

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 14:43:17
Data source version	SCIA-OL/3.01-R
Processing scope for products	09APR2009 00:00:00 to 10APR2009 00:00:00
Start time of first product within scope	09APR2009 00:33:42
Stop time of last product within scope	10APR2009 00:57:26
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__2PRDPA20090409_003342_000033252078_00031_37159_2248.N1	09APR2009 00:33:42	09APR2009 01:29:08	0	GOOD
1	SCI_OL__2PRDPA20090409_021417_000033812078_00032_37160_2283.N1	09APR2009 02:14:17	09APR2009 03:10:39	0	GOOD
2	SCI_OL__2PRDPA20090409_035453_000033252078_00033_37161_2249.N1	09APR2009 03:54:53	09APR2009 04:50:19	0	GOOD
3	SCI_OL__2PRDPA20090409_053529_000033812078_00034_37162_2250.N1	09APR2009 05:35:29	09APR2009 06:31:50	0	GOOD
4	SCI_OL__2PRDPA20090409_071604_000033252078_00035_37163_2251.N1	09APR2009 07:16:04	09APR2009 08:11:30	0	GOOD
5	SCI_OL__2PRDPA20090409_085640_000033812078_00036_37164_2258.N1	09APR2009 08:56:40	09APR2009 09:53:02	0	GOOD
6	SCI_OL__2PRDPA20090409_103716_000033252078_00037_37165_2259.N1	09APR2009 10:37:16	09APR2009 11:32:41	0	GOOD
7	SCI_OL__2PRDPA20090409_121751_000033812078_00038_37166_2254.N1	09APR2009 12:17:51	09APR2009 13:14:13	0	GOOD
8	SCI_OL__2PRDPA20090409_135827_000033252078_00038_37166_2260.N1	09APR2009 13:58:27	09APR2009 14:53:52	0	GOOD
9	SCI_OL__2PRDPA20090409_153902_000033812078_00040_37168_2255.N1	09APR2009 15:39:02	09APR2009 16:35:24	0	GOOD
10	SCI_OL__2PRDPA20090409_171958_000033312078_00040_37168_2252.N1	09APR2009 17:19:58	09APR2009 18:15:29	0	GOOD
11	SCI_OL__2PRDPA20090409_190034_000033252078_00042_37170_2253.N1	09APR2009 19:00:34	09APR2009 19:55:59	0	GOOD
12	SCI_OL__2PRDPA20090409_204049_000033252078_00042_37170_2284.N1	09APR2009 20:40:49	09APR2009 21:36:15	0	GOOD
13	SCI_OL__2PRDPA20090409_222125_000033812078_00044_37172_2256.N1	09APR2009 22:21:25	09APR2009 23:17:46	0	GOOD
14	SCI_OL__2PRDPA20090410_000200_000033252078_00045_37173_2257.N1	10APR2009 00:02:00	10APR2009 00:57:26	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: 145600

Total number of cloud data DSRs with good quality flag (=0): 145600 (100.0 %)

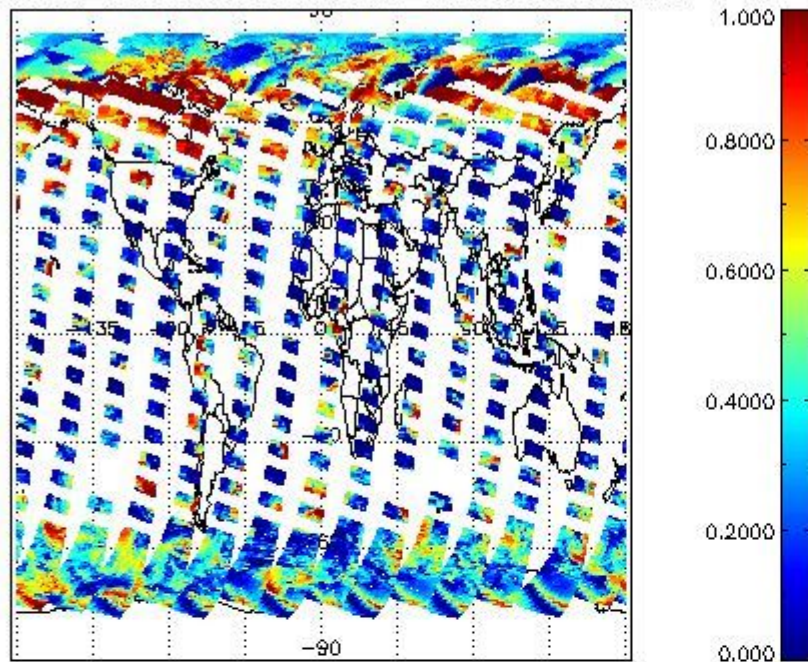
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	145600	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	145600	0.17009	0.12500	0.12500	0.25000	0.060026	s
CL_FRAC	145600	0.38418	0.35333	0.0000	1.0000	0.30576	-
CL_FRAC_ERR	145600	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	145600	5.4429	4.0000	4.0000	8.0000	1.9208	
PMD_READ_CL[0]	145600	0.33611	0.0000	0.0000	8.0000	1.2104	-
PMD_READ_CL[1]	145600	1.3034	0.0000	0.0000	8.0000	2.5161	-
CL_TOP_HEIGHT	126558	2.9948	1.3813	0.0000	17.000	3.4866	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	126558	66.799	100.00	0.0000	101.00	41.700	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	145600	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	145600	11001010	11000100	11000000	11100000	3324.8	flags
AERO_ABSO_IND	145600	3.6211	4.4407	-1.2938	13.835	2.3936	
AERO_IND_DIAG	145600	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	145600	01010111	00000000	00000000	11000000	24472.	flags

Time and geolocation plots:

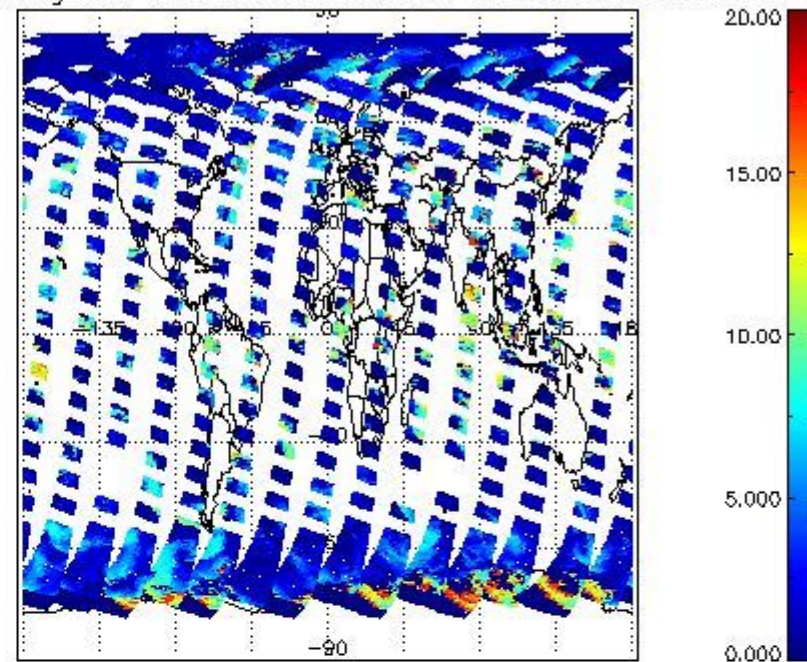
Plots are available for the following parameters:

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

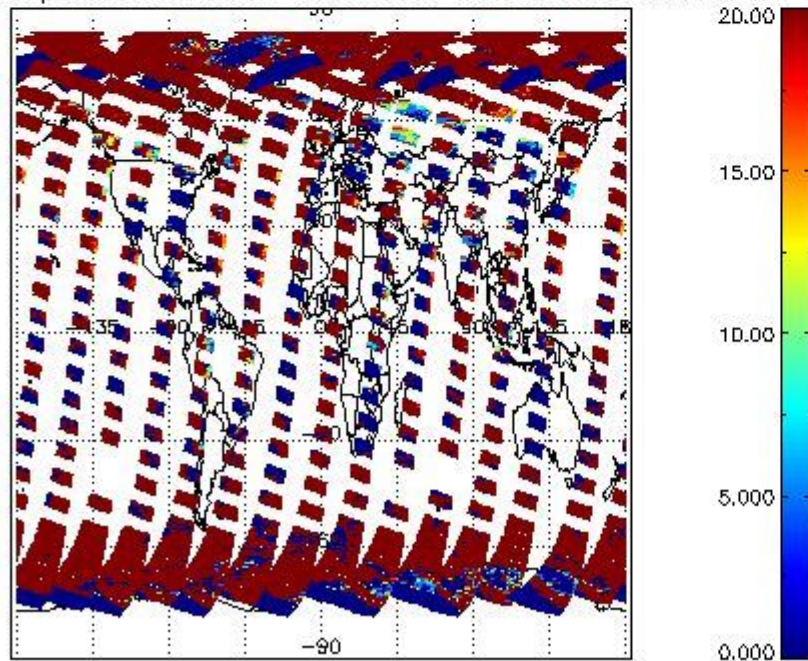
cL_frac for 09APR2009 00:00:00 to 10APR2009 00:00:00



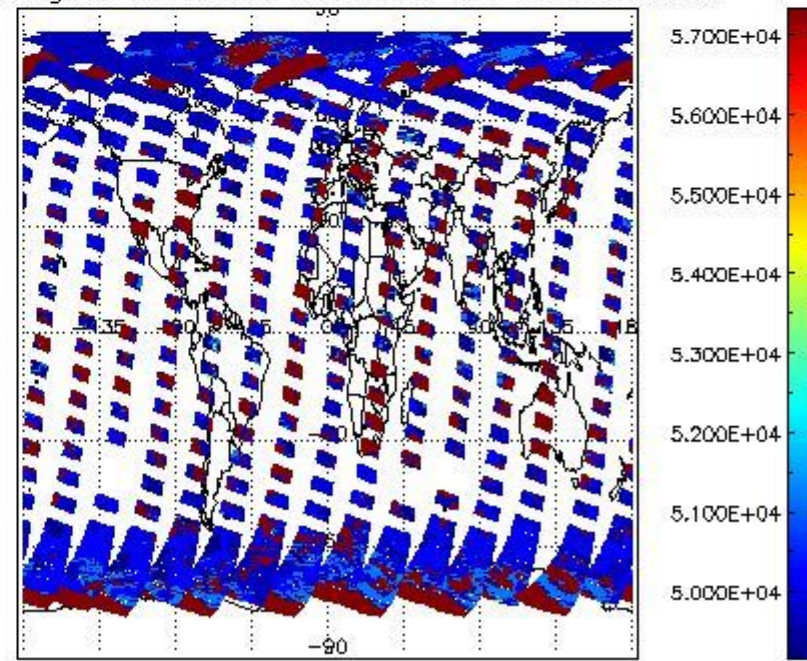
cL_top_height for 09APR2009 00:00:00 to 10APR2009 00:00:00



cL_opt_depth for 09APR2009 00:00:00 to 10APR2009 00:00:00



cloud_flags for 09APR2009 00:00:00 to 10APR2009 00:00:00



2.2.2 Nadir

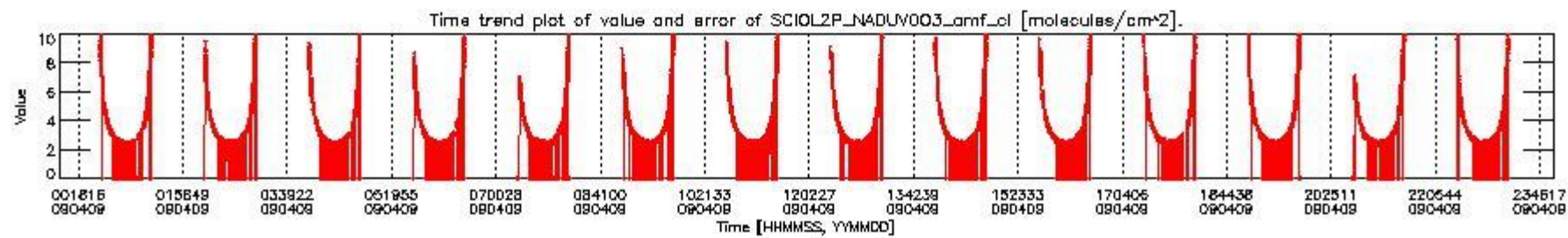
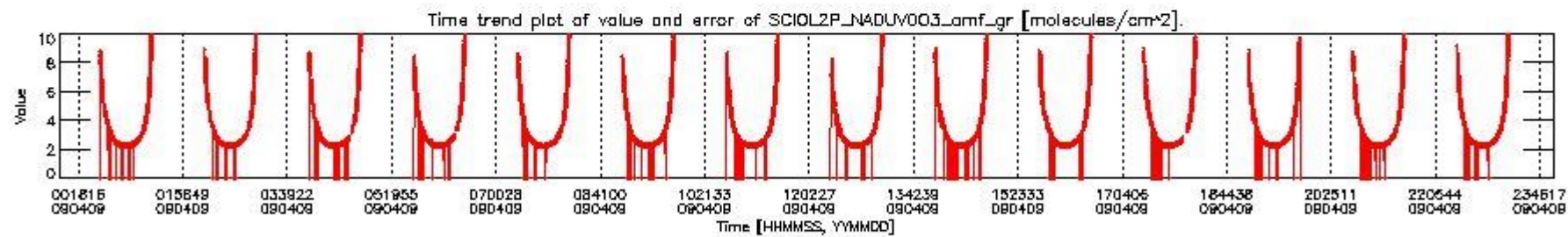
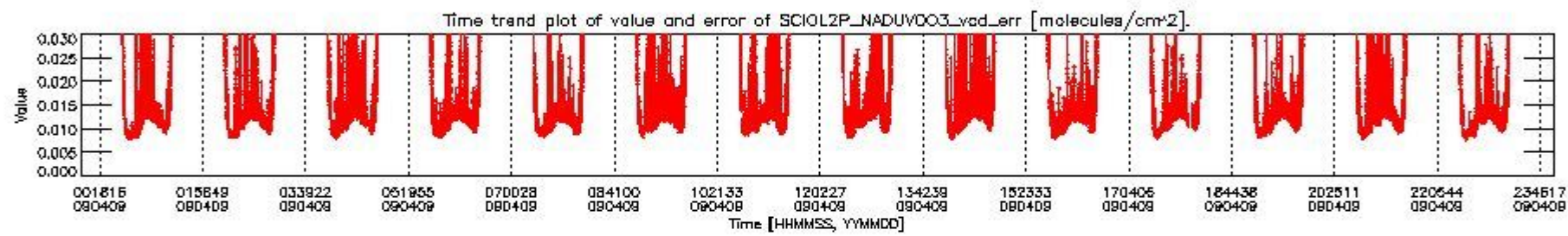
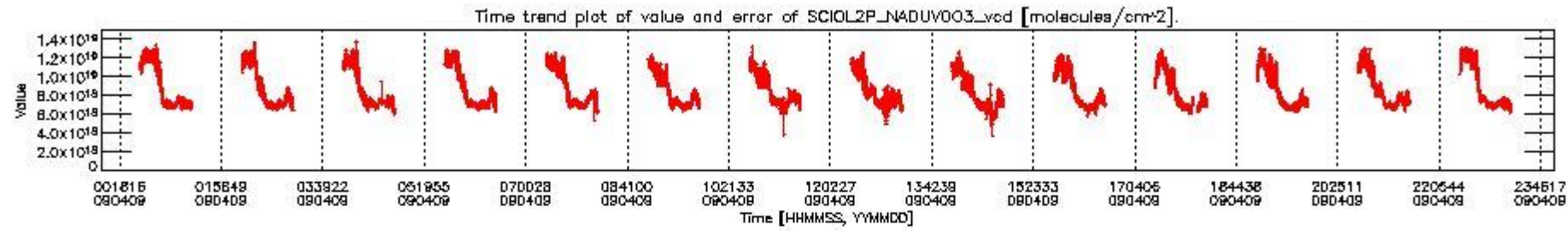
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

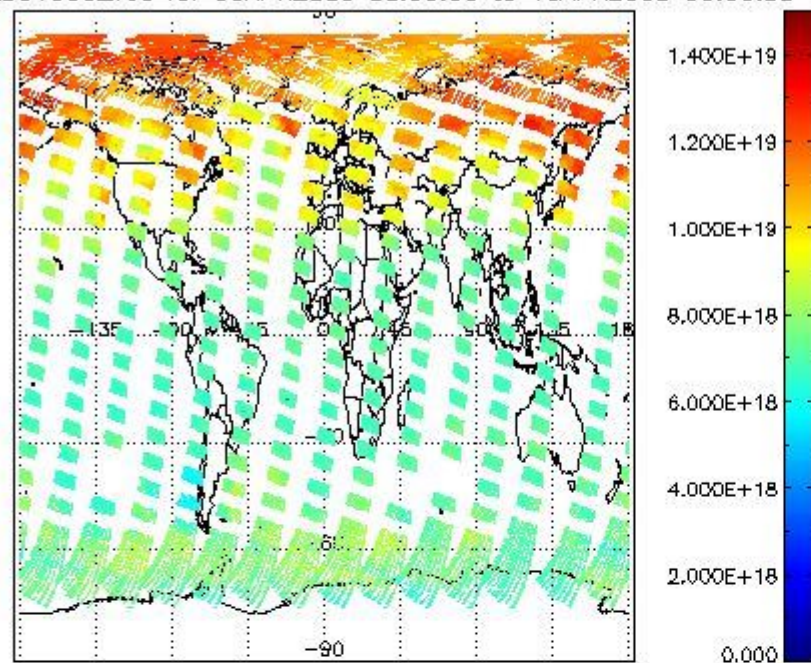
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

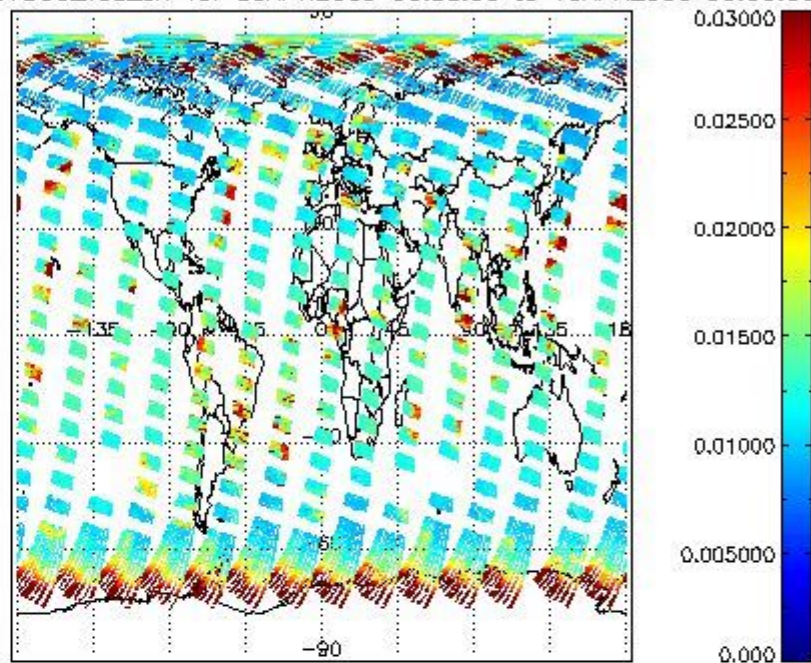
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



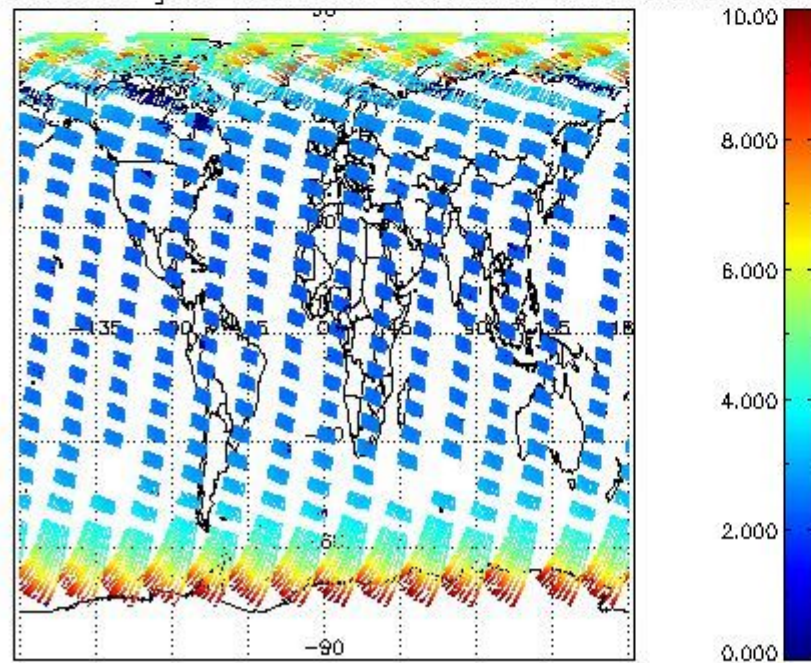
SCIOL2P_NADUV003_vcd for 09APR2009 00:00:00 to 10APR2009 00:00:00



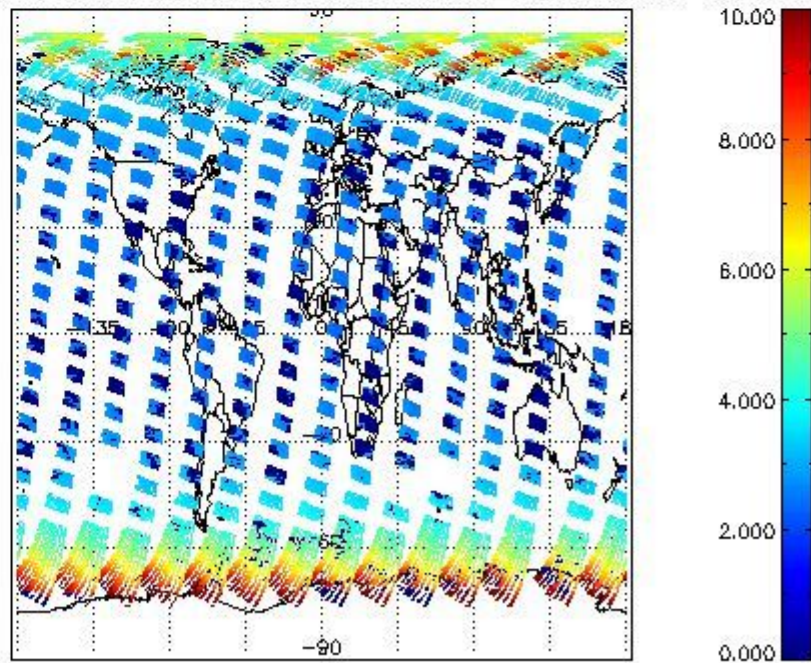
SCIOL2P_NADUV003_vcd_err for 09APR2009 00:00:00 to 10APR2009 00:00:00

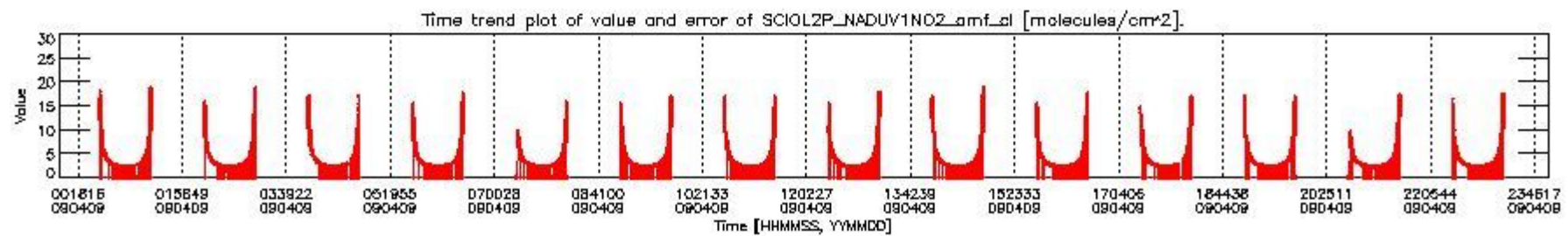
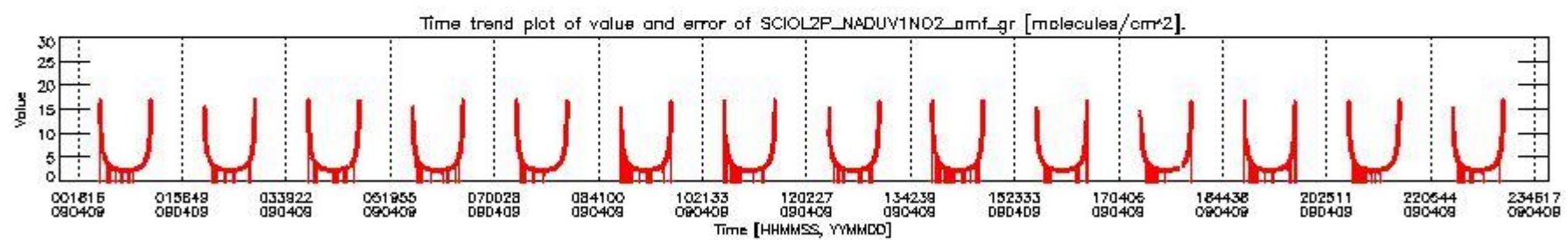
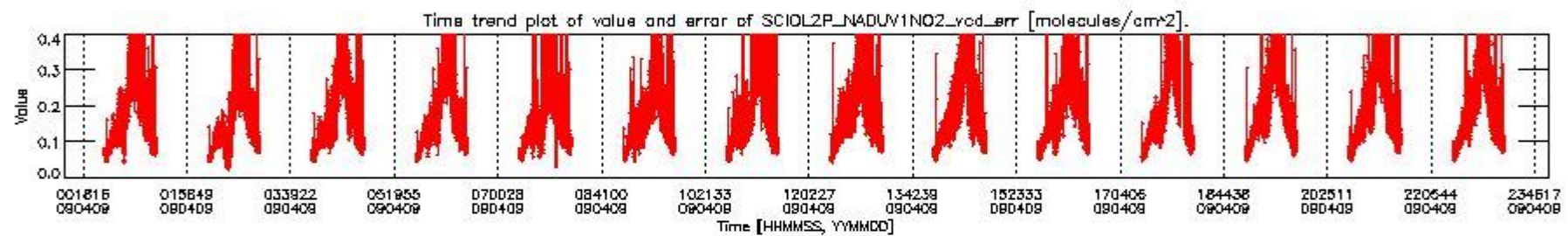
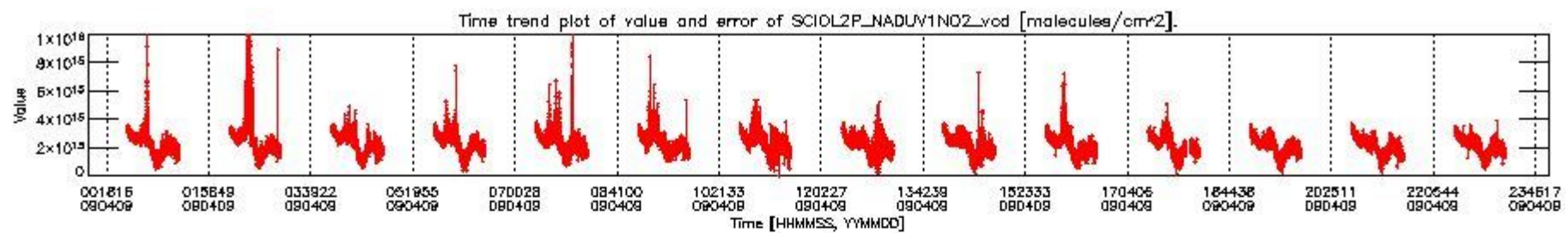


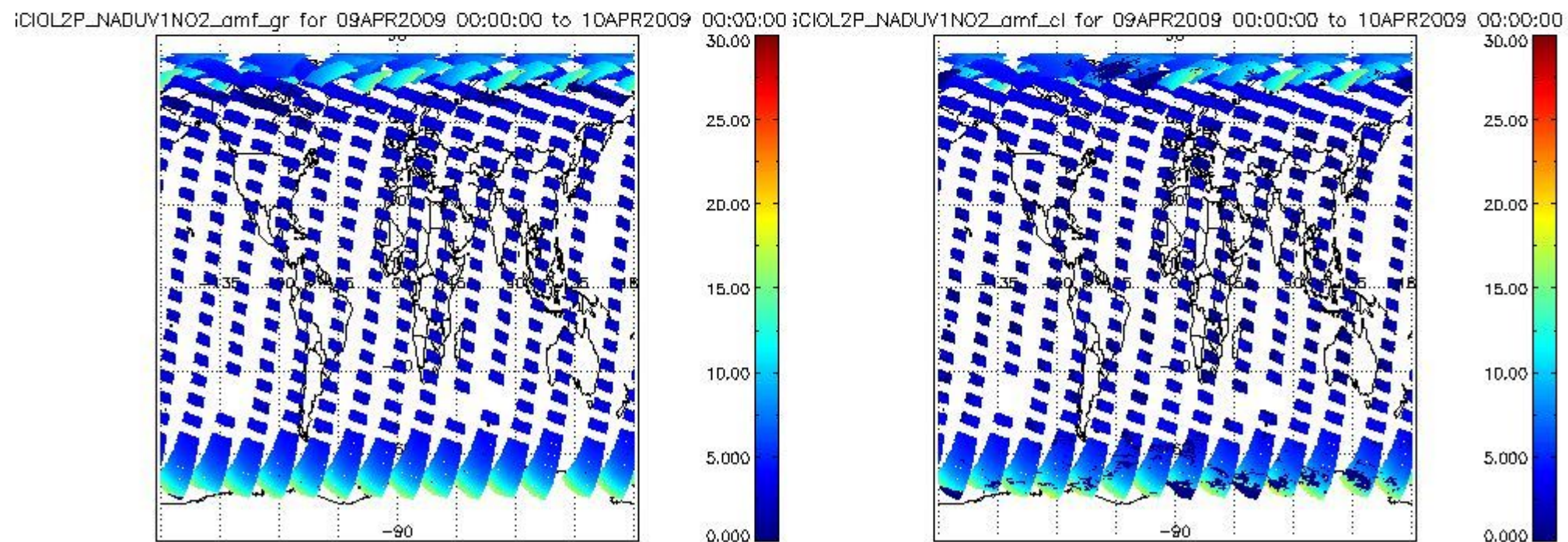
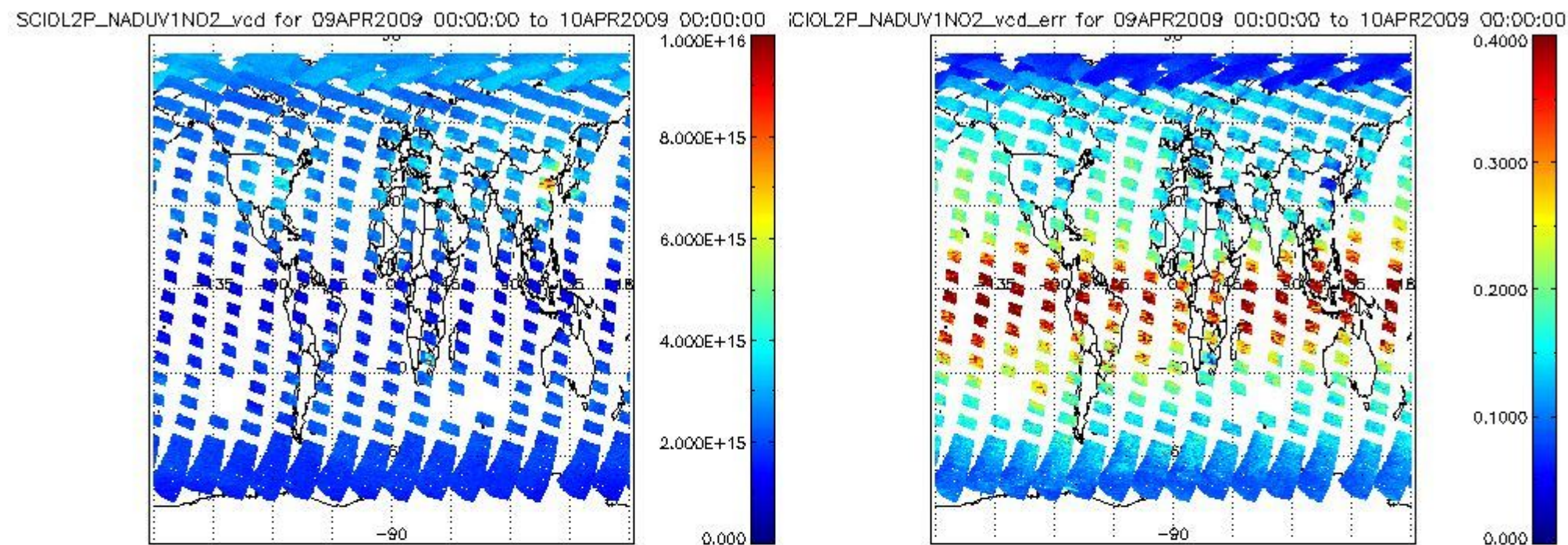
SCIOL2P_NADUV003_amf_gr for 09APR2009 00:00:00 to 10APR2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 09APR2009 00:00:00 to 10APR2009 00:00:00







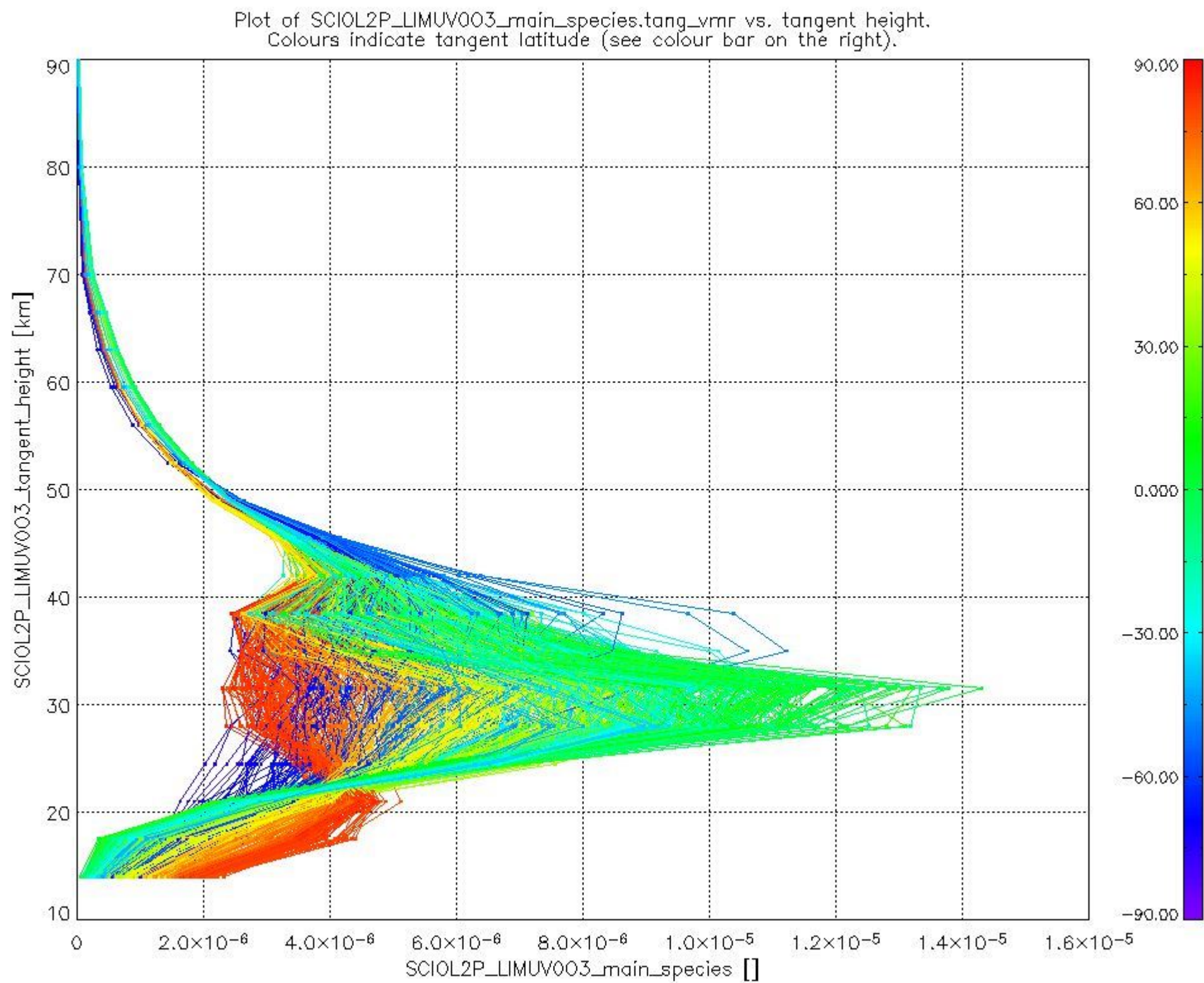
2.2.3 Limb

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

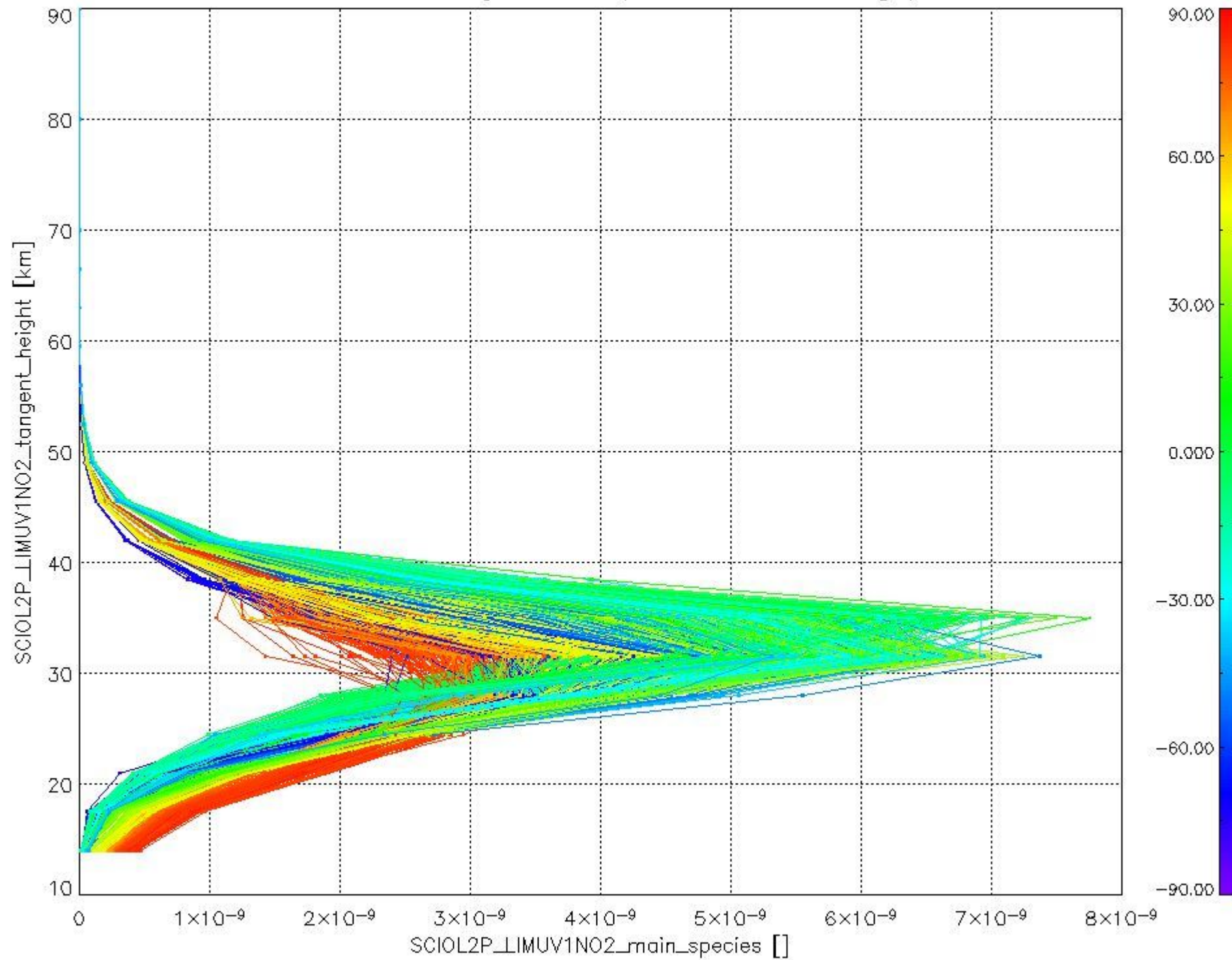
The following data items are currently included into this section:

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.



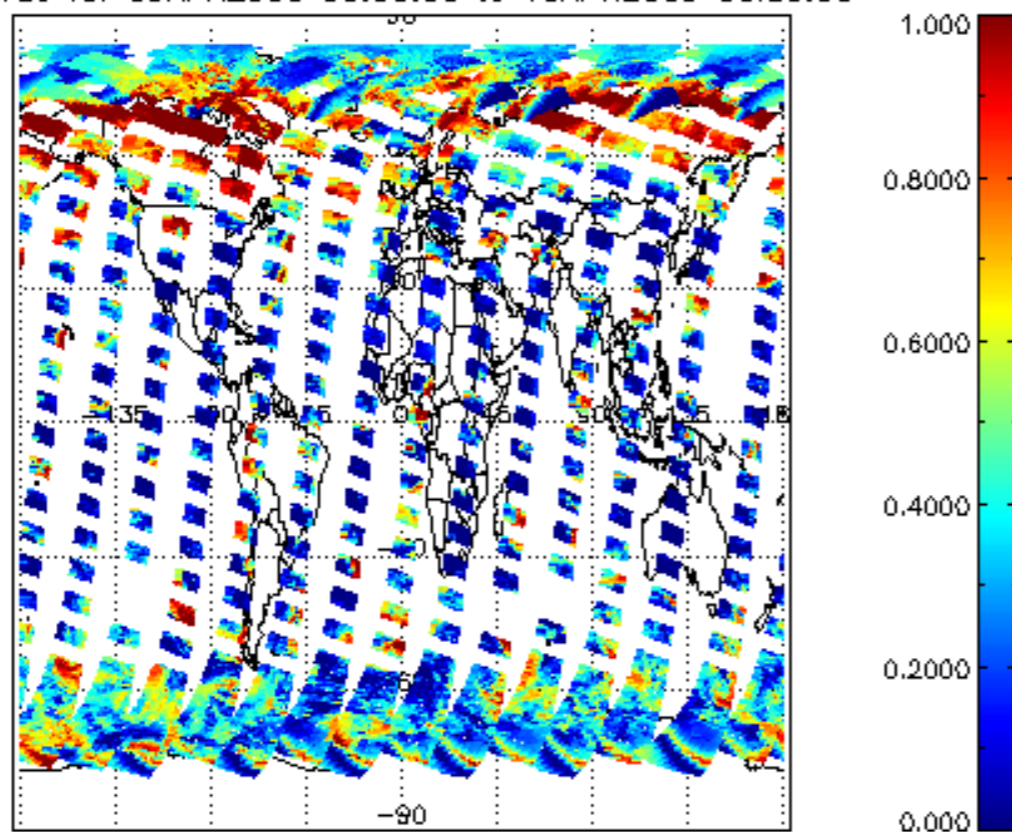
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



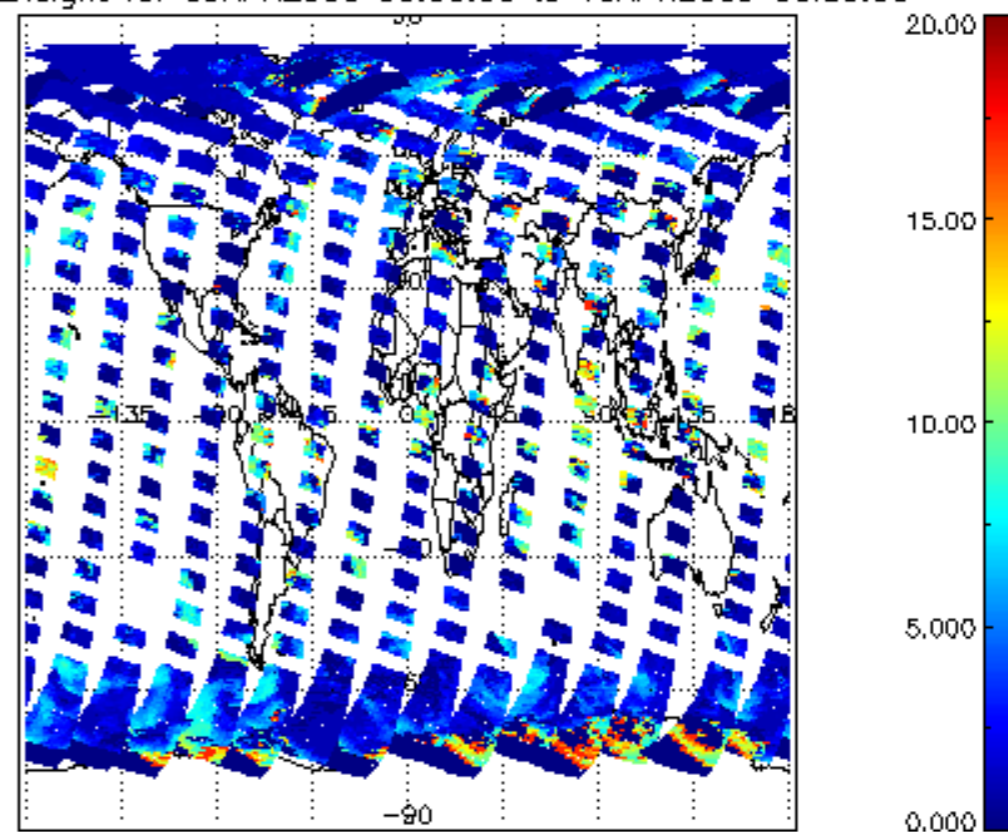
2.3 ADF monitoring

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

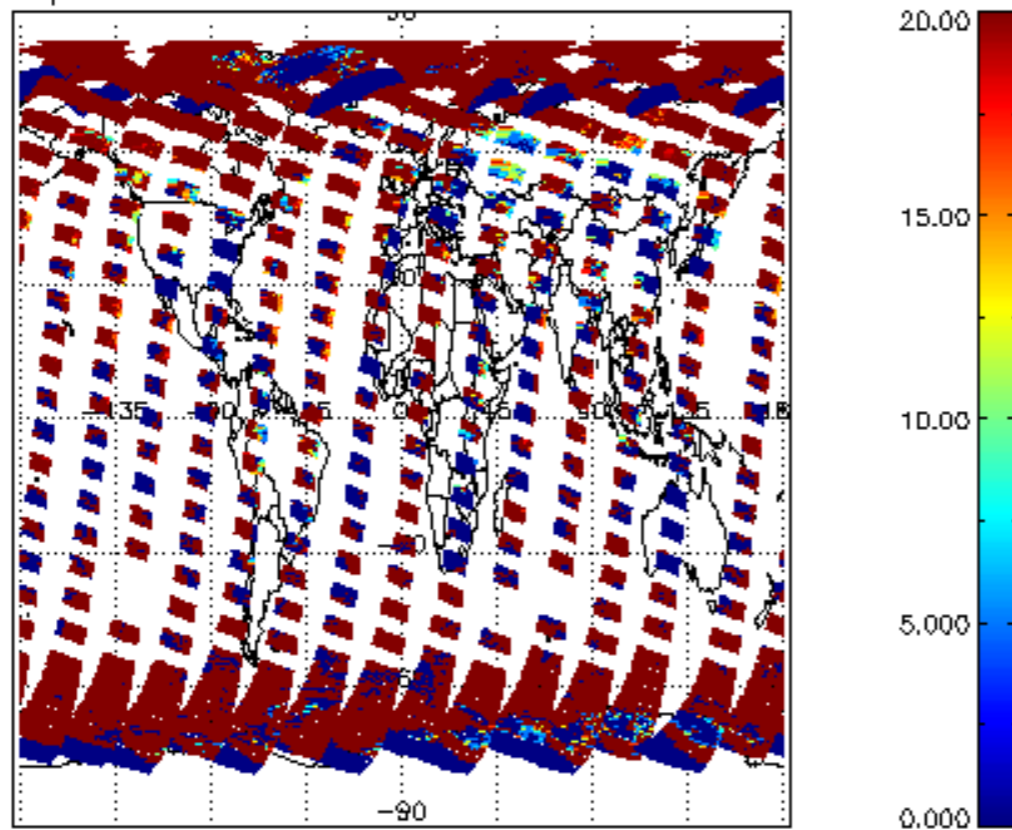
cL_frac for 09APR2009 00:00:00 to 10APR2009 00:00:00



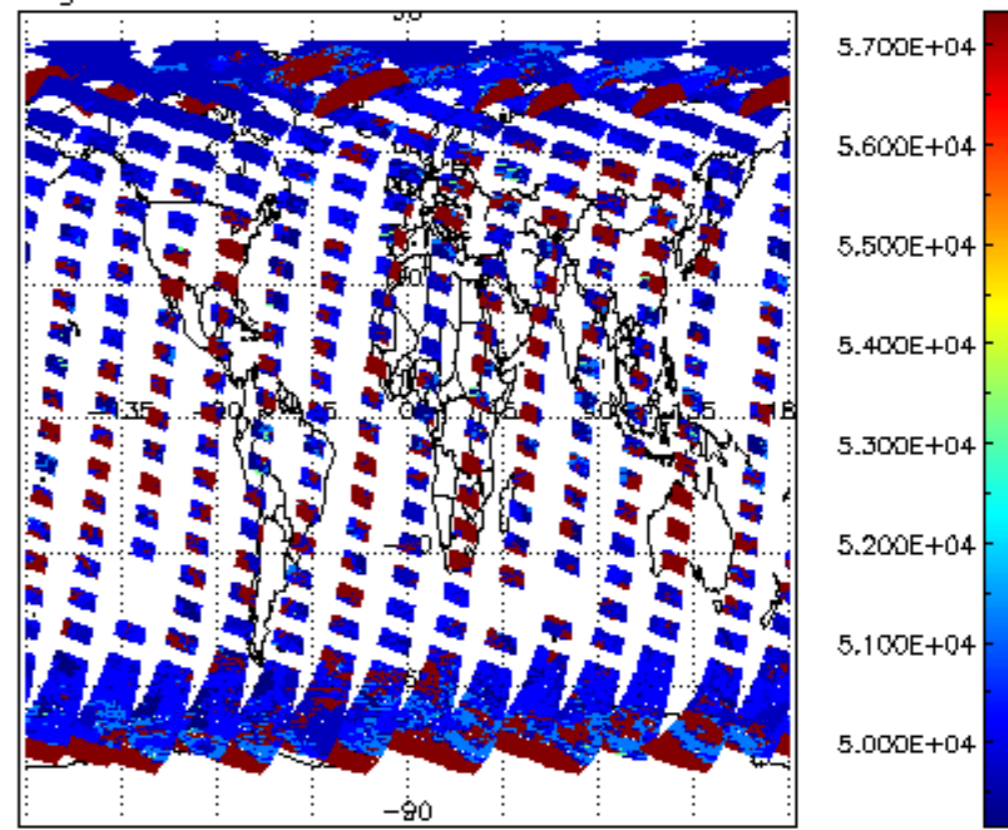
cL_top_height for 09APR2009 00:00:00 to 10APR2009 00:00:00

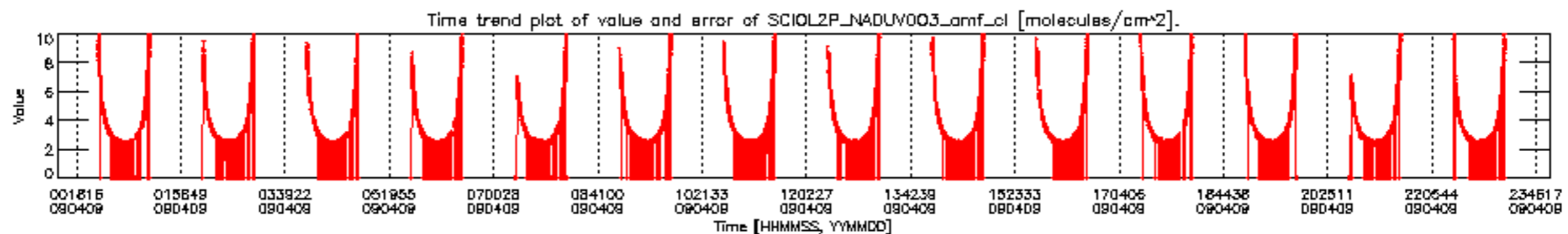
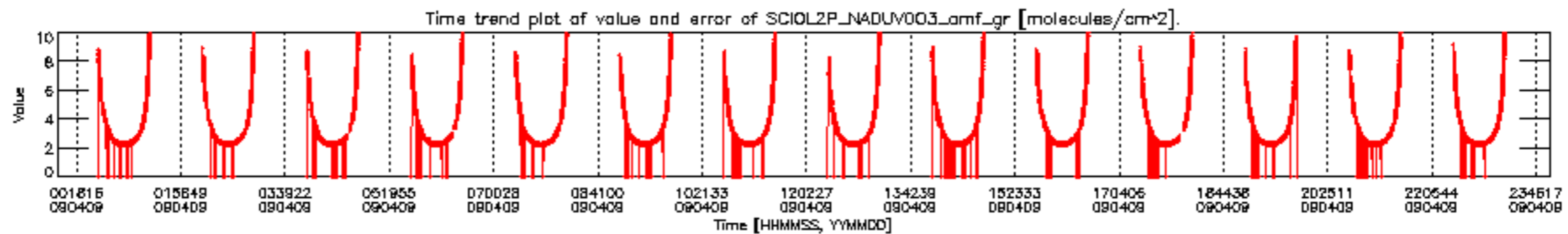
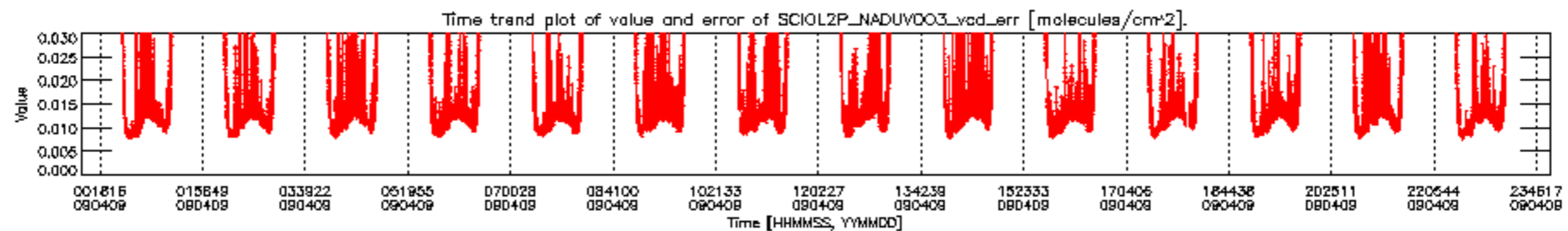
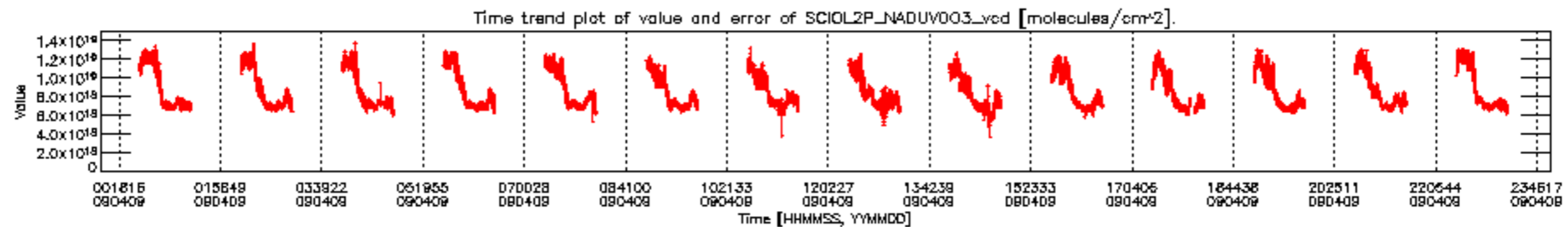


cL_opt_depth for 09APR2009 00:00:00 to 10APR2009 00:00:00

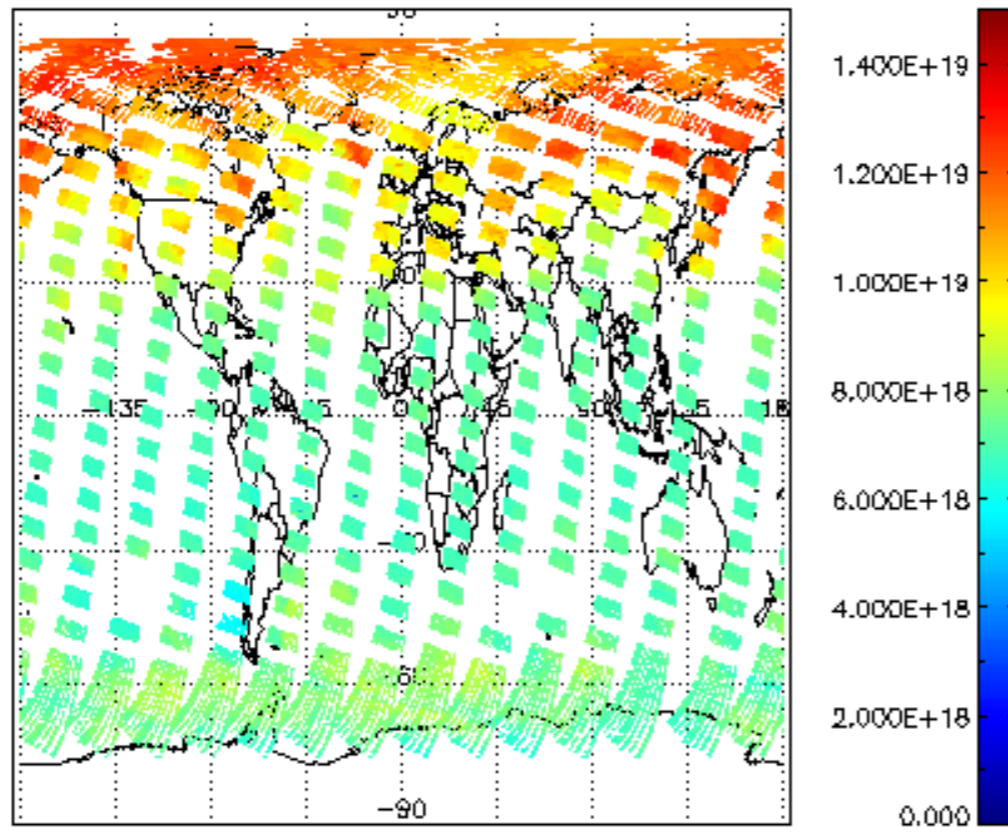


cloud_flags for 09APR2009 00:00:00 to 10APR2009 00:00:00

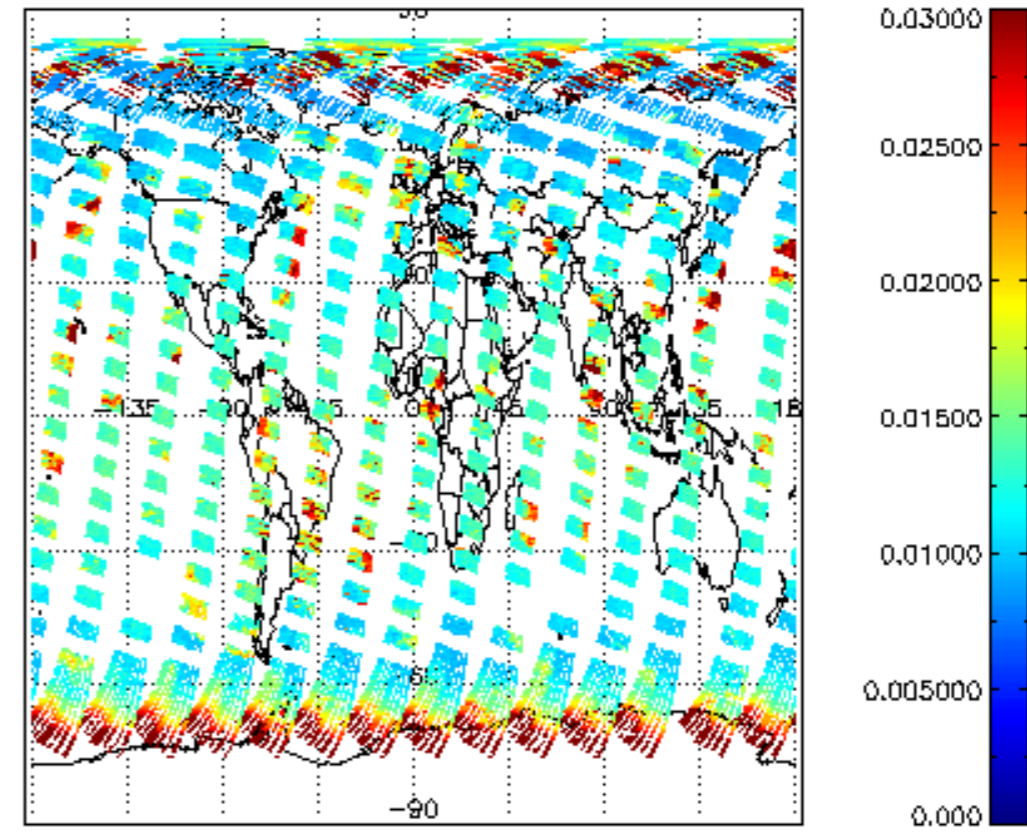




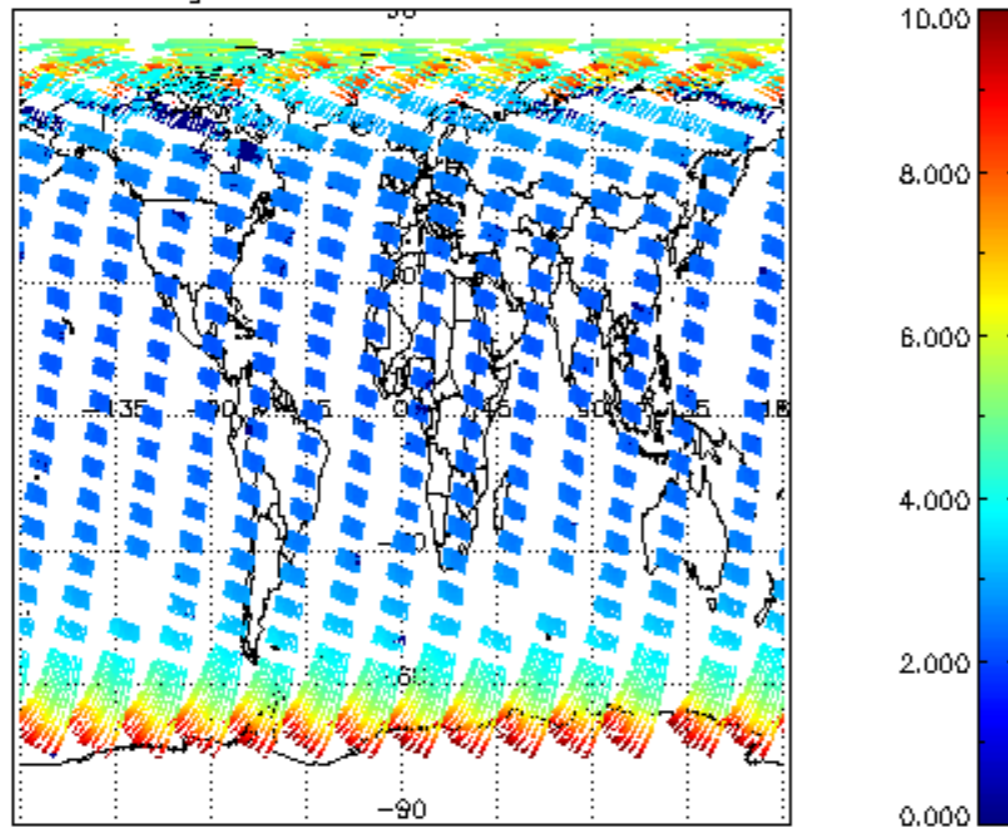
SCIOL2P_NADUV003_vcd for 09APR2009 00:00:00 to 10APR2009 00:00:00



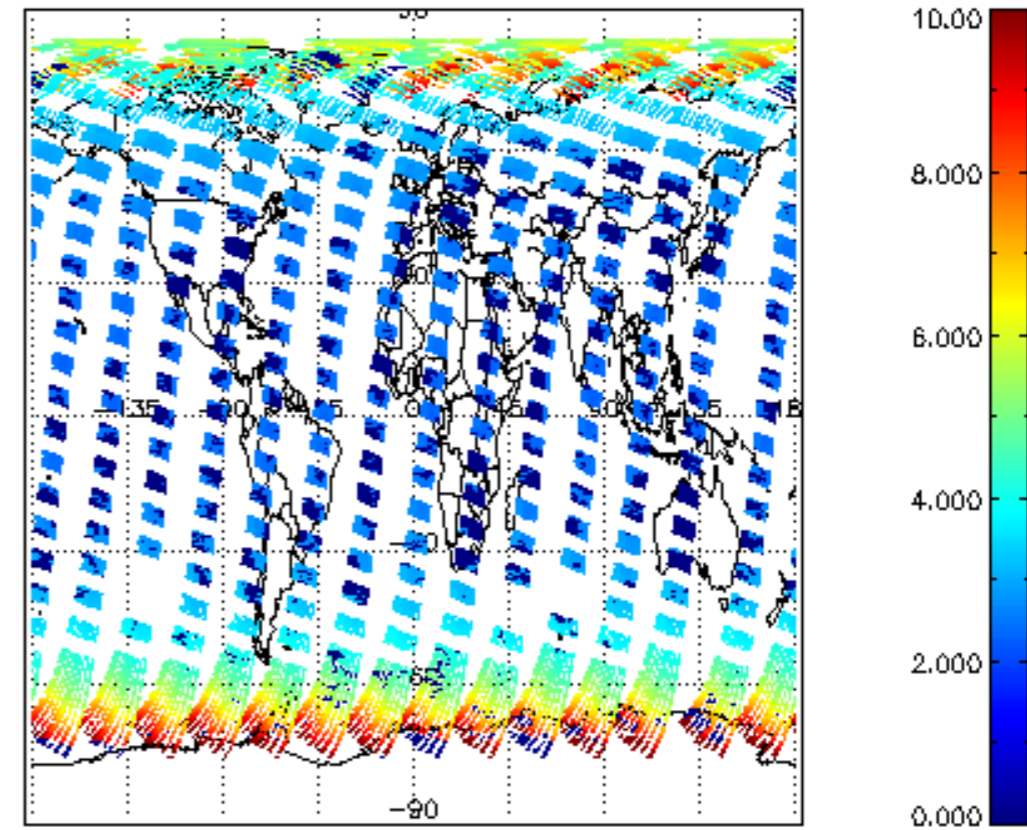
SCIOL2P_NADUV003_vcd_err for 09APR2009 00:00:00 to 10APR2009 00:00:00

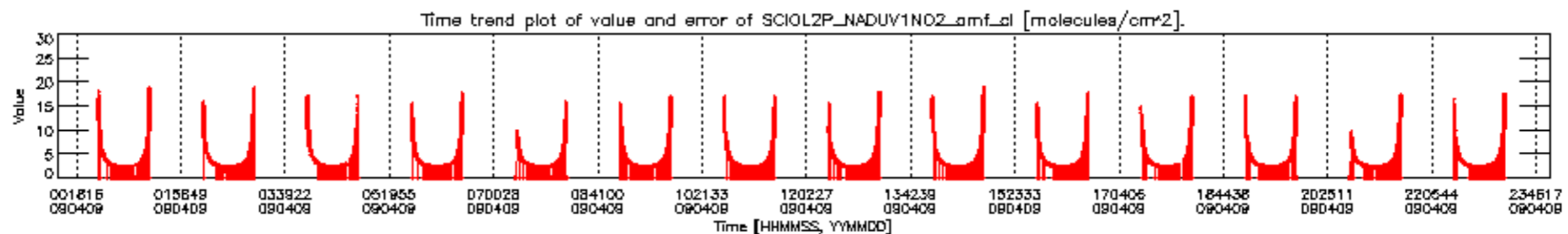
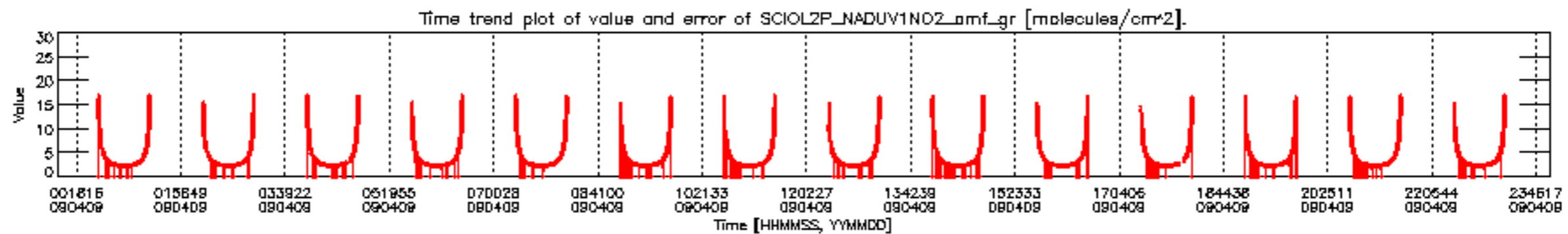
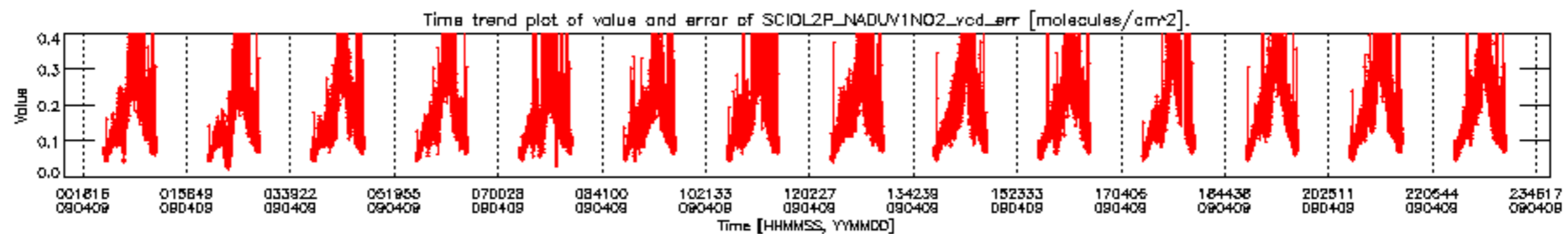
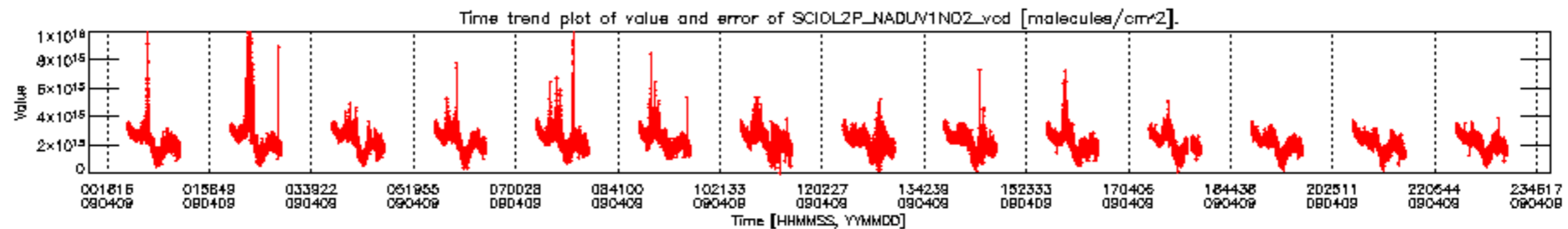


SCIOL2P_NADUV003_amf_gr for 09APR2009 00:00:00 to 10APR2009 00:00:00

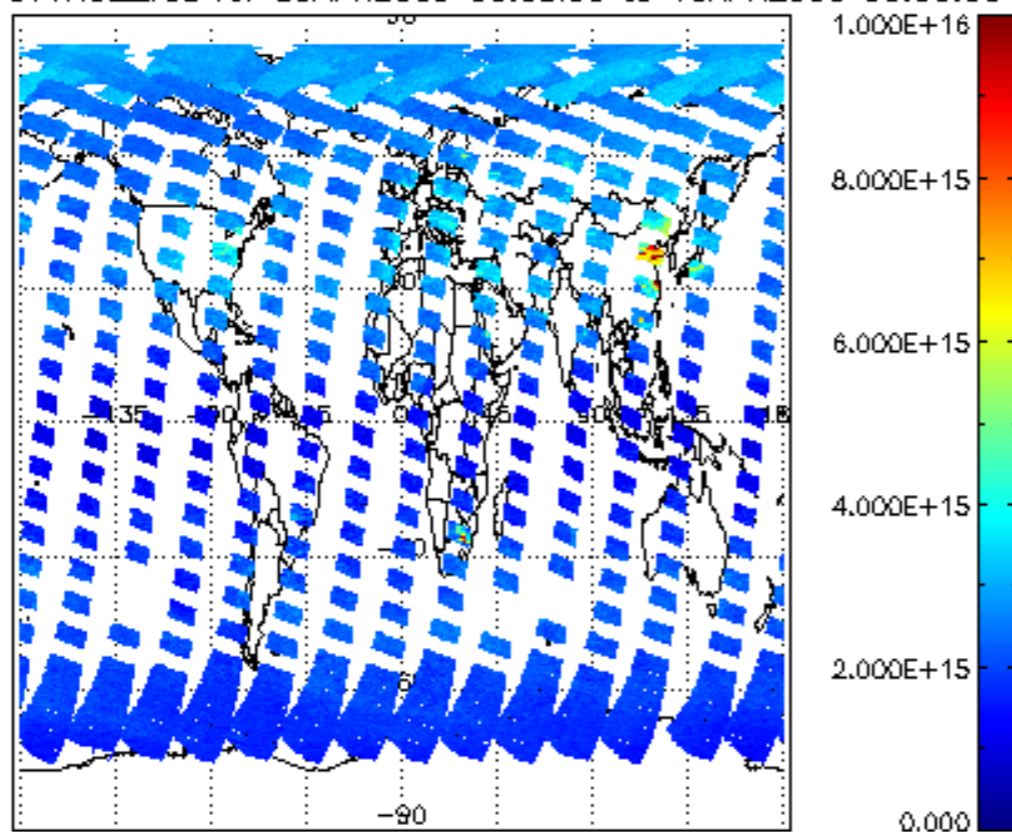


SCIOL2P_NADUV003_amf_cl for 09APR2009 00:00:00 to 10APR2009 00:00:00

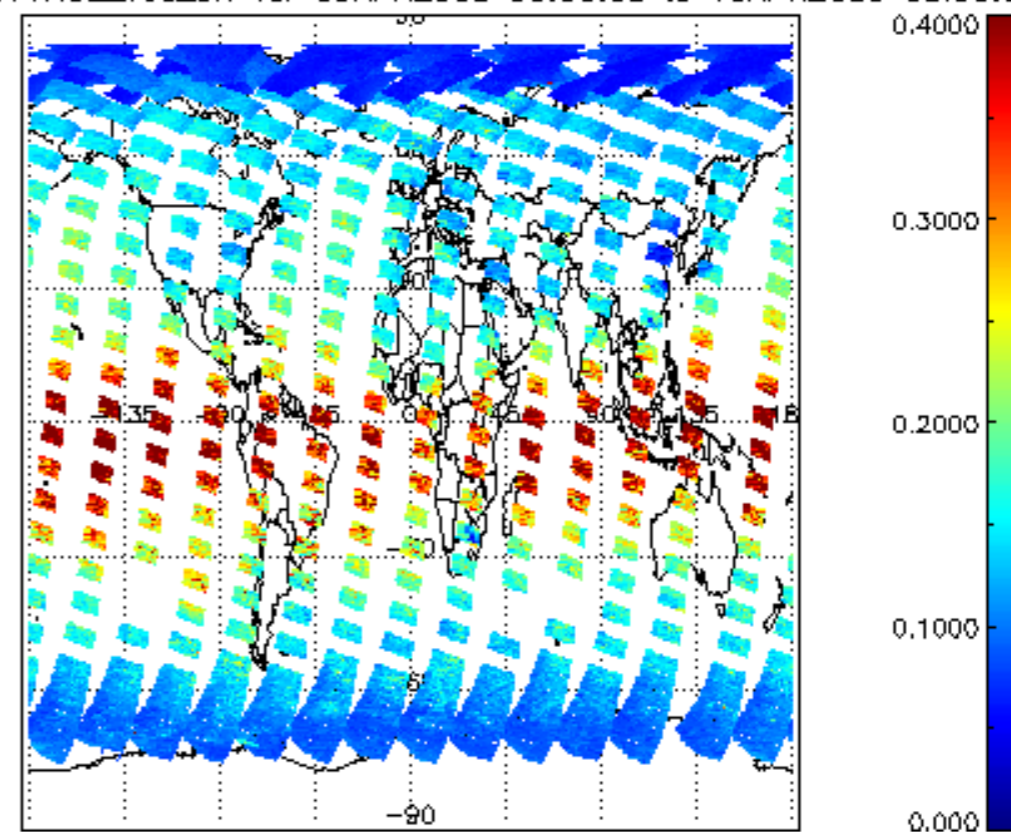




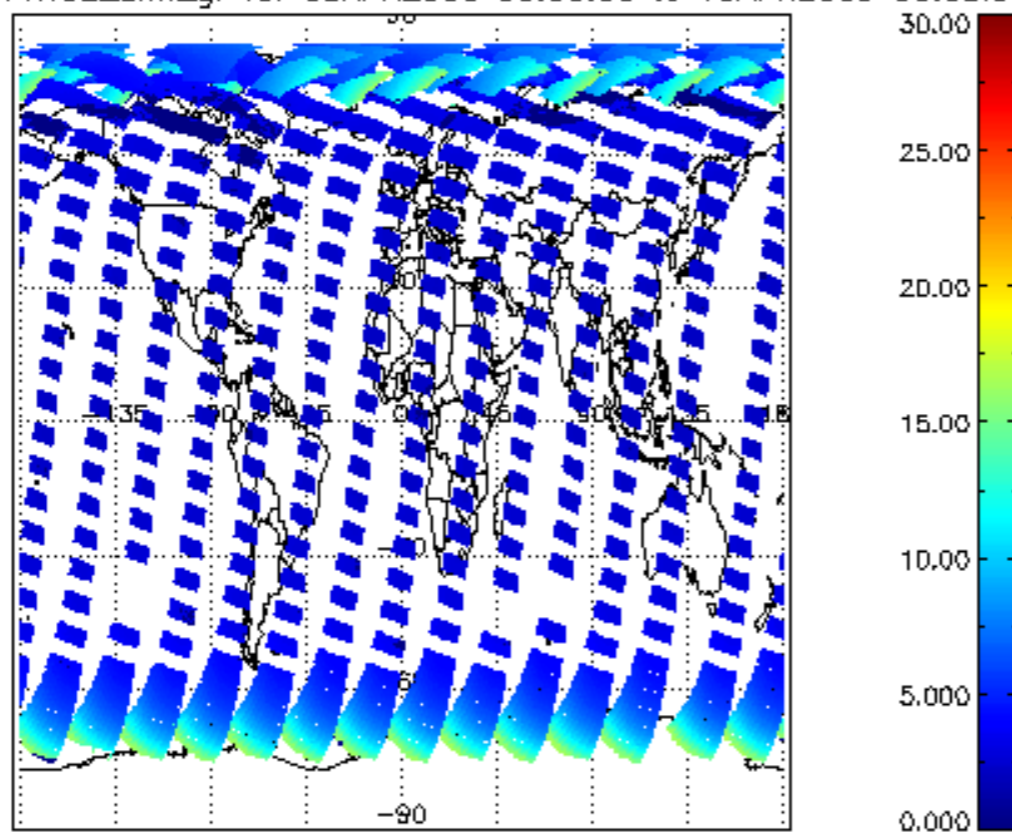
SCIOL2P_NADUV1NO2_vcd for 09APR2009 00:00:00 to 10APR2009 00:00:00



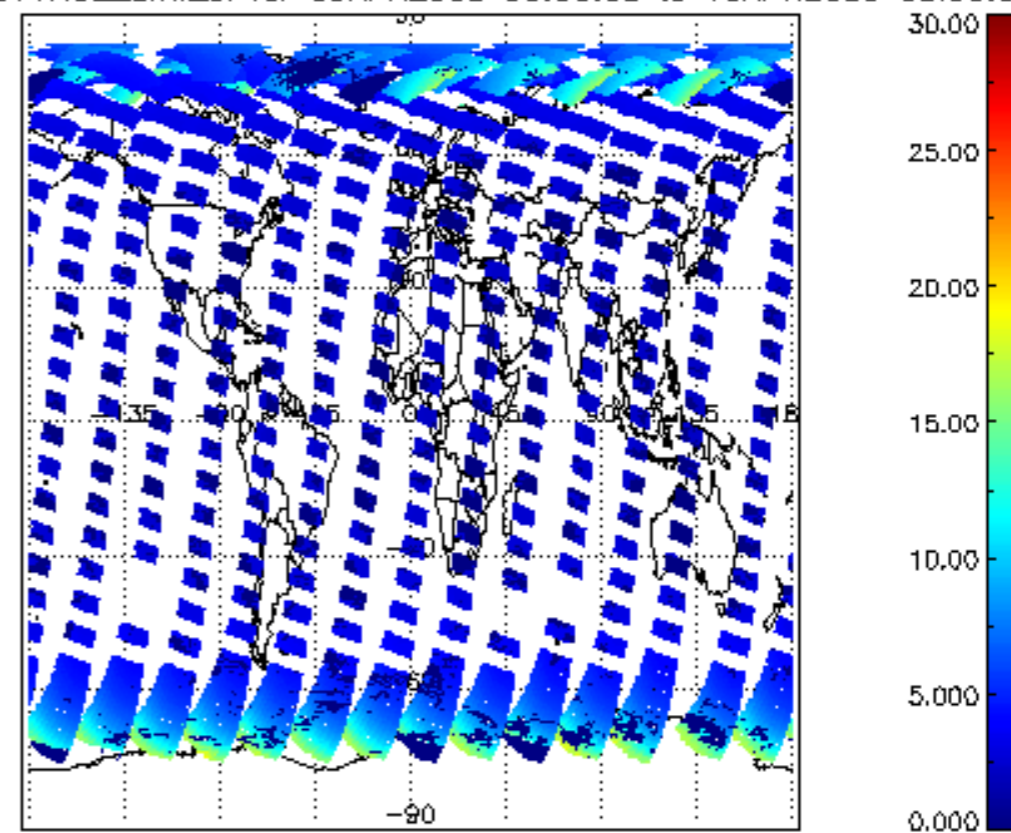
iCIOL2P_NADUV1NO2_vcd_err for 09APR2009 00:00:00 to 10APR2009 00:00:00



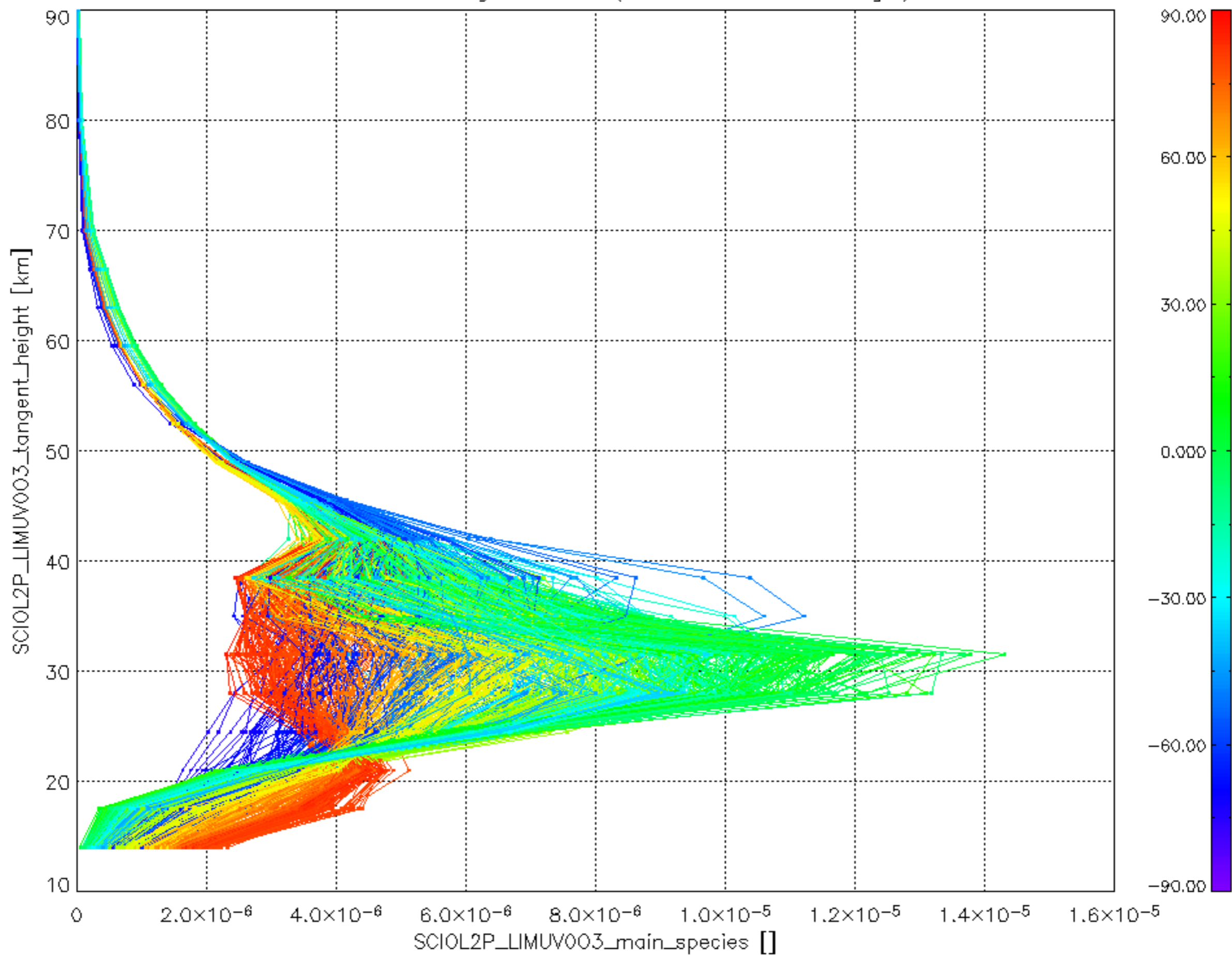
iCIOL2P_NADUV1NO2_amf_gr for 09APR2009 00:00:00 to 10APR2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 09APR2009 00:00:00 to 10APR2009 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).

