

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	03DEC2009 03:05:54
Data source version	SCIA-OL/3.01-R
Processing scope for products	15NOV2009 00:00:00 to 16NOV2009 00:00:00
Start time of first product within scope	14NOV2009 22:47:08
Stop time of last product within scope	16NOV2009 00:52:33
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__2PRDPA20091114_224708_000033252084_00173_40307_5324.N1	14NOV2009 22:47:08	14NOV2009 23:42:34	0	GOOD
1	SCI_OL__2PRDPA20091115_002745_000033812084_00174_40308_5325.N1	15NOV2009 00:27:45	15NOV2009 01:24:06	0	GOOD
2	SCI_OL__2PRDPA20091115_020821_000033252084_00175_40309_5326.N1	15NOV2009 02:08:21	15NOV2009 03:03:46	0	GOOD
3	SCI_OL__2PRDPA20091115_034857_000033812084_00176_40310_5327.N1	15NOV2009 03:48:57	15NOV2009 04:45:18	0	GOOD
4	SCI_OL__2PRDPA20091115_052933_000033252084_00177_40311_5328.N1	15NOV2009 05:29:33	15NOV2009 06:24:59	0	GOOD
5	SCI_OL__2PRDPA20091115_071010_000033812084_00178_40312_5329.N1	15NOV2009 07:10:10	15NOV2009 08:06:31	0	GOOD
6	SCI_OL__2PRDPA20091115_085046_000033252084_00179_40313_5330.N1	15NOV2009 08:50:46	15NOV2009 09:46:11	0	GOOD
7	SCI_OL__2PRDPA20091115_103122_000033812084_00180_40314_5331.N1	15NOV2009 10:31:22	15NOV2009 11:27:43	0	GOOD
8	SCI_OL__2PRDPA20091115_121158_000033252084_00181_40315_5332.N1	15NOV2009 12:11:58	15NOV2009 13:07:24	0	GOOD
9	SCI_OL__2PRDPA20091115_135234_000033812084_00182_40316_5333.N1	15NOV2009 13:52:34	15NOV2009 14:48:56	0	GOOD
10	SCI_OL__2PRDPA20091115_153311_000033252084_00183_40317_5334.N1	15NOV2009 15:33:11	15NOV2009 16:28:36	0	GOOD
11	SCI_OL__2PRDPA20091115_171408_000033122084_00184_40318_5335.N1	15NOV2009 17:14:08	15NOV2009 18:09:21	0	GOOD
12	SCI_OL__2PRDPA20091115_185444_000033252084_00185_40319_5336.N1	15NOV2009 18:54:44	15NOV2009 19:50:10	0	GOOD
13	SCI_OL__2PRDPA20091115_203500_000033812084_00186_40320_5340.N1	15NOV2009 20:35:00	15NOV2009 21:31:21	0	GOOD
14	SCI_OL__2PRDPA20091115_221536_000033252084_00187_40321_5341.N1	15NOV2009 22:15:36	15NOV2009 23:11:01	0	GOOD
15	SCI_OL__2PRDPA20091115_235612_000033812084_00188_40322_5342.N1	15NOV2009 23:56:12	16NOV2009 00:52:33	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: 146120

Total number of cloud data DSRs with good quality flag (=0): 146120 (100.0 %)

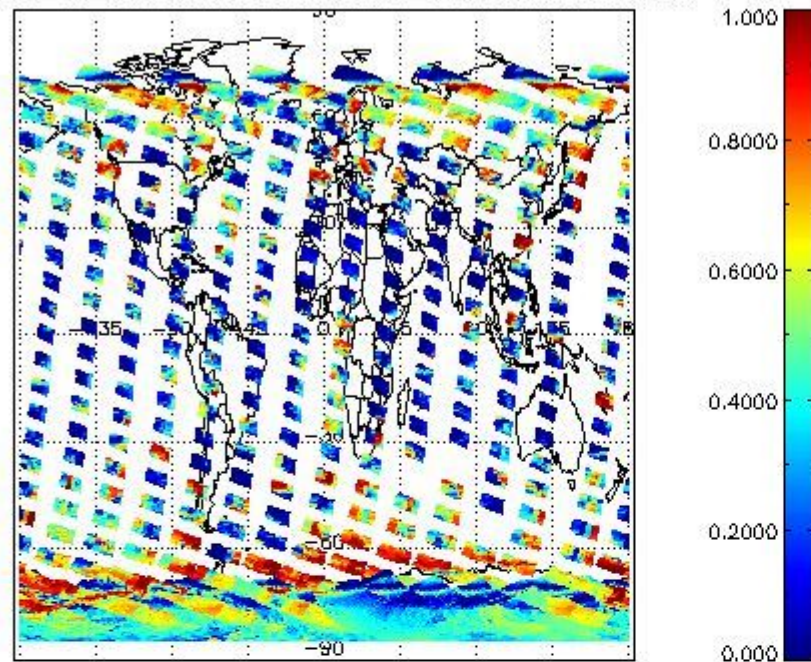
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	146120	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	146120	0.16948	0.12500	0.12500	0.25000	0.059847	s
CL_FRAC	146120	0.38010	0.37473	0.0000	1.0000	0.28217	-
CL_FRAC_ERR	146120	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	146120	5.4235	4.0000	4.0000	8.0000	1.9151	
PMD_READ_CL[0]	146120	0.20464	0.0000	0.0000	8.0000	1.0201	-
PMD_READ_CL[1]	146120	1.1740	0.0000	0.0000	8.0000	2.3874	-
CL_TOP_HEIGHT	123542	4.1119	3.0391	0.0000	17.000	4.0440	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	123542	54.461	46.948	0.0000	101.00	40.923	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	146120	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	146120	11001011	11000100	11000000	11100000	3384.3	flags
AERO_ABSO_IND	146120	4.1006	4.7825	0.0000	19.320	2.7862	
AERO_IND_DIAG	146120	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	146120	01010110	00000000	00000000	11000000	24461.	flags

Time and geolocation plots:

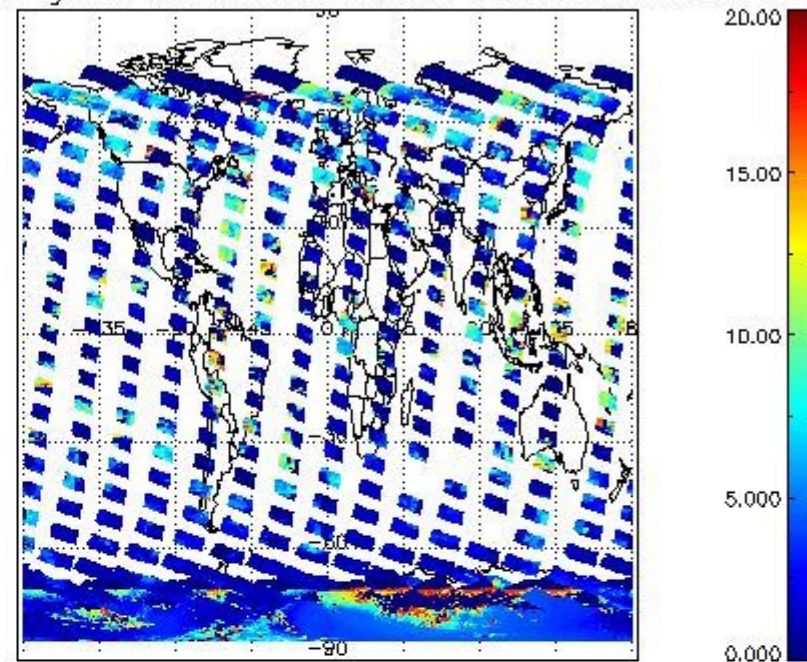
Plots are available for the following parameters:

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

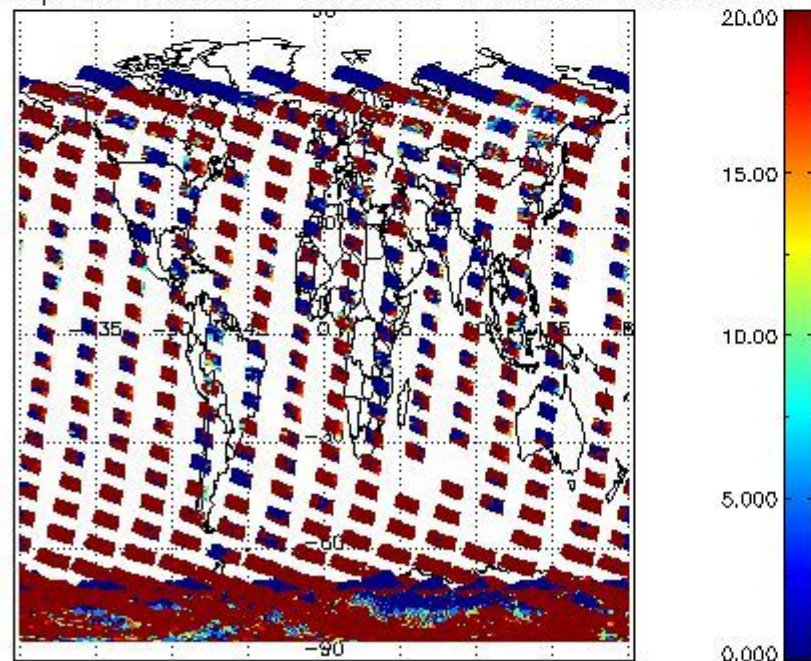
cLfrac for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



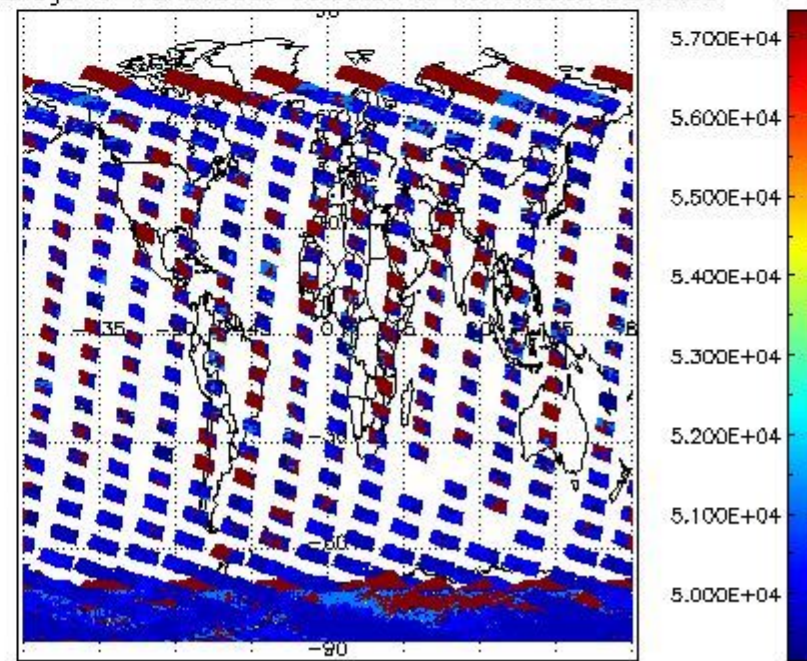
cL_top_height for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



cLopt_depth for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



cloud_flags for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



2.2.2 Nadir

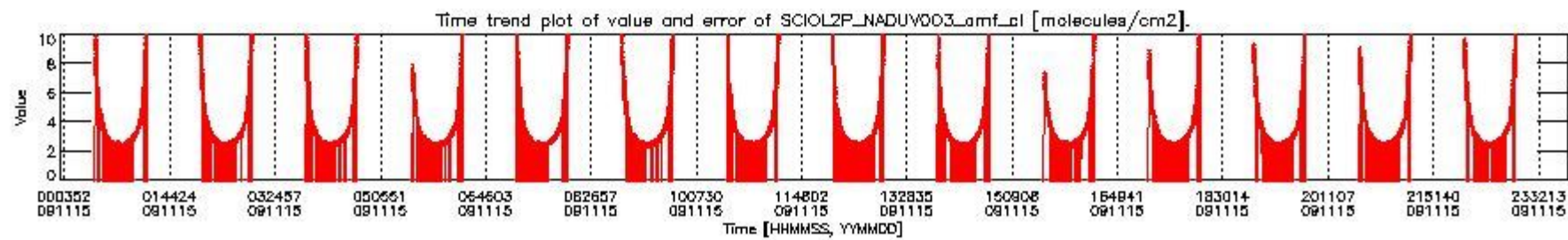
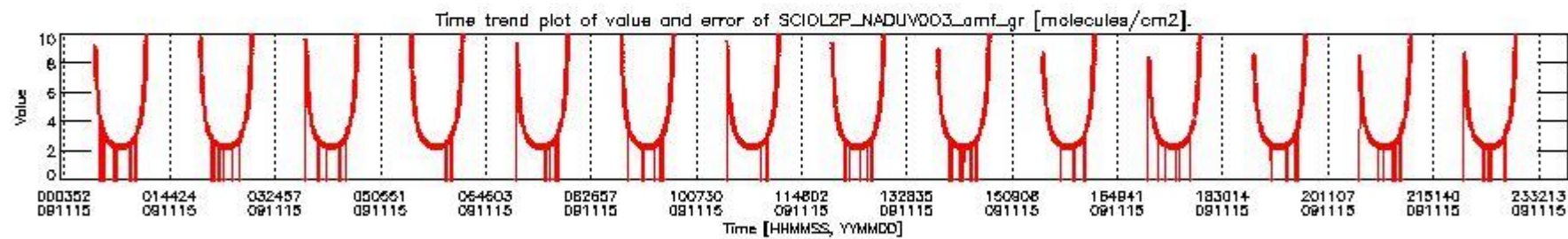
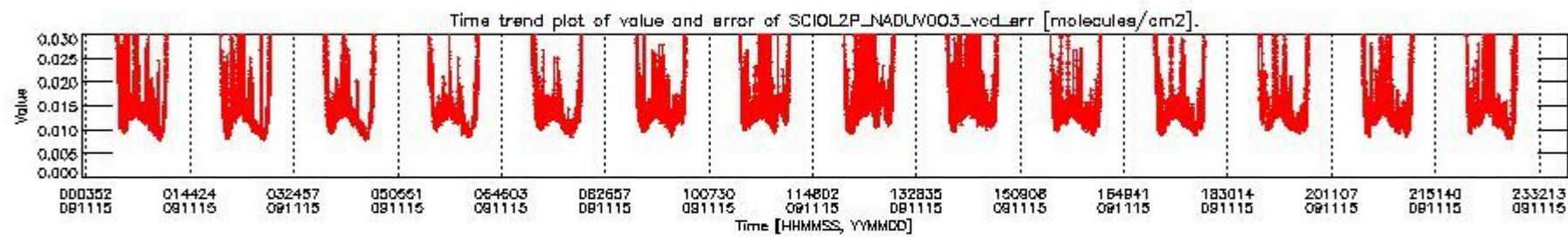
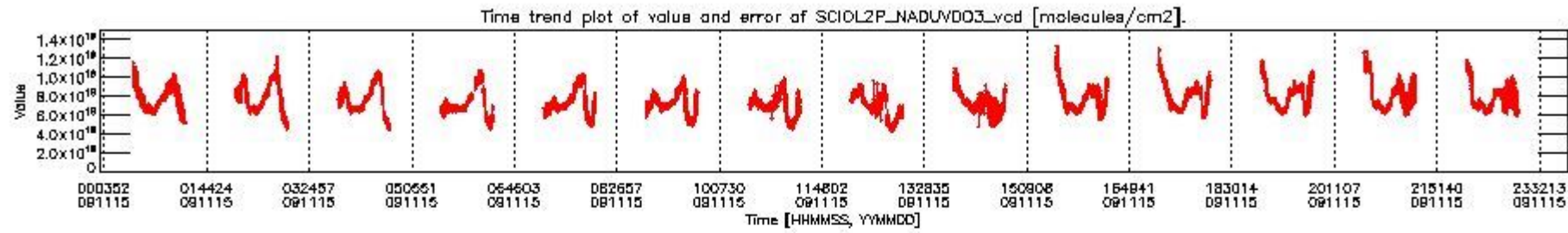
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

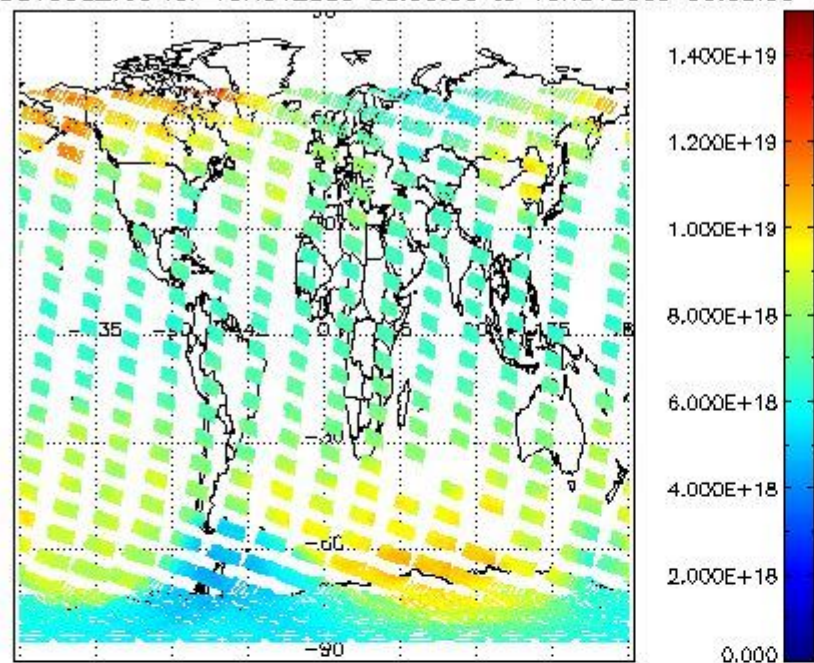
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

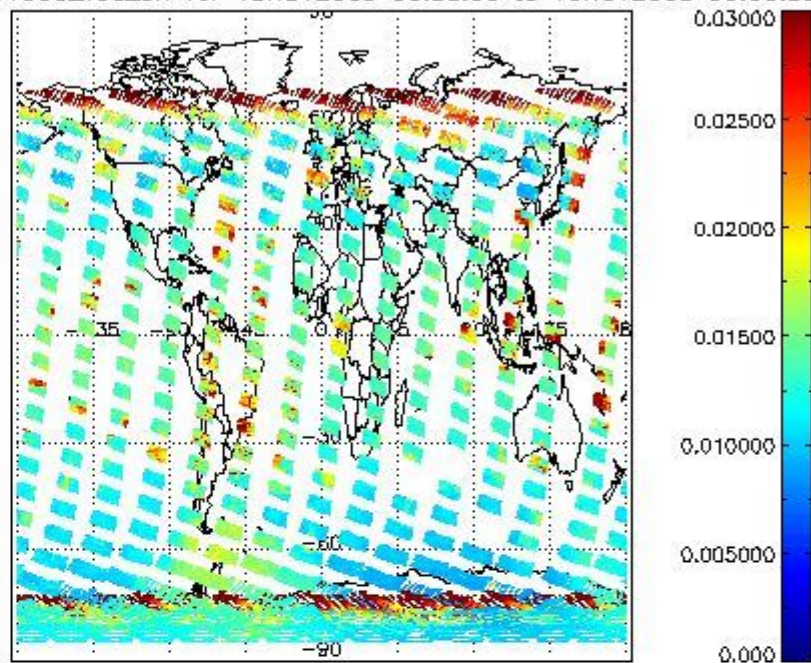
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



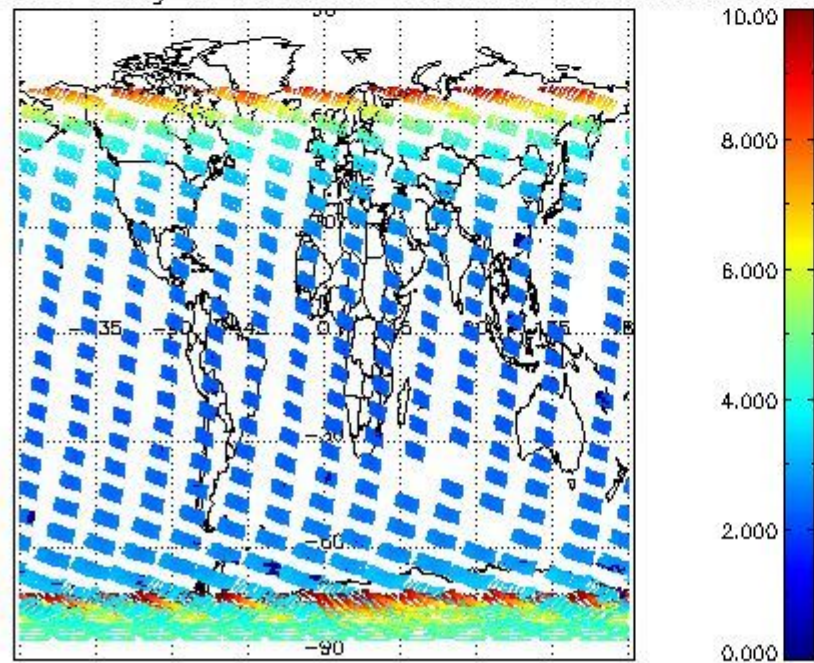
SCIOL2P_NADUV003_vcd for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



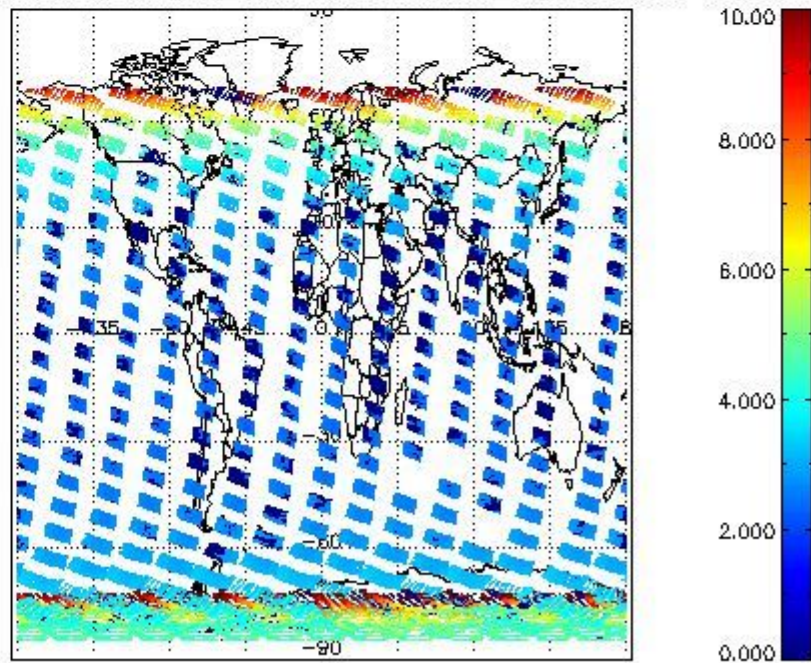
SCIOL2P_NADUV003_vcd_err for 15NOV2009 00:00:00 to 16NOV2009 00:00:00

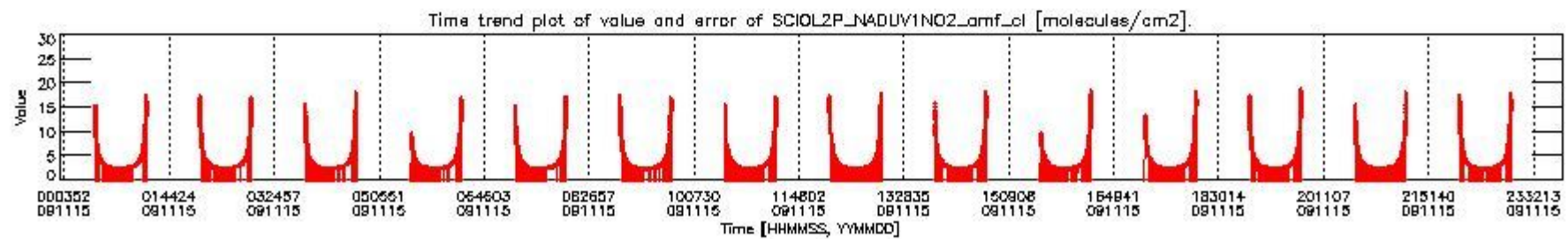
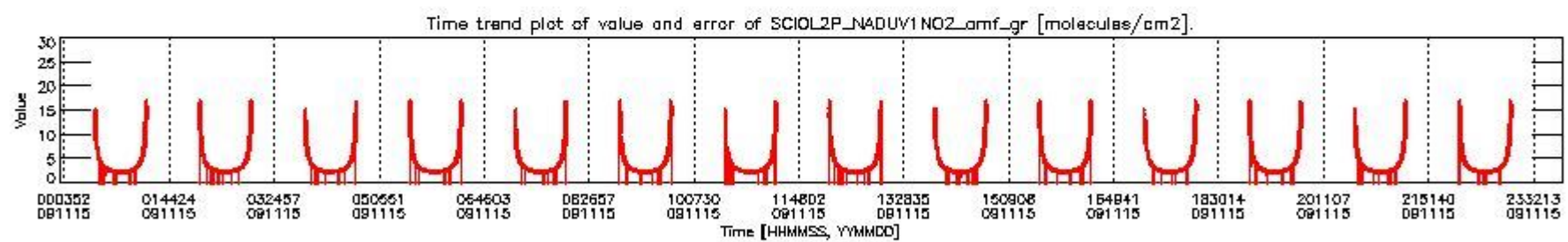
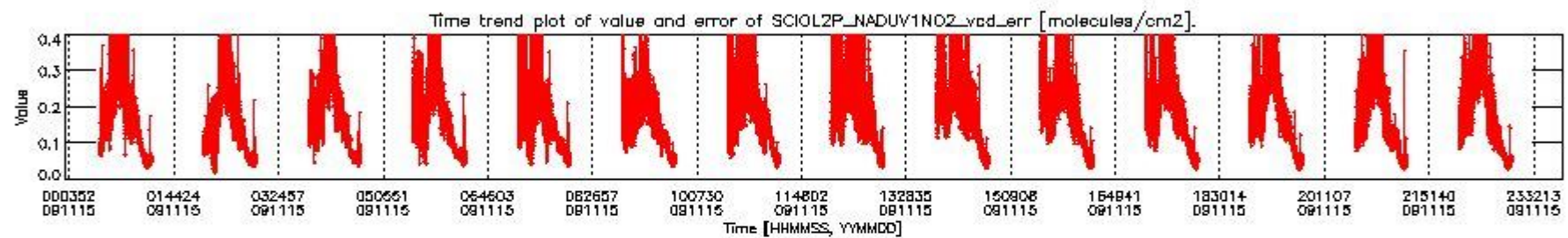
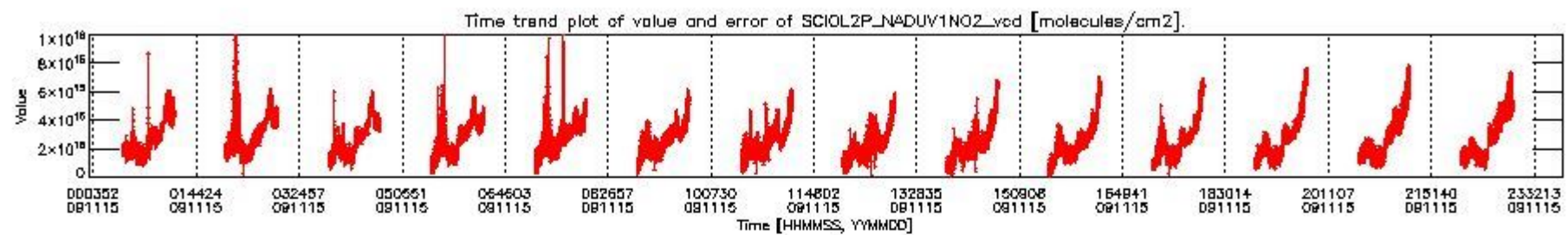


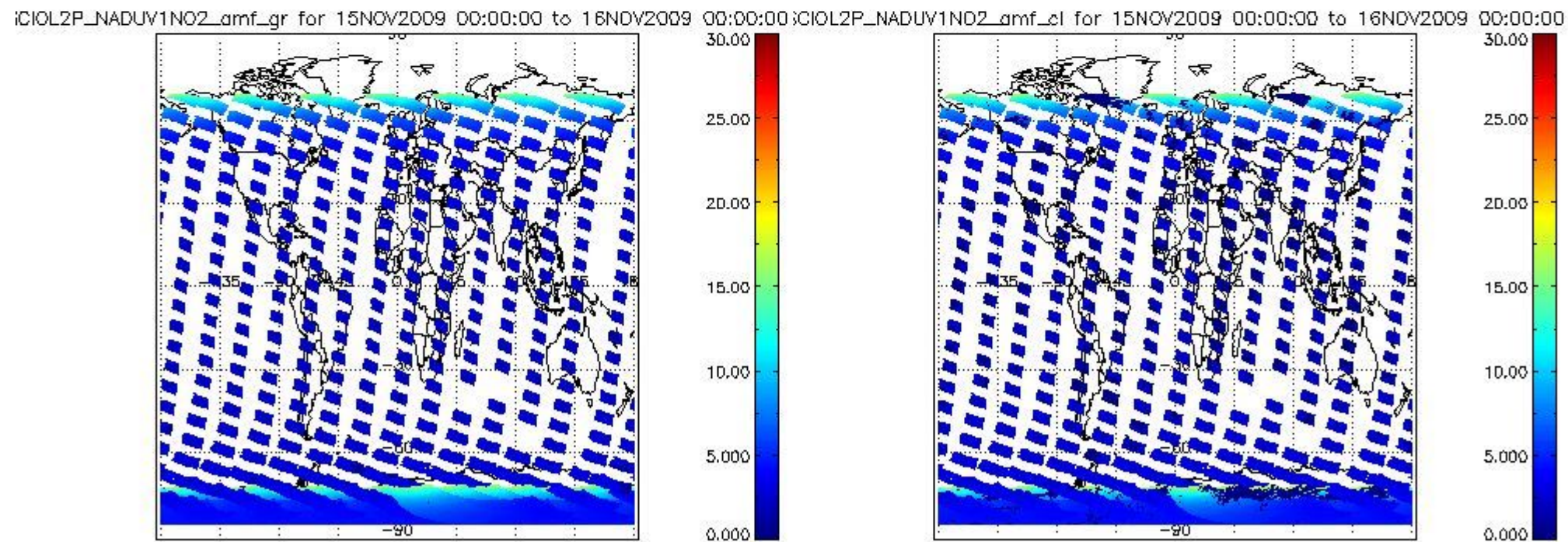
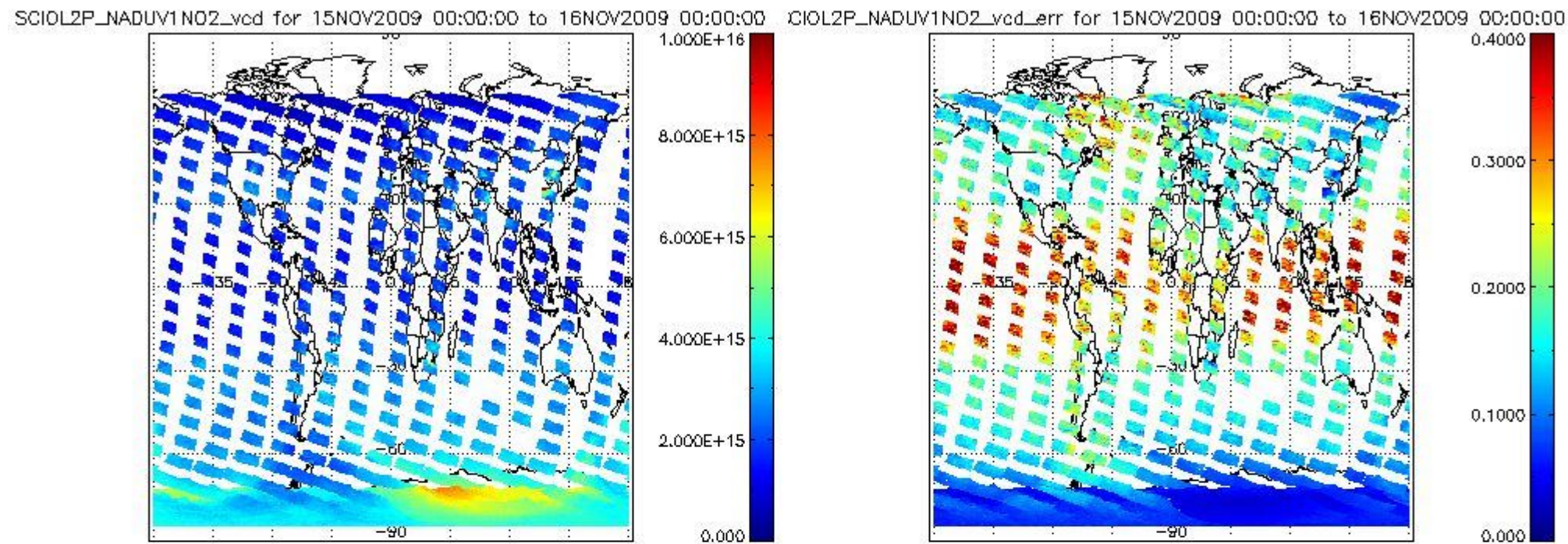
SCIOL2P_NADUV003_amf_gr for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 15NOV2009 00:00:00 to 16NOV2009 00:00:00







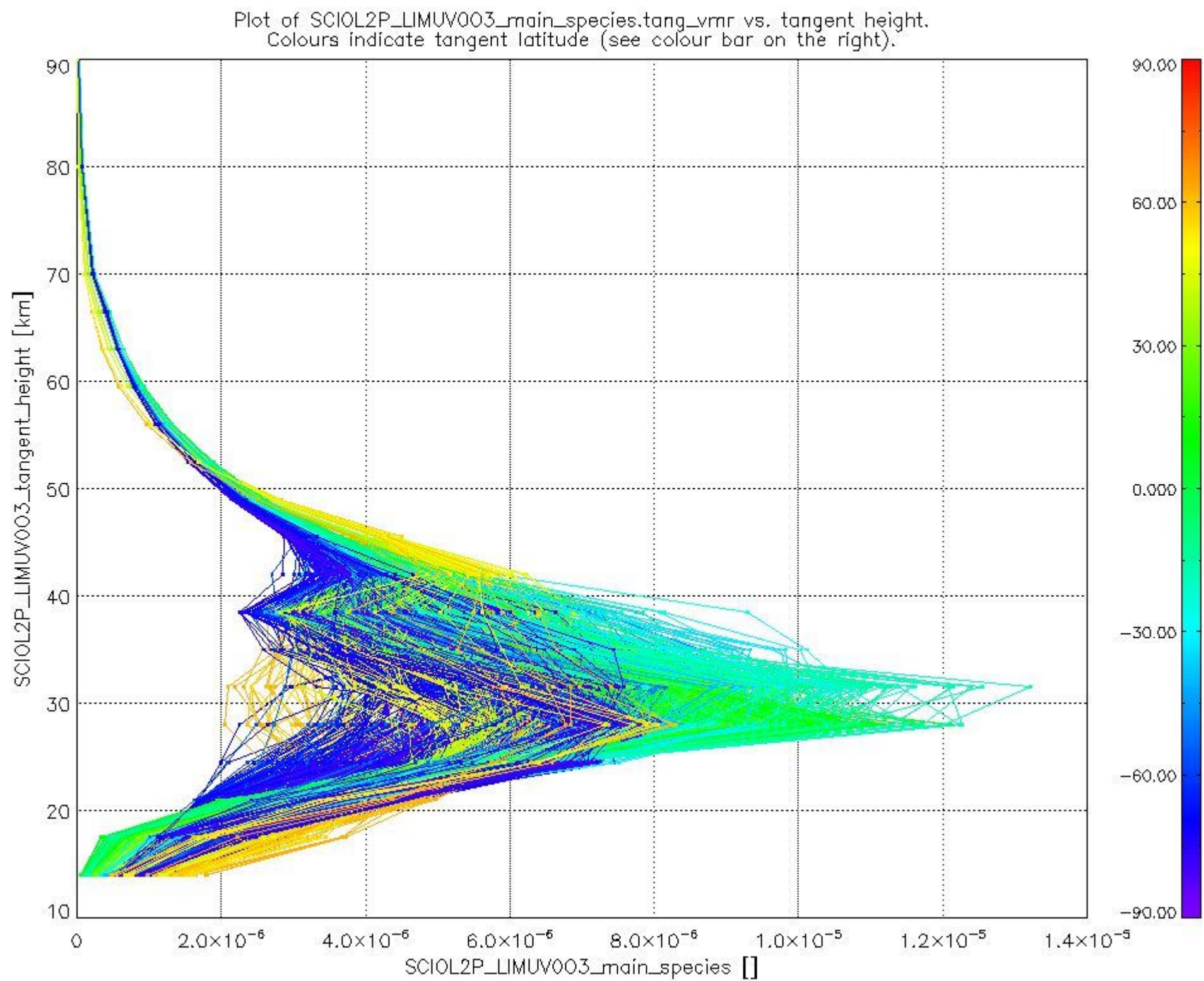
2.2.3 Limb

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

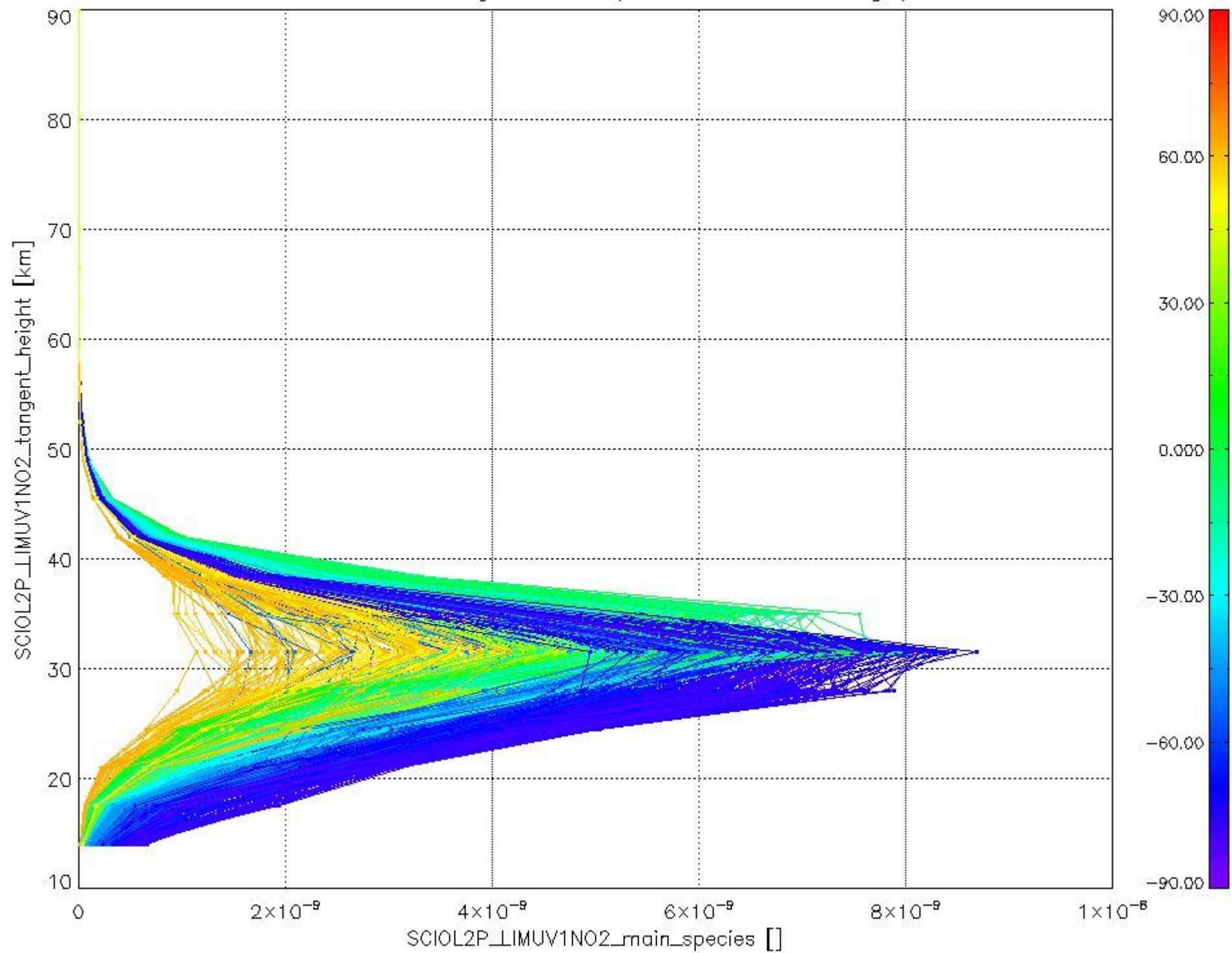
The following data items are currently included into this section:

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.



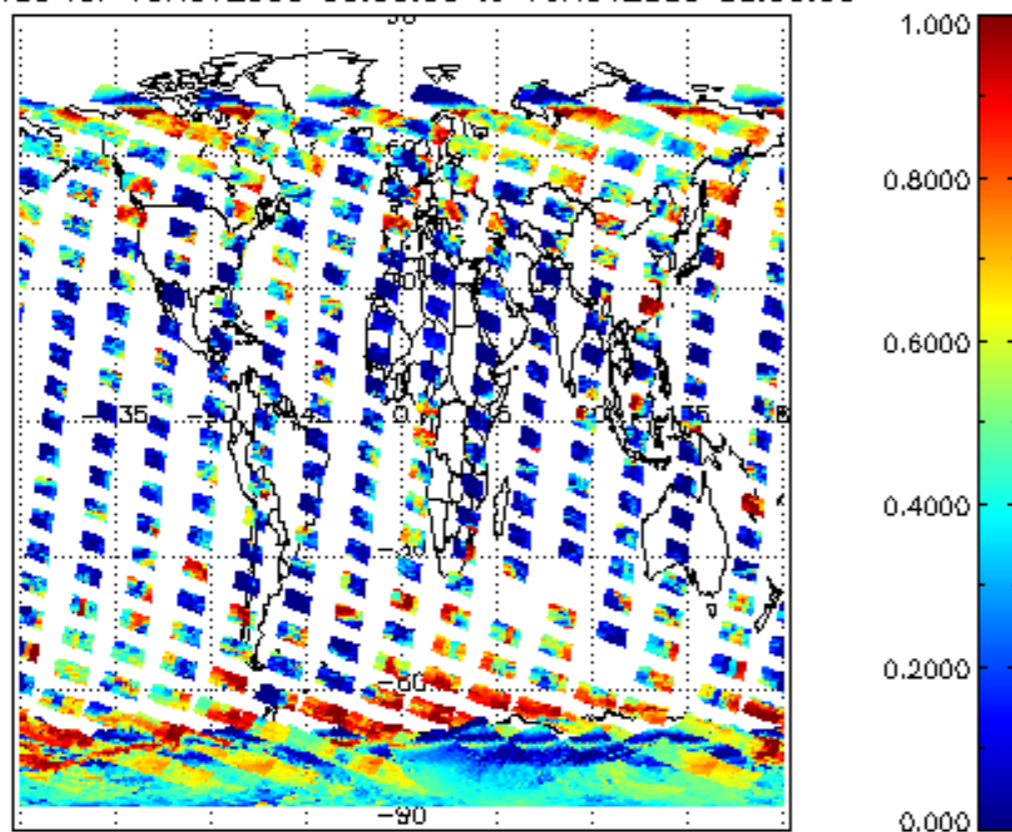
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



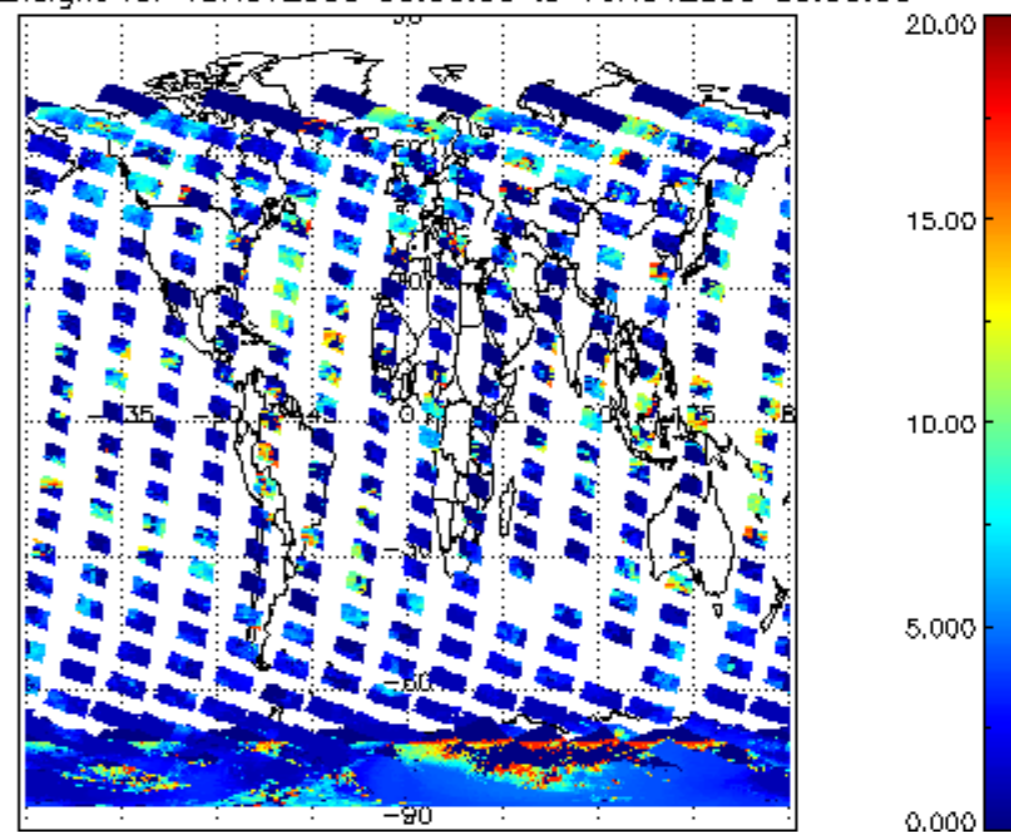
2.3 ADF monitoring

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

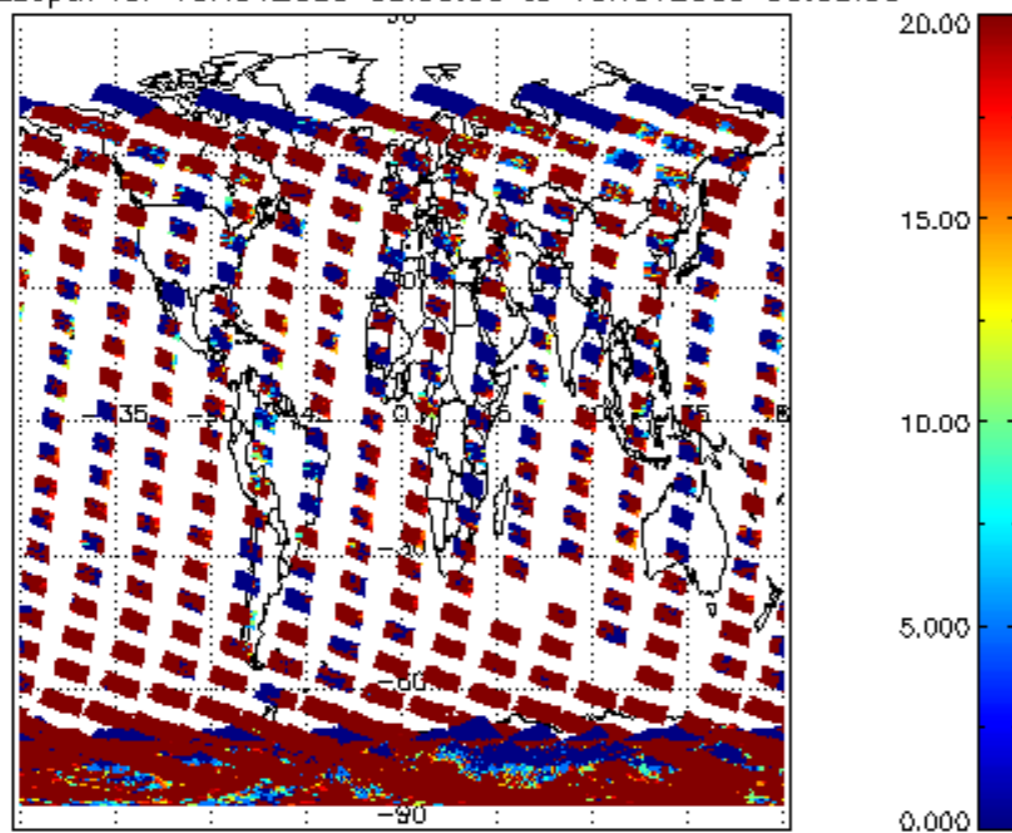
cLfrac for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



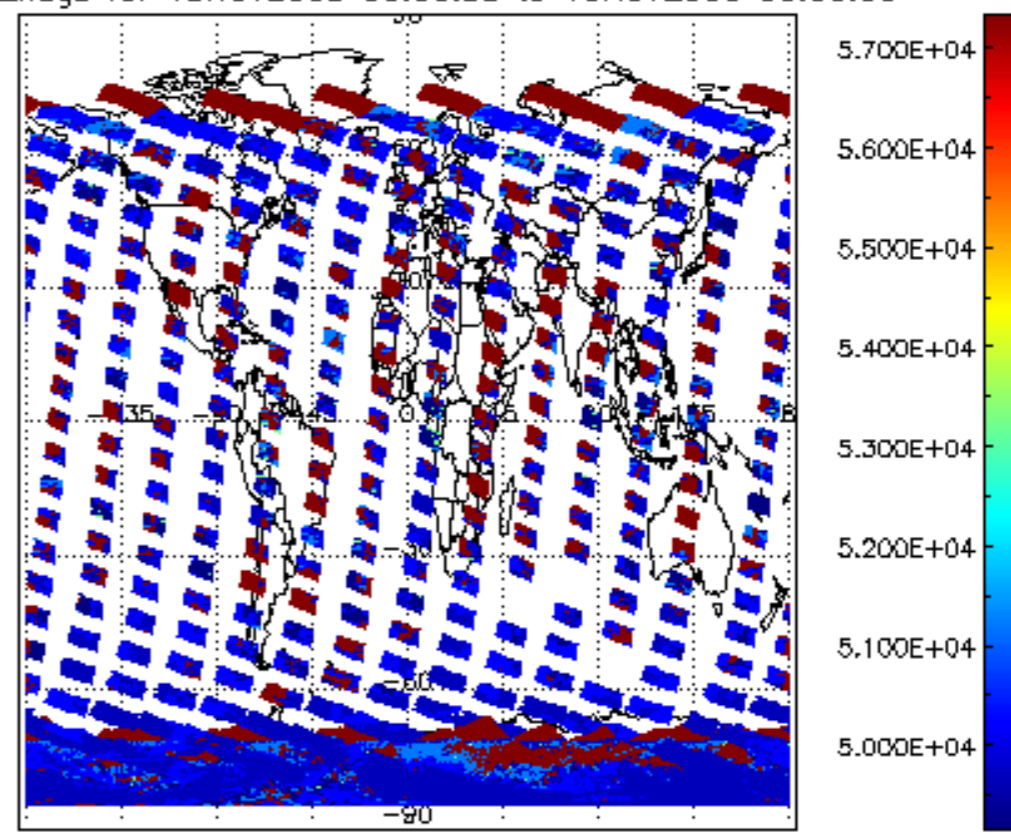
cL_top_height for 15NOV2009 00:00:00 to 16NOV2009 00:00:00

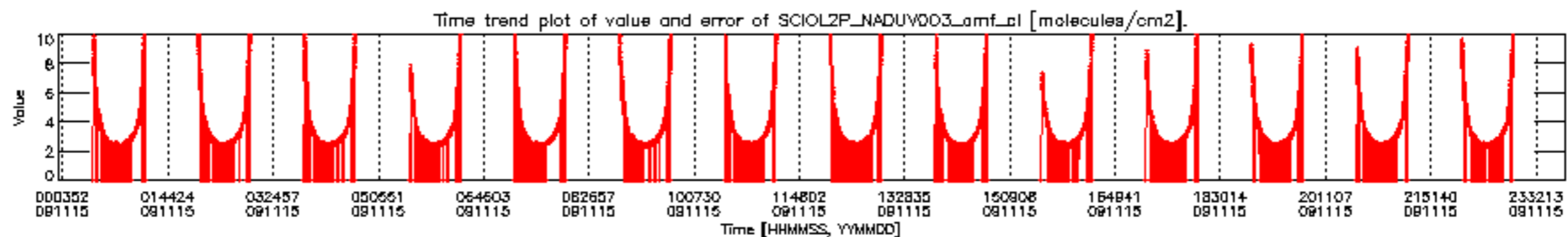
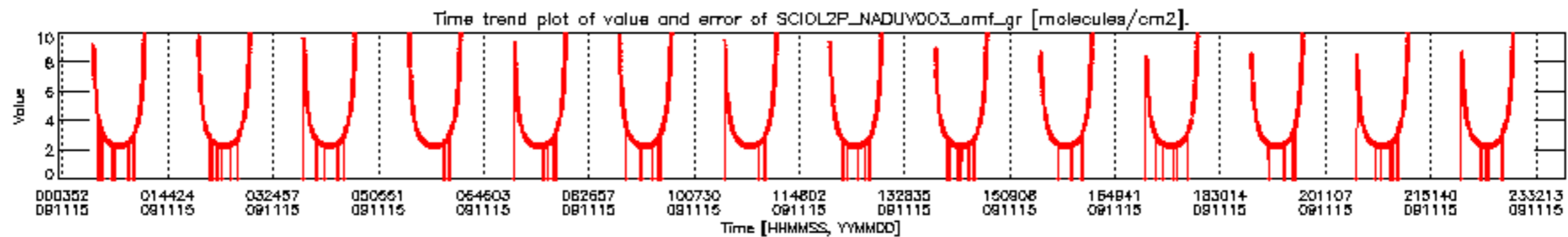
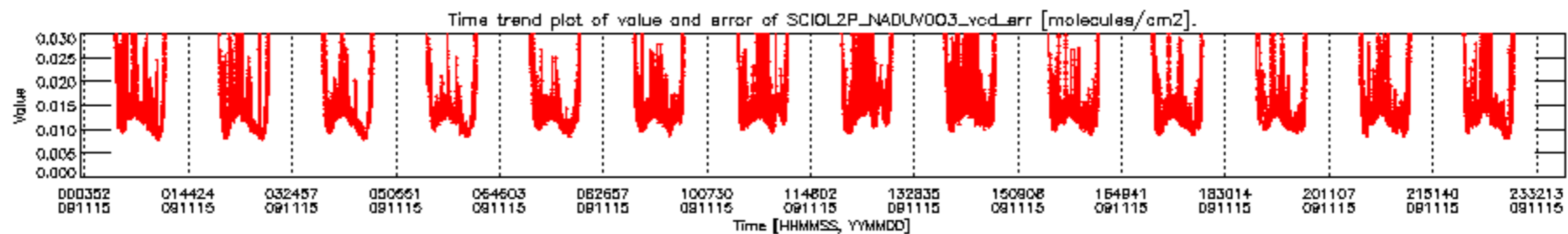
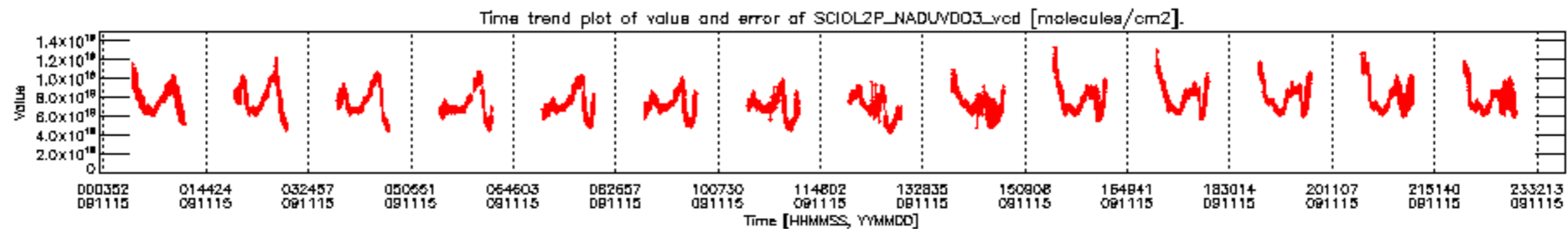


cL_opt_depth for 15NOV2009 00:00:00 to 16NOV2009 00:00:00

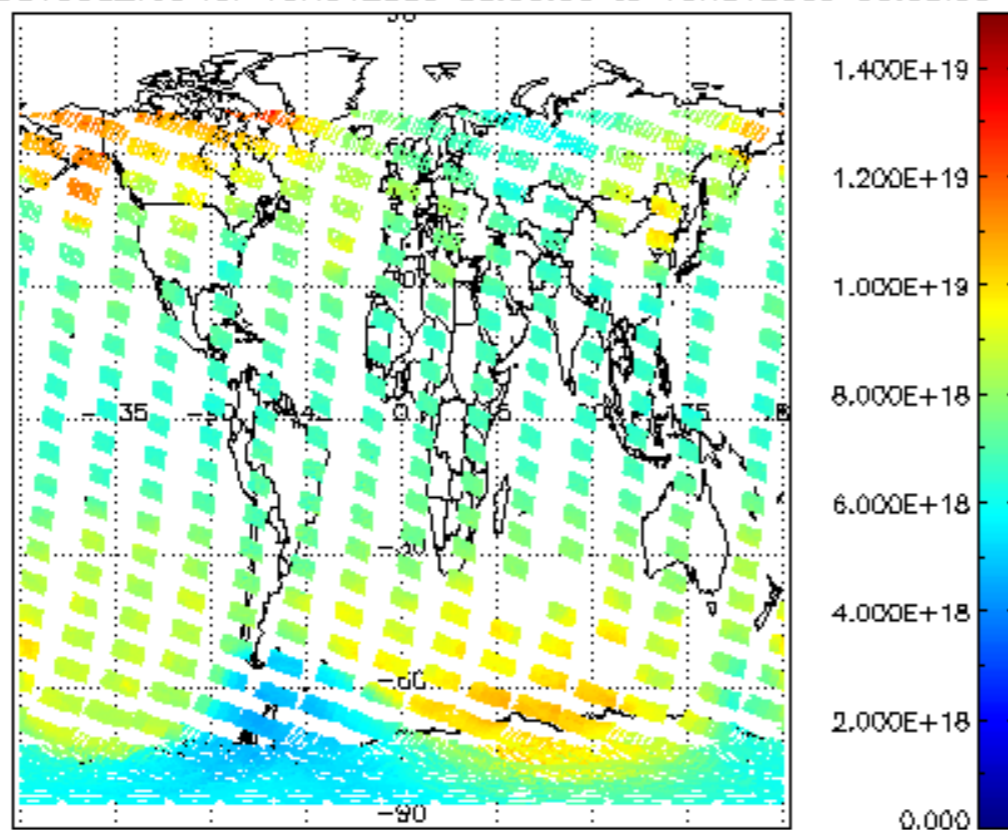


cloud_flags for 15NOV2009 00:00:00 to 16NOV2009 00:00:00

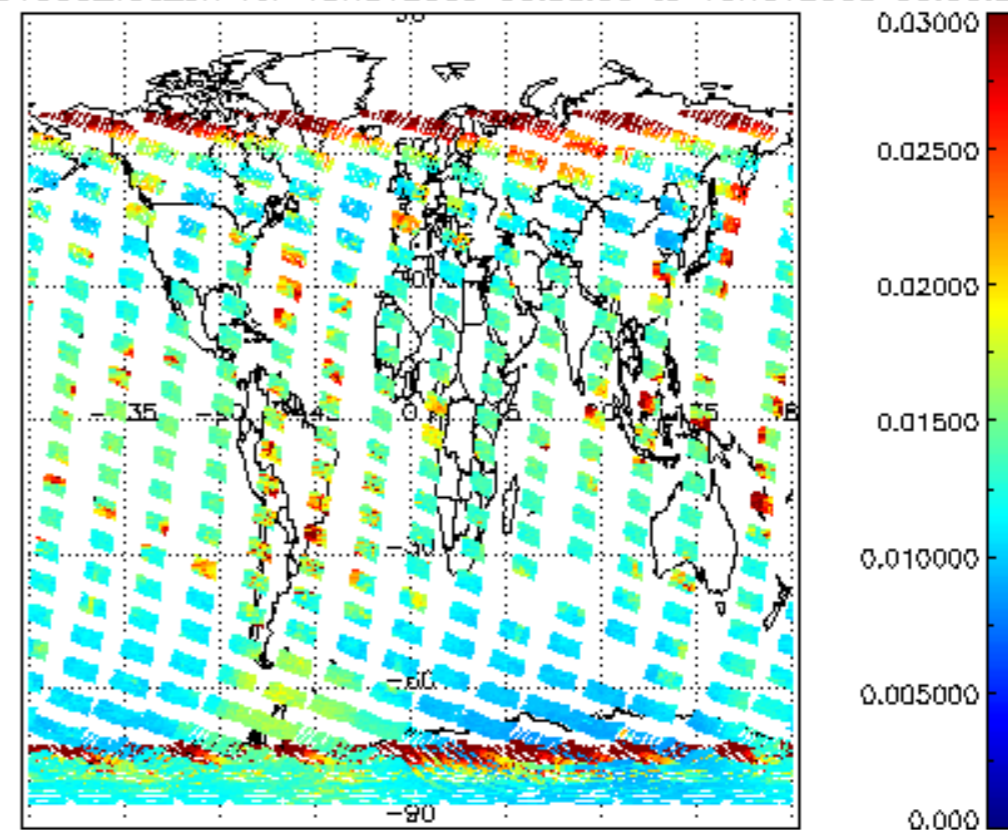




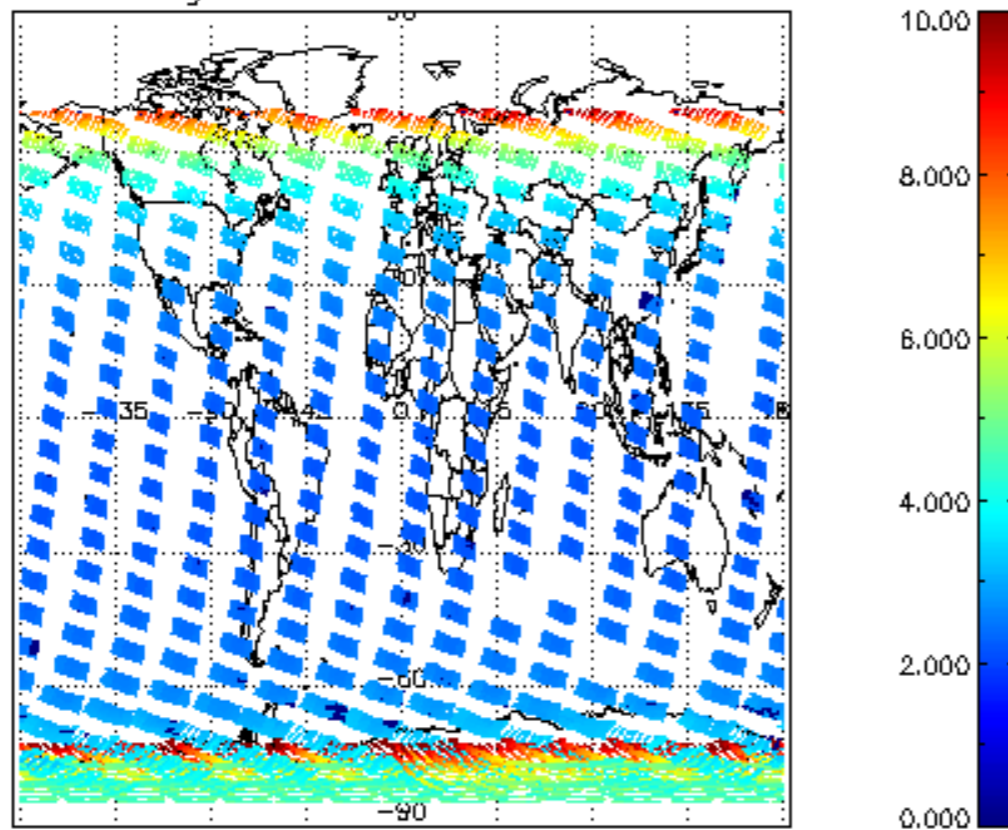
SCIOL2P_NADUV003_vcd for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



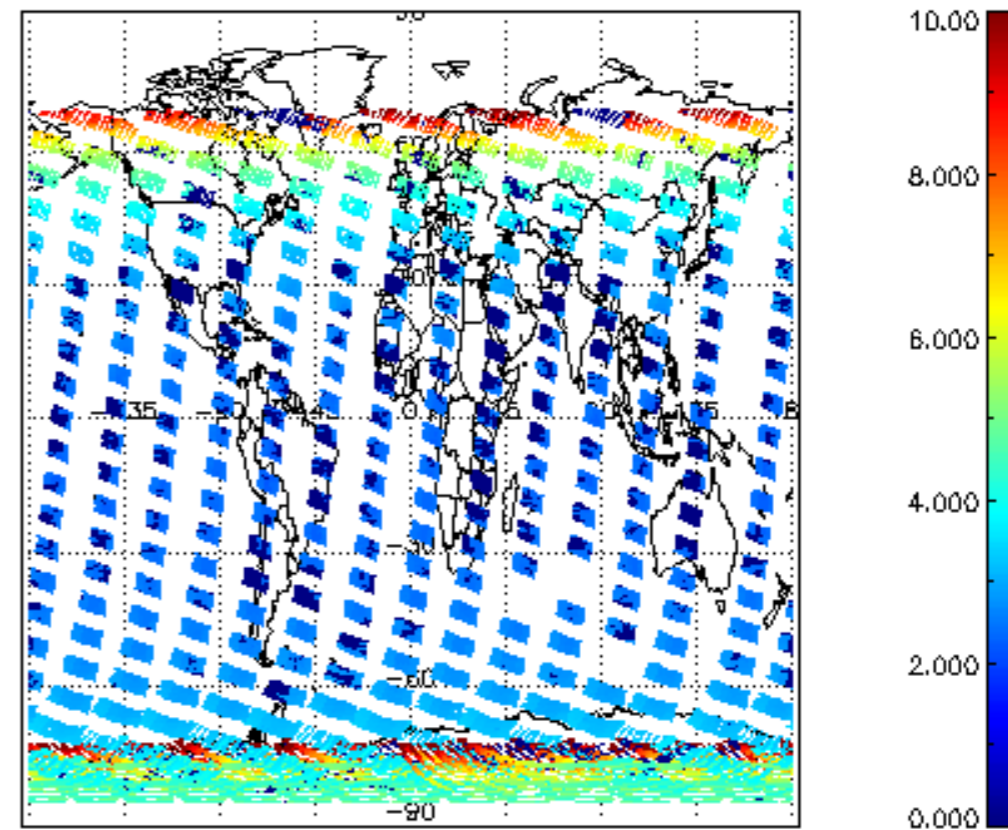
SCIOL2P_NADUV003_vcd_err for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



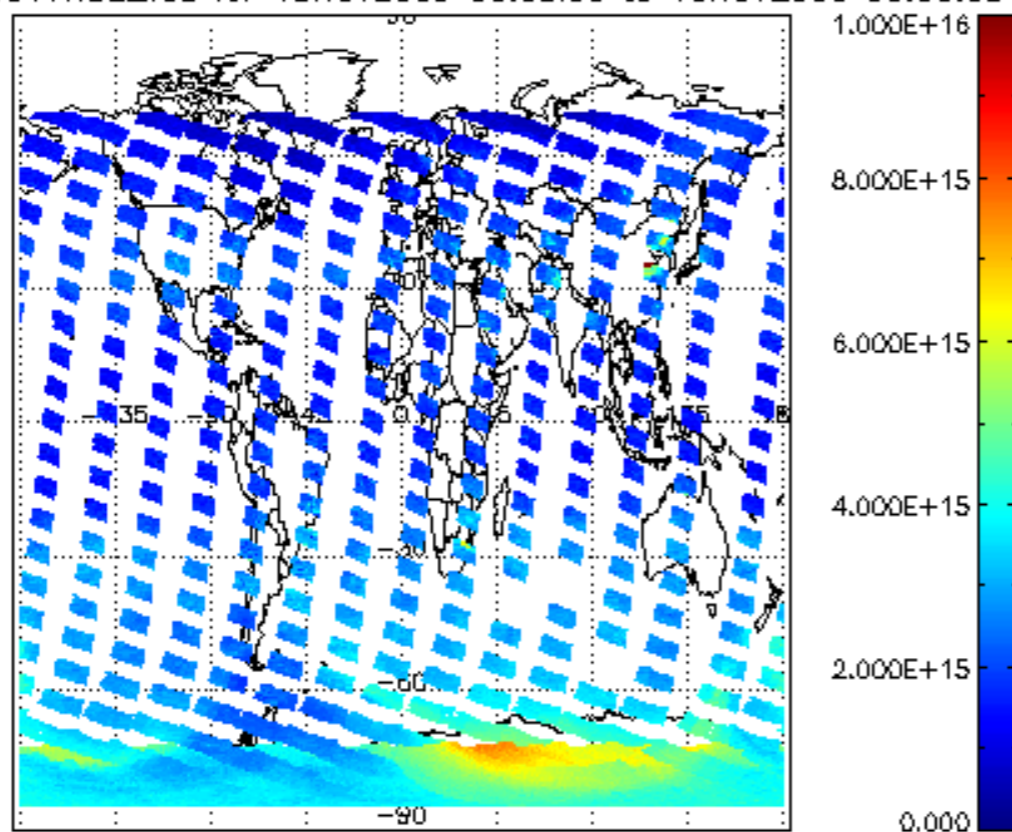
SCIOL2P_NADUV003_amf_gr for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



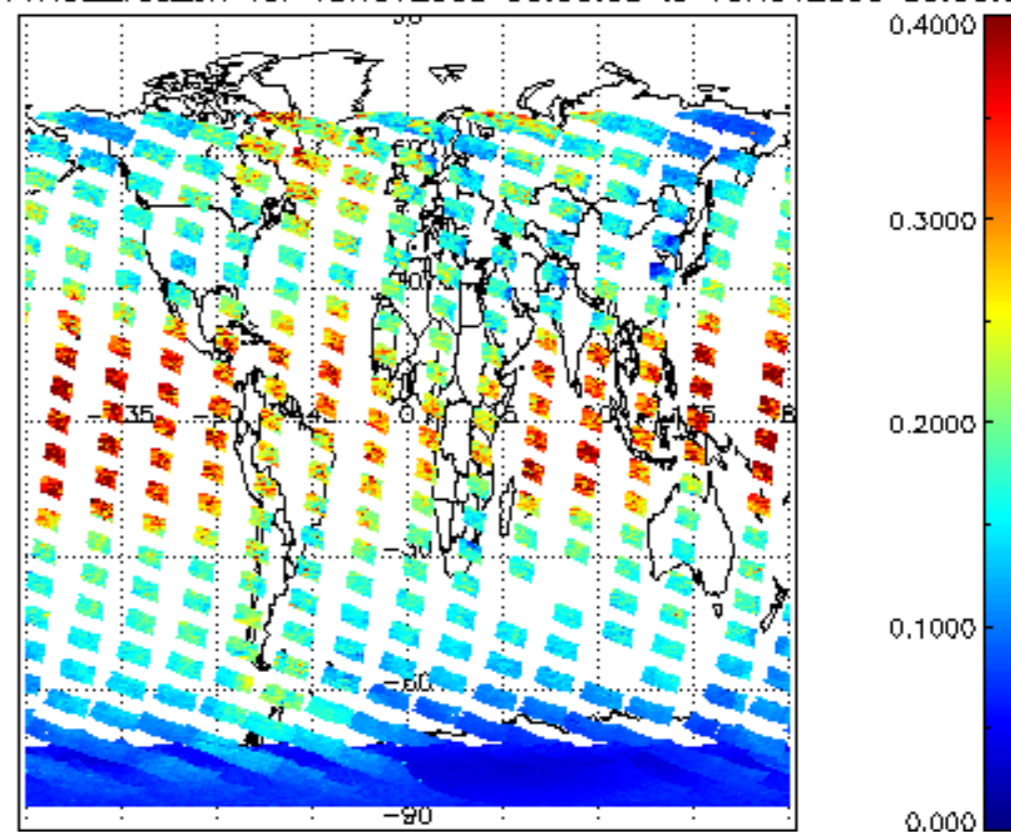
SCIOL2P_NADUV003_amf_cl for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



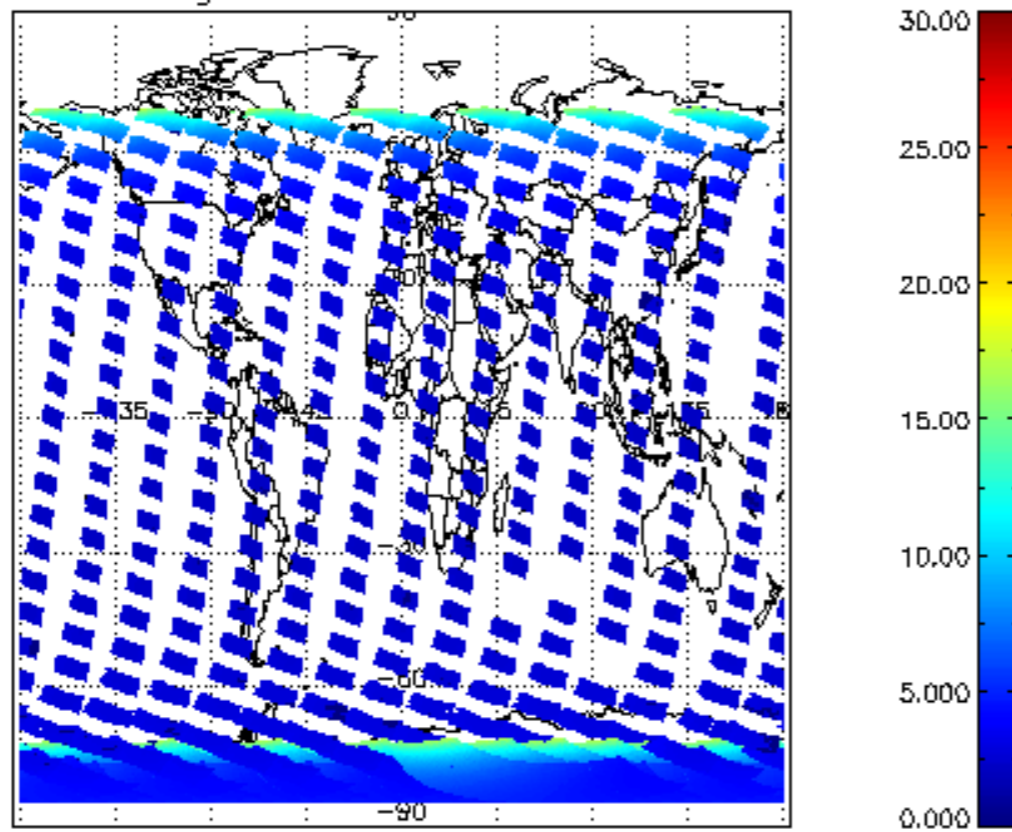
SCIOL2P_NADUV1NO2_vcd for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



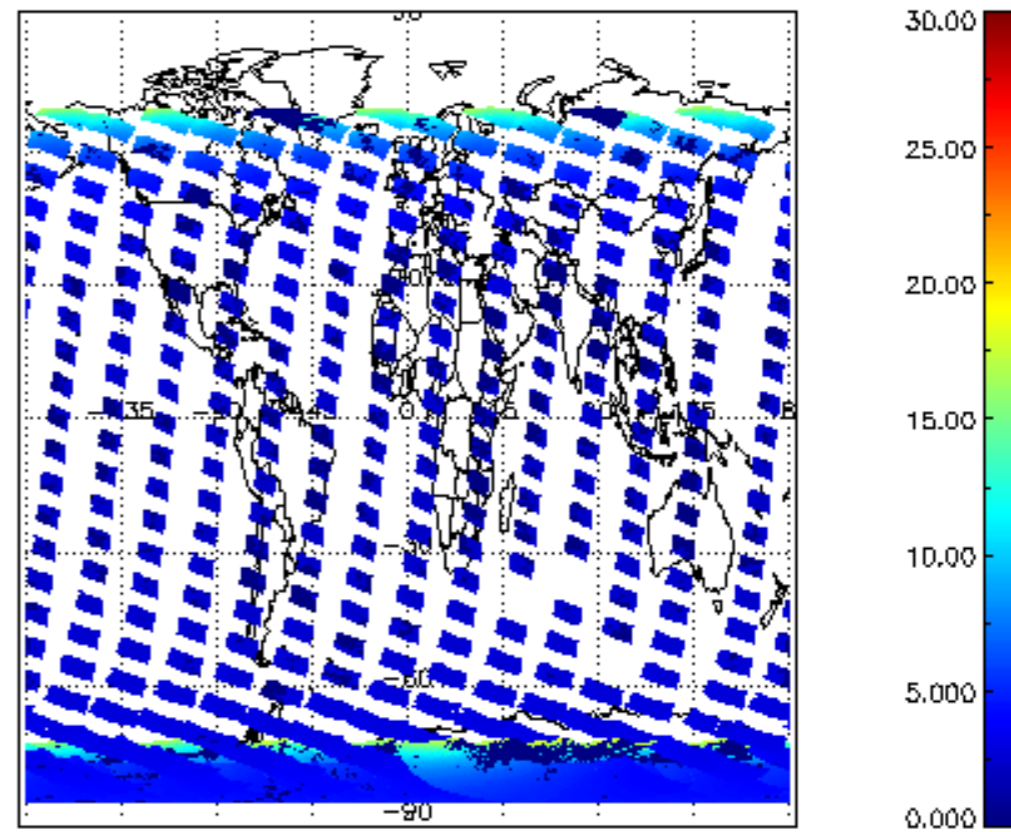
SCIOL2P_NADUV1NO2_vcd_err for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



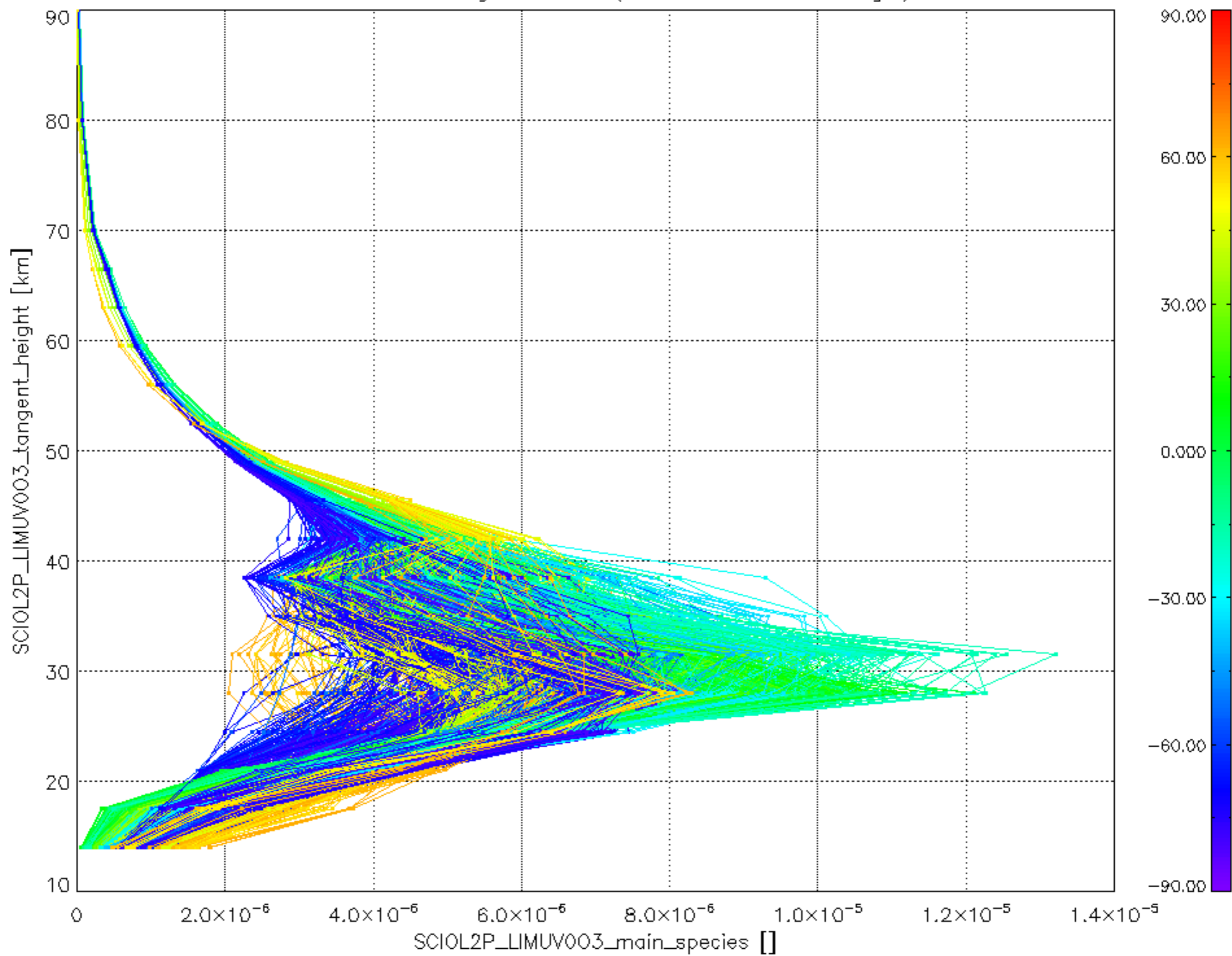
SCIOL2P_NADUV1NO2_amf_gr for 15NOV2009 00:00:00 to 16NOV2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 15NOV2009 00:00:00 to 16NOV2009 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).

