

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	14AUG2008 12:41:17
Data source version	SCIA-OL/3.01-R
Processing scope for products	28APR2004 00:00:00 to 29APR2004 00:00:00
Start time of first product within scope	27APR2004 22:43:01
Stop time of last product within scope	29APR2004 00:47:44
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__2PRDPA20040427_224301_000032932026_00216_11292_7326.N1	27APR2004 22:43:01	27APR2004 23:37:55	0	GOOD
1	SCI_OL__2PRDPA20040428_002337_000033492026_00217_11293_7451.N1	28APR2004 00:23:37	28APR2004 01:19:26	0	GOOD
2	SCI_OL__2PRDPA20040428_020412_000032932026_00218_11294_7453.N1	28APR2004 02:04:12	28APR2004 02:59:06	0	GOOD
3	SCI_OL__2PRDPA20040428_034448_000033492026_00219_11295_7292.N1	28APR2004 03:44:48	28APR2004 04:40:37	0	GOOD
4	SCI_OL__2PRDPA20040428_052524_000032932026_00220_11296_7384.N1	28APR2004 05:25:24	28APR2004 06:20:17	0	GOOD
5	SCI_OL__2PRDPA20040428_070559_000033492026_00221_11297_7191.N1	28APR2004 07:05:59	28APR2004 08:01:49	0	GOOD
6	SCI_OL__2PRDPA20040428_084635_000032932026_00222_11298_7559.N1	28APR2004 08:46:35	28APR2004 09:41:28	0	GOOD
7	SCI_OL__2PRDPA20040428_102710_000033492026_00223_11299_7487.N1	28APR2004 10:27:10	28APR2004 11:23:00	0	GOOD
8	SCI_OL__2PRDPA20040428_120746_000033492026_00224_11300_7357.N1	28APR2004 12:07:46	28APR2004 13:03:35	0	GOOD
9	SCI_OL__2PRDPA20040428_134821_000033492026_00225_11301_7535.N1	28APR2004 13:48:21	28APR2004 14:44:11	0	GOOD
10	SCI_OL__2PRDPA20040428_152857_000033492026_00226_11302_7525.N1	28APR2004 15:28:57	28APR2004 16:24:46	0	GOOD
11	SCI_OL__2PRDPA20040428_170934_000033532026_00227_11303_7402.N1	28APR2004 17:09:34	28APR2004 18:05:28	0	GOOD
12	SCI_OL__2PRDPA20040428_185121_000032932026_00228_11304_7510.N1	28APR2004 18:51:21	28APR2004 19:46:15	0	GOOD
13	SCI_OL__2PRDPA20040428_203044_000033492026_00229_11305_7306.N1	28APR2004 20:30:44	28APR2004 21:26:33	0	GOOD
14	SCI_OL__2PRDPA20040428_221120_000033492026_00230_11306_7494.N1	28APR2004 22:11:20	28APR2004 23:07:09	0	GOOD
15	SCI_OL__2PRDPA20040428_235155_000033492026_00231_11307_7204.N1	28APR2004 23:51:55	29APR2004 00:47:44	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: 110540

Total number of cloud data DSRs with good quality flag (=0): 110540 (100.0 %)

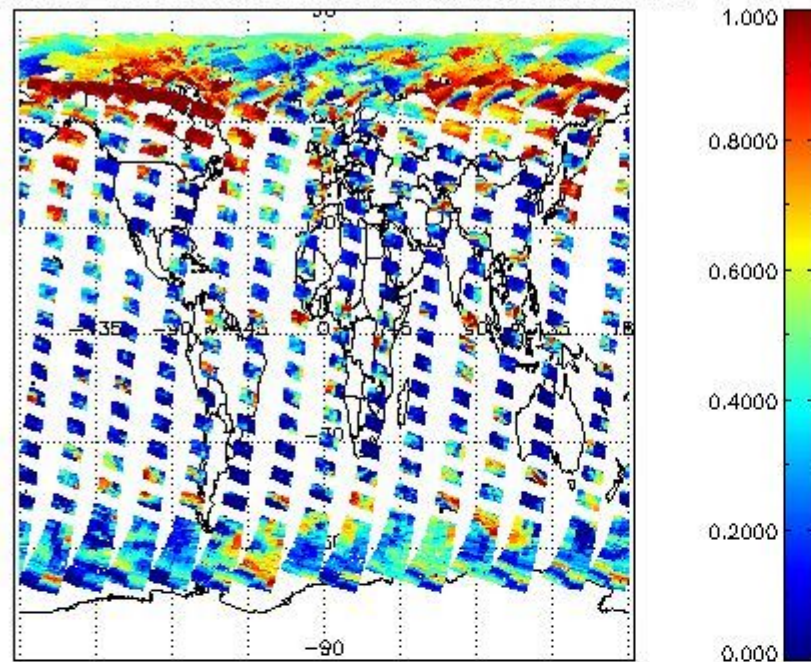
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	110540	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	110540	0.22164	0.25000	0.12500	0.50000	0.088100	s
CL_FRAC	110540	0.41467	0.38734	0.0000	1.0000	0.31740	-
CL_FRAC_ERR	110540	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	110540	7.0925	8.0000	4.0000	16.000	2.8192	
PMD_READ_CL[0]	110540	0.57944	0.0000	0.0000	16.000	1.8064	-
PMD_READ_CL[1]	110540	1.1166	0.0000	0.0000	16.000	2.4674	-
CL_TOP_HEIGHT	100311	3.2719	1.3312	0.0000	17.000	3.7122	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	100311	57.602	55.084	0.0000	101.00	41.447	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	110540	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	110540	11001000	11000010	11000000	11100000	3017.1	flags
AERO_ABSO_IND	110540	0.76901	0.73759	-4.3792	11.708	1.1068	
AERO_IND_DIAG	110540	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	110540	01101010	11000000	00000000	11000000	24417.	flags

Time and geolocation plots:

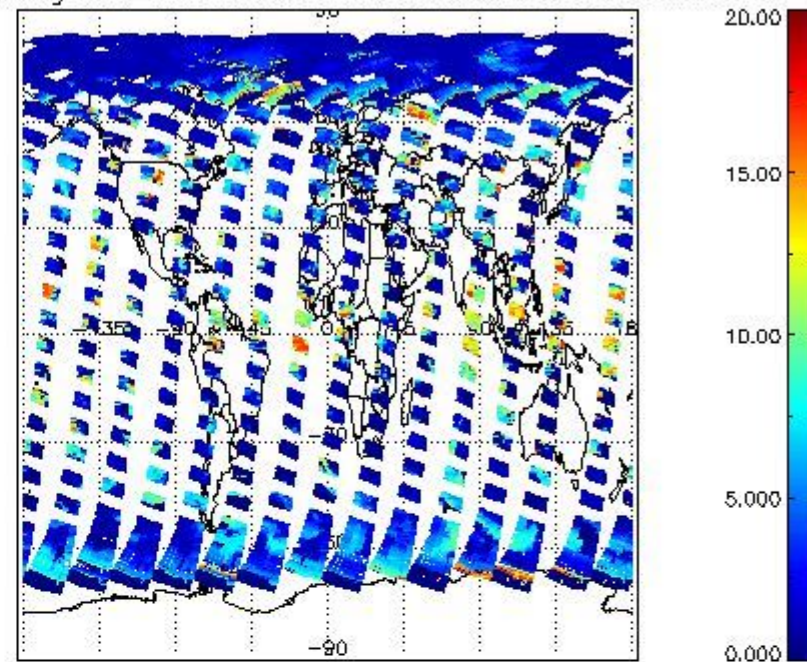
Plots are available for the following parameters:

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

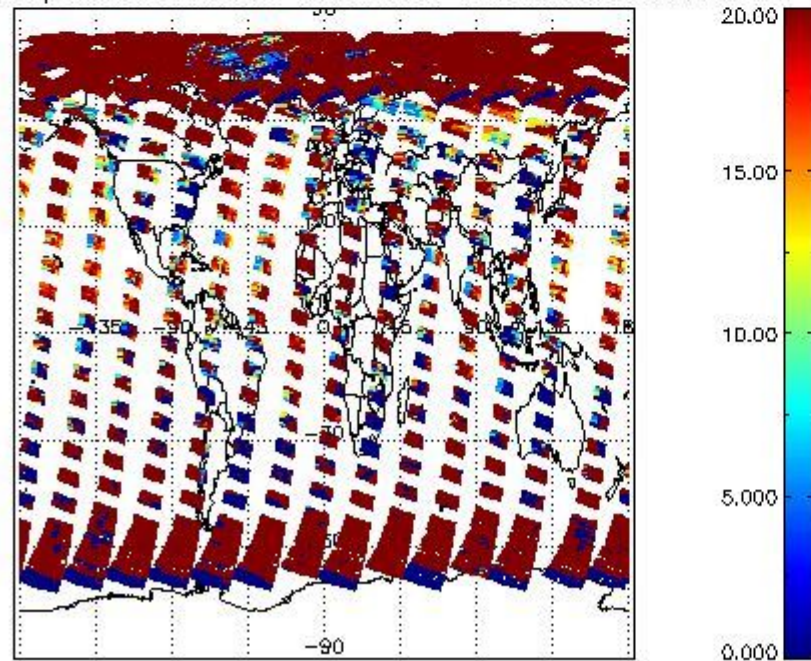
cL_frac for 28APR2004 00:00:00 to 29APR2004 00:00:00



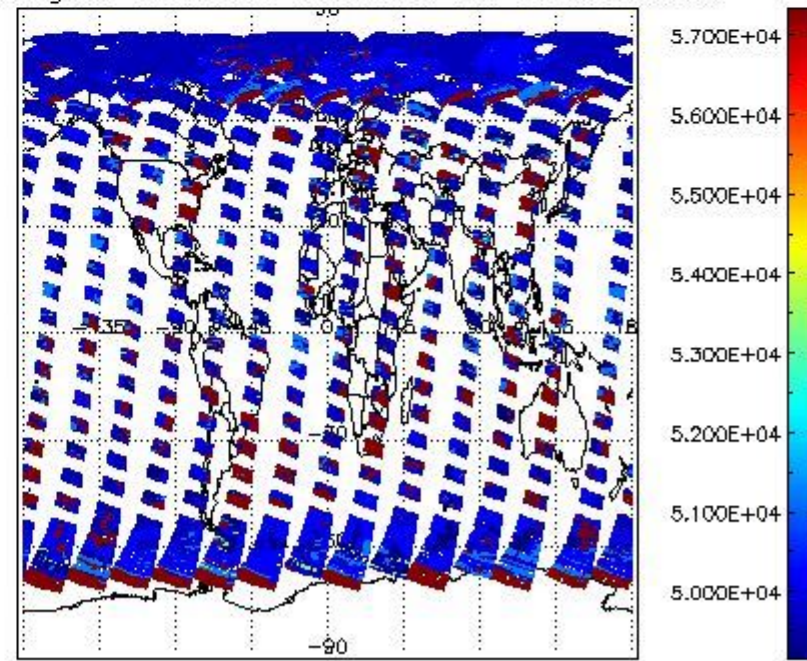
cL_top_height for 28APR2004 00:00:00 to 29APR2004 00:00:00



cL_opt_depth for 28APR2004 00:00:00 to 29APR2004 00:00:00



cloud_flags for 28APR2004 00:00:00 to 29APR2004 00:00:00



2.2.2 Nadir

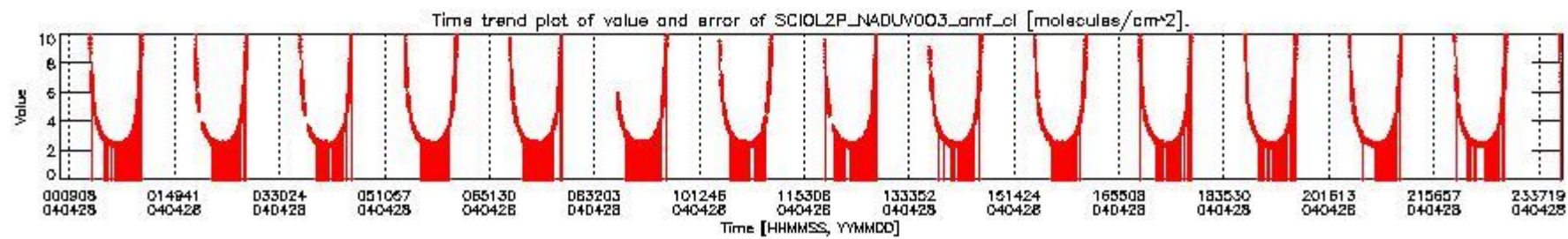
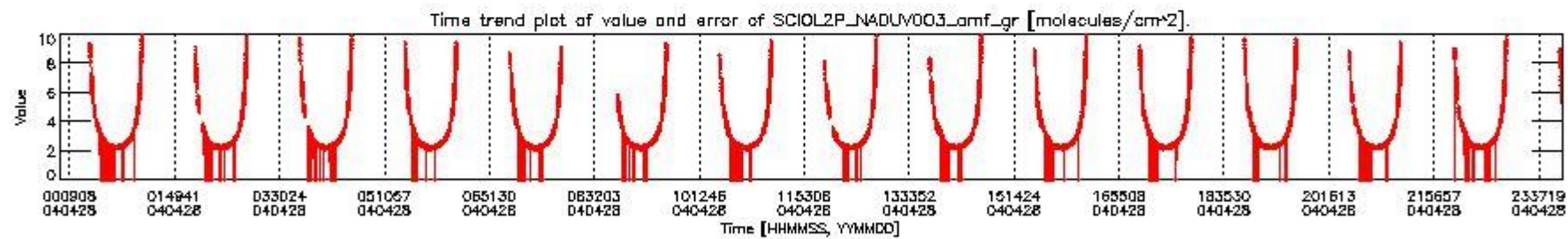
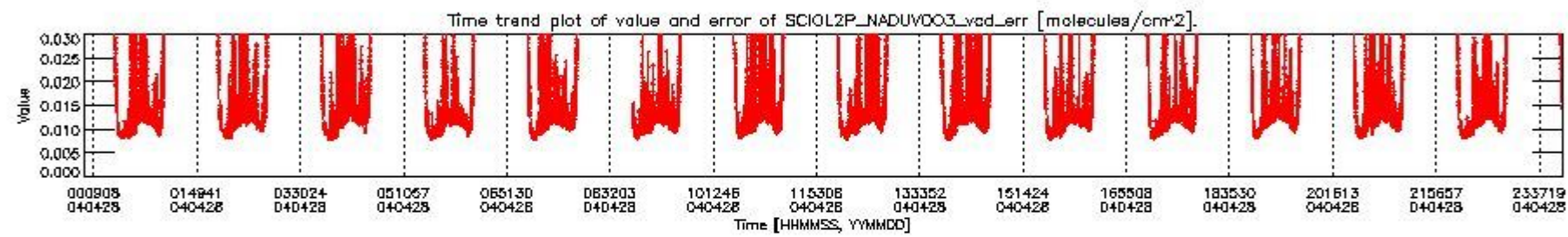
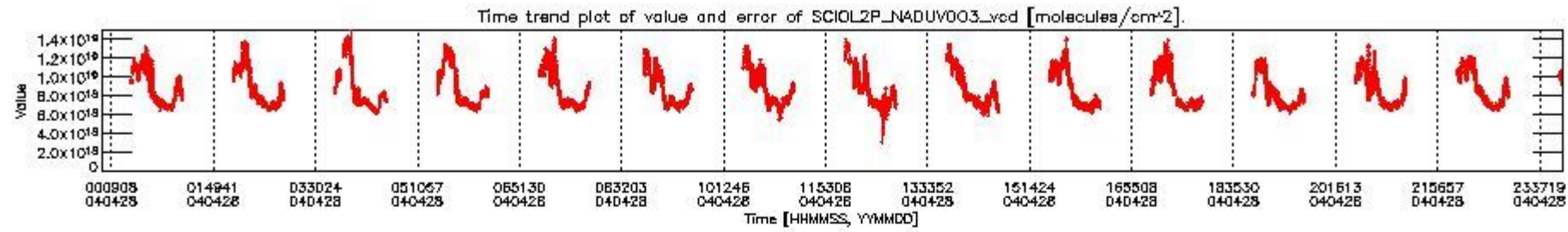
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

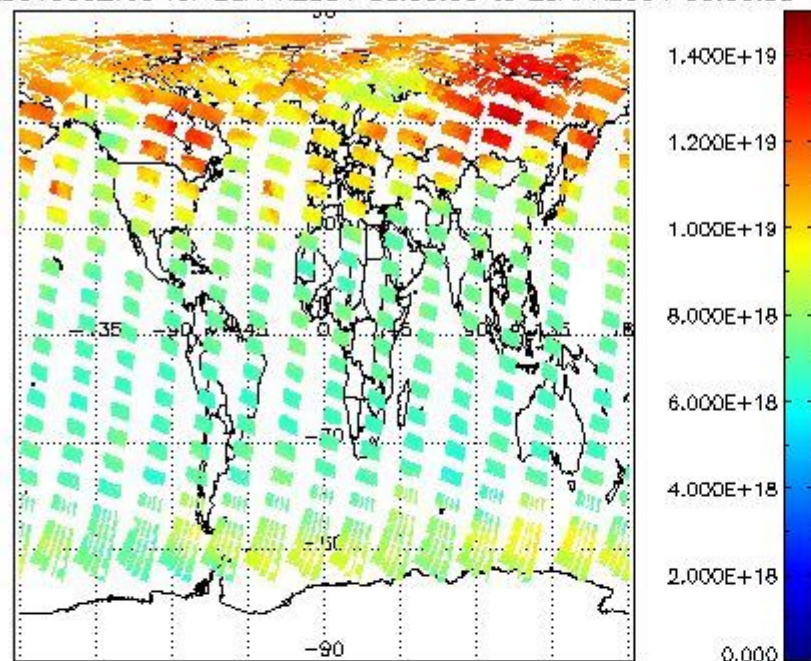
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

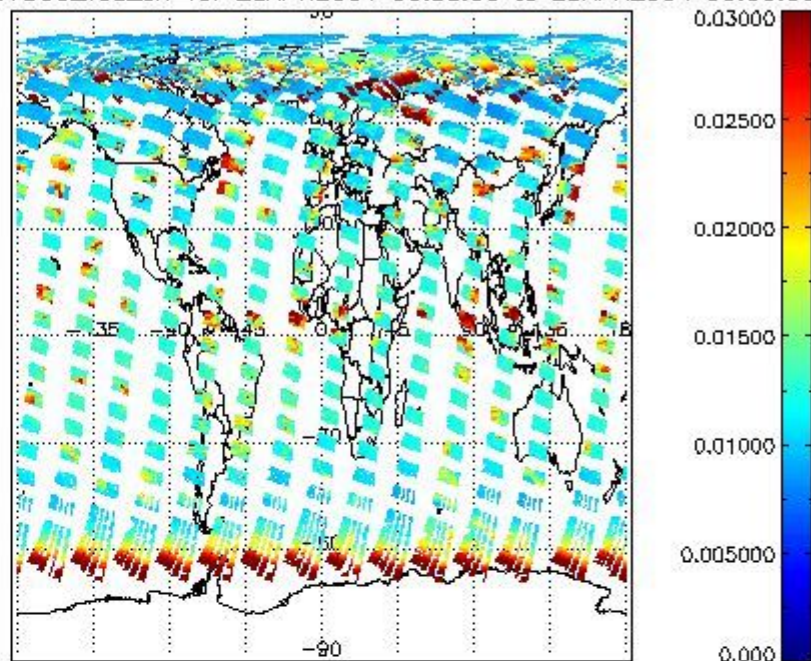
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



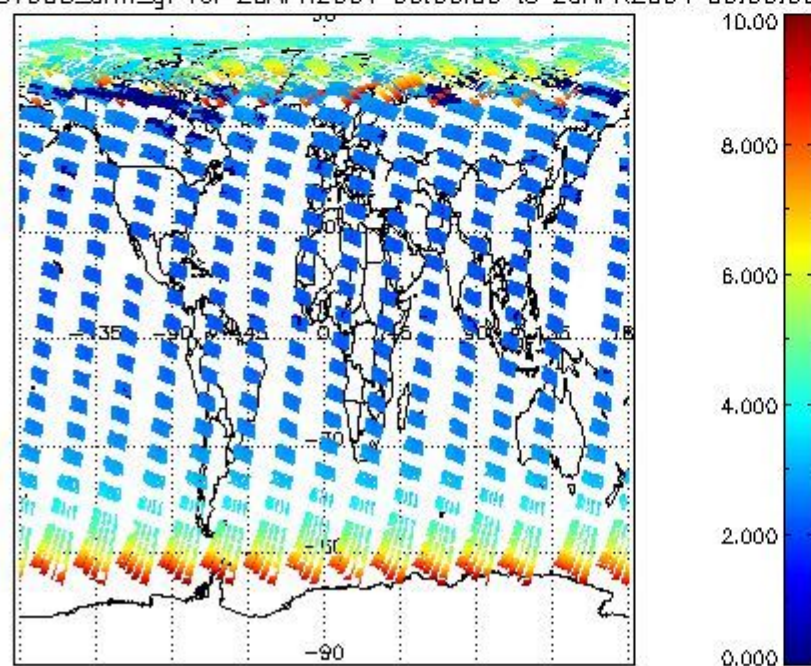
SCIOL2P_NADUV003_vcd for 28APR2004 00:00:00 to 29APR2004 00:00:00



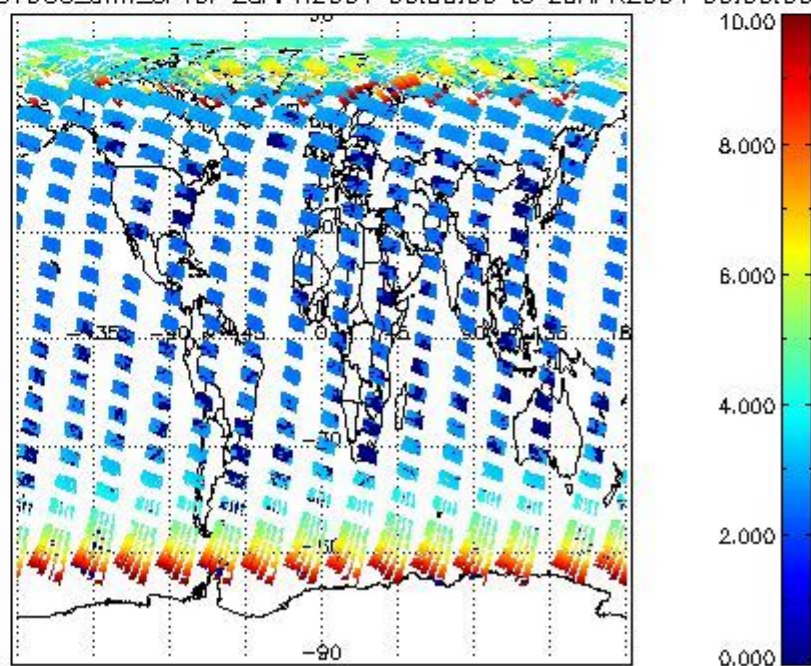
SCIOL2P_NADUV003_vcd_err for 28APR2004 00:00:00 to 29APR2004 00:00:00

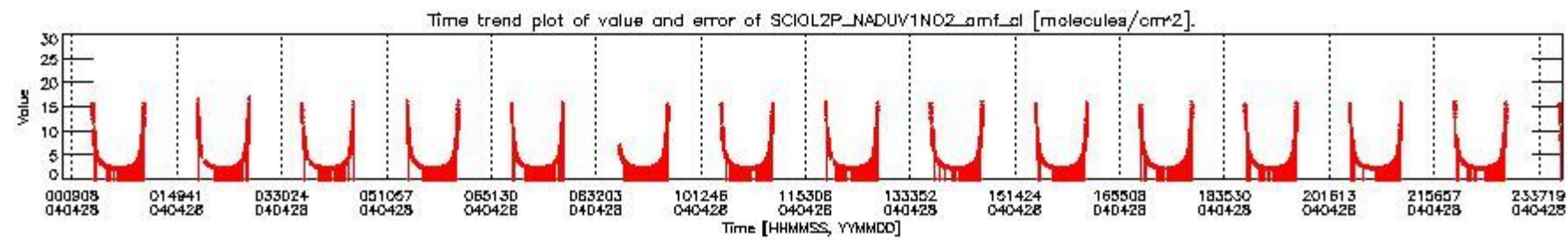
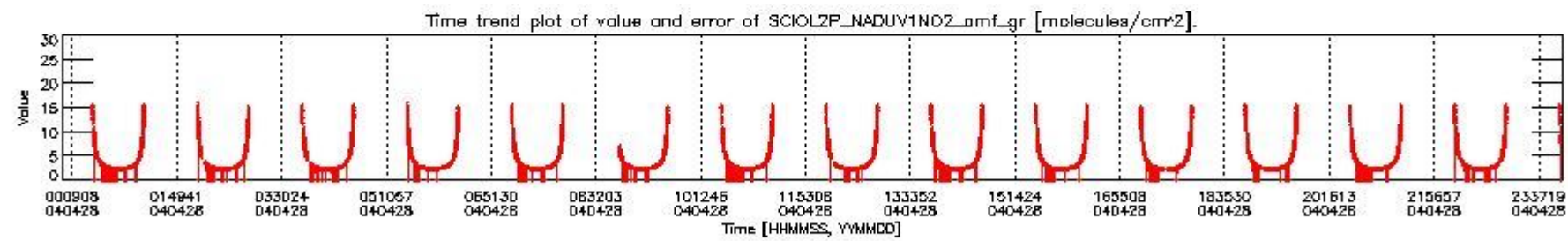
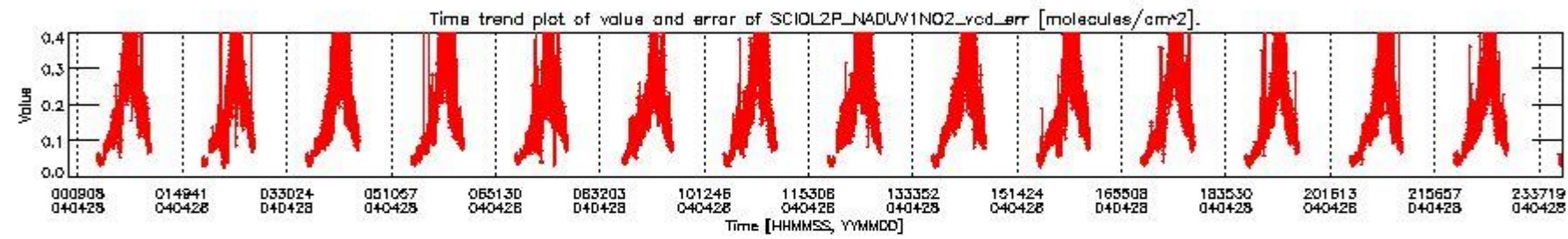
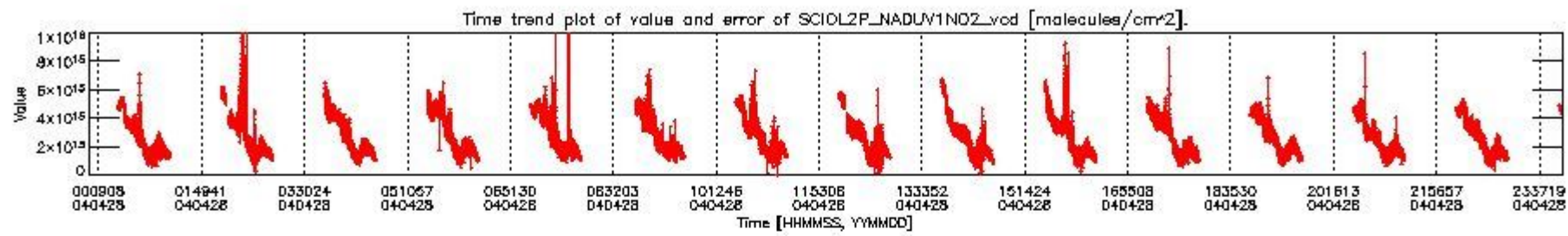


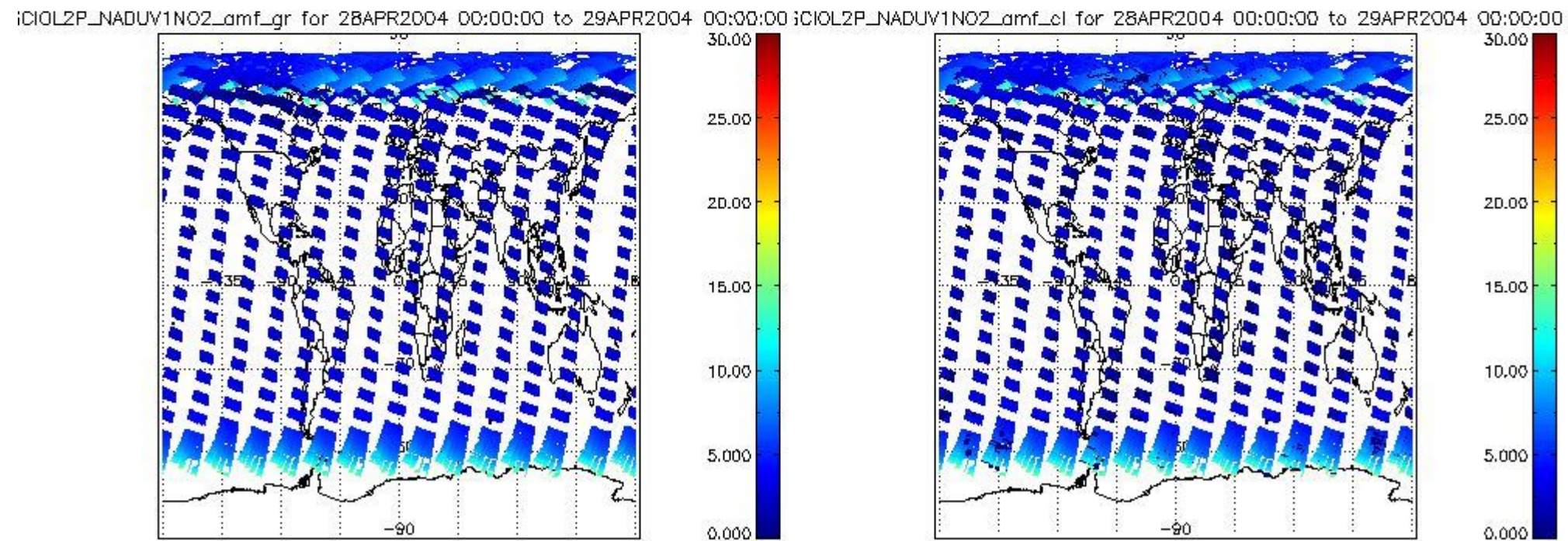
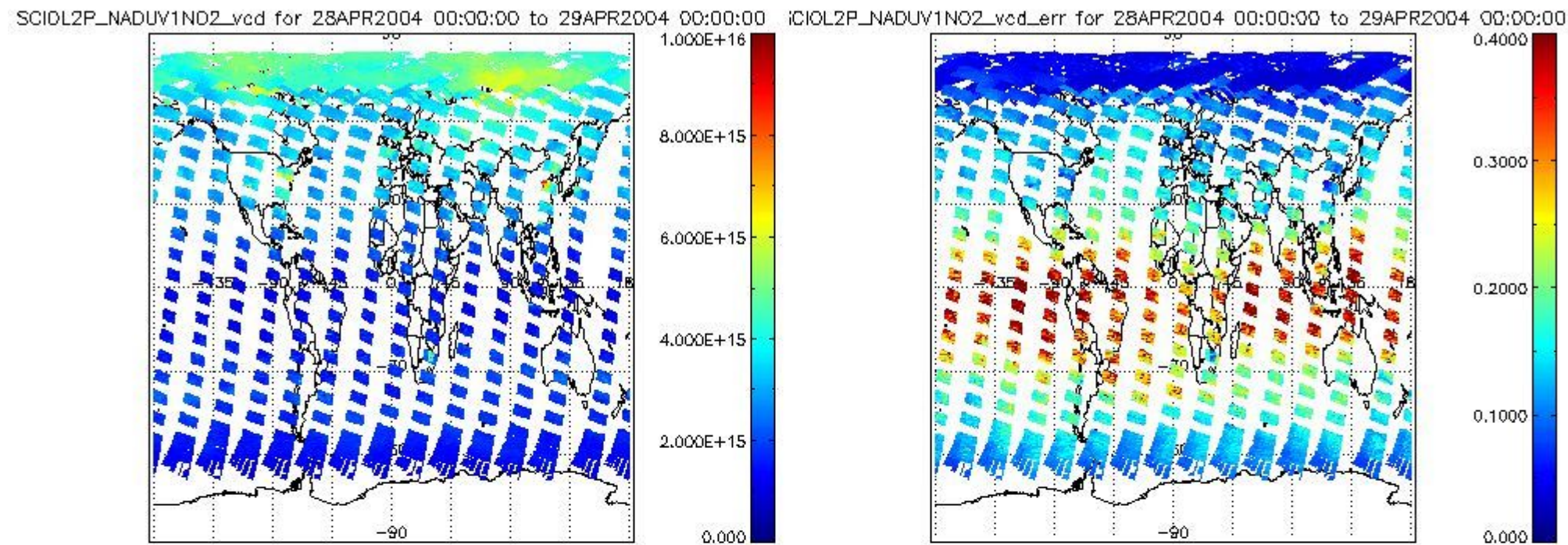
SCIOL2P_NADUV003_amf_gr for 28APR2004 00:00:00 to 29APR2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 28APR2004 00:00:00 to 29APR2004 00:00:00







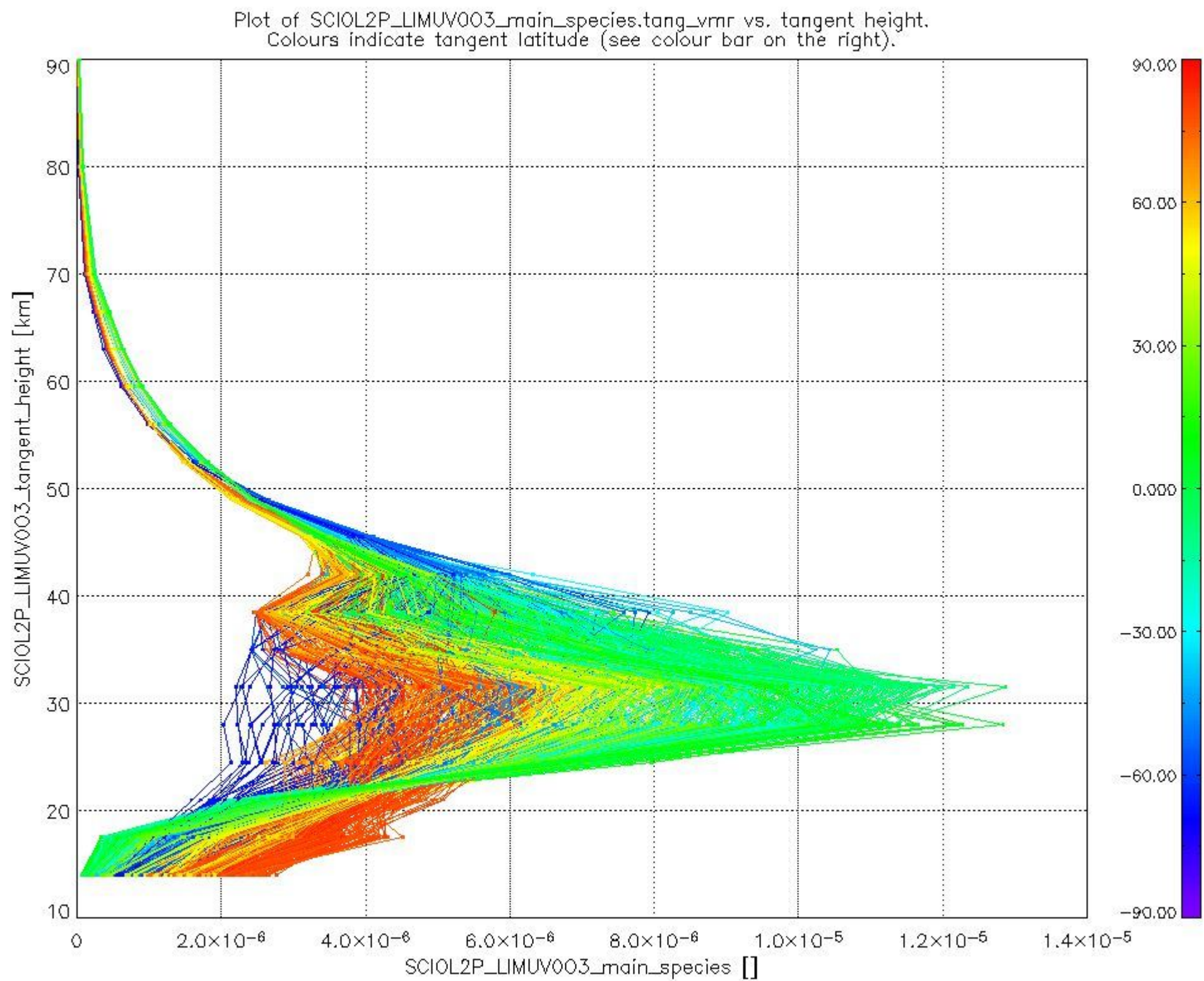
2.2.3 Limb

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

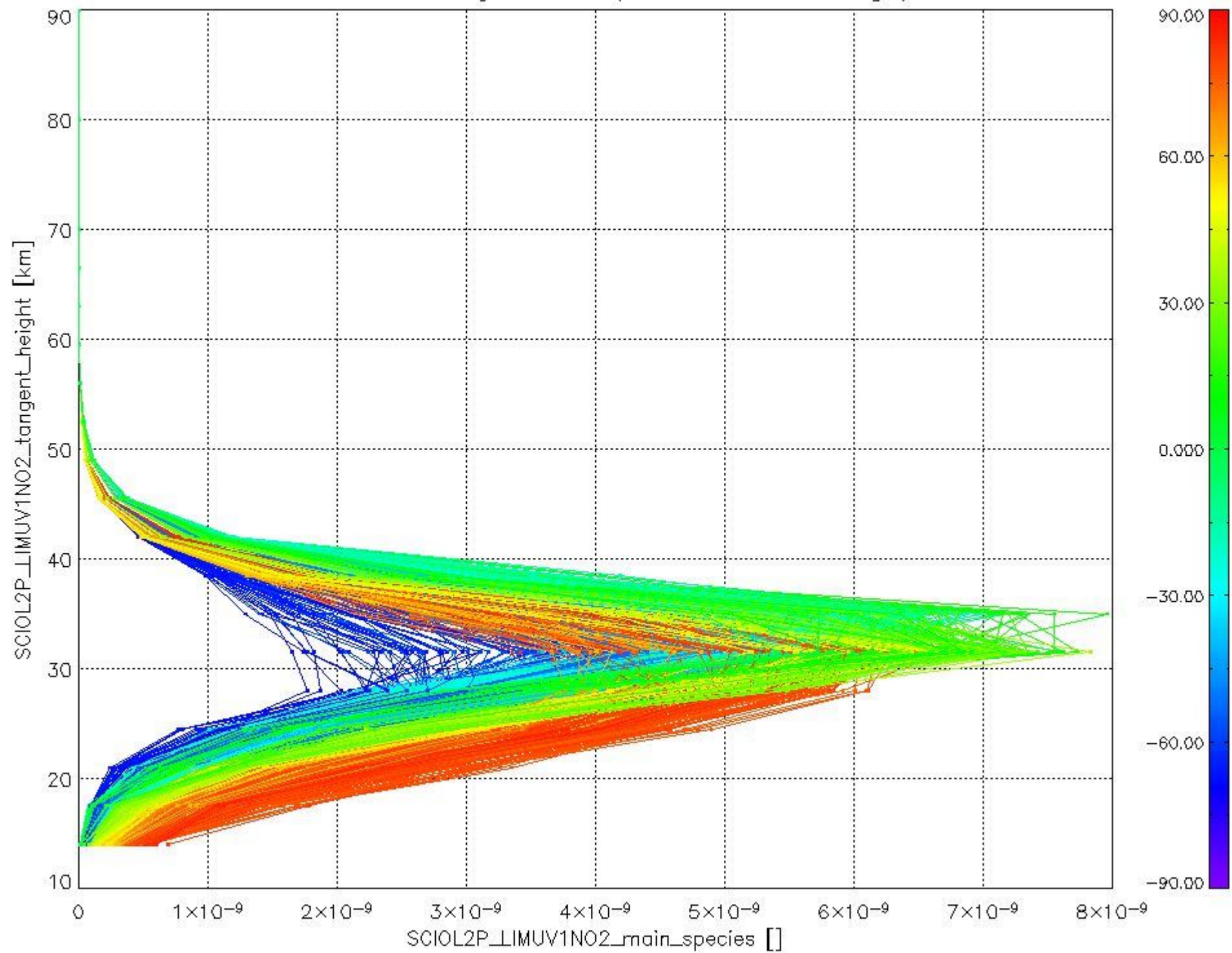
The following data items are currently included into this section:

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.



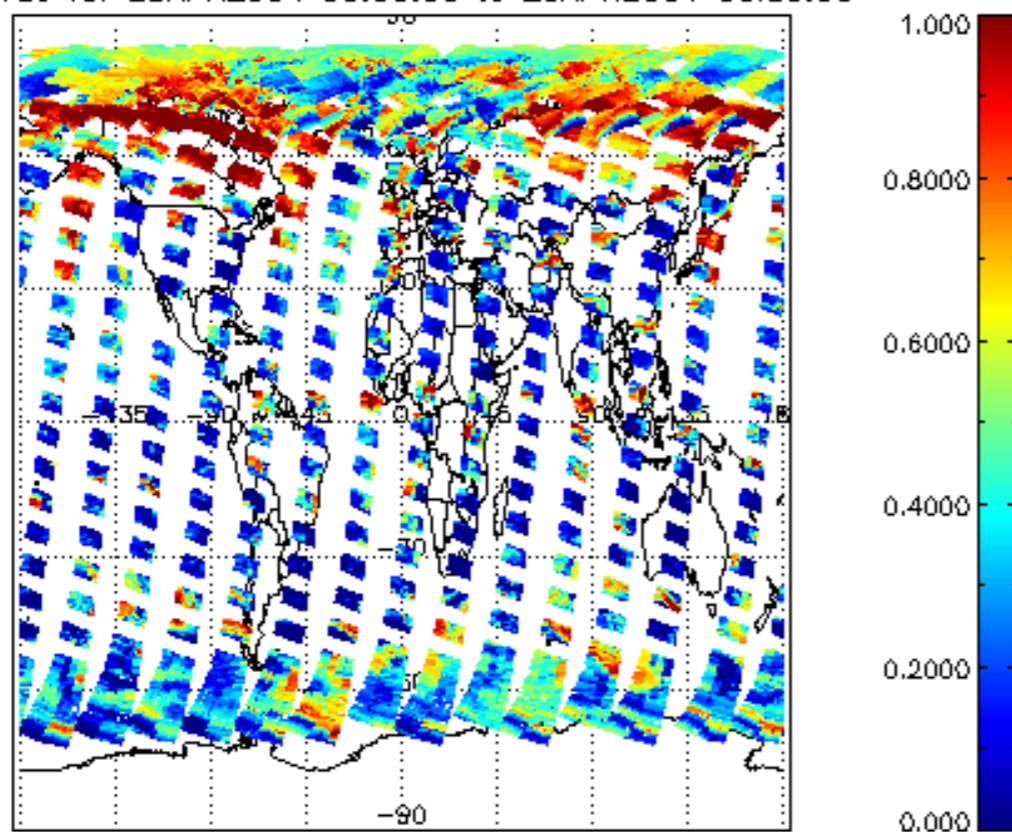
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



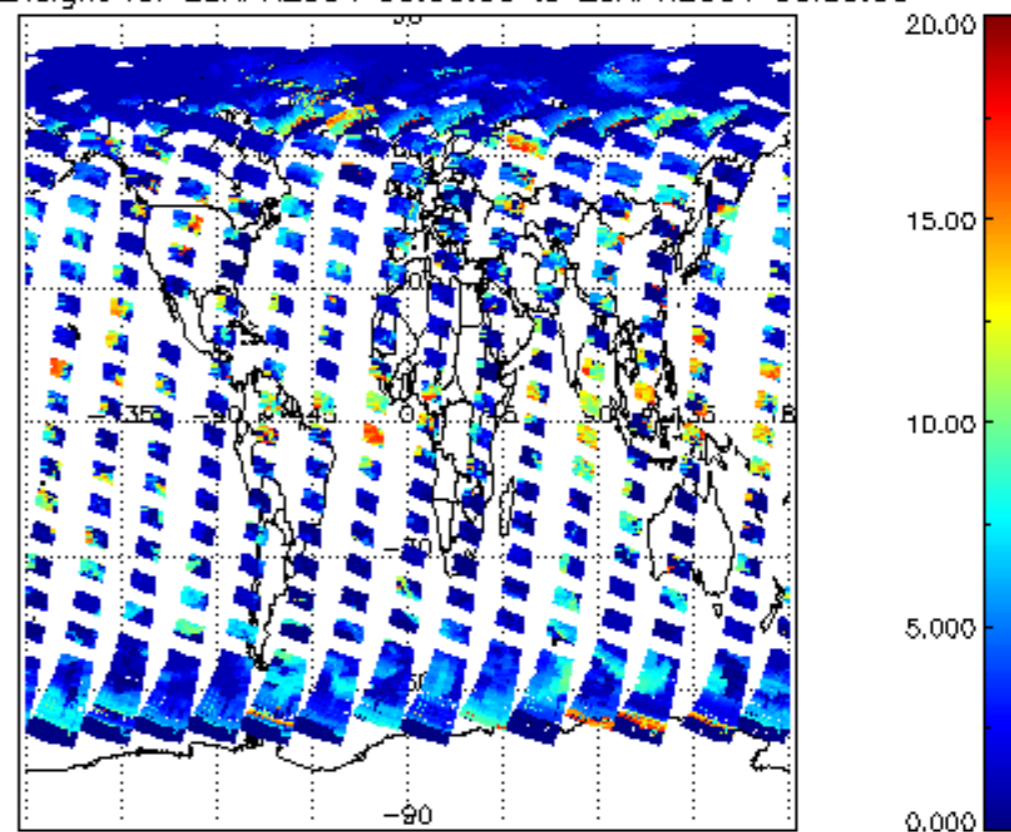
2.3 ADF monitoring

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

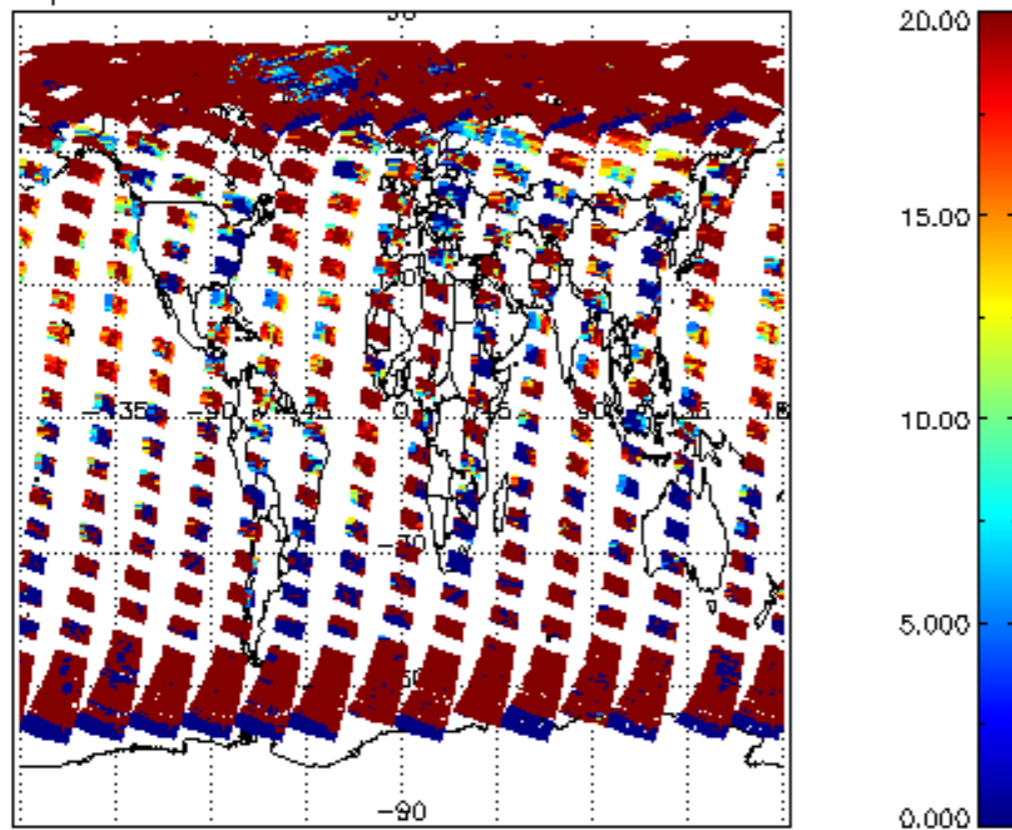
cl_frac for 28APR2004 00:00:00 to 29APR2004 00:00:00



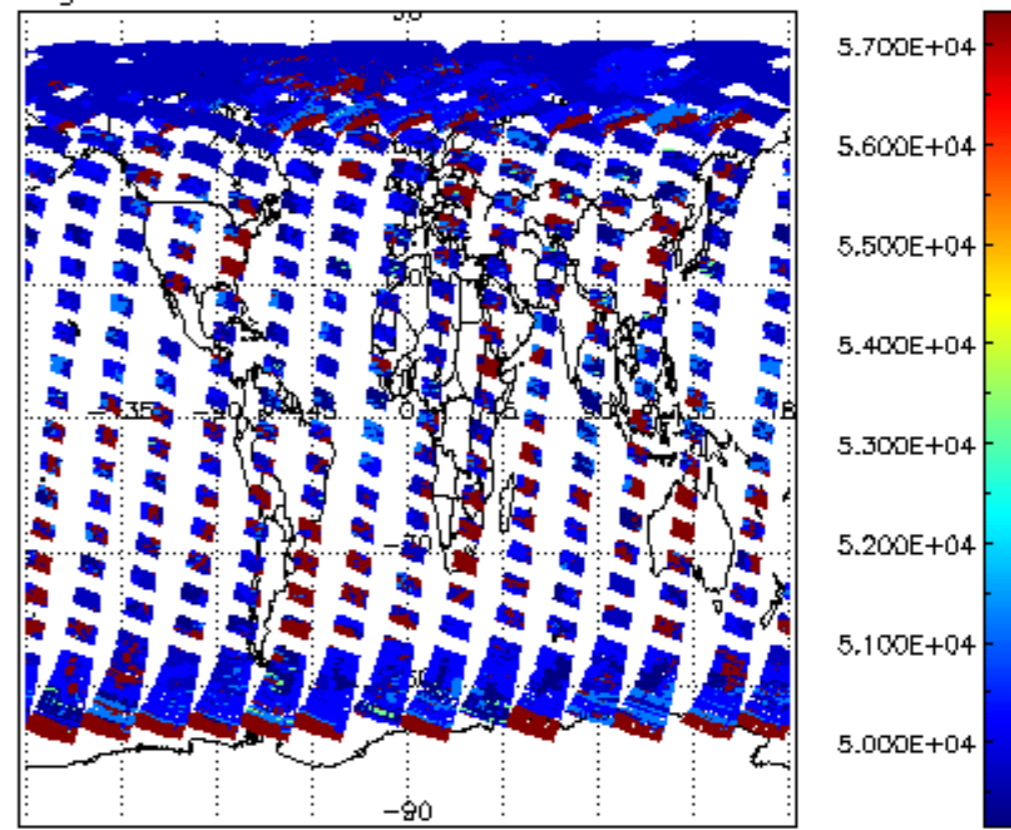
cl_top_height for 28APR2004 00:00:00 to 29APR2004 00:00:00

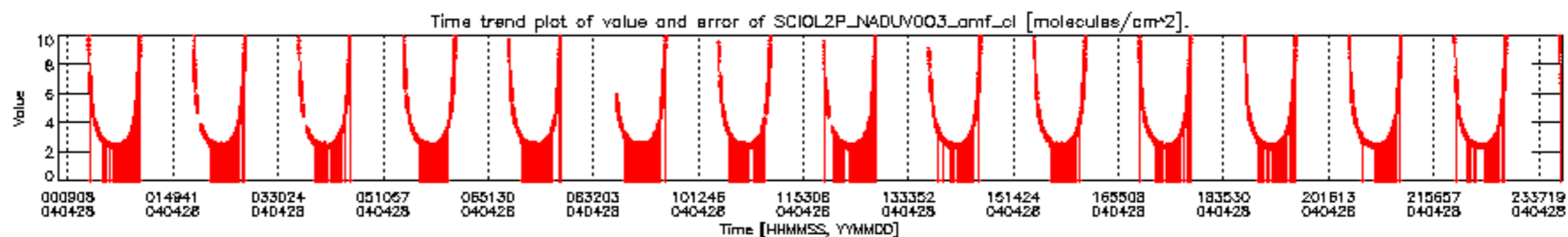
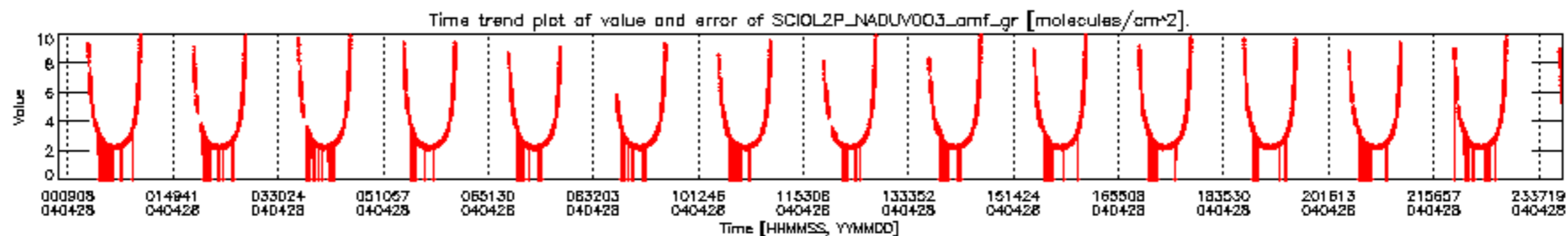
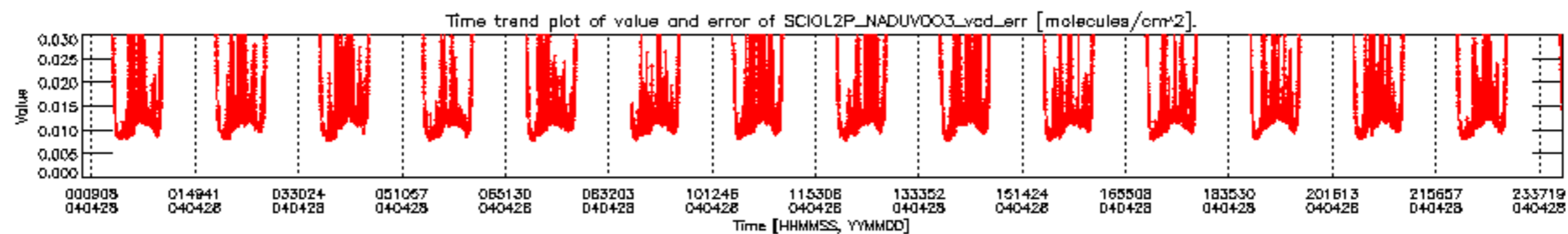
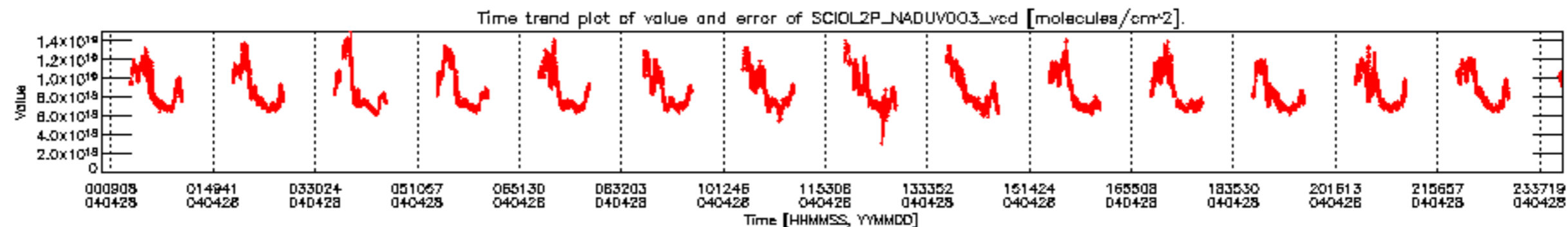


cl_opt_depth for 28APR2004 00:00:00 to 29APR2004 00:00:00

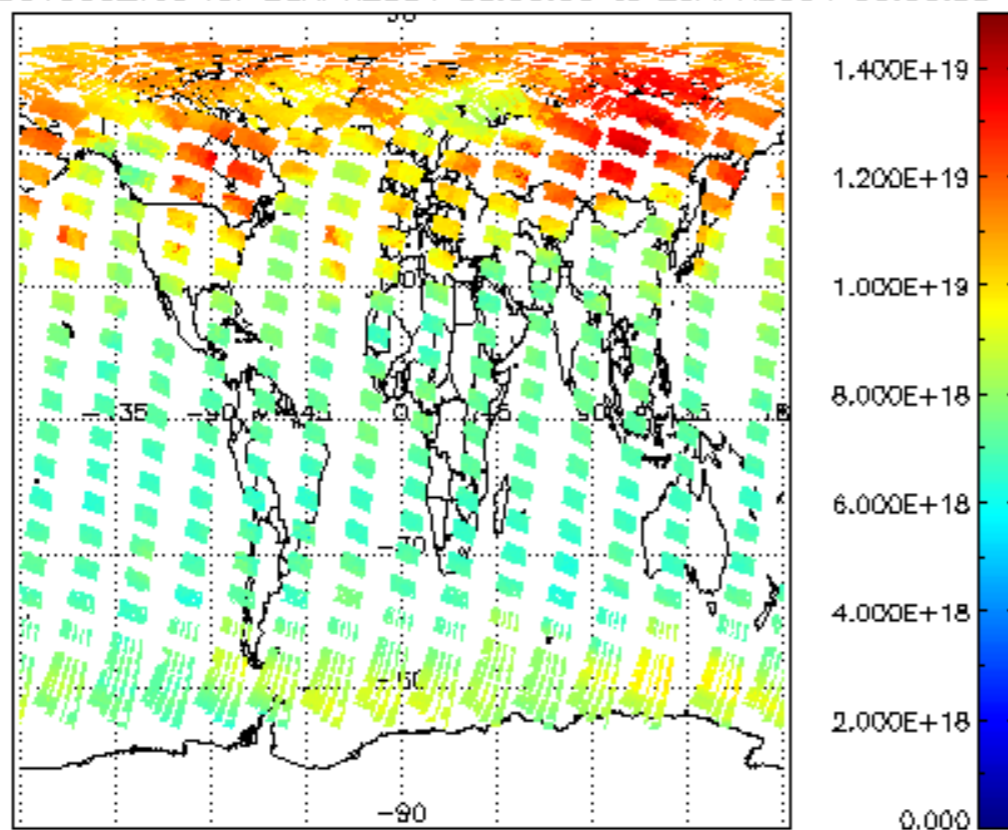


cloud_flags for 28APR2004 00:00:00 to 29APR2004 00:00:00

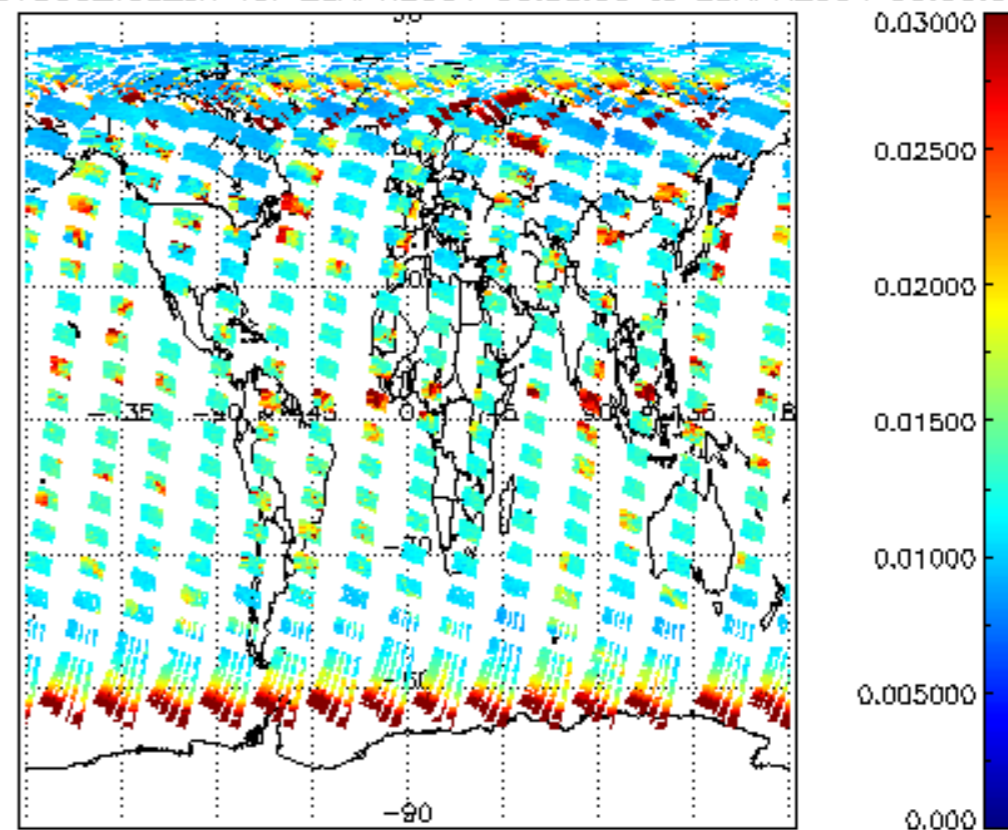




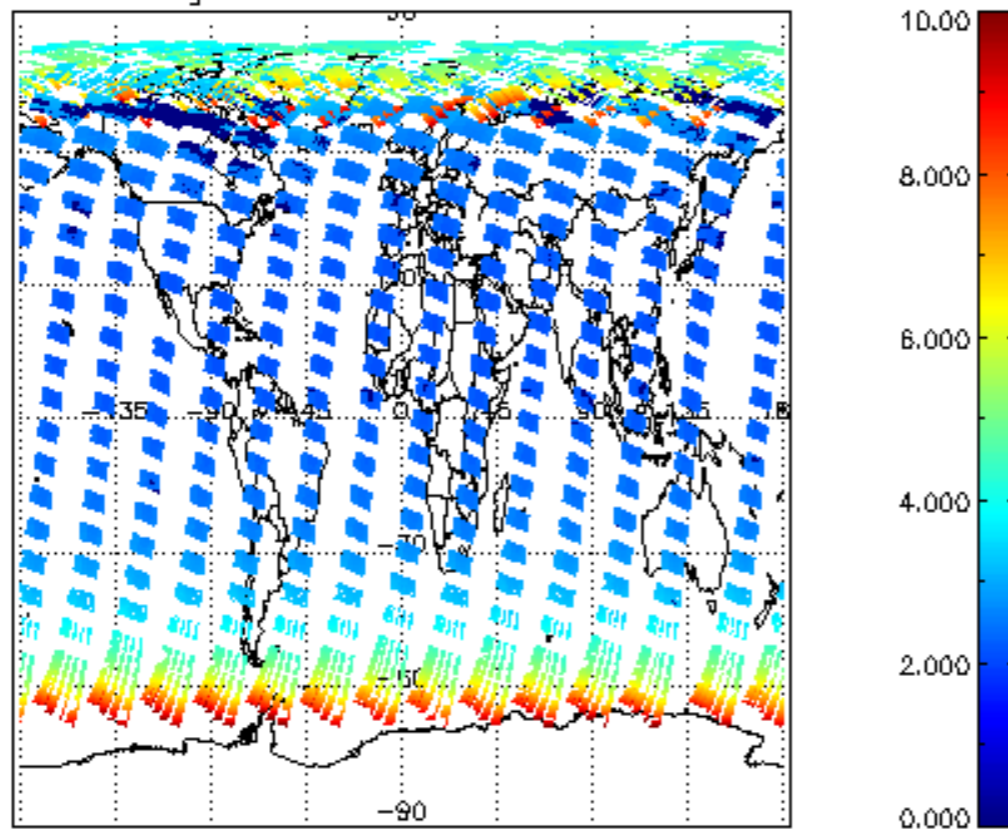
SCIOL2P_NADUV003_vcd for 28APR2004 00:00:00 to 29APR2004 00:00:00



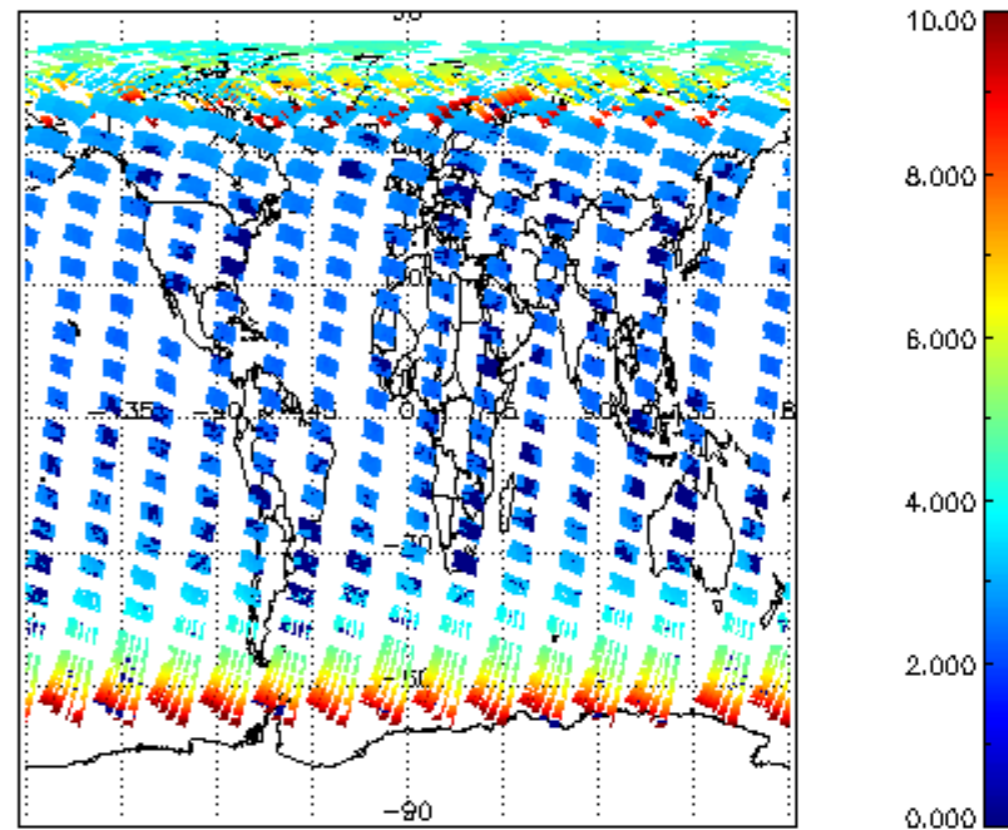
SCIOL2P_NADUV003_vcd_err for 28APR2004 00:00:00 to 29APR2004 00:00:00

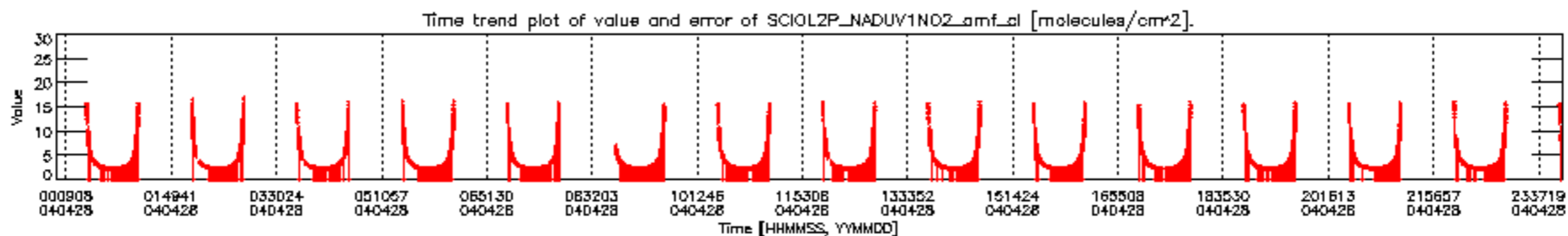
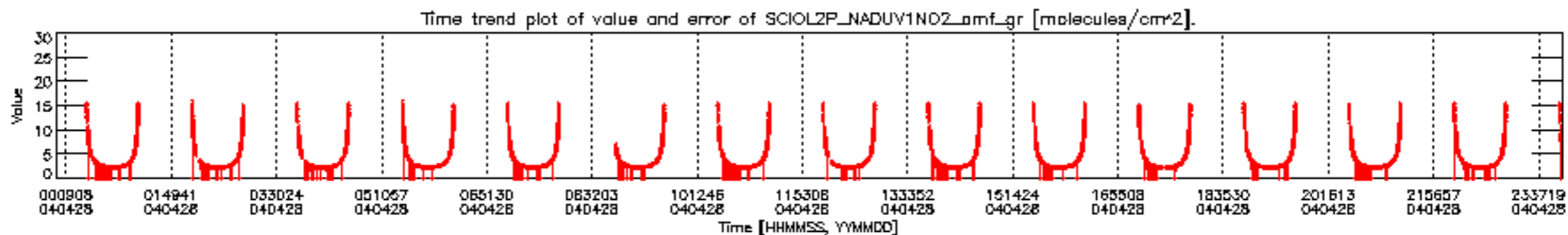
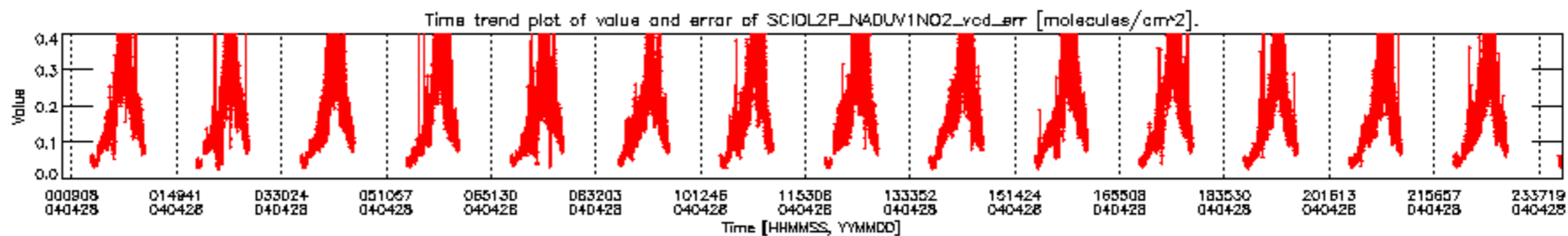
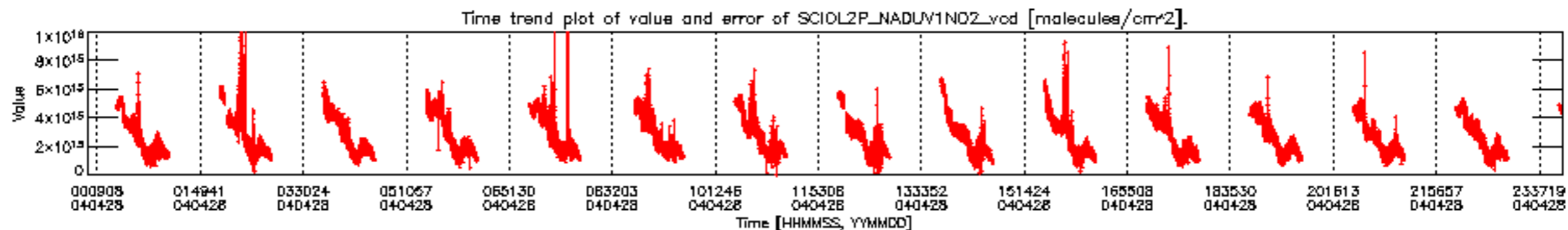


SCIOL2P_NADUV003_amf_gr for 28APR2004 00:00:00 to 29APR2004 00:00:00

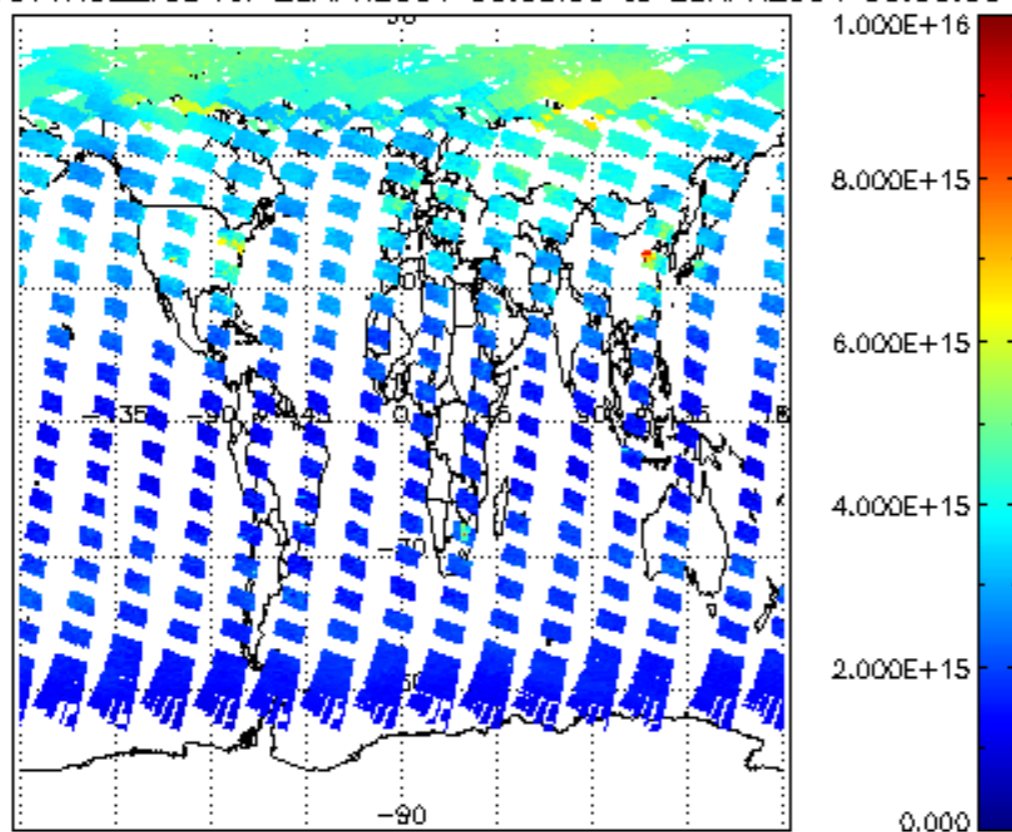


SCIOL2P_NADUV003_amf_cl for 28APR2004 00:00:00 to 29APR2004 00:00:00

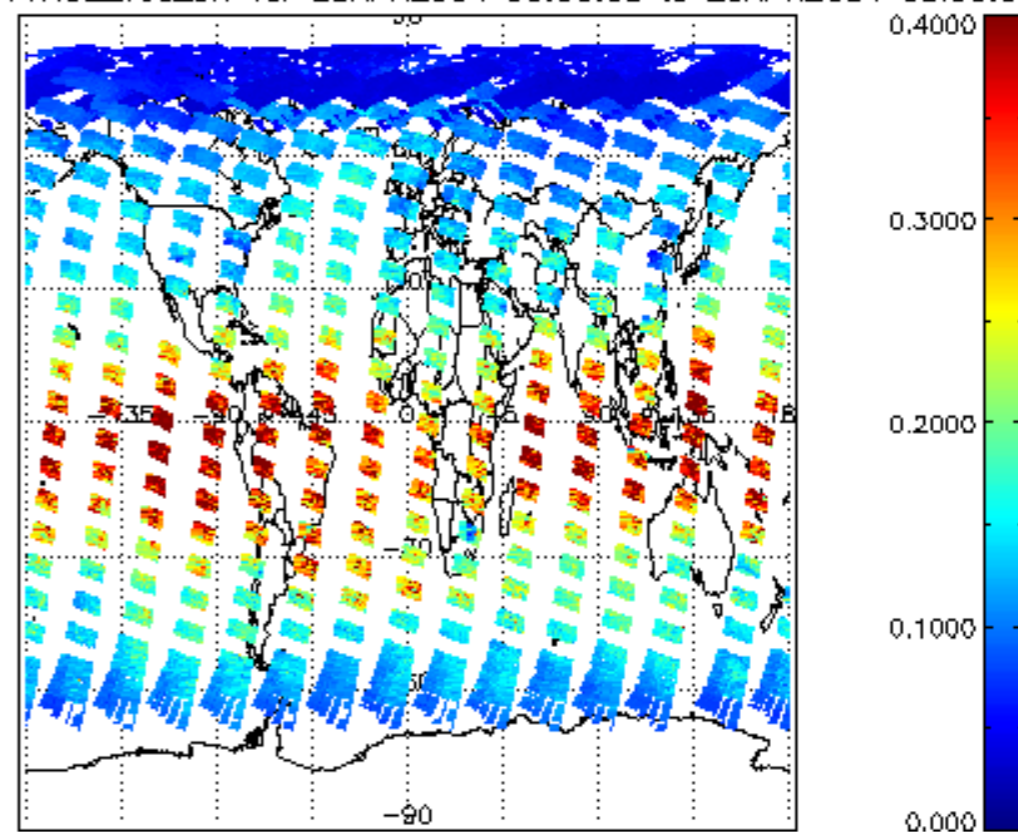




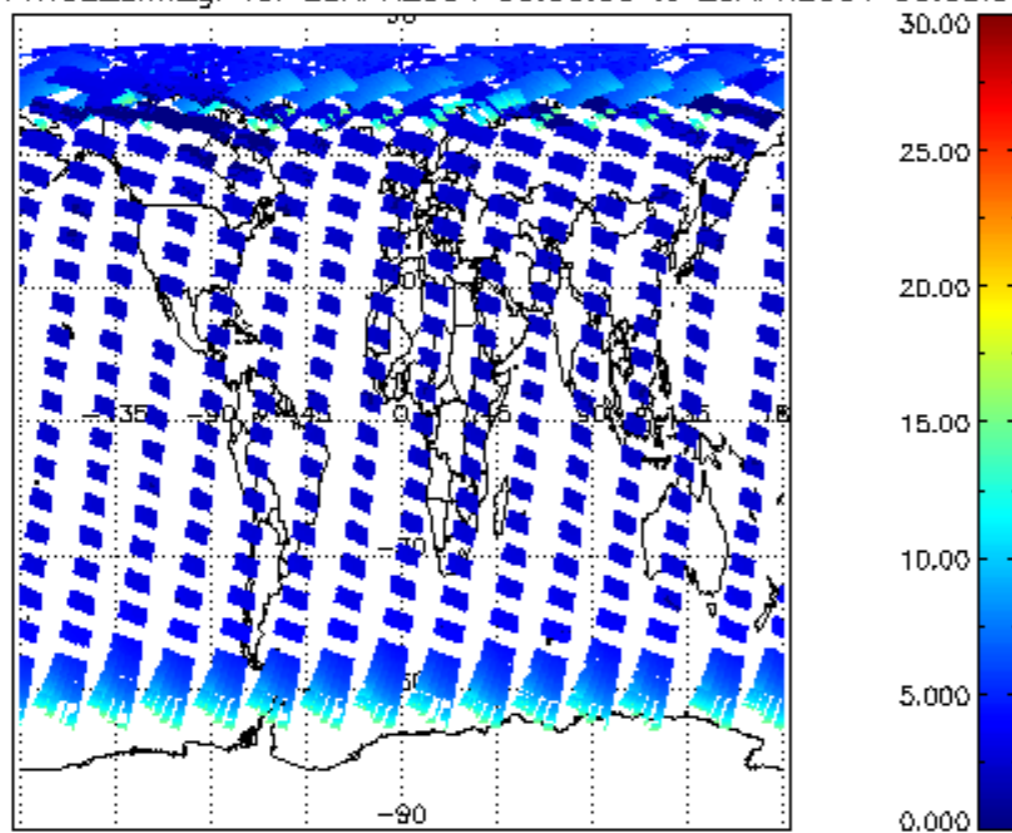
SCIOL2P_NADUV1NO2_vcd for 28APR2004 00:00:00 to 29APR2004 00:00:00



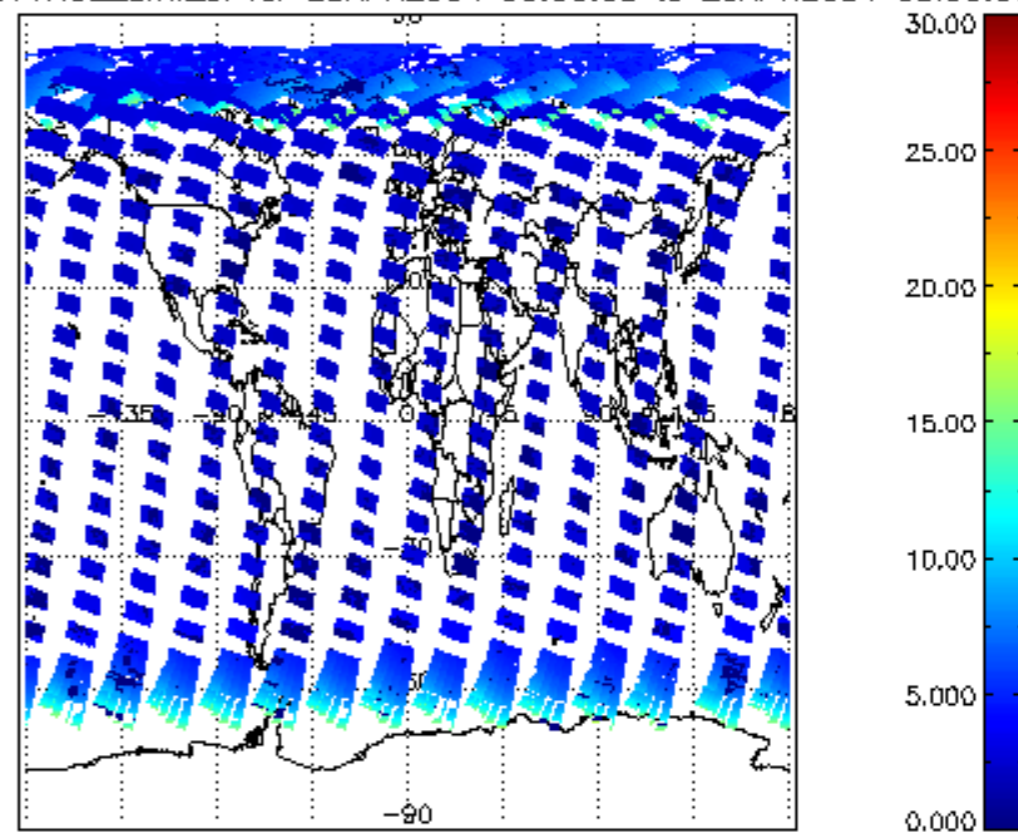
iCIOL2P_NADUV1NO2_vcd_err for 28APR2004 00:00:00 to 29APR2004 00:00:00



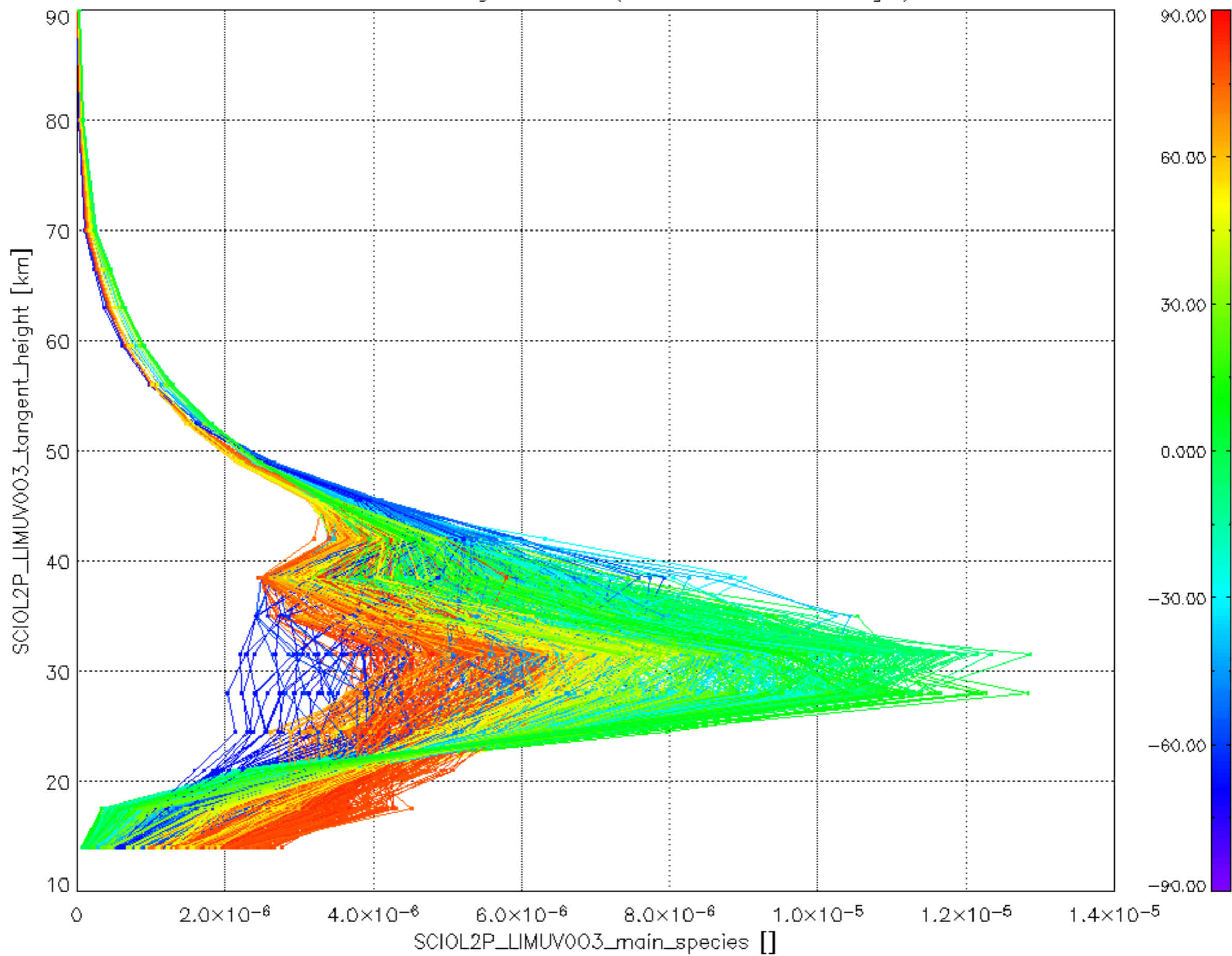
iCIOL2P_NADUV1NO2_amf_gr for 28APR2004 00:00:00 to 29APR2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 28APR2004 00:00:00 to 29APR2004 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).

