

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	08JUN2009 06:04:15
Data source version	SCIA-OL/3.01-R
Processing scope for products	21MAY2009 00:00:00 to 22MAY2009 00:00:00
Start time of first product within scope	21MAY2009 00:10:24
Stop time of last product within scope	22MAY2009 00:34:09
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__2PRDPA20090521_001024_000033252079_00131_37760_2626.N1	21MAY2009 00:10:24	21MAY2009 01:05:49	0	GOOD
1	SCI_OL__2PRDPA20090521_015100_000033122079_00132_37761_2627.N1	21MAY2009 01:51:00	21MAY2009 02:46:12	0	GOOD
2	SCI_OL__2PRDPA20090521_033135_000033252079_00133_37762_2628.N1	21MAY2009 03:31:35	21MAY2009 04:27:01	0	GOOD
3	SCI_OL__2PRDPA20090521_051211_000033122079_00134_37763_2629.N1	21MAY2009 05:12:11	21MAY2009 06:07:24	0	GOOD
4	SCI_OL__2PRDPA20090521_065247_000033252079_00135_37764_2630.N1	21MAY2009 06:52:47	21MAY2009 07:48:12	0	GOOD
5	SCI_OL__2PRDPA20090521_083323_000033122079_00136_37765_2631.N1	21MAY2009 08:33:23	21MAY2009 09:28:35	0	GOOD
6	SCI_OL__2PRDPA20090521_101358_000033252079_00137_37766_2632.N1	21MAY2009 10:13:58	21MAY2009 11:09:24	0	GOOD
7	SCI_OL__2PRDPA20090521_115434_000033122079_00138_37767_2633.N1	21MAY2009 11:54:34	21MAY2009 12:49:47	0	GOOD
8	SCI_OL__2PRDPA20090521_133509_000033252079_00139_37768_2634.N1	21MAY2009 13:35:09	21MAY2009 14:30:35	0	GOOD
9	SCI_OL__2PRDPA20090521_151545_000033122079_00140_37769_2635.N1	21MAY2009 15:15:45	21MAY2009 16:10:58	0	GOOD
10	SCI_OL__2PRDPA20090521_165621_000033252079_00141_37770_2636.N1	21MAY2009 16:56:21	21MAY2009 17:51:46	0	GOOD
11	SCI_OL__2PRDPA20090521_183616_000033682079_00142_37771_2637.N1	21MAY2009 18:36:16	21MAY2009 19:32:25	0	GOOD
12	SCI_OL__2PRDPA20090521_201652_000033812079_00143_37772_2644.N1	21MAY2009 20:16:52	21MAY2009 21:13:13	0	GOOD
13	SCI_OL__2PRDPA20090521_215808_000033122079_00144_37773_2642.N1	21MAY2009 21:58:08	21MAY2009 22:53:21	0	GOOD
14	SCI_OL__2PRDPA20090521_233844_000033252079_00145_37774_2641.N1	21MAY2009 23:38:44	22MAY2009 00:34:09	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: 146380

Total number of cloud data DSRs with good quality flag (=0): 146380 (100.0 %)

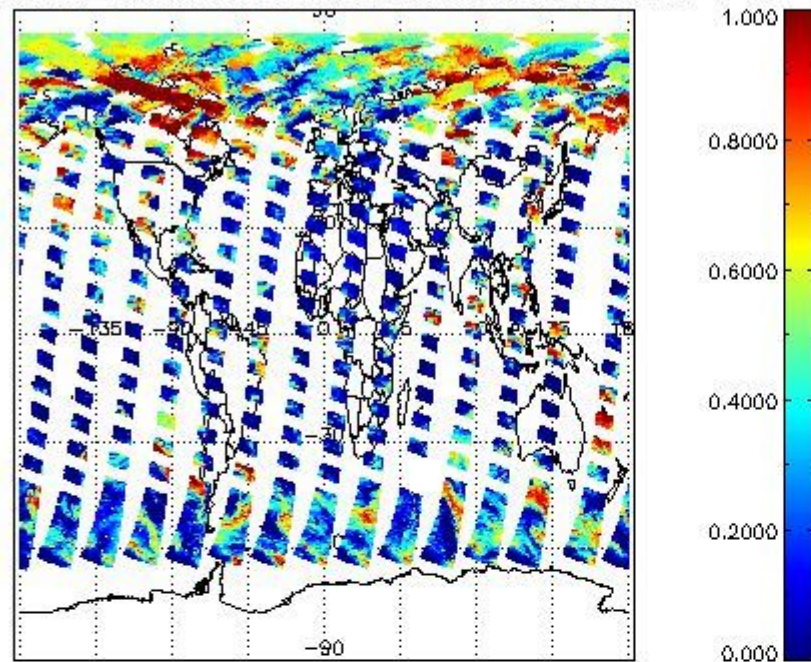
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	146380	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	146380	0.17052	0.12500	0.12500	0.25000	0.060148	s
CL_FRAC	146380	0.35833	0.32385	0.0000	1.0000	0.30610	-
CL_FRAC_ERR	146380	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	146380	5.4565	4.0000	4.0000	8.0000	1.9247	
PMD_READ_CL[0]	146380	0.32243	0.0000	0.0000	8.0000	1.3570	-
PMD_READ_CL[1]	146380	1.5785	0.0000	0.0000	8.0000	2.6394	-
CL_TOP_HEIGHT	130550	2.9501	1.1320	0.0000	17.000	3.5306	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	130550	62.844	100.00	0.0000	101.00	43.704	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	146380	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	146380	11001011	11000100	11000000	11100000	3456.1	flags
AERO_ABSO_IND	146380	3.8371	4.5009	-0.85503	16.385	2.4815	
AERO_IND_DIAG	146380	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	146380	01011000	00000000	00000000	11000000	24504.	flags

Time and geolocation plots:

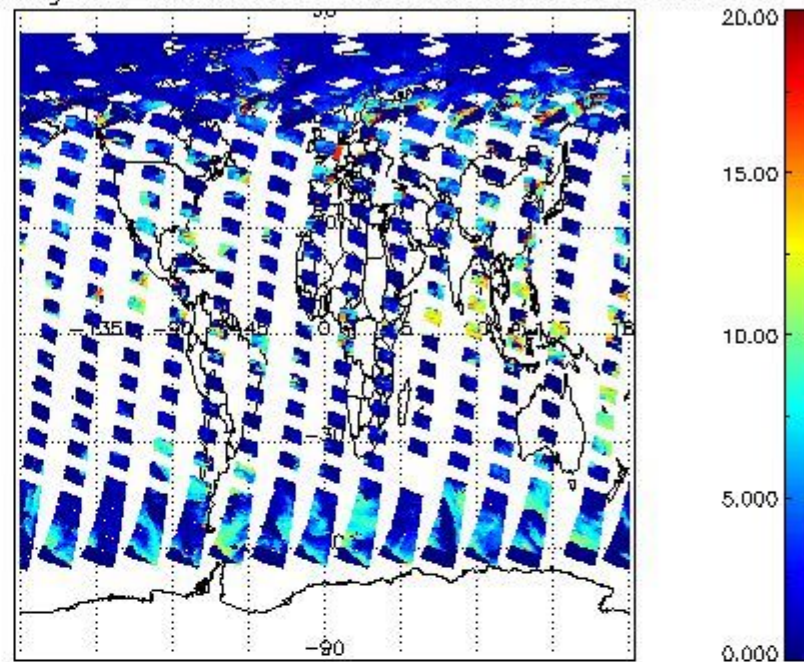
Plots are available for the following parameters:

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

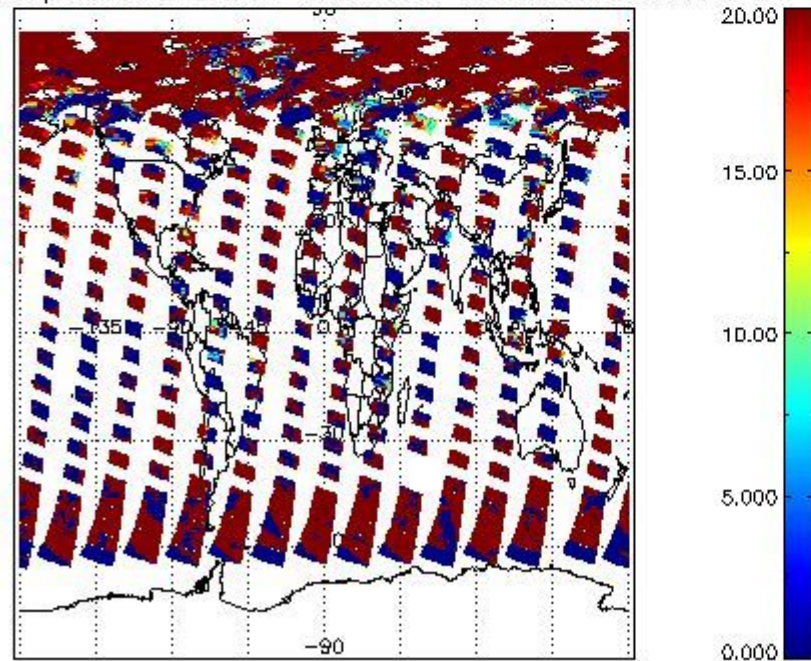
cL_frac for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



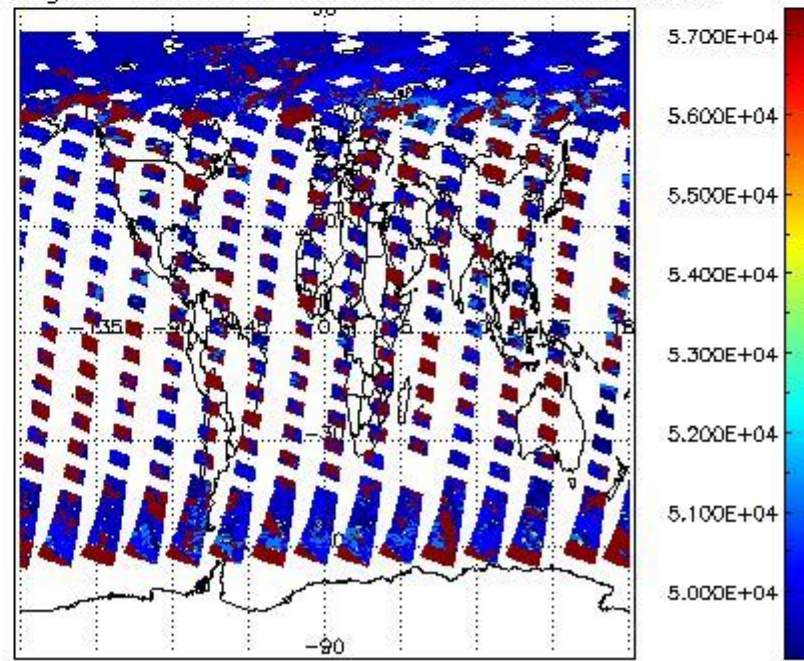
cL_top_height for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



cL_opt_depth for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



cloud_flags for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



2.2.2 Nadir

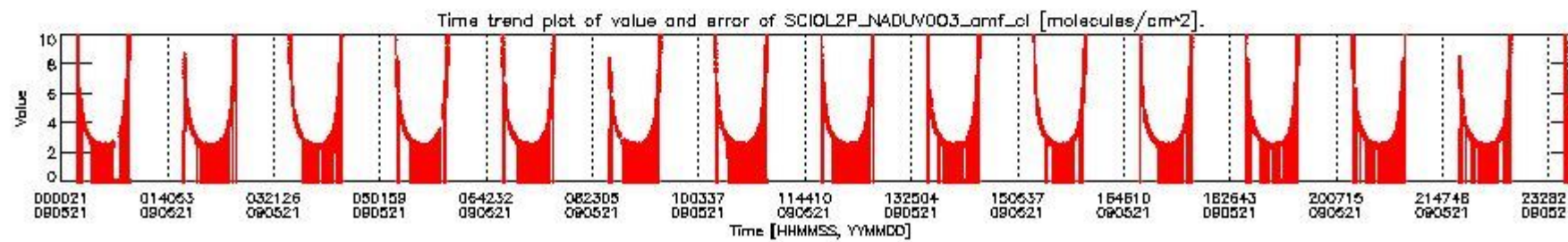
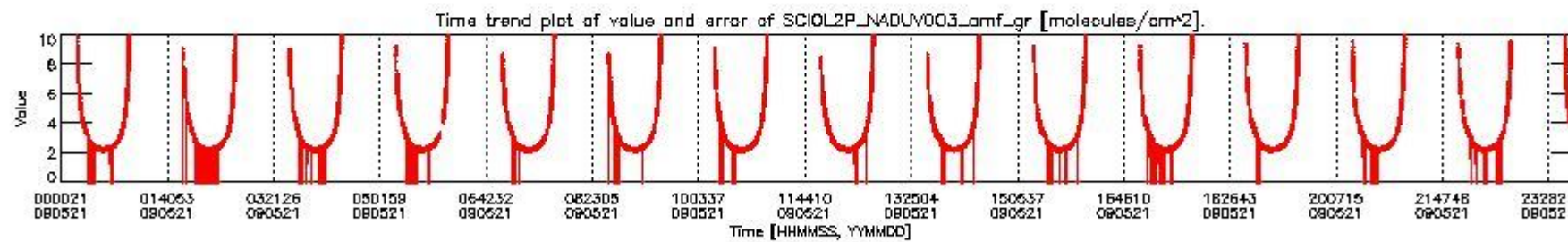
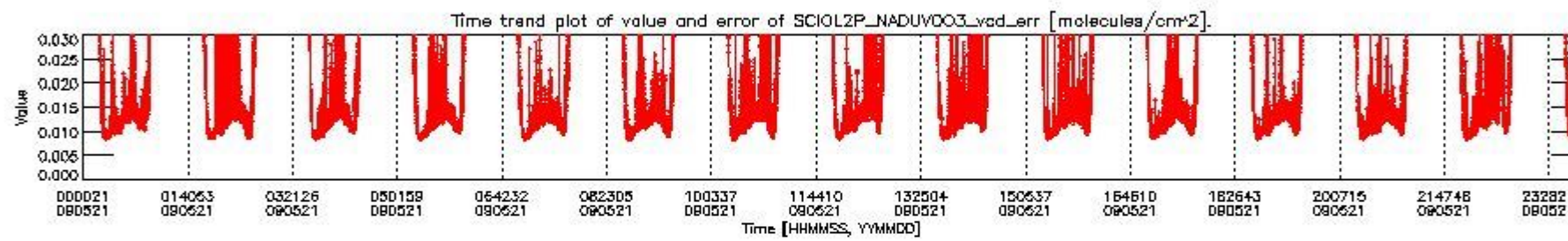
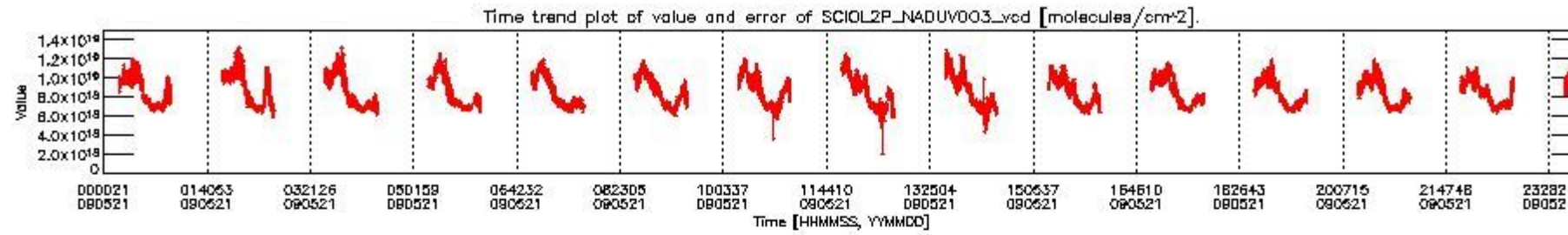
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

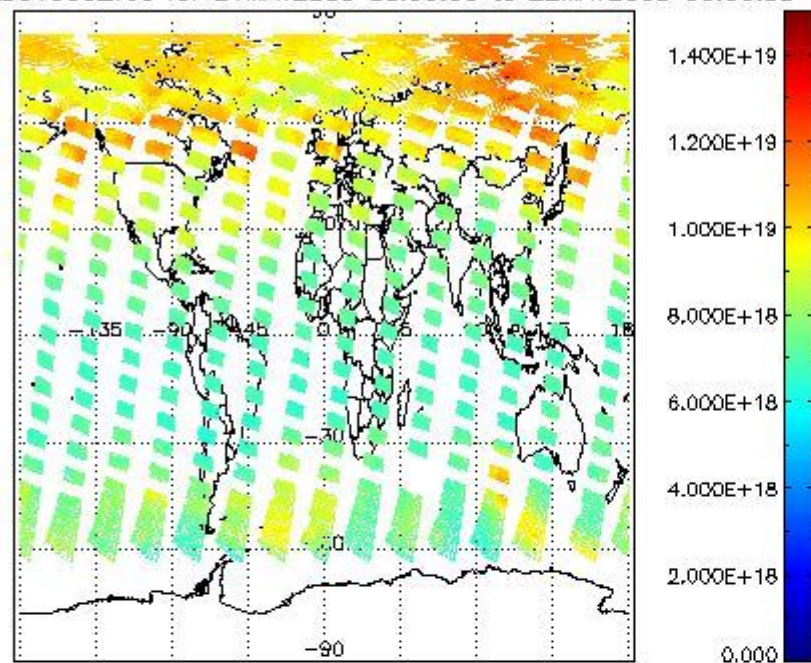
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

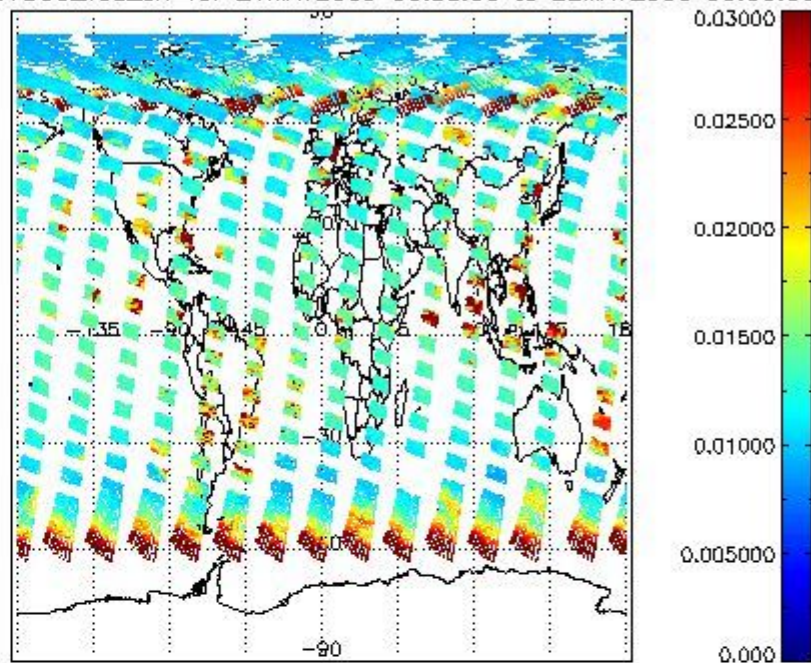
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



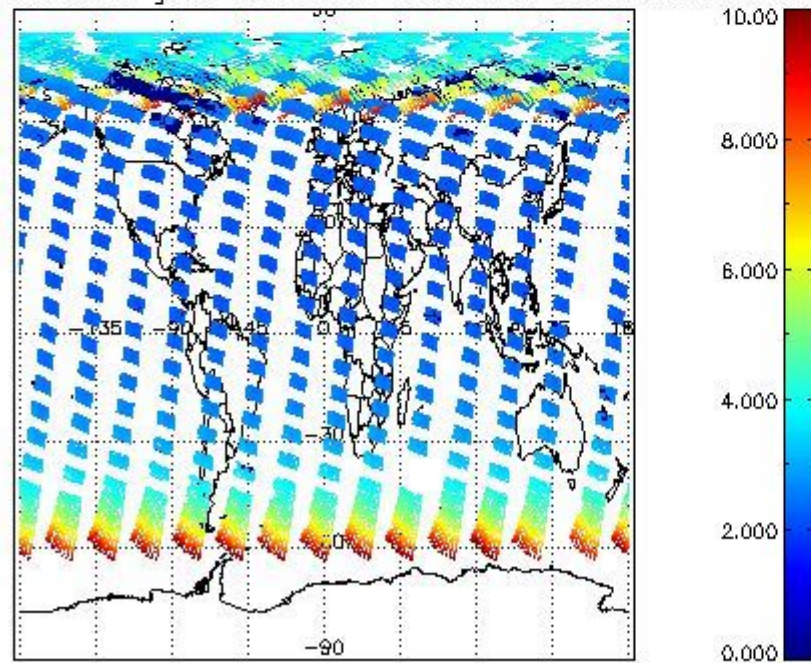
SCIOL2P_NADUV003_vcd for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



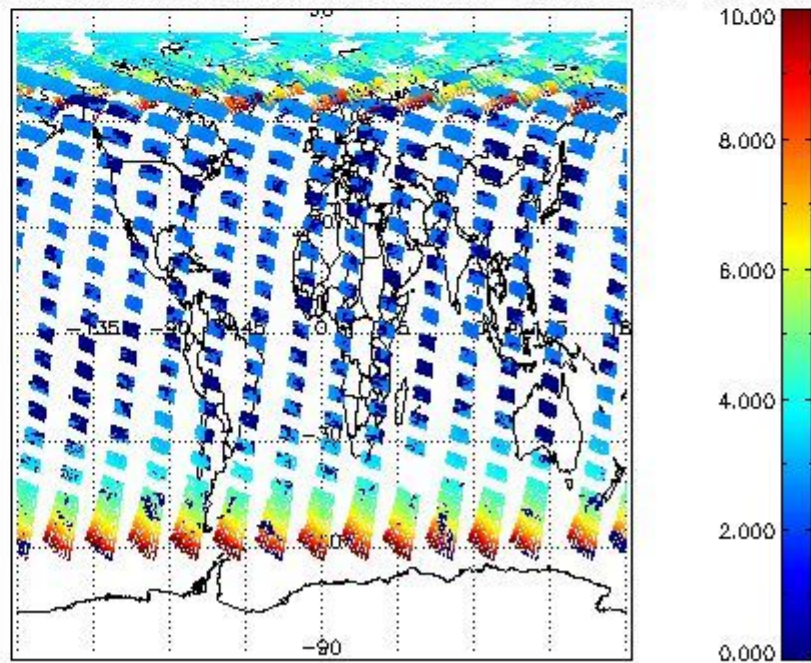
SCIOL2P_NADUV003_vcd_err for 21MAY2009 00:00:00 to 22MAY2009 00:00:00

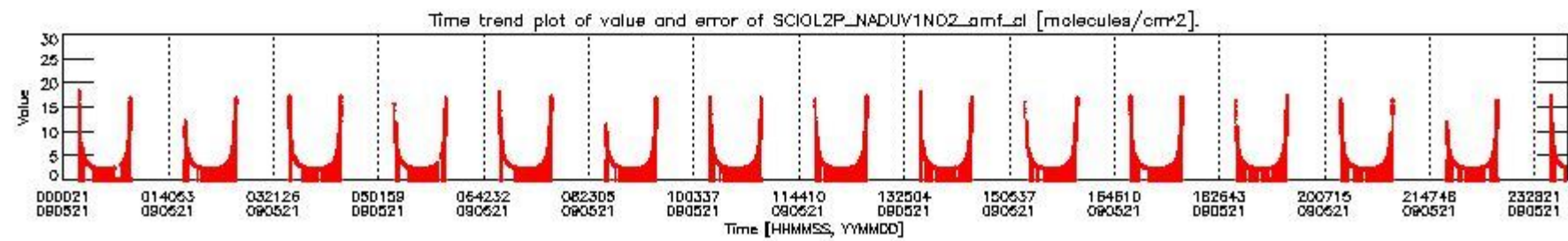
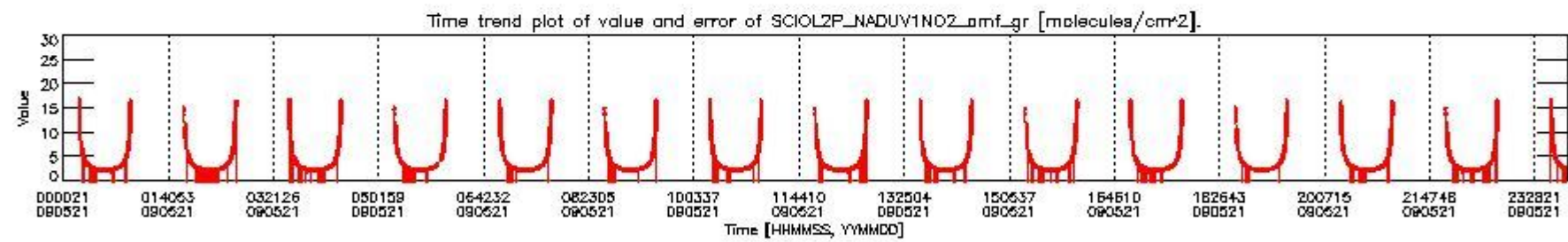
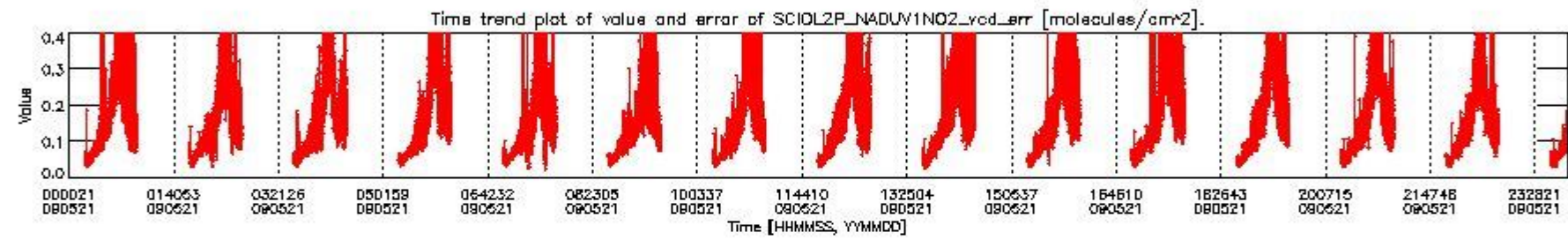
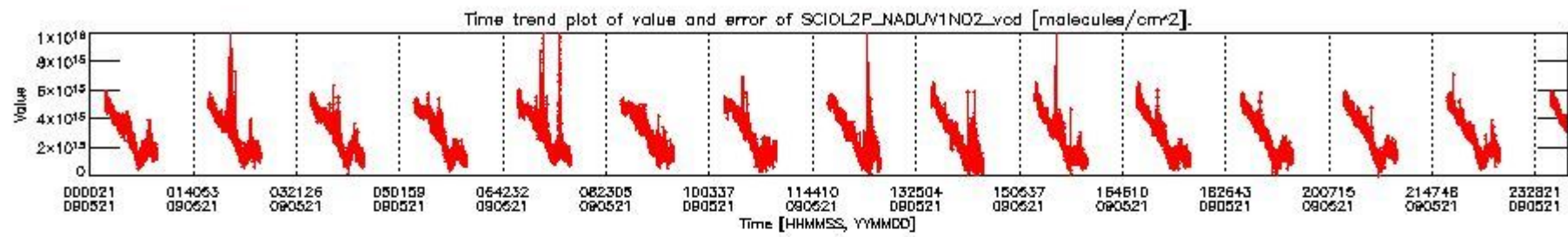


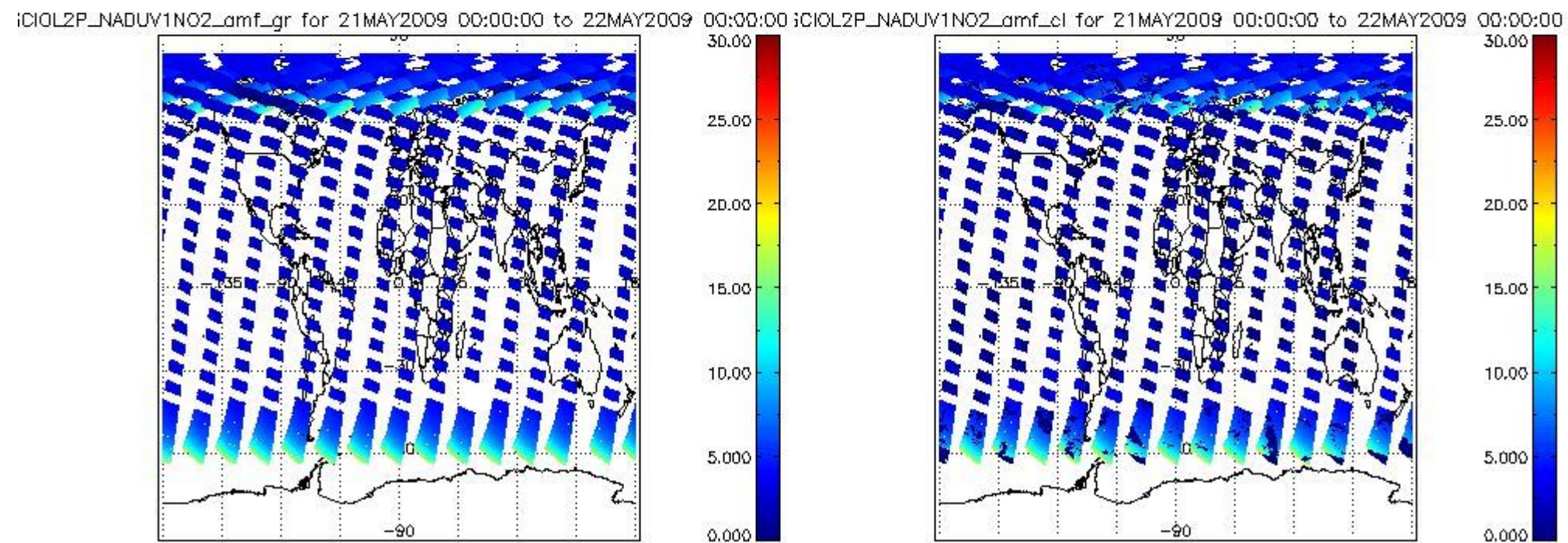
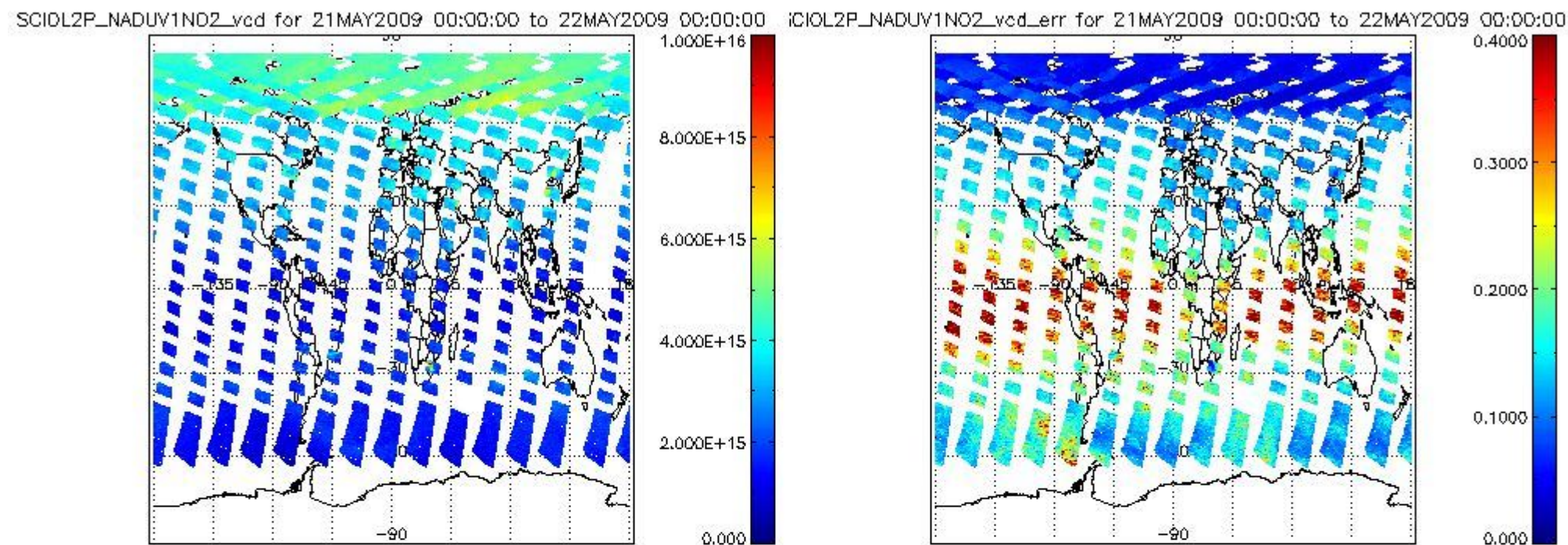
SCIOL2P_NADUV003_amf_gr for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 21MAY2009 00:00:00 to 22MAY2009 00:00:00







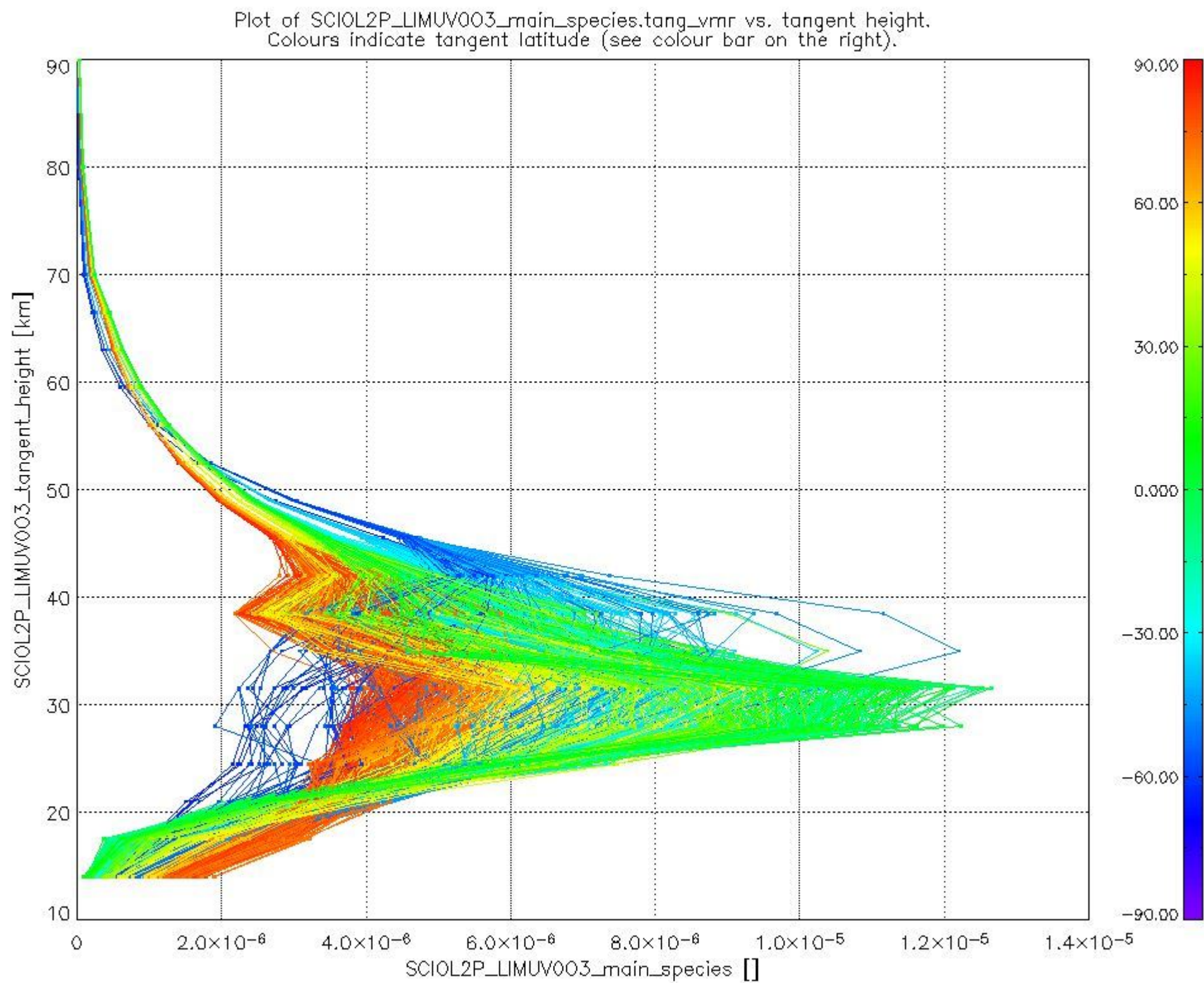
2.2.3 Limb

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

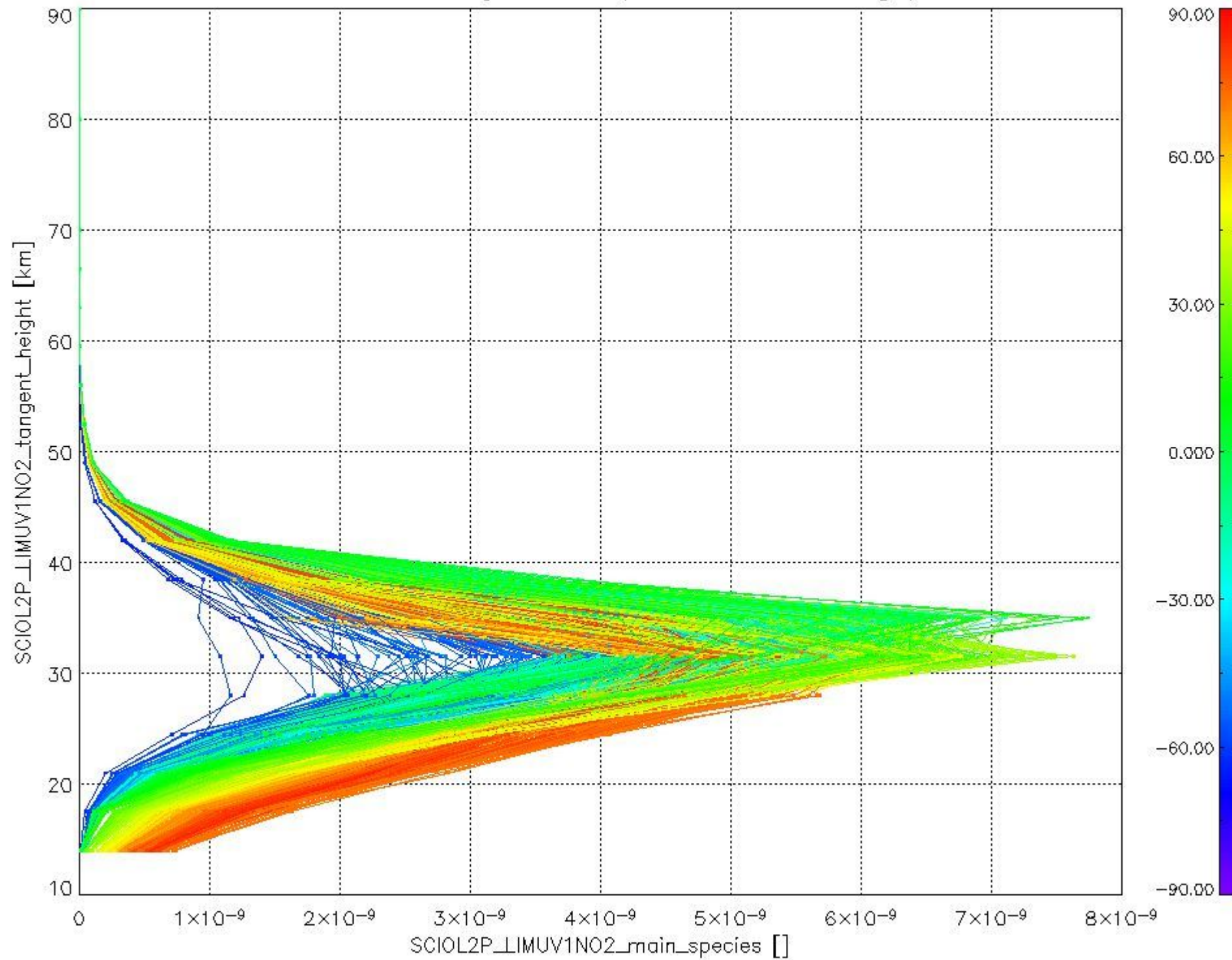
The following data items are currently included into this section:

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.



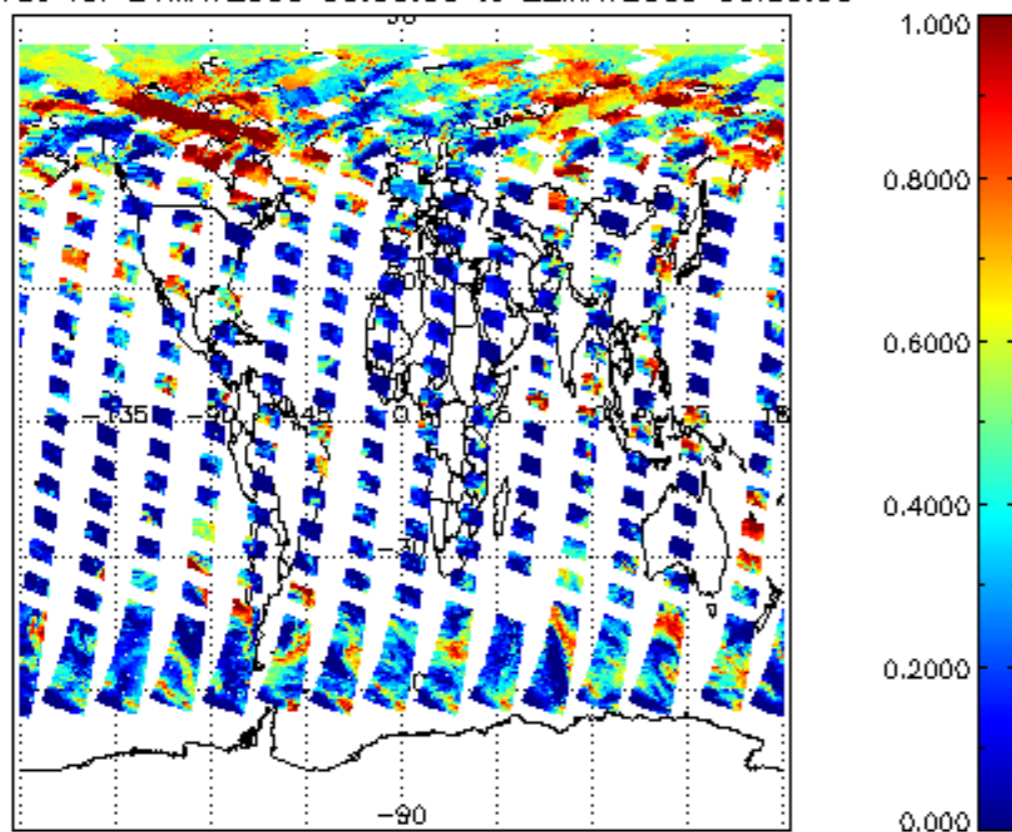
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



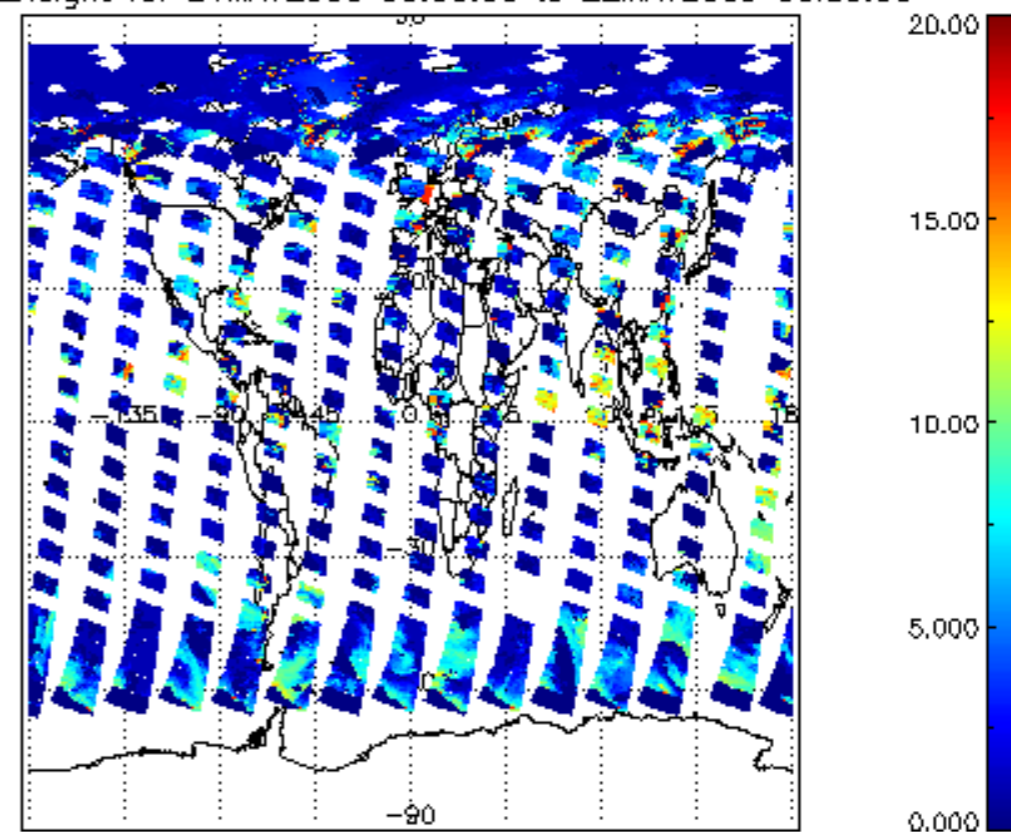
2.3 ADF monitoring

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

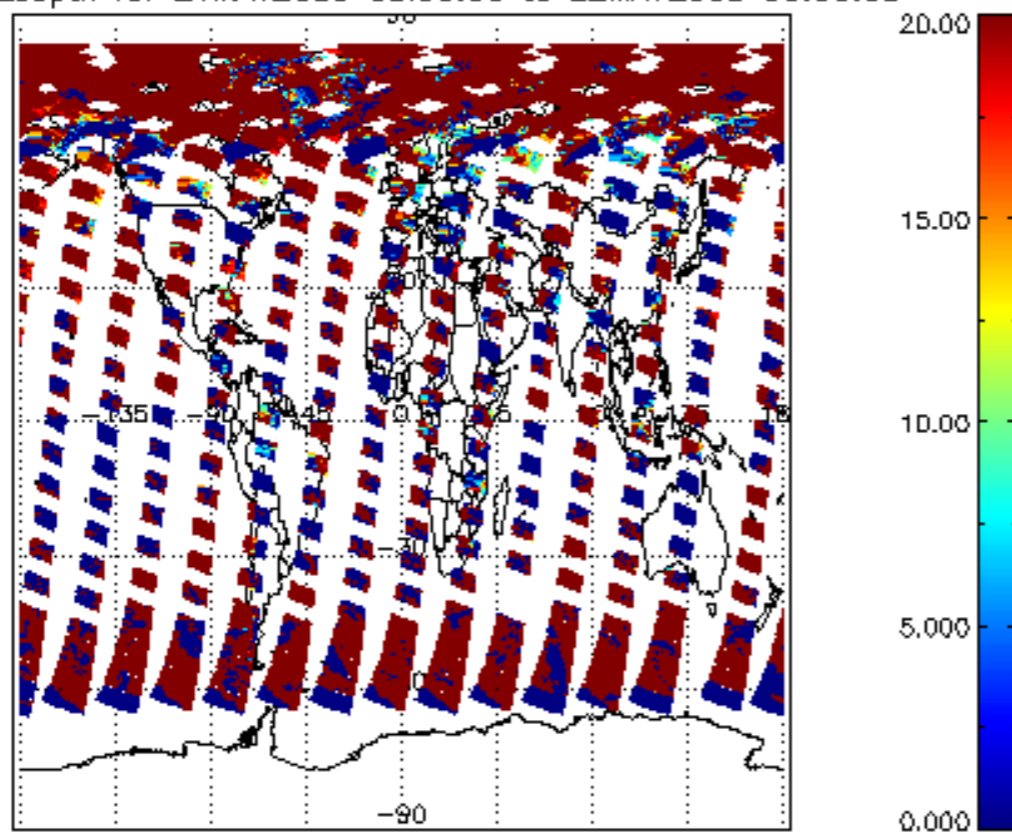
cl_frac for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



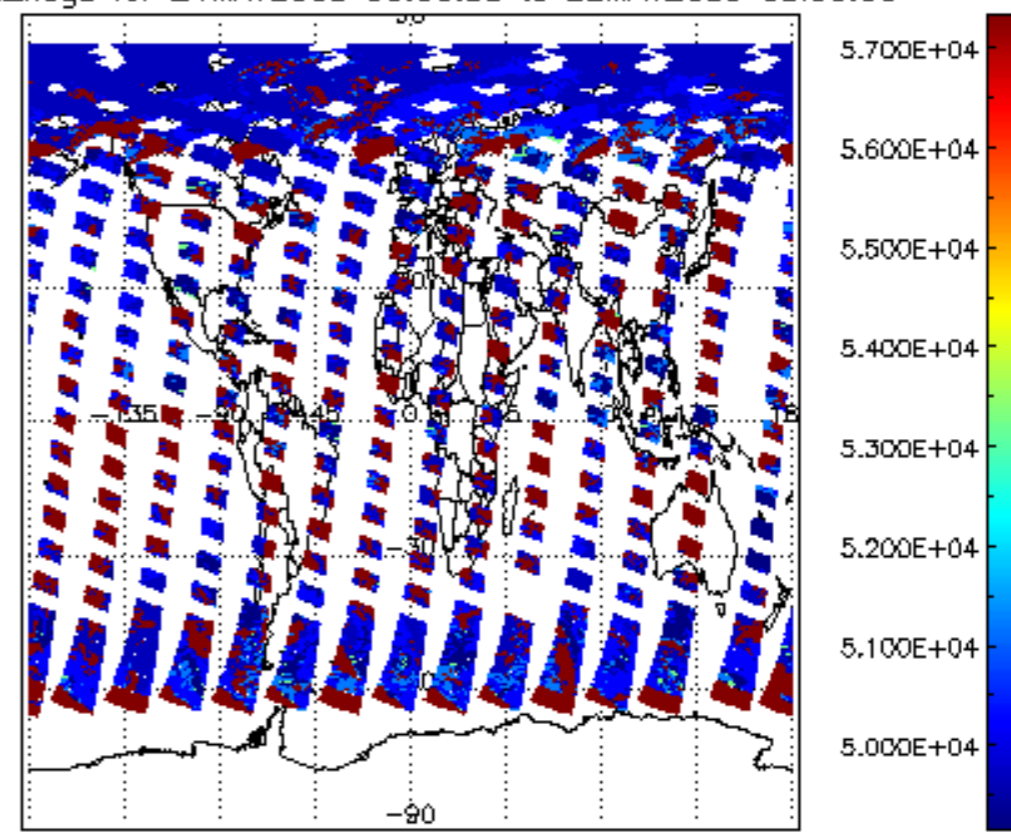
cl_top_height for 21MAY2009 00:00:00 to 22MAY2009 00:00:00

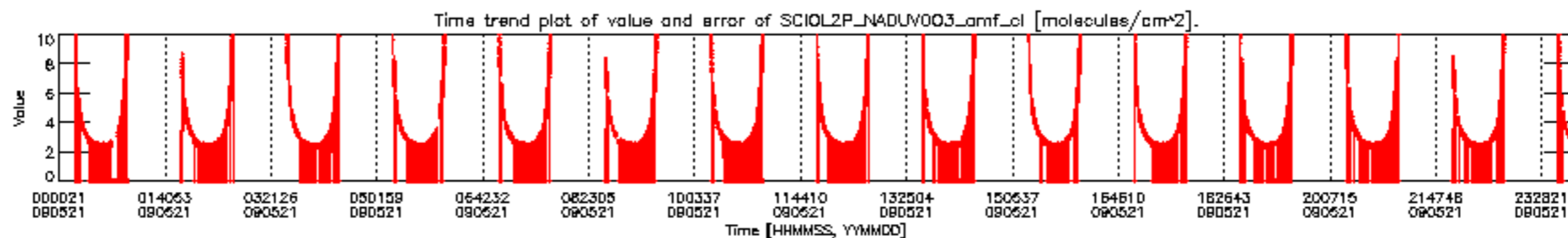
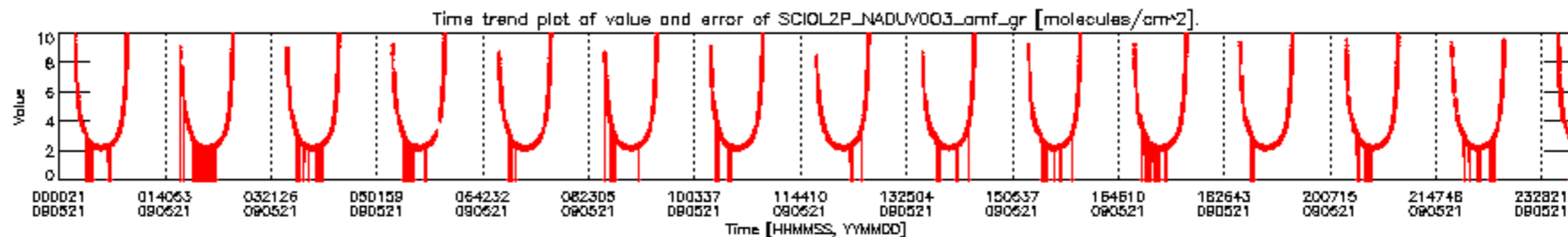
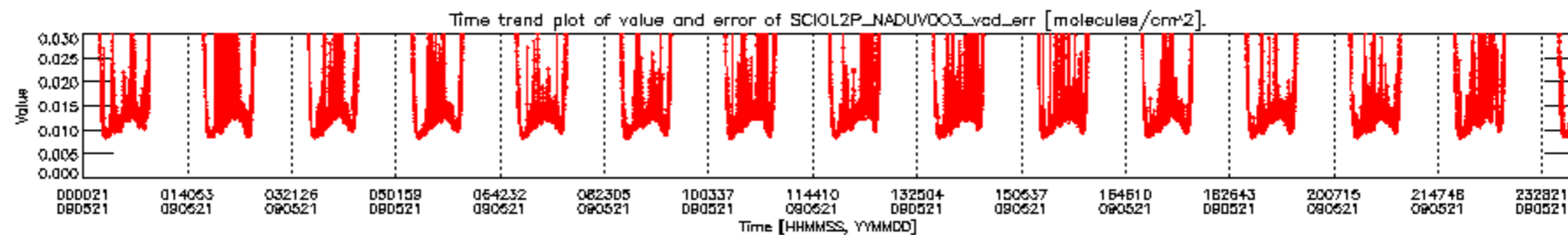
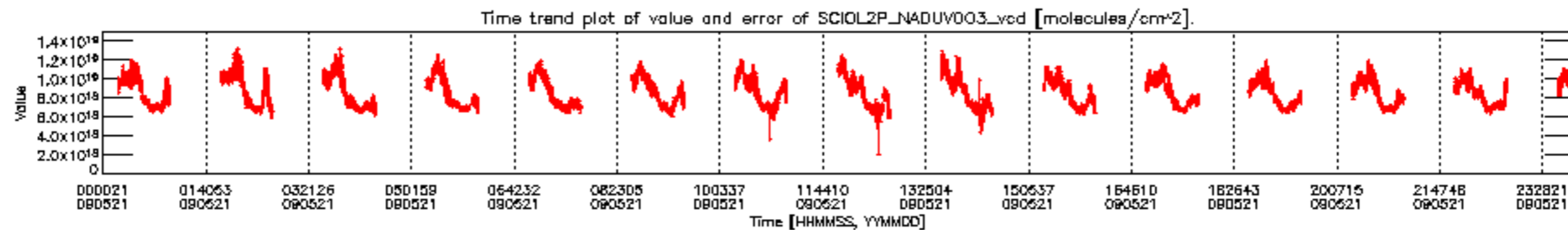


cl_opt_depth for 21MAY2009 00:00:00 to 22MAY2009 00:00:00

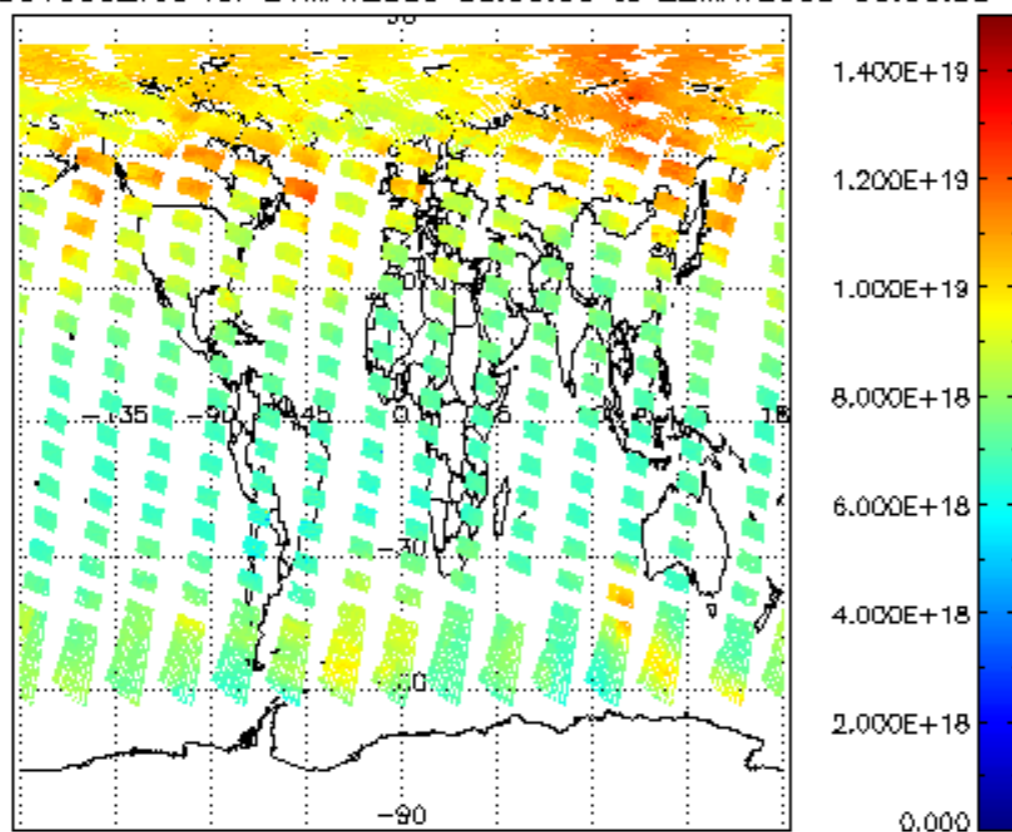


cloud_flags for 21MAY2009 00:00:00 to 22MAY2009 00:00:00

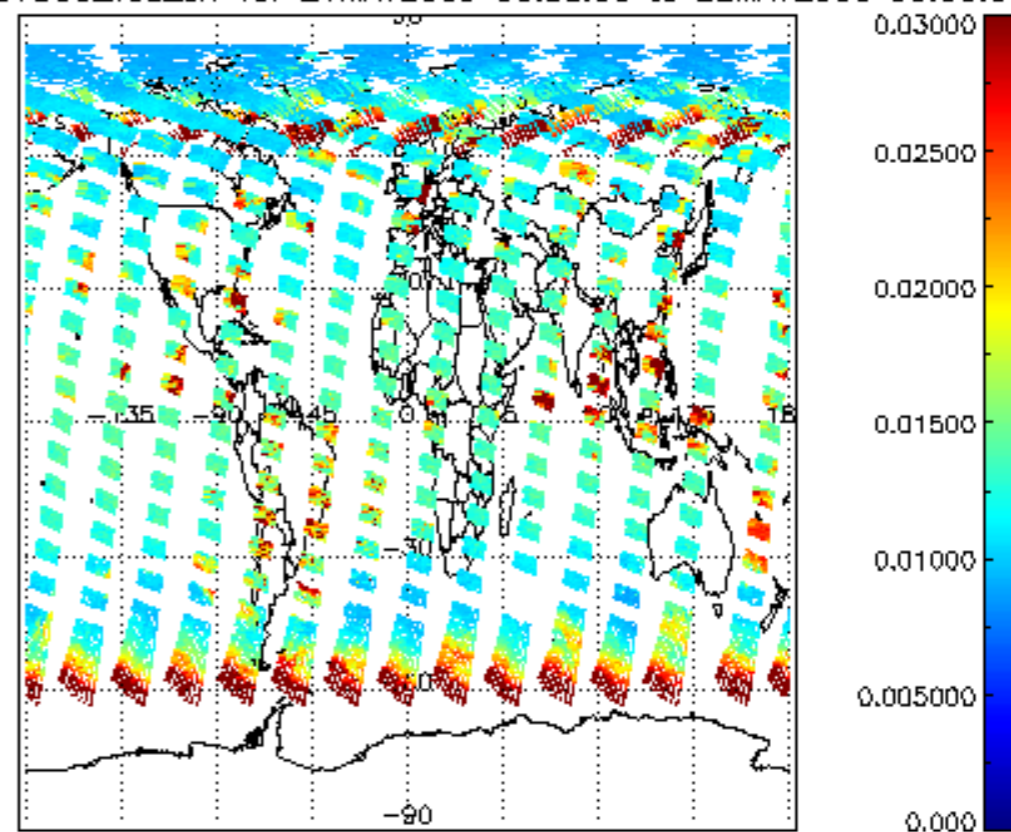




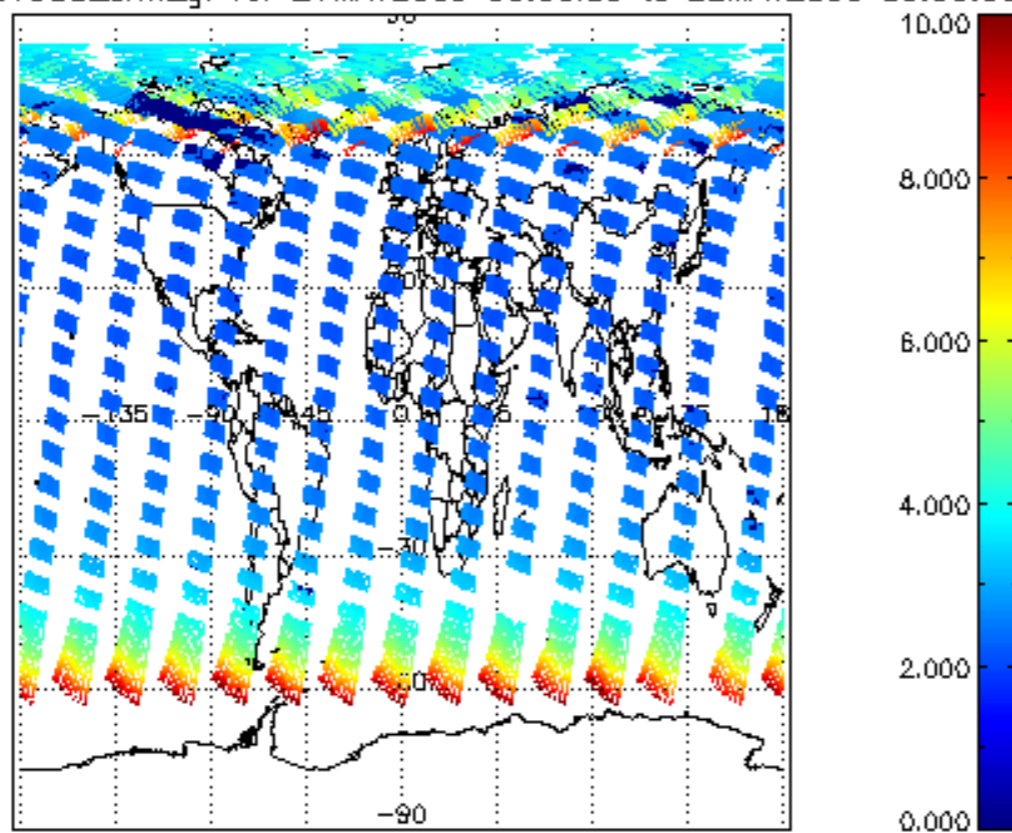
SCIOL2P_NADUV003_vcd for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



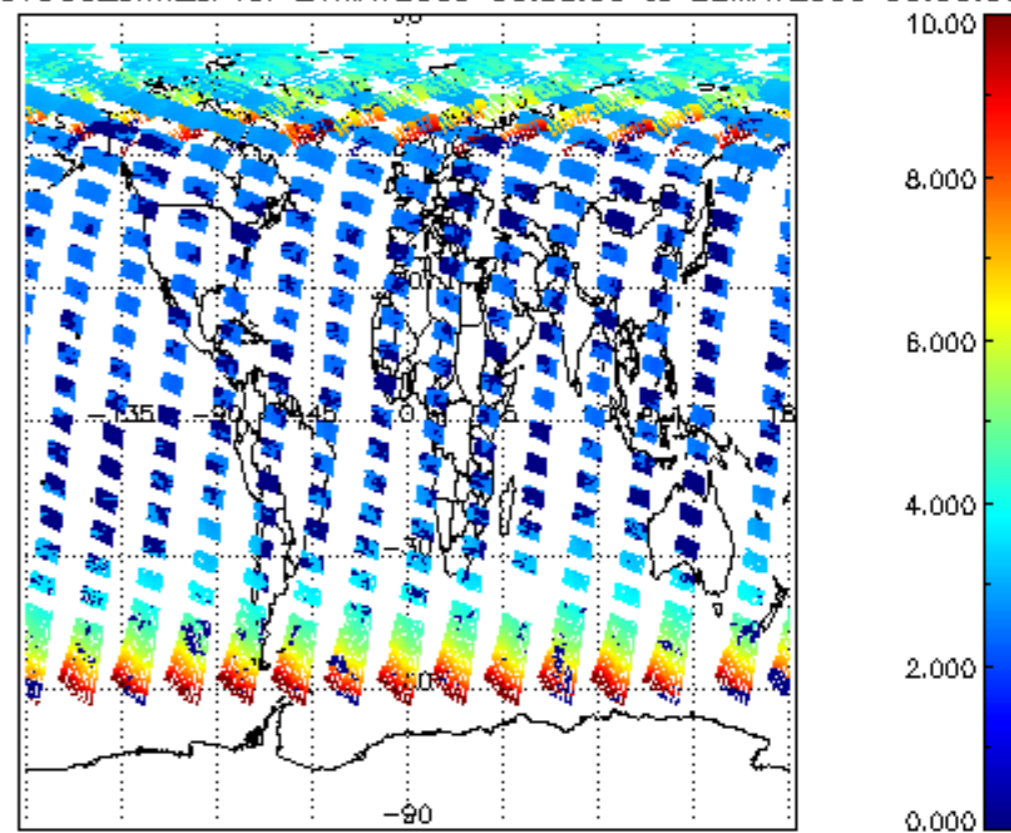
SCIOL2P_NADUV003_vcd_err for 21MAY2009 00:00:00 to 22MAY2009 00:00:00

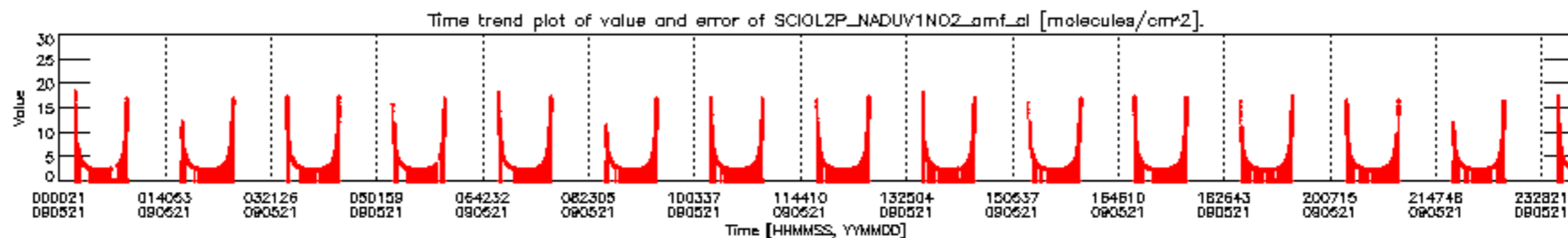
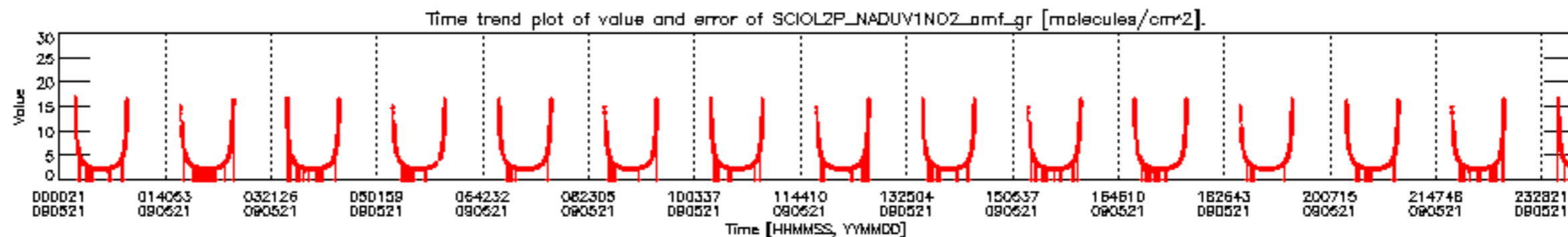
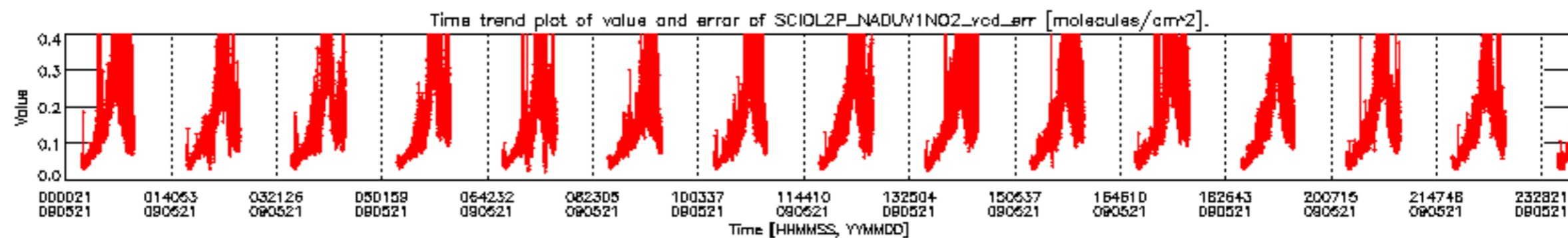
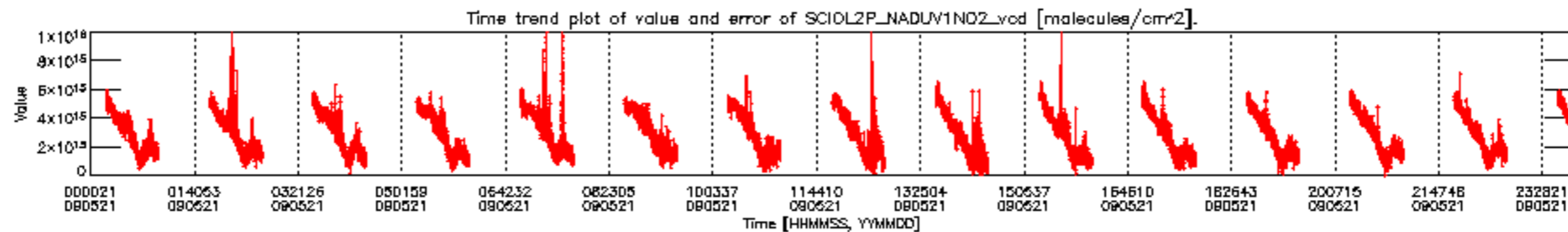


SCIOL2P_NADUV003_amf_gr for 21MAY2009 00:00:00 to 22MAY2009 00:00:00

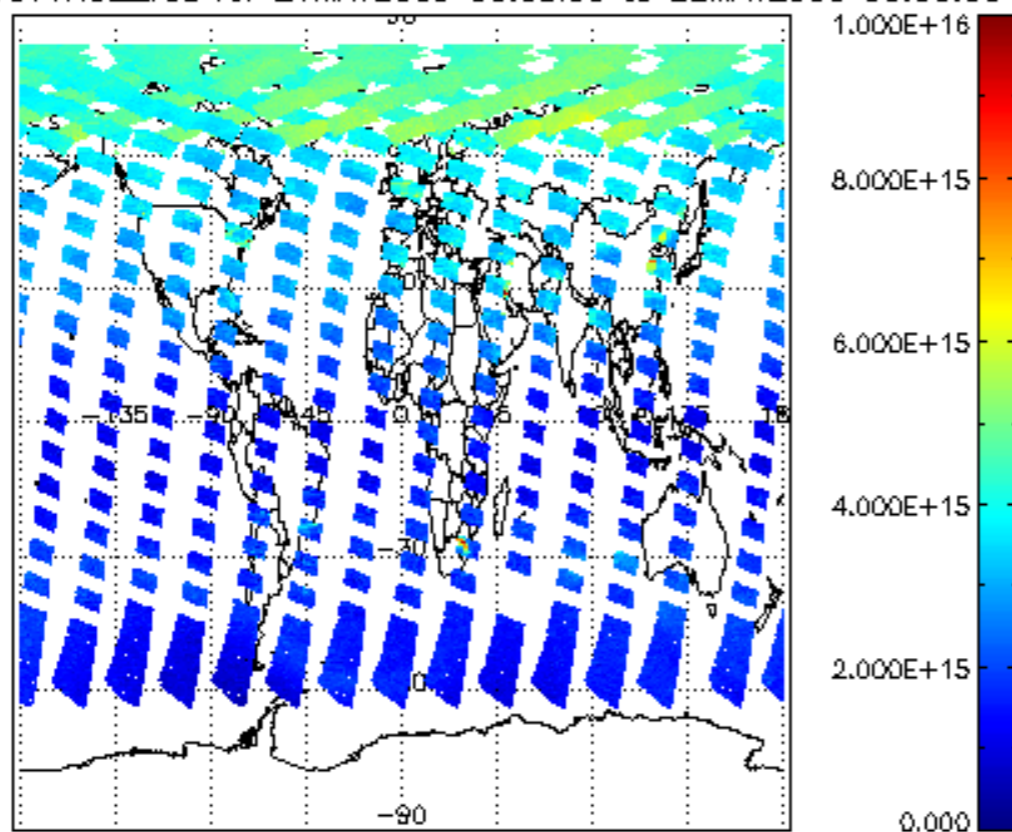


SCIOL2P_NADUV003_amf_cl for 21MAY2009 00:00:00 to 22MAY2009 00:00:00

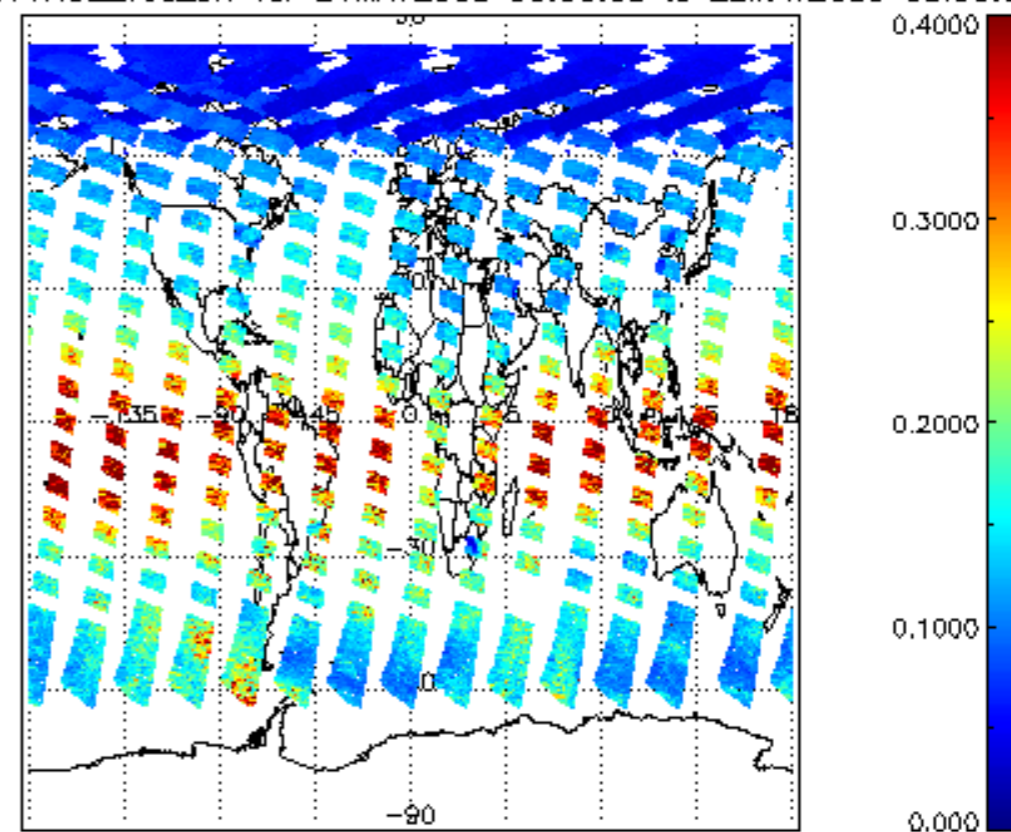




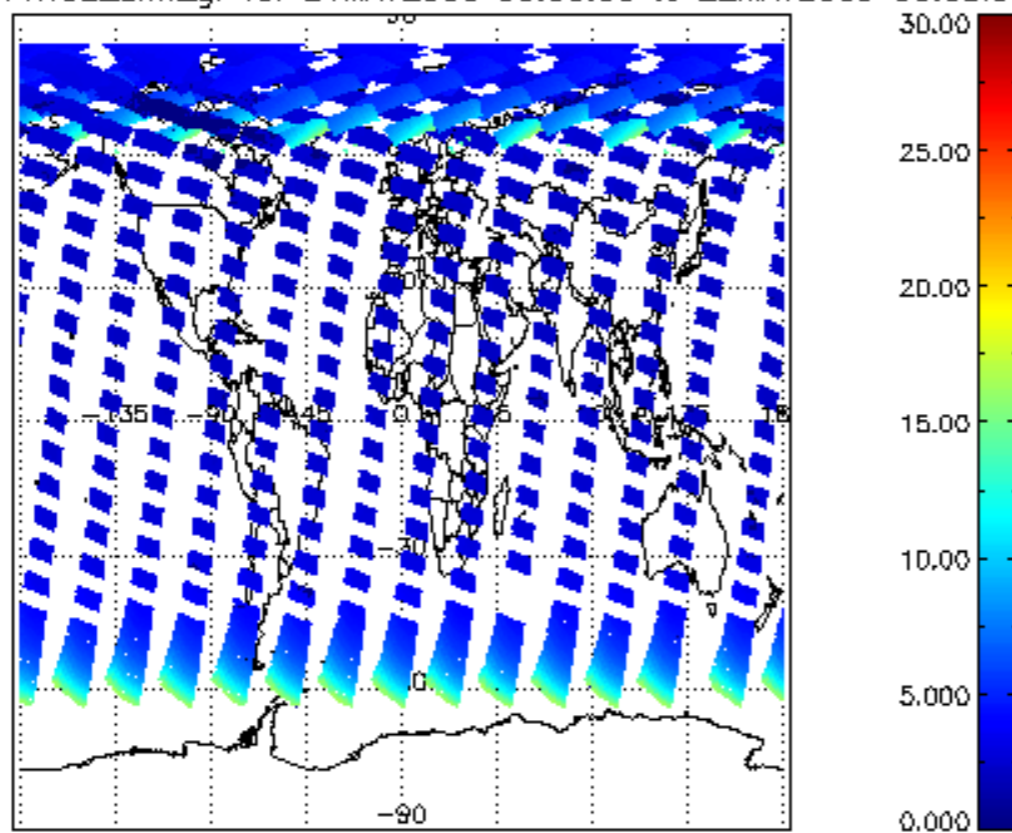
SCIOL2P_NADUV1NO2_vcd for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



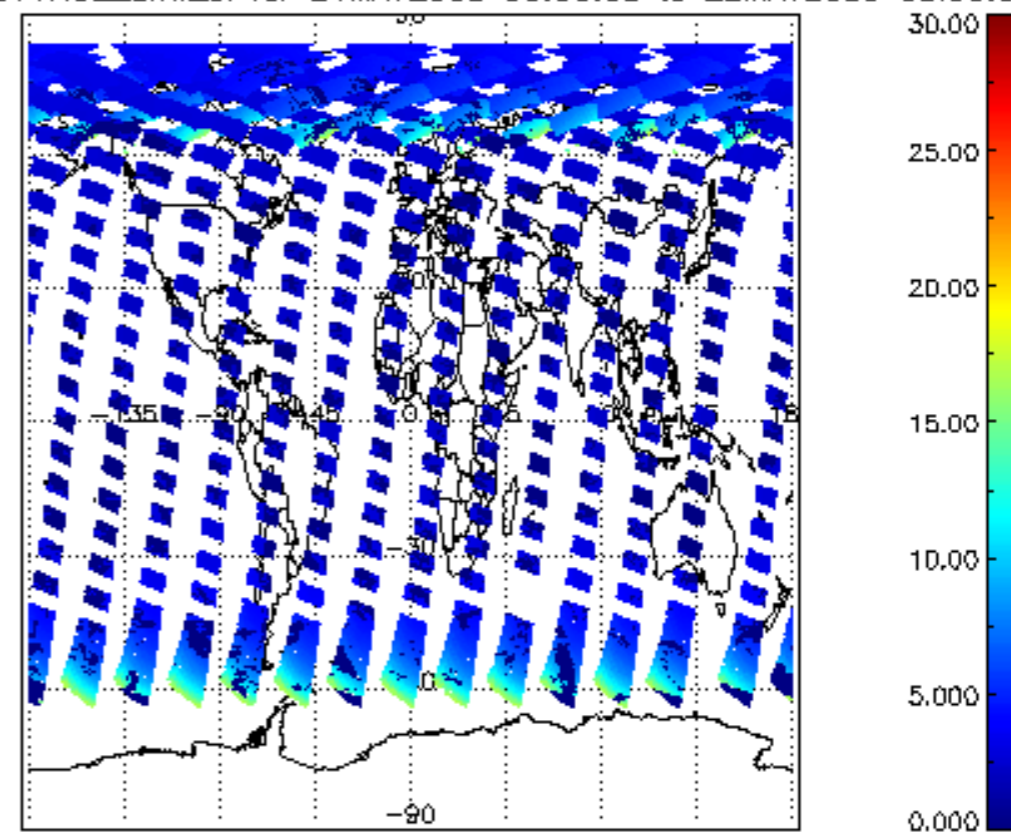
iCIOL2P_NADUV1NO2_vcd_err for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



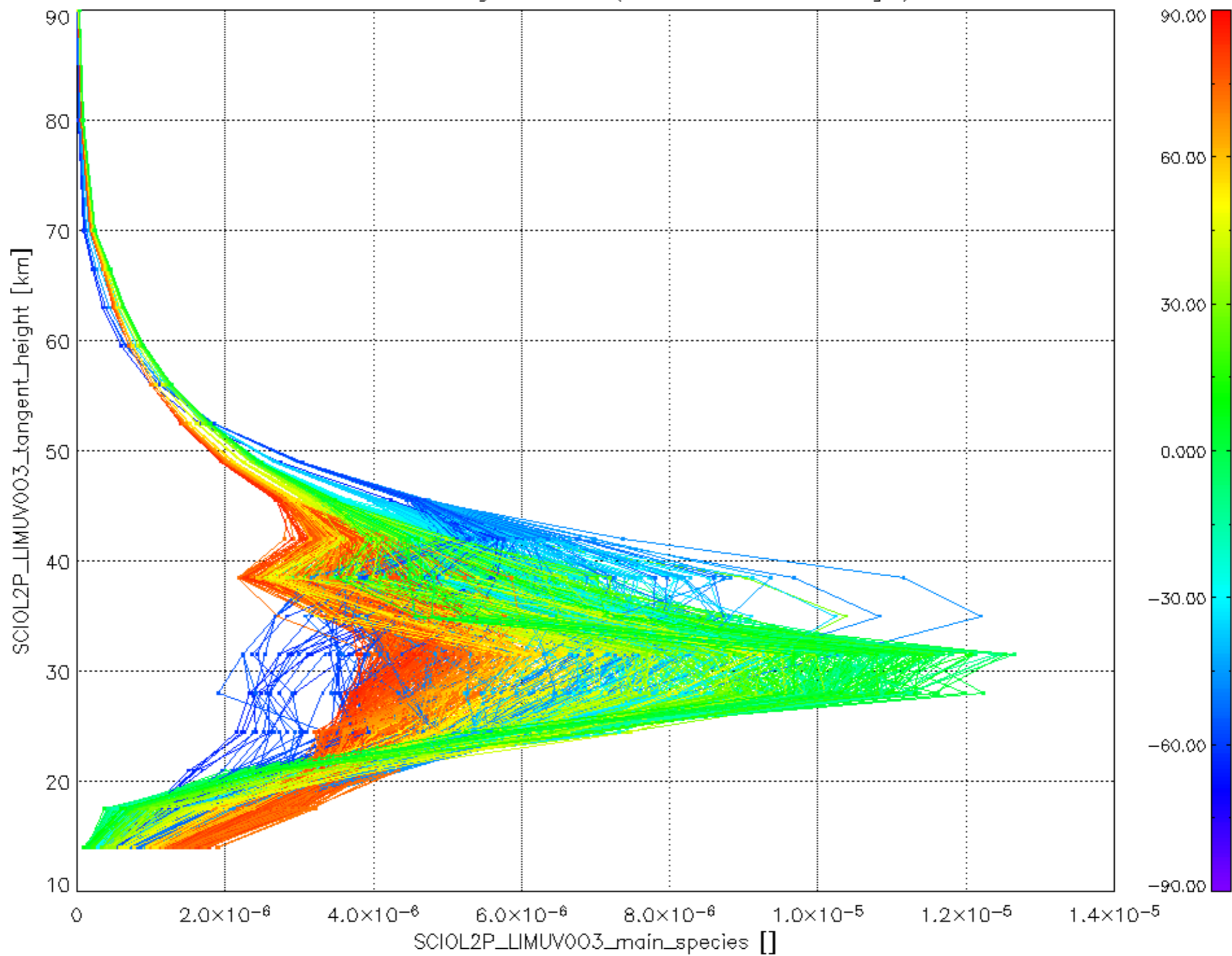
iCIOL2P_NADUV1NO2_amf_gr for 21MAY2009 00:00:00 to 22MAY2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 21MAY2009 00:00:00 to 22MAY2009 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).

