

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	1.5 (01-07-2008)
Time of report generation	04AUG2008 08:34:03
Data source version	SCIA-OL/3.01-R
Processing scope for products	17FEB2004 00:00:00 to 18FEB2004 00:00:00
Start time of first product within scope	17FEB2004 01:03:29
Stop time of last product within scope	17FEB2004 23:46:31
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_010329_000033772024_00203_10277_6665.N1	17FEB2004 01:03:29	17FEB2004 01:59:46	0	GOOD
1	SCI_OL__2PRDPA20040217_024528_000032372024_00204_10278_6644.N1	17FEB2004 02:45:28	17FEB2004 03:39:26	0	GOOD
2	SCI_OL__2PRDPA20040217_042440_000033772024_00205_10279_6834.N1	17FEB2004 04:24:40	17FEB2004 05:20:57	0	GOOD
3	SCI_OL__2PRDPA20040217_060639_000032372024_00206_10280_6657.N1	17FEB2004 06:06:39	17FEB2004 07:00:37	0	GOOD
4	SCI_OL__2PRDPA20040217_074551_000033772024_00207_10281_6675.N1	17FEB2004 07:45:51	17FEB2004 08:42:08	0	GOOD
5	SCI_OL__2PRDPA20040217_092750_000032372024_00208_10282_6784.N1	17FEB2004 09:27:50	17FEB2004 10:21:48	0	GOOD
6	SCI_OL__2PRDPA20040217_110702_000033772024_00209_10283_6814.N1	17FEB2004 11:07:02	17FEB2004 12:03:19	0	GOOD
7	SCI_OL__2PRDPA20040217_124901_000032372024_00210_10284_6810.N1	17FEB2004 12:49:01	17FEB2004 13:42:58	0	GOOD
8	SCI_OL__2PRDPA20040217_142813_000033772024_00211_10285_6824.N1	17FEB2004 14:28:13	17FEB2004 15:24:30	0	GOOD
9	SCI_OL__2PRDPA20040217_161012_000032372024_00212_10286_6799.N1	17FEB2004 16:10:12	17FEB2004 17:04:09	0	GOOD
10	SCI_OL__2PRDPA20040217_174852_000033642024_00213_10287_6813.N1	17FEB2004 17:48:52	17FEB2004 18:44:57	0	GOOD
11	SCI_OL__2PRDPA20040217_192932_000033772024_00214_10288_6658.N1	17FEB2004 19:29:32	17FEB2004 20:25:49	0	GOOD
12	SCI_OL__2PRDPA20040217_211035_000033772024_00215_10289_6859.N1	17FEB2004 21:10:35	17FEB2004 22:06:52	0	GOOD
13	SCI_OL__2PRDPA20040217_225234_000032372024_00216_10290_6878.N1	17FEB2004 22:52:34	17FEB2004 23:46:31	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: 111500

Total number of cloud data DSRs with good quality flag (=0): 111500 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	111500	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	111500	0.21874	0.25000	0.12500	1.0000	0.098268	s
CL_FRAC	111500	0.46328	0.44738	0.0000	1.0000	0.28381	-
CL_FRAC_ERR	111500	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	111500	6.9998	8.0000	4.0000	32.000	3.1446	

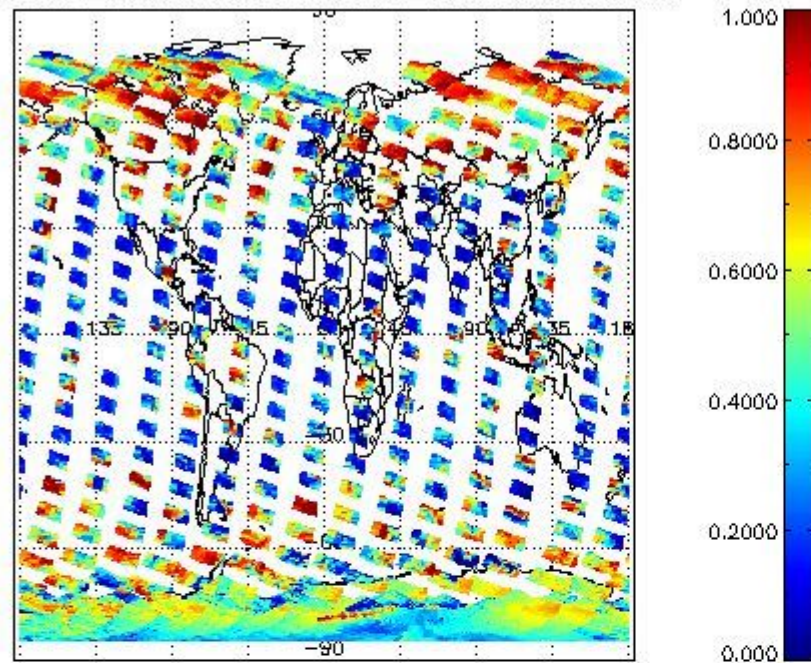
PMD_READ_CL[0]	111500	0.36687	0.0000	0.0000	18.000	1.3643	-
PMD_READ_CL[1]	111500	0.26079	0.0000	0.0000	32.000	1.3100	-
CL_TOP_HEIGHT	101363	4.2567	2.6600	0.0000	17.000	3.9534	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	101363	47.282	32.834	0.0000	101.00	37.888	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	111500	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	111500	11000110	11000010	11000000	11100000	2359.9	flags
AERO_ABSO_IND	111500	0.78155	0.55533	-4.4139	14.241	1.1992	
AERO_IND_DIAG	111500	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	111500	01101001	11000000	00000000	11000000	24456.	flags

Time and geolocation plots:

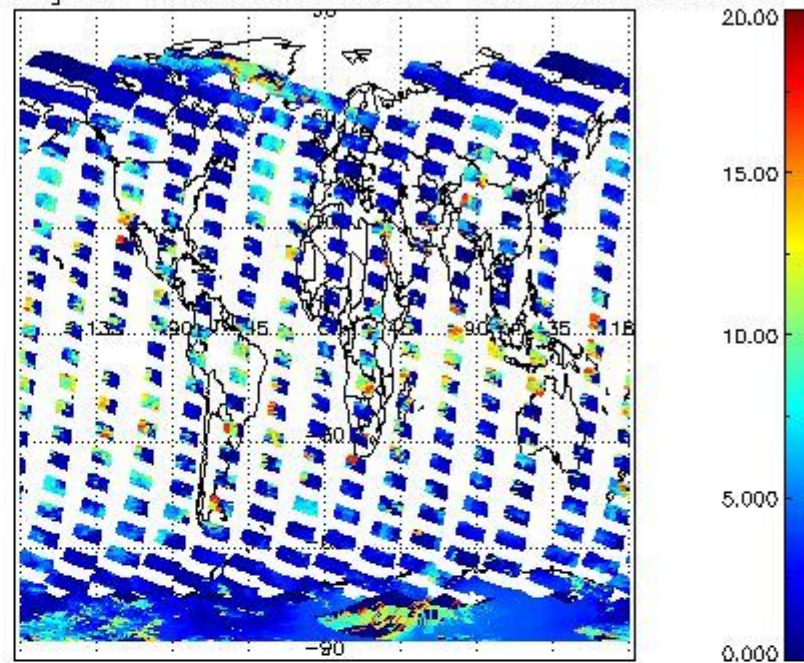
Plots are available for the following parameters:

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

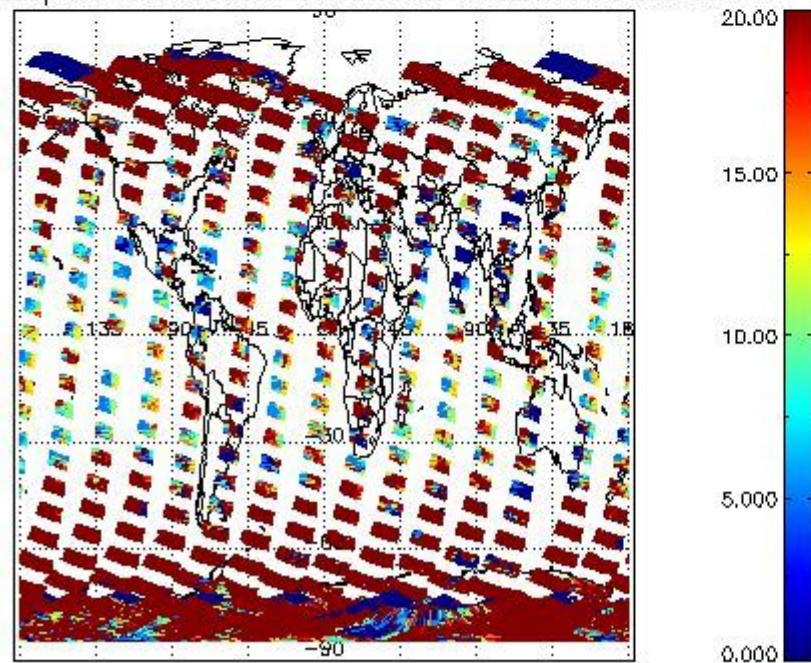
cLfrac for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



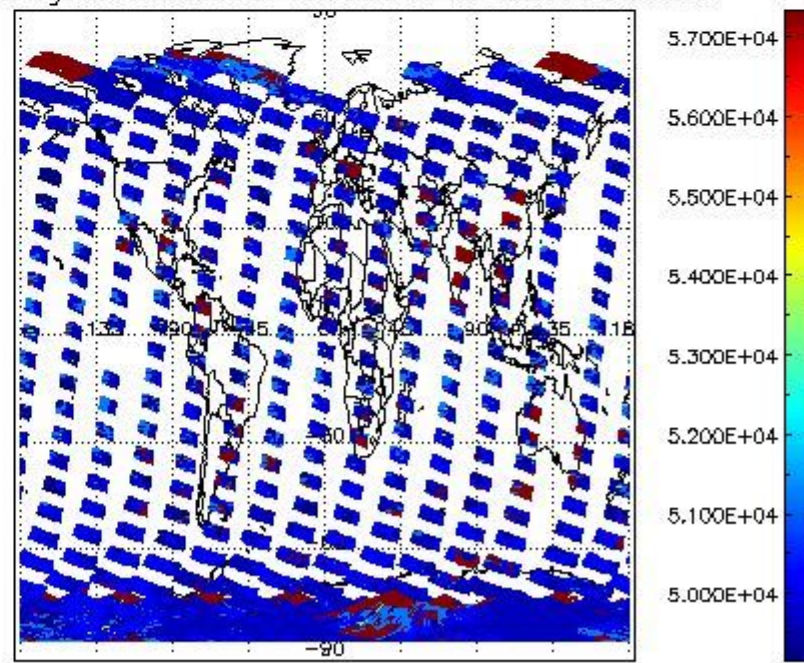
cL_top_height for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



cLopt_depth for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



cloud_flags for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



2.2.2 Nadir

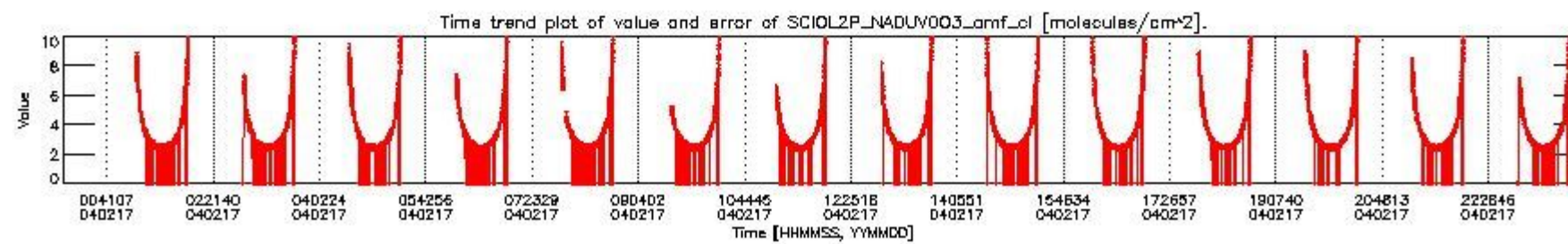
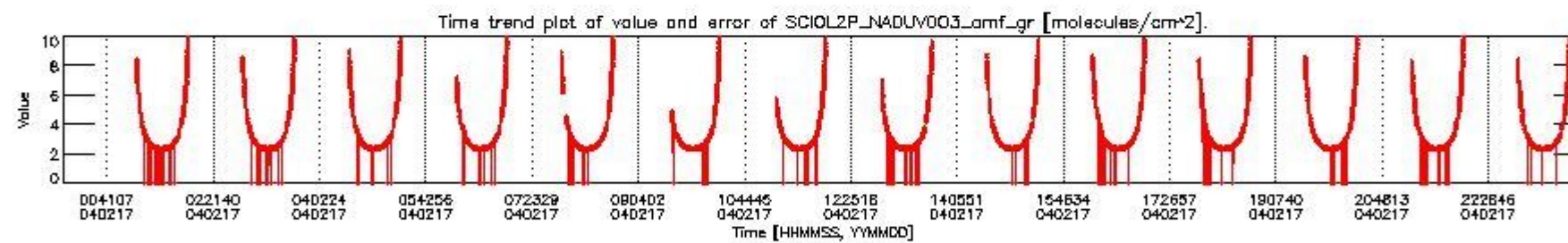
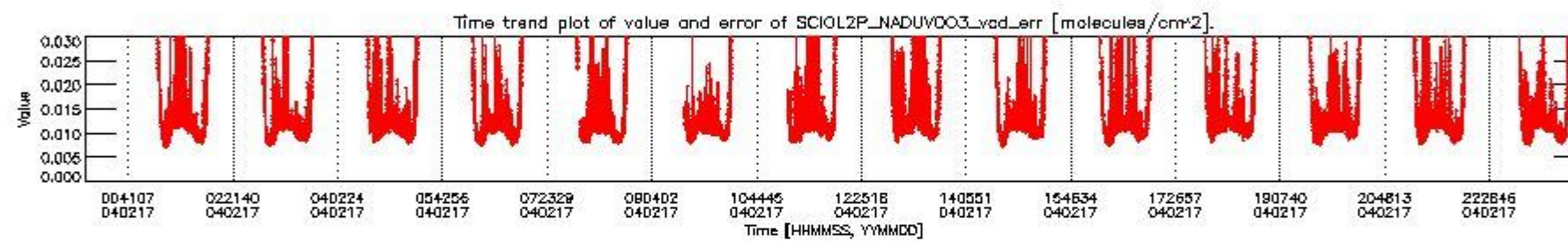
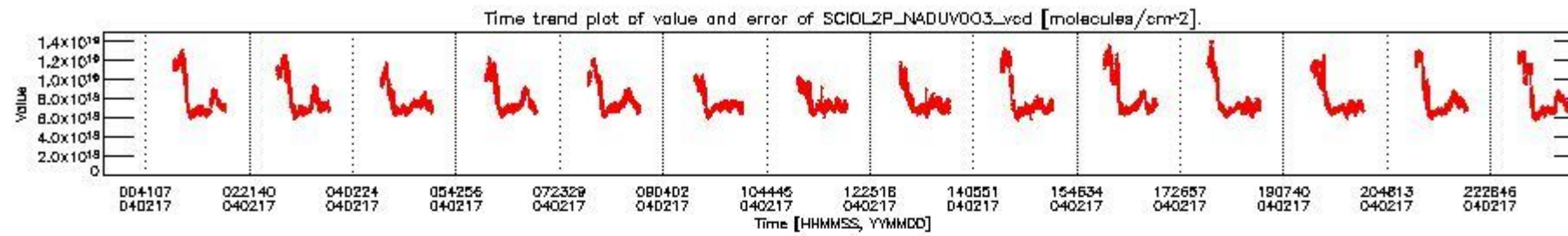
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

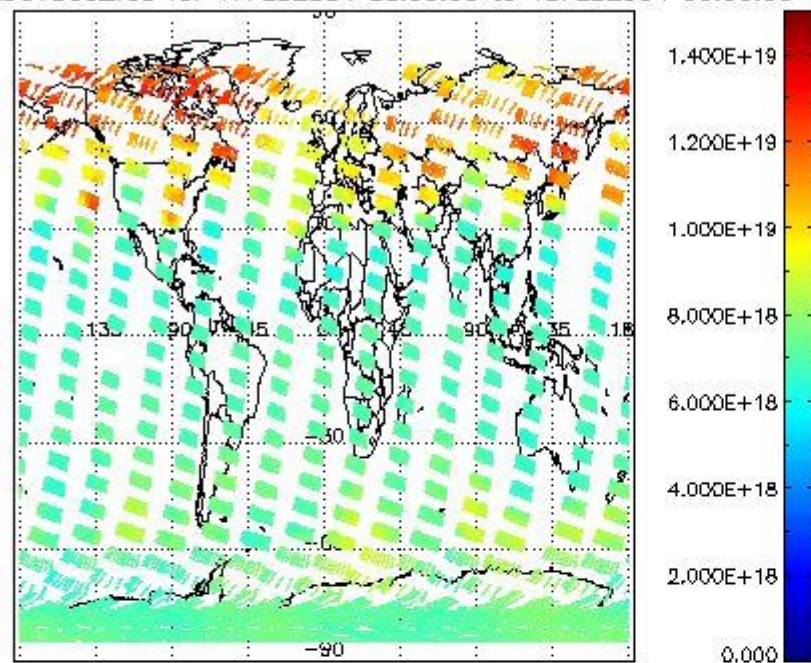
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

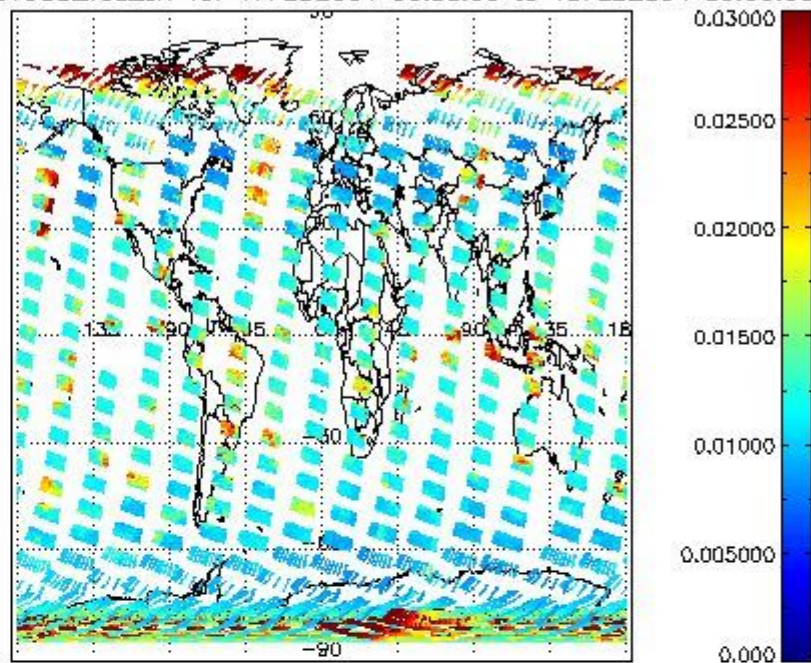
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



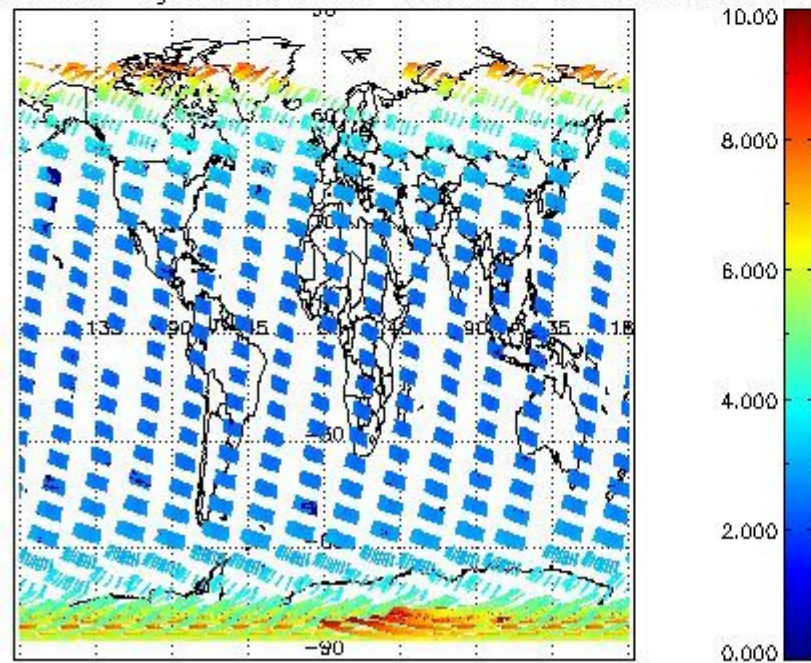
SCIOL2P_NADUV003_vcd for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



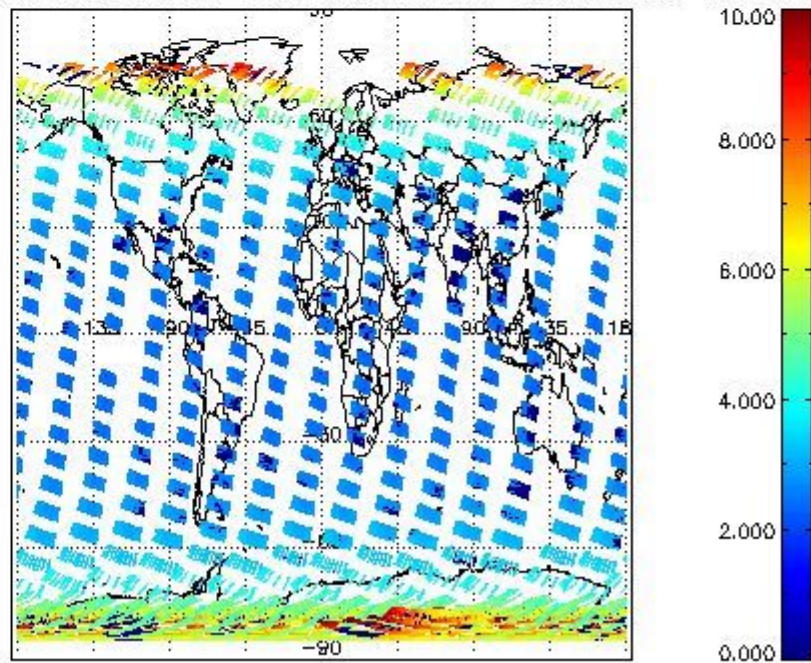
SCIOL2P_NADUV003_vcd_err for 17FEB2004 00:00:00 to 18FEB2004 00:00:00

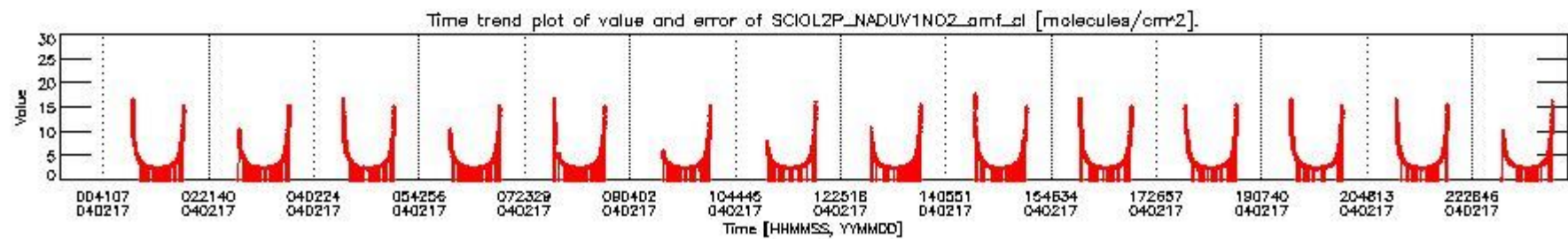
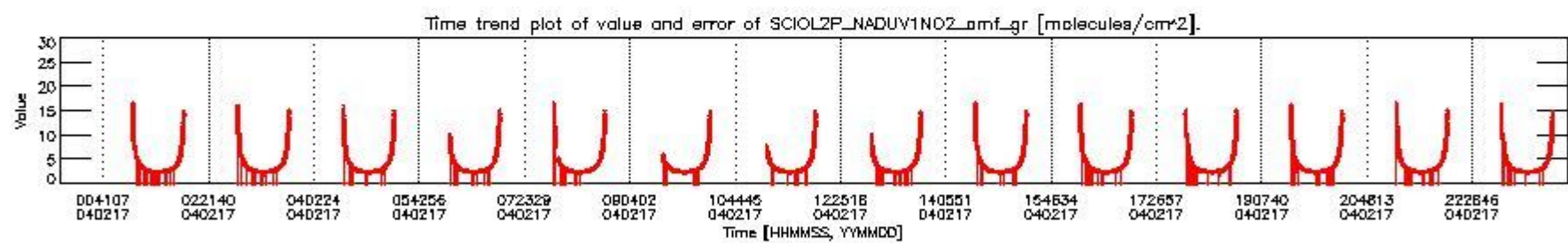
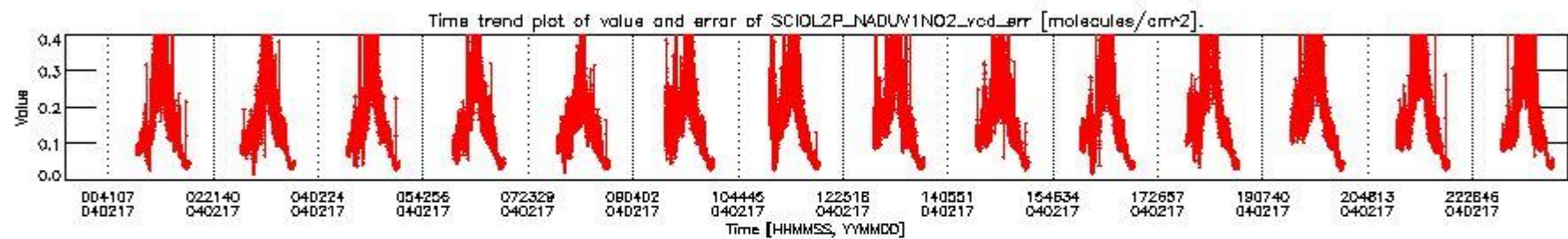
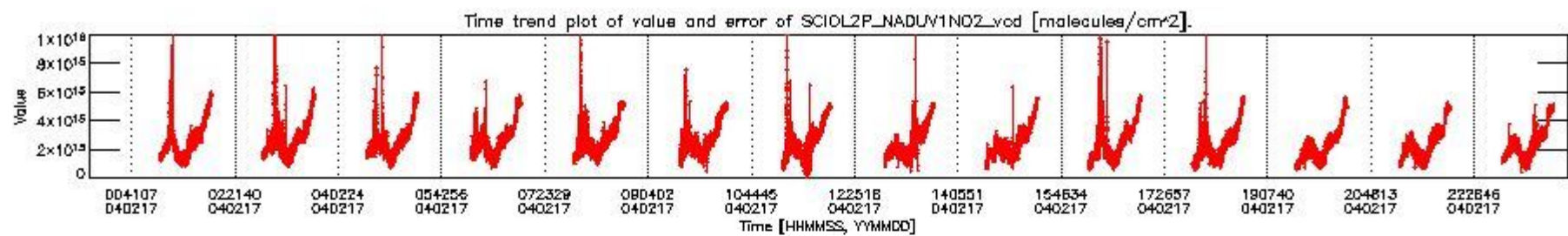


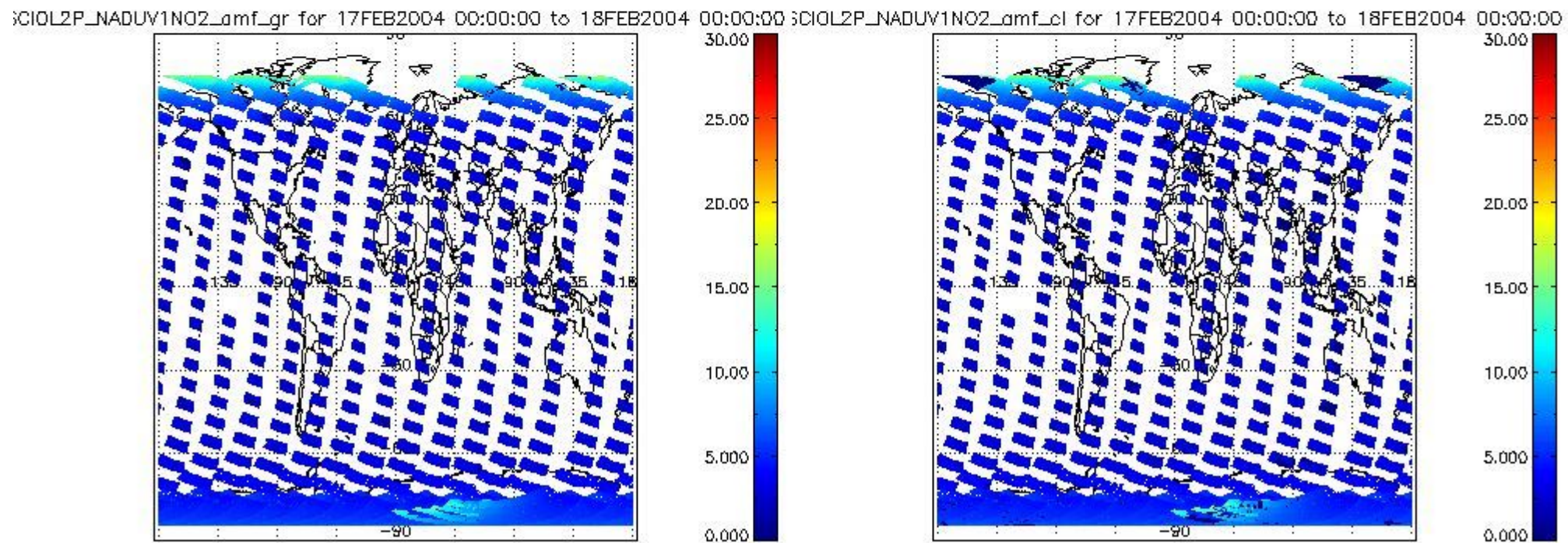
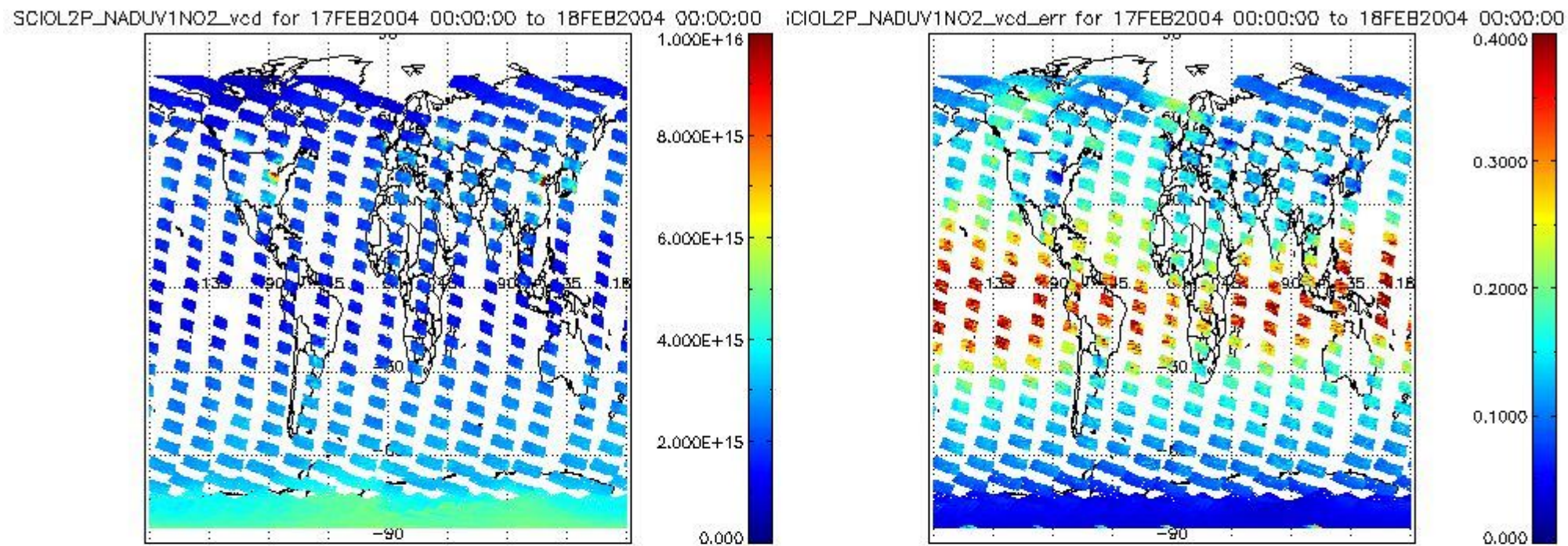
SCIOL2P_NADUV003_amf_gr for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 17FEB2004 00:00:00 to 18FEB2004 00:00:00







2.2.3 Limb

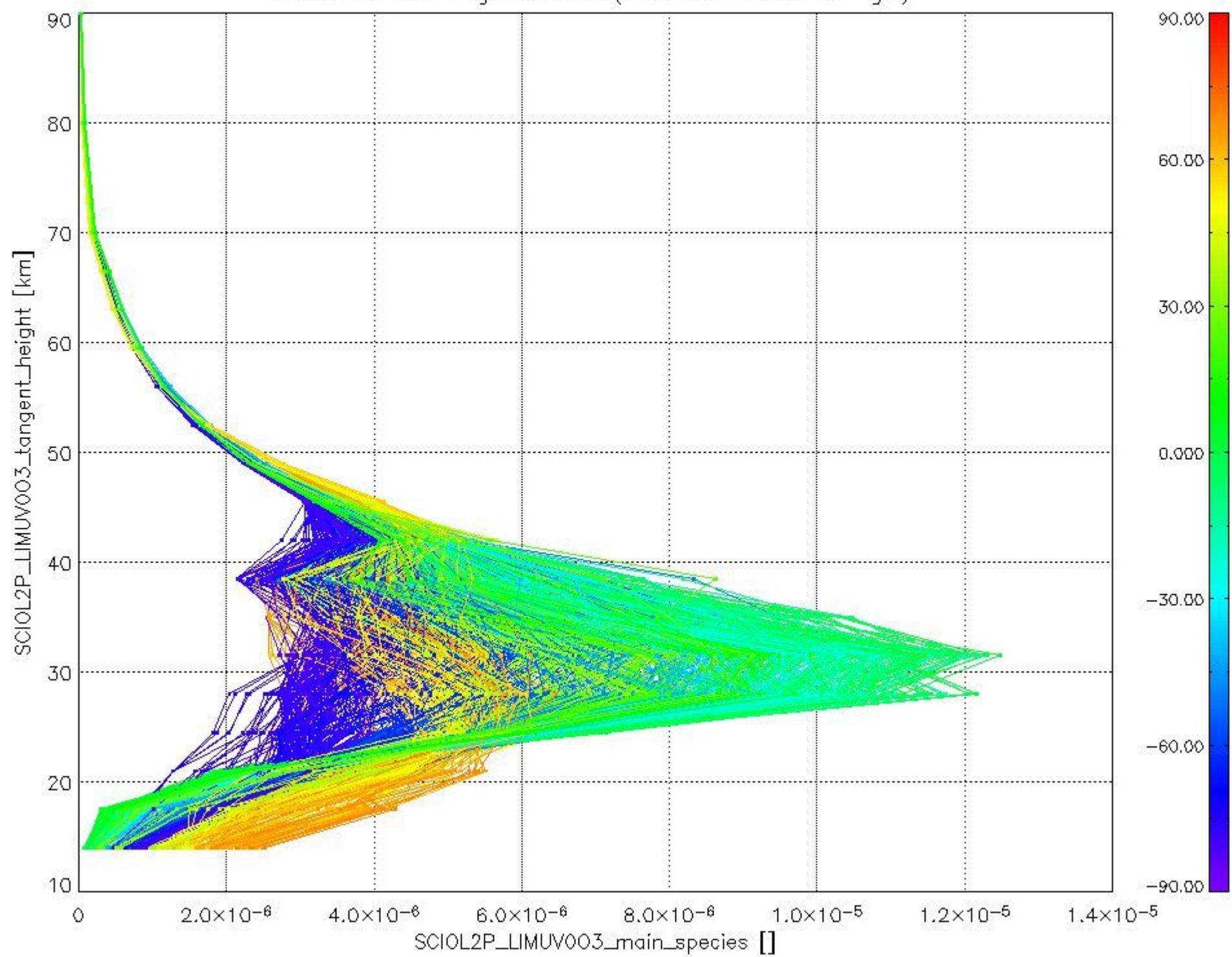
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

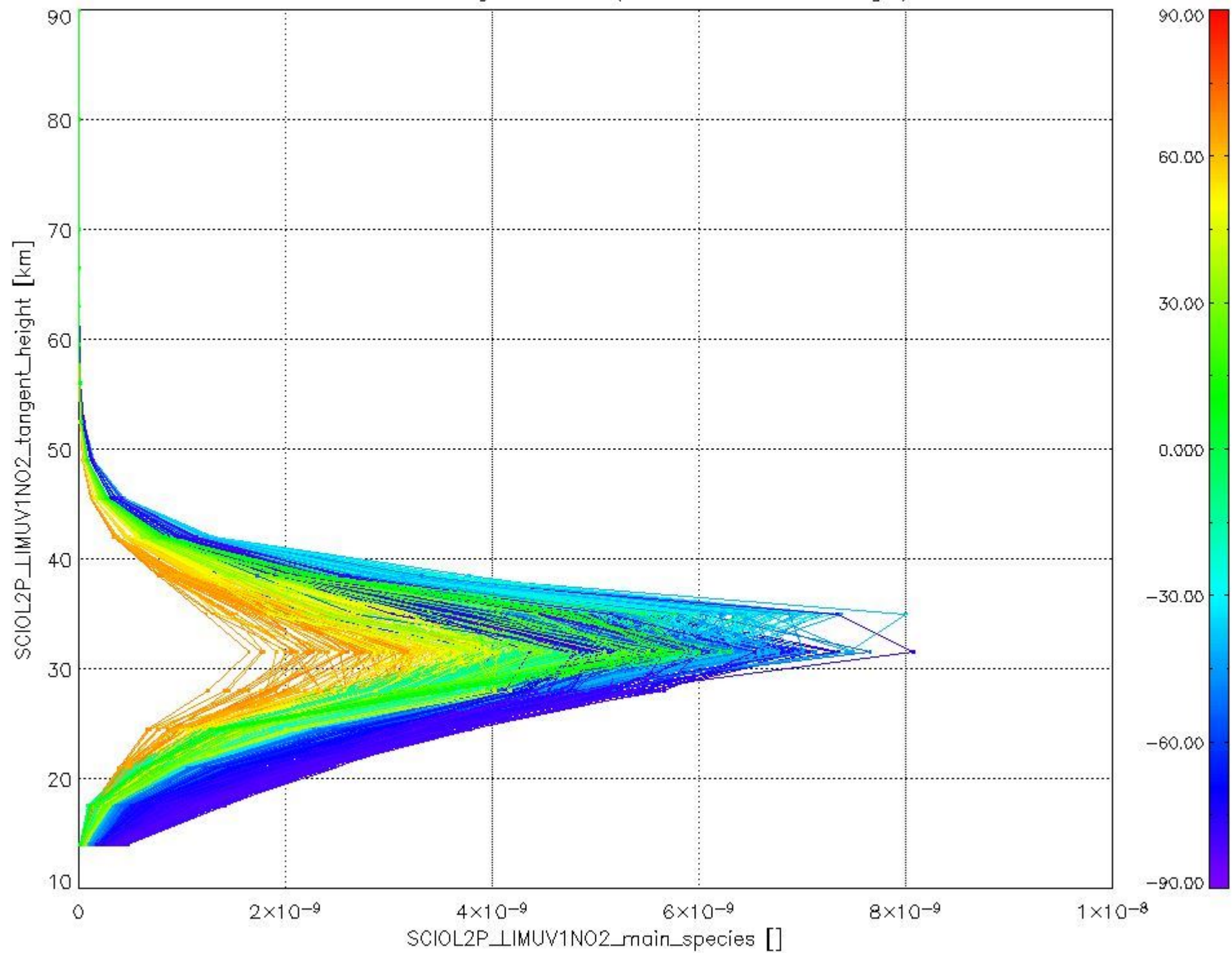
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



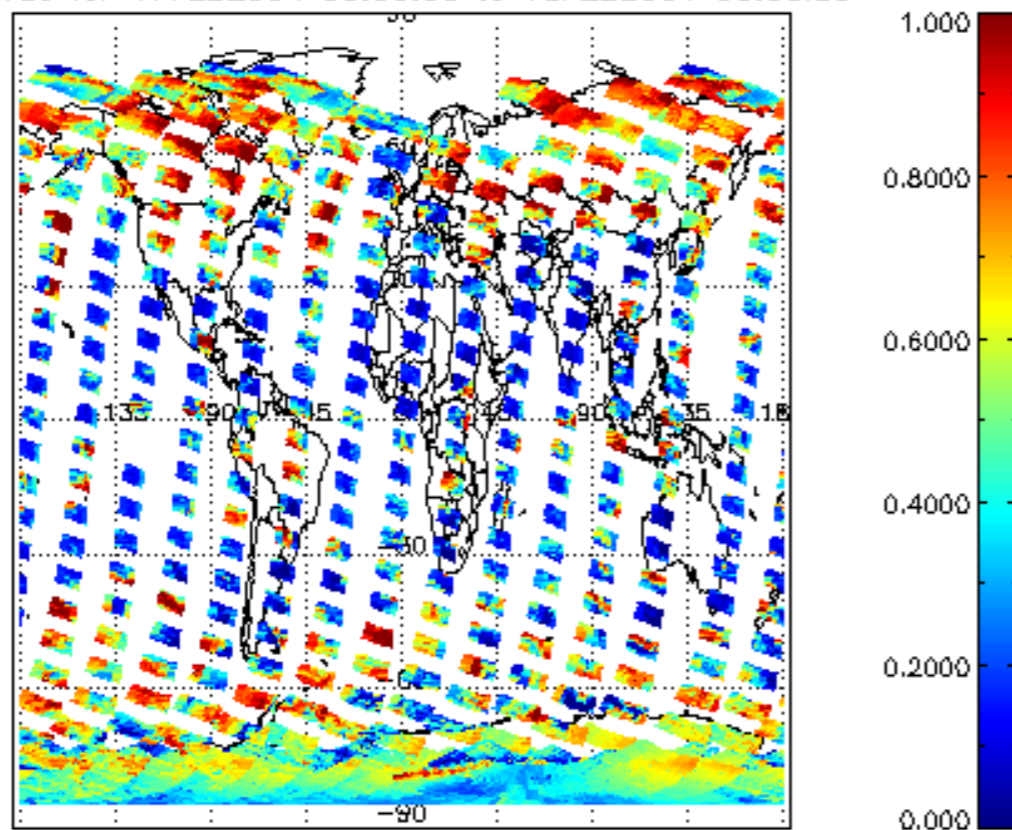
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



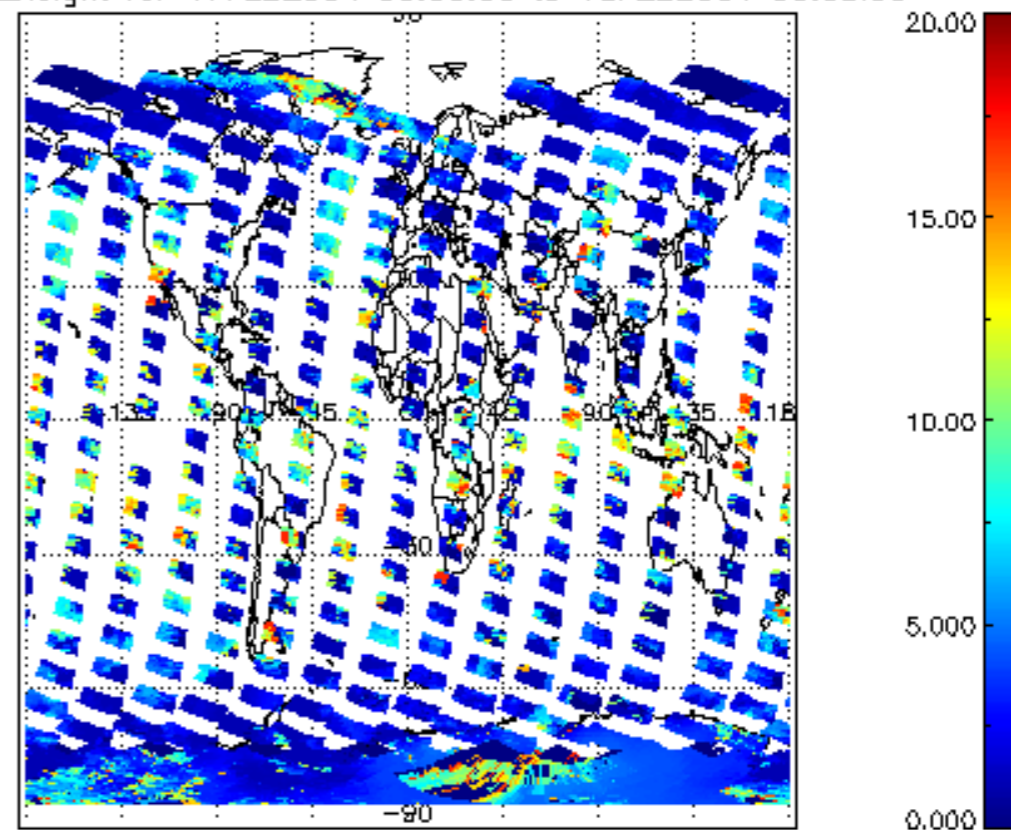
2.3 ADF monitoring

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

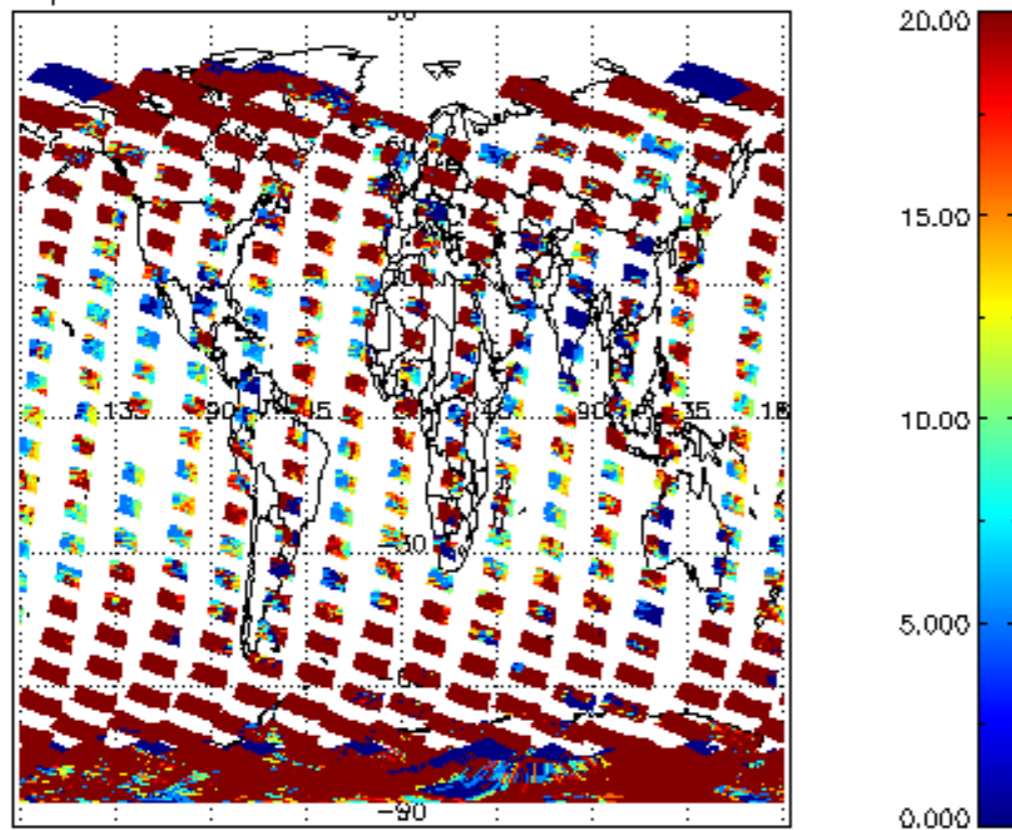
cl_frac for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



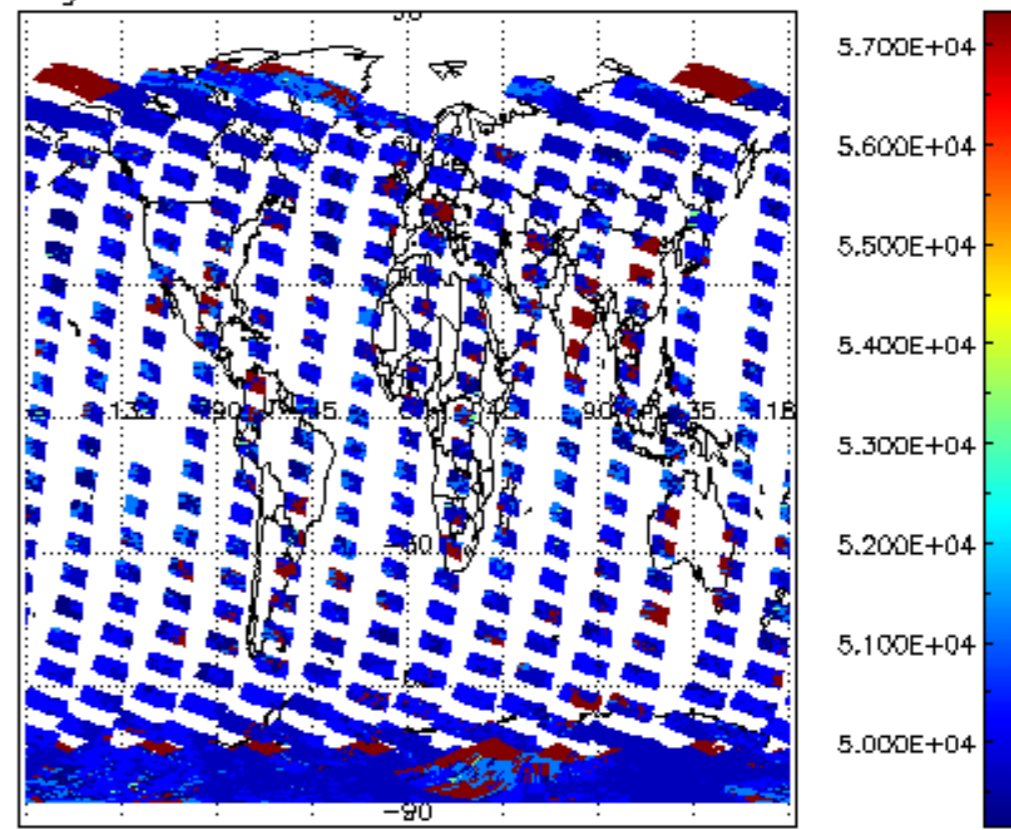
cl_top_height for 17FEB2004 00:00:00 to 18FEB2004 00:00:00

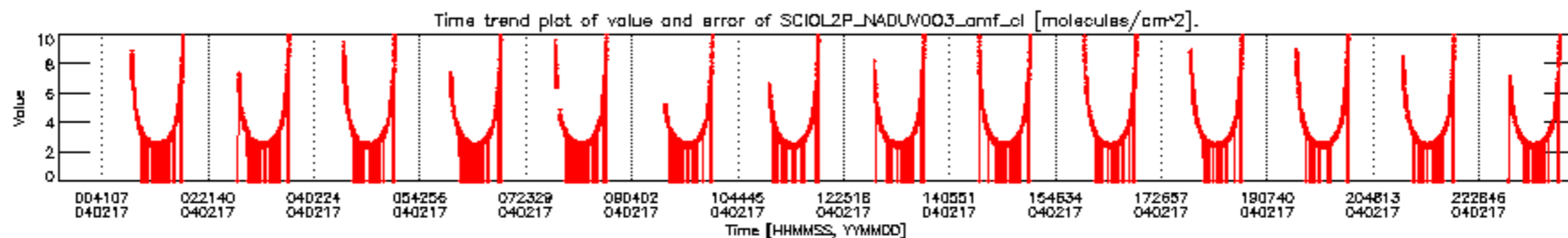
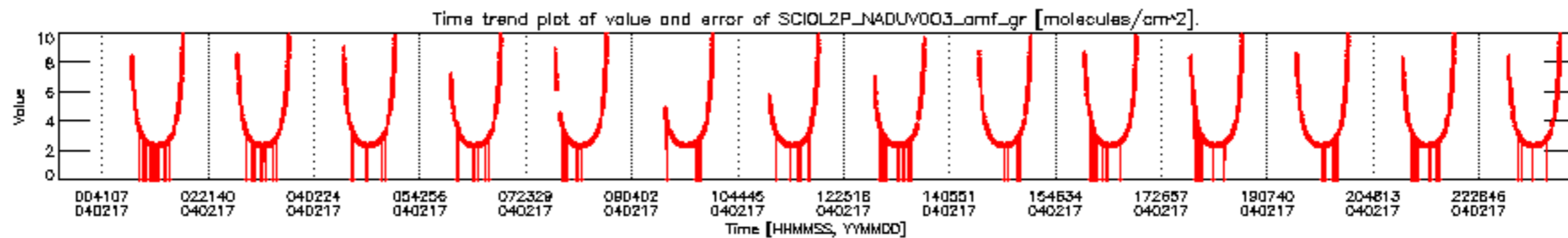
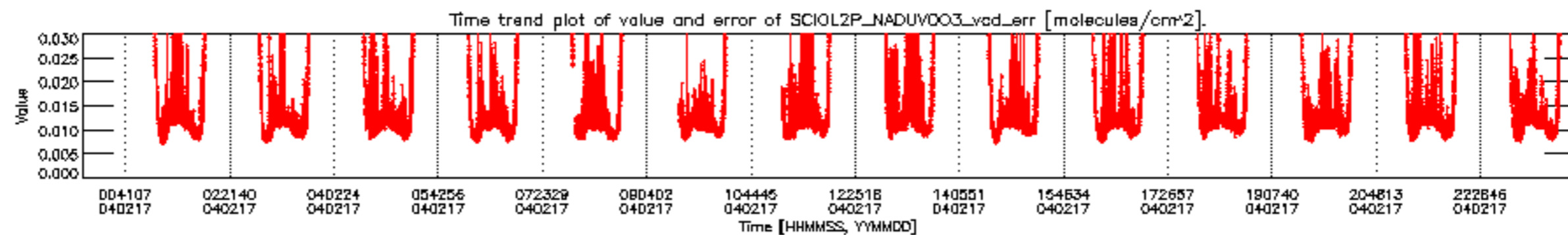
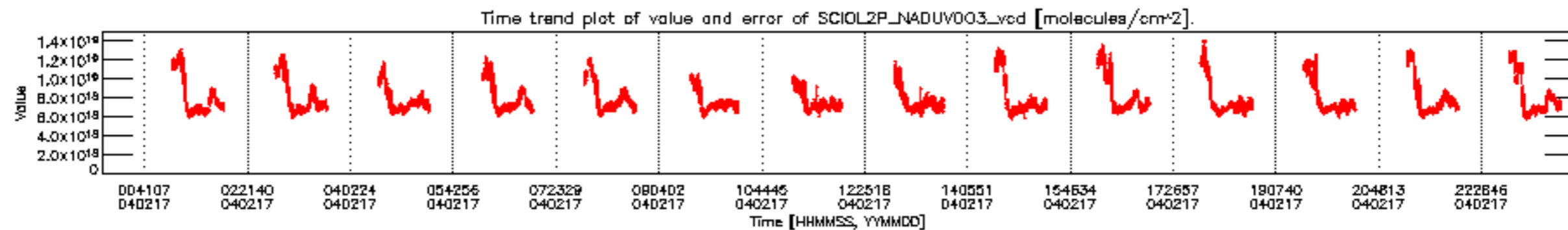


cl_opt_depth for 17FEB2004 00:00:00 to 18FEB2004 00:00:00

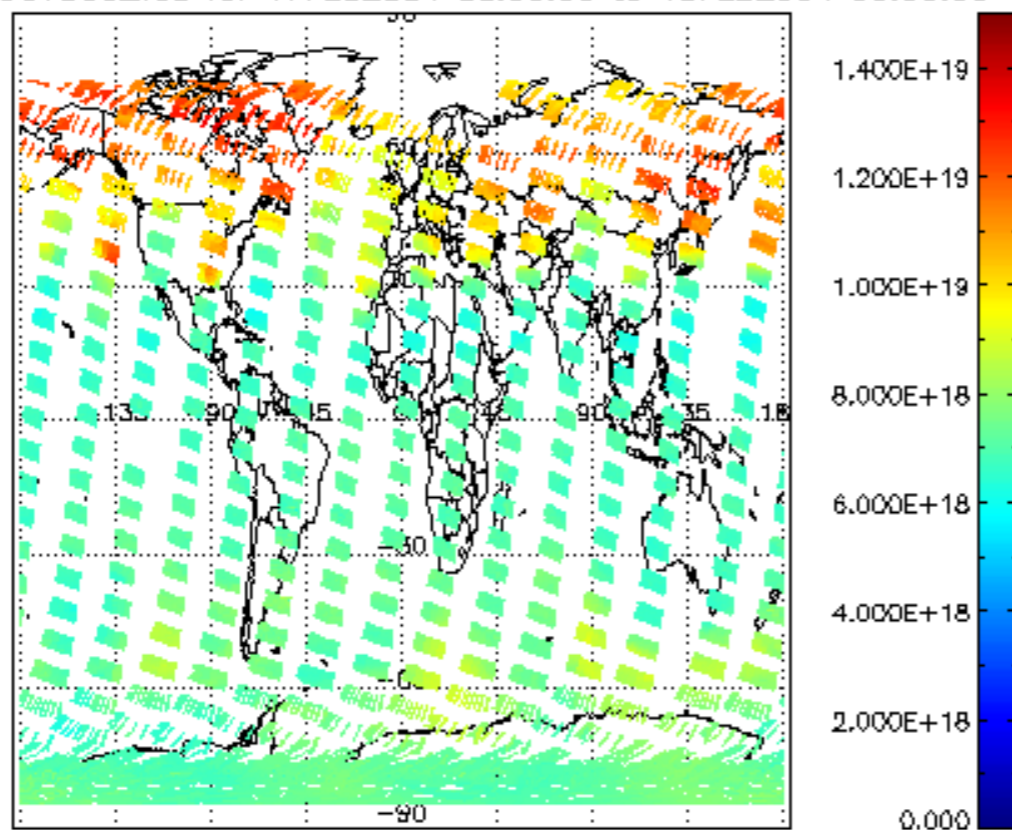


cloud_flags for 17FEB2004 00:00:00 to 18FEB2004 00:00:00

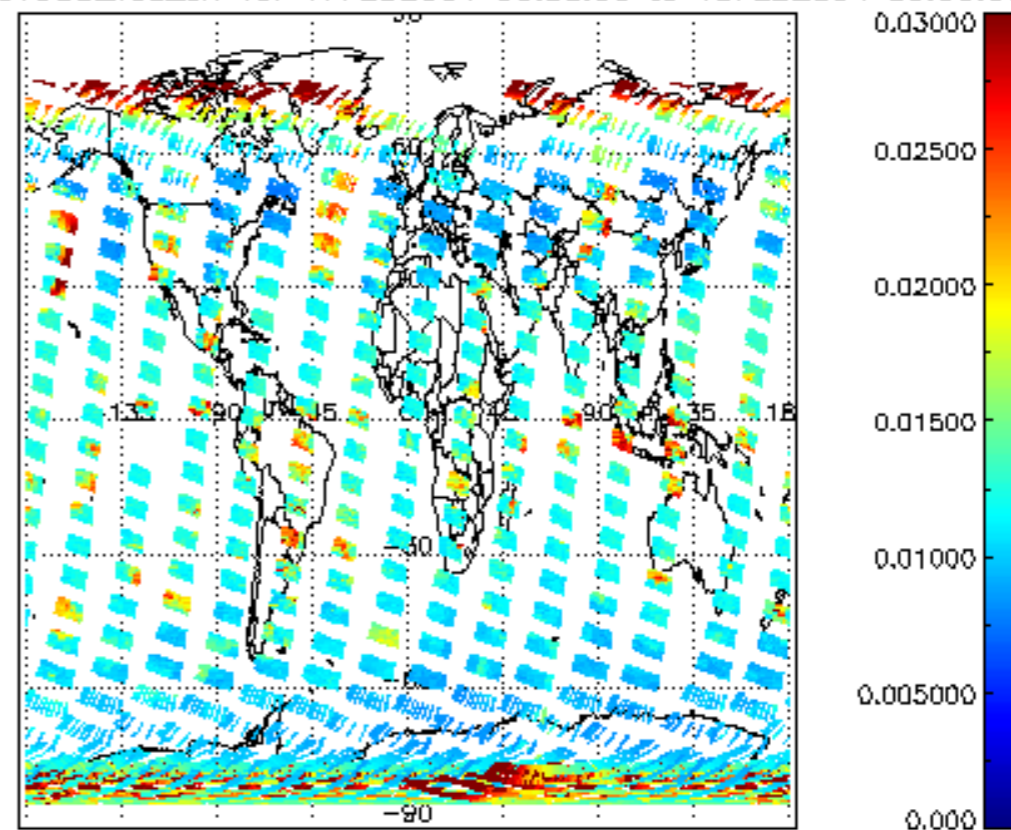




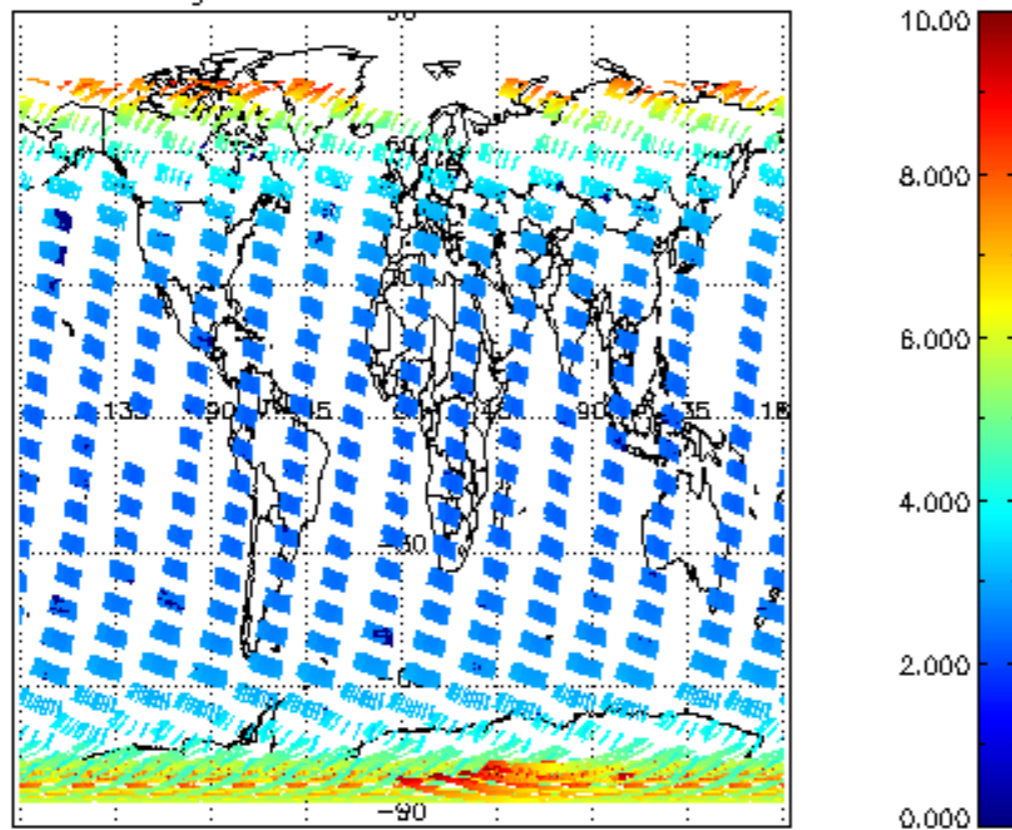
SCIOL2P_NADUV003_vcd for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



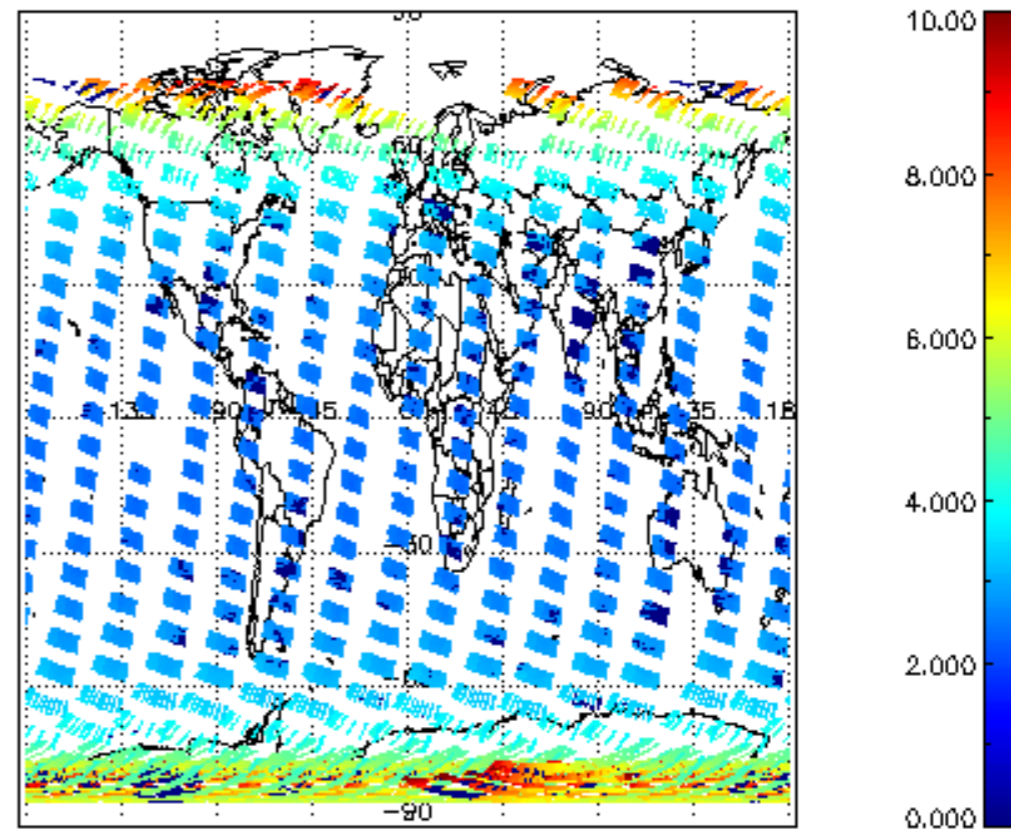
SCIOL2P_NADUV003_vcd_err for 17FEB2004 00:00:00 to 18FEB2004 00:00:00

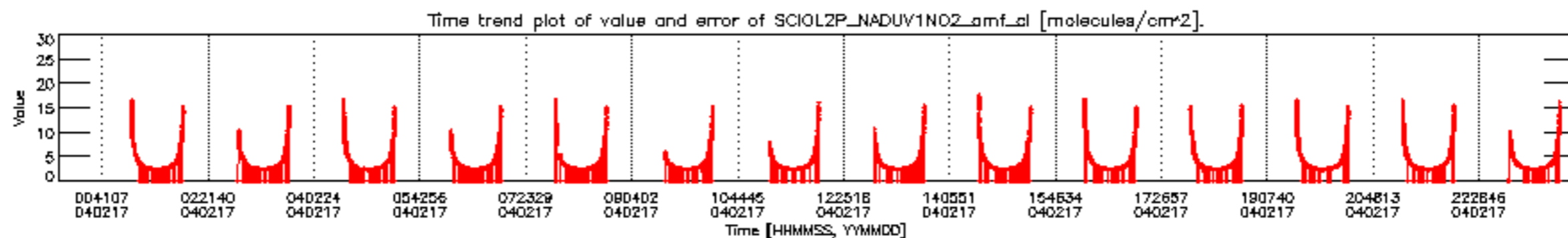
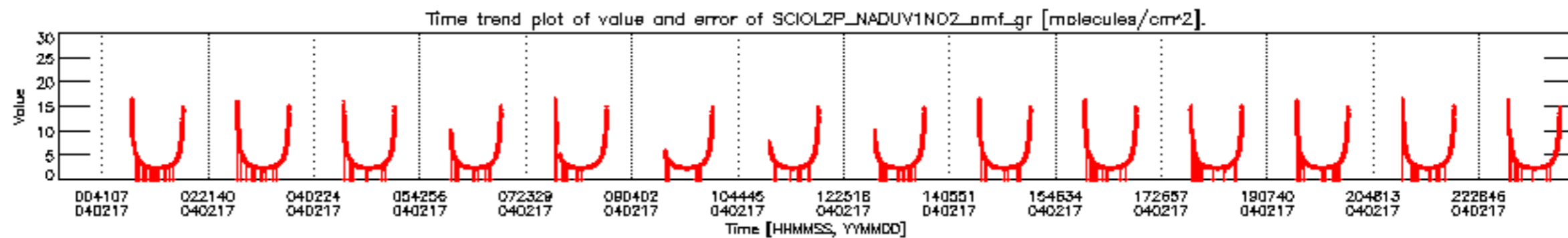
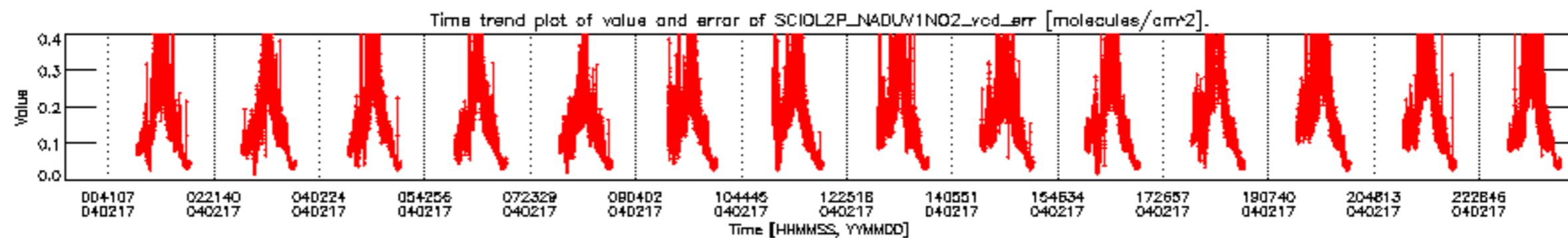
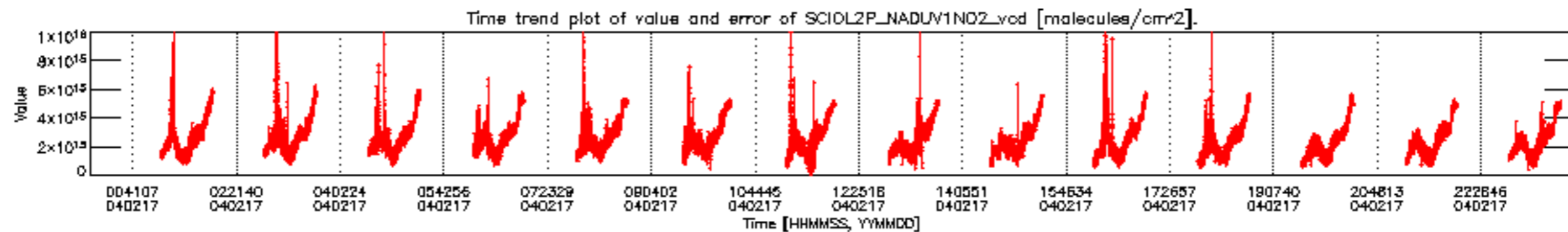


SCIOL2P_NADUV003_amf_gr for 17FEB2004 00:00:00 to 18FEB2004 00:00:00

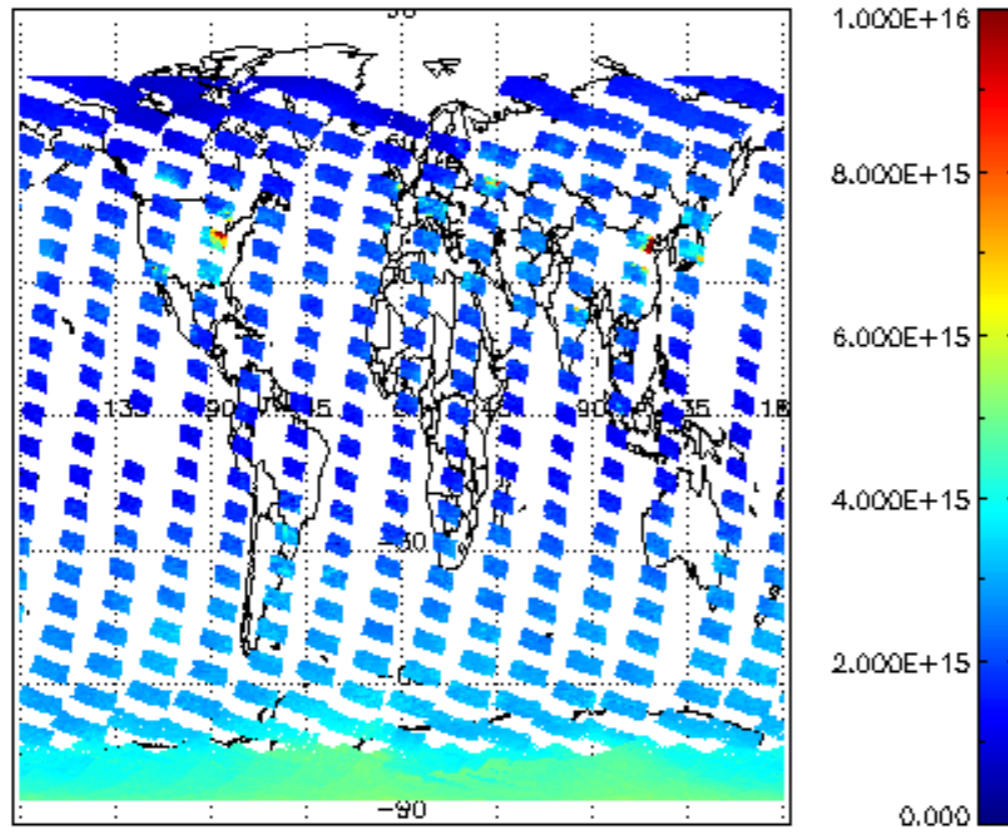


SCIOL2P_NADUV003_amf_cl for 17FEB2004 00:00:00 to 18FEB2004 00:00:00

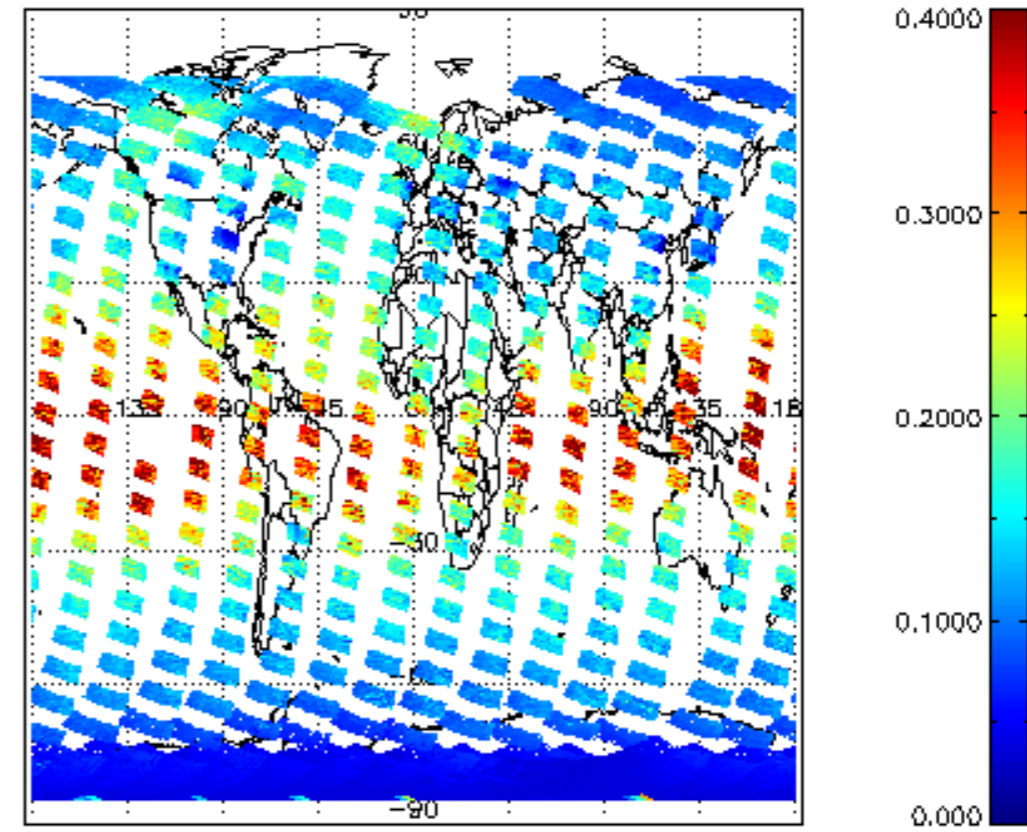




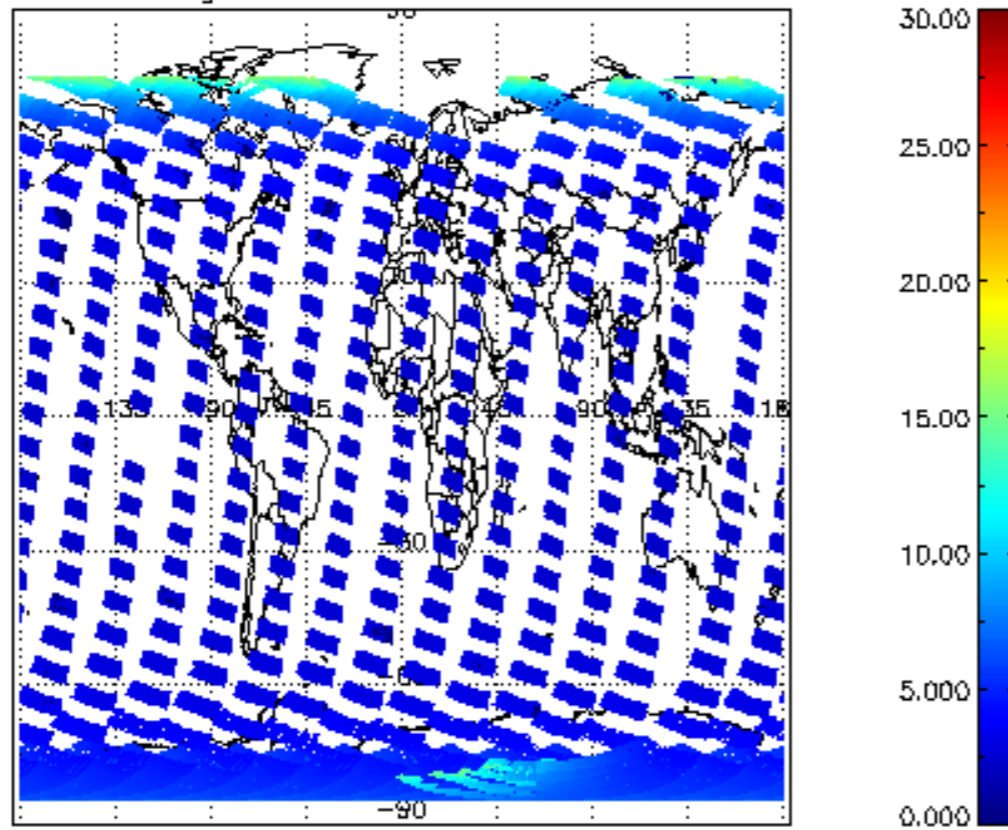
SCIOL2P_NADUV1NO2_vcd for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



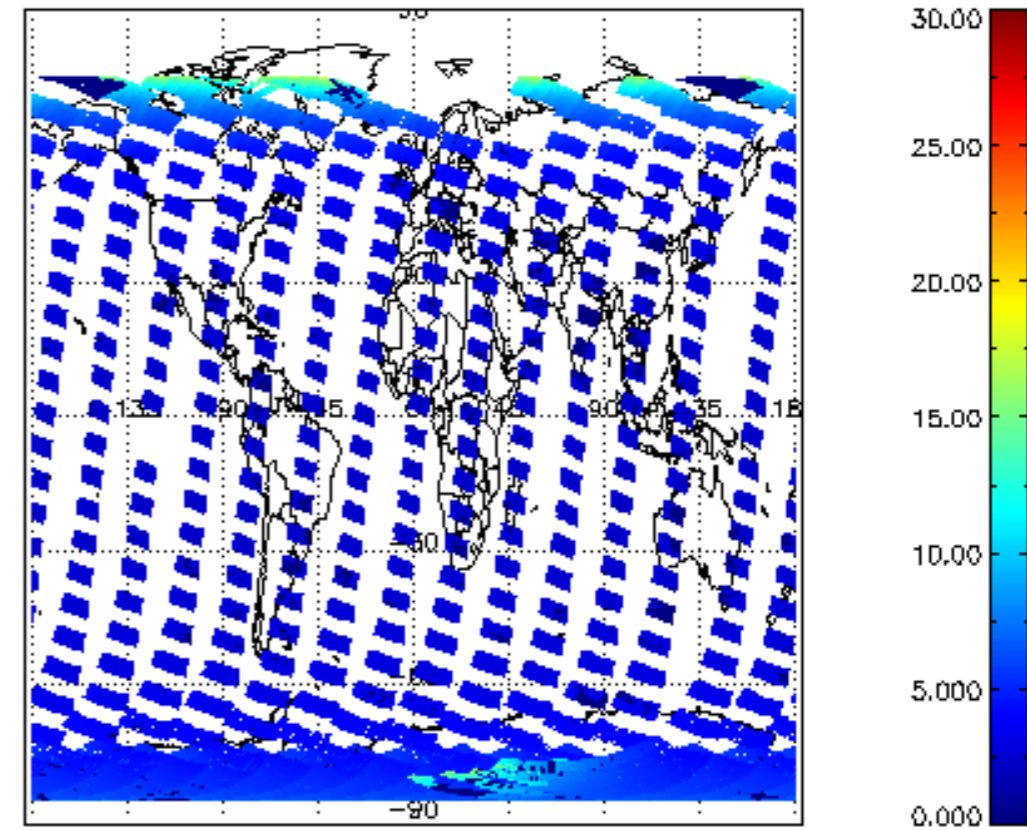
SCIOL2P_NADUV1NO2_vcd_err for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



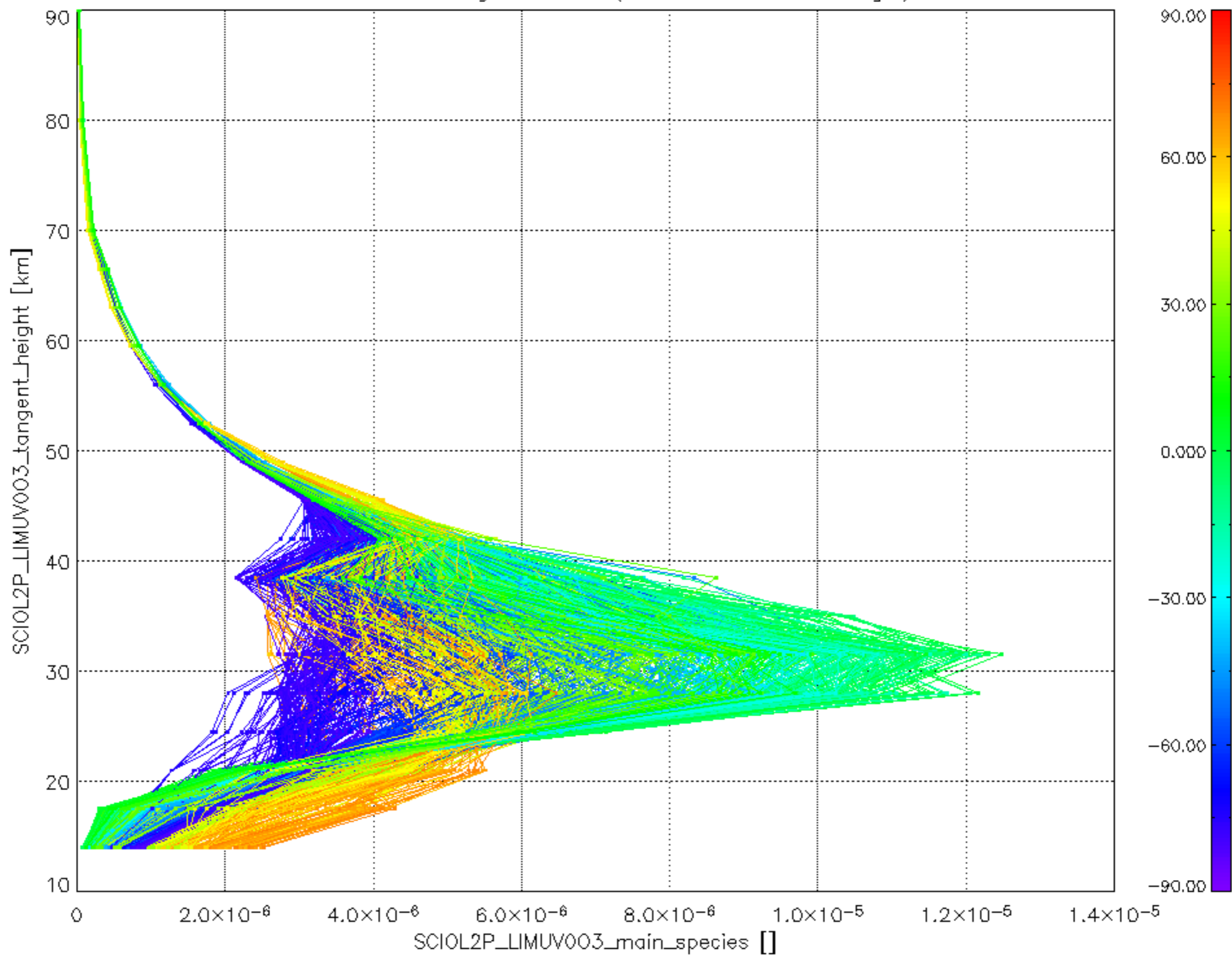
SCIOL2P_NADUV1NO2_amf_gr for 17FEB2004 00:00:00 to 18FEB2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 17FEB2004 00:00:00 to 18FEB2004 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).

