

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	13AUG2008 14:21:09
Data source version	SCIA-OL/3.01-R
Processing scope for products	16APR2004 00:00:00 to 17APR2004 00:00:00
Start time of first product within scope	16APR2004 00:01:38
Stop time of last product within scope	17APR2004 00:25:21
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__2PRDPA20040416_000138_000033252026_00045_11121_7252.N1	16APR2004 00:01:38	16APR2004 00:57:03	0	GOOD
1	SCI_OL__2PRDPA20040416_014213_000033812026_00046_11122_7445.N1	16APR2004 01:42:13	16APR2004 02:38:34	0	GOOD
2	SCI_OL__2PRDPA20040416_032249_000033252026_00047_11123_7298.N1	16APR2004 03:22:49	16APR2004 04:18:14	0	GOOD
3	SCI_OL__2PRDPA20040416_050324_000033812026_00048_11124_7428.N1	16APR2004 05:03:24	16APR2004 05:59:46	0	GOOD
4	SCI_OL__2PRDPA20040416_064400_000033252026_00049_11125_7387.N1	16APR2004 06:44:00	16APR2004 07:39:25	0	GOOD
5	SCI_OL__2PRDPA20040416_082435_000033812026_00050_11126_7423.N1	16APR2004 08:24:35	16APR2004 09:20:57	0	GOOD
6	SCI_OL__2PRDPA20040416_100511_000033252026_00051_11127_7558.N1	16APR2004 10:05:11	16APR2004 11:00:36	0	GOOD
7	SCI_OL__2PRDPA20040416_114546_000033812026_00052_11128_7399.N1	16APR2004 11:45:46	16APR2004 12:42:08	0	GOOD
8	SCI_OL__2PRDPA20040416_132622_000033252026_00053_11129_7530.N1	16APR2004 13:26:22	16APR2004 14:21:47	0	GOOD
9	SCI_OL__2PRDPA20040416_150657_000033812026_00054_11130_7529.N1	16APR2004 15:06:57	16APR2004 16:03:19	0	GOOD
10	SCI_OL__2PRDPA20040416_164733_000033252026_00055_11131_7465.N1	16APR2004 16:47:33	16APR2004 17:42:58	0	GOOD
11	SCI_OL__2PRDPA20040416_182802_000033752026_00056_11132_7330.N1	16APR2004 18:28:02	16APR2004 19:24:17	0	GOOD
12	SCI_OL__2PRDPA20040416_200904_000033252026_00057_11133_7447.N1	16APR2004 20:09:04	16APR2004 21:04:29	0	GOOD
13	SCI_OL__2PRDPA20040416_214920_000033812026_00058_11134_7436.N1	16APR2004 21:49:20	16APR2004 22:45:42	0	GOOD
14	SCI_OL__2PRDPA20040416_232956_000033252026_00059_11135_7527.N1	16APR2004 23:29:56	17APR2004 00:25:21	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: 150564

Total number of cloud data DSRs with good quality flag (=0): 150564 (100.0 %)

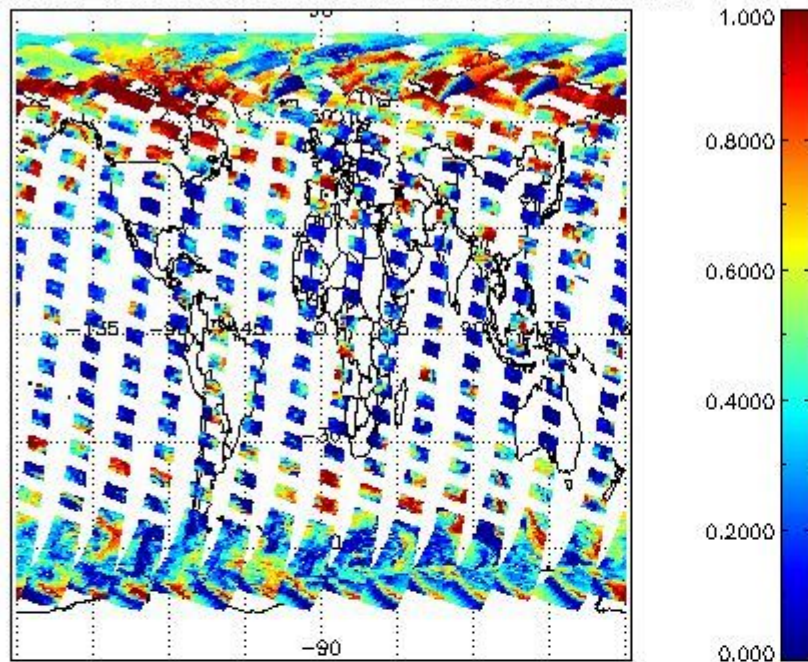
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	150564	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	150564	0.17013	0.12500	0.12500	0.25000	0.060039	s
CL_FRAC	150564	0.42755	0.40251	0.0000	1.0000	0.31036	-
CL_FRAC_ERR	150564	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	150564	5.4443	4.0000	4.0000	8.0000	1.9212	
PMD_READ_CL[0]	150564	0.45612	0.0000	0.0000	8.0000	1.4601	-
PMD_READ_CL[1]	150564	0.70140	0.0000	0.0000	8.0000	1.7803	-
CL_TOP_HEIGHT	134748	3.4066	1.5779	0.0000	17.000	3.6845	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	134748	62.934	96.956	0.0000	101.00	41.282	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	150564	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	150564	11001000	11000100	11000000	11100000	2950.5	flags
AERO_ABSO_IND	150564	0.71212	0.51210	-4.3369	9.3001	1.0436	
AERO_IND_DIAG	150564	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	150564	01010111	00000000	00000000	11000000	24476.	flags

Time and geolocation plots:

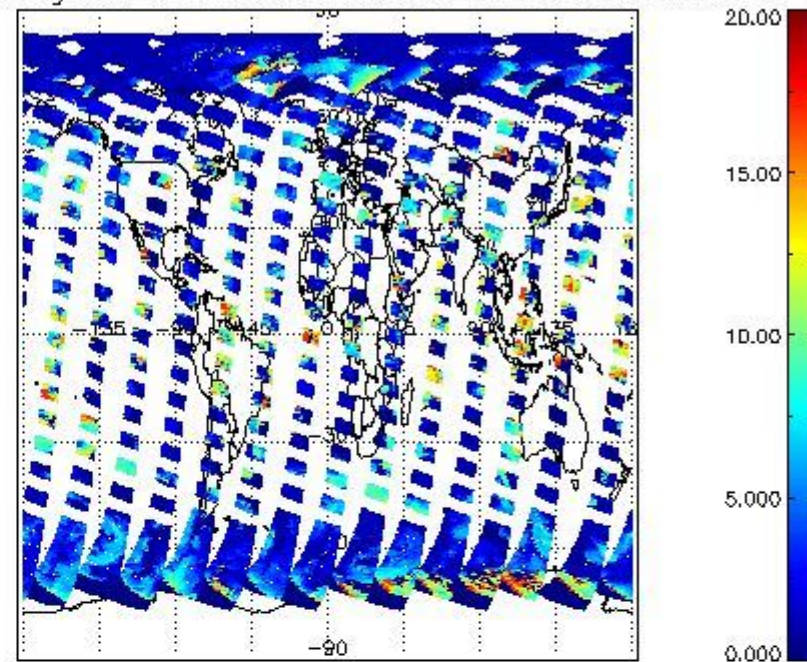
Plots are available for the following parameters:

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

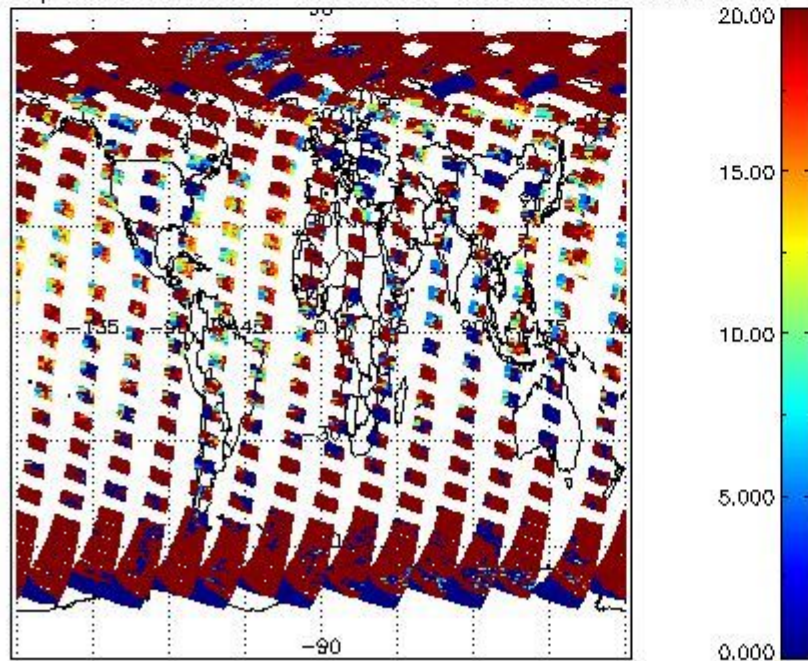
cLfrac for 16APR2004 00:00:00 to 17APR2004 00:00:00



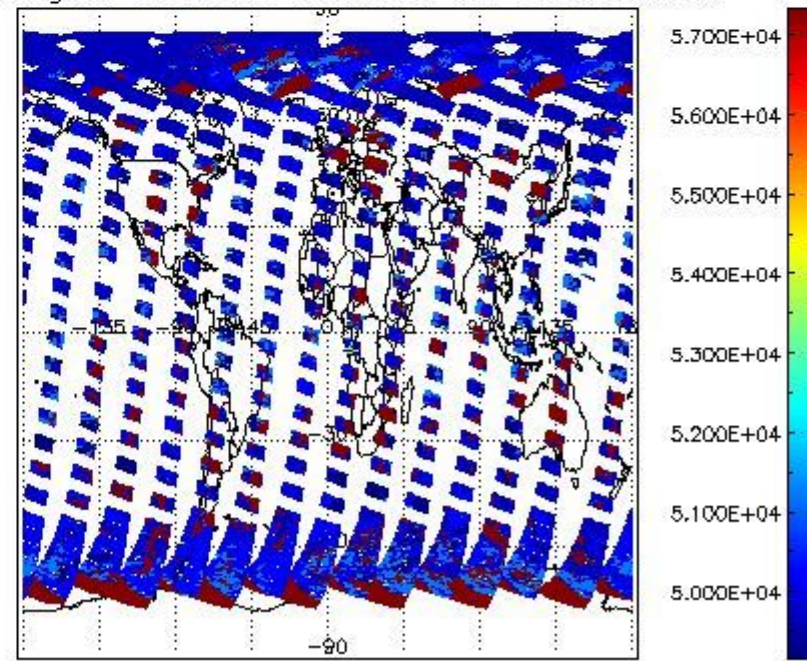
cL_top_height for 16APR2004 00:00:00 to 17APR2004 00:00:00



cLopt_depth for 16APR2004 00:00:00 to 17APR2004 00:00:00



cloud_flags for 16APR2004 00:00:00 to 17APR2004 00:00:00



2.2.2 Nadir

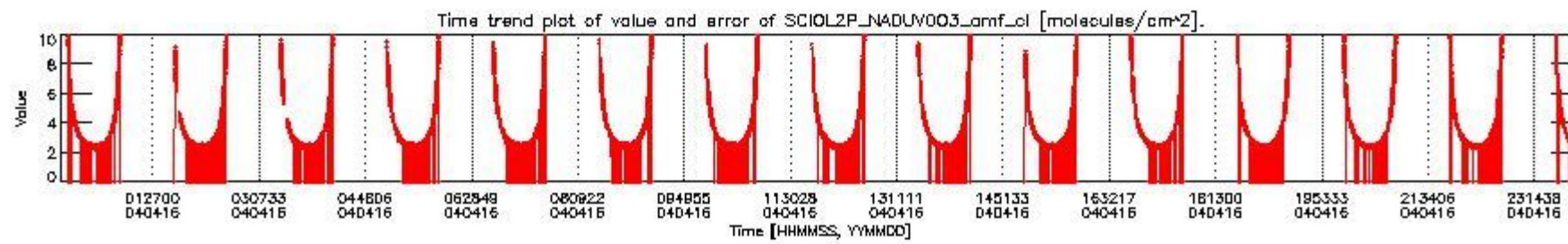
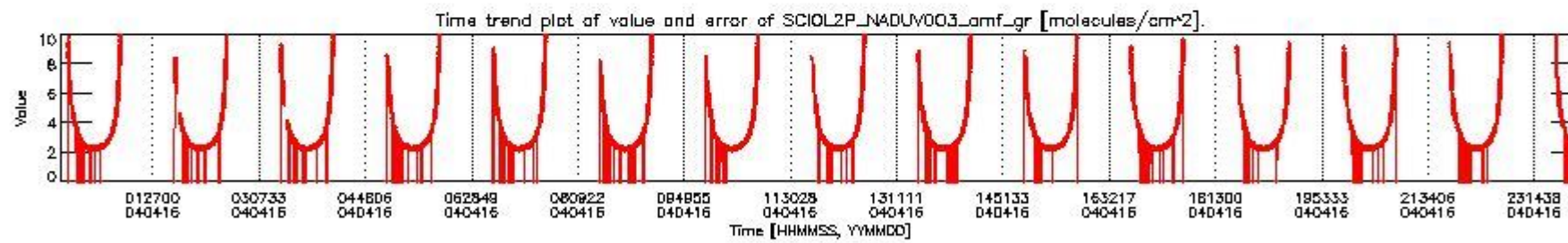
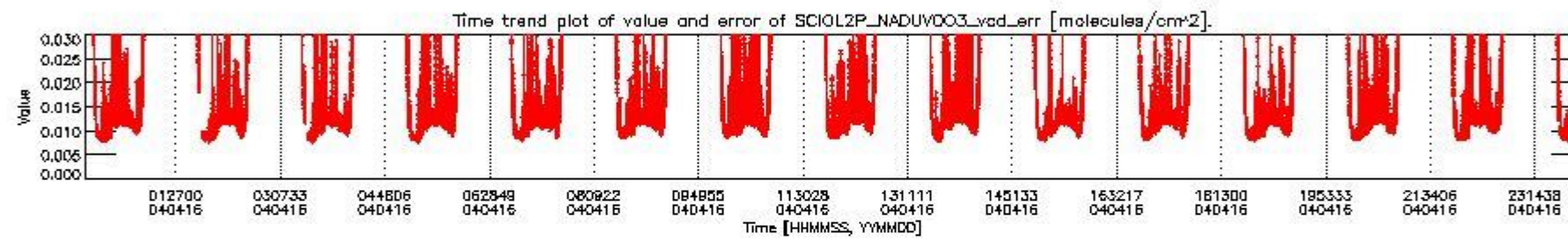
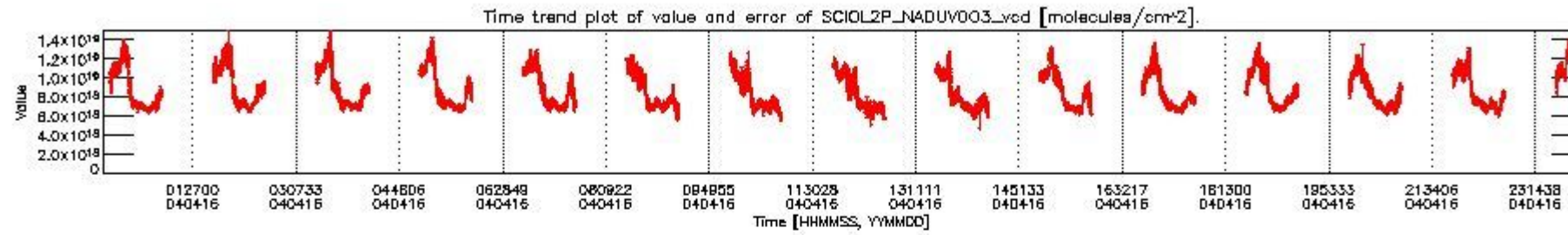
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

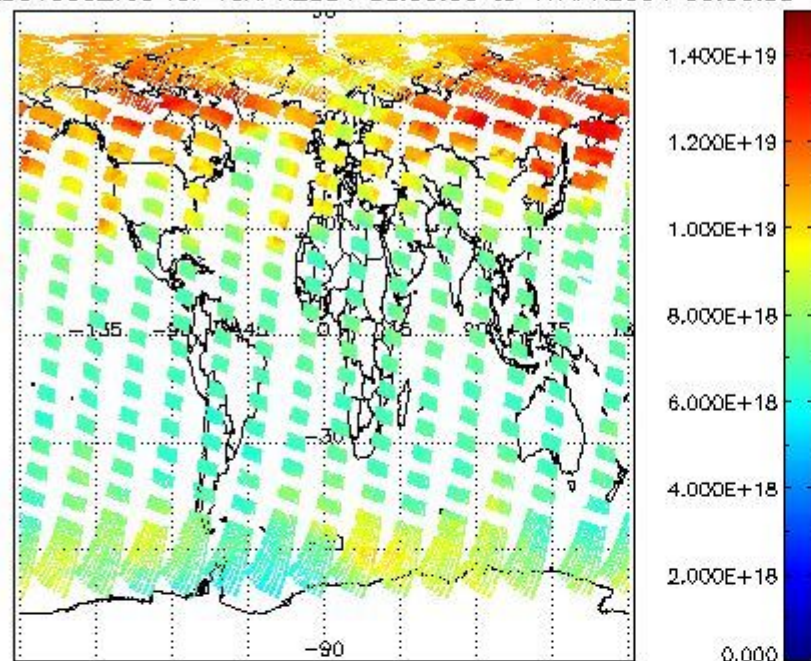
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

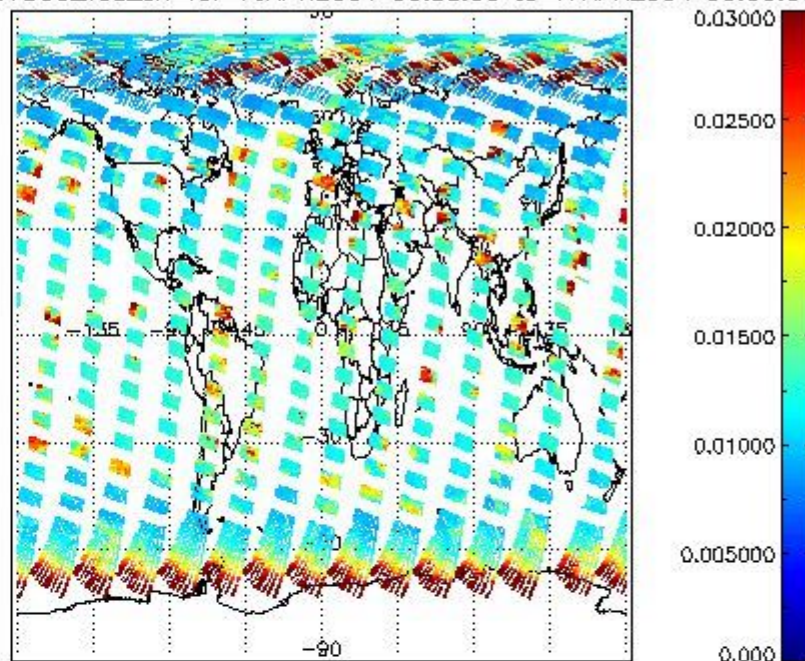
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



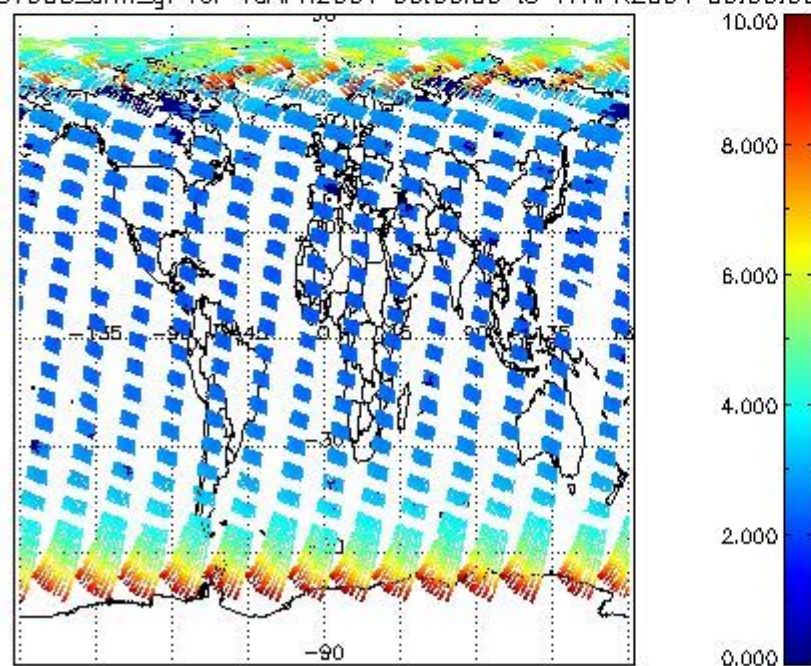
SCIOL2P_NADUV003_vcd for 16APR2004 00:00:00 to 17APR2004 00:00:00



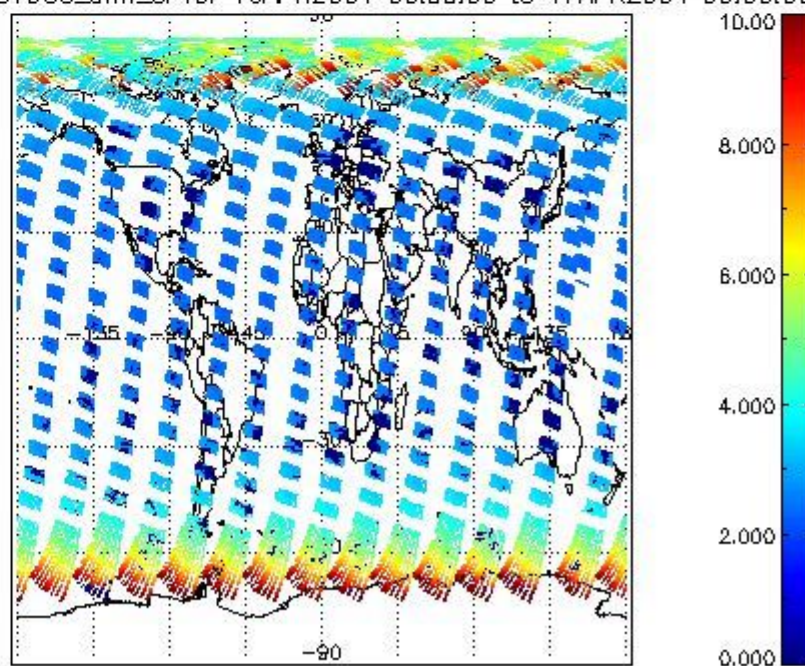
SCIOL2P_NADUV003_vcd_err for 16APR2004 00:00:00 to 17APR2004 00:00:00

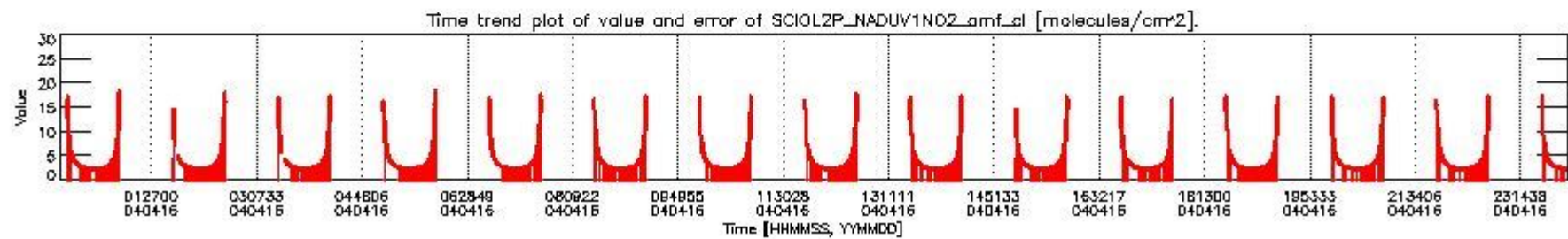
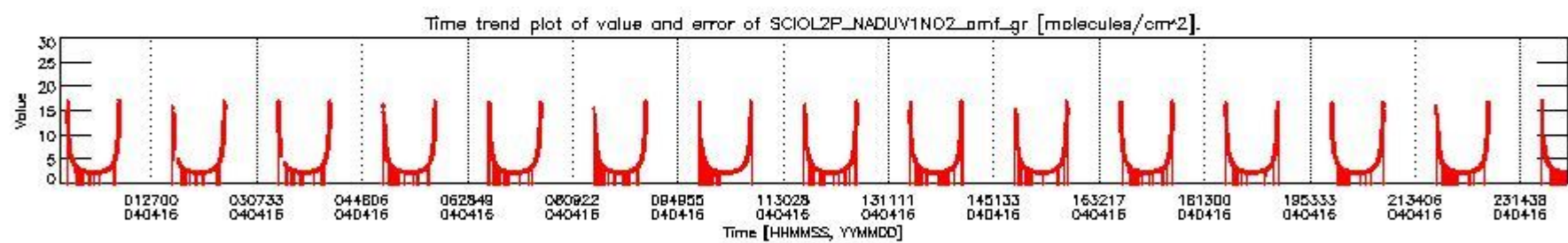
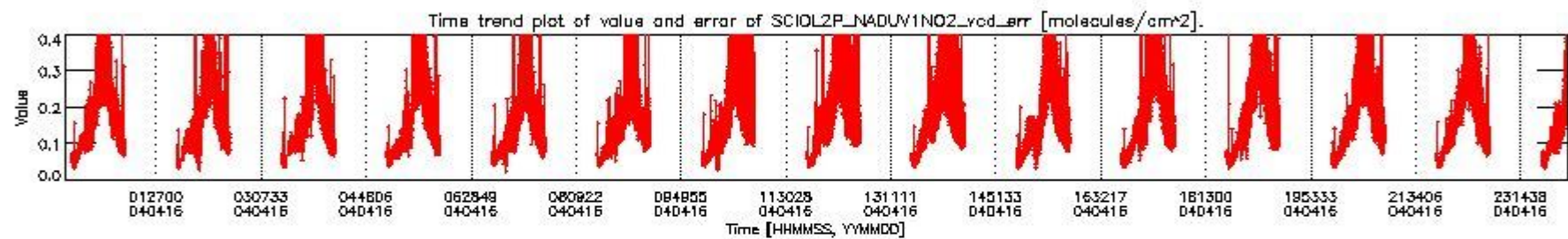
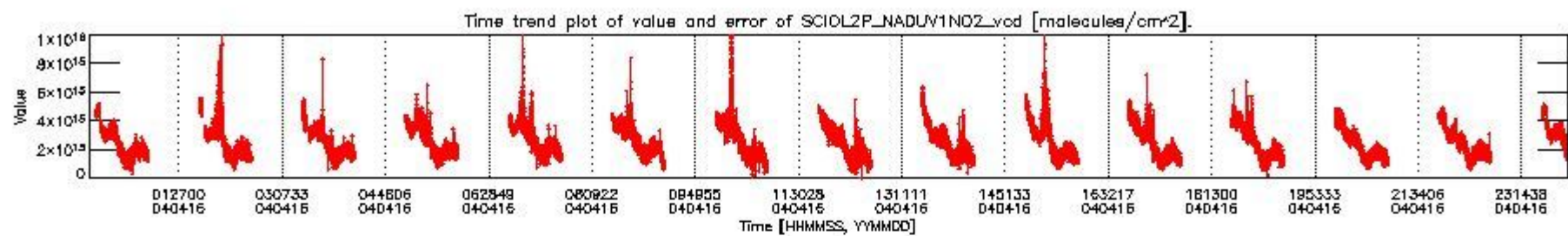


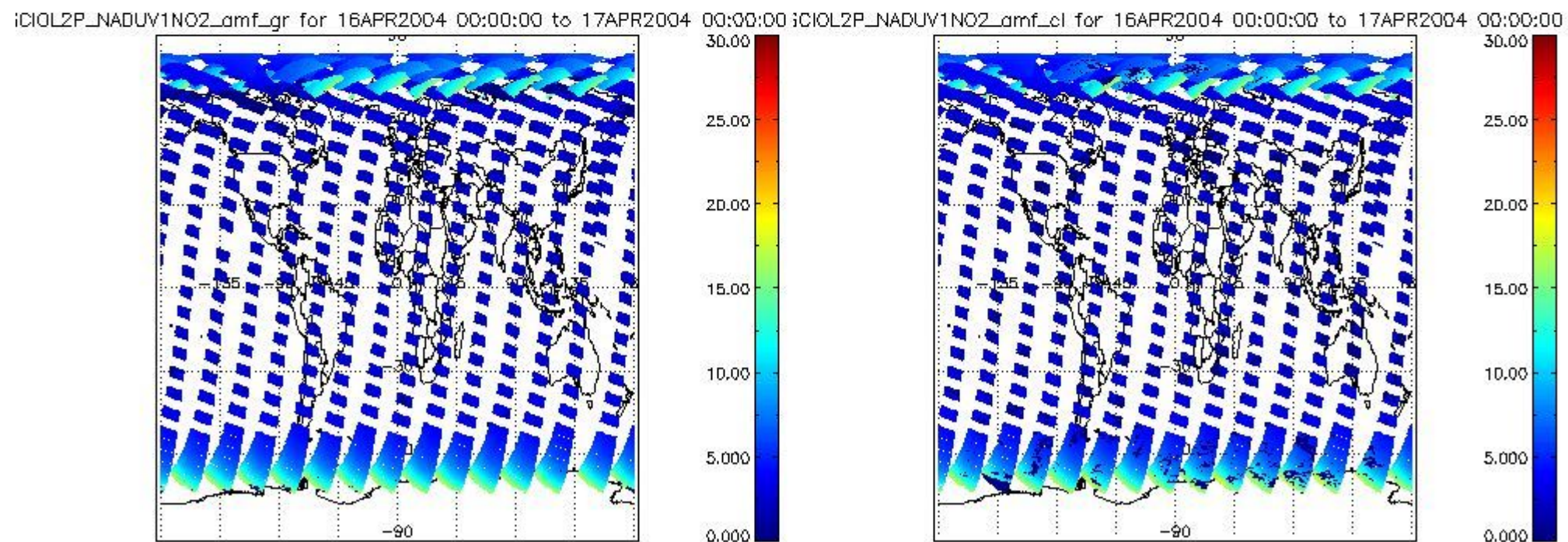
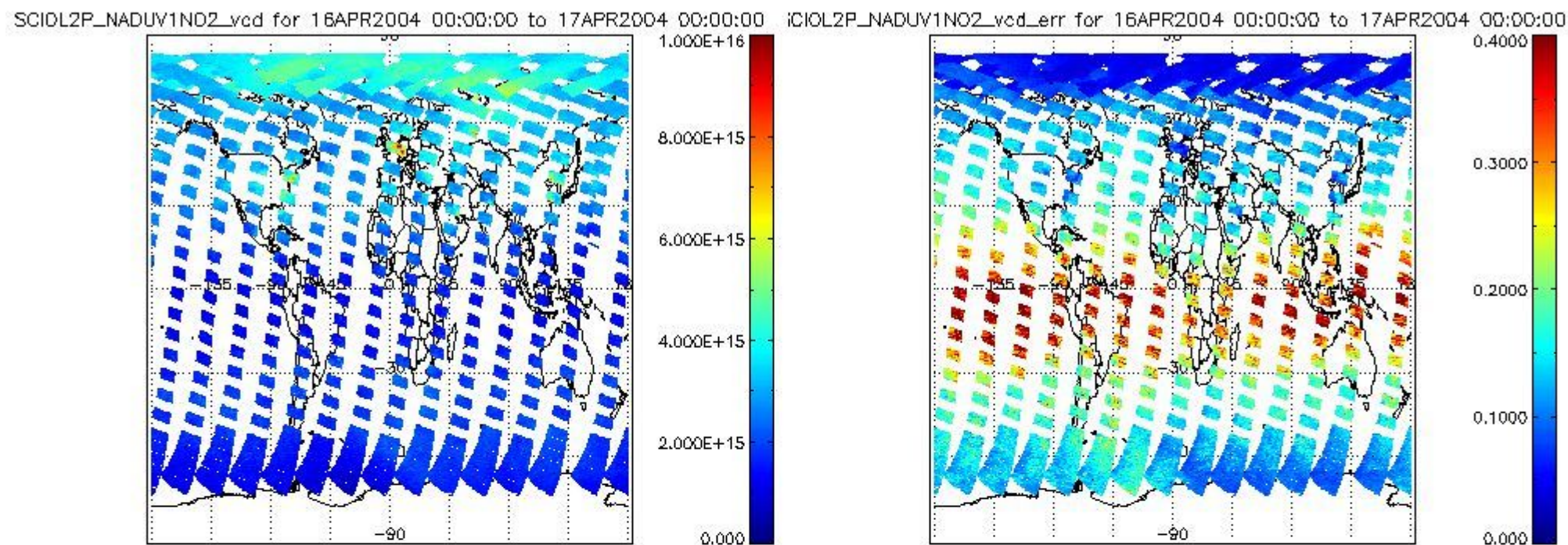
SCIOL2P_NADUV003_amf_gr for 16APR2004 00:00:00 to 17APR2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 16APR2004 00:00:00 to 17APR2004 00:00:00







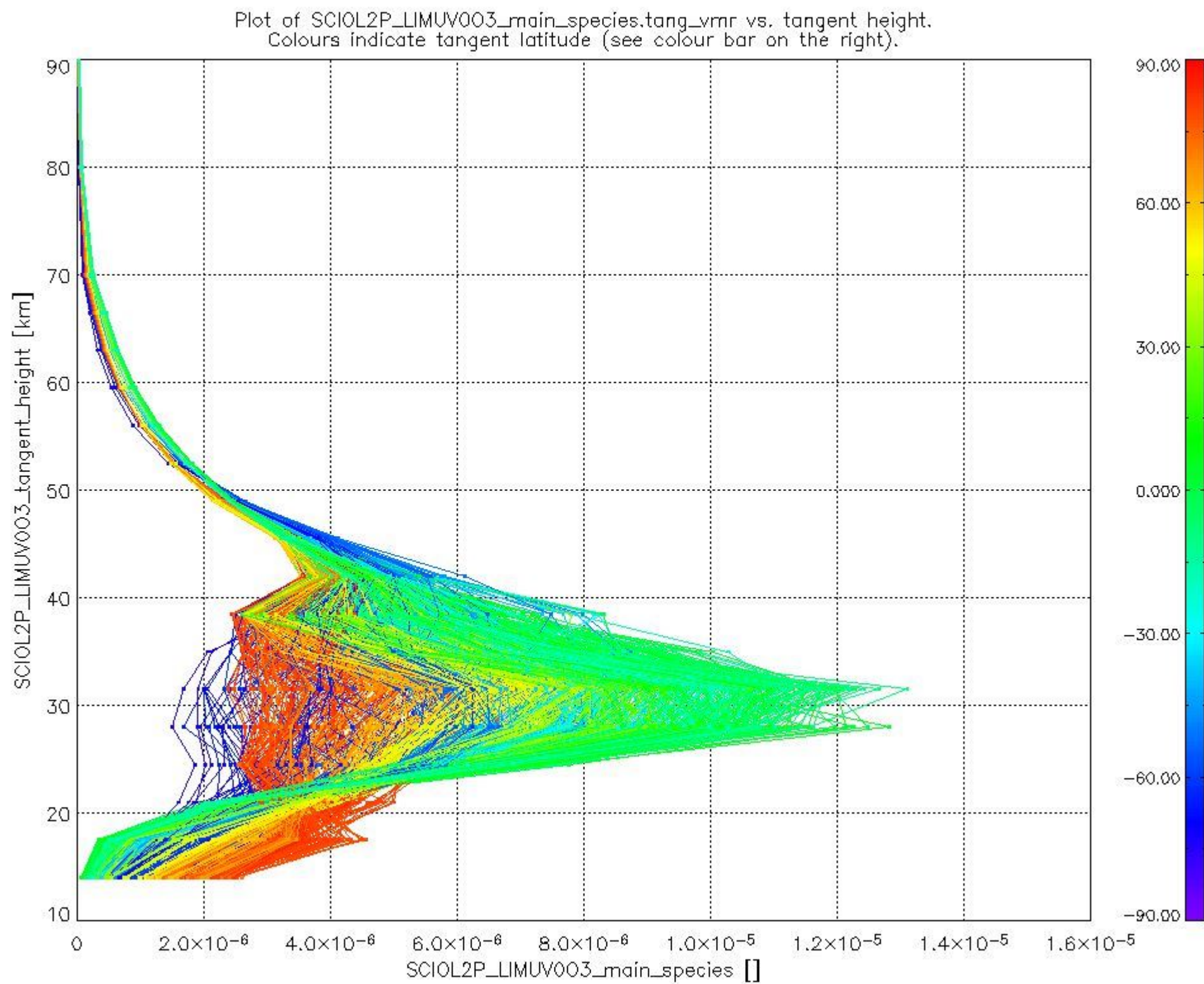
2.2.3 Limb

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

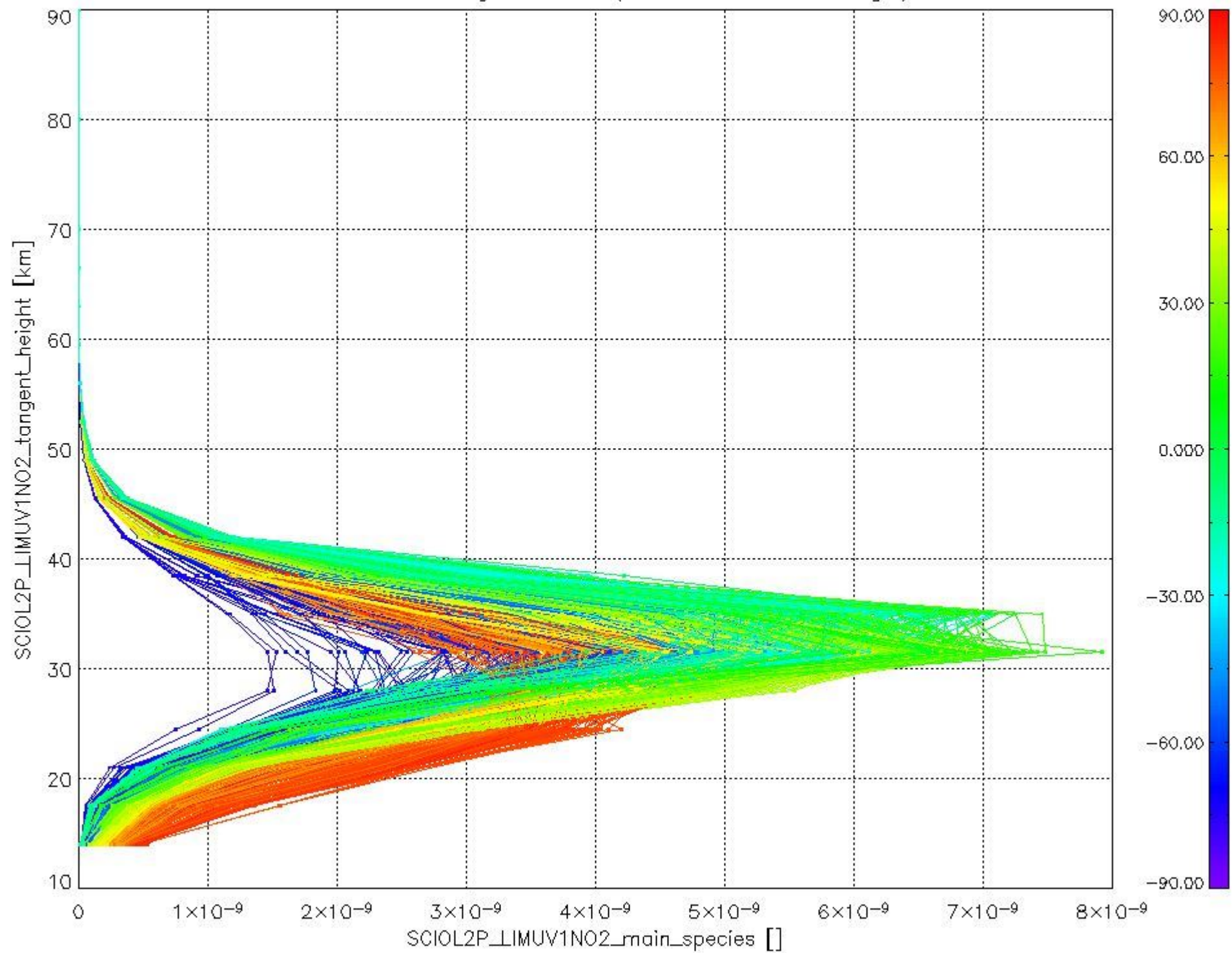
The following data items are currently included into this section:

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.



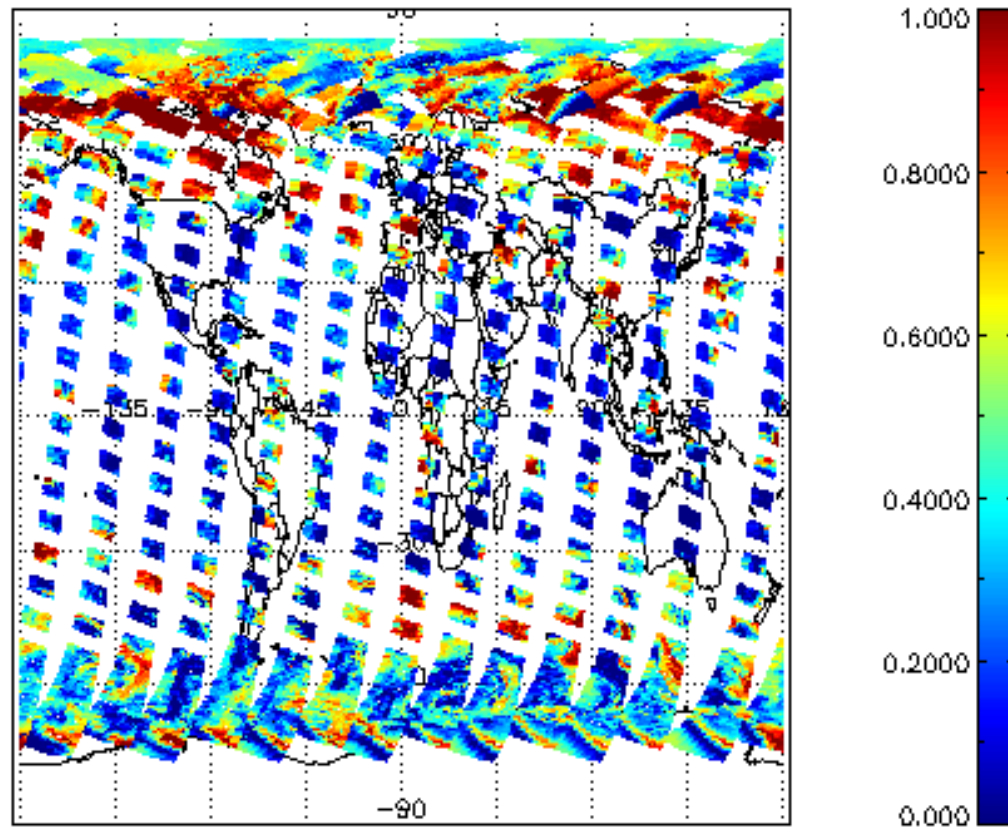
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



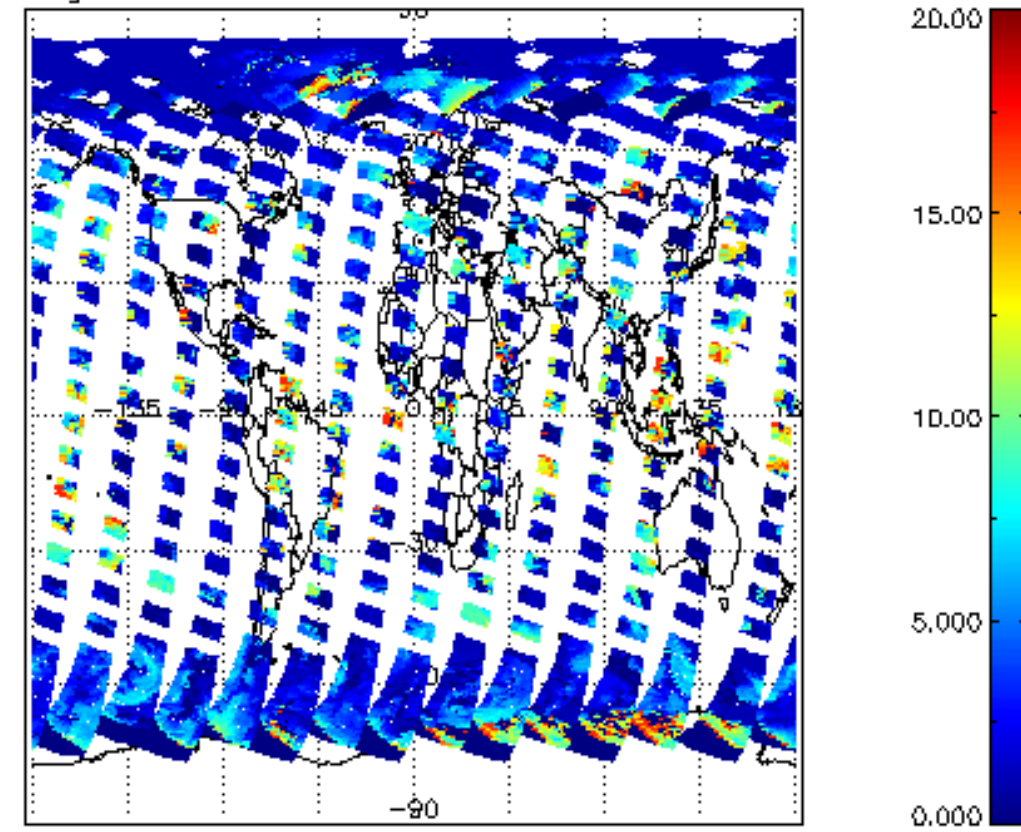
2.3 ADF monitoring

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

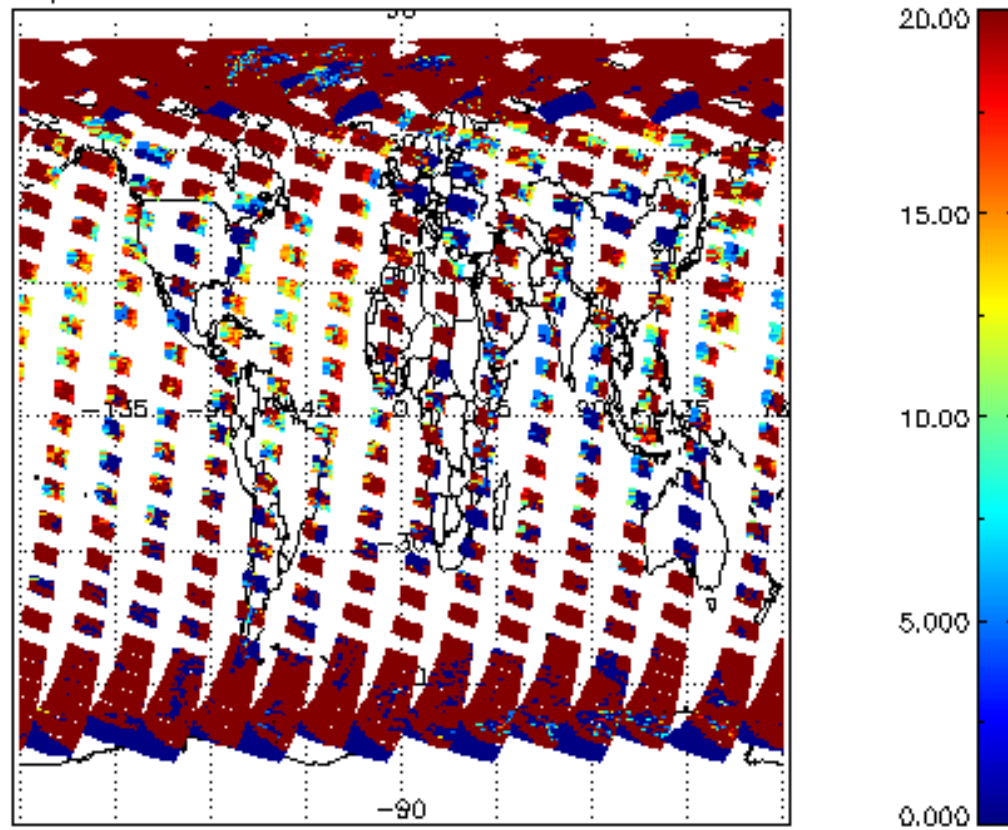
cL_frac for 16APR2004 00:00:00 to 17APR2004 00:00:00



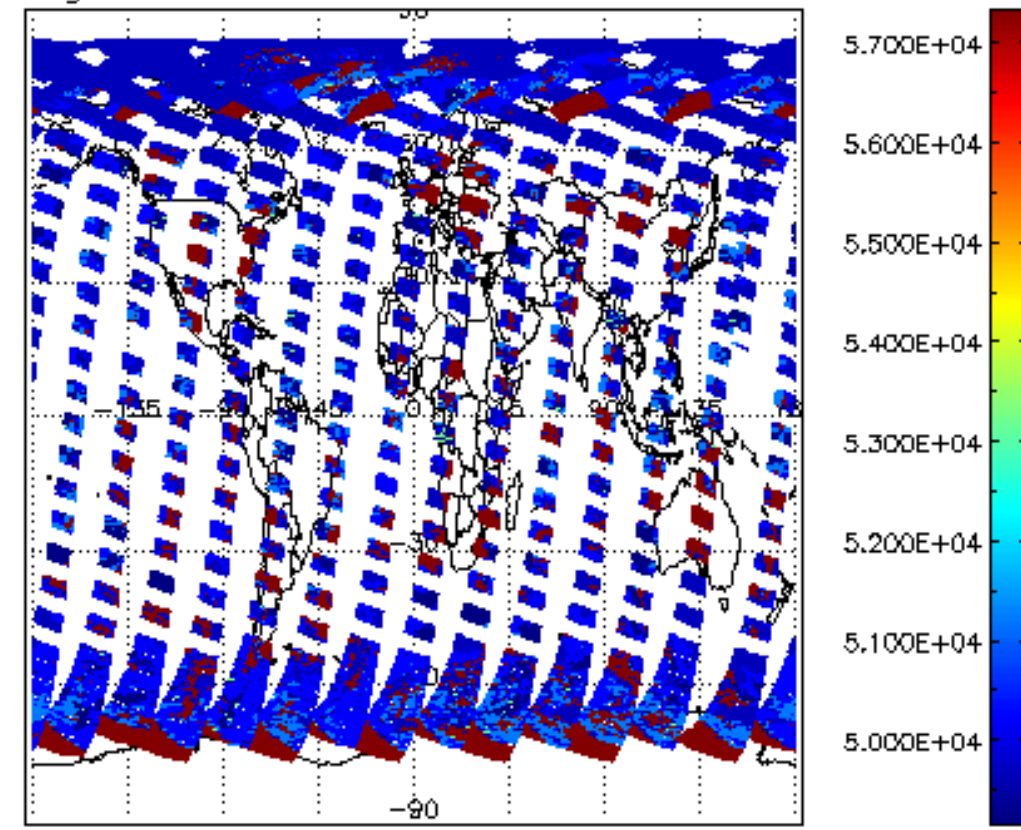
cL_top_height for 16APR2004 00:00:00 to 17APR2004 00:00:00

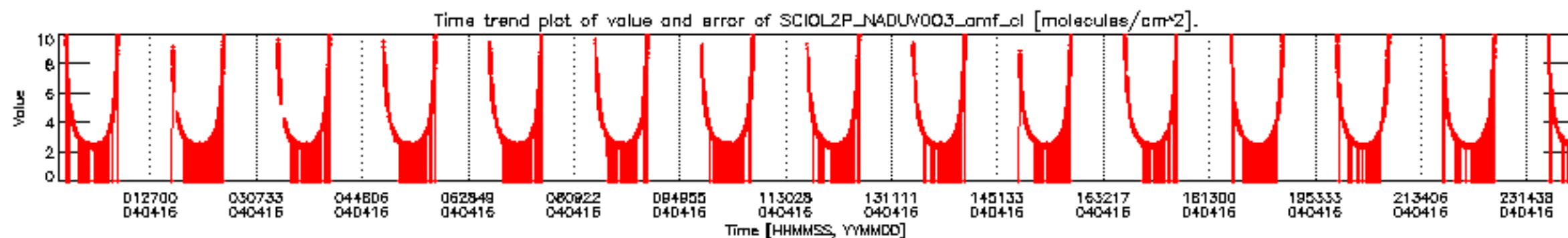
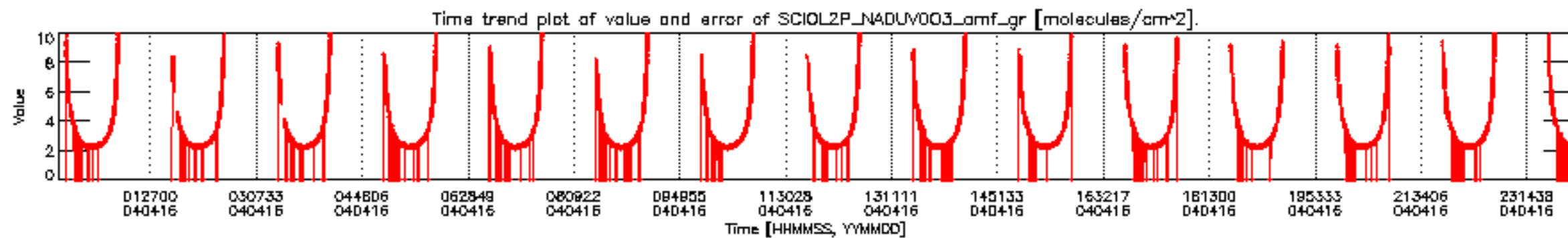
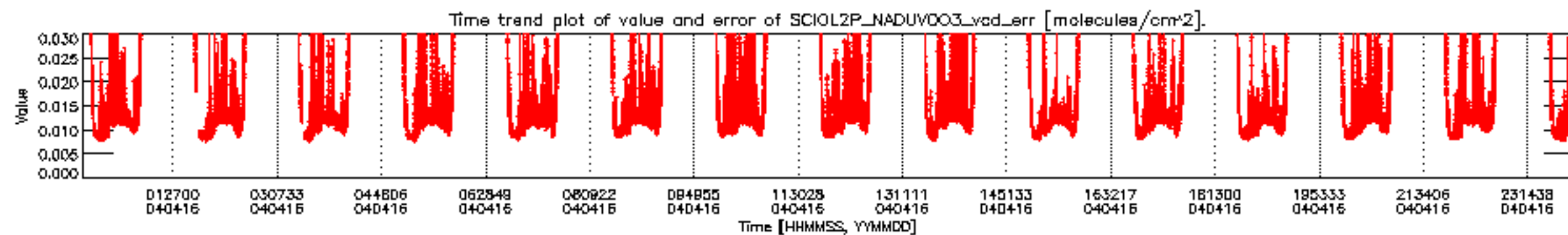
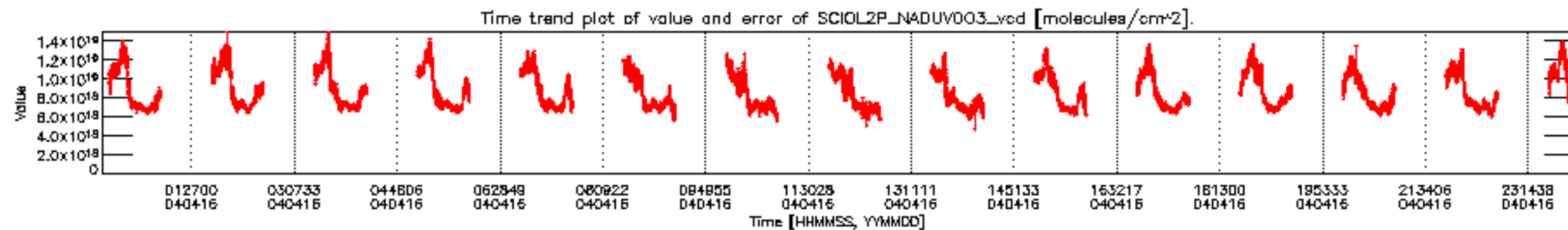


cL_opt_depth for 16APR2004 00:00:00 to 17APR2004 00:00:00

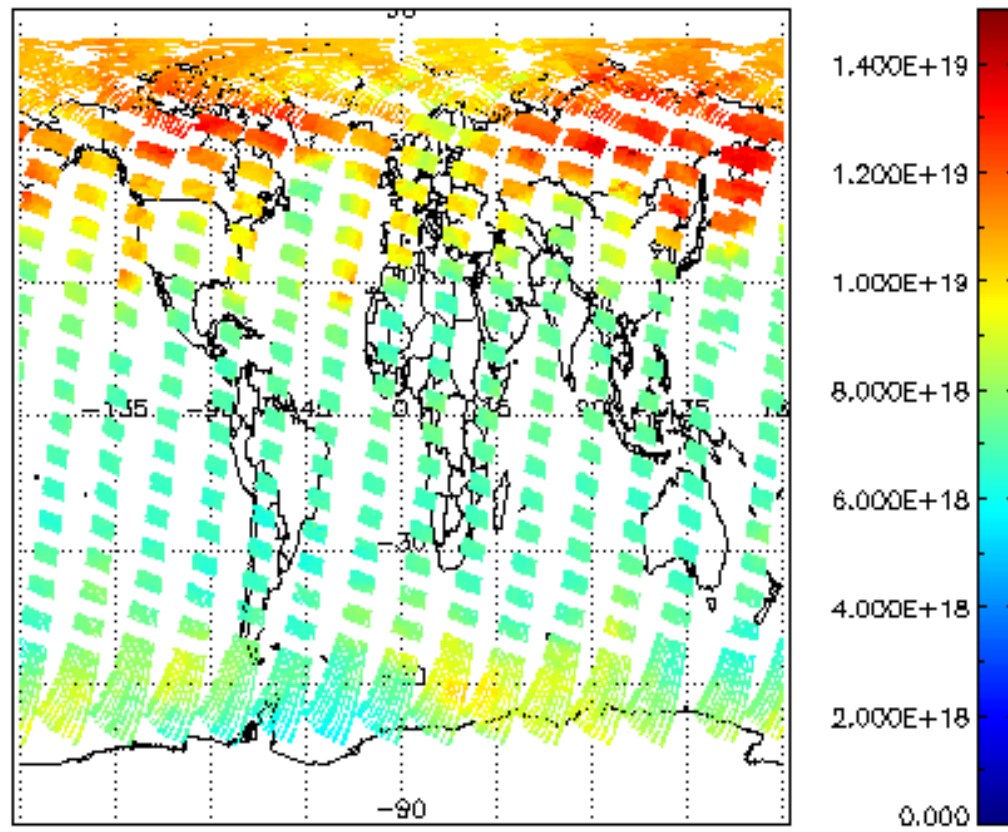


cloud_flags for 16APR2004 00:00:00 to 17APR2004 00:00:00

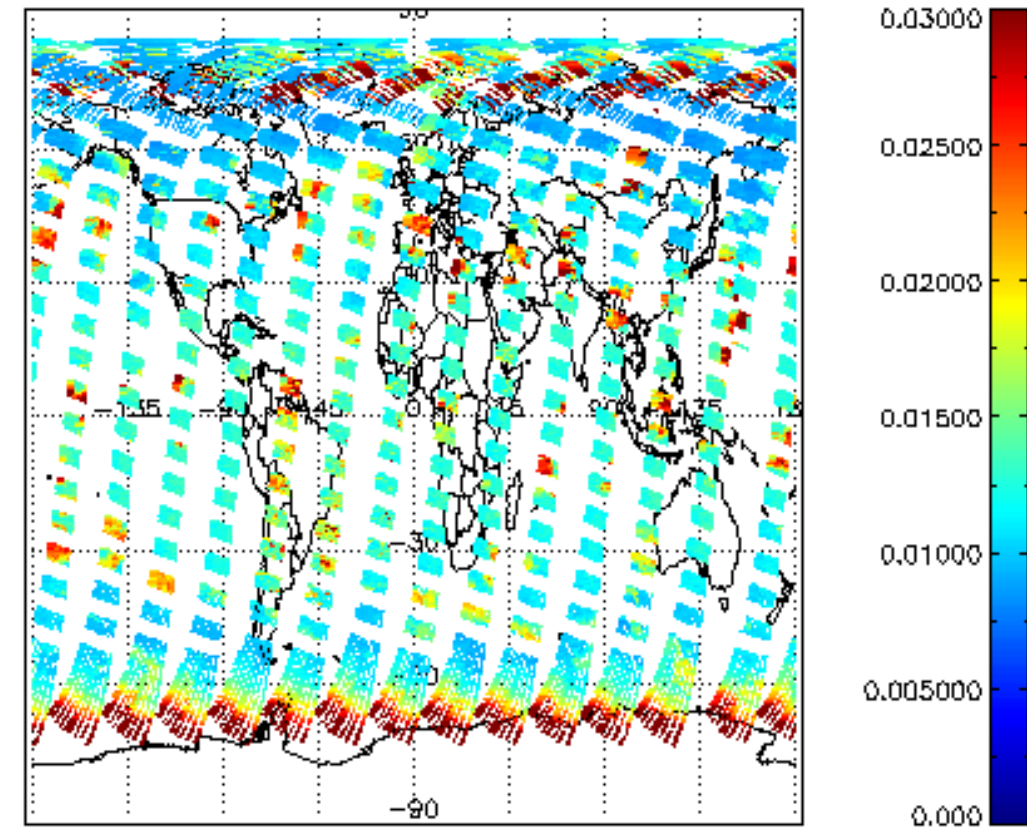




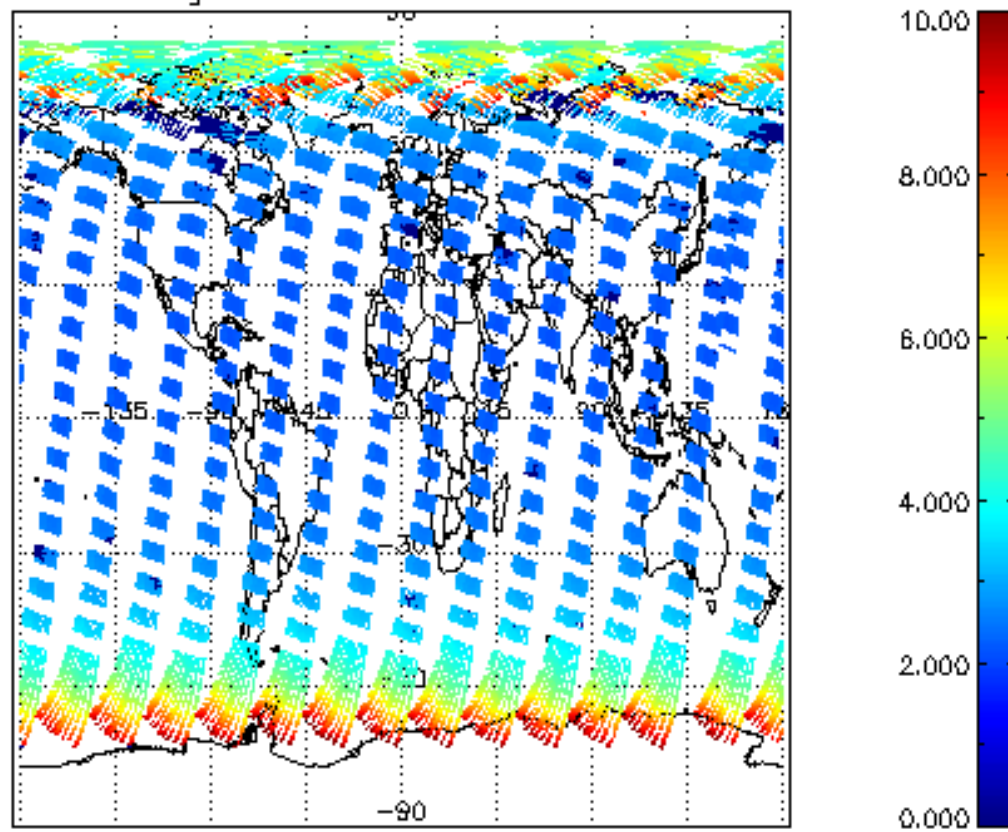
SCIOL2P_NADUV003_vcd for 16APR2004 00:00:00 to 17APR2004 00:00:00



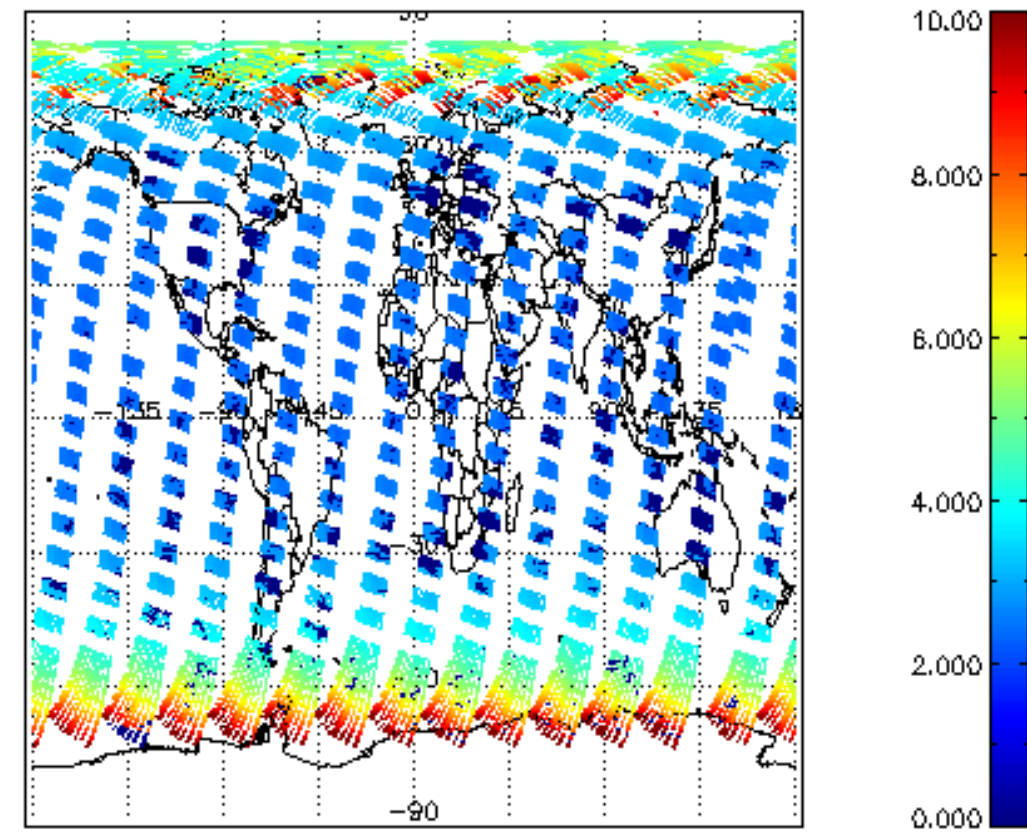
SCIOL2P_NADUV003_vcd_err for 16APR2004 00:00:00 to 17APR2004 00:00:00

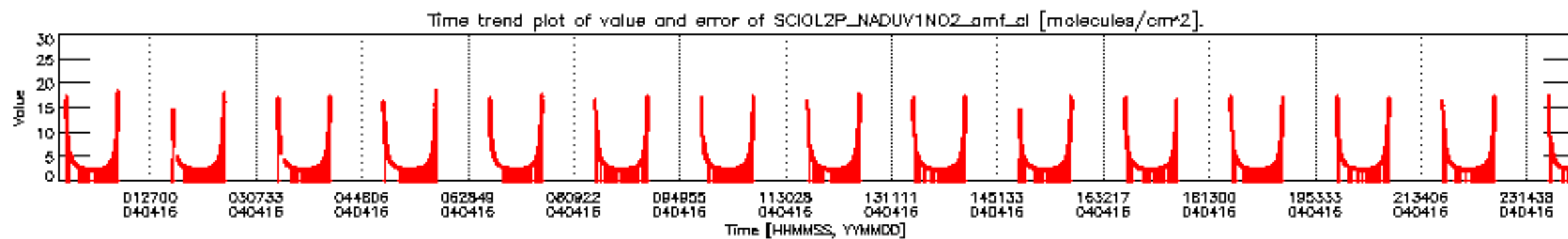
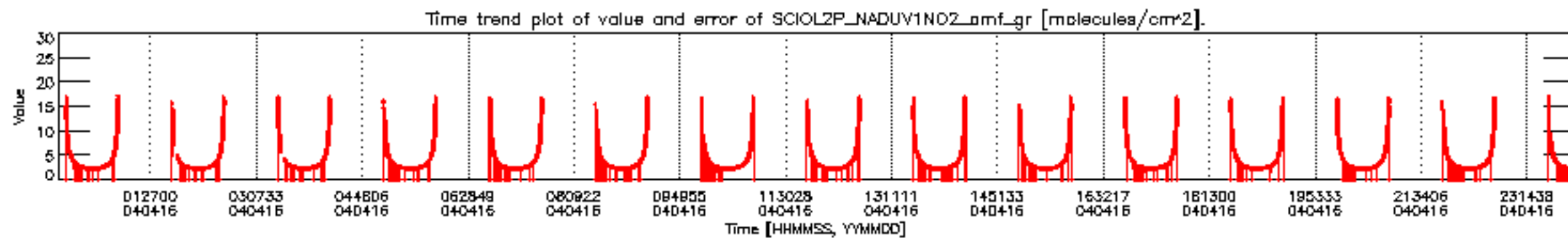
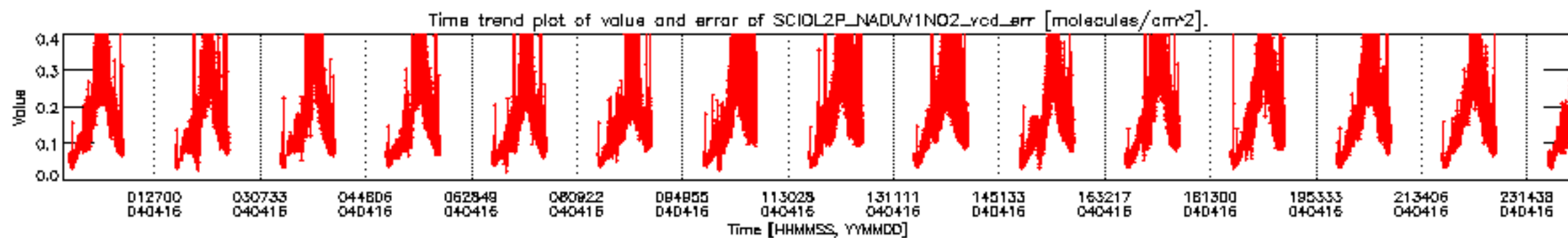
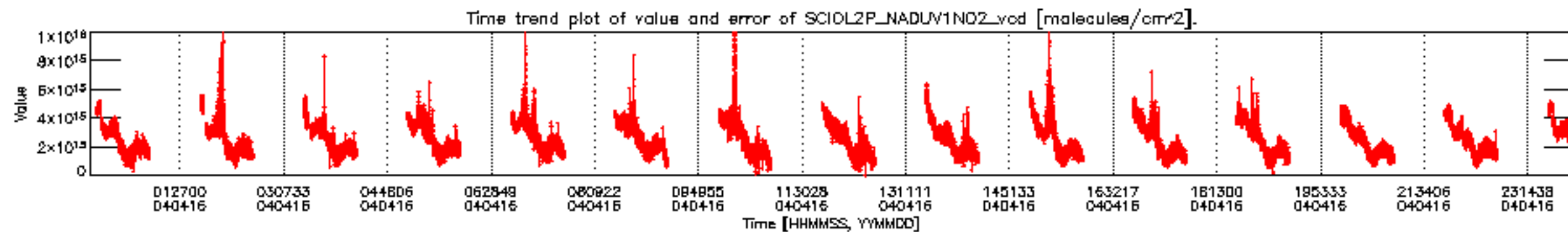


SCIOL2P_NADUV003_amf_gr for 16APR2004 00:00:00 to 17APR2004 00:00:00

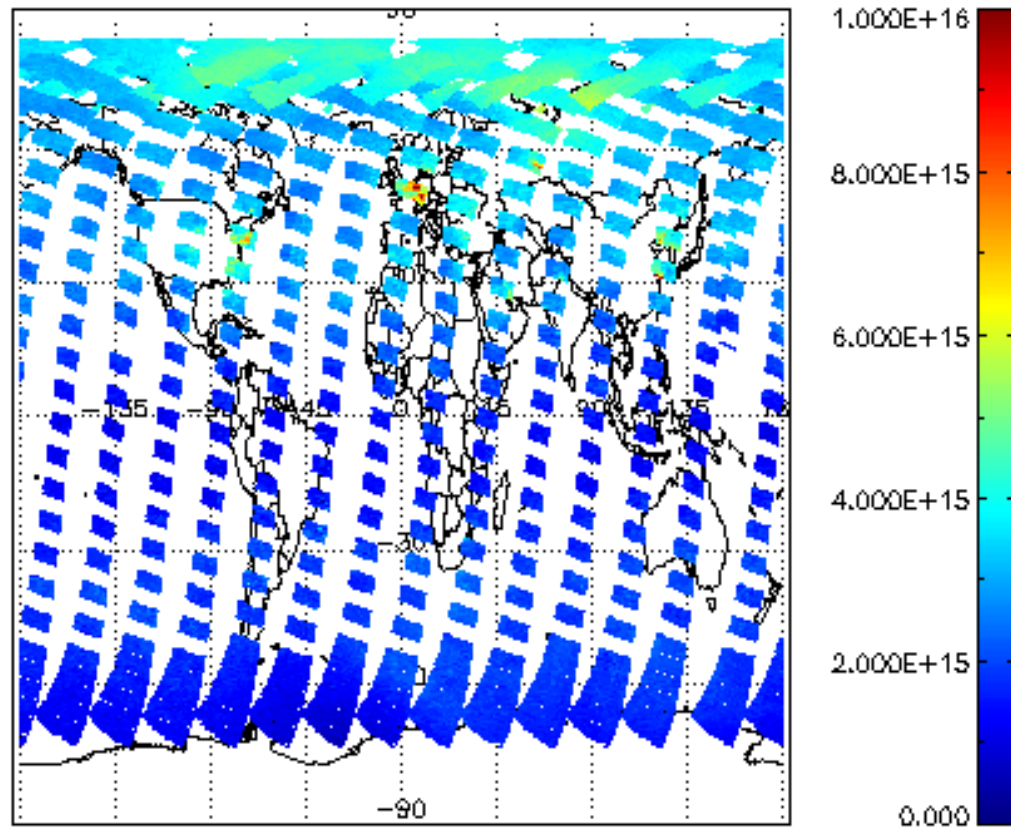


SCIOL2P_NADUV003_amf_cl for 16APR2004 00:00:00 to 17APR2004 00:00:00

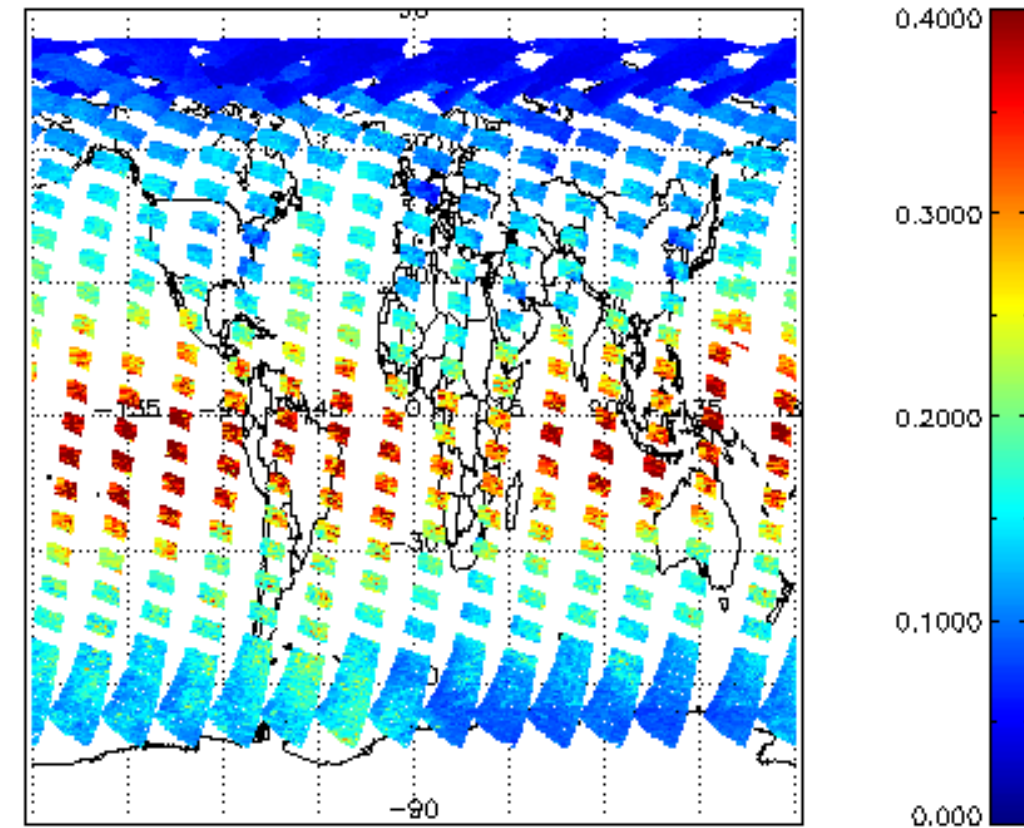




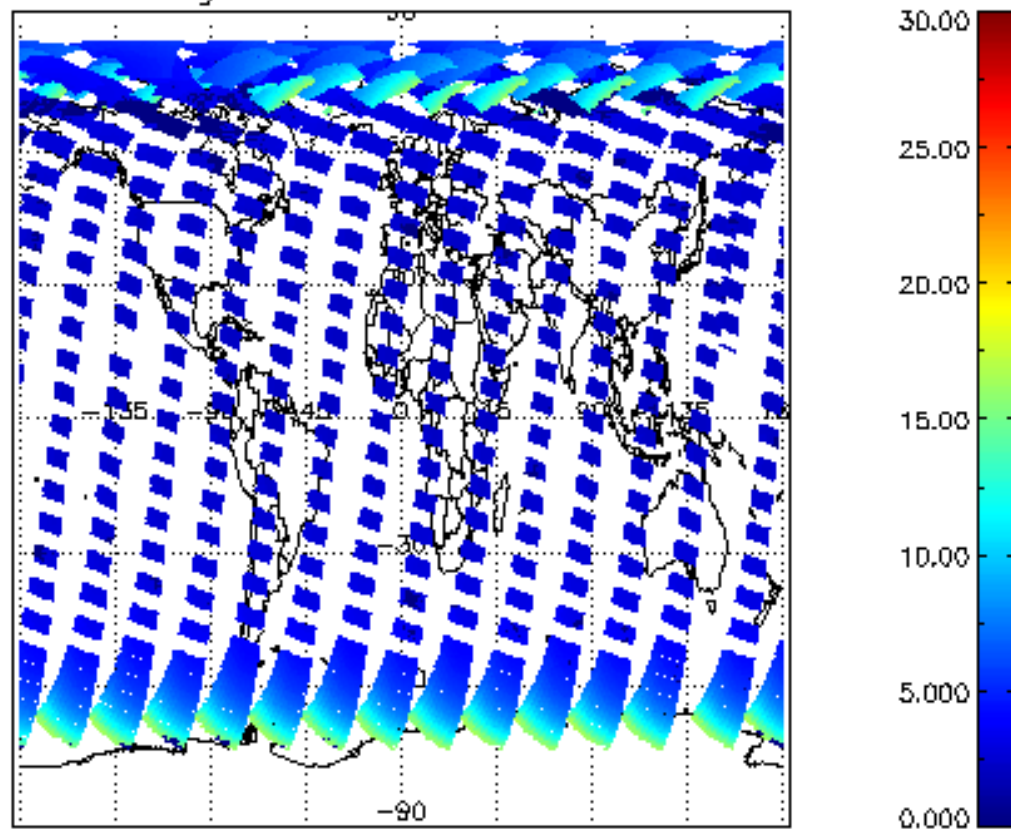
SCIOL2P_NADUV1NO2_vcd for 16APR2004 00:00:00 to 17APR2004 00:00:00



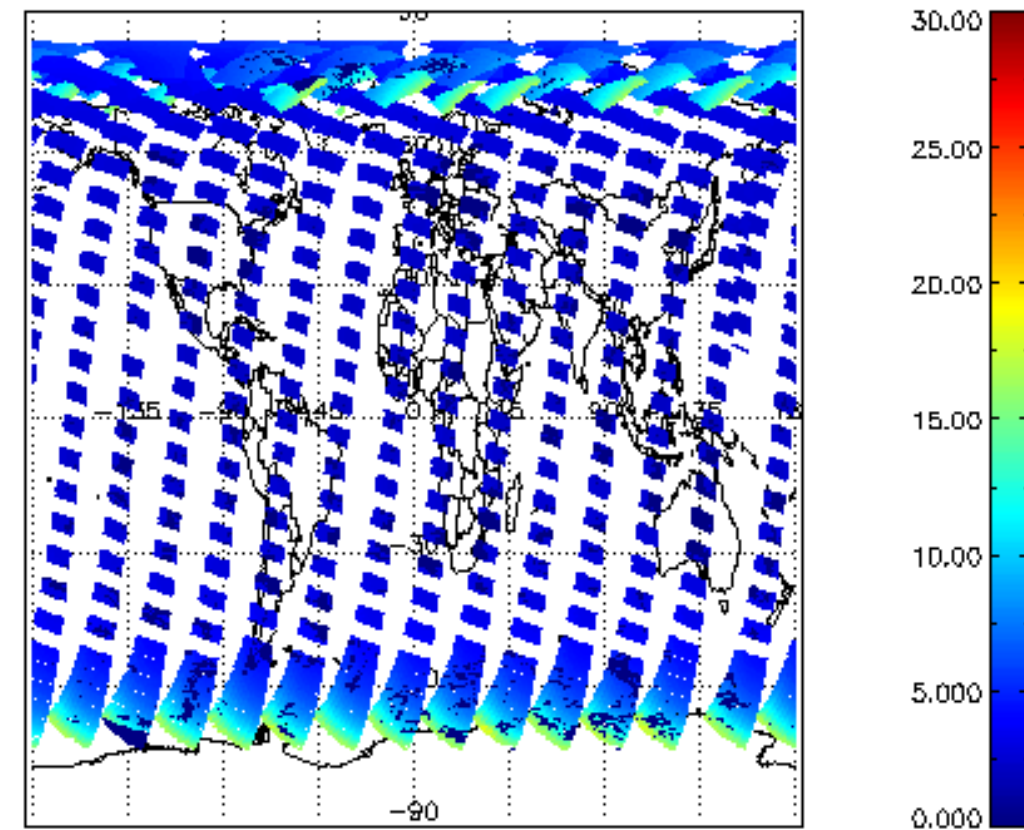
iCIOL2P_NADUV1NO2_vcd_err for 16APR2004 00:00:00 to 17APR2004 00:00:00



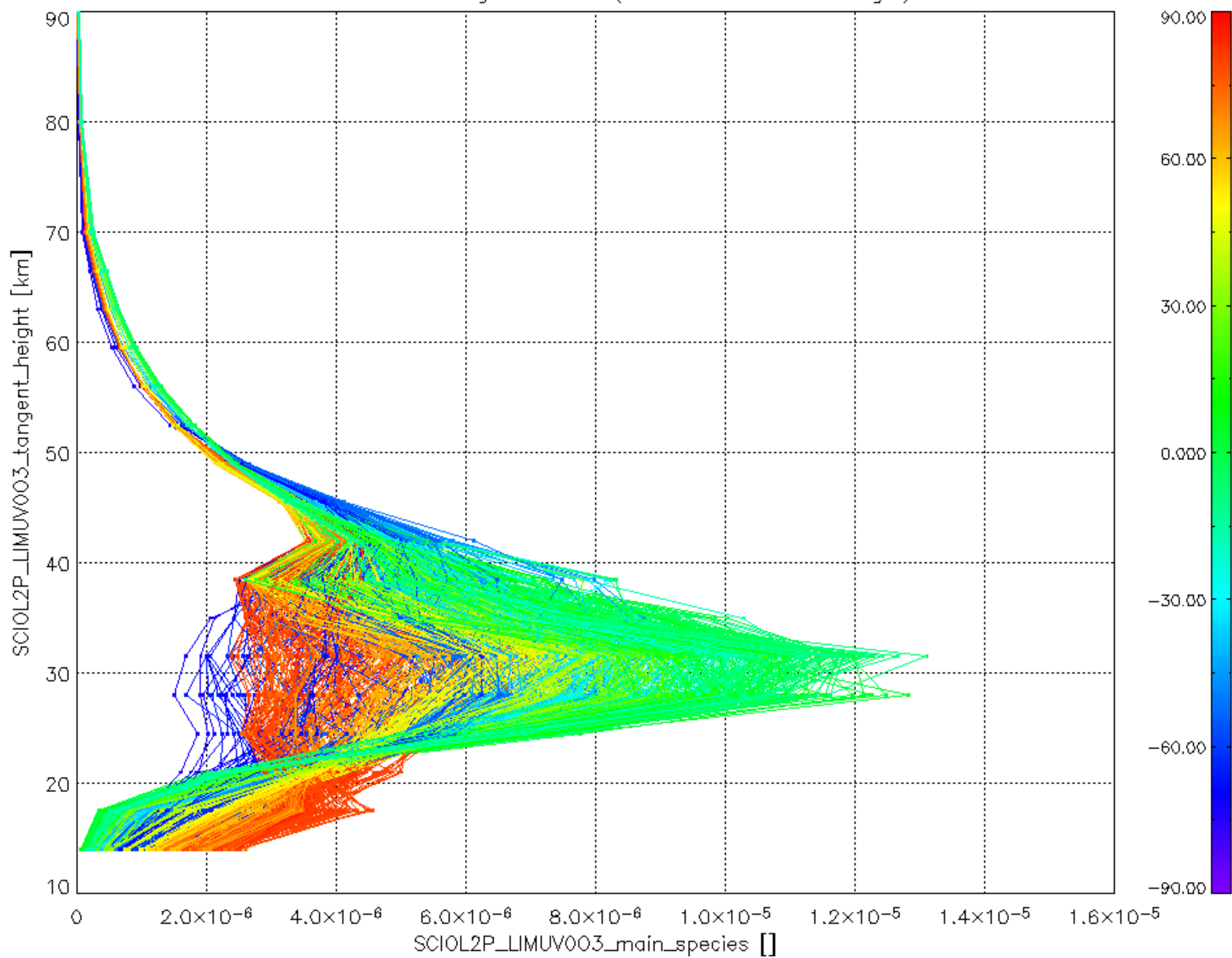
iCIOL2P_NADUV1NO2_amf_gr for 16APR2004 00:00:00 to 17APR2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 16APR2004 00:00:00 to 17APR2004 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).

