

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 11:45:17
Data source version	SCIA-OL/3.01-R
Processing scope for products	19AUG2004 00:00:00 to 20AUG2004 00:00:00
Start time of first product within scope	18AUG2004 23:32:05
Stop time of last product within scope	19AUG2004 23:55:59
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__2PRDPA20040818_233205_000033252029_00331_12910_9642.N1	18AUG2004 23:32:05	19AUG2004 00:27:30	0	GOOD
1	SCI_OL__2PRDPA20040819_011241_000033812029_00332_12911_9331.N1	19AUG2004 01:12:41	19AUG2004 02:09:03	0	GOOD
2	SCI_OL__2PRDPA20040819_025317_000033252029_00333_12912_9650.N1	19AUG2004 02:53:17	19AUG2004 03:48:43	0	GOOD
3	SCI_OL__2PRDPA20040819_043354_000033812029_00334_12913_9394.N1	19AUG2004 04:33:54	19AUG2004 05:30:15	0	GOOD
4	SCI_OL__2PRDPA20040819_061430_000033252029_00335_12914_9417.N1	19AUG2004 06:14:30	19AUG2004 07:09:56	0	GOOD
5	SCI_OL__2PRDPA20040819_075507_000033812029_00336_12915_9605.N1	19AUG2004 07:55:07	19AUG2004 08:51:28	0	GOOD
6	SCI_OL__2PRDPA20040819_093543_000033252029_00337_12916_9646.N1	19AUG2004 09:35:43	19AUG2004 10:31:09	0	GOOD
7	SCI_OL__2PRDPA20040819_111619_000033812029_00338_12917_9373.N1	19AUG2004 11:16:19	19AUG2004 12:12:41	0	GOOD
8	SCI_OL__2PRDPA20040819_125656_000033252029_00339_12918_9637.N1	19AUG2004 12:56:56	19AUG2004 13:52:21	0	GOOD
9	SCI_OL__2PRDPA20040819_143732_000033812029_00340_12919_9528.N1	19AUG2004 14:37:32	19AUG2004 15:33:53	0	GOOD
10	SCI_OL__2PRDPA20040819_161808_000033252029_00341_12920_9389.N1	19AUG2004 16:18:08	19AUG2004 17:13:34	0	GOOD
11	SCI_OL__2PRDPA20040819_175839_000033762029_00342_12921_9404.N1	19AUG2004 17:58:39	19AUG2004 18:54:55	0	GOOD
12	SCI_OL__2PRDPA20040819_193940_000033252029_00343_12922_9244.N1	19AUG2004 19:39:40	19AUG2004 20:35:06	0	GOOD
13	SCI_OL__2PRDPA20040819_211958_000033812029_00344_12923_9620.N1	19AUG2004 21:19:58	19AUG2004 22:16:19	0	GOOD
14	SCI_OL__2PRDPA20040819_230034_000033252029_00345_12924_9513.N1	19AUG2004 23:00:34	19AUG2004 23:55:59	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: 153136

Total number of cloud data DSRs with good quality flag (=0): 153136 (100.0 %)

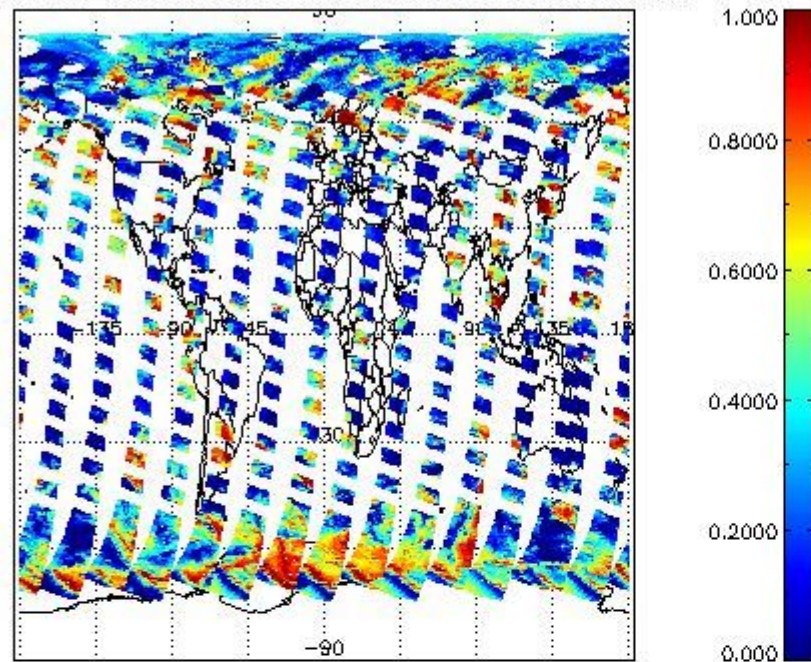
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	153136	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	153136	0.16978	0.12500	0.12500	0.25000	0.059935	s
CL_FRAC	153136	0.34623	0.29753	0.0000	1.0000	0.28327	-
CL_FRAC_ERR	153136	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	153136	5.4329	4.0000	4.0000	8.0000	1.9179	
PMD_READ_CL[0]	153136	0.20703	0.0000	0.0000	8.0000	1.0470	-
PMD_READ_CL[1]	153136	1.0022	0.0000	0.0000	8.0000	2.0712	-
CL_TOP_HEIGHT	132546	3.5864	1.9386	0.0000	17.000	3.7651	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	132546	58.573	65.268	0.0000	101.00	43.065	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	153136	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	153136	11001010	11000100	11000000	11100000	3303.0	flags
AERO_ABSO_IND	153136	0.80035	0.56234	-4.8342	8.1428	1.0722	
AERO_IND_DIAG	153136	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	153136	01010110	00000000	00000000	11000000	24466.	flags

Time and geolocation plots:

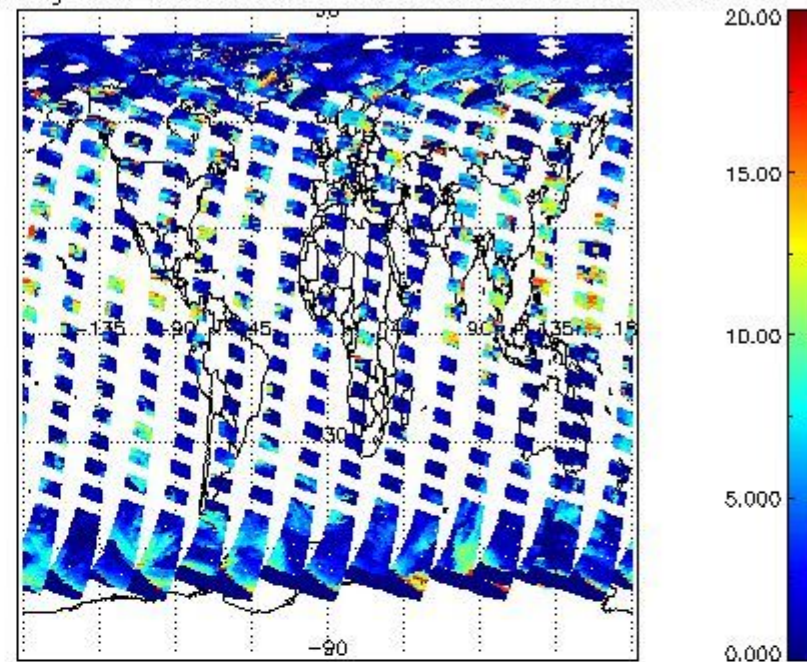
Plots are available for the following parameters:

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

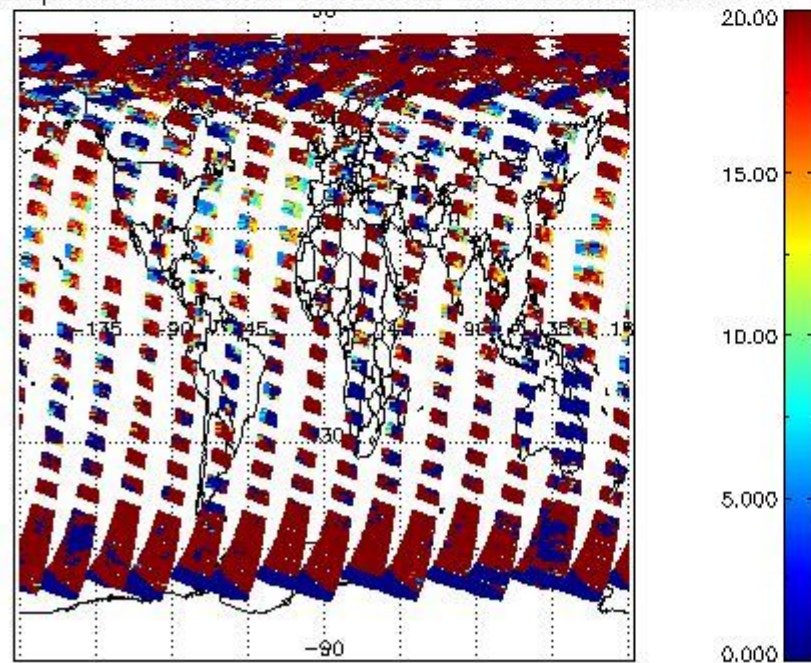
cL_frac for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



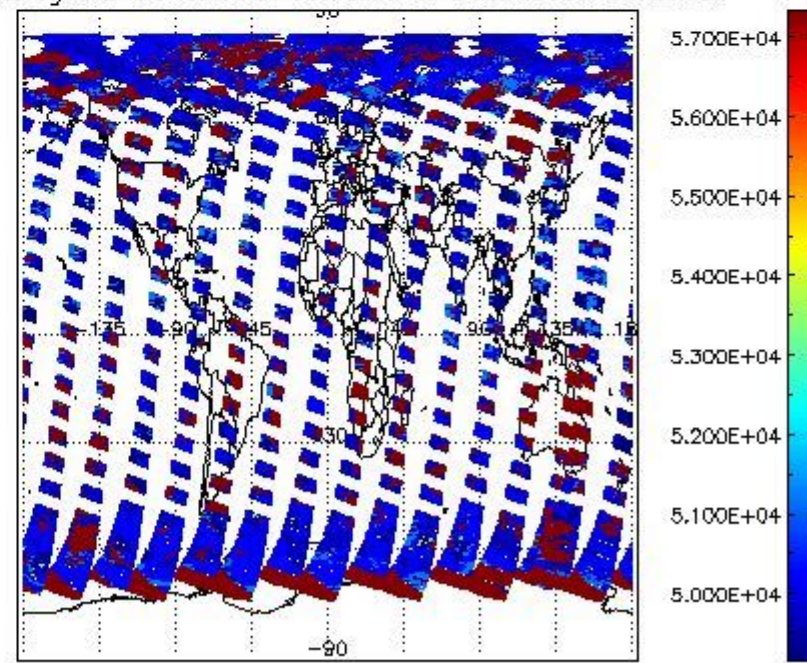
cL_top_height for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



cL_opt_depth for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



cloud_flags for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



2.2.2 Nadir

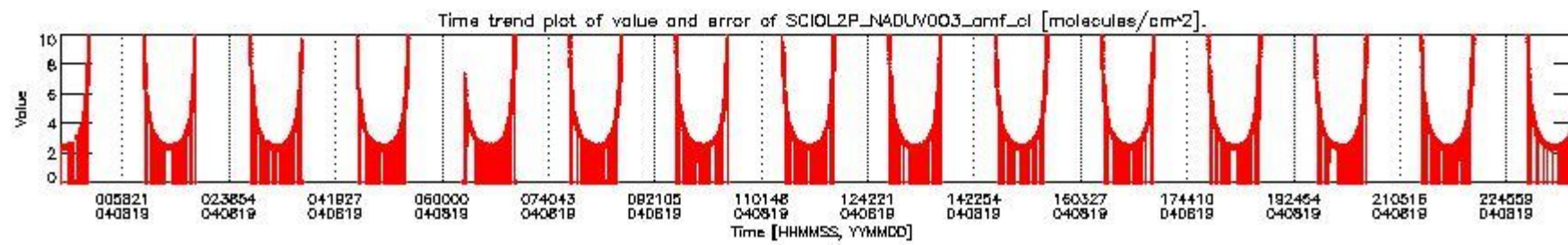
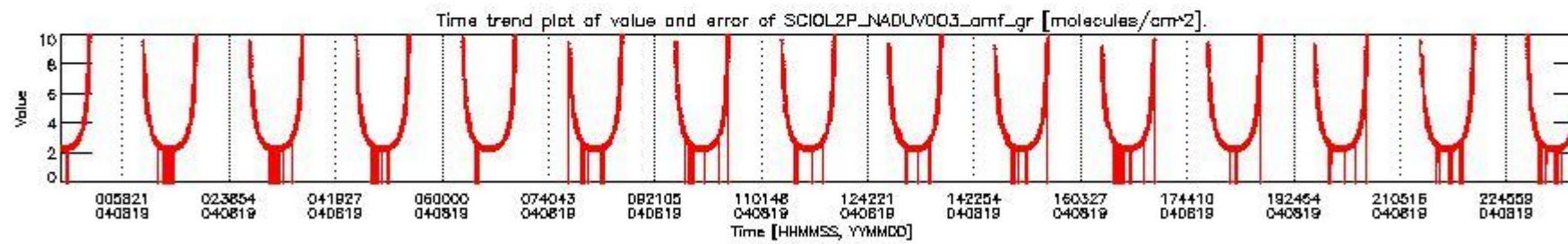
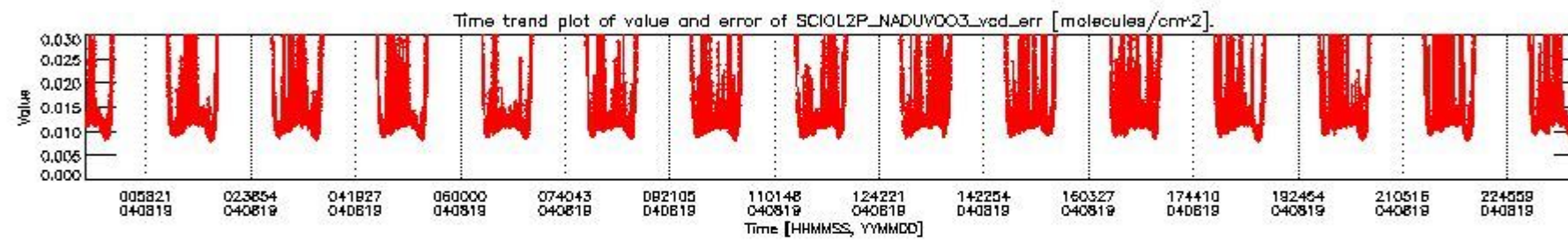
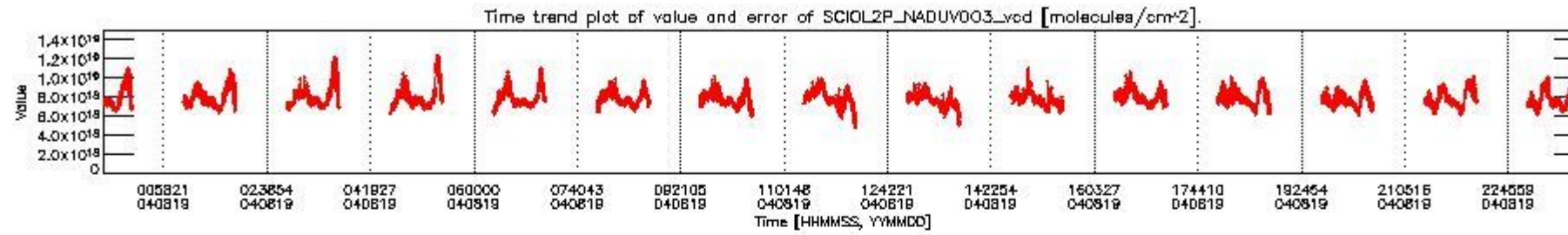
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

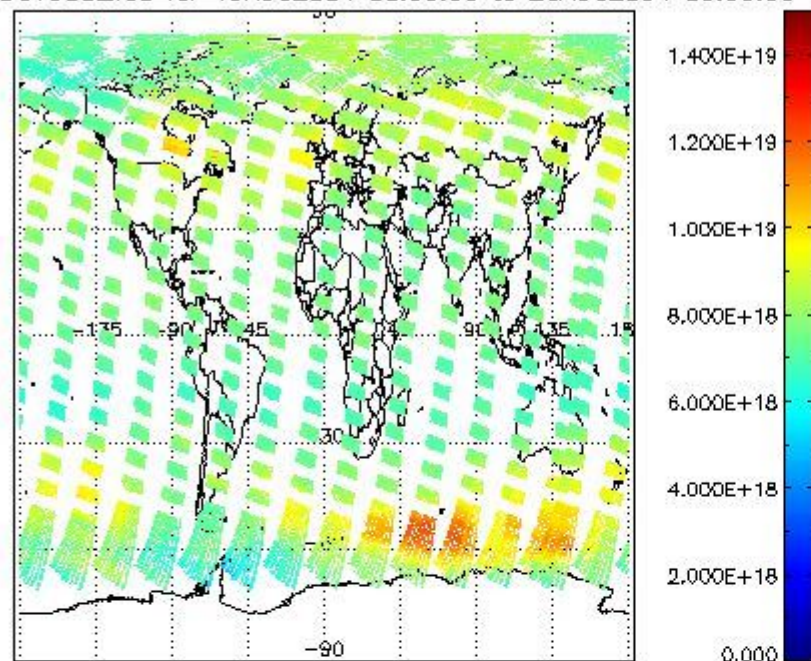
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

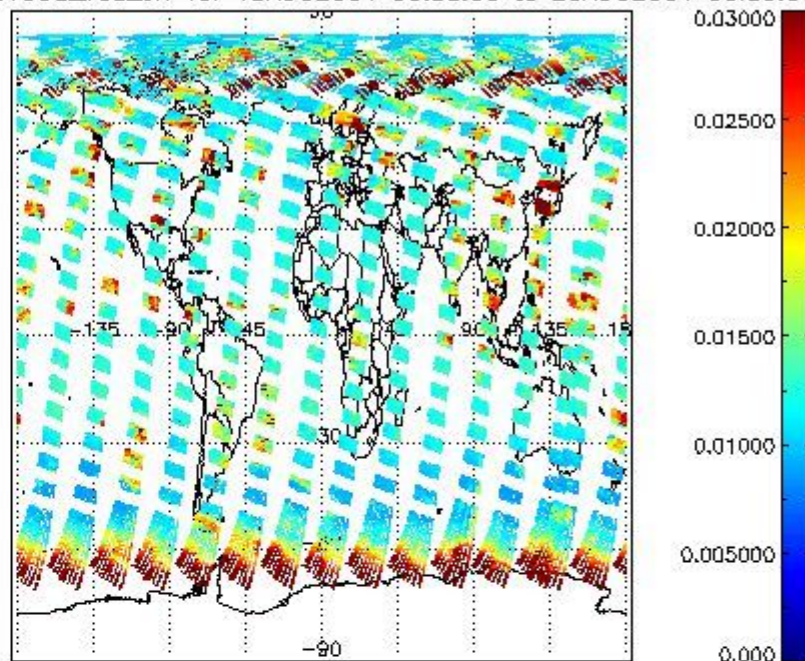
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



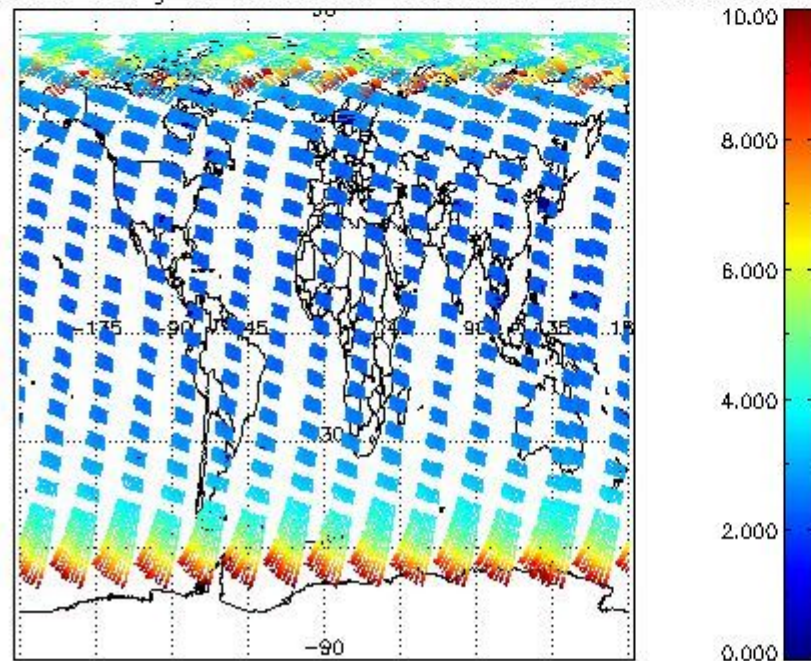
SCIOL2P_NADUV003_vcd for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



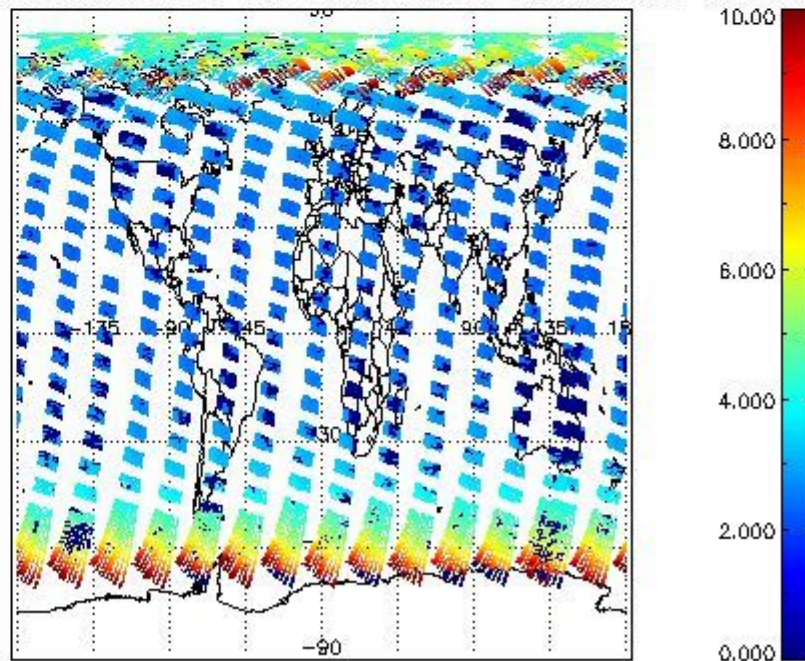
SCIOL2P_NADUV003_vcd_err for 19AUG2004 00:00:00 to 20AUG2004 00:00:00

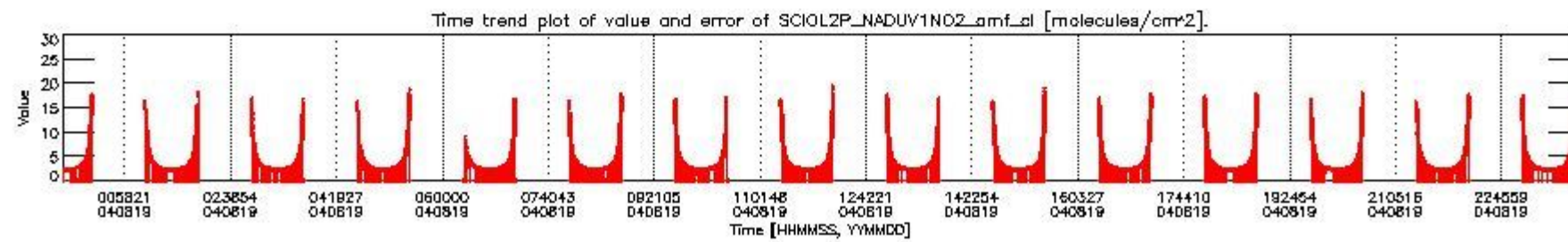
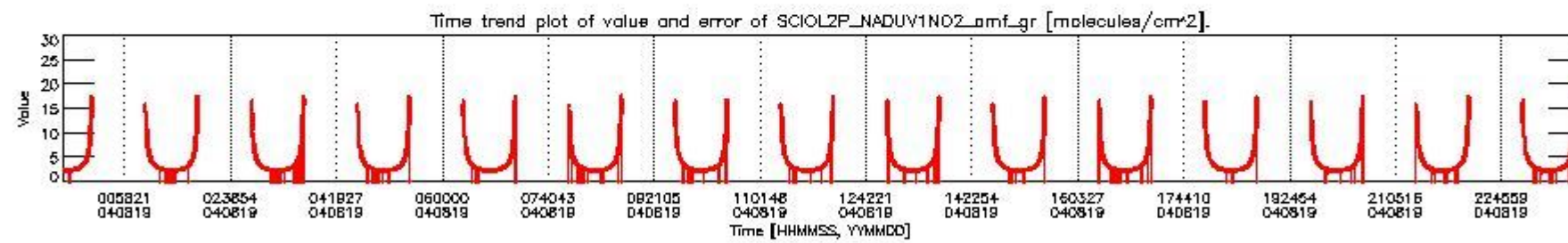
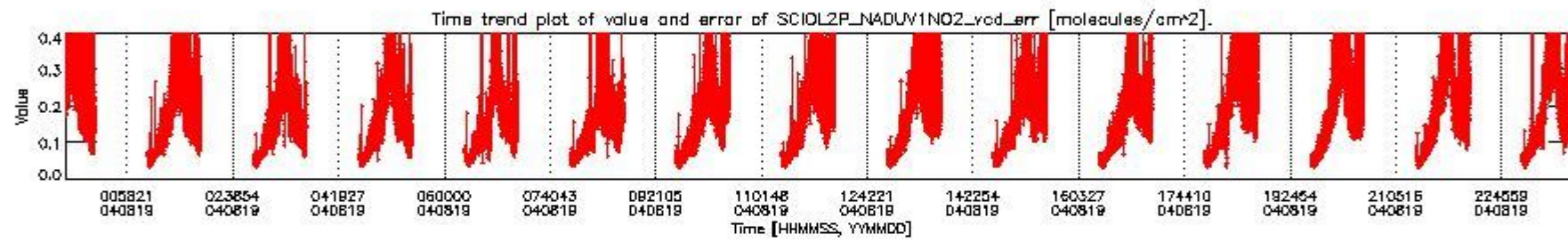
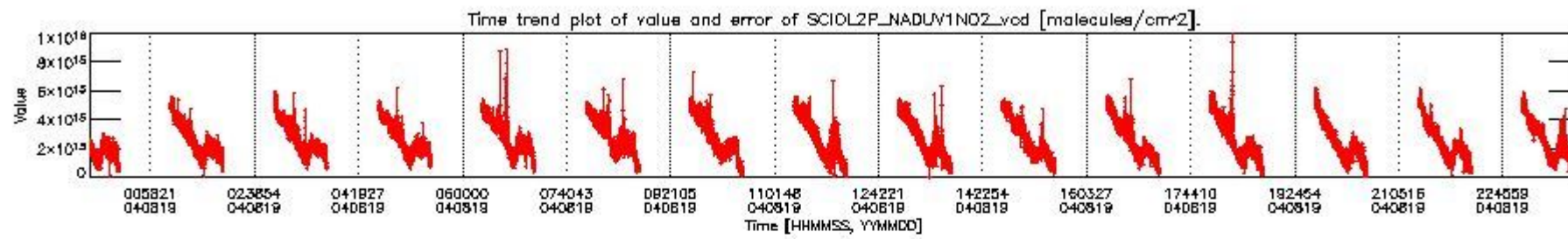


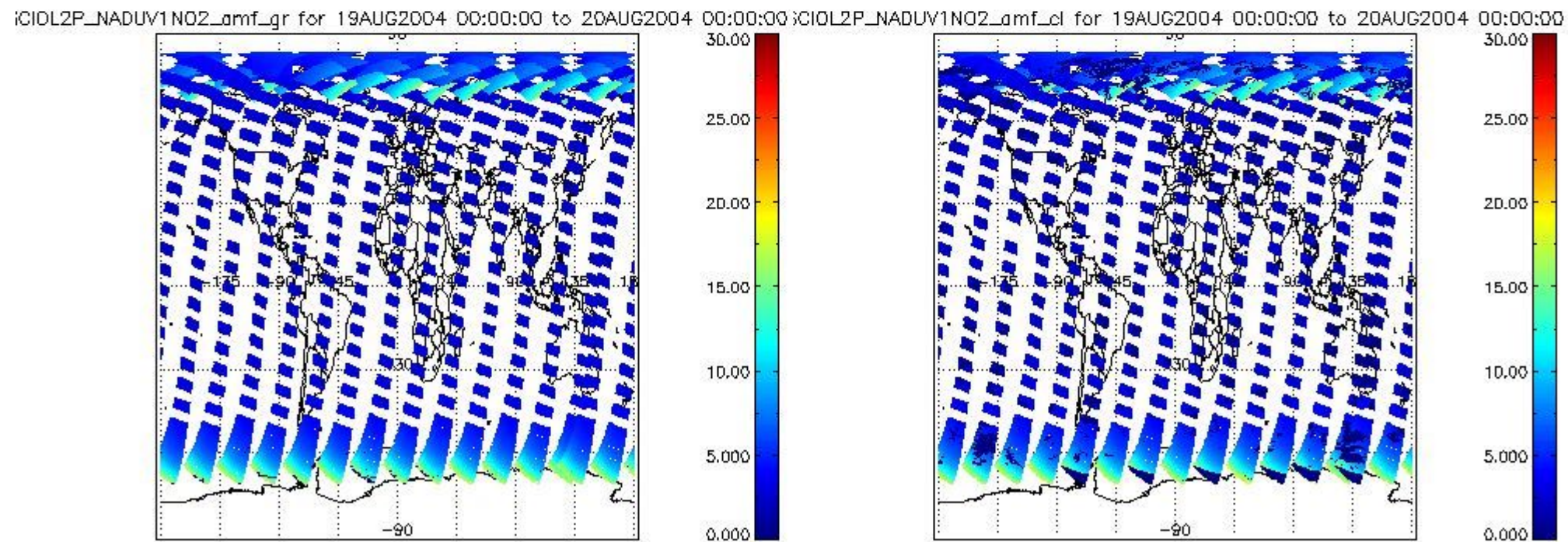
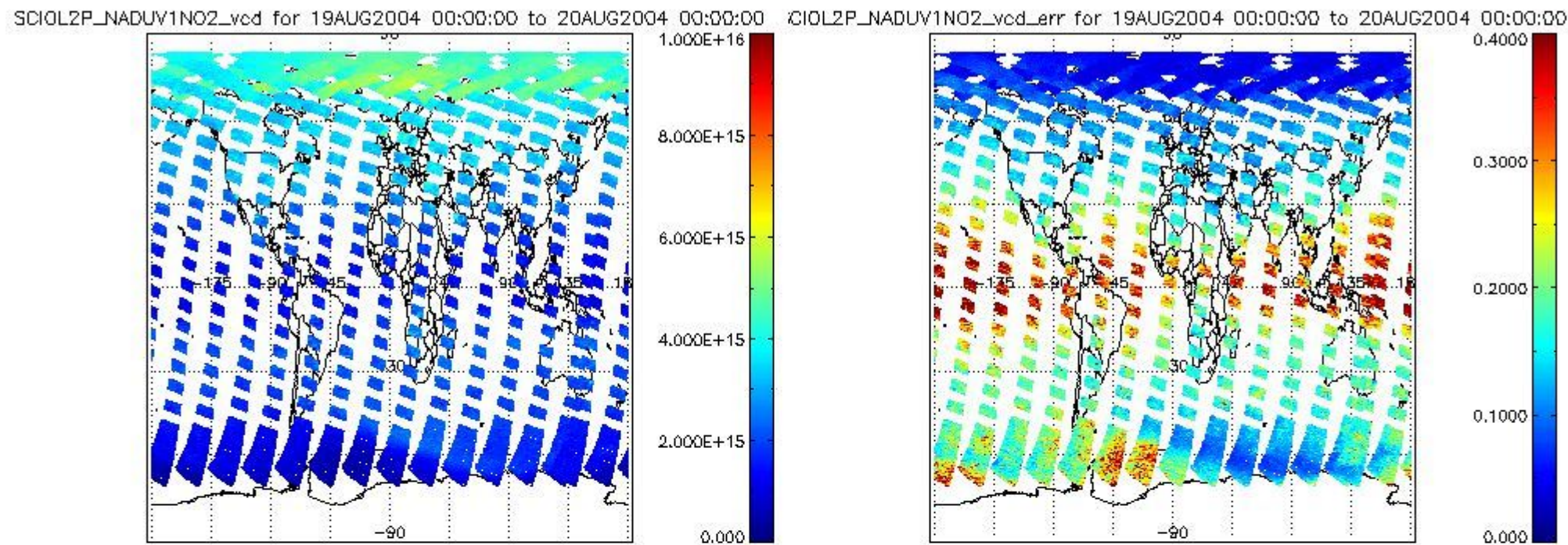
SCIOL2P_NADUV003_amf_gr for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 19AUG2004 00:00:00 to 20AUG2004 00:00:00







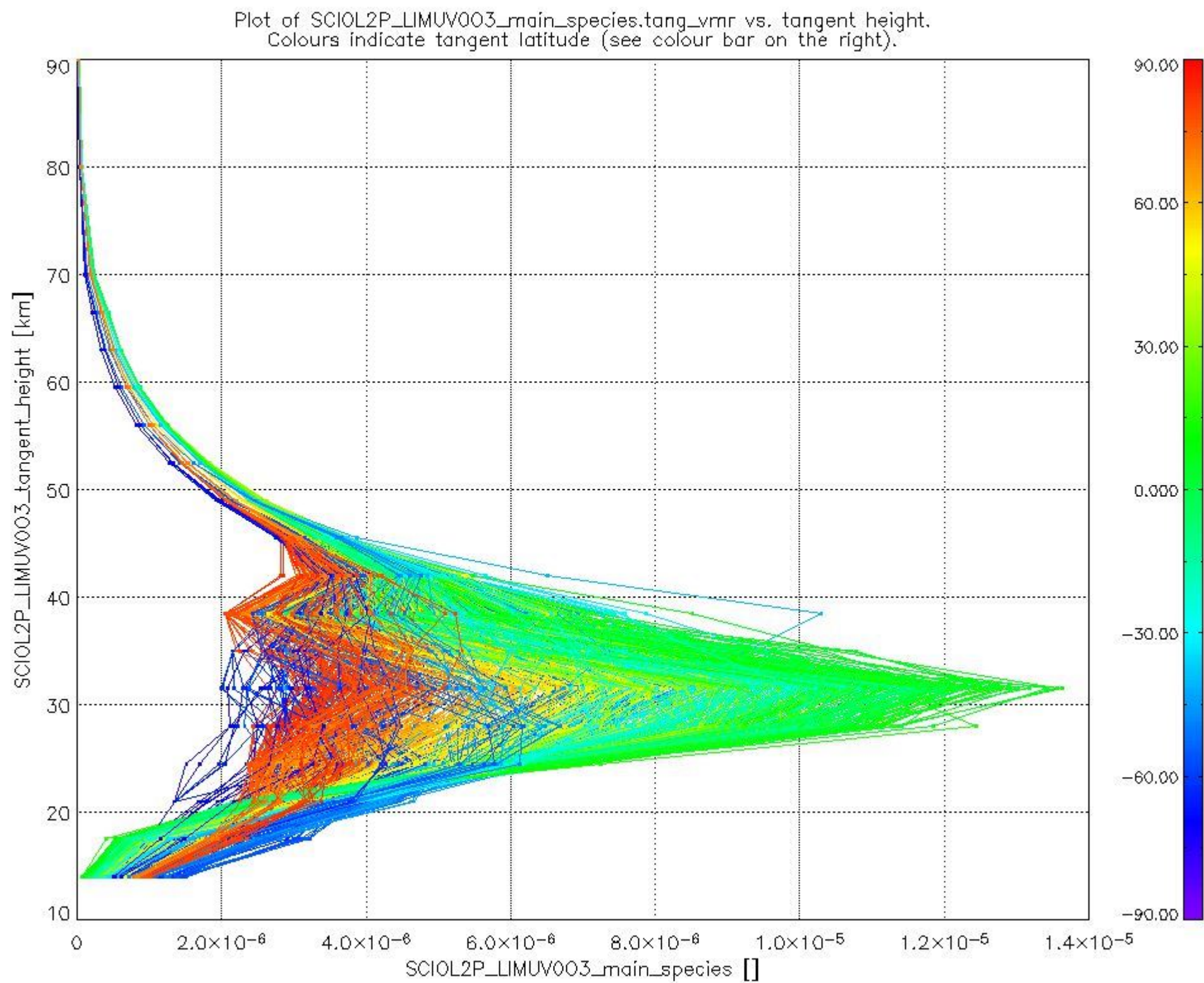
2.2.3 Limb

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

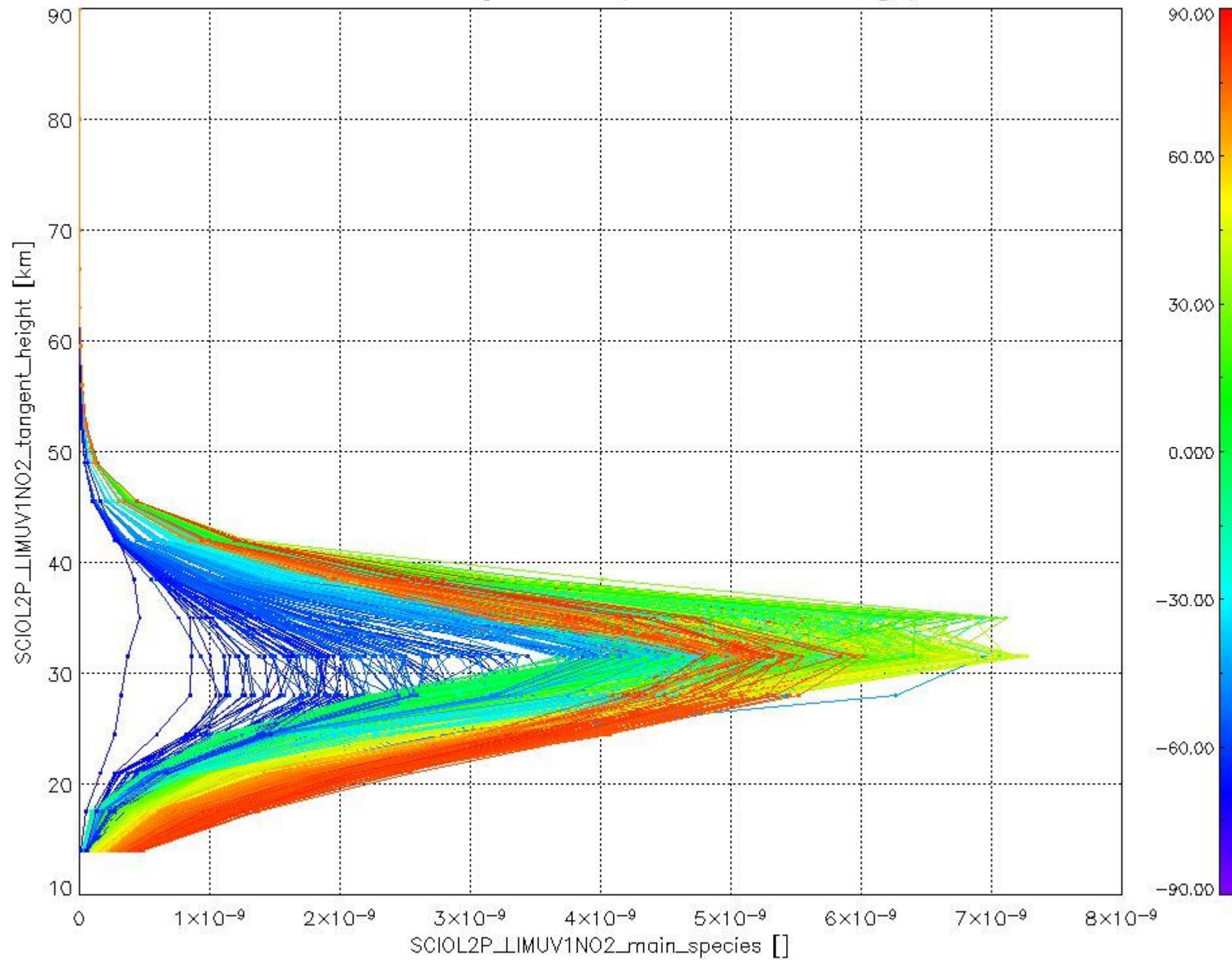
The following data items are currently included into this section:

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.



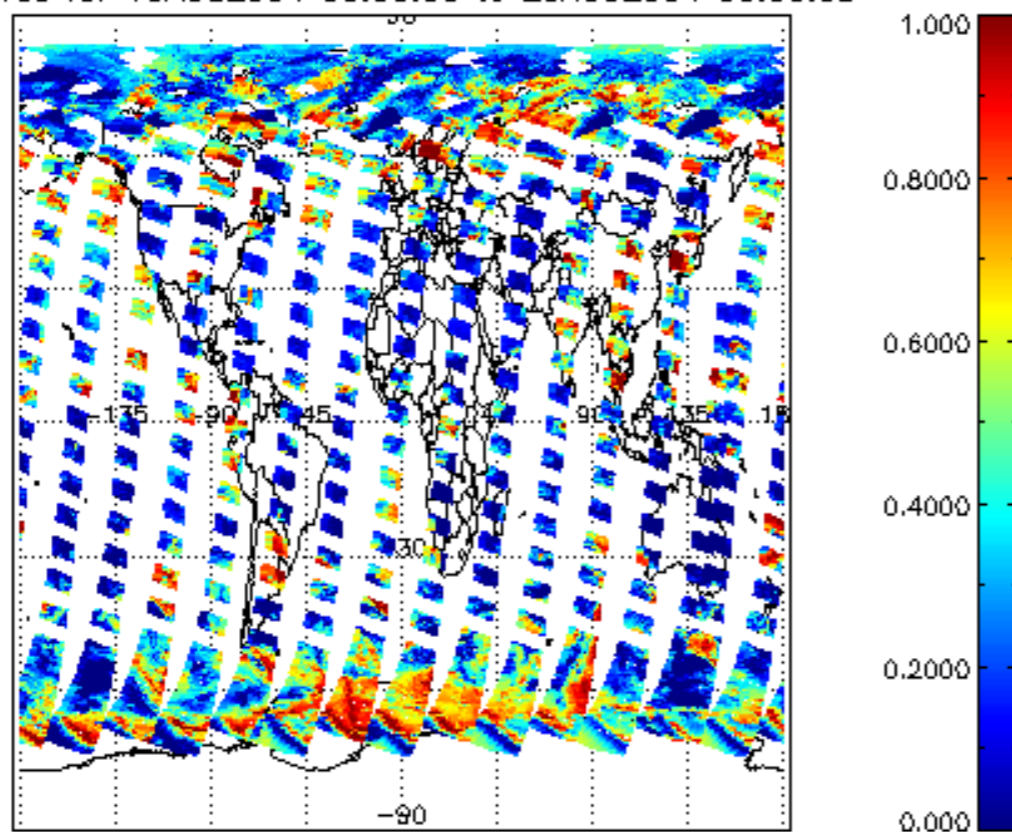
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



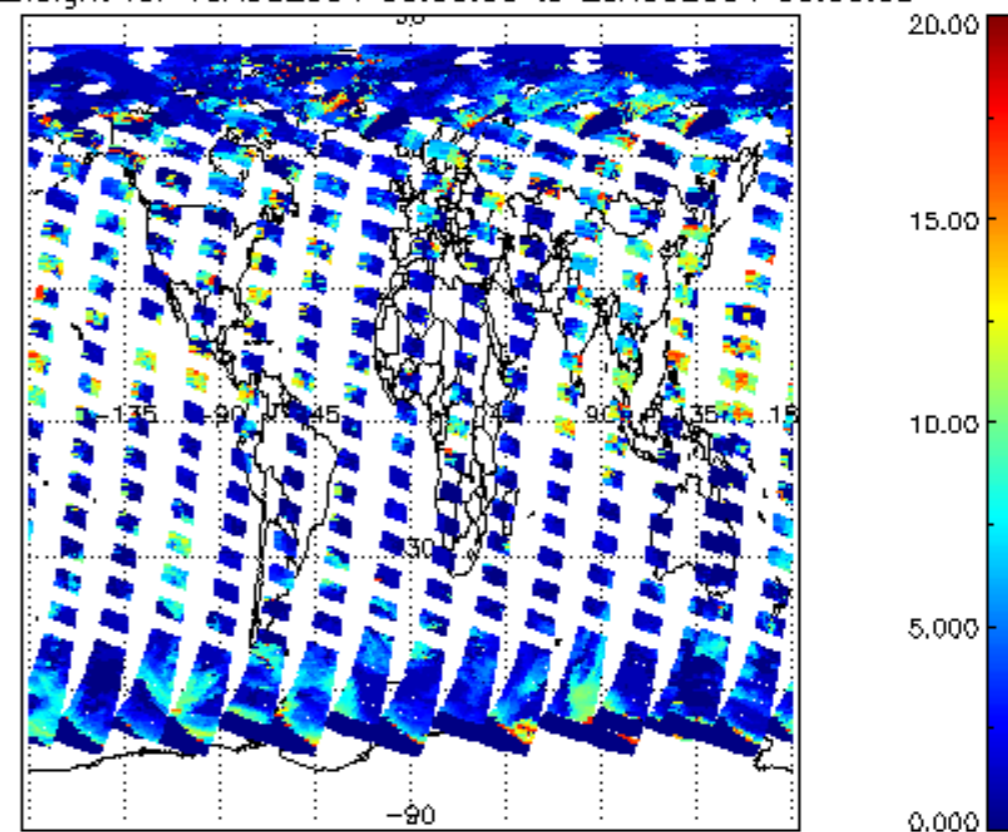
2.3 ADF monitoring

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

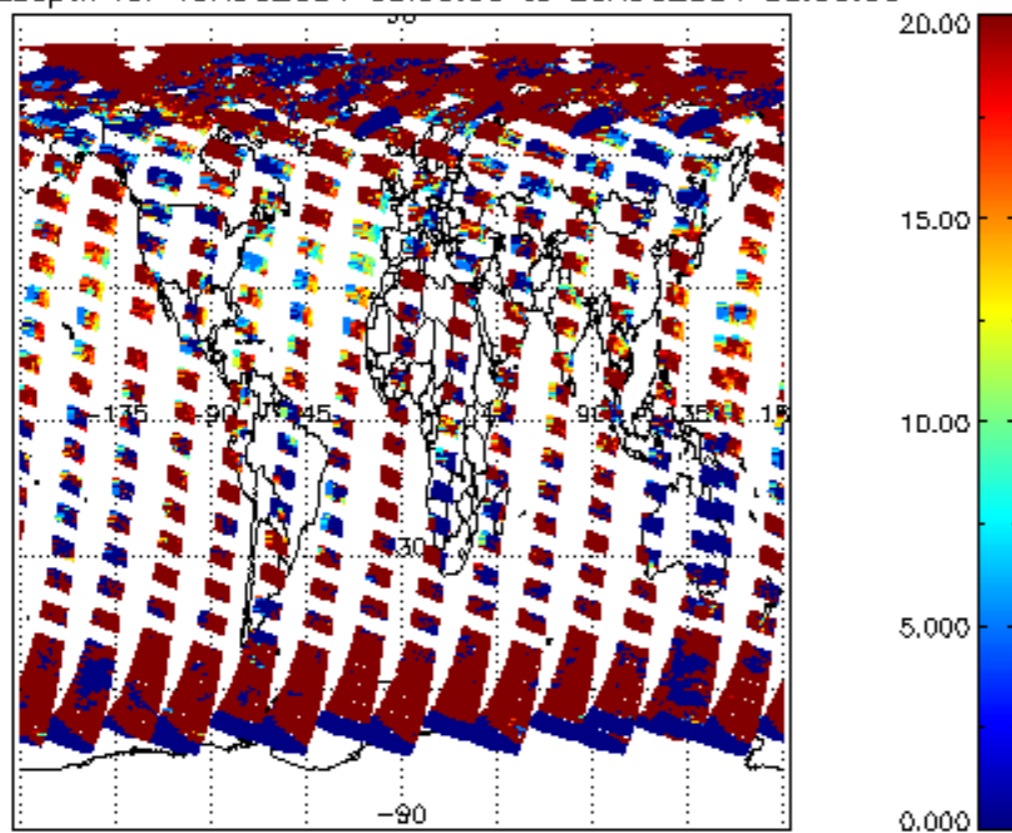
cL_frac for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



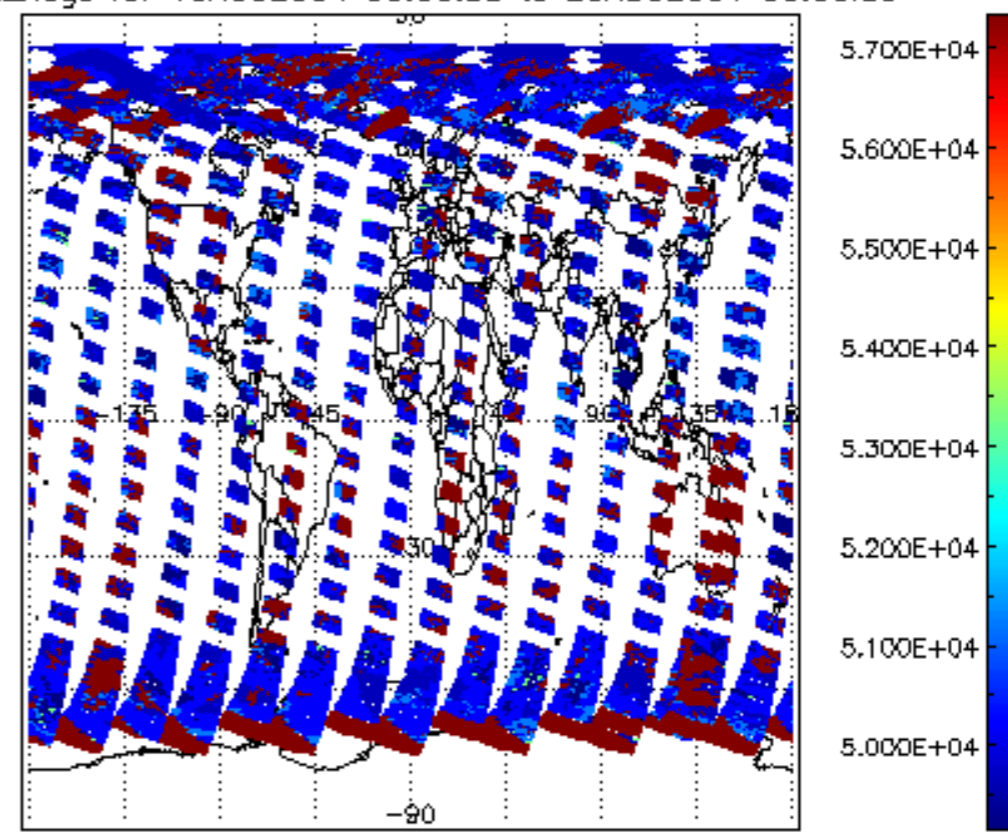
cL_top_height for 19AUG2004 00:00:00 to 20AUG2004 00:00:00

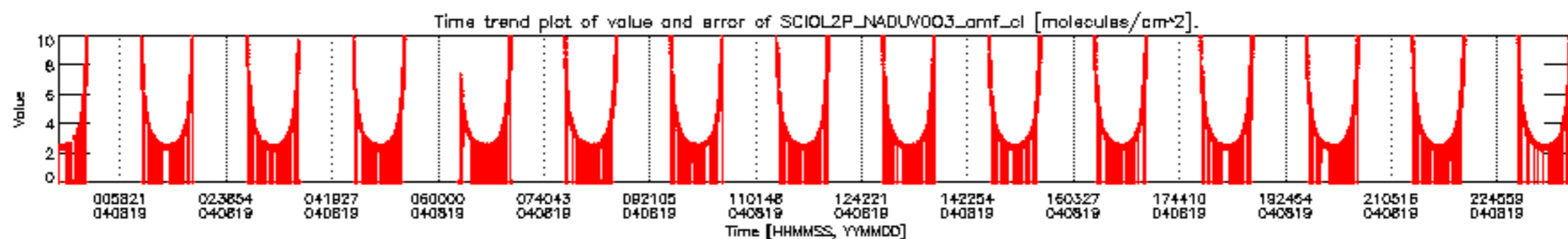
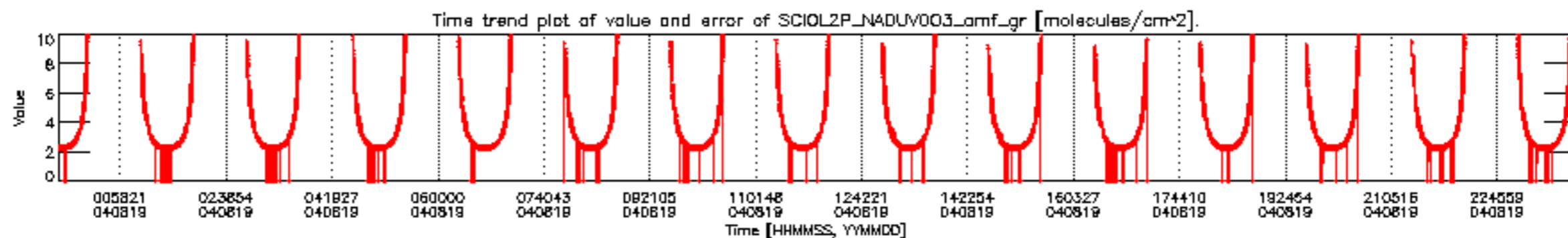
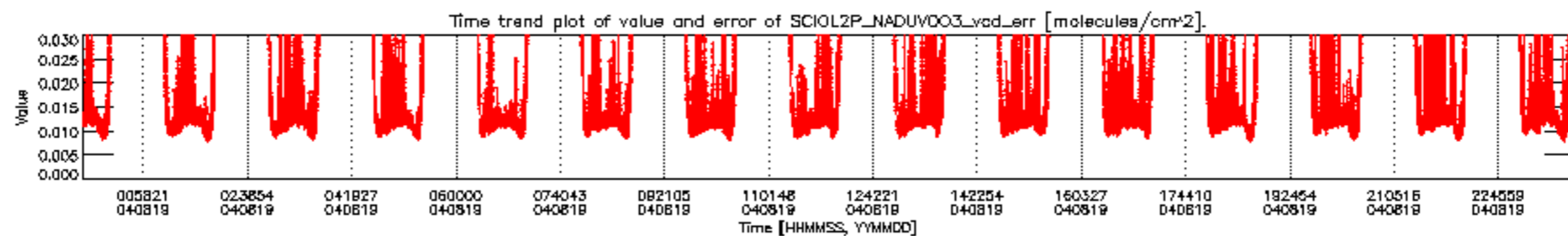
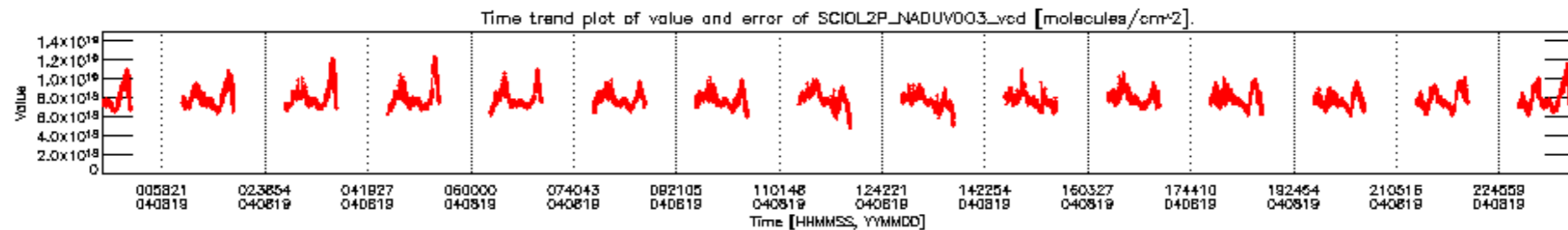


cL_opt_depth for 19AUG2004 00:00:00 to 20AUG2004 00:00:00

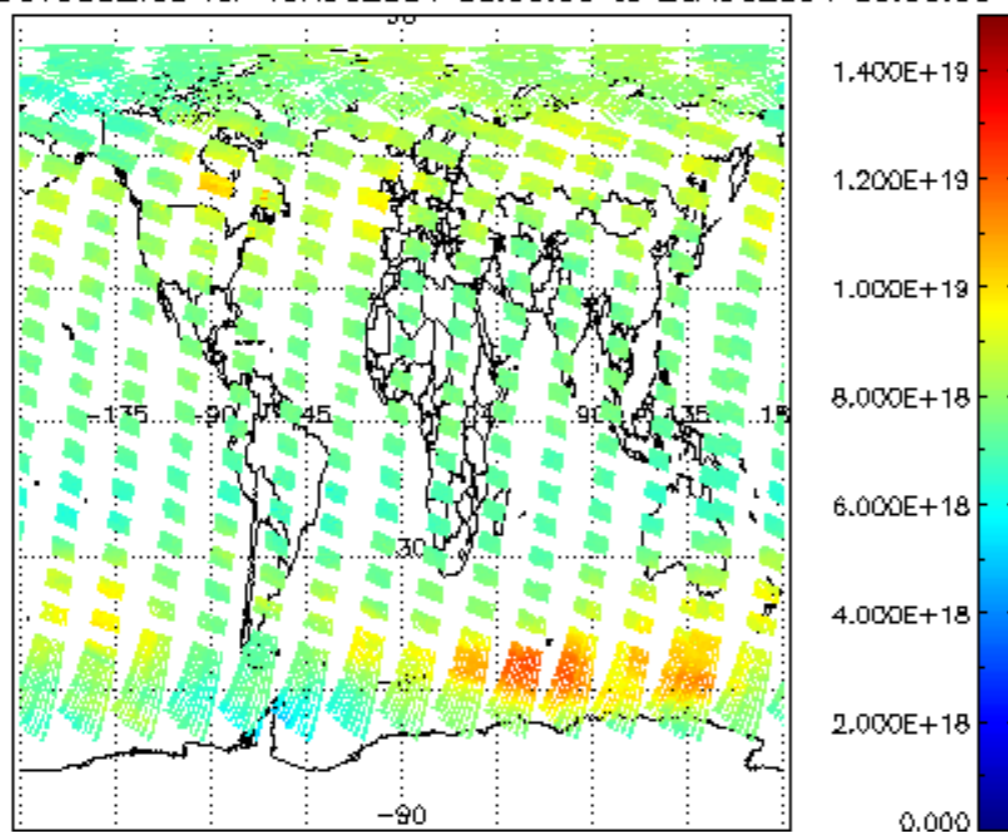


cloud_flags for 19AUG2004 00:00:00 to 20AUG2004 00:00:00

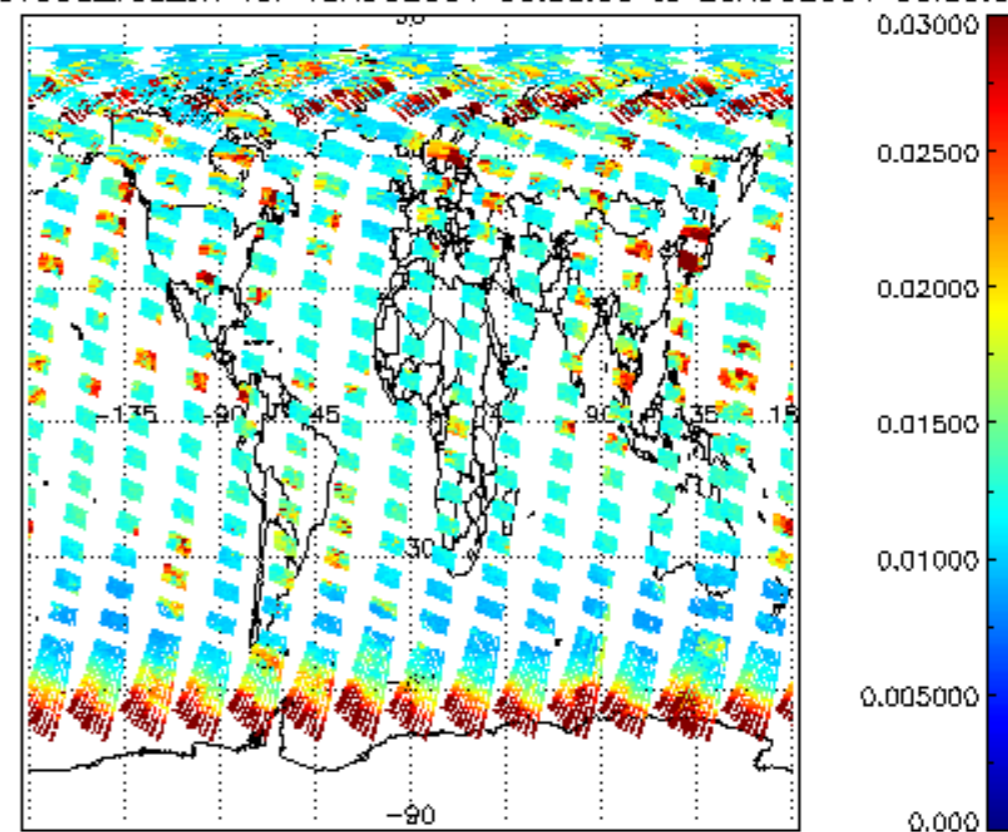




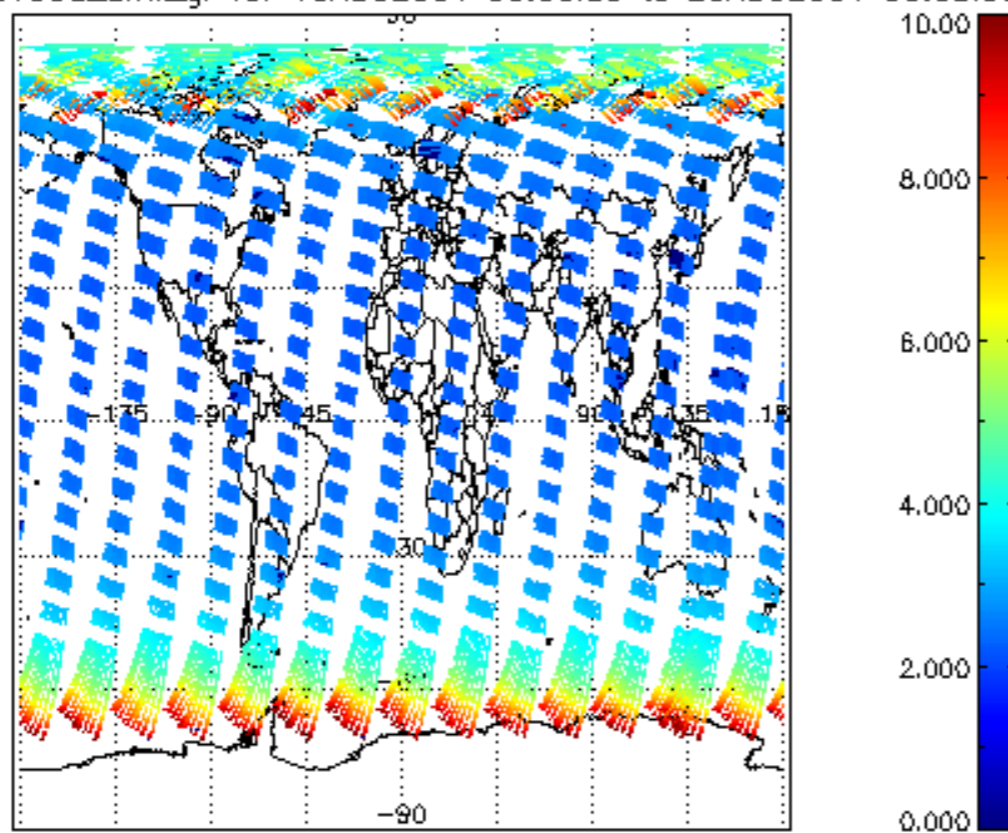
SCIOL2P_NADUV003_vcd for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



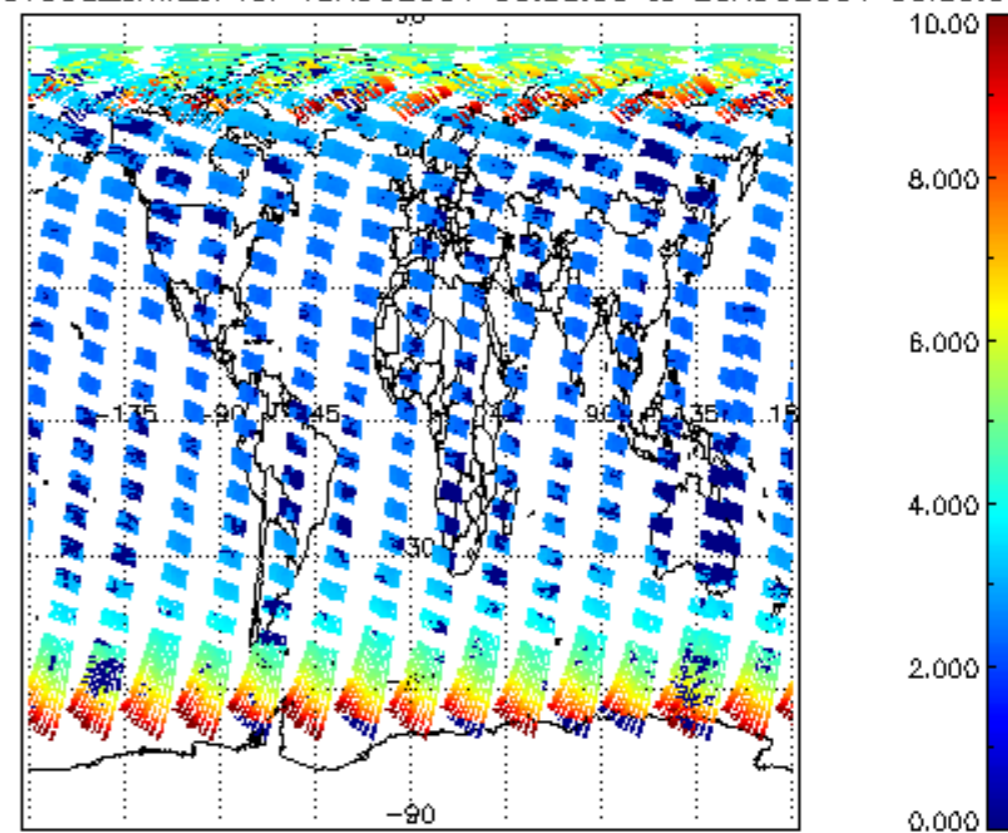
SCIOL2P_NADUV003_vcd_err for 19AUG2004 00:00:00 to 20AUG2004 00:00:00

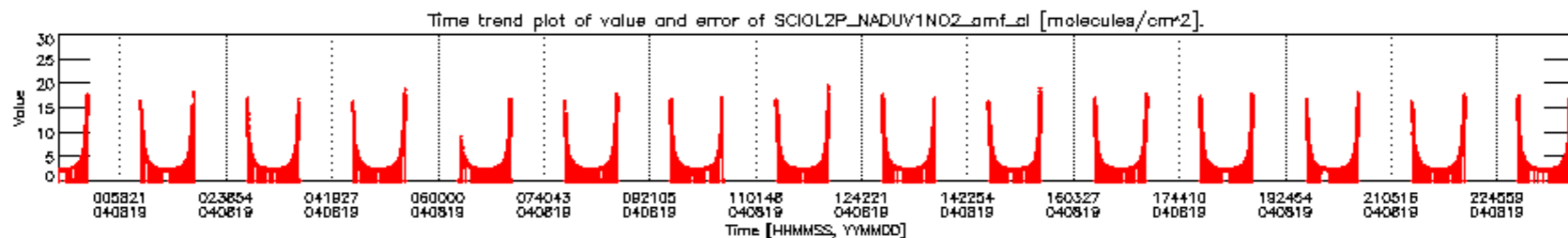
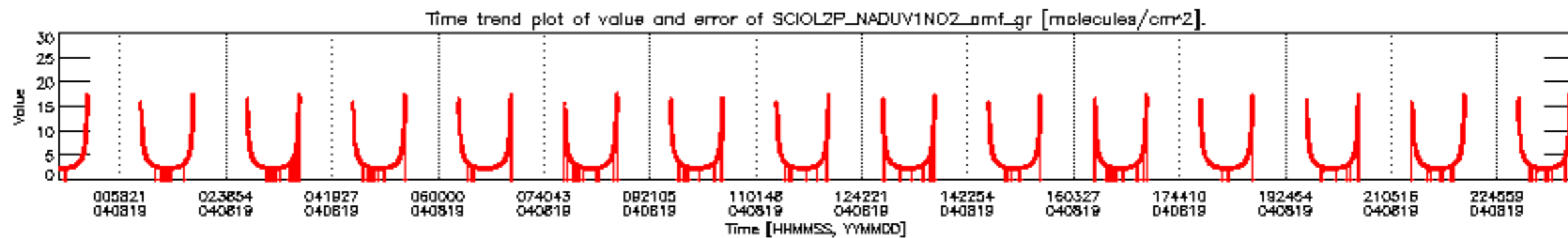
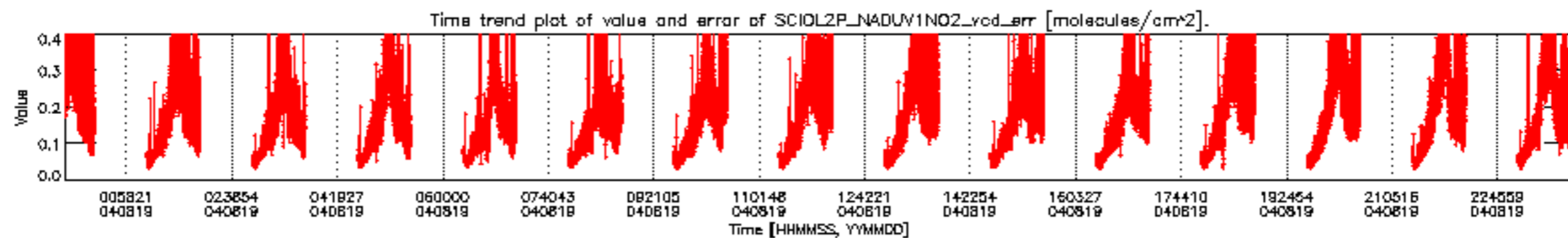
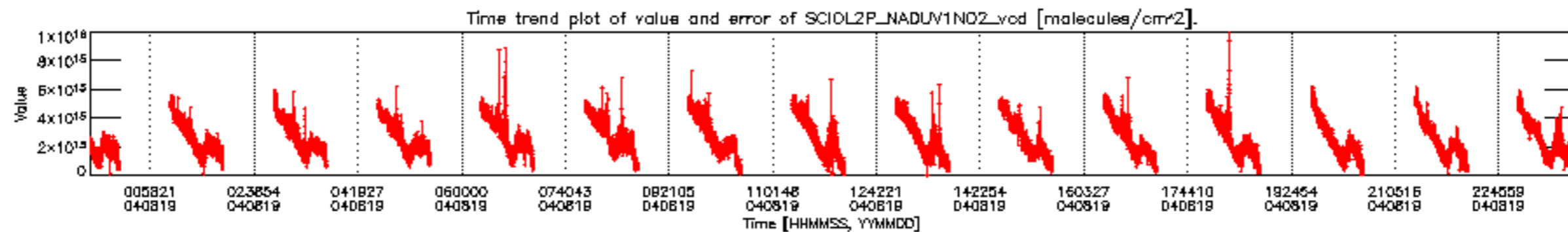


SCIOL2P_NADUV003_amf_gr for 19AUG2004 00:00:00 to 20AUG2004 00:00:00

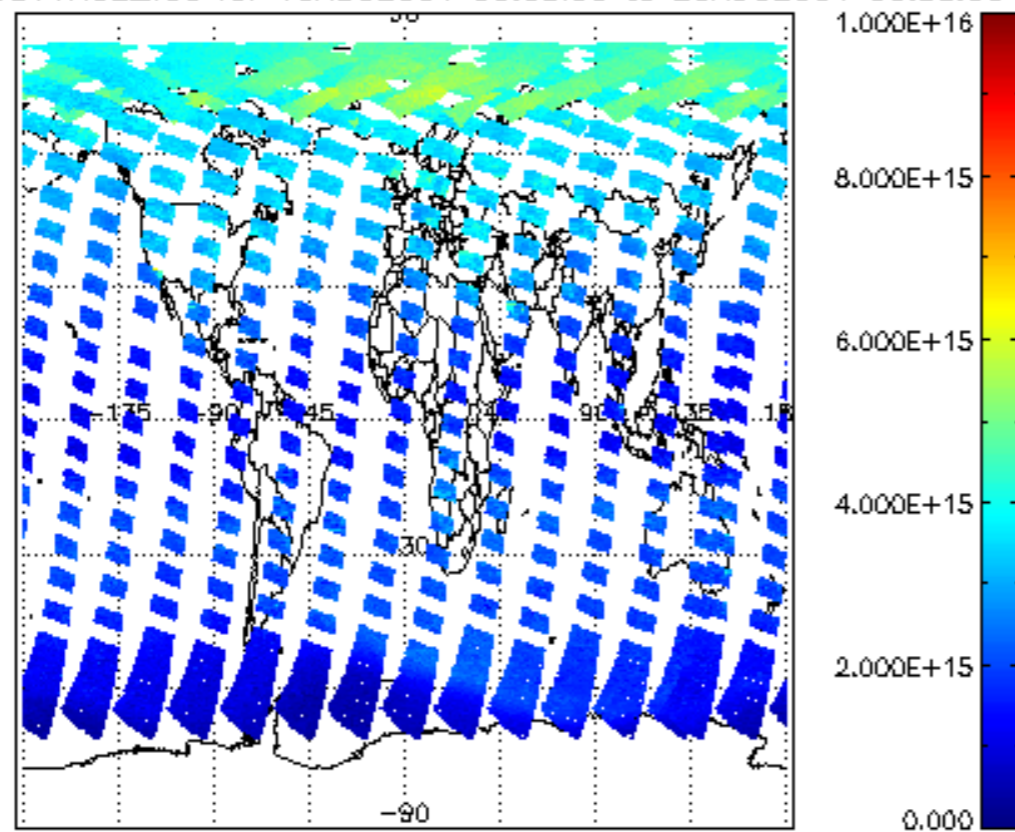


SCIOL2P_NADUV003_amf_cl for 19AUG2004 00:00:00 to 20AUG2004 00:00:00

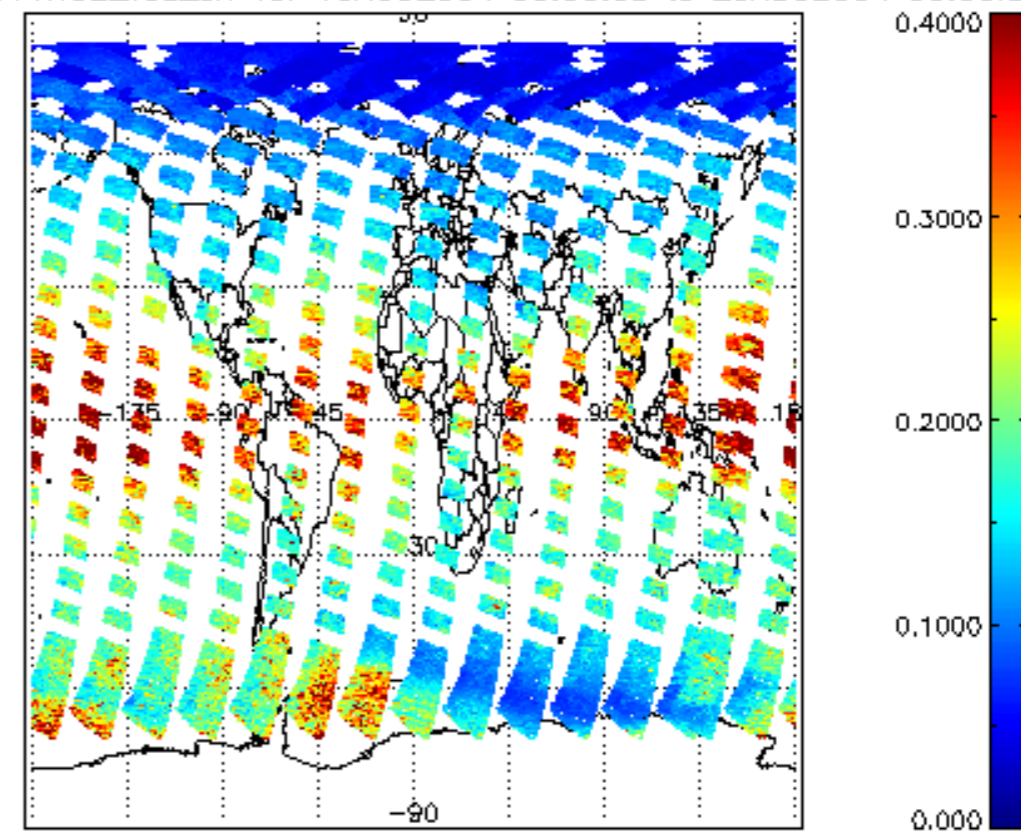




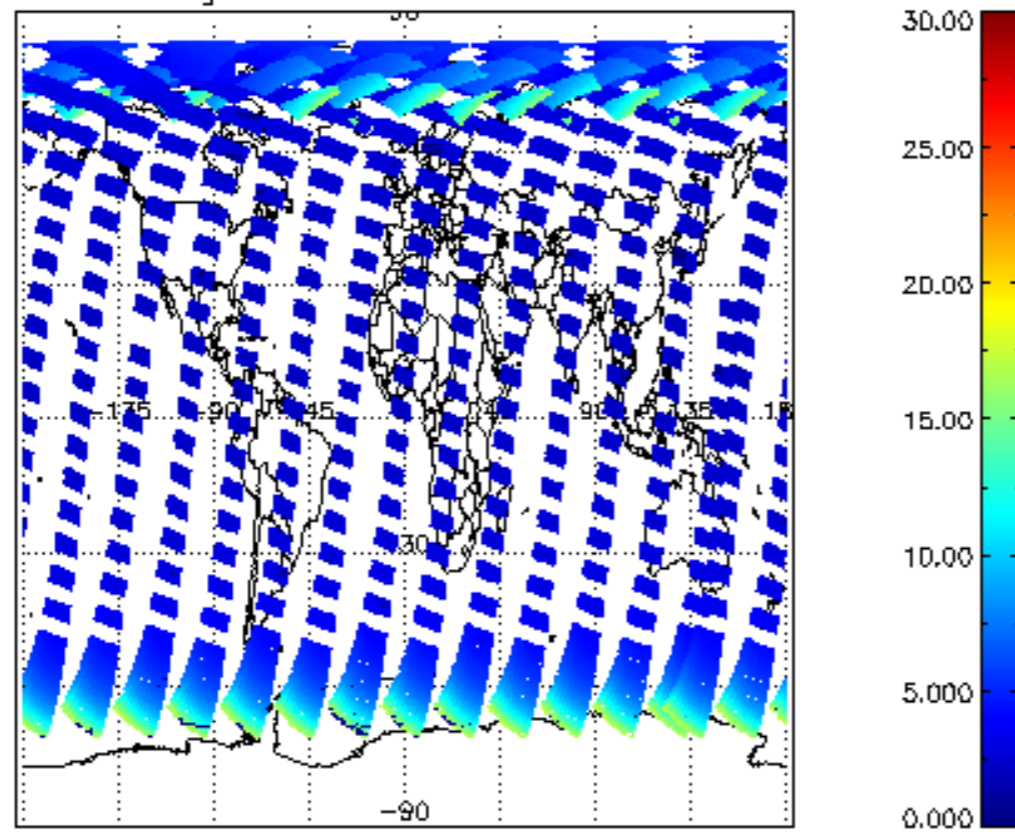
SCIOL2P_NADUV1NO2_vcd for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



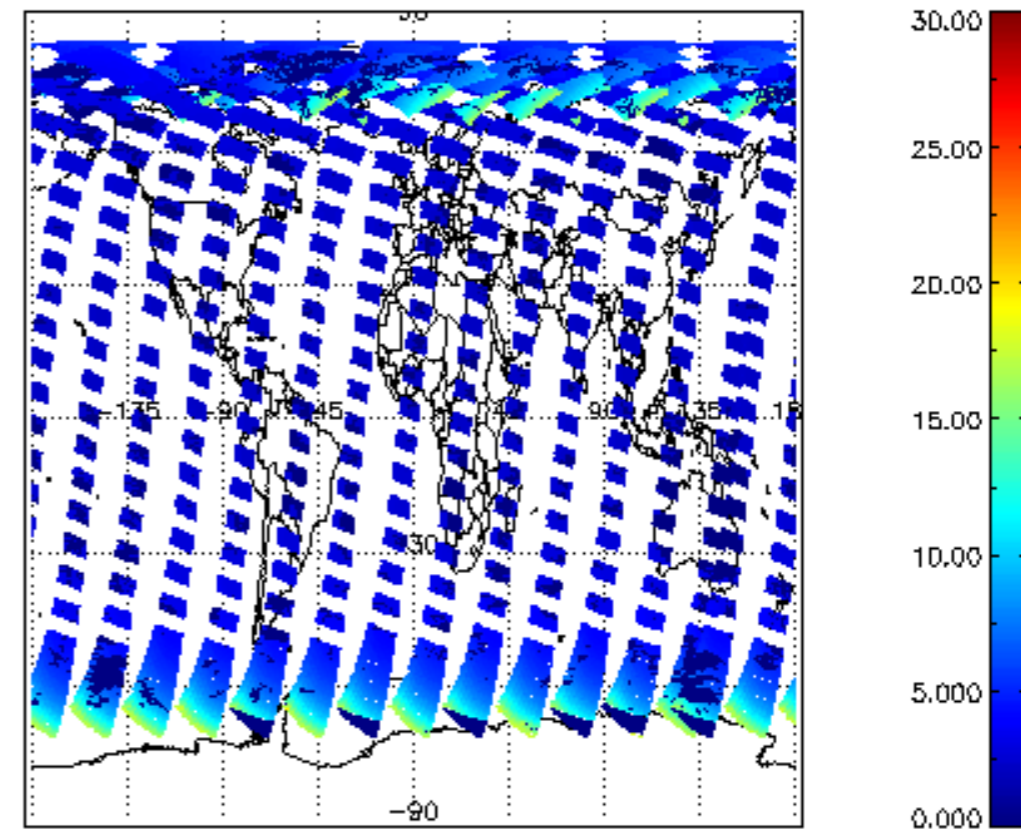
SCIOL2P_NADUV1NO2_vcd_err for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



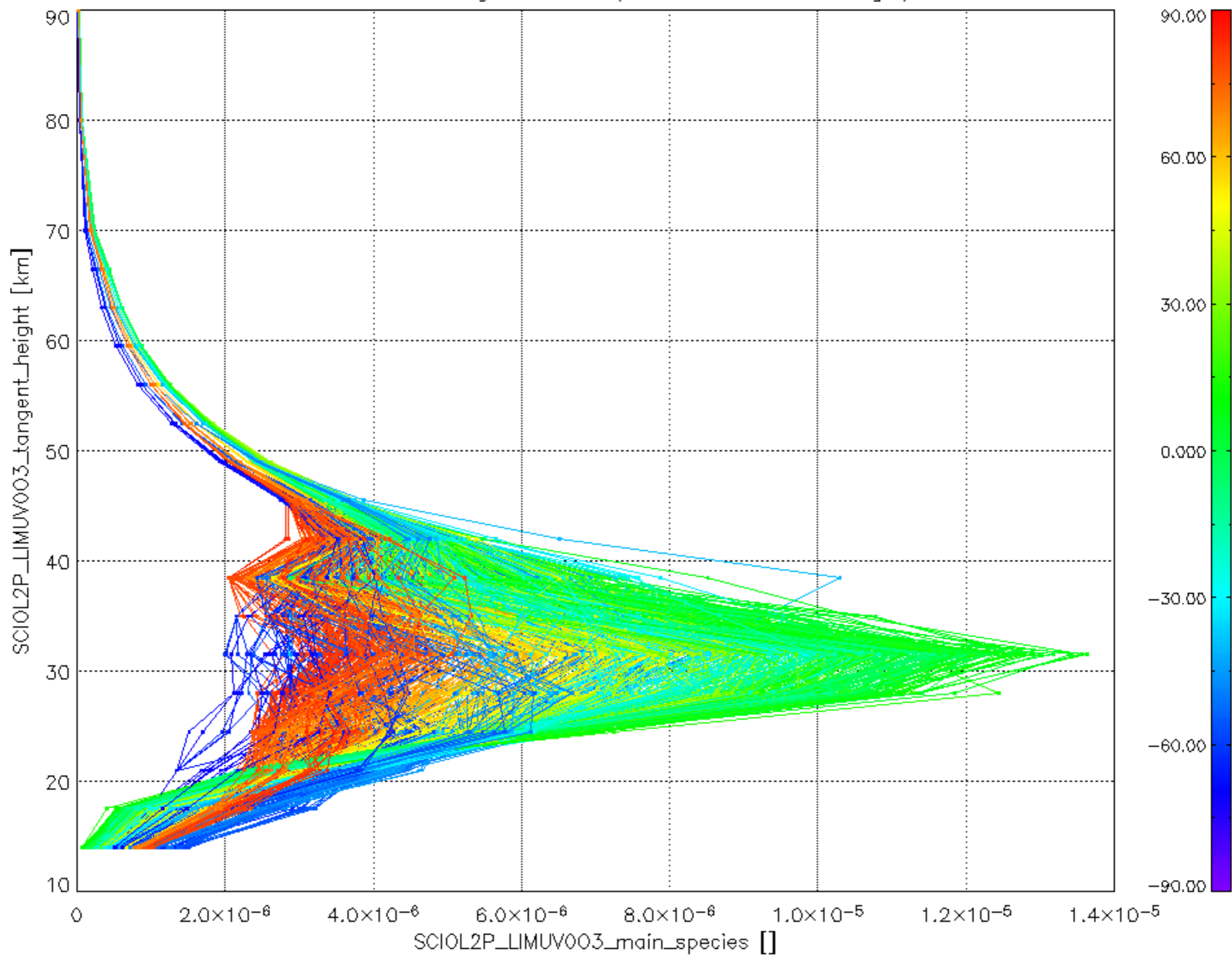
SCIOL2P_NADUV1NO2_amf_gr for 19AUG2004 00:00:00 to 20AUG2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 19AUG2004 00:00:00 to 20AUG2004 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).

