

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	28NOV2008 06:02:35
Data source version	SCIA-OL/3.01-R
Processing scope for products	10NOV2008 00:00:00 to 11NOV2008 00:00:00
Start time of first product within scope	09NOV2008 23:15:33
Stop time of last product within scope	10NOV2008 23:39:54
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__2PRDPA20081109_231533_000033252073_00388_35011_3892.N1	09NOV2008 23:15:33	10NOV2008 00:10:58	0	GOOD
1	SCI_OL__2PRDPA20081110_005609_000033812073_00389_35012_3895.N1	10NOV2008 00:56:09	10NOV2008 01:52:31	0	GOOD
2	SCI_OL__2PRDPA20081110_023645_000033252073_00390_35013_3896.N1	10NOV2008 02:36:45	10NOV2008 03:32:11	0	GOOD
3	SCI_OL__2PRDPA20081110_041722_000033812073_00391_35014_3899.N1	10NOV2008 04:17:22	10NOV2008 05:13:43	0	GOOD
4	SCI_OL__2PRDPA20081110_055758_000033252073_00392_35015_3901.N1	10NOV2008 05:57:58	10NOV2008 06:53:24	0	GOOD
5	SCI_OL__2PRDPA20081110_073834_000033812073_00393_35016_3902.N1	10NOV2008 07:38:34	10NOV2008 08:34:56	0	GOOD
6	SCI_OL__2PRDPA20081110_091911_000033252073_00394_35017_3928.N1	10NOV2008 09:19:11	10NOV2008 10:14:36	0	GOOD
7	SCI_OL__2PRDPA20081110_105947_000033812073_00395_35018_3934.N1	10NOV2008 10:59:47	10NOV2008 11:56:08	0	GOOD
8	SCI_OL__2PRDPA20081110_124023_000033252073_00396_35019_3939.N1	10NOV2008 12:40:23	10NOV2008 13:35:49	0	GOOD
9	SCI_OL__2PRDPA20081110_142059_000033812073_00397_35020_3943.N1	10NOV2008 14:20:59	10NOV2008 15:17:21	0	GOOD
10	SCI_OL__2PRDPA20081110_160136_000033332073_00398_35021_3945.N1	10NOV2008 16:01:36	10NOV2008 16:57:09	0	GOOD
11	SCI_OL__2PRDPA20081110_210325_000033482073_00401_35024_4005.N1	10NOV2008 21:03:25	10NOV2008 21:59:13	0	GOOD
12	SCI_OL__2PRDPA20081110_224401_000033532073_00402_35025_3978.N1	10NOV2008 22:44:01	10NOV2008 23:39:54	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: 130000

Total number of cloud data DSRs with good quality flag (=0): 130000 (100.0 %)

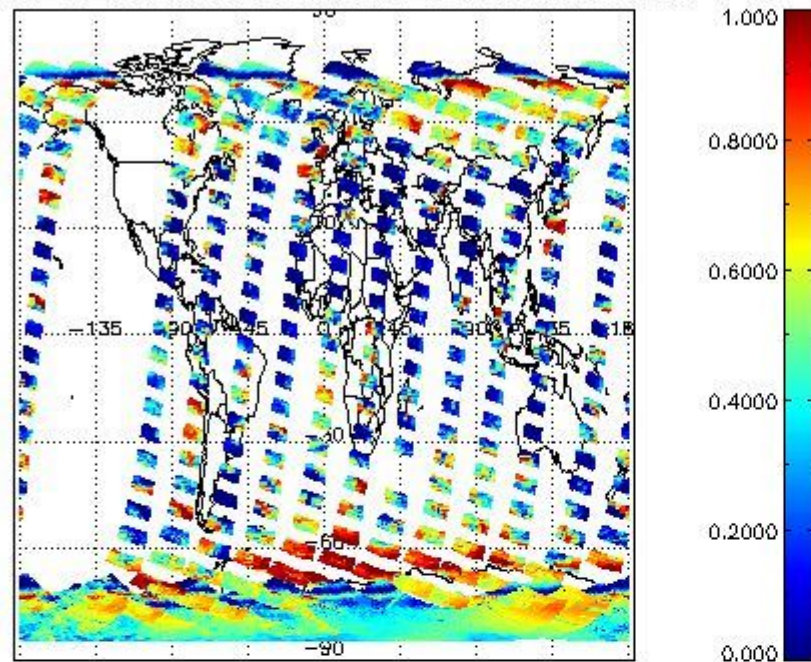
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	130000	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	130000	0.16950	0.12500	0.12500	0.25000	0.059852	s
CL_FRAC	130000	0.39070	0.39420	0.0000	1.0000	0.27478	-
CL_FRAC_ERR	130000	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	130000	5.4240	4.0000	4.0000	8.0000	1.9153	
PMD_READ_CL[0]	130000	0.19459	0.0000	0.0000	8.0000	0.98484	-
PMD_READ_CL[1]	130000	0.95146	0.0000	0.0000	8.0000	2.1402	-
CL_TOP_HEIGHT	109445	3.9970	3.1218	0.0000	17.000	3.7574	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	109445	54.051	44.395	0.0000	101.00	40.718	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	130000	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	130000	11001010	11000100	11000000	11100000	3333.0	flags
AERO_ABSO_IND	130000	2.9846	3.2797	-1.7023	17.148	2.2020	
AERO_IND_DIAG	130000	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	130000	01010110	00000000	00000000	11000000	24452.	flags

Time and geolocation plots:

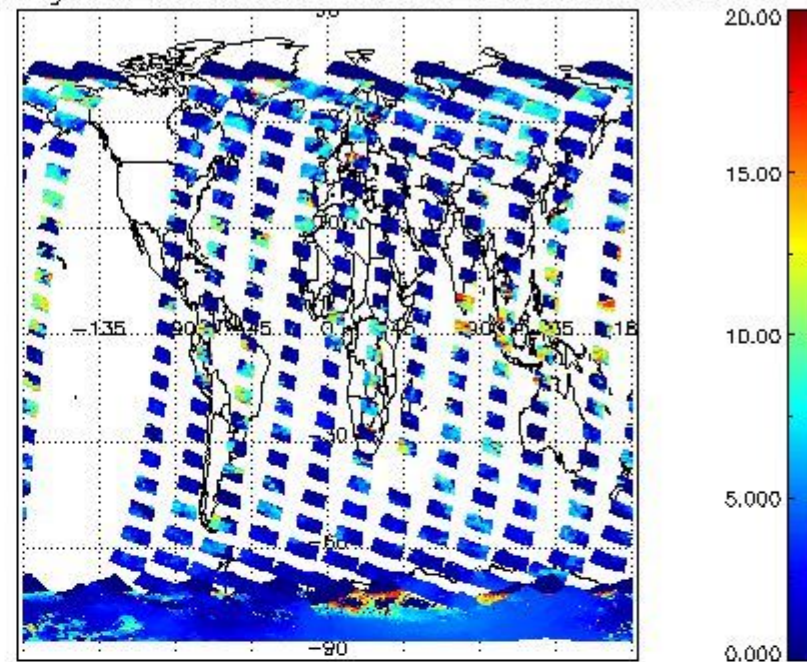
Plots are available for the following parameters:

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

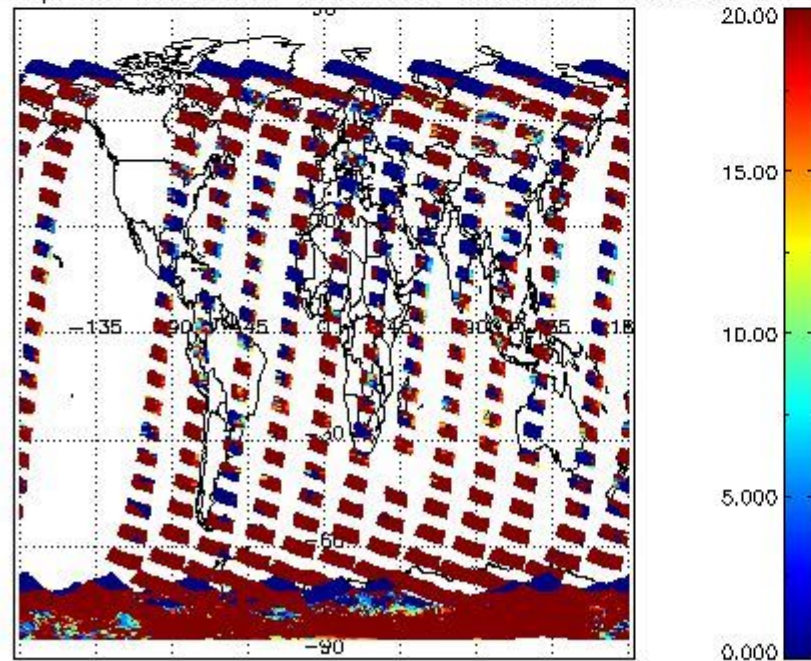
cLfrac for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



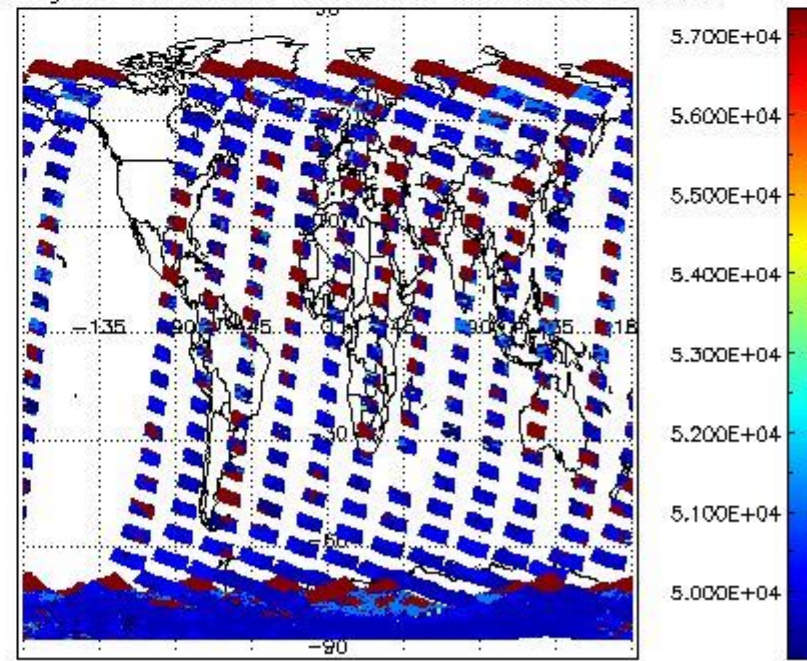
cL_top_height for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



cLopt_depth for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



cloud_flags for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



2.2.2 Nadir

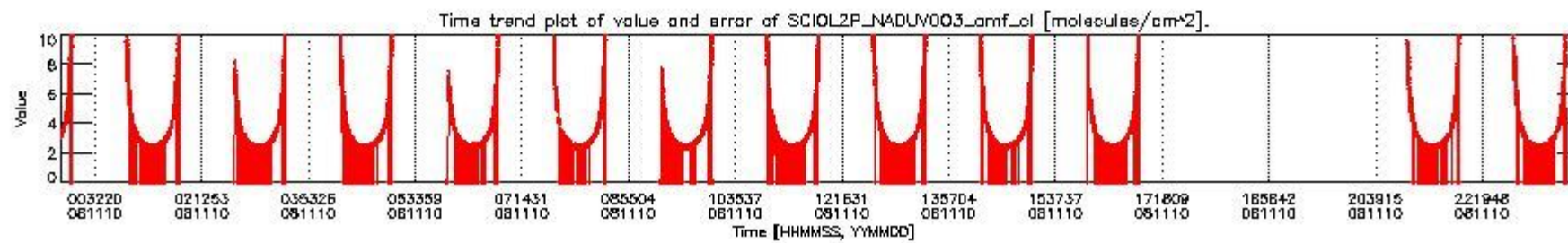
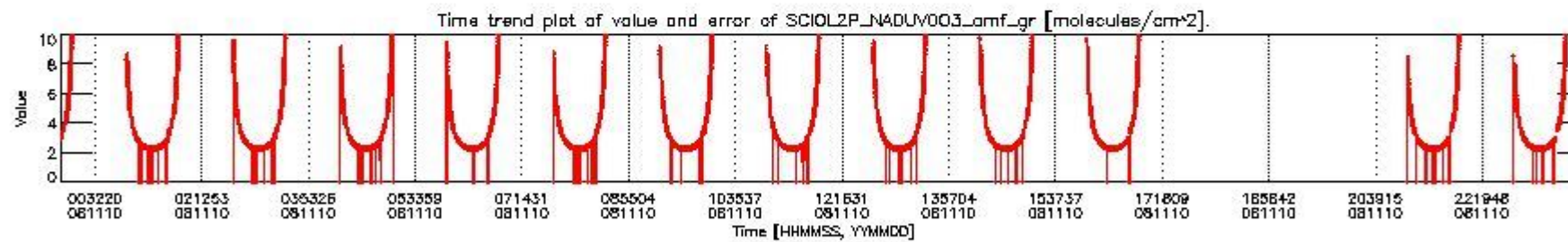
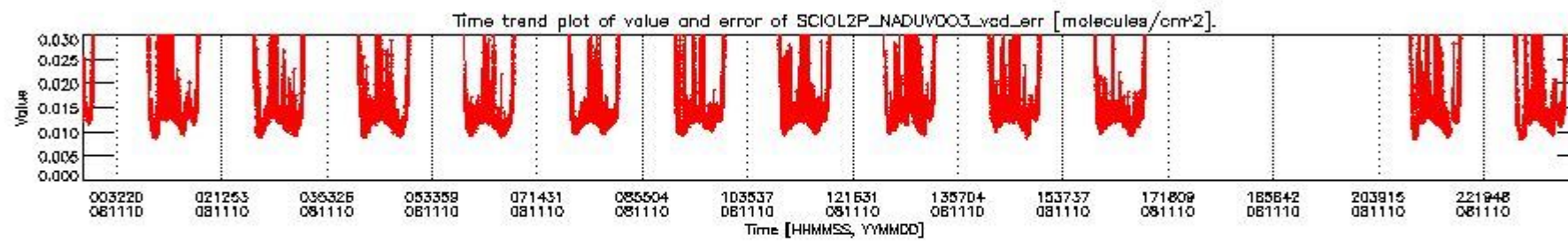
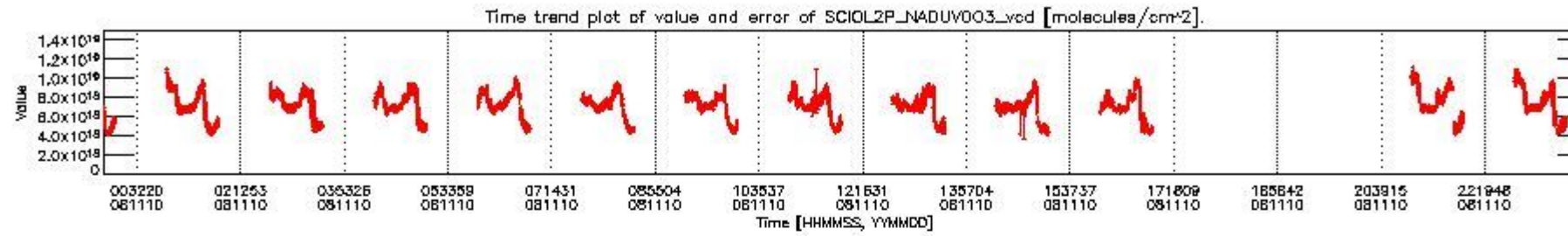
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

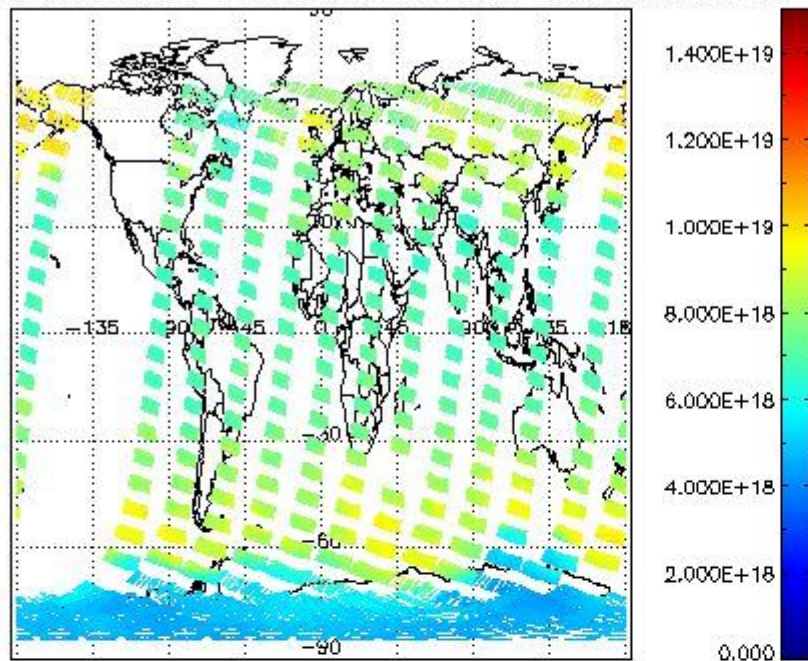
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

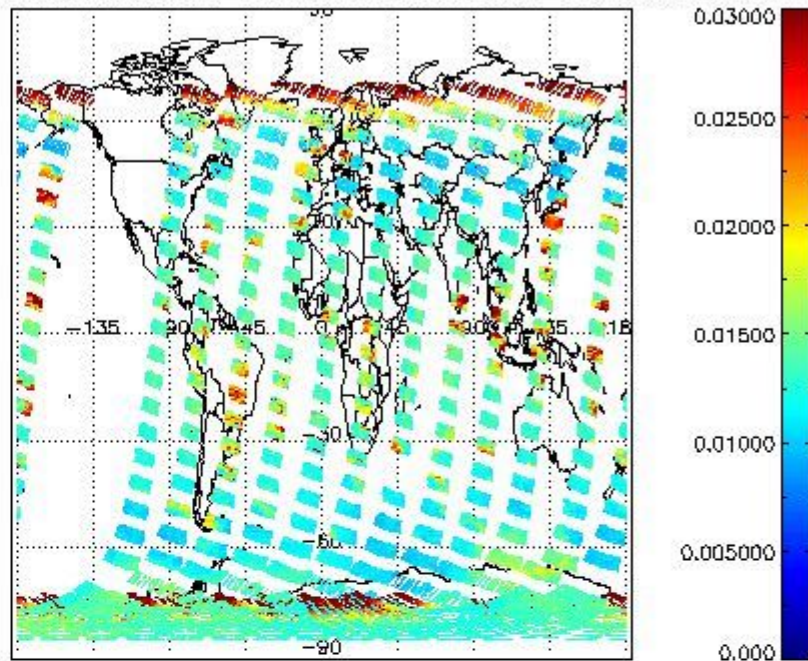
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



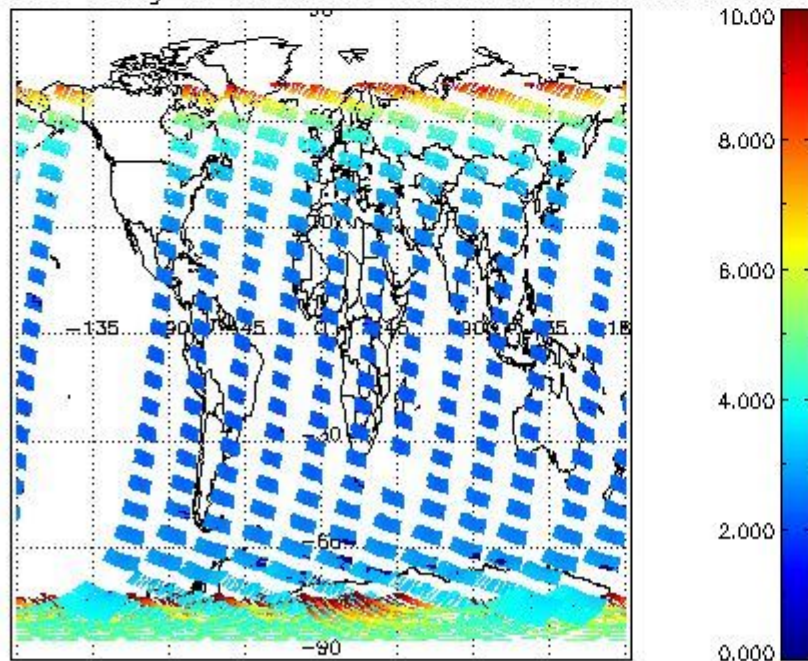
SCIOL2P_NADUV003_vcd for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



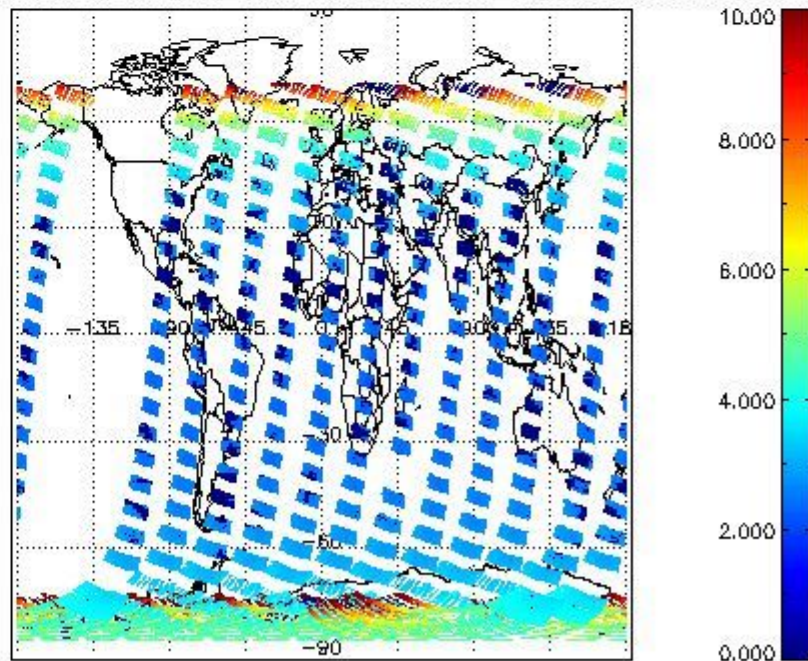
SCIOL2P_NADUV003_vcd_err for 10NOV2008 00:00:00 to 11NOV2008 00:00:00

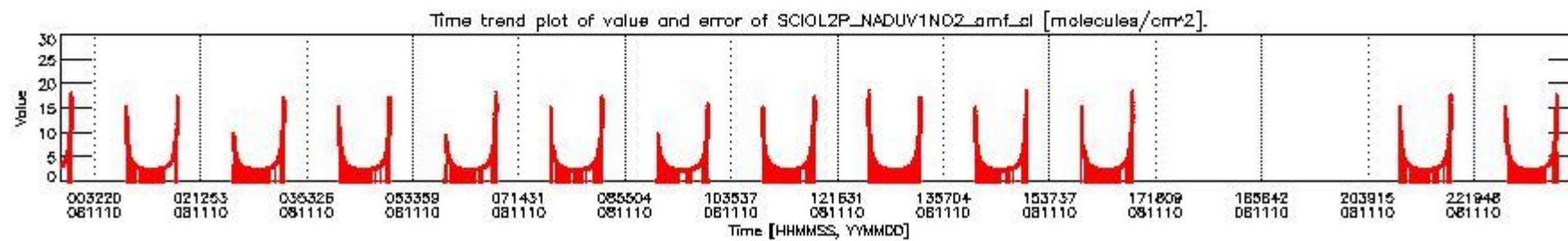
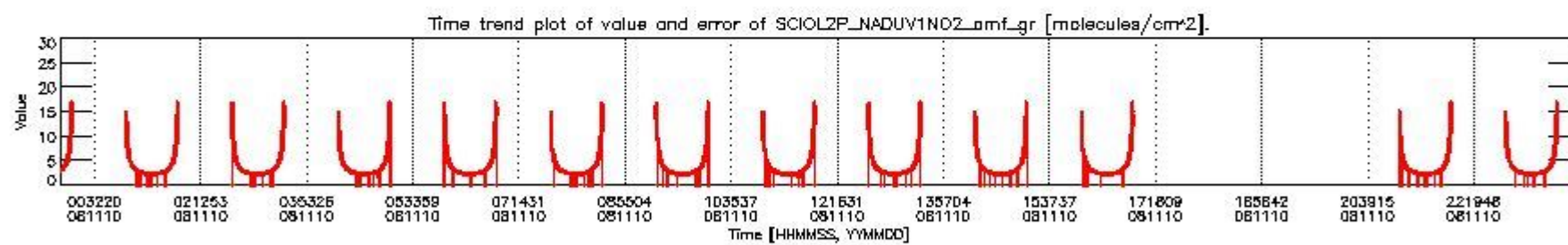
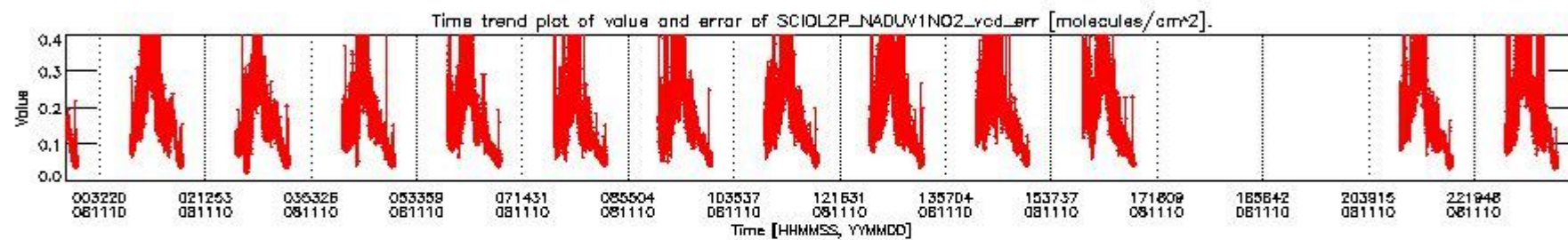
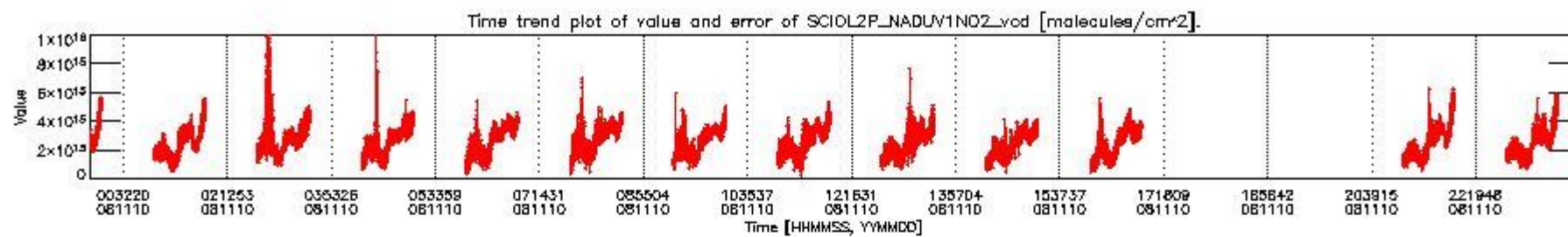


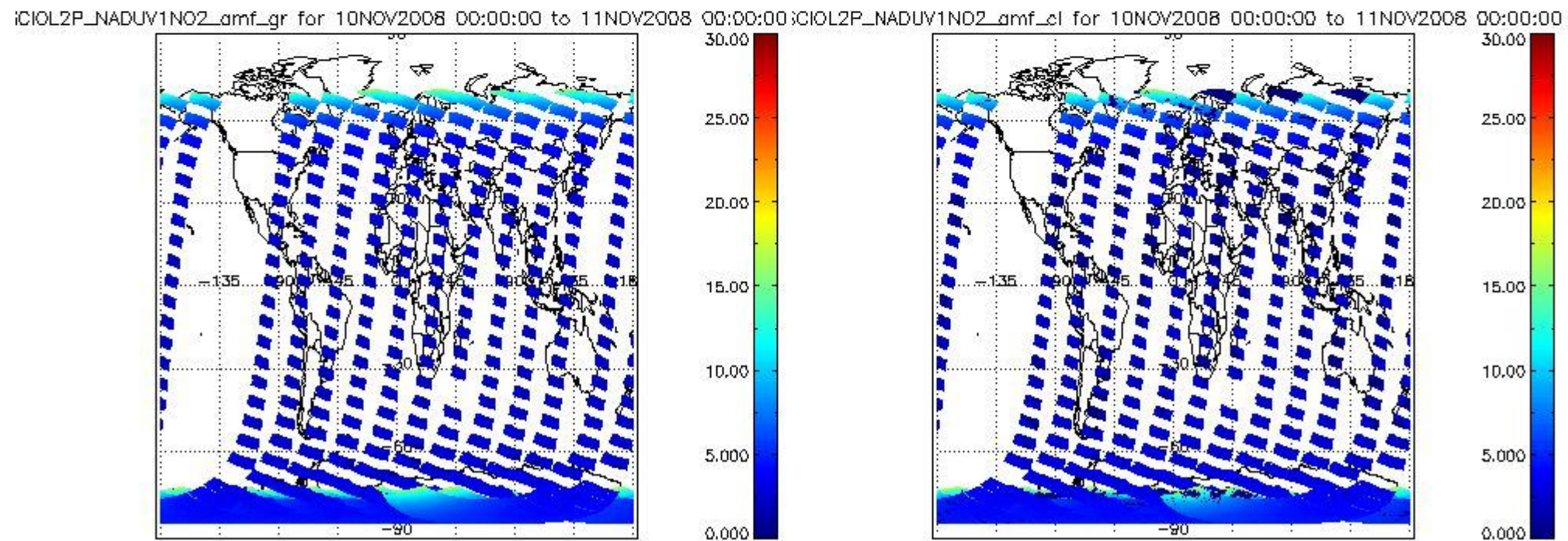
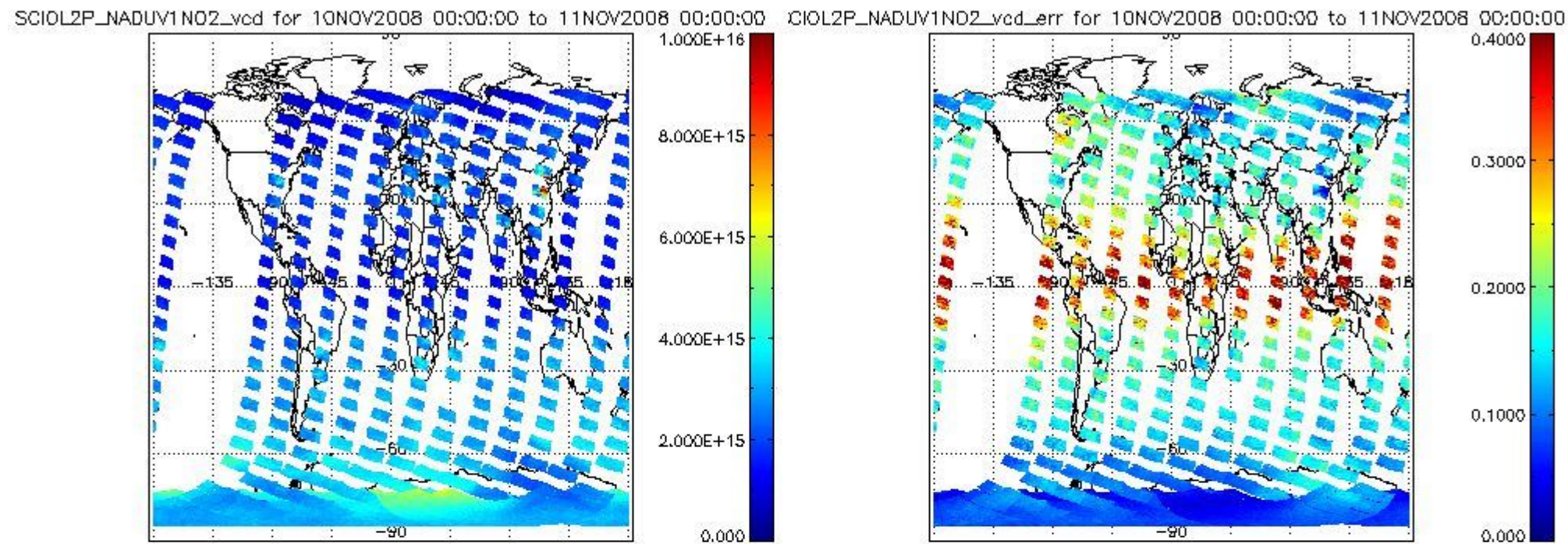
SCIOL2P_NADUV003_amf_gr for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 10NOV2008 00:00:00 to 11NOV2008 00:00:00







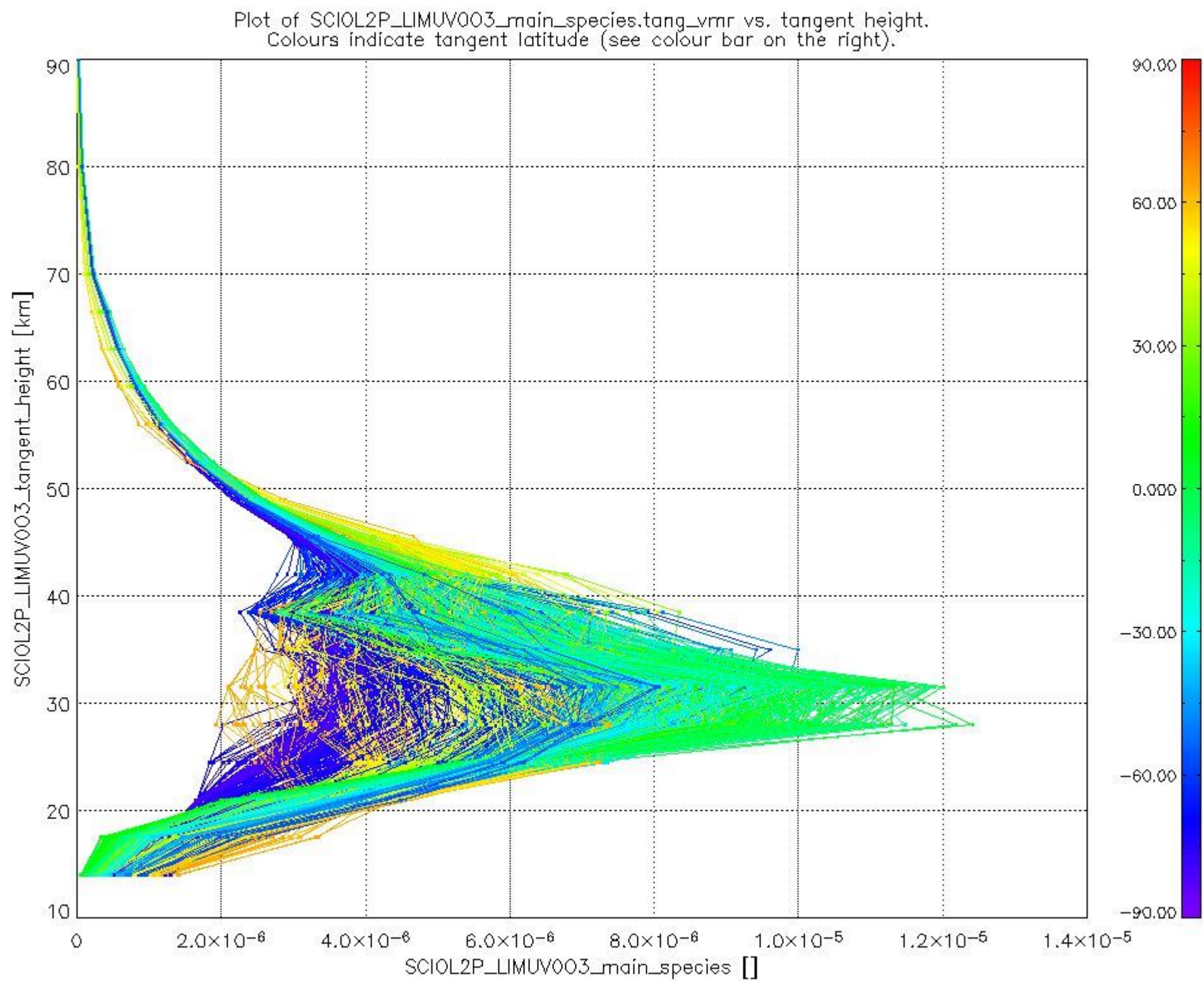
2.2.3 Limb

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

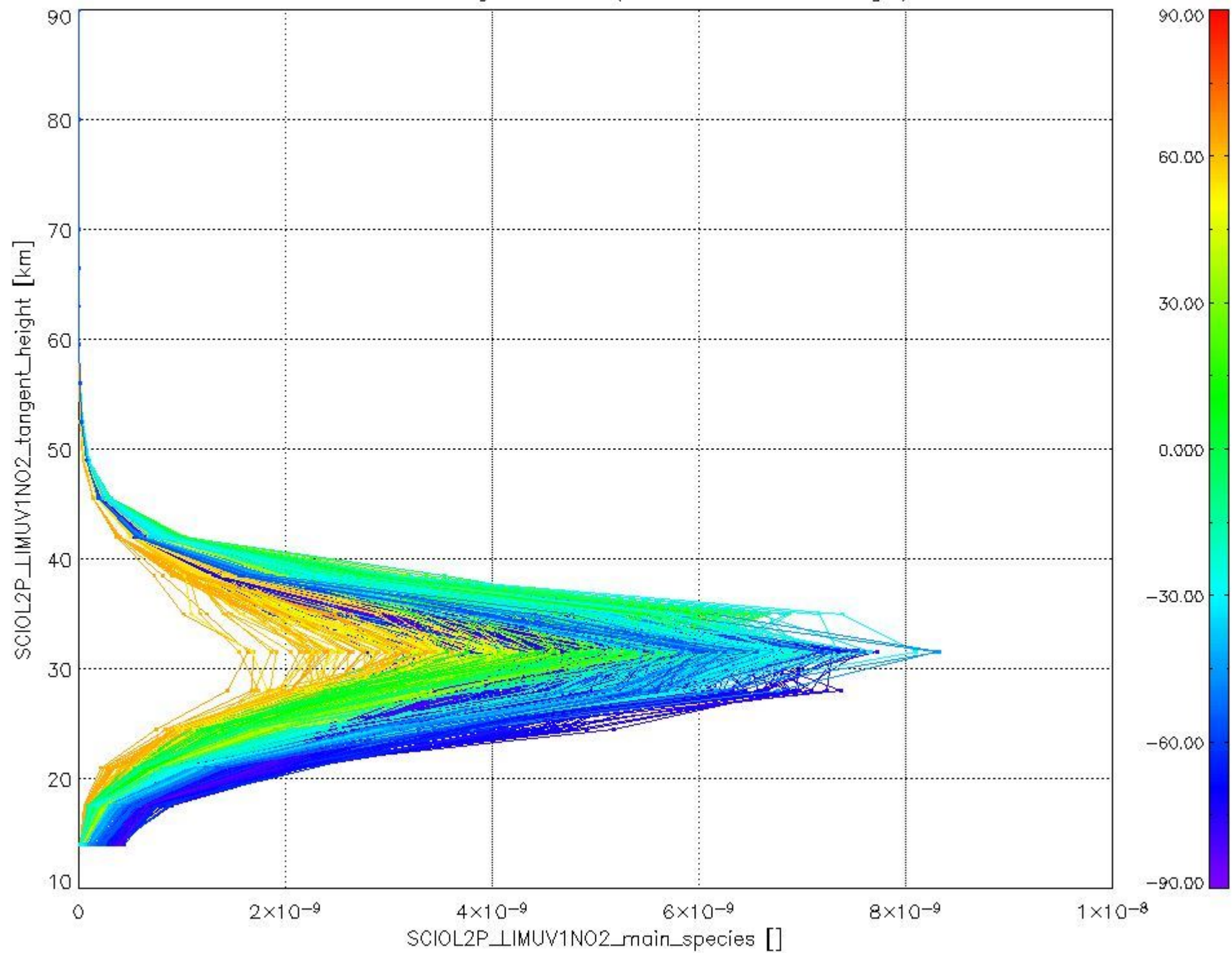
The following data items are currently included into this section:

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.



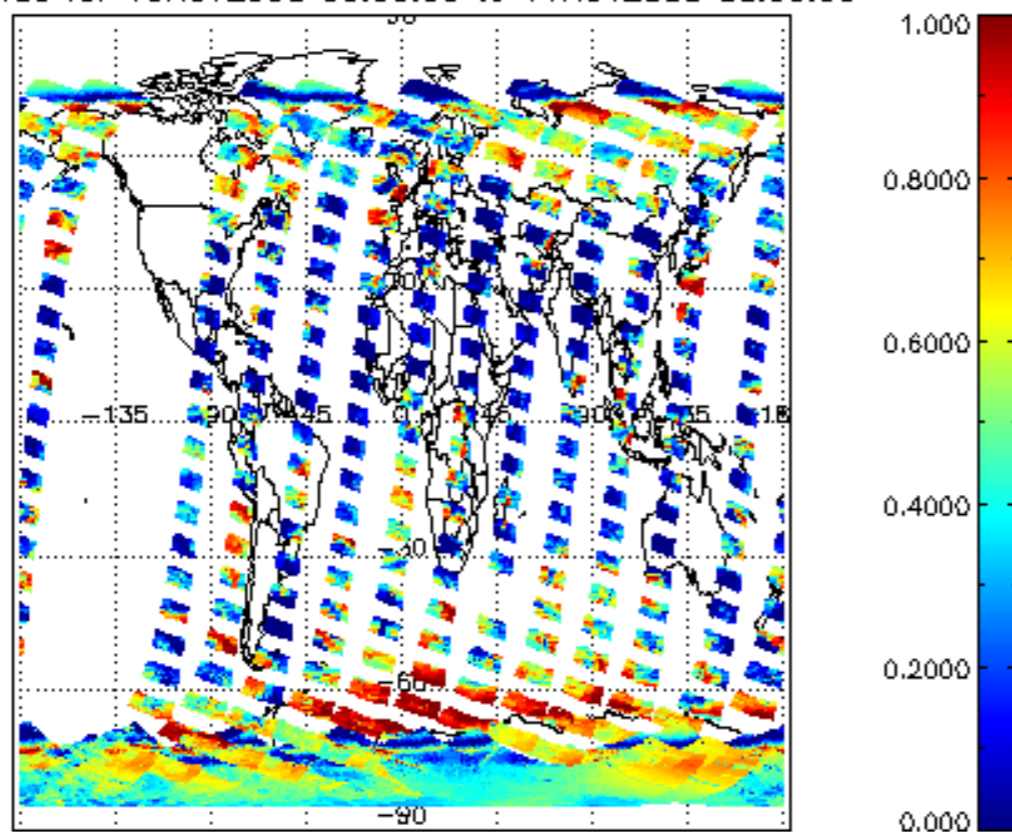
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



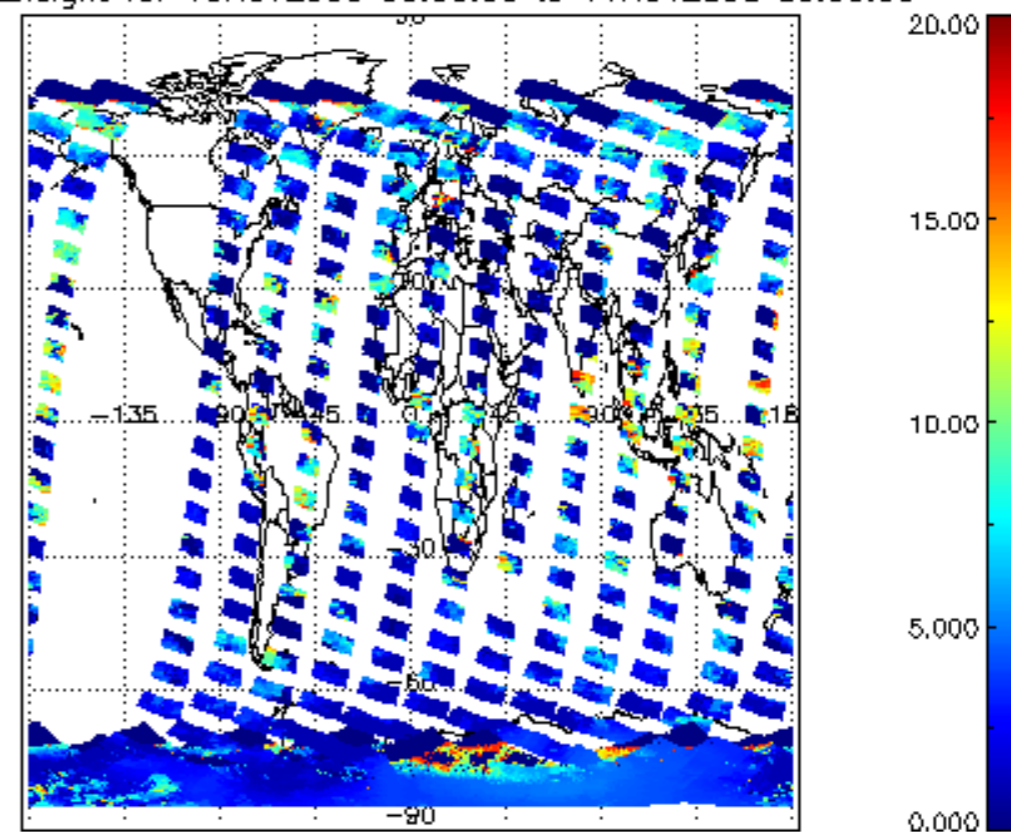
2.3 ADF monitoring

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

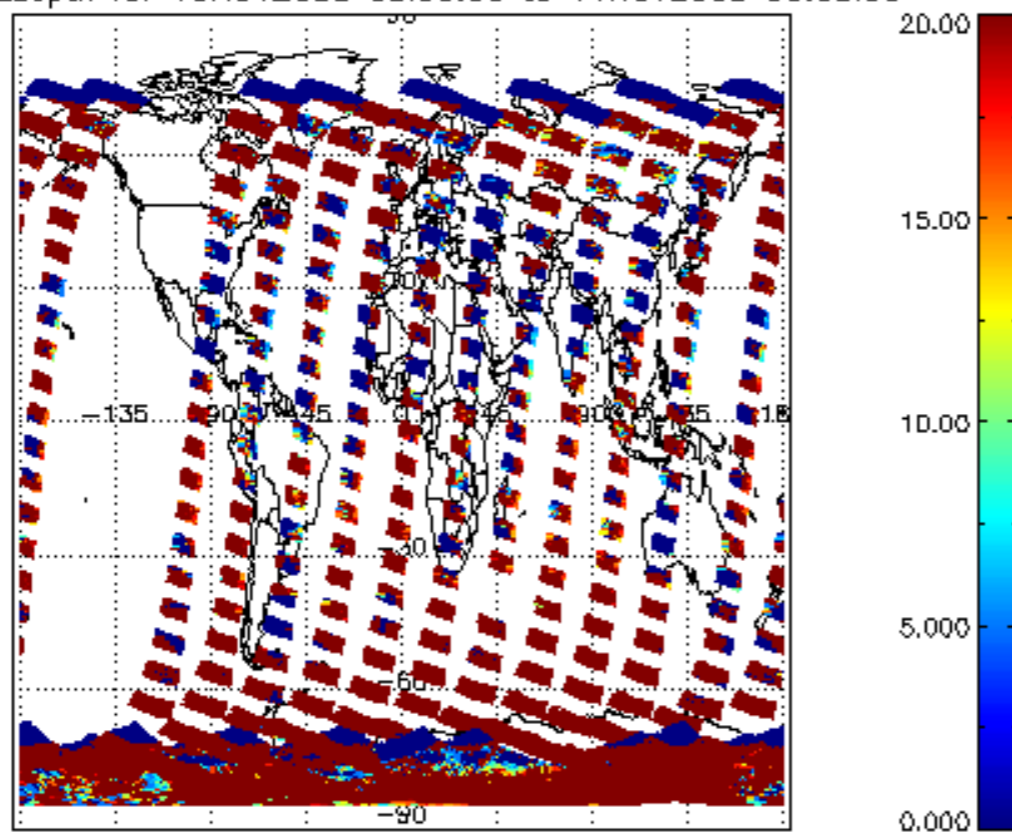
cLfrac for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



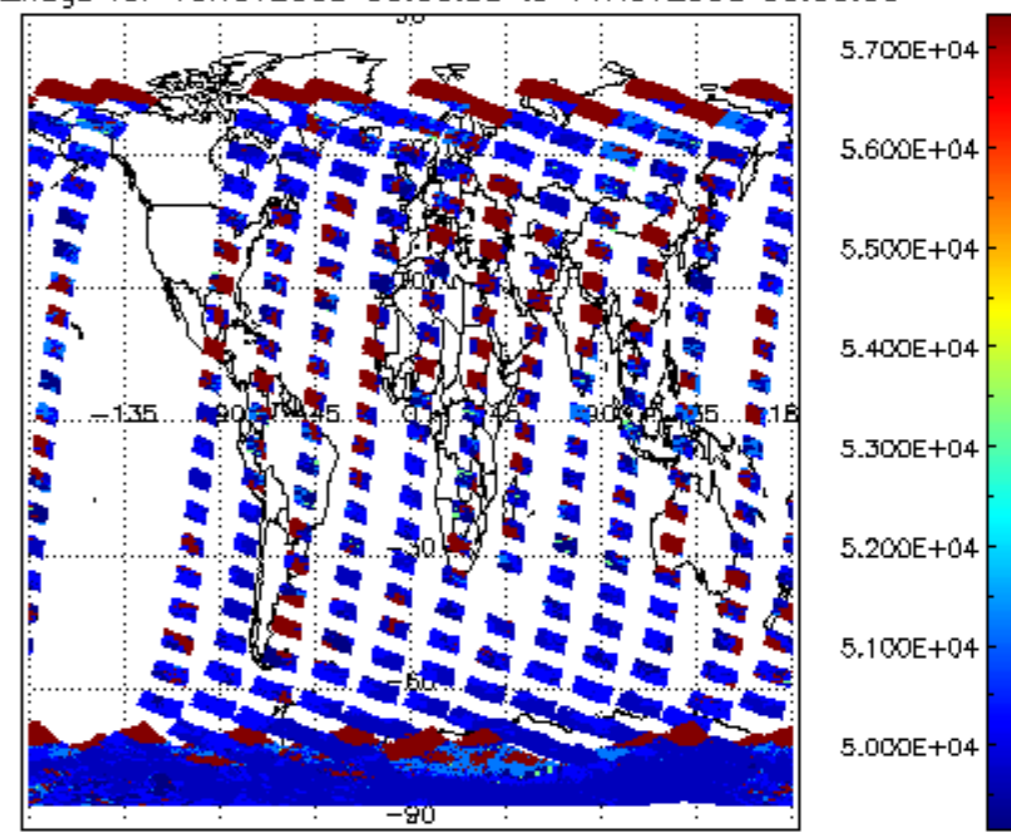
cL_top_height for 10NOV2008 00:00:00 to 11NOV2008 00:00:00

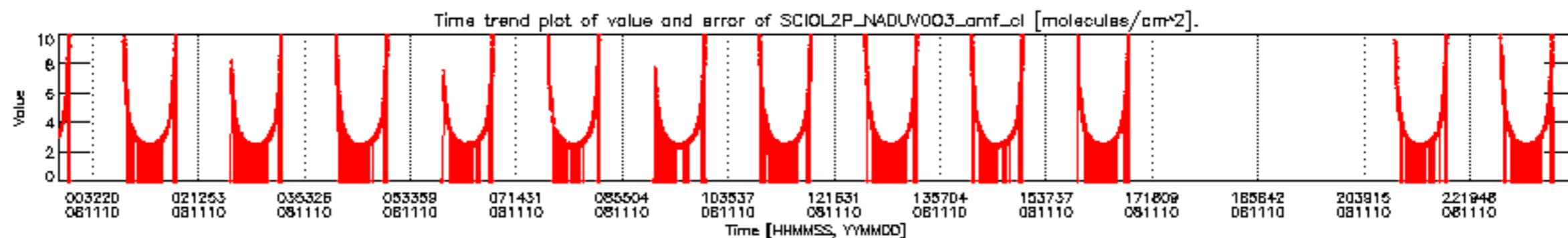
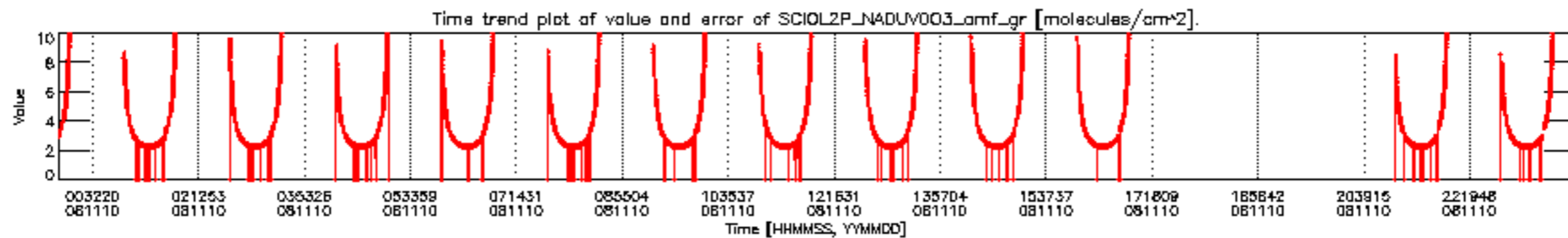
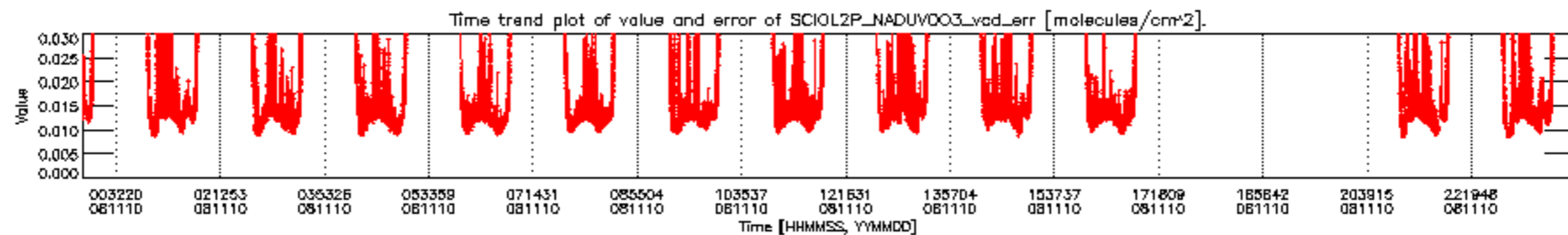
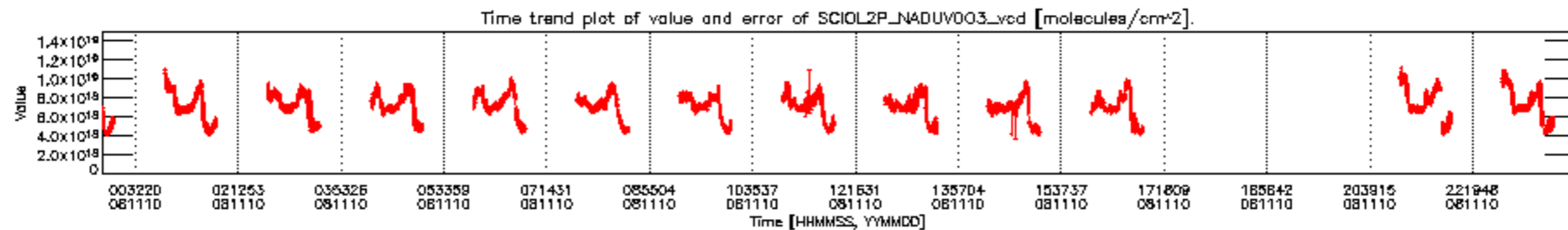


cL_opt_depth for 10NOV2008 00:00:00 to 11NOV2008 00:00:00

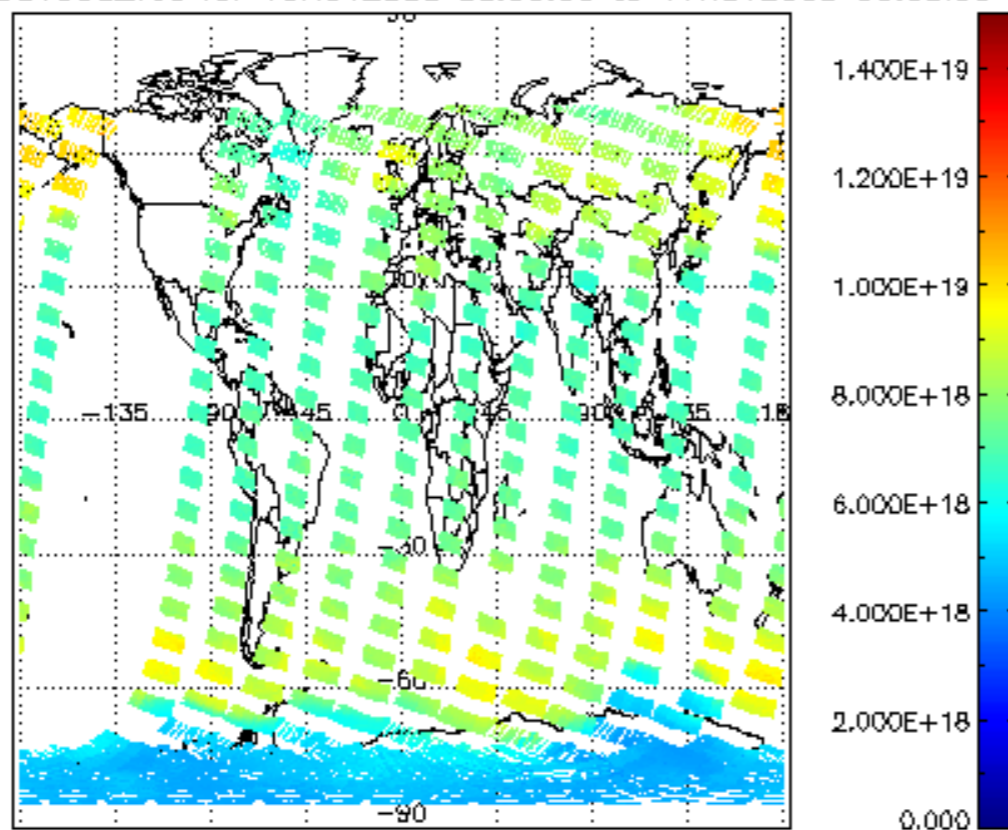


cloud_flags for 10NOV2008 00:00:00 to 11NOV2008 00:00:00

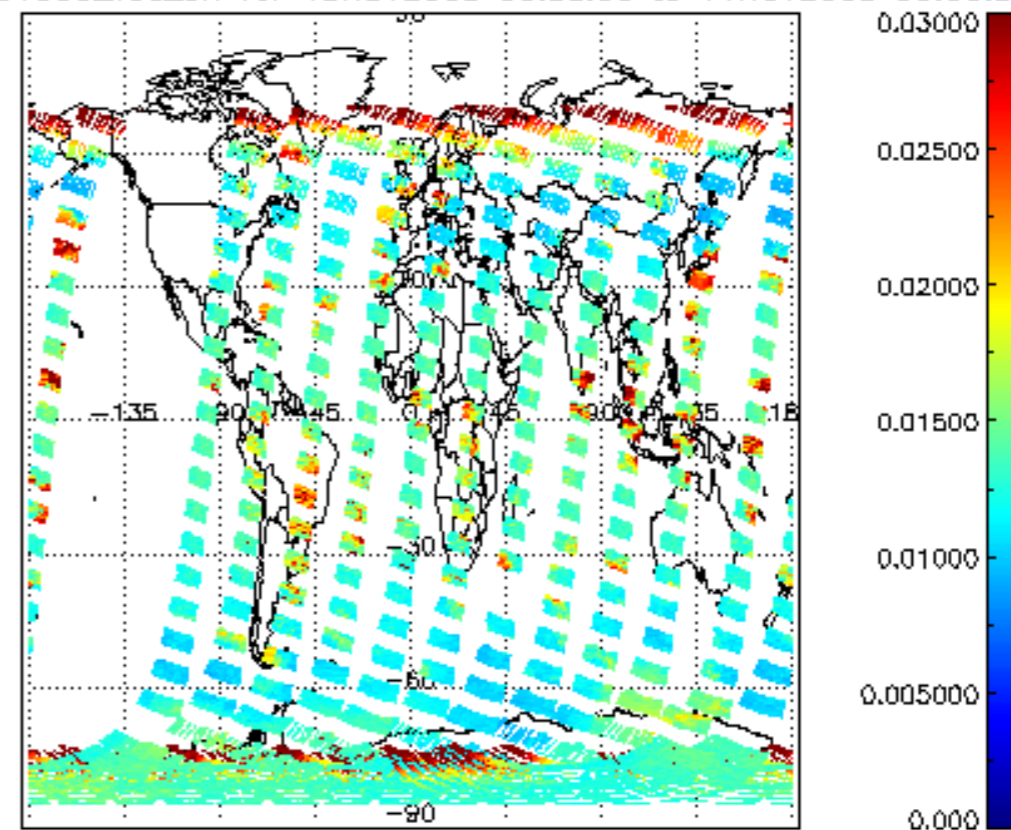




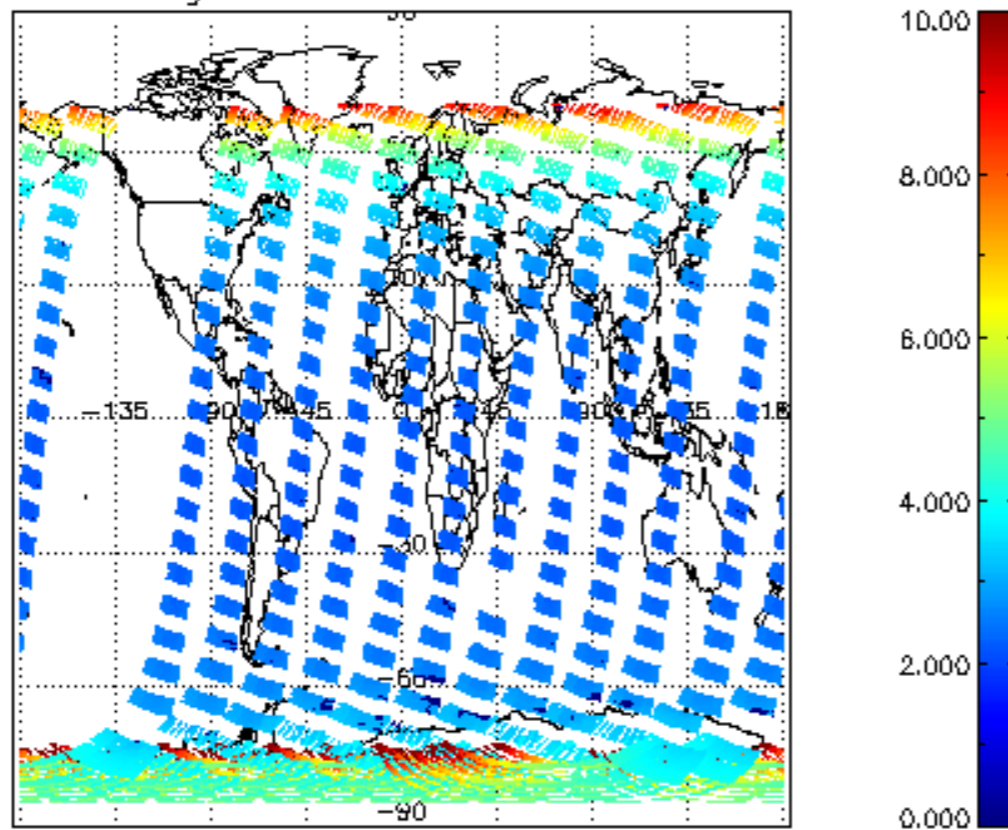
SCIOL2P_NADUV003_vcd for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



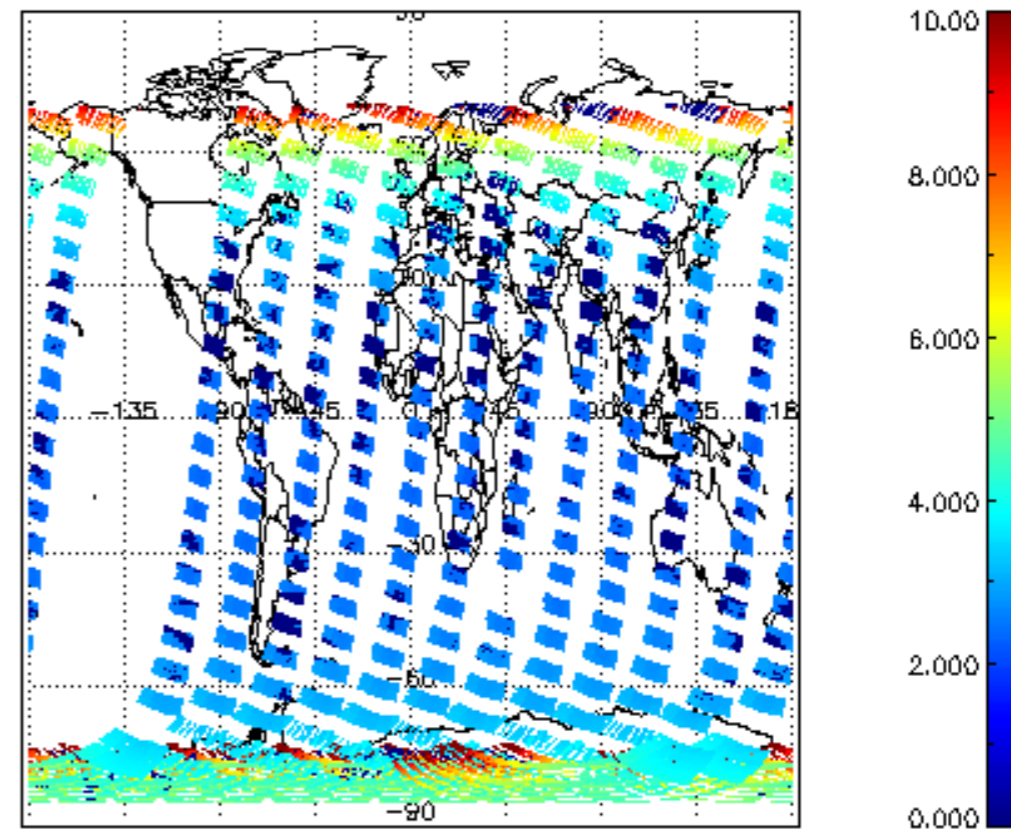
SCIOL2P_NADUV003_vcd_err for 10NOV2008 00:00:00 to 11NOV2008 00:00:00

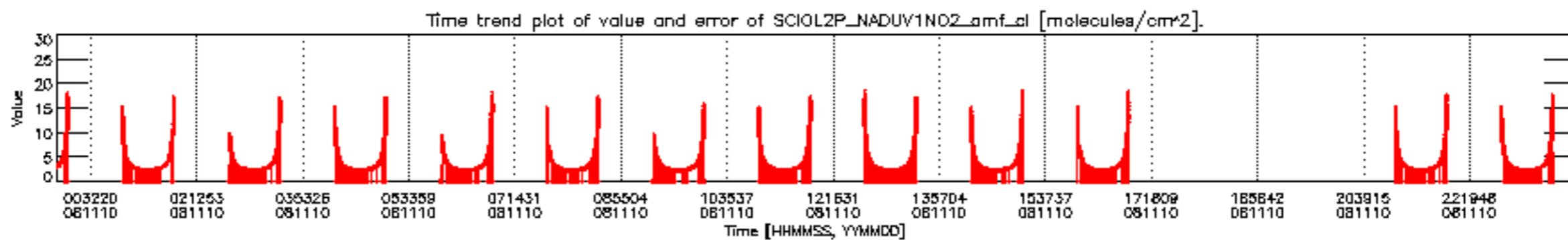
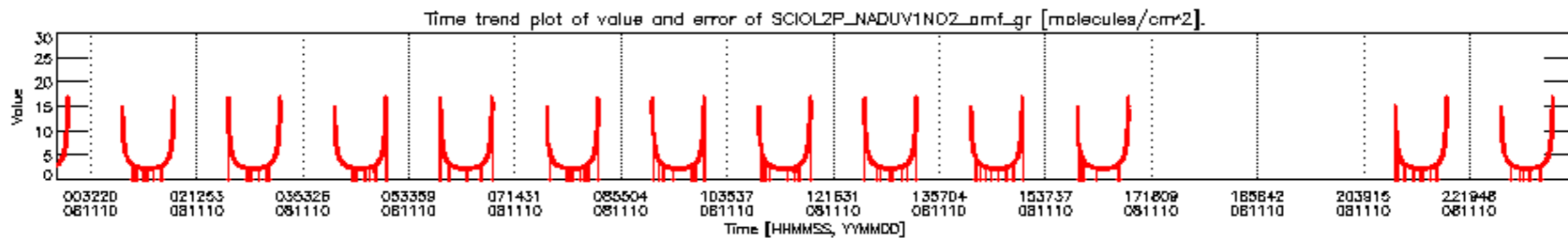
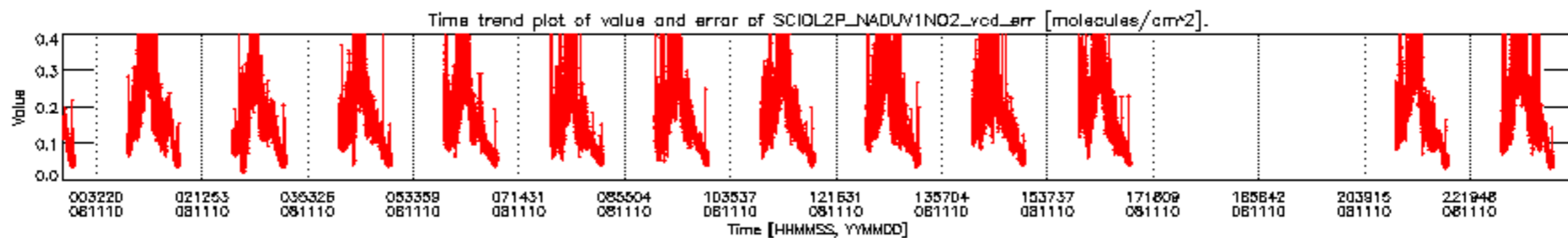
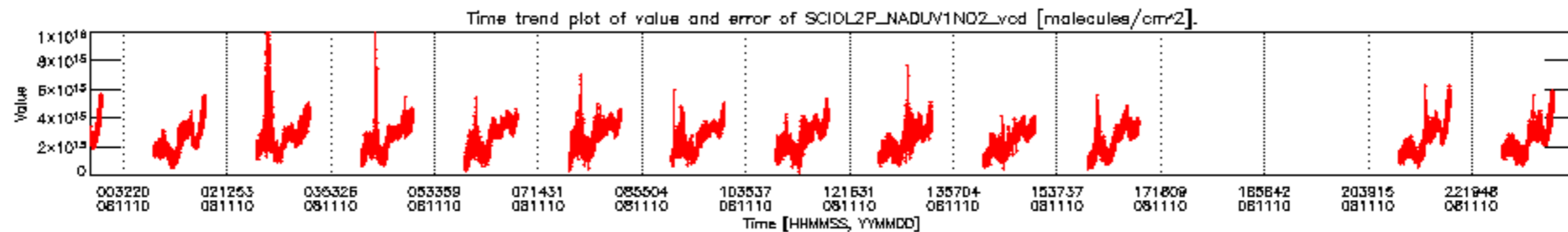


SCIOL2P_NADUV003_amf_gr for 10NOV2008 00:00:00 to 11NOV2008 00:00:00

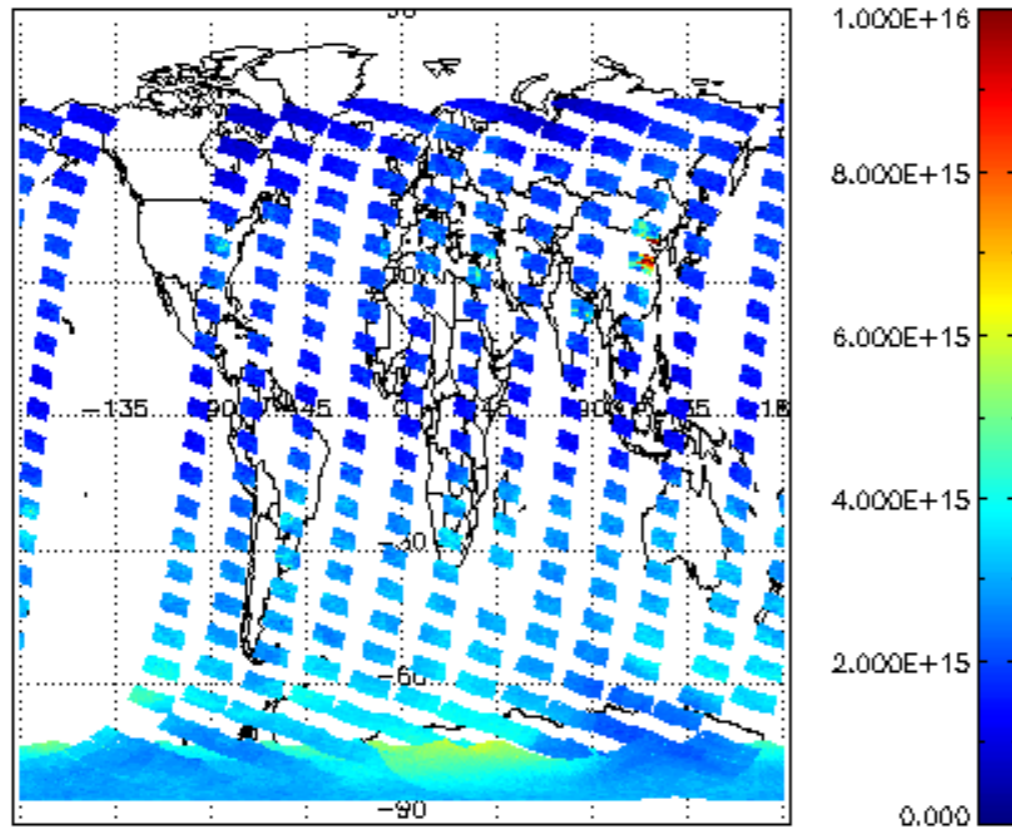


SCIOL2P_NADUV003_amf_cl for 10NOV2008 00:00:00 to 11NOV2008 00:00:00

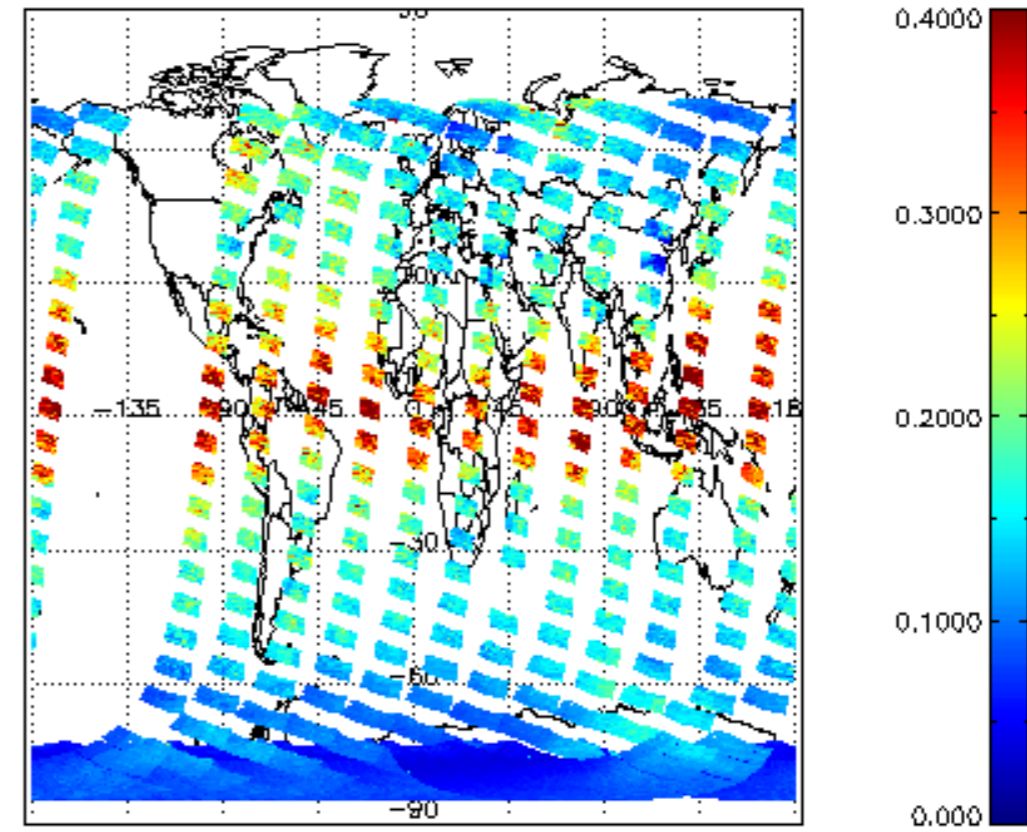




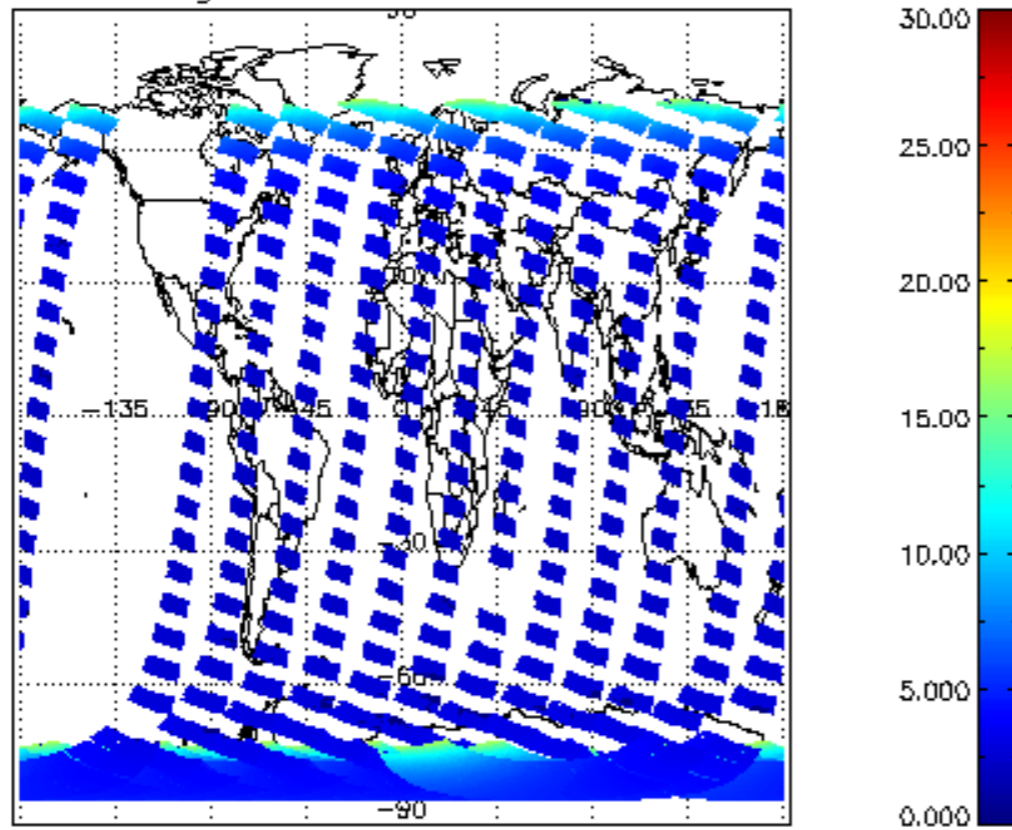
SCIOL2P_NADUV1NO2_vcd for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



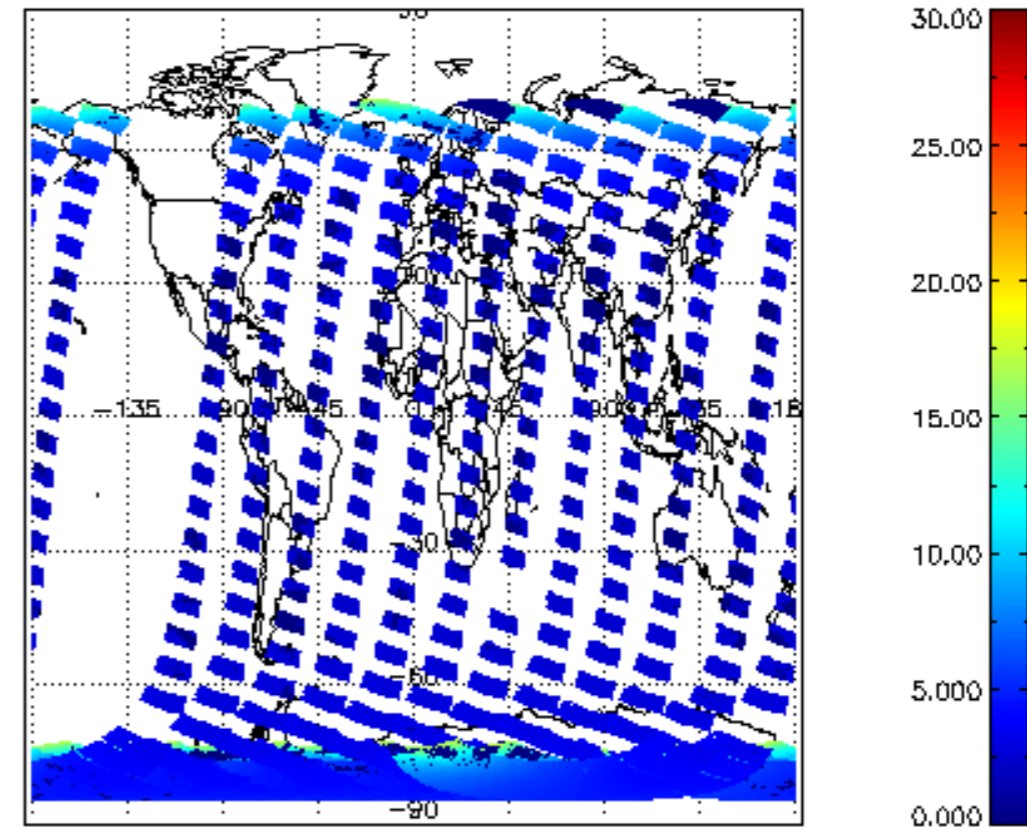
SCIOL2P_NADUV1NO2_vcd_err for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



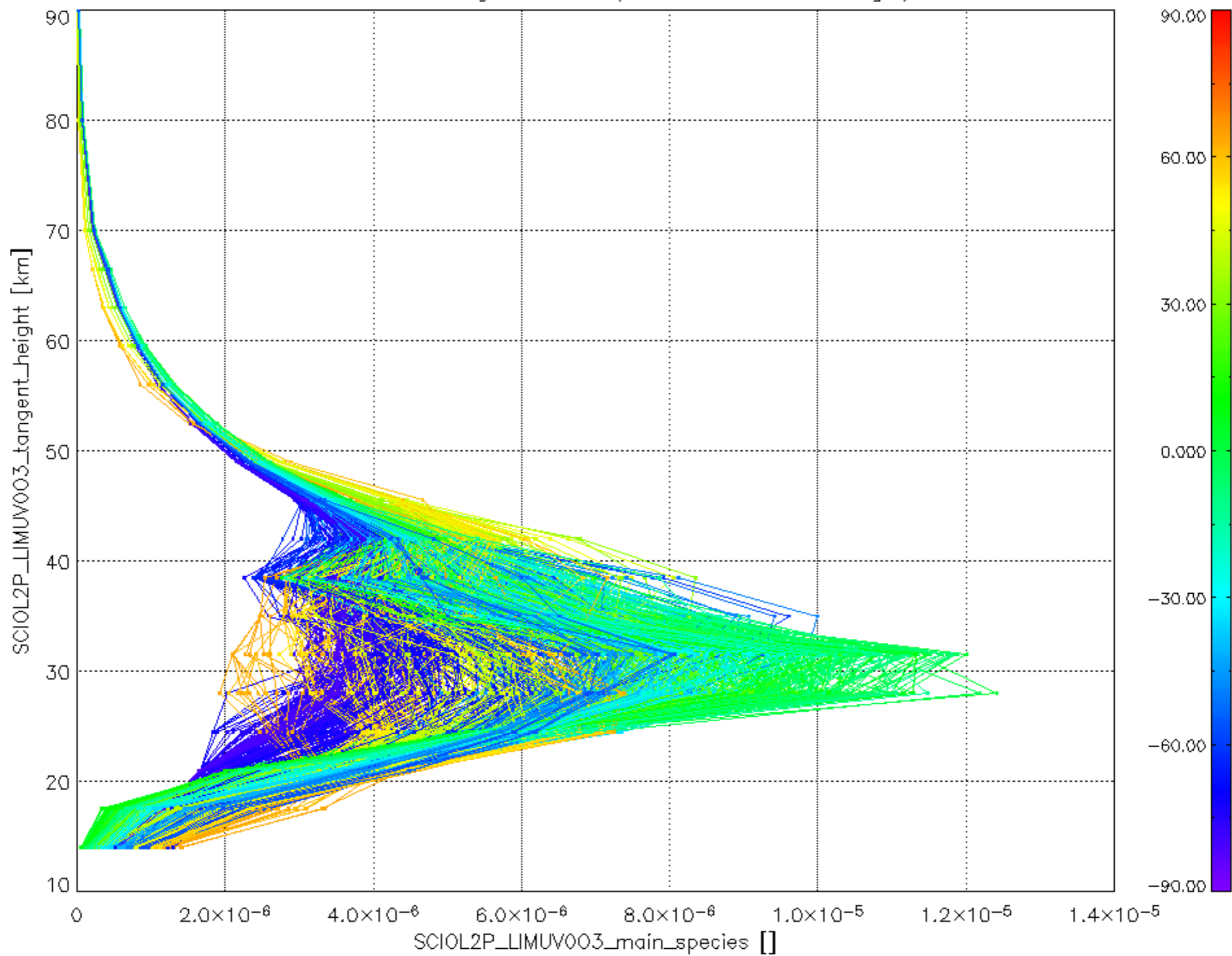
SCIOL2P_NADUV1NO2_amf_gr for 10NOV2008 00:00:00 to 11NOV2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 10NOV2008 00:00:00 to 11NOV2008 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 SCIOI2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

