

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	04DEC2008 06:02:54
Data source version	SCIA-OL/3.01-R
Processing scope for products	16NOV2008 00:00:00 to 17NOV2008 00:00:00
Start time of first product within scope	15NOV2008 23:27:31
Stop time of last product within scope	16NOV2008 23:51:24
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__2PRDPA20081115_232731_000033252073_00474_35097_4460.N1	15NOV2008 23:27:31	16NOV2008 00:22:57	0	GOOD
1	SCI_OL__2PRDPA20081116_010807_000033812073_00475_35098_4462.N1	16NOV2008 01:08:07	16NOV2008 02:04:29	0	GOOD
2	SCI_OL__2PRDPA20081116_024844_000033252073_00476_35099_4465.N1	16NOV2008 02:48:44	16NOV2008 03:44:09	0	GOOD
3	SCI_OL__2PRDPA20081116_042920_000033812073_00477_35100_4466.N1	16NOV2008 04:29:20	16NOV2008 05:25:41	0	GOOD
4	SCI_OL__2PRDPA20081116_060956_000033252073_00478_35101_4468.N1	16NOV2008 06:09:56	16NOV2008 07:05:22	0	GOOD
5	SCI_OL__2PRDPA20081116_075032_000033812073_00479_35102_4470.N1	16NOV2008 07:50:32	16NOV2008 08:46:54	0	GOOD
6	SCI_OL__2PRDPA20081116_093109_000033252073_00480_35103_4472.N1	16NOV2008 09:31:09	16NOV2008 10:26:34	0	GOOD
7	SCI_OL__2PRDPA20081116_111145_000033812073_00481_35104_4474.N1	16NOV2008 11:11:45	16NOV2008 12:08:06	0	GOOD
8	SCI_OL__2PRDPA20081116_125221_000033252073_00482_35105_4476.N1	16NOV2008 12:52:21	16NOV2008 13:47:47	0	GOOD
9	SCI_OL__2PRDPA20081116_143257_000033812073_00483_35106_4478.N1	16NOV2008 14:32:57	16NOV2008 15:29:19	0	GOOD
10	SCI_OL__2PRDPA20081116_161334_000033252073_00484_35107_4481.N1	16NOV2008 16:13:34	16NOV2008 17:08:59	0	GOOD
11	SCI_OL__2PRDPA20081116_175403_000033862073_00485_35108_4483.N1	16NOV2008 17:54:03	16NOV2008 18:50:29	0	GOOD
12	SCI_OL__2PRDPA20081116_193507_000033252073_00486_35109_4484.N1	16NOV2008 19:35:07	16NOV2008 20:30:32	0	GOOD
13	SCI_OL__2PRDPA20081116_211522_000033812073_00487_35110_4486.N1	16NOV2008 21:15:22	16NOV2008 22:11:44	0	GOOD
14	SCI_OL__2PRDPA20081116_225559_000033252073_00488_35111_4489.N1	16NOV2008 22:55:59	16NOV2008 23:51:24	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: 152777

Total number of cloud data DSRs with good quality flag (=0): 152777 (100.0 %)

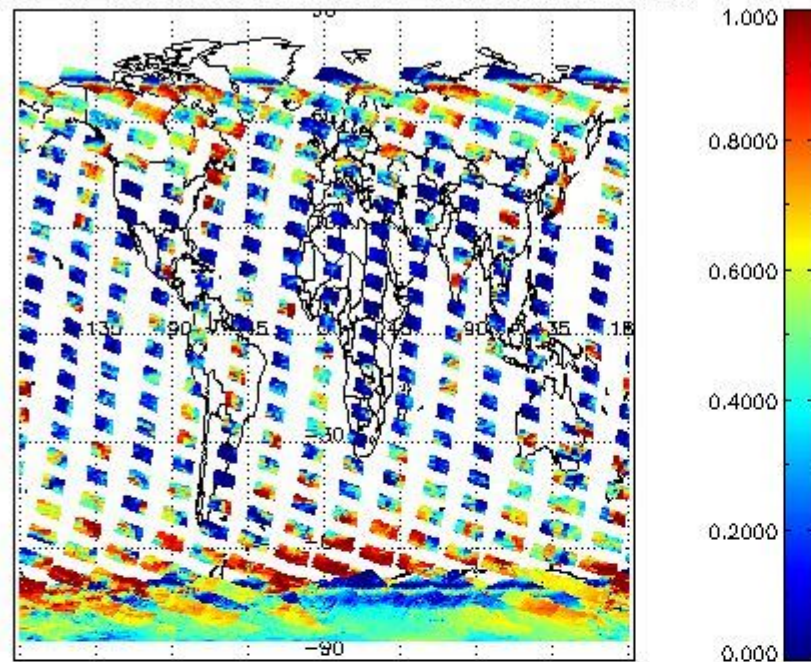
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	152777	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	152777	0.16959	0.12500	0.12500	0.25000	0.059879	s
CL_FRAC	152777	0.41180	0.41962	0.0000	1.0000	0.27922	-
CL_FRAC_ERR	152777	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	152777	5.4268	4.0000	4.0000	8.0000	1.9161	
PMD_READ_CL[0]	152777	0.24775	0.0000	0.0000	8.0000	1.1485	-
PMD_READ_CL[1]	152777	0.87260	0.0000	0.0000	8.0000	2.0686	-
CL_TOP_HEIGHT	133438	4.0375	3.0842	0.0000	17.000	3.7644	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	133438	56.017	48.263	0.0000	101.00	40.339	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	152777	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	152777	11001001	11000100	11000000	11100000	3145.5	flags
AERO_ABSO_IND	152777	3.0012	3.3062	-1.1671	19.151	2.1728	
AERO_IND_DIAG	152777	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	152777	01010110	00000000	00000000	11000000	24463.	flags

Time and geolocation plots:

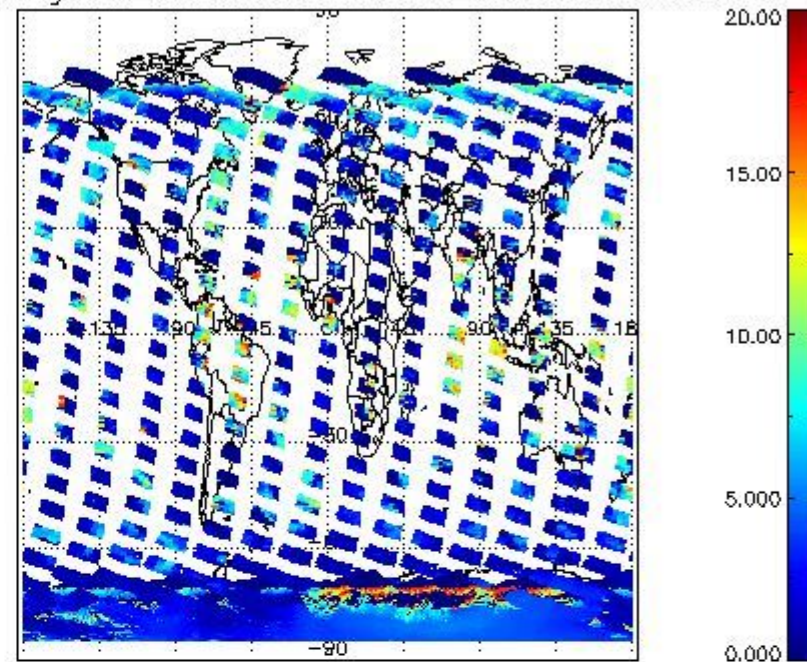
Plots are available for the following parameters:

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

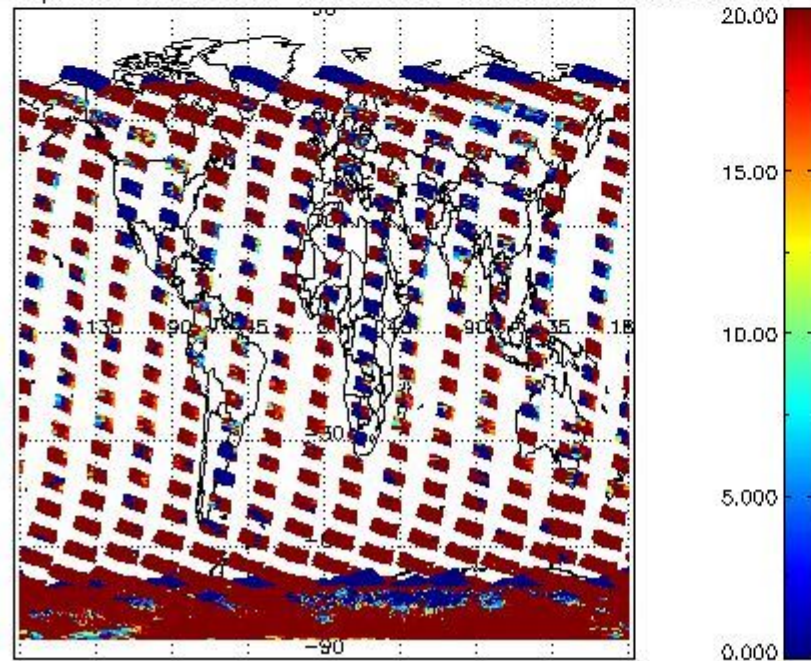
cLfrac for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



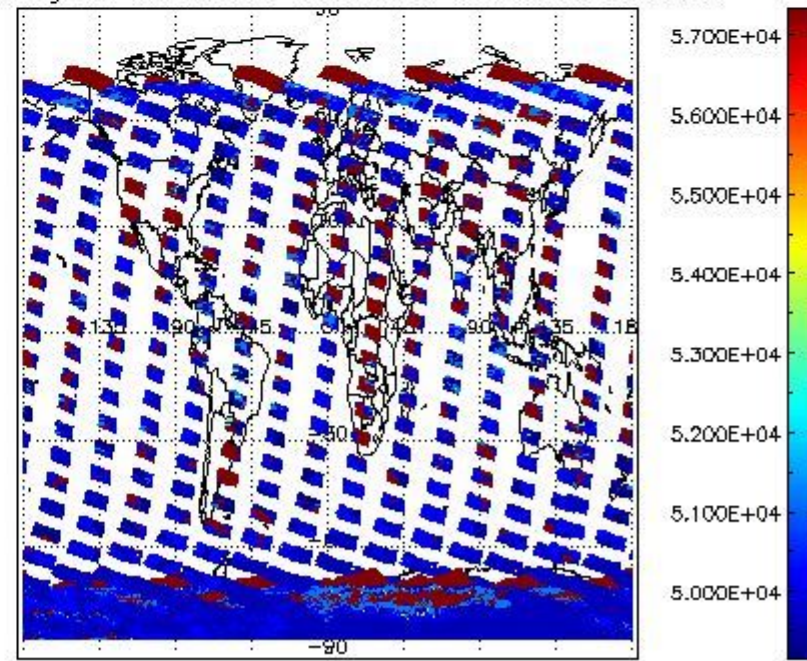
cL_top_height for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



cLopt_depth for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



cloud_flags for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



2.2.2 Nadir

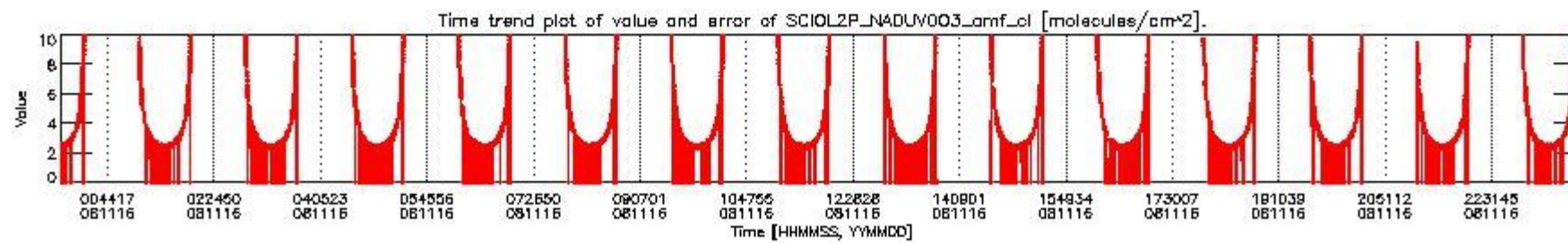
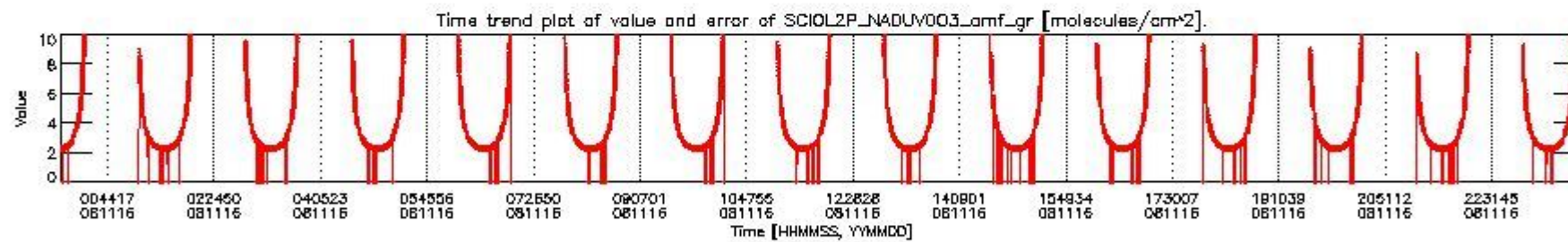
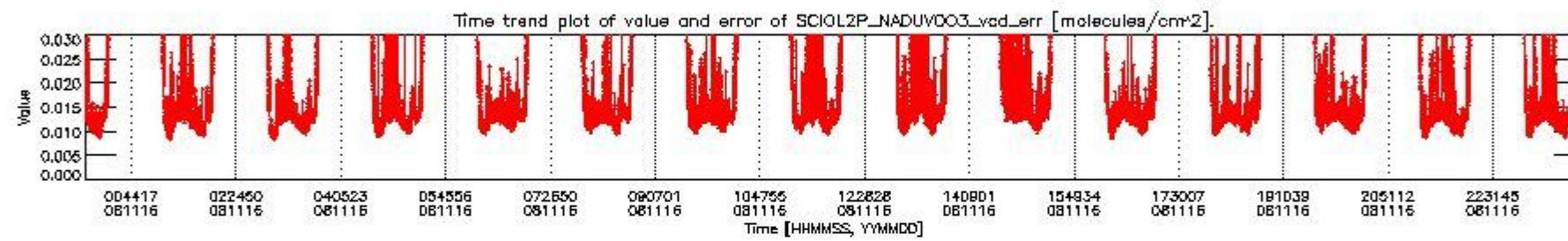
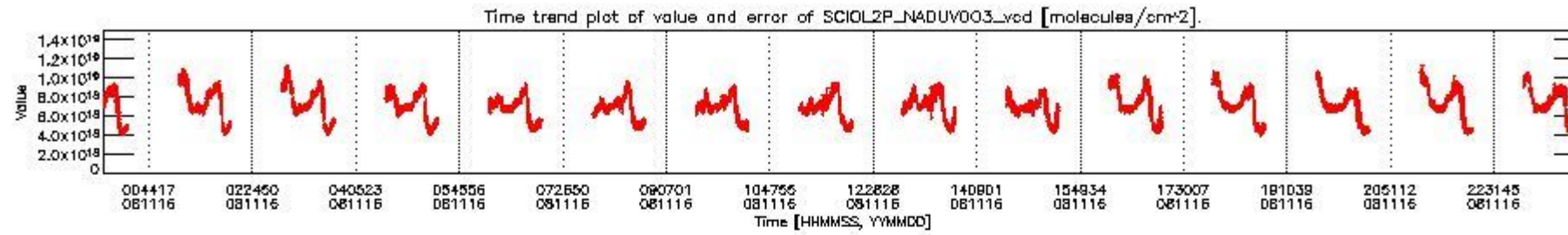
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

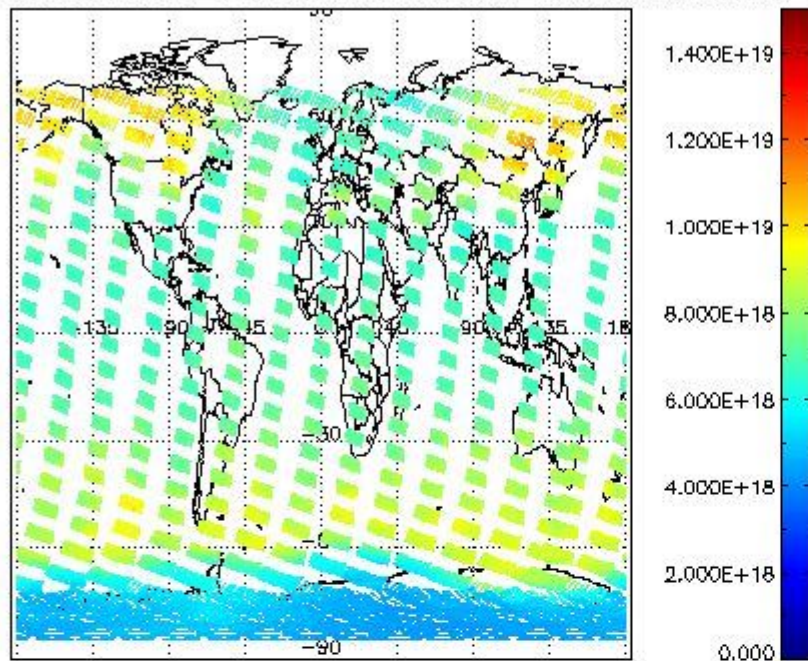
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

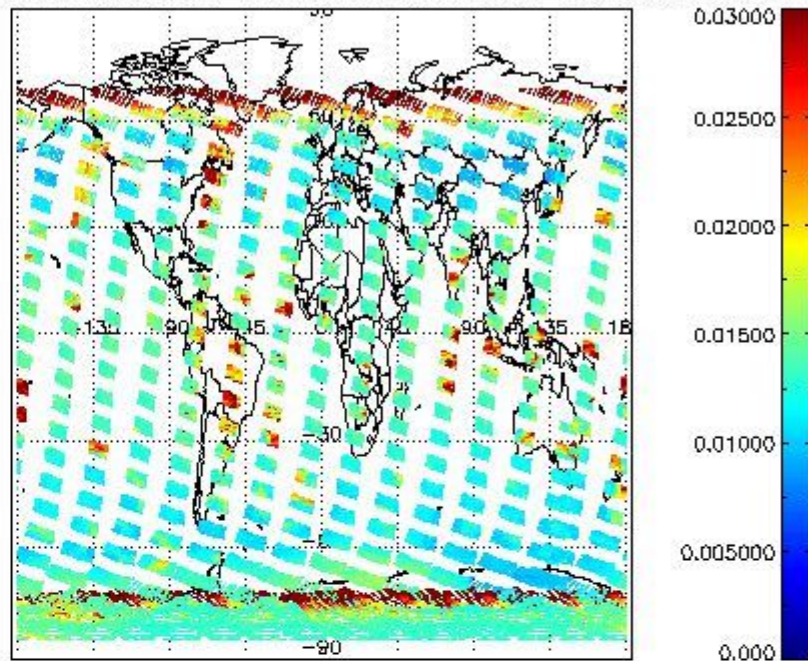
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



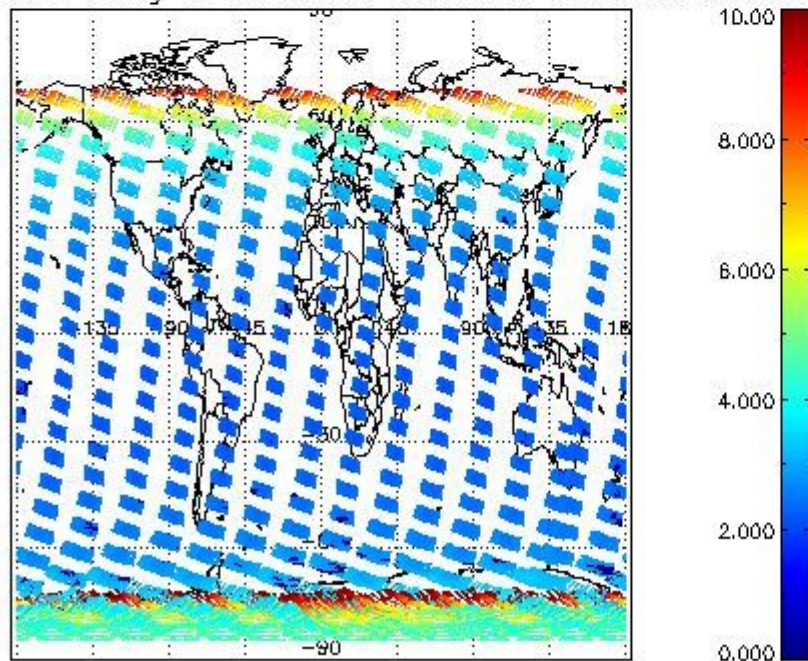
SCIOL2P_NADUV003_vcd for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



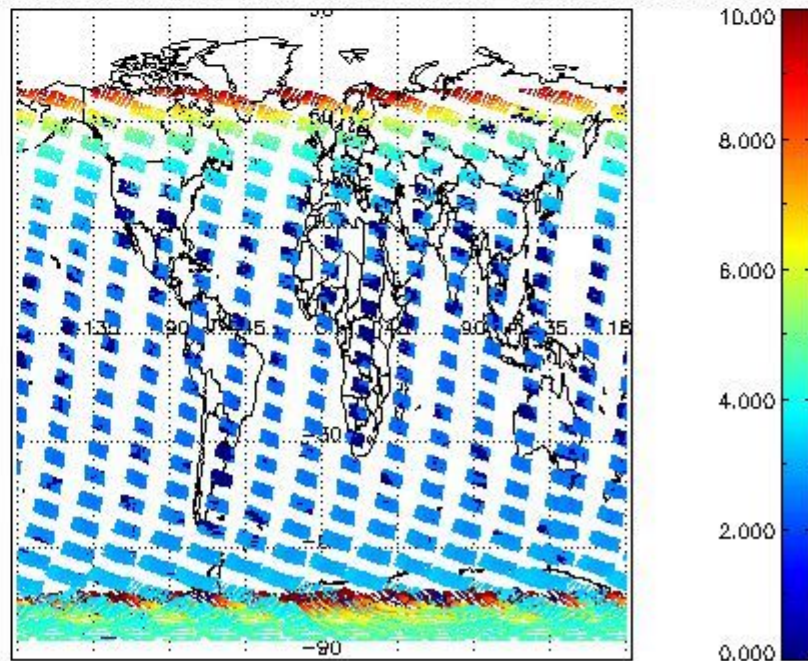
SCIOL2P_NADUV003_vcd_err for 16NOV2008 00:00:00 to 17NOV2008 00:00:00

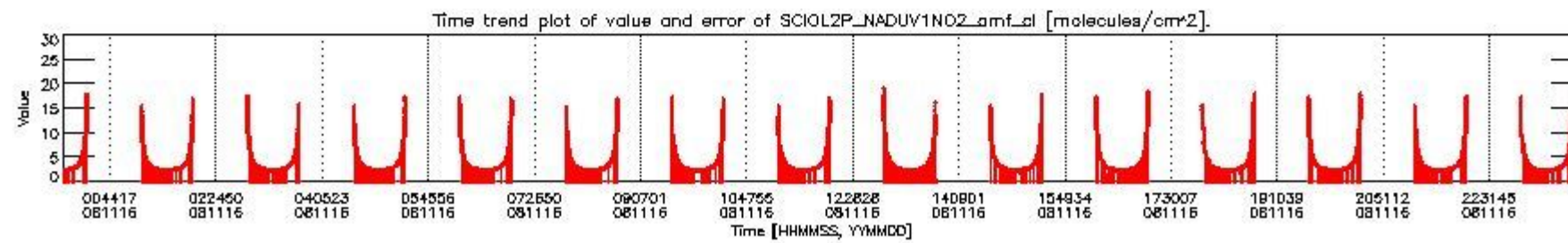
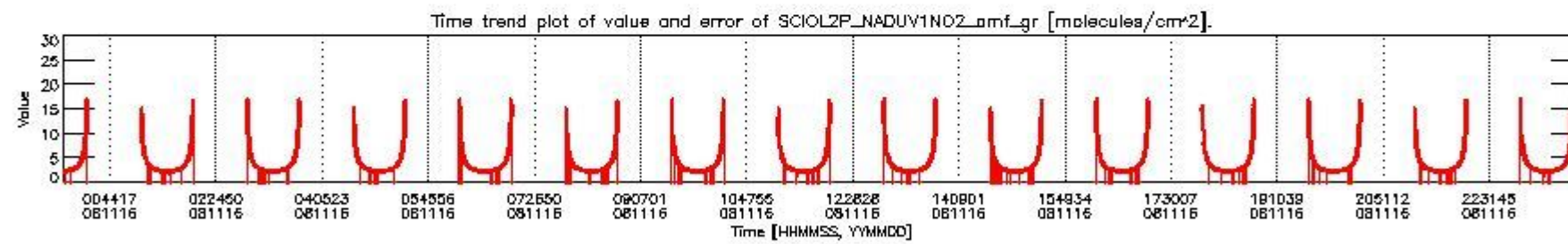
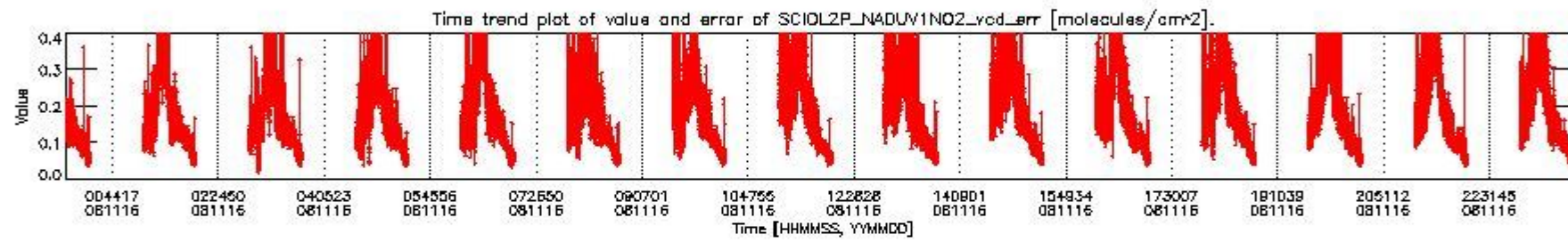
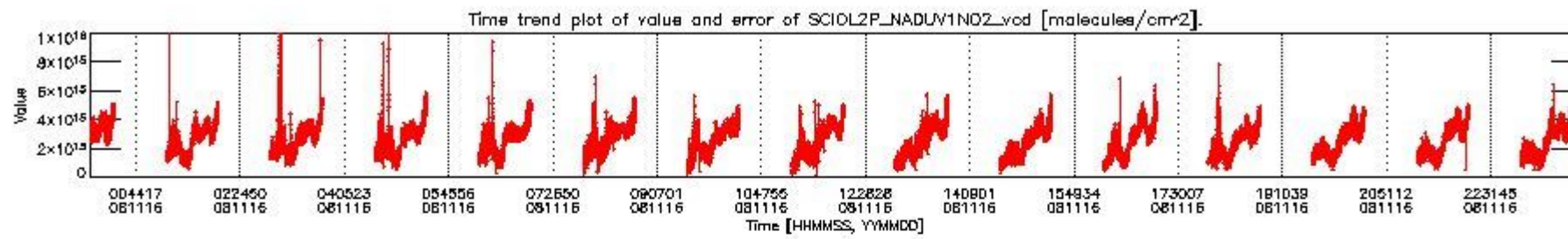


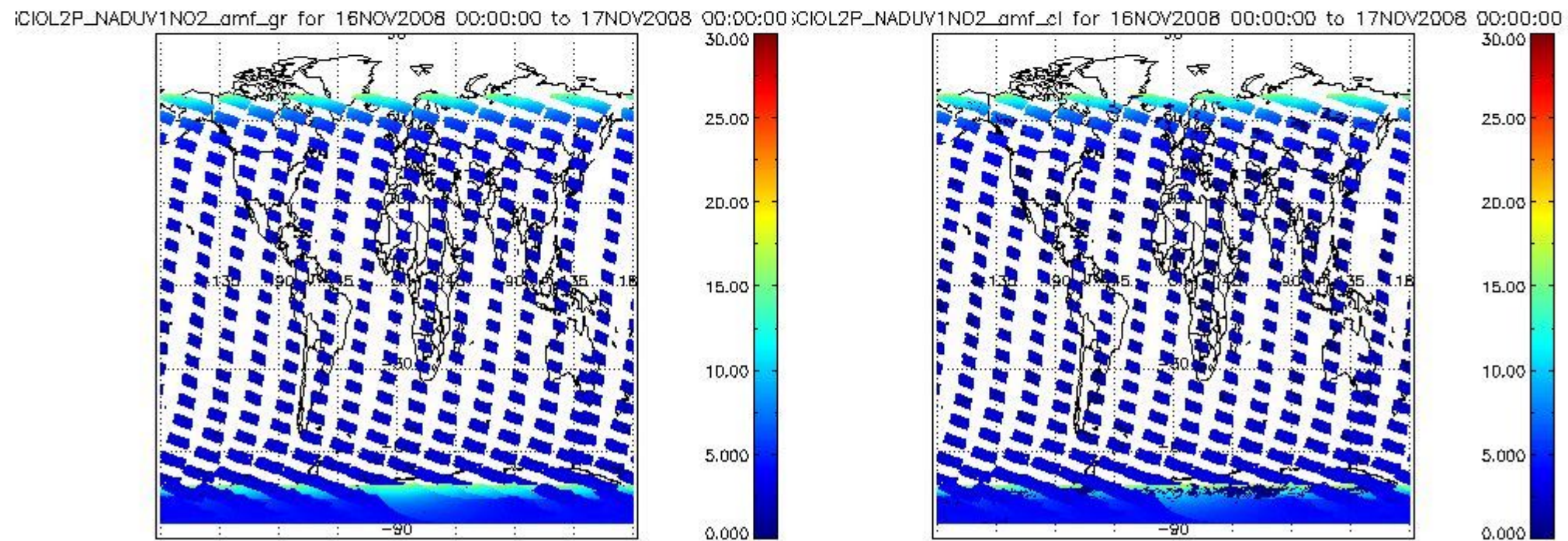
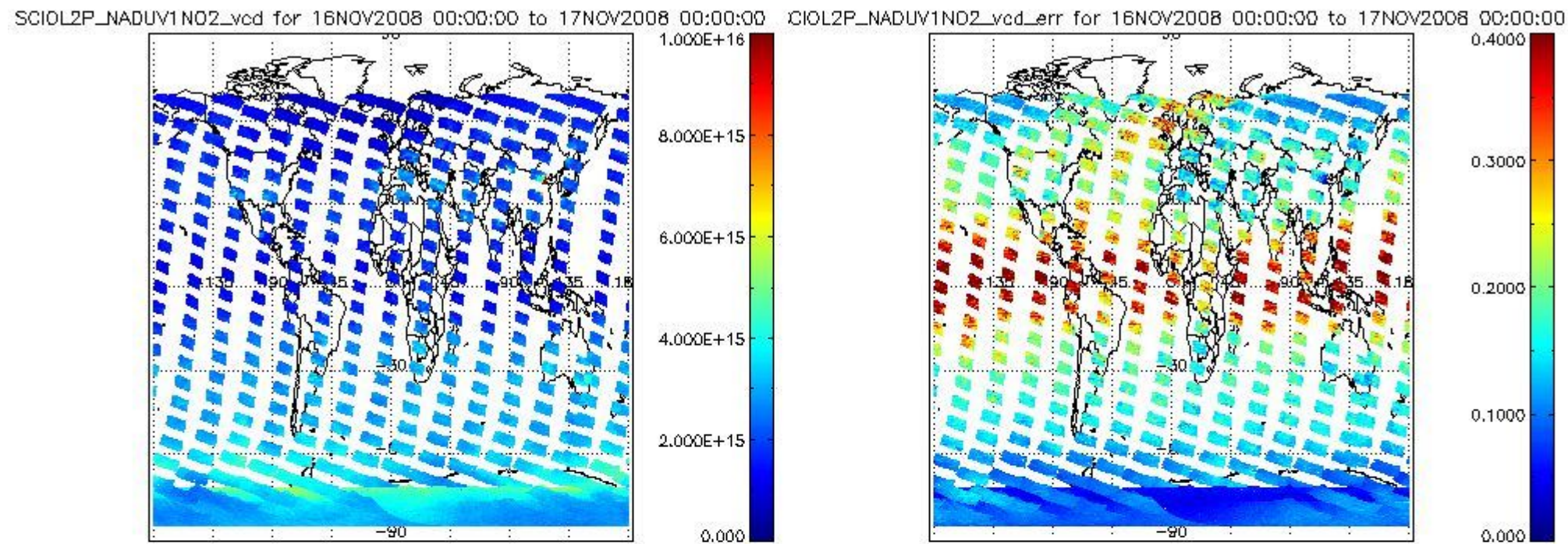
SCIOL2P_NADUV003_amf_gr for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 16NOV2008 00:00:00 to 17NOV2008 00:00:00







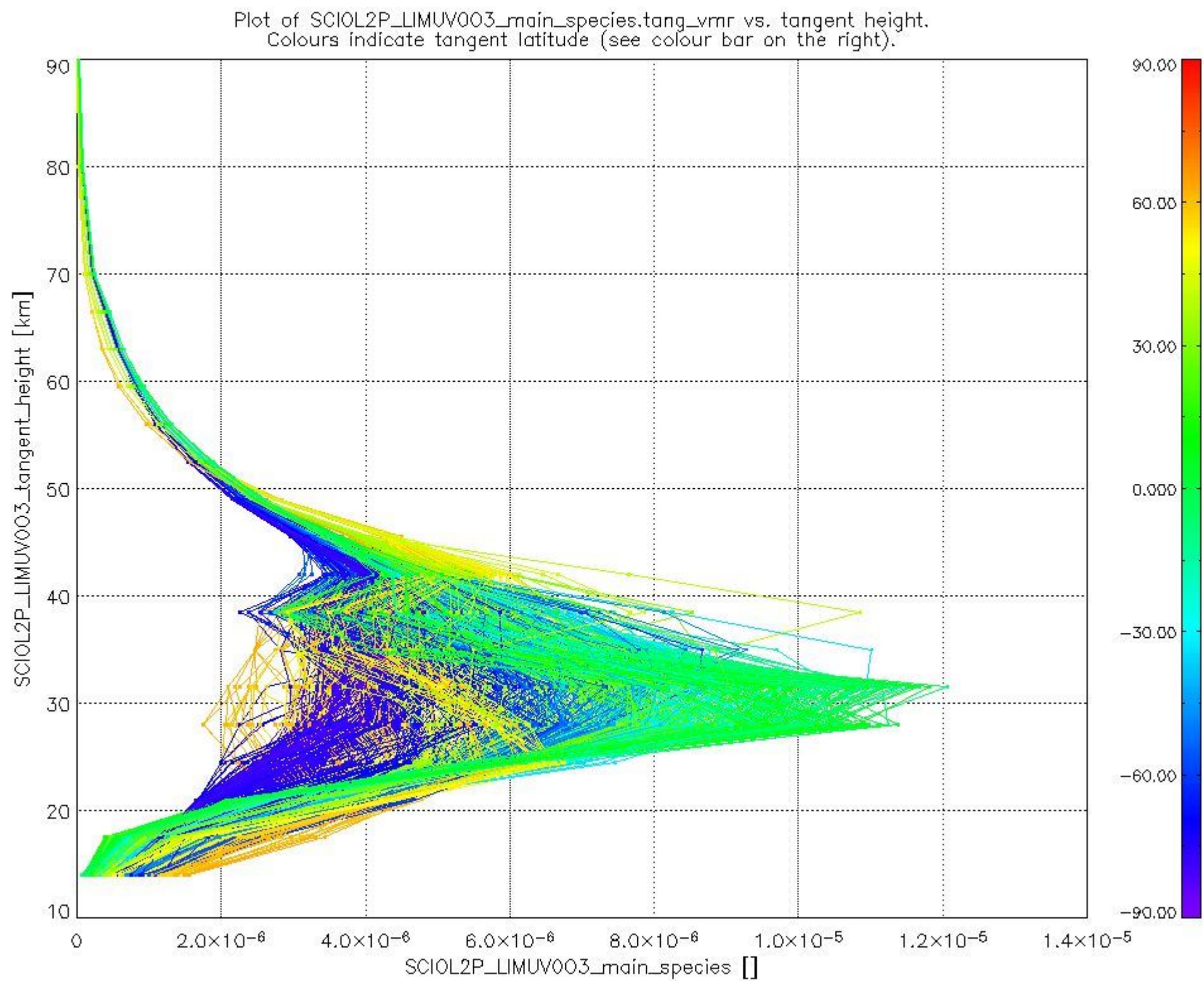
2.2.3 Limb

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

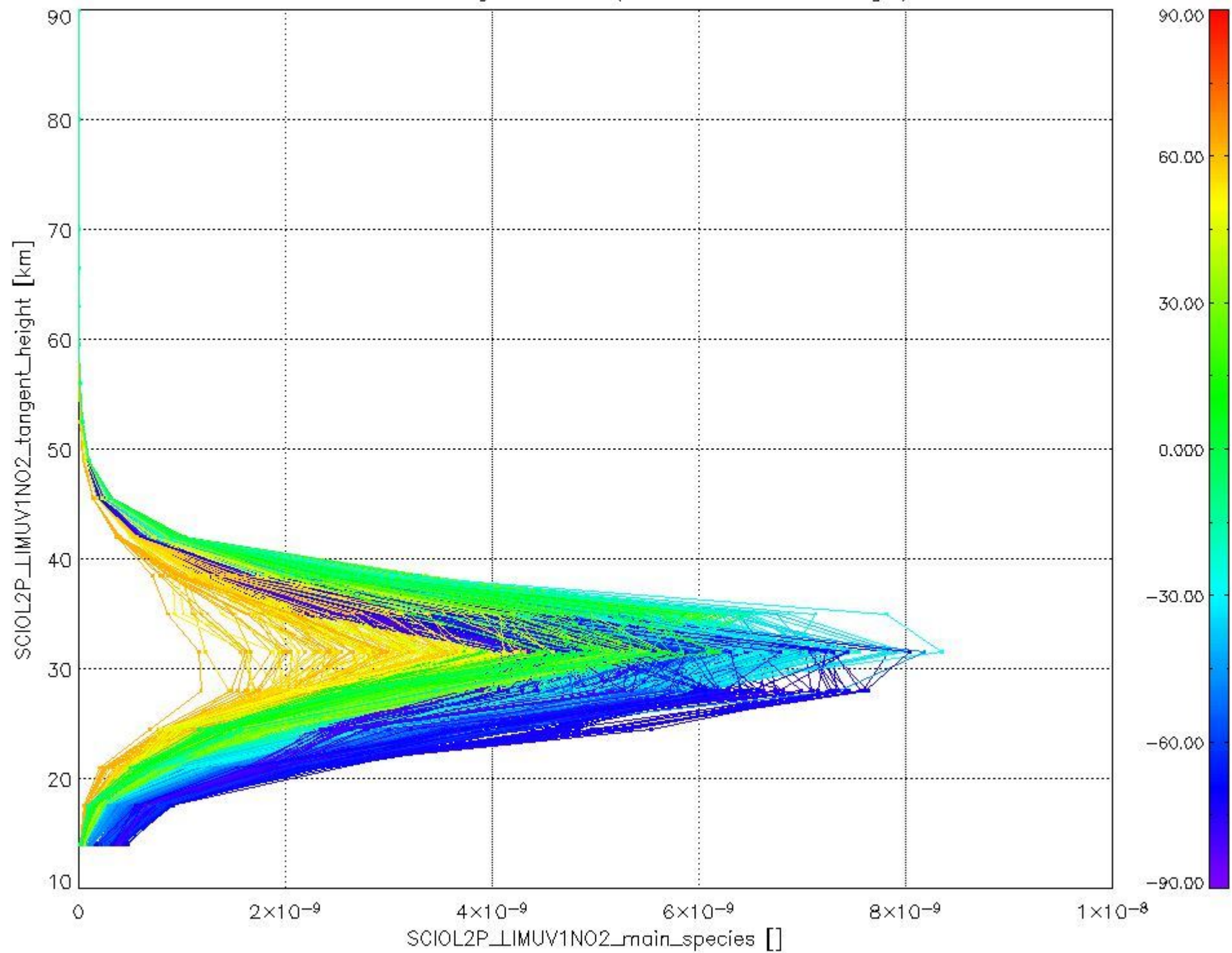
The following data items are currently included into this section:

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.



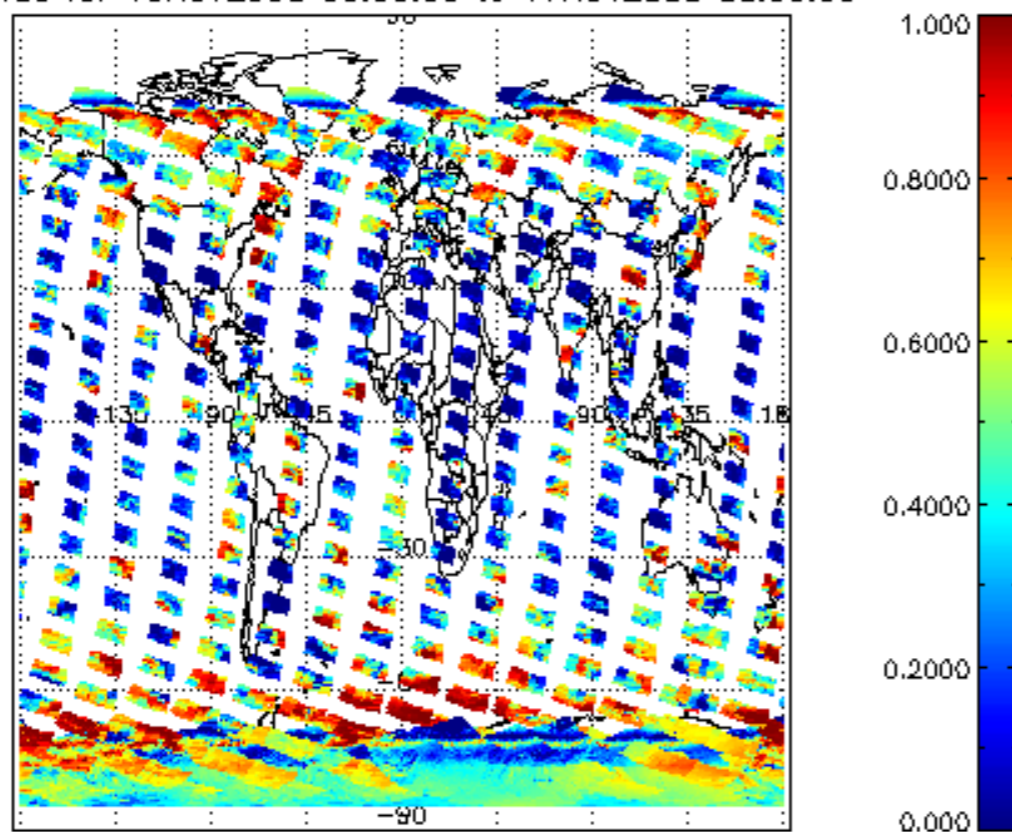
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



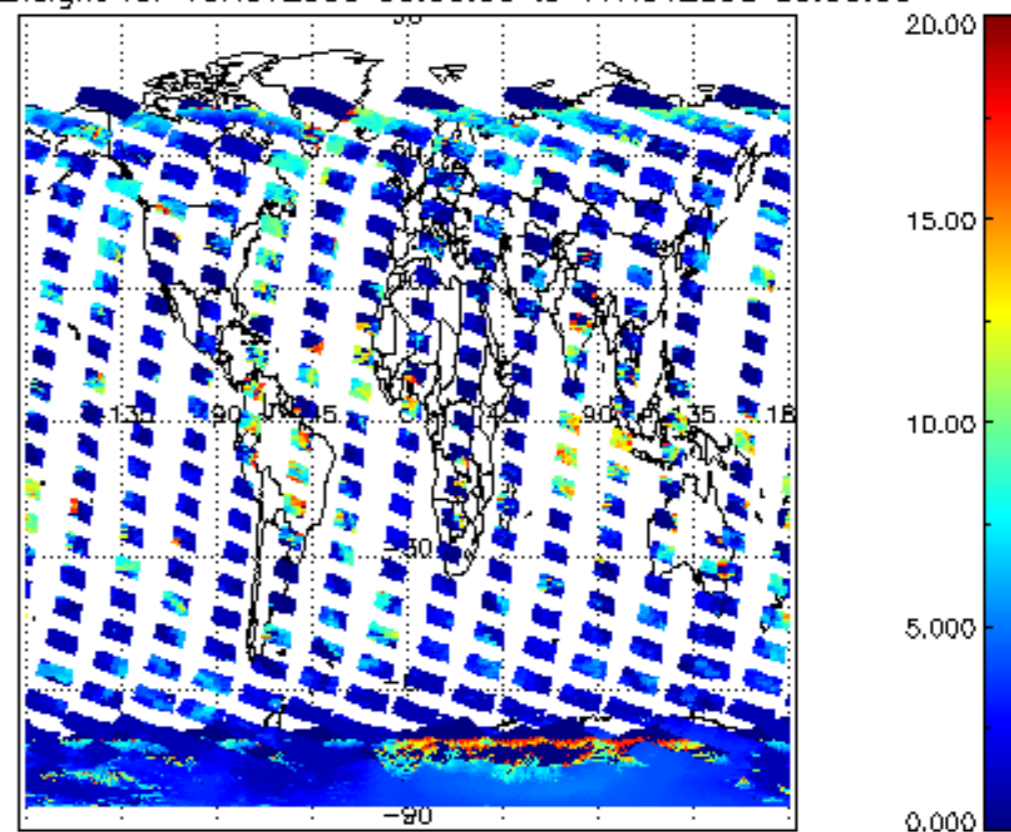
2.3 ADF monitoring

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

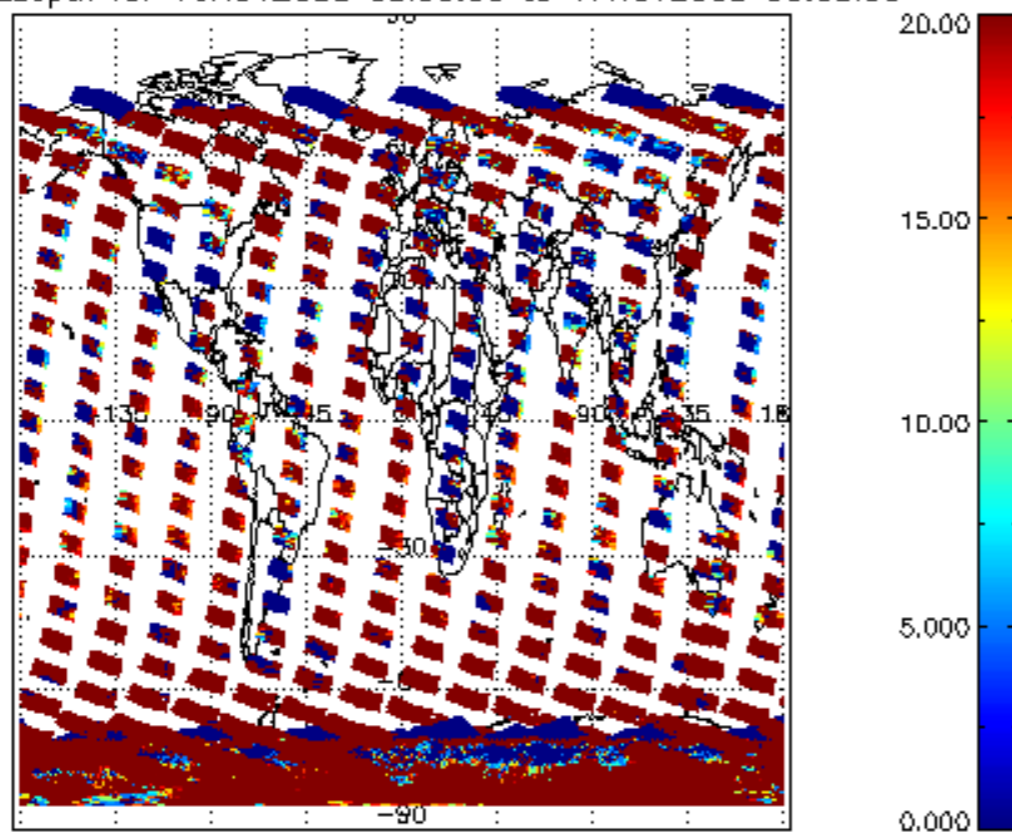
cLfrac for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



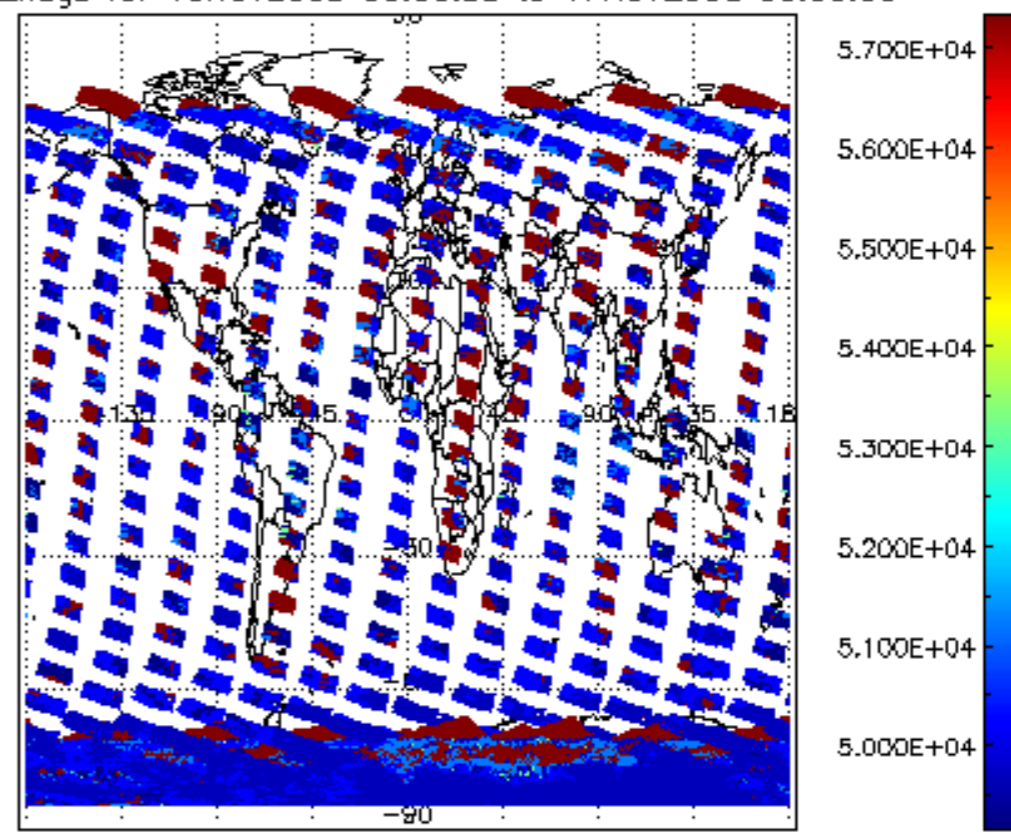
cL_top_height for 16NOV2008 00:00:00 to 17NOV2008 00:00:00

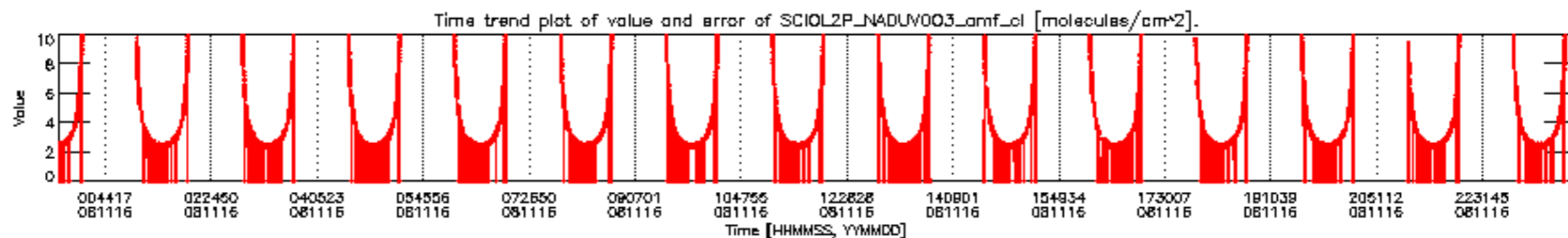
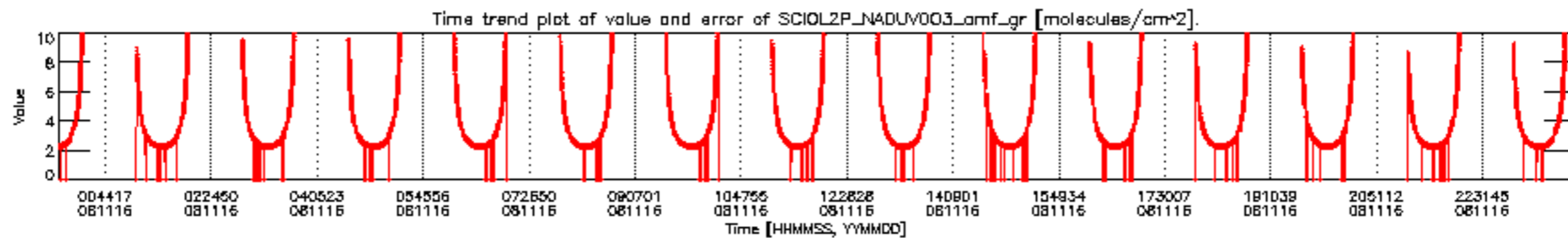
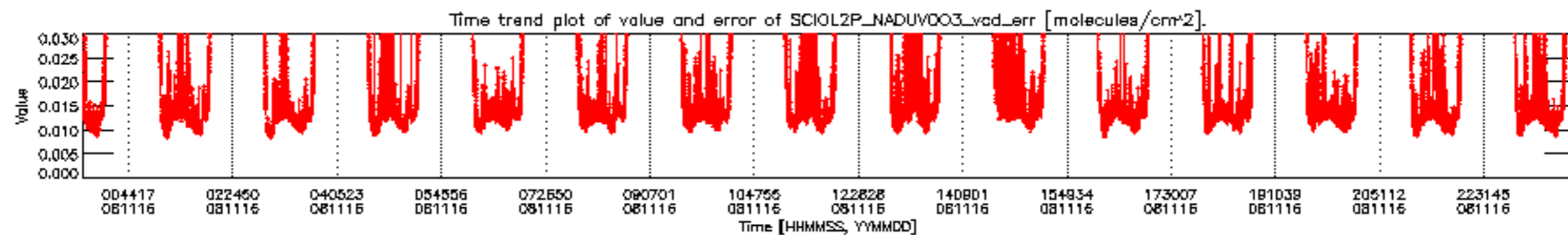
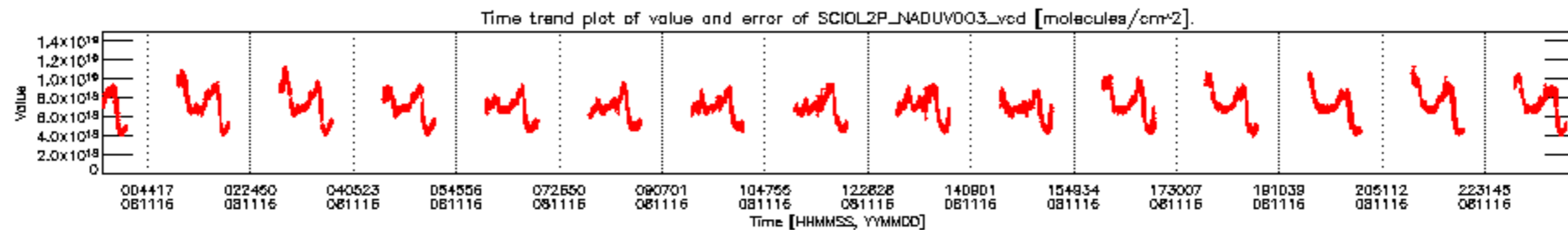


cL_opt_depth for 16NOV2008 00:00:00 to 17NOV2008 00:00:00

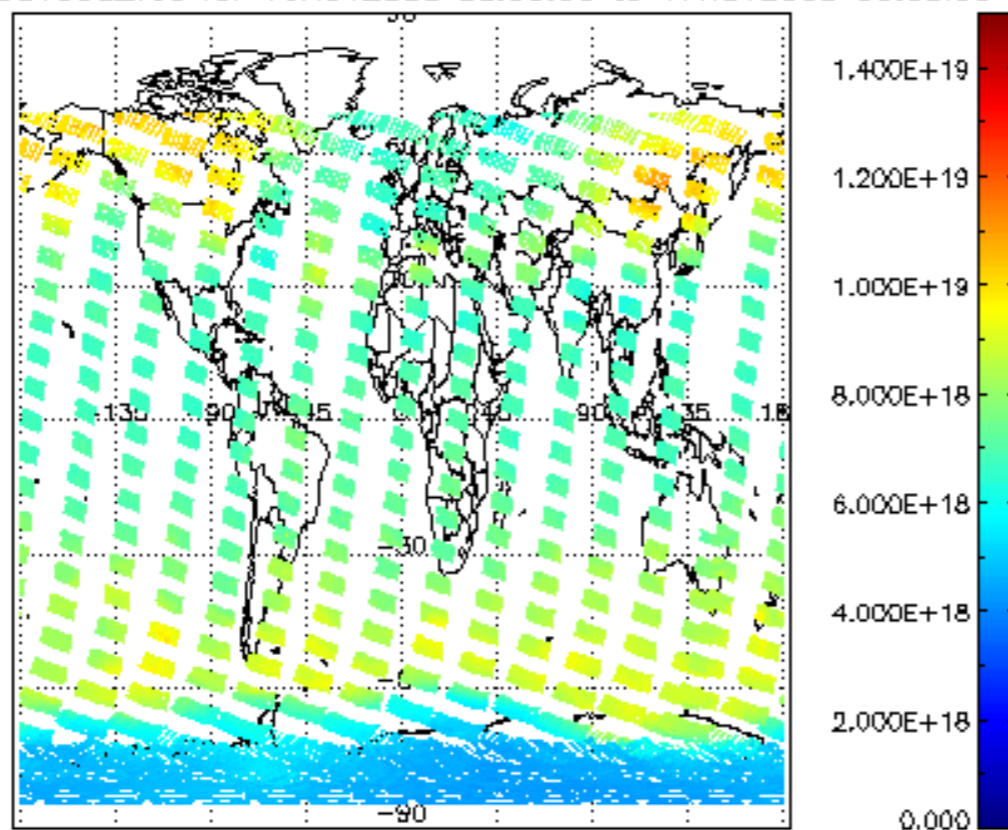


cloud_flags for 16NOV2008 00:00:00 to 17NOV2008 00:00:00

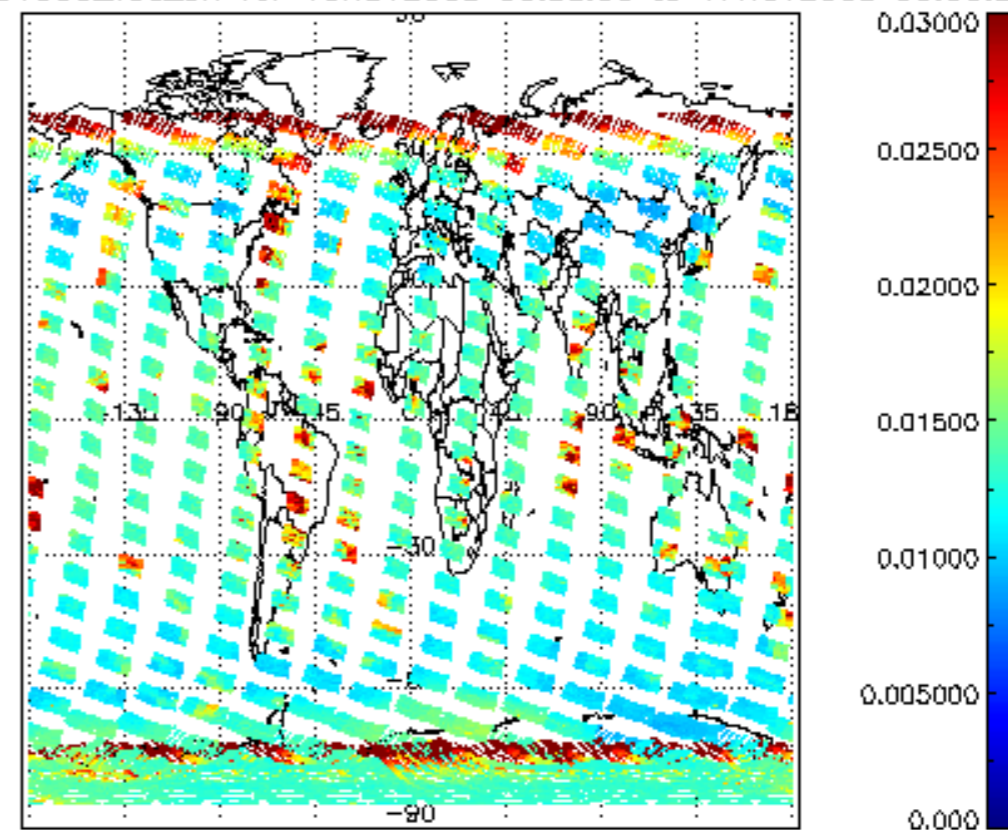




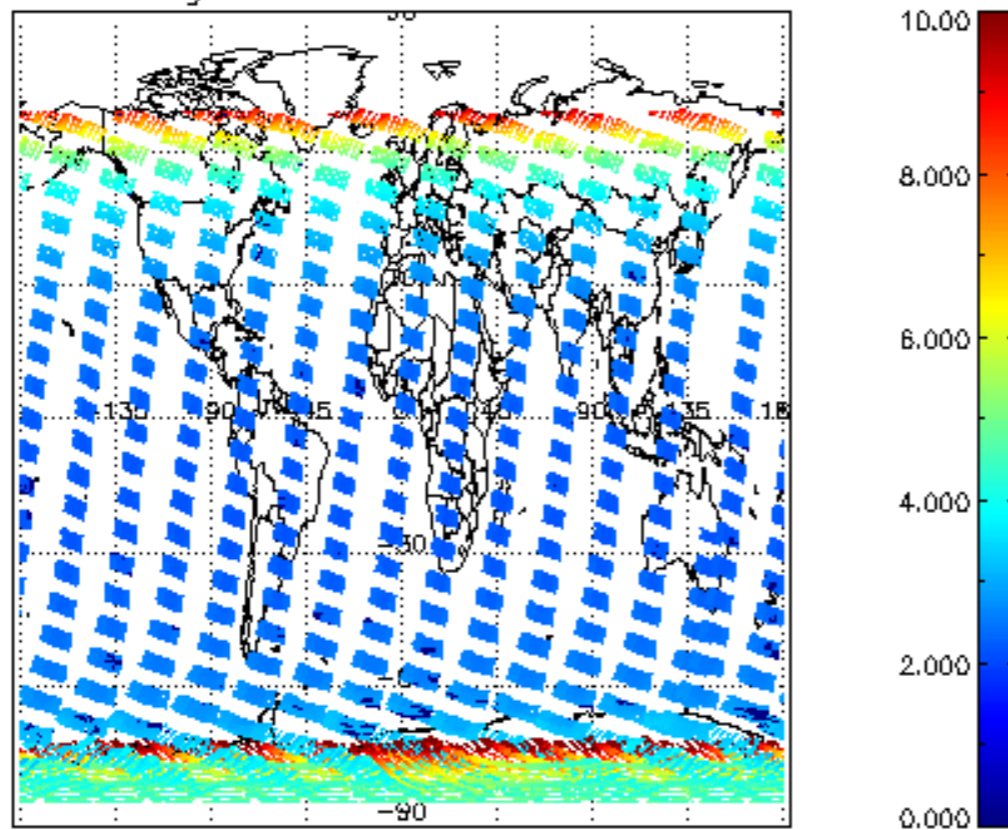
SCIOL2P_NADUV003_vcd for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



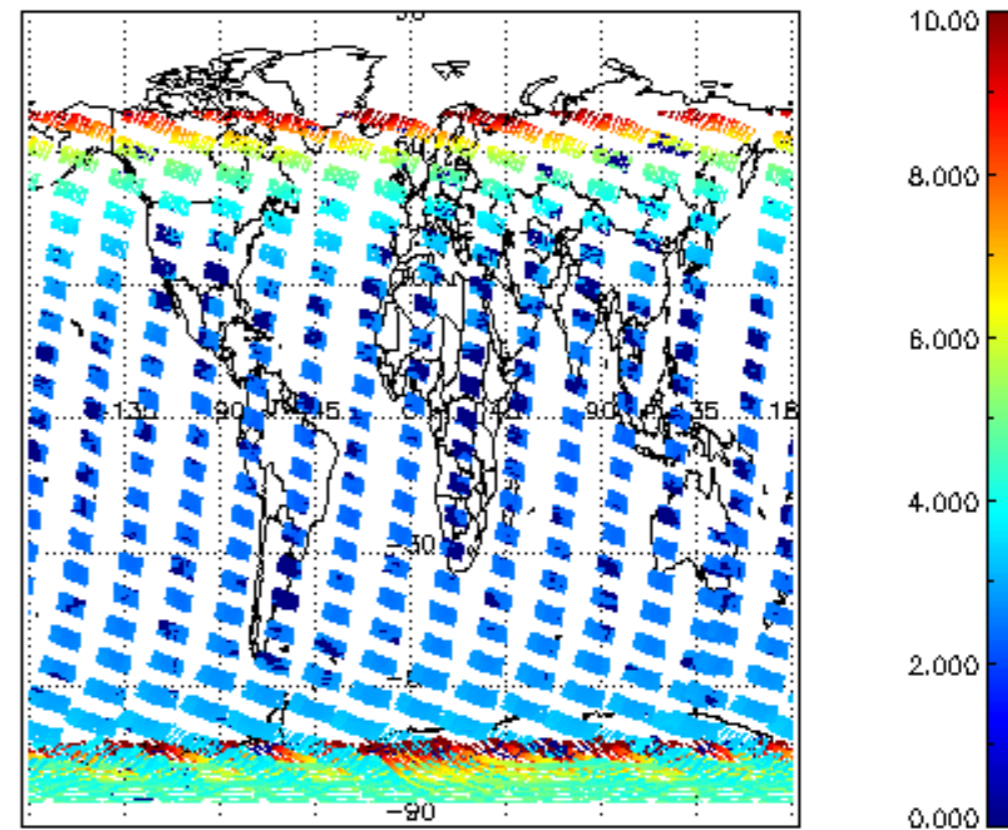
SCIOL2P_NADUV003_vcd_err for 16NOV2008 00:00:00 to 17NOV2008 00:00:00

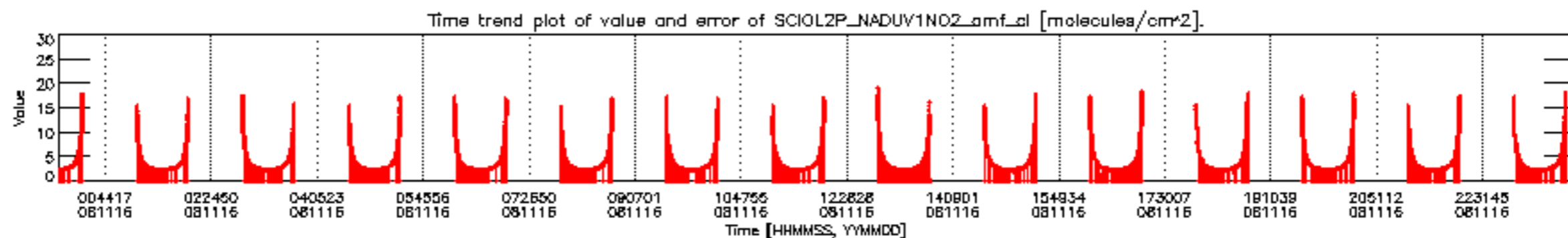
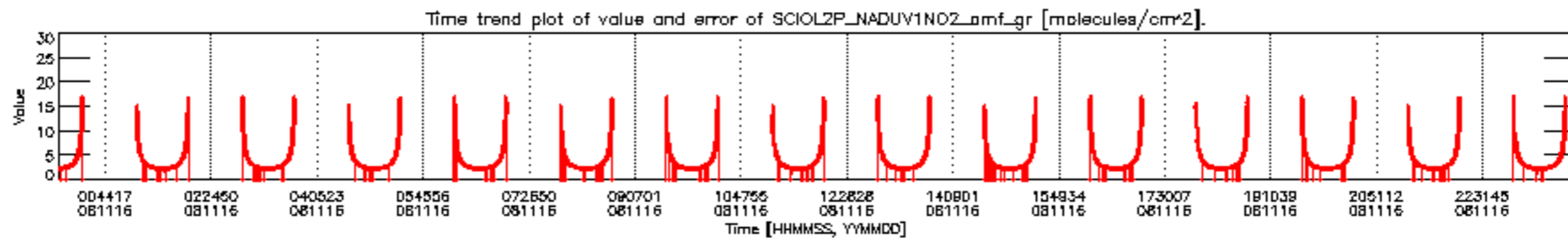
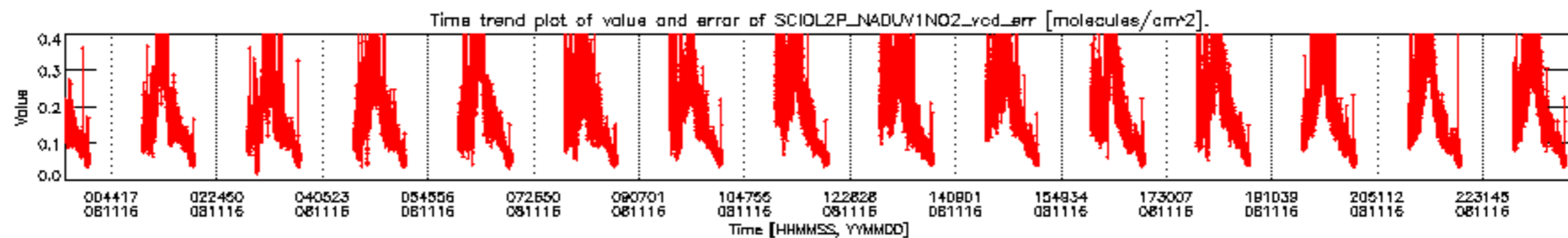
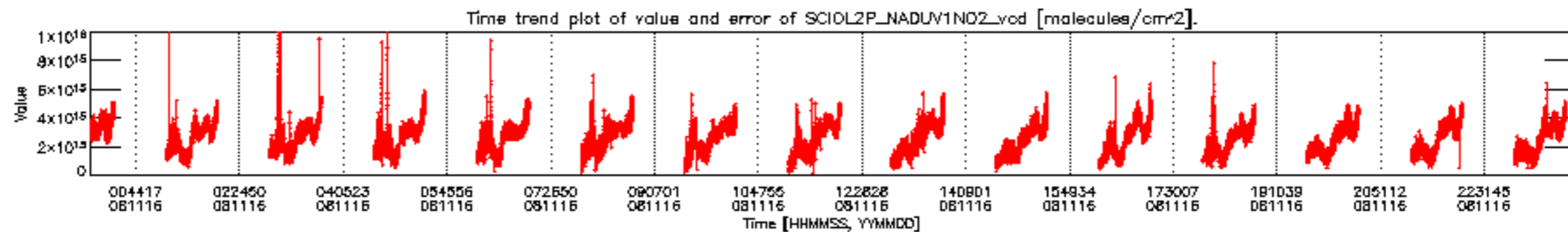


SCIOL2P_NADUV003_amf_gr for 16NOV2008 00:00:00 to 17NOV2008 00:00:00

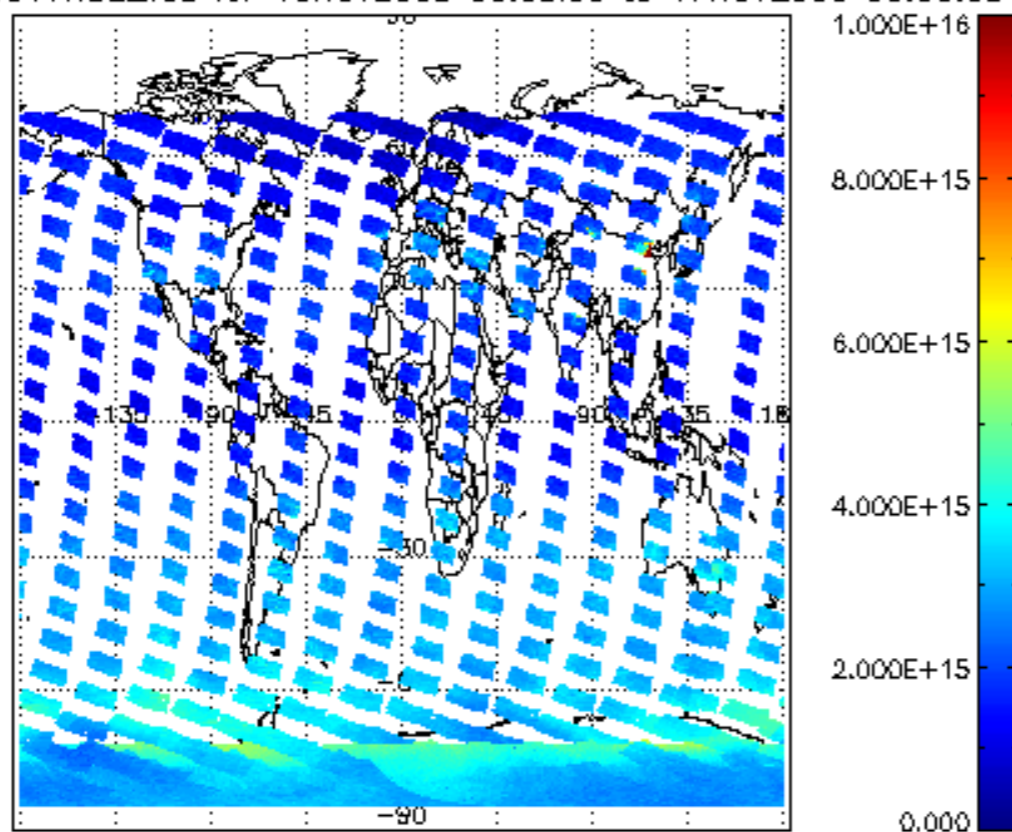


SCIOL2P_NADUV003_amf_cl for 16NOV2008 00:00:00 to 17NOV2008 00:00:00

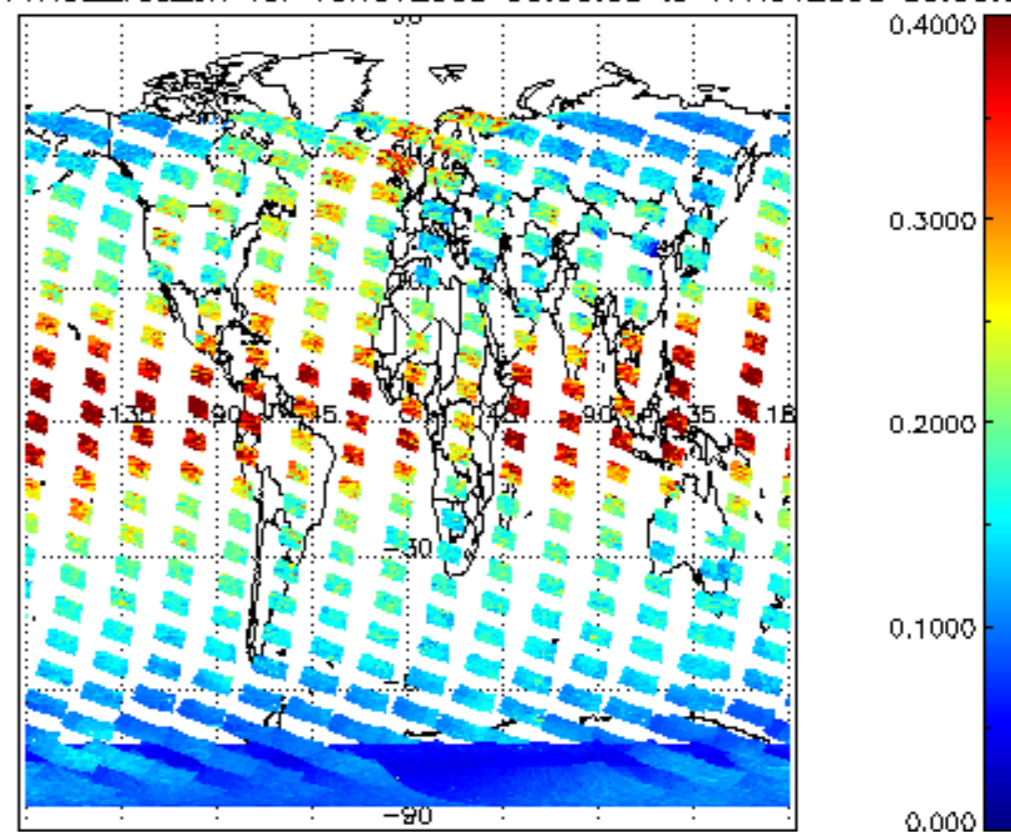




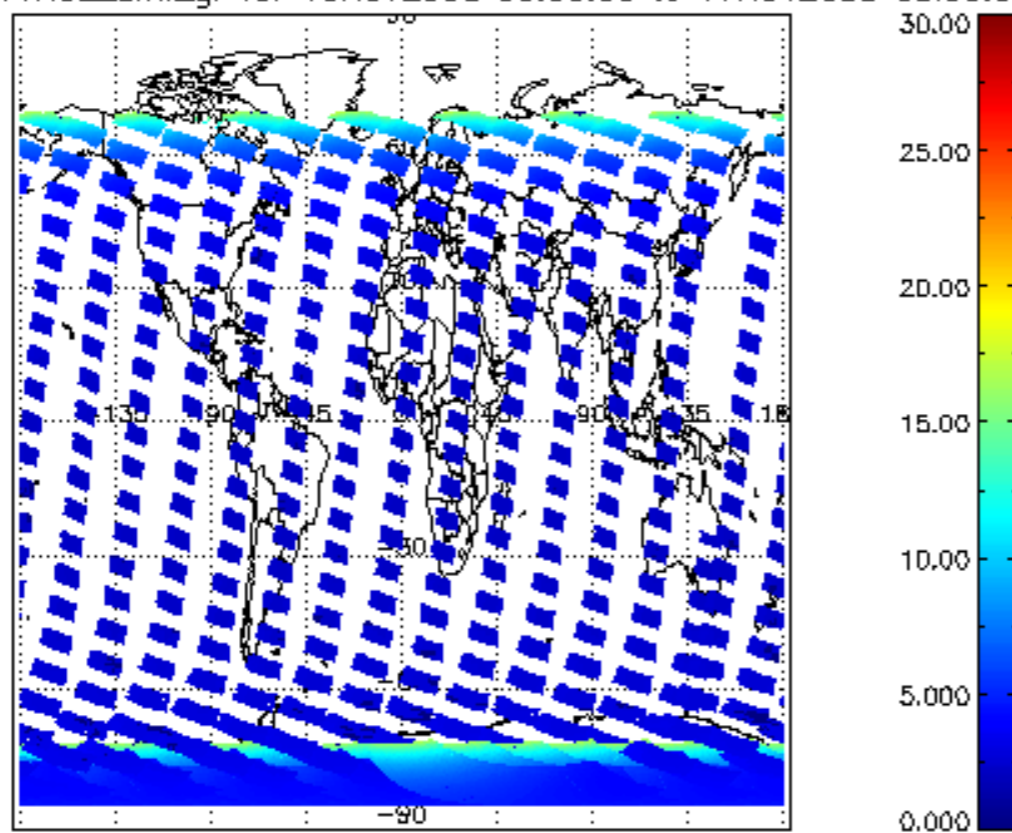
SCIOL2P_NADUV1NO2_vcd for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



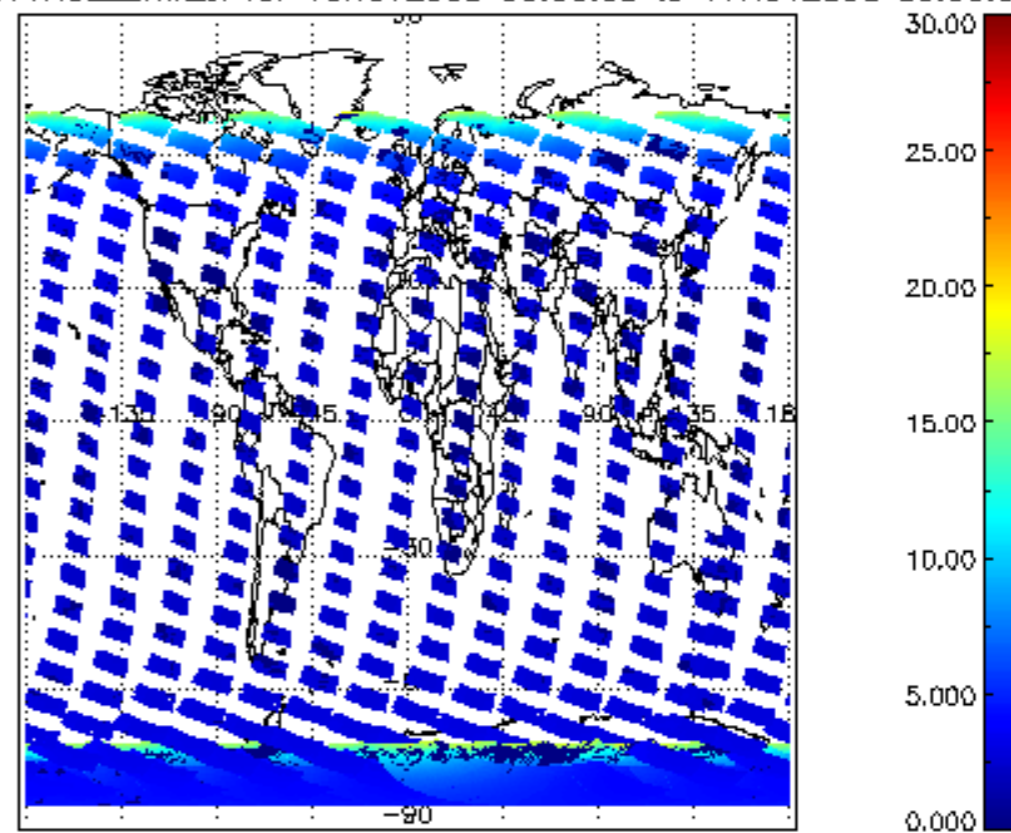
SCIOL2P_NADUV1NO2_vcd_err for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



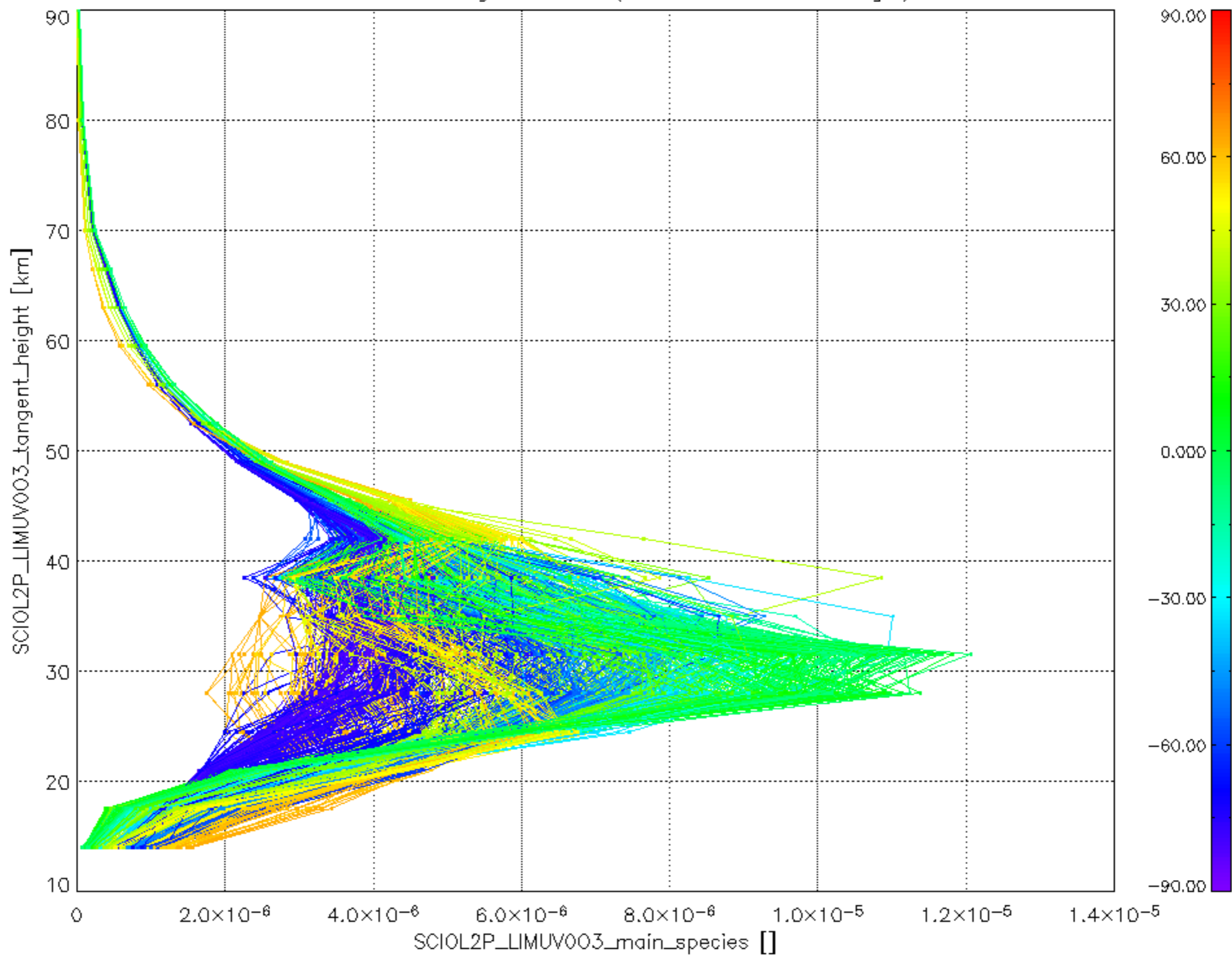
SCIOL2P_NADUV1NO2_amf_gr for 16NOV2008 00:00:00 to 17NOV2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 16NOV2008 00:00:00 to 17NOV2008 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).

