

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	13JUN2008 10:46:49
Data source version	SCIA-OL/3.01-R
Processing scope for products	26NOV2002 00:00:00 to 27NOV2002 00:00:00
Start time of first product within scope	25NOV2002 23:05:29
Stop time of last product within scope	27NOV2002 01:10:39
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__2PRDPA20021125_230529_000033242011_00302_03863_1674.N1	25NOV2002 23:05:29	26NOV2002 00:00:54	0	GOOD
1	SCI_OL__2PRDPA20021126_004605_000033242011_00303_03864_1657.N1	26NOV2002 00:46:05	26NOV2002 01:41:30	0	GOOD
2	SCI_OL__2PRDPA20021126_022642_000033242011_00304_03865_1628.N1	26NOV2002 02:26:42	26NOV2002 03:22:06	0	GOOD
3	SCI_OL__2PRDPA20021126_041204_000030812011_00305_03866_1699.N1	26NOV2002 04:12:04	26NOV2002 05:03:25	0	GOOD
4	SCI_OL__2PRDPA20021126_073316_000030812011_00307_03868_1702.N1	26NOV2002 07:33:16	26NOV2002 08:24:38	0	GOOD
5	SCI_OL__2PRDPA20021126_091352_000030812011_00308_03869_1673.N1	26NOV2002 09:13:52	26NOV2002 10:05:14	0	GOOD
6	SCI_OL__2PRDPA20021126_105428_000030812011_00309_03870_1662.N1	26NOV2002 10:54:28	26NOV2002 11:45:50	0	GOOD
7	SCI_OL__2PRDPA20021126_123504_000030812011_00310_03871_1647.N1	26NOV2002 12:35:04	26NOV2002 13:26:26	0	GOOD
8	SCI_OL__2PRDPA20021126_141541_000030812011_00311_03872_1623.N1	26NOV2002 14:15:41	26NOV2002 15:07:02	0	GOOD
9	SCI_OL__2PRDPA20021126_155617_000030812011_00312_03873_1691.N1	26NOV2002 15:56:17	26NOV2002 16:47:38	0	GOOD
10	SCI_OL__2PRDPA20021126_173653_000030812011_00313_03874_3329.N1	26NOV2002 17:36:53	26NOV2002 18:28:14	0	GOOD
11	SCI_OL__2PRDPA20021126_191639_000031112011_00314_03875_1660.N1	26NOV2002 19:16:39	26NOV2002 20:08:30	0	GOOD
12	SCI_OL__2PRDPA20021126_205718_000030812011_00315_03876_1701.N1	26NOV2002 20:57:18	26NOV2002 21:48:40	0	GOOD
13	SCI_OL__2PRDPA20021126_223841_000030812011_00316_03877_1621.N1	26NOV2002 22:38:41	26NOV2002 23:30:03	0	GOOD
14	SCI_OL__2PRDPA20021127_001917_000030812011_00317_03878_1684.N1	27NOV2002 00:19:17	27NOV2002 01:10:39	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: 144069

Total number of cloud data DSRs with good quality flag (=0): 144069 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	144069	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	144069	0.24651	0.25000	0.12500	0.50000	0.028413	s
SURFACE_PRES	144069	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	144069	0.44960	0.43664	0.0000	1.0000	0.29517	-

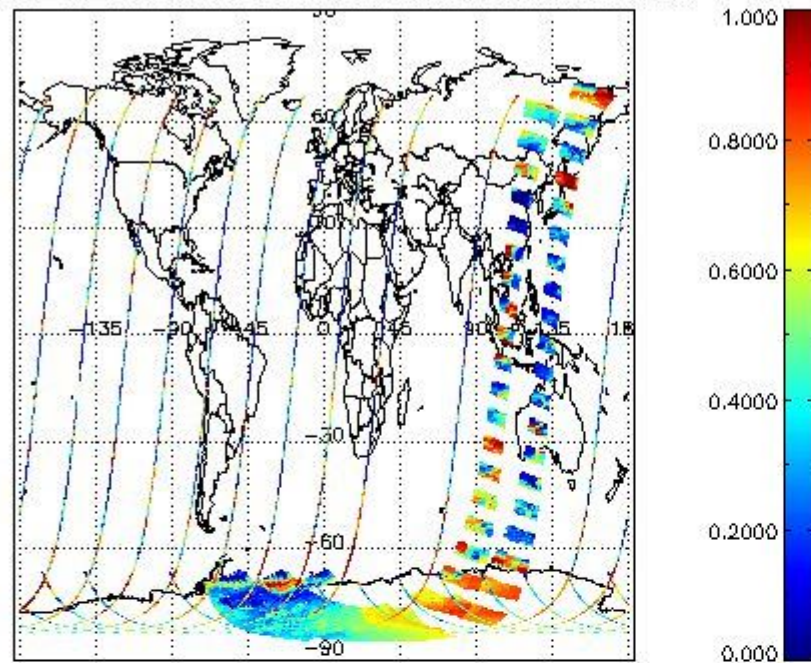
CL_FRAC_ERR	144069	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	144069	7.8883	8.0000	4.0000	16.000	0.90922		
PMD_READ_CL[0]	144069	0.45425	0.0000	0.0000	16.000	1.8222	-	
PMD_READ_CL[1]	144069	0.34099	0.0000	0.0000	16.000	1.5765	-	
CL_TOP_HEIGHT	131701	4.1804	2.5177	0.0000	17.000	4.0979	km	
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---	
CL_OPT_DEPTH	131701	43.805	24.003	0.0000	101.00	37.815	km	
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---	
CL_TYPE_FLAGS	144069	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	144069	11000110	11000010	11000000	11100000	2540.6	flags	
AERO_ABSO_IND	144069	0.56984	0.32396	-4.3316	11.327	1.1116		
AERO_IND_DIAG	144069	0.0000	0.0000	0.0000	0.0000	0.0000		
AERO_FLAGS	144069	10011111	11000000	00000000	11000000	18448.	flags	

Time and geolocation plots:

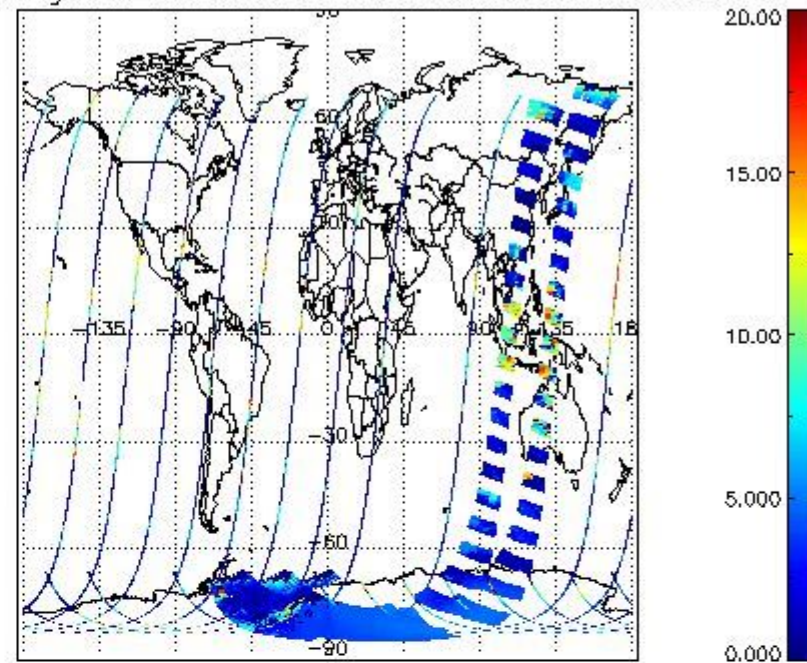
Plots are available for the following parameters:

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

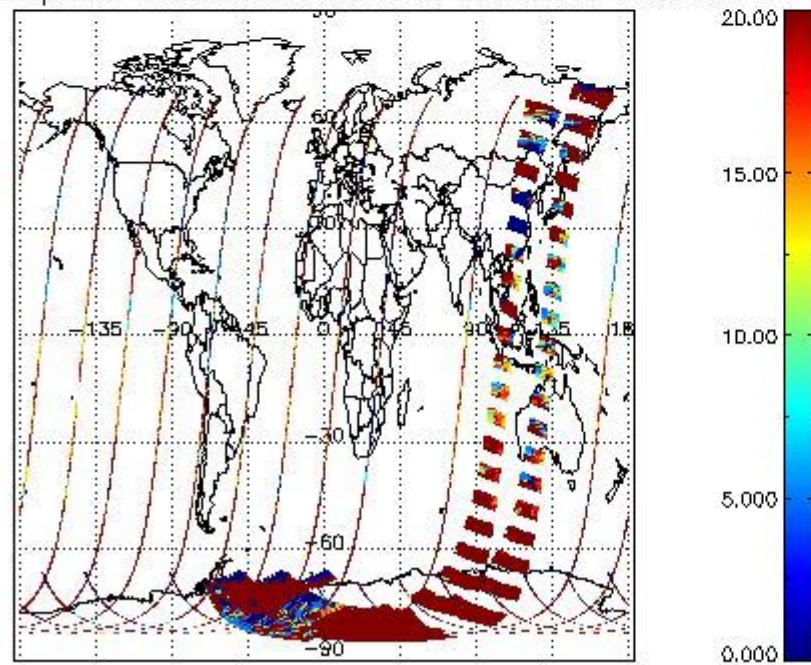
cLfrac for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



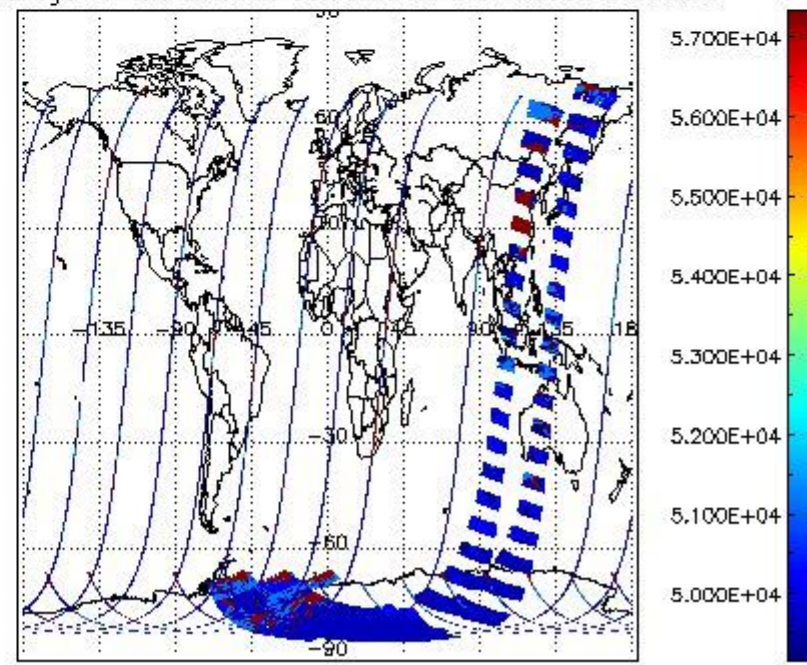
cL_top_height for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



cL_opt_depth for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



cloud_flags for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



2.2.2 Nadir

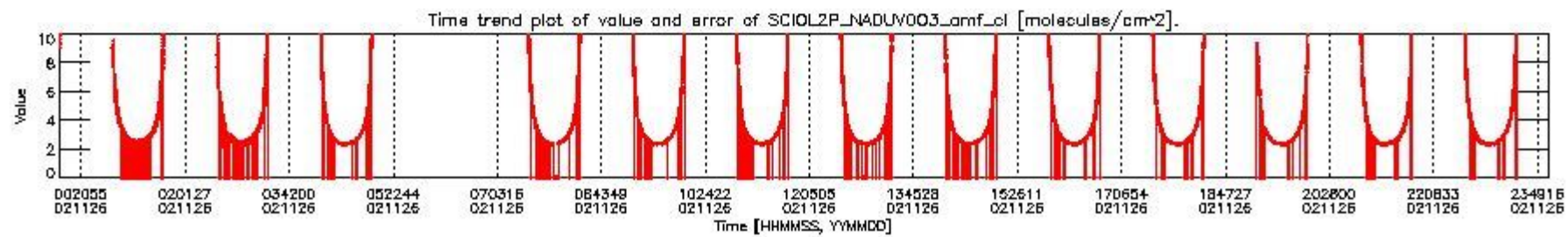
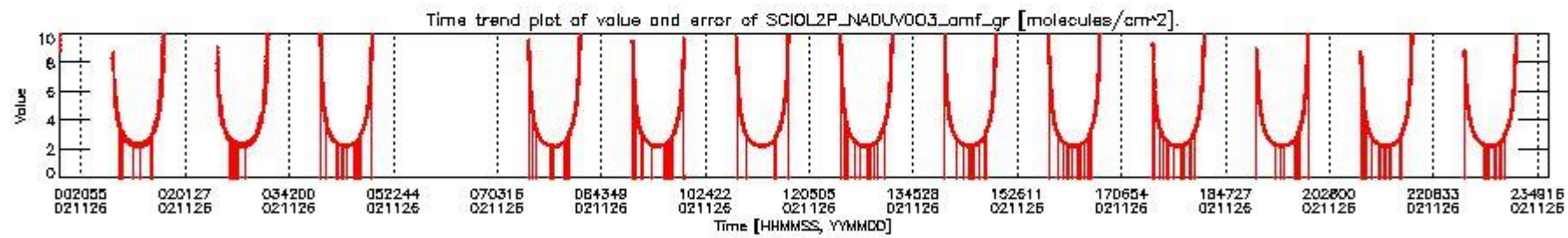
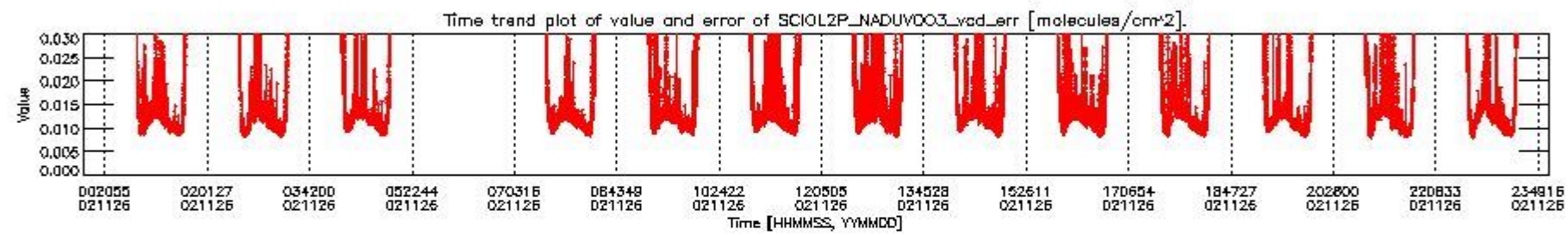
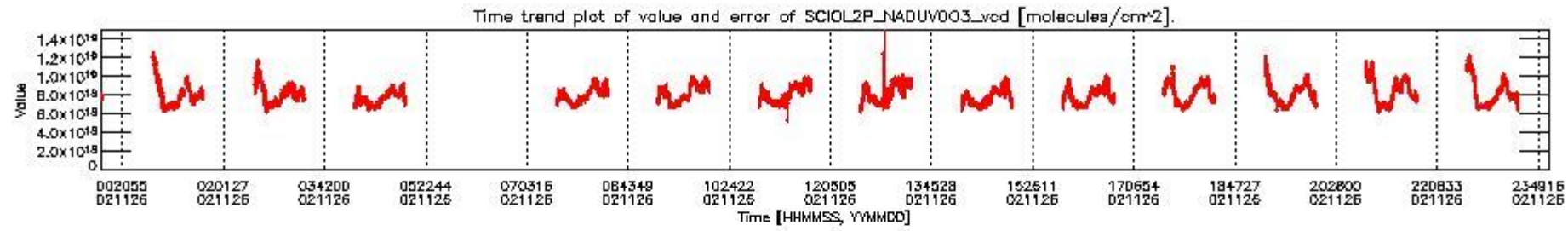
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

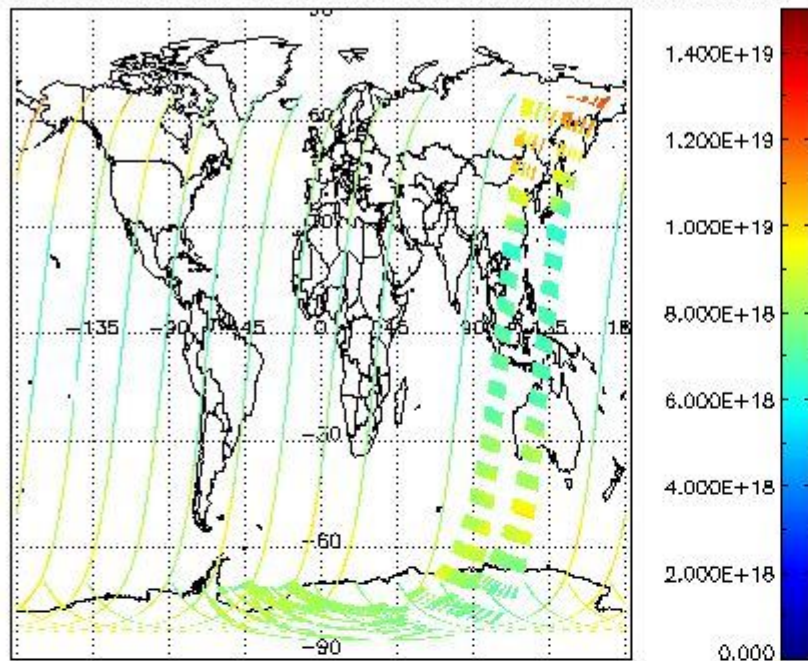
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

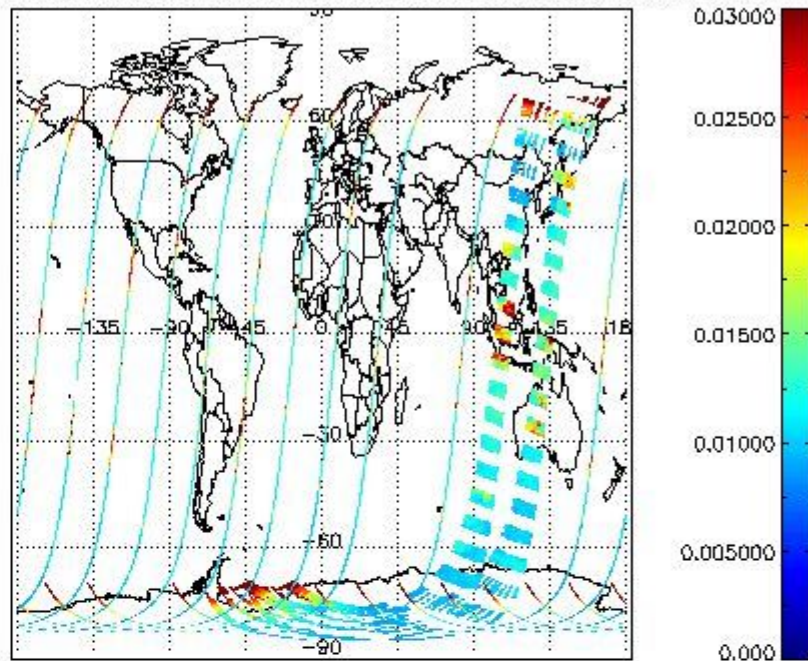
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



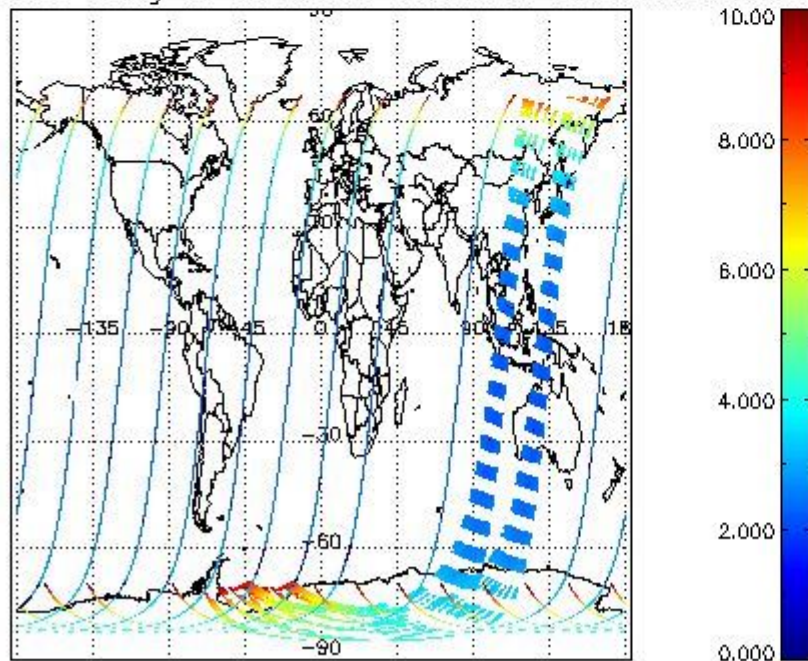
SCIOL2P_NADUV003_vcd for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



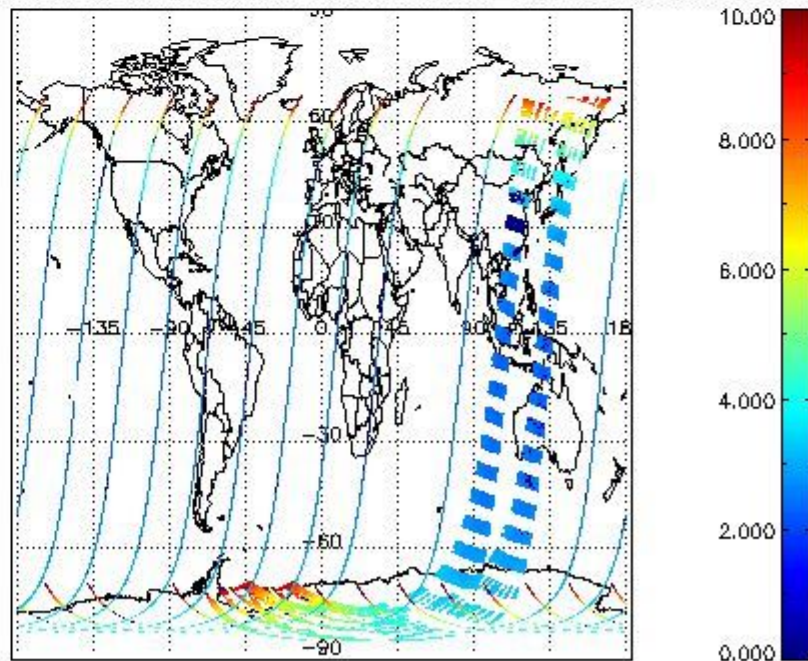
SCIOL2P_NADUV003_vcd_err for 26NOV2002 00:00:00 to 27NOV2002 00:00:00

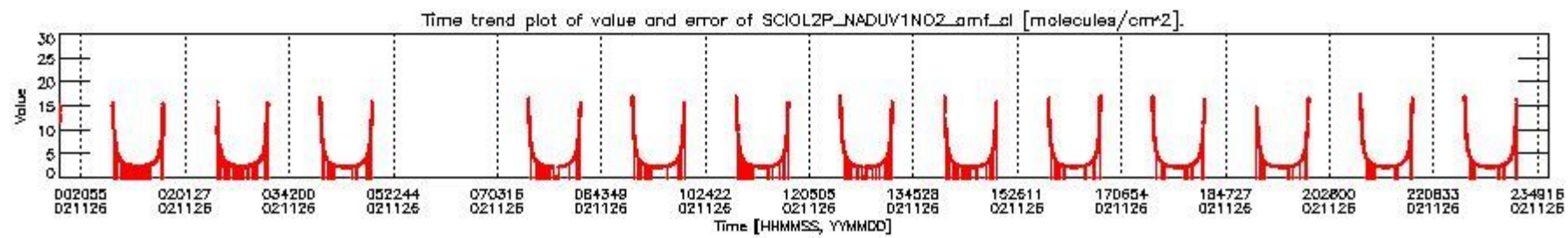
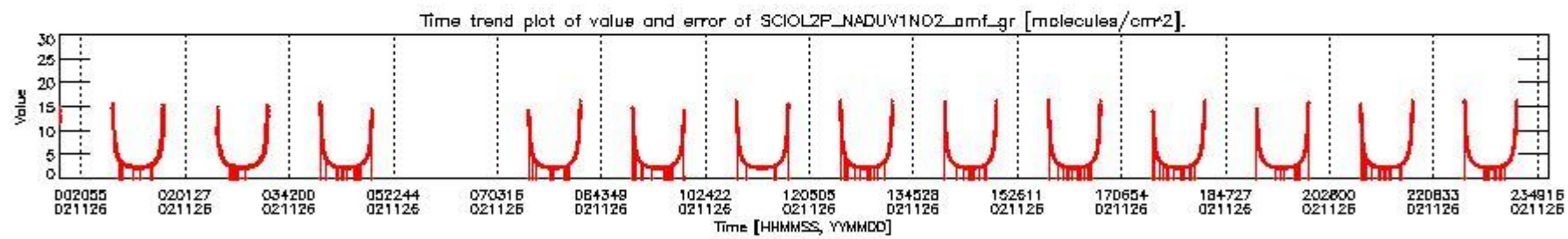
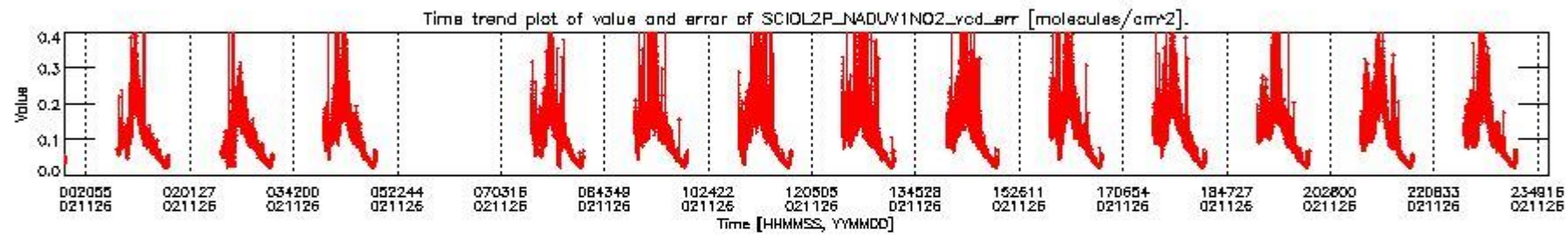
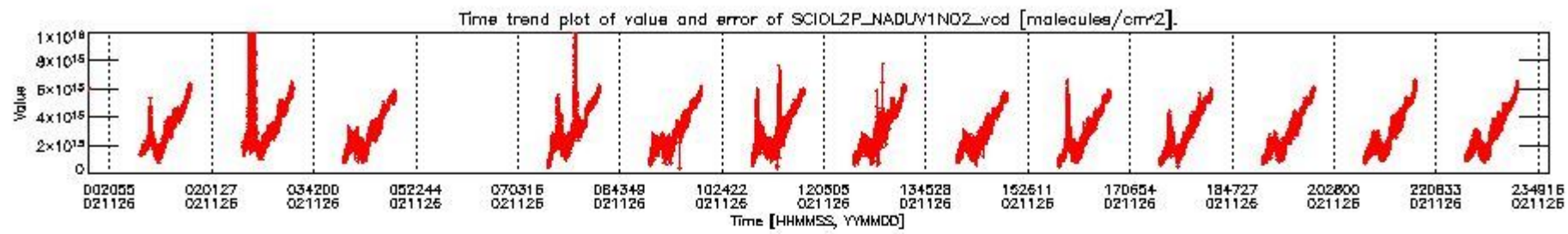


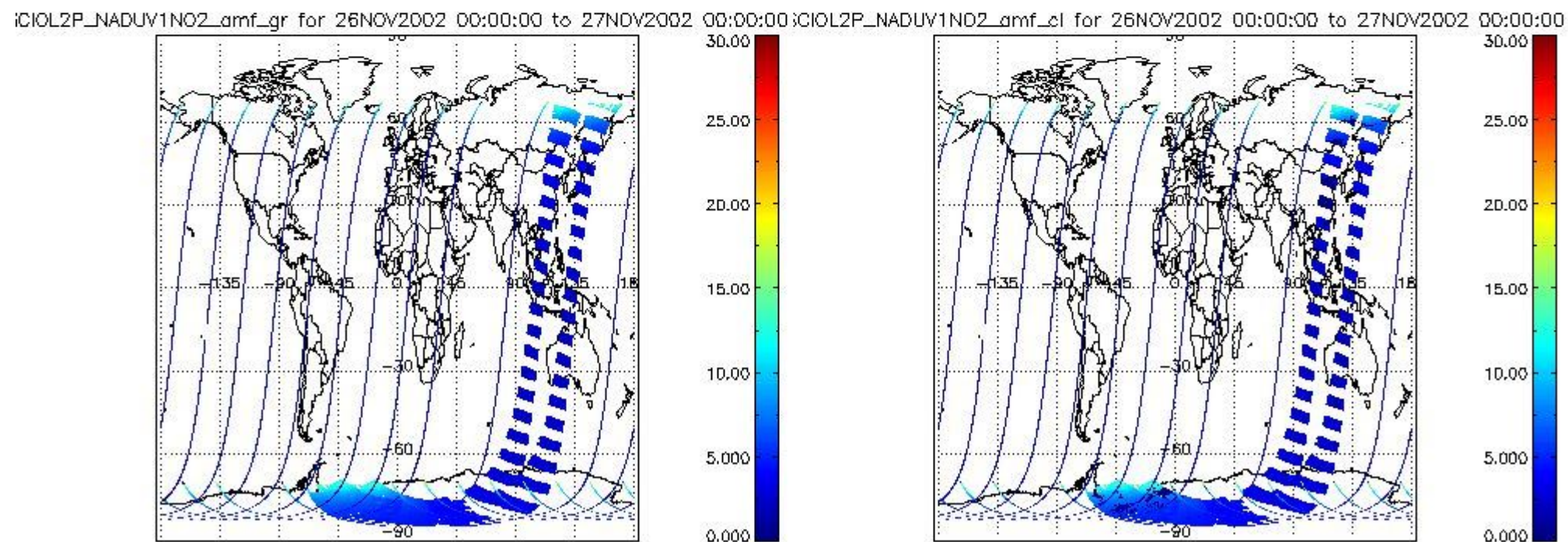
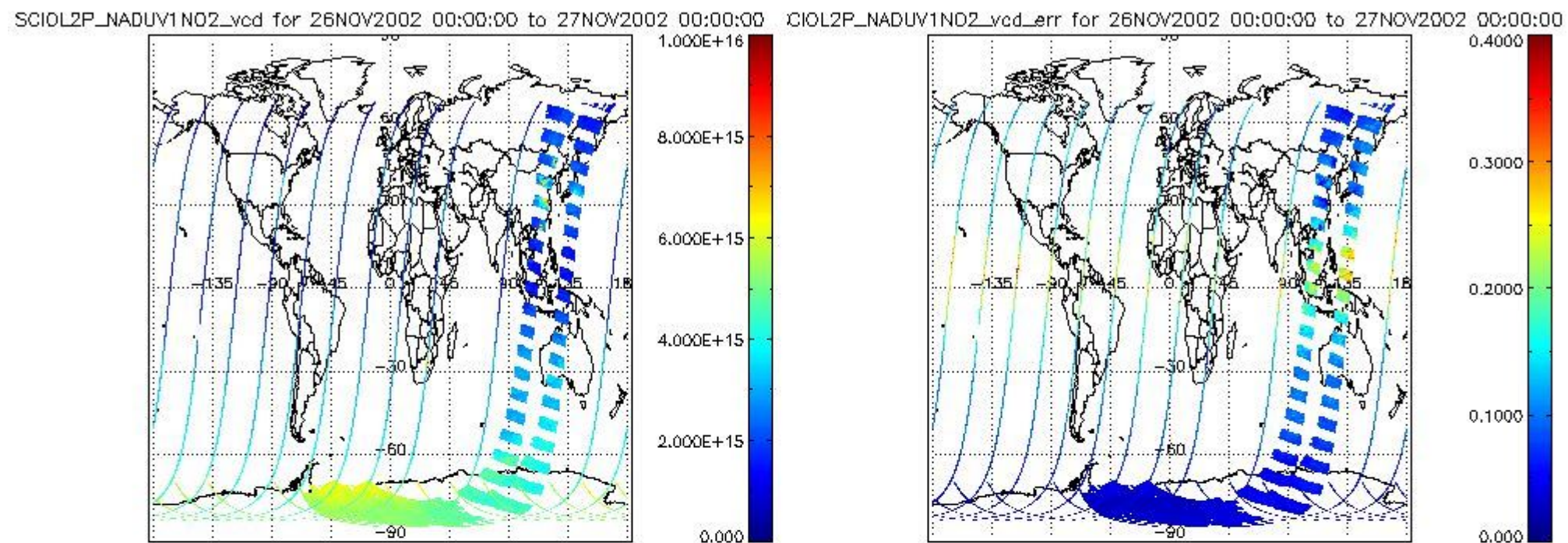
SCIOL2P_NADUV003_amf_gr for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



SCIOL2P_NADUV003_amf_cl for 26NOV2002 00:00:00 to 27NOV2002 00:00:00







2.2.3 Limb

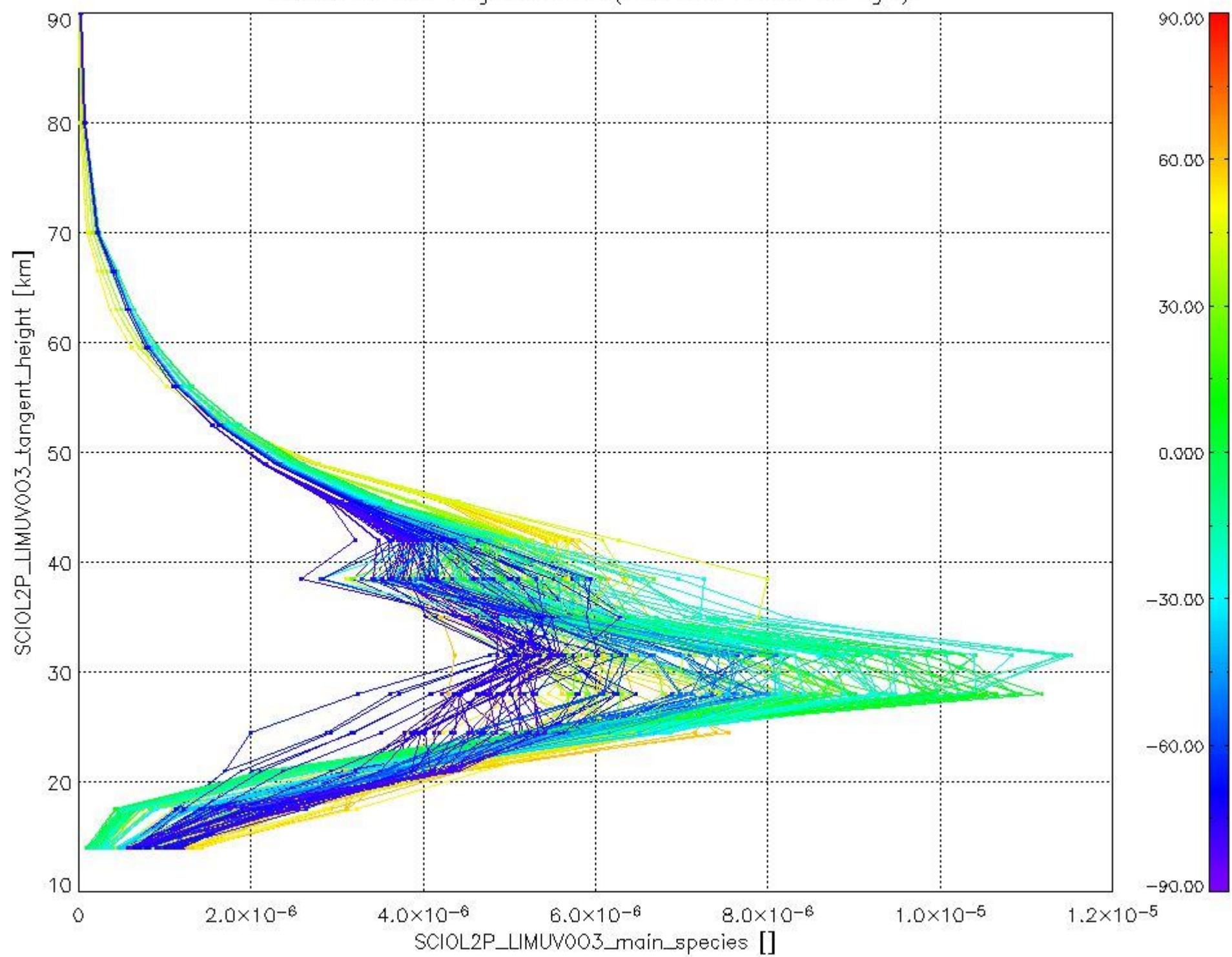
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

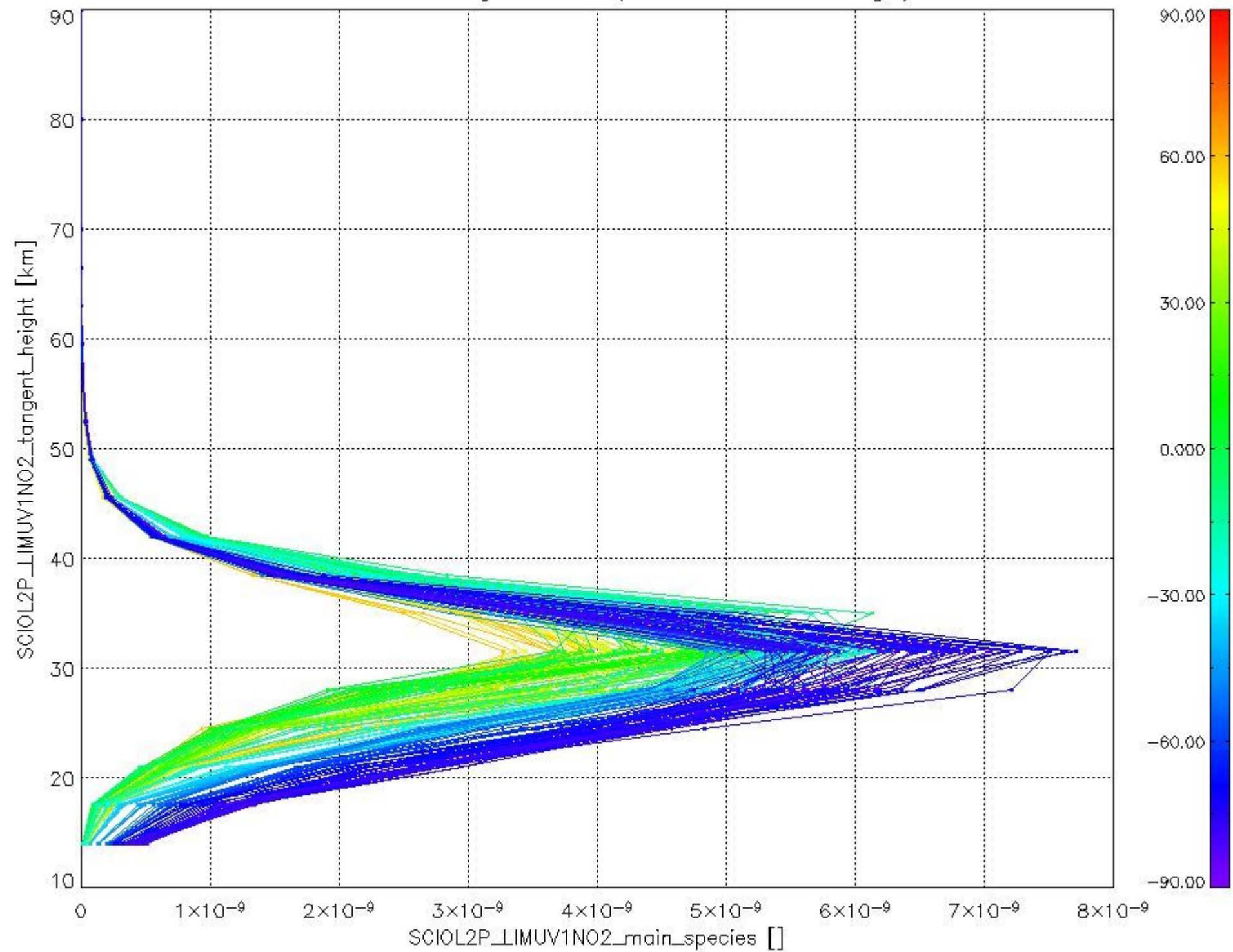
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



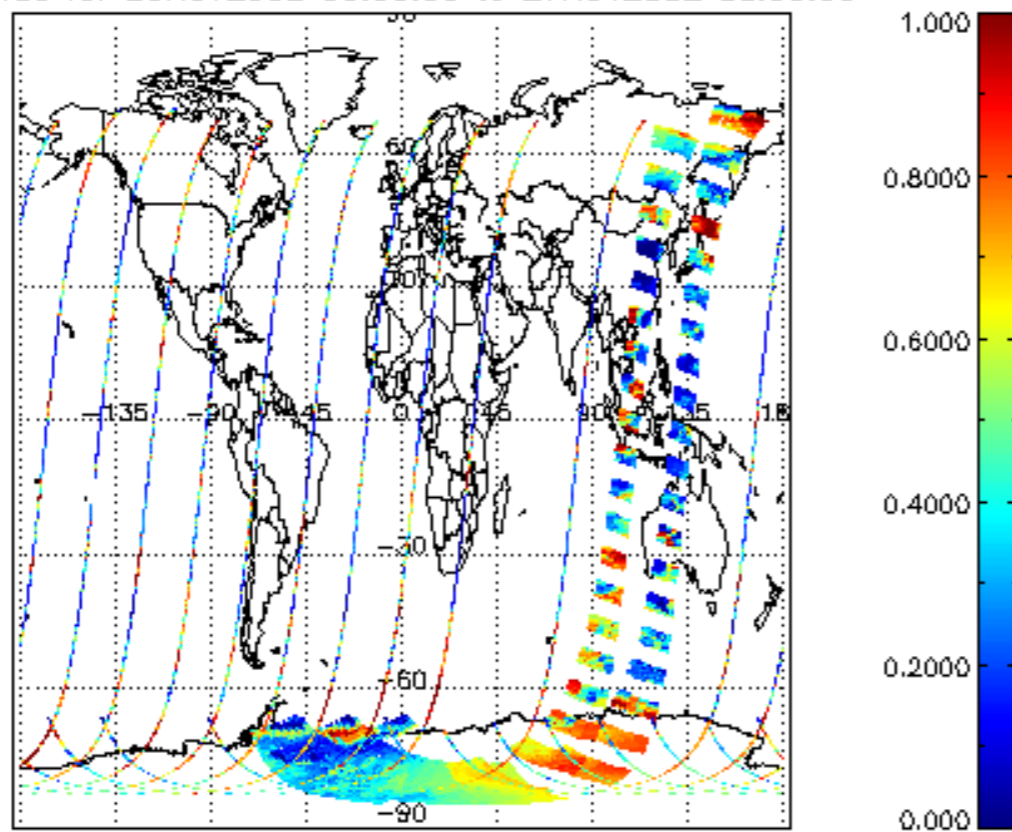
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



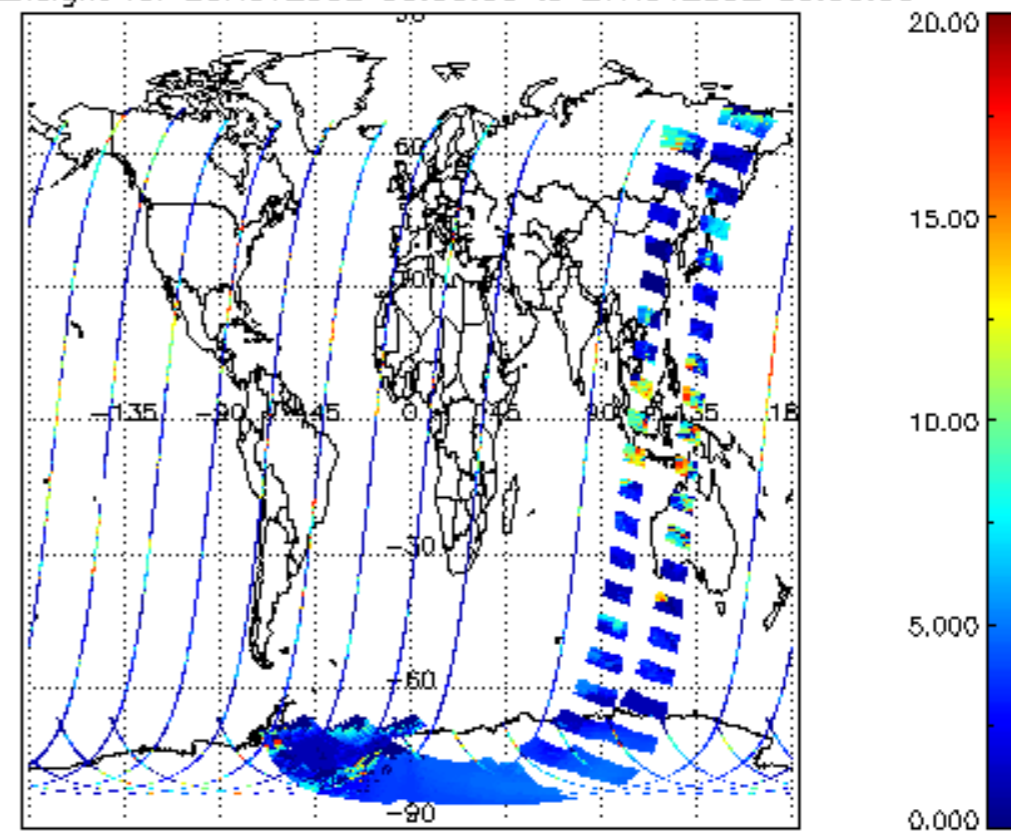
2.3 ADF monitoring

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

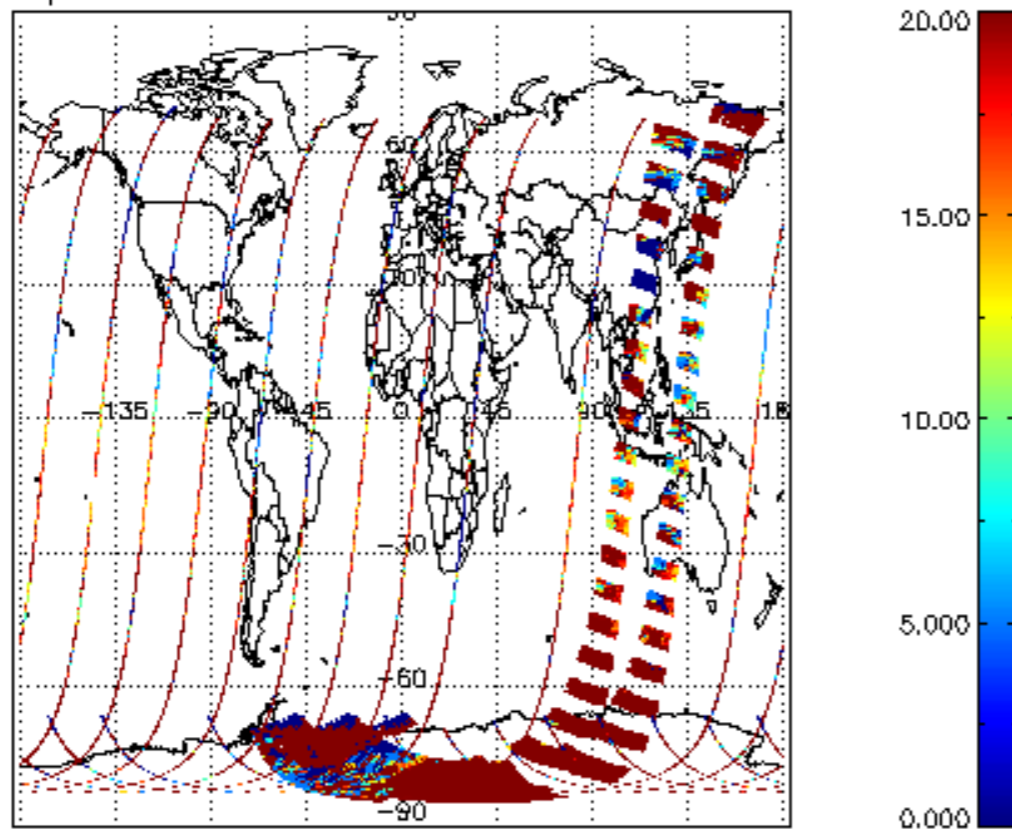
cLfrac for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



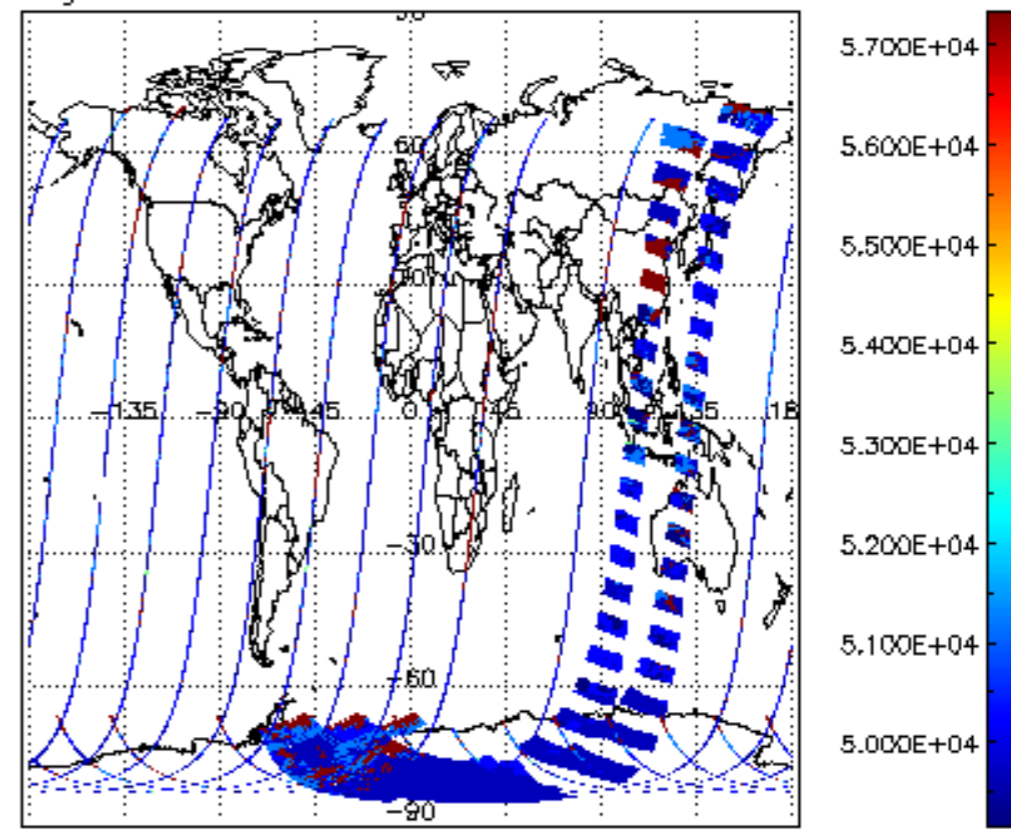
cl_top_height for 26NOV2002 00:00:00 to 27NOV2002 00:00:00

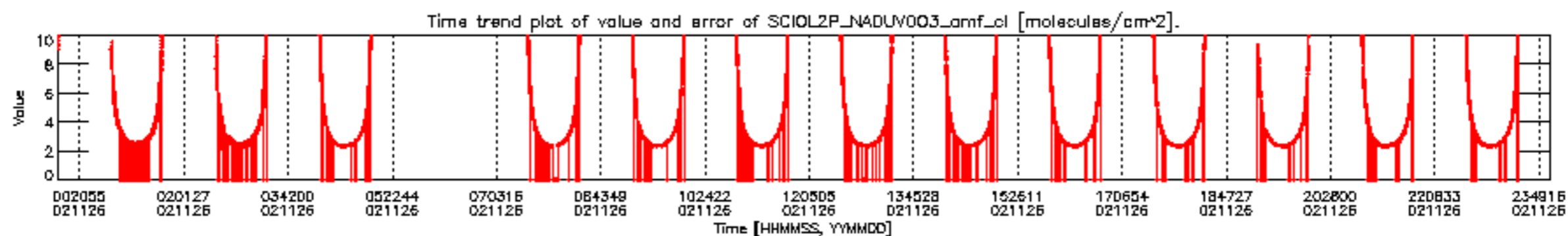
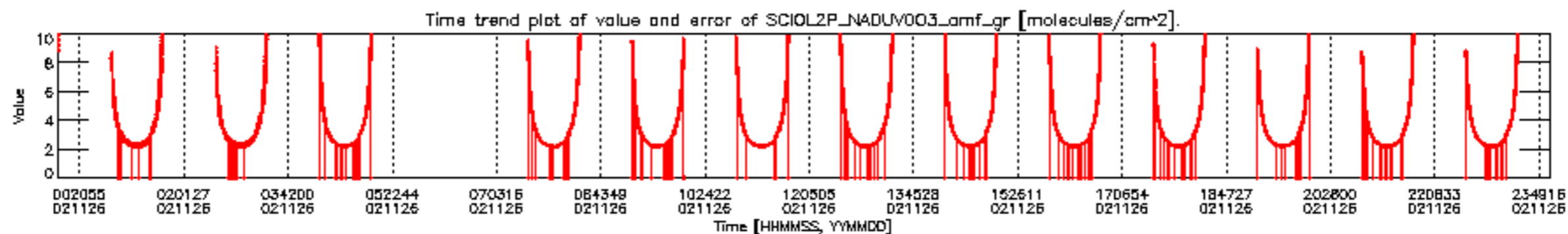
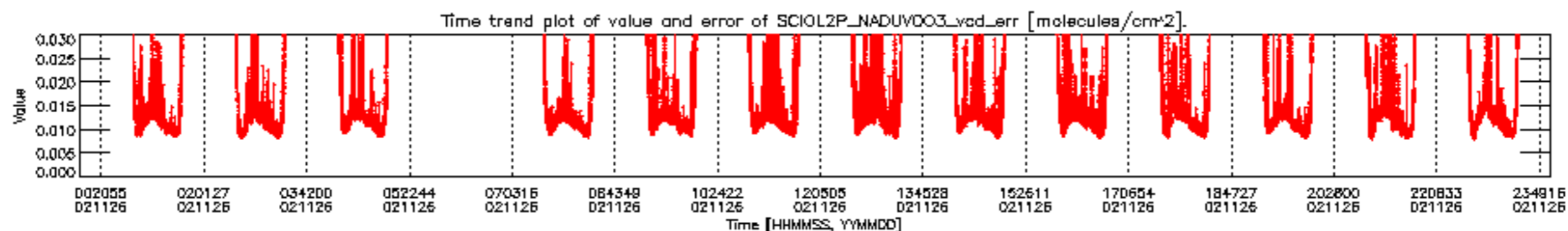
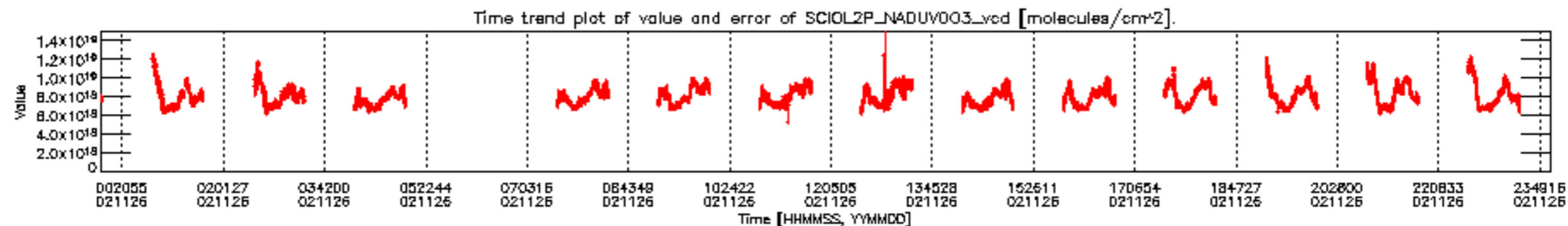


cl_opt_depth for 26NOV2002 00:00:00 to 27NOV2002 00:00:00

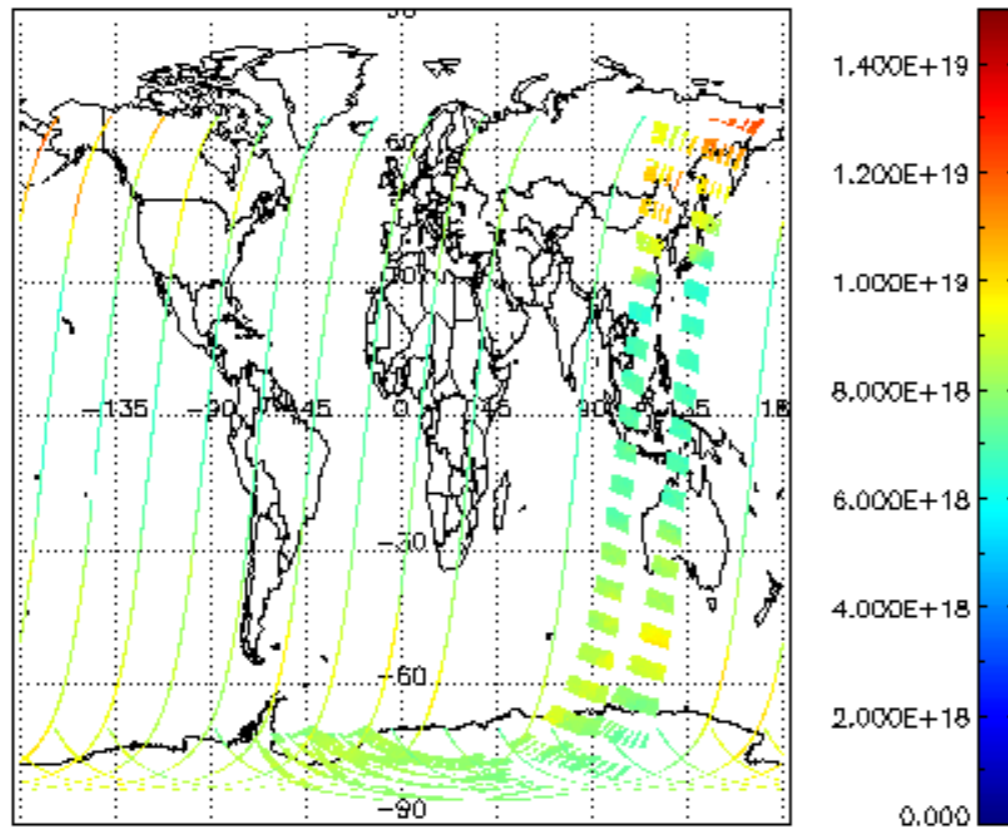


cloud_flags for 26NOV2002 00:00:00 to 27NOV2002 00:00:00

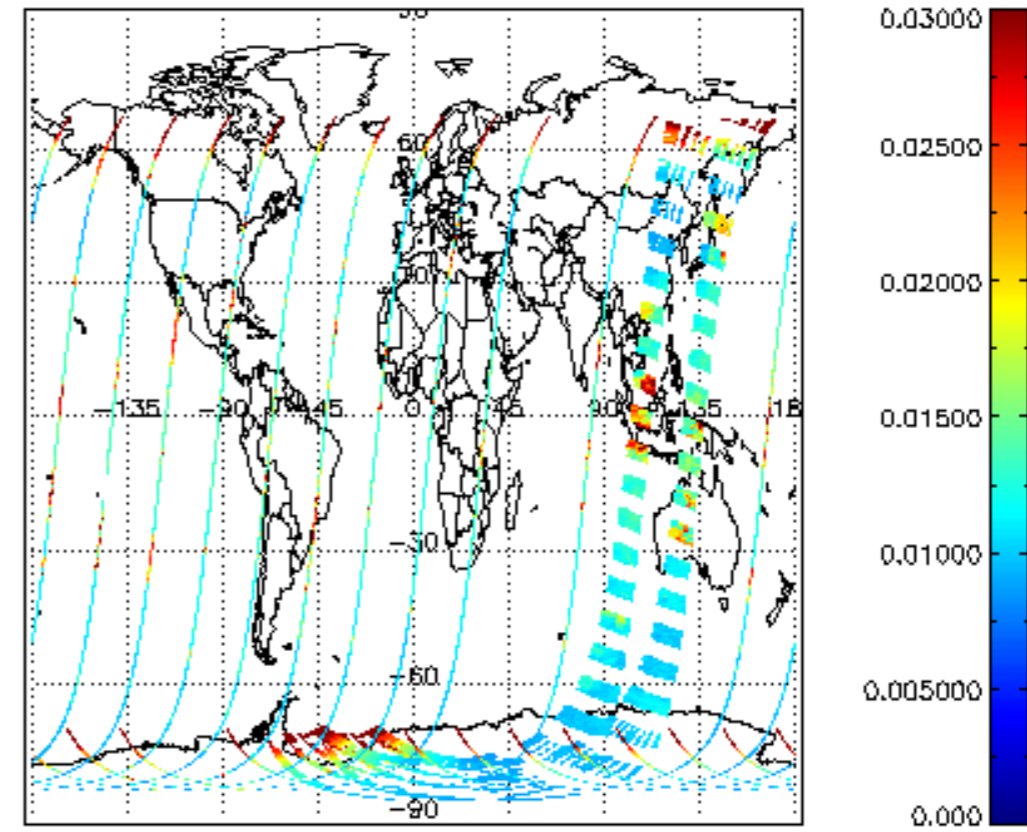




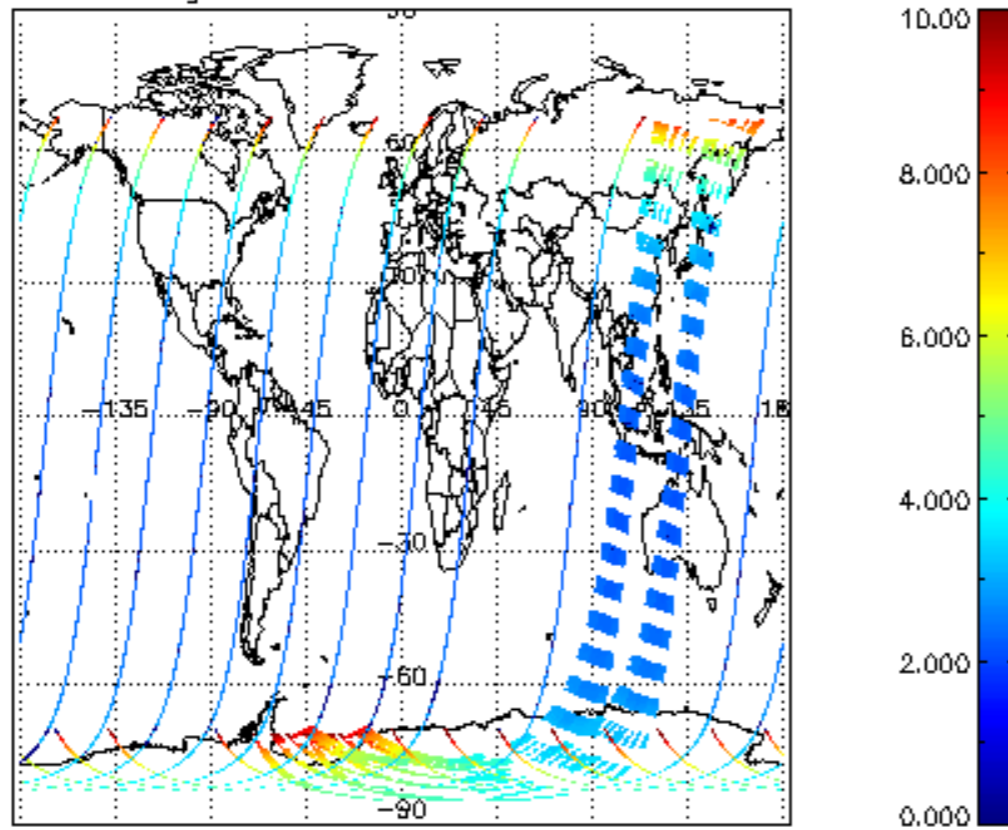
SCIOL2P_NADUV003_vcd for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



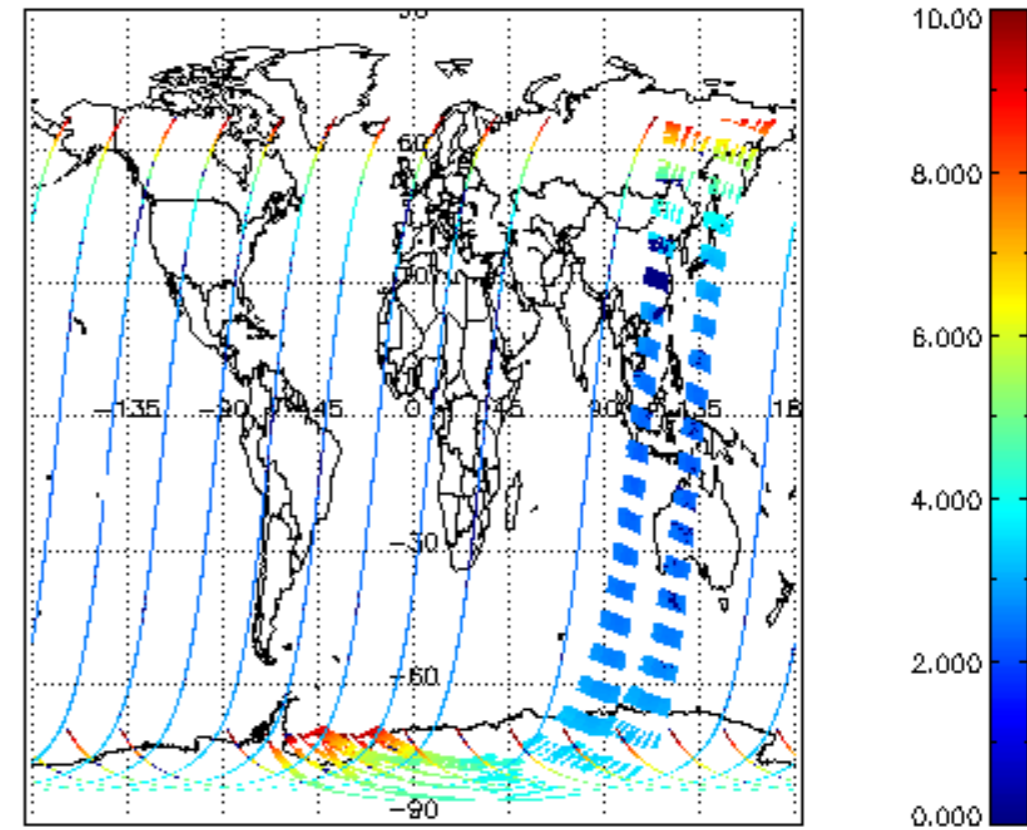
SCIOL2P_NADUV003_vcd_err for 26NOV2002 00:00:00 to 27NOV2002 00:00:00

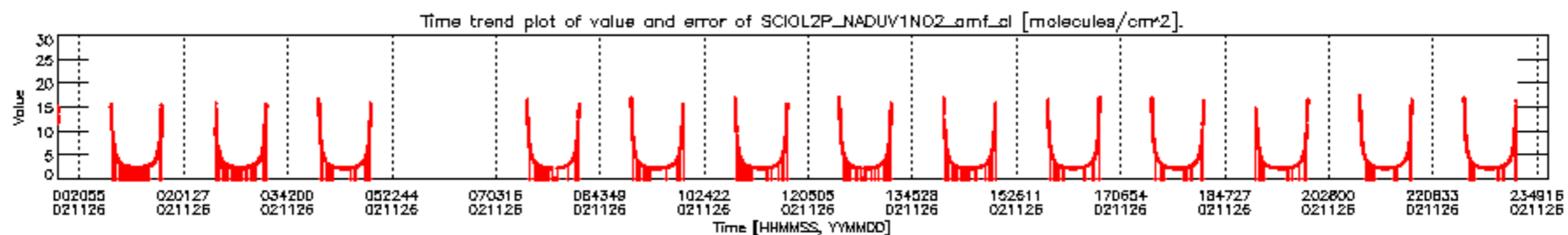
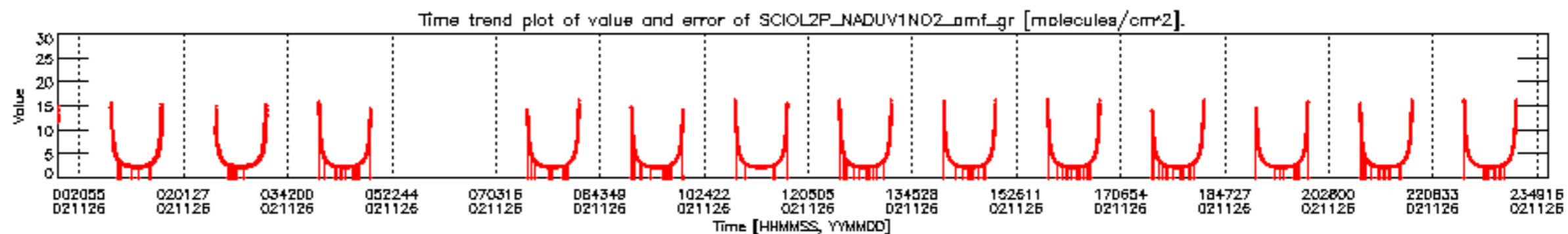
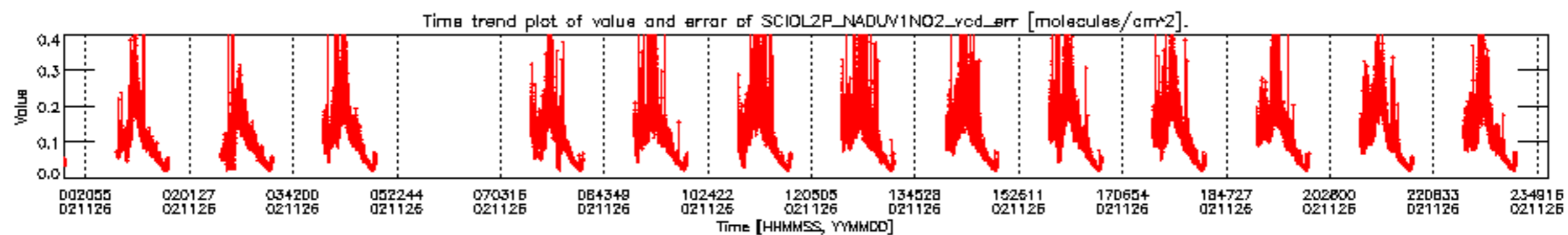
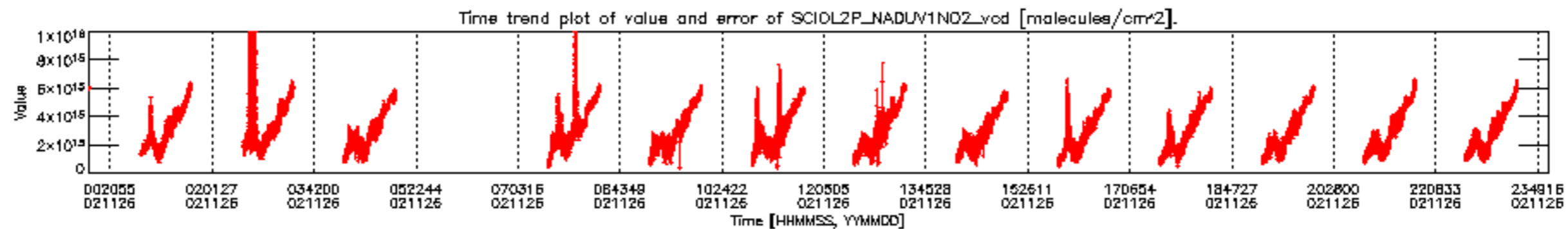


SCIOL2P_NADUV003_amf_gr for 26NOV2002 00:00:00 to 27NOV2002 00:00:00

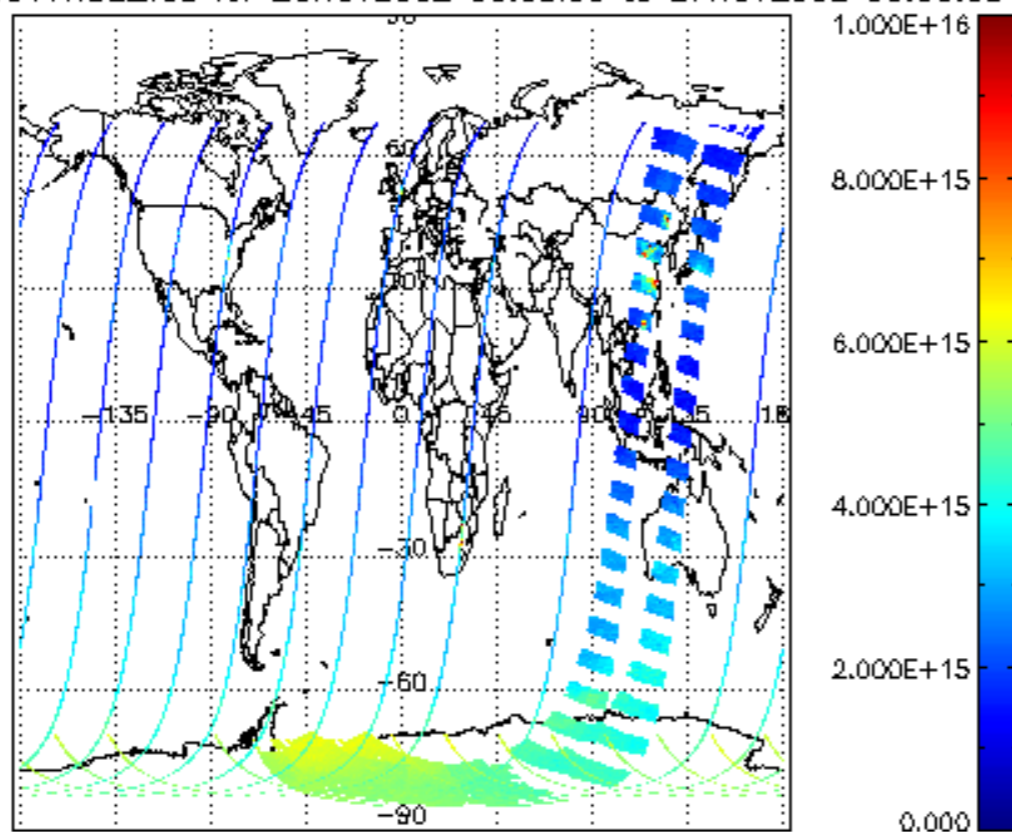


SCIOL2P_NADUV003_amf_cl for 26NOV2002 00:00:00 to 27NOV2002 00:00:00

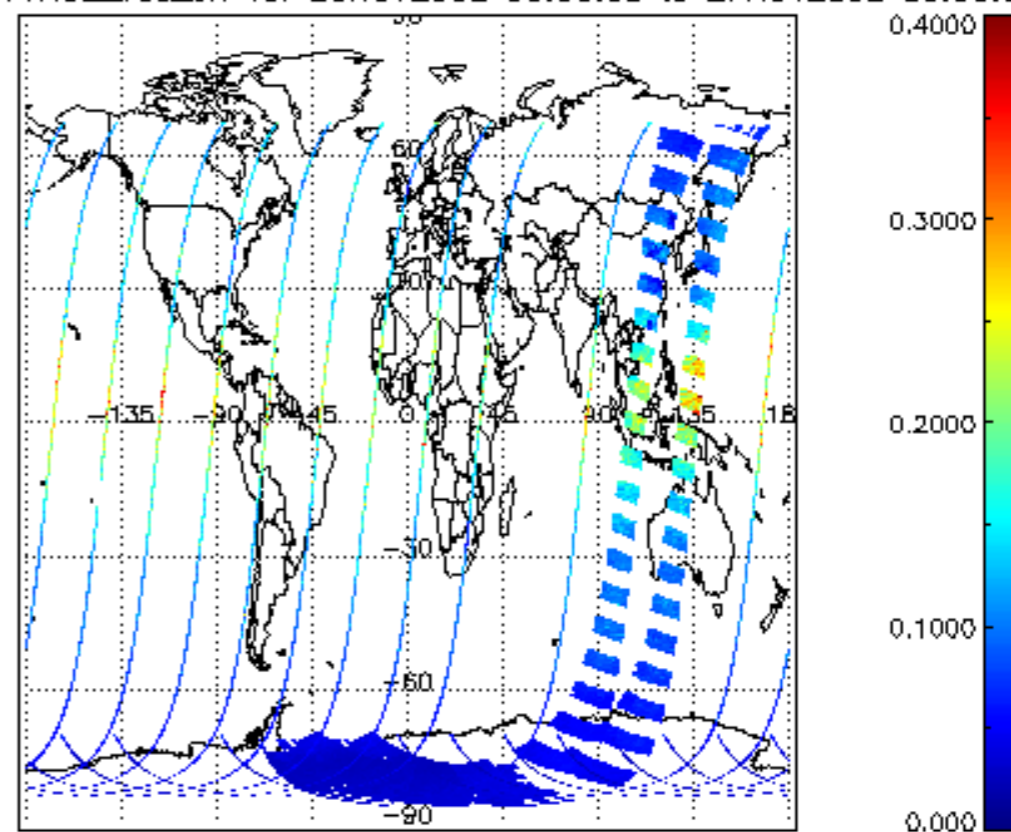




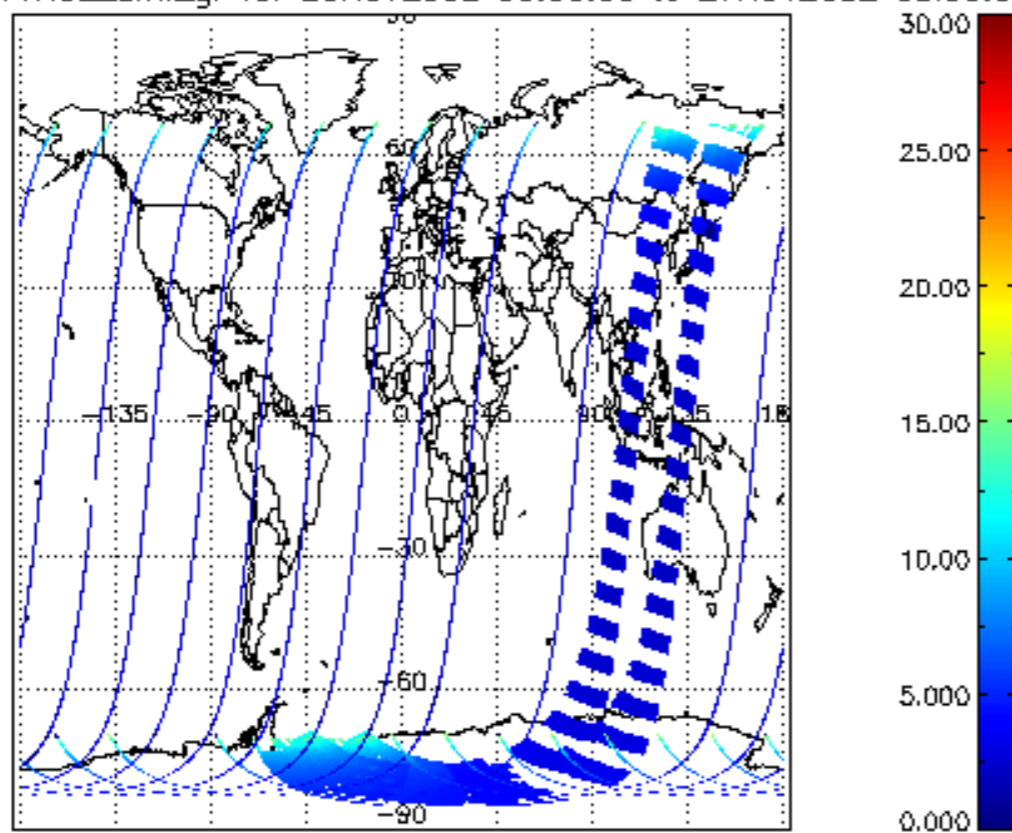
SCIOL2P_NADUV1NO2_vcd for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



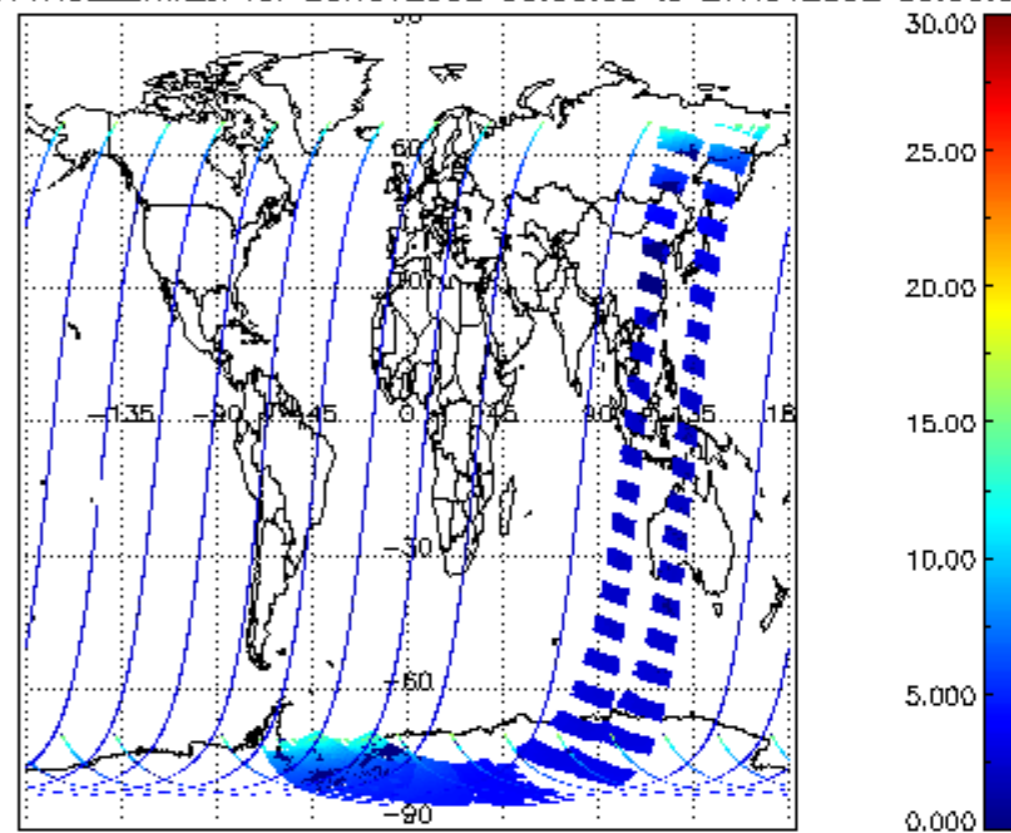
SCIOL2P_NADUV1NO2_vcd_err for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



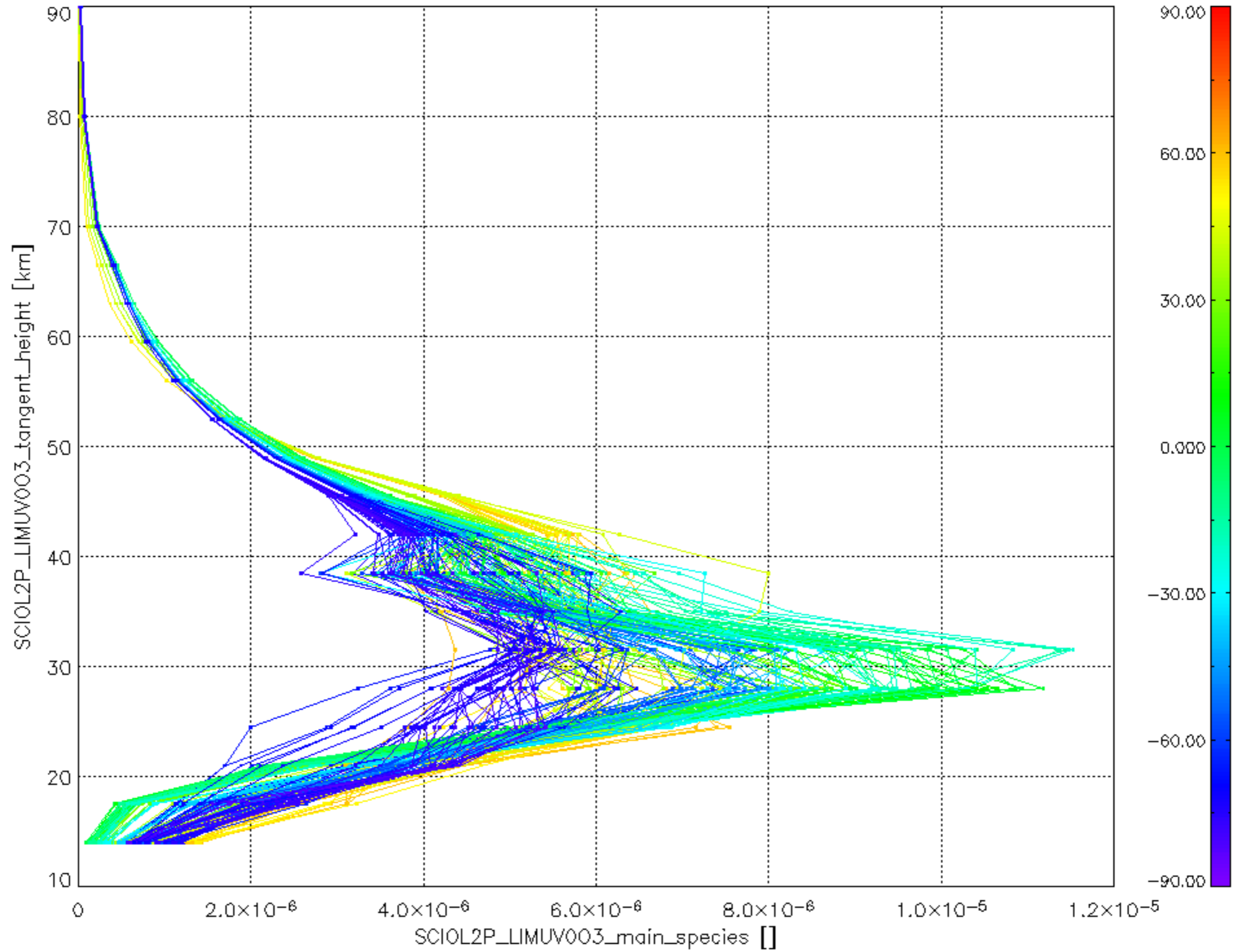
SCIOL2P_NADUV1NO2_amf_gr for 26NOV2002 00:00:00 to 27NOV2002 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 26NOV2002 00:00:00 to 27NOV2002 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).

