

2. SCIAMACHY Daily Report for level 2 products

[2.1. General Info](#)

[2.2 Product Quality Indicators](#)

[2.3 ADF monitoring](#)

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	05JUL2008 06:02:53
Data source version	SCIA-OL/3.01-R
Processing scope for products	17JUN2008 00:00:00 to 18JUN2008 00:00:00
Start time of first product within scope	16JUN2008 22:51:50
Stop time of last product within scope	18JUN2008 00:56:14
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__2PRDPA20080616_225150_000033002069_00302_32921_1905.N1	16JUN2008 22:51:50	16JUN2008 23:46:51	0	GOOD
1	SCI_OL__2PRDPA20080617_003226_000032962069_00303_32922_1908.N1	17JUN2008 00:32:26	17JUN2008 01:27:22	0	GOOD
2	SCI_OL__2PRDPA20080617_021302_000032912069_00304_32923_1910.N1	17JUN2008 02:13:02	17JUN2008 03:07:53	0	GOOD
3	SCI_OL__2PRDPA20080617_035338_000033542069_00305_32924_1911.N1	17JUN2008 03:53:38	17JUN2008 04:49:32	0	GOOD
4	SCI_OL__2PRDPA20080617_053414_000033492069_00306_32925_1913.N1	17JUN2008 05:34:14	17JUN2008 06:30:03	0	GOOD
5	SCI_OL__2PRDPA20080617_071449_000033442069_00307_32926_1915.N1	17JUN2008 07:14:49	17JUN2008 08:10:34	0	GOOD
6	SCI_OL__2PRDPA20080617_085525_000033392069_00308_32927_1918.N1	17JUN2008 08:55:25	17JUN2008 09:51:04	0	GOOD
7	SCI_OL__2PRDPA20080617_103601_000033332069_00309_32928_1919.N1	17JUN2008 10:36:01	17JUN2008 11:31:35	0	GOOD
8	SCI_OL__2PRDPA20080617_121637_000033282069_00310_32929_1930.N1	17JUN2008 12:16:37	17JUN2008 13:12:05	0	GOOD
9	SCI_OL__2PRDPA20080617_135713_000033222069_00311_32930_1944.N1	17JUN2008 13:57:13	17JUN2008 14:52:36	0	GOOD
10	SCI_OL__2PRDPA20080617_153749_000033172069_00312_32931_1946.N1	17JUN2008 15:37:49	17JUN2008 16:33:06	0	GOOD
11	SCI_OL__2PRDPA20080617_171744_000033722069_00313_32932_1948.N1	17JUN2008 17:17:44	17JUN2008 18:13:56	0	GOOD
12	SCI_OL__2PRDPA20080617_185820_000033682069_00314_32933_1949.N1	17JUN2008 18:58:20	17JUN2008 19:54:28	0	GOOD
13	SCI_OL__2PRDPA20080617_203936_000033252069_00315_32934_1950.N1	17JUN2008 20:39:36	17JUN2008 21:35:02	0	GOOD
14	SCI_OL__2PRDPA20080617_222012_000033122069_00316_32935_1952.N1	17JUN2008 22:20:12	17JUN2008 23:15:25	0	GOOD
15	SCI_OL__2PRDPA20080618_000048_000033252069_00317_32936_1954.N1	18JUN2008 00:00:48	18JUN2008 00:56:14	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: 140660

Total number of cloud data DSRs with good quality flag (=0): 140660 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	140660	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	140660	0.17514	0.12500	0.12500	0.25000	0.061266	s
CL_FRAC	140660	0.31847	0.26566	0.0000	1.0000	0.29139	-

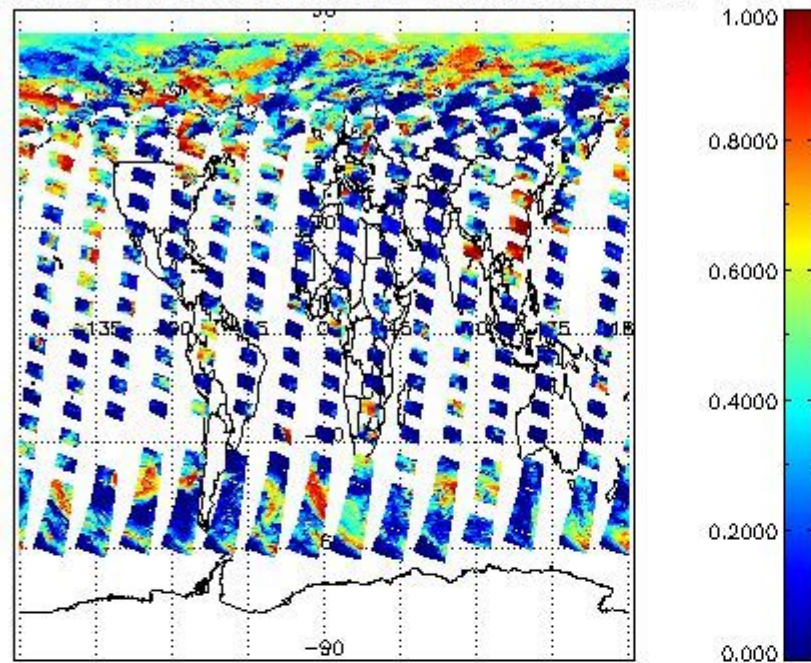
CL_FRAC_ERR	140660	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	140660	5.6044	4.0000	4.0000	8.0000	1.9605	
PMD_READ_CL[0]	140660	0.17982	0.0000	0.0000	8.0000	0.95778	-
PMD_READ_CL[1]	140660	1.7422	0.0000	0.0000	8.0000	2.6569	-
CL_TOP_HEIGHT	122763	3.1100	1.1869	0.0000	17.000	3.6863	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	122763	57.879	78.684	0.0000	101.00	44.767	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	140660	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	140660	11001100	11000100	11000000	11100000	3575.0	flags
AERO_ABSO_IND	140660	3.1287	3.5629	-1.7038	17.107	2.1918	
AERO_IND_DIAG	140660	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	140660	01011101	00000000	00000000	11000000	24564.	flags

Time and geolocation plots:

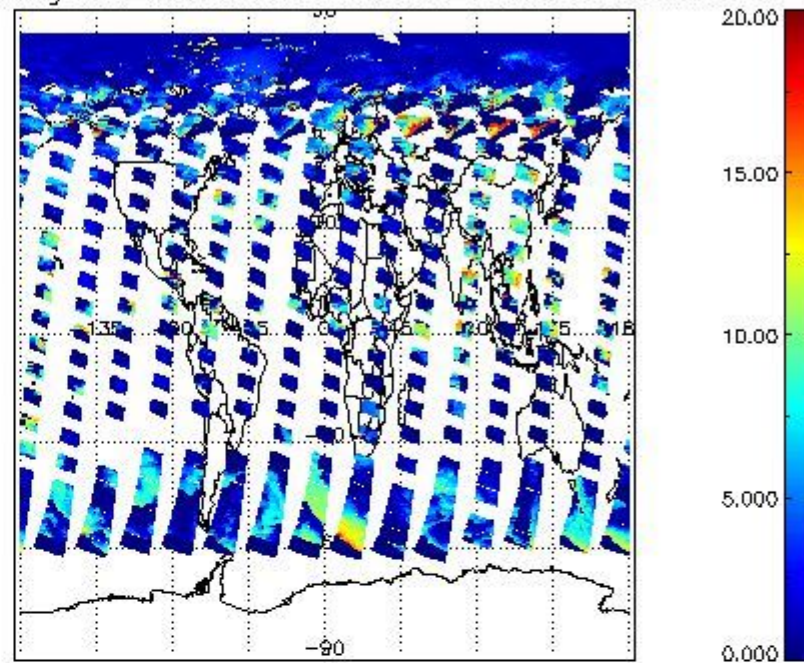
Plots are available for the following parameters:

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

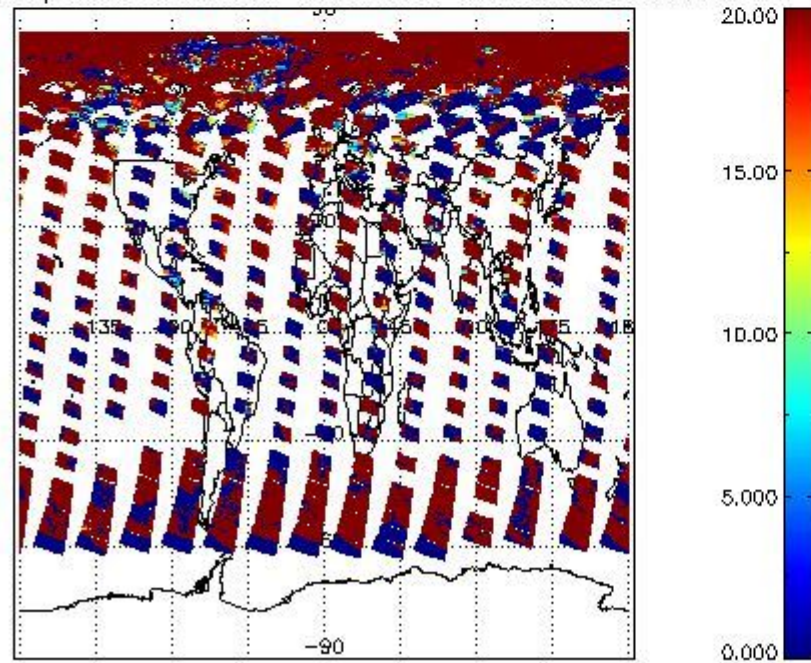
cL_frac for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



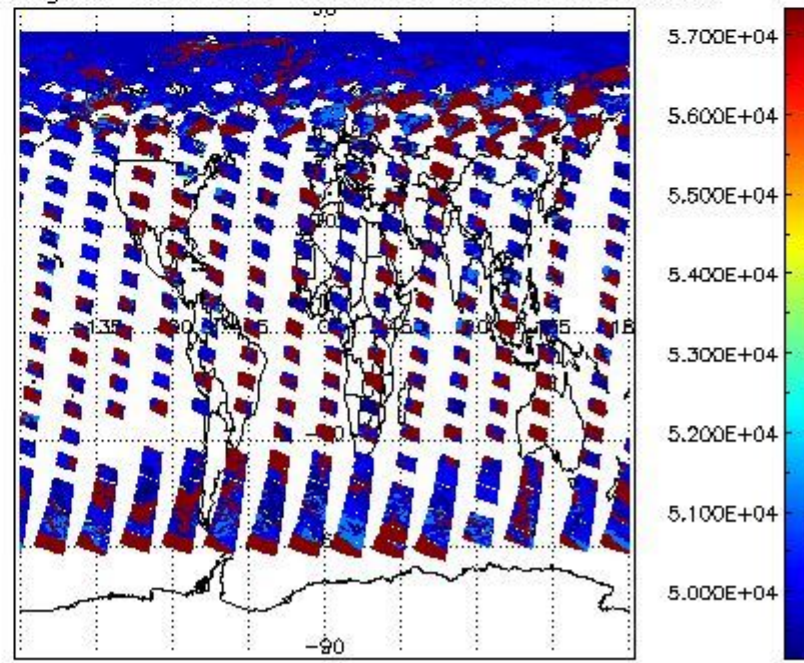
cL_top_height for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



cL_opt_depth for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



cloud_flags for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



2.2.2 Nadir

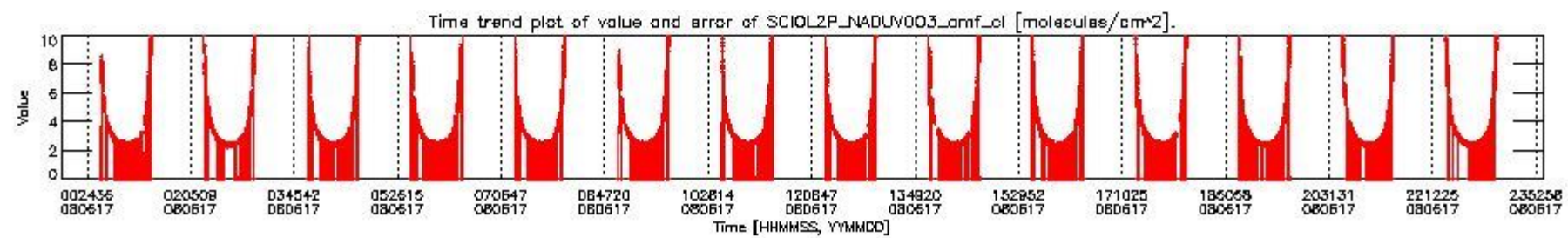
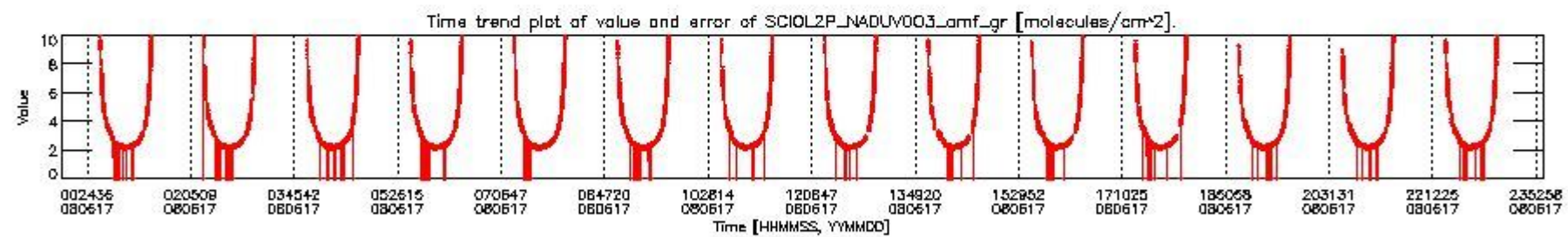
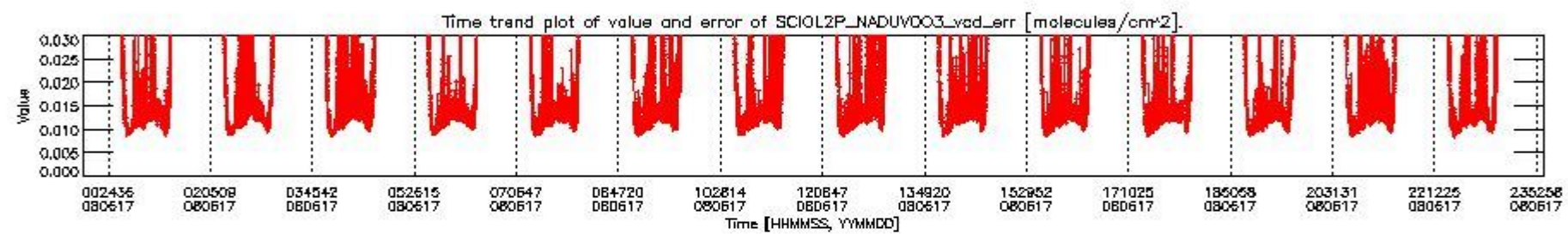
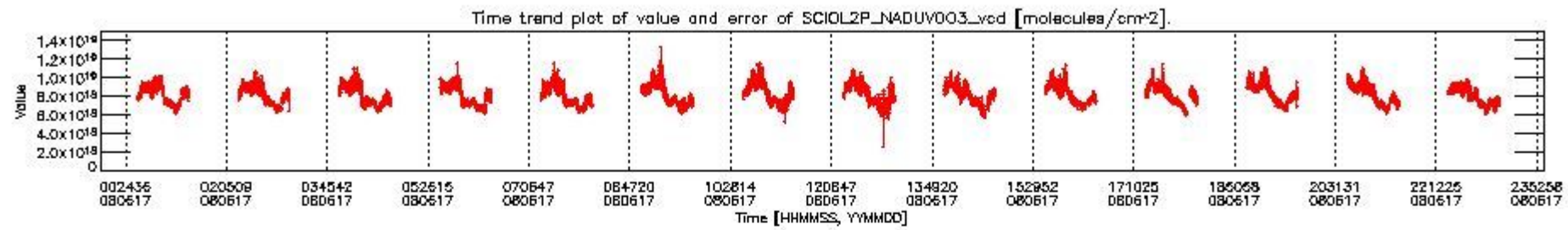
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

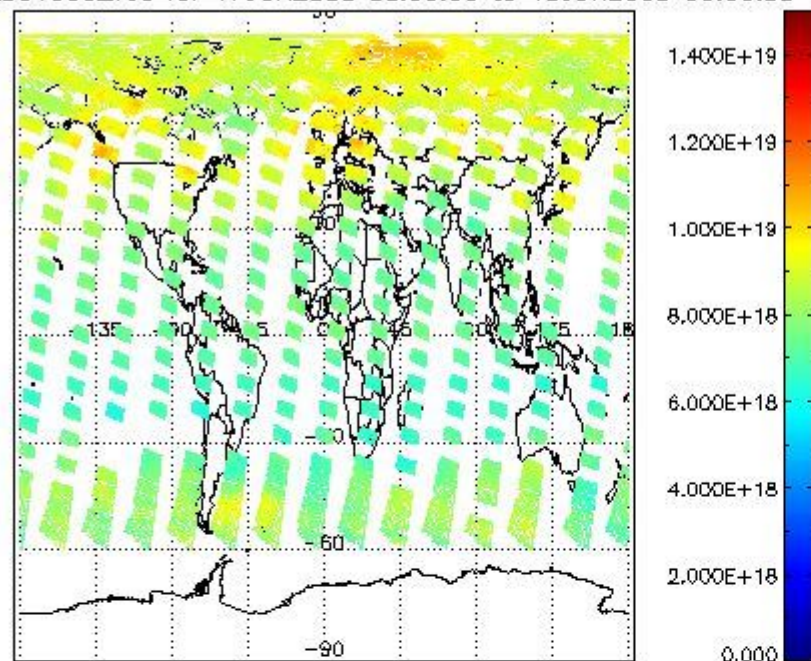
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

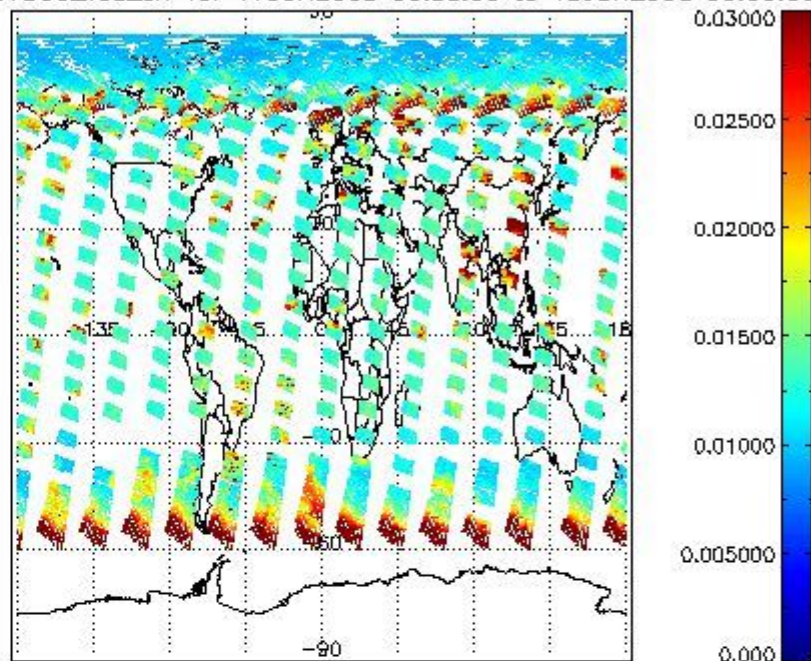
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



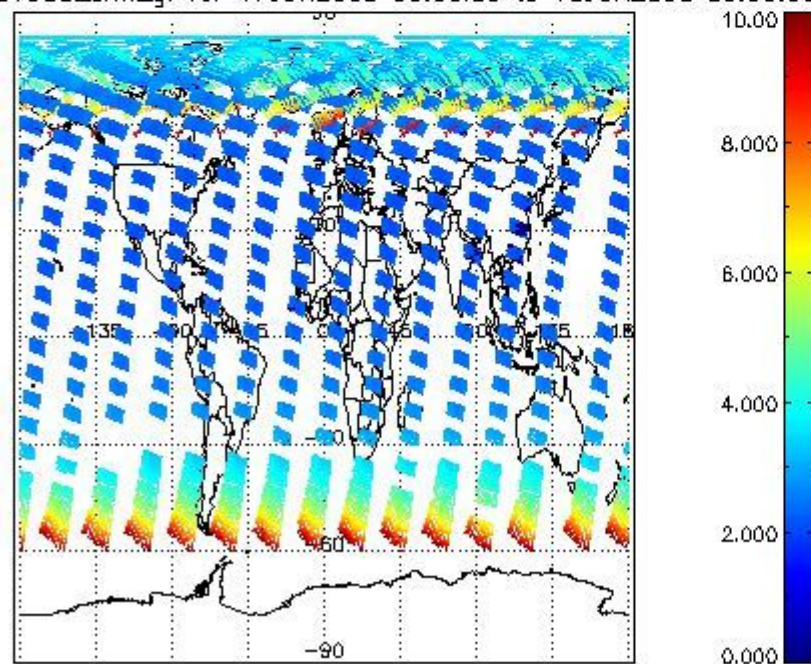
SCIOL2P_NADUV003_vcd for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



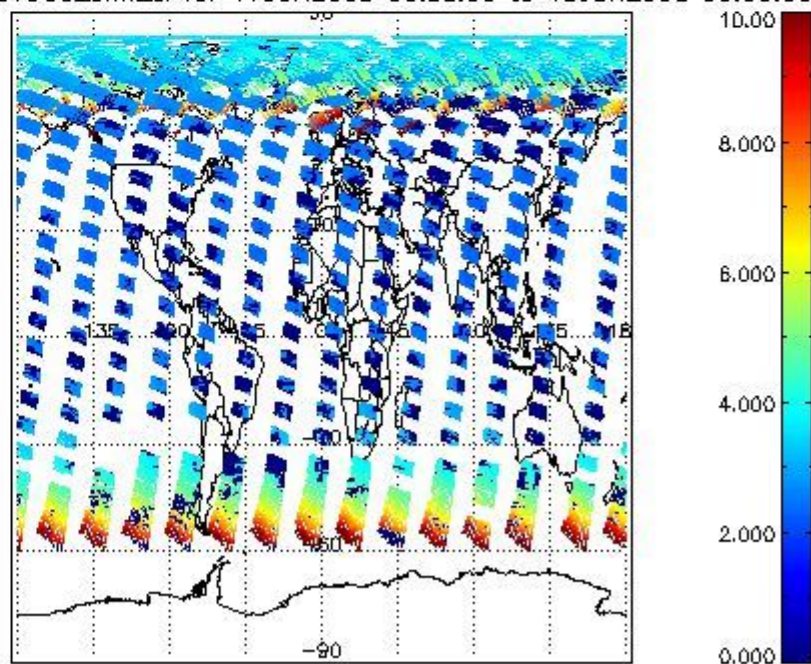
SCIOL2P_NADUV003_vcd_err for 17JUN2008 00:00:00 to 18JUN2008 00:00:00

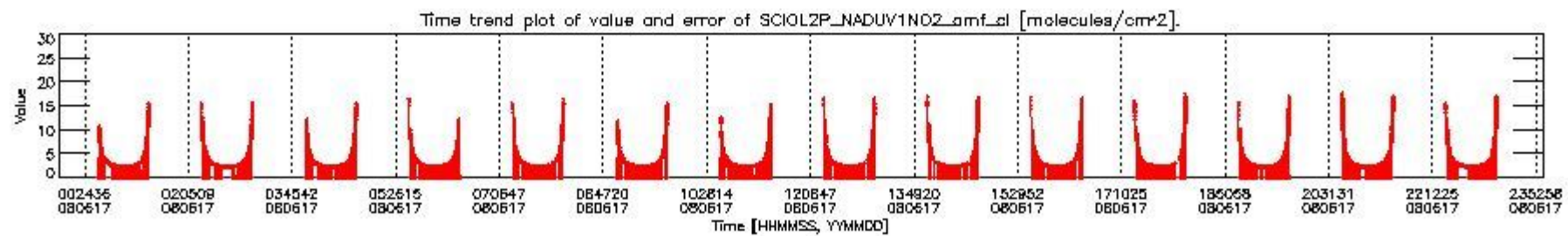
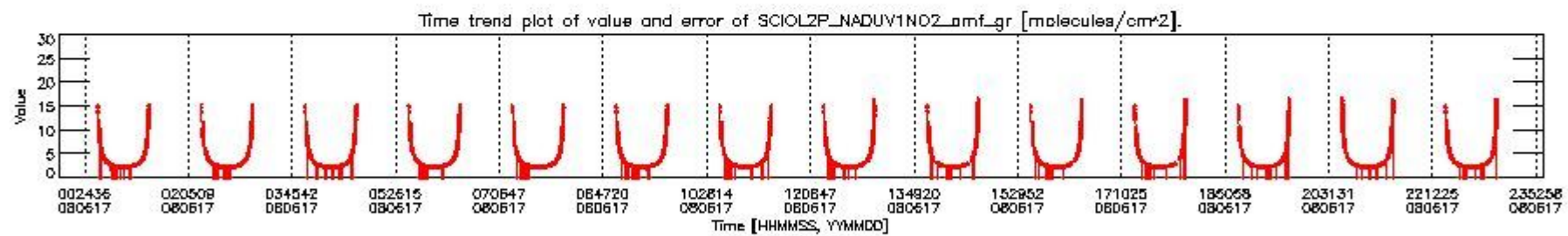
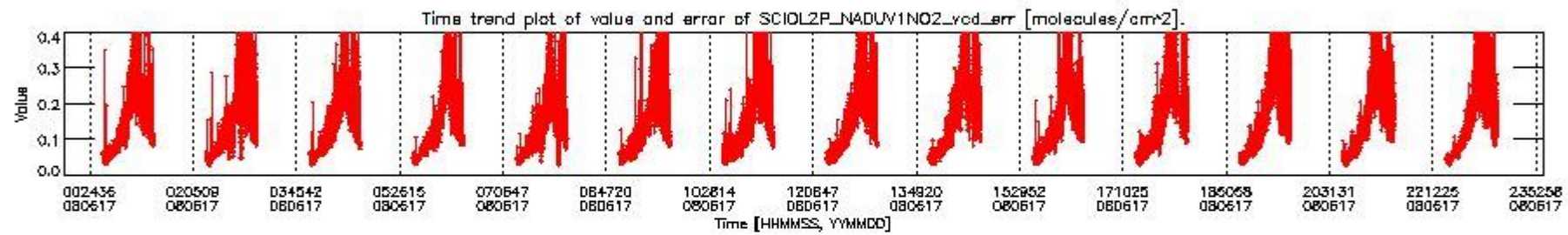
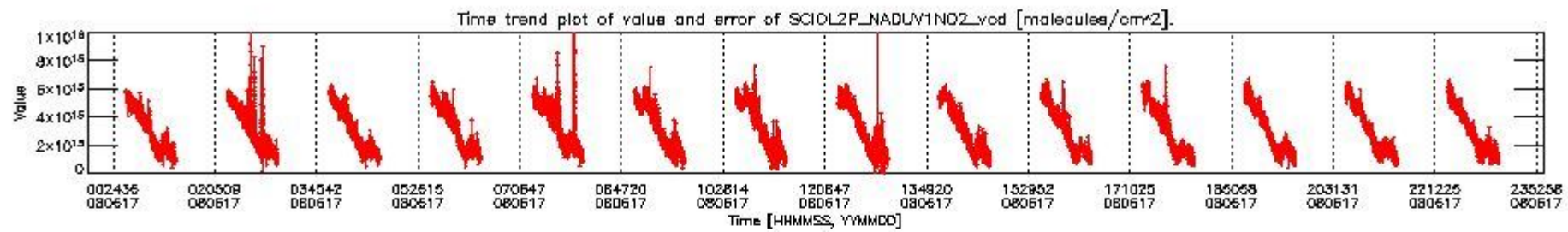


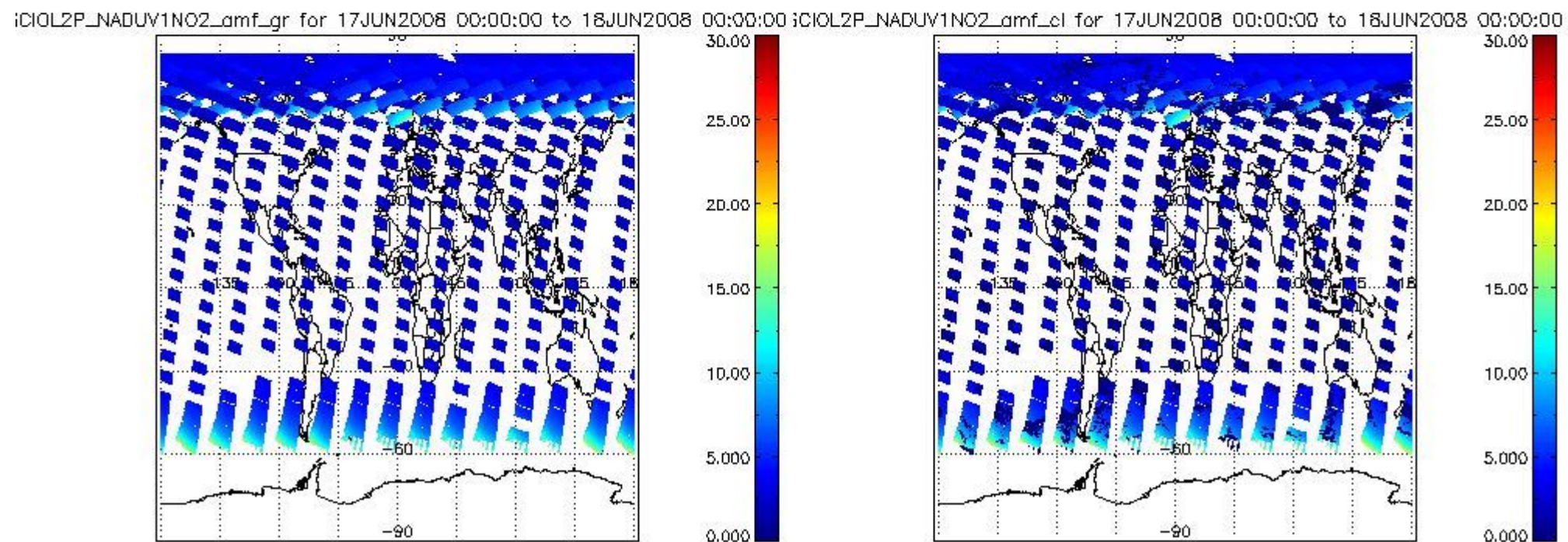
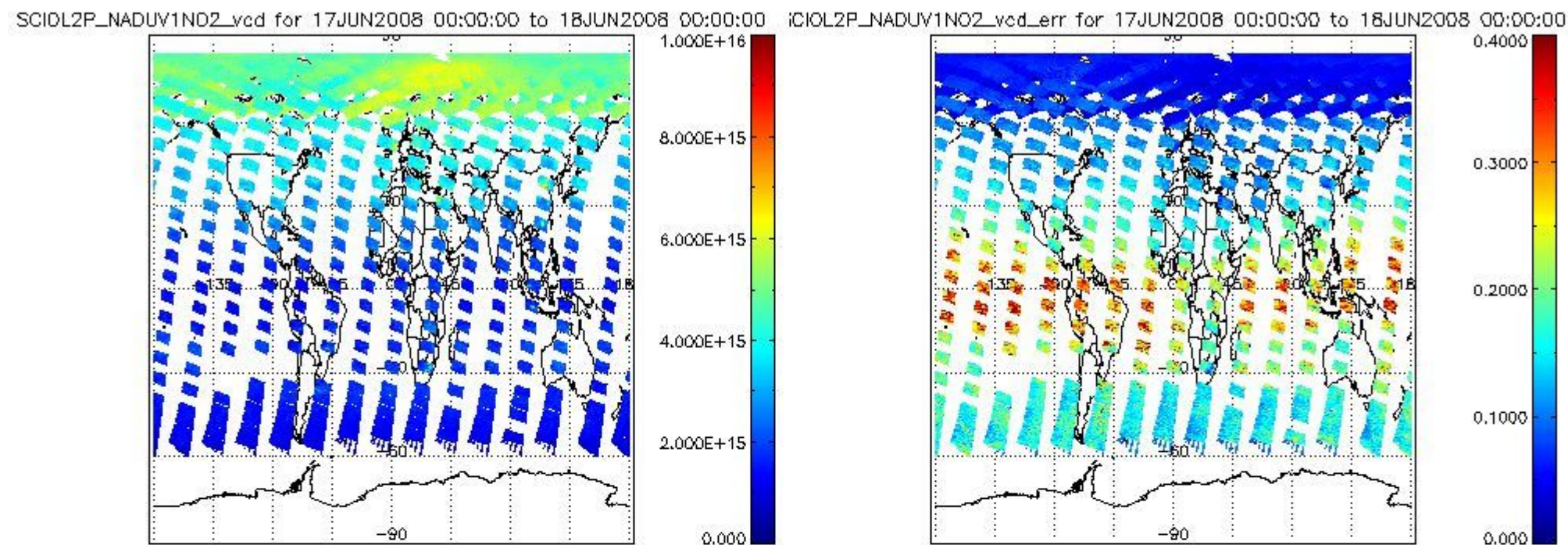
SCIOL2P_NADUV003_amf_gr for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 17JUN2008 00:00:00 to 18JUN2008 00:00:00







2.2.3 Limb

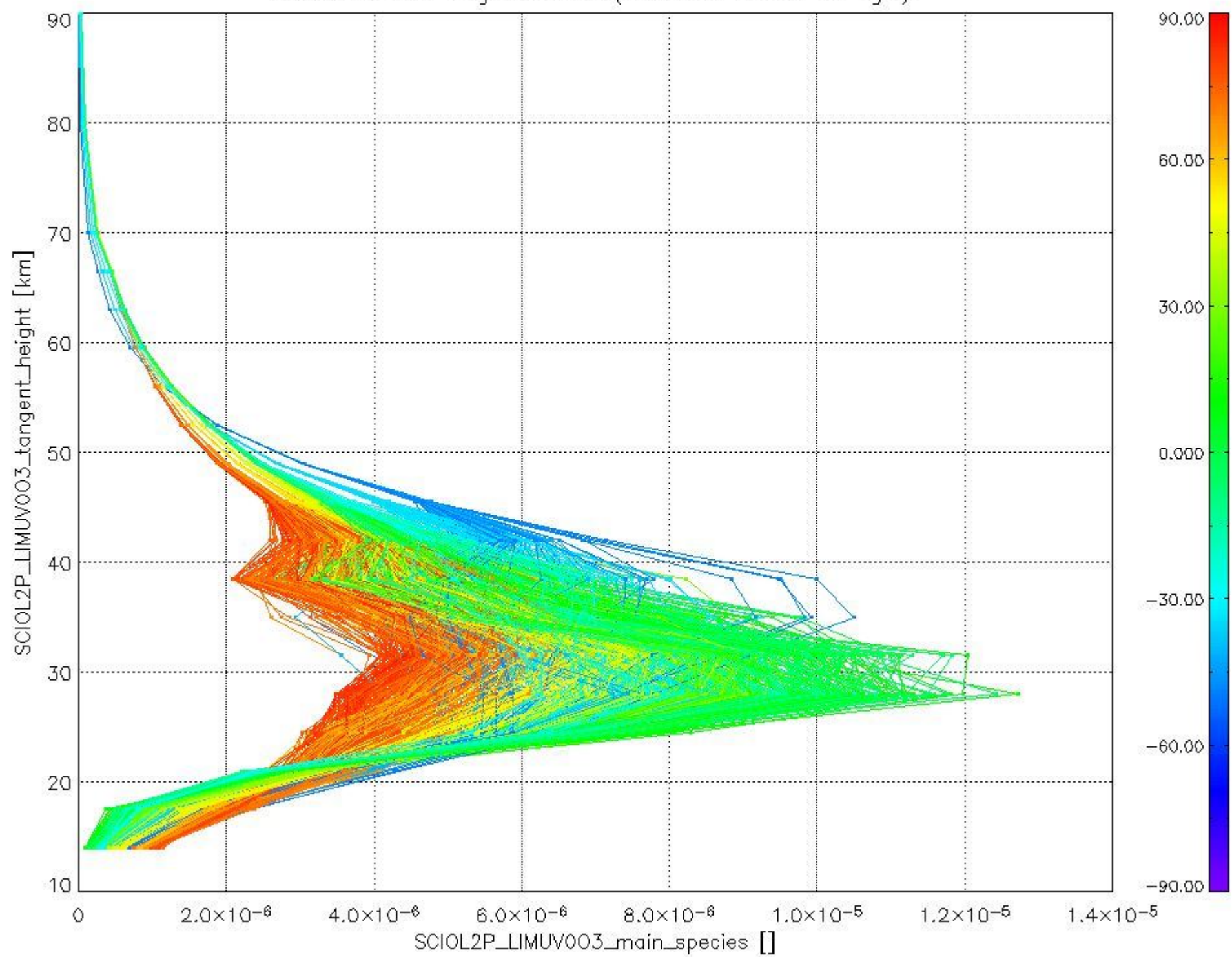
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

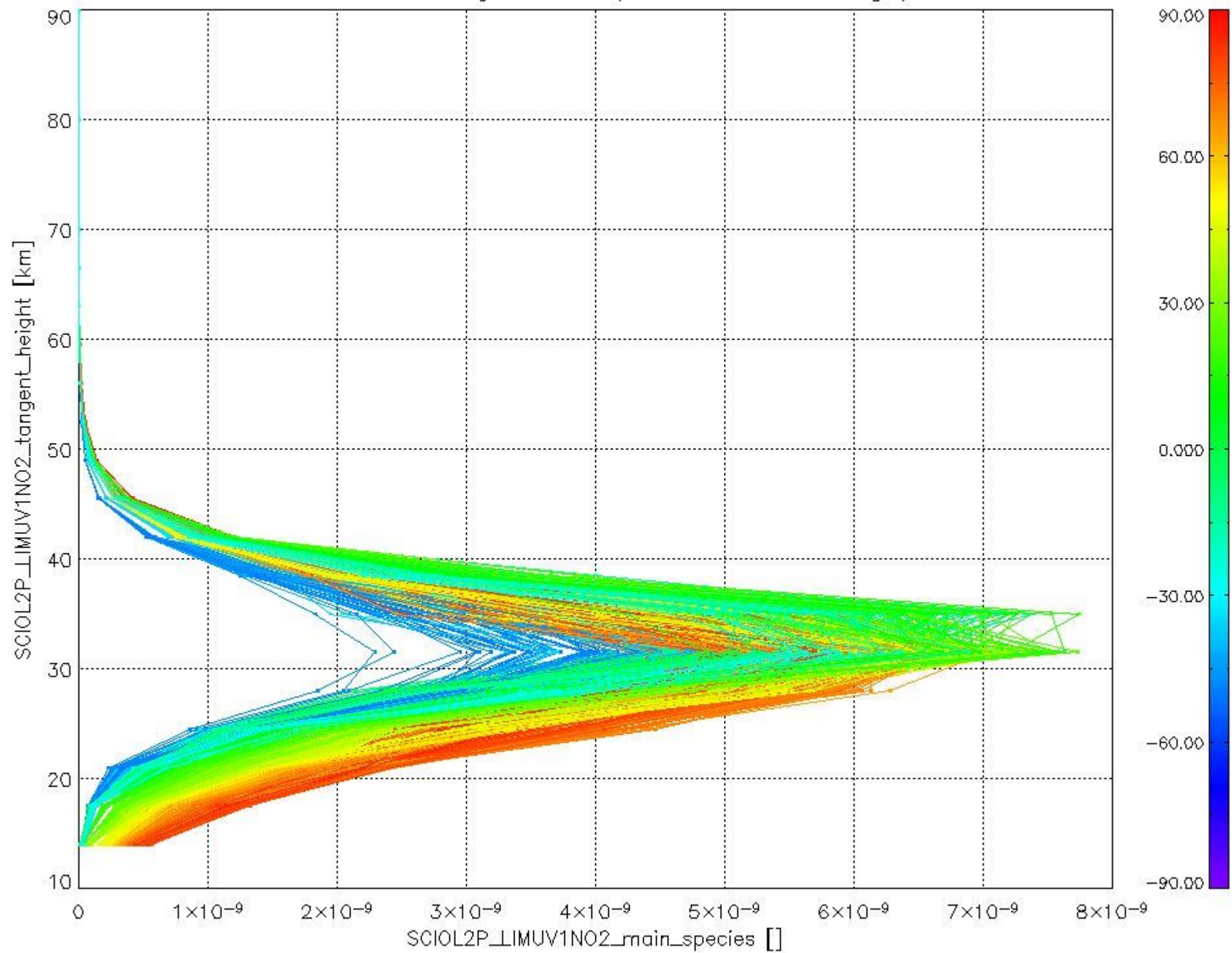
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



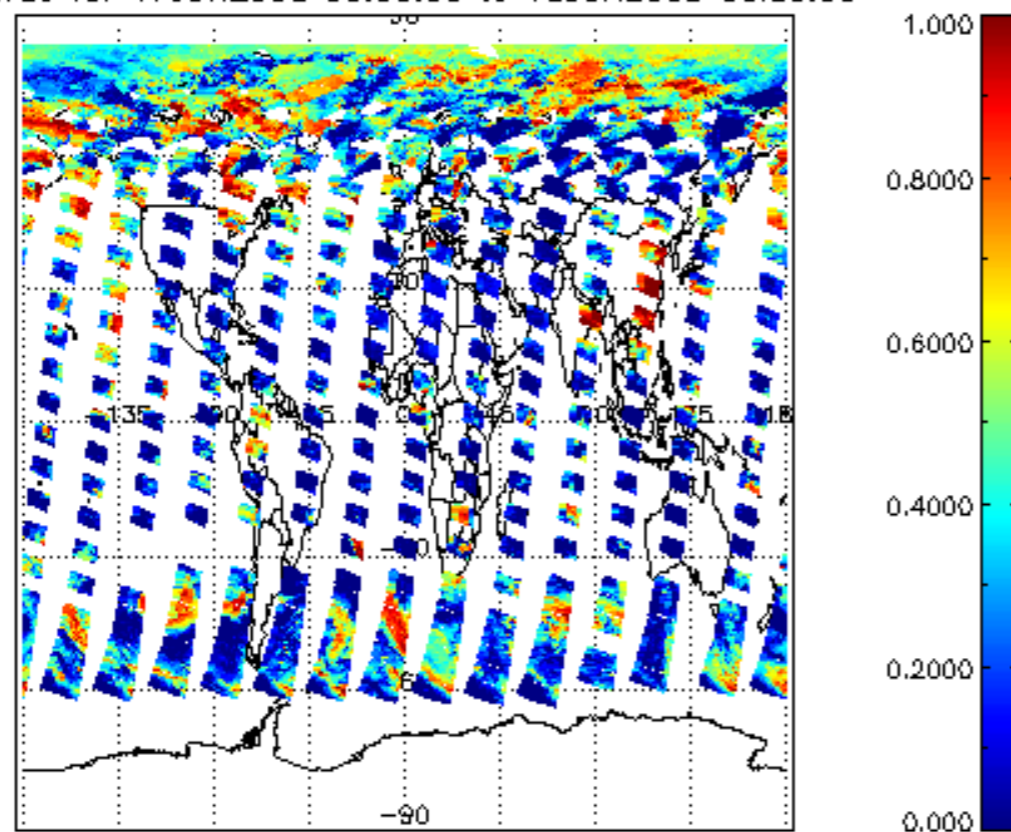
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



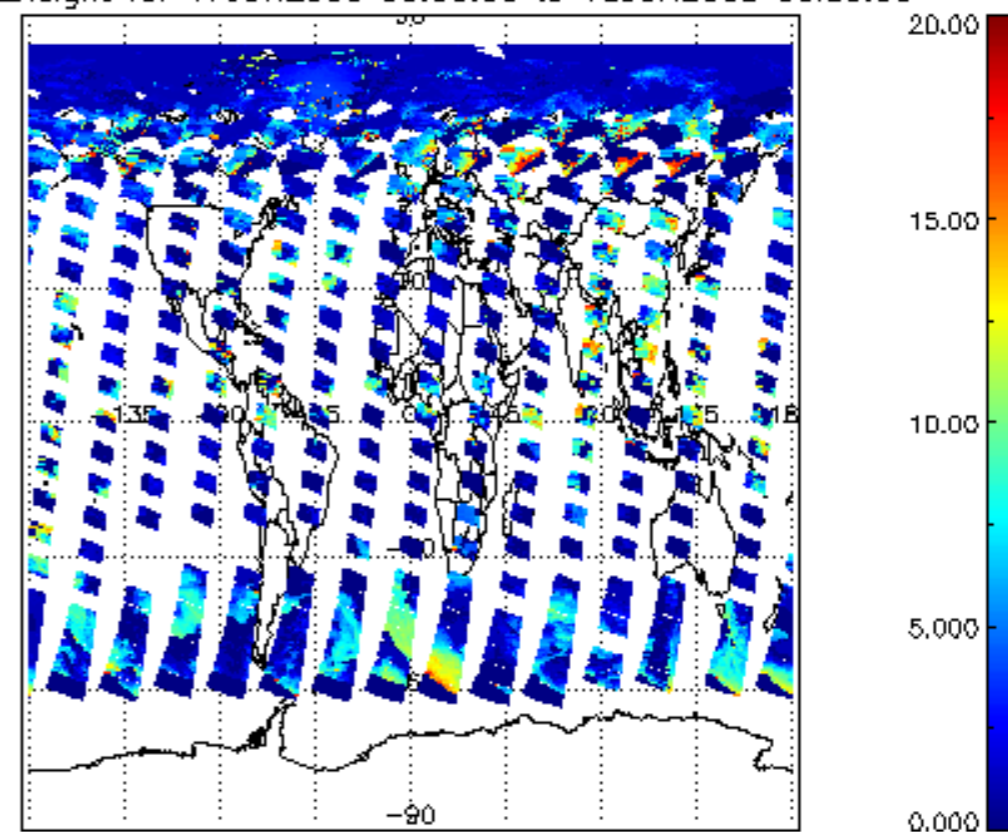
2.3 ADF monitoring

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

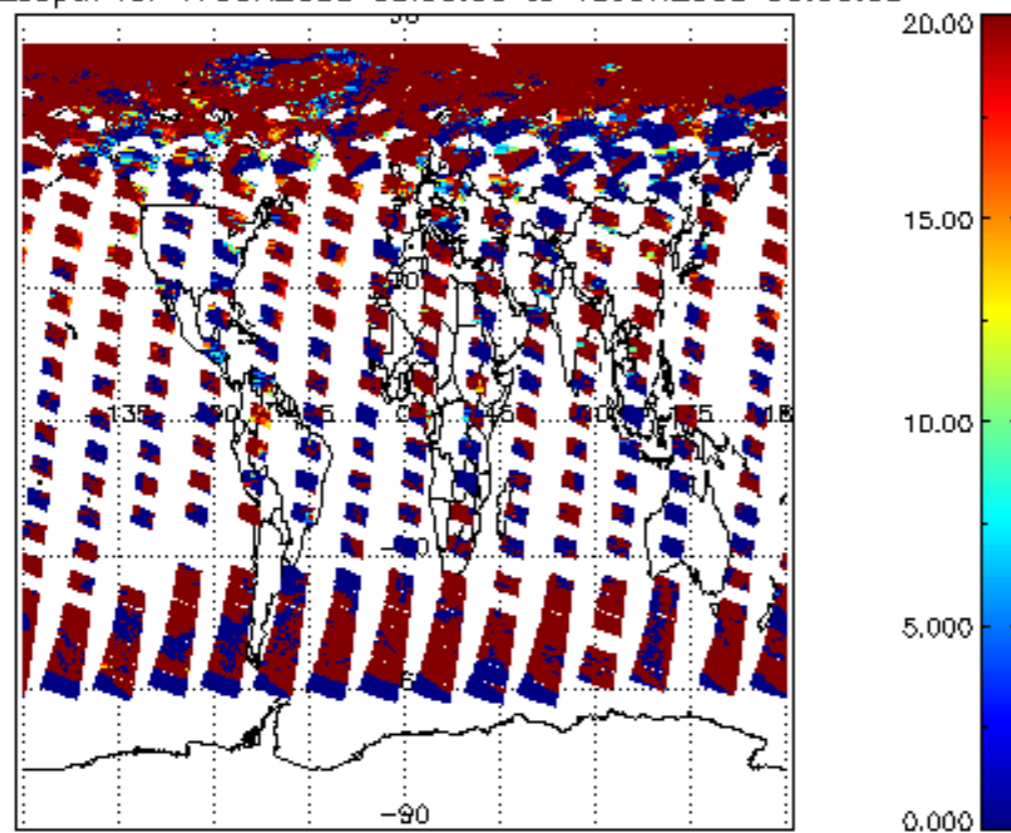
cl_frac for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



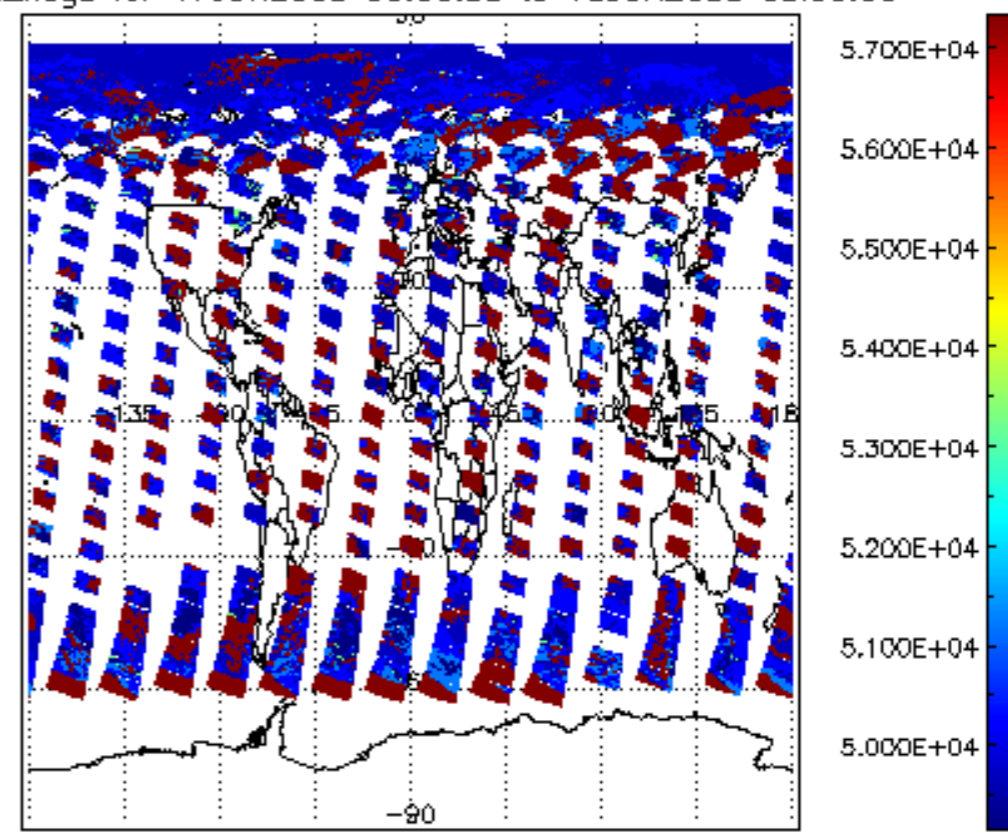
cl_top_height for 17JUN2008 00:00:00 to 18JUN2008 00:00:00

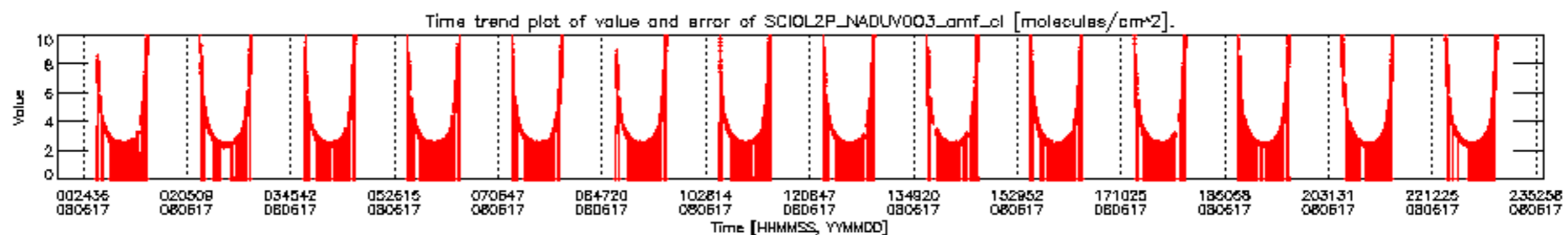
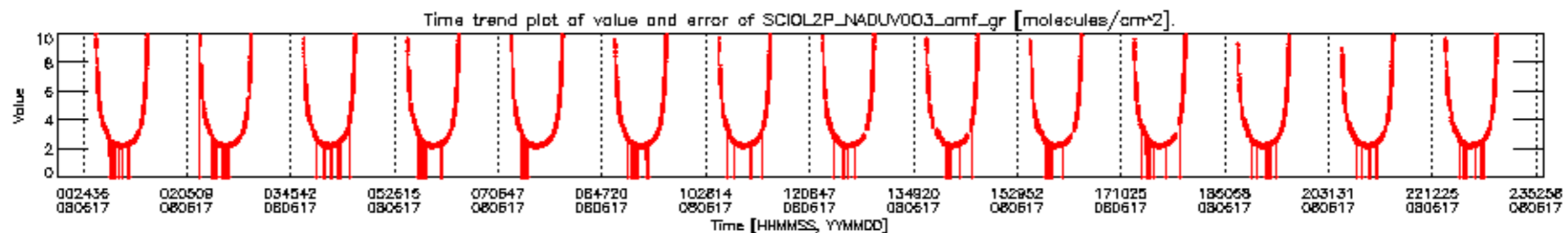
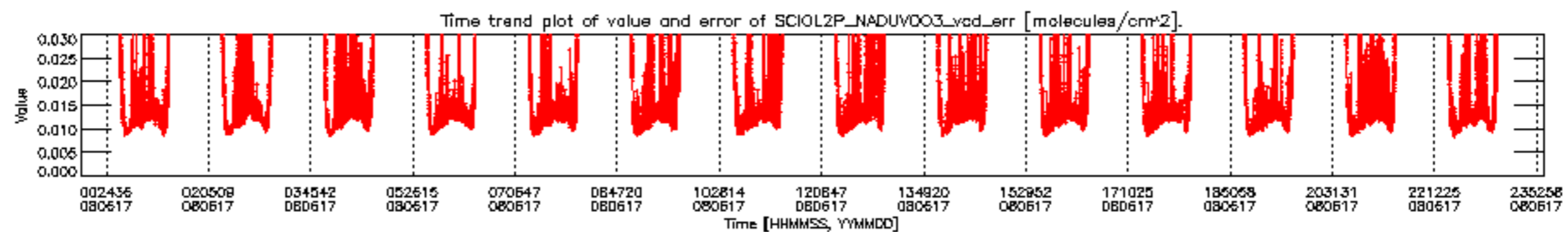
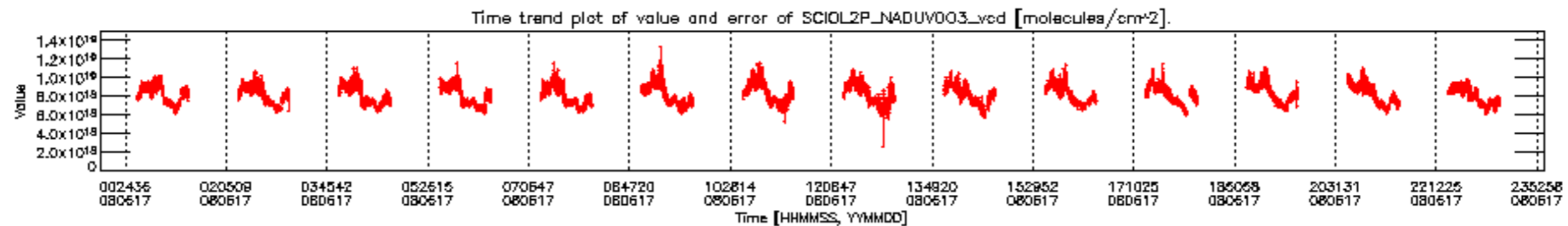


cl_opt_depth for 17JUN2008 00:00:00 to 18JUN2008 00:00:00

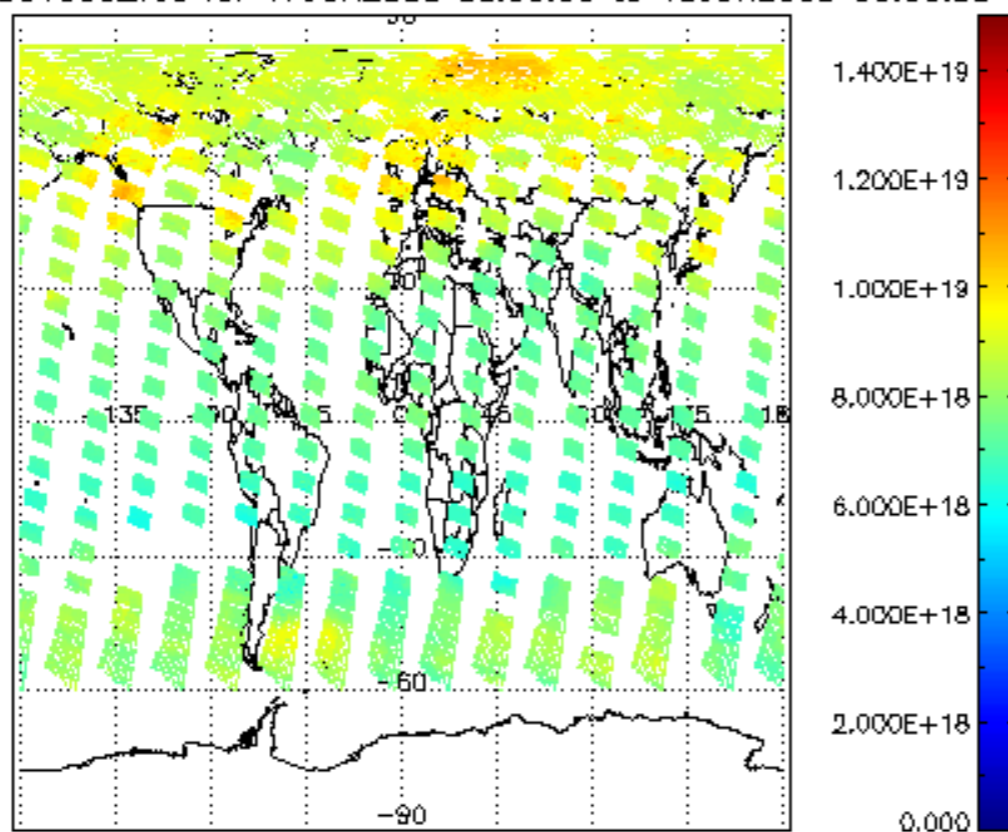


cloud_flags for 17JUN2008 00:00:00 to 18JUN2008 00:00:00

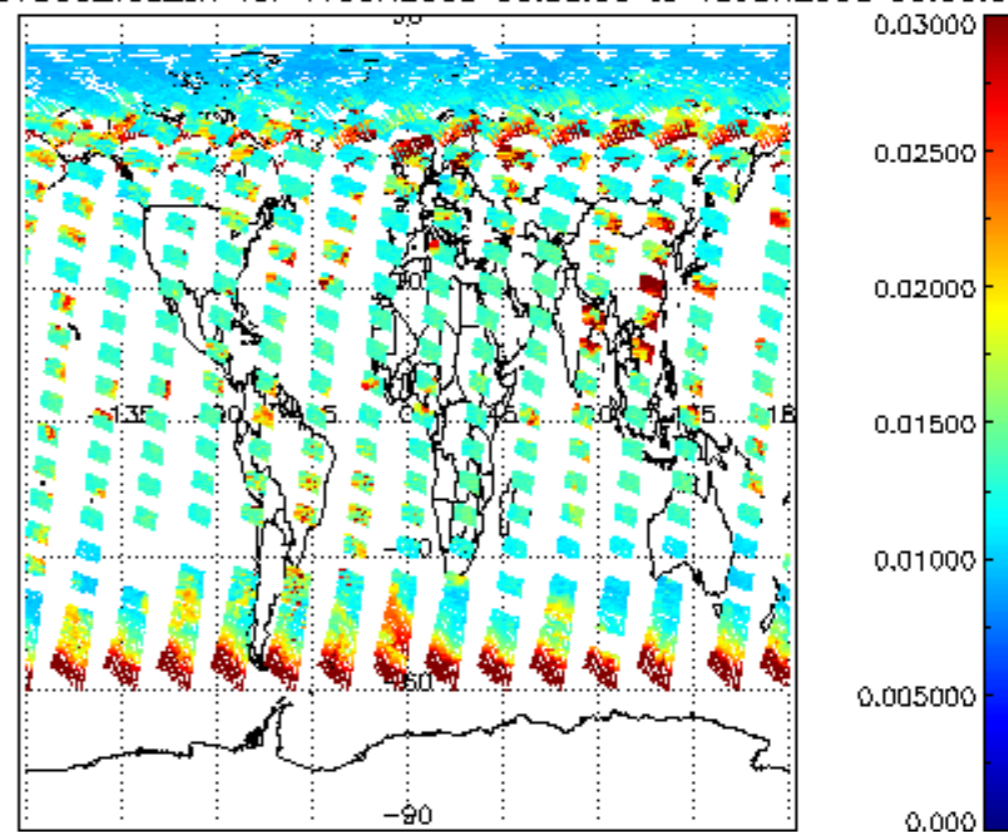




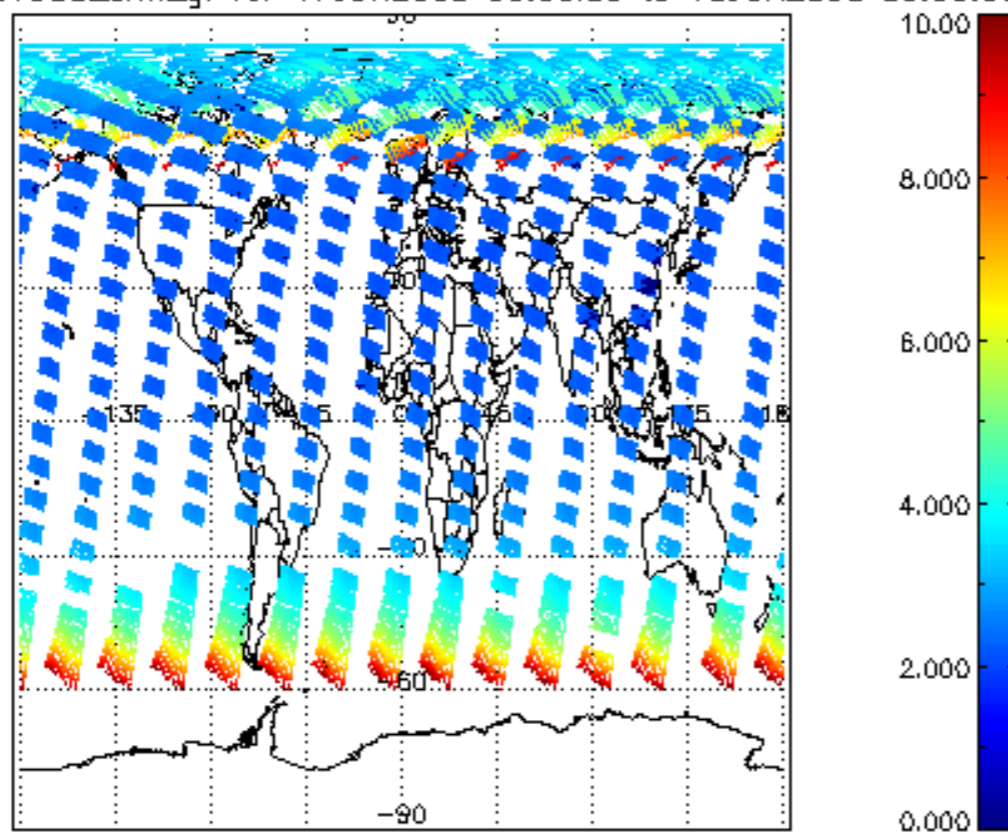
SCIOL2P_NADUV003_vcd for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



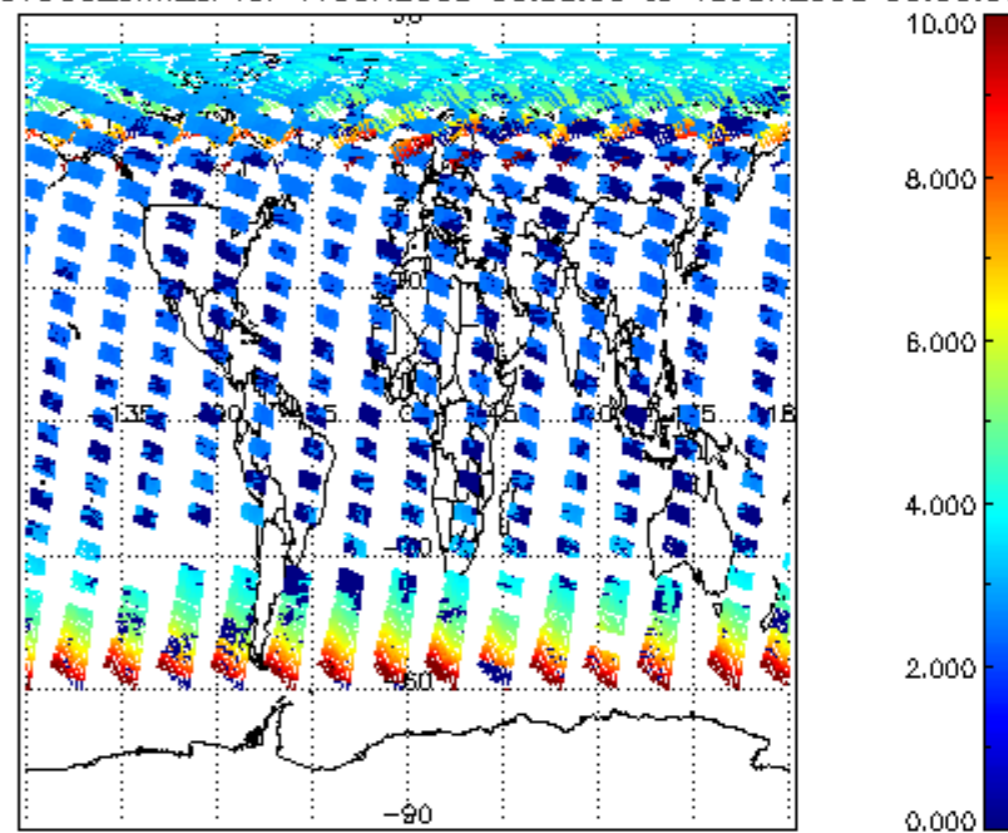
SCIOL2P_NADUV003_vcd_err for 17JUN2008 00:00:00 to 18JUN2008 00:00:00

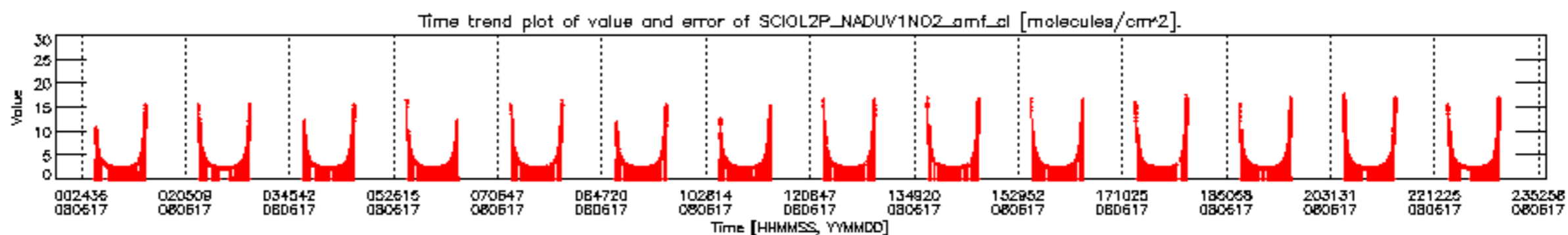
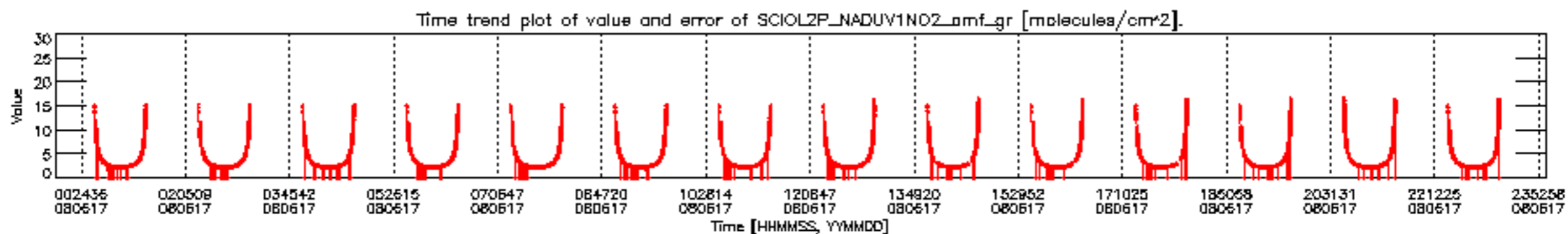
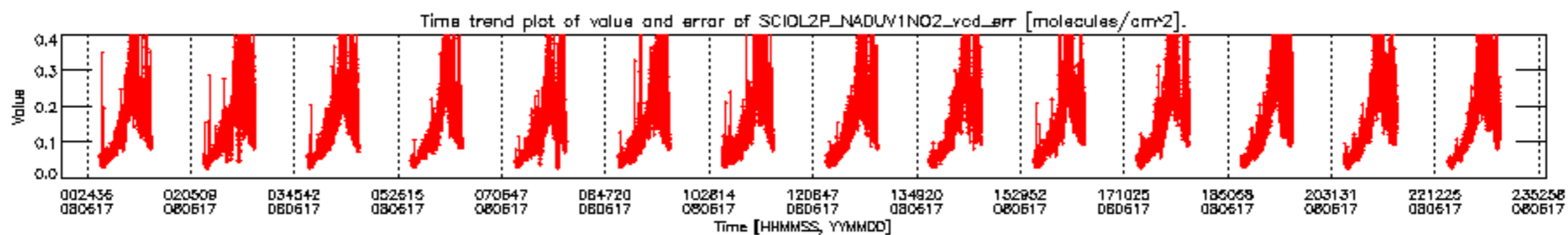
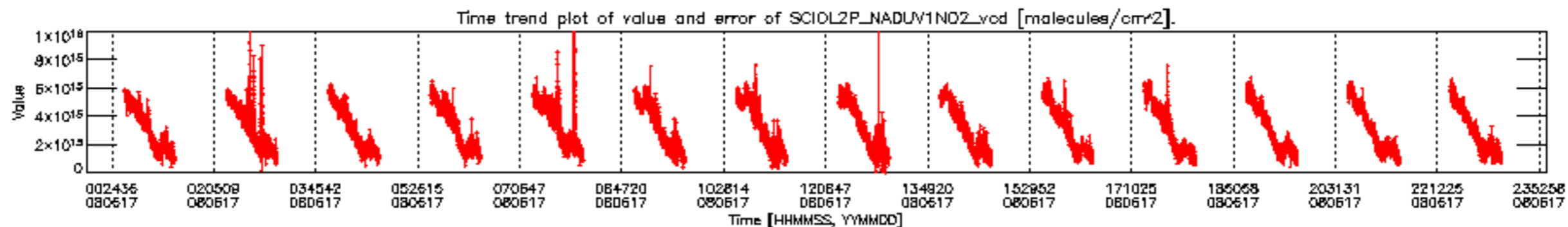


SCIOL2P_NADUV003_amf_gr for 17JUN2008 00:00:00 to 18JUN2008 00:00:00

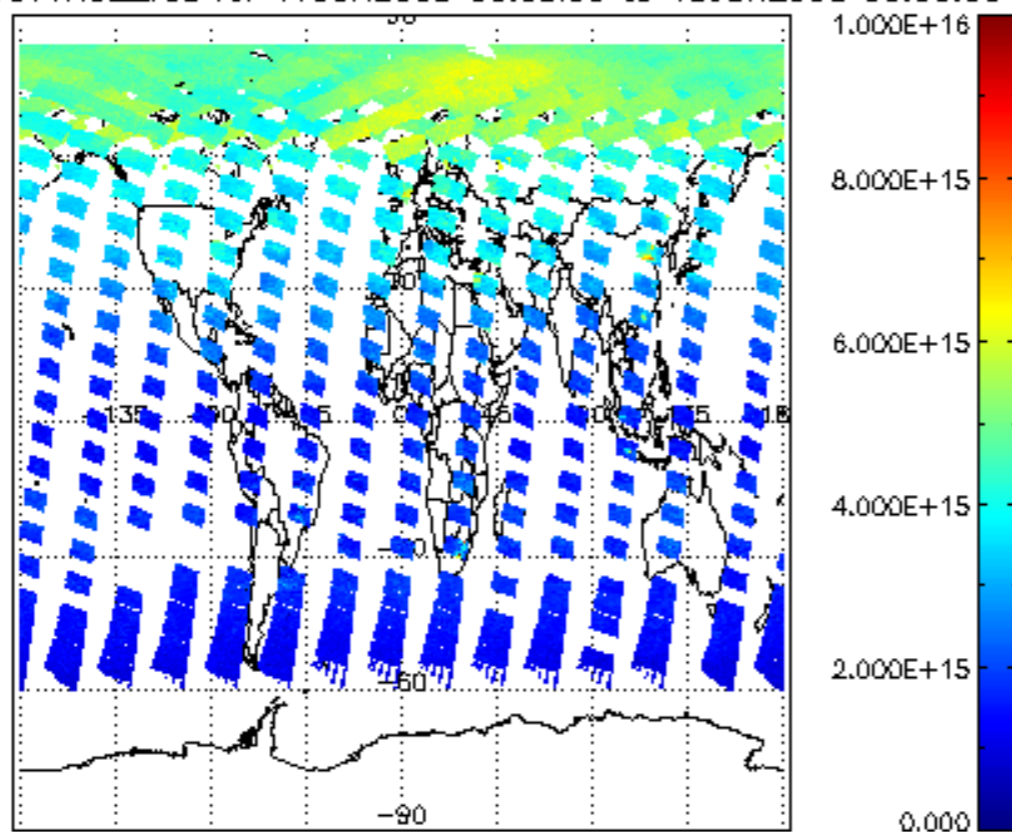


SCIOL2P_NADUV003_amf_cl for 17JUN2008 00:00:00 to 18JUN2008 00:00:00

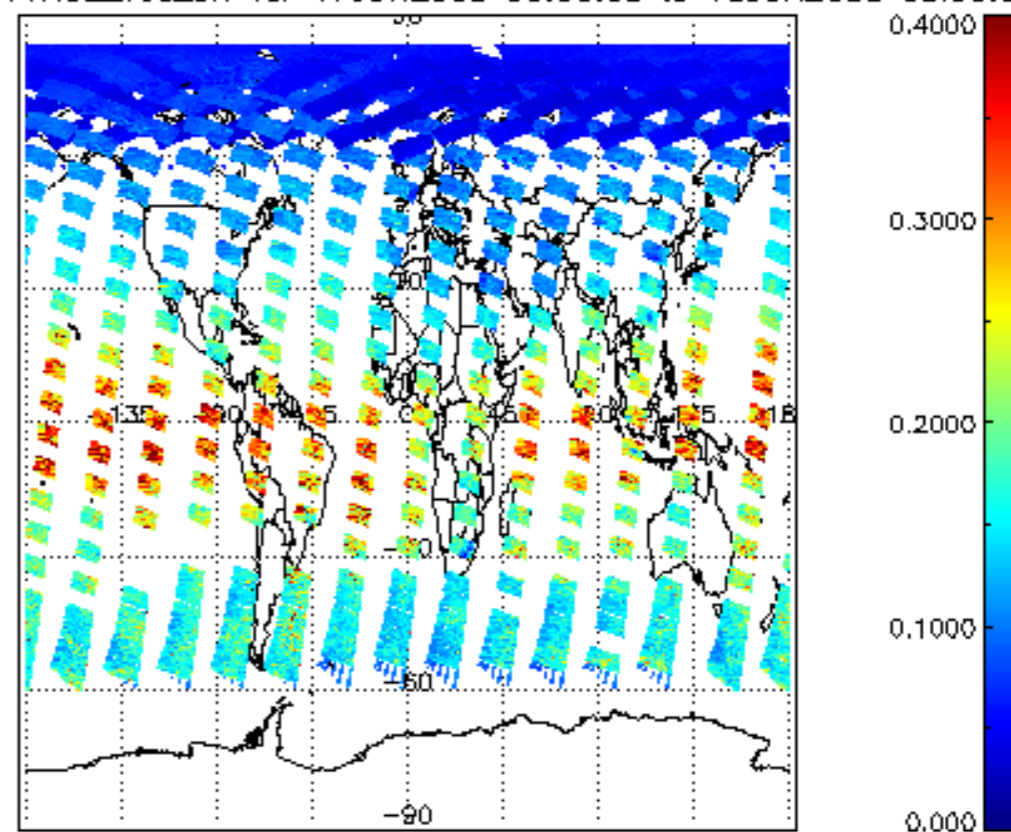




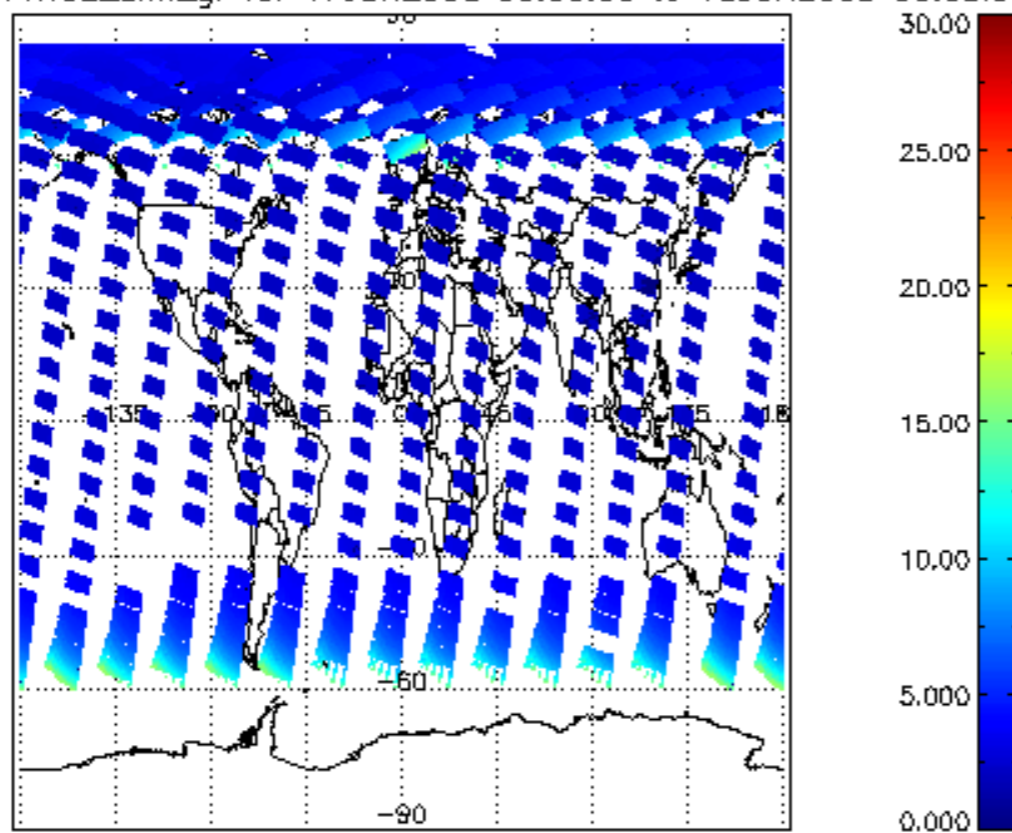
SCIOL2P_NADUV1NO2_vcd for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



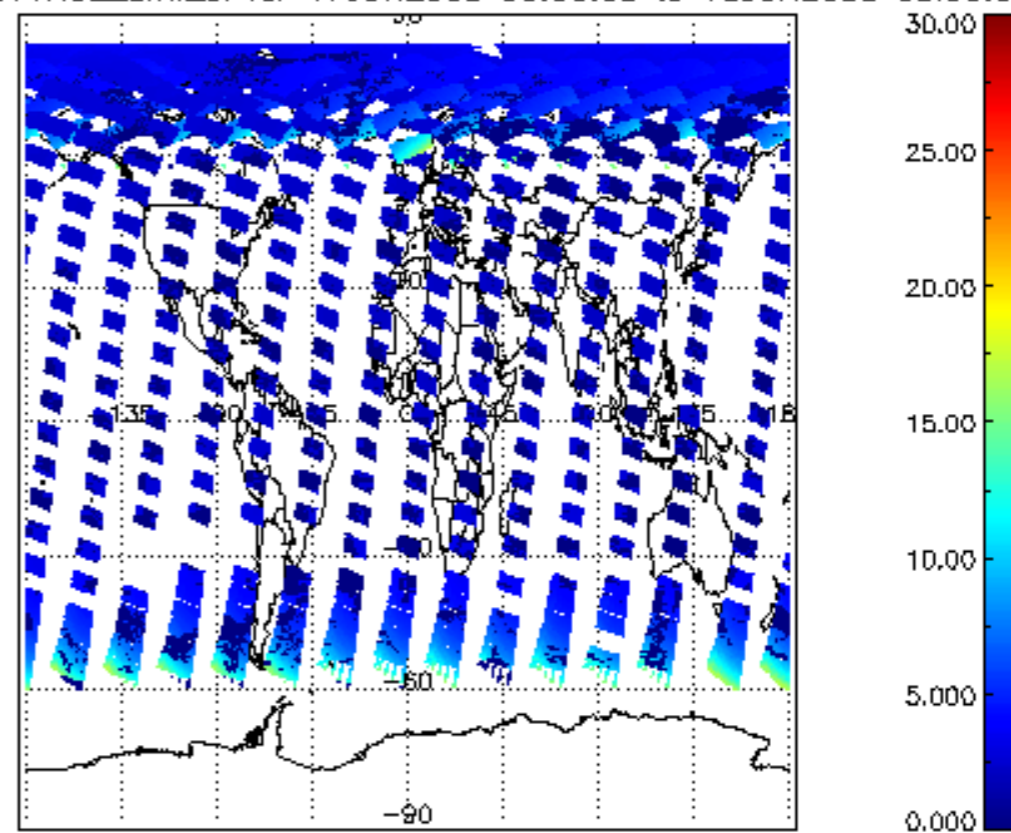
iCIOL2P_NADUV1NO2_vcd_err for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



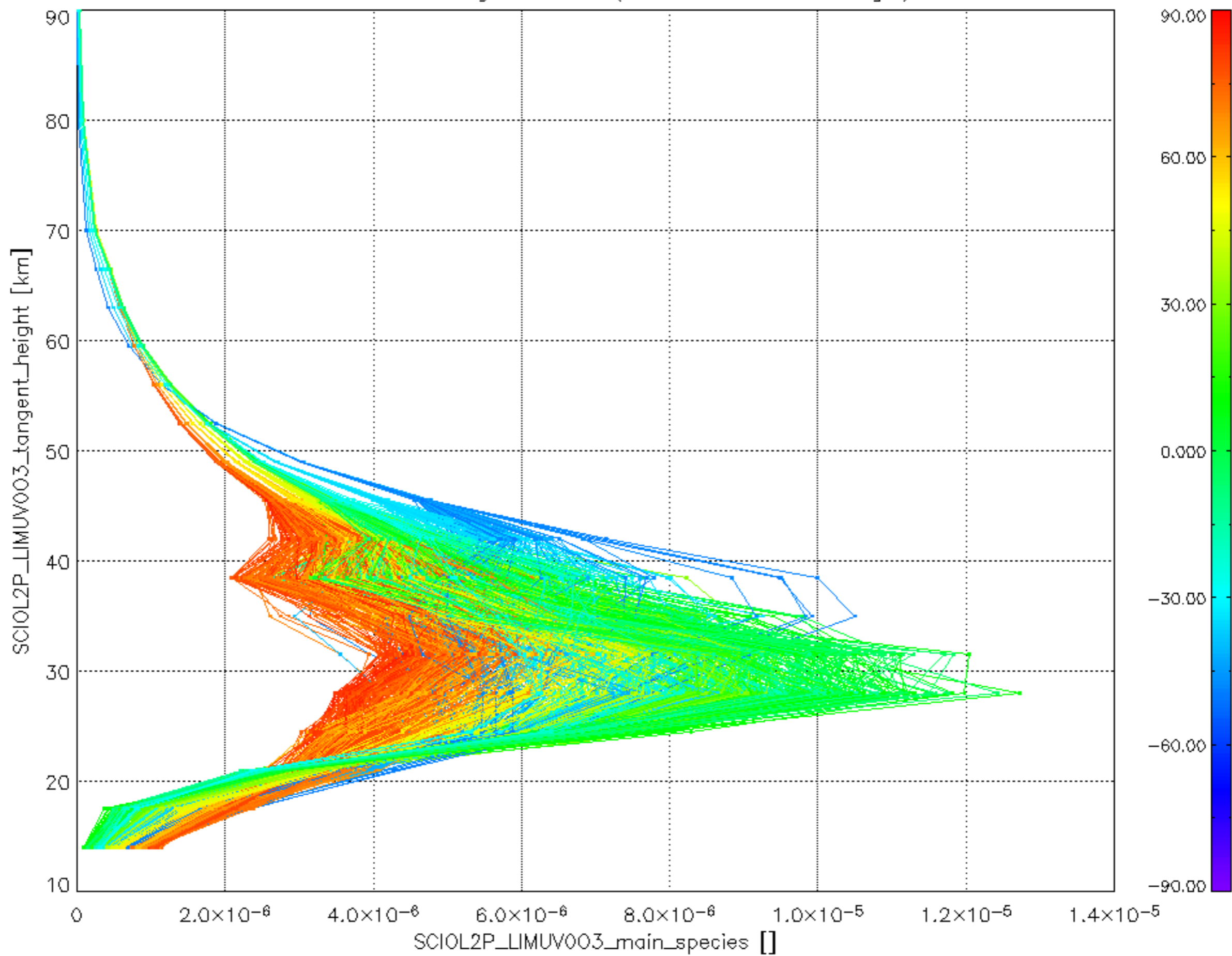
iCIOL2P_NADUV1NO2_amf_gr for 17JUN2008 00:00:00 to 18JUN2008 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 17JUN2008 00:00:00 to 18JUN2008 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_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

