

2. SCIAMACHY Daily Report for level 2 products

[2.1. General Info](#)

[2.2 Product Quality Indicators](#)

[2.3 ADF monitoring](#)

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	01SEP2008 07:12:27
Data source version	SCIA-OL/3.01-R
Processing scope for products	03AUG2004 00:00:00 to 04AUG2004 00:00:00
Start time of first product within scope	02AUG2004 23:33:36
Stop time of last product within scope	03AUG2004 23:58:25
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__2PRDPA20040802_233336_000033812029_00102_12681_9465.N1	02AUG2004 23:33:36	03AUG2004 00:29:58	0	GOOD
1	SCI_OL__2PRDPA20040803_011412_000033252029_00103_12682_9363.N1	03AUG2004 01:14:12	03AUG2004 02:09:38	0	GOOD
2	SCI_OL__2PRDPA20040803_025449_000033812029_00104_12683_9415.N1	03AUG2004 02:54:49	03AUG2004 03:51:10	0	GOOD
3	SCI_OL__2PRDPA20040803_043525_000033252029_00105_12684_9583.N1	03AUG2004 04:35:25	03AUG2004 05:30:50	0	GOOD
4	SCI_OL__2PRDPA20040803_061601_000033812029_00106_12685_9352.N1	03AUG2004 06:16:01	03AUG2004 07:12:23	0	GOOD
5	SCI_OL__2PRDPA20040803_075638_000033252029_00107_12686_9489.N1	03AUG2004 07:56:38	03AUG2004 08:52:03	0	GOOD
6	SCI_OL__2PRDPA20040803_093714_000033812029_00108_12687_9571.N1	03AUG2004 09:37:14	03AUG2004 10:33:35	0	GOOD
7	SCI_OL__2PRDPA20040803_111750_000033252029_00109_12688_9279.N1	03AUG2004 11:17:50	03AUG2004 12:13:15	0	GOOD
8	SCI_OL__2PRDPA20040803_125826_000033812029_00110_12689_9400.N1	03AUG2004 12:58:26	03AUG2004 13:54:47	0	GOOD
9	SCI_OL__2PRDPA20040803_143902_000033252029_00111_12690_9438.N1	03AUG2004 14:39:02	03AUG2004 15:34:28	0	GOOD
10	SCI_OL__2PRDPA20040803_161938_000033812029_00112_12691_9304.N1	03AUG2004 16:19:38	03AUG2004 17:16:00	0	GOOD
11	SCI_OL__2PRDPA20040803_180008_000033882029_00113_12692_9232.N1	03AUG2004 18:00:08	03AUG2004 18:56:36	0	GOOD
12	SCI_OL__2PRDPA20040803_194109_000033122029_00114_12693_9582.N1	03AUG2004 19:41:09	03AUG2004 20:36:22	0	GOOD
13	SCI_OL__2PRDPA20040803_212127_000033252029_00115_12694_9502.N1	03AUG2004 21:21:27	03AUG2004 22:16:53	0	GOOD
14	SCI_OL__2PRDPA20040803_230203_000033812029_00116_12695_9483.N1	03AUG2004 23:02:03	03AUG2004 23:58:25	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: 153660

Total number of cloud data DSRs with good quality flag (=0): 153660 (100.0 %)

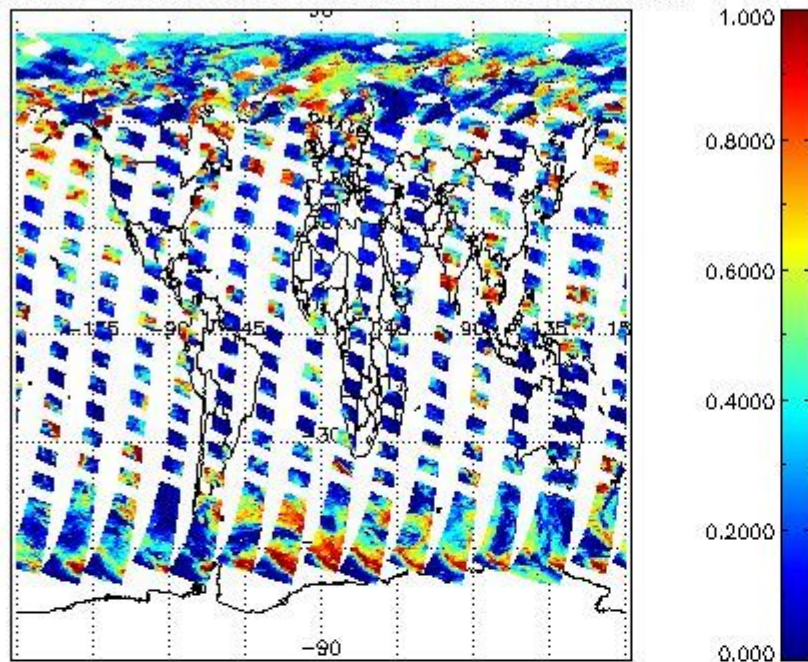
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	153660	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	153660	0.16963	0.12500	0.12500	0.25000	0.059890	s
CL_FRAC	153660	0.32963	0.27207	0.0000	1.0000	0.28725	-
CL_FRAC_ERR	153660	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	153660	5.4281	4.0000	4.0000	8.0000	1.9165	
PMD_READ_CL[0]	153660	0.22122	0.0000	0.0000	8.0000	1.0652	-
PMD_READ_CL[1]	153660	1.1677	0.0000	0.0000	8.0000	2.1846	-
CL_TOP_HEIGHT	131471	3.3462	1.4674	0.0000	17.000	3.7463	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	131471	57.899	68.258	0.0000	101.00	43.897	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	153660	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	153660	11001011	11000100	11000000	11100000	3443.1	flags
AERO_ABSO_IND	153660	0.76682	0.55915	-4.7550	11.154	1.0398	
AERO_IND_DIAG	153660	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	153660	01010110	00000000	00000000	11000000	24457.	flags

Time and geolocation plots:

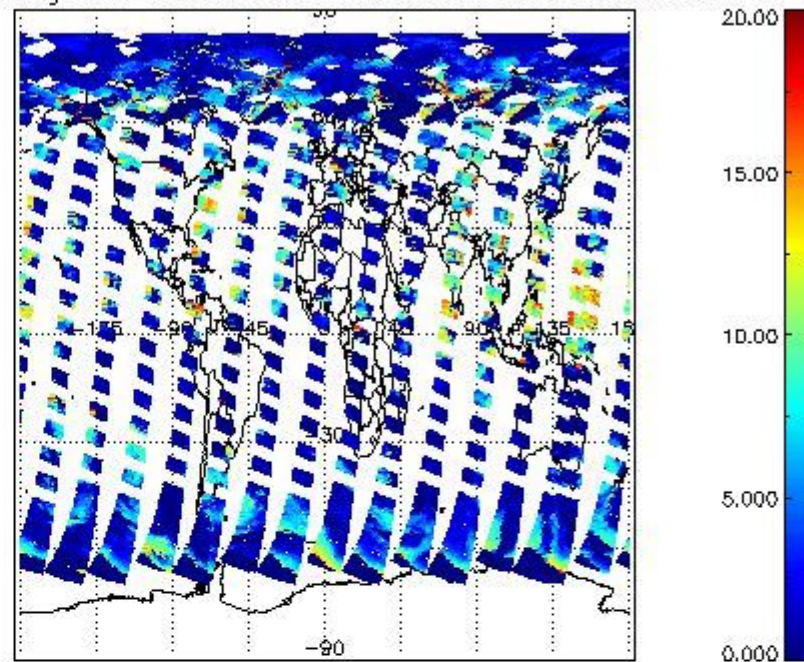
Plots are available for the following parameters:

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

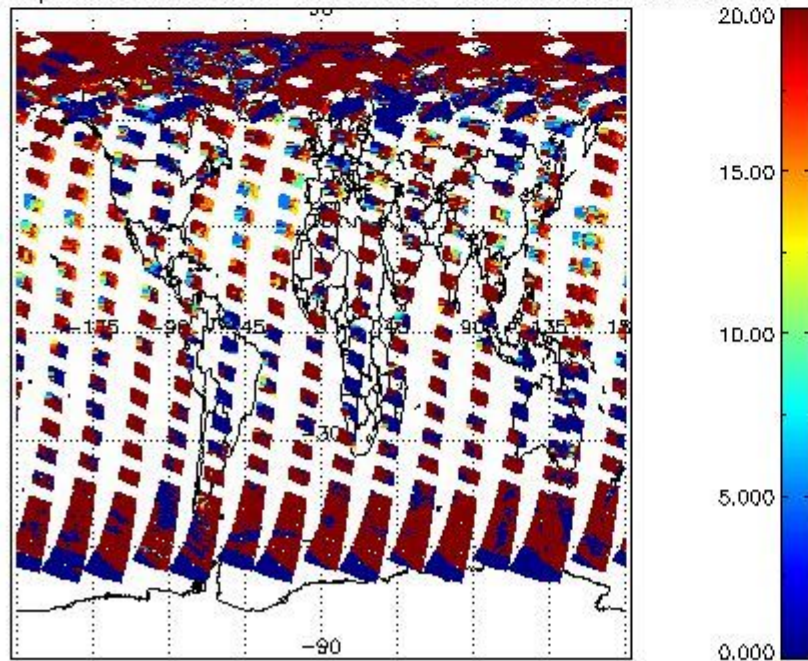
cL_frac for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



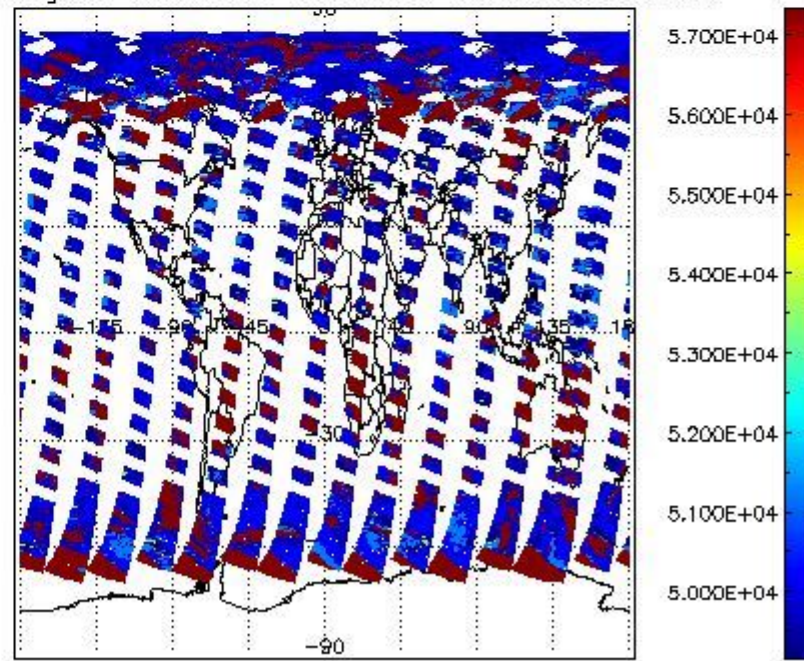
cL_top_height for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



cL_opt_depth for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



cloud_flags for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



2.2.2 Nadir

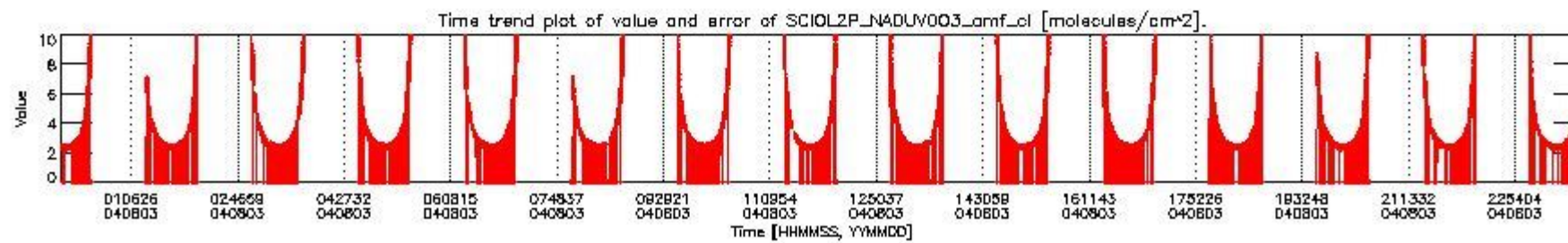
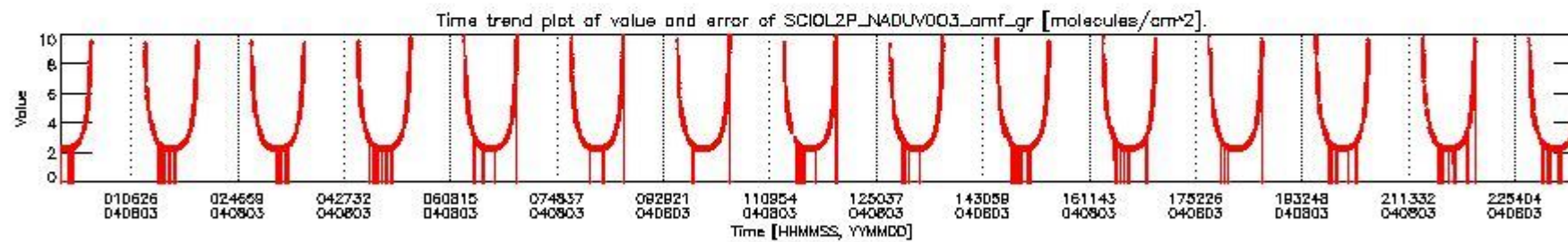
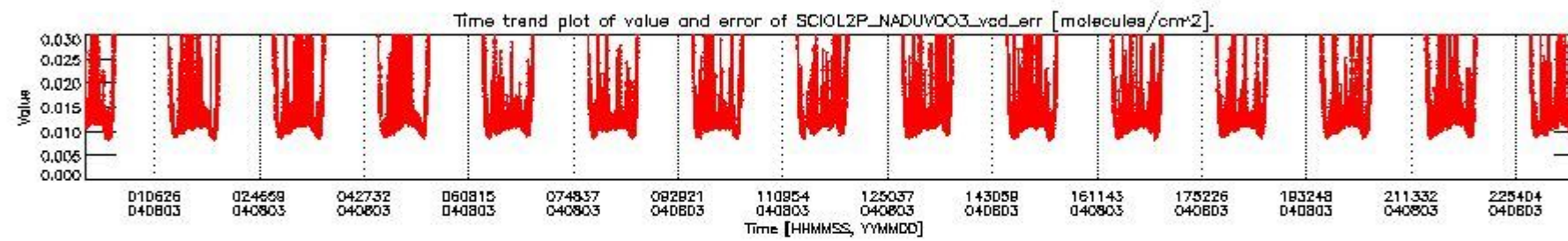
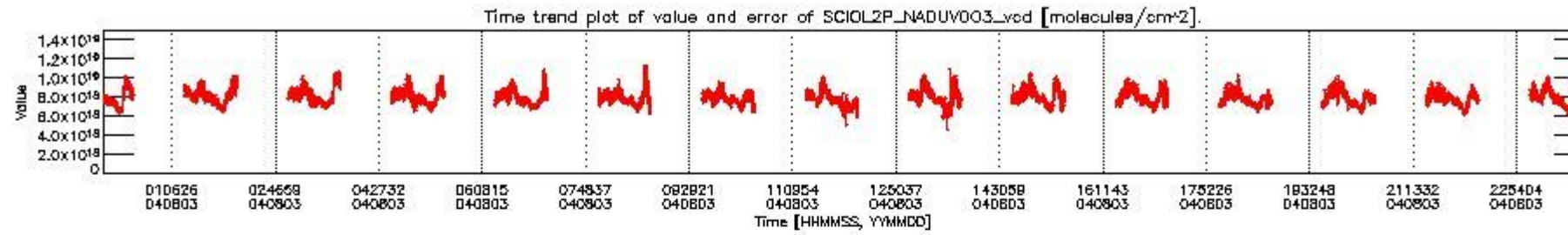
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

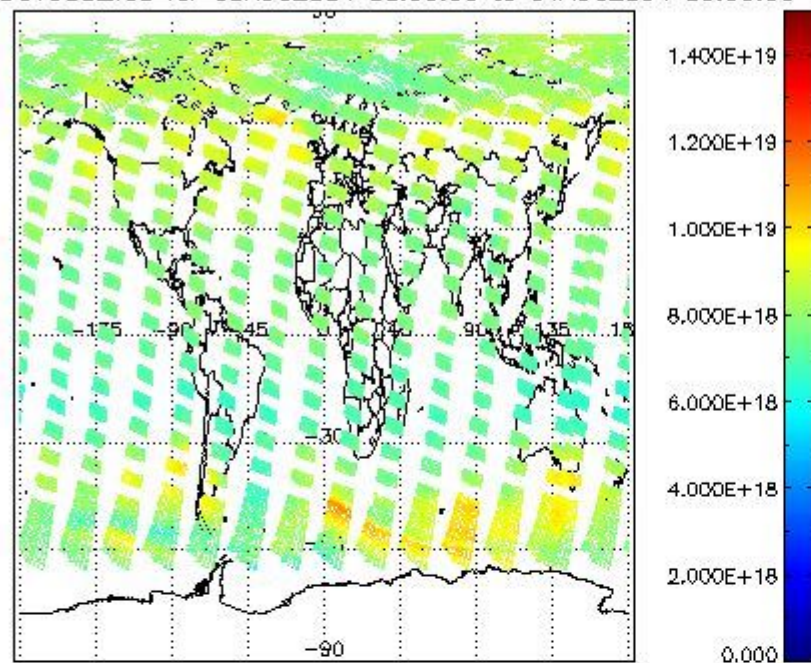
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

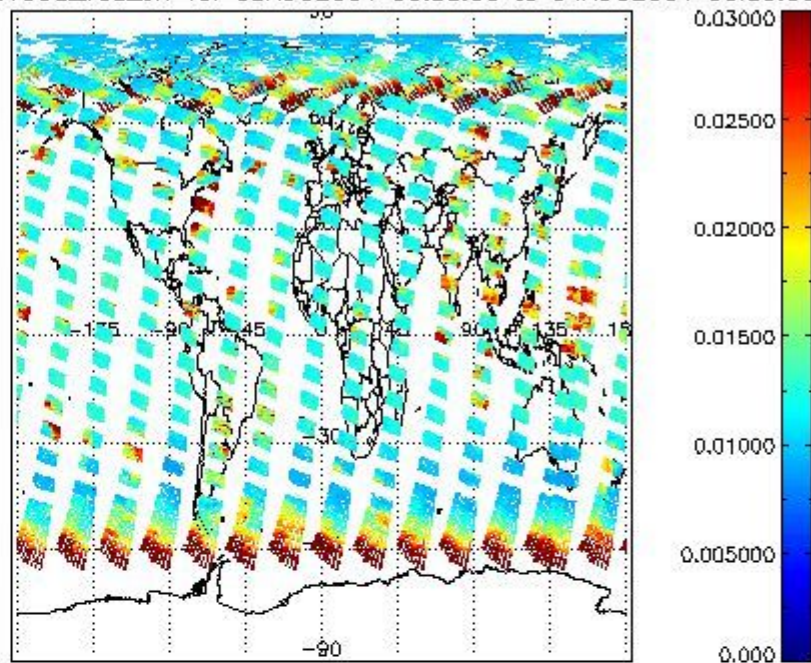
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



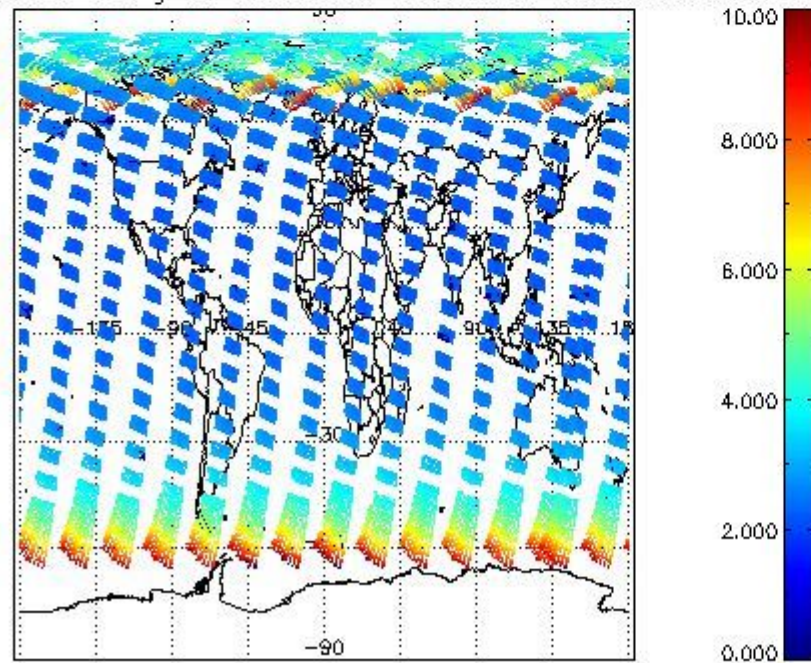
SCIOL2P_NADUV003_vcd for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



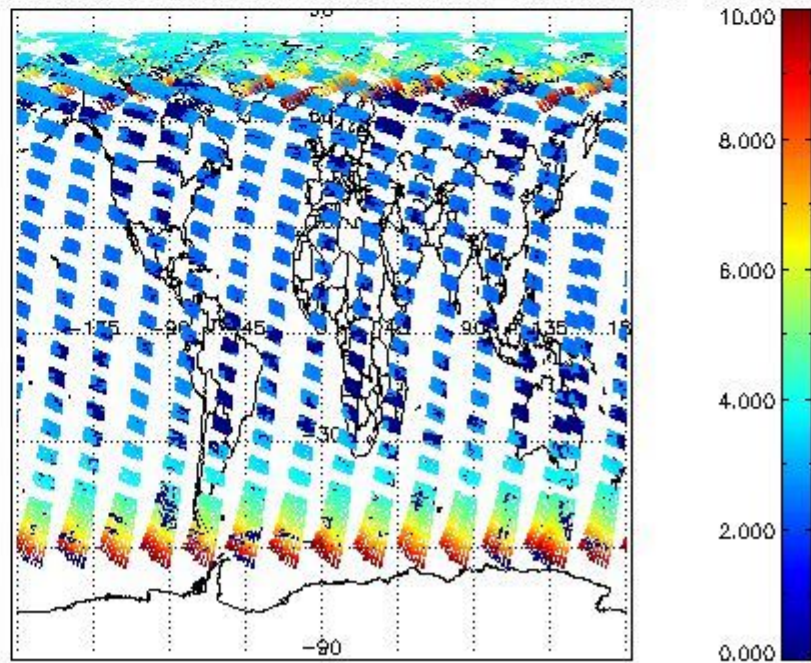
SCIOL2P_NADUV003_vcd_err for 03AUG2004 00:00:00 to 04AUG2004 00:00:00

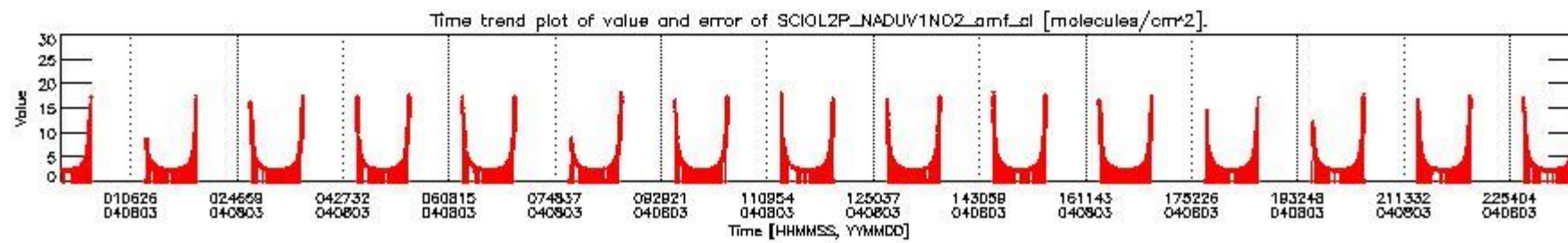
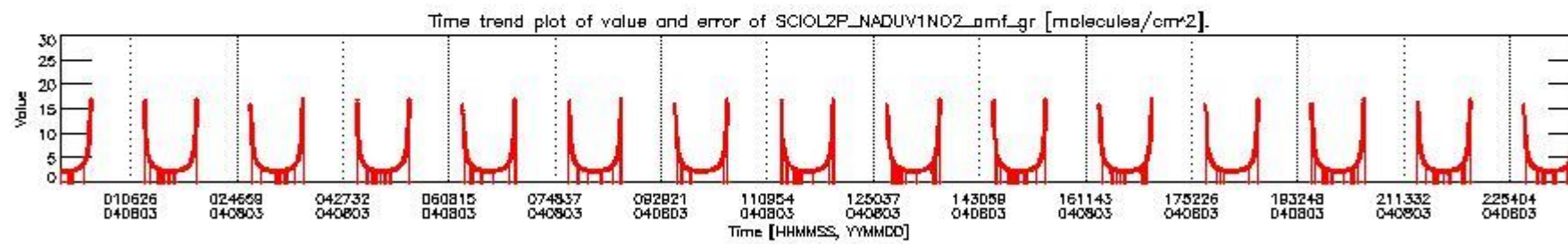
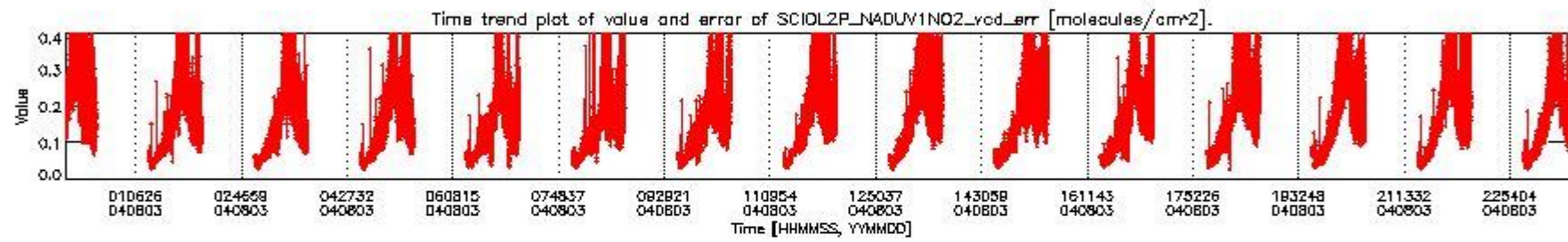
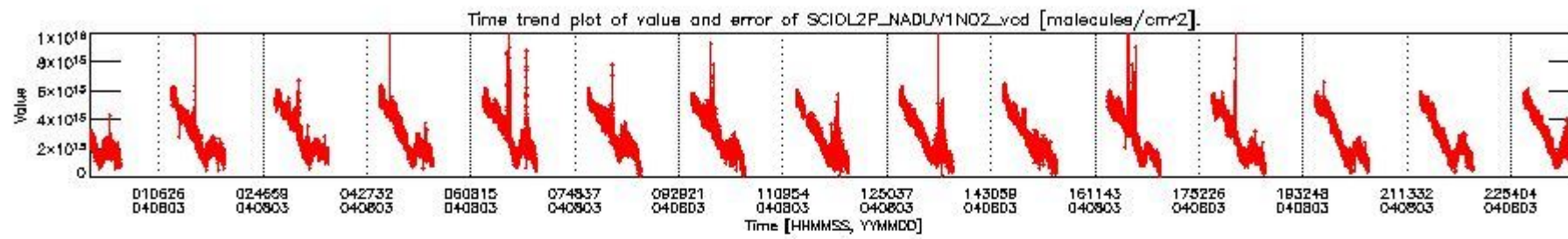


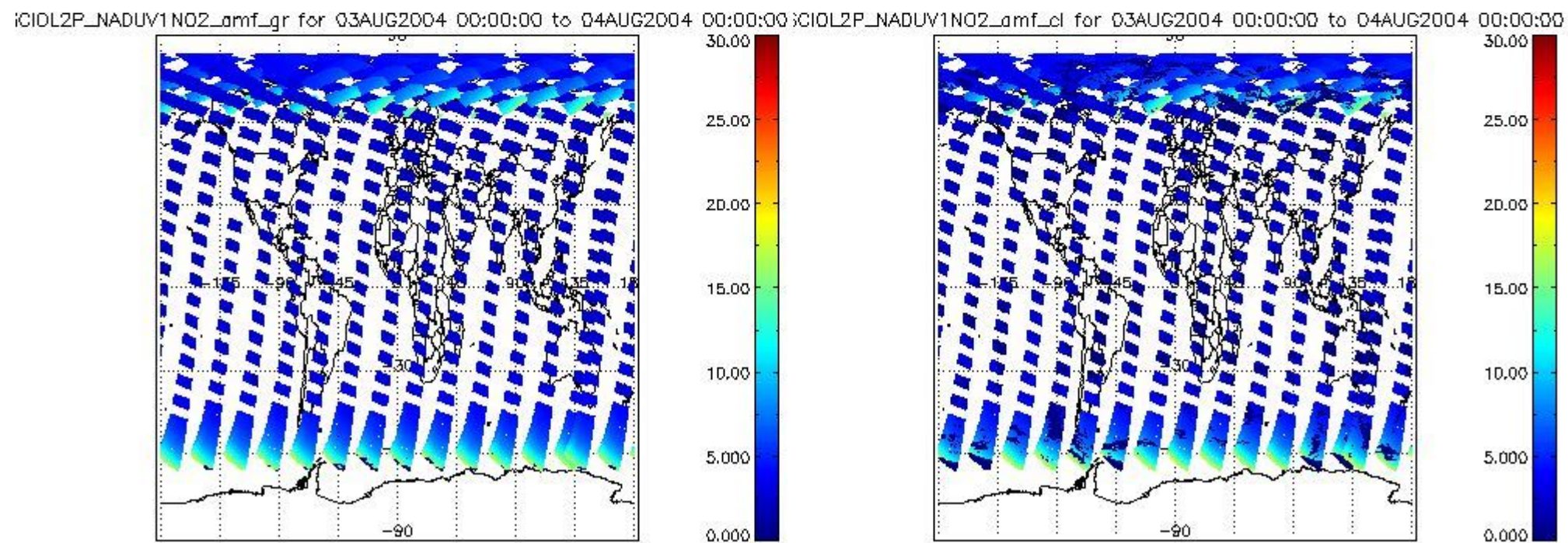
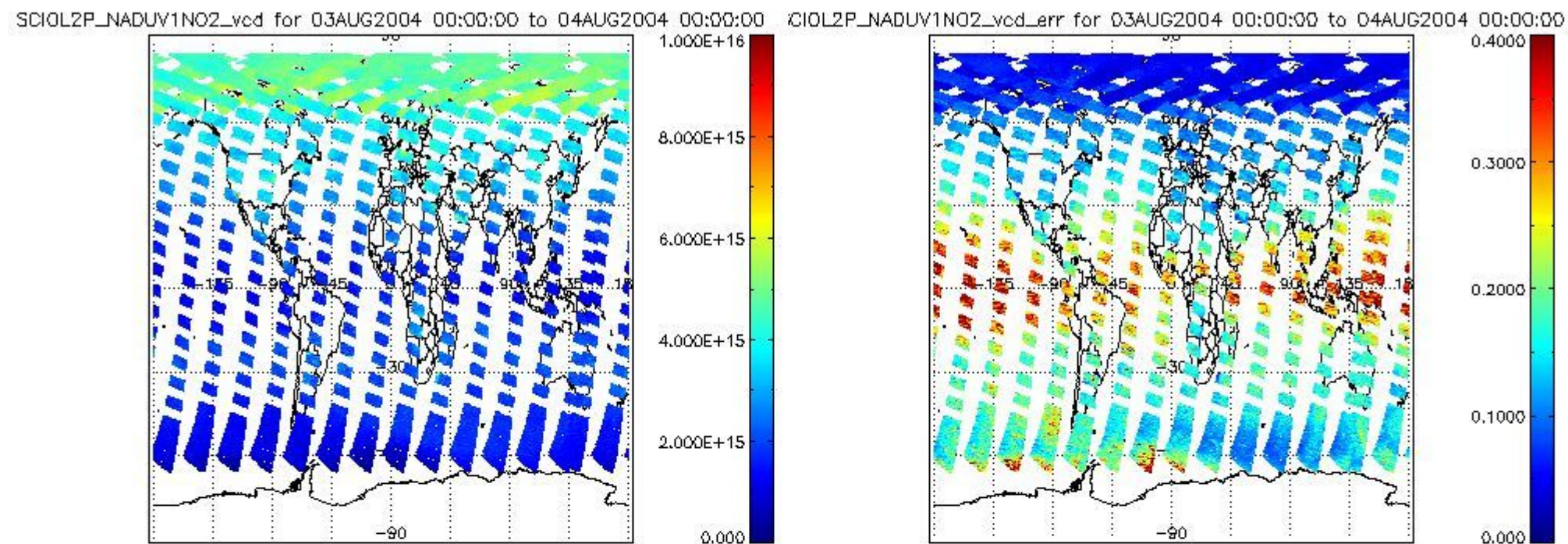
SCIOL2P_NADUV003_amf_gr for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 03AUG2004 00:00:00 to 04AUG2004 00:00:00







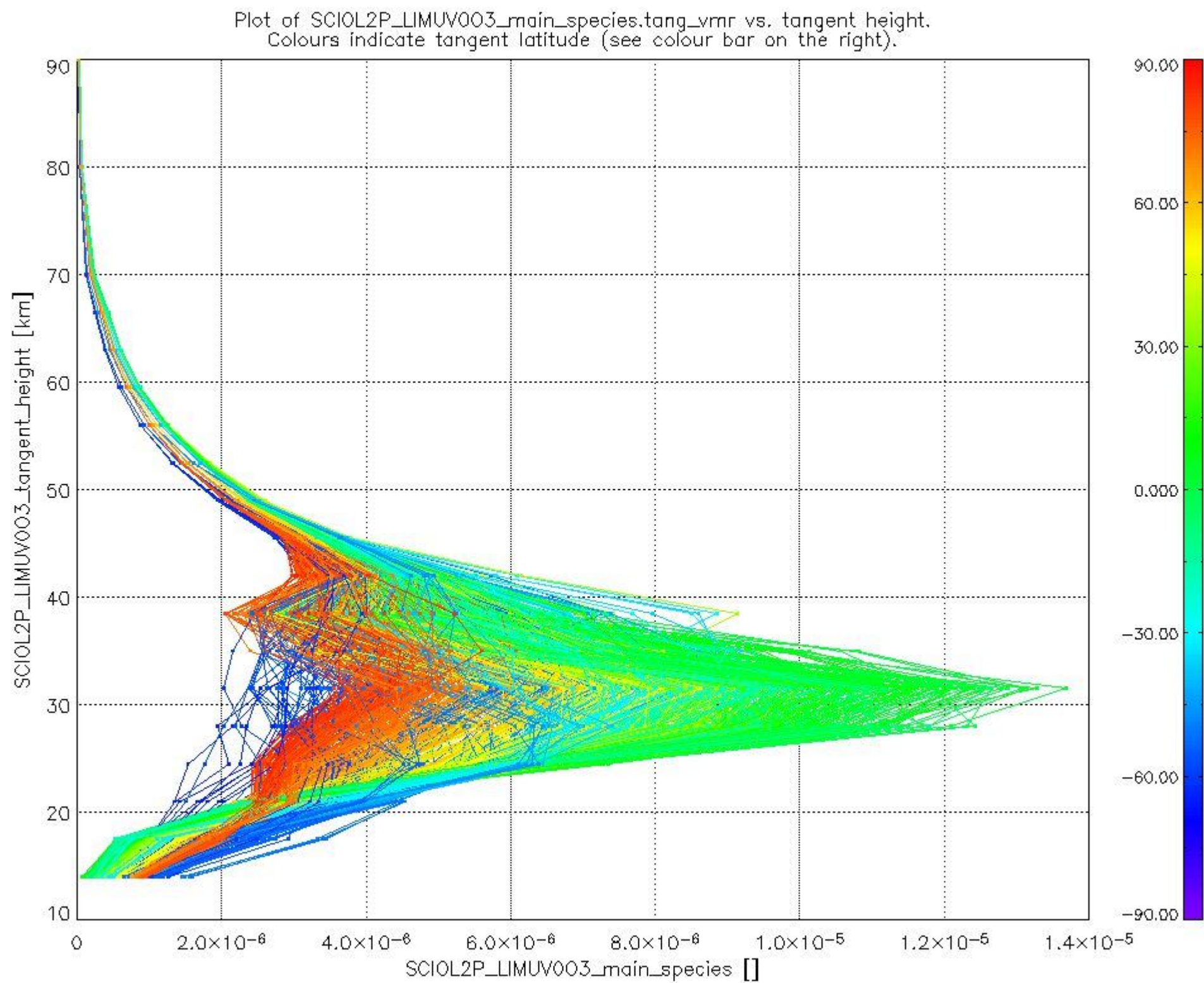
2.2.3 Limb

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

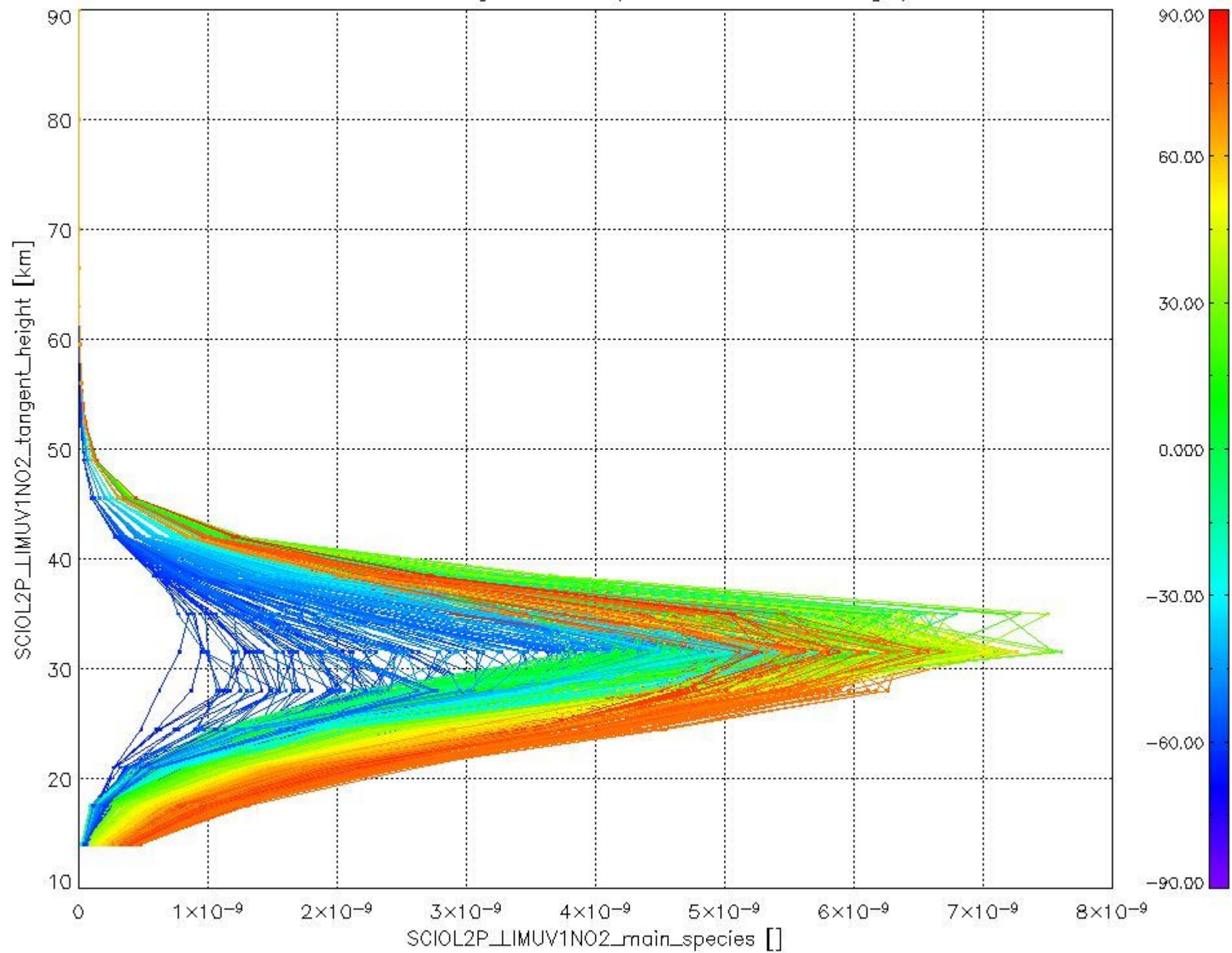
The following data items are currently included into this section:

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.



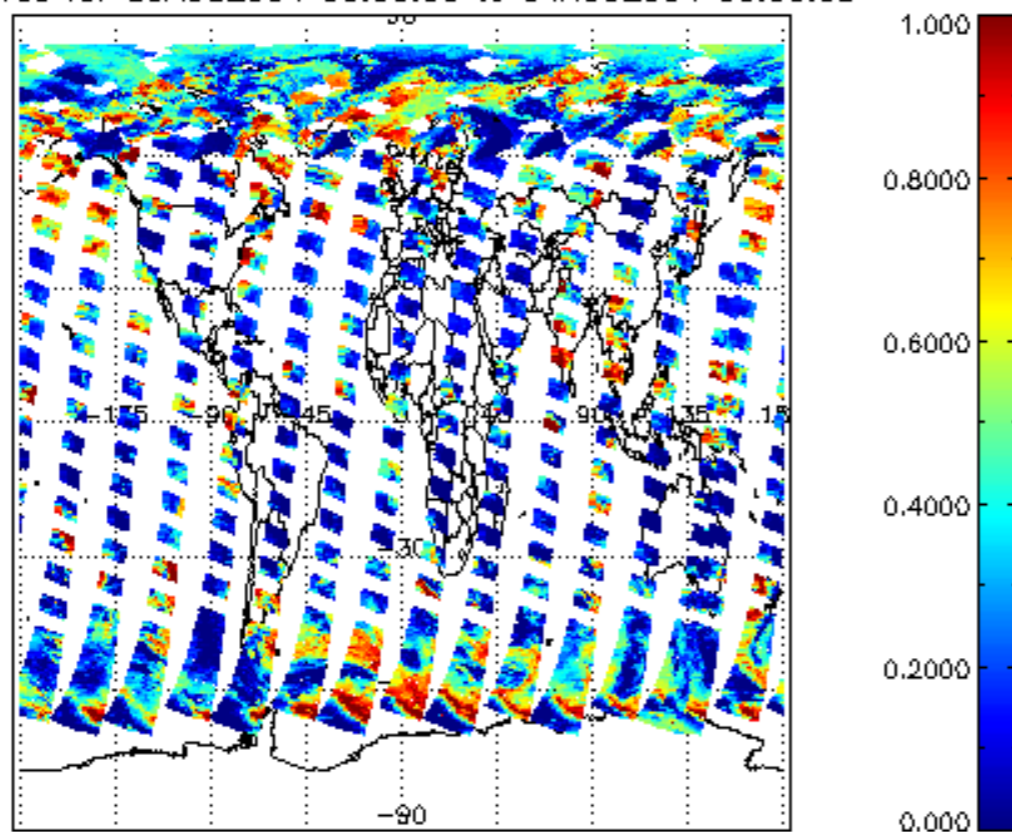
Plot of SCIO2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



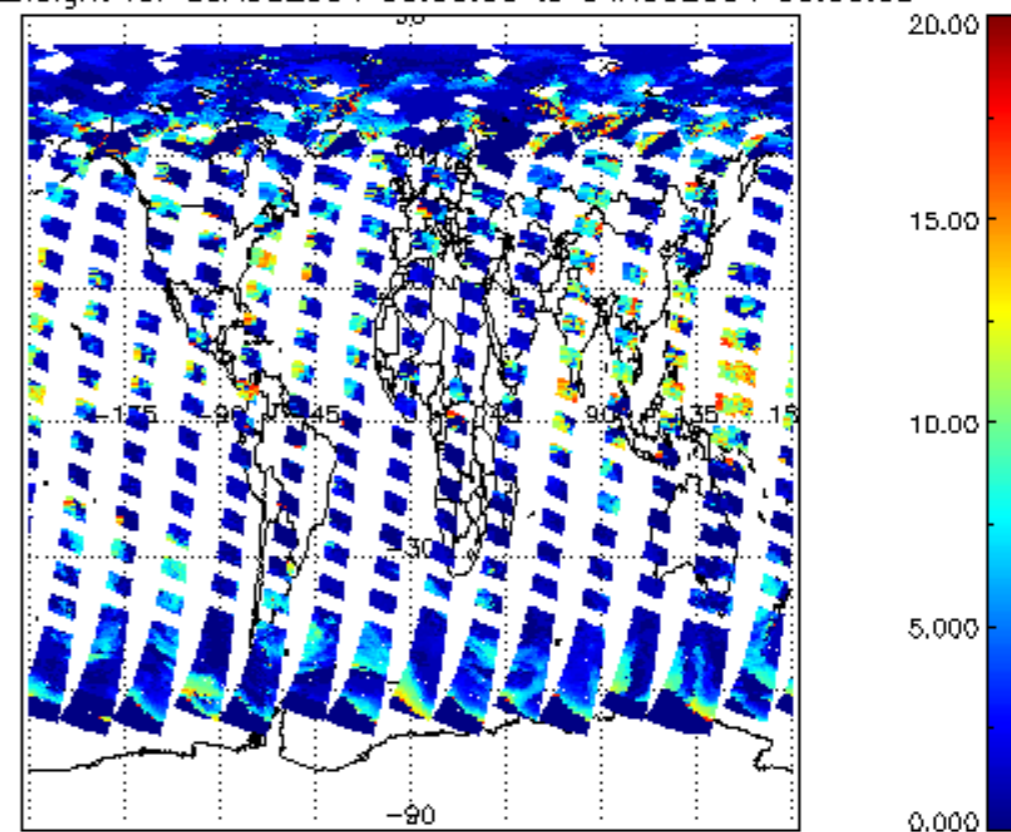
2.3 ADF monitoring

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

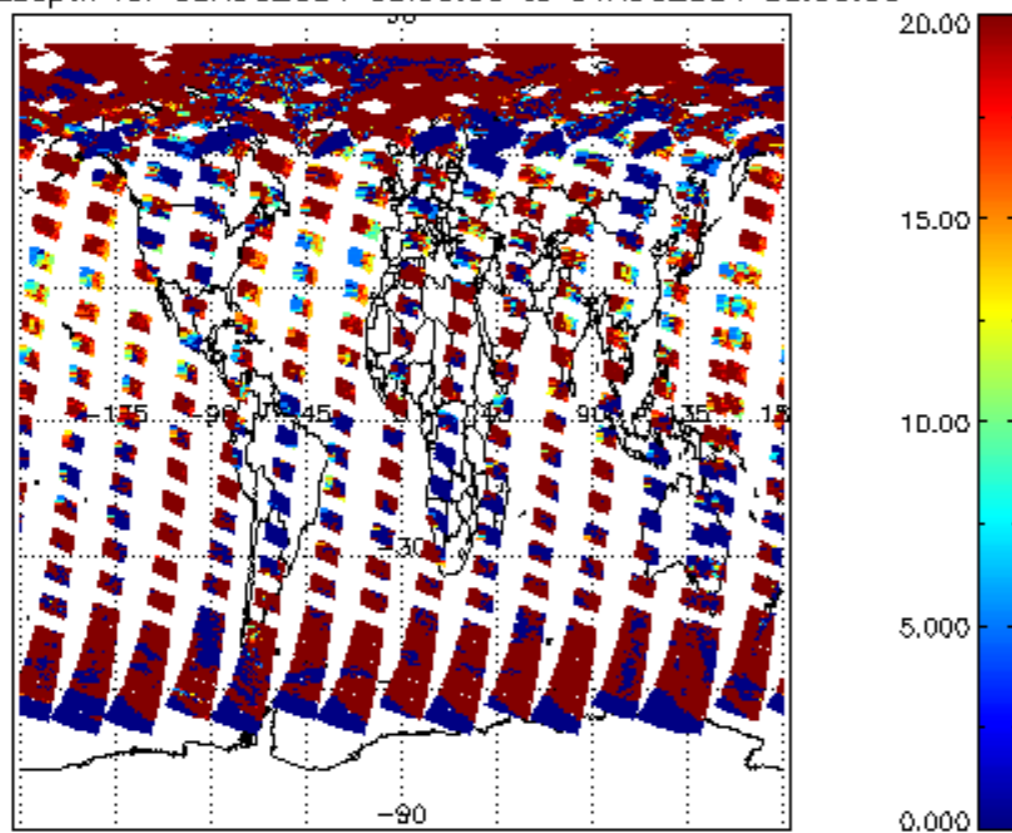
cL_frac for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



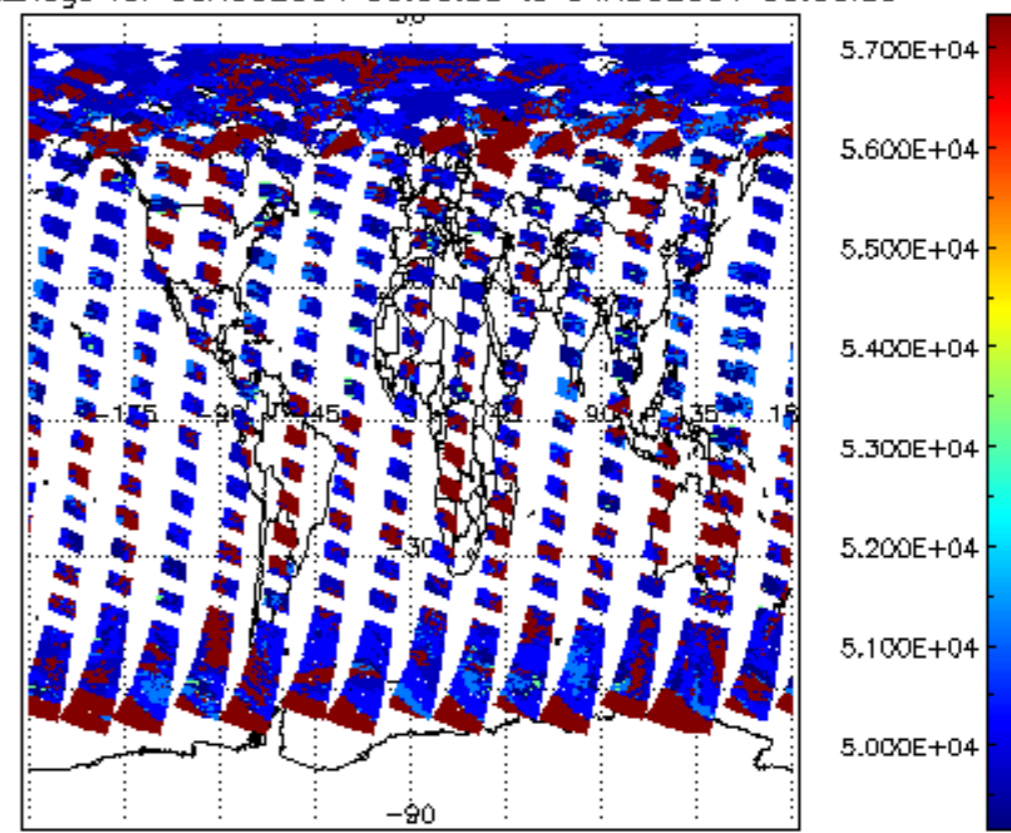
cL_top_height for 03AUG2004 00:00:00 to 04AUG2004 00:00:00

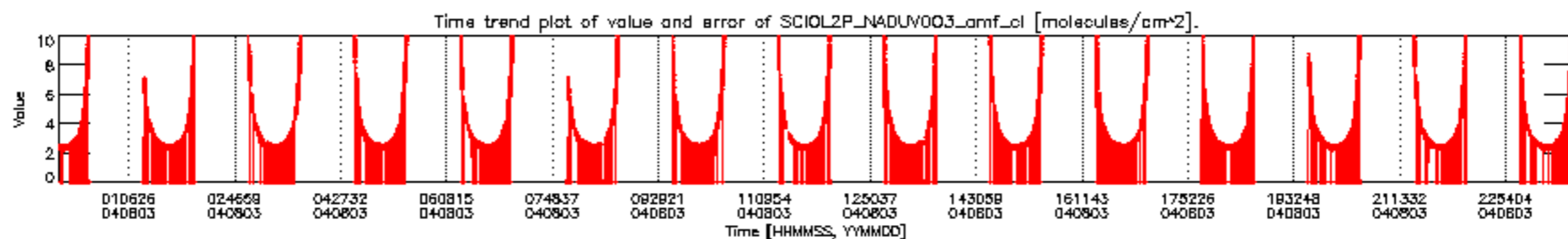
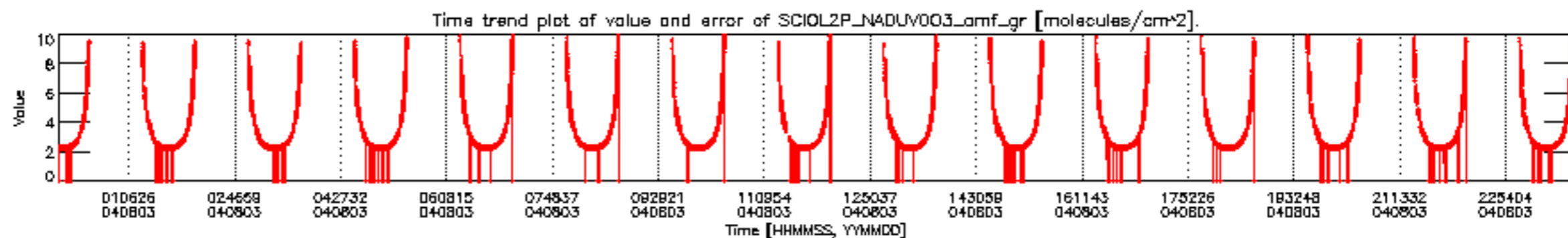
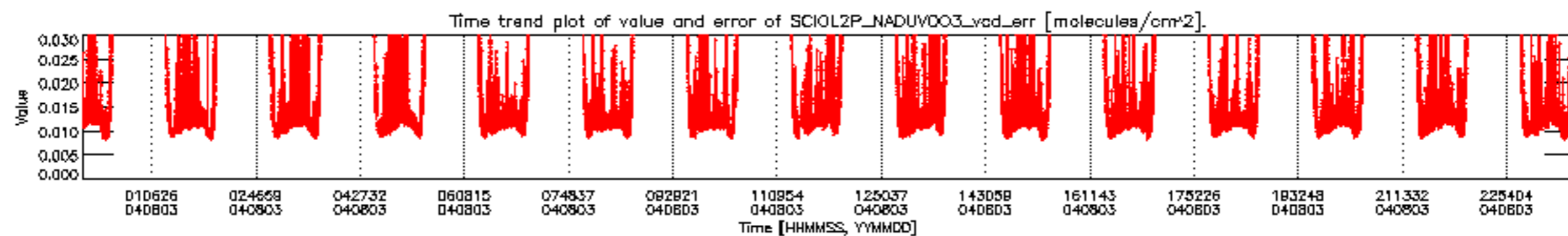
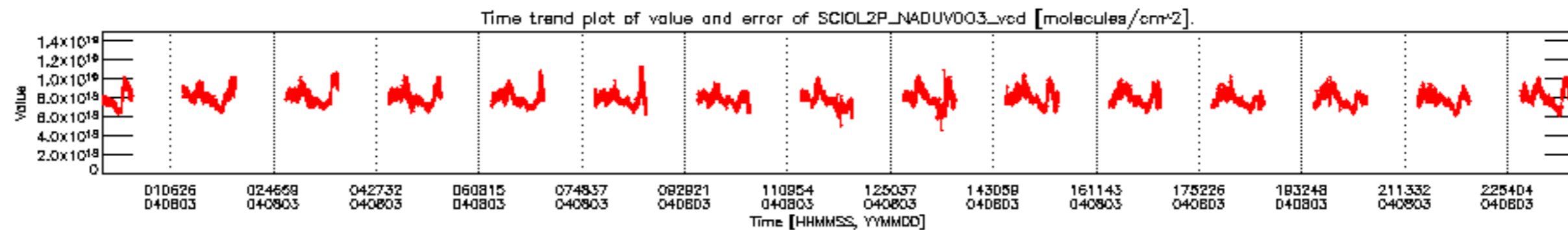


cL_opt_depth for 03AUG2004 00:00:00 to 04AUG2004 00:00:00

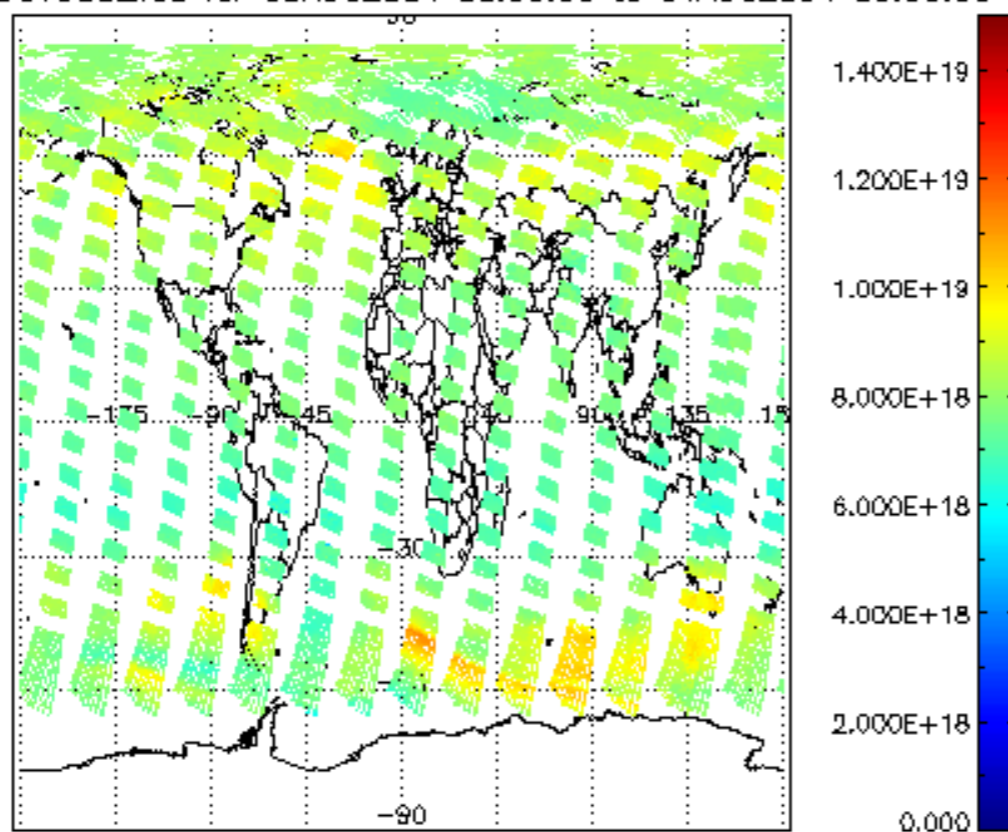


cloud_flags for 03AUG2004 00:00:00 to 04AUG2004 00:00:00

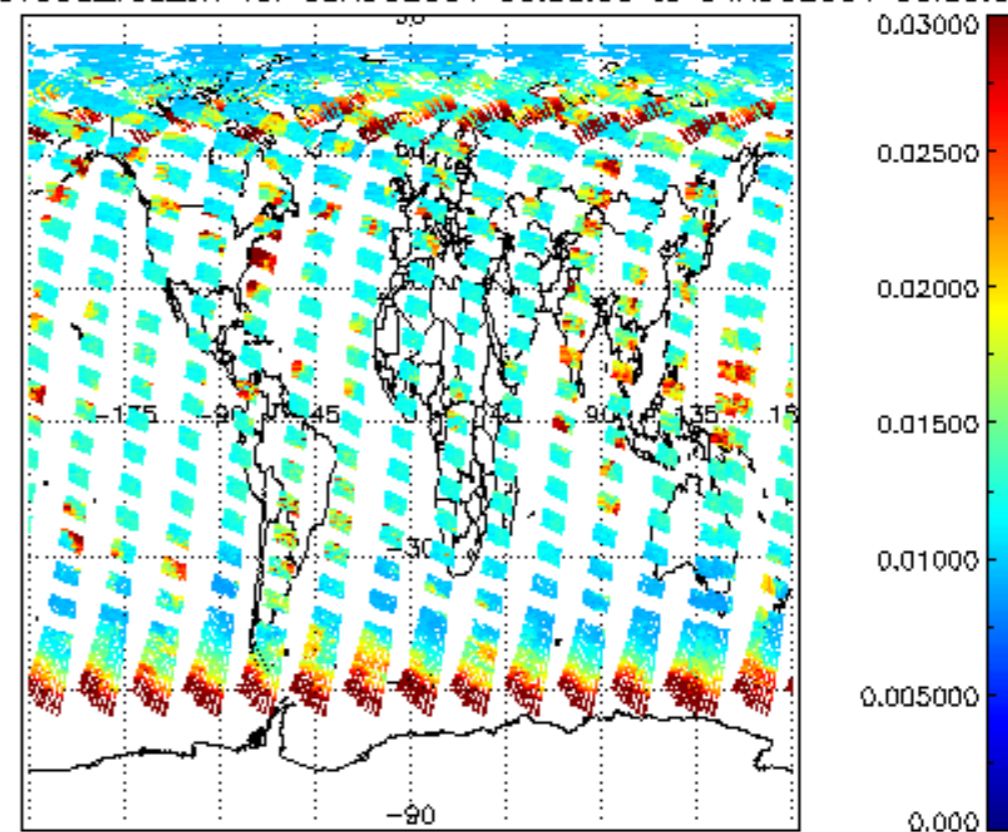




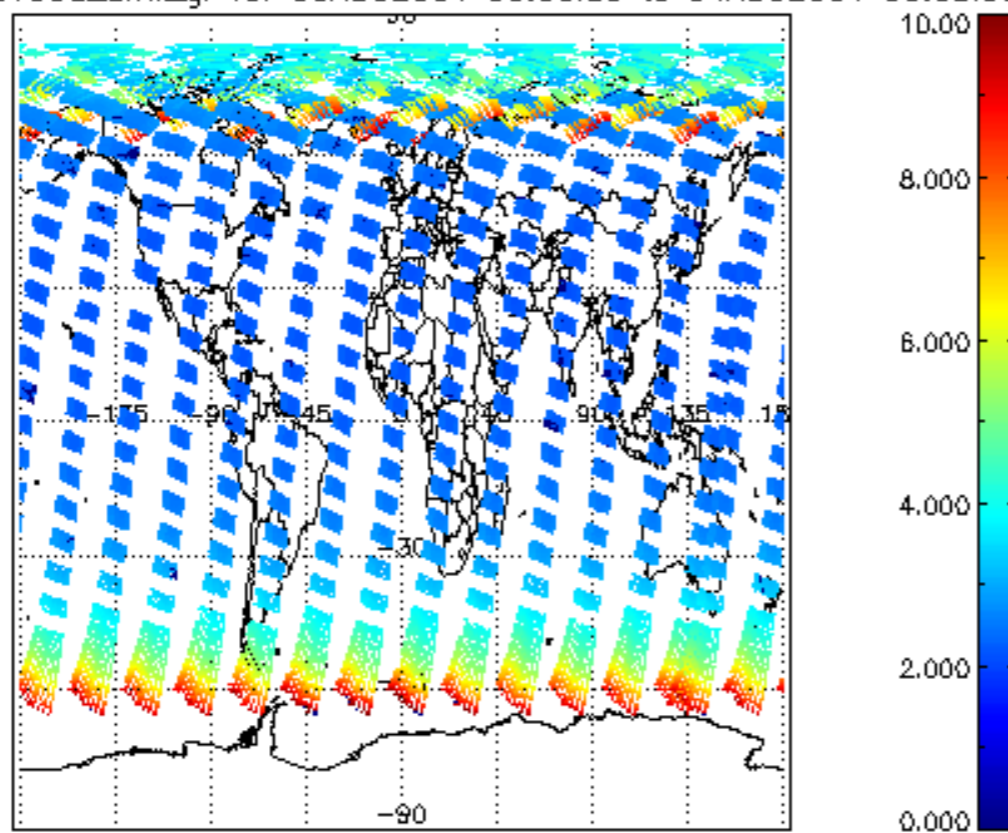
SCIOL2P_NADUV003_vcd for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



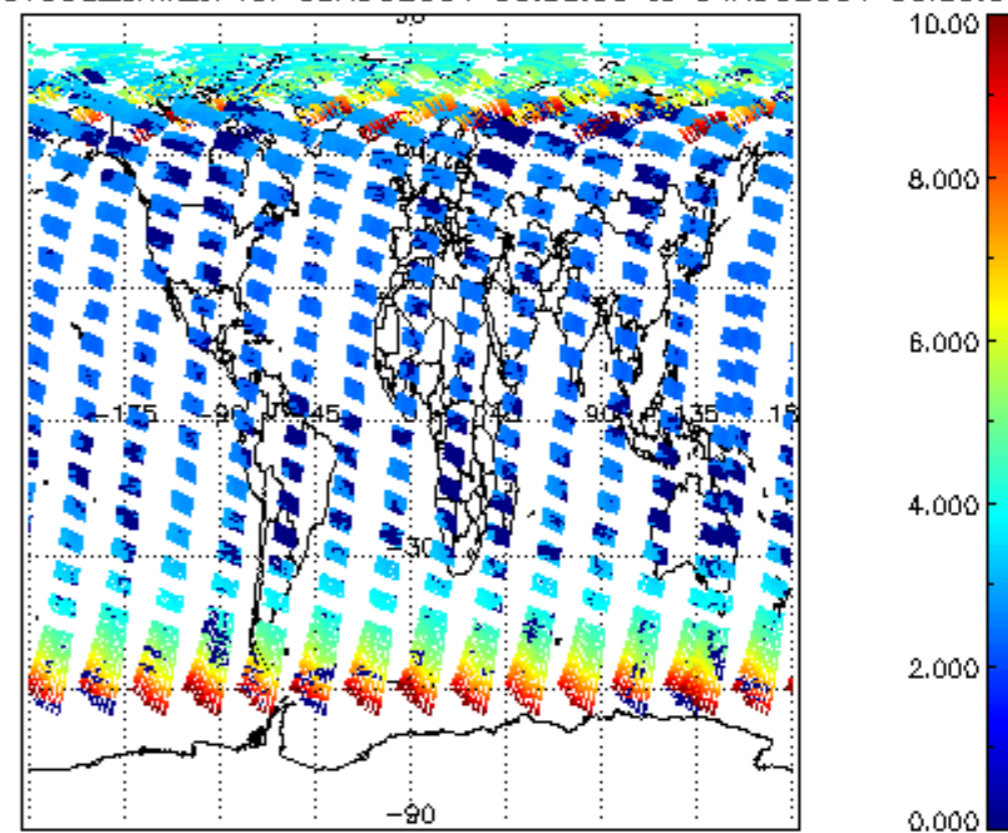
SCIOL2P_NADUV003_vcd_err for 03AUG2004 00:00:00 to 04AUG2004 00:00:00

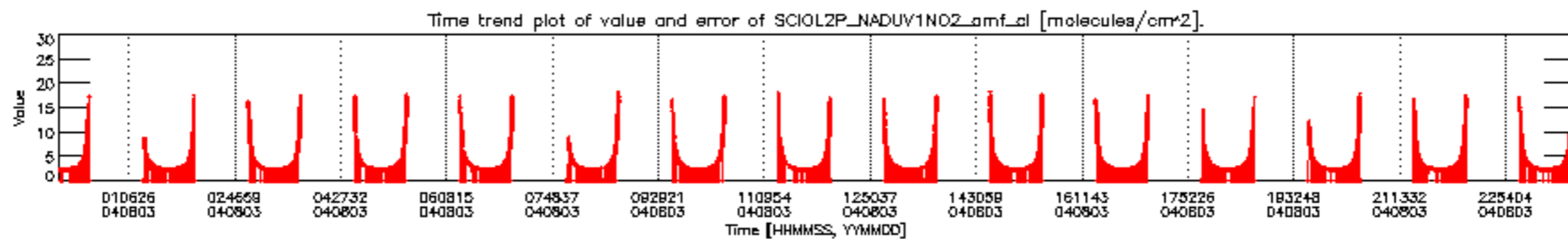
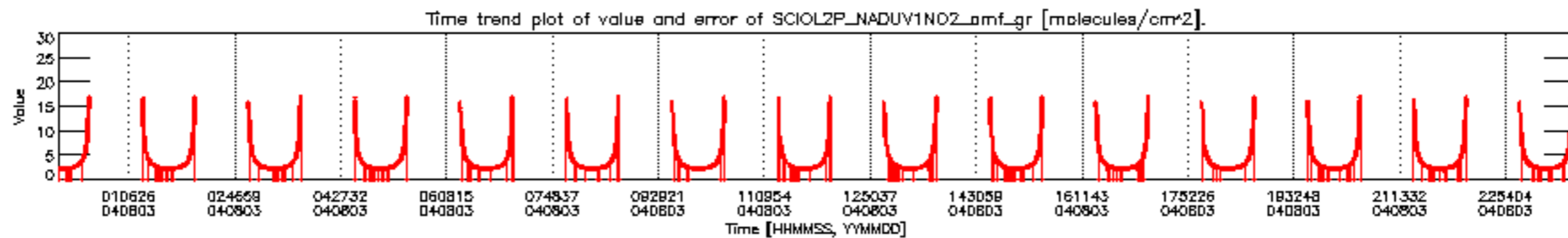
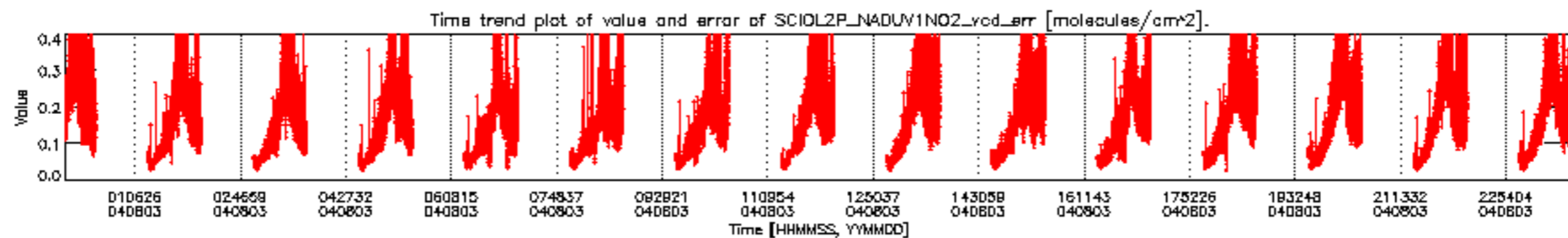
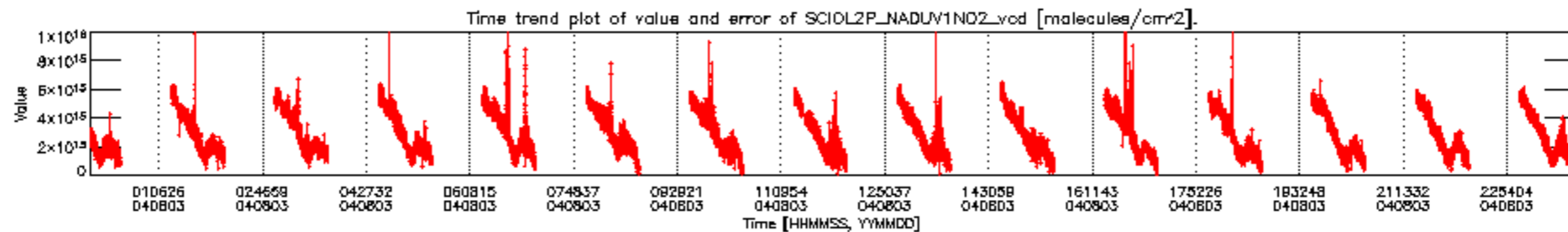


SCIOL2P_NADUV003_amf_gr for 03AUG2004 00:00:00 to 04AUG2004 00:00:00

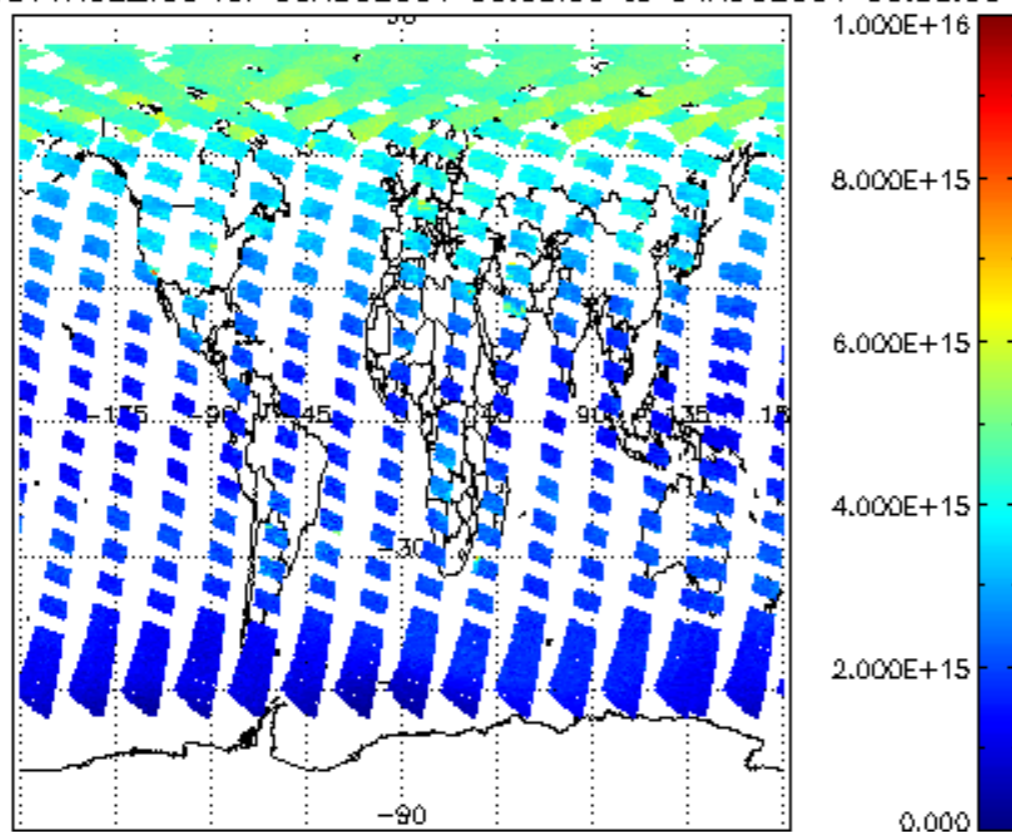


SCIOL2P_NADUV003_amf_cl for 03AUG2004 00:00:00 to 04AUG2004 00:00:00

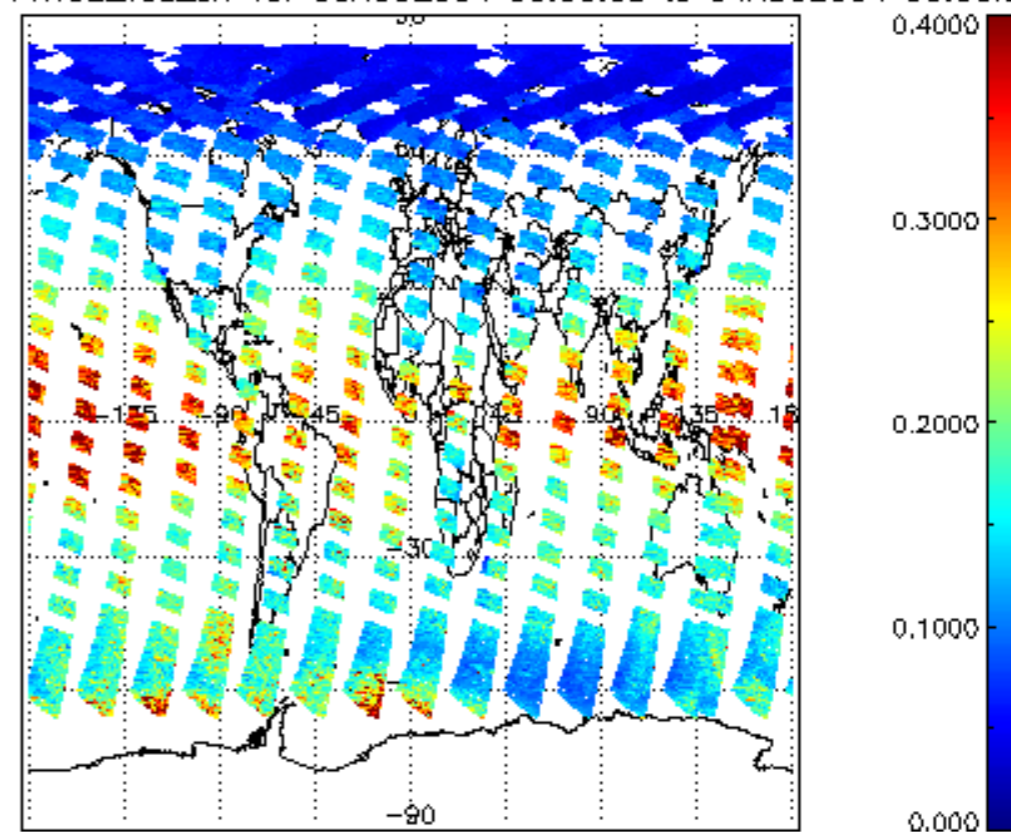




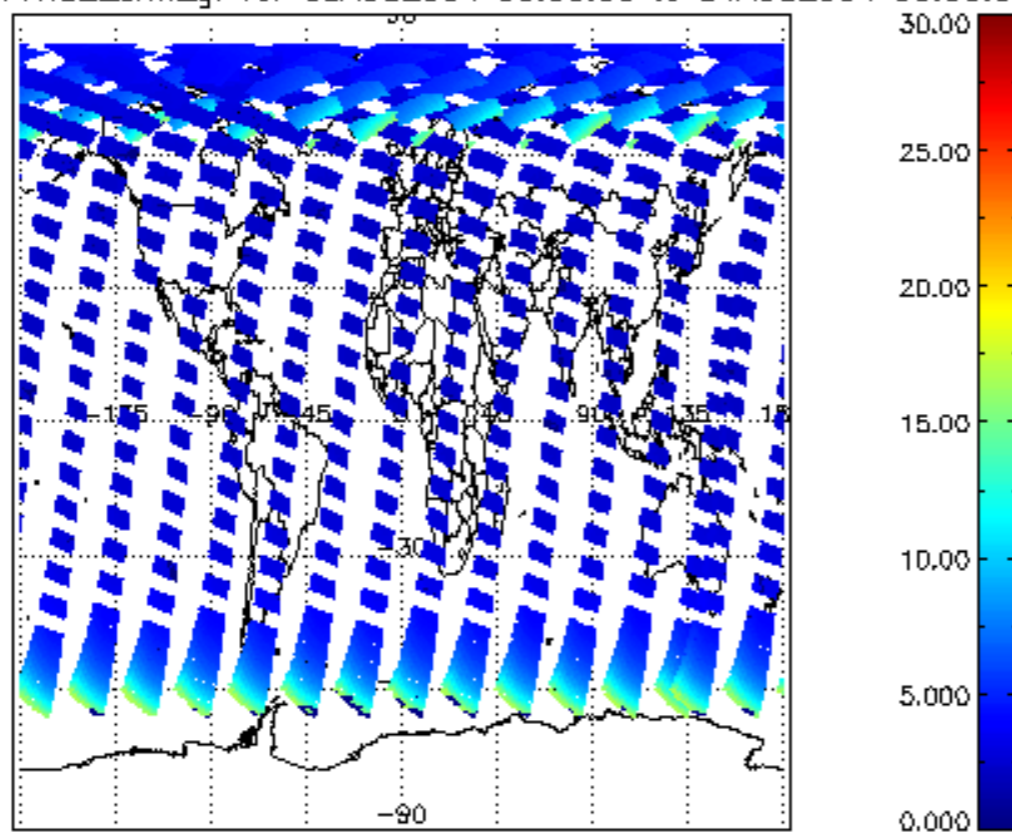
SCIOL2P_NADUV1NO2_vcd for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



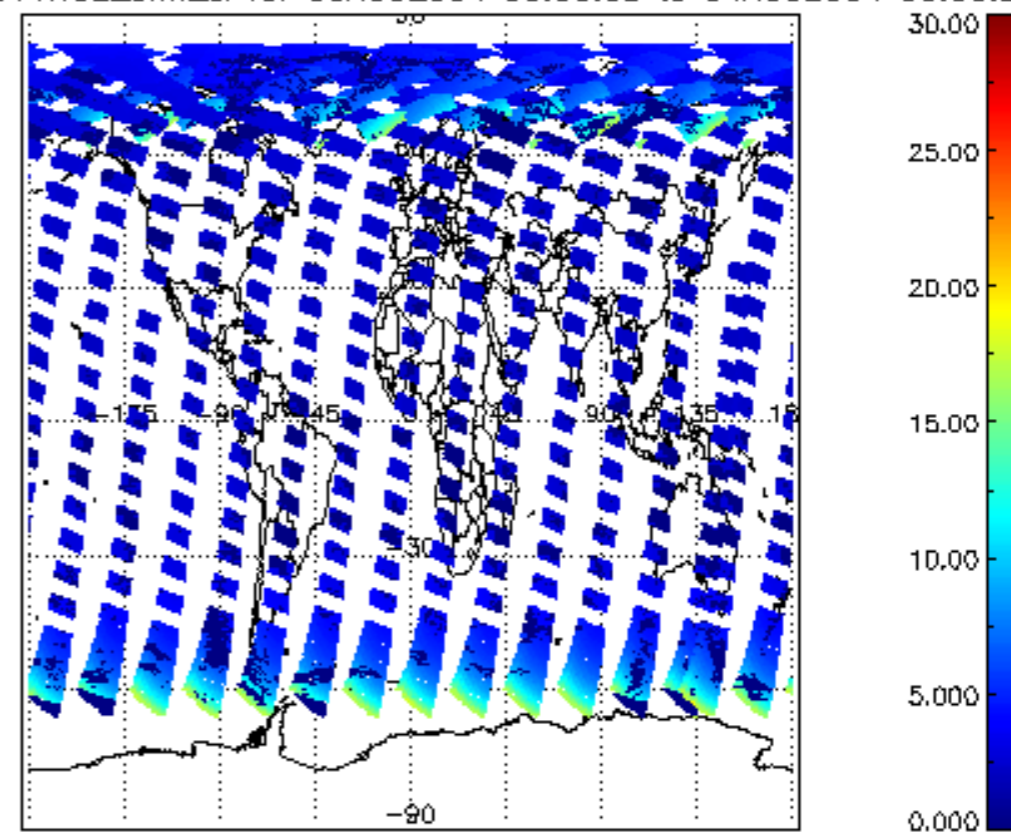
SCIOL2P_NADUV1NO2_vcd_err for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



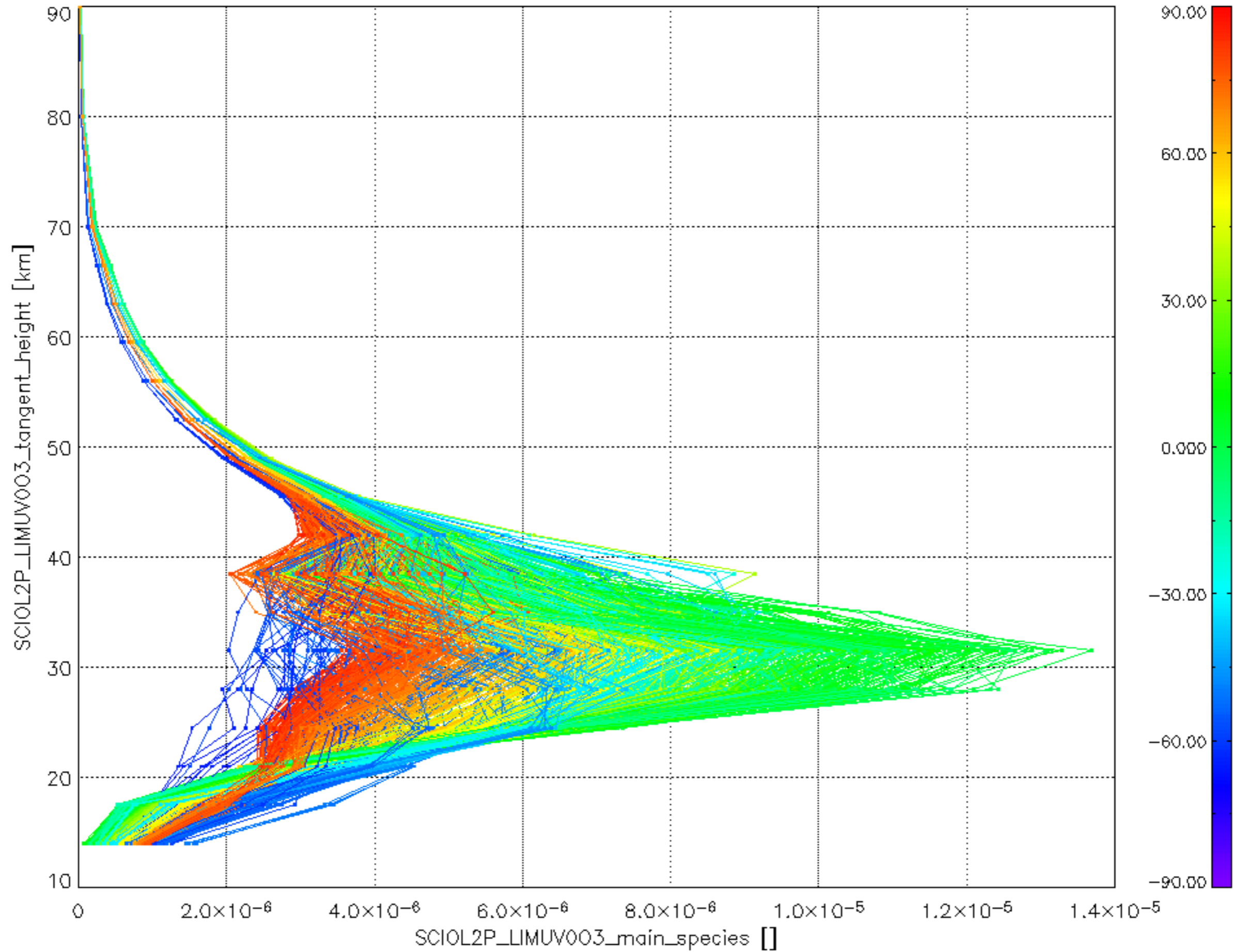
SCIOL2P_NADUV1NO2_amf_gr for 03AUG2004 00:00:00 to 04AUG2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 03AUG2004 00:00:00 to 04AUG2004 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).

