

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	21NOV2008 06:02:54
Data source version	SCIA-OL/3.01-R
Processing scope for products	03NOV2008 00:00:00 to 04NOV2008 00:00:00
Start time of first product within scope	02NOV2008 23:35:03
Stop time of last product within scope	03NOV2008 23:58:57
Total number of level 2 products	15
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__2PRDPA20081102_233503_000033252073_00288_34911_3581.N1	02NOV2008 23:35:03	03NOV2008 00:30:28	0	GOOD
1	SCI_OL__2PRDPA20081103_011539_000033812073_00289_34912_3583.N1	03NOV2008 01:15:39	03NOV2008 02:12:00	0	GOOD
2	SCI_OL__2PRDPA20081103_025615_000033252073_00290_34913_3585.N1	03NOV2008 02:56:15	03NOV2008 03:51:41	0	GOOD
3	SCI_OL__2PRDPA20081103_043651_000033812073_00291_34914_3587.N1	03NOV2008 04:36:51	03NOV2008 05:33:13	0	GOOD
4	SCI_OL__2PRDPA20081103_061728_000033252073_00292_34915_3590.N1	03NOV2008 06:17:28	03NOV2008 07:12:53	0	GOOD
5	SCI_OL__2PRDPA20081103_075804_000033812073_00293_34916_3591.N1	03NOV2008 07:58:04	03NOV2008 08:54:26	0	GOOD
6	SCI_OL__2PRDPA20081103_093840_000033252073_00294_34917_3594.N1	03NOV2008 09:38:40	03NOV2008 10:34:06	0	GOOD
7	SCI_OL__2PRDPA20081103_111917_000033812073_00294_34917_3595.N1	03NOV2008 11:19:17	03NOV2008 12:15:38	0	GOOD
8	SCI_OL__2PRDPA20081103_125953_000033252073_00296_34919_3597.N1	03NOV2008 12:59:53	03NOV2008 13:55:19	0	GOOD
9	SCI_OL__2PRDPA20081103_144029_000033812073_00296_34919_3602.N1	03NOV2008 14:40:29	03NOV2008 15:36:51	0	GOOD
10	SCI_OL__2PRDPA20081103_162106_000033252073_00298_34921_3609.N1	03NOV2008 16:21:06	03NOV2008 17:16:31	0	GOOD
11	SCI_OL__2PRDPA20081103_183124_000015832073_00299_34922_3612.N1	03NOV2008 18:31:24	03NOV2008 18:57:47	0	GOOD
12	SCI_OL__2PRDPA20081103_194239_000033252073_00300_34923_3613.N1	03NOV2008 19:42:39	03NOV2008 20:38:04	0	GOOD
13	SCI_OL__2PRDPA20081103_212255_000033812073_00301_34924_3615.N1	03NOV2008 21:22:55	03NOV2008 22:19:16	0	GOOD
14	SCI_OL__2PRDPA20081103_230331_000033252073_00302_34925_3618.N1	03NOV2008 23:03:31	03NOV2008 23:58:57	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: 148200

Total number of cloud data DSRs with good quality flag (=0): 148200 (100.0 %)

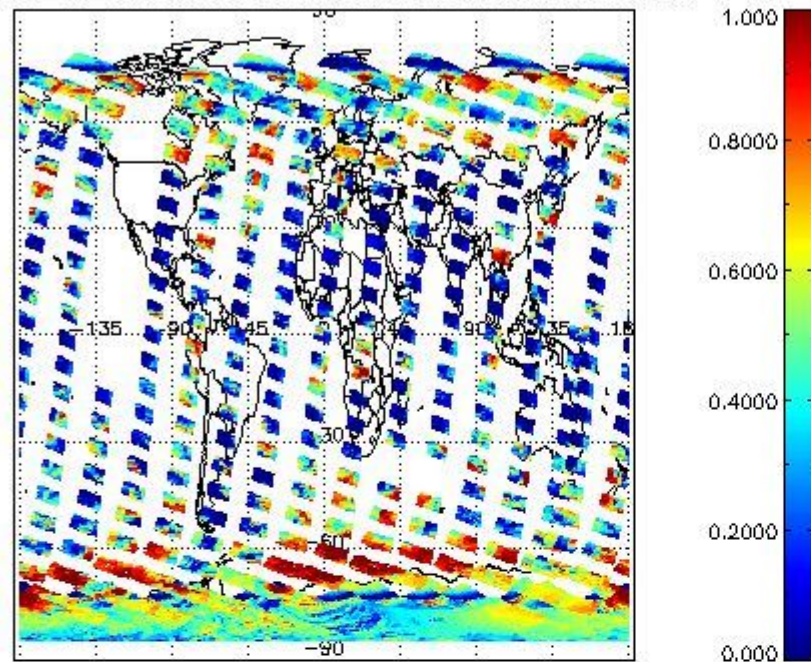
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	148200	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	148200	0.16974	0.12500	0.12500	0.25000	0.059923	s
CL_FRAC	148200	0.39319	0.38048	0.0000	1.0000	0.28079	-
CL_FRAC_ERR	148200	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	148200	5.4316	4.0000	4.0000	8.0000	1.9175	
PMD_READ_CL[0]	148200	0.21588	0.0000	0.0000	8.0000	1.0318	-
PMD_READ_CL[1]	148200	1.0010	0.0000	0.0000	8.0000	2.2356	-
CL_TOP_HEIGHT	122465	4.2723	3.1837	0.0000	17.000	4.0831	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	122465	52.964	43.457	0.0000	101.00	40.269	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	148200	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	148200	11001011	11000100	11000000	11100000	3360.0	flags
AERO_ABSO_IND	148200	2.9553	3.3046	-1.1043	16.270	2.1010	
AERO_IND_DIAG	148200	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	148200	01010110	00000000	00000000	11000000	24466.	flags

Time and geolocation plots:

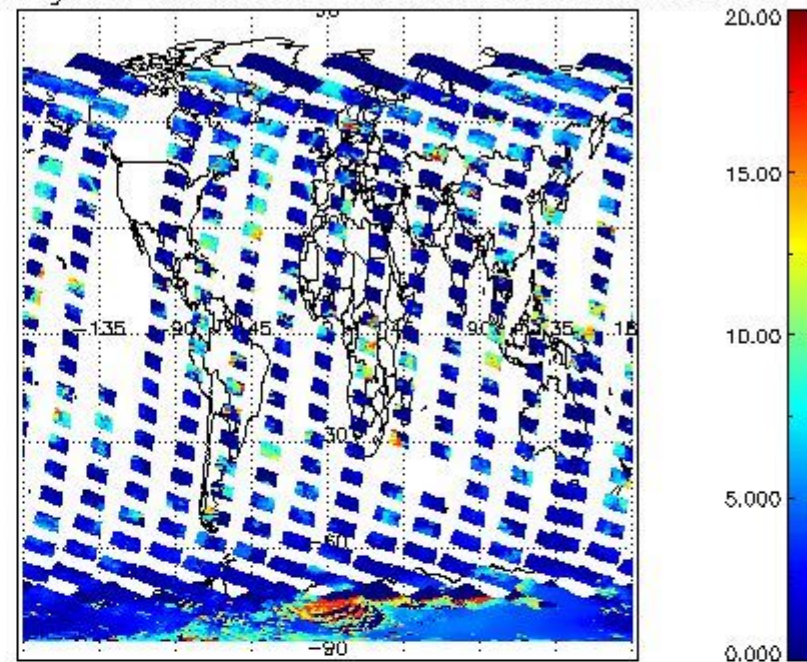
Plots are available for the following parameters:

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

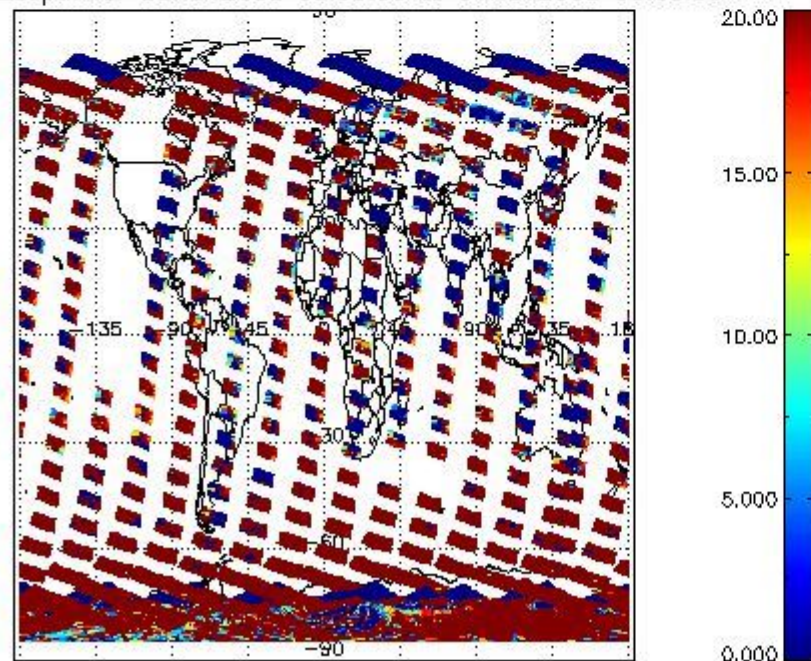
cLfrac for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



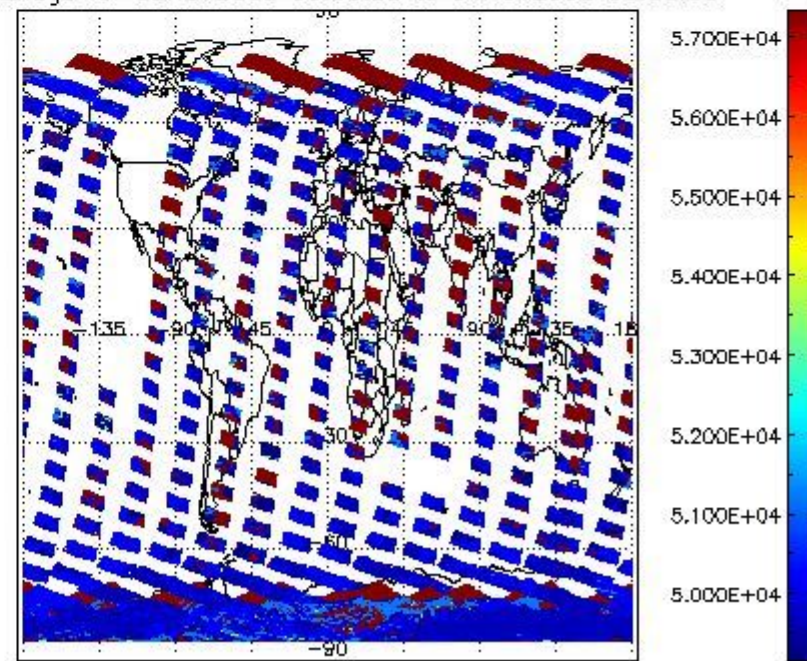
cL_top_height for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



cLopt_depth for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



cloud_flags for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



2.2.2 Nadir

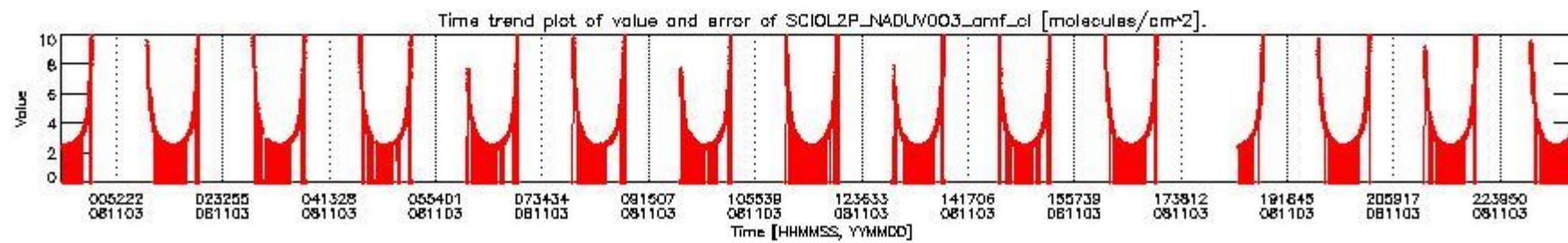
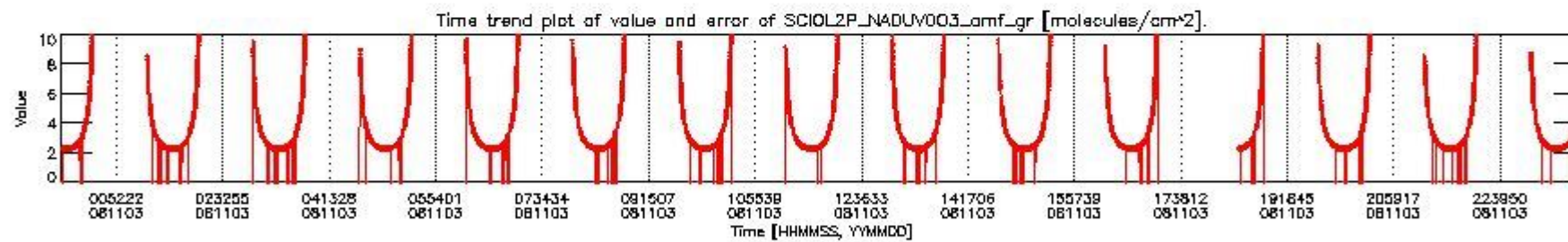
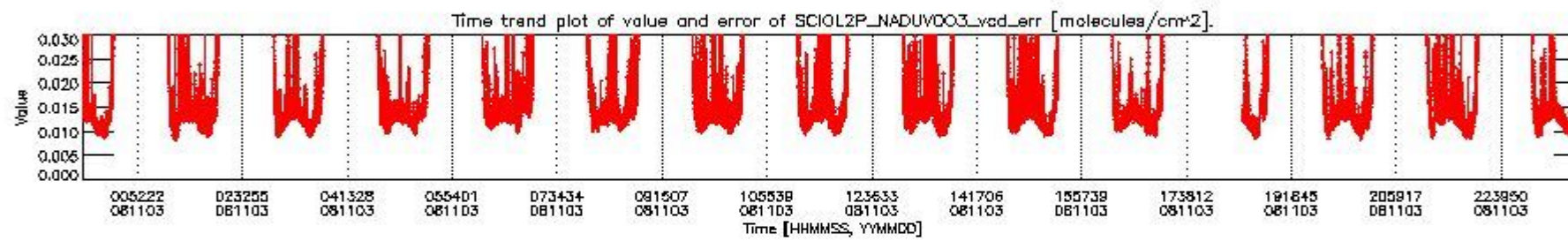
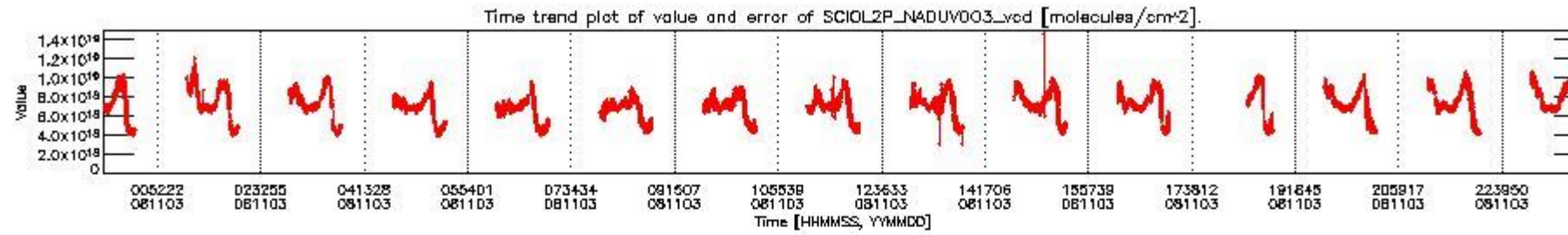
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

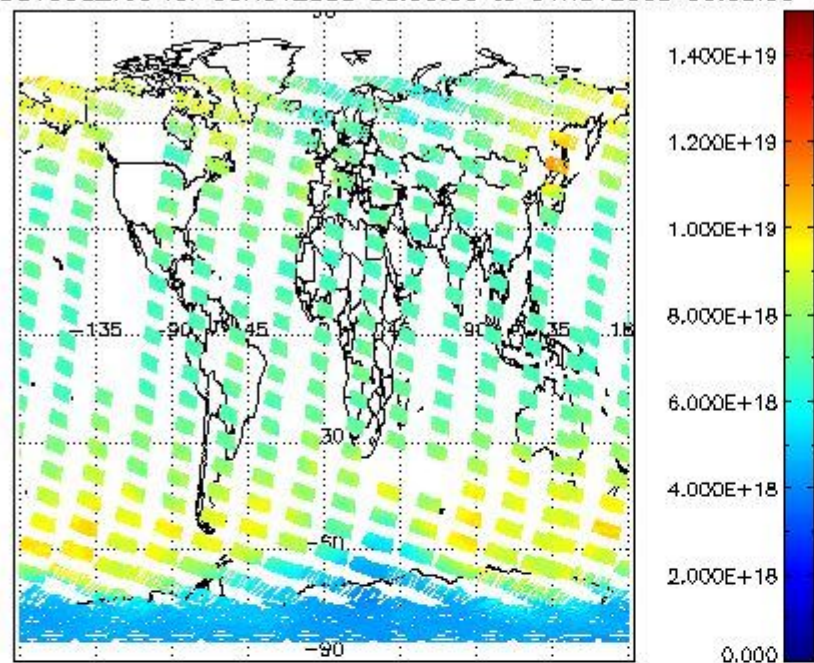
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

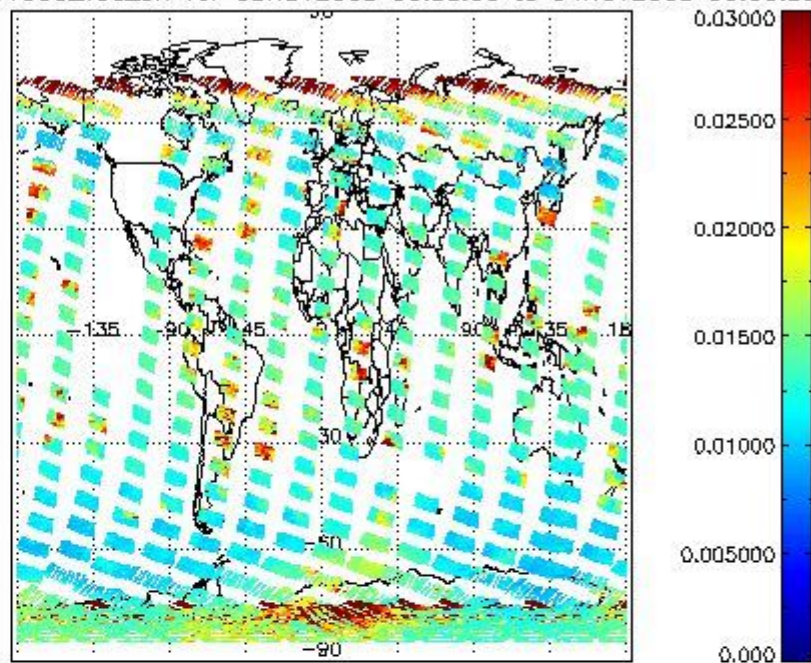
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



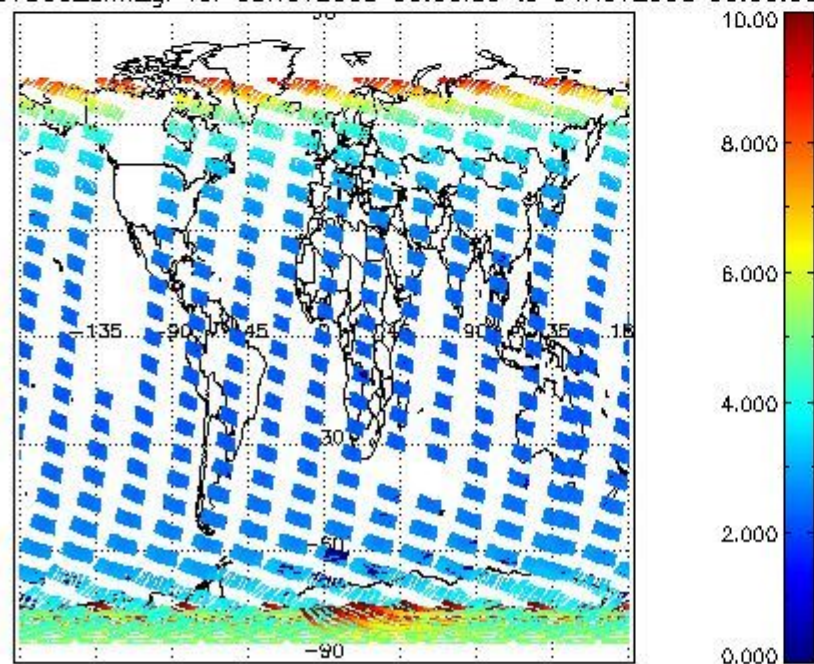
SCIOL2P_NADUV003_vcd for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



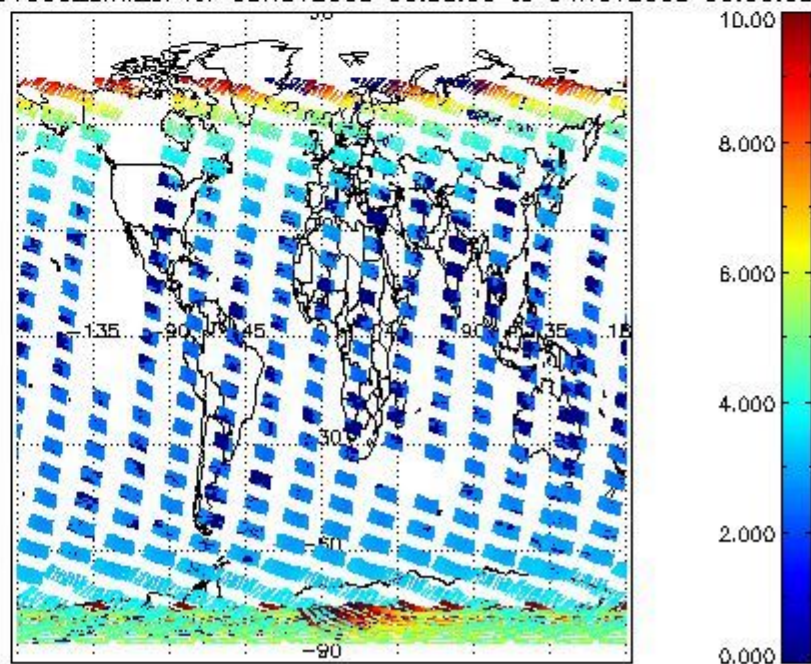
SCIOL2P_NADUV003_vcd_err for 03NOV2008 00:00:00 to 04NOV2008 00:00:00

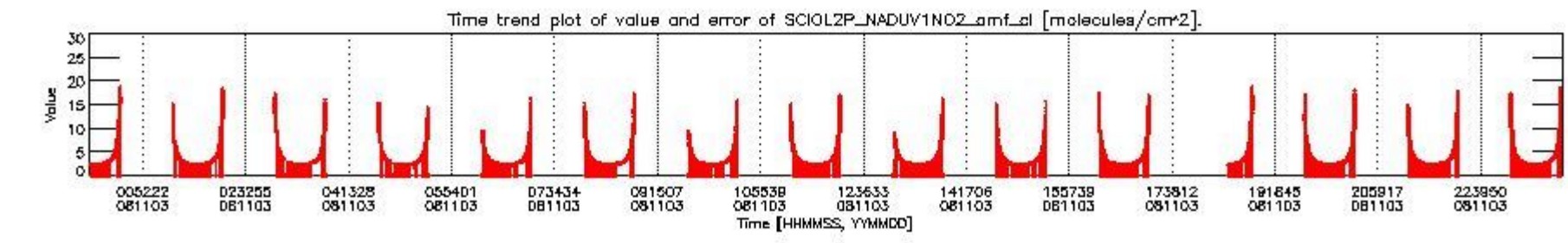
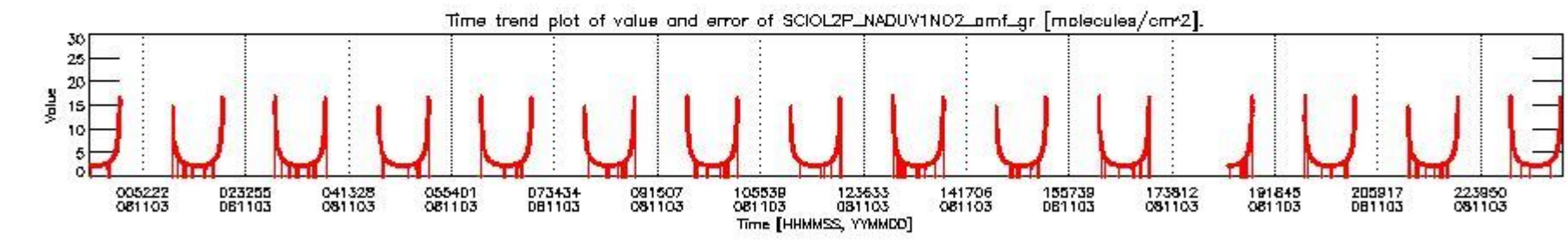
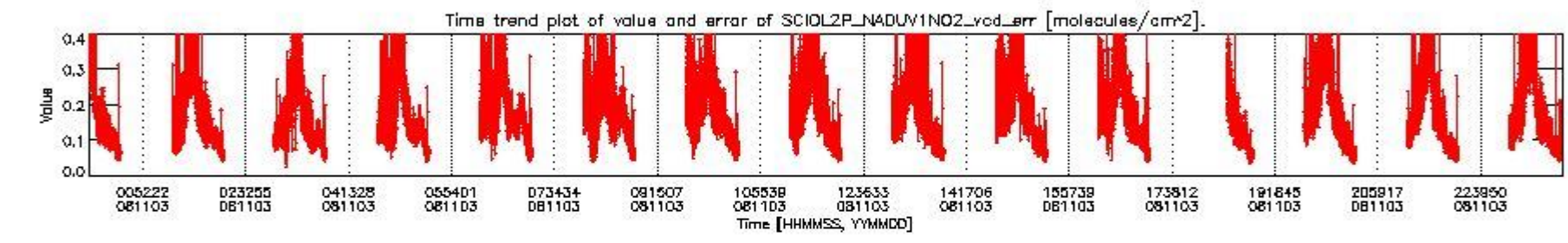
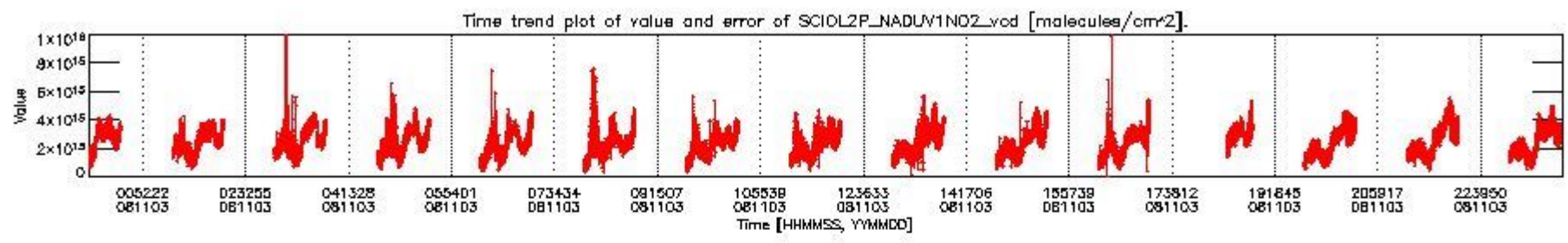


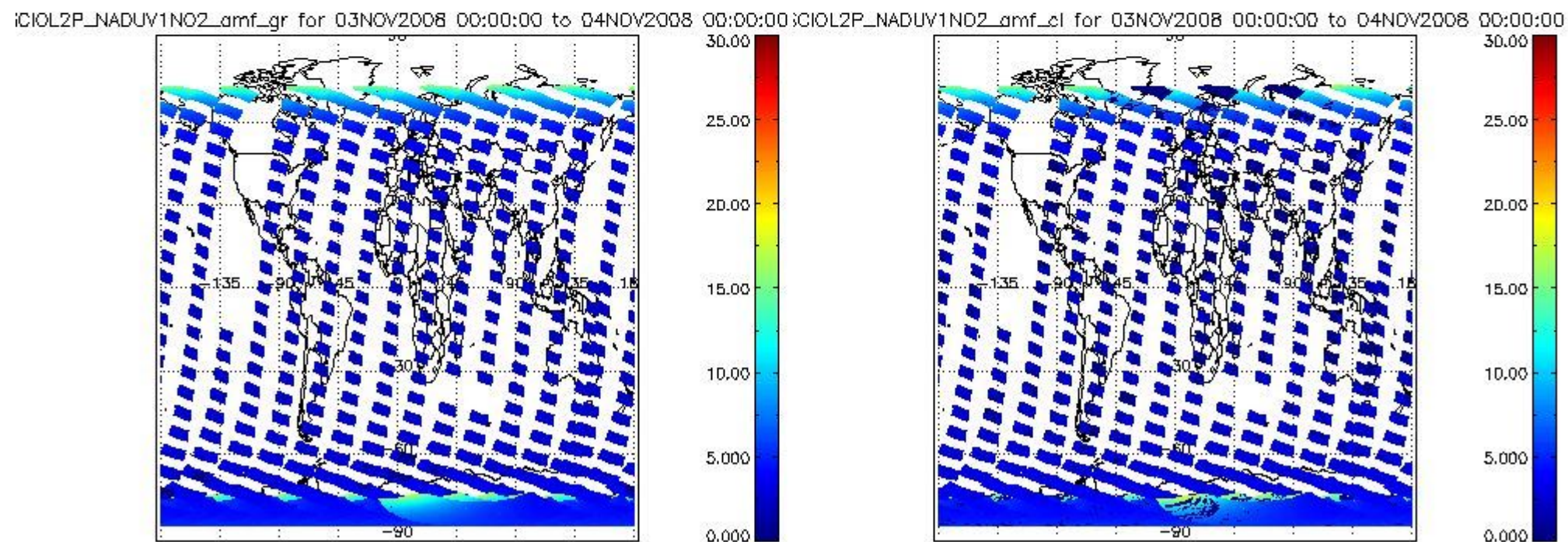
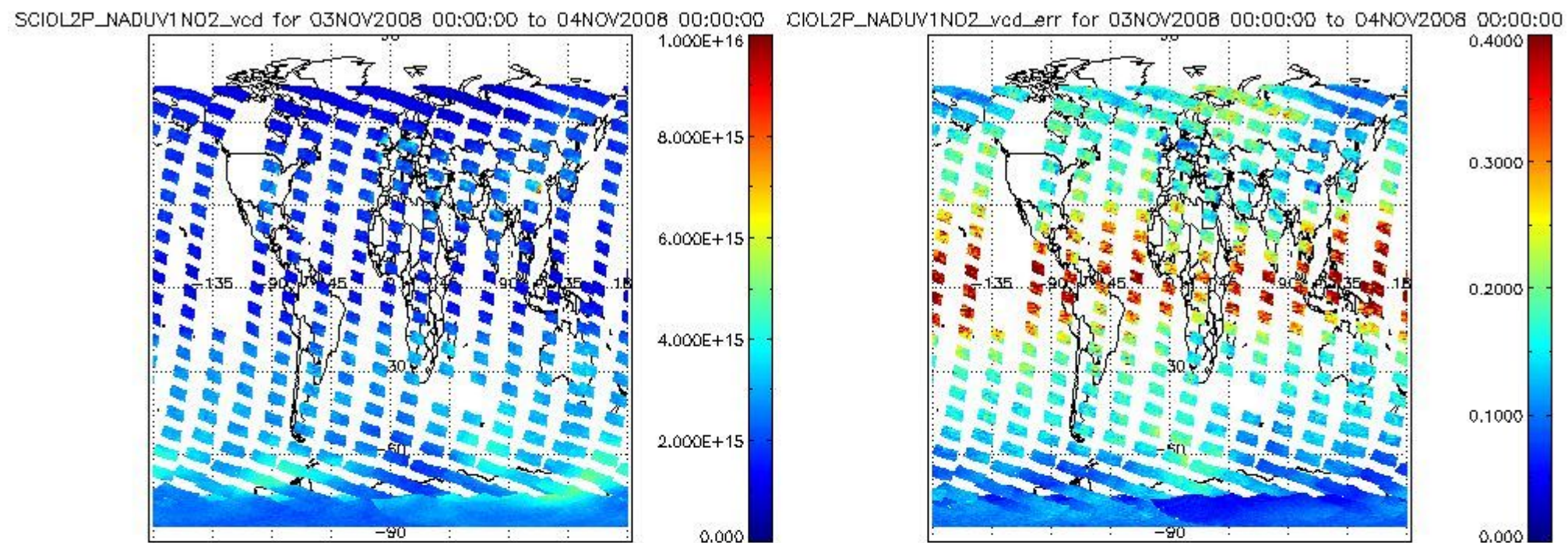
SCIOL2P_NADUV003_amf_gr for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 03NOV2008 00:00:00 to 04NOV2008 00:00:00







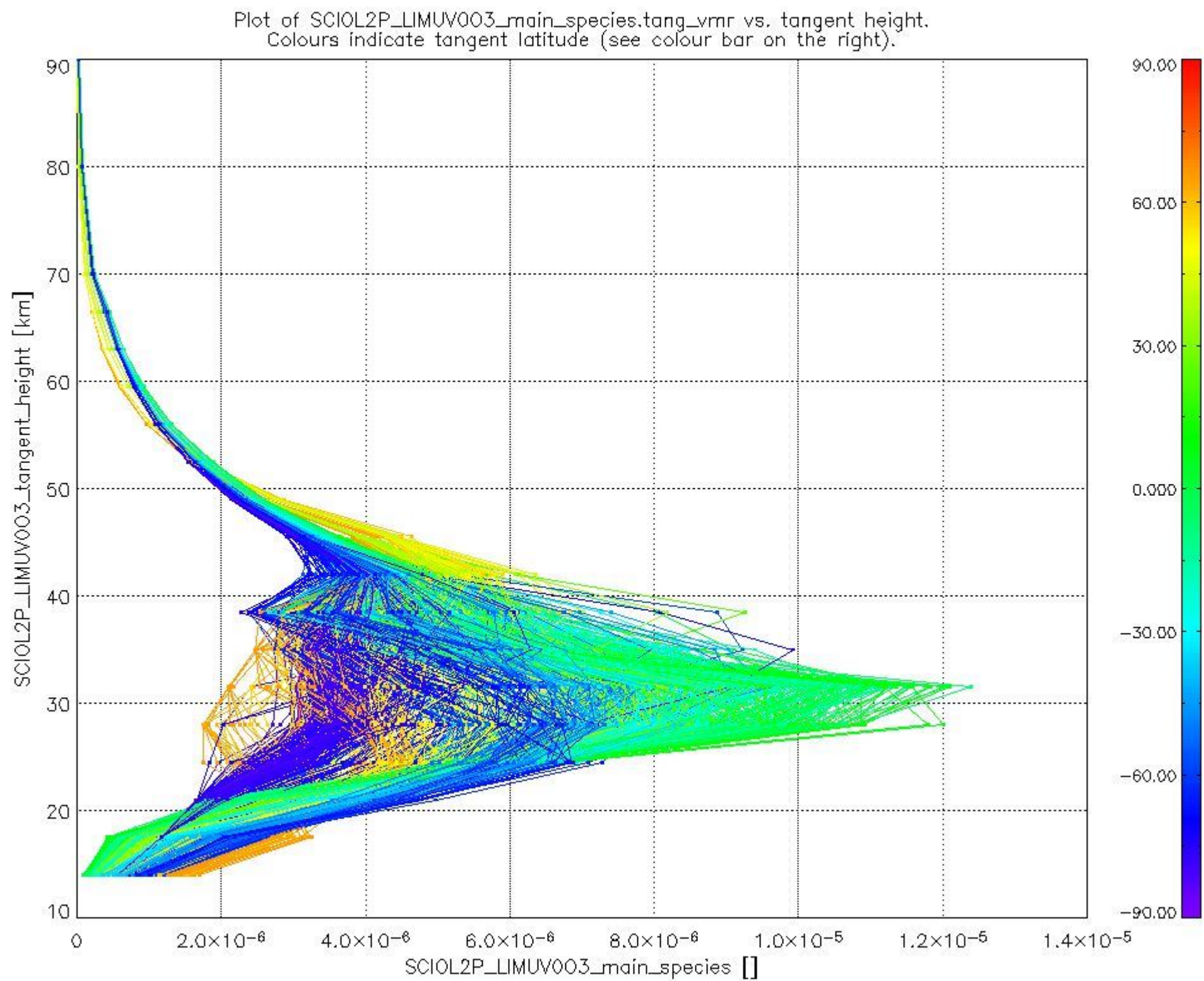
2.2.3 Limb

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

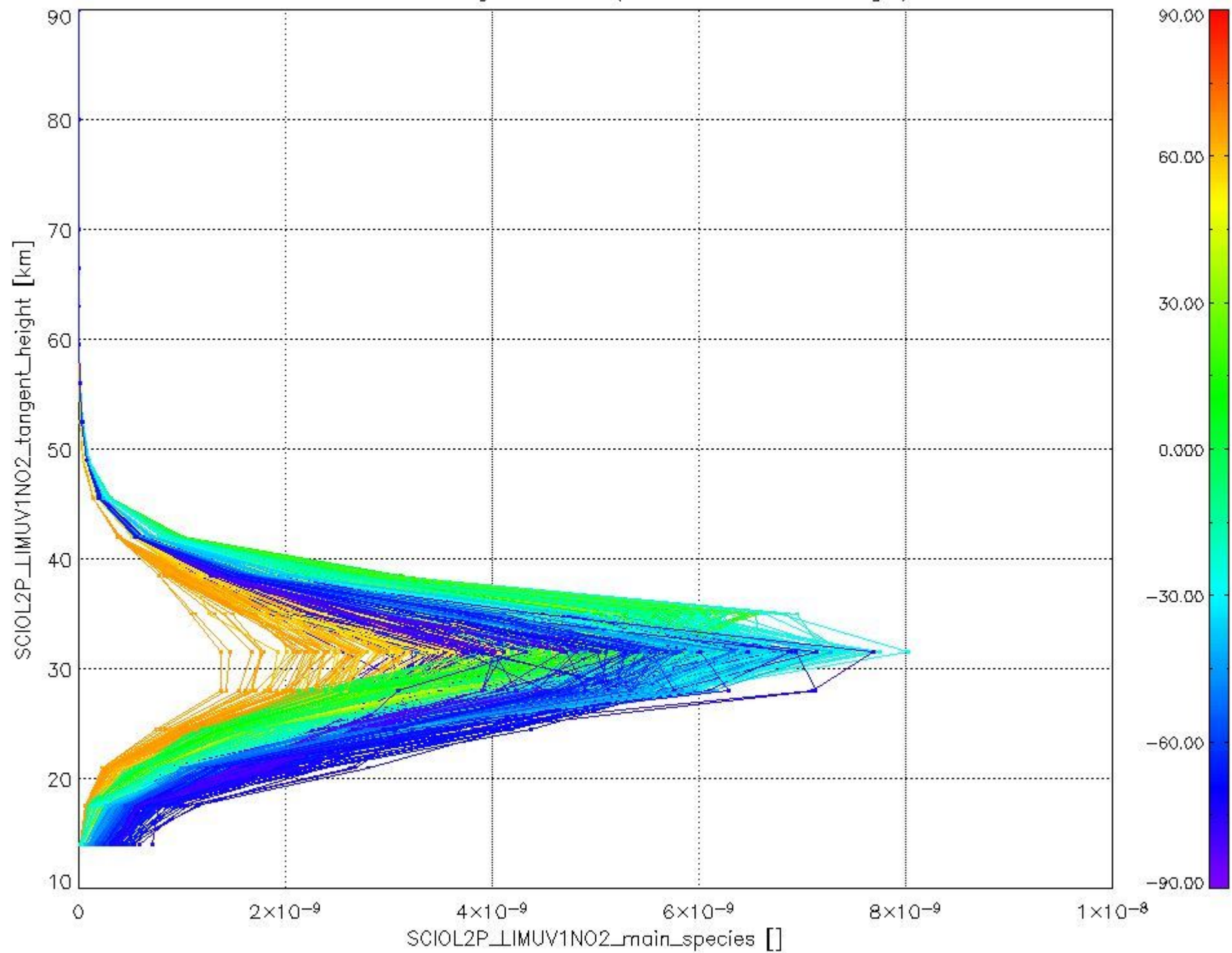
The following data items are currently included into this section:

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.



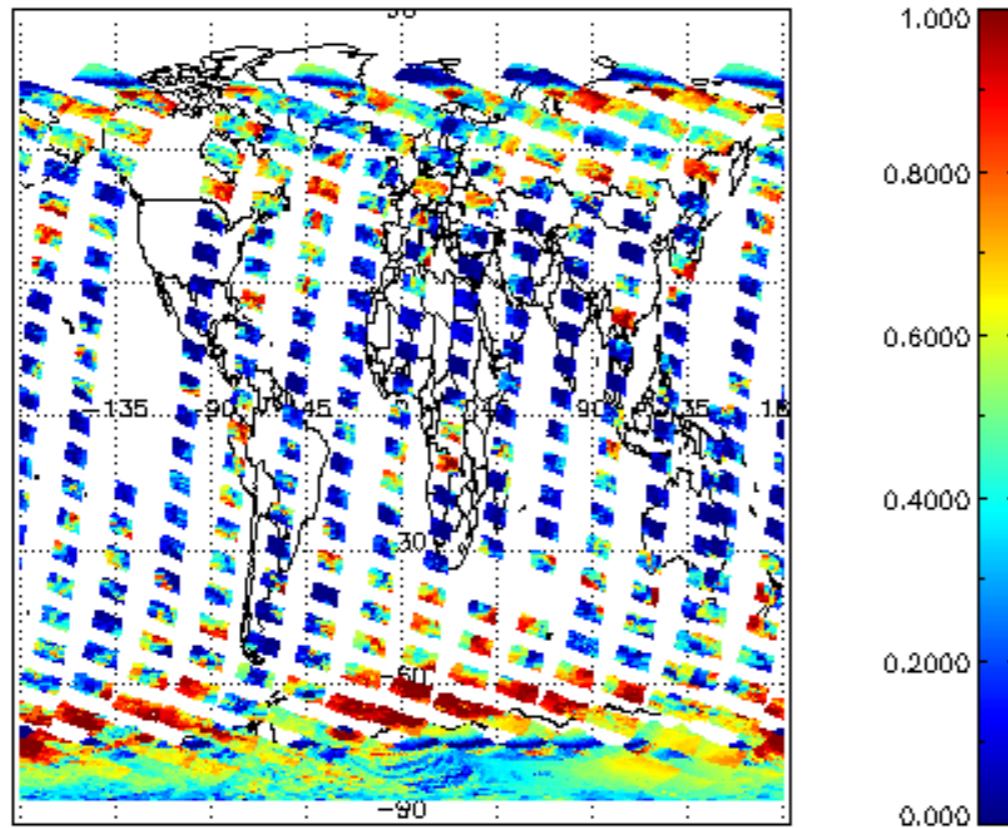
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



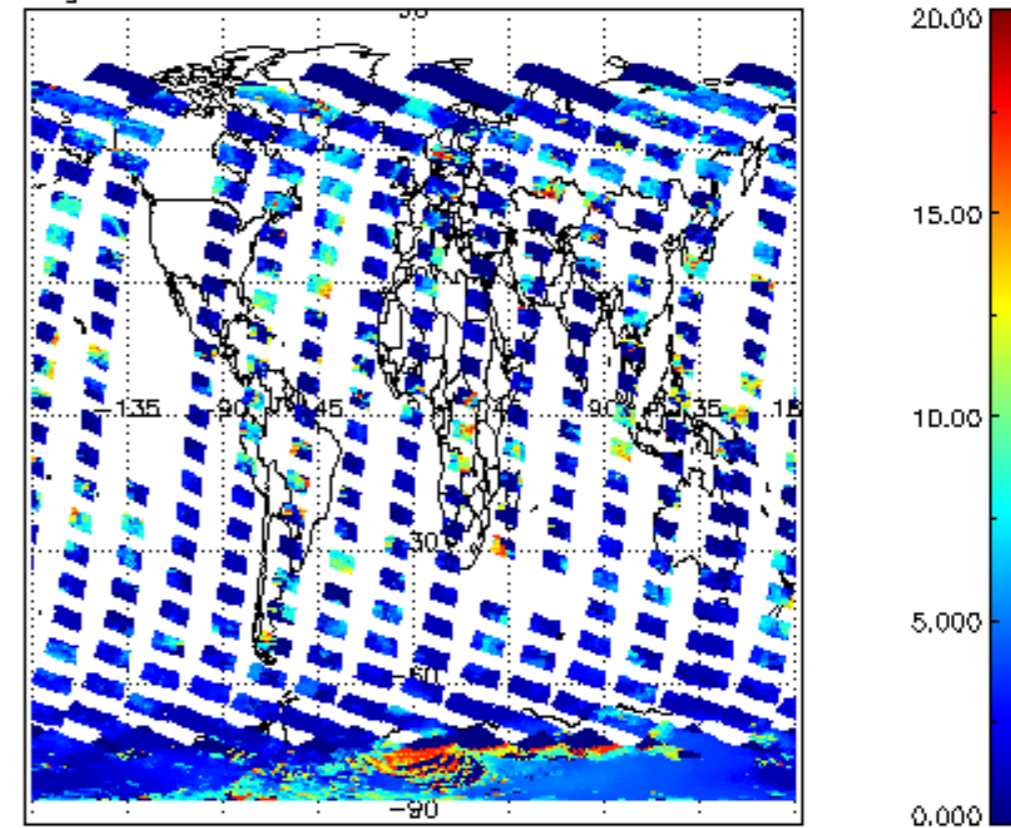
2.3 ADF monitoring

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

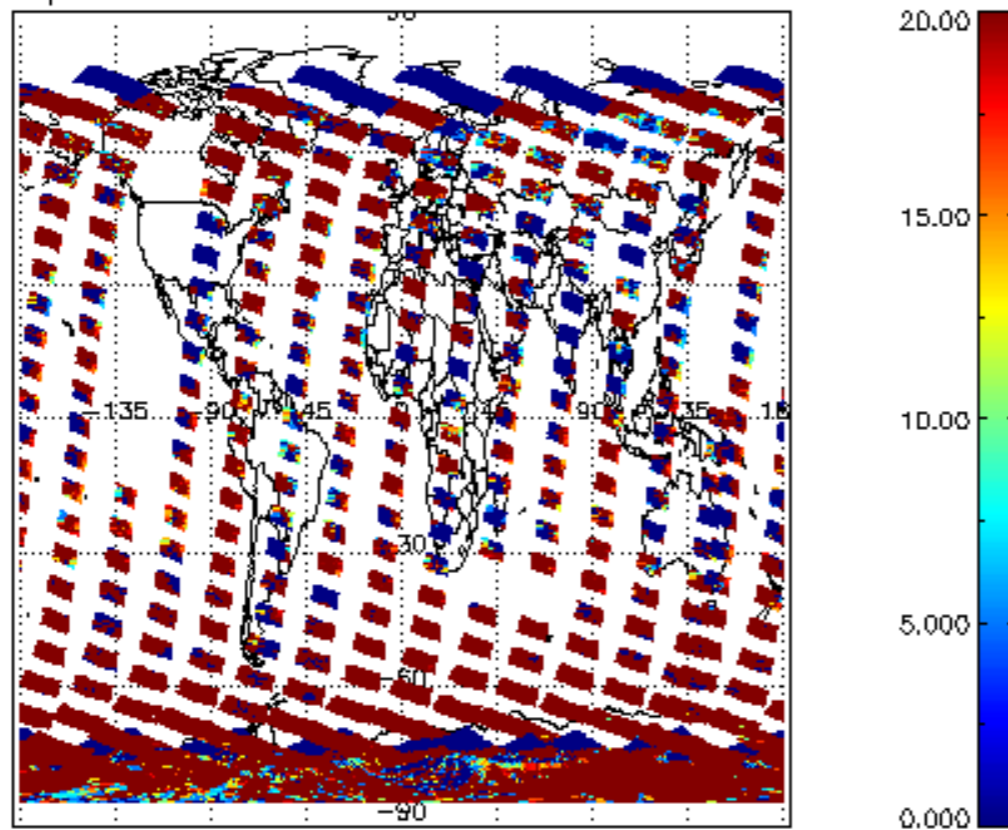
cLfrac for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



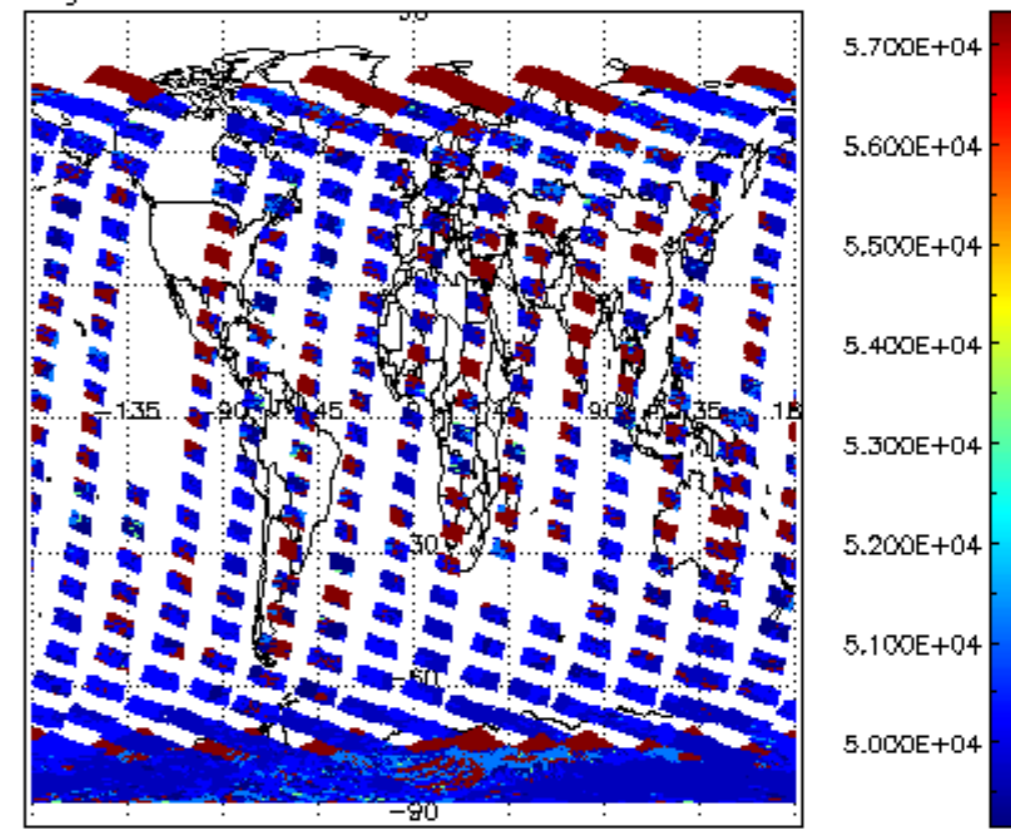
cL_top_height for 03NOV2008 00:00:00 to 04NOV2008 00:00:00

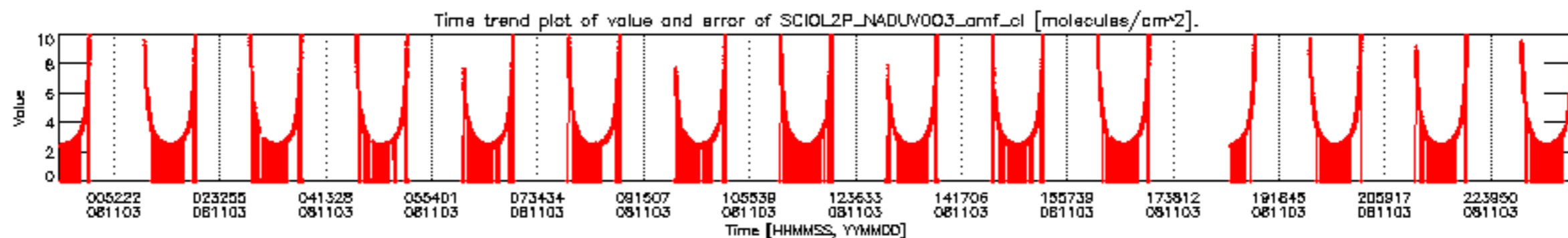
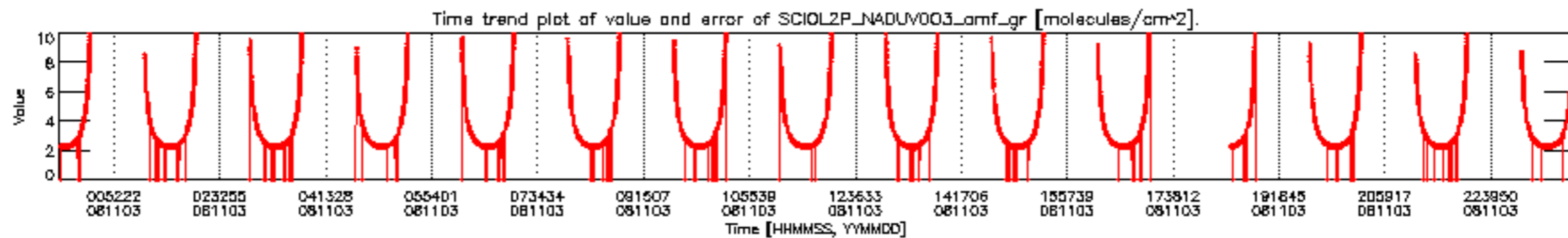
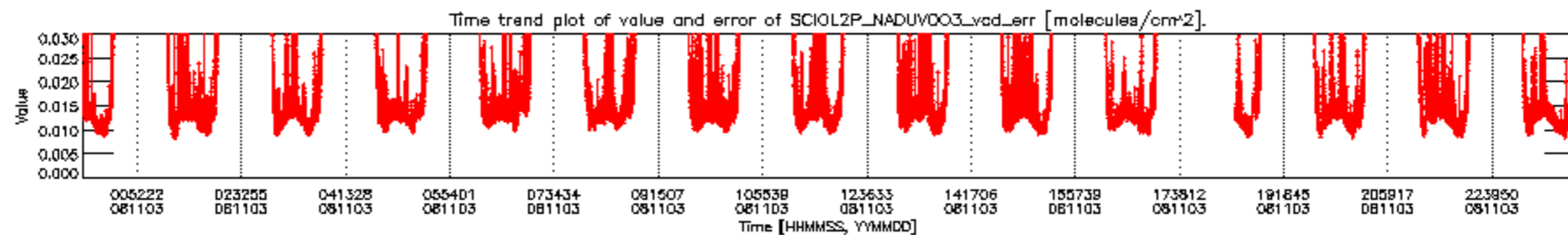
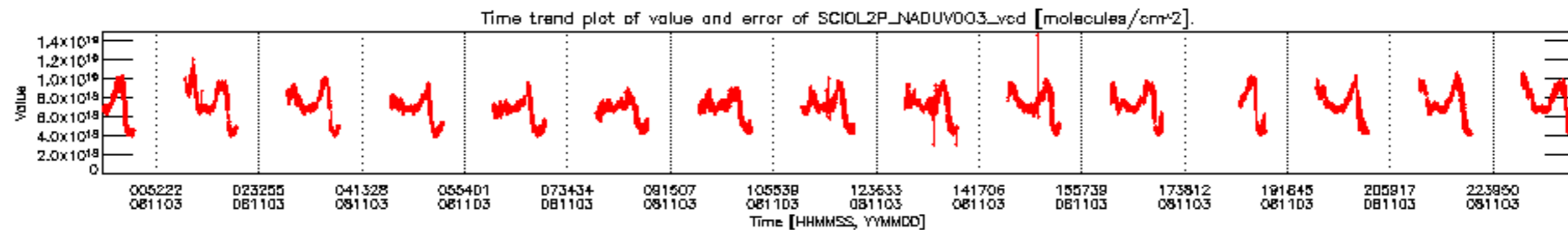


cL_opt_depth for 03NOV2008 00:00:00 to 04NOV2008 00:00:00

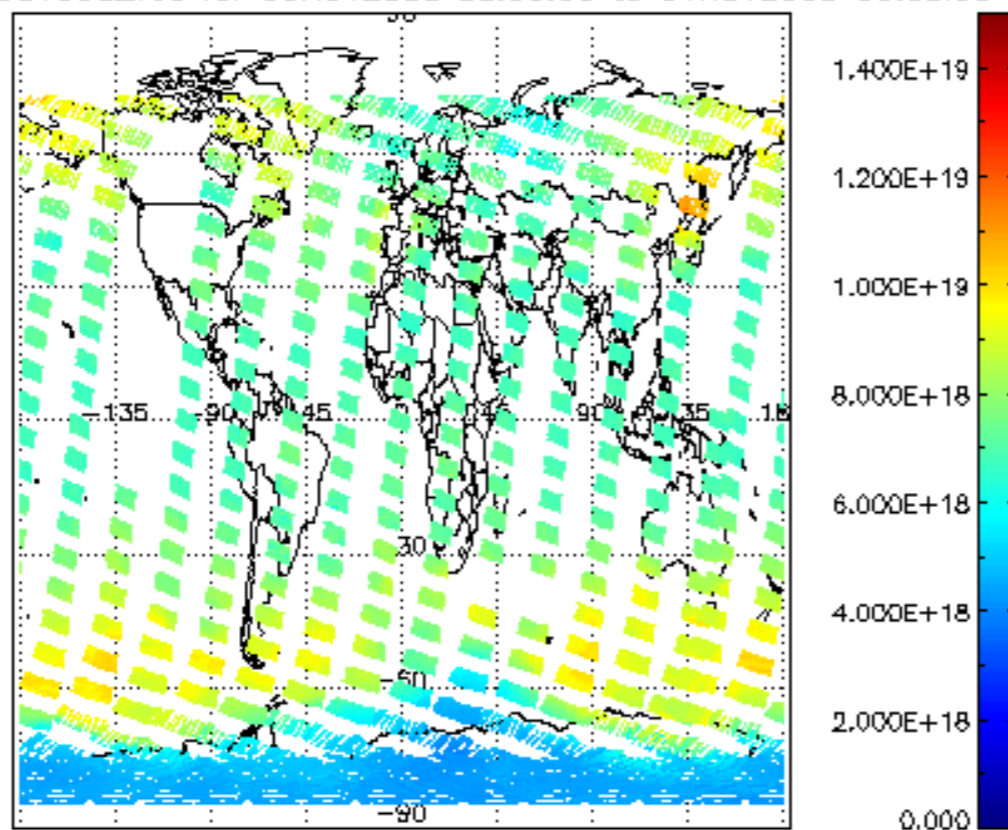


cloud_flags for 03NOV2008 00:00:00 to 04NOV2008 00:00:00

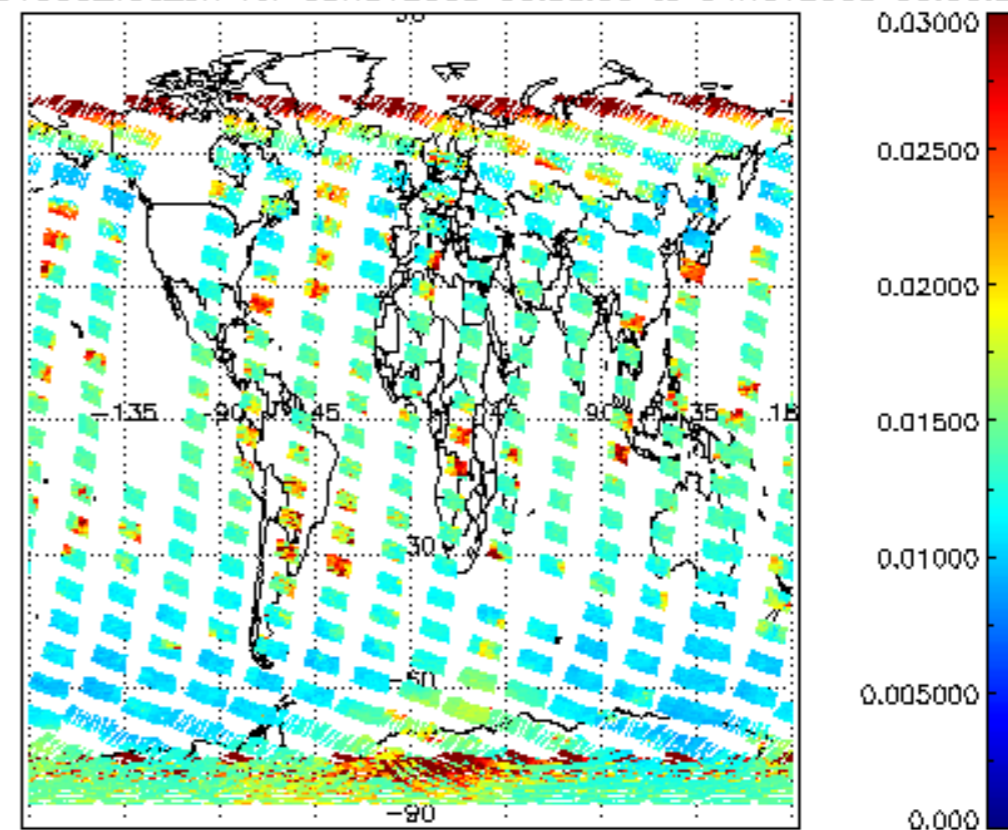




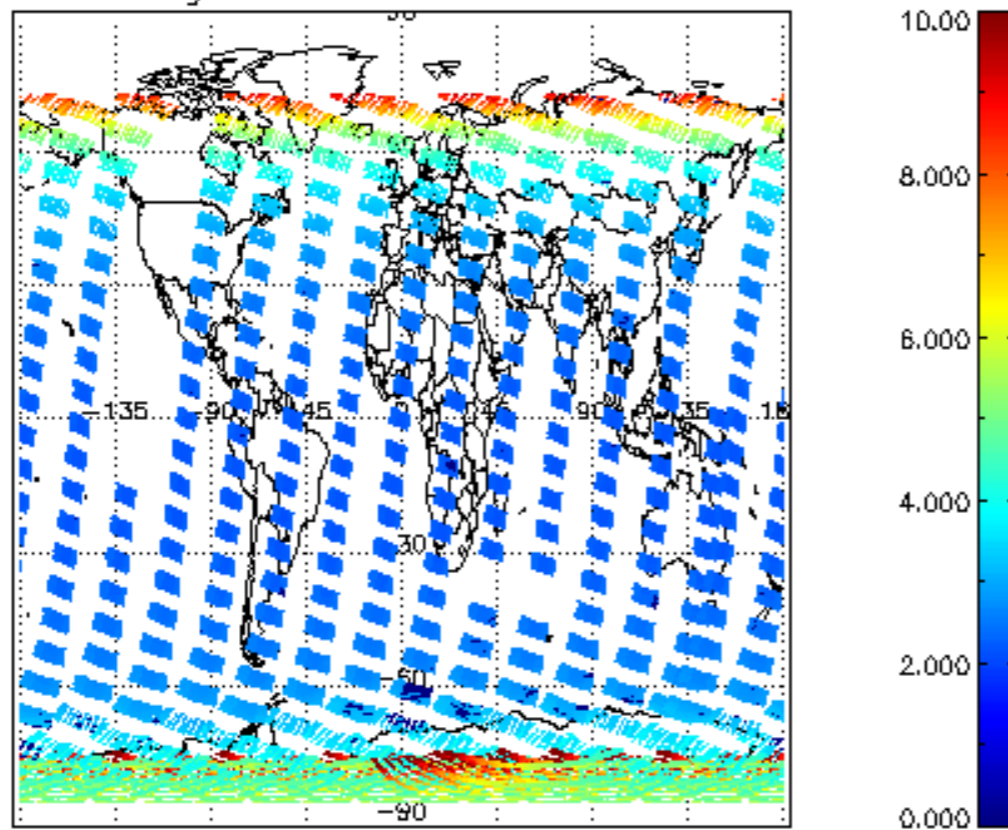
SCIOL2P_NADUV003_vcd for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



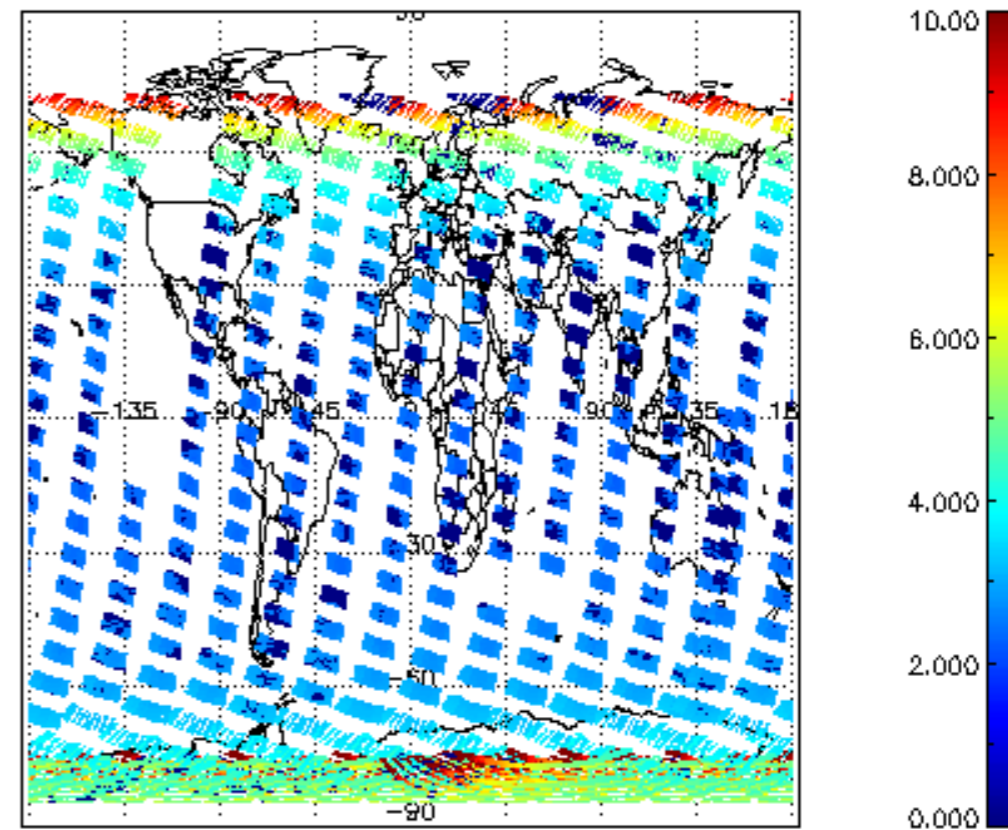
SCIOL2P_NADUV003_vcd_err for 03NOV2008 00:00:00 to 04NOV2008 00:00:00

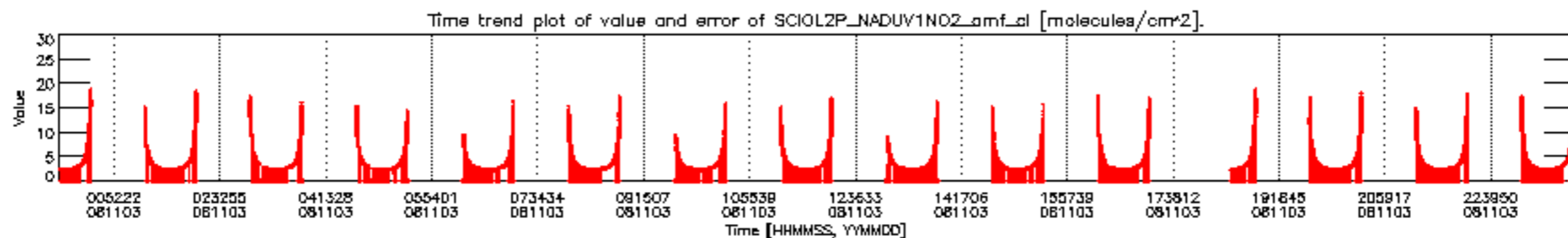
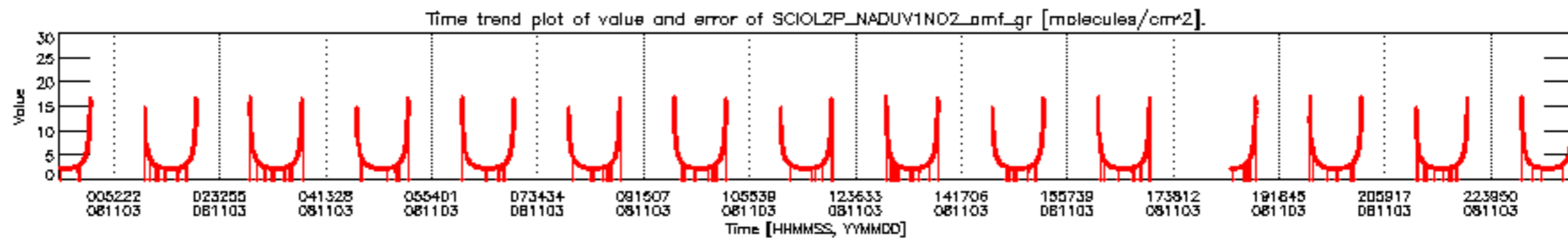
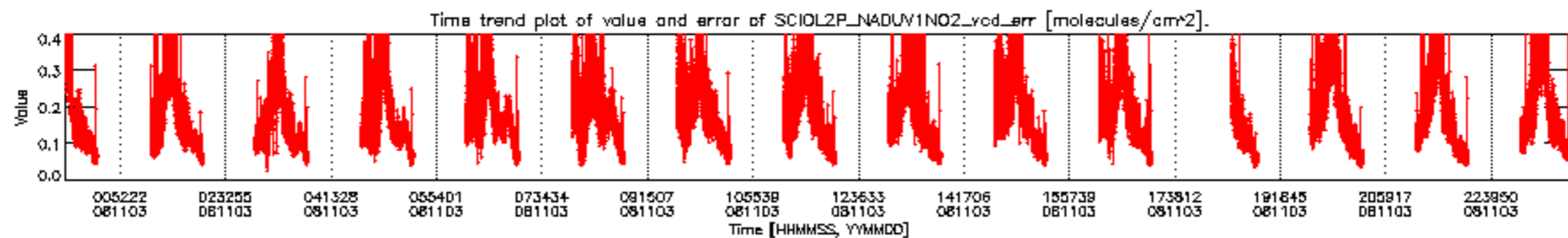
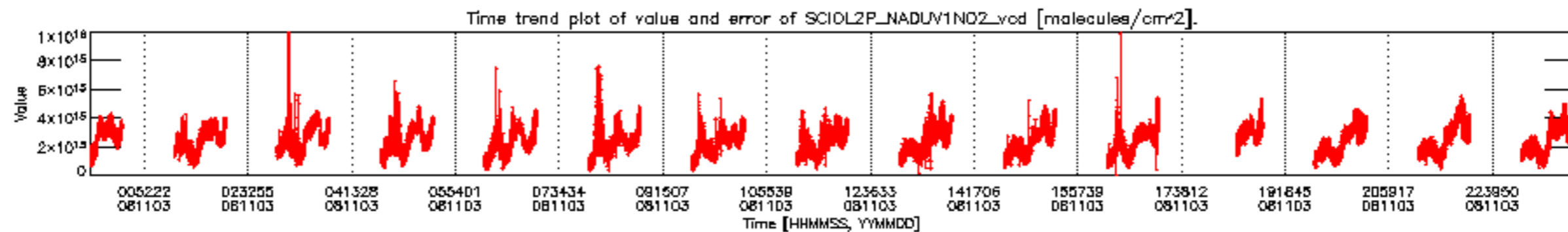


SCIOL2P_NADUV003_amf_gr for 03NOV2008 00:00:00 to 04NOV2008 00:00:00

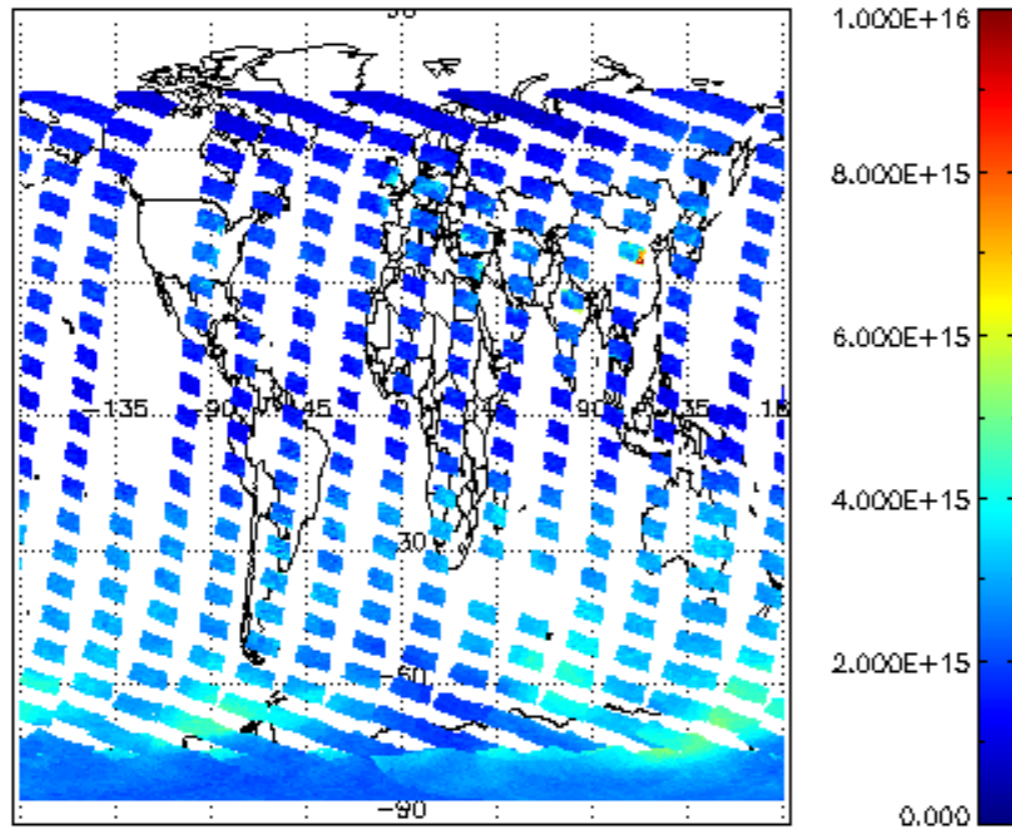


SCIOL2P_NADUV003_amf_cl for 03NOV2008 00:00:00 to 04NOV2008 00:00:00

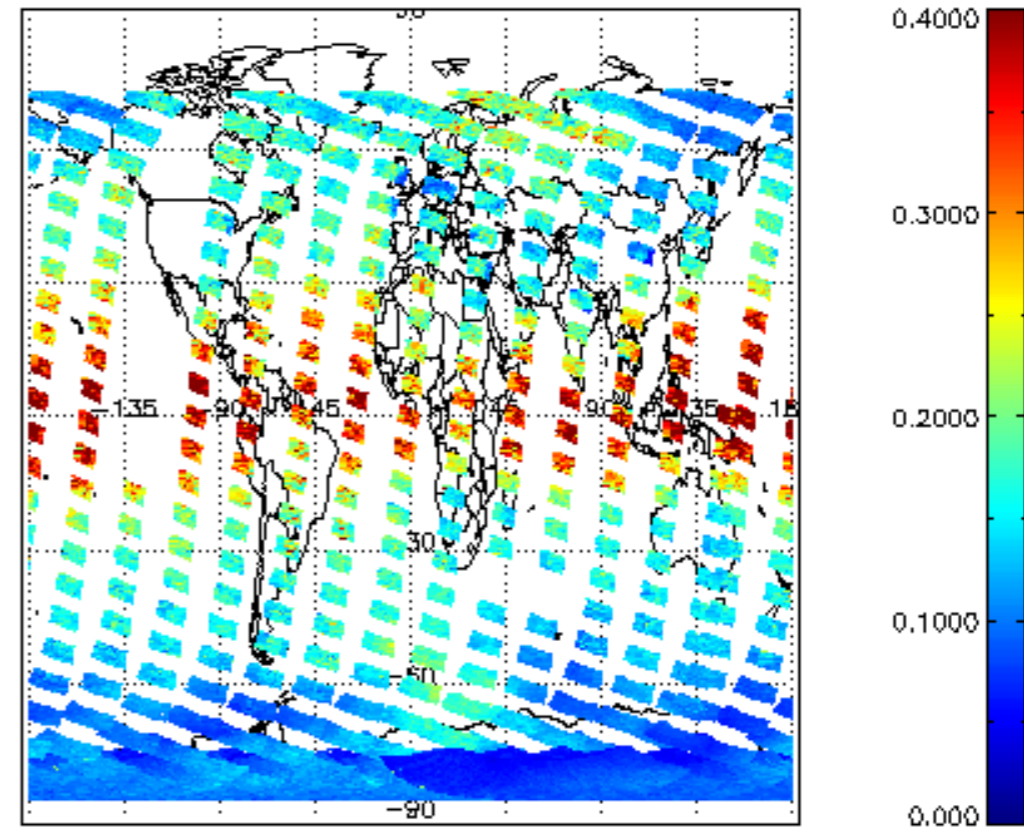




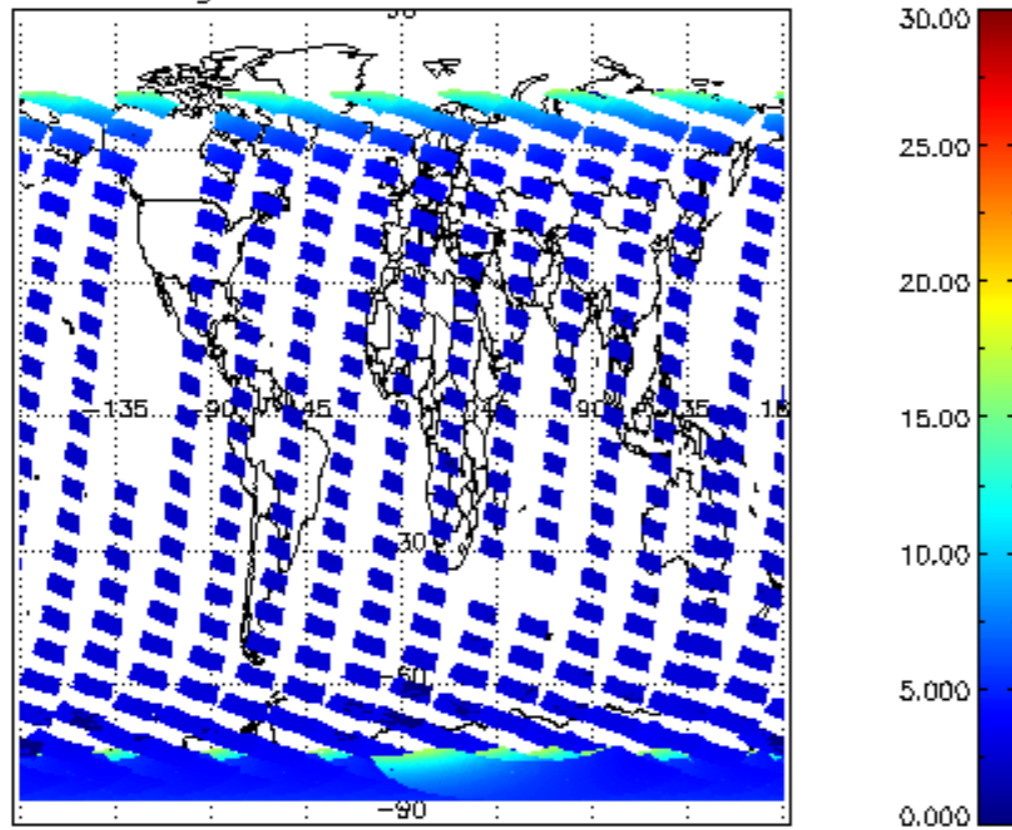
SCIOL2P_NADUV1NO2_vcd for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



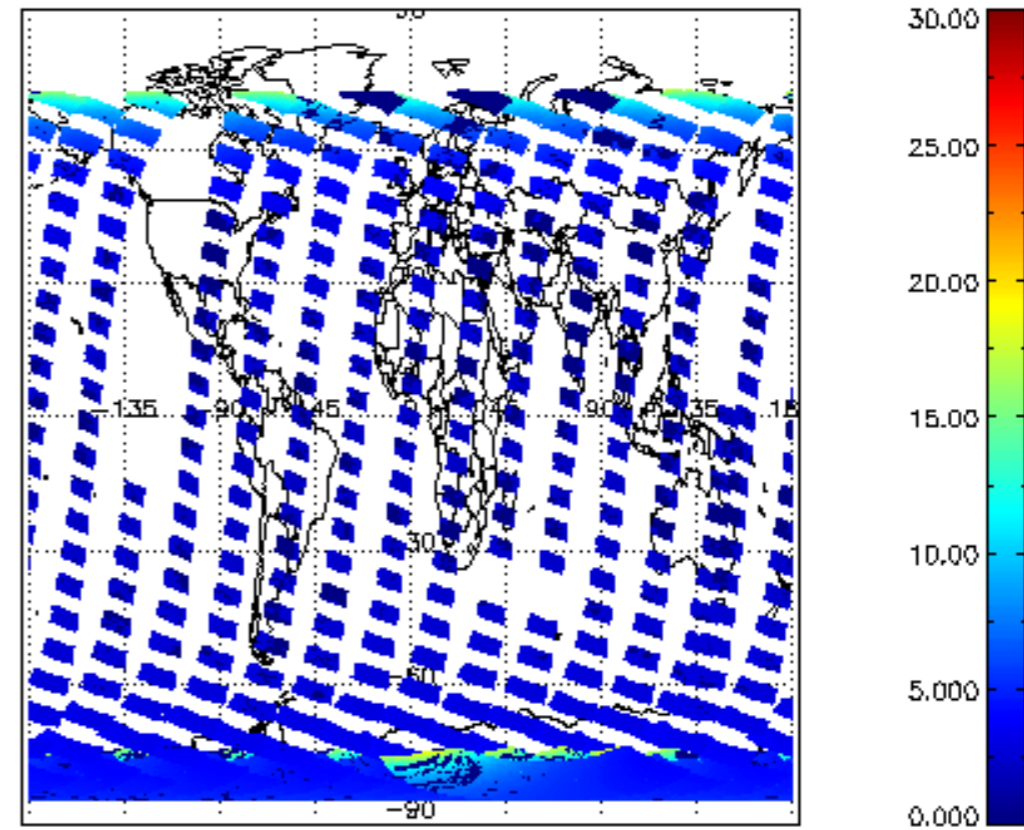
SCIOL2P_NADUV1NO2_vcd_err for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



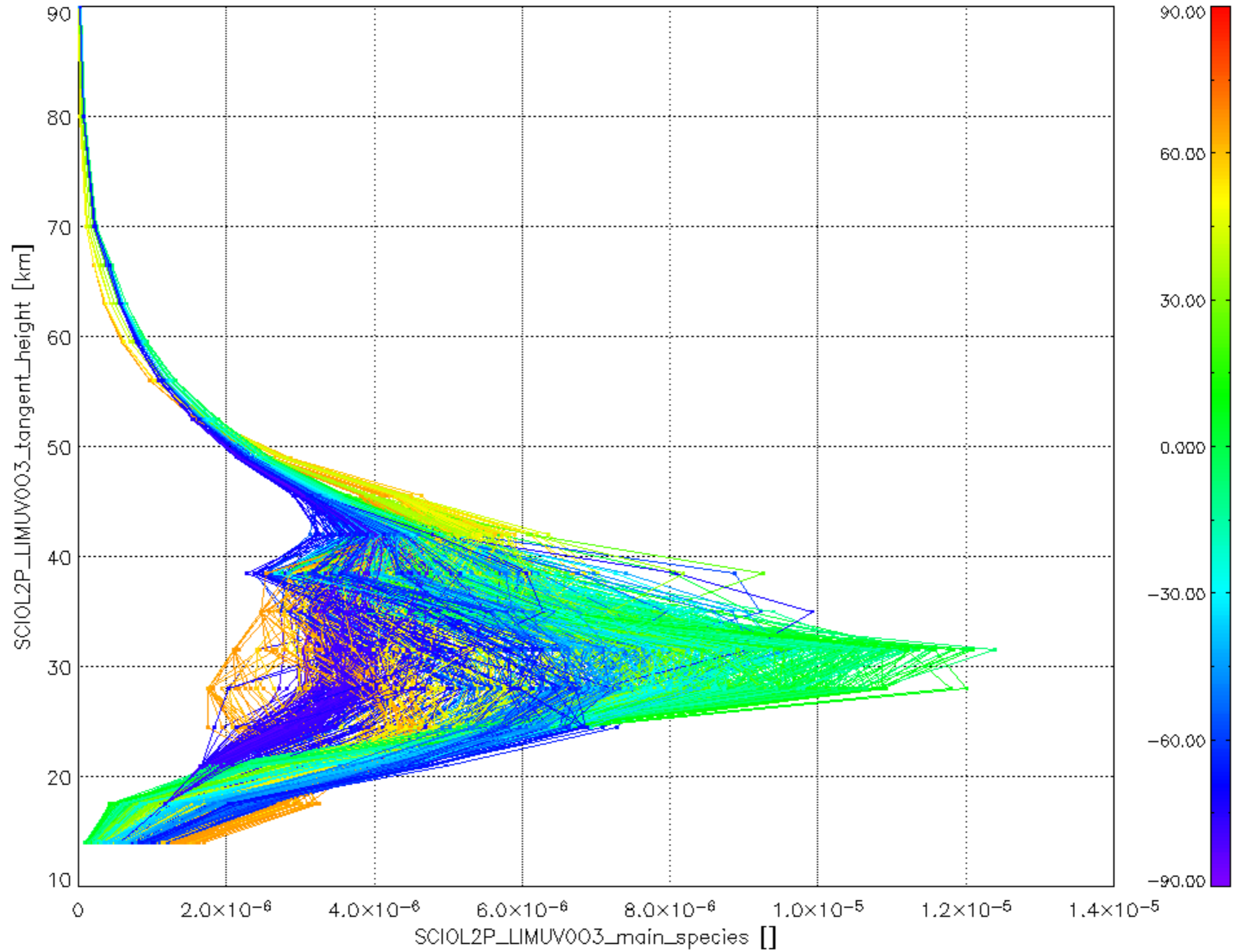
SCIOL2P_NADUV1NO2_amf_gr for 03NOV2008 00:00:00 to 04NOV2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 03NOV2008 00:00:00 to 04NOV2008 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).

