

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	1.4 (06-11-2007)
Time of report generation	14JUN2008 10:42:40
Data source version	SCIA-OL/3.01-R
Processing scope for products	28OCT2002 00:00:00 to 29OCT2002 00:00:00
Start time of first product within scope	27OCT2002 23:14:37
Stop time of last product within scope	28OCT2002 23:38:31
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.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PRDPA20021027_231437_000033242010_00388_03448_1083.N1	27OCT2002 23:14:37	28OCT2002 00:10:02	0	GOOD
1	SCI_OL__2PRDPA20021028_005514_000033242010_00389_03449_1058.N1	28OCT2002 00:55:14	28OCT2002 01:50:38	0	GOOD
2	SCI_OL__2PRDPA20021028_023550_000033242010_00390_03450_1341.N1	28OCT2002 02:35:50	28OCT2002 03:31:14	0	GOOD
3	SCI_OL__2PRDPA20021028_041626_000033242010_00391_03451_1229.N1	28OCT2002 04:16:26	28OCT2002 05:11:51	0	GOOD
4	SCI_OL__2PRDPA20021028_055703_000033242010_00392_03452_1407.N1	28OCT2002 05:57:03	28OCT2002 06:52:27	0	GOOD
5	SCI_OL__2PRDPA20021028_073739_000033242010_00393_03453_1298.N1	28OCT2002 07:37:39	28OCT2002 08:33:03	0	GOOD
6	SCI_OL__2PRDPA20021028_091815_000033242010_00394_03454_1325.N1	28OCT2002 09:18:15	28OCT2002 10:13:40	0	GOOD
7	SCI_OL__2PRDPA20021028_105852_000033242010_00395_03455_1102.N1	28OCT2002 10:58:52	28OCT2002 11:54:16	0	GOOD
8	SCI_OL__2PRDPA20021028_123928_000033242010_00396_03456_1209.N1	28OCT2002 12:39:28	28OCT2002 13:34:52	0	GOOD
9	SCI_OL__2PRDPA20021028_142004_000033242010_00397_03457_1299.N1	28OCT2002 14:20:04	28OCT2002 15:15:29	0	GOOD
10	SCI_OL__2PRDPA20021028_160041_000033242010_00398_03458_1066.N1	28OCT2002 16:00:41	28OCT2002 16:56:05	0	GOOD
11	SCI_OL__2PRDPA20021028_174117_000033242010_00399_03459_1359.N1	28OCT2002 17:41:17	28OCT2002 18:36:42	0	GOOD
12	SCI_OL__2PRDPA20021028_192121_000033662010_00400_03460_1142.N1	28OCT2002 19:21:21	28OCT2002 20:17:28	0	GOOD
13	SCI_OL__2PRDPA20021028_210148_000033862010_00401_03461_1295.N1	28OCT2002 21:01:48	28OCT2002 21:58:14	0	GOOD
14	SCI_OL__2PRDPA20021028_224306_000033242010_00402_03462_1258.N1	28OCT2002 22:43:06	28OCT2002 23:38:31	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: 110660

Total number of cloud data DSRs with good quality flag (=0): 110660 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	110660	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	110660	0.21525	0.25000	0.12500	1.0000	0.080356	s
SURFACE_PRES	110660	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	110660	0.43950	0.41387	0.0000	1.0000	0.28337	-

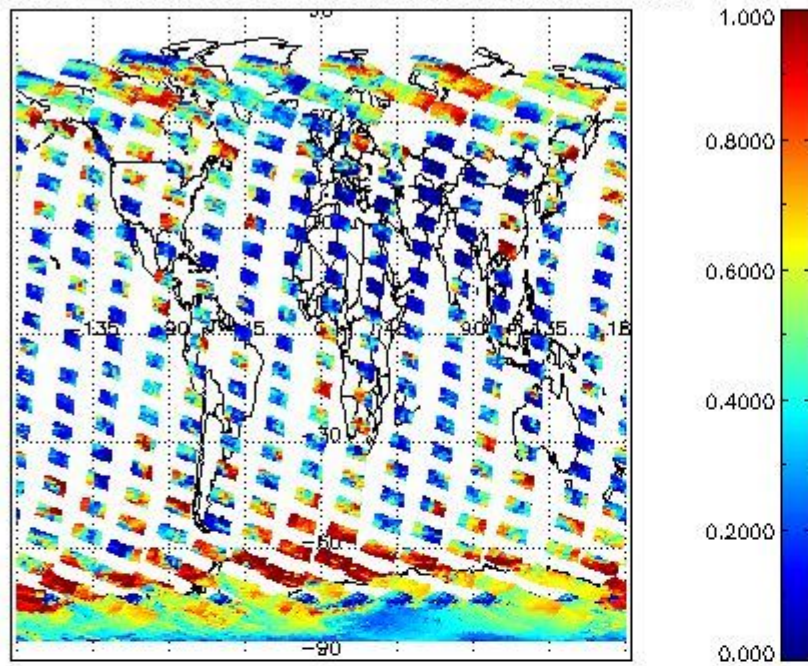
CL_FRAC_ERR	110660	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	110660	6.8881	8.0000	4.0000	32.000	2.5714	
PMD_READ_CL[0]	110660	0.37440	0.0000	0.0000	21.000	1.3582	-
PMD_READ_CL[1]	110660	0.38797	0.0000	0.0000	30.000	1.4740	-
CL_TOP_HEIGHT	100144	4.3606	2.9153	0.0000	17.000	4.0548	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	100144	47.215	32.289	0.0000	101.00	37.570	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	110660	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	110660	11000110	11000010	11000000	11100000	2507.3	flags
AERO_ABSO_IND	110660	0.42459	0.27904	-4.6365	11.613	1.0254	
AERO_IND_DIAG	110660	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	110660	01101000	11000000	00000000	11000000	24486.	flags

Time and geolocation plots:

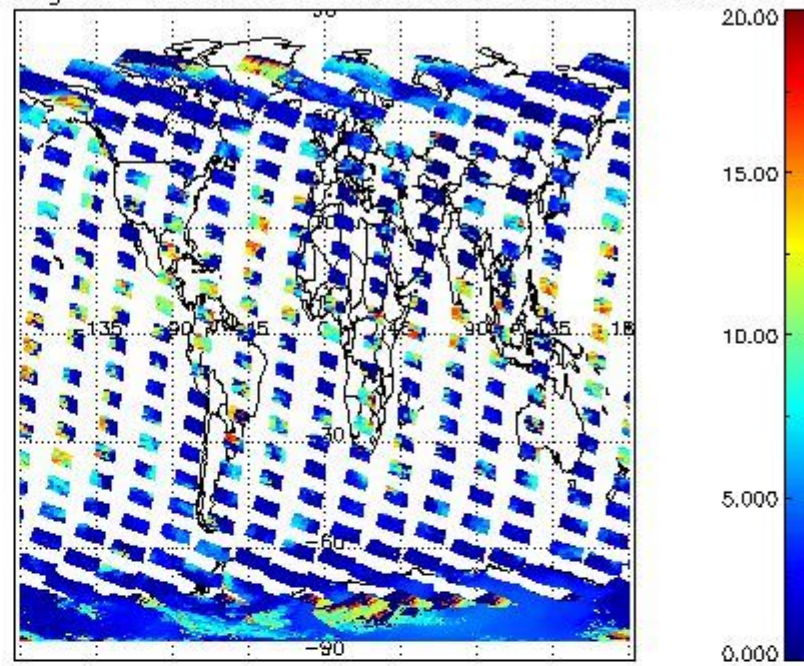
Plots are available for the following parameters:

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

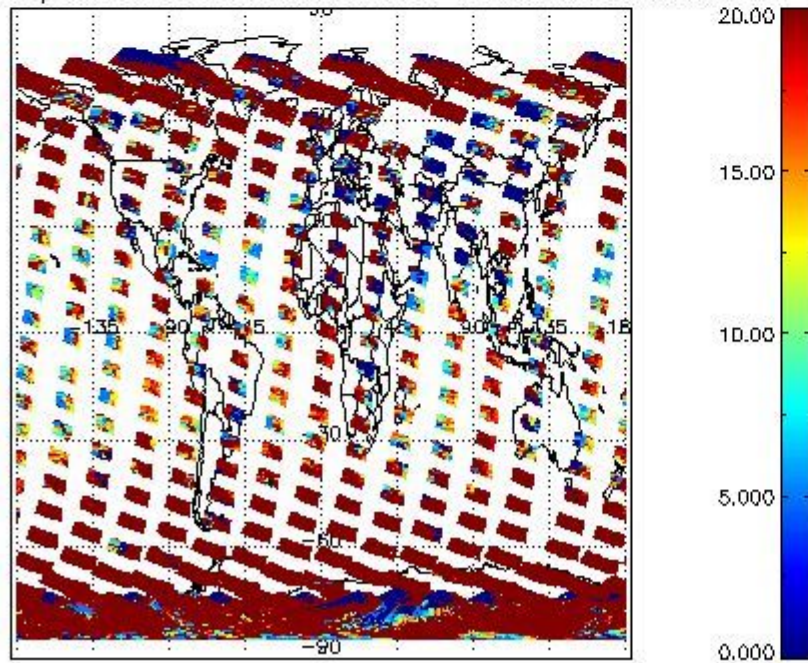
cLfrac for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



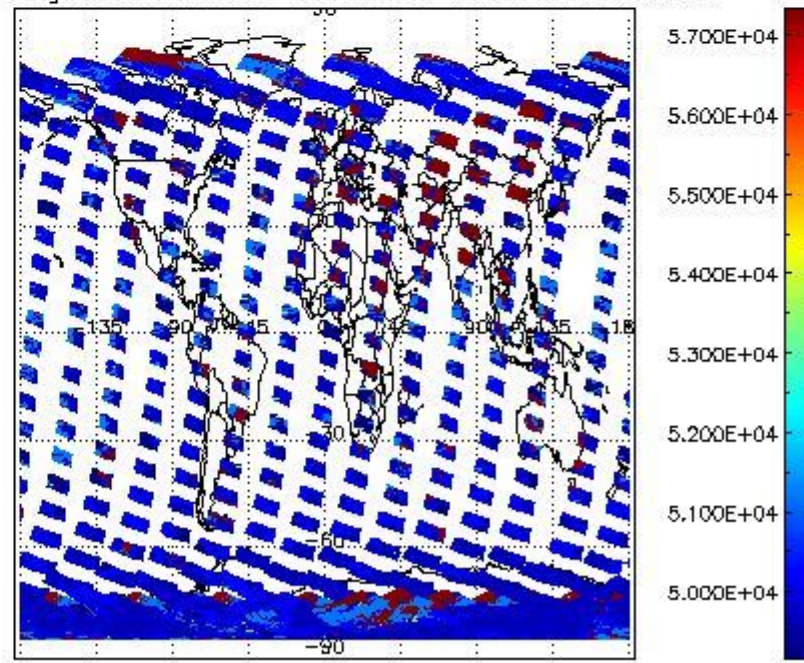
cL_top_height for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



cLopt_depth for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



cloud_flags for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



2.2.2 Nadir

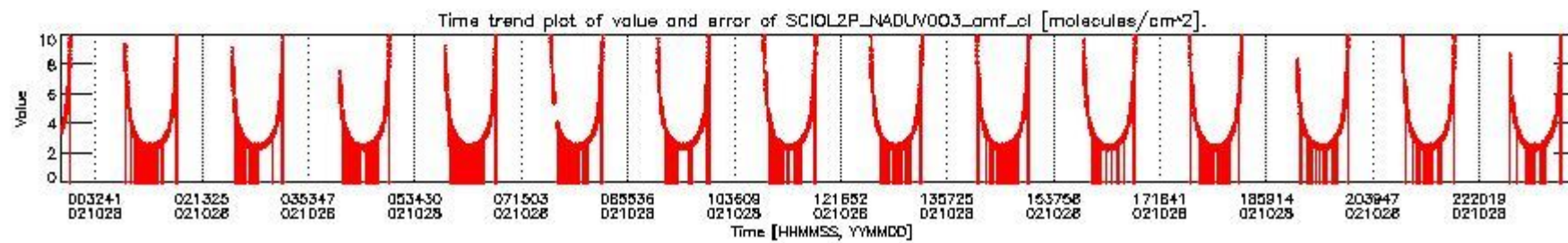
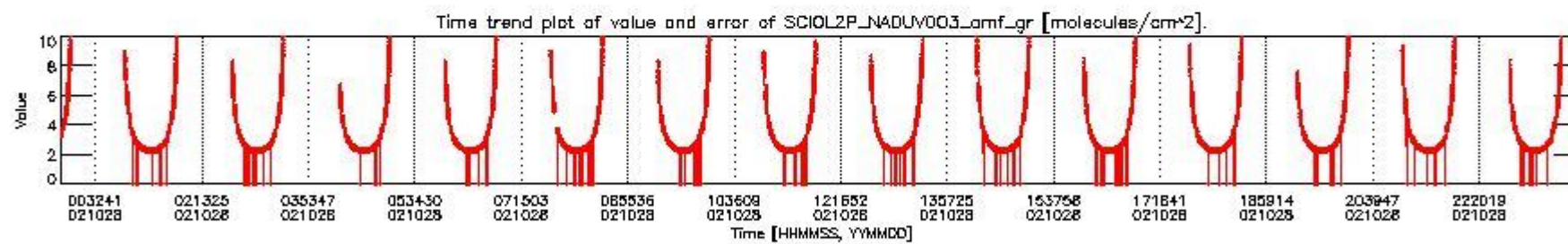
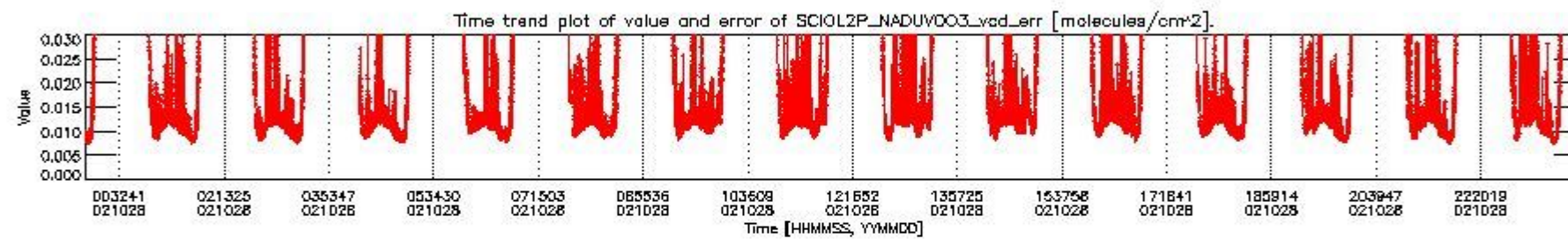
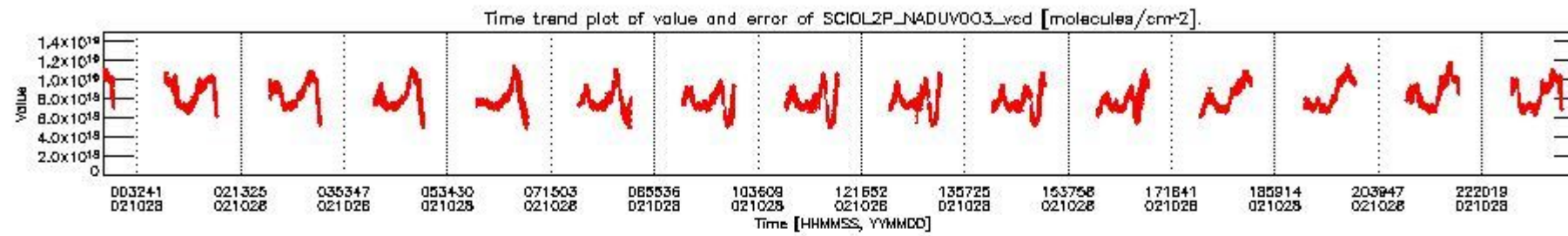
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

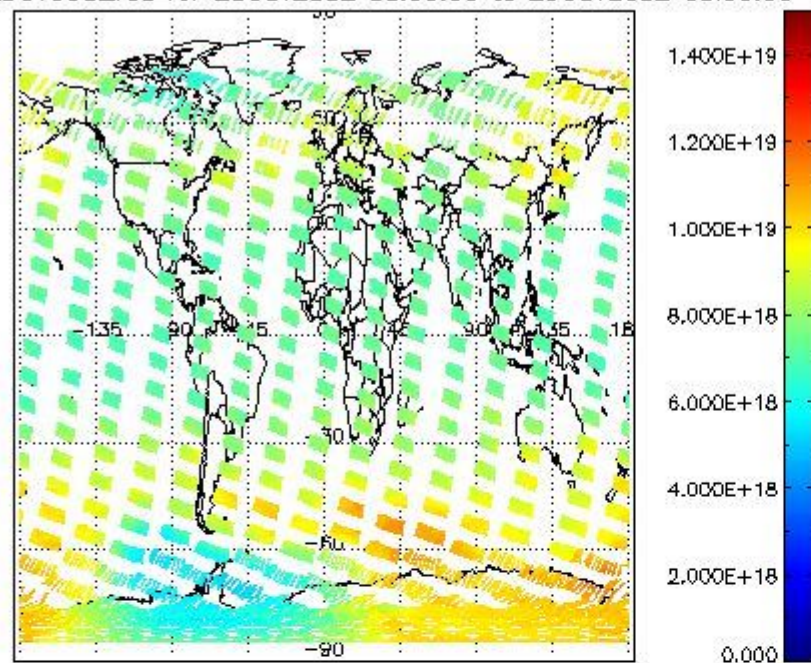
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

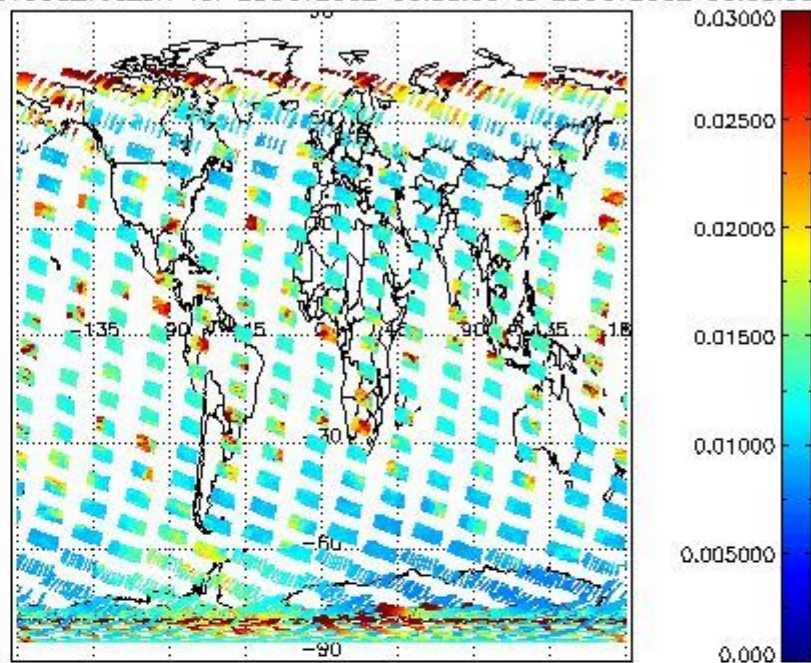
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



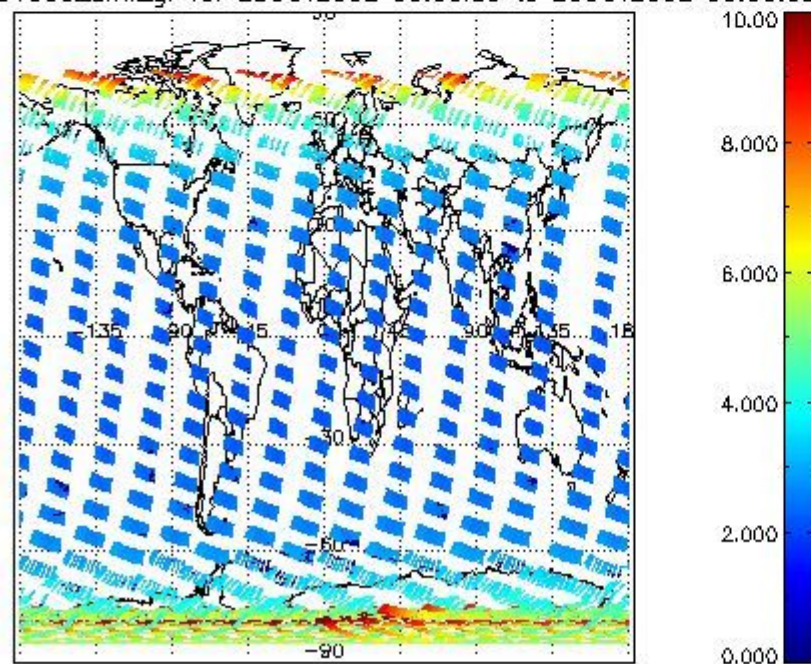
SCIOL2P_NADUV003_vcd for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



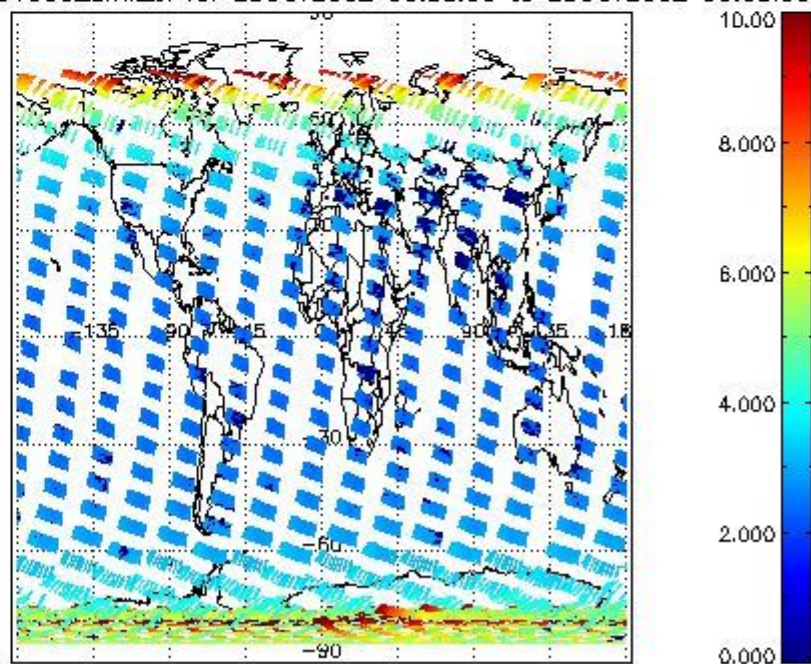
SCIOL2P_NADUV003_vcd_err for 28OCT2002 00:00:00 to 29OCT2002 00:00:00

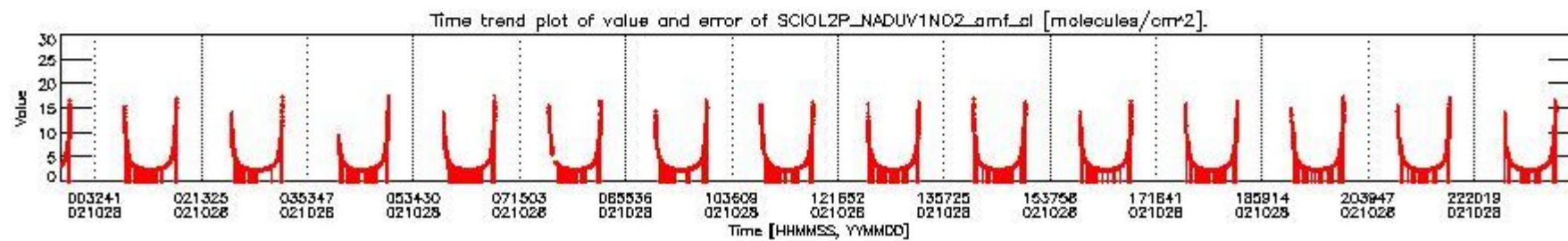
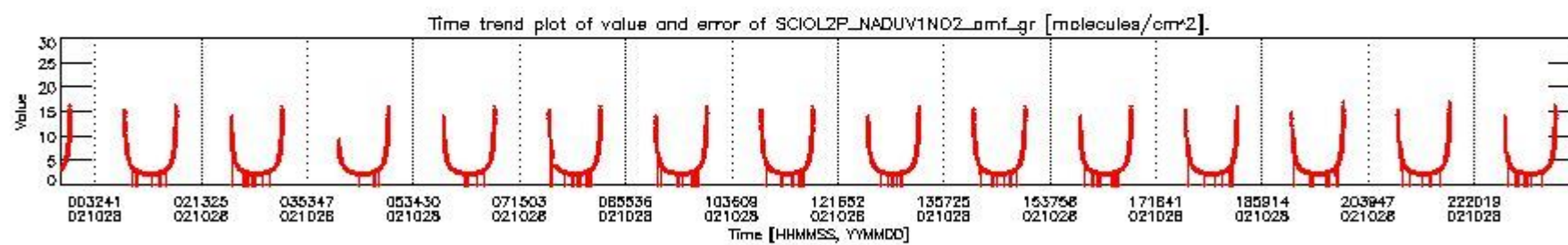
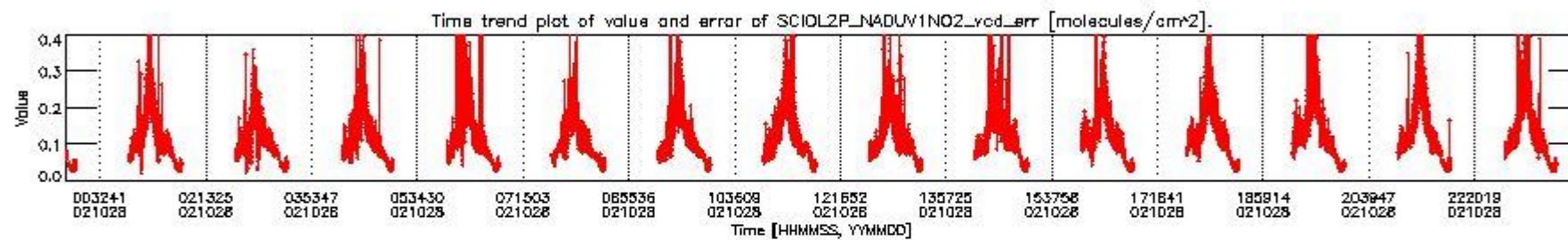
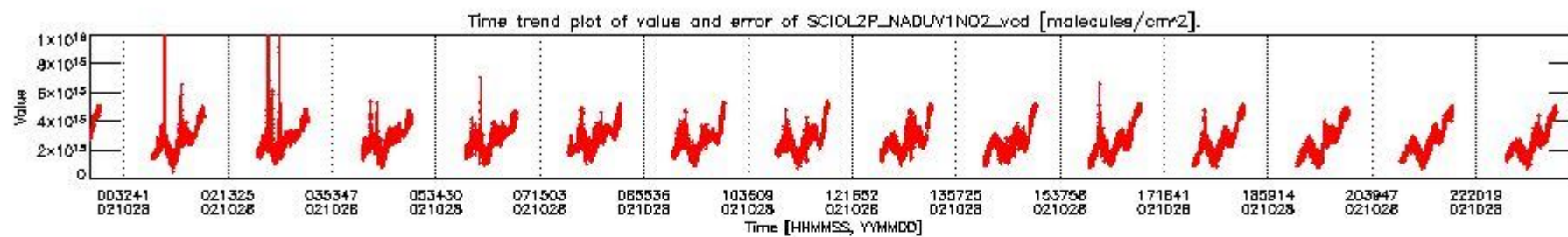


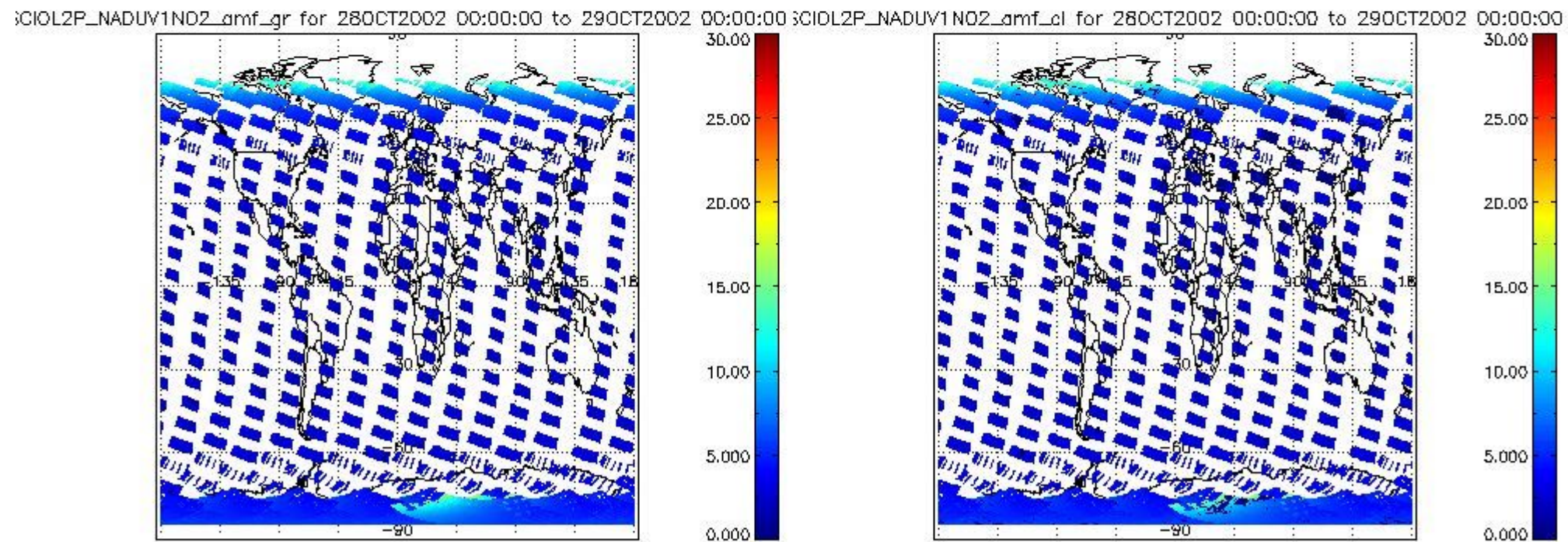
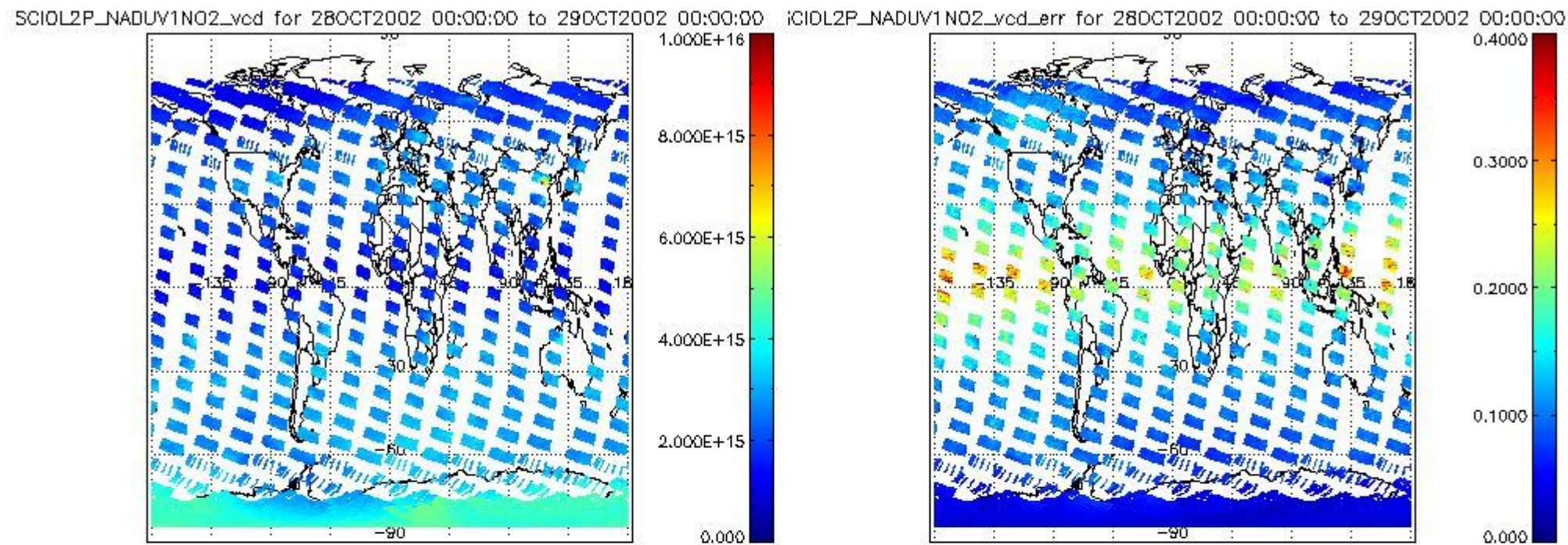
SCIOL2P_NADUV003_amf_gr for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



SCIOL2P_NADUV003_amf_sl for 28OCT2002 00:00:00 to 29OCT2002 00:00:00







2.2.3 Limb

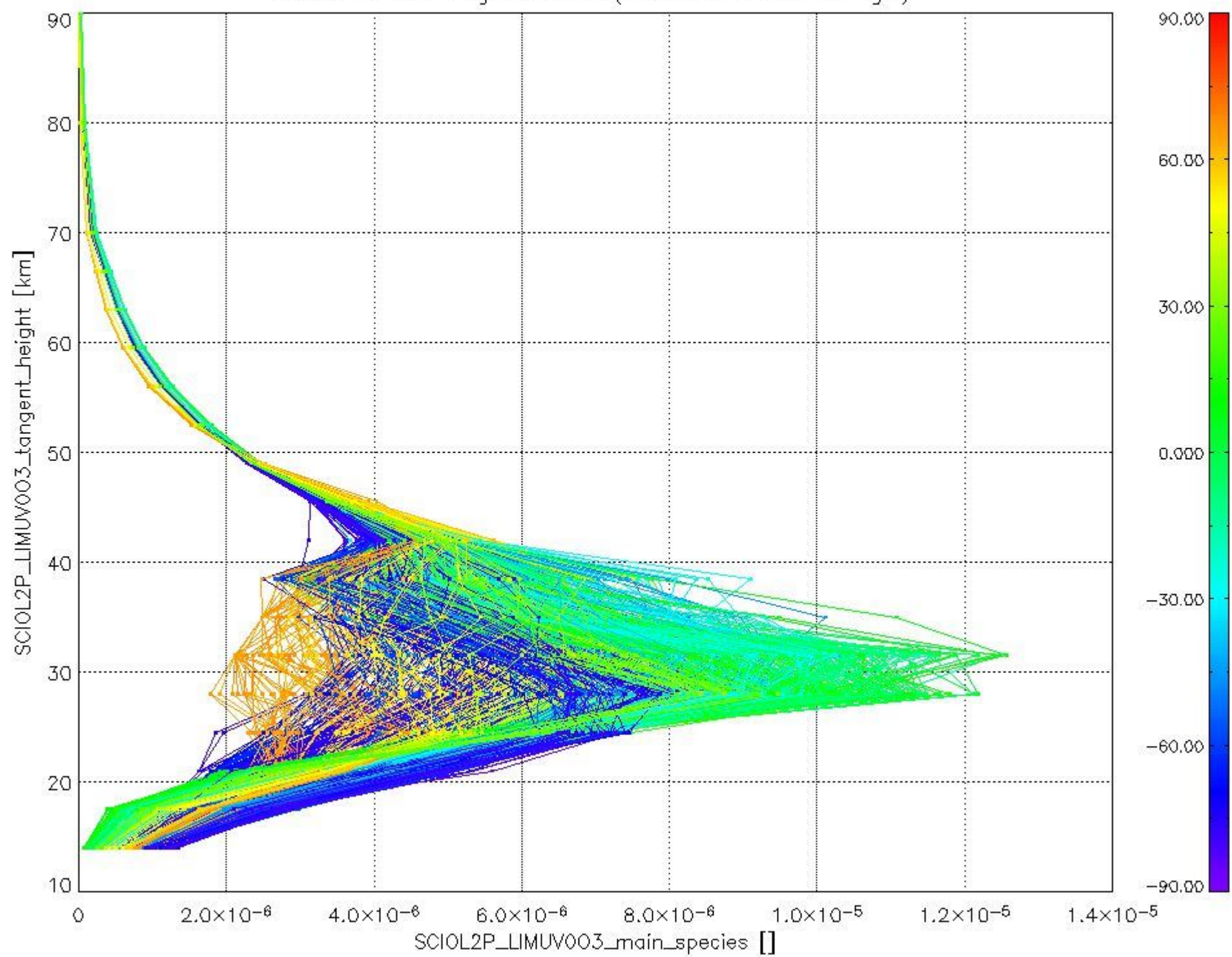
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

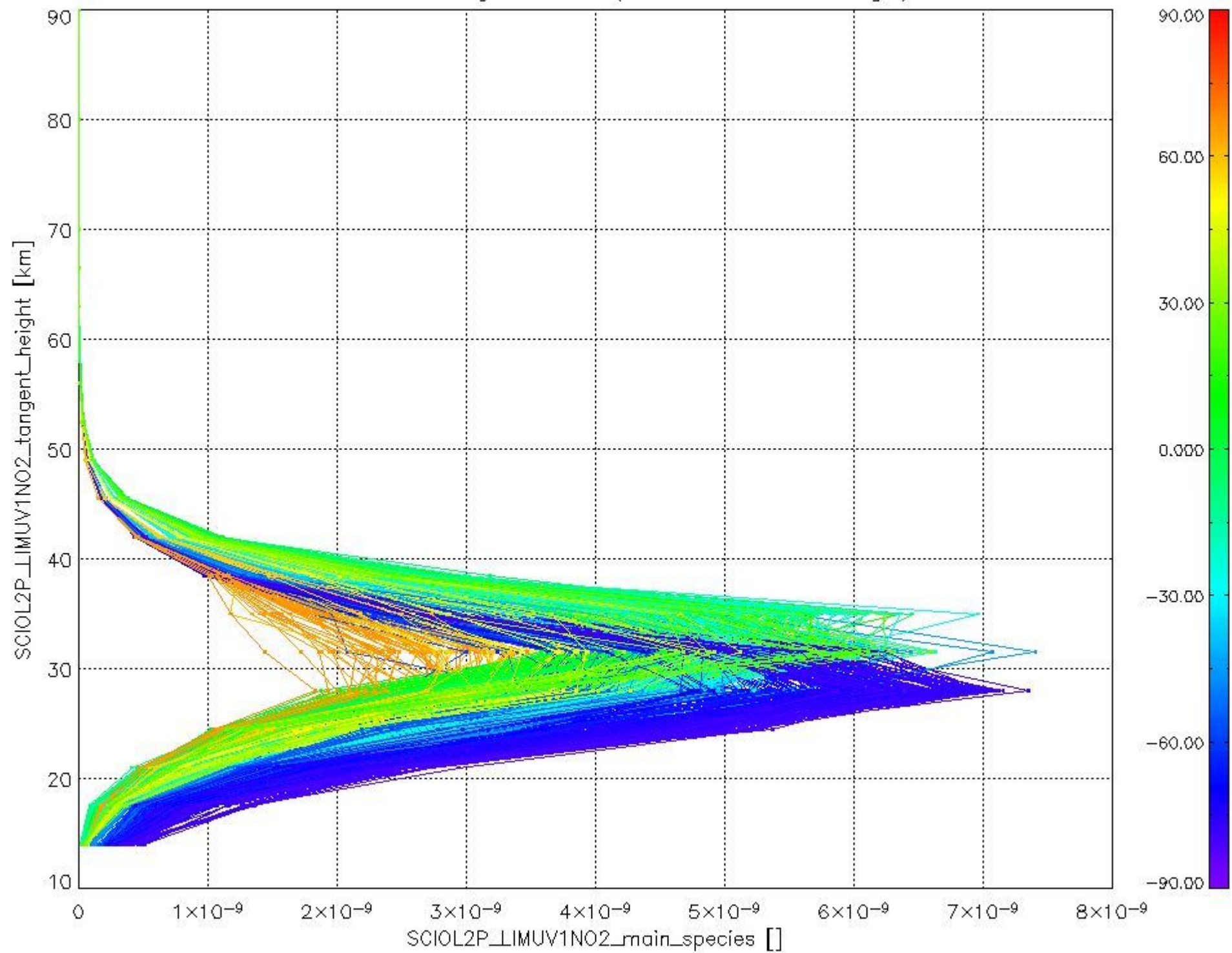
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

Plot of SCIOL2P_LIMUV003_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



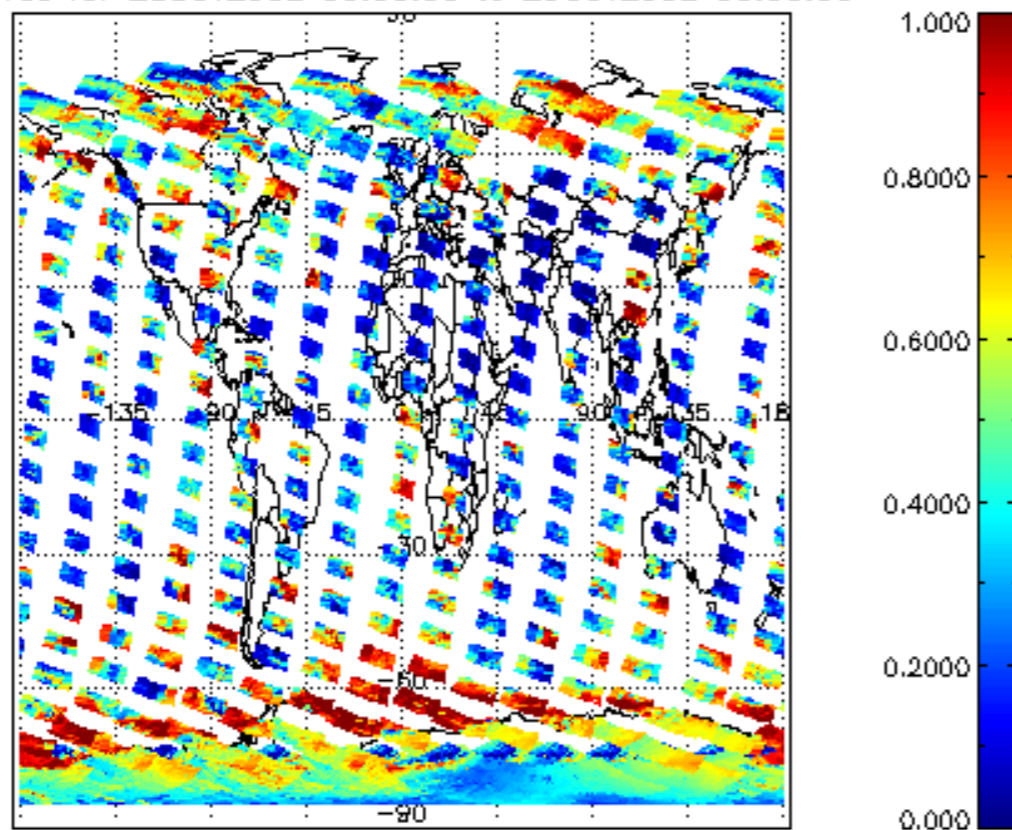
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



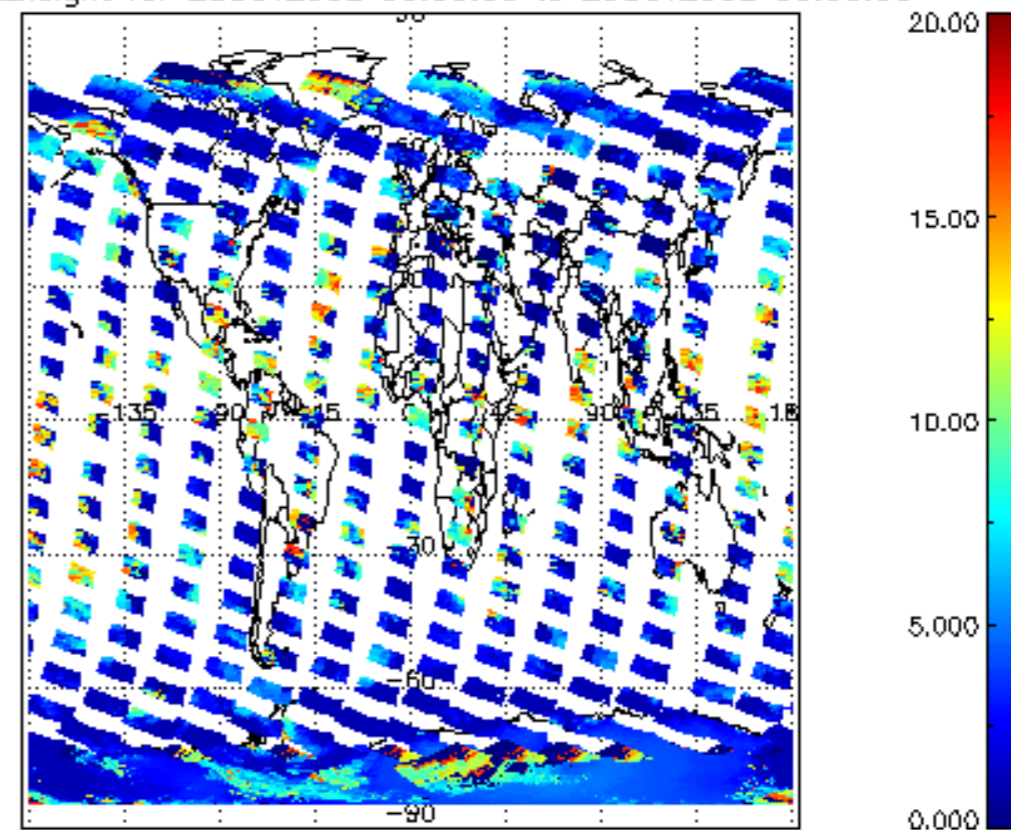
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

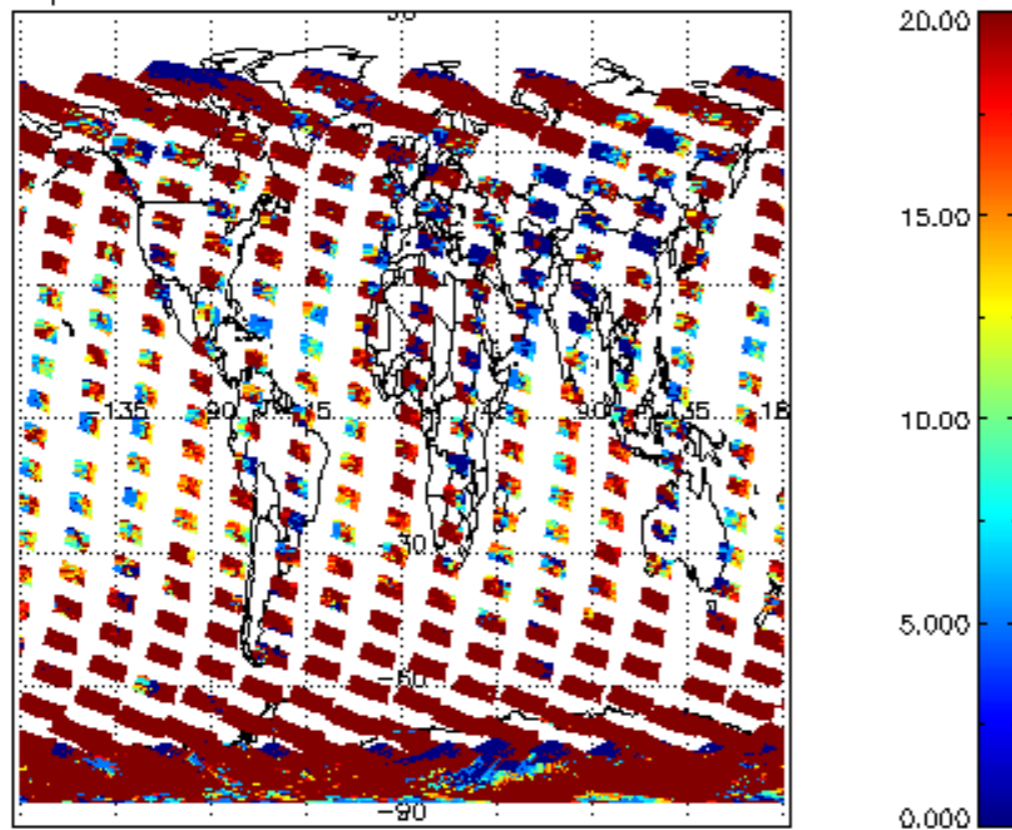
cl_frac for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



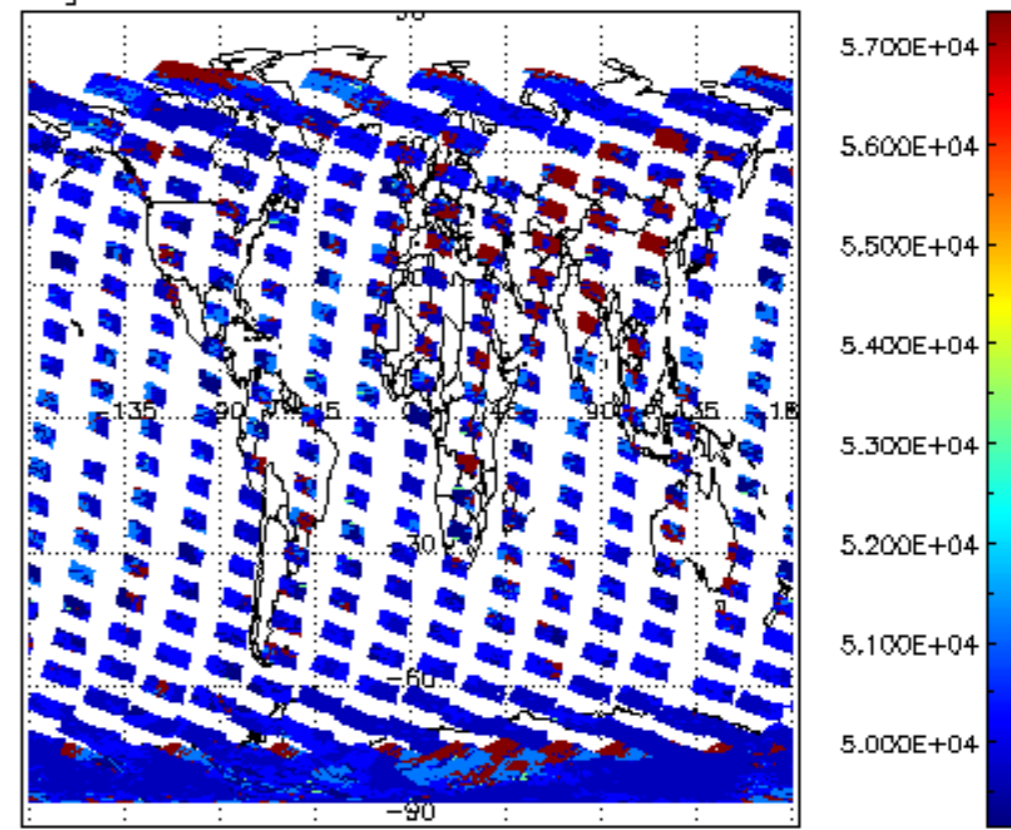
cl_top_height for 28OCT2002 00:00:00 to 29OCT2002 00:00:00

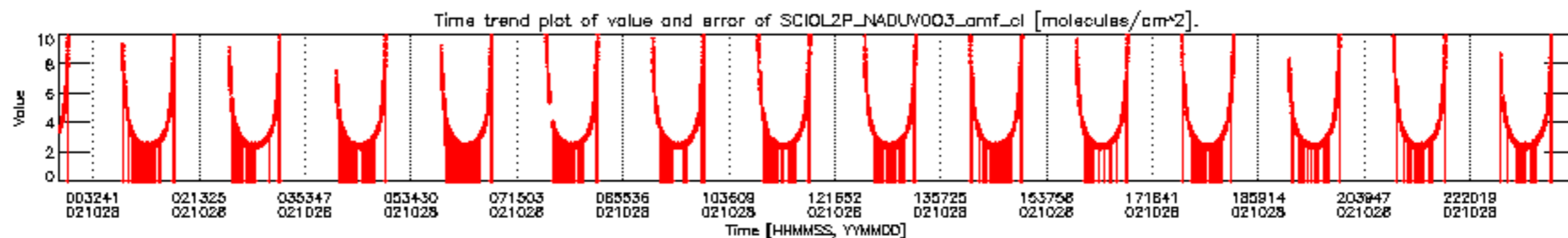
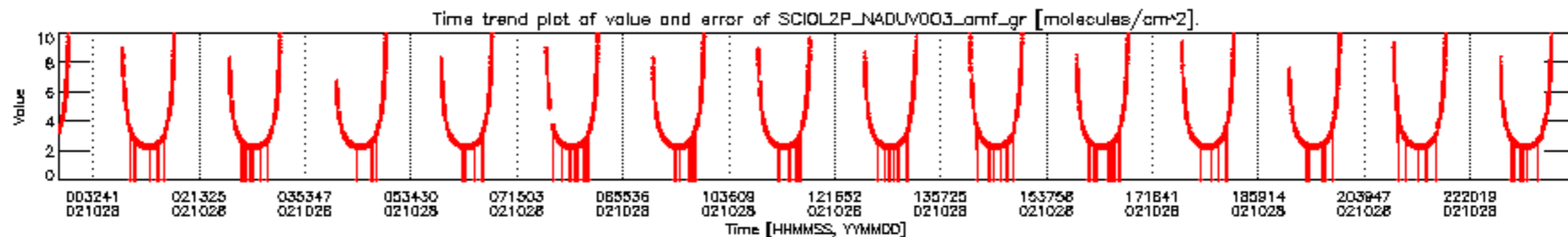
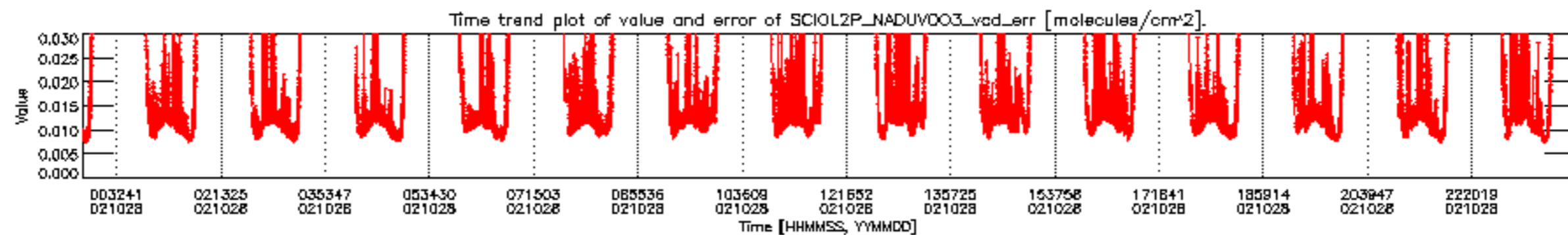
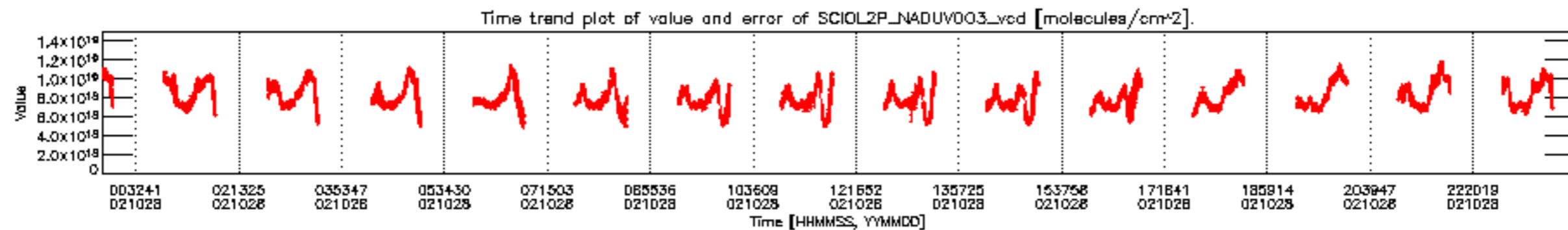


cl_opt_depth for 28OCT2002 00:00:00 to 29OCT2002 00:00:00

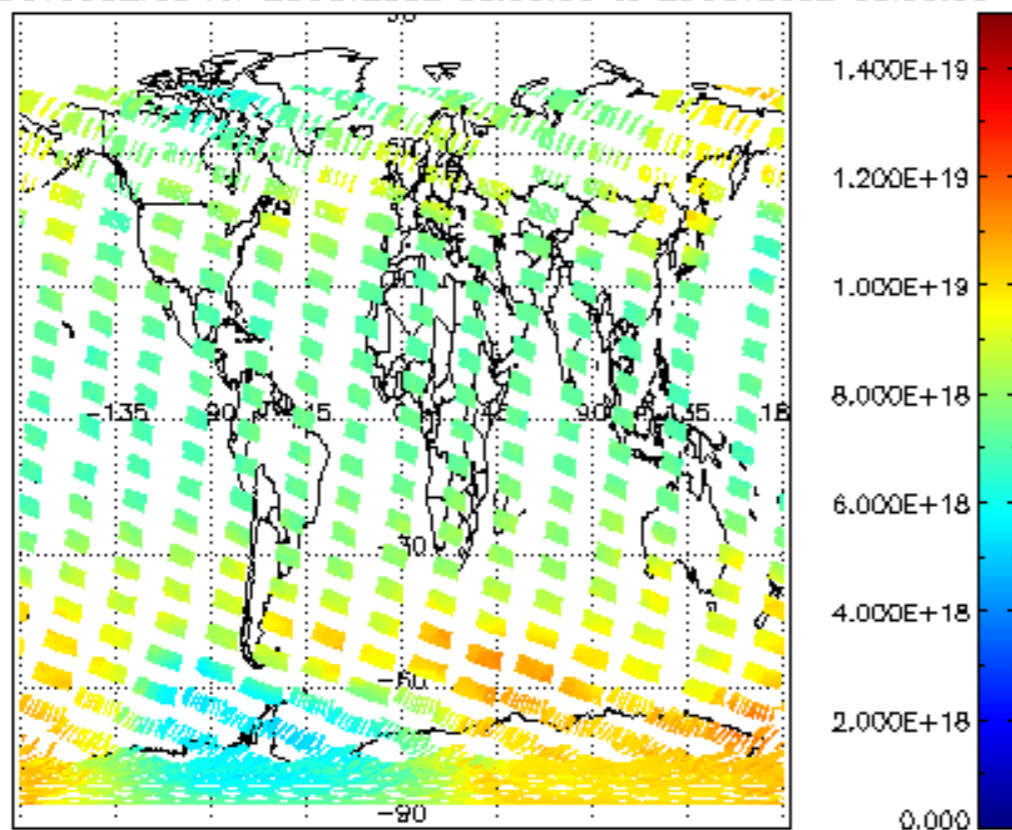


cloud_flags for 28OCT2002 00:00:00 to 29OCT2002 00:00:00

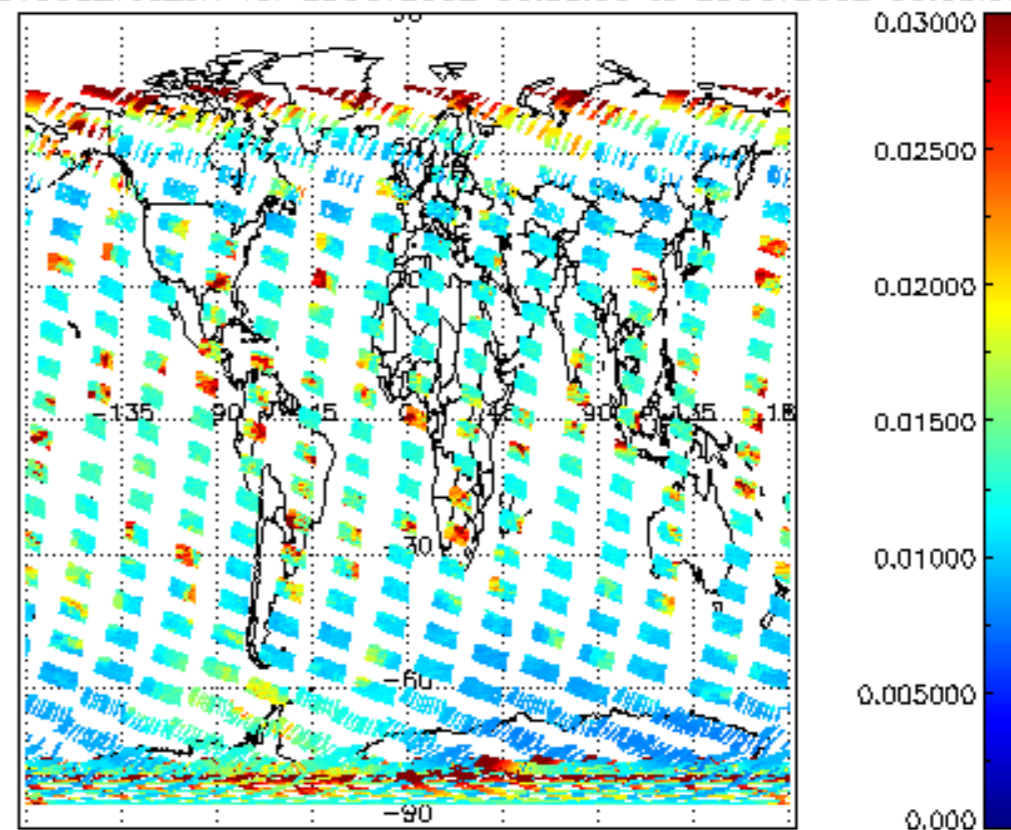




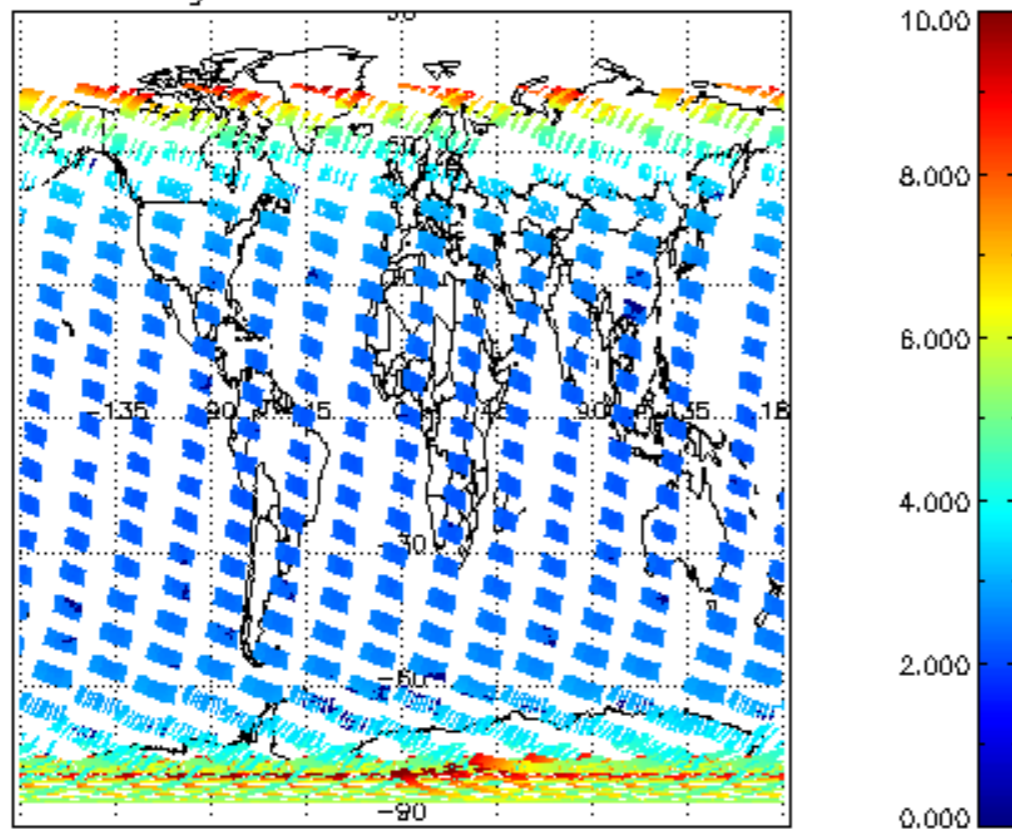
SCIOL2P_NADUV003_vcd for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



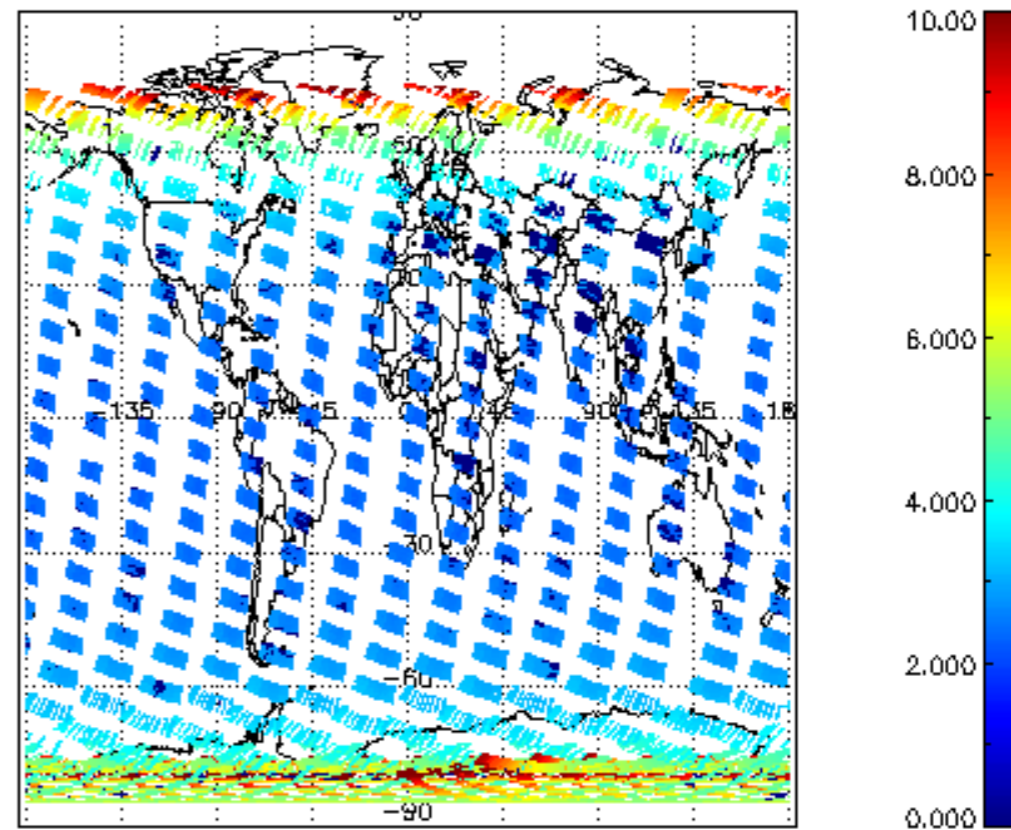
SCIOL2P_NADUV003_vcd_err for 28OCT2002 00:00:00 to 29OCT2002 00:00:00

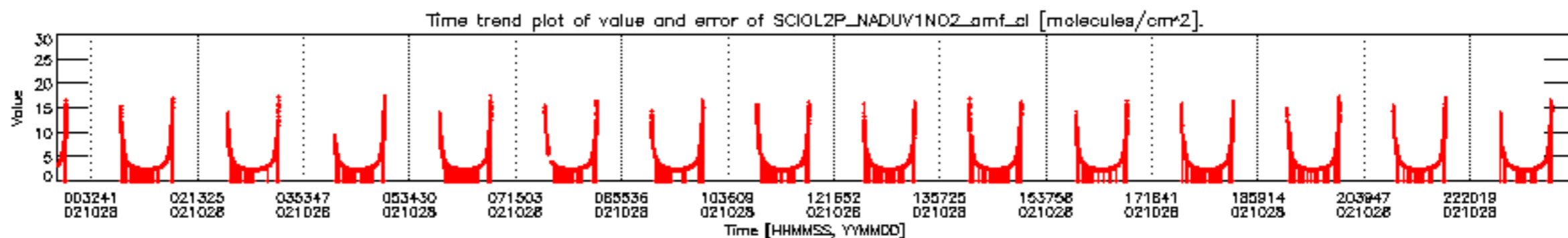
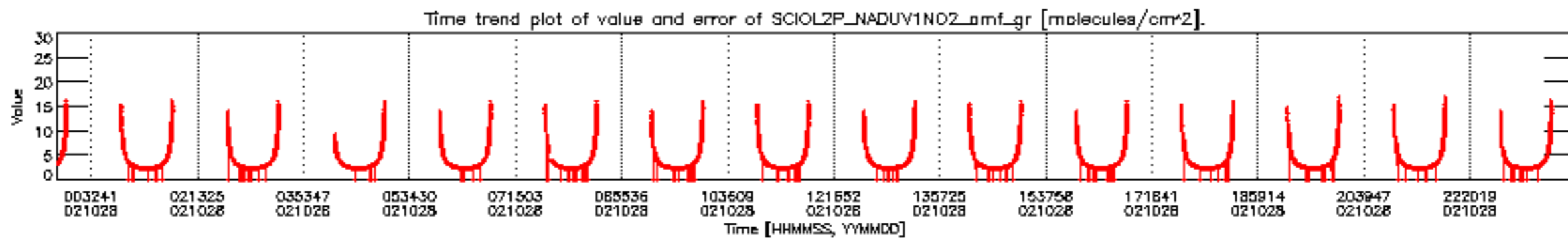
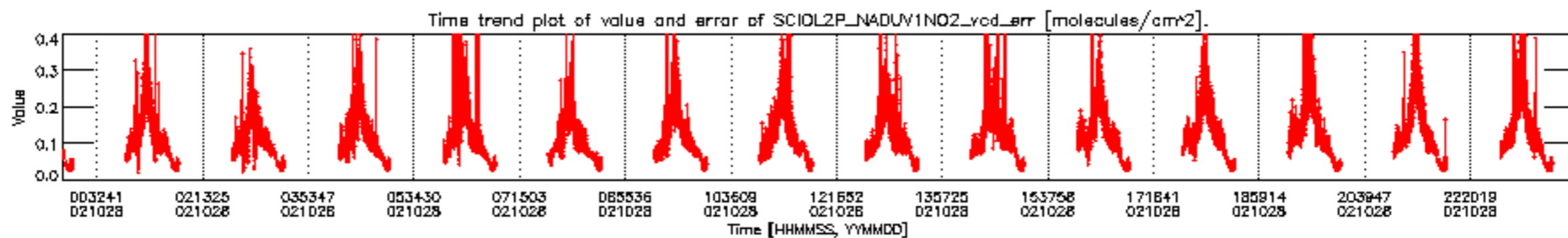
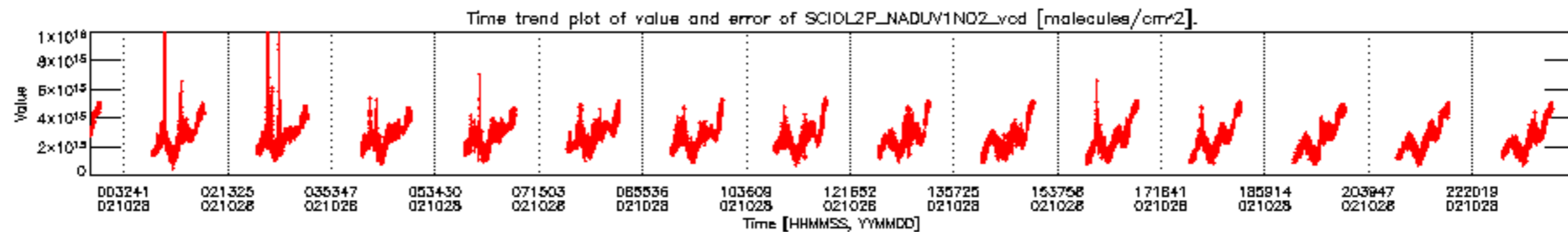


SCIOL2P_NADUV003_amf_gr for 28OCT2002 00:00:00 to 29OCT2002 00:00:00

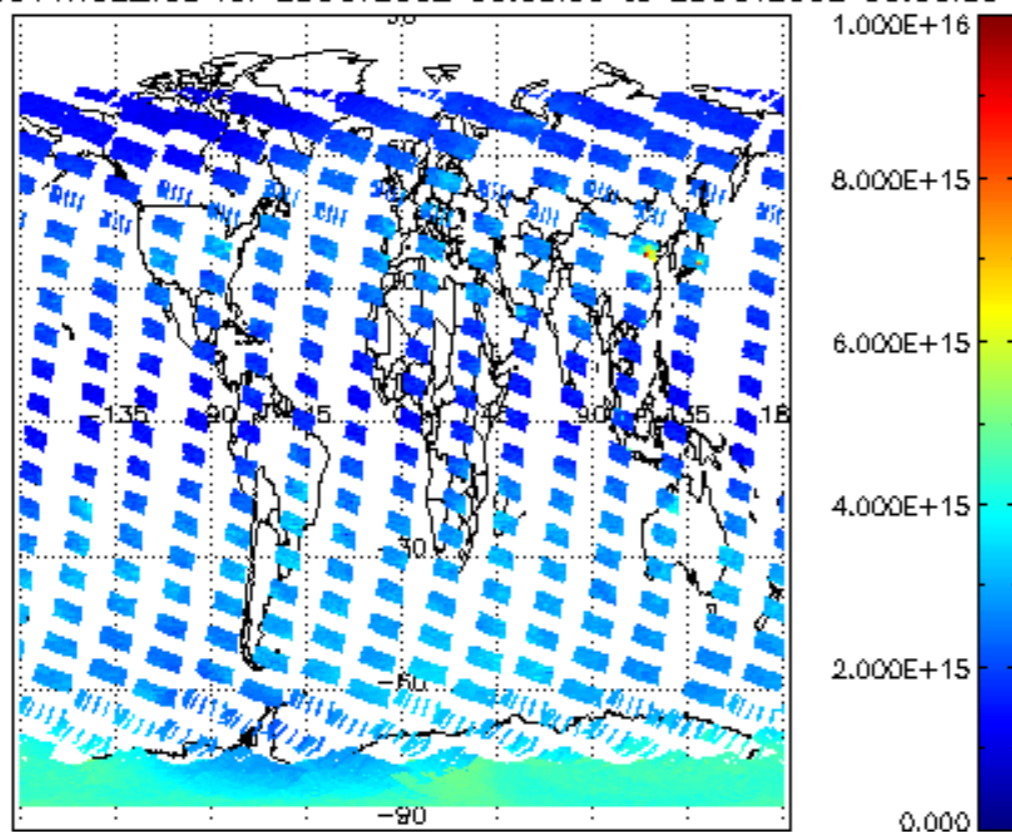


SCIOL2P_NADUV003_amf_sl for 28OCT2002 00:00:00 to 29OCT2002 00:00:00

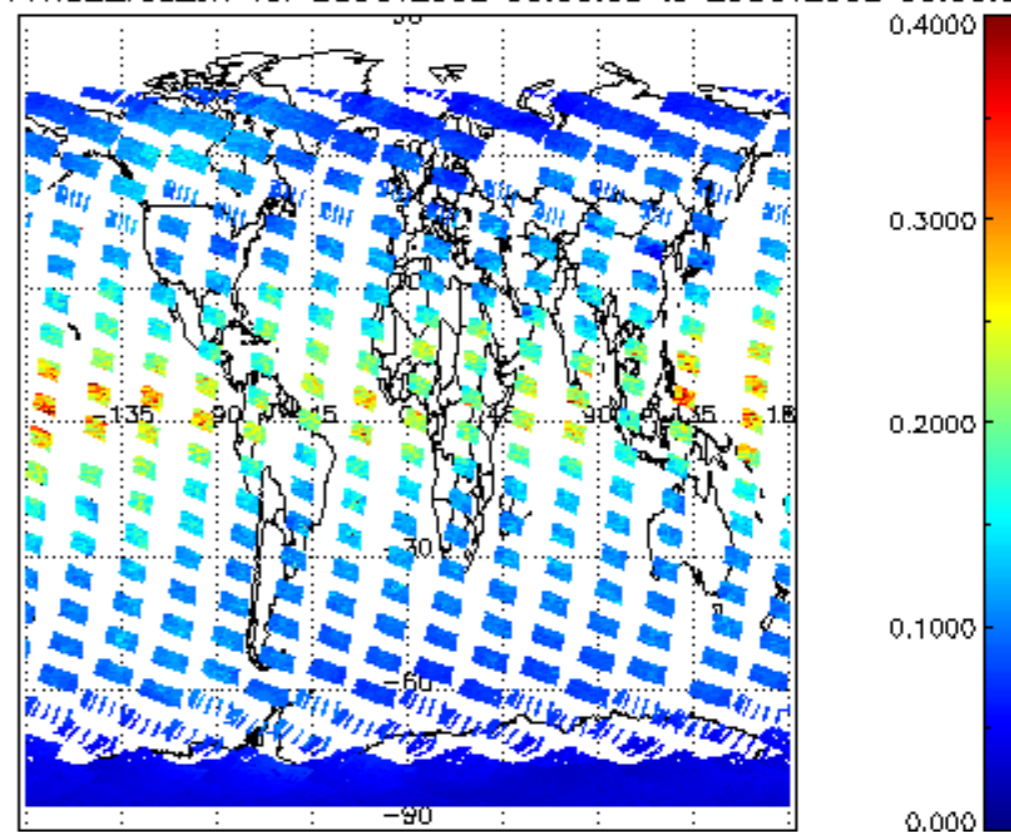




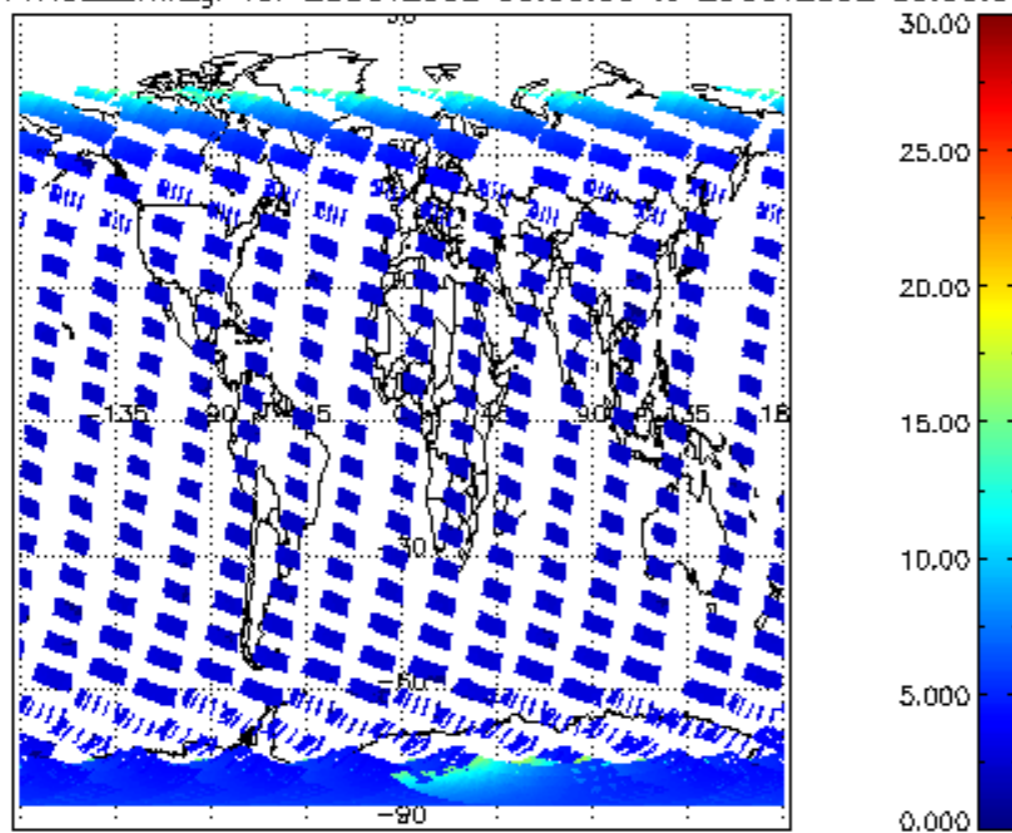
SCIOL2P_NADUV1NO2_vcd for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



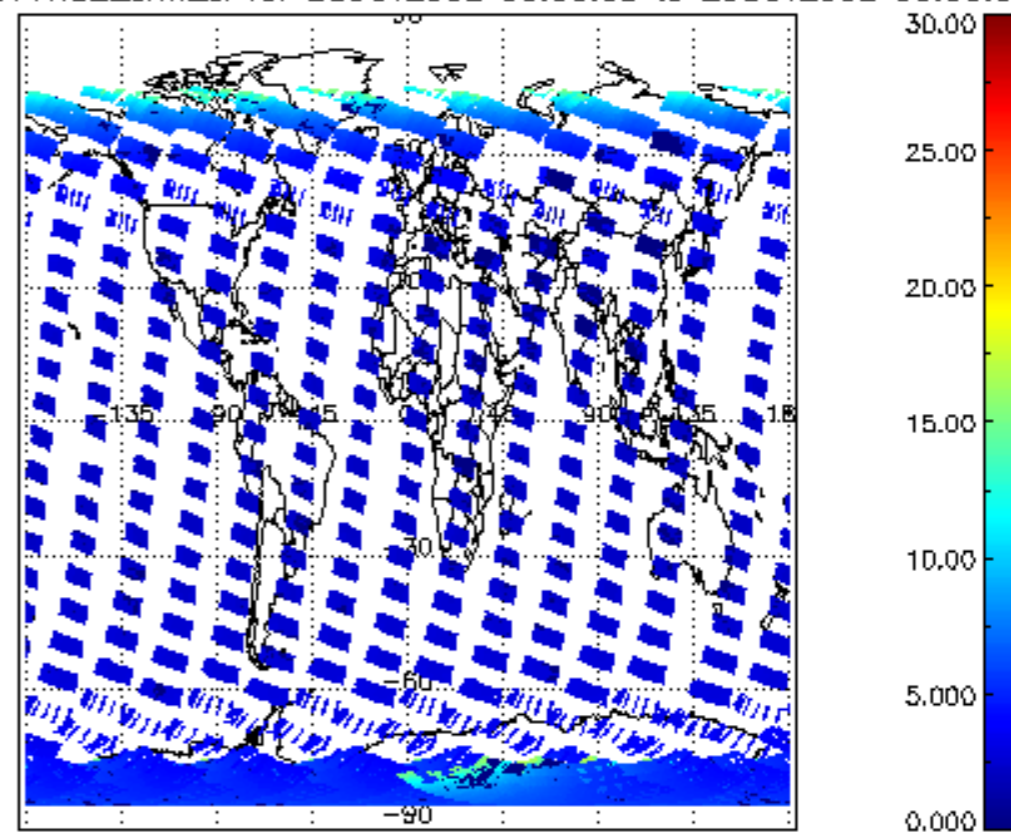
iCIOL2P_NADUV1NO2_vcd_err for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



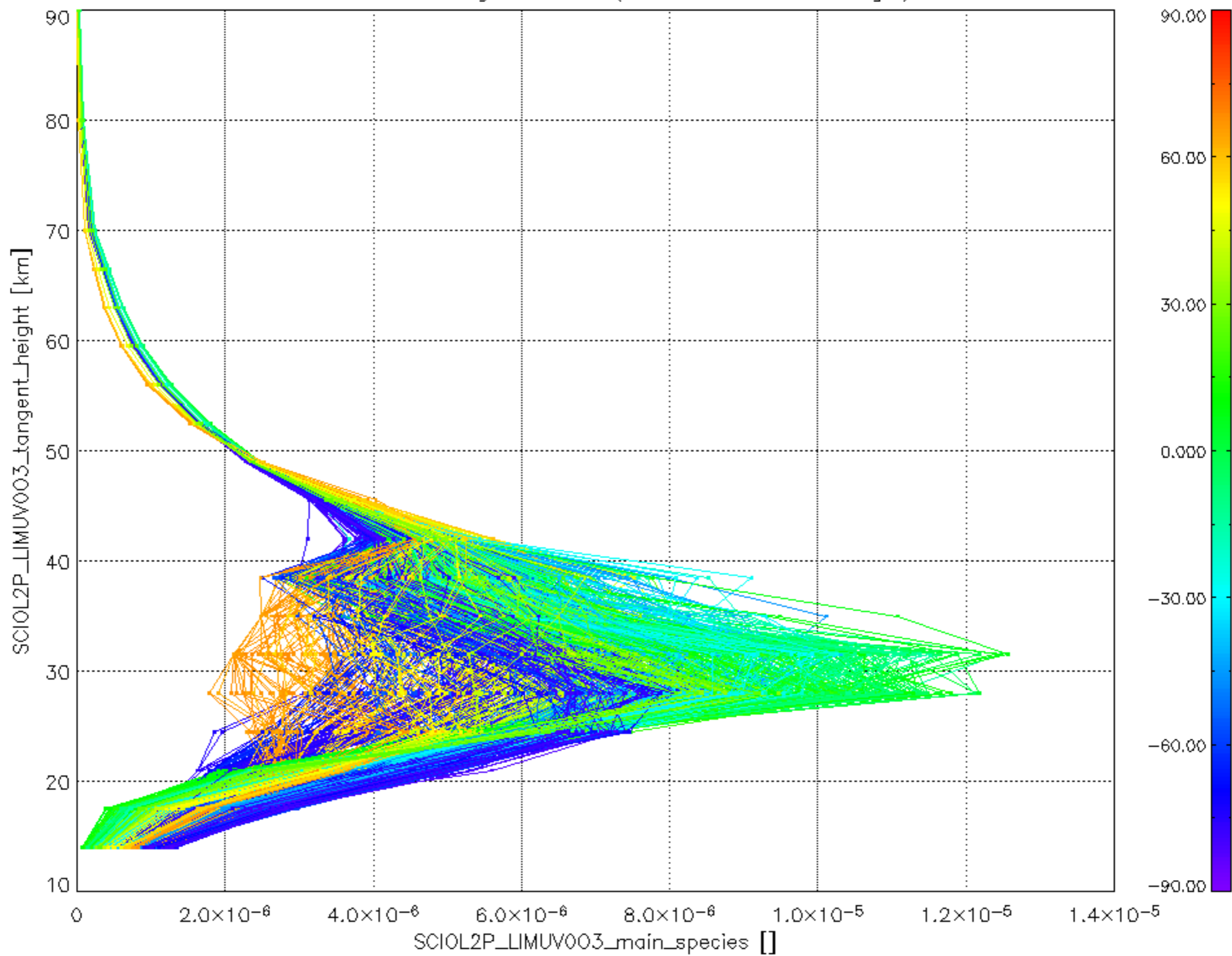
iCIOL2P_NADUV1NO2_amf_gr for 28OCT2002 00:00:00 to 29OCT2002 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 28OCT2002 00:00:00 to 29OCT2002 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_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

