

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	22NOV2008 06:02:54
Data source version	SCIA-OL/3.01-R
Processing scope for products	04NOV2008 00:00:00 to 05NOV2008 00:00:00
Start time of first product within scope	03NOV2008 23:03:31
Stop time of last product within scope	05NOV2008 01:08:57
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__2PRDPA20081103_230331_000033252073_00302_34925_3618.N1	03NOV2008 23:03:31	03NOV2008 23:58:57	0	GOOD
1	SCI_OL__2PRDPA20081104_004407_000033812073_00303_34926_3620.N1	04NOV2008 00:44:07	04NOV2008 01:40:29	0	GOOD
2	SCI_OL__2PRDPA20081104_022444_000033252073_00304_34927_3621.N1	04NOV2008 02:24:44	04NOV2008 03:20:09	0	GOOD
3	SCI_OL__2PRDPA20081104_040520_000033812073_00305_34928_3623.N1	04NOV2008 04:05:20	04NOV2008 05:01:41	0	GOOD
4	SCI_OL__2PRDPA20081104_054556_000033252073_00306_34929_3643.N1	04NOV2008 05:45:56	04NOV2008 06:41:22	0	GOOD
5	SCI_OL__2PRDPA20081104_072633_000033812073_00307_34930_3668.N1	04NOV2008 07:26:33	04NOV2008 08:22:54	0	GOOD
6	SCI_OL__2PRDPA20081104_090709_000033252073_00308_34931_3683.N1	04NOV2008 09:07:09	04NOV2008 10:02:34	0	GOOD
7	SCI_OL__2PRDPA20081104_104745_000033812073_00309_34932_3685.N1	04NOV2008 10:47:45	04NOV2008 11:44:07	0	GOOD
8	SCI_OL__2PRDPA20081104_122821_000033252073_00310_34933_3687.N1	04NOV2008 12:28:21	04NOV2008 13:23:47	0	GOOD
9	SCI_OL__2PRDPA20081104_140858_000033812073_00311_34934_3690.N1	04NOV2008 14:08:58	04NOV2008 15:05:19	0	GOOD
10	SCI_OL__2PRDPA20081104_154934_000033252073_00312_34935_3691.N1	04NOV2008 15:49:34	04NOV2008 16:45:00	0	GOOD
11	SCI_OL__2PRDPA20081104_173031_000033122073_00313_34936_3693.N1	04NOV2008 17:30:31	04NOV2008 18:25:44	0	GOOD
12	SCI_OL__2PRDPA20081104_191107_000033252073_00314_34937_3696.N1	04NOV2008 19:11:07	04NOV2008 20:06:33	0	GOOD
13	SCI_OL__2PRDPA20081104_205123_000033812073_00315_34938_3698.N1	04NOV2008 20:51:23	04NOV2008 21:47:45	0	GOOD
14	SCI_OL__2PRDPA20081104_223159_000033252073_00316_34939_3700.N1	04NOV2008 22:32:00	04NOV2008 23:27:25	0	GOOD
15	SCI_OL__2PRDPA20081105_001236_000033812073_00317_34940_3701.N1	05NOV2008 00:12:36	05NOV2008 01:08:57	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: 145860

Total number of cloud data DSRs with good quality flag (=0): 145860 (100.0 %)

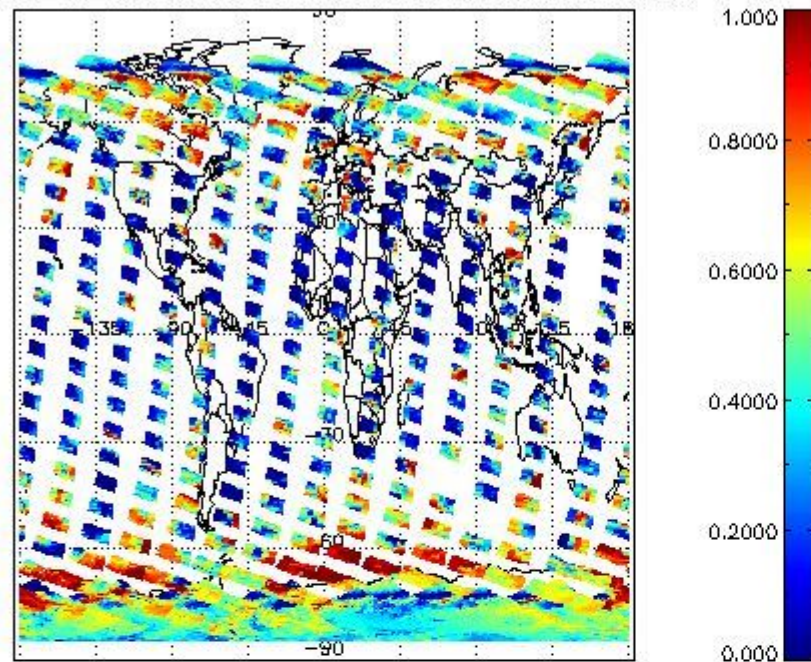
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	145860	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	145860	0.16979	0.12500	0.12500	0.25000	0.059937	s
CL_FRAC	145860	0.39776	0.38549	0.0000	1.0000	0.28270	-
CL_FRAC_ERR	145860	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	145860	5.4332	4.0000	4.0000	8.0000	1.9180	
PMD_READ_CL[0]	145860	0.22151	0.0000	0.0000	8.0000	1.0458	-
PMD_READ_CL[1]	145860	0.98041	0.0000	0.0000	8.0000	2.2012	-
CL_TOP_HEIGHT	120513	4.0417	2.9069	0.0000	17.000	3.8515	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	120513	52.664	42.394	0.0000	101.00	39.951	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	145860	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	145860	11001011	11000100	11000000	11100000	3359.2	flags
AERO_ABSO_IND	145860	2.9910	3.3475	-1.3825	14.429	2.0951	
AERO_IND_DIAG	145860	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	145860	01010111	00000000	00000000	11000000	24473.	flags

Time and geolocation plots:

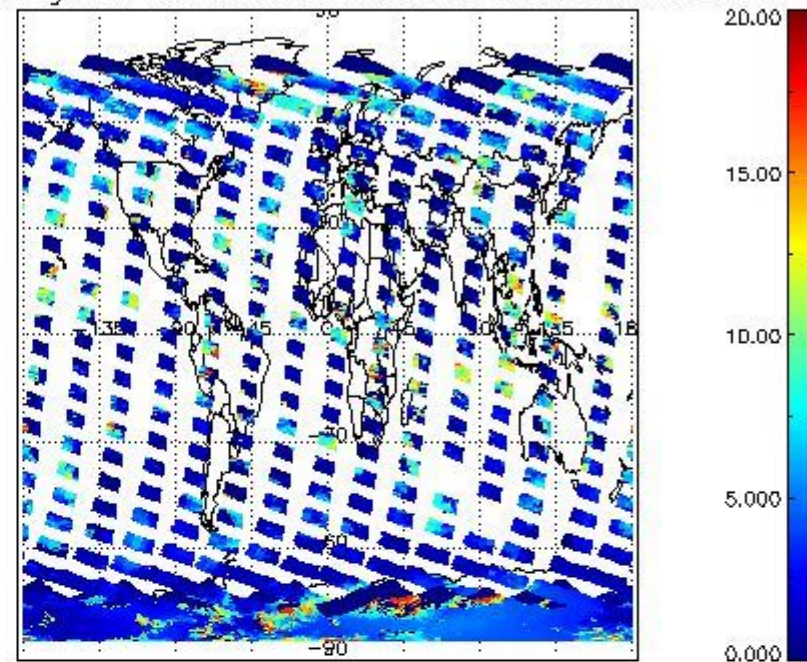
Plots are available for the following parameters:

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

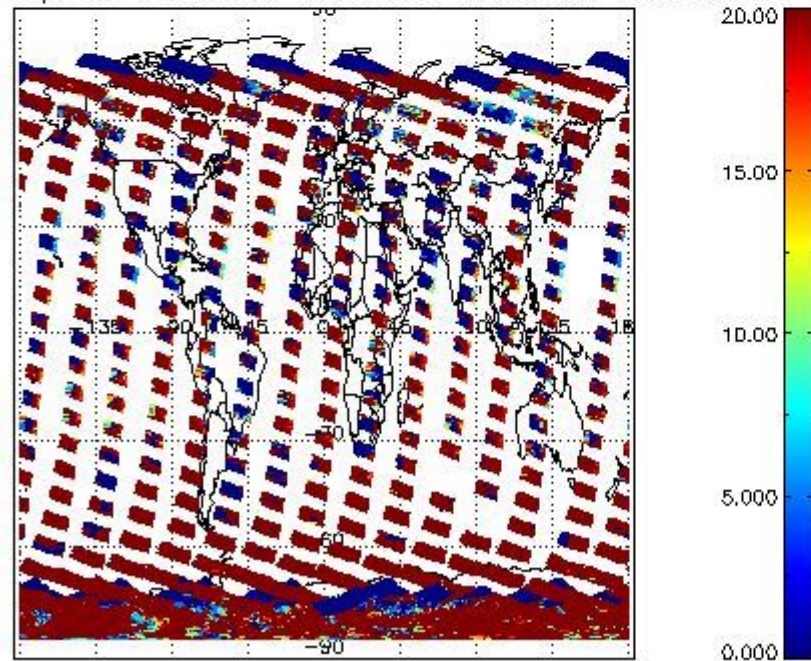
cLfrac for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



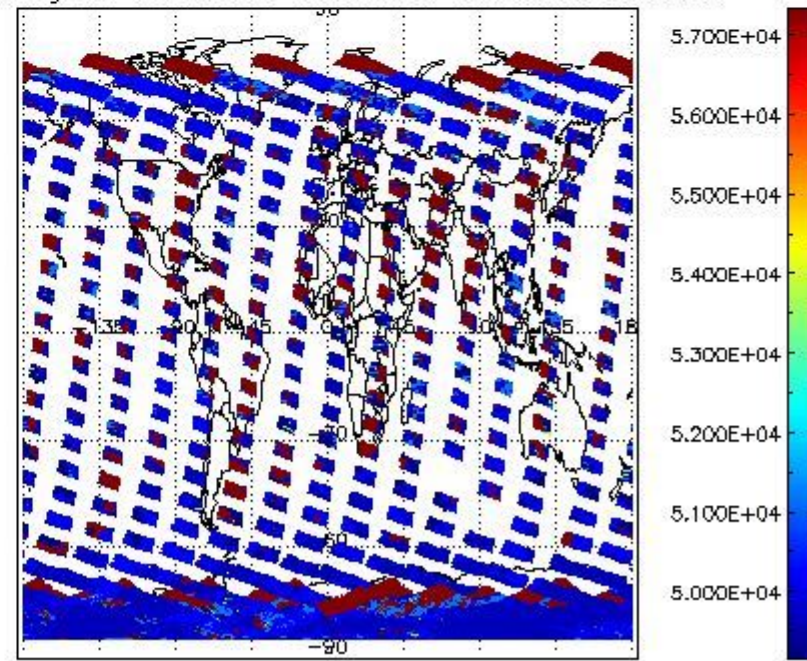
cL_top_height for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



cLopt_depth for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



cloud_flags for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



2.2.2 Nadir

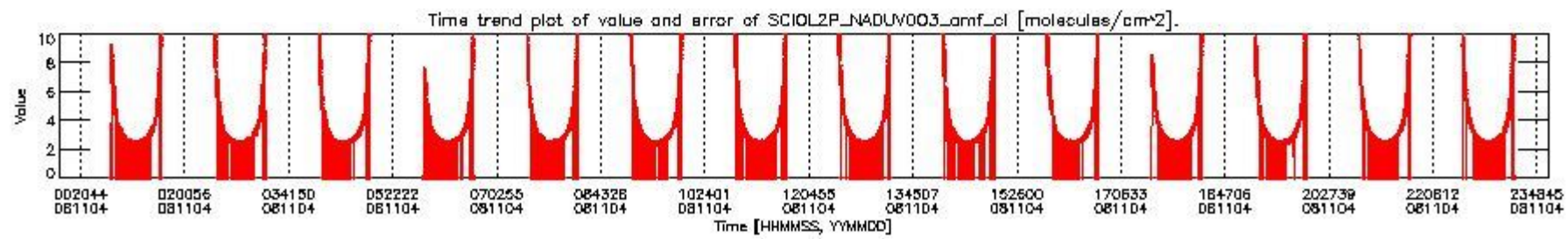
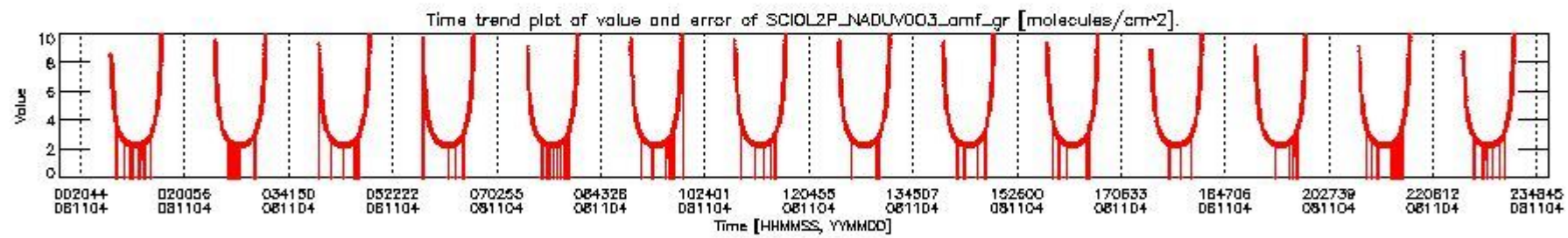
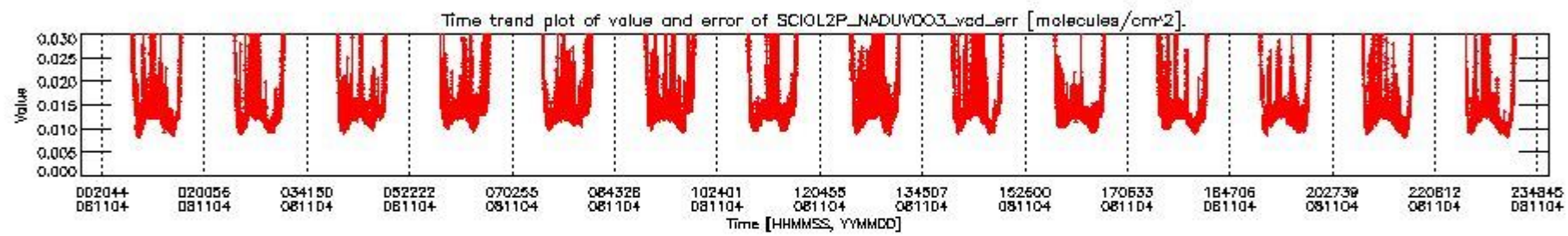
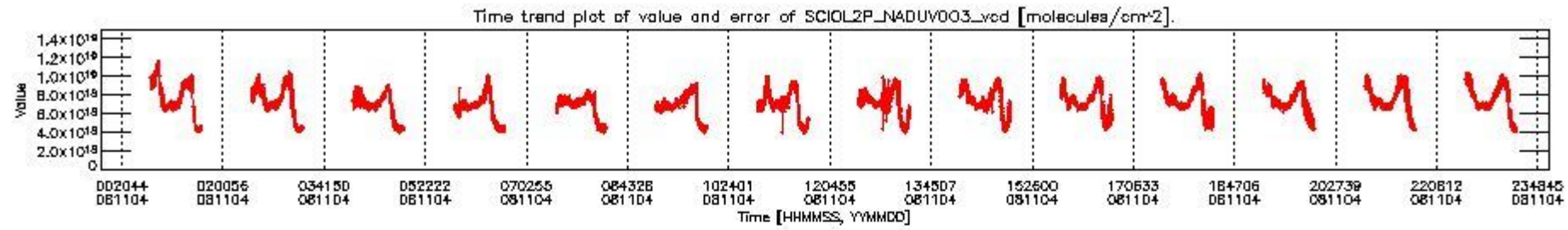
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

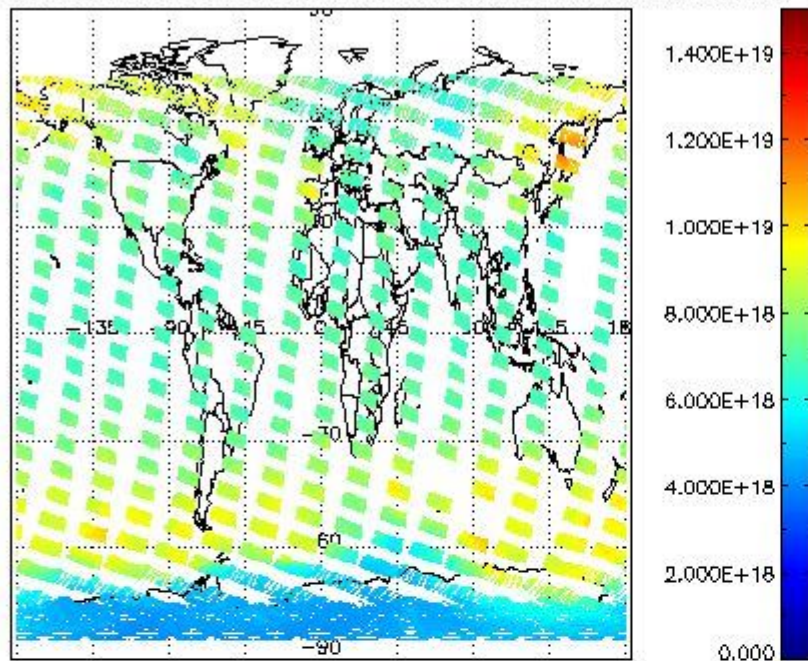
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

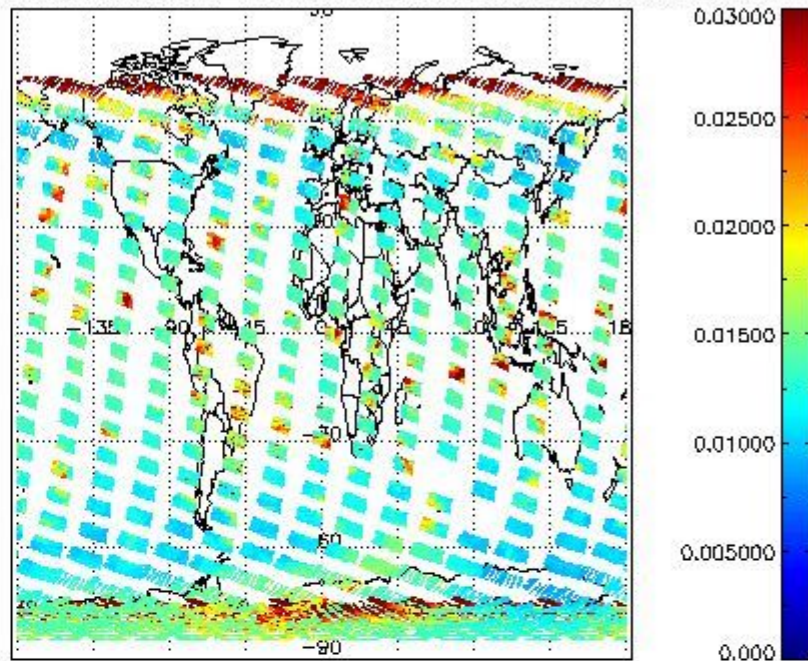
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



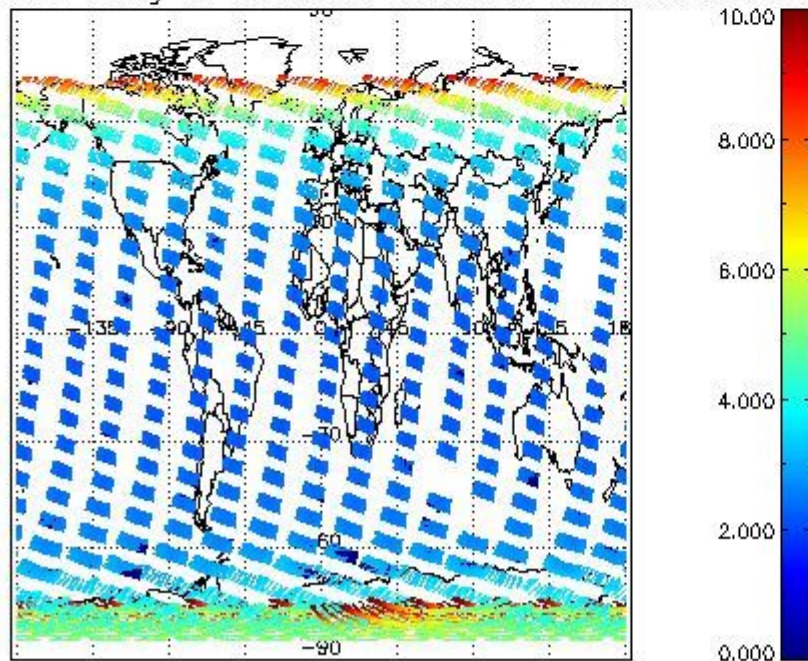
SCIOL2P_NADUV003_vcd for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



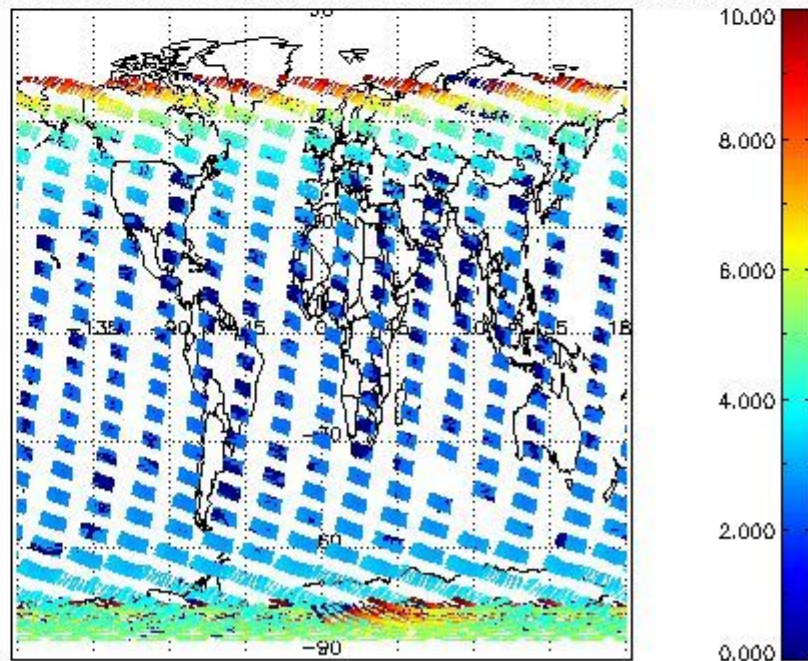
SCIOL2P_NADUV003_vcd_err for 04NOV2008 00:00:00 to 05NOV2008 00:00:00

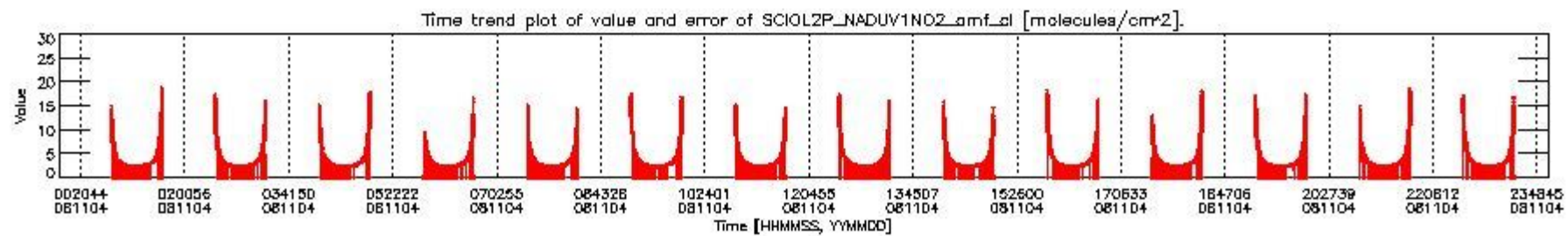
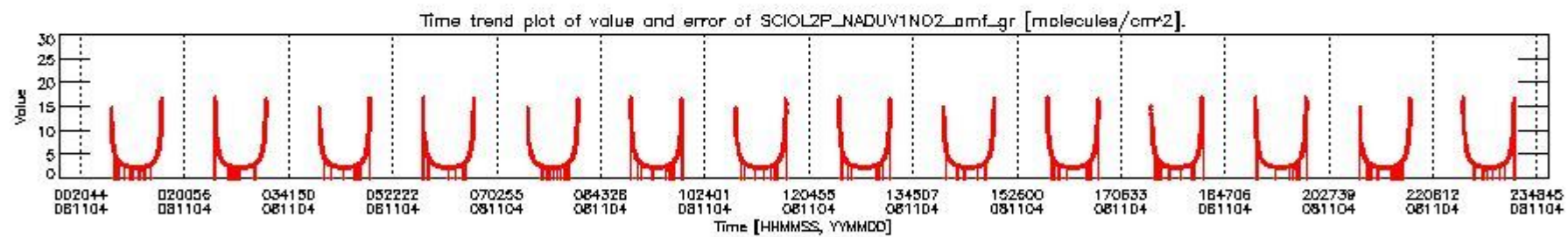
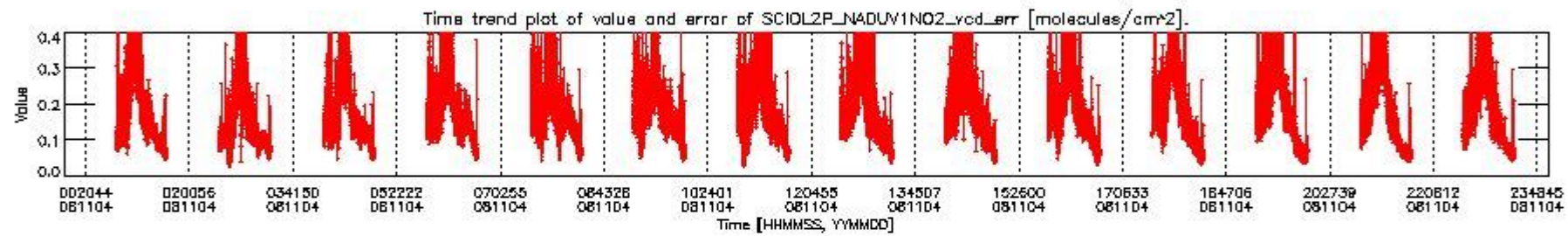
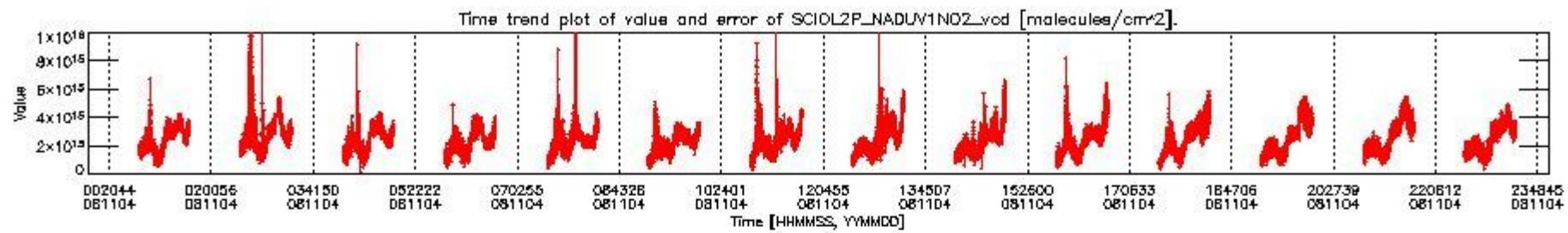


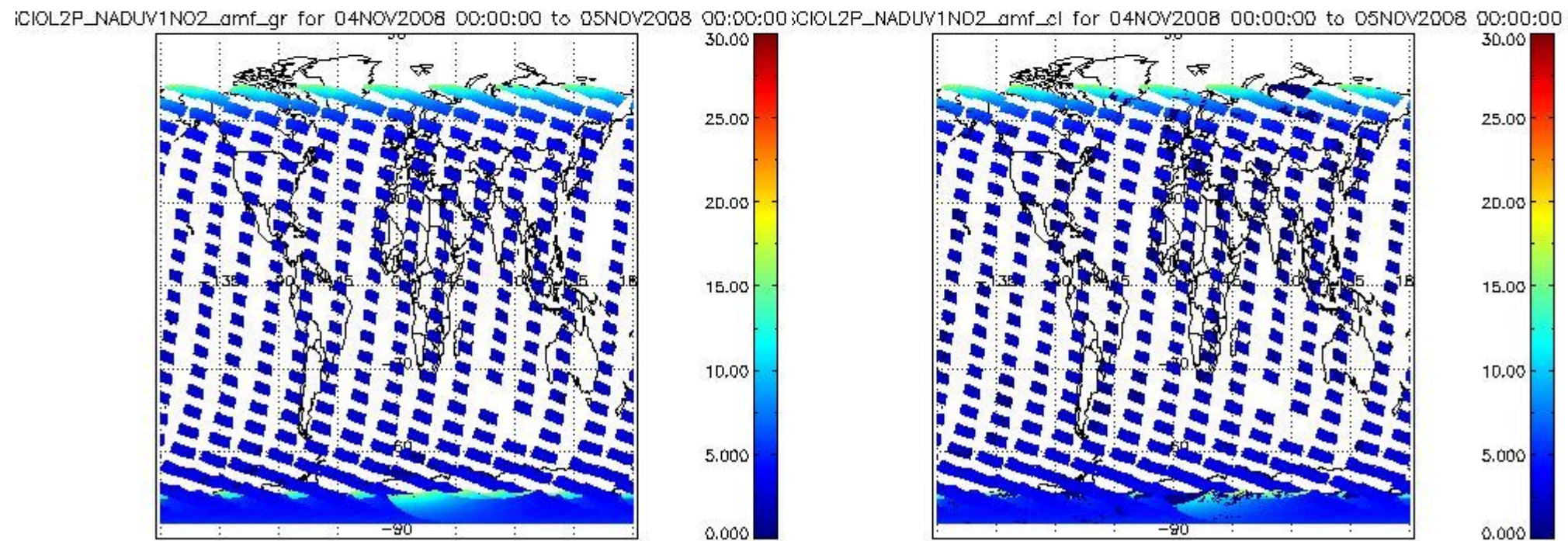
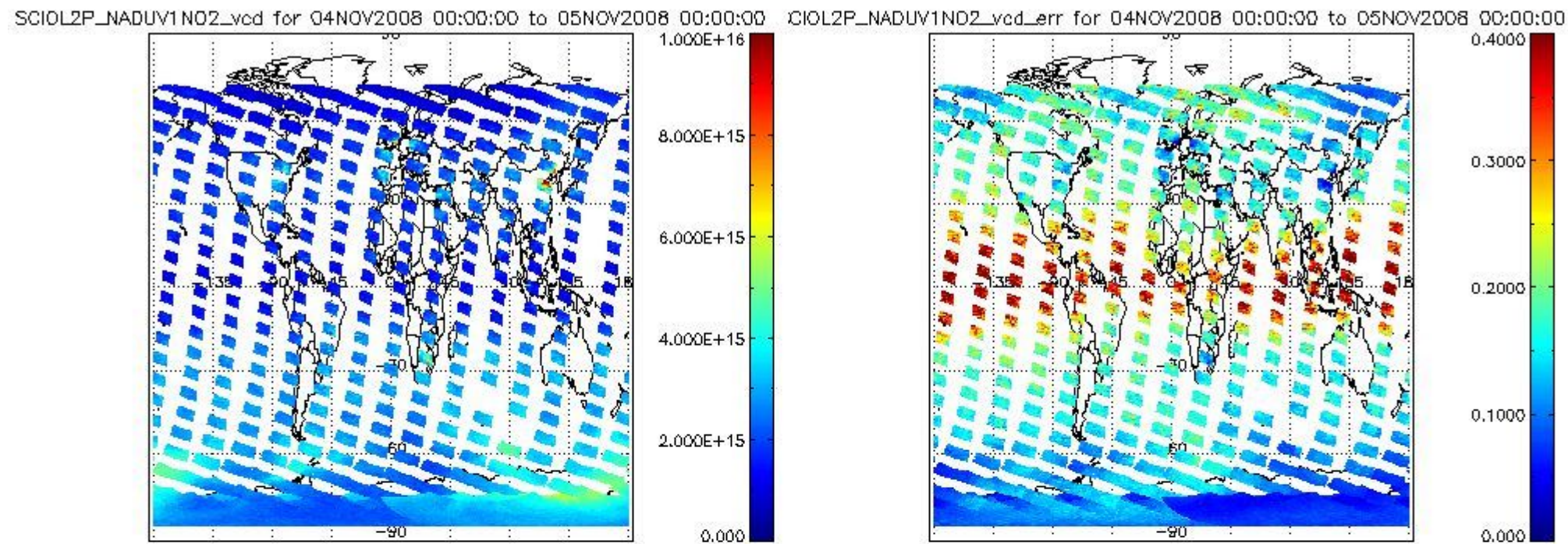
SCIOL2P_NADUV003_amf_gr for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 04NOV2008 00:00:00 to 05NOV2008 00:00:00







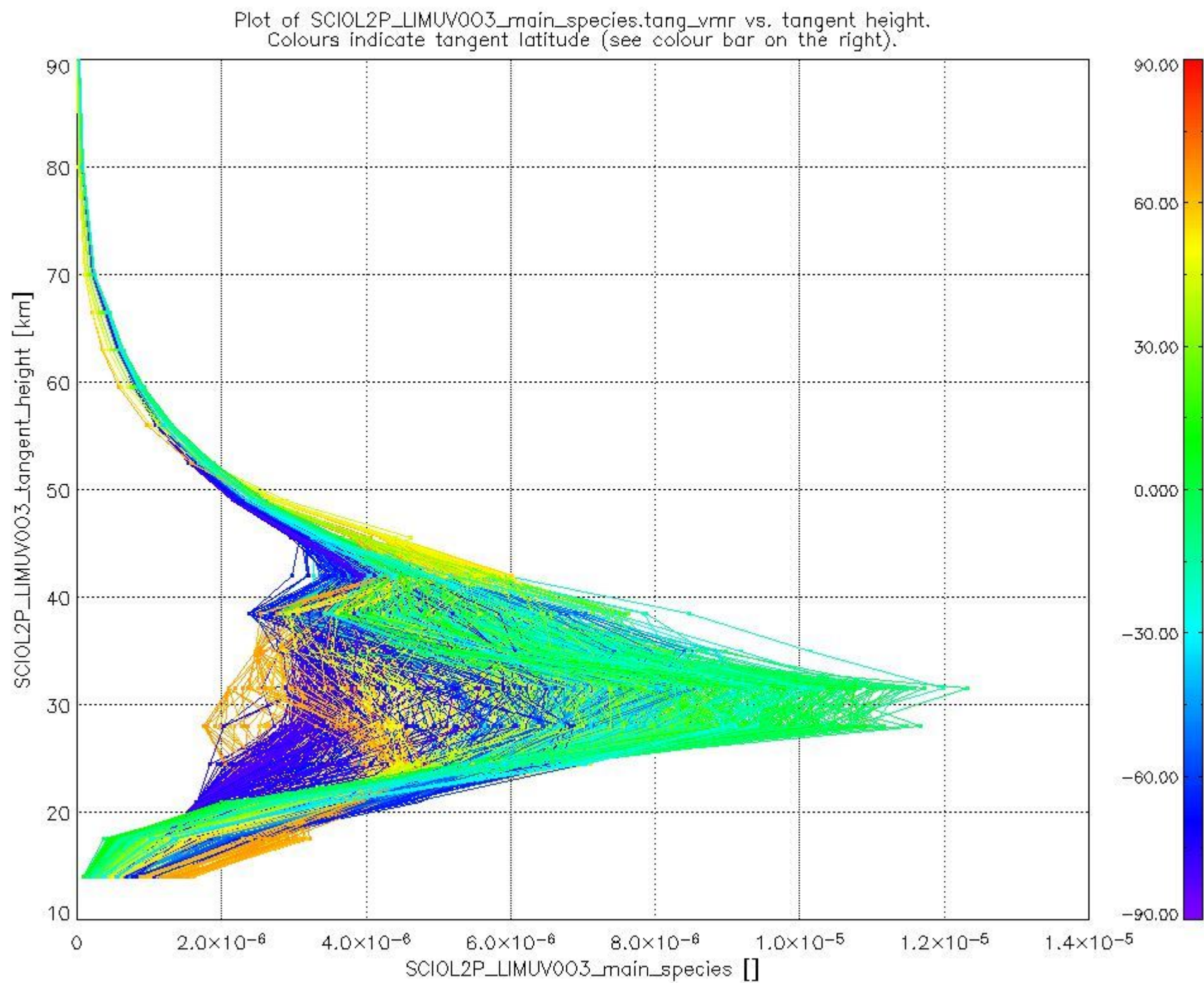
2.2.3 Limb

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

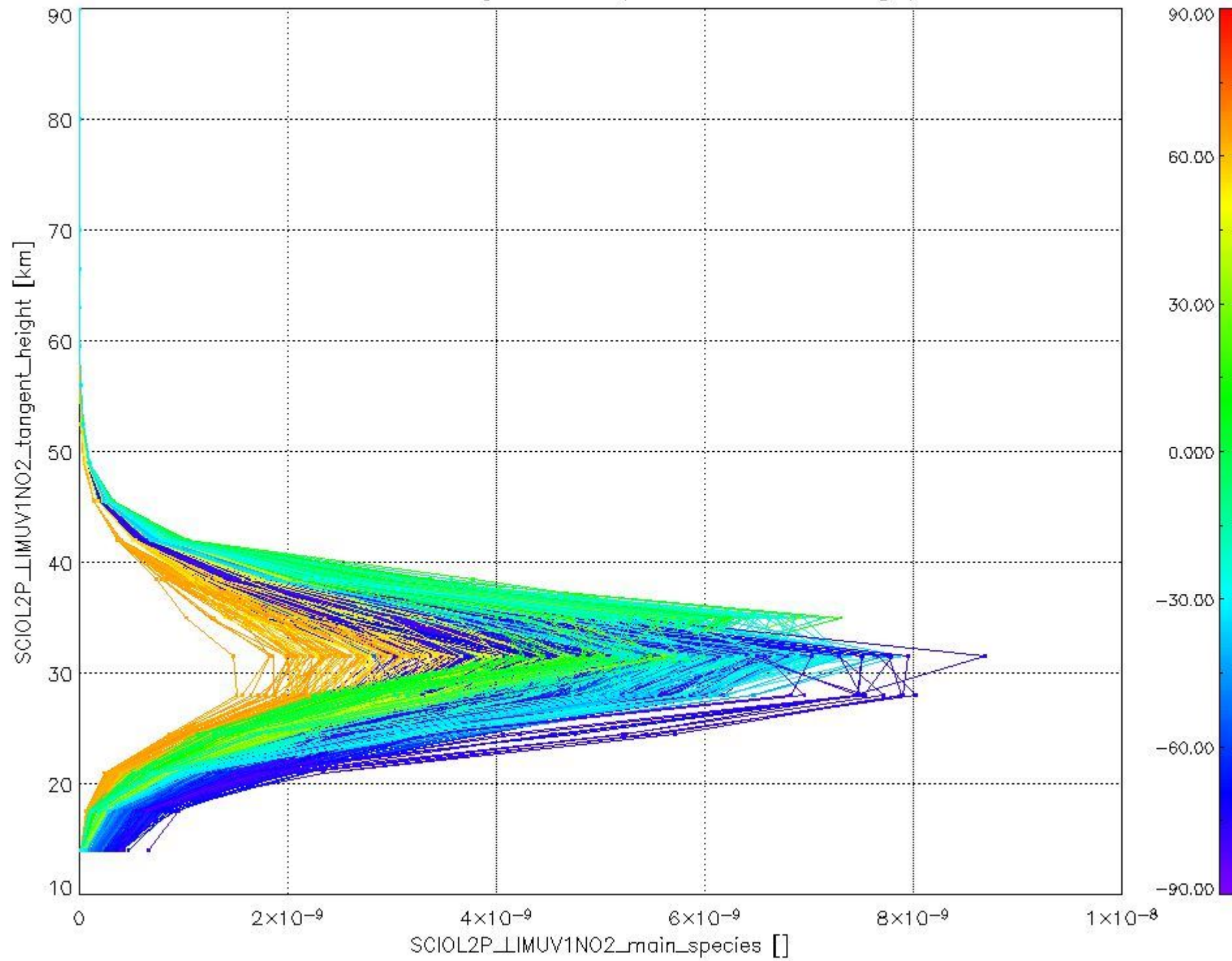
The following data items are currently included into this section:

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.



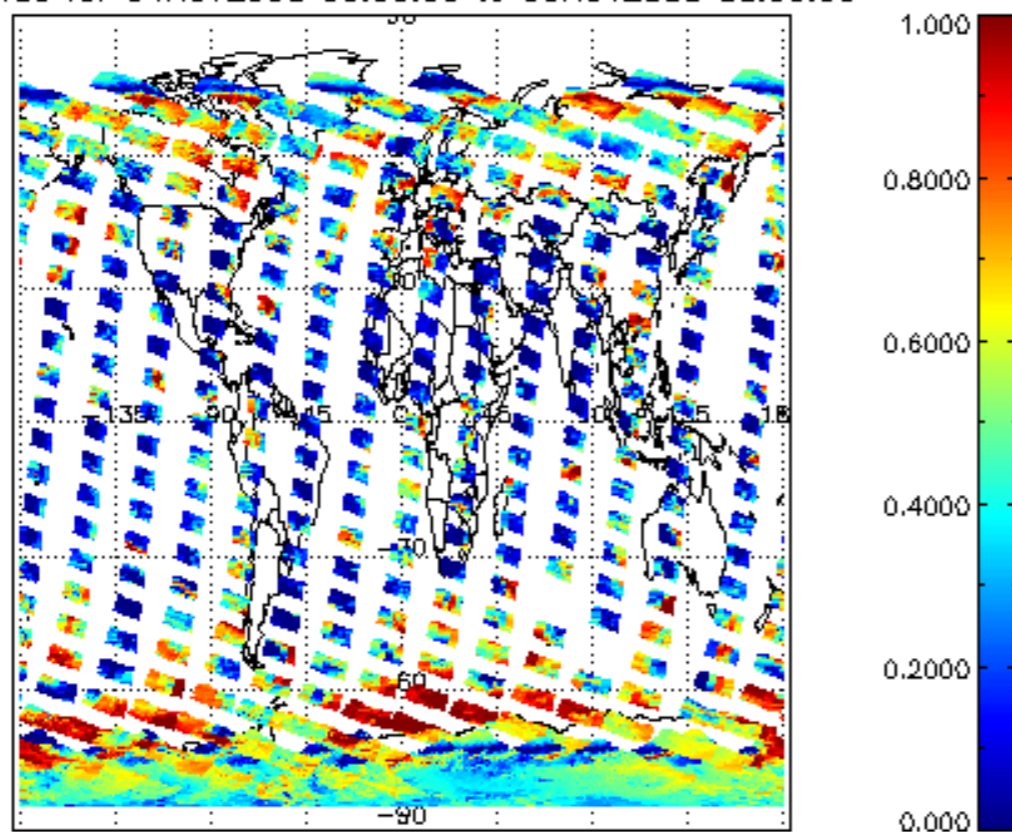
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



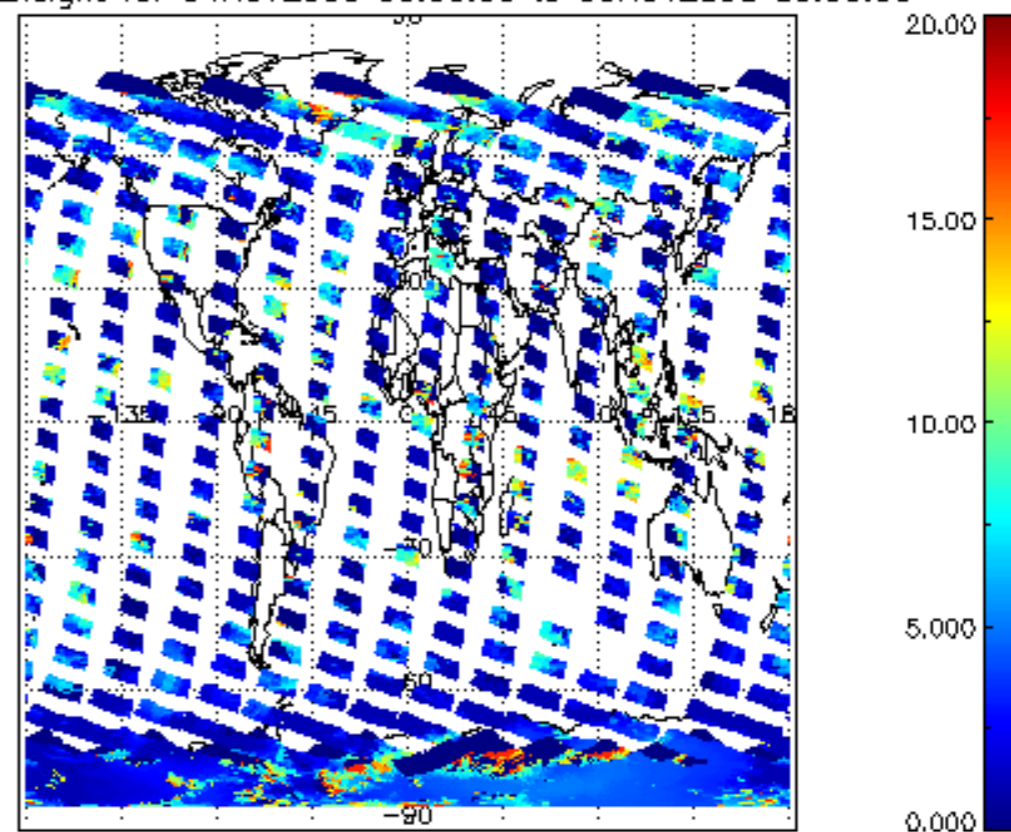
2.3 ADF monitoring

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

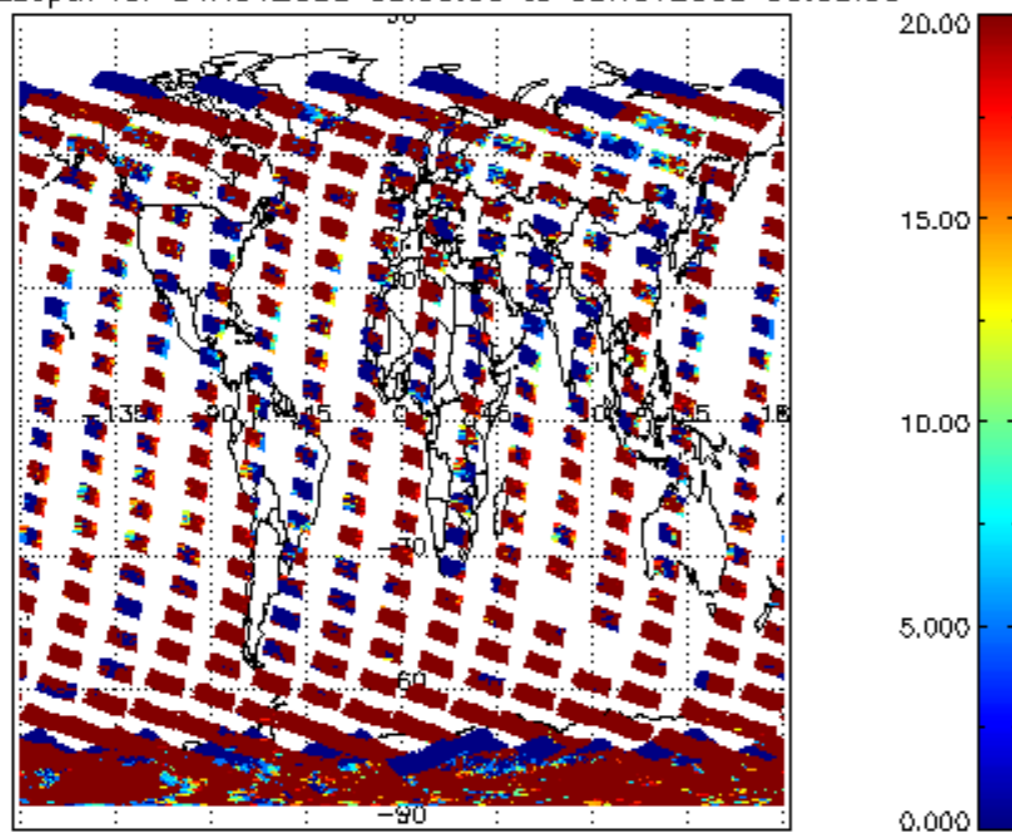
cLfrac for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



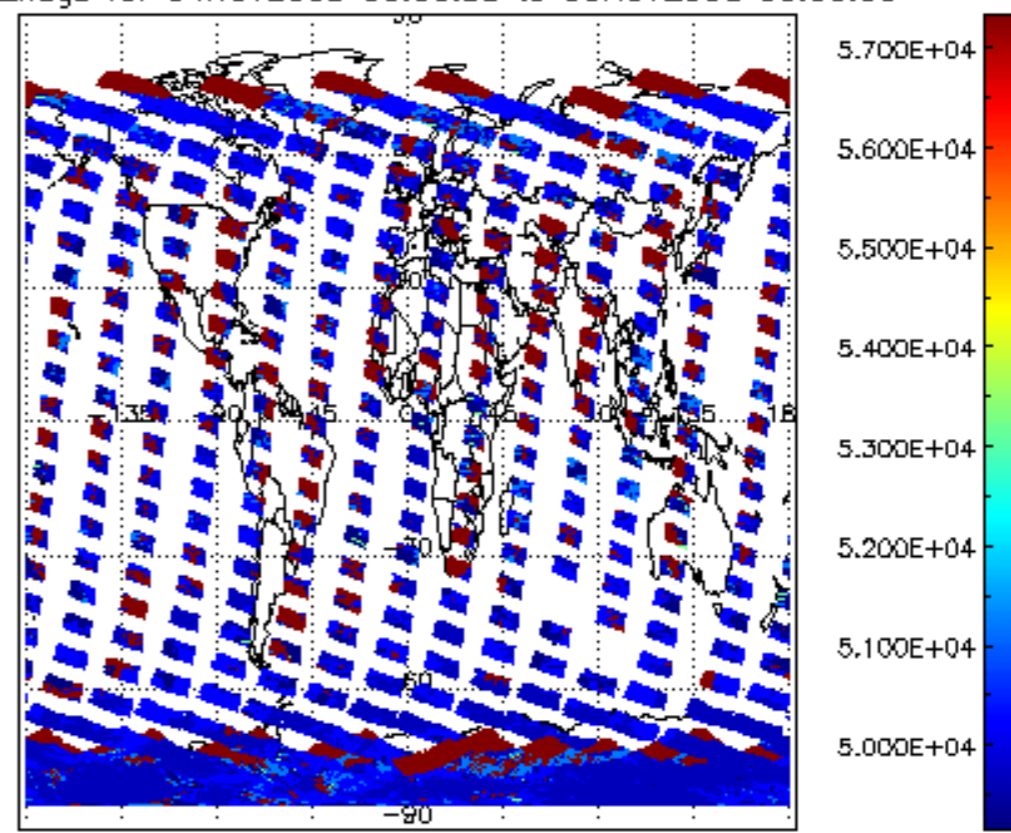
cL_top_height for 04NOV2008 00:00:00 to 05NOV2008 00:00:00

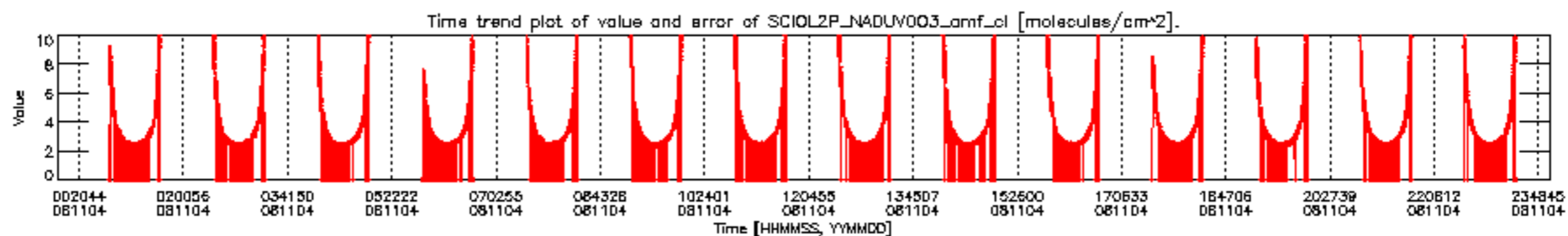
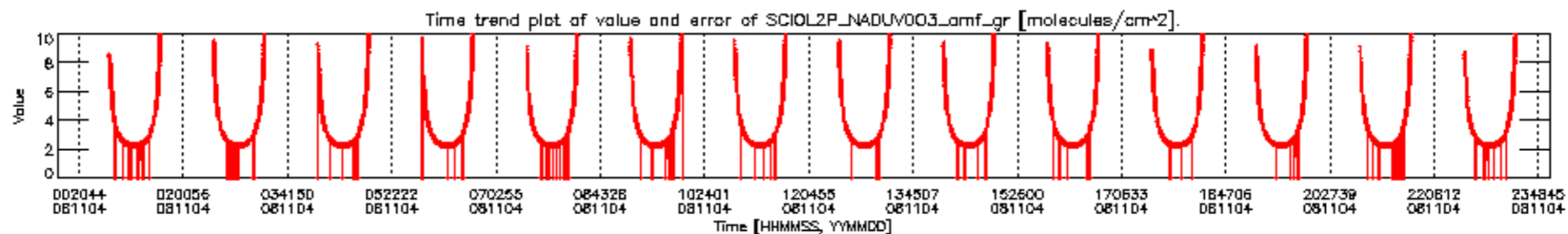
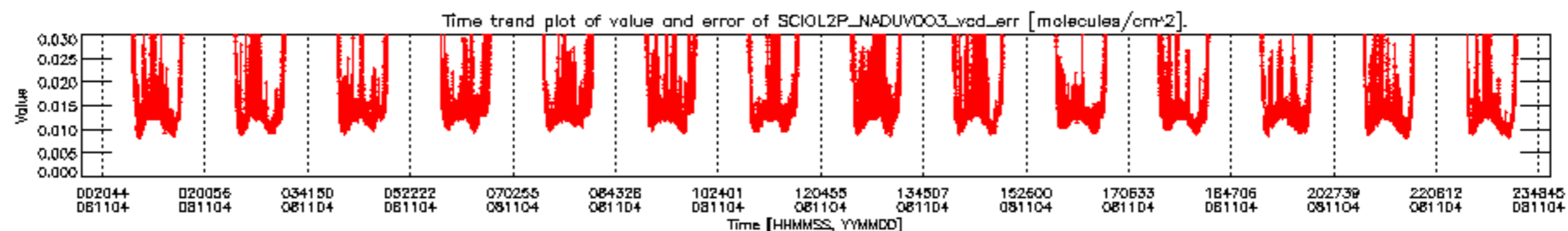
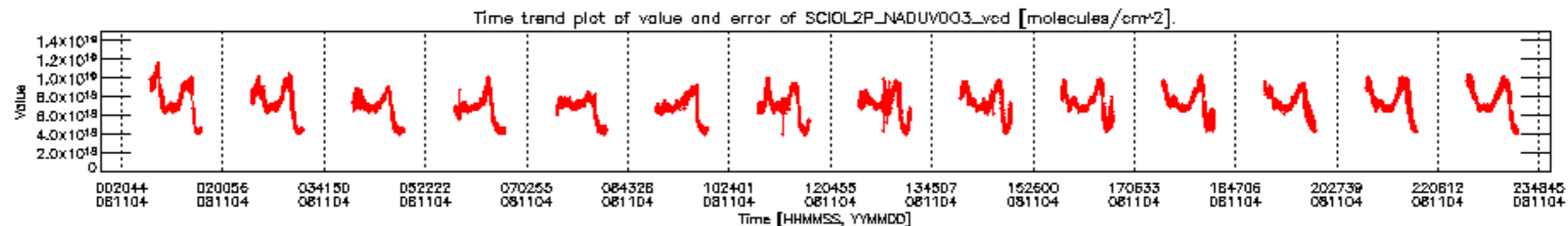


cL_opt_depth for 04NOV2008 00:00:00 to 05NOV2008 00:00:00

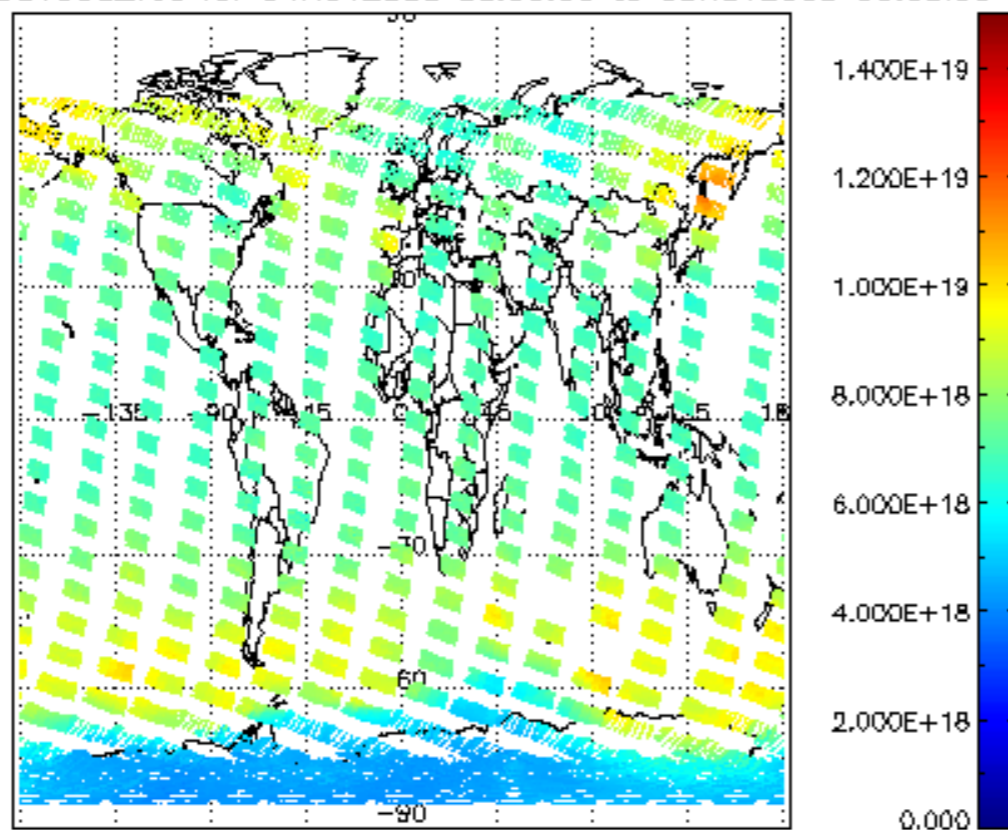


cloud_flags for 04NOV2008 00:00:00 to 05NOV2008 00:00:00

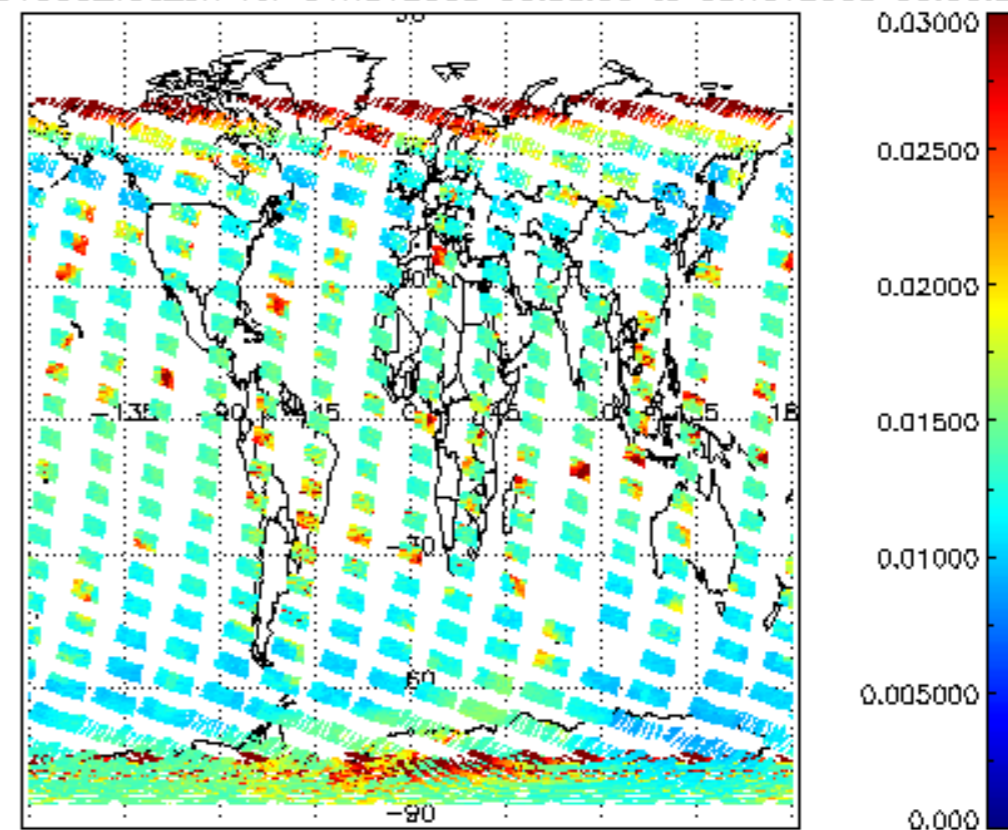




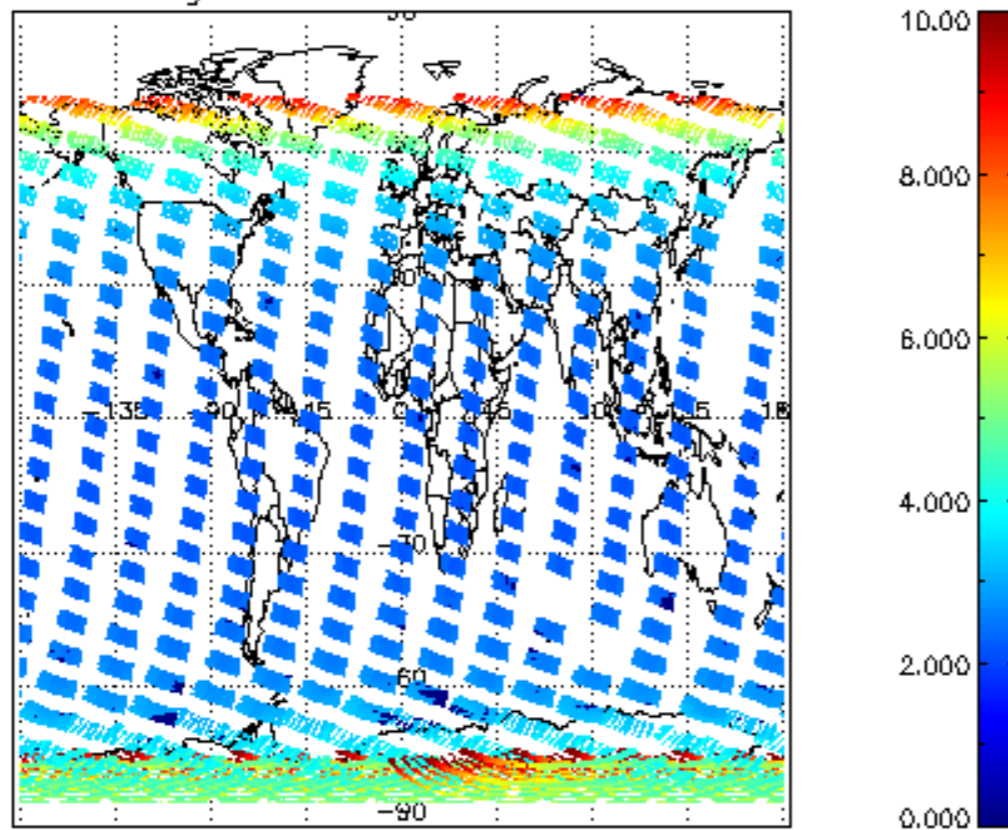
SCIOL2P_NADUV003_vcd for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



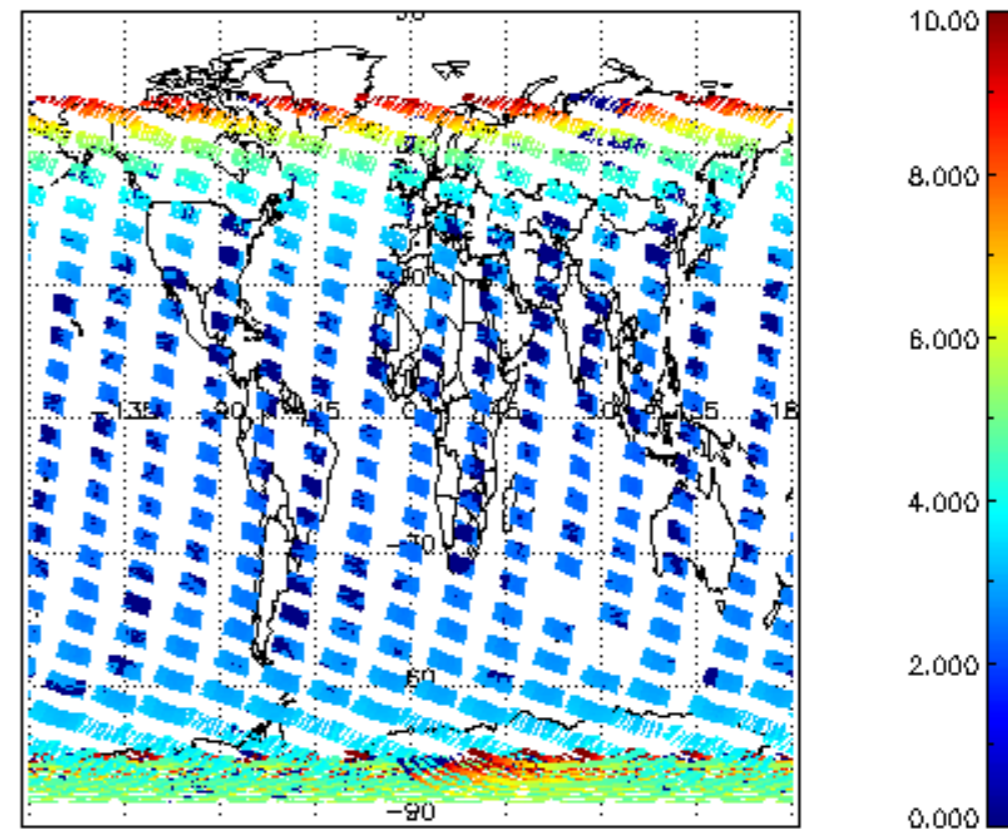
SCIOL2P_NADUV003_vcd_err for 04NOV2008 00:00:00 to 05NOV2008 00:00:00

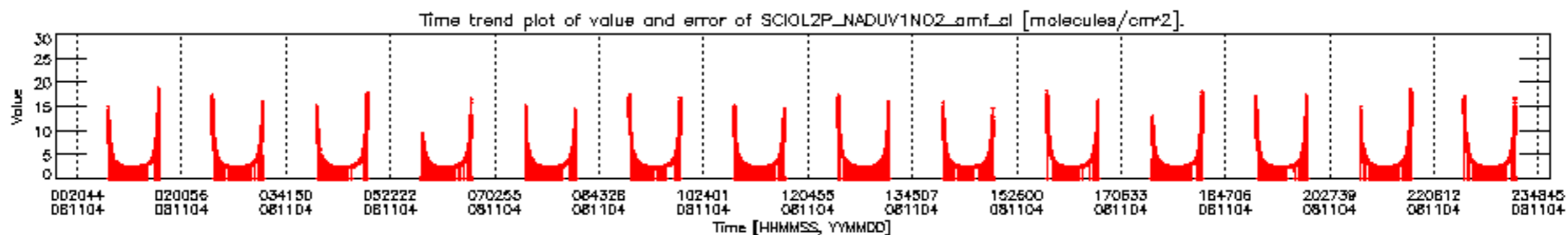
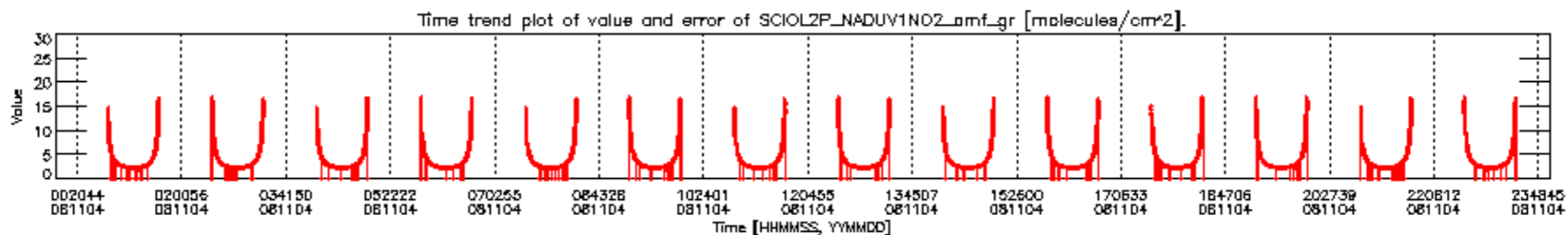
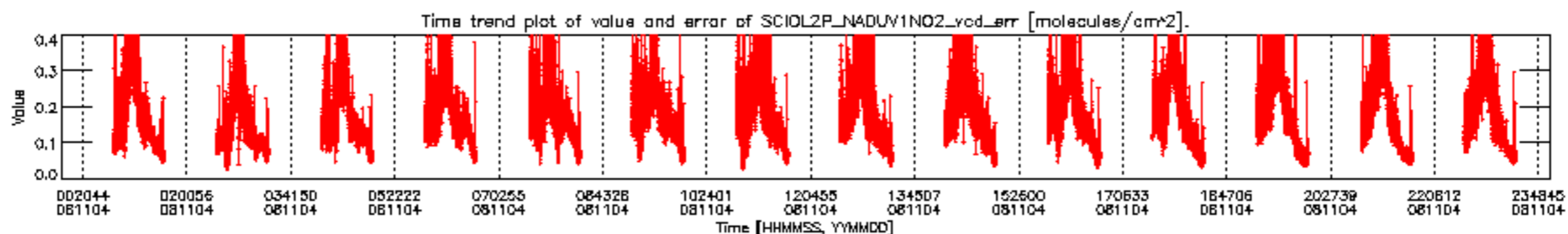
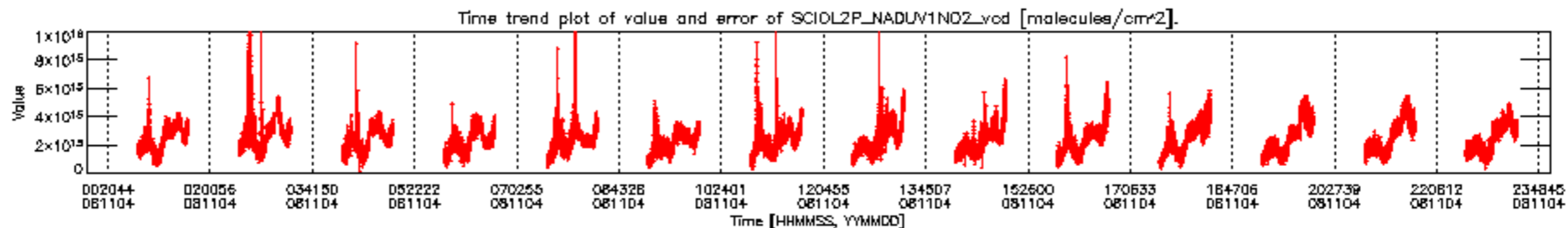


SCIOL2P_NADUV003_amf_gr for 04NOV2008 00:00:00 to 05NOV2008 00:00:00

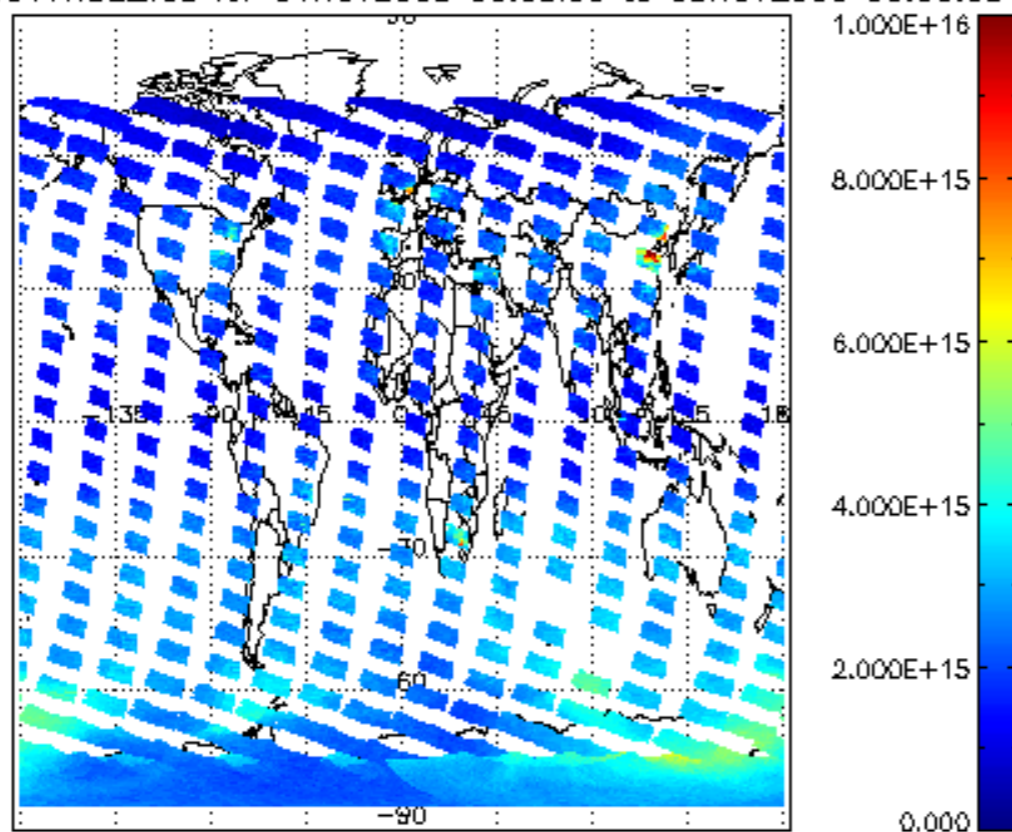


SCIOL2P_NADUV003_amf_cl for 04NOV2008 00:00:00 to 05NOV2008 00:00:00

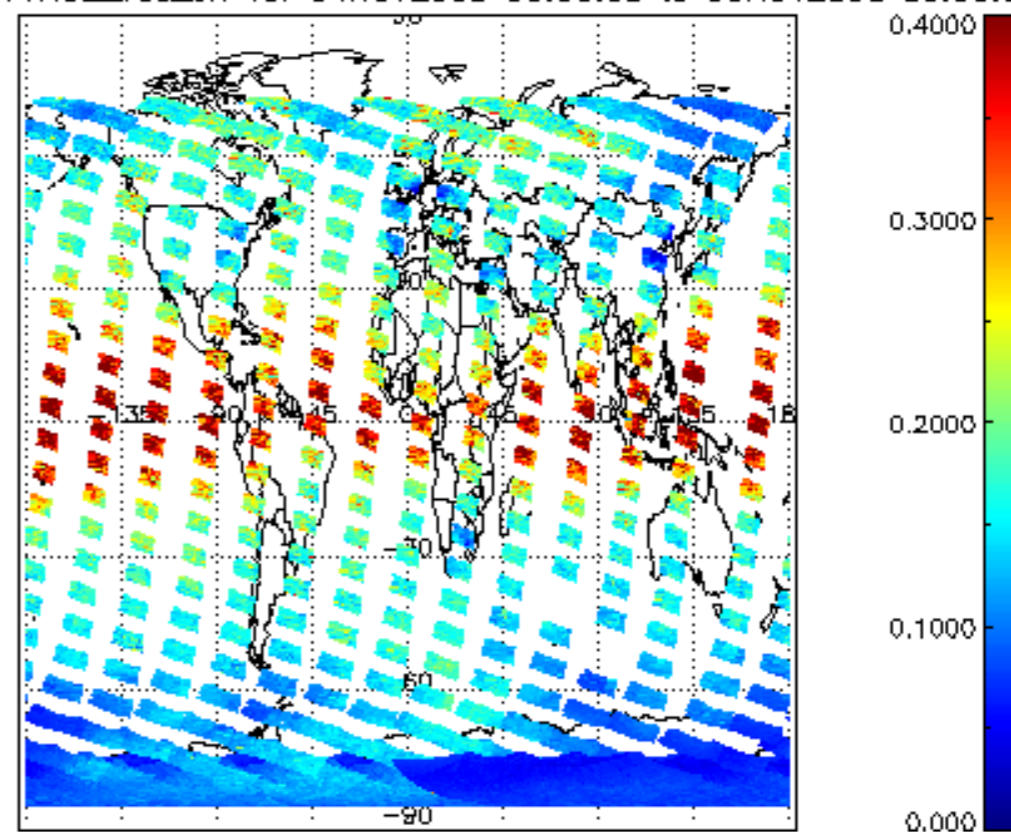




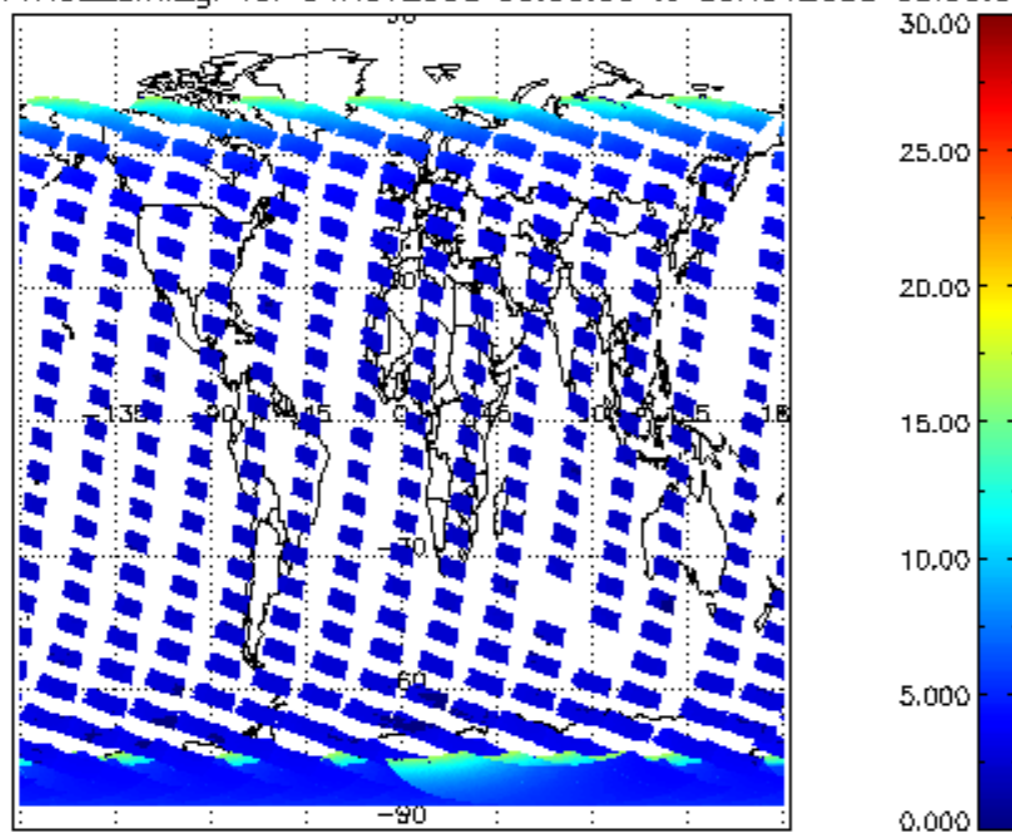
SCIOL2P_NADUV1NO2_vcd for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



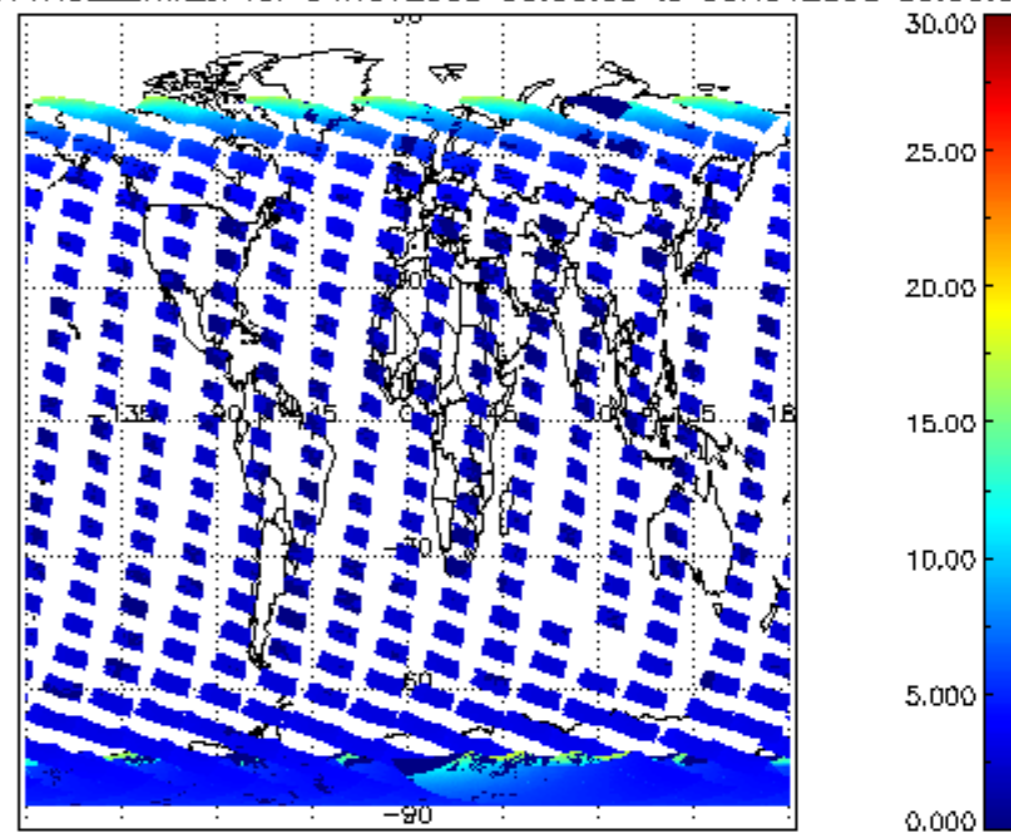
SCIOL2P_NADUV1NO2_vcd_err for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



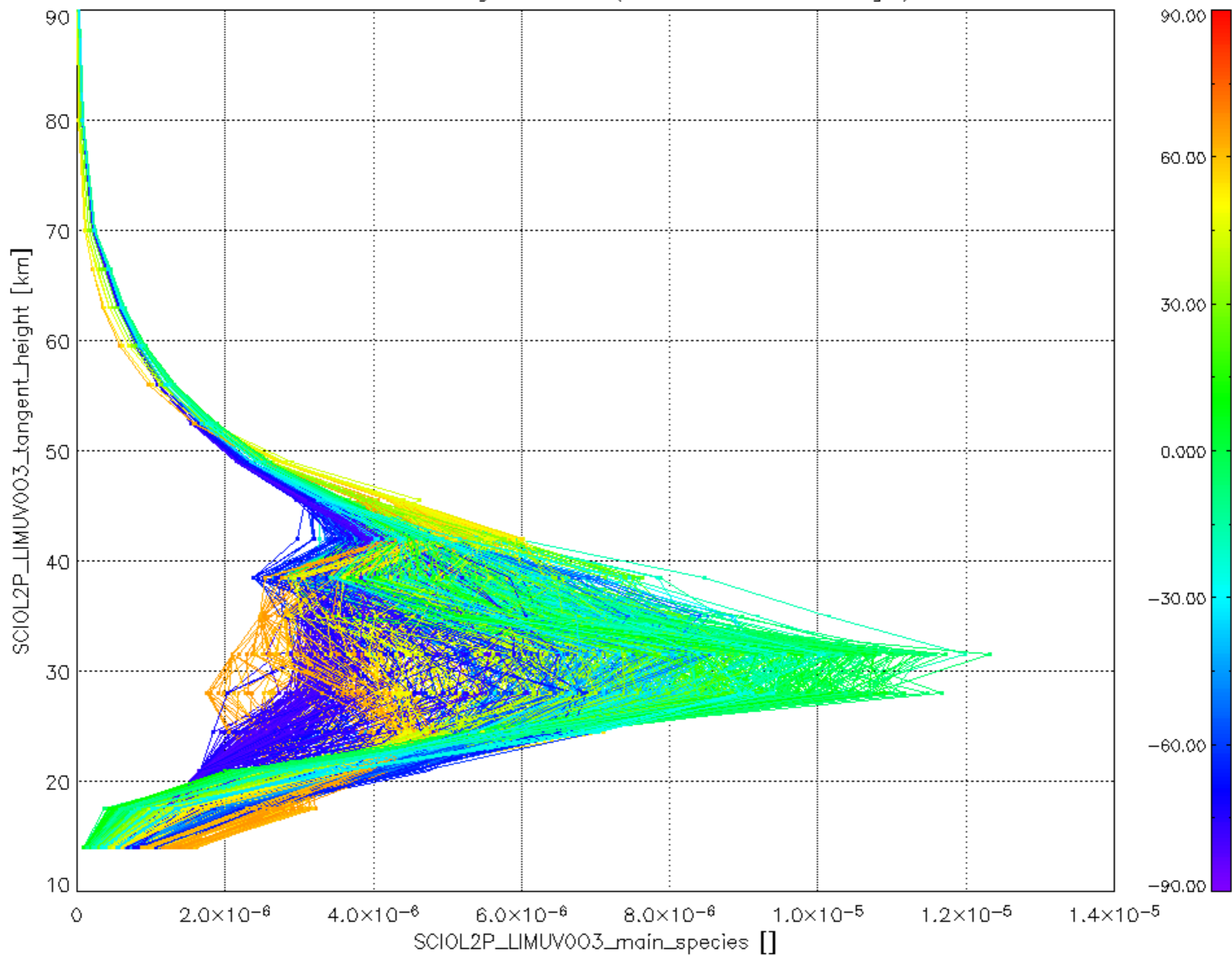
SCIOL2P_NADUV1NO2_amf_gr for 04NOV2008 00:00:00 to 05NOV2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 04NOV2008 00:00:00 to 05NOV2008 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).

