

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	10MAR2008 20:55:44
Data source version	SCIA-OL/3.01-R
Processing scope for products	27JAN2008 00:00:00 to 28JAN2008 00:00:00
Start time of first product within scope	27JAN2008 00:08:05
Stop time of last product within scope	28JAN2008 00:31:48
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__2PRDPA20080127_000805_000033252065_00274_30889_2017.N1	27JAN2008 00:08:05	27JAN2008 01:03:31	0	GOOD
1	SCI_OL__2PRDPA20080127_014949_000032692065_00275_30890_2018.N1	27JAN2008 01:49:49	27JAN2008 02:44:19	0	GOOD
2	SCI_OL__2PRDPA20080127_032916_000033252065_00276_30891_2019.N1	27JAN2008 03:29:16	27JAN2008 04:24:42	0	GOOD
3	SCI_OL__2PRDPA20080127_051100_000032692065_00277_30892_2021.N1	27JAN2008 05:11:00	27JAN2008 06:05:30	0	GOOD
4	SCI_OL__2PRDPA20080127_065028_000033252065_00278_30893_2022.N1	27JAN2008 06:50:28	27JAN2008 07:45:53	0	GOOD
5	SCI_OL__2PRDPA20080127_083212_000032692065_00279_30894_2020.N1	27JAN2008 08:32:12	27JAN2008 09:26:41	0	GOOD
6	SCI_OL__2PRDPA20080127_101139_000033252065_00280_30895_2023.N1	27JAN2008 10:11:39	27JAN2008 11:07:04	0	GOOD
7	SCI_OL__2PRDPA20080127_115323_000032692065_00281_30896_2024.N1	27JAN2008 11:53:23	27JAN2008 12:47:52	0	GOOD
8	SCI_OL__2PRDPA20080127_133249_000033252065_00282_30897_2025.N1	27JAN2008 13:32:49	27JAN2008 14:28:15	0	GOOD
9	SCI_OL__2PRDPA20080127_151434_000032692065_00283_30898_2026.N1	27JAN2008 15:14:34	27JAN2008 16:09:03	0	GOOD
10	SCI_OL__2PRDPA20080127_165401_000033252065_00284_30899_2027.N1	27JAN2008 16:54:01	27JAN2008 17:49:26	0	GOOD
11	SCI_OL__2PRDPA20080127_183409_000033942065_00285_30900_2031.N1	27JAN2008 18:34:09	27JAN2008 19:30:43	0	GOOD
12	SCI_OL__2PRDPA20080127_201445_000033812065_00286_30901_2029.N1	27JAN2008 20:14:45	27JAN2008 21:11:06	0	GOOD
13	SCI_OL__2PRDPA20080127_215656_000032692065_00287_30902_2028.N1	27JAN2008 21:56:56	27JAN2008 22:51:26	0	GOOD
14	SCI_OL__2PRDPA20080127_233623_000033252065_00288_30903_2032.N1	27JAN2008 23:36:23	28JAN2008 00:31:48	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: 150800

Total number of cloud data DSRs with good quality flag (=0): 150800 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	150800	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	150800	0.16940	0.12500	0.12500	0.25000	0.059821	s
SURFACE_PRES	150800	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	150800	0.42412	0.41696	0.0000	1.0000	0.26654	-

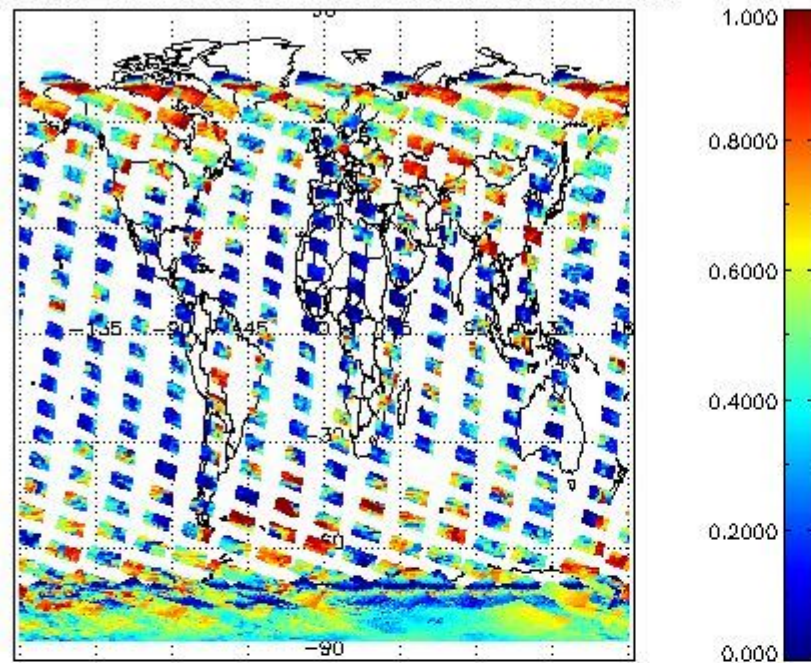
CL_FRAC_ERR	150800	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	150800	5.4207	4.0000	4.0000	8.0000	1.9143	
PMD_READ_CL[0]	150800	0.20659	0.0000	0.0000	8.0000	1.0145	-
PMD_READ_CL[1]	150800	0.50514	0.0000	0.0000	8.0000	1.5819	-
CL_TOP_HEIGHT	130331	4.4159	3.4972	0.0000	17.000	3.7649	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	130331	54.716	44.250	0.0000	101.00	39.623	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	150800	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	150800	11001000	11000100	11000000	11100000	2910.2	flags
AERO_ABSO_IND	150800	2.6947	2.9884	-1.4947	12.781	1.9648	
AERO_IND_DIAG	150800	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	150800	01010110	00000000	00000000	11000000	24453.	flags

Time and geolocation plots:

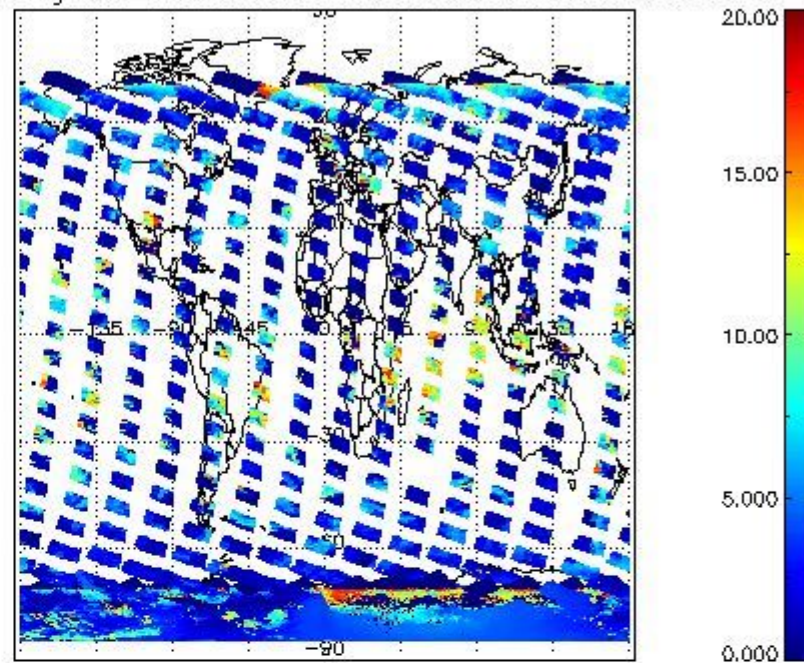
Plots are available for the following parameters:

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

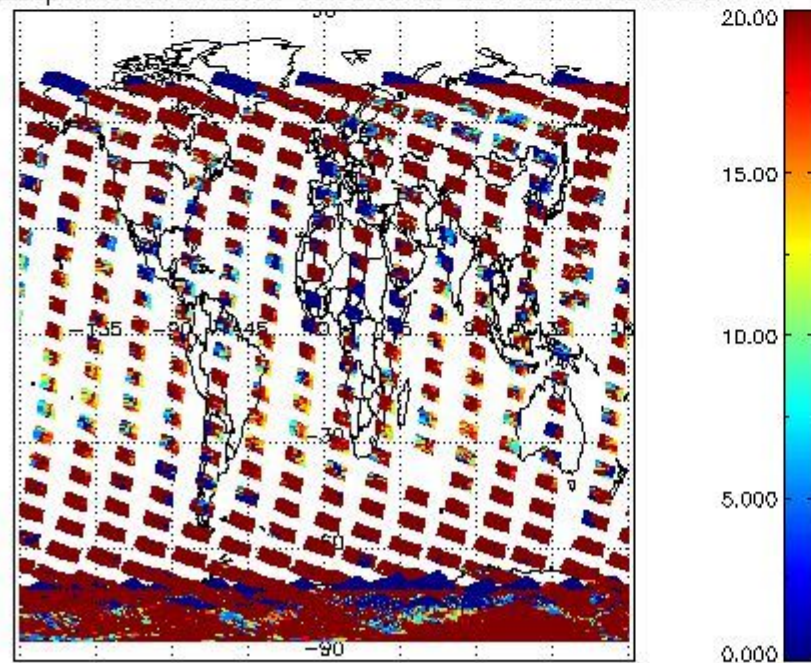
cL_frac for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



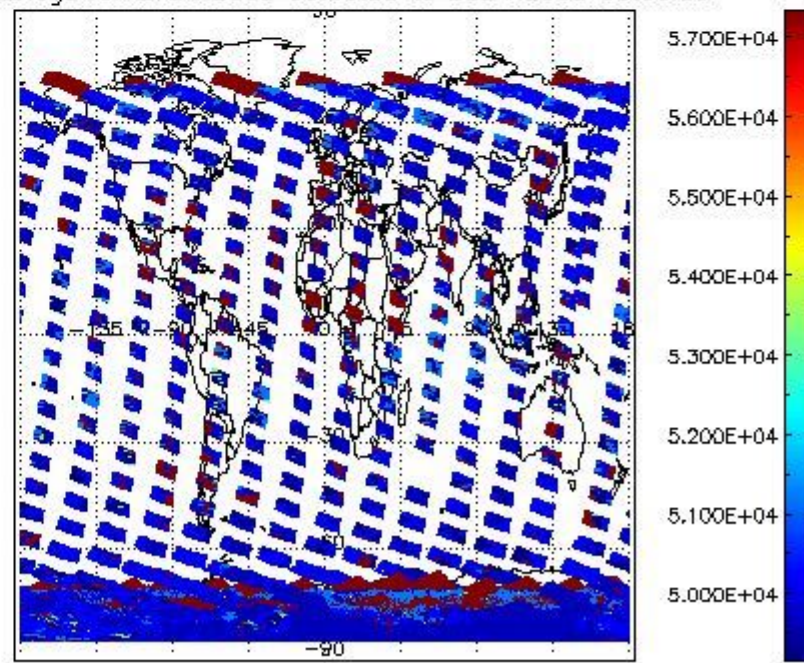
cL_top_height for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



cLopt_depth for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



cloud_flags for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



2.2.2 Nadir

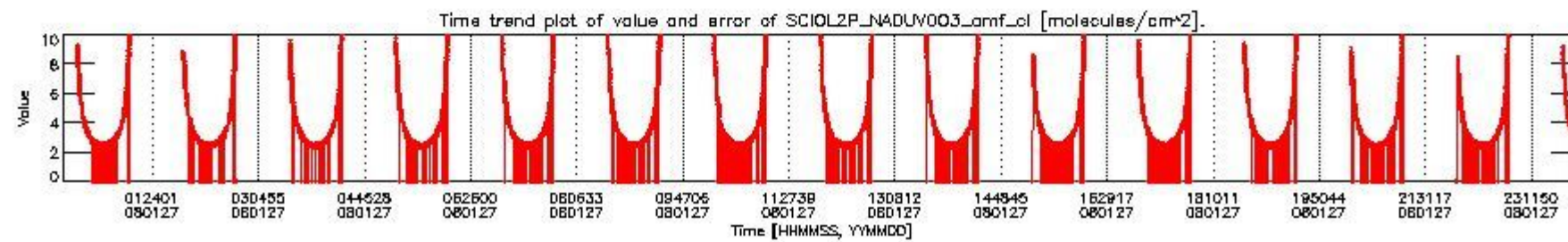
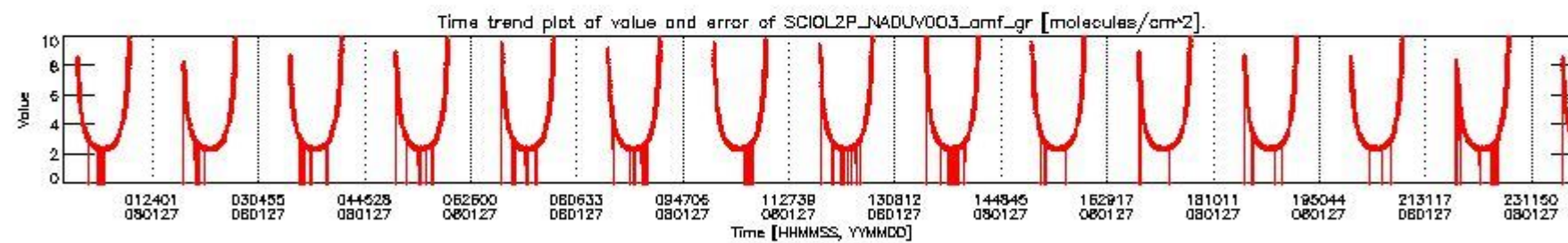
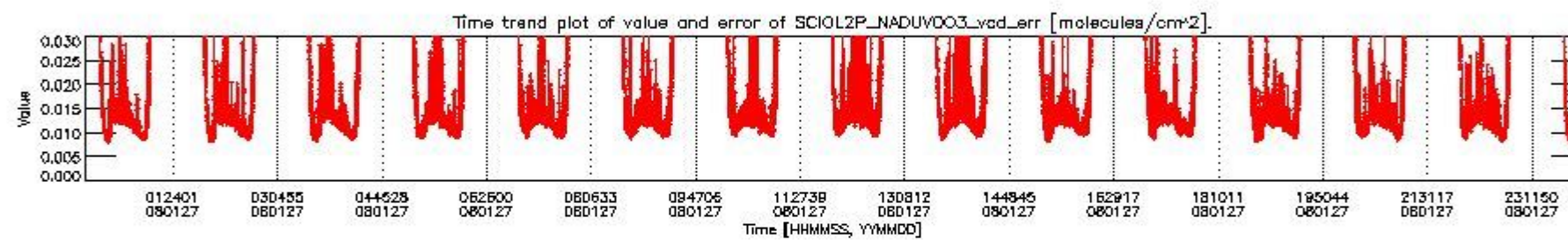
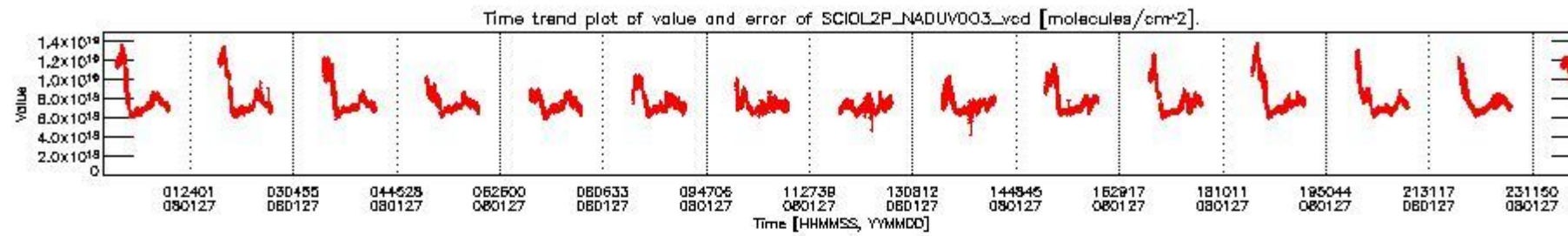
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

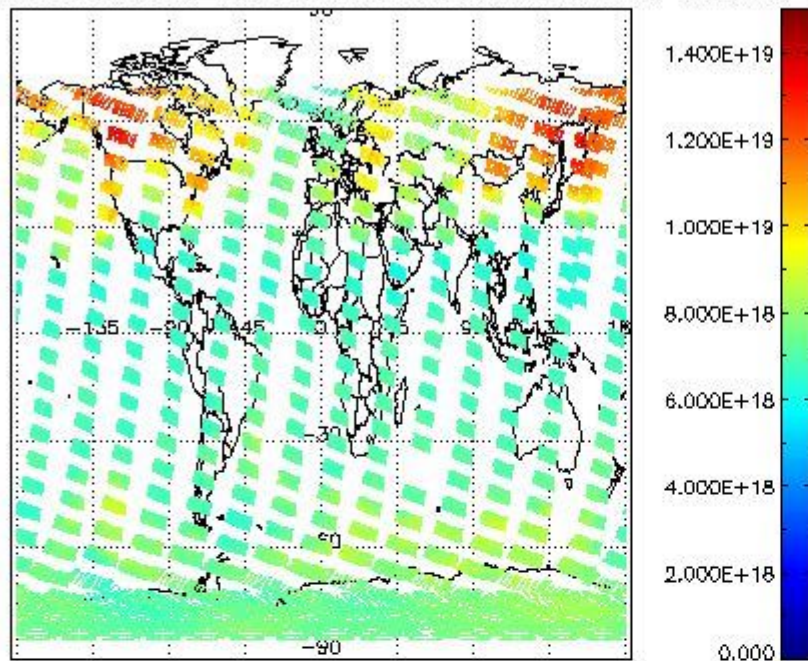
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

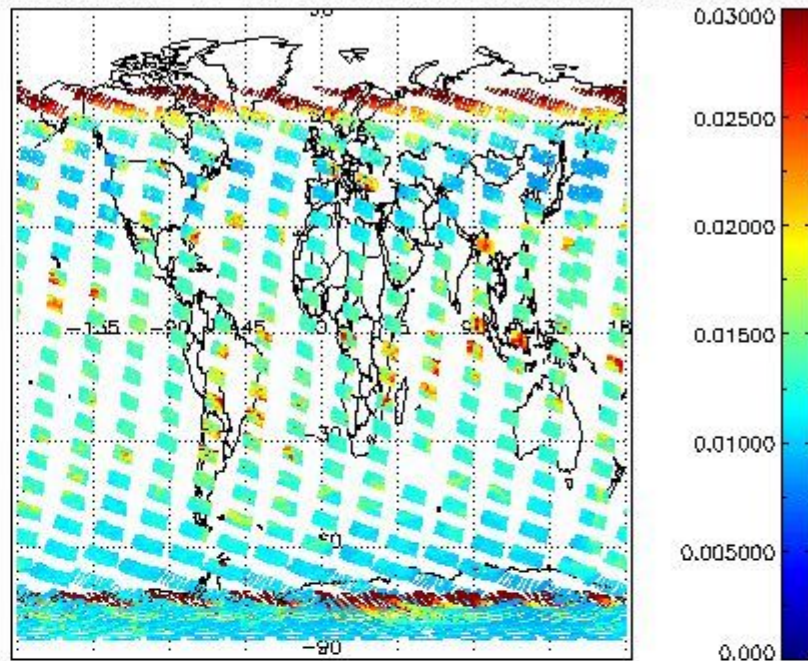
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



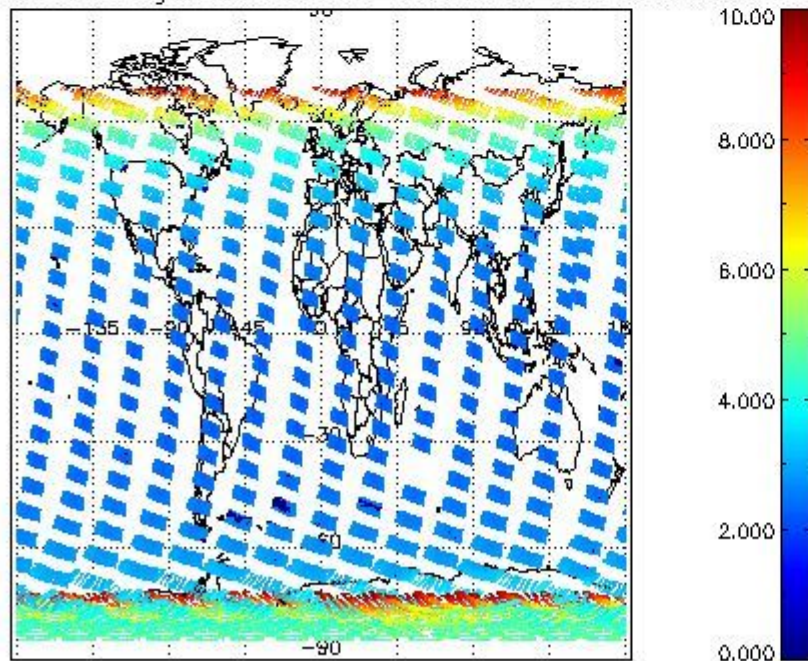
SCIOL2P_NADUV003_vcd for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



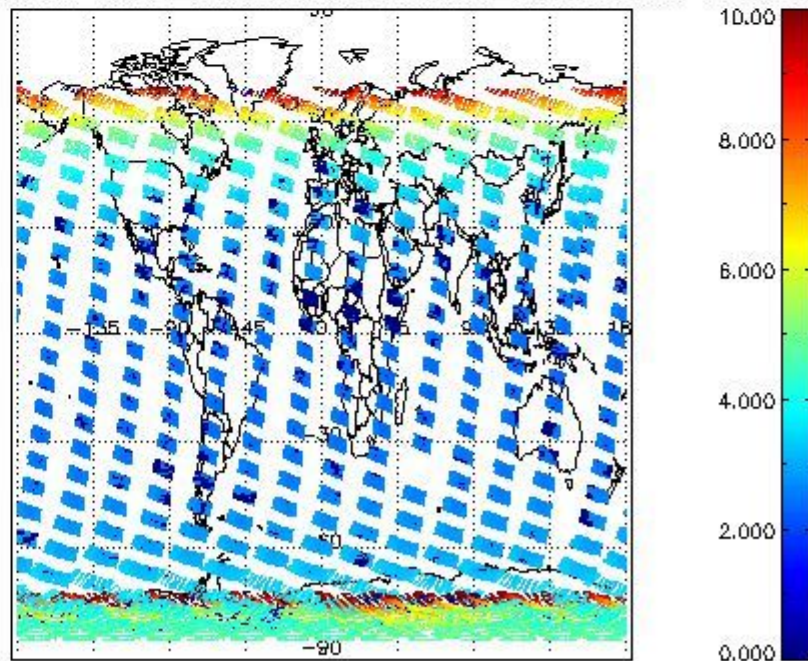
SCIOL2P_NADUV003_vcd_err for 27JAN2008 00:00:00 to 28JAN2008 00:00:00

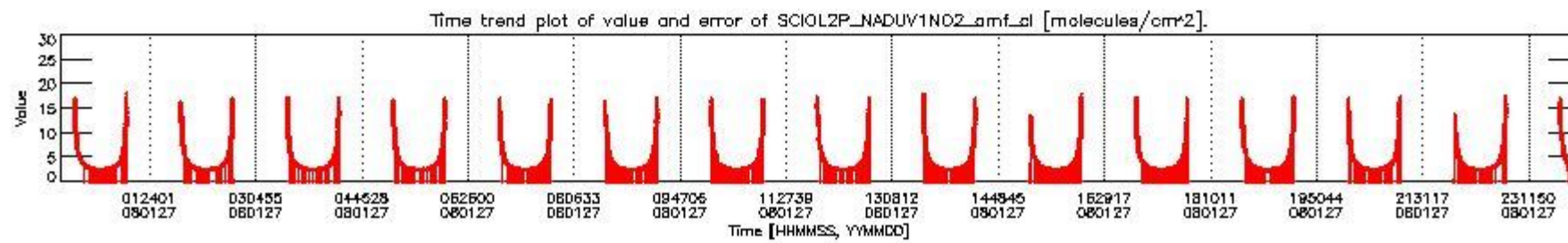
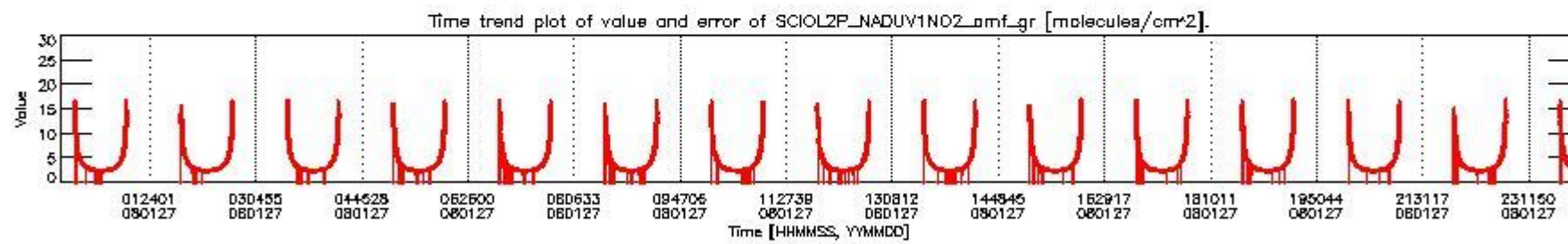
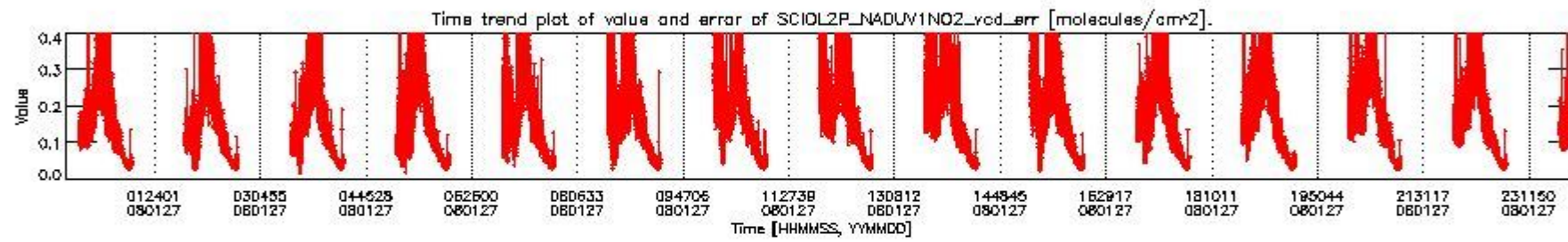
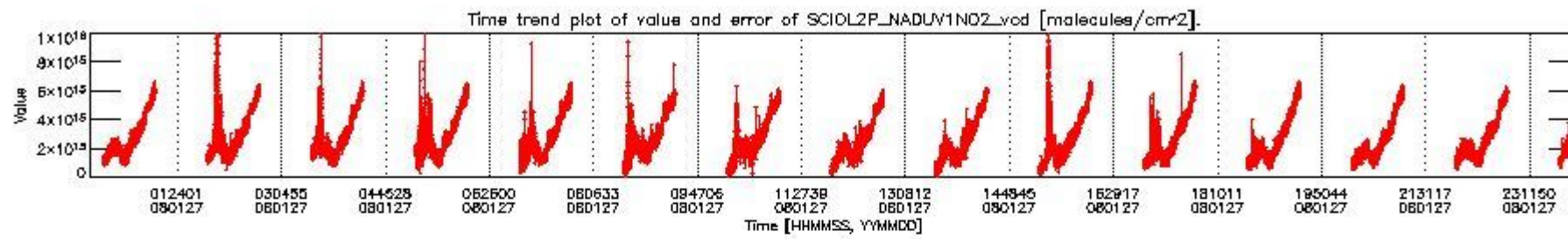


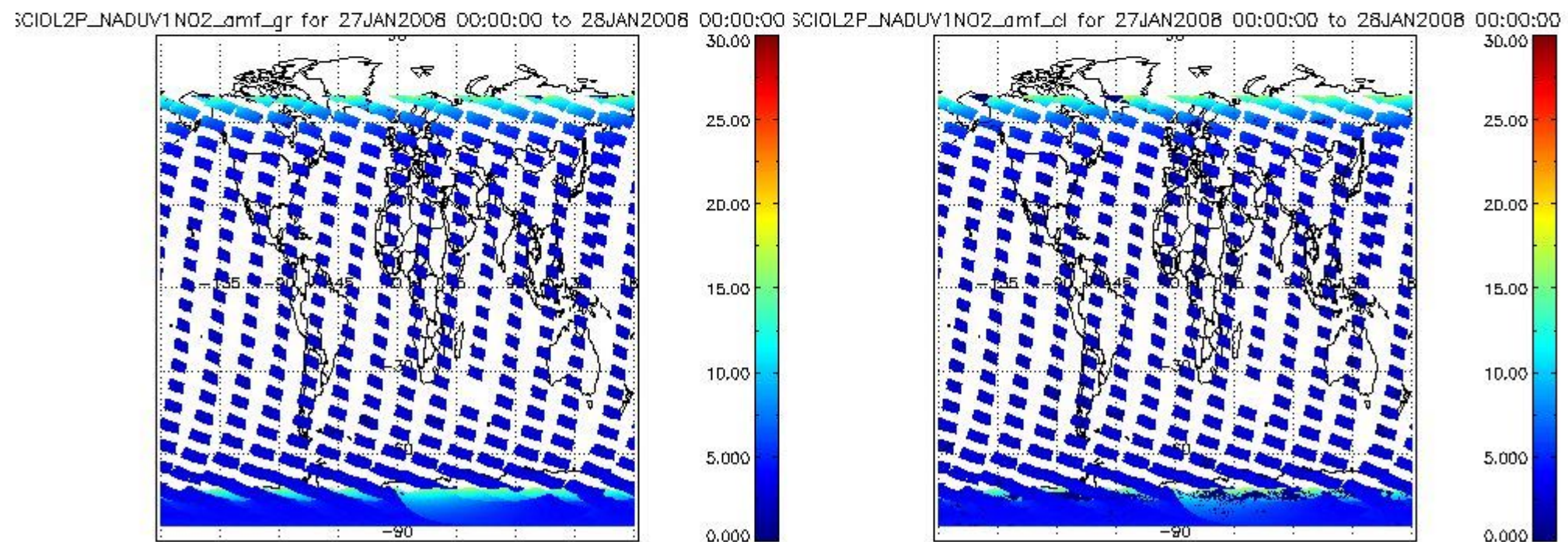
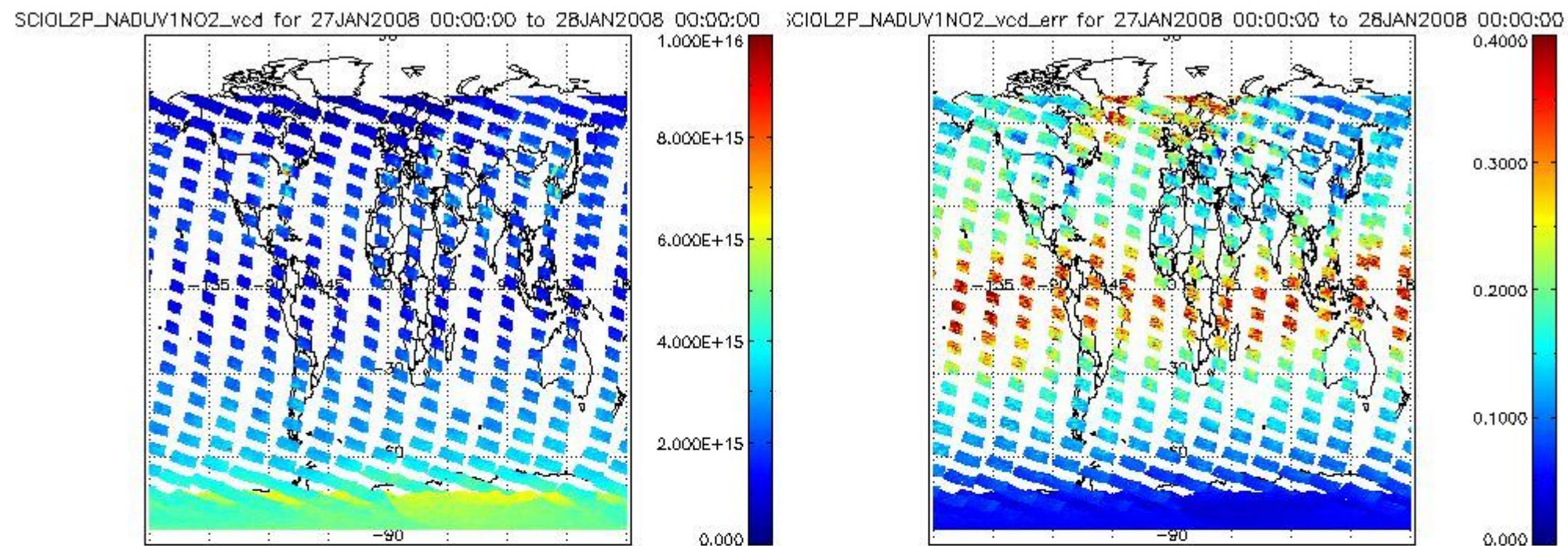
SCIOL2P_NADUV003_amf_gr for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 27JAN2008 00:00:00 to 28JAN2008 00:00:00







2.2.3 Limb

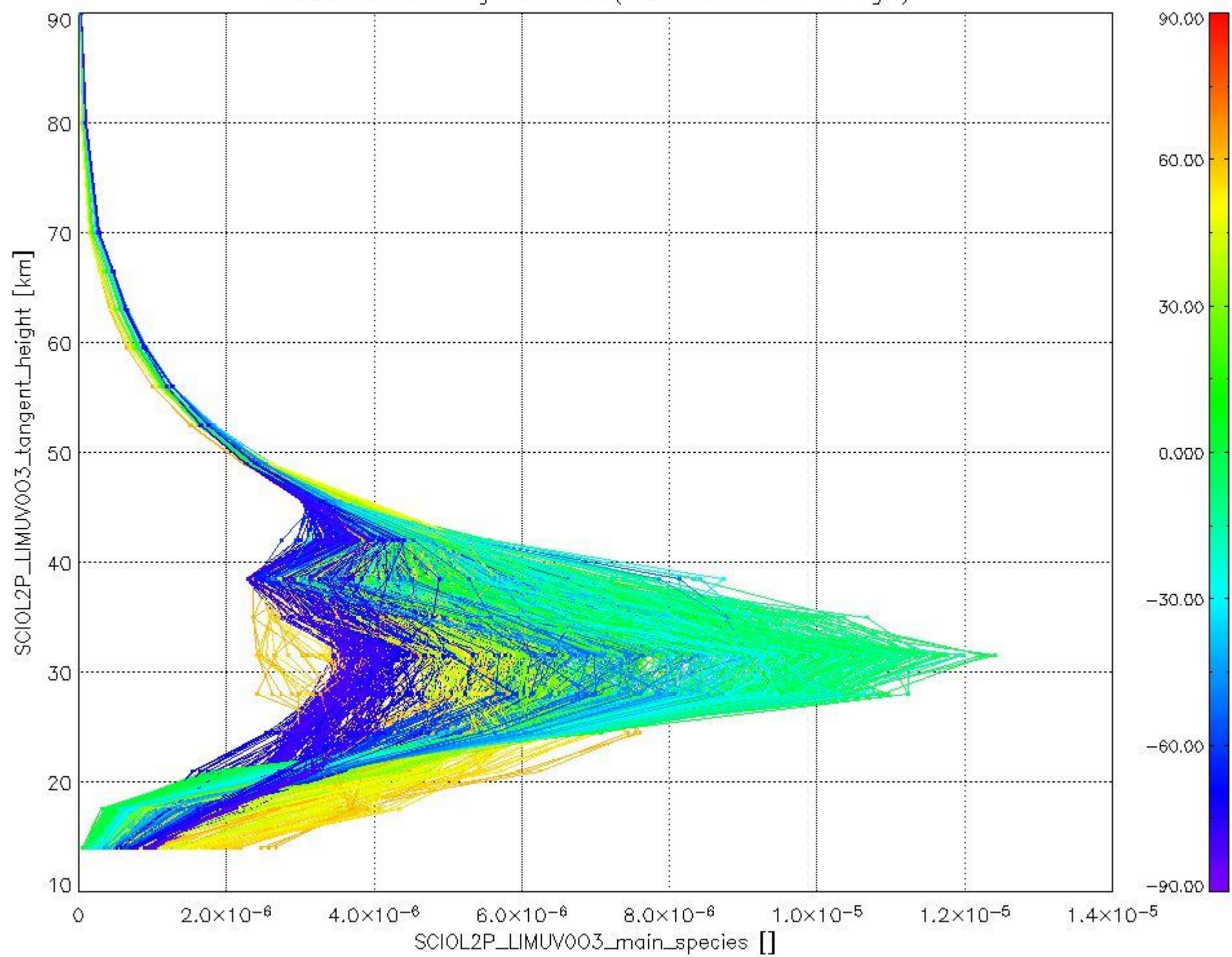
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

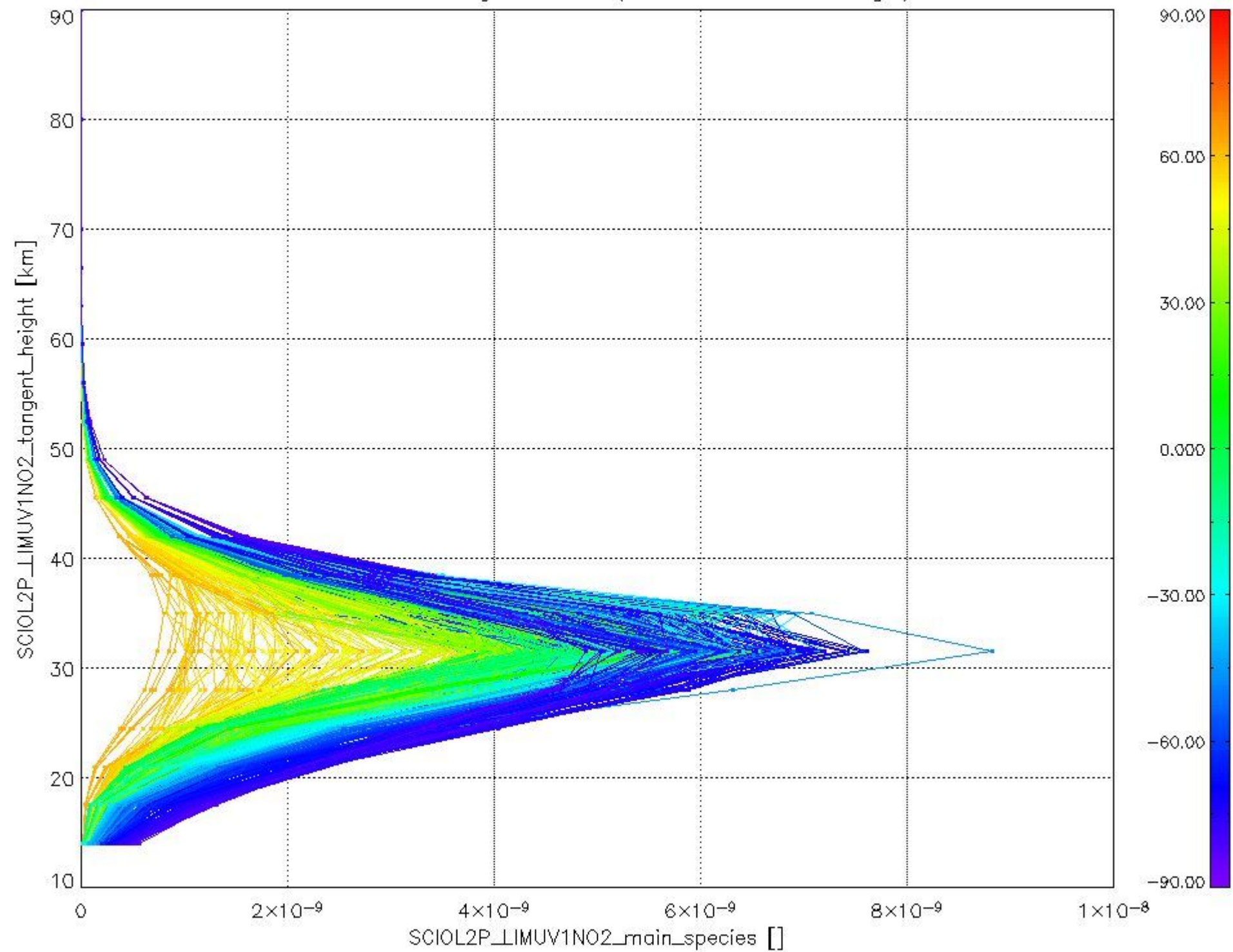
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



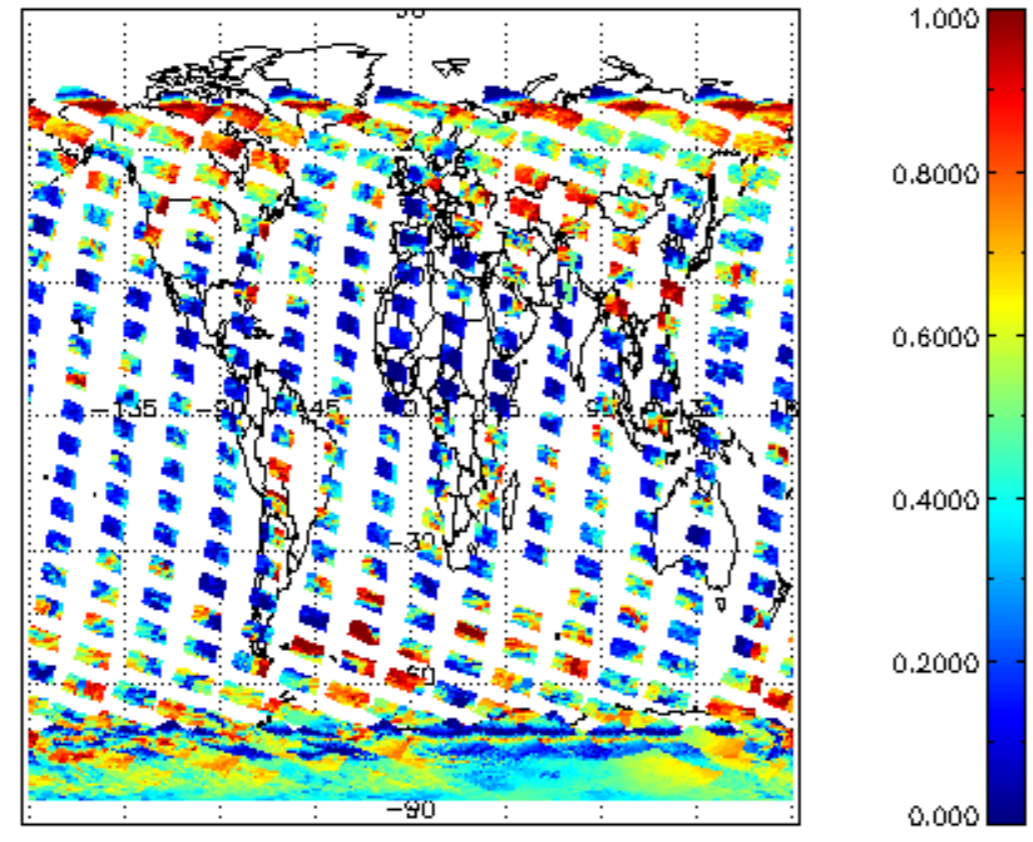
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



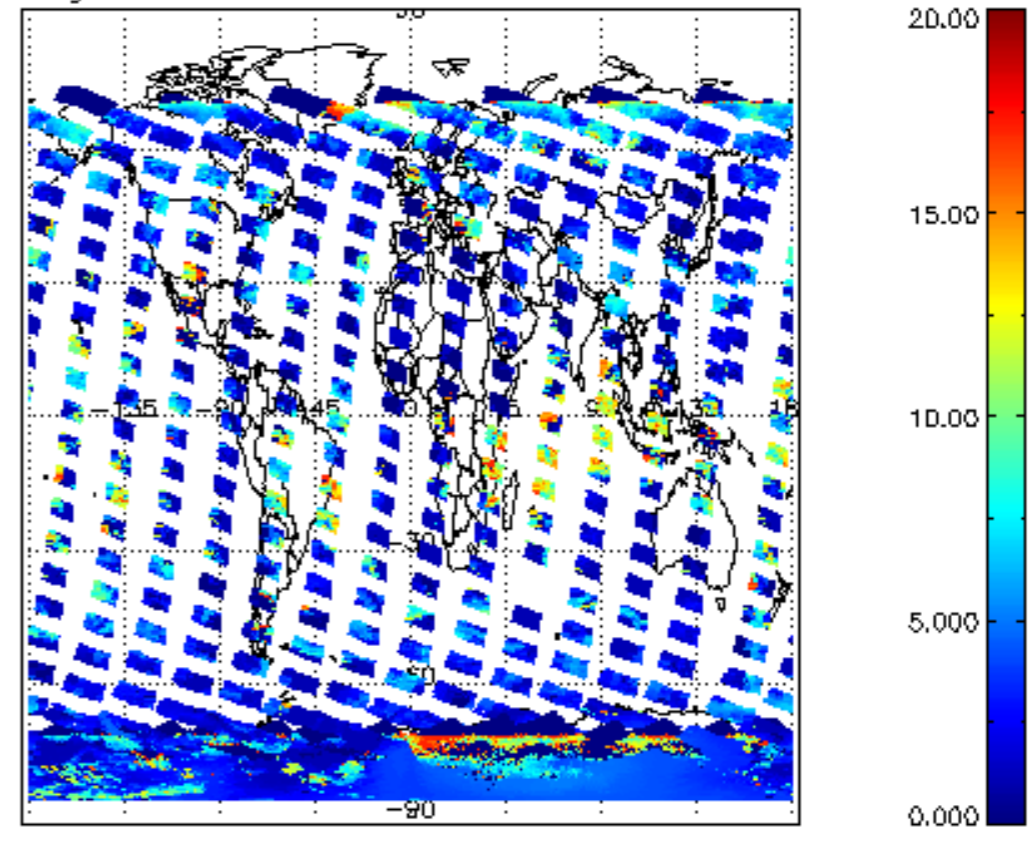
2.3 ADF monitoring

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

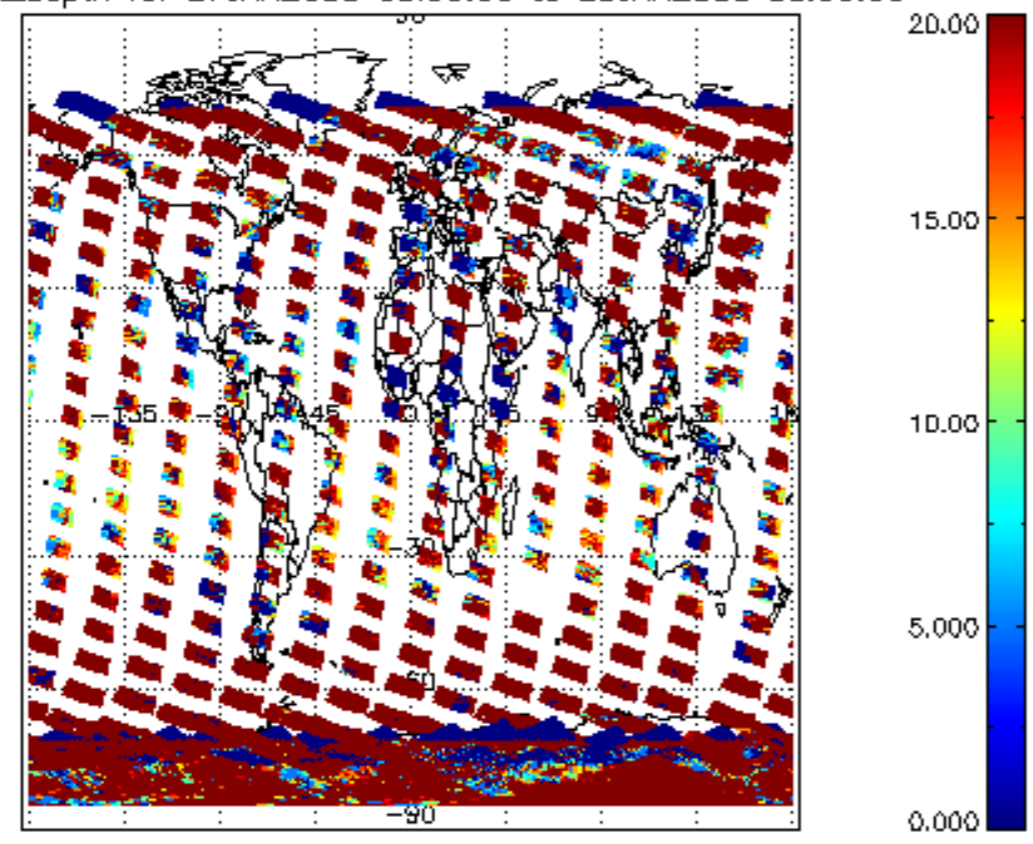
cL_frac for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



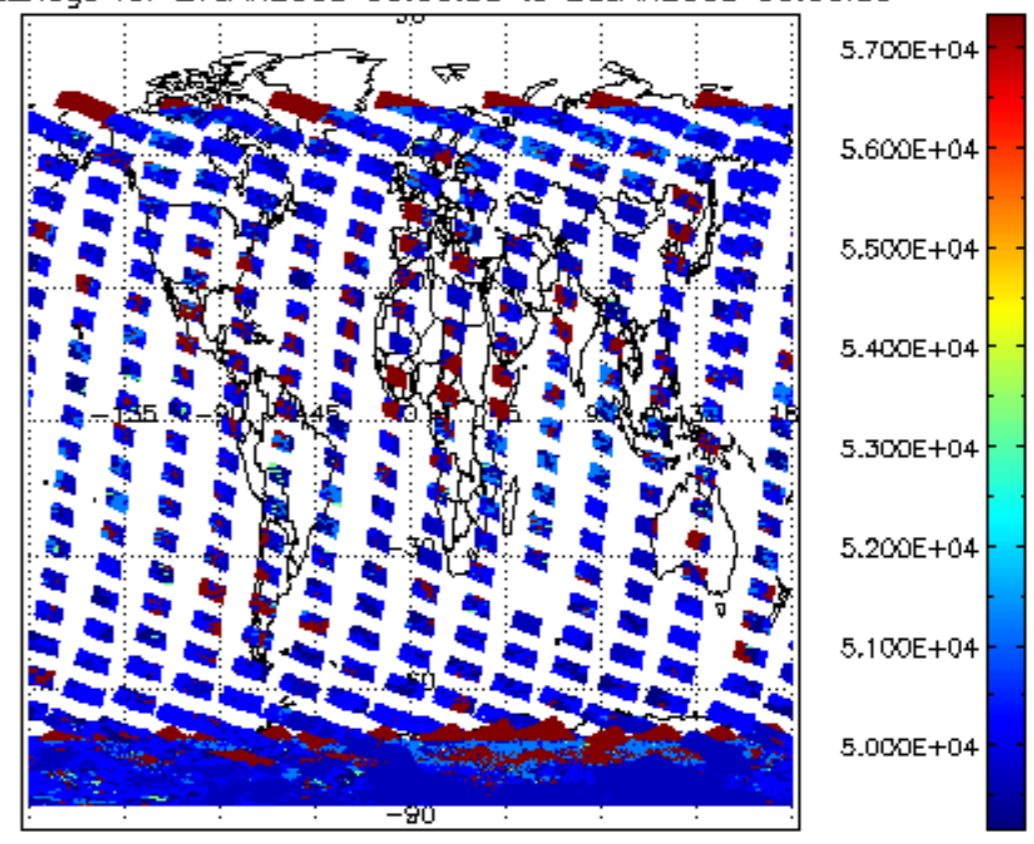
cL_top_height for 27JAN2008 00:00:00 to 28JAN2008 00:00:00

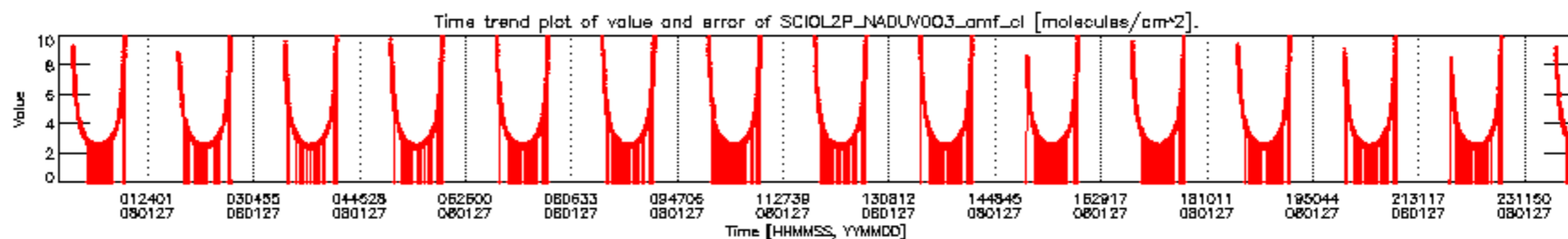
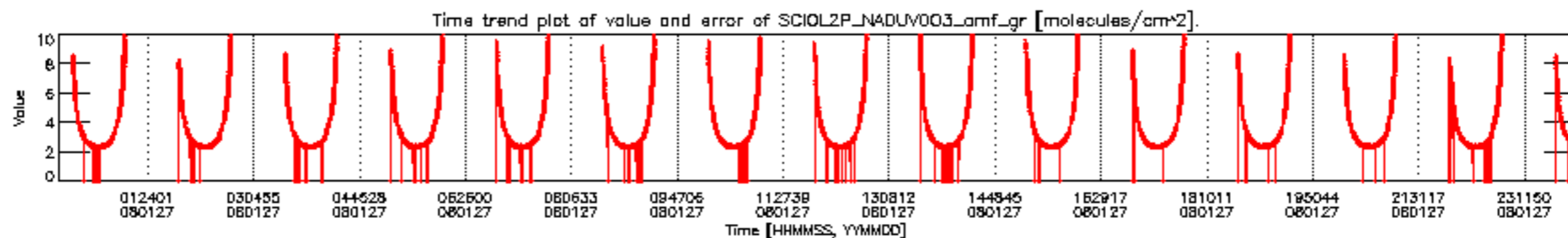
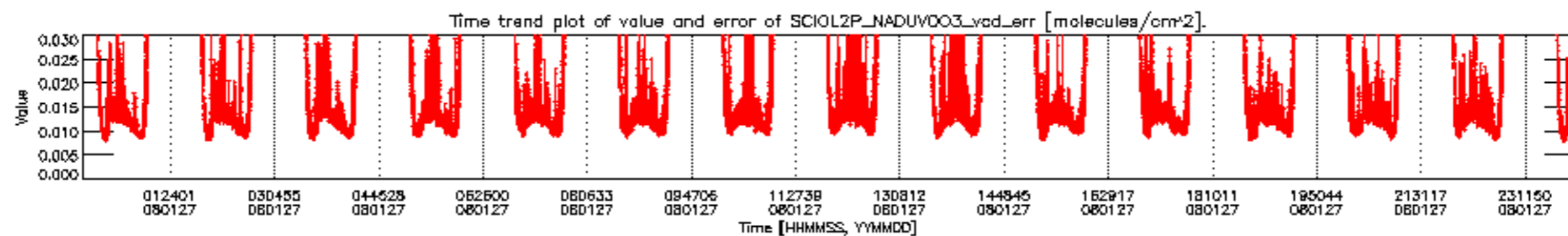
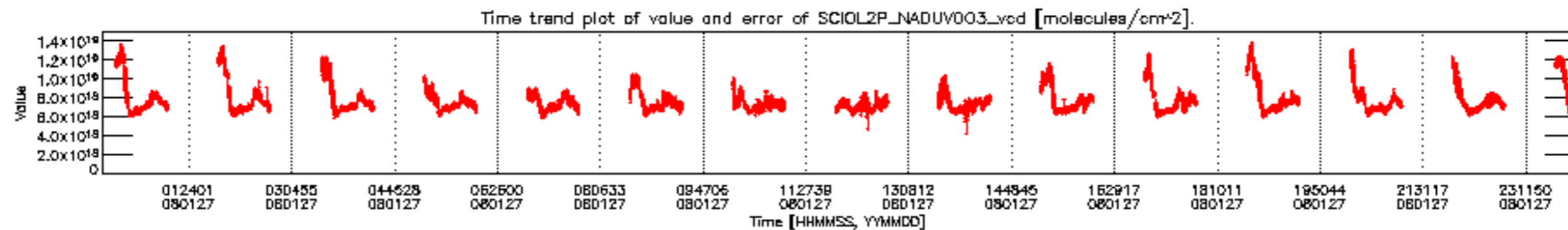


cL_opt_depth for 27JAN2008 00:00:00 to 28JAN2008 00:00:00

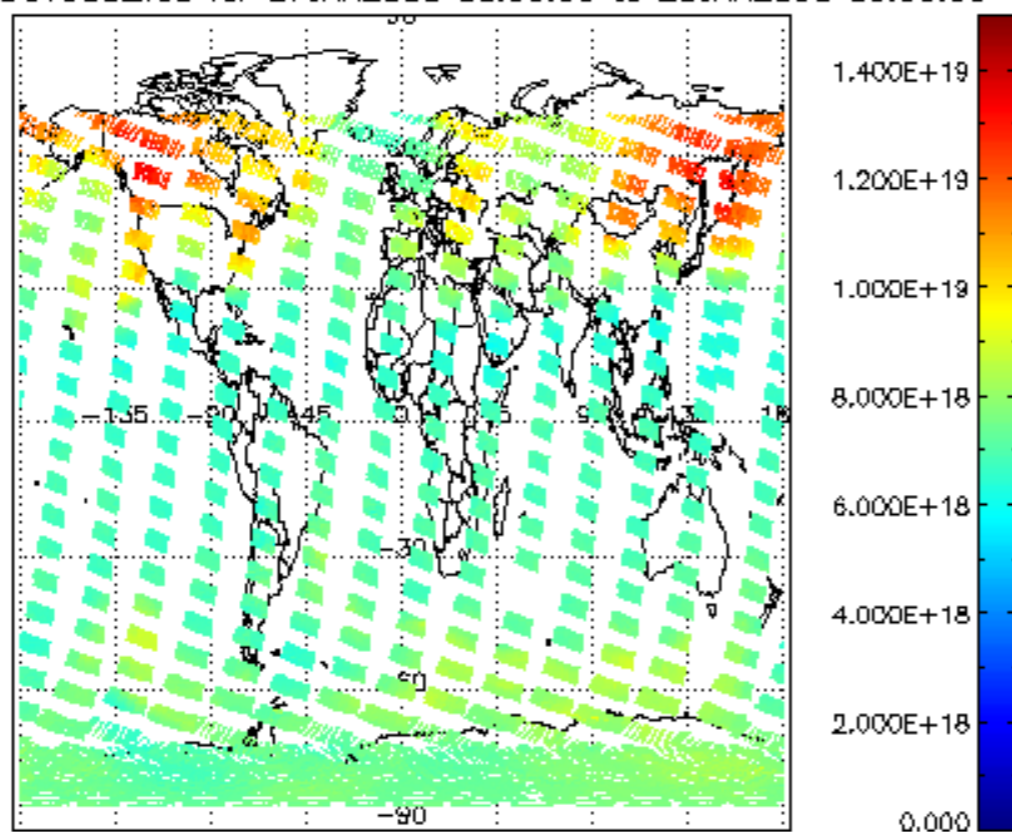


cloud_flags for 27JAN2008 00:00:00 to 28JAN2008 00:00:00

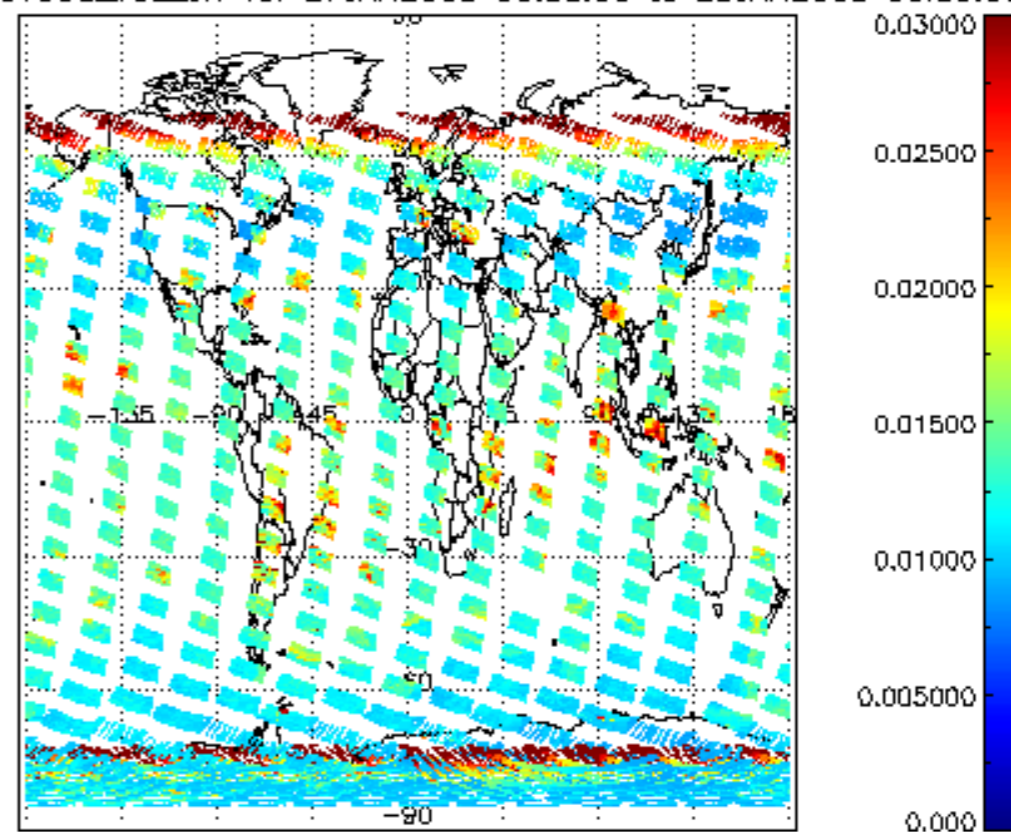




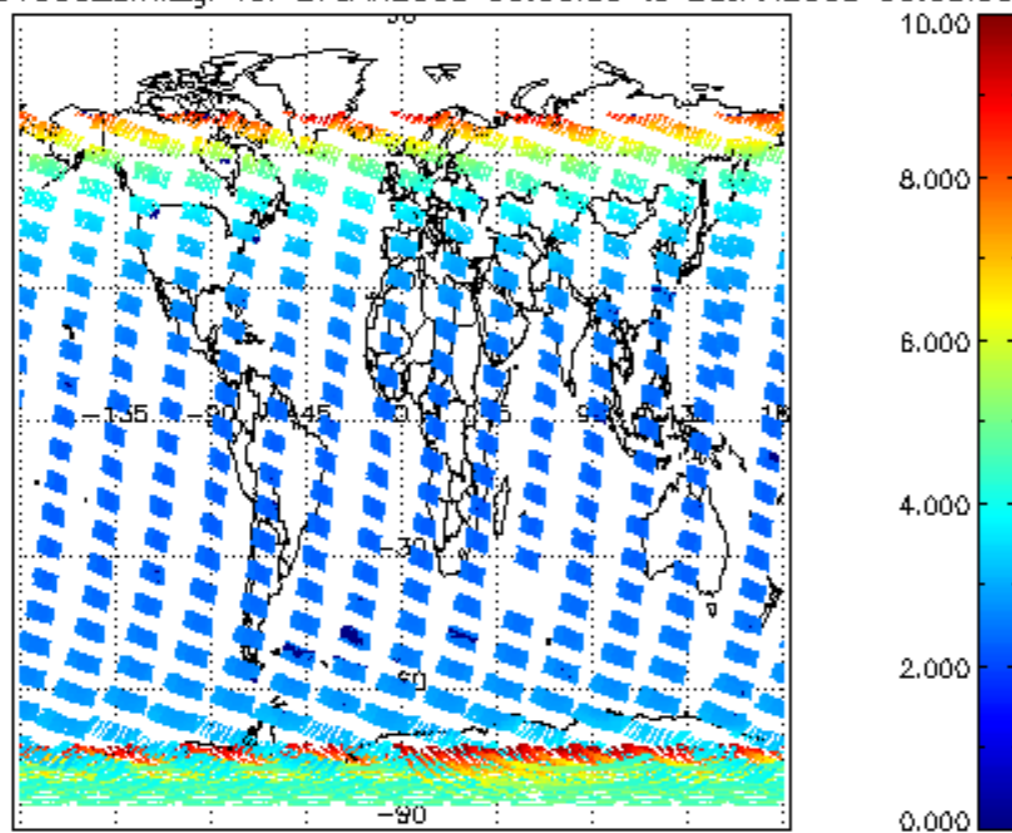
SCIOL2P_NADUV003_vcd for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



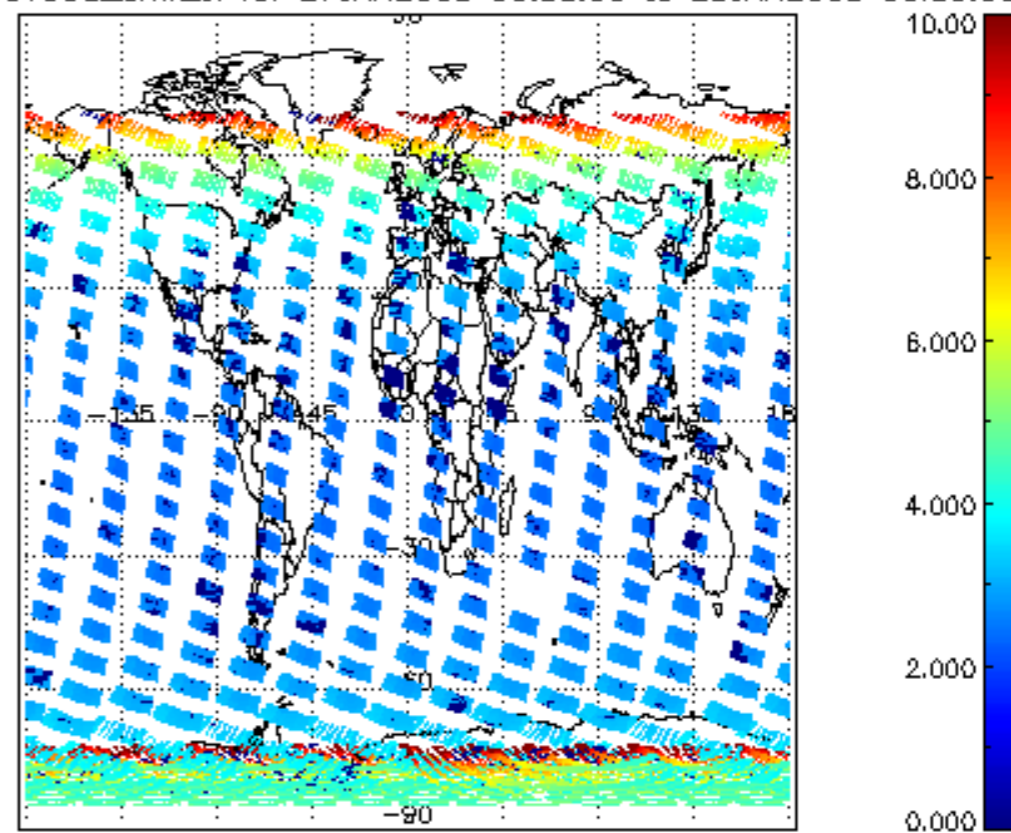
SCIOL2P_NADUV003_vcd_err for 27JAN2008 00:00:00 to 28JAN2008 00:00:00

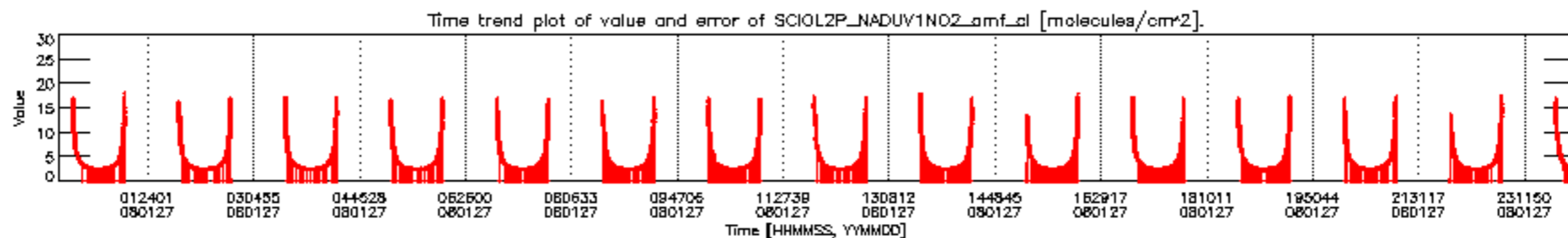
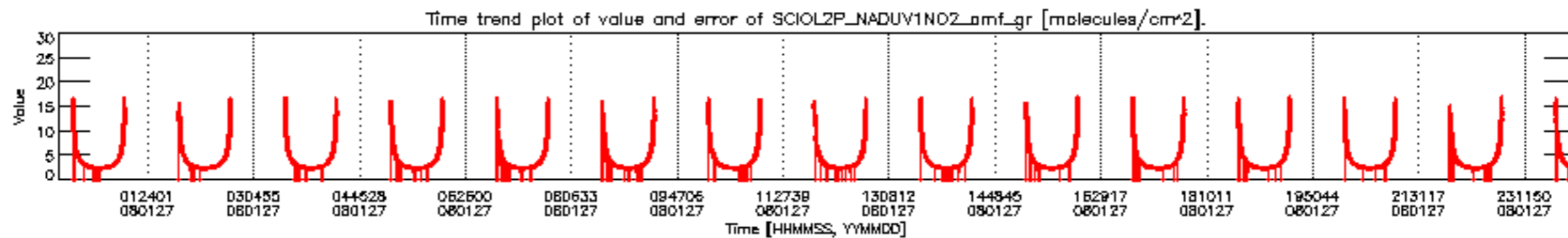
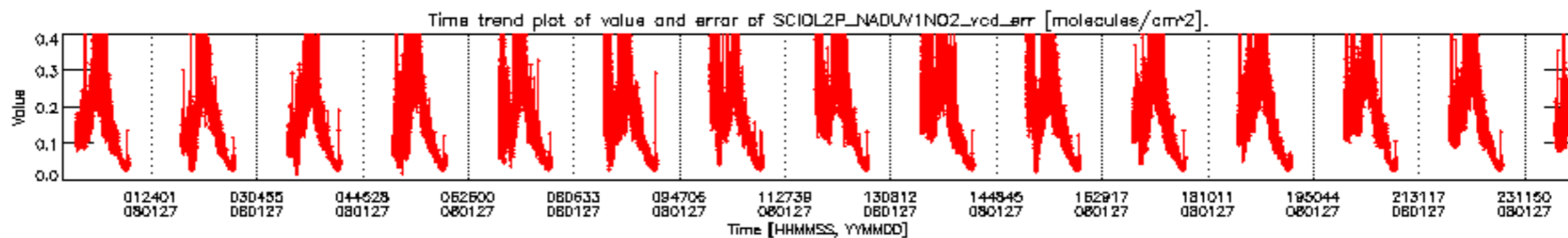
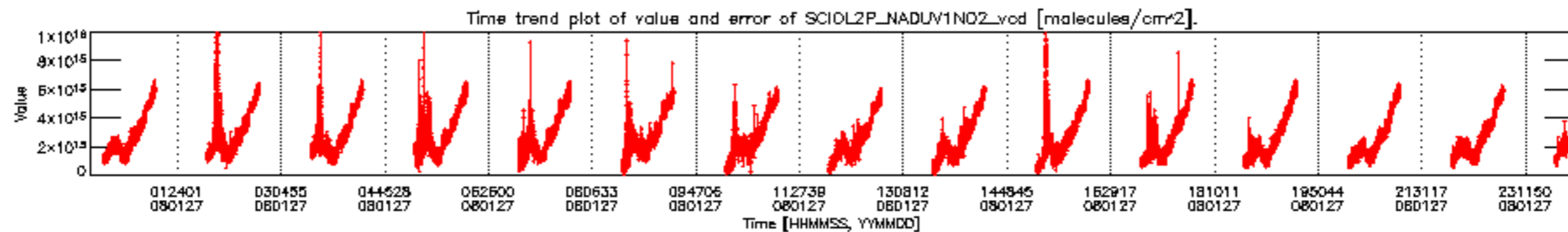


SCIOL2P_NADUV003_amf_gr for 27JAN2008 00:00:00 to 28JAN2008 00:00:00

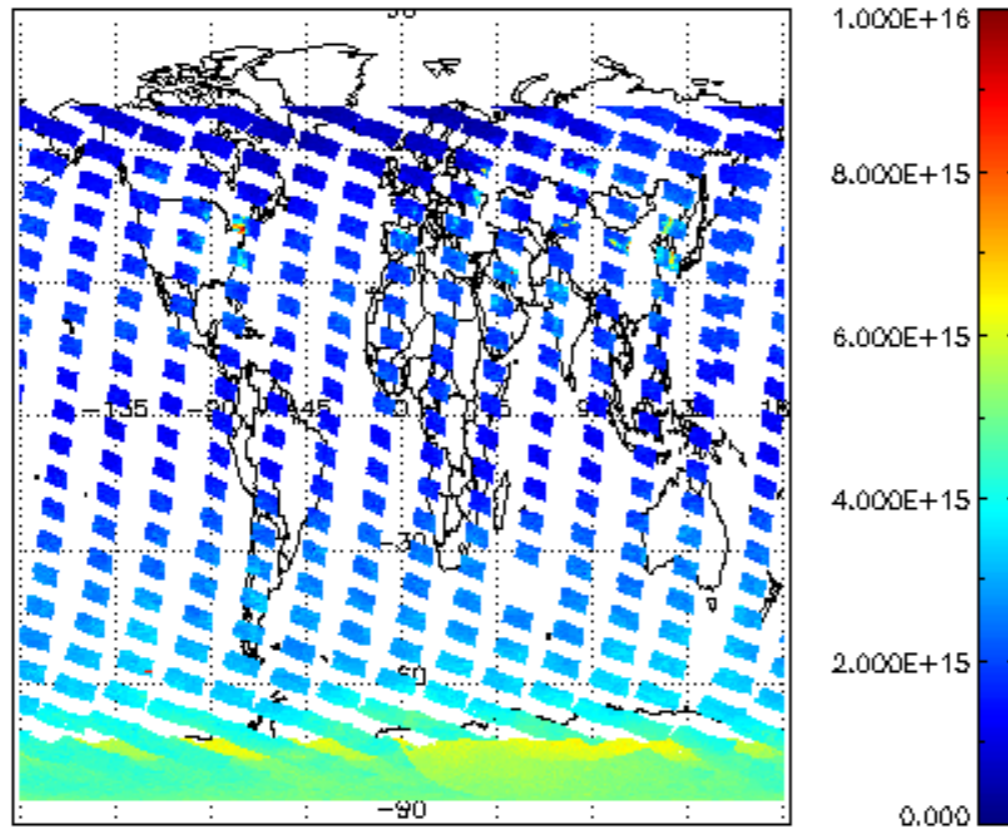


SCIOL2P_NADUV003_amf_cl for 27JAN2008 00:00:00 to 28JAN2008 00:00:00

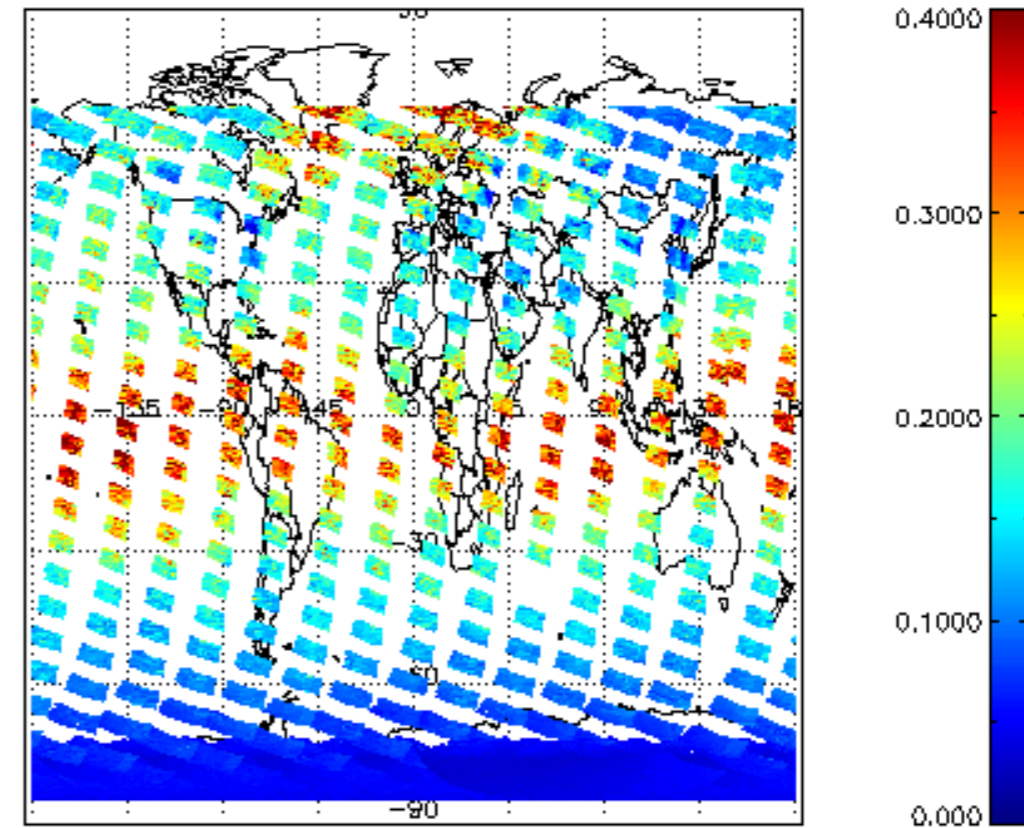




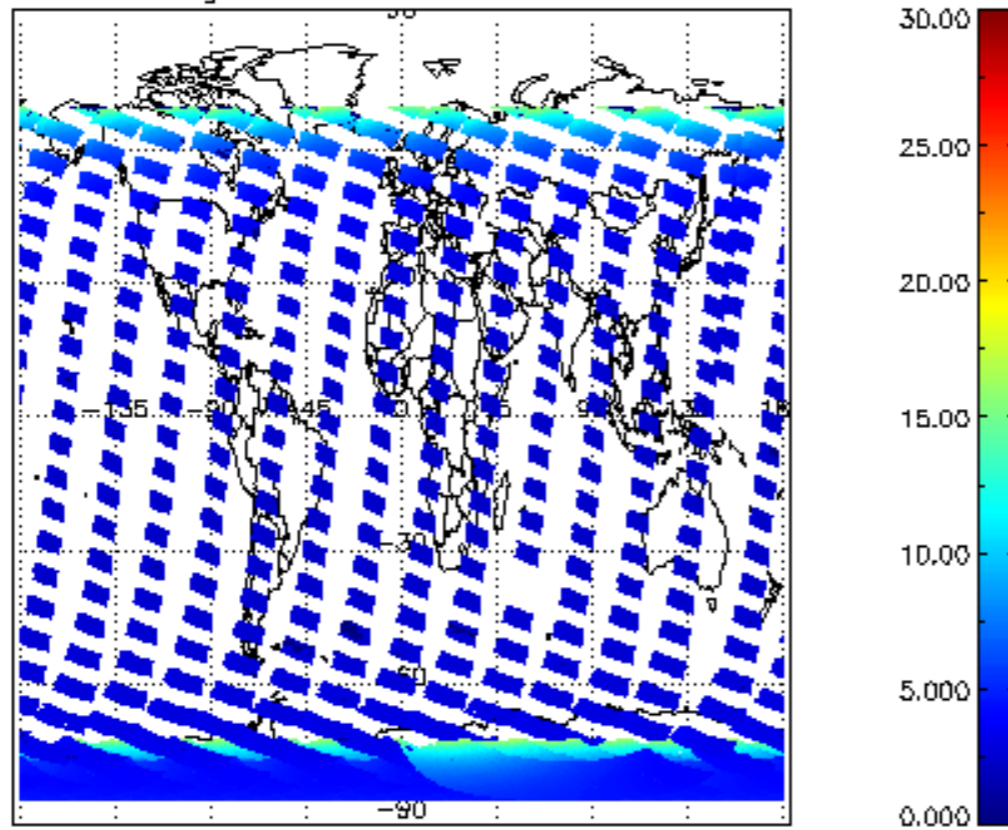
SCIOL2P_NADUV1NO2_vcd for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



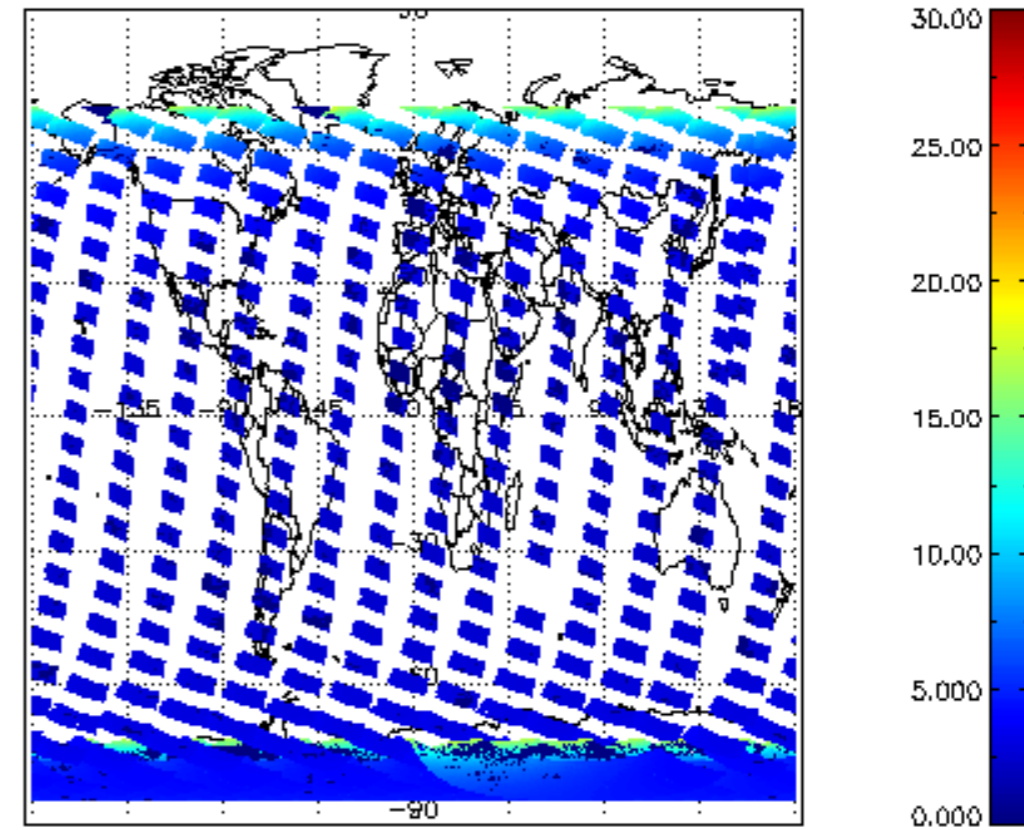
SCIOL2P_NADUV1NO2_vcd_err for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



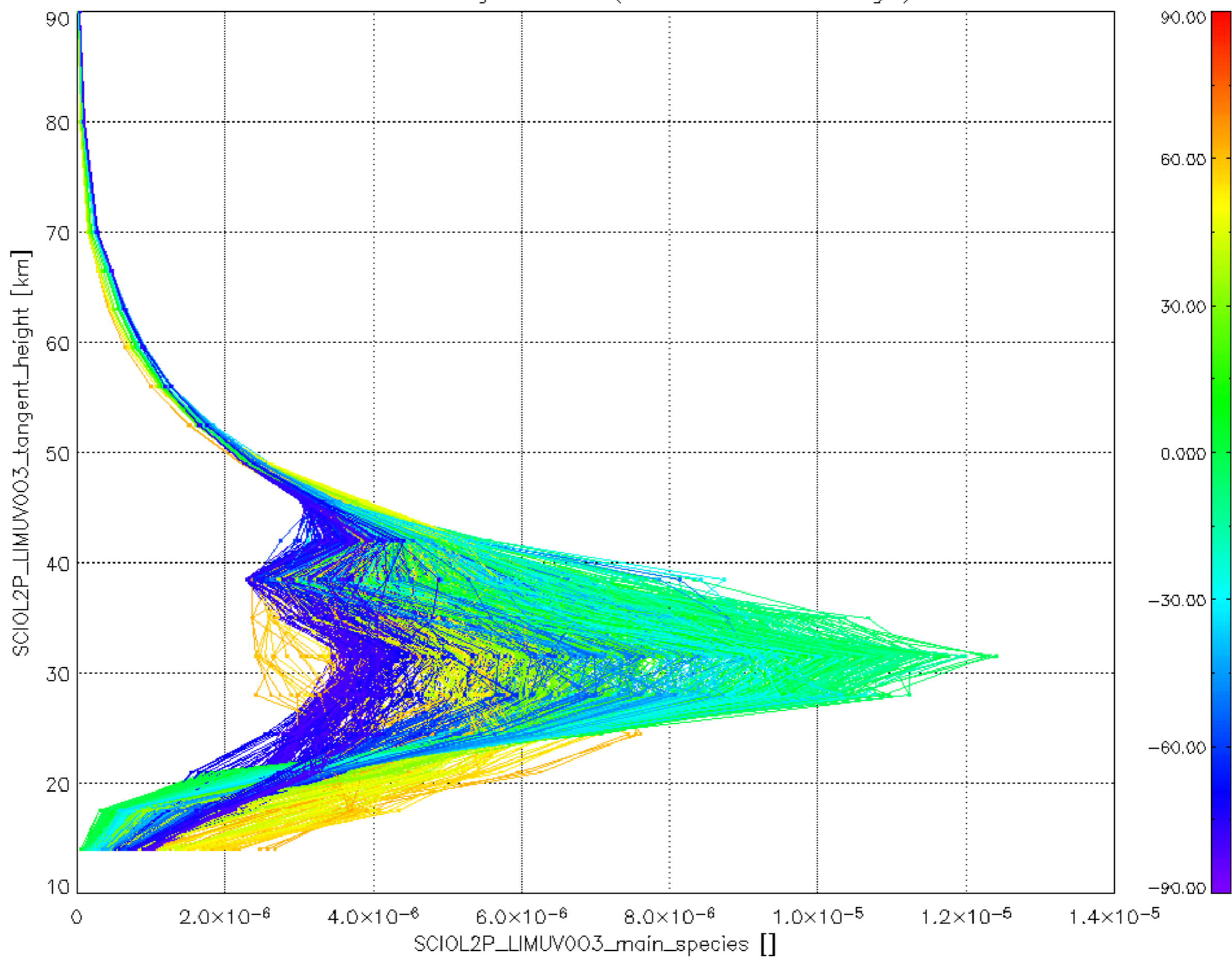
SCIOL2P_NADUV1NO2_amf_gr for 27JAN2008 00:00:00 to 28JAN2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 27JAN2008 00:00:00 to 28JAN2008 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).

