

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 11:52:25
Data source version	SCIA-OL/3.01-R
Processing scope for products	20AUG2004 00:00:00 to 21AUG2004 00:00:00
Start time of first product within scope	19AUG2004 23:00:34
Stop time of last product within scope	20AUG2004 23:24:28
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__2PRDPA20040819_230034_000033252029_00345_12924_9513.N1	19AUG2004 23:00:34	19AUG2004 23:55:59	0	GOOD
1	SCI_OL__2PRDPA20040820_004110_000033812029_00346_12925_9429.N1	20AUG2004 00:41:10	20AUG2004 01:37:32	0	GOOD
2	SCI_OL__2PRDPA20040820_022146_000033252029_00347_12926_9410.N1	20AUG2004 02:21:46	20AUG2004 03:17:12	0	GOOD
3	SCI_OL__2PRDPA20040820_040223_000033812029_00348_12927_9473.N1	20AUG2004 04:02:23	20AUG2004 04:58:44	0	GOOD
4	SCI_OL__2PRDPA20040820_054259_000033252029_00349_12928_9273.N1	20AUG2004 05:42:59	20AUG2004 06:38:25	0	GOOD
5	SCI_OL__2PRDPA20040820_072336_000033812029_00350_12929_9406.N1	20AUG2004 07:23:36	20AUG2004 08:19:57	0	GOOD
6	SCI_OL__2PRDPA20040820_090412_000033252029_00351_12930_9655.N1	20AUG2004 09:04:12	20AUG2004 09:59:38	0	GOOD
7	SCI_OL__2PRDPA20040820_104448_000033812029_00352_12931_9463.N1	20AUG2004 10:44:48	20AUG2004 11:41:10	0	GOOD
8	SCI_OL__2PRDPA20040820_122525_000033252029_00353_12932_9253.N1	20AUG2004 12:25:25	20AUG2004 13:20:50	0	GOOD
9	SCI_OL__2PRDPA20040820_140601_000033812029_00354_12933_9453.N1	20AUG2004 14:06:01	20AUG2004 15:02:22	0	GOOD
10	SCI_OL__2PRDPA20040820_154637_000033252029_00355_12934_9457.N1	20AUG2004 15:46:37	20AUG2004 16:42:03	0	GOOD
11	SCI_OL__2PRDPA20040820_172708_000033762029_00356_12935_9459.N1	20AUG2004 17:27:08	20AUG2004 18:23:24	0	GOOD
12	SCI_OL__2PRDPA20040820_190809_000033252029_00357_12936_9378.N1	20AUG2004 19:08:09	20AUG2004 20:03:35	0	GOOD
13	SCI_OL__2PRDPA20040820_204827_000033812029_00358_12937_9444.N1	20AUG2004 20:48:27	20AUG2004 21:44:48	0	GOOD
14	SCI_OL__2PRDPA20040820_222903_000033252029_00359_12938_9430.N1	20AUG2004 22:29:03	20AUG2004 23:24:28	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: 147160

Total number of cloud data DSRs with good quality flag (=0): 147160 (100.0 %)

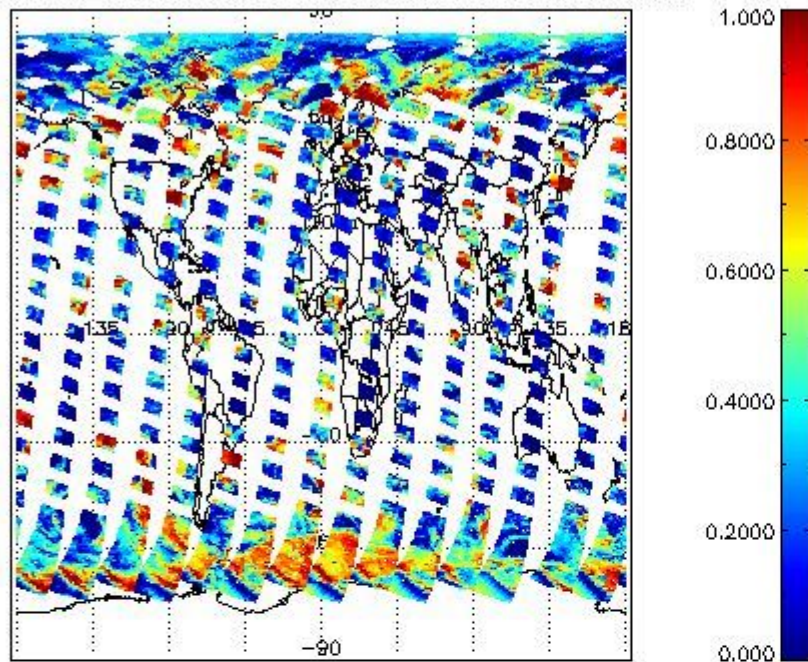
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	147160	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	147160	0.16961	0.12500	0.12500	0.25000	0.059885	s
CL_FRAC	147160	0.35886	0.31395	0.0000	1.0000	0.28536	-
CL_FRAC_ERR	147160	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	147160	5.4276	4.0000	4.0000	8.0000	1.9163	
PMD_READ_CL[0]	147160	0.25315	0.0000	0.0000	8.0000	1.1800	-
PMD_READ_CL[1]	147160	0.91417	0.0000	0.0000	8.0000	1.9832	-
CL_TOP_HEIGHT	126001	3.6536	1.8050	0.0000	17.000	3.9007	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	126001	59.603	70.400	0.0000	101.00	42.502	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	147160	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	147160	11001010	11000100	11000000	11100000	3282.7	flags
AERO_ABSO_IND	147160	0.79287	0.57091	-4.5700	13.215	1.0853	
AERO_IND_DIAG	147160	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	147160	01010110	00000000	00000000	11000000	24461.	flags

Time and geolocation plots:

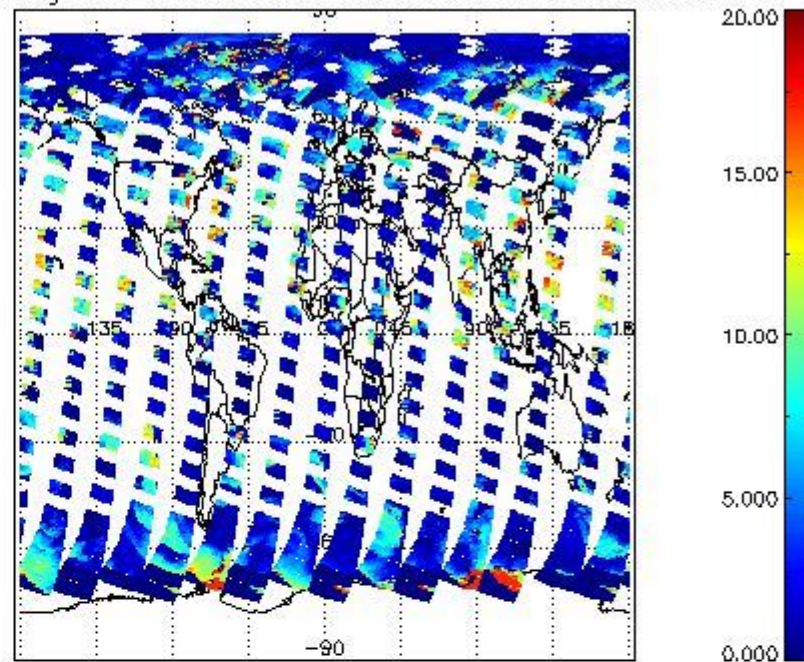
Plots are available for the following parameters:

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

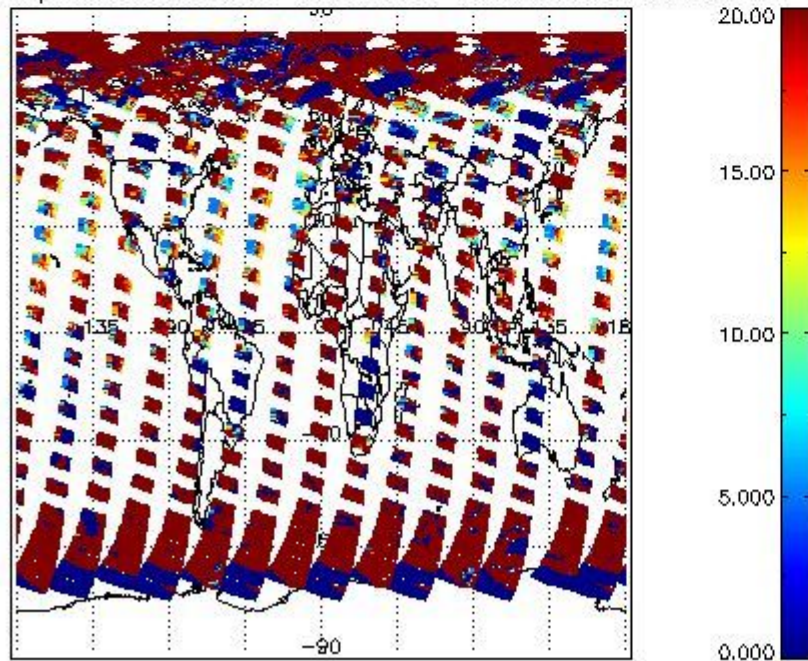
cL_frac for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



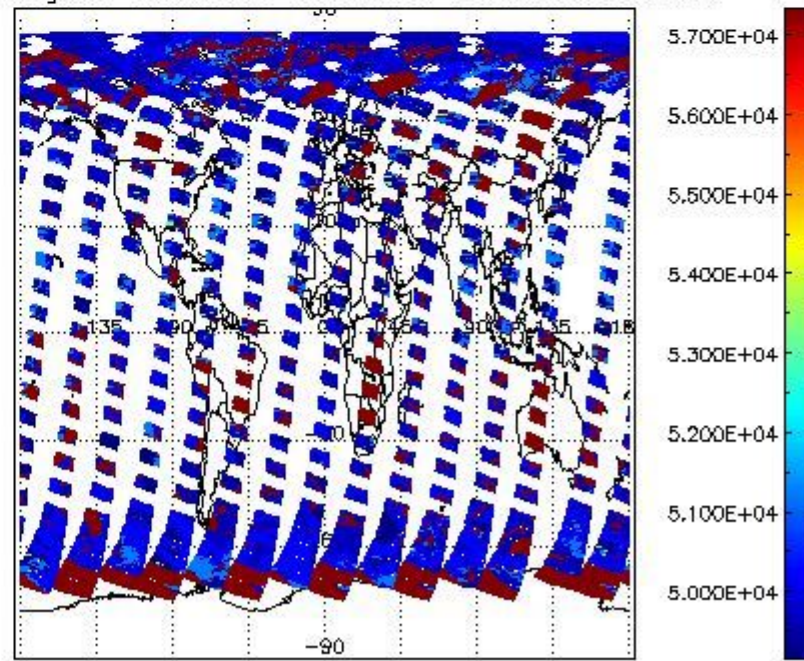
cL_top_height for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



cL_opt_depth for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



cloud_flags for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



2.2.2 Nadir

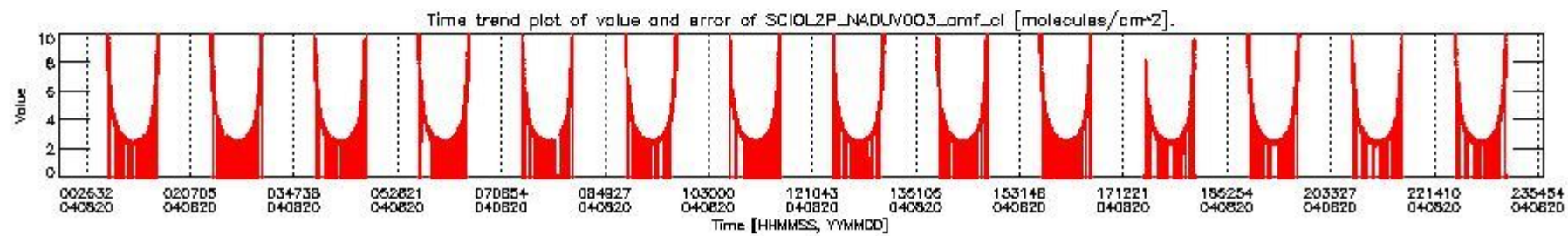
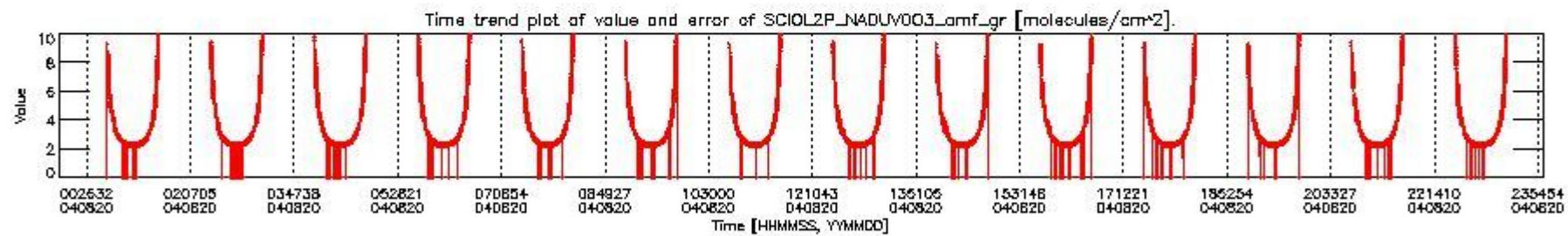
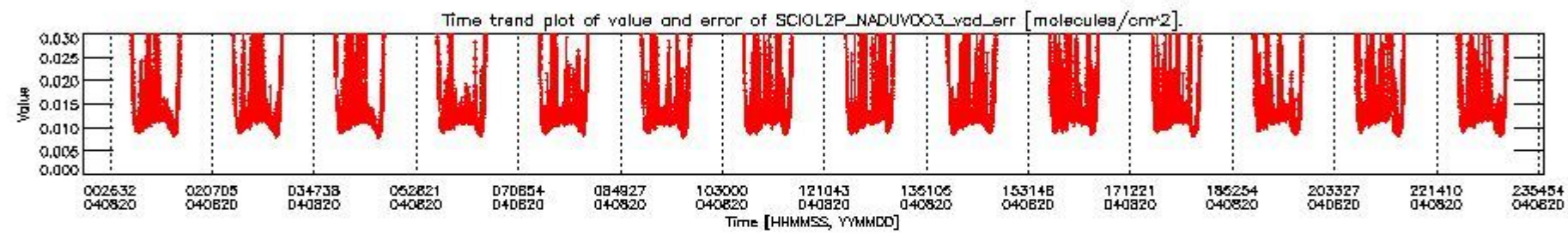
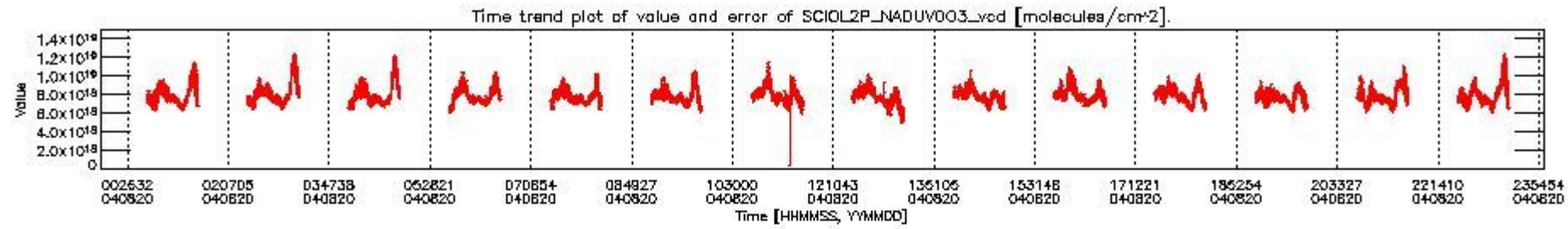
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

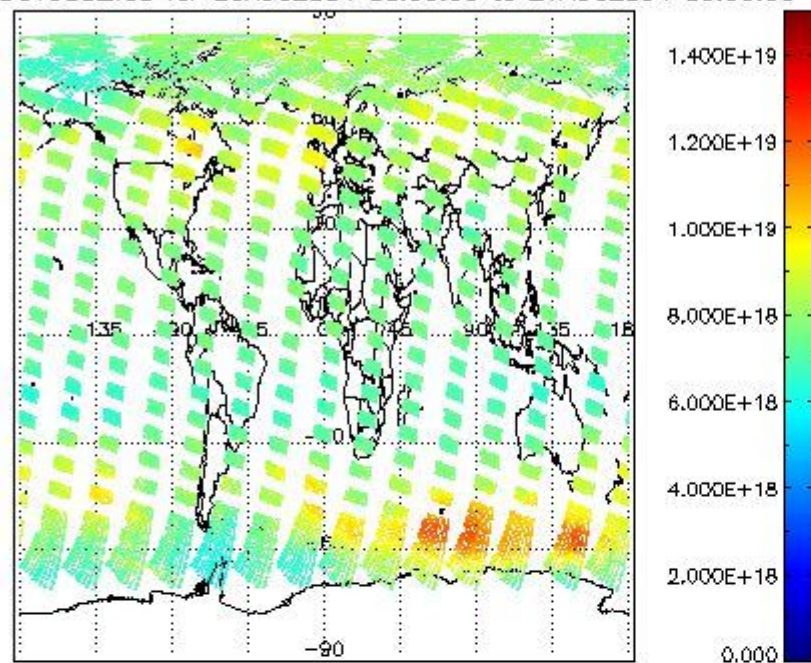
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

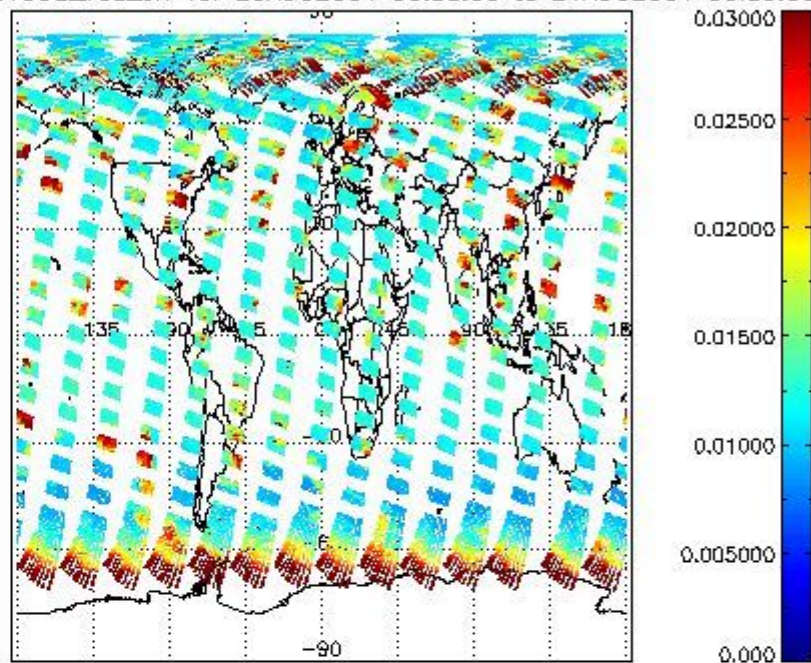
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



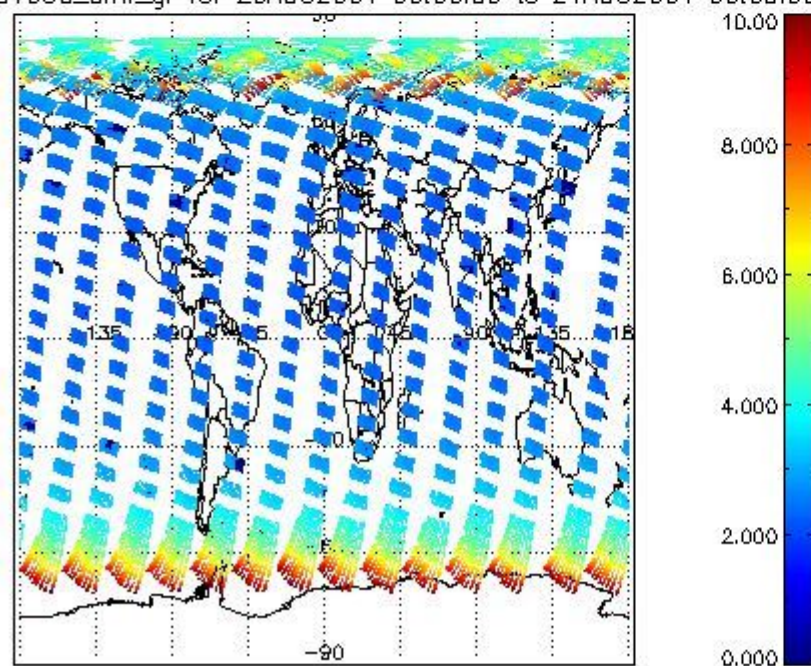
SCIOL2P_NADUV003_vcd for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



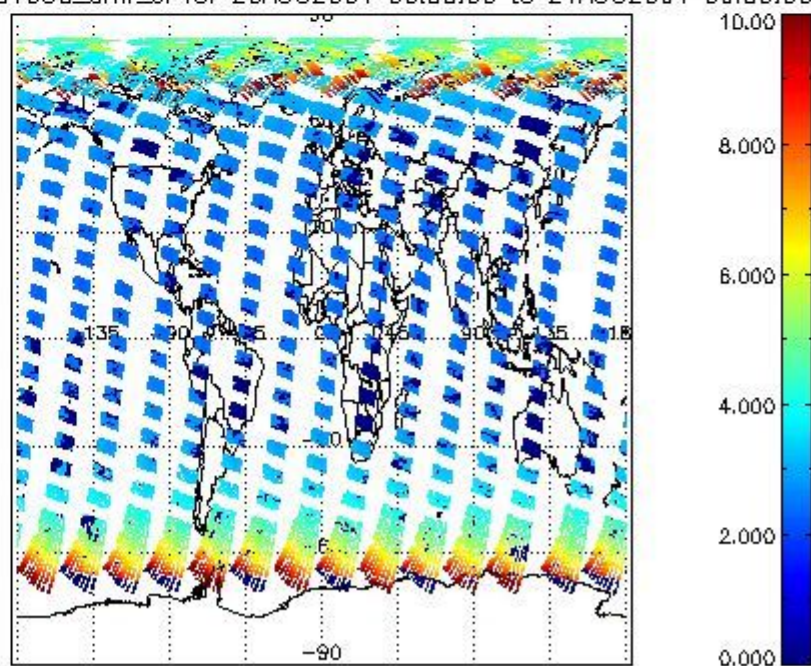
SCIOL2P_NADUV003_vcd_err for 20AUG2004 00:00:00 to 21AUG2004 00:00:00

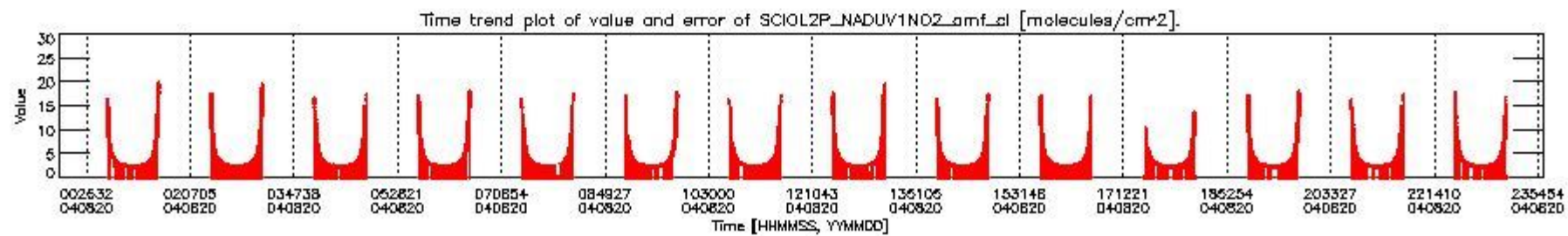
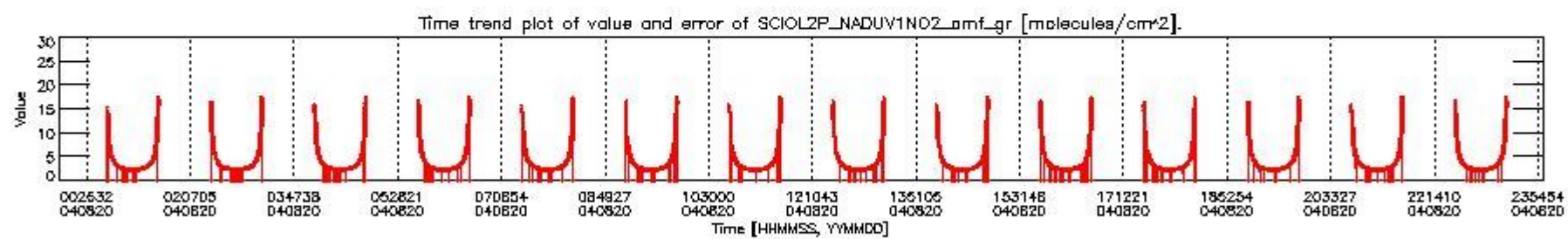
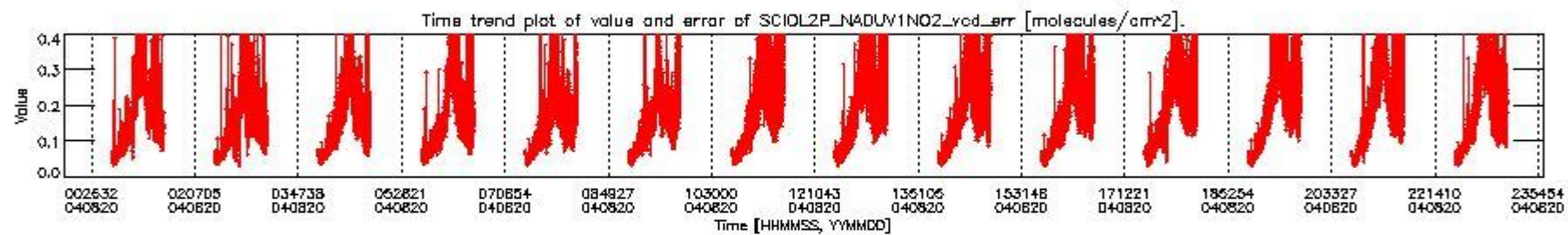
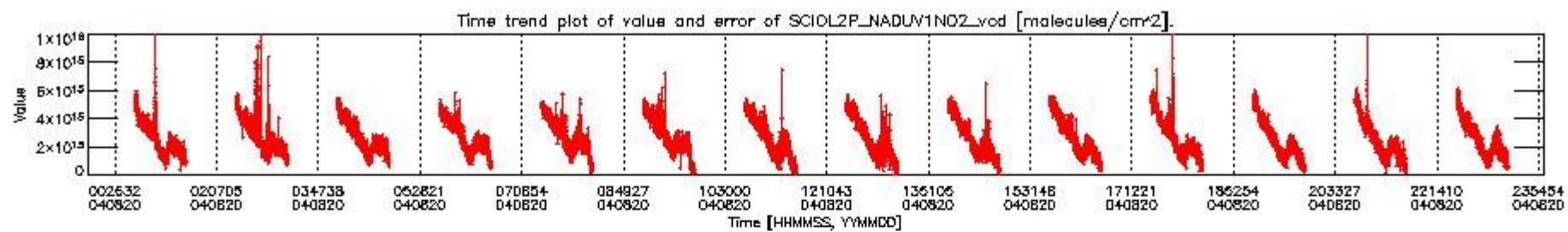


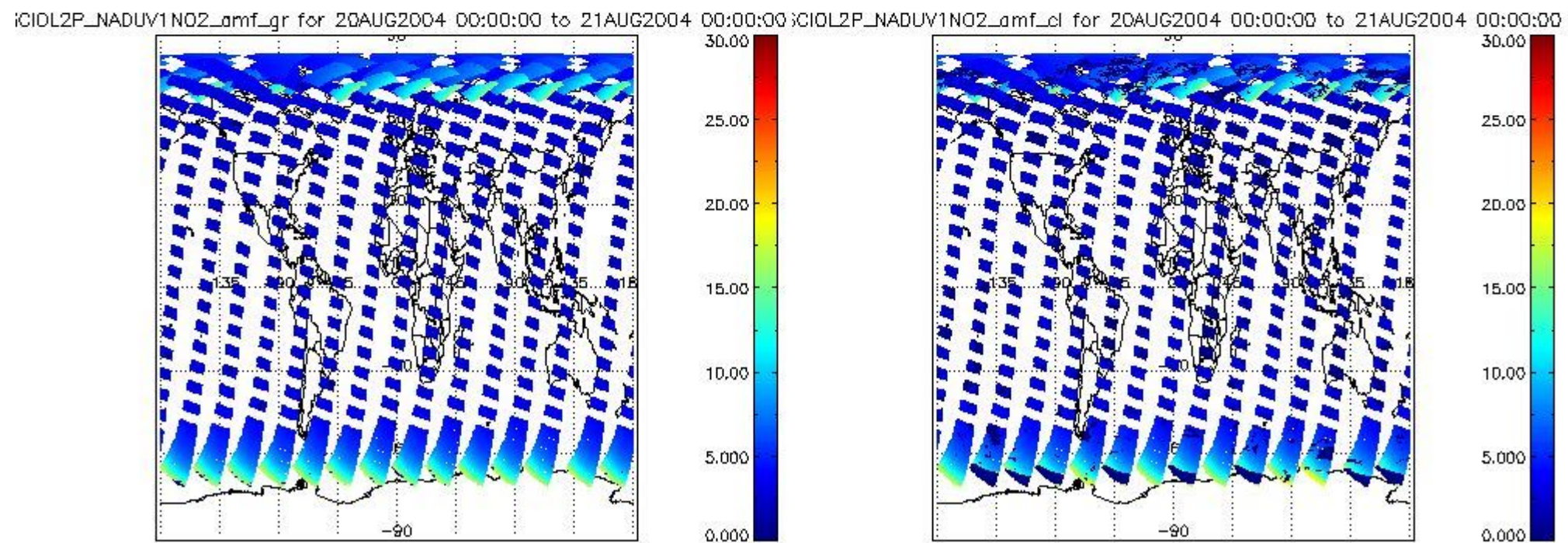
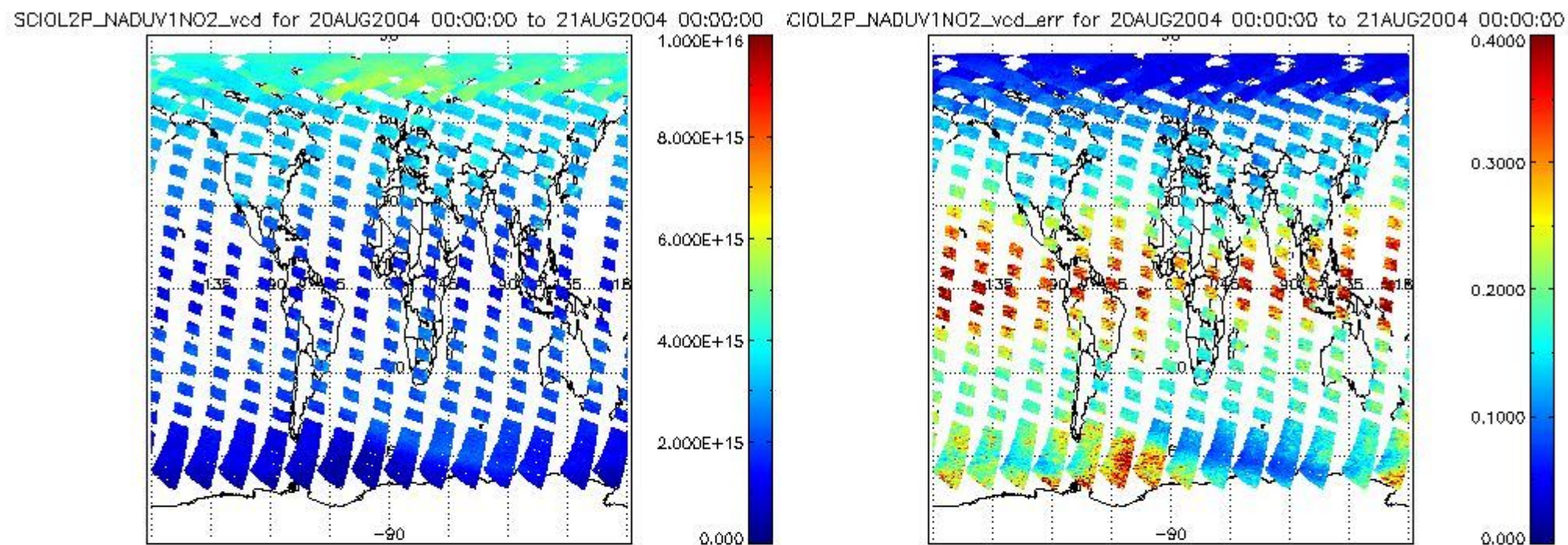
SCIOL2P_NADUV003_amf_gr for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 20AUG2004 00:00:00 to 21AUG2004 00:00:00







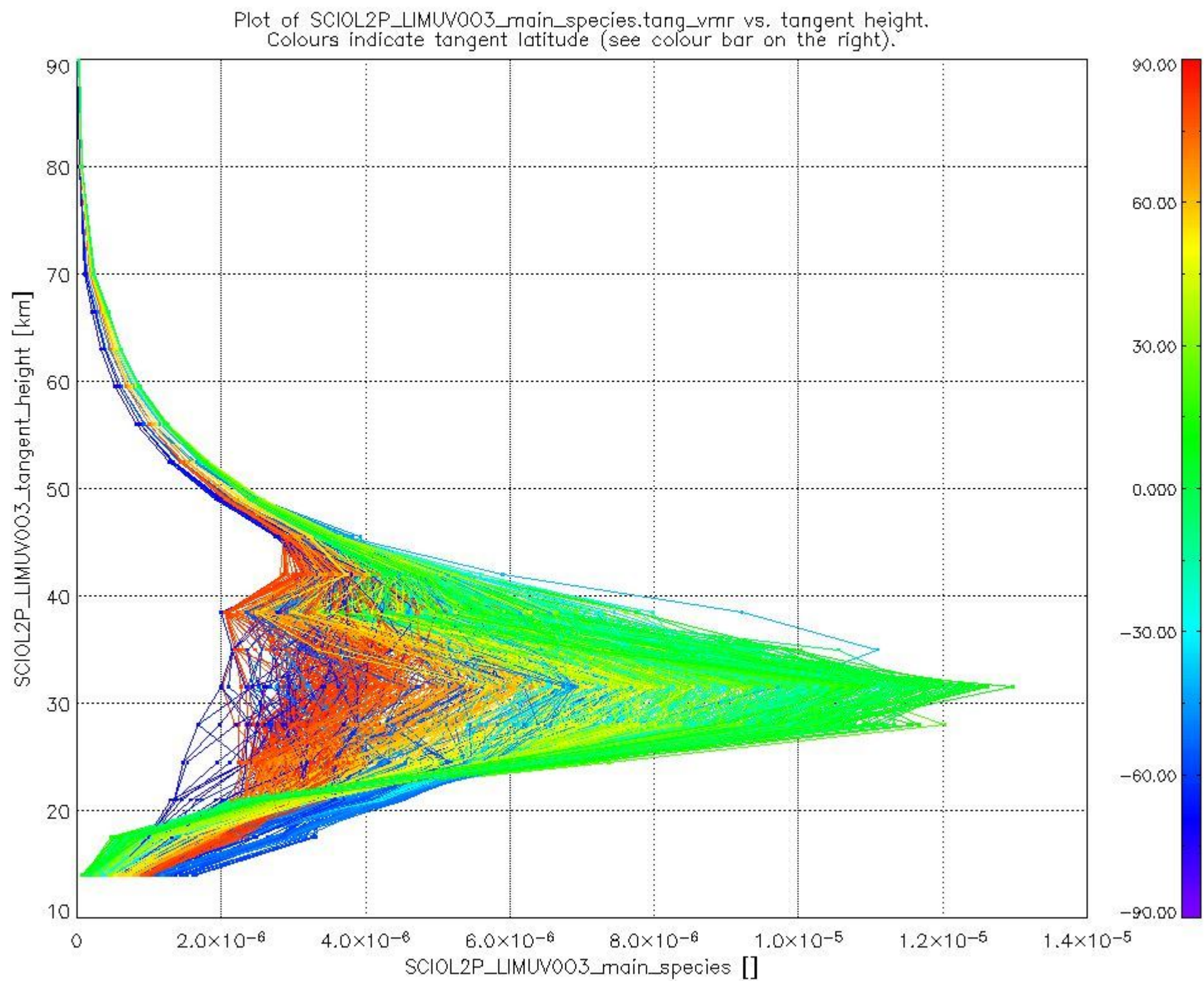
2.2.3 Limb

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

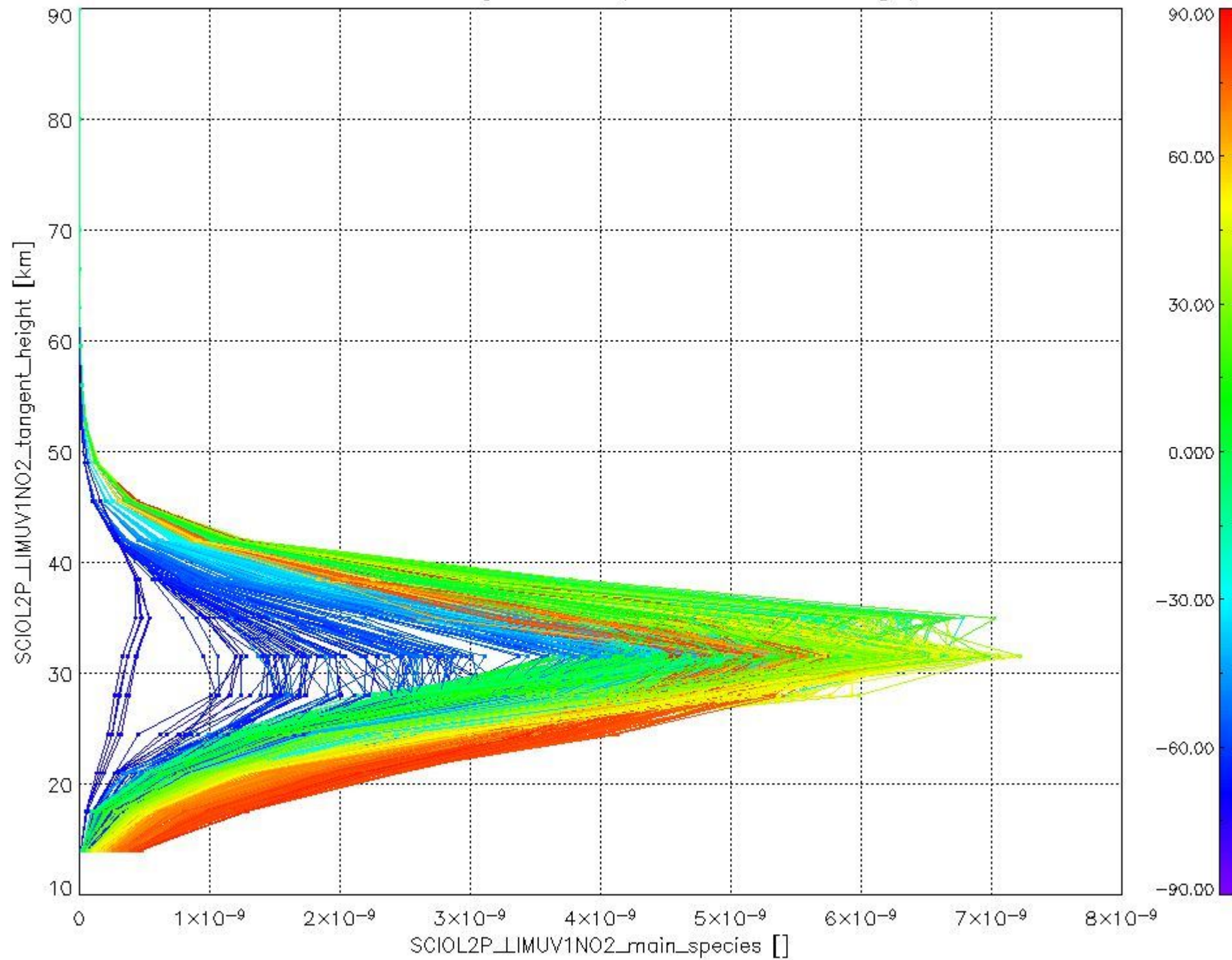
The following data items are currently included into this section:

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.



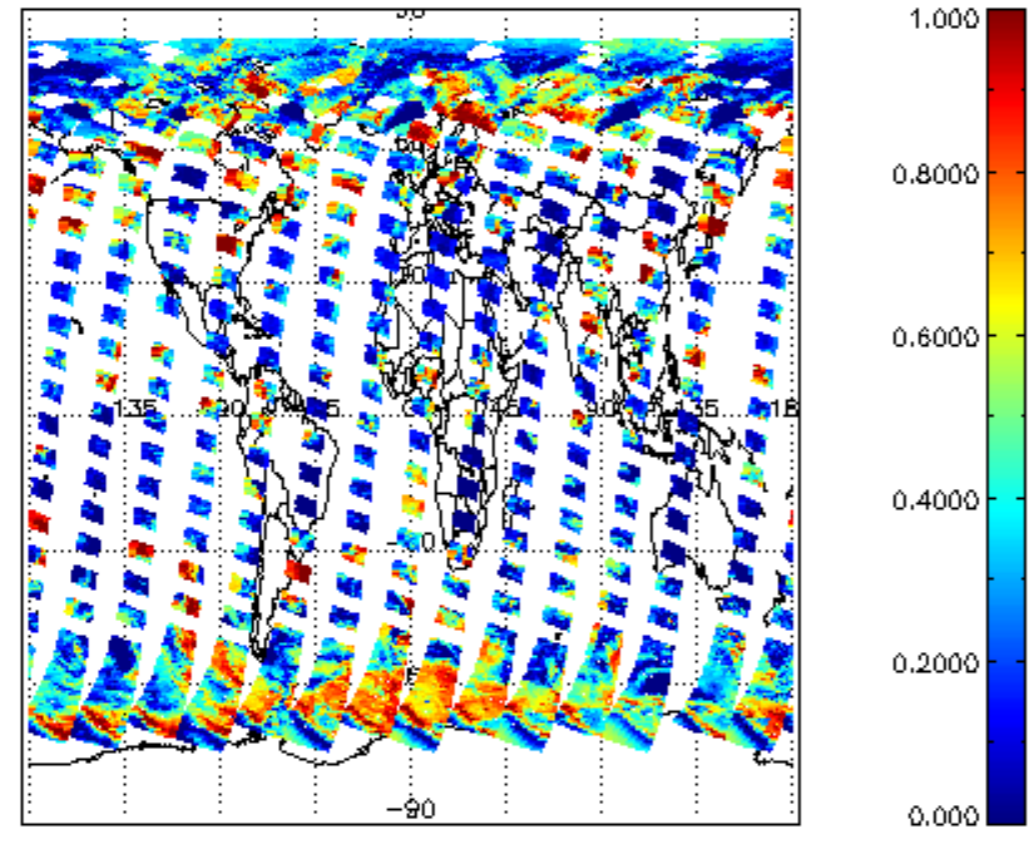
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



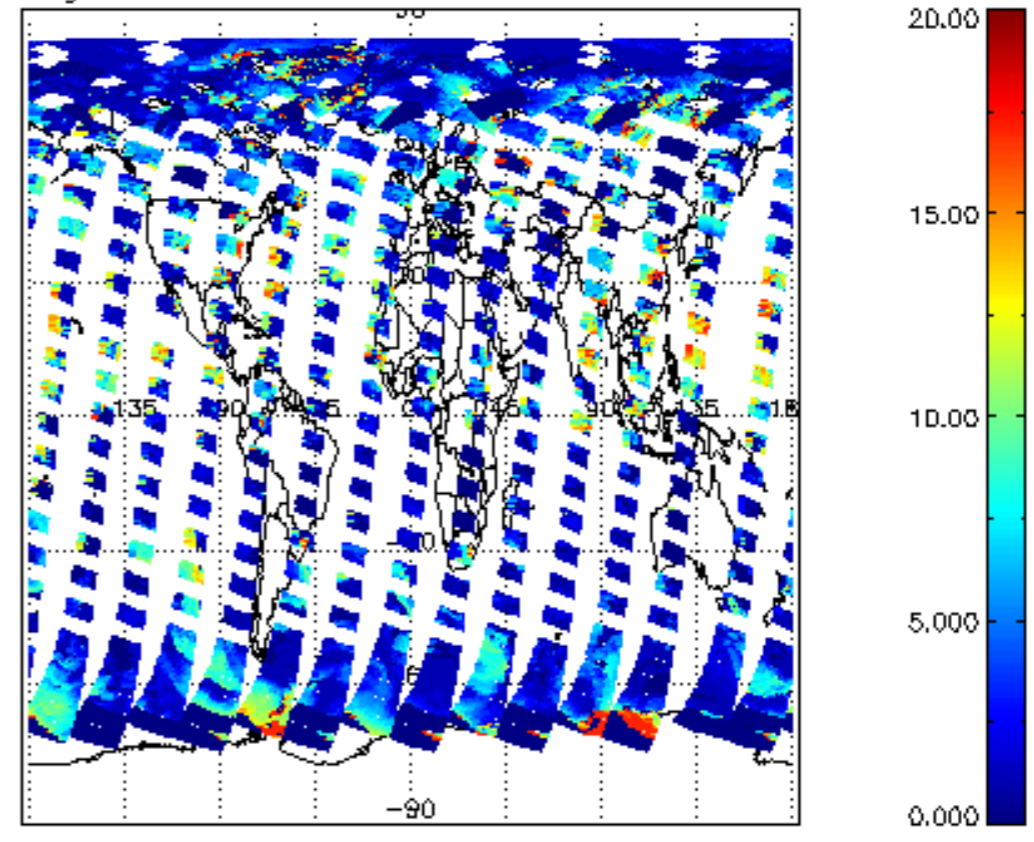
2.3 ADF monitoring

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

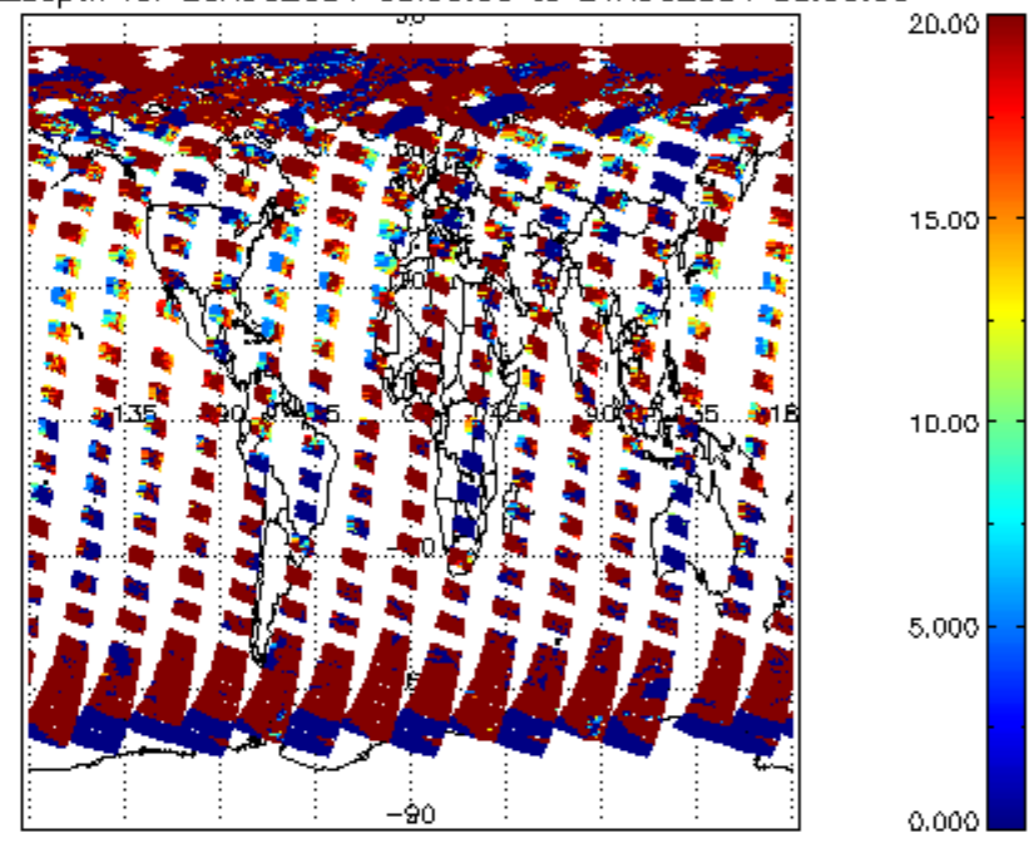
cL_frac for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



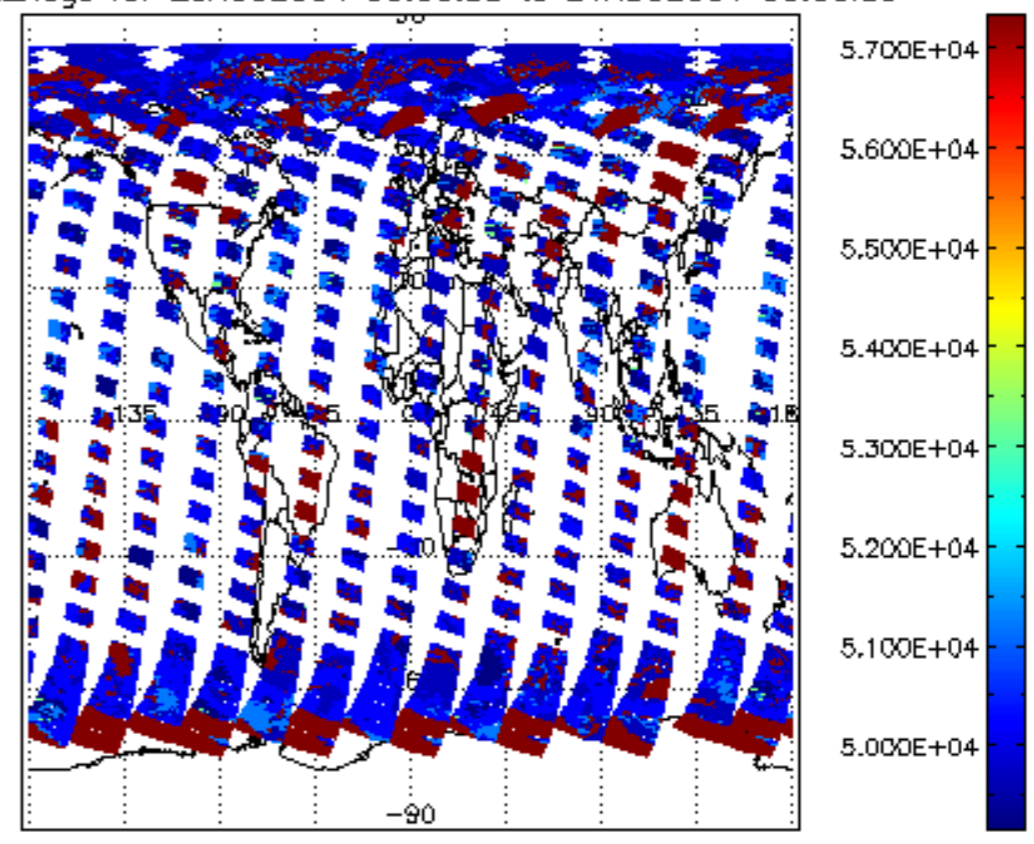
cL_top_height for 20AUG2004 00:00:00 to 21AUG2004 00:00:00

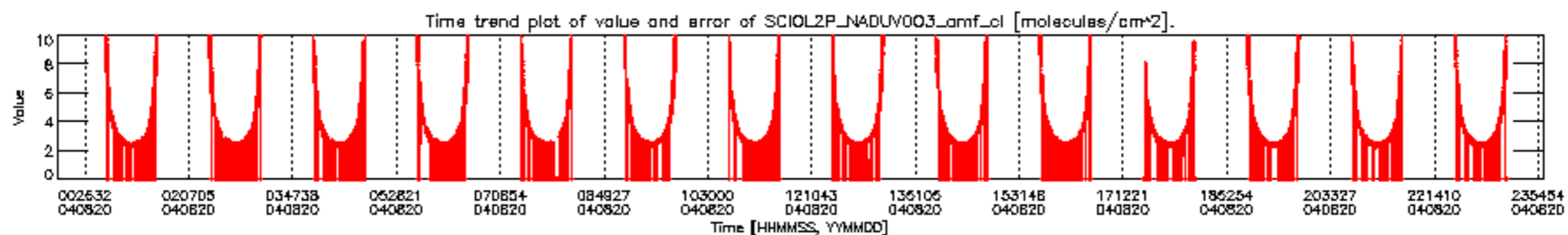
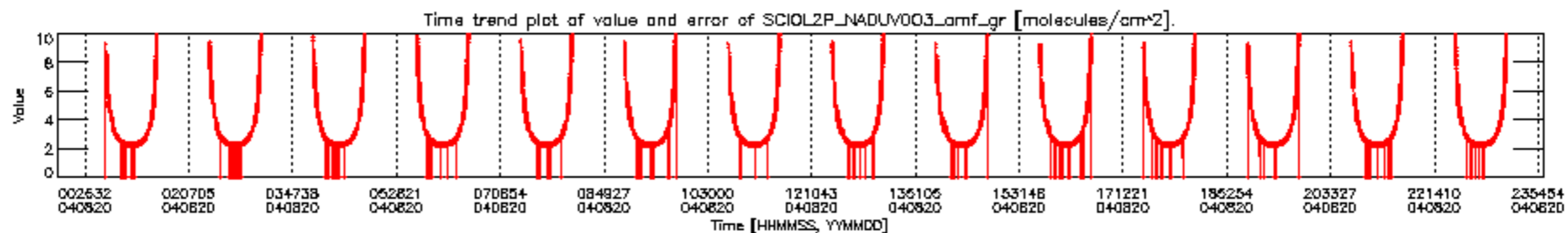
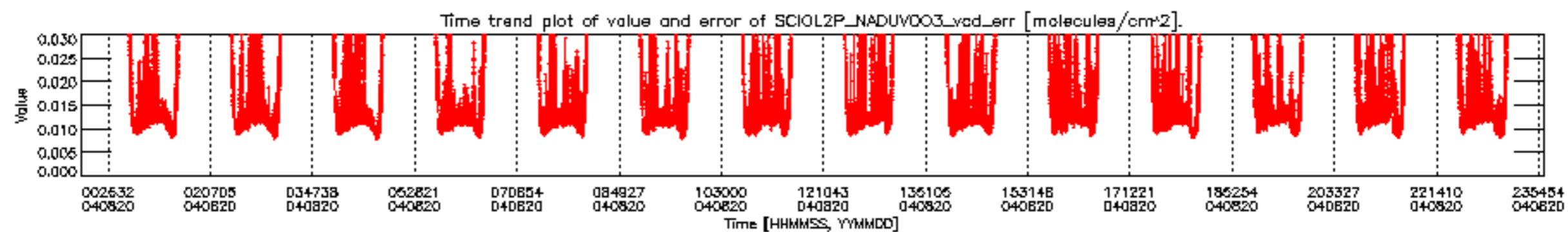
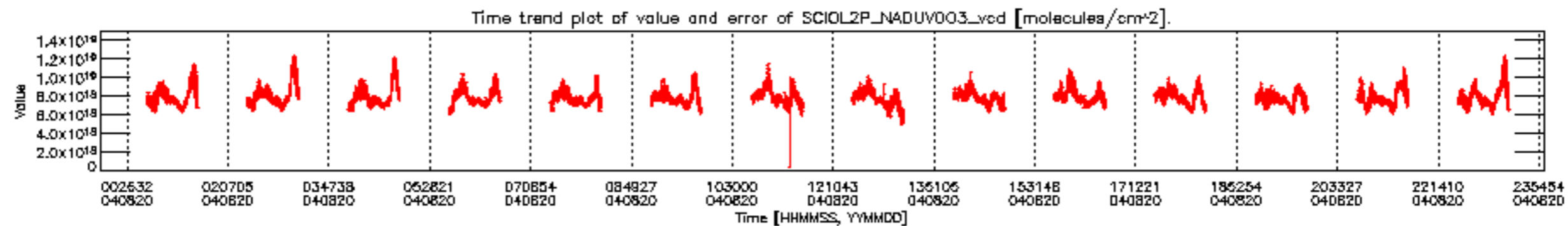


cL_opt_depth for 20AUG2004 00:00:00 to 21AUG2004 00:00:00

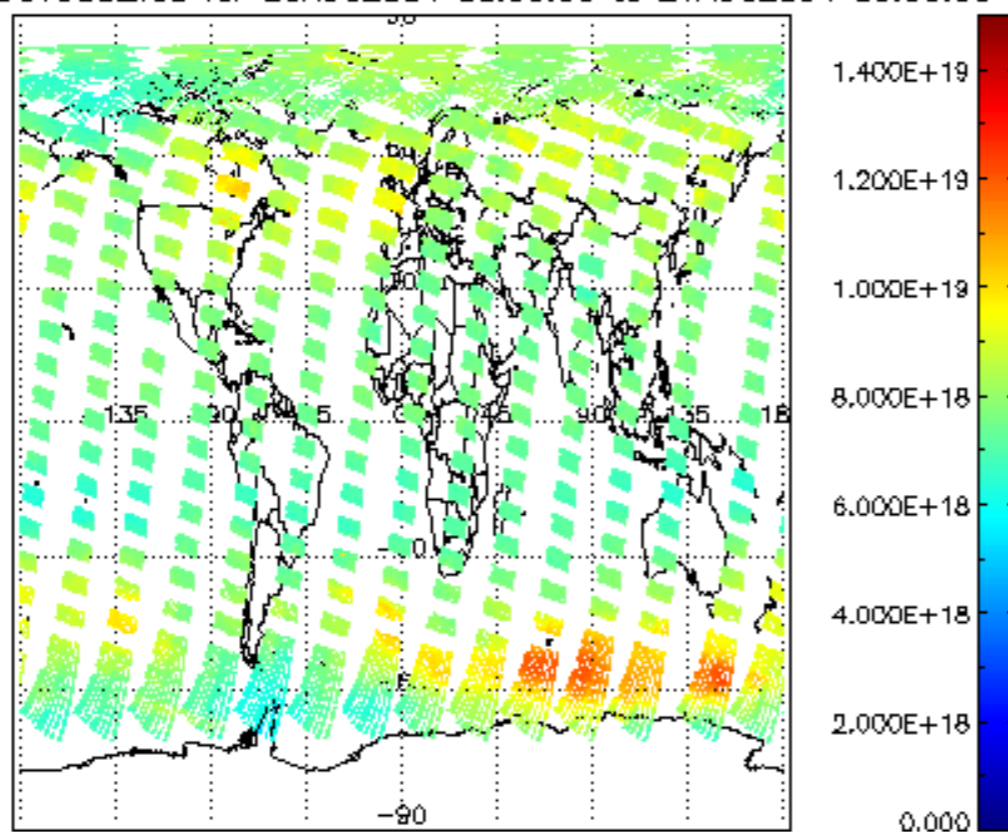


cloud_flags for 20AUG2004 00:00:00 to 21AUG2004 00:00:00

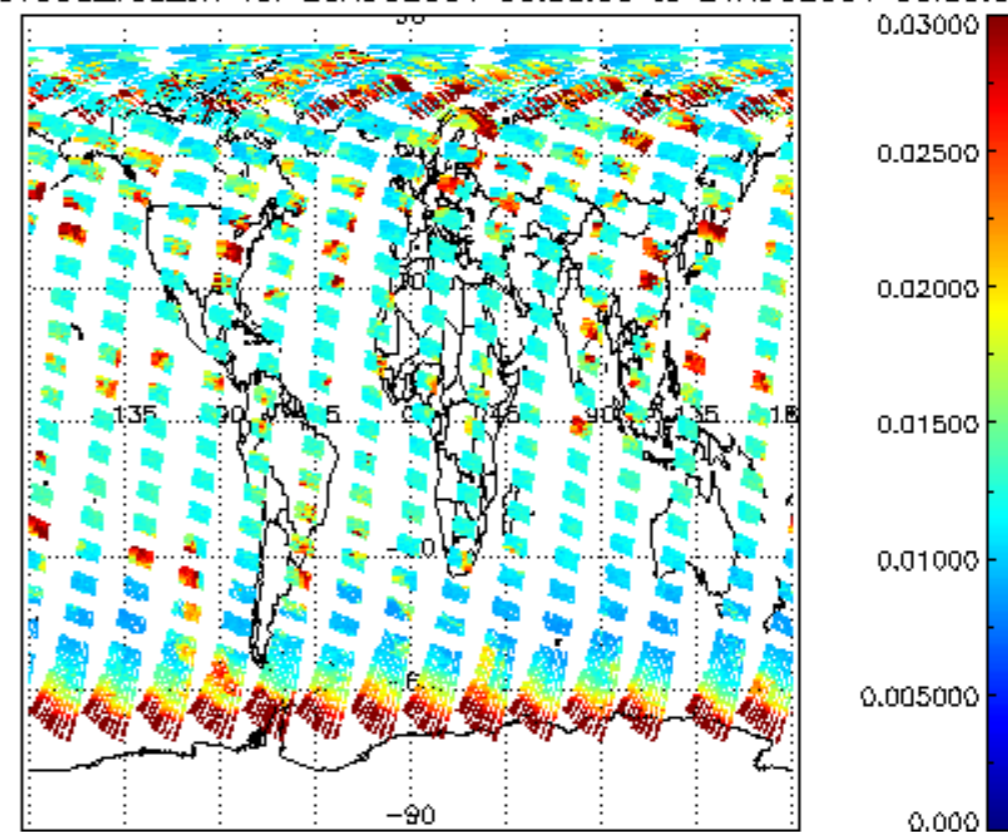




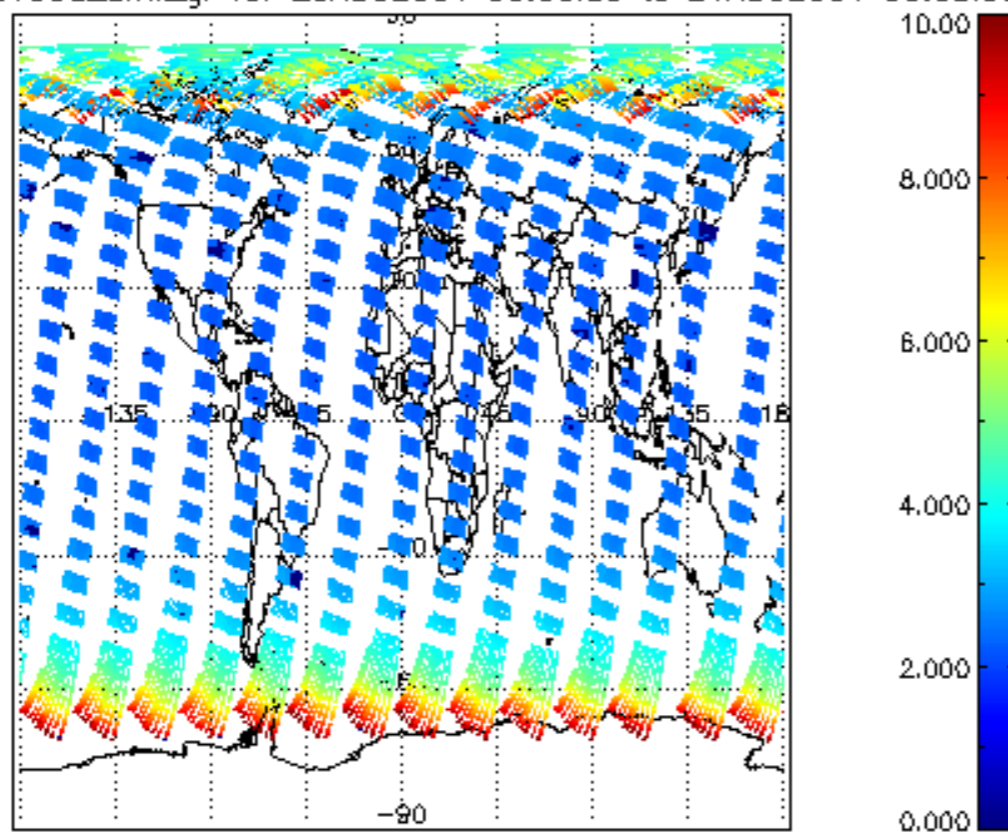
SCIOL2P_NADUV003_vcd for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



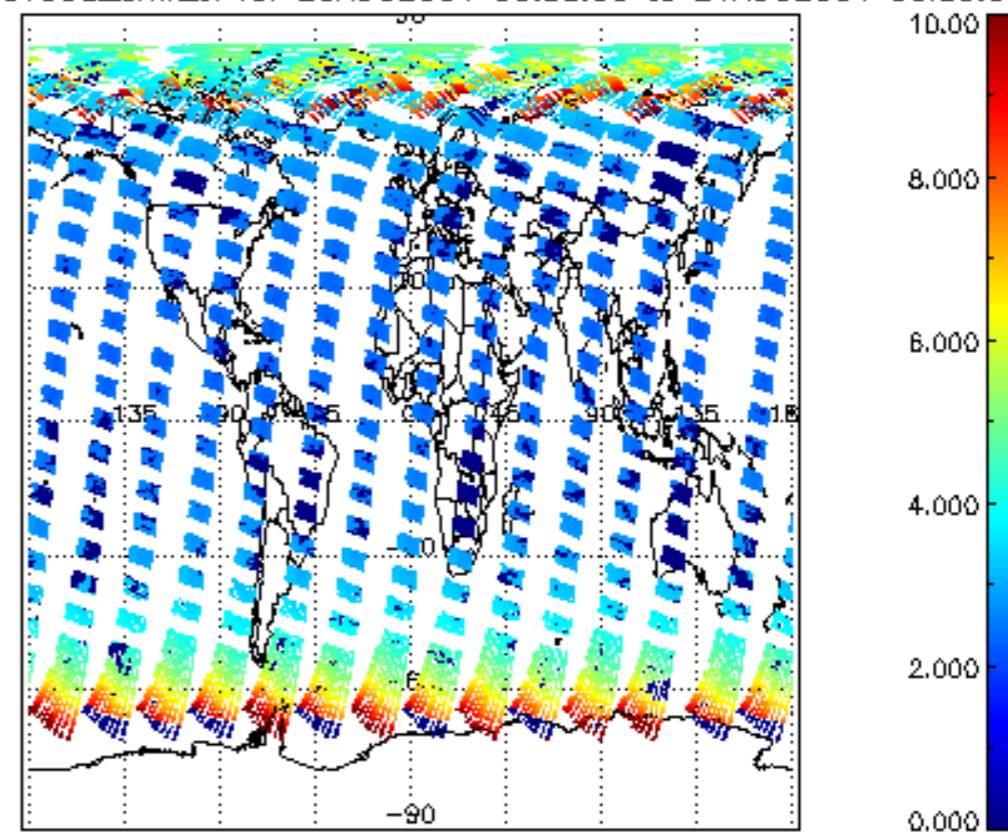
SCIOL2P_NADUV003_vcd_err for 20AUG2004 00:00:00 to 21AUG2004 00:00:00

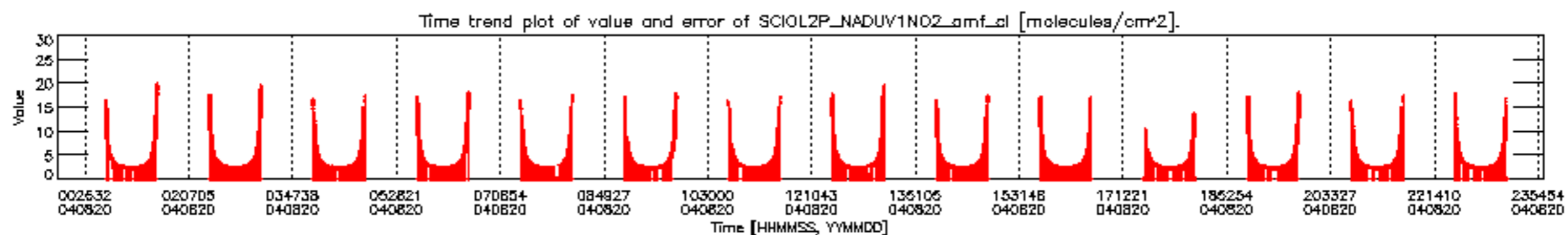
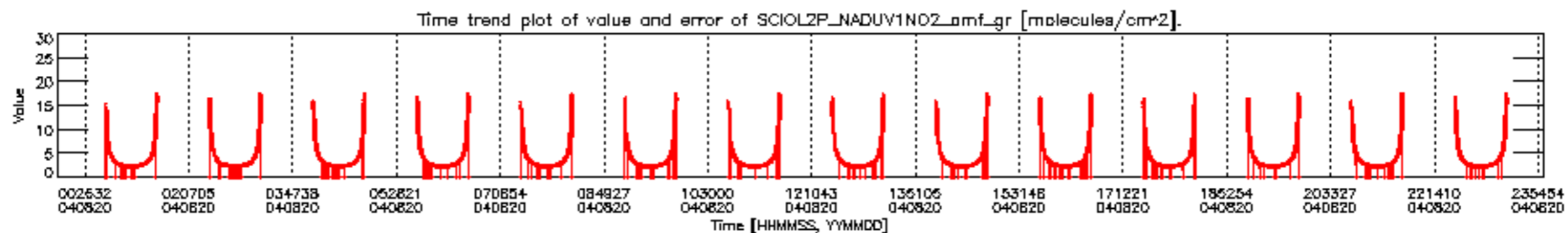
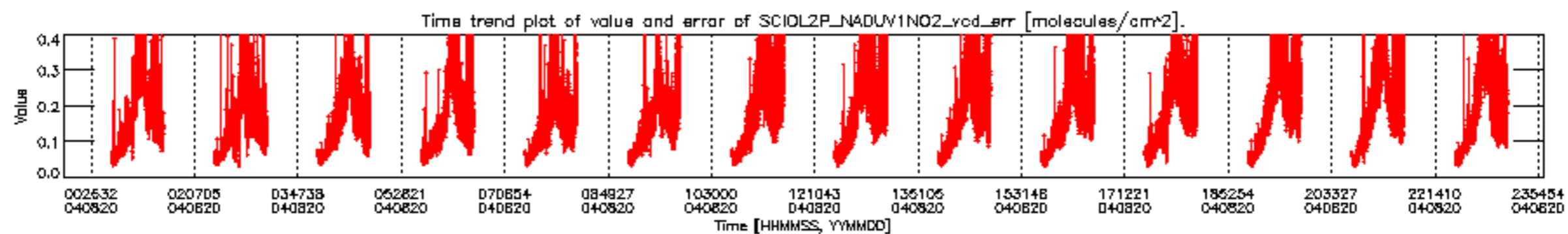
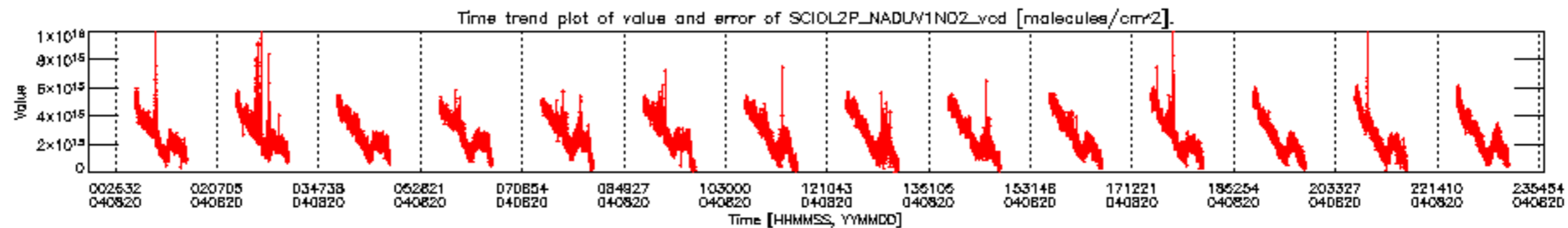


SCIOL2P_NADUV003_amf_gr for 20AUG2004 00:00:00 to 21AUG2004 00:00:00

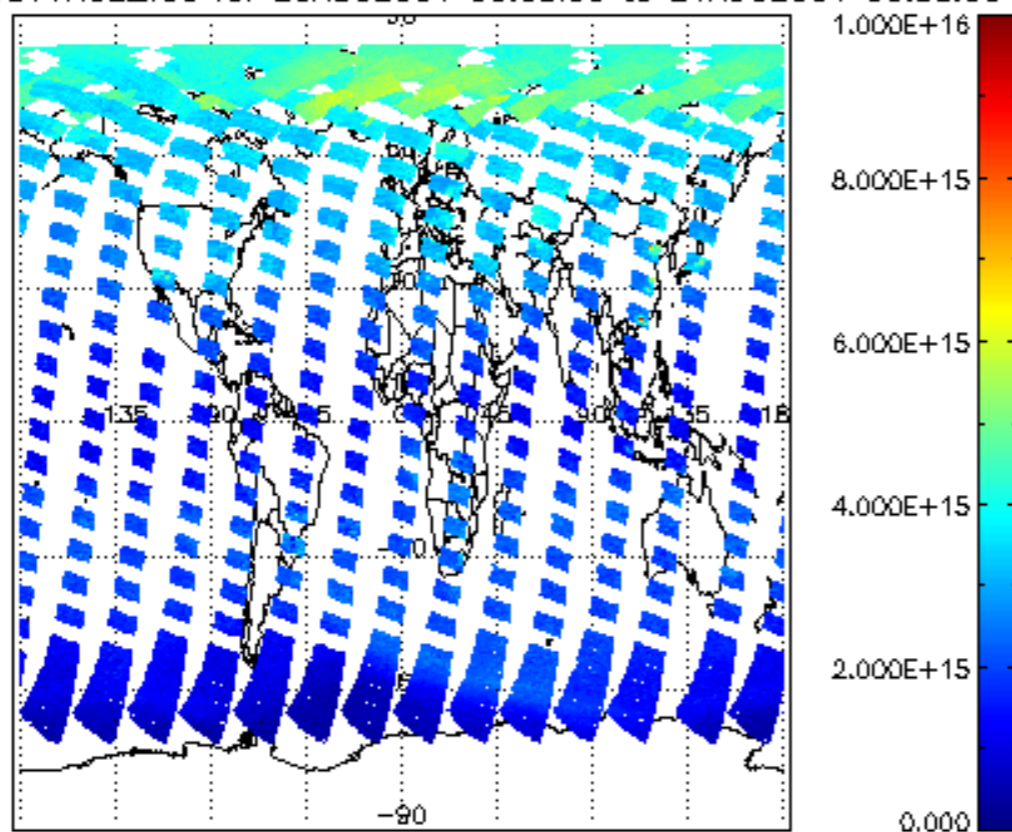


SCIOL2P_NADUV003_amf_cl for 20AUG2004 00:00:00 to 21AUG2004 00:00:00

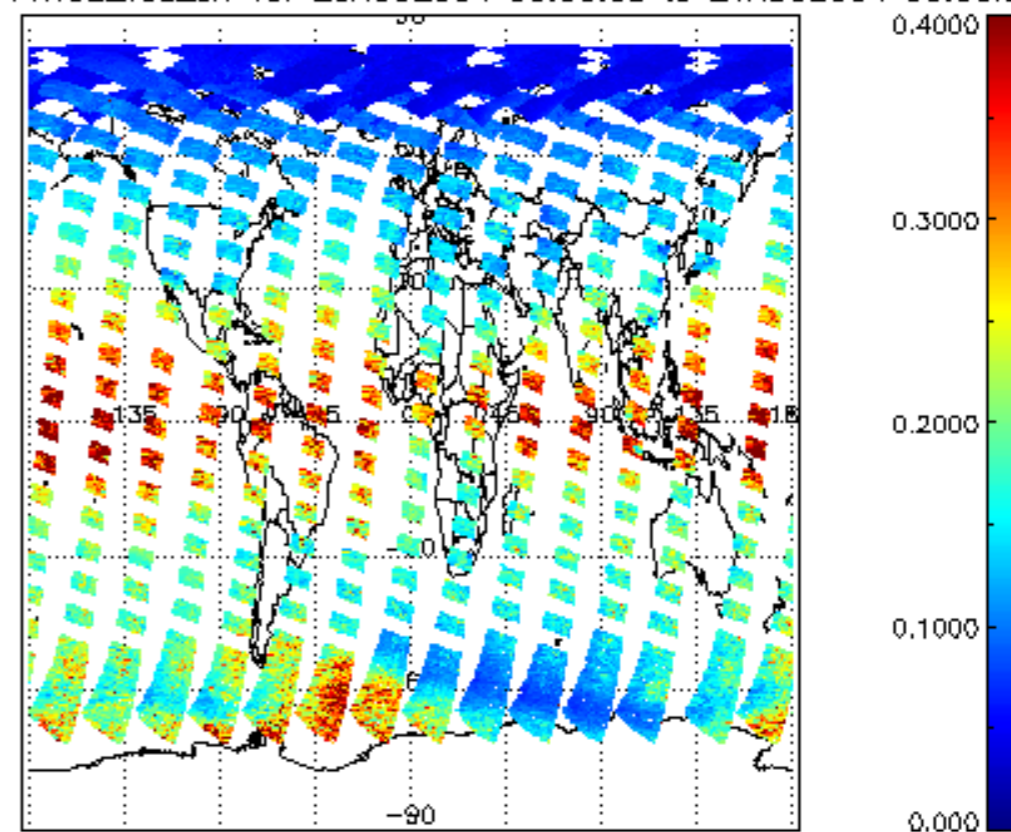




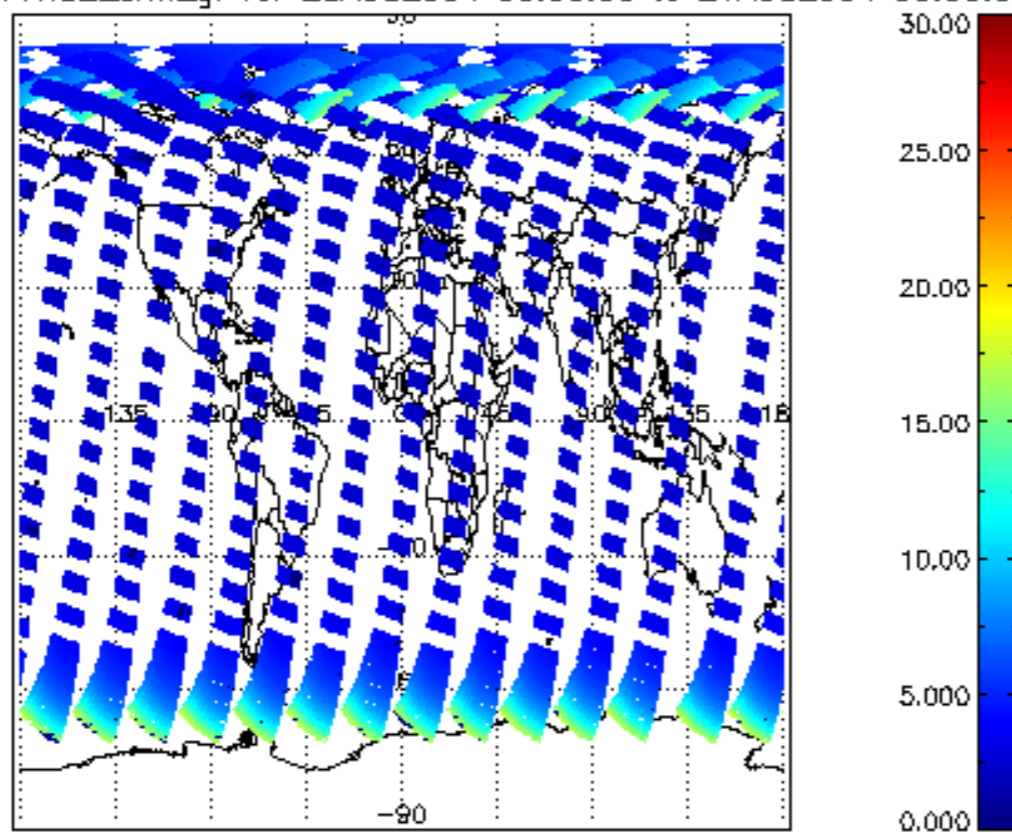
SCIOL2P_NADUV1NO2_vcd for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



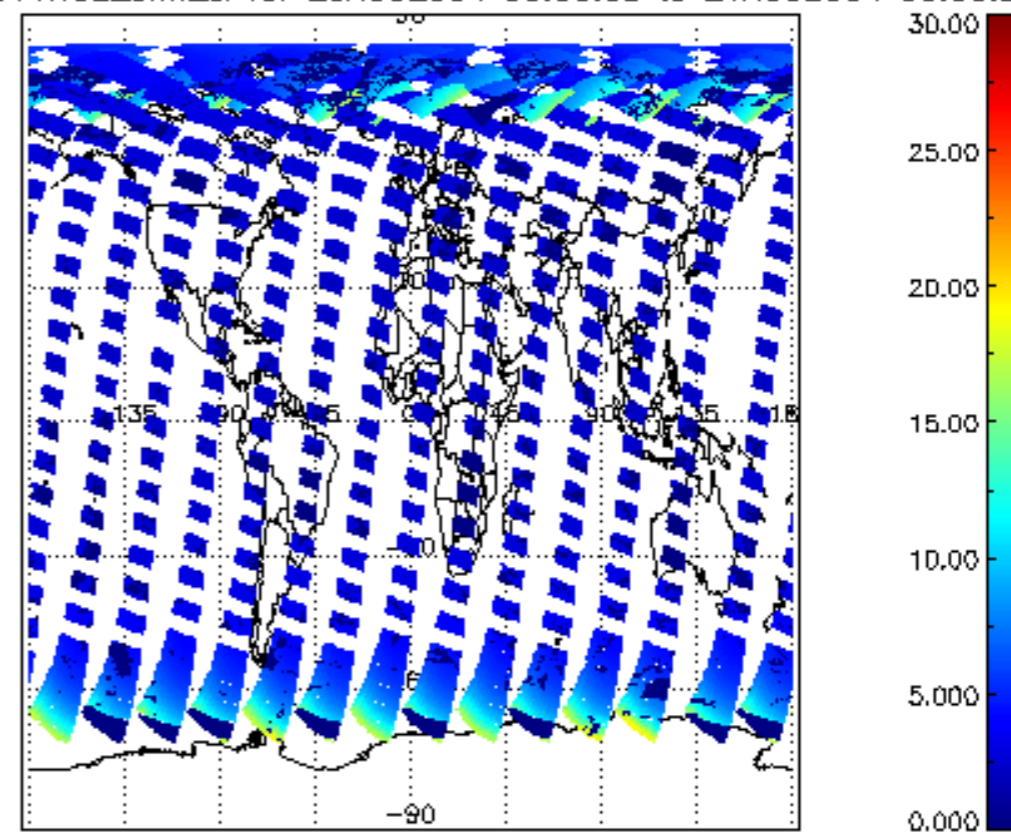
SCIOL2P_NADUV1NO2_vcd_err for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



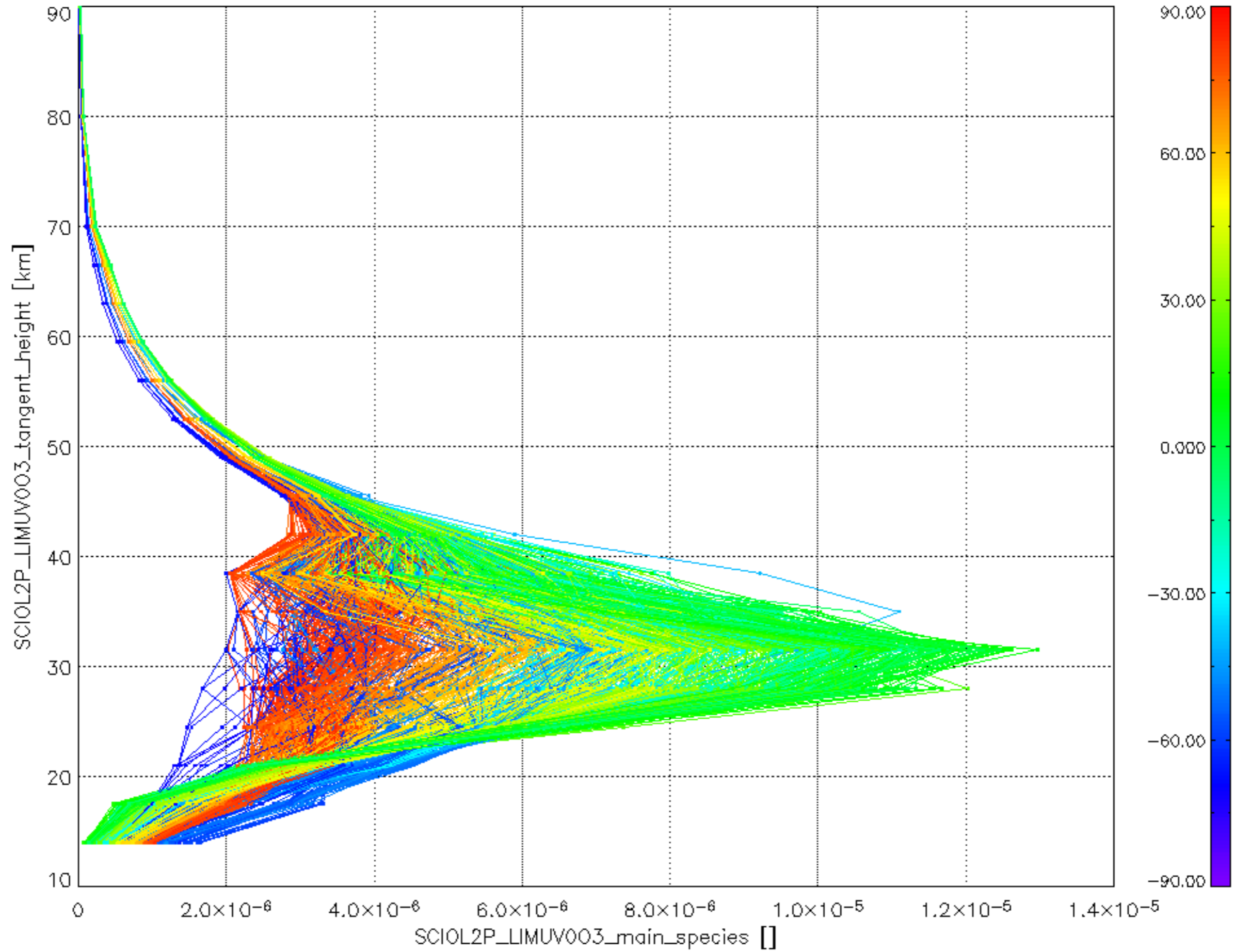
SCIOL2P_NADUV1NO2_amf_gr for 20AUG2004 00:00:00 to 21AUG2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 20AUG2004 00:00:00 to 21AUG2004 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).

