

2. SCIAMACHY Daily Report for level 2 products

[2.1. General Info](#)

[2.2 Product Quality Indicators](#)

[2.3 ADF monitoring](#)

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	15FEB2009 06:02:45
Data source version	SCIA-OL/3.01-R
Processing scope for products	28JAN2009 00:00:00 to 29JAN2009 00:00:00
Start time of first product within scope	27JAN2009 23:33:21
Stop time of last product within scope	28JAN2009 23:57:04
Total number of level 2 products	14
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__2PRDPA20090127_233321_000033252076_00016_36142_2103.N1	27JAN2009 23:33:21	28JAN2009 00:28:47	0	GOOD
1	SCI_OL__2PRDPA20090128_011505_000032692076_00017_36143_2104.N1	28JAN2009 01:15:05	28JAN2009 02:09:35	0	GOOD
2	SCI_OL__2PRDPA20090128_025432_000033252076_00018_36144_2105.N1	28JAN2009 02:54:32	28JAN2009 03:49:58	0	GOOD
3	SCI_OL__2PRDPA20090128_043616_000032692076_00019_36145_2106.N1	28JAN2009 04:36:16	28JAN2009 05:30:46	0	GOOD
4	SCI_OL__2PRDPA20090128_061543_000033252076_00020_36146_2107.N1	28JAN2009 06:15:43	28JAN2009 07:11:09	0	GOOD
5	SCI_OL__2PRDPA20090128_075727_000032692076_00021_36147_2108.N1	28JAN2009 07:57:27	28JAN2009 08:51:57	0	GOOD
6	SCI_OL__2PRDPA20090128_093654_000033252076_00022_36148_2111.N1	28JAN2009 09:36:54	28JAN2009 10:32:20	0	GOOD
7	SCI_OL__2PRDPA20090128_111838_000032692076_00023_36149_2113.N1	28JAN2009 11:18:38	28JAN2009 12:13:08	0	GOOD
8	SCI_OL__2PRDPA20090128_125805_000033252076_00024_36150_2112.N1	28JAN2009 12:58:05	28JAN2009 13:53:31	0	GOOD
9	SCI_OL__2PRDPA20090128_143949_000032692076_00025_36151_2115.N1	28JAN2009 14:39:49	28JAN2009 15:34:19	0	GOOD
10	SCI_OL__2PRDPA20090128_161916_000033252076_00026_36152_2109.N1	28JAN2009 16:19:16	28JAN2009 17:14:42	0	GOOD
11	SCI_OL__2PRDPA20090128_175925_000033942076_00027_36153_2114.N1	28JAN2009 17:59:25	28JAN2009 18:55:59	0	GOOD
12	SCI_OL__2PRDPA20090128_212212_000032692076_00029_36155_2116.N1	28JAN2009 21:22:12	28JAN2009 22:16:41	0	GOOD
13	SCI_OL__2PRDPA20090128_230139_000033252076_00030_36156_2117.N1	28JAN2009 23:01:39	28JAN2009 23:57:04	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: 142544

Total number of cloud data DSRs with good quality flag (=0): 142544 (100.0 %)

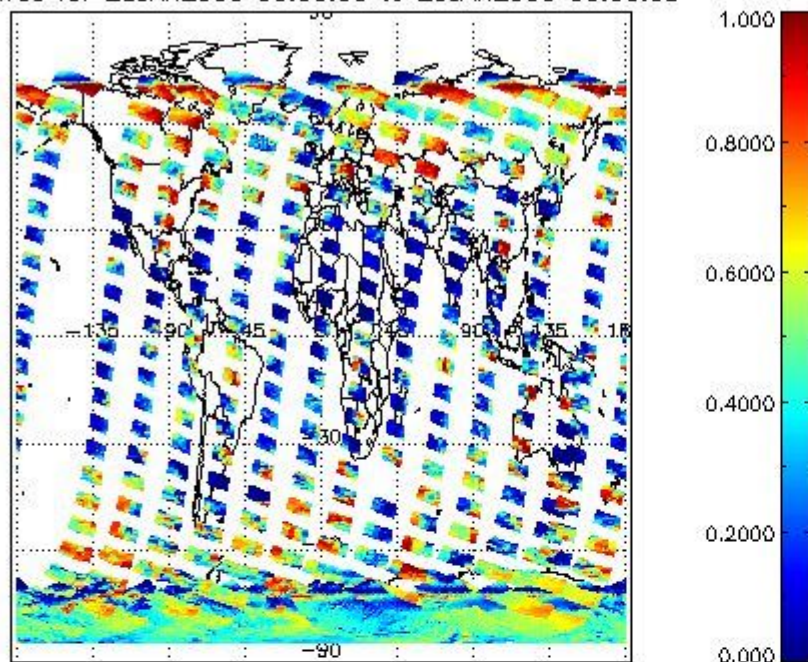
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	142544	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	142544	0.16974	0.12500	0.12500	0.25000	0.059925	s
CL_FRAC	142544	0.40840	0.40021	0.0000	1.0000	0.26444	-
CL_FRAC_ERR	142544	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	142544	5.4318	4.0000	4.0000	8.0000	1.9176	
PMD_READ_CL[0]	142544	0.15980	0.0000	0.0000	8.0000	0.86150	-
PMD_READ_CL[1]	142544	0.65115	0.0000	0.0000	8.0000	1.8264	-
CL_TOP_HEIGHT	118841	4.1402	3.1324	0.0000	17.000	3.7343	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	118841	54.846	45.210	0.0000	101.00	39.732	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	142544	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	142544	11001001	11000100	11000000	11100000	3142.8	flags
AERO_ABSO_IND	142544	3.1944	3.6647	-1.2772	17.444	2.2693	
AERO_IND_DIAG	142544	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	142544	01010110	00000000	00000000	11000000	24460.	flags

Time and geolocation plots:

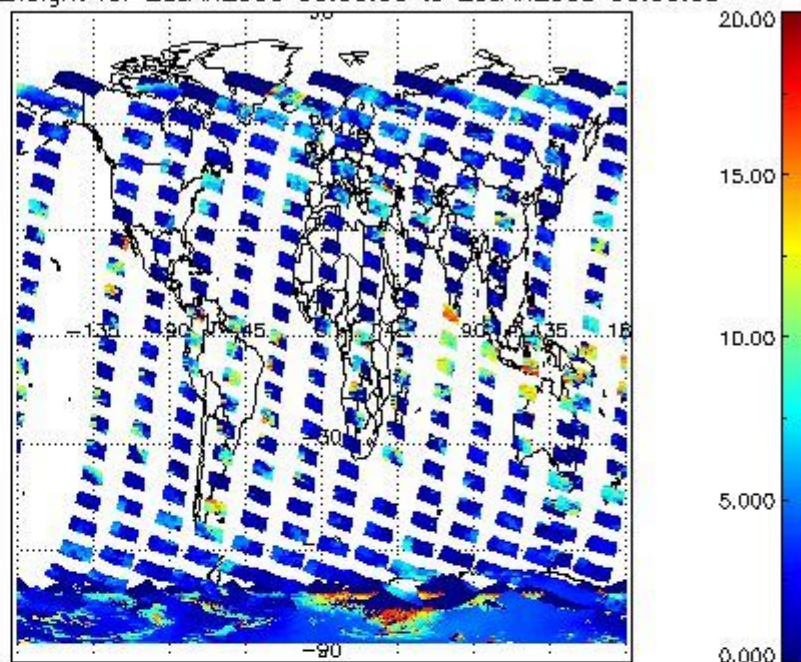
Plots are available for the following parameters:

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

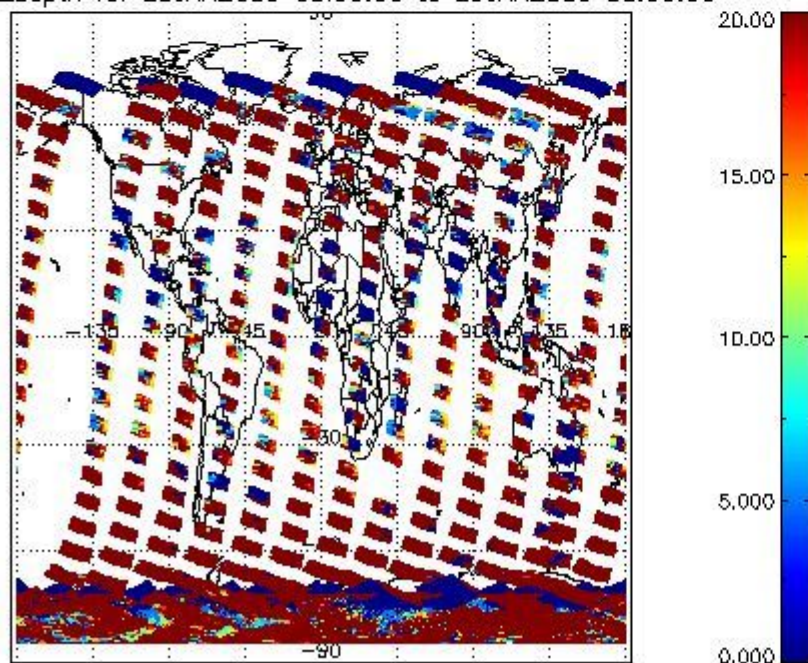
cL_frac for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



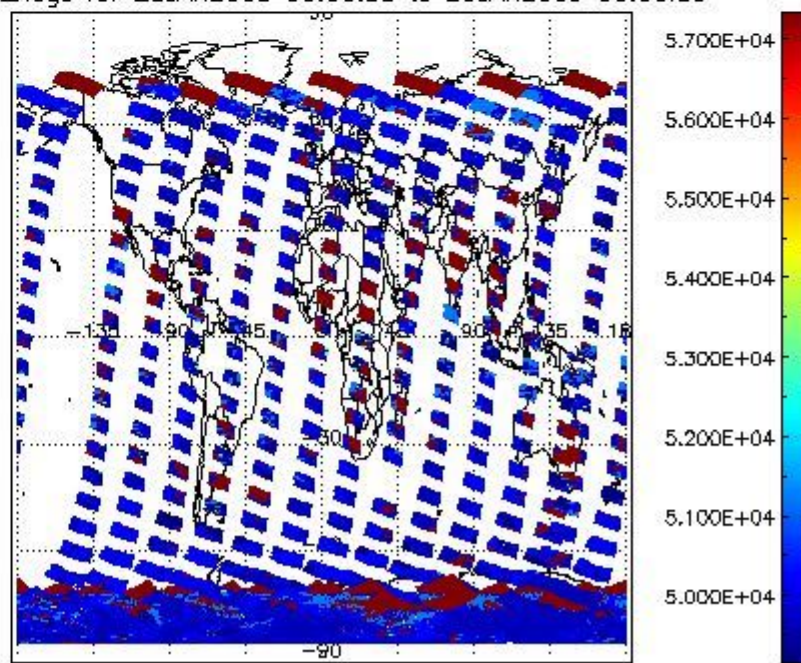
cL_top_height for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



cLopt_depth for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



cloud_flags for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



2.2.2 Nadir

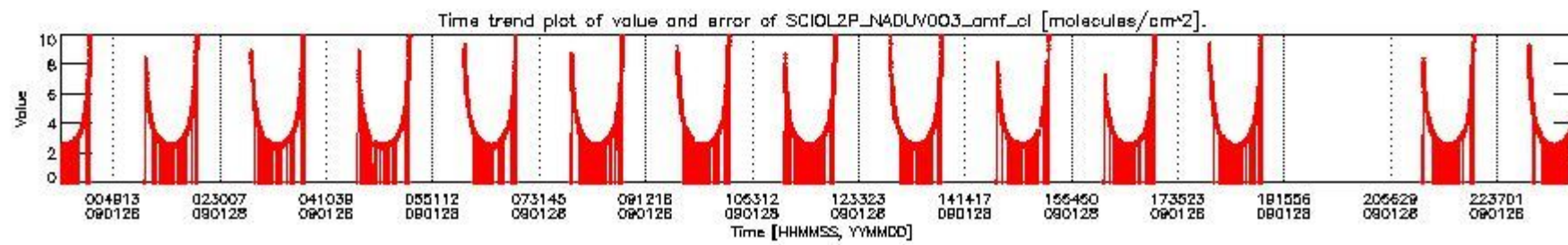
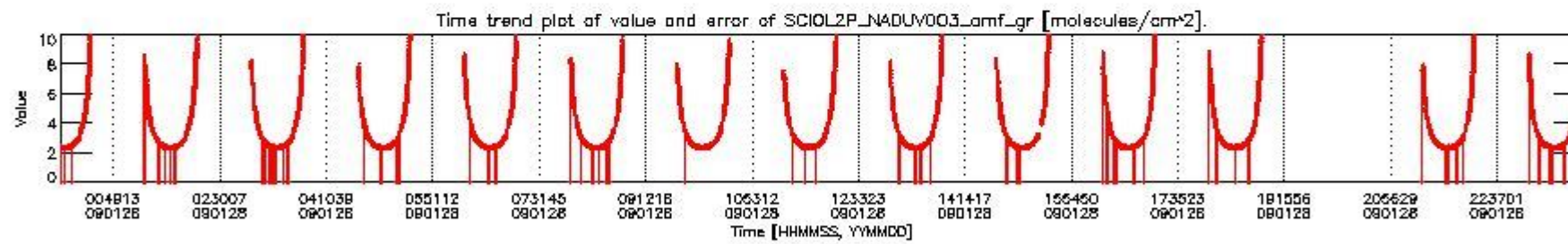
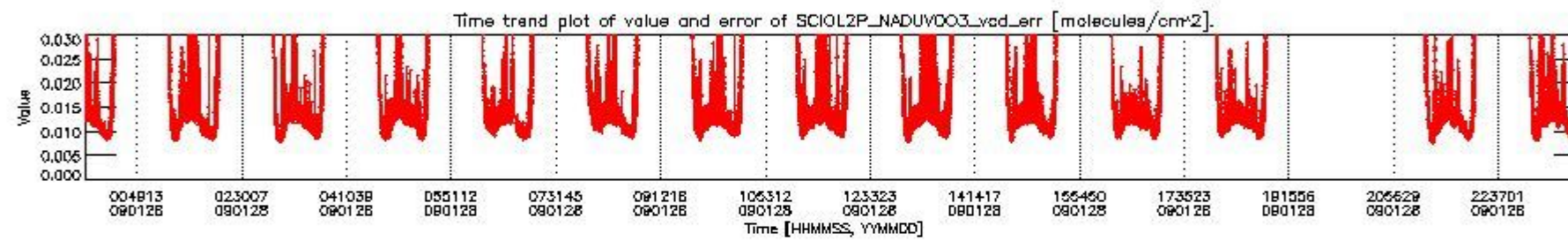
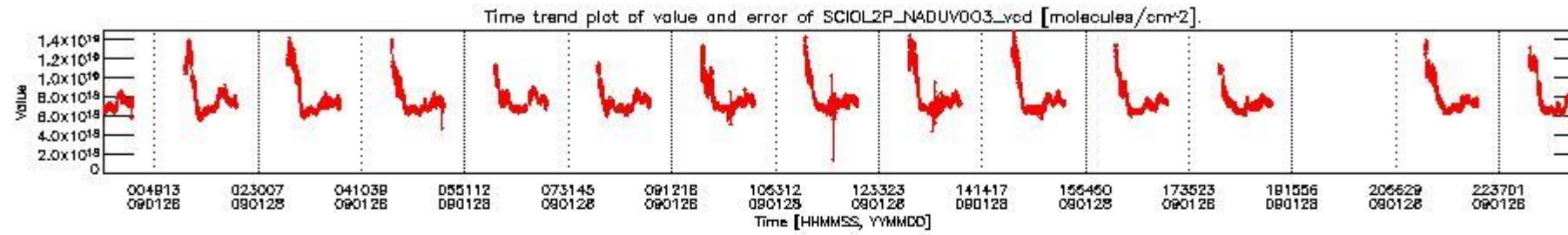
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

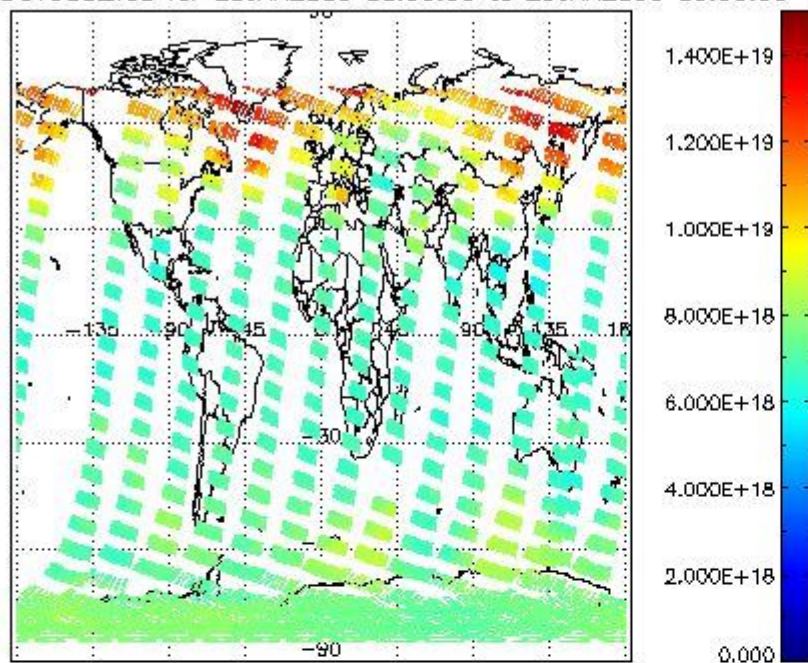
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

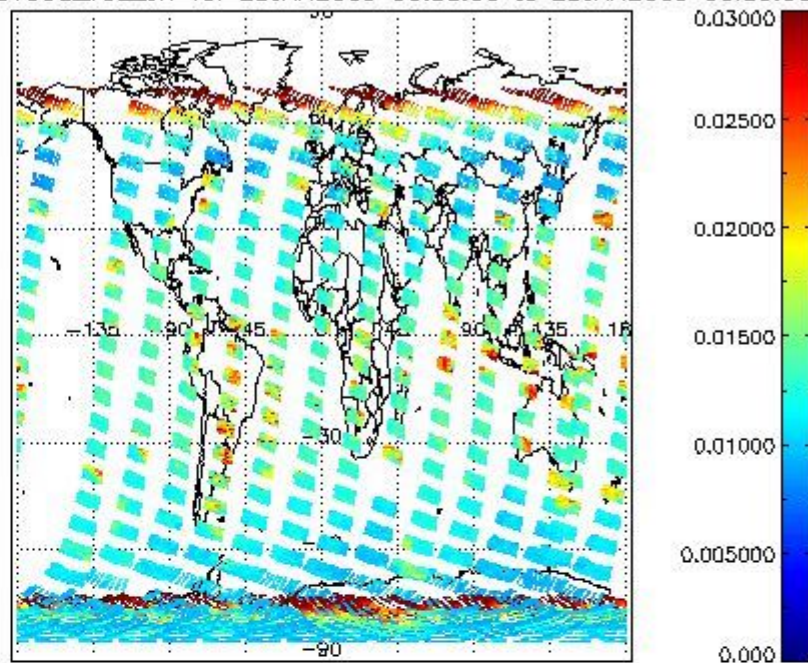
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



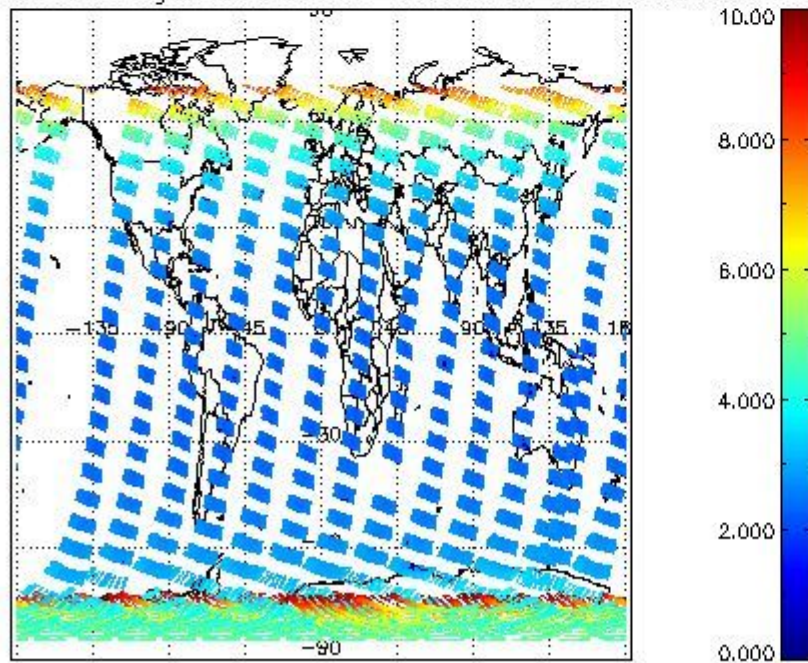
SCIOL2P_NADUV003_vcd for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



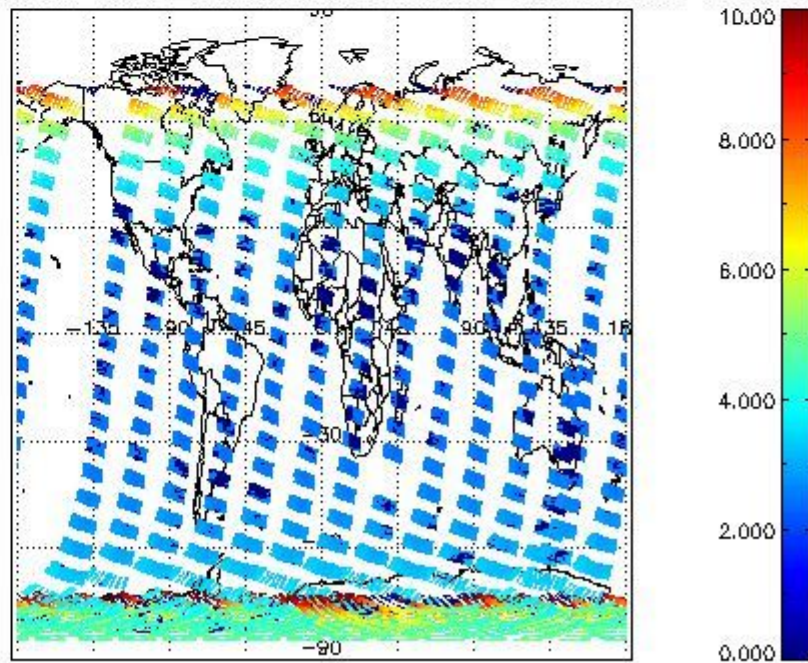
SCIOL2P_NADUV003_vcd_err for 28JAN2009 00:00:00 to 29JAN2009 00:00:00

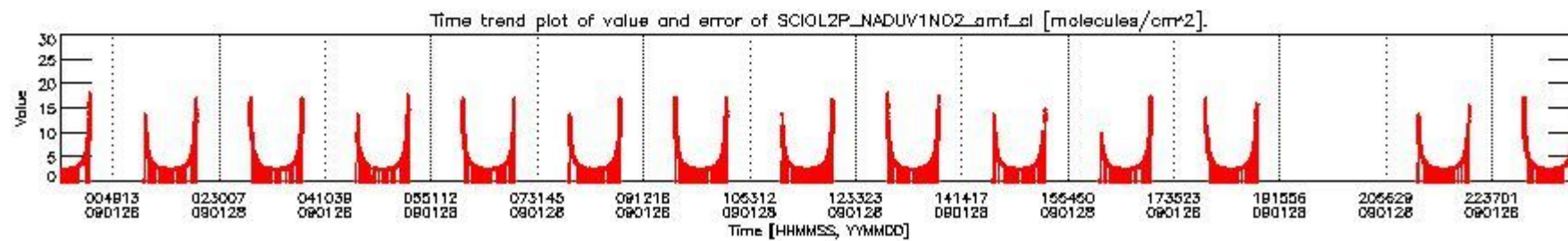
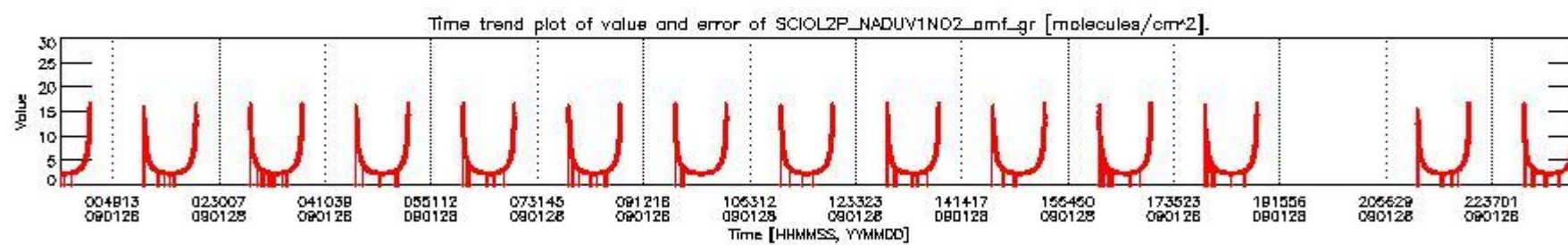
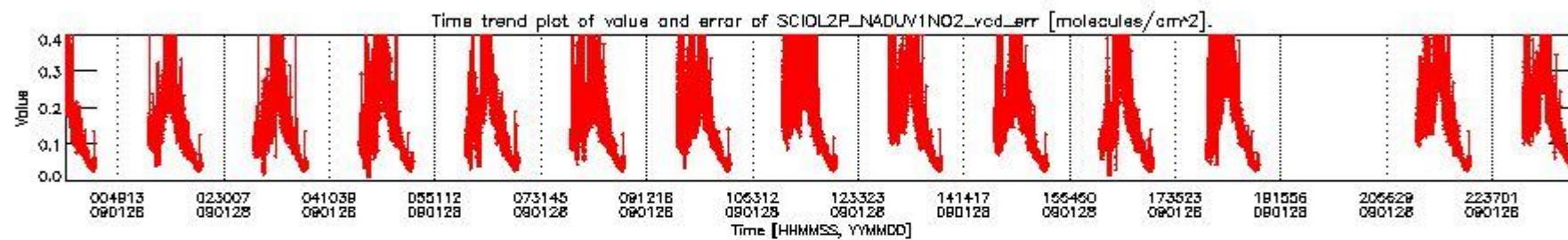
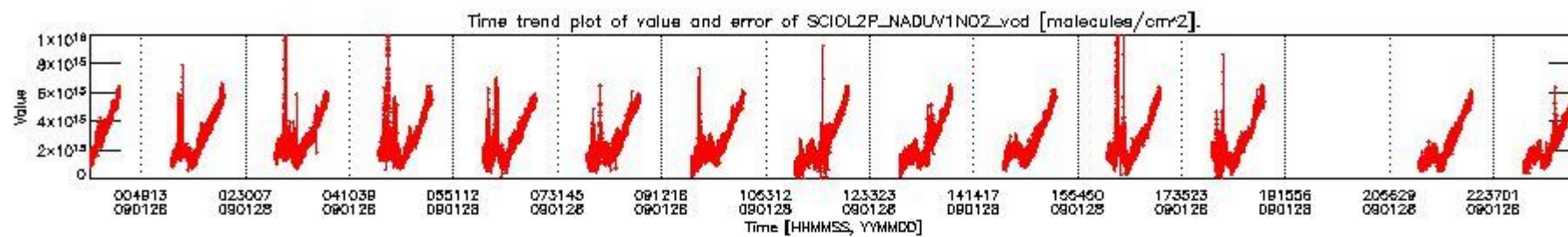


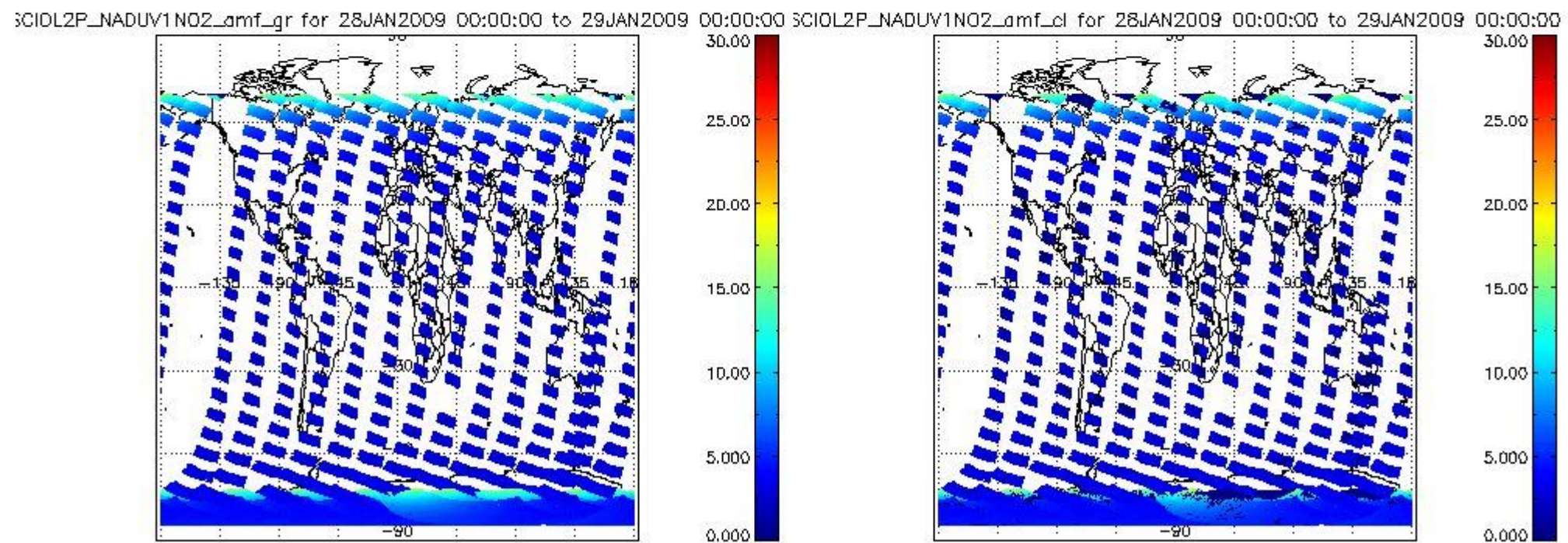
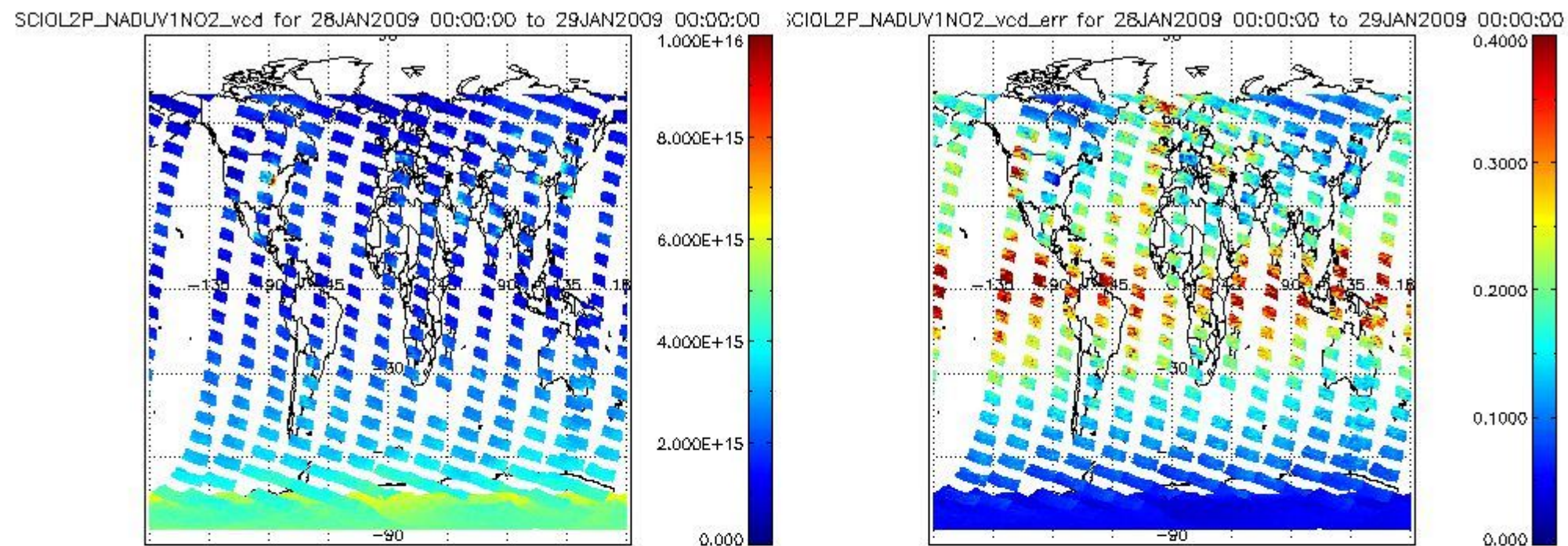
SCIOL2P_NADUV003_amf_gr for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 28JAN2009 00:00:00 to 29JAN2009 00:00:00







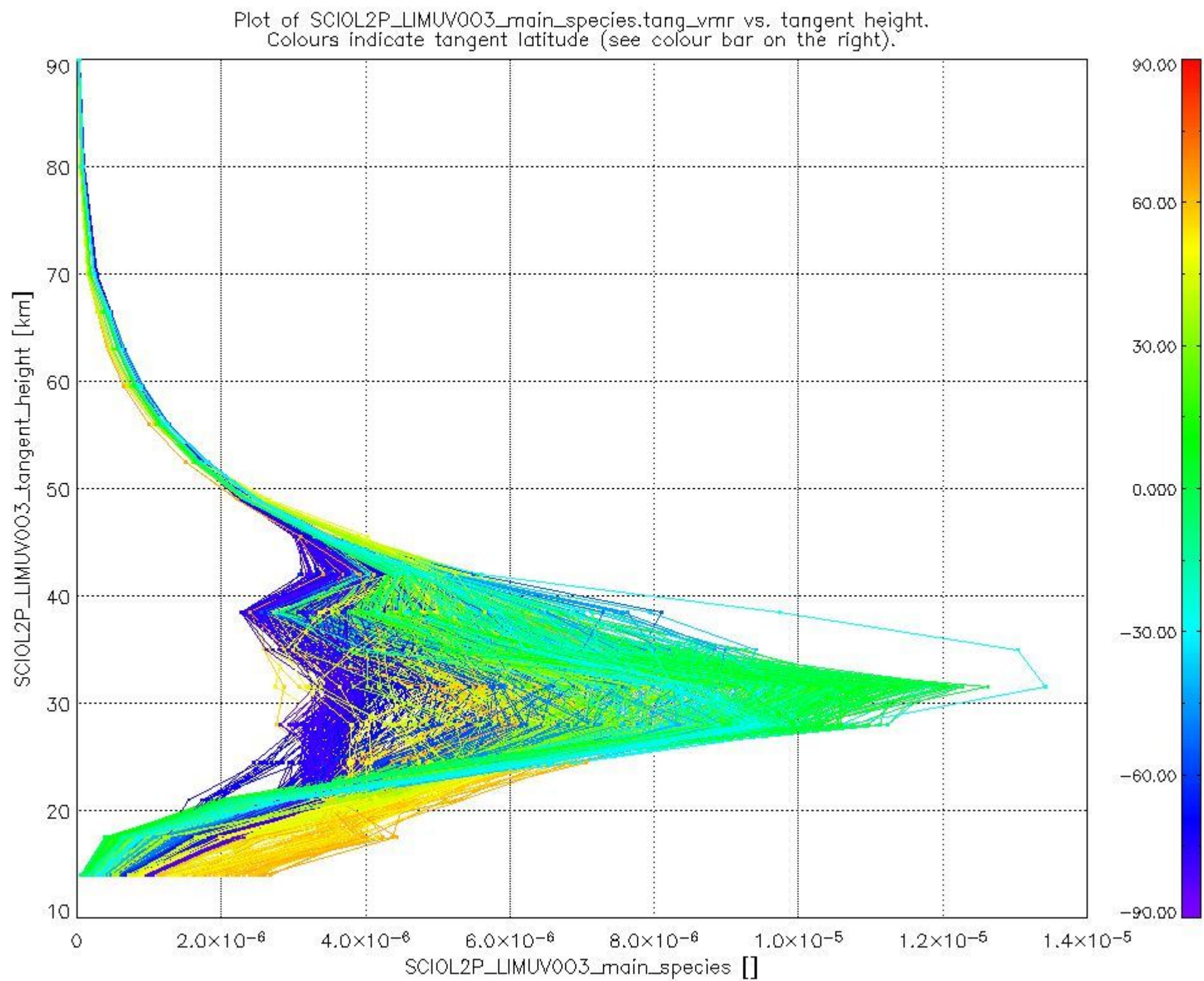
2.2.3 Limb

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

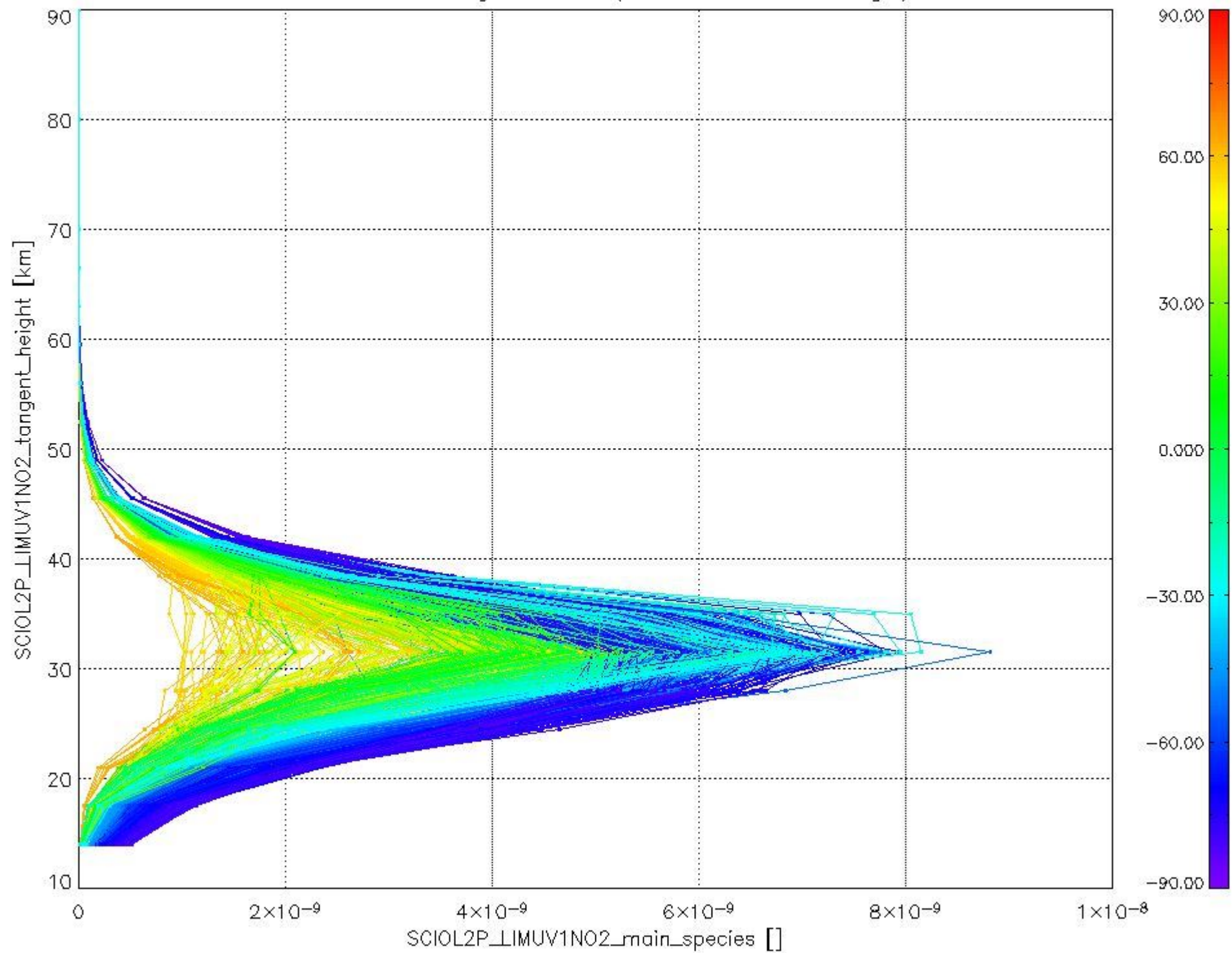
The following data items are currently included into this section:

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.



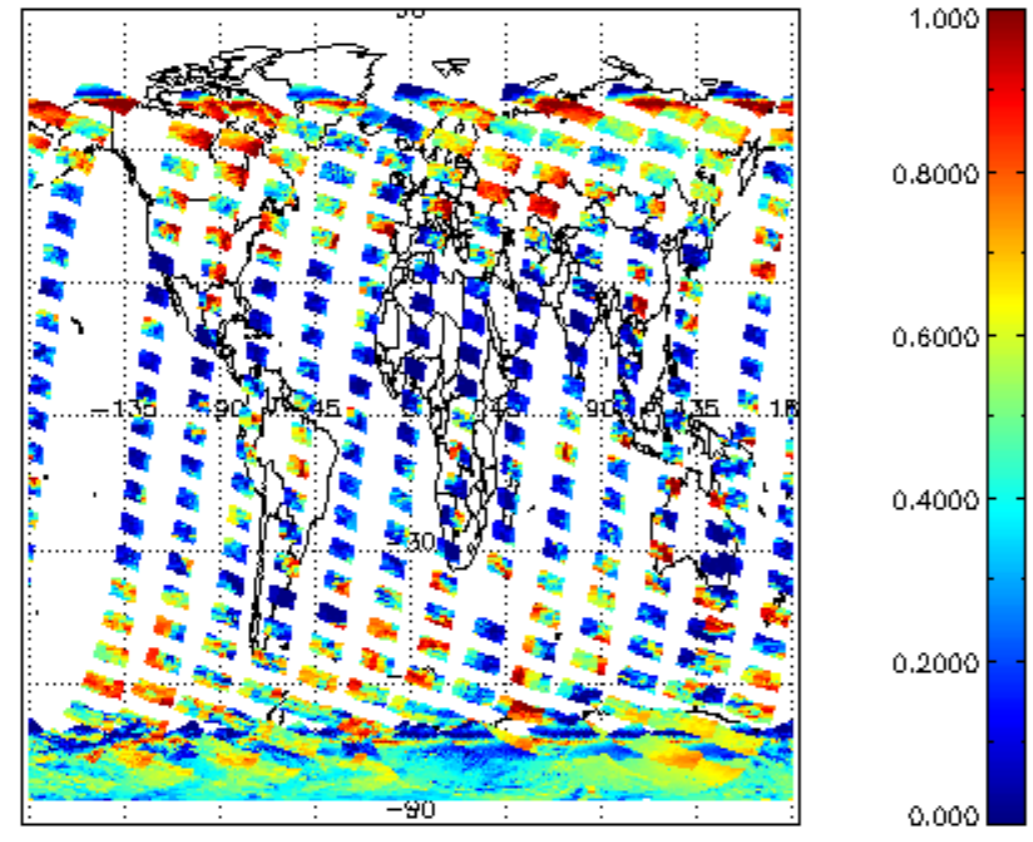
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



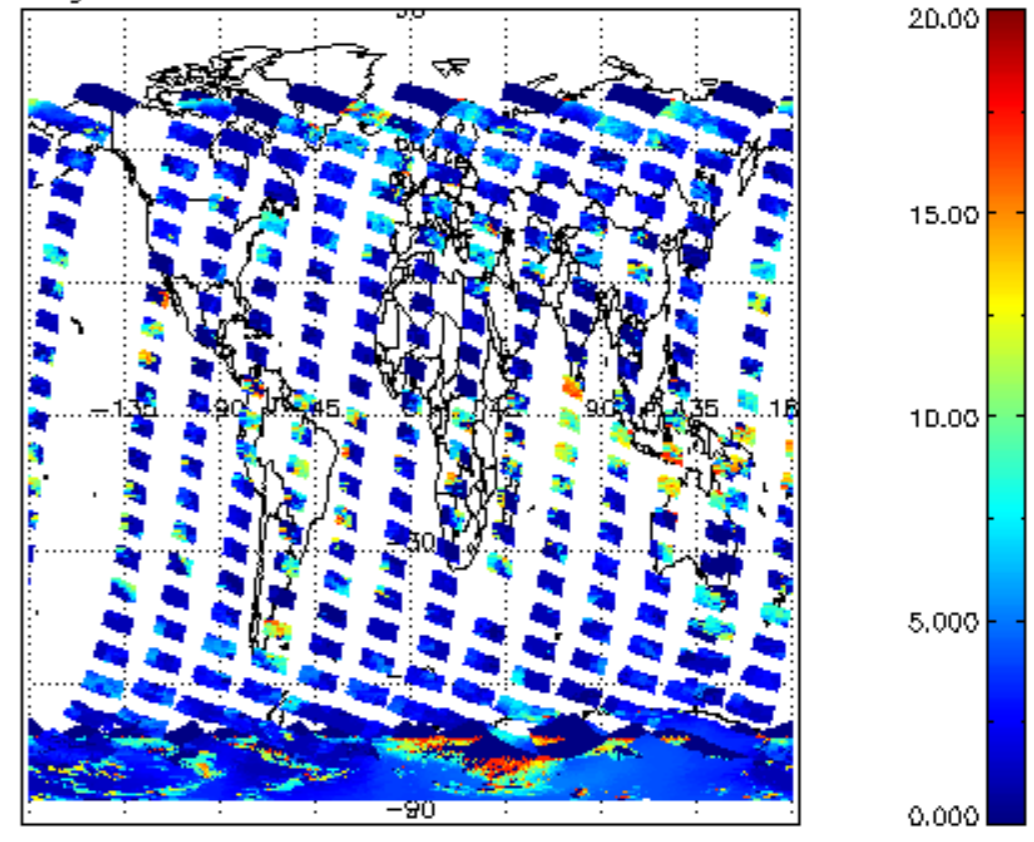
2.3 ADF monitoring

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

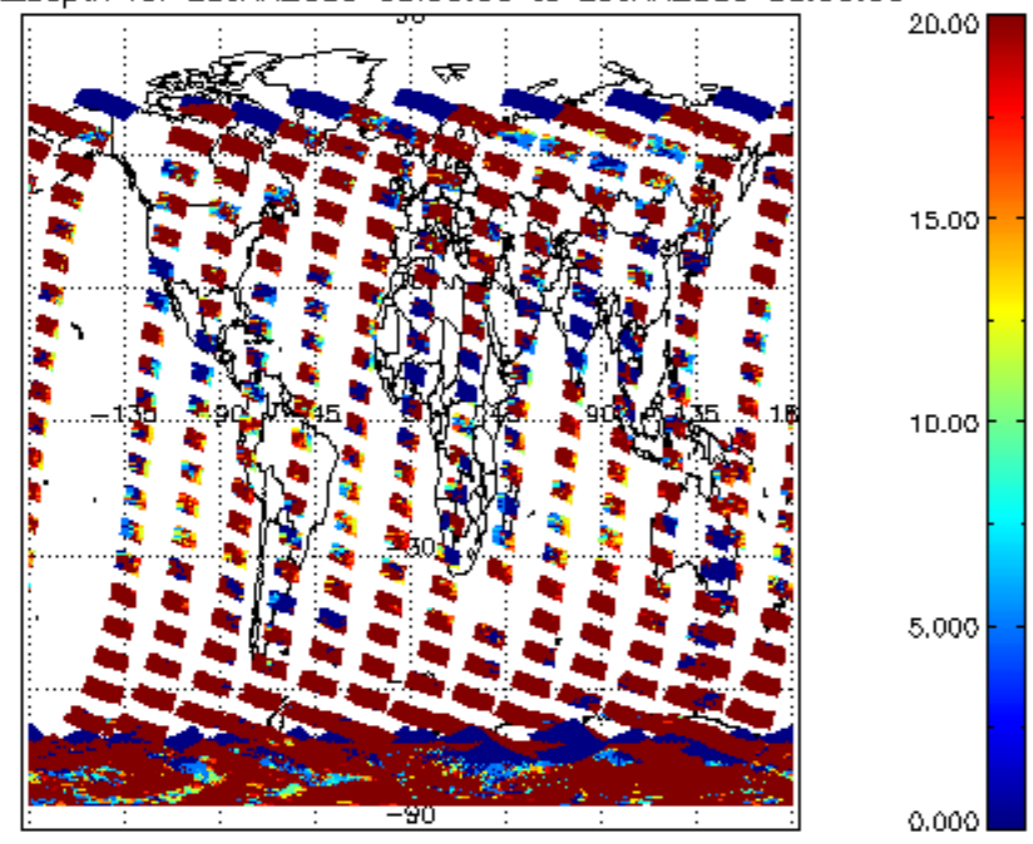
cL_frac for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



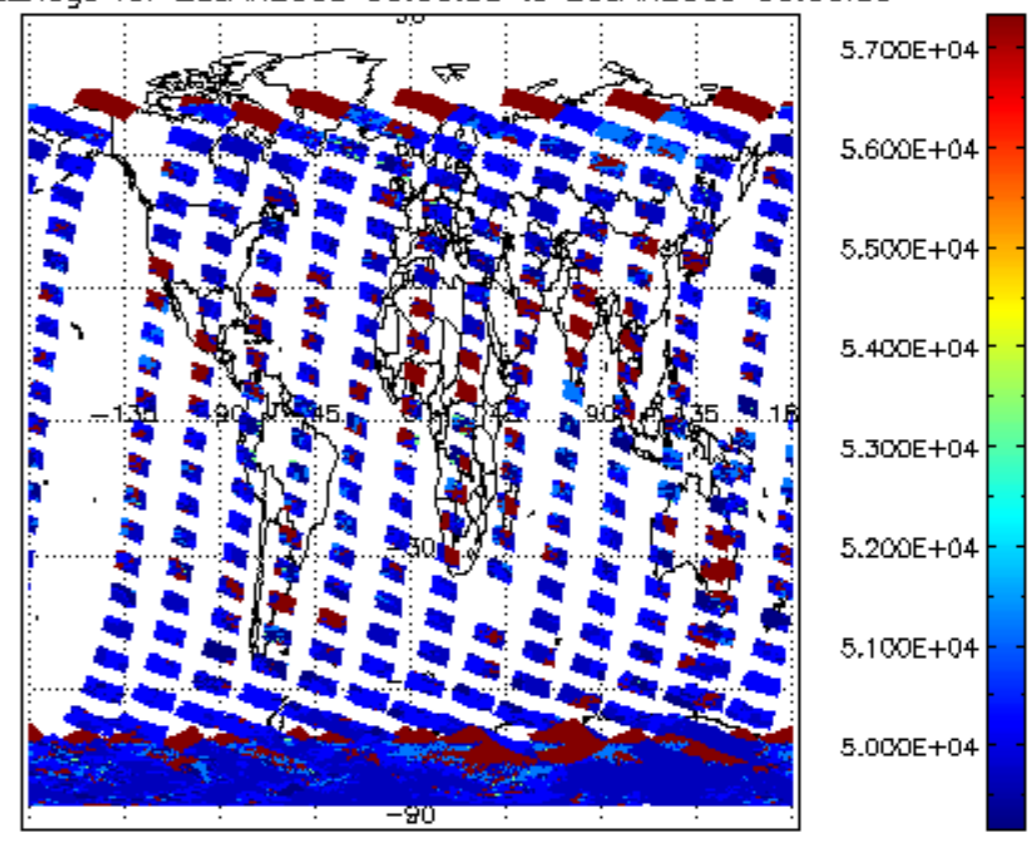
cL_top_height for 28JAN2009 00:00:00 to 29JAN2009 00:00:00

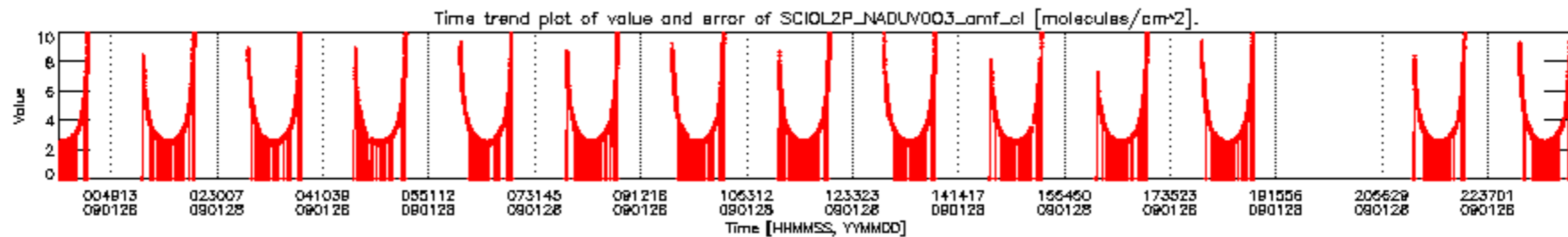
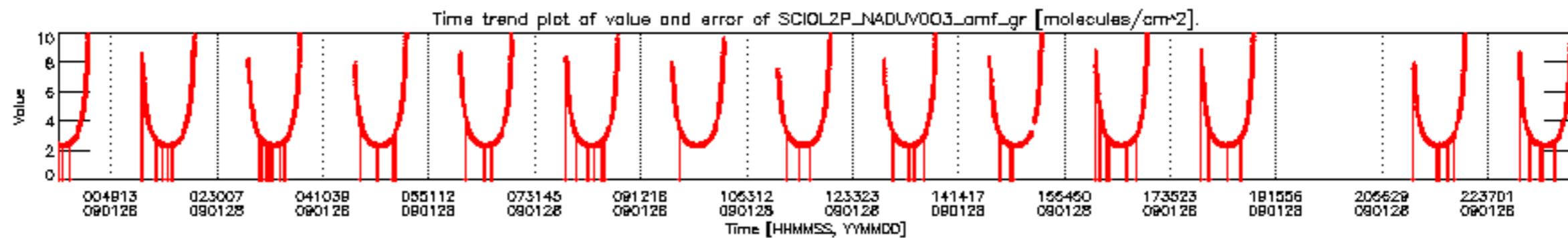
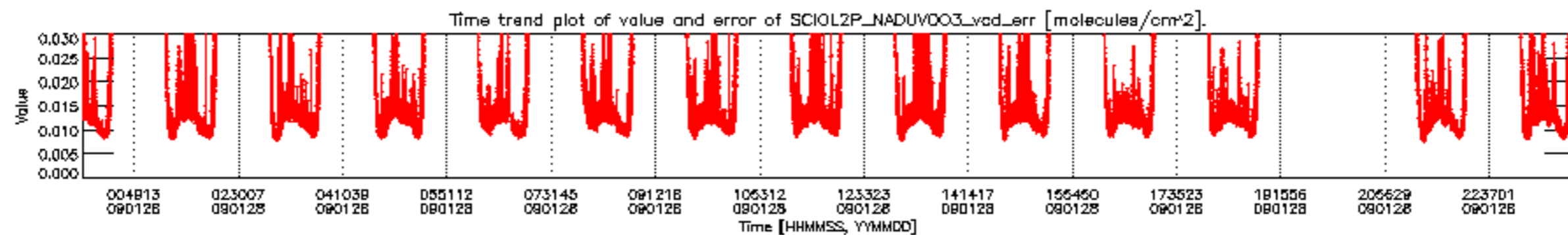
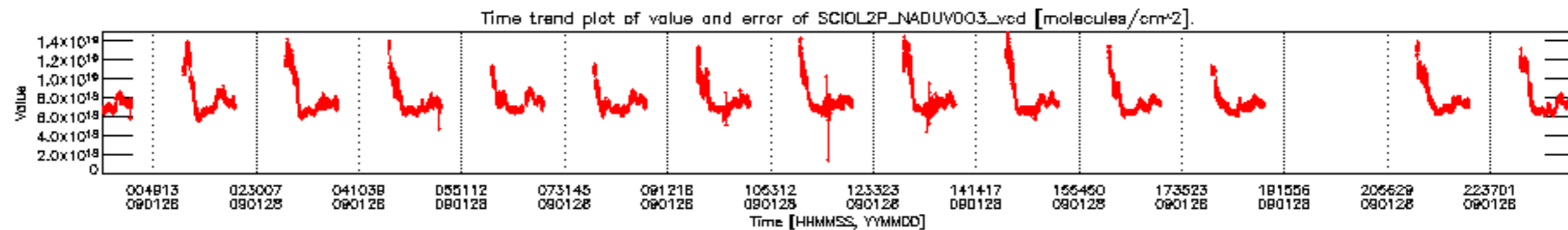


cLopt_depth for 28JAN2009 00:00:00 to 29JAN2009 00:00:00

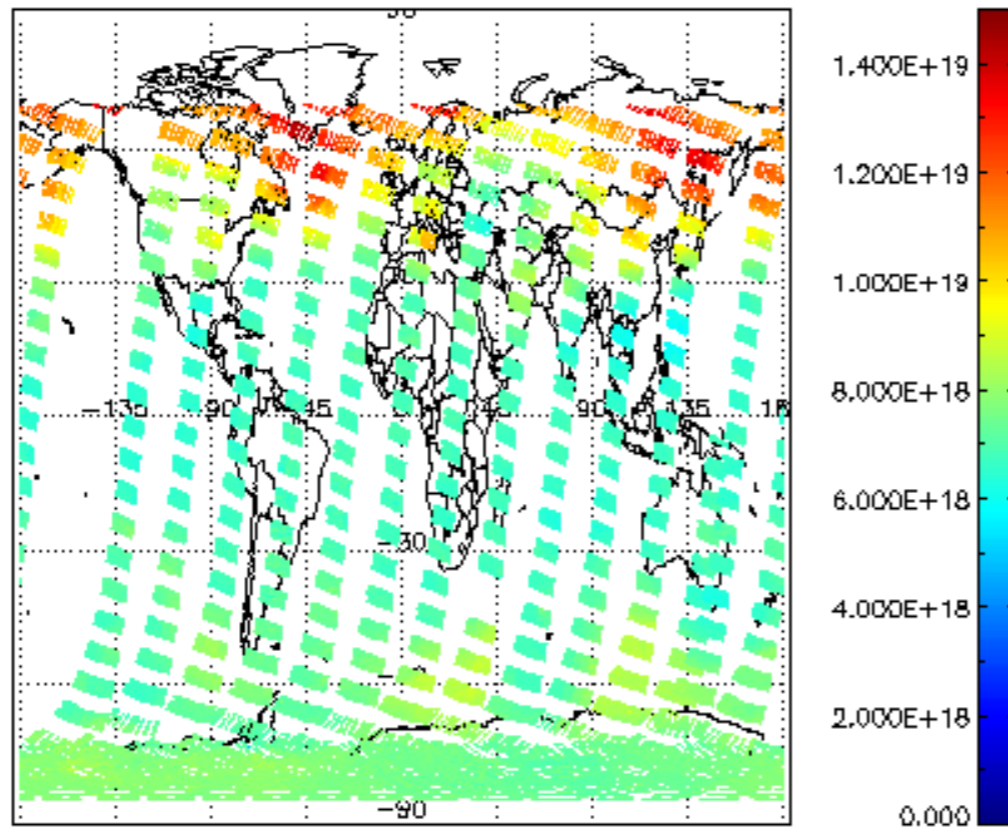


cloud_flags for 28JAN2009 00:00:00 to 29JAN2009 00:00:00

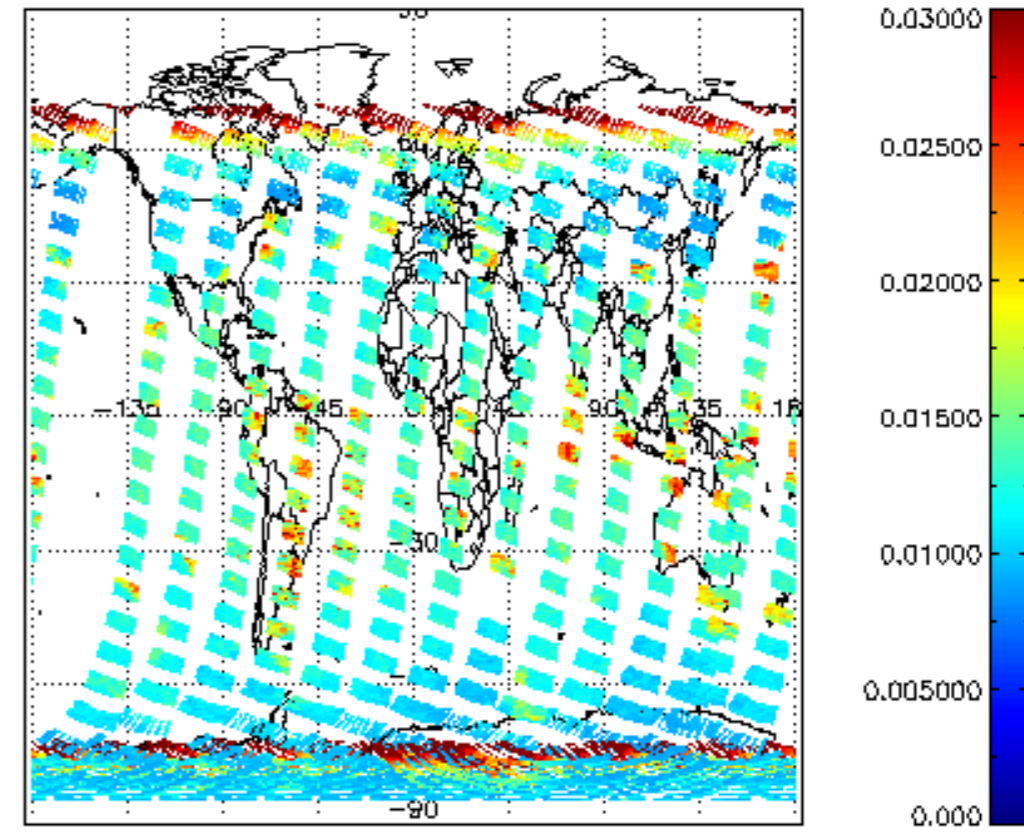




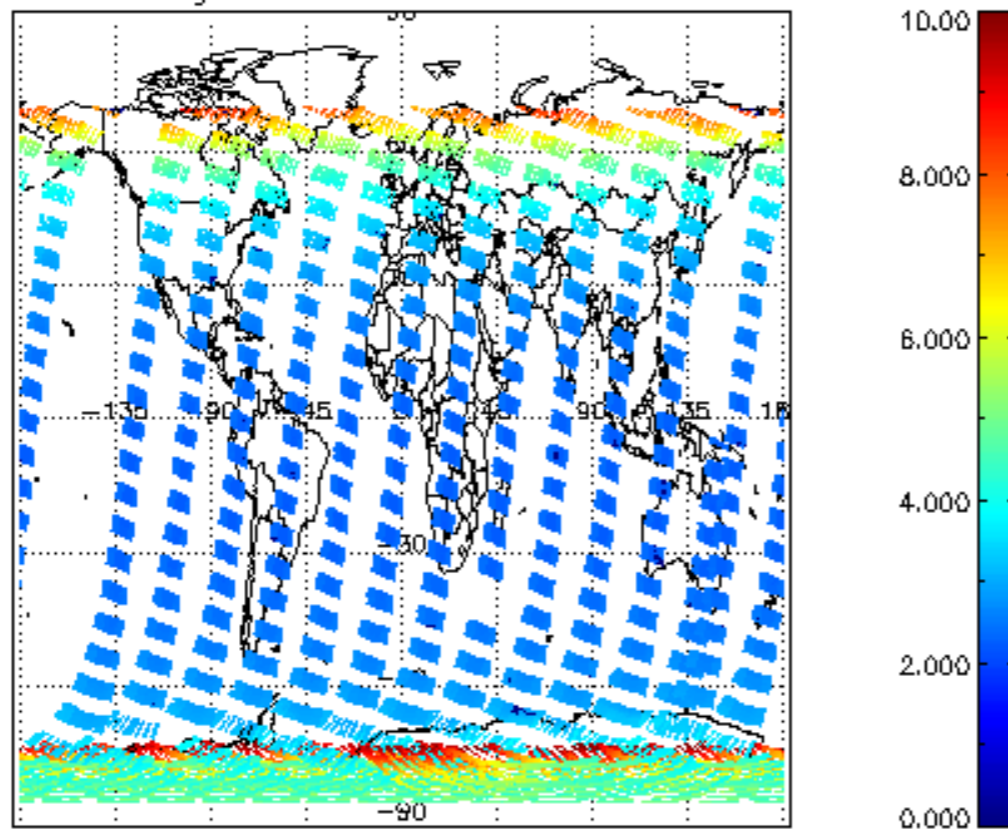
SCIOL2P_NADUV003_vcd for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



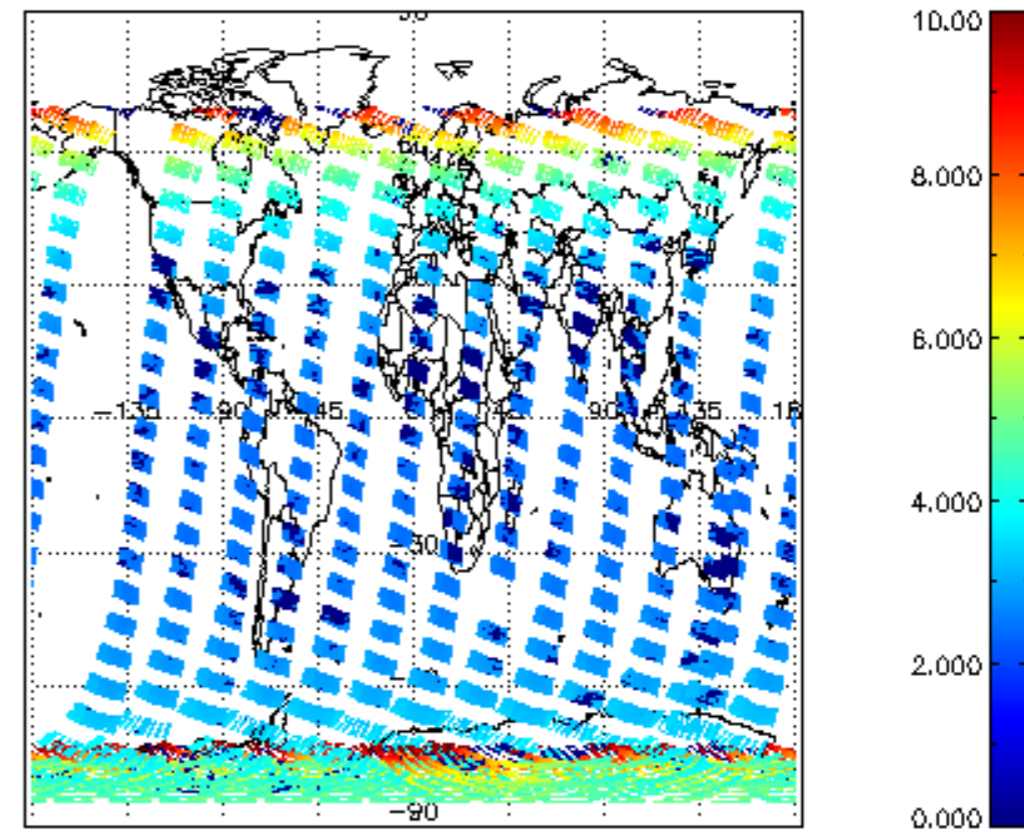
SCIOL2P_NADUV003_vcd_err for 28JAN2009 00:00:00 to 29JAN2009 00:00:00

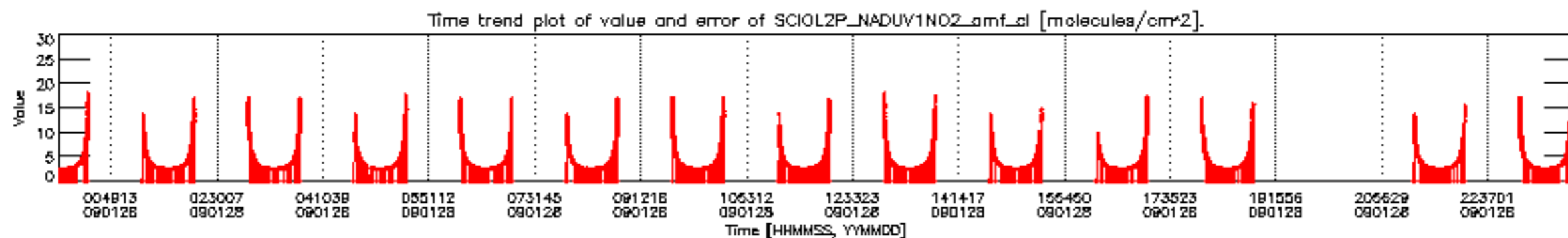
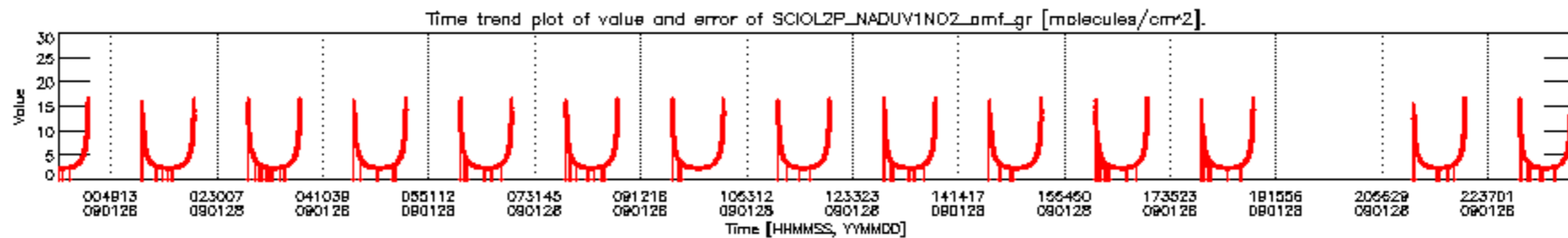
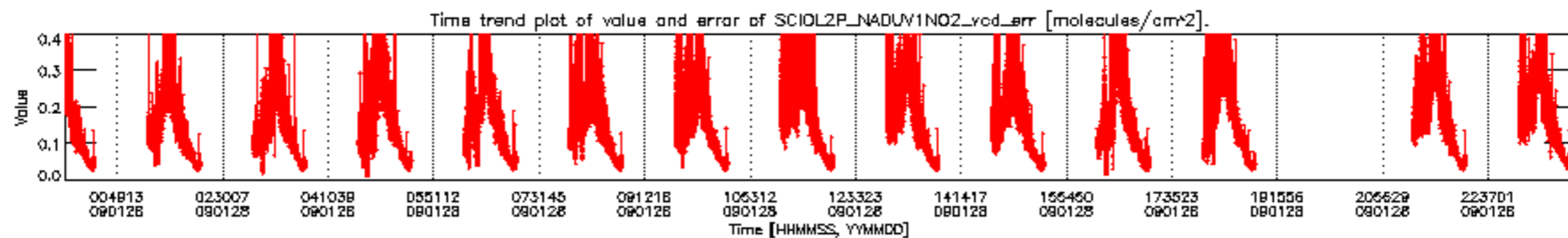
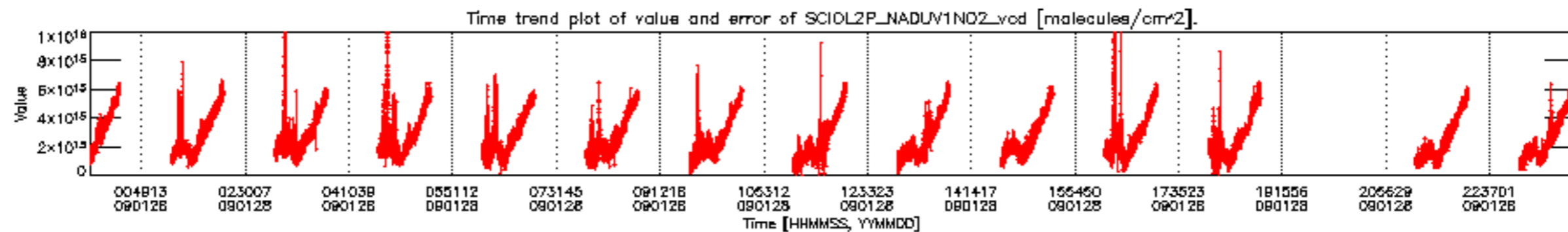


SCIOL2P_NADUV003_amf_gr for 28JAN2009 00:00:00 to 29JAN2009 00:00:00

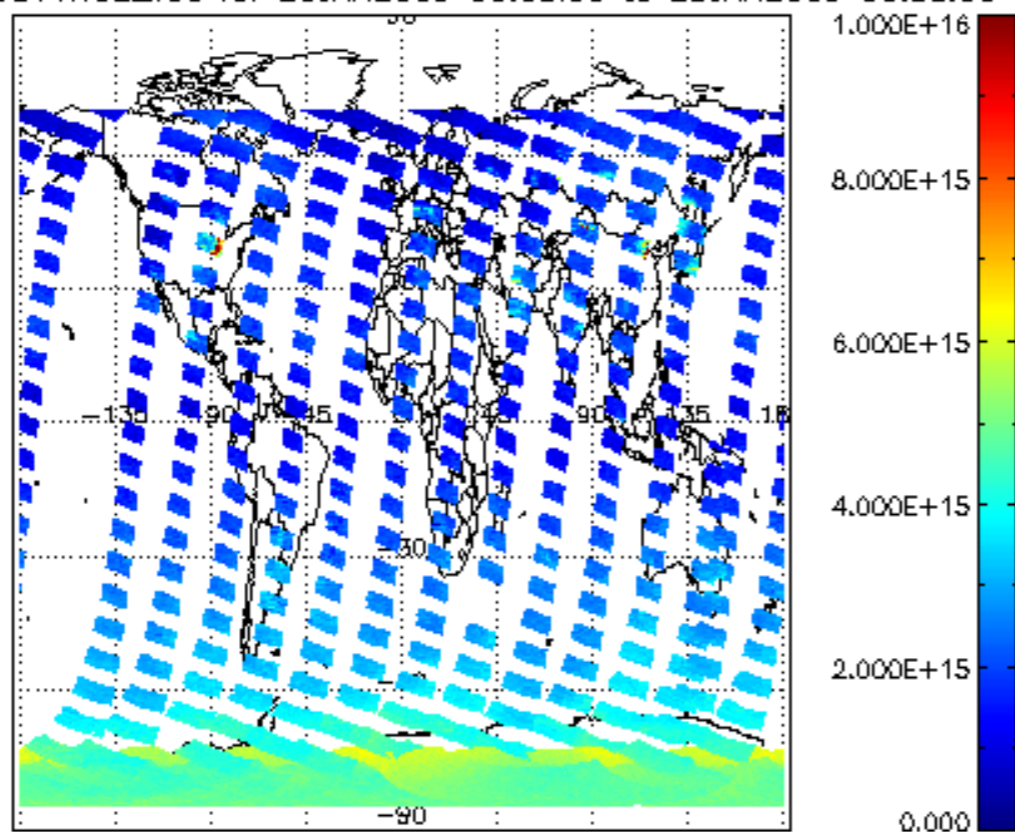


SCIOL2P_NADUV003_amf_cl for 28JAN2009 00:00:00 to 29JAN2009 00:00:00

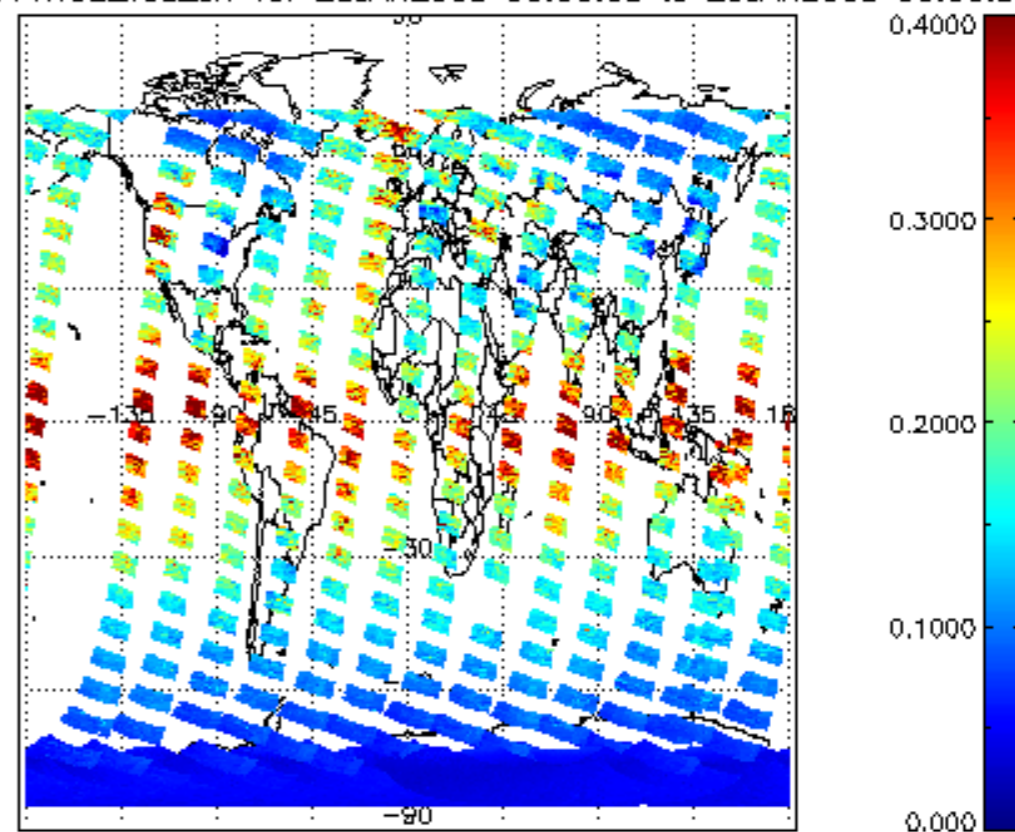




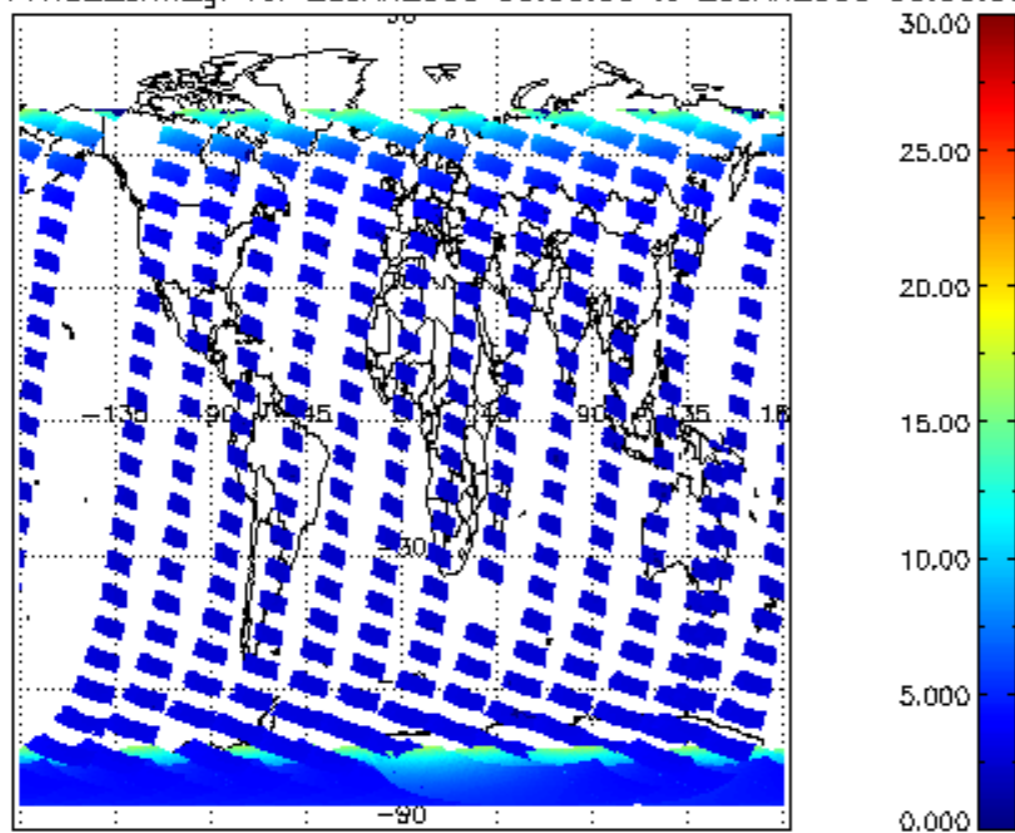
SCIOL2P_NADUV1NO2_vcd for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



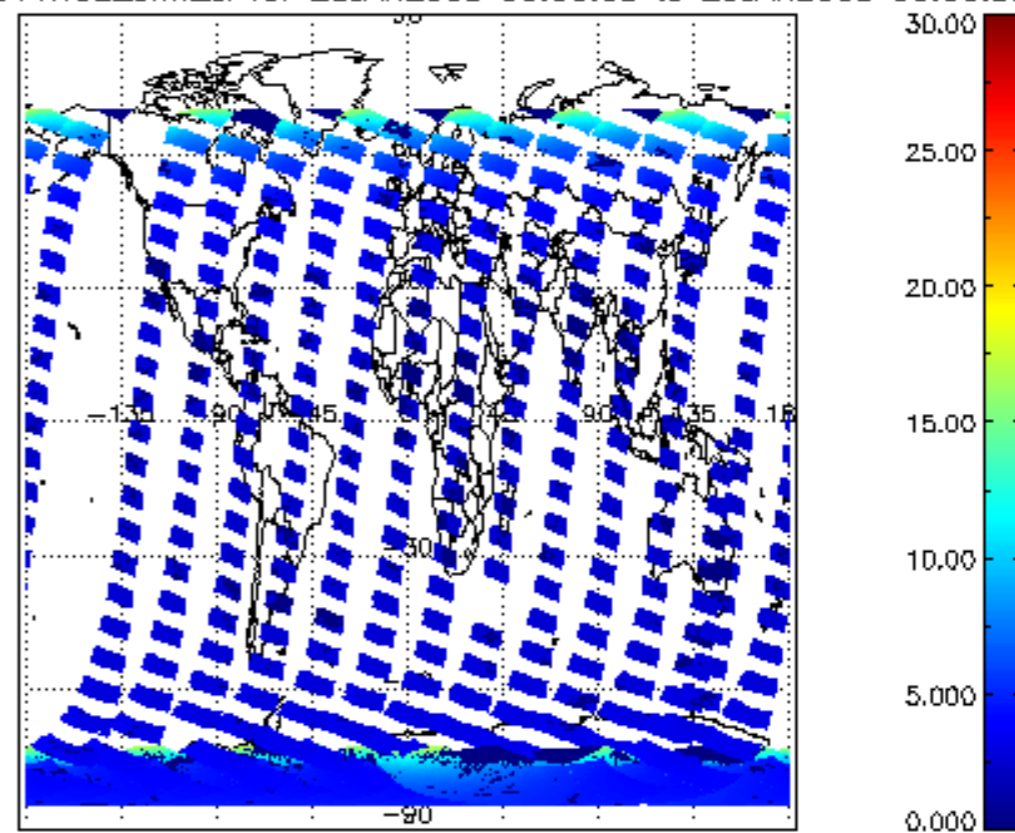
SCIOL2P_NADUV1NO2_vcd_err for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



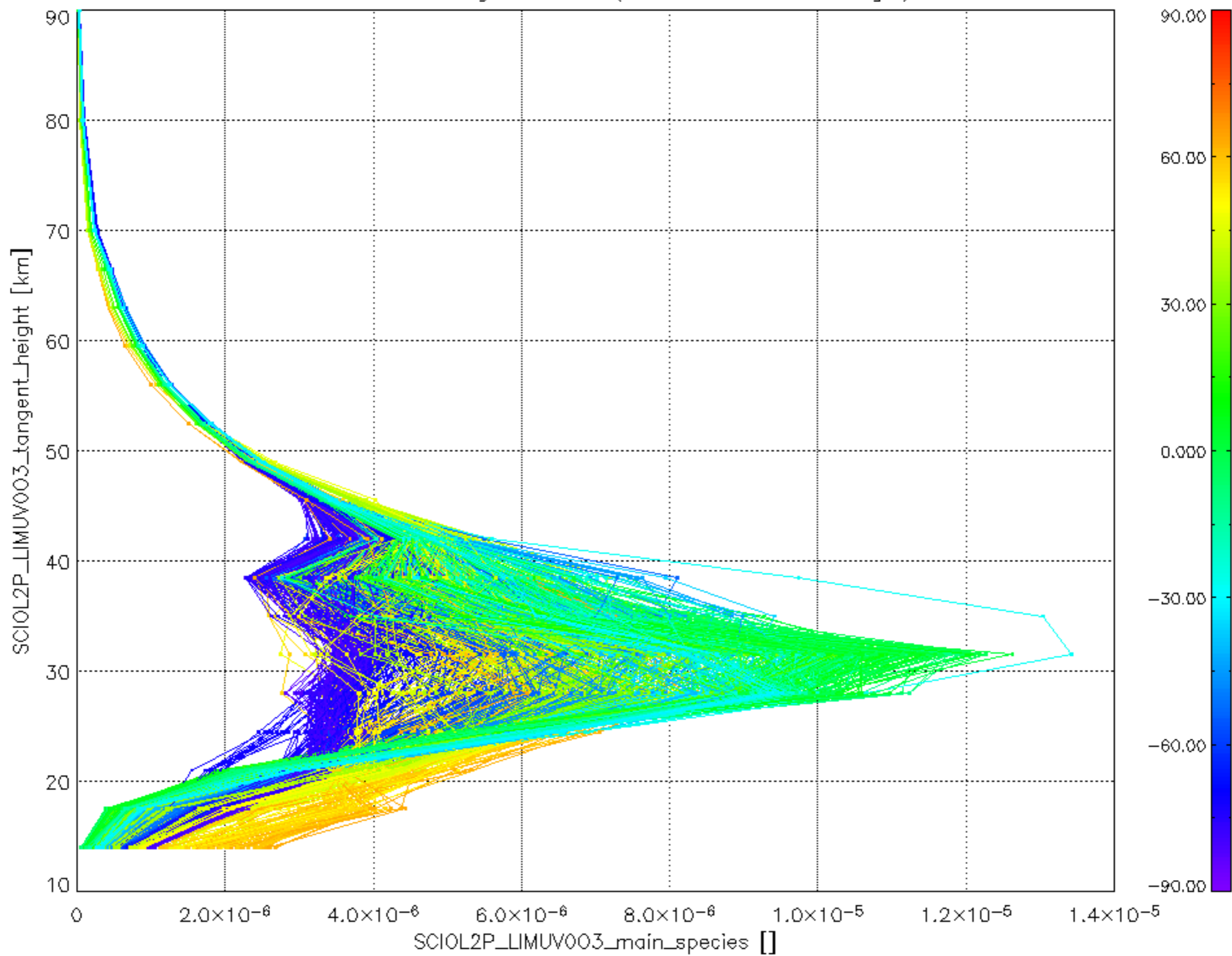
SCIOL2P_NADUV1NO2_amf_gr for 28JAN2009 00:00:00 to 29JAN2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 28JAN2009 00:00:00 to 29JAN2009 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).

