

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	1.5 (01-07-2008)
Time of report generation	06JUL2008 06:02:32
Data source version	SCIA-OL/3.01-R
Processing scope for products	18JUN2008 00:00:00 to 19JUN2008 00:00:00
Start time of first product within scope	18JUN2008 00:00:48
Stop time of last product within scope	19JUN2008 00:24:50
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__2PRDPA20080618_000048_000033252069_00317_32936_1954.N1	18JUN2008 00:00:48	18JUN2008 00:56:14	0	GOOD
1	SCI_OL__2PRDPA20080618_014124_000033122069_00318_32937_1956.N1	18JUN2008 01:41:24	18JUN2008 02:36:37	0	GOOD
2	SCI_OL__2PRDPA20080618_032200_000033252069_00319_32938_1958.N1	18JUN2008 03:22:00	18JUN2008 04:17:25	0	GOOD
3	SCI_OL__2PRDPA20080618_050236_000033122069_00320_32939_1963.N1	18JUN2008 05:02:36	18JUN2008 05:57:49	0	GOOD
4	SCI_OL__2PRDPA20080618_064312_000033252069_00321_32940_1965.N1	18JUN2008 06:43:12	18JUN2008 07:38:37	0	GOOD
5	SCI_OL__2PRDPA20080618_082347_000033122069_00322_32941_2005.N1	18JUN2008 08:23:47	18JUN2008 09:19:00	0	GOOD
6	SCI_OL__2PRDPA20080618_100423_000033252069_00323_32942_2006.N1	18JUN2008 10:04:23	18JUN2008 10:59:49	0	GOOD
7	SCI_OL__2PRDPA20080618_114459_000033122069_00324_32943_2003.N1	18JUN2008 11:44:59	18JUN2008 12:40:12	0	GOOD
8	SCI_OL__2PRDPA20080618_132535_000033252069_00325_32944_2027.N1	18JUN2008 13:25:35	18JUN2008 14:21:00	0	GOOD
9	SCI_OL__2PRDPA20080618_150611_000033122069_00326_32945_2028.N1	18JUN2008 15:06:11	18JUN2008 16:01:24	0	GOOD
10	SCI_OL__2PRDPA20080618_164647_000033252069_00327_32946_2029.N1	18JUN2008 16:46:47	18JUN2008 17:42:12	0	GOOD
11	SCI_OL__2PRDPA20080618_182639_000033712069_00328_32947_2030.N1	18JUN2008 18:26:39	18JUN2008 19:22:50	0	GOOD
12	SCI_OL__2PRDPA20080618_233329_000030812069_00331_32950_2036.N1	18JUN2008 23:33:29	19JUN2008 00:24:50	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: 124597

Total number of cloud data DSRs with good quality flag (=0): 124597 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	124597	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	124597	0.17696	0.12500	0.12500	0.25000	0.061606	s
CL_FRAC	124597	0.32141	0.27074	0.0000	1.0000	0.28870	-
CL_FRAC_ERR	124597	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	124597	5.6629	4.0000	4.0000	8.0000	1.9714	
PMD_READ_CL[0]	124597	0.20027	0.0000	0.0000	8.0000	1.0582	-

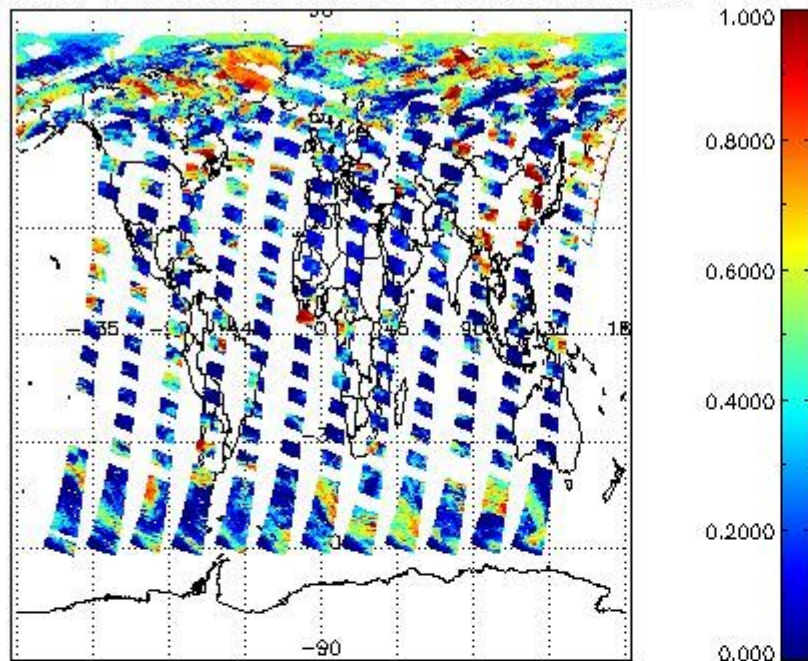
PMD_READ_CL[1]	124597	1.6384	0.0000	0.0000	8.0000	2.5945	-
CL_TOP_HEIGHT	109811	3.2348	1.1954	0.0000	17.000	3.8012	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	109811	57.966	82.425	0.0000	101.00	44.780	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	124597	11100000	11100000	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	124597	11001100	11000100	11000000	11100000	3522.7	flags
AERO_ABSO_IND	124597	3.1448	3.6254	-1.7858	13.515	2.2743	
AERO_IND_DIAG	124597	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	124597	01010111	00000000	00000000	11000000	24484.	flags

Time and geolocation plots:

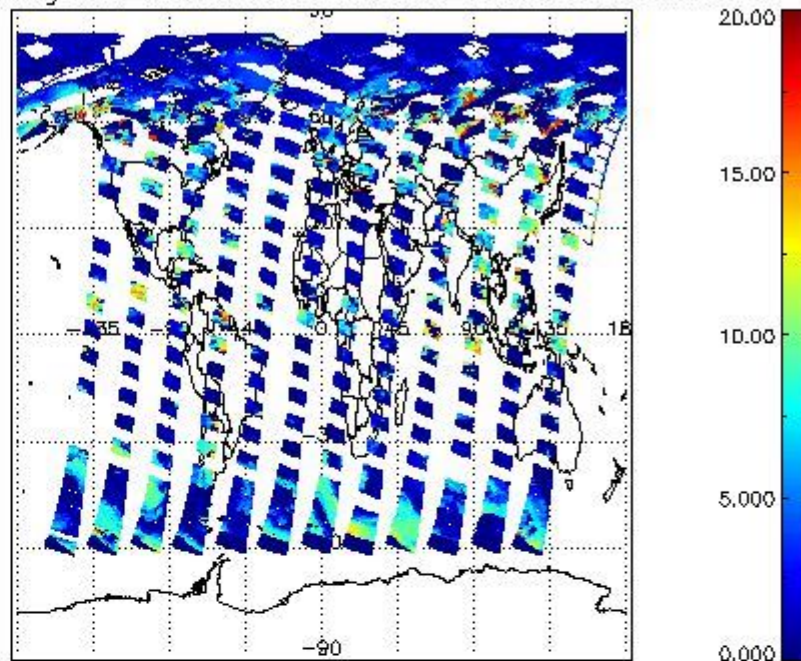
Plots are available for the following parameters:

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

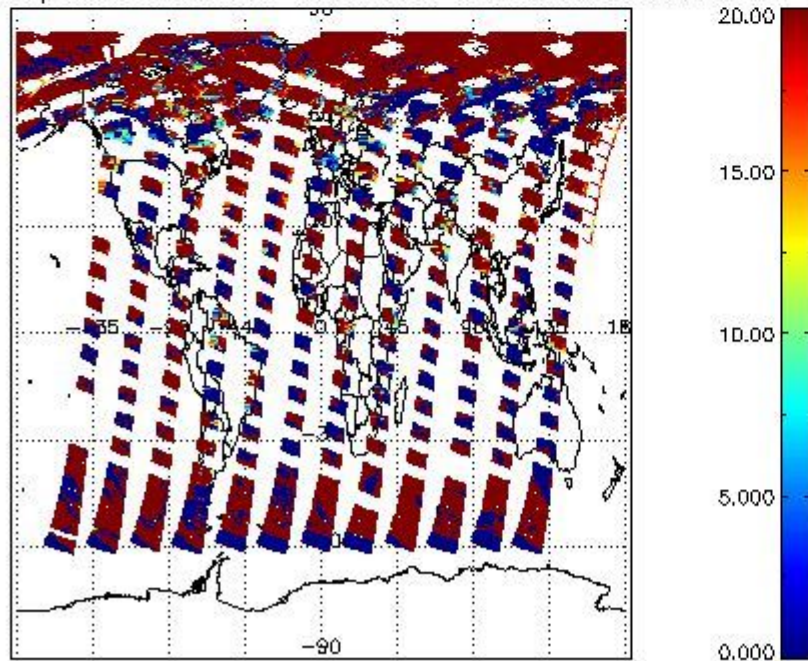
cL_frac for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



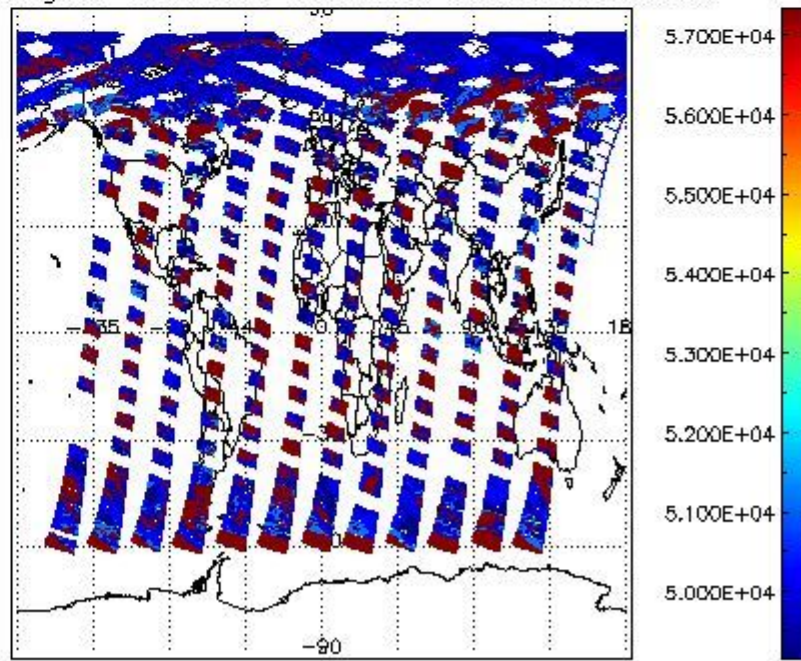
cL_top_height for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



cL_opt_depth for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



cloud_flags for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



2.2.2 Nadir

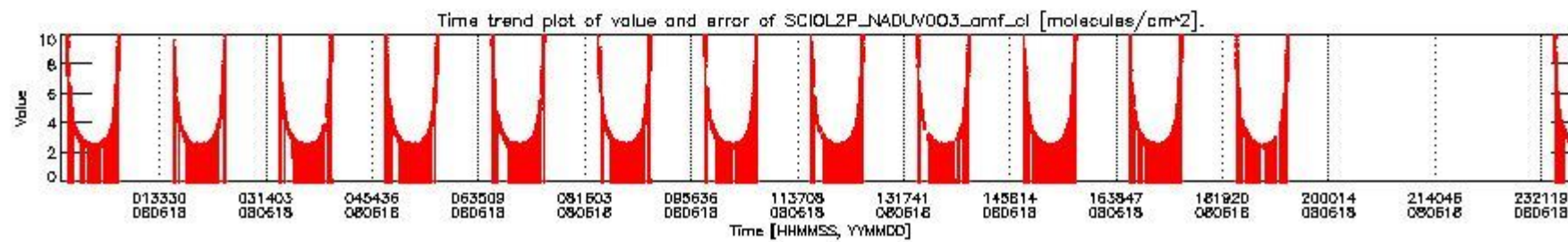
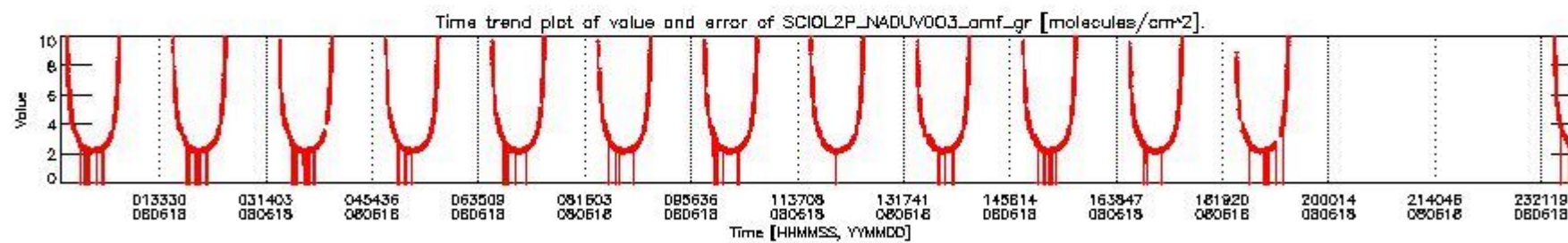
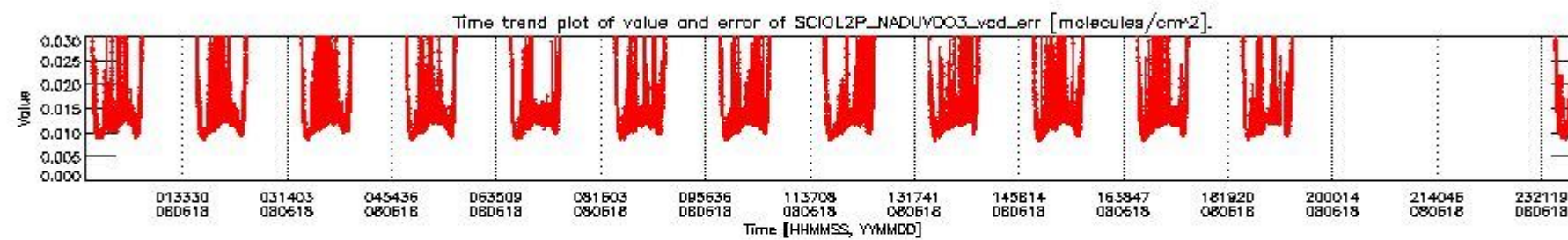
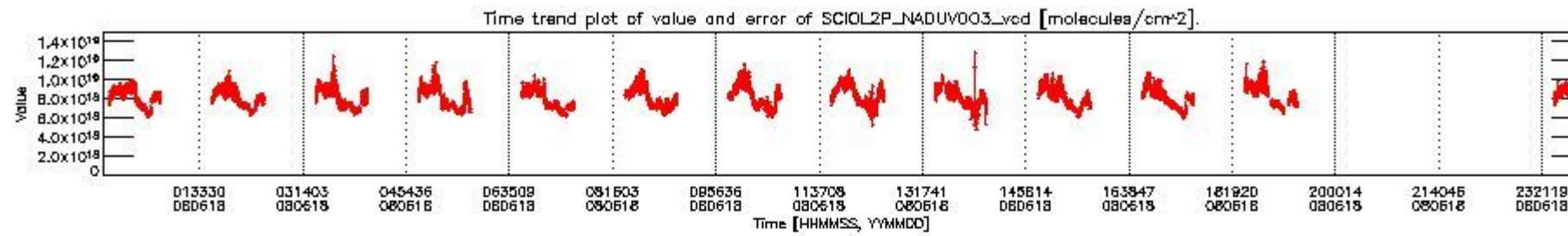
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

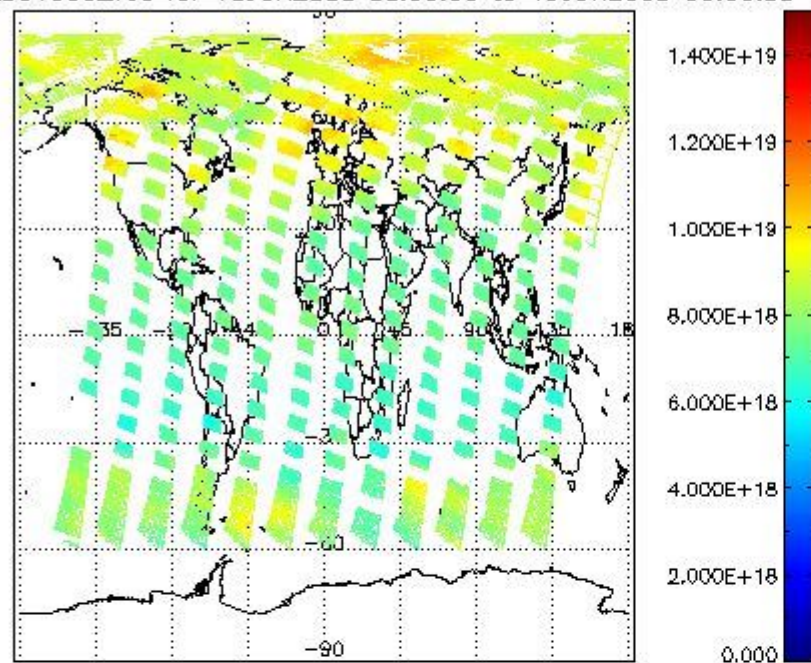
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

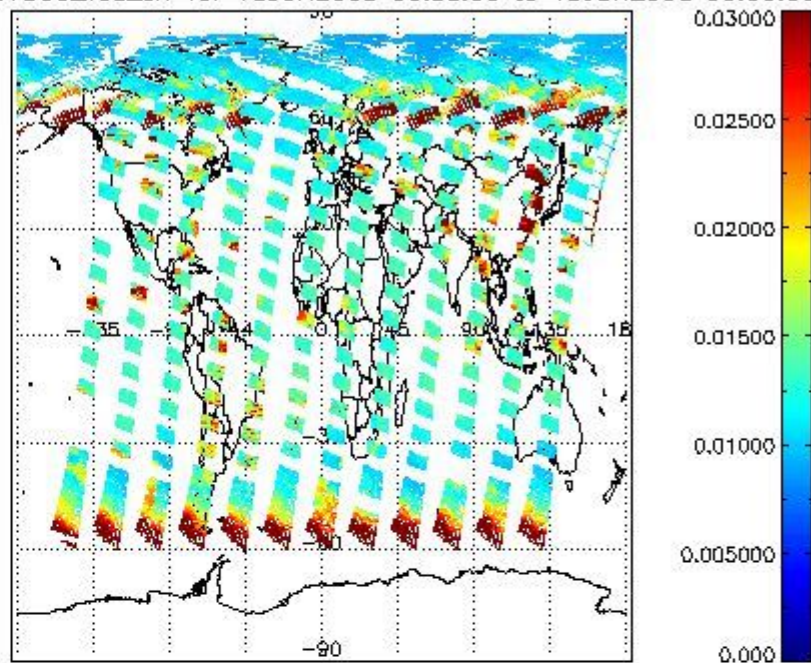
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



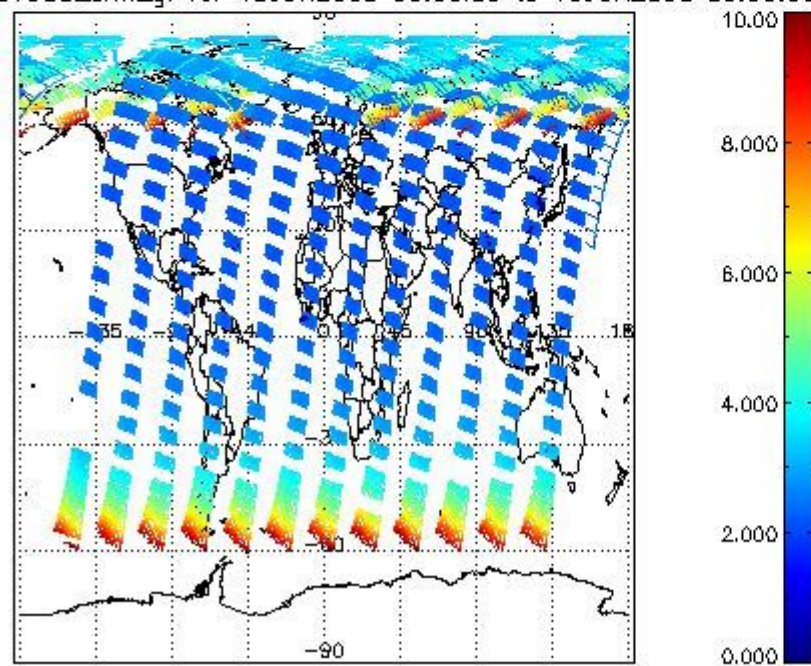
SCIOL2P_NADUV003_vcd for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



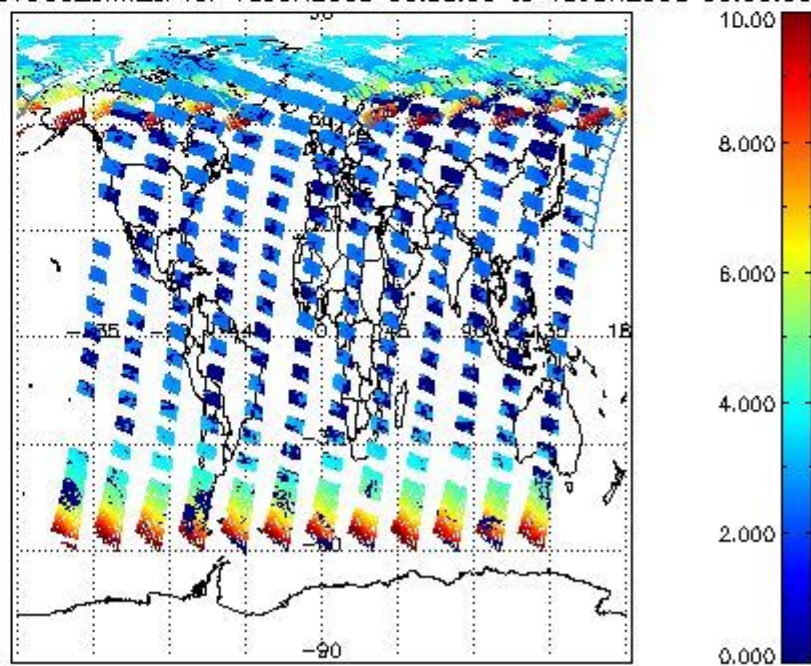
SCIOL2P_NADUV003_vcd_err for 18JUN2008 00:00:00 to 19JUN2008 00:00:00

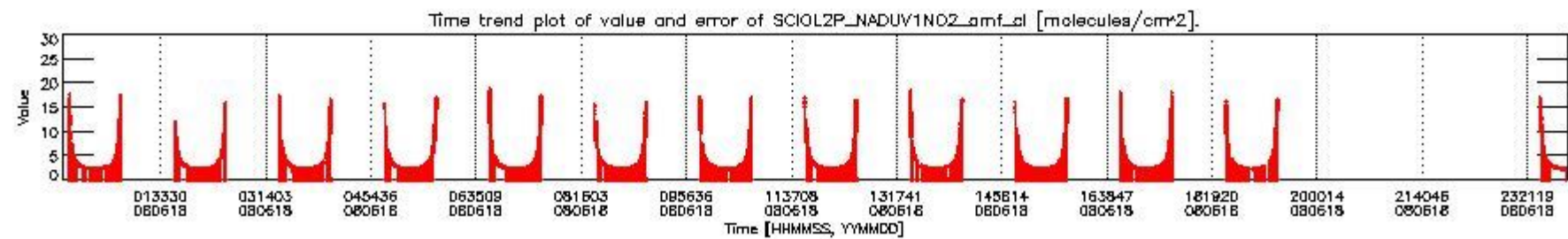
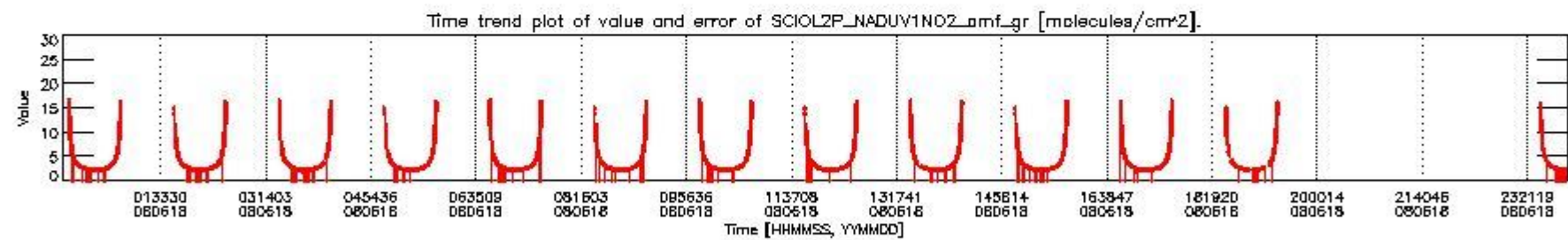
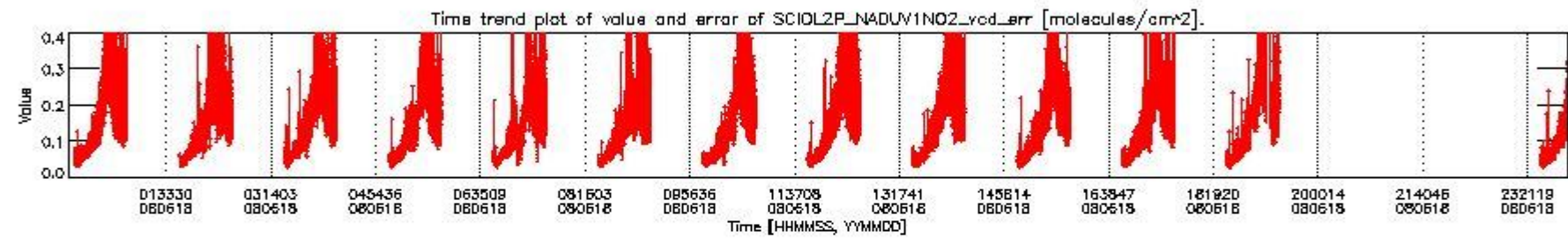
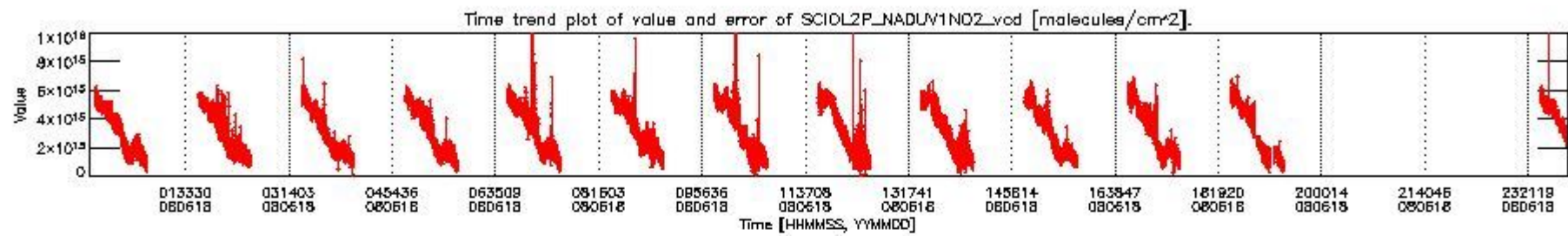


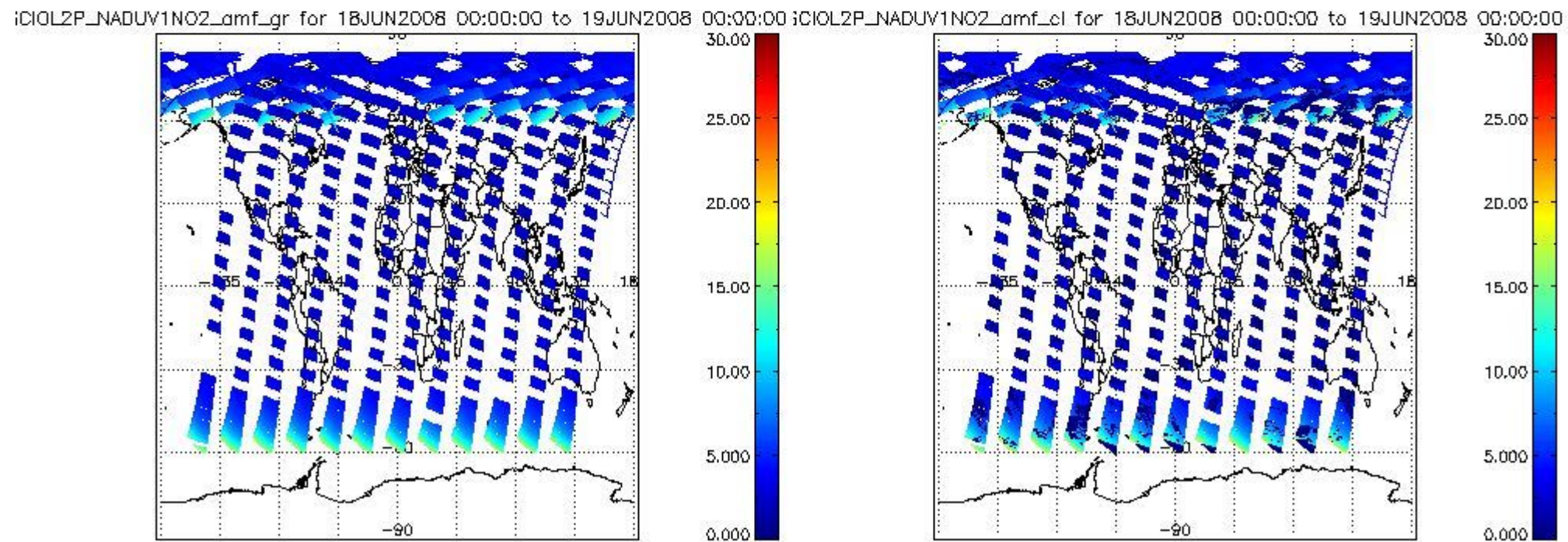
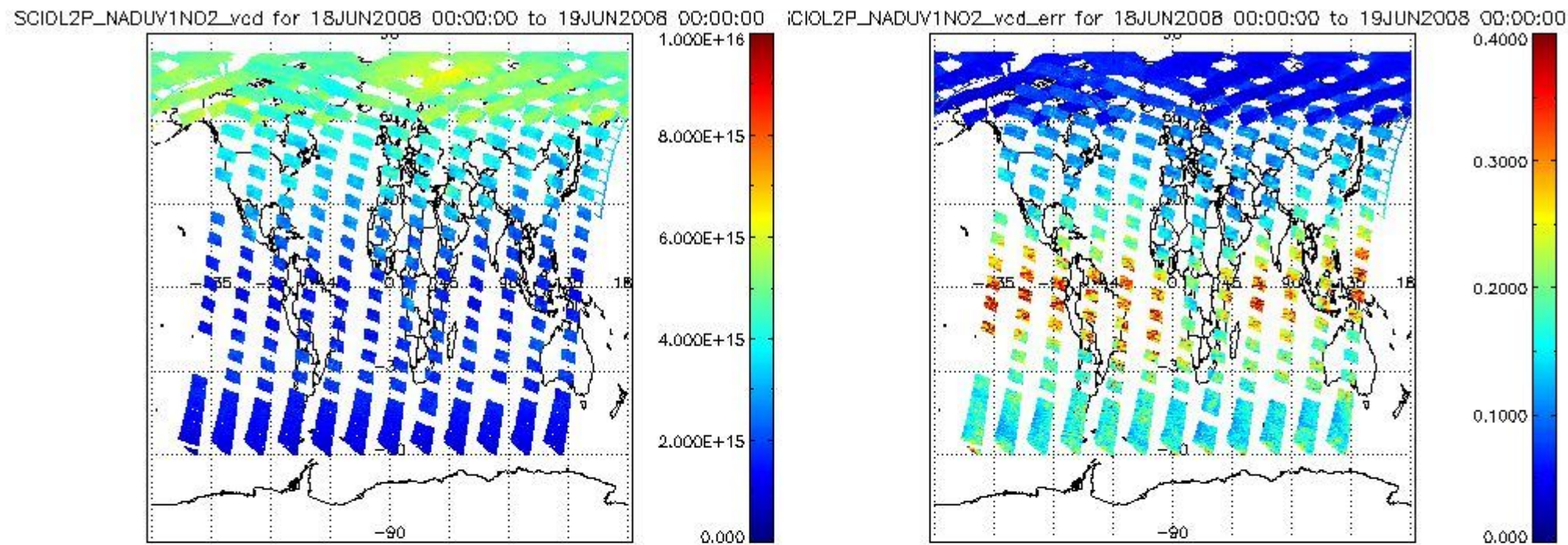
SCIOL2P_NADUV003_amf_gr for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 18JUN2008 00:00:00 to 19JUN2008 00:00:00







2.2.3 Limb

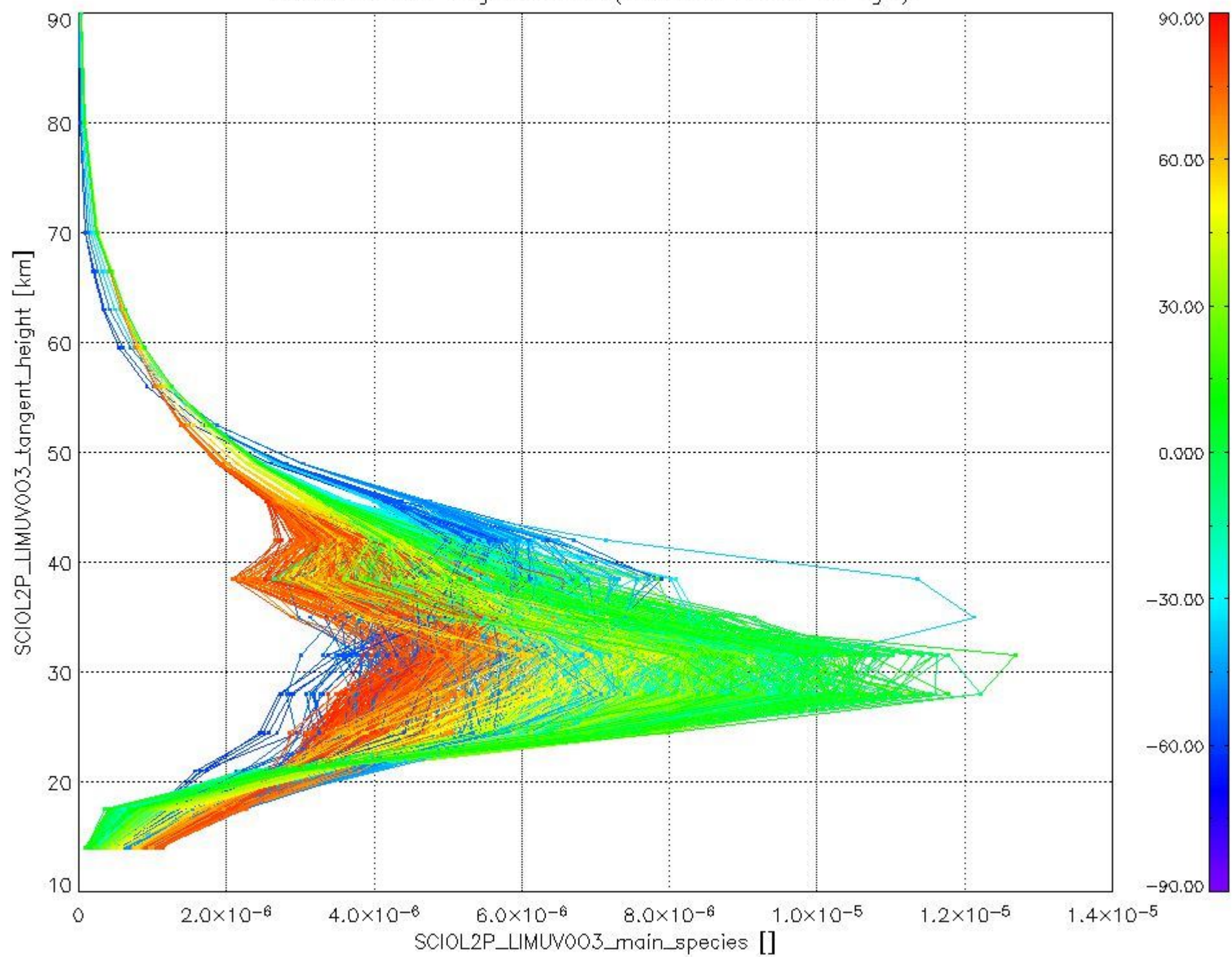
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

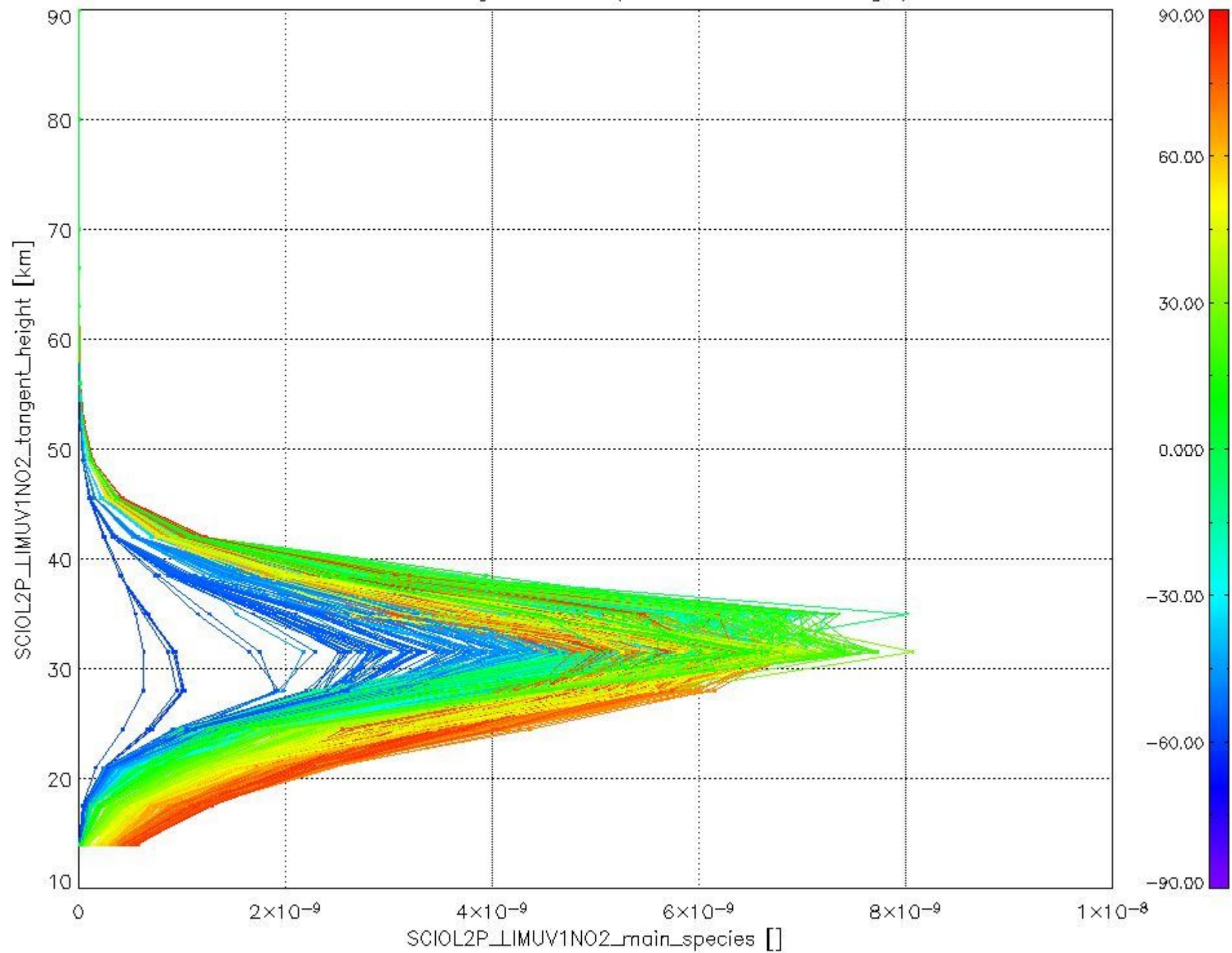
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



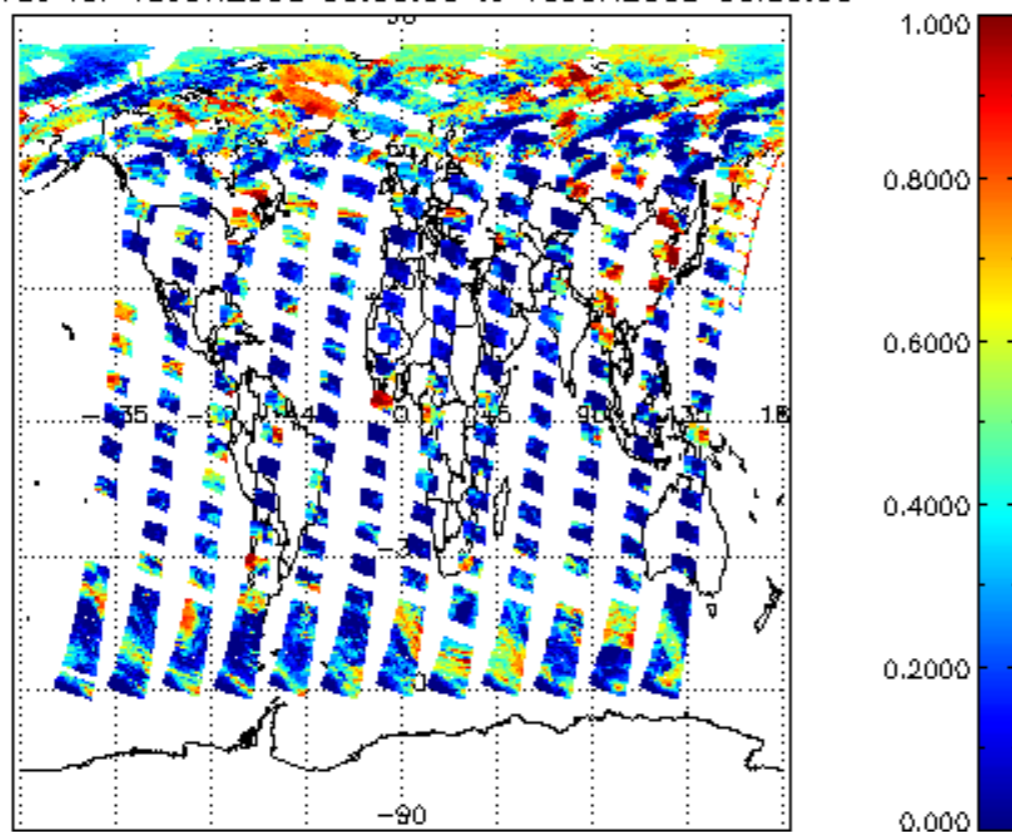
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



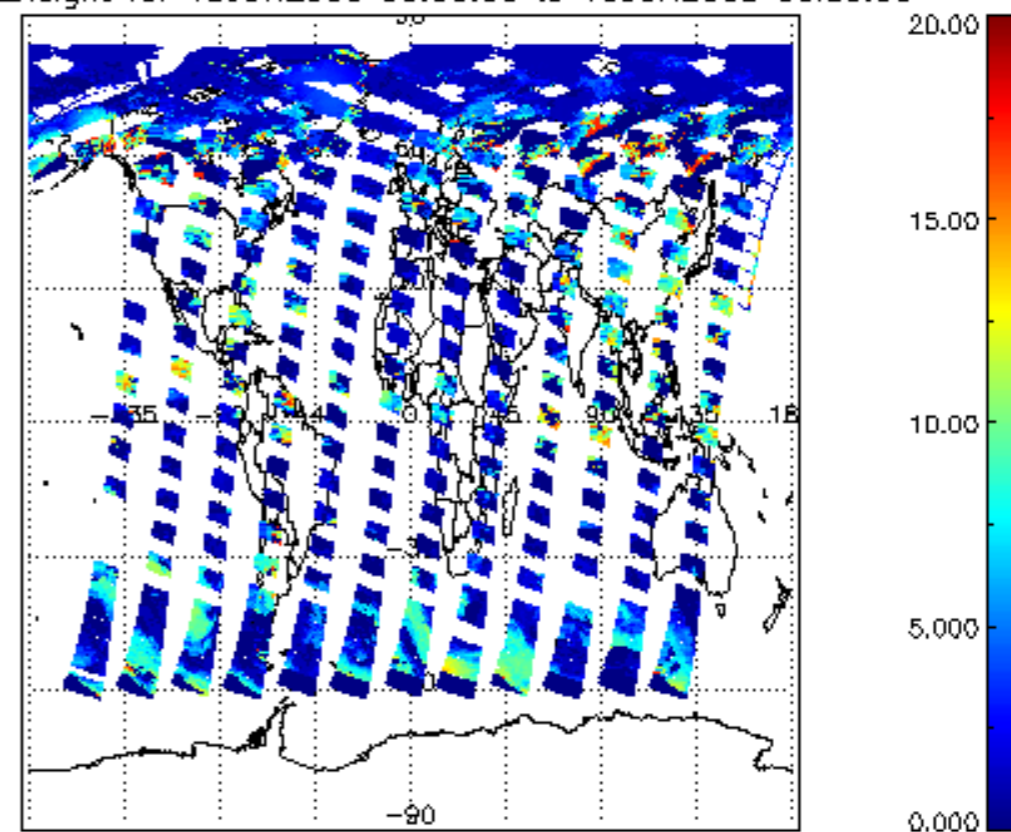
2.3 ADF monitoring

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

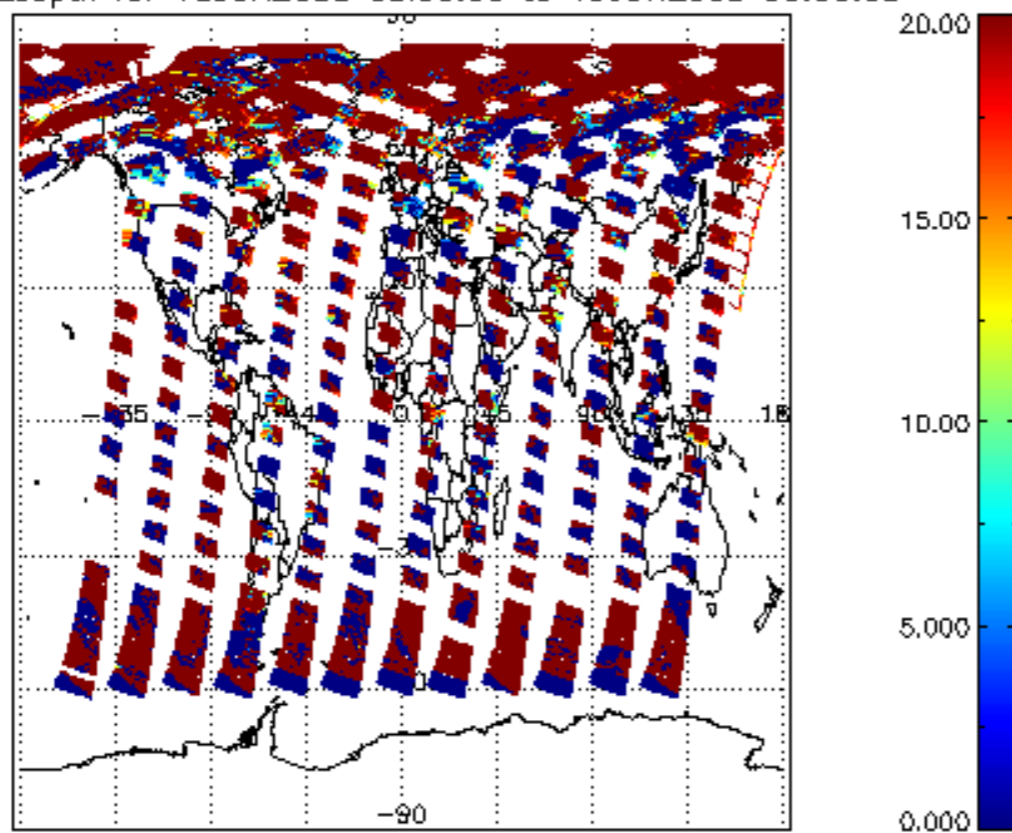
cl_frac for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



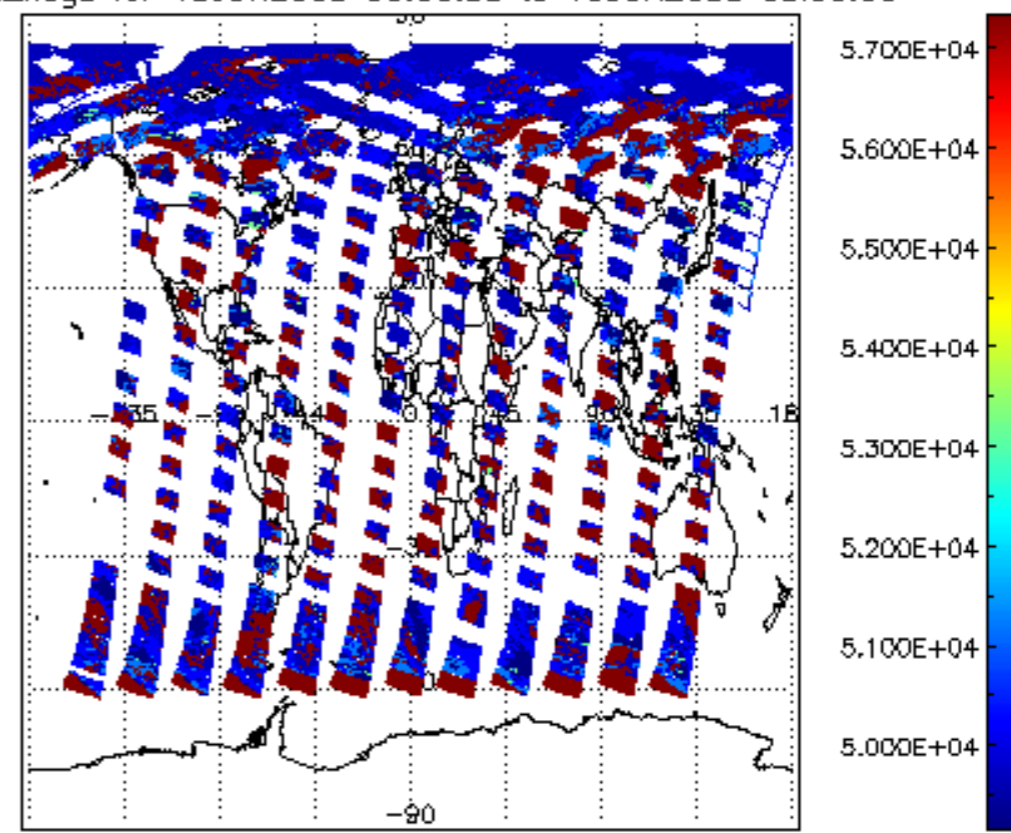
cl_top_height for 18JUN2008 00:00:00 to 19JUN2008 00:00:00

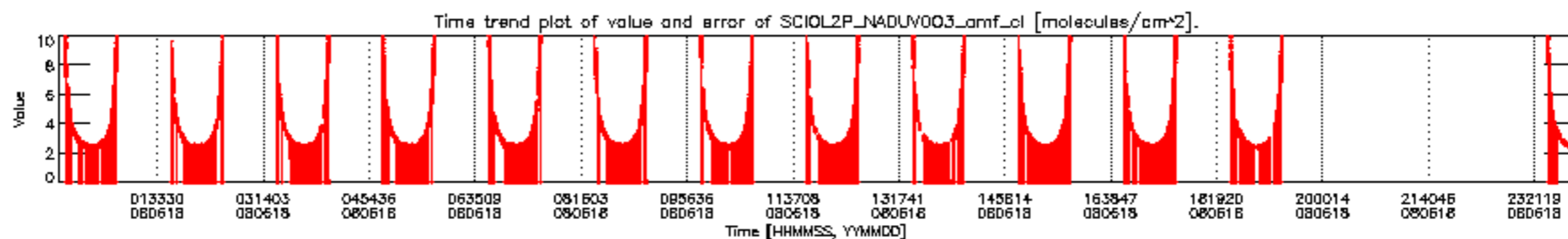
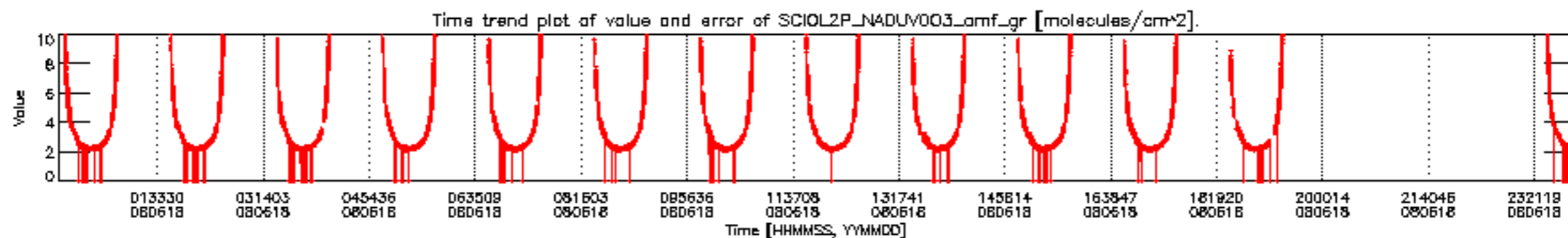
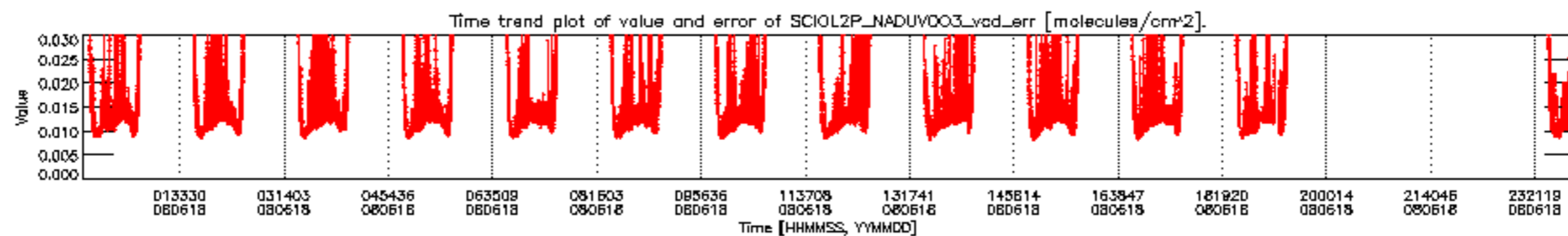
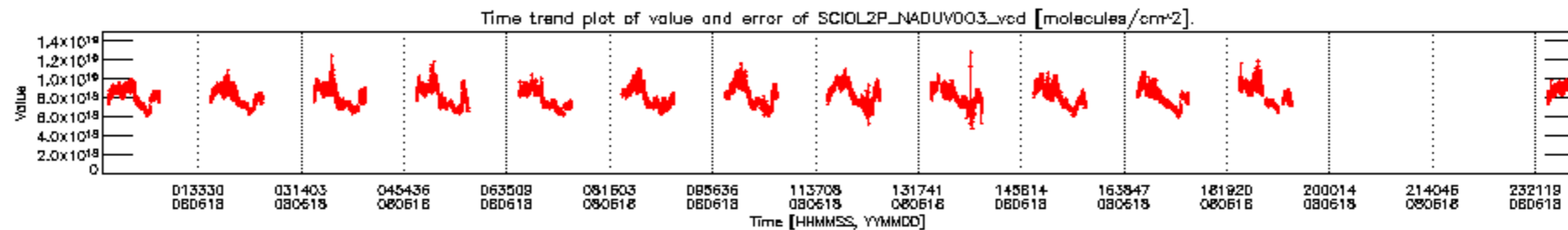


cl_opt_depth for 18JUN2008 00:00:00 to 19JUN2008 00:00:00

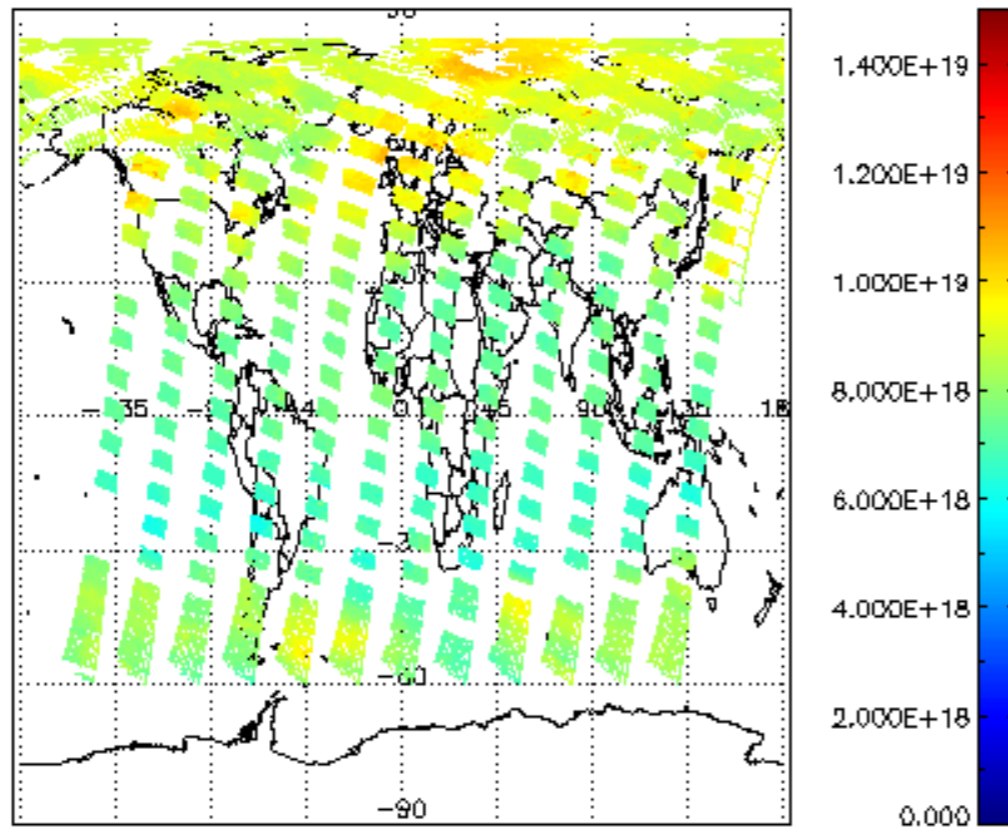


cloud_flags for 18JUN2008 00:00:00 to 19JUN2008 00:00:00

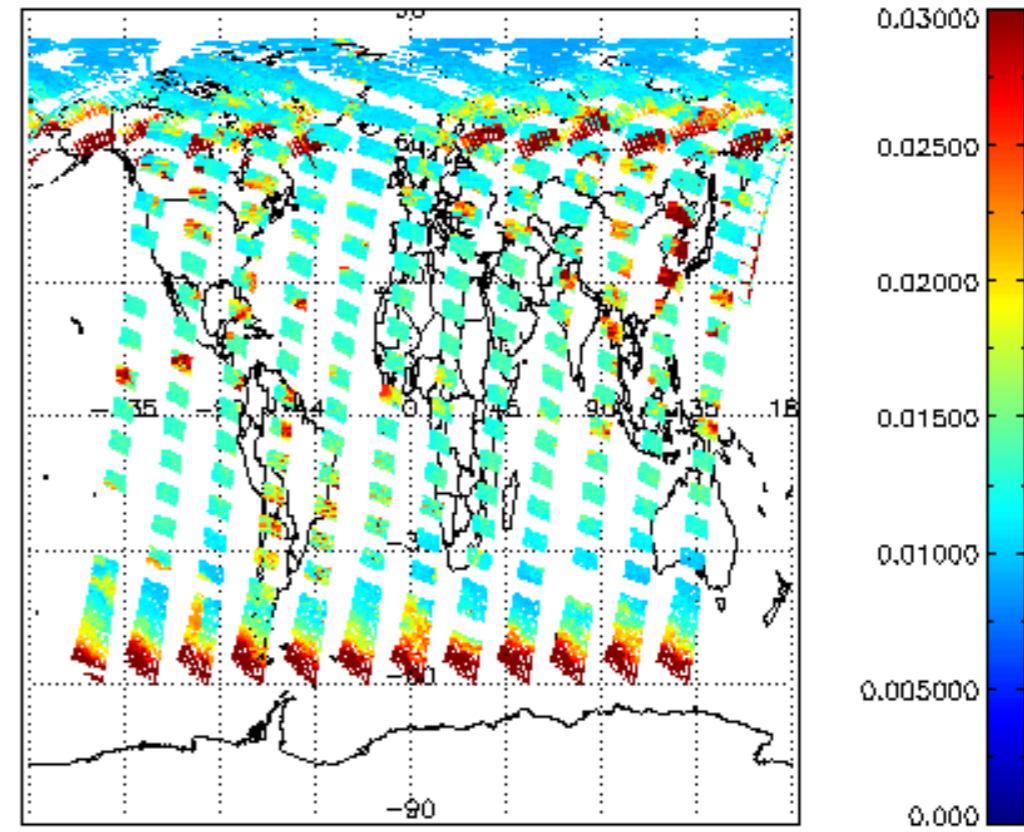




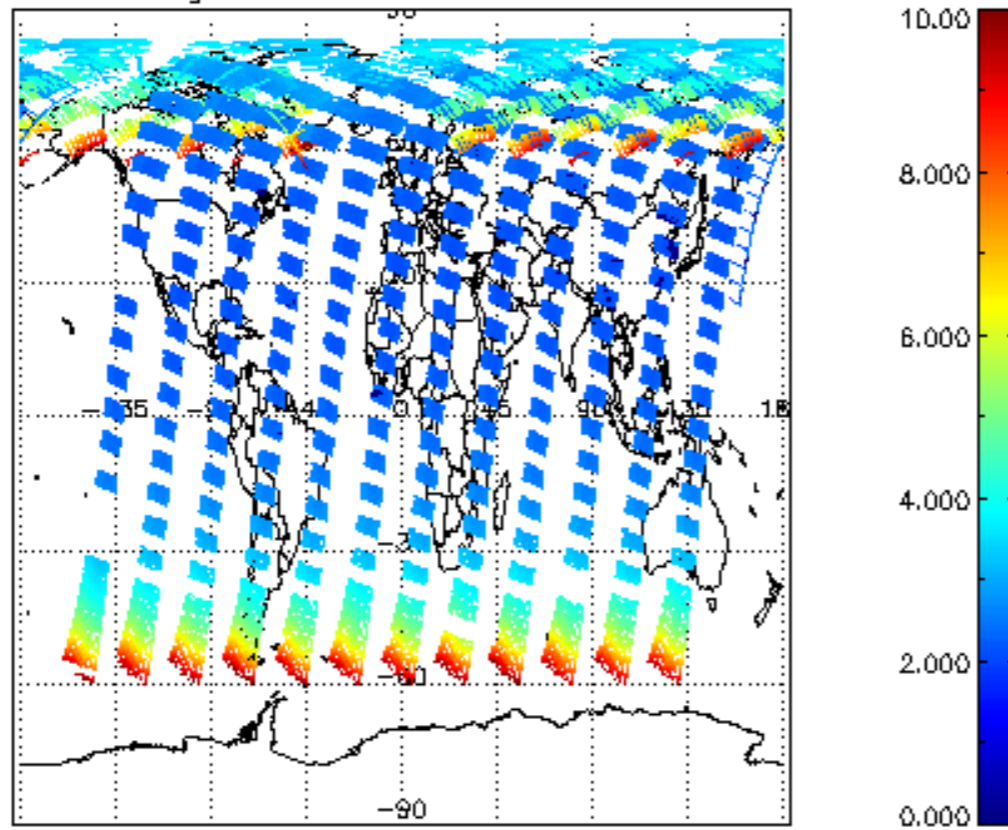
SCIOL2P_NADUV003_vcd for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



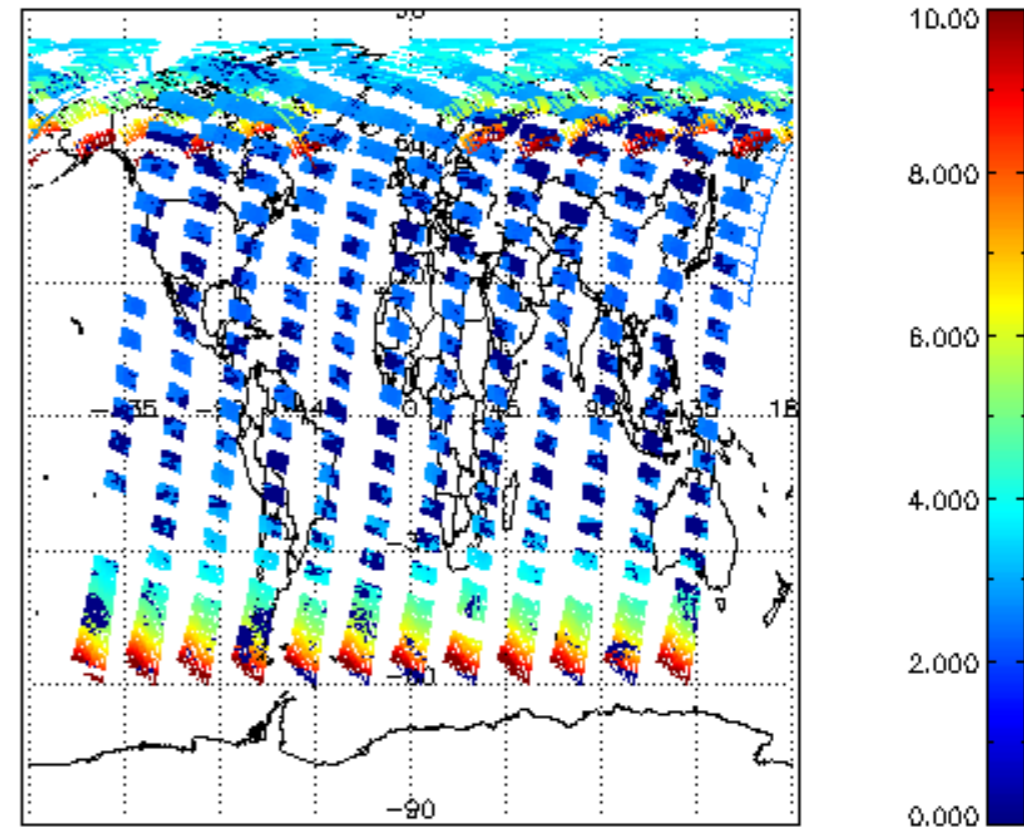
SCIOL2P_NADUV003_vcd_err for 18JUN2008 00:00:00 to 19JUN2008 00:00:00

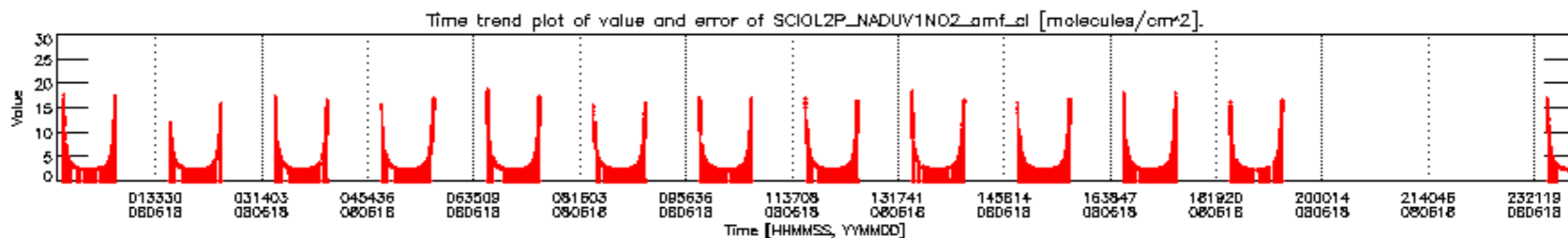
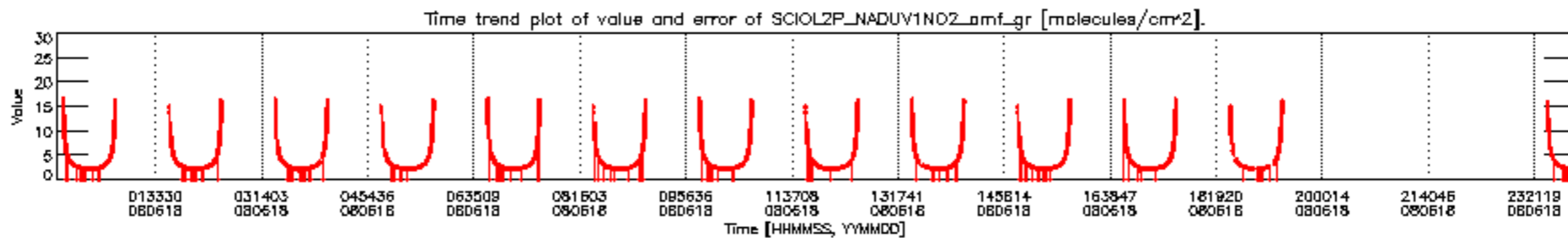
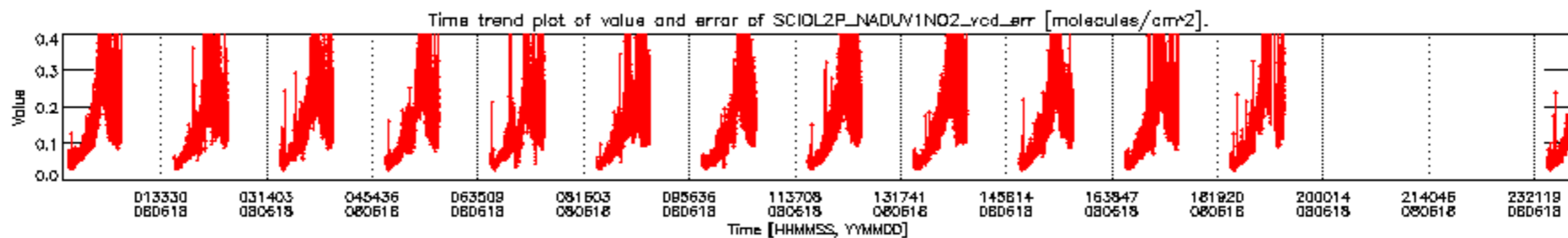
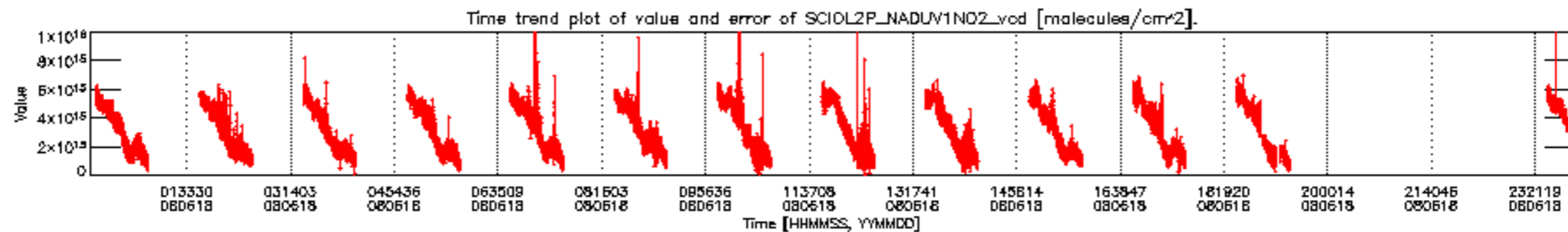


SCIOL2P_NADUV003_amf_gr for 18JUN2008 00:00:00 to 19JUN2008 00:00:00

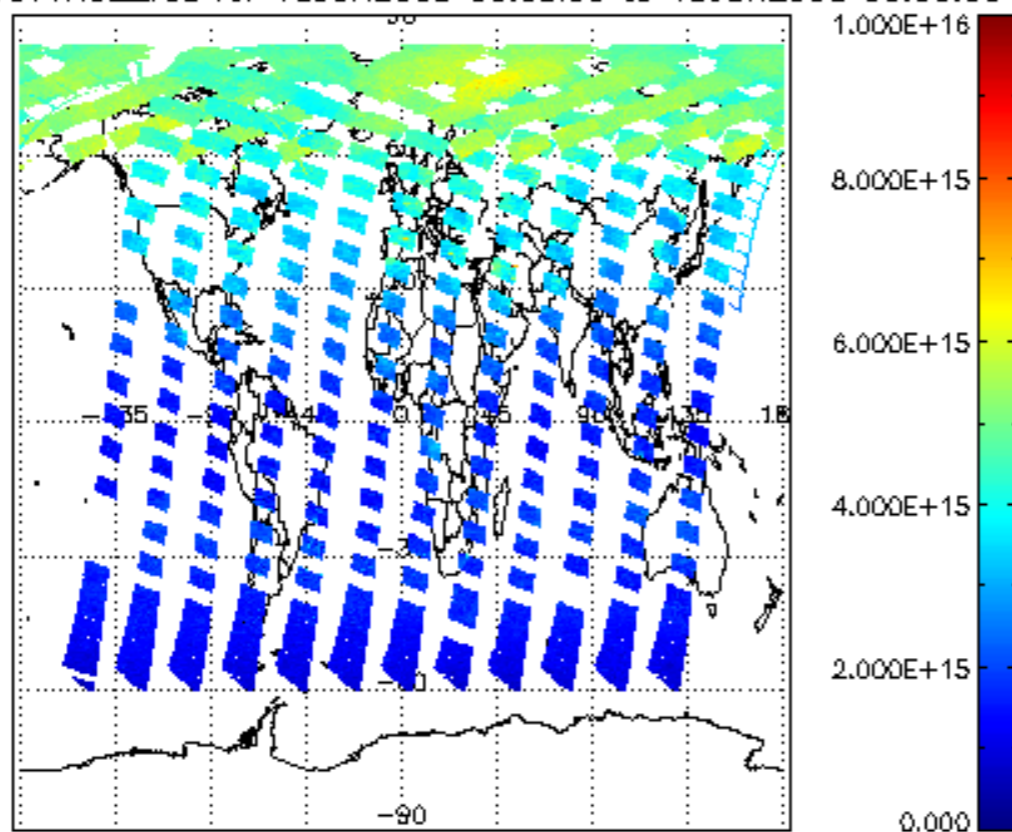


SCIOL2P_NADUV003_amf_cl for 18JUN2008 00:00:00 to 19JUN2008 00:00:00

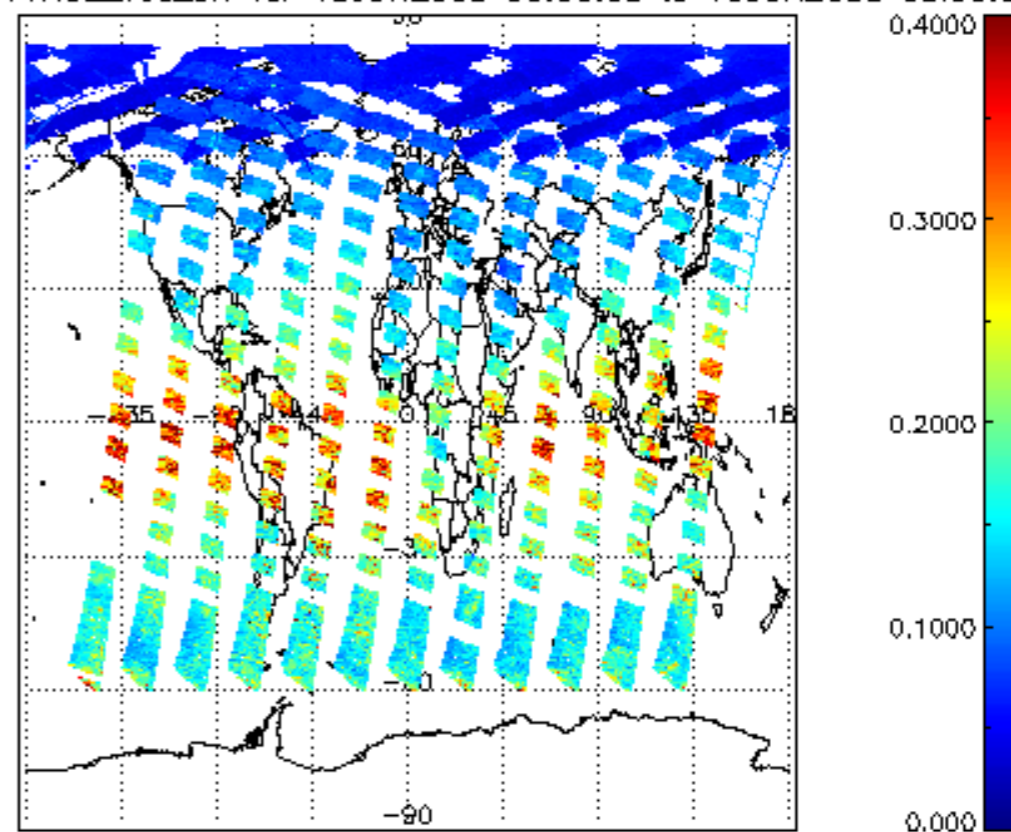




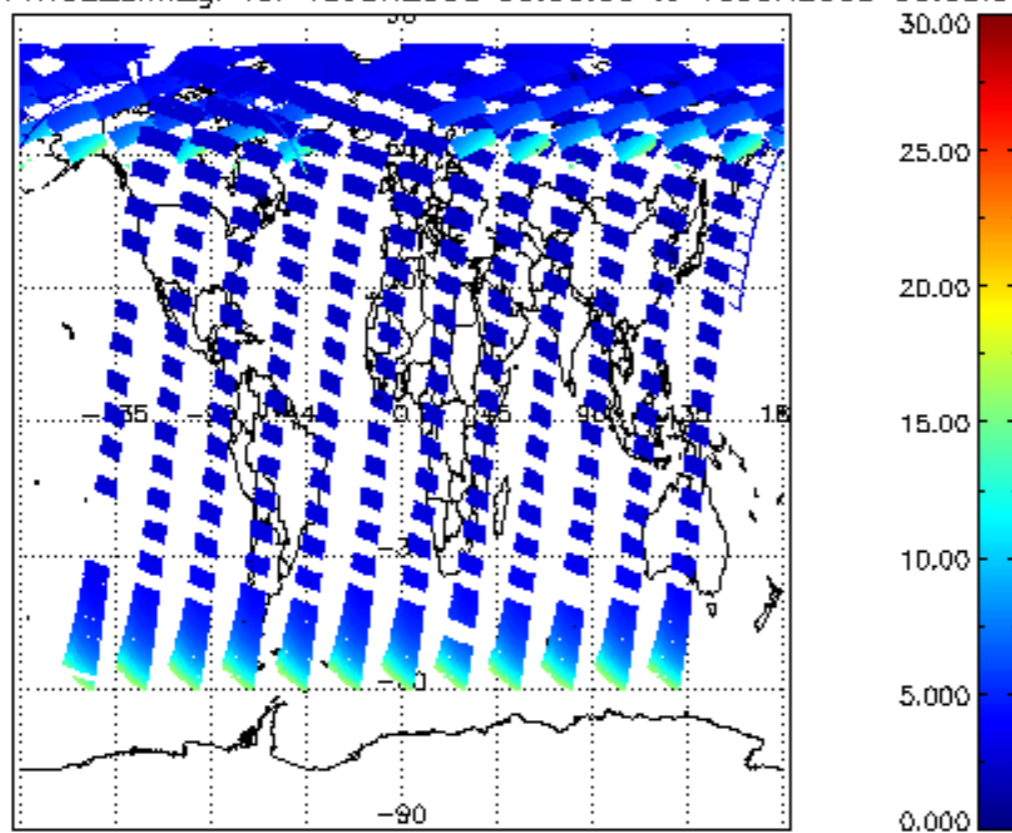
SCIOL2P_NADUV1NO2_vcd for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



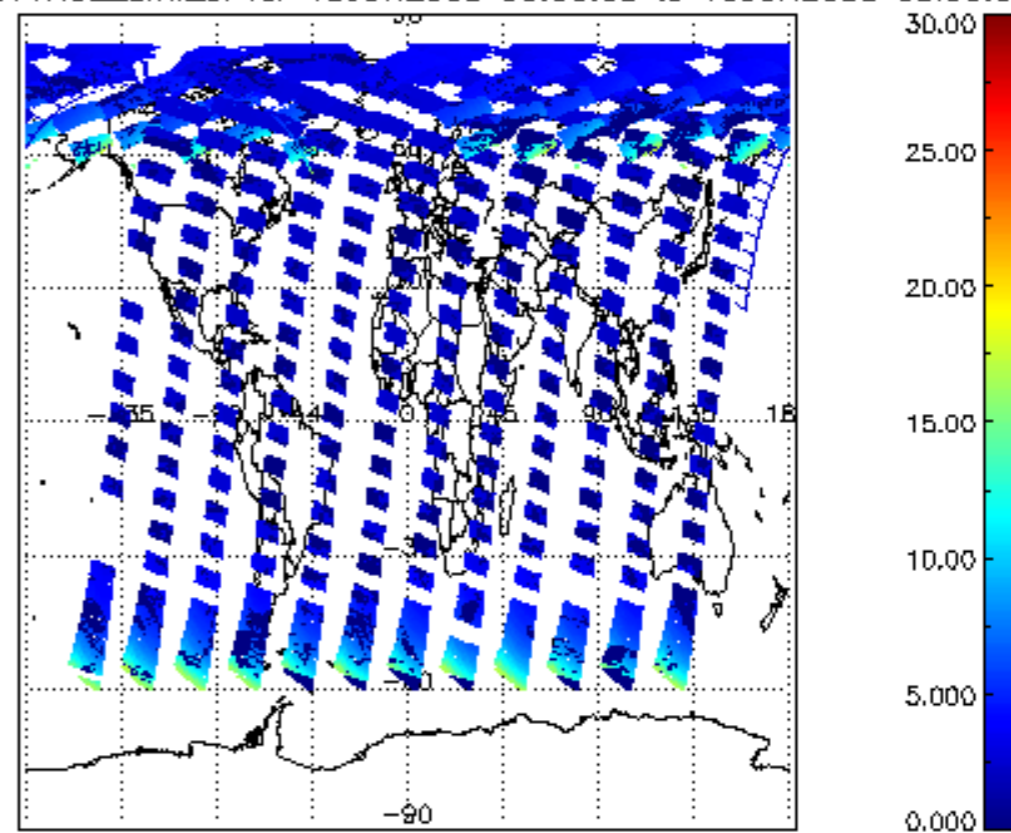
iCIOL2P_NADUV1NO2_vcd_err for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



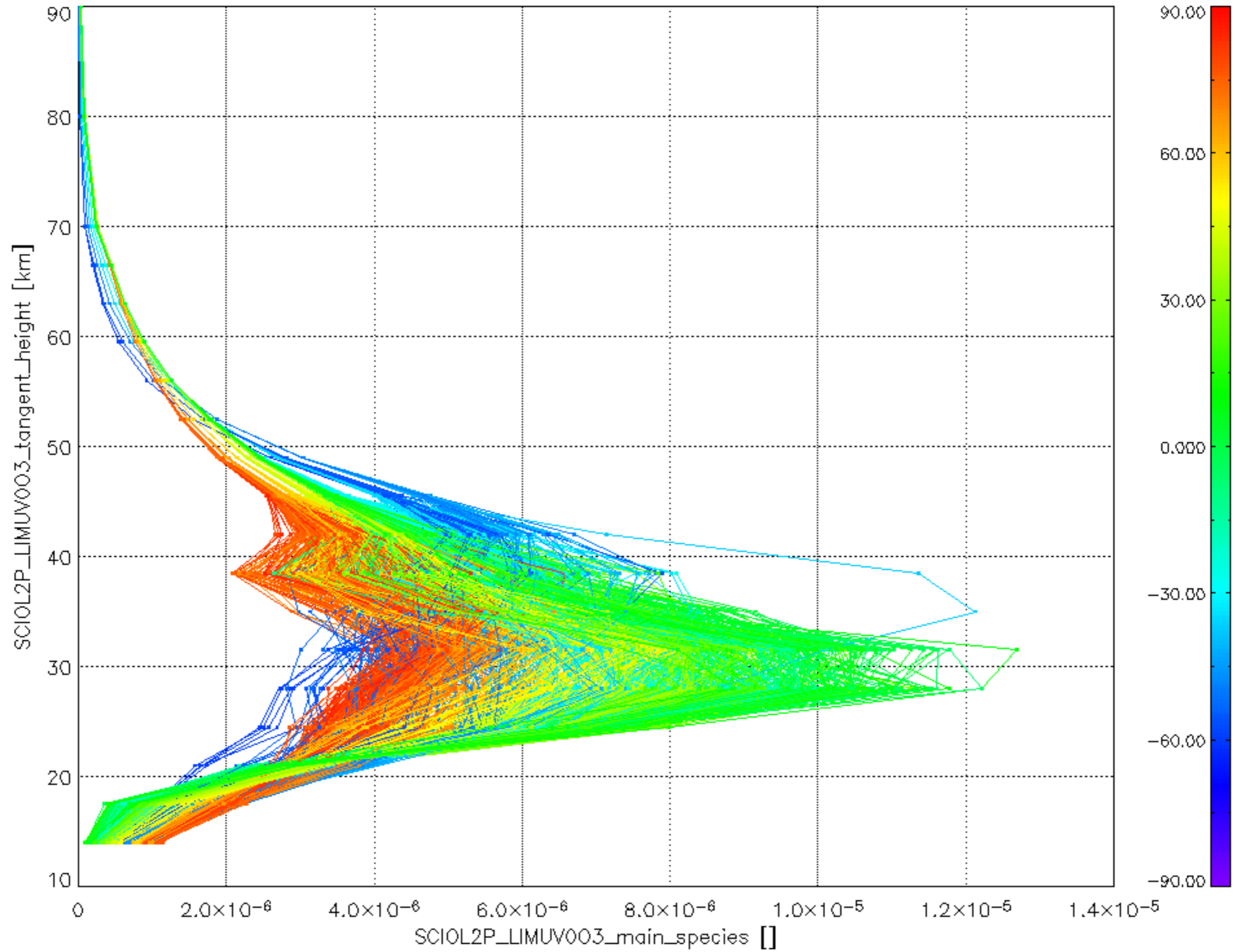
iCIOL2P_NADUV1NO2_amf_gr for 18JUN2008 00:00:00 to 19JUN2008 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 18JUN2008 00:00:00 to 19JUN2008 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).

