

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	05JUN2009 15:50:30
Data source version	SCIA-OL/3.01-R
Processing scope for products	18APR2009 00:00:00 to 19APR2009 00:00:00
Start time of first product within scope	17APR2009 23:09:33
Stop time of last product within scope	18APR2009 23:33:17
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__2PRDPA20090417_230933_000033252078_00159_37287_2101.N1	17APR2009 23:09:33	18APR2009 00:04:58	0	GOOD
1	SCI_OL__2PRDPA20090418_005009_000033122078_00160_37288_2102.N1	18APR2009 00:50:09	18APR2009 01:45:22	0	GOOD
2	SCI_OL__2PRDPA20090418_023044_000033252078_00161_37289_2103.N1	18APR2009 02:30:44	18APR2009 03:26:10	0	GOOD
3	SCI_OL__2PRDPA20090418_041120_000033122078_00162_37290_2104.N1	18APR2009 04:11:20	18APR2009 05:06:33	0	GOOD
4	SCI_OL__2PRDPA20090418_055156_000033252078_00163_37291_2105.N1	18APR2009 05:51:56	18APR2009 06:47:21	0	GOOD
5	SCI_OL__2PRDPA20090418_073231_000033122078_00164_37292_2106.N1	18APR2009 07:32:31	18APR2009 08:27:44	0	GOOD
6	SCI_OL__2PRDPA20090418_091307_000033252078_00165_37293_2107.N1	18APR2009 09:13:07	18APR2009 10:08:32	0	GOOD
7	SCI_OL__2PRDPA20090418_105342_000033122078_00166_37294_2108.N1	18APR2009 10:53:42	18APR2009 11:48:55	0	GOOD
8	SCI_OL__2PRDPA20090418_123418_000033252078_00167_37295_2109.N1	18APR2009 12:34:18	18APR2009 13:29:43	0	GOOD
9	SCI_OL__2PRDPA20090418_141453_000033122078_00168_37296_2110.N1	18APR2009 14:14:53	18APR2009 15:10:06	0	GOOD
10	SCI_OL__2PRDPA20090418_155529_000033252078_00169_37297_2111.N1	18APR2009 15:55:29	18APR2009 16:50:54	0	GOOD
11	SCI_OL__2PRDPA20090418_173623_000033122078_00170_37298_2112.N1	18APR2009 17:36:23	18APR2009 18:31:36	0	GOOD
12	SCI_OL__2PRDPA20090418_191659_000033252078_00171_37299_2113.N1	18APR2009 19:16:59	18APR2009 20:12:24	0	GOOD
13	SCI_OL__2PRDPA20090418_205716_000033122078_00172_37300_2114.N1	18APR2009 20:57:16	18APR2009 21:52:29	0	GOOD
14	SCI_OL__2PRDPA20090418_223751_000033252078_00173_37301_2115.N1	18APR2009 22:37:51	18APR2009 23:33:17	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: 146057

Total number of cloud data DSRs with good quality flag (=0): 146057 (100.0 %)

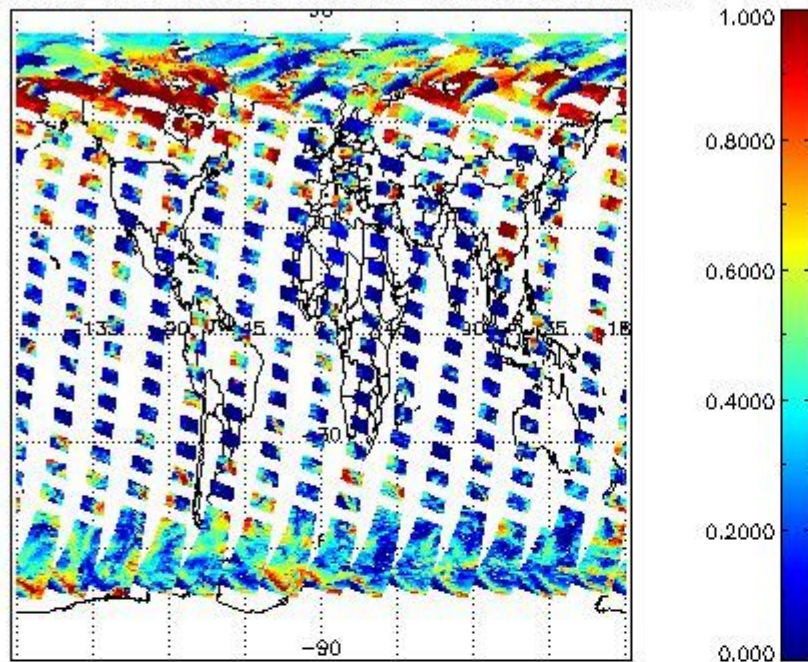
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	146057	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	146057	0.17017	0.12500	0.12500	0.25000	0.060050	s
CL_FRAC	146057	0.38002	0.35487	0.0000	1.0000	0.30192	-
CL_FRAC_ERR	146057	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	146057	5.4455	4.0000	4.0000	8.0000	1.9216	
PMD_READ_CL[0]	146057	0.33624	0.0000	0.0000	8.0000	1.2761	-
PMD_READ_CL[1]	146057	1.3420	0.0000	0.0000	8.0000	2.5514	-
CL_TOP_HEIGHT	130697	2.9374	1.3714	0.0000	17.000	3.2914	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	130697	67.549	100.00	0.0000	101.00	41.613	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	146057	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	146057	11001010	11000100	11000000	11100000	3255.8	flags
AERO_ABSO_IND	146057	3.7262	4.4987	-1.0385	14.686	2.4001	
AERO_IND_DIAG	146057	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	146057	01010111	00000000	00000000	11000000	24488.	flags

Time and geolocation plots:

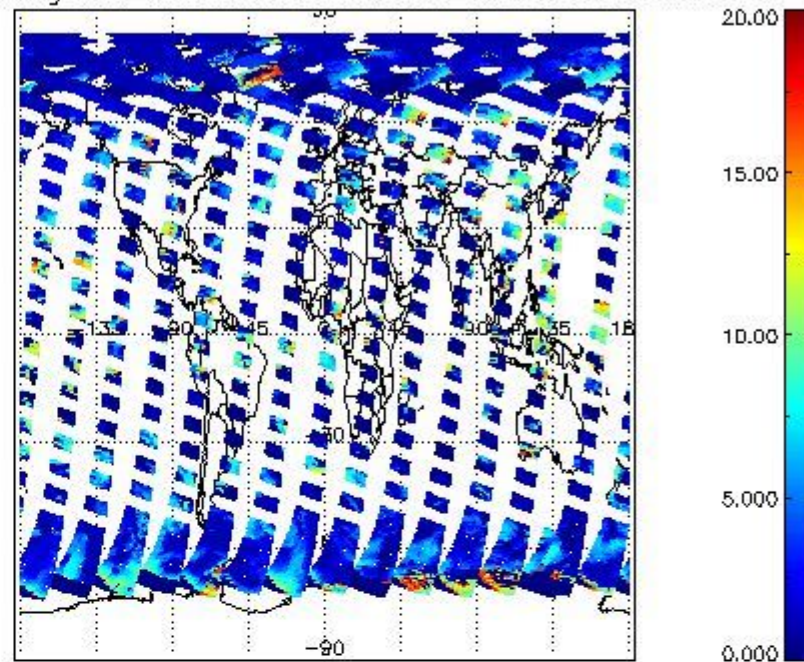
Plots are available for the following parameters:

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

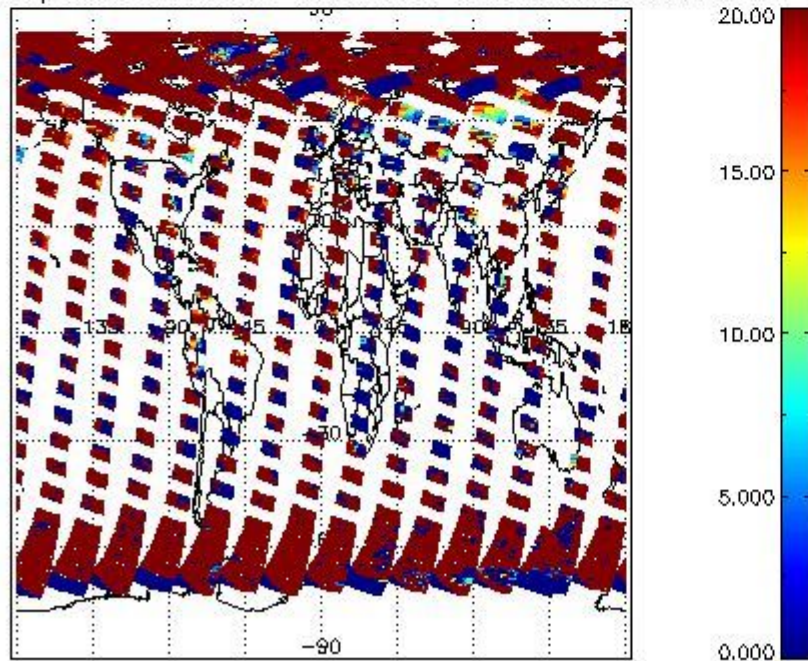
cL_frac for 18APR2009 00:00:00 to 19APR2009 00:00:00



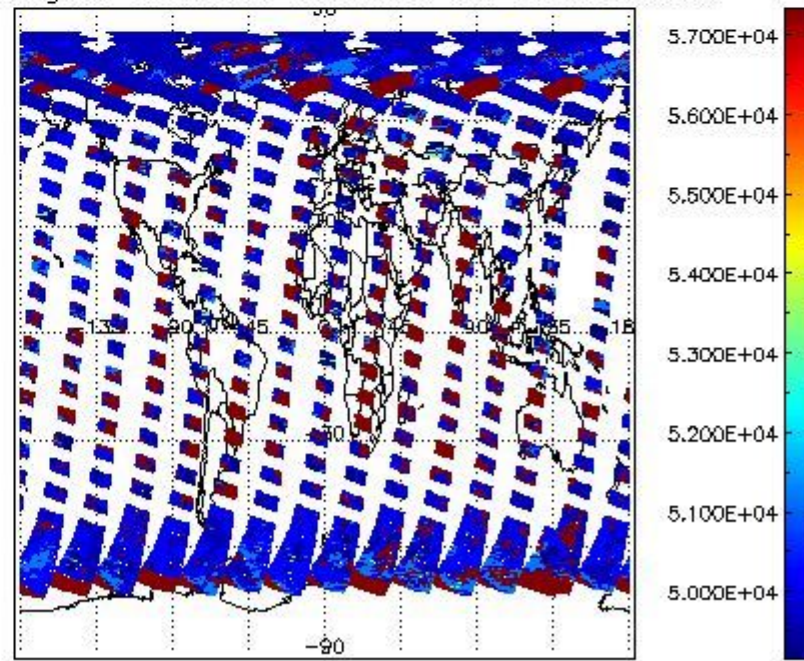
cL_top_height for 18APR2009 00:00:00 to 19APR2009 00:00:00



cL_opt_depth for 18APR2009 00:00:00 to 19APR2009 00:00:00



cloud_flags for 18APR2009 00:00:00 to 19APR2009 00:00:00



2.2.2 Nadir

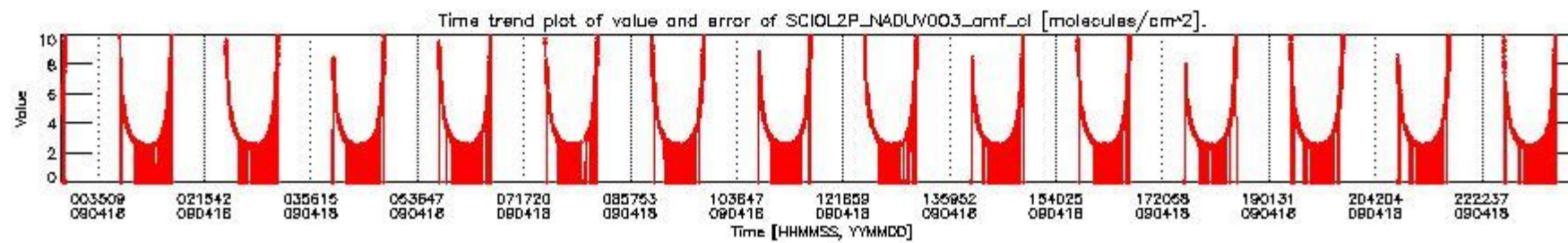
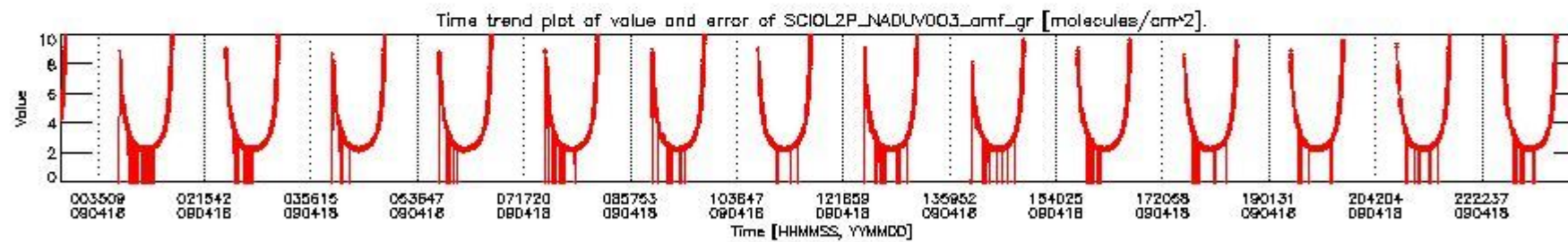
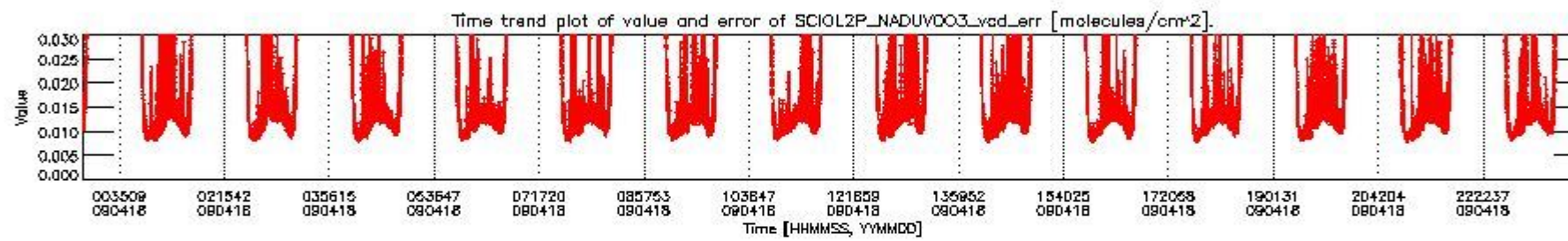
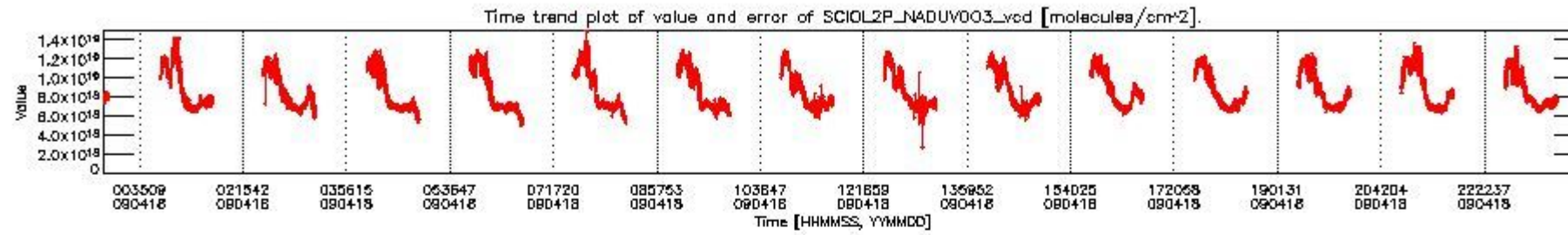
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

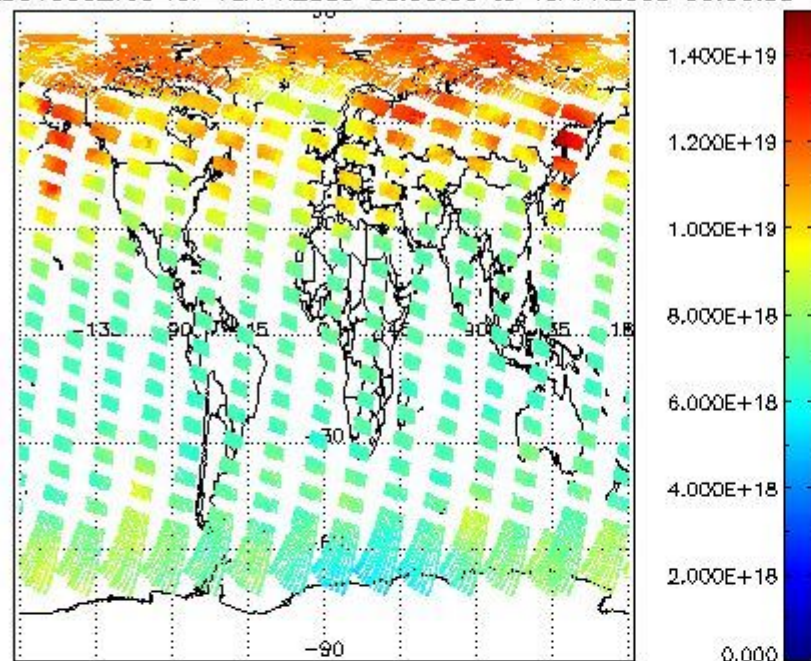
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

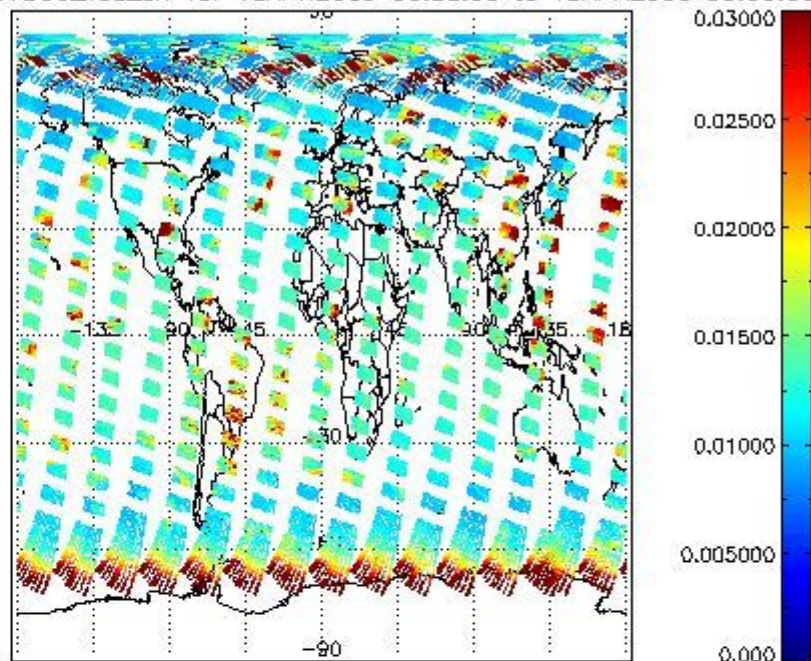
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



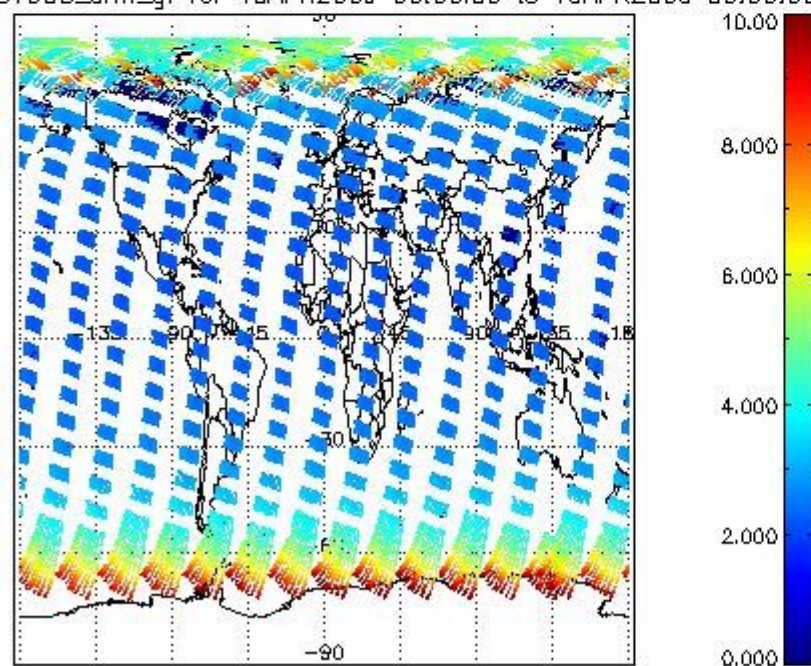
SCIOL2P_NADUV003_vcd for 18APR2009 00:00:00 to 19APR2009 00:00:00



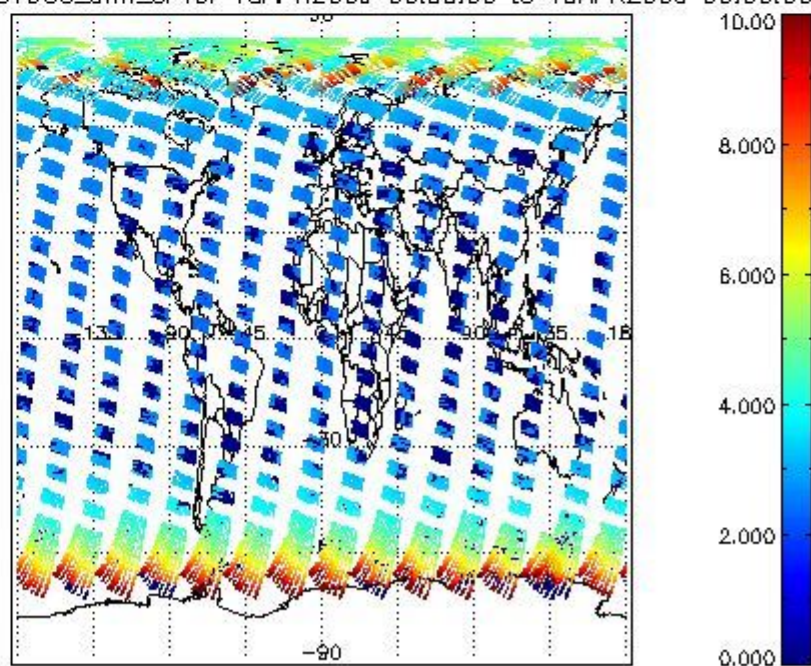
SCIOL2P_NADUV003_vcd_err for 18APR2009 00:00:00 to 19APR2009 00:00:00

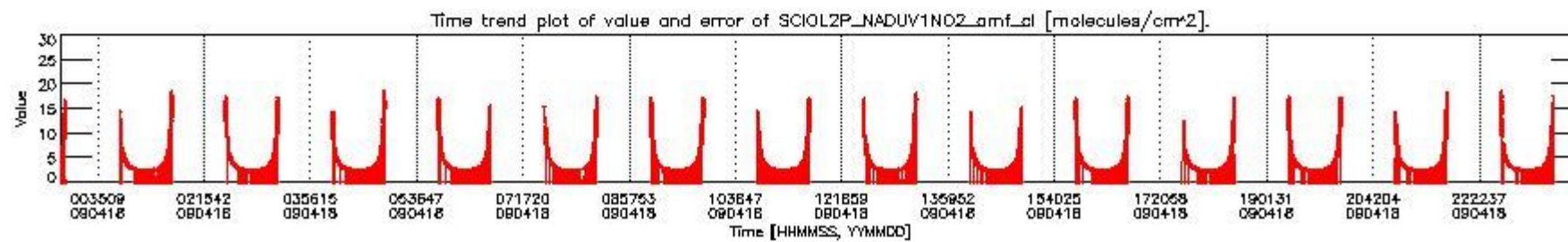
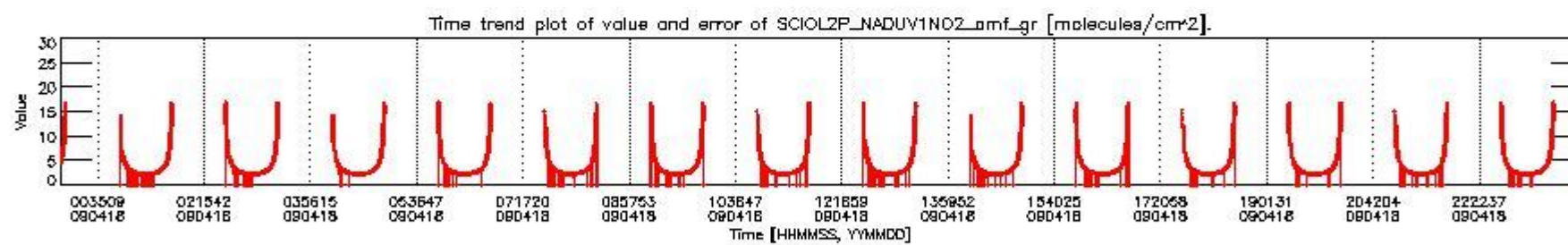
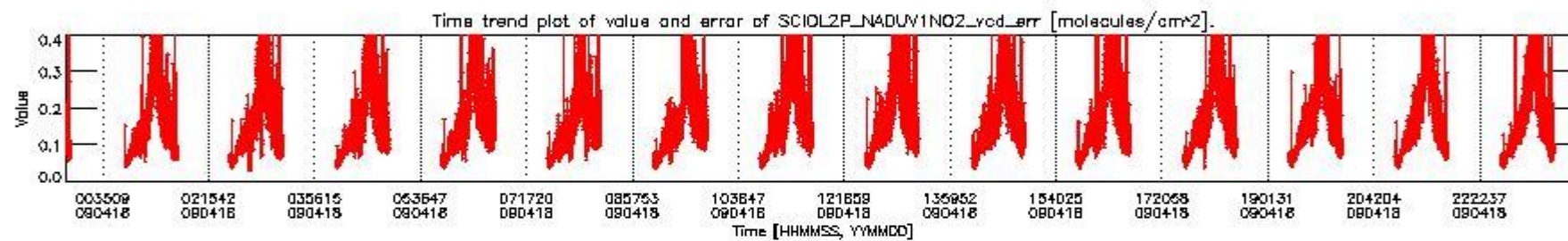
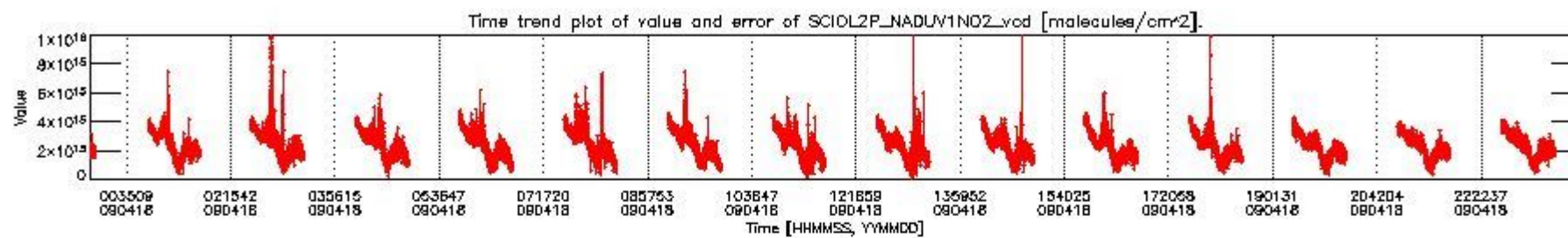


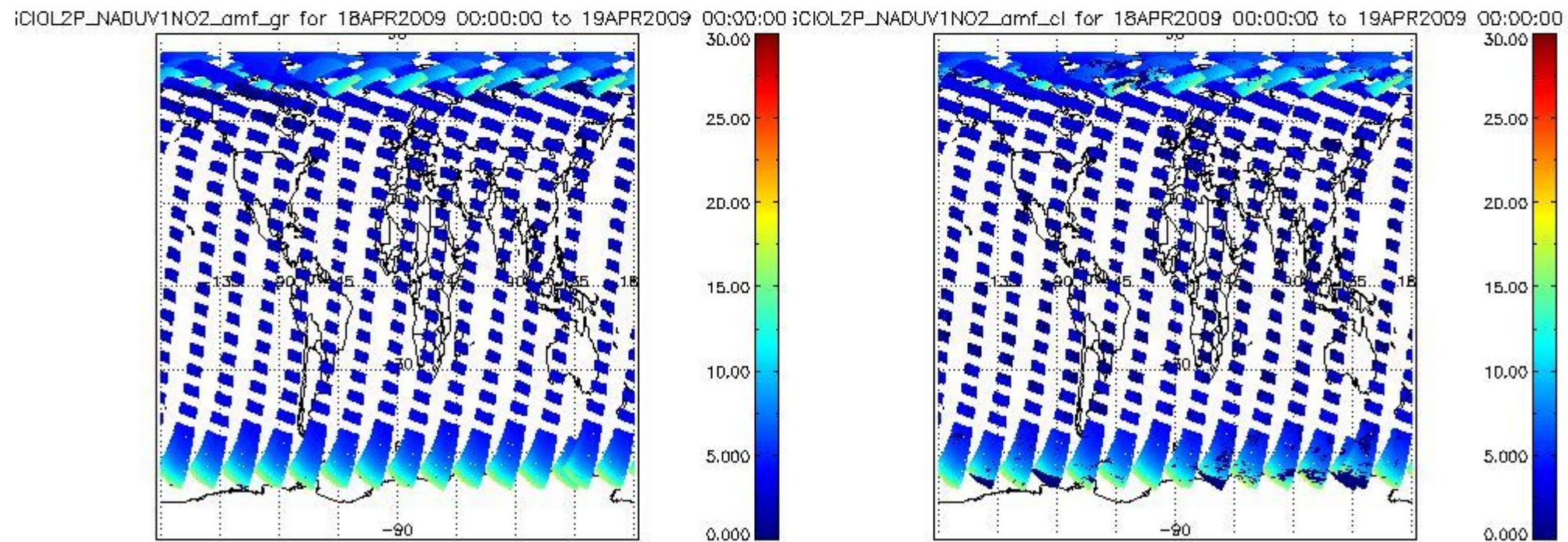
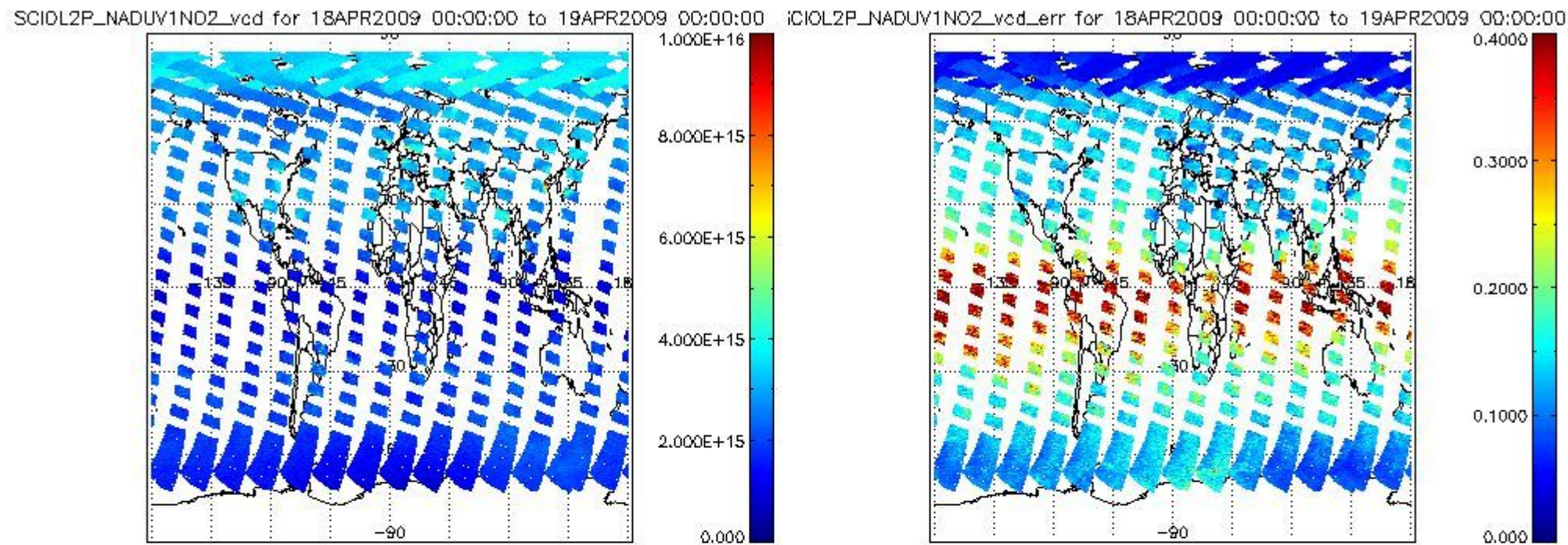
SCIOL2P_NADUV003_amf_gr for 18APR2009 00:00:00 to 19APR2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 18APR2009 00:00:00 to 19APR2009 00:00:00







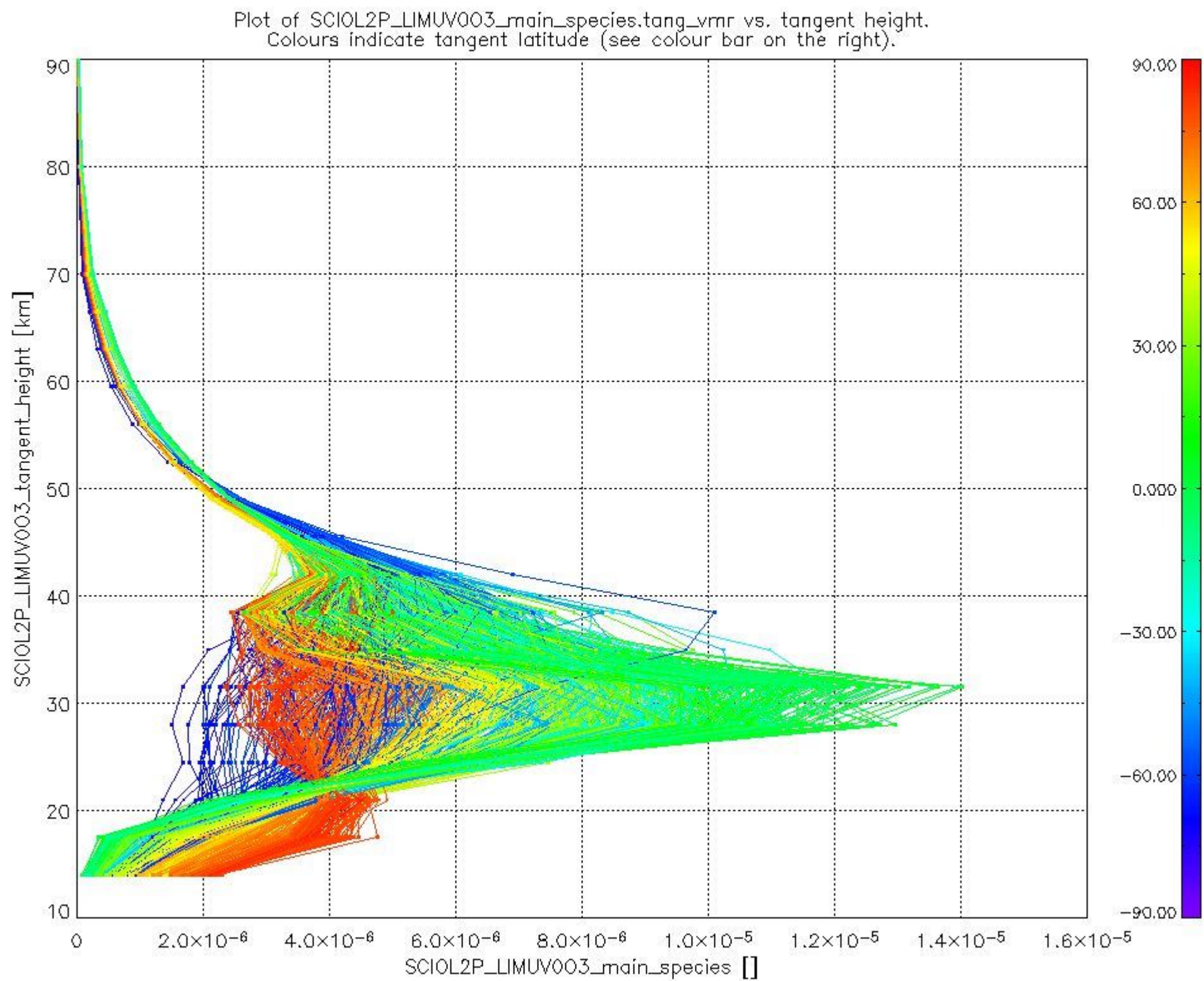
2.2.3 Limb

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

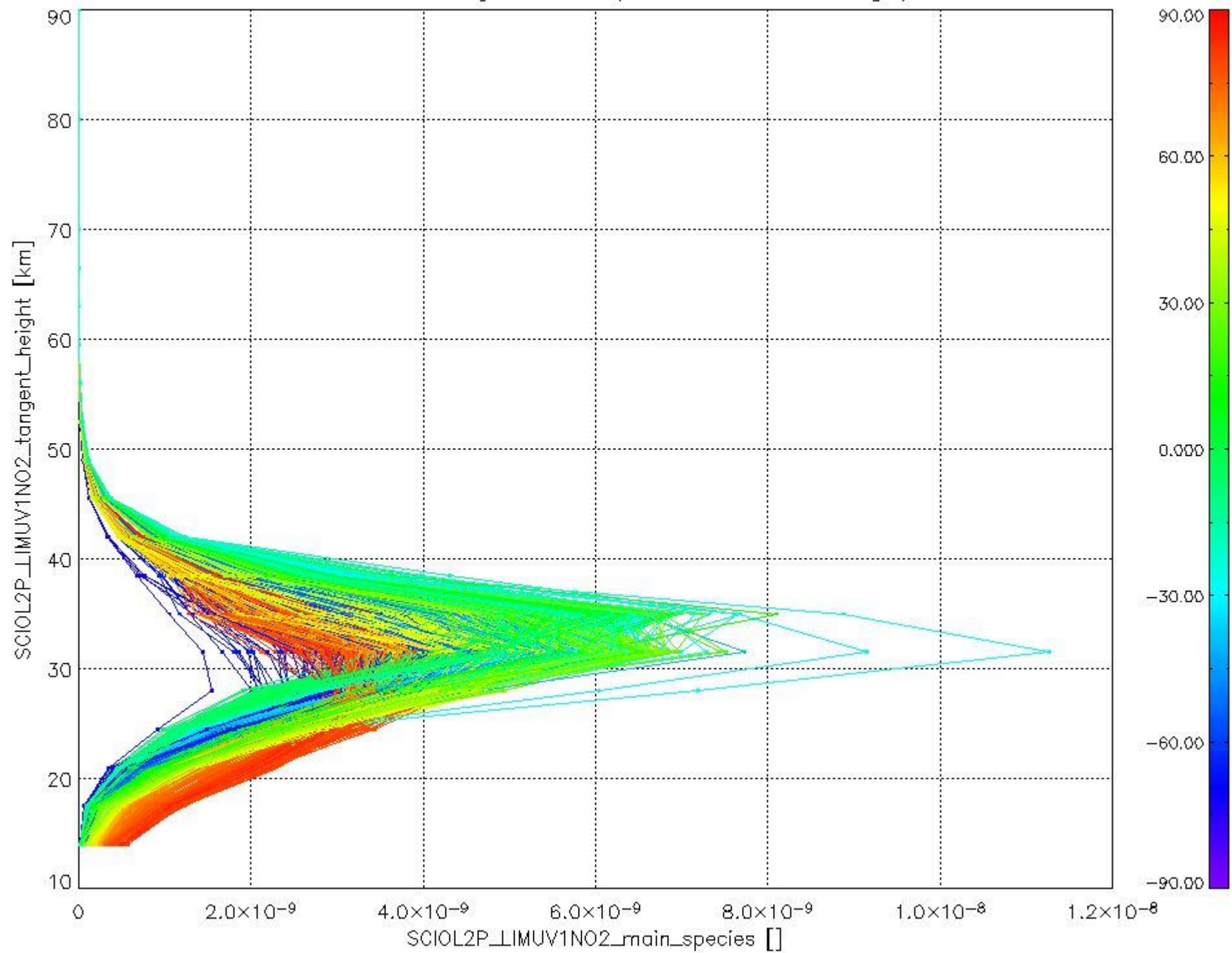
The following data items are currently included into this section:

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.



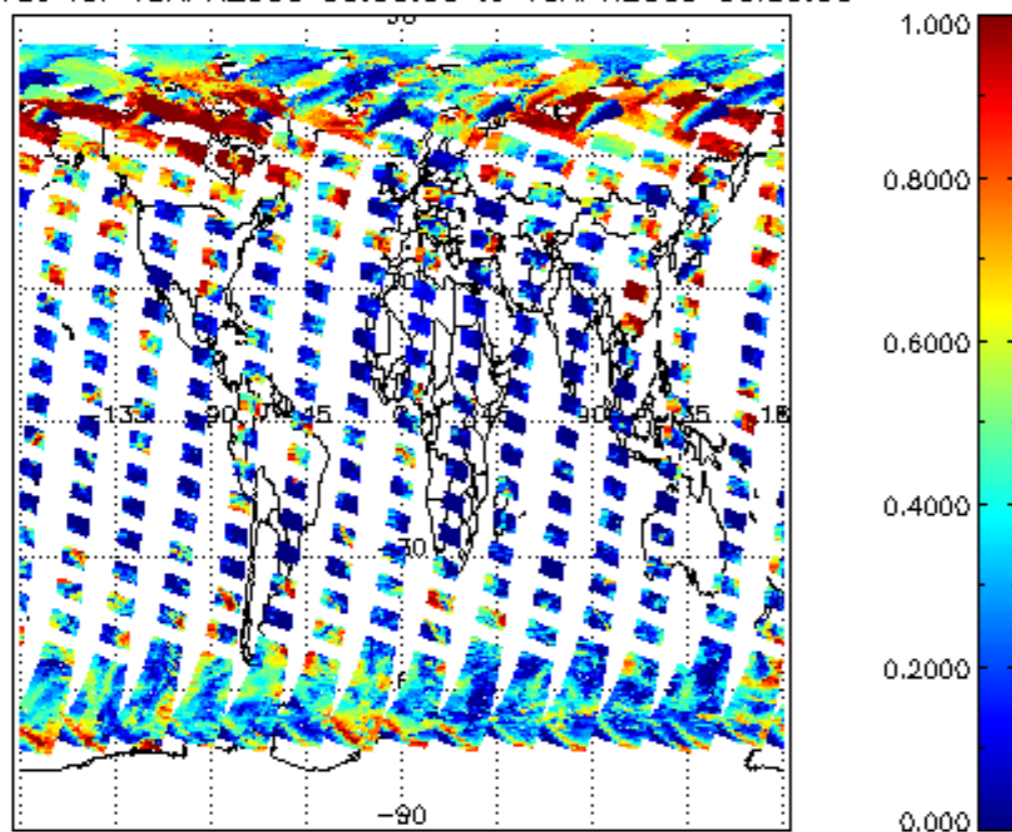
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



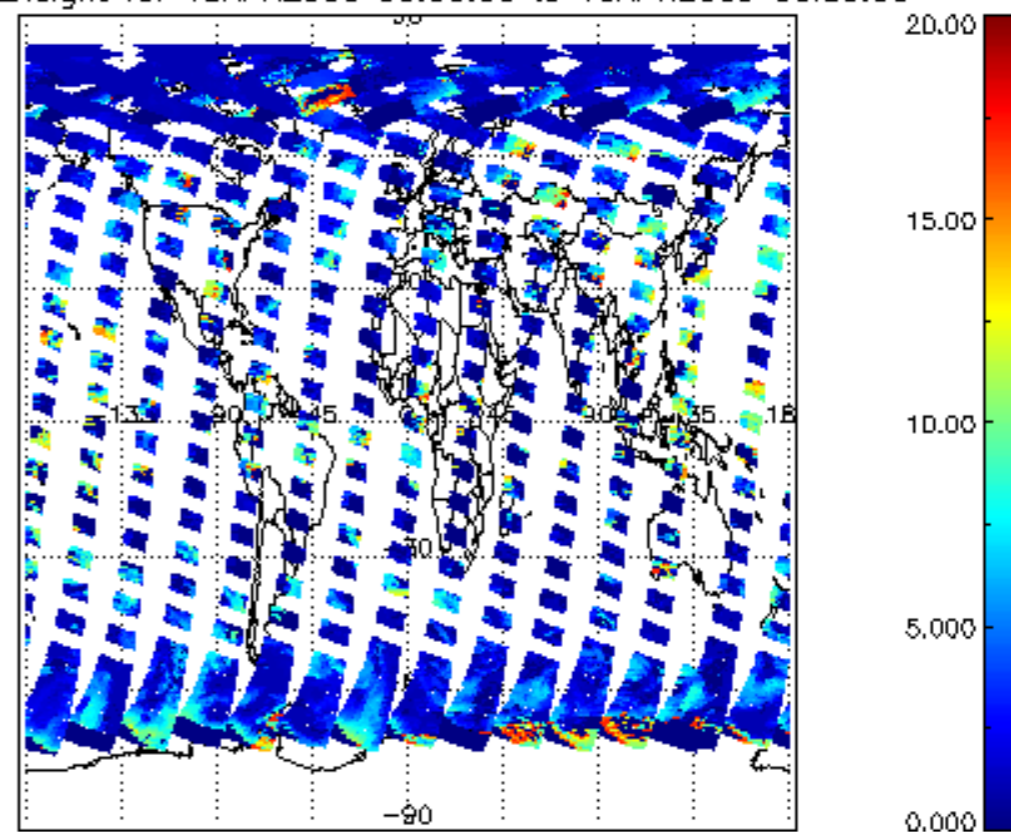
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

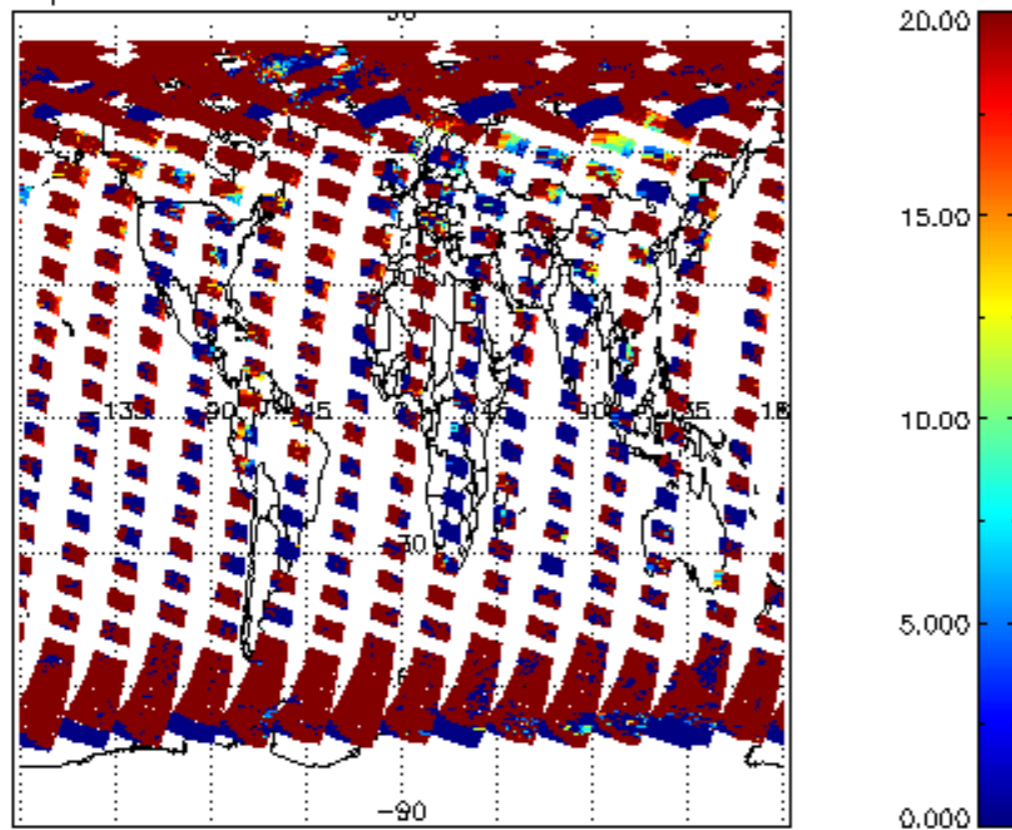
cl_frac for 18APR2009 00:00:00 to 19APR2009 00:00:00



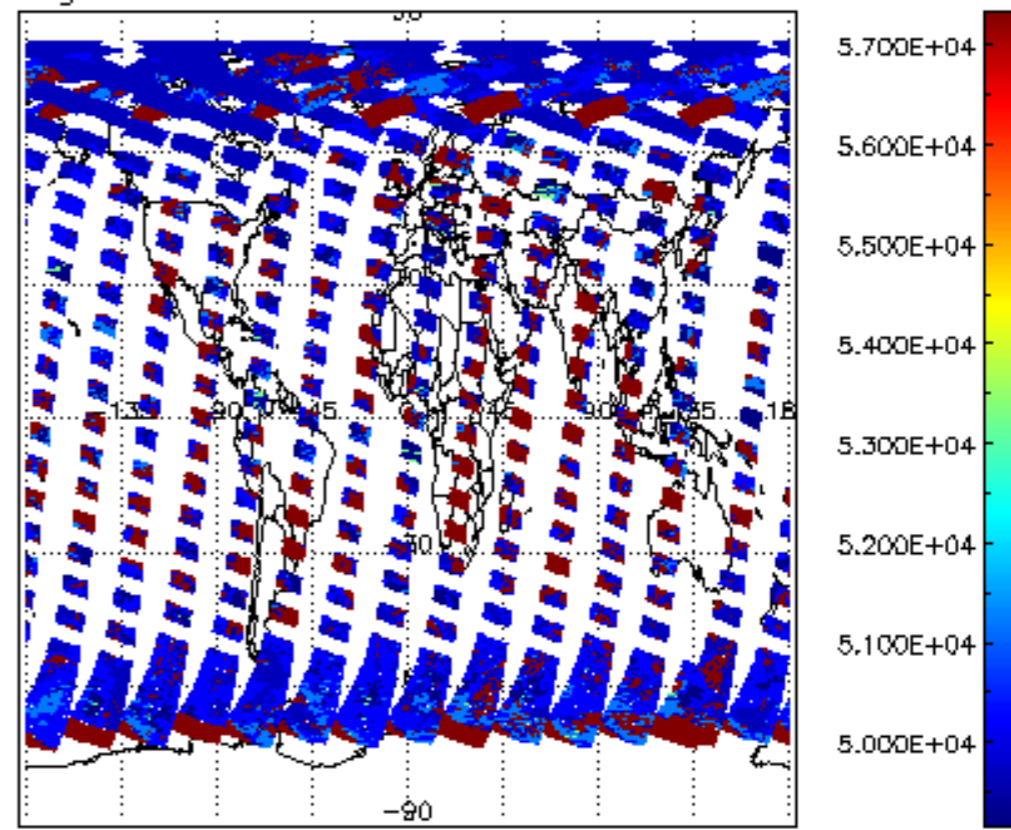
cl_top_height for 18APR2009 00:00:00 to 19APR2009 00:00:00

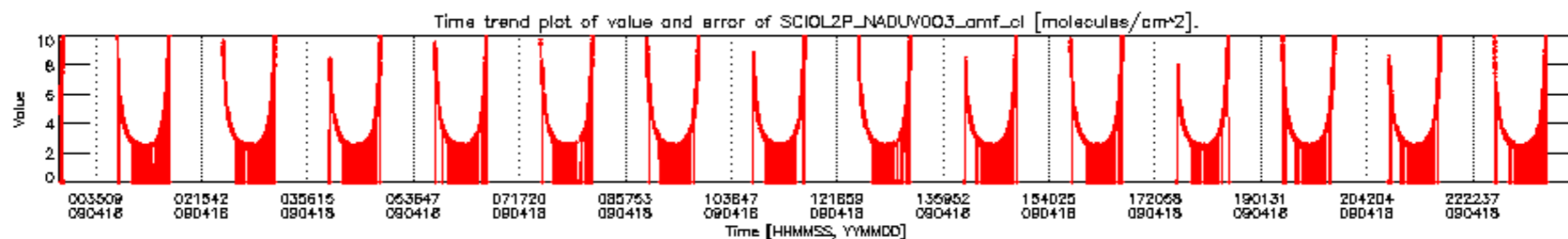
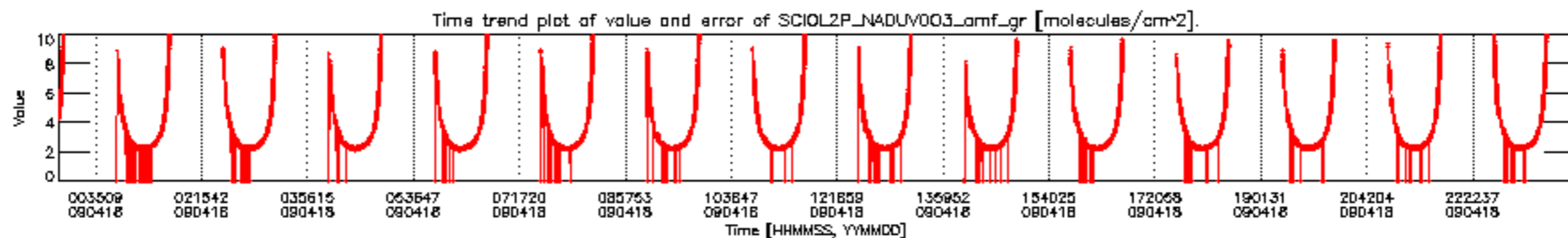
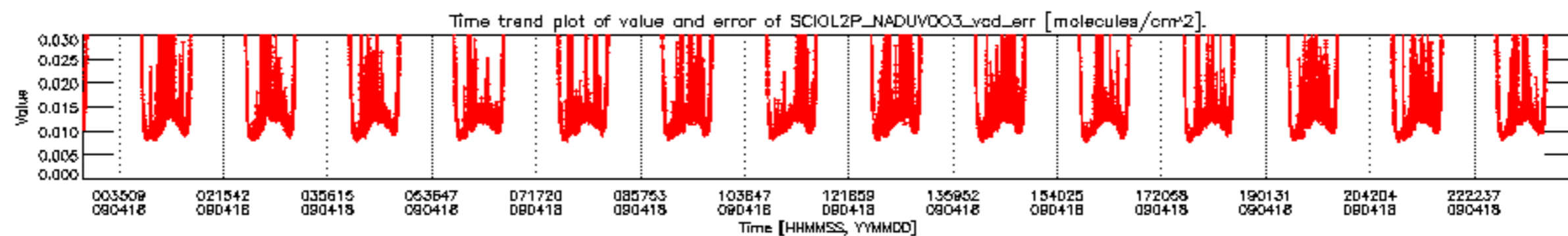
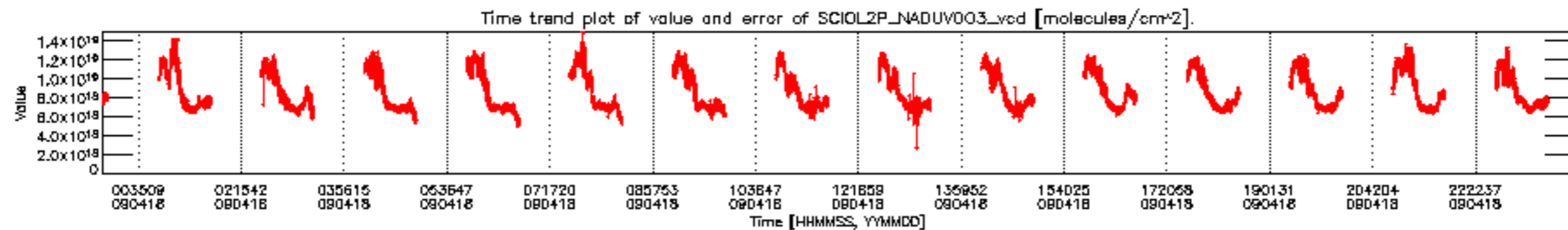


cl_opt_depth for 18APR2009 00:00:00 to 19APR2009 00:00:00

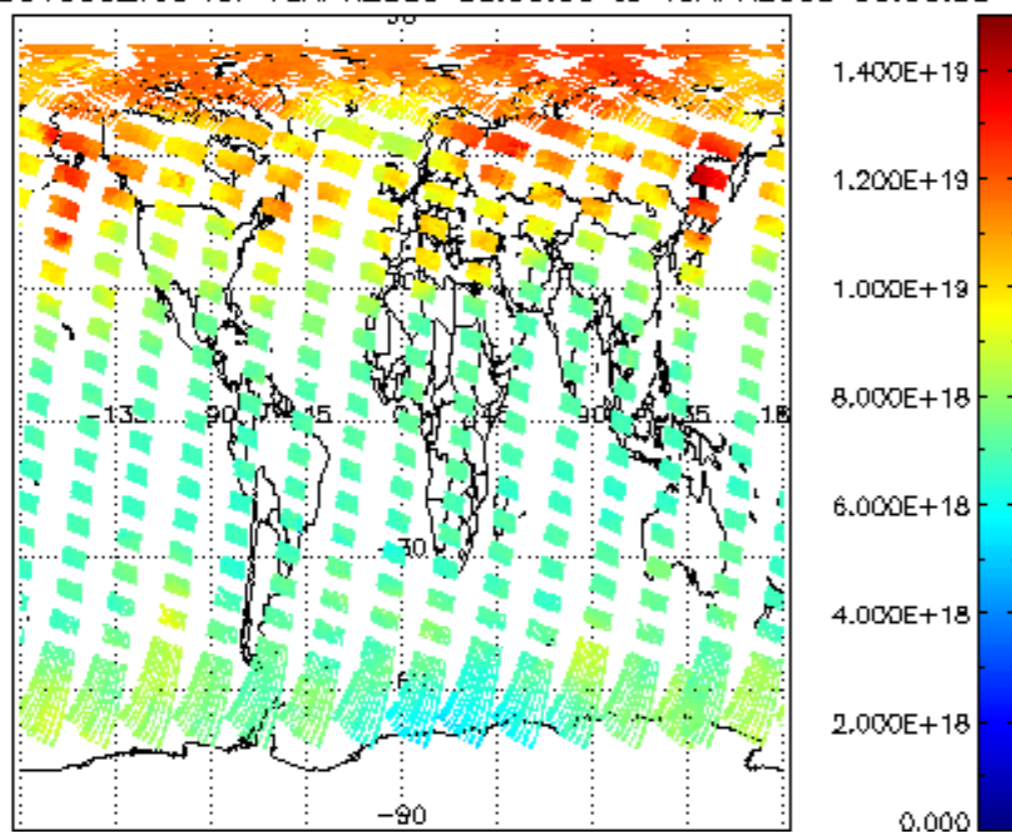


cloud_flags for 18APR2009 00:00:00 to 19APR2009 00:00:00

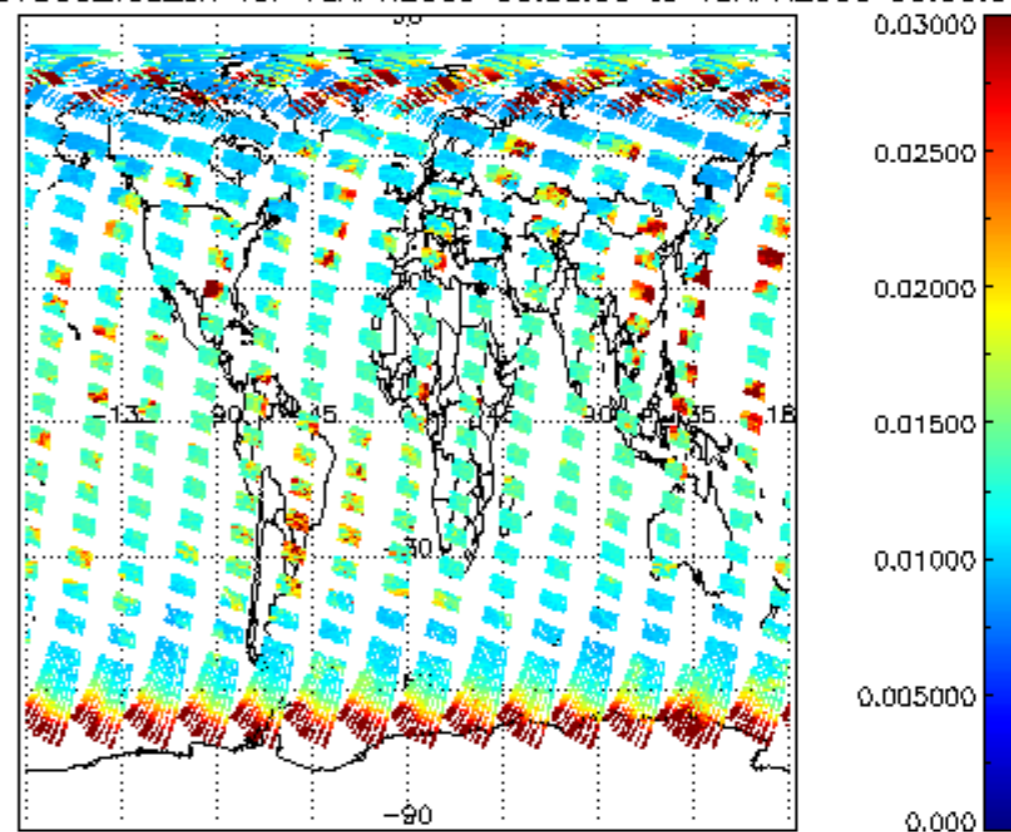




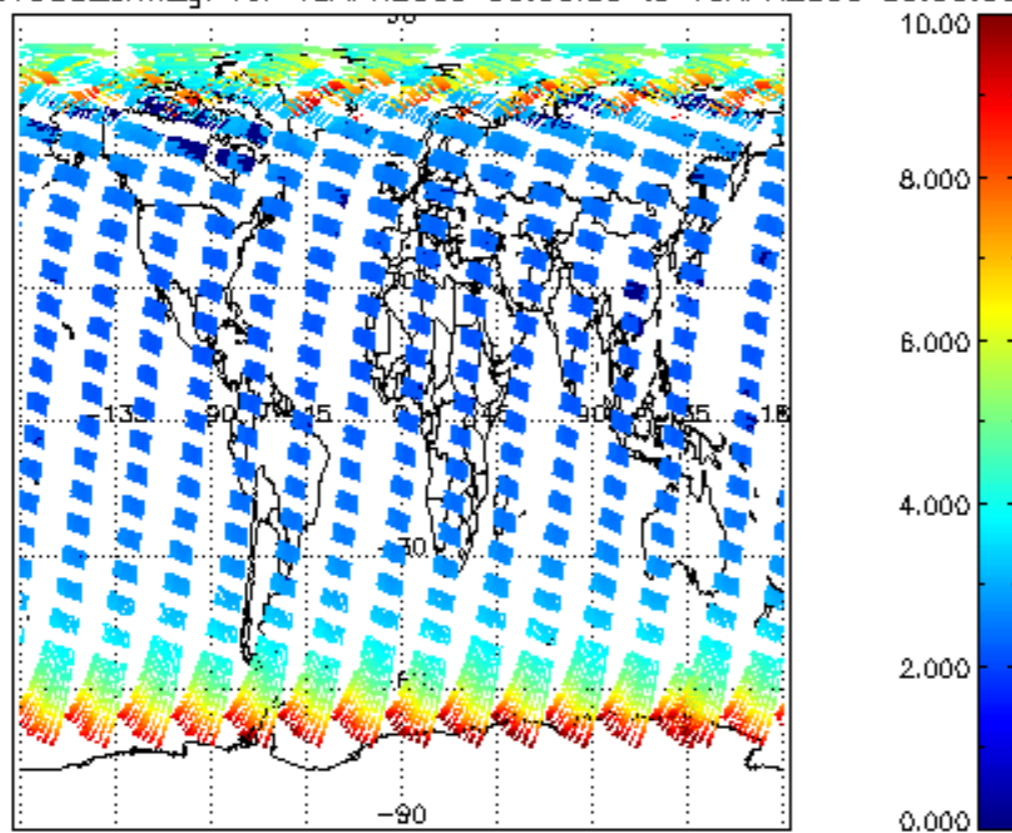
SCIOL2P_NADUV003_vcd for 18APR2009 00:00:00 to 19APR2009 00:00:00



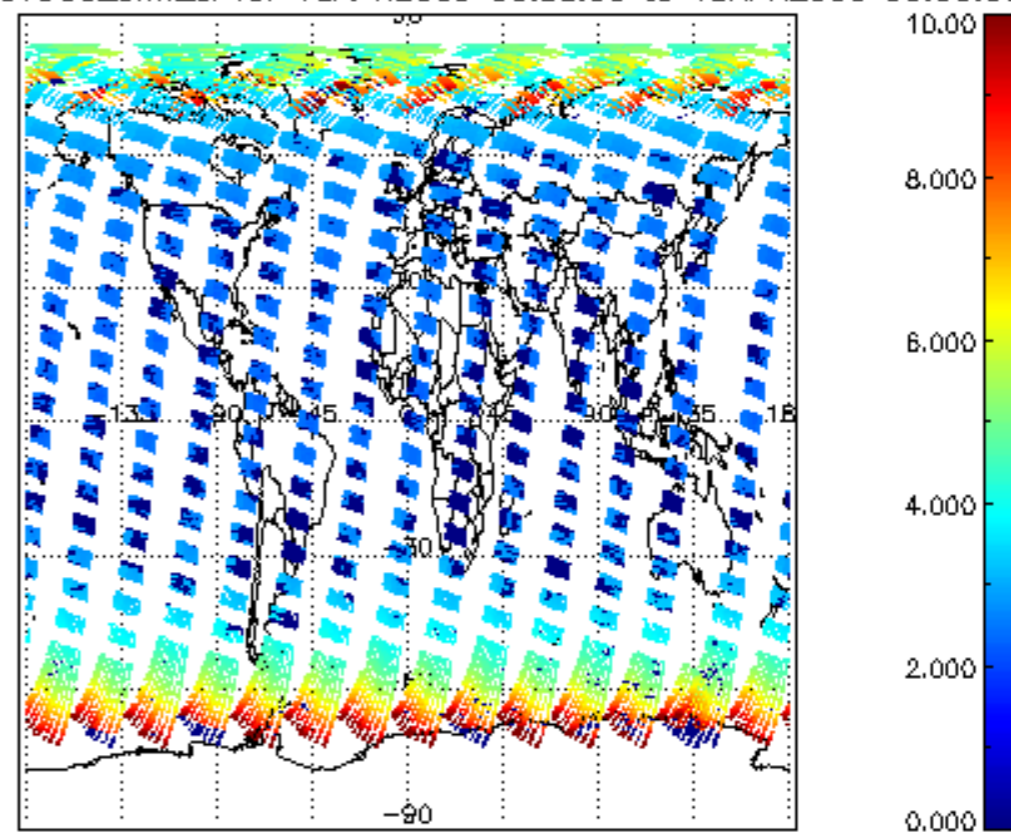
SCIOL2P_NADUV003_vcd_err for 18APR2009 00:00:00 to 19APR2009 00:00:00

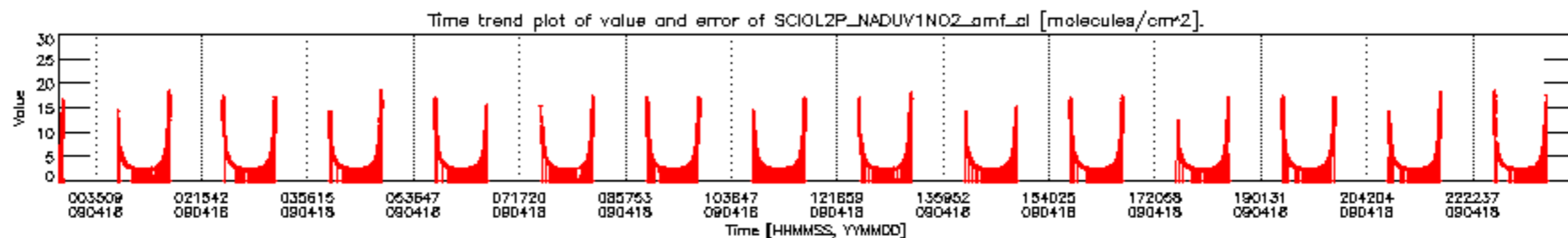
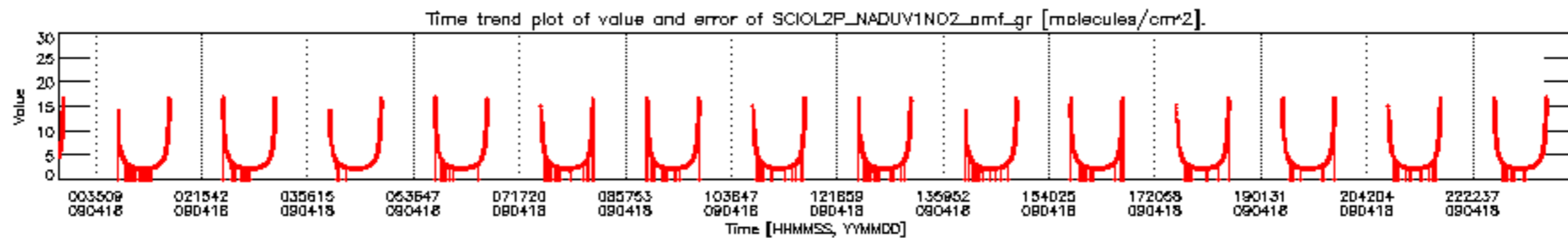
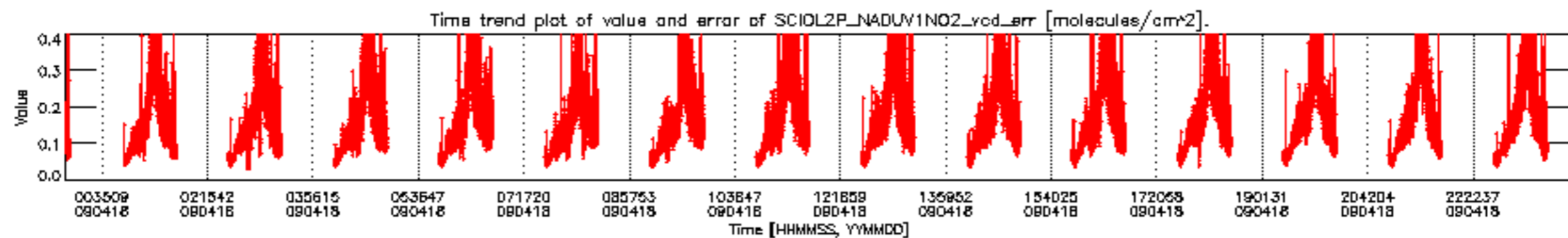
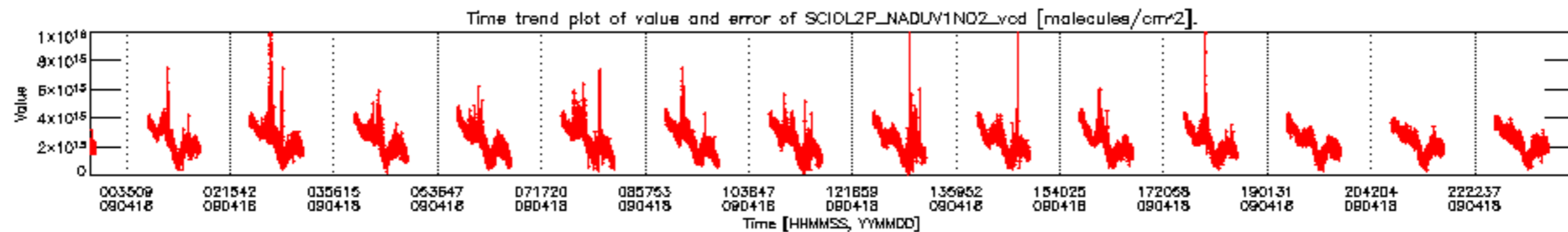


SCIOL2P_NADUV003_amf_gr for 18APR2009 00:00:00 to 19APR2009 00:00:00

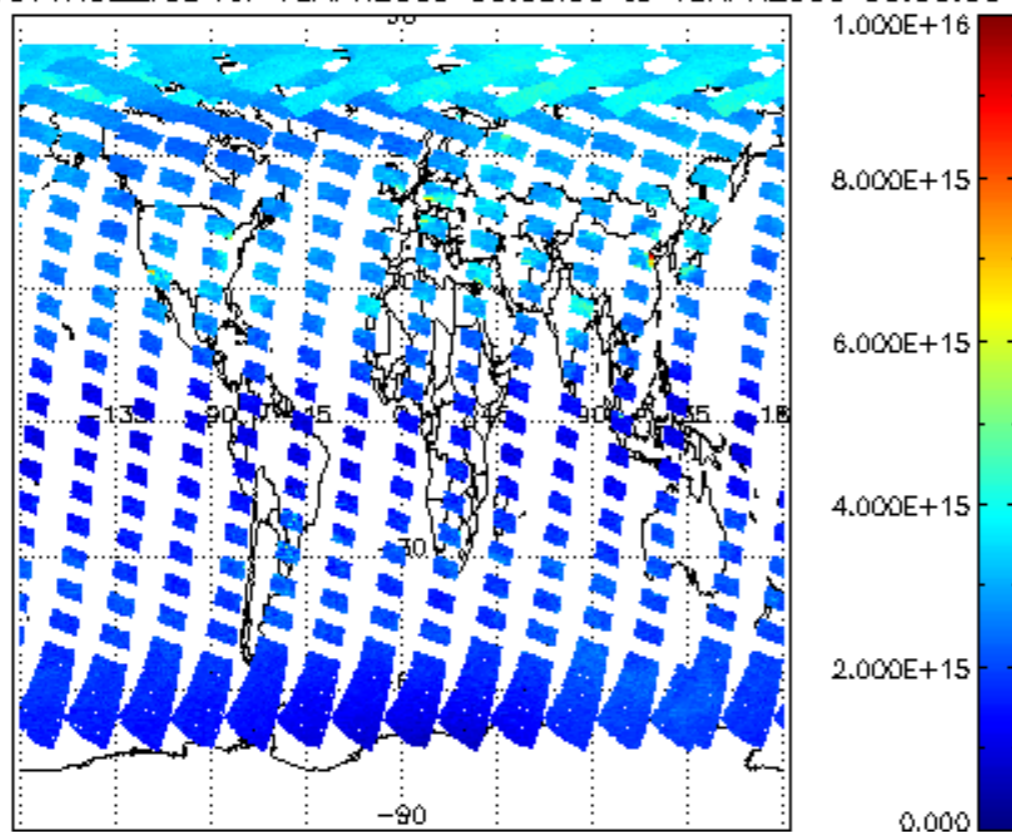


SCIOL2P_NADUV003_amf_cl for 18APR2009 00:00:00 to 19APR2009 00:00:00

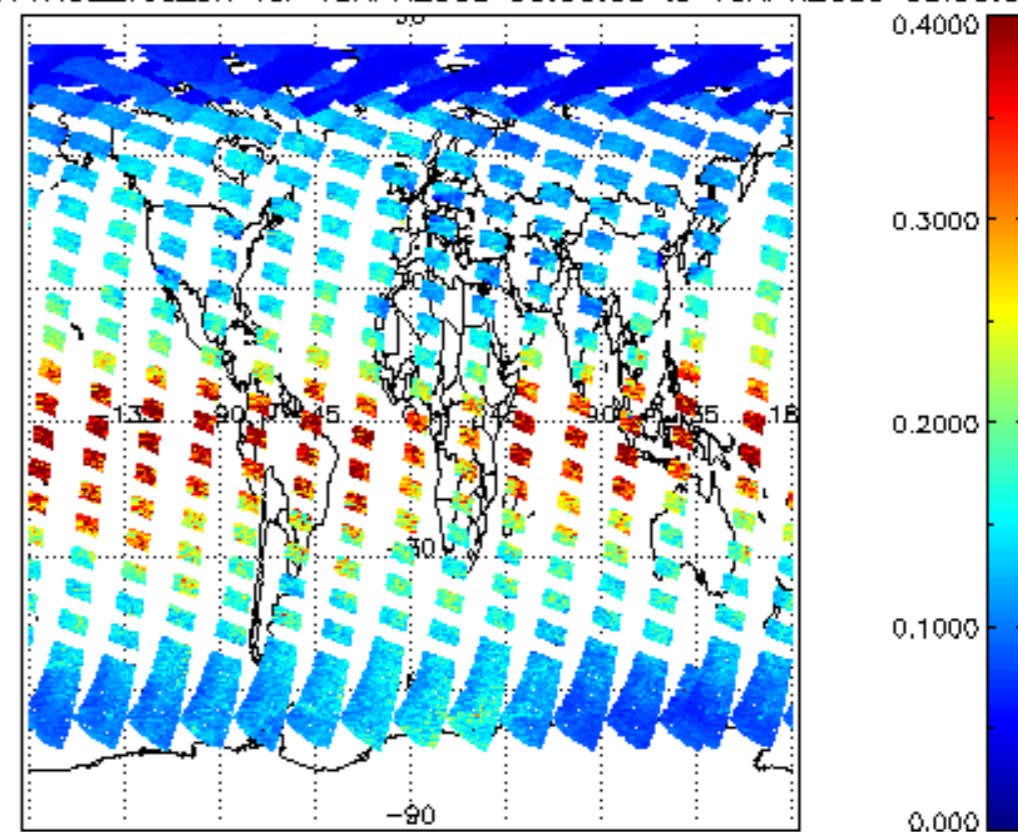




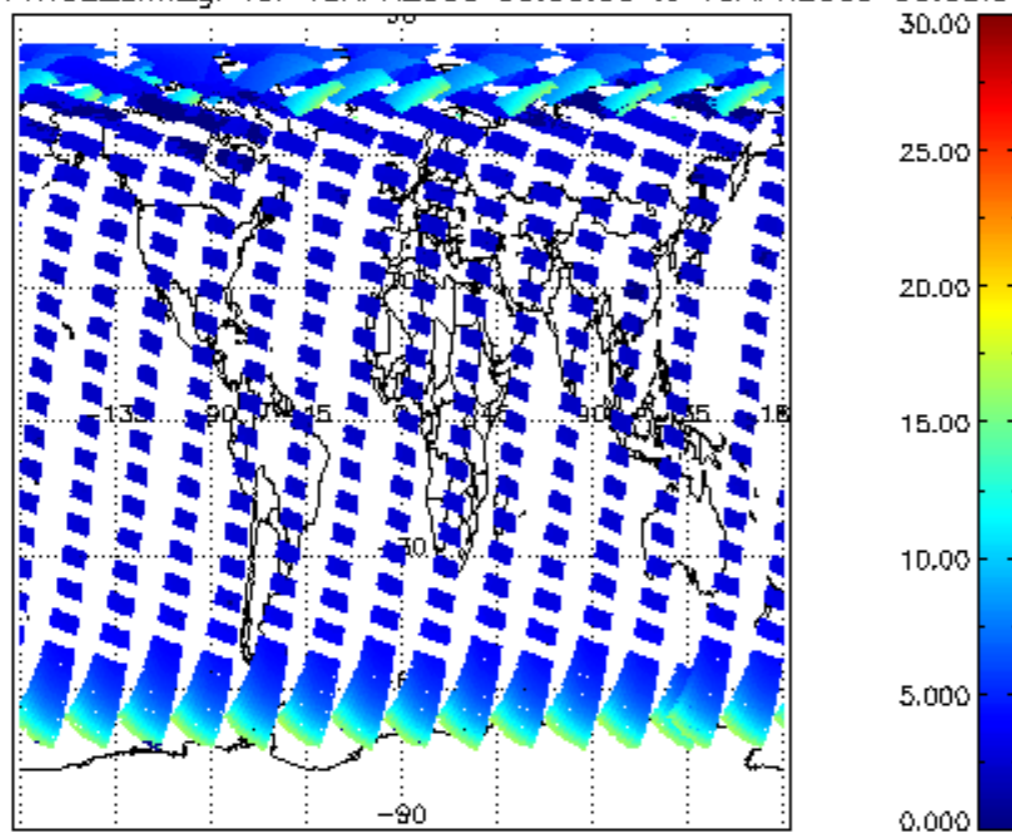
SCIOL2P_NADUV1NO2_vcd for 18APR2009 00:00:00 to 19APR2009 00:00:00



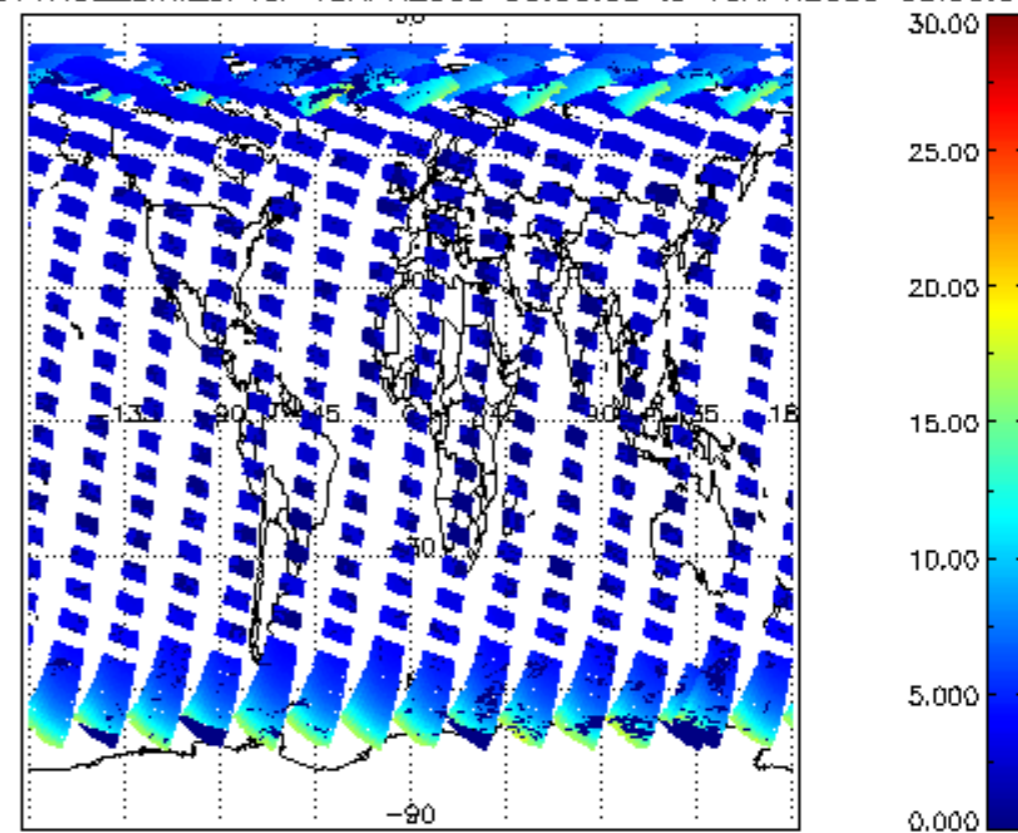
iCIOL2P_NADUV1NO2_vcd_err for 18APR2009 00:00:00 to 19APR2009 00:00:00



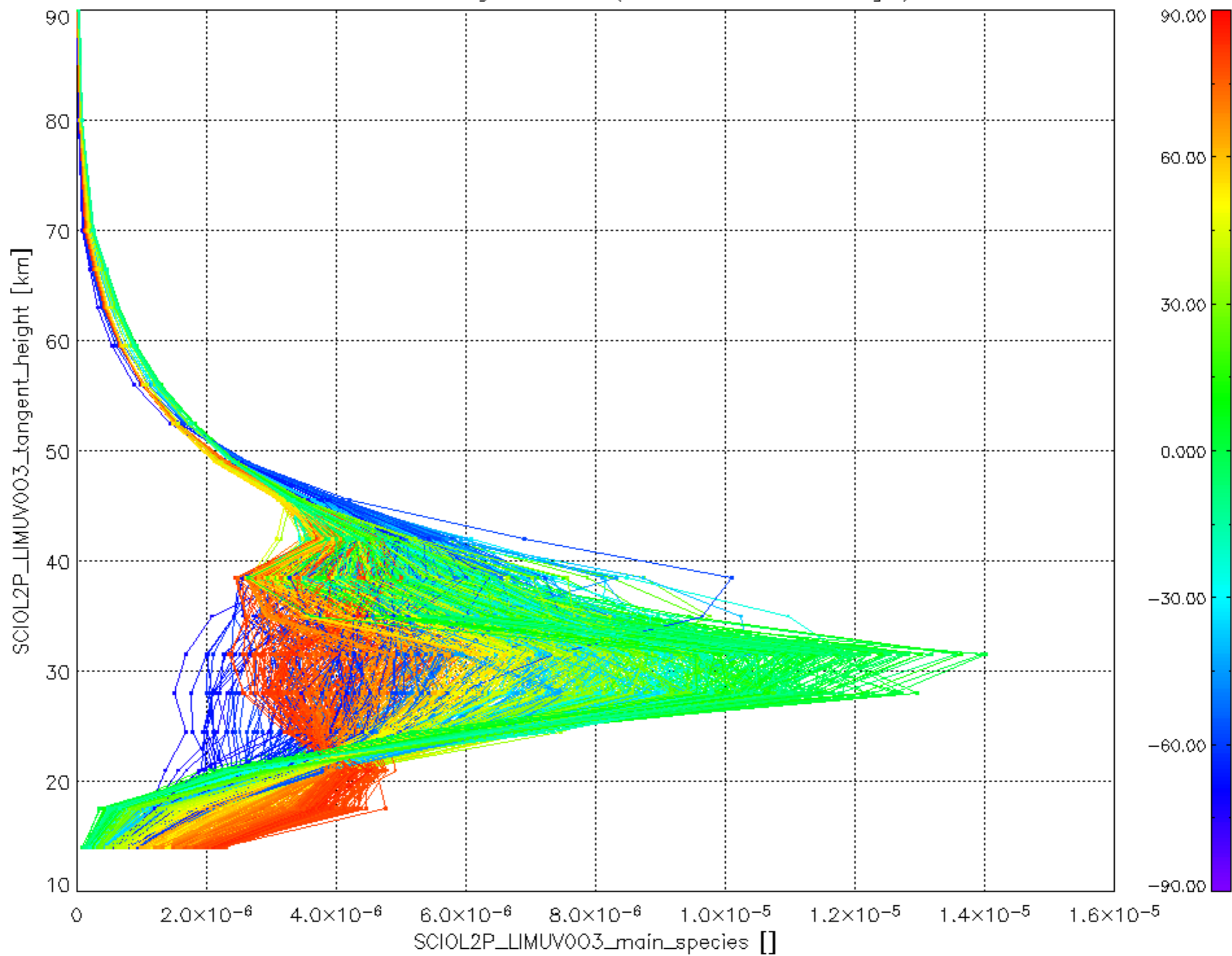
iCIOL2P_NADUV1NO2_amf_gr for 18APR2009 00:00:00 to 19APR2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 18APR2009 00:00:00 to 19APR2009 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_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

