

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 10:33:16
Data source version	SCIA-OL/3.01-R
Processing scope for products	23NOV2002 00:00:00 to 24NOV2002 00:00:00
Start time of first product within scope	22NOV2002 22:59:35
Stop time of last product within scope	24NOV2002 01:04:02
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__2PRDPA20021122_225935_000033242011_00259_03820_1631.N1	22NOV2002 22:59:35	22NOV2002 23:54:59	0	GOOD
1	SCI_OL__2PRDPA20021123_004011_000033242011_00260_03821_1644.N1	23NOV2002 00:40:11	23NOV2002 01:35:36	0	GOOD
2	SCI_OL__2PRDPA20021123_040124_000033242011_00262_03823_1703.N1	23NOV2002 04:01:24	23NOV2002 04:56:48	0	GOOD
3	SCI_OL__2PRDPA20021123_054200_000033242011_00263_03824_1634.N1	23NOV2002 05:42:00	23NOV2002 06:37:24	0	GOOD
4	SCI_OL__2PRDPA20021123_072236_000033242011_00264_03825_1651.N1	23NOV2002 07:22:36	23NOV2002 08:18:00	0	GOOD
5	SCI_OL__2PRDPA20021123_090312_000033242011_00265_03826_1649.N1	23NOV2002 09:03:12	23NOV2002 09:58:36	0	GOOD
6	SCI_OL__2PRDPA20021123_104348_000033242011_00266_03827_1695.N1	23NOV2002 10:43:48	23NOV2002 11:39:12	0	GOOD
7	SCI_OL__2PRDPA20021123_122424_000033242011_00267_03828_1664.N1	23NOV2002 12:24:24	23NOV2002 13:19:49	0	GOOD
8	SCI_OL__2PRDPA20021123_140500_000033242011_00268_03829_1667.N1	23NOV2002 14:05:00	23NOV2002 15:00:25	0	GOOD
9	SCI_OL__2PRDPA20021123_154537_000033242011_00269_03830_1697.N1	23NOV2002 15:45:37	23NOV2002 16:41:01	0	GOOD
10	SCI_OL__2PRDPA20021123_172613_000033242011_00270_03831_1686.N1	23NOV2002 17:26:13	23NOV2002 18:21:37	0	GOOD
11	SCI_OL__2PRDPA20021123_190626_000033752011_00271_03832_1690.N1	23NOV2002 19:06:26	23NOV2002 20:02:42	0	GOOD
12	SCI_OL__2PRDPA20021123_204746_000033242011_00272_03833_1698.N1	23NOV2002 20:47:46	23NOV2002 21:43:11	0	GOOD
13	SCI_OL__2PRDPA20021123_222801_000033242011_00273_03834_1696.N1	23NOV2002 22:28:01	23NOV2002 23:23:26	0	GOOD
14	SCI_OL__2PRDPA20021124_001104_000031782011_00274_03835_1635.N1	24NOV2002 00:11:04	24NOV2002 01:04:02	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: 100720

Total number of cloud data DSRs with good quality flag (=0): 100720 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	100720	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	100720	0.21659	0.25000	0.12500	1.0000	0.080993	s
SURFACE_PRES	100720	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	100720	0.45936	0.46119	0.0000	1.0000	0.28576	-

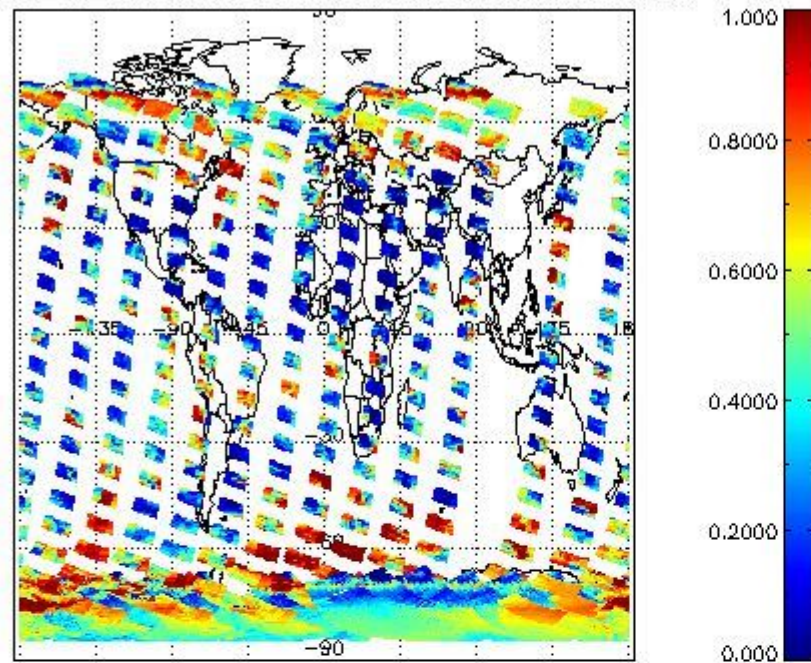
CL_FRAC_ERR	100720	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	100720	6.9309	8.0000	4.0000	32.000	2.5918	
PMD_READ_CL[0]	100720	0.44807	0.0000	0.0000	30.000	1.5856	-
PMD_READ_CL[1]	100720	0.41413	0.0000	0.0000	32.000	1.5211	-
CL_TOP_HEIGHT	91571	4.4669	3.2800	0.0000	17.000	3.9552	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	91571	50.164	34.280	0.0000	101.00	38.741	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	100720	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	100720	11000110	11000010	11000000	11100000	2524.8	flags
AERO_ABSO_IND	100720	0.45855	0.30178	-4.3618	12.069	1.0849	
AERO_IND_DIAG	100720	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	100720	01101010	11000000	00000000	11000000	24440.	flags

Time and geolocation plots:

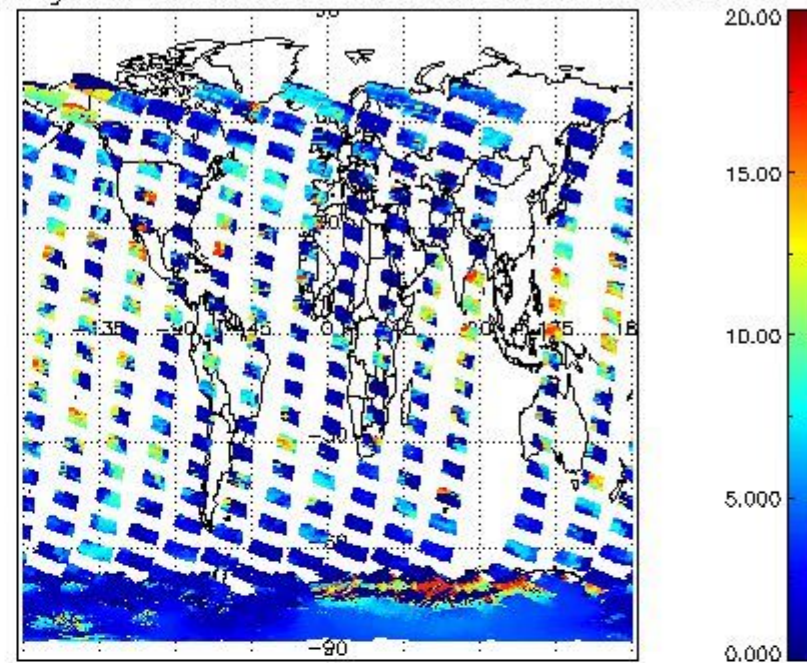
Plots are available for the following parameters:

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

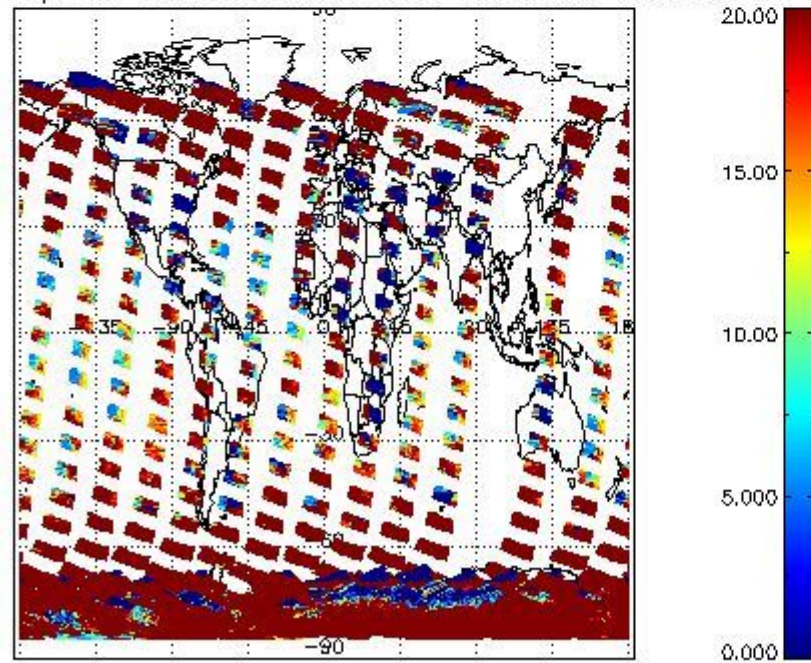
cLfrac for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



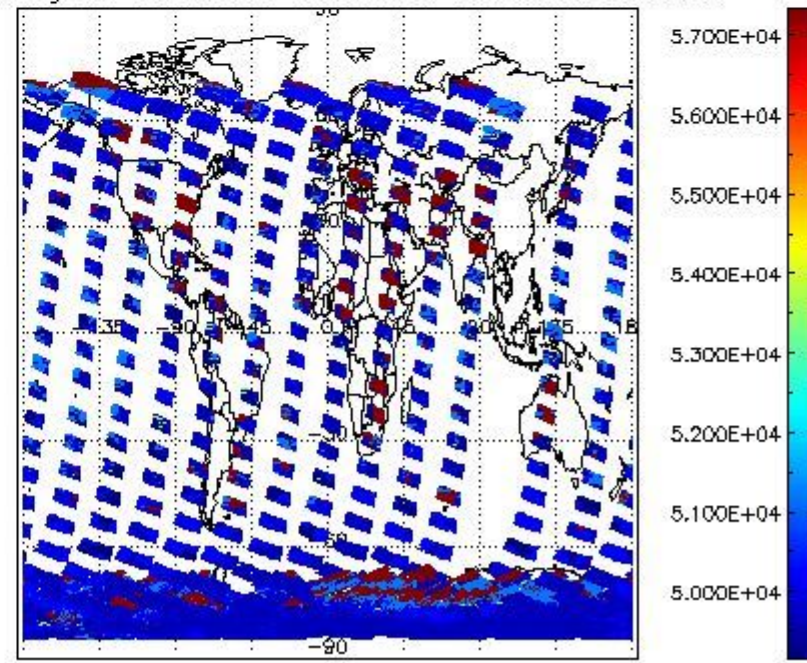
cL_top_height for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



cL_opt_depth for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



cloud_flags for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



2.2.2 Nadir

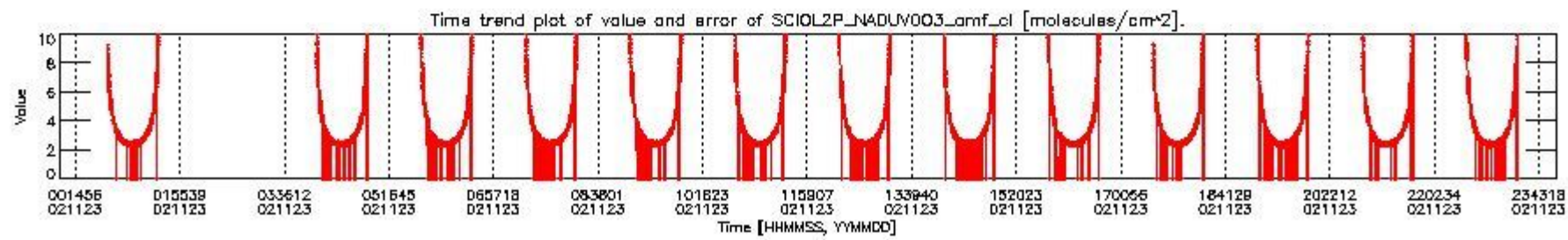
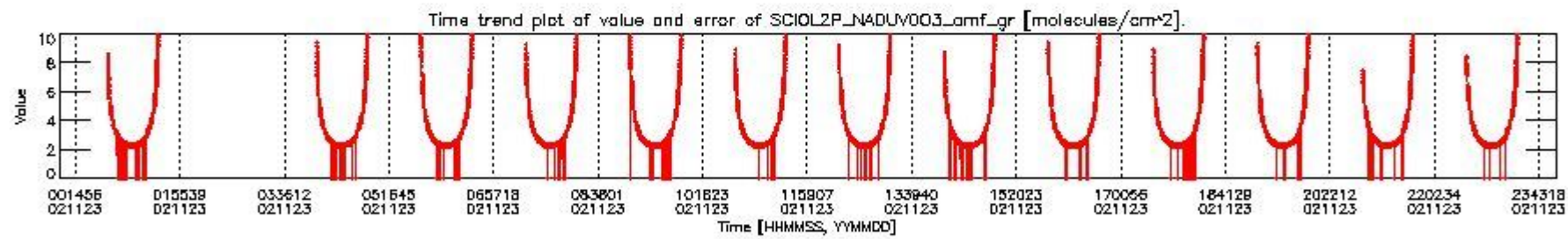
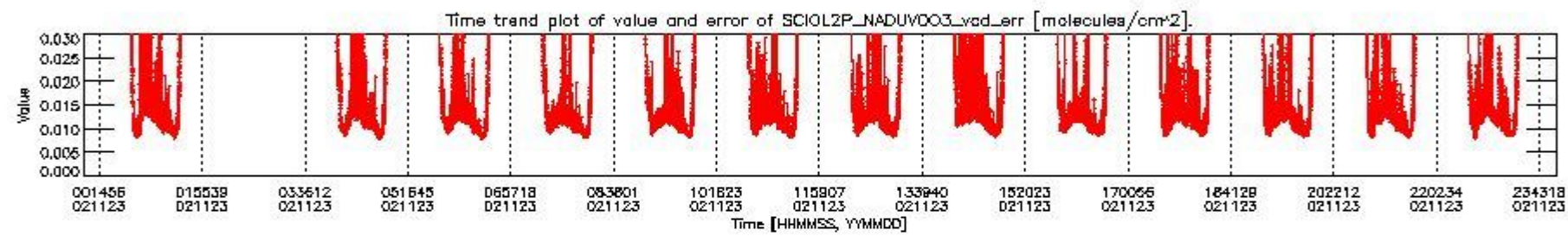
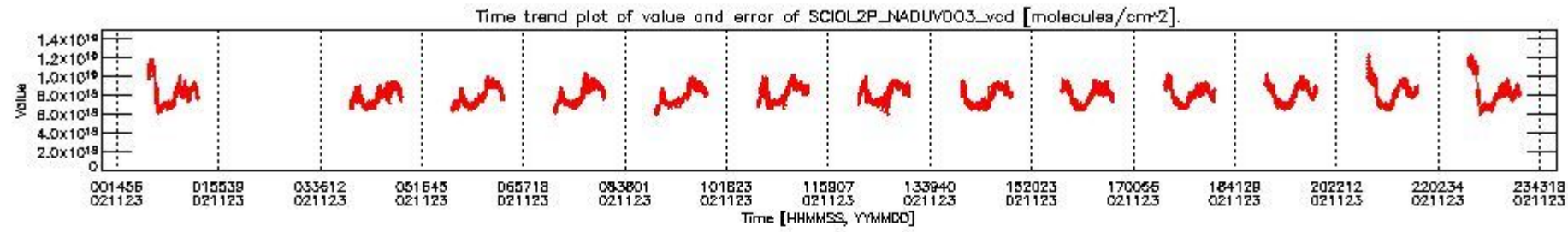
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

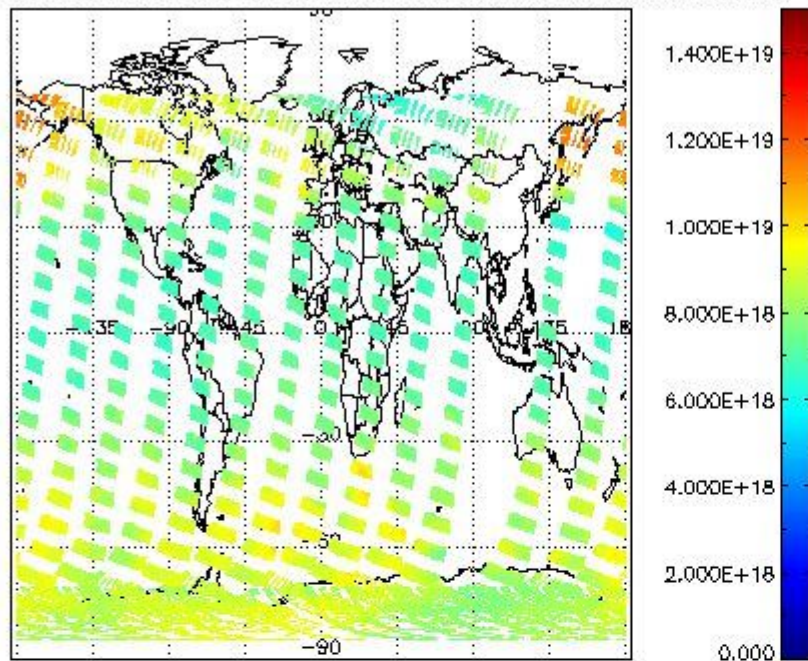
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

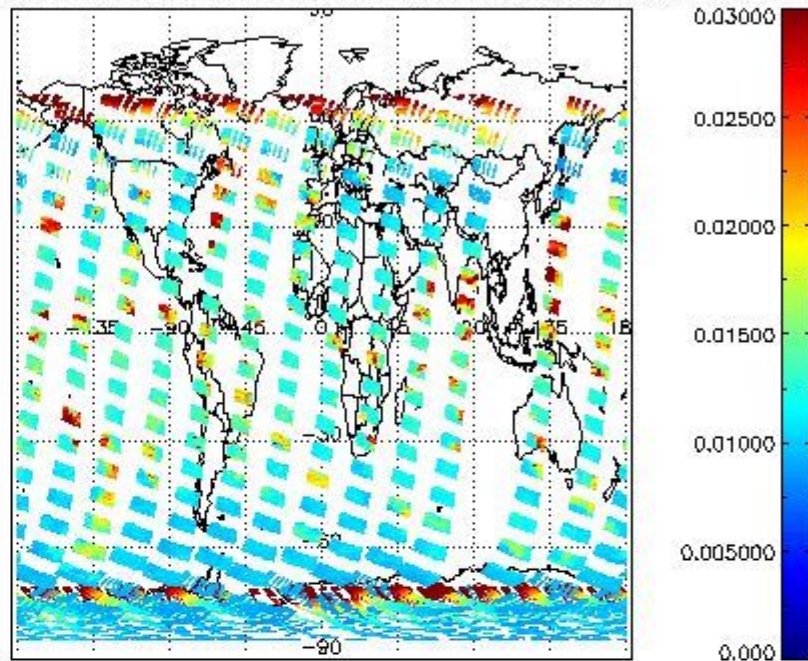
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



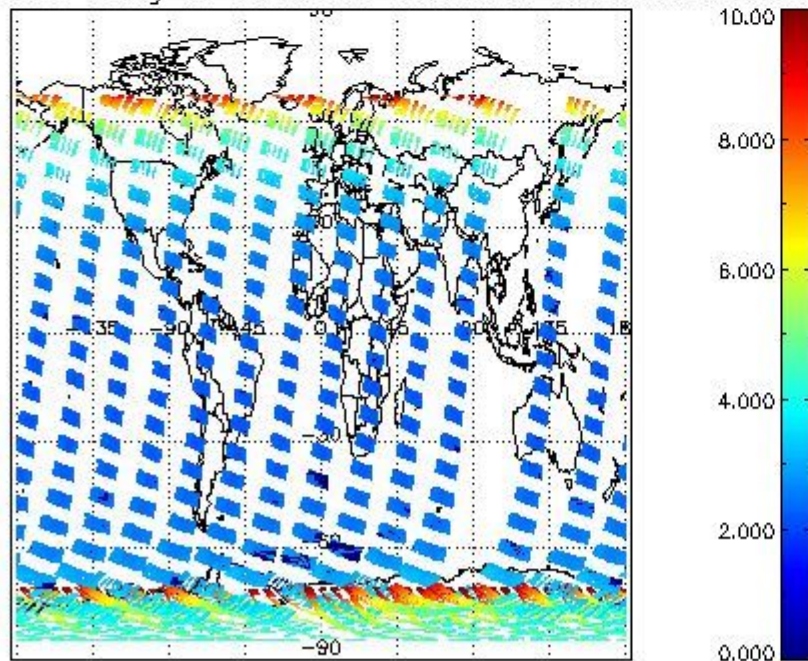
SCIOL2P_NADUV003_vcd for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



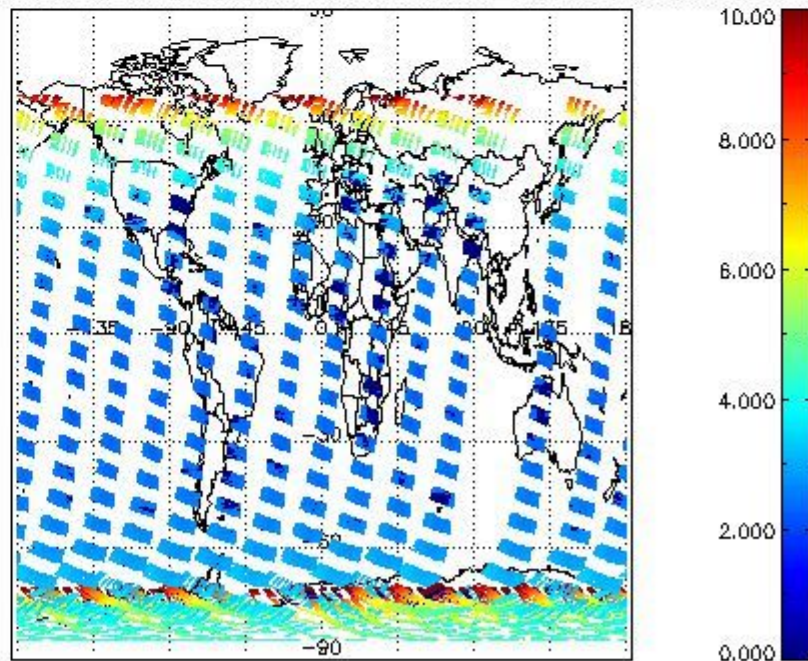
SCIOL2P_NADUV003_vcd_err for 23NOV2002 00:00:00 to 24NOV2002 00:00:00

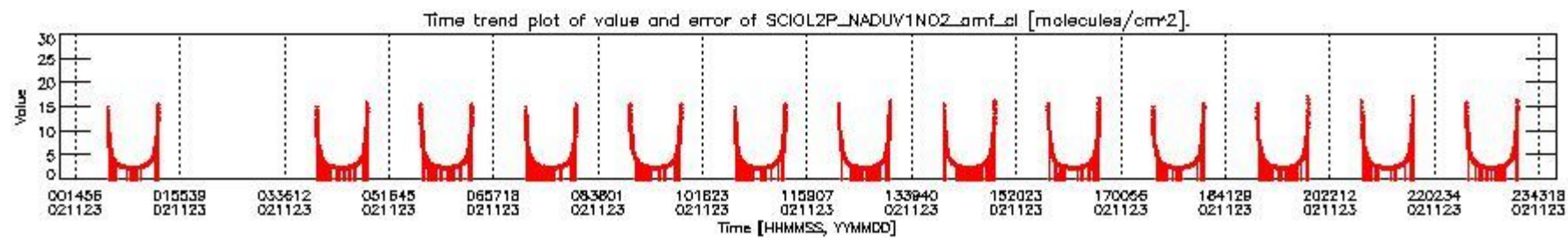
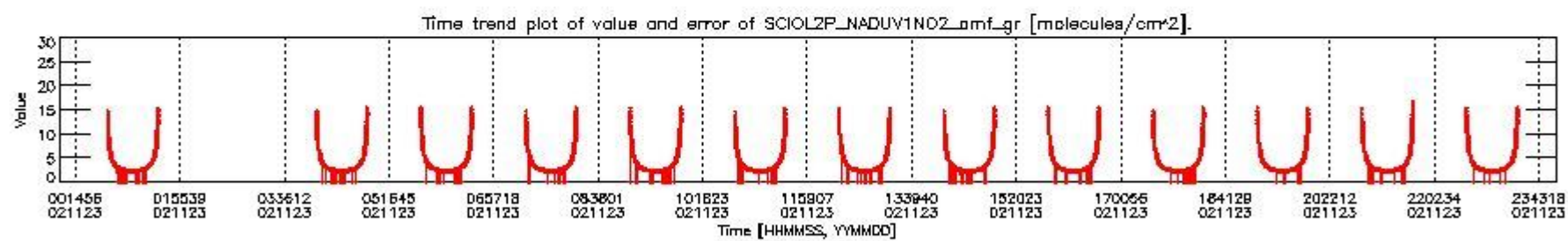
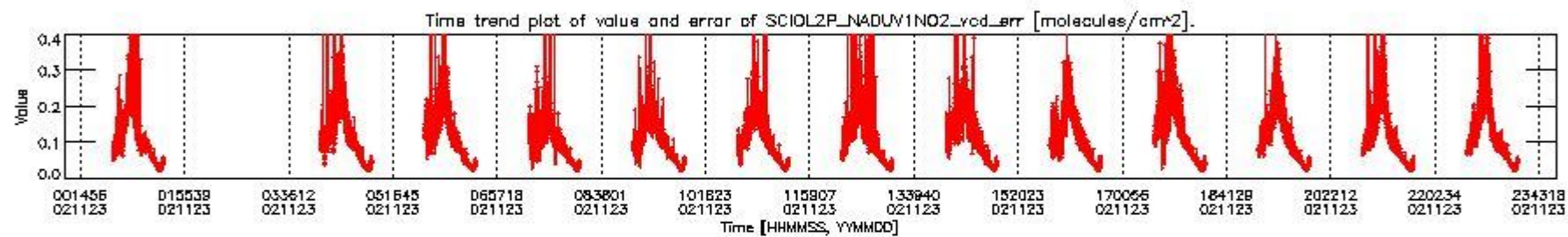
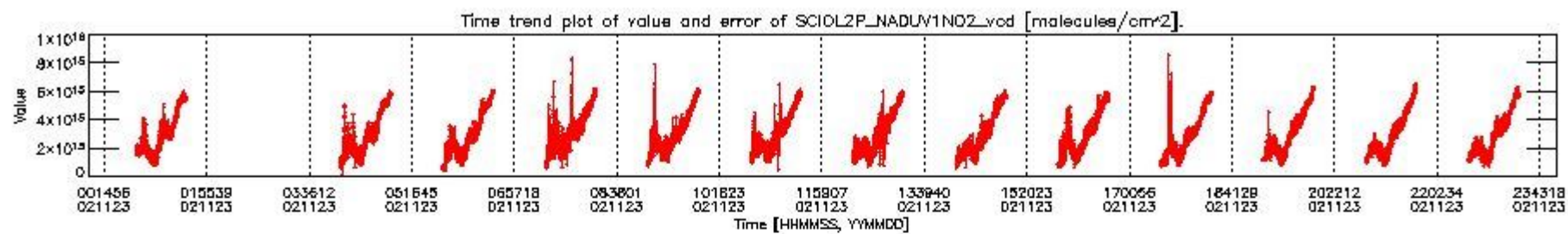


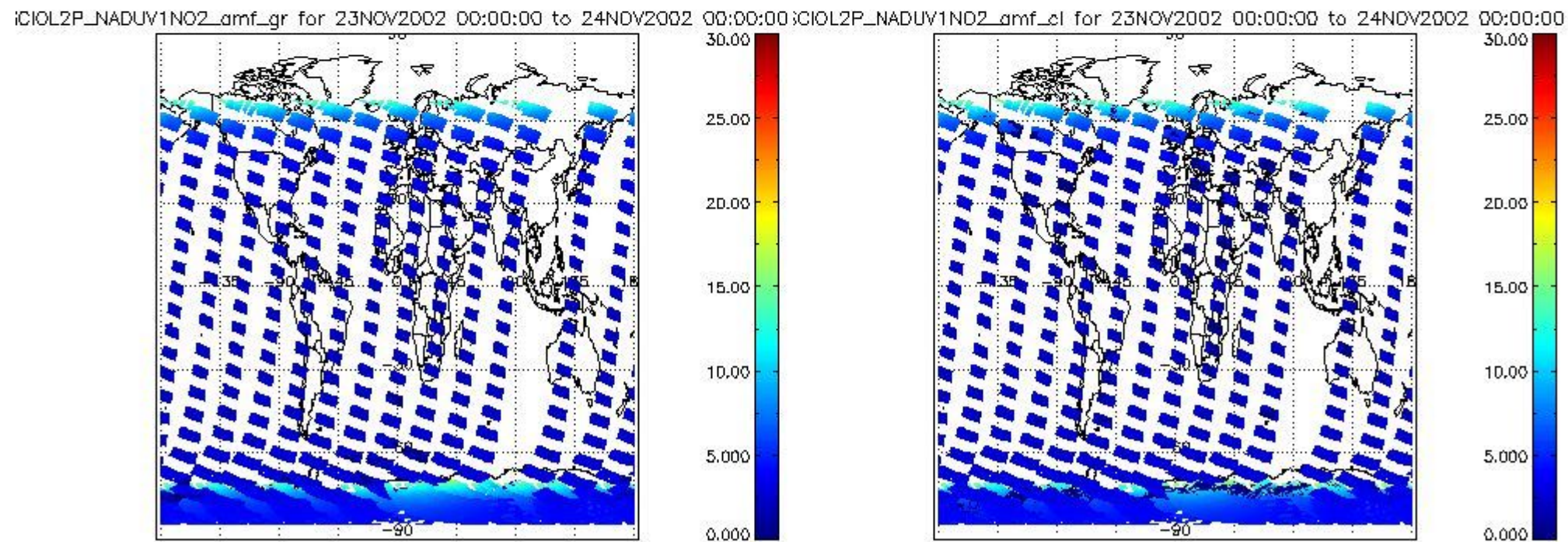
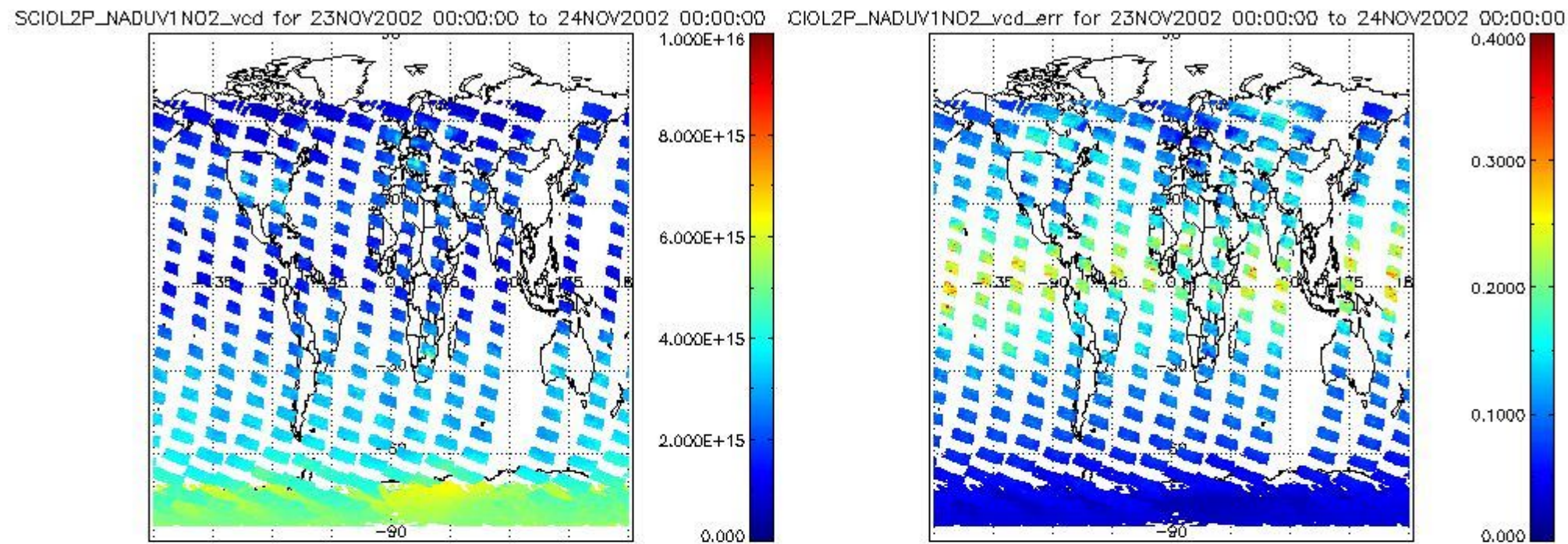
SCIOL2P_NADUV003_amf_gr for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



SCIOL2P_NADUV003_amf_cl for 23NOV2002 00:00:00 to 24NOV2002 00:00:00







2.2.3 Limb

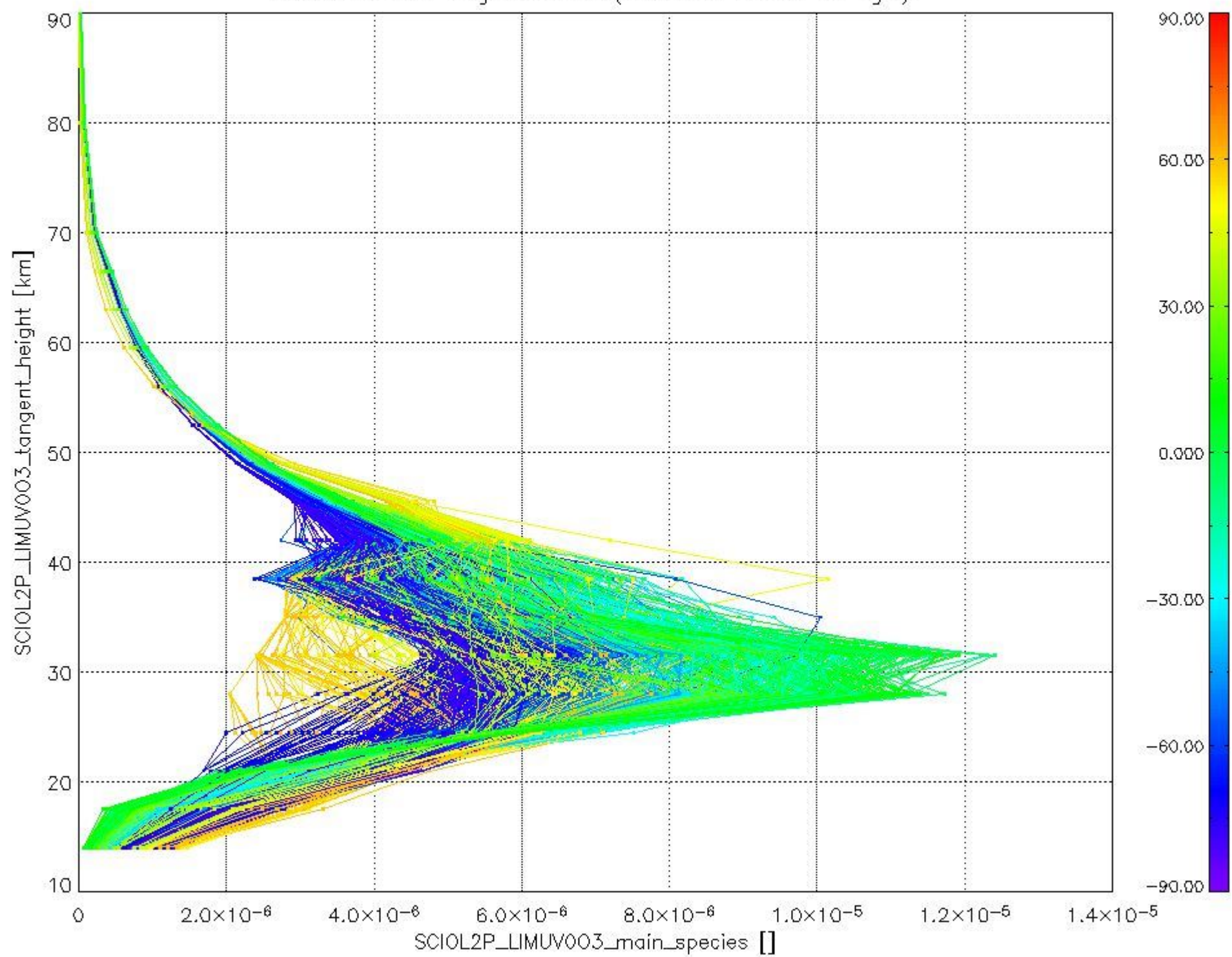
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

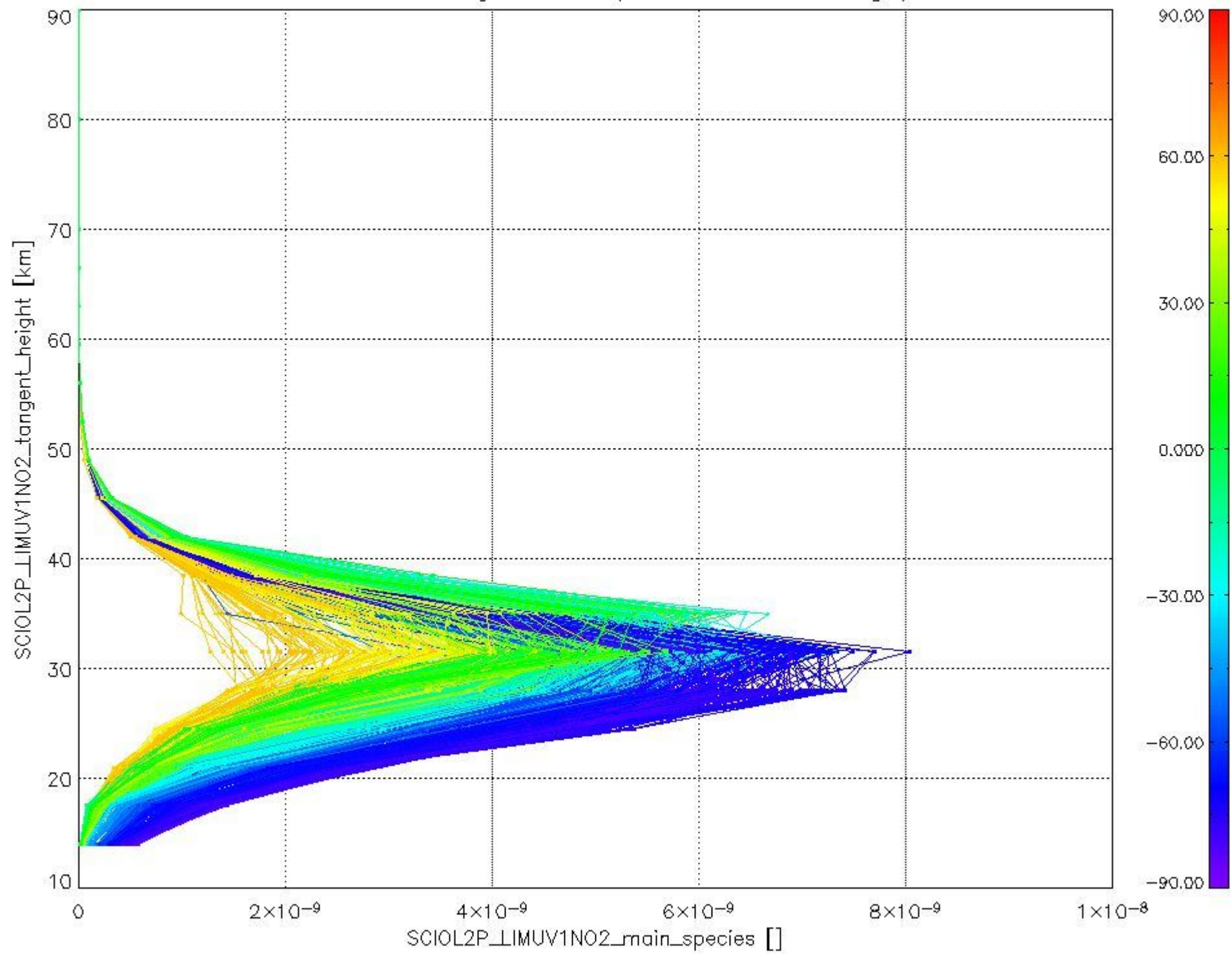
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



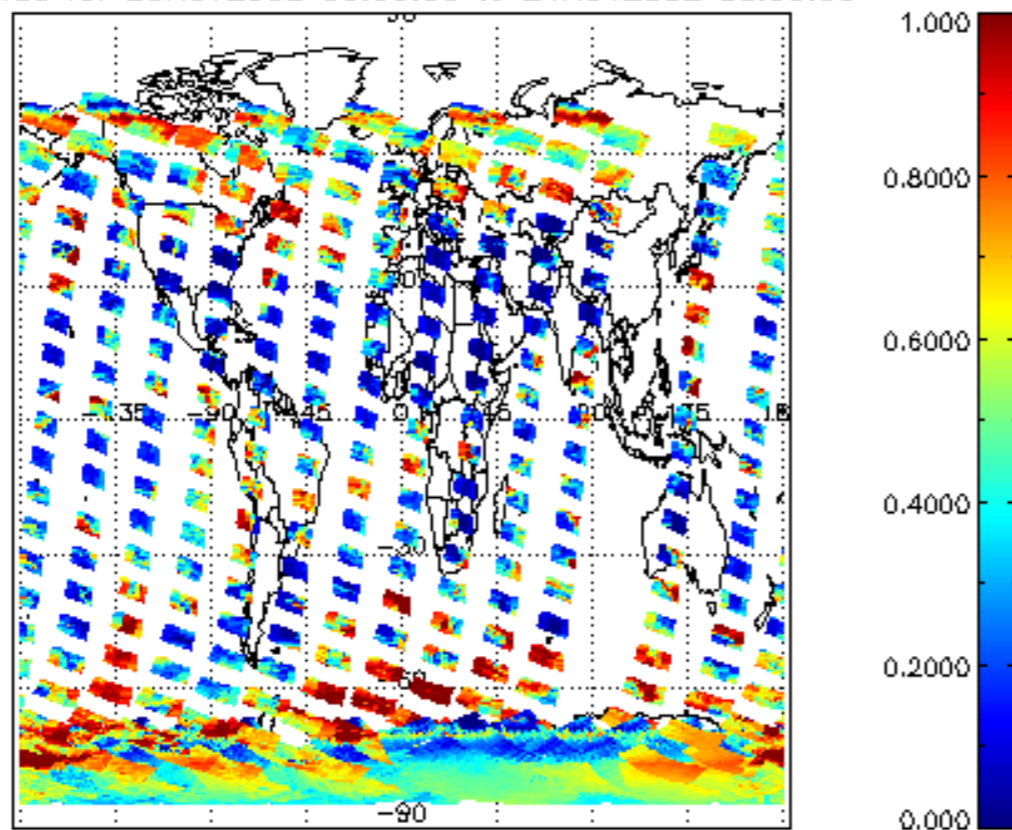
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



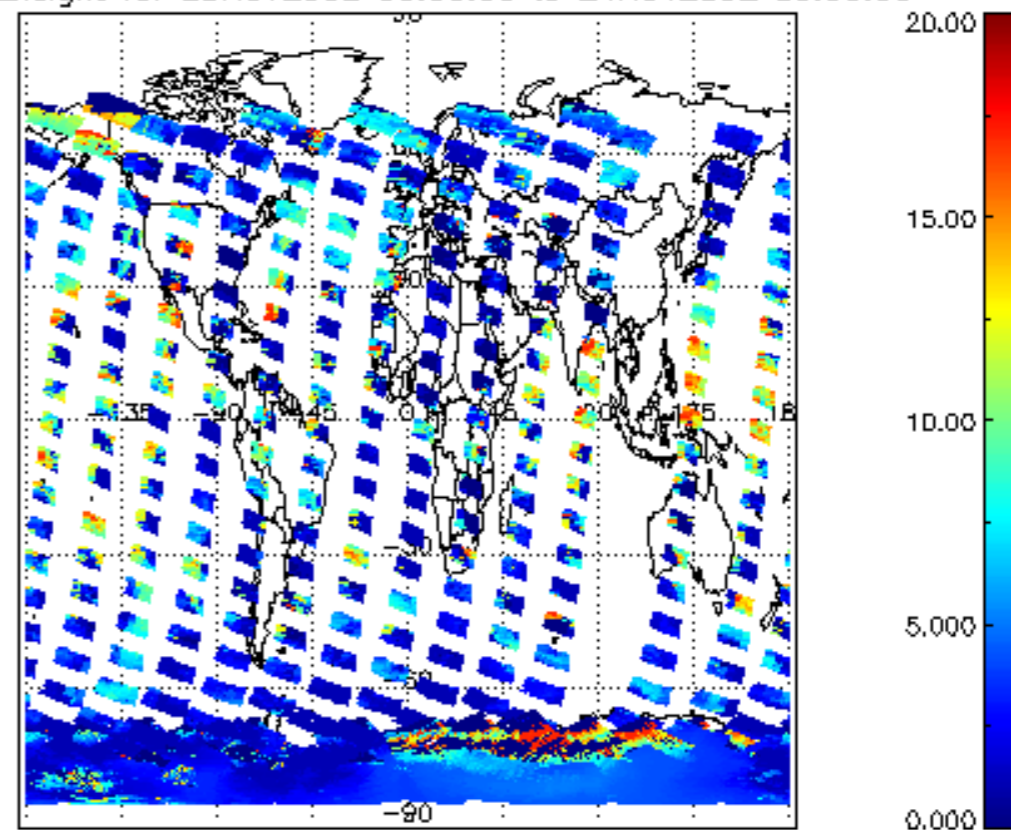
2.3 ADF monitoring

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

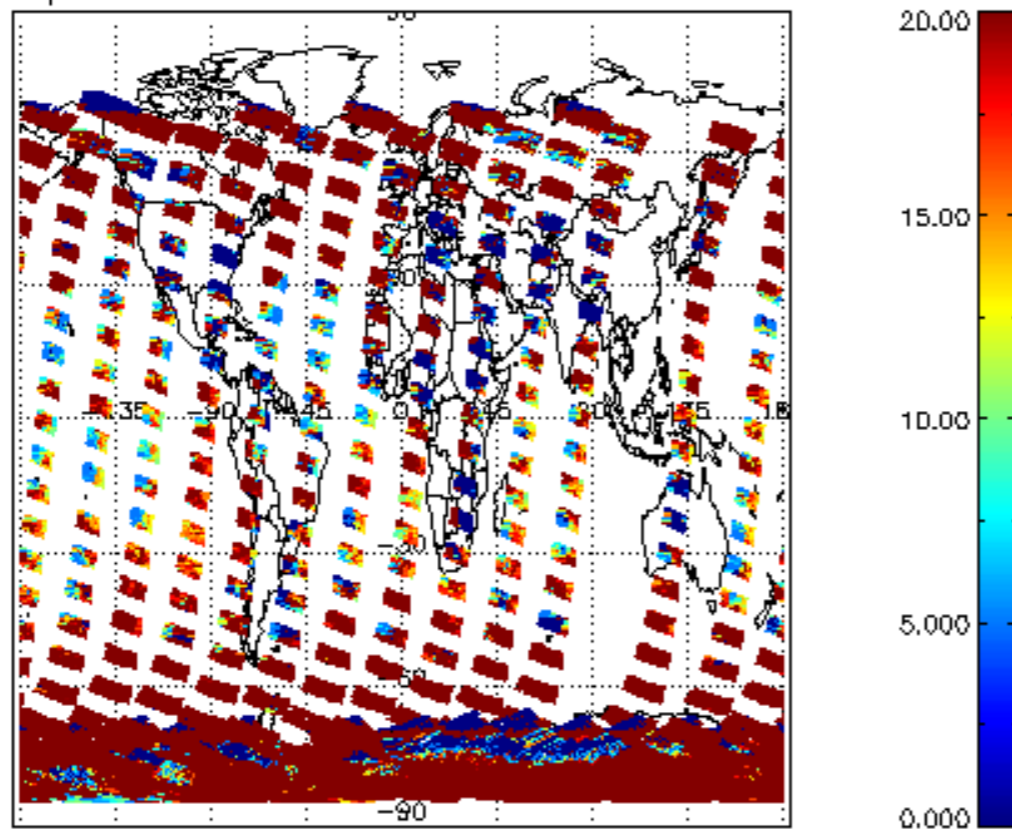
cLfrac for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



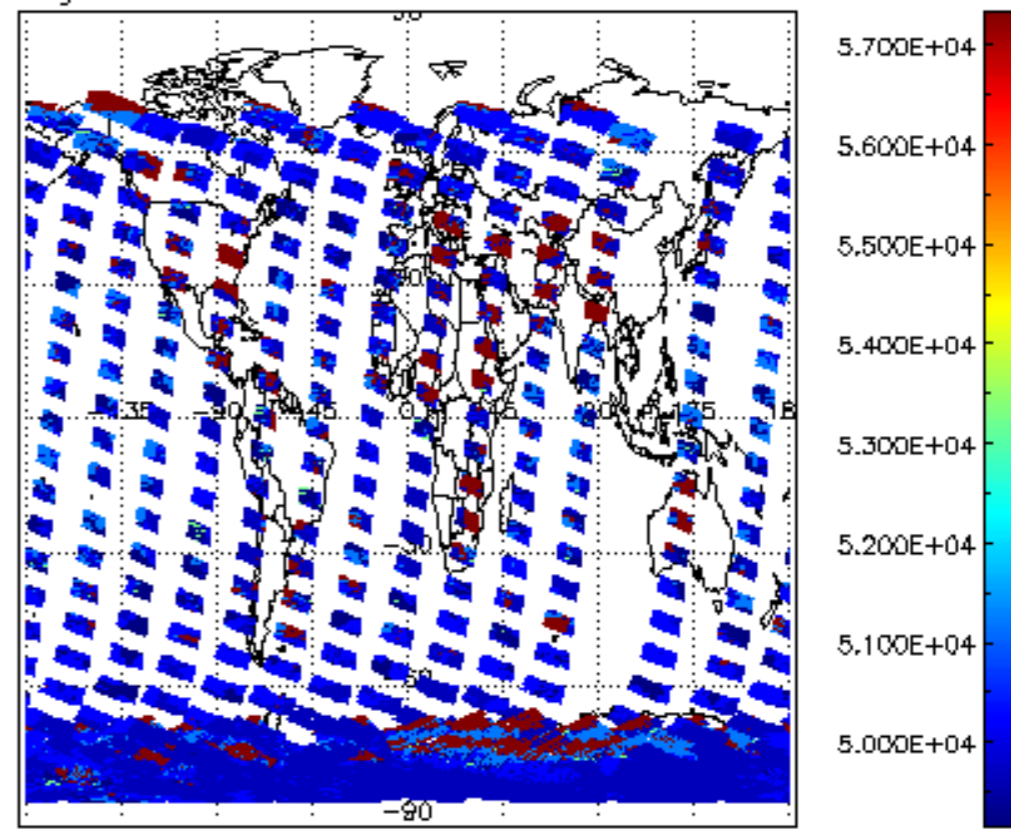
cL_top_height for 23NOV2002 00:00:00 to 24NOV2002 00:00:00

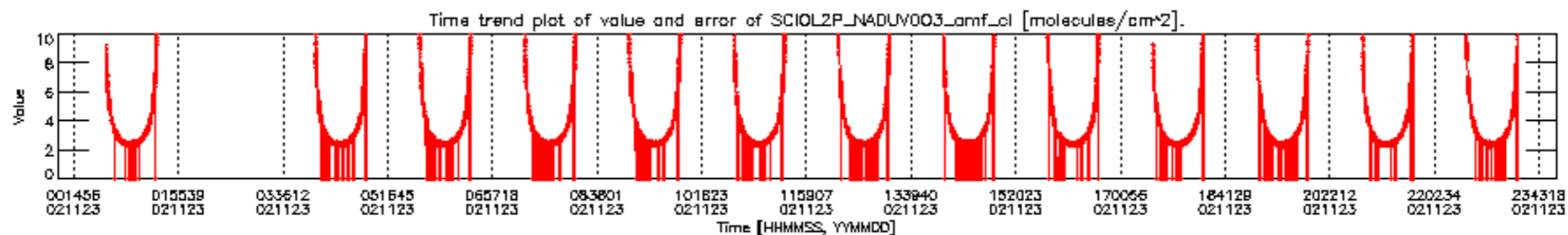
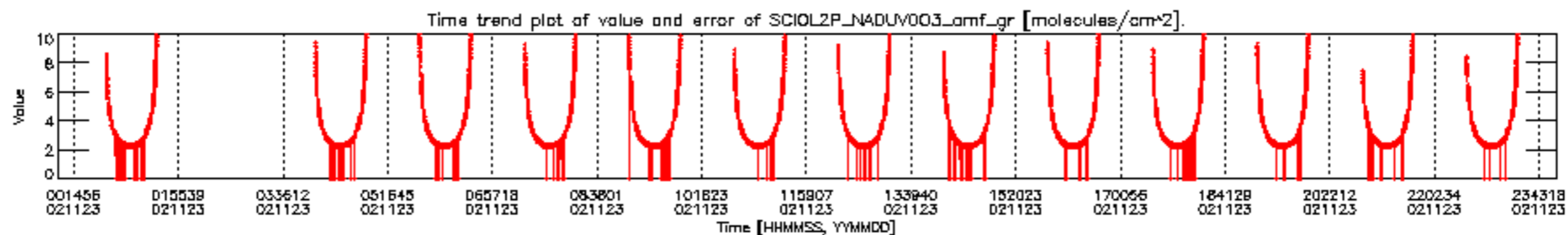
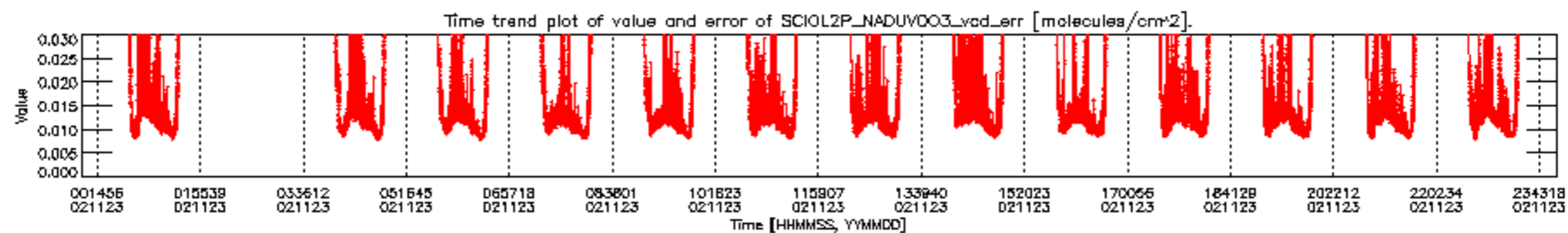
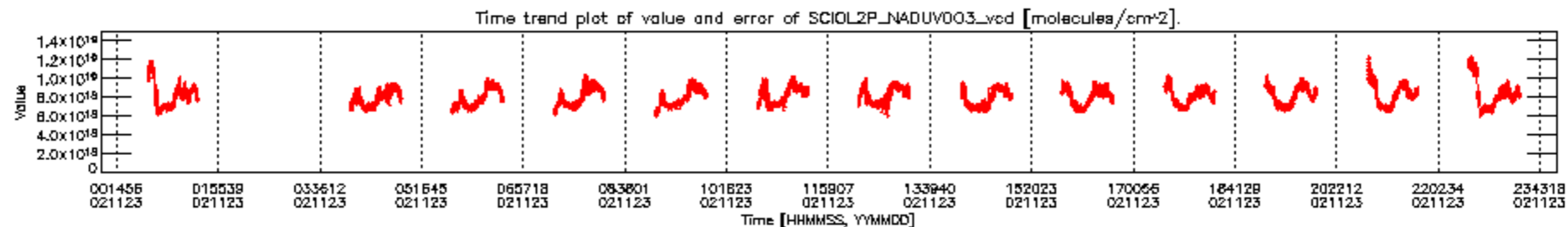


cL_opt_depth for 23NOV2002 00:00:00 to 24NOV2002 00:00:00

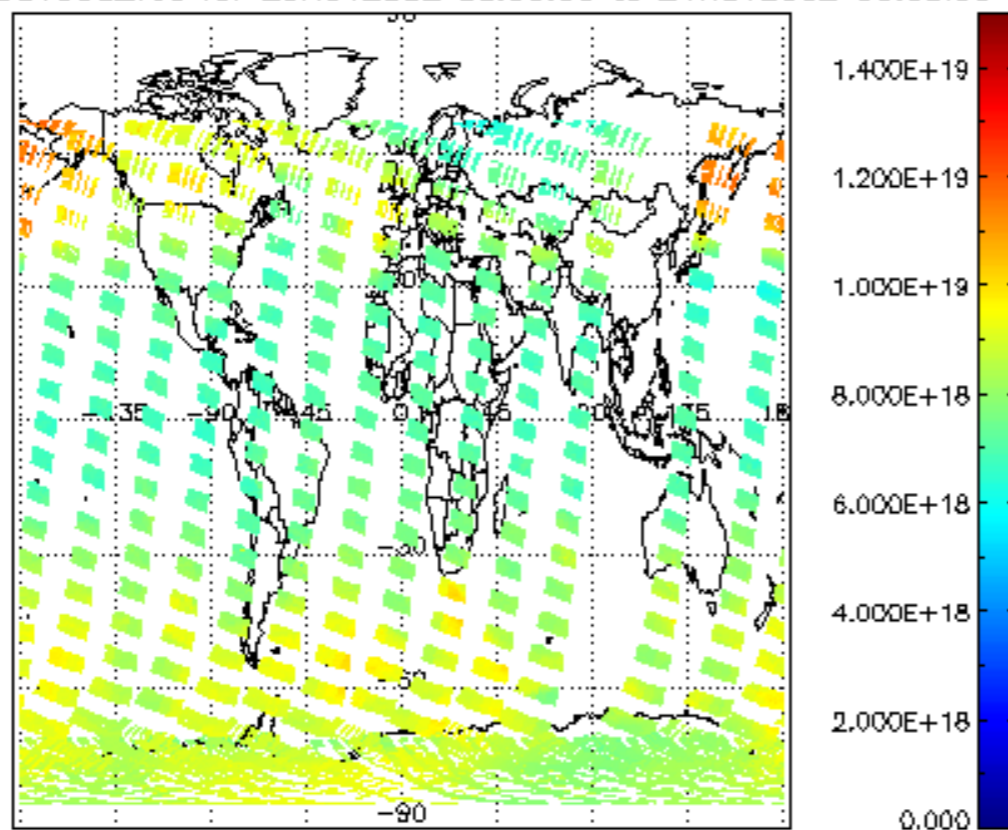


cloud_flags for 23NOV2002 00:00:00 to 24NOV2002 00:00:00

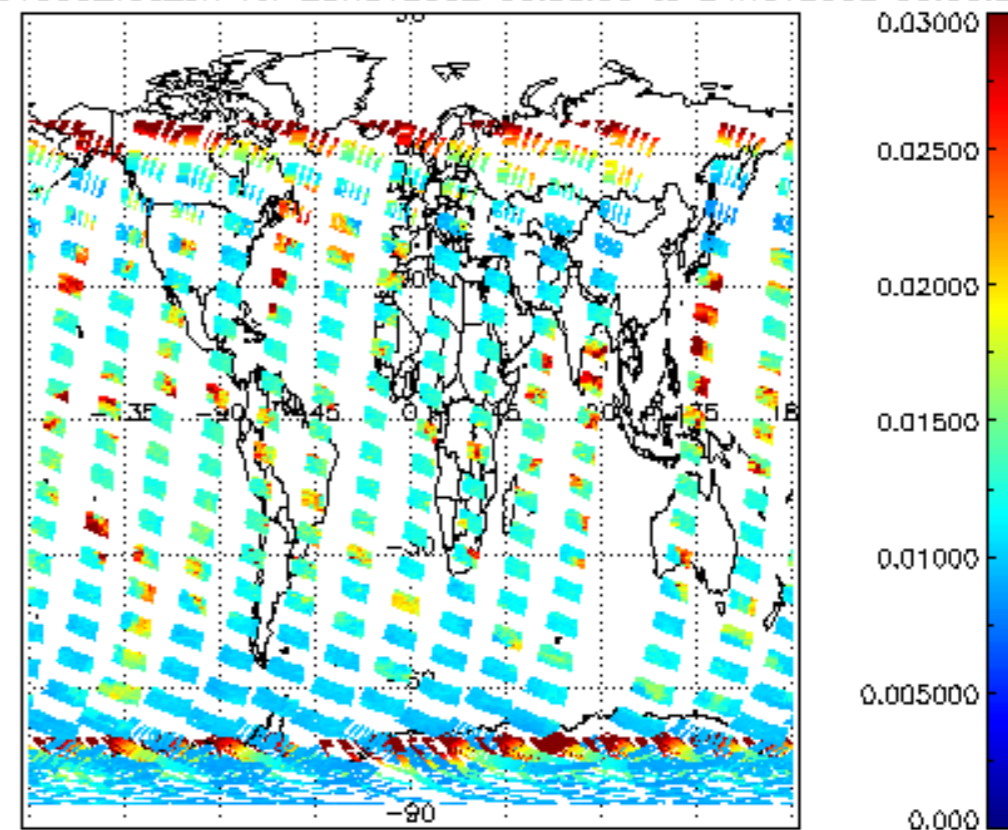




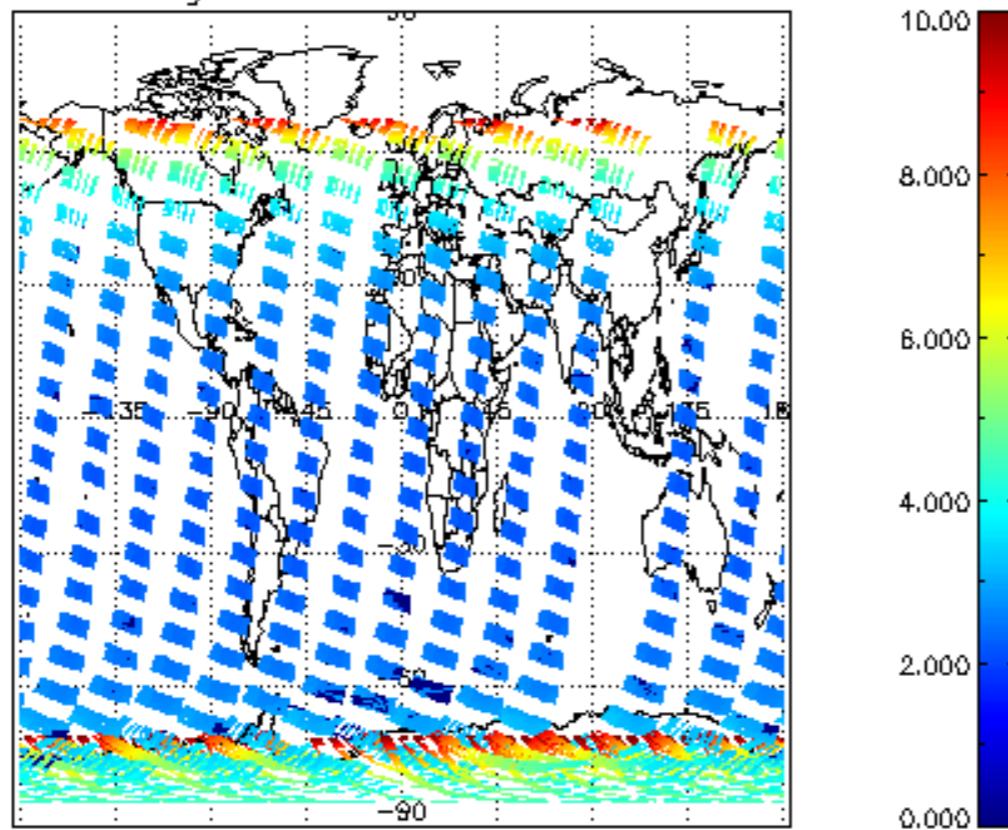
SCIOL2P_NADUV003_vcd for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



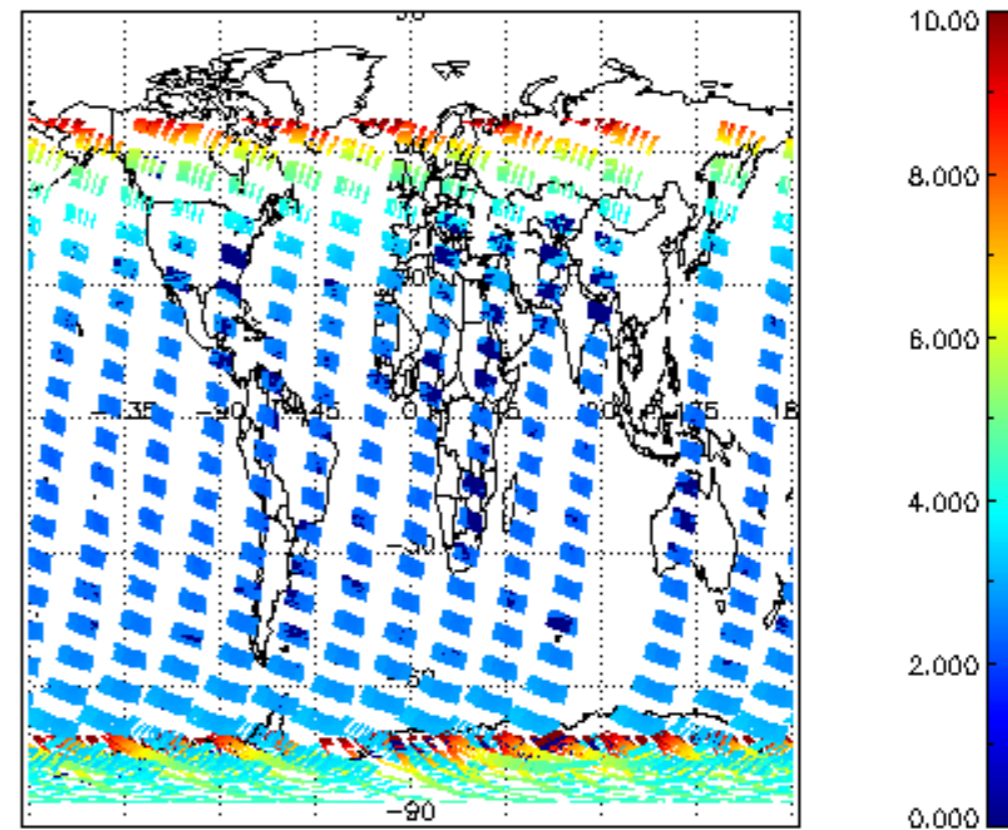
SCIOL2P_NADUV003_vcd_err for 23NOV2002 00:00:00 to 24NOV2002 00:00:00

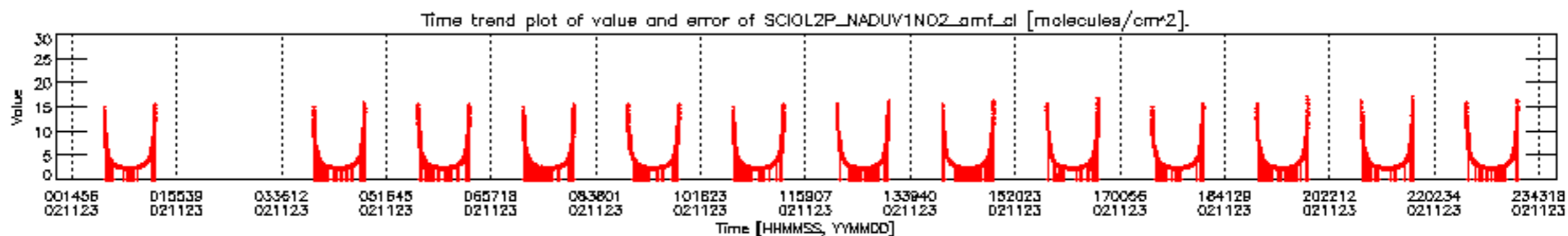
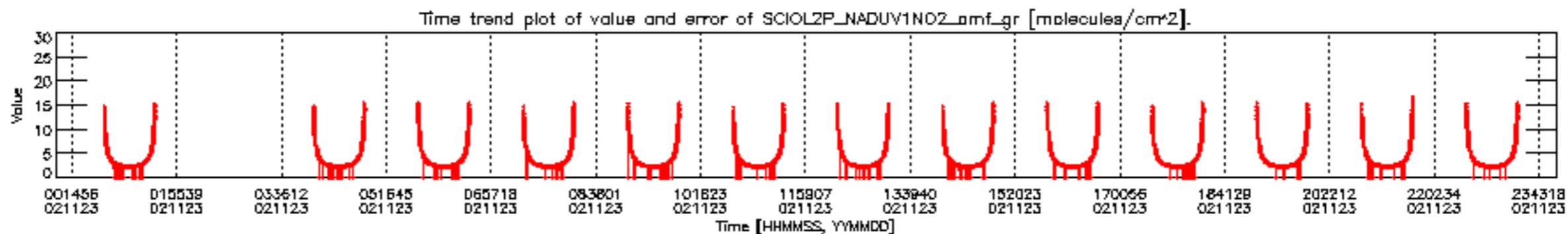
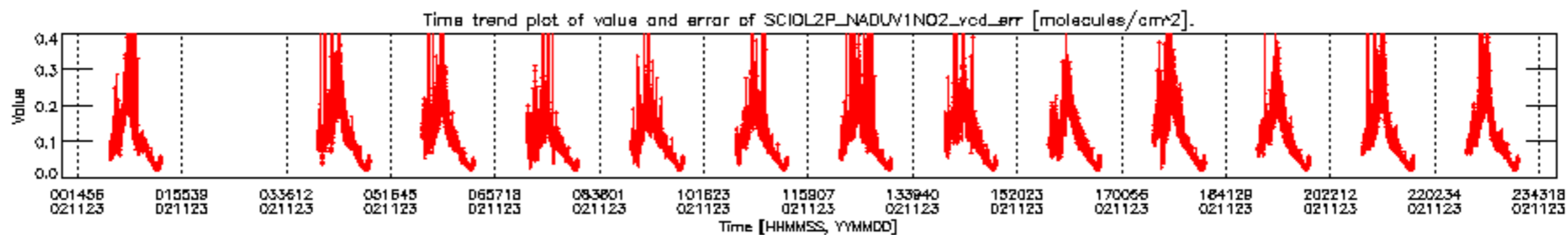
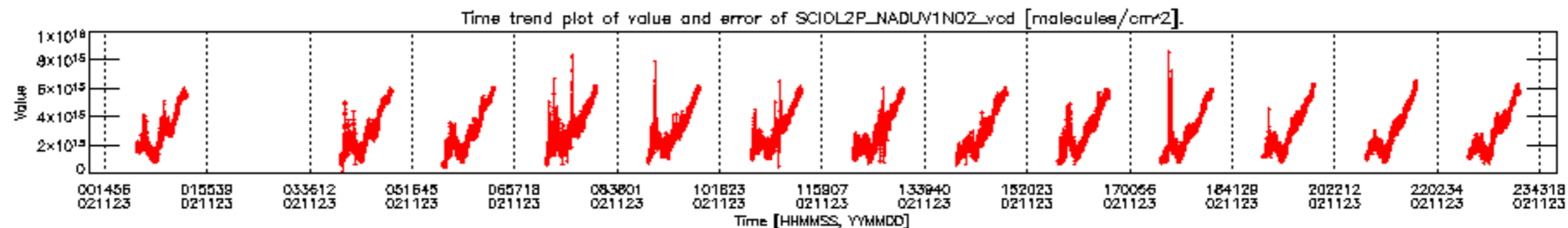


SCIOL2P_NADUV003_amf_gr for 23NOV2002 00:00:00 to 24NOV2002 00:00:00

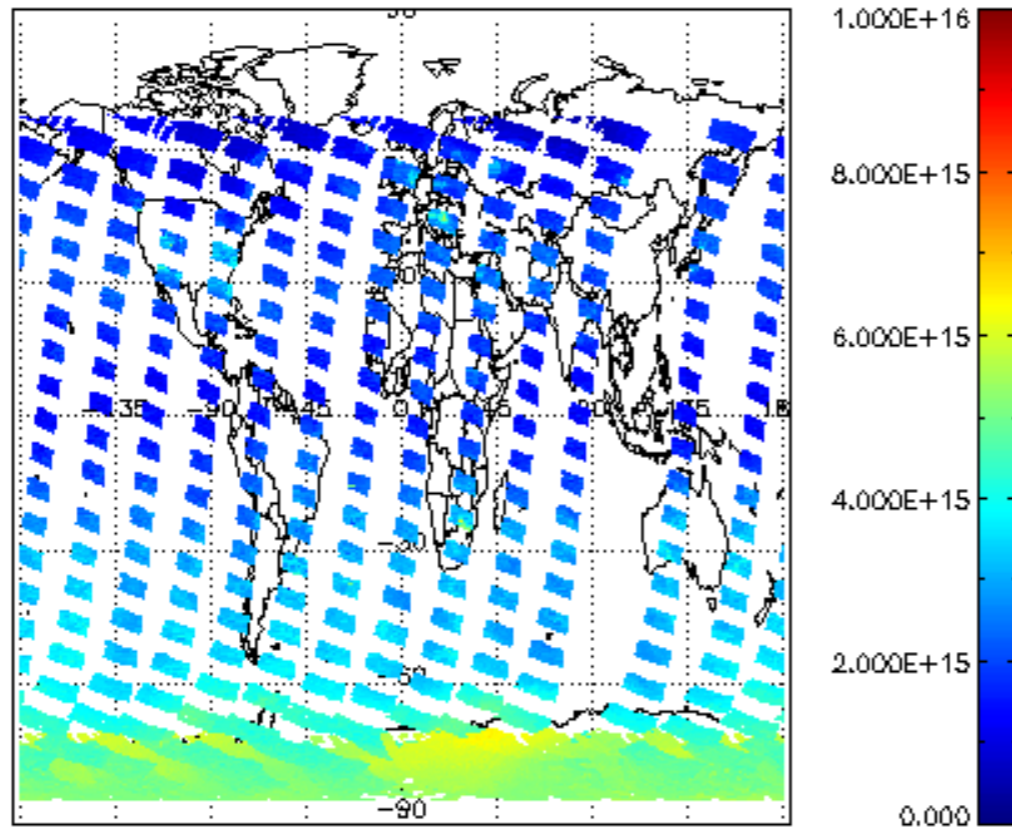


SCIOL2P_NADUV003_amf_cl for 23NOV2002 00:00:00 to 24NOV2002 00:00:00

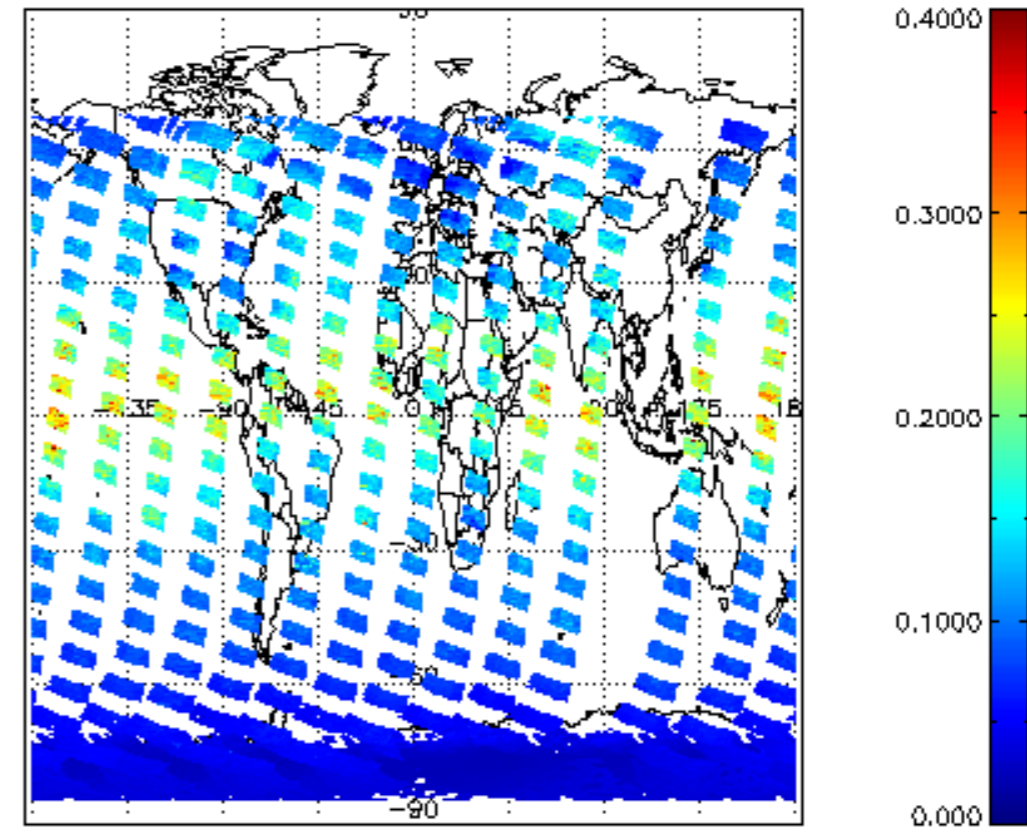




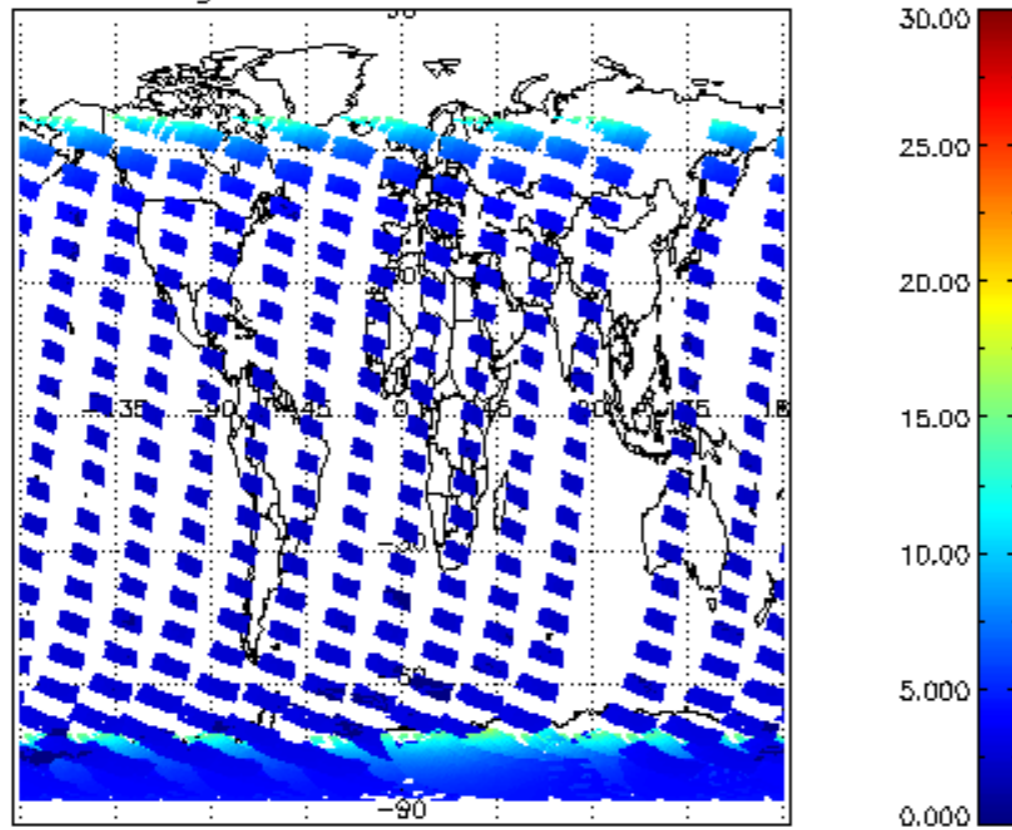
SCIOL2P_NADUV1NO2_vcd for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



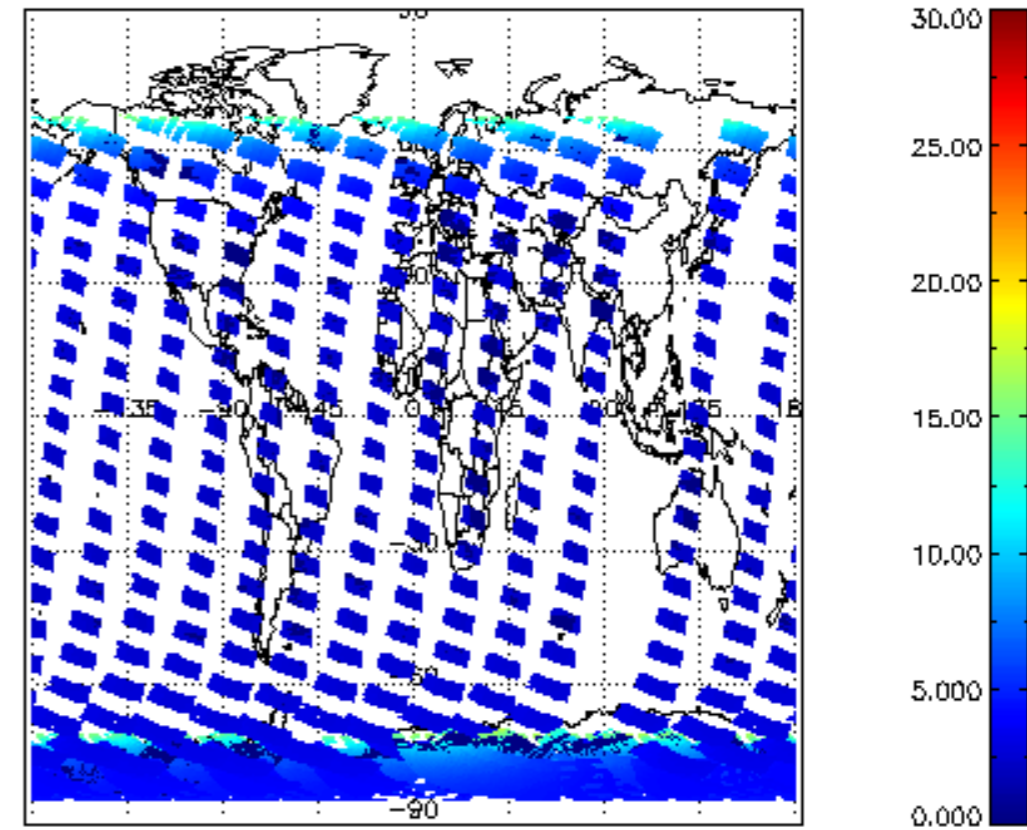
SCIOL2P_NADUV1NO2_vcd_err for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



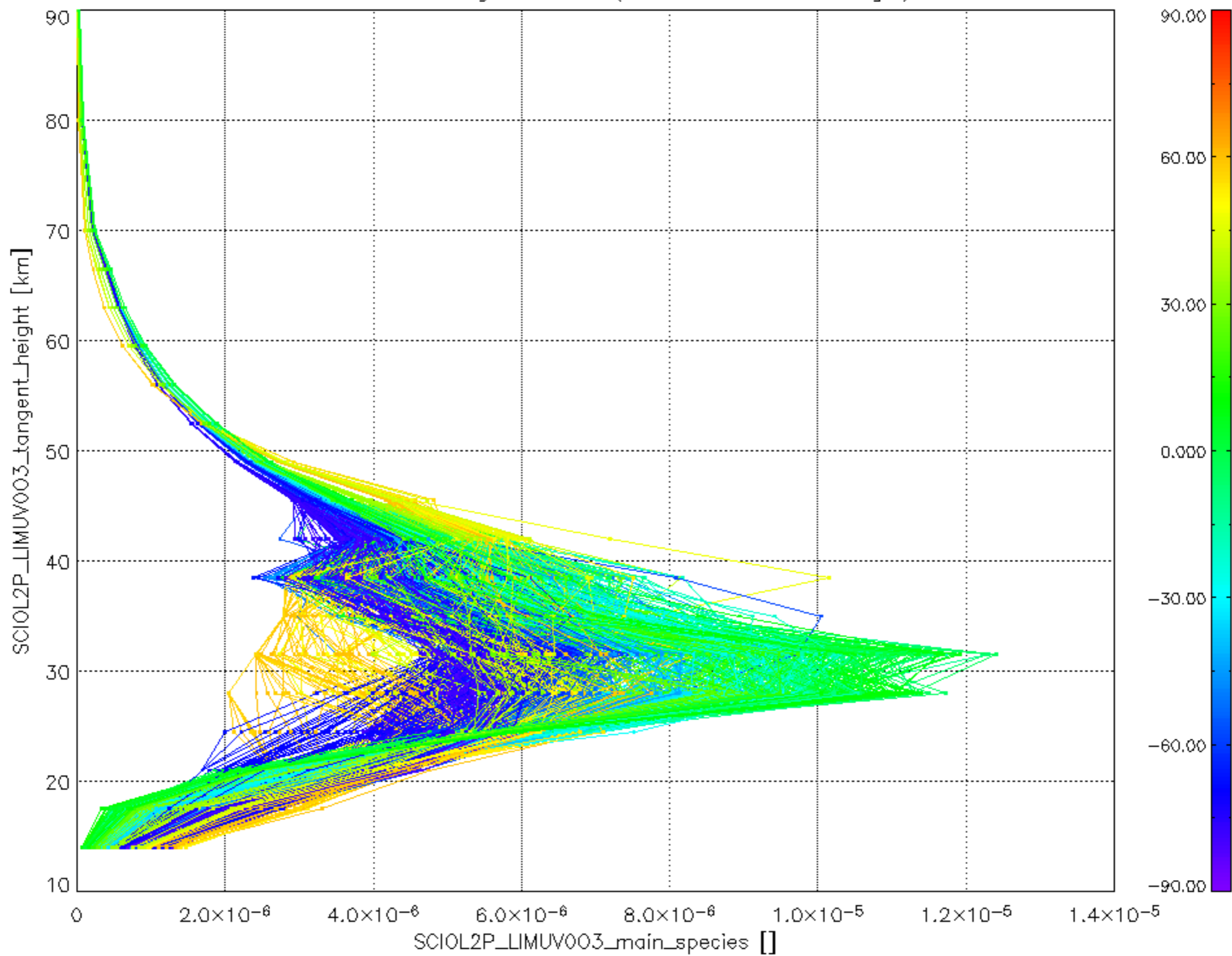
SCIOL2P_NADUV1NO2_amf_gr for 23NOV2002 00:00:00 to 24NOV2002 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 23NOV2002 00:00:00 to 24NOV2002 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).

