

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	06AUG2008 07:25:57
Data source version	SCIA-OL/3.01-R
Processing scope for products	26FEB2004 00:00:00 to 27FEB2004 00:00:00
Start time of first product within scope	25FEB2004 23:39:06
Stop time of last product within scope	27FEB2004 00:03:39
Total number of level 2 products	15
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__2PRDPA20040225_233906_000033772024_00331_10405_6827.N1	25FEB2004 23:39:06	26FEB2004 00:35:23	0	GOOD
1	SCI_OL__2PRDPA20040226_012105_000032372024_00332_10406_6745.N1	26FEB2004 01:21:05	26FEB2004 02:15:02	0	GOOD
2	SCI_OL__2PRDPA20040226_030017_000033772024_00333_10407_6648.N1	26FEB2004 03:00:17	26FEB2004 03:56:34	0	GOOD
3	SCI_OL__2PRDPA20040226_044216_000032372024_00334_10408_6811.N1	26FEB2004 04:42:16	26FEB2004 05:36:13	0	GOOD
4	SCI_OL__2PRDPA20040226_062128_000033772024_00335_10409_6893.N1	26FEB2004 06:21:28	26FEB2004 07:17:45	0	GOOD
5	SCI_OL__2PRDPA20040226_080327_000032372024_00336_10410_6825.N1	26FEB2004 08:03:27	26FEB2004 08:57:24	0	GOOD
6	SCI_OL__2PRDPA20040226_094239_000033772024_00337_10411_6788.N1	26FEB2004 09:42:39	26FEB2004 10:38:56	0	GOOD
7	SCI_OL__2PRDPA20040226_112437_000032372024_00338_10412_6805.N1	26FEB2004 11:24:37	26FEB2004 12:18:35	0	GOOD
8	SCI_OL__2PRDPA20040226_130349_000033772024_00339_10413_6835.N1	26FEB2004 13:03:49	26FEB2004 14:00:06	0	GOOD
9	SCI_OL__2PRDPA20040226_144548_000032372024_00340_10414_6720.N1	26FEB2004 14:45:48	26FEB2004 15:39:46	0	GOOD
10	SCI_OL__2PRDPA20040226_162500_000033772024_00341_10415_6870.N1	26FEB2004 16:25:00	26FEB2004 17:21:17	0	GOOD
11	SCI_OL__2PRDPA20040226_180545_000033342024_00342_10416_6707.N1	26FEB2004 18:05:45	26FEB2004 19:01:20	0	GOOD
12	SCI_OL__2PRDPA20040226_194543_000033492024_00343_10417_6638.N1	26FEB2004 19:45:43	26FEB2004 20:41:33	0	GOOD
13	SCI_OL__2PRDPA20040226_212810_000032372024_00344_10418_6854.N1	26FEB2004 21:28:10	26FEB2004 22:22:08	0	GOOD
14	SCI_OL__2PRDPA20040226_230722_000033772024_00345_10419_6886.N1	26FEB2004 23:07:22	27FEB2004 00:03:39	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: 117864

Total number of cloud data DSRs with good quality flag (=0): 117864 (100.0 %)

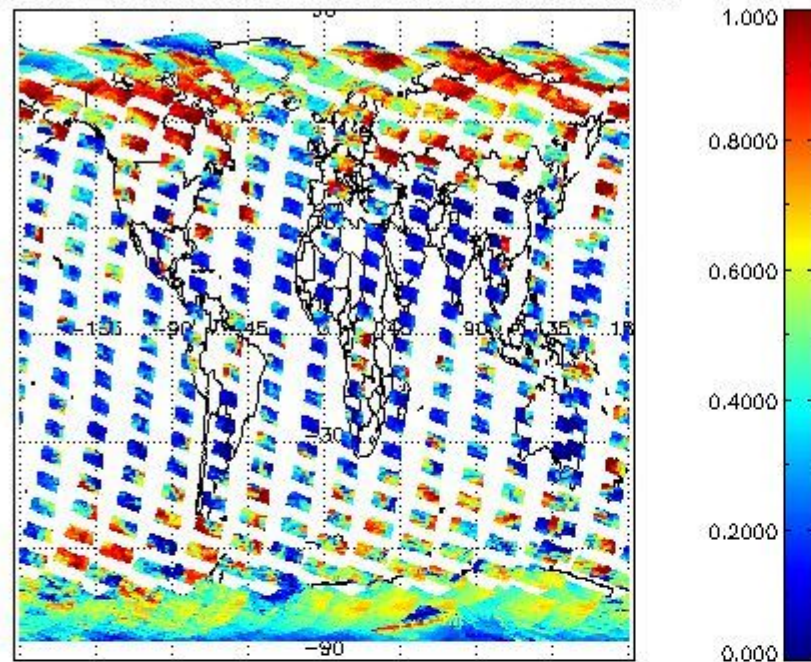
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	117864	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	117864	0.21979	0.25000	0.12500	1.0000	0.096945	s
CL_FRAC	117864	0.44543	0.41834	0.0000	1.0000	0.28972	-
CL_FRAC_ERR	117864	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	117864	7.0331	8.0000	4.0000	32.000	3.1022	
PMD_READ_CL[0]	117864	0.35564	0.0000	0.0000	16.000	1.3373	-
PMD_READ_CL[1]	117864	0.36739	0.0000	0.0000	32.000	1.5327	-
CL_TOP_HEIGHT	107269	4.2383	2.4270	0.0000	17.000	4.1704	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	107269	47.535	31.949	0.0000	101.00	38.700	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	117864	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	117864	11000110	11000100	11000000	11100000	2440.4	flags
AERO_ABSO_IND	117864	0.75932	0.56109	-4.3334	14.057	1.1819	
AERO_IND_DIAG	117864	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	117864	01101001	11000000	00000000	11000000	24444.	flags

Time and geolocation plots:

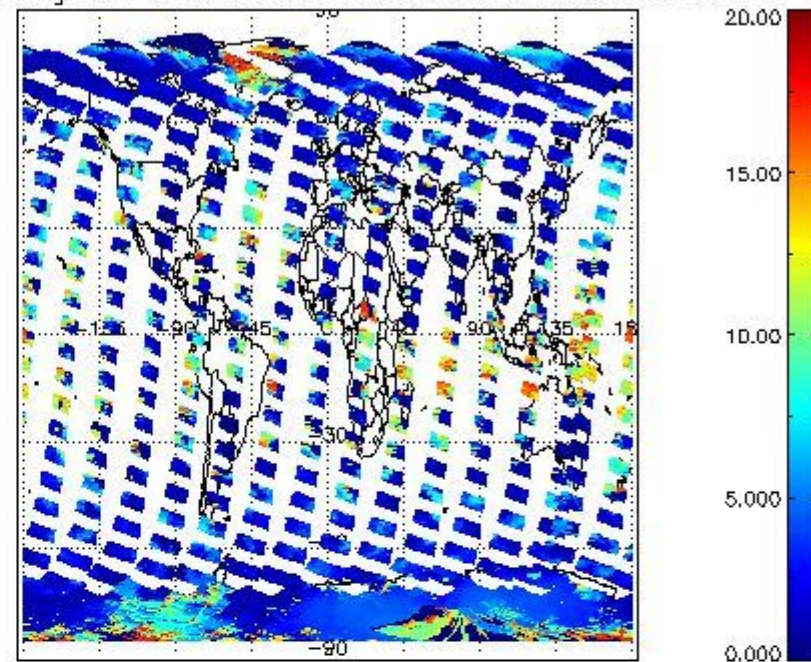
Plots are available for the following parameters:

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

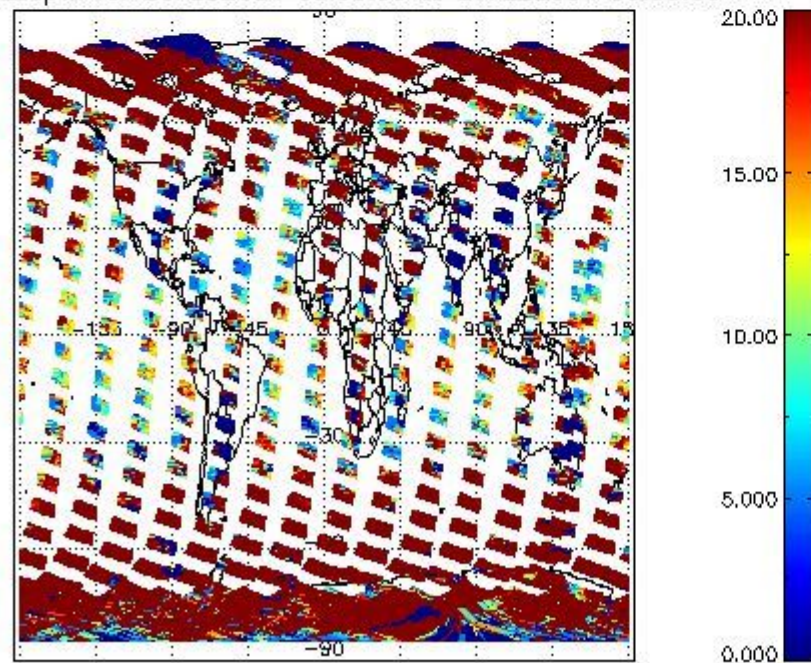
cL_frac for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



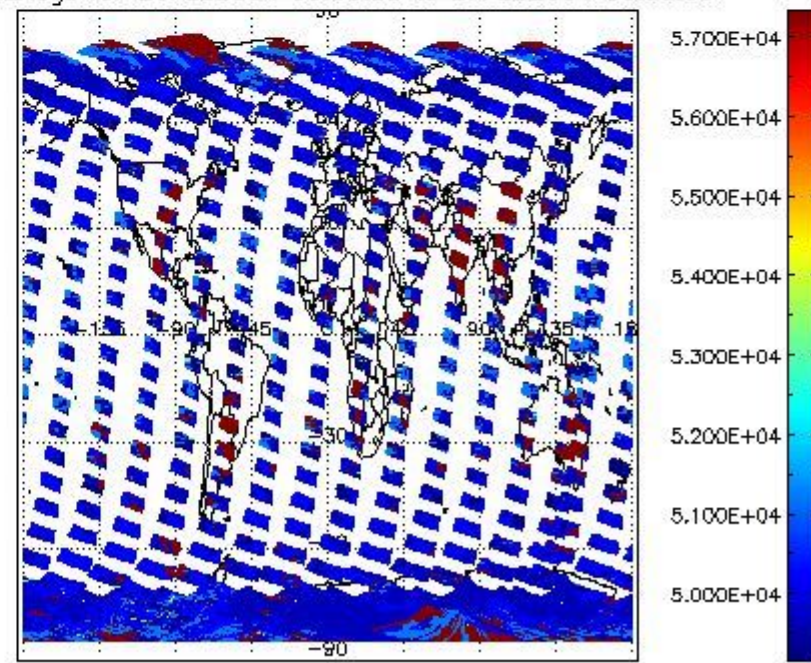
cL_top_height for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



cL_opt_depth for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



cloud_flags for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



2.2.2 Nadir

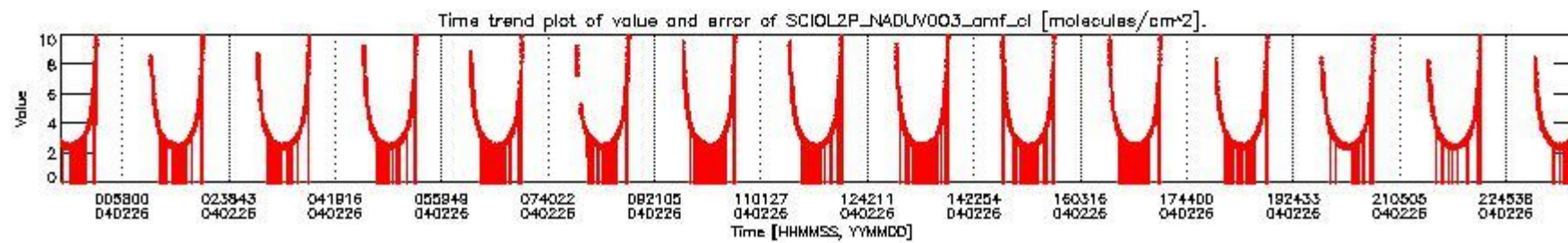
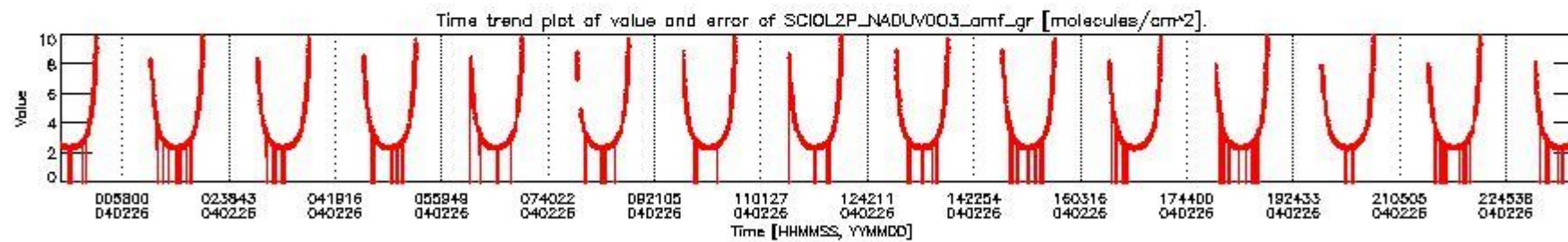
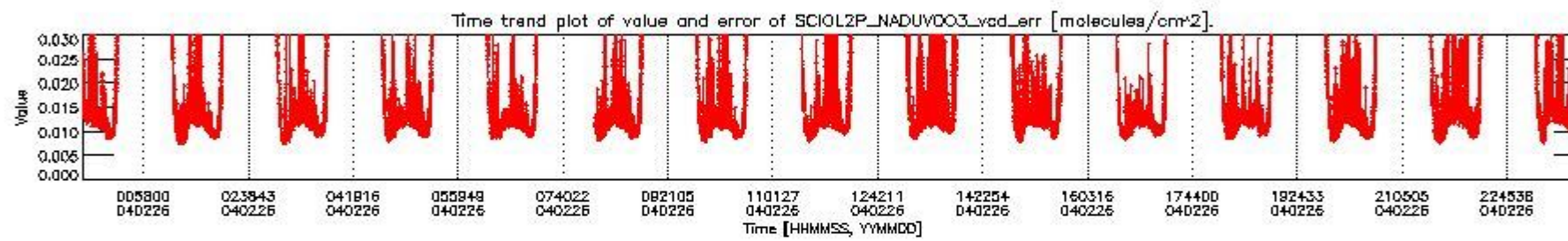
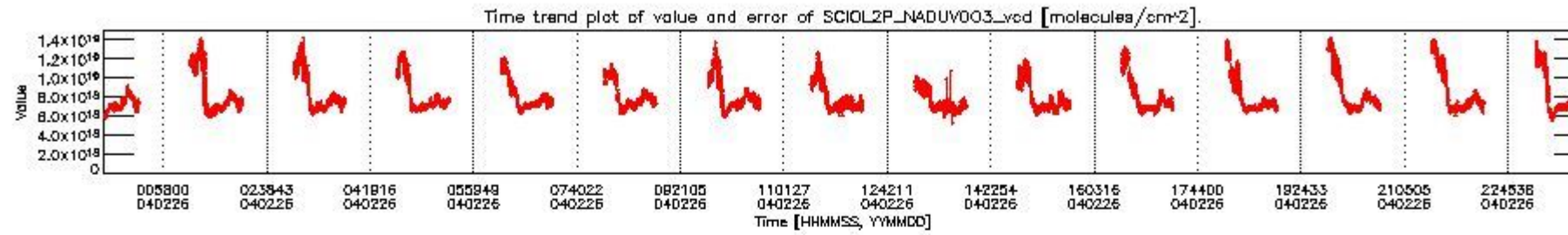
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

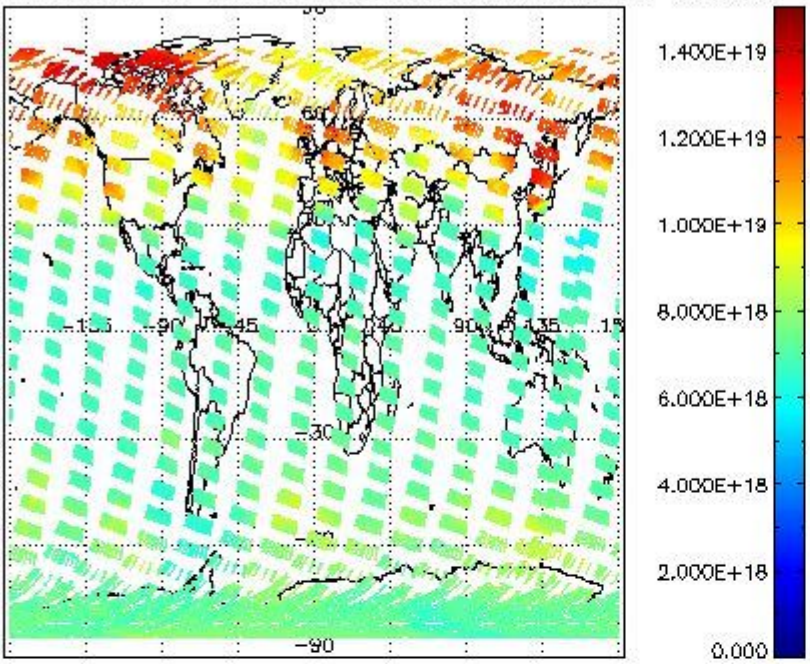
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

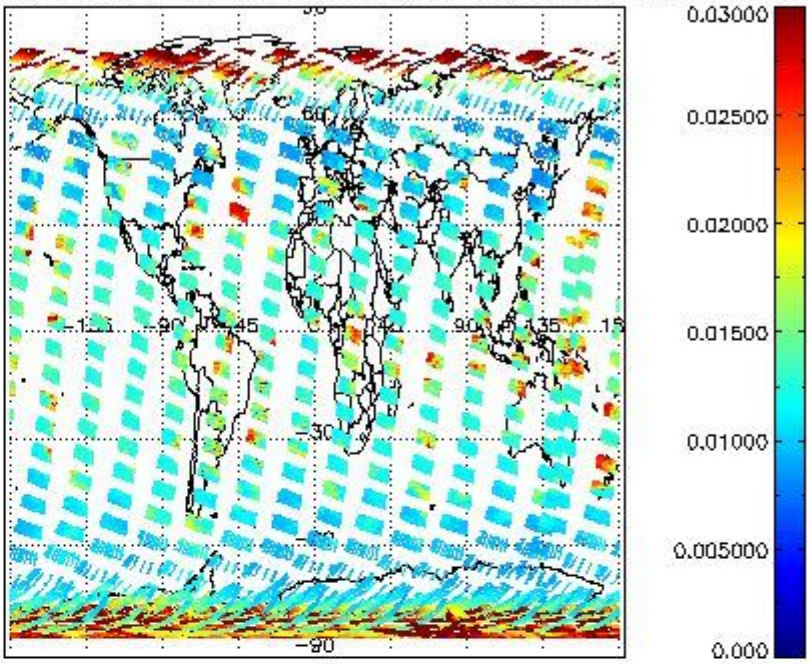
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



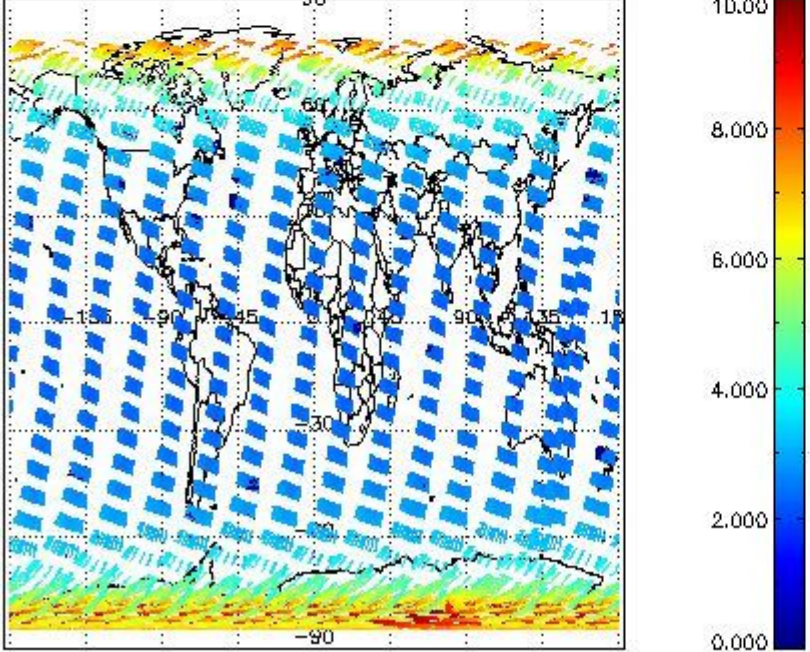
SCIOL2P_NADUV003_vcd for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



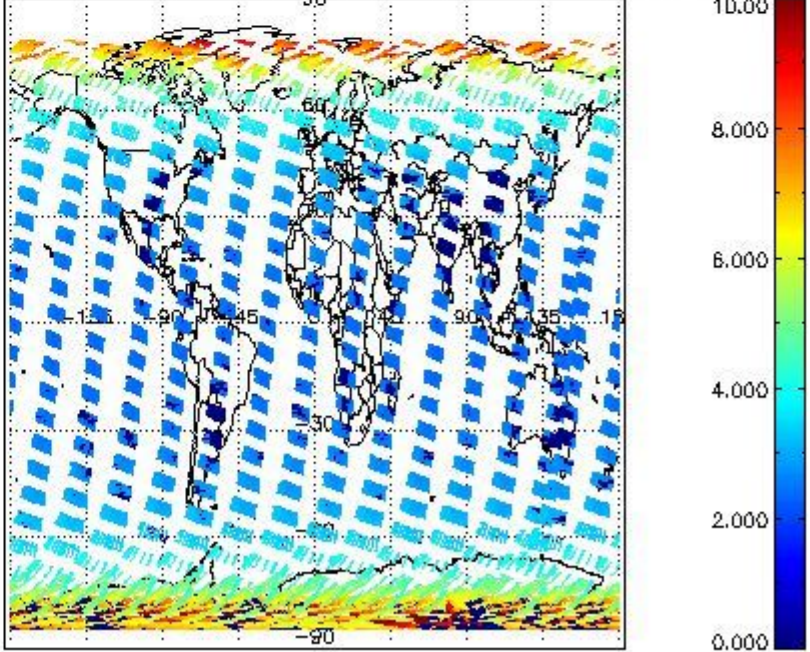
SCIOL2P_NADUV003_vcd_err for 26FEB2004 00:00:00 to 27FEB2004 00:00:00

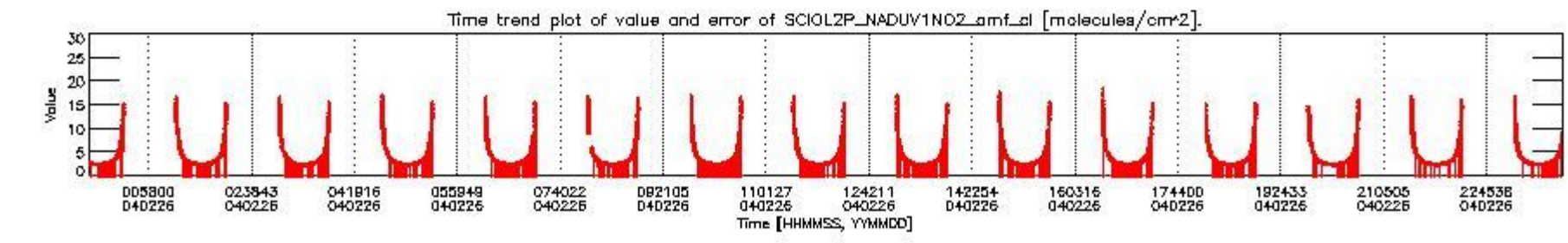
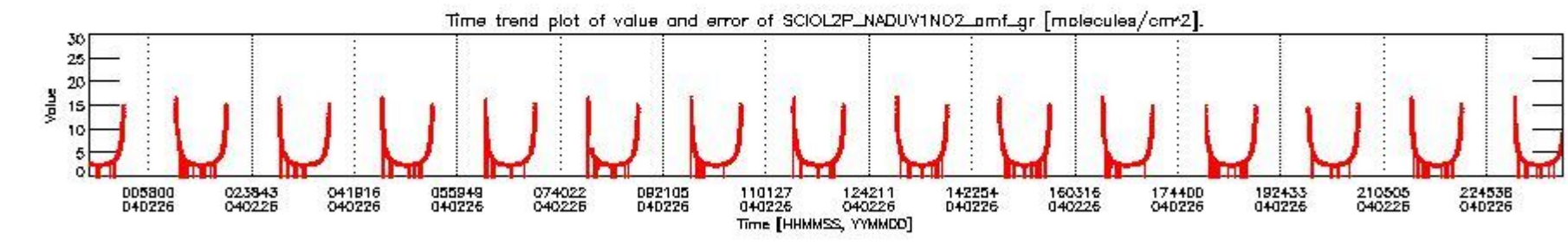
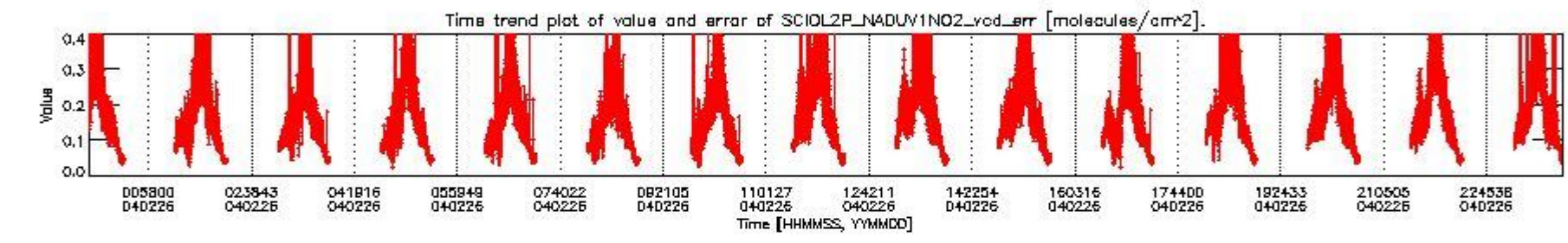
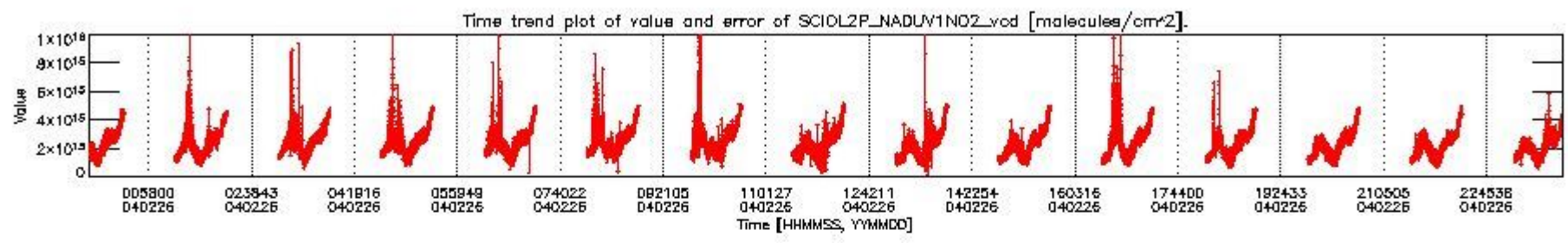


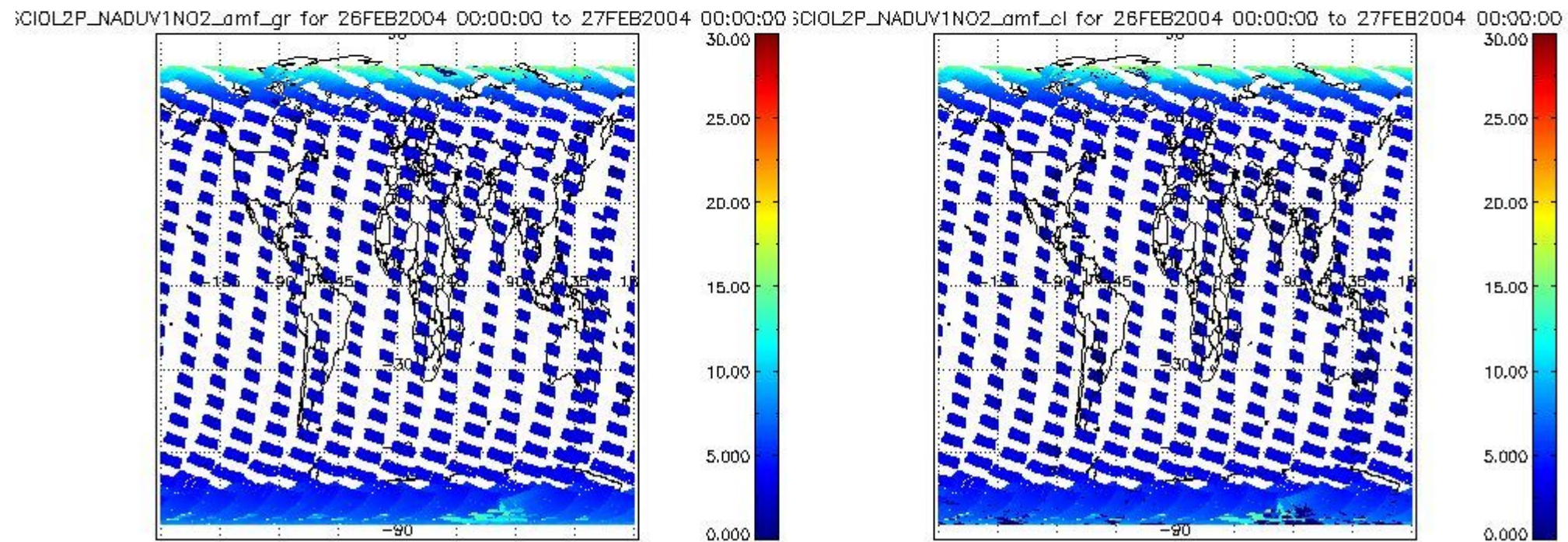
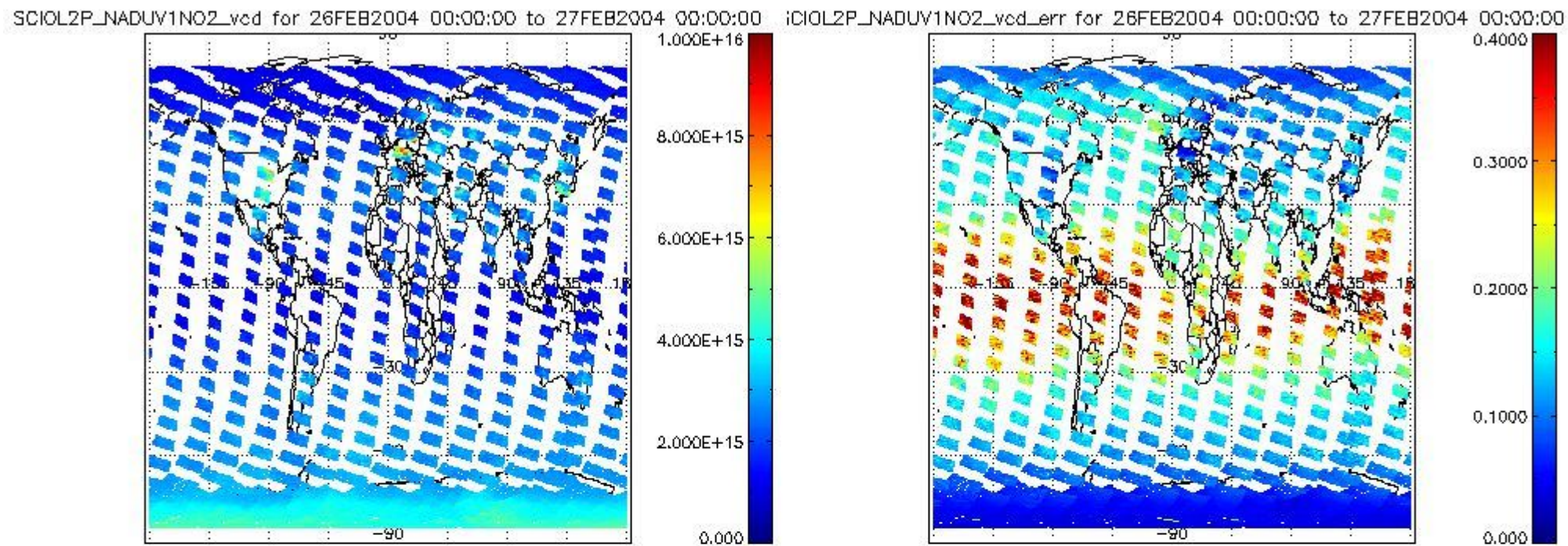
SCIOL2P_NADUV003_amf_gr for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 26FEB2004 00:00:00 to 27FEB2004 00:00:00







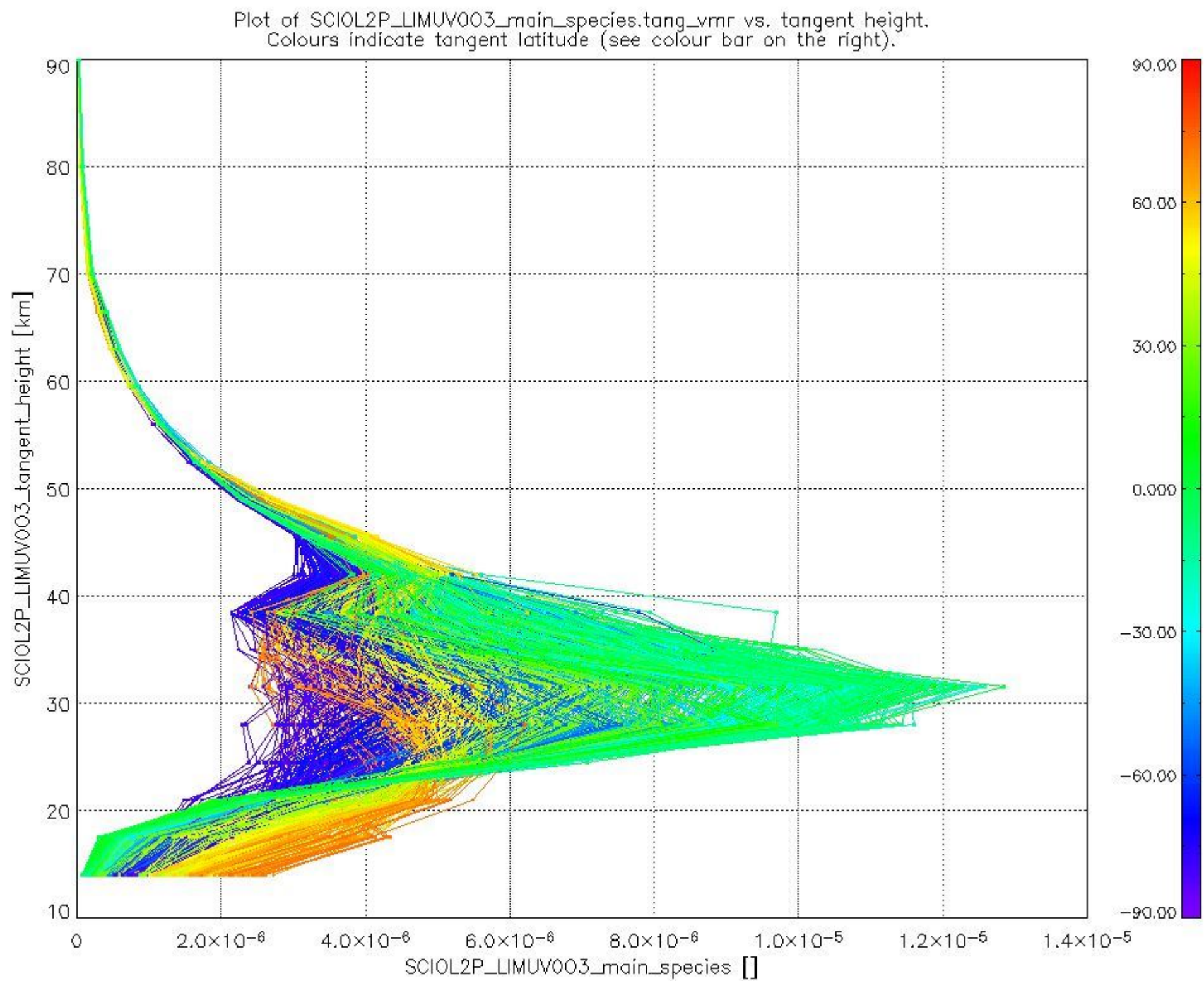
2.2.3 Limb

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

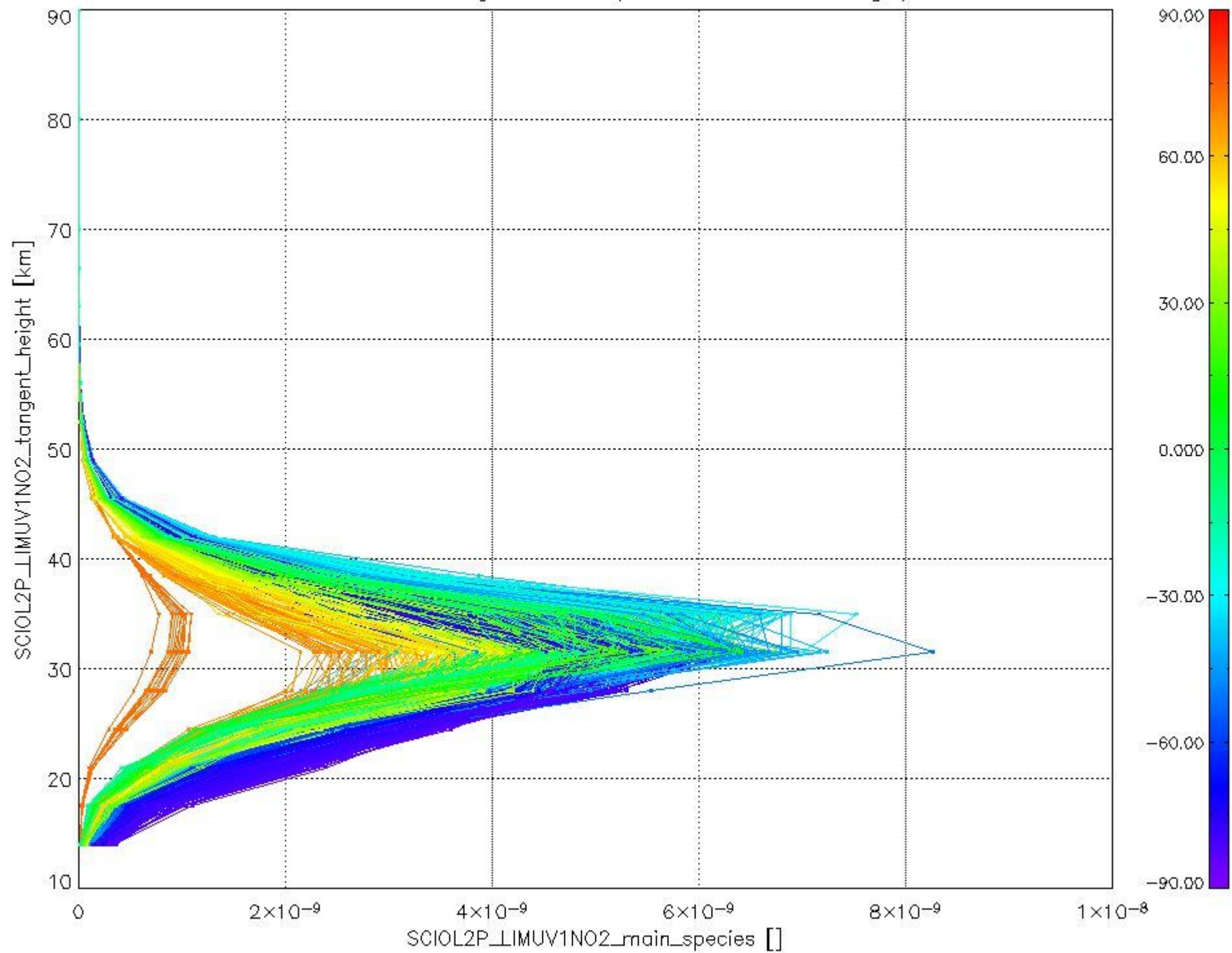
The following data items are currently included into this section:

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.



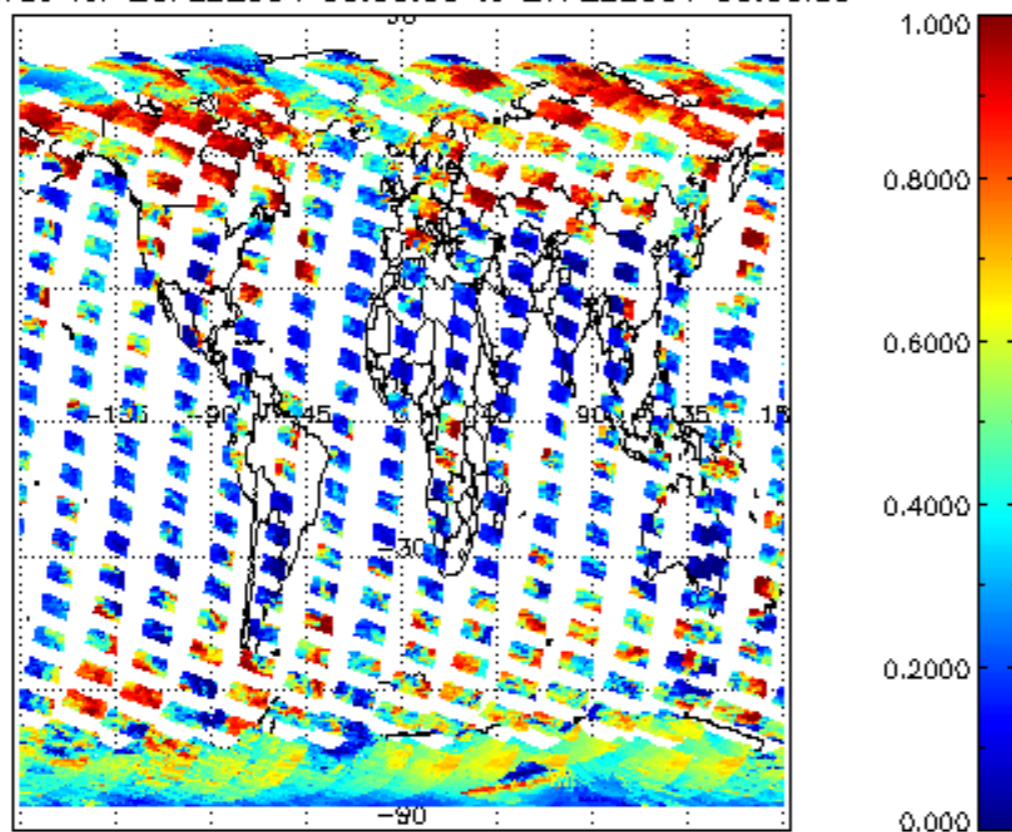
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



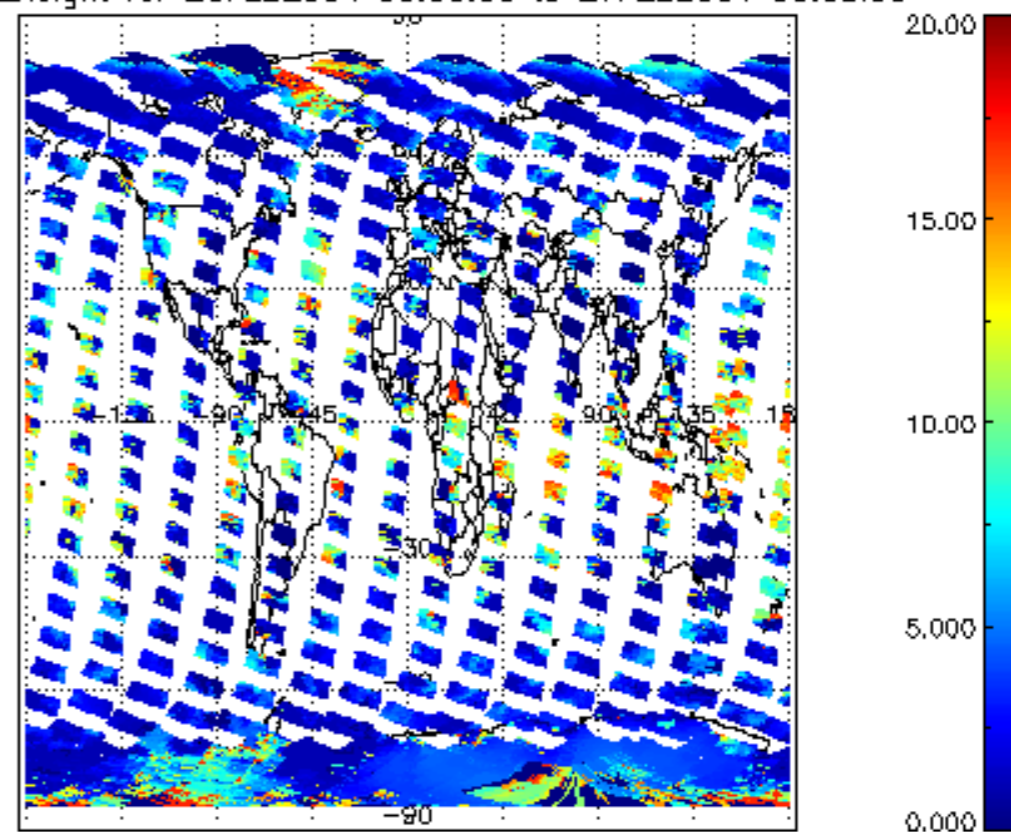
2.3 ADF monitoring

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

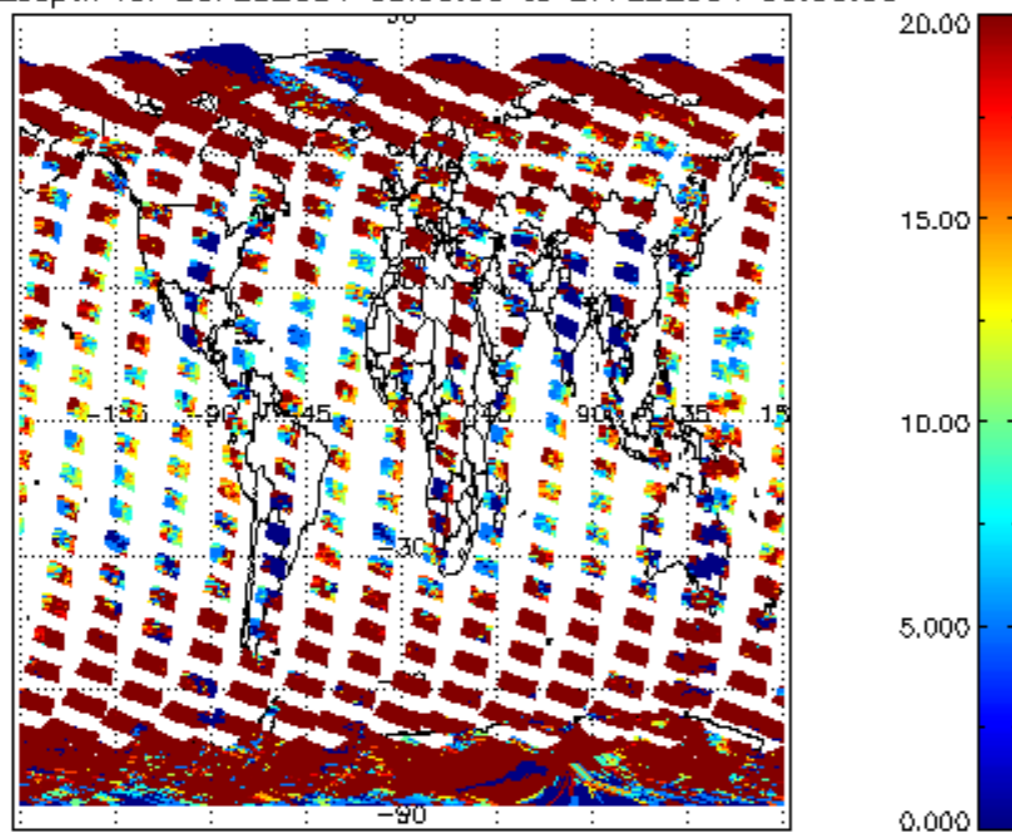
cl_frac for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



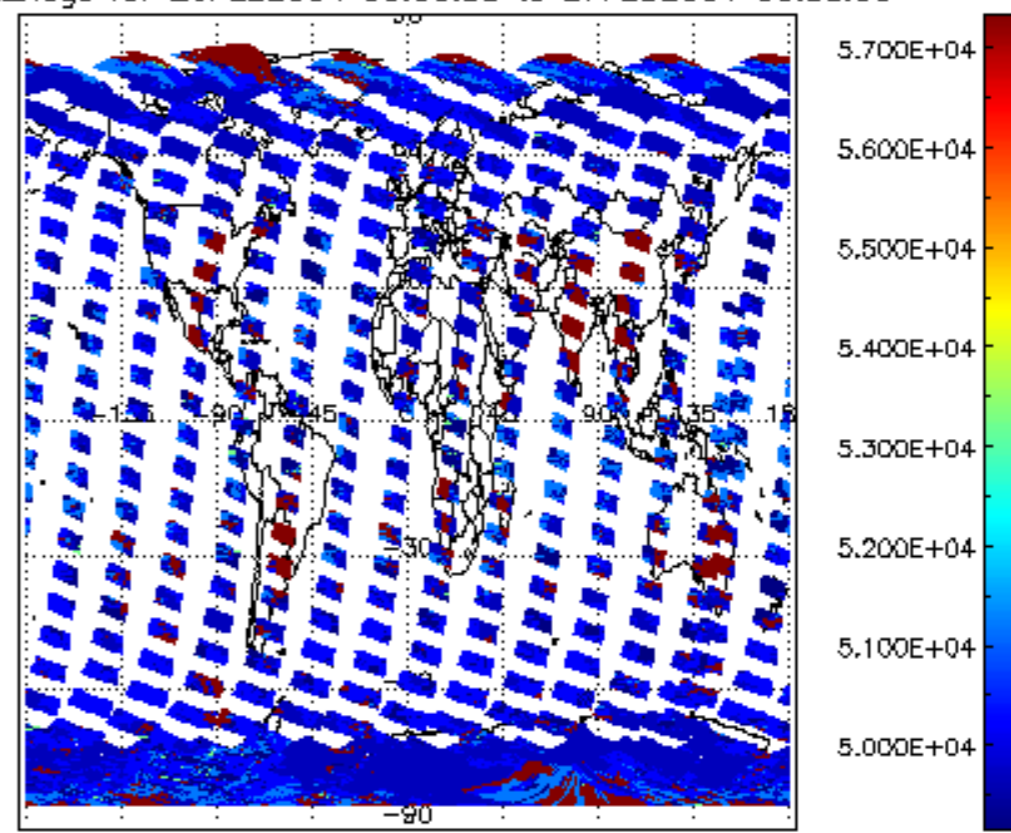
cl_top_height for 26FEB2004 00:00:00 to 27FEB2004 00:00:00

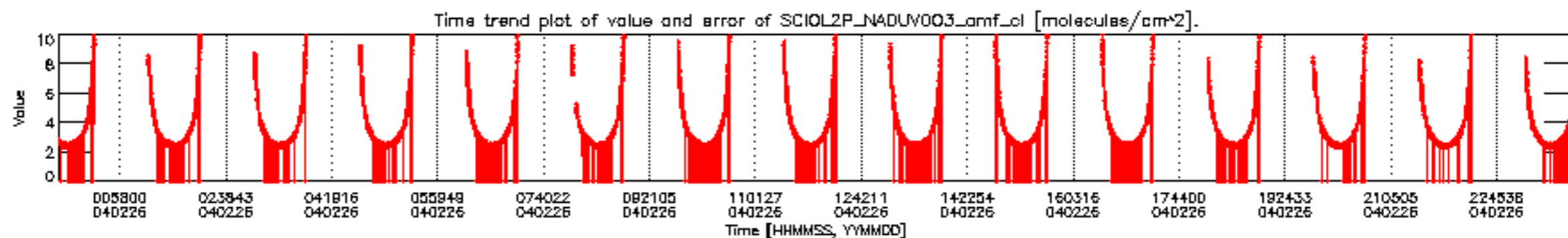
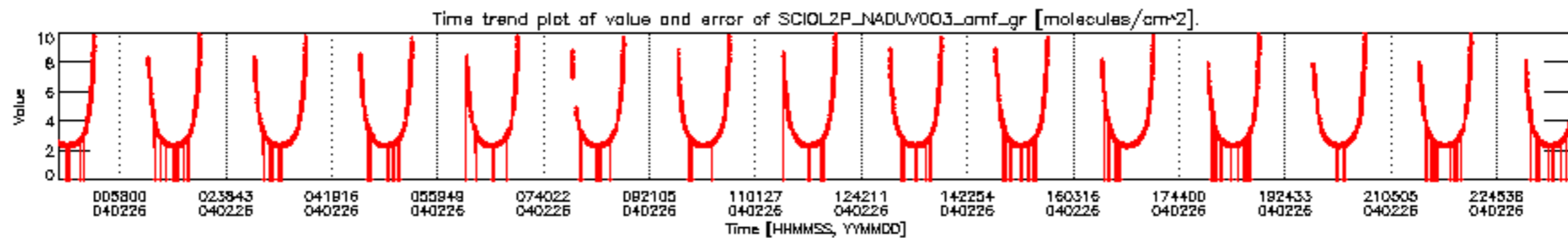
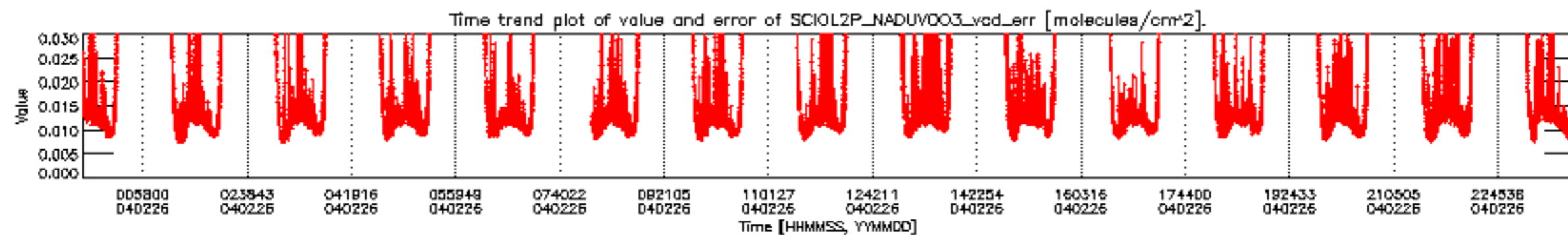
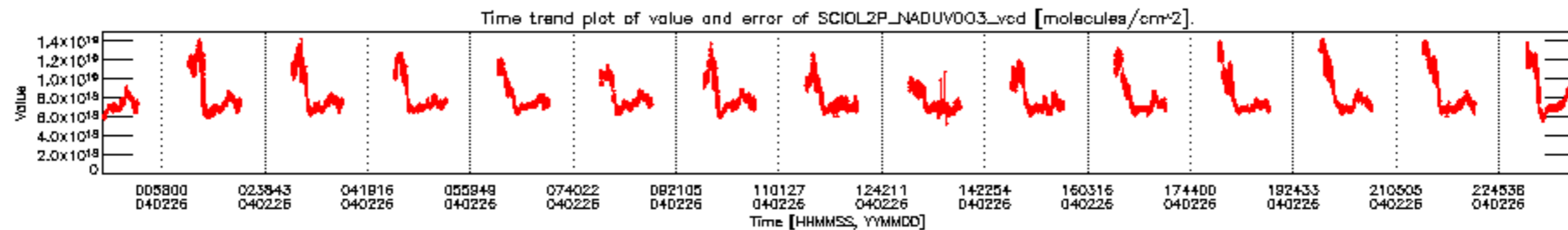


cl_lopt_depth for 26FEB2004 00:00:00 to 27FEB2004 00:00:00

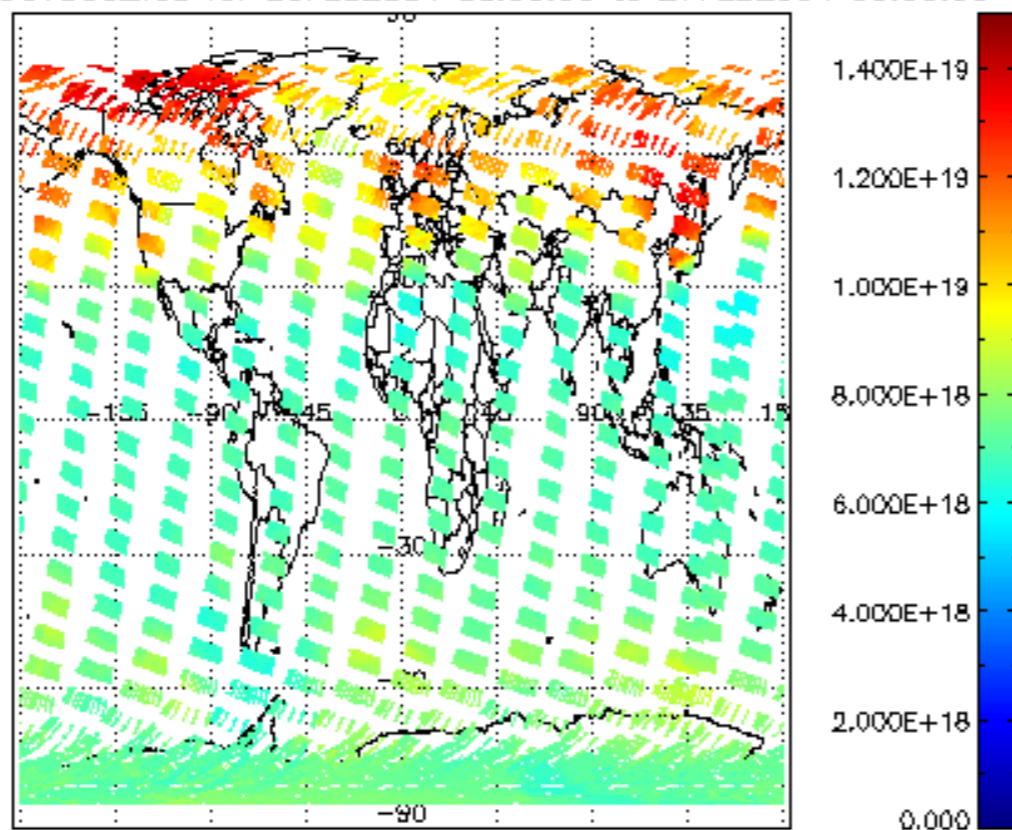


cloud_flags for 26FEB2004 00:00:00 to 27FEB2004 00:00:00

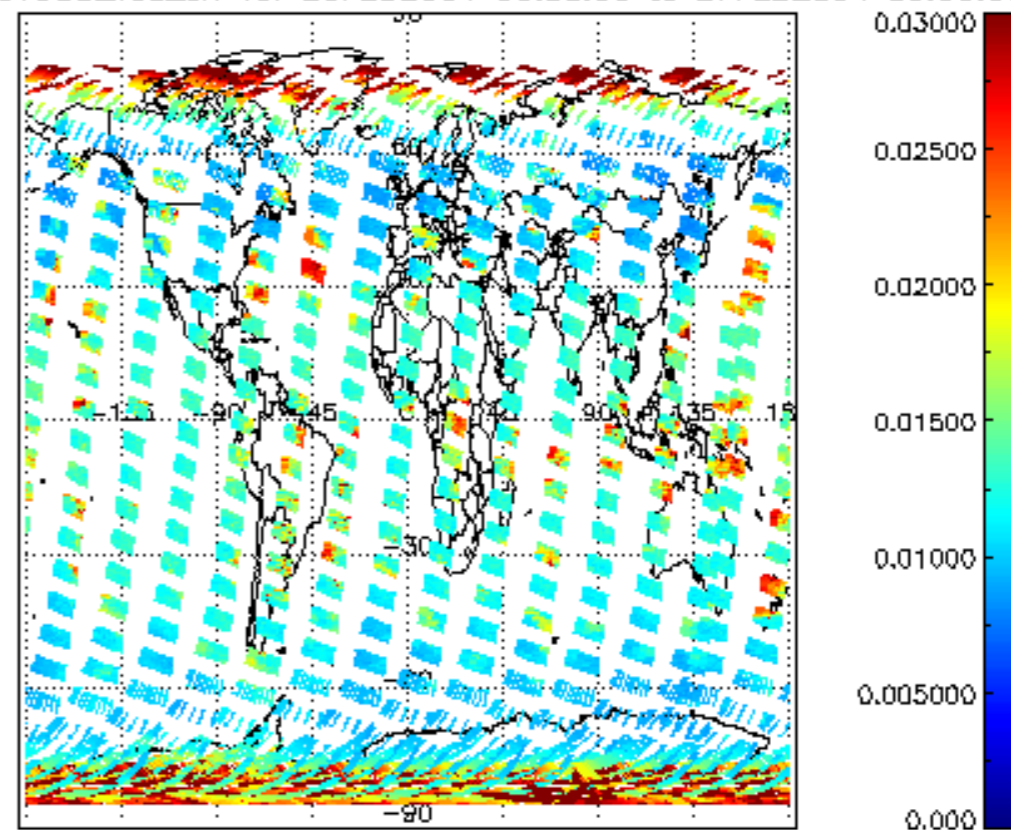




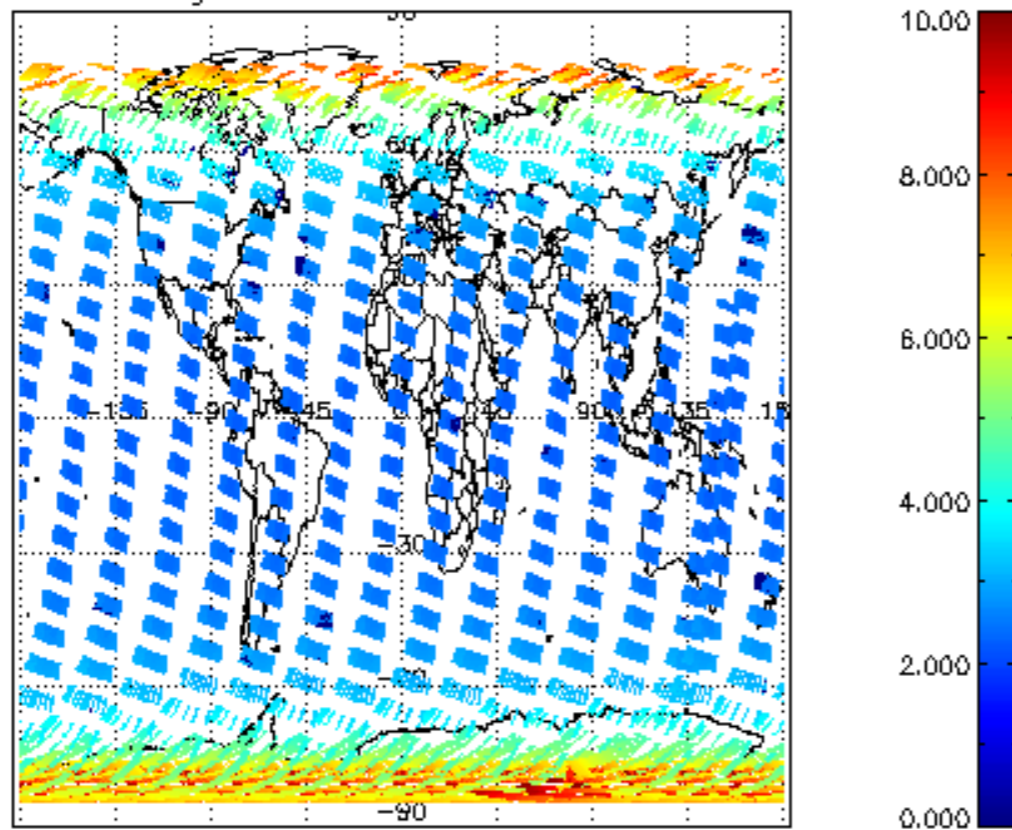
SCIOL2P_NADUV003_vcd for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



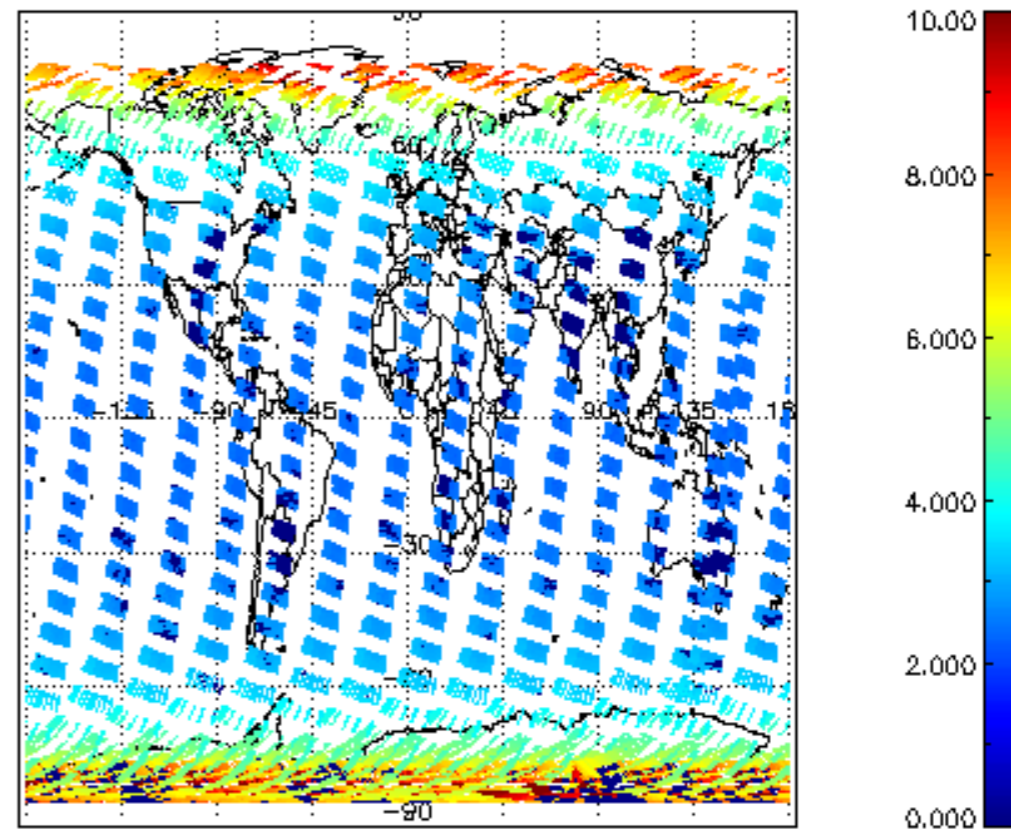
SCIOL2P_NADUV003_vcd_err for 26FEB2004 00:00:00 to 27FEB2004 00:00:00

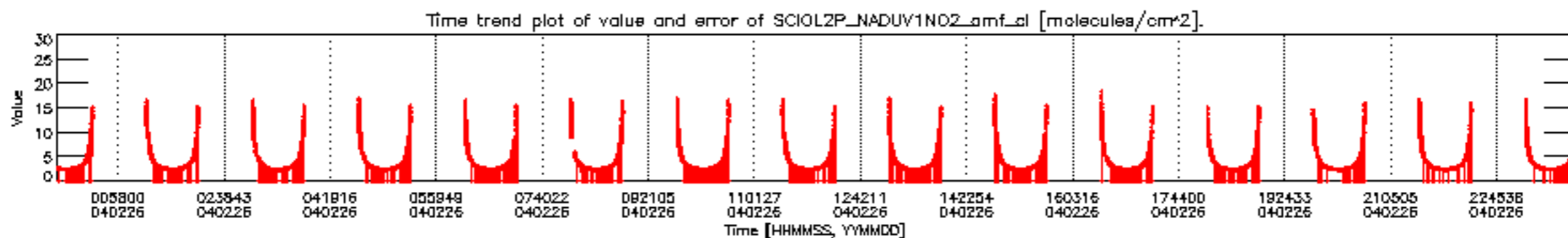
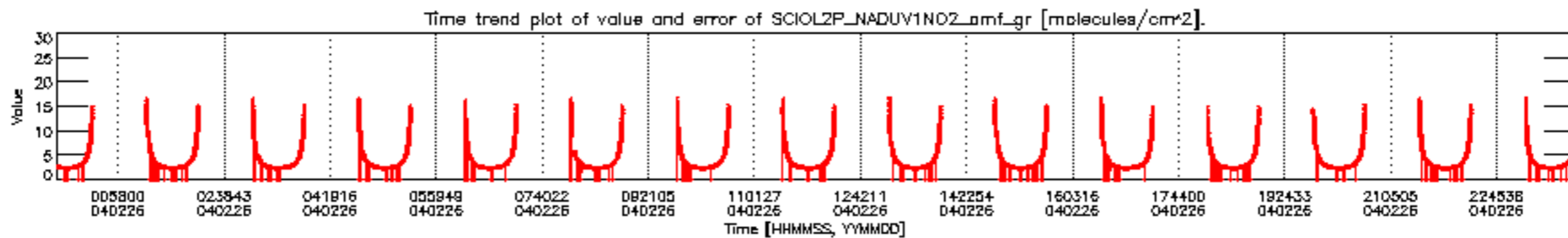
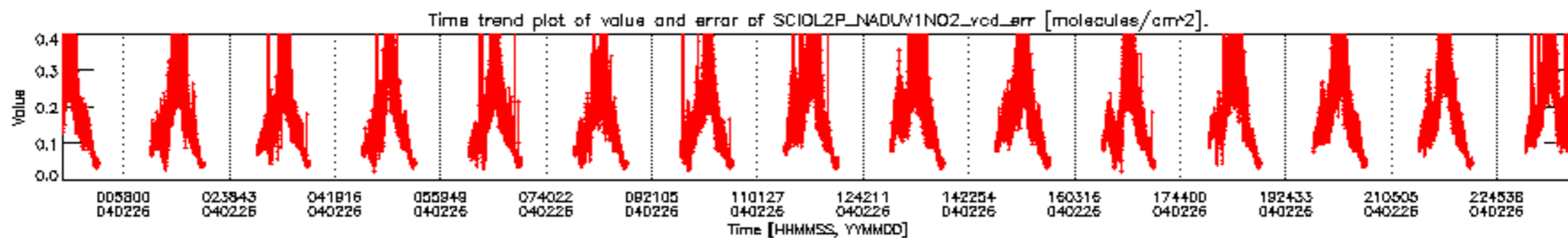
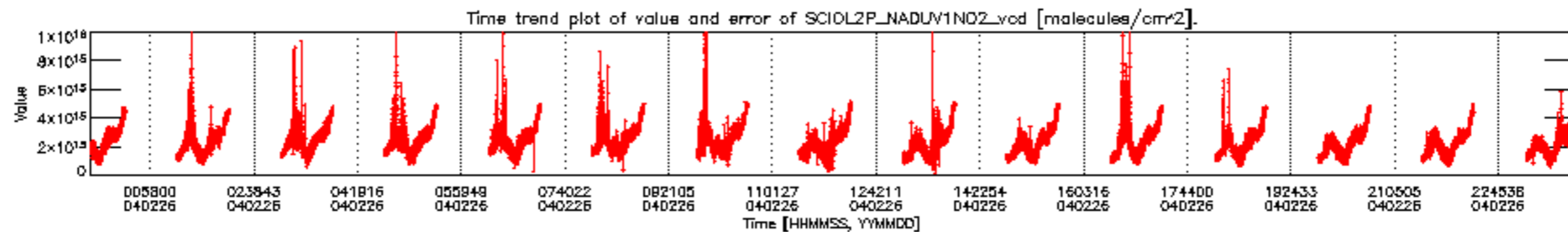


SCIOL2P_NADUV003_amf_gr for 26FEB2004 00:00:00 to 27FEB2004 00:00:00

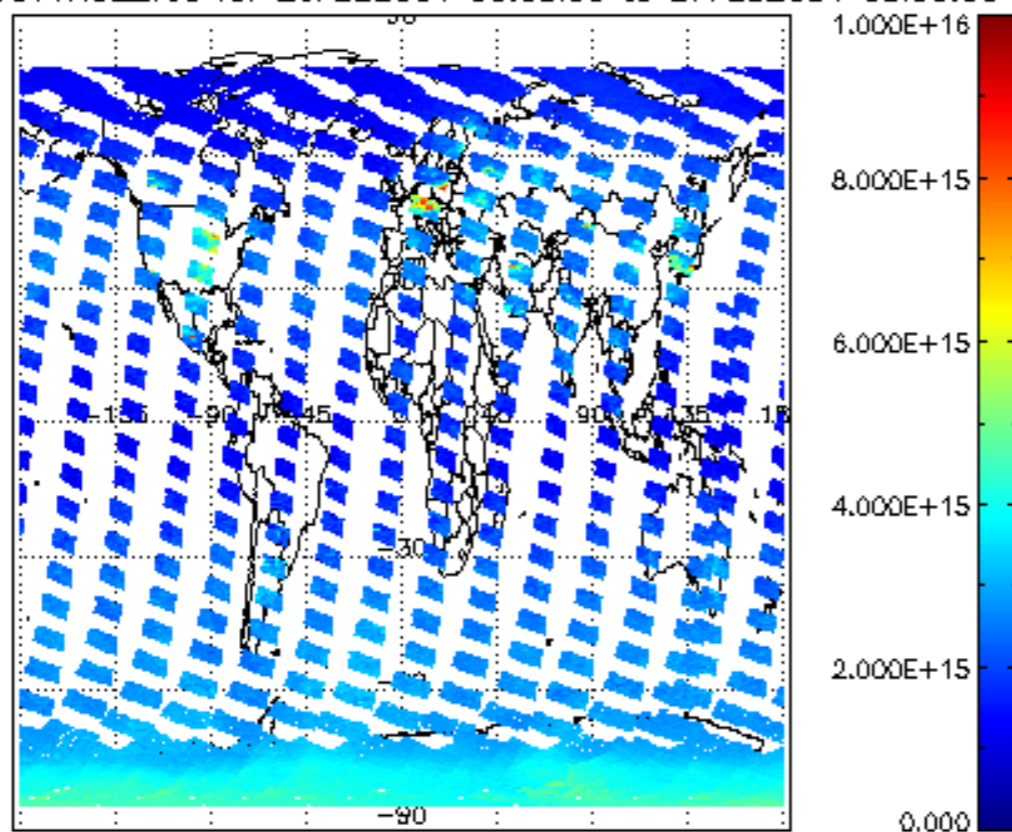


SCIOL2P_NADUV003_amf_cl for 26FEB2004 00:00:00 to 27FEB2004 00:00:00

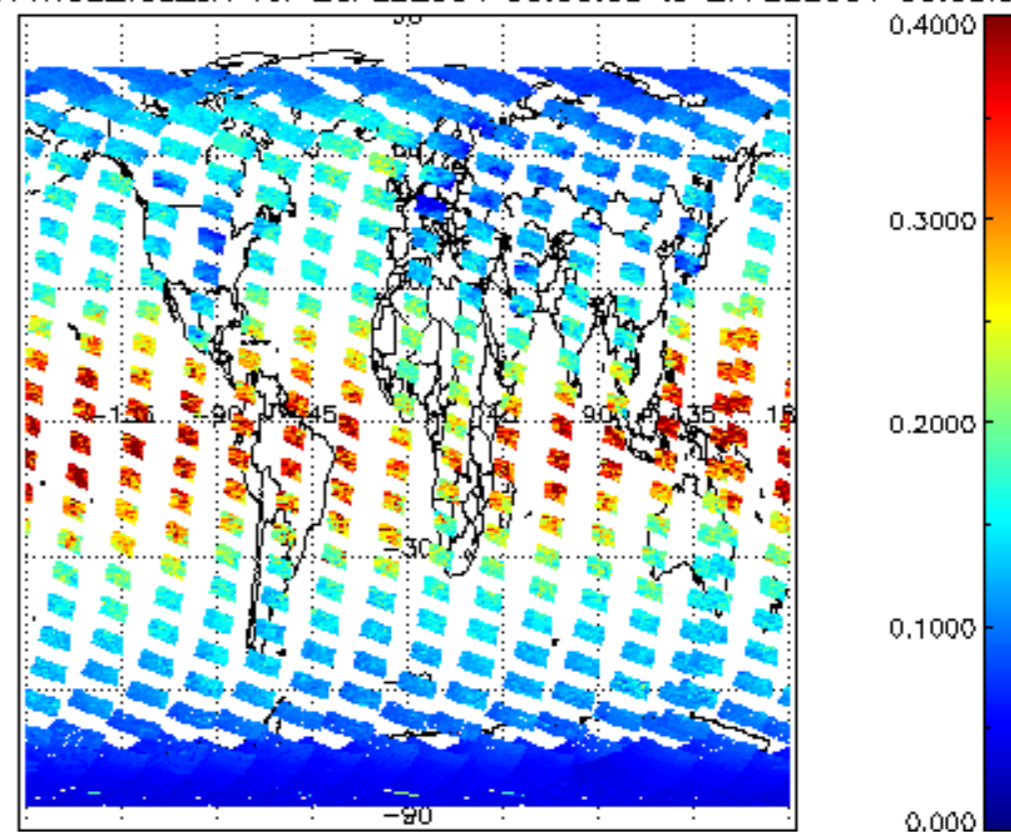




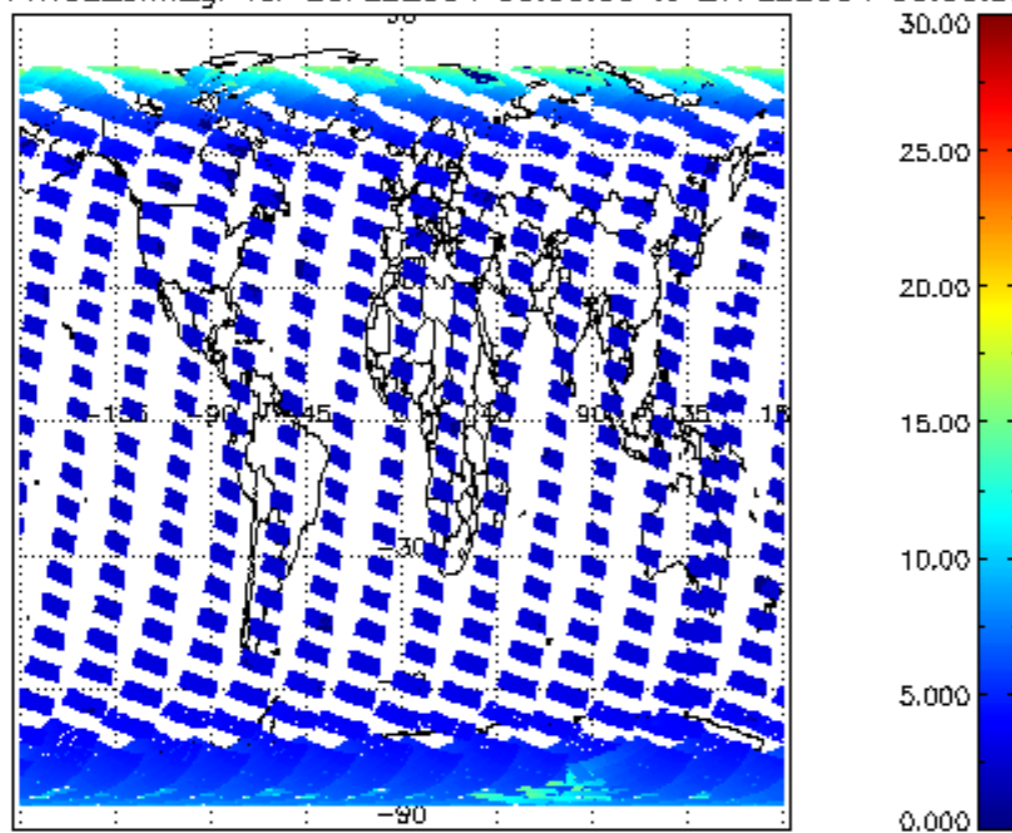
SCIOL2P_NADUV1NO2_vcd for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



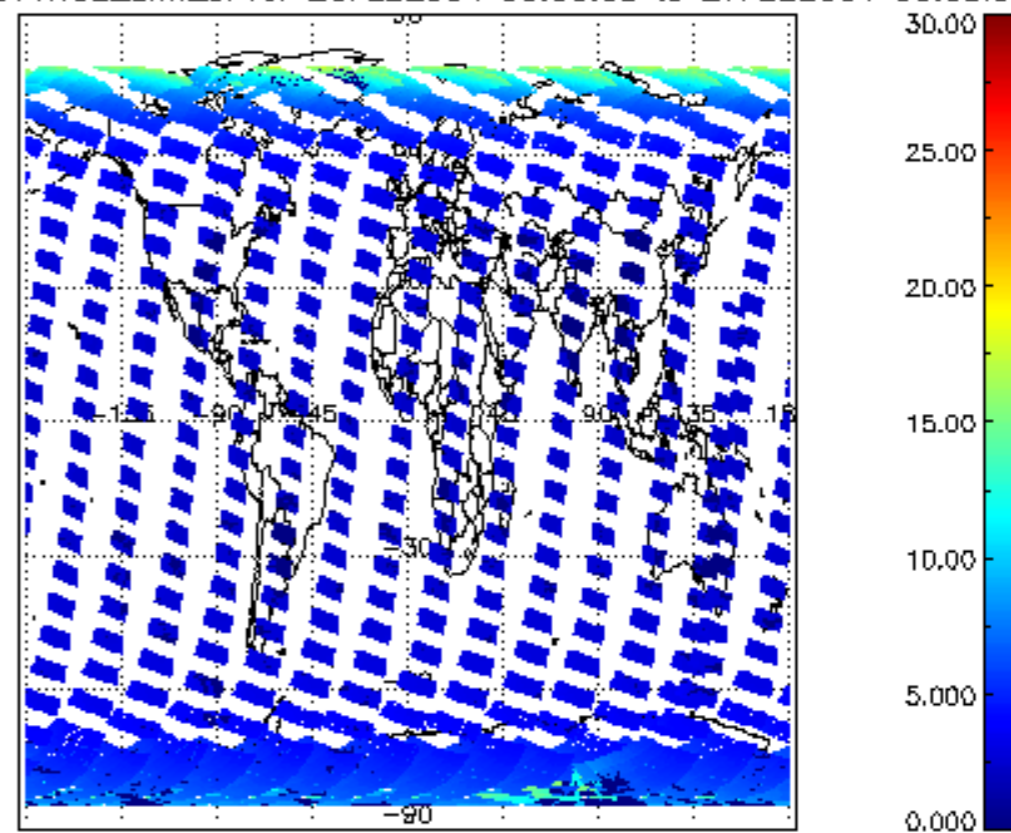
SCIOL2P_NADUV1NO2_vcd_err for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



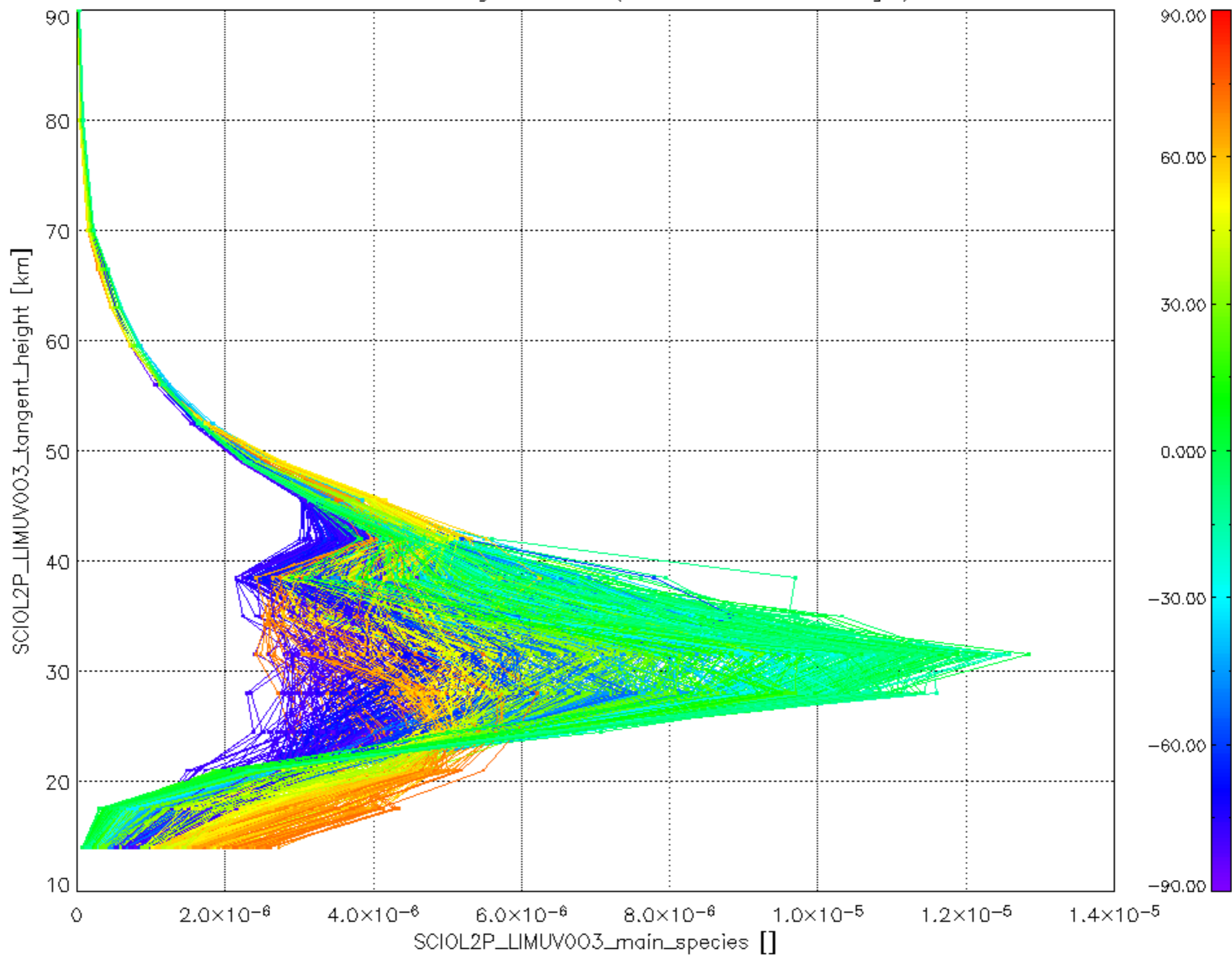
SCIOL2P_NADUV1NO2_amf_gr for 26FEB2004 00:00:00 to 27FEB2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 26FEB2004 00:00:00 to 27FEB2004 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 SCIOI2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

