

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 15:50:57
Data source version	SCIA-OL/3.01-R
Processing scope for products	07APR2004 00:00:00 to 08APR2004 00:00:00
Start time of first product within scope	06APR2004 23:45:14
Stop time of last product within scope	08APR2004 00:09:21
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__2PRDPA20040406_234514_000033492025_00417_10992_7526.N1	06APR2004 23:45:14	07APR2004 00:41:04	0	GOOD
1	SCI_OL__2PRDPA20040407_012550_000033772025_00418_10993_7495.N1	07APR2004 01:25:50	07APR2004 02:22:07	0	GOOD
2	SCI_OL__2PRDPA20040407_030625_000033492025_00419_10994_7473.N1	07APR2004 03:06:25	07APR2004 04:02:14	0	GOOD
3	SCI_OL__2PRDPA20040407_044701_000033772025_00420_10995_7282.N1	07APR2004 04:47:01	07APR2004 05:43:18	0	GOOD
4	SCI_OL__2PRDPA20040407_062736_000033492025_00421_10996_7591.N1	07APR2004 06:27:36	07APR2004 07:23:26	0	GOOD
5	SCI_OL__2PRDPA20040407_080812_000033772025_00422_10997_7582.N1	07APR2004 08:08:12	07APR2004 09:04:29	0	GOOD
6	SCI_OL__2PRDPA20040407_094847_000033492025_00423_10998_7509.N1	07APR2004 09:48:47	07APR2004 10:44:37	0	GOOD
7	SCI_OL__2PRDPA20040407_112923_000033772025_00424_10999_7493.N1	07APR2004 11:29:23	07APR2004 12:25:40	0	GOOD
8	SCI_OL__2PRDPA20040407_130958_000033492025_00425_11000_7336.N1	07APR2004 13:09:58	07APR2004 14:05:48	0	GOOD
9	SCI_OL__2PRDPA20040407_145034_000033772025_00426_11001_7258.N1	07APR2004 14:50:34	07APR2004 15:46:51	0	GOOD
10	SCI_OL__2PRDPA20040407_163109_000033492025_00427_11002_7511.N1	07APR2004 16:31:09	07APR2004 17:26:59	0	GOOD
11	SCI_OL__2PRDPA20040407_181139_000033832025_00428_11003_7239.N1	07APR2004 18:11:39	07APR2004 19:08:02	0	GOOD
12	SCI_OL__2PRDPA20040407_195241_000033492025_00429_11004_7490.N1	07APR2004 19:52:41	07APR2004 20:48:30	0	GOOD
13	SCI_OL__2PRDPA20040407_213256_000033772025_00430_11005_7545.N1	07APR2004 21:32:56	07APR2004 22:29:13	0	GOOD
14	SCI_OL__2PRDPA20040407_231331_000033492025_00431_11006_7595.N1	07APR2004 23:13:31	08APR2004 00:09:21	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: 118067

Total number of cloud data DSRs with good quality flag (=0): 118067 (100.0 %)

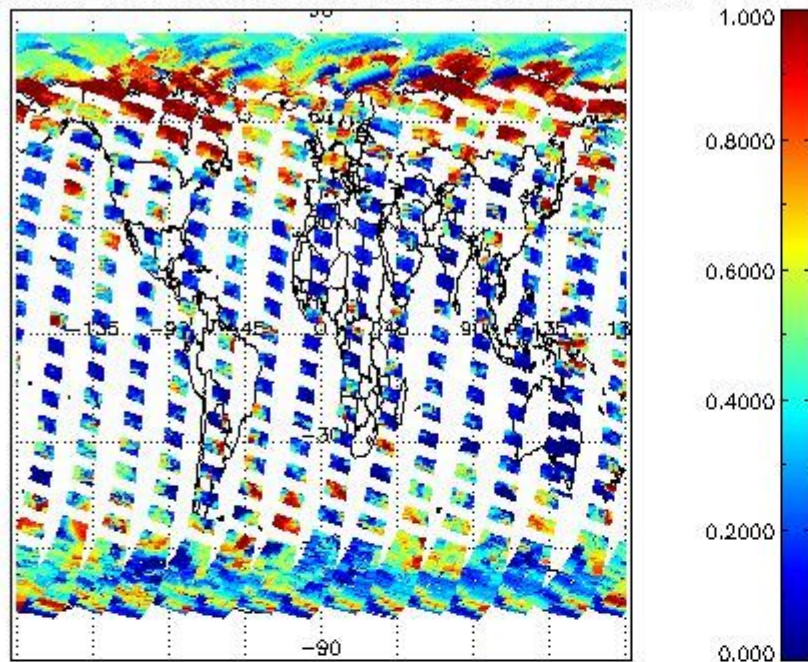
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	118067	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	118067	0.22016	0.25000	0.12500	1.0000	0.088646	s
CL_FRAC	118067	0.43834	0.41379	0.0000	1.0000	0.31549	-
CL_FRAC_ERR	118067	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	118067	7.0451	8.0000	4.0000	32.000	2.8367	
PMD_READ_CL[0]	118067	0.53769	0.0000	0.0000	16.000	1.6227	-
PMD_READ_CL[1]	118067	0.79213	0.0000	0.0000	32.000	2.1630	-
CL_TOP_HEIGHT	107438	3.4844	1.5568	0.0000	17.000	3.8509	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	107438	56.535	48.689	0.0000	101.00	40.577	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	118067	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	118067	11000111	11000010	11000000	11100000	2734.3	flags
AERO_ABSO_IND	118067	0.79436	0.77359	-4.1844	11.658	1.0592	
AERO_IND_DIAG	118067	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	118067	01101010	11000000	00000000	11000000	24418.	flags

Time and geolocation plots:

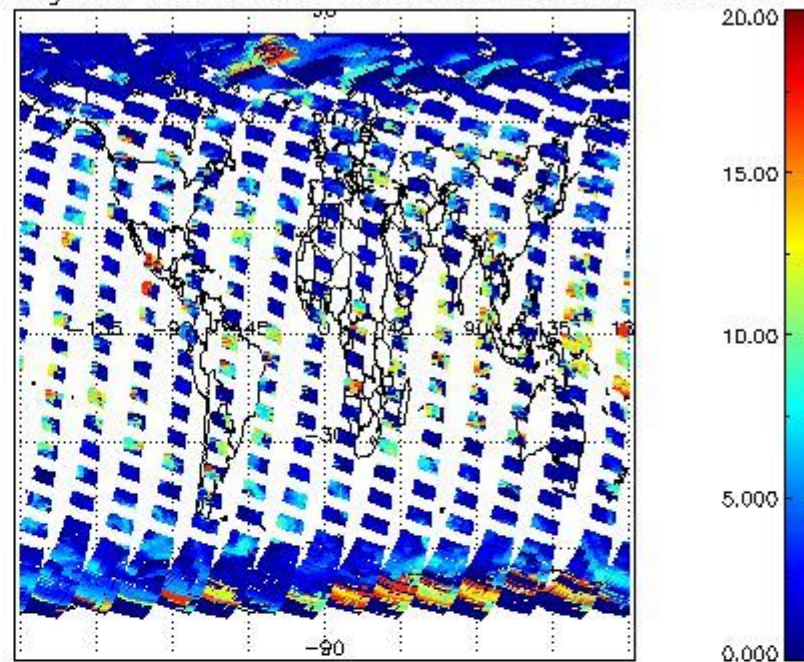
Plots are available for the following parameters:

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

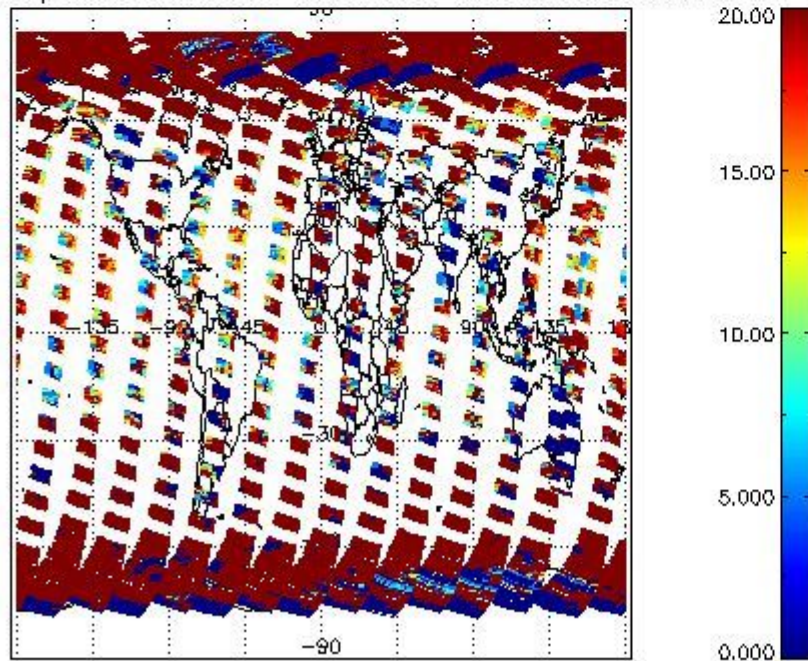
cL_frac for 07APR2004 00:00:00 to 08APR2004 00:00:00



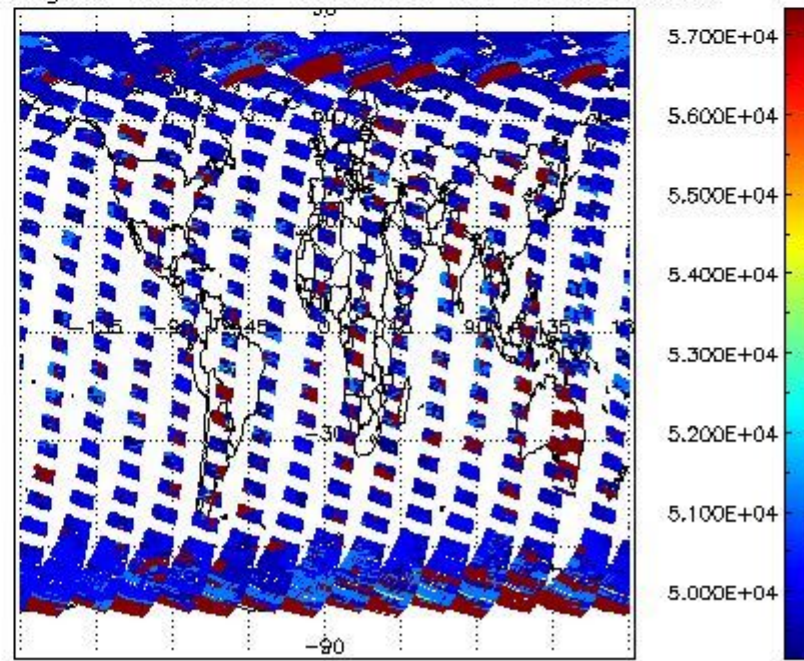
cL_top_height for 07APR2004 00:00:00 to 08APR2004 00:00:00



cL_opt_depth for 07APR2004 00:00:00 to 08APR2004 00:00:00



cloud_flags for 07APR2004 00:00:00 to 08APR2004 00:00:00



2.2.2 Nadir

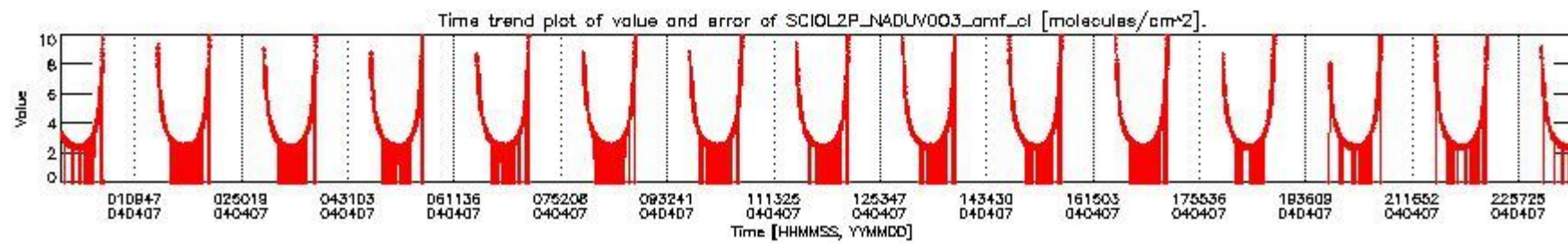
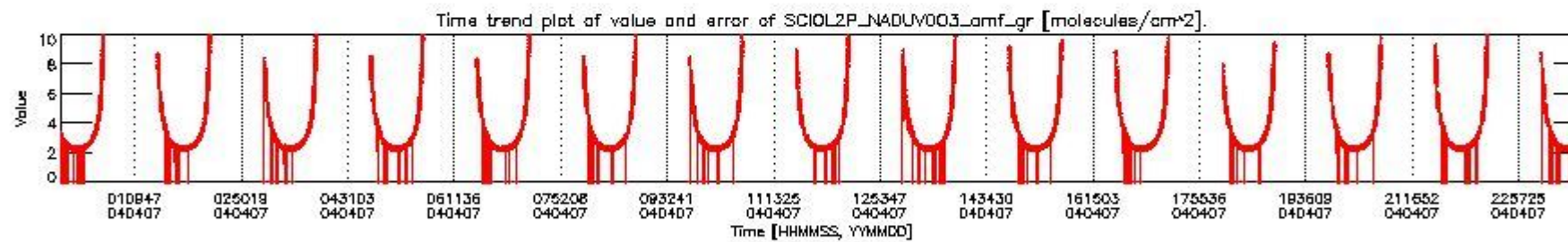
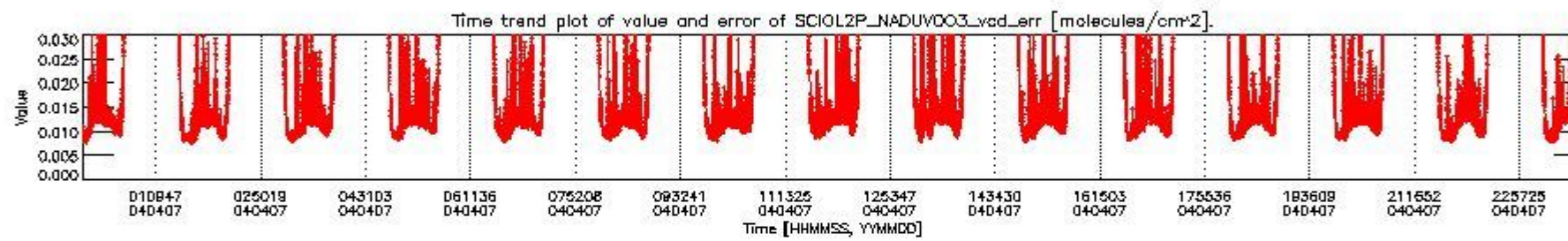
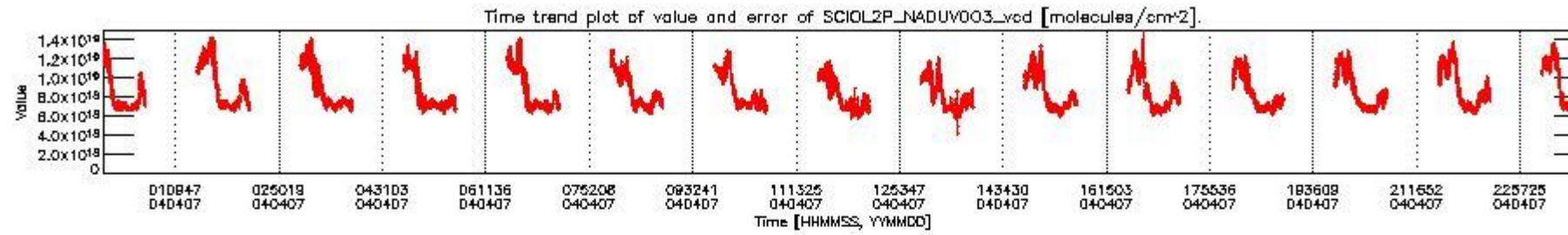
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

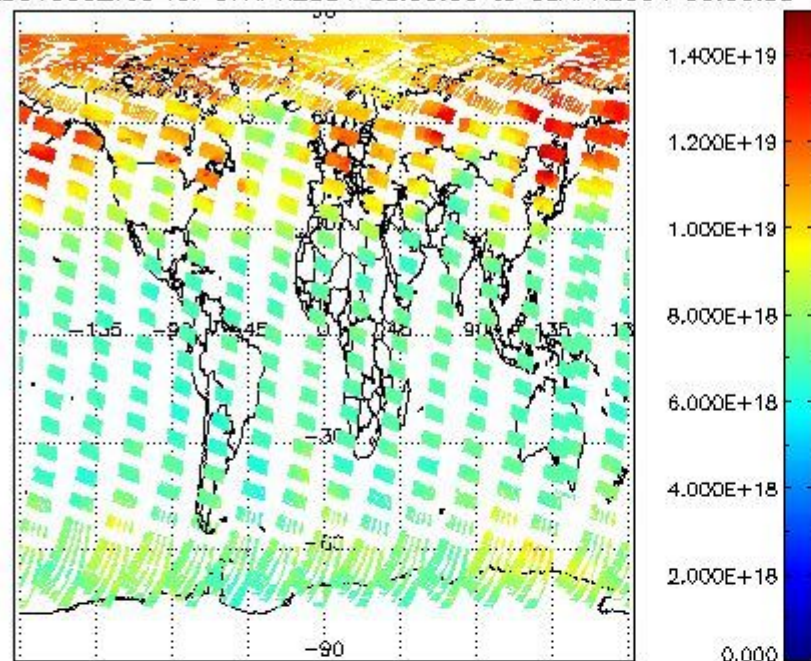
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

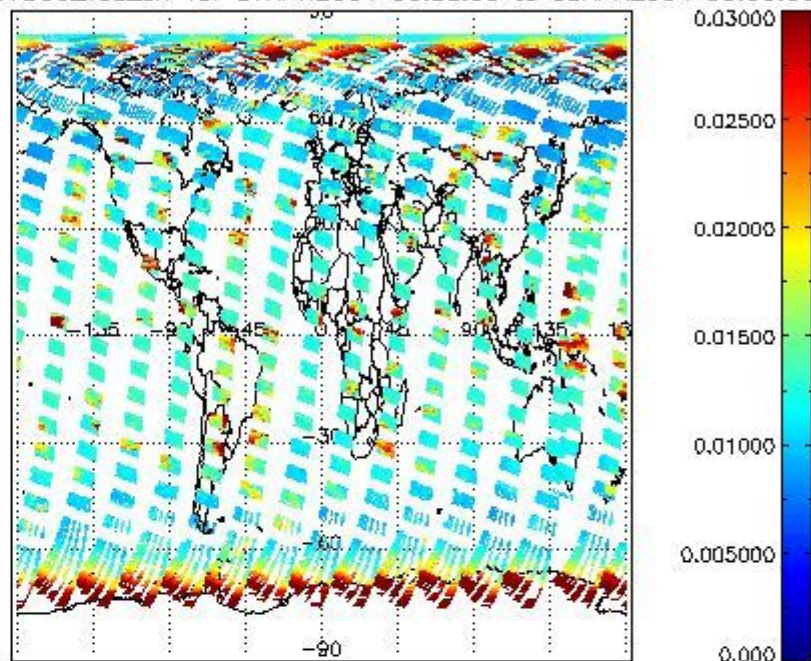
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



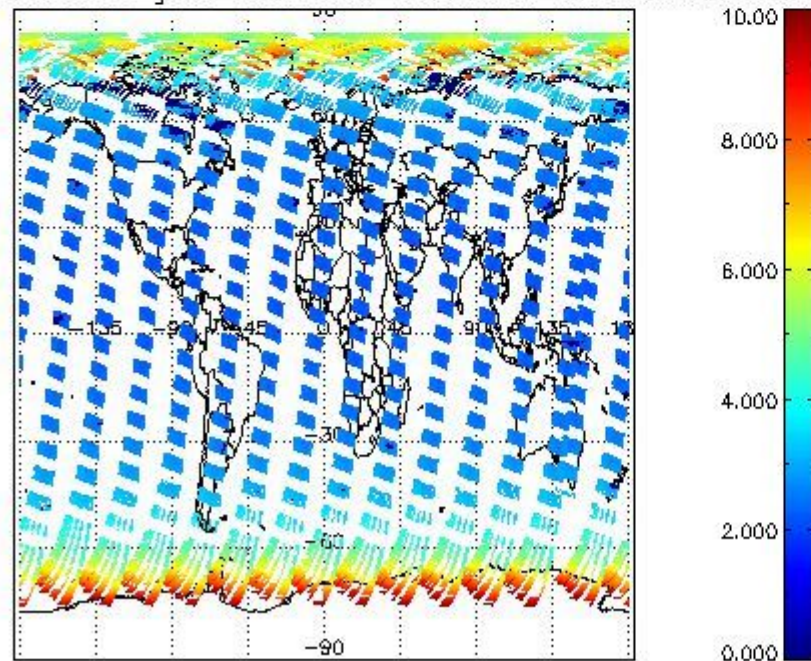
SCIOL2P_NADUV003_vcd for 07APR2004 00:00:00 to 08APR2004 00:00:00



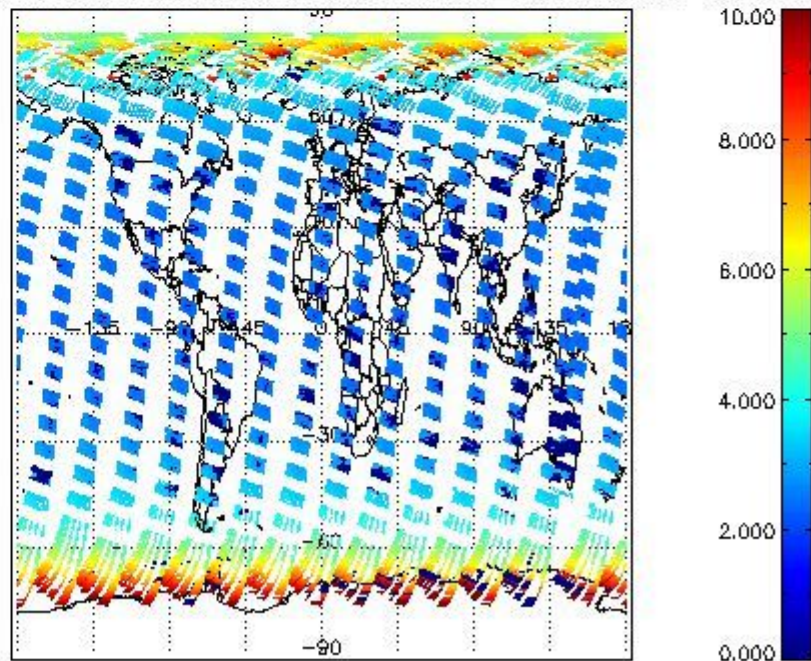
SCIOL2P_NADUV003_vcd_err for 07APR2004 00:00:00 to 08APR2004 00:00:00

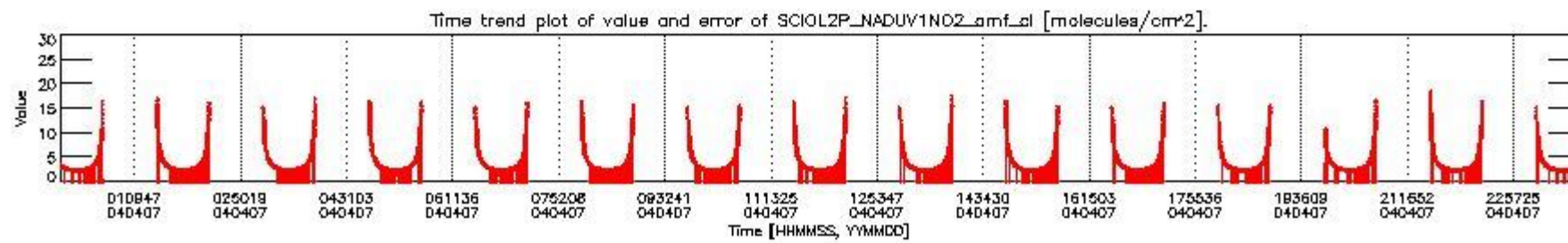
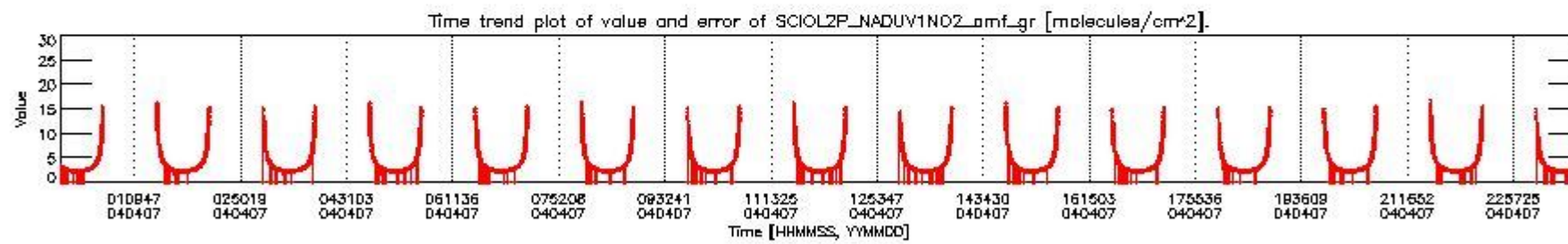
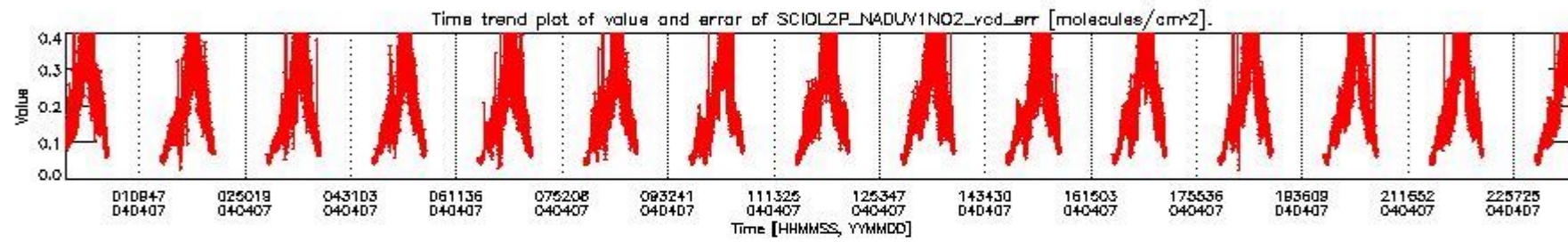
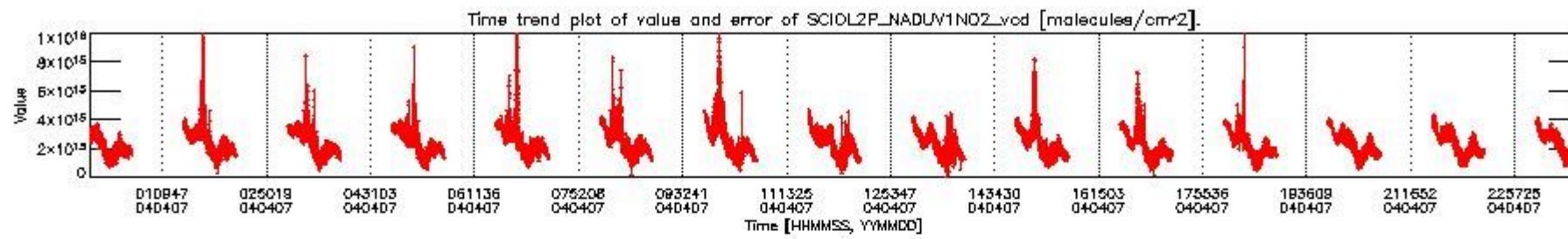


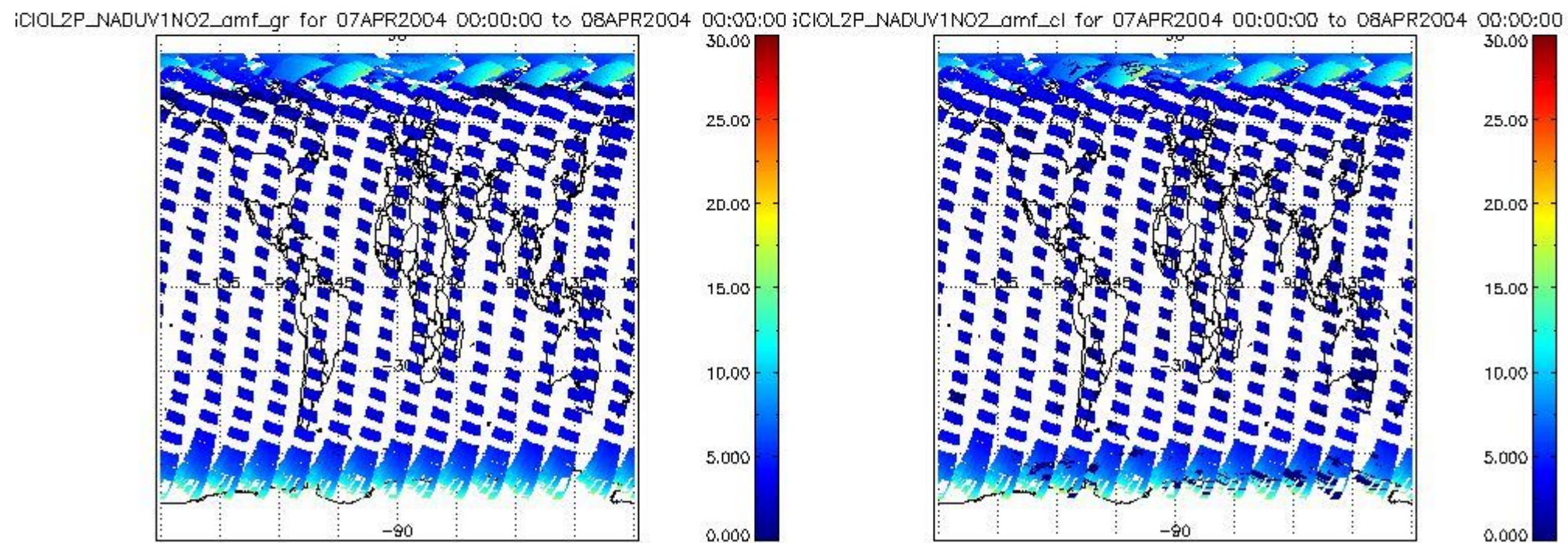
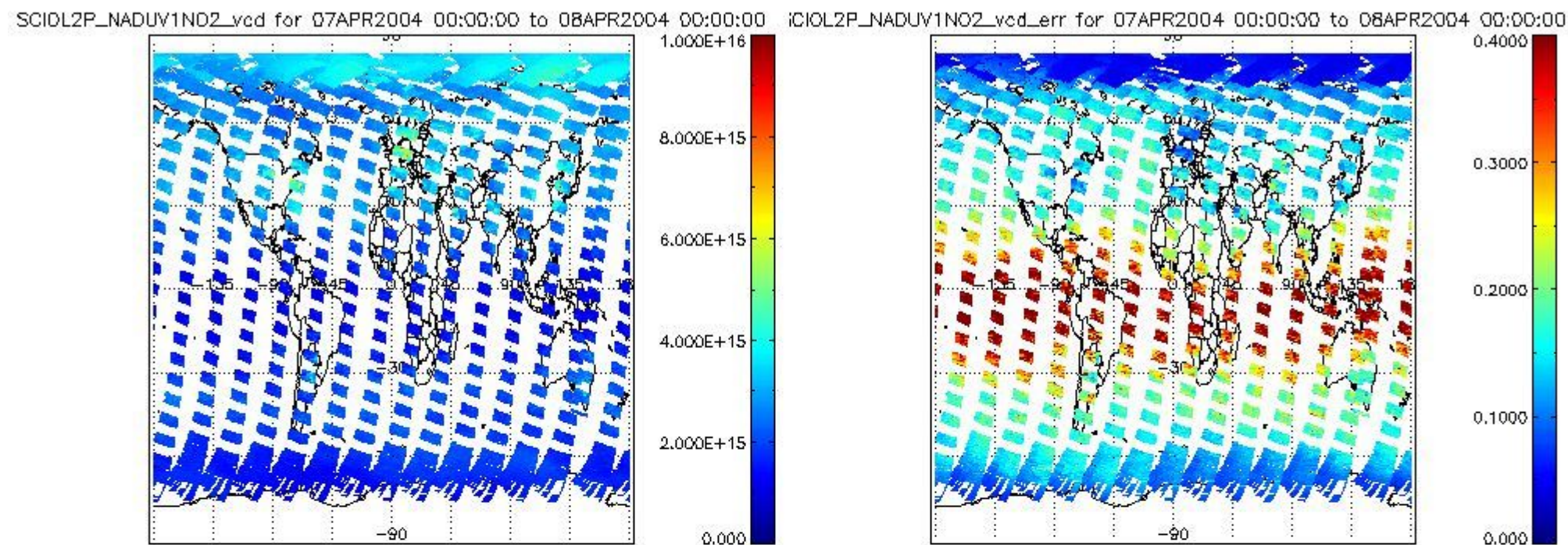
SCIOL2P_NADUV003_amf_gr for 07APR2004 00:00:00 to 08APR2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 07APR2004 00:00:00 to 08APR2004 00:00:00







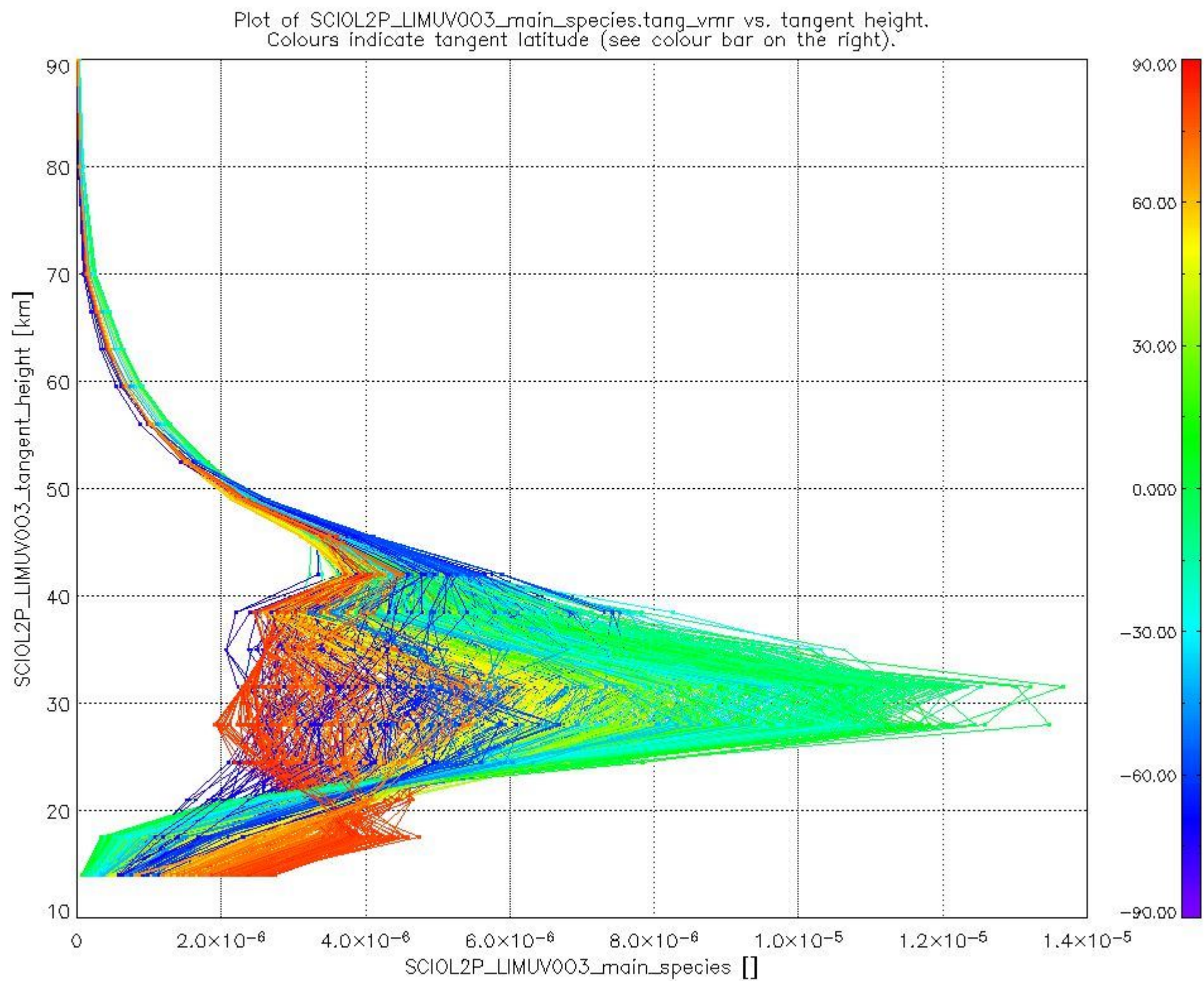
2.2.3 Limb

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

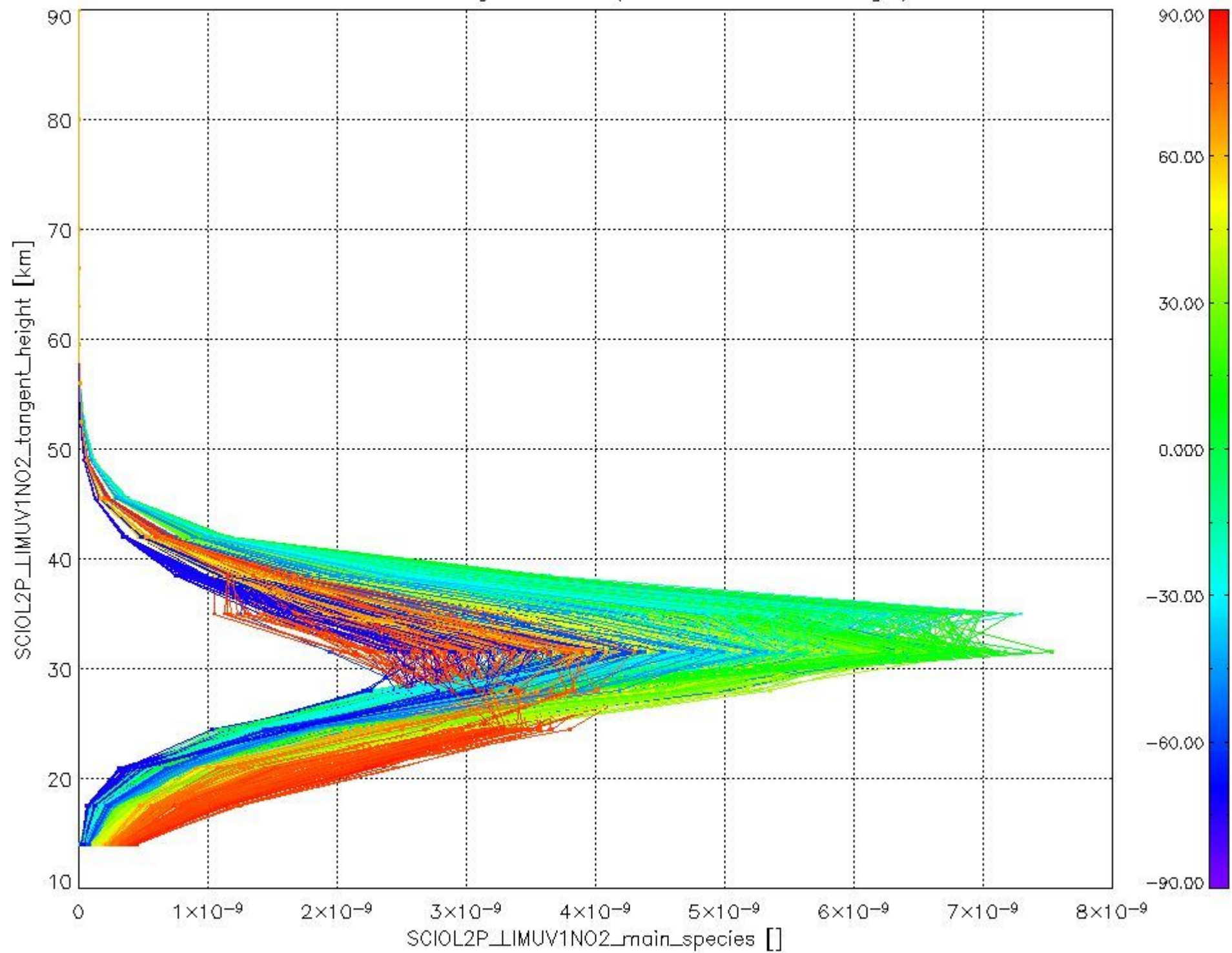
The following data items are currently included into this section:

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.



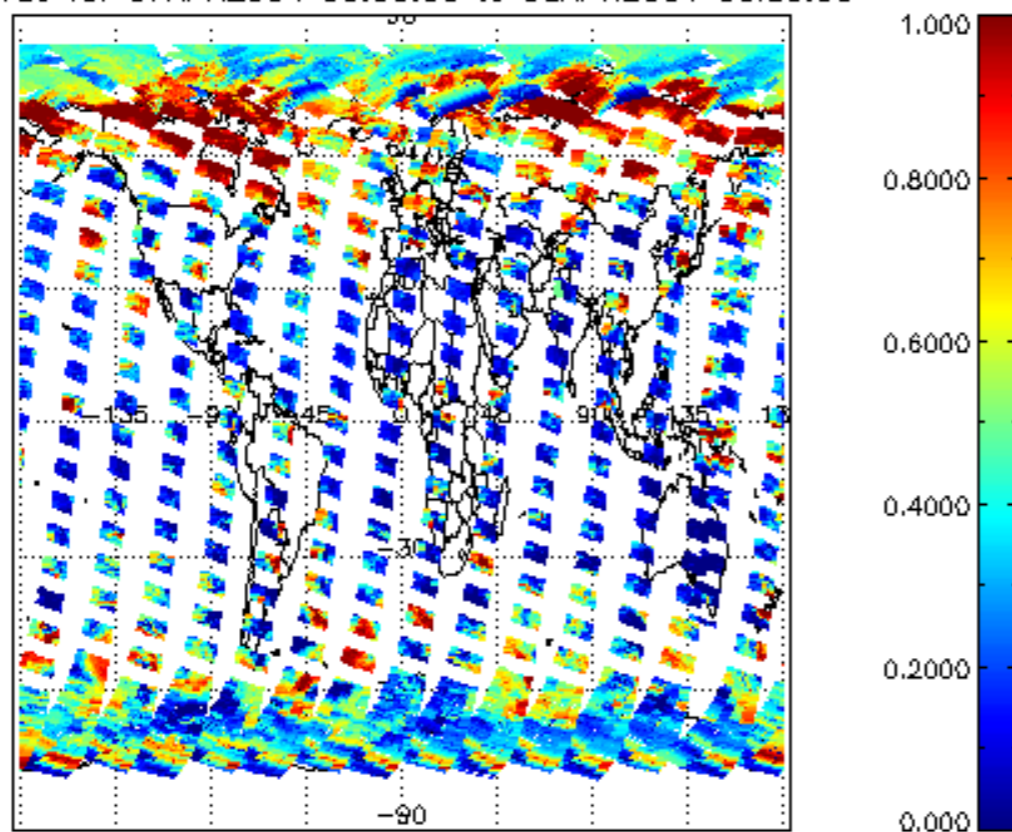
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



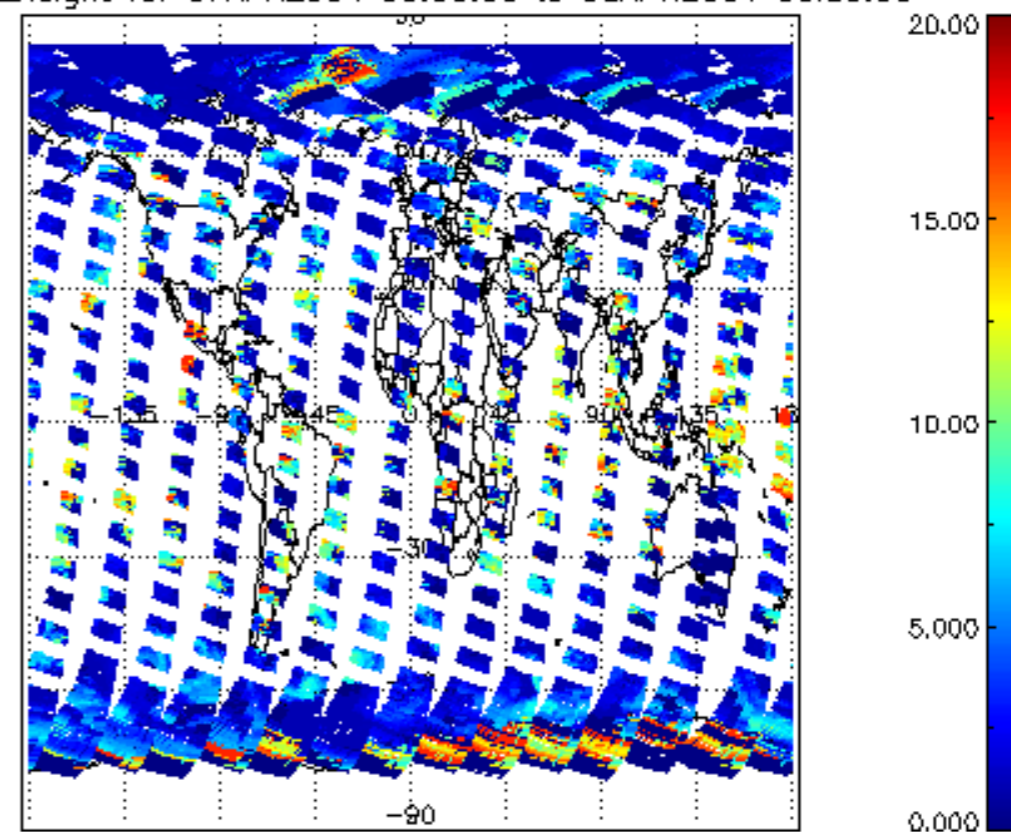
2.3 ADF monitoring

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

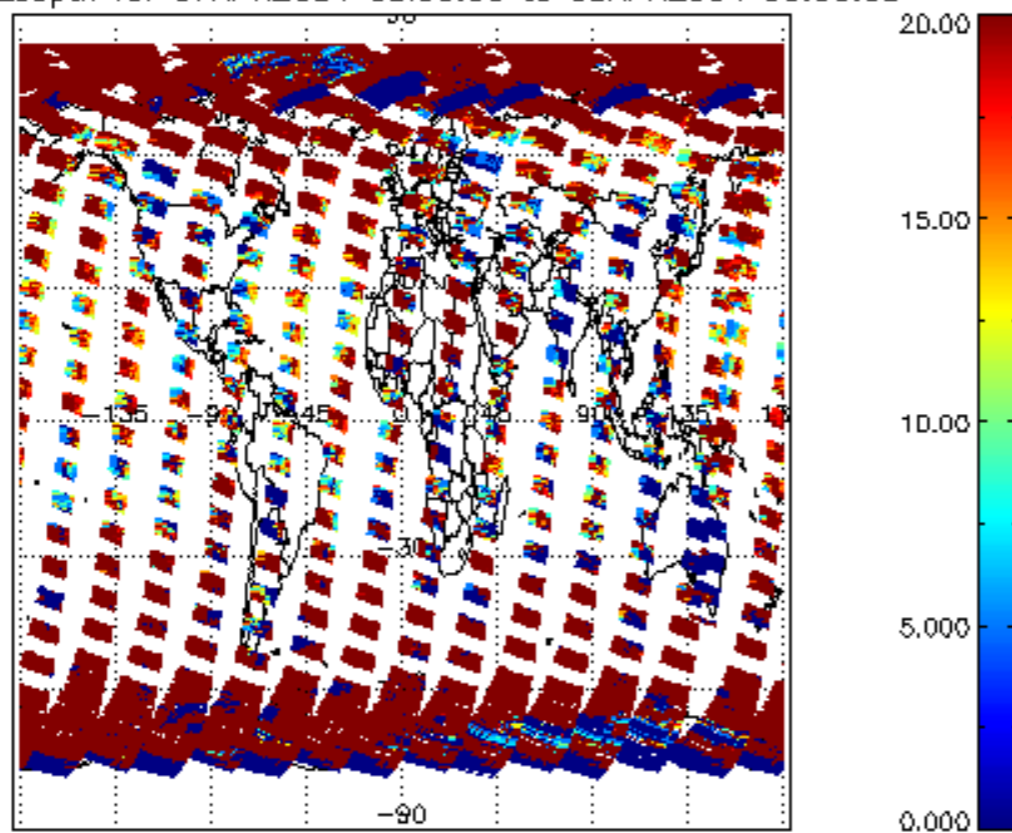
cL_frac for 07APR2004 00:00:00 to 08APR2004 00:00:00



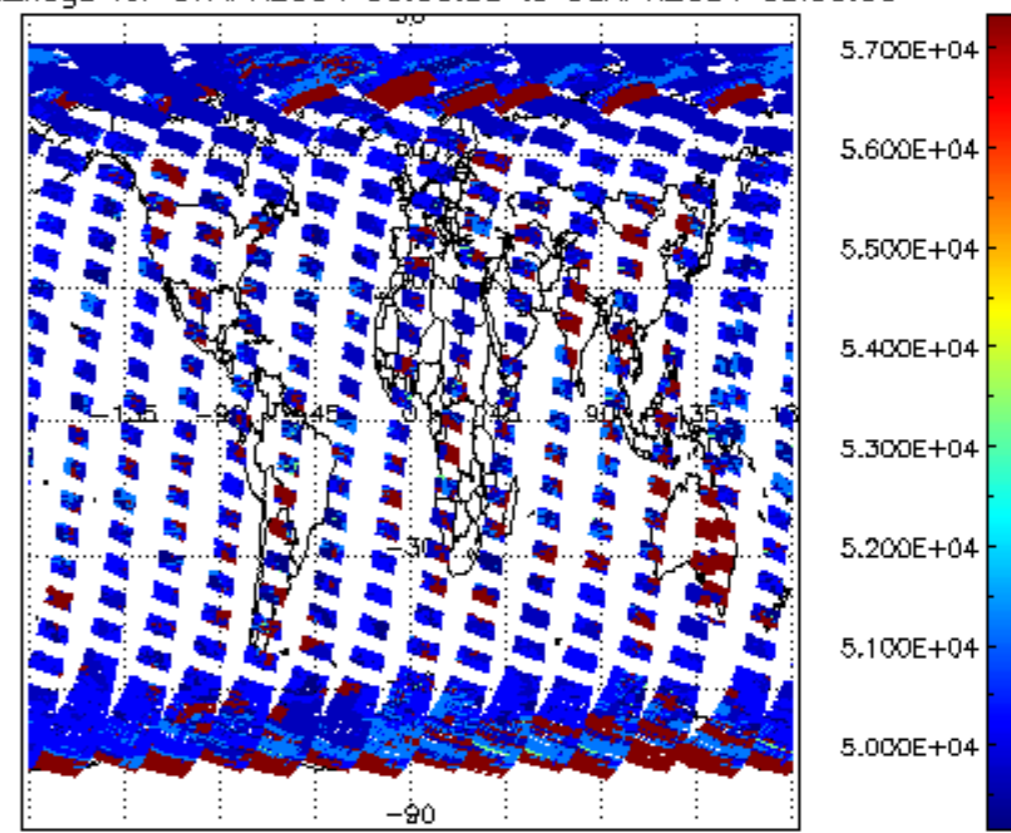
cL_top_height for 07APR2004 00:00:00 to 08APR2004 00:00:00

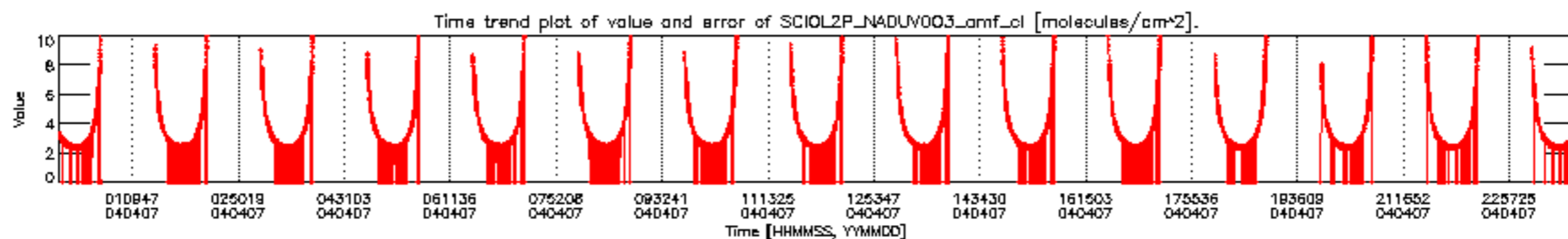
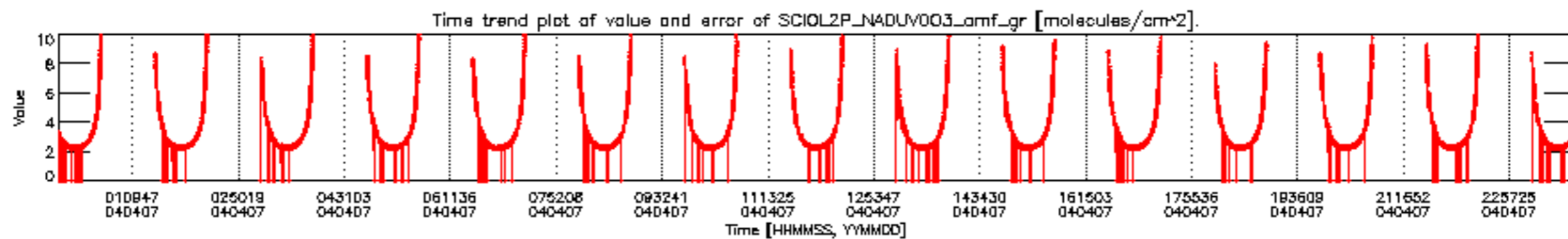
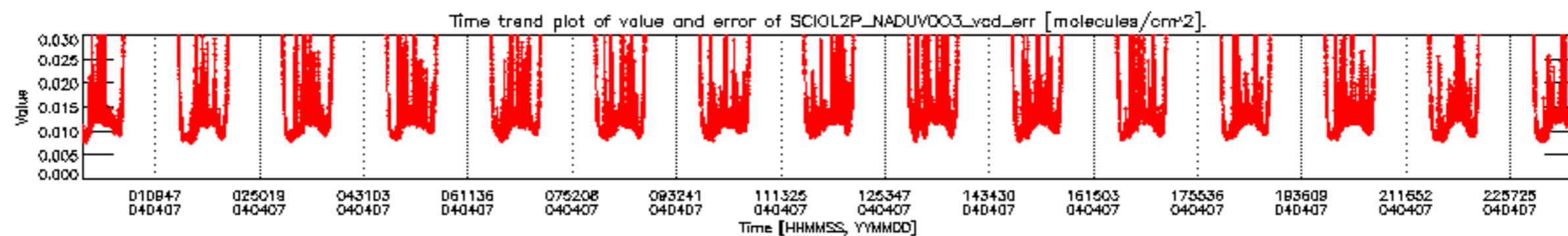
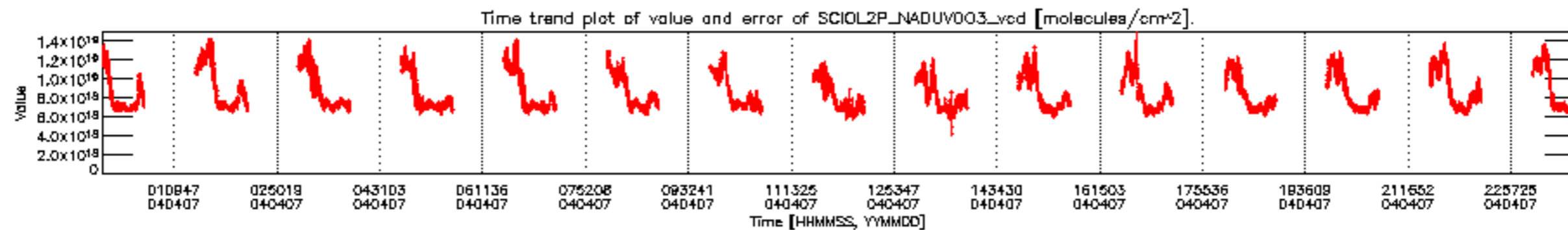


cL_opt_depth for 07APR2004 00:00:00 to 08APR2004 00:00:00

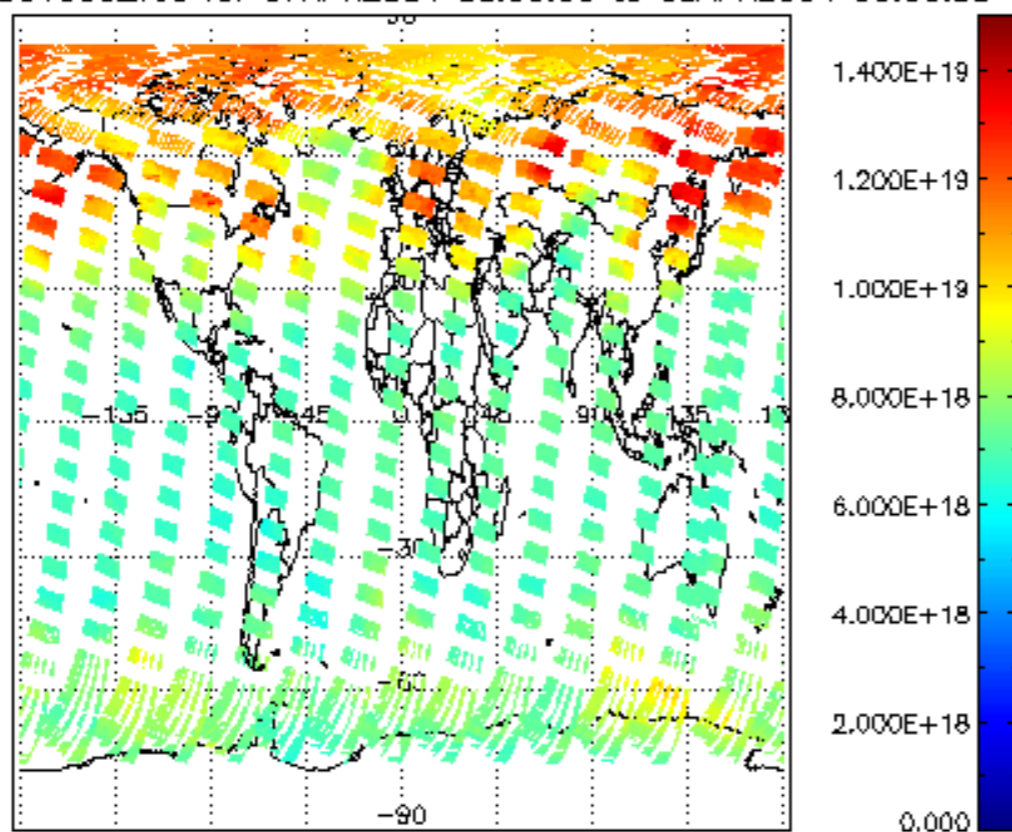


cloud_flags for 07APR2004 00:00:00 to 08APR2004 00:00:00

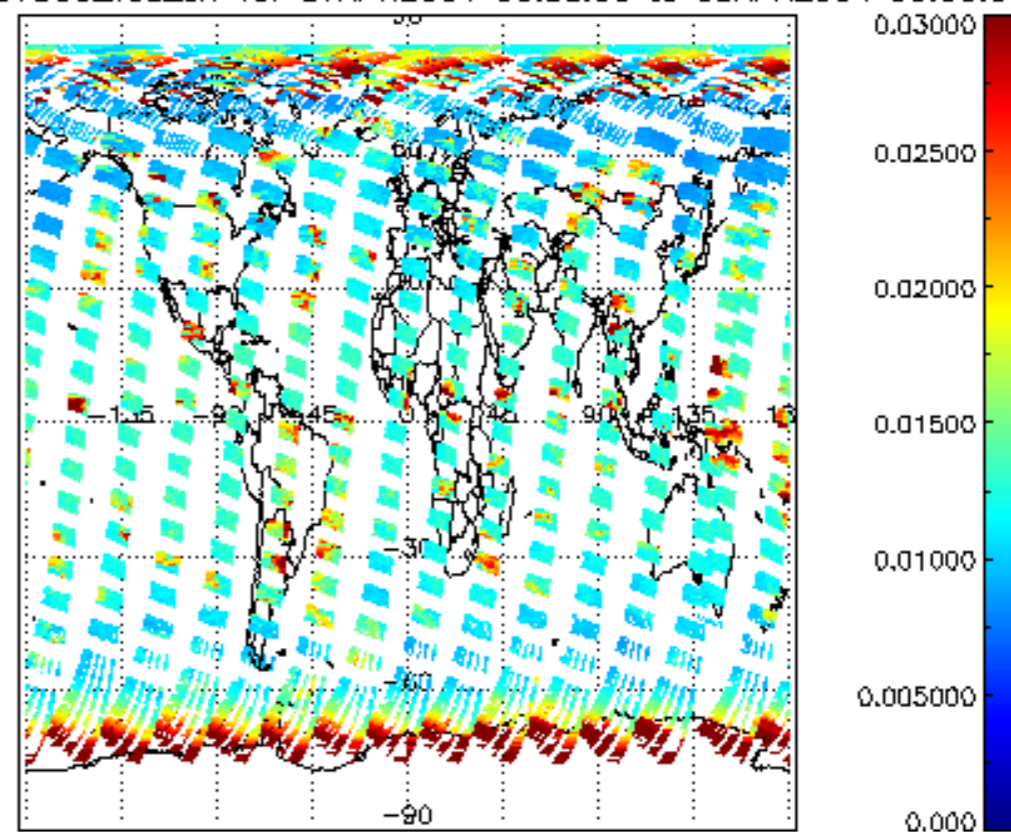




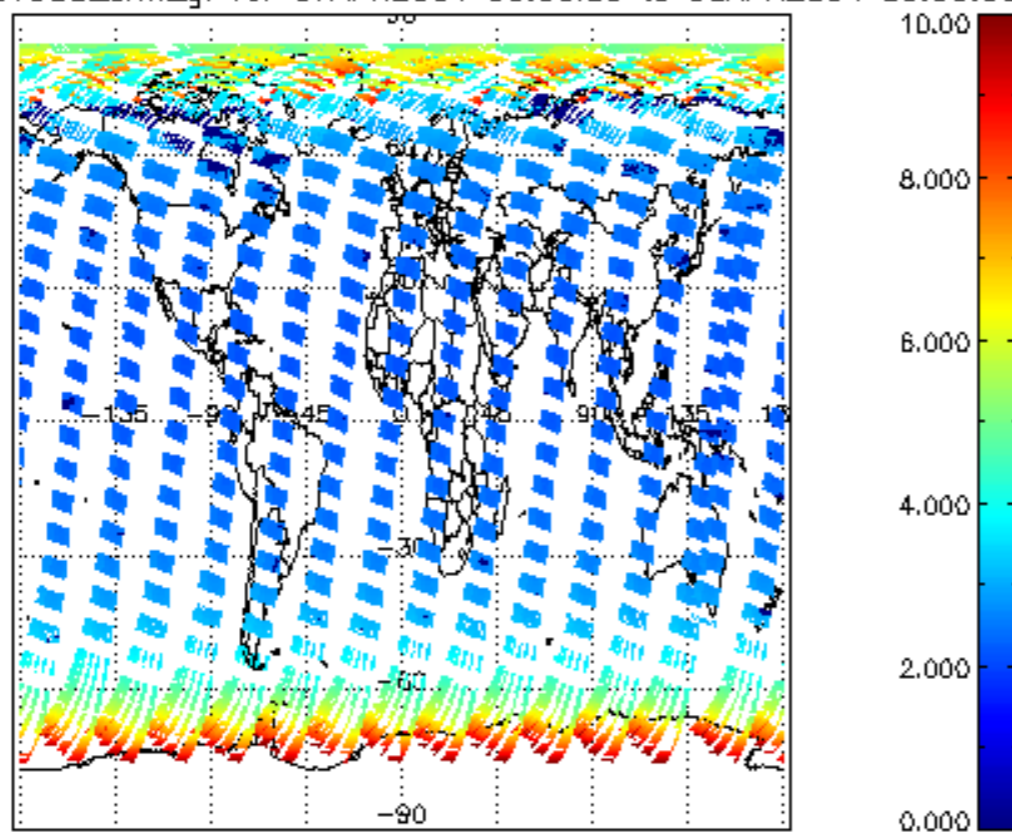
SCIOL2P_NADUV003_vcd for 07APR2004 00:00:00 to 08APR2004 00:00:00



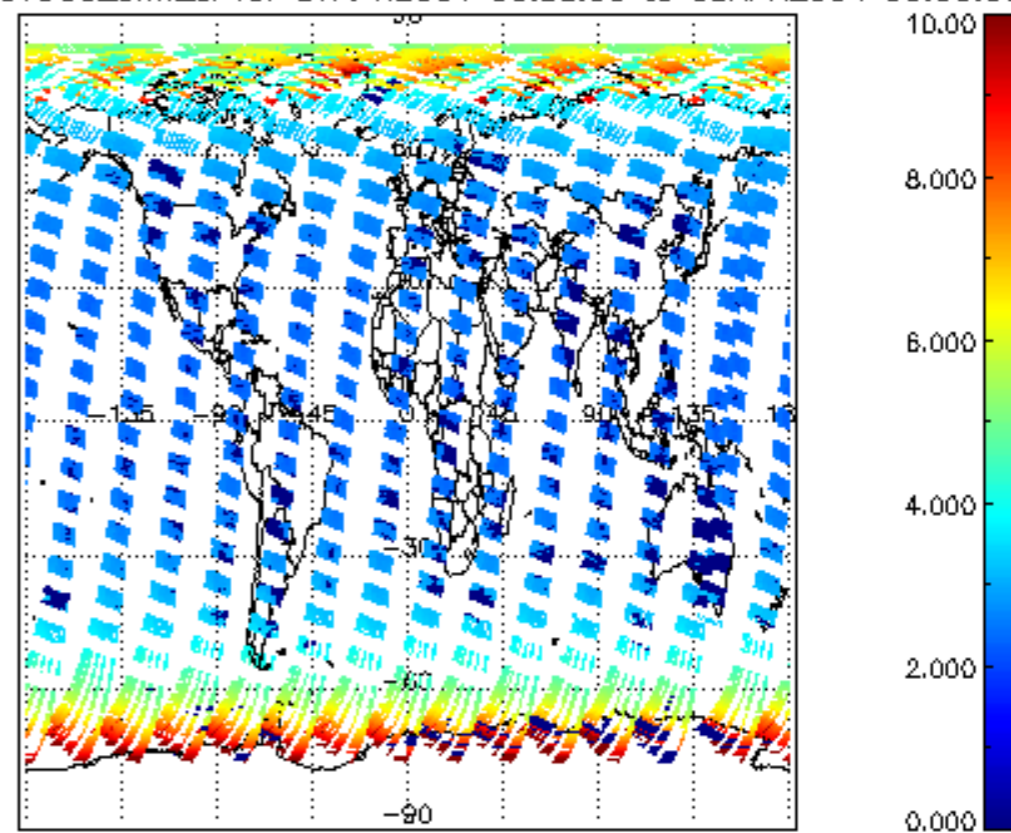
SCIOL2P_NADUV003_vcd_err for 07APR2004 00:00:00 to 08APR2004 00:00:00

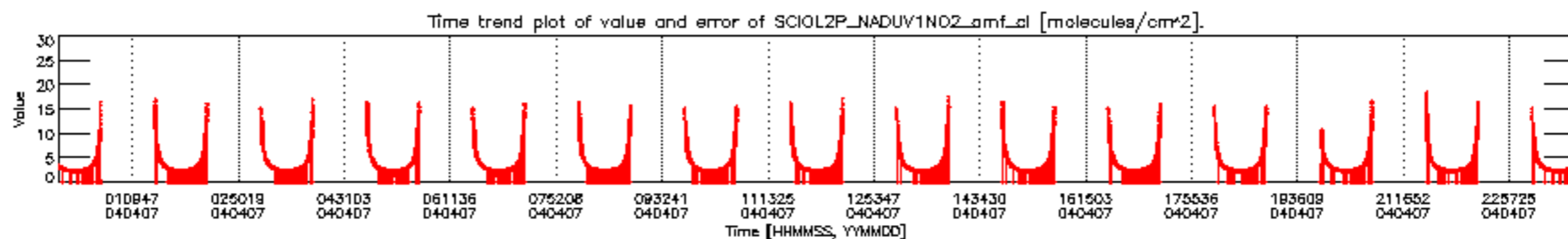
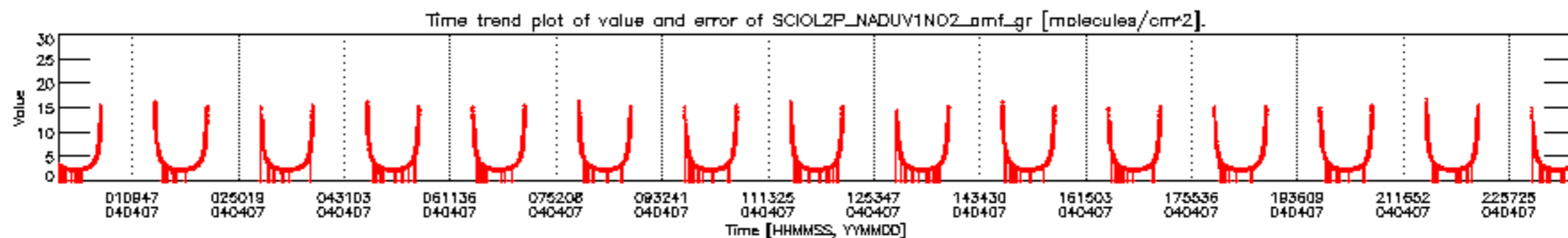
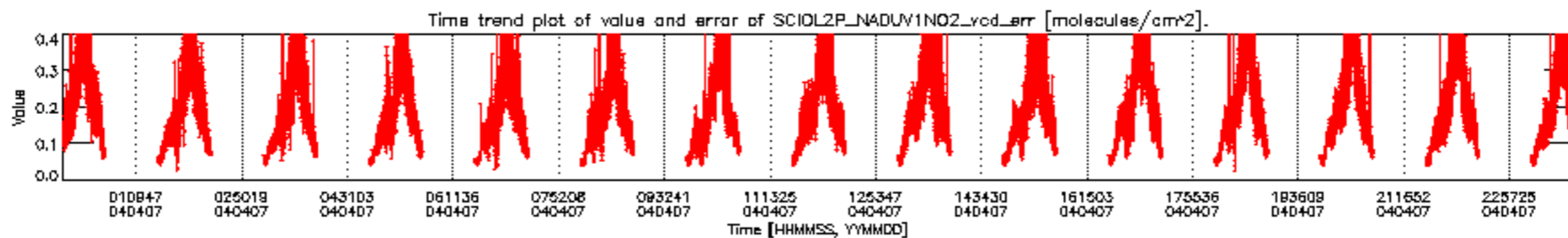
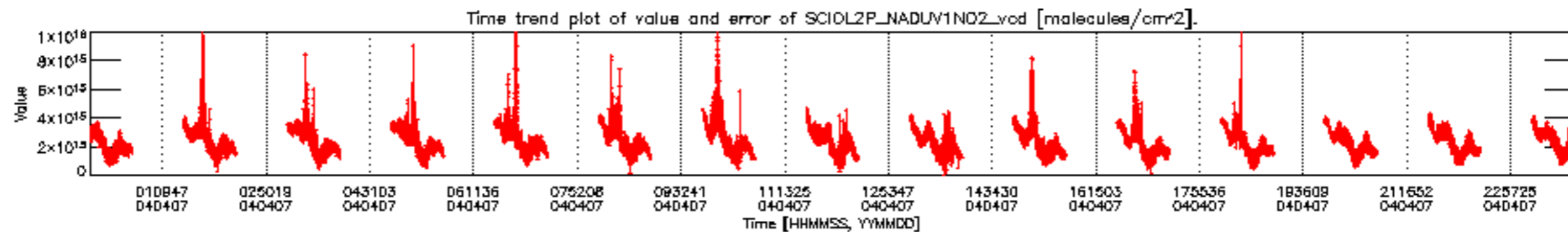


SCIOL2P_NADUV003_amf_gr for 07APR2004 00:00:00 to 08APR2004 00:00:00

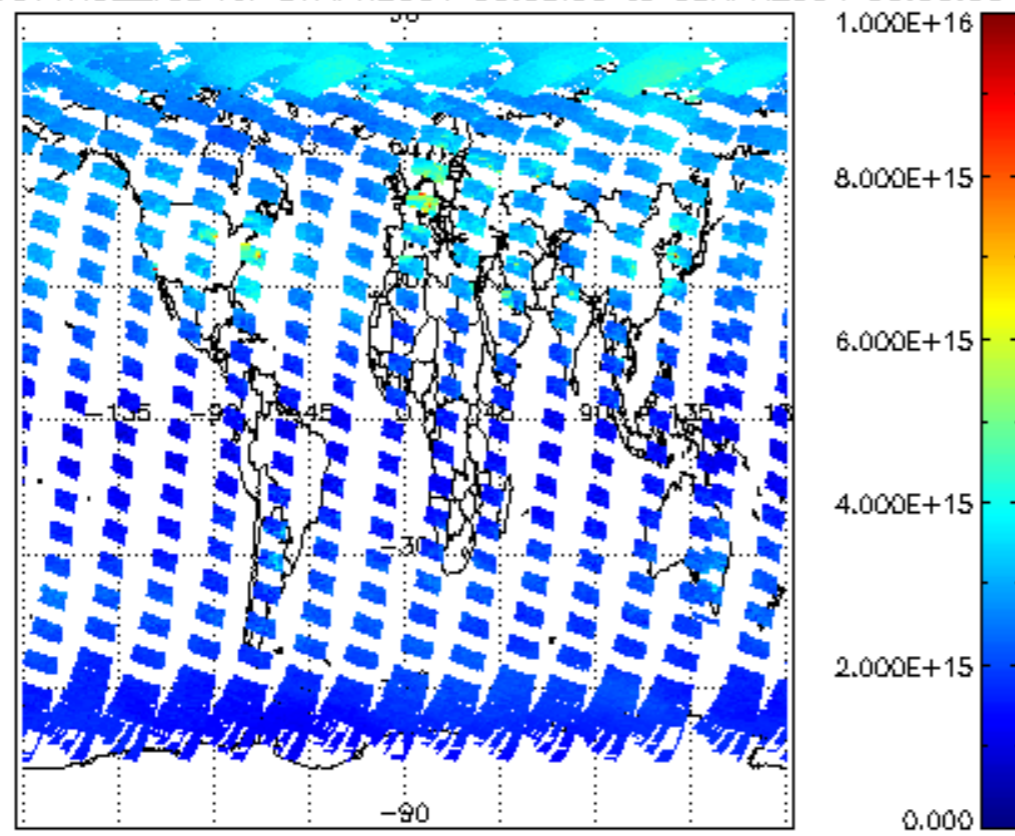


SCIOL2P_NADUV003_amf_cl for 07APR2004 00:00:00 to 08APR2004 00:00:00

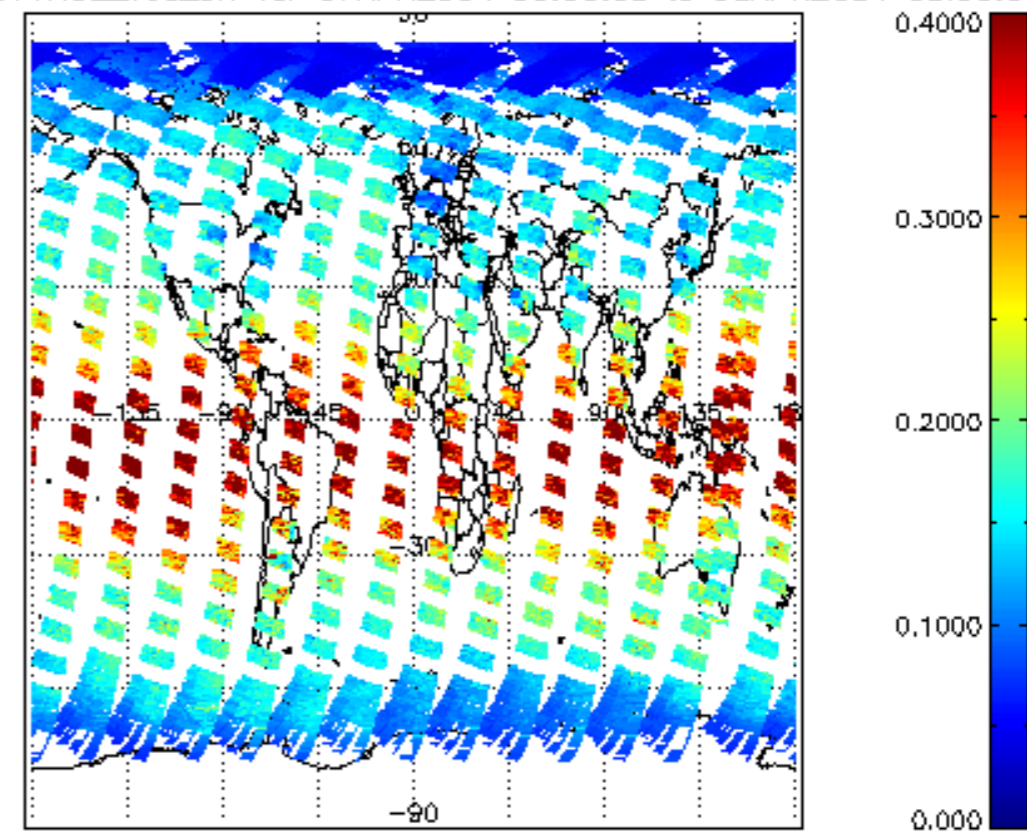




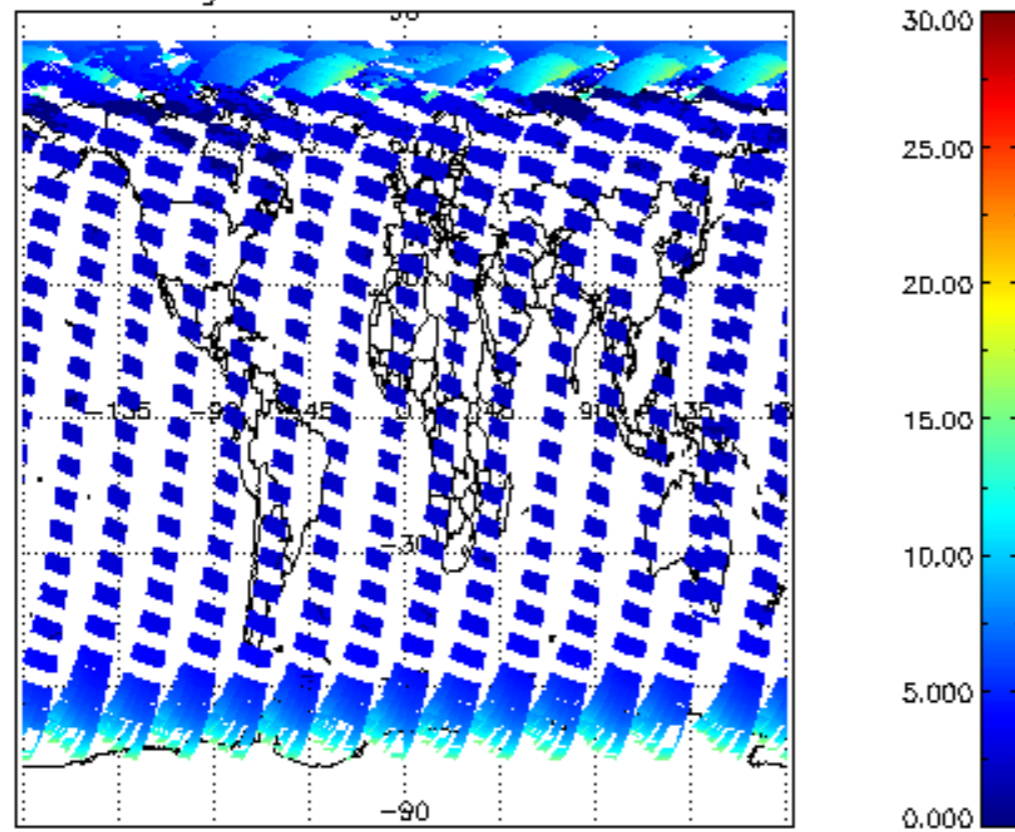
SCIOL2P_NADUV1NO2_vcd for 07APR2004 00:00:00 to 08APR2004 00:00:00



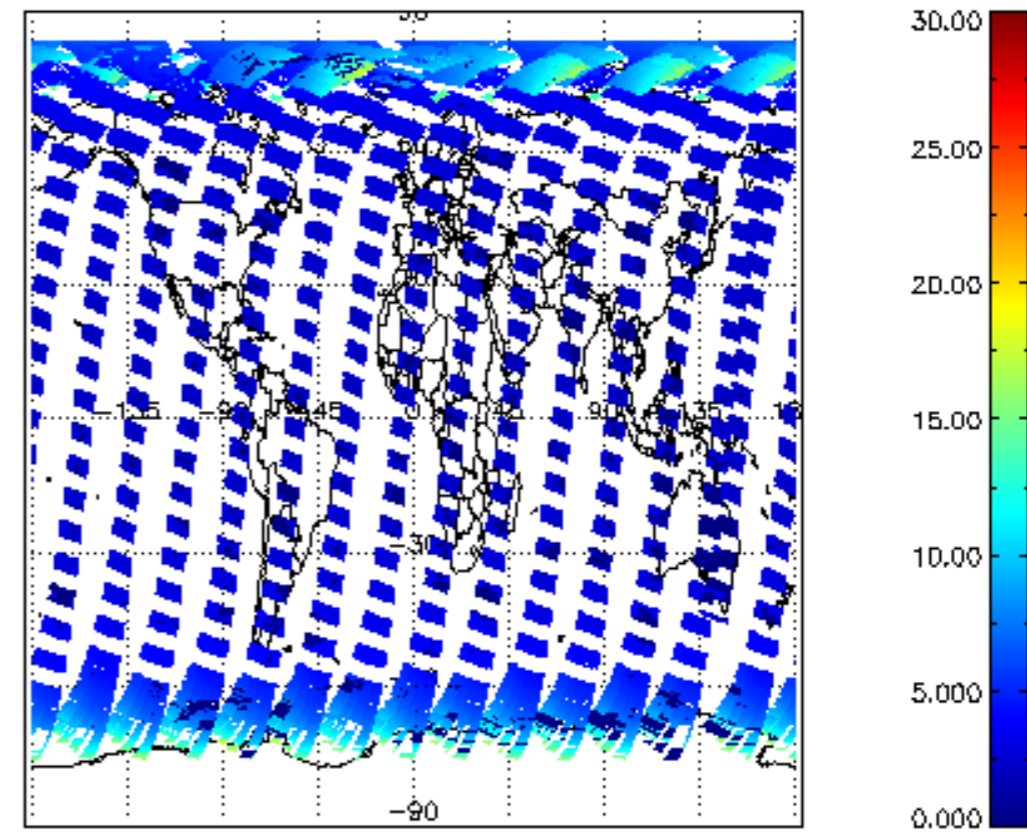
iCIOL2P_NADUV1NO2_vcd_err for 07APR2004 00:00:00 to 08APR2004 00:00:00



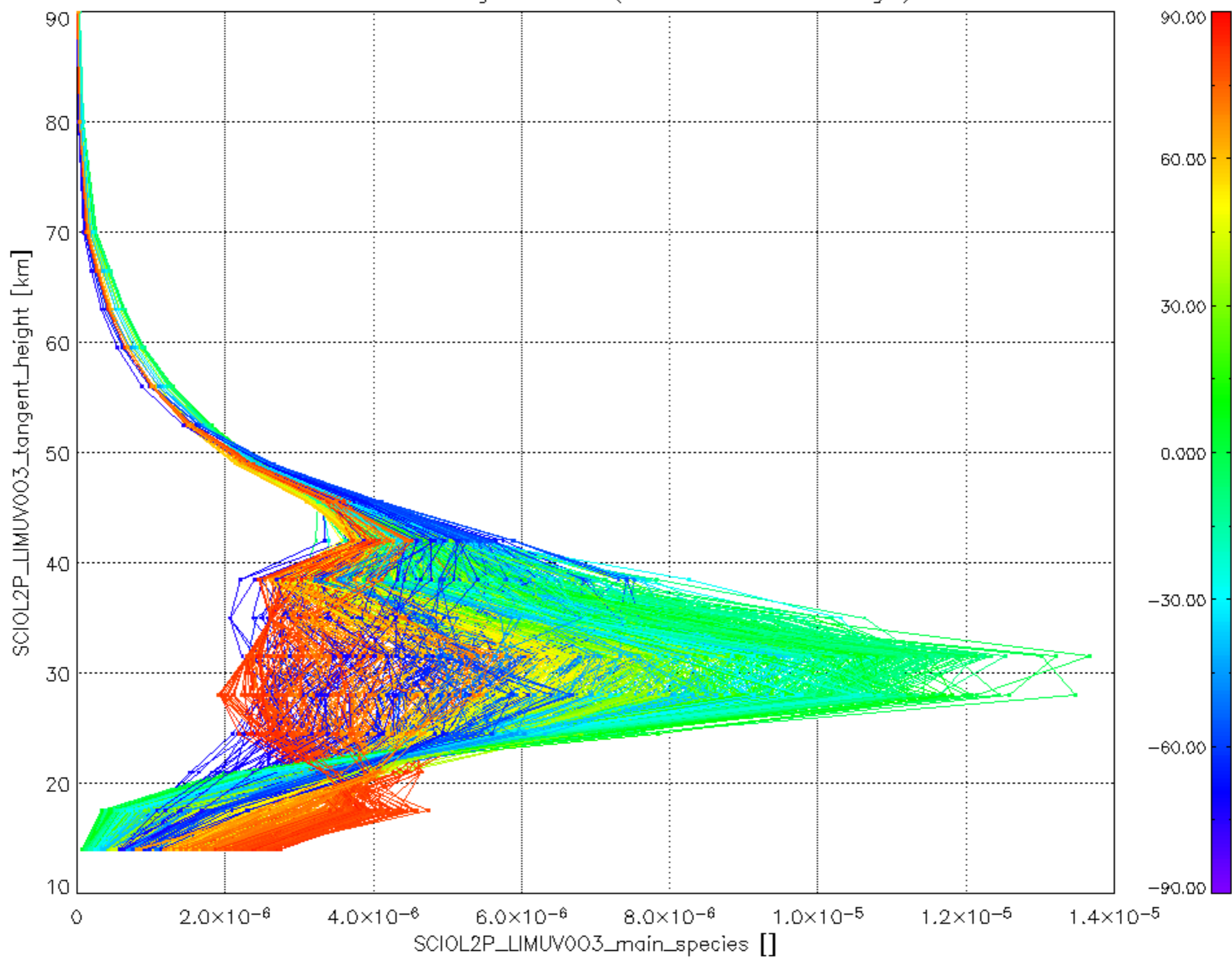
iCIOL2P_NADUV1NO2_amf_gr for 07APR2004 00:00:00 to 08APR2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 07APR2004 00:00:00 to 08APR2004 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).

