

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	12JUN2008 13:37:04
Data source version	SCIA-OL/3.01-R
Processing scope for products	17NOV2002 00:00:00 to 18NOV2002 00:00:00
Start time of first product within scope	17NOV2002 02:13:01
Stop time of last product within scope	18NOV2002 00:51:55
Total number of level 2 products	12
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__2PRDPA20021117_021301_000030812011_00175_03736_1478.N1	17NOV2002 02:13:01	17NOV2002 03:04:22	0	GOOD
1	SCI_OL__2PRDPA20021117_040113_000026012011_00176_03737_1604.N1	17NOV2002 04:01:13	17NOV2002 04:44:34	0	GOOD
2	SCI_OL__2PRDPA20021117_052936_000033852011_00177_03738_1561.N1	17NOV2002 05:29:36	17NOV2002 06:26:01	0	GOOD
3	SCI_OL__2PRDPA20021117_071014_000033872011_00178_03739_1576.N1	17NOV2002 07:10:14	17NOV2002 08:06:41	0	GOOD
4	SCI_OL__2PRDPA20021117_085052_000033882011_00179_03740_1617.N1	17NOV2002 08:50:52	17NOV2002 09:47:21	0	GOOD
5	SCI_OL__2PRDPA20021117_103130_000033902011_00180_03741_1534.N1	17NOV2002 10:31:30	17NOV2002 11:28:01	0	GOOD
6	SCI_OL__2PRDPA20021117_121208_000033922011_00181_03742_1515.N1	17NOV2002 12:12:08	17NOV2002 13:08:41	0	GOOD
7	SCI_OL__2PRDPA20021117_135246_000033942011_00182_03743_1504.N1	17NOV2002 13:52:46	17NOV2002 14:49:21	0	GOOD
8	SCI_OL__2PRDPA20021117_153324_000033962011_00183_03744_1543.N1	17NOV2002 15:33:24	17NOV2002 16:30:01	0	GOOD
9	SCI_OL__2PRDPA20021117_171402_000033982011_00184_03745_1458.N1	17NOV2002 17:14:02	17NOV2002 18:10:41	0	GOOD
10	SCI_OL__2PRDPA20021117_221556_000033192011_00187_03748_1450.N1	17NOV2002 22:15:56	17NOV2002 23:11:16	0	GOOD
11	SCI_OL__2PRDPA20021117_235634_000033212011_00188_03749_1522.N1	17NOV2002 23:56:34	18NOV2002 00:51:55	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: 85700

Total number of cloud data DSRs with good quality flag (=0): 85700 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	85700	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	85700	0.23746	0.25000	0.12500	0.50000	0.066228	s
SURFACE_PRES	85700	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	85700	0.46272	0.44245	0.0000	1.0000	0.29176	-
CL_FRAC_ERR	85700	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	85700	7.5986	8.0000	4.0000	16.000	2.1193	-
PMD_READ_CL[0]	85700	0.49565	0.0000	0.0000	16.000	1.7239	-

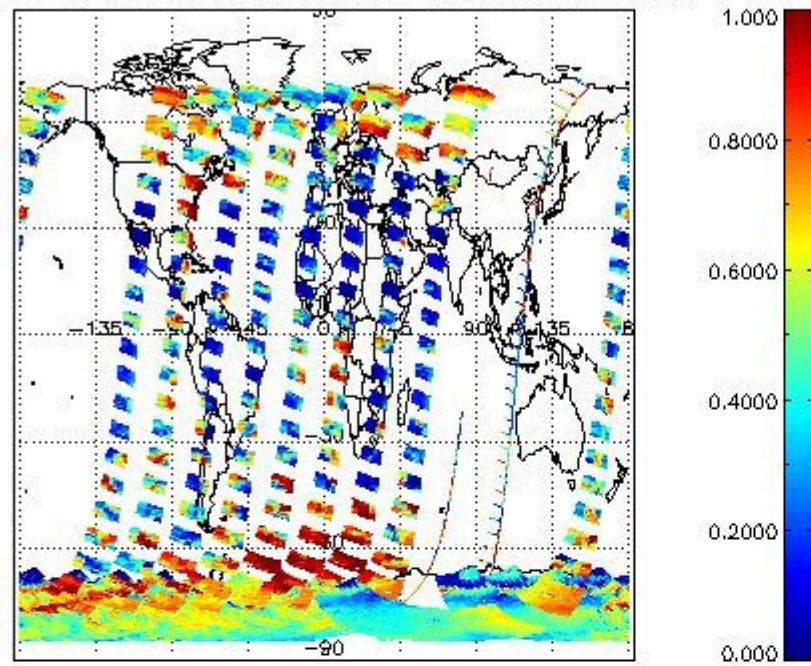
PMD_READ_CL[1]	85700	0.43056	0.0000	0.0000	16.000	1.6718	-
CL_TOP_HEIGHT	76865	4.0655	2.7270	0.0000	17.000	3.8337	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	76865	47.456	29.586	0.0000	101.00	38.823	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	85700	11100000	11100000	11100000	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	85700	11000111	11000010	11000000	11100000	2622.1	flags
AERO_ABSO_IND	85700	0.39168	0.098415	-4.6620	9.9463	0.98933	
AERO_IND_DIAG	85700	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	85700	01101010	11000000	00000000	11000000	24442.	flags

Time and geolocation plots:

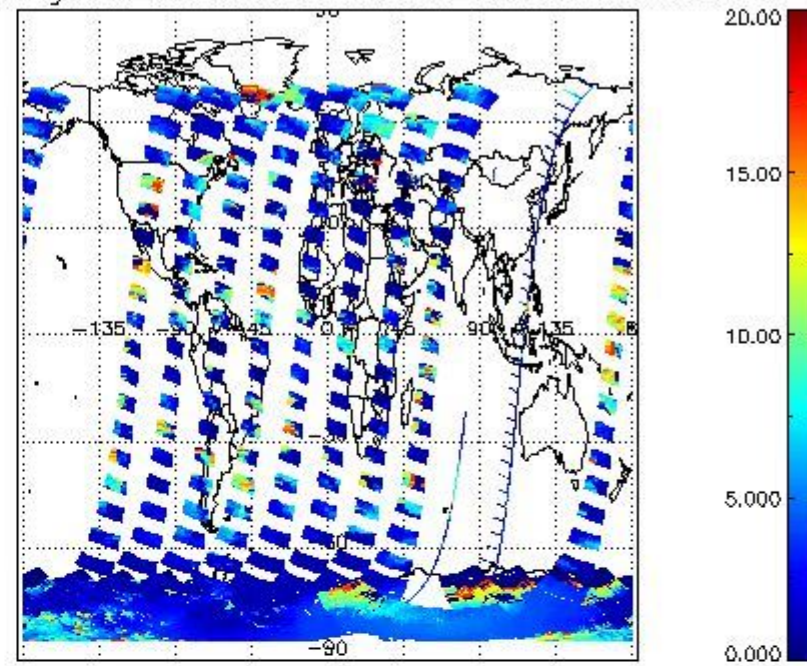
Plots are available for the following parameters:

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

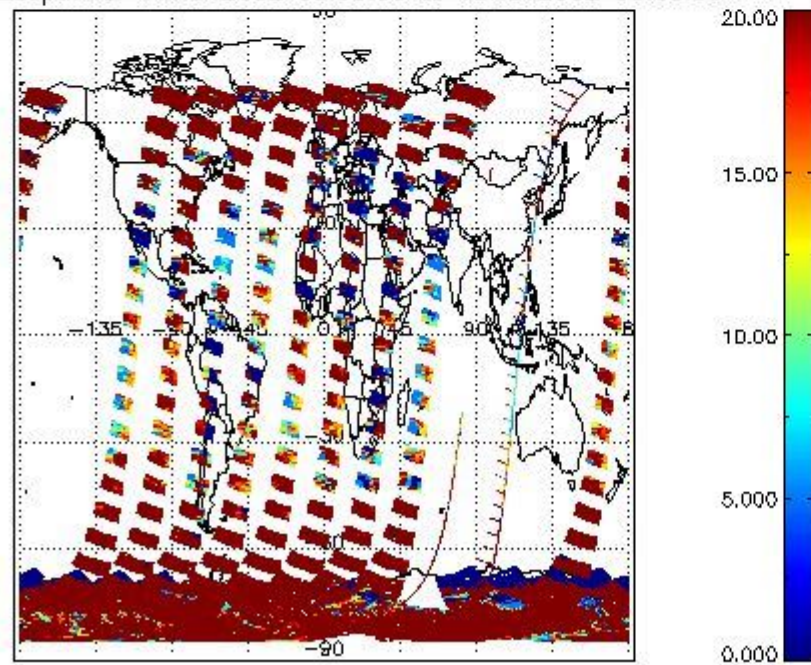
cLfrac for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



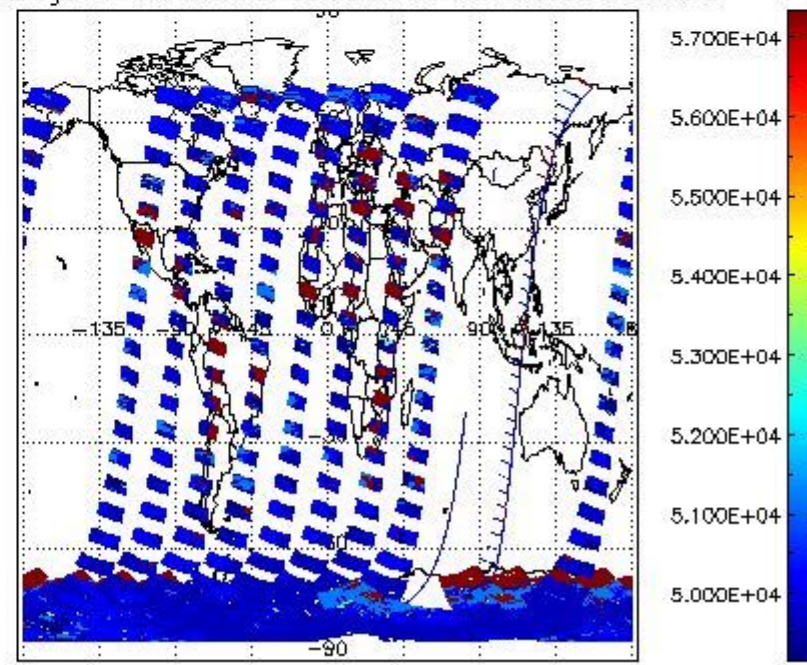
cL_top_height for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



cL_opt_depth for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



cloud_flags for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



2.2.2 Nadir

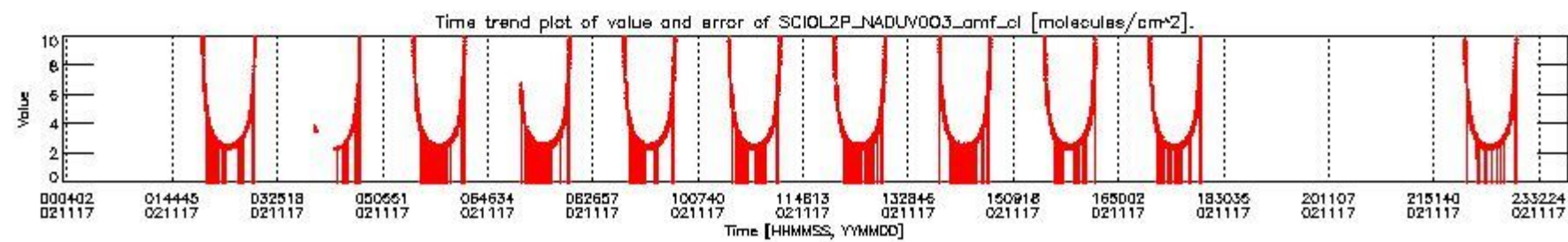
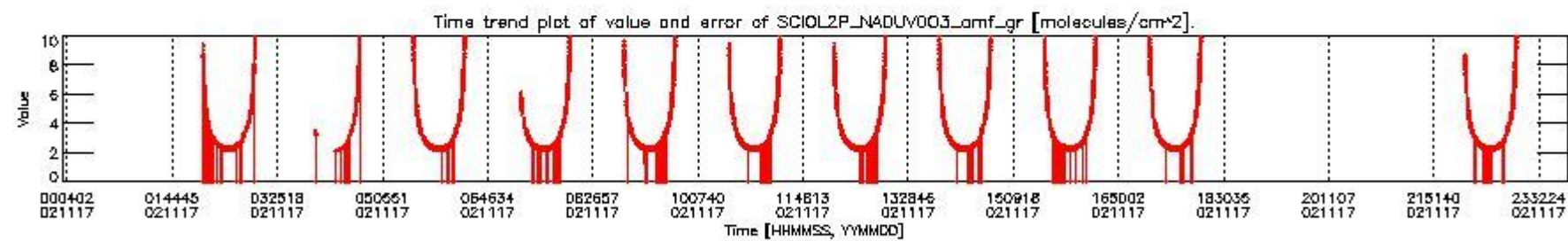
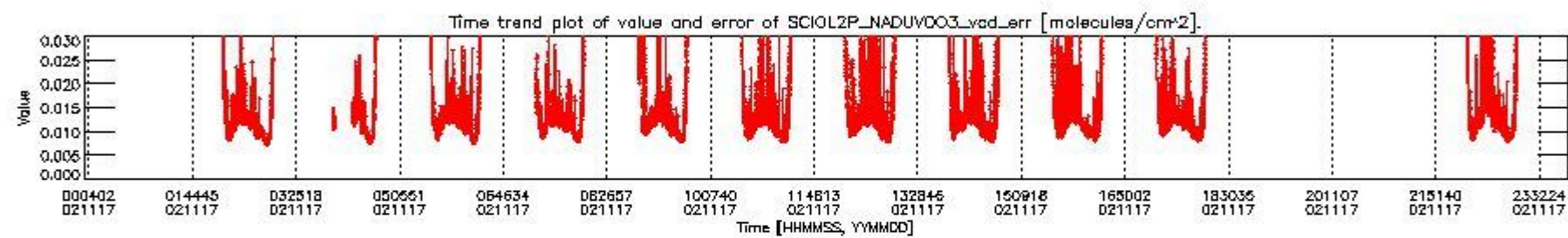
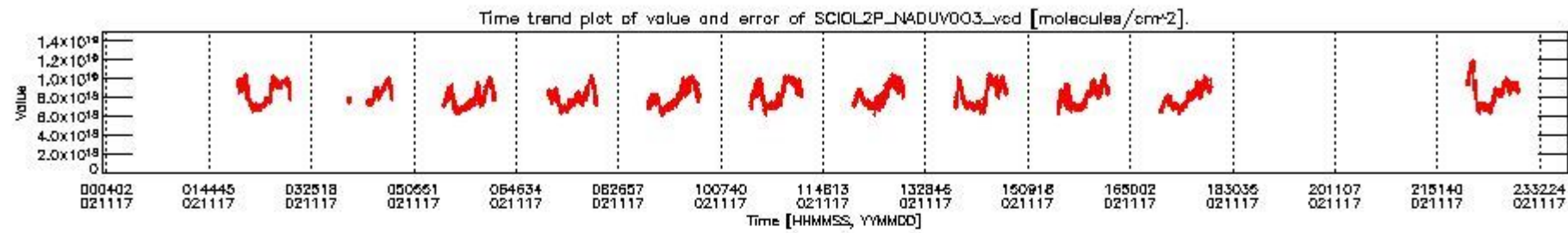
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

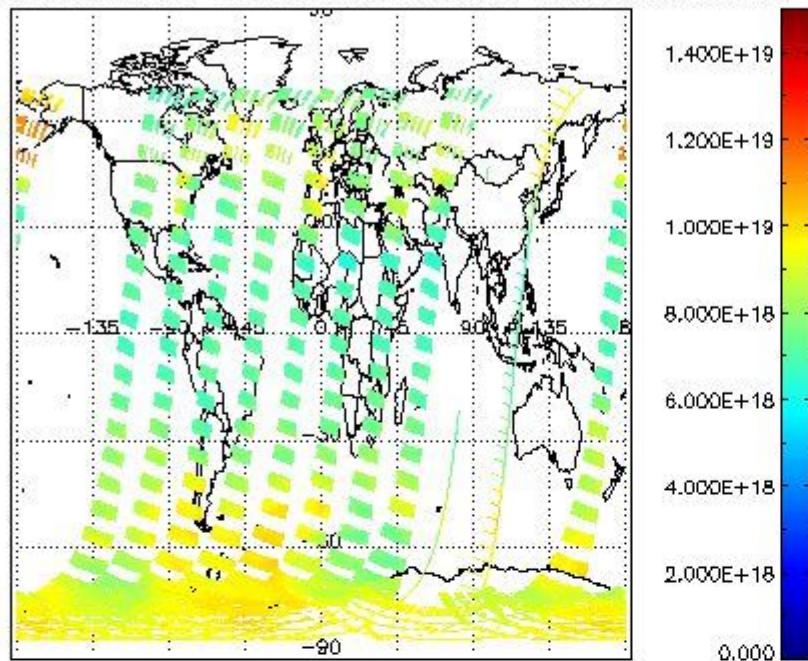
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

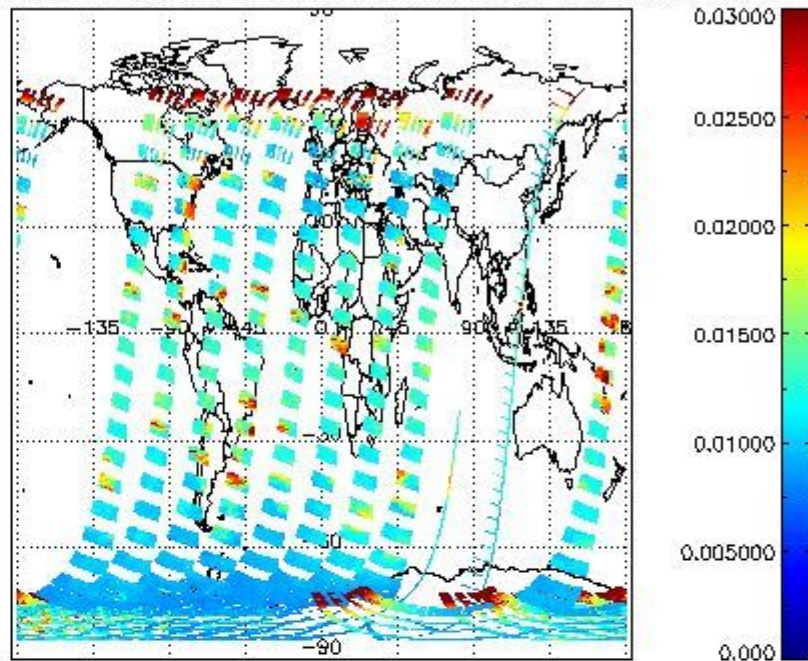
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



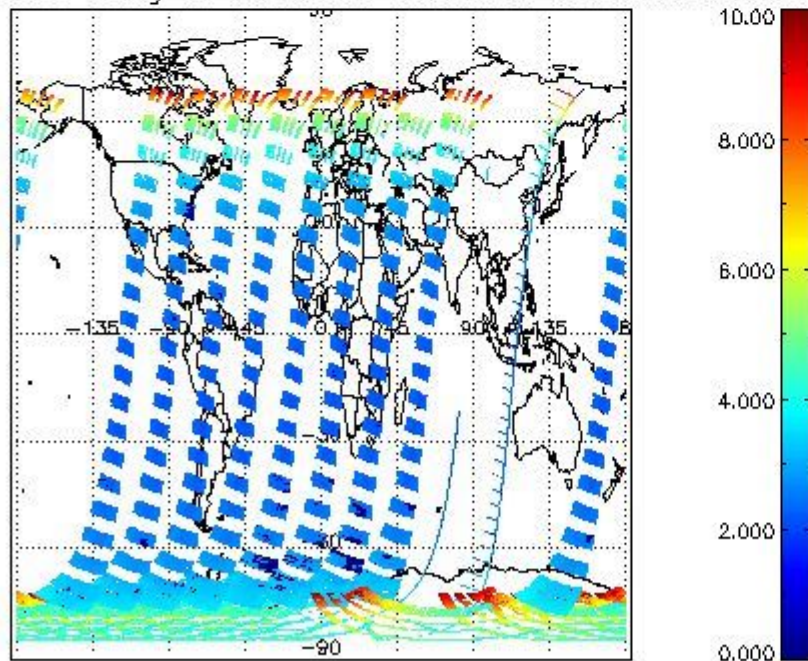
SCIOL2P_NADUV003_vcd for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



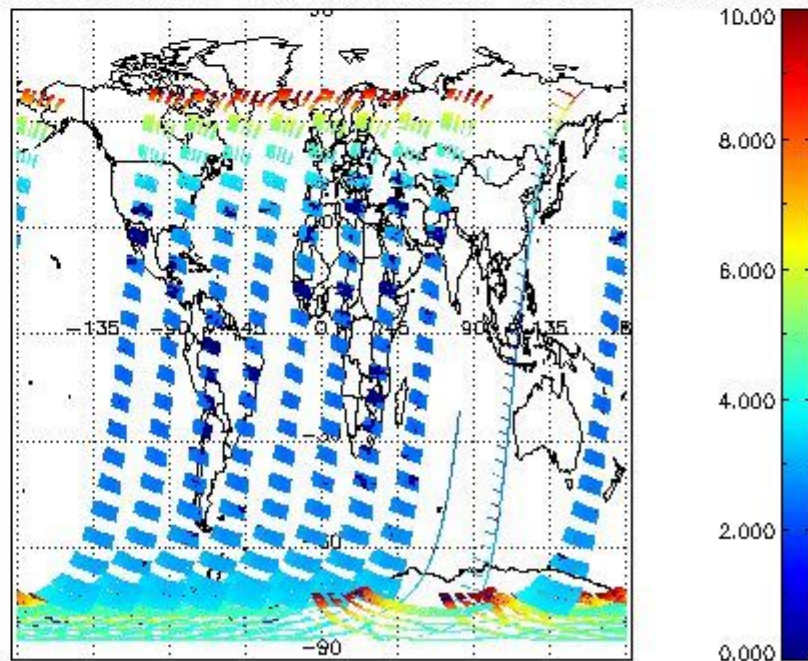
SCIOL2P_NADUV003_vcd_err for 17NOV2002 00:00:00 to 18NOV2002 00:00:00

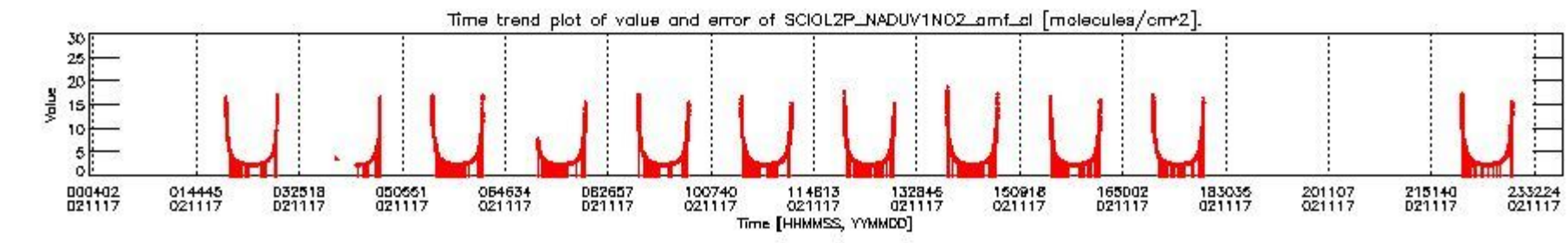
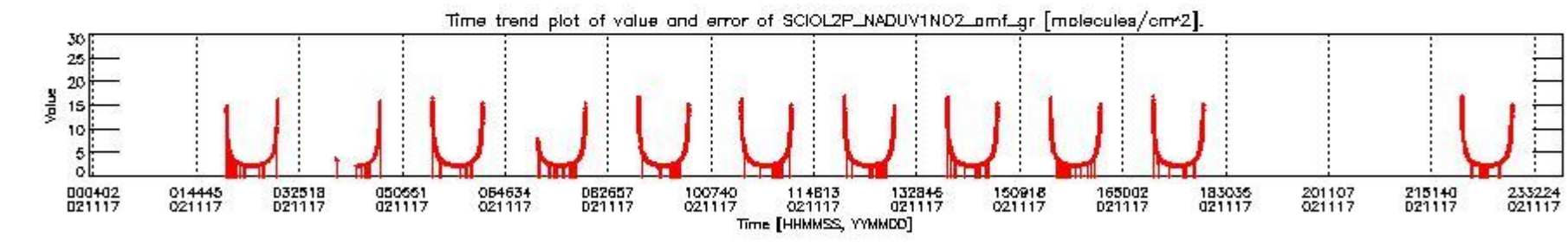
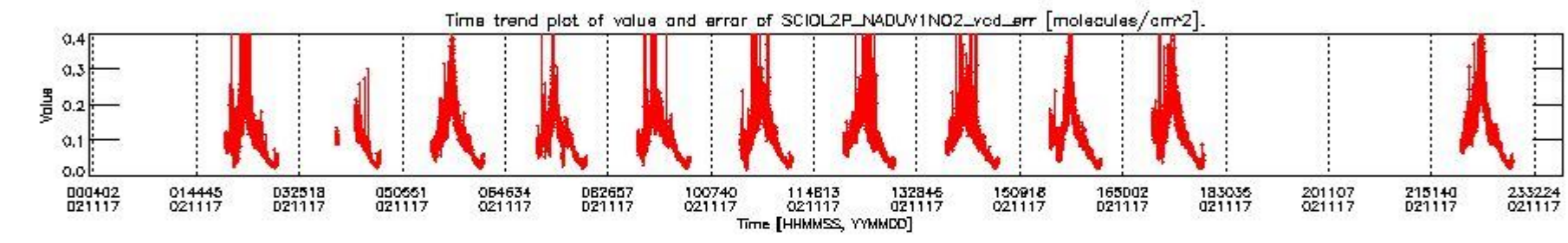
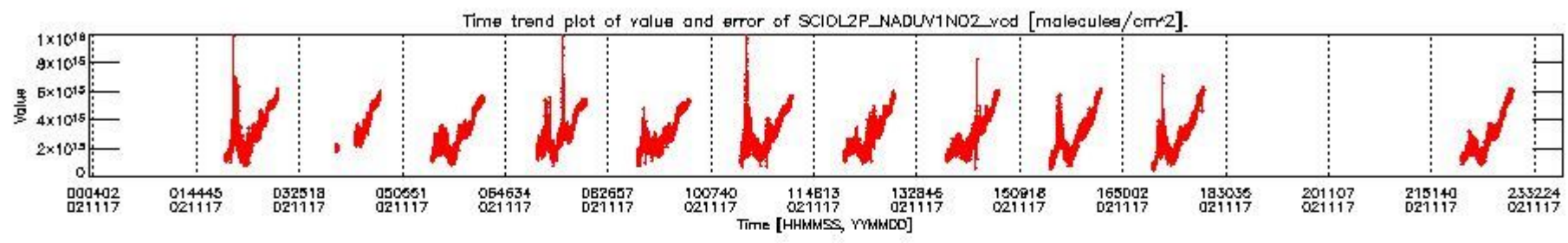


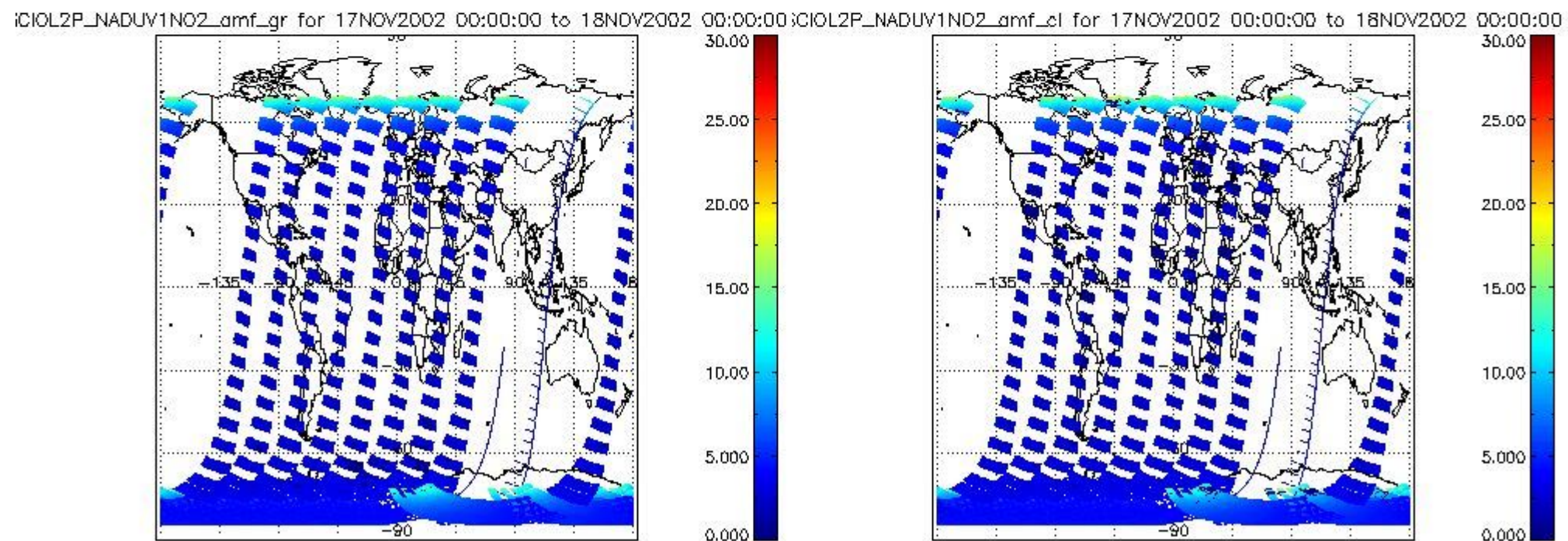
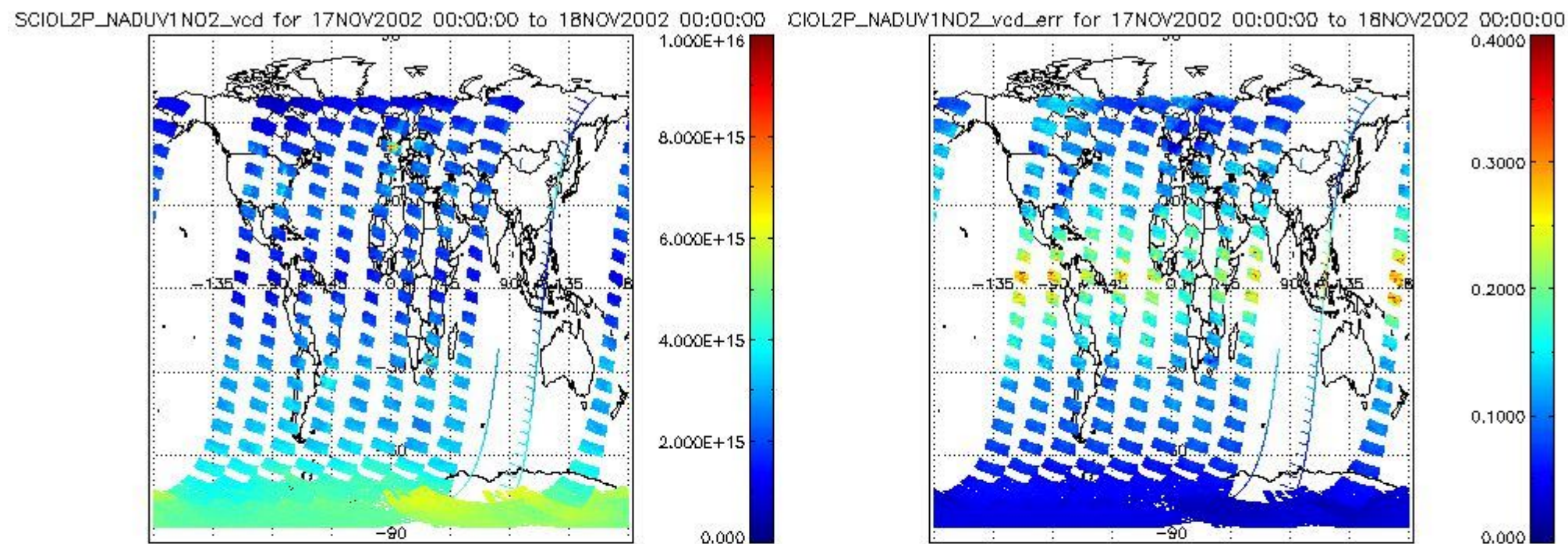
SCIOL2P_NADUV003_amf_gr for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



SCIOL2P_NADUV003_amf_cl for 17NOV2002 00:00:00 to 18NOV2002 00:00:00







2.2.3 Limb

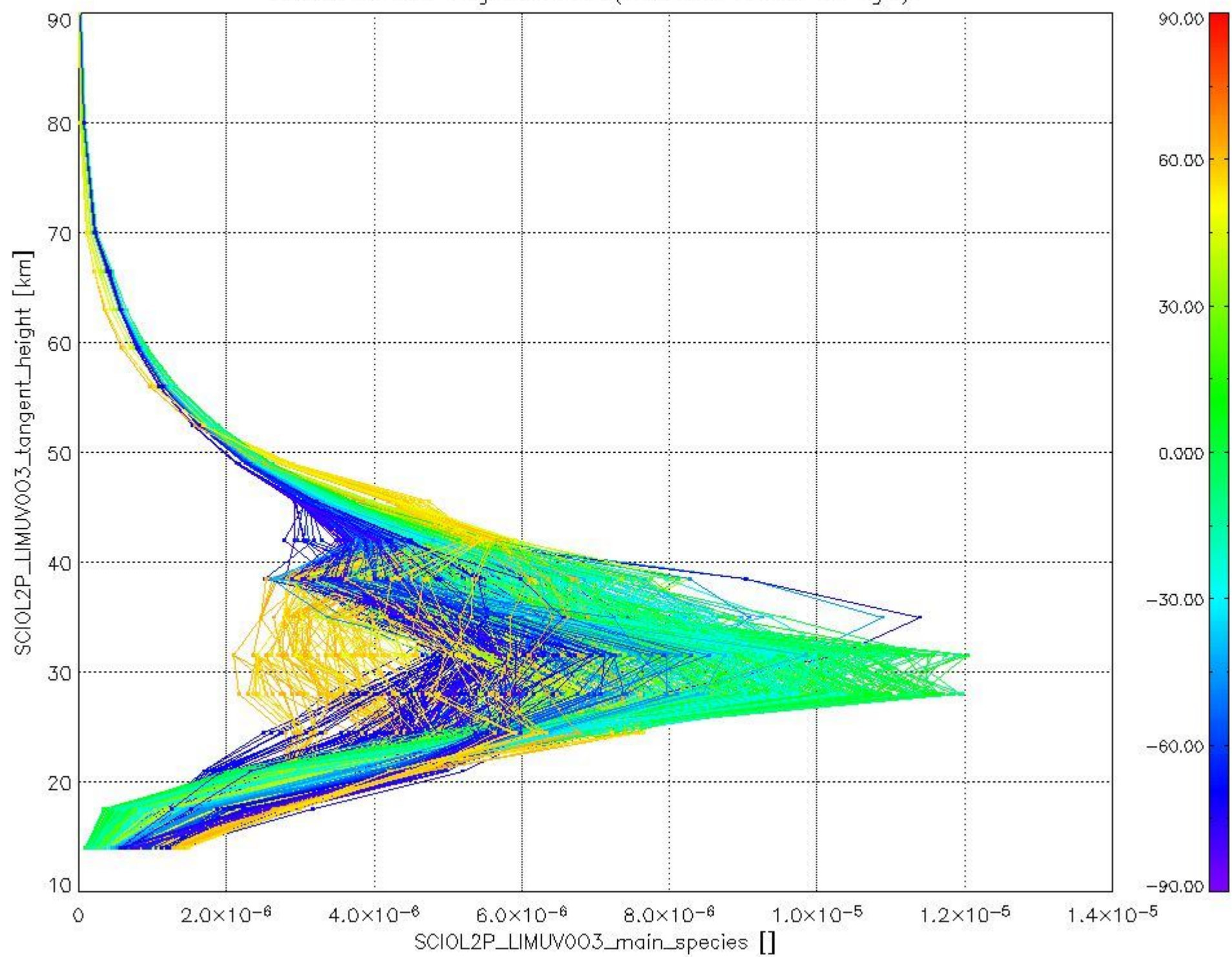
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

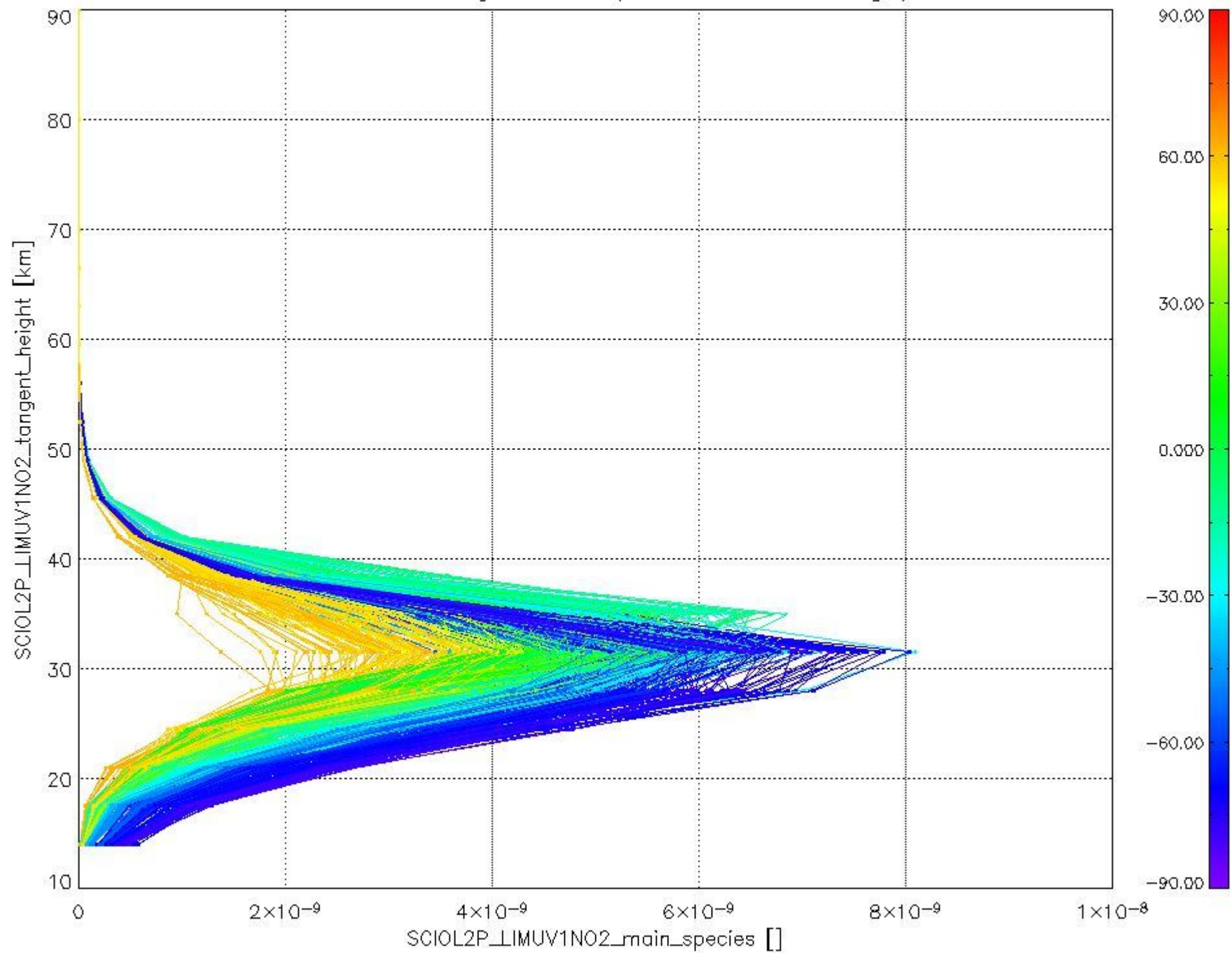
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



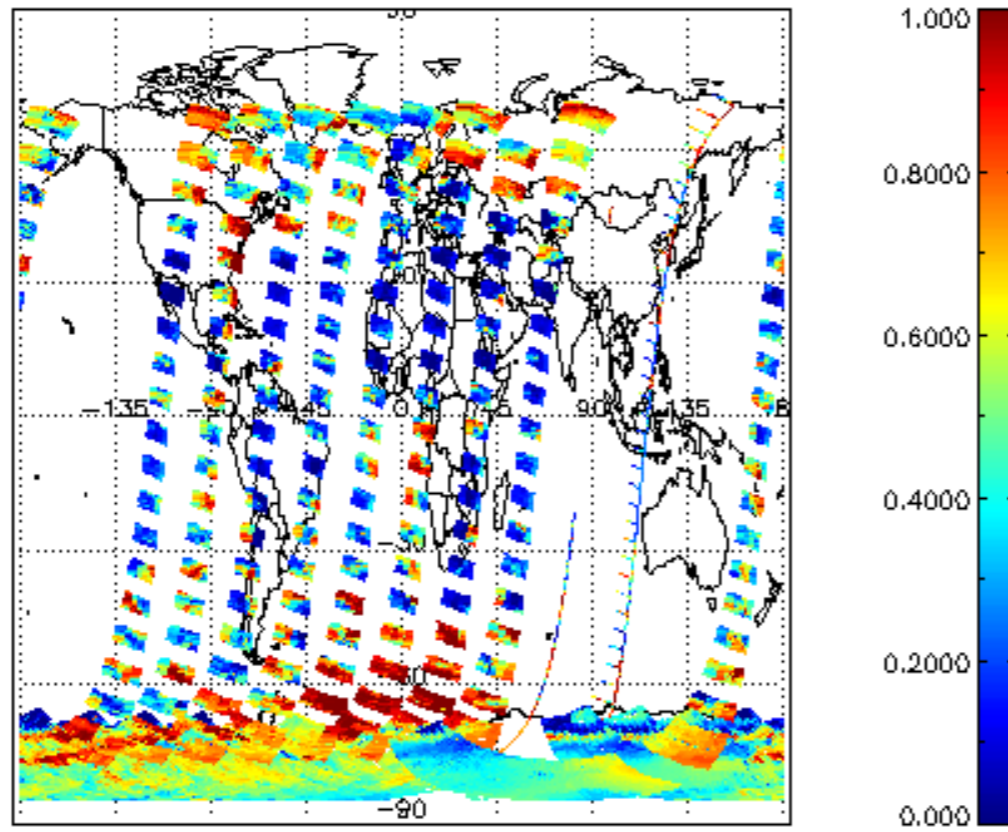
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



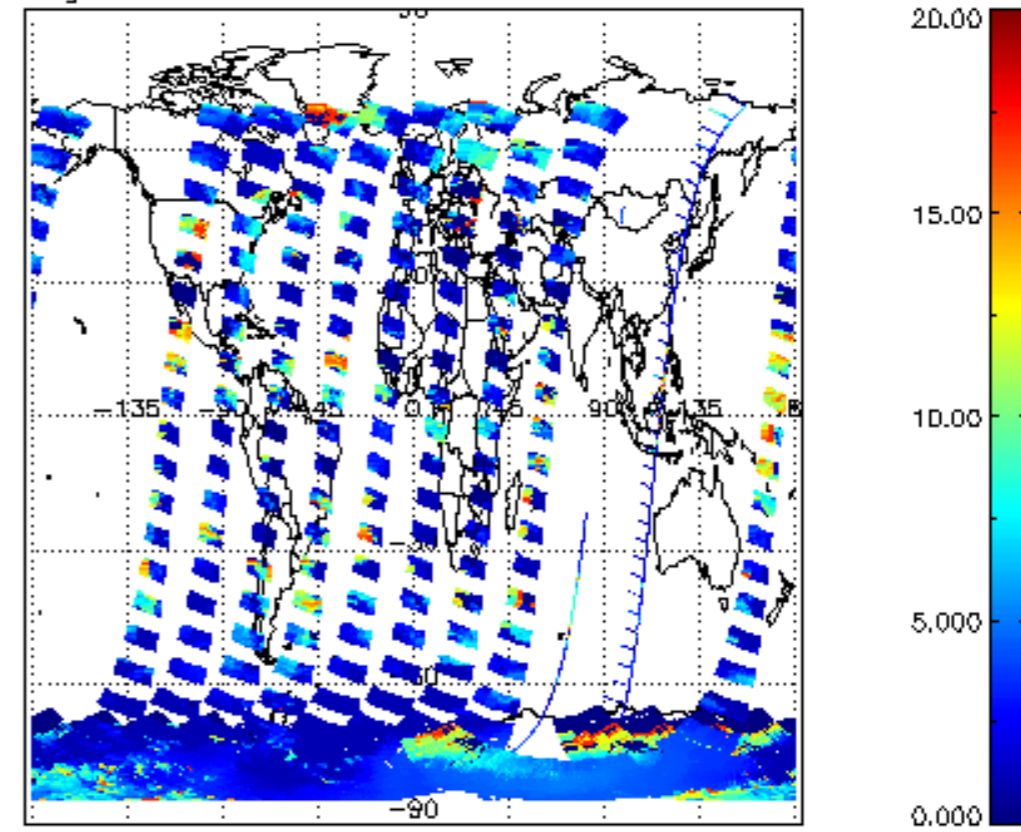
2.3 ADF monitoring

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

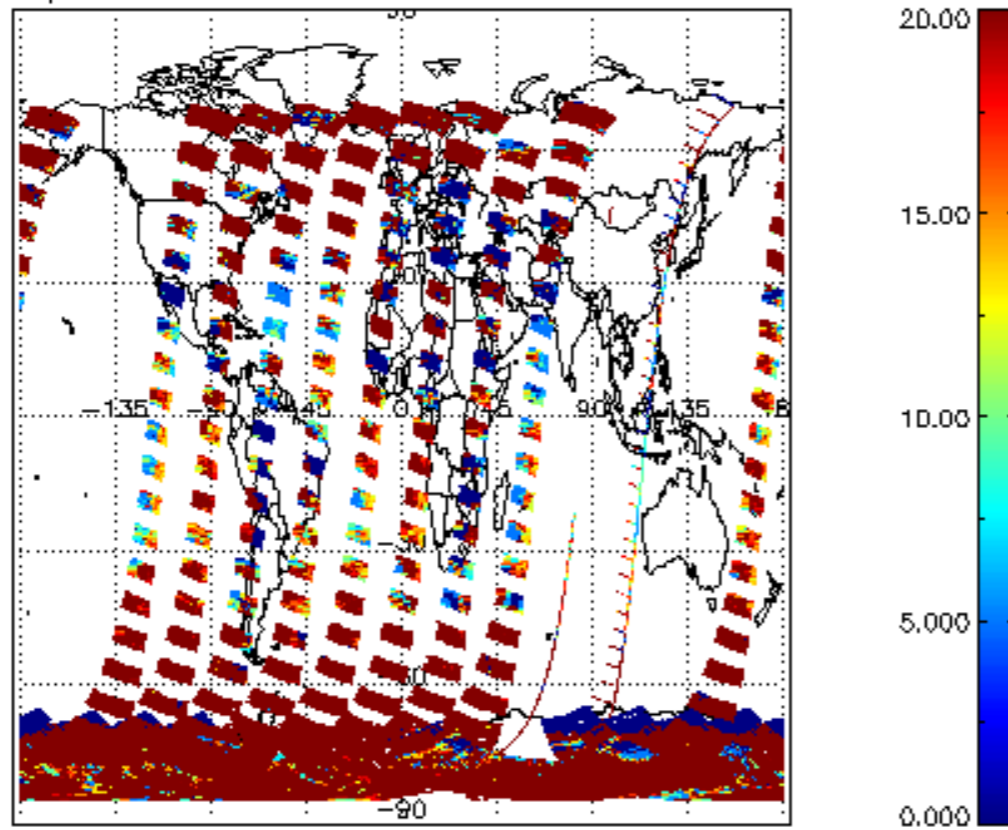
cLfrac for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



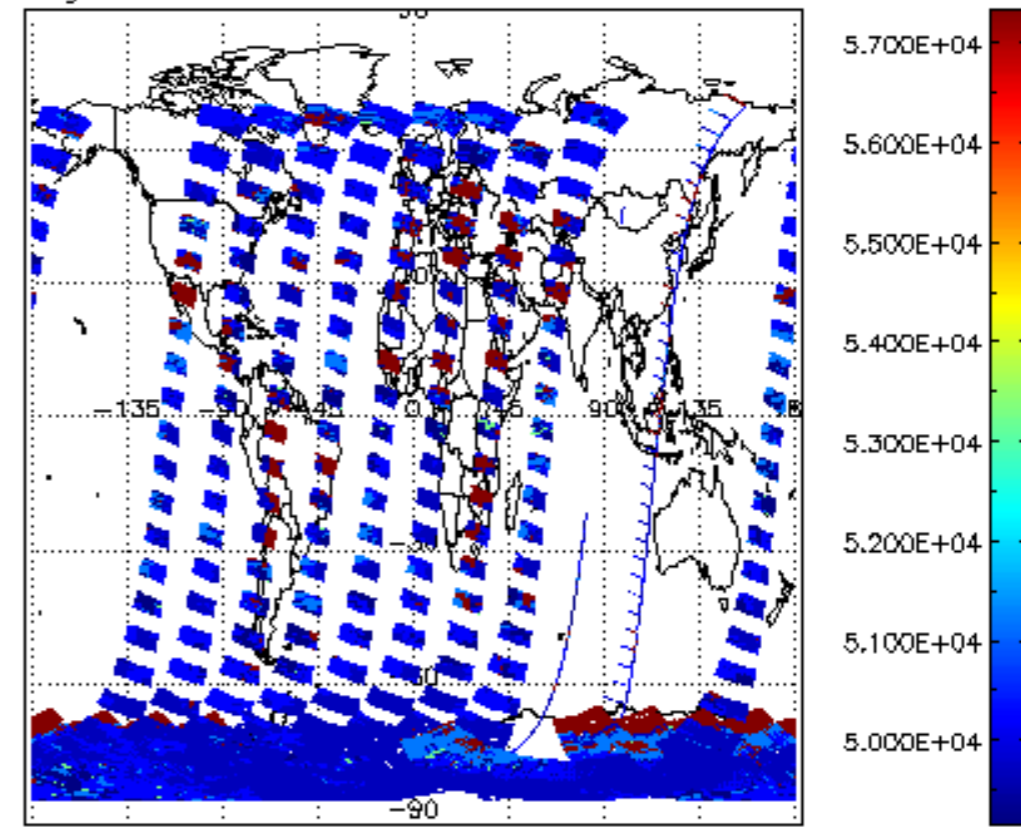
cL_top_height for 17NOV2002 00:00:00 to 18NOV2002 00:00:00

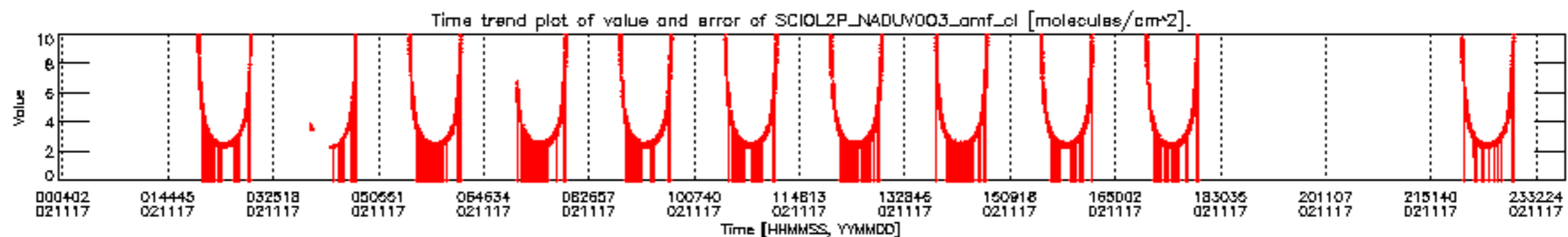
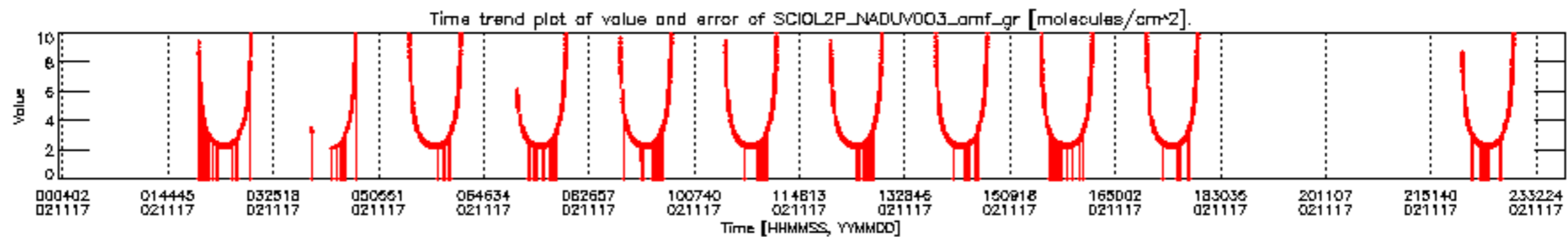
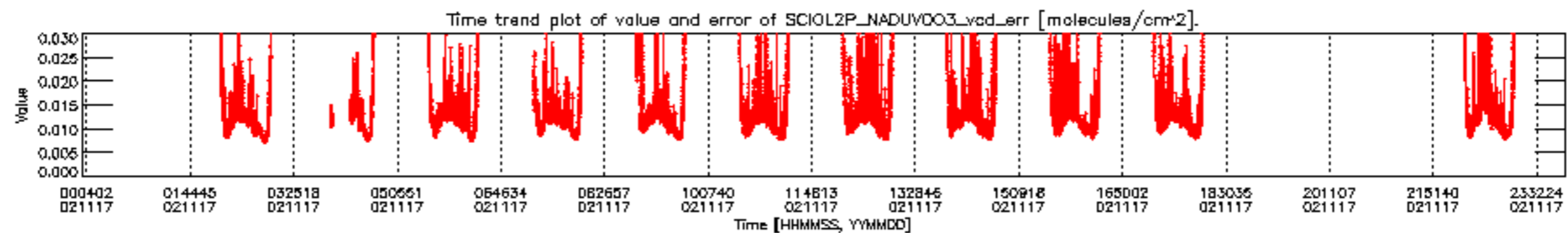
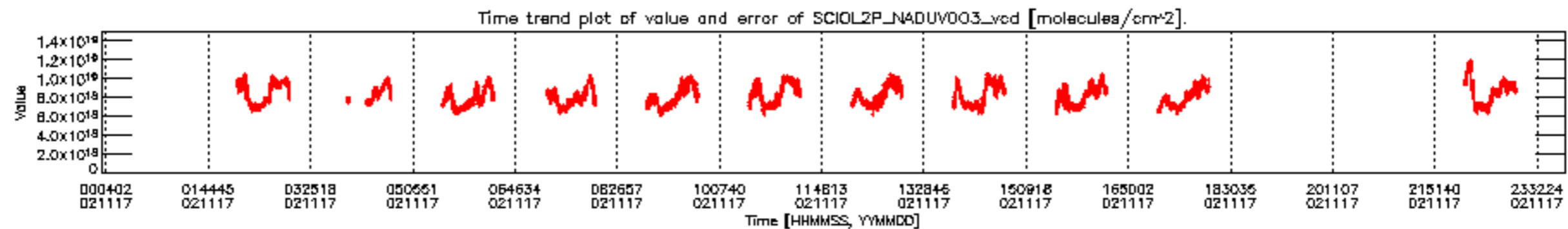


cL_opt_depth for 17NOV2002 00:00:00 to 18NOV2002 00:00:00

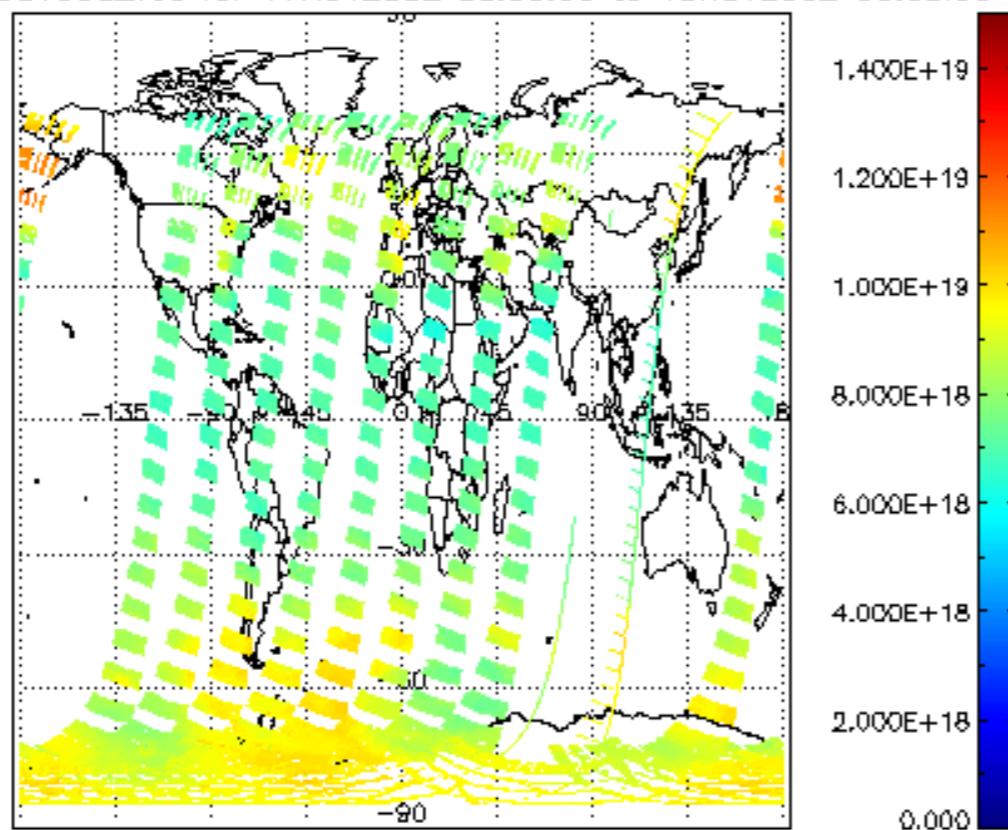


cloud_flags for 17NOV2002 00:00:00 to 18NOV2002 00:00:00

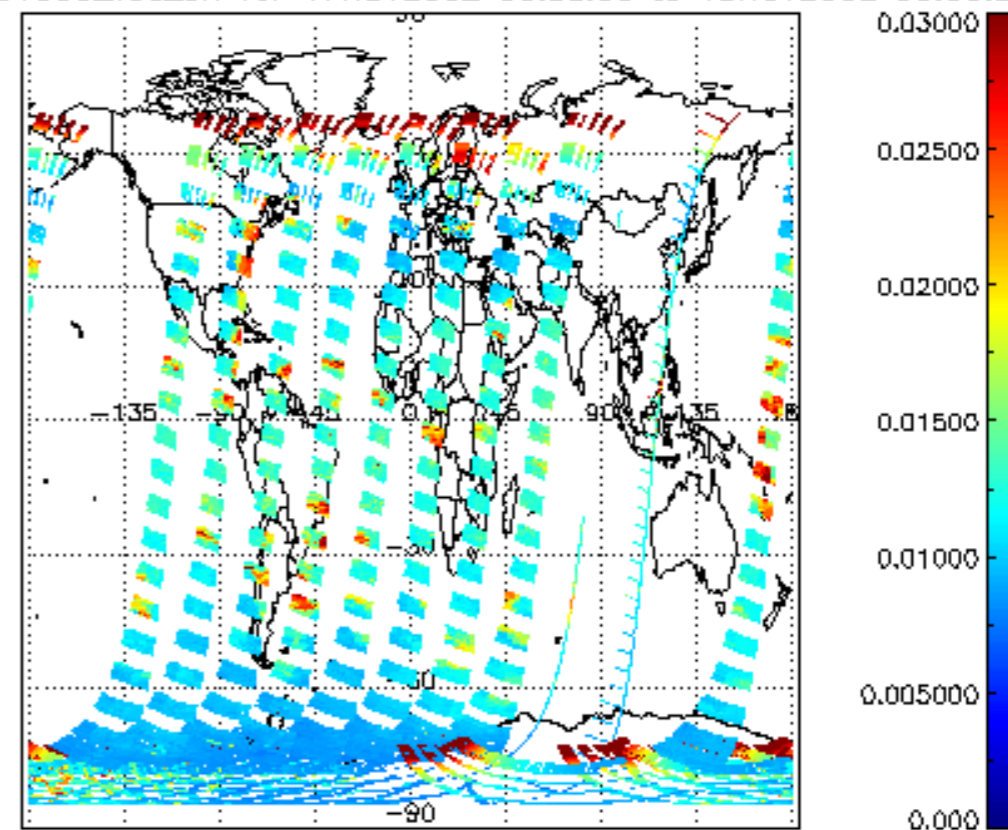




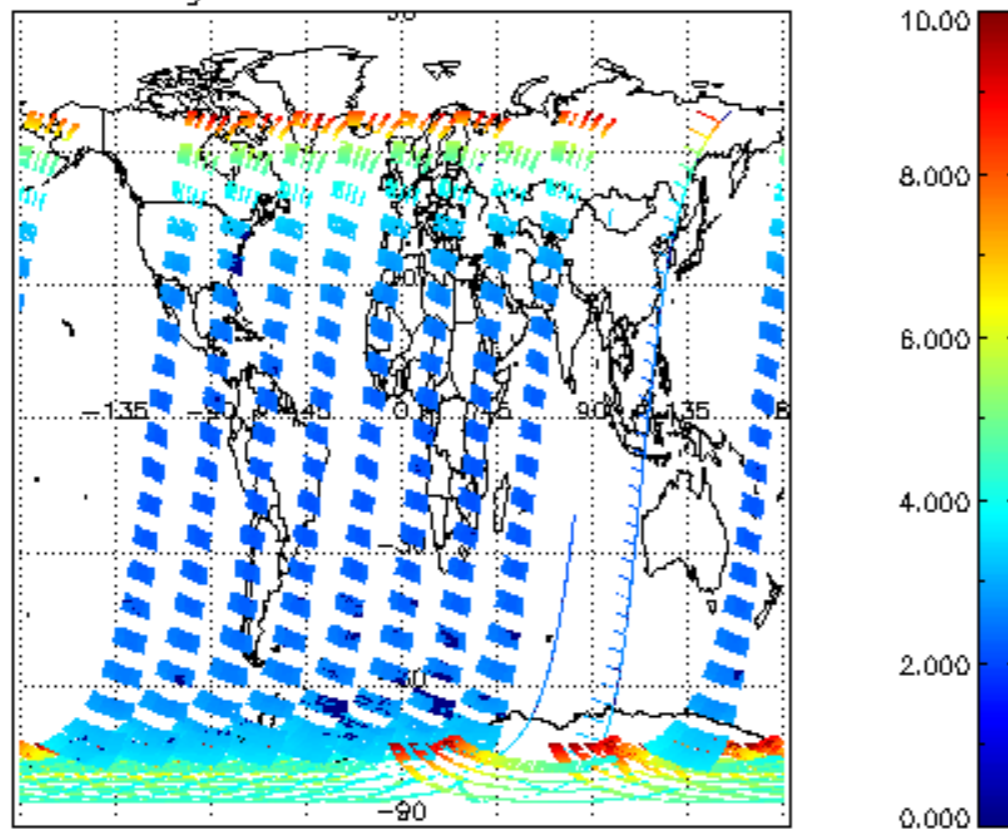
SCIOL2P_NADUV003_vcd for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



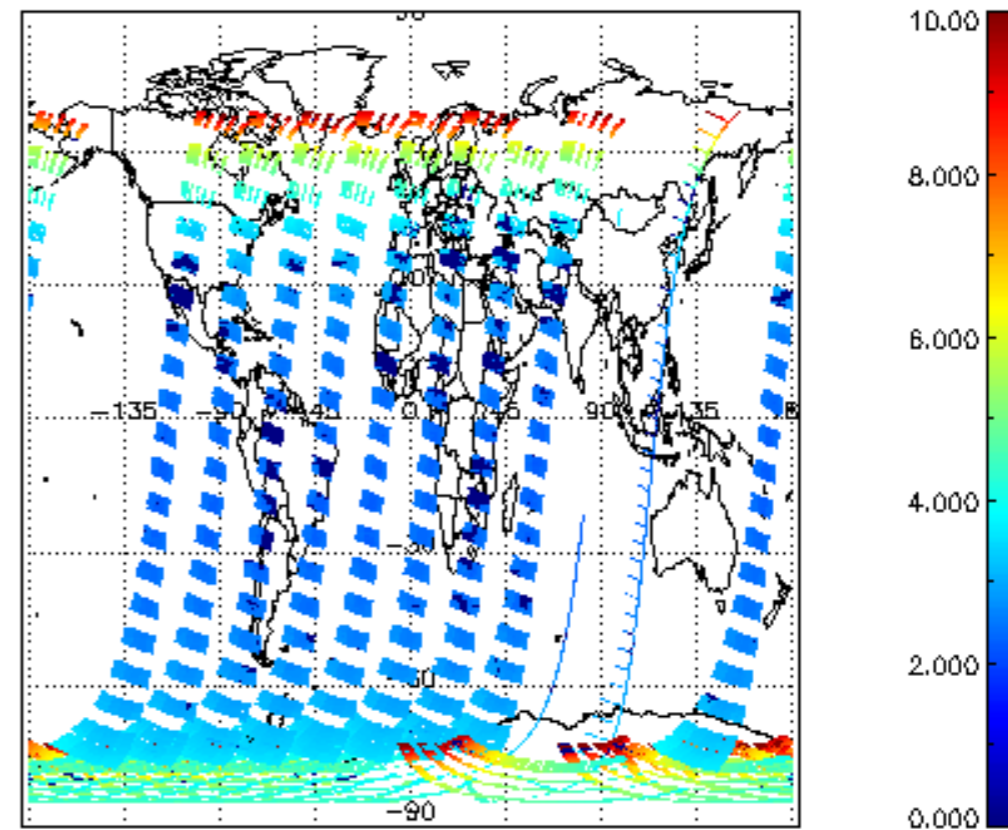
SCIOL2P_NADUV003_vcd_err for 17NOV2002 00:00:00 to 18NOV2002 00:00:00

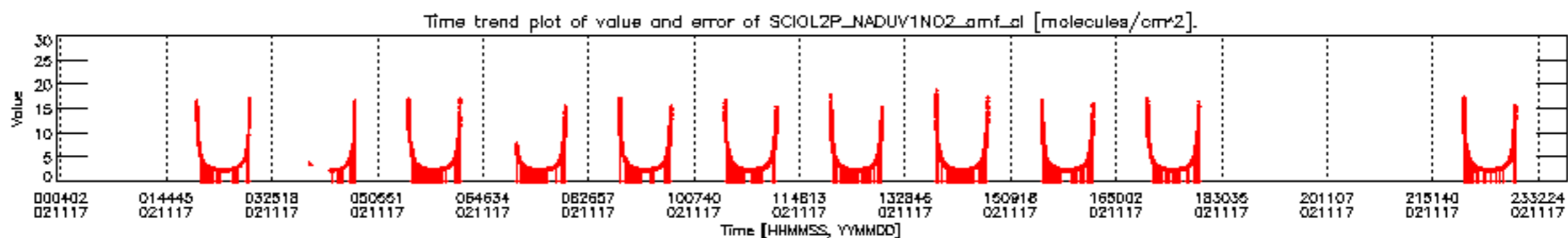
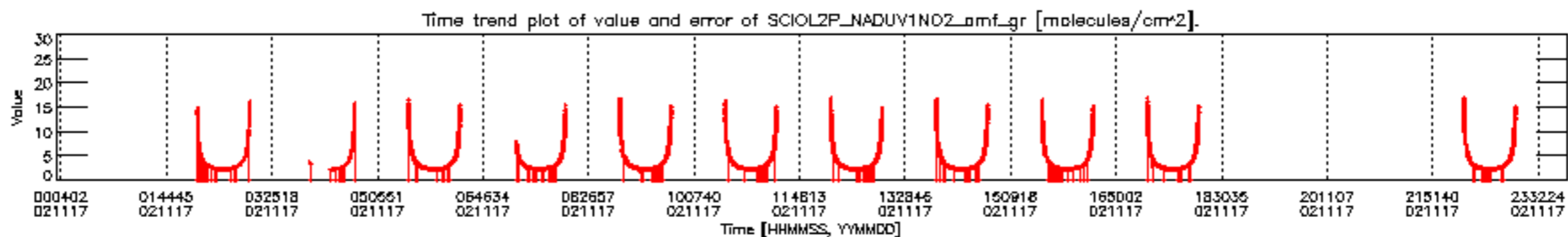
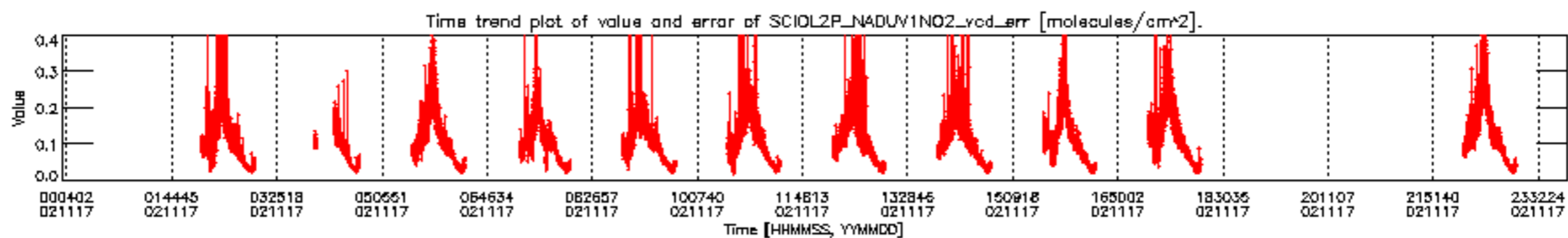
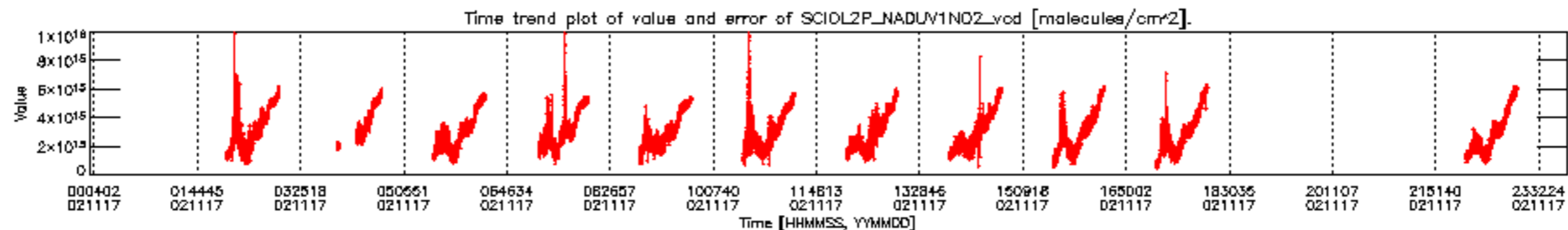


SCIOL2P_NADUV003_amf_gr for 17NOV2002 00:00:00 to 18NOV2002 00:00:00

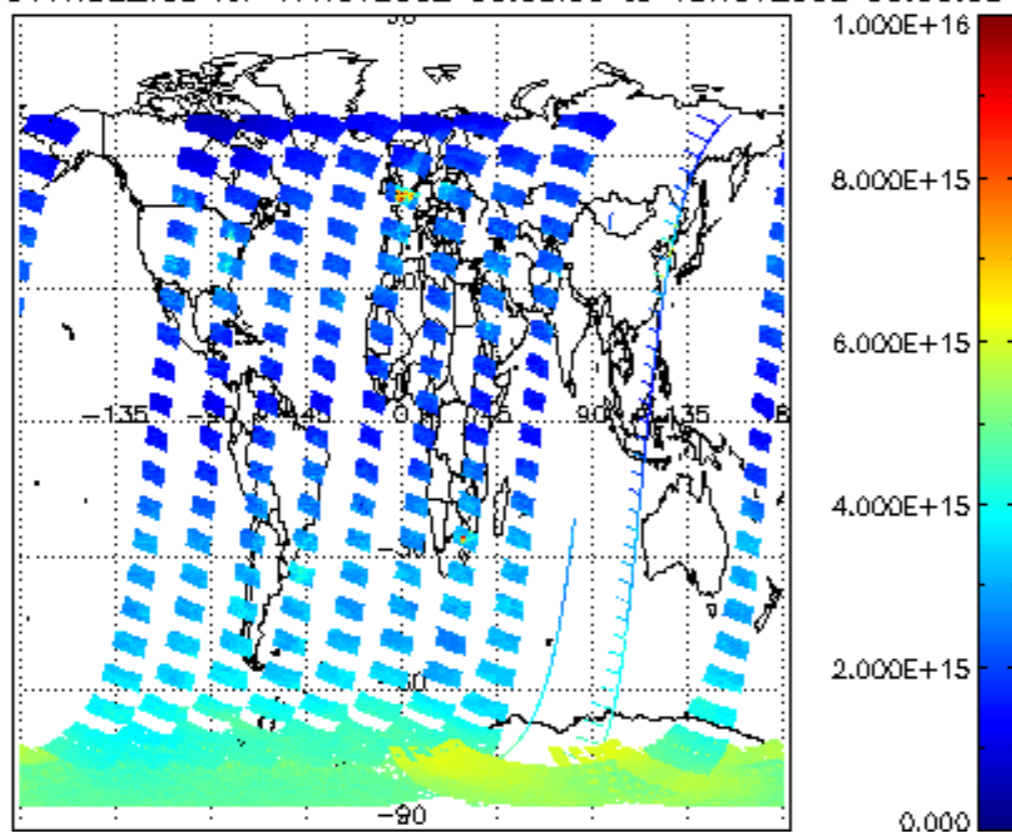


SCIOL2P_NADUV003_amf_cl for 17NOV2002 00:00:00 to 18NOV2002 00:00:00

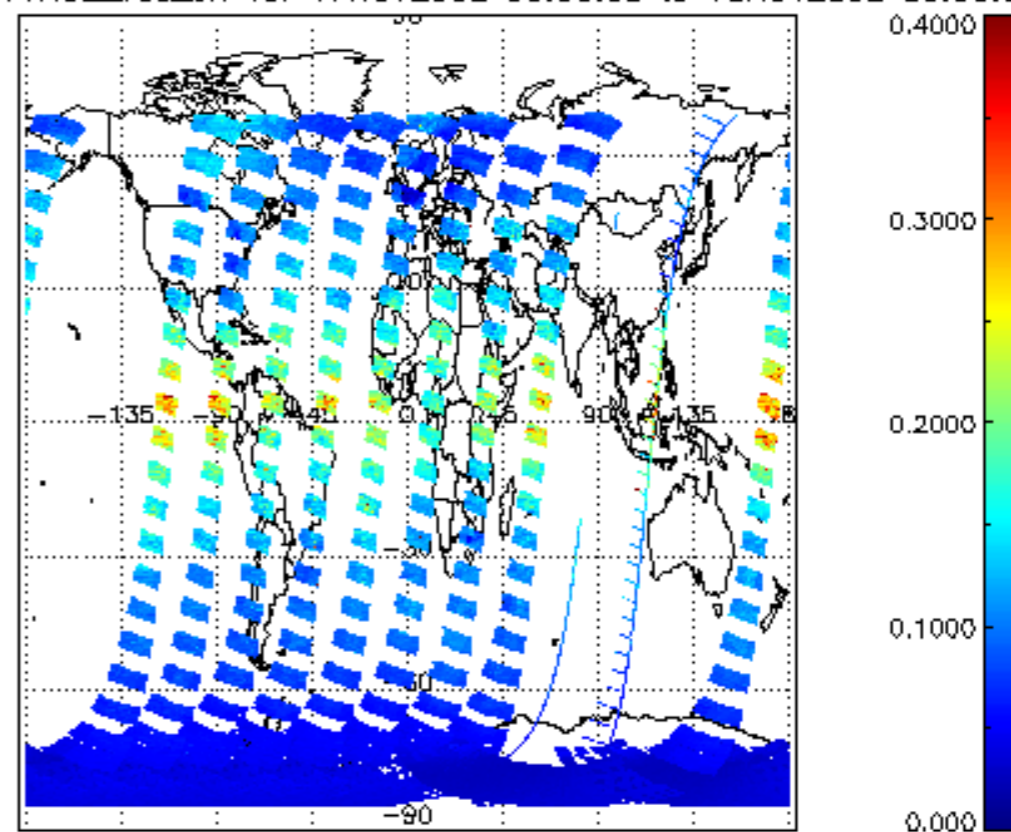




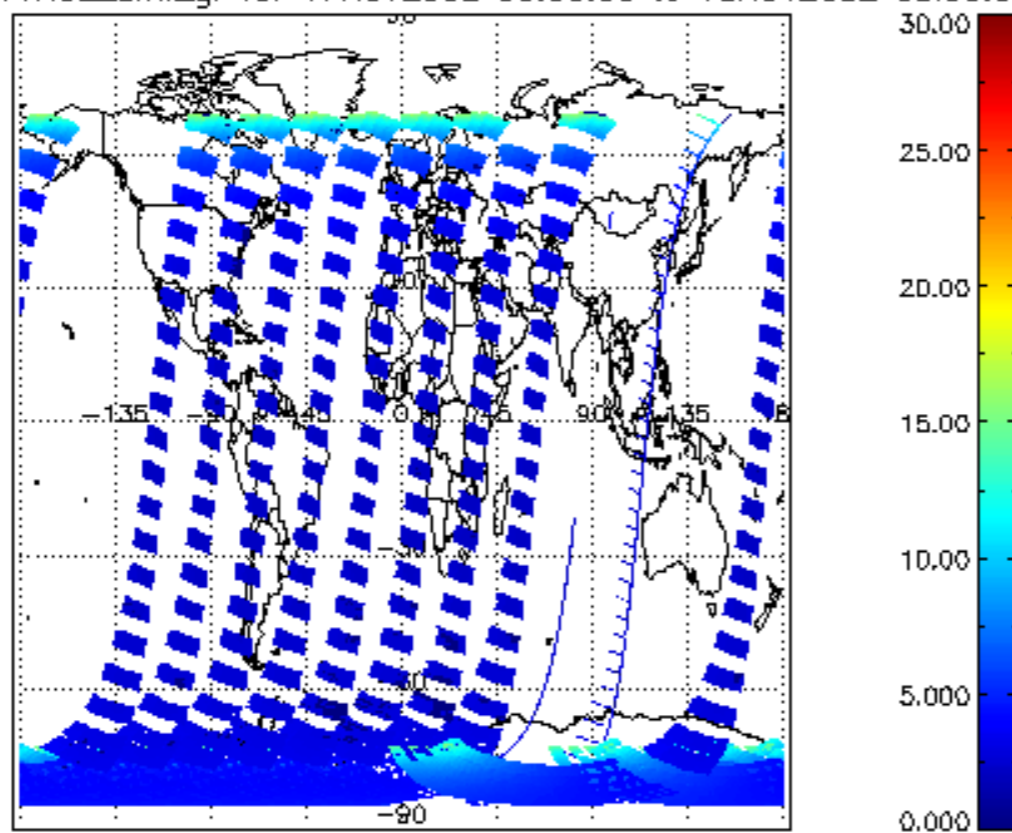
SCIOL2P_NADUV1NO2_vcd for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



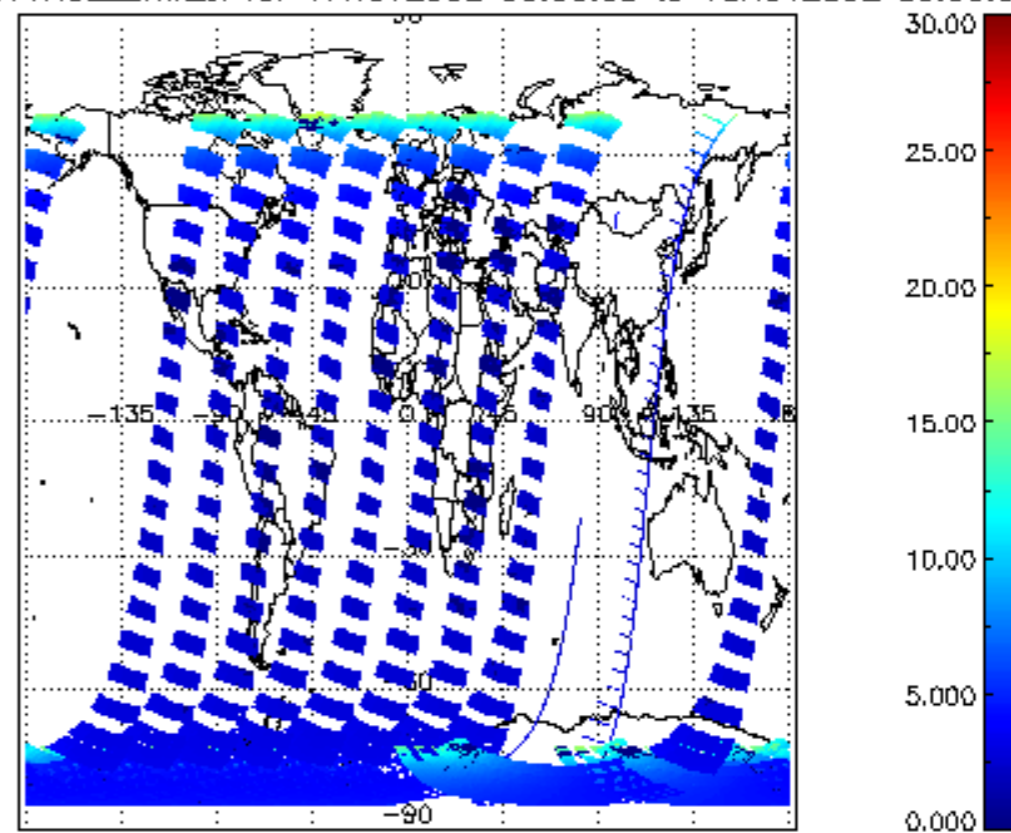
SCIOL2P_NADUV1NO2_vcd_err for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



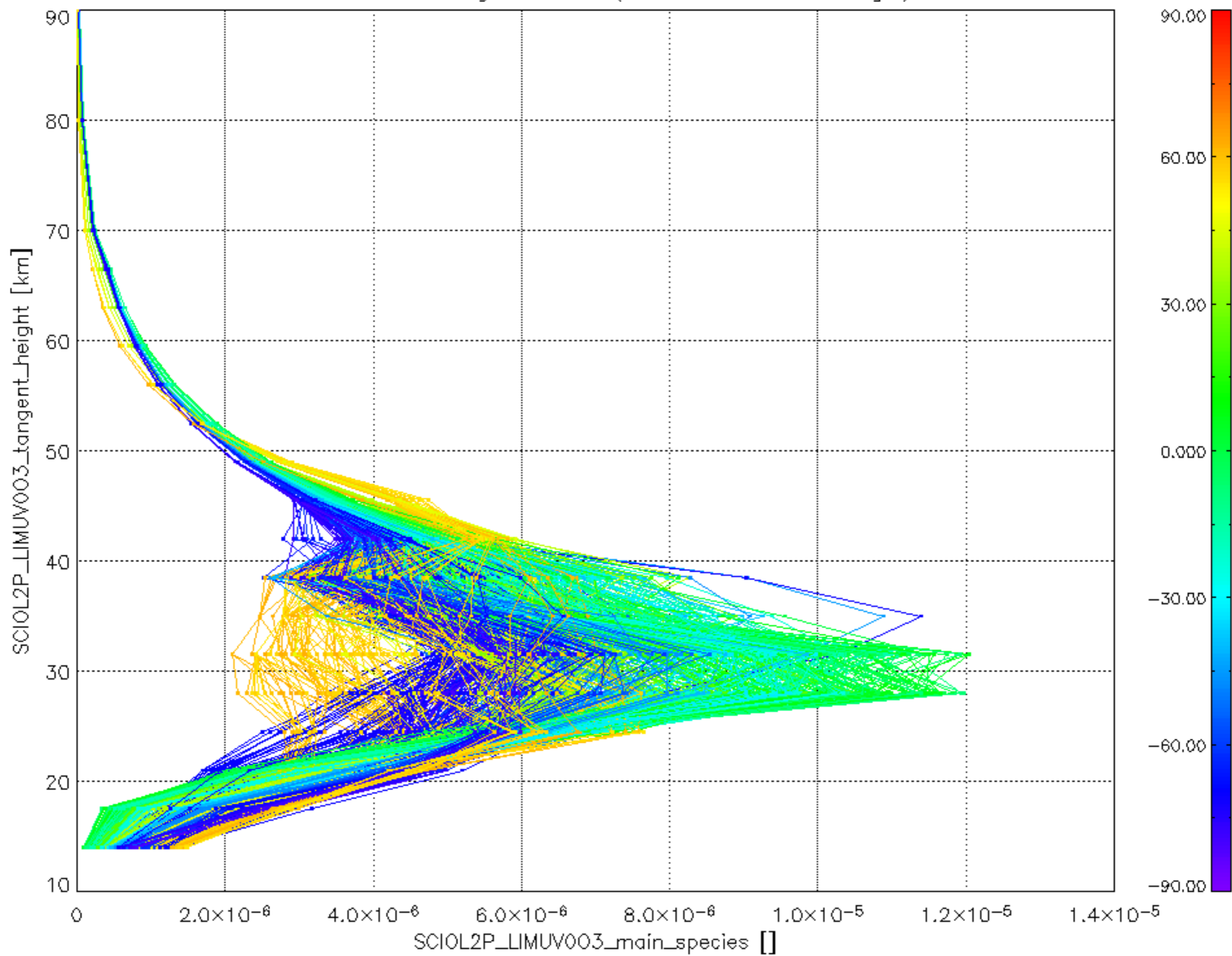
SCIOL2P_NADUV1NO2_amf_gr for 17NOV2002 00:00:00 to 18NOV2002 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 17NOV2002 00:00:00 to 18NOV2002 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).

