

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	19NOV2008 16:26:00
Data source version	SCIA-OL/3.01-R
Processing scope for products	19NOV2004 00:00:00 to 20NOV2004 00:00:00
Start time of first product within scope	18NOV2004 23:50:58
Stop time of last product within scope	19NOV2004 20:53:47
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__2PRDPA20041118_235058_000033812032_00145_14227_0729.N1	18NOV2004 23:50:58	19NOV2004 00:47:19	0	GOOD
1	SCI_OL__2PRDPA20041119_013134_000033252032_00146_14228_0676.N1	19NOV2004 01:31:34	19NOV2004 02:27:00	0	GOOD
2	SCI_OL__2PRDPA20041119_031210_000033812032_00147_14229_0659.N1	19NOV2004 03:12:10	19NOV2004 04:08:32	0	GOOD
3	SCI_OL__2PRDPA20041119_045247_000033252032_00148_14230_0777.N1	19NOV2004 04:52:47	19NOV2004 05:48:12	0	GOOD
4	SCI_OL__2PRDPA20041119_063323_000033812032_00149_14231_0764.N1	19NOV2004 06:33:23	19NOV2004 07:29:44	0	GOOD
5	SCI_OL__2PRDPA20041119_081359_000033252032_00150_14232_0639.N1	19NOV2004 08:13:59	19NOV2004 09:09:25	0	GOOD
6	SCI_OL__2PRDPA20041119_095435_000033812032_00151_14233_0677.N1	19NOV2004 09:54:35	19NOV2004 10:50:57	0	GOOD
7	SCI_OL__2PRDPA20041119_113512_000033252032_00152_14234_0688.N1	19NOV2004 11:35:12	19NOV2004 12:30:37	0	GOOD
8	SCI_OL__2PRDPA20041119_131548_000033812032_00153_14235_0620.N1	19NOV2004 13:15:48	19NOV2004 14:12:09	0	GOOD
9	SCI_OL__2PRDPA20041119_145624_000033252032_00154_14236_0630.N1	19NOV2004 14:56:24	19NOV2004 15:51:49	0	GOOD
10	SCI_OL__2PRDPA20041119_163700_000033812032_00155_14237_0670.N1	19NOV2004 16:37:00	19NOV2004 17:33:22	0	GOOD
11	SCI_OL__2PRDPA20041119_181730_000033862032_00156_14238_0739.N1	19NOV2004 18:17:30	19NOV2004 19:13:56	0	GOOD
12	SCI_OL__2PRDPA20041119_195834_000033122032_00157_14239_0728.N1	19NOV2004 19:58:34	19NOV2004 20:53:47	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: 135009

Total number of cloud data DSRs with good quality flag (=0): 135009 (100.0 %)

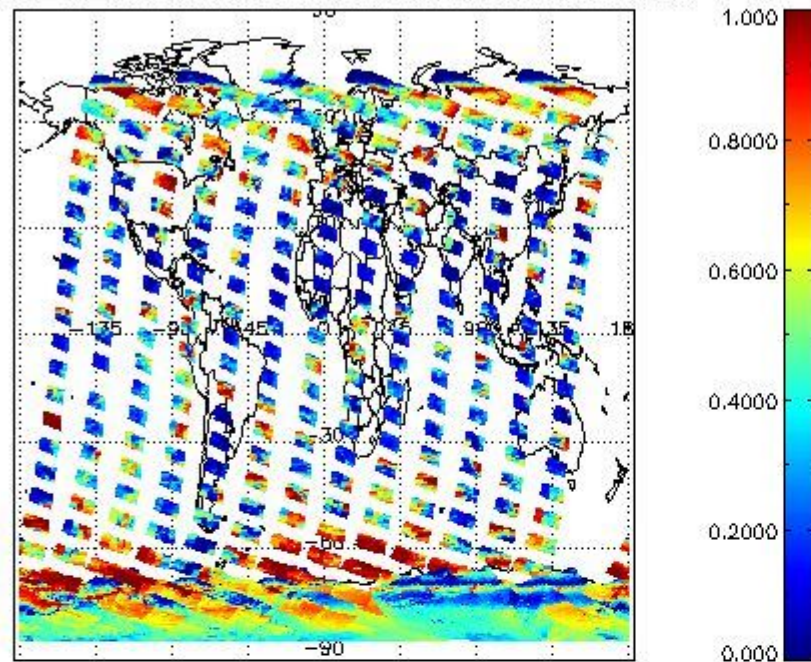
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	135009	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	135009	0.17002	0.12500	0.12500	0.25000	0.060005	s
CL_FRAC	135009	0.42484	0.41241	0.0000	1.0000	0.28052	-
CL_FRAC_ERR	135009	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	135009	5.4405	4.0000	4.0000	8.0000	1.9202	
PMD_READ_CL[0]	135009	0.31816	0.0000	0.0000	8.0000	1.2990	-
PMD_READ_CL[1]	135009	0.40294	0.0000	0.0000	8.0000	1.3212	-
CL_TOP_HEIGHT	114469	4.2710	3.1358	0.0000	17.000	3.8547	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	114469	50.068	34.395	0.0000	101.00	39.748	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	135009	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	135009	11001001	11000100	11000000	11100000	3037.3	flags
AERO_ABSO_IND	135009	0.75553	0.49067	-4.1911	12.739	1.0889	
AERO_IND_DIAG	135009	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	135009	01010111	00000000	00000000	11000000	24480.	flags

Time and geolocation plots:

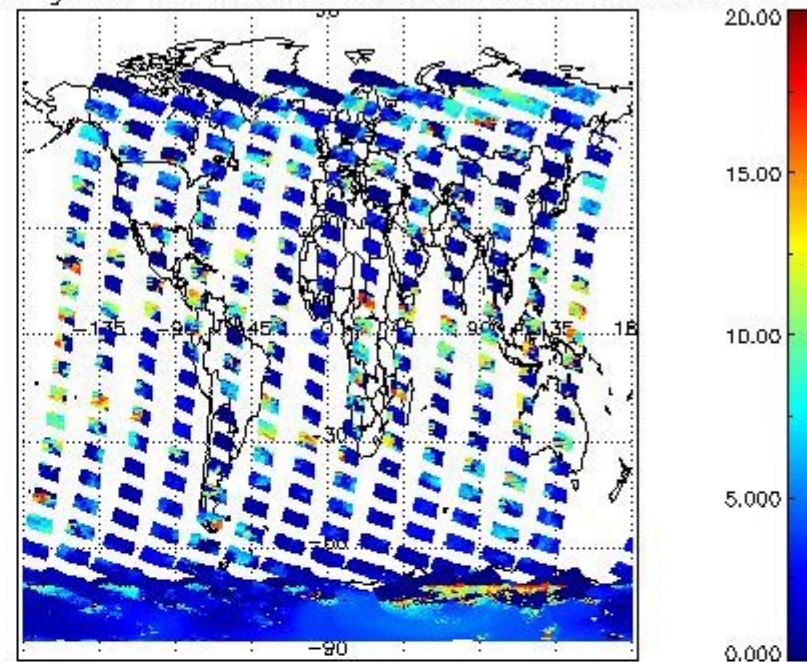
Plots are available for the following parameters:

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

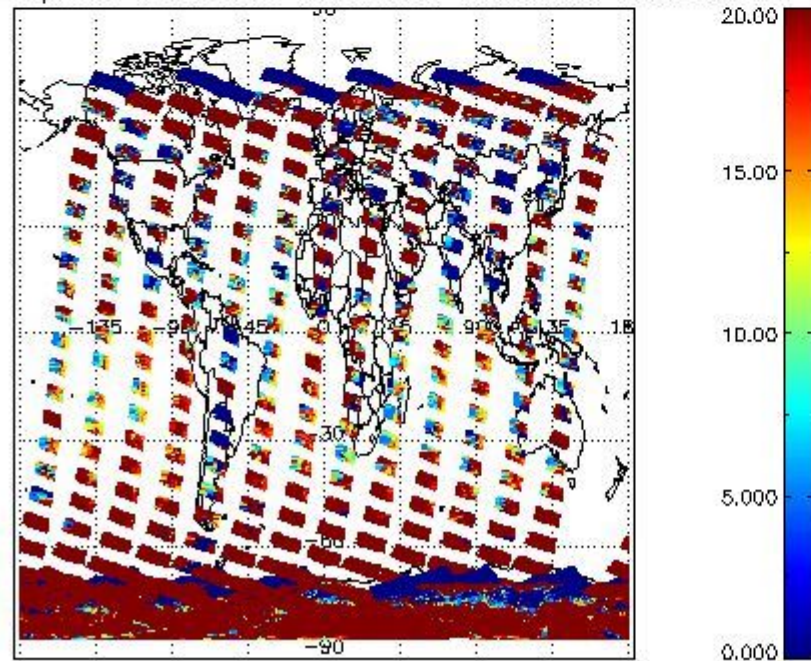
cLfrac for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



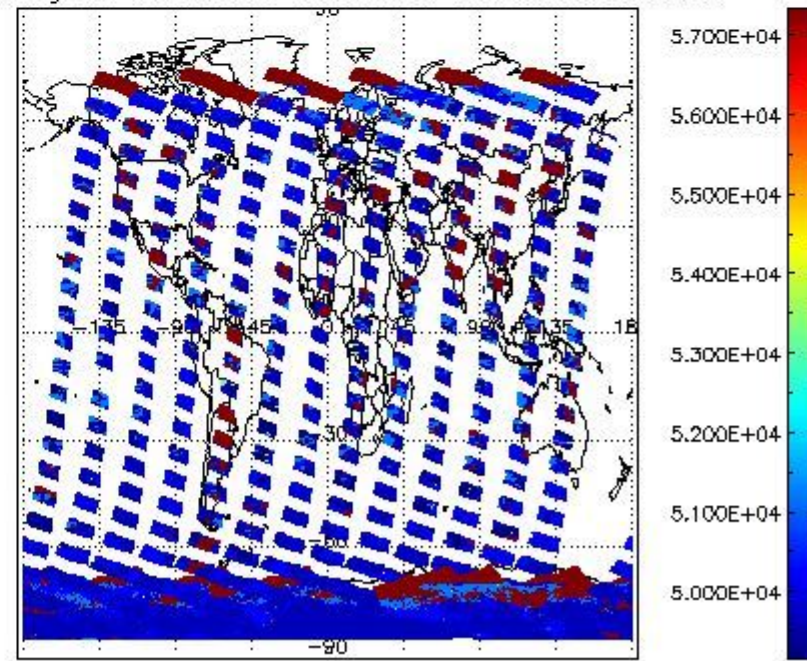
cL_top_height for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



cLopt_depth for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



cloud_flags for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



2.2.2 Nadir

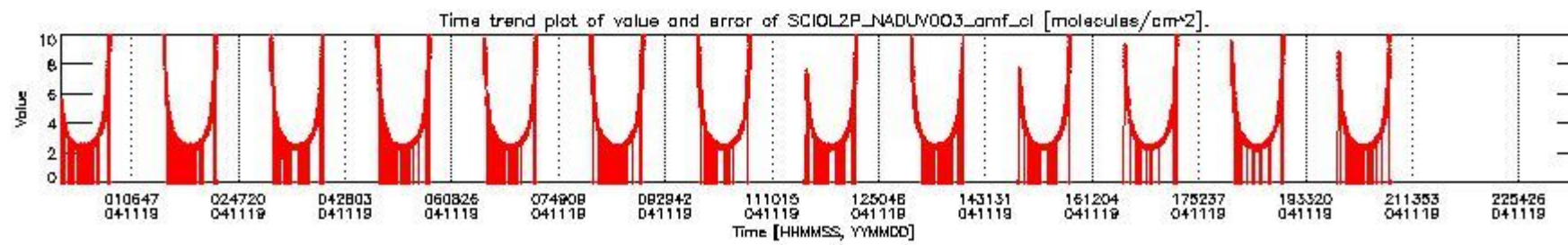
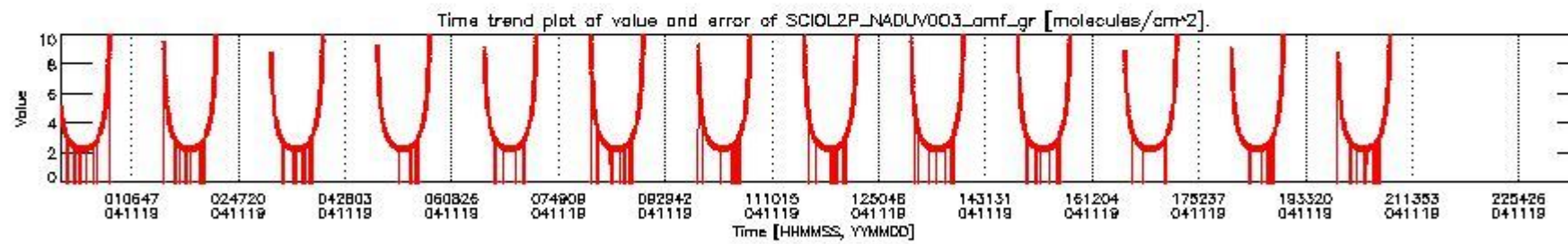
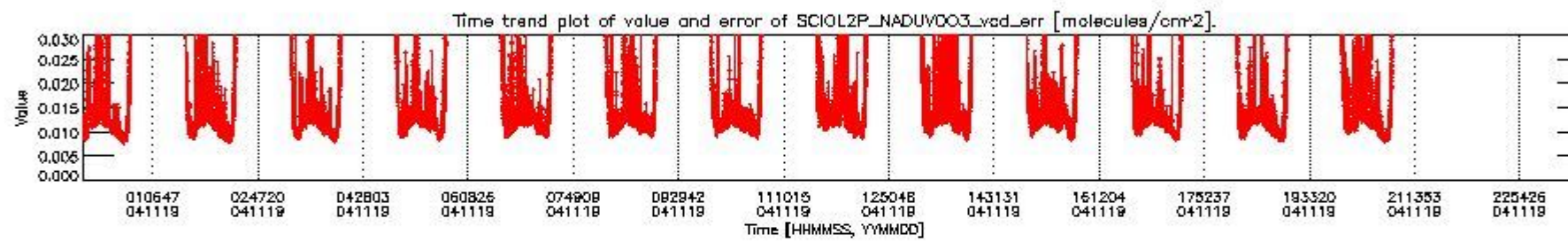
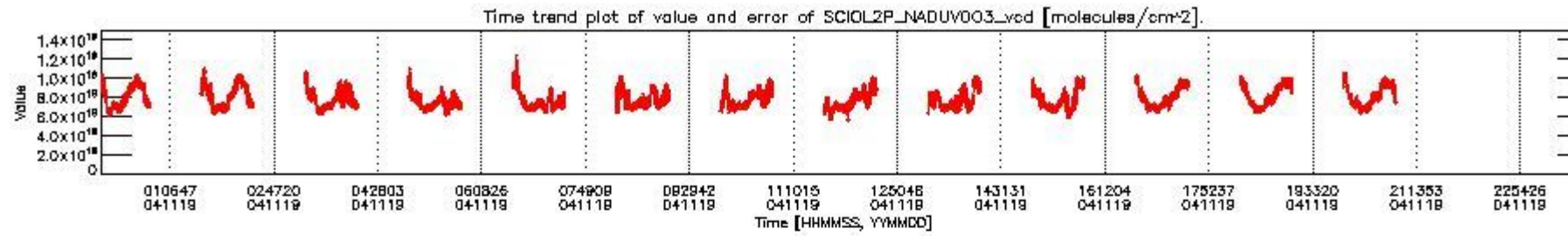
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

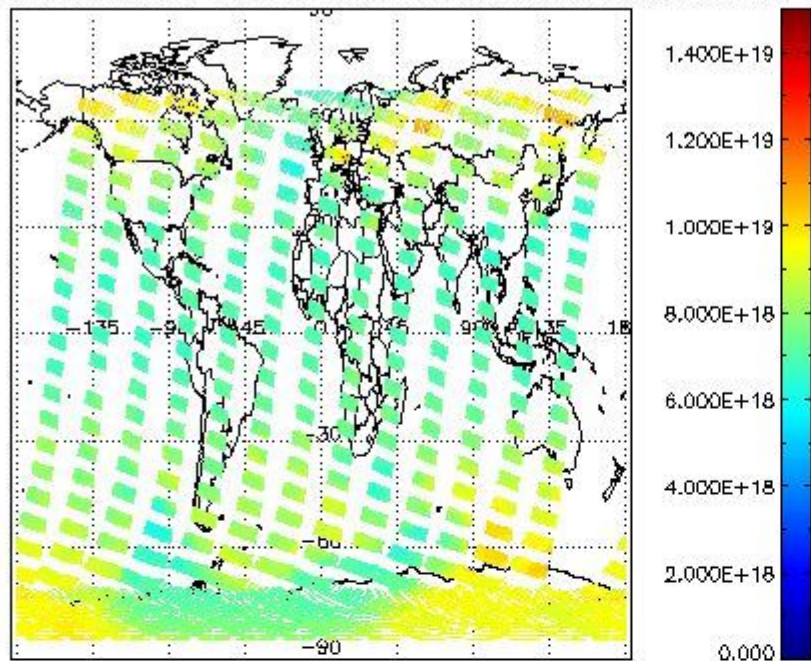
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

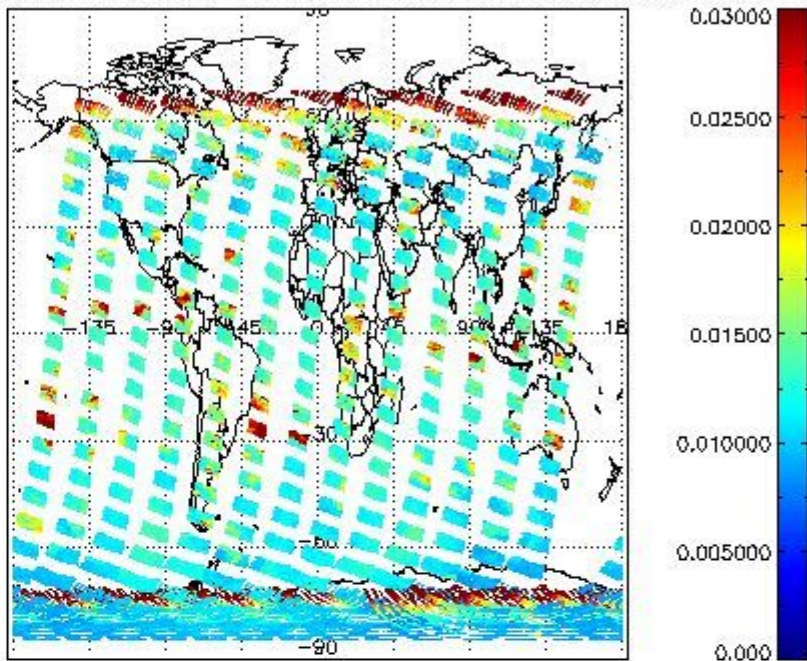
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



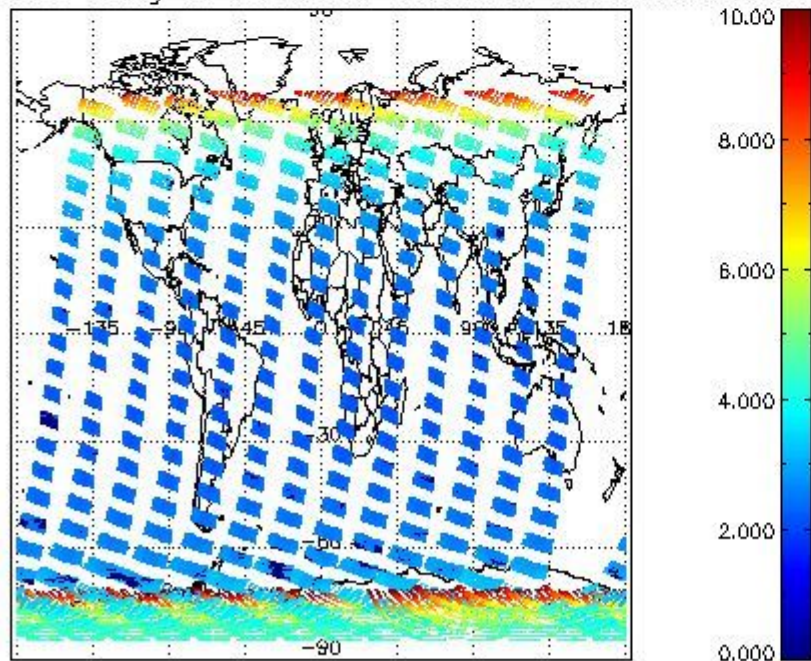
SCIOL2P_NADUV003_vcd for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



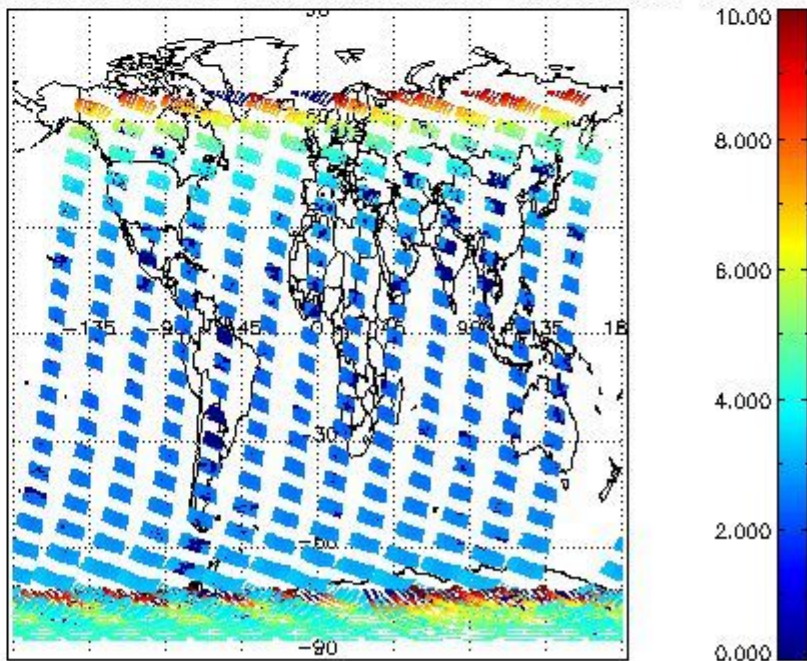
SCIOL2P_NADUV003_vcd_err for 19NOV2004 00:00:00 to 20NOV2004 00:00:00

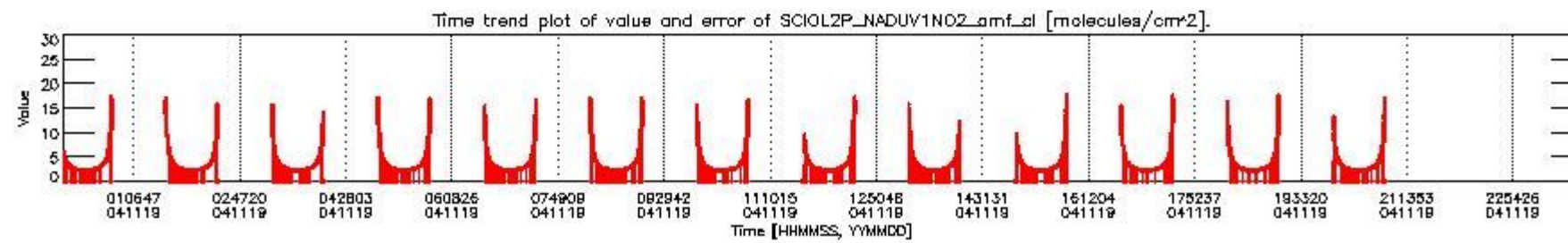
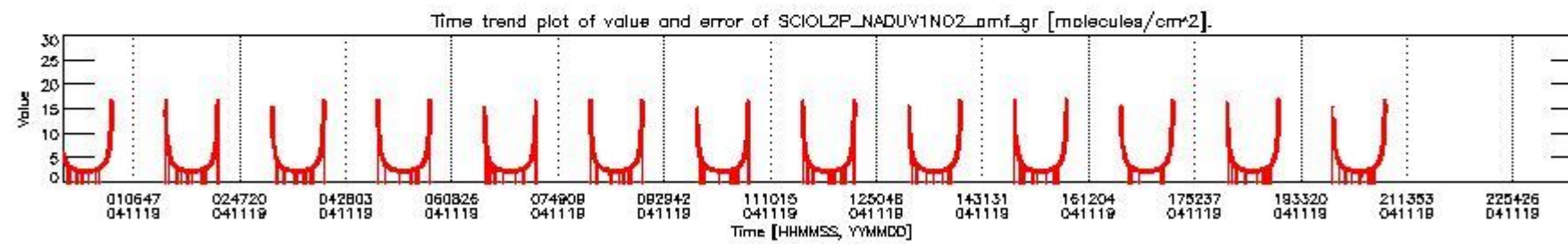
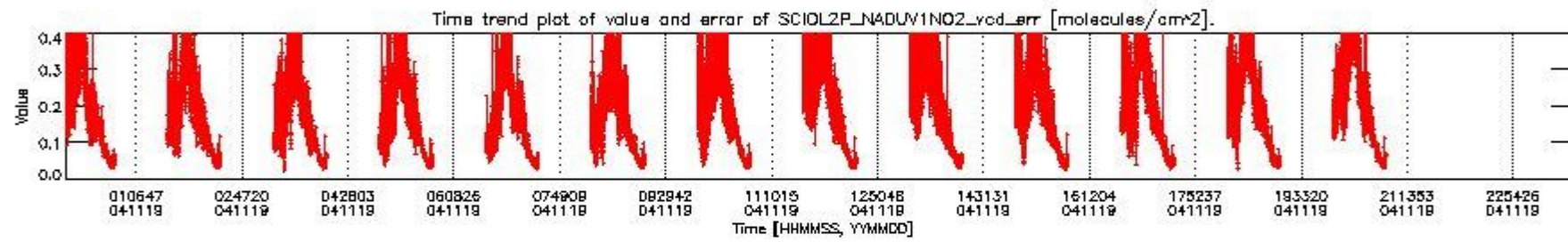
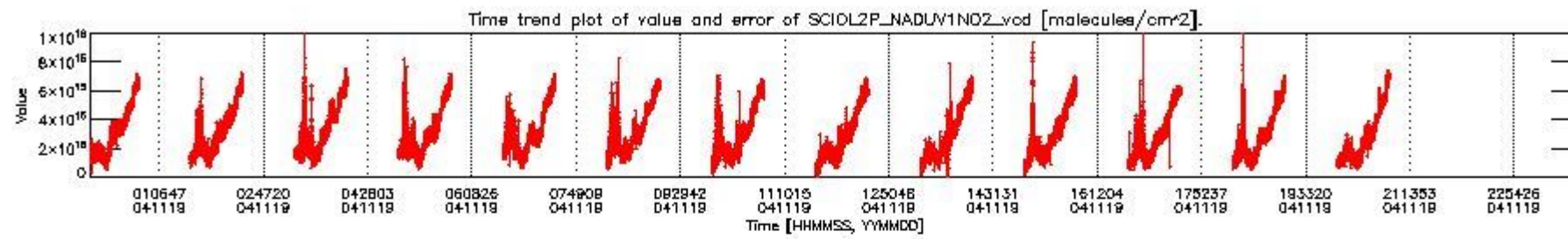


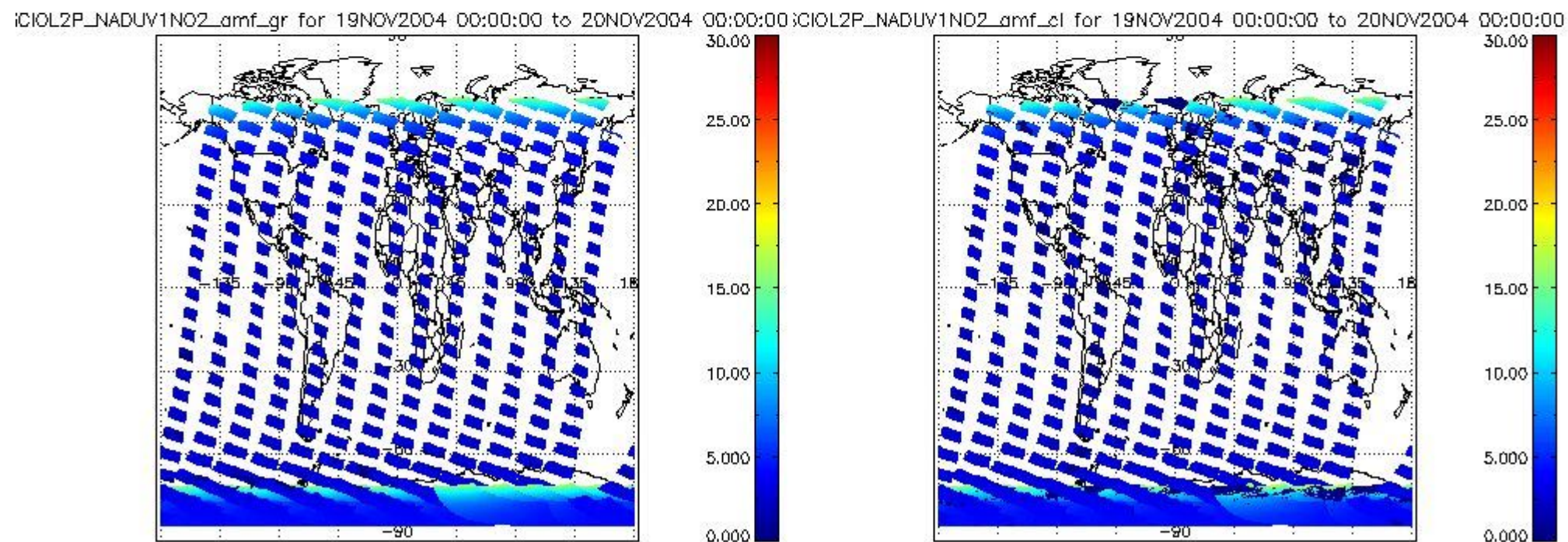
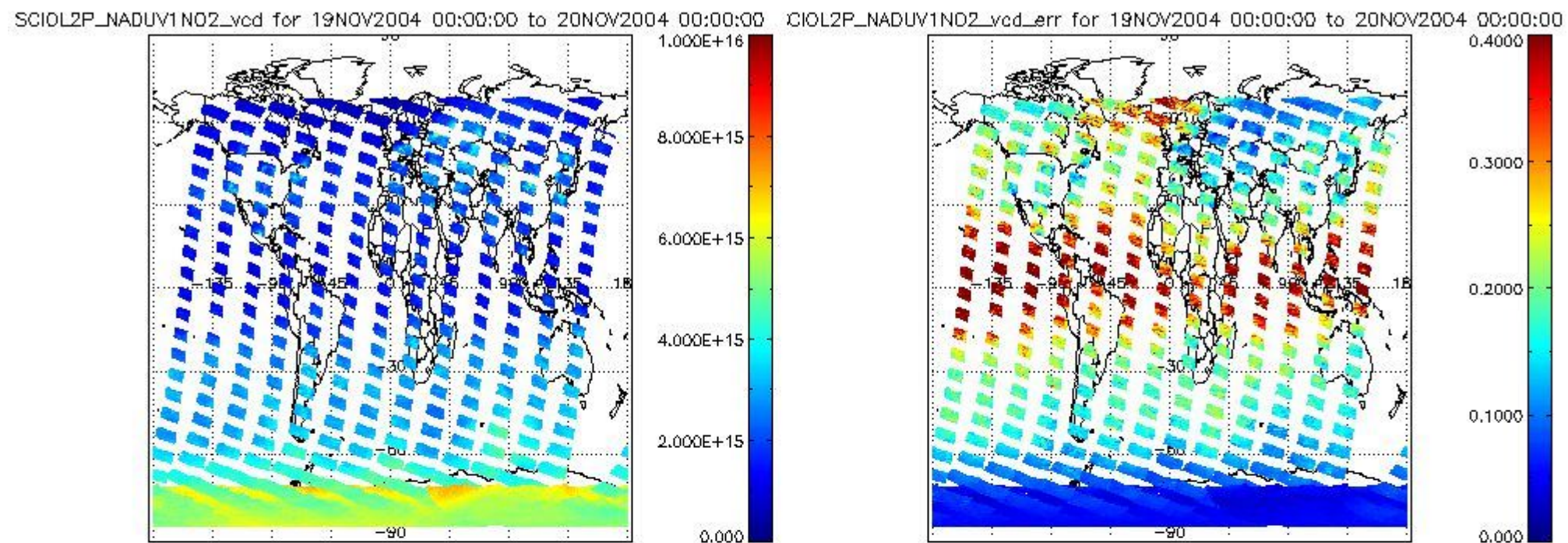
SCIOL2P_NADUV003_amf_gr for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 19NOV2004 00:00:00 to 20NOV2004 00:00:00







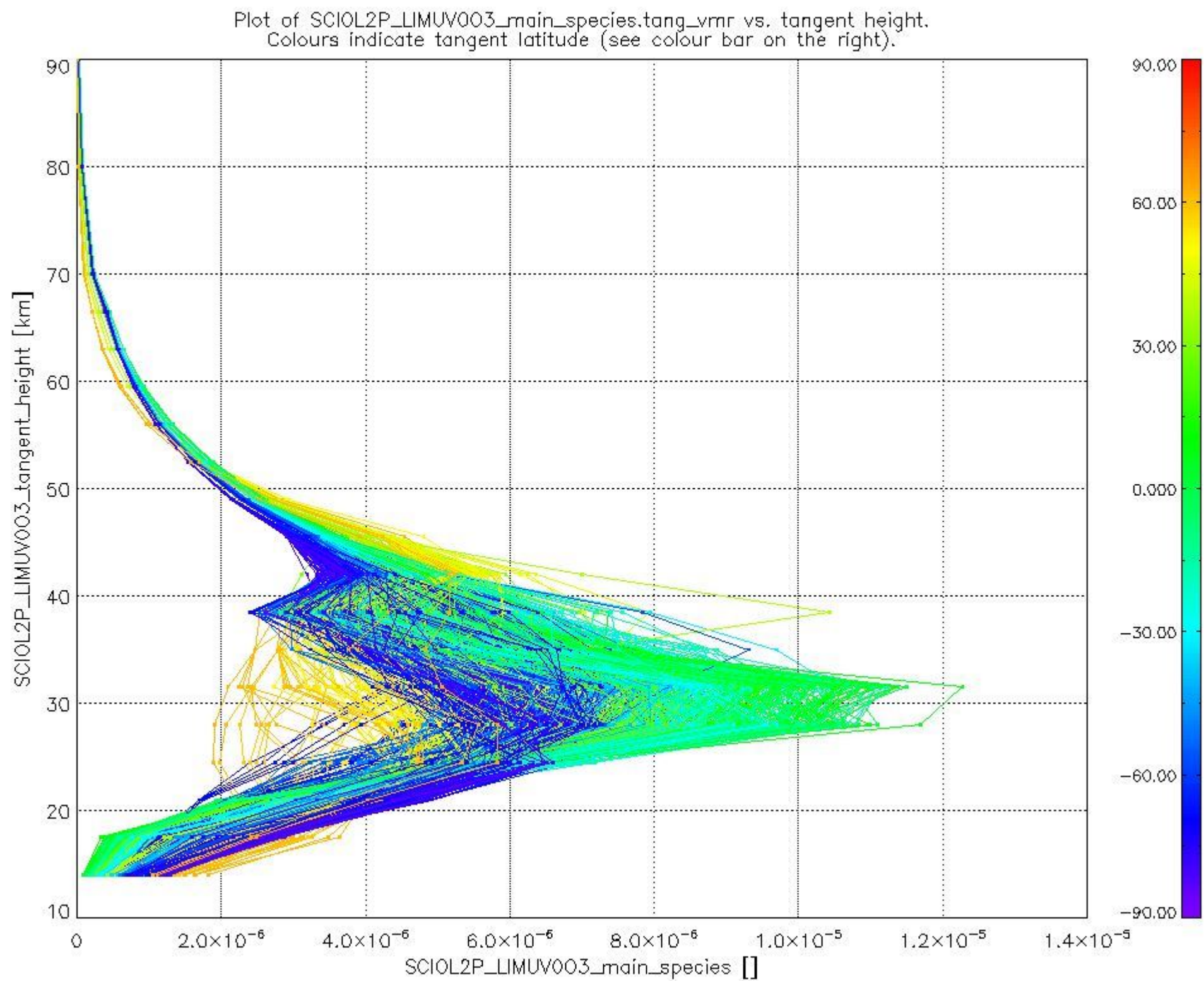
2.2.3 Limb

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

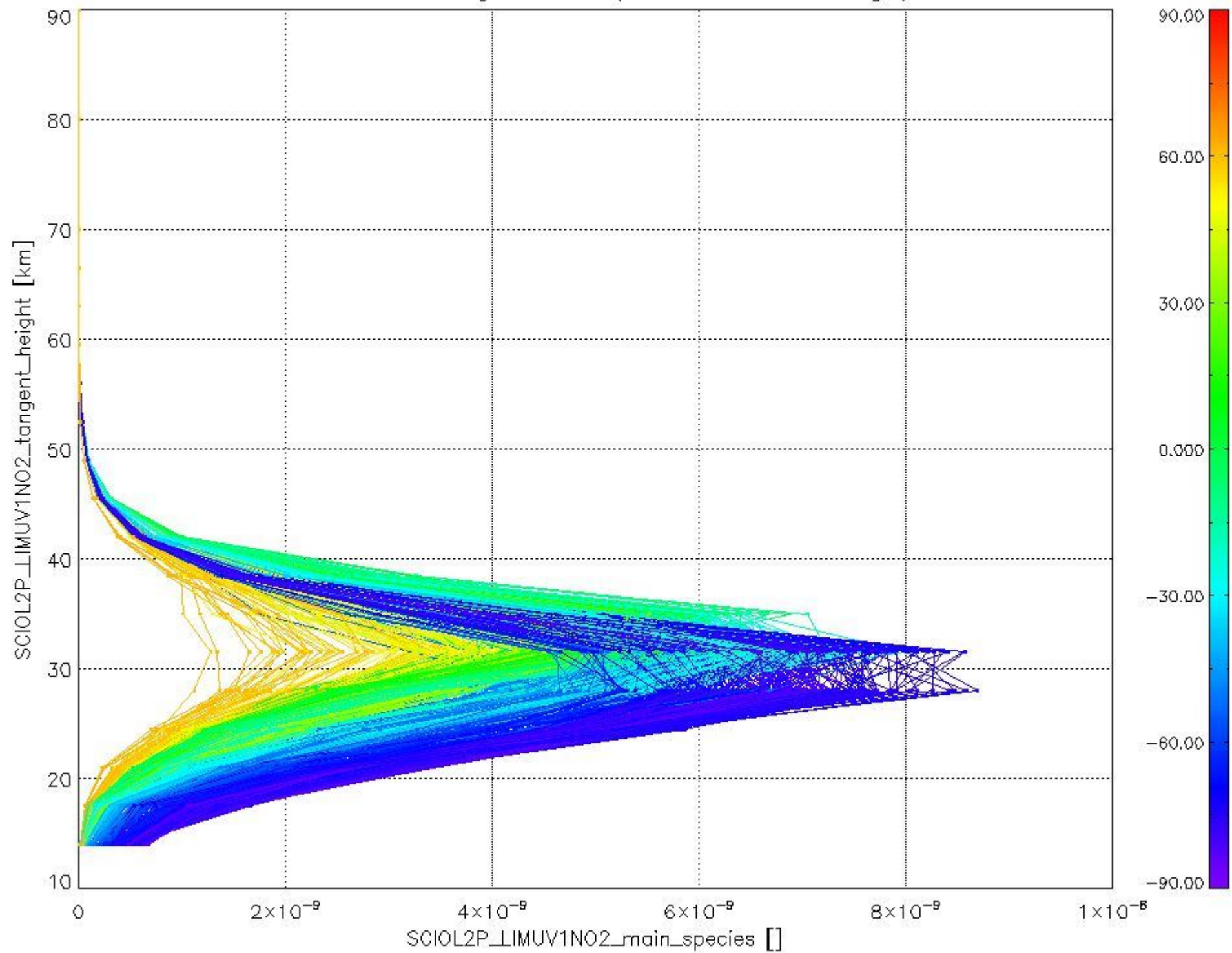
The following data items are currently included into this section:

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.



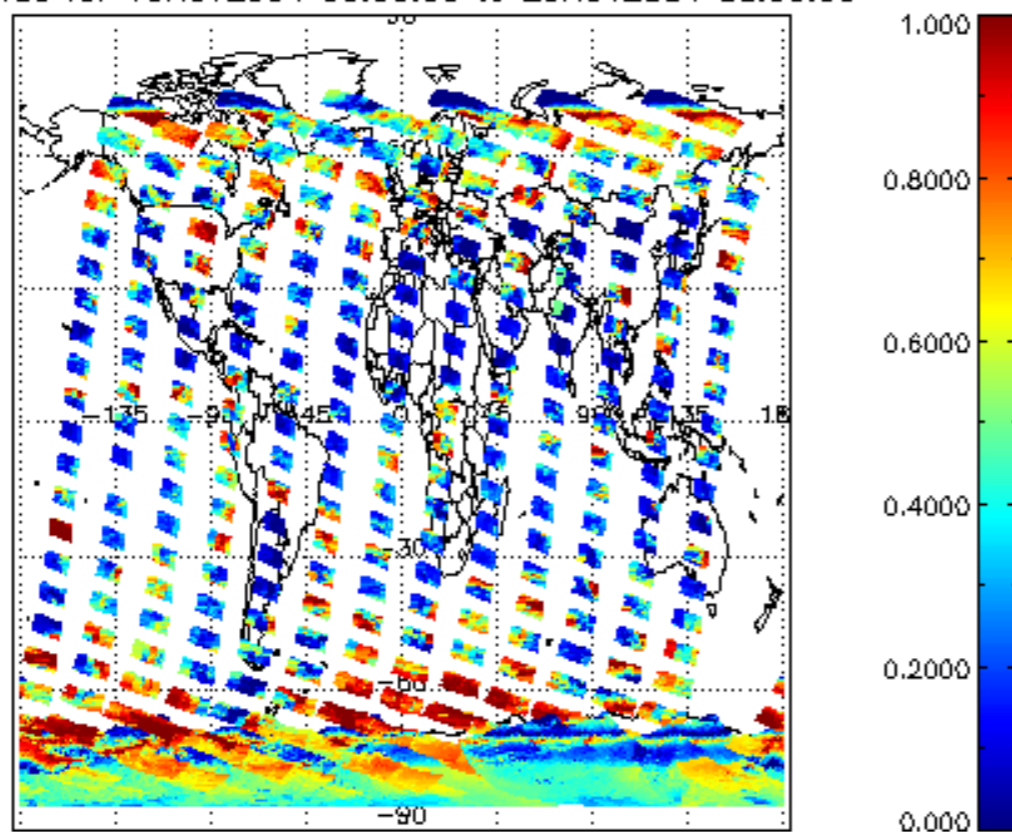
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



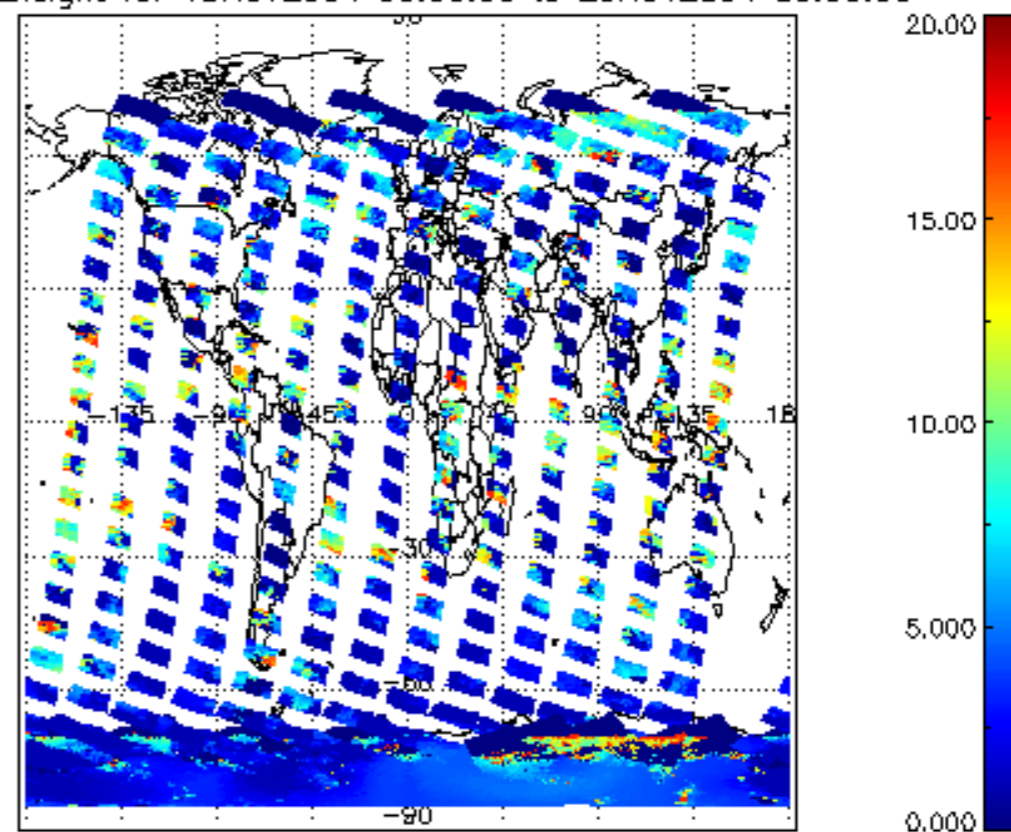
2.3 ADF monitoring

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

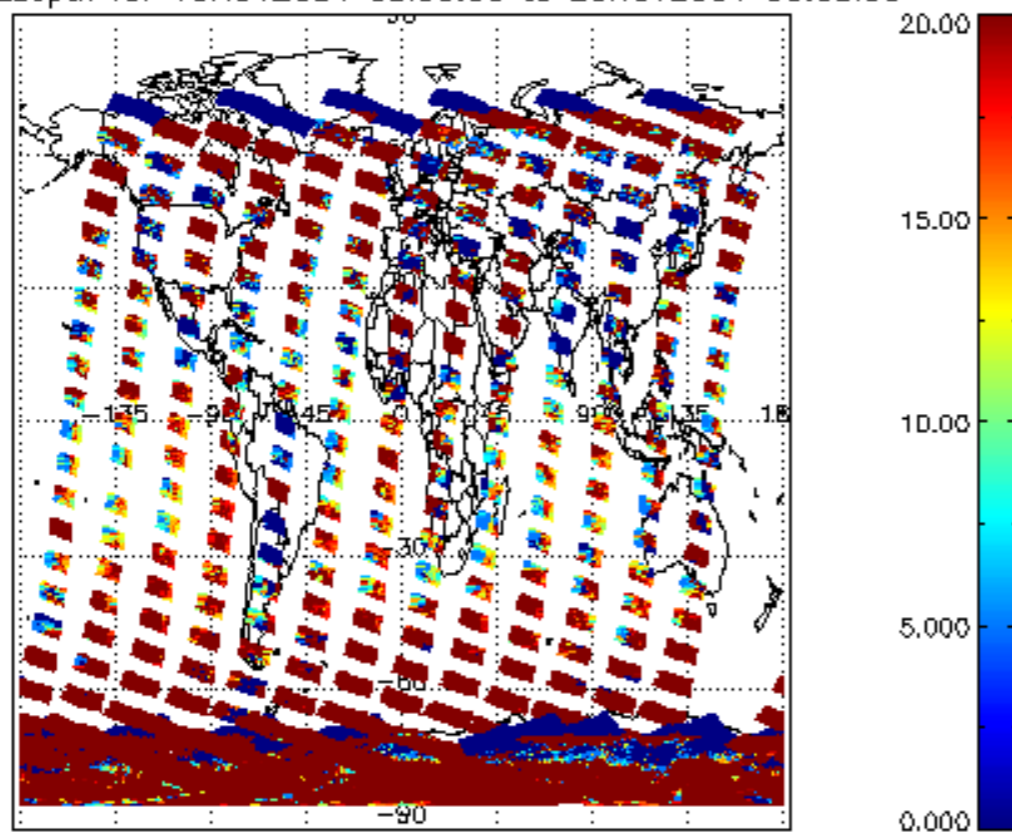
cLfrac for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



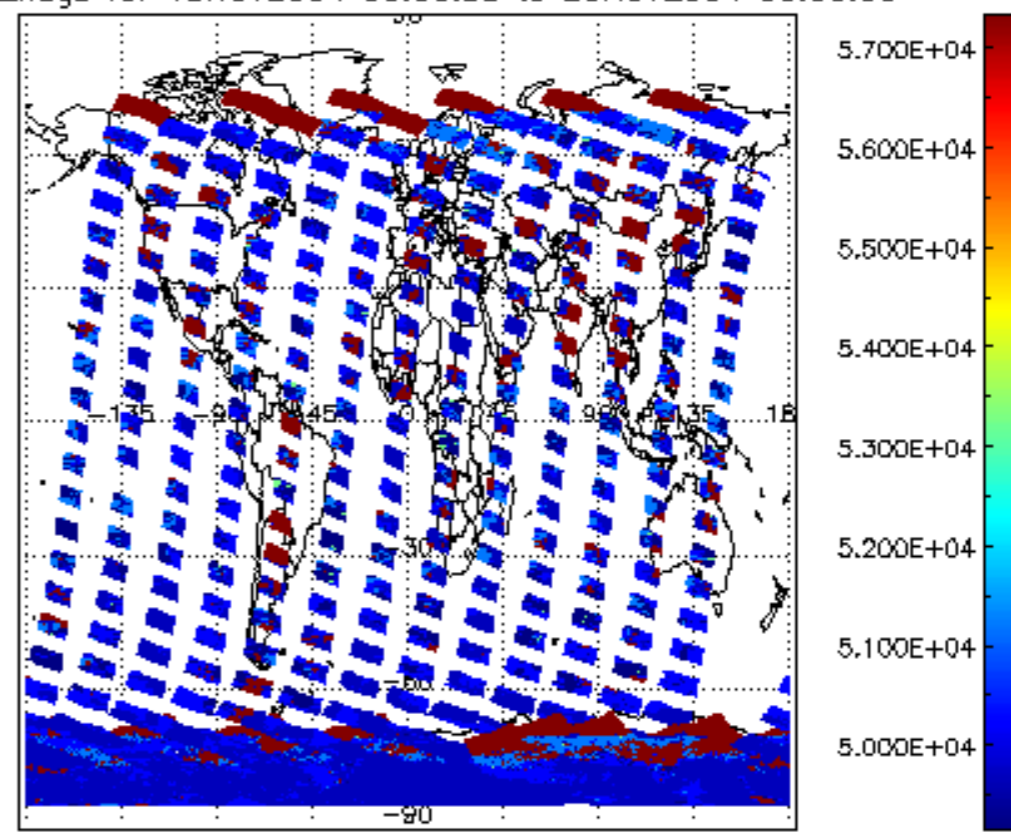
cL_top_height for 19NOV2004 00:00:00 to 20NOV2004 00:00:00

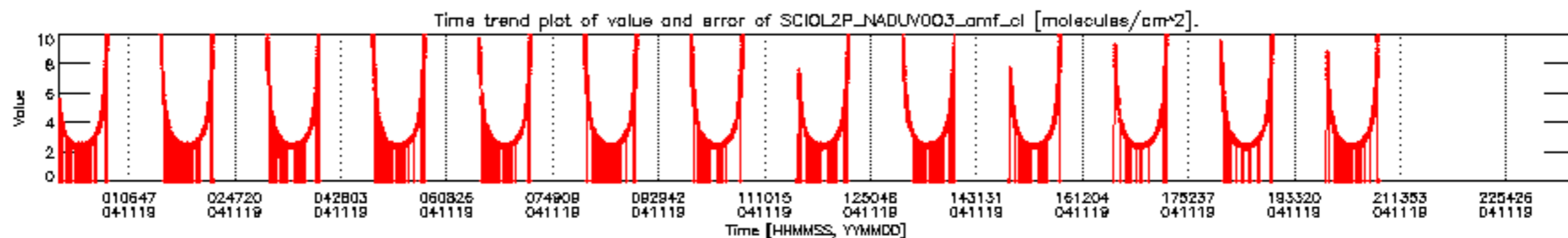
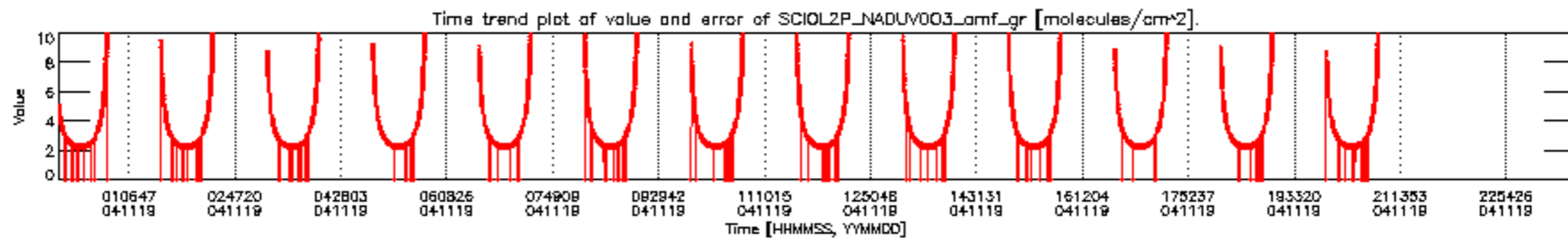
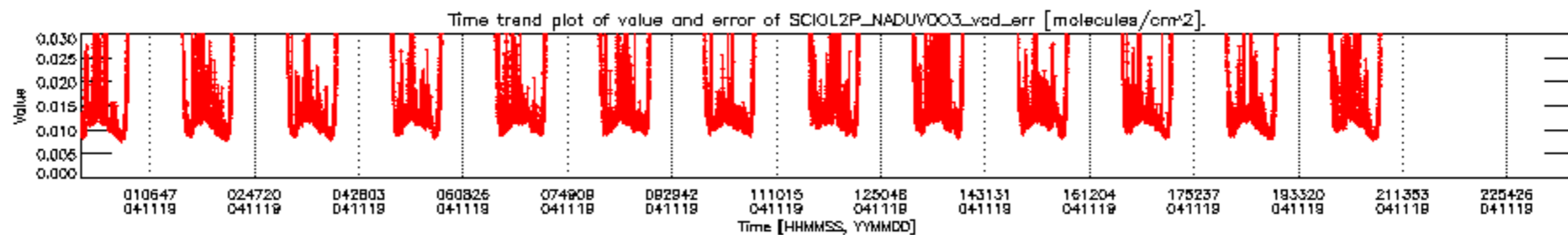
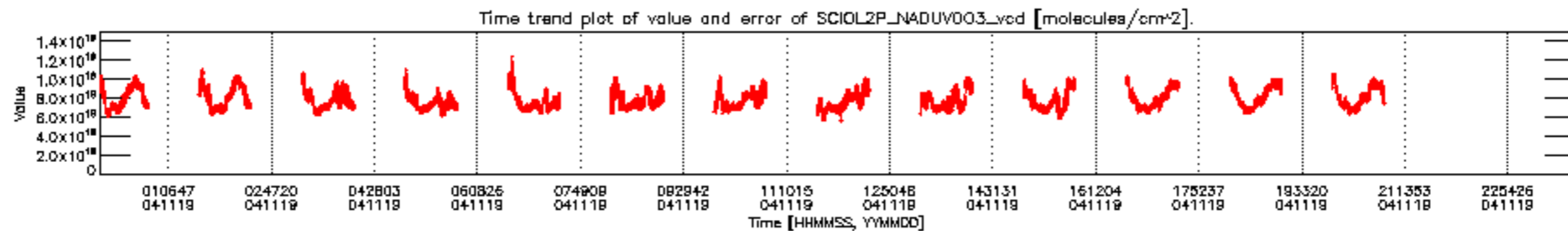


cL_opt_depth for 19NOV2004 00:00:00 to 20NOV2004 00:00:00

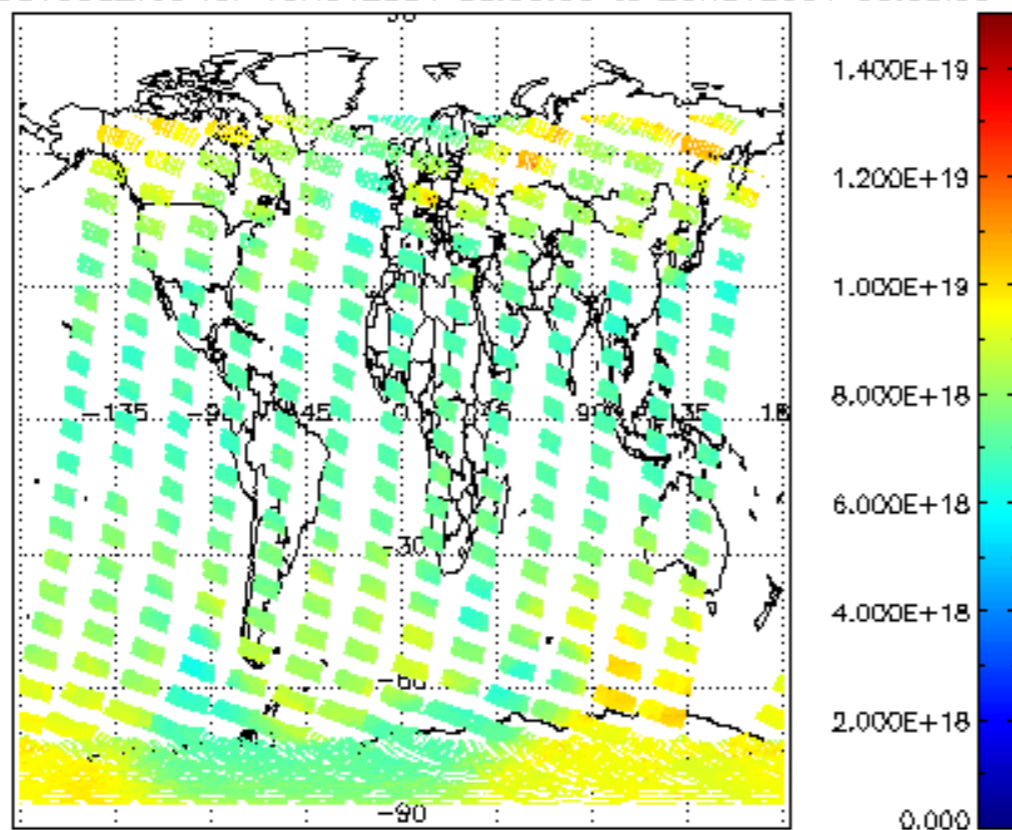


cloud_flags for 19NOV2004 00:00:00 to 20NOV2004 00:00:00

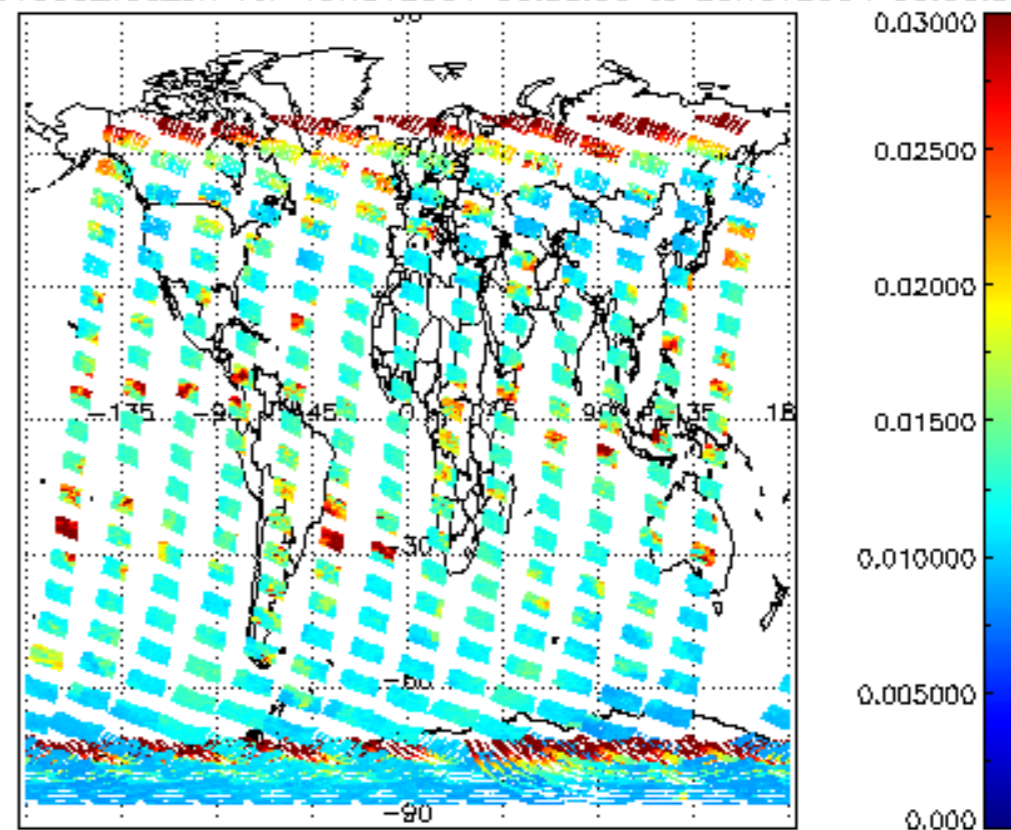




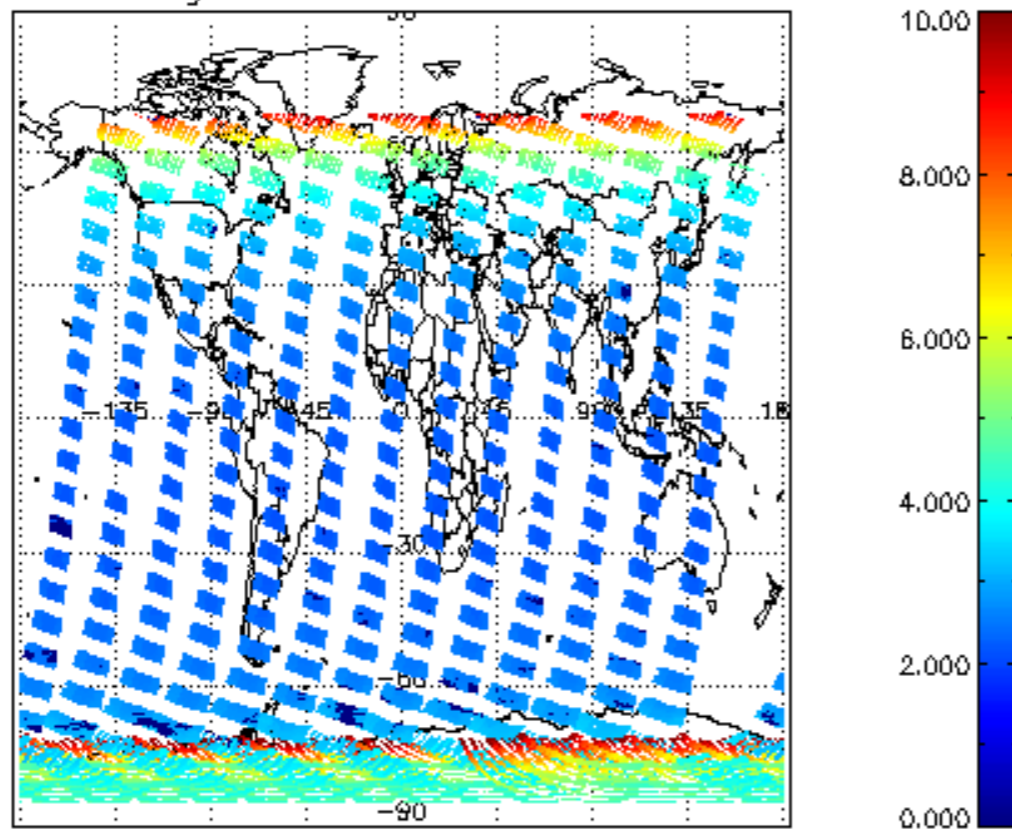
SCIOL2P_NADUV003_vcd for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



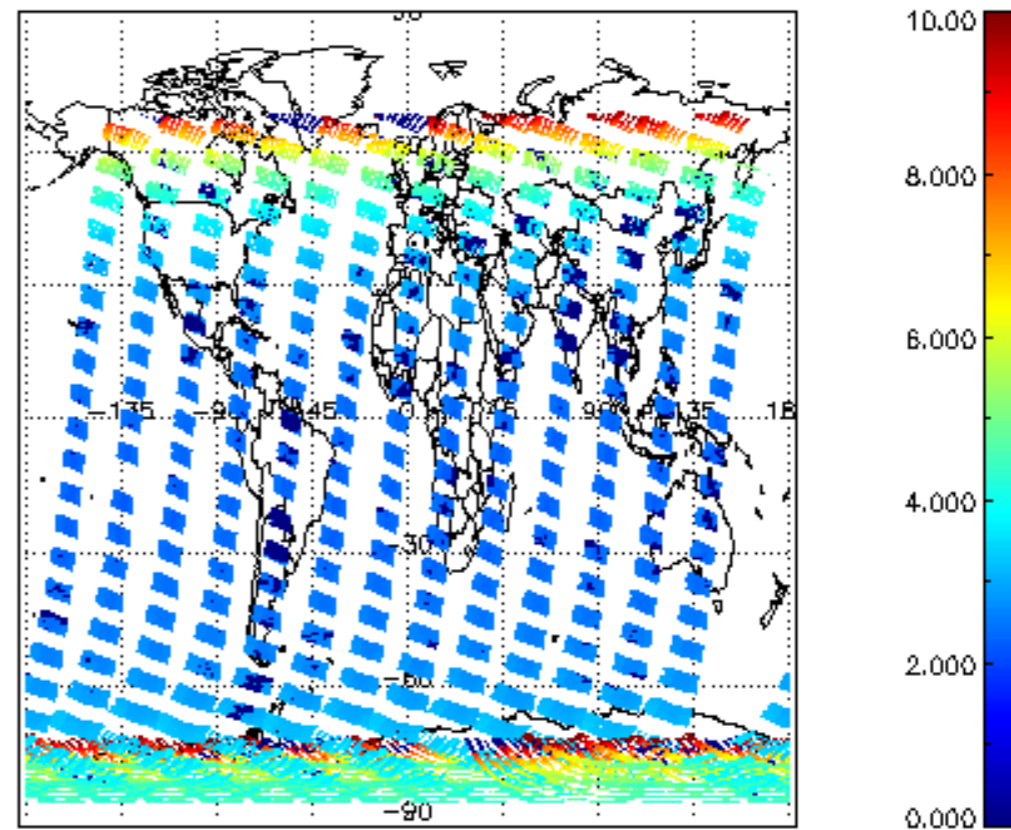
SCIOL2P_NADUV003_vcd_err for 19NOV2004 00:00:00 to 20NOV2004 00:00:00

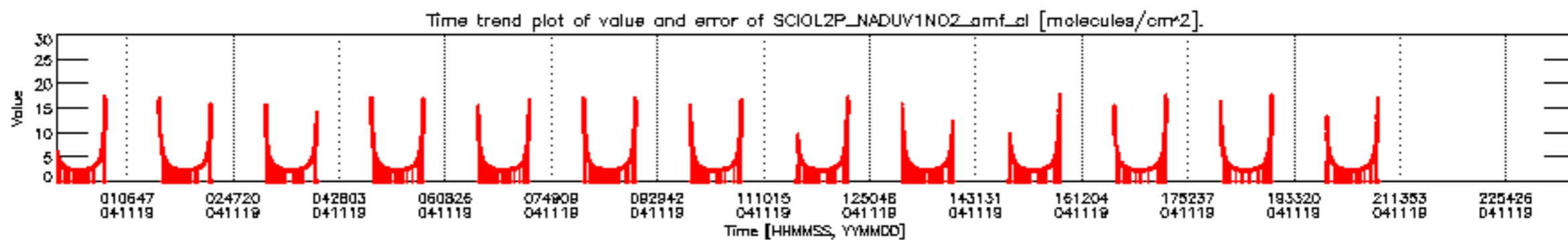
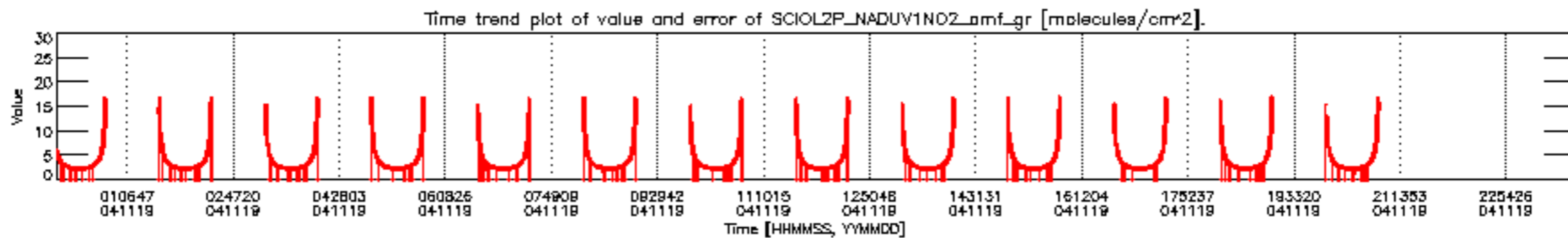
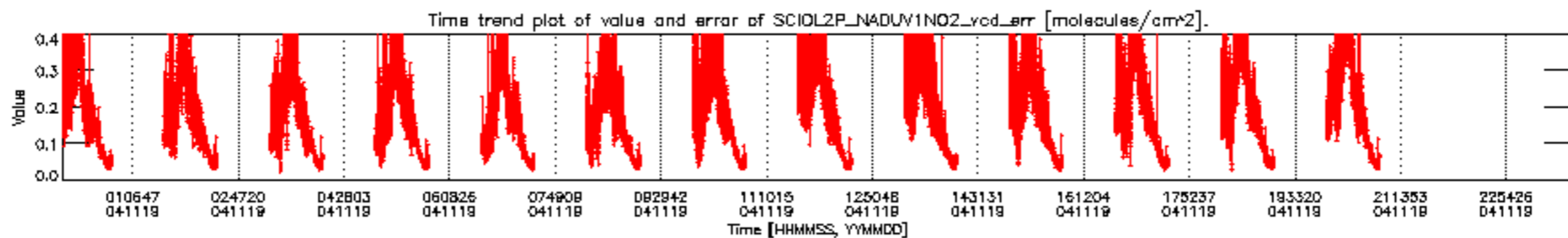
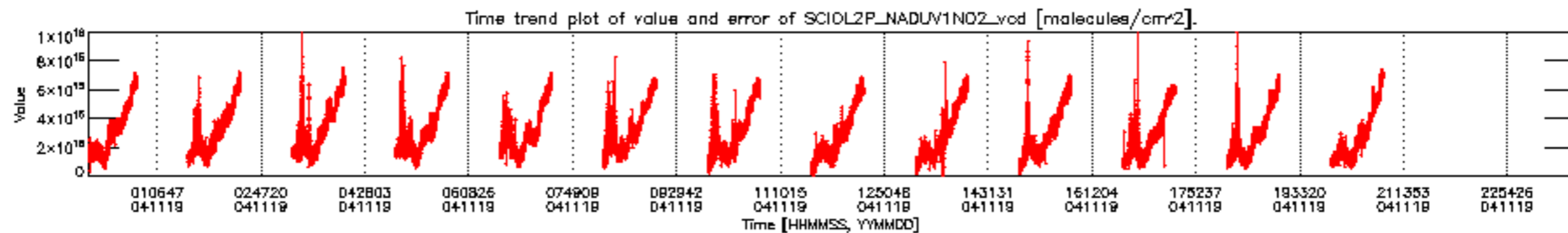


SCIOL2P_NADUV003_amf_gr for 19NOV2004 00:00:00 to 20NOV2004 00:00:00

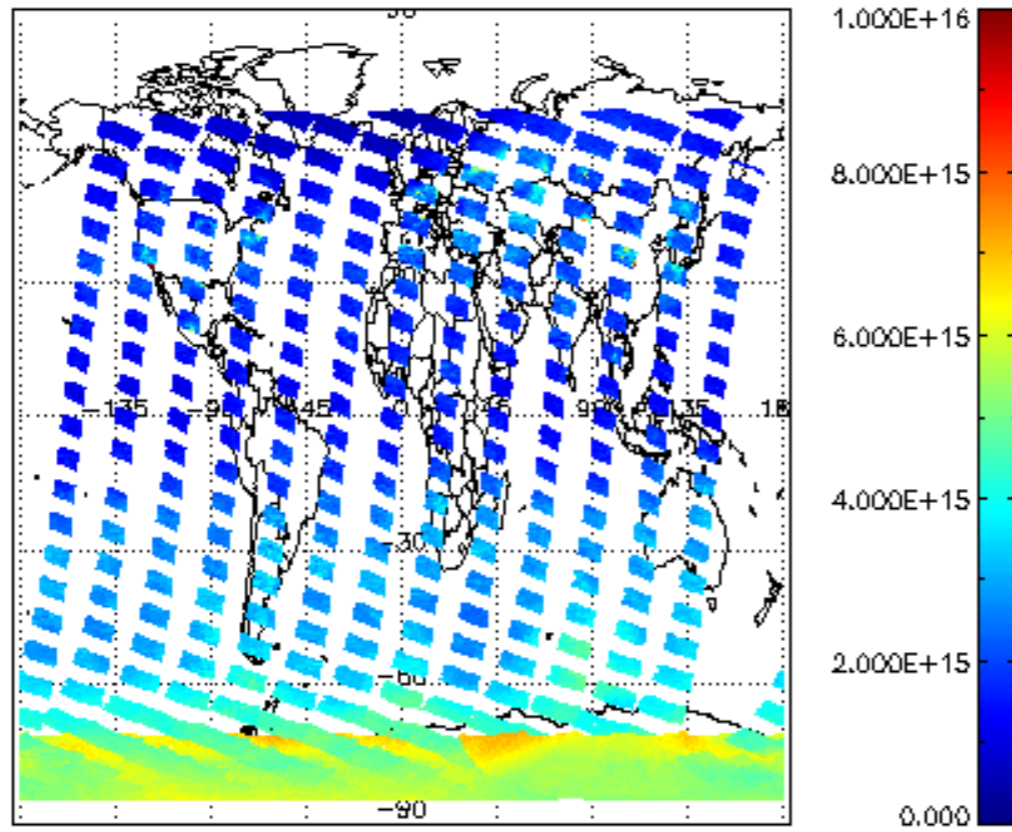


SCIOL2P_NADUV003_amf_cl for 19NOV2004 00:00:00 to 20NOV2004 00:00:00

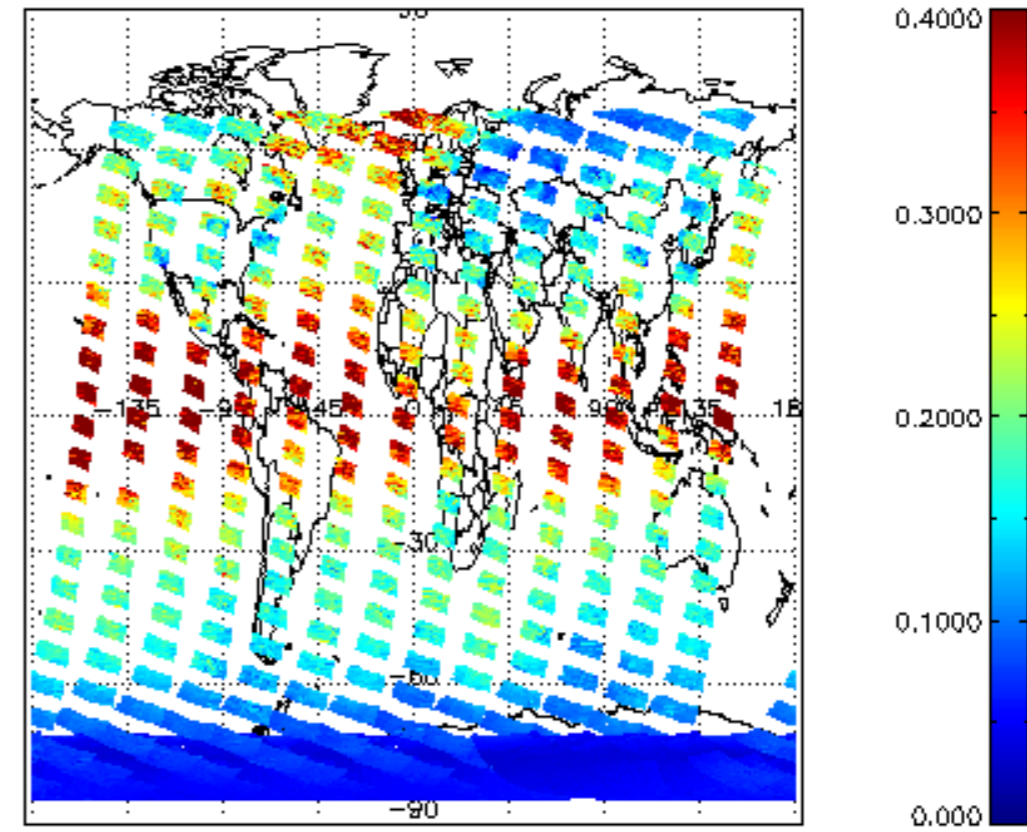




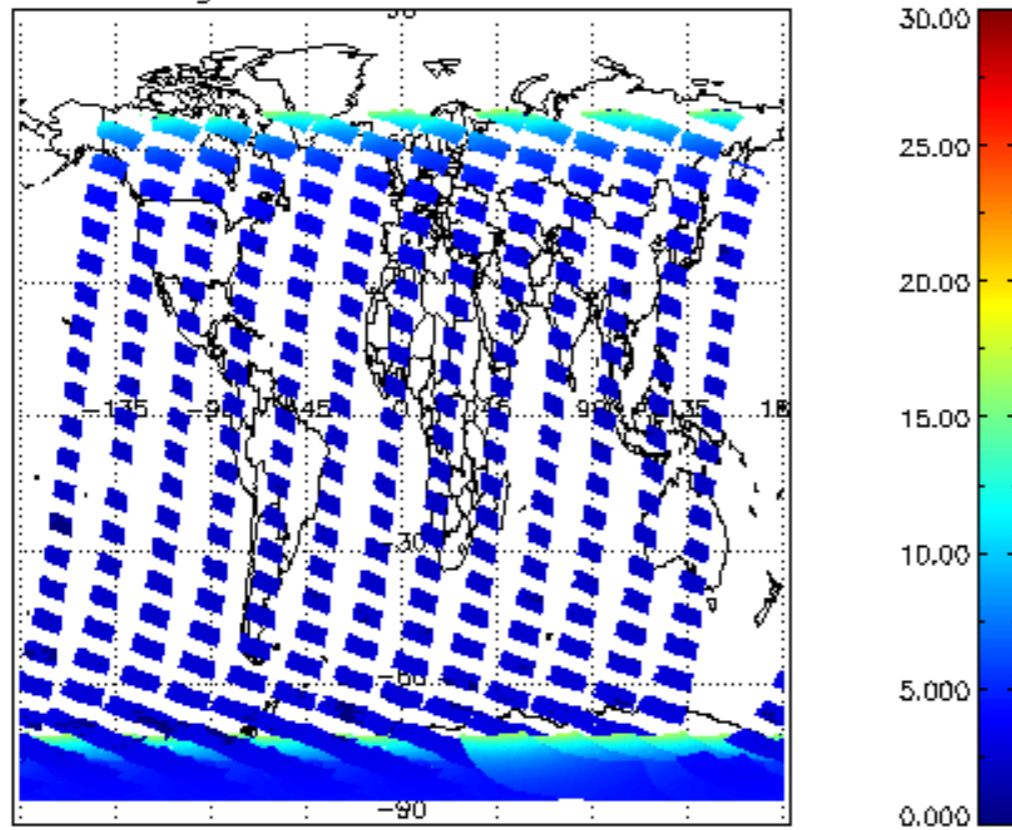
SCIOL2P_NADUV1NO2_vcd for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



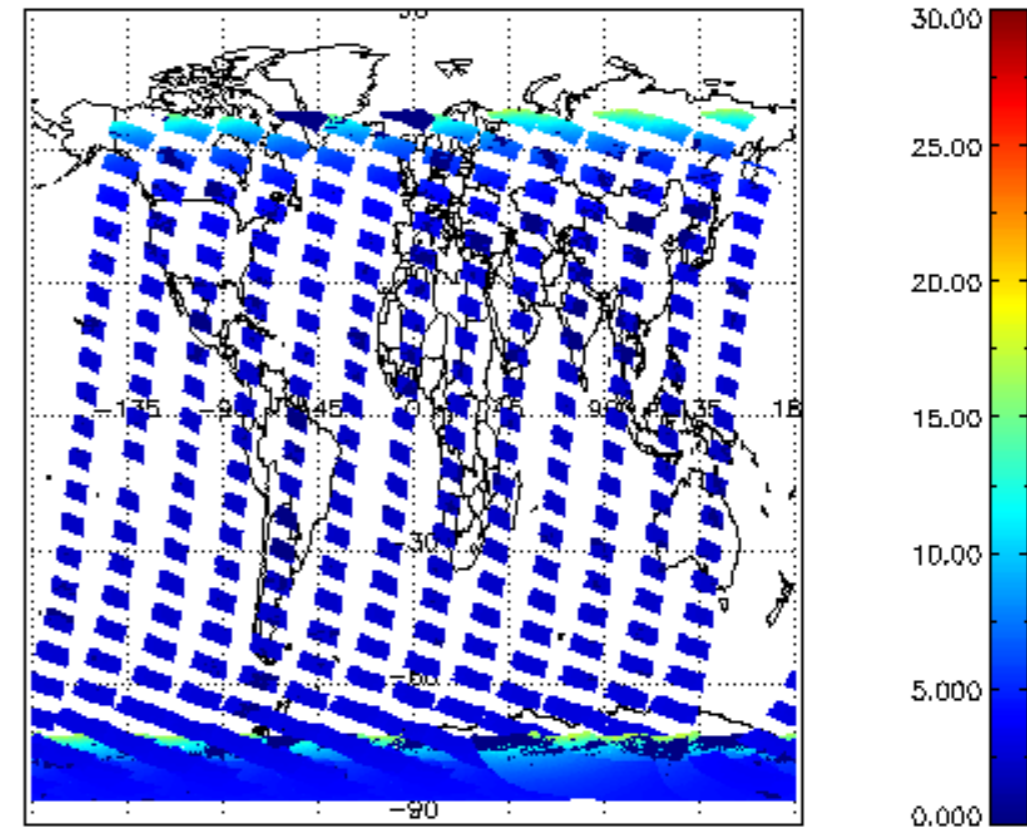
SCIOL2P_NADUV1NO2_vcd_err for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



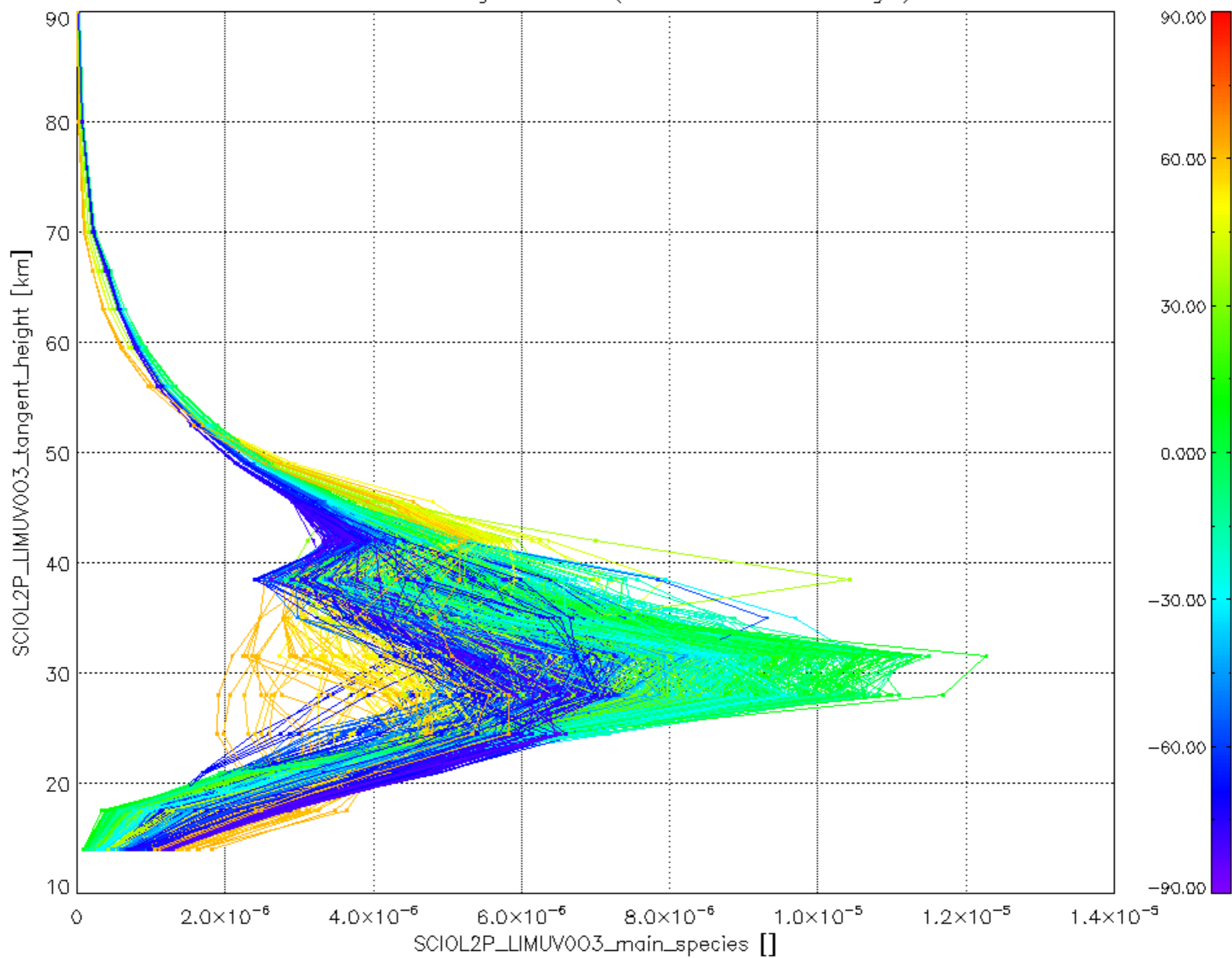
SCIOL2P_NADUV1NO2_amf_gr for 19NOV2004 00:00:00 to 20NOV2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 19NOV2004 00:00:00 to 20NOV2004 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).

