

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	14AUG2008 12:01:25
Data source version	SCIA-OL/3.01-R
Processing scope for products	22APR2004 00:00:00 to 23APR2004 00:00:00
Start time of first product within scope	22APR2004 00:12:37
Stop time of last product within scope	23APR2004 00:36:44
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.

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__2PRDPA20040422_001237_000033492026_00131_11207_7206.N1	22APR2004 00:12:37	22APR2004 01:08:26	0	GOOD
1	SCI_OL__2PRDPA20040422_015312_000033772026_00132_11208_7295.N1	22APR2004 01:53:12	22APR2004 02:49:29	0	GOOD
2	SCI_OL__2PRDPA20040422_033348_000033492026_00133_11209_7599.N1	22APR2004 03:33:48	22APR2004 04:29:37	0	GOOD
3	SCI_OL__2PRDPA20040422_051424_000033772026_00134_11210_7434.N1	22APR2004 05:14:24	22APR2004 06:10:41	0	GOOD
4	SCI_OL__2PRDPA20040422_065459_000033492026_00135_11211_7358.N1	22APR2004 06:54:59	22APR2004 07:50:48	0	GOOD
5	SCI_OL__2PRDPA20040422_083535_000033772026_00136_11212_7573.N1	22APR2004 08:35:35	22APR2004 09:31:52	0	GOOD
6	SCI_OL__2PRDPA20040422_101610_000033492026_00137_11213_7408.N1	22APR2004 10:16:10	22APR2004 11:12:00	0	GOOD
7	SCI_OL__2PRDPA20040422_115646_000033772026_00138_11214_7519.N1	22APR2004 11:56:46	22APR2004 12:53:03	0	GOOD
8	SCI_OL__2PRDPA20040422_133721_000033492026_00139_11215_7184.N1	22APR2004 13:37:21	22APR2004 14:33:11	0	GOOD
9	SCI_OL__2PRDPA20040422_151757_000033772026_00140_11216_7308.N1	22APR2004 15:17:57	22APR2004 16:14:14	0	GOOD
10	SCI_OL__2PRDPA20040422_165832_000033492026_00141_11217_7472.N1	22APR2004 16:58:32	22APR2004 17:54:22	0	GOOD
11	SCI_OL__2PRDPA20040422_183857_000033802026_00142_11218_7223.N1	22APR2004 18:38:57	22APR2004 19:35:18	0	GOOD
12	SCI_OL__2PRDPA20040422_202002_000033492026_00143_11219_7394.N1	22APR2004 20:20:02	22APR2004 21:15:51	0	GOOD
13	SCI_OL__2PRDPA20040422_220019_000033772026_00144_11220_7505.N1	22APR2004 22:00:19	22APR2004 22:56:36	0	GOOD
14	SCI_OL__2PRDPA20040422_234055_000033492026_00145_11221_7407.N1	22APR2004 23:40:55	23APR2004 00:36:44	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: 116580

Total number of cloud data DSRs with good quality flag (=0): 116580 (100.0 %)

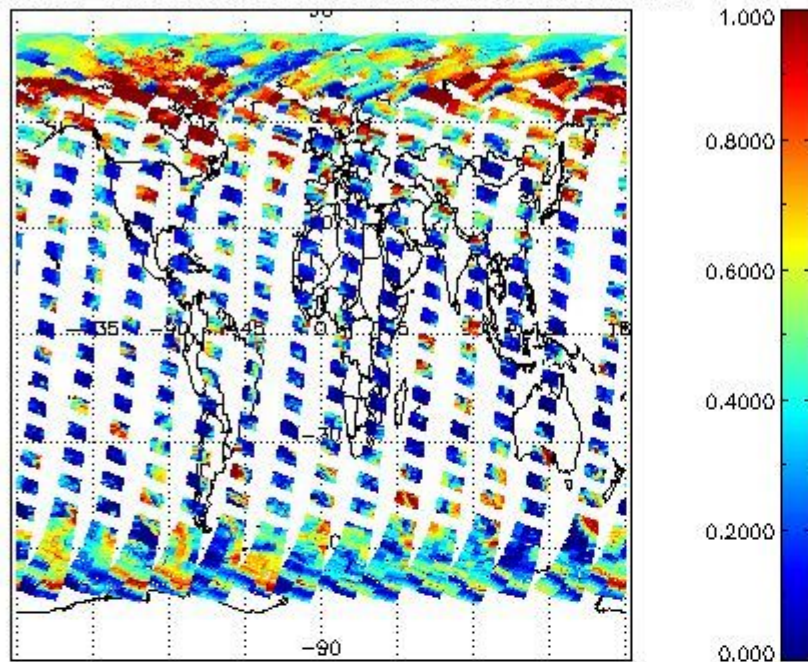
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	116580	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	116580	0.21861	0.25000	0.12500	1.0000	0.090276	s
CL_FRAC	116580	0.43126	0.41645	0.0000	1.0000	0.31779	-
CL_FRAC_ERR	116580	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	116580	6.9954	8.0000	4.0000	32.000	2.8888	
PMD_READ_CL[0]	116580	0.55606	0.0000	0.0000	28.000	1.6990	-
PMD_READ_CL[1]	116580	0.98376	0.0000	0.0000	32.000	2.3765	-
CL_TOP_HEIGHT	105530	3.2231	1.3140	0.0000	17.000	3.7211	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	105530	59.170	61.562	0.0000	101.00	41.004	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	116580	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	116580	11001000	11000010	11000000	11100000	2913.0	flags
AERO_ABSO_IND	116580	0.77810	0.77109	-3.8762	10.626	1.0771	
AERO_IND_DIAG	116580	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	116580	01100111	11000000	00000000	11000000	24510.	flags

Time and geolocation plots:

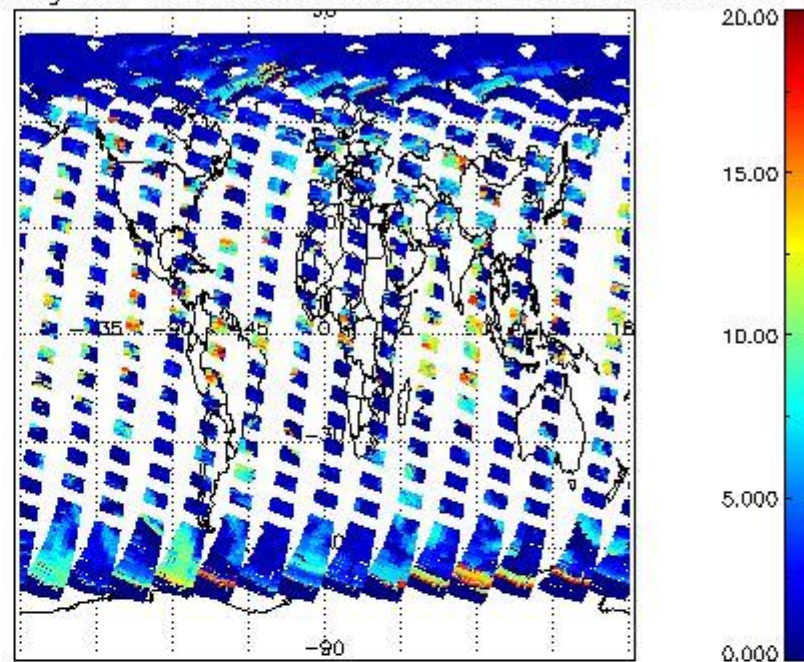
Plots are available for the following parameters:

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

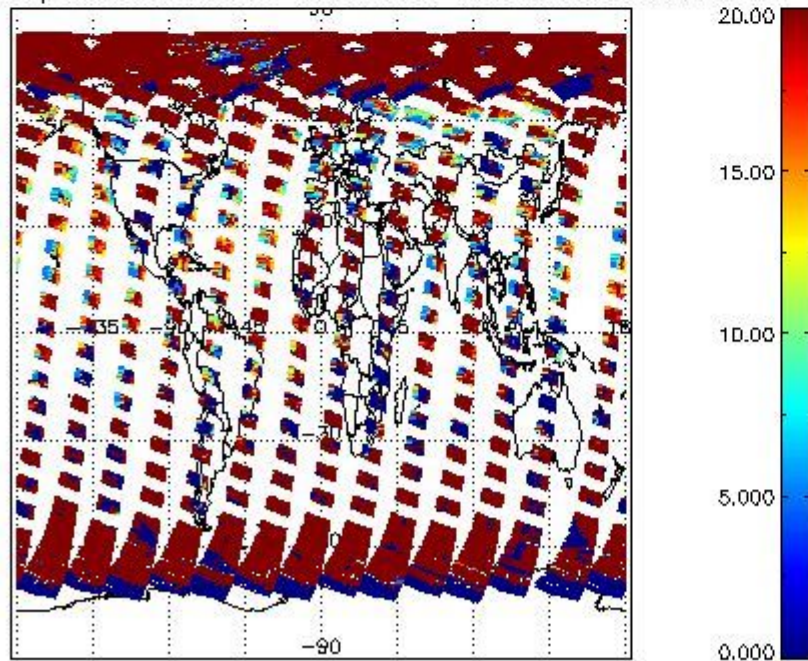
cL_frac for 22APR2004 00:00:00 to 23APR2004 00:00:00



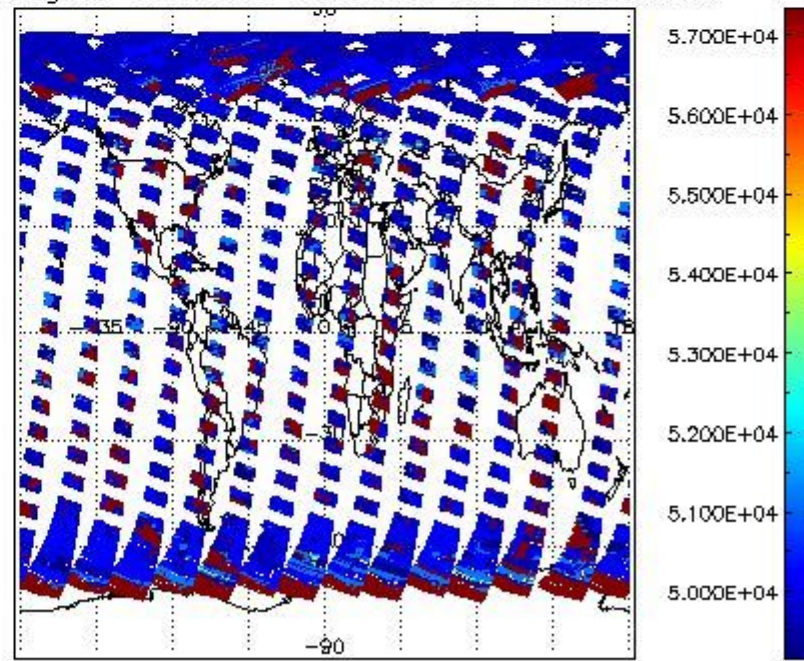
cL_top_height for 22APR2004 00:00:00 to 23APR2004 00:00:00



cL_opt_depth for 22APR2004 00:00:00 to 23APR2004 00:00:00



cloud_flags for 22APR2004 00:00:00 to 23APR2004 00:00:00



2.2.2 Nadir

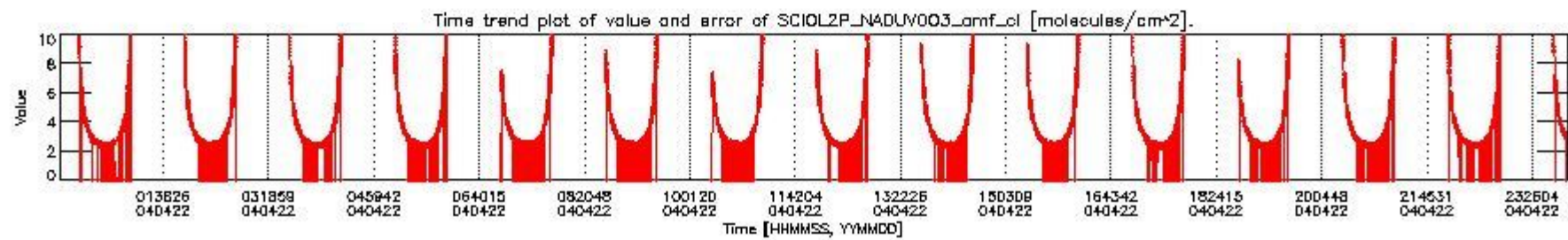
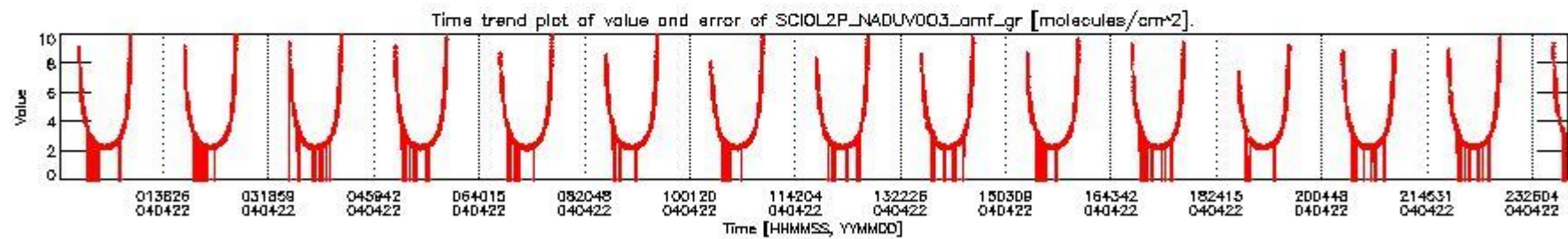
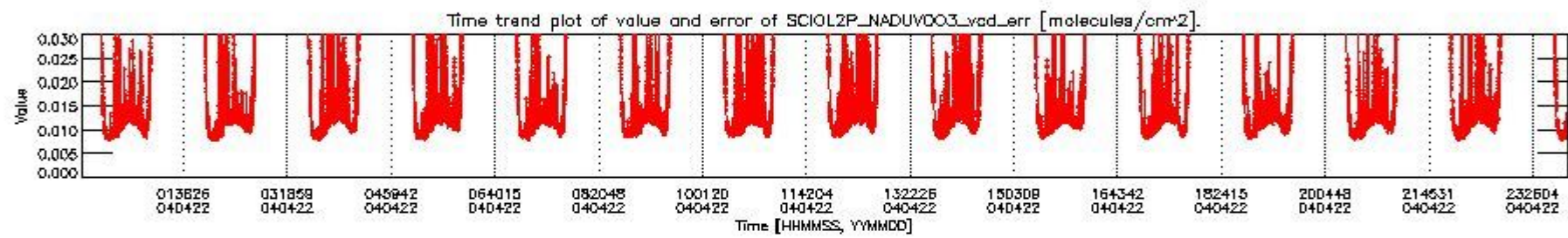
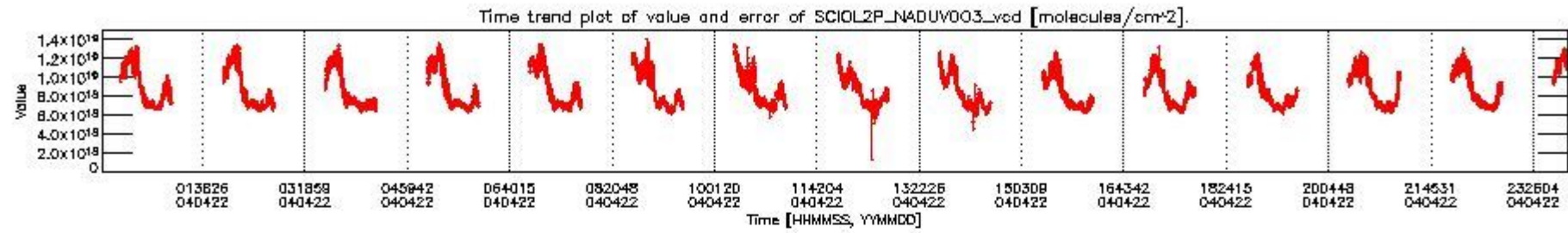
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

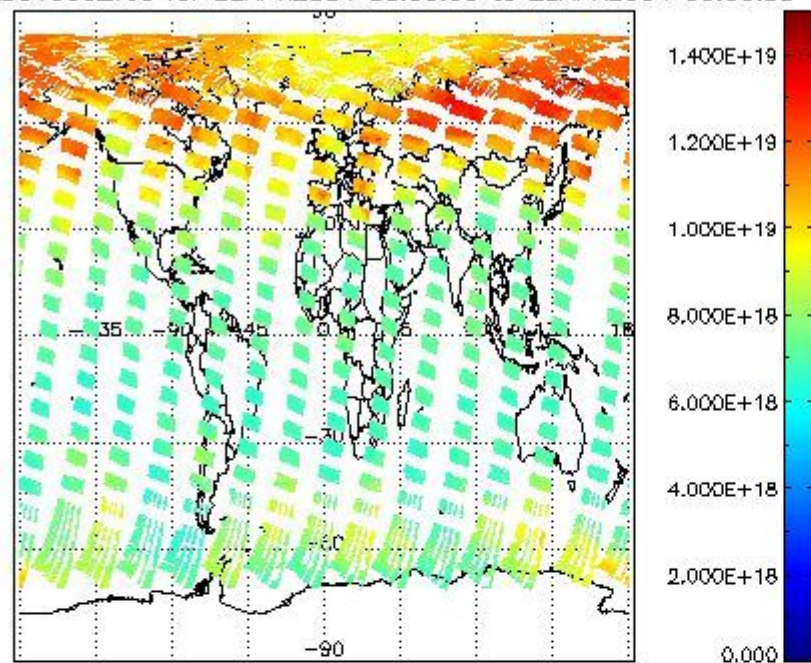
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

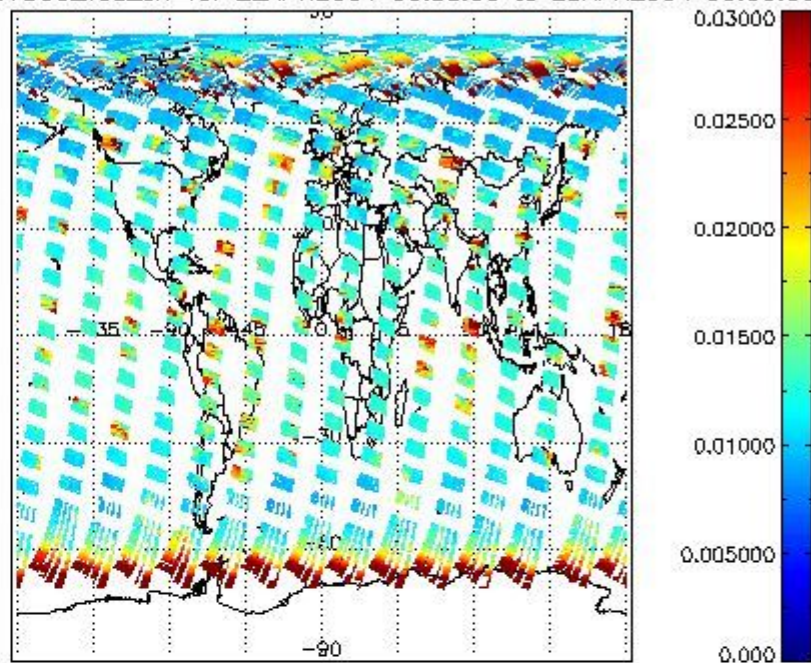
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



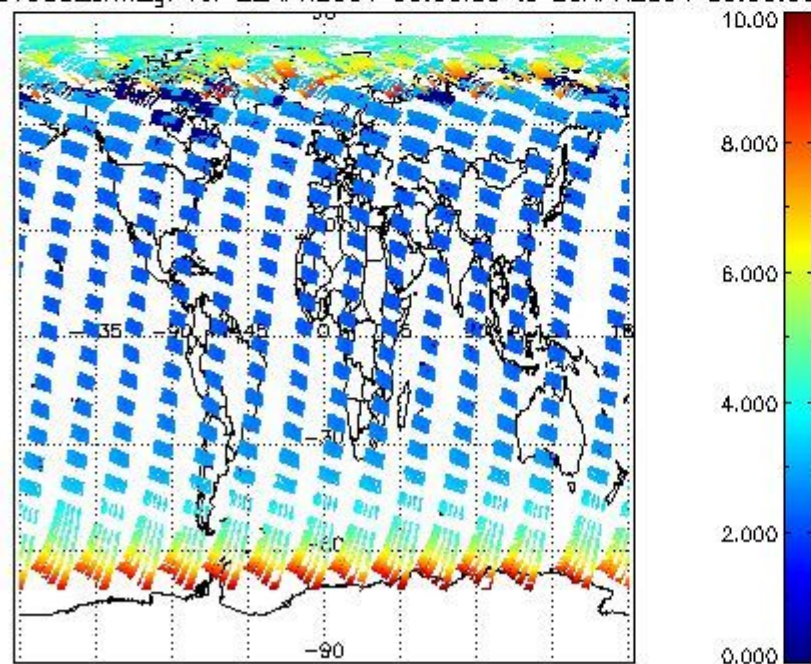
SCIOL2P_NADUV003_vcd for 22APR2004 00:00:00 to 23APR2004 00:00:00



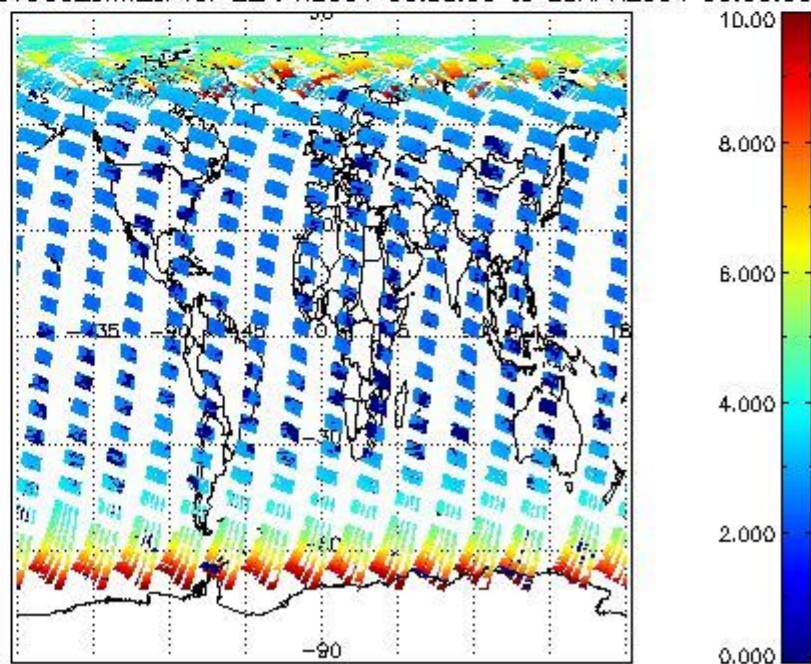
SCIOL2P_NADUV003_vcd_err for 22APR2004 00:00:00 to 23APR2004 00:00:00

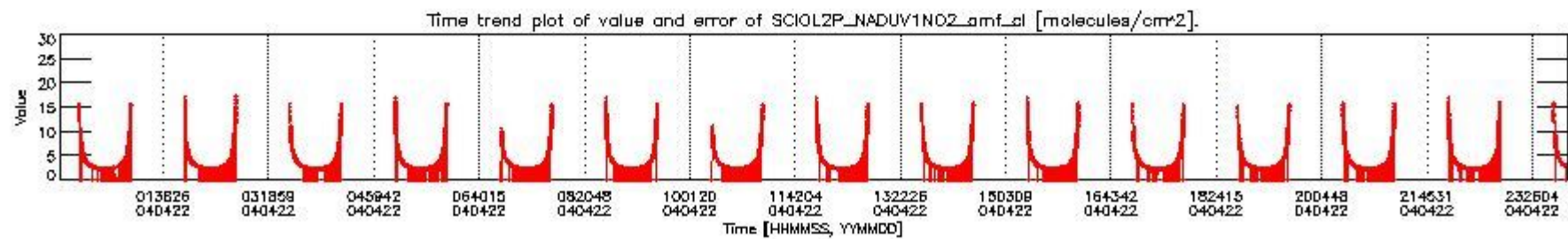
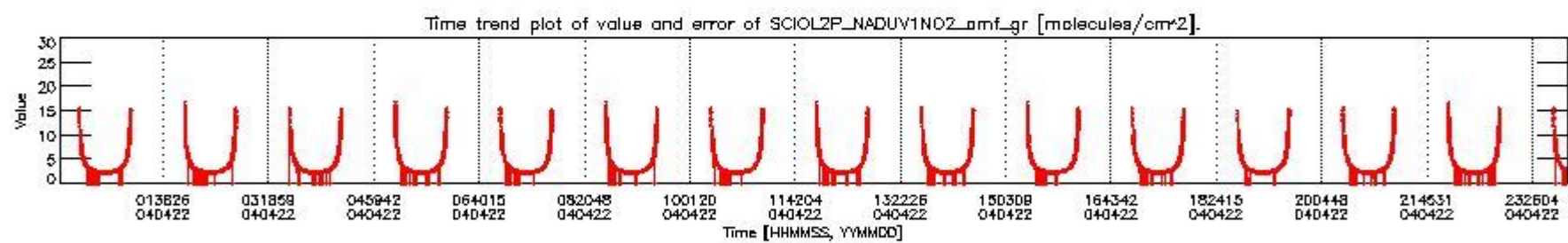
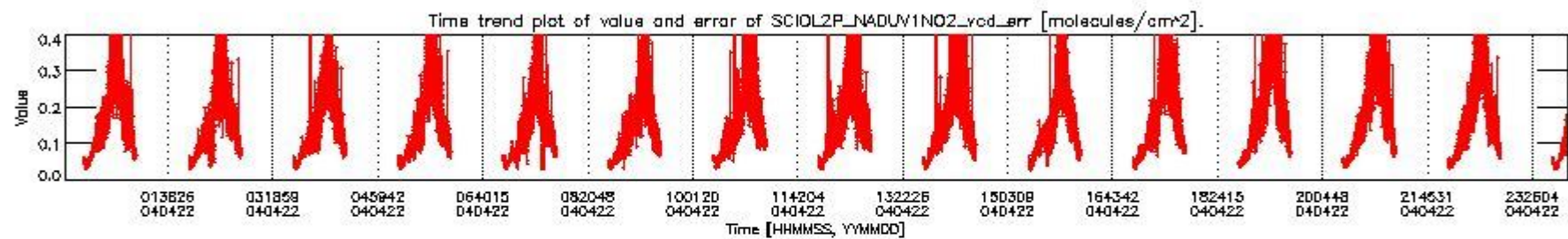
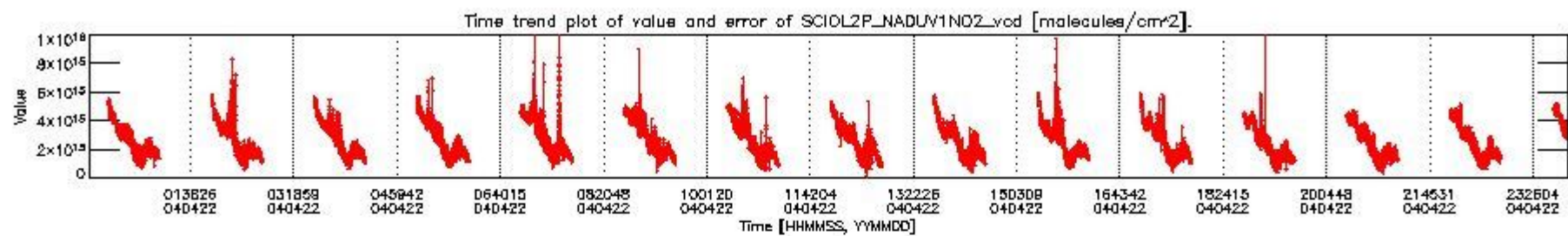


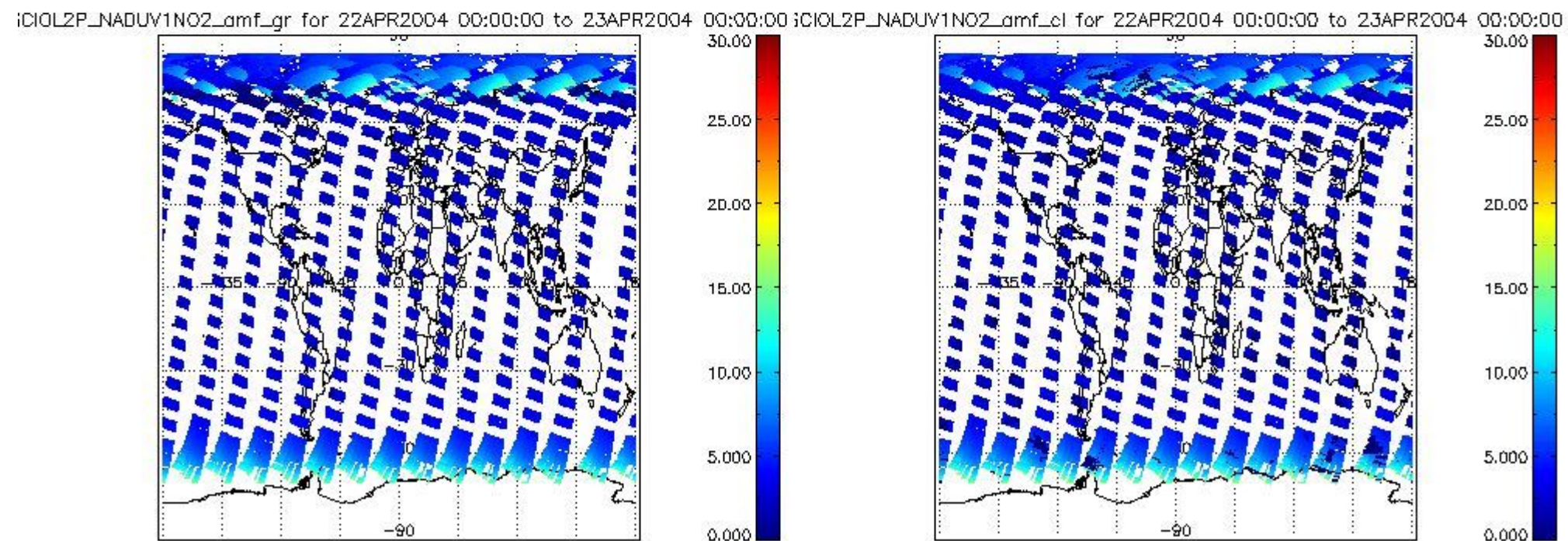
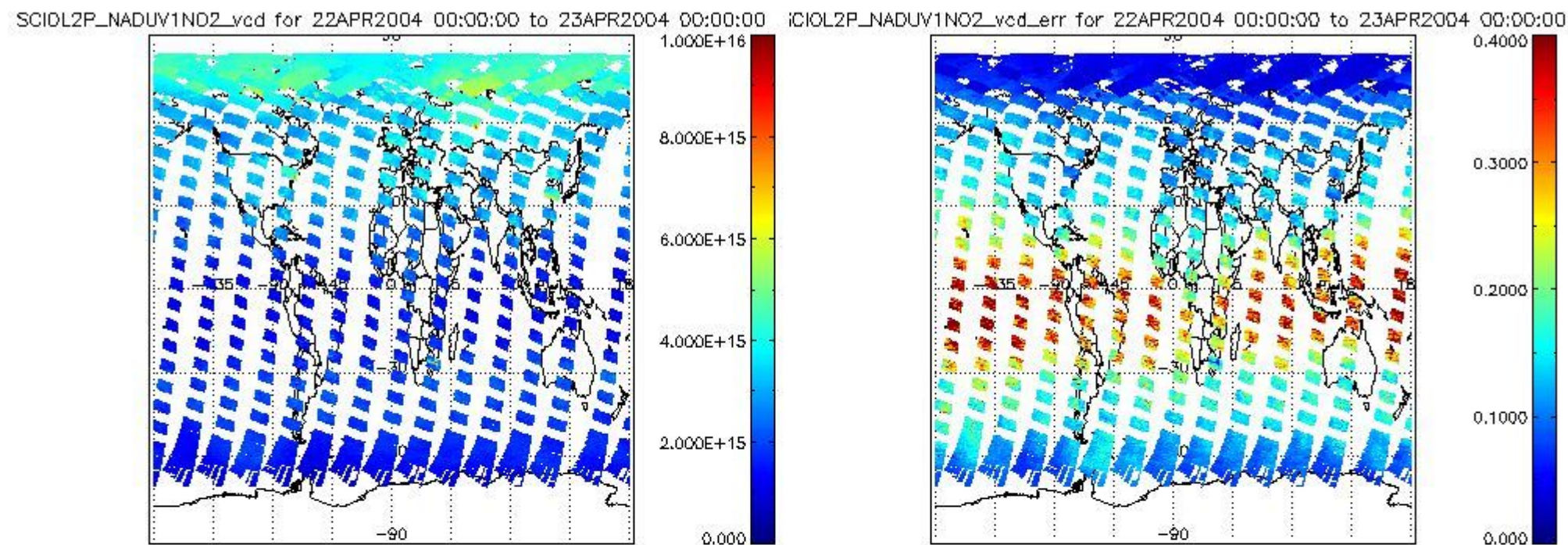
SCIOL2P_NADUV003_amf_gr for 22APR2004 00:00:00 to 23APR2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 22APR2004 00:00:00 to 23APR2004 00:00:00







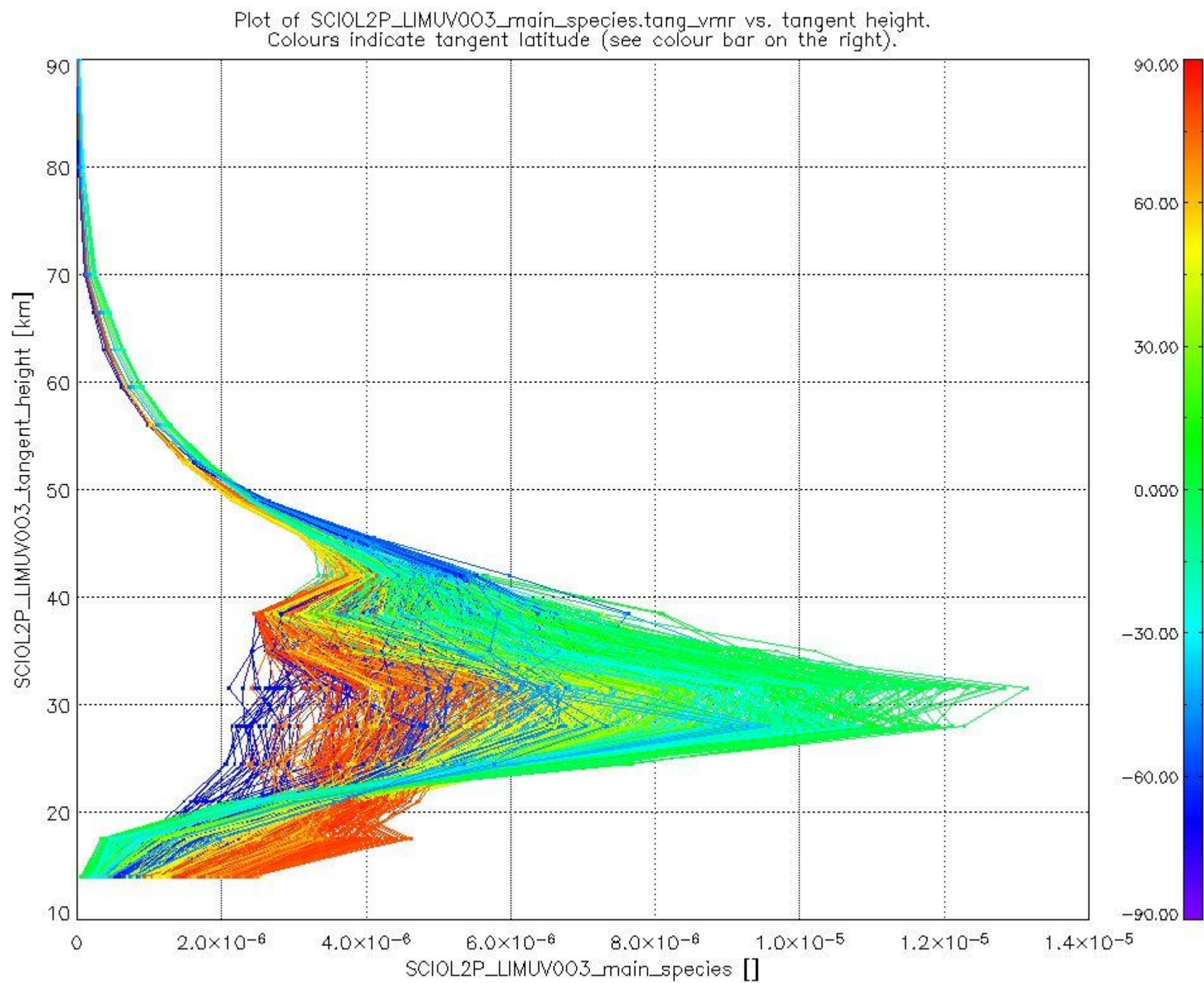
2.2.3 Limb

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

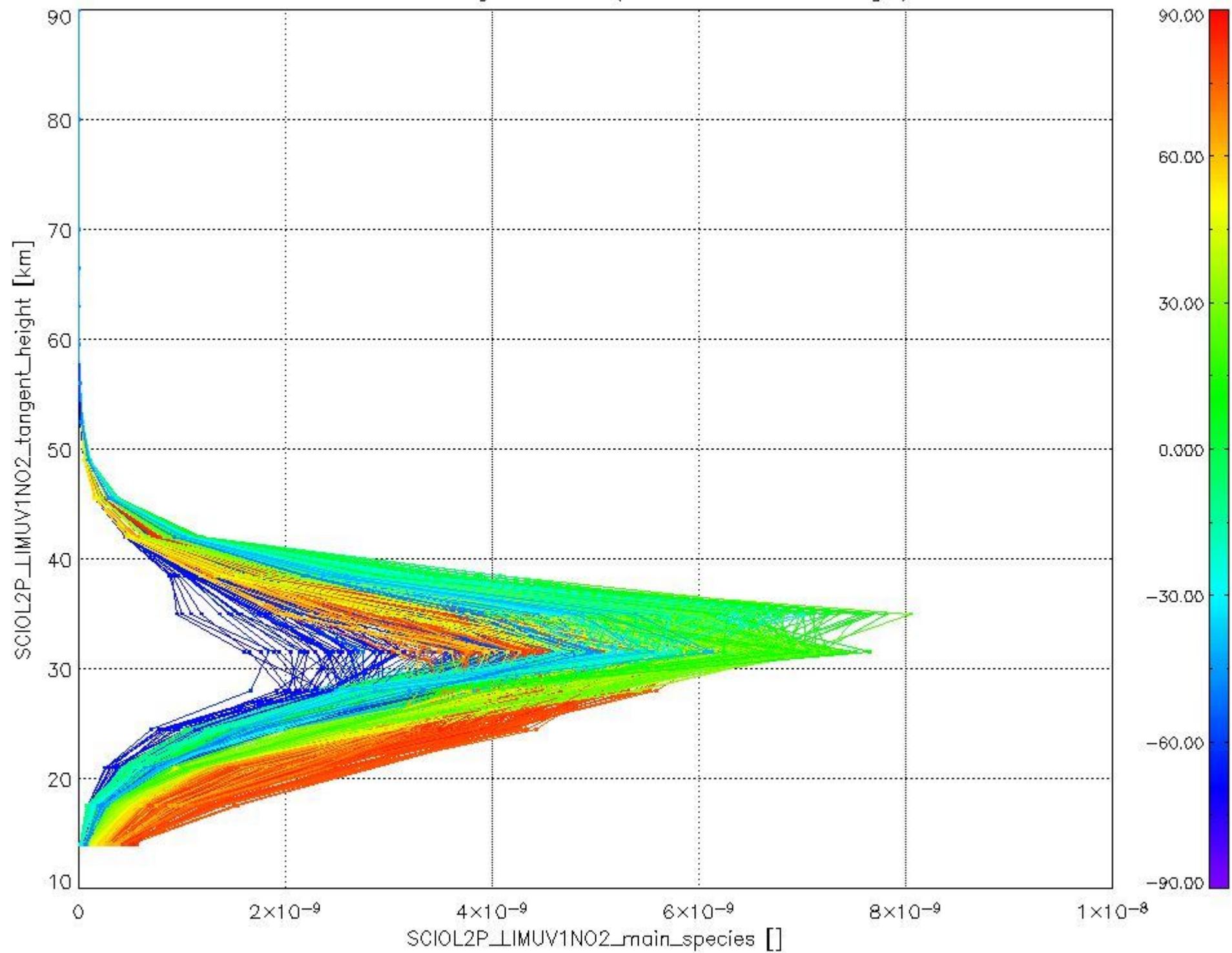
The following data items are currently included into this section:

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.



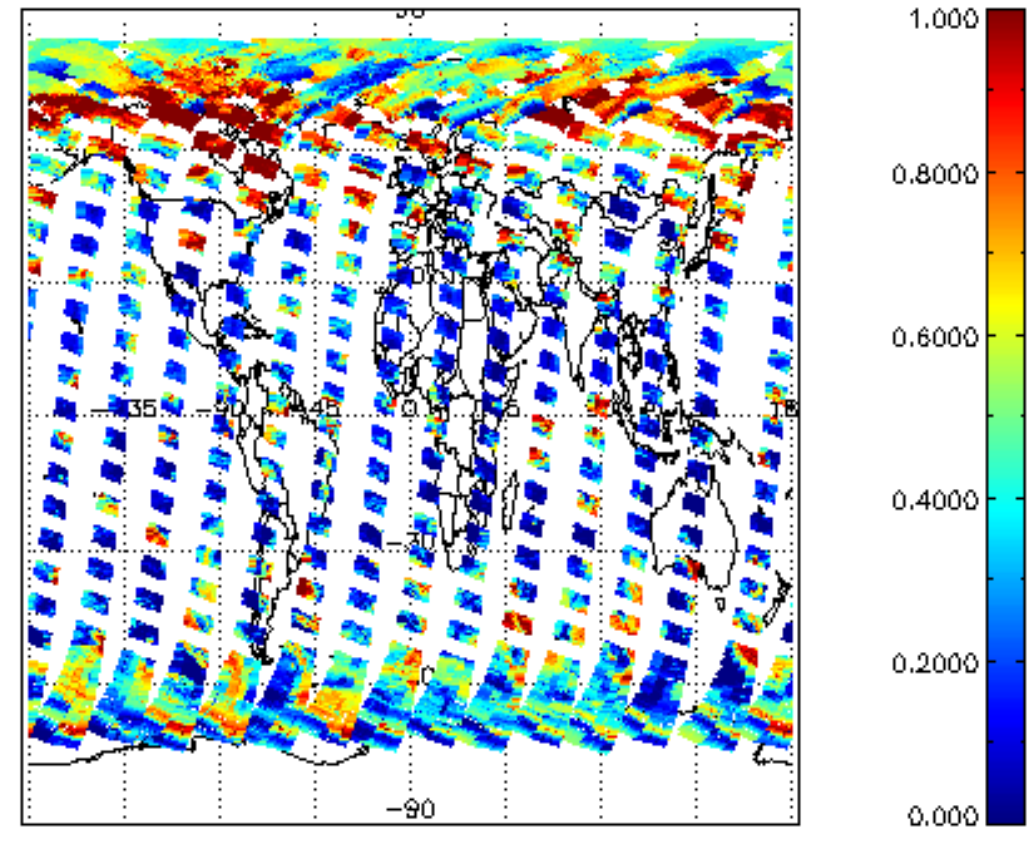
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



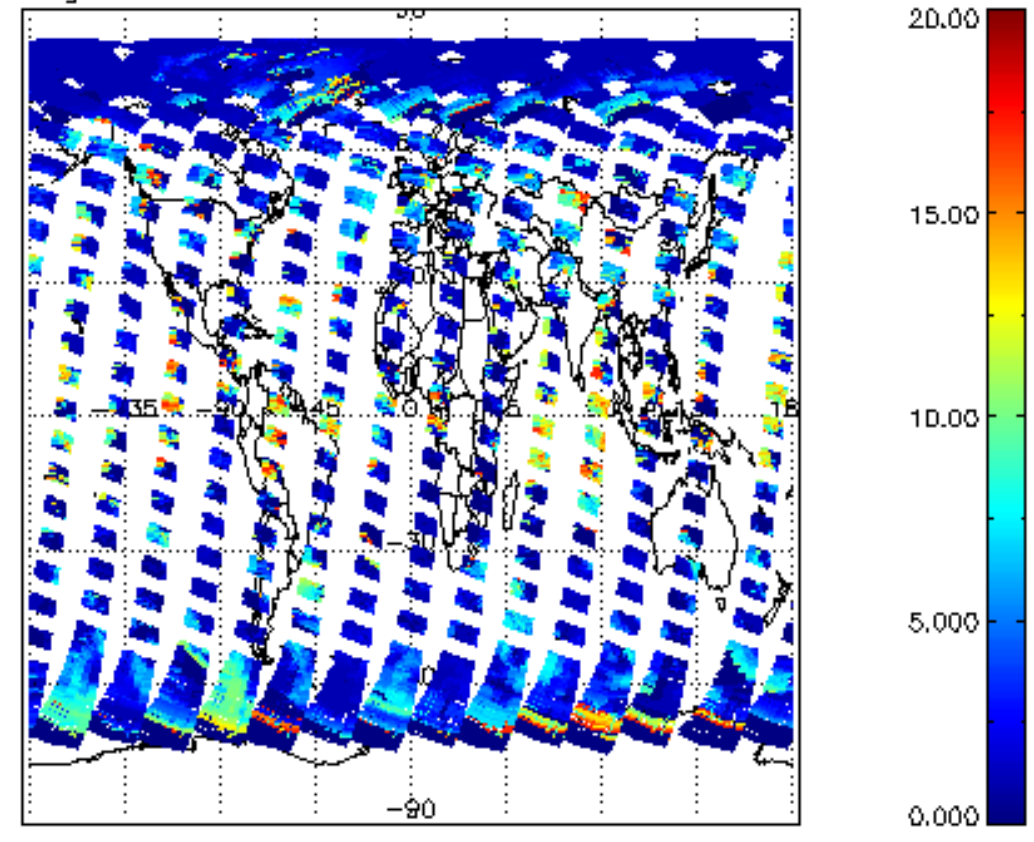
2.3 ADF monitoring

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

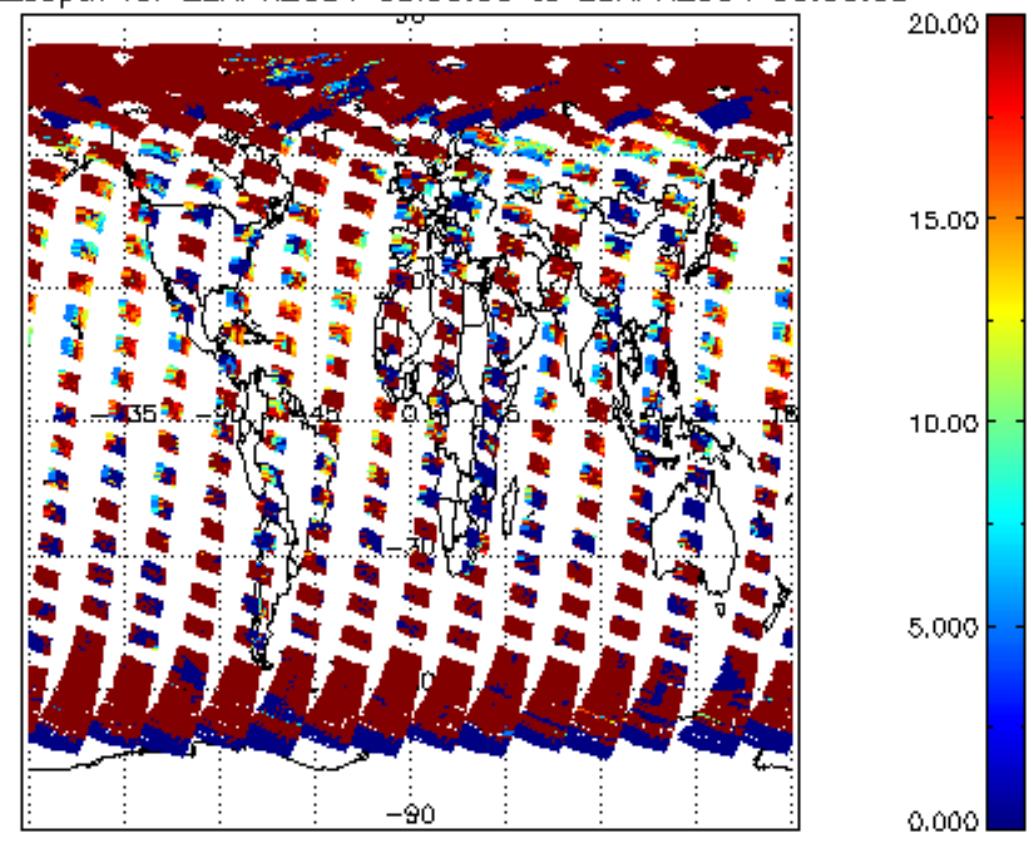
cl_frac for 22APR2004 00:00:00 to 23APR2004 00:00:00



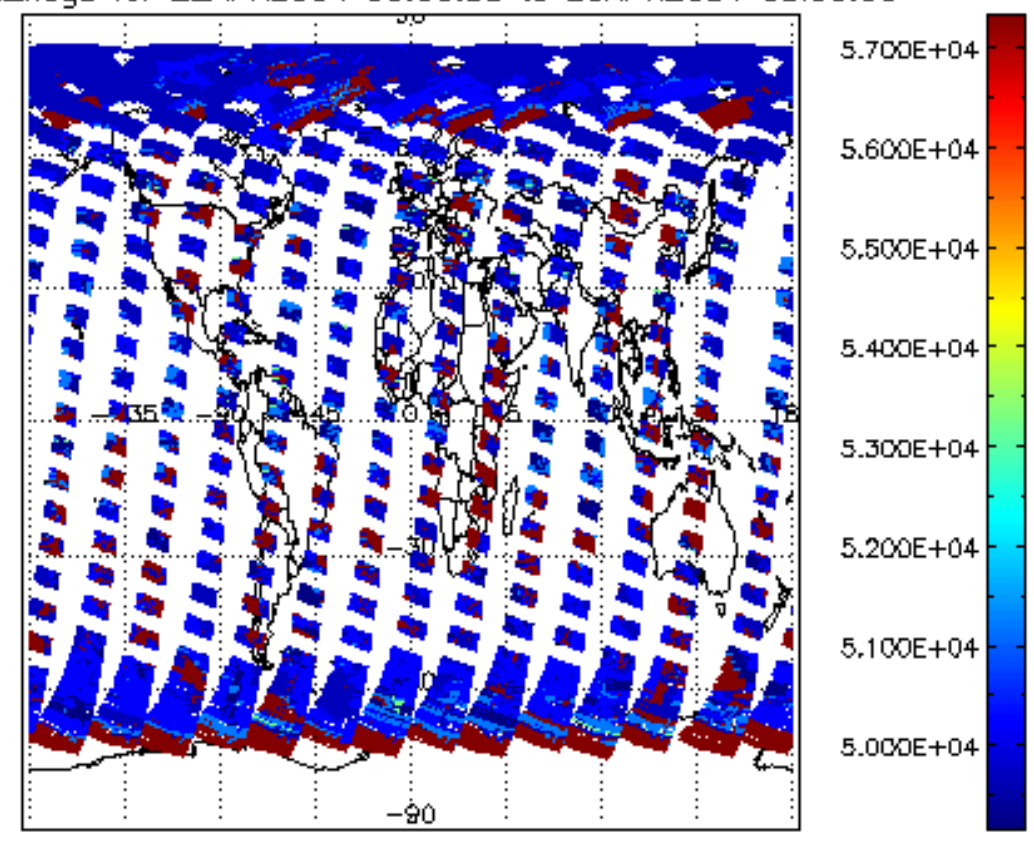
cl_top_height for 22APR2004 00:00:00 to 23APR2004 00:00:00

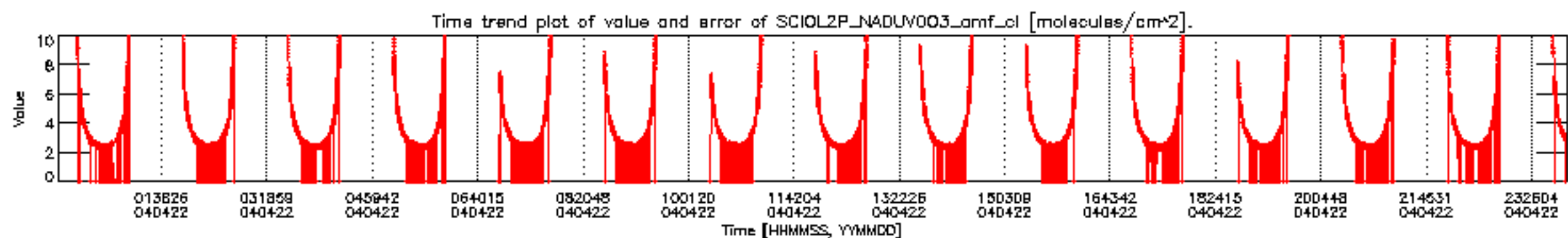
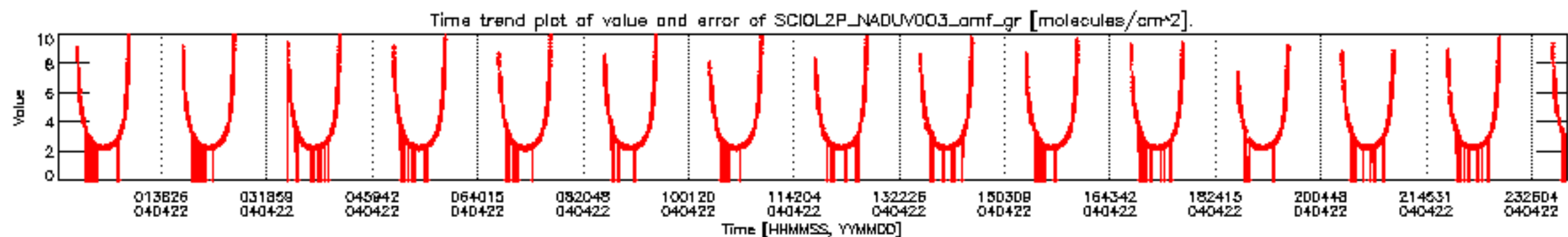
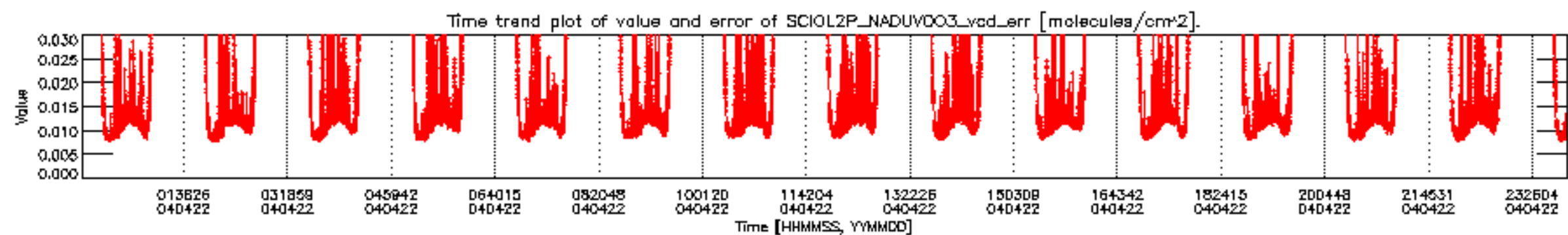
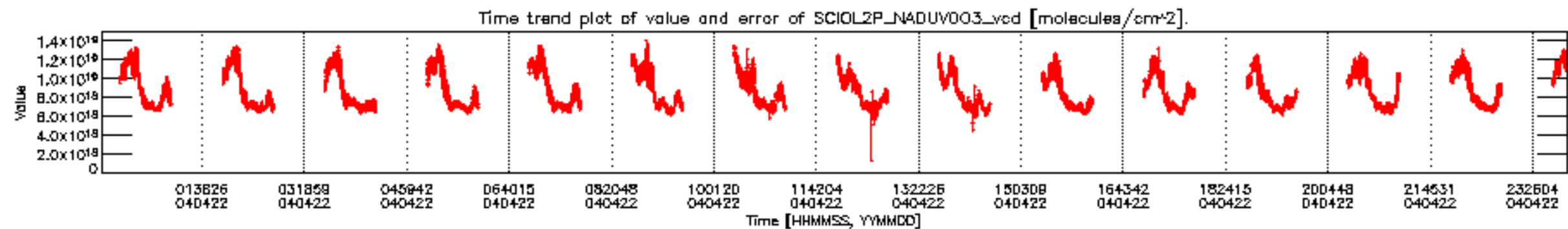


cl_opt_depth for 22APR2004 00:00:00 to 23APR2004 00:00:00

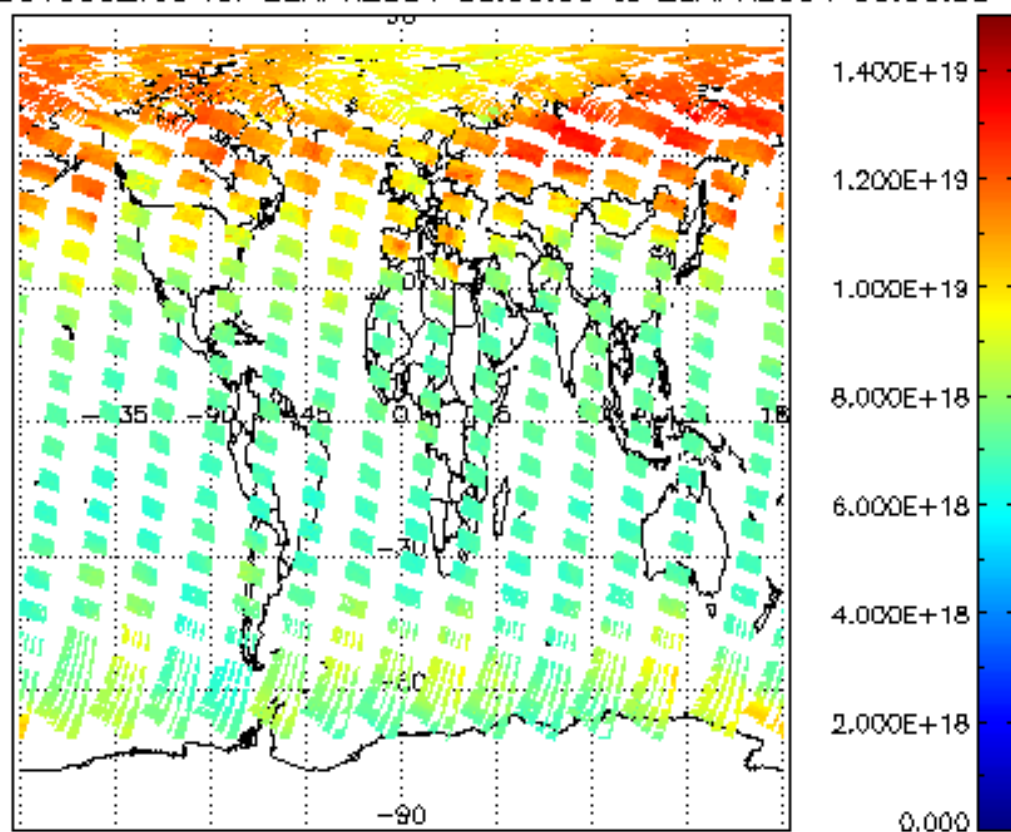


cloud_flags for 22APR2004 00:00:00 to 23APR2004 00:00:00

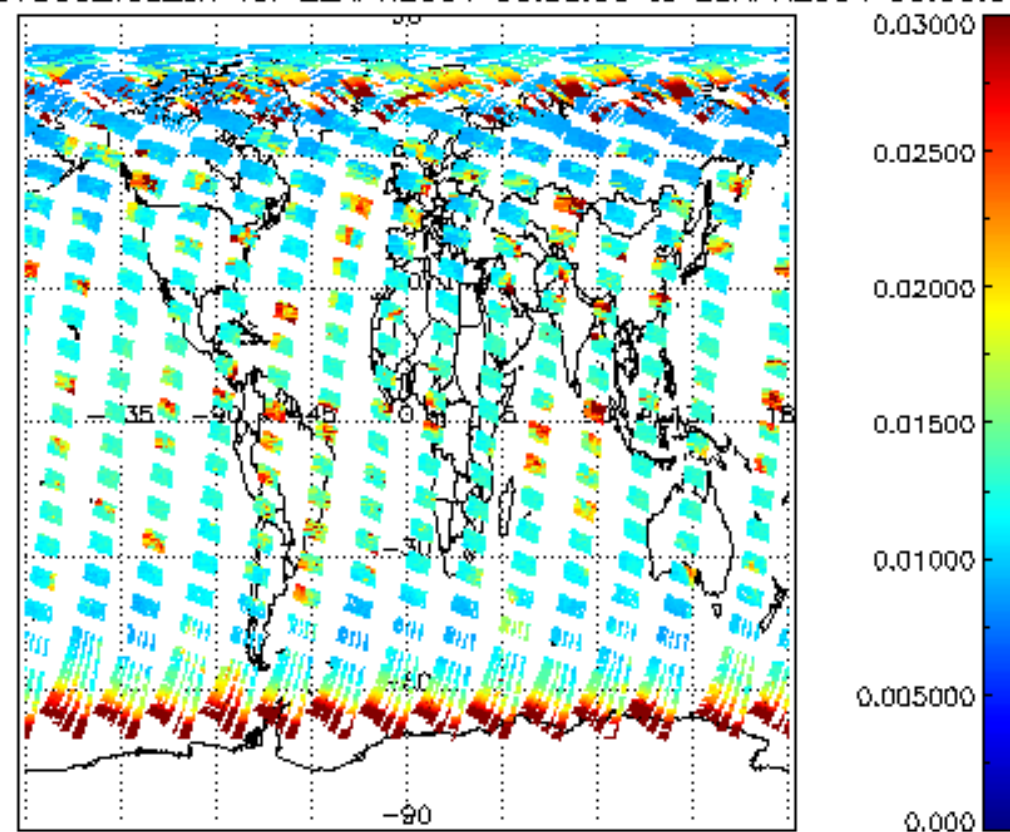




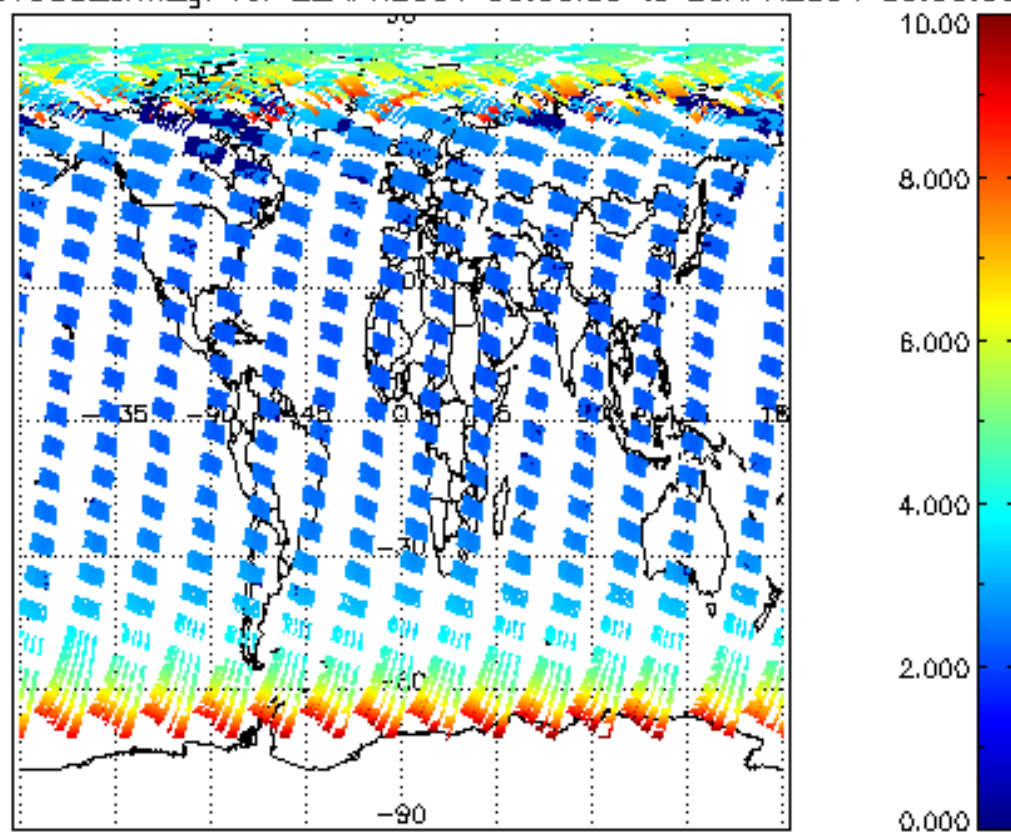
SCIOL2P_NADUV003_vcd for 22APR2004 00:00:00 to 23APR2004 00:00:00



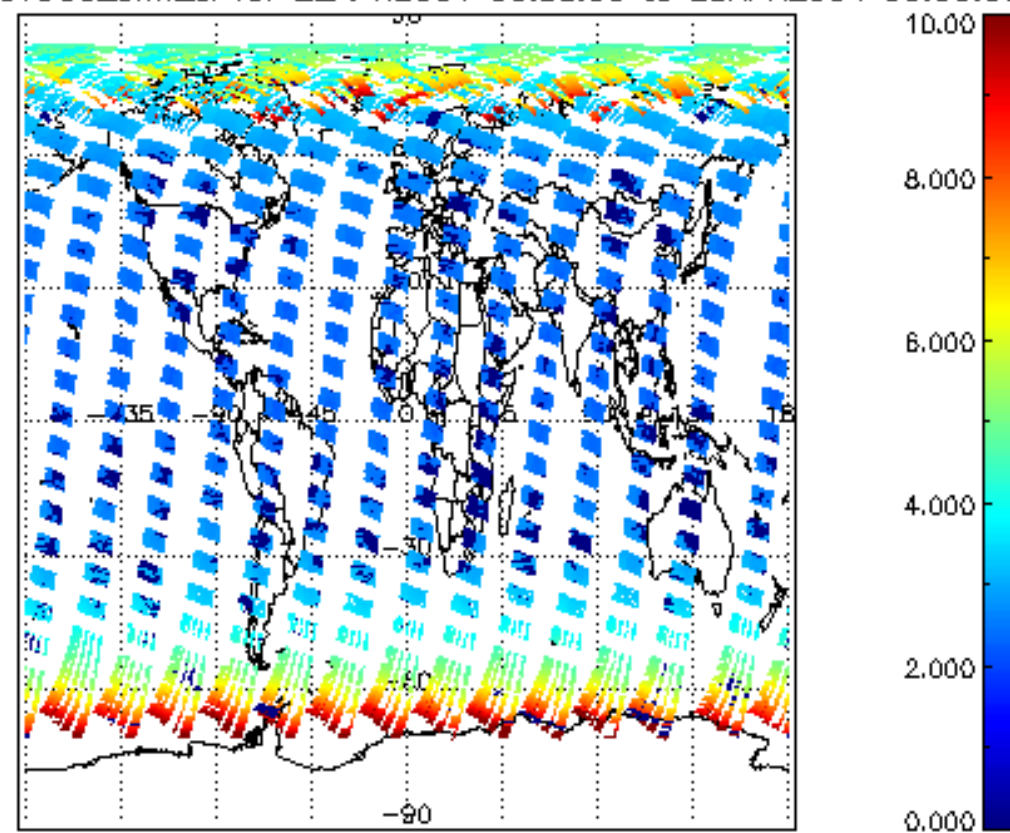
SCIOL2P_NADUV003_vcd_err for 22APR2004 00:00:00 to 23APR2004 00:00:00

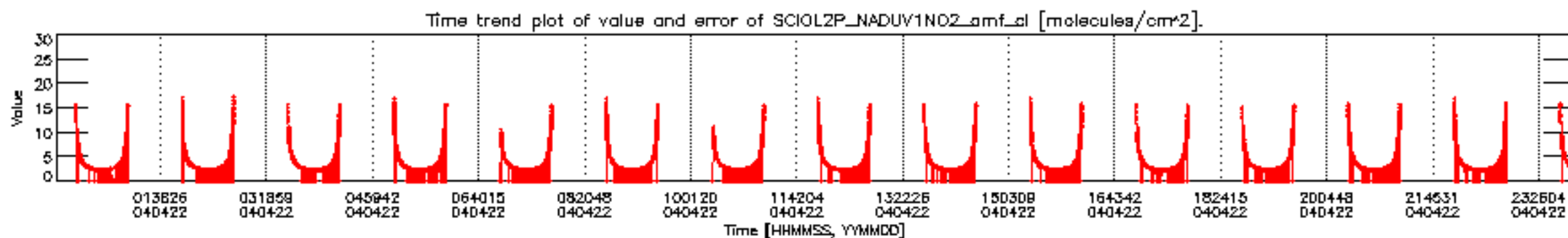
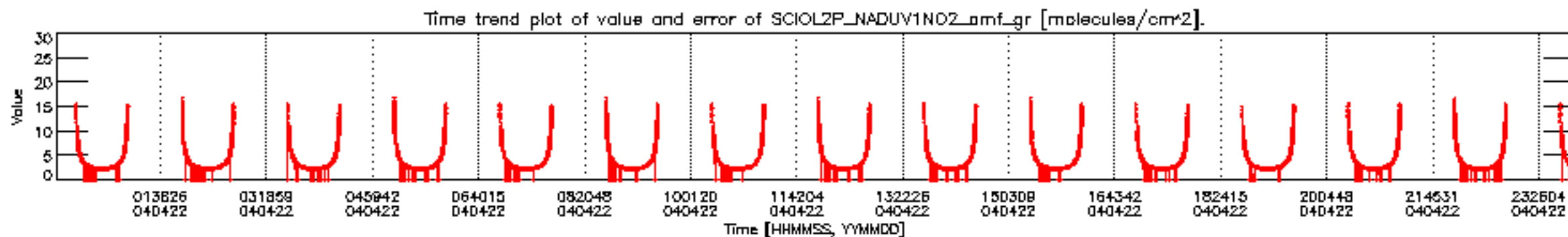
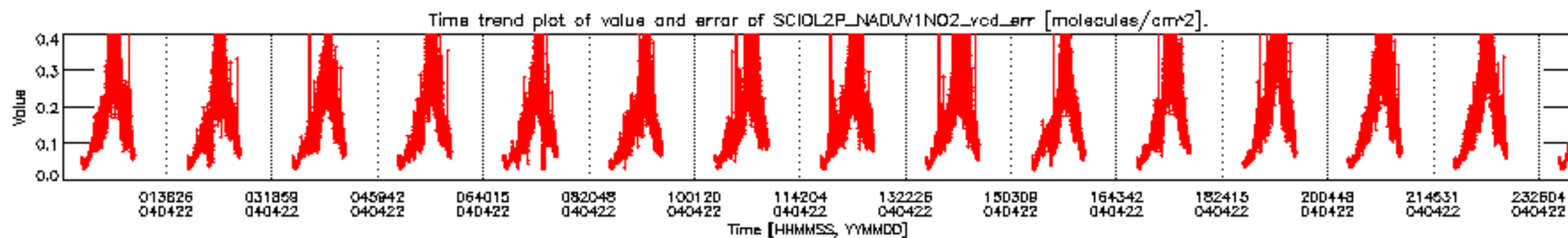
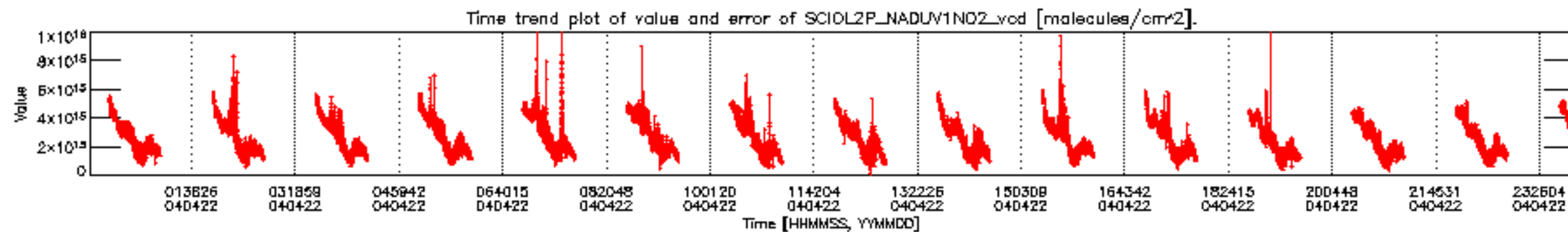


SCIOL2P_NADUV003_amf_gr for 22APR2004 00:00:00 to 23APR2004 00:00:00

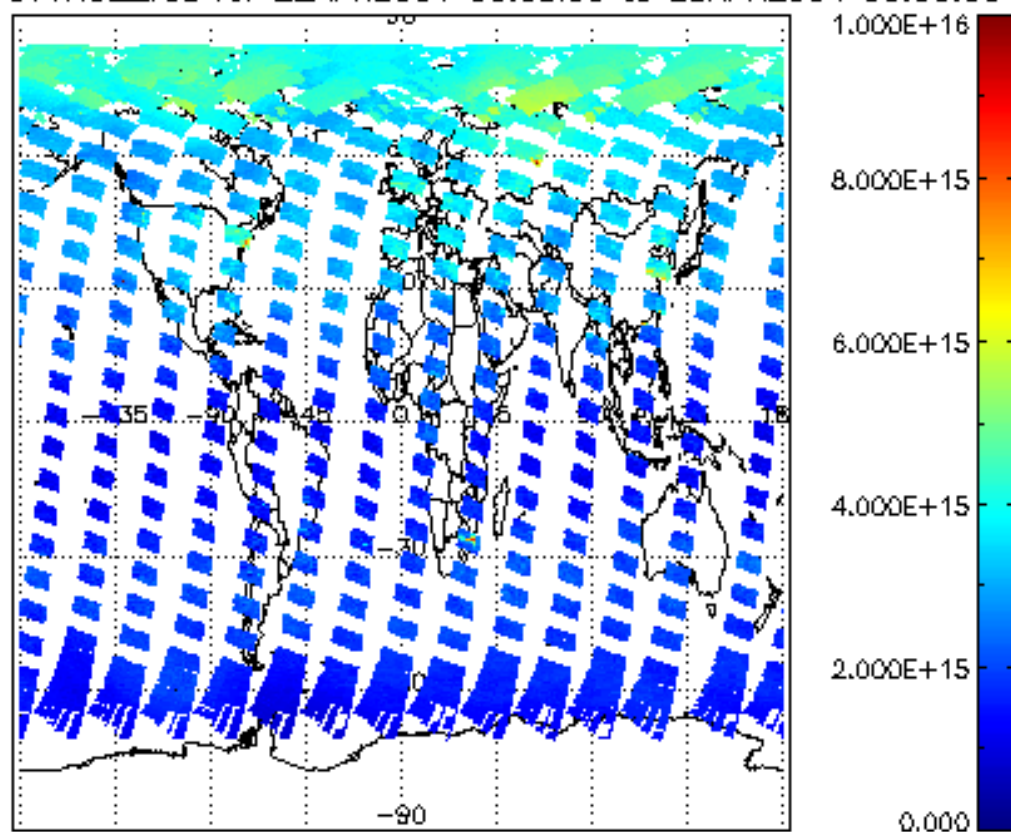


SCIOL2P_NADUV003_amf_cl for 22APR2004 00:00:00 to 23APR2004 00:00:00

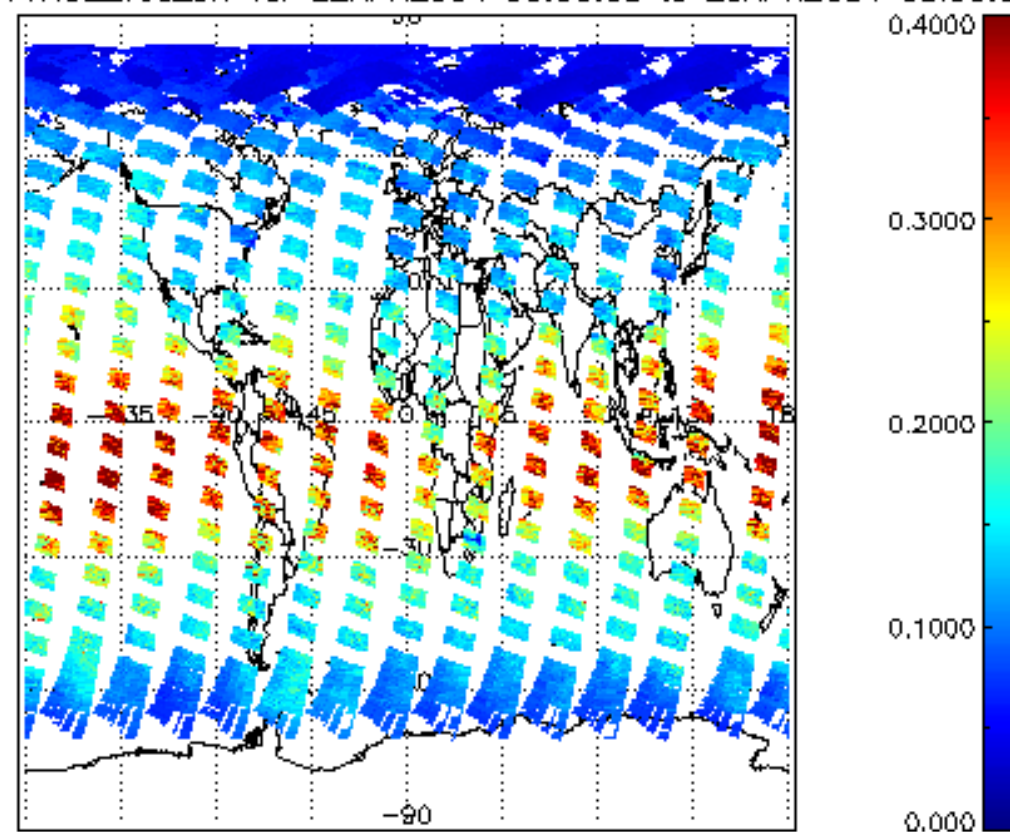




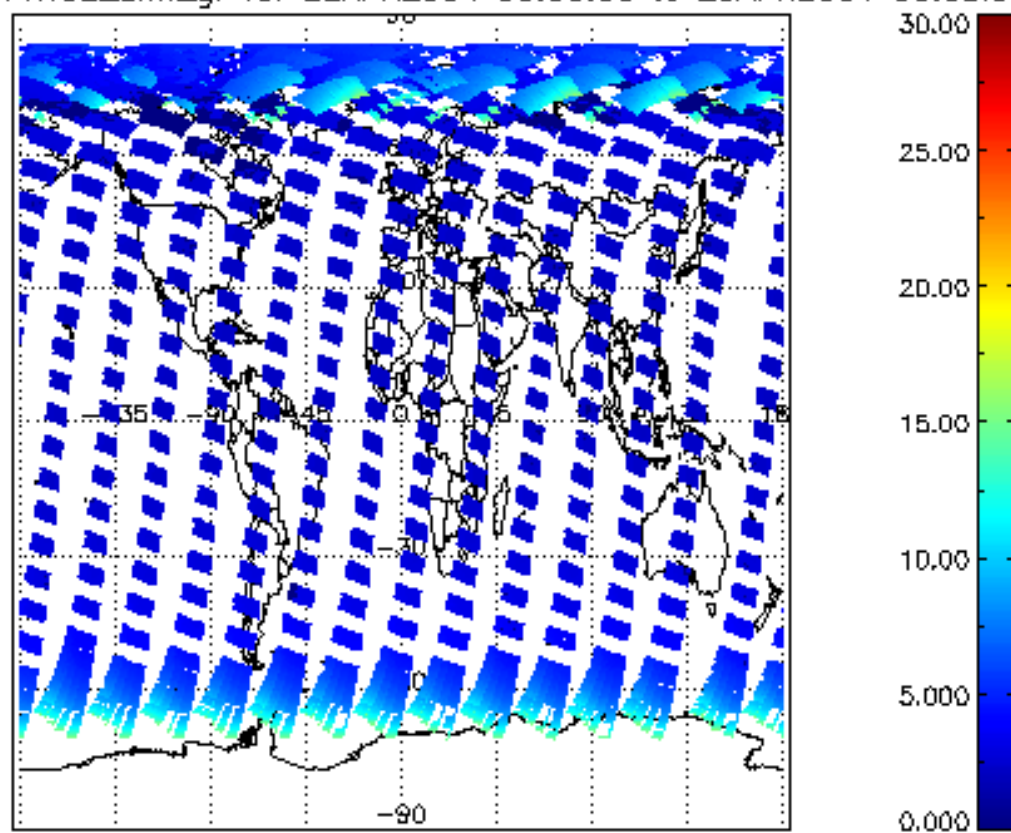
SCIOL2P_NADUV1NO2_vcd for 22APR2004 00:00:00 to 23APR2004 00:00:00



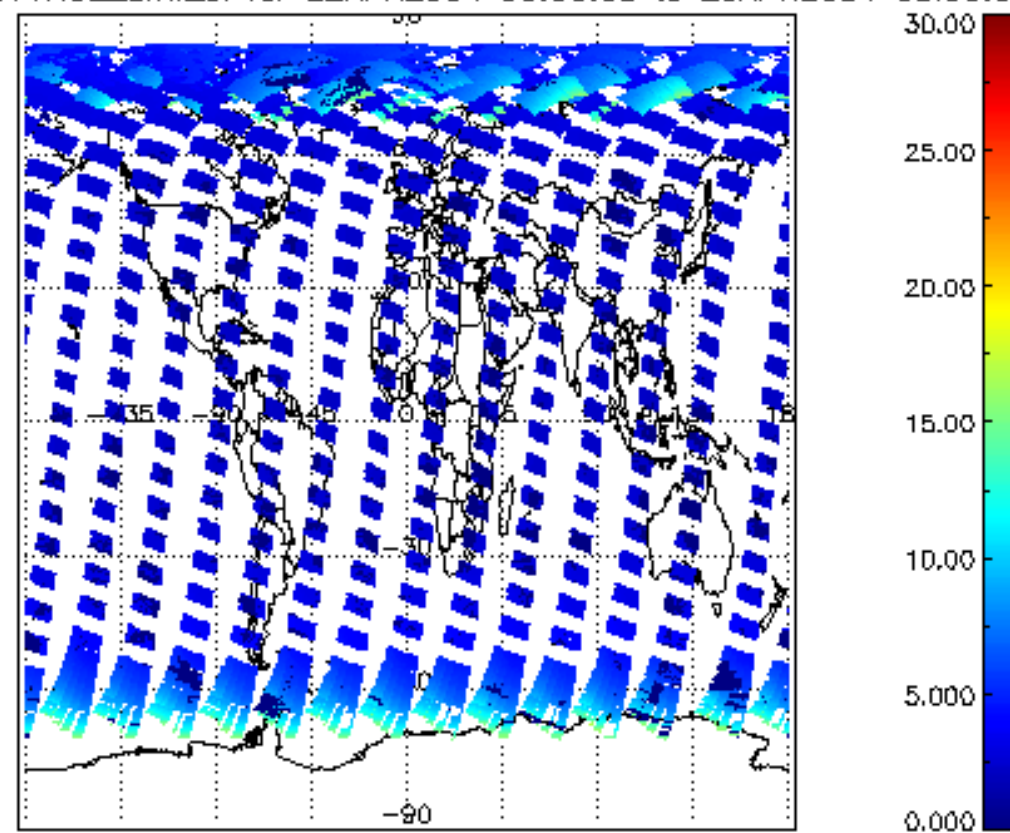
iCIOL2P_NADUV1NO2_vcd_err for 22APR2004 00:00:00 to 23APR2004 00:00:00



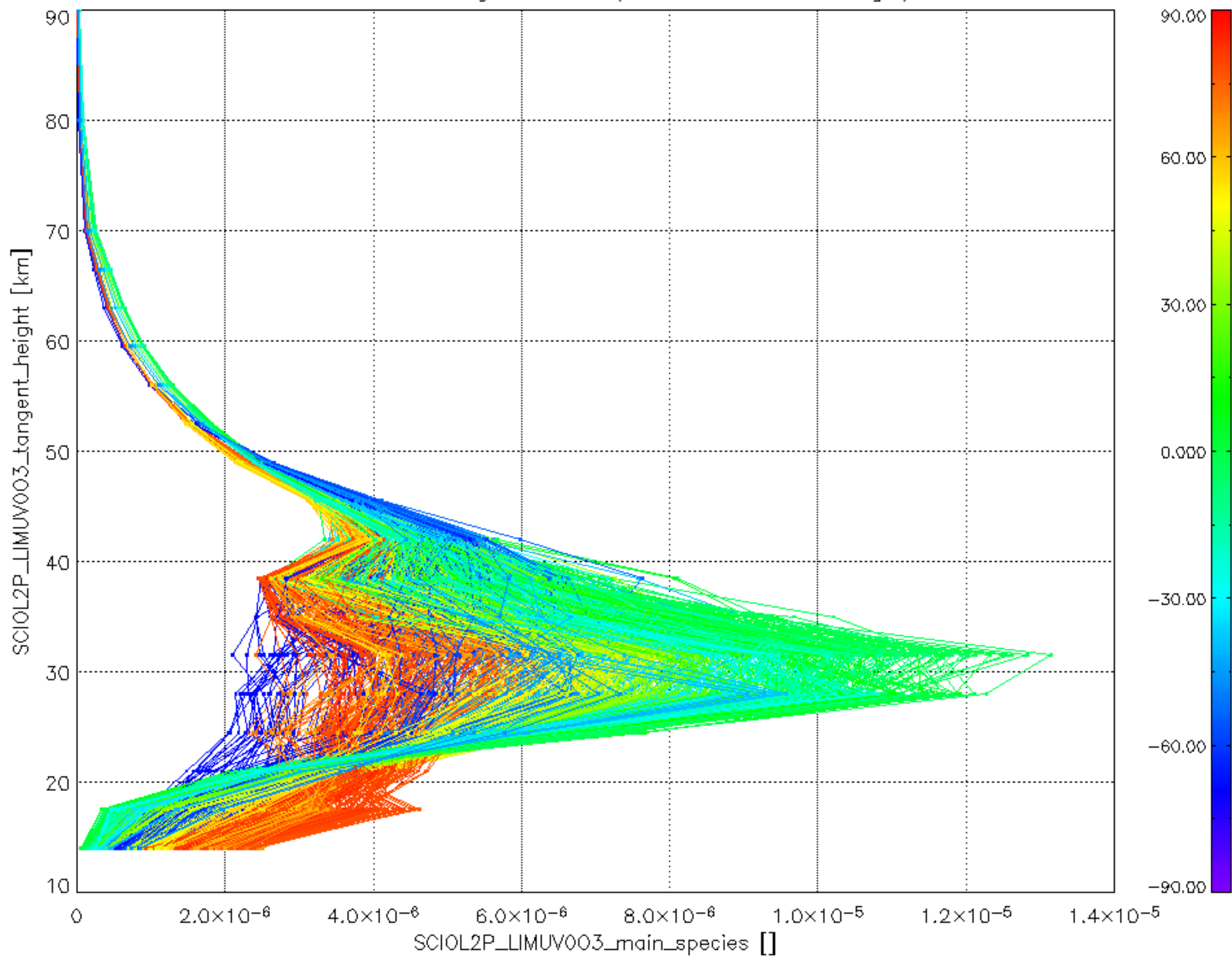
iCIOL2P_NADUV1NO2_amf_gr for 22APR2004 00:00:00 to 23APR2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 22APR2004 00:00:00 to 23APR2004 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).

