

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	03APR2008 06:03:30
Data source version	SCIA-OL/3.01-R
Processing scope for products	11MAR2008 00:00:00 to 12MAR2008 00:00:00
Start time of first product within scope	10MAR2008 22:39:55
Stop time of last product within scope	12MAR2008 00:44:25
Total number of level 2 products	16
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__2PRDPA20080310_223955_000033252066_00402_31518_4366.N1	10MAR2008 22:39:55	10MAR2008 23:35:20	0	GOOD
1	SCI_OL__2PRDPA20080311_002138_000032692066_00403_31519_4367.N1	11MAR2008 00:21:38	11MAR2008 01:16:08	0	GOOD
2	SCI_OL__2PRDPA20080311_020105_000033252066_00404_31520_4368.N1	11MAR2008 02:01:05	11MAR2008 02:56:31	0	GOOD
3	SCI_OL__2PRDPA20080311_034249_000032692066_00405_31521_4369.N1	11MAR2008 03:42:49	11MAR2008 04:37:19	0	GOOD
4	SCI_OL__2PRDPA20080311_052216_000033252066_00406_31522_4370.N1	11MAR2008 05:22:16	11MAR2008 06:17:42	0	GOOD
5	SCI_OL__2PRDPA20080311_070400_000032692066_00407_31523_4371.N1	11MAR2008 07:04:00	11MAR2008 07:58:30	0	GOOD
6	SCI_OL__2PRDPA20080311_084327_000033252066_00408_31524_4374.N1	11MAR2008 08:43:27	11MAR2008 09:38:53	0	GOOD
7	SCI_OL__2PRDPA20080311_102511_000032692066_00409_31525_4375.N1	11MAR2008 10:25:11	11MAR2008 11:19:41	0	GOOD
8	SCI_OL__2PRDPA20080311_120438_000033252066_00410_31526_4448.N1	11MAR2008 12:04:38	11MAR2008 13:00:04	0	GOOD
9	SCI_OL__2PRDPA20080311_134622_000032692066_00411_31527_4475.N1	11MAR2008 13:46:22	11MAR2008 14:40:52	0	GOOD
10	SCI_OL__2PRDPA20080311_152549_000033252066_00412_31528_4476.N1	11MAR2008 15:25:49	11MAR2008 16:21:15	0	GOOD
11	SCI_OL__2PRDPA20080311_170733_000032692066_00413_31529_4478.N1	11MAR2008 17:07:33	11MAR2008 18:02:03	0	GOOD
12	SCI_OL__2PRDPA20080311_184630_000033812066_00414_31530_4481.N1	11MAR2008 18:46:30	11MAR2008 19:42:51	0	GOOD
13	SCI_OL__2PRDPA20080311_202705_000033942066_00415_31531_4484.N1	11MAR2008 20:27:05	11MAR2008 21:23:39	0	GOOD
14	SCI_OL__2PRDPA20080311_220811_000033252066_00416_31532_4491.N1	11MAR2008 22:08:11	11MAR2008 23:03:37	0	GOOD
15	SCI_OL__2PRDPA20080311_234955_000032692066_00417_31533_4492.N1	11MAR2008 23:49:55	12MAR2008 00:44:25	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: 144708

Total number of cloud data DSRs with good quality flag (=0): 144708 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	144708	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	144708	0.17059	0.12500	0.12500	0.25000	0.060170	s
SURFACE_PRES	144708	0.0000	0.0000	0.0000	0.0000	0.0000	hPa

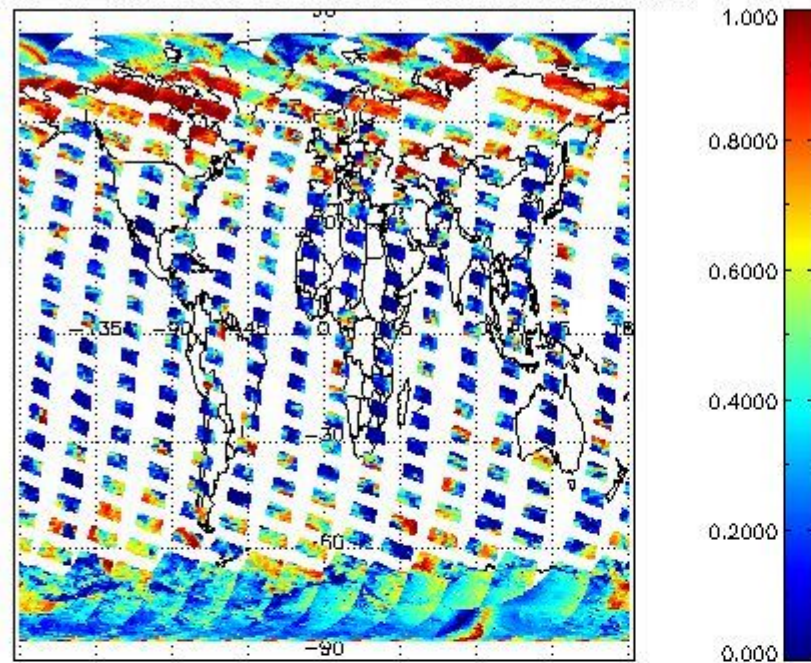
CL_FRAC	144708	0.38803	0.34681	0.0000	1.0000	0.28848	-
CL_FRAC_ERR	144708	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	144708	5.4589	4.0000	4.0000	8.0000	1.9254	
PMD_READ_CL[0]	144708	0.19821	0.0000	0.0000	8.0000	0.91919	-
PMD_READ_CL[1]	144708	0.89180	0.0000	0.0000	8.0000	2.0897	-
CL_TOP_HEIGHT	120614	3.8003	2.0820	0.0000	17.000	3.9849	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	120614	58.290	56.965	0.0000	101.00	40.851	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	144708	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	144708	11001010	11000100	11000000	11100000	3250.8	flags
AERO_ABSO_IND	144708	2.9412	3.4265	-1.3205	14.488	2.0135	
AERO_IND_DIAG	144708	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	144708	01011000	00000000	00000000	11000000	24491.	flags

Time and geolocation plots:

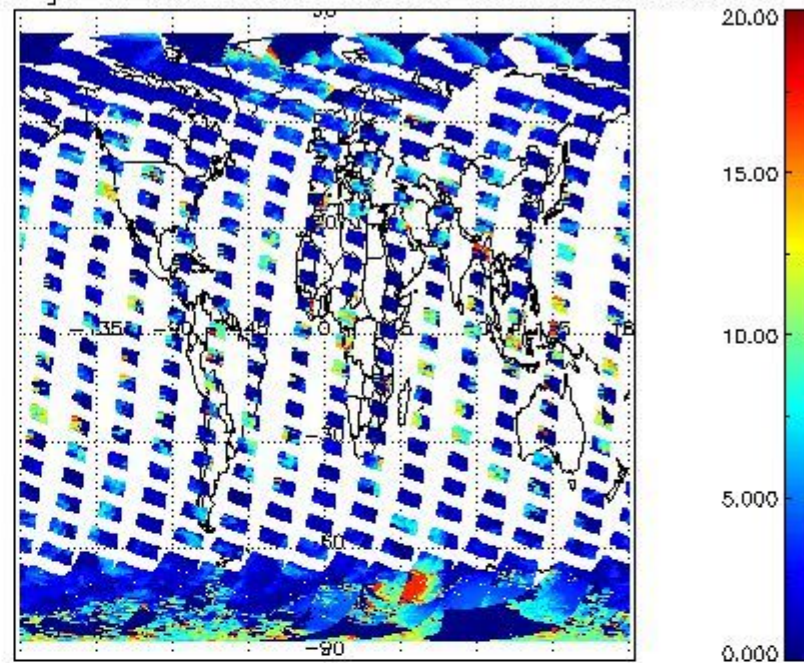
Plots are available for the following parameters:

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

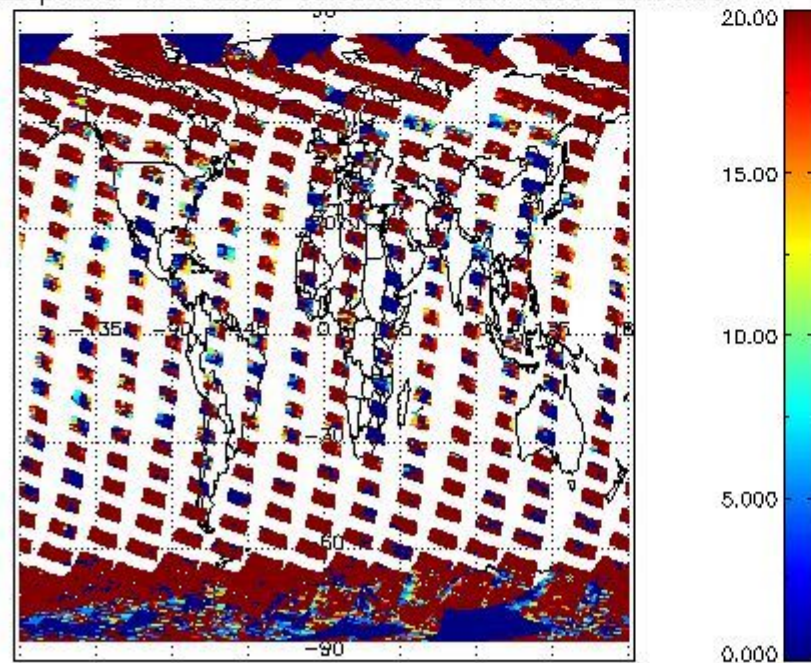
cL_frac for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



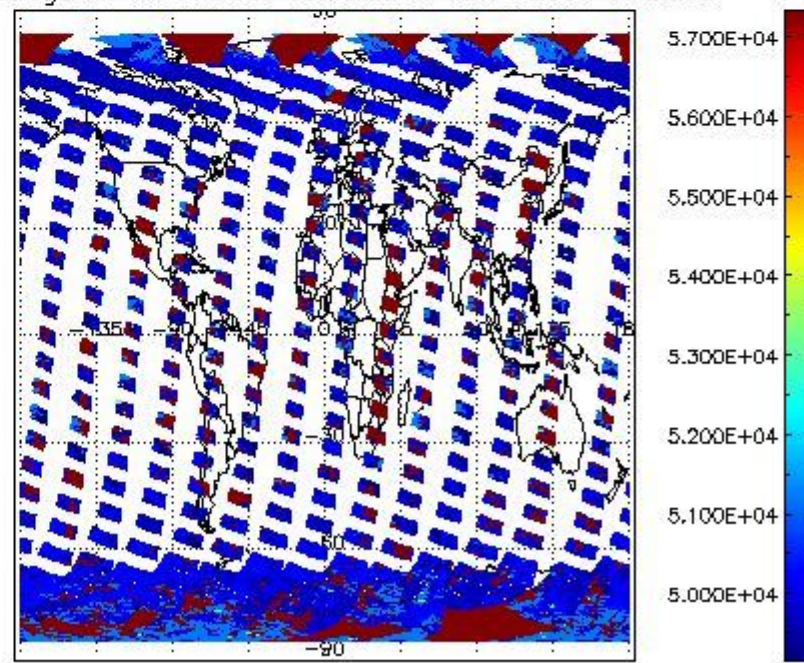
cL_top_height for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



cL_opt_depth for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



cloud_flags for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



2.2.2 Nadir

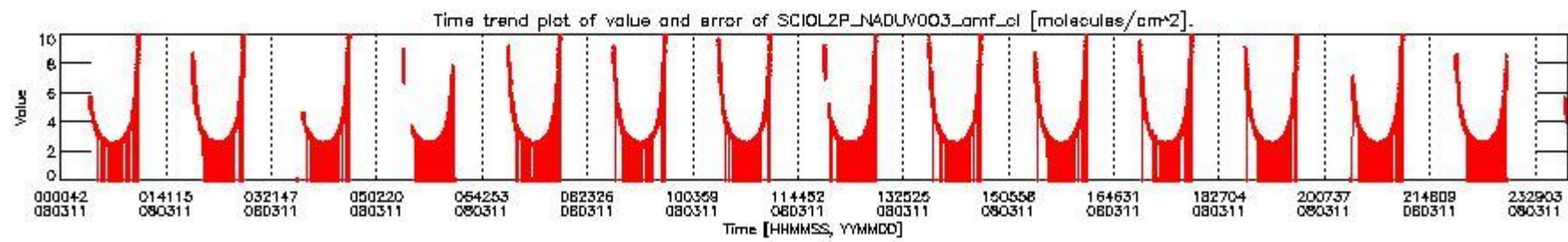
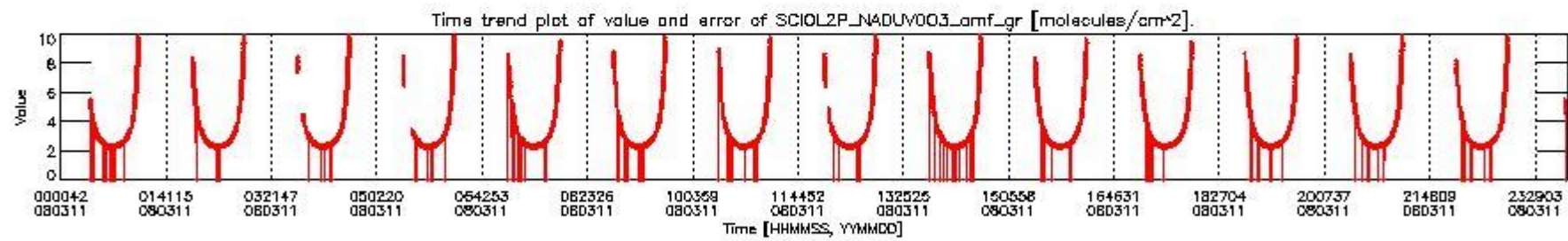
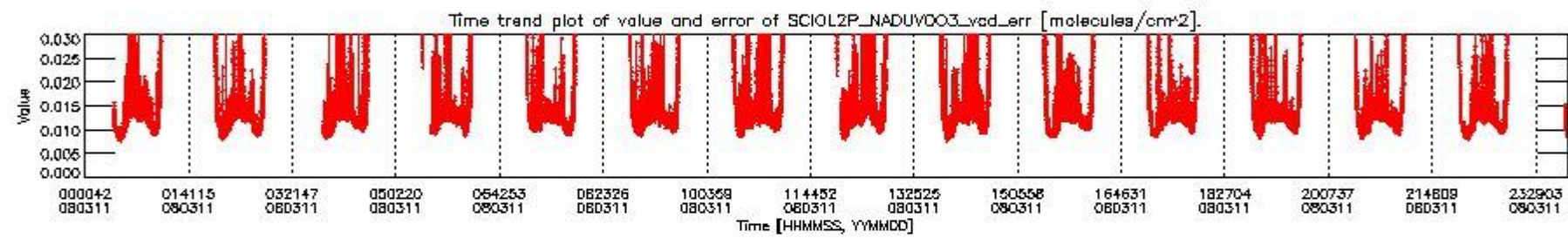
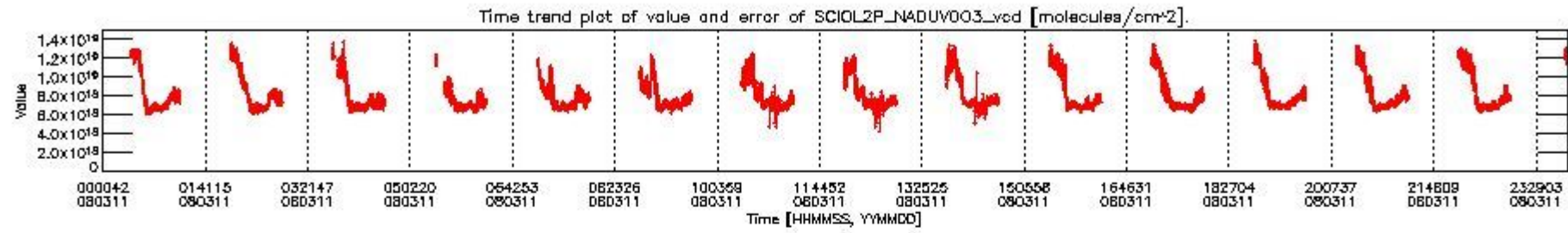
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

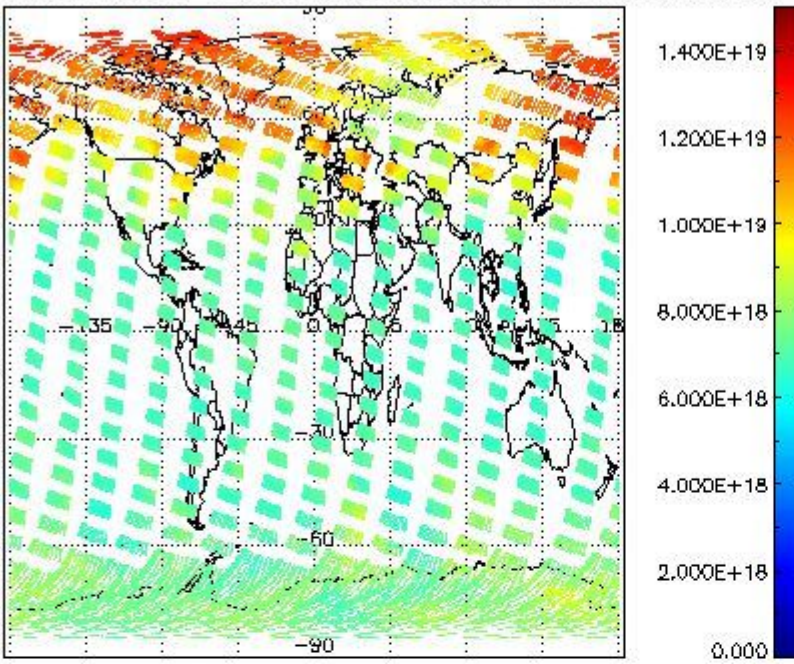
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

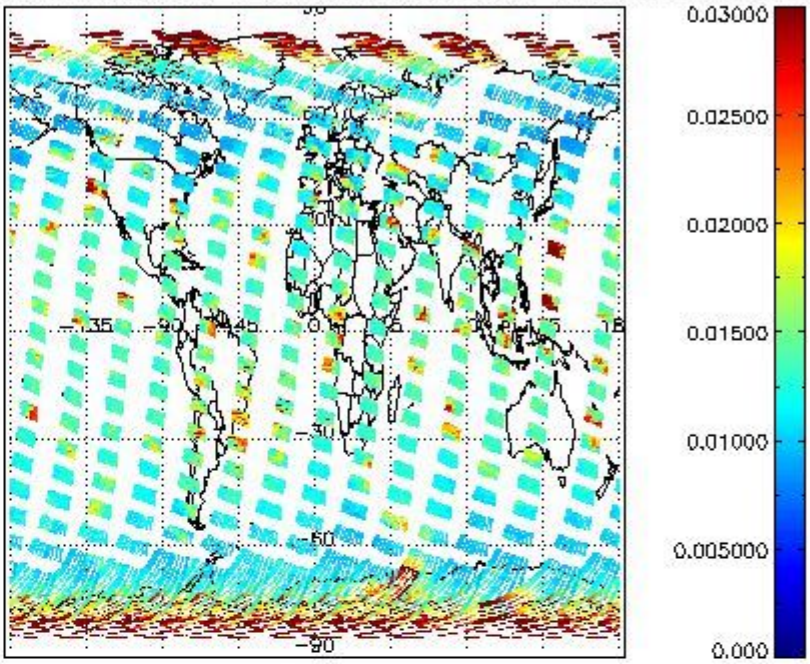
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



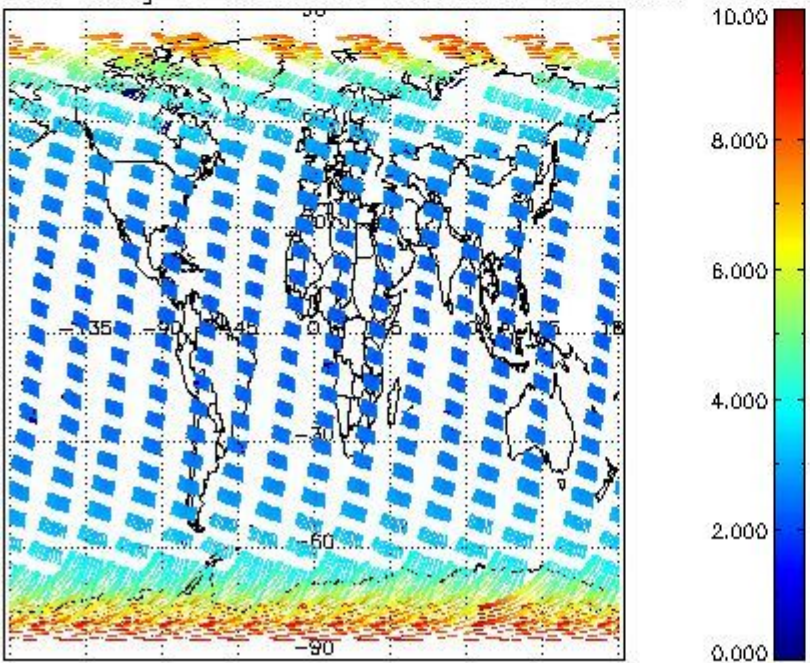
SCIOL2P_NADUV003_vcd for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



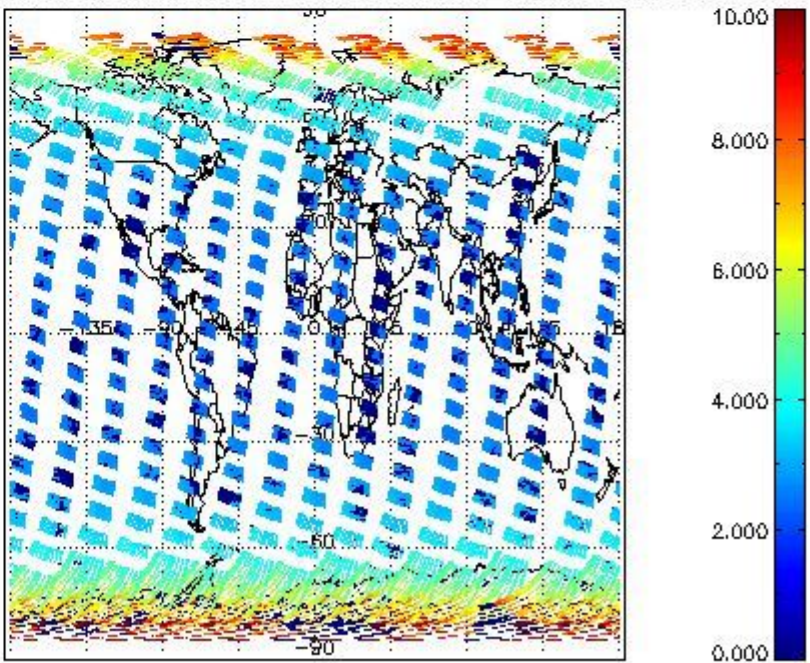
SCIOL2P_NADUV003_vcd_err for 11MAR2008 00:00:00 to 12MAR2008 00:00:00

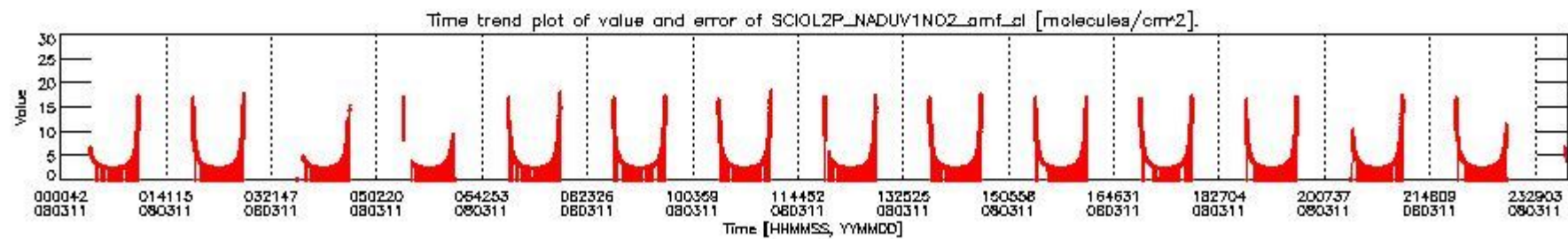
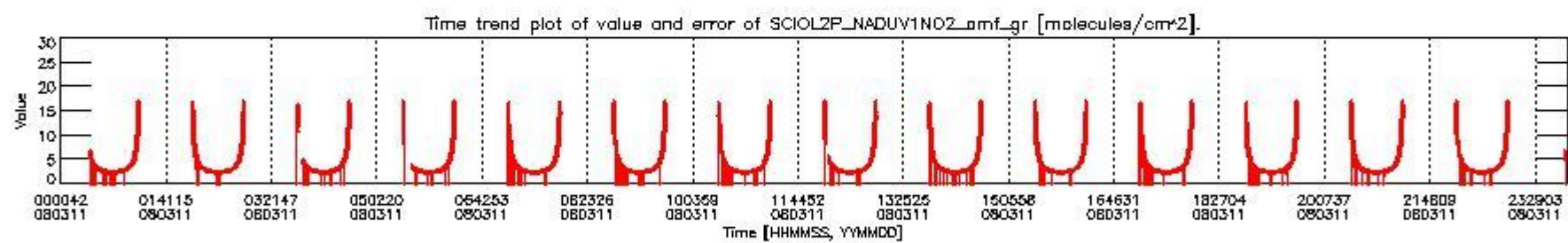
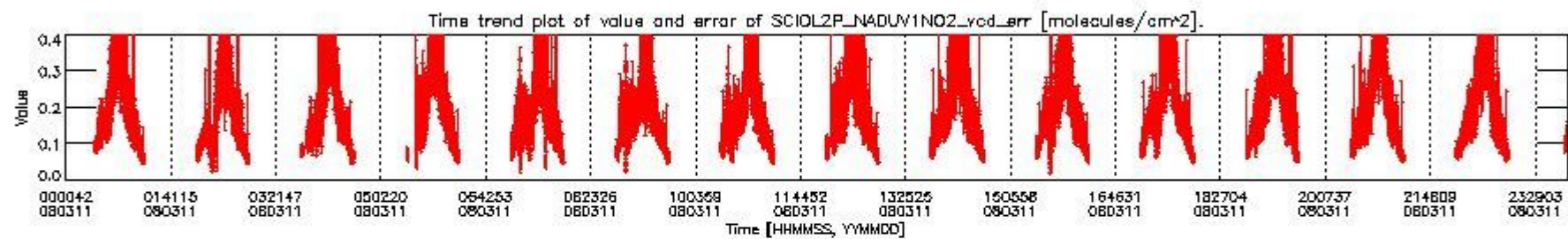
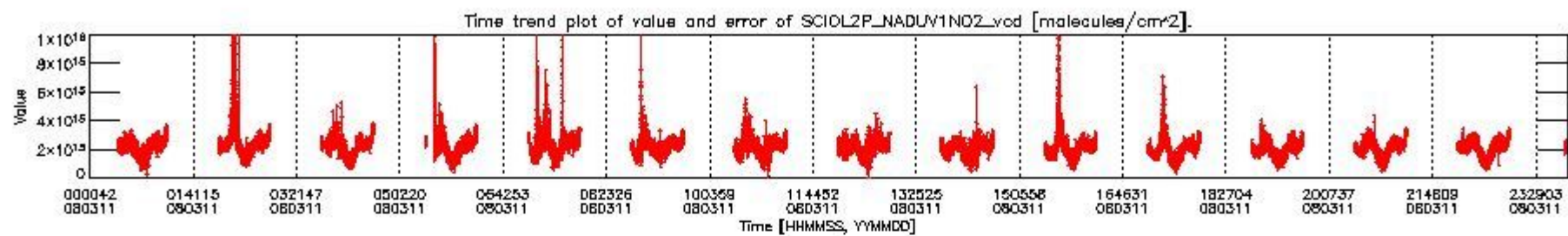


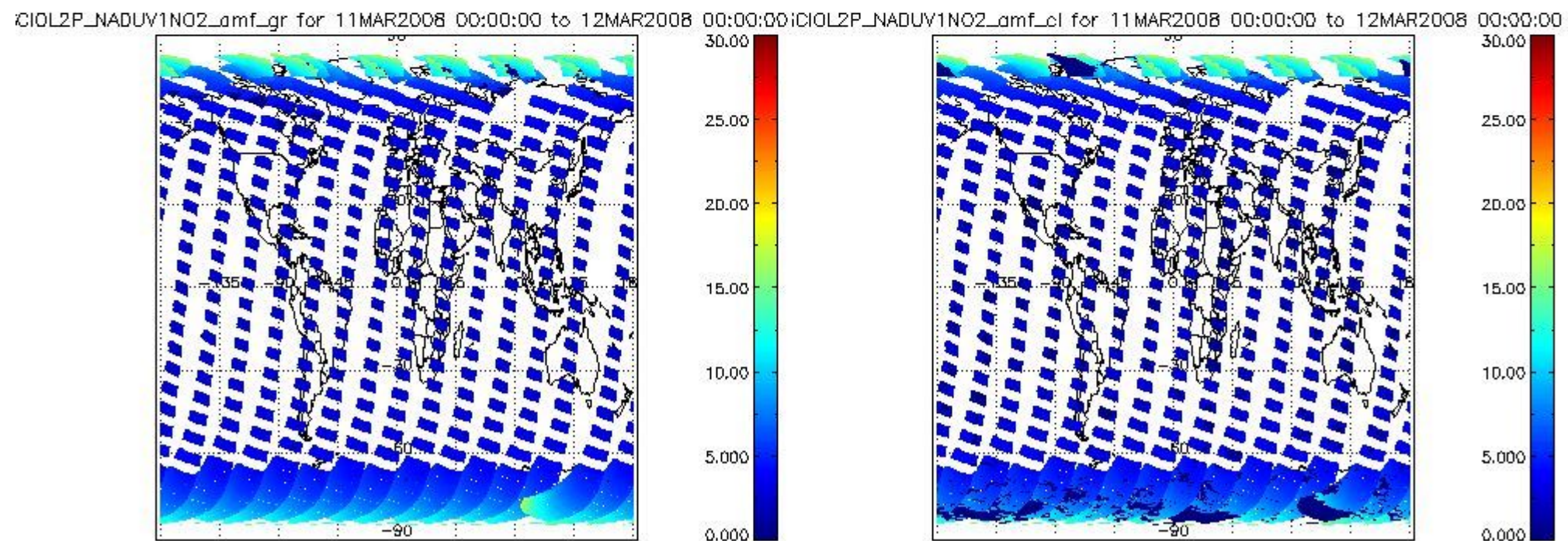
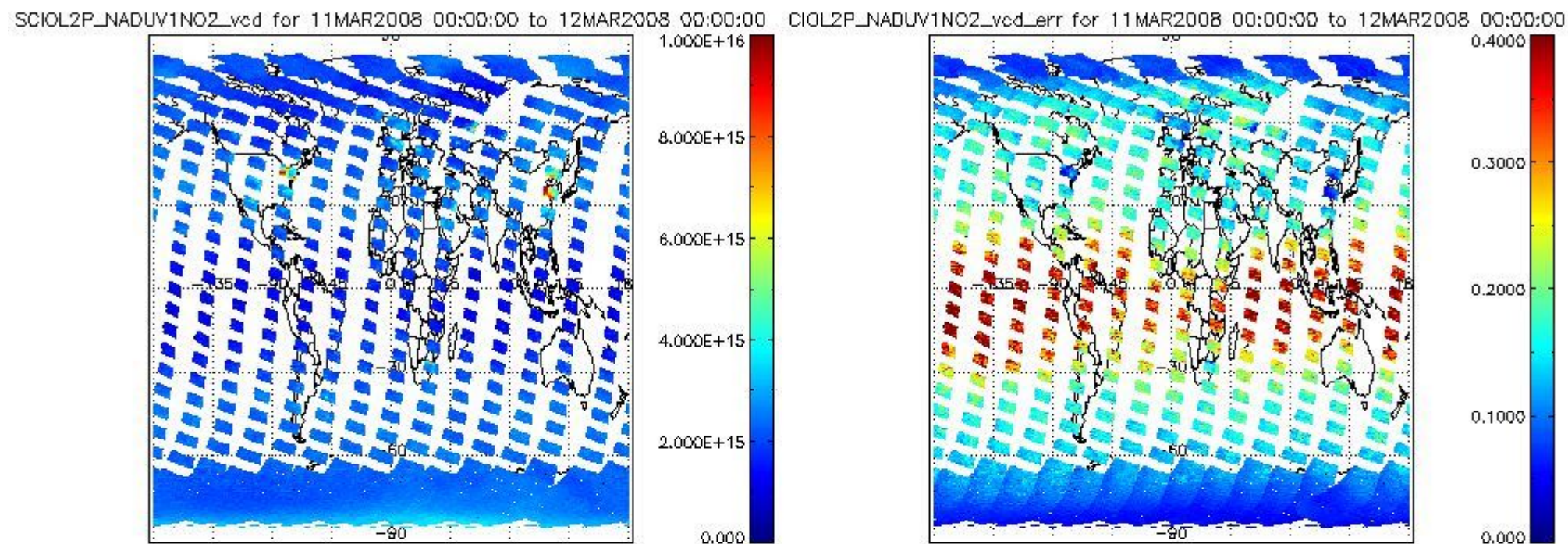
SCIOL2P_NADUV003_amf_gr for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 11MAR2008 00:00:00 to 12MAR2008 00:00:00







2.2.3 Limb

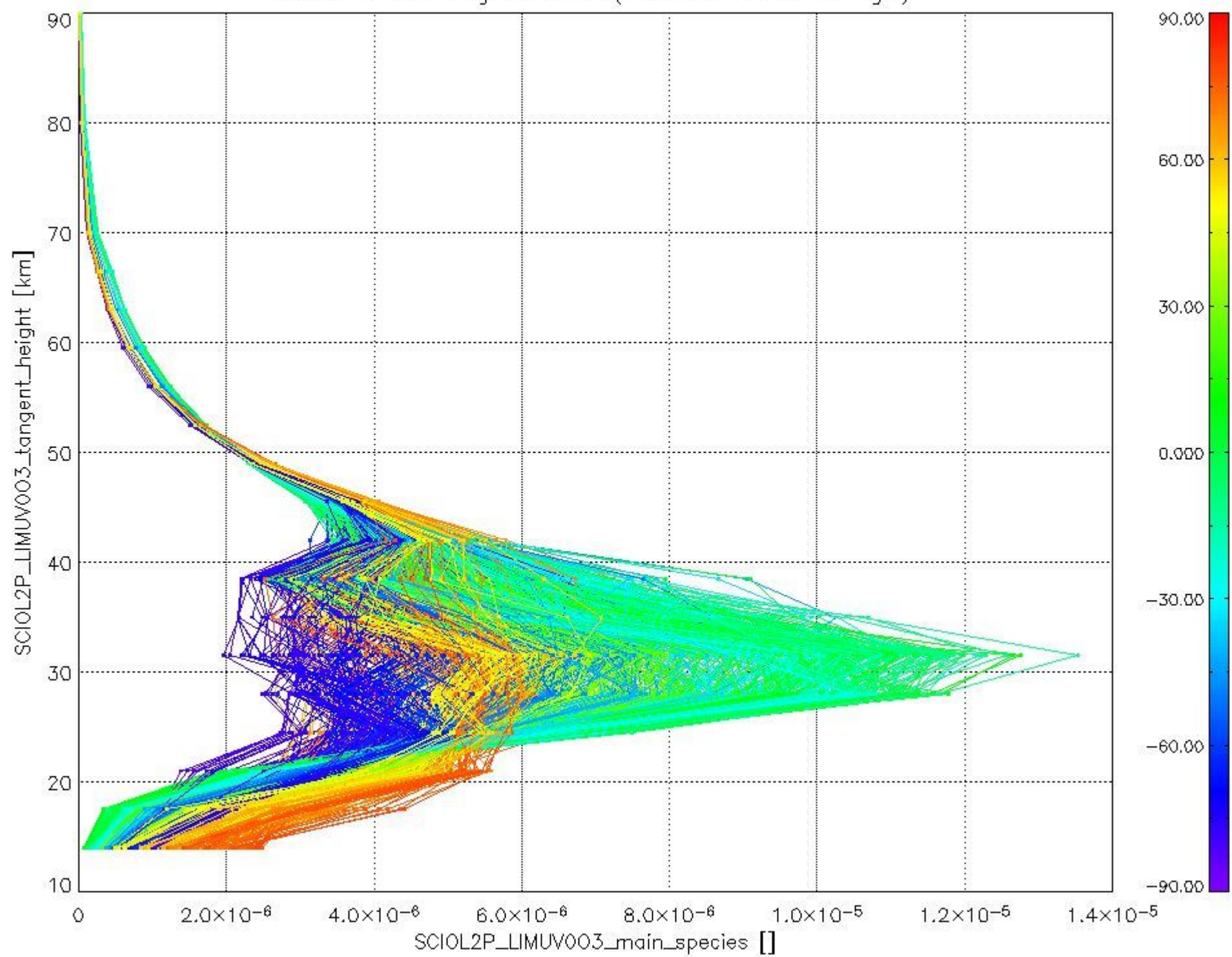
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

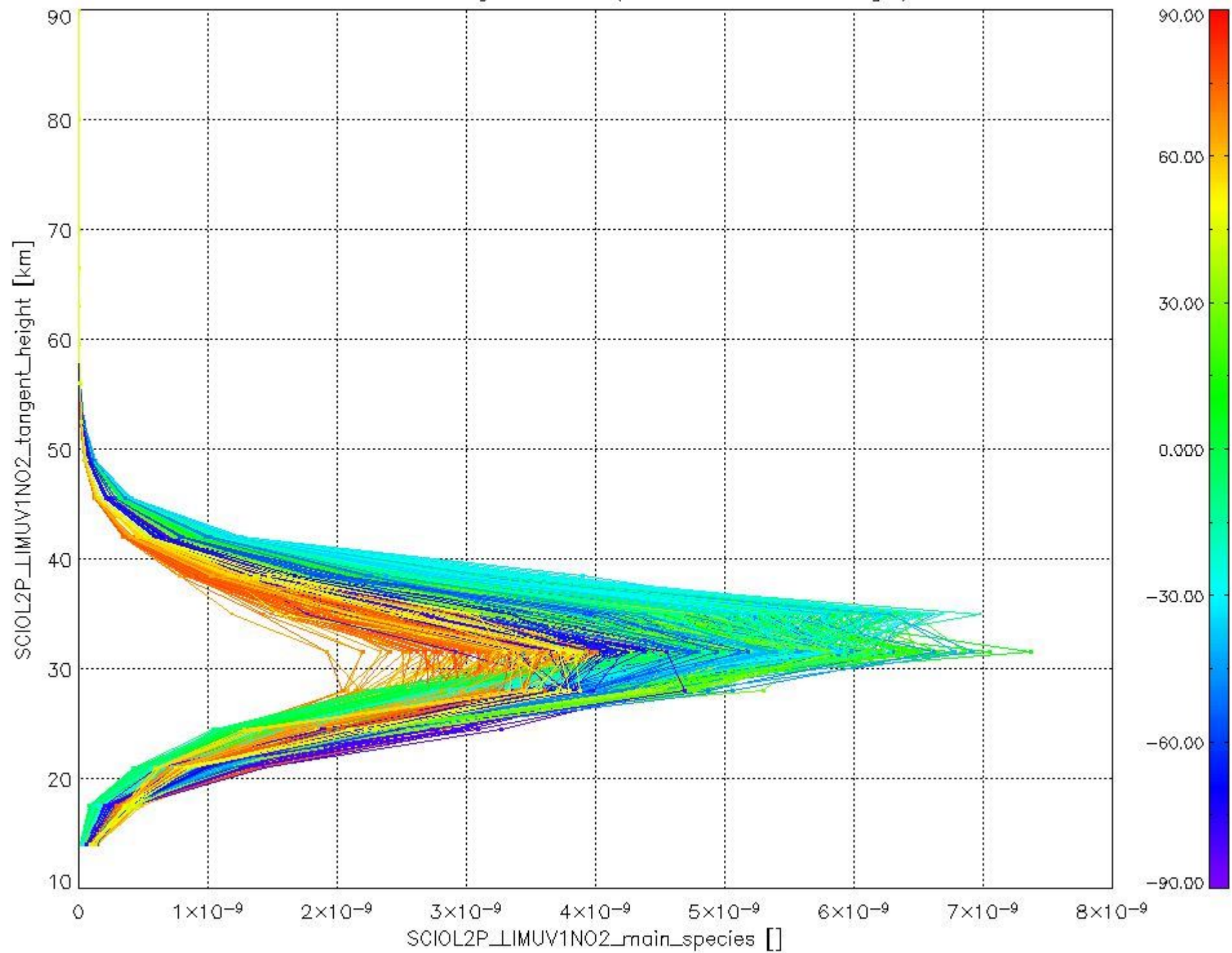
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



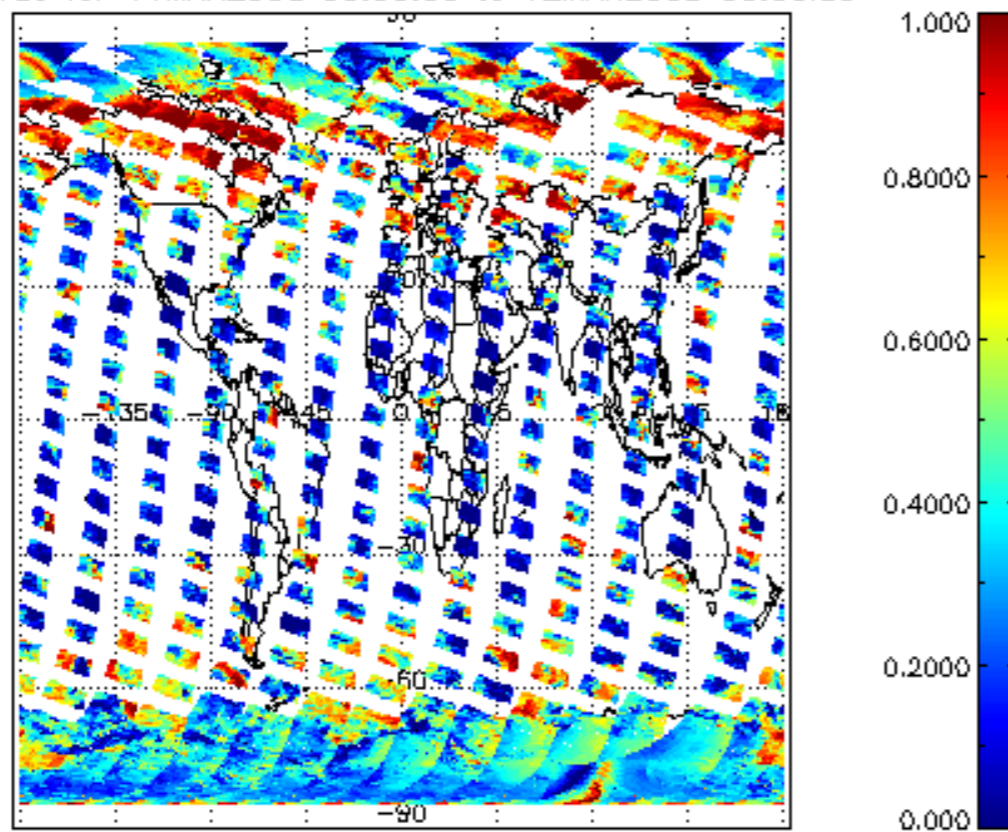
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



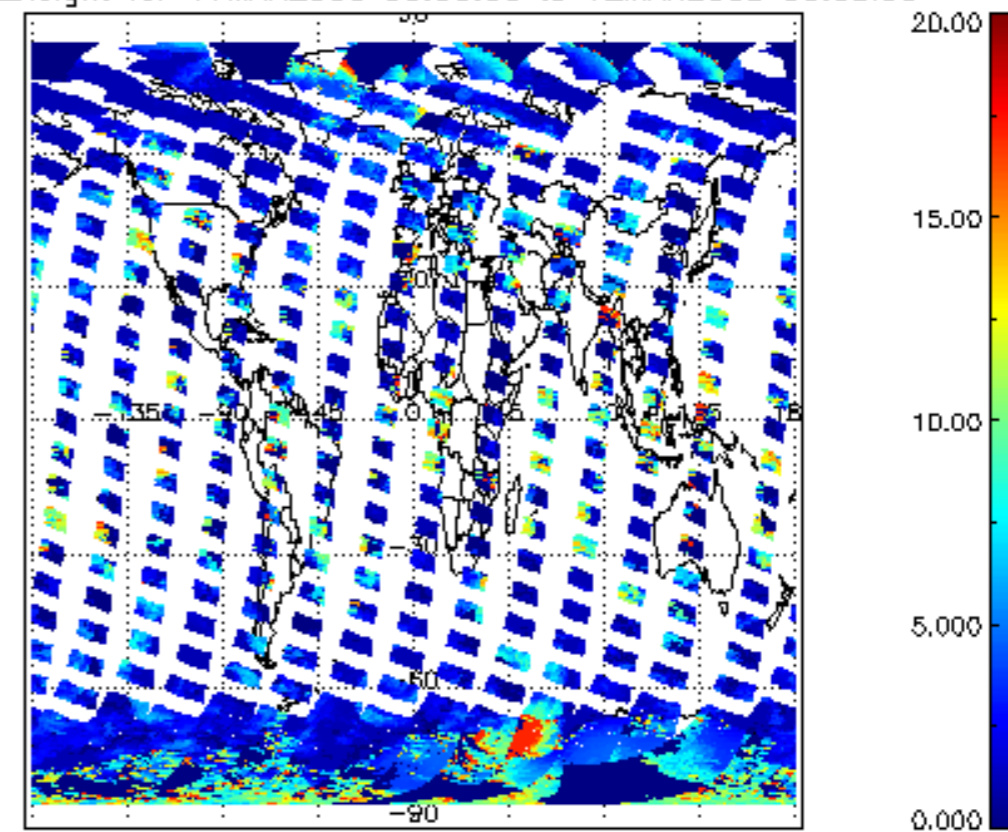
2.3 ADF monitoring

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

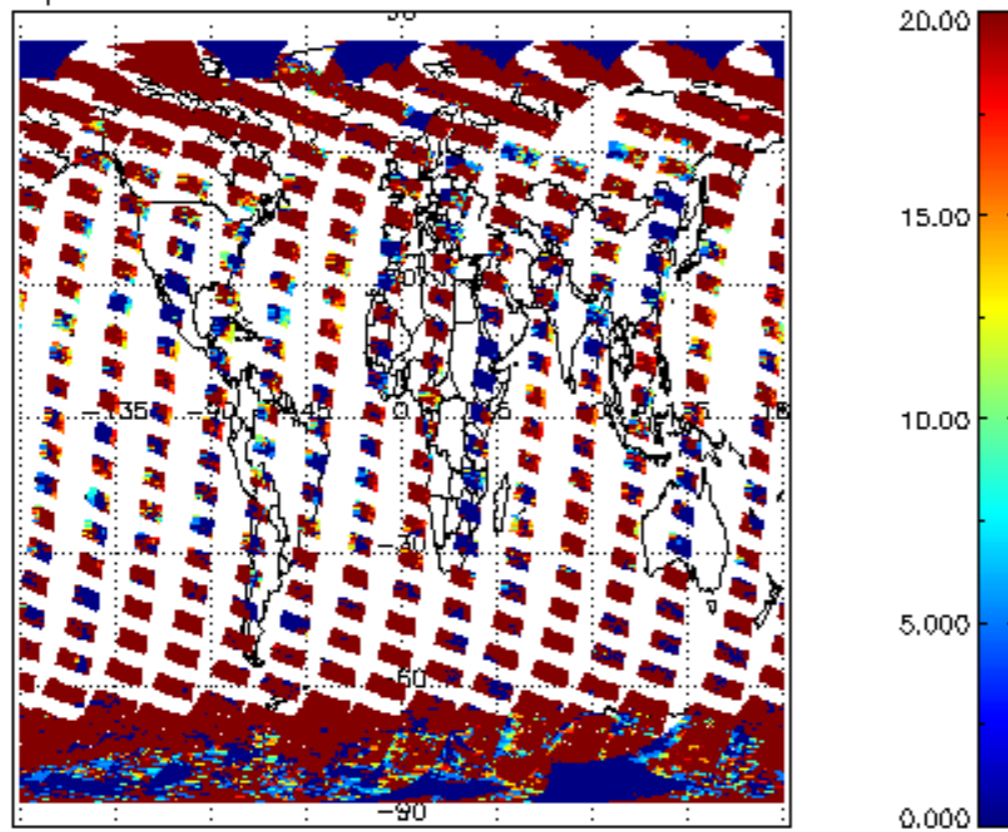
cL_frac for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



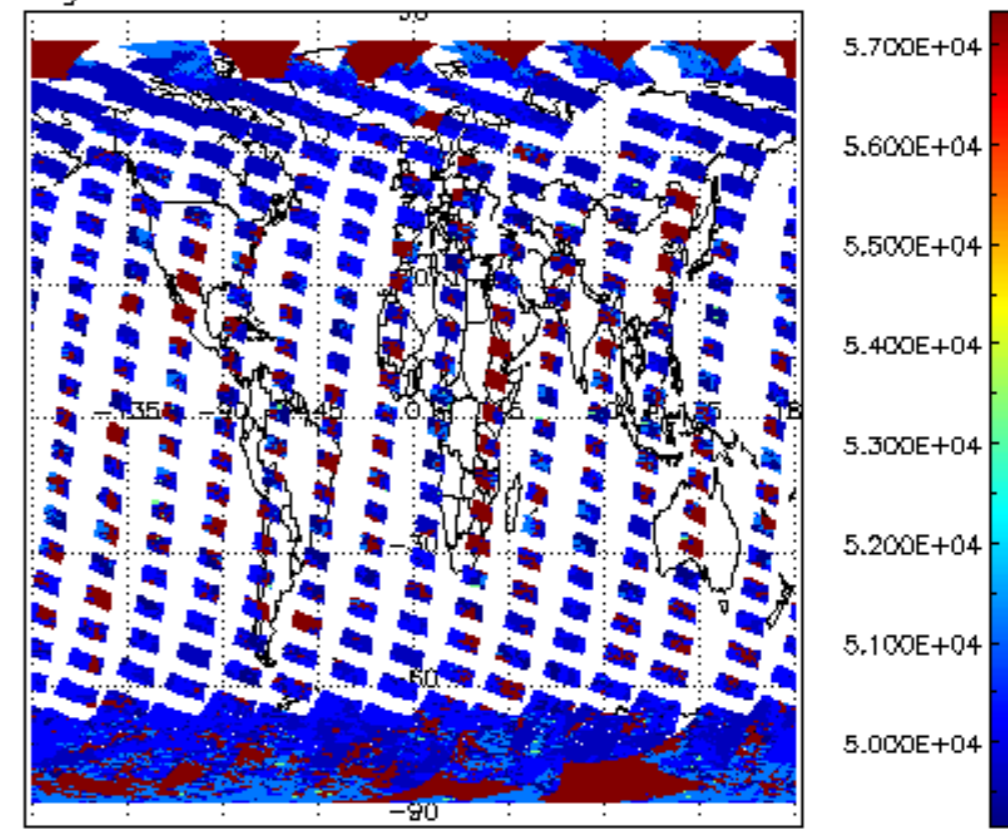
cL_top_height for 11MAR2008 00:00:00 to 12MAR2008 00:00:00

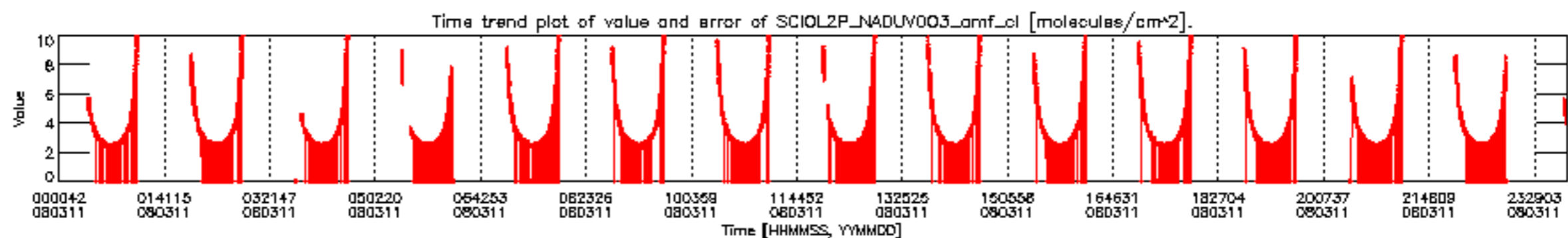
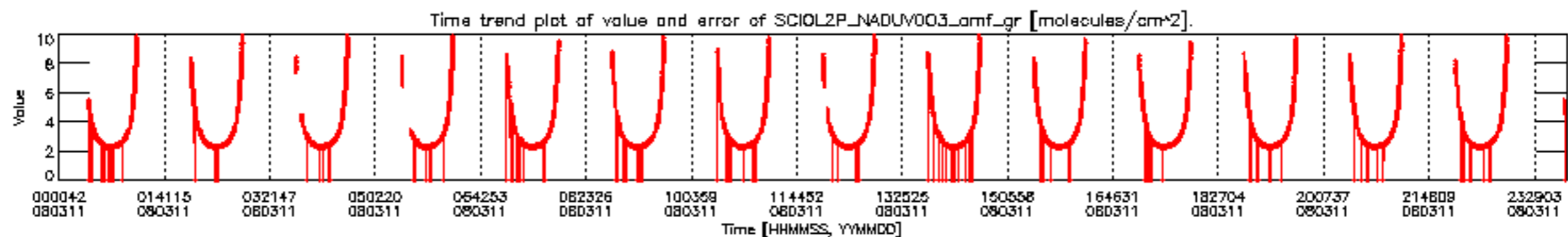
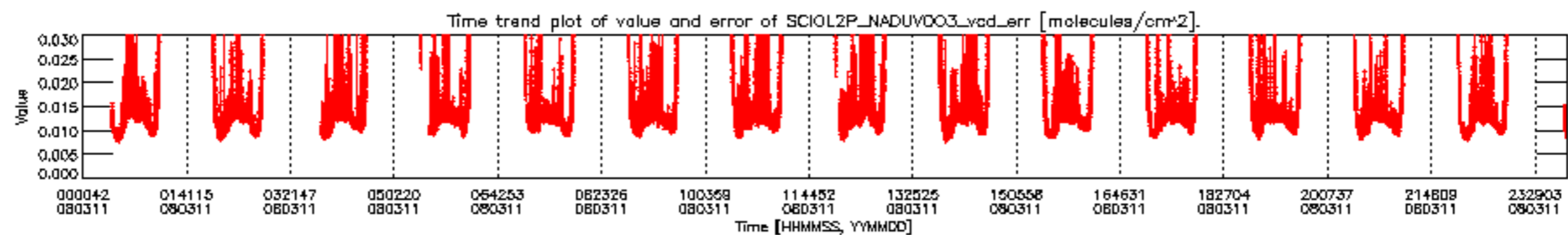
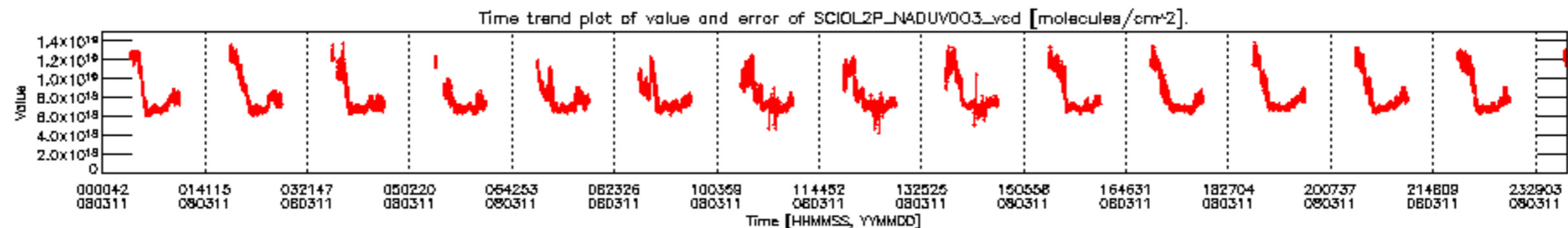


cL_opt_depth for 11MAR2008 00:00:00 to 12MAR2008 00:00:00

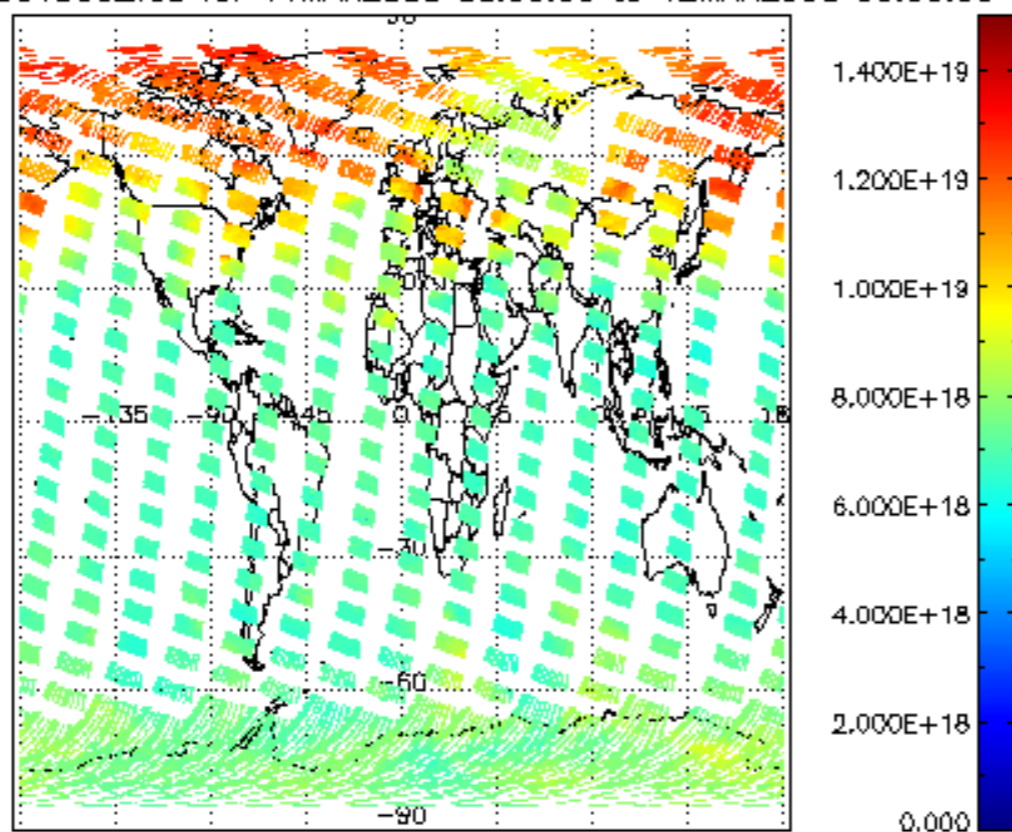


cloud_flags for 11MAR2008 00:00:00 to 12MAR2008 00:00:00

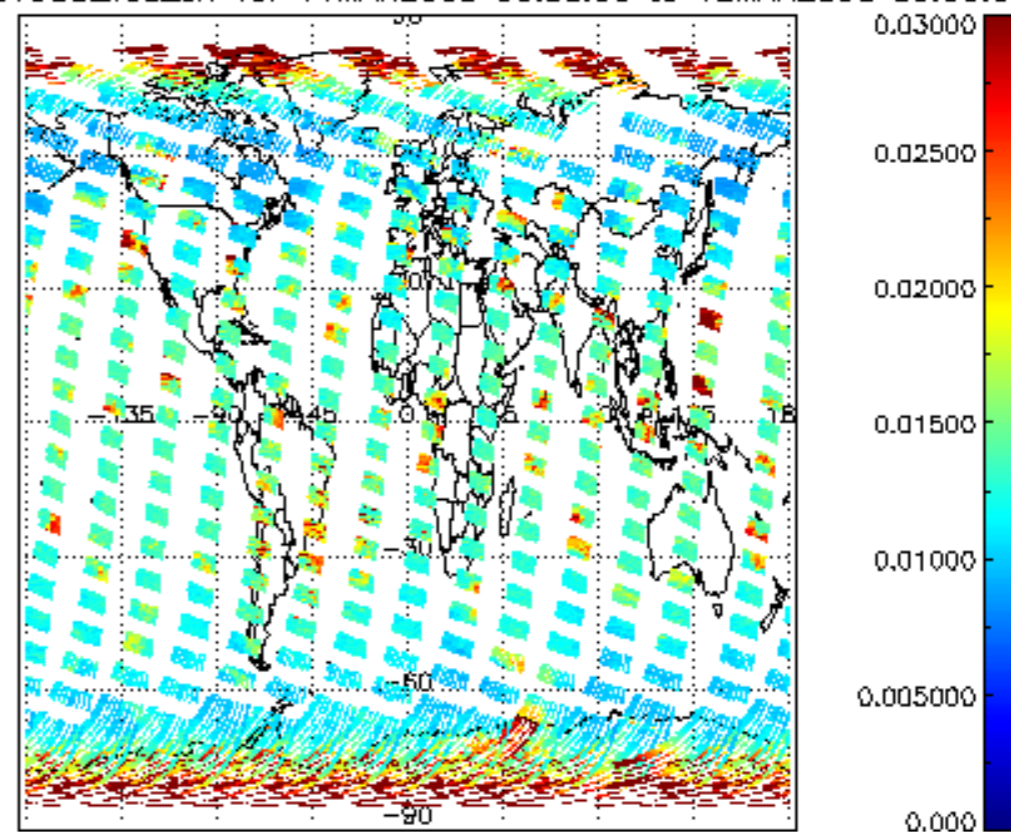




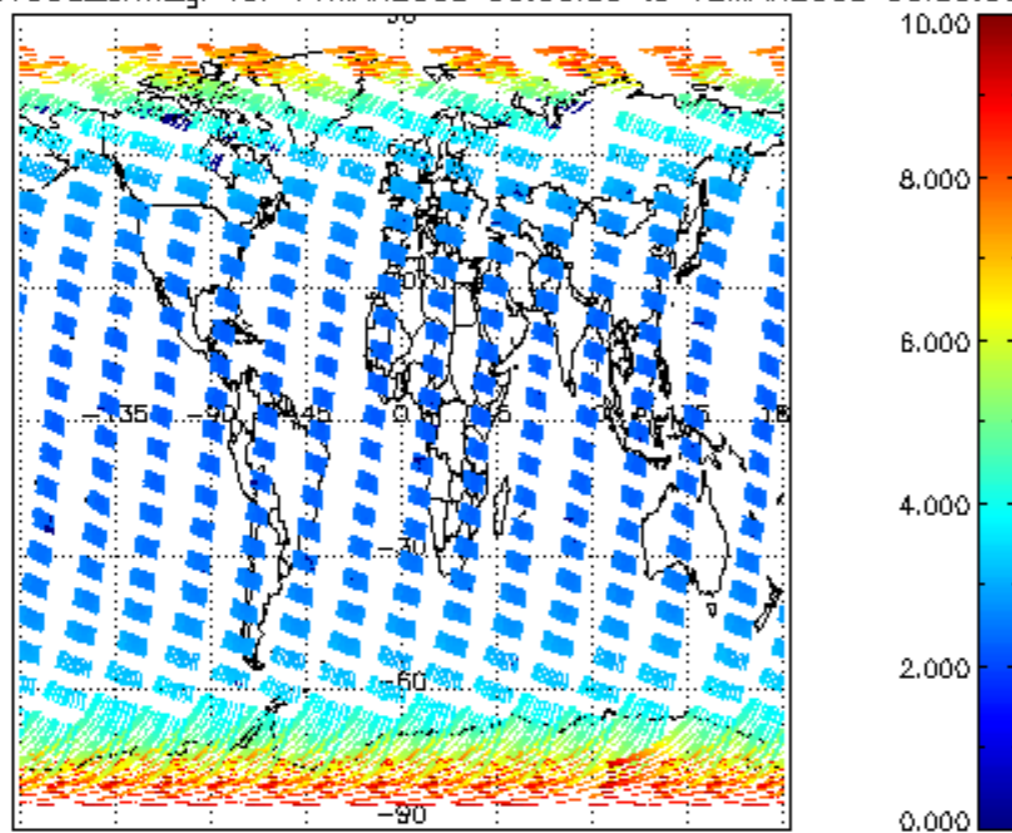
SCIOL2P_NADUV003_vcd for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



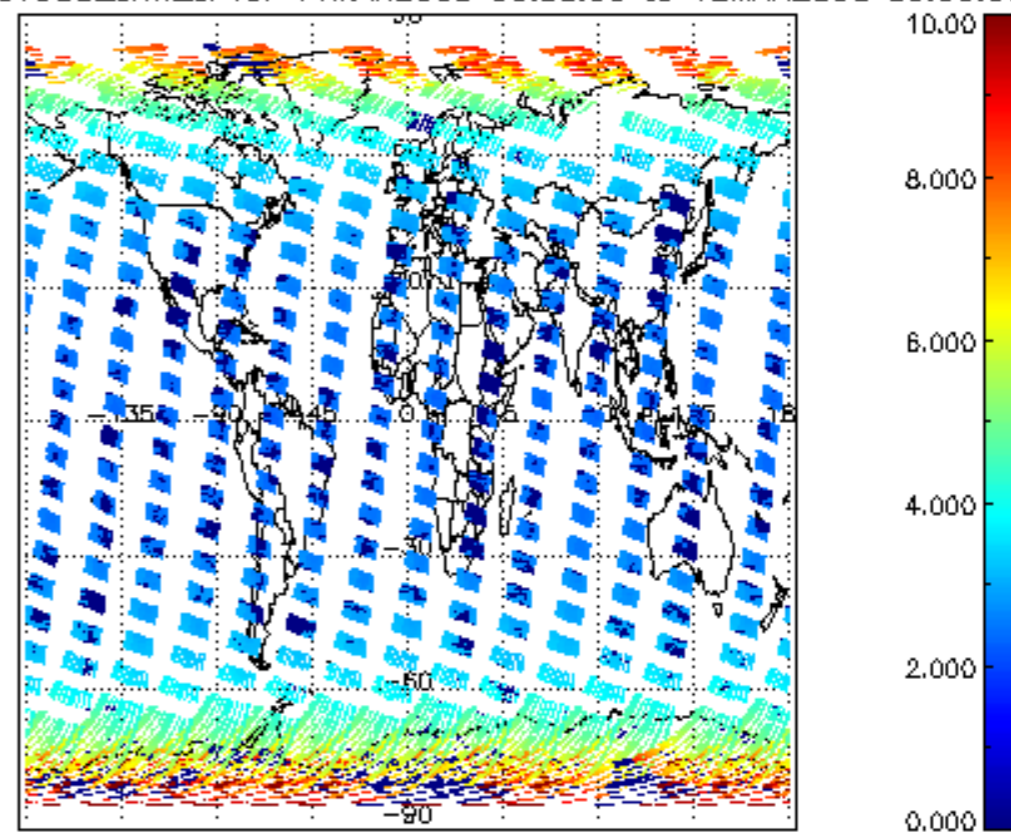
SCIOL2P_NADUV003_vcd_err for 11MAR2008 00:00:00 to 12MAR2008 00:00:00

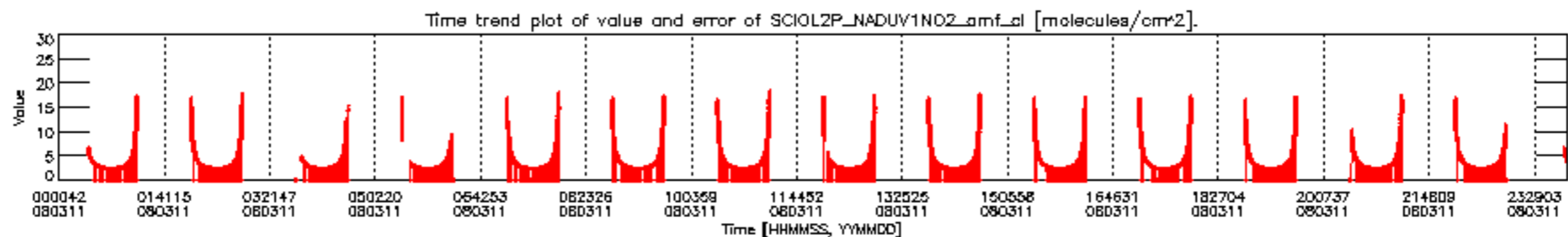
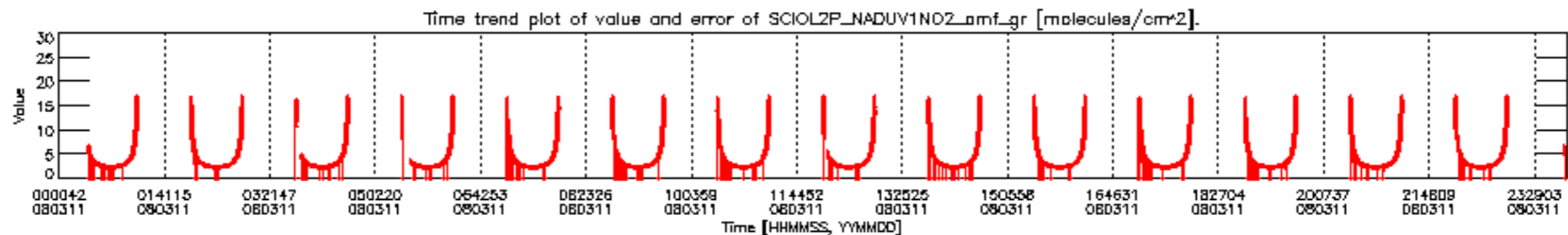
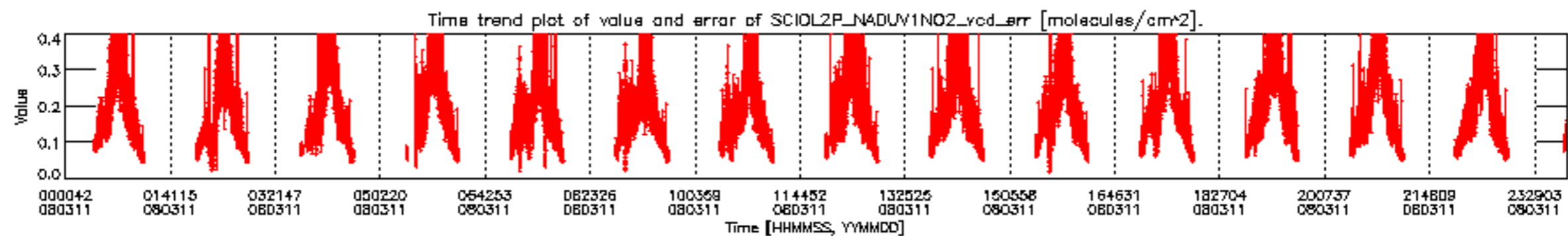
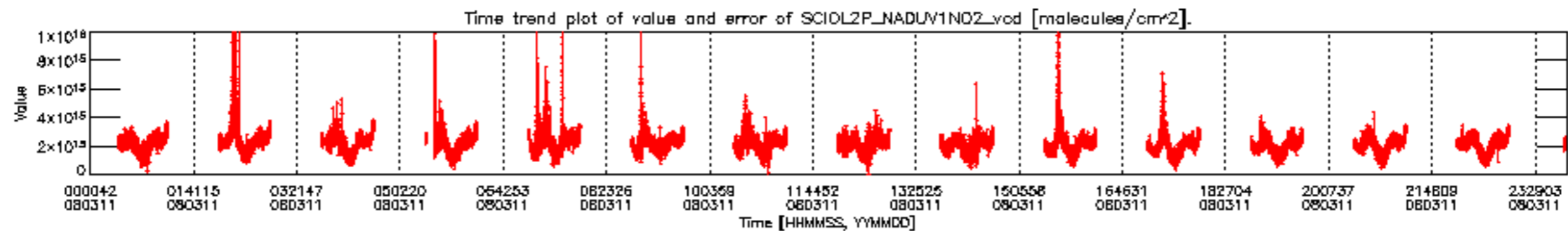


SCIOL2P_NADUV003_amf_gr for 11MAR2008 00:00:00 to 12MAR2008 00:00:00

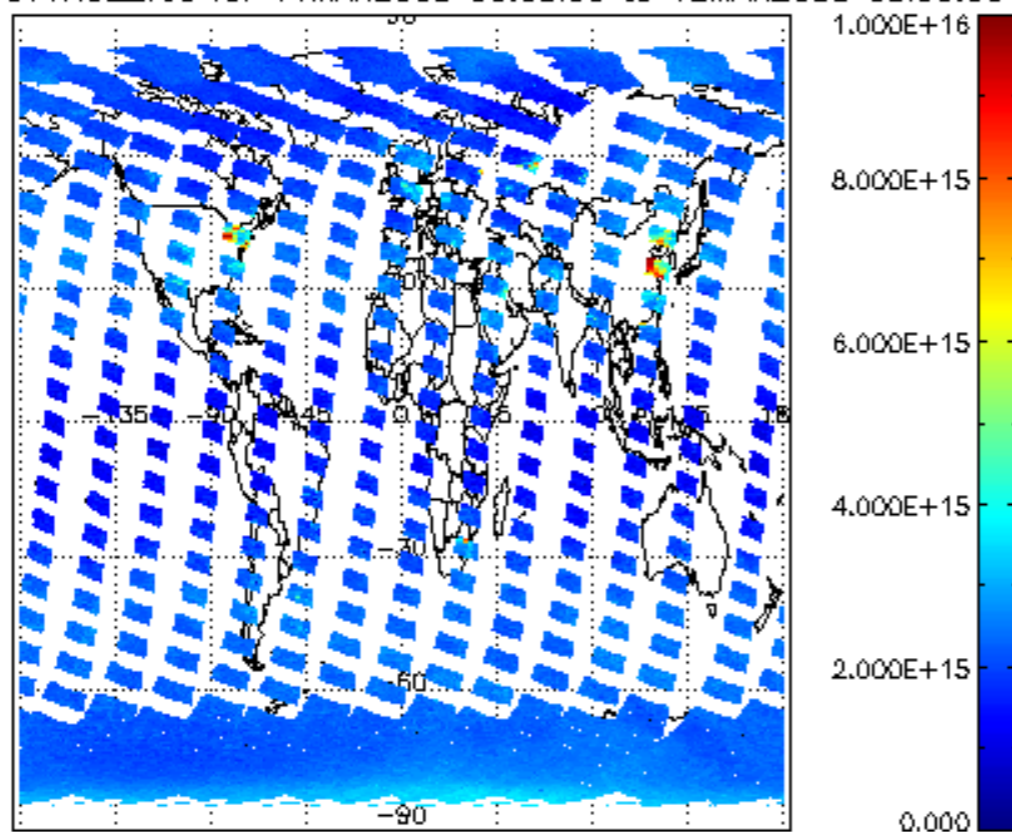


SCIOL2P_NADUV003_amf_cl for 11MAR2008 00:00:00 to 12MAR2008 00:00:00

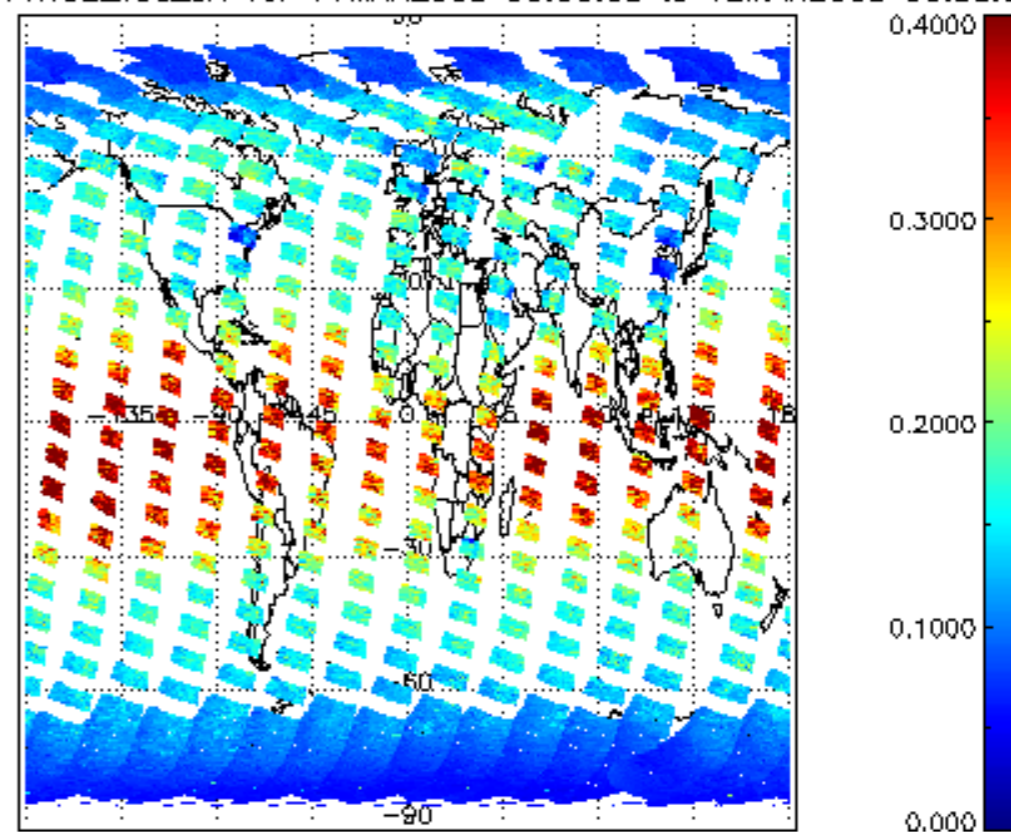




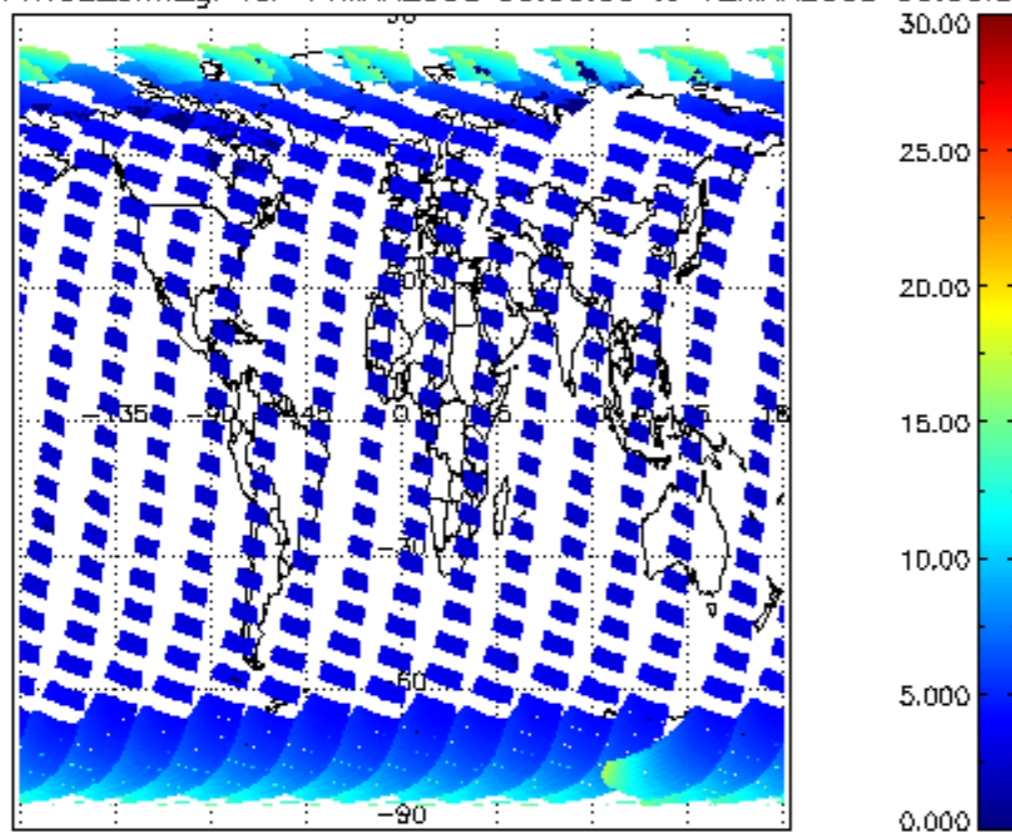
SCIOL2P_NADUV1NO2_vcd for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



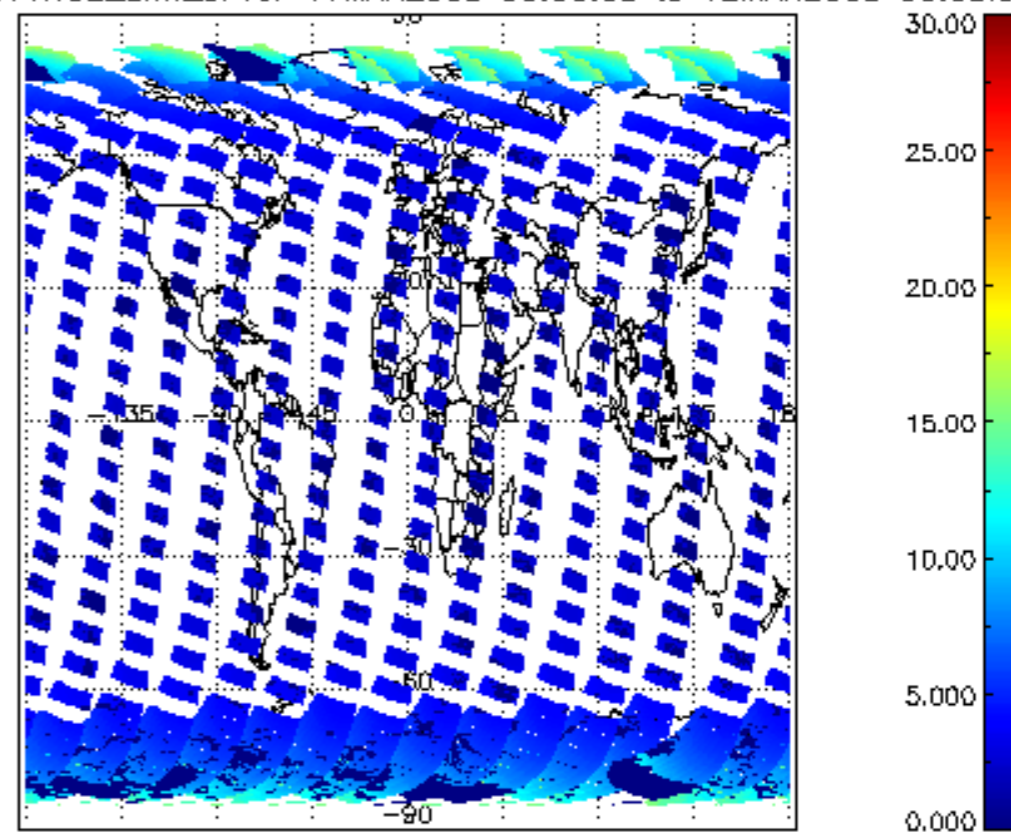
SCIOL2P_NADUV1NO2_vcd_err for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



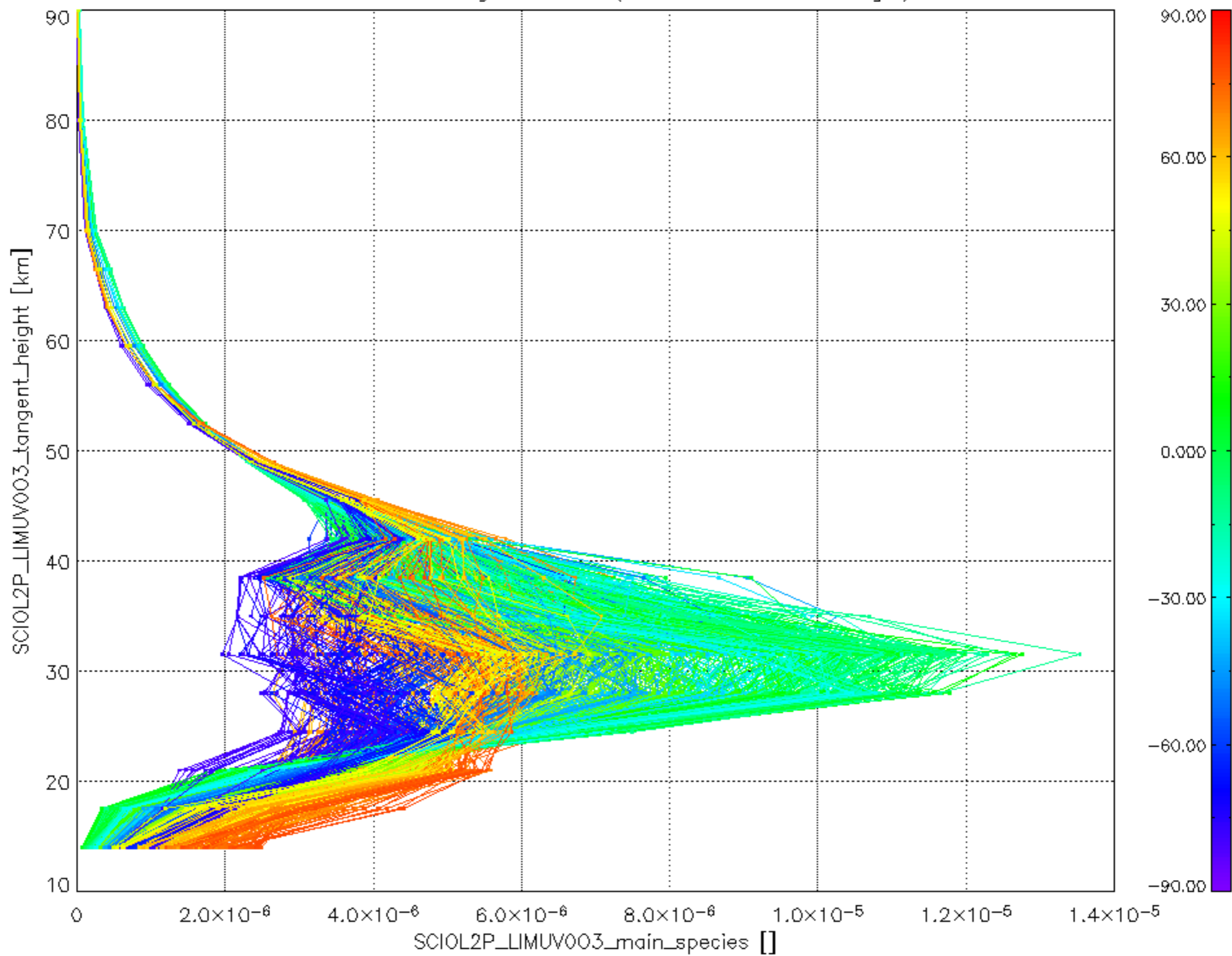
SCIOL2P_NADUV1NO2_amf_gr for 11MAR2008 00:00:00 to 12MAR2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 11MAR2008 00:00:00 to 12MAR2008 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).

