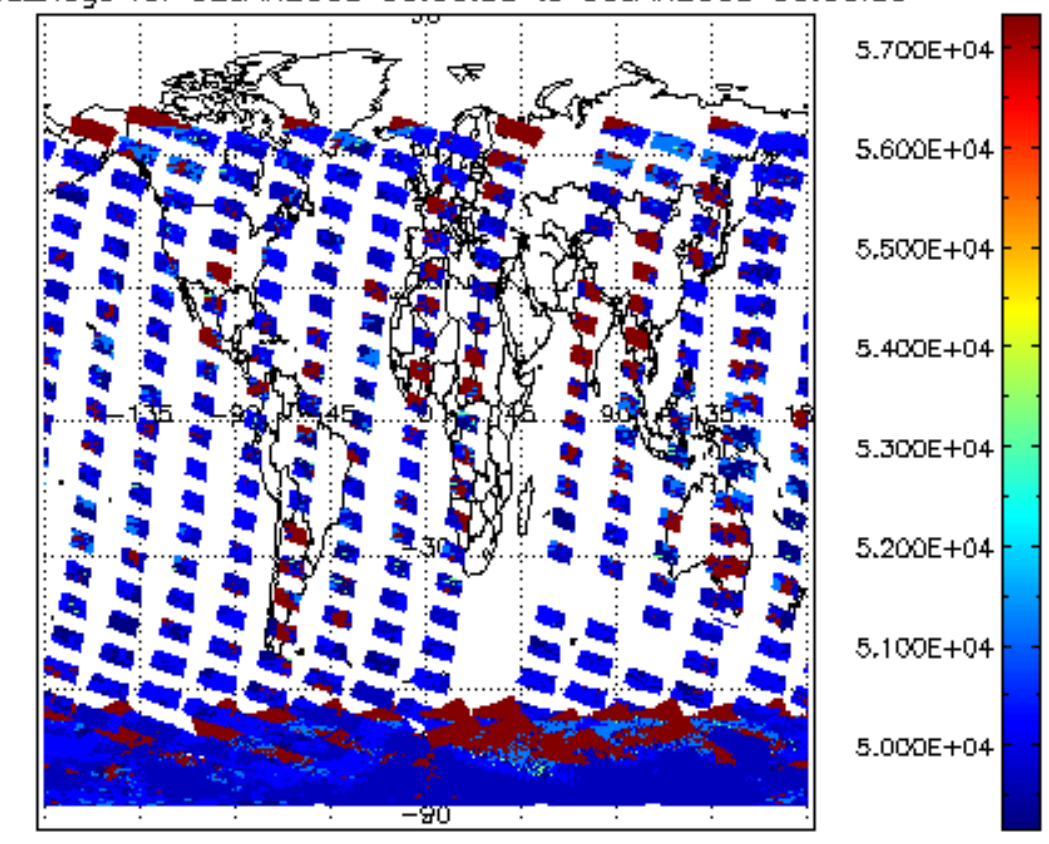
cL_top_height for 02JAN2008 00:00:00 to 03JAN2008 00:00:00

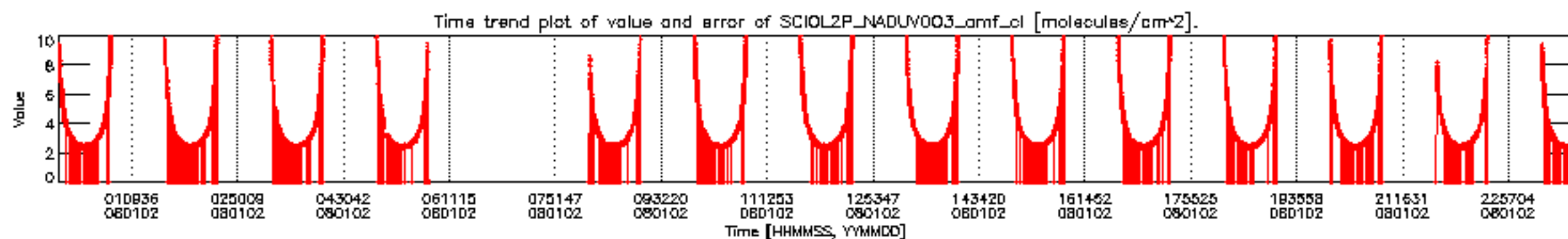
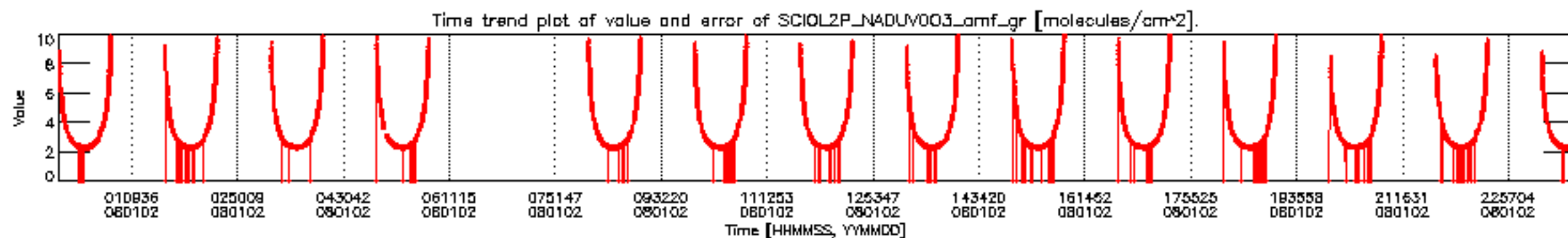
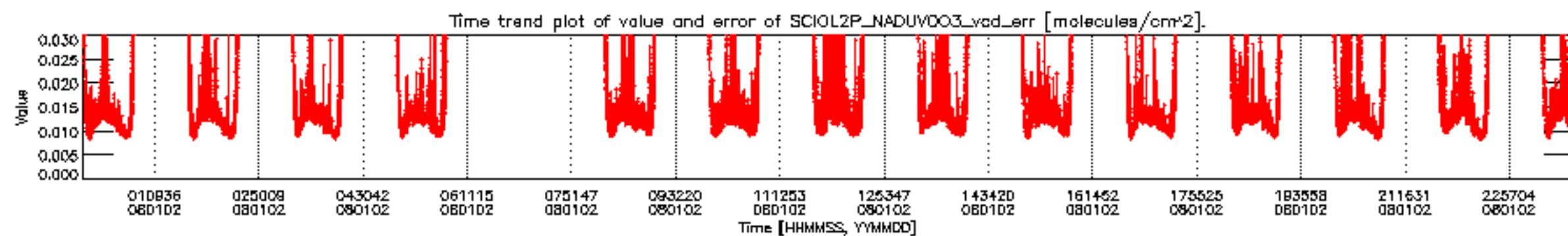
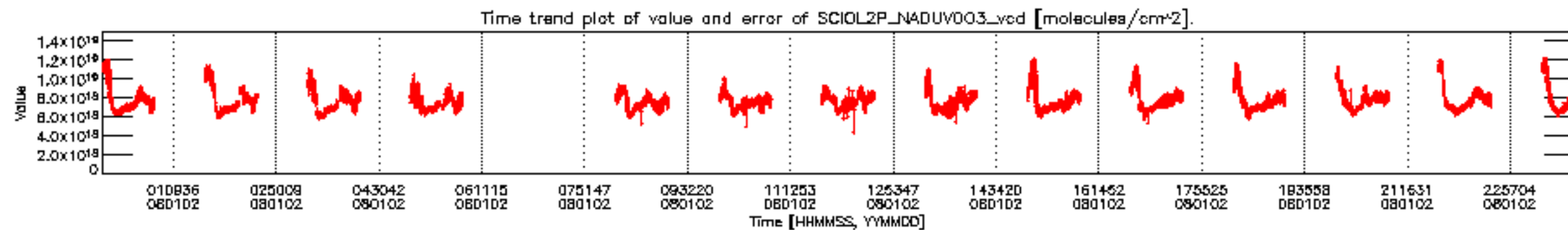


cLopt_depth for 02JAN2008 00:00:00 to 03JAN2008 00:00:00

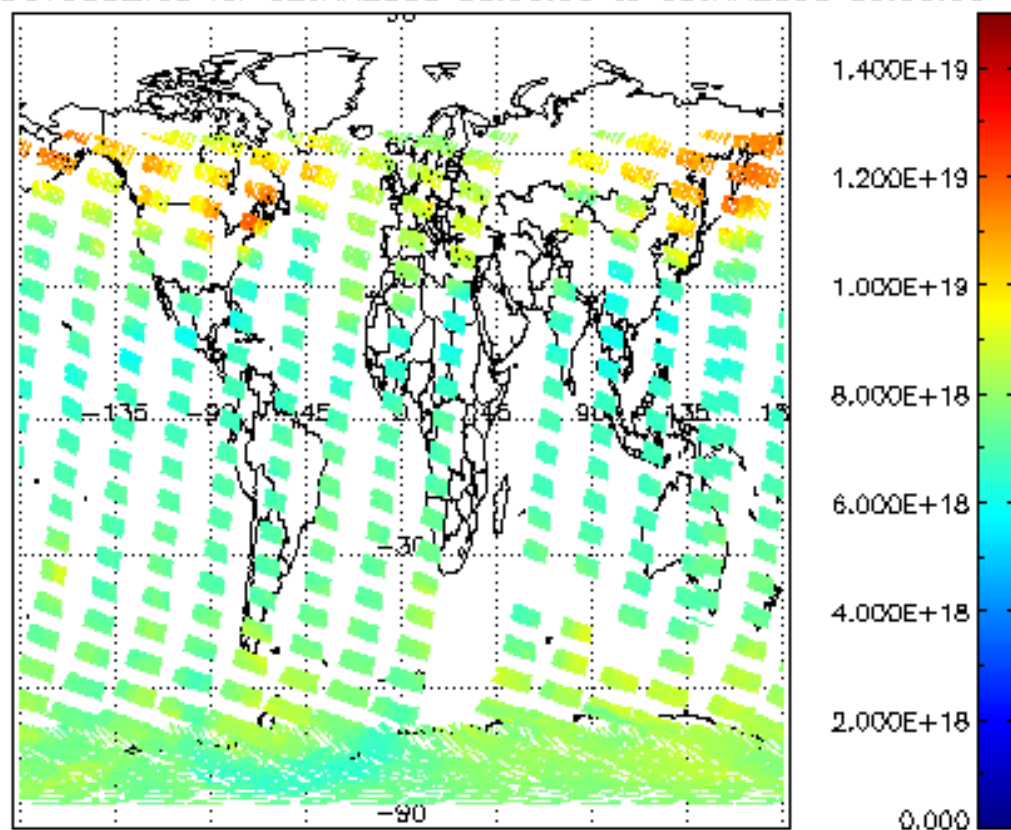


cloud_flags for 02JAN2008 00:00:00 to 03JAN2008 00:00:00

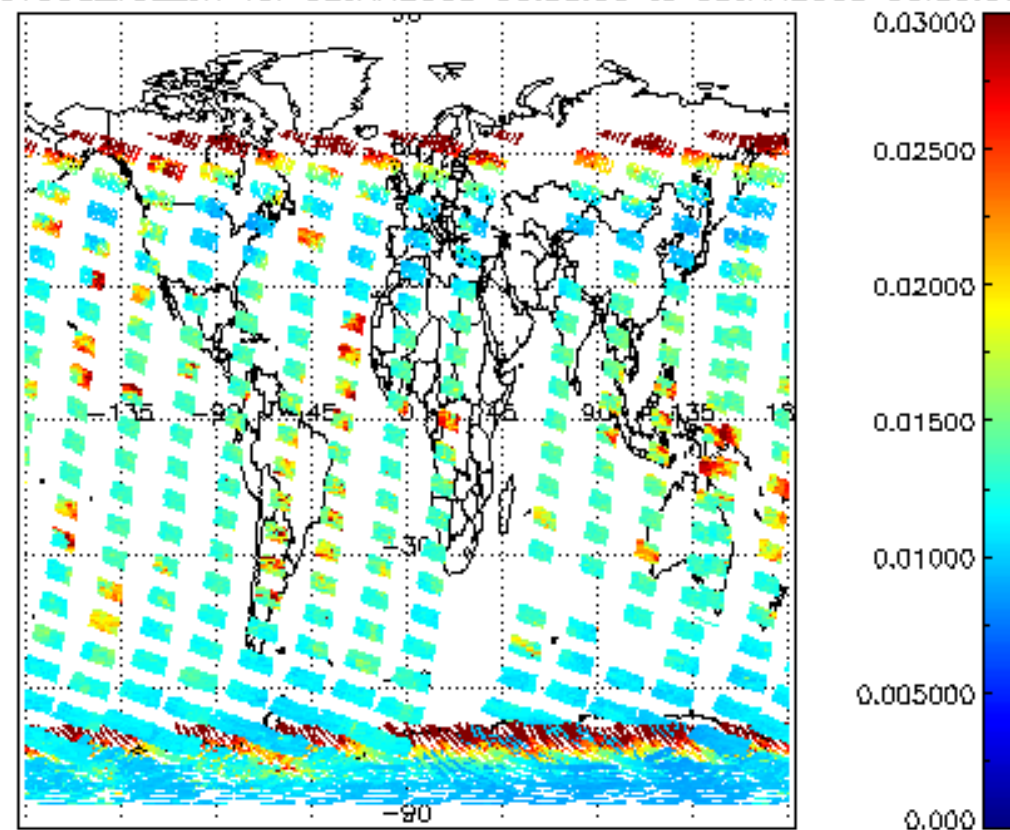




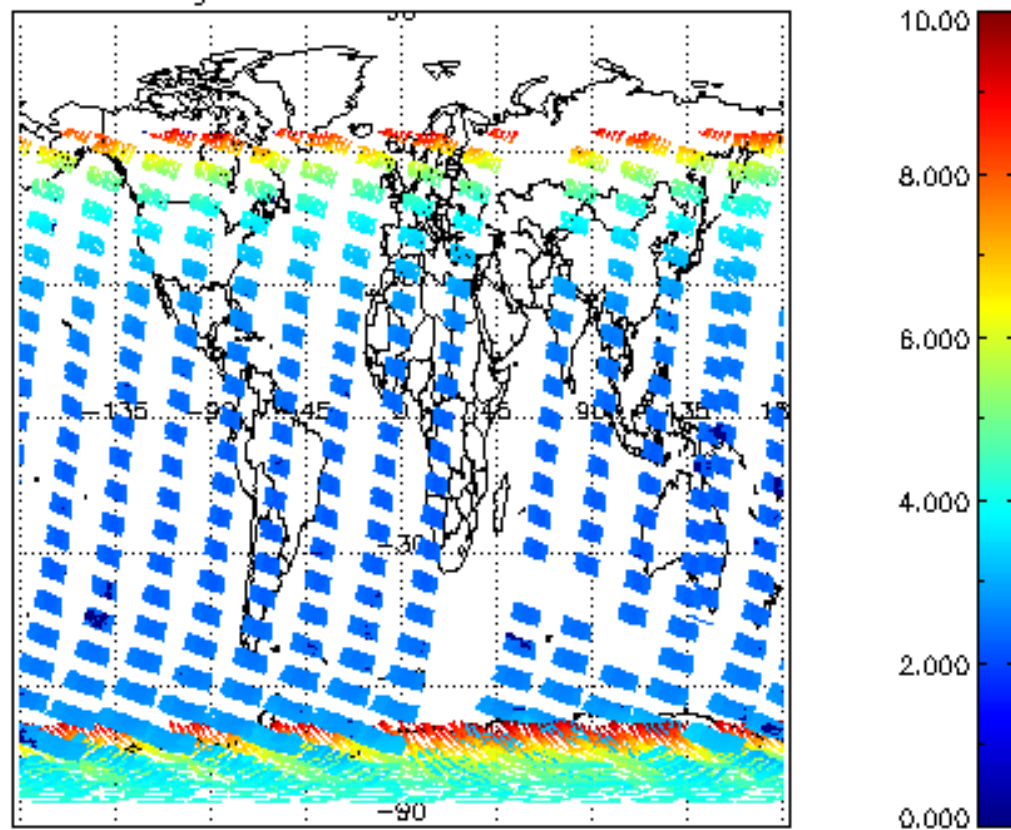
SCIOL2P_NADUV003_vcd for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



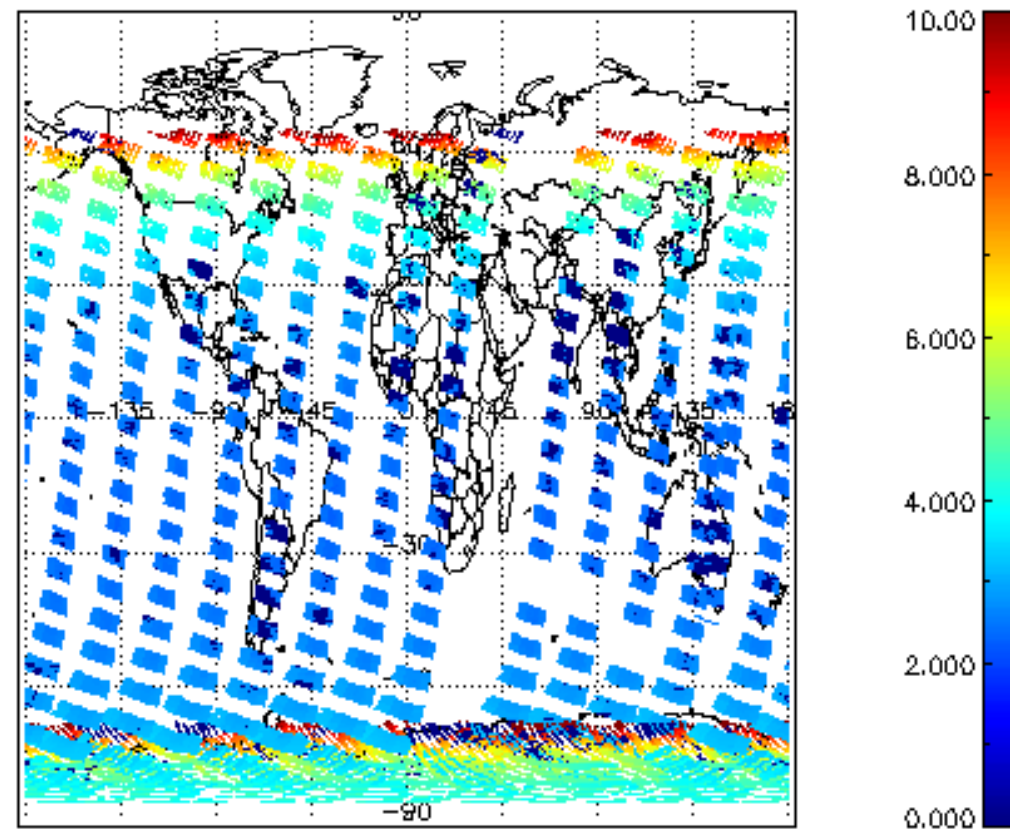
SCIOL2P_NADUV003_vcd_err for 02JAN2008 00:00:00 to 03JAN2008 00:00:00

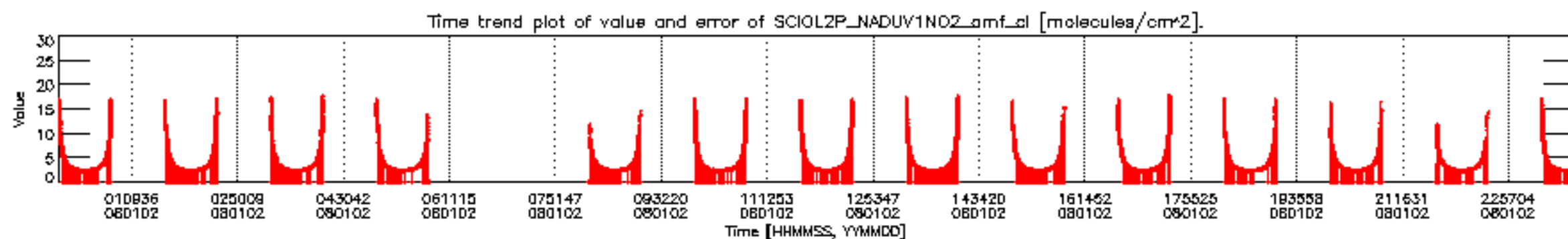
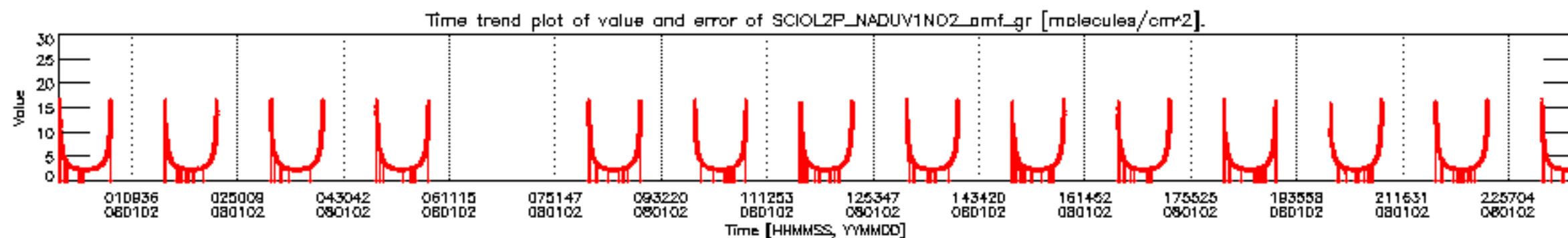
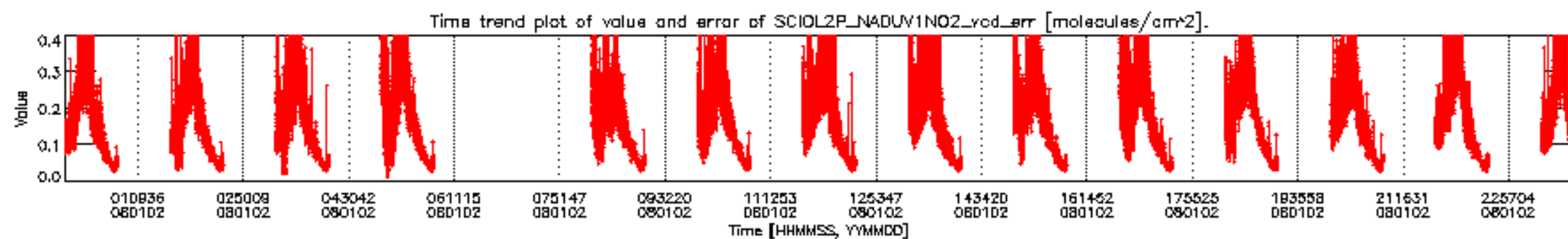
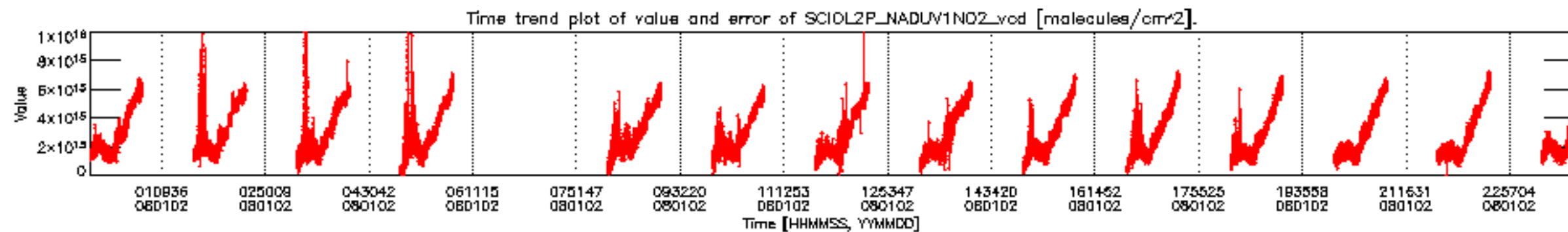


SCIOL2P_NADUV003_amf_gr for 02JAN2008 00:00:00 to 03JAN2008 00:00:00

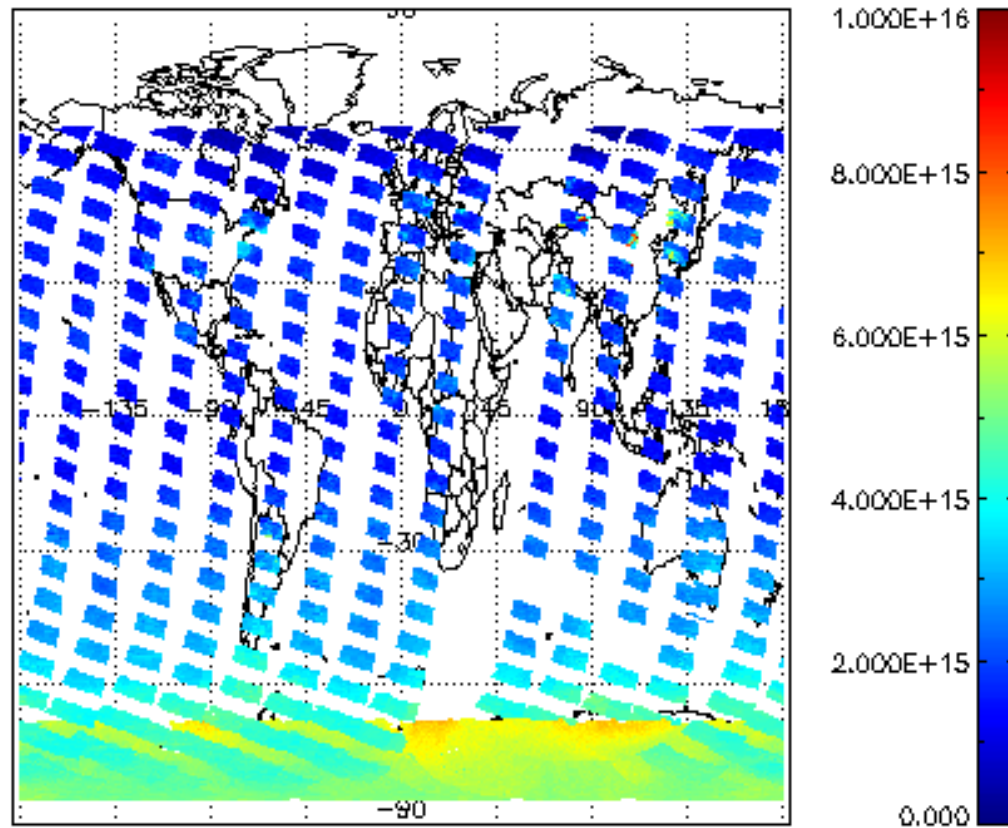


SCIOL2P_NADUV003_amf_cl for 02JAN2008 00:00:00 to 03JAN2008 00:00:00

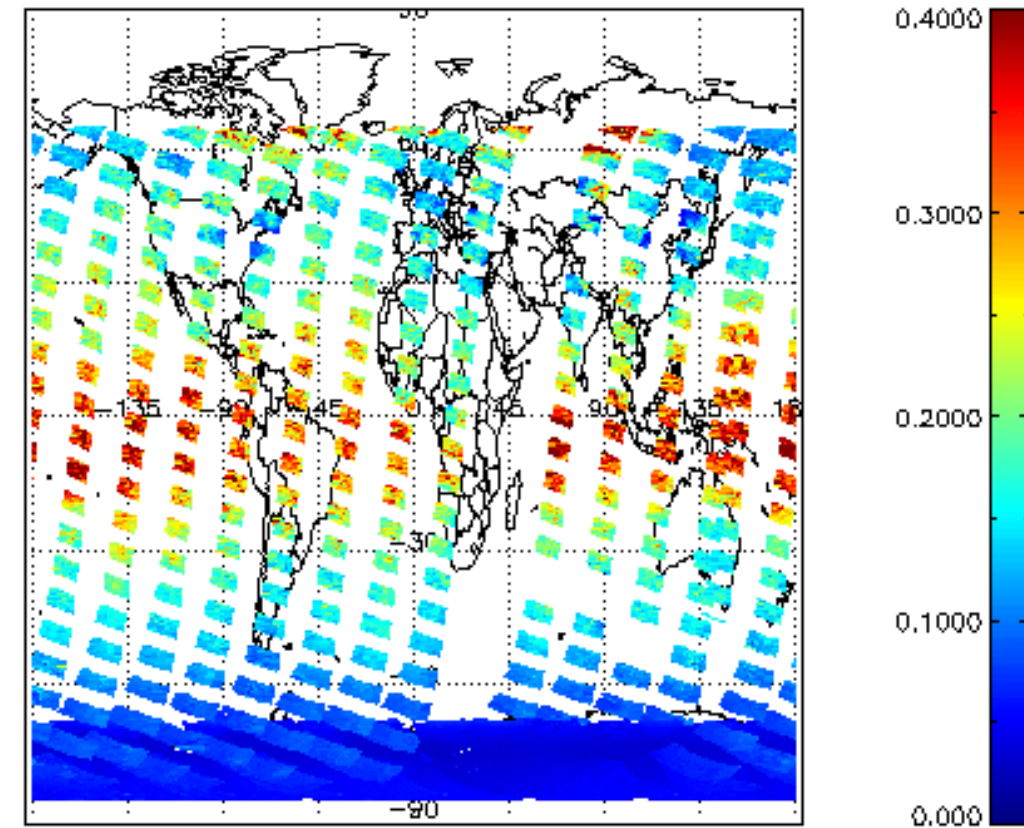




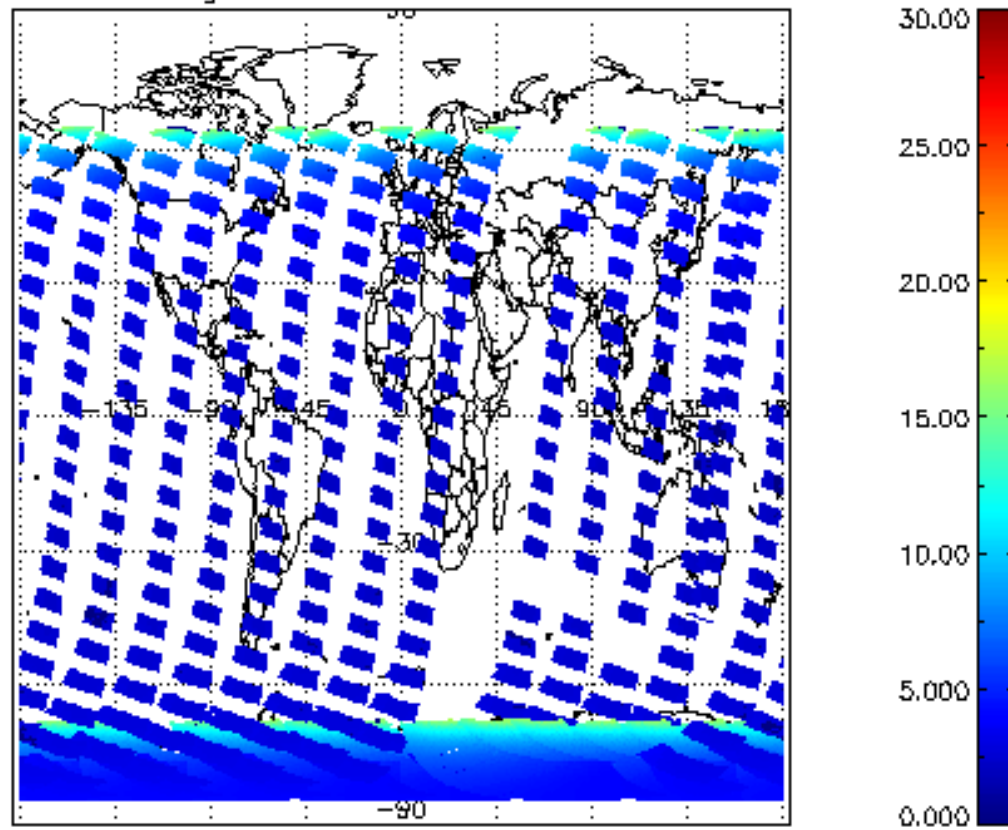
SCIOL2P_NADUV1NO2_vcd for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



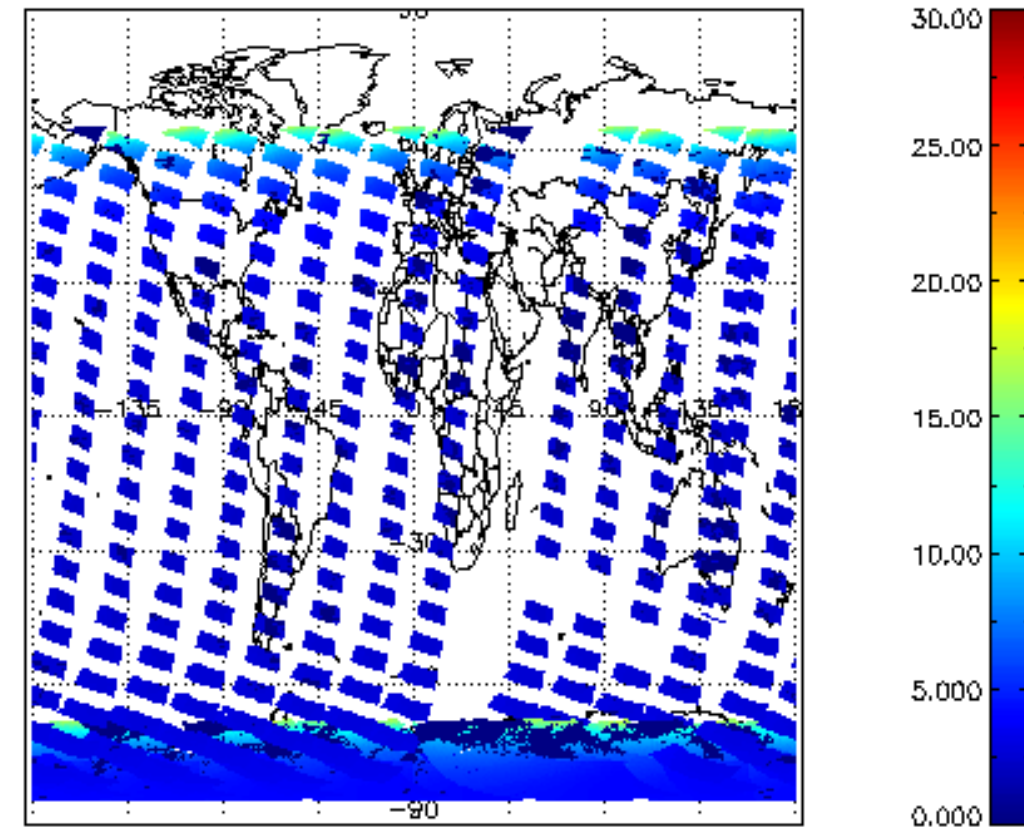
SCIOL2P_NADUV1NO2_vcd_err for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



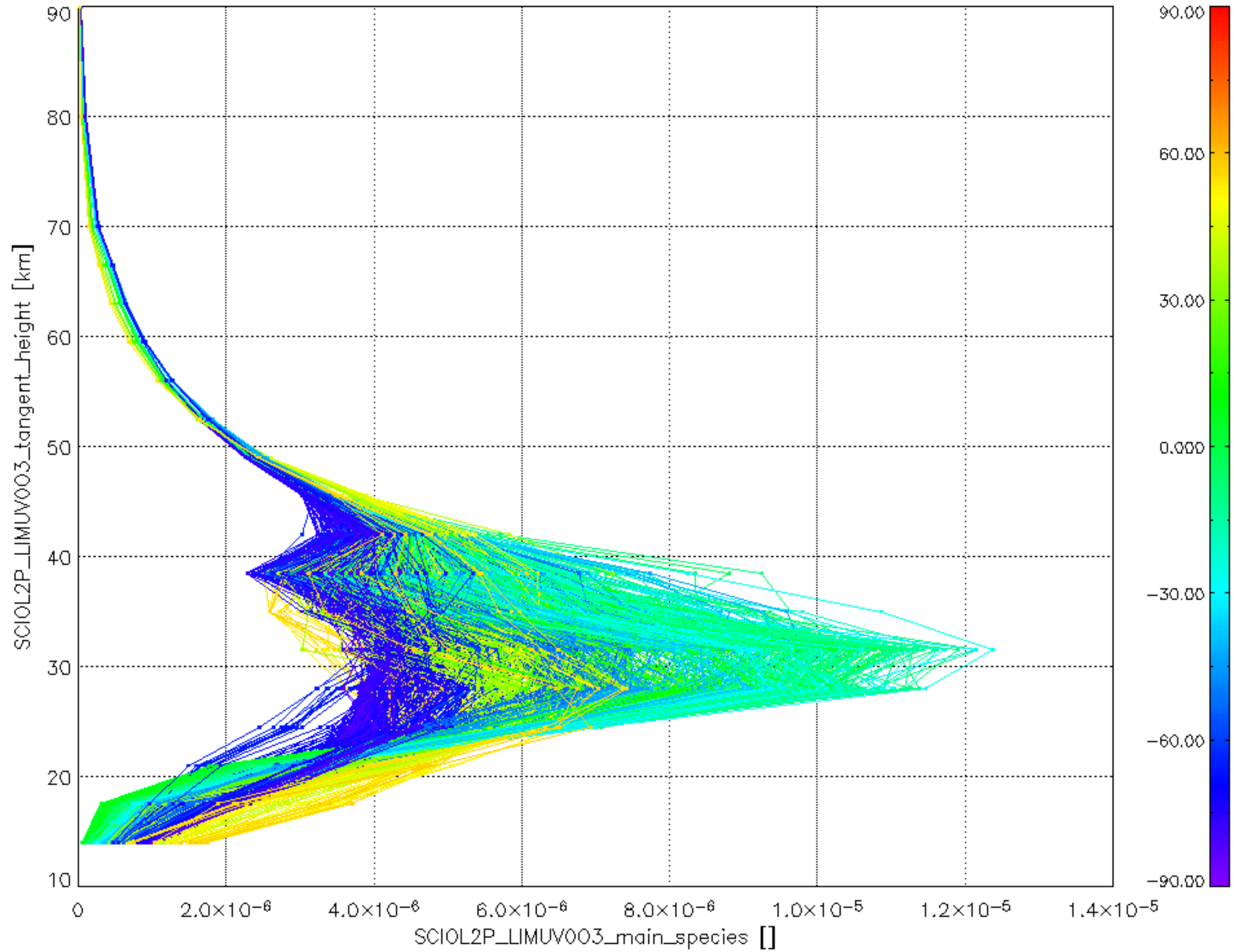
SCIOL2P_NADUV1NO2_amf_gr for 02JAN2008 00:00:00 to 03JAN2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 02JAN2008 00:00:00 to 03JAN2008 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).

