

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	22AUG2008 07:53:24
Data source version	SCIA-OL/3.01-R
Processing scope for products	16JUN2004 00:00:00 to 17JUN2004 00:00:00
Start time of first product within scope	15JUN2004 23:40:54
Stop time of last product within scope	17JUN2004 00:04:29
Total number of level 2 products	13
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__2PRDPA20040615_234054_000033122027_00417_11994_8438.N1	15JUN2004 23:40:54	16JUN2004 00:36:07	0	GOOD
1	SCI_OL__2PRDPA20040616_012130_000033252027_00418_11995_8471.N1	16JUN2004 01:21:30	16JUN2004 02:16:56	0	GOOD
2	SCI_OL__2PRDPA20040616_030206_000033122027_00419_11996_8798.N1	16JUN2004 03:02:06	16JUN2004 03:57:19	0	GOOD
3	SCI_OL__2PRDPA20040616_044242_000033252027_00420_11997_8724.N1	16JUN2004 04:42:42	16JUN2004 05:38:08	0	GOOD
4	SCI_OL__2PRDPA20040616_062318_000033122027_00421_11998_8457.N1	16JUN2004 06:23:18	16JUN2004 07:18:31	0	GOOD
5	SCI_OL__2PRDPA20040616_080354_000033252027_00422_11999_8455.N1	16JUN2004 08:03:54	16JUN2004 08:59:19	0	GOOD
6	SCI_OL__2PRDPA20040616_094430_000033122027_00423_12000_8620.N1	16JUN2004 09:44:30	16JUN2004 10:39:42	0	GOOD
7	SCI_OL__2PRDPA20040616_112505_000033252027_00424_12001_8549.N1	16JUN2004 11:25:05	16JUN2004 12:20:31	0	GOOD
8	SCI_OL__2PRDPA20040616_130541_000033122027_00425_12002_8669.N1	16JUN2004 13:05:41	16JUN2004 14:00:54	0	GOOD
9	SCI_OL__2PRDPA20040616_144617_000033252027_00426_12003_8468.N1	16JUN2004 14:46:17	16JUN2004 15:41:43	0	GOOD
10	SCI_OL__2PRDPA20040616_162653_000033122027_00427_12004_8786.N1	16JUN2004 16:26:53	16JUN2004 17:22:06	0	GOOD
11	SCI_OL__2PRDPA20040616_180716_000033162027_00428_12005_8784.N1	16JUN2004 18:07:16	16JUN2004 19:02:32	0	GOOD
12	SCI_OL__2PRDPA20040616_230916_000033122027_00431_12008_8637.N1	16JUN2004 23:09:16	17JUN2004 00:04:29	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: 126477

Total number of cloud data DSRs with good quality flag (=0): 126477 (100.0 %)

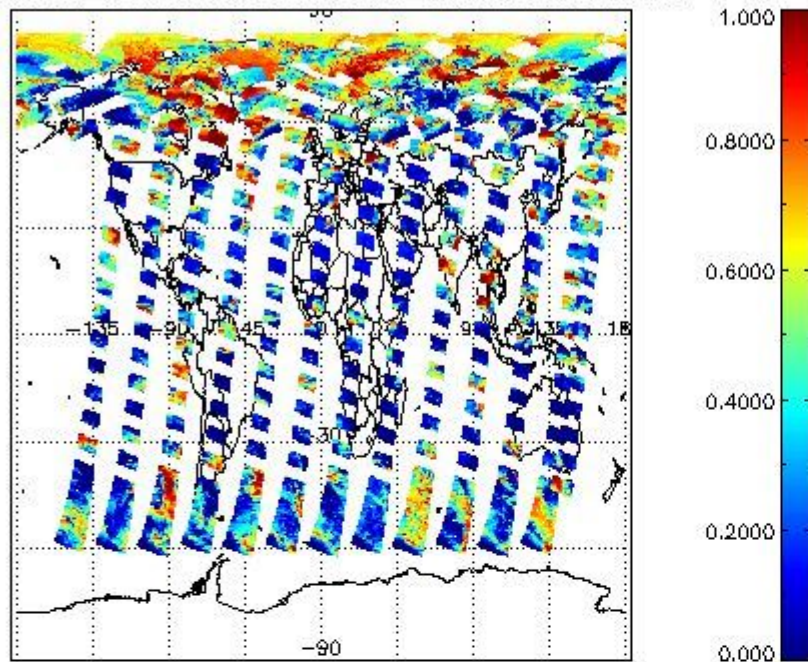
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	126477	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	126477	0.17239	0.12500	0.12500	0.25000	0.060646	s
CL_FRAC	126477	0.36826	0.32475	0.0000	1.0000	0.30656	-
CL_FRAC_ERR	126477	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	126477	5.5164	4.0000	4.0000	8.0000	1.9407	
PMD_READ_CL[0]	126477	0.31527	0.0000	0.0000	8.0000	1.2923	-
PMD_READ_CL[1]	126477	1.1748	0.0000	0.0000	8.0000	2.1852	-
CL_TOP_HEIGHT	111705	3.4941	1.4090	0.0000	17.000	3.8481	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	111705	57.300	60.149	0.0000	101.00	43.444	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	126477	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	126477	11001010	11000100	11000000	11100000	3381.2	flags
AERO_ABSO_IND	126477	0.74824	0.53339	-3.8263	9.8722	1.0896	
AERO_IND_DIAG	126477	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	126477	01011011	00000000	00000000	11000000	24544.	flags

Time and geolocation plots:

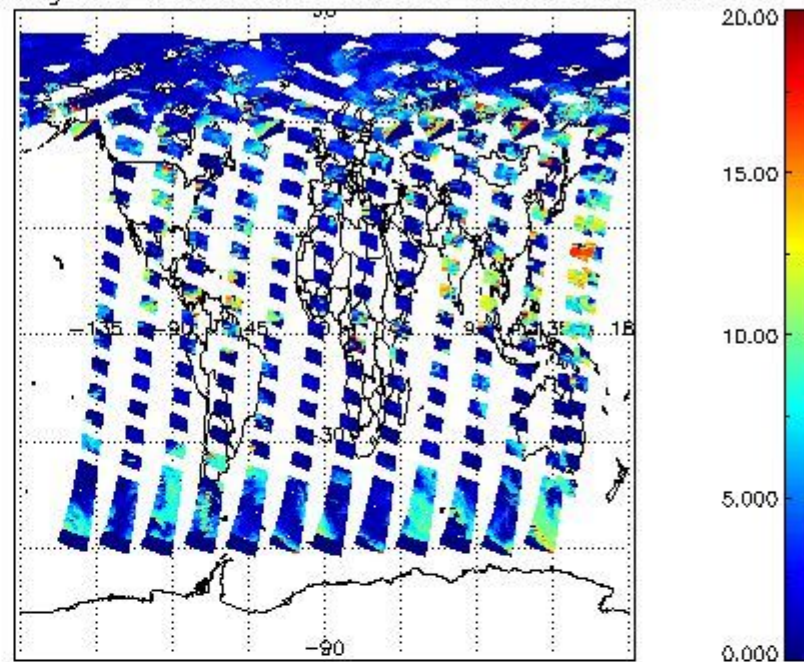
Plots are available for the following parameters:

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

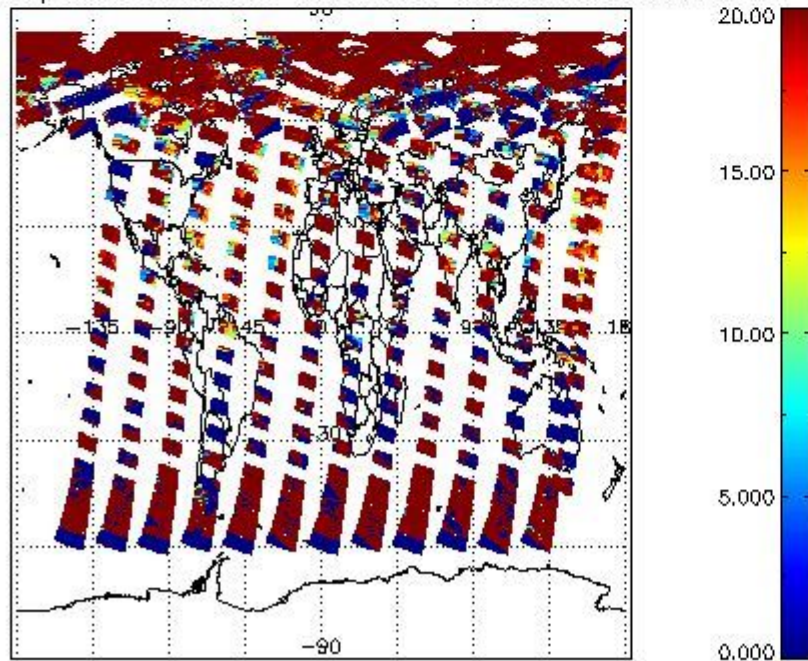
cL_frac for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



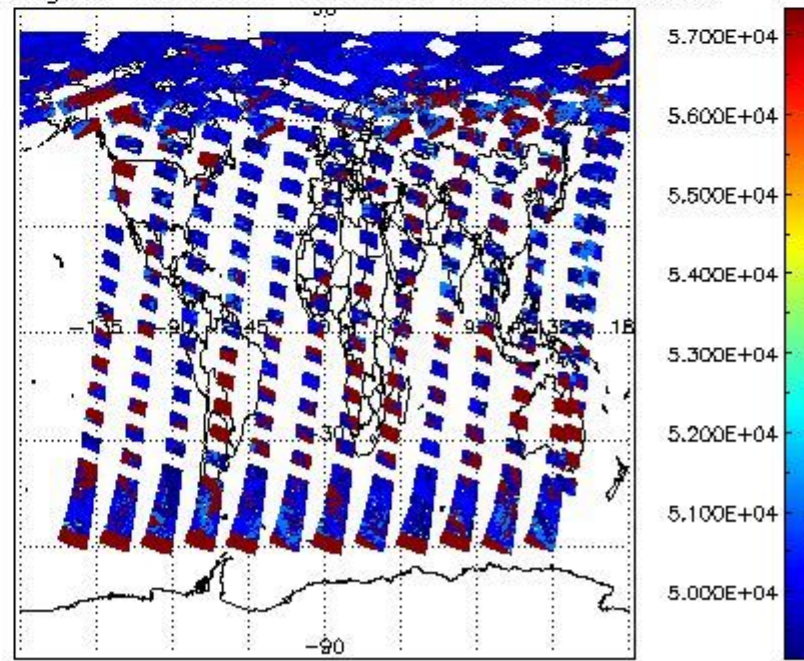
cL_top_height for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



cL_opt_depth for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



cloud_flags for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



2.2.2 Nadir

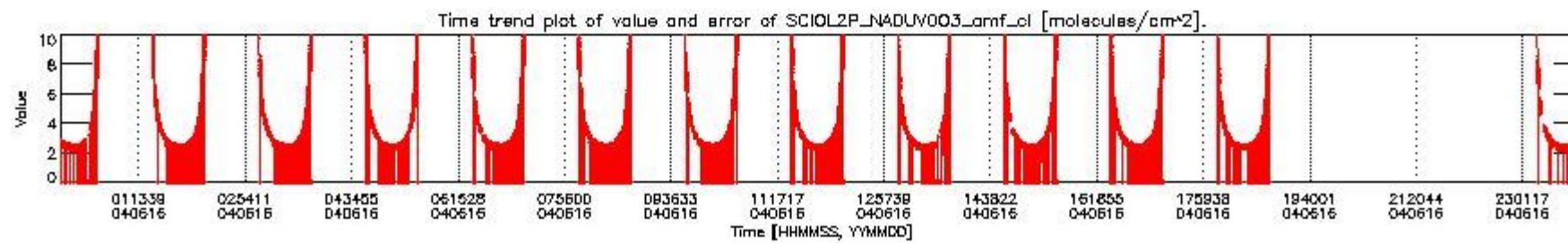
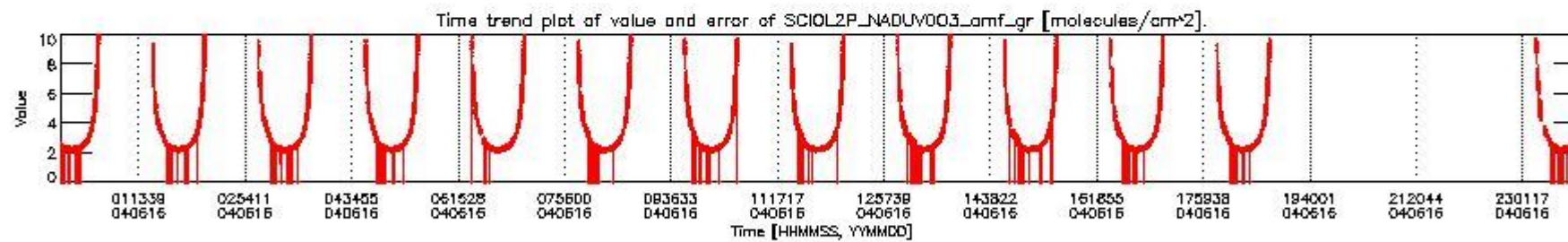
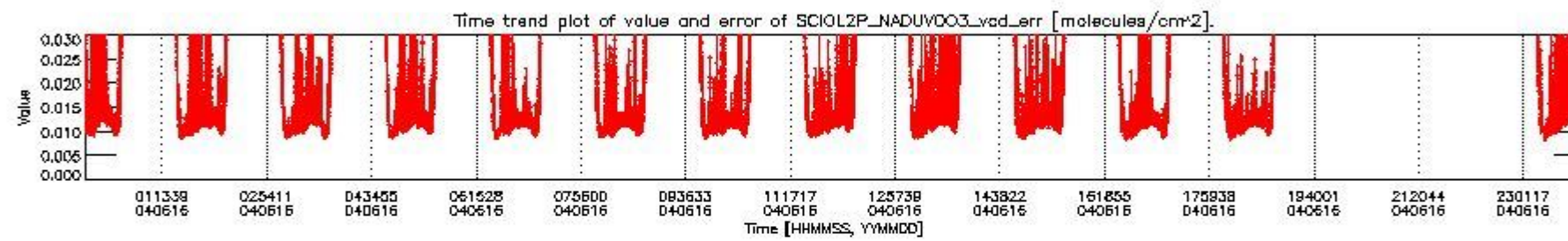
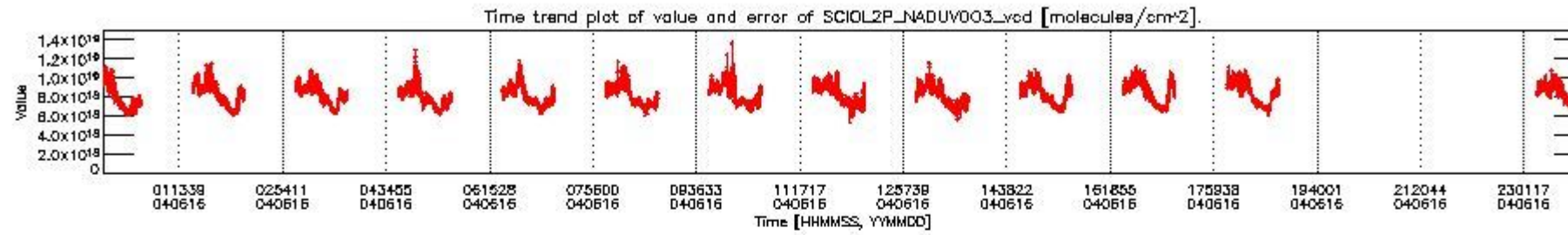
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

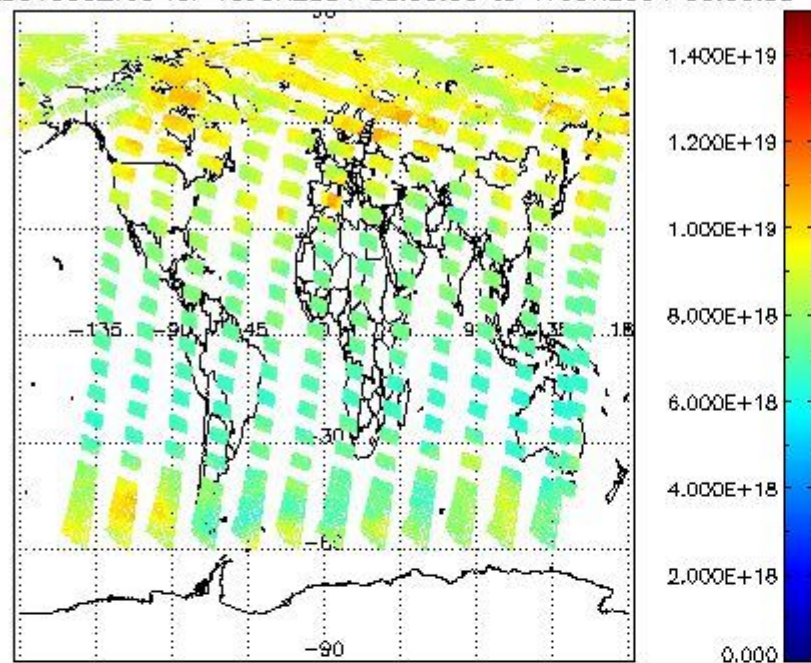
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

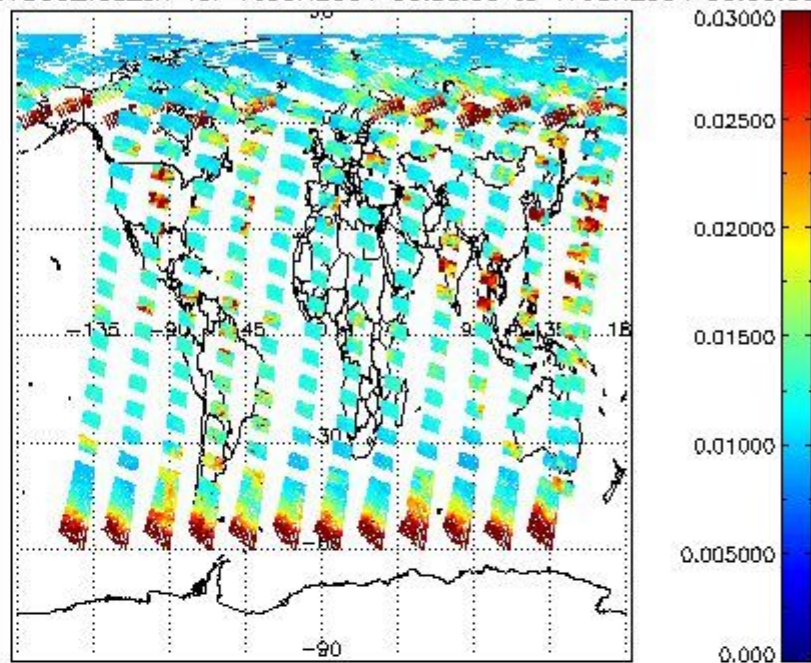
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



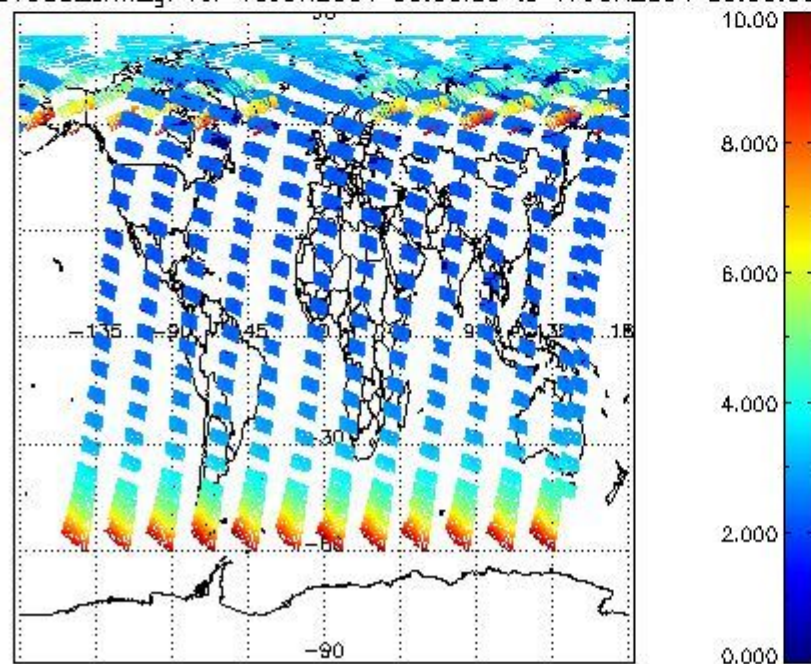
SCIOL2P_NADUV003_vcd for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



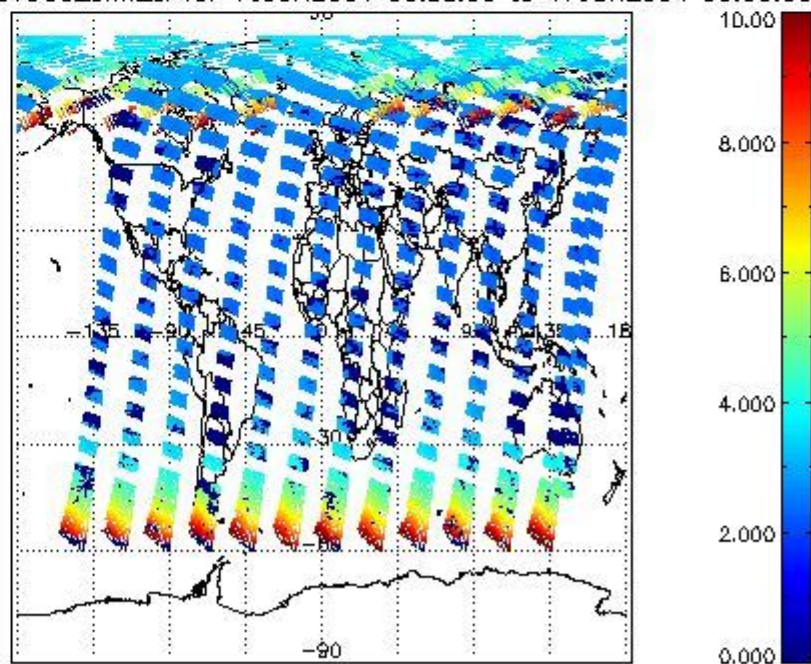
SCIOL2P_NADUV003_vcd_err for 16JUN2004 00:00:00 to 17JUN2004 00:00:00

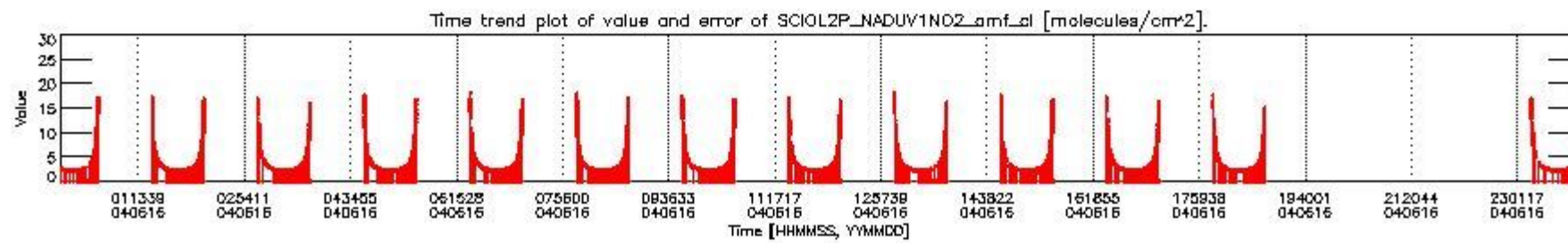
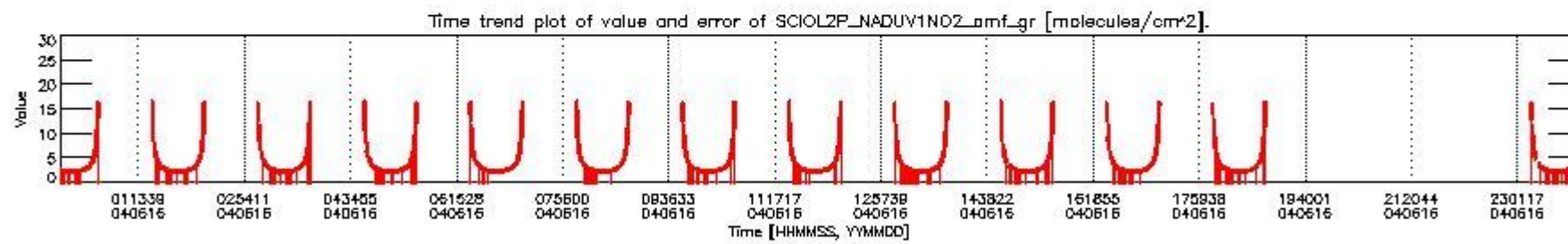
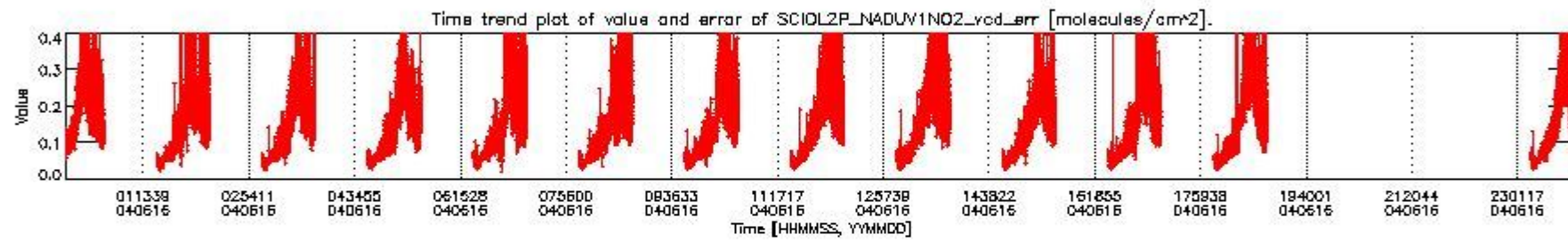
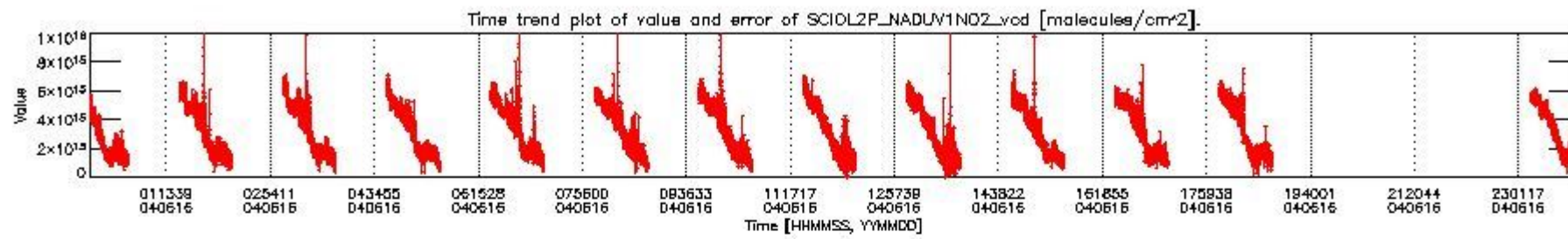


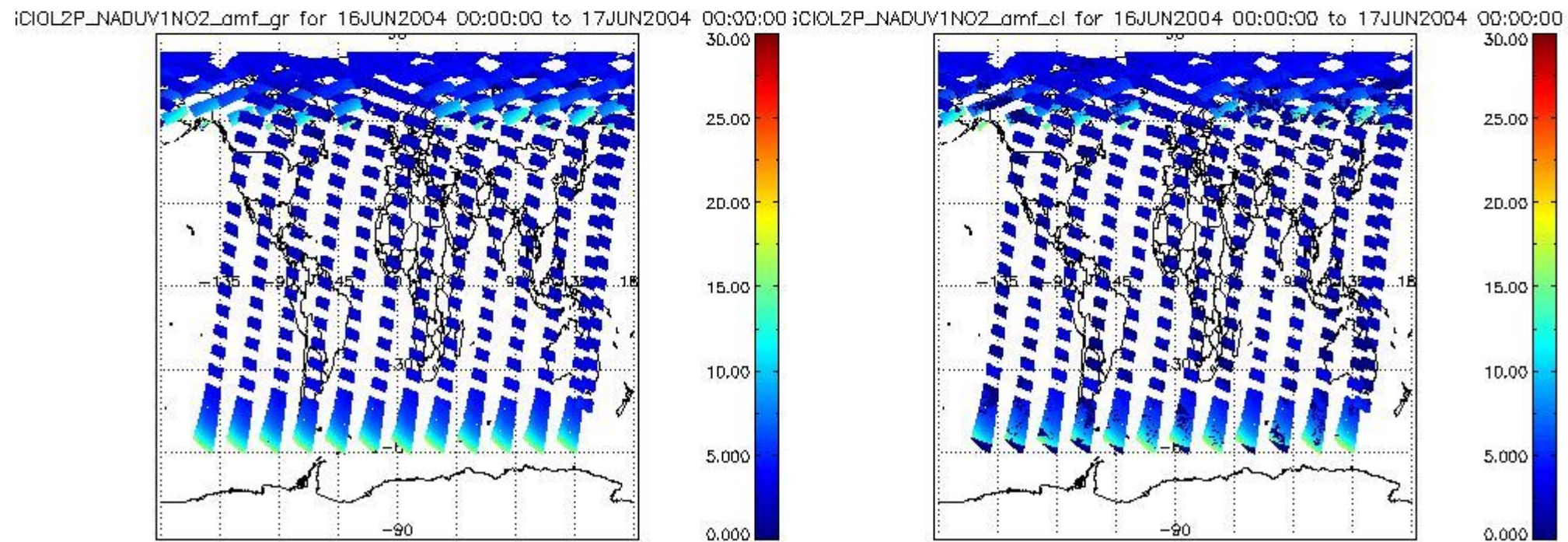
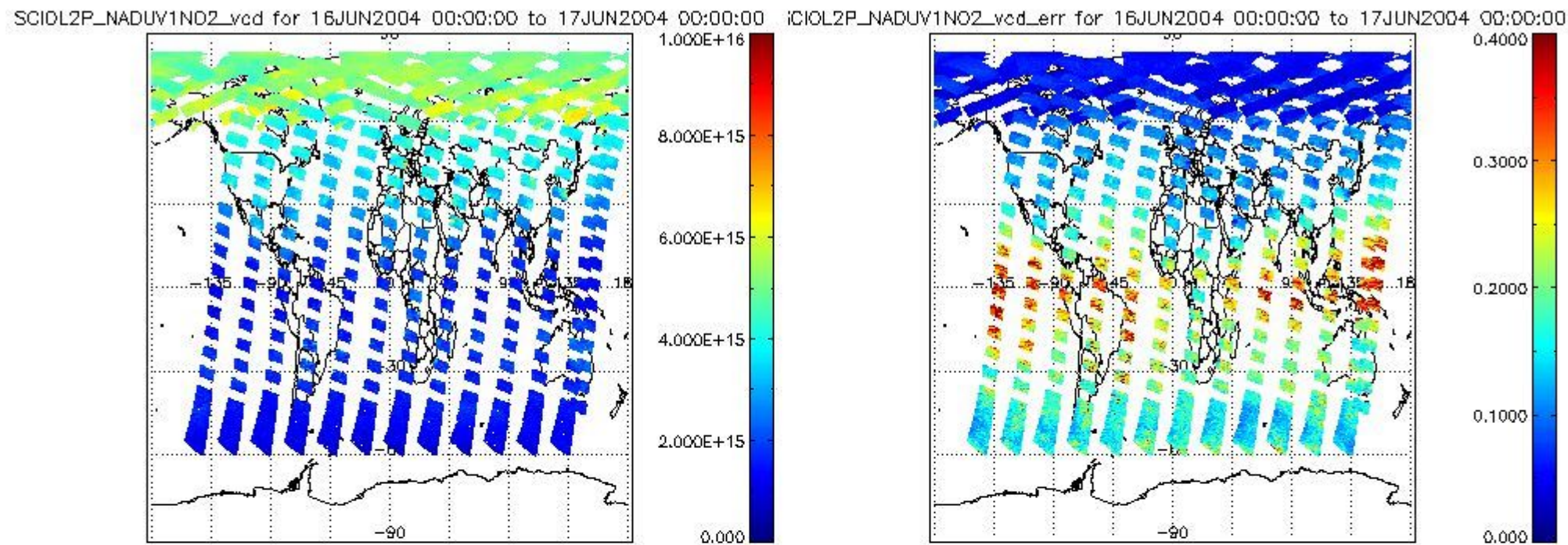
SCIOL2P_NADUV003_amf_gr for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 16JUN2004 00:00:00 to 17JUN2004 00:00:00







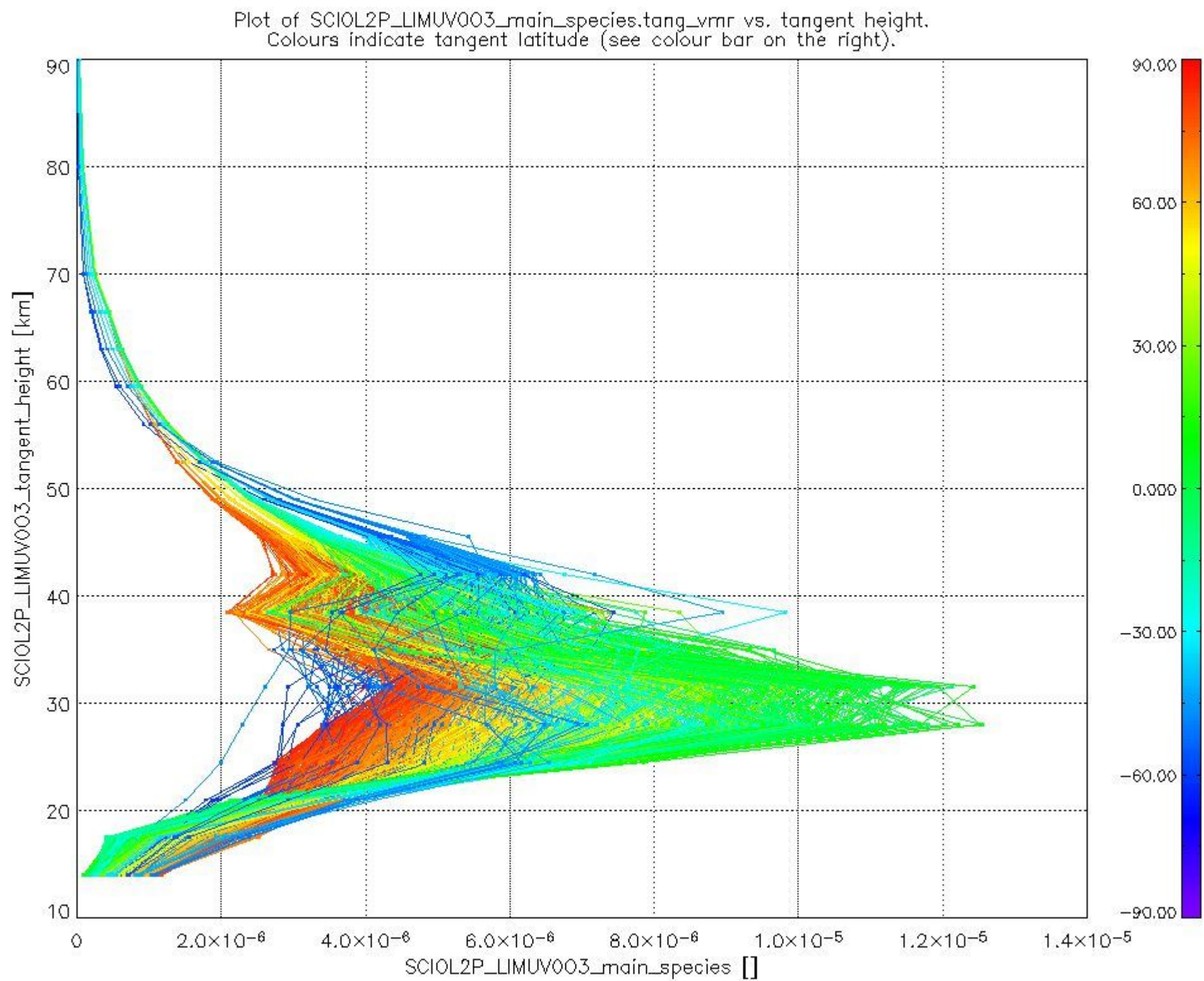
2.2.3 Limb

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

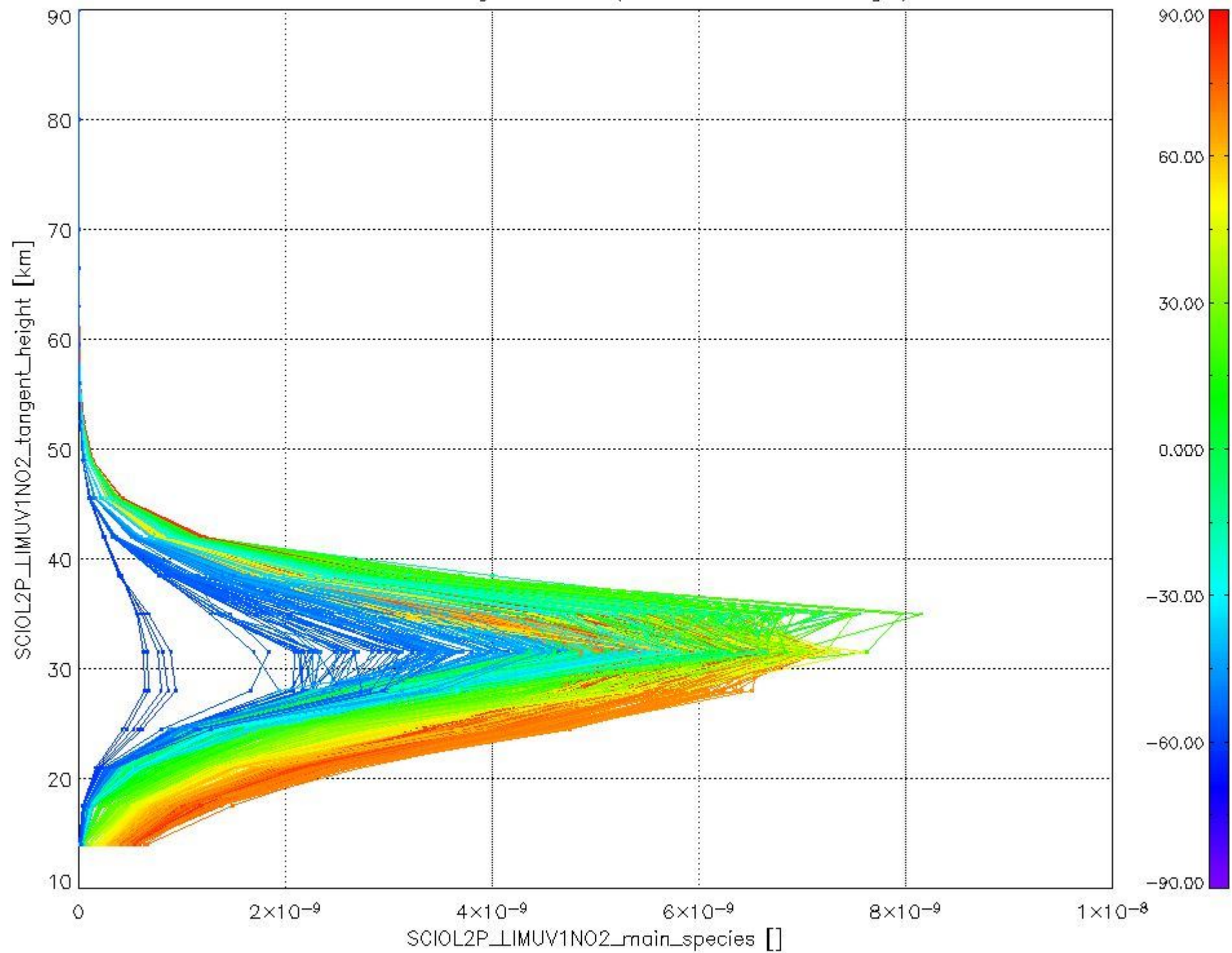
The following data items are currently included into this section:

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.



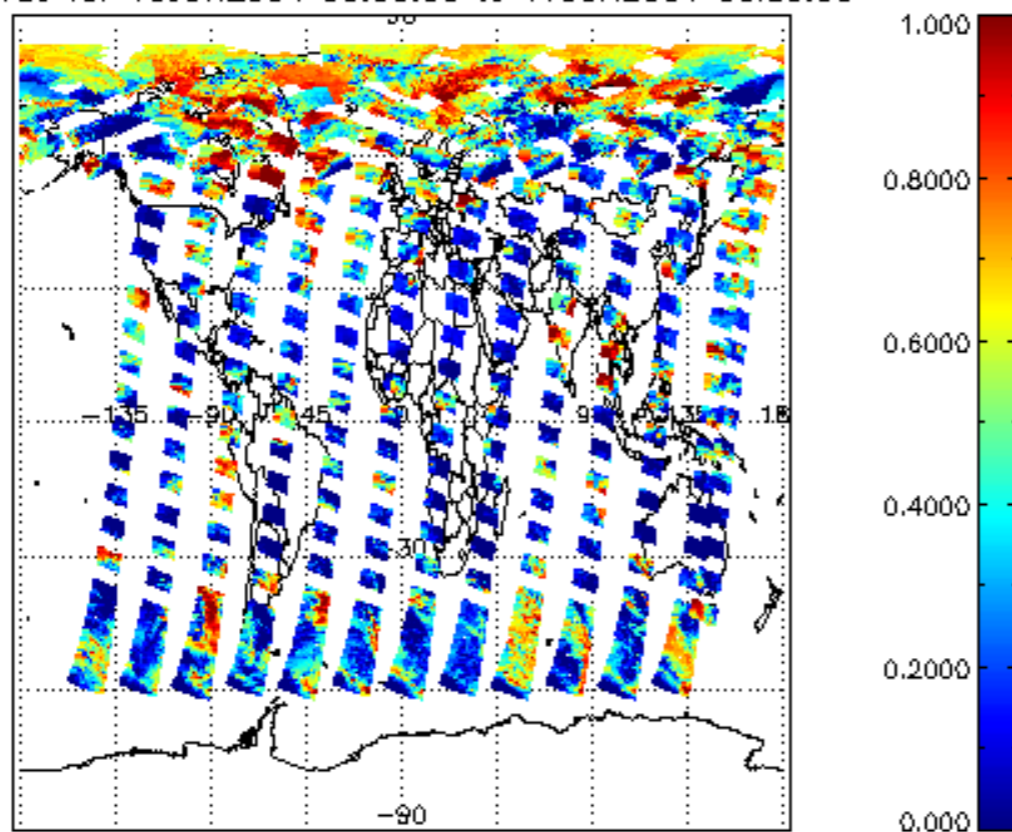
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



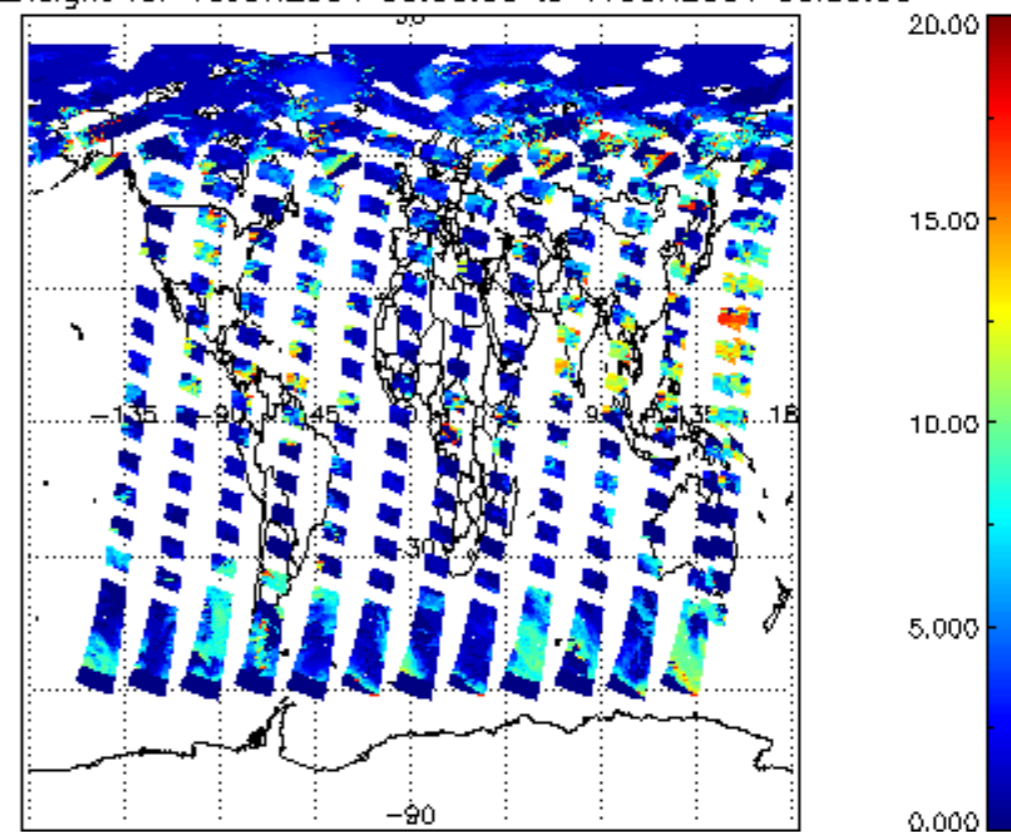
2.3 ADF monitoring

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

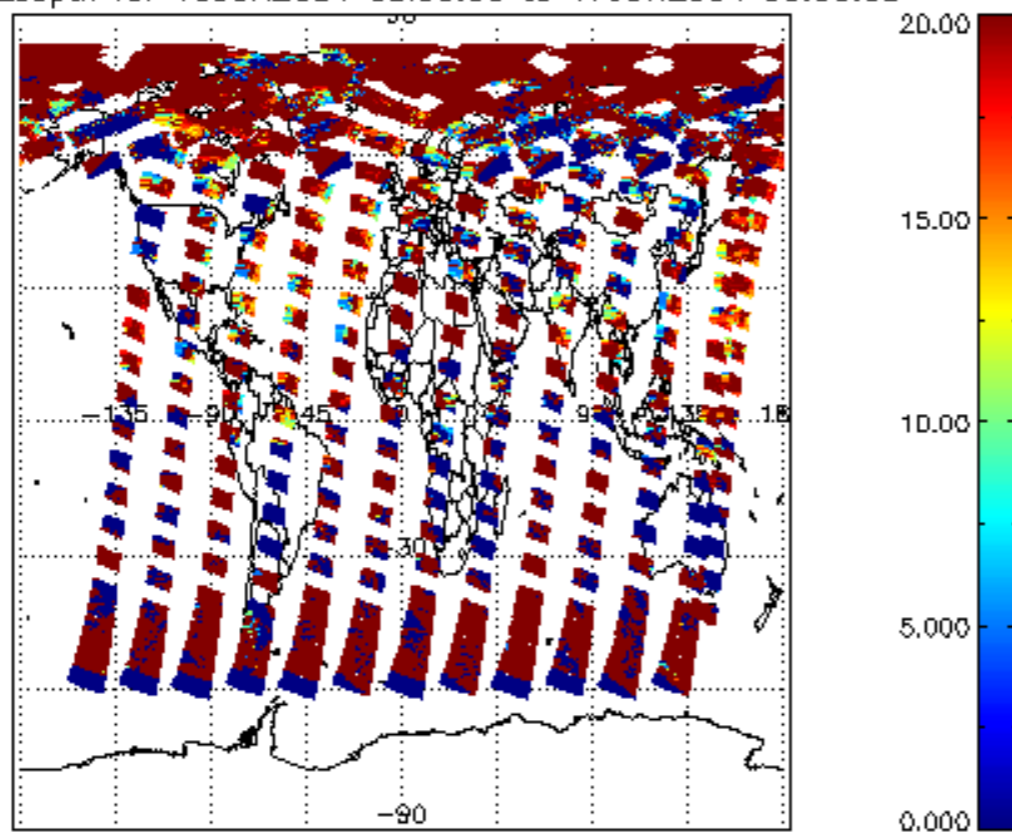
cl_frac for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



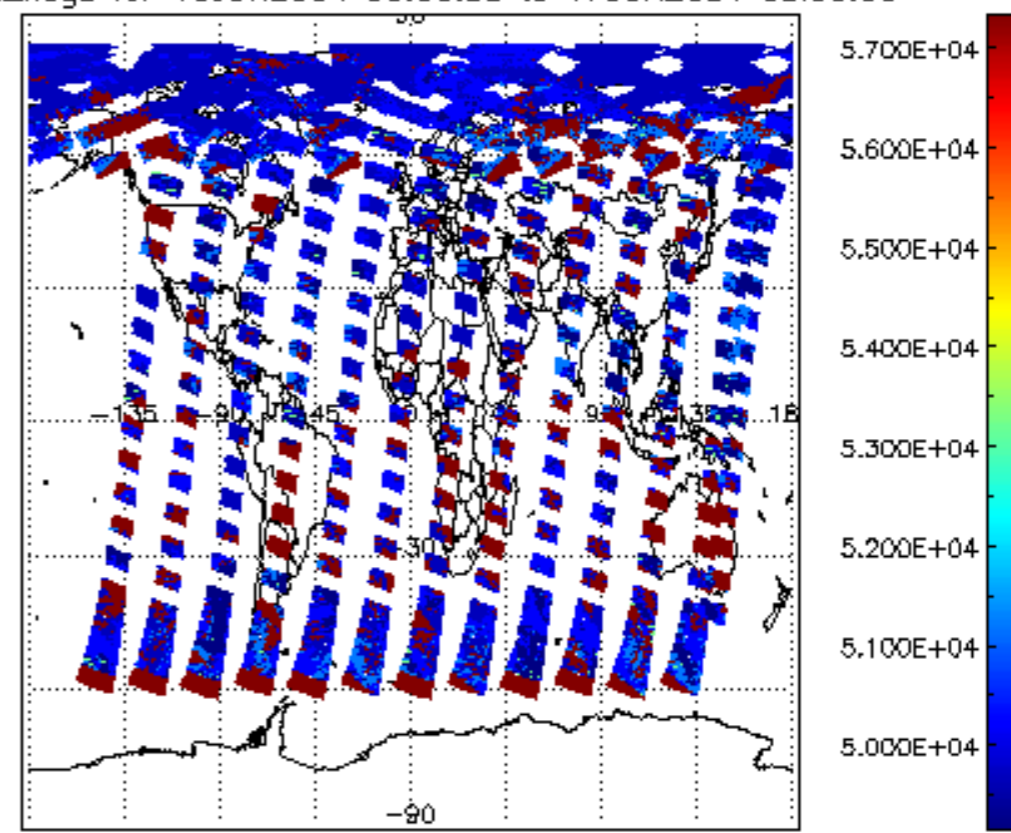
cl_top_height for 16JUN2004 00:00:00 to 17JUN2004 00:00:00

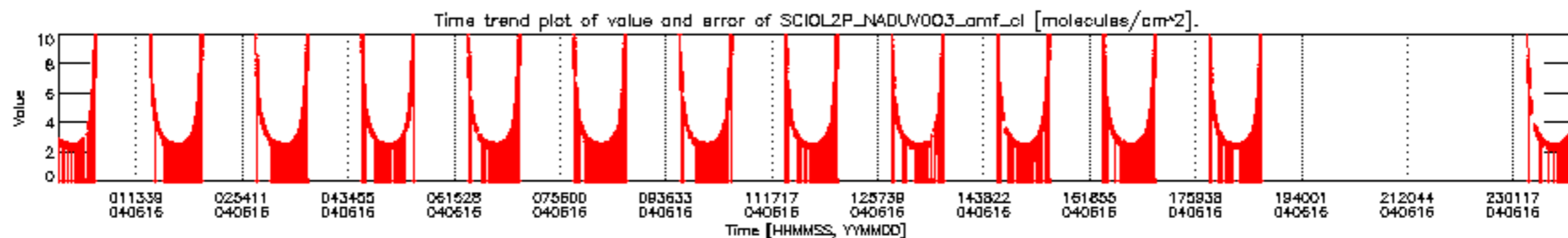
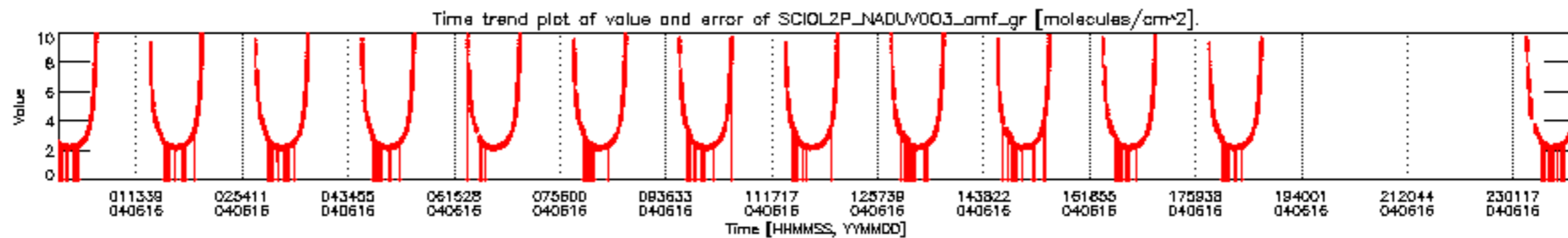
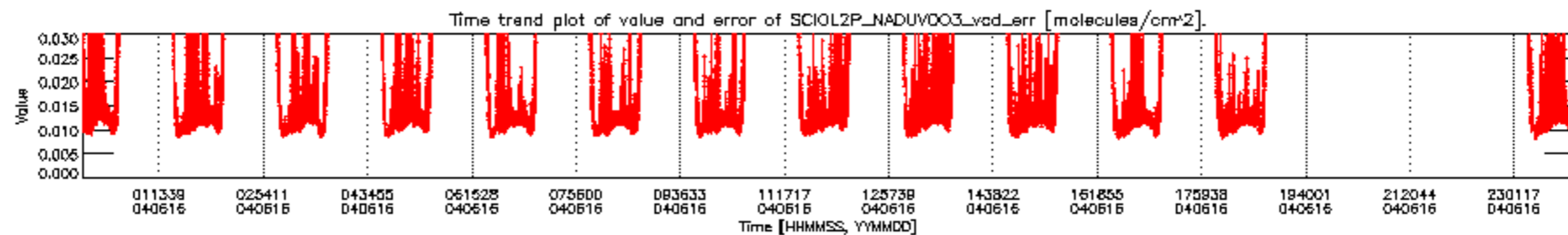
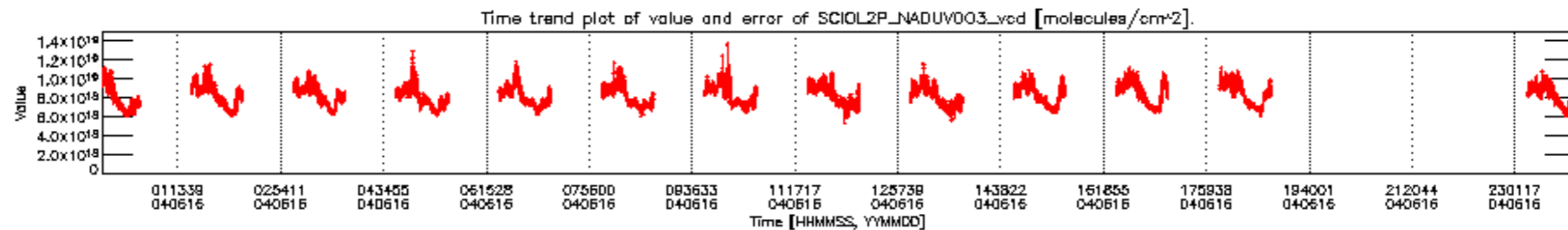


cl_opt_depth for 16JUN2004 00:00:00 to 17JUN2004 00:00:00

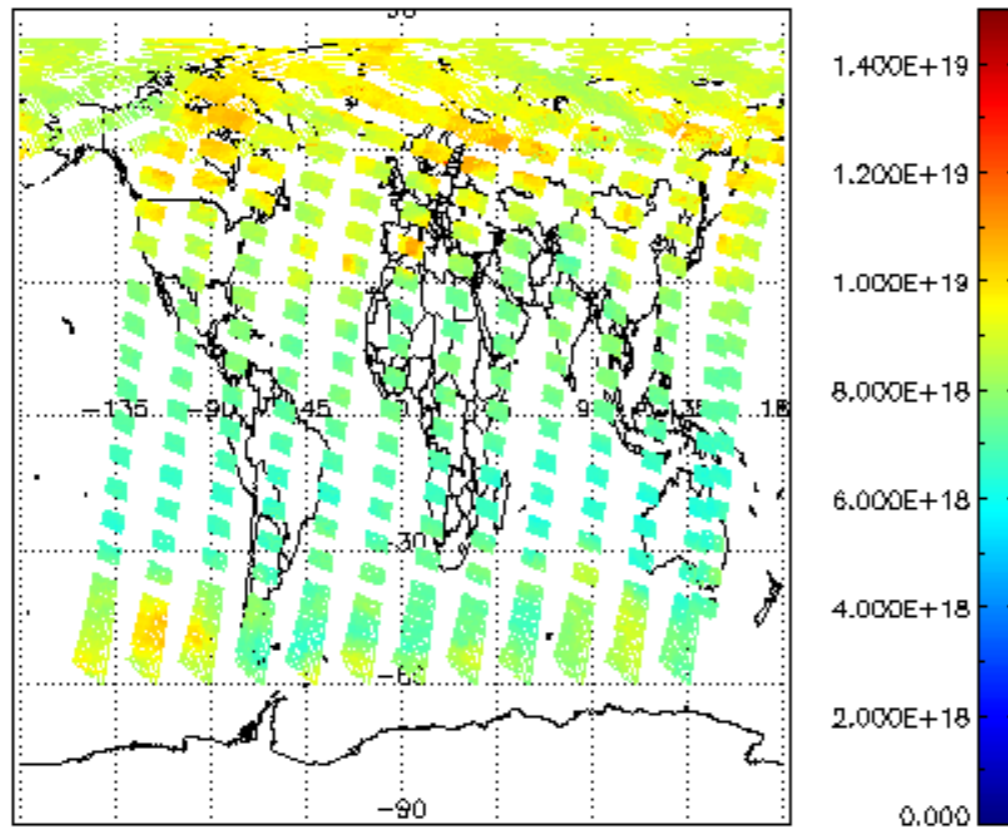


cloud_flags for 16JUN2004 00:00:00 to 17JUN2004 00:00:00

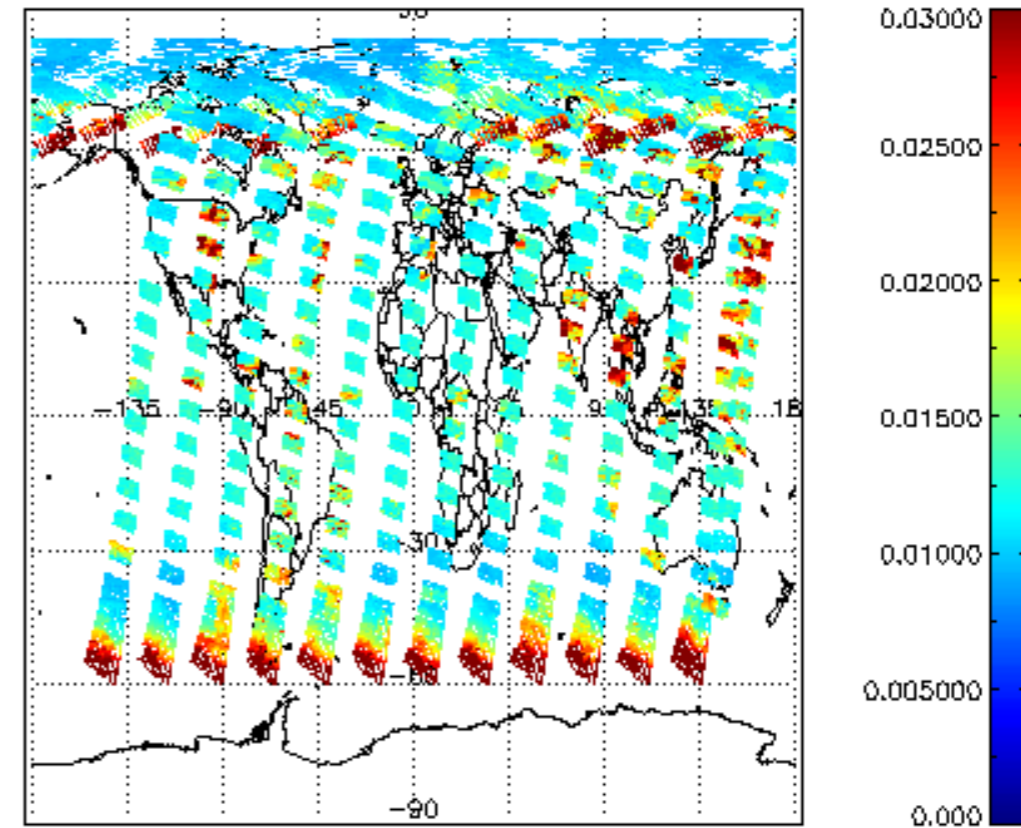




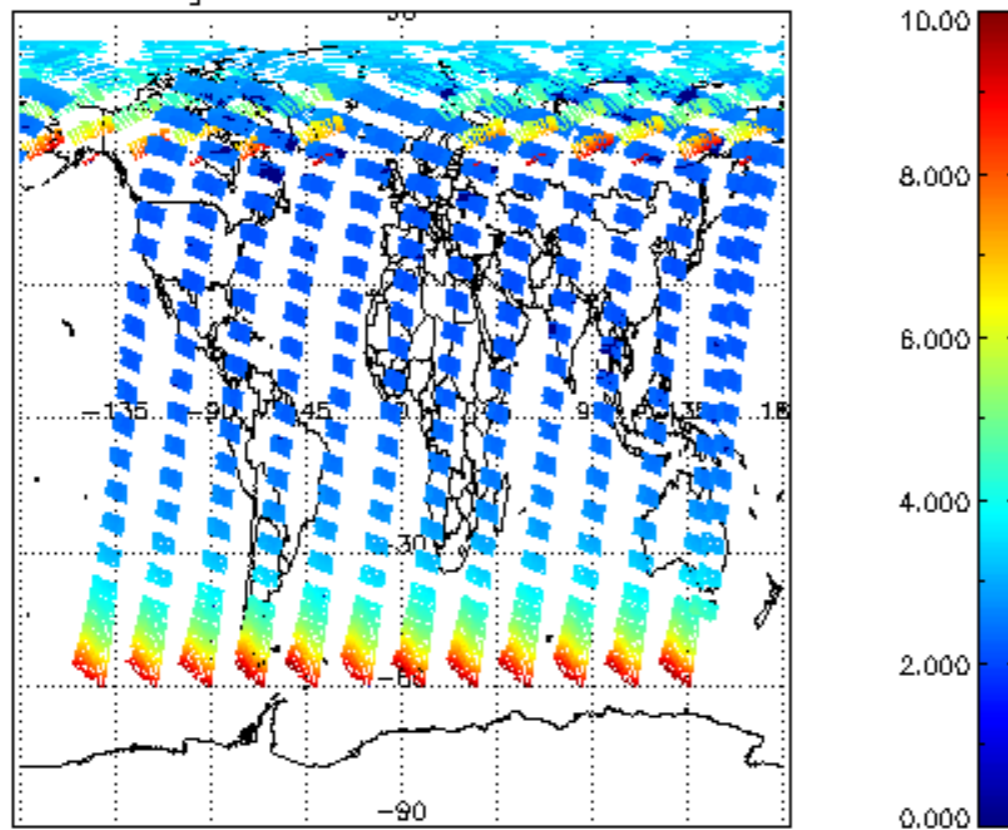
SCIOL2P_NADUV003_vcd for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



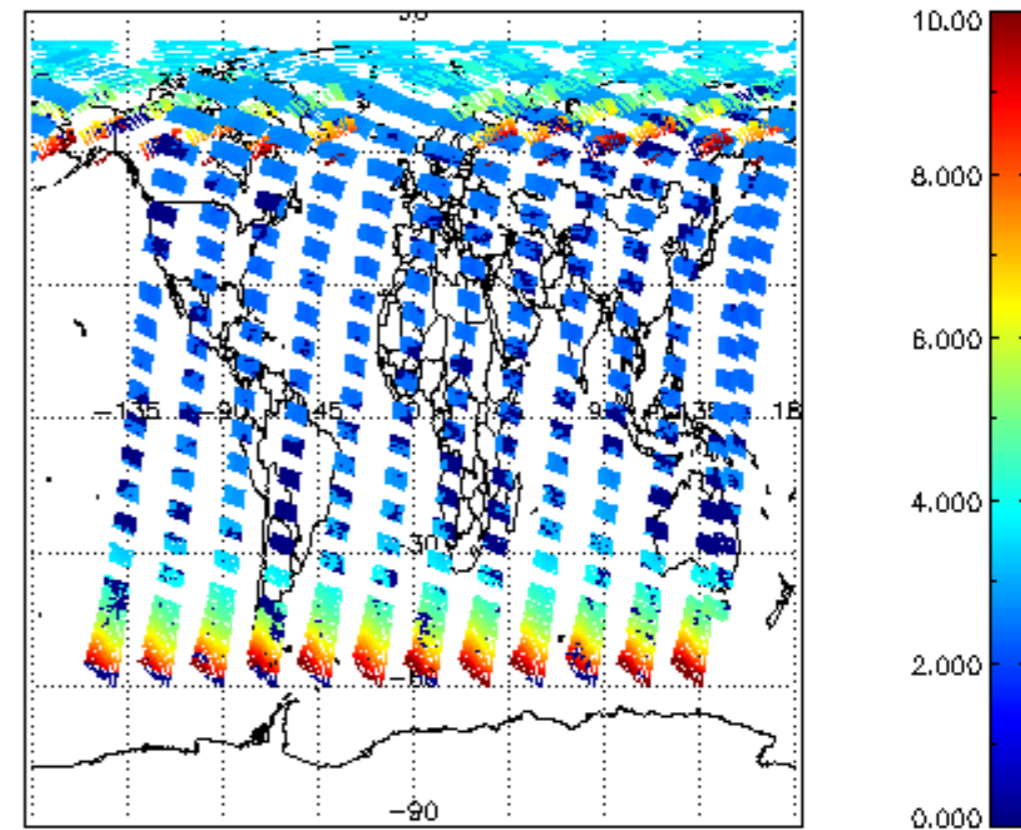
SCIOL2P_NADUV003_vcd_err for 16JUN2004 00:00:00 to 17JUN2004 00:00:00

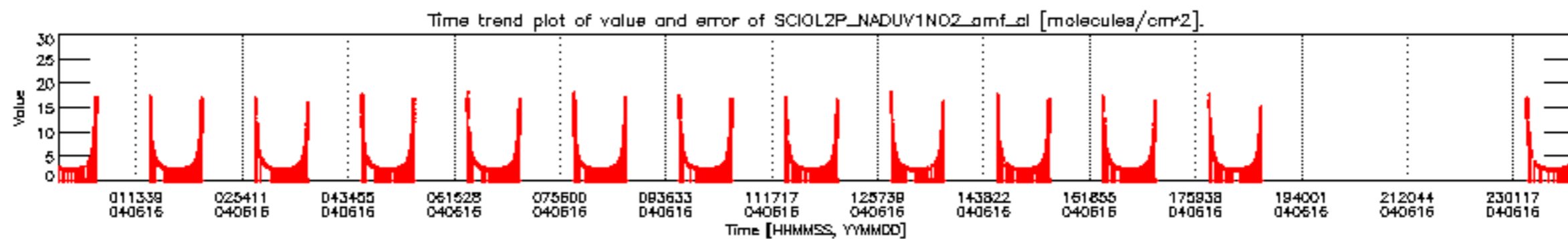
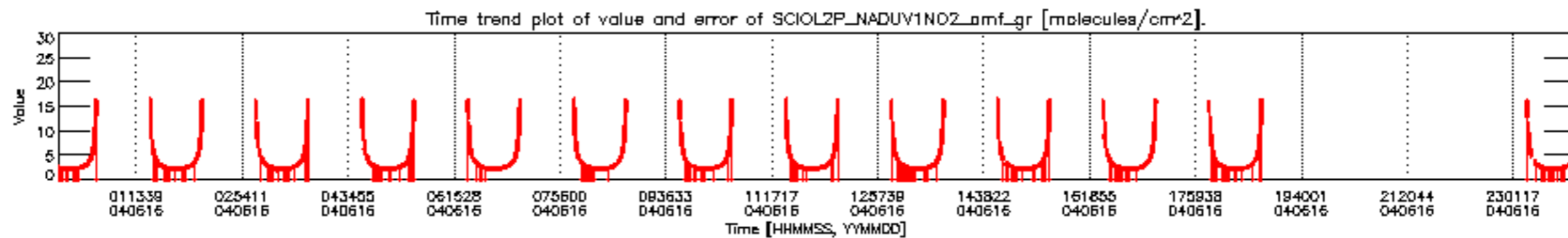
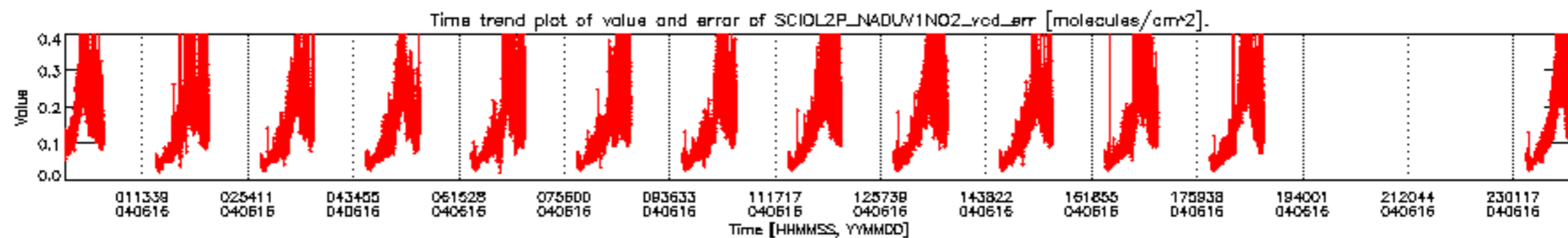
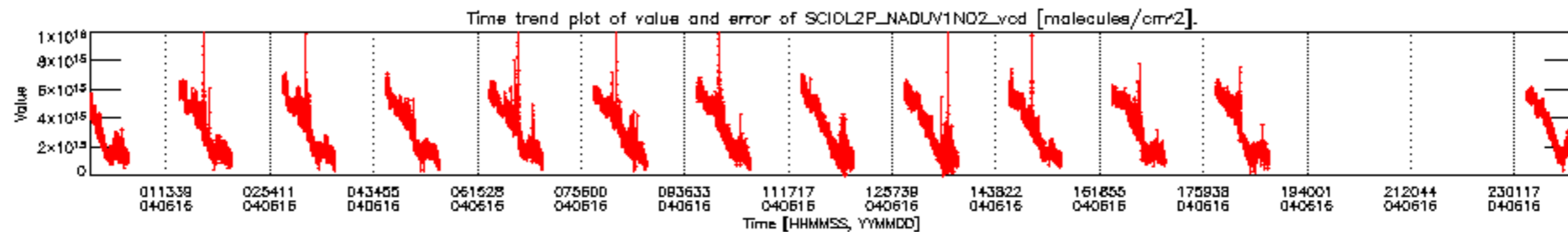


SCIOL2P_NADUV003_amf_gr for 16JUN2004 00:00:00 to 17JUN2004 00:00:00

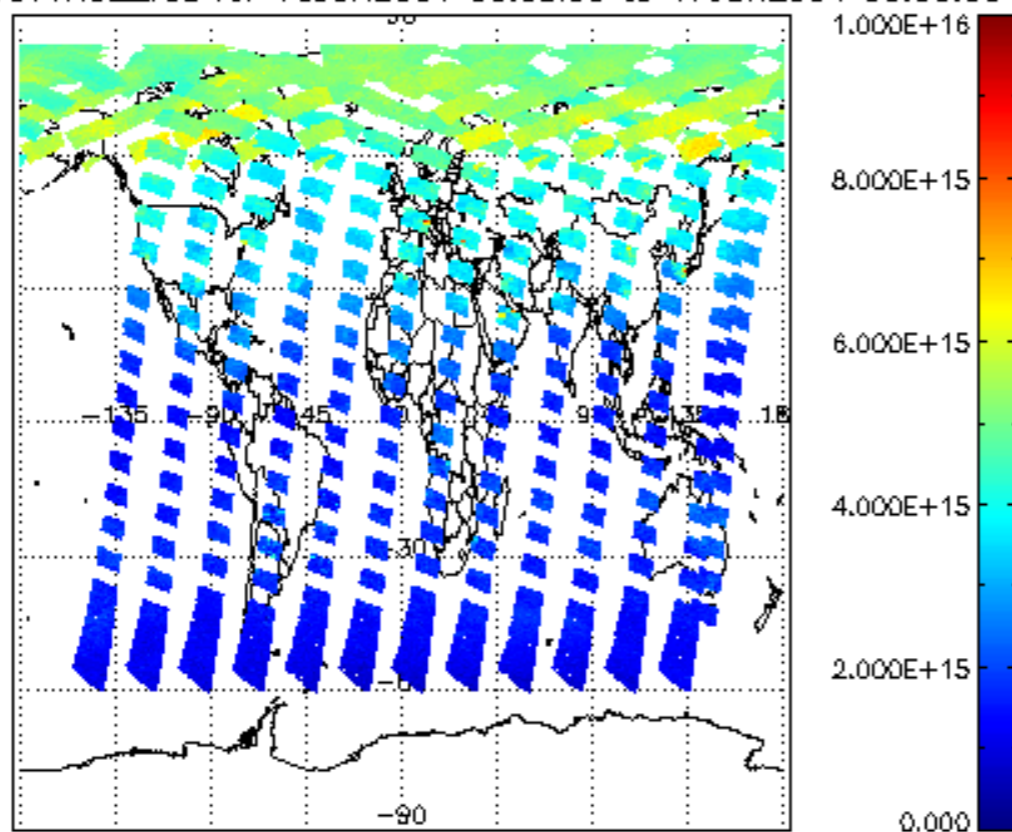


SCIOL2P_NADUV003_amf_cl for 16JUN2004 00:00:00 to 17JUN2004 00:00:00

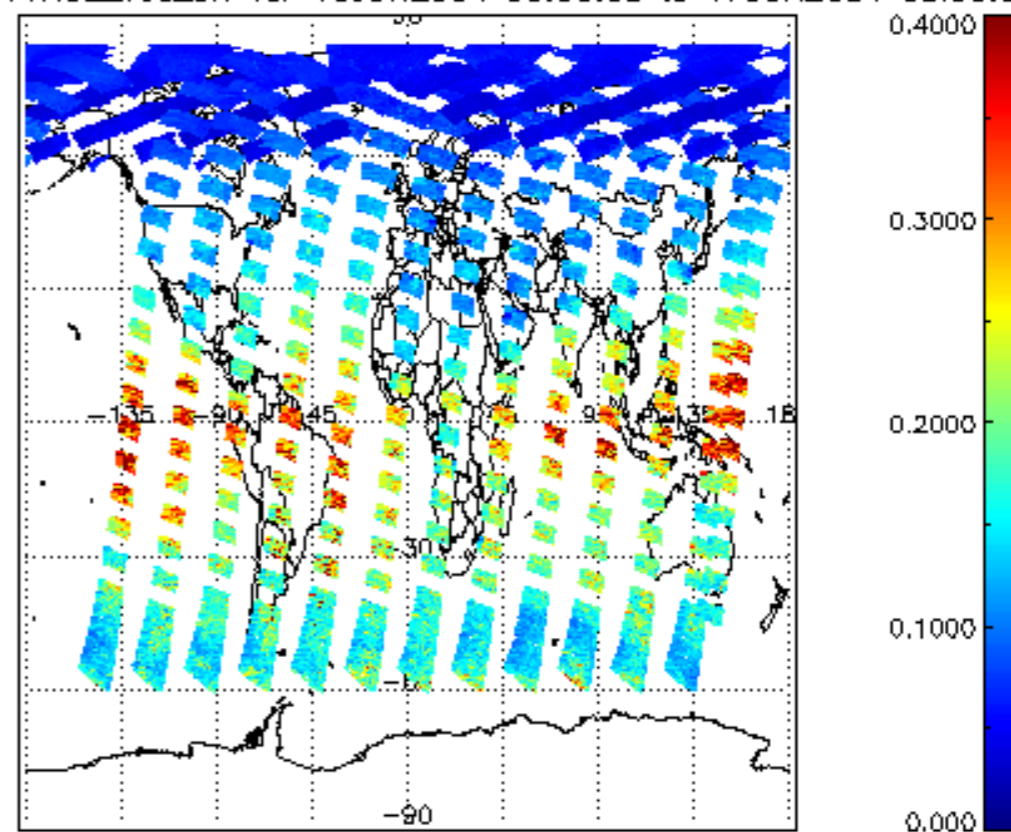




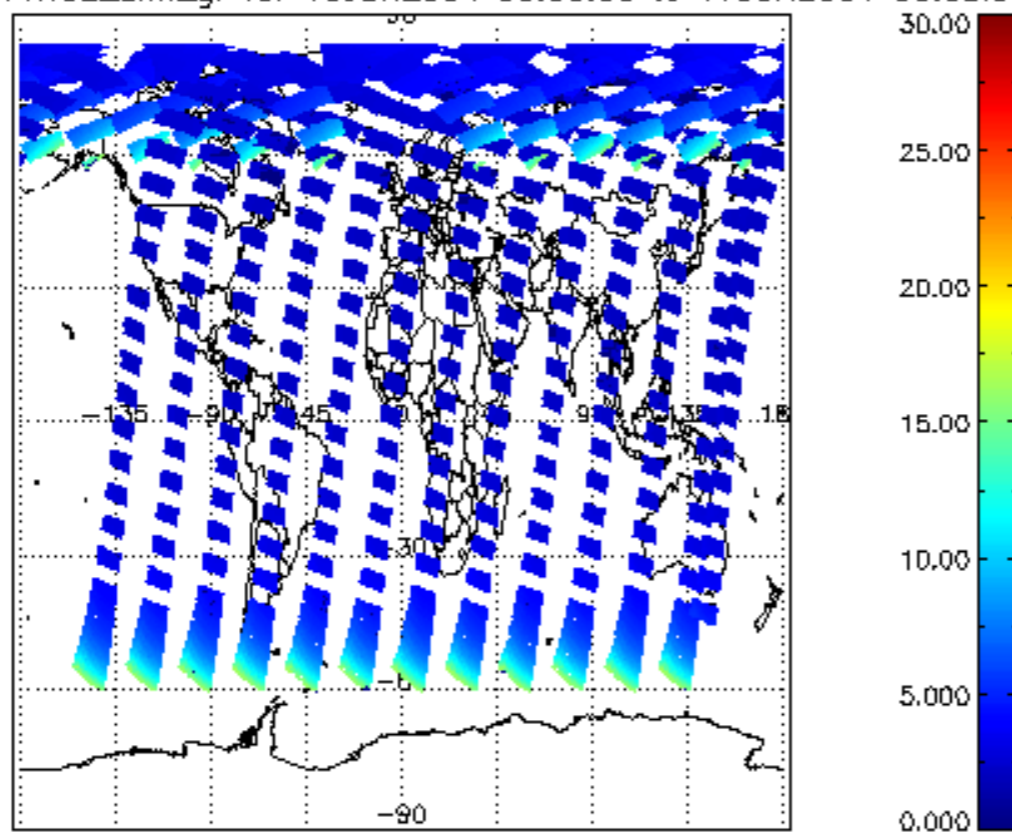
SCIOL2P_NADUV1NO2_vcd for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



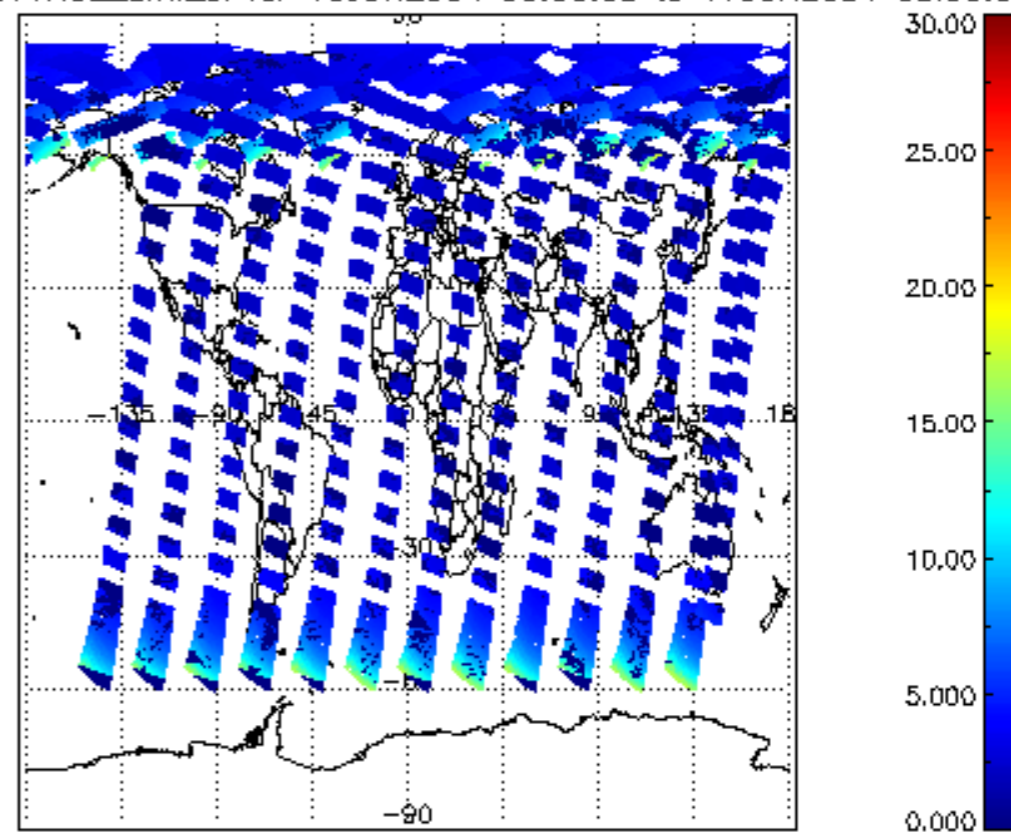
iCIOL2P_NADUV1NO2_vcd_err for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



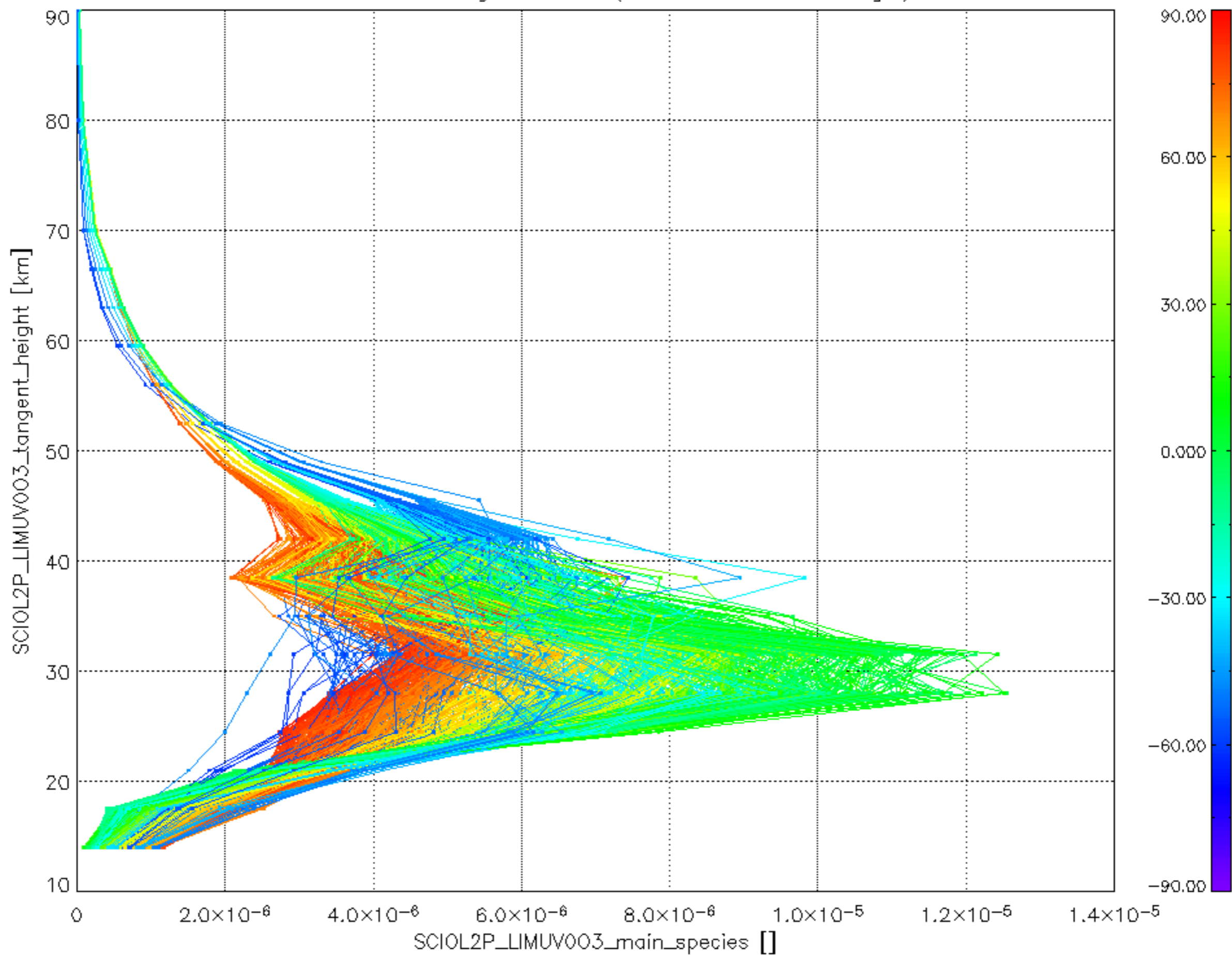
iCIOL2P_NADUV1NO2_amf_gr for 16JUN2004 00:00:00 to 17JUN2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 16JUN2004 00:00:00 to 17JUN2004 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).

