

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	20SEP2008 13:09:18
Data source version	SCIA-OL/3.01-R
Processing scope for products	05NOV2004 00:00:00 to 06NOV2004 00:00:00
Start time of first product within scope	04NOV2004 22:49:29
Stop time of last product within scope	06NOV2004 00:54:55
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__2PRDPA20041104_224929_000033252031_00445_14026_0490.N1	04NOV2004 22:49:29	04NOV2004 23:44:54	0	GOOD
1	SCI_OL__2PRDPA20041105_003005_000033812031_00446_14027_0441.N1	05NOV2004 00:30:05	05NOV2004 01:26:27	0	GOOD
2	SCI_OL__2PRDPA20041105_021041_000033252031_00447_14028_0588.N1	05NOV2004 02:10:41	05NOV2004 03:06:07	0	GOOD
3	SCI_OL__2PRDPA20041105_035118_000033812031_00448_14029_0521.N1	05NOV2004 03:51:18	05NOV2004 04:47:39	0	GOOD
4	SCI_OL__2PRDPA20041105_053154_000033252031_00449_14030_0485.N1	05NOV2004 05:31:54	05NOV2004 06:27:20	0	GOOD
5	SCI_OL__2PRDPA20041105_071230_000033812031_00450_14031_0504.N1	05NOV2004 07:12:30	05NOV2004 08:08:52	0	GOOD
6	SCI_OL__2PRDPA20041105_085307_000033252031_00451_14032_0607.N1	05NOV2004 08:53:07	05NOV2004 09:48:32	0	GOOD
7	SCI_OL__2PRDPA20041105_103343_000033812031_00452_14033_0449.N1	05NOV2004 10:33:43	05NOV2004 11:30:04	0	GOOD
8	SCI_OL__2PRDPA20041105_121419_000033252031_00453_14034_0528.N1	05NOV2004 12:14:19	05NOV2004 13:09:45	0	GOOD
9	SCI_OL__2PRDPA20041105_135551_000033252031_00454_14035_0603.N1	05NOV2004 13:55:51	05NOV2004 14:51:17	0	GOOD
10	SCI_OL__2PRDPA20041105_153532_000033252031_00455_14036_0562.N1	05NOV2004 15:35:32	05NOV2004 16:30:57	0	GOOD
11	SCI_OL__2PRDPA20041105_171600_000033732031_00456_14037_0558.N1	05NOV2004 17:16:00	05NOV2004 18:12:13	0	GOOD
12	SCI_OL__2PRDPA20041105_185705_000033252031_00457_14038_0444.N1	05NOV2004 18:57:05	05NOV2004 19:52:30	0	GOOD
13	SCI_OL__2PRDPA20041105_203721_000033812031_00458_14039_0468.N1	05NOV2004 20:37:21	05NOV2004 21:33:42	0	GOOD
14	SCI_OL__2PRDPA20041105_221757_000033252031_00459_14040_0505.N1	05NOV2004 22:17:57	05NOV2004 23:13:23	0	GOOD
15	SCI_OL__2PRDPA20041105_235833_000033812031_00460_14041_0452.N1	05NOV2004 23:58:33	06NOV2004 00:54:55	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: 147160

Total number of cloud data DSRs with good quality flag (=0): 147160 (100.0 %)

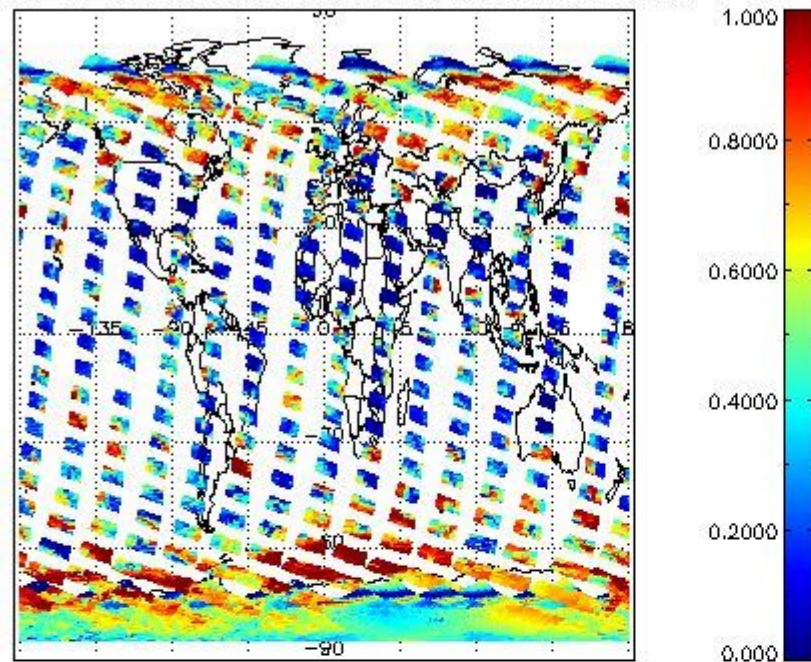
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	147160	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	147160	0.16961	0.12500	0.12500	0.25000	0.059885	s
CL_FRAC	147160	0.45484	0.44556	0.0000	1.0000	0.28143	-
CL_FRAC_ERR	147160	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	147160	5.4276	4.0000	4.0000	8.0000	1.9163	
PMD_READ_CL[0]	147160	0.32941	0.0000	0.0000	8.0000	1.2809	-
PMD_READ_CL[1]	147160	0.39450	0.0000	0.0000	8.0000	1.3832	-
CL_TOP_HEIGHT	125145	4.5802	3.5537	0.0000	17.000	4.0027	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	125145	50.981	37.154	0.0000	101.00	39.243	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	147160	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	147160	11001000	11000100	11000000	11100000	2969.4	flags
AERO_ABSO_IND	147160	0.58618	0.28296	-3.6414	11.993	1.0418	
AERO_IND_DIAG	147160	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	147160	01010110	00000000	00000000	11000000	24465.	flags

Time and geolocation plots:

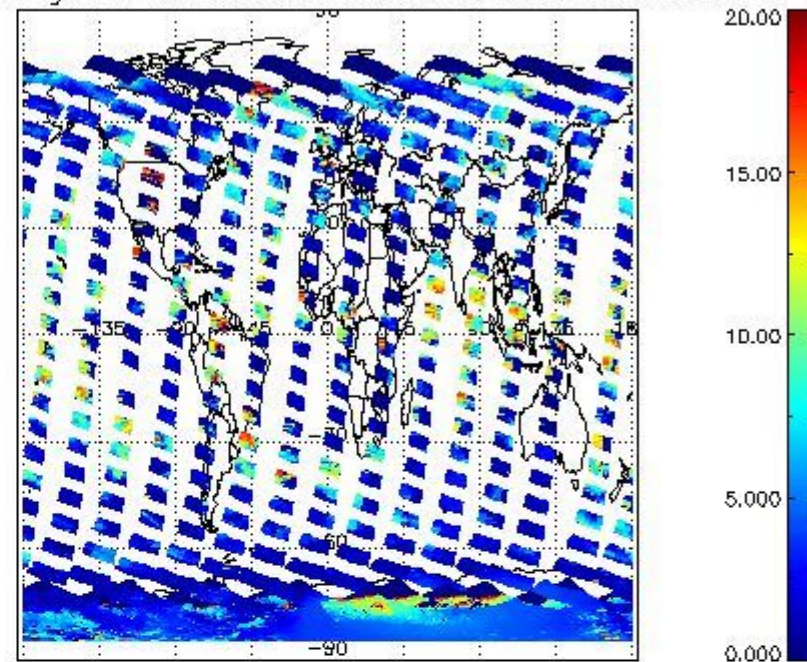
Plots are available for the following parameters:

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

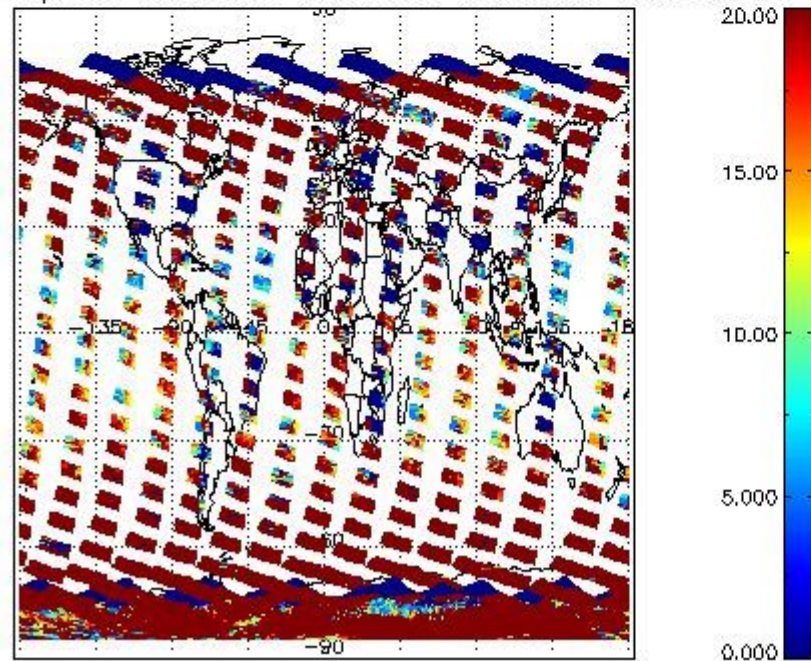
cLfrac for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



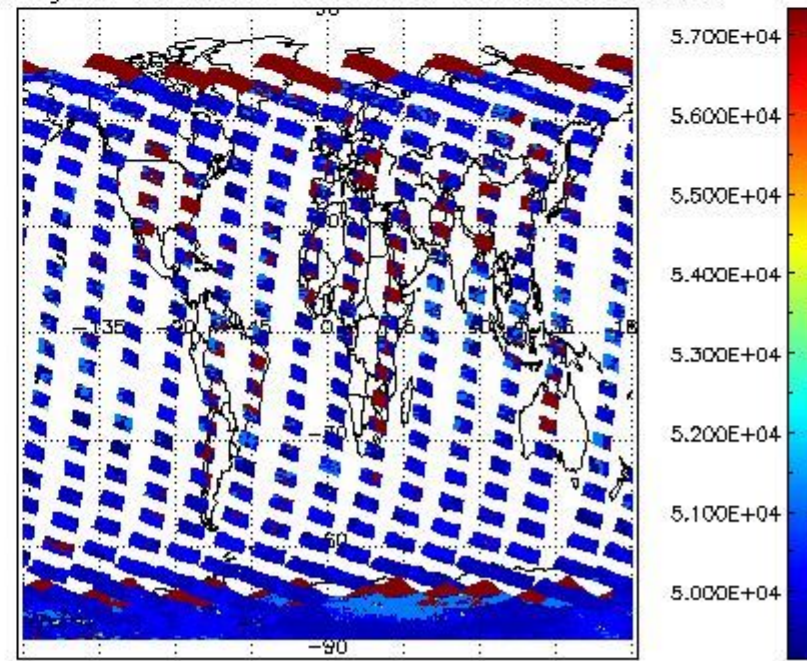
cL_top_height for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



cLopt_depth for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



cloud_flags for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



2.2.2 Nadir

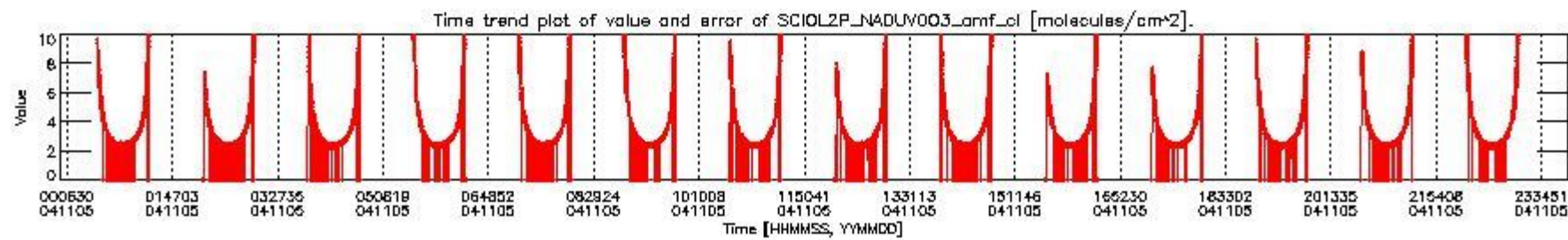
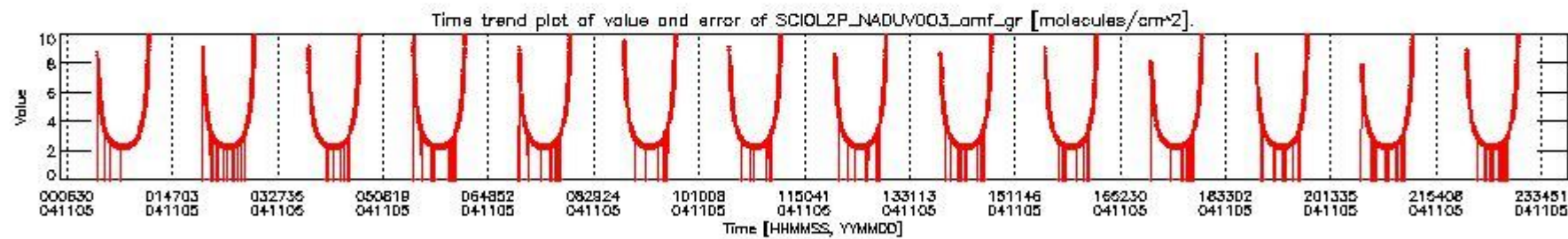
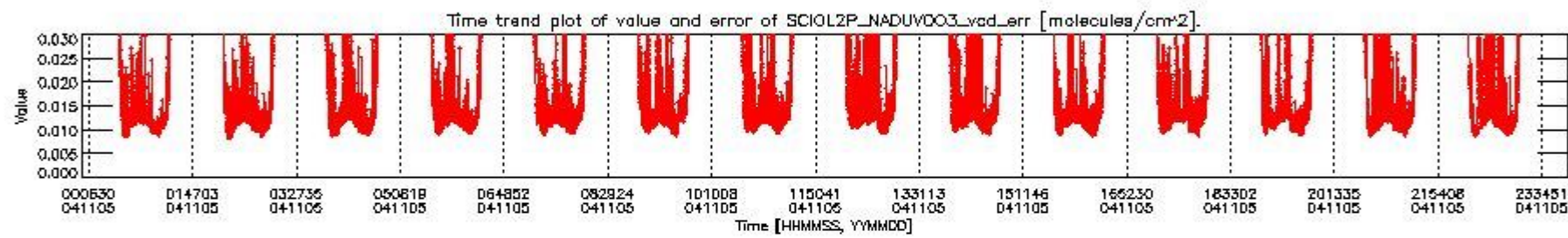
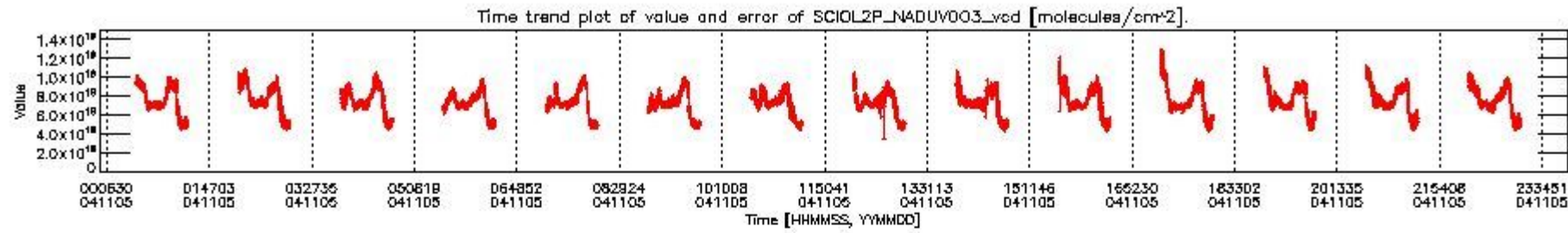
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

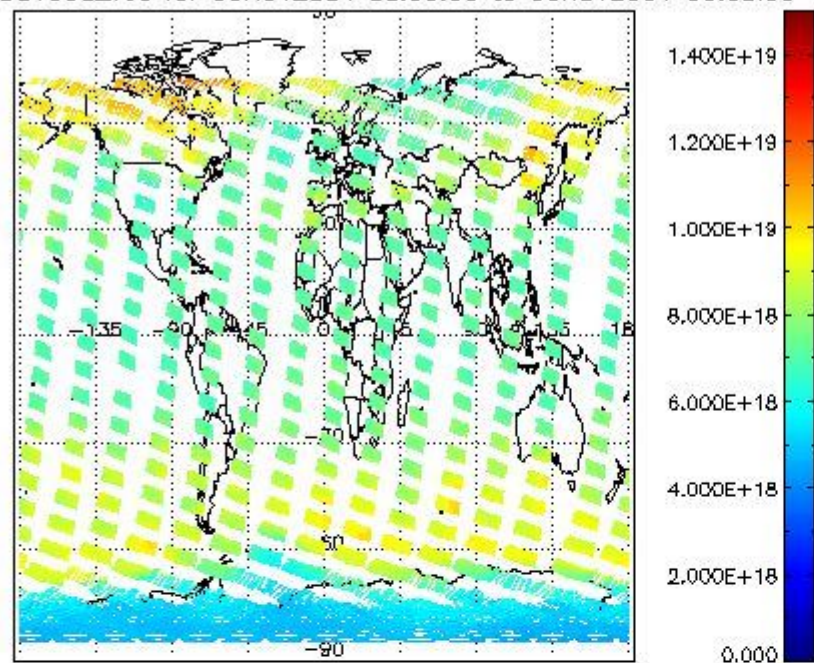
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

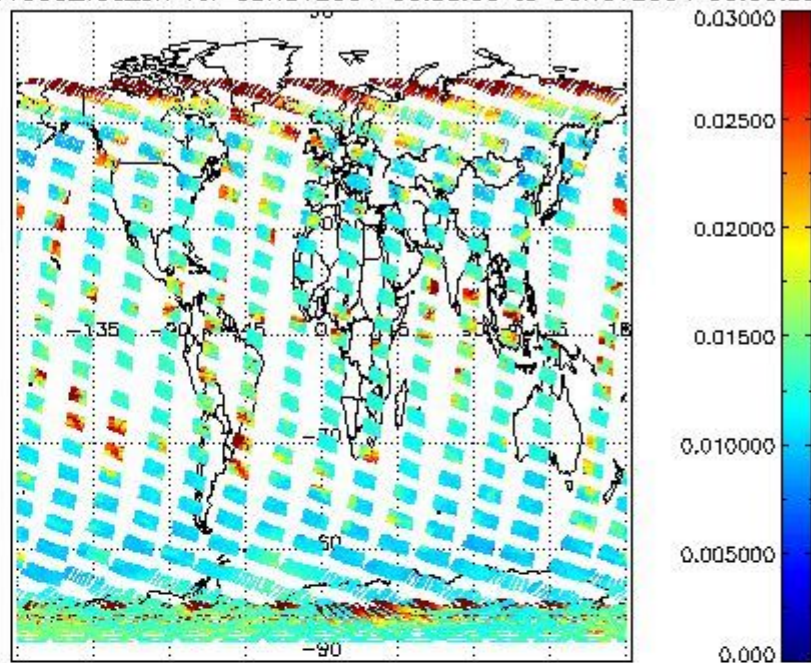
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



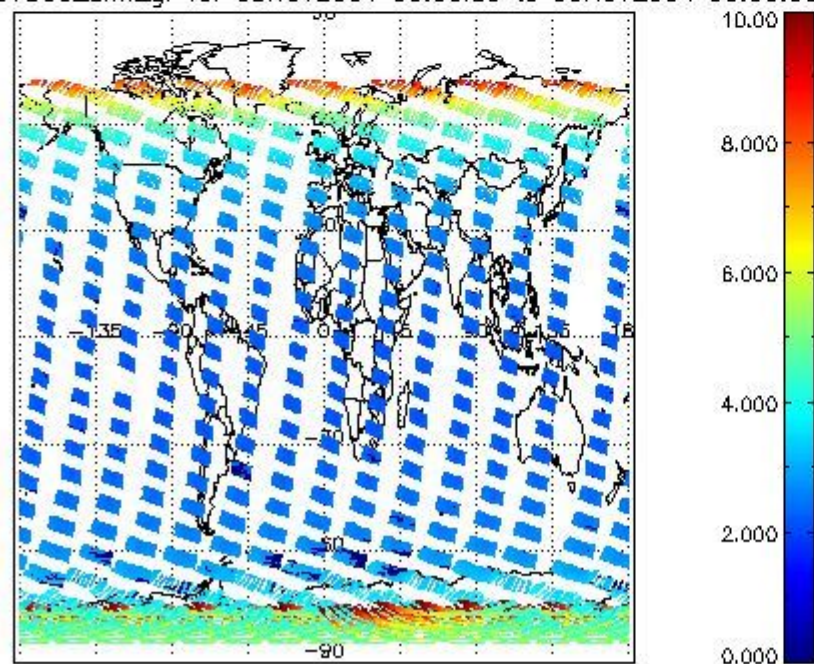
SCIOL2P_NADUV003_vcd for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



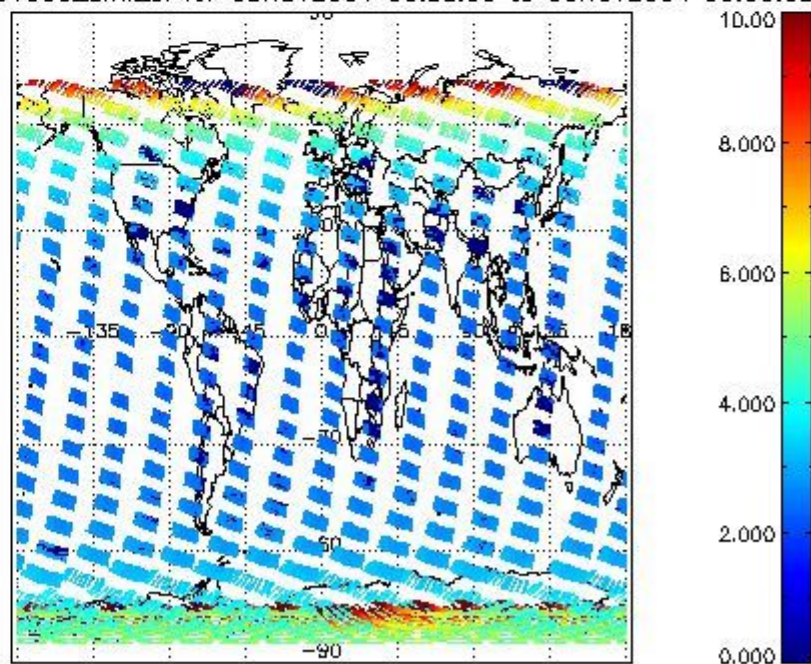
SCIOL2P_NADUV003_vcd_err for 05NOV2004 00:00:00 to 06NOV2004 00:00:00

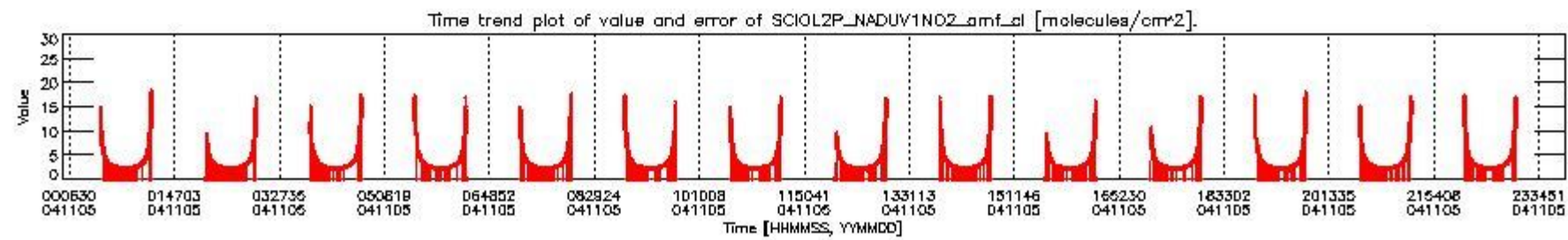
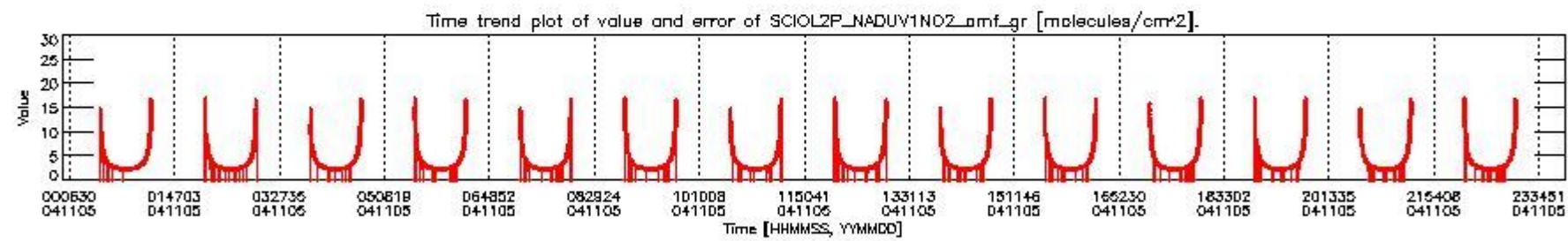
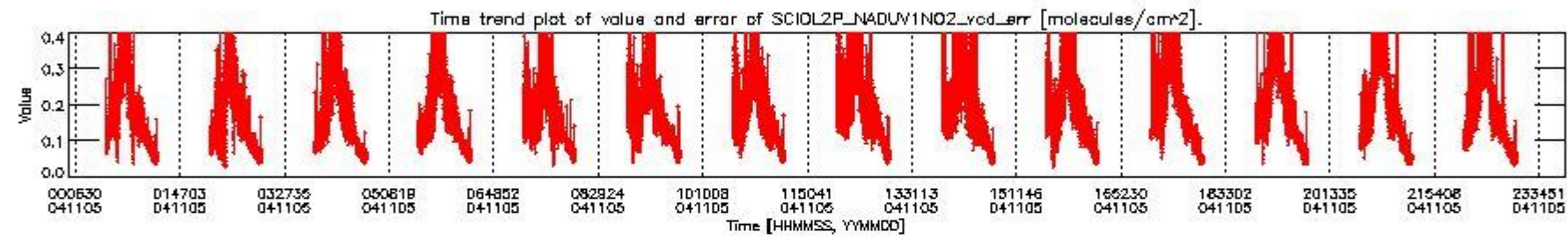
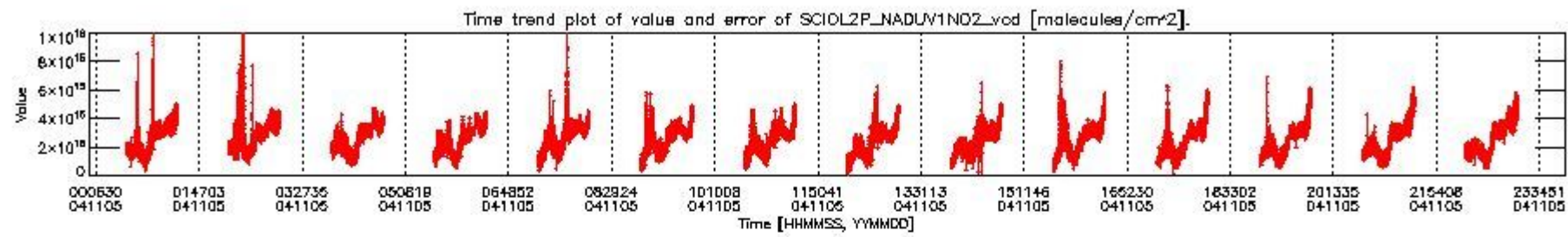


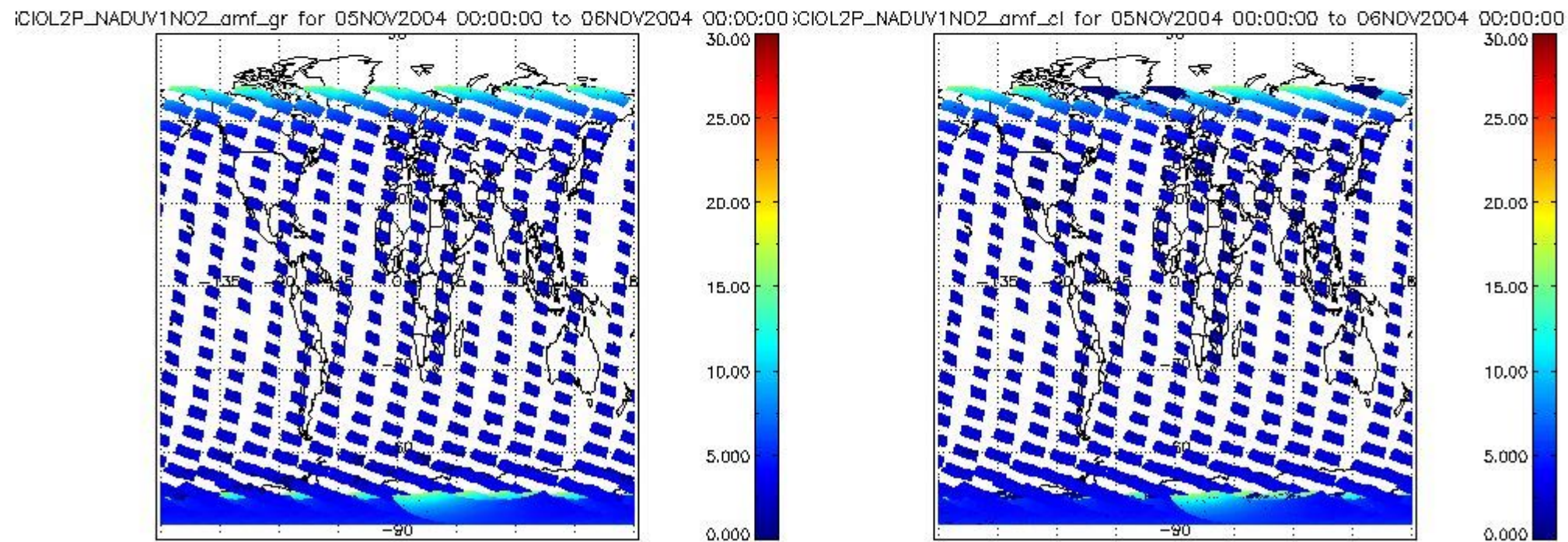
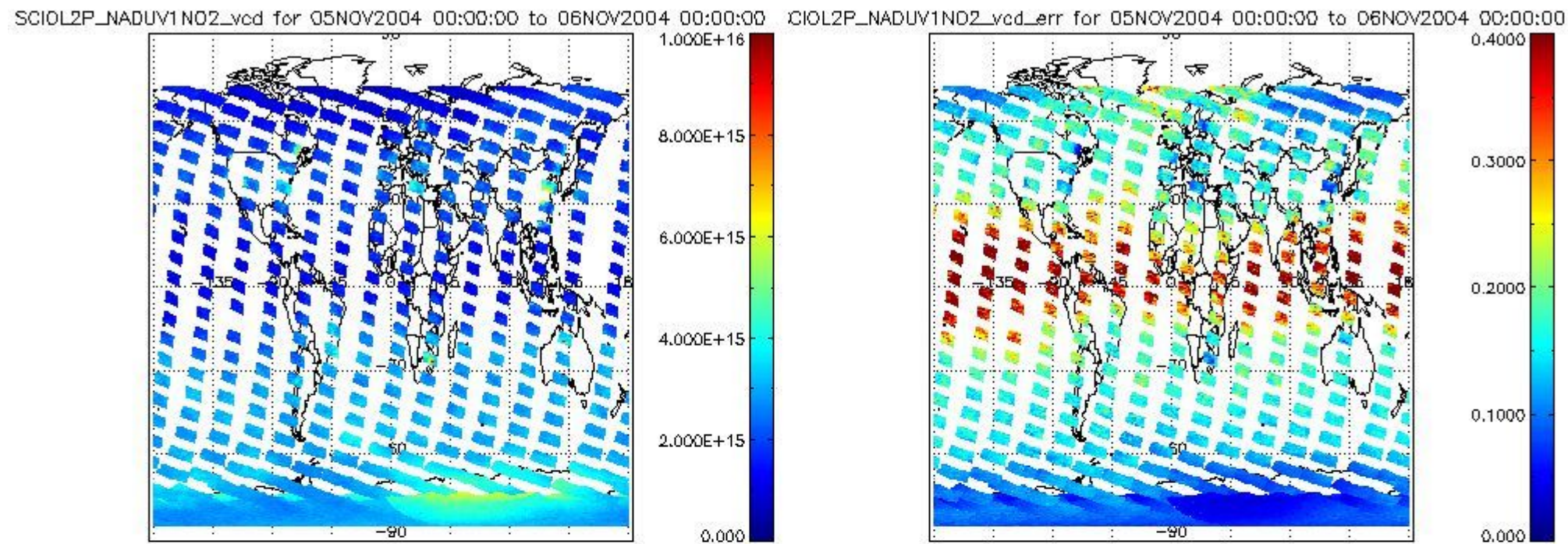
SCIOL2P_NADUV003_amf_gr for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 05NOV2004 00:00:00 to 06NOV2004 00:00:00







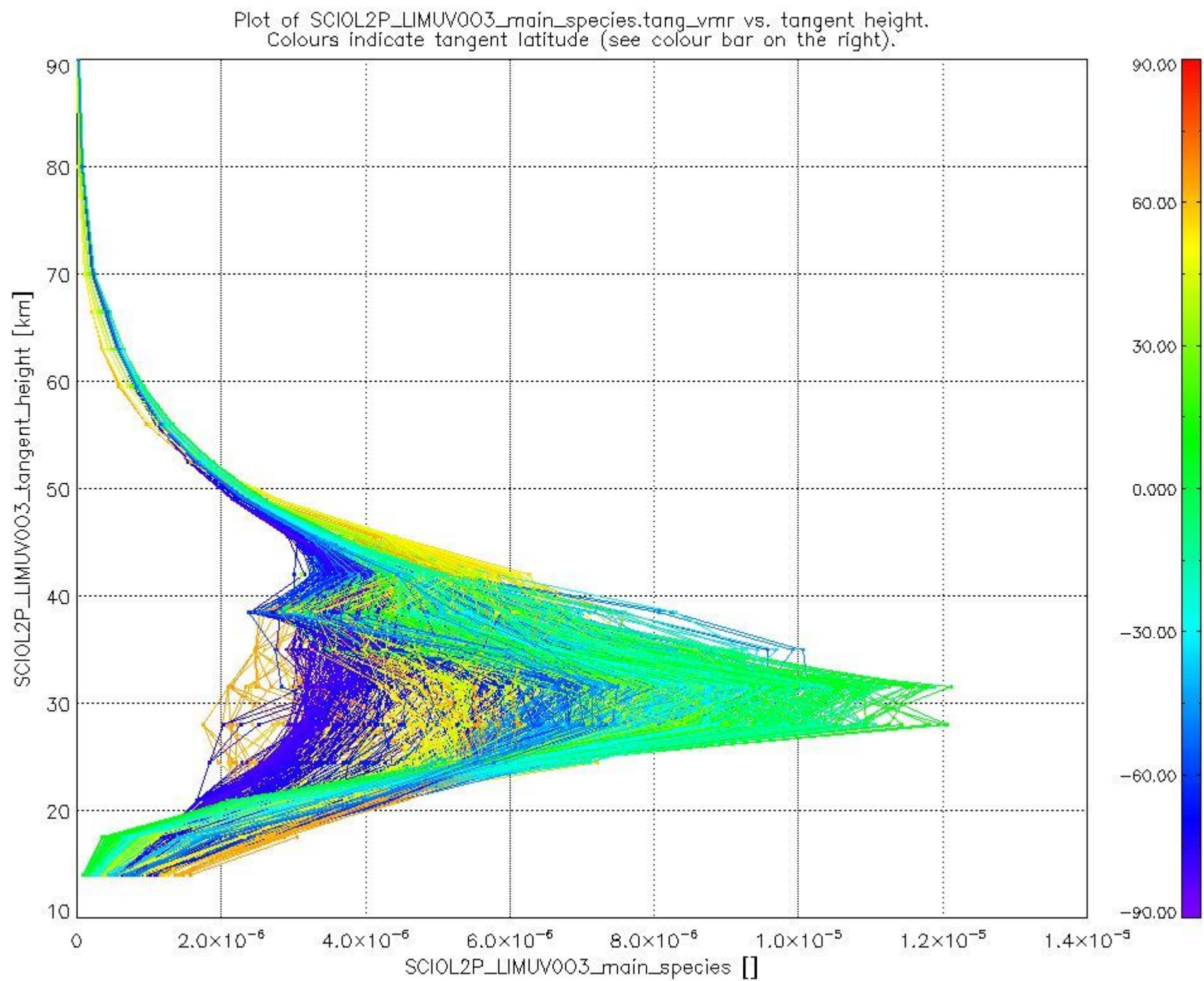
2.2.3 Limb

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

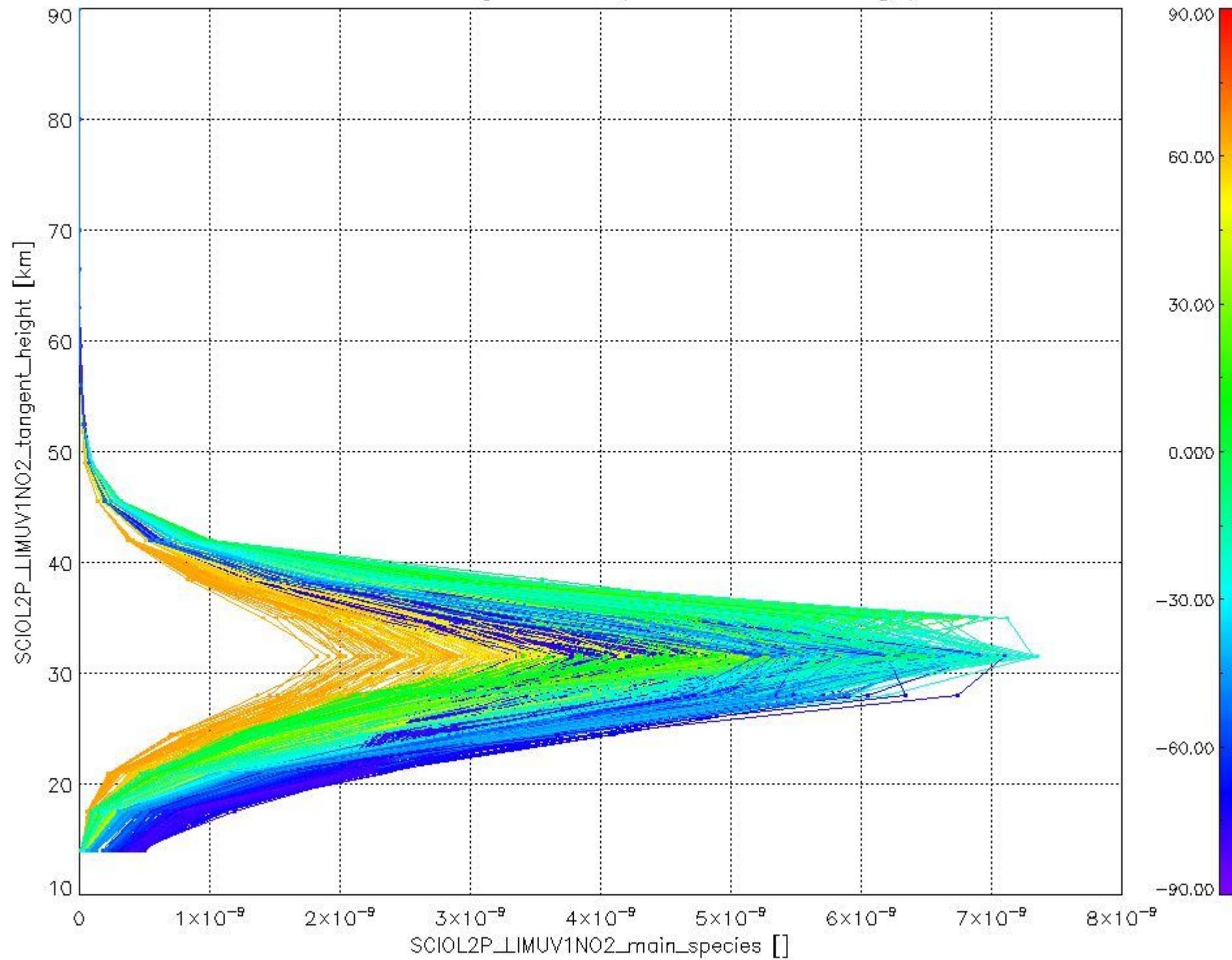
The following data items are currently included into this section:

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.



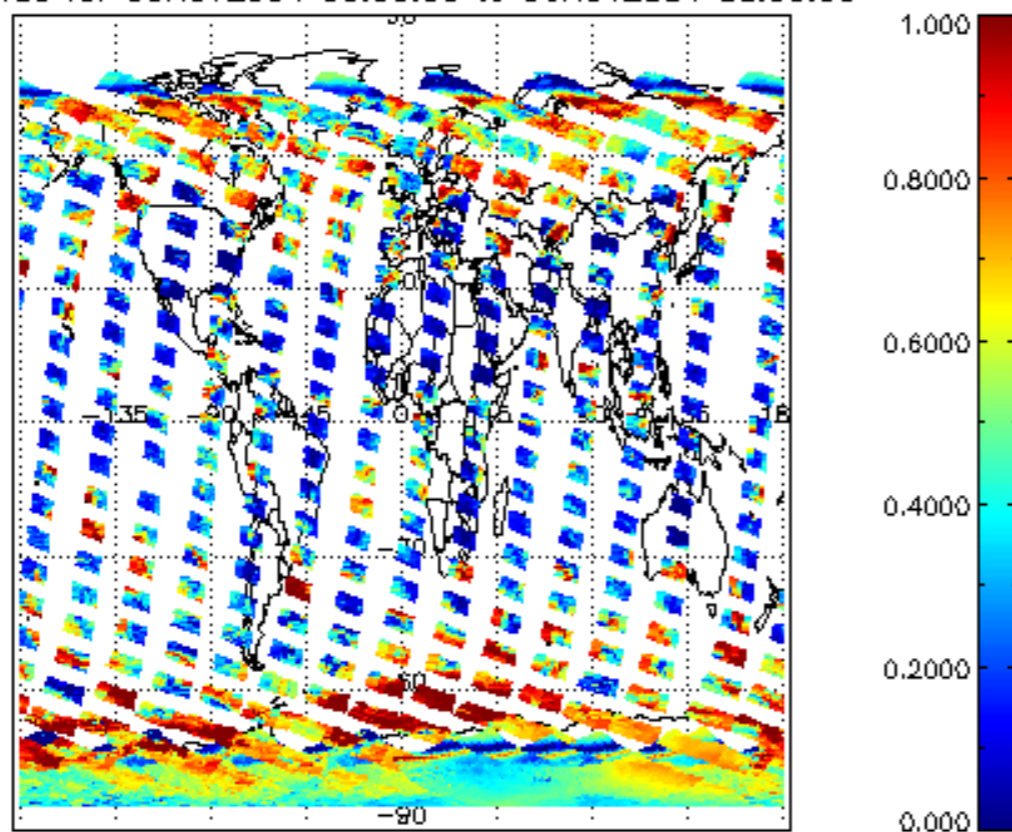
Plot of SCIO2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



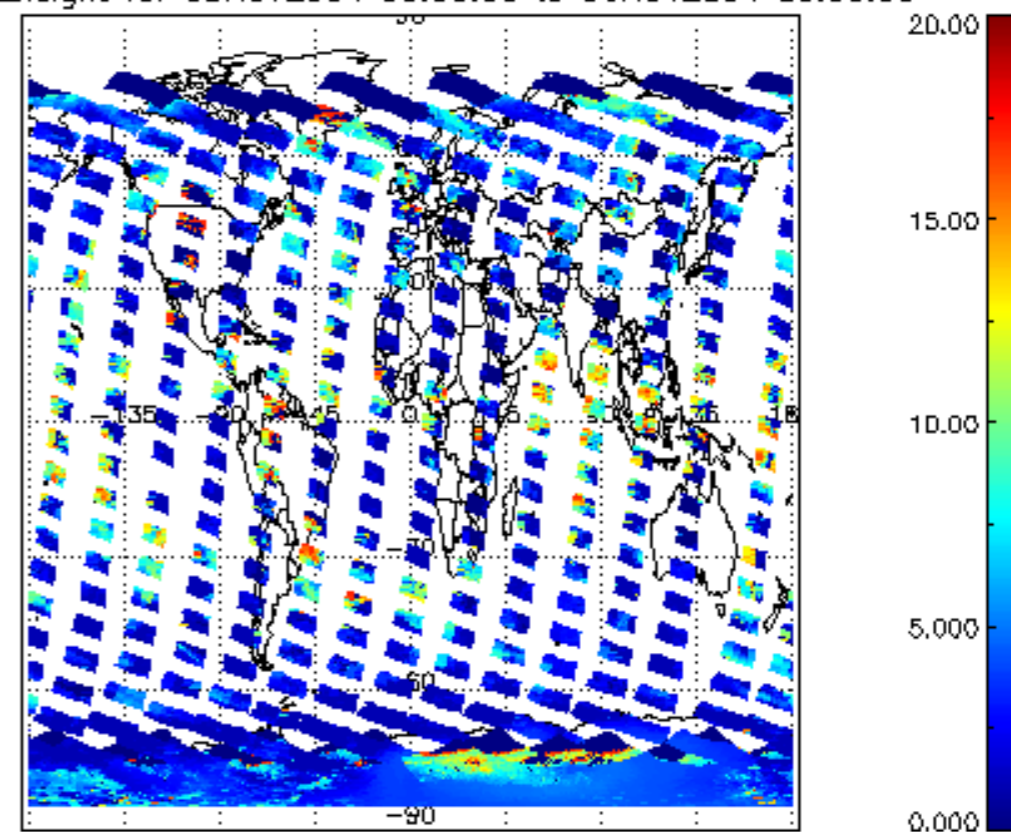
2.3 ADF monitoring

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

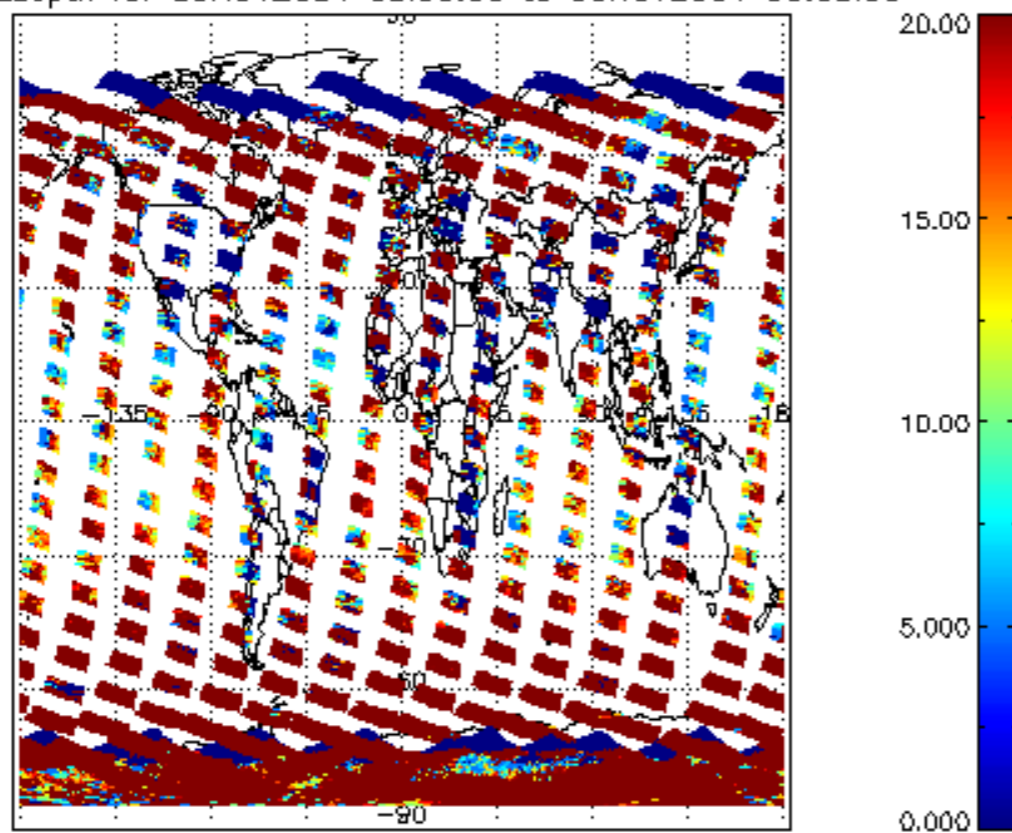
cLfrac for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



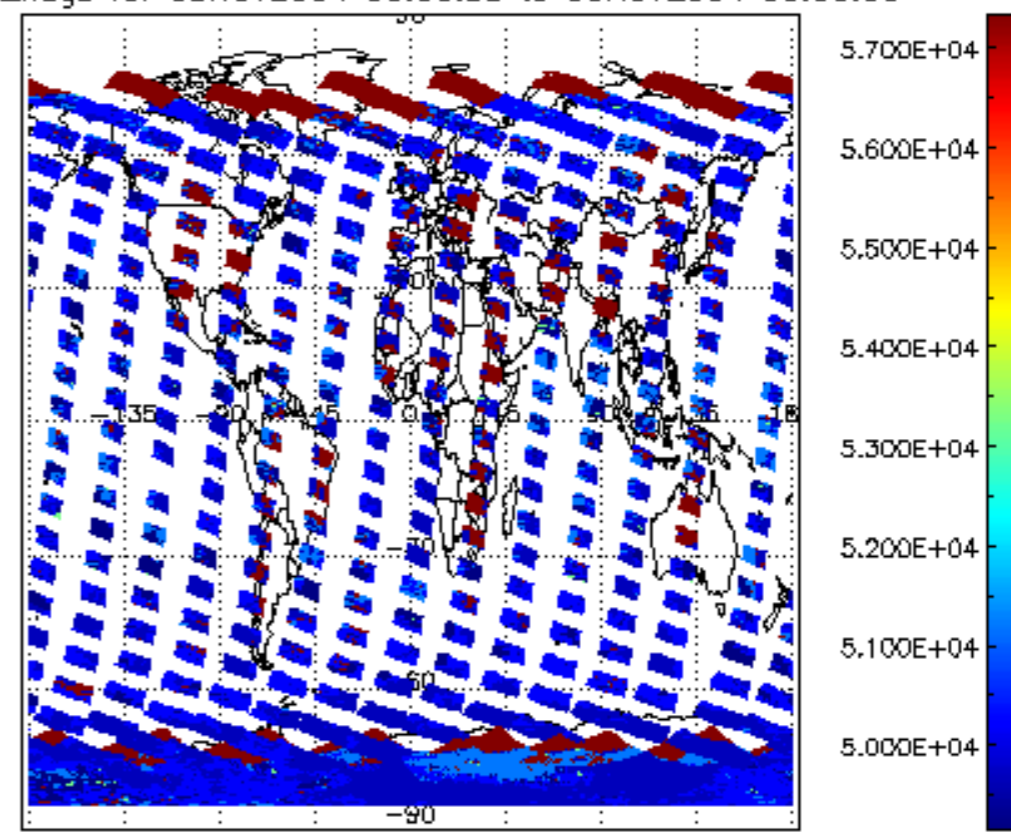
cL_top_height for 05NOV2004 00:00:00 to 06NOV2004 00:00:00

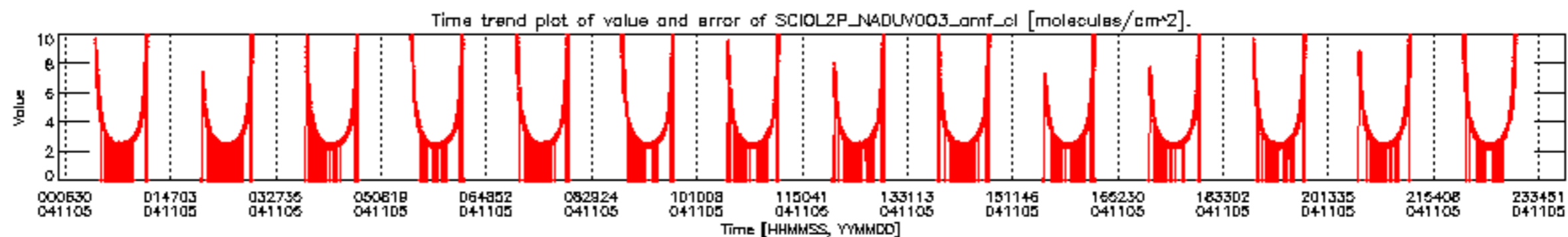
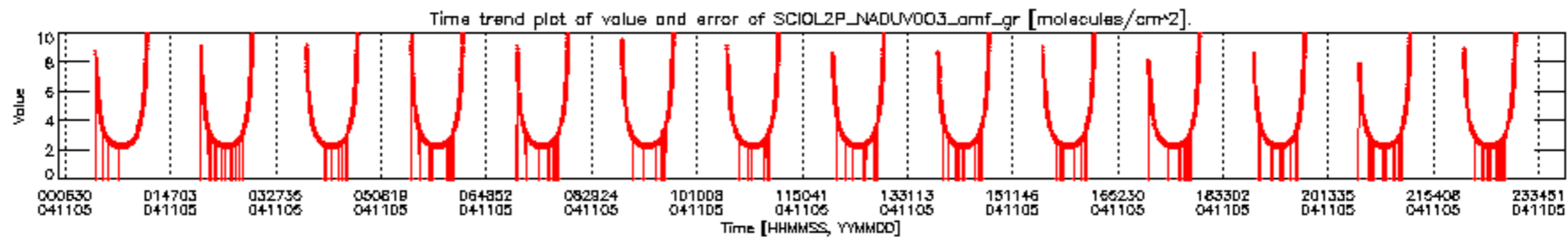
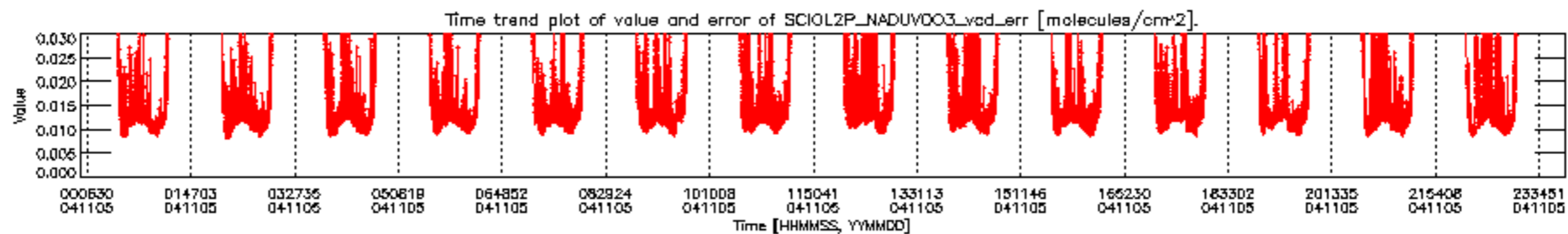
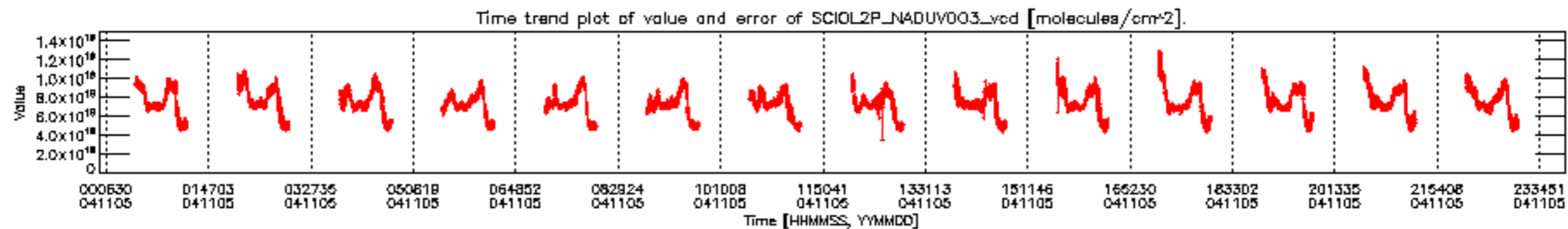


cL_opt_depth for 05NOV2004 00:00:00 to 06NOV2004 00:00:00

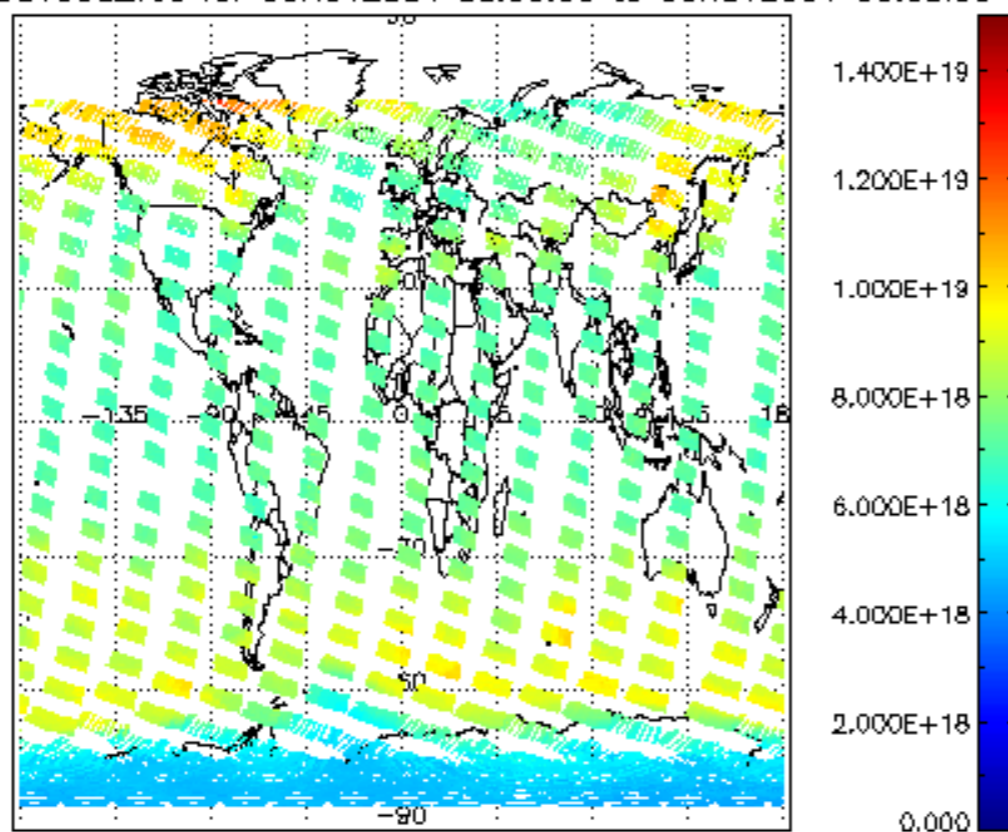


cloud_flags for 05NOV2004 00:00:00 to 06NOV2004 00:00:00

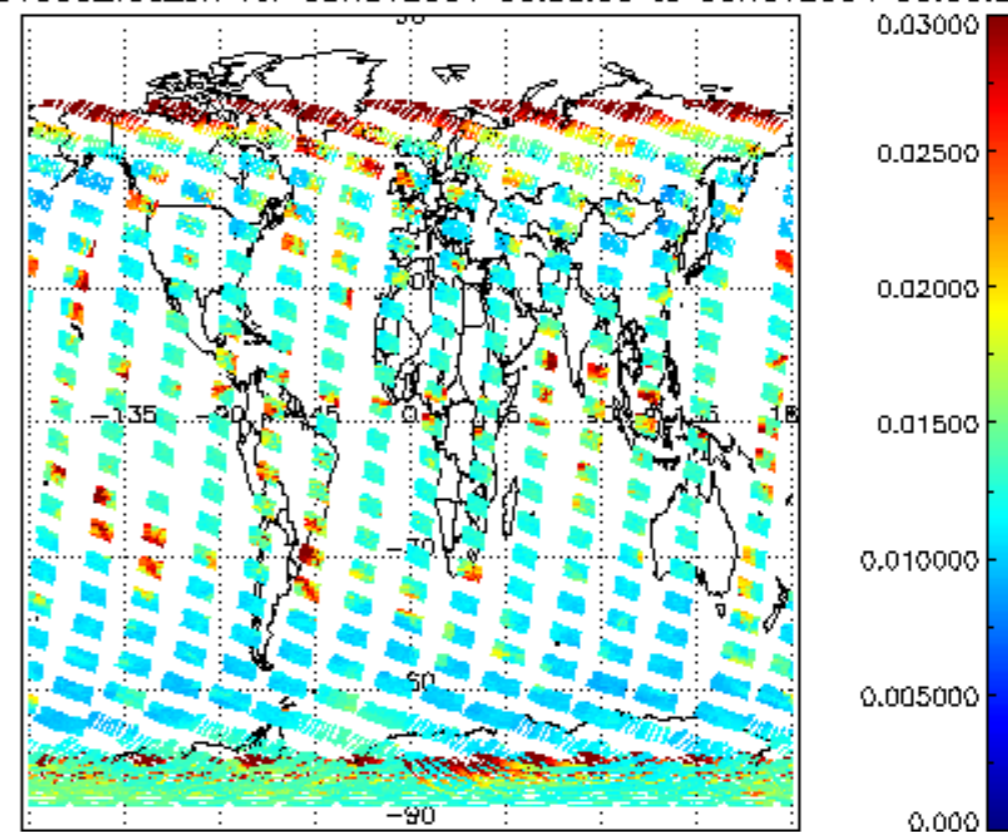




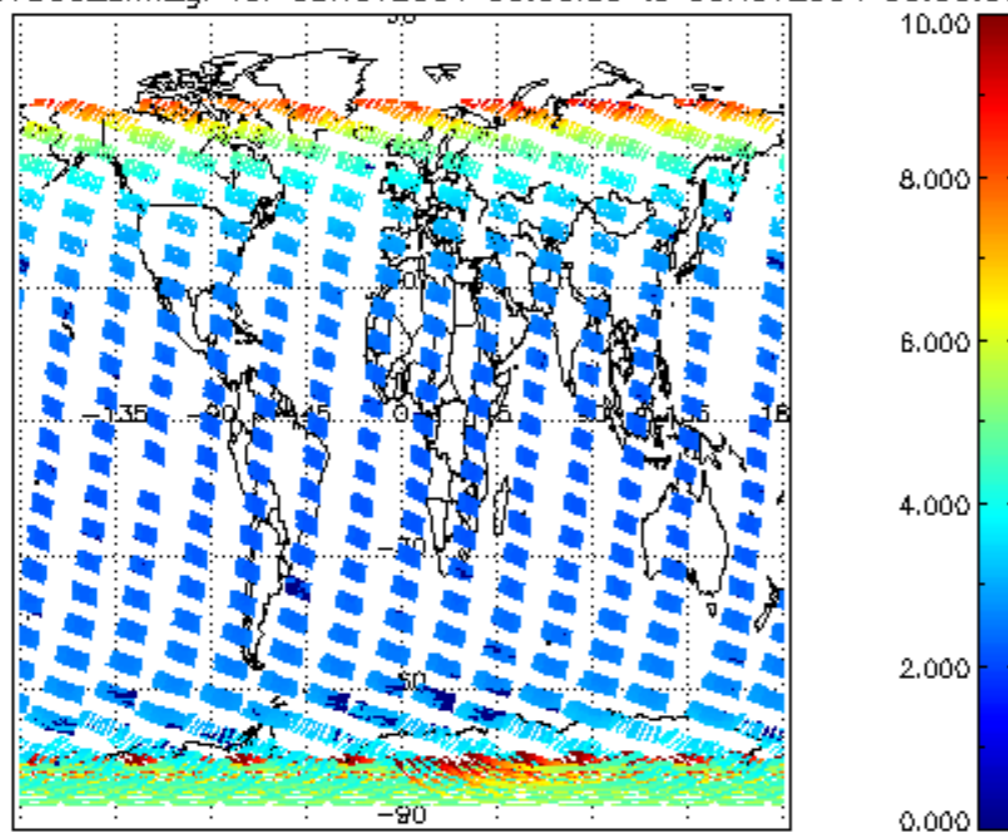
SCIOL2P_NADUV003_vcd for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



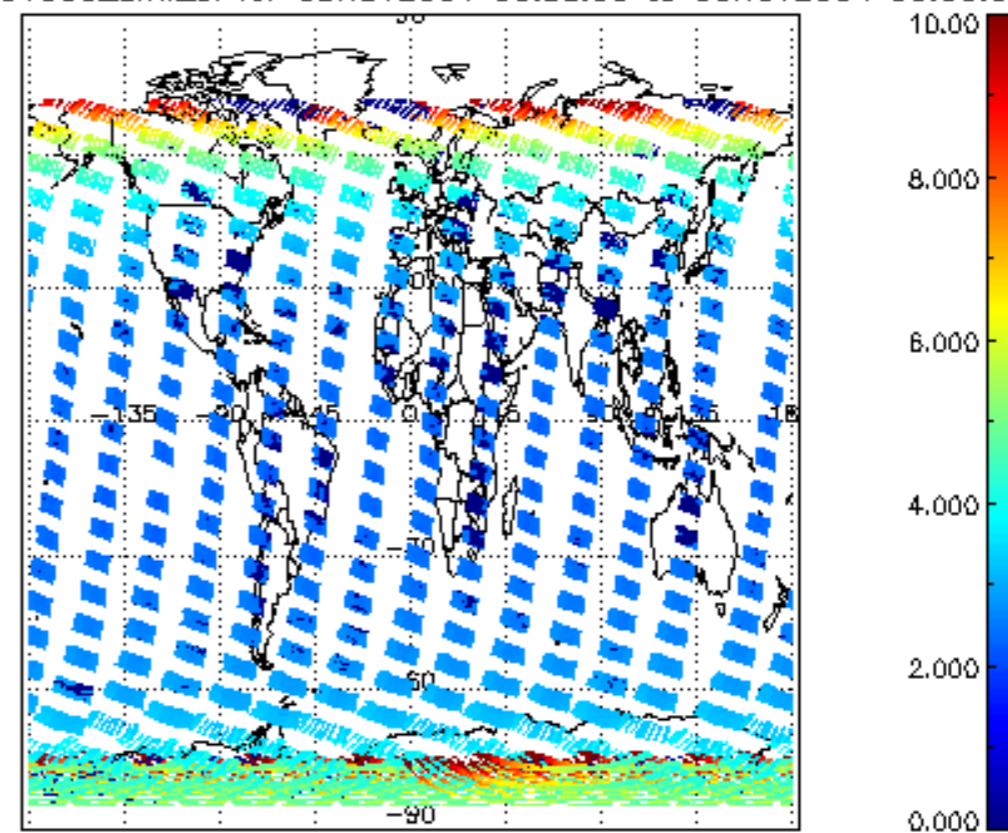
SCIOL2P_NADUV003_vcd_err for 05NOV2004 00:00:00 to 06NOV2004 00:00:00

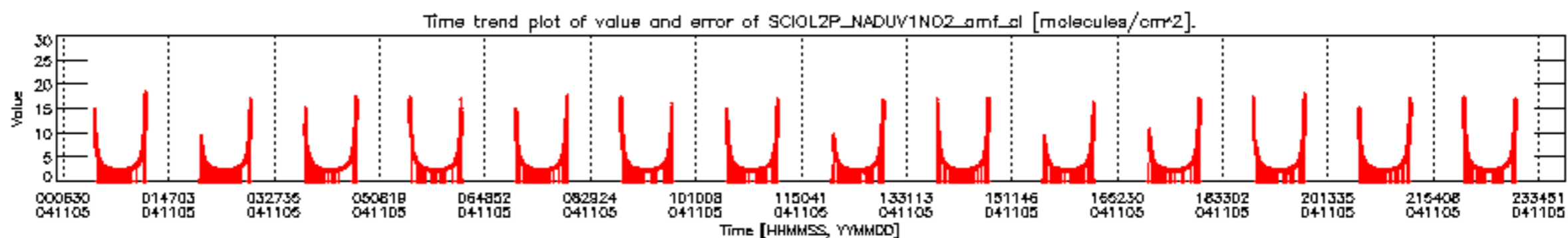
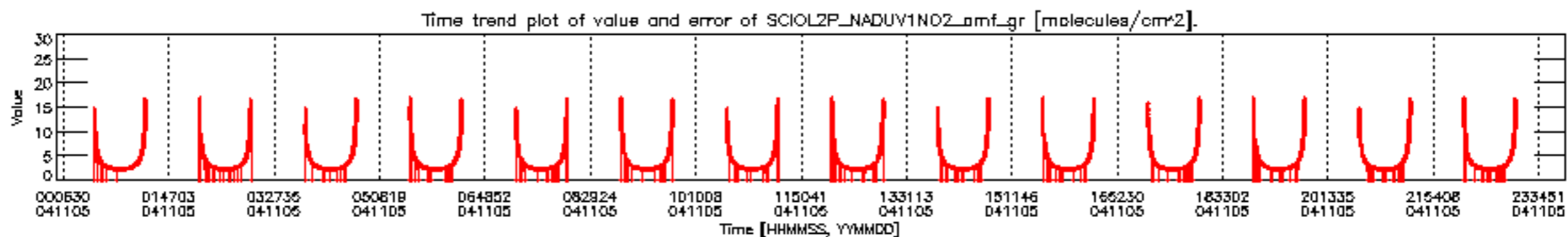
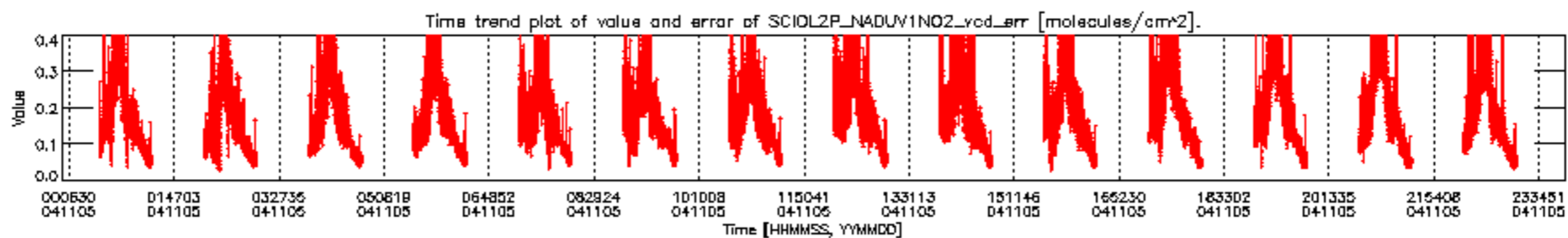
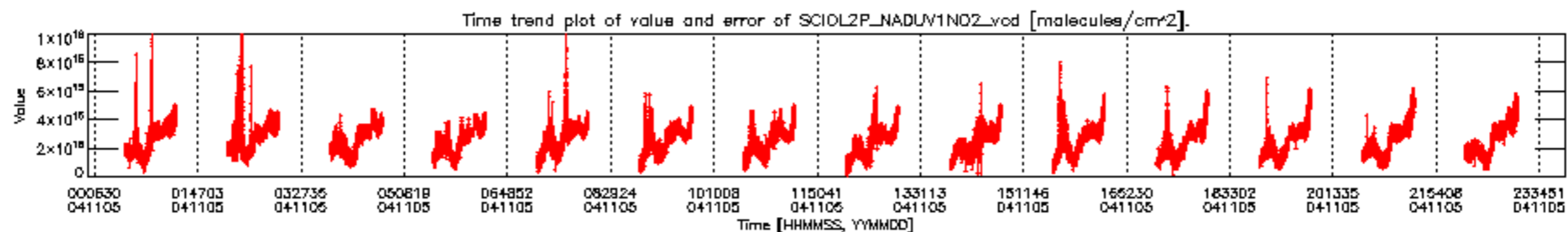


SCIOL2P_NADUV003_amf_gr for 05NOV2004 00:00:00 to 06NOV2004 00:00:00

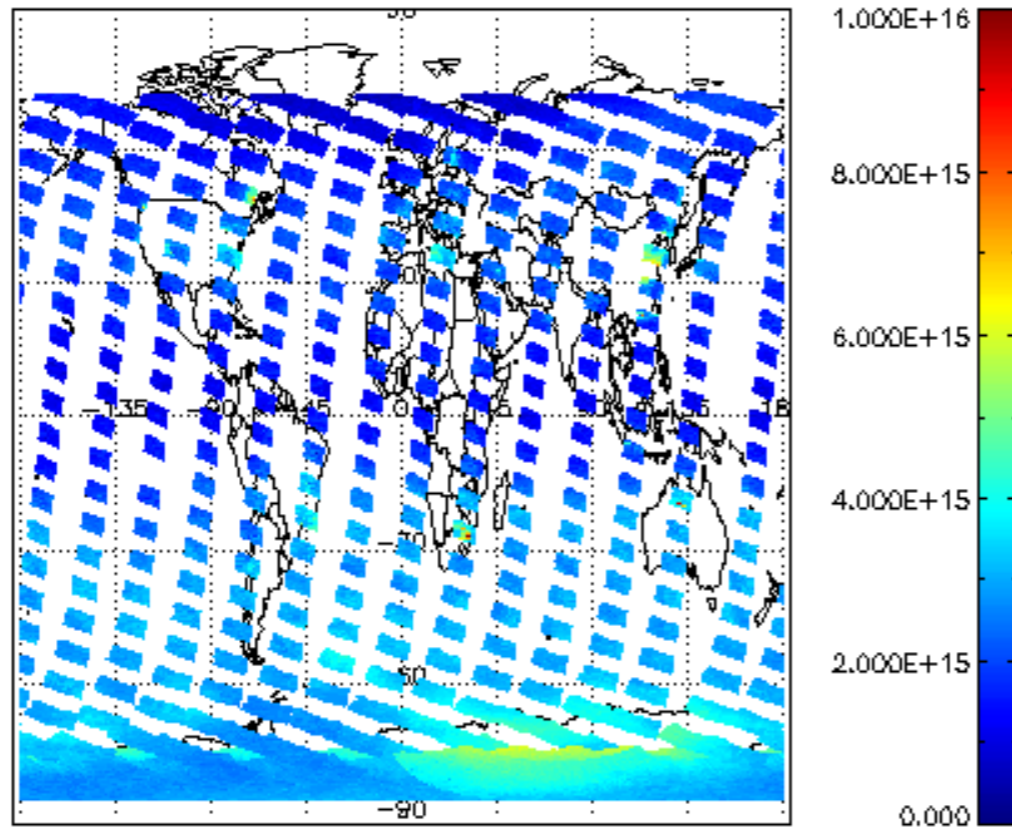


SCIOL2P_NADUV003_amf_cl for 05NOV2004 00:00:00 to 06NOV2004 00:00:00

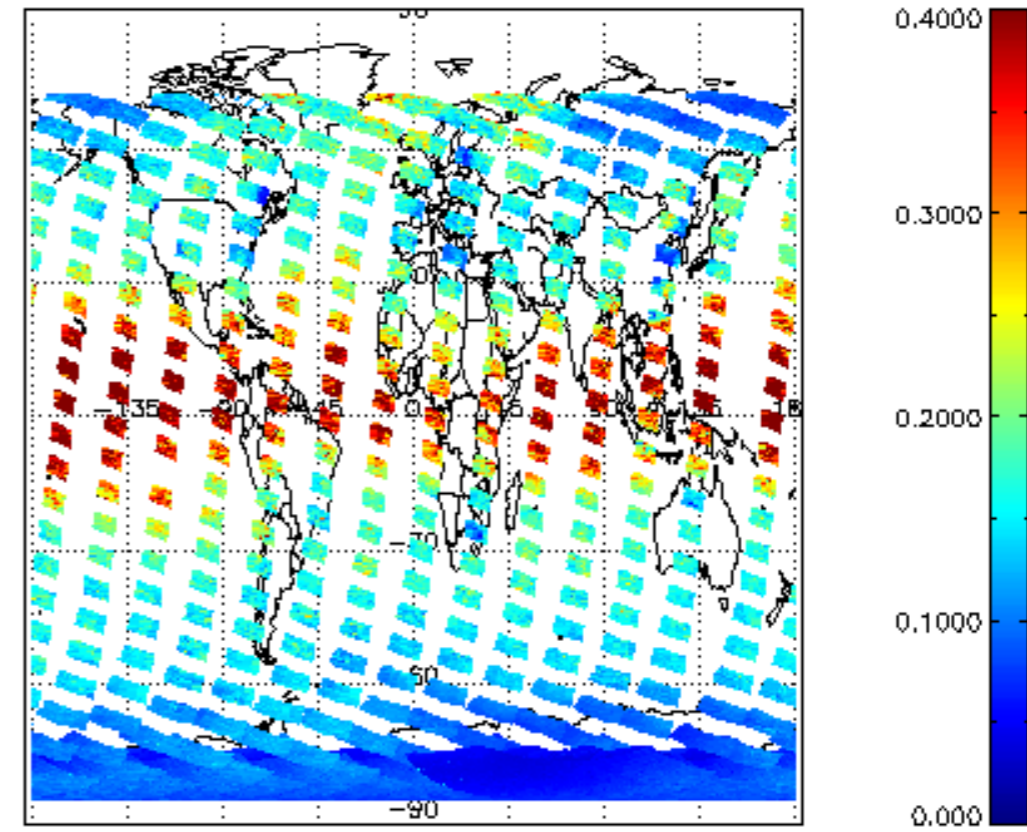




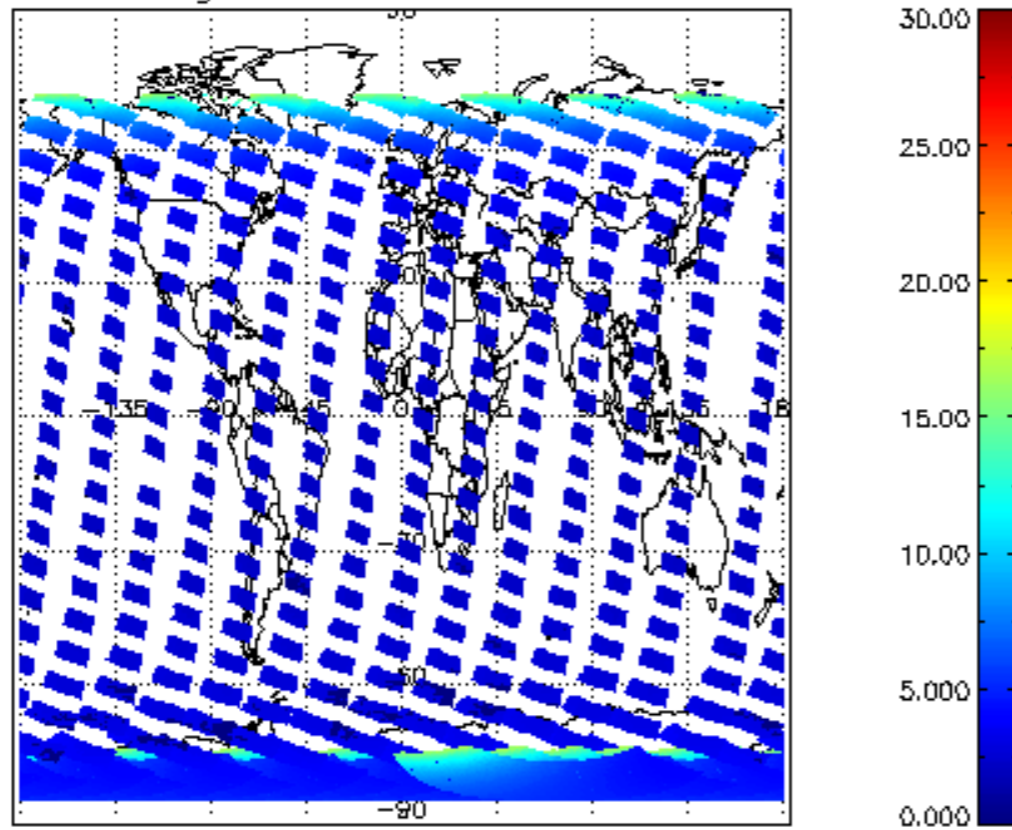
SCIOL2P_NADUV1NO2_vcd for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



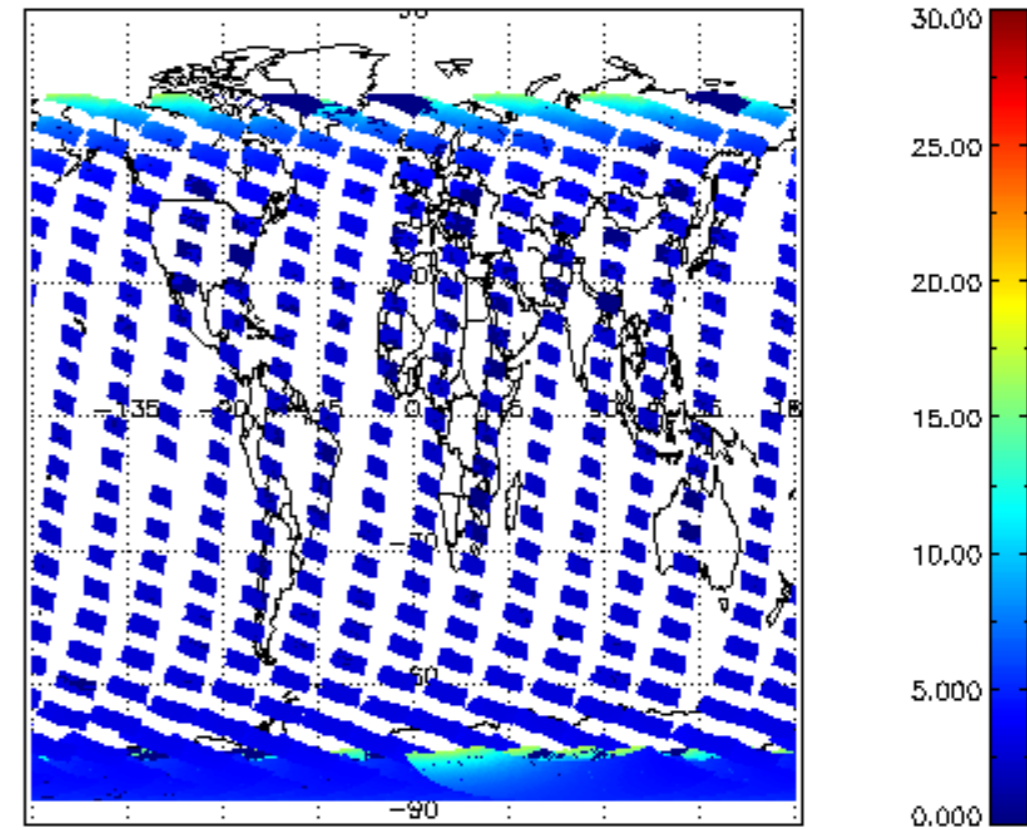
SCIOL2P_NADUV1NO2_vcd_err for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



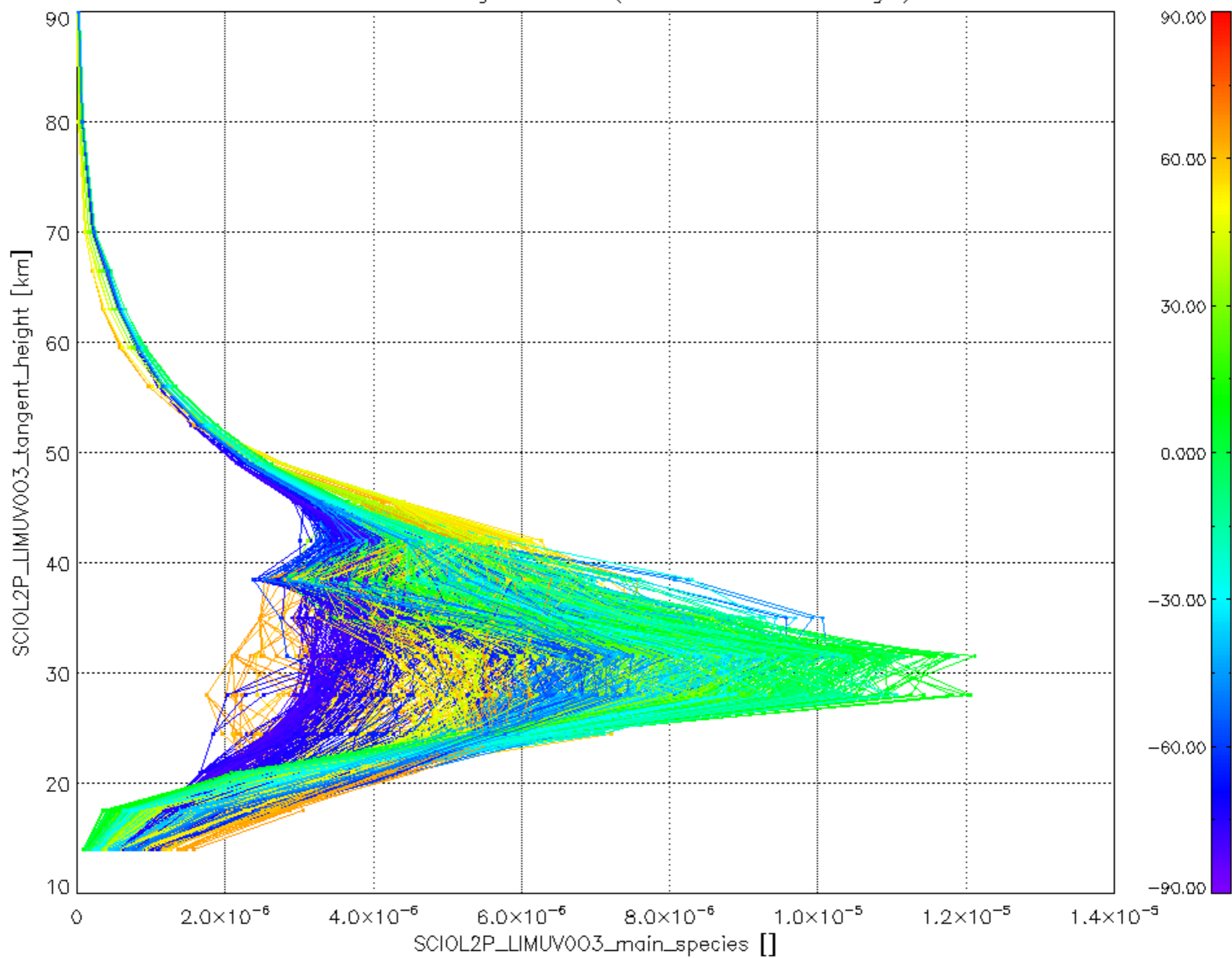
SCIOL2P_NADUV1NO2_amf_gr for 05NOV2004 00:00:00 to 06NOV2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 05NOV2004 00:00:00 to 06NOV2004 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).

