

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	17FEB2009 06:02:55
Data source version	SCIA-OL/3.01-R
Processing scope for products	30JAN2009 00:00:00 to 31JAN2009 00:00:00
Start time of first product within scope	30JAN2009 00:11:40
Stop time of last product within scope	31JAN2009 00:34:27
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__2PRDPA20090130_001140_000032692076_00045_36171_2136.N1	30JAN2009 00:11:40	30JAN2009 01:06:10	0	GOOD
1	SCI_OL__2PRDPA20090130_015107_000033252076_00046_36172_2137.N1	30JAN2009 01:51:07	30JAN2009 02:46:33	0	GOOD
2	SCI_OL__2PRDPA20090130_033251_000032692076_00047_36173_2138.N1	30JAN2009 03:32:51	30JAN2009 04:27:21	0	GOOD
3	SCI_OL__2PRDPA20090130_051218_000033252076_00048_36174_2139.N1	30JAN2009 05:12:18	30JAN2009 06:07:44	0	GOOD
4	SCI_OL__2PRDPA20090130_065403_000032692076_00049_36175_2140.N1	30JAN2009 06:54:03	30JAN2009 07:48:32	0	GOOD
5	SCI_OL__2PRDPA20090130_083329_000033252076_00050_36176_2141.N1	30JAN2009 08:33:29	30JAN2009 09:28:55	0	GOOD
6	SCI_OL__2PRDPA20090130_101513_000032692076_00051_36177_1075.N1	30JAN2009 10:15:13	30JAN2009 11:09:43	0	GOOD
7	SCI_OL__2PRDPA20090130_115440_000033252076_00052_36178_1116.N1	30JAN2009 11:54:40	30JAN2009 12:50:06	0	GOOD
8	SCI_OL__2PRDPA20090130_133624_000032692076_00053_36179_1077.N1	30JAN2009 13:36:24	30JAN2009 14:30:54	0	GOOD
9	SCI_OL__2PRDPA20090130_151551_000033252076_00054_36180_1078.N1	30JAN2009 15:15:51	30JAN2009 16:11:17	0	GOOD
10	SCI_OL__2PRDPA20090130_165736_000032692076_00055_36181_1079.N1	30JAN2009 16:57:36	30JAN2009 17:52:05	0	GOOD
11	SCI_OL__2PRDPA20090130_183636_000033812076_00056_36182_1080.N1	30JAN2009 18:36:36	30JAN2009 19:32:57	0	GOOD
12	SCI_OL__2PRDPA20090130_201711_000033942076_00057_36183_1081.N1	30JAN2009 20:17:11	30JAN2009 21:13:45	0	GOOD
13	SCI_OL__2PRDPA20090130_215814_000033252076_00058_36184_1082.N1	30JAN2009 21:58:14	30JAN2009 22:53:39	0	GOOD
14	SCI_OL__2PRDPA20090130_233958_000032692076_00059_36185_1083.N1	30JAN2009 23:39:58	31JAN2009 00:34:27	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: 149604

Total number of cloud data DSRs with good quality flag (=0): 149604 (100.0 %)

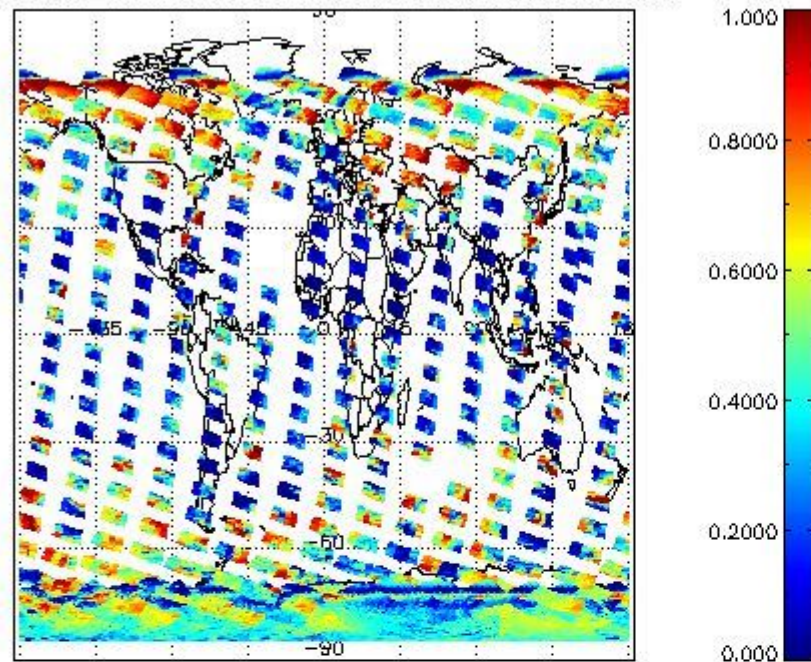
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	149604	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	149604	0.16875	0.12500	0.12500	0.25000	0.059622	s
CL_FRAC	149604	0.40420	0.39050	0.0000	1.0000	0.26988	-
CL_FRAC_ERR	149604	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	149604	5.4001	4.0000	4.0000	8.0000	1.9079	
PMD_READ_CL[0]	149604	0.17181	0.0000	0.0000	8.0000	0.90187	-
PMD_READ_CL[1]	149604	0.68062	0.0000	0.0000	8.0000	1.8662	-
CL_TOP_HEIGHT	120711	4.2120	3.1149	0.0000	17.000	3.8640	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	120711	53.650	43.194	0.0000	101.00	40.059	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	149604	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	149604	11001010	11000100	11000000	11100000	3276.9	flags
AERO_ABSO_IND	149604	3.3270	3.7442	-0.82692	20.009	2.3956	
AERO_IND_DIAG	149604	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	149604	01010101	00000000	00000000	11000000	24429.	flags

Time and geolocation plots:

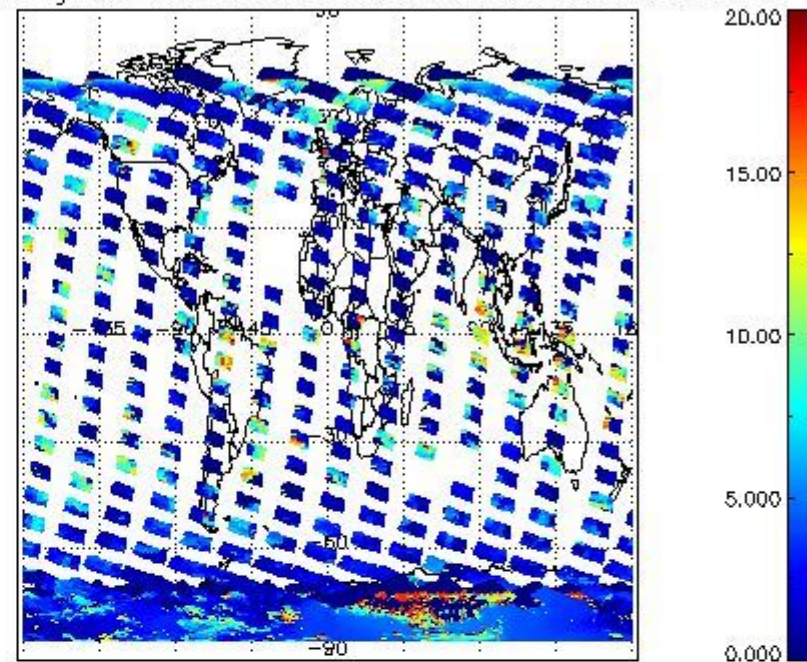
Plots are available for the following parameters:

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

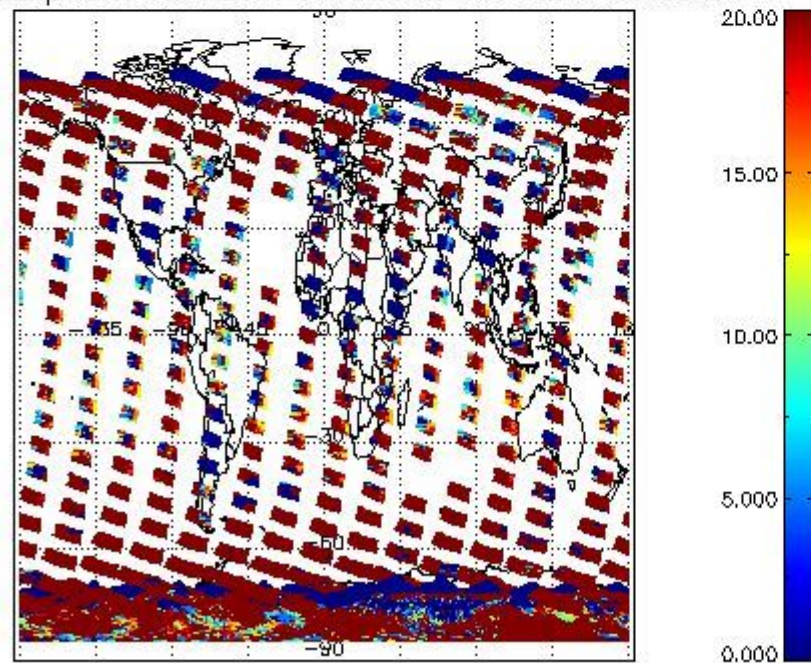
cL_frac for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



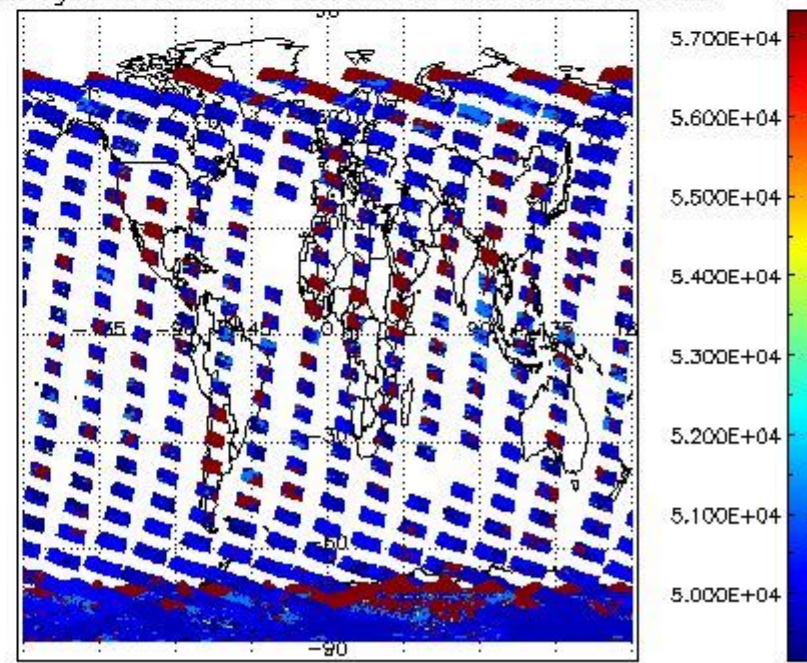
cL_top_height for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



cLopt_depth for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



cloud_flags for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



2.2.2 Nadir

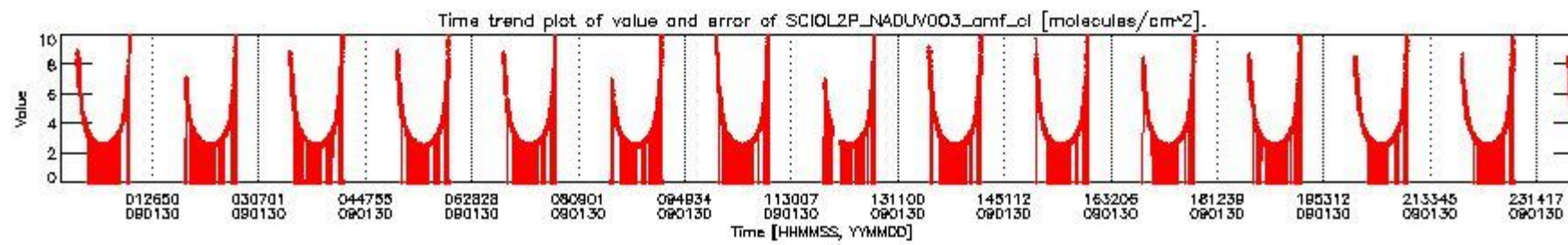
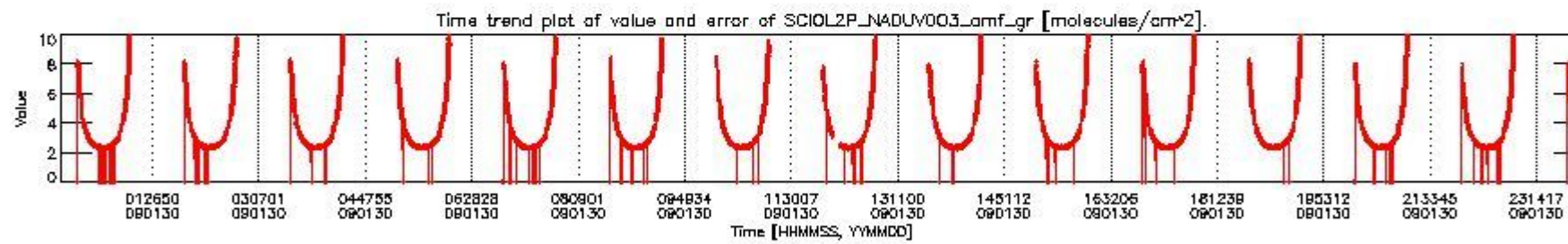
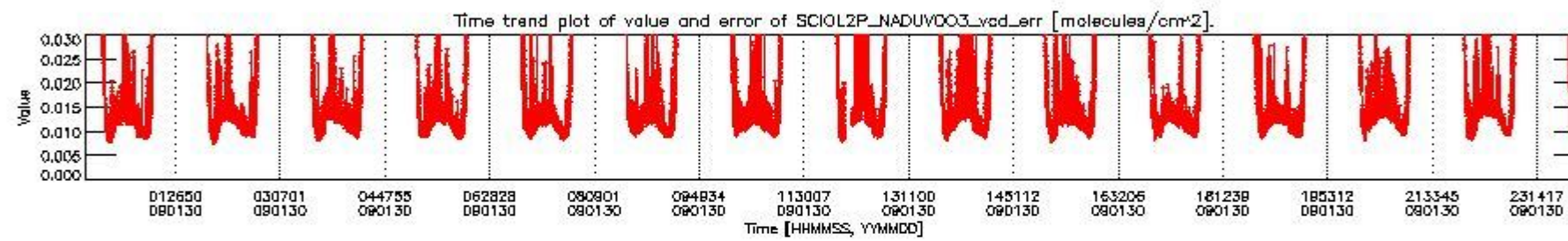
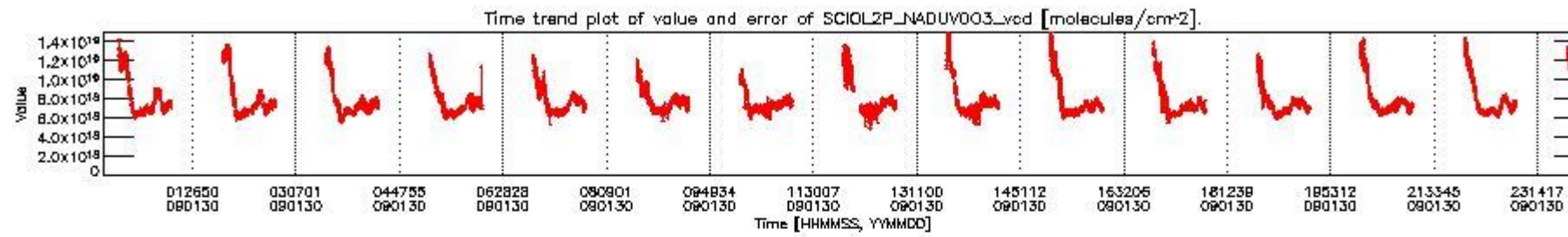
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

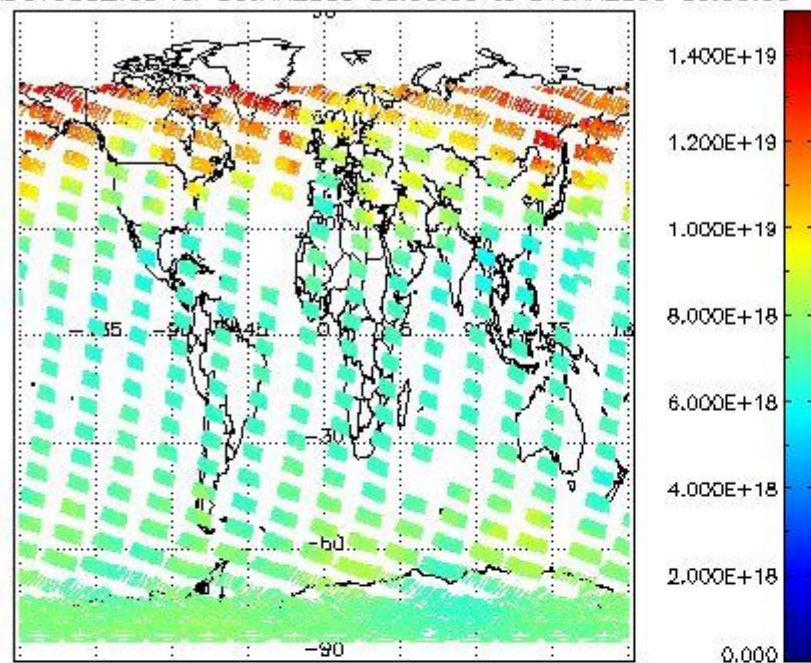
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

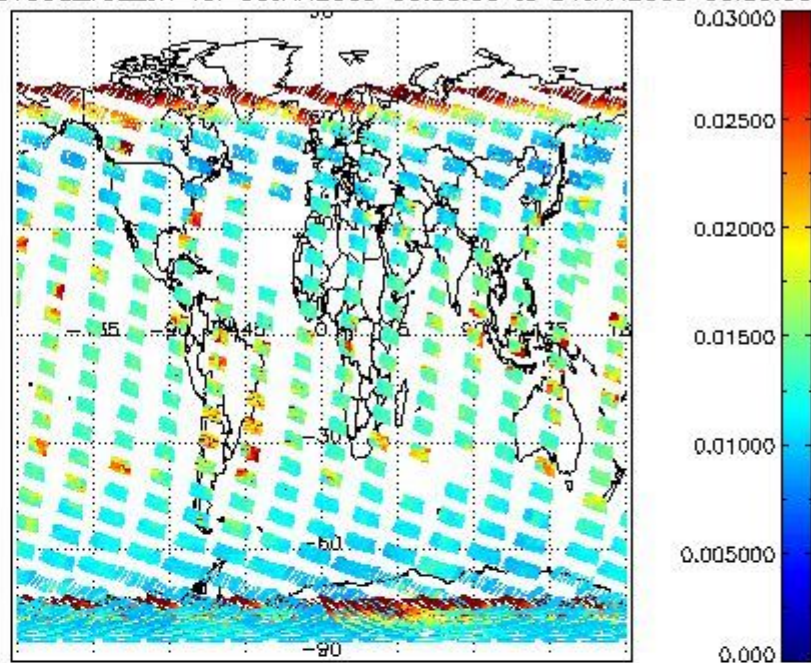
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



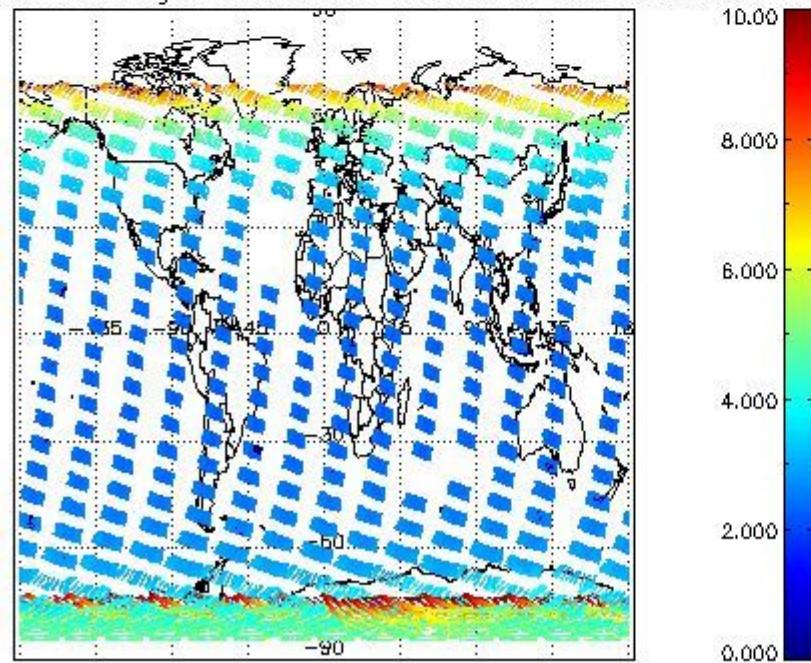
SCIOL2P_NADUV003_vcd for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



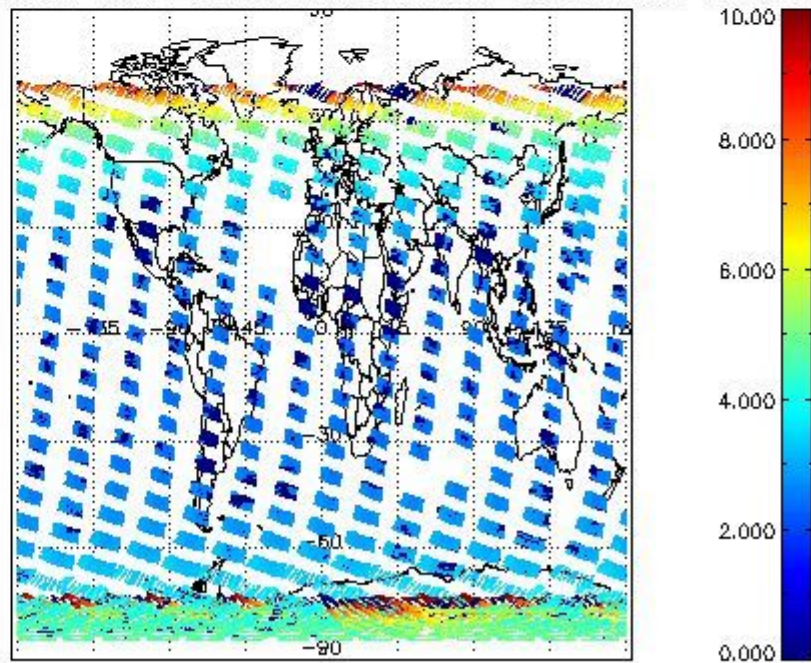
SCIOL2P_NADUV003_vcd_err for 30JAN2009 00:00:00 to 31JAN2009 00:00:00

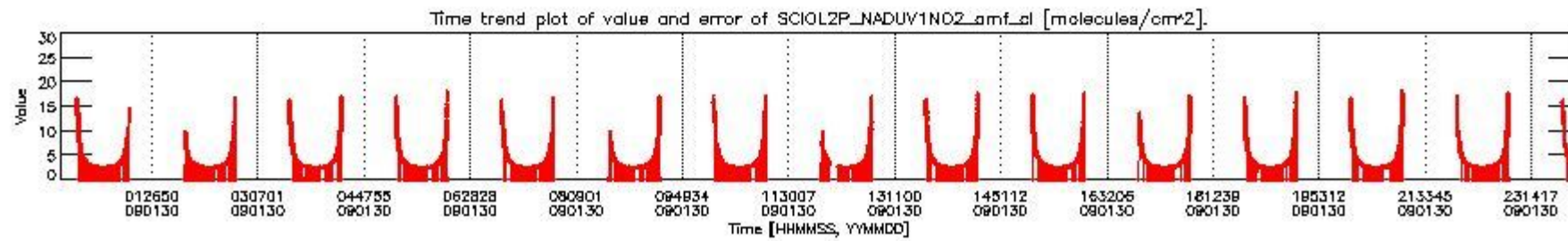
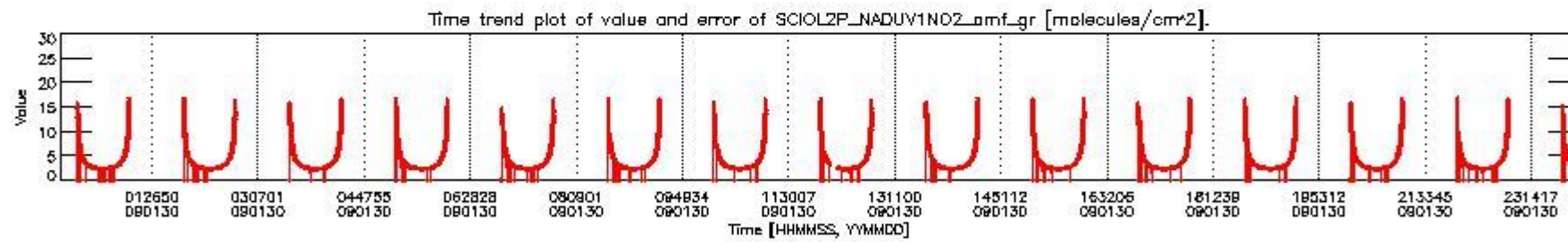
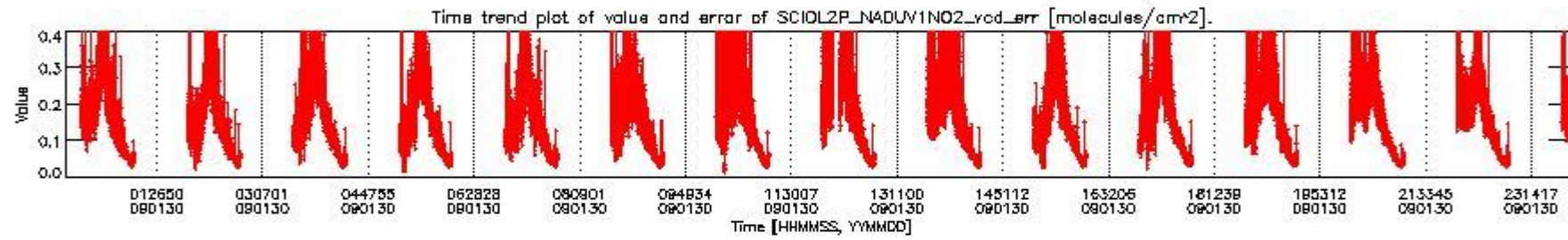
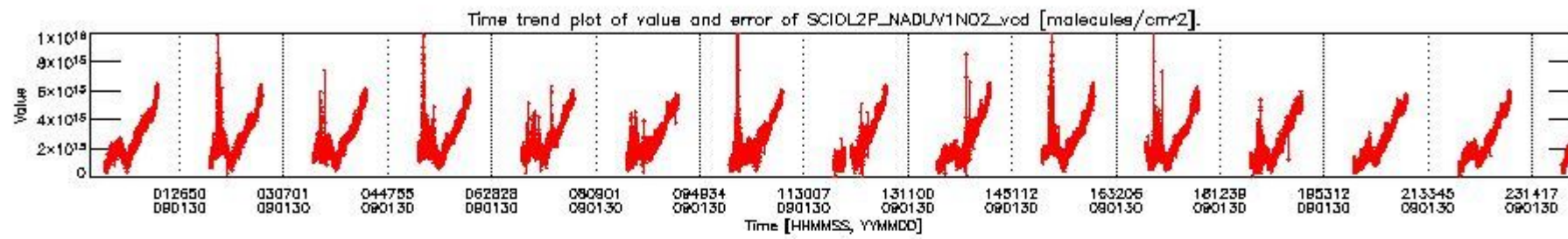


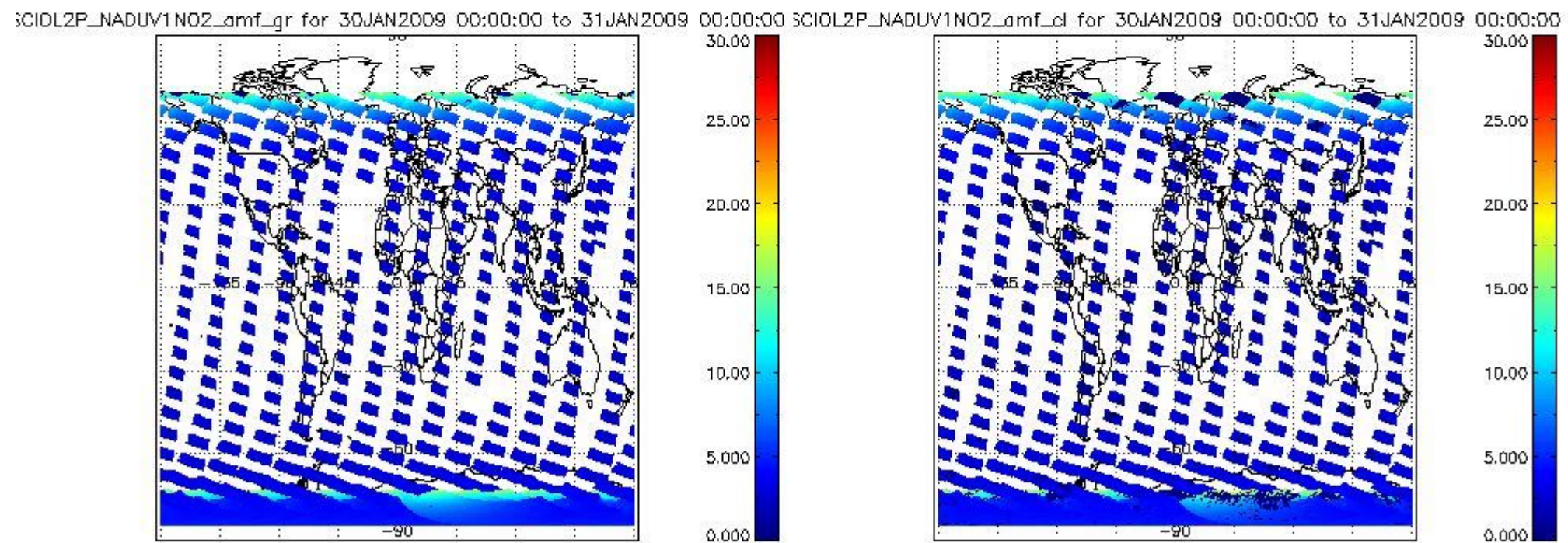
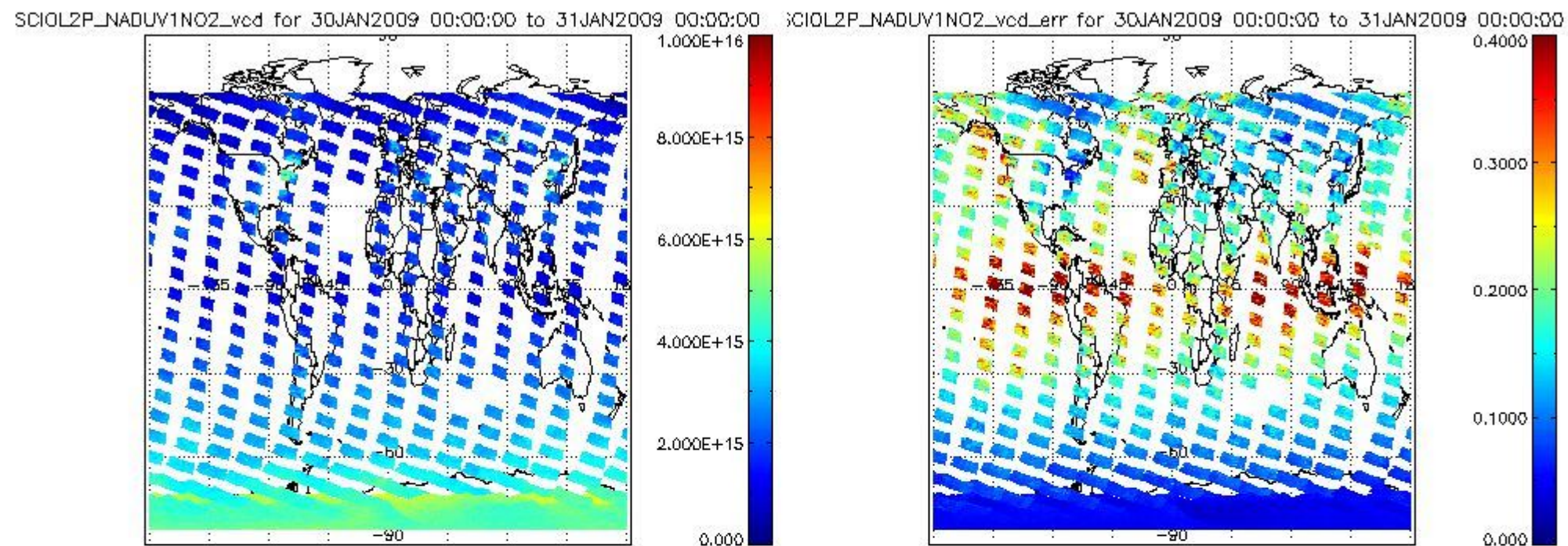
SCIOL2P_NADUV003_amf_gr for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 30JAN2009 00:00:00 to 31JAN2009 00:00:00







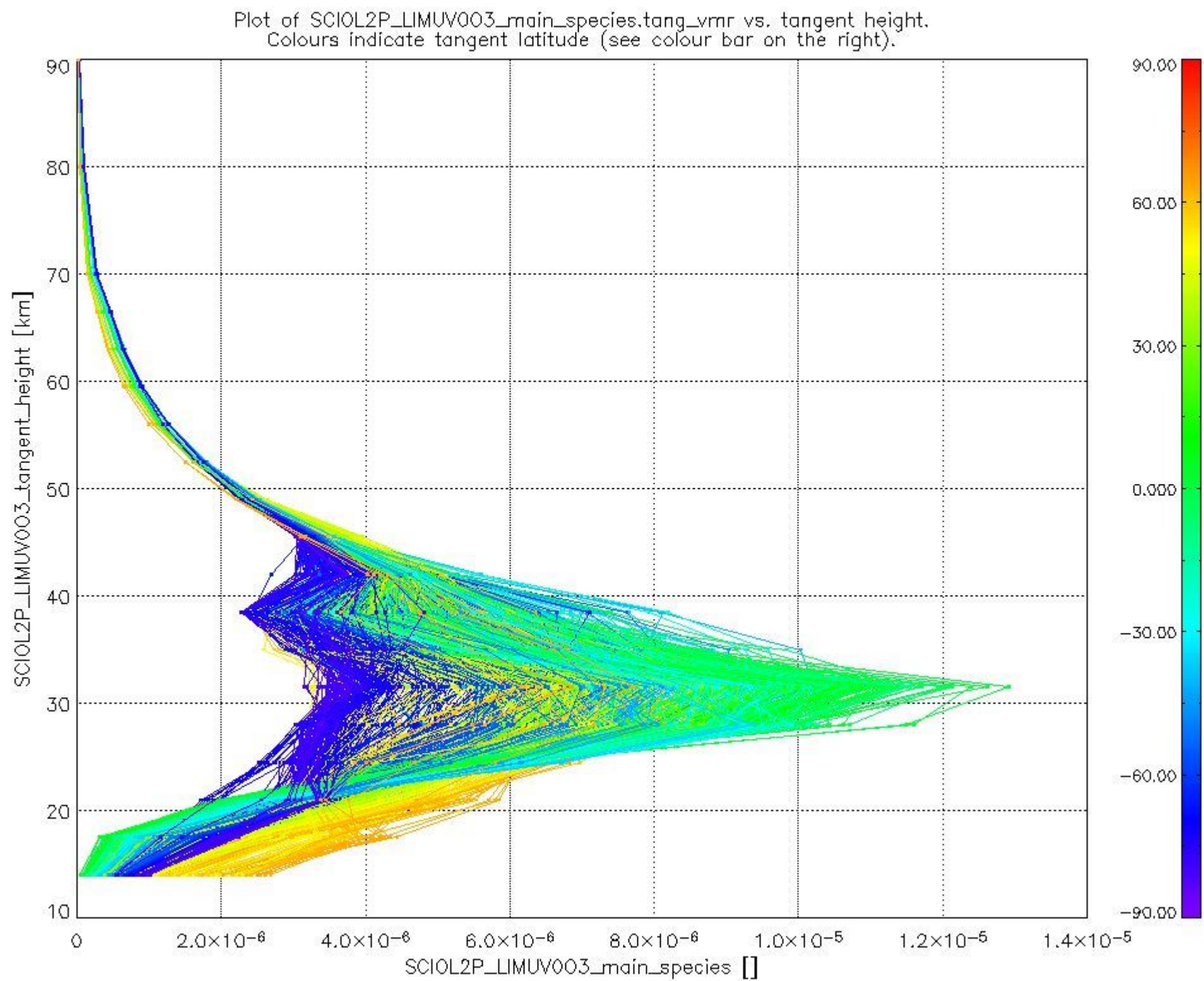
2.2.3 Limb

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

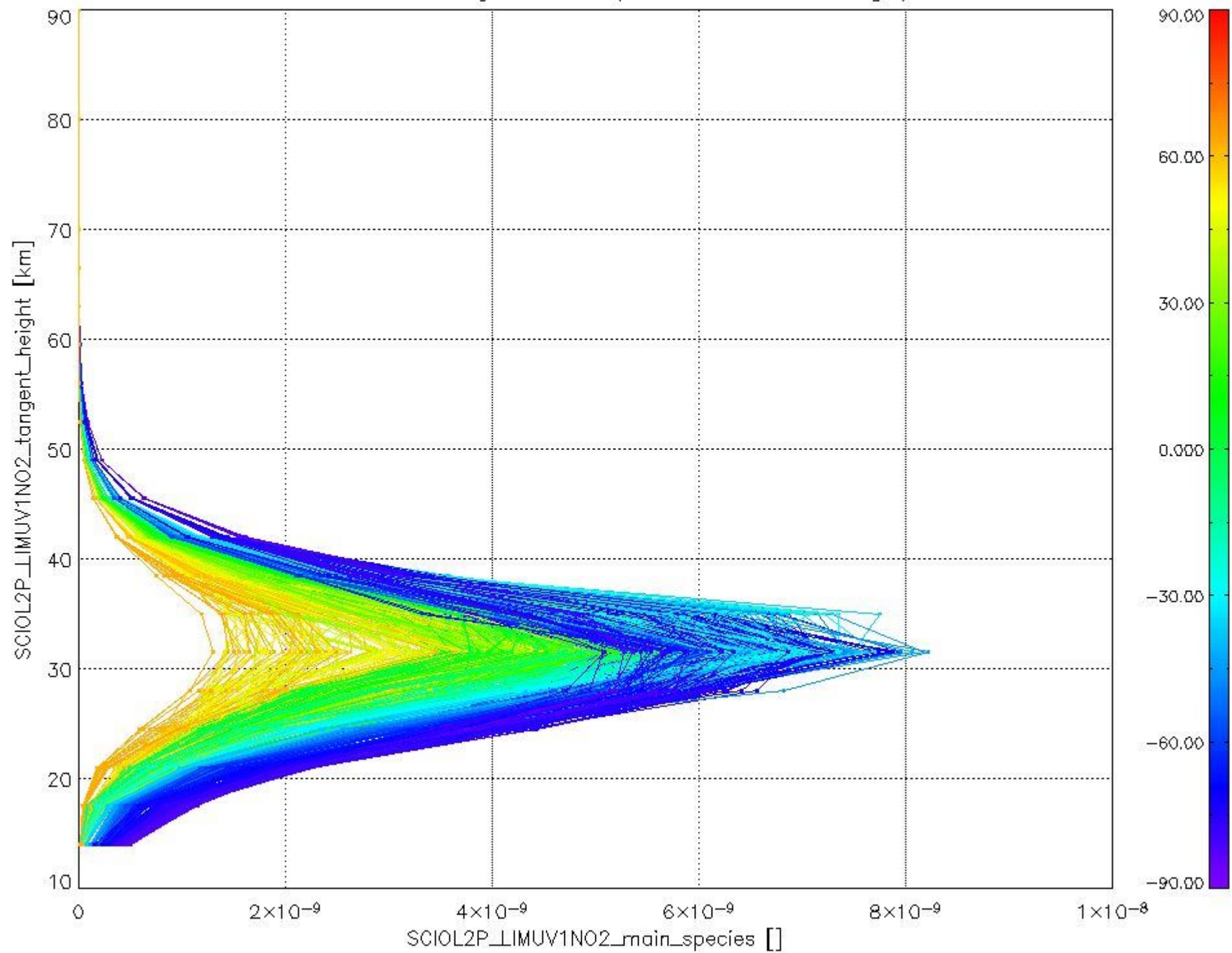
The following data items are currently included into this section:

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.



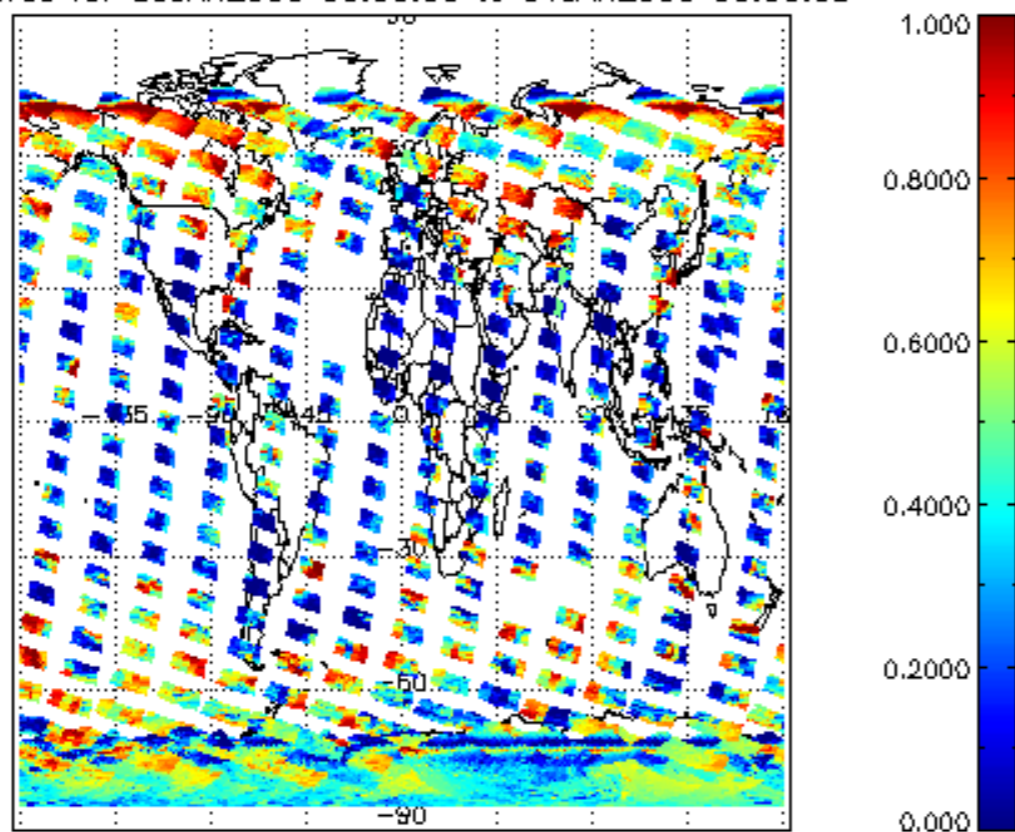
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



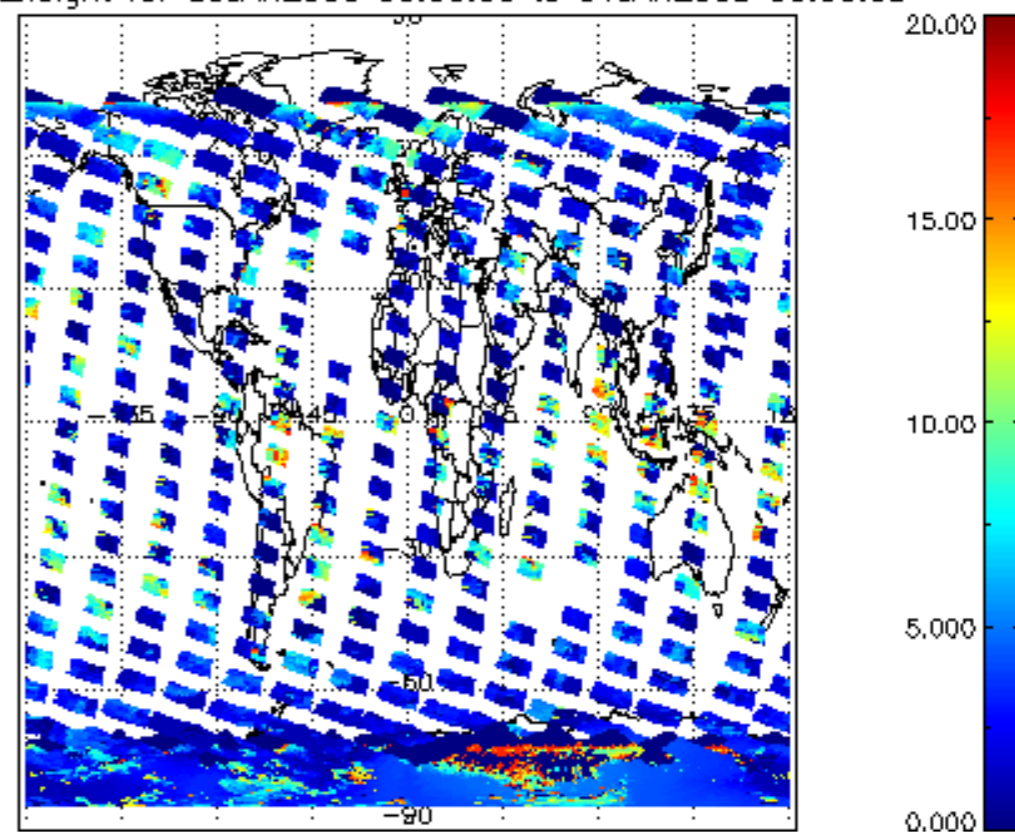
2.3 ADF monitoring

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

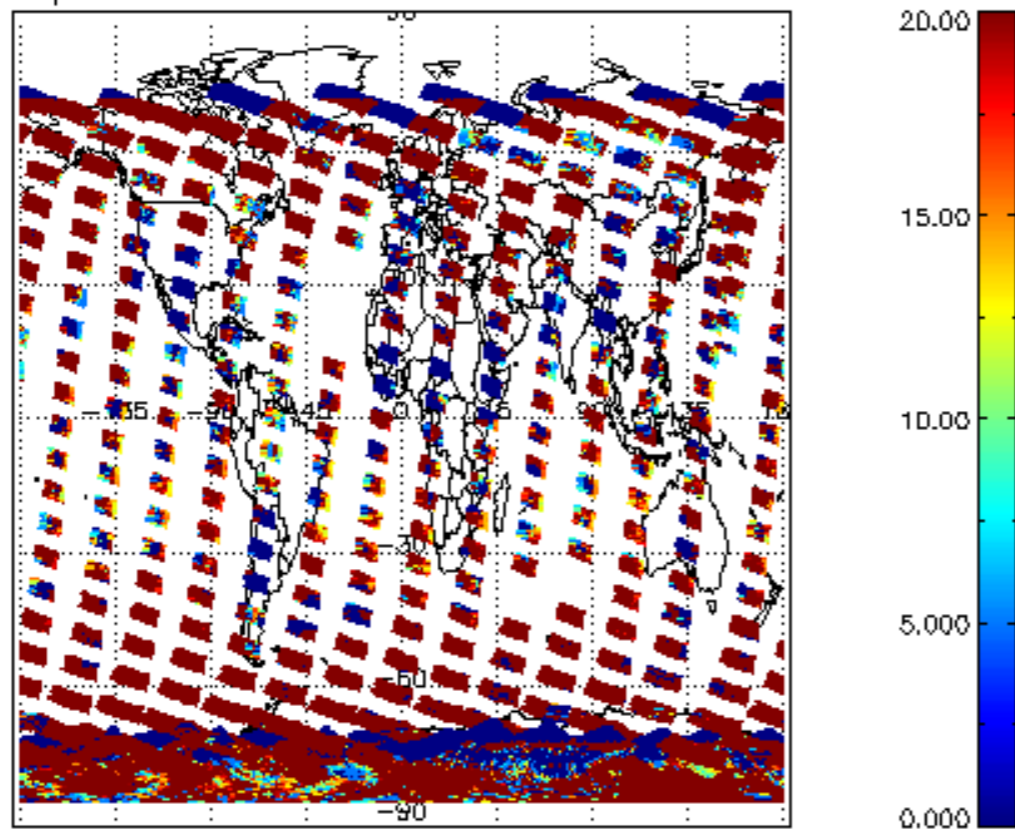
cL_frac for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



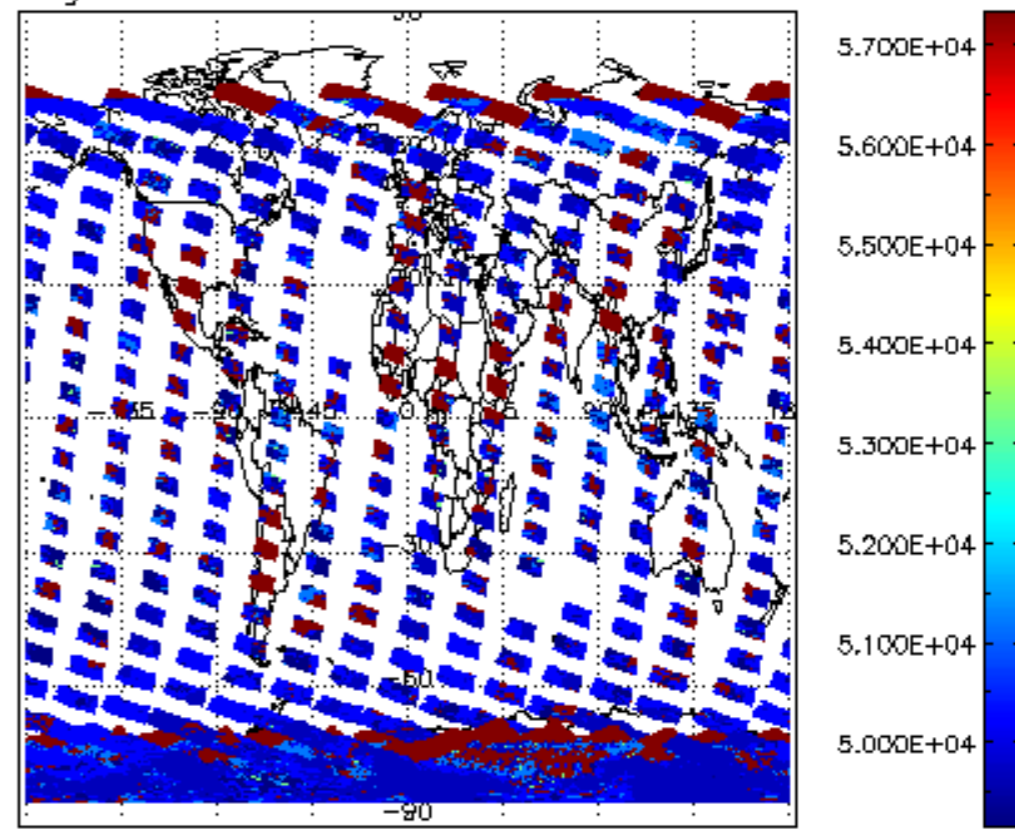
cL_top_height for 30JAN2009 00:00:00 to 31JAN2009 00:00:00

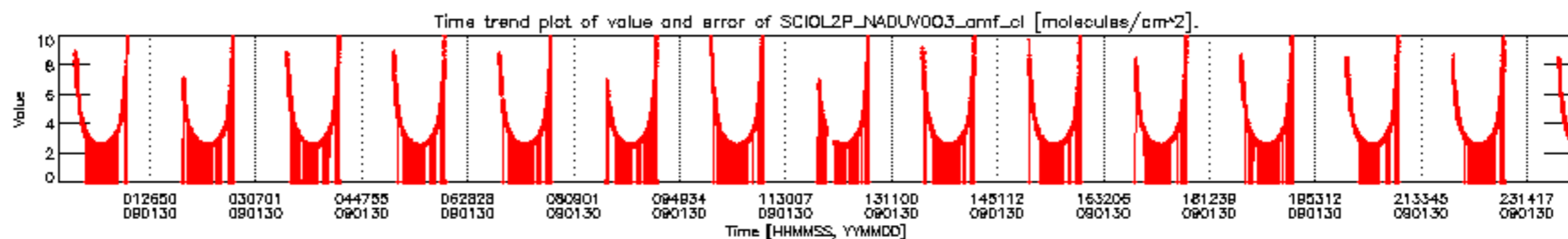
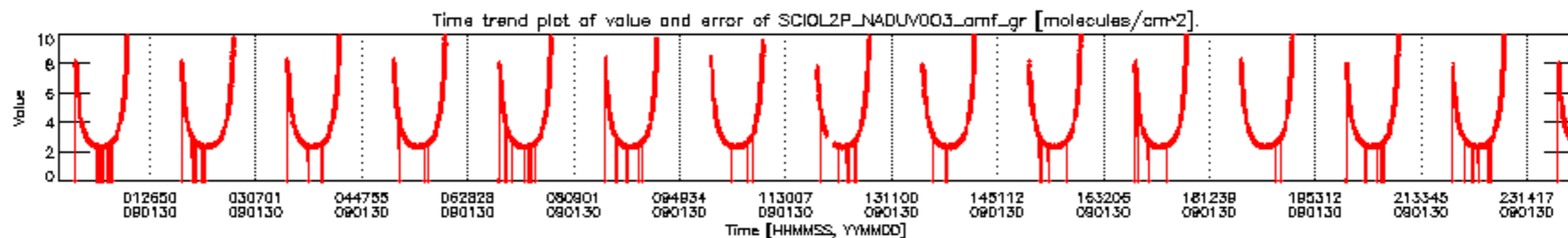
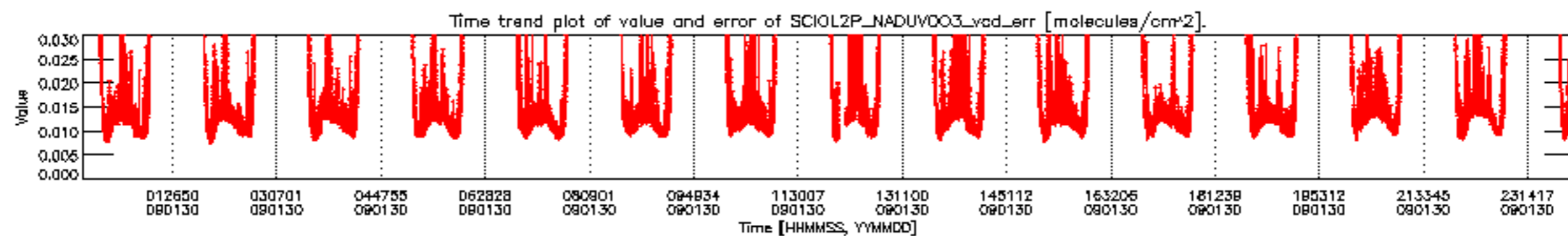
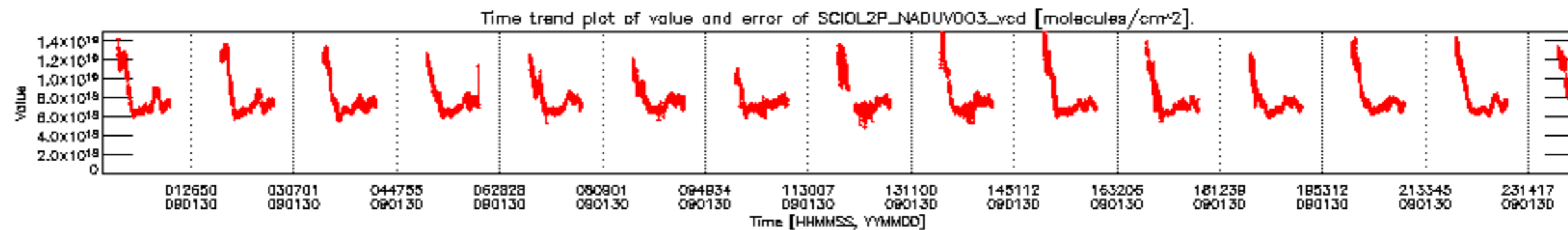


cLopt_depth for 30JAN2009 00:00:00 to 31JAN2009 00:00:00

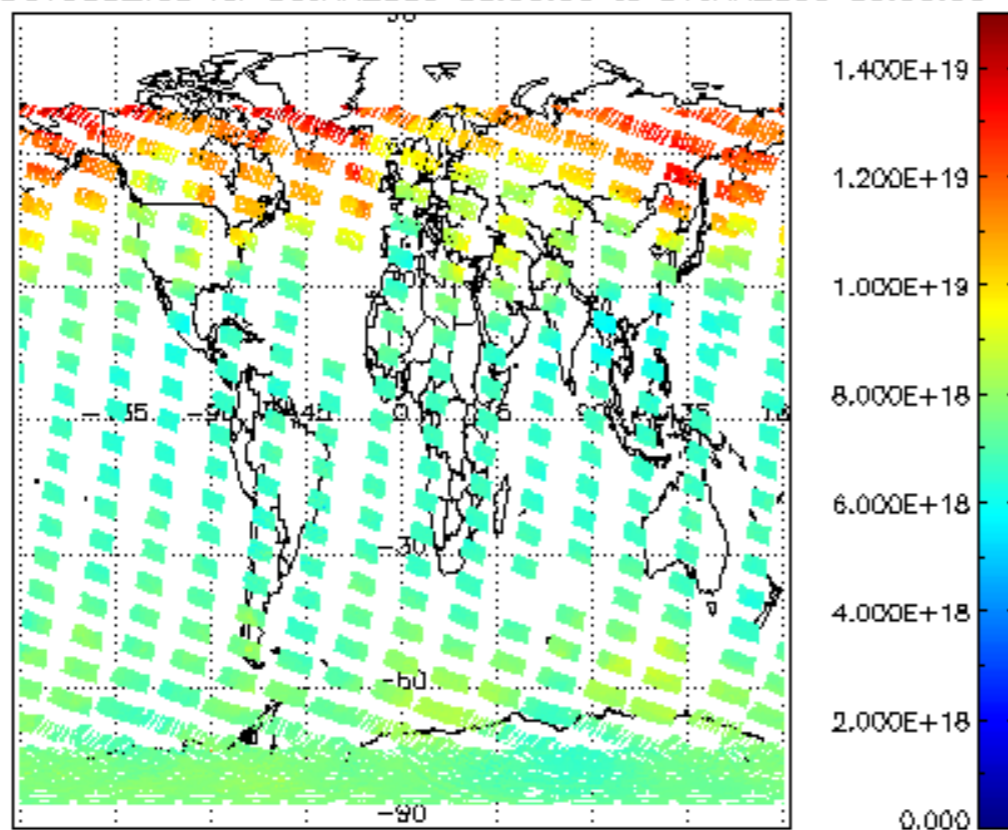


cloud_flags for 30JAN2009 00:00:00 to 31JAN2009 00:00:00

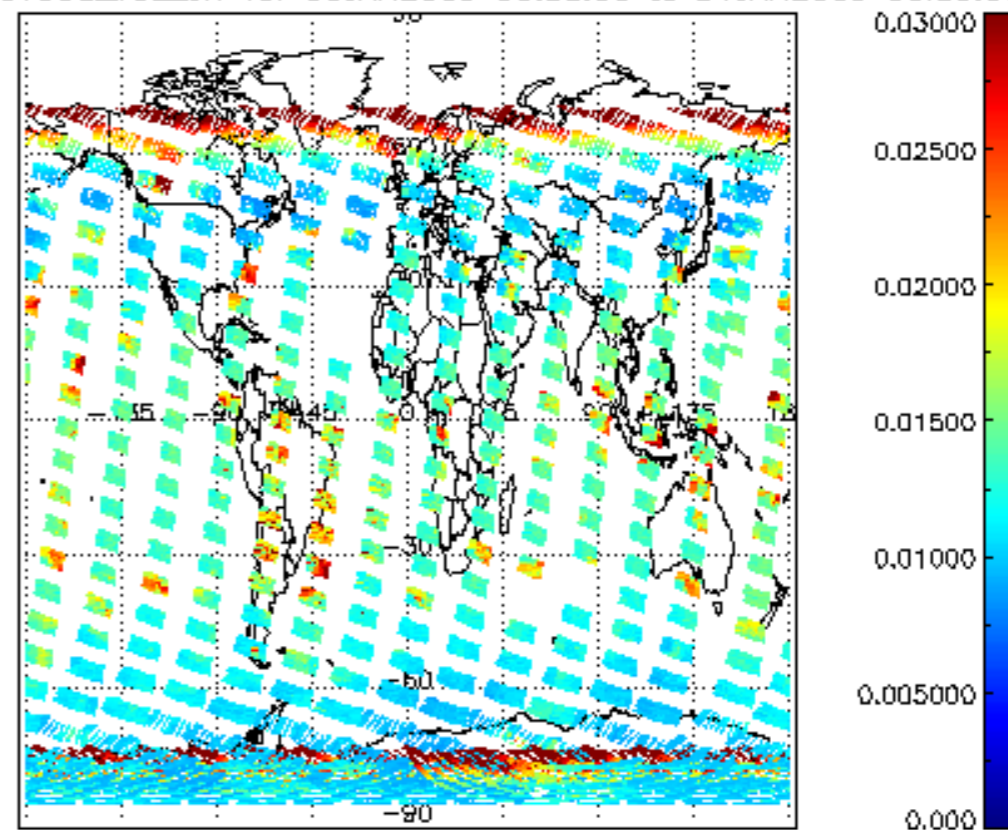




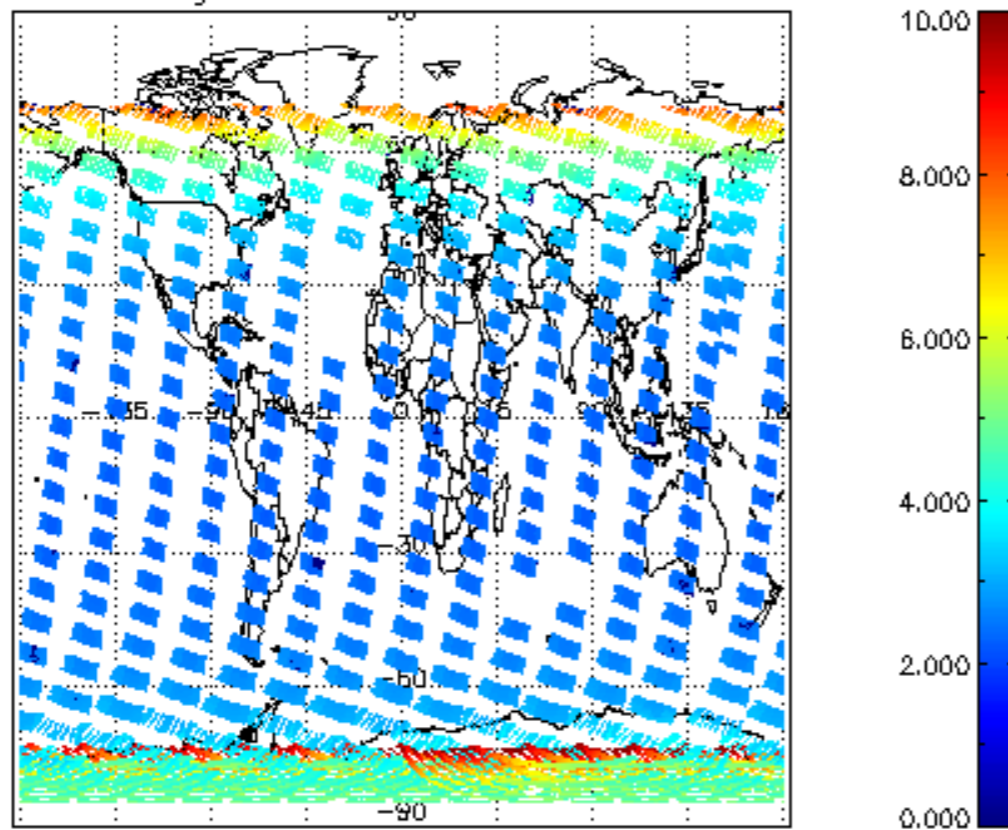
SCIOL2P_NADUV003_vcd for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



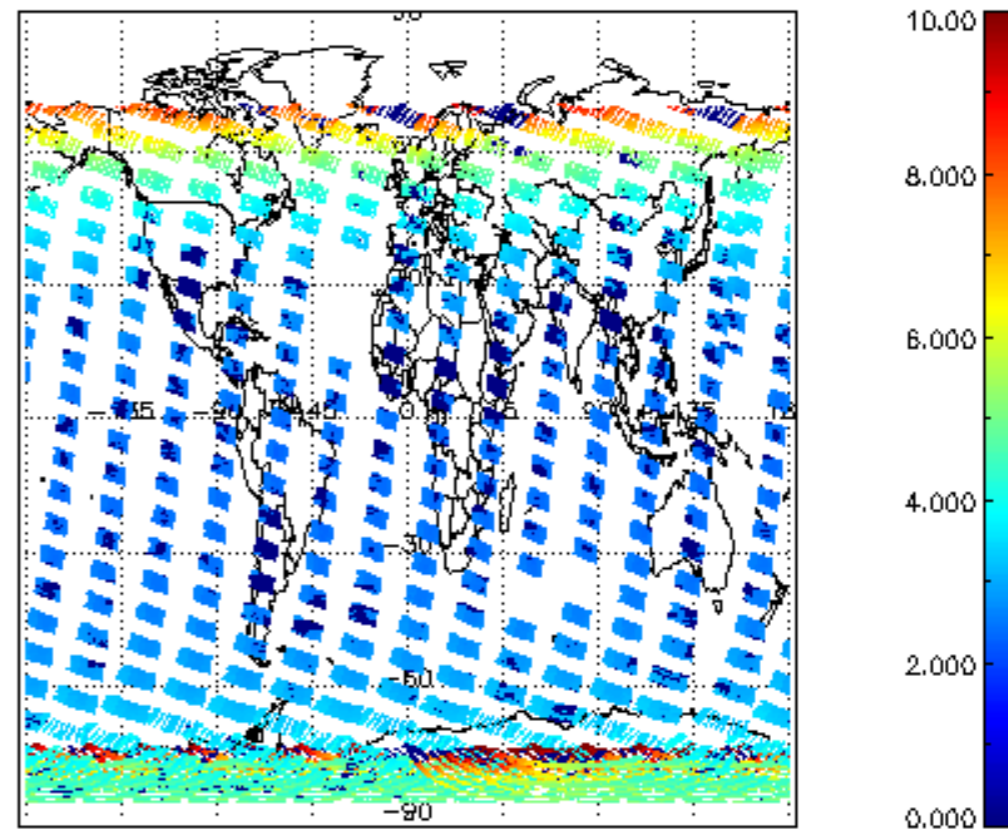
SCIOL2P_NADUV003_vcd_err for 30JAN2009 00:00:00 to 31JAN2009 00:00:00

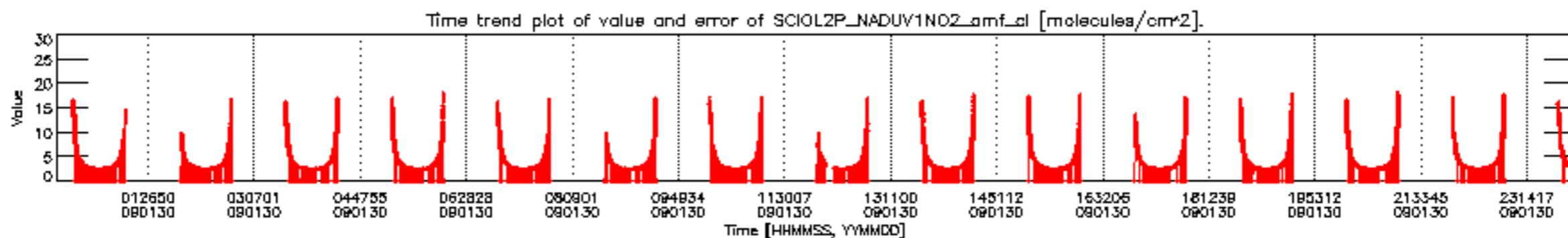
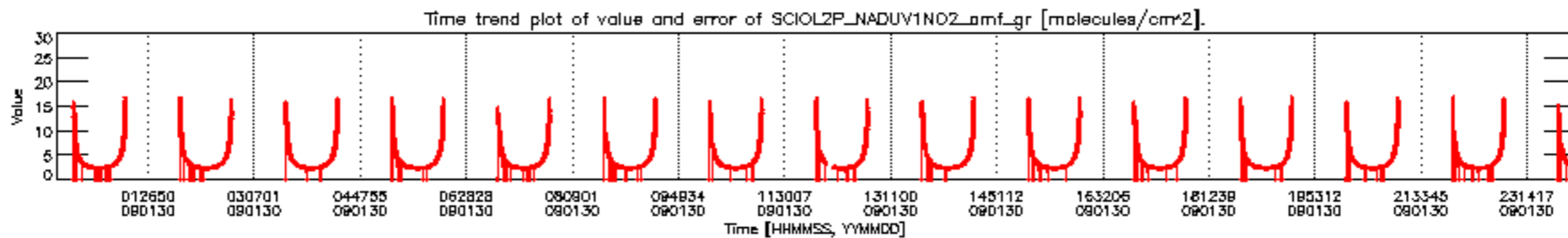
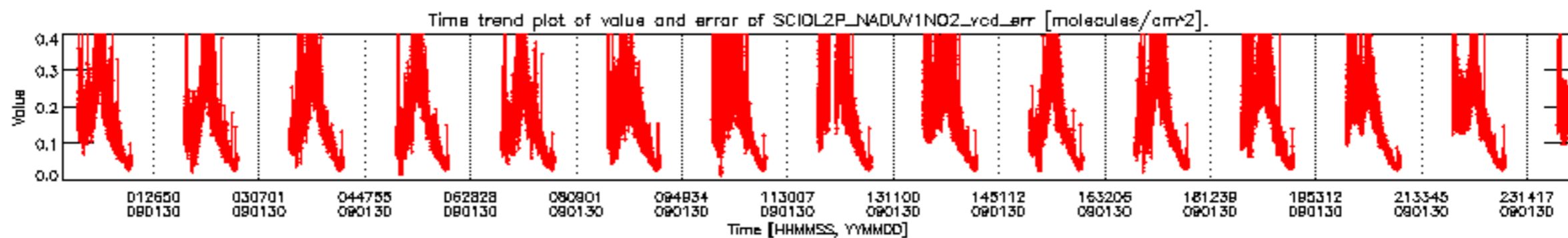
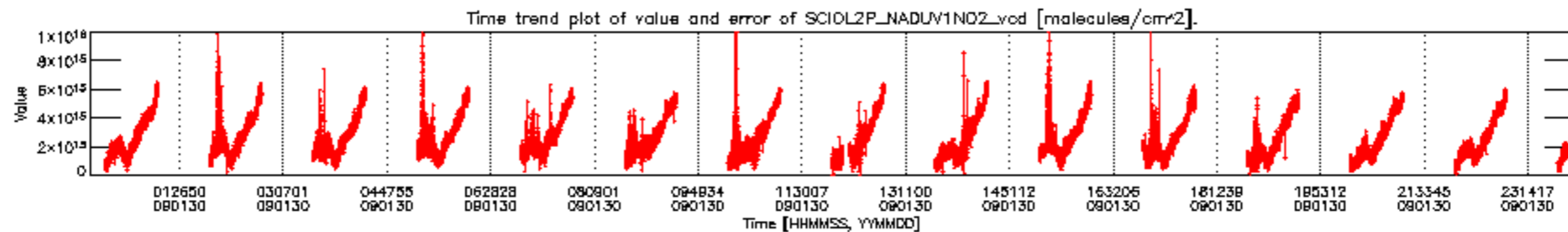


SCIOL2P_NADUV003_amf_gr for 30JAN2009 00:00:00 to 31JAN2009 00:00:00

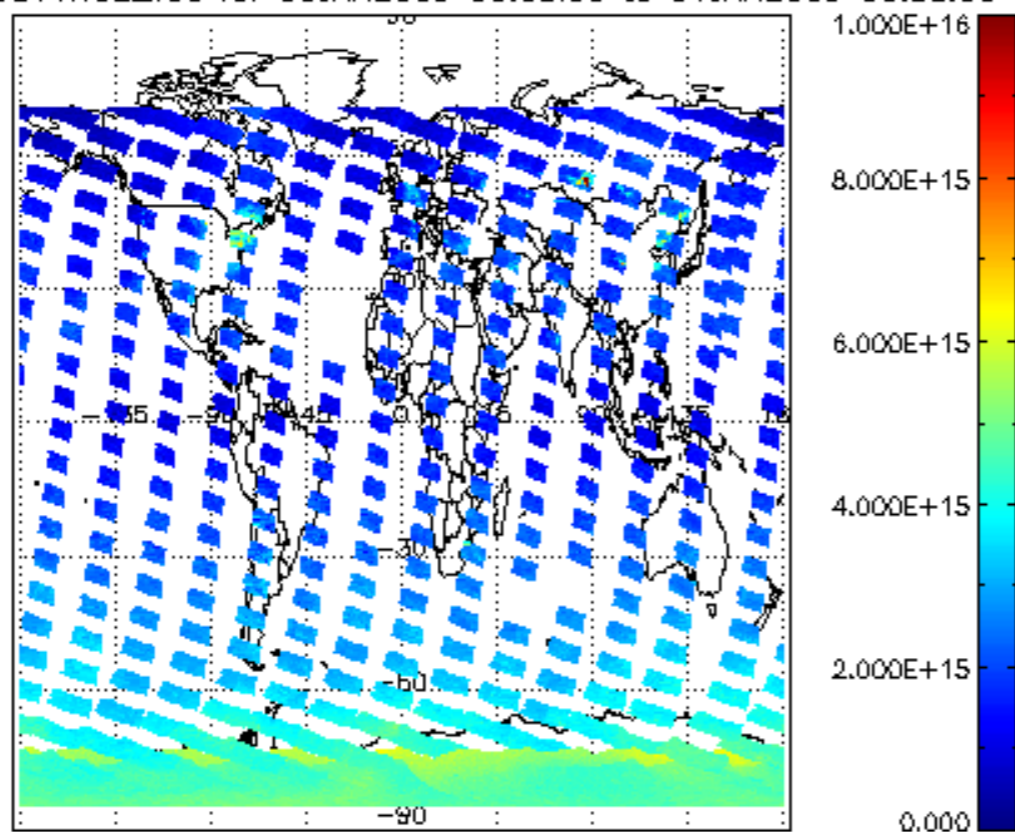


SCIOL2P_NADUV003_amf_cl for 30JAN2009 00:00:00 to 31JAN2009 00:00:00

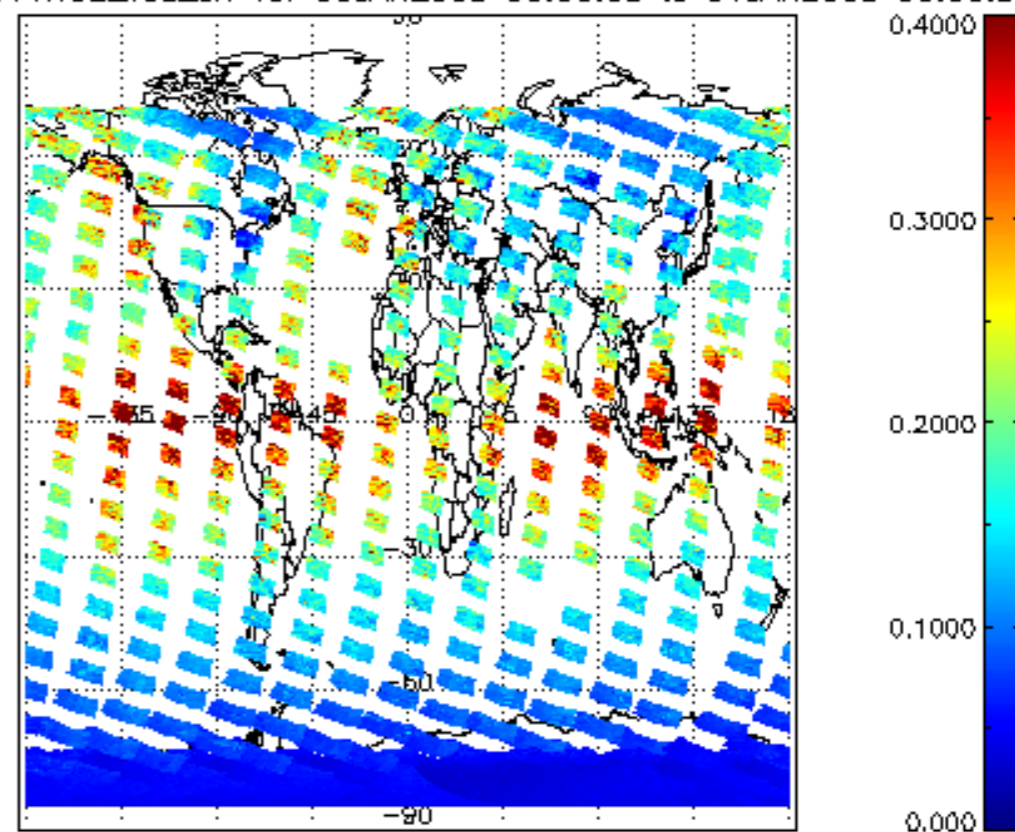




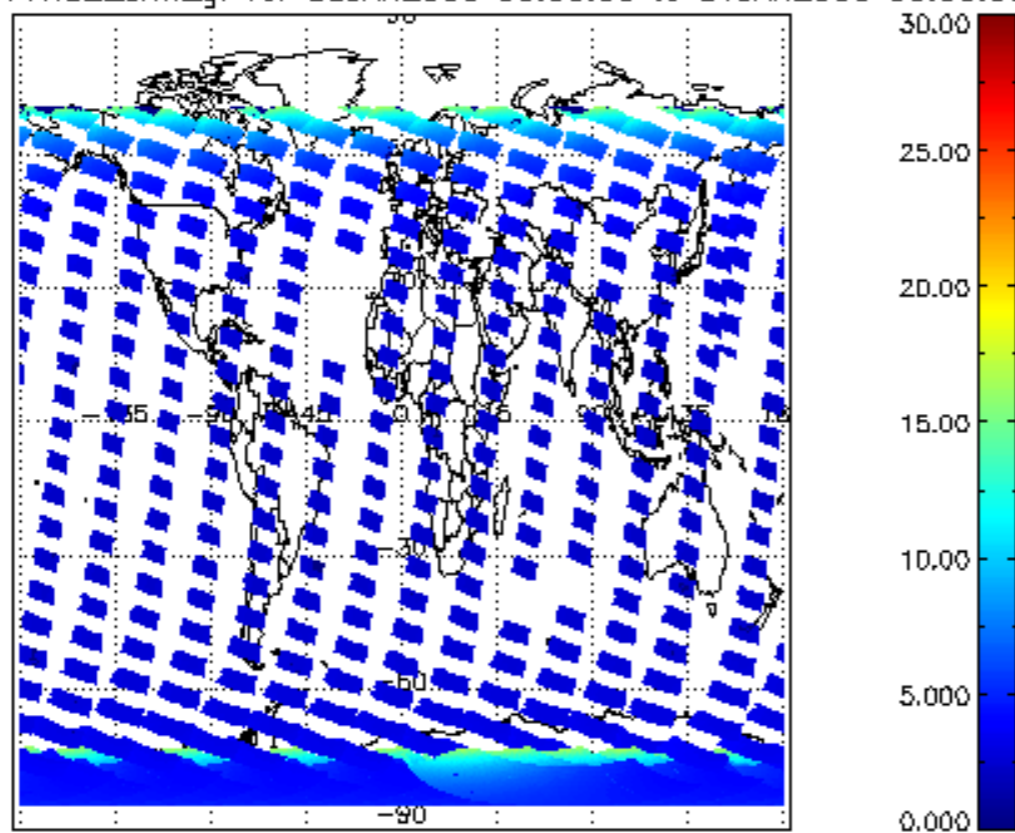
SCIOL2P_NADUV1NO2_vcd for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



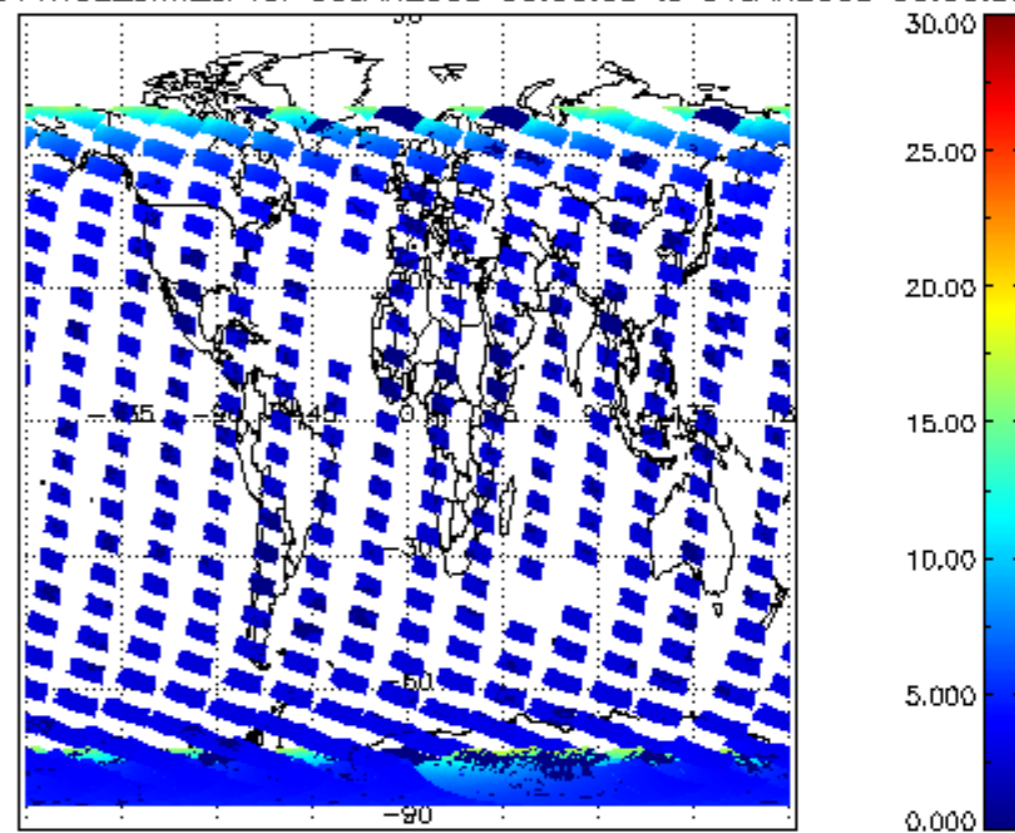
SCIOL2P_NADUV1NO2_vcd_err for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



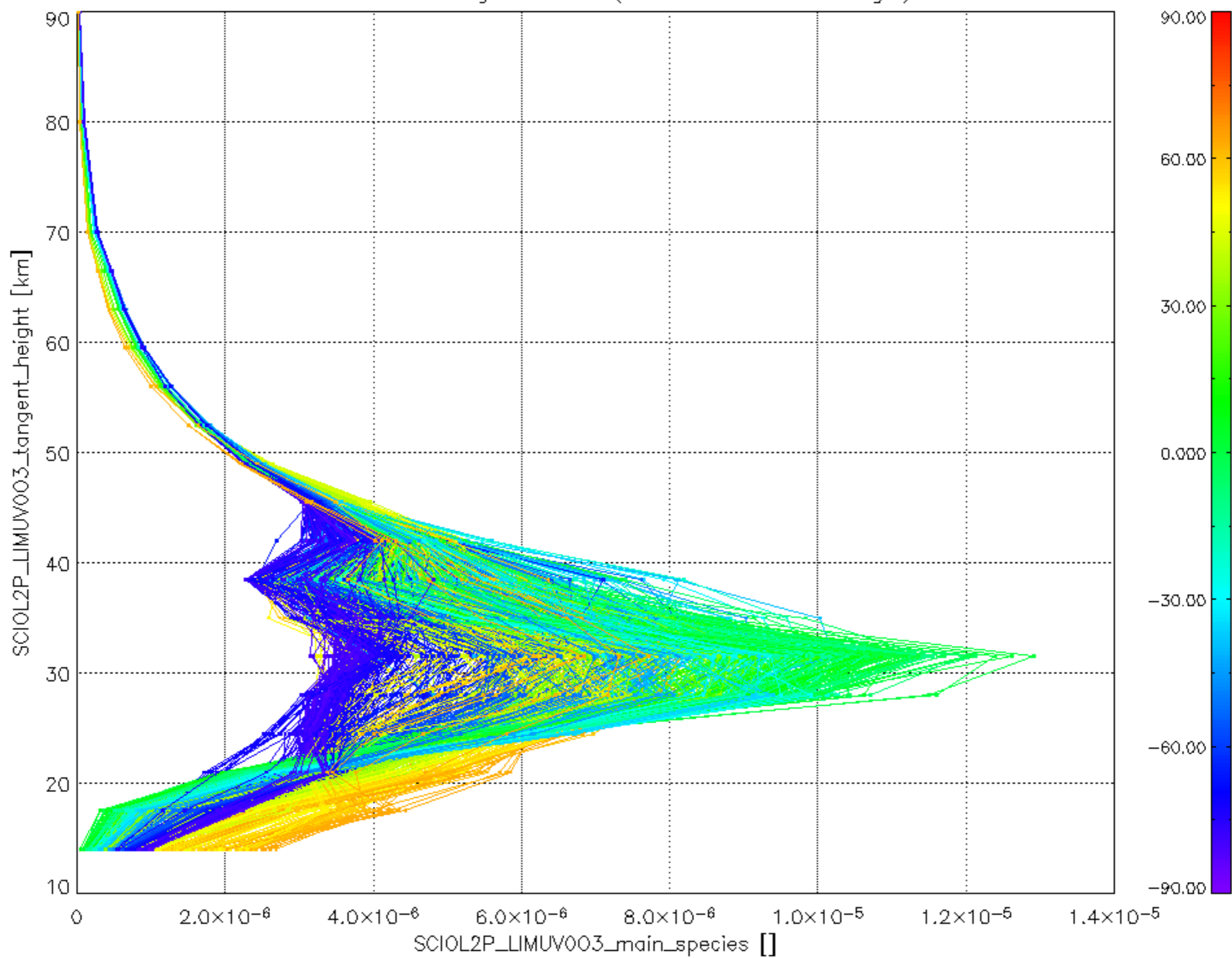
SCIOL2P_NADUV1NO2_amf_gr for 30JAN2009 00:00:00 to 31JAN2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 30JAN2009 00:00:00 to 31JAN2009 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).

