

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	30MAY2008 15:16:04
Data source version	SCIA-OL/3.01-R
Processing scope for products	26DEC2002 00:00:00 to 27DEC2002 00:00:00
Start time of first product within scope	26DEC2002 00:03:30
Stop time of last product within scope	27DEC2002 00:27:17
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__2PRDPA20021226_000330_000033242012_00231_04293_1812.N1	26DEC2002 00:03:30	26DEC2002 00:58:55	0	GOOD
1	SCI_OL__2PRDPA20021226_014406_000033242012_00232_04294_1926.N1	26DEC2002 01:44:06	26DEC2002 02:39:30	0	GOOD
2	SCI_OL__2PRDPA20021226_032442_000033242012_00233_04295_1868.N1	26DEC2002 03:24:42	26DEC2002 04:20:06	0	GOOD
3	SCI_OL__2PRDPA20021226_050518_000033242012_00234_04296_1823.N1	26DEC2002 05:05:18	26DEC2002 06:00:42	0	GOOD
4	SCI_OL__2PRDPA20021226_064554_000033242012_00235_04297_1908.N1	26DEC2002 06:45:54	26DEC2002 07:41:18	0	GOOD
5	SCI_OL__2PRDPA20021226_082630_000033242012_00236_04298_1818.N1	26DEC2002 08:26:30	26DEC2002 09:21:54	0	GOOD
6	SCI_OL__2PRDPA20021226_100705_000033242012_00237_04299_1799.N1	26DEC2002 10:07:05	26DEC2002 11:02:30	0	GOOD
7	SCI_OL__2PRDPA20021226_114741_000033242012_00238_04300_1948.N1	26DEC2002 11:47:41	26DEC2002 12:43:05	0	GOOD
8	SCI_OL__2PRDPA20021226_132817_000033242012_00239_04301_1897.N1	26DEC2002 13:28:17	26DEC2002 14:23:41	0	GOOD
9	SCI_OL__2PRDPA20021226_150853_000033242012_00240_04302_1850.N1	26DEC2002 15:08:53	26DEC2002 16:04:17	0	GOOD
10	SCI_OL__2PRDPA20021226_164929_000033242012_00241_04303_1789.N1	26DEC2002 16:49:29	26DEC2002 17:44:53	0	GOOD
11	SCI_OL__2PRDPA20021226_183052_000033162012_00242_04304_1839.N1	26DEC2002 18:30:52	26DEC2002 19:26:09	0	GOOD
12	SCI_OL__2PRDPA20021226_201105_000033242012_00243_04305_1747.N1	26DEC2002 20:11:05	26DEC2002 21:06:30	0	GOOD
13	SCI_OL__2PRDPA20021226_215116_000033242012_00244_04306_1882.N1	26DEC2002 21:51:16	26DEC2002 22:46:41	0	GOOD
14	SCI_OL__2PRDPA20021226_233152_000033242012_00245_04307_1918.N1	26DEC2002 23:31:52	27DEC2002 00:27:17	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: 112040

Total number of cloud data DSRs with good quality flag (=0): 112040 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	112040	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	112040	0.21608	0.25000	0.12500	0.50000	0.077683	s
SURFACE_PRES	112040	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	112040	0.47573	0.49261	0.0000	1.0000	0.27398	-

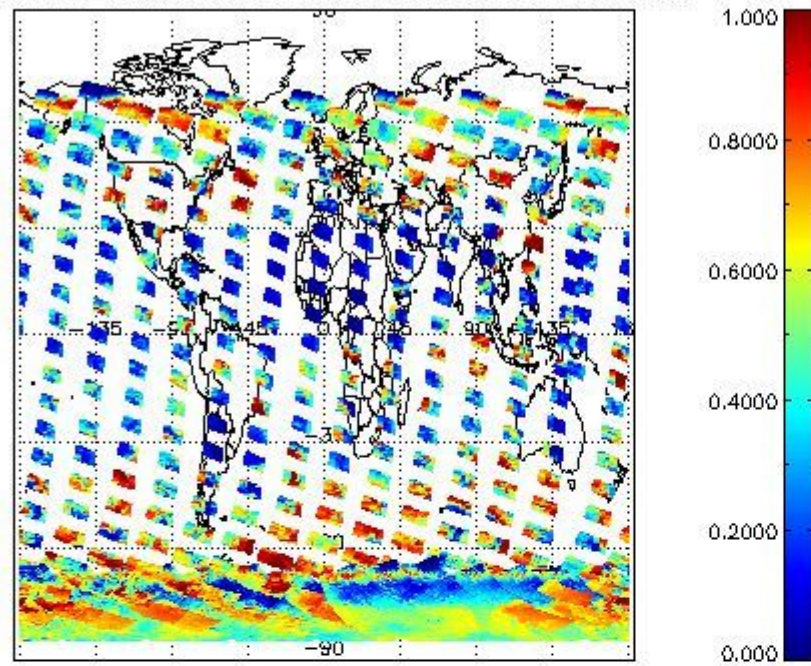
CL_FRAC_ERR	112040	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	112040	6.9147	8.0000	4.0000	16.000	2.4859	
PMD_READ_CL[0]	112040	0.35413	0.0000	0.0000	16.000	1.3799	-
PMD_READ_CL[1]	112040	0.30762	0.0000	0.0000	16.000	1.3996	-
CL_TOP_HEIGHT	103338	4.4757	3.3182	0.0000	17.000	3.8899	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	103338	52.787	37.978	0.0000	101.00	39.547	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	112040	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	112040	11000101	11000010	11000000	11100000	2282.4	flags
AERO_ABSO_IND	112040	0.31520	0.054740	-4.3460	10.835	1.1600	
AERO_IND_DIAG	112040	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	112040	01101001	11000000	00000000	11000000	24446.	flags

Time and geolocation plots:

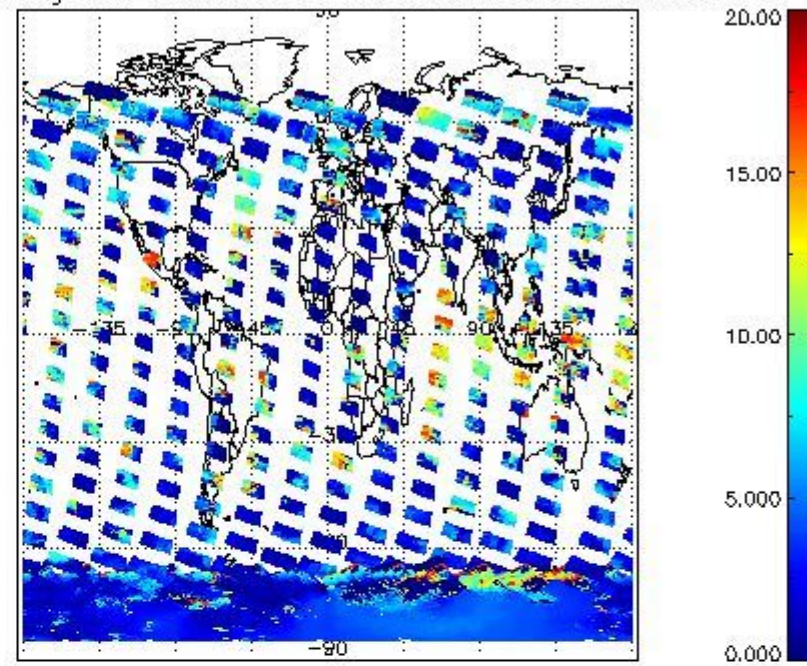
Plots are available for the following parameters:

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

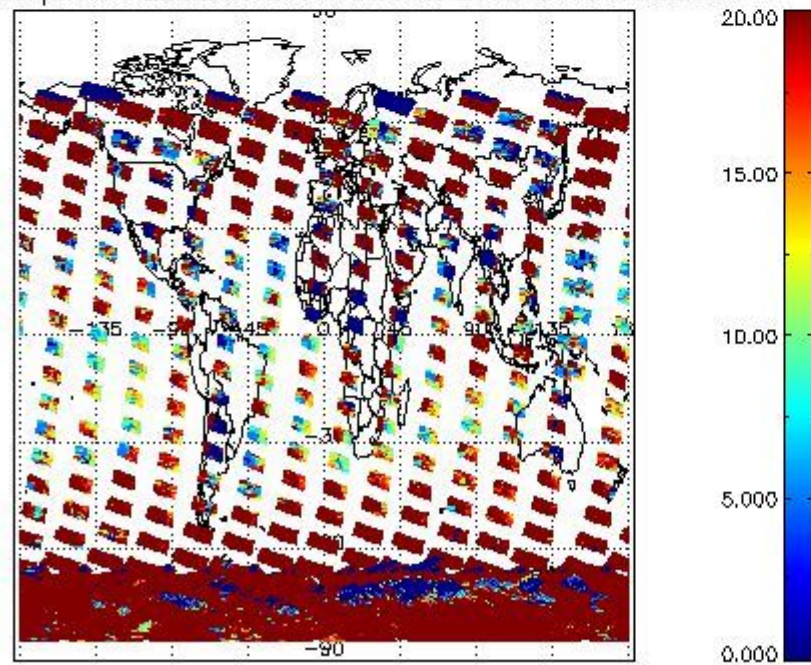
cL_frac for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



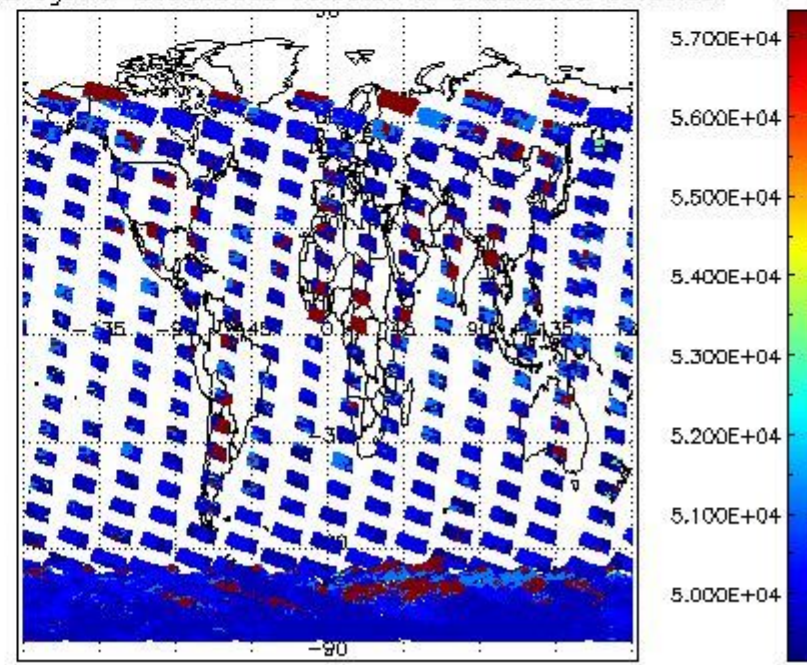
cL_top_height for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



cL_opt_depth for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



cloud_flags for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



2.2.2 Nadir

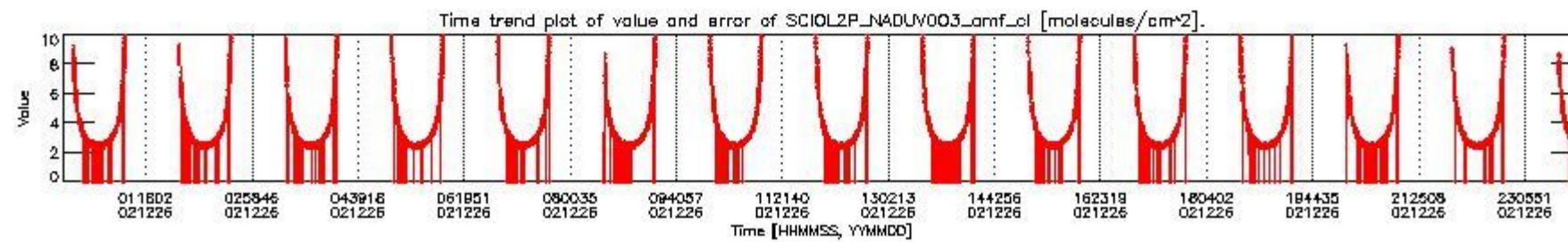
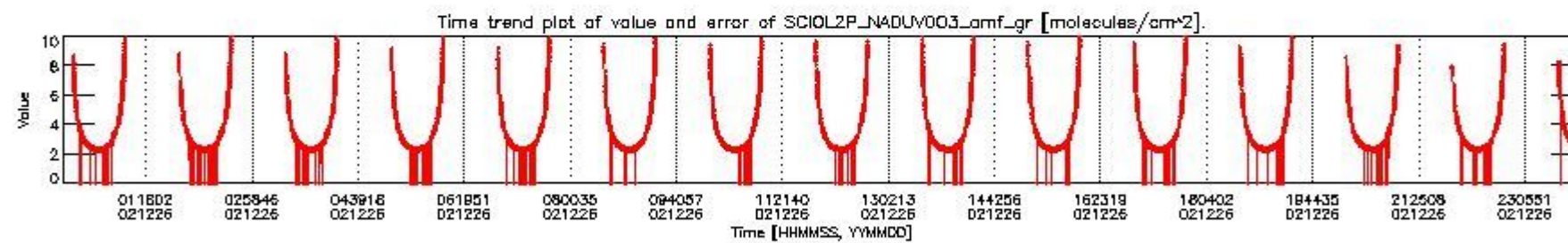
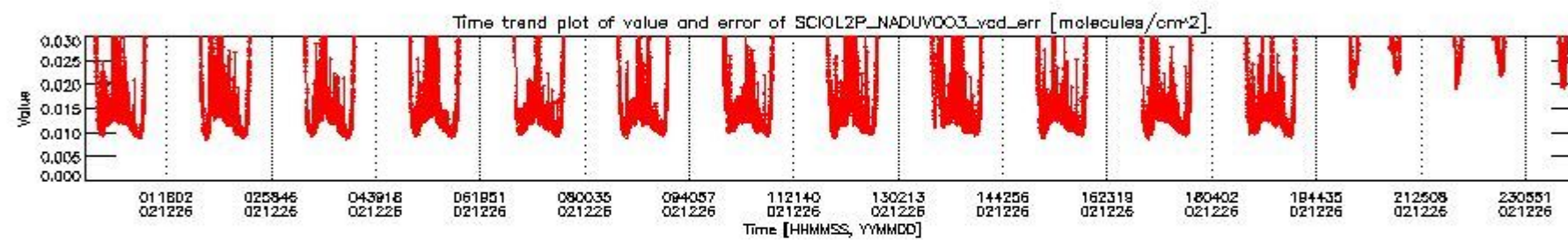
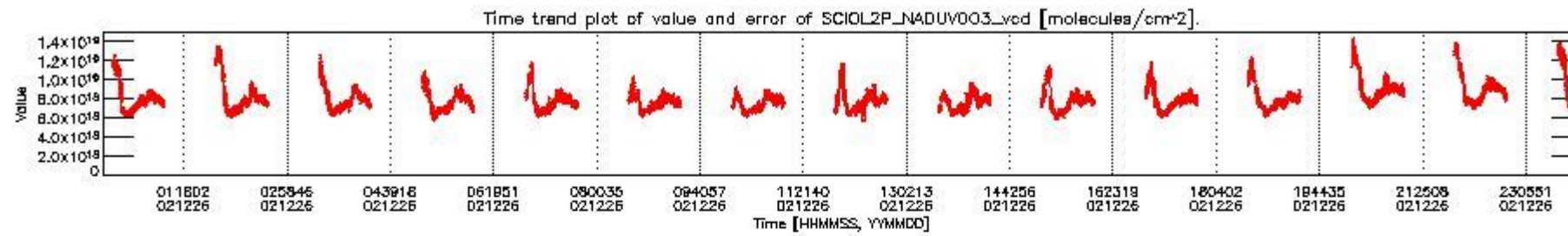
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

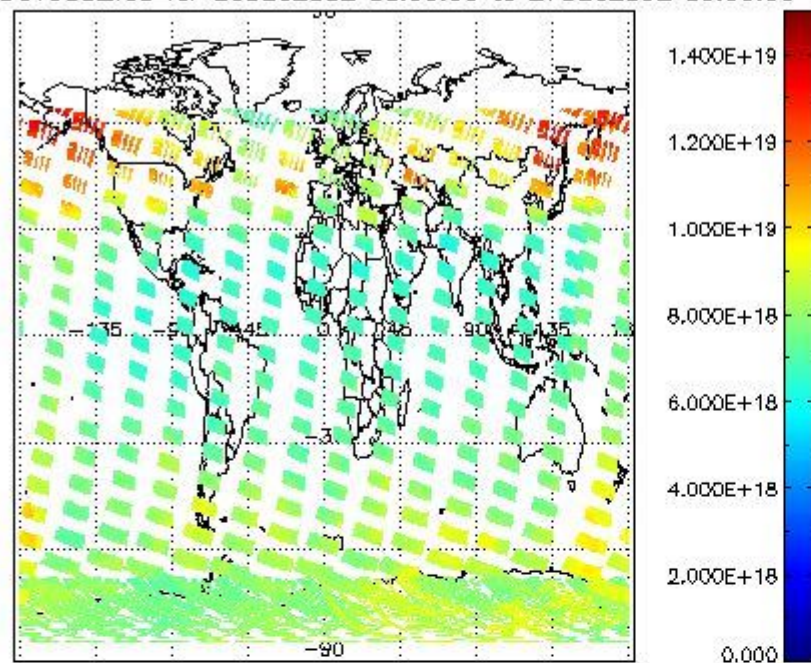
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

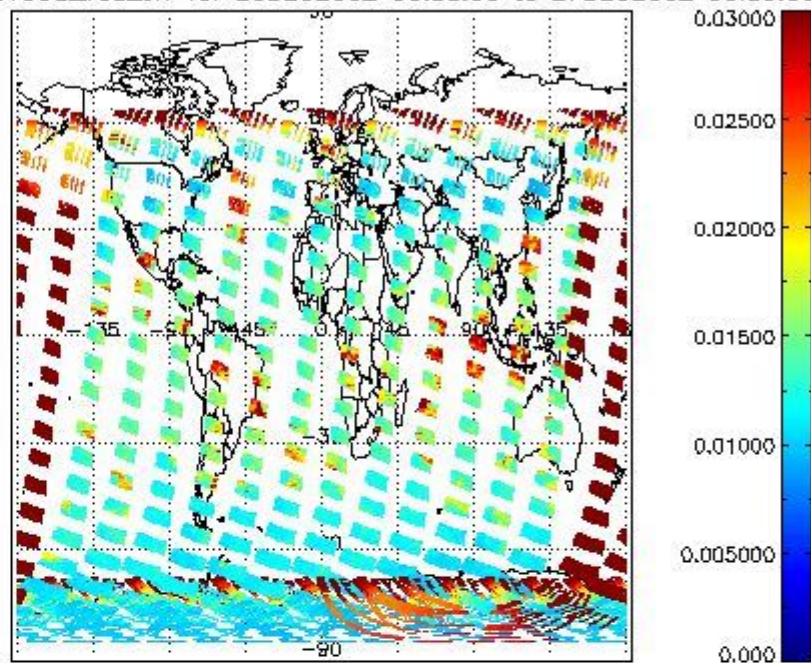
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



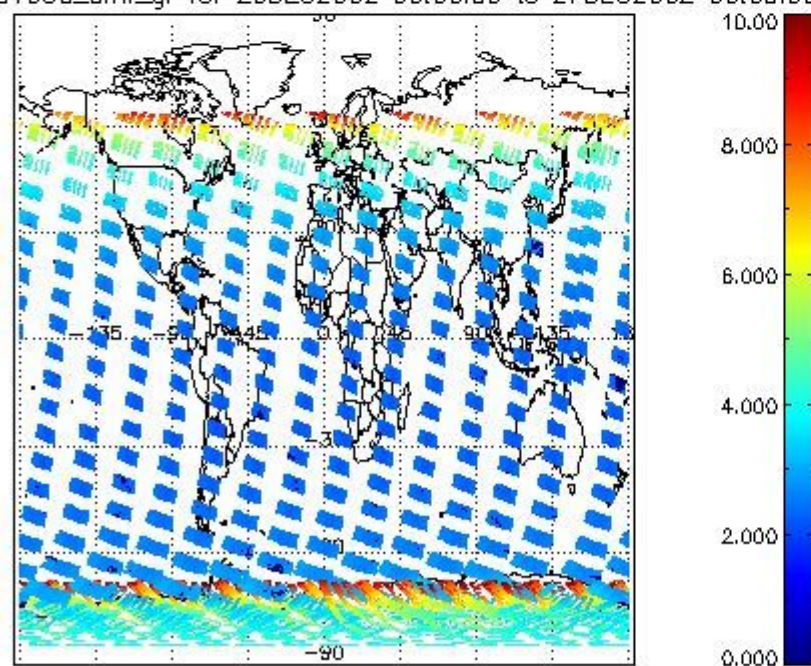
SCIOL2P_NADUV003_vcd for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



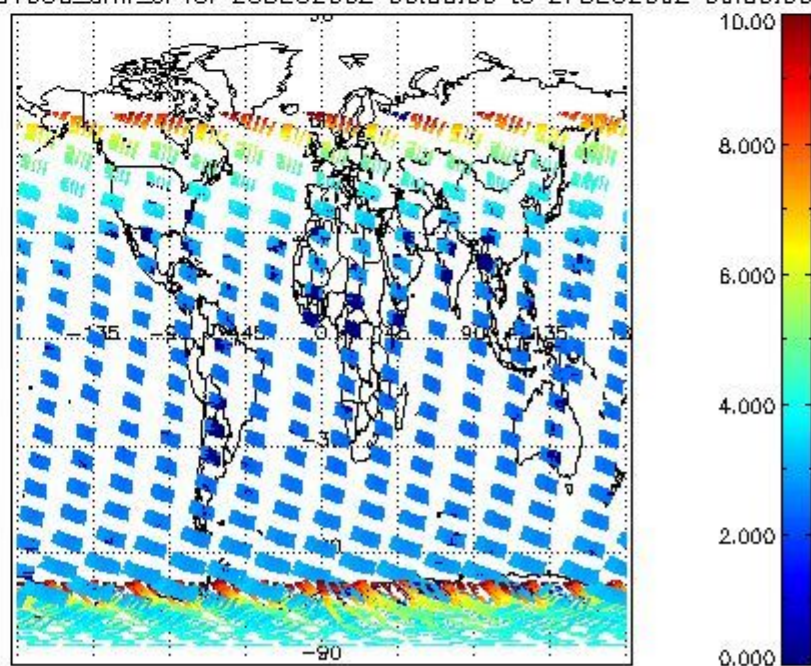
SCIOL2P_NADUV003_vcd_err for 26DEC2002 00:00:00 to 27DEC2002 00:00:00

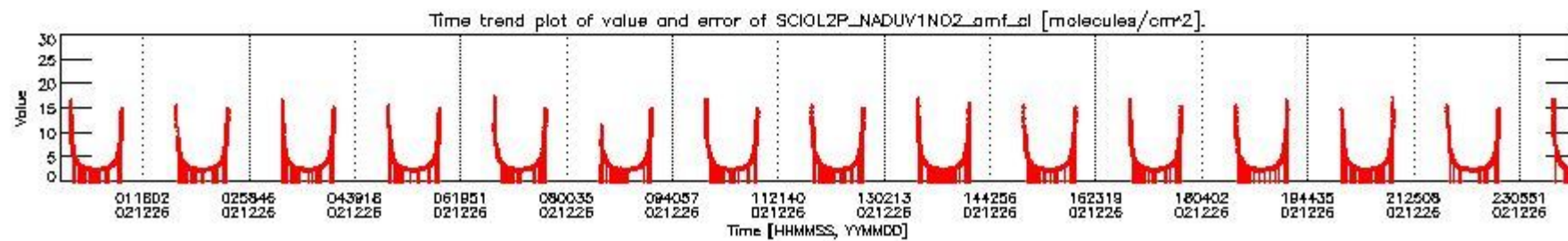
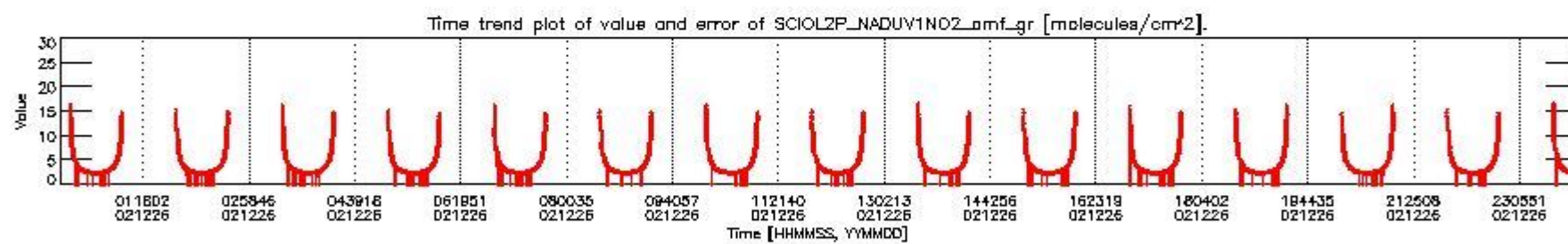
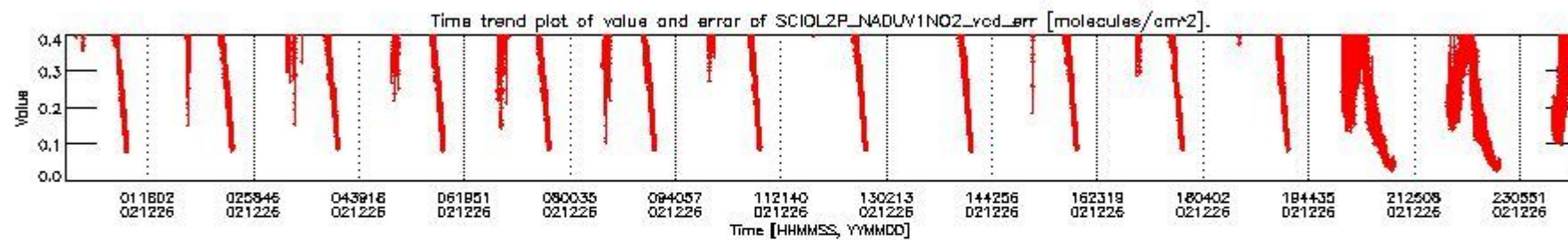
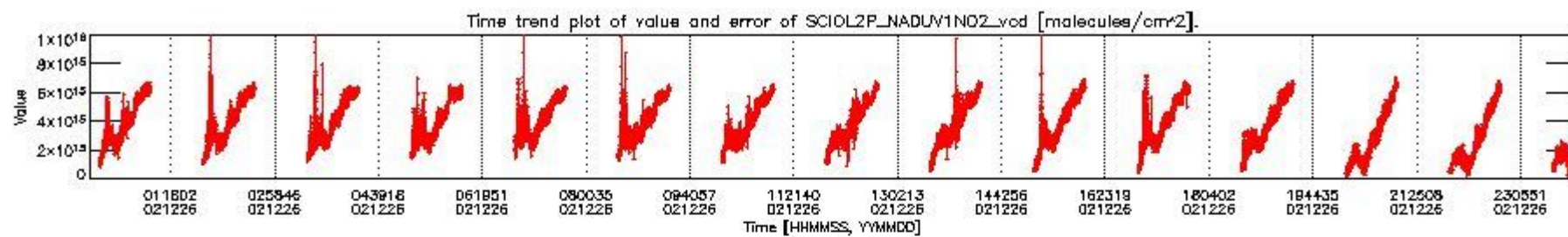


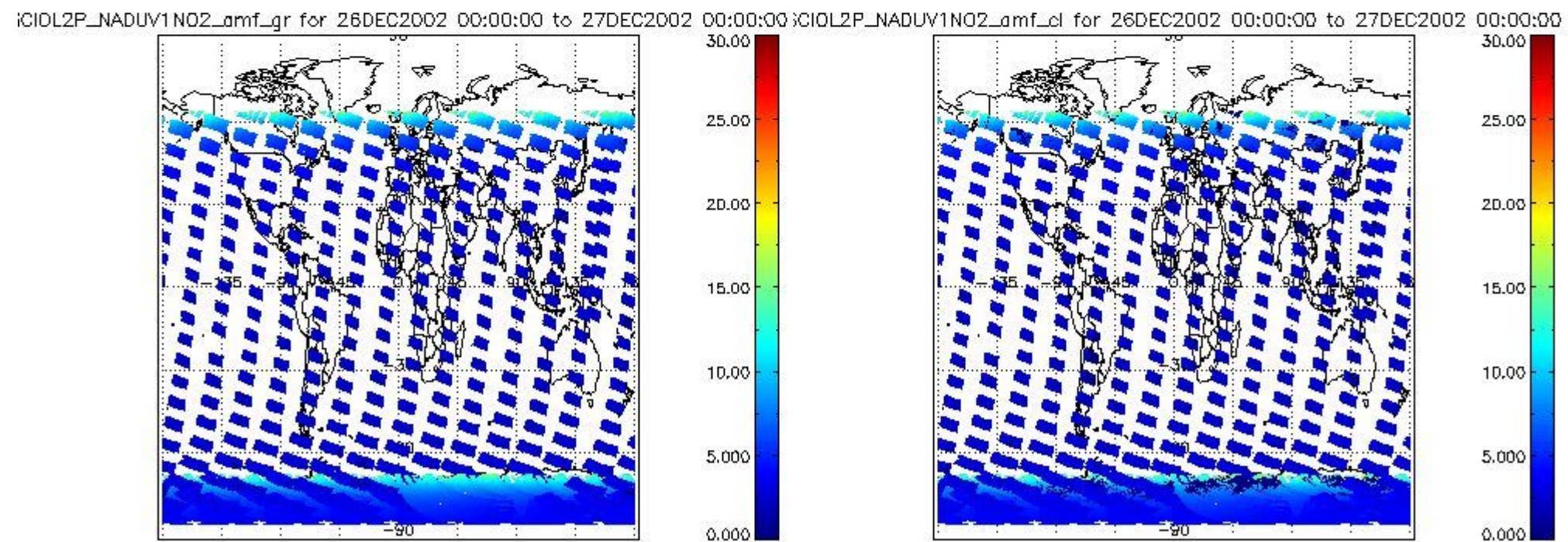
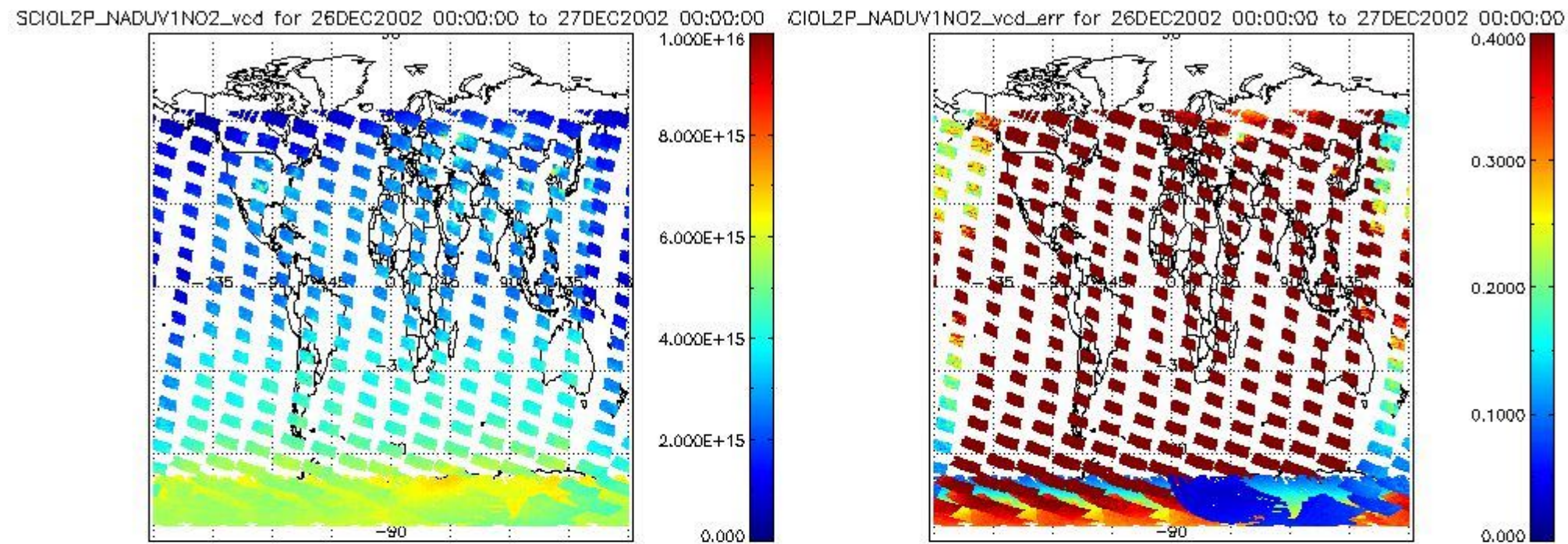
SCIOL2P_NADUV003_amf_gr for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



SCIOL2P_NADUV003_amf_sl for 26DEC2002 00:00:00 to 27DEC2002 00:00:00







2.2.3 Limb

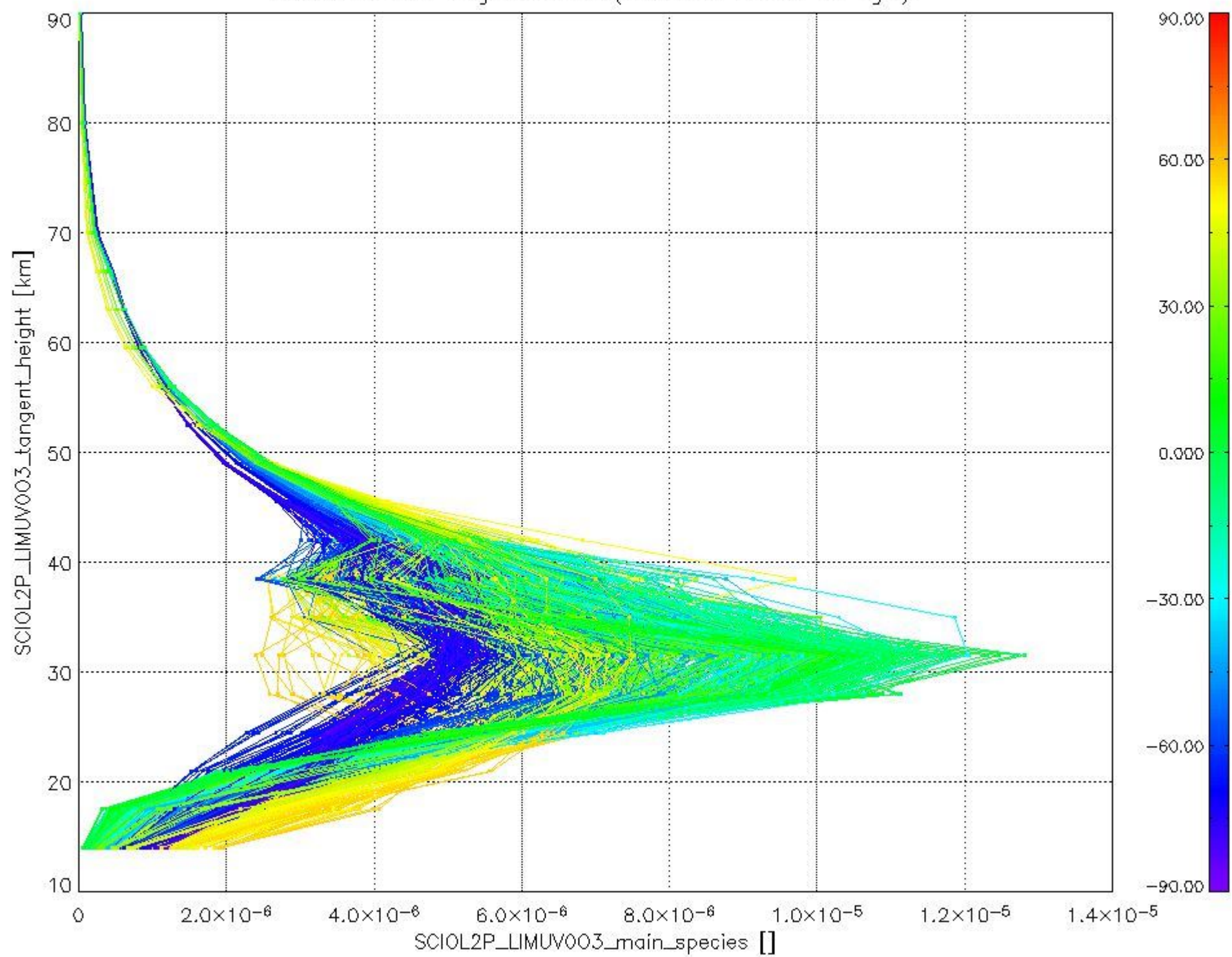
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

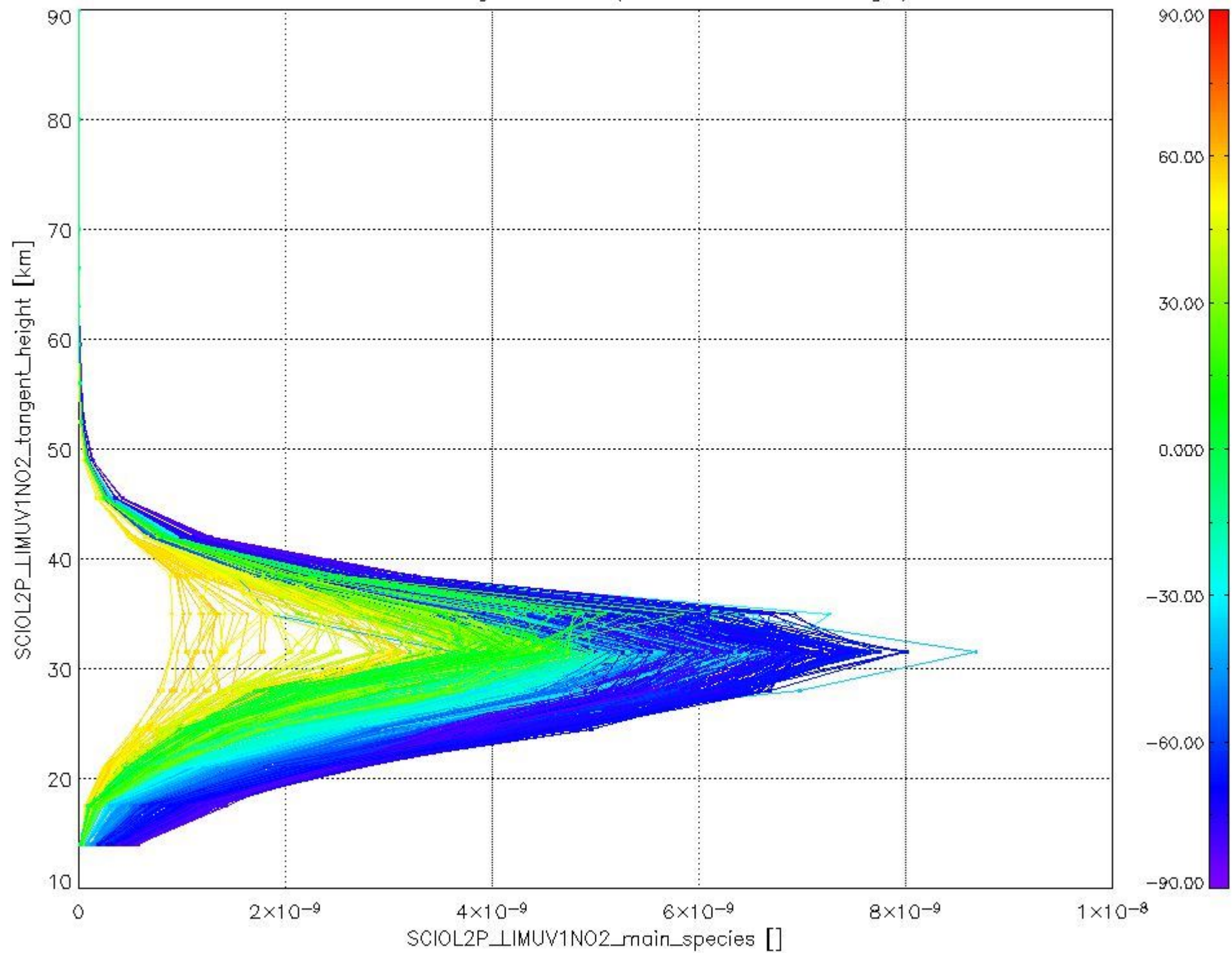
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



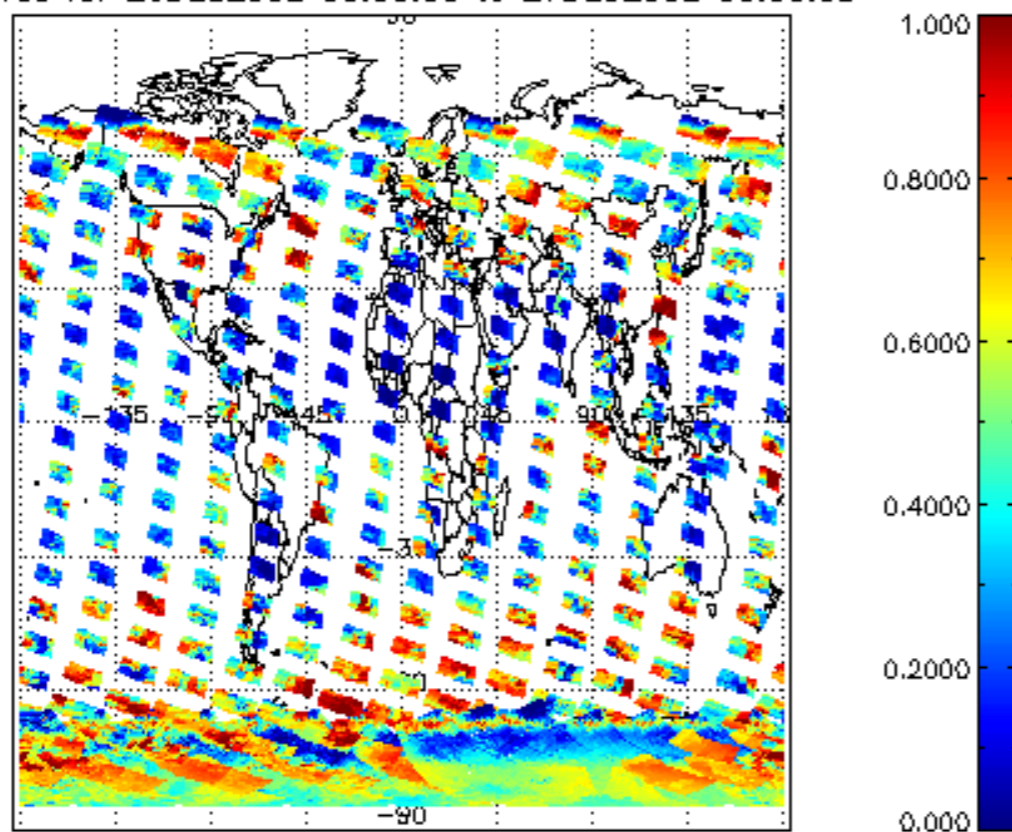
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



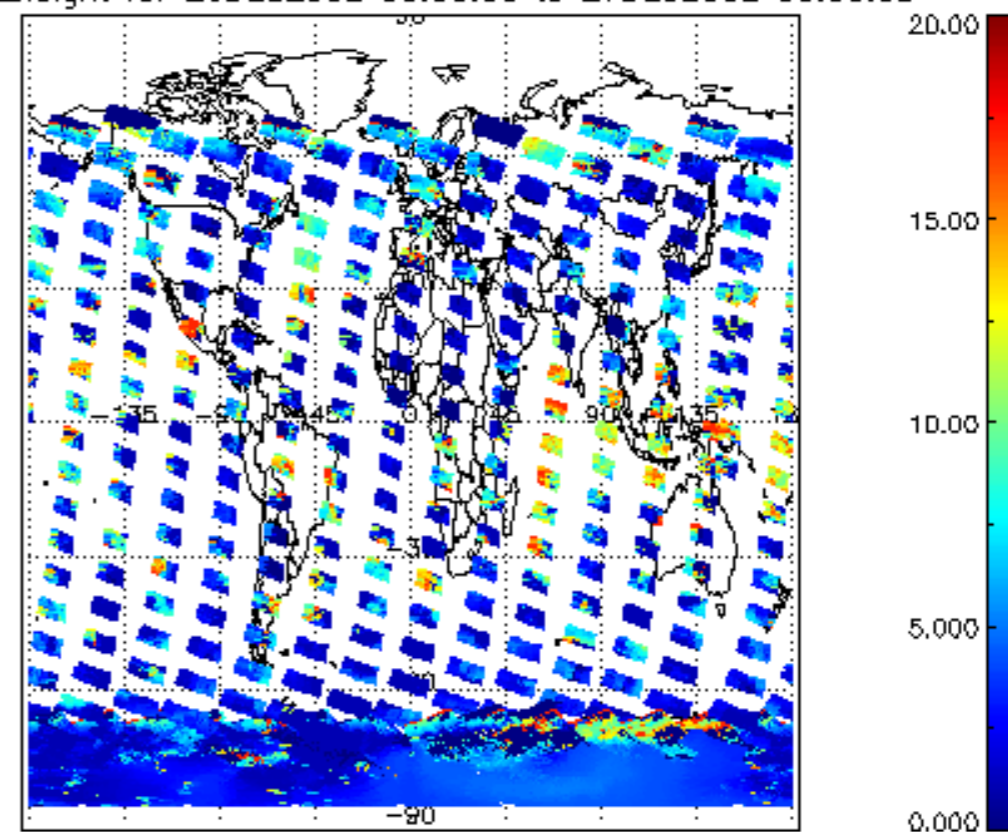
2.3 ADF monitoring

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

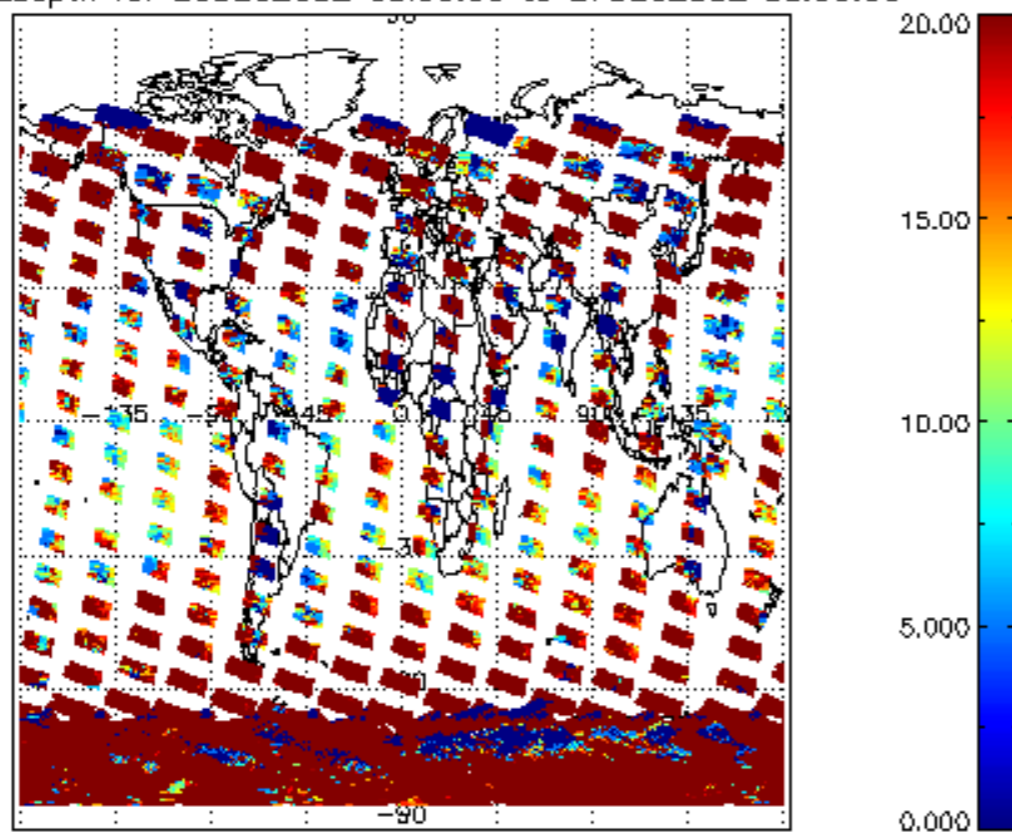
cI_frac for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



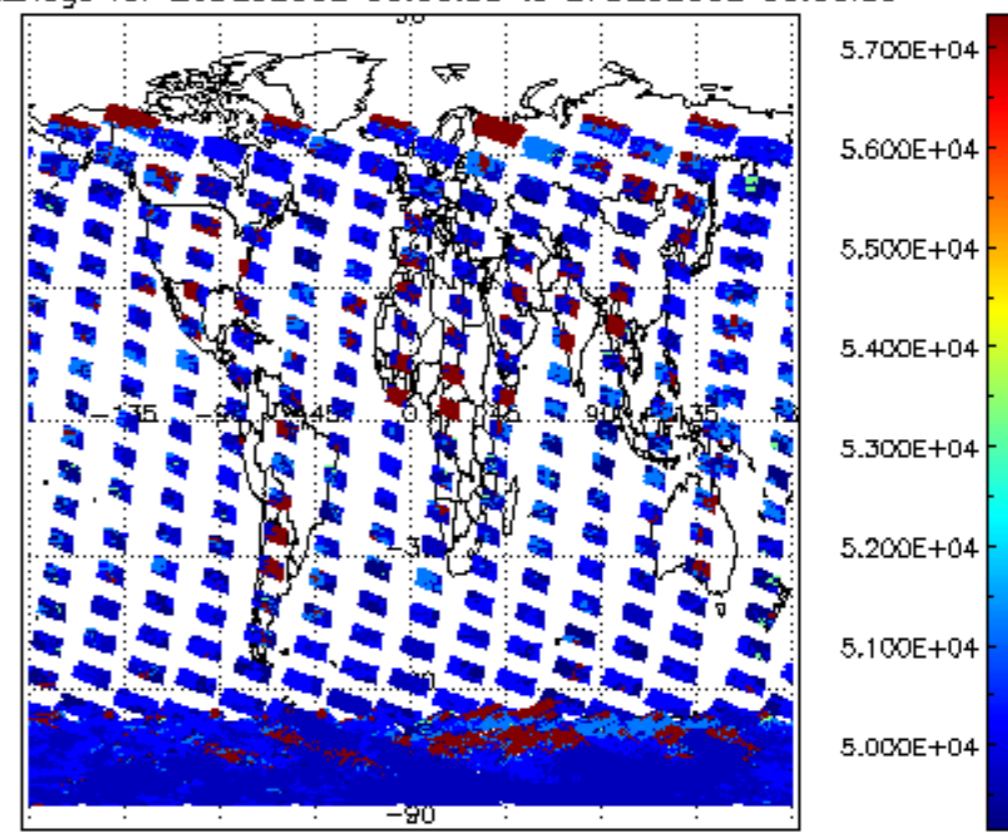
cI_top_height for 26DEC2002 00:00:00 to 27DEC2002 00:00:00

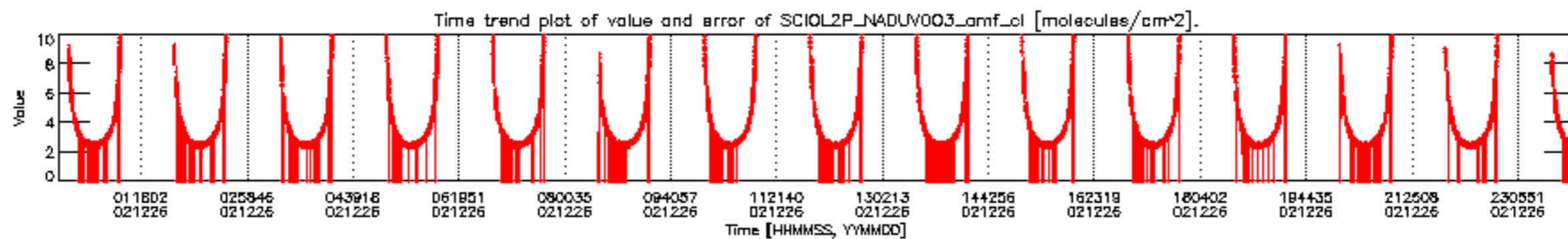
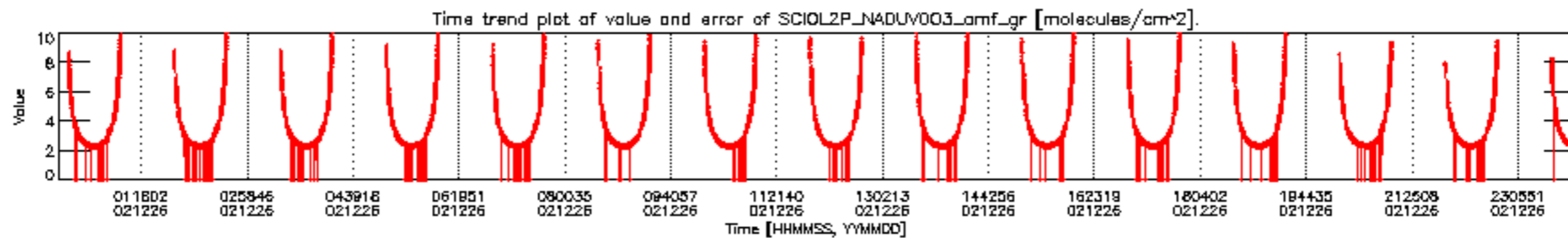
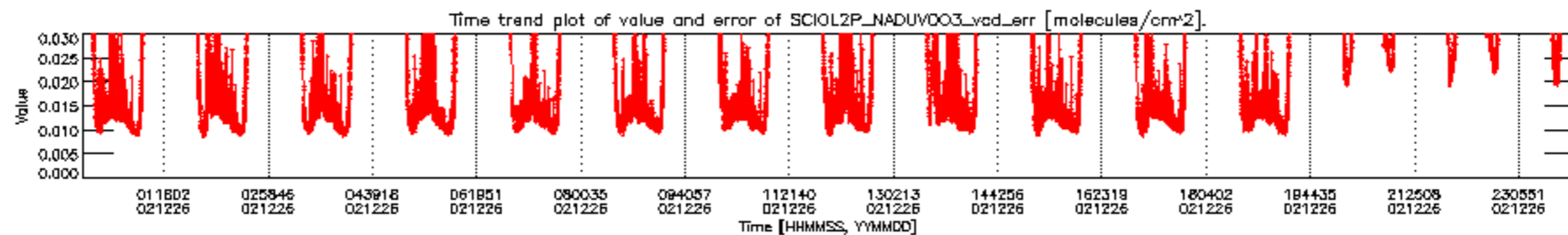
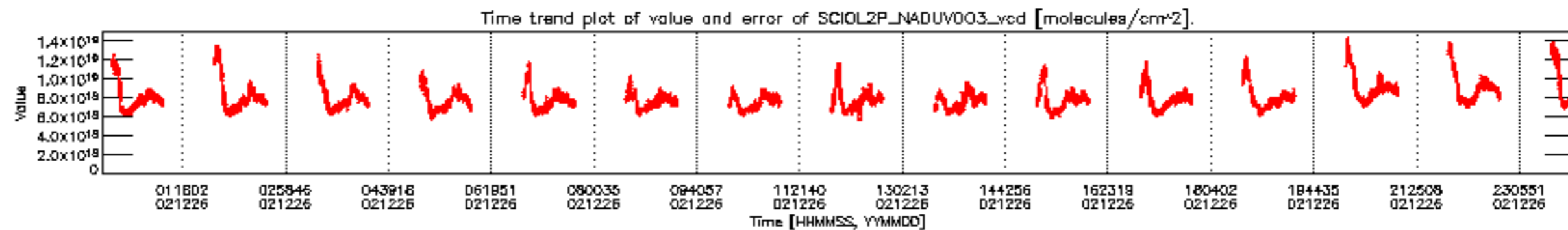


cI_opt_depth for 26DEC2002 00:00:00 to 27DEC2002 00:00:00

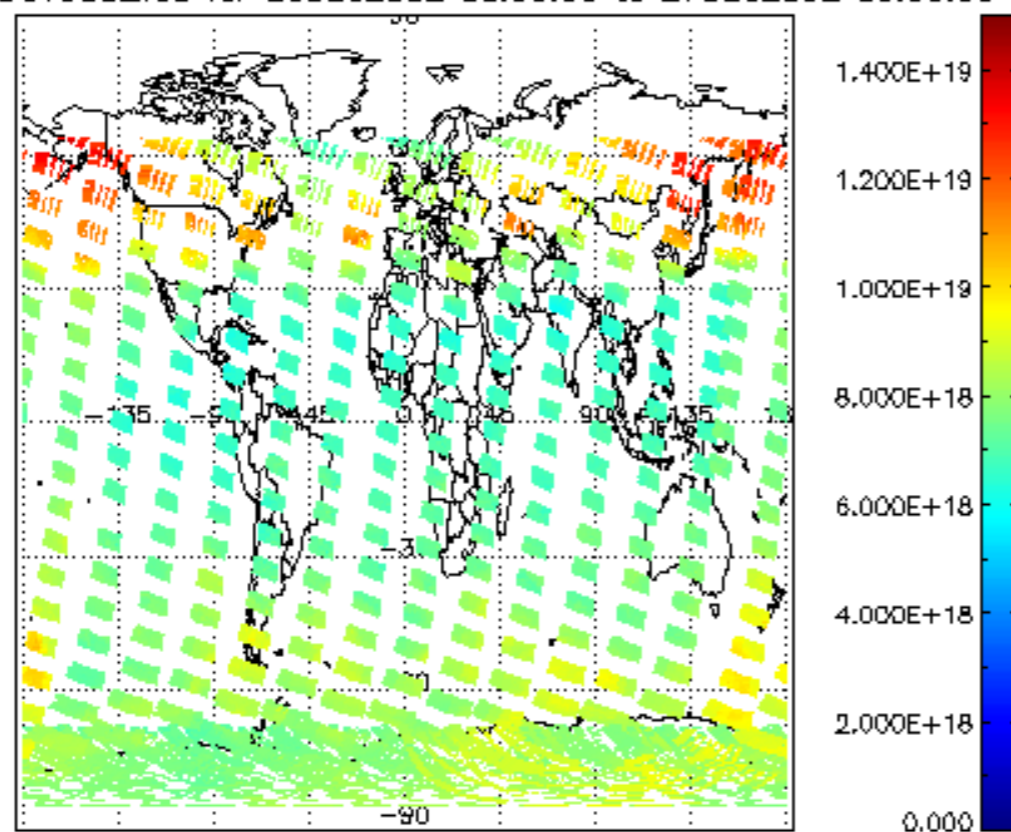


cloud_flags for 26DEC2002 00:00:00 to 27DEC2002 00:00:00

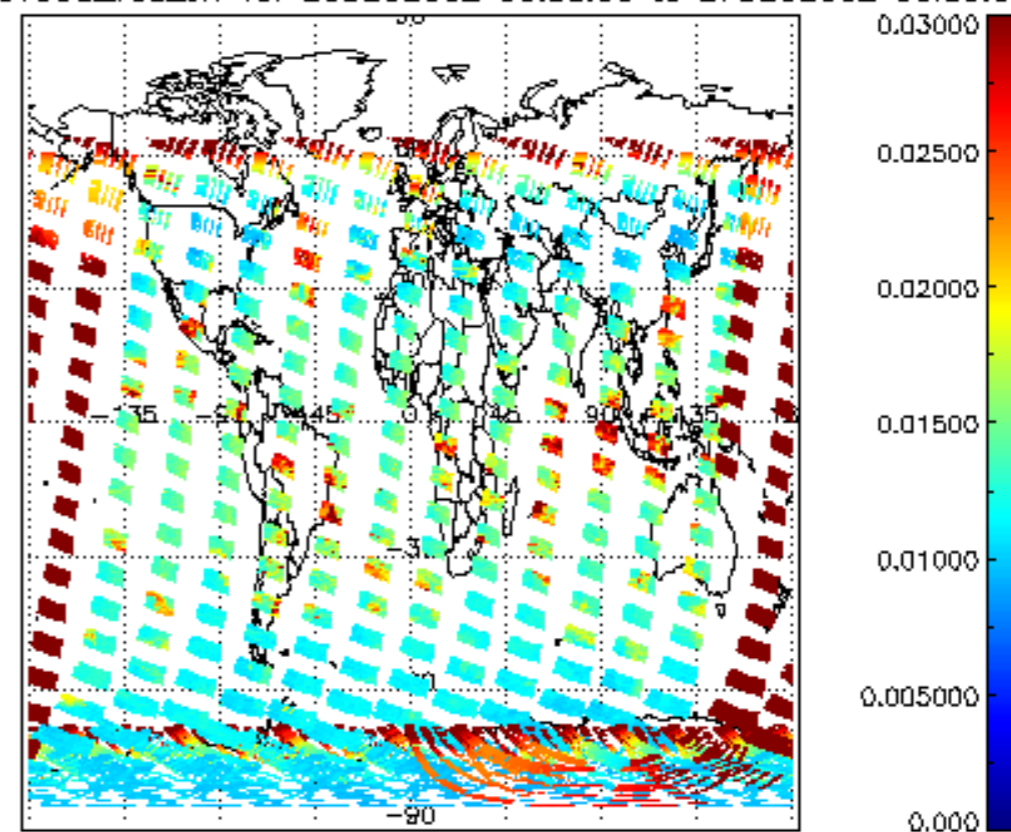




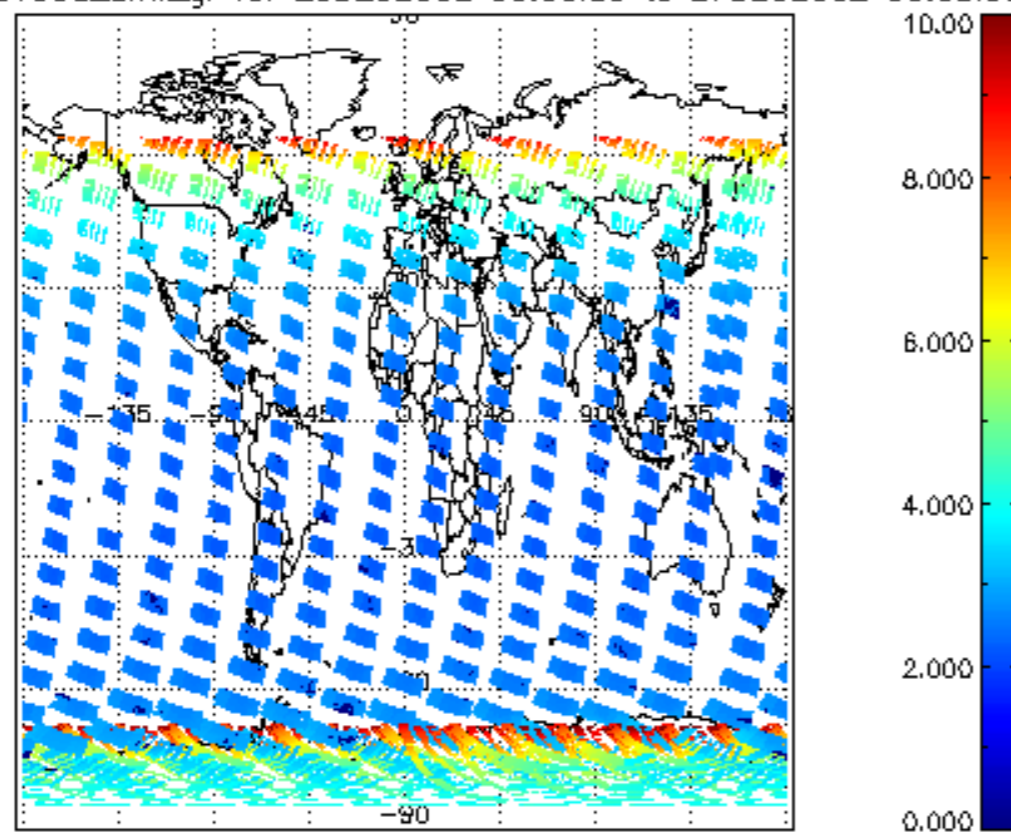
SCIOL2P_NADUV003_vcd for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



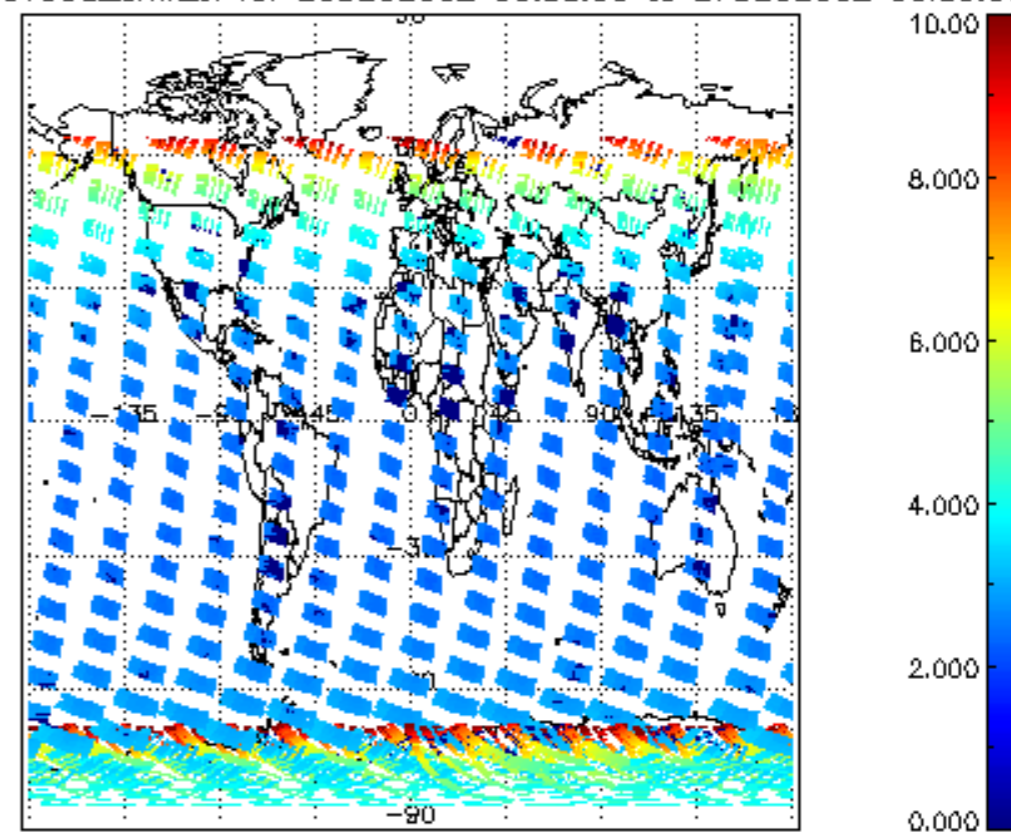
SCIOL2P_NADUV003_vcd_err for 26DEC2002 00:00:00 to 27DEC2002 00:00:00

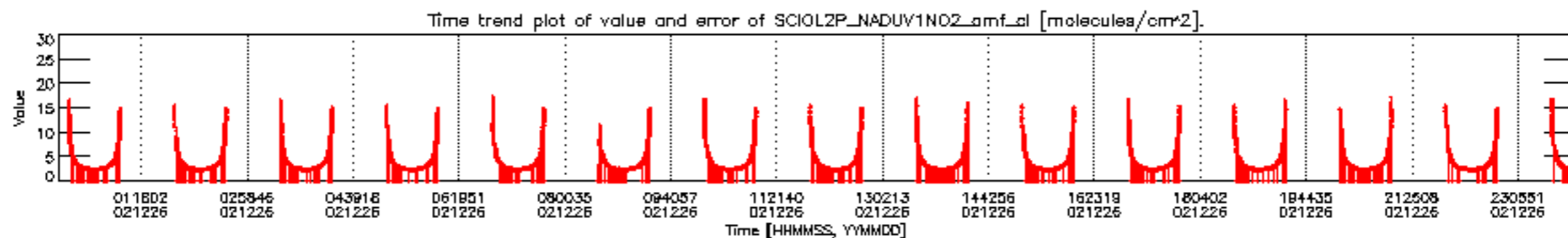
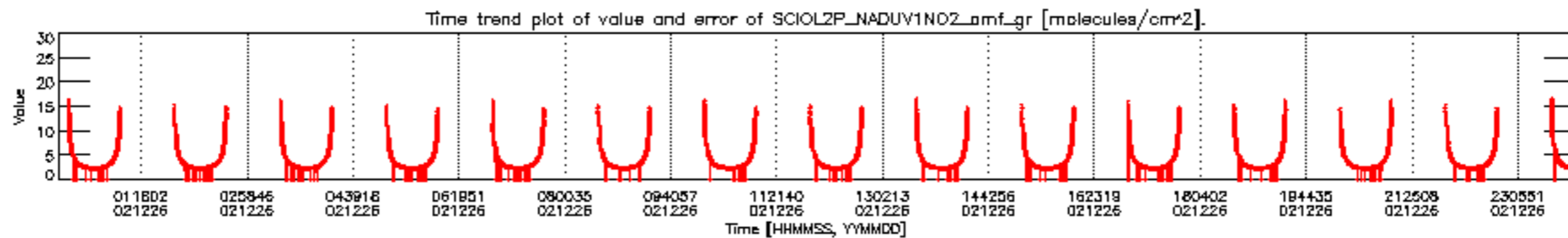
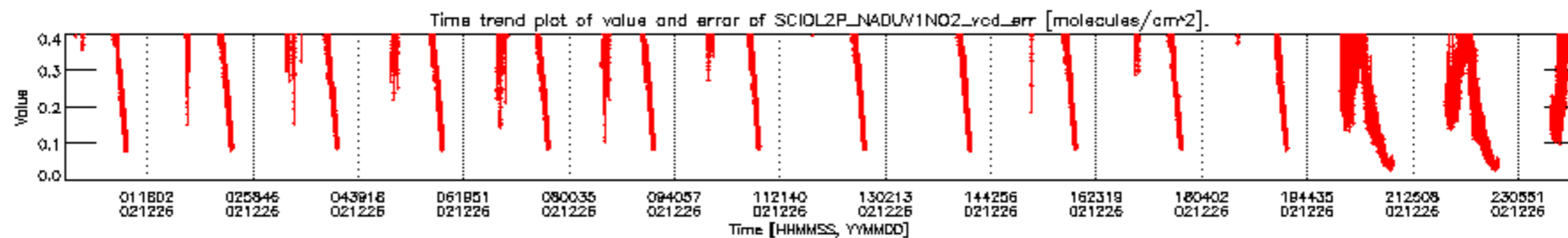
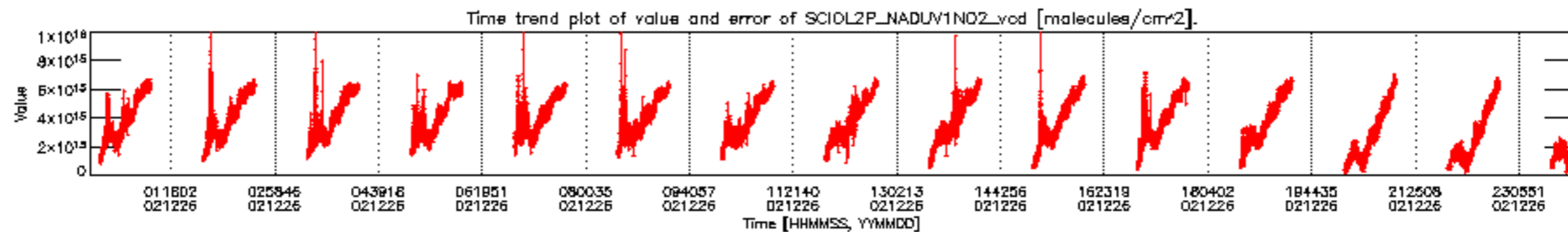


SCIOL2P_NADUV003_amf_gr for 26DEC2002 00:00:00 to 27DEC2002 00:00:00

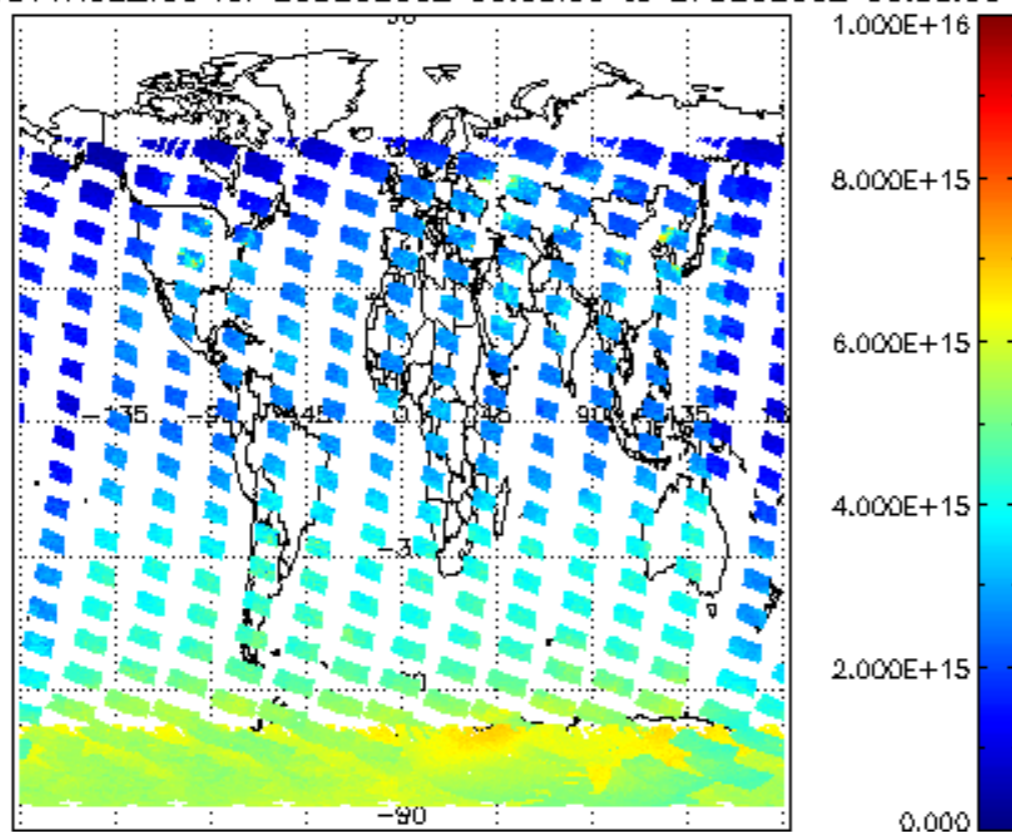


SCIOL2P_NADUV003_amf_cl for 26DEC2002 00:00:00 to 27DEC2002 00:00:00

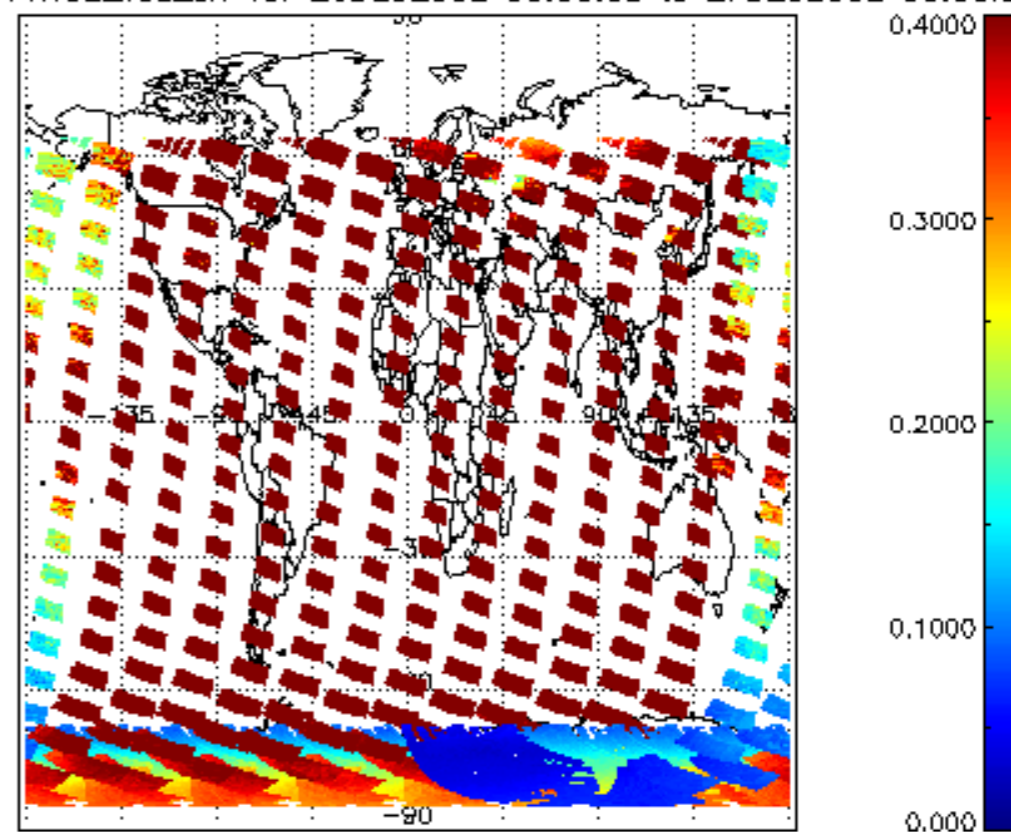




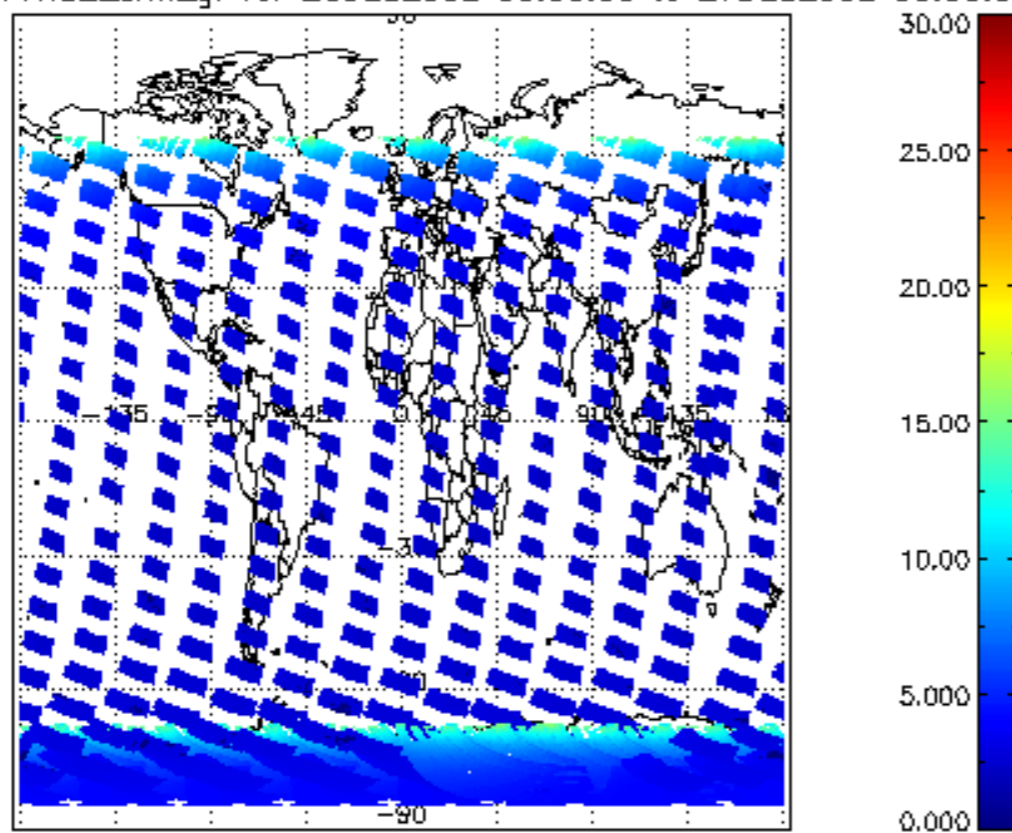
SCIOL2P_NADUV1NO2_vcd for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



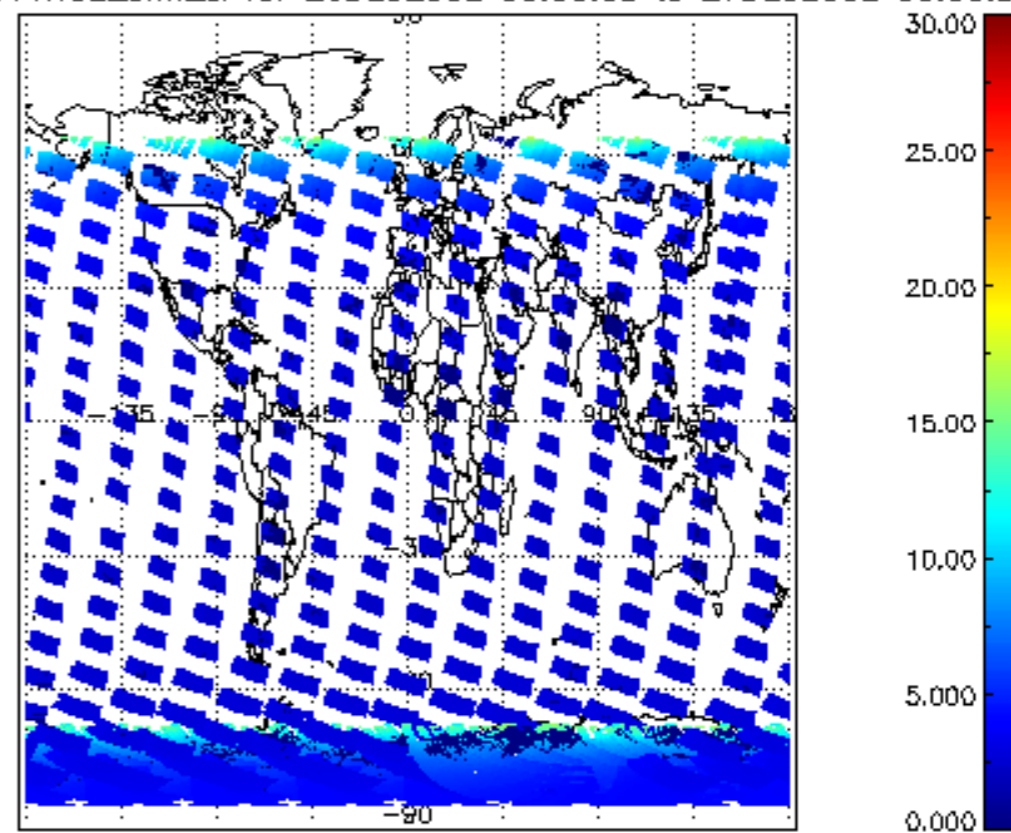
SCIOL2P_NADUV1NO2_vcd_err for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



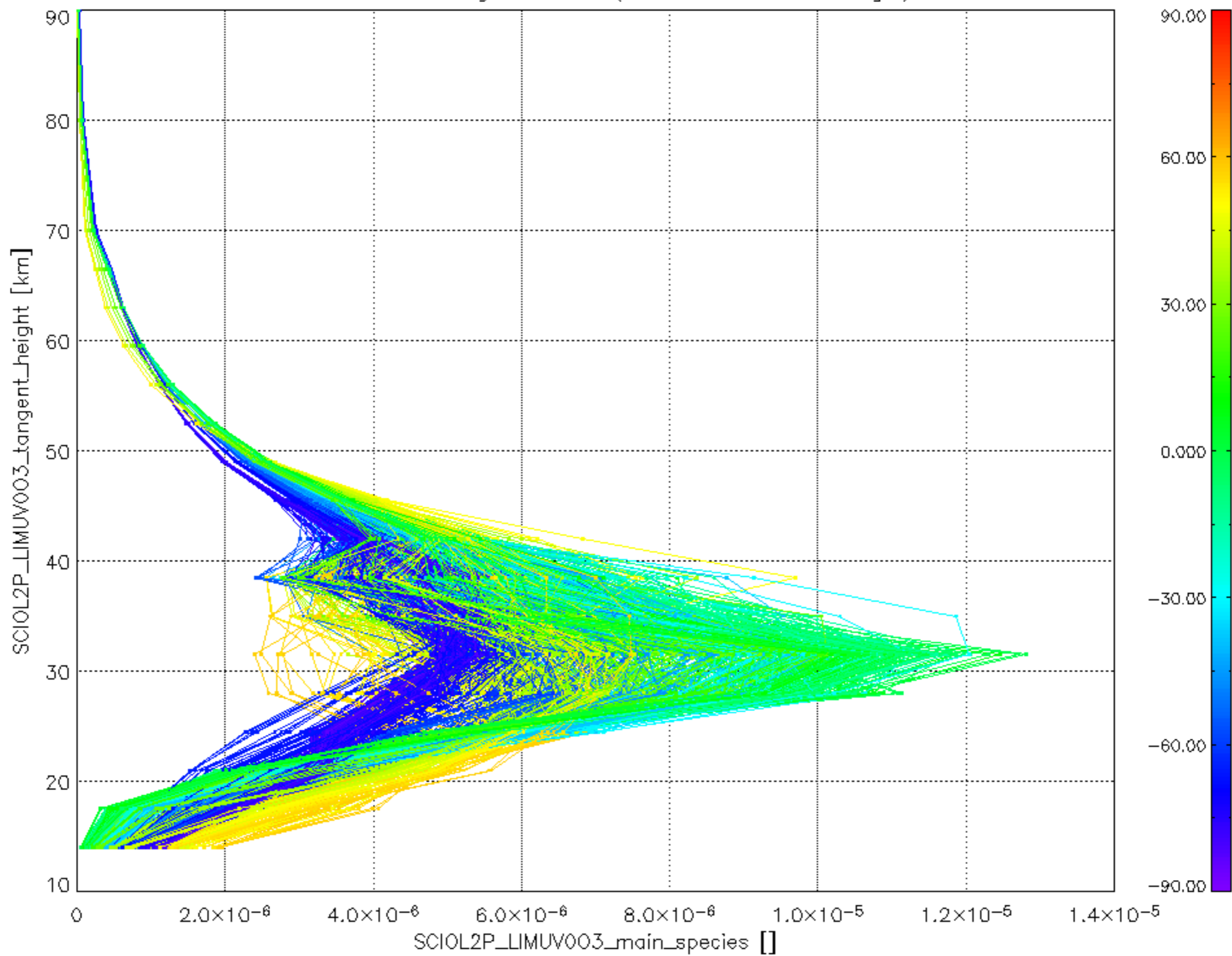
SCIOL2P_NADUV1NO2_amf_gr for 26DEC2002 00:00:00 to 27DEC2002 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 26DEC2002 00:00:00 to 27DEC2002 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).

