

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	03SEP2008 13:52:31
Data source version	SCIA-OL/3.01-R
Processing scope for products	21AUG2004 00:00:00 to 22AUG2004 00:00:00
Start time of first product within scope	21AUG2004 00:09:39
Stop time of last product within scope	22AUG2004 00:34:30
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__2PRDPA20040821_000939_000033812029_00360_12939_9305.N1	21AUG2004 00:09:39	21AUG2004 01:06:01	0	GOOD
1	SCI_OL__2PRDPA20040821_015015_000033252029_00361_12940_9428.N1	21AUG2004 01:50:15	21AUG2004 02:45:41	0	GOOD
2	SCI_OL__2PRDPA20040821_033052_000033812029_00362_12941_9652.N1	21AUG2004 03:30:52	21AUG2004 04:27:13	0	GOOD
3	SCI_OL__2PRDPA20040821_051128_000033252029_00363_12942_9292.N1	21AUG2004 05:11:28	21AUG2004 06:06:54	0	GOOD
4	SCI_OL__2PRDPA20040821_065205_000033812029_00364_12943_9296.N1	21AUG2004 06:52:05	21AUG2004 07:48:26	0	GOOD
5	SCI_OL__2PRDPA20040821_083241_000033252029_00365_12944_9357.N1	21AUG2004 08:32:41	21AUG2004 09:28:07	0	GOOD
6	SCI_OL__2PRDPA20040821_101317_000033812029_00366_12945_9574.N1	21AUG2004 10:13:17	21AUG2004 11:09:39	0	GOOD
7	SCI_OL__2PRDPA20040821_115354_000033252029_00367_12946_9403.N1	21AUG2004 11:53:54	21AUG2004 12:49:19	0	GOOD
8	SCI_OL__2PRDPA20040821_133430_000033812029_00368_12947_9407.N1	21AUG2004 13:34:30	21AUG2004 14:30:51	0	GOOD
9	SCI_OL__2PRDPA20040821_151506_000033252029_00369_12948_9559.N1	21AUG2004 15:15:06	21AUG2004 16:10:32	0	GOOD
10	SCI_OL__2PRDPA20040821_165543_000033812029_00370_12949_9474.N1	21AUG2004 16:55:43	21AUG2004 17:52:04	0	GOOD
11	SCI_OL__2PRDPA20040821_183614_000033892029_00371_12950_9530.N1	21AUG2004 18:36:14	21AUG2004 19:32:43	0	GOOD
12	SCI_OL__2PRDPA20040821_201715_000033122029_00372_12951_9236.N1	21AUG2004 20:17:15	21AUG2004 21:12:28	0	GOOD
13	SCI_OL__2PRDPA20040821_215732_000033252029_00373_12952_9511.N1	21AUG2004 21:57:32	21AUG2004 22:52:58	0	GOOD
14	SCI_OL__2PRDPA20040821_233808_000033812029_00374_12953_9516.N1	21AUG2004 23:38:08	22AUG2004 00:34:30	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: 150280

Total number of cloud data DSRs with good quality flag (=0): 150280 (100.0 %)

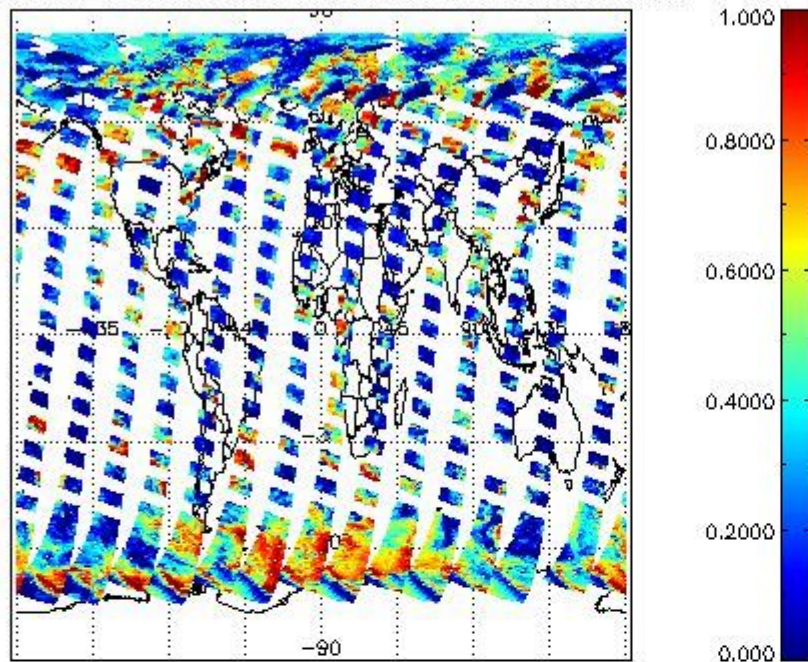
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	150280	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	150280	0.16912	0.12500	0.12500	0.25000	0.059736	s
CL_FRAC	150280	0.35513	0.31074	0.0000	1.0000	0.28364	-
CL_FRAC_ERR	150280	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	150280	5.4118	4.0000	4.0000	8.0000	1.9115	
PMD_READ_CL[0]	150280	0.20450	0.0000	0.0000	8.0000	1.0187	-
PMD_READ_CL[1]	150280	0.91682	0.0000	0.0000	8.0000	1.9748	-
CL_TOP_HEIGHT	127412	3.5574	1.8947	0.0000	17.000	3.6710	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	127412	60.009	82.145	0.0000	101.00	42.852	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	150280	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	150280	11001010	11000100	11000000	11100000	3309.6	flags
AERO_ABSO_IND	150280	0.80855	0.60386	-4.2816	10.832	1.0773	
AERO_IND_DIAG	150280	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	150280	01010101	00000000	00000000	11000000	24441.	flags

Time and geolocation plots:

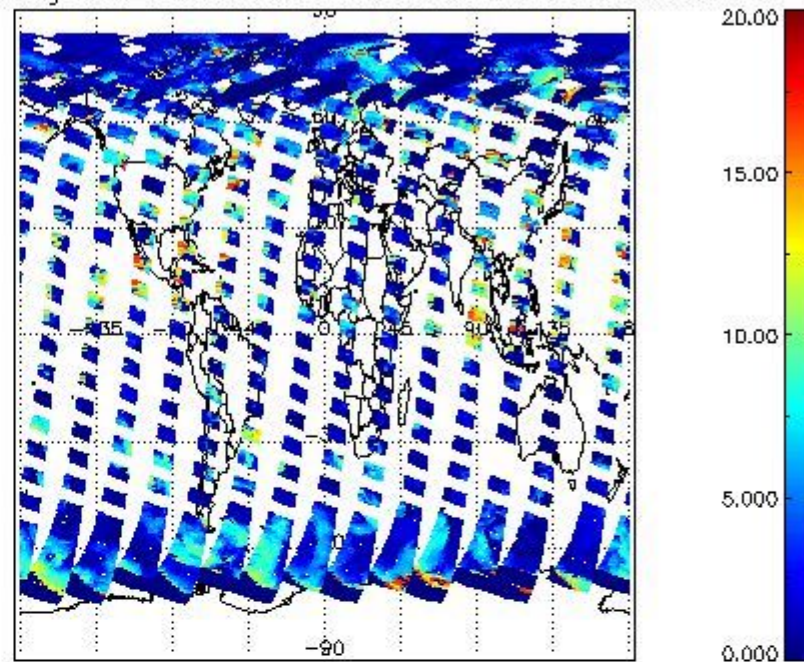
Plots are available for the following parameters:

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

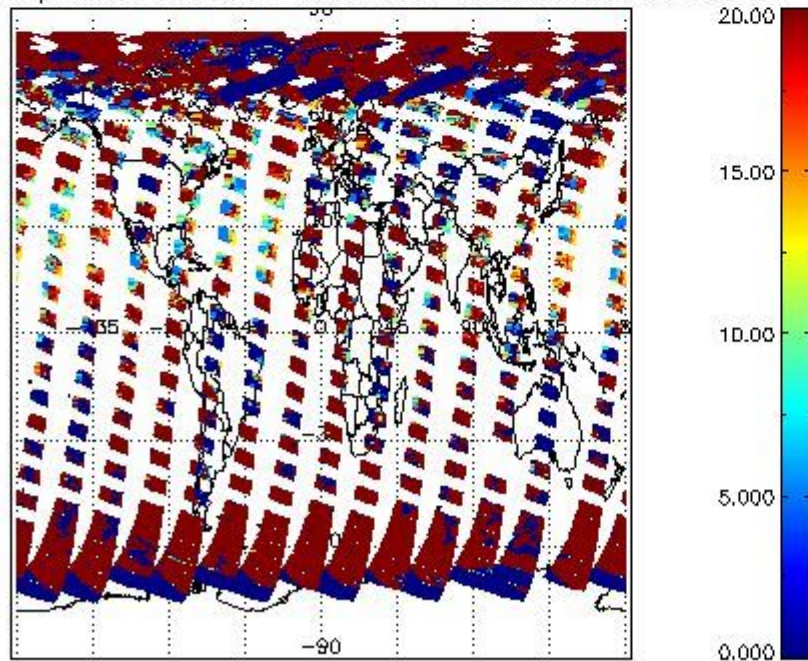
cL_frac for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



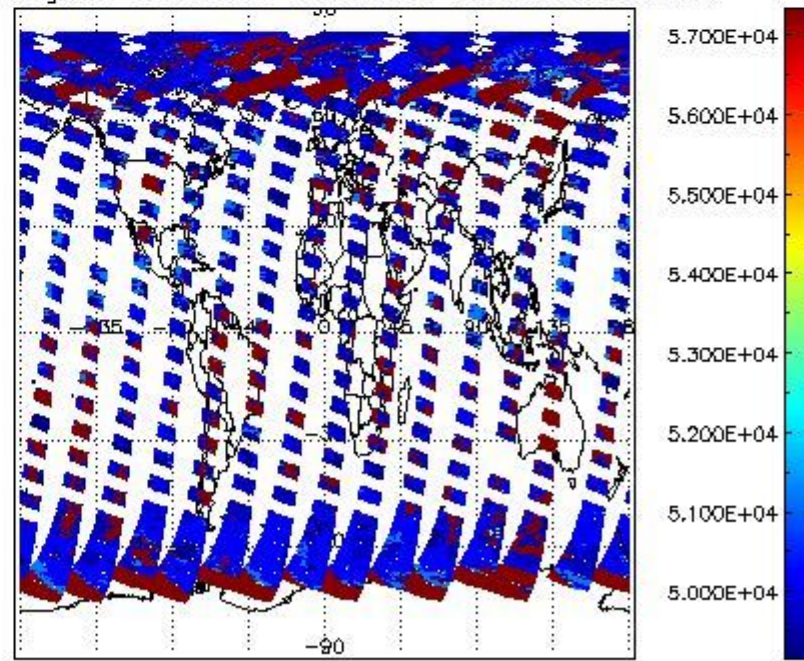
cL_top_height for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



cL_opt_depth for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



cloud_flags for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



2.2.2 Nadir

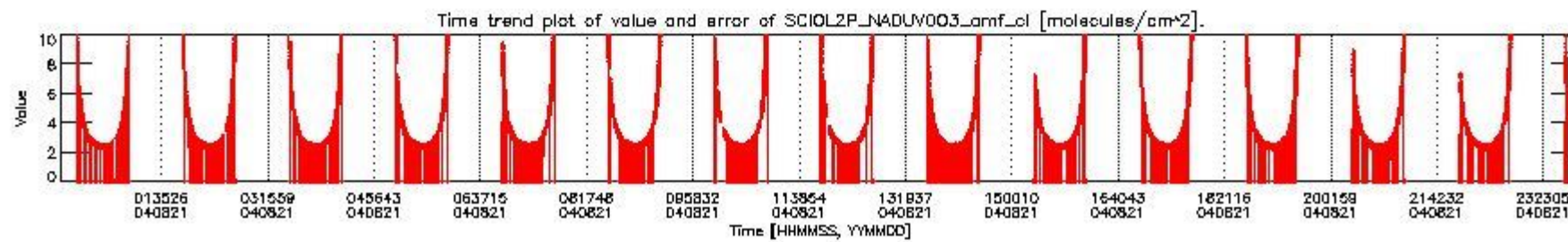
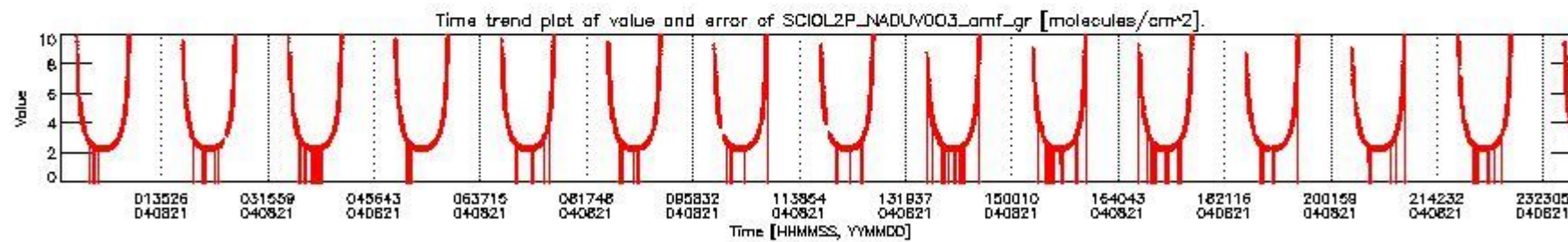
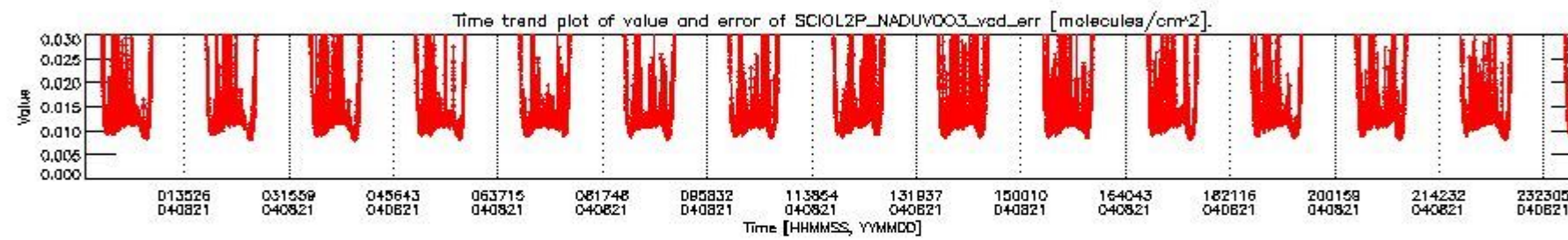
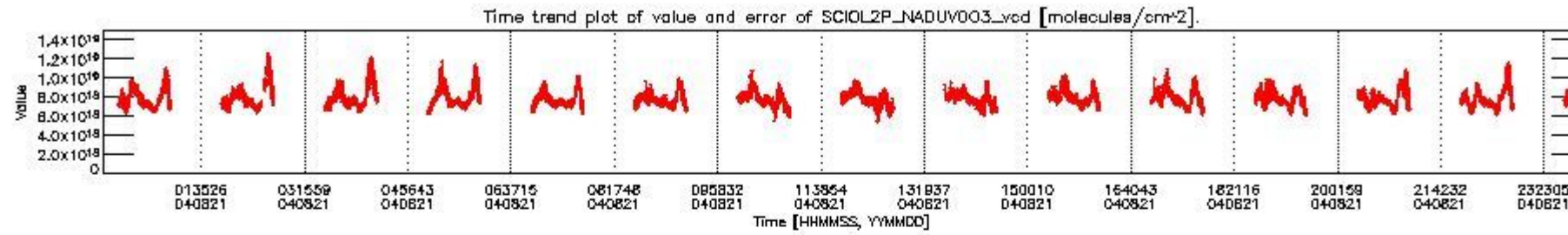
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

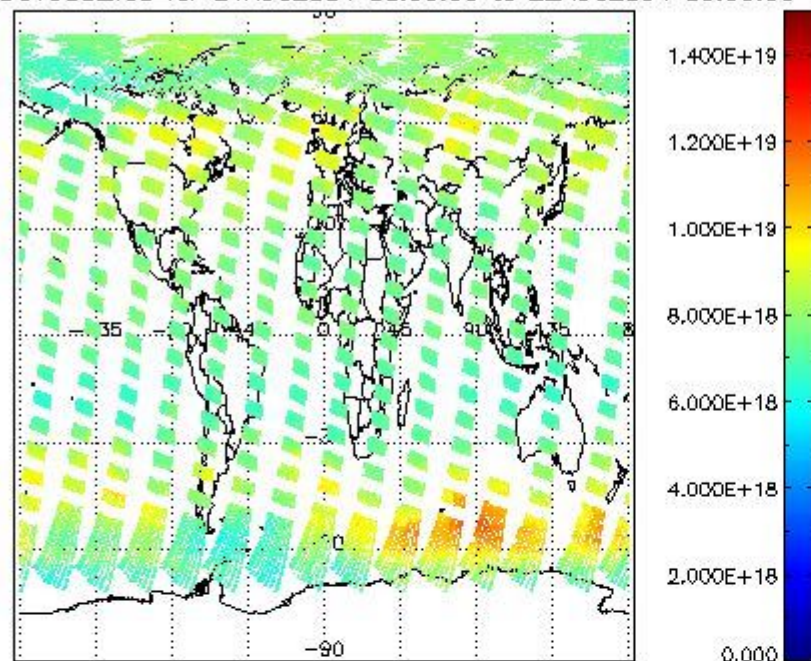
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

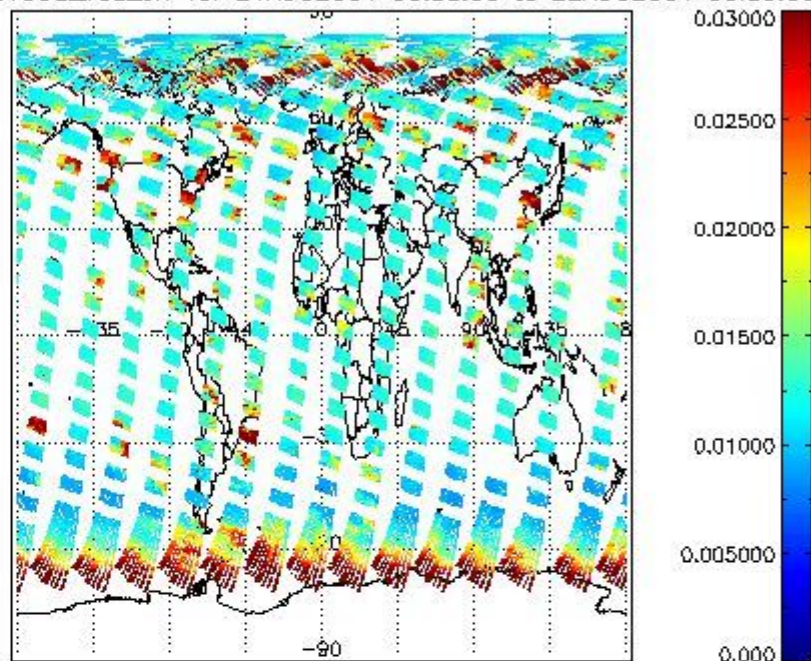
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



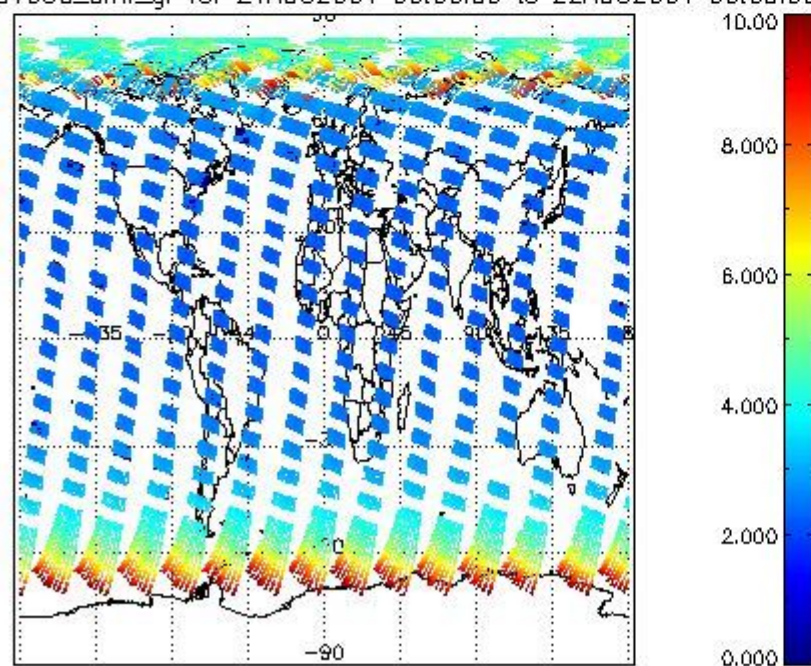
SCIOL2P_NADUV003_vcd for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



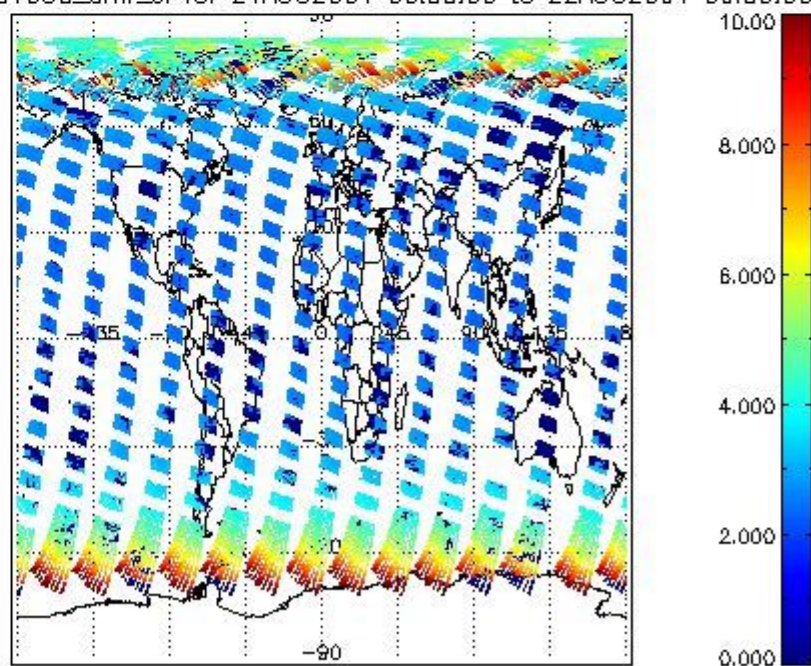
SCIOL2P_NADUV003_vcd_err for 21AUG2004 00:00:00 to 22AUG2004 00:00:00

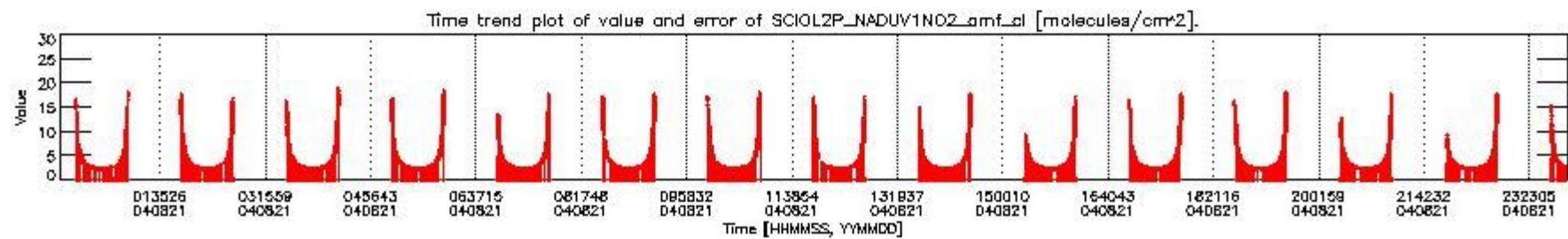
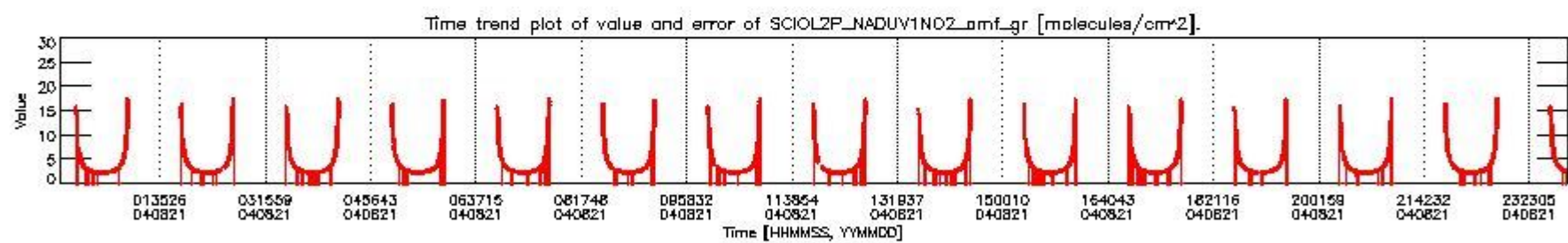
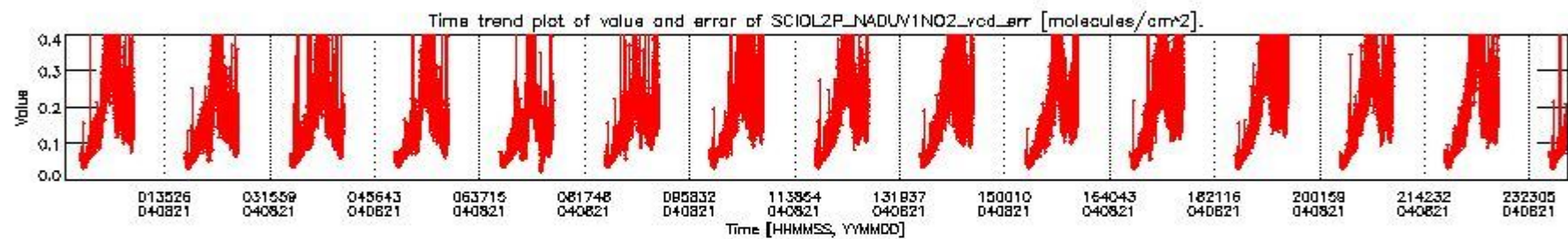
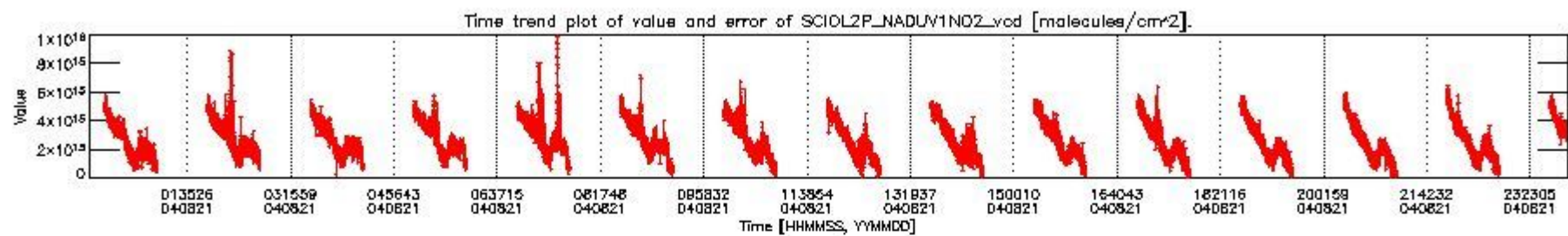


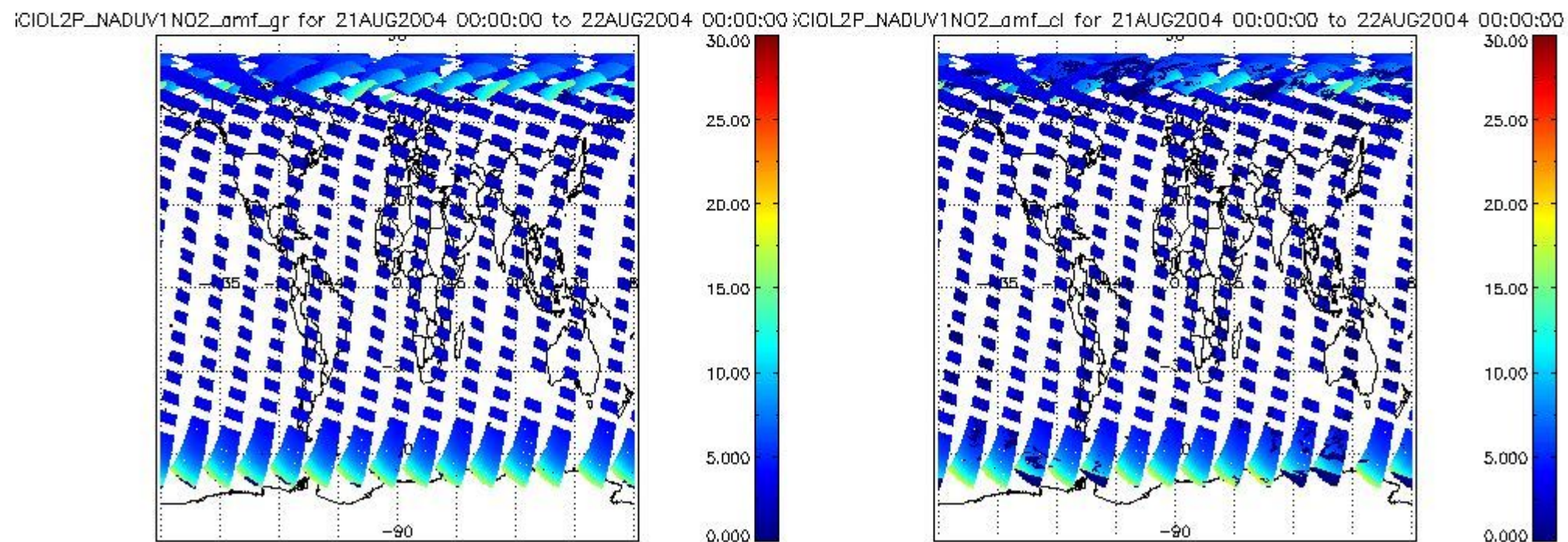
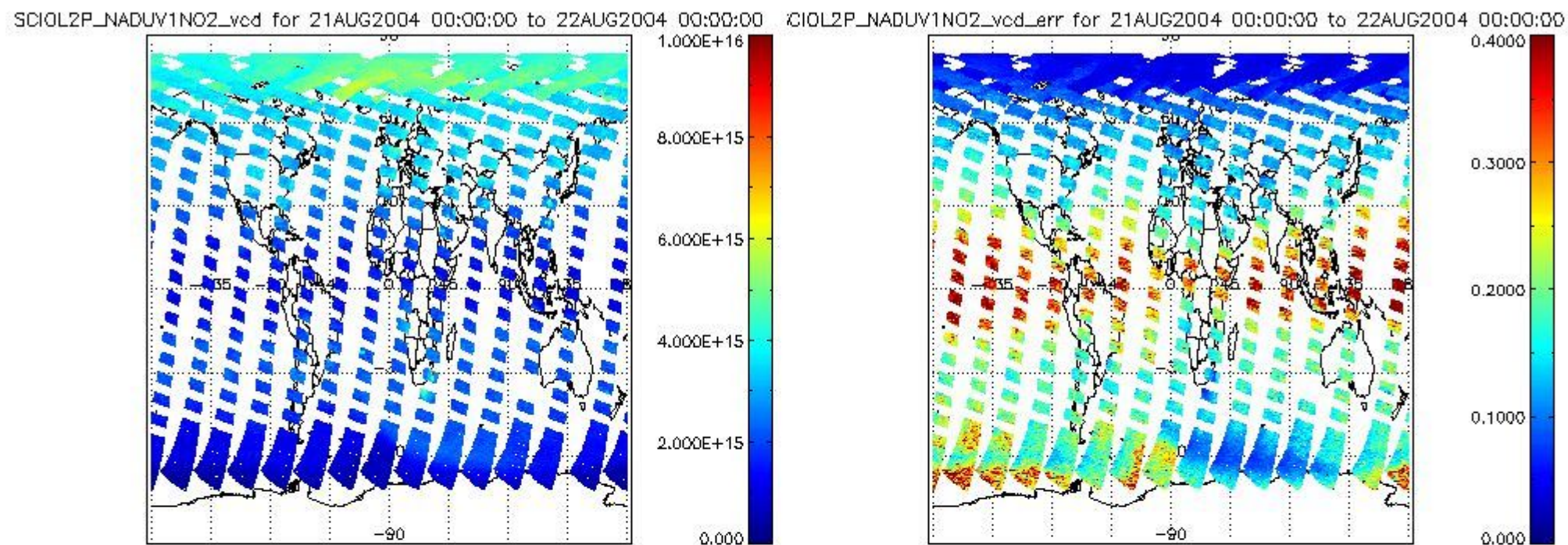
SCIOL2P_NADUV003_amf_gr for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 21AUG2004 00:00:00 to 22AUG2004 00:00:00







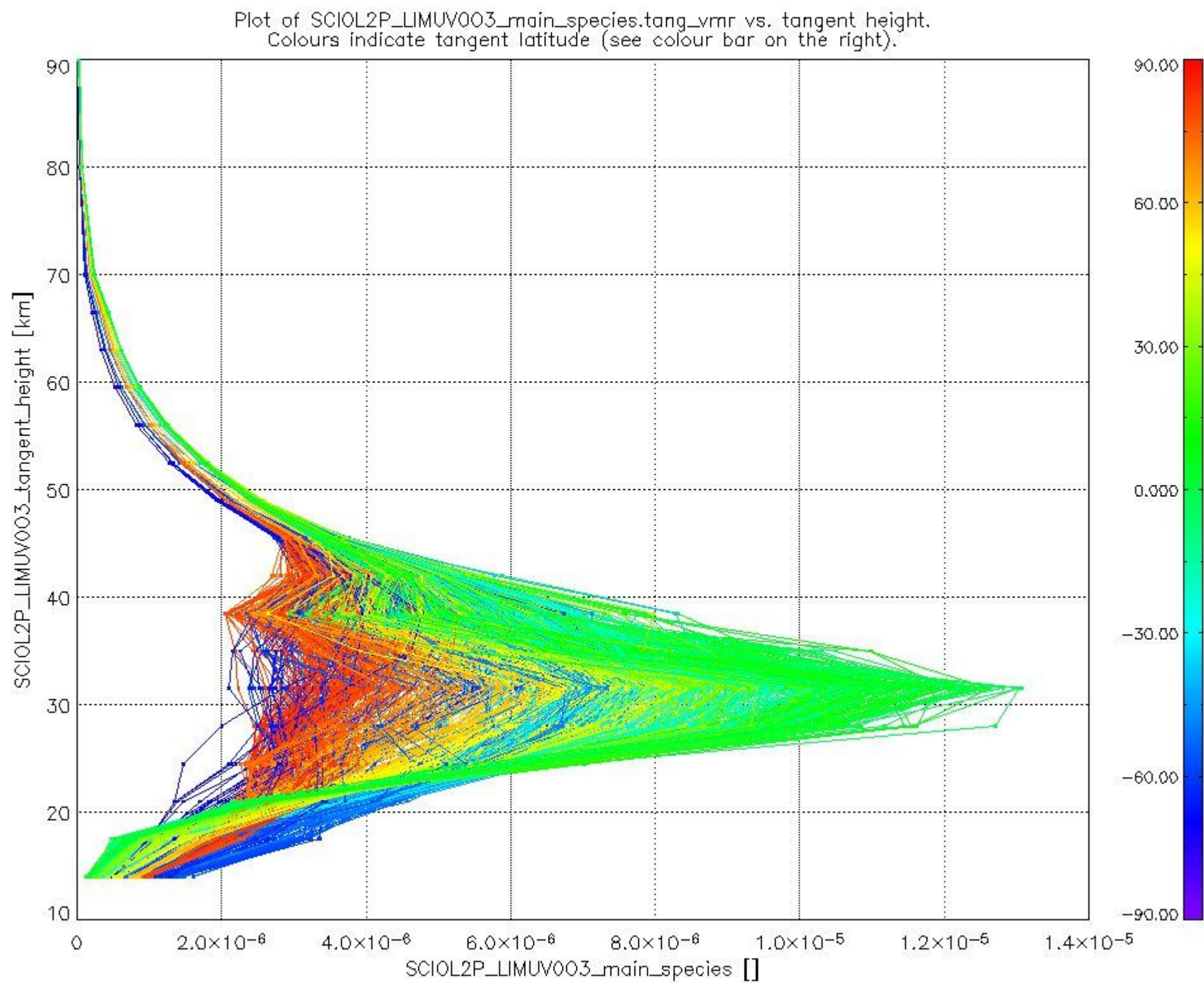
2.2.3 Limb

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

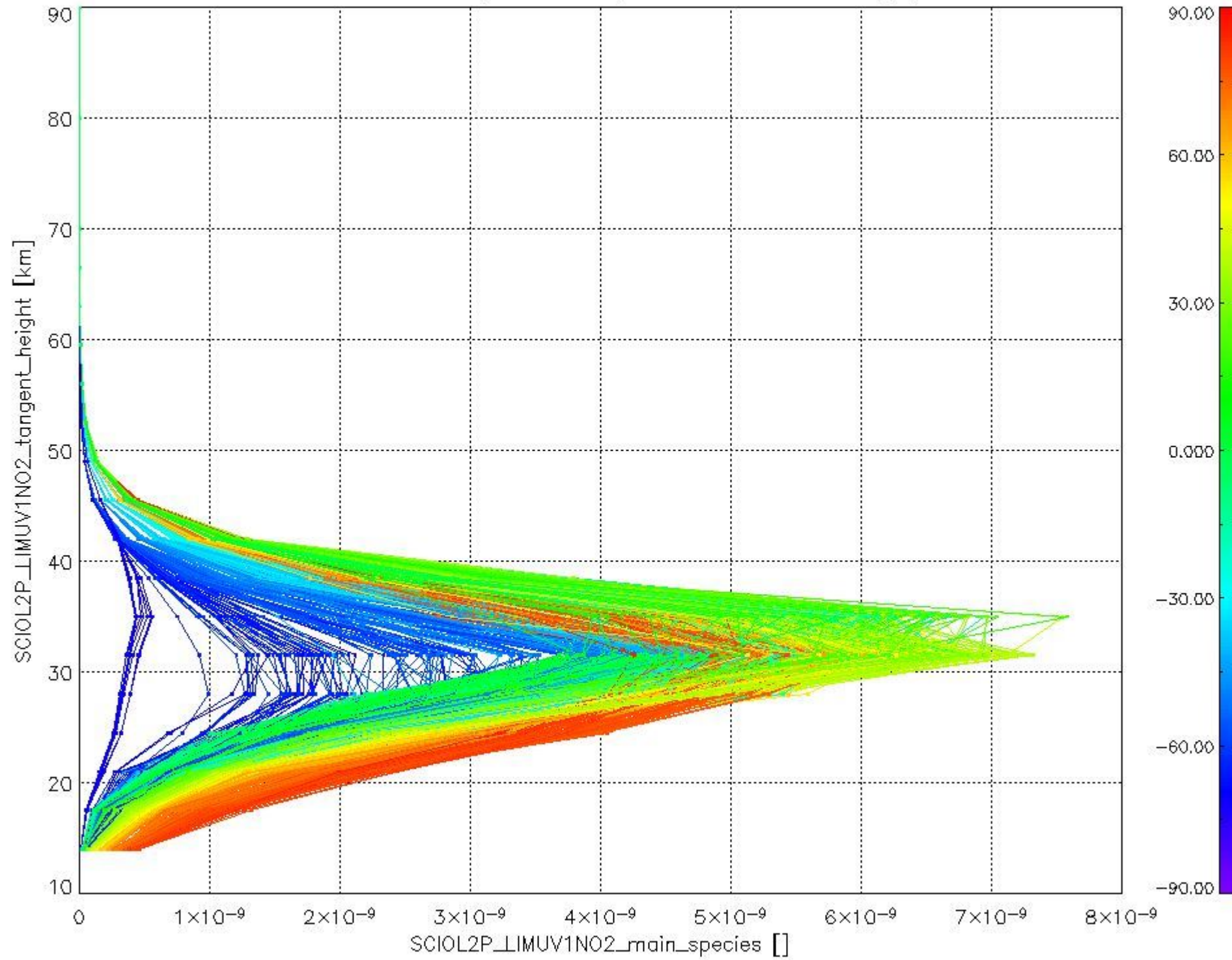
The following data items are currently included into this section:

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.



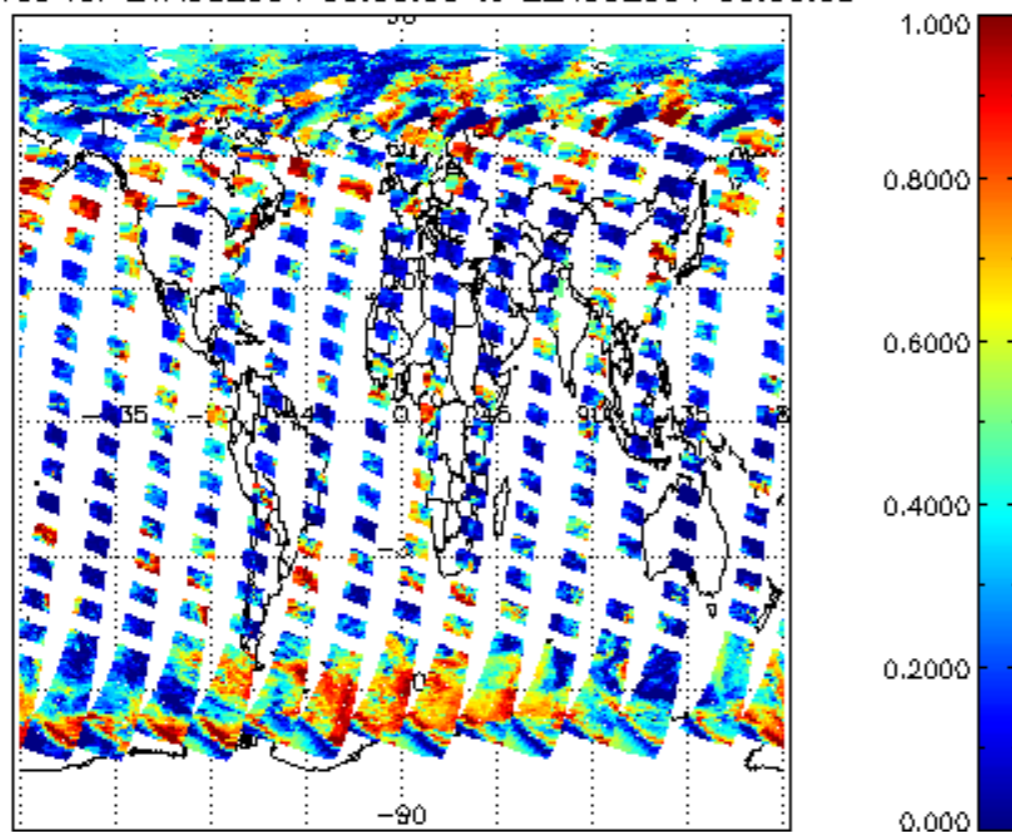
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



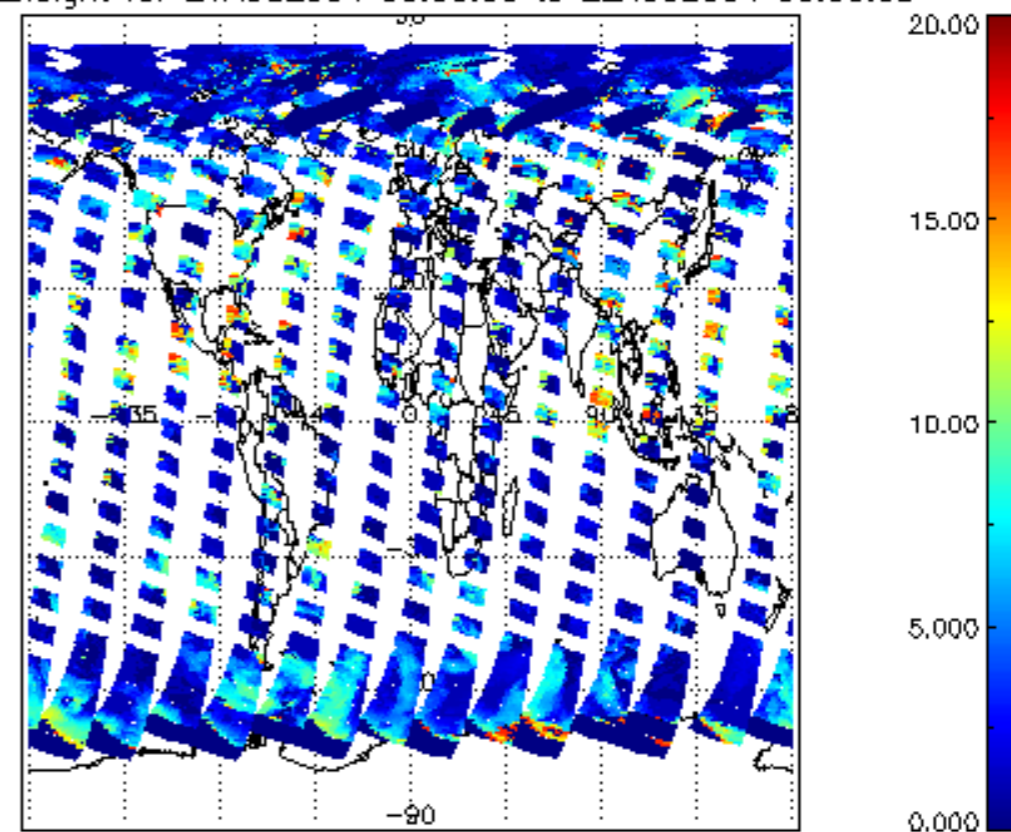
2.3 ADF monitoring

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

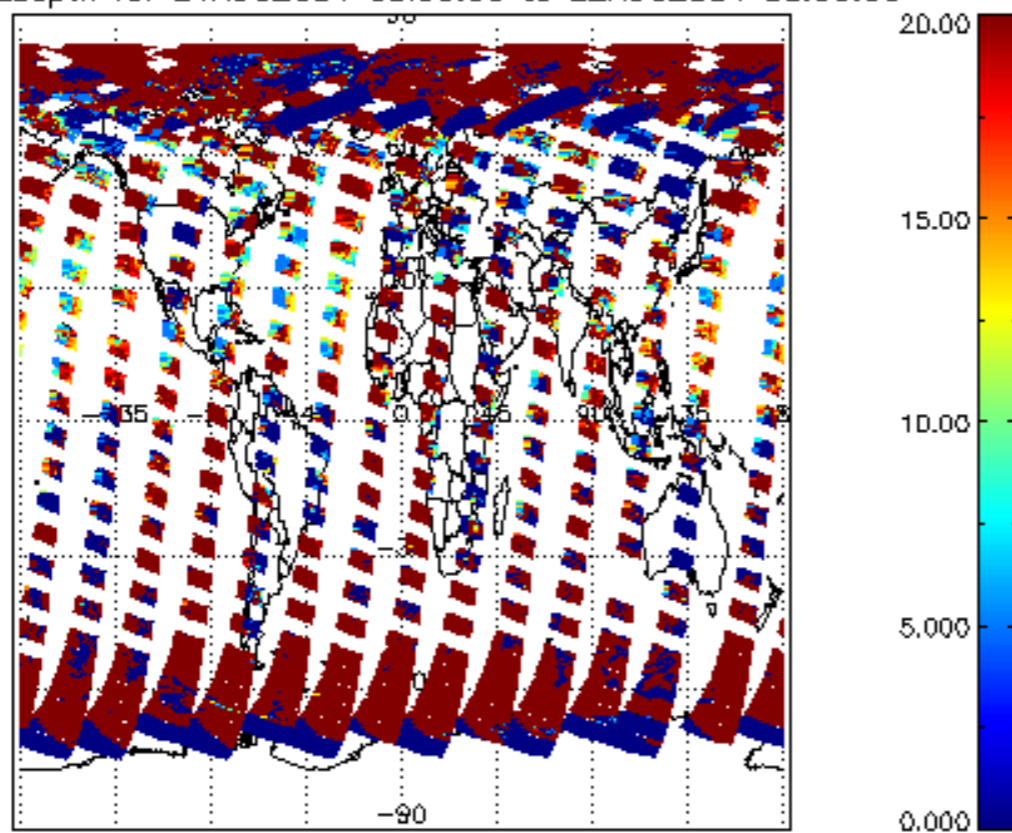
cL_frac for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



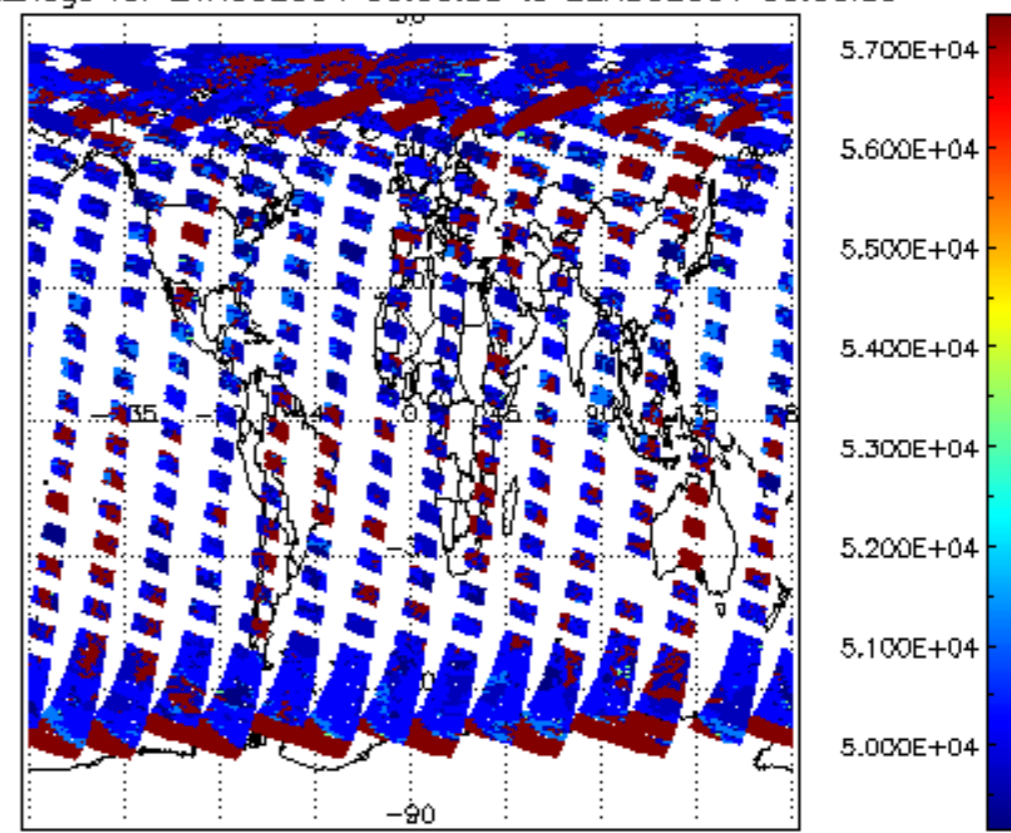
cL_top_height for 21AUG2004 00:00:00 to 22AUG2004 00:00:00

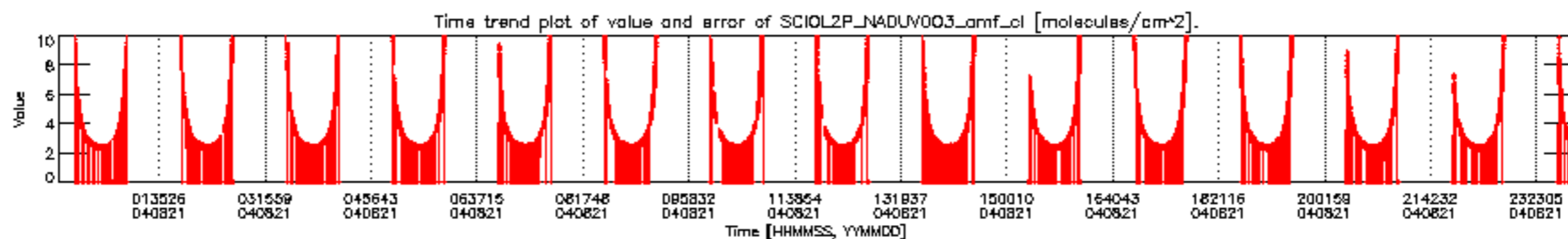
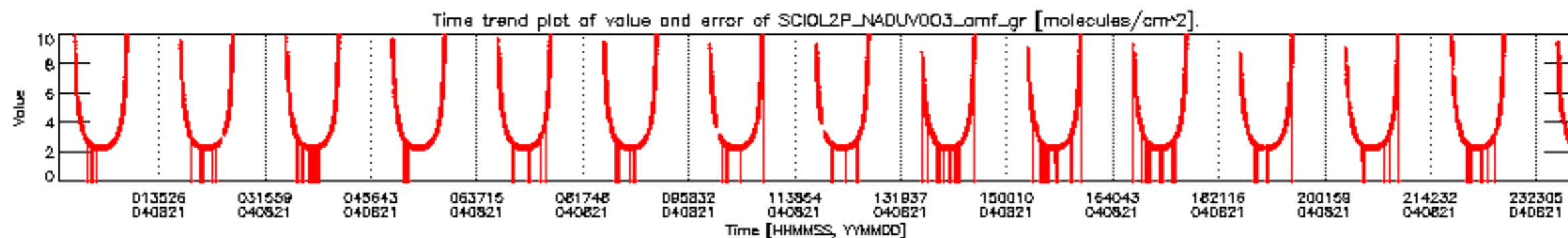
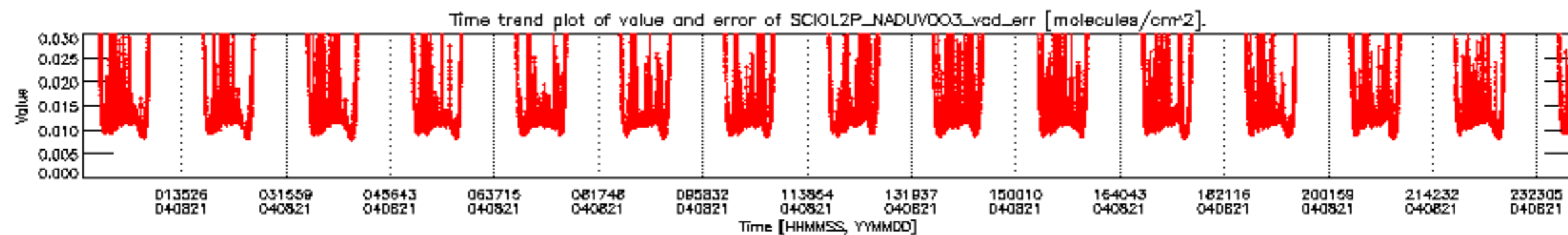
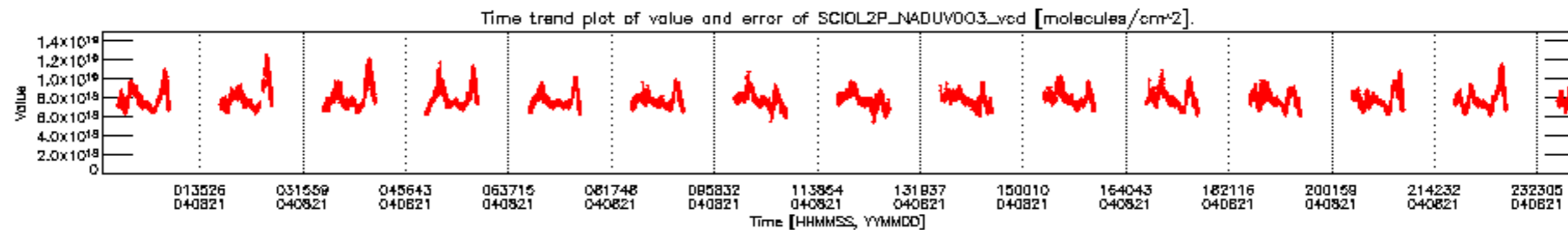


cL_opt_depth for 21AUG2004 00:00:00 to 22AUG2004 00:00:00

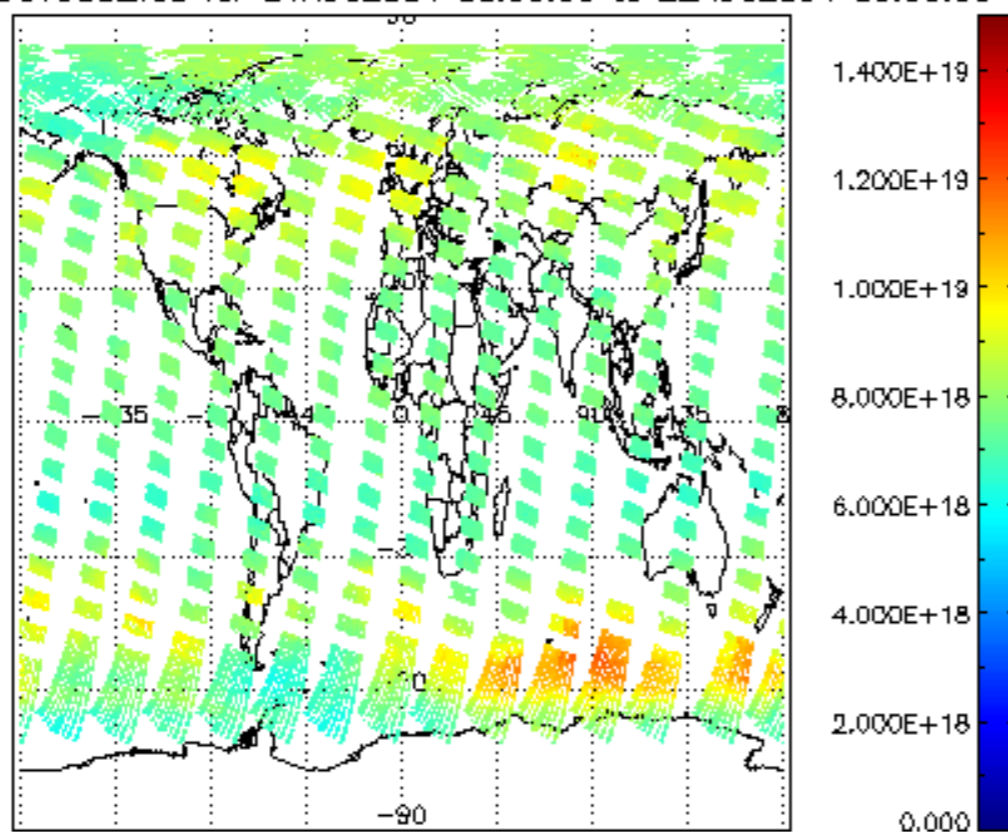


cloud_flags for 21AUG2004 00:00:00 to 22AUG2004 00:00:00

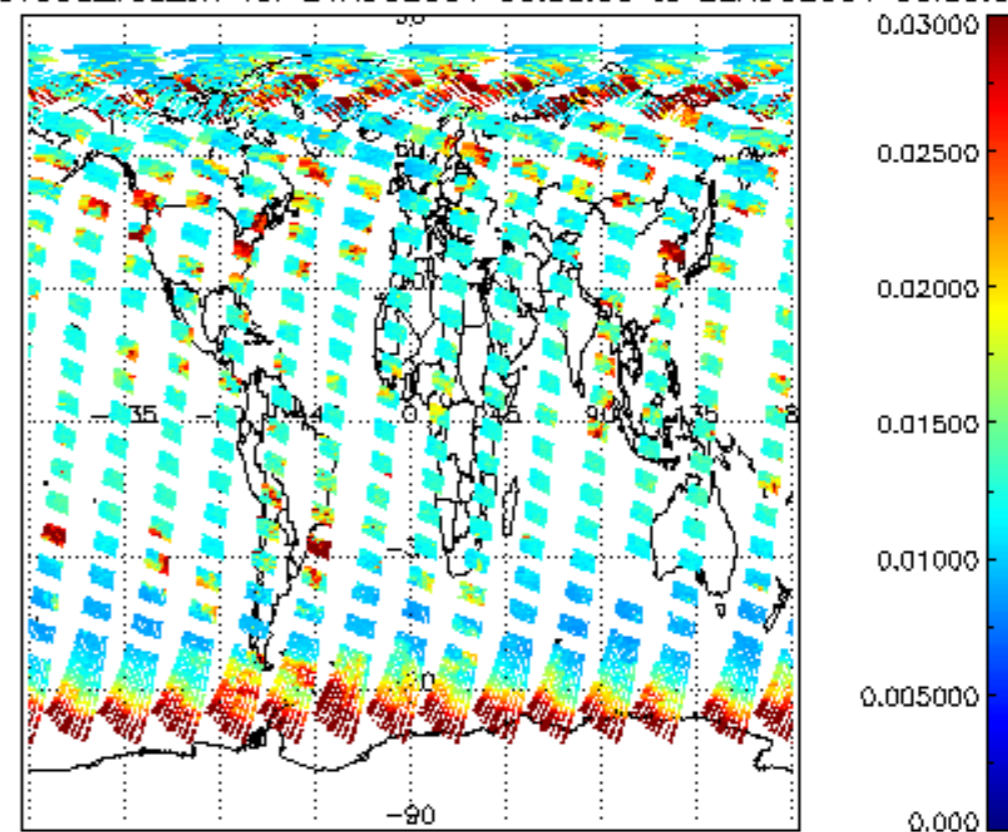




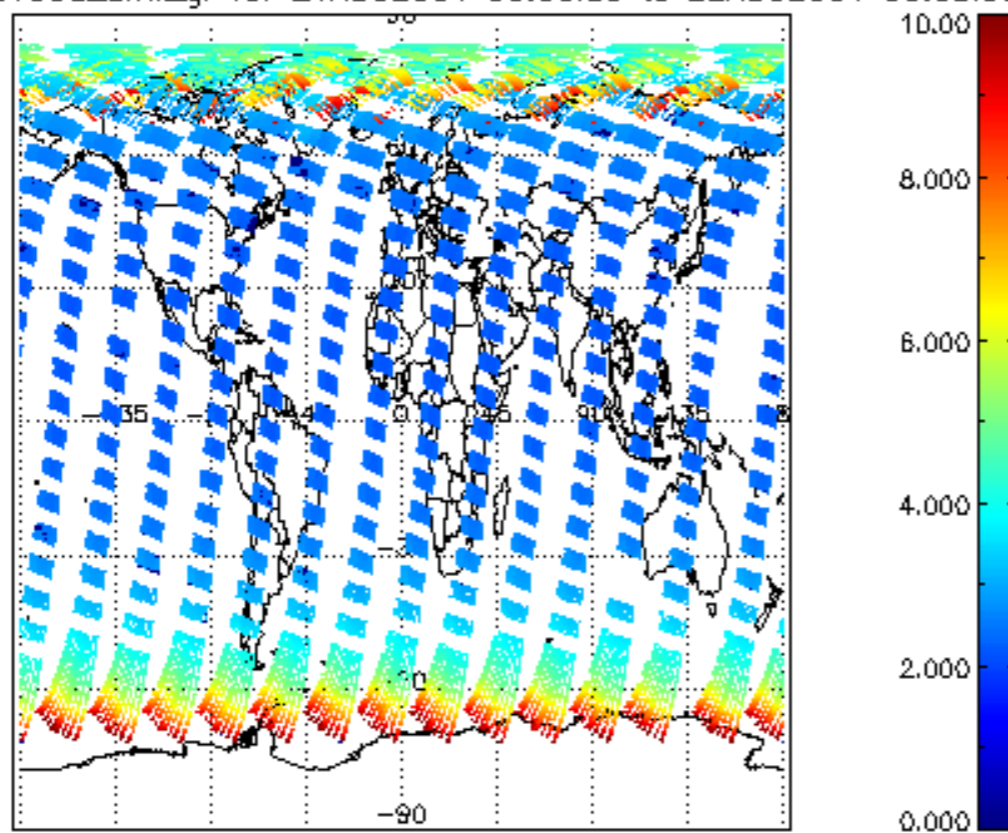
SCIOL2P_NADUV003_vcd for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



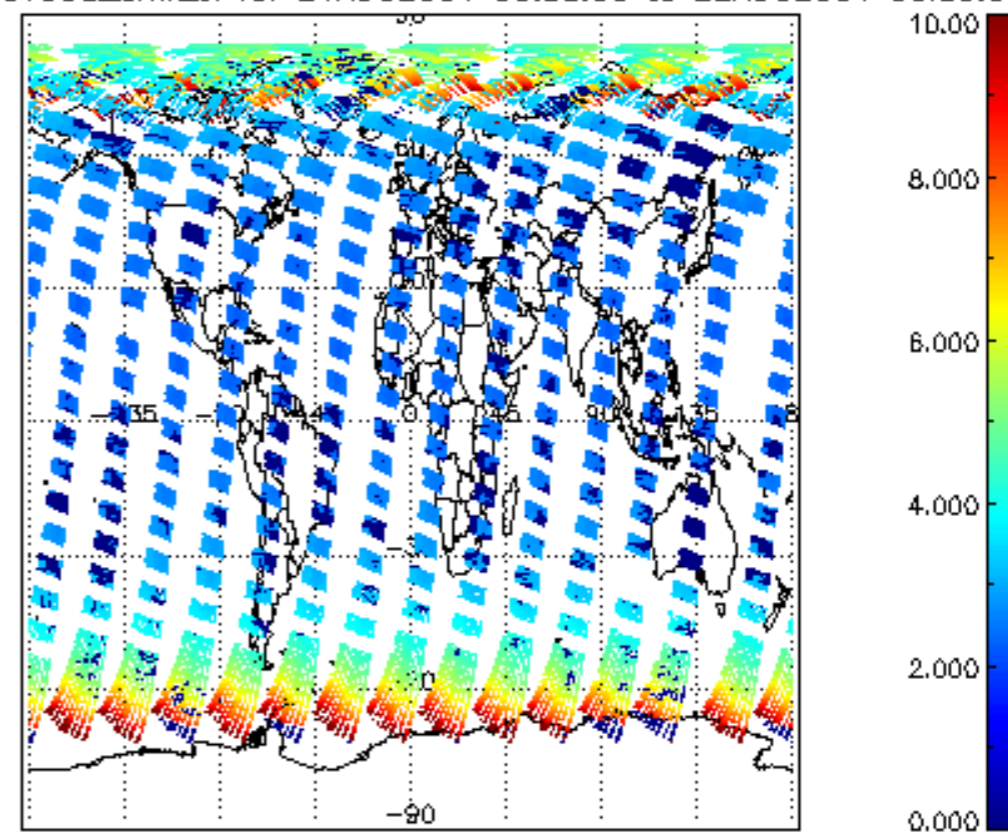
SCIOL2P_NADUV003_vcd_err for 21AUG2004 00:00:00 to 22AUG2004 00:00:00

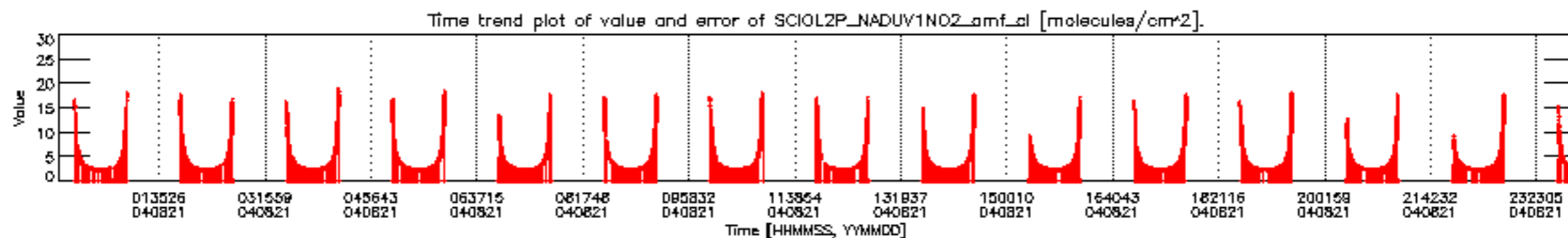
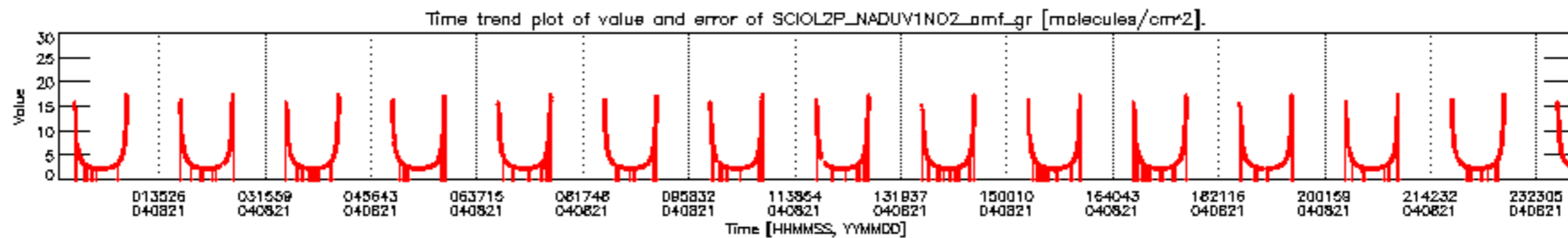
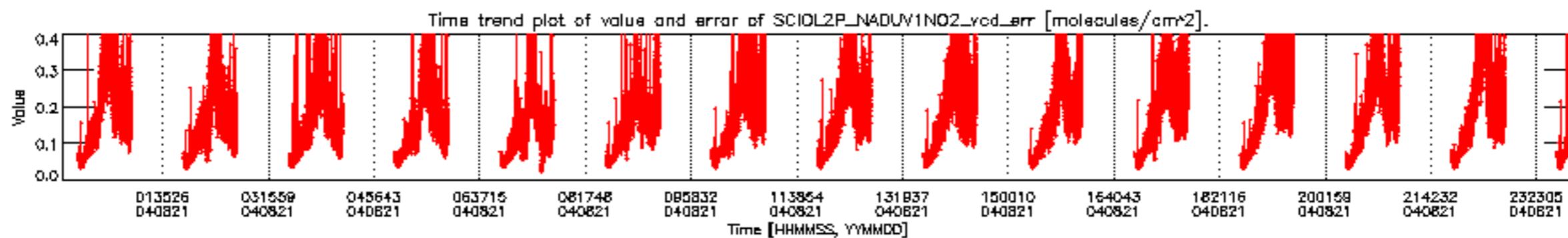
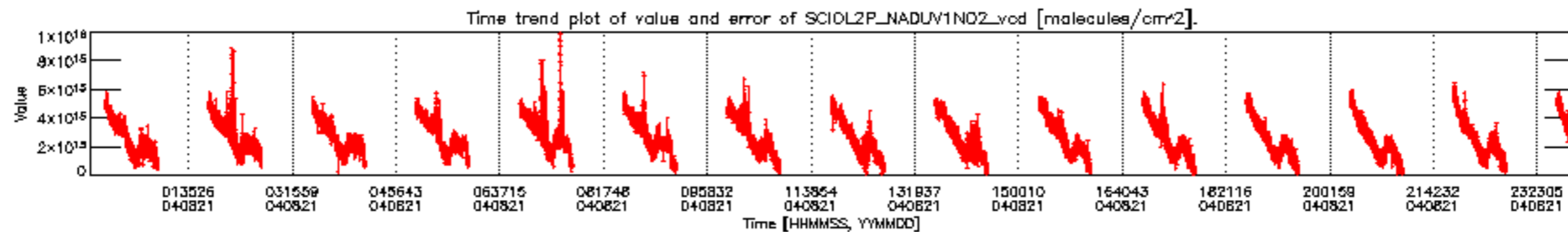


SCIOL2P_NADUV003_amf_gr for 21AUG2004 00:00:00 to 22AUG2004 00:00:00

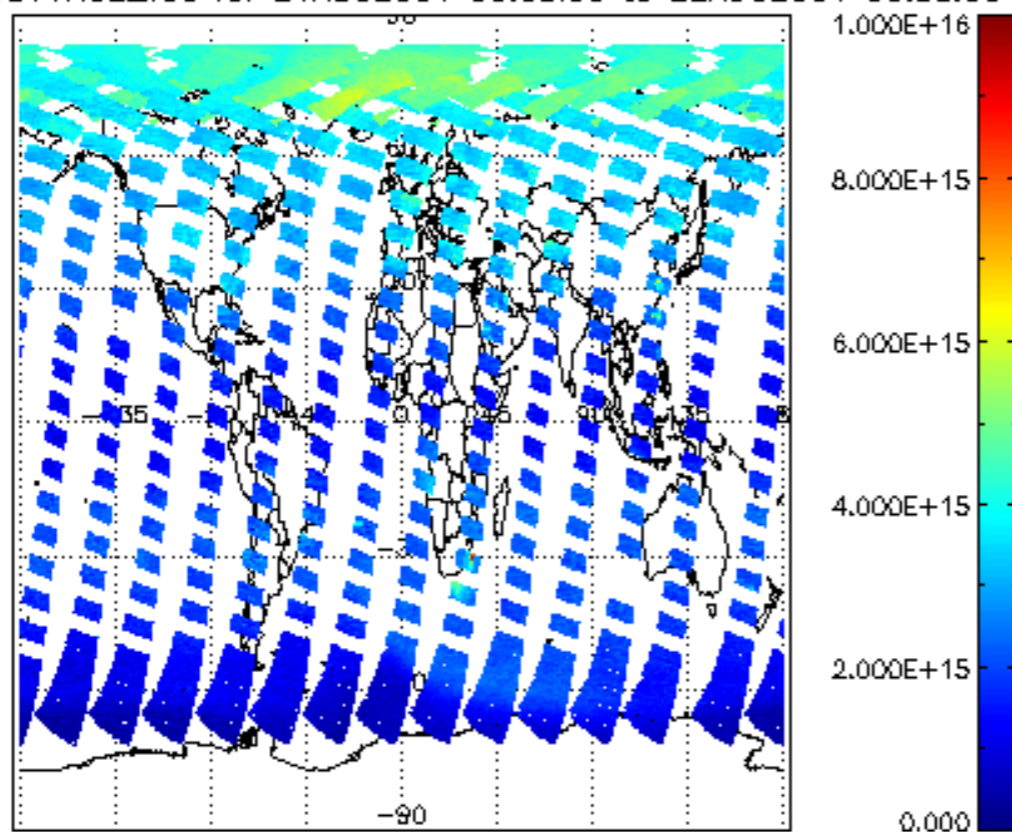


SCIOL2P_NADUV003_amf_cl for 21AUG2004 00:00:00 to 22AUG2004 00:00:00

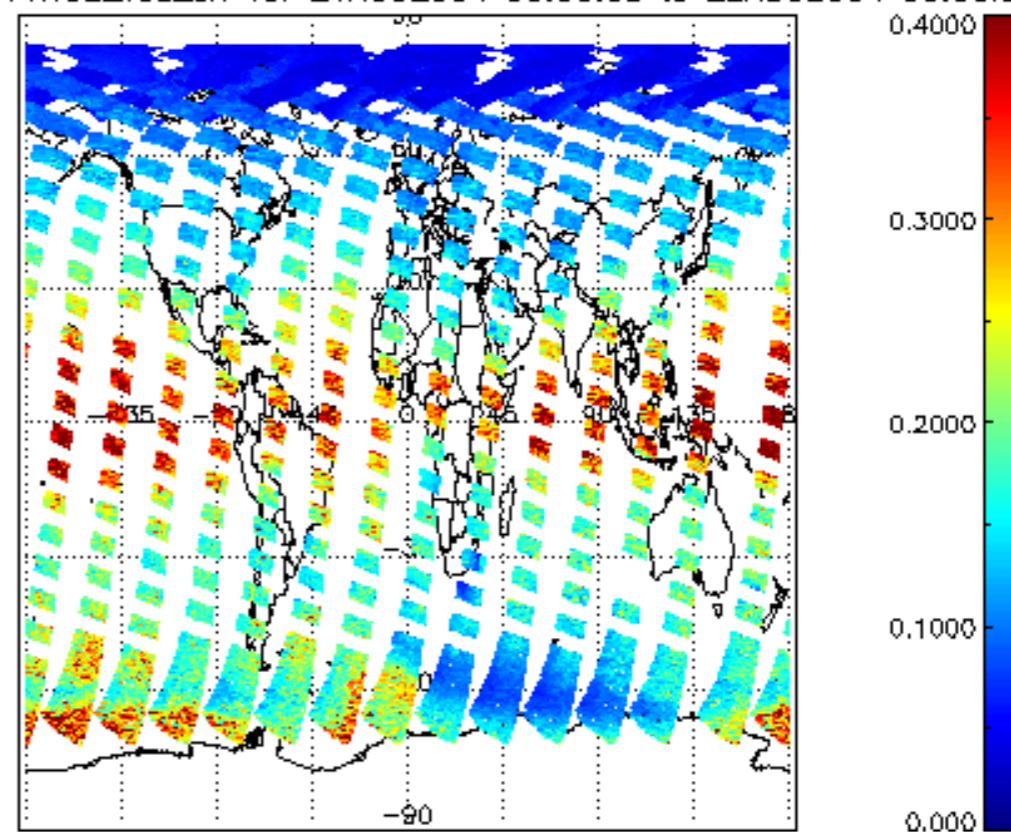




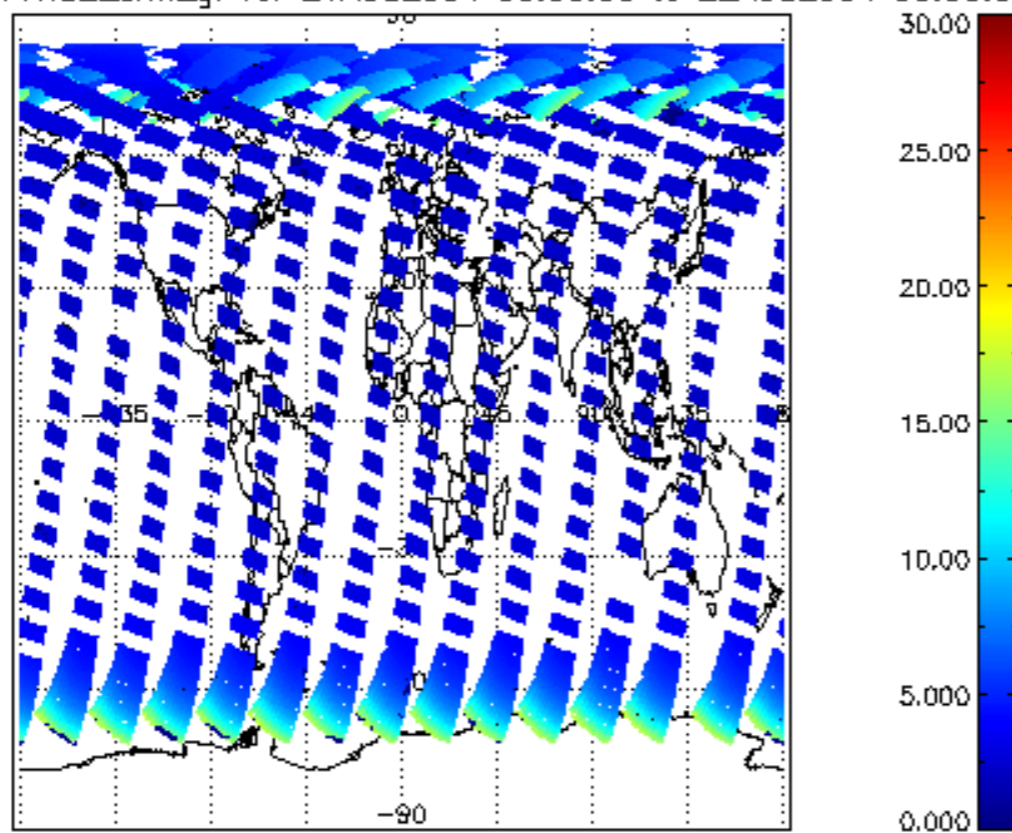
SCIOL2P_NADUV1NO2_vcd for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



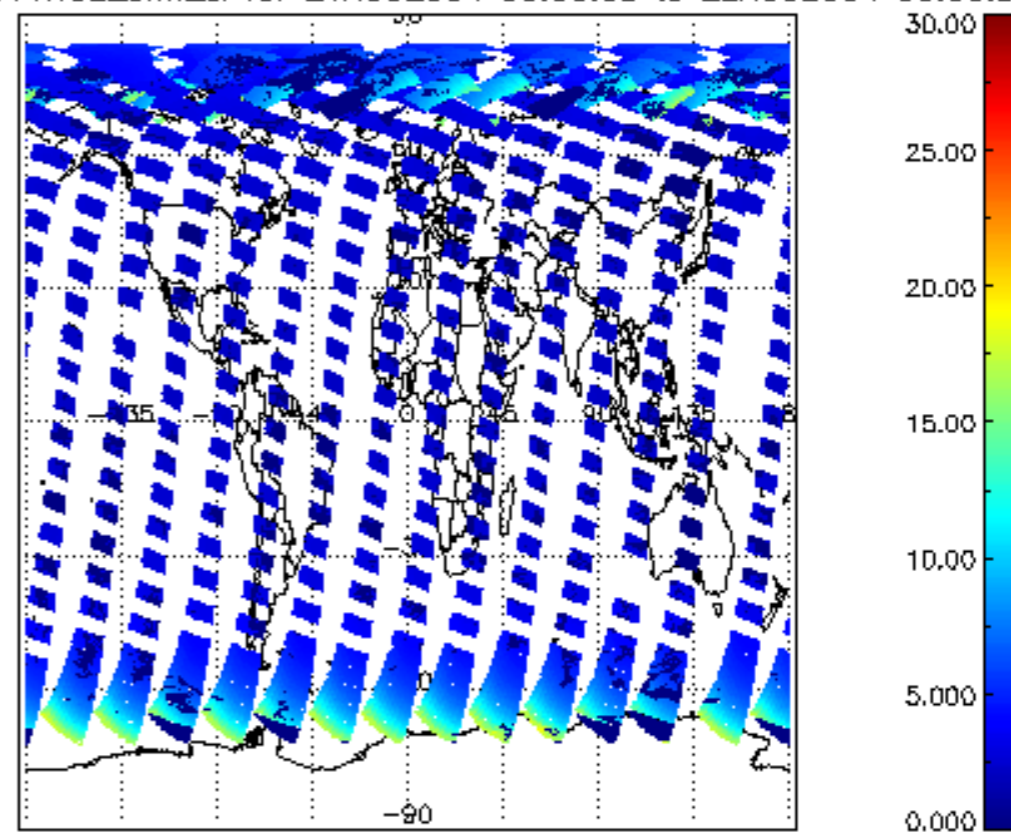
SCIOL2P_NADUV1NO2_vcd_err for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



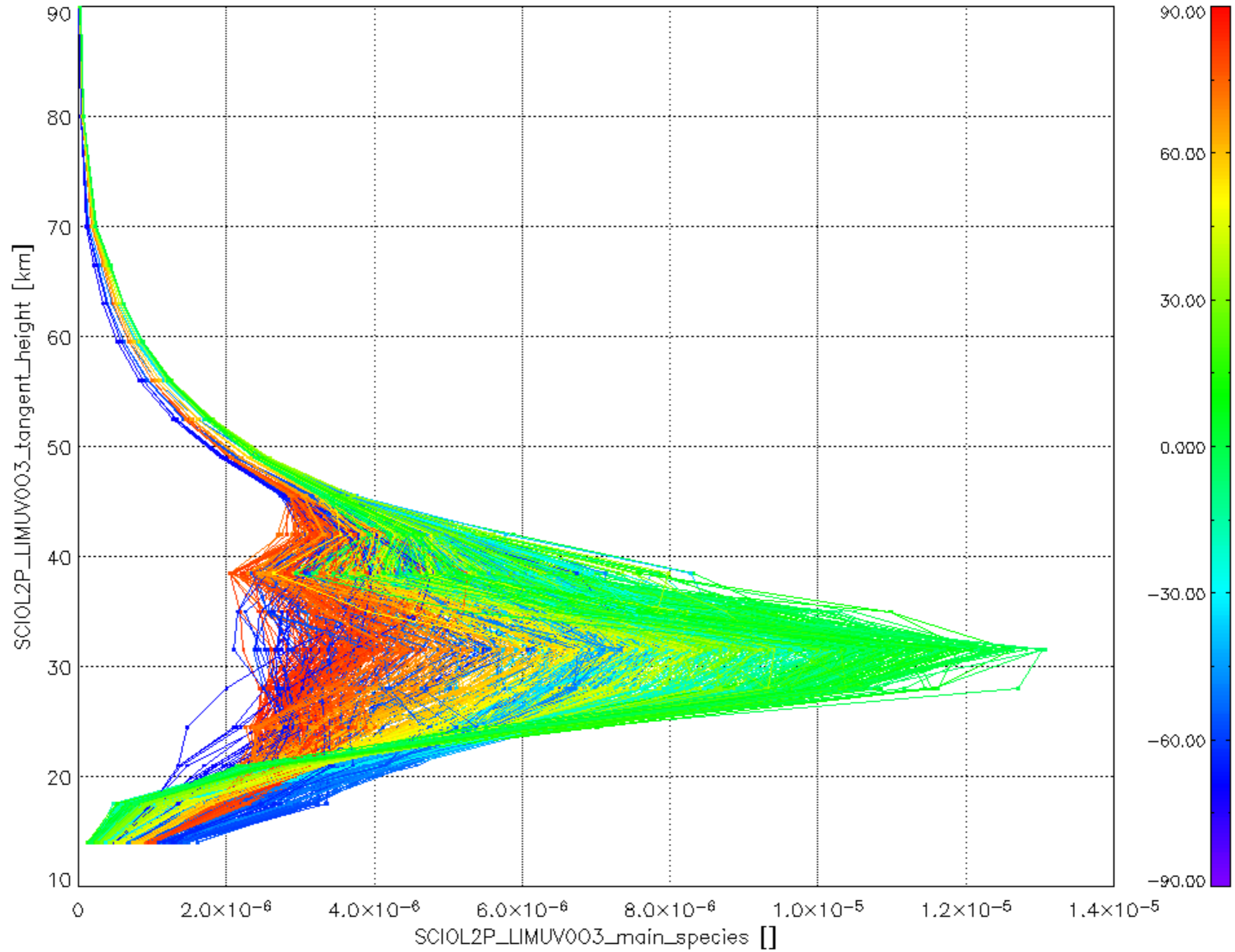
SCIOL2P_NADUV1NO2_amf_gr for 21AUG2004 00:00:00 to 22AUG2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 21AUG2004 00:00:00 to 22AUG2004 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).

