

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	09DEC2009 14:35:41
Data source version	SCIA-OL/3.01-R
Processing scope for products	21NOV2009 00:00:00 to 22NOV2009 00:00:00
Start time of first product within scope	20NOV2009 23:04:08
Stop time of last product within scope	22NOV2009 01:04:28
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__2PRDPA20091120_230408_000030202084_00259_40393_5394.N1	20NOV2009 23:04:08	20NOV2009 23:54:29	0	GOOD
1	SCI_OL__2PRDPA20091121_004336_000031452084_00260_40394_5395.N1	21NOV2009 00:43:36	21NOV2009 01:36:01	0	GOOD
2	SCI_OL__2PRDPA20091121_022016_000033252084_00261_40395_5396.N1	21NOV2009 02:20:16	21NOV2009 03:15:41	0	GOOD
3	SCI_OL__2PRDPA20091121_040052_000033812084_00262_40396_5397.N1	21NOV2009 04:00:52	21NOV2009 04:57:13	0	GOOD
4	SCI_OL__2PRDPA20091121_054128_000033252084_00263_40397_5398.N1	21NOV2009 05:41:28	21NOV2009 06:36:54	0	GOOD
5	SCI_OL__2PRDPA20091121_072204_000033812084_00264_40398_5399.N1	21NOV2009 07:22:04	21NOV2009 08:18:26	0	GOOD
6	SCI_OL__2PRDPA20091121_090240_000033252084_00265_40399_5400.N1	21NOV2009 09:02:40	21NOV2009 09:58:06	0	GOOD
7	SCI_OL__2PRDPA20091121_104317_000033812084_00266_40400_5401.N1	21NOV2009 10:43:17	21NOV2009 11:39:38	0	GOOD
8	SCI_OL__2PRDPA20091121_122353_000033252084_00267_40401_5402.N1	21NOV2009 12:23:53	21NOV2009 13:19:18	0	GOOD
9	SCI_OL__2PRDPA20091121_140429_000033812084_00268_40402_5403.N1	21NOV2009 14:04:29	21NOV2009 15:00:50	0	GOOD
10	SCI_OL__2PRDPA20091121_154505_000033252084_00269_40403_5404.N1	21NOV2009 15:45:05	21NOV2009 16:40:31	0	GOOD
11	SCI_OL__2PRDPA20091121_172535_000033862084_00270_40404_5405.N1	21NOV2009 17:25:35	21NOV2009 18:22:02	0	GOOD
12	SCI_OL__2PRDPA20091121_190639_000033252084_00271_40405_5406.N1	21NOV2009 19:06:39	21NOV2009 20:02:04	0	GOOD
13	SCI_OL__2PRDPA20091121_204654_000033812084_00272_40406_5407.N1	21NOV2009 20:46:54	21NOV2009 21:43:15	0	GOOD
14	SCI_OL__2PRDPA20091121_222730_000033252084_00273_40407_5408.N1	21NOV2009 22:27:30	21NOV2009 23:22:56	0	GOOD
15	SCI_OL__2PRDPA20091122_000806_000033812084_00274_40408_5409.N1	22NOV2009 00:08:06	22NOV2009 01:04:28	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: 147420

Total number of cloud data DSRs with good quality flag (=0): 147420 (100.0 %)

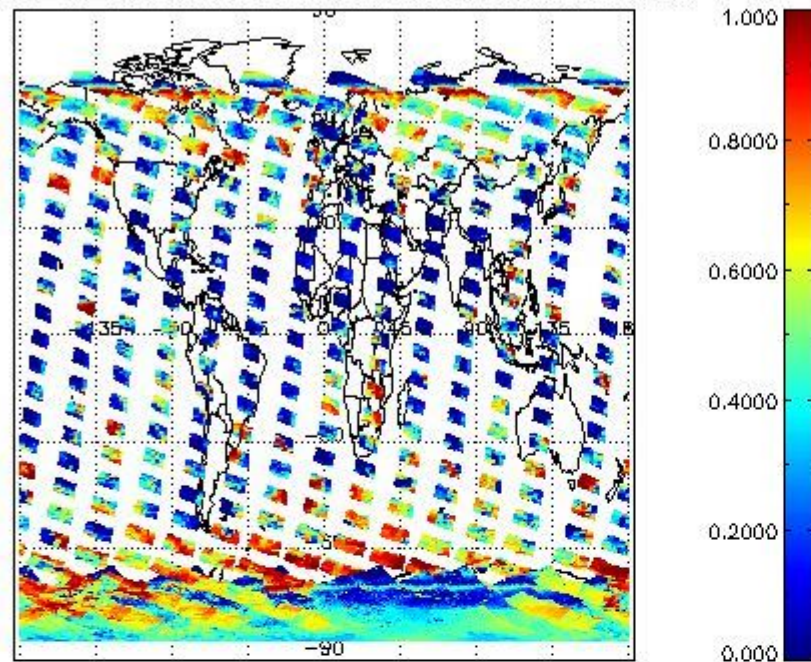
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	147420	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	147420	0.16975	0.12500	0.12500	0.25000	0.059928	s
CL_FRAC	147420	0.39027	0.38662	0.0000	1.0000	0.28045	-
CL_FRAC_ERR	147420	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	147420	5.4321	4.0000	4.0000	8.0000	1.9177	
PMD_READ_CL[0]	147420	0.21852	0.0000	0.0000	8.0000	1.0862	-
PMD_READ_CL[1]	147420	1.0529	0.0000	0.0000	8.0000	2.2724	-
CL_TOP_HEIGHT	123326	4.2479	3.2749	0.0000	17.000	4.0122	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	123326	54.748	46.698	0.0000	101.00	40.660	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	147420	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	147420	11001011	11000100	11000000	11100000	3362.2	flags
AERO_ABSO_IND	147420	4.0941	4.7572	-0.18798	18.602	2.7928	
AERO_IND_DIAG	147420	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	147420	01010111	00000000	00000000	11000000	24468.	flags

Time and geolocation plots:

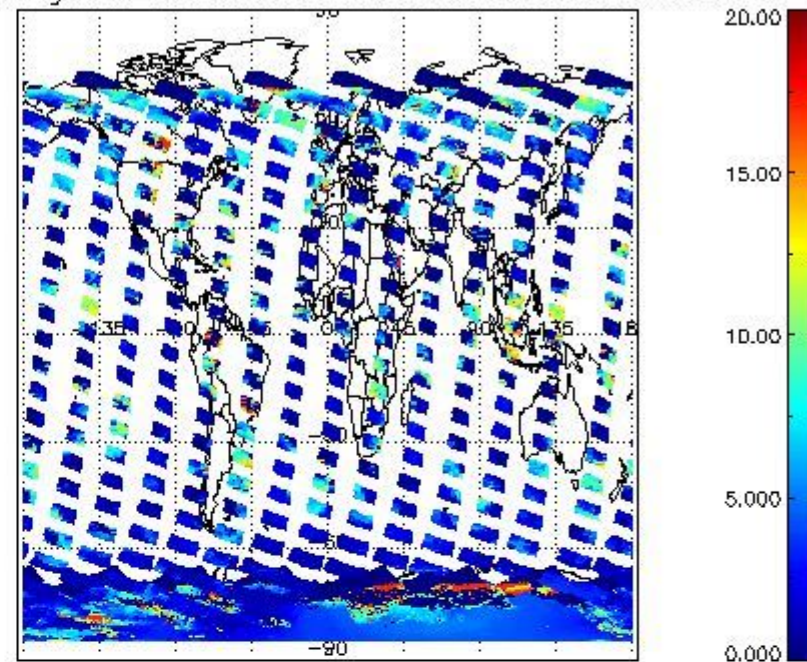
Plots are available for the following parameters:

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

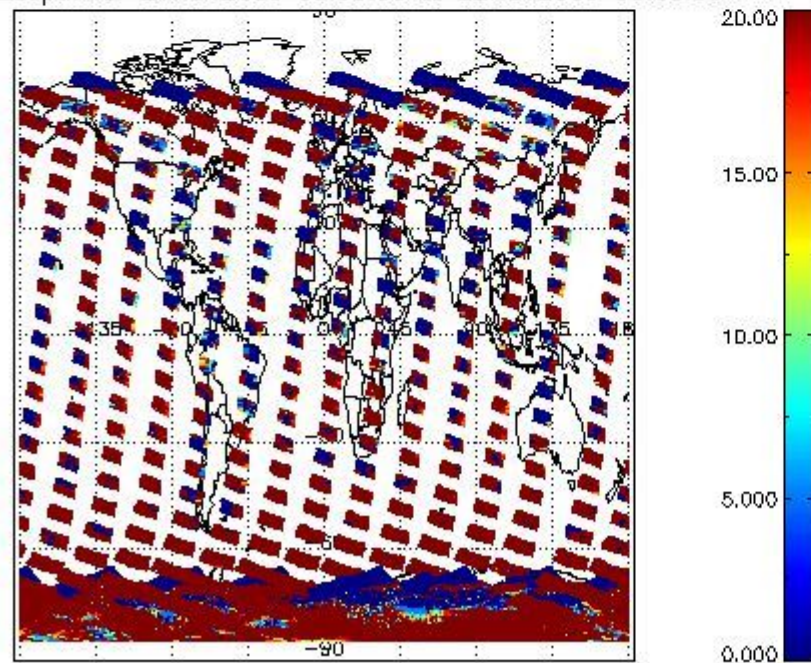
cLfrac for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



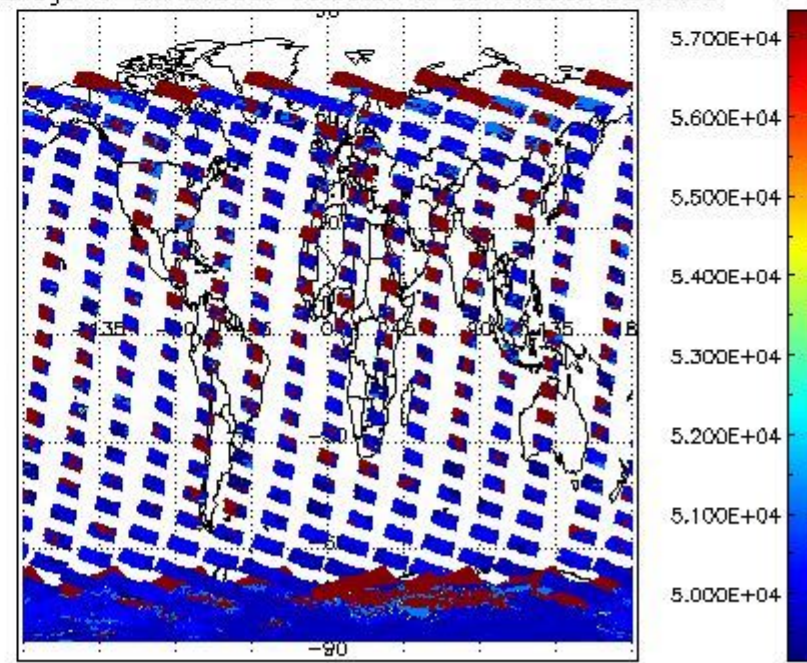
cL_top_height for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



cLopt_depth for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



cloud_flags for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



2.2.2 Nadir

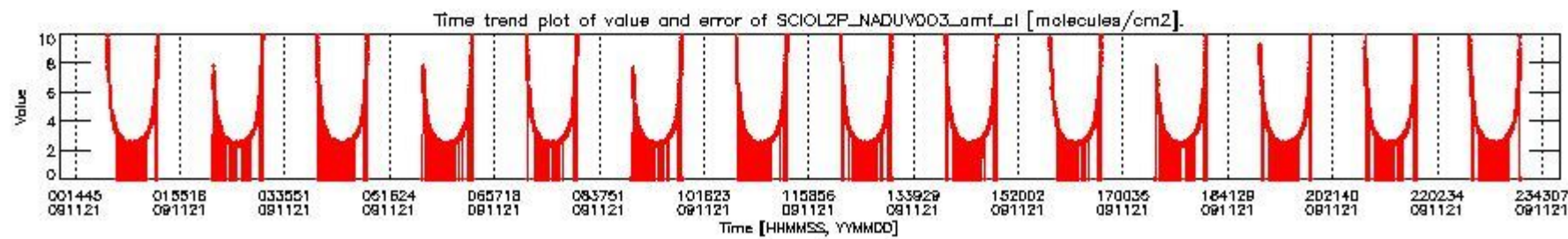
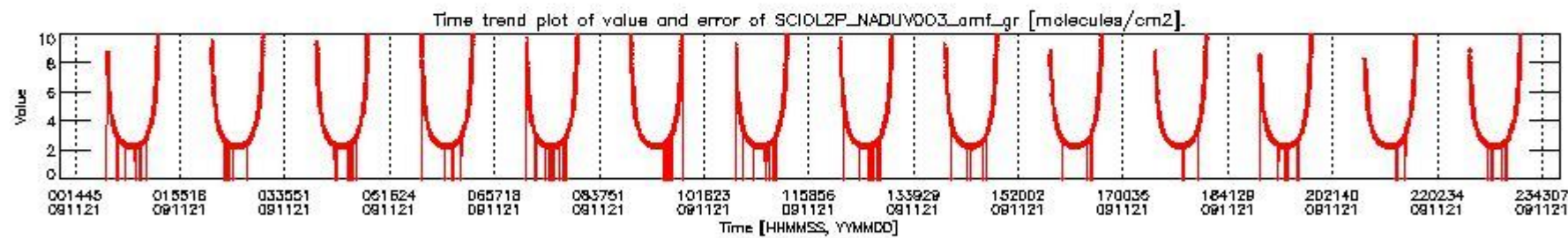
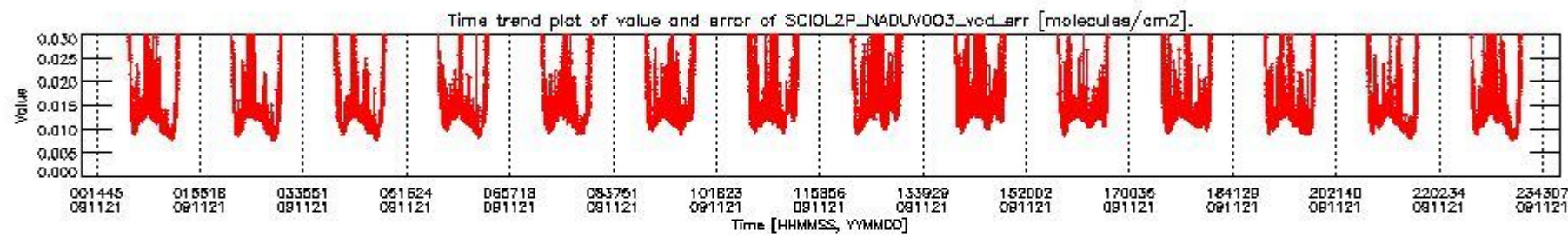
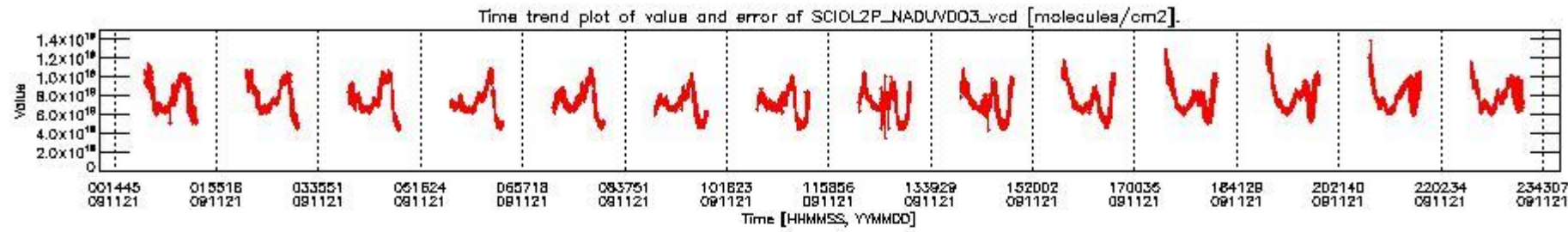
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

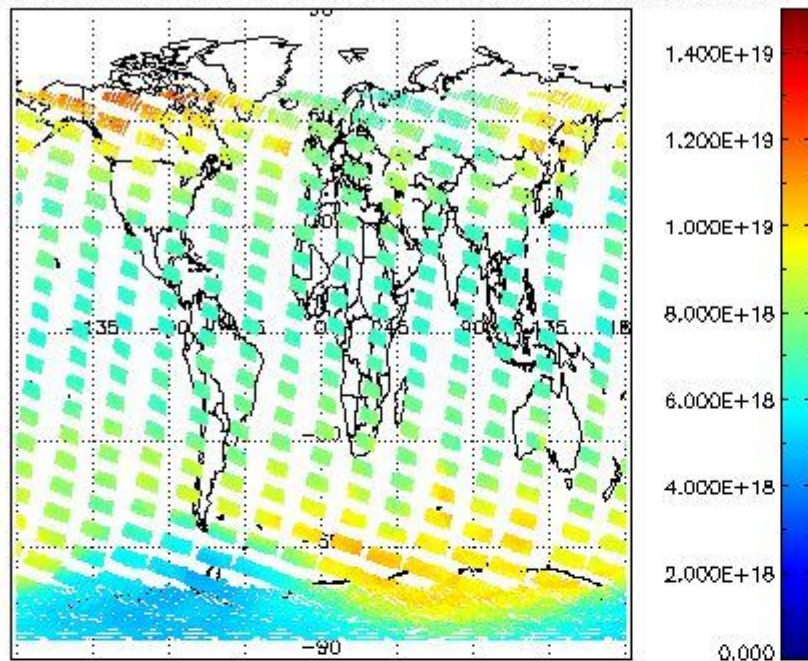
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

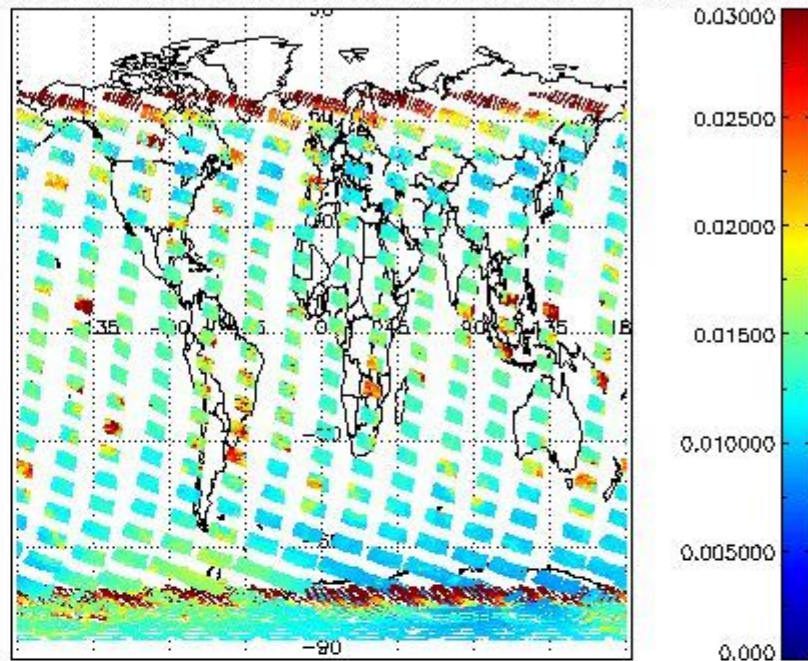
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



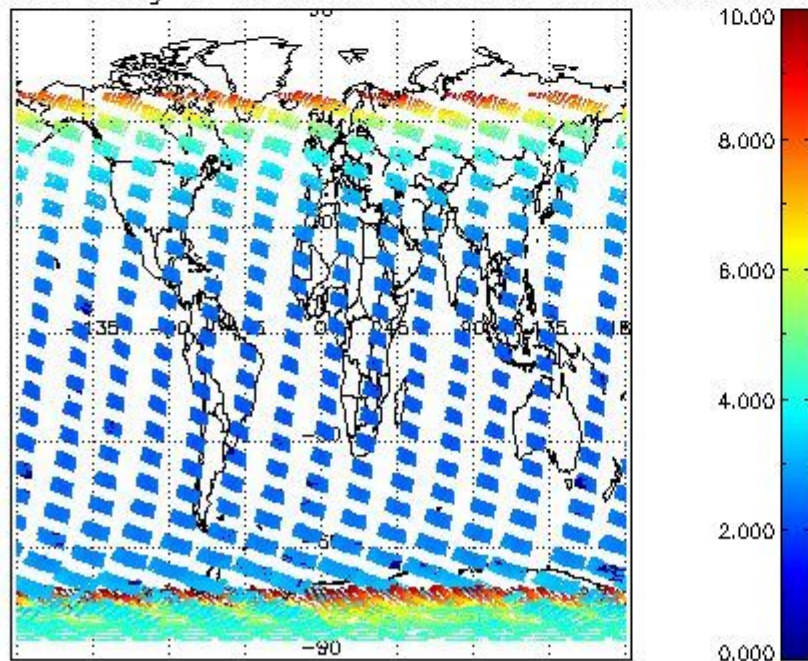
SCIOL2P_NADUV003_vcd for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



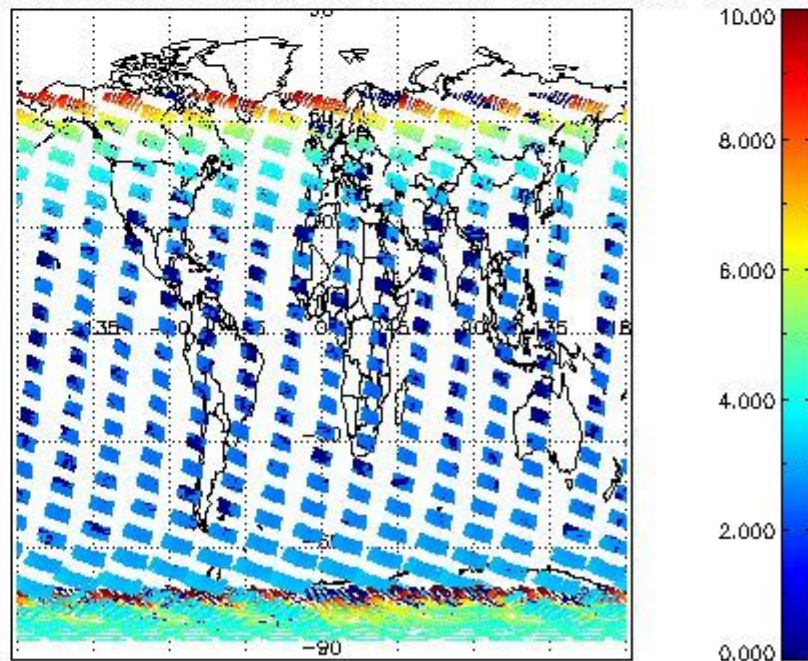
SCIOL2P_NADUV003_vcd_err for 21NOV2009 00:00:00 to 22NOV2009 00:00:00

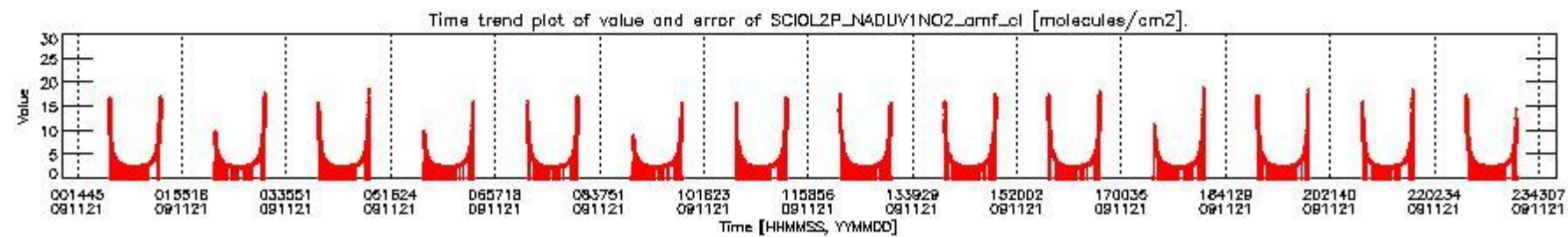
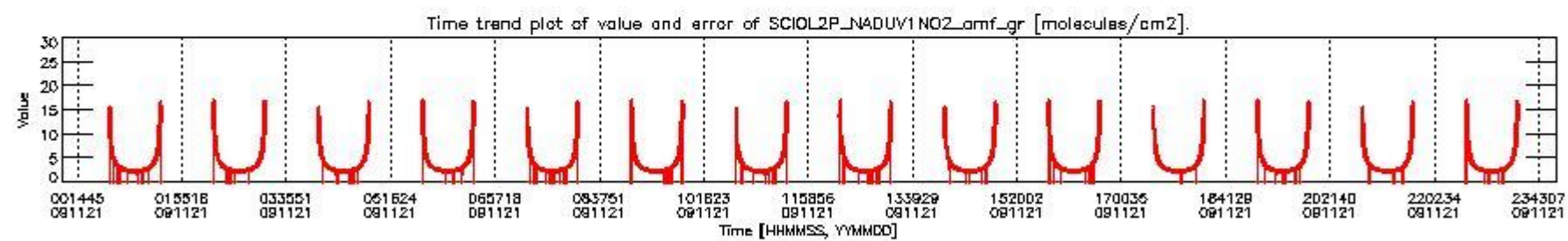
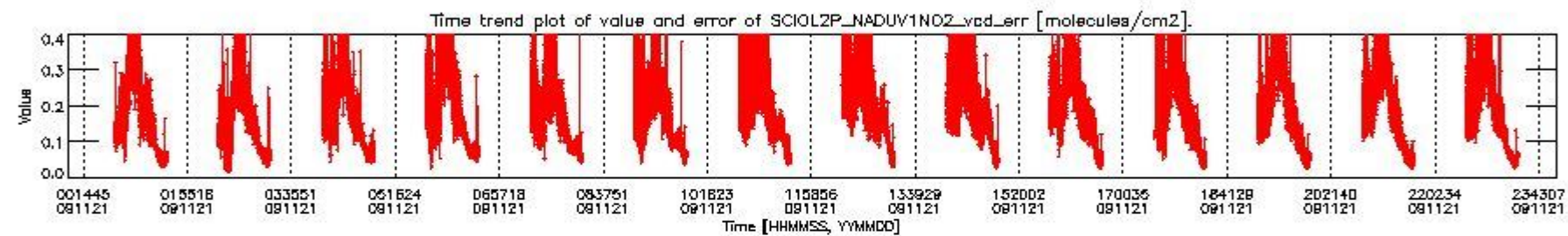
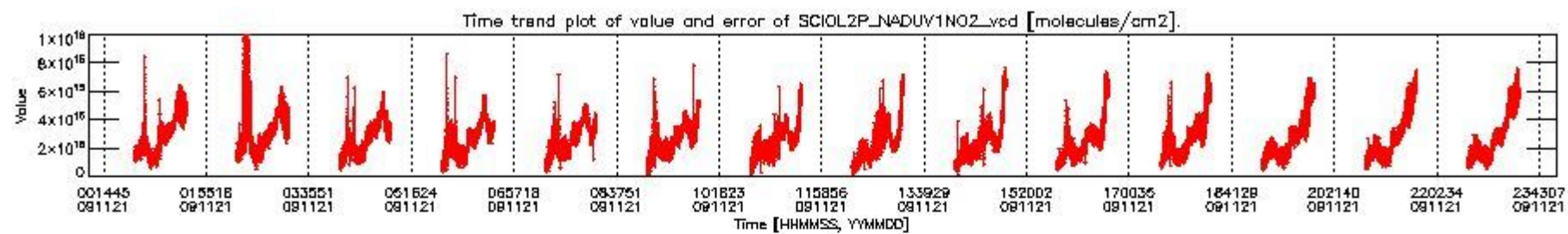


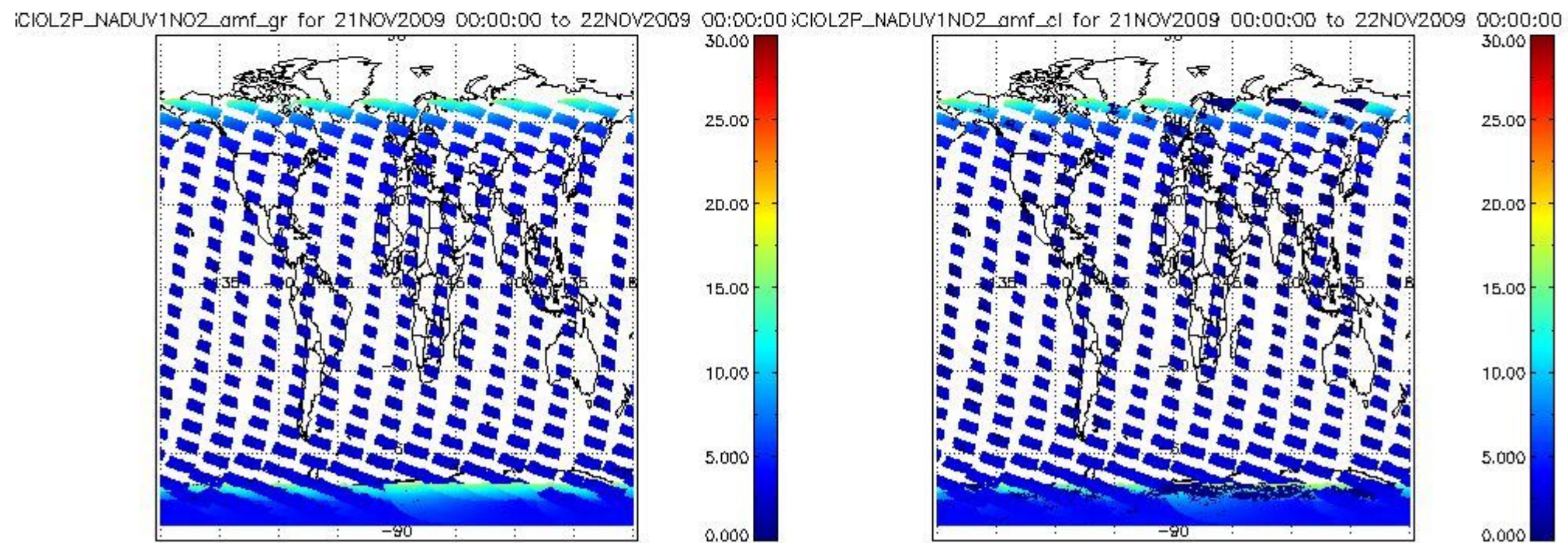
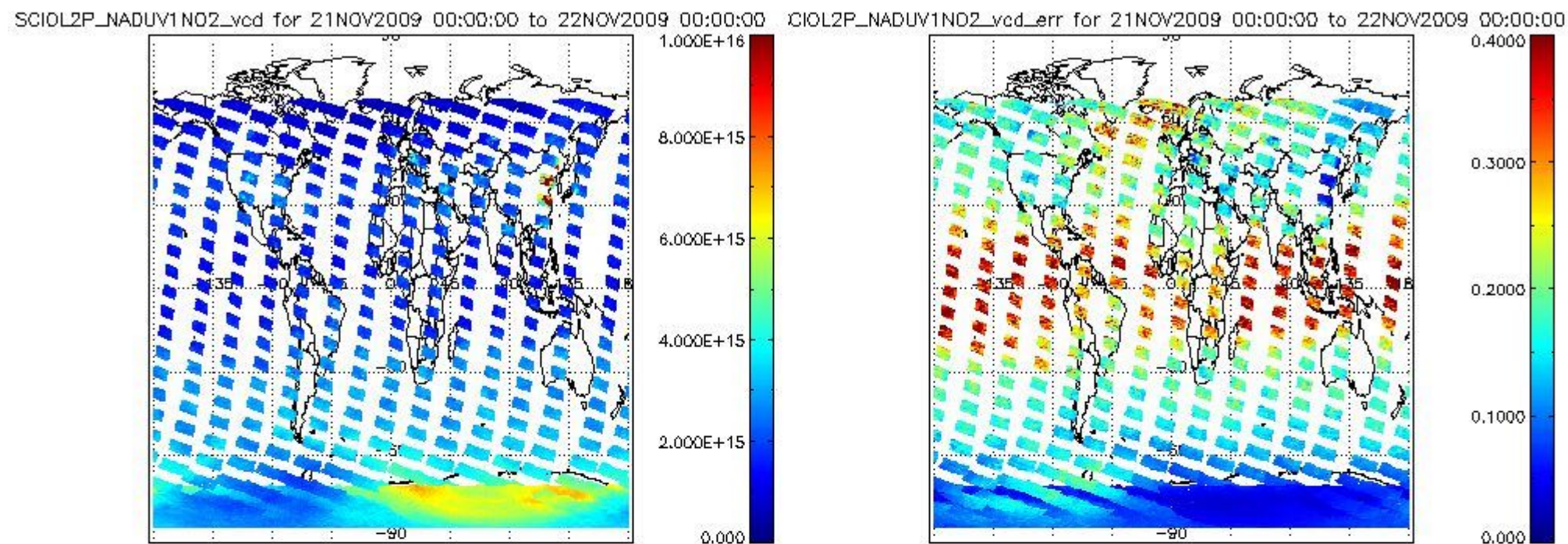
SCIOL2P_NADUV003_amf_gr for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 21NOV2009 00:00:00 to 22NOV2009 00:00:00







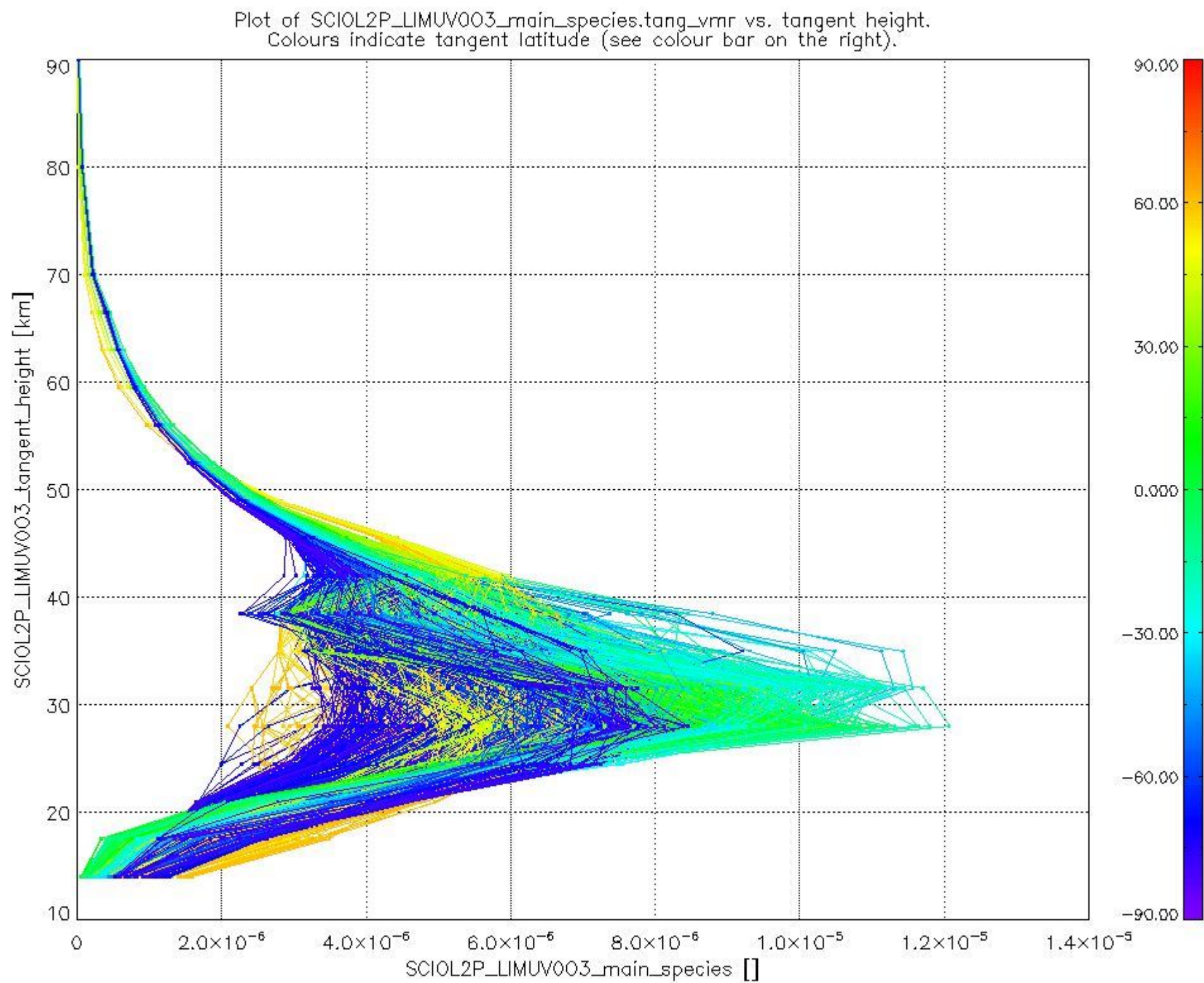
2.2.3 Limb

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

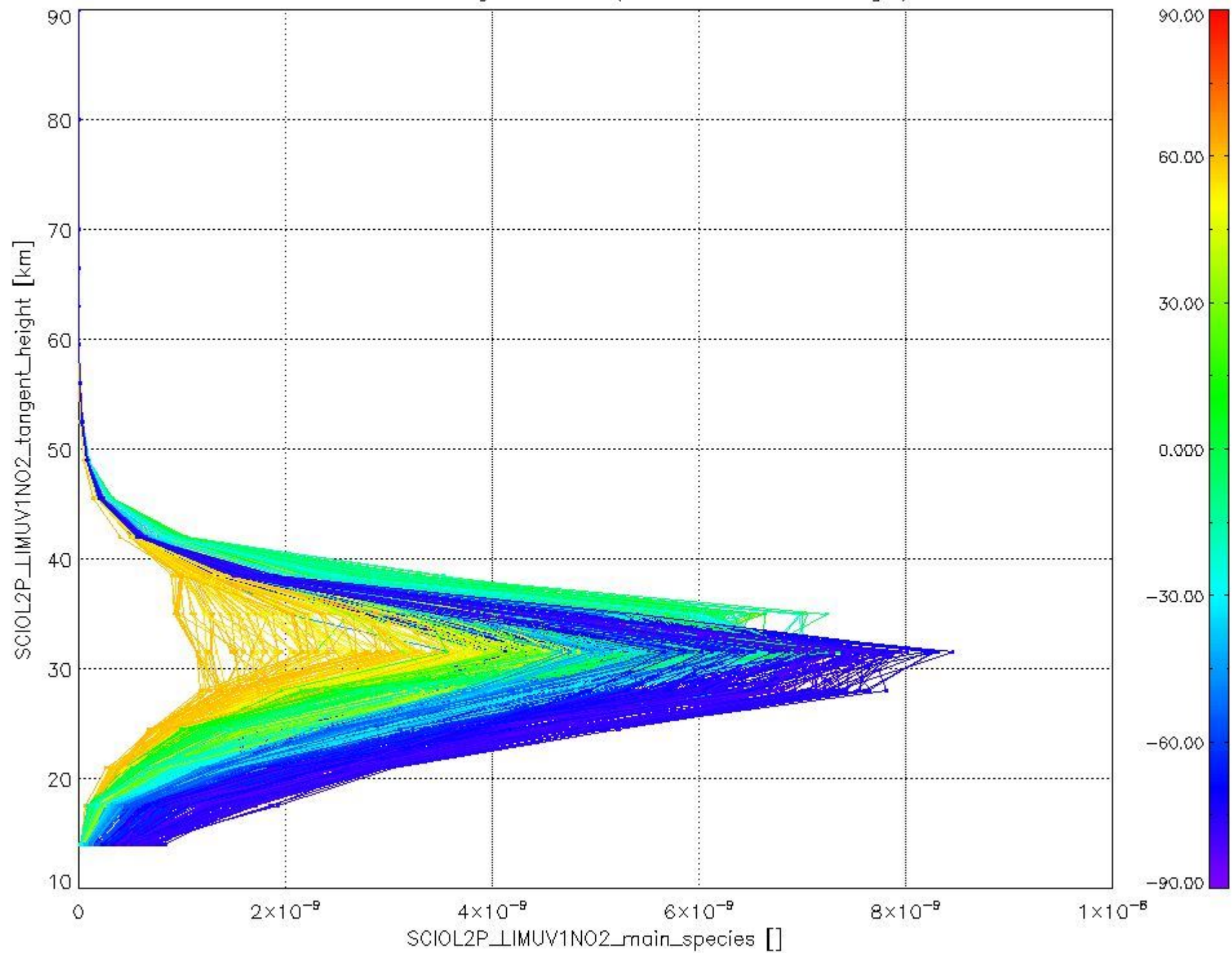
The following data items are currently included into this section:

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.



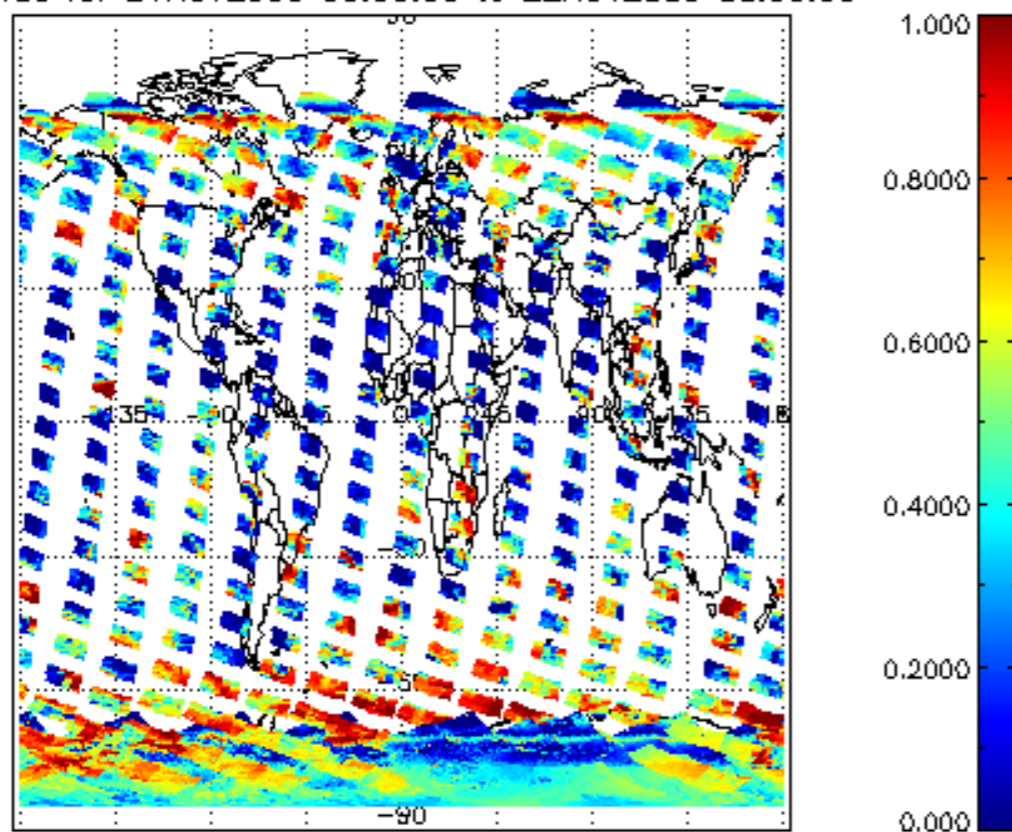
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



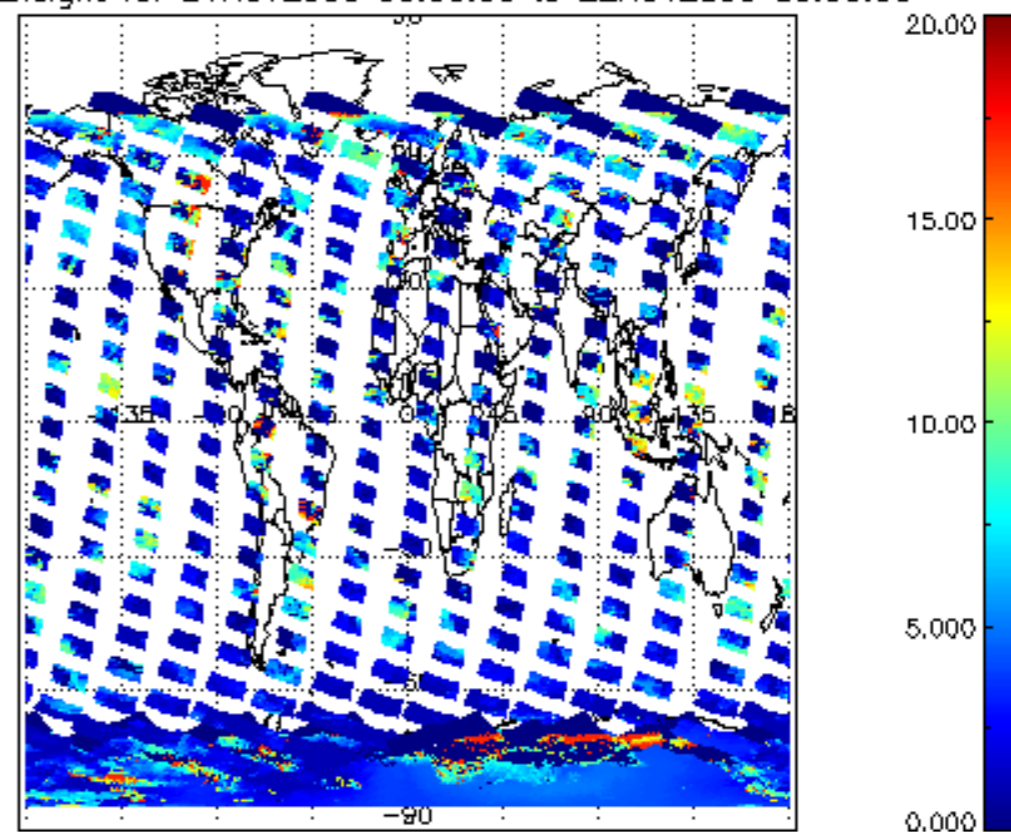
2.3 ADF monitoring

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

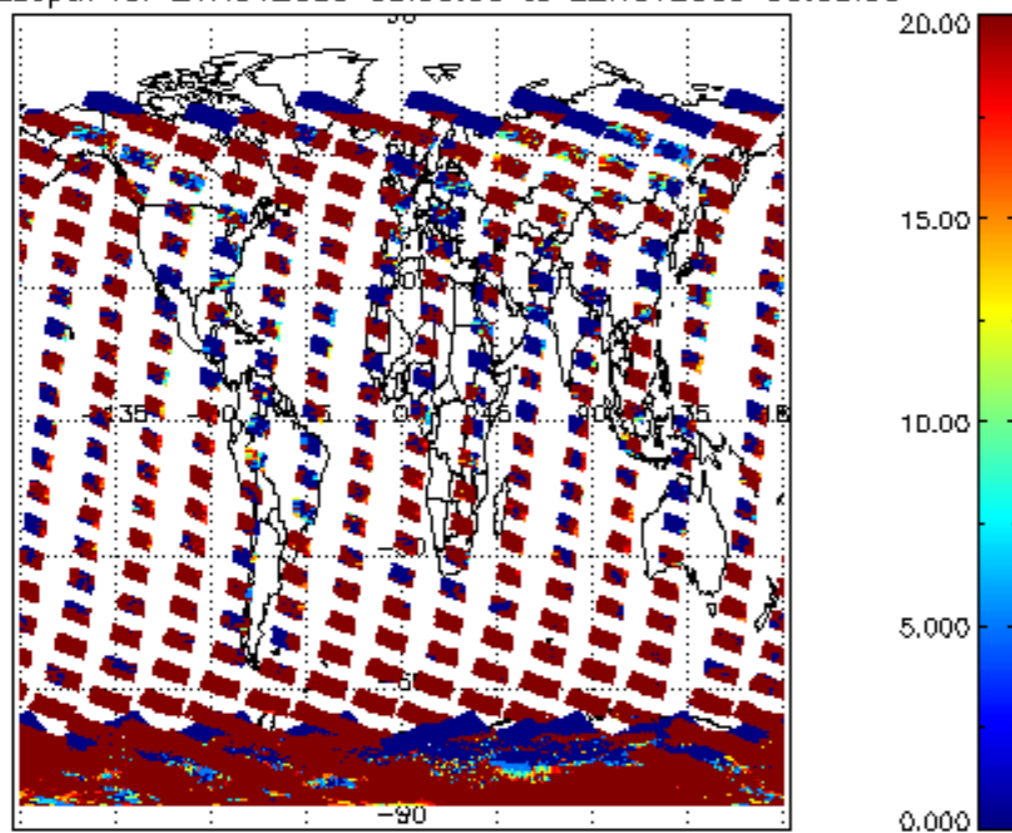
cLfrac for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



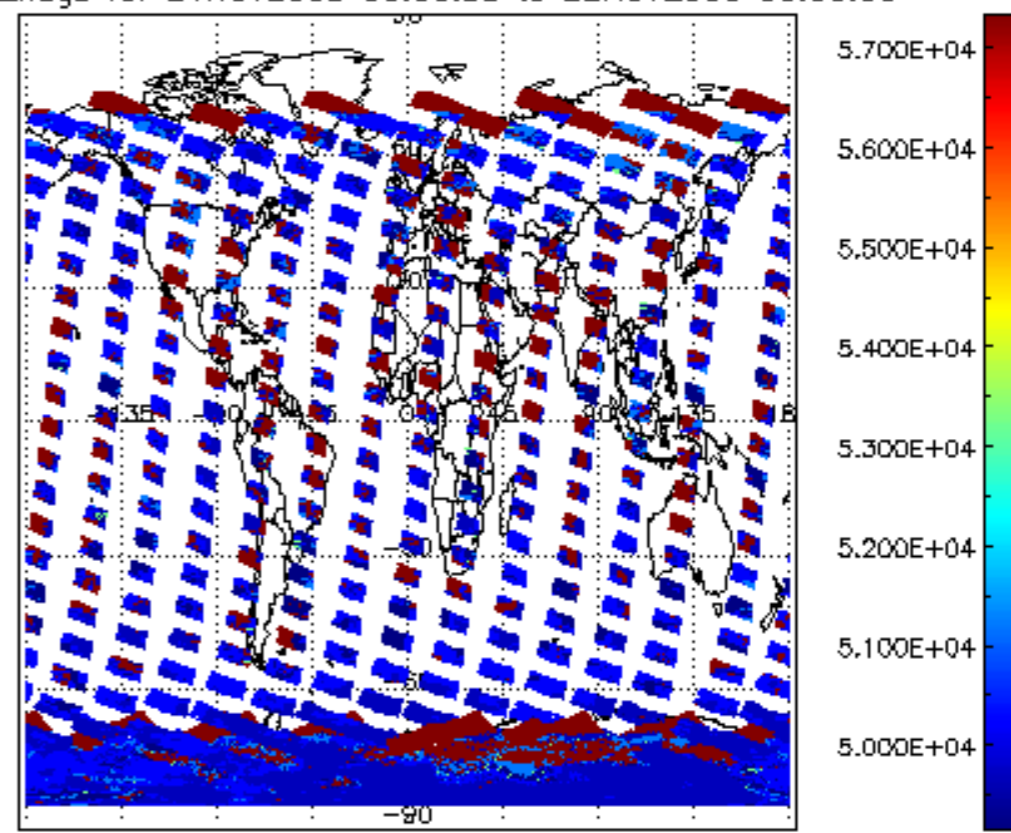
cL_top_height for 21NOV2009 00:00:00 to 22NOV2009 00:00:00

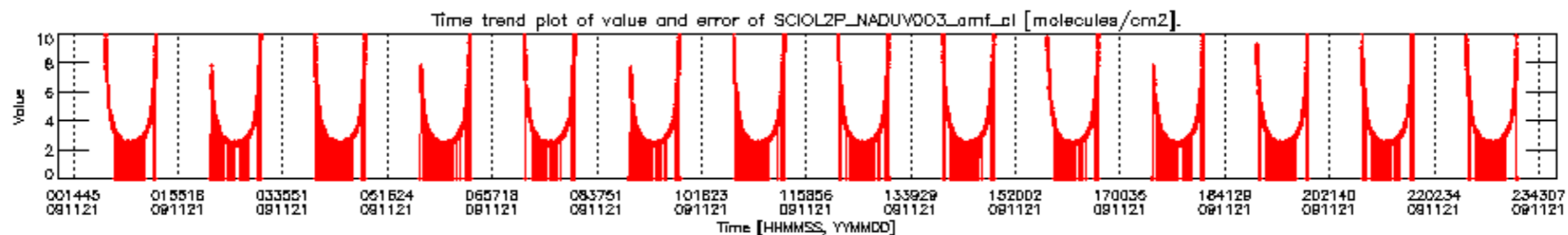
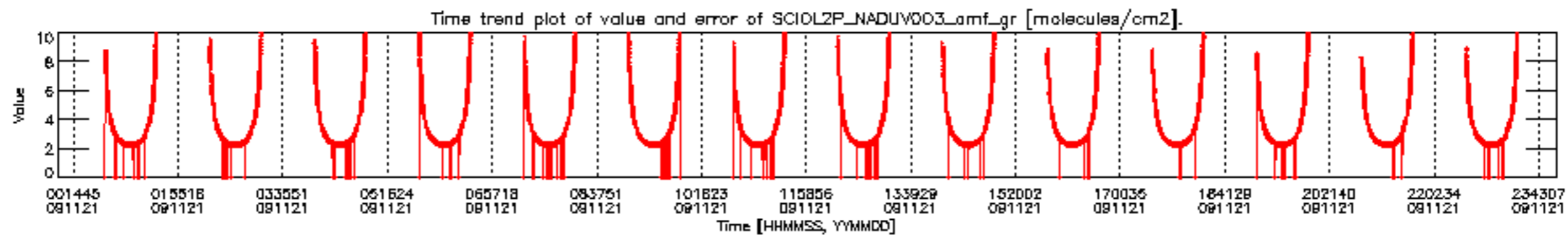
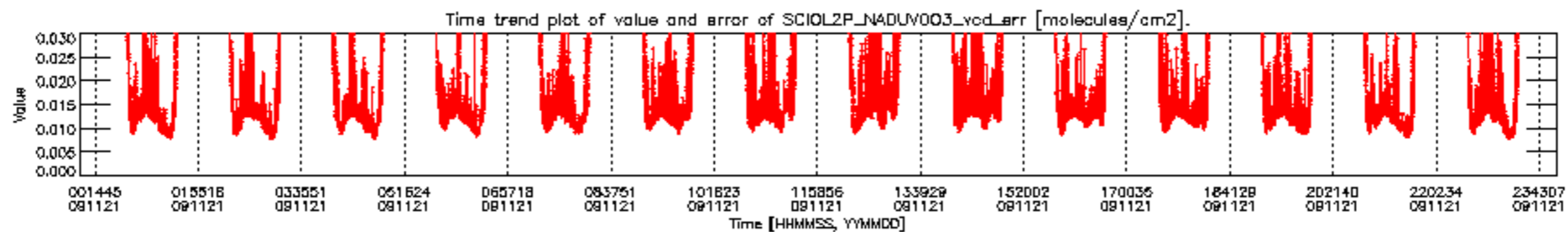
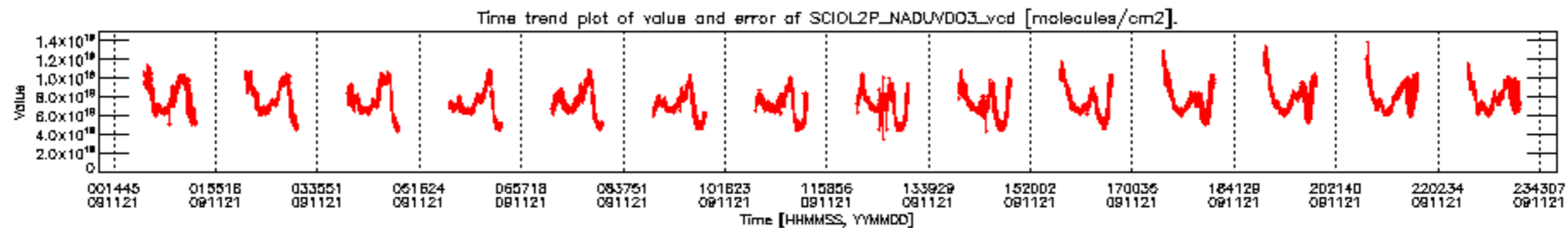


cL_opt_depth for 21NOV2009 00:00:00 to 22NOV2009 00:00:00

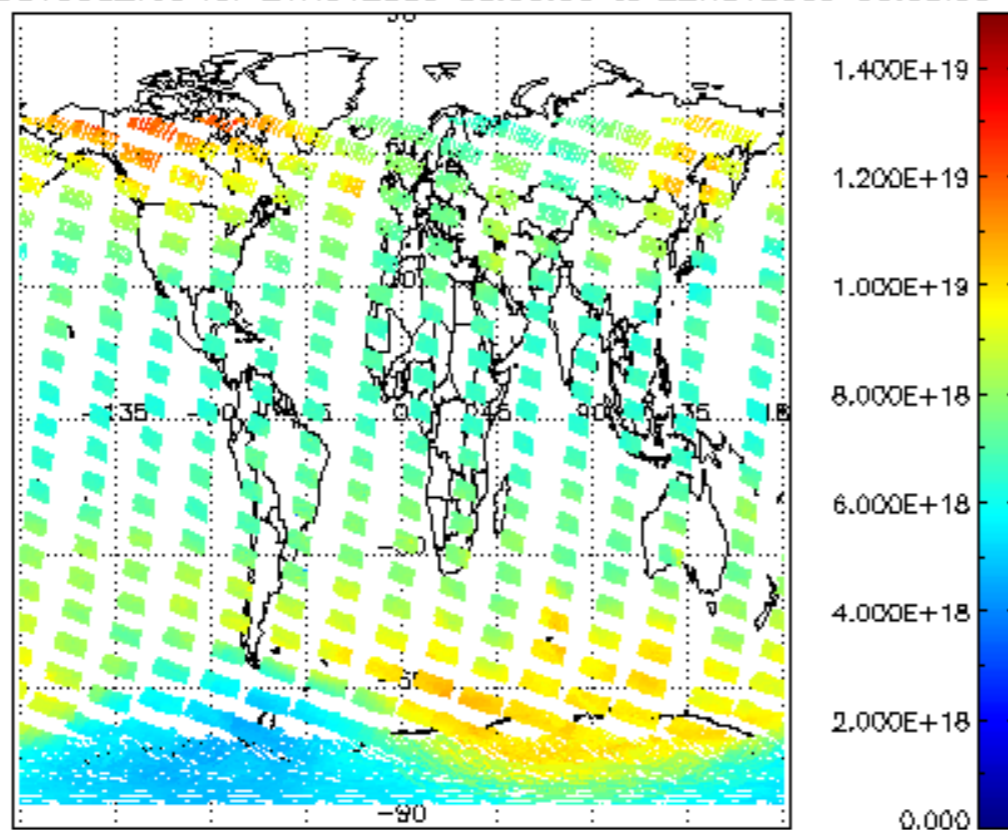


cloud_flags for 21NOV2009 00:00:00 to 22NOV2009 00:00:00

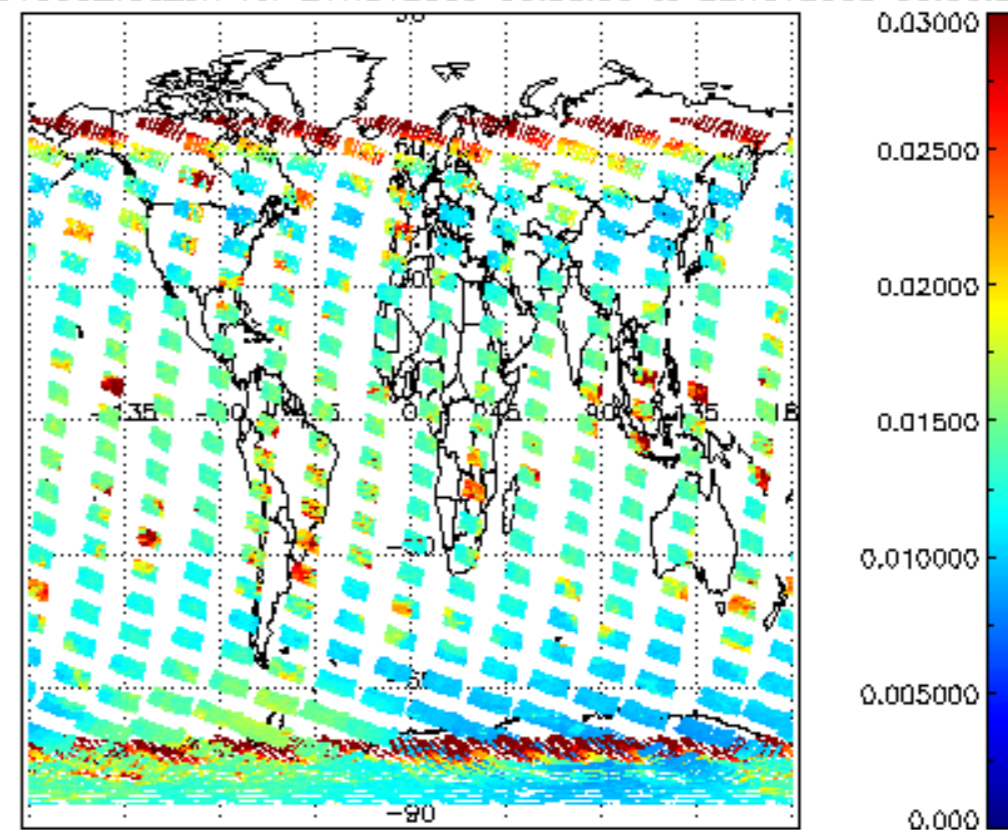




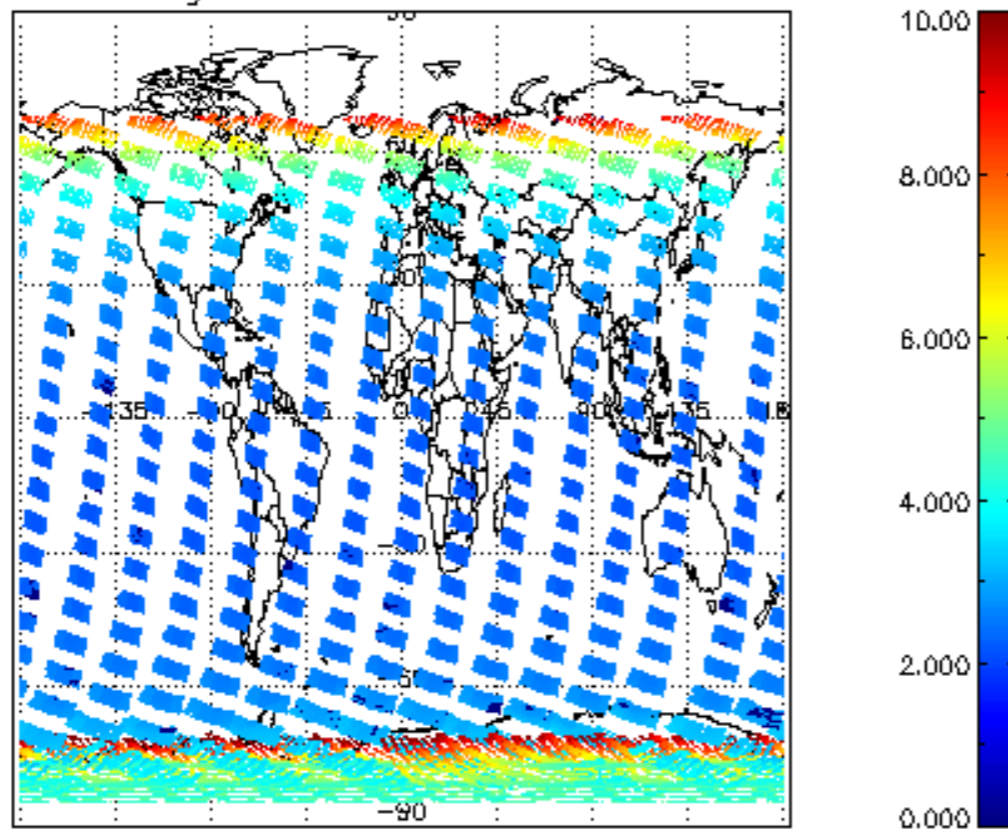
SCIOL2P_NADUV003_vcd for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



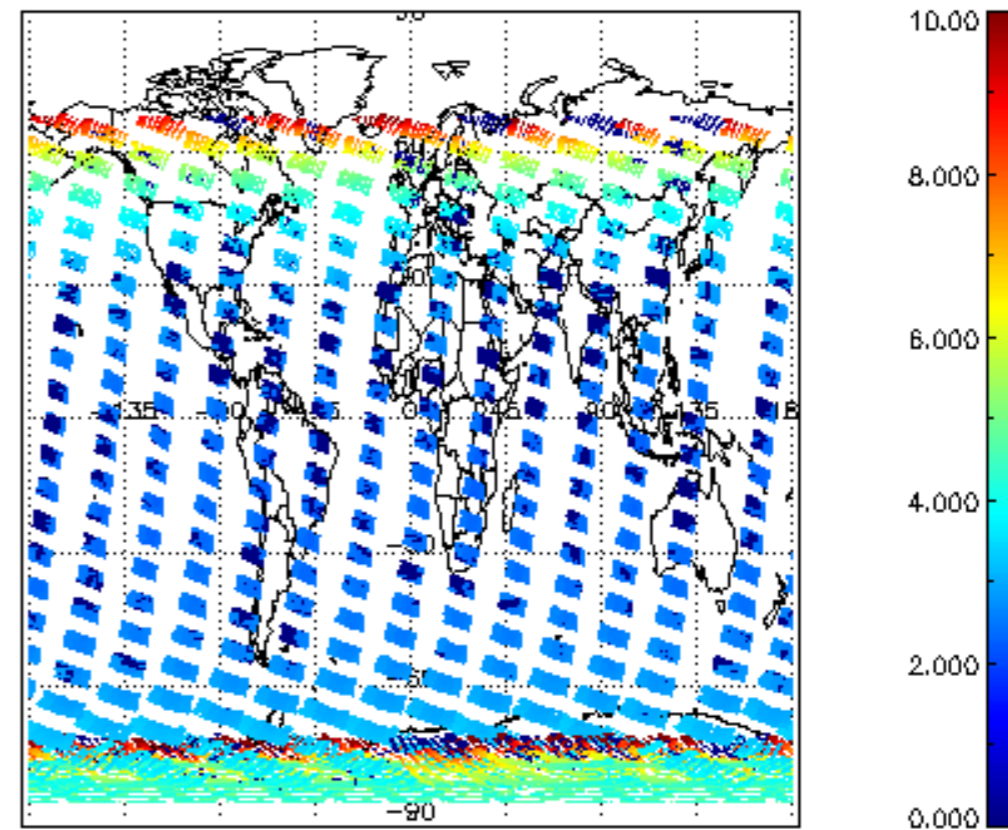
SCIOL2P_NADUV003_vcd_err for 21NOV2009 00:00:00 to 22NOV2009 00:00:00

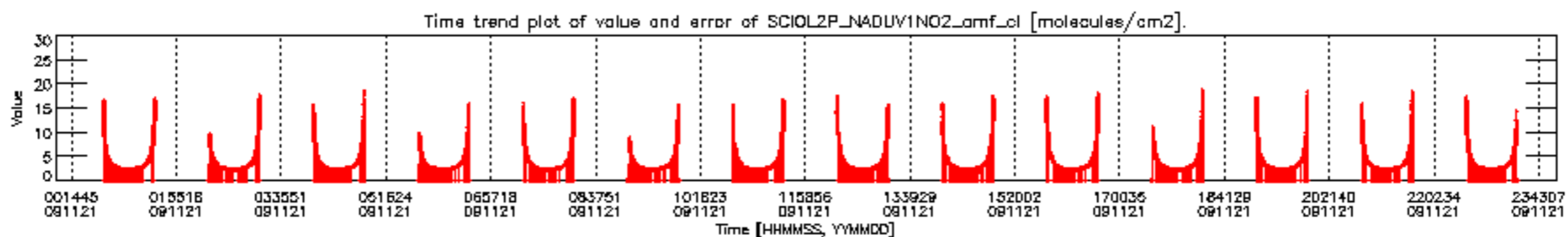
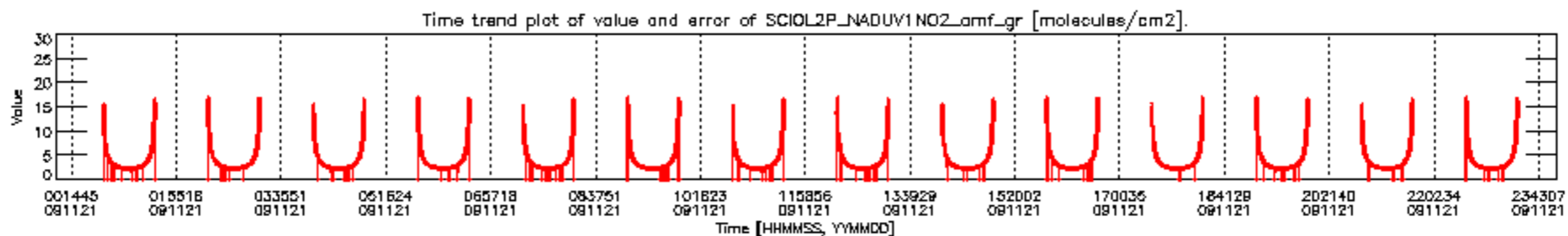
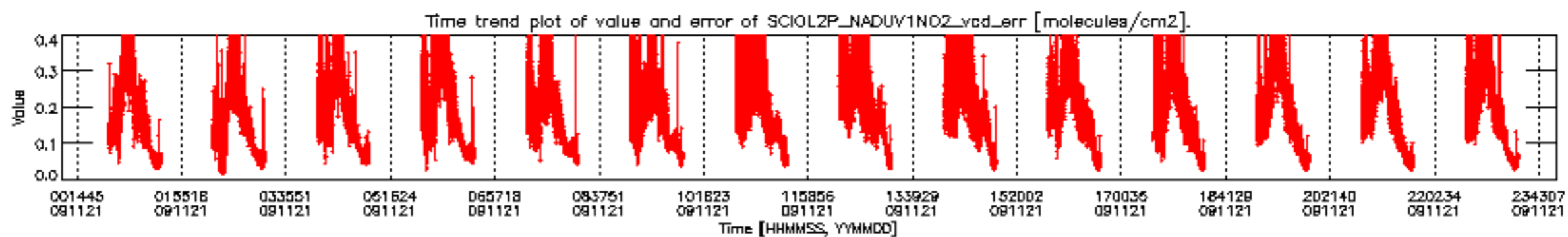
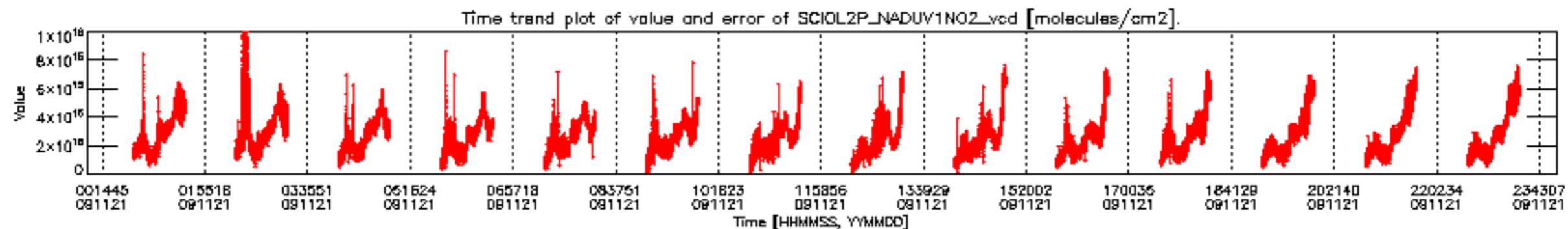


SCIOL2P_NADUV003_amf_gr for 21NOV2009 00:00:00 to 22NOV2009 00:00:00

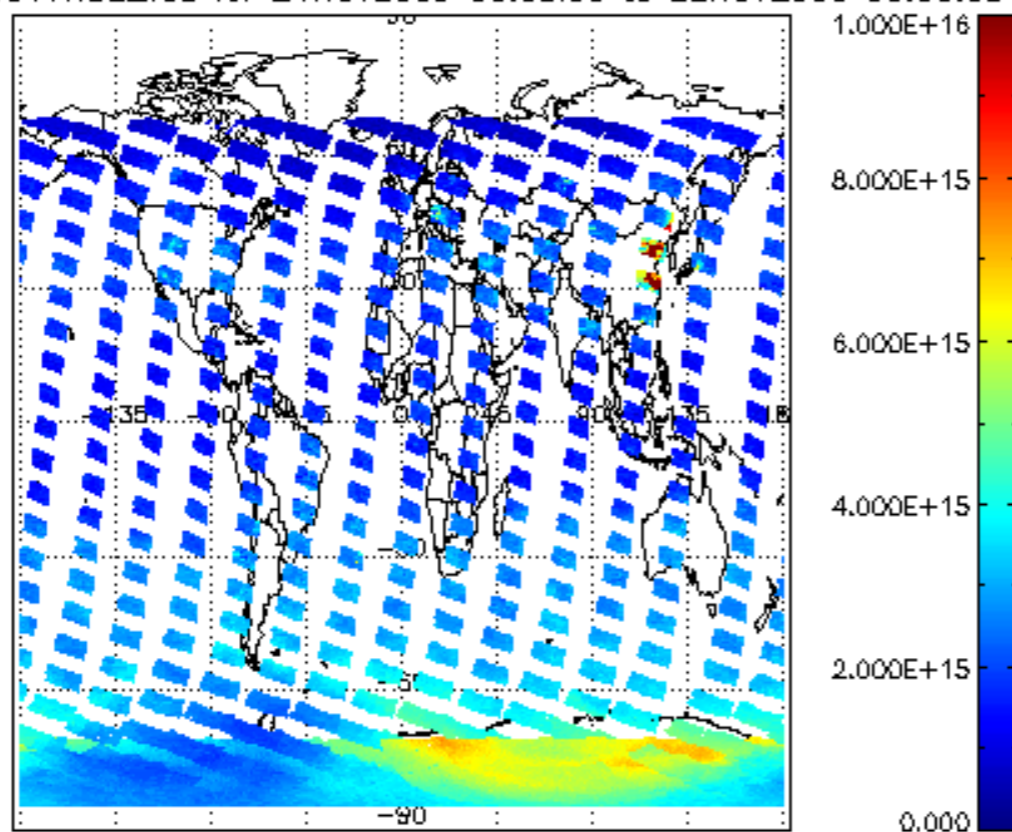


SCIOL2P_NADUV003_amf_cl for 21NOV2009 00:00:00 to 22NOV2009 00:00:00

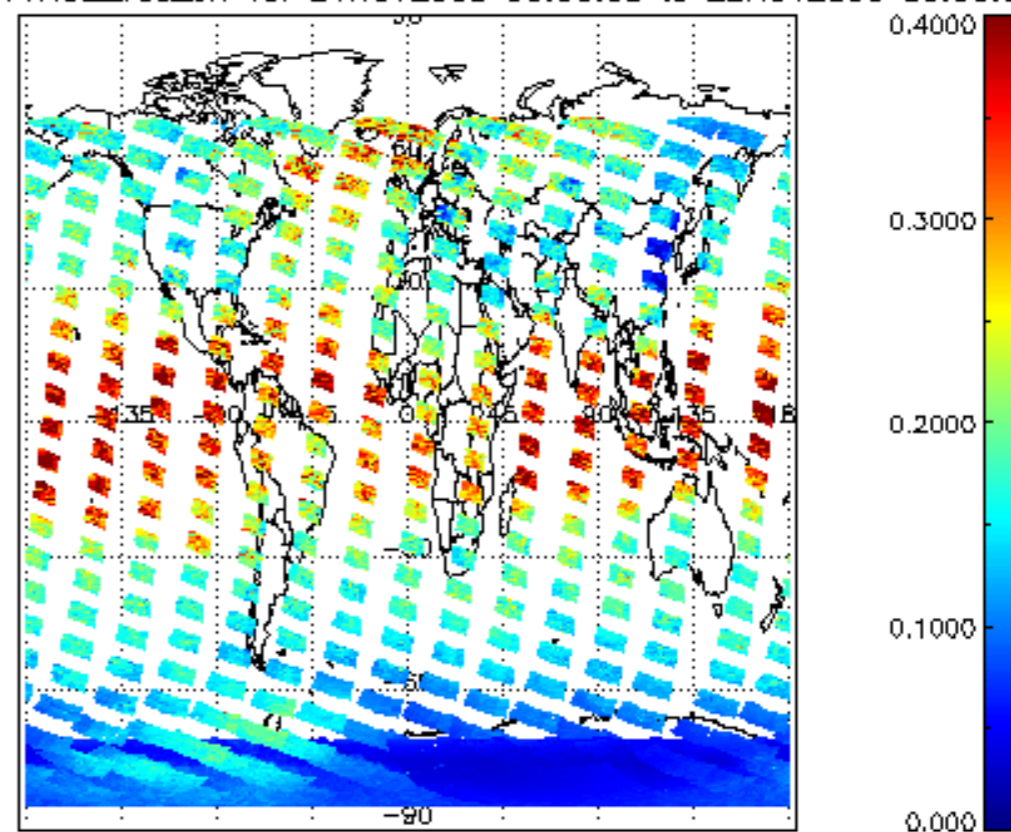




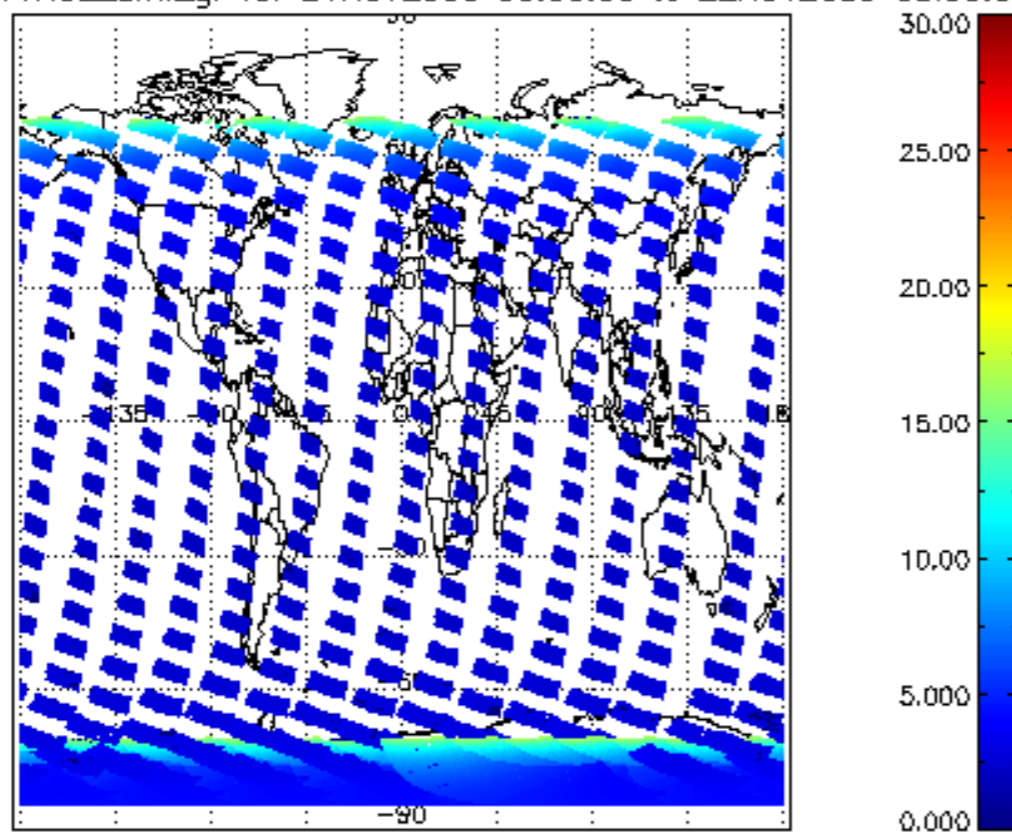
SCIOL2P_NADUV1NO2_vcd for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



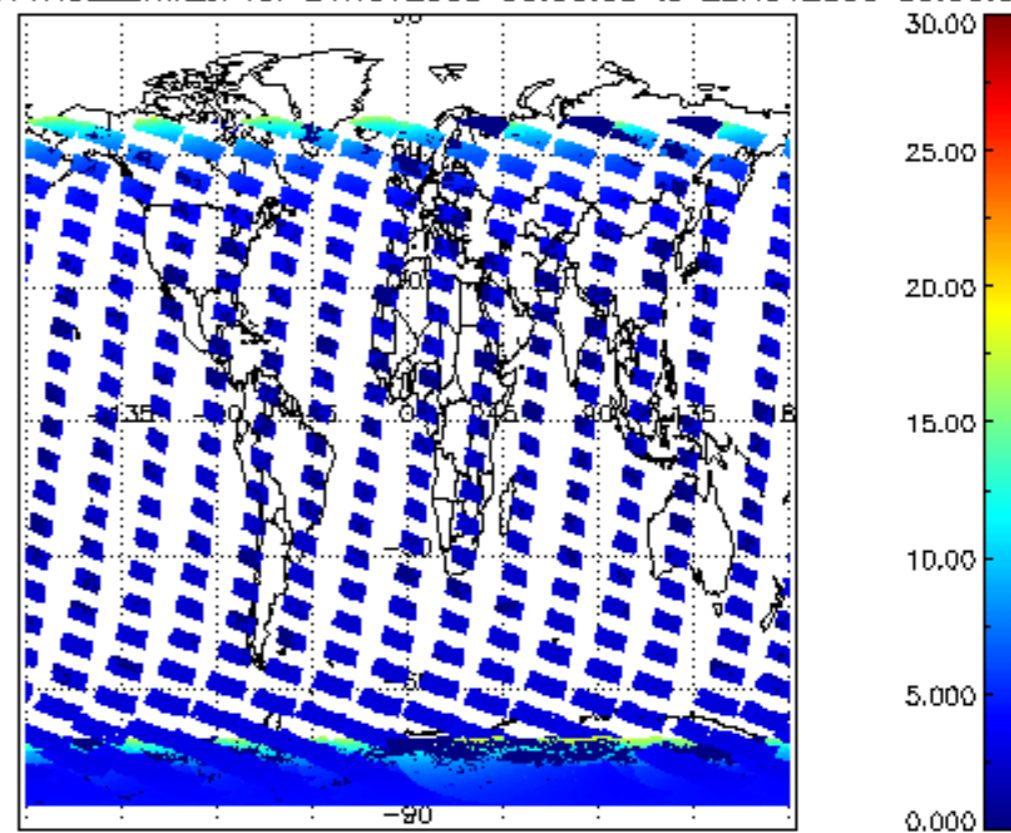
SCIOL2P_NADUV1NO2_vcd_err for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



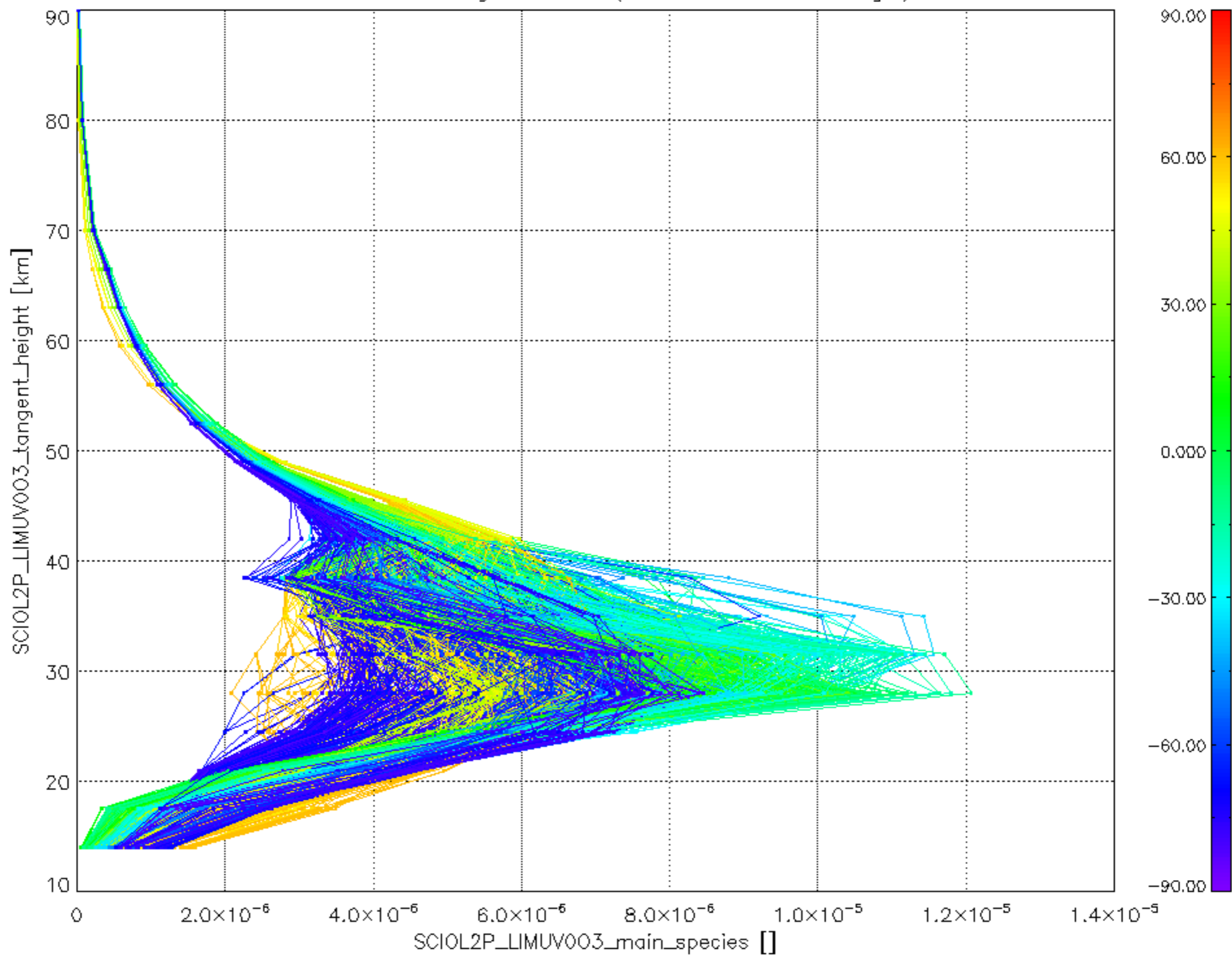
SCIOL2P_NADUV1NO2_amf_gr for 21NOV2009 00:00:00 to 22NOV2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 21NOV2009 00:00:00 to 22NOV2009 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).

