

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	12AUG2008 15:45:04
Data source version	SCIA-OL/3.01-R
Processing scope for products	06APR2004 00:00:00 to 07APR2004 00:00:00
Start time of first product within scope	05APR2004 22:36:22
Stop time of last product within scope	07APR2004 00:41:04
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__2PRDPA20040405_223622_000033492025_00402_10977_7424.N1	05APR2004 22:36:22	05APR2004 23:32:11	0	GOOD
1	SCI_OL__2PRDPA20040406_001657_000033772025_00403_10978_7438.N1	06APR2004 00:16:57	06APR2004 01:13:14	0	GOOD
2	SCI_OL__2PRDPA20040406_015733_000033492025_00404_10979_7544.N1	06APR2004 01:57:33	06APR2004 02:53:22	0	GOOD
3	SCI_OL__2PRDPA20040406_033808_000033772025_00405_10980_7411.N1	06APR2004 03:38:08	06APR2004 04:34:25	0	GOOD
4	SCI_OL__2PRDPA20040406_051844_000033492025_00406_10981_7497.N1	06APR2004 05:18:44	06APR2004 06:14:33	0	GOOD
5	SCI_OL__2PRDPA20040406_065919_000033772025_00407_10982_7491.N1	06APR2004 06:59:19	06APR2004 07:55:36	0	GOOD
6	SCI_OL__2PRDPA20040406_083955_000033492025_00408_10983_7482.N1	06APR2004 08:39:55	06APR2004 09:35:44	0	GOOD
7	SCI_OL__2PRDPA20040406_102030_000033772025_00409_10984_7421.N1	06APR2004 10:20:30	06APR2004 11:16:47	0	GOOD
8	SCI_OL__2PRDPA20040406_120106_000033492025_00410_10985_7351.N1	06APR2004 12:01:06	06APR2004 12:56:55	0	GOOD
9	SCI_OL__2PRDPA20040406_134141_000033772025_00411_10986_7341.N1	06APR2004 13:41:41	06APR2004 14:37:58	0	GOOD
10	SCI_OL__2PRDPA20040406_152217_000033492025_00412_10987_7576.N1	06APR2004 15:22:17	06APR2004 16:18:06	0	GOOD
11	SCI_OL__2PRDPA20040406_170252_000033772025_00413_10988_7254.N1	06APR2004 17:02:52	06APR2004 17:59:09	0	GOOD
12	SCI_OL__2PRDPA20040406_184336_000033562025_00414_10989_7561.N1	06APR2004 18:43:36	06APR2004 19:39:33	0	GOOD
13	SCI_OL__2PRDPA20040406_202424_000032932025_00415_10990_7461.N1	06APR2004 20:24:24	06APR2004 21:19:17	0	GOOD
14	SCI_OL__2PRDPA20040406_220439_000033772025_00416_10991_7506.N1	06APR2004 22:04:39	06APR2004 23:00:56	0	GOOD
15	SCI_OL__2PRDPA20040406_234514_000033492025_00417_10992_7526.N1	06APR2004 23:45:14	07APR2004 00:41:04	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: 116080

Total number of cloud data DSRs with good quality flag (=0): 116080 (100.0 %)

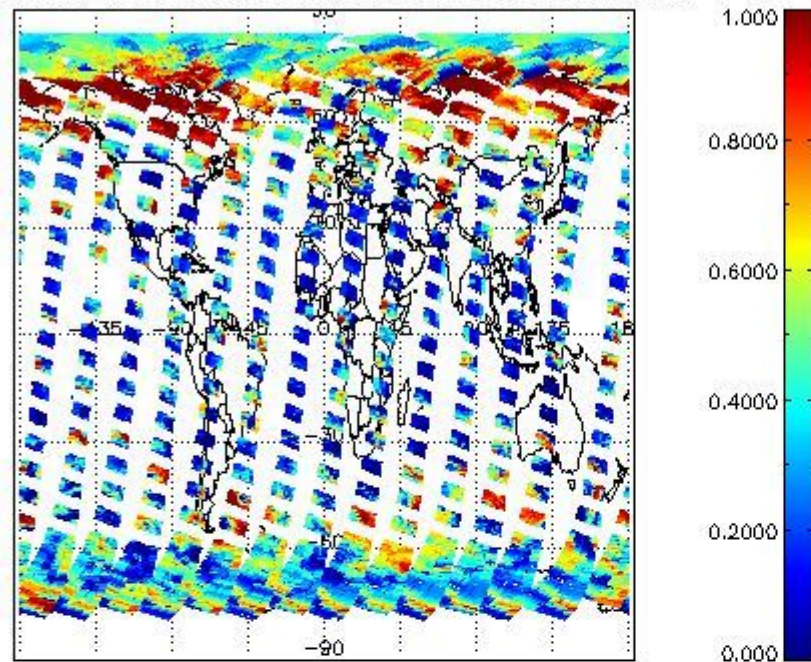
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	116080	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	116080	0.21580	0.25000	0.12500	0.50000	0.086597	s
CL_FRAC	116080	0.44090	0.41790	0.0000	1.0000	0.31120	-
CL_FRAC_ERR	116080	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	116080	6.9056	8.0000	4.0000	16.000	2.7711	
PMD_READ_CL[0]	116080	0.49575	0.0000	0.0000	16.000	1.4985	-
PMD_READ_CL[1]	116080	0.71586	0.0000	0.0000	16.000	1.9839	-
CL_TOP_HEIGHT	106013	3.4542	1.5838	0.0000	17.000	3.8227	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	106013	58.314	55.914	0.0000	101.00	40.578	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	116080	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	116080	11000111	11000010	11000000	11100000	2671.2	flags
AERO_ABSO_IND	116080	0.80426	0.74420	-4.0590	11.983	1.1142	
AERO_IND_DIAG	116080	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	116080	01100101	11000000	00000000	11000000	24532.	flags

Time and geolocation plots:

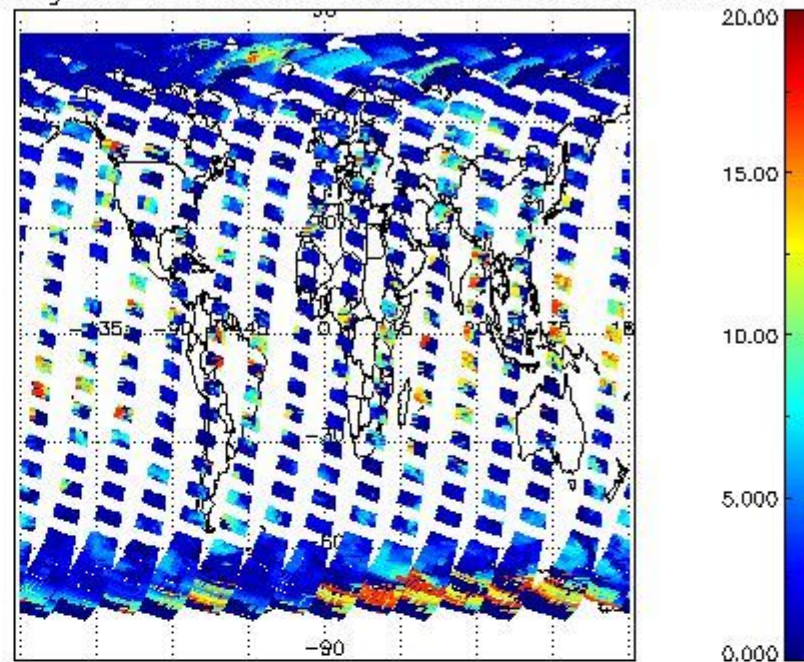
Plots are available for the following parameters:

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

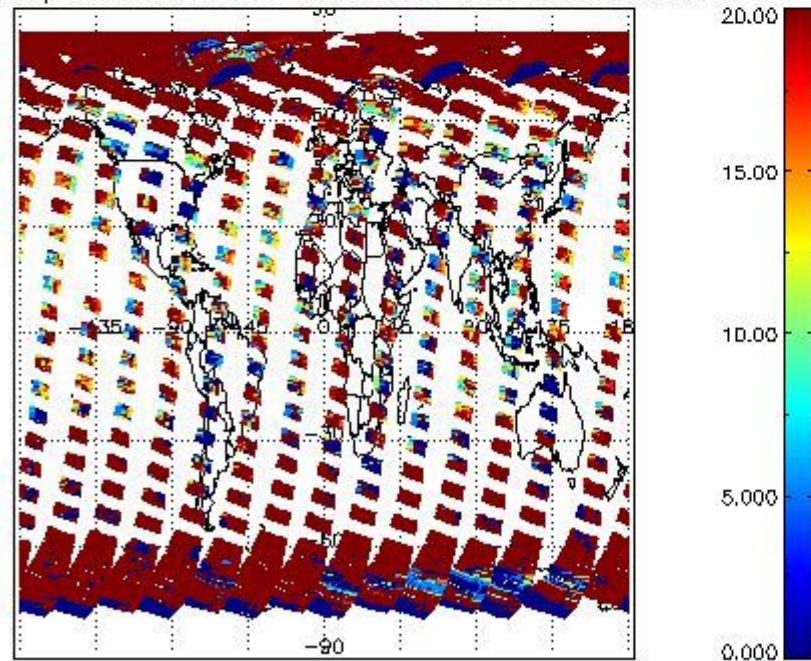
cLfrac for 06APR2004 00:00:00 to 07APR2004 00:00:00



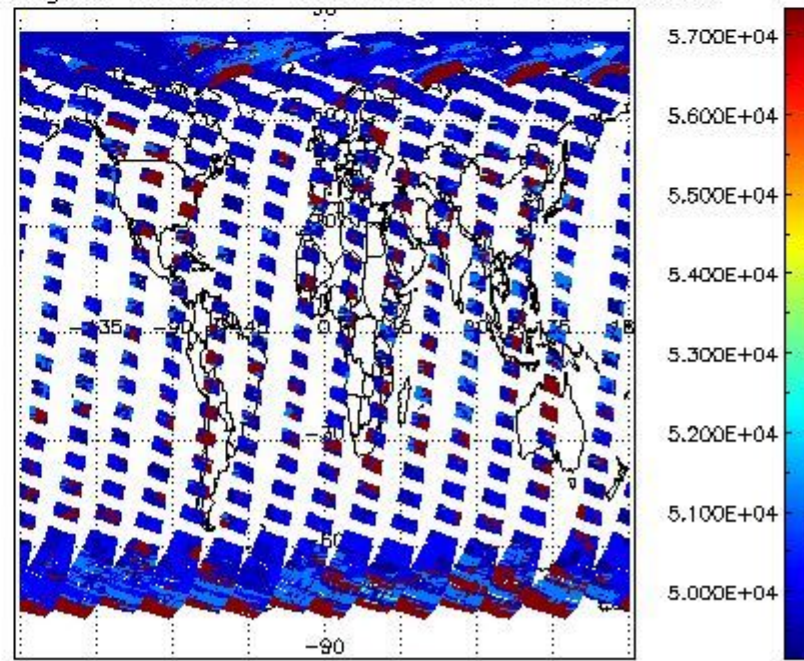
cL_top_height for 06APR2004 00:00:00 to 07APR2004 00:00:00



cL_opt_depth for 06APR2004 00:00:00 to 07APR2004 00:00:00



cloud_flags for 06APR2004 00:00:00 to 07APR2004 00:00:00



2.2.2 Nadir

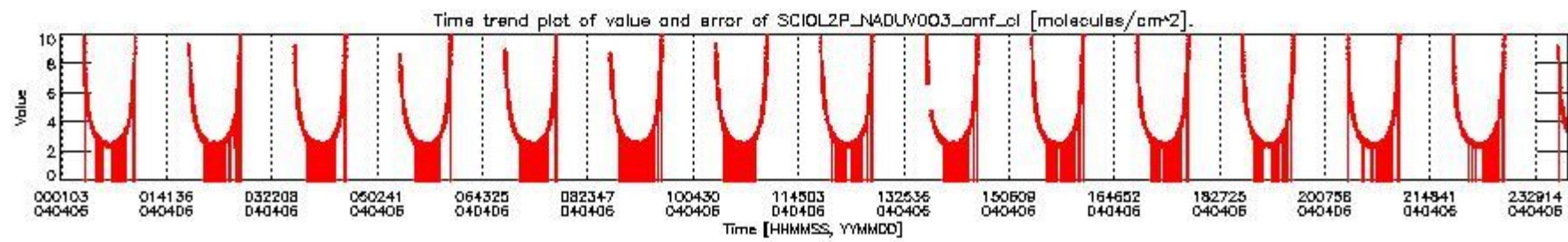
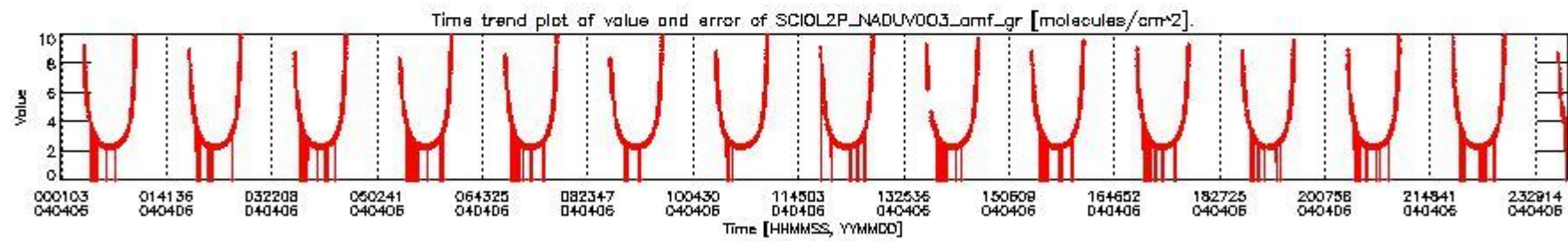
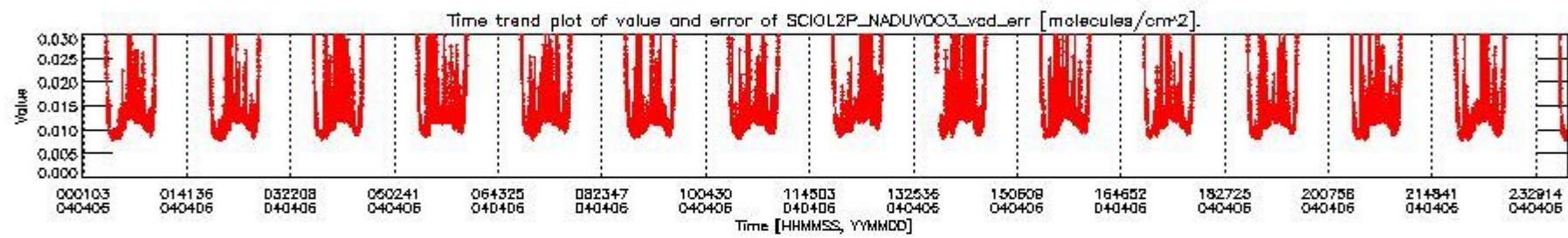
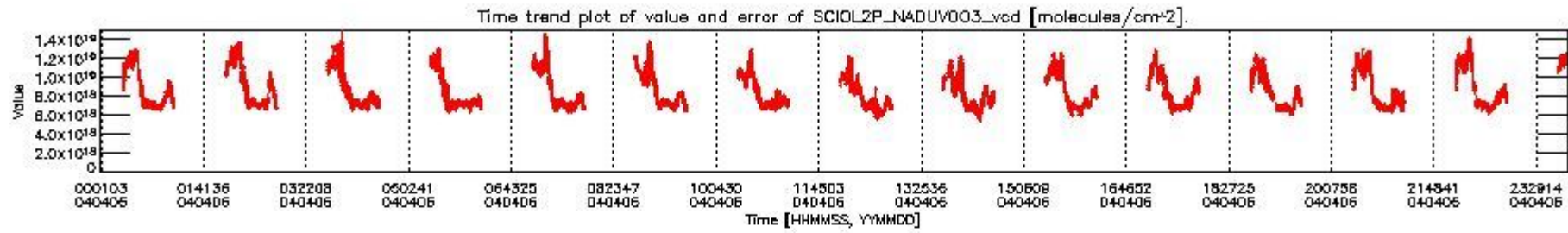
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

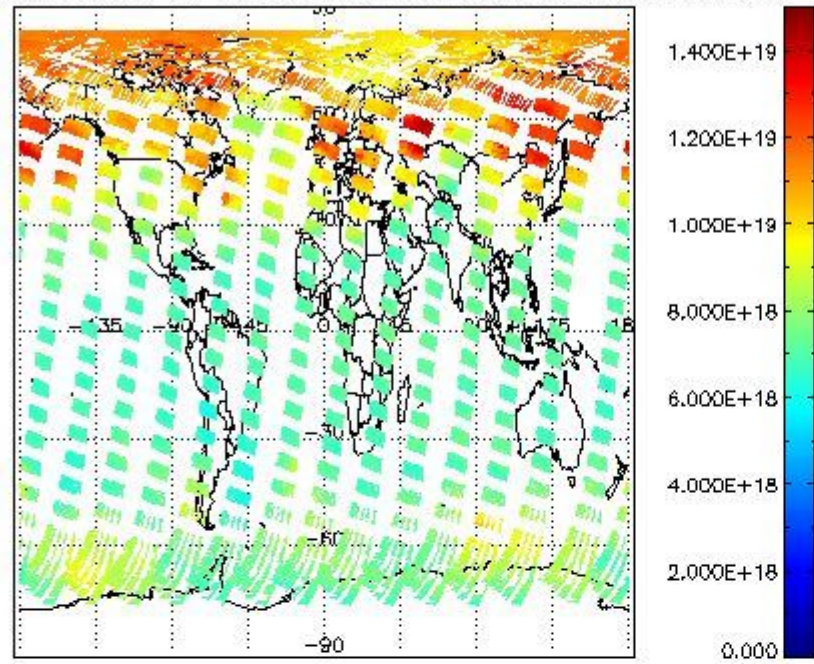
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

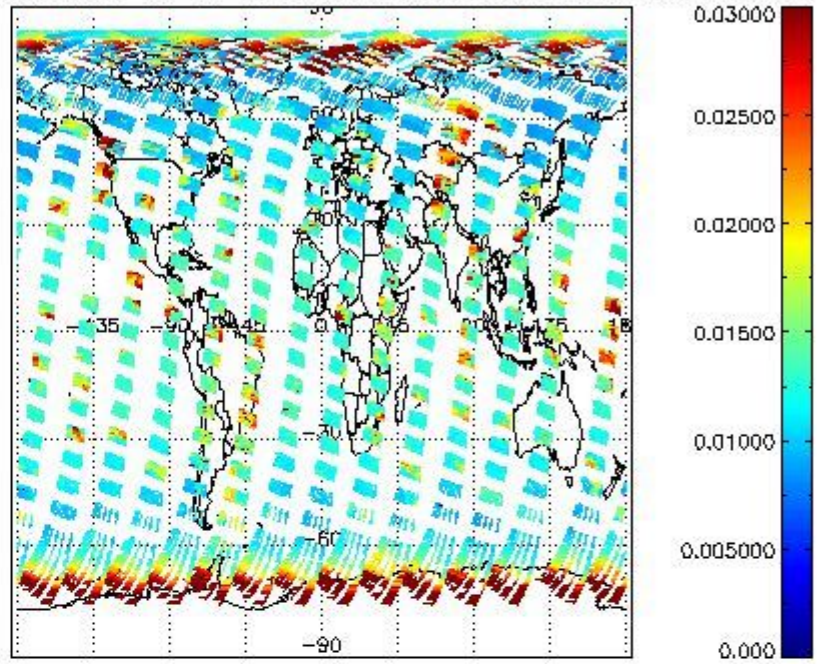
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



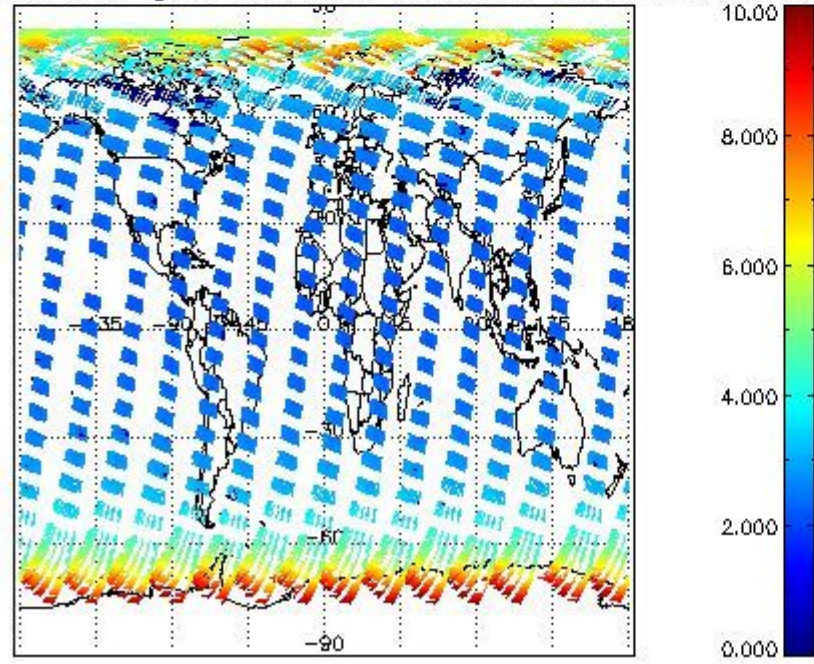
SCIOL2P_NADUV003_vcd for 06APR2004 00:00:00 to 07APR2004 00:00:00



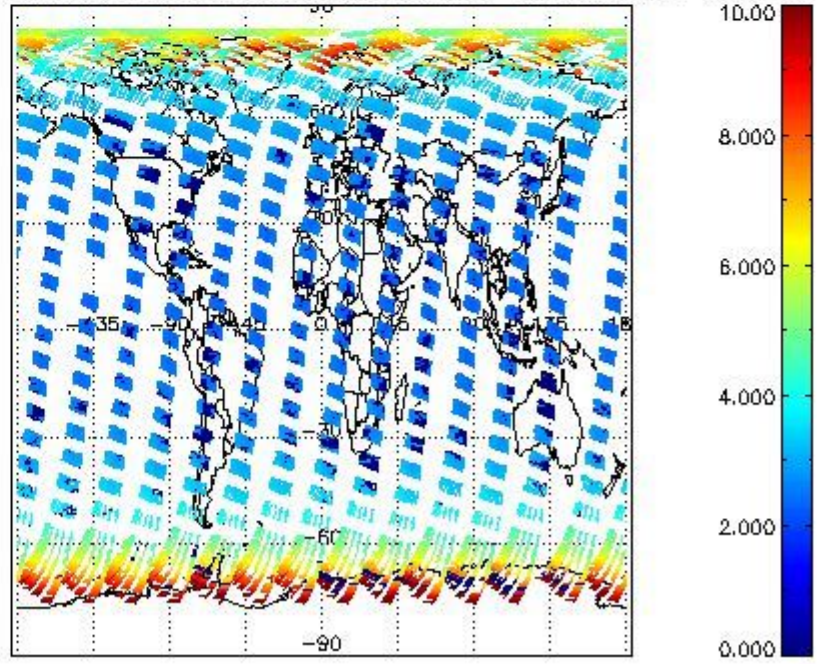
SCIOL2P_NADUV003_vcd_err for 06APR2004 00:00:00 to 07APR2004 00:00:00

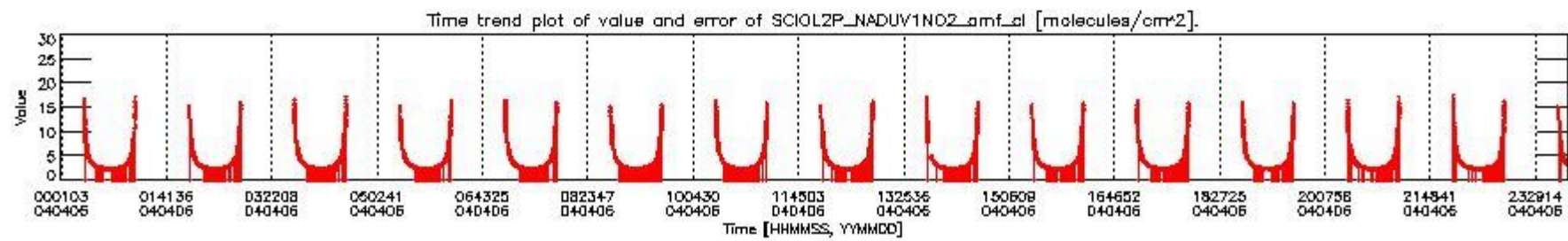
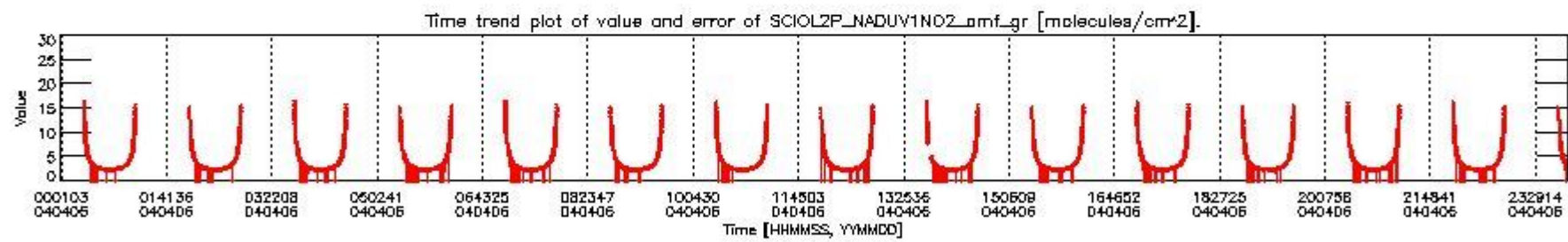
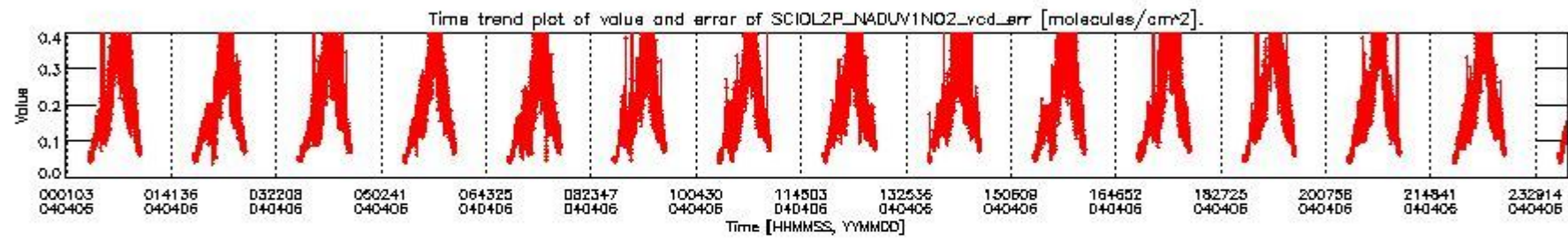
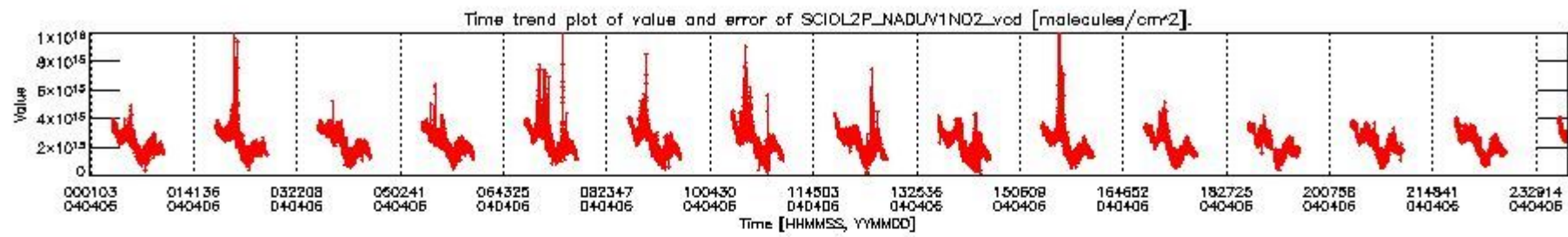


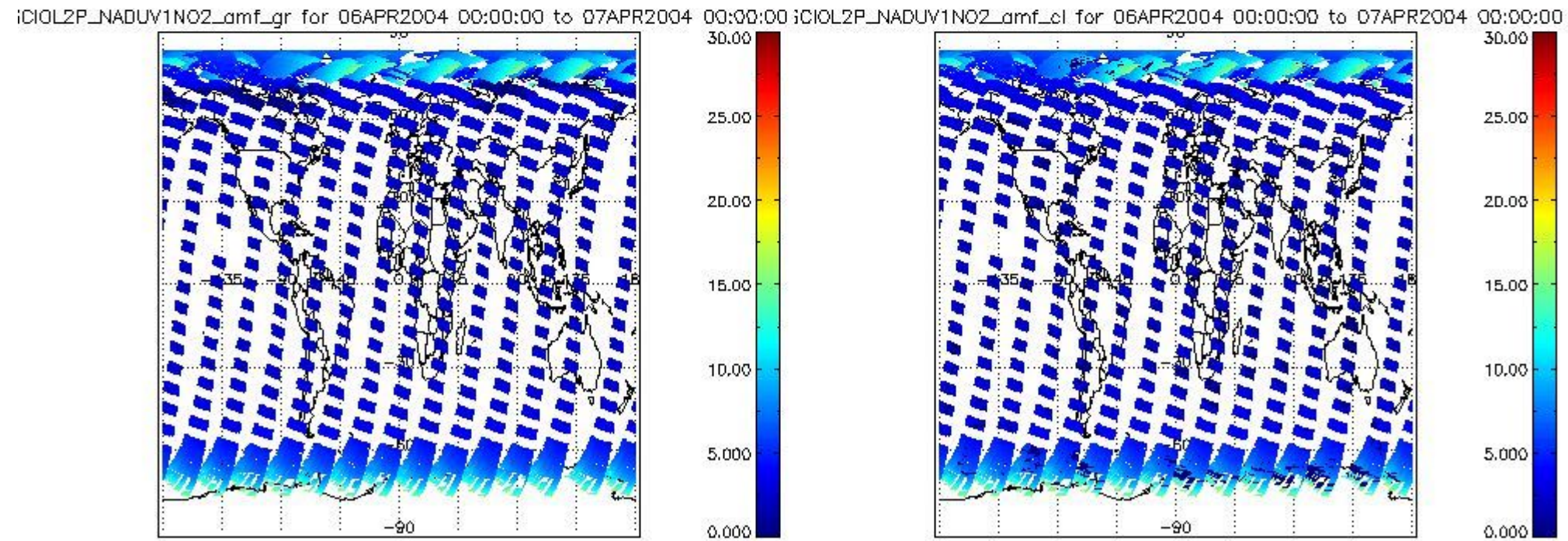
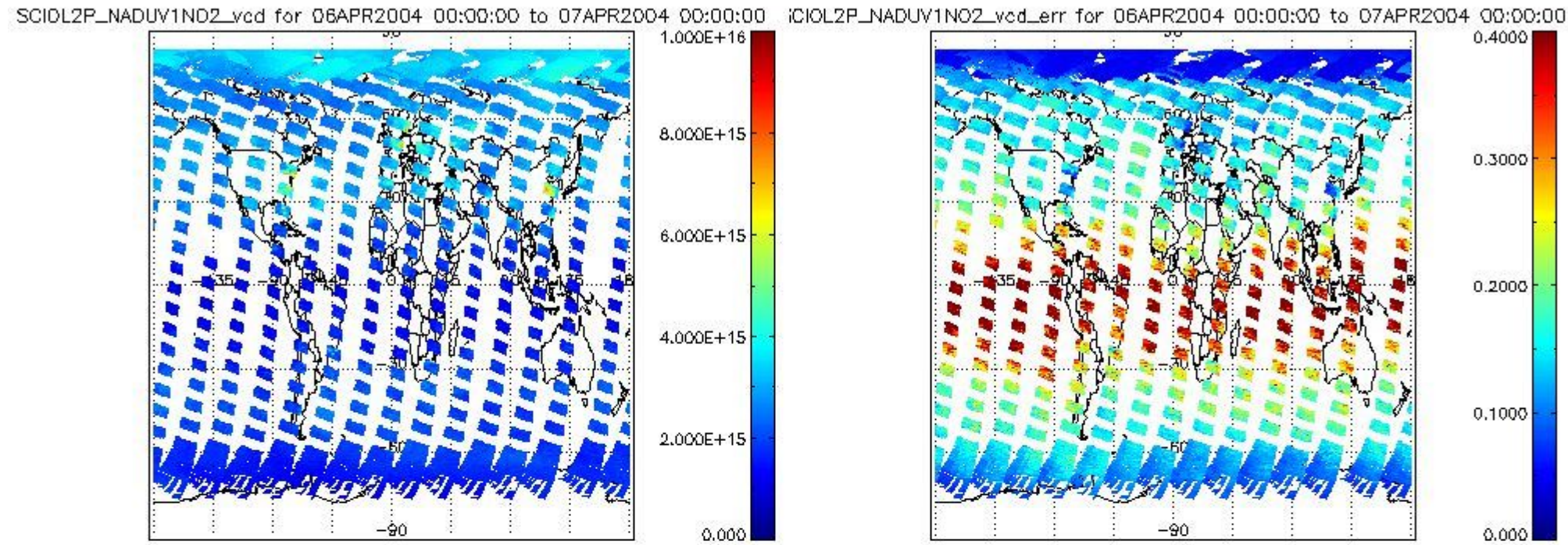
SCIOL2P_NADUV003_amf_gr for 06APR2004 00:00:00 to 07APR2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 06APR2004 00:00:00 to 07APR2004 00:00:00







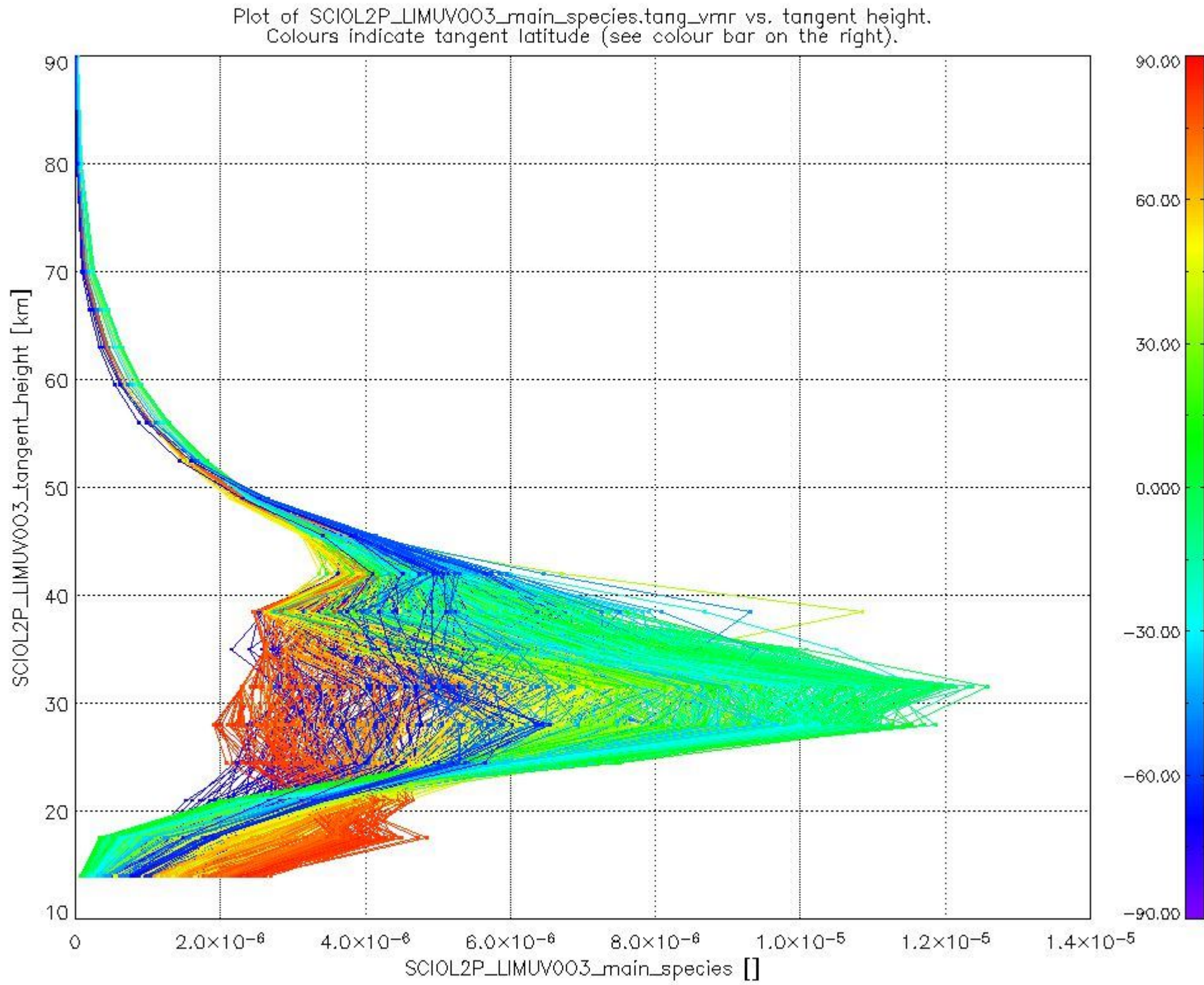
2.2.3 Limb

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

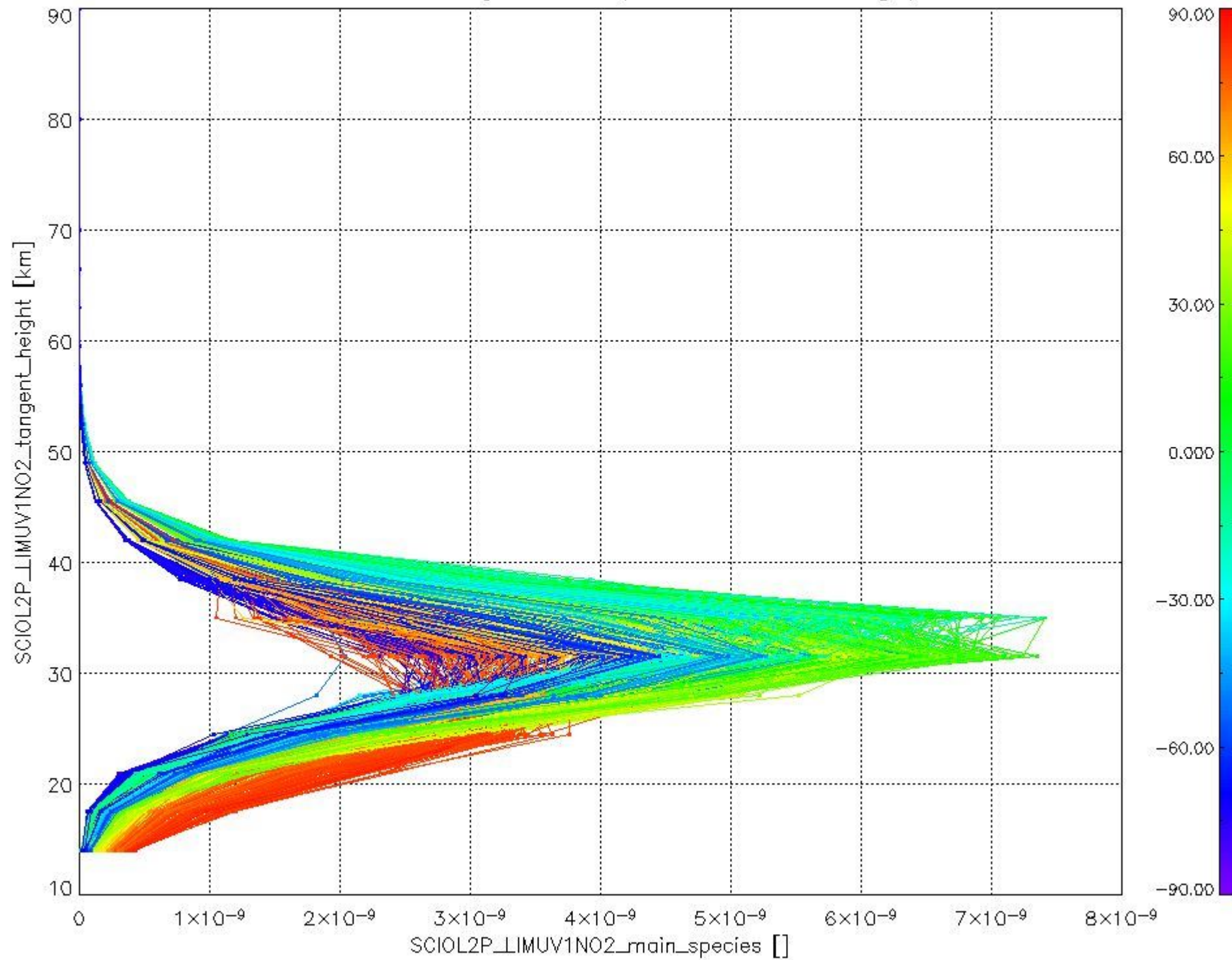
The following data items are currently included into this section:

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.



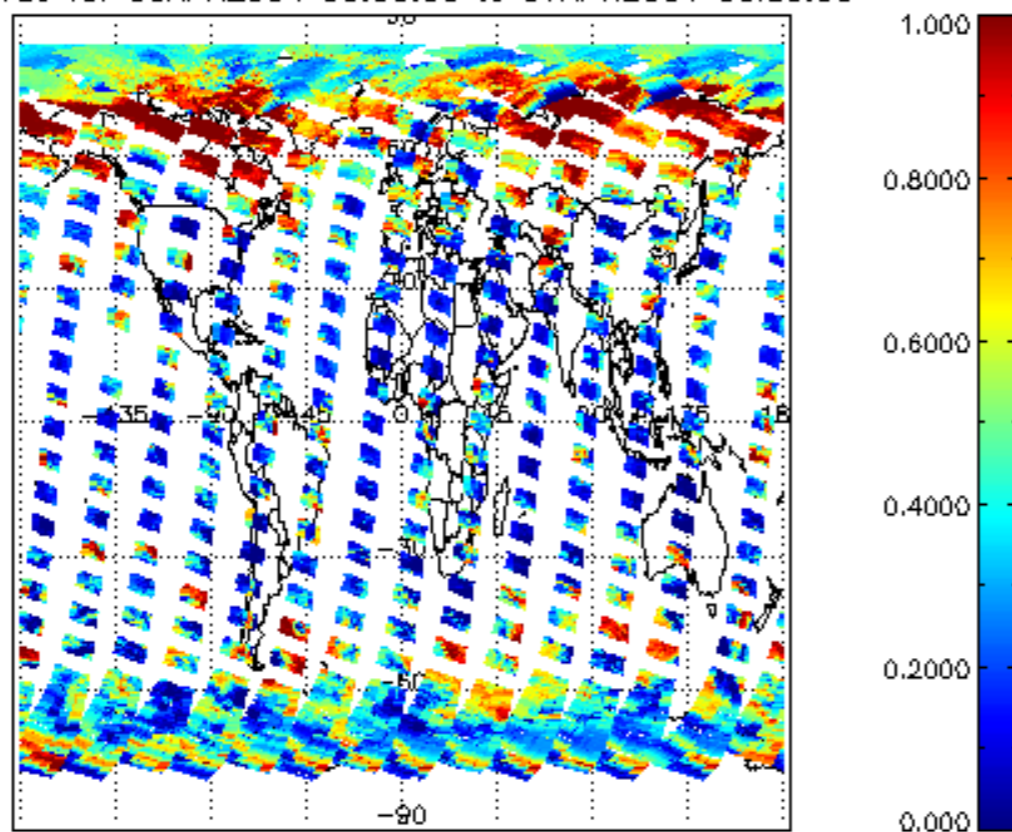
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



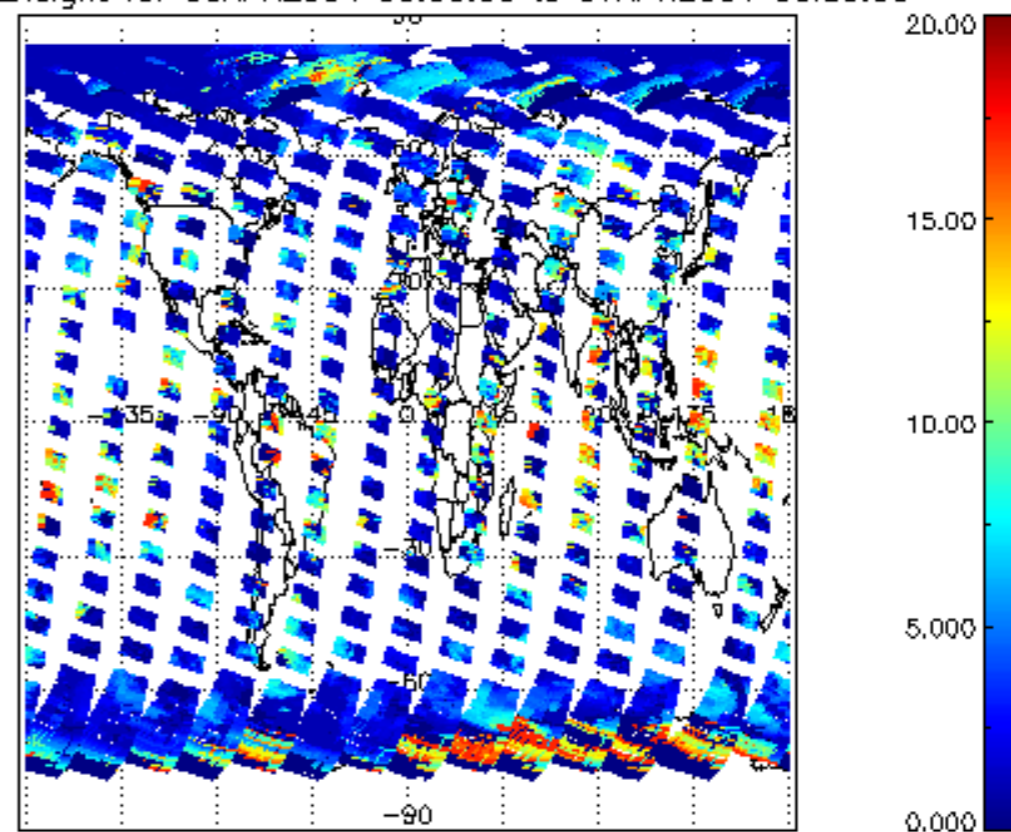
2.3 ADF monitoring

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

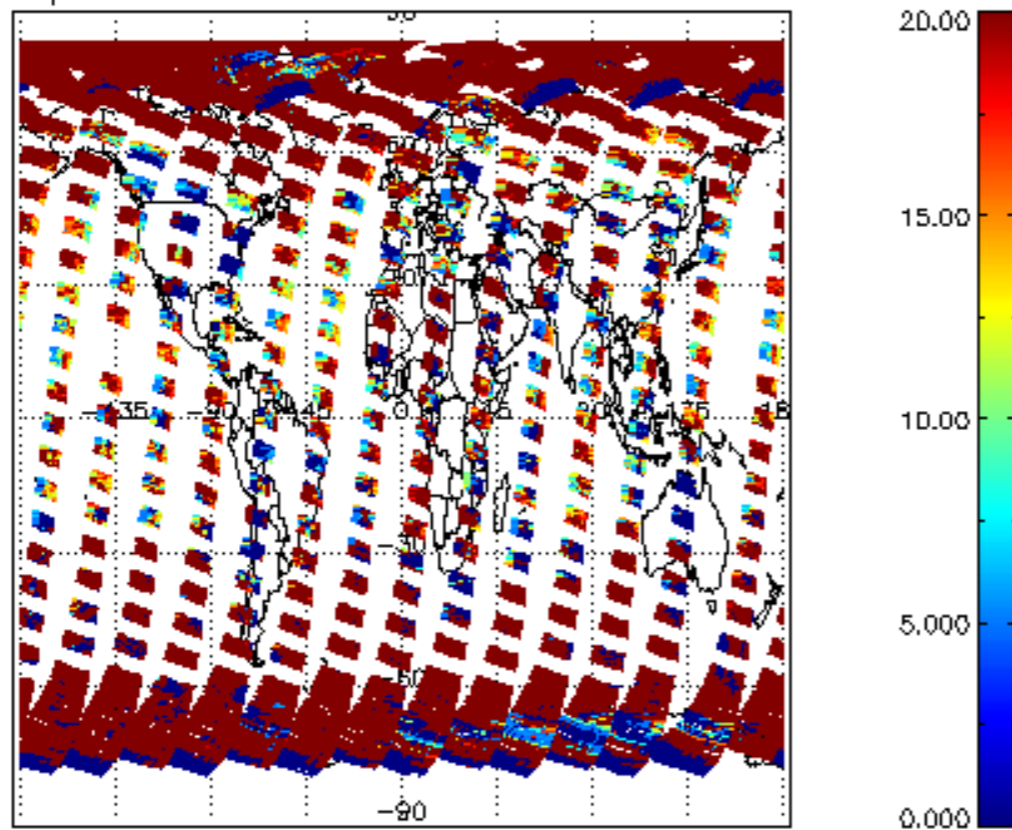
cl_frac for 06APR2004 00:00:00 to 07APR2004 00:00:00



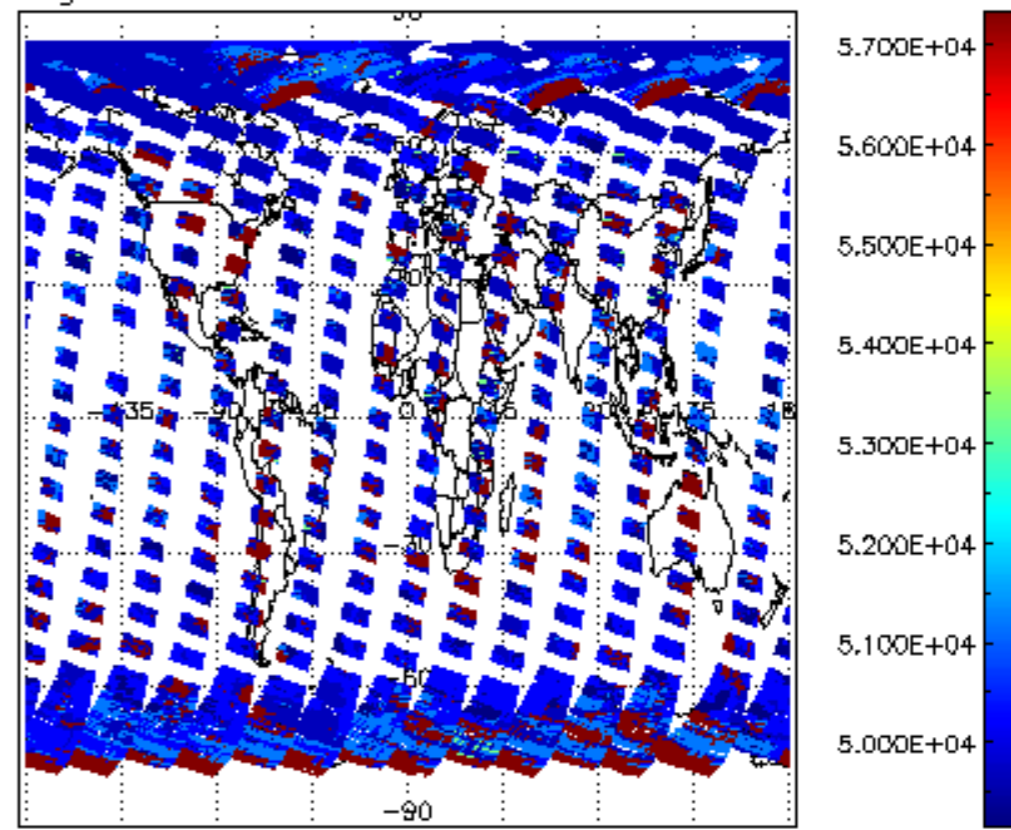
cl_top_height for 06APR2004 00:00:00 to 07APR2004 00:00:00

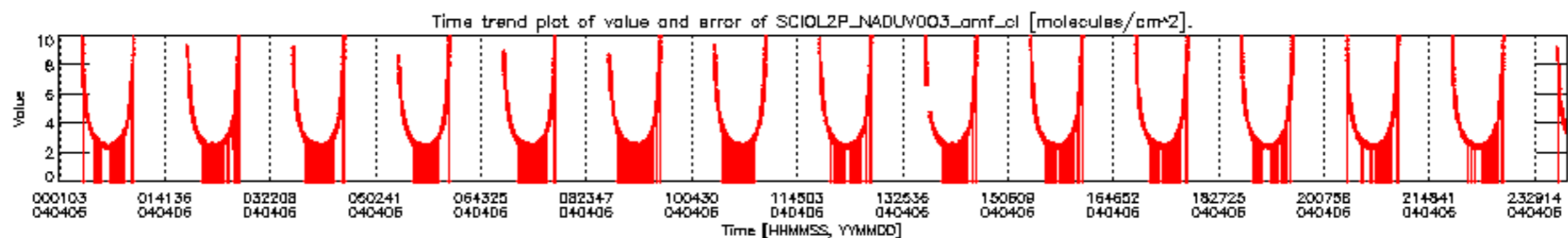
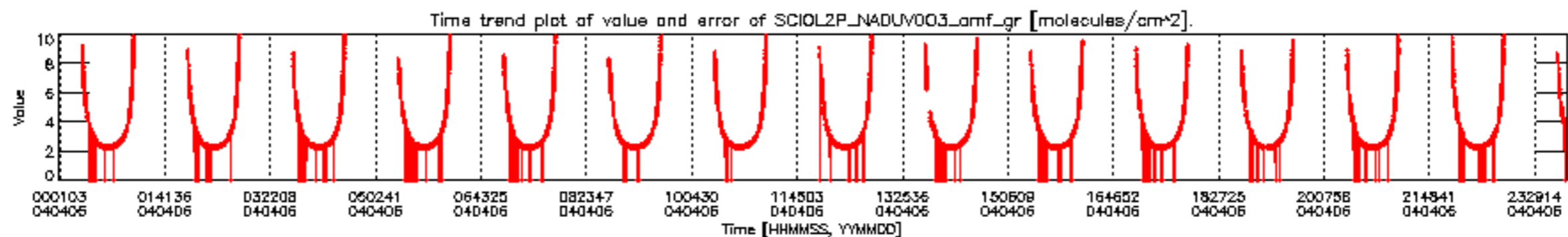
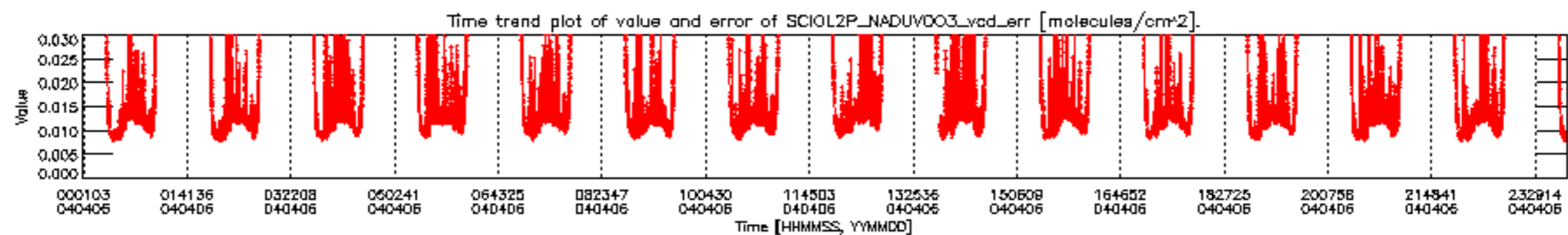
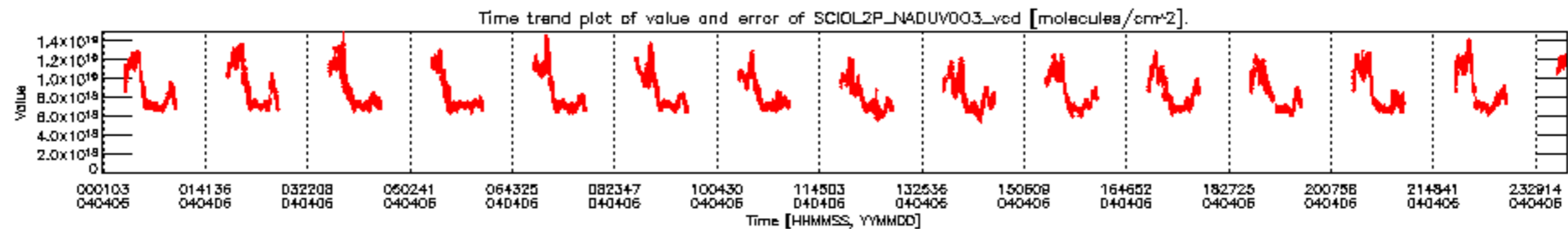


cl_opt_depth for 06APR2004 00:00:00 to 07APR2004 00:00:00

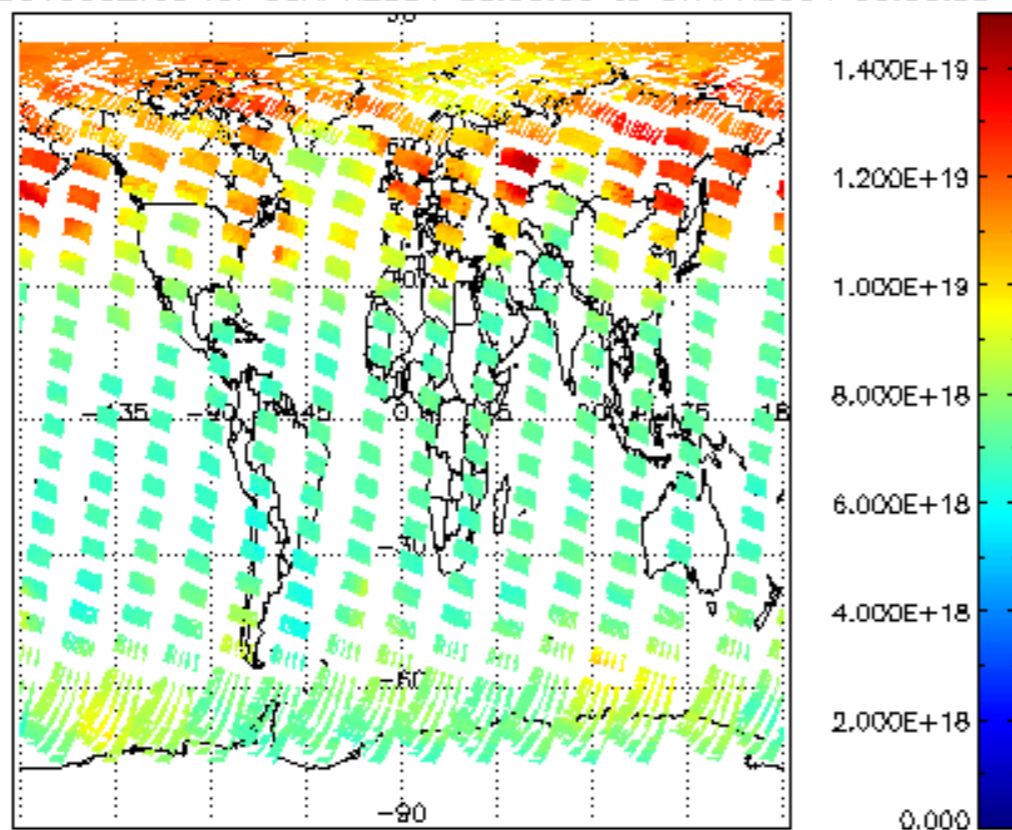


cloud_flags for 06APR2004 00:00:00 to 07APR2004 00:00:00

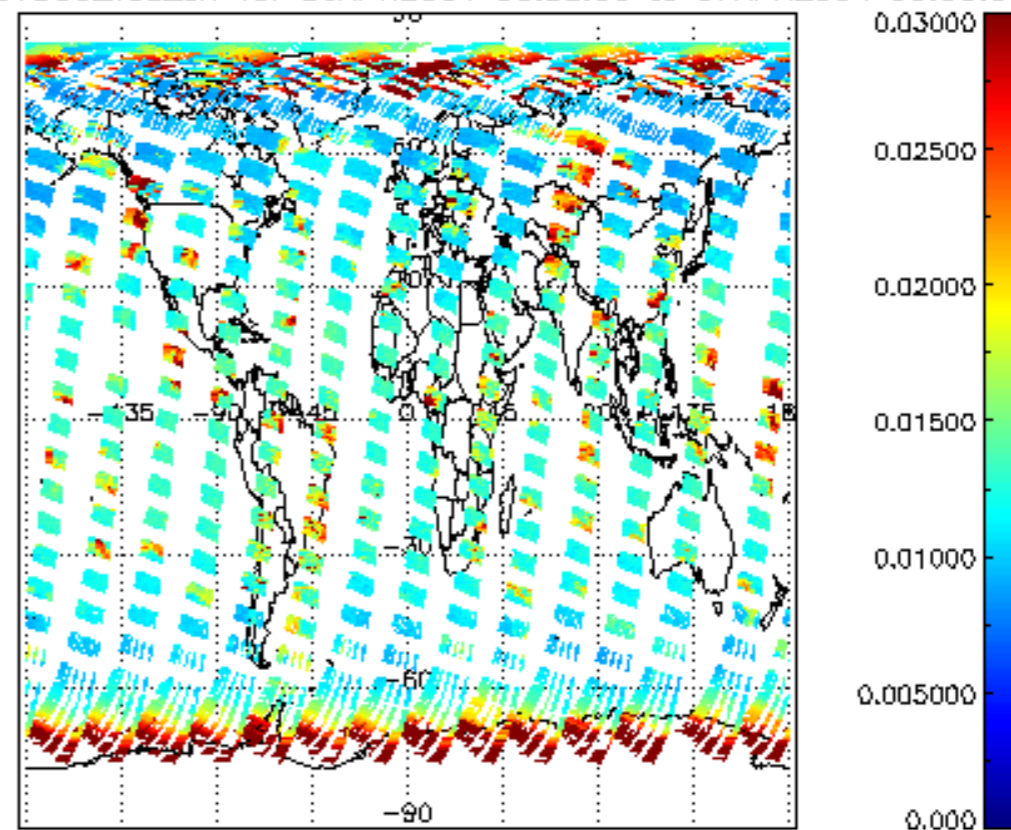




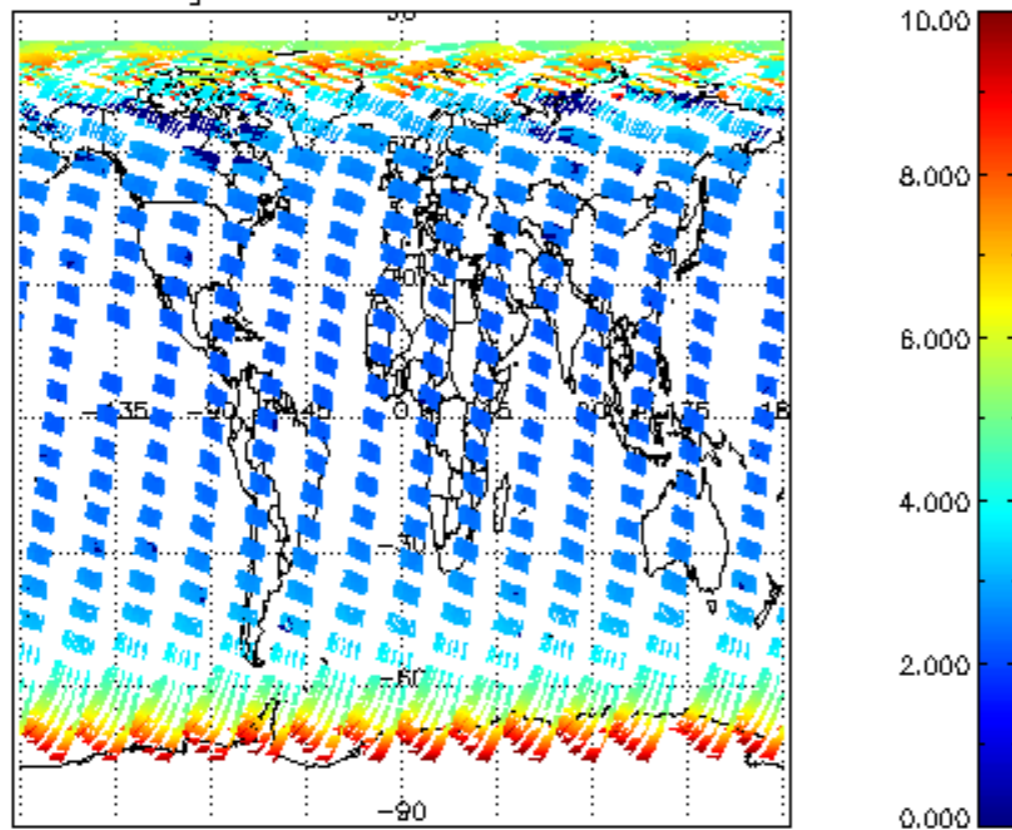
SCIOL2P_NADUV003_vcd for 06APR2004 00:00:00 to 07APR2004 00:00:00



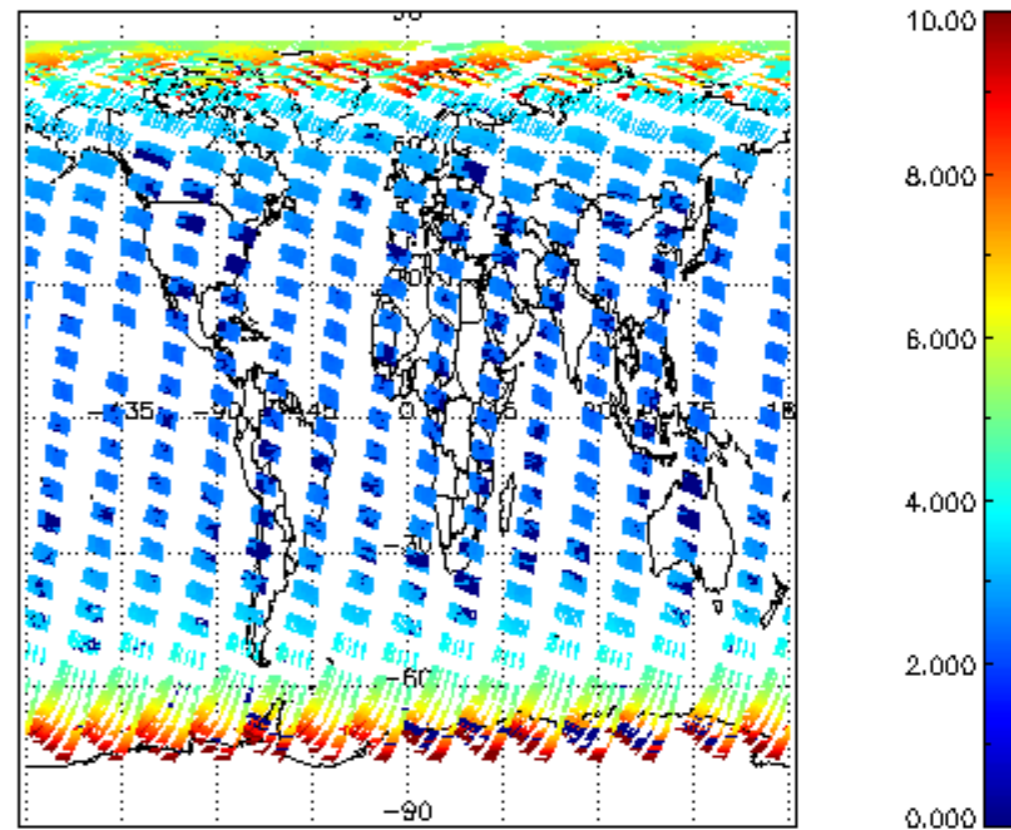
SCIOL2P_NADUV003_vcd_err for 06APR2004 00:00:00 to 07APR2004 00:00:00

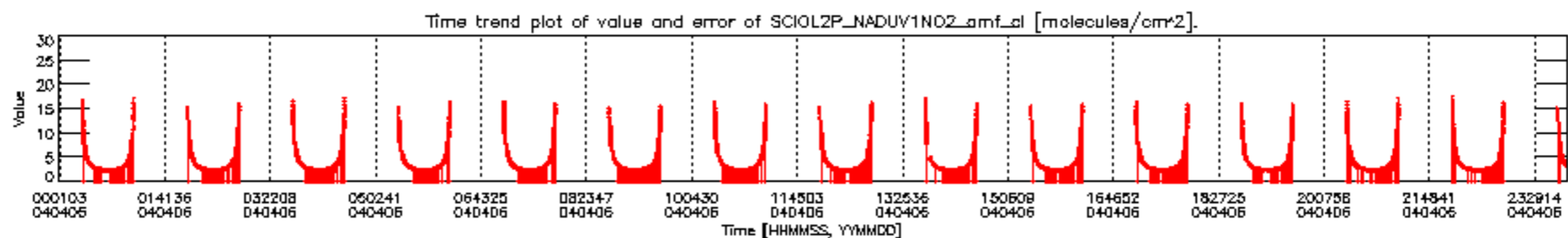
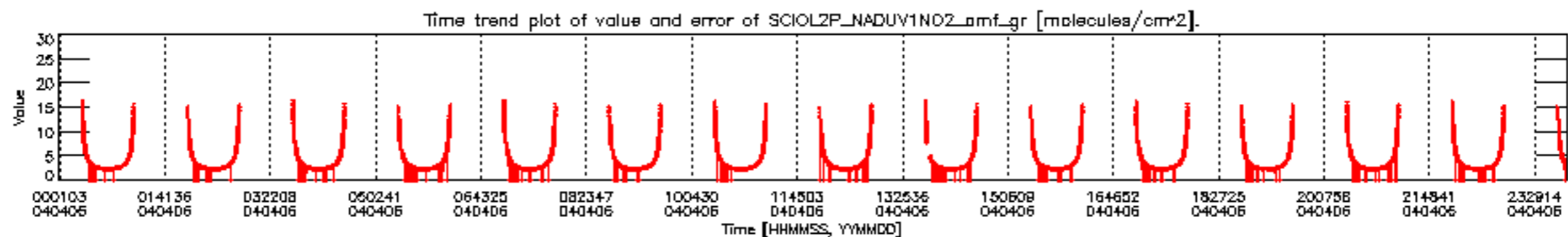
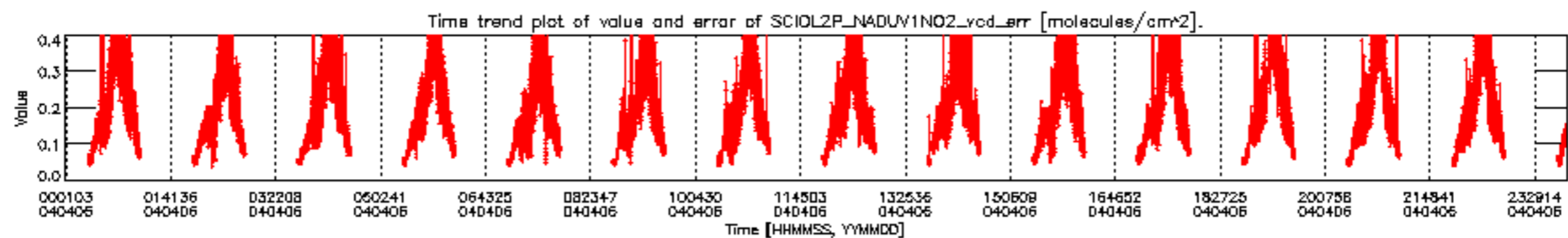
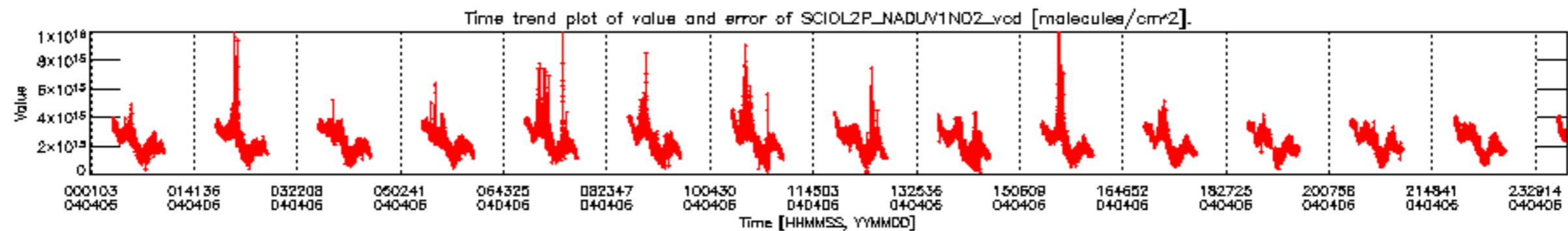


SCIOL2P_NADUV003_amf_gr for 06APR2004 00:00:00 to 07APR2004 00:00:00

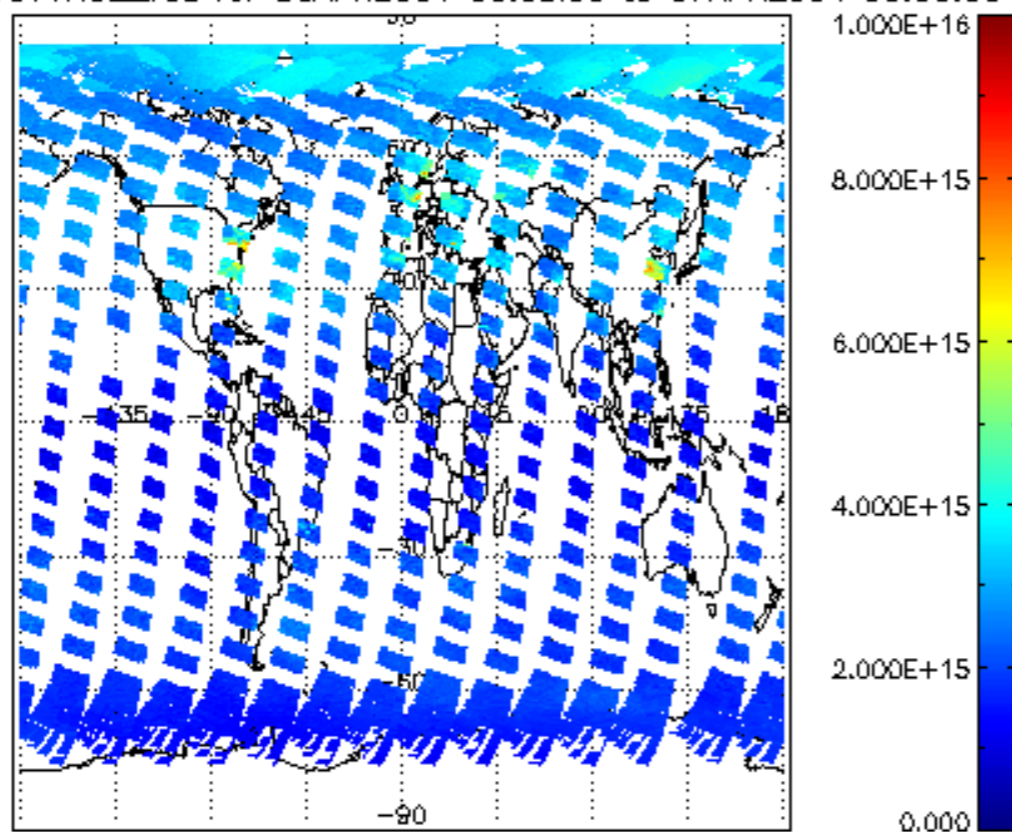


SCIOL2P_NADUV003_amf_cl for 06APR2004 00:00:00 to 07APR2004 00:00:00

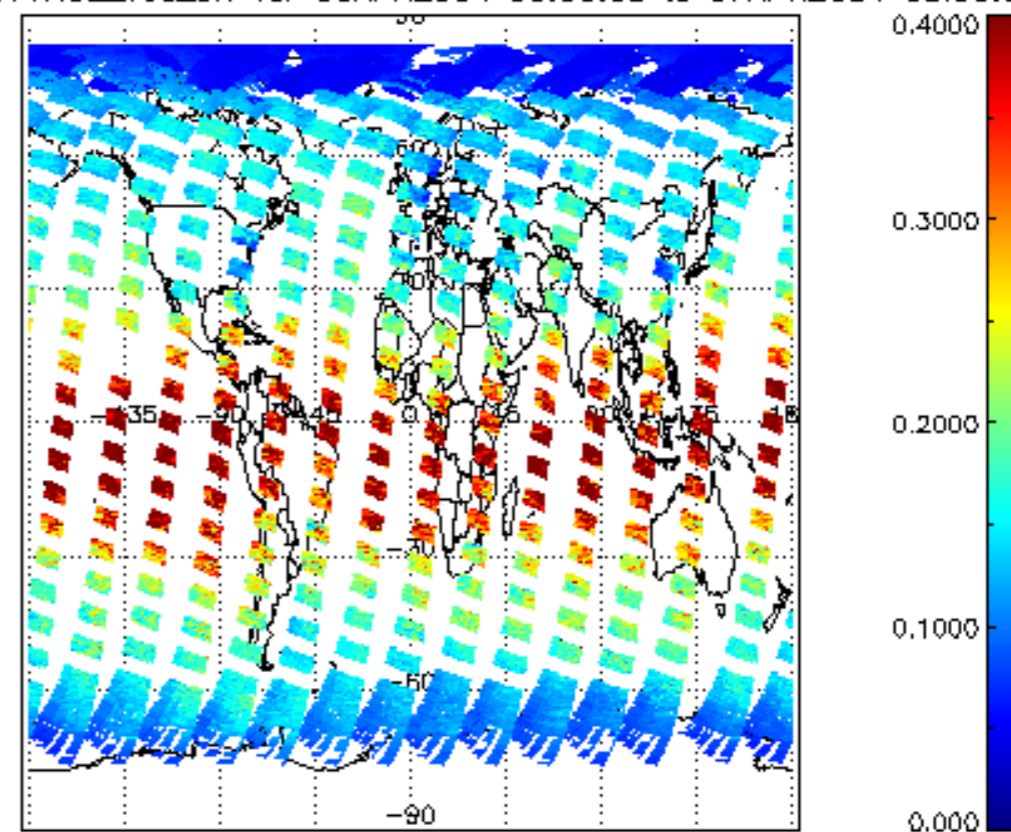




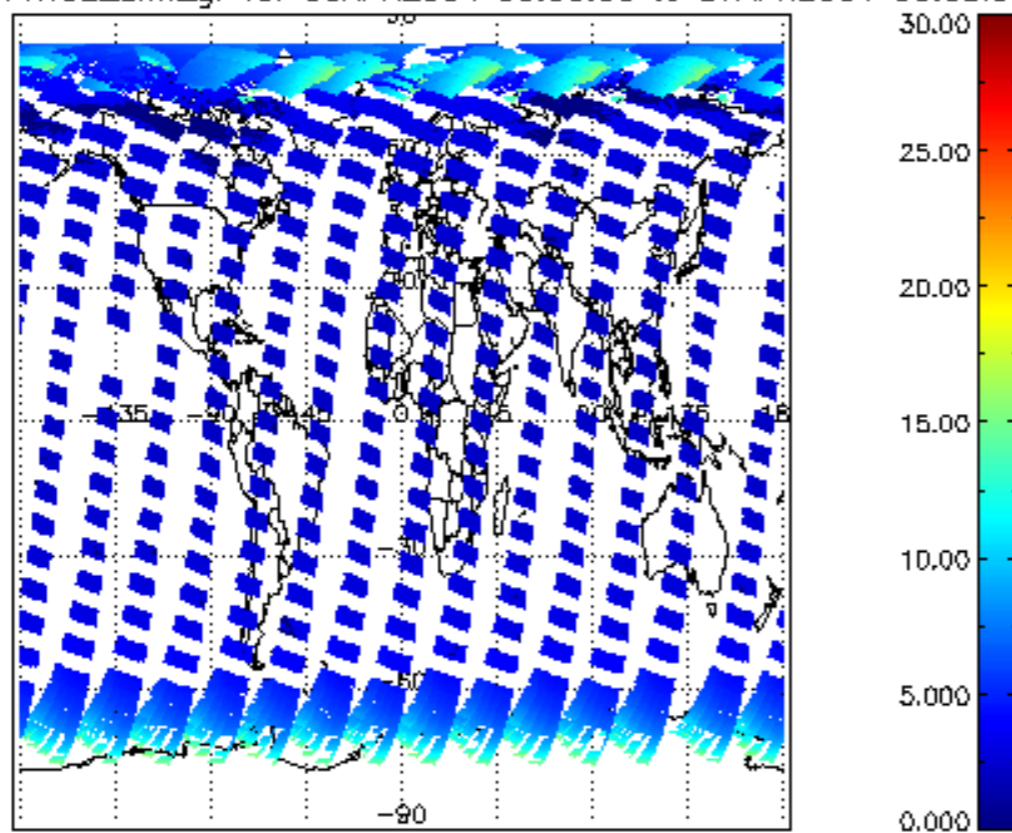
SCIOL2P_NADUV1NO2_vcd for 06APR2004 00:00:00 to 07APR2004 00:00:00



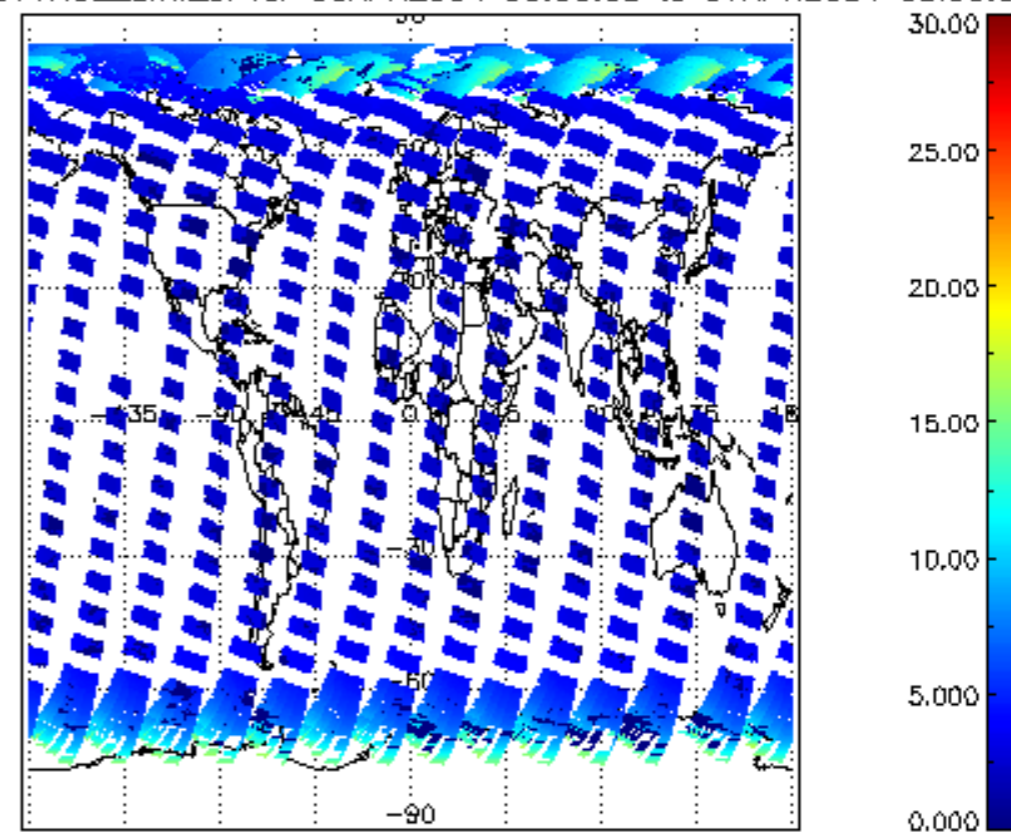
iCIOL2P_NADUV1NO2_vcd_err for 06APR2004 00:00:00 to 07APR2004 00:00:00



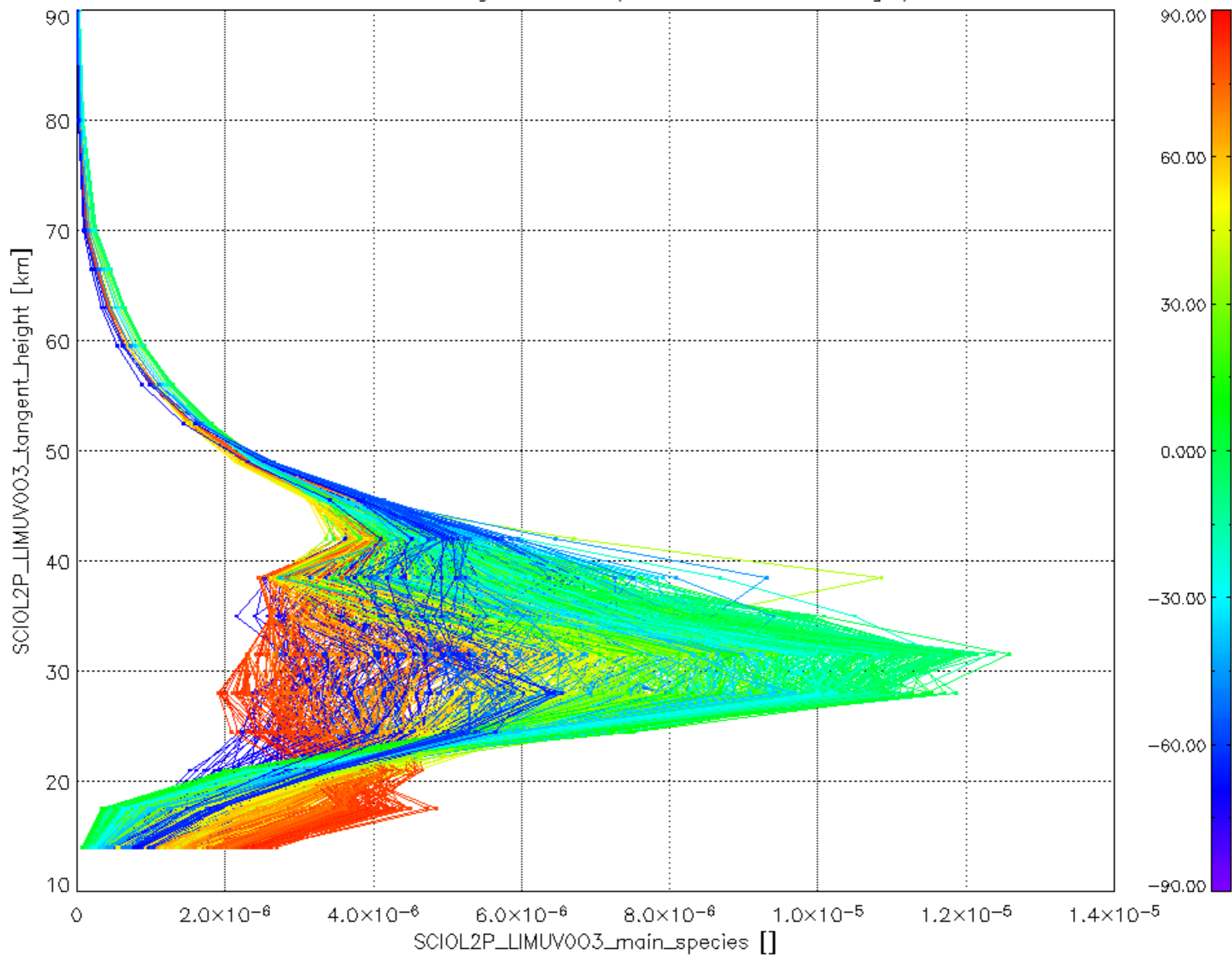
iCIOL2P_NADUV1NO2_amf_gr for 06APR2004 00:00:00 to 07APR2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 06APR2004 00:00:00 to 07APR2004 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_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

