

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	04AUG2009 17:06:31
Data source version	SCIA-OL/3.01-R
Processing scope for products	17JUL2009 00:00:00 to 18JUL2009 00:00:00
Start time of first product within scope	16JUL2009 22:37:46
Stop time of last product within scope	18JUL2009 00:42:01
Total number of level 2 products	16
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__2PRDPA20090716_223746_000033252080_00445_38575_3424.N1	16JUL2009 22:37:46	16JUL2009 23:33:12	0	GOOD
1	SCI_OL__2PRDPA20090717_001822_000033122080_00446_38576_3420.N1	17JUL2009 00:18:22	17JUL2009 01:13:35	0	GOOD
2	SCI_OL__2PRDPA20090717_015858_000033252080_00447_38577_3416.N1	17JUL2009 01:58:58	17JUL2009 02:54:24	0	GOOD
3	SCI_OL__2PRDPA20090717_033935_000033122080_00448_38578_3417.N1	17JUL2009 03:39:35	17JUL2009 04:34:47	0	GOOD
4	SCI_OL__2PRDPA20090717_052011_000033252080_00449_38579_3418.N1	17JUL2009 05:20:11	17JUL2009 06:15:36	0	GOOD
5	SCI_OL__2PRDPA20090717_070047_000033122080_00450_38580_3421.N1	17JUL2009 07:00:47	17JUL2009 07:56:00	0	GOOD
6	SCI_OL__2PRDPA20090717_084123_000033252080_00451_38581_3425.N1	17JUL2009 08:41:23	17JUL2009 09:36:49	0	GOOD
7	SCI_OL__2PRDPA20090717_102159_000033122080_00452_38582_3427.N1	17JUL2009 10:21:59	17JUL2009 11:17:12	0	GOOD
8	SCI_OL__2PRDPA20090717_120235_000033252080_00453_38583_3426.N1	17JUL2009 12:02:35	17JUL2009 12:58:01	0	GOOD
9	SCI_OL__2PRDPA20090717_134311_000033122080_00454_38584_3428.N1	17JUL2009 13:43:11	17JUL2009 14:38:24	0	GOOD
10	SCI_OL__2PRDPA20090717_152347_000033252080_00455_38585_3429.N1	17JUL2009 15:23:47	17JUL2009 16:19:13	0	GOOD
11	SCI_OL__2PRDPA20090717_170440_000033122080_00456_38586_3430.N1	17JUL2009 17:04:40	17JUL2009 17:59:53	0	GOOD
12	SCI_OL__2PRDPA20090717_184516_000033252080_00457_38587_3431.N1	17JUL2009 18:45:16	17JUL2009 19:40:42	0	GOOD
13	SCI_OL__2PRDPA20090717_202536_000033122080_00458_38588_3432.N1	17JUL2009 20:25:36	17JUL2009 21:20:49	0	GOOD
14	SCI_OL__2PRDPA20090717_220612_000033252080_00459_38589_3433.N1	17JUL2009 22:06:12	17JUL2009 23:01:37	0	GOOD
15	SCI_OL__2PRDPA20090717_234648_000033122080_00460_38590_3434.N1	17JUL2009 23:46:48	18JUL2009 00:42:01	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: 146063

Total number of cloud data DSRs with good quality flag (=0): 146063 (100.0 %)

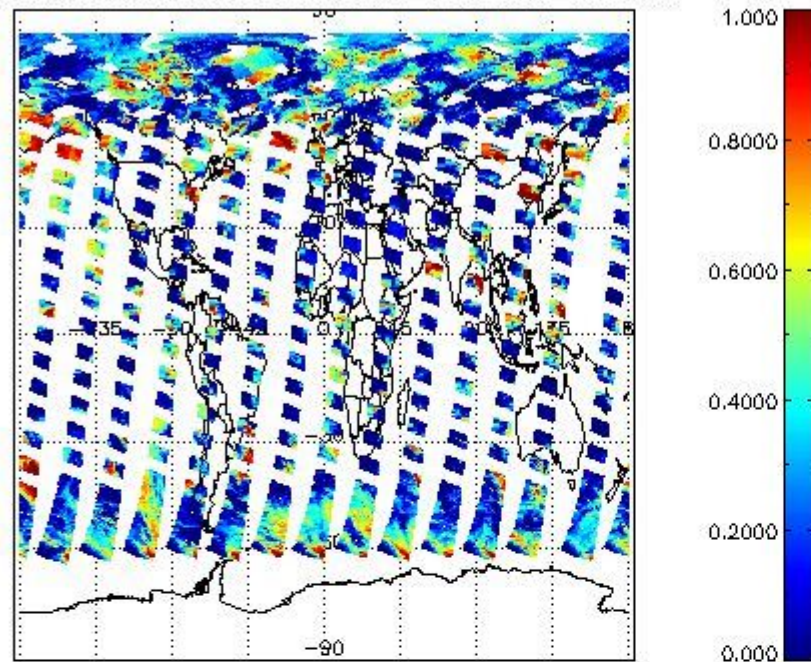
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	146063	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	146063	0.16995	0.12500	0.12500	0.25000	0.059985	s
CL_FRAC	146063	0.27238	0.20928	0.0000	1.0000	0.26747	-
CL_FRAC_ERR	146063	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	146063	5.4383	4.0000	4.0000	8.0000	1.9195	
PMD_READ_CL[0]	146063	0.13497	0.0000	0.0000	8.0000	0.84155	-
PMD_READ_CL[1]	146063	1.8610	0.0000	0.0000	8.0000	2.6694	-
CL_TOP_HEIGHT	127277	3.1568	1.2540	0.0000	17.000	3.7777	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	127277	57.520	84.927	0.0000	101.00	45.492	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	146063	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	146063	11001101	11000100	11000000	11100000	3610.5	flags
AERO_ABSO_IND	146063	4.2619	4.9715	-0.48852	16.014	2.7857	
AERO_IND_DIAG	146063	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	146063	01010111	00000000	00000000	11000000	24487.	flags

Time and geolocation plots:

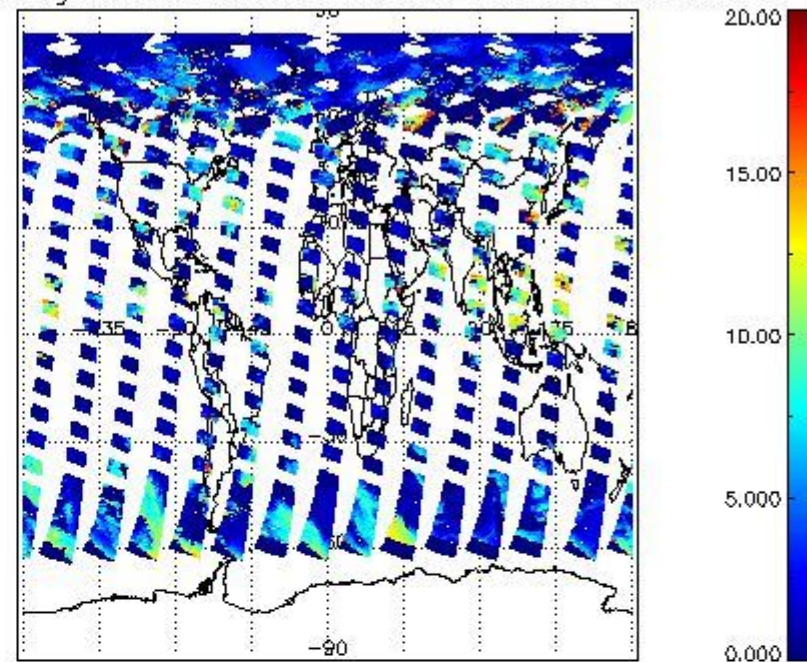
Plots are available for the following parameters:

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

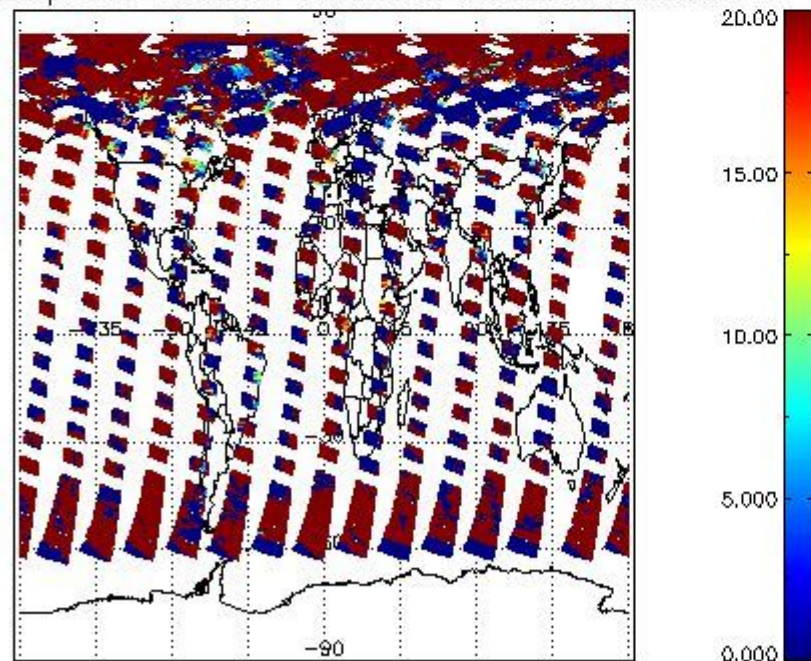
cL_frac for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



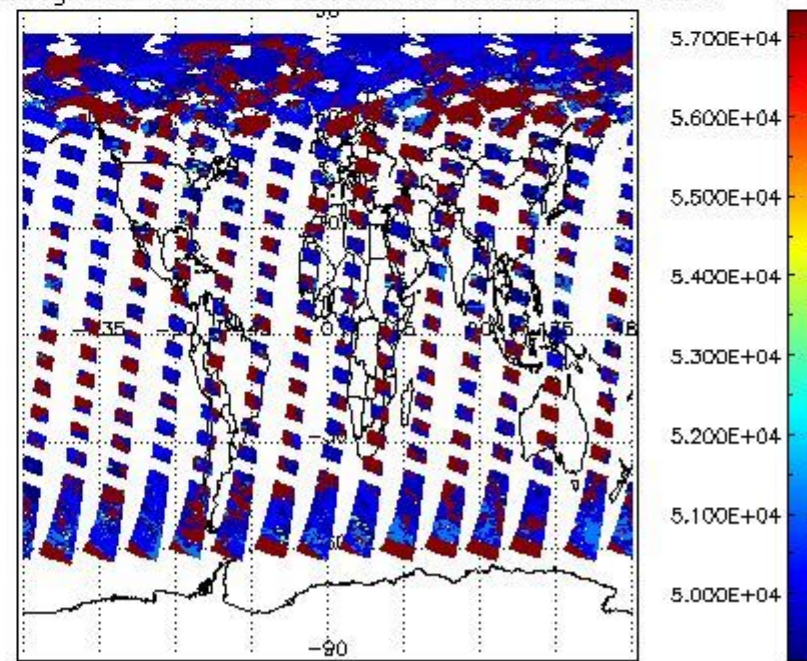
cL_top_height for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



cL_opt_depth for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



cloud_flags for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



2.2.2 Nadir

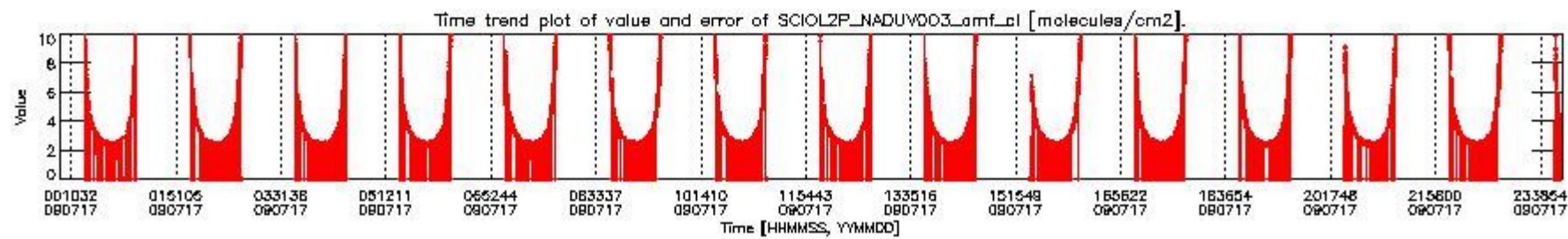
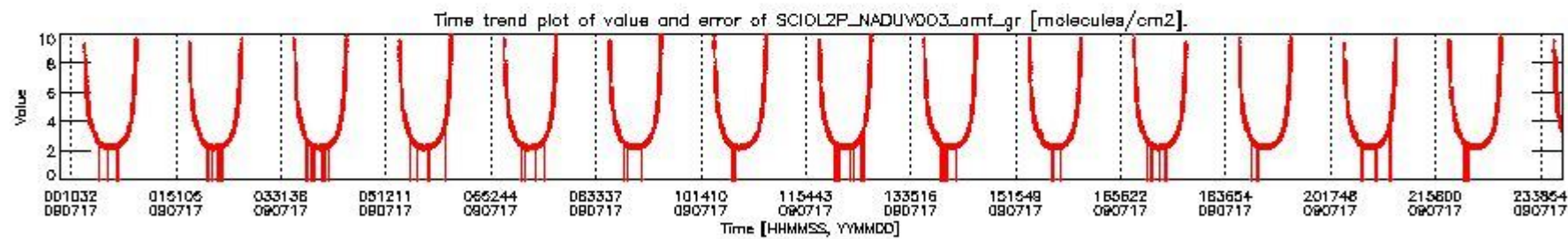
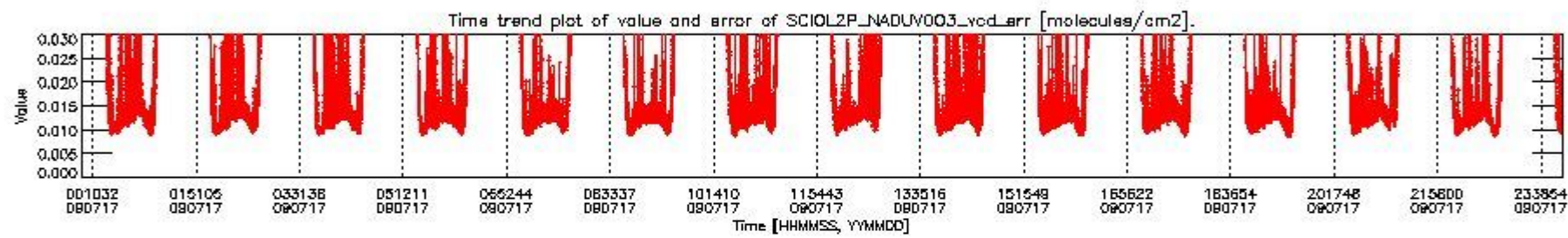
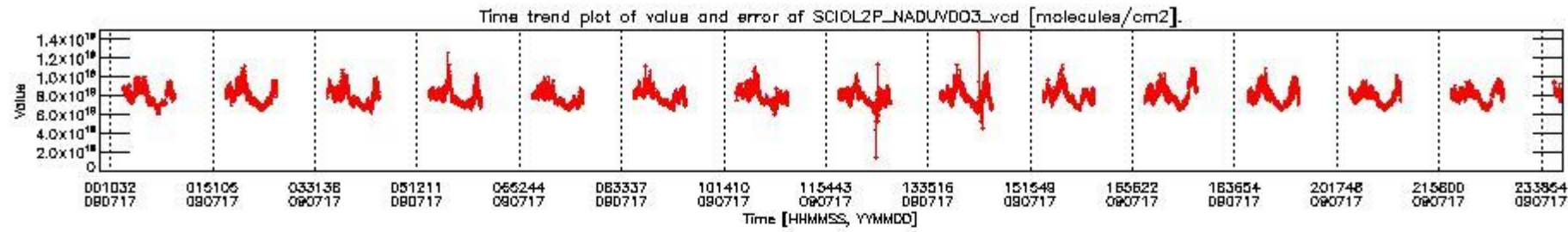
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

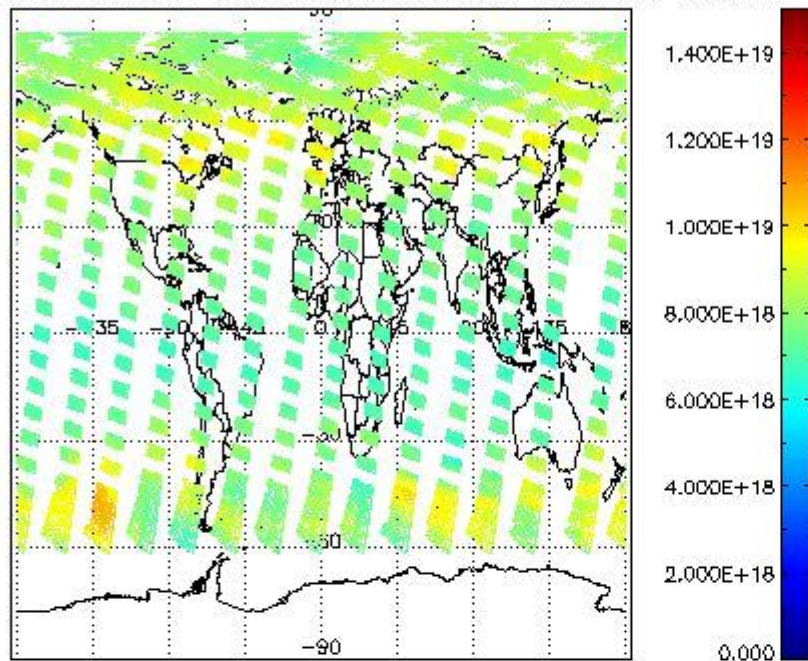
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

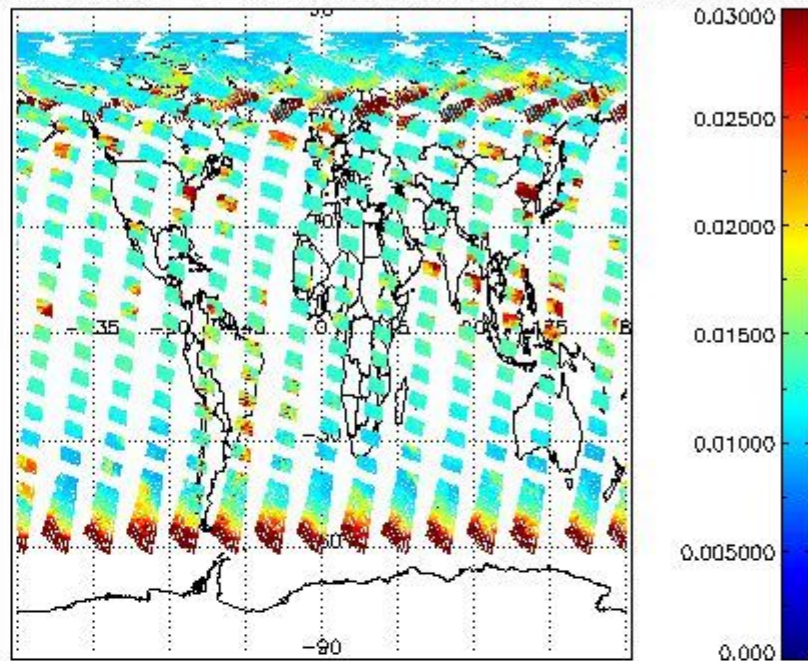
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



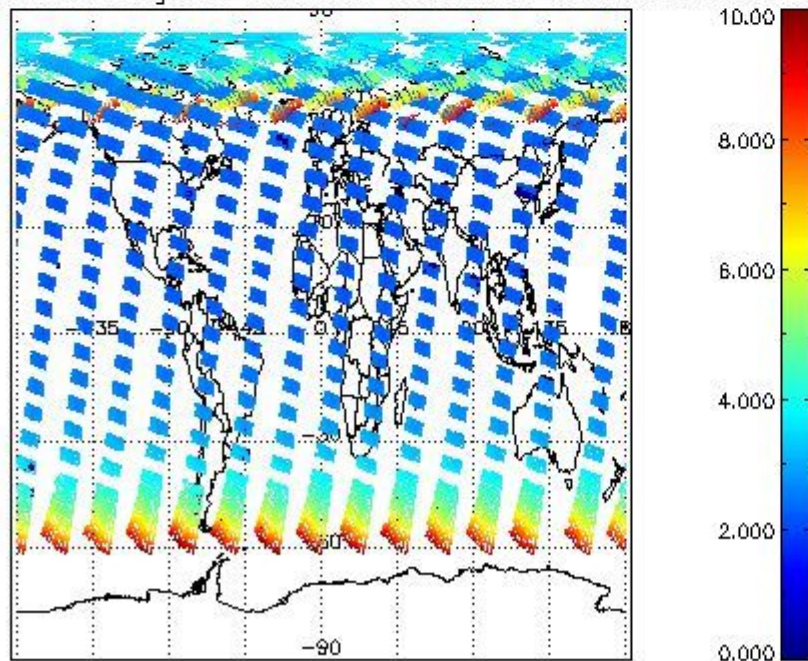
SCIOL2P_NADUV003_vcd for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



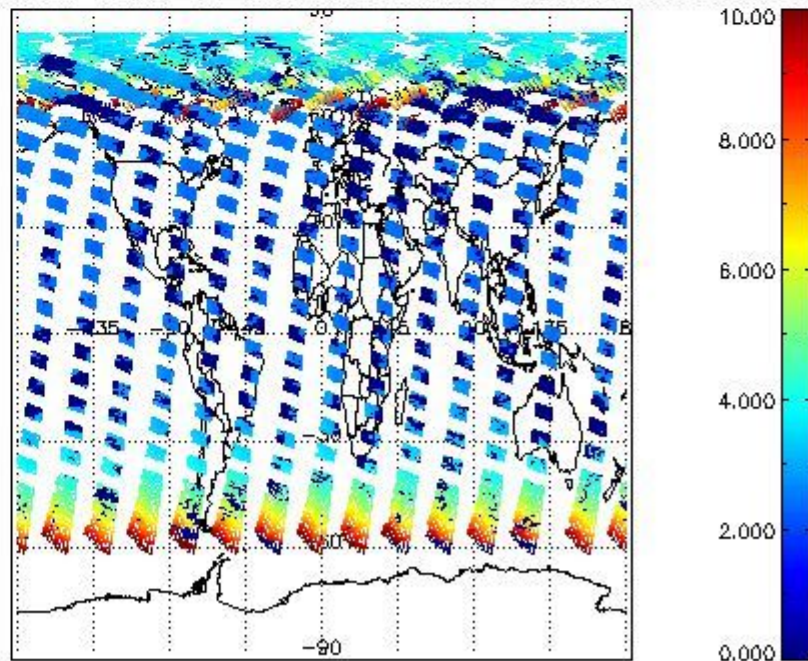
SCIOL2P_NADUV003_vcd_err for 17JUL2009 00:00:00 to 18JUL2009 00:00:00

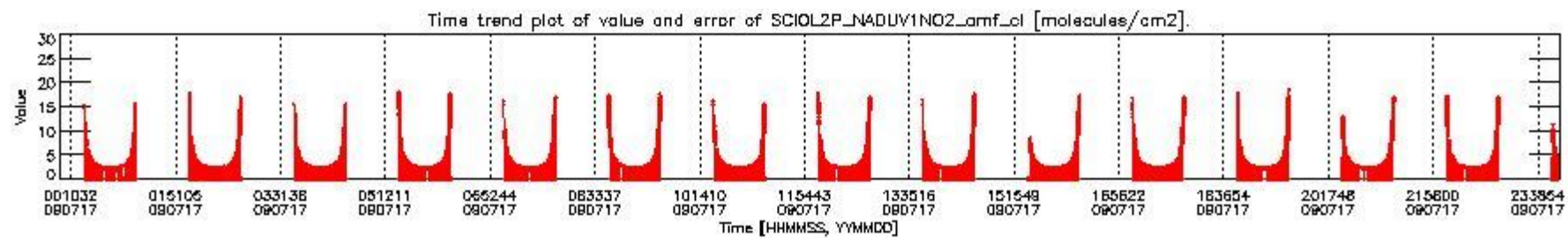
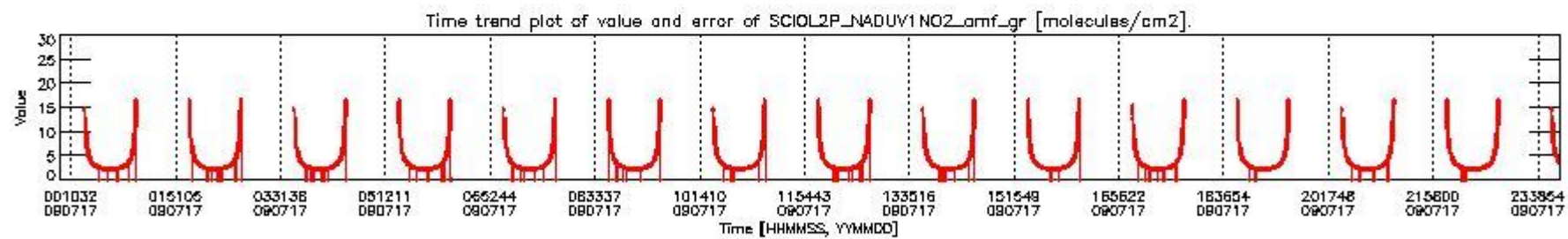
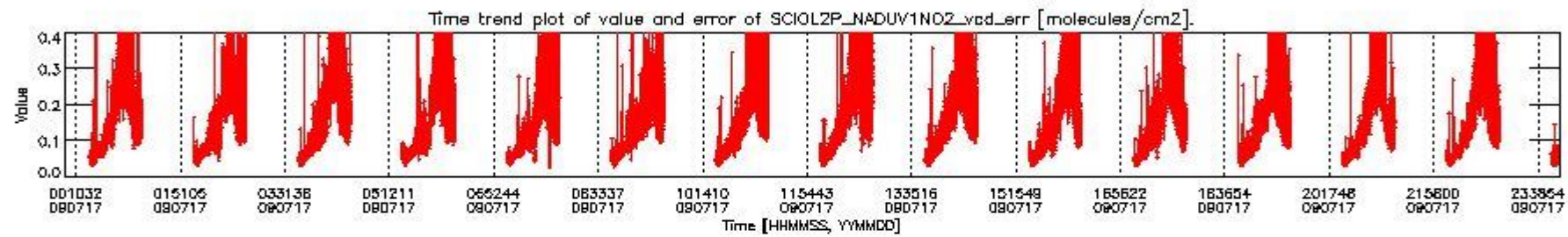
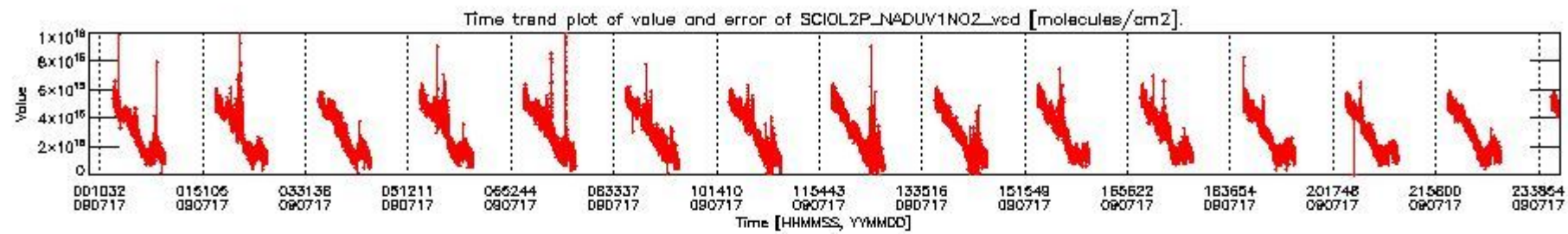


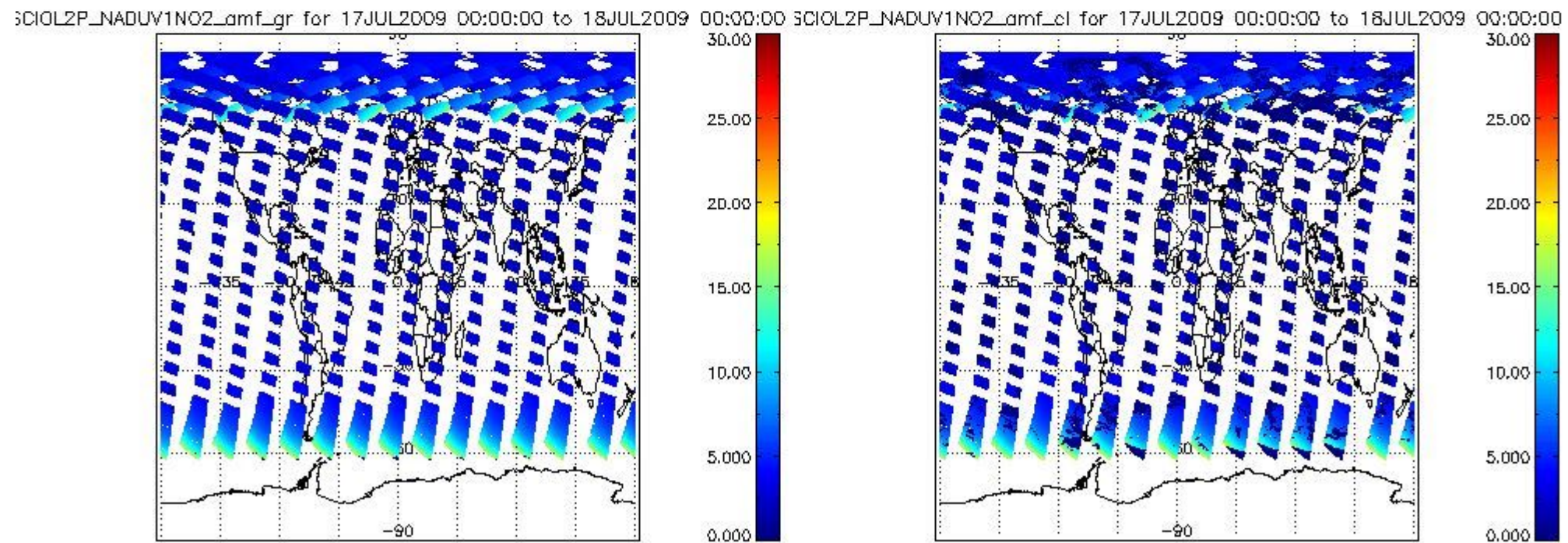
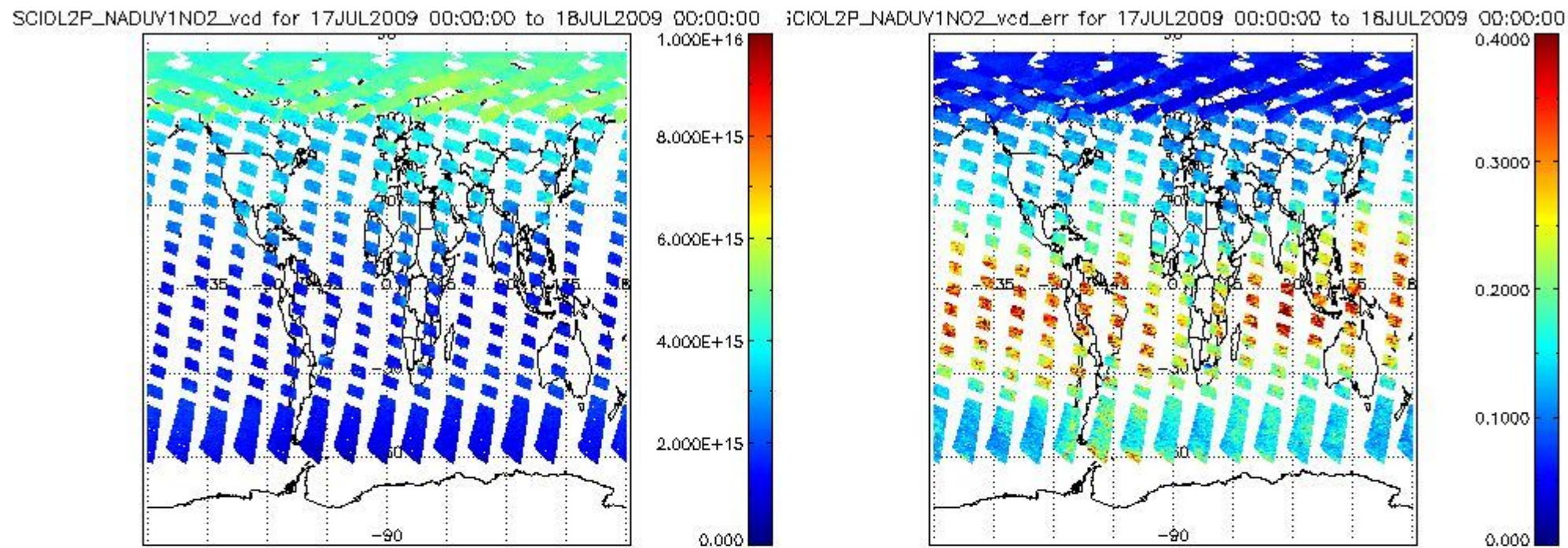
SCIOL2P_NADUV003_amf_gr for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 17JUL2009 00:00:00 to 18JUL2009 00:00:00







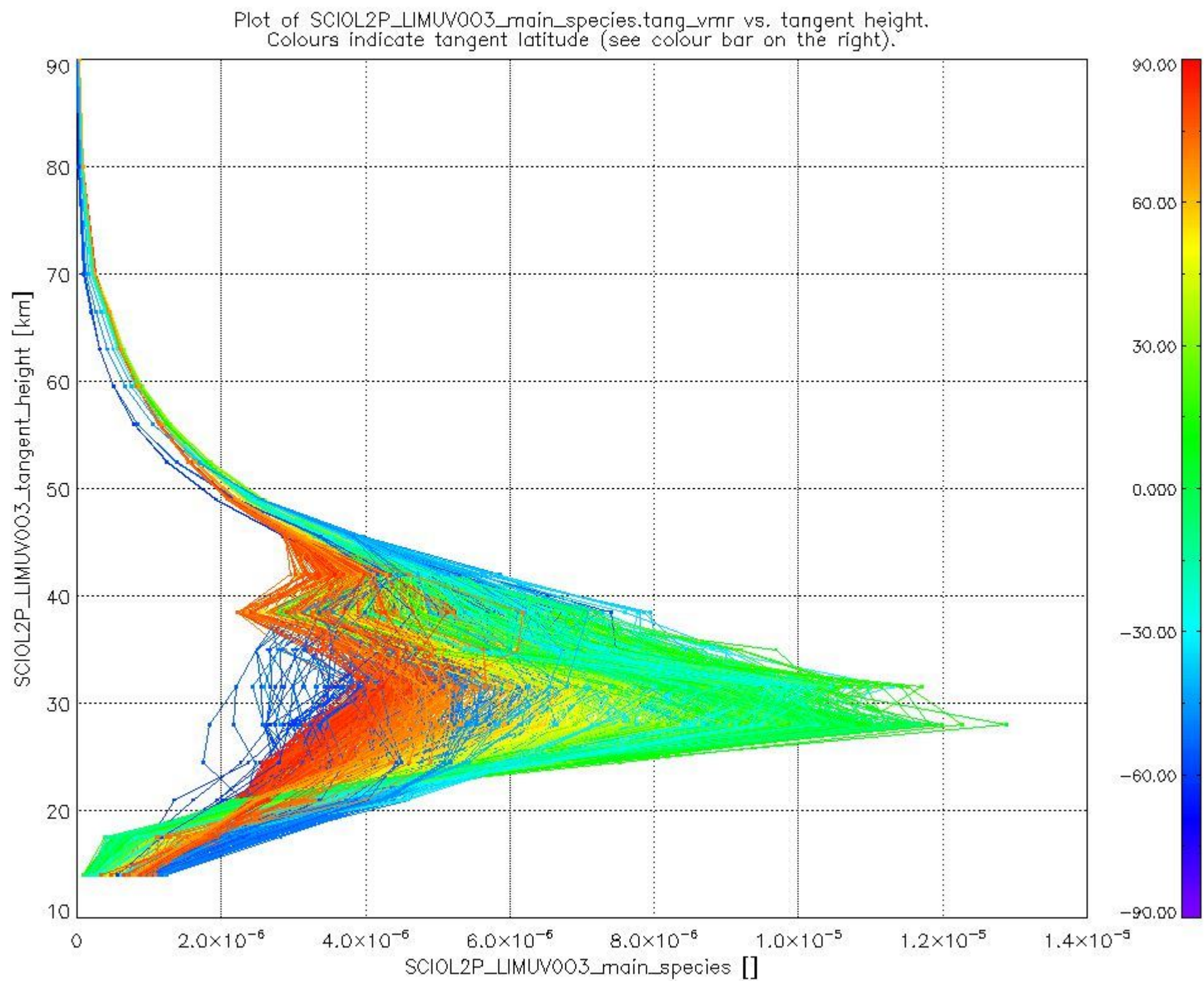
2.2.3 Limb

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

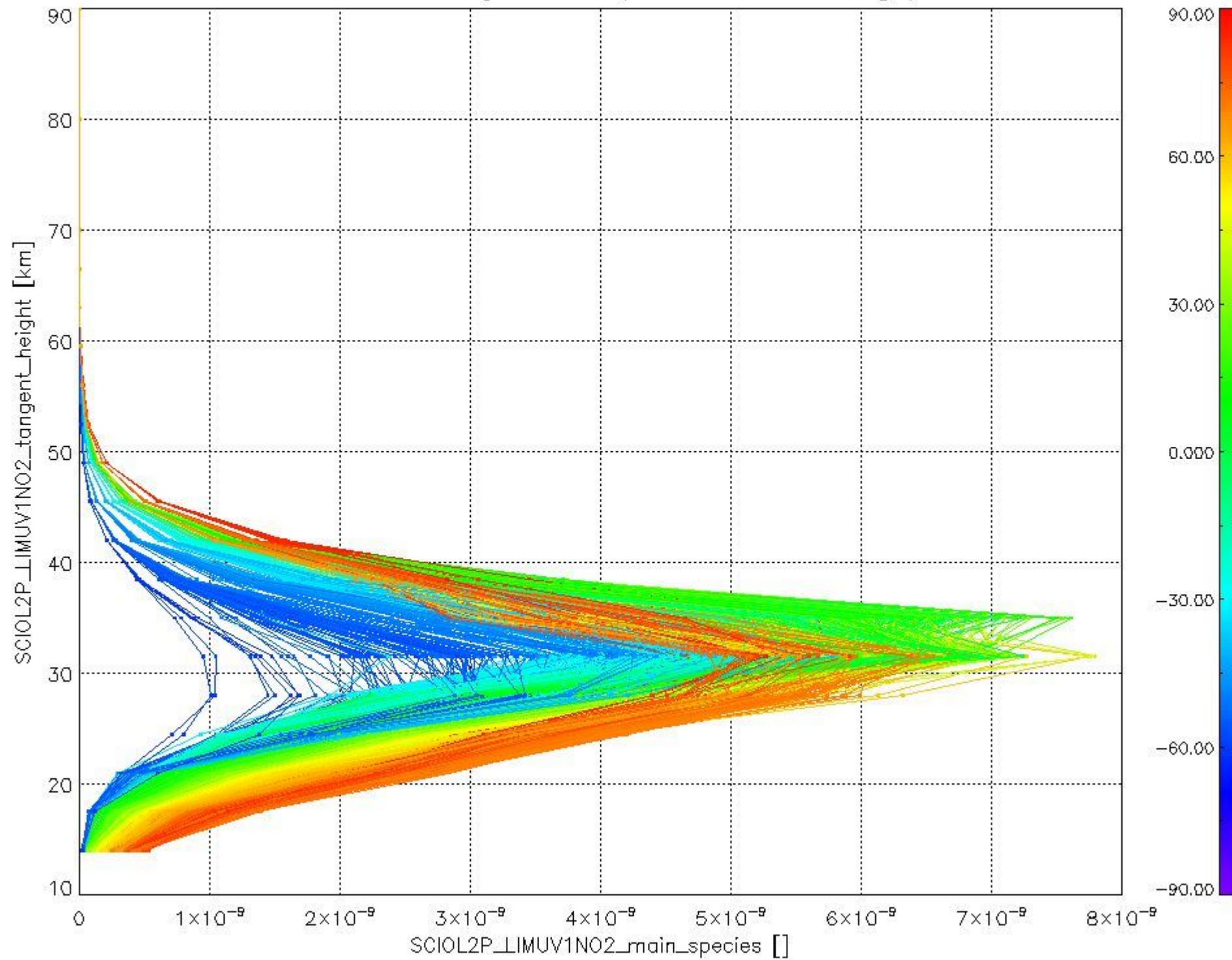
The following data items are currently included into this section:

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.



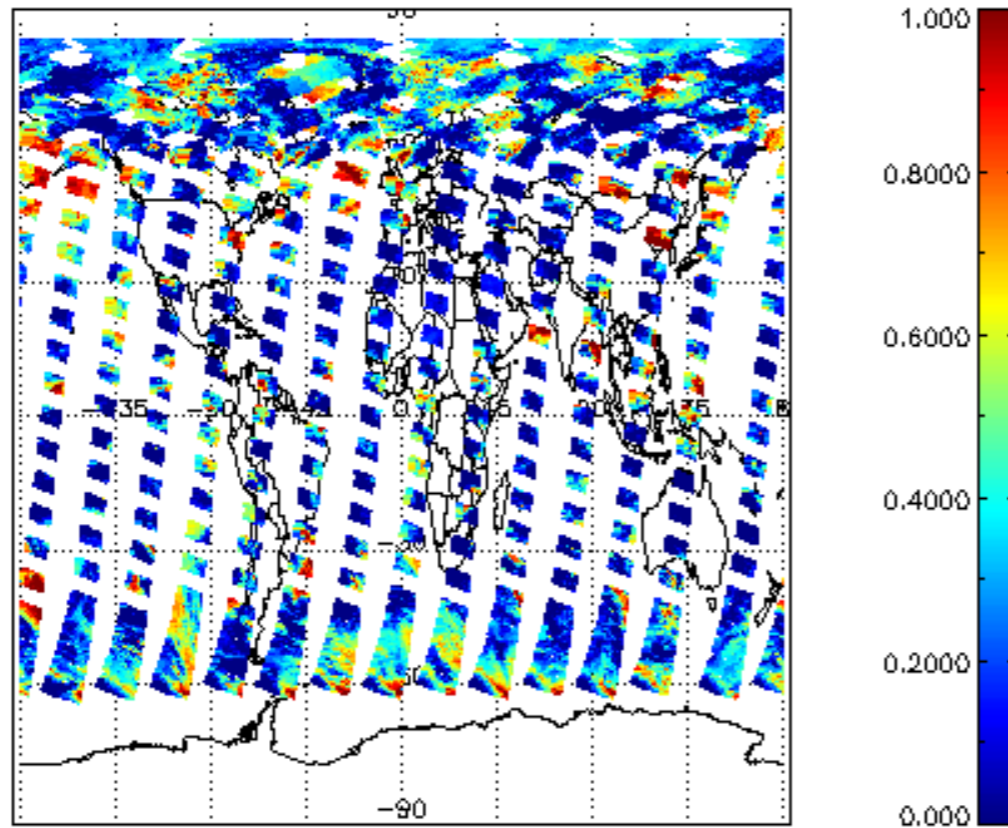
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



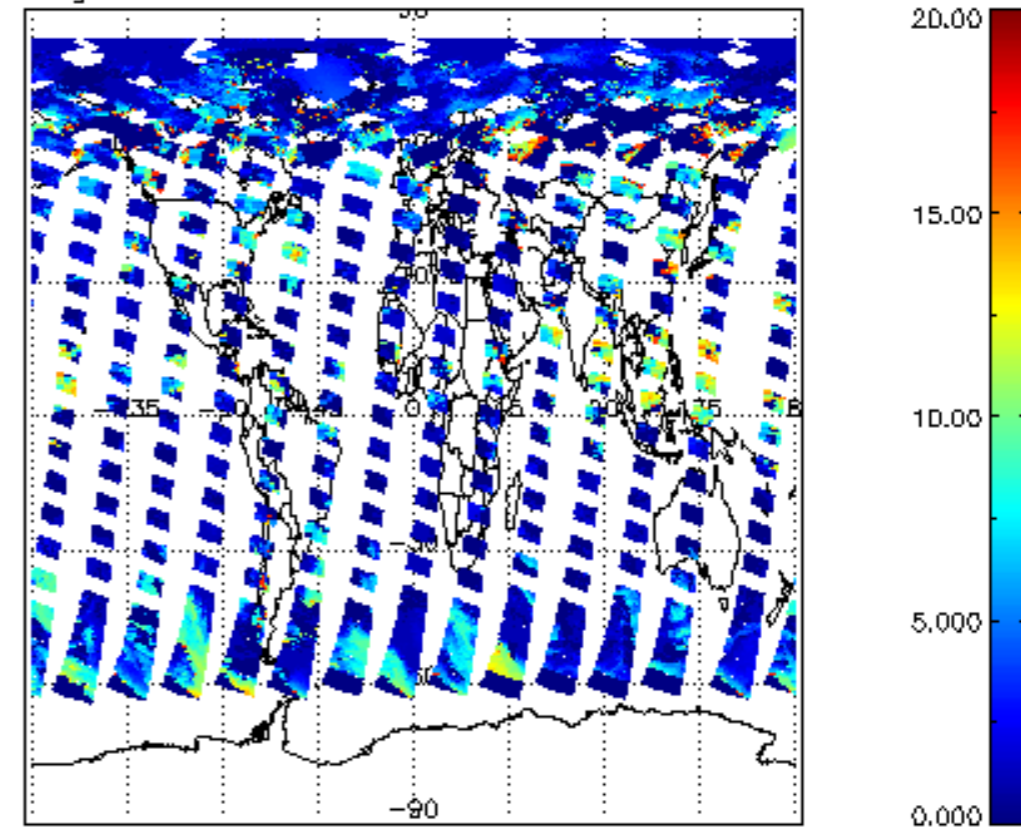
2.3 ADF monitoring

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

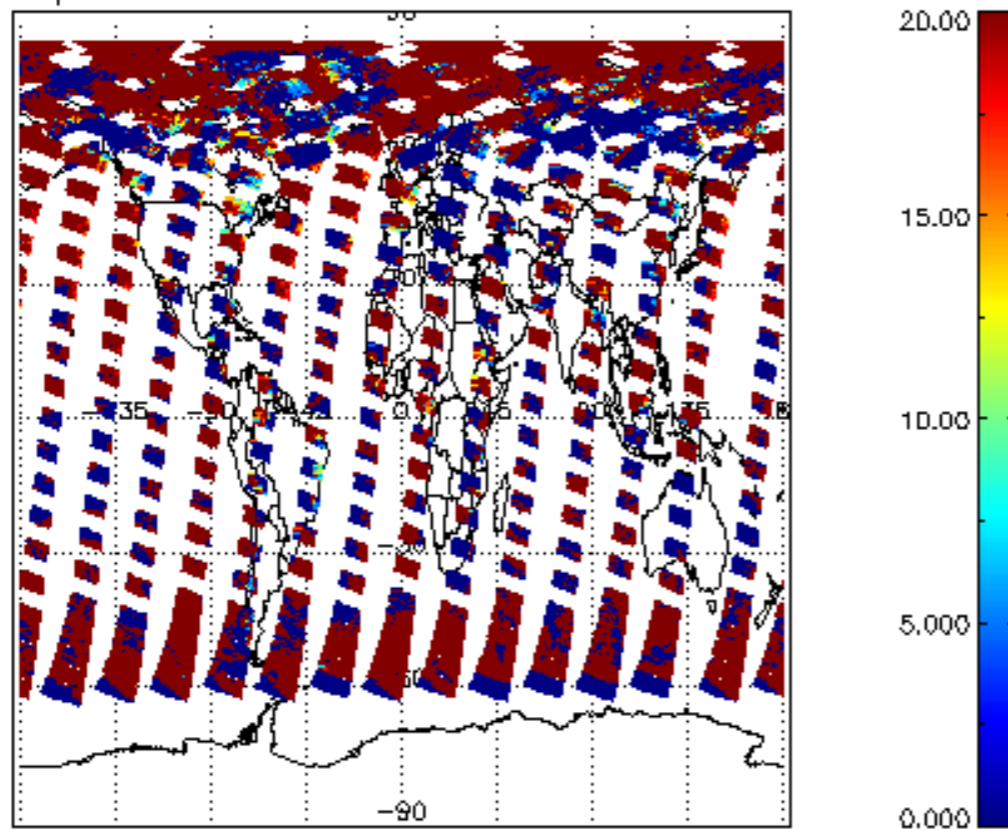
cl_frac for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



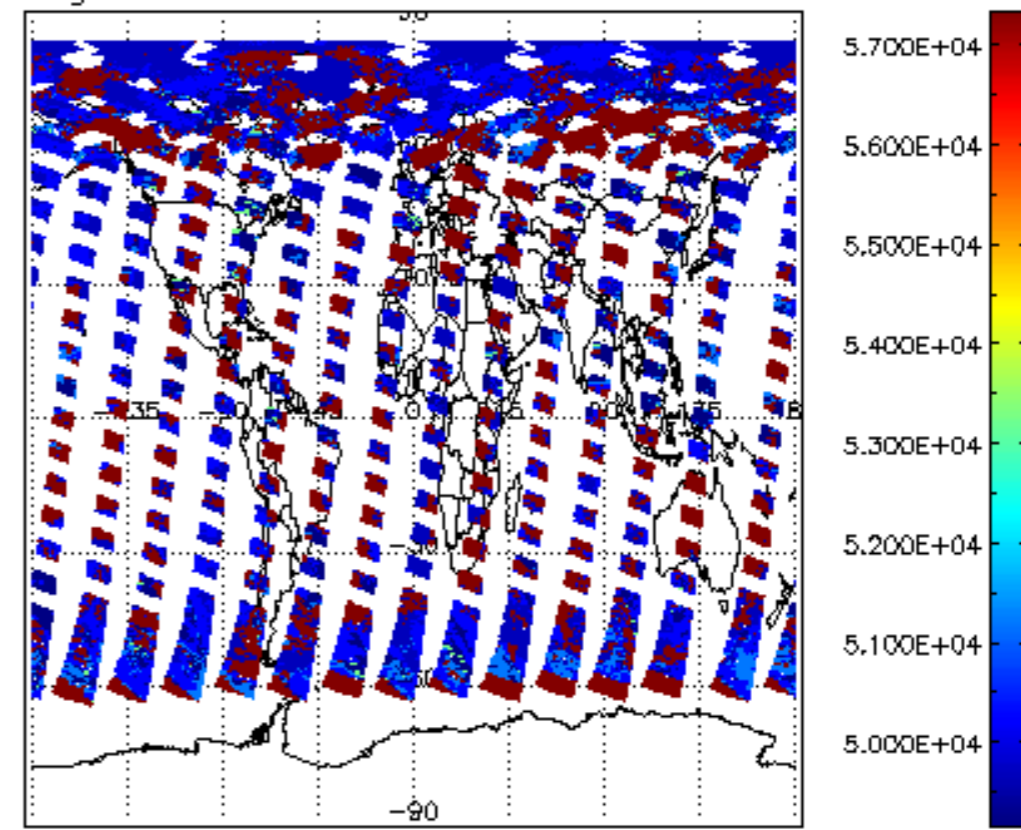
cl_top_height for 17JUL2009 00:00:00 to 18JUL2009 00:00:00

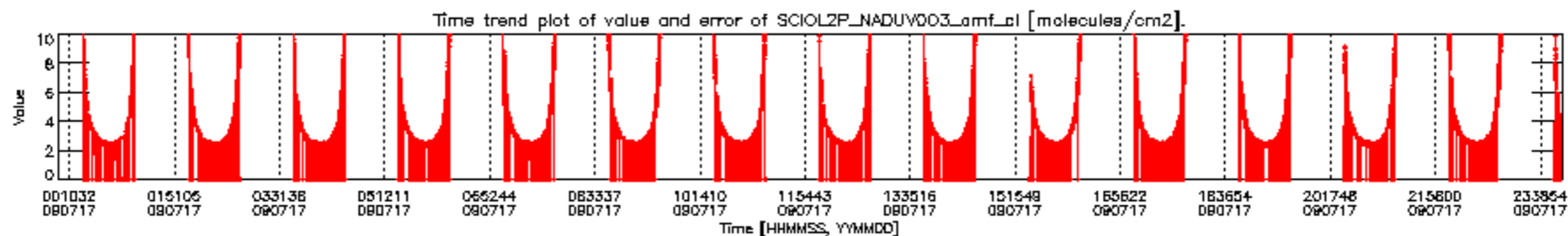
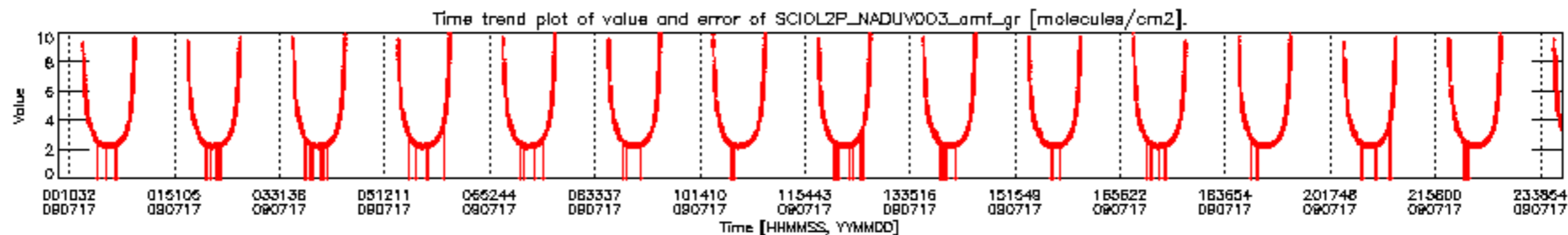
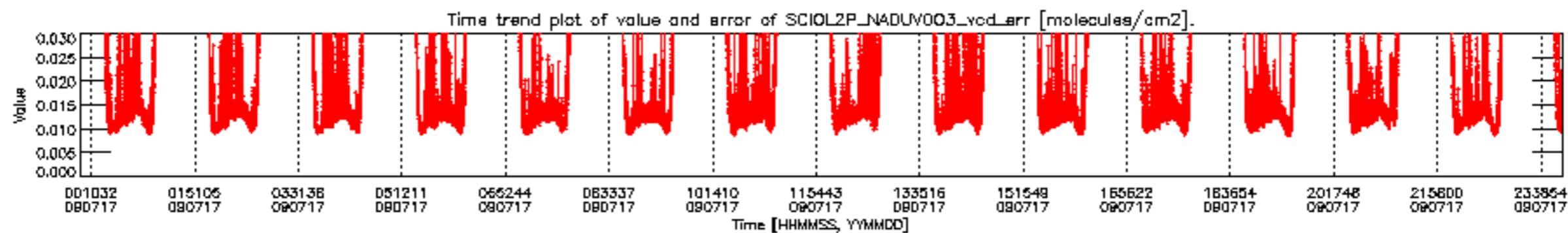
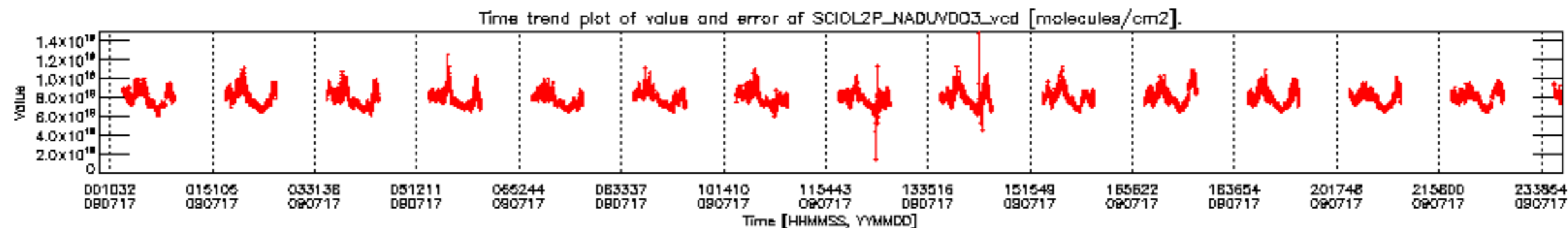


cl_opt_depth for 17JUL2009 00:00:00 to 18JUL2009 00:00:00

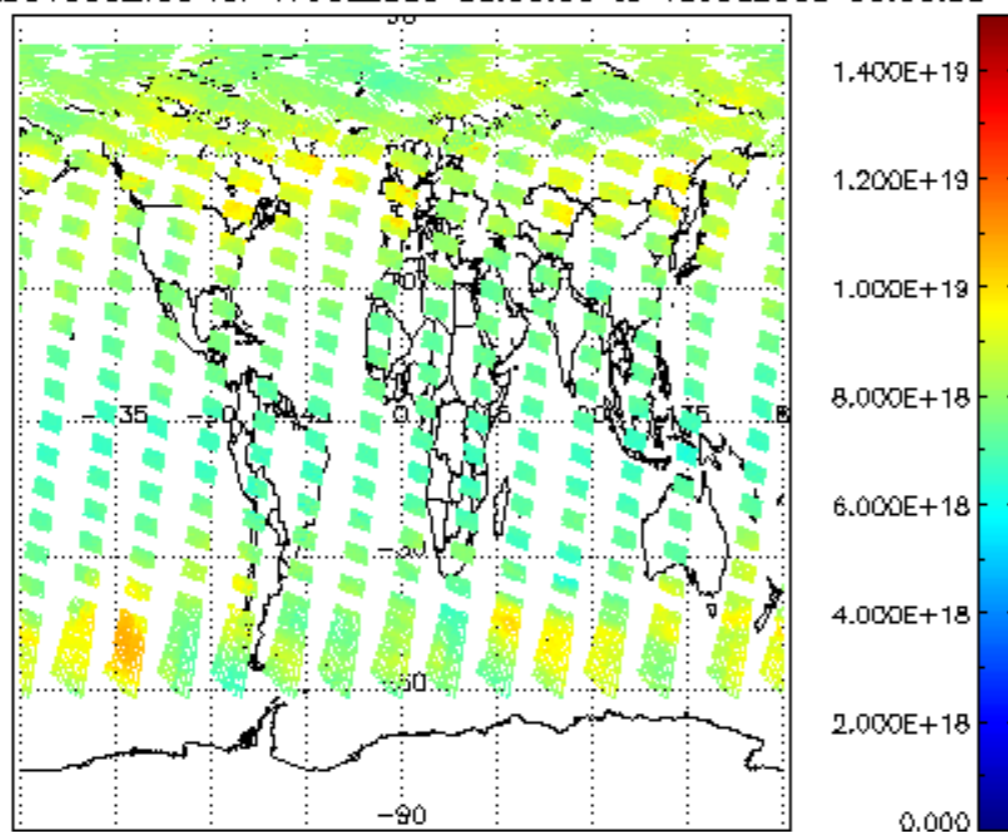


cloud_flags for 17JUL2009 00:00:00 to 18JUL2009 00:00:00

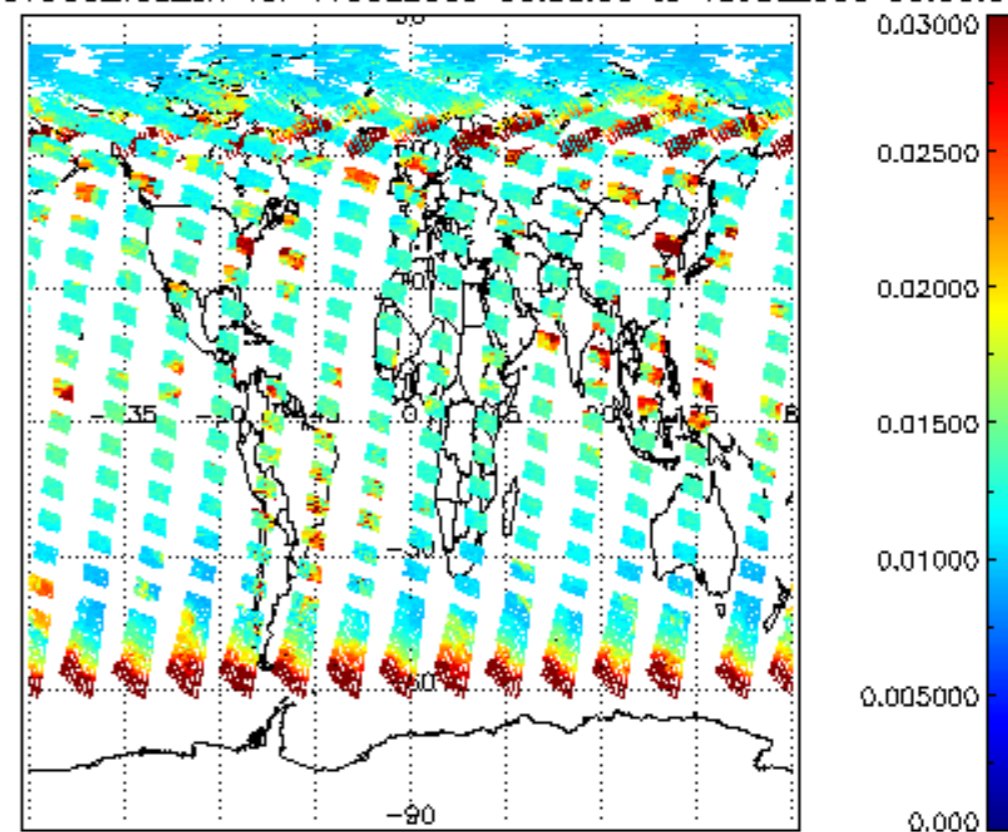




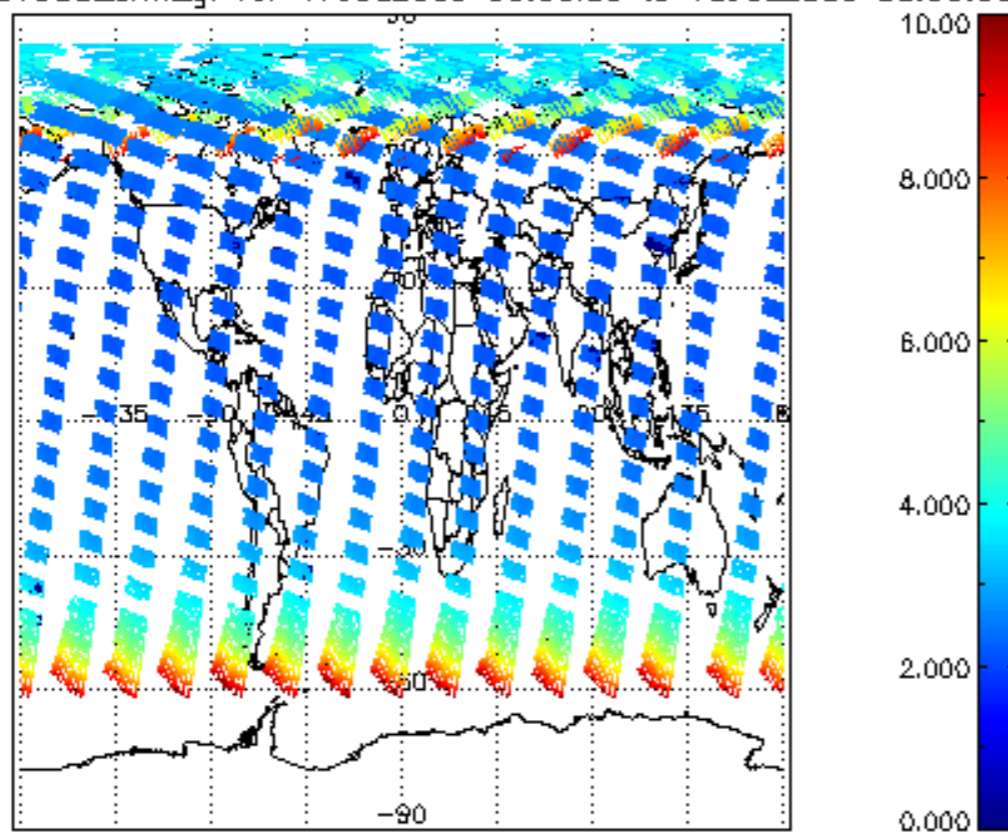
SCIOL2P_NADUV003_vcd for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



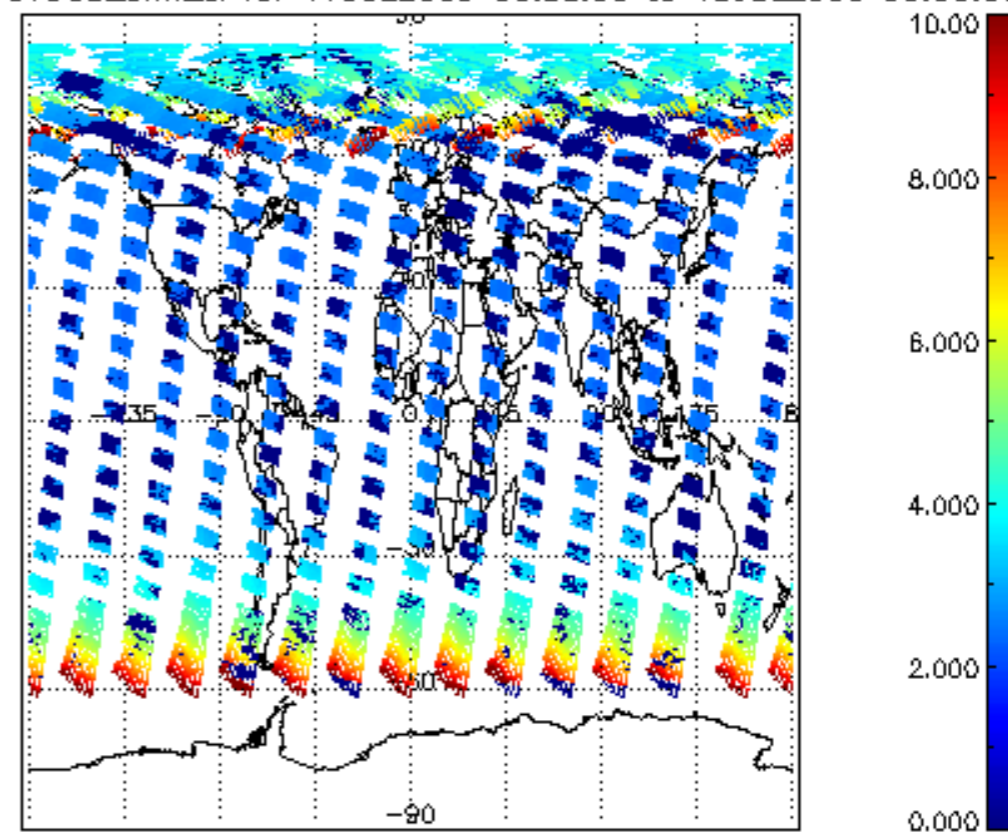
SCIOL2P_NADUV003_vcd_err for 17JUL2009 00:00:00 to 18JUL2009 00:00:00

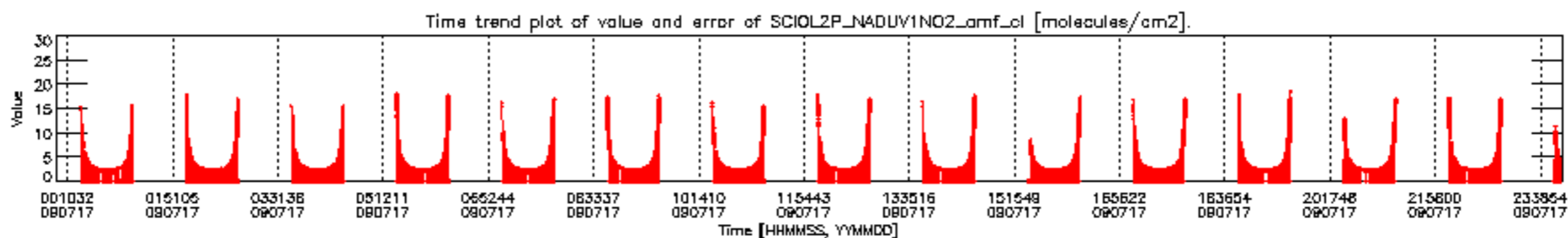
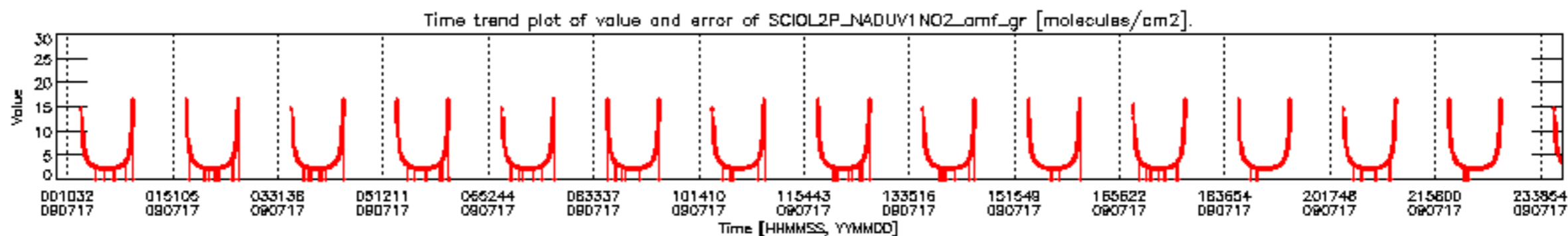
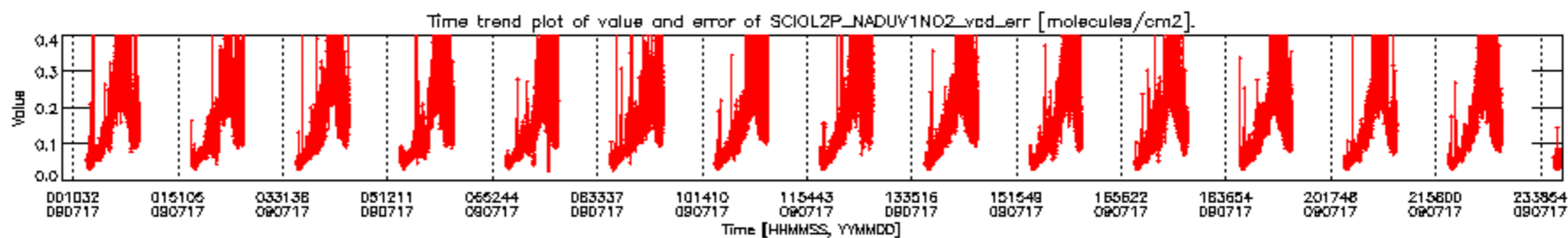
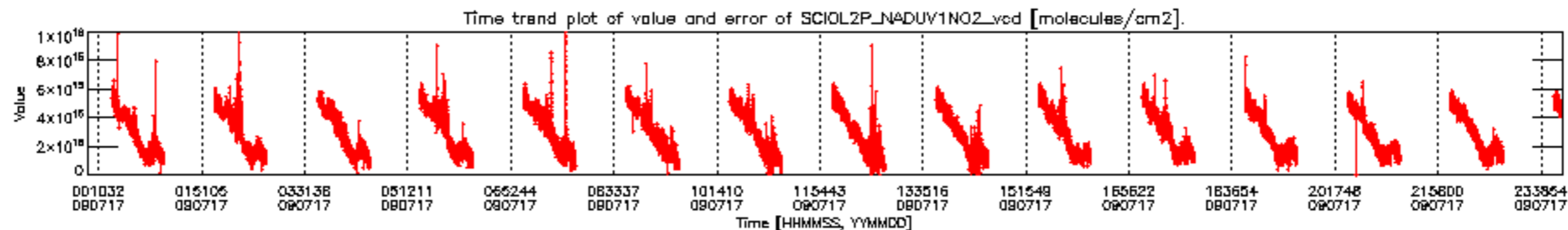


SCIOL2P_NADUV003_amf_gr for 17JUL2009 00:00:00 to 18JUL2009 00:00:00

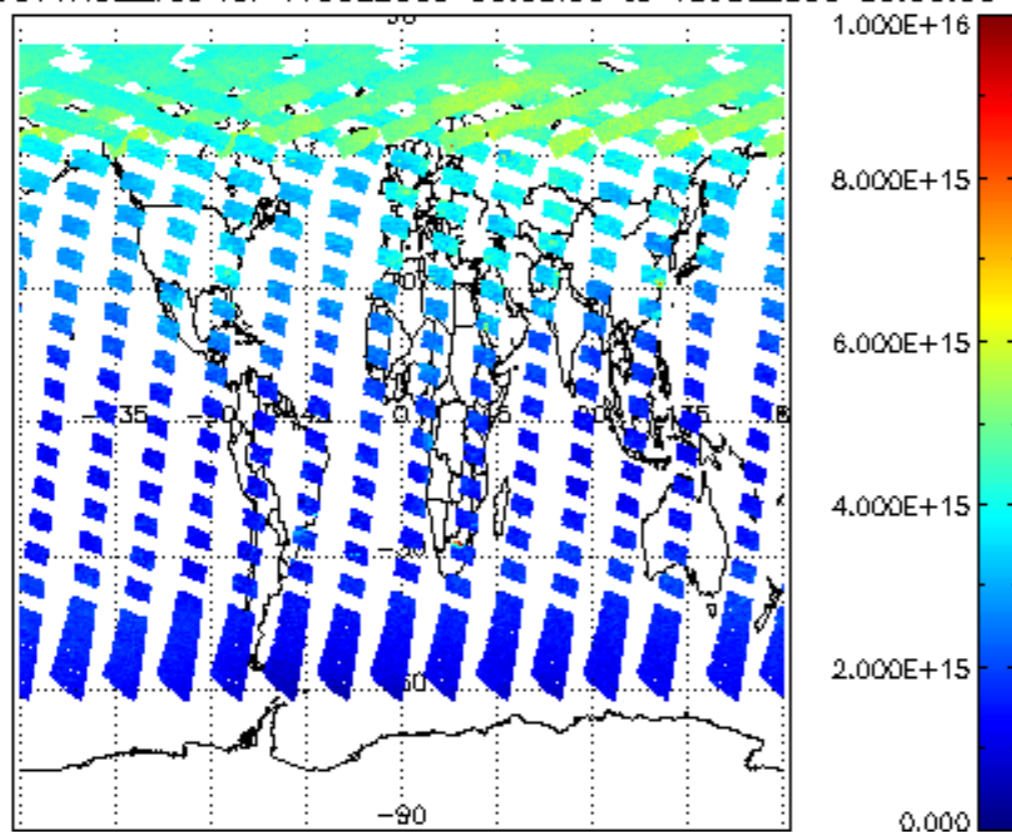


SCIOL2P_NADUV003_amf_cl for 17JUL2009 00:00:00 to 18JUL2009 00:00:00

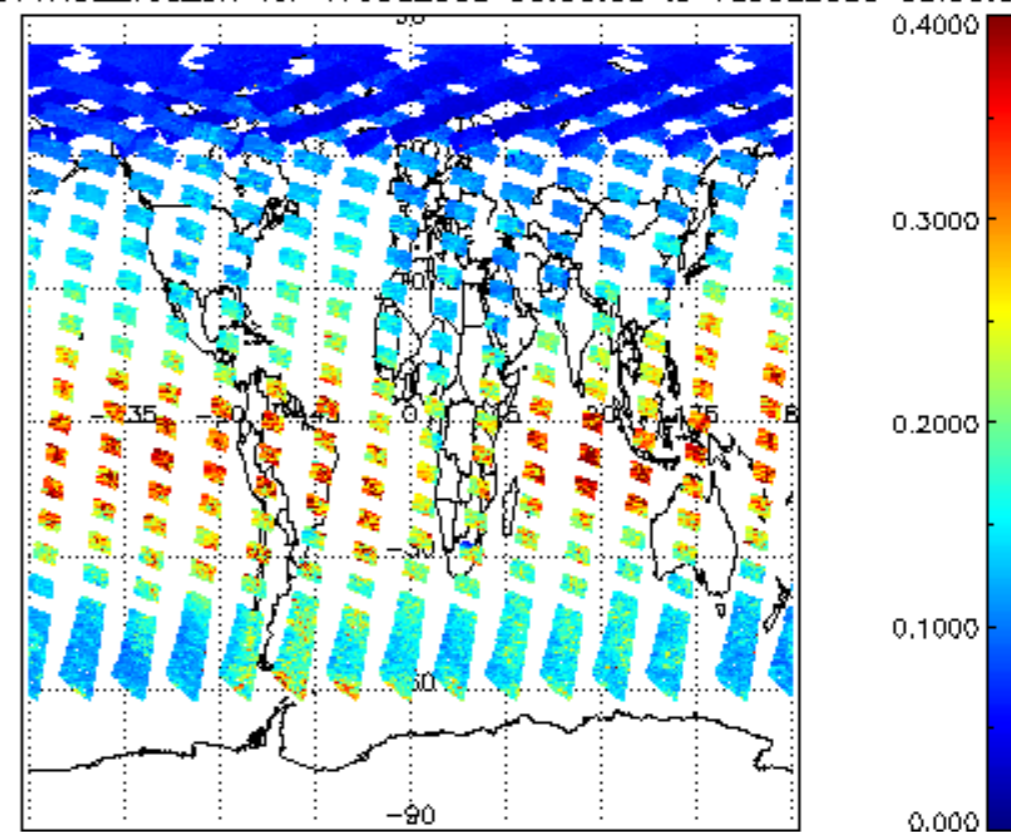




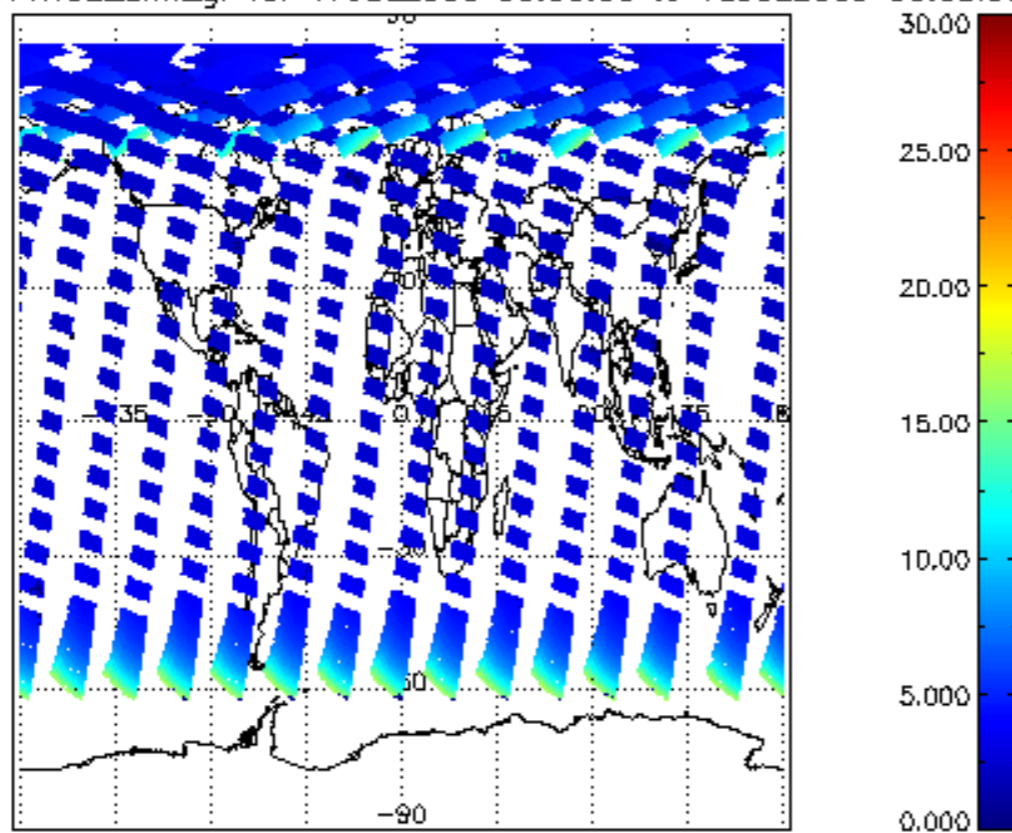
SCIOL2P_NADUV1NO2_vcd for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



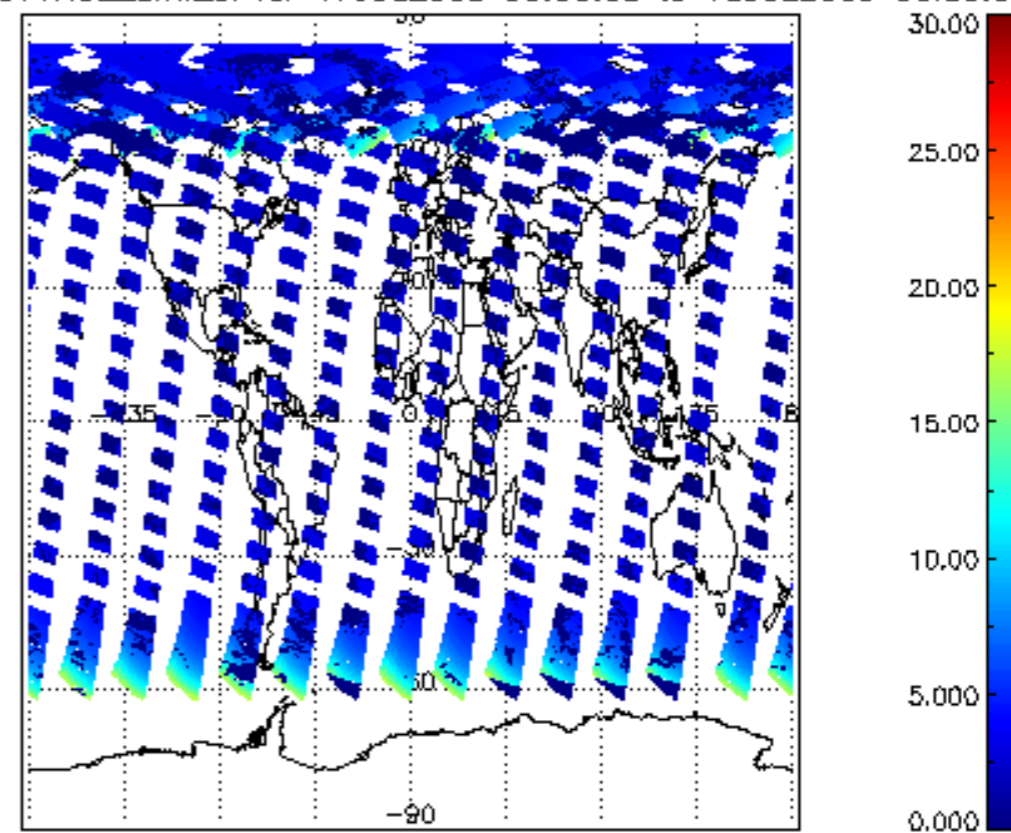
SCIOL2P_NADUV1NO2_vcd_err for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



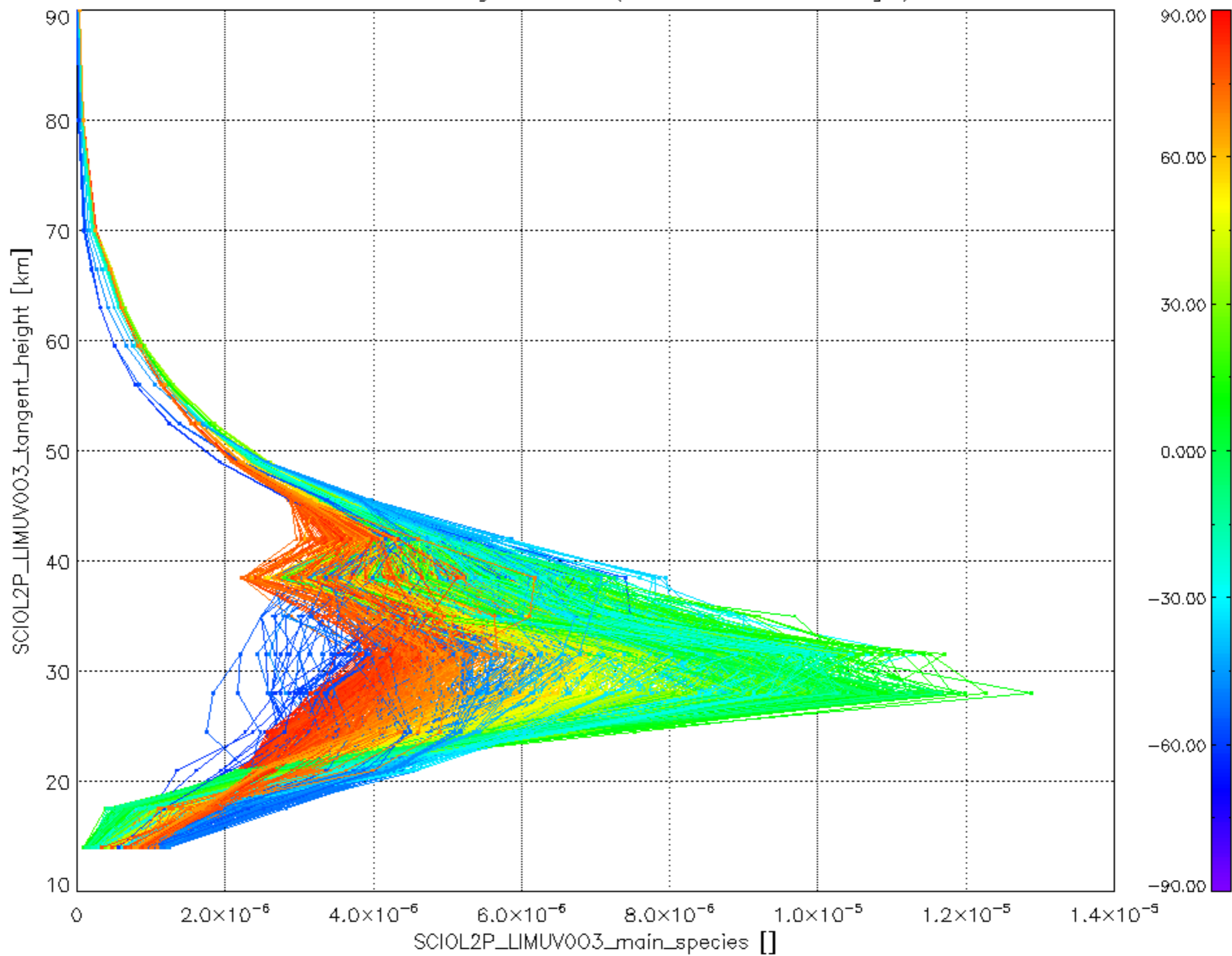
SCIOL2P_NADUV1NO2_amf_gr for 17JUL2009 00:00:00 to 18JUL2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 17JUL2009 00:00:00 to 18JUL2009 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).

