

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 14:33:22
Data source version	SCIA-OL/3.01-R
Processing scope for products	06APR2009 00:00:00 to 07APR2009 00:00:00
Start time of first product within scope	05APR2009 22:47:40
Stop time of last product within scope	06APR2009 23:11:51
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__2PRDPA20090405_224740_000031752077_00488_37115_1917.N1	05APR2009 22:47:40	05APR2009 23:40:35	0	GOOD
1	SCI_OL__2PRDPA20090406_002815_000031752077_00489_37116_1918.N1	06APR2009 00:28:15	06APR2009 01:21:11	0	GOOD
2	SCI_OL__2PRDPA20090406_020850_000031072077_00490_37117_1919.N1	06APR2009 02:08:50	06APR2009 03:00:38	0	GOOD
3	SCI_OL__2PRDPA20090406_034926_000031072077_00491_37118_1920.N1	06APR2009 03:49:26	06APR2009 04:41:13	0	GOOD
4	SCI_OL__2PRDPA20090406_053002_000031072077_00492_37119_1921.N1	06APR2009 05:30:02	06APR2009 06:21:49	0	GOOD
5	SCI_OL__2PRDPA20090406_071037_000031072077_00493_37120_1922.N1	06APR2009 07:10:37	06APR2009 08:02:24	0	GOOD
6	SCI_OL__2PRDPA20090406_085113_000031072077_00494_37121_1923.N1	06APR2009 08:51:13	06APR2009 09:43:00	0	GOOD
7	SCI_OL__2PRDPA20090406_103148_000031072077_00495_37122_1924.N1	06APR2009 10:31:48	06APR2009 11:23:35	0	GOOD
8	SCI_OL__2PRDPA20090406_121224_000031072077_00496_37123_1925.N1	06APR2009 12:12:24	06APR2009 13:04:11	0	GOOD
9	SCI_OL__2PRDPA20090406_135259_000031072077_00497_37124_1926.N1	06APR2009 13:52:59	06APR2009 14:44:46	0	GOOD
10	SCI_OL__2PRDPA20090406_153335_000033882077_00498_37125_1927.N1	06APR2009 15:33:35	06APR2009 16:30:03	0	GOOD
11	SCI_OL__2PRDPA20090406_171407_000033932077_00499_37126_1928.N1	06APR2009 17:14:07	06APR2009 18:10:40	0	GOOD
12	SCI_OL__2PRDPA20090406_185506_000033502077_00500_37127_1929.N1	06APR2009 18:55:06	06APR2009 19:50:57	0	GOOD
13	SCI_OL__2PRDPA20090406_203521_000033622077_00501_37128_1930.N1	06APR2009 20:35:21	06APR2009 21:31:24	0	GOOD
14	SCI_OL__2PRDPA20090406_221557_000033532078_00001_37129_1931.N1	06APR2009 22:15:57	06APR2009 23:11:51	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: 118300

Total number of cloud data DSRs with good quality flag (=0): 118300 (100.0 %)

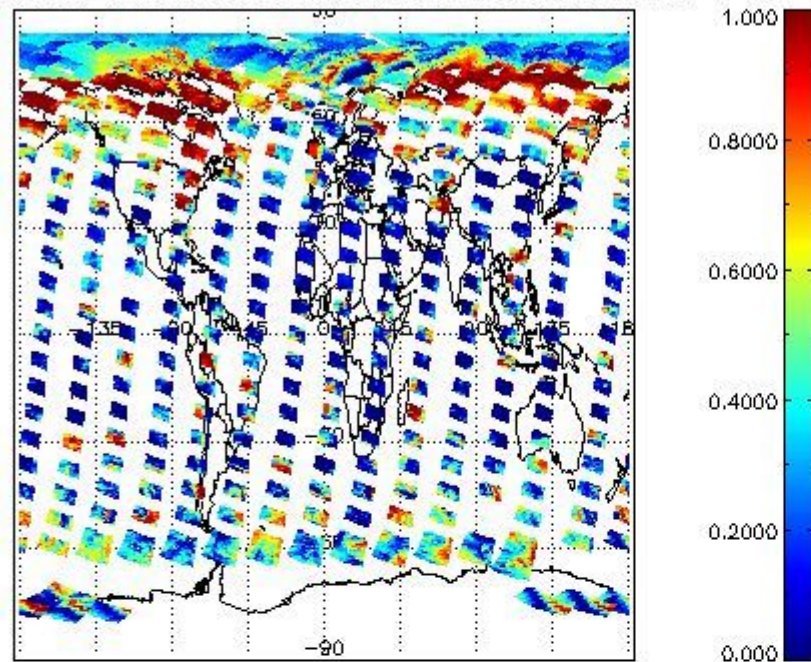
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	118300	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	118300	0.17857	0.12500	0.12500	0.25000	0.061859	s
CL_FRAC	118300	0.39373	0.36545	0.0000	1.0000	0.31544	-
CL_FRAC_ERR	118300	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	118300	5.7143	4.0000	4.0000	8.0000	1.9795	
PMD_READ_CL[0]	118300	0.37183	0.0000	0.0000	8.0000	1.2963	-
PMD_READ_CL[1]	118300	1.4320	0.0000	0.0000	8.0000	2.6789	-
CL_TOP_HEIGHT	107870	2.6147	1.2481	0.0000	17.000	3.0958	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	107870	62.851	90.472	0.0000	101.00	41.518	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	118300	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	118300	11001001	11000100	11000000	11100000	3205.6	flags
AERO_ABSO_IND	118300	4.3525	4.6998	-1.0733	15.511	1.9034	
AERO_IND_DIAG	118300	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	118300	01101000	11000000	00000000	11000000	24482.	flags

Time and geolocation plots:

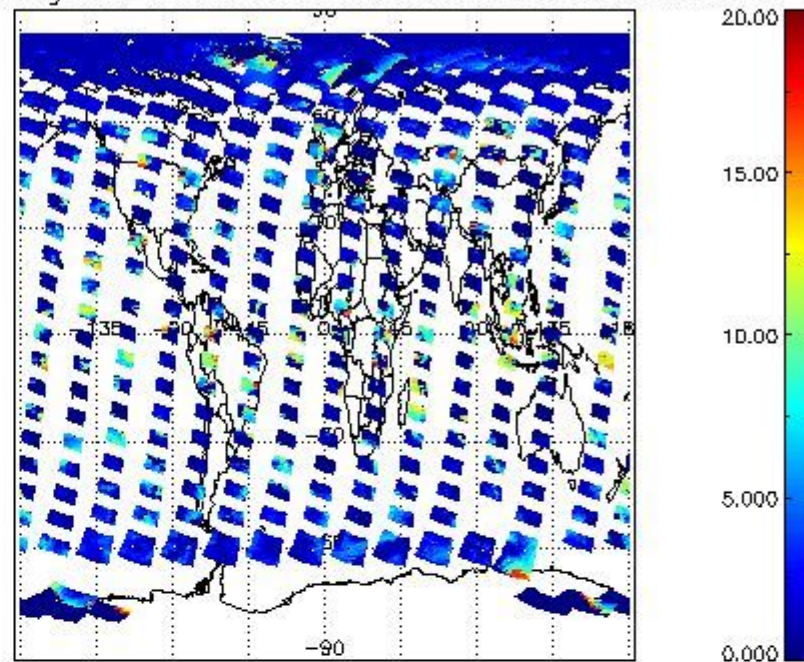
Plots are available for the following parameters:

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

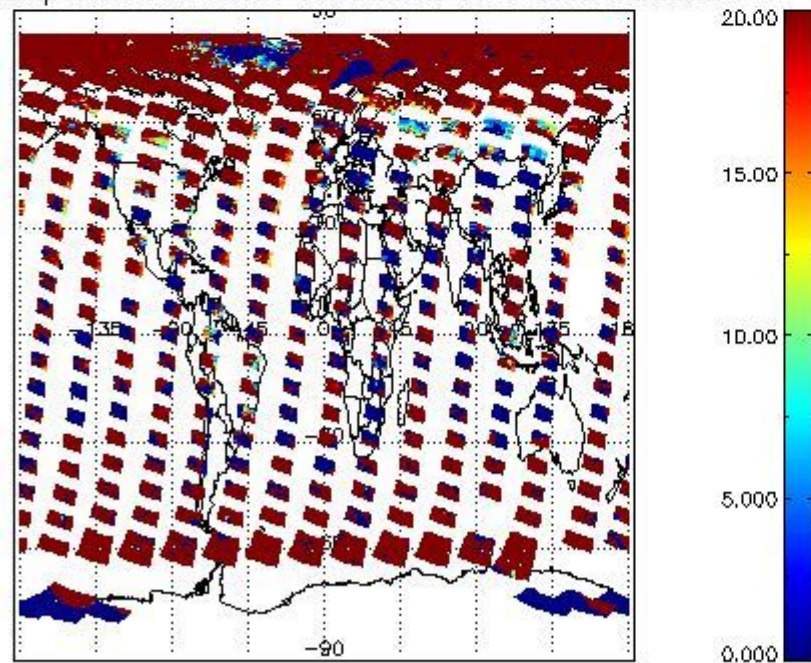
cL_frac for 06APR2009 00:00:00 to 07APR2009 00:00:00



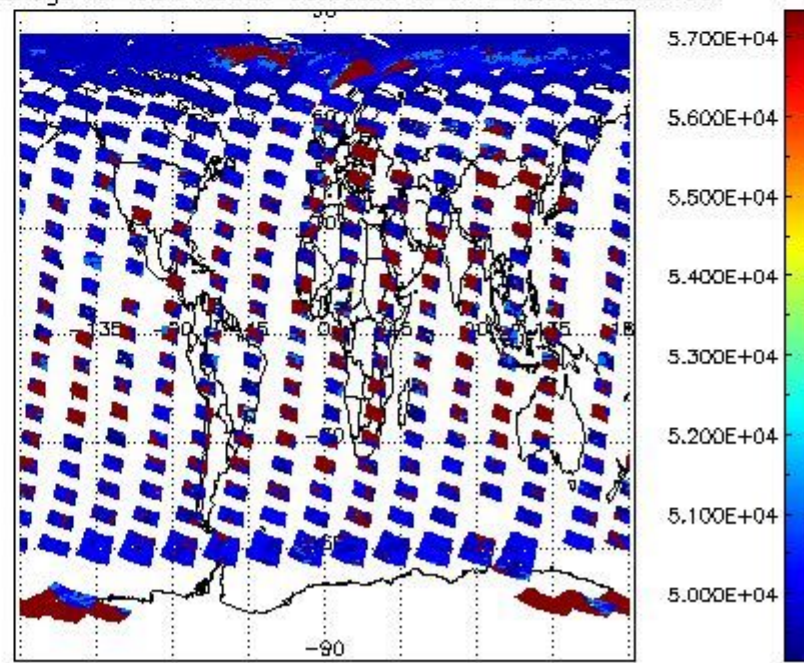
cL_top_height for 06APR2009 00:00:00 to 07APR2009 00:00:00



cL_opt_depth for 06APR2009 00:00:00 to 07APR2009 00:00:00



cloud_flags for 06APR2009 00:00:00 to 07APR2009 00:00:00



2.2.2 Nadir

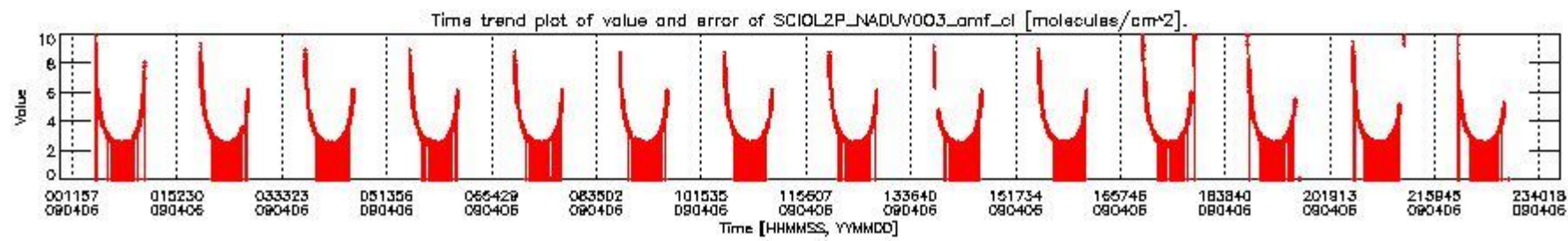
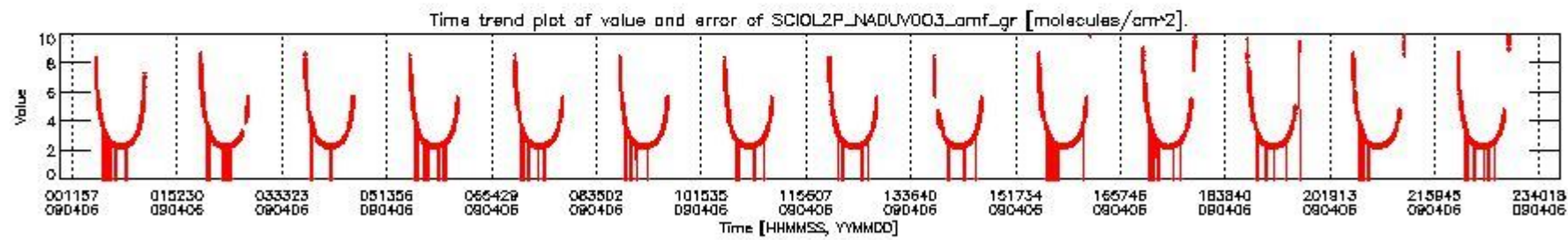
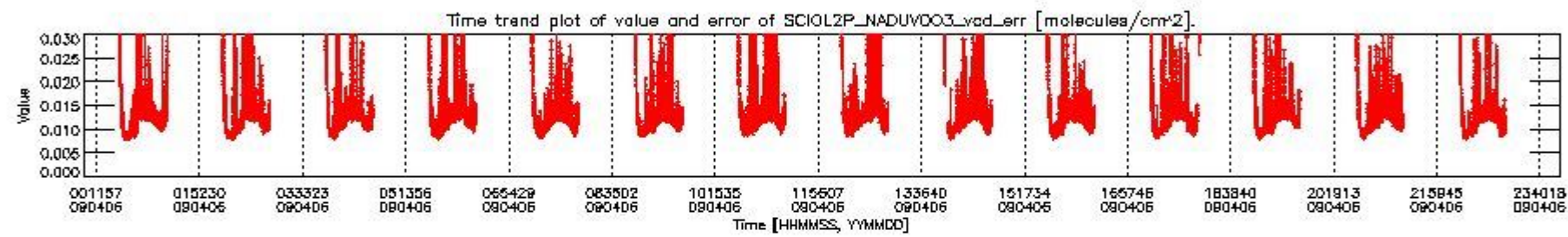
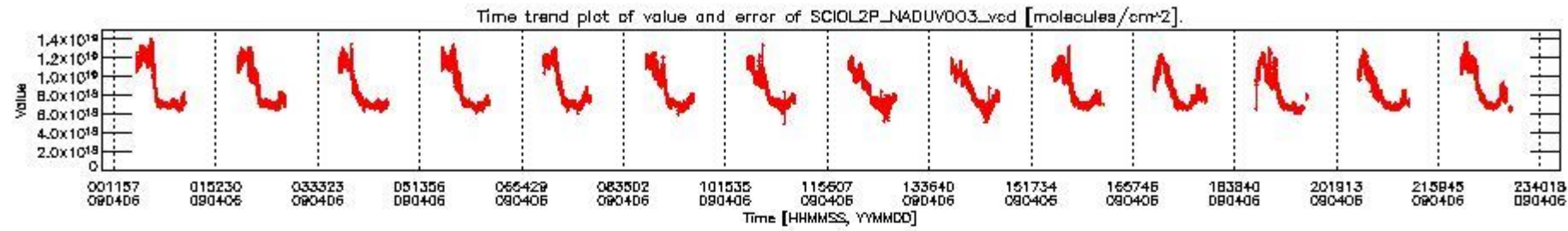
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

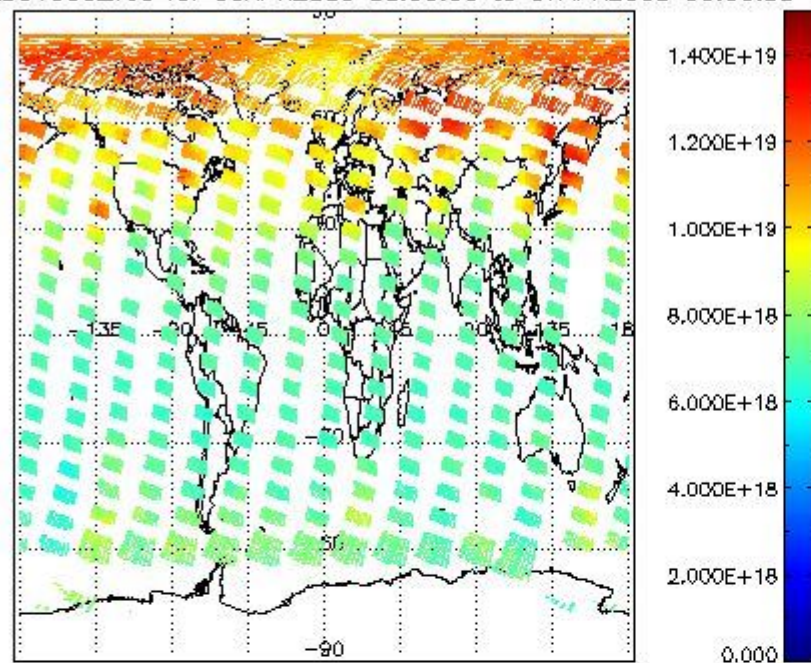
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

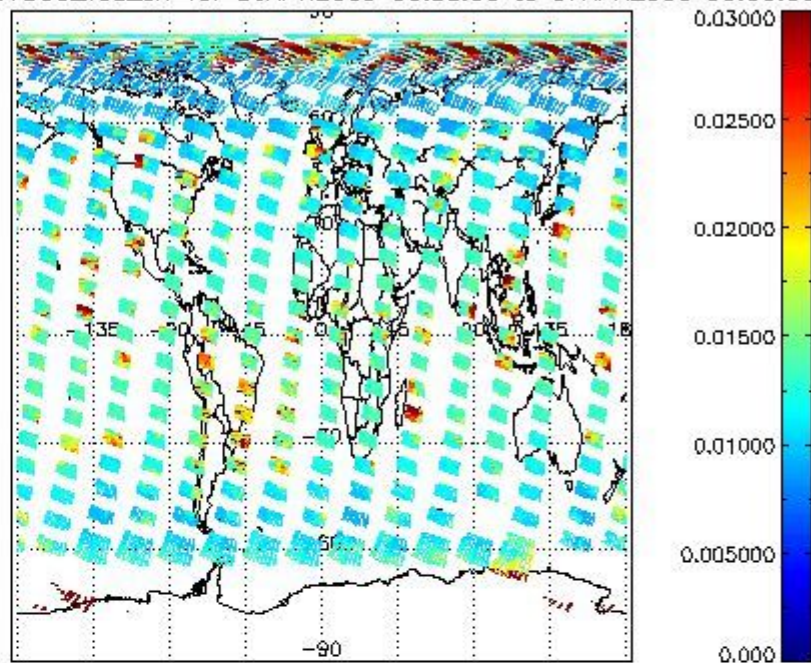
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



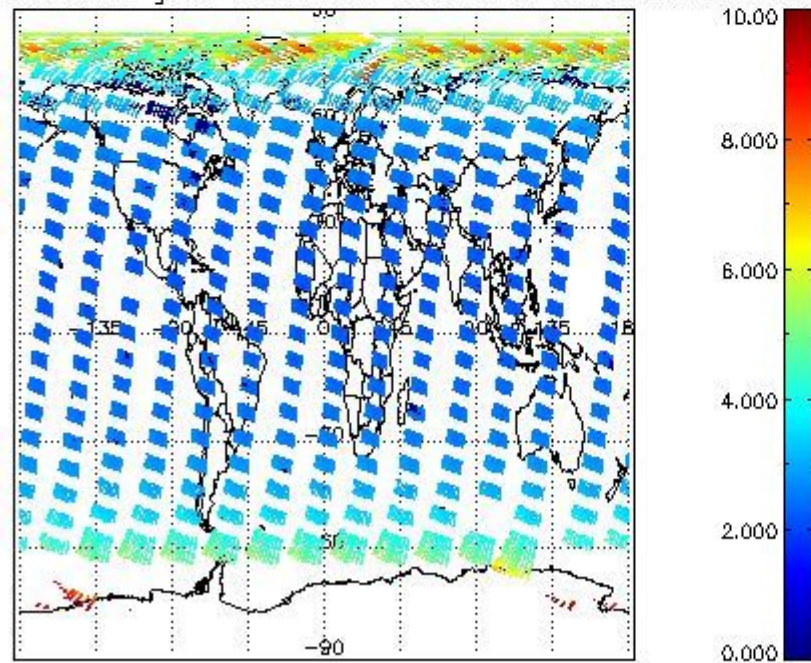
SCIOL2P_NADUV003_vcd for 06APR2009 00:00:00 to 07APR2009 00:00:00



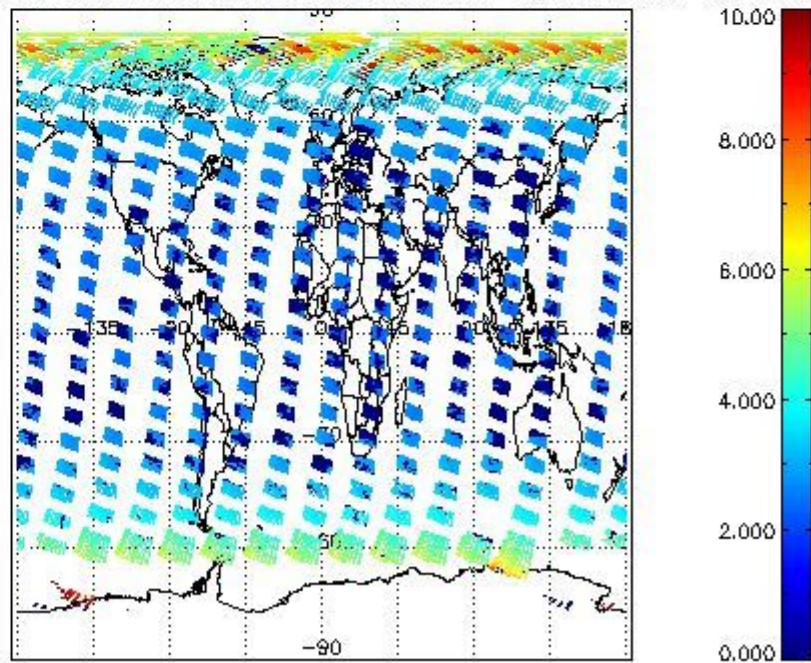
SCIOL2P_NADUV003_vcd_err for 06APR2009 00:00:00 to 07APR2009 00:00:00

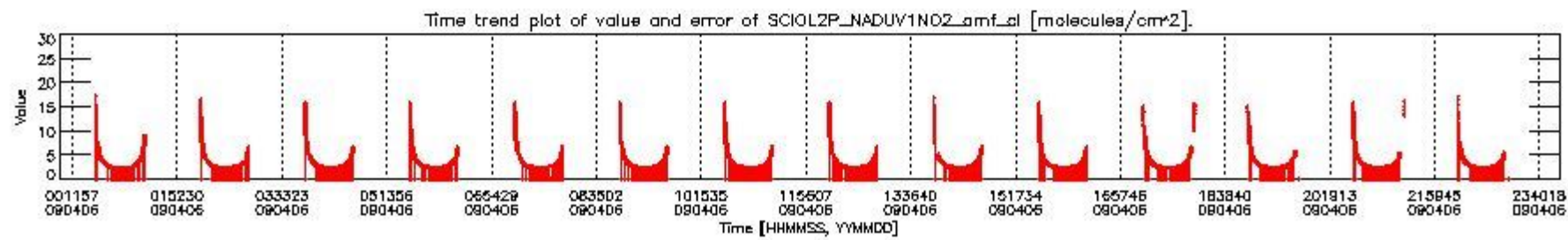
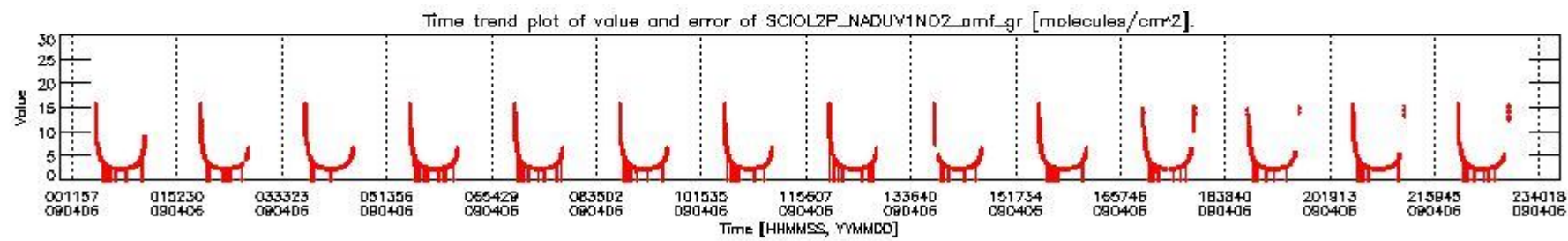
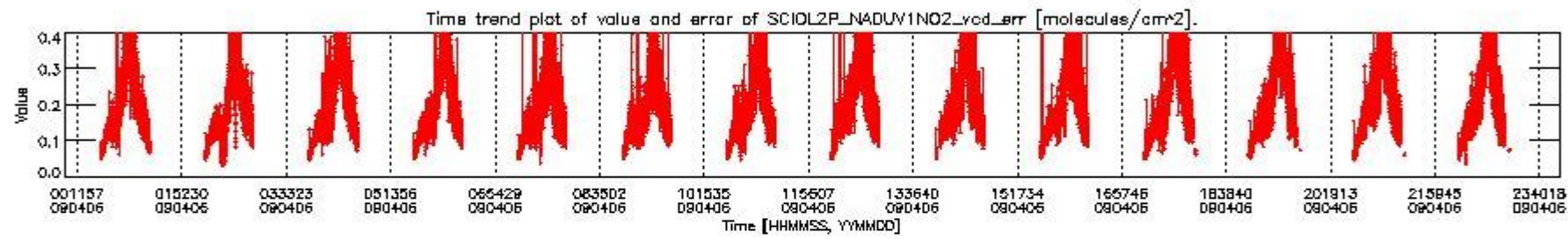
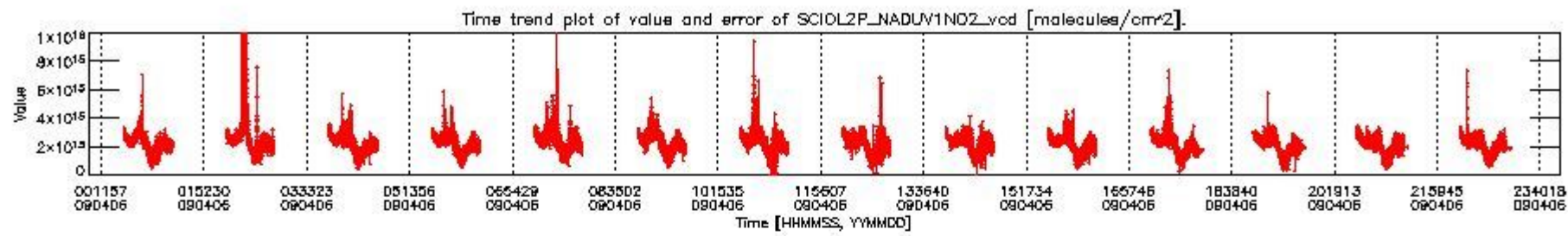


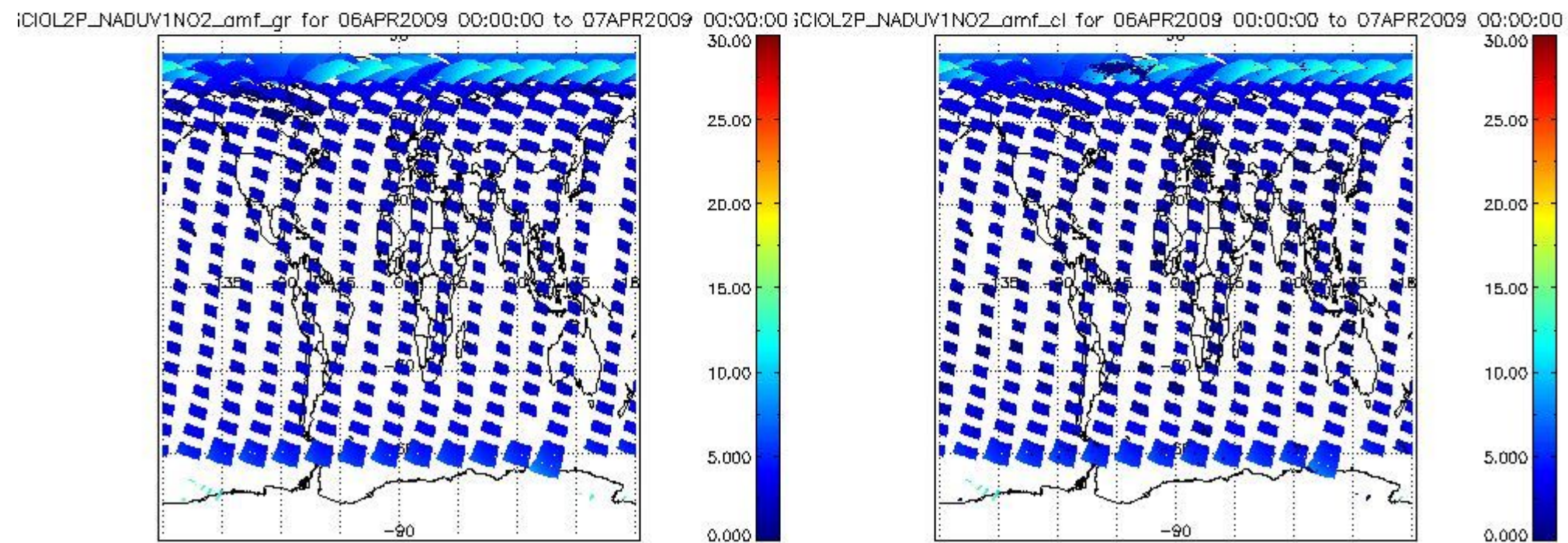
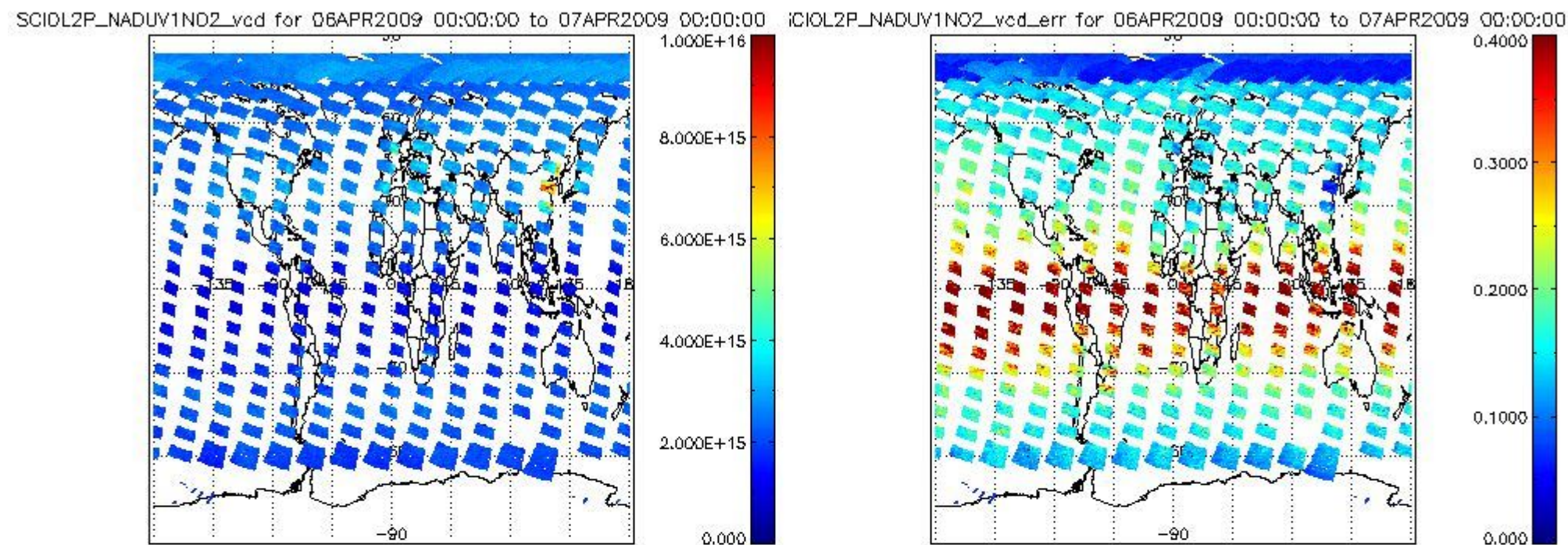
SCIOL2P_NADUV003_amf_gr for 06APR2009 00:00:00 to 07APR2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 06APR2009 00:00:00 to 07APR2009 00:00:00







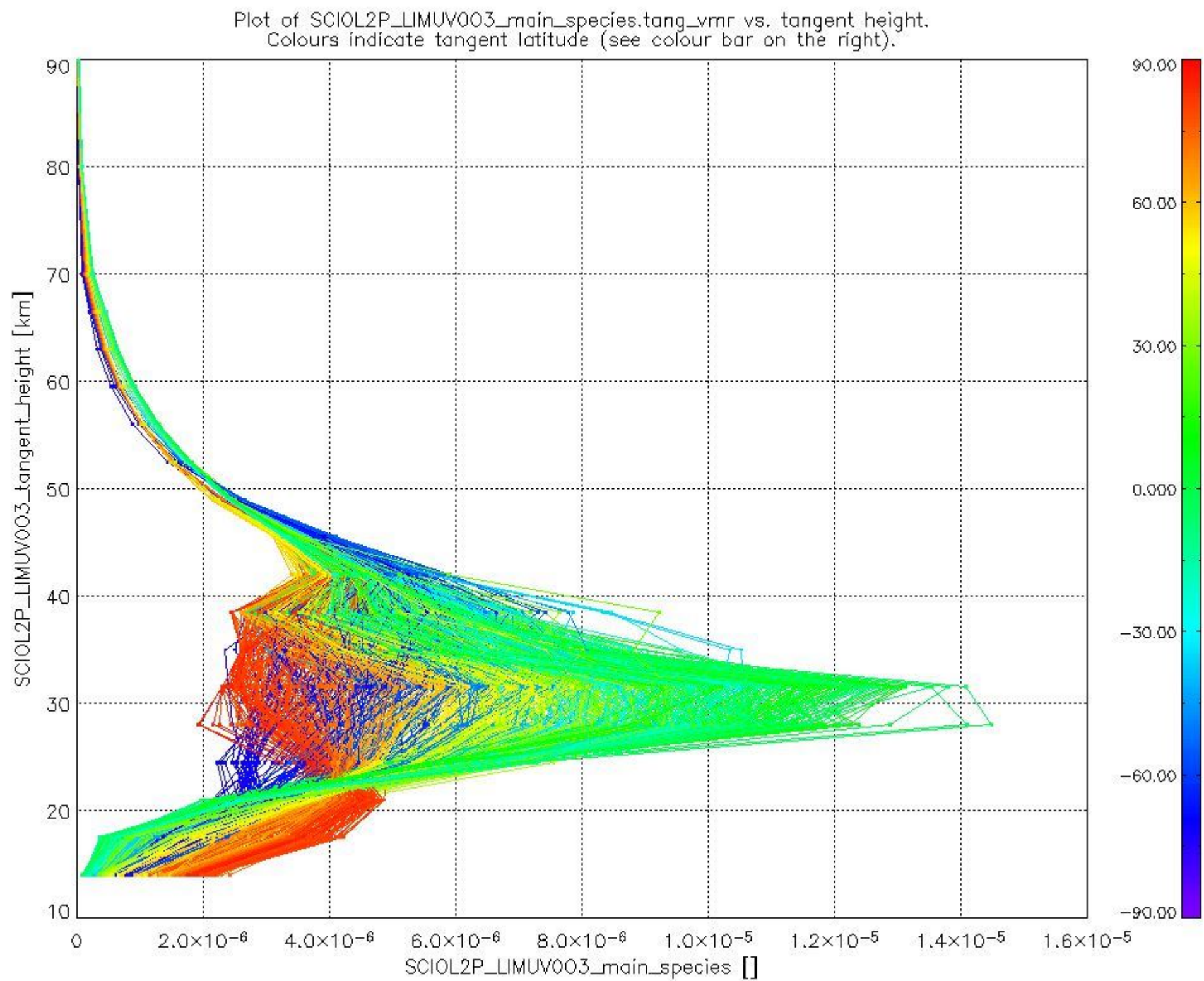
2.2.3 Limb

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

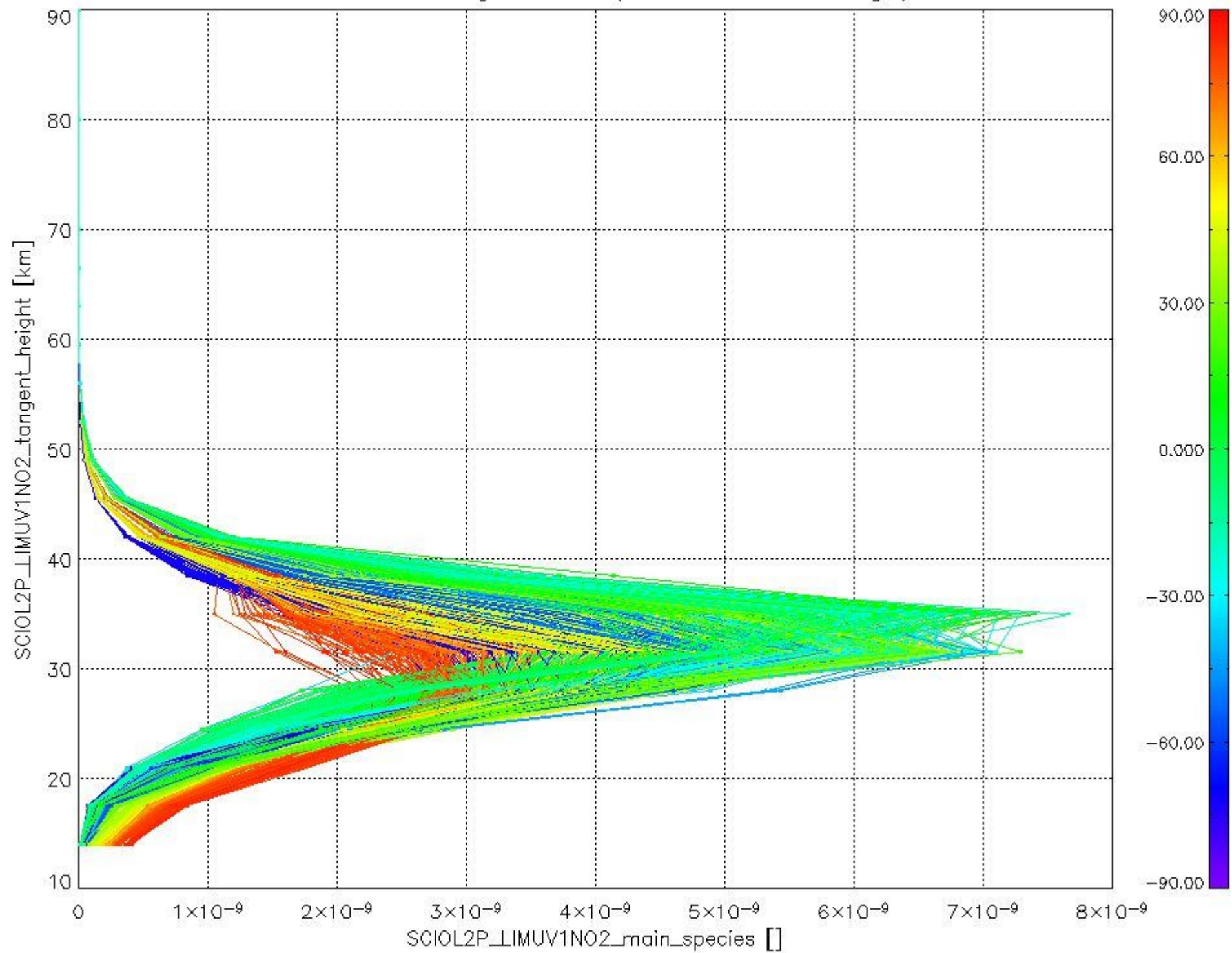
The following data items are currently included into this section:

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.



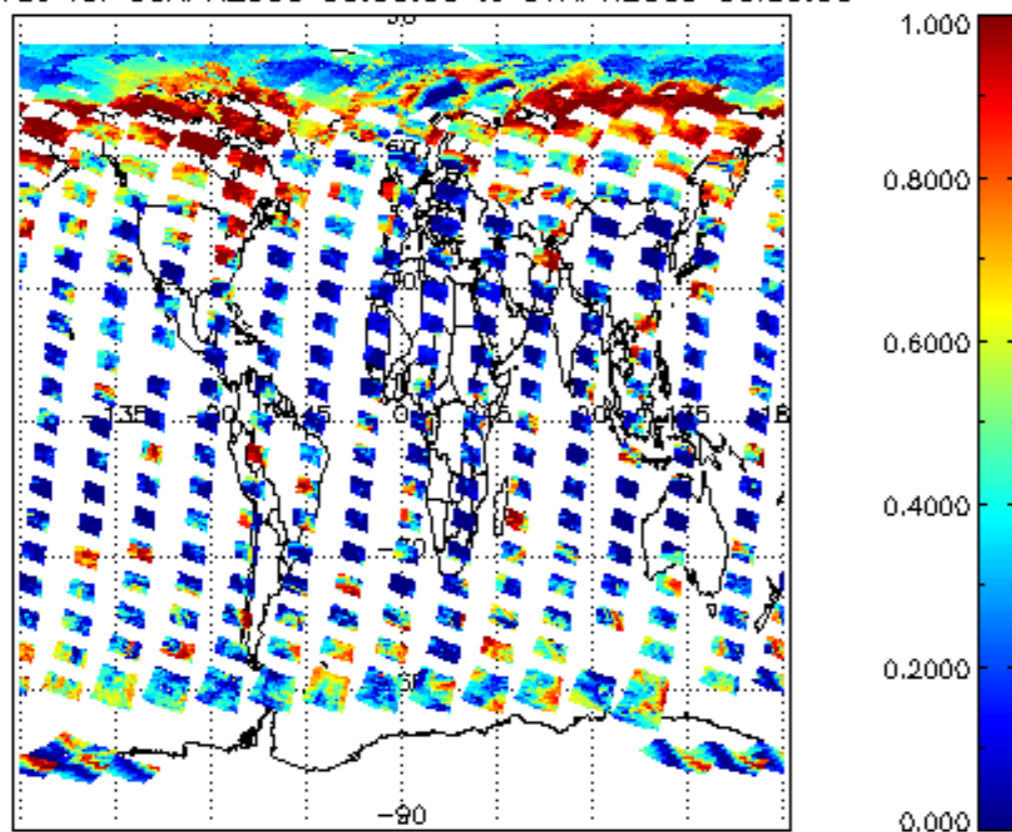
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



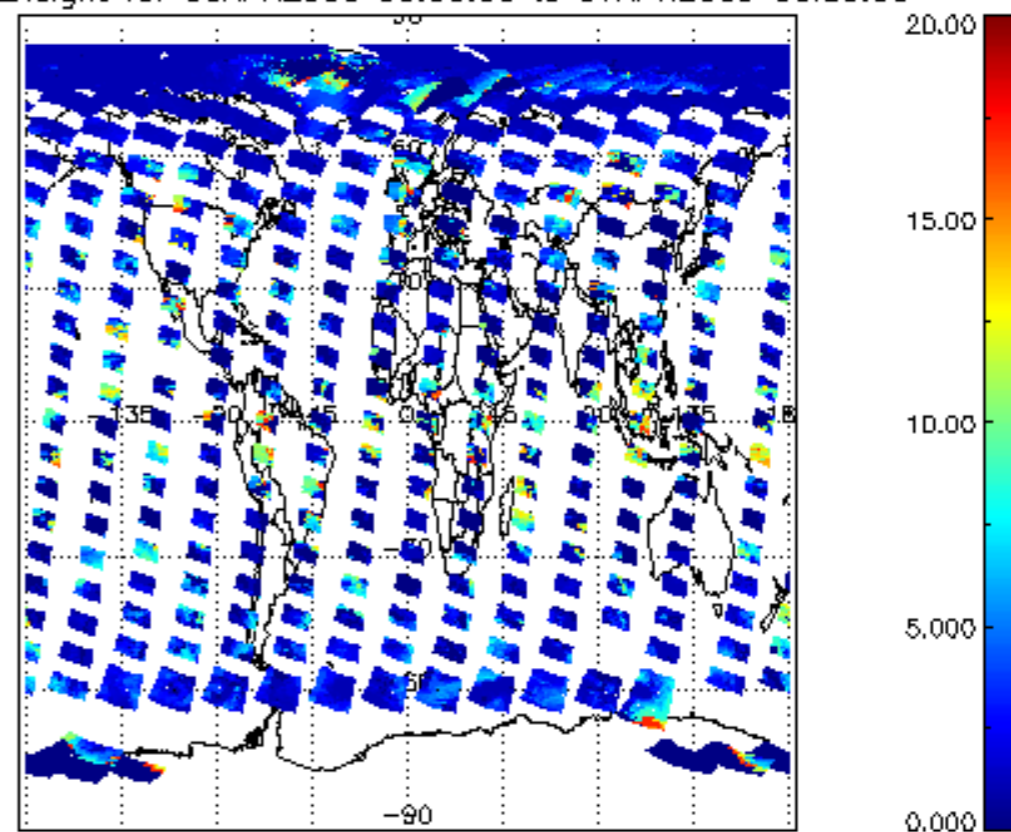
2.3 ADF monitoring

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

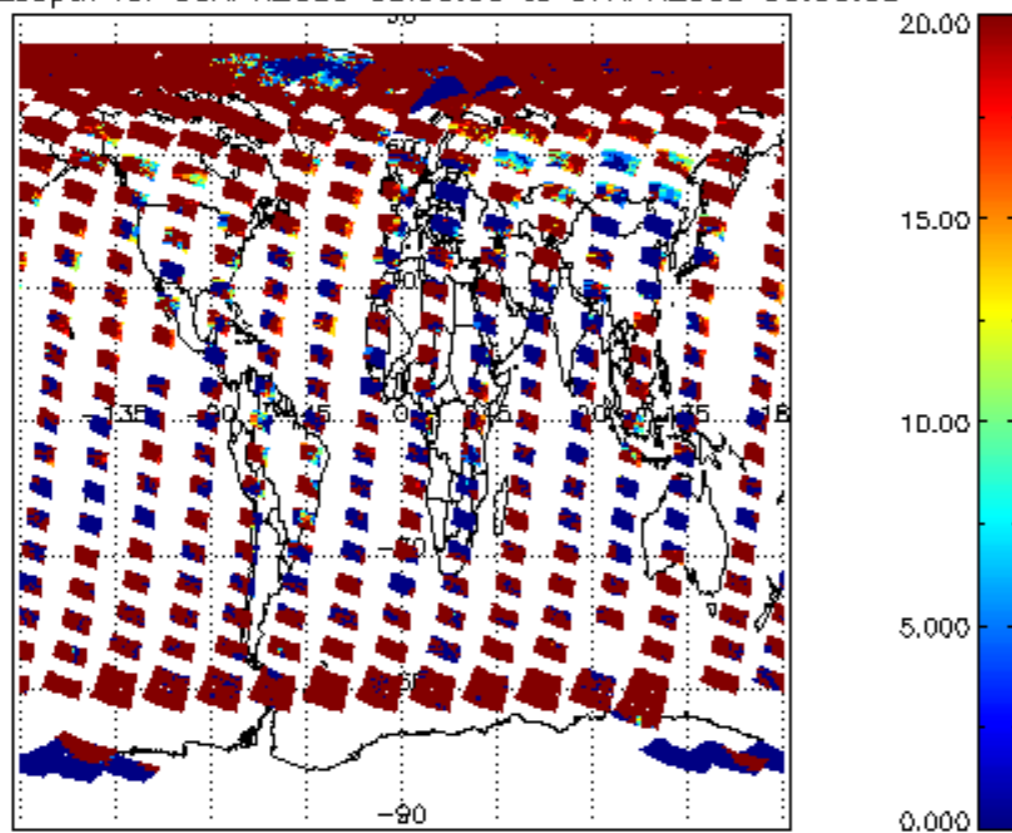
cL_frac for 06APR2009 00:00:00 to 07APR2009 00:00:00



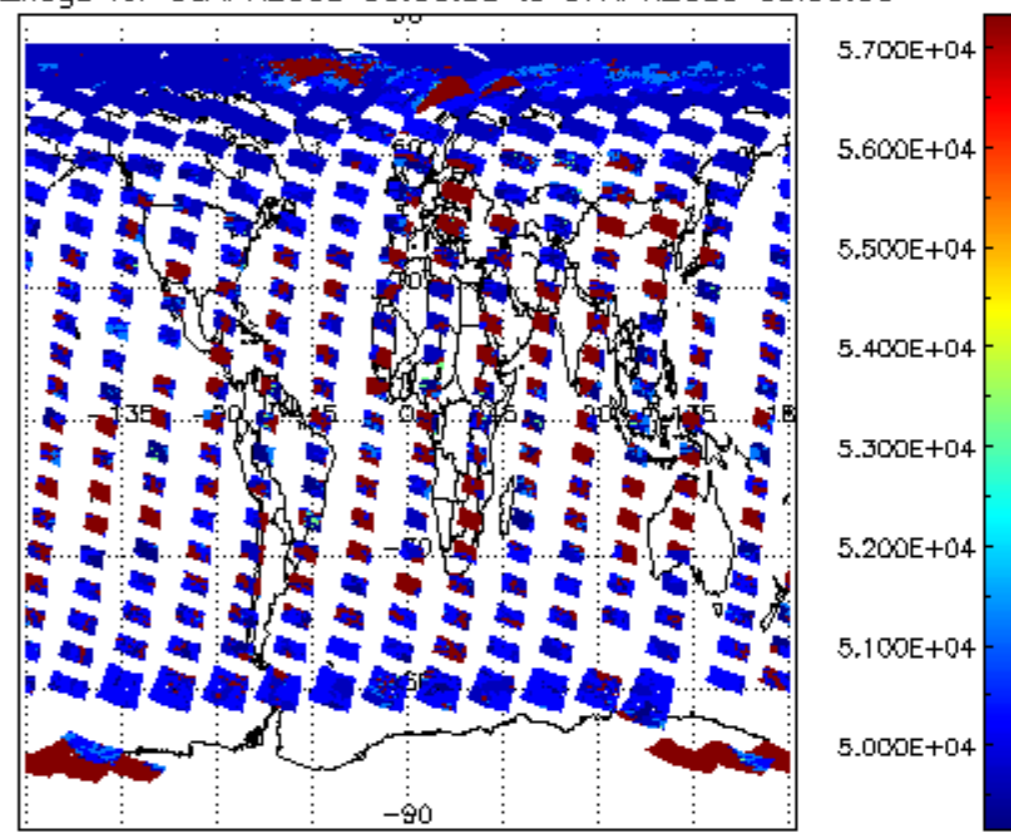
cL_top_height for 06APR2009 00:00:00 to 07APR2009 00:00:00

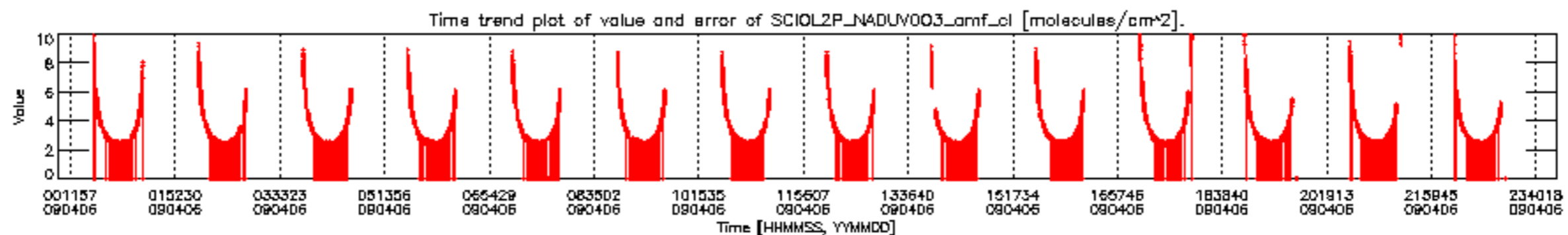
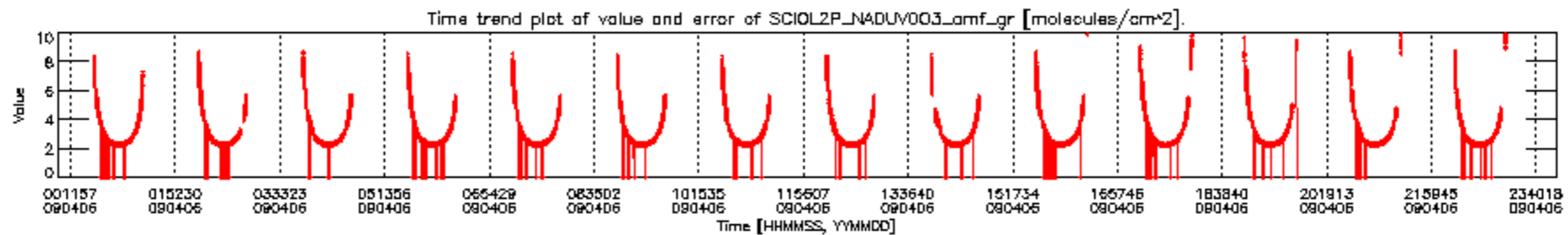
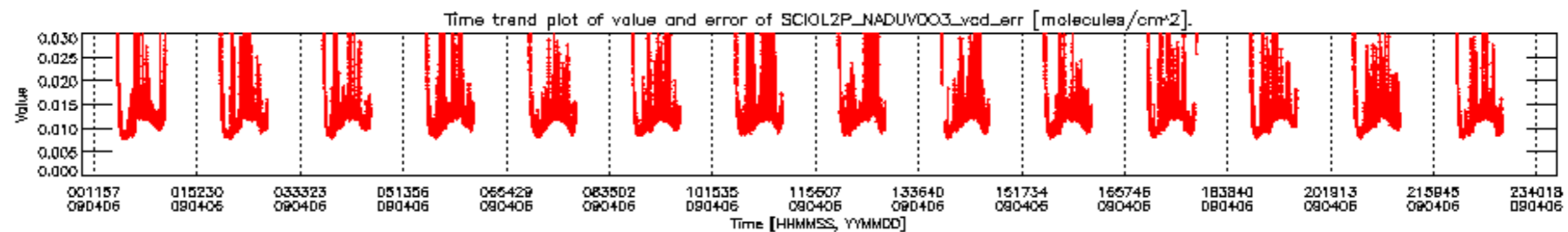
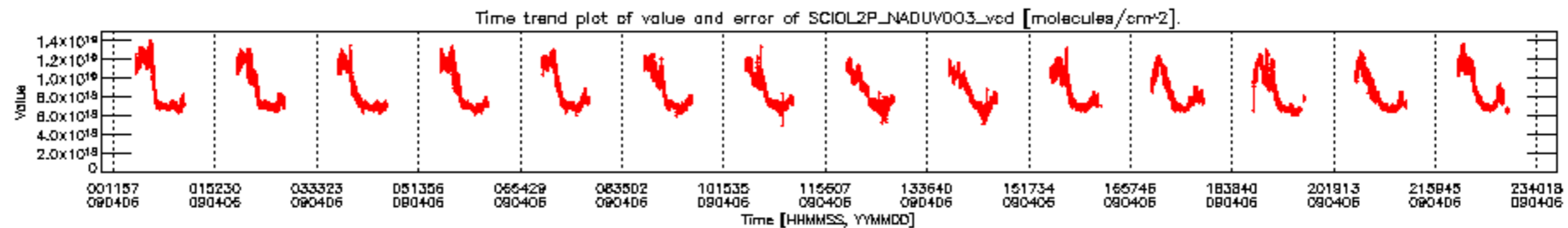


cL_opt_depth for 06APR2009 00:00:00 to 07APR2009 00:00:00

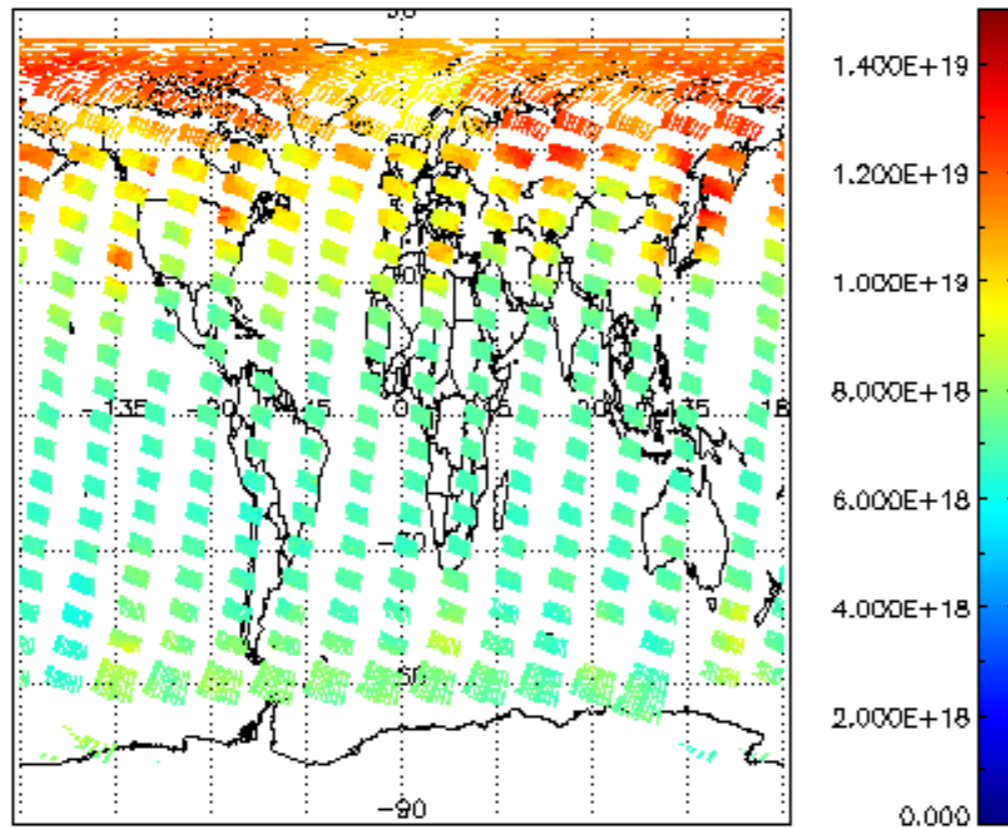


cloud_flags for 06APR2009 00:00:00 to 07APR2009 00:00:00

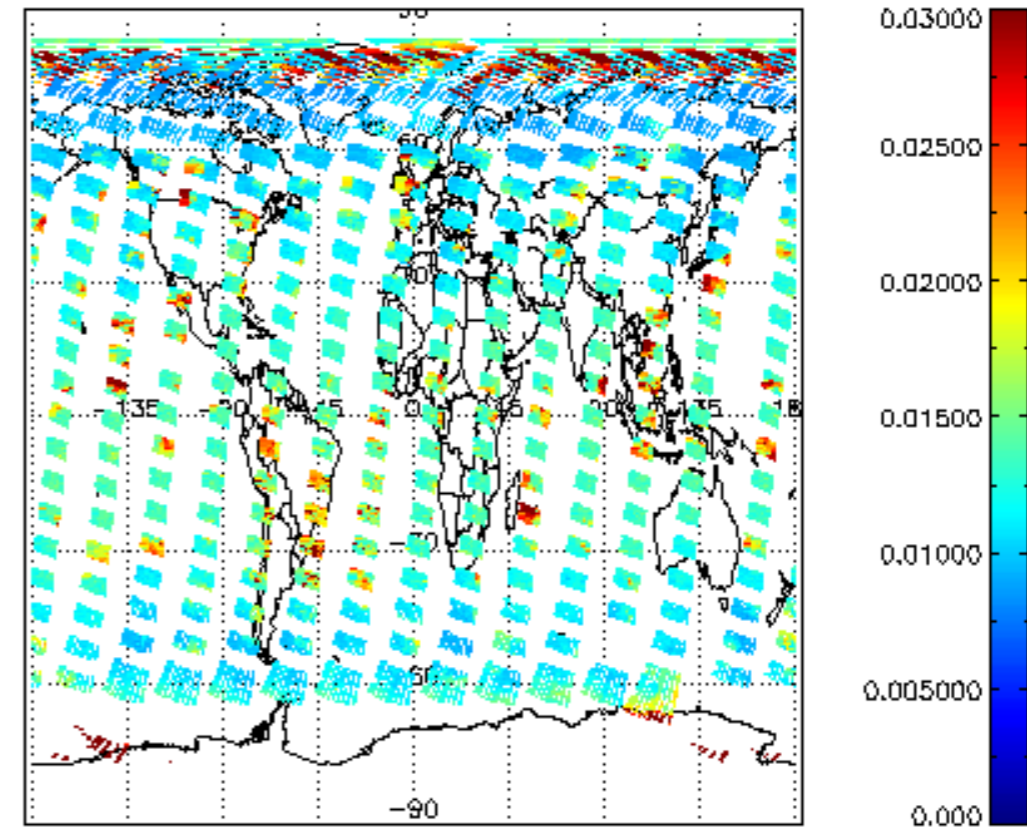




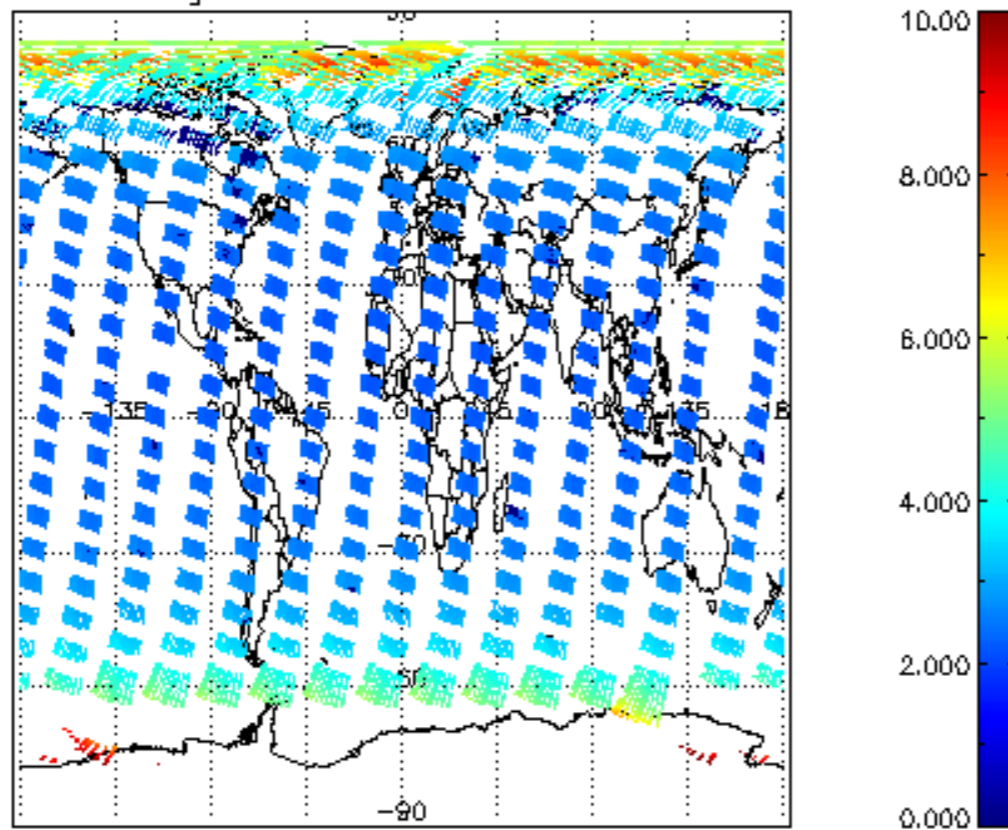
SCIOL2P_NADUV003_vcd for 06APR2009 00:00:00 to 07APR2009 00:00:00



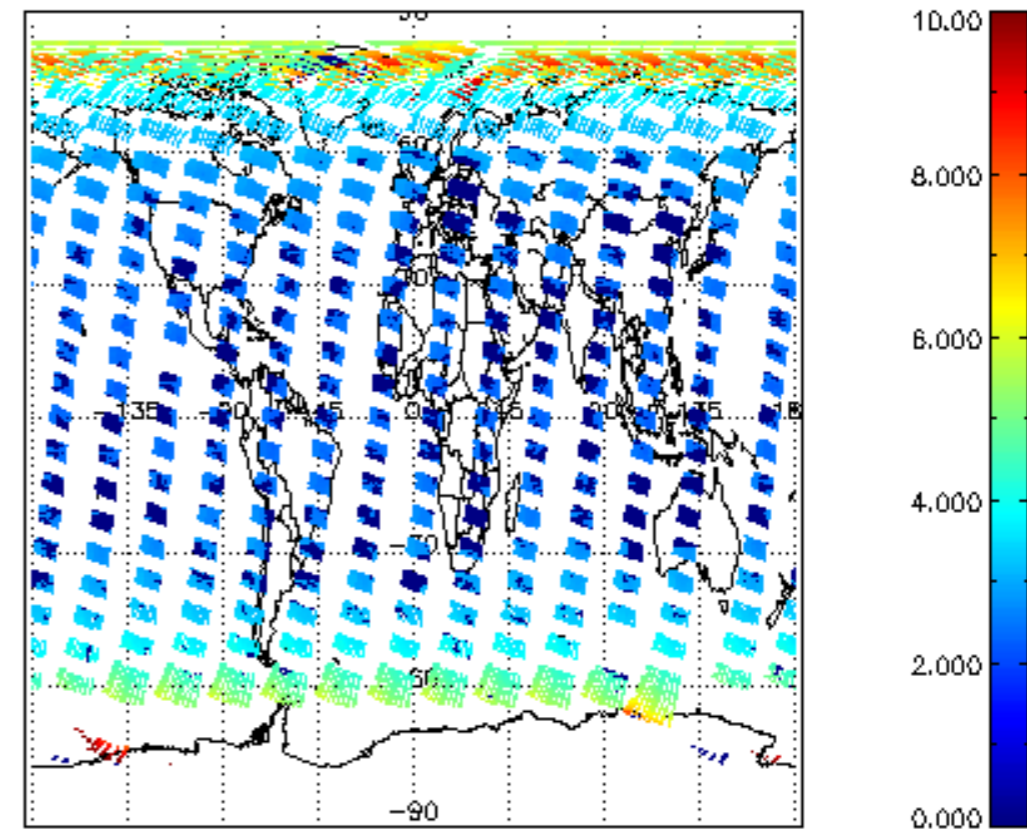
SCIOL2P_NADUV003_vcd_err for 06APR2009 00:00:00 to 07APR2009 00:00:00

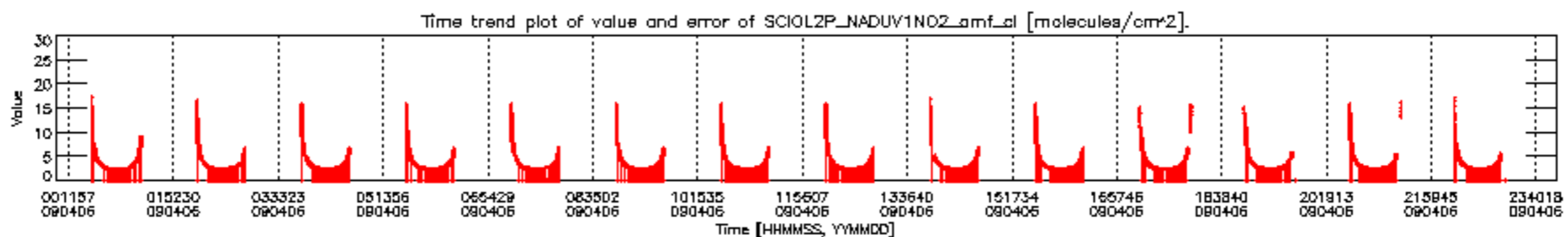
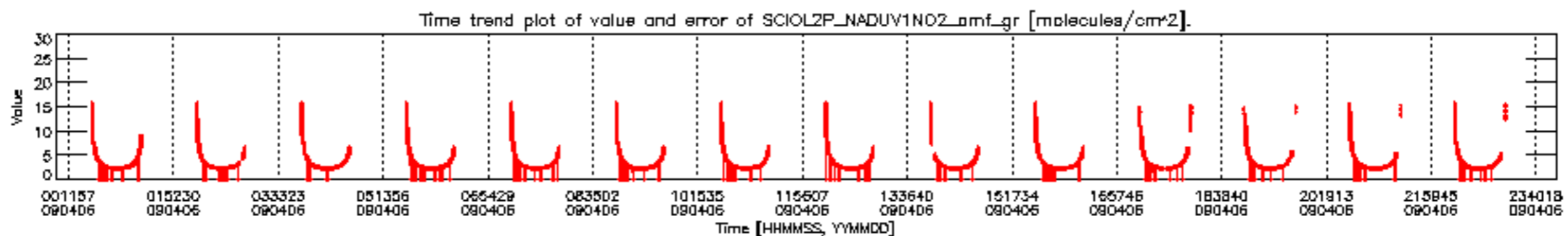
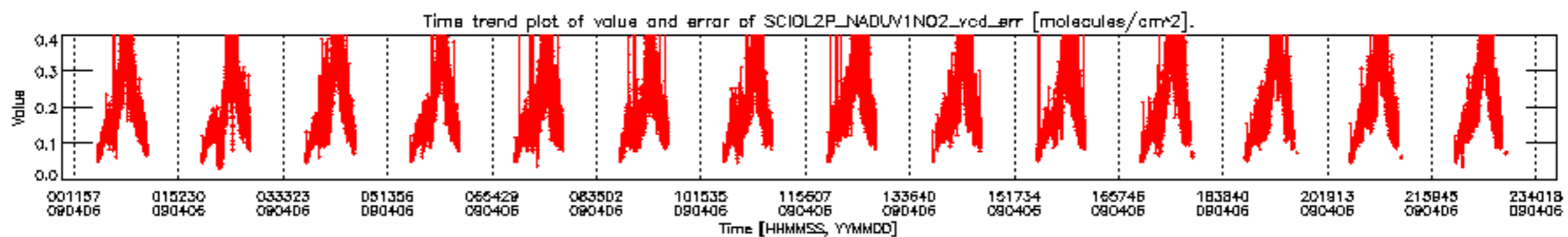
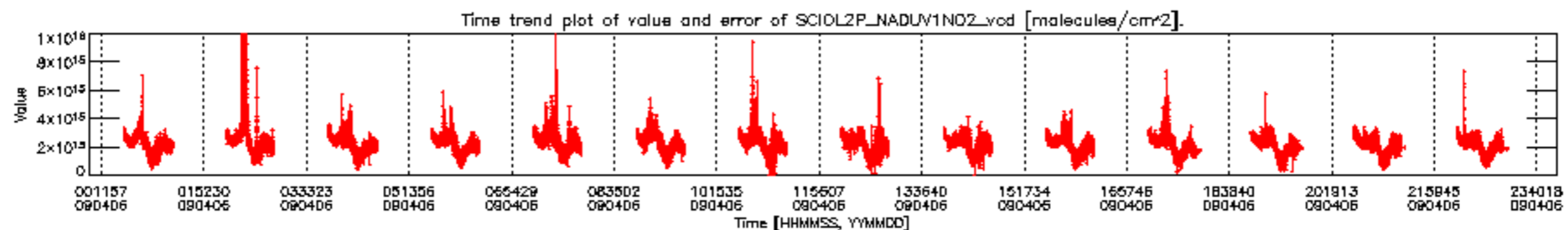


SCIOL2P_NADUV003_amf_gr for 06APR2009 00:00:00 to 07APR2009 00:00:00

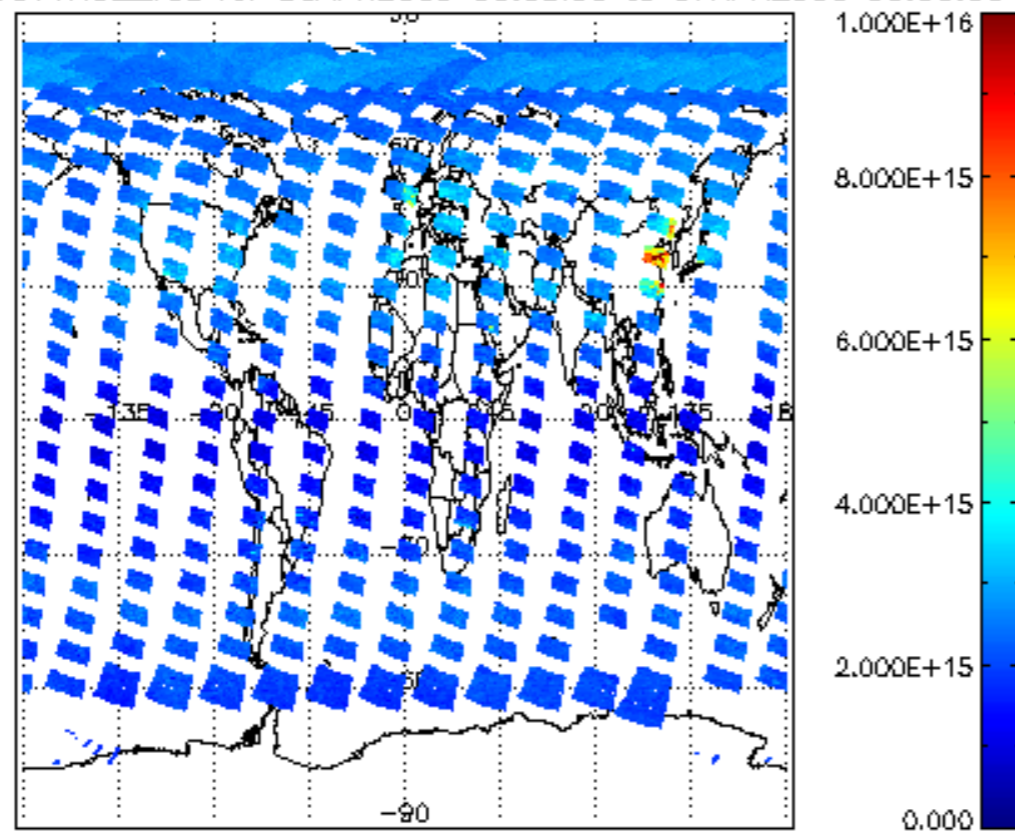


SCIOL2P_NADUV003_amf_cl for 06APR2009 00:00:00 to 07APR2009 00:00:00

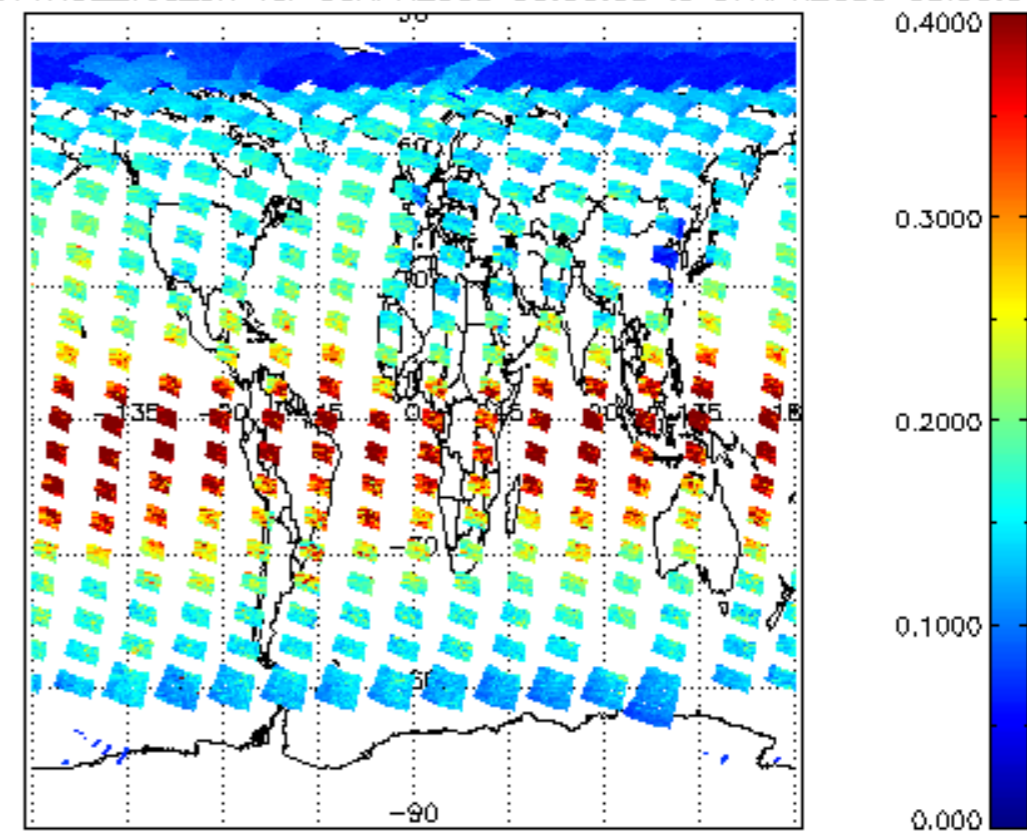




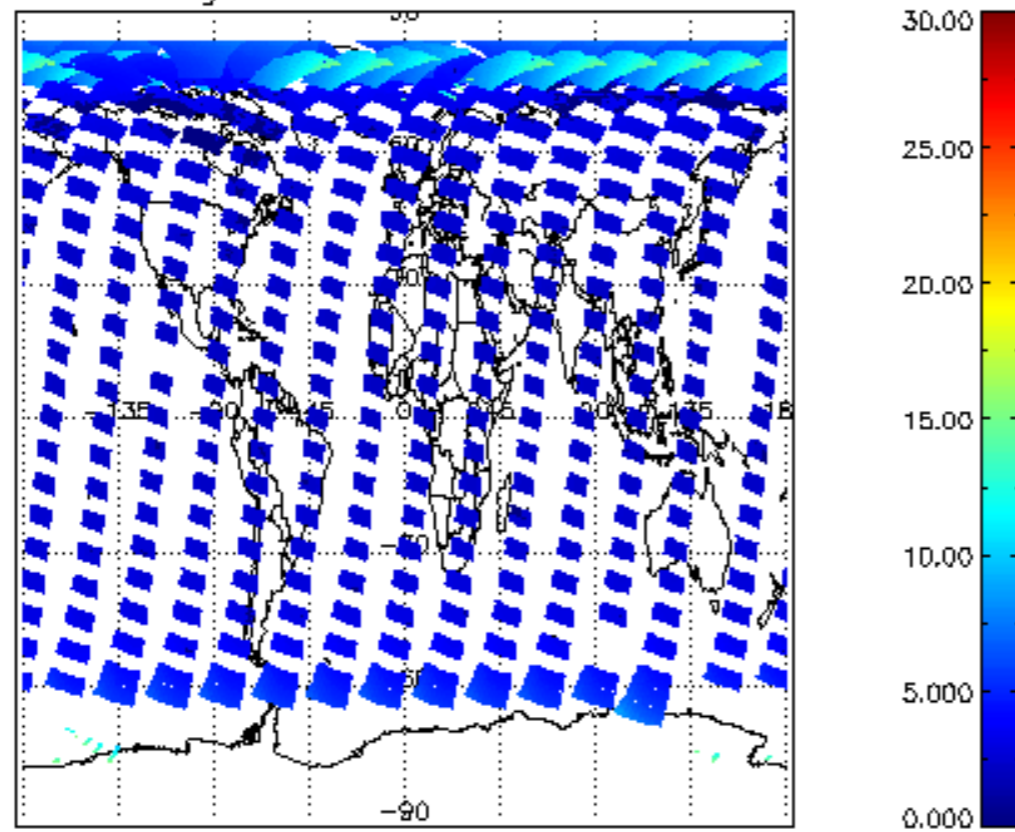
SCIOL2P_NADUV1NO2_vcd for 06APR2009 00:00:00 to 07APR2009 00:00:00



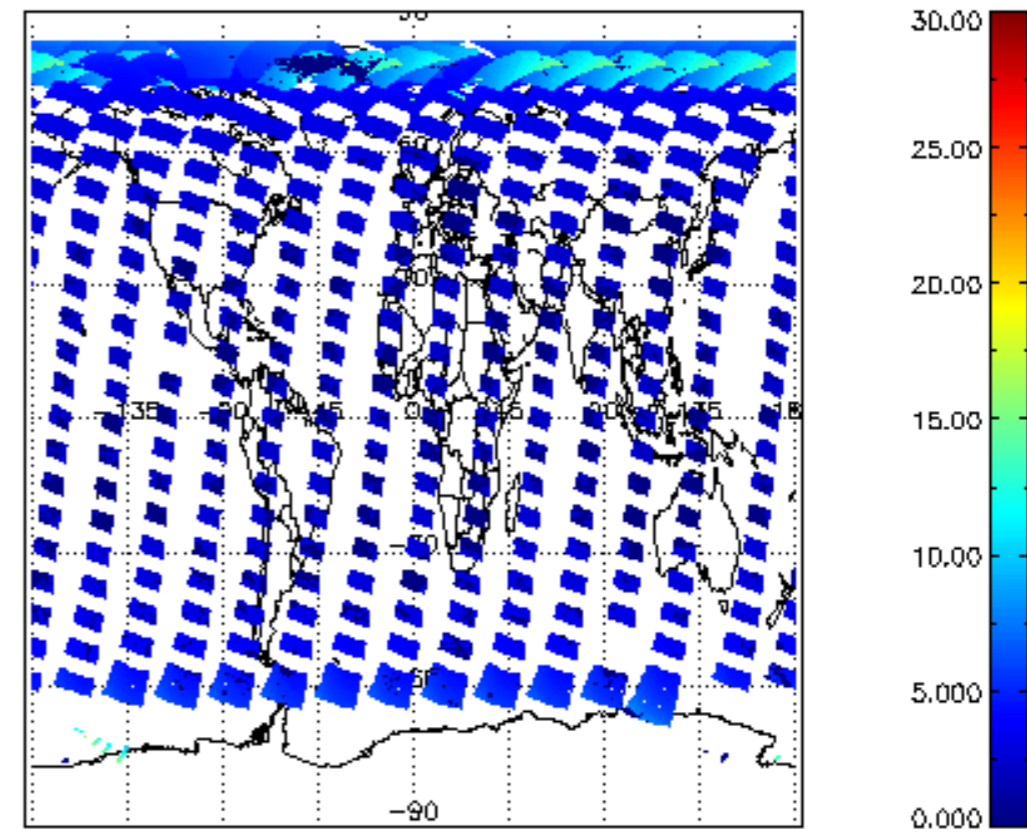
iCIOL2P_NADUV1NO2_vcd_err for 06APR2009 00:00:00 to 07APR2009 00:00:00



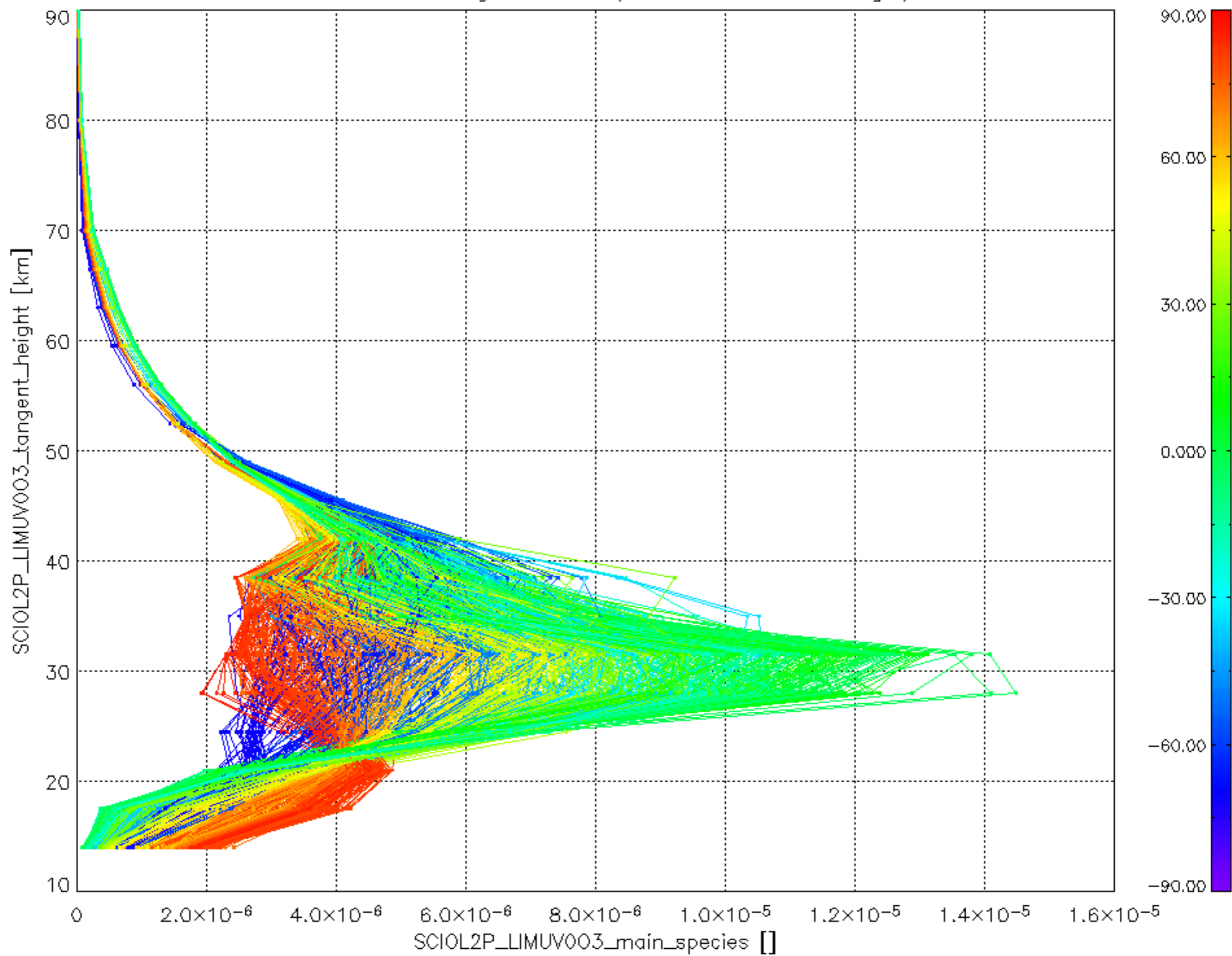
iCIOL2P_NADUV1NO2_amf_gr for 06APR2009 00:00:00 to 07APR2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 06APR2009 00:00:00 to 07APR2009 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).

