

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	1.5 (01-07-2008)
Time of report generation	04AUG2008 08:40:09
Data source version	SCIA-OL/3.01-R
Processing scope for products	18FEB2004 00:00:00 to 19FEB2004 00:00:00
Start time of first product within scope	17FEB2004 22:52:34
Stop time of last product within scope	19FEB2004 00:56:19
Total number of level 2 products	14
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.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PRDPA20040217_225234_000032372024_00216_10290_6878.N1	17FEB2004 22:52:34	17FEB2004 23:46:31	0	GOOD
1	SCI_OL__2PRDPA20040218_003145_000033772024_00217_10291_6860.N1	18FEB2004 00:31:45	18FEB2004 01:28:02	0	GOOD
2	SCI_OL__2PRDPA20040218_021344_000032372024_00218_10292_6763.N1	18FEB2004 02:13:44	18FEB2004 03:07:42	0	GOOD
3	SCI_OL__2PRDPA20040218_035256_000033772024_00219_10293_6775.N1	18FEB2004 03:52:56	18FEB2004 04:49:13	0	GOOD
4	SCI_OL__2PRDPA20040218_053455_000032372024_00220_10294_6797.N1	18FEB2004 05:34:55	18FEB2004 06:28:53	0	GOOD
5	SCI_OL__2PRDPA20040218_071407_000033772024_00221_10295_6721.N1	18FEB2004 07:14:07	18FEB2004 08:10:24	0	GOOD
6	SCI_OL__2PRDPA20040218_121717_000032372024_00224_10298_6885.N1	18FEB2004 12:17:17	18FEB2004 13:11:15	0	GOOD
7	SCI_OL__2PRDPA20040218_135629_000033772024_00225_10299_6645.N1	18FEB2004 13:56:29	18FEB2004 14:52:46	0	GOOD
8	SCI_OL__2PRDPA20040218_153828_000032372024_00226_10300_6802.N1	18FEB2004 15:38:28	18FEB2004 16:32:25	0	GOOD
9	SCI_OL__2PRDPA20040218_171708_000033642024_00227_10301_6817.N1	18FEB2004 17:17:08	18FEB2004 18:13:13	0	GOOD
10	SCI_OL__2PRDPA20040218_185748_000033772024_00228_10302_6709.N1	18FEB2004 18:57:48	18FEB2004 19:54:05	0	GOOD
11	SCI_OL__2PRDPA20040218_203851_000033772024_00229_10303_6861.N1	18FEB2004 20:38:51	18FEB2004 21:35:08	0	GOOD
12	SCI_OL__2PRDPA20040218_222050_000032372024_00230_10304_6741.N1	18FEB2004 22:20:50	18FEB2004 23:14:47	0	GOOD
13	SCI_OL__2PRDPA20040219_000002_000033772024_00231_10305_6752.N1	19FEB2004 00:00:02	19FEB2004 00:56:19	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: 97080

Total number of cloud data DSRs with good quality flag (=0): 97080 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	97080	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	97080	0.21853	0.25000	0.12500	1.0000	0.097520	s
CL_FRAC	97080	0.46684	0.45884	0.0000	1.0000	0.27798	-
CL_FRAC_ERR	97080	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	97080	6.9930	8.0000	4.0000	32.000	3.1206	

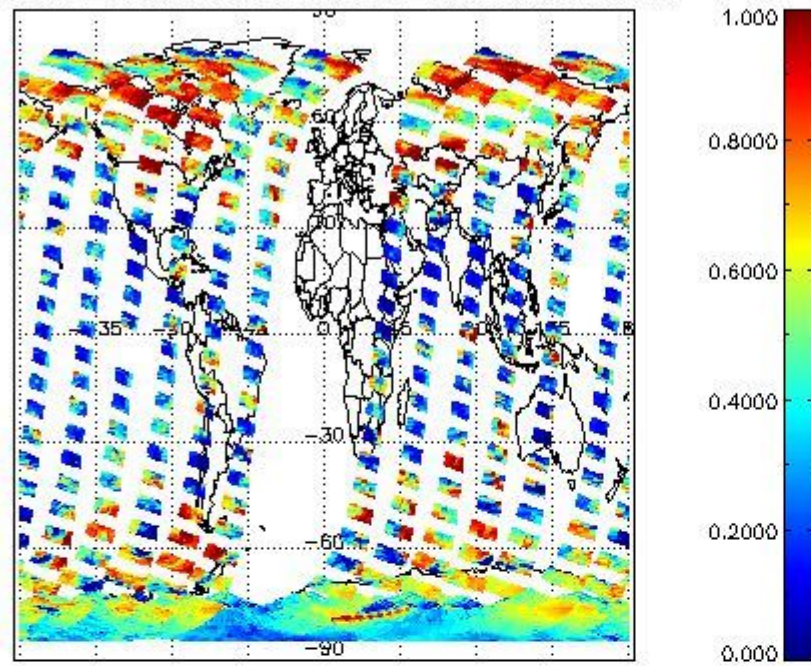
PMD_READ_CL[0]	97080	0.30979	0.0000	0.0000	22.000	1.2435	-
PMD_READ_CL[1]	97080	0.27094	0.0000	0.0000	32.000	1.3274	-
CL_TOP_HEIGHT	88289	4.1336	2.5708	0.0000	17.000	3.8900	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	88289	46.281	31.369	0.0000	101.00	37.734	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	97080	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	97080	11000110	11000010	11000000	11100000	2380.6	flags
AERO_ABSO_IND	97080	0.74665	0.48034	-4.6770	11.389	1.2237	
AERO_IND_DIAG	97080	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	97080	01100111	11000000	00000000	11000000	24494.	flags

Time and geolocation plots:

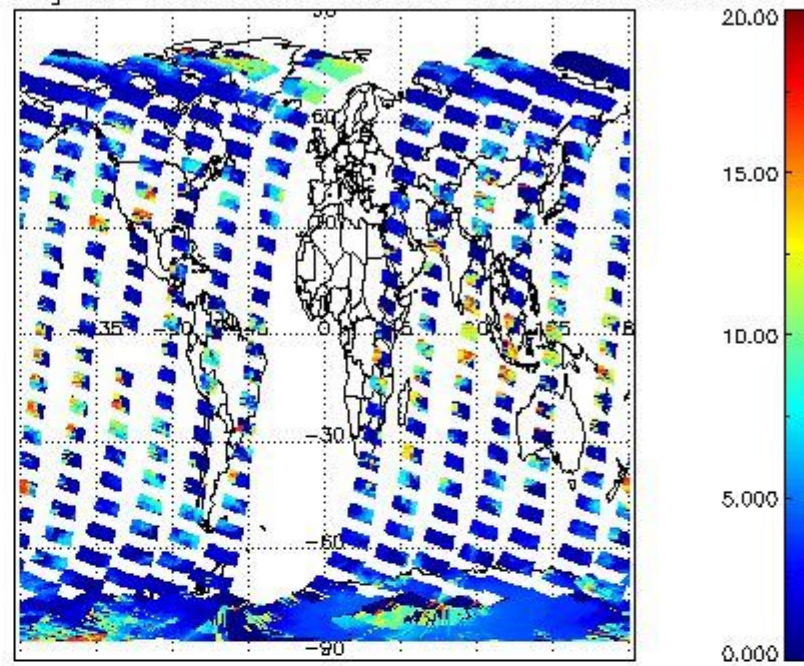
Plots are available for the following parameters:

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

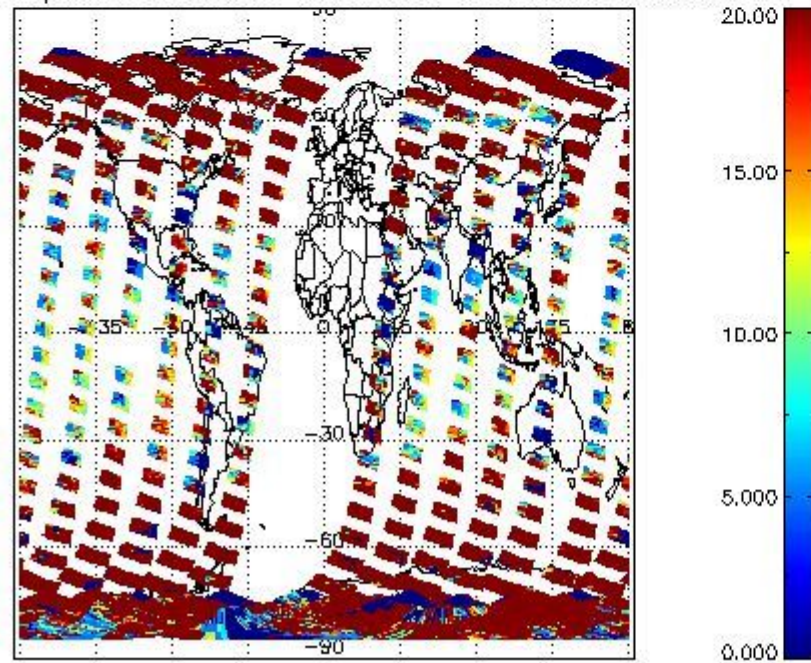
cLfrac for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



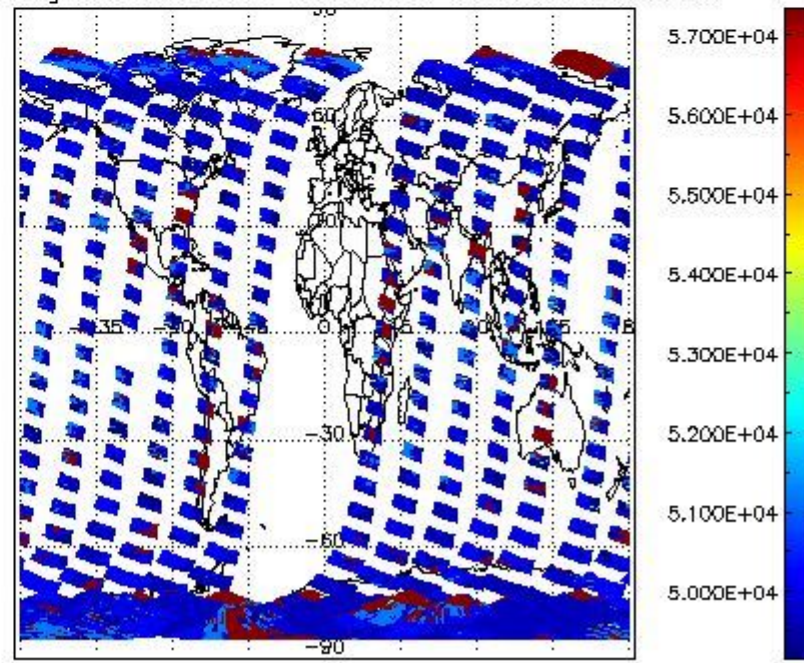
cL_top_height for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



cLopt_depth for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



cloud_flags for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



2.2.2 Nadir

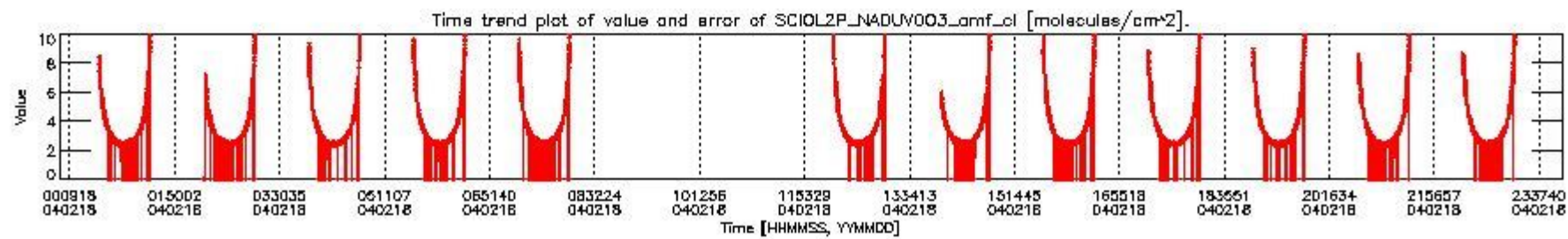
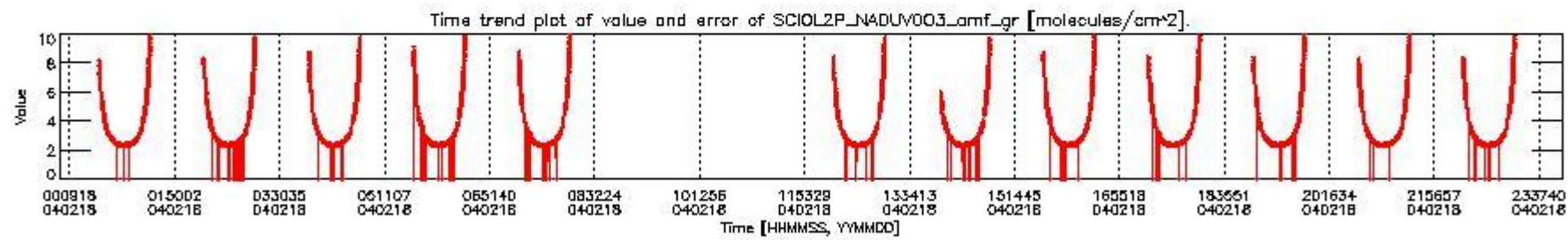
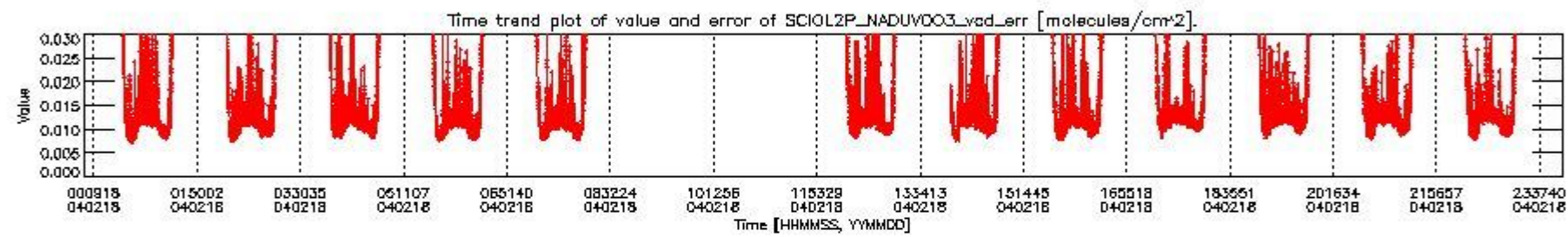
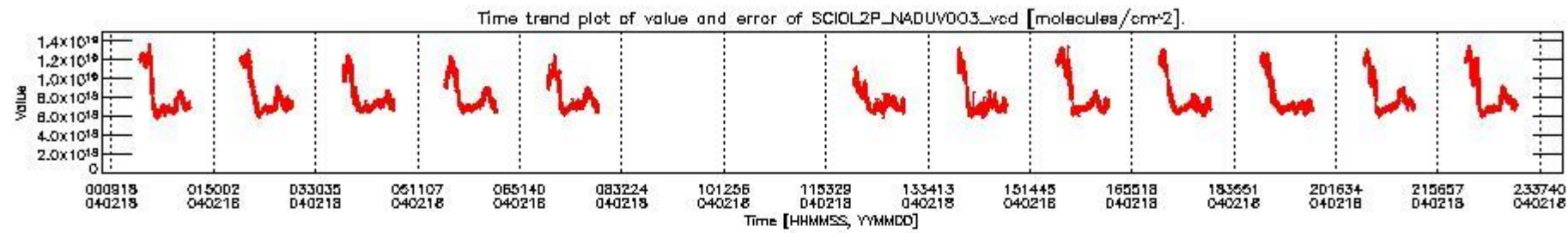
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

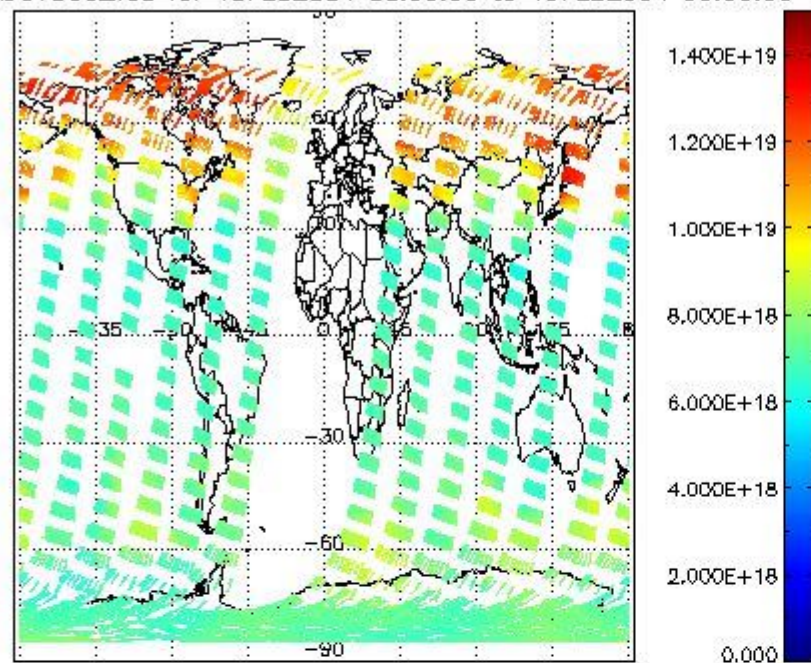
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

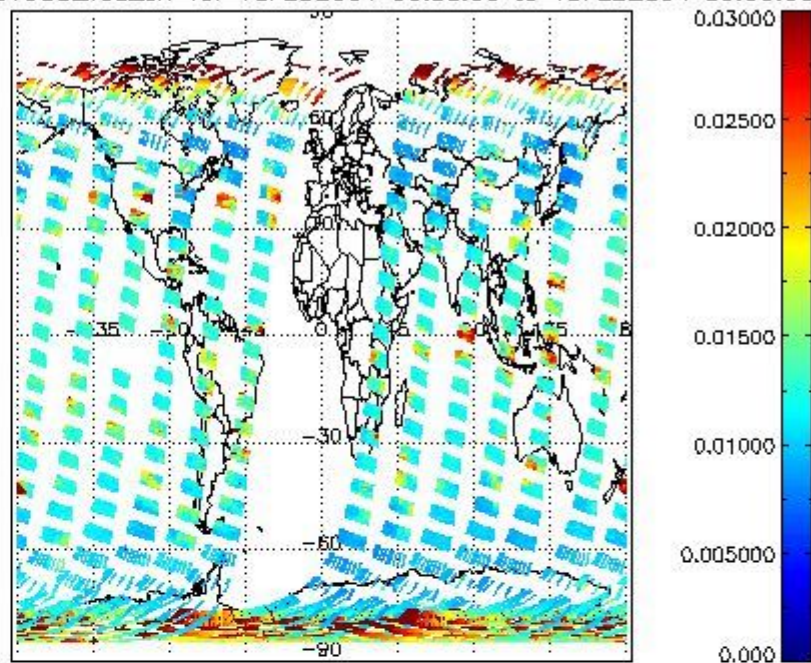
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



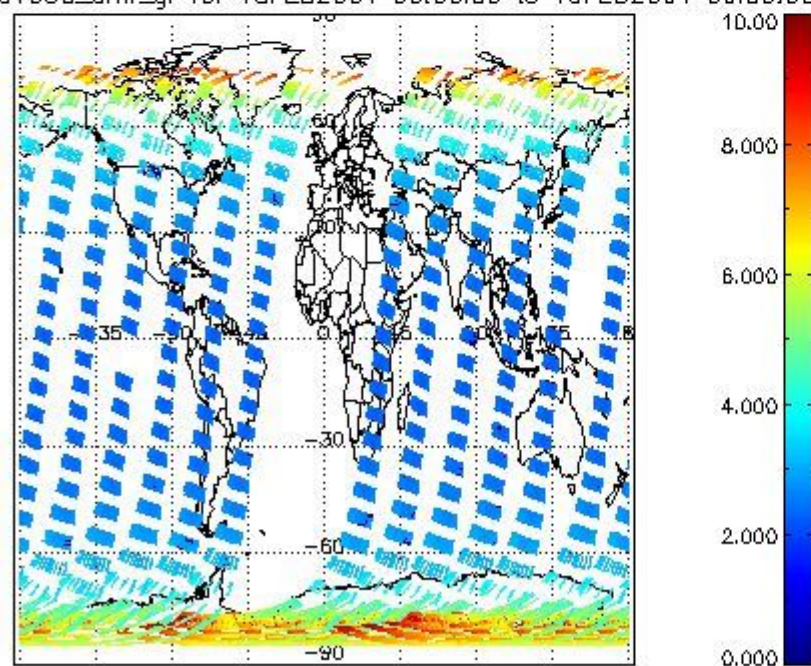
SCIOL2P_NADUV003_vcd for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



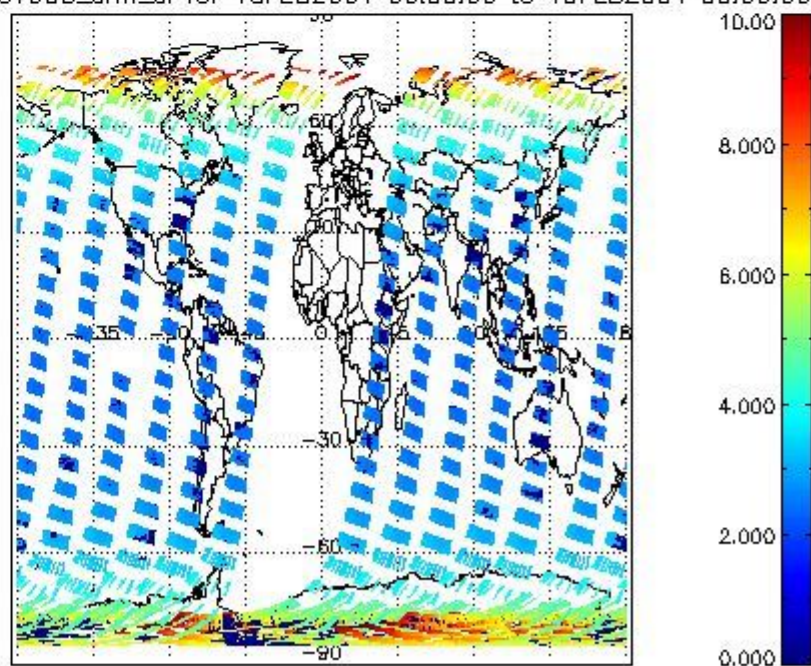
SCIOL2P_NADUV003_vcd_err for 18FEB2004 00:00:00 to 19FEB2004 00:00:00

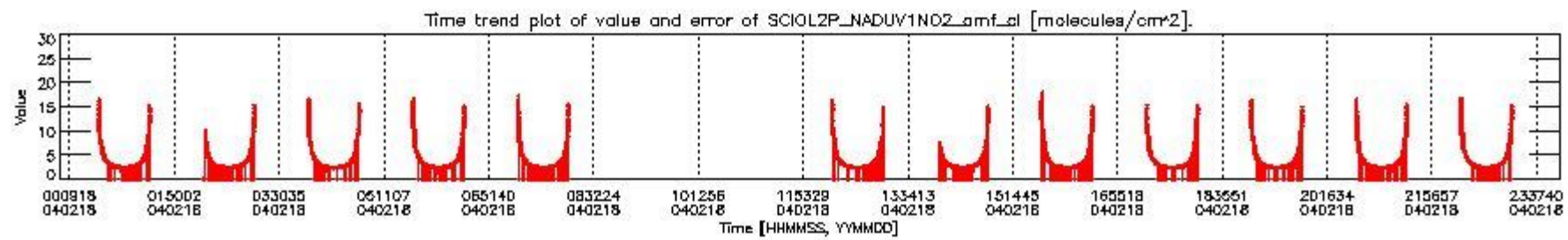
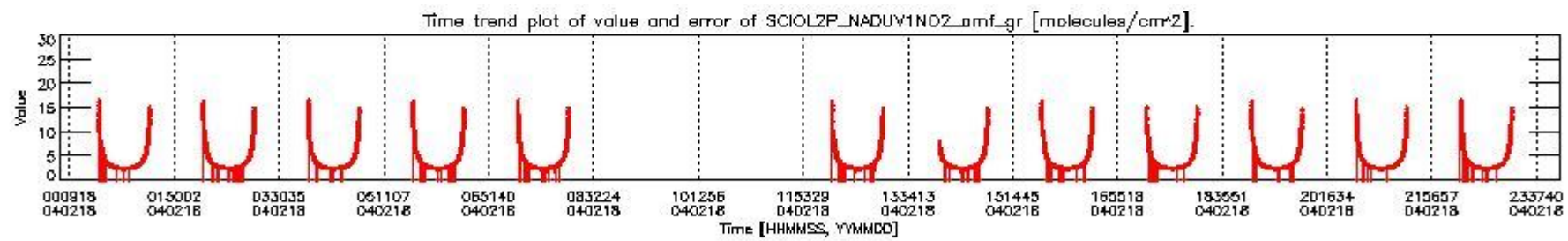
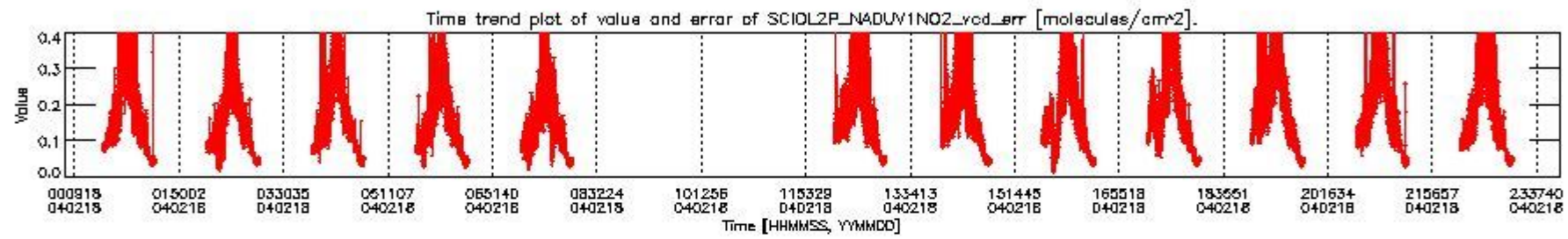
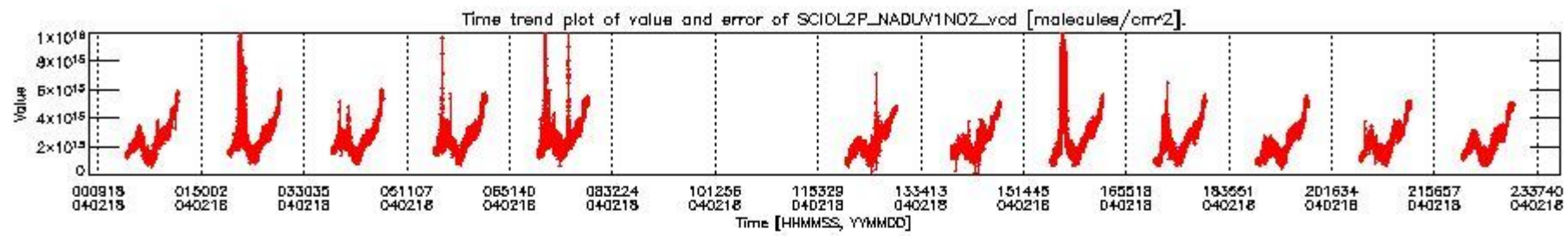


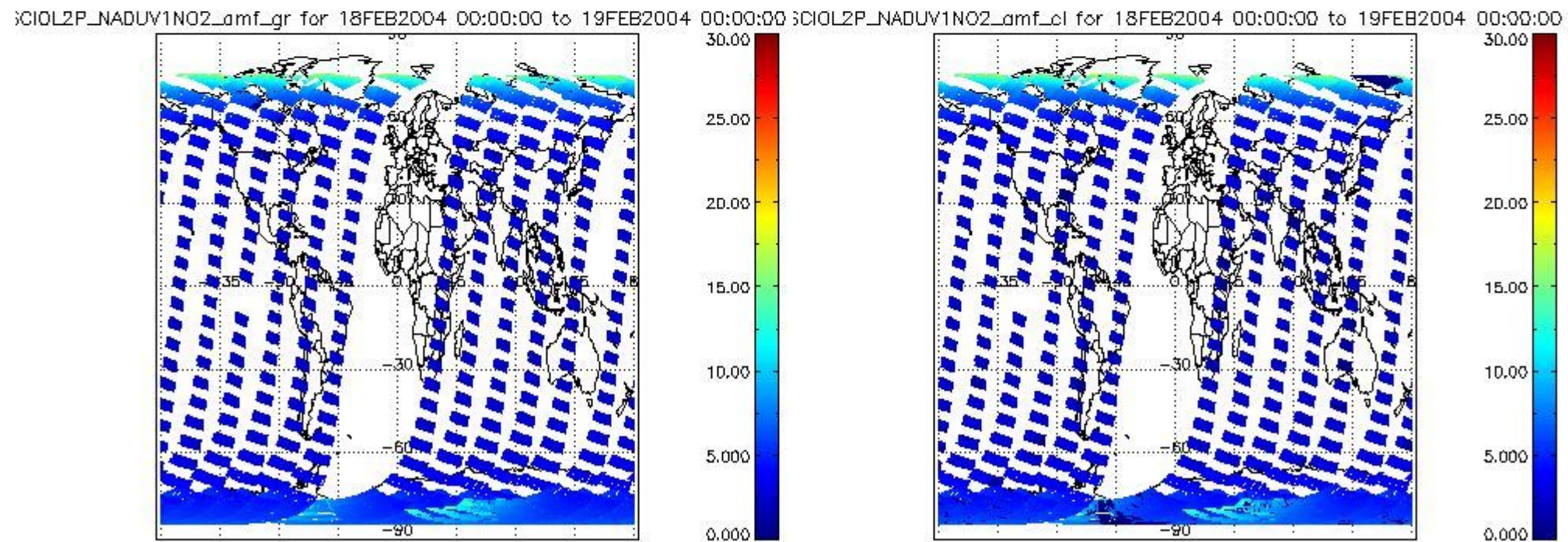
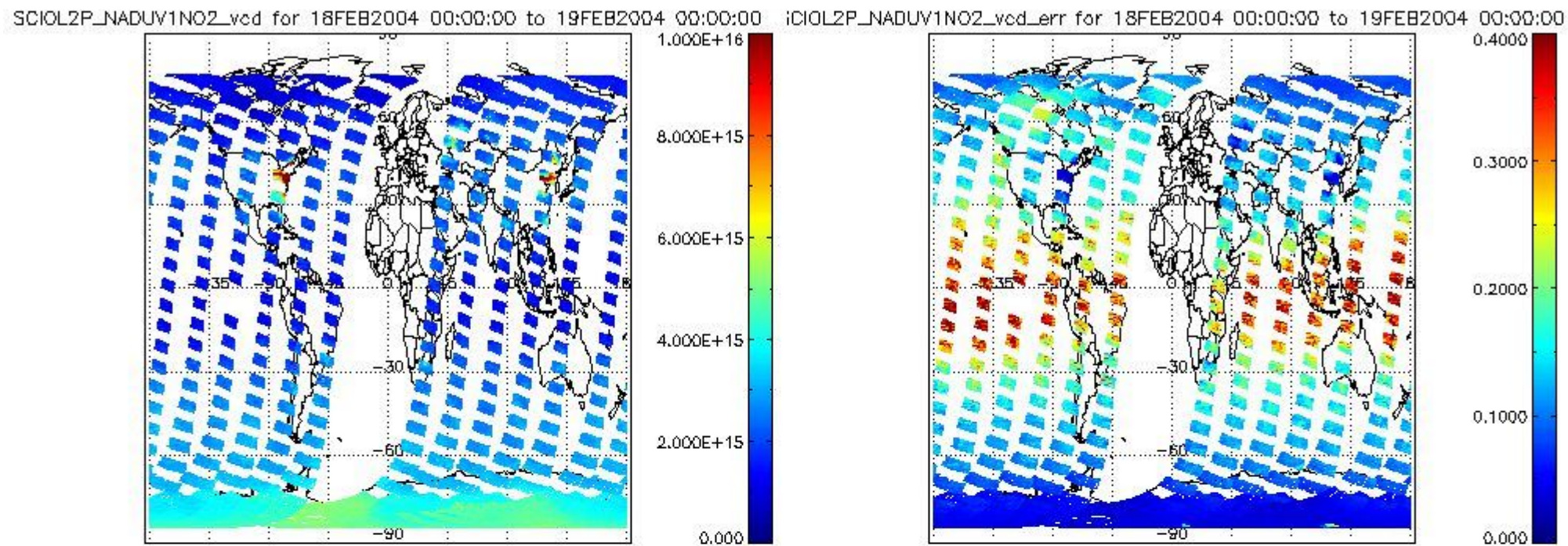
SCIOL2P_NADUV003_amf_gr for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 18FEB2004 00:00:00 to 19FEB2004 00:00:00







2.2.3 Limb

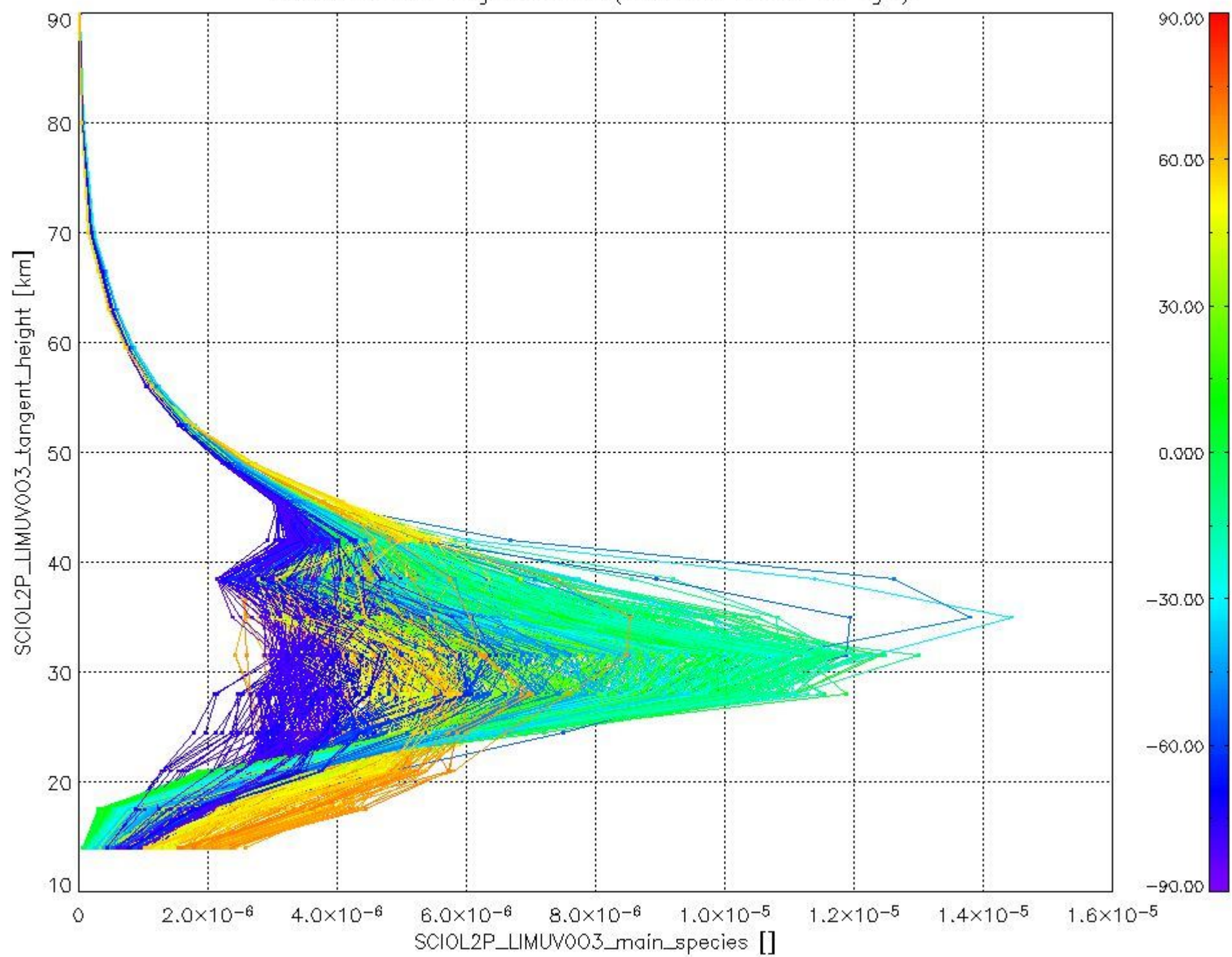
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

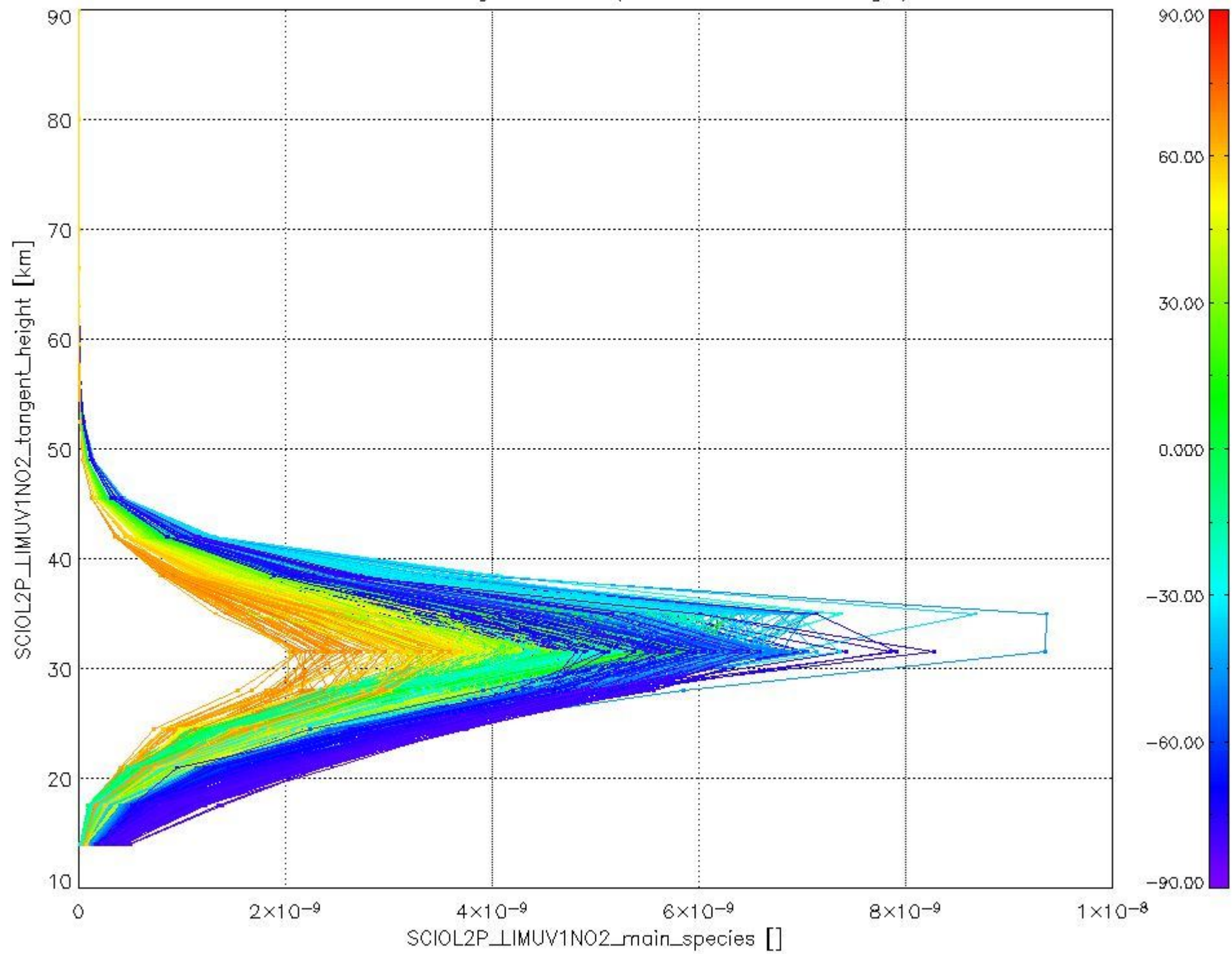
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

Plot of SCIOL2P_LIMUV003_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



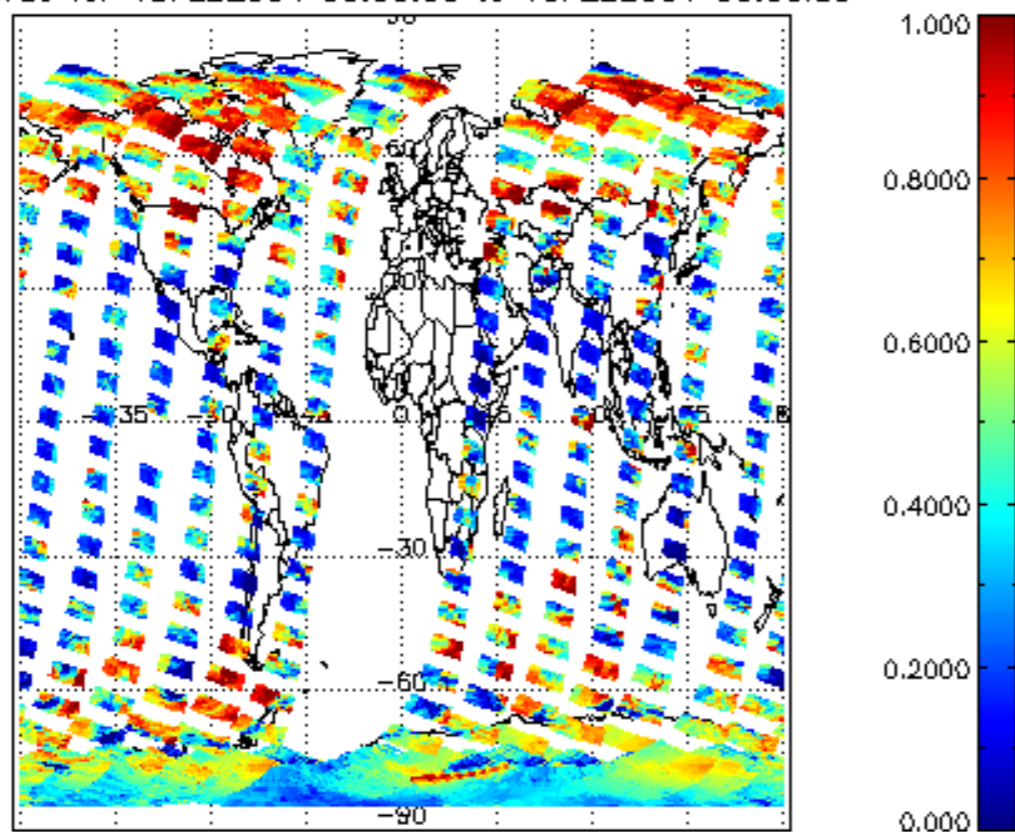
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



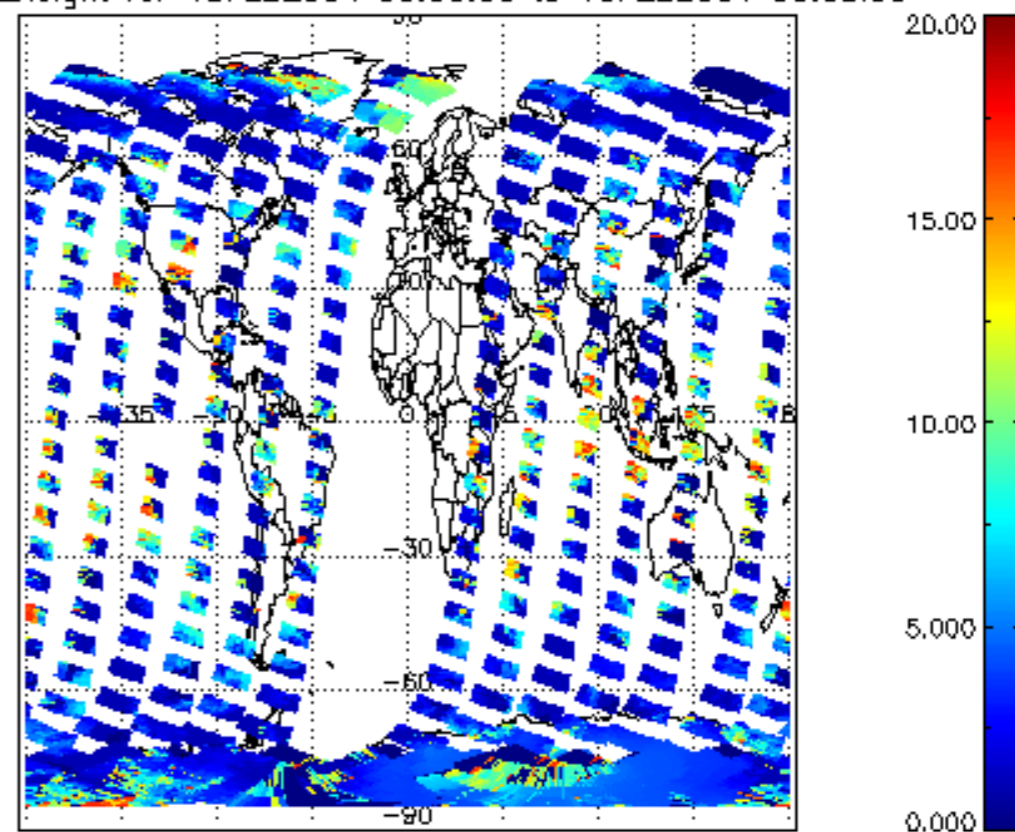
2.3 ADF monitoring

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

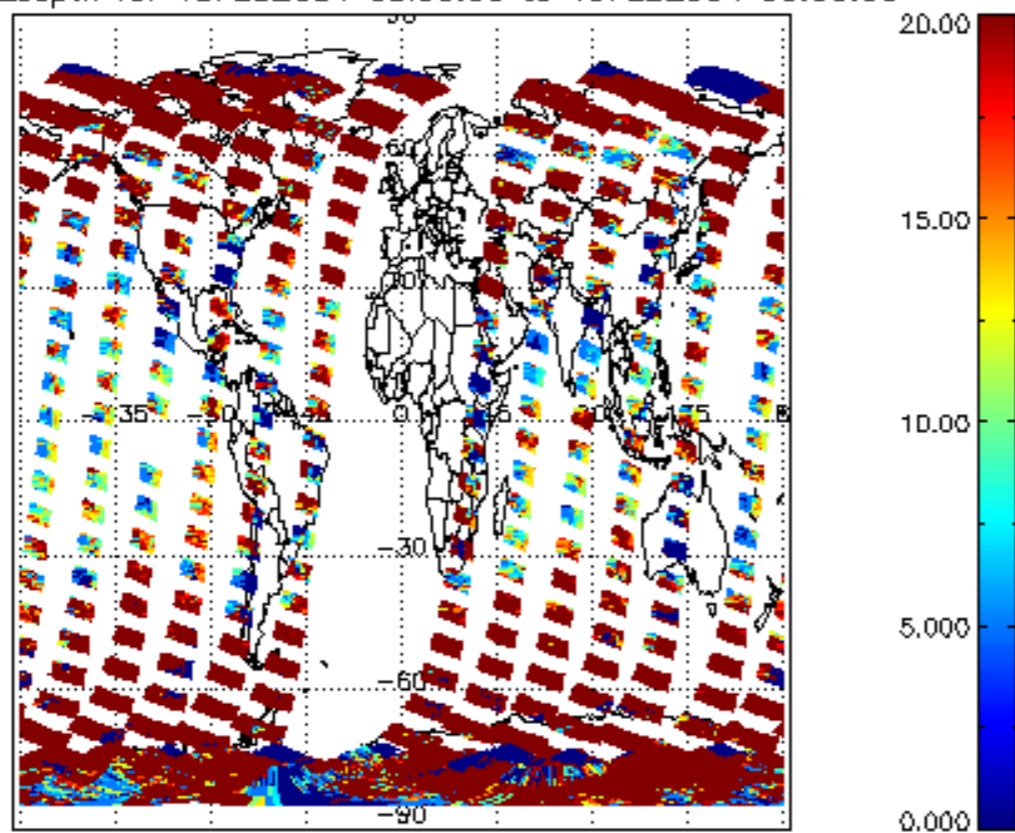
cl_frac for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



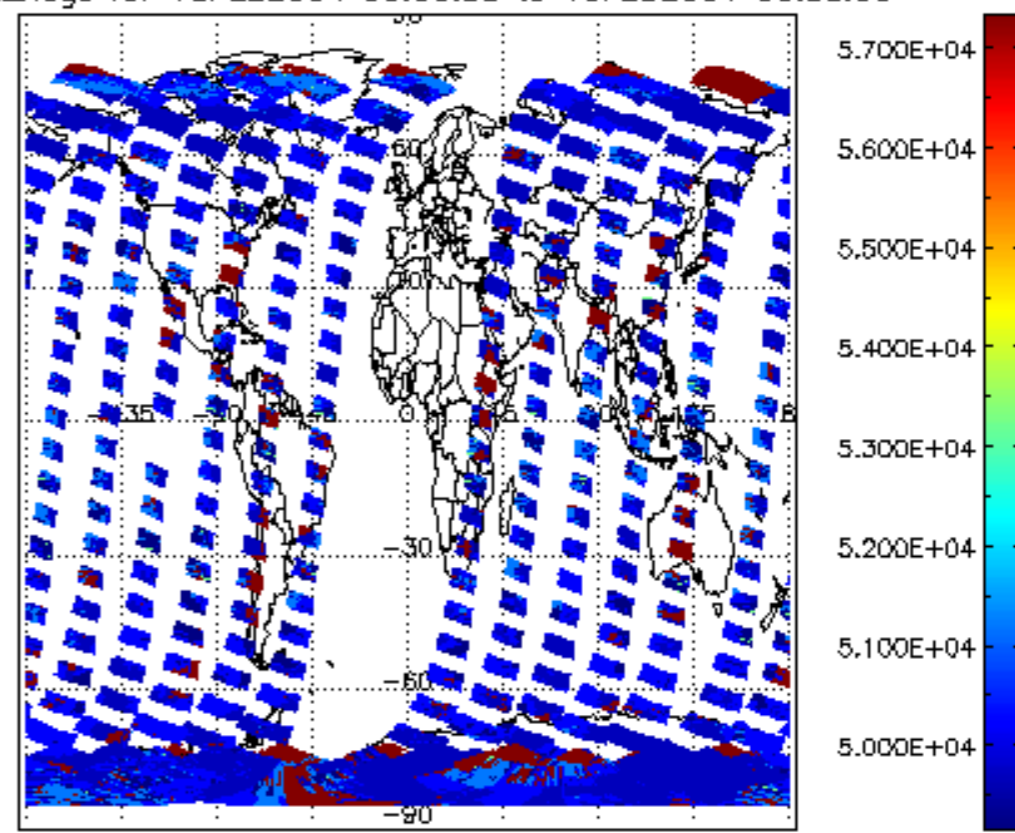
cl_top_height for 18FEB2004 00:00:00 to 19FEB2004 00:00:00

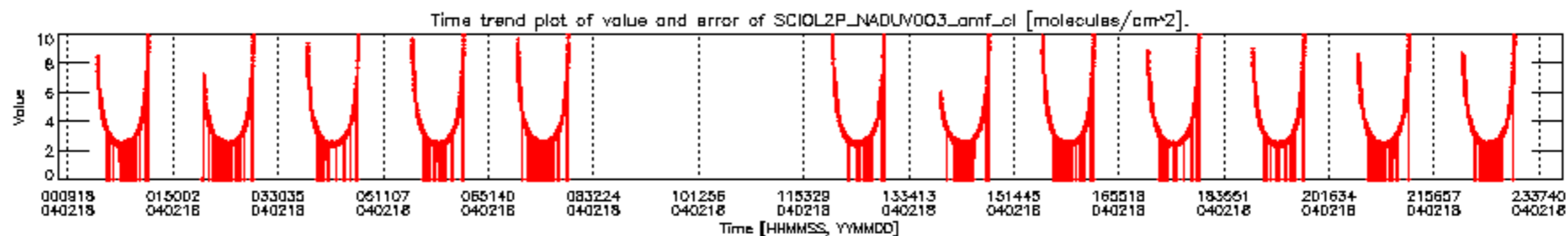
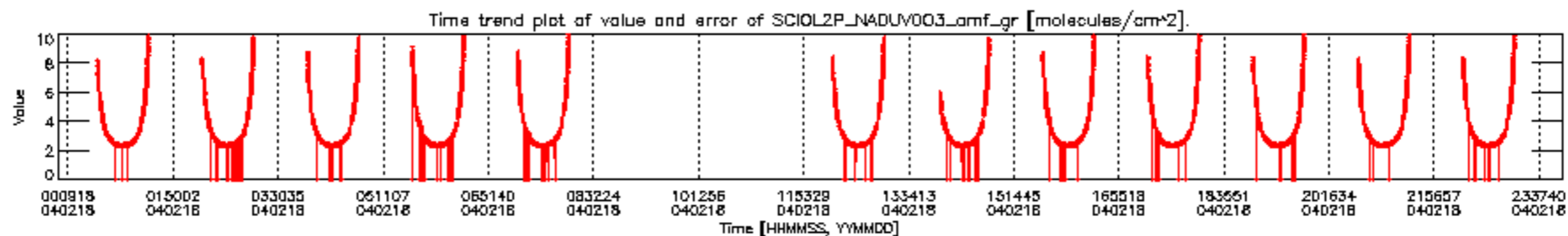
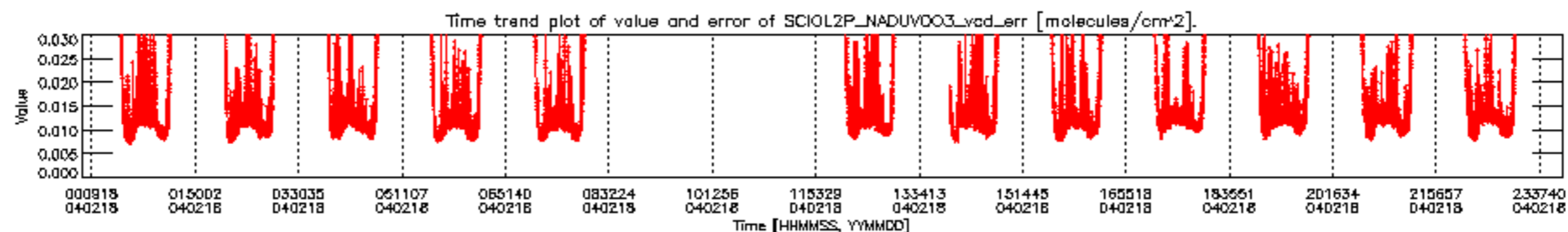
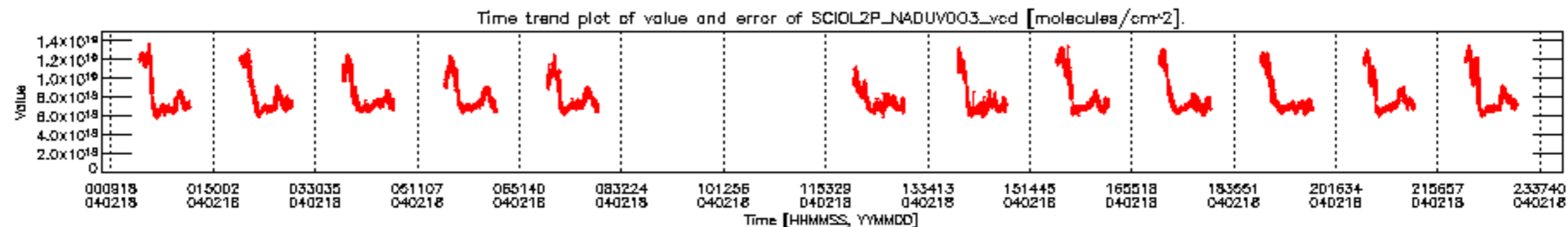


cl_lopt_depth for 18FEB2004 00:00:00 to 19FEB2004 00:00:00

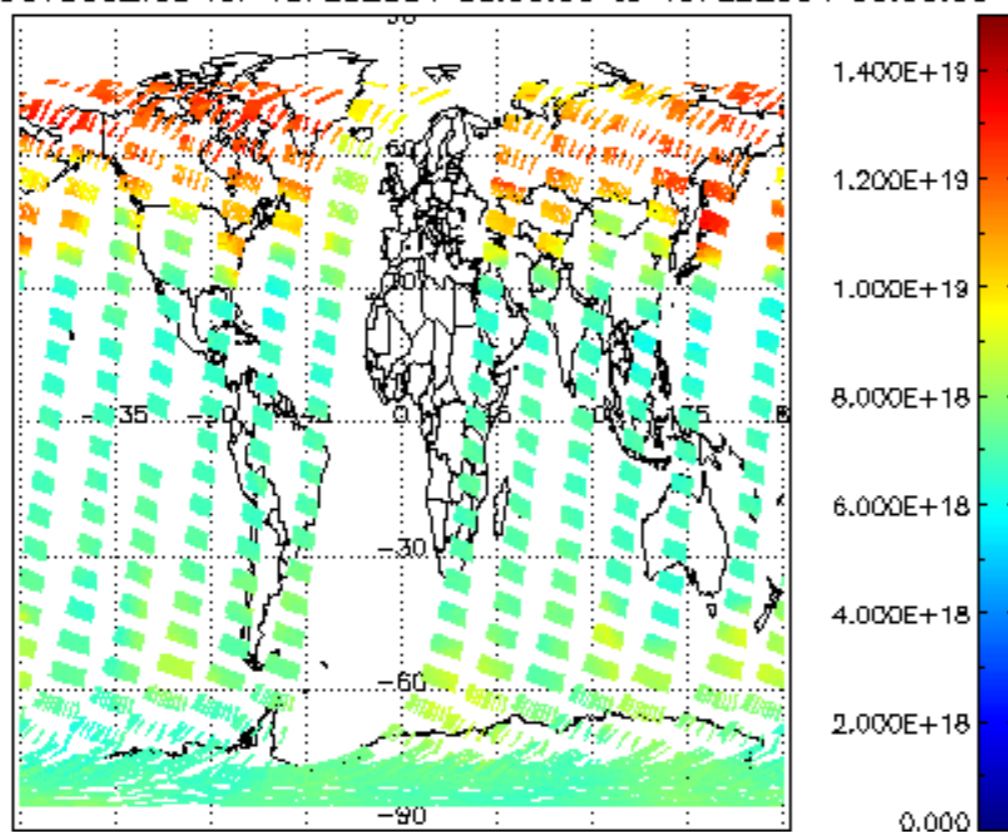


cloud_flags for 18FEB2004 00:00:00 to 19FEB2004 00:00:00

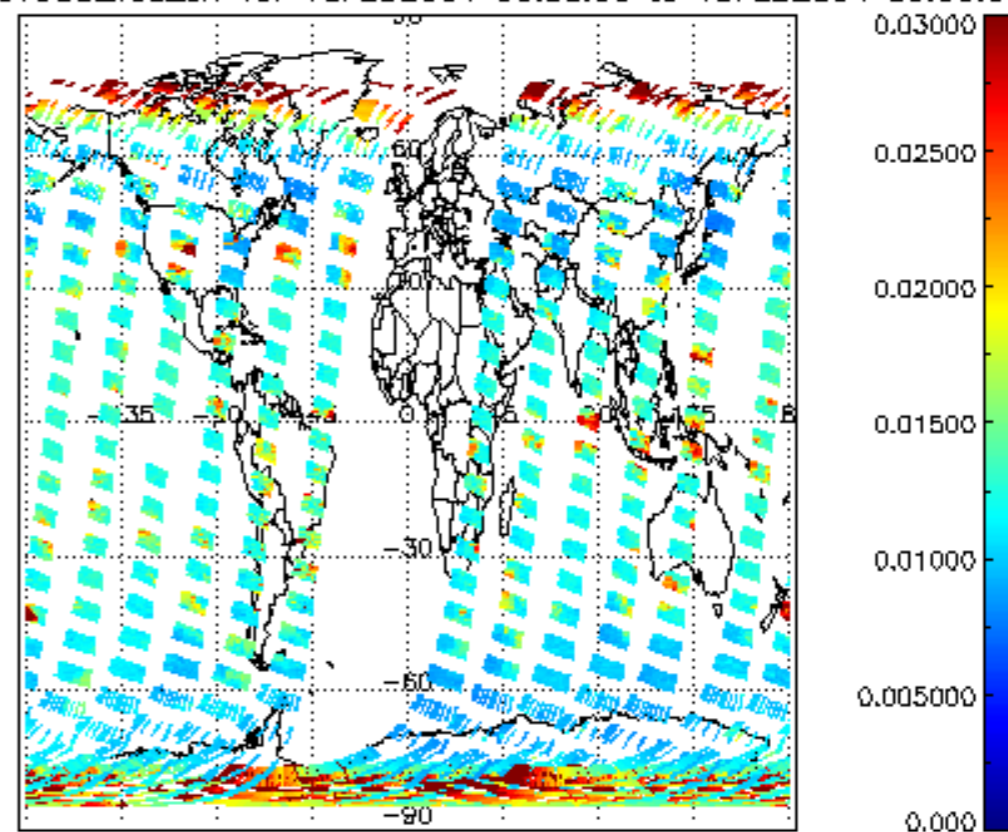




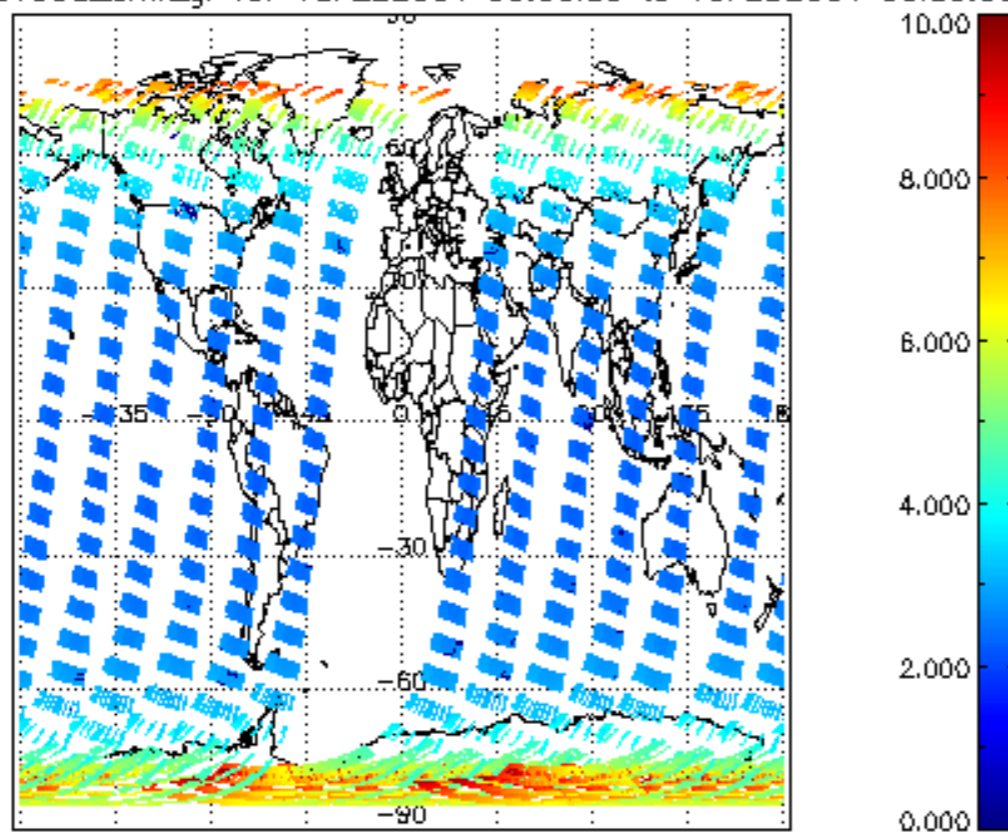
SCIOL2P_NADUV003_vcd for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



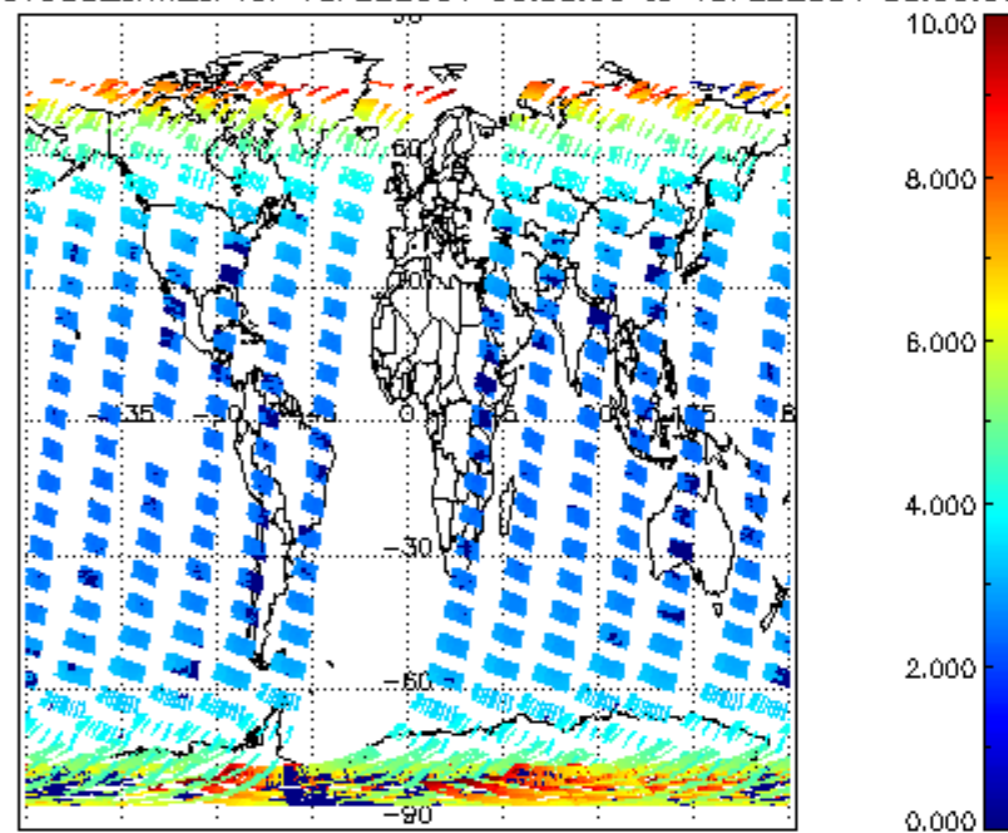
SCIOL2P_NADUV003_vcd_err for 18FEB2004 00:00:00 to 19FEB2004 00:00:00

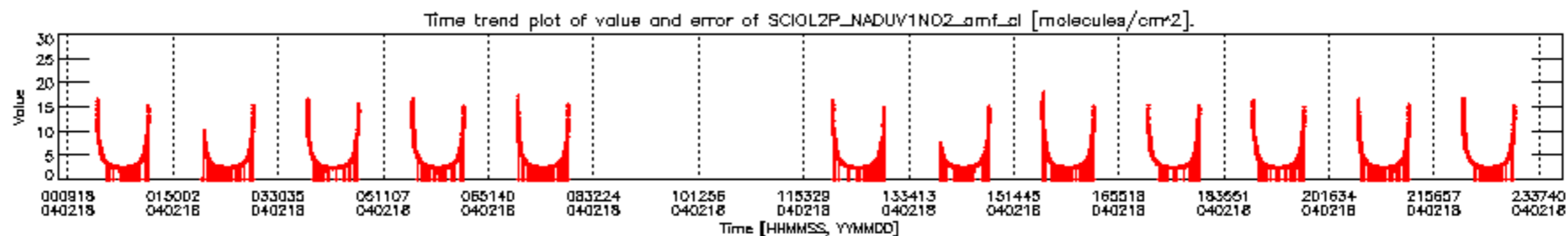
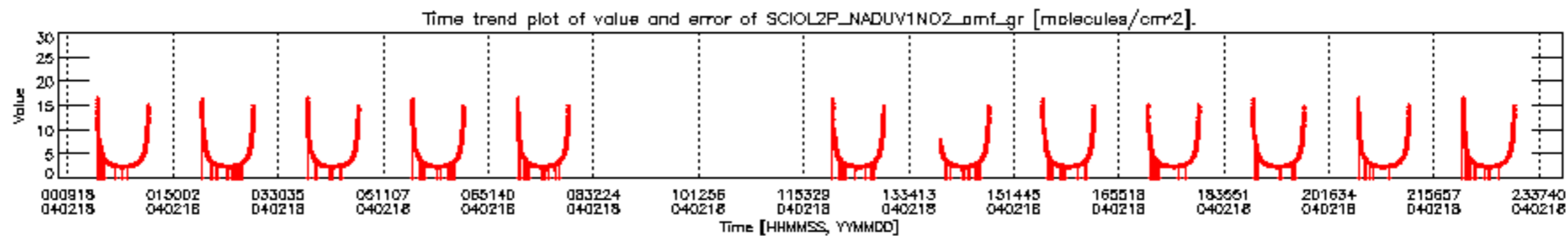
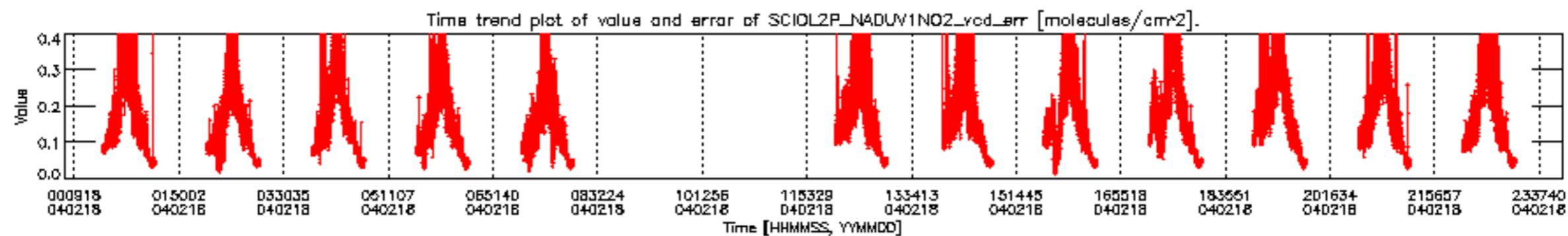
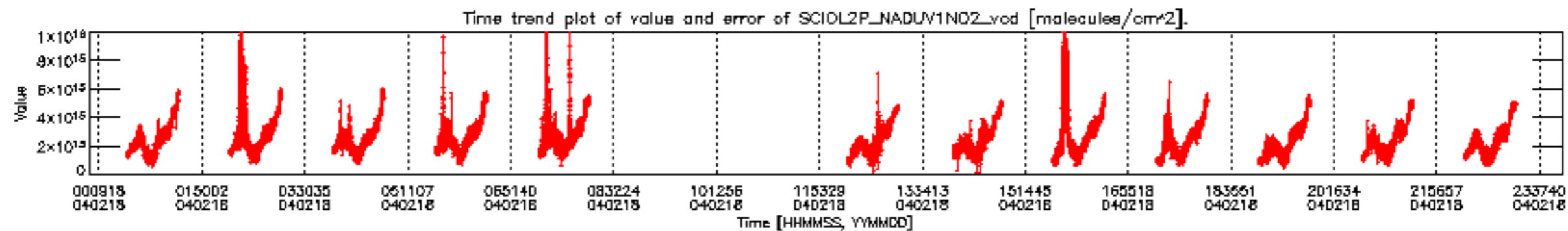


SCIOL2P_NADUV003_amf_gr for 18FEB2004 00:00:00 to 19FEB2004 00:00:00

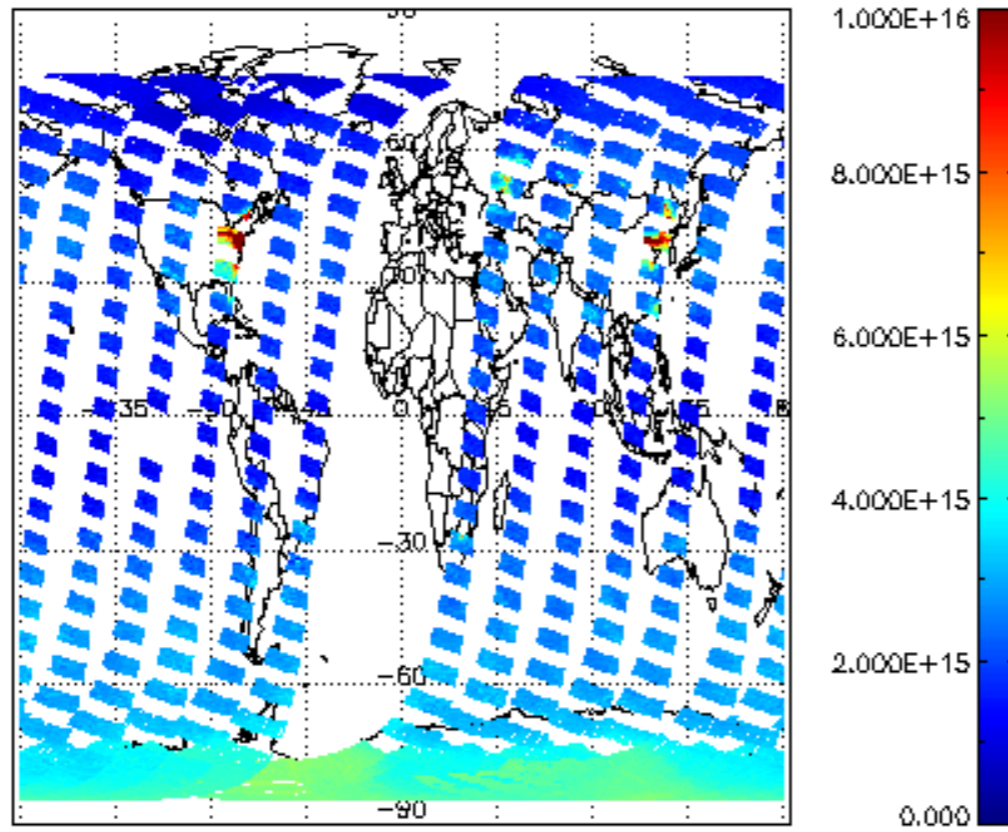


SCIOL2P_NADUV003_amf_cl for 18FEB2004 00:00:00 to 19FEB2004 00:00:00

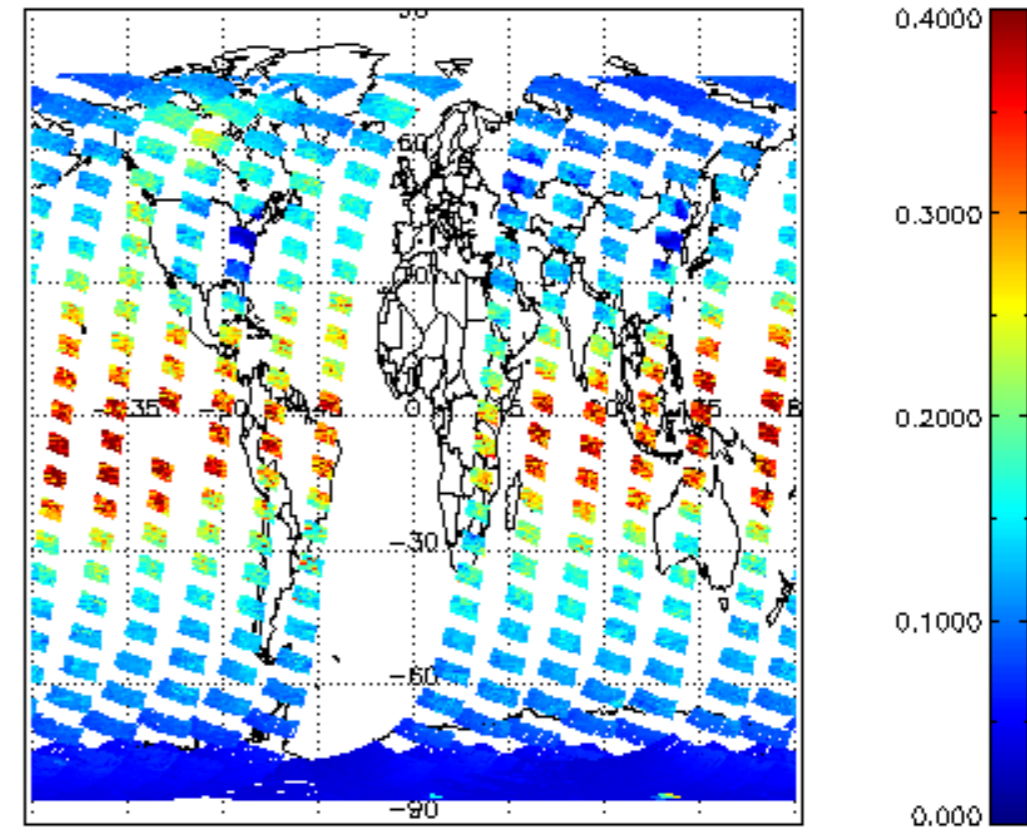




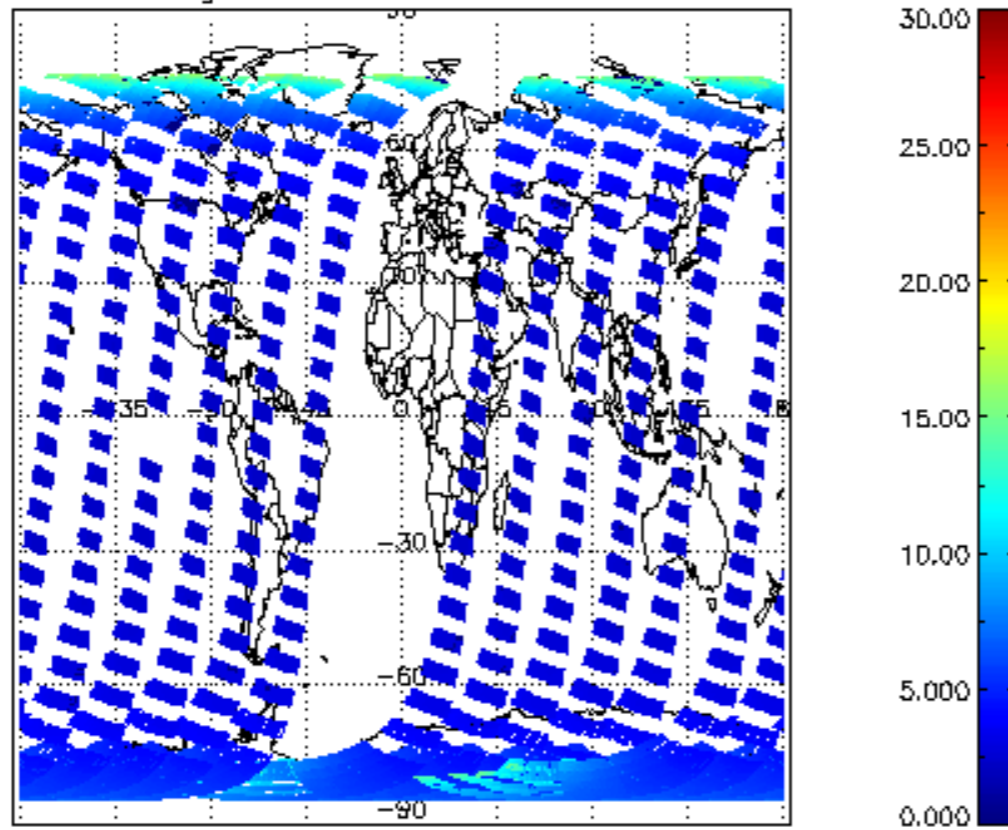
SCIOL2P_NADUV1NO2_vcd for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



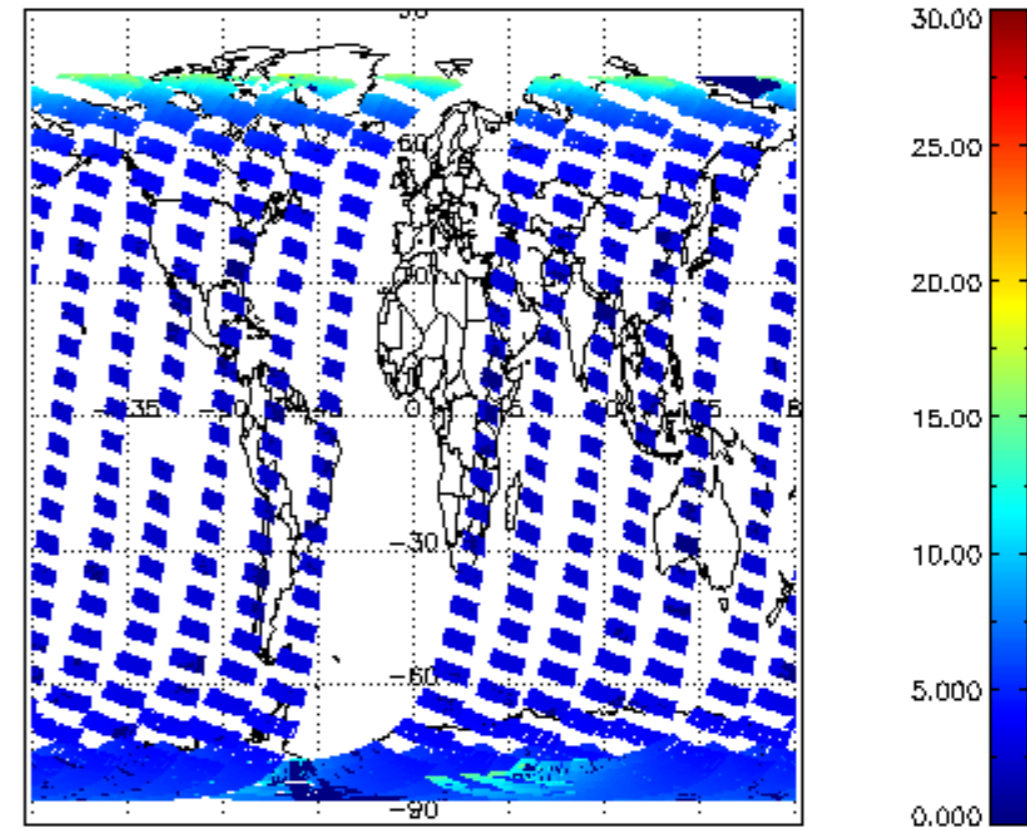
SCIOL2P_NADUV1NO2_vcd_err for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



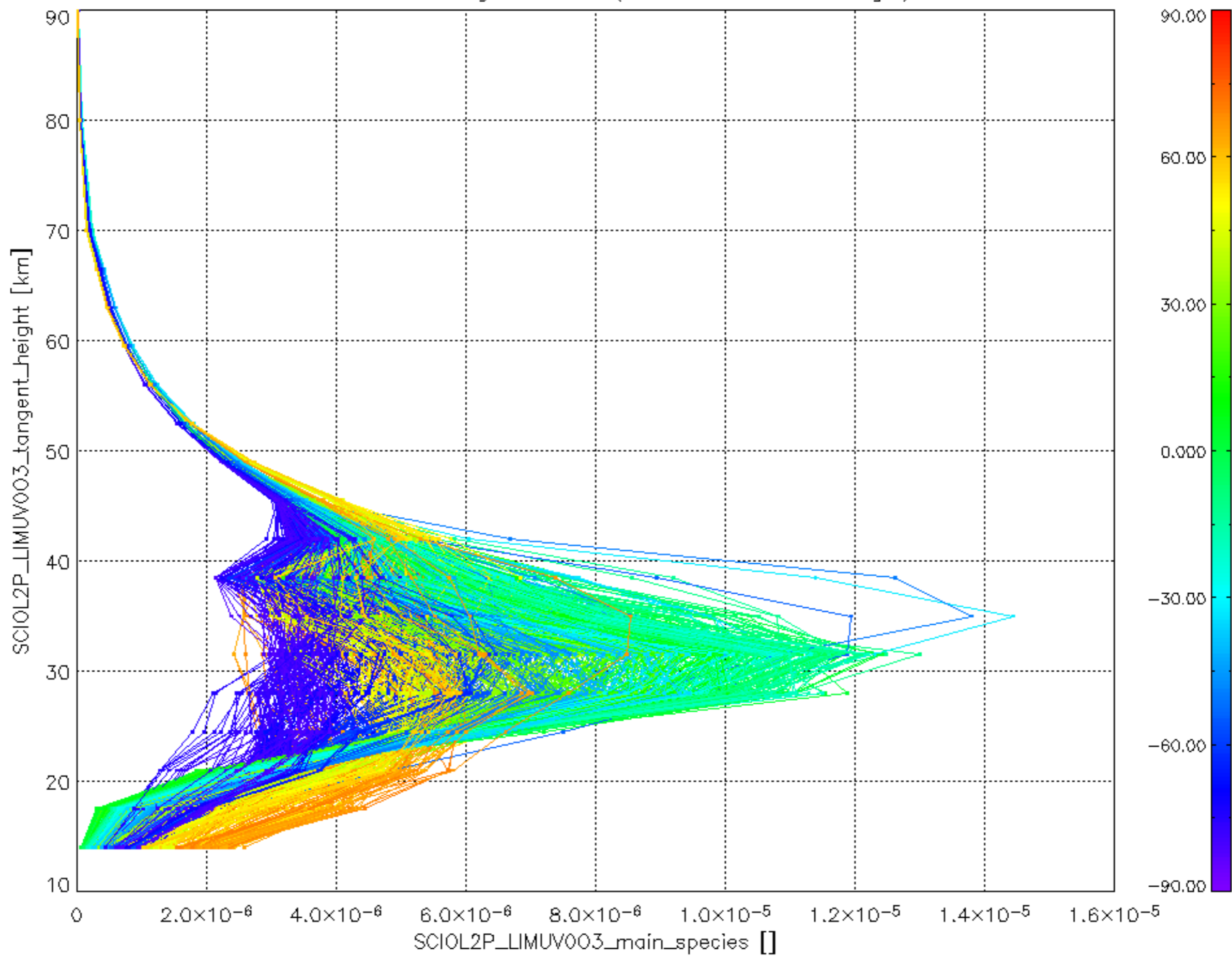
SCIOL2P_NADUV1NO2_amf_gr for 18FEB2004 00:00:00 to 19FEB2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 18FEB2004 00:00:00 to 19FEB2004 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).

