

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	07JUL2008 06:02:45
Data source version	SCIA-OL/3.01-R
Processing scope for products	19JUN2008 00:00:00 to 20JUN2008 00:00:00
Start time of first product within scope	18JUN2008 23:33:29
Stop time of last product within scope	19JUN2008 23:52:58
Total number of level 2 products	14
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_233329_000030812069_00331_32950_2036.N1	18JUN2008 23:33:29	19JUN2008 00:24:50	0	GOOD
1	SCI_OL__2PRDPA20080619_011342_000030812069_00332_32951_2039.N1	19JUN2008 01:13:42	19JUN2008 02:05:04	0	GOOD
2	SCI_OL__2PRDPA20080619_025022_000033252069_00333_32952_2041.N1	19JUN2008 02:50:22	19JUN2008 03:45:47	0	GOOD
3	SCI_OL__2PRDPA20080619_043058_000033122069_00334_32953_2043.N1	19JUN2008 04:30:58	19JUN2008 05:26:11	0	GOOD
4	SCI_OL__2PRDPA20080619_061134_000033252069_00335_32954_2044.N1	19JUN2008 06:11:34	19JUN2008 07:06:59	0	GOOD
5	SCI_OL__2PRDPA20080619_075210_000033122069_00336_32955_2047.N1	19JUN2008 07:52:10	19JUN2008 08:47:23	0	GOOD
6	SCI_OL__2PRDPA20080619_111321_000033122069_00338_32957_2102.N1	19JUN2008 11:13:21	19JUN2008 12:08:34	0	GOOD
7	SCI_OL__2PRDPA20080619_125357_000033252069_00339_32958_2104.N1	19JUN2008 12:53:57	19JUN2008 13:49:23	0	GOOD
8	SCI_OL__2PRDPA20080619_143433_000033122069_00340_32959_2106.N1	19JUN2008 14:34:33	19JUN2008 15:29:46	0	GOOD
9	SCI_OL__2PRDPA20080619_161509_000033252069_00341_32960_2107.N1	19JUN2008 16:15:09	19JUN2008 17:10:35	0	GOOD
10	SCI_OL__2PRDPA20080619_175504_000033552069_00342_32961_2108.N1	19JUN2008 17:55:04	19JUN2008 18:51:00	0	GOOD
11	SCI_OL__2PRDPA20080619_193540_000033682069_00343_32962_2116.N1	19JUN2008 19:35:40	19JUN2008 20:31:49	0	GOOD
12	SCI_OL__2PRDPA20080619_211657_000033122069_00344_32963_2120.N1	19JUN2008 21:16:57	19JUN2008 22:12:10	0	GOOD
13	SCI_OL__2PRDPA20080619_225733_000033252069_00345_32964_2161.N1	19JUN2008 22:57:33	19JUN2008 23:52:58	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: 139824

Total number of cloud data DSRs with good quality flag (=0): 139824 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	139824	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	139824	0.18027	0.12500	0.12500	0.25000	0.062081	s
CL_FRAC	139824	0.30521	0.25247	0.0000	1.0000	0.28373	-
CL_FRAC_ERR	139824	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	139824	5.7686	4.0000	4.0000	8.0000	1.9866	

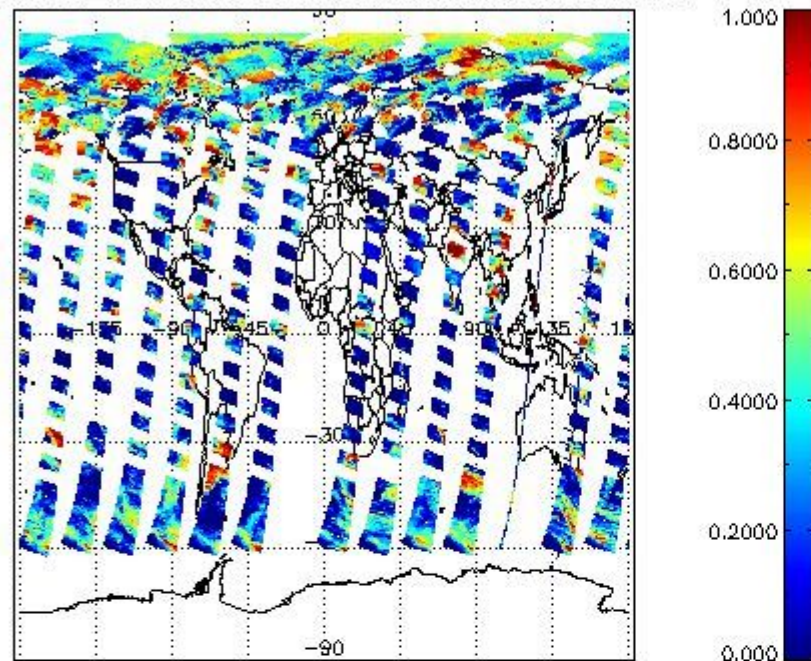
PMD_READ_CL[0]	139824	0.19673	0.0000	0.0000	8.0000	1.0560	-
PMD_READ_CL[1]	139824	1.7940	0.0000	0.0000	8.0000	2.7946	-
CL_TOP_HEIGHT	124197	3.1643	1.1420	0.0000	17.000	3.8709	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	124197	55.821	56.887	0.0000	101.00	44.916	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	139824	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	139824	11001100	11000100	11000000	11100000	3557.6	flags
AERO_ABSO_IND	139824	3.1708	3.6082	-1.3294	13.154	2.2277	
AERO_IND_DIAG	139824	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	139824	01011011	00000000	00000000	11000000	24550.	flags

Time and geolocation plots:

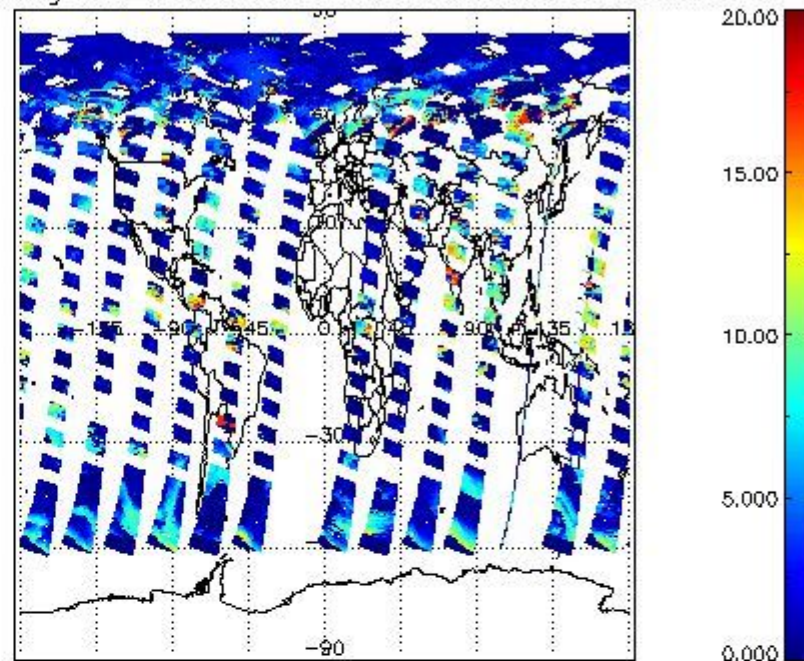
Plots are available for the following parameters:

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

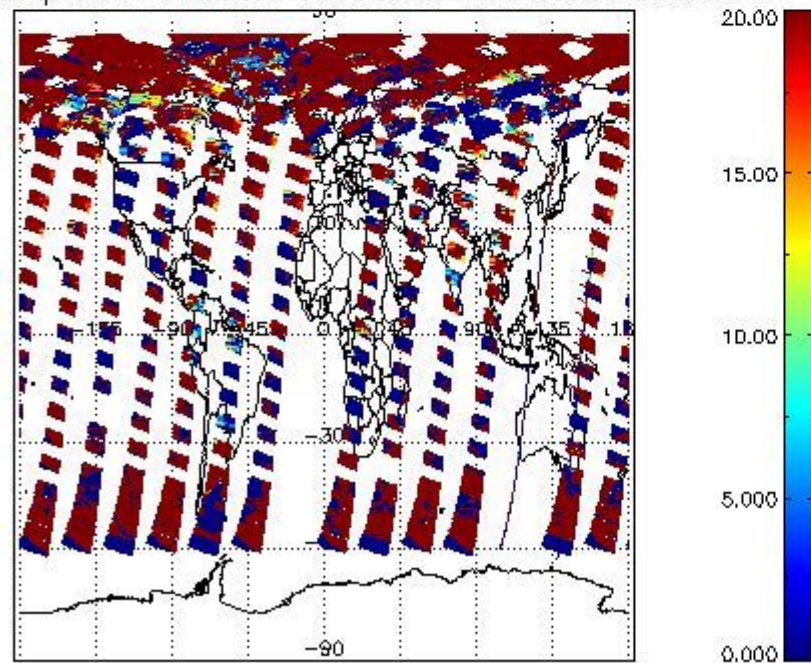
cL_frac for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



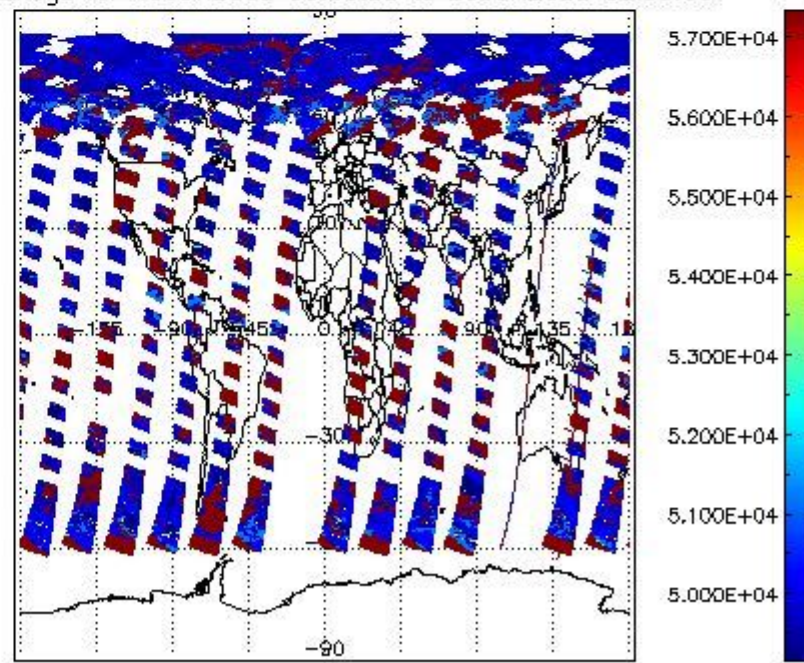
cL_top_height for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



cL_opt_depth for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



cloud_flags for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



2.2.2 Nadir

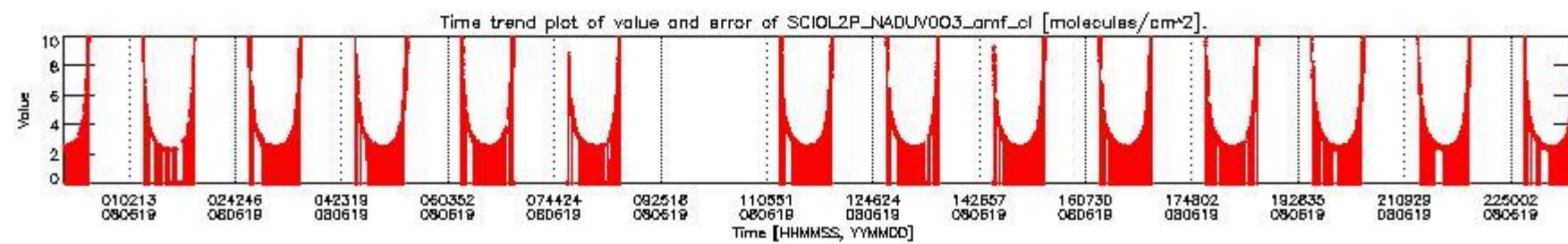
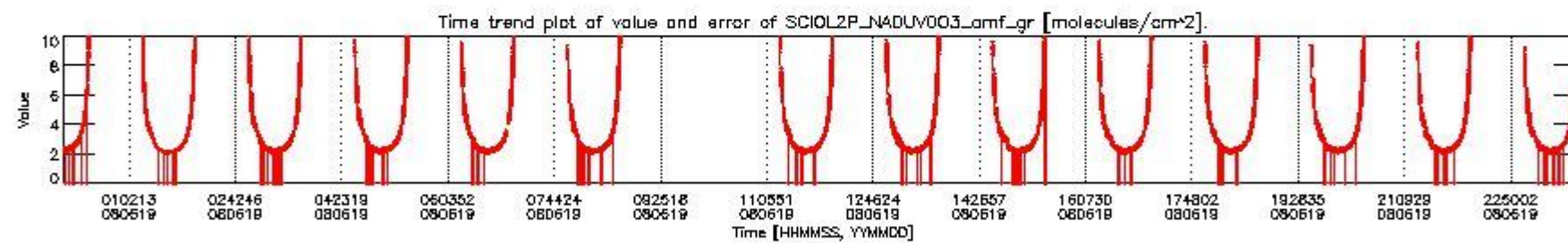
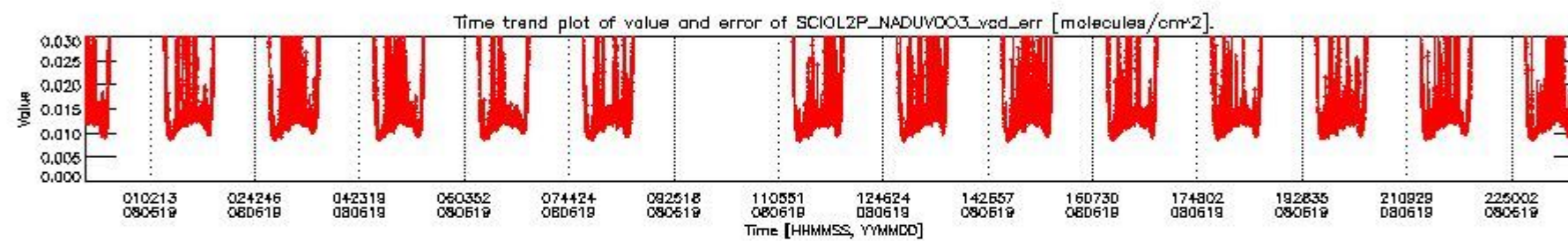
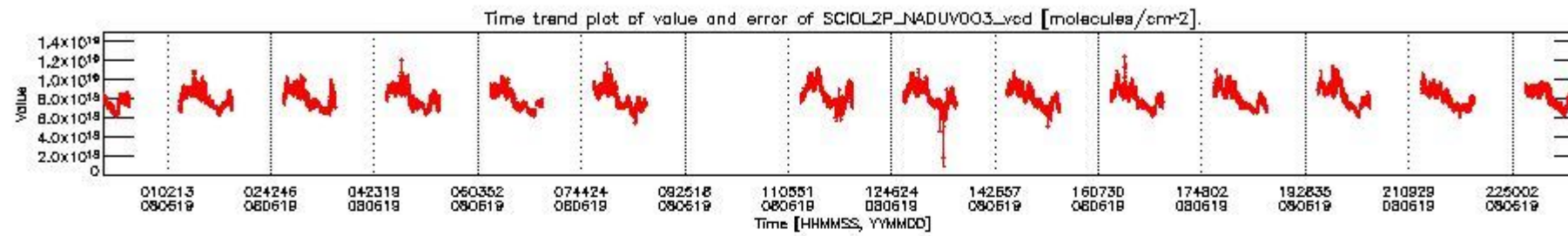
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

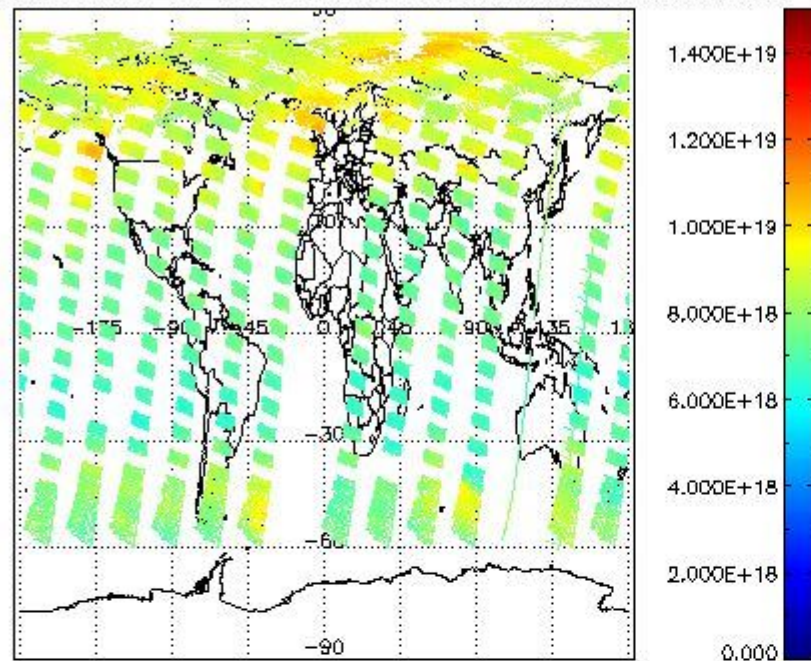
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

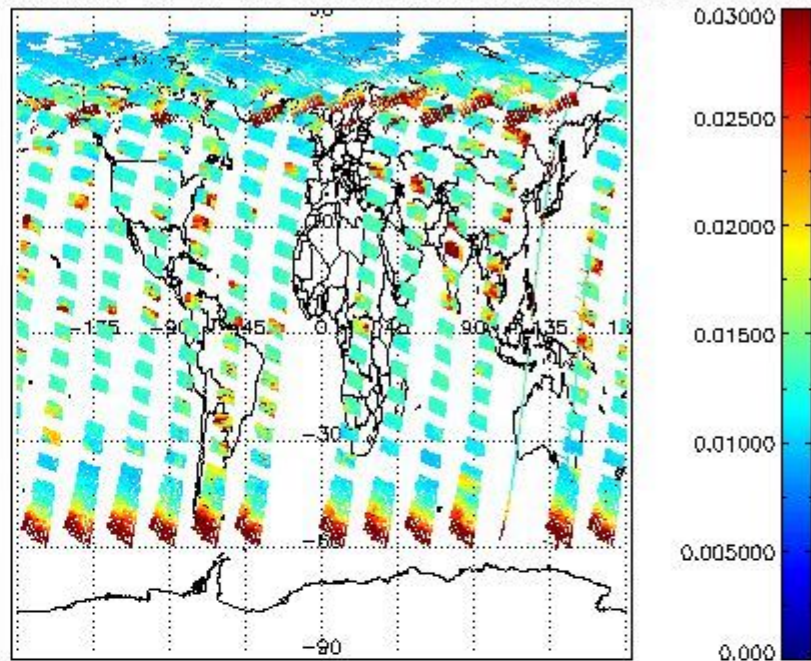
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



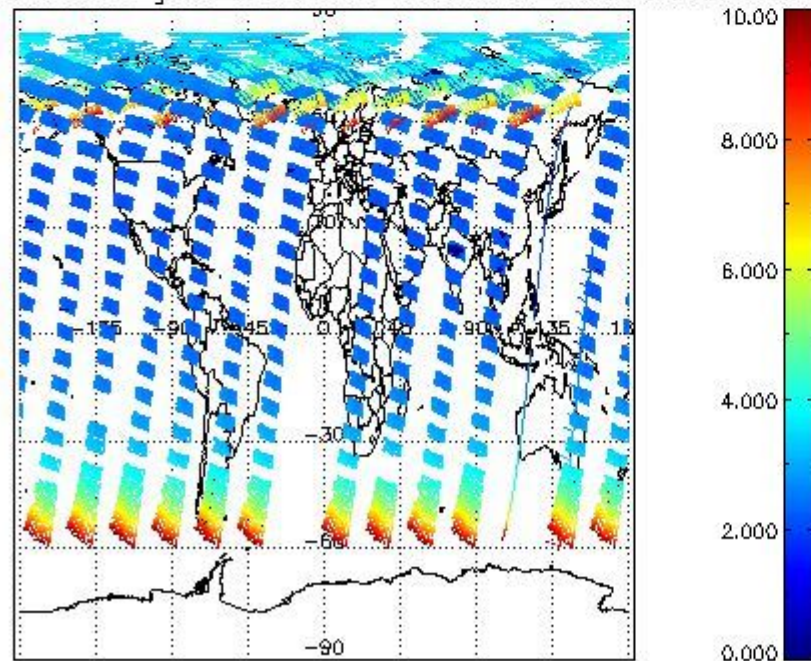
SCIOL2P_NADUV003_vcd for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



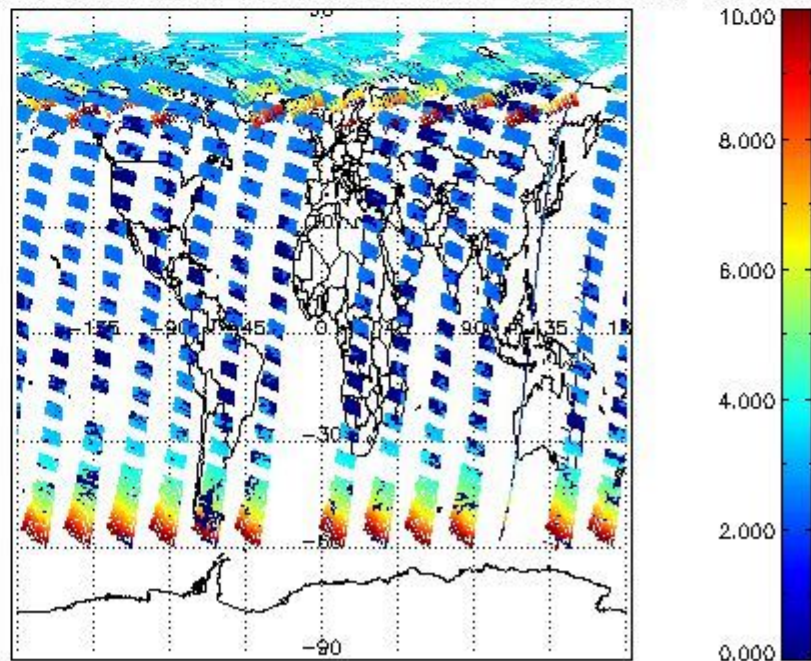
SCIOL2P_NADUV003_vcd_err for 19JUN2008 00:00:00 to 20JUN2008 00:00:00

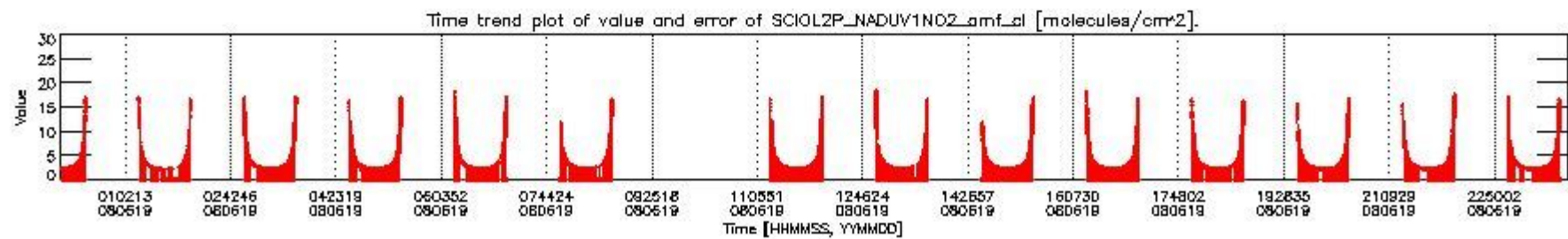
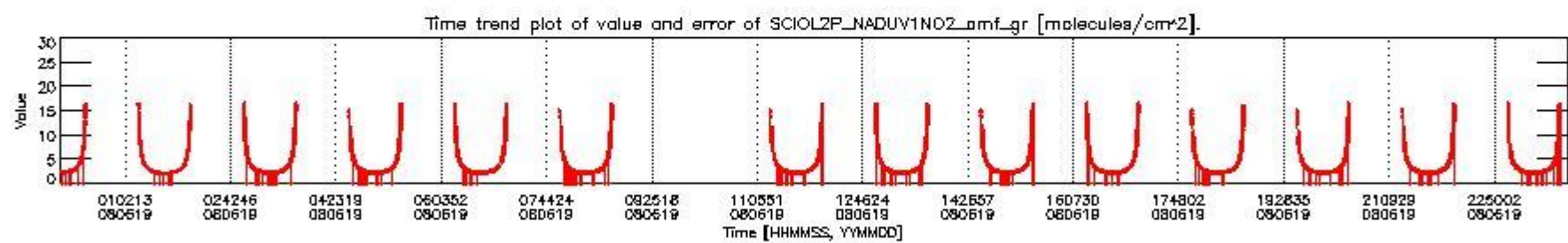
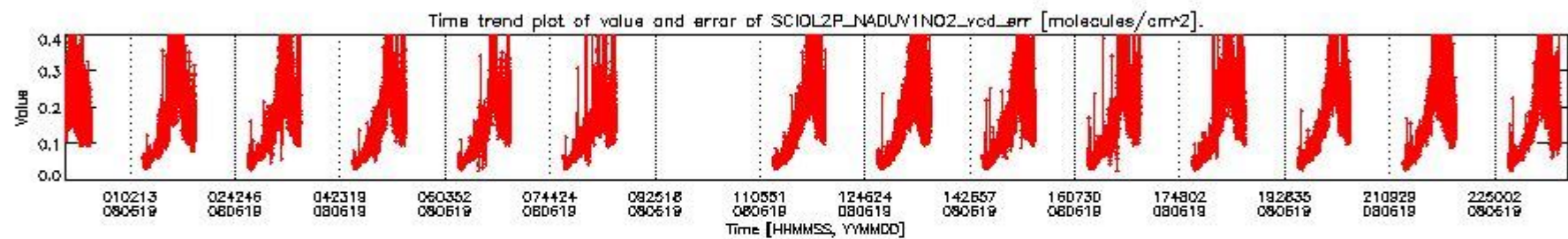
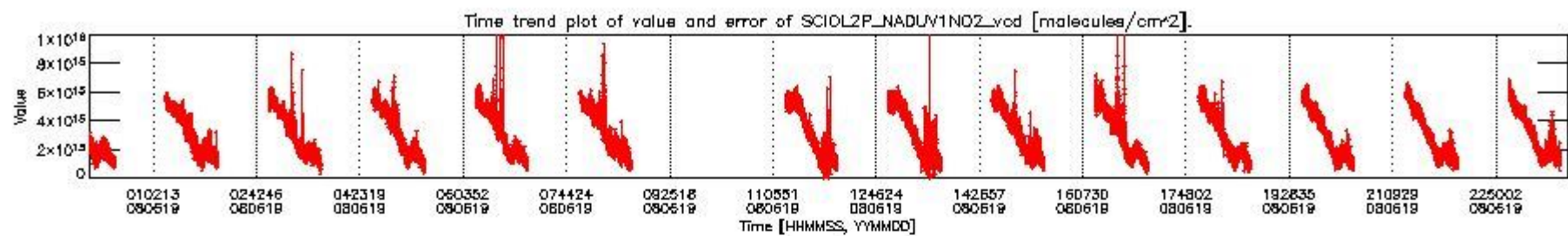


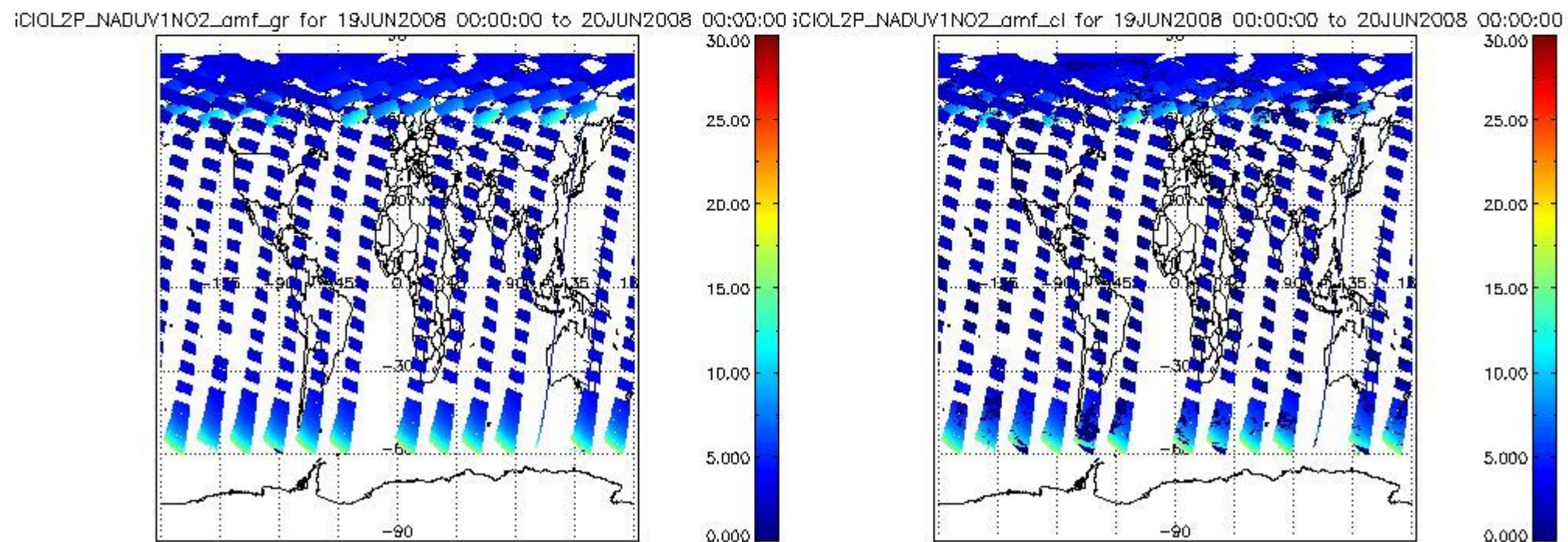
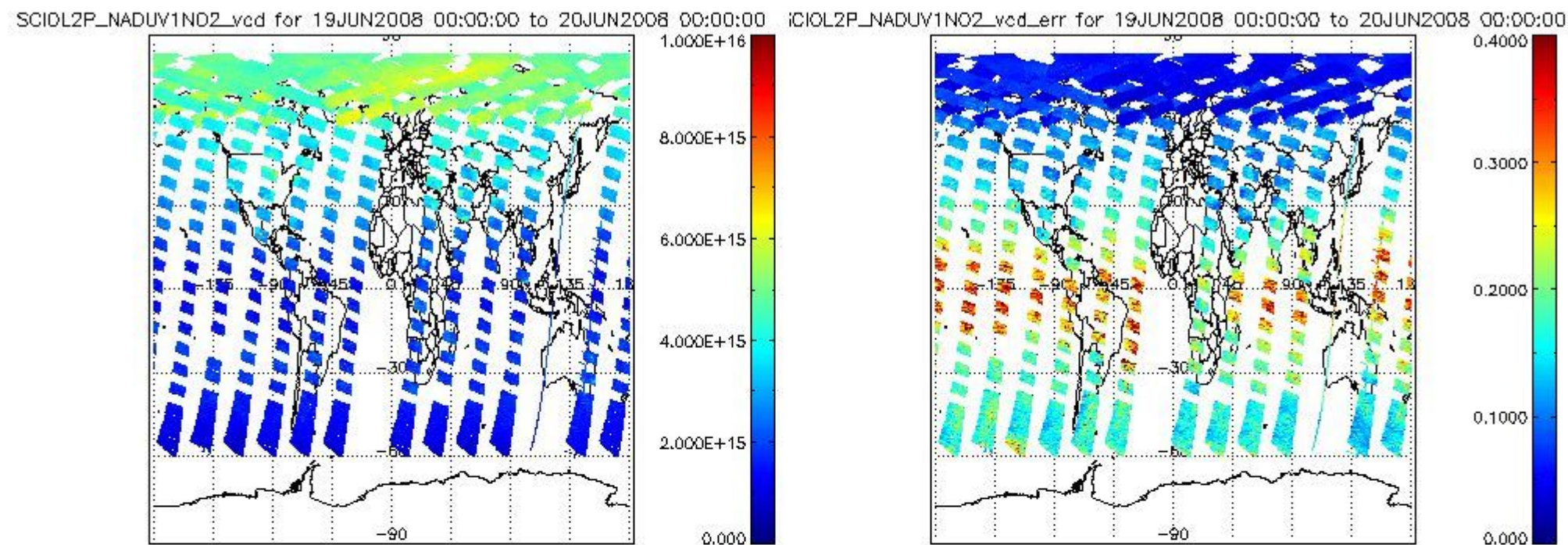
SCIOL2P_NADUV003_amf_gr for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 19JUN2008 00:00:00 to 20JUN2008 00:00:00







2.2.3 Limb

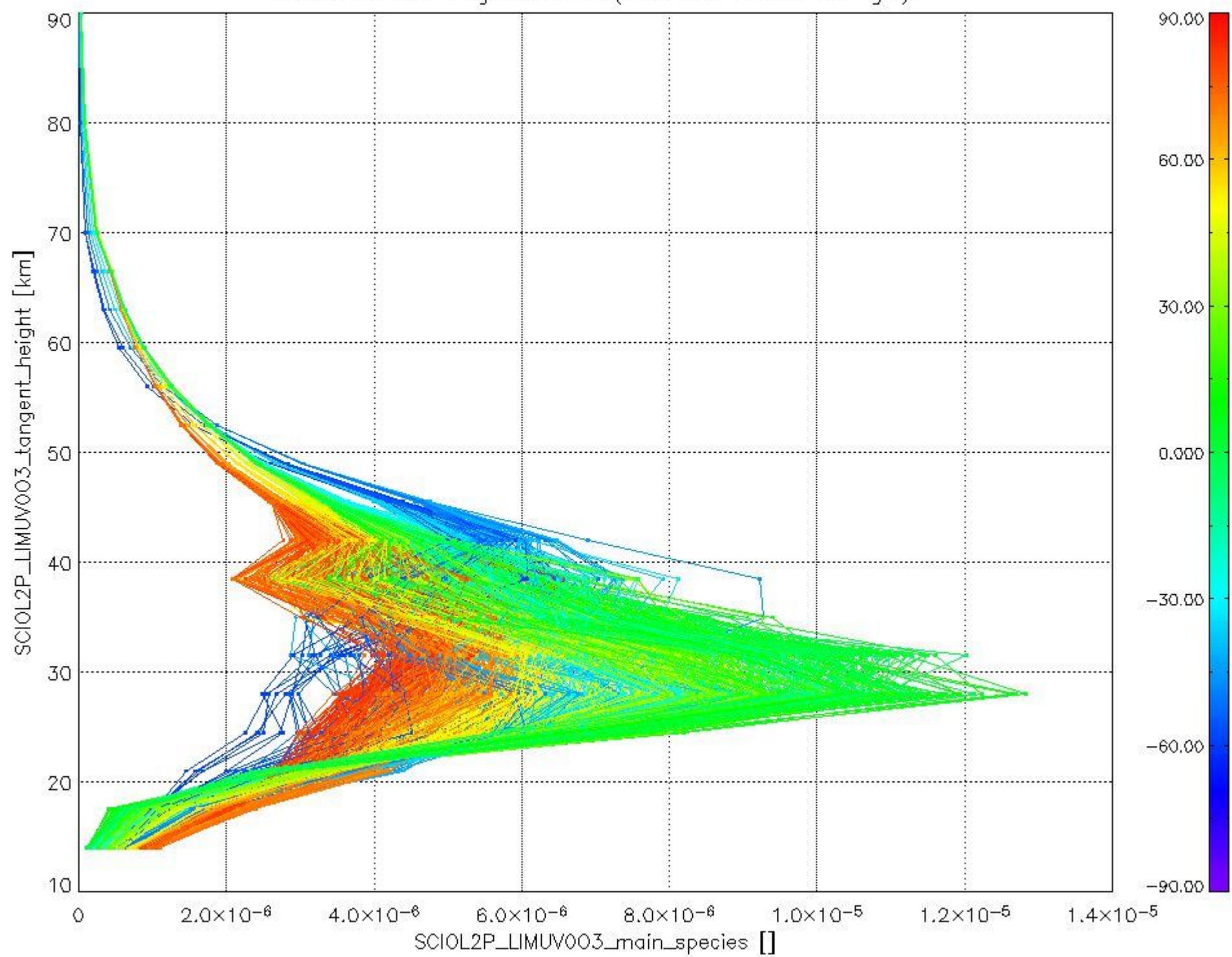
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

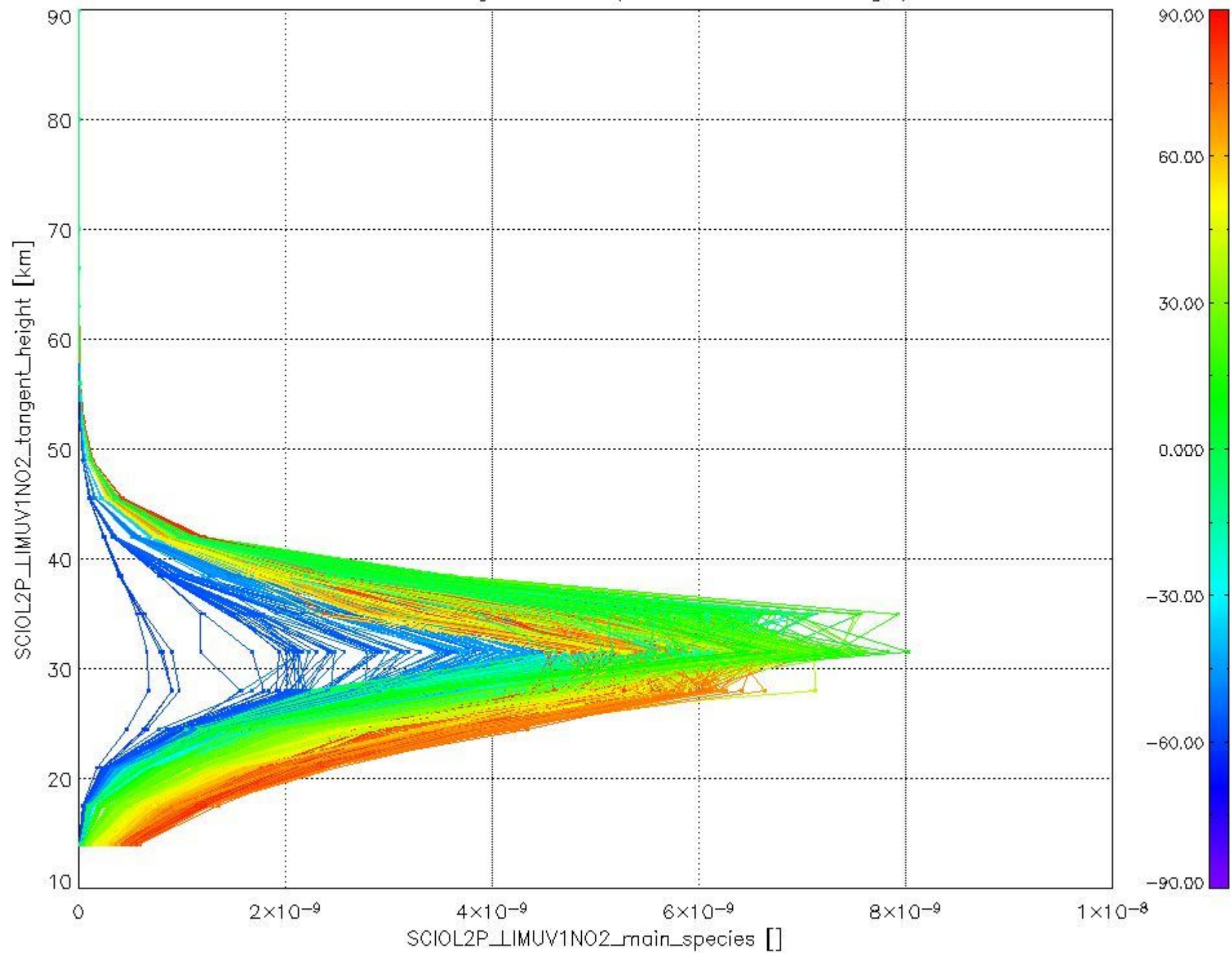
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



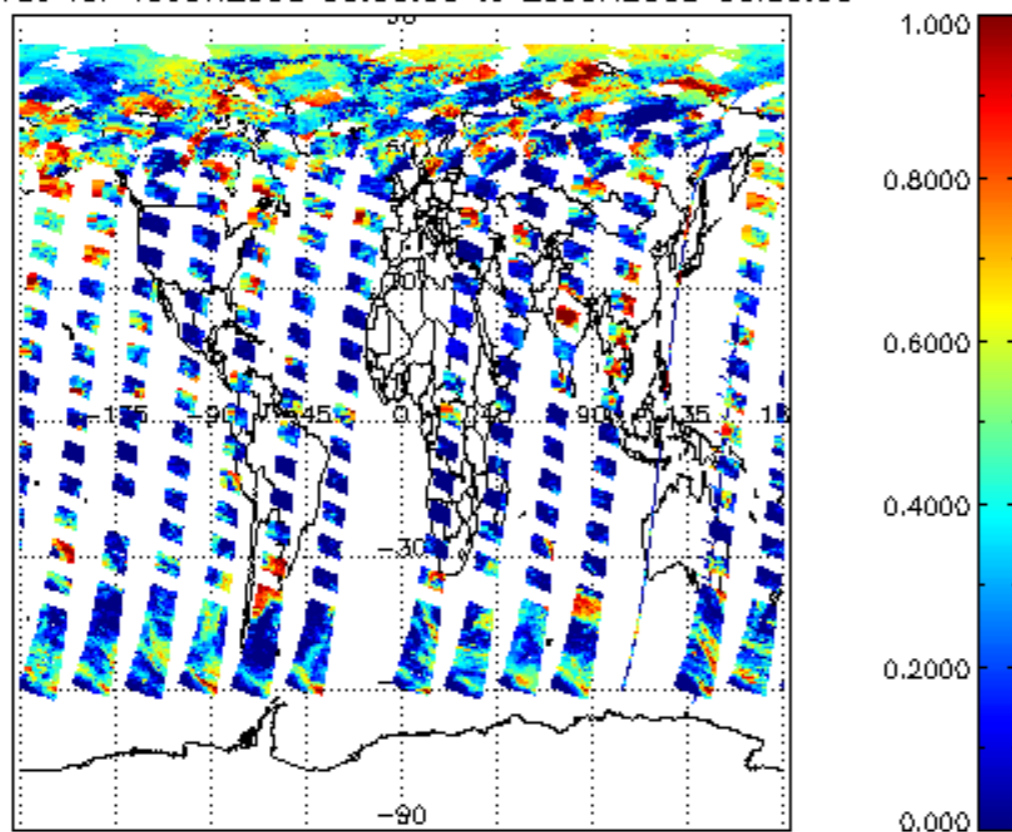
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



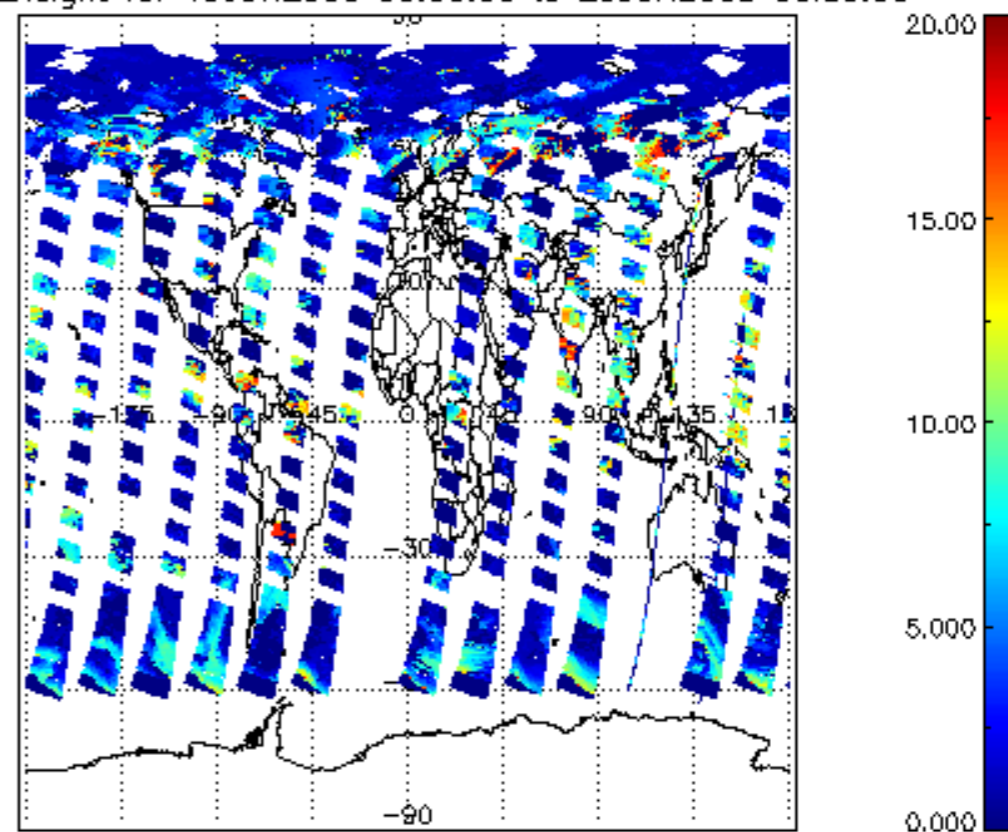
2.3 ADF monitoring

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

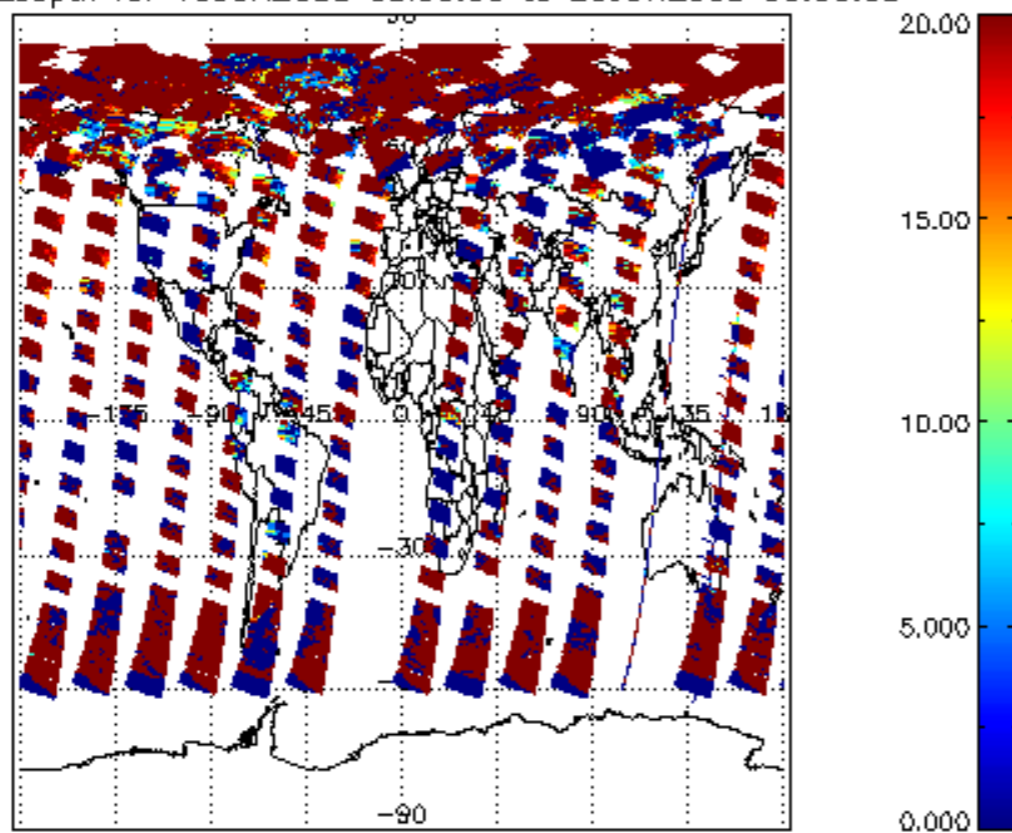
cl_frac for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



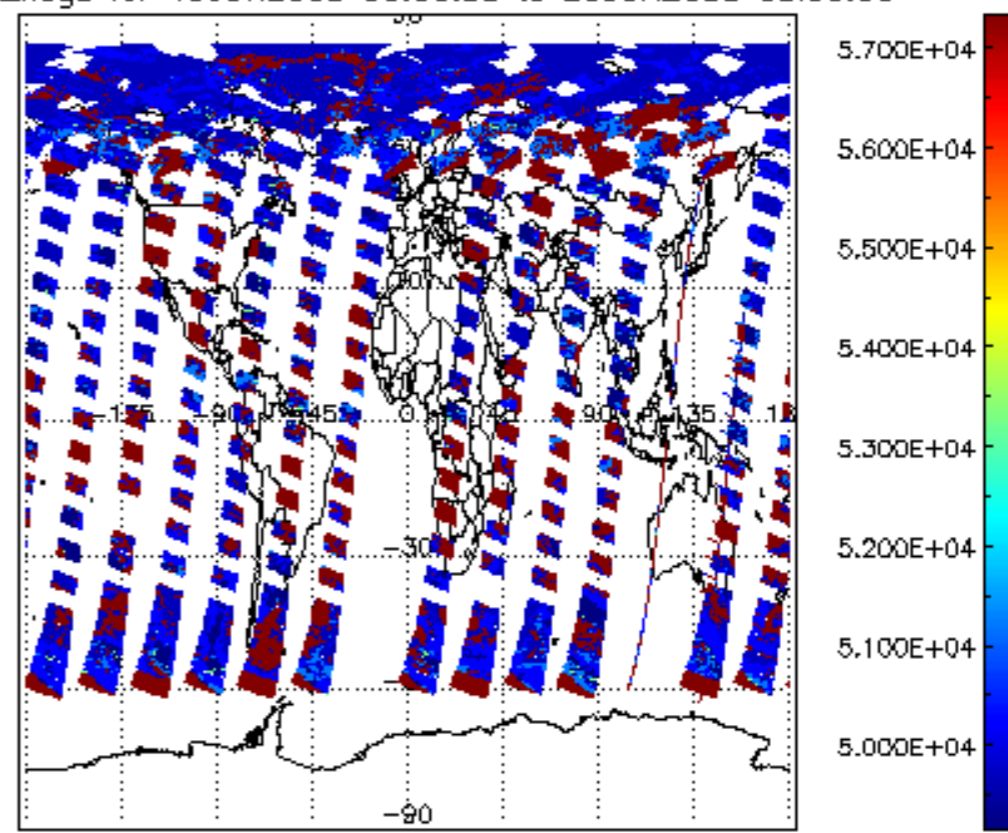
cl_top_height for 19JUN2008 00:00:00 to 20JUN2008 00:00:00

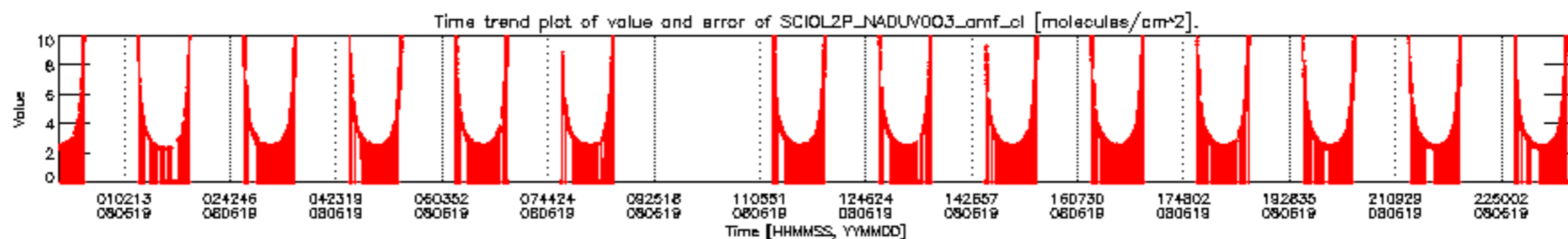
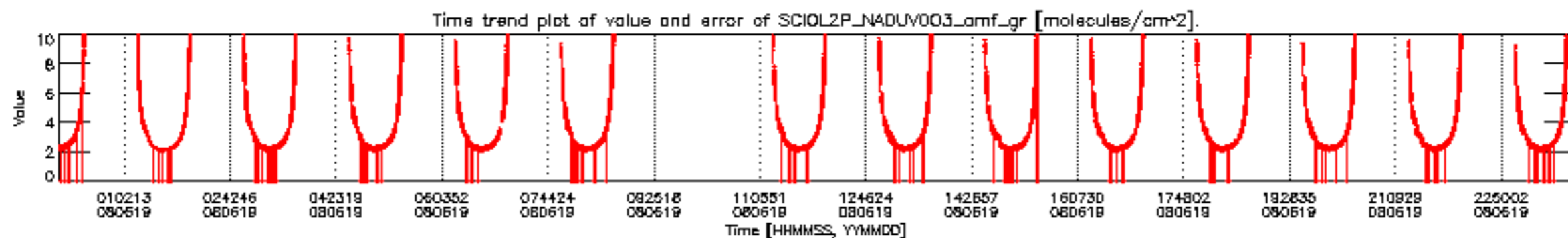
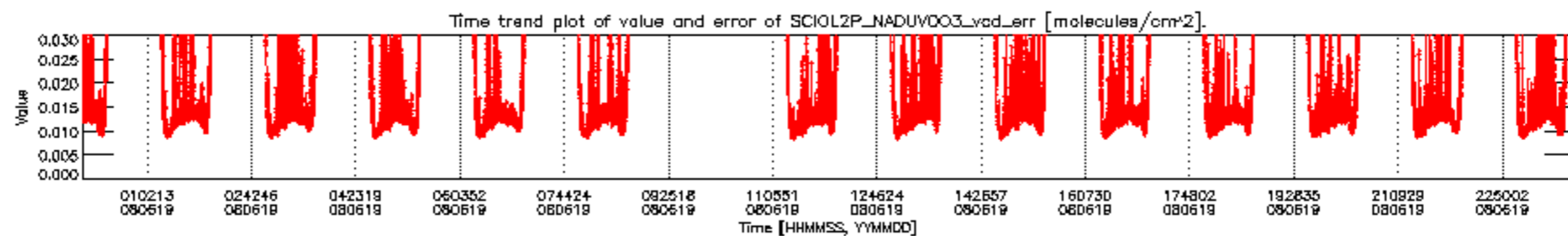
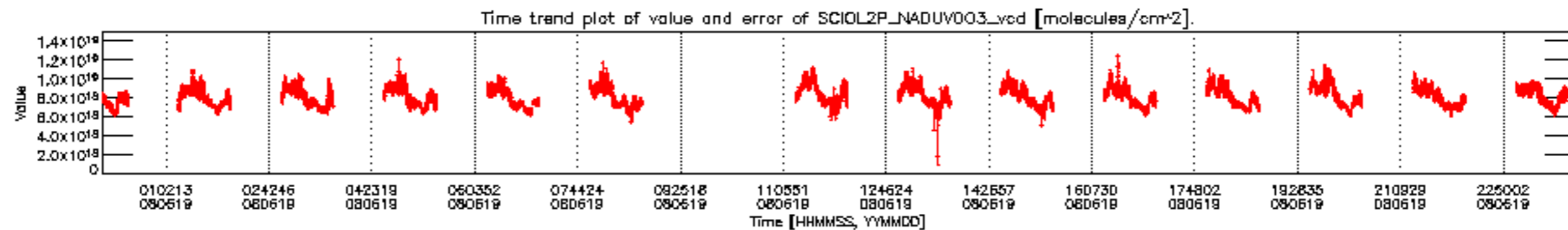


cl_opt_depth for 19JUN2008 00:00:00 to 20JUN2008 00:00:00

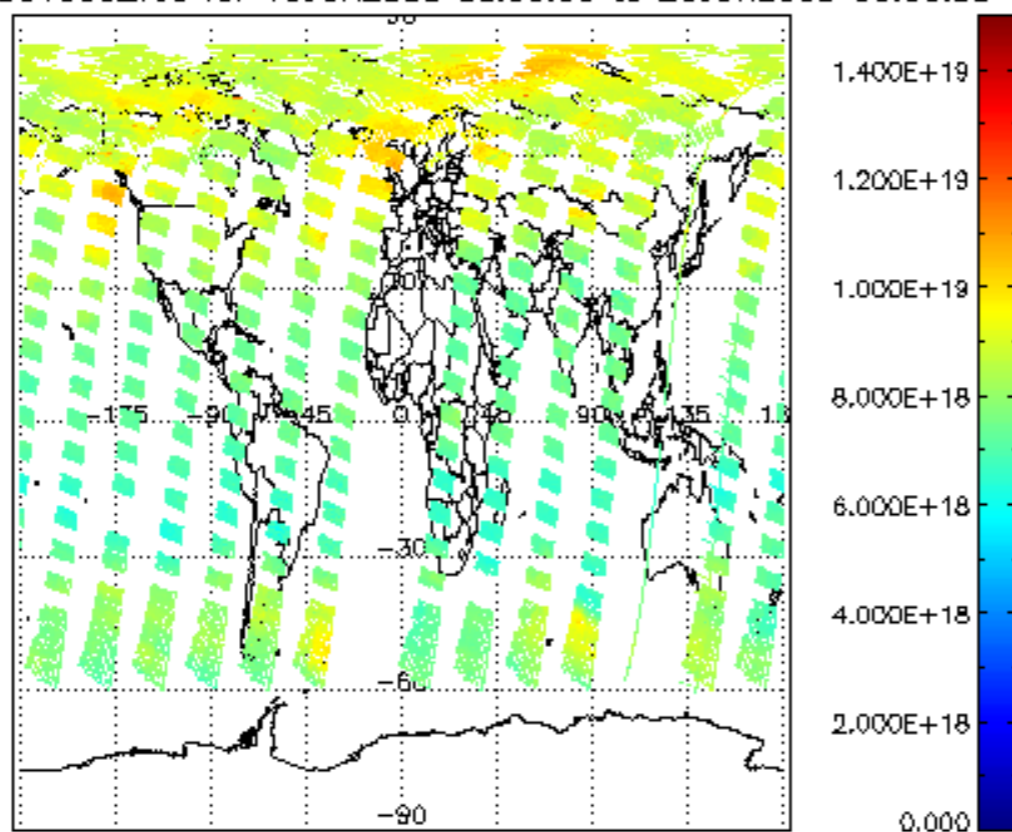


cloud_flags for 19JUN2008 00:00:00 to 20JUN2008 00:00:00

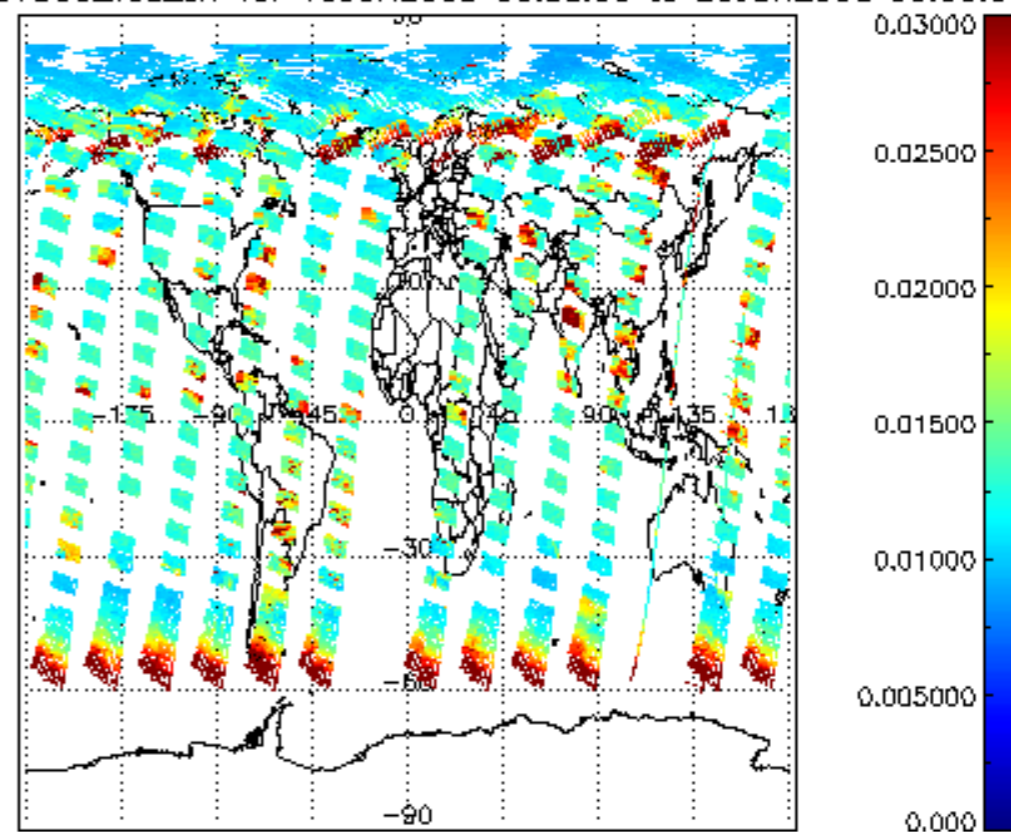




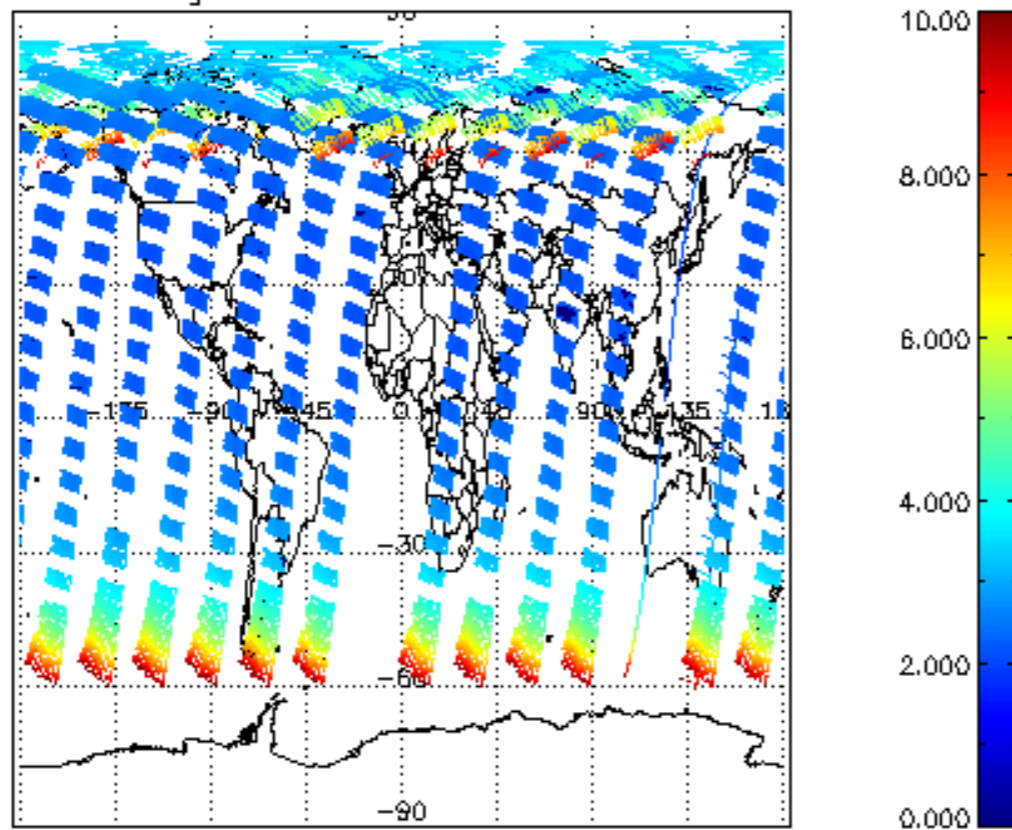
SCIOL2P_NADUV003_vcd for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



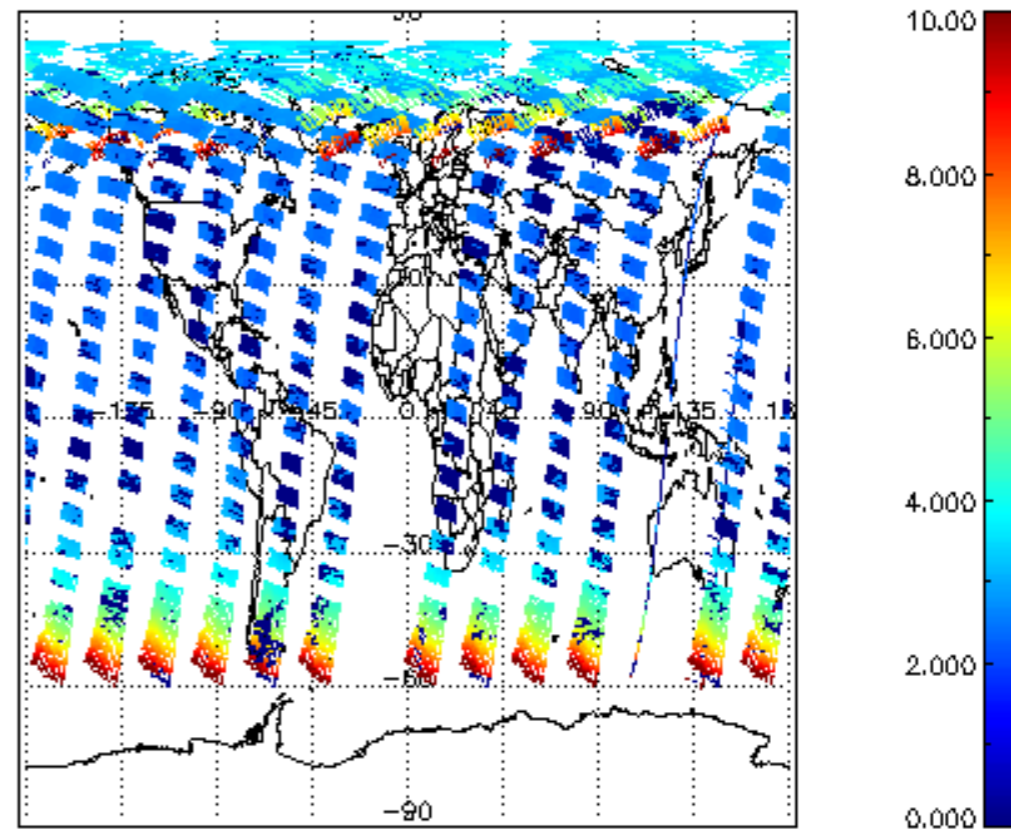
SCIOL2P_NADUV003_vcd_err for 19JUN2008 00:00:00 to 20JUN2008 00:00:00

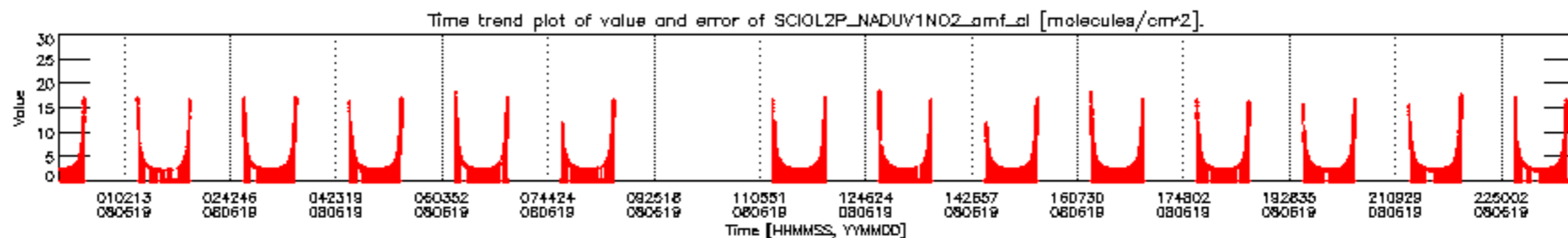
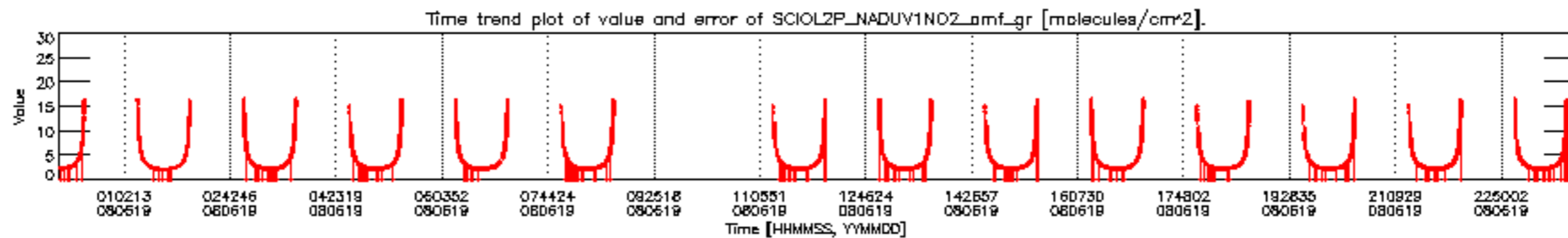
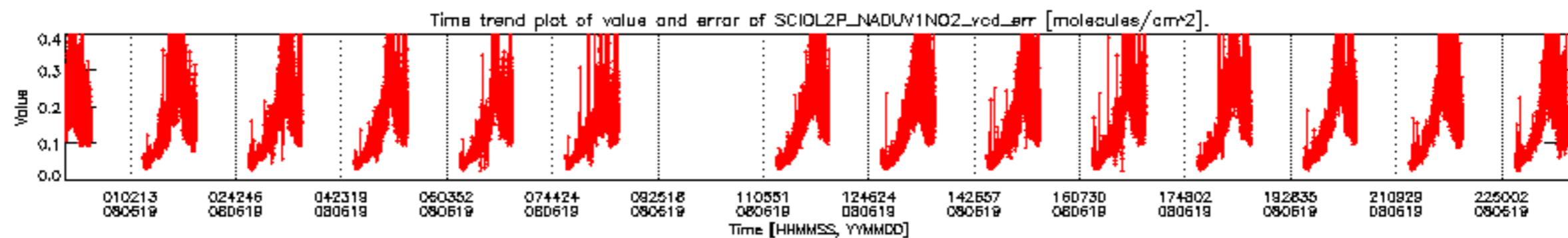
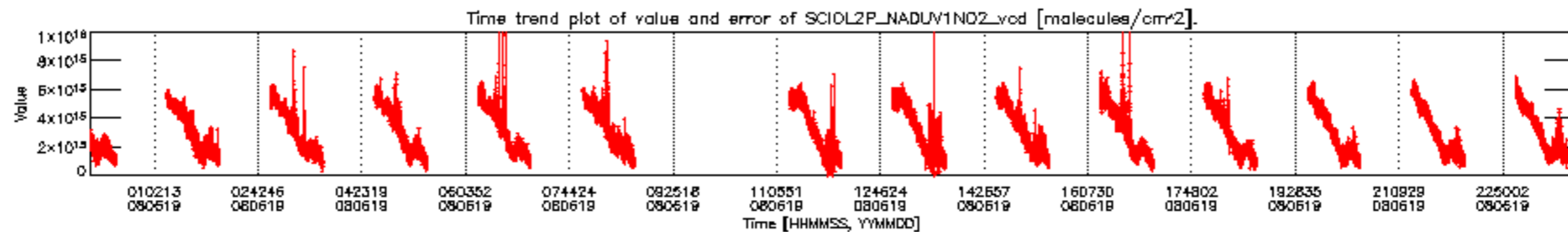


SCIOL2P_NADUV003_amf_gr for 19JUN2008 00:00:00 to 20JUN2008 00:00:00

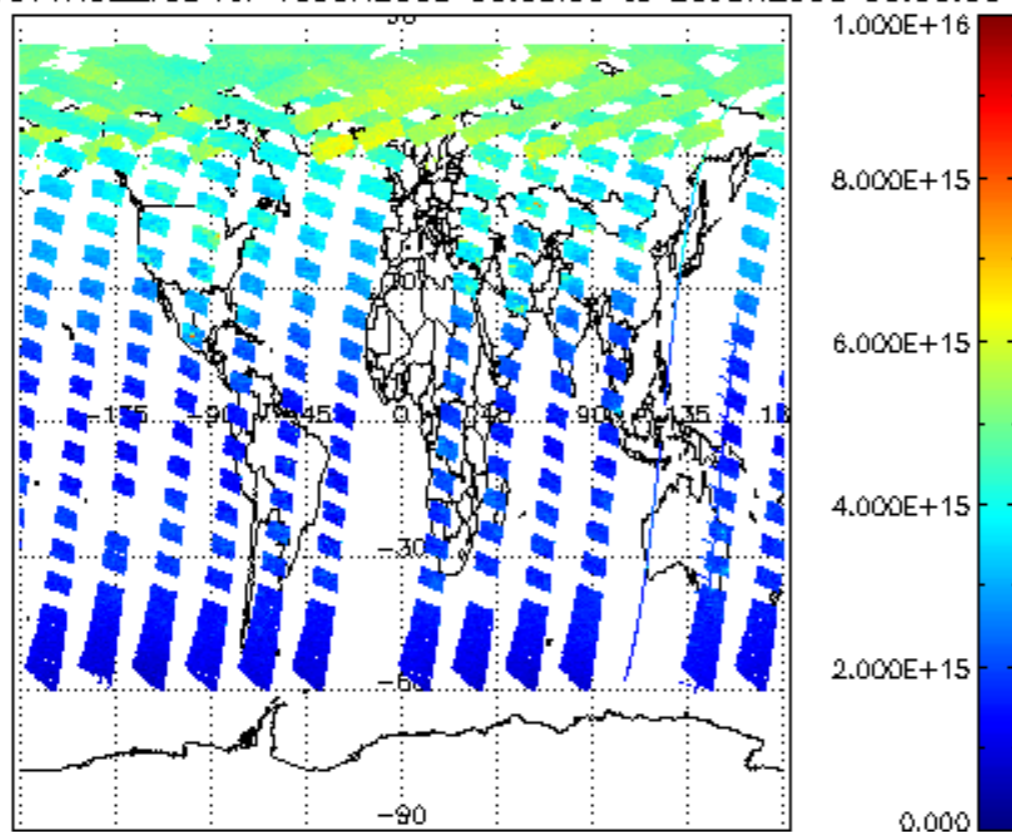


SCIOL2P_NADUV003_amf_cl for 19JUN2008 00:00:00 to 20JUN2008 00:00:00

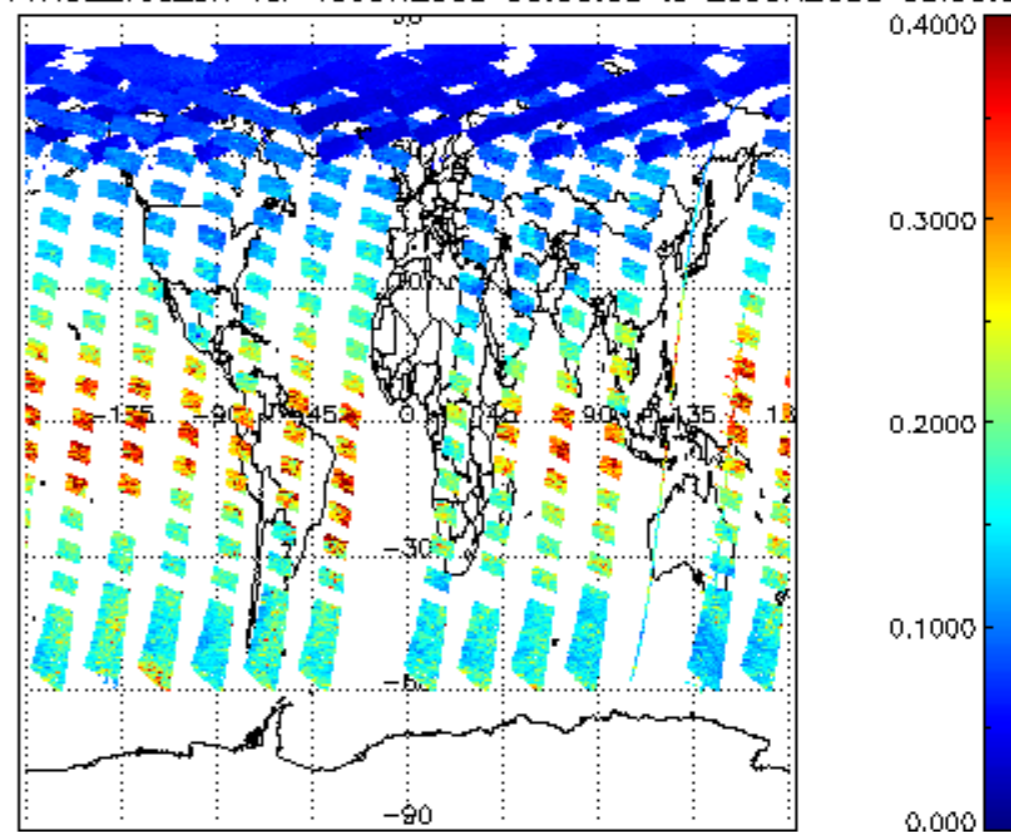




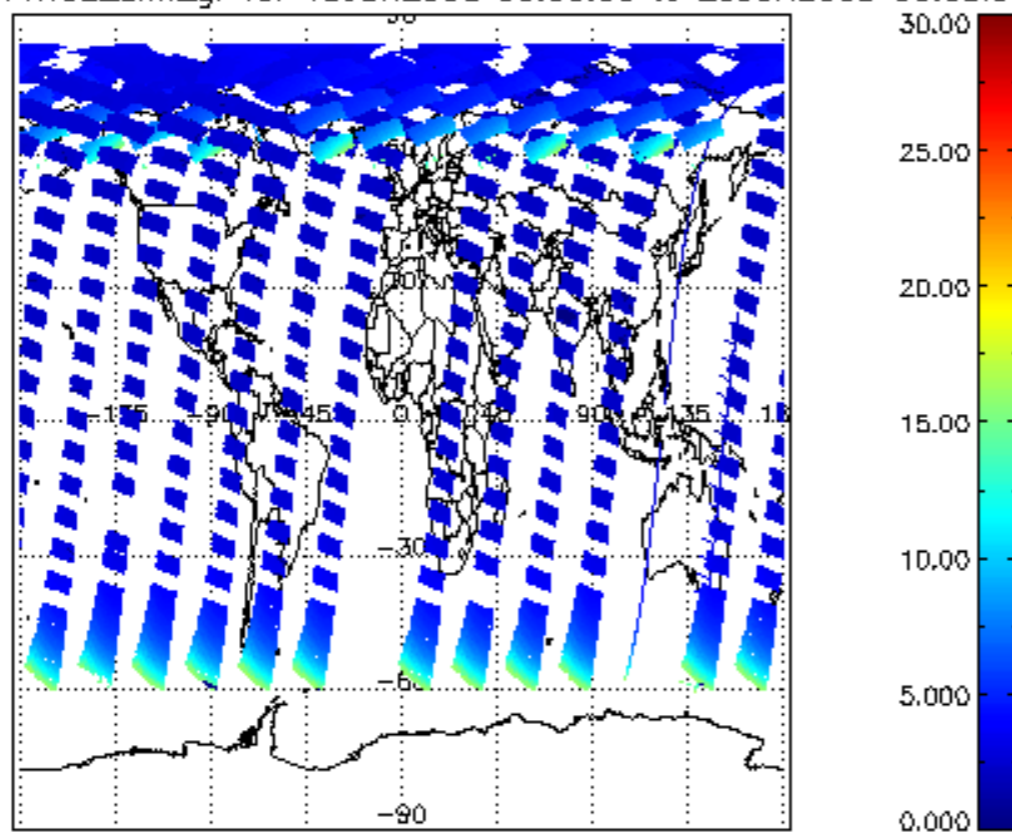
SCIOL2P_NADUV1NO2_vcd for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



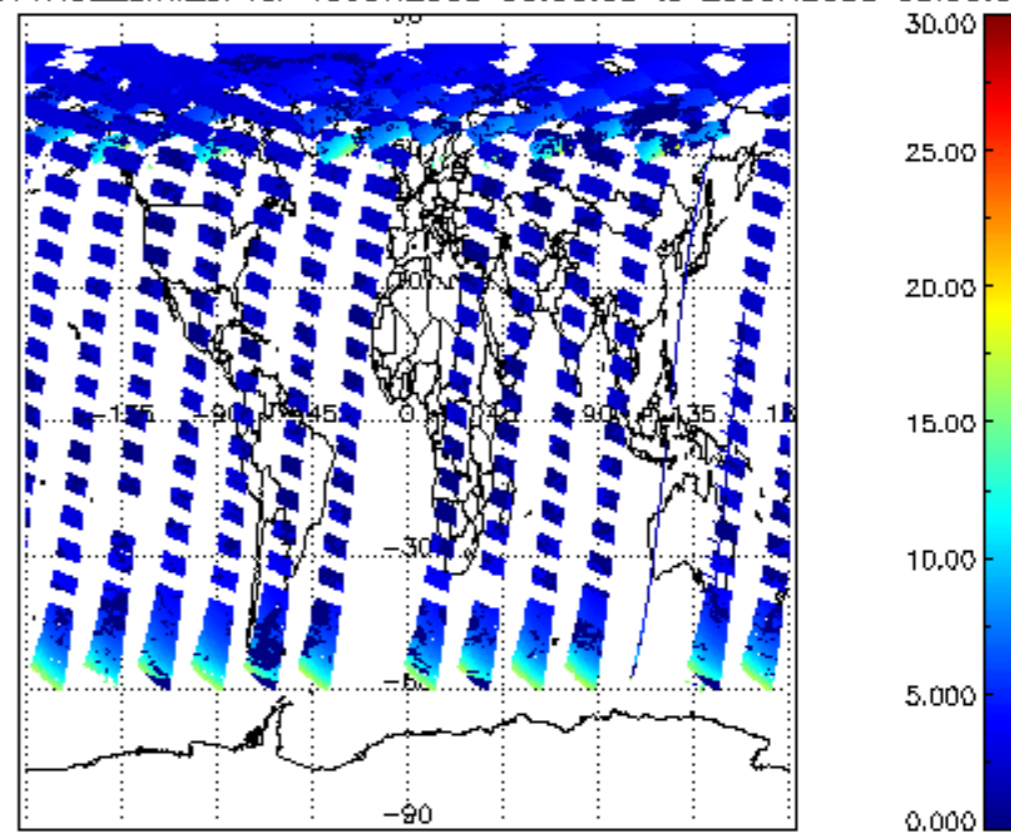
iCIOL2P_NADUV1NO2_vcd_err for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



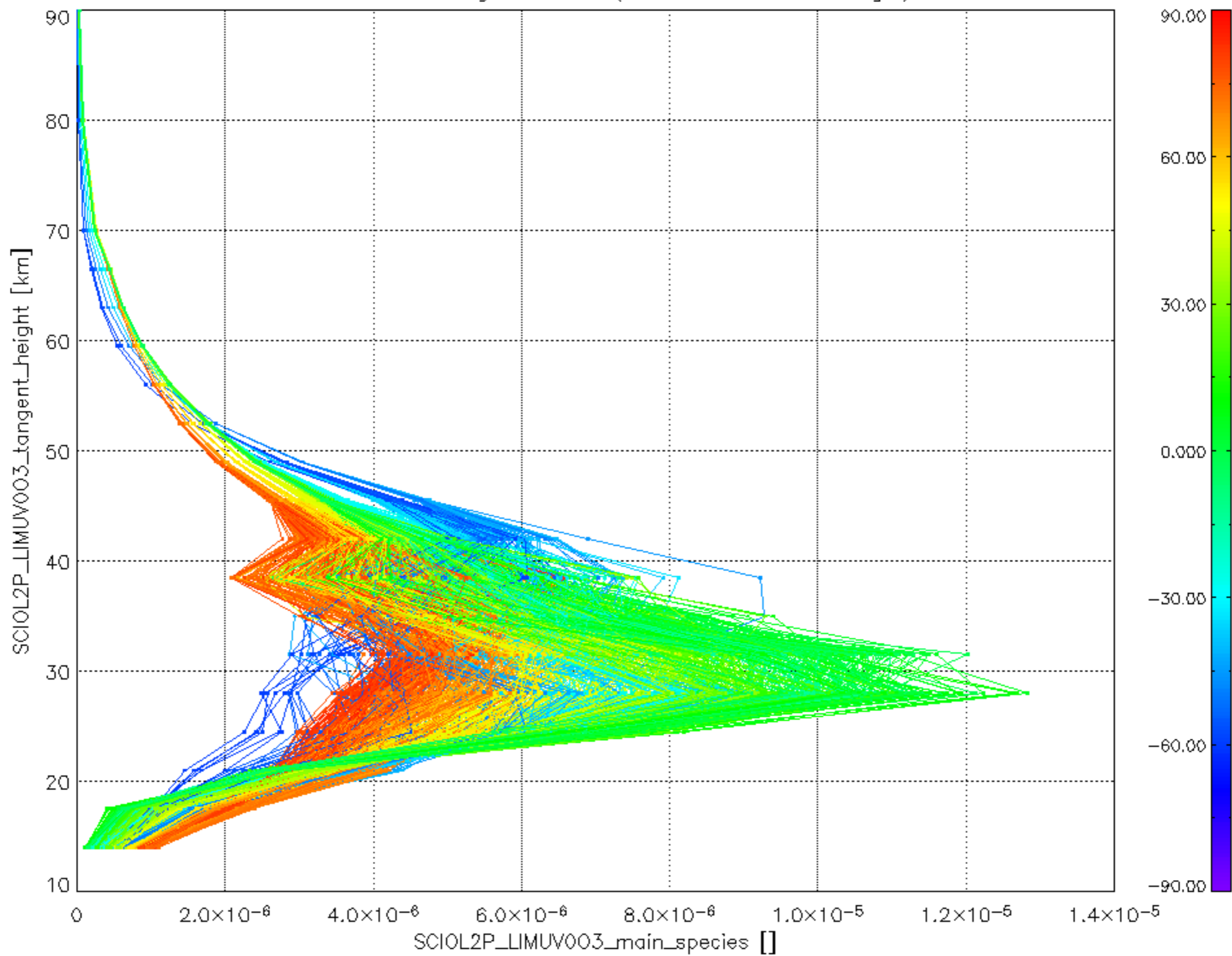
iCIOL2P_NADUV1NO2_amf_gr for 19JUN2008 00:00:00 to 20JUN2008 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 19JUN2008 00:00:00 to 20JUN2008 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).

