

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	11JUN2008 14:23:52
Data source version	SCIA-OL/3.01-R
Processing scope for products	01NOV2002 00:00:00 to 02NOV2002 00:00:00
Start time of first product within scope	01NOV2002 00:29:46
Stop time of last product within scope	01NOV2002 21:32:46
Total number of level 2 products	13
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__2PRDPA20021101_002946_000033242010_00446_03506_3331.N1	01NOV2002 00:29:46	01NOV2002 01:25:10	0	GOOD
1	SCI_OL__2PRDPA20021101_021022_000033242010_00447_03507_1614.N1	01NOV2002 02:10:22	01NOV2002 03:05:46	0	GOOD
2	SCI_OL__2PRDPA20021101_035058_000033242010_00448_03508_1482.N1	01NOV2002 03:50:58	01NOV2002 04:46:23	0	GOOD
3	SCI_OL__2PRDPA20021101_053135_000033242010_00449_03509_1585.N1	01NOV2002 05:31:35	01NOV2002 06:26:59	0	GOOD
4	SCI_OL__2PRDPA20021101_071211_000033242010_00450_03510_1466.N1	01NOV2002 07:12:11	01NOV2002 08:07:36	0	GOOD
5	SCI_OL__2PRDPA20021101_085248_000033242010_00451_03511_1551.N1	01NOV2002 08:52:48	01NOV2002 09:48:12	0	GOOD
6	SCI_OL__2PRDPA20021101_103324_000033242010_00452_03512_1580.N1	01NOV2002 10:33:24	01NOV2002 11:28:48	0	GOOD
7	SCI_OL__2PRDPA20021101_121400_000033242010_00453_03513_1582.N1	01NOV2002 12:14:00	01NOV2002 13:09:24	0	GOOD
8	SCI_OL__2PRDPA20021101_135436_000033242010_00454_03514_4808.N1	01NOV2002 13:54:36	01NOV2002 14:50:01	0	GOOD
9	SCI_OL__2PRDPA20021101_153513_000033242010_00455_03515_1606.N1	01NOV2002 15:35:13	01NOV2002 16:30:37	0	GOOD
10	SCI_OL__2PRDPA20021101_171549_000033242010_00456_03516_1564.N1	01NOV2002 17:15:49	01NOV2002 18:11:13	0	GOOD
11	SCI_OL__2PRDPA20021101_185553_000033662010_00457_03517_1475.N1	01NOV2002 18:55:53	01NOV2002 19:52:00	0	GOOD
12	SCI_OL__2PRDPA20021101_203619_000033862010_00458_03518_1592.N1	01NOV2002 20:36:19	01NOV2002 21:32:46	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: 101040

Total number of cloud data DSRs with good quality flag (=0): 101040 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	101040	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	101040	0.21605	0.25000	0.12500	1.0000	0.081116	s
SURFACE_PRES	101040	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	101040	0.44871	0.42680	0.0000	1.0000	0.29201	-
CL_FRAC_ERR	101040	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	101040	6.9137	8.0000	4.0000	32.000	2.5957	

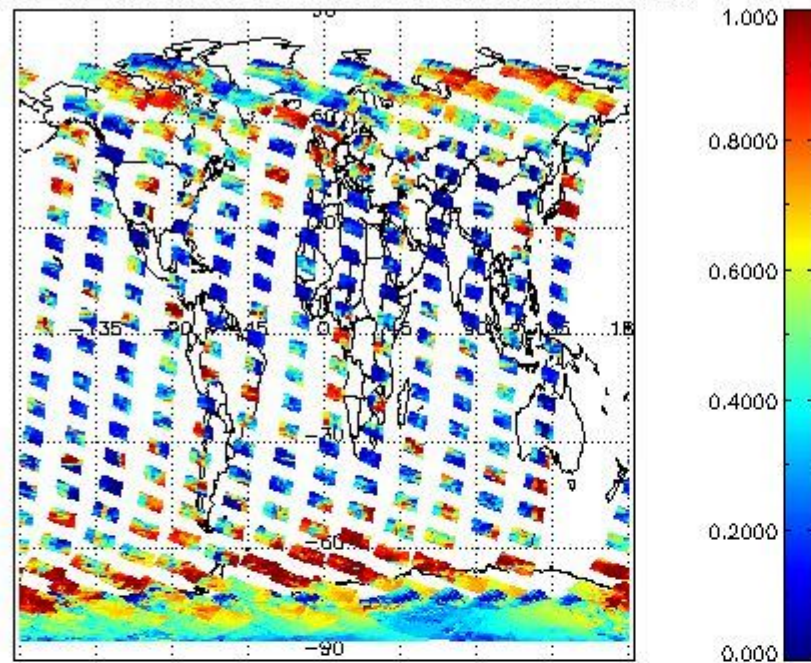
PMD_READ_CL[0]	101040	0.41959	0.0000	0.0000	22.000	1.4654	-
PMD_READ_CL[1]	101040	0.47417	0.0000	0.0000	28.000	1.6664	-
CL_TOP_HEIGHT	90806	4.2247	2.9003	0.0000	17.000	3.8703	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	90806	46.501	31.161	0.0000	101.00	37.659	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	101040	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	101040	11000111	11000010	11000000	11100000	2626.3	flags
AERO_ABSO_IND	101040	0.46308	0.31549	-4.1102	10.505	1.0687	
AERO_IND_DIAG	101040	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	101040	01101000	11000000	00000000	11000000	24469.	flags

Time and geolocation plots:

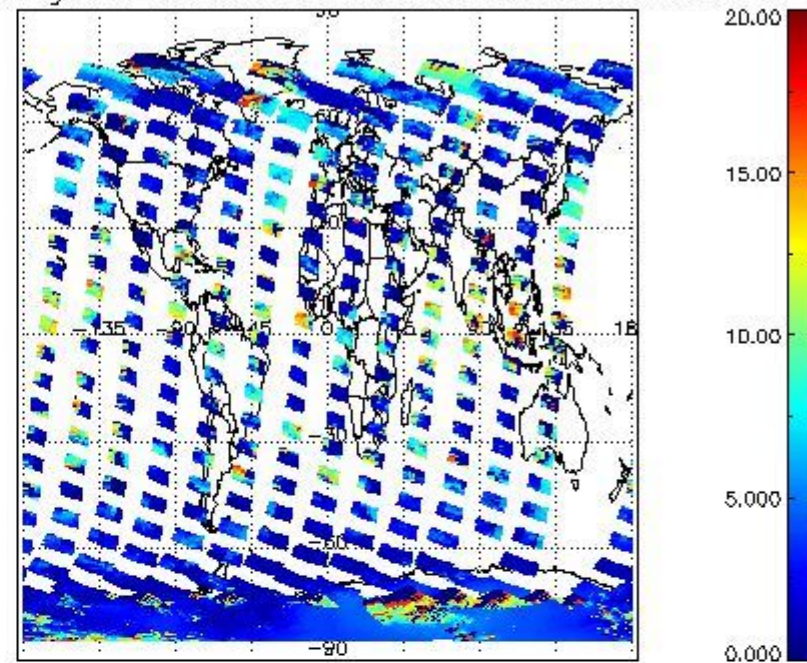
Plots are available for the following parameters:

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

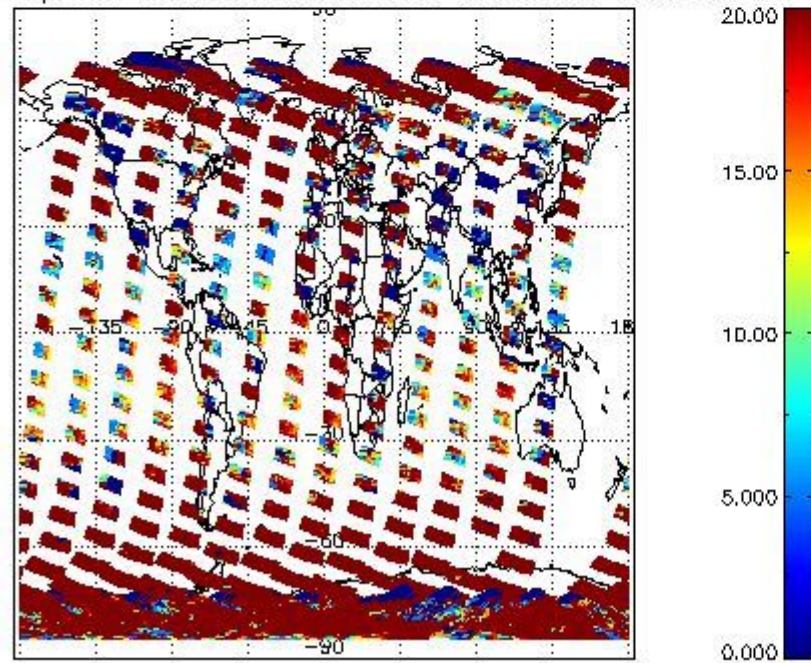
cLfrac for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



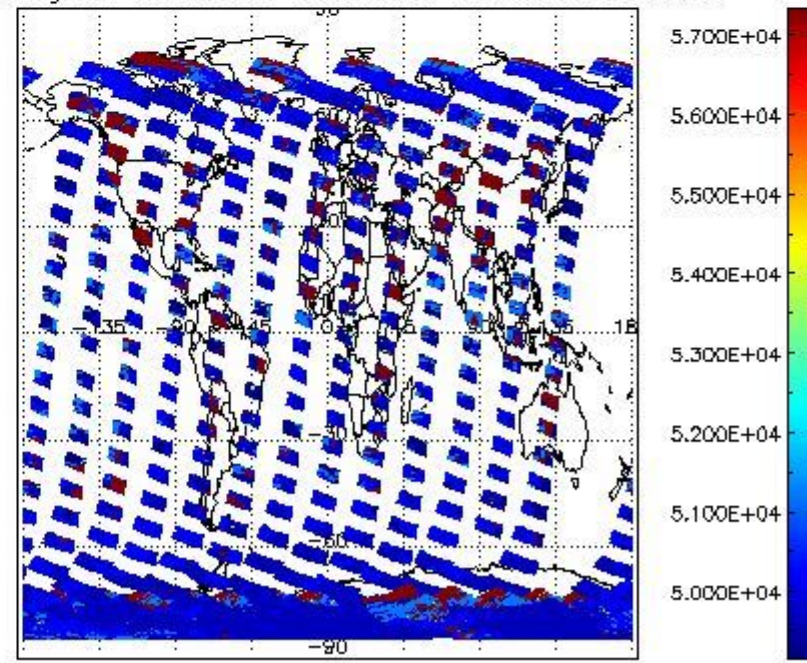
cL_top_height for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



cL_opt_depth for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



cloud_flags for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



2.2.2 Nadir

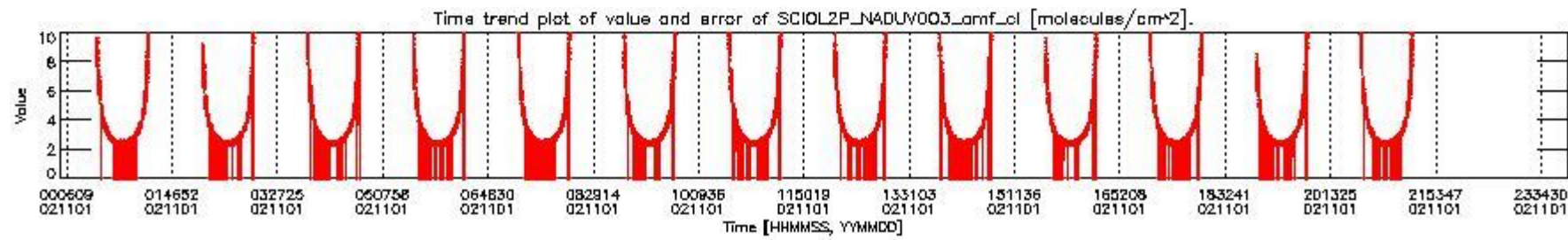
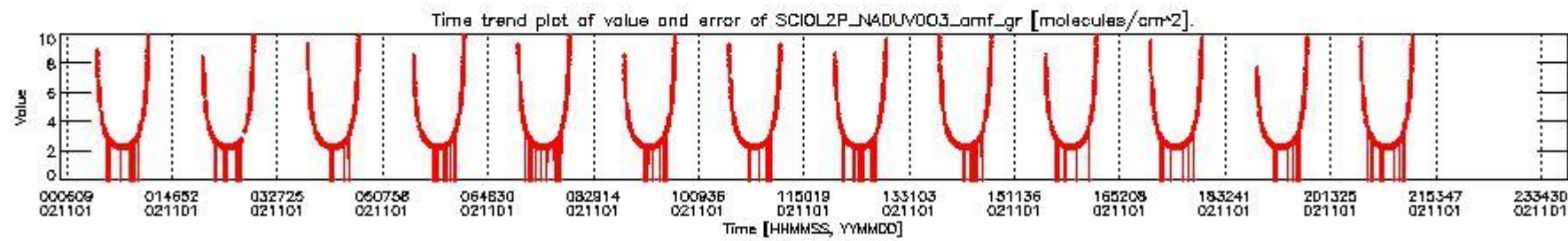
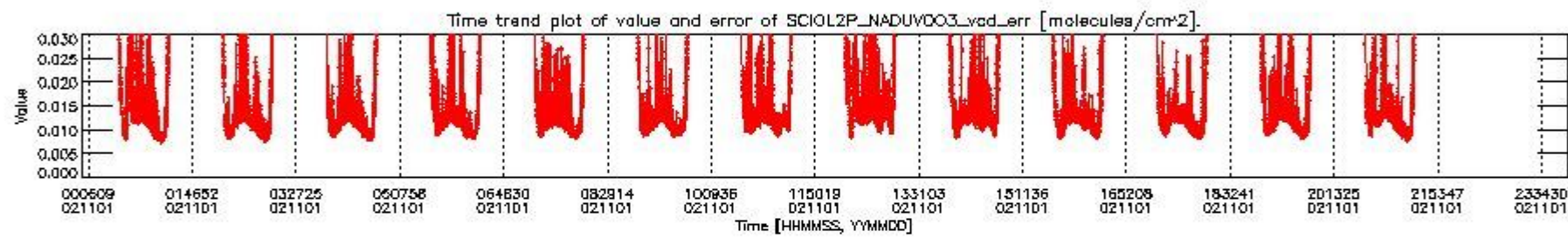
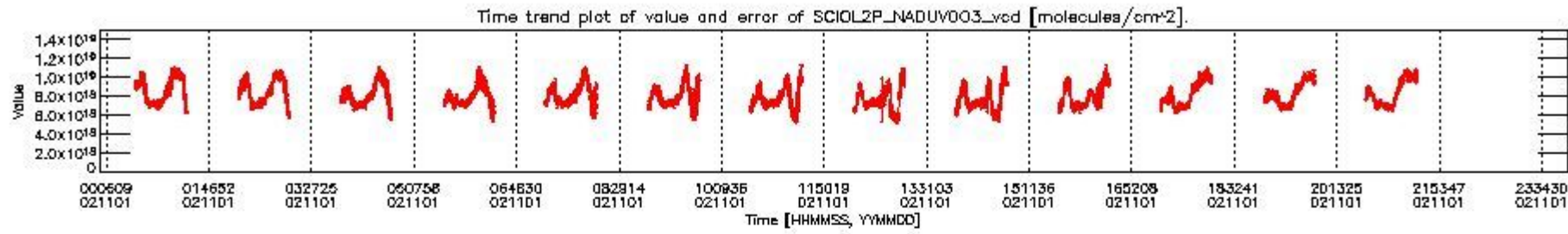
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

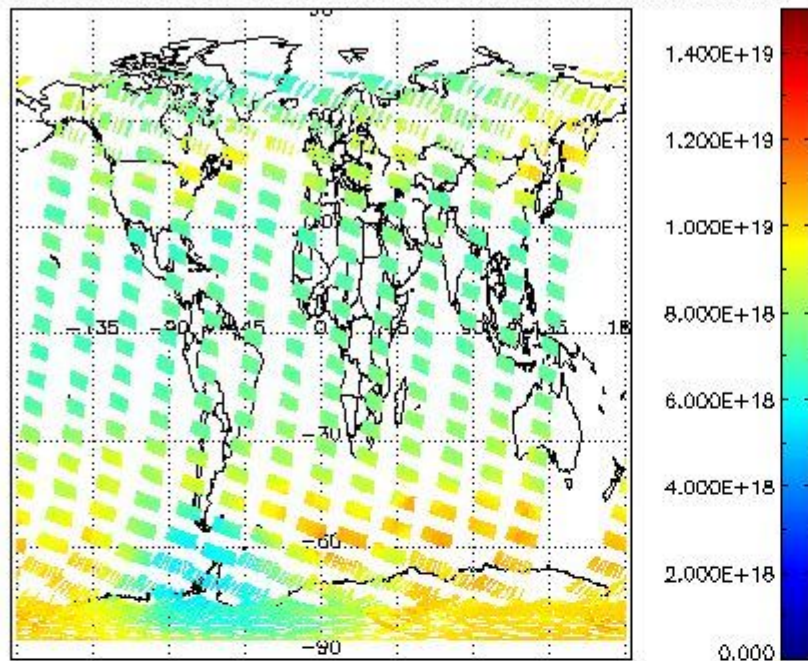
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

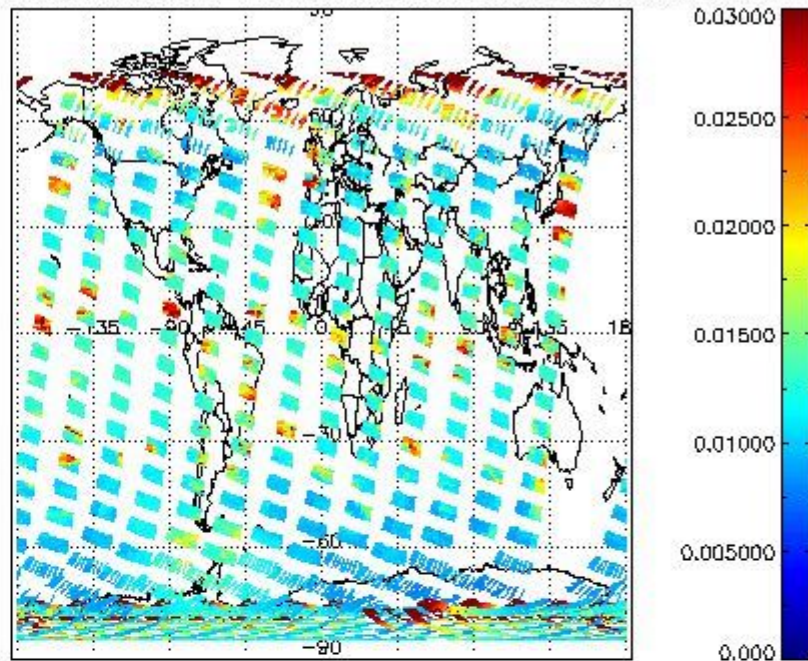
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



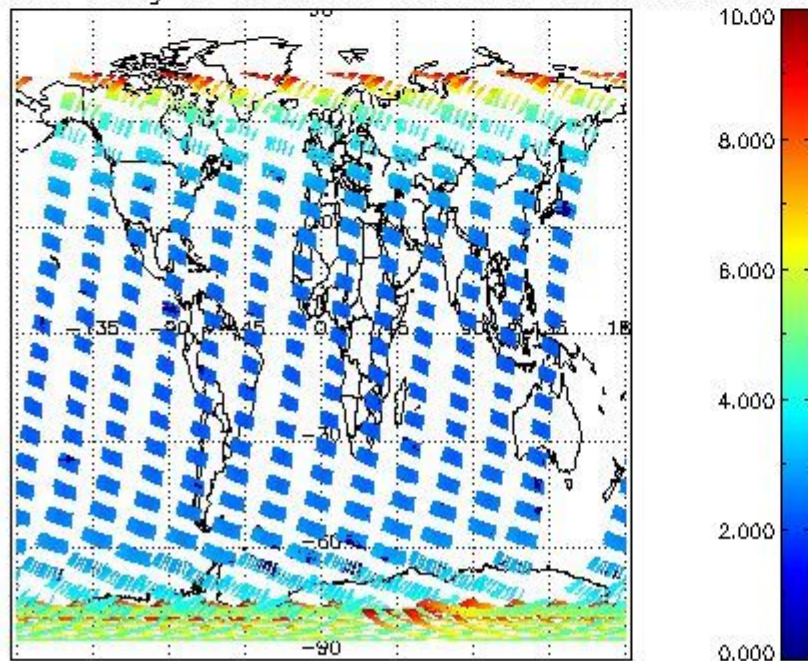
SCIOL2P_NADUV003_vcd for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



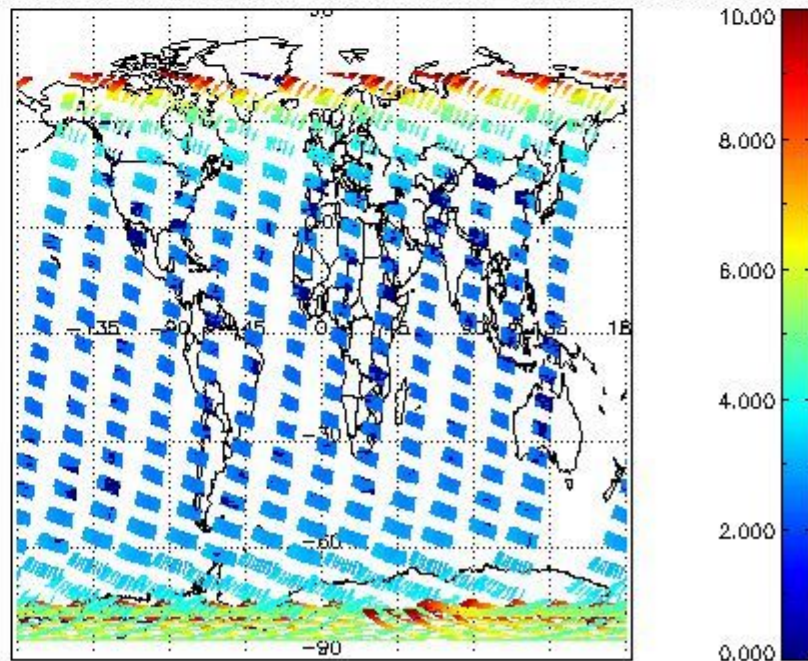
SCIOL2P_NADUV003_vcd_err for 01NOV2002 00:00:00 to 02NOV2002 00:00:00

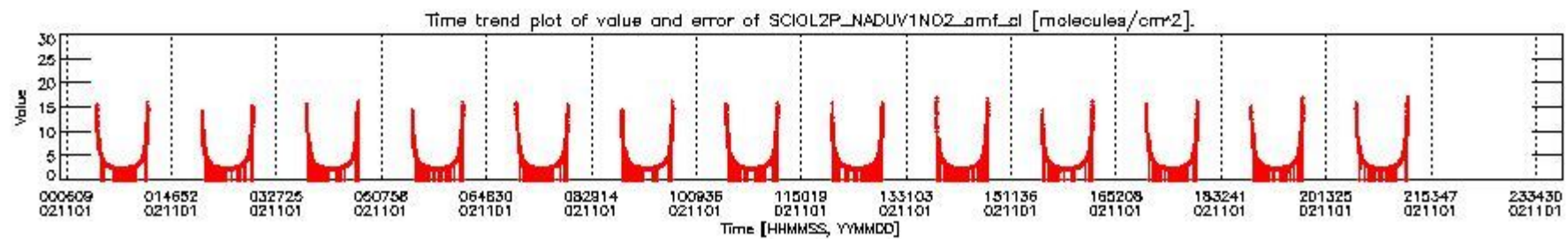
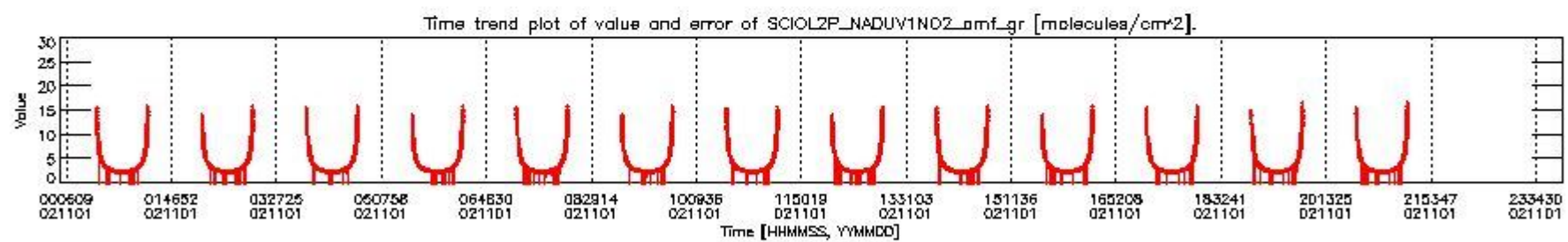
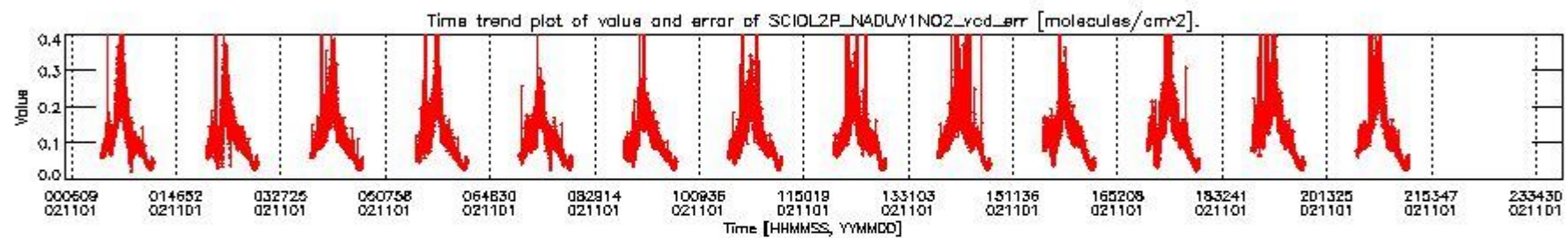
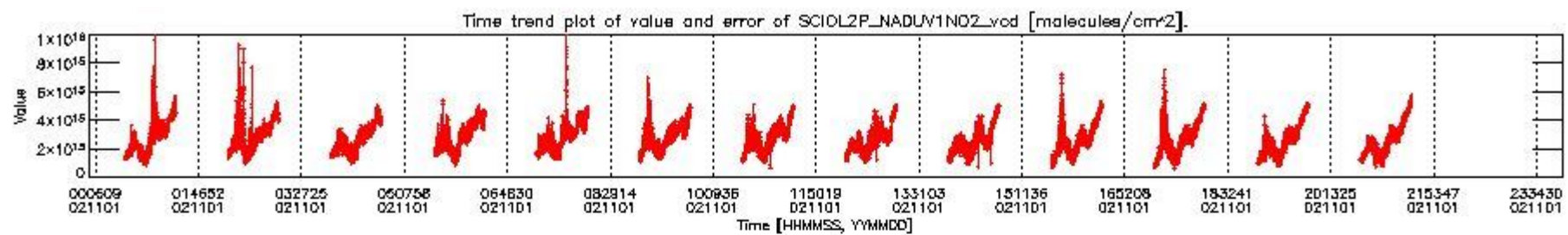


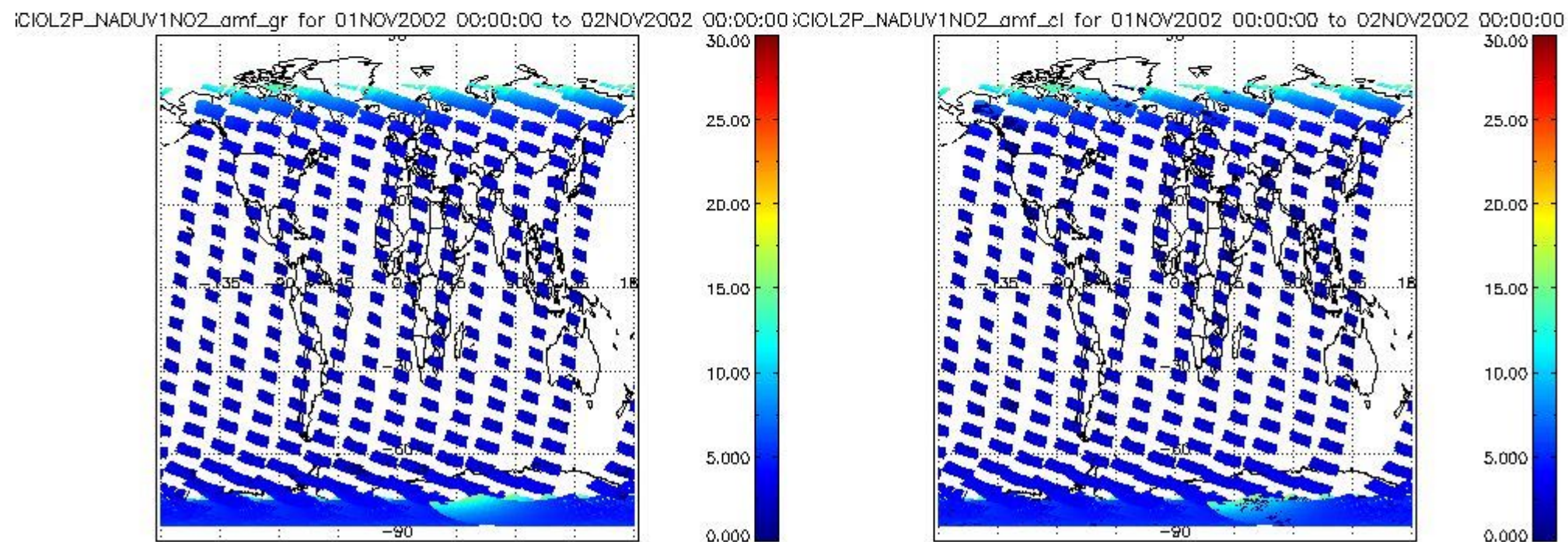
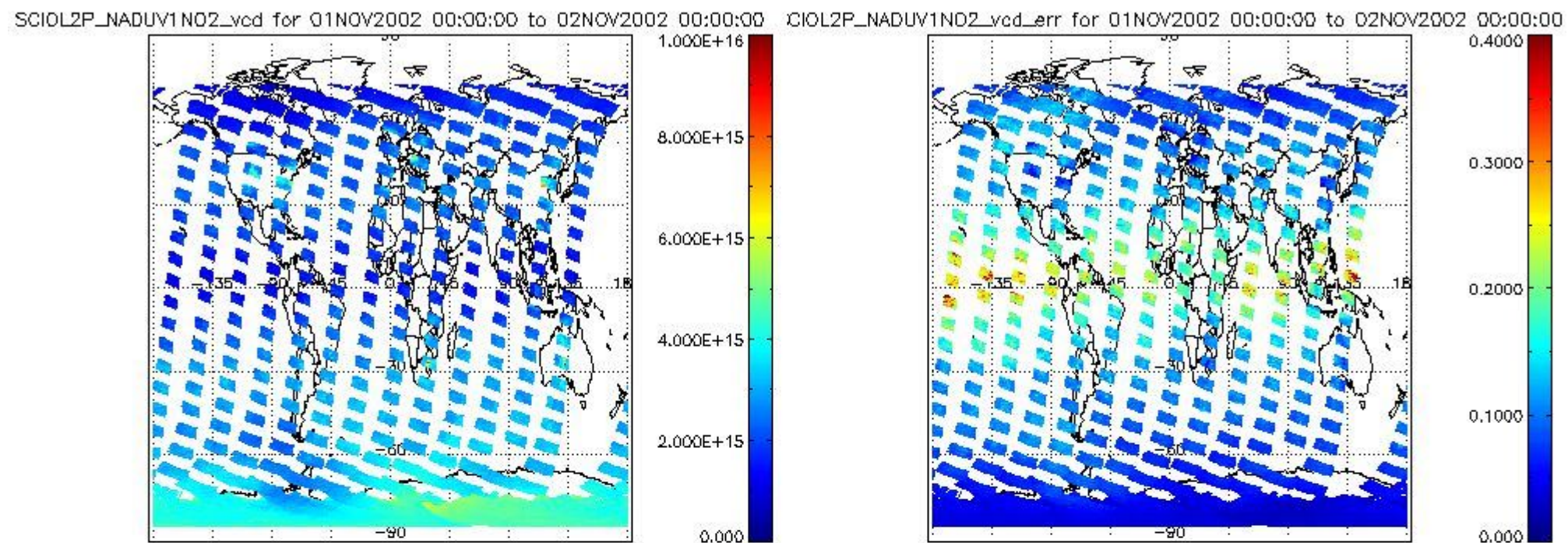
SCIOL2P_NADUV003_amf_gr for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



SCIOL2P_NADUV003_amf_sl for 01NOV2002 00:00:00 to 02NOV2002 00:00:00







2.2.3 Limb

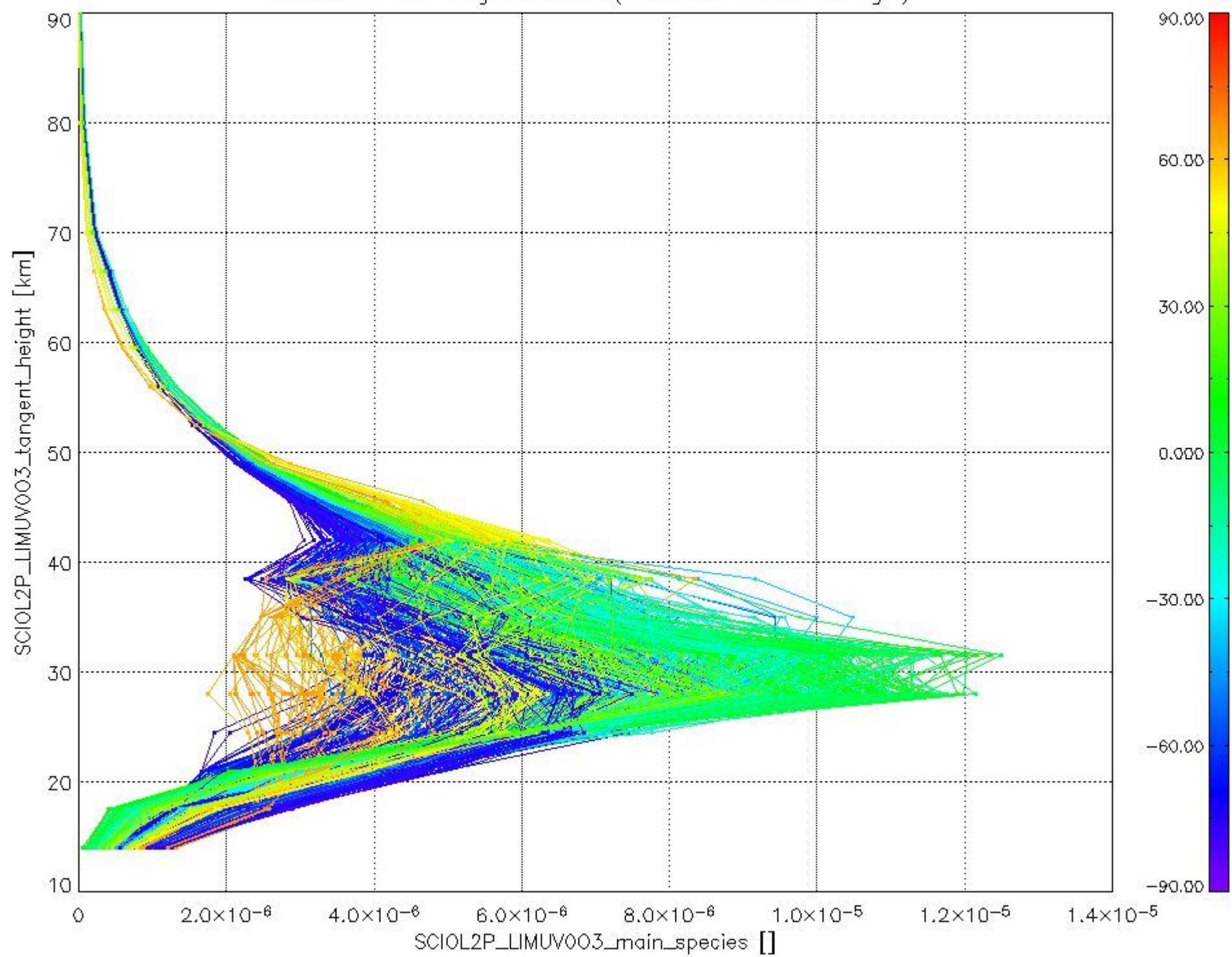
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

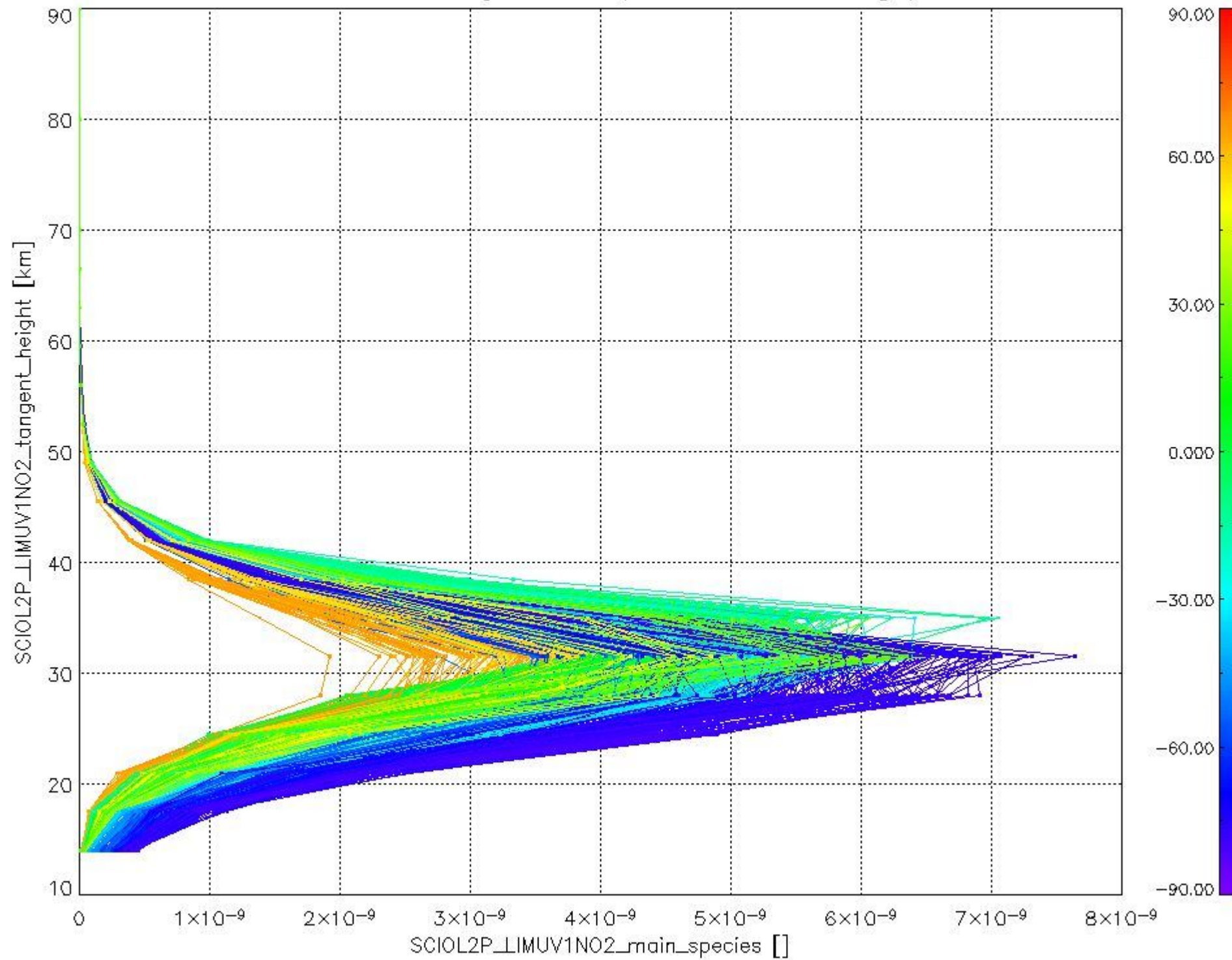
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



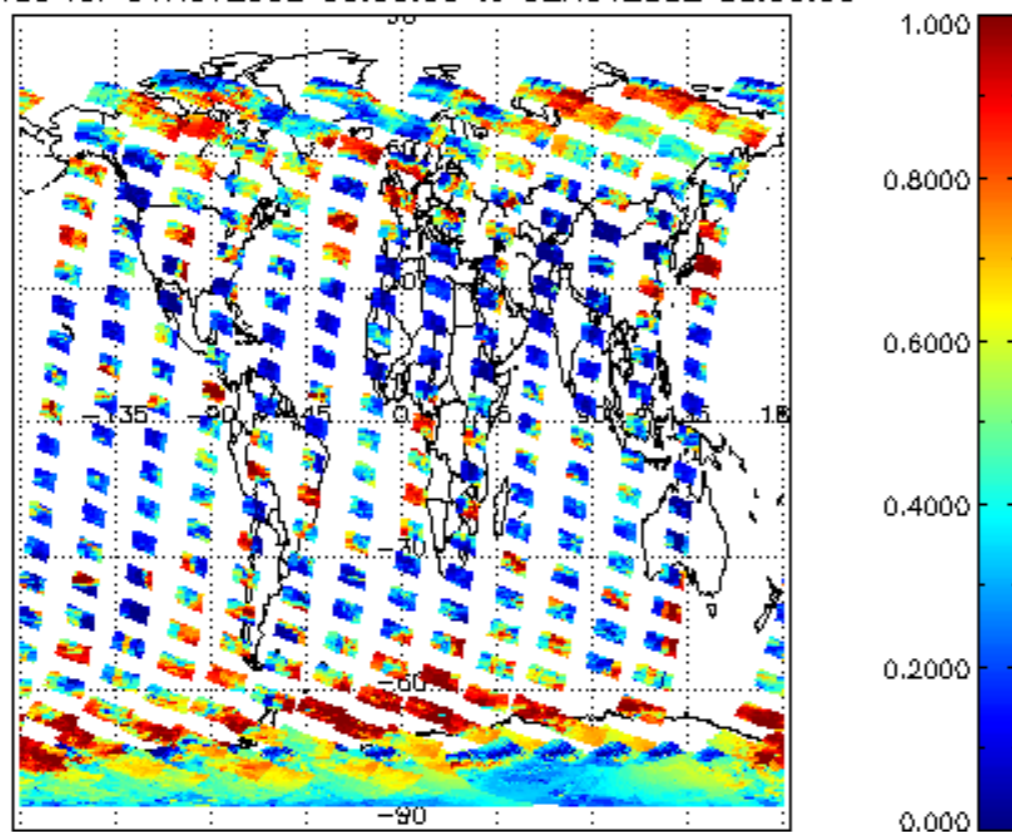
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



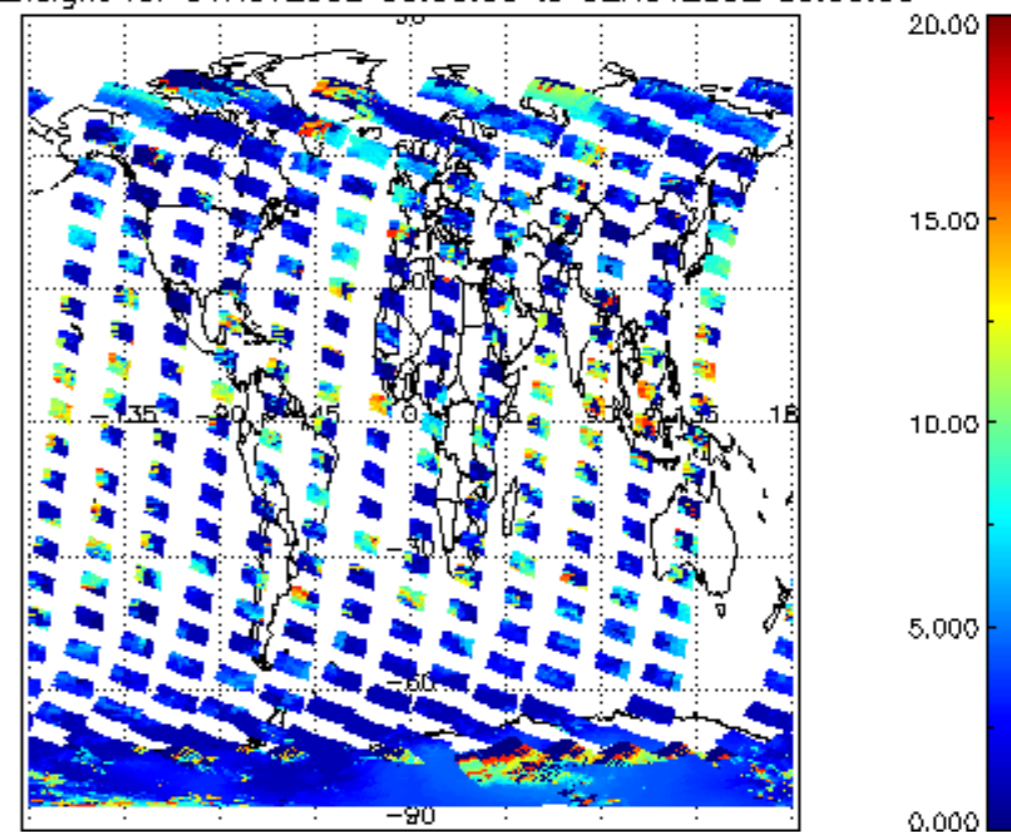
2.3 ADF monitoring

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

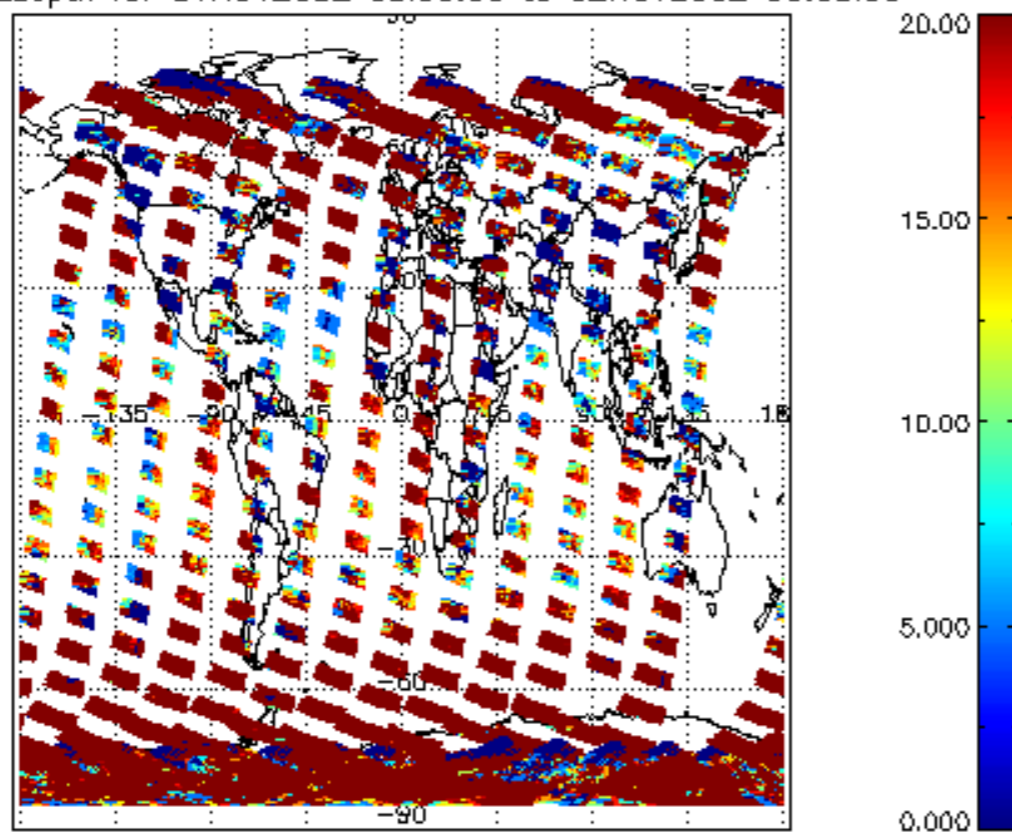
cLfrac for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



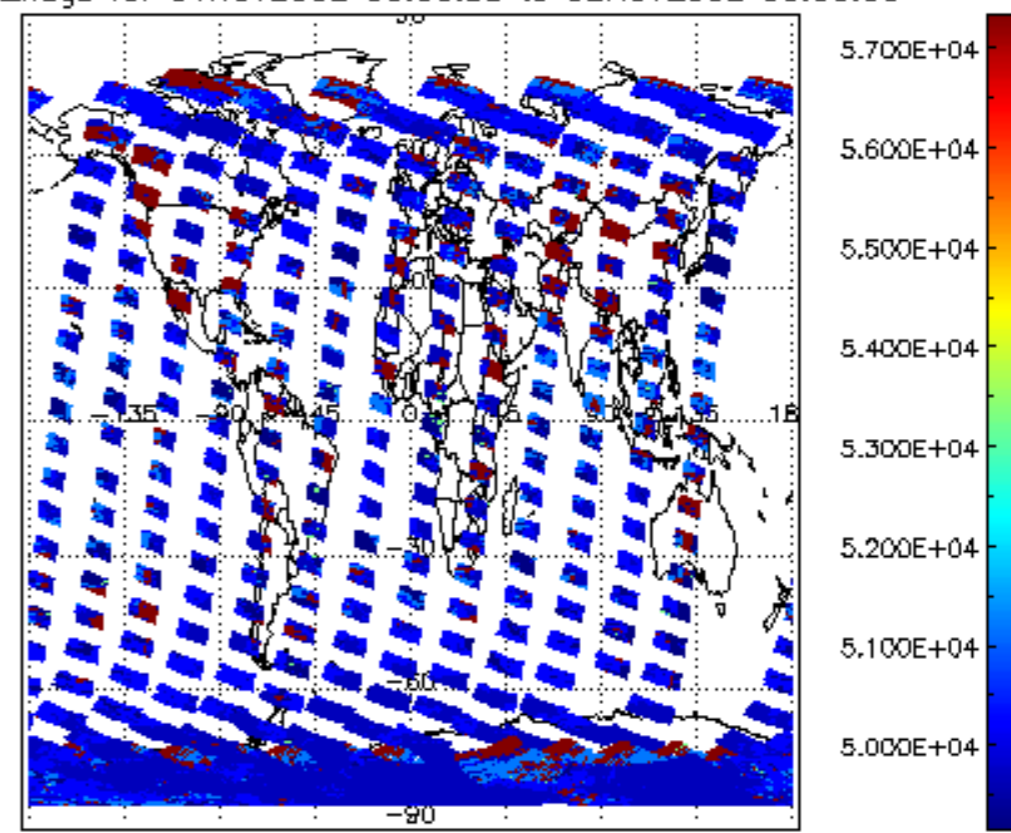
cL_top_height for 01NOV2002 00:00:00 to 02NOV2002 00:00:00

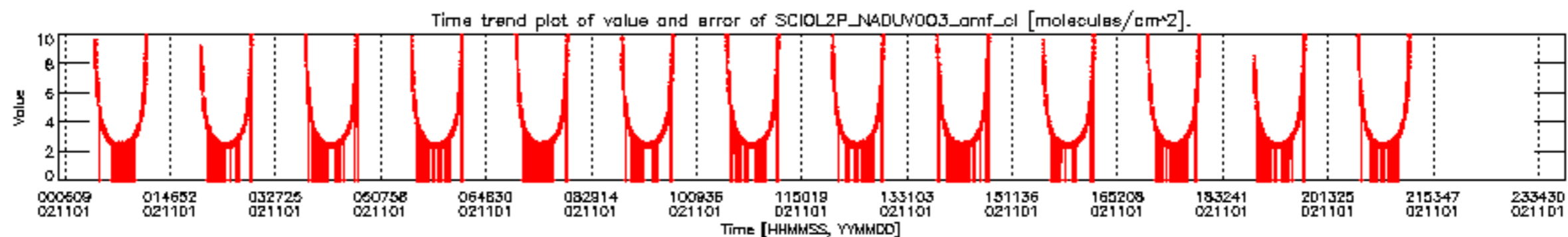
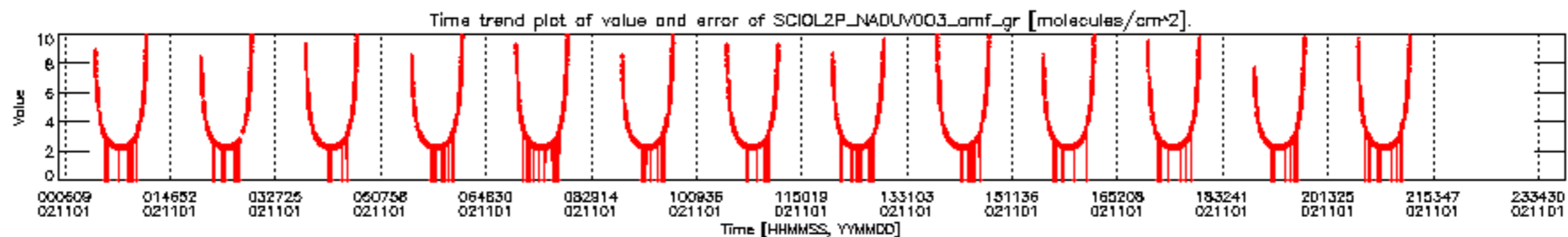
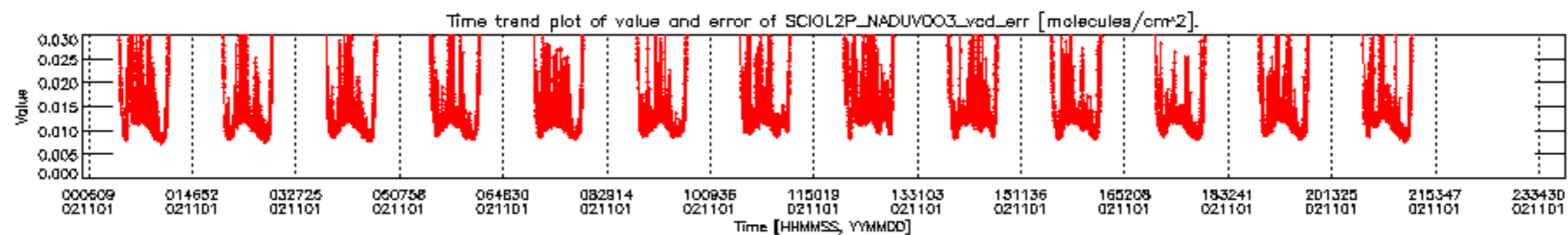
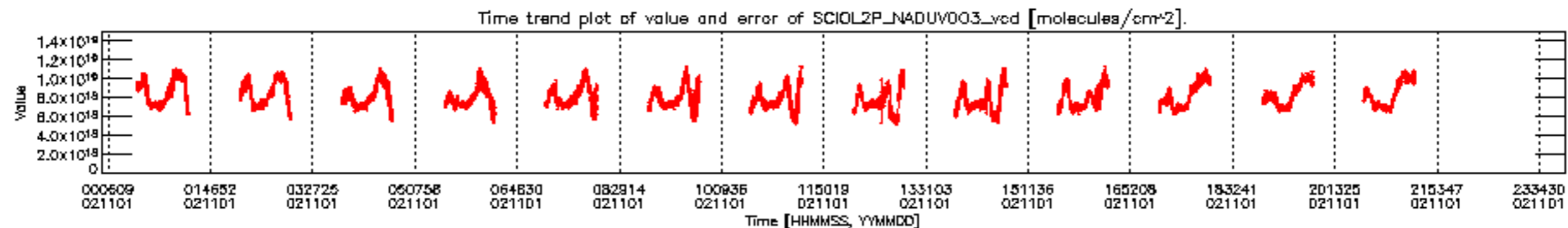


cL_opt_depth for 01NOV2002 00:00:00 to 02NOV2002 00:00:00

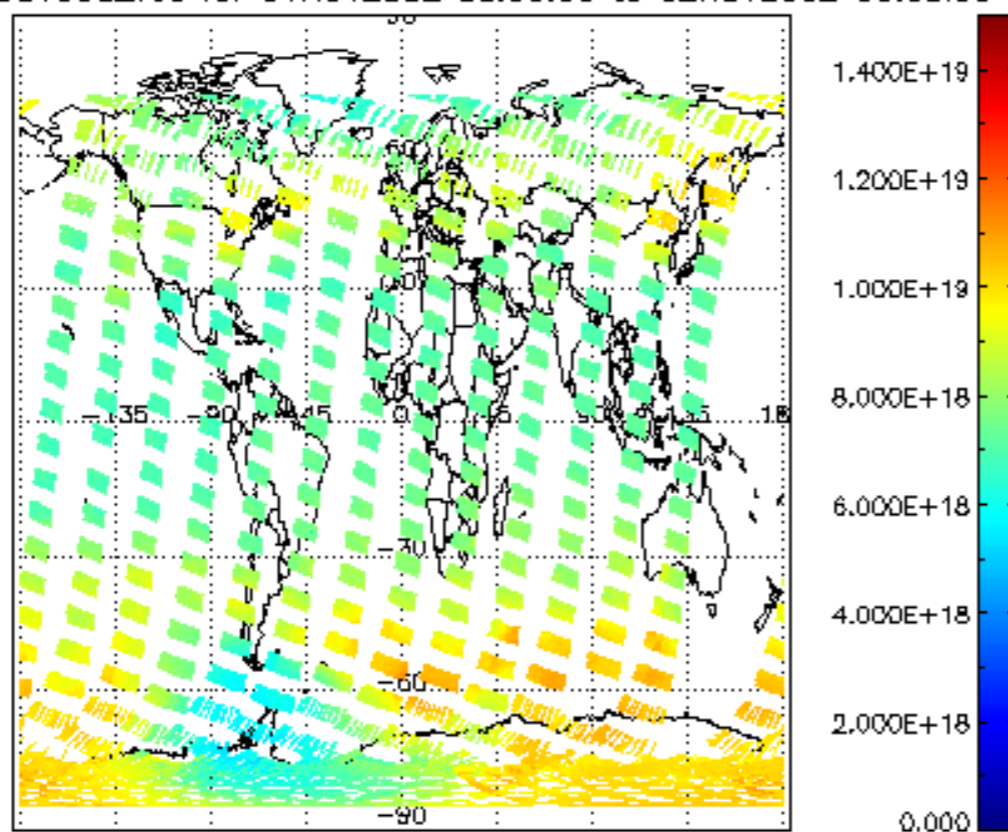


cloud_flags for 01NOV2002 00:00:00 to 02NOV2002 00:00:00

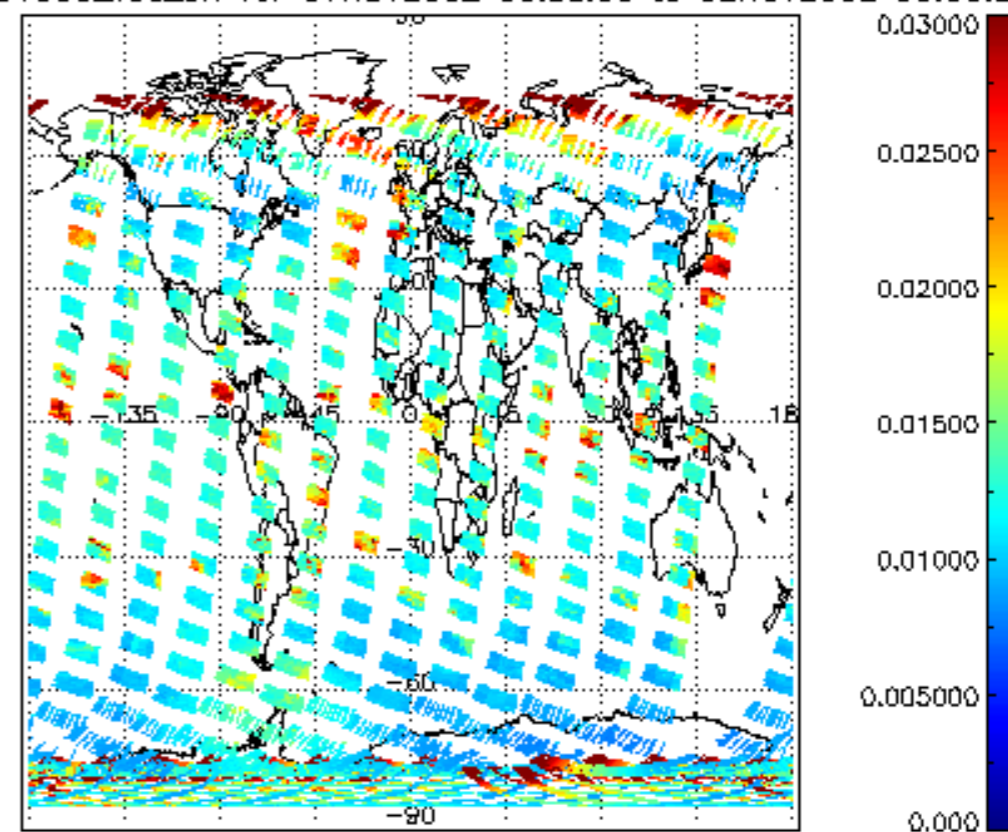




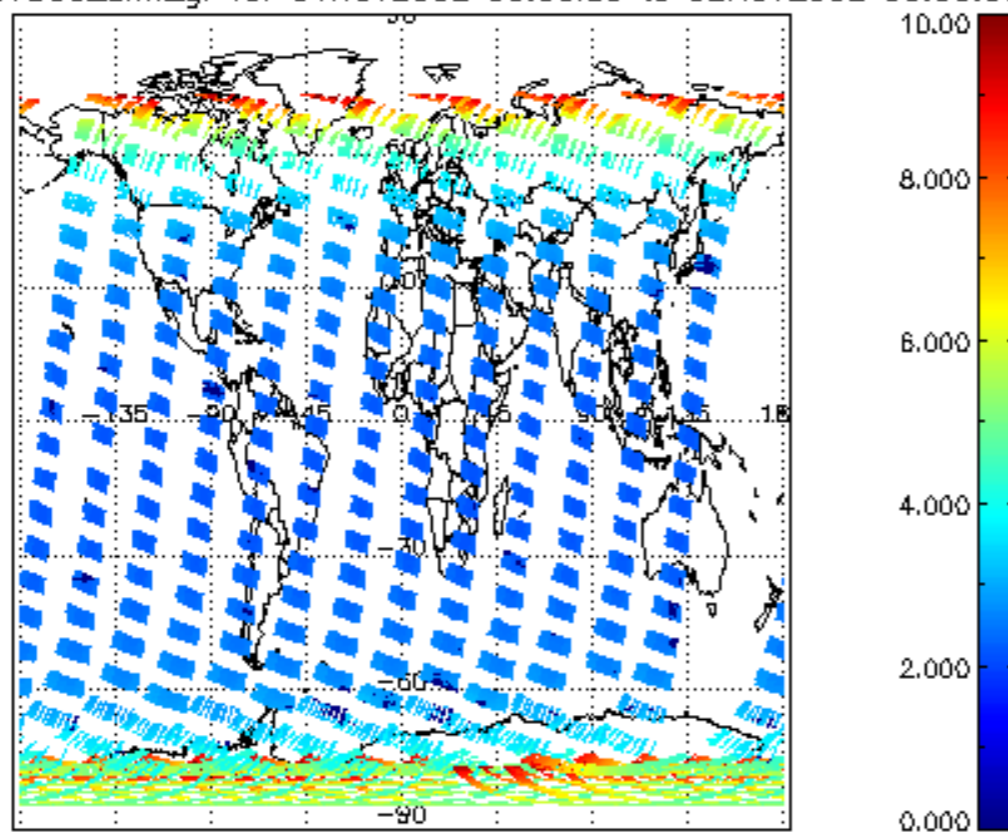
SCIOL2P_NADUV003_vcd for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



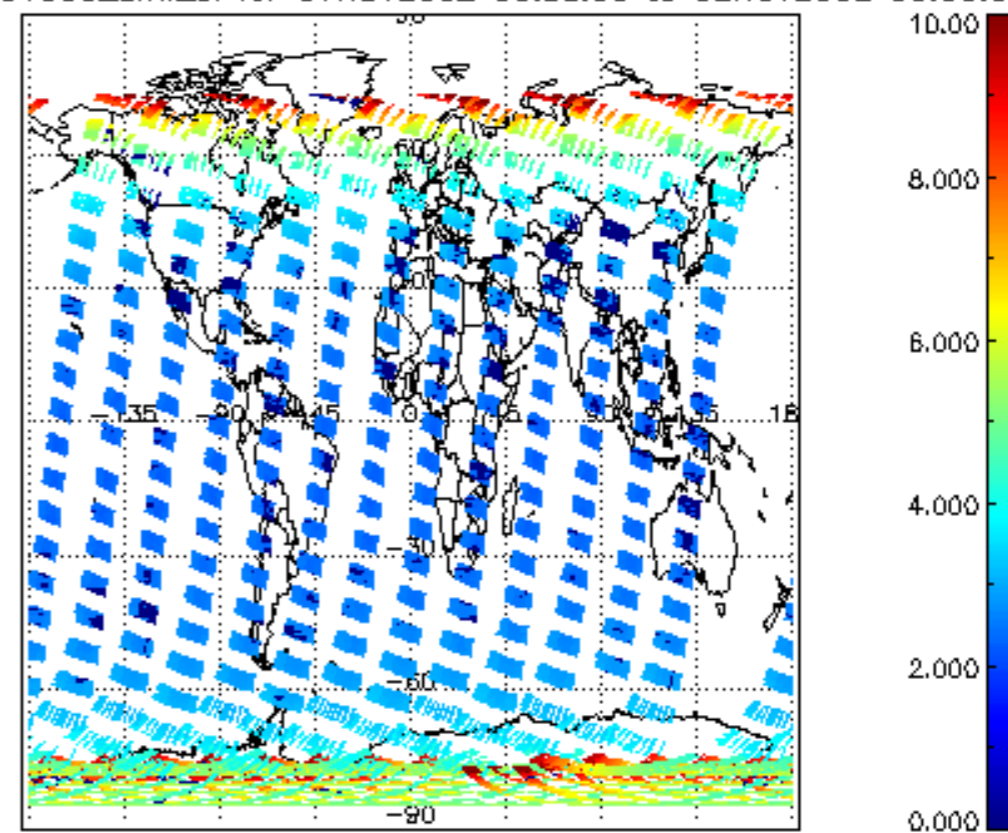
SCIOL2P_NADUV003_vcd_err for 01NOV2002 00:00:00 to 02NOV2002 00:00:00

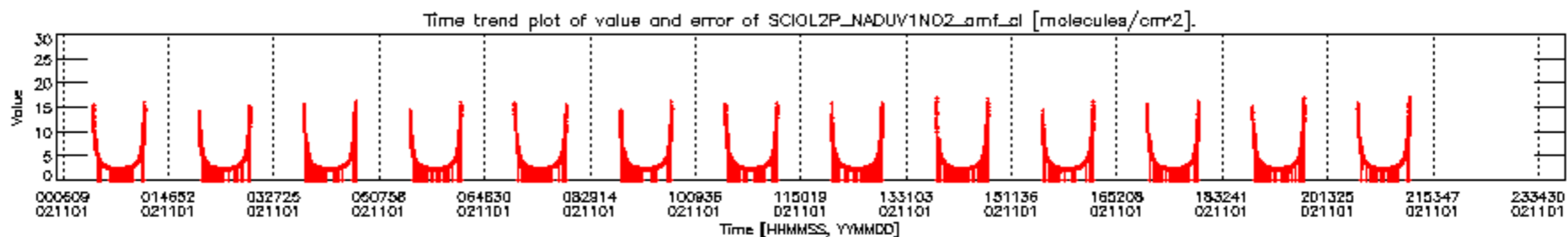
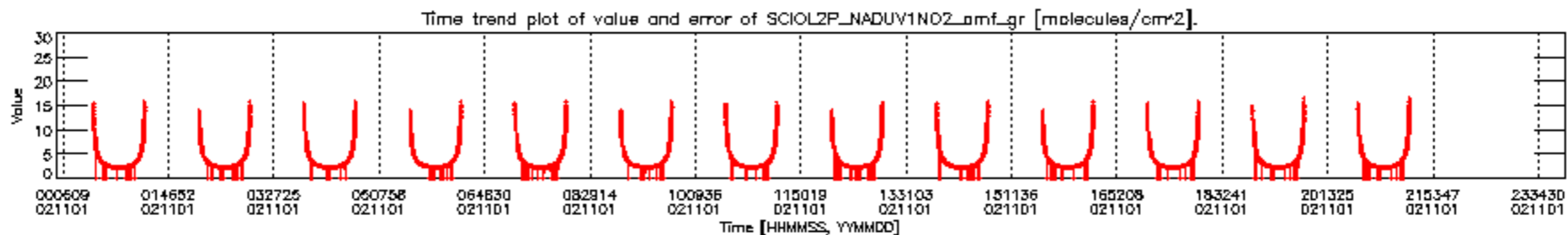
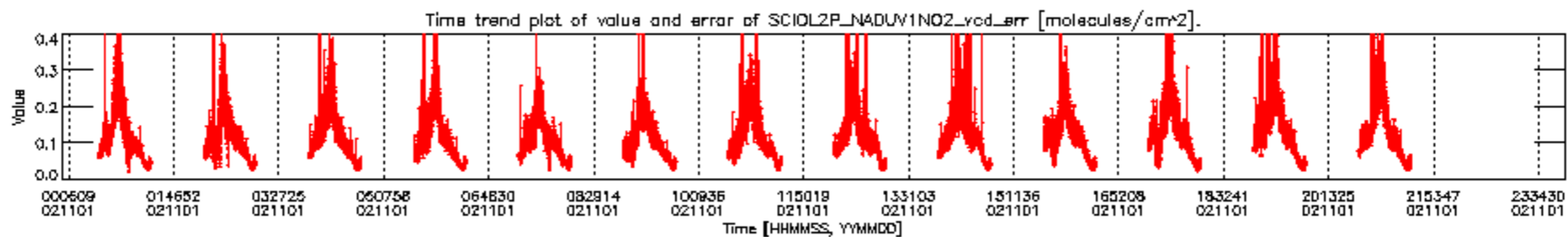
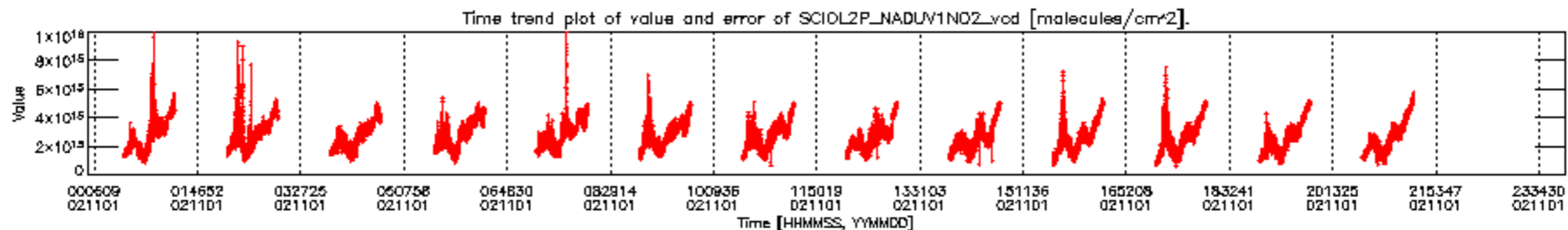


SCIOL2P_NADUV003_amf_gr for 01NOV2002 00:00:00 to 02NOV2002 00:00:00

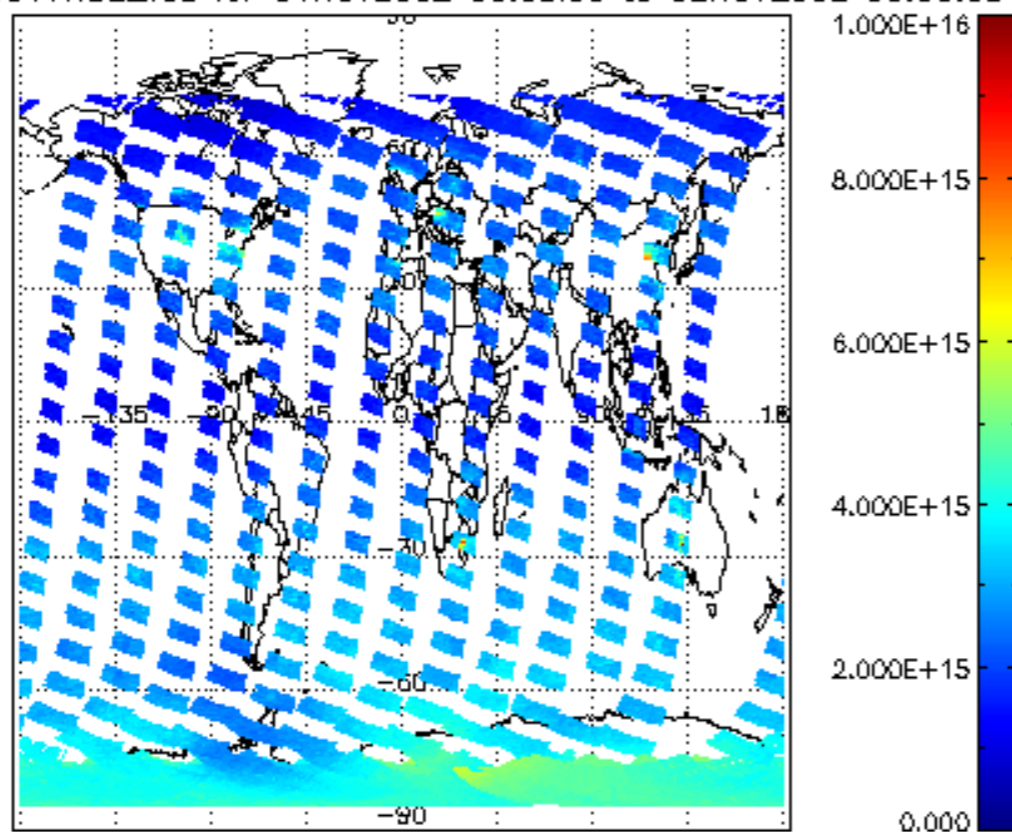


SCIOL2P_NADUV003_amf_cl for 01NOV2002 00:00:00 to 02NOV2002 00:00:00

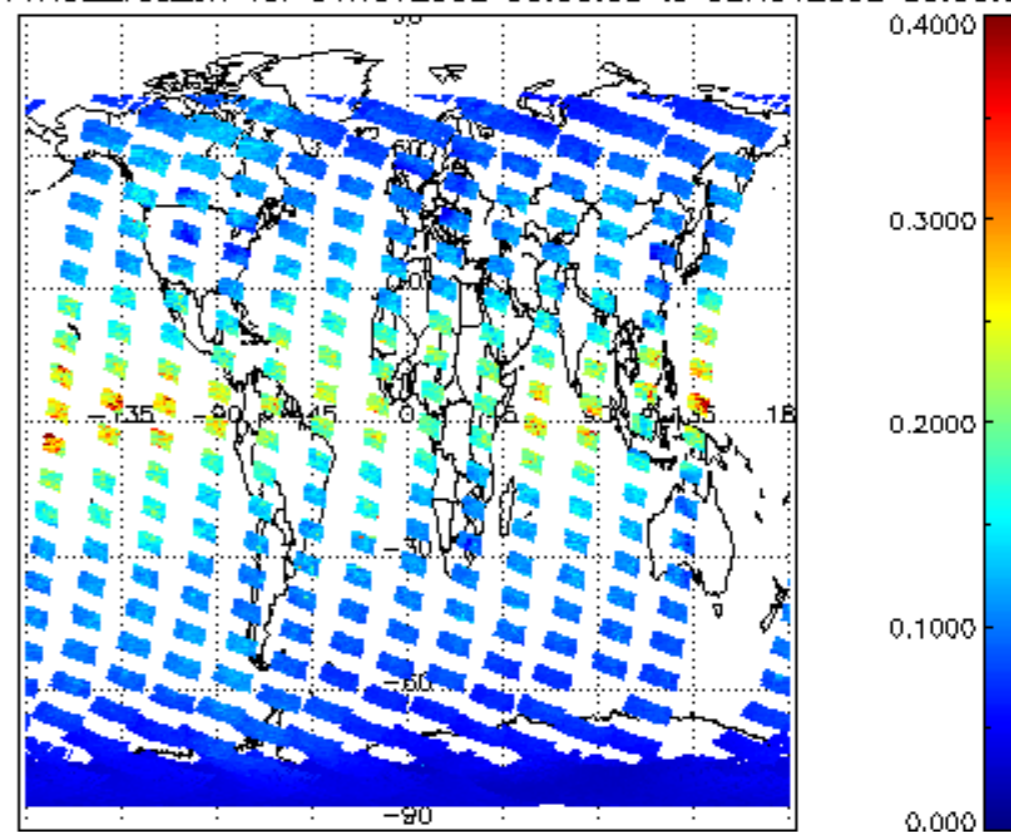




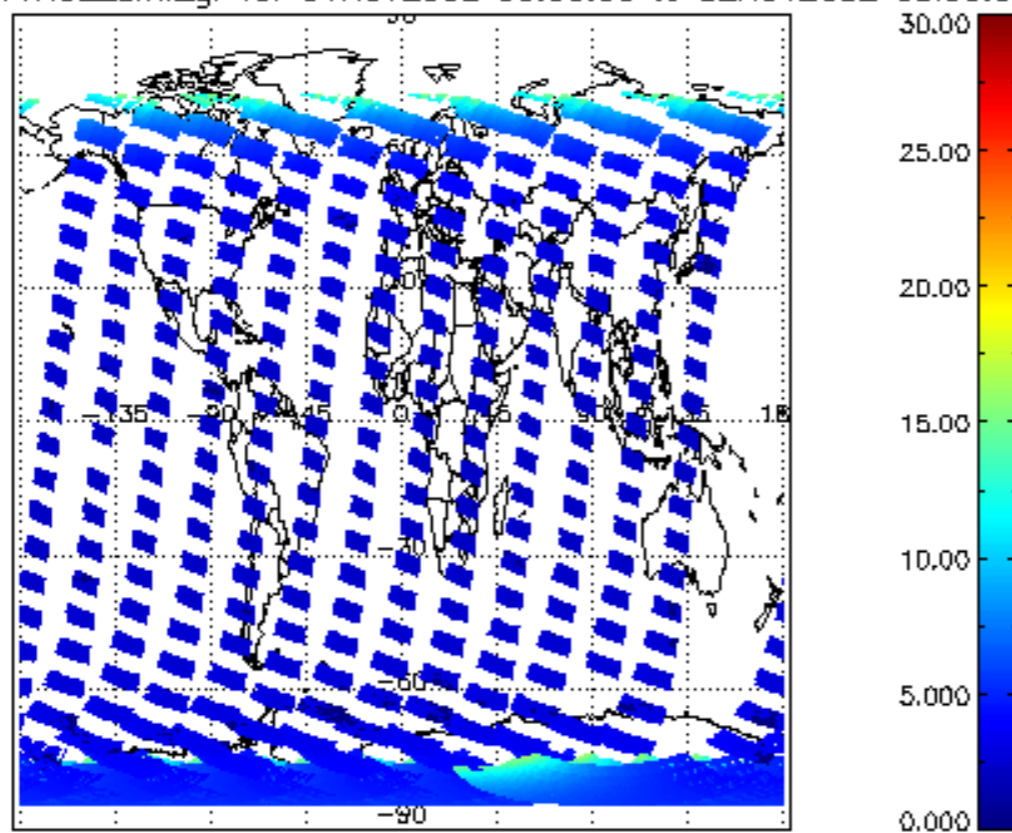
SCIOL2P_NADUV1NO2_vcd for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



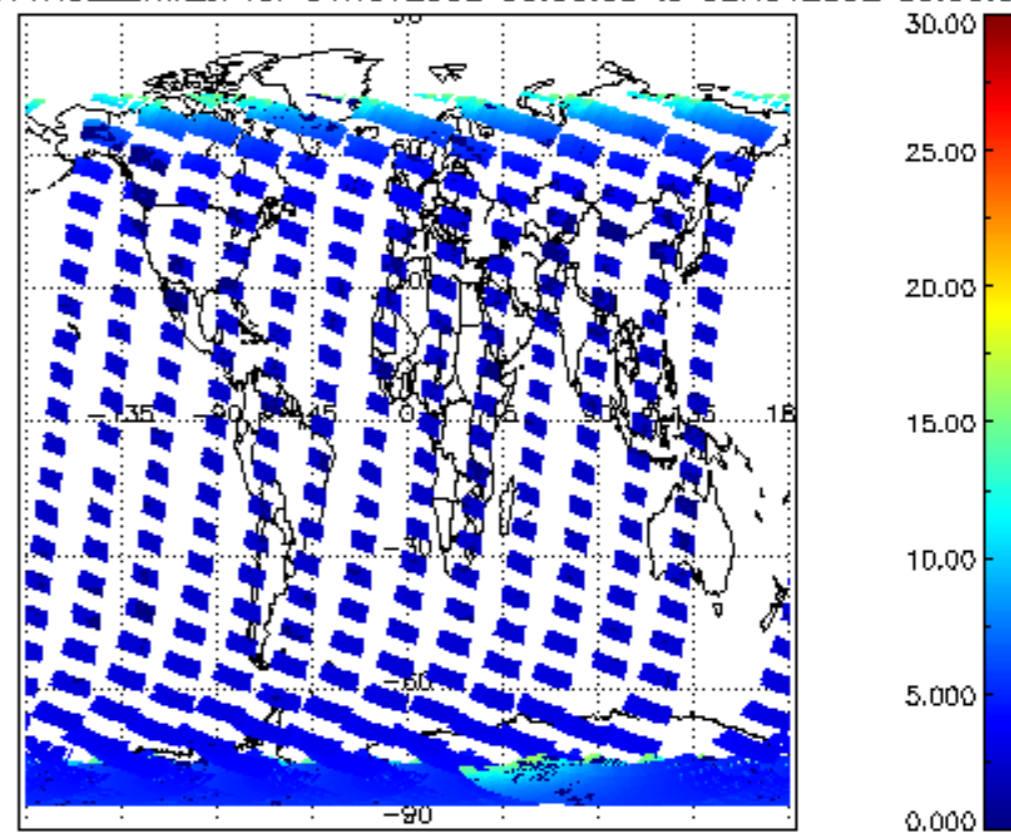
SCIOL2P_NADUV1NO2_vcd_err for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



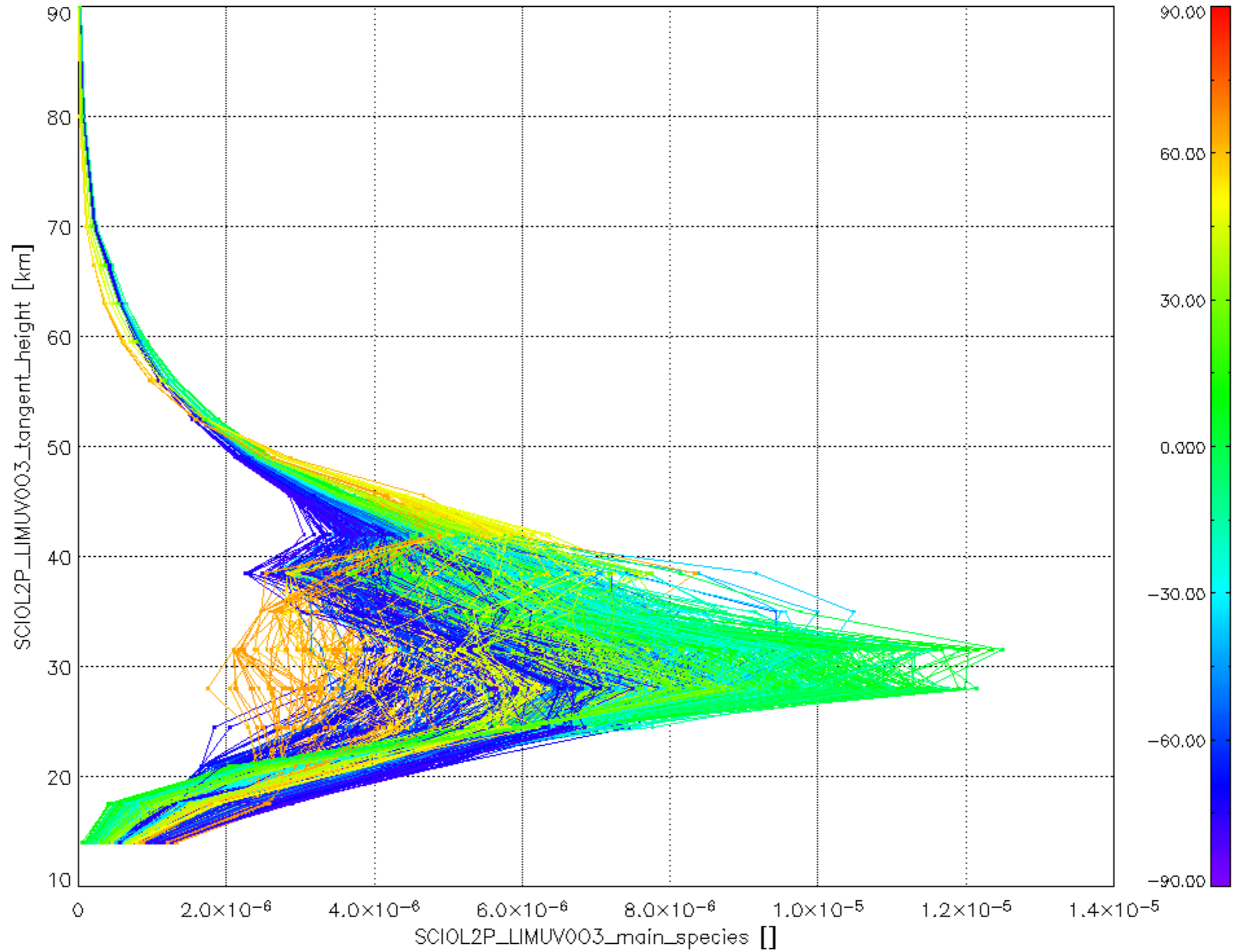
SCIOL2P_NADUV1NO2_amf_gr for 01NOV2002 00:00:00 to 02NOV2002 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 01NOV2002 00:00:00 to 02NOV2002 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).

