

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	25JUN2008 06:02:53
Data source version	SCIA-OL/3.01-R
Processing scope for products	07JUN2008 00:00:00 to 08JUN2008 00:00:00
Start time of first product within scope	06JUN2008 23:06:26
Stop time of last product within scope	07JUN2008 23:30:13
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__2PRDPA20080606_230626_000033252069_00159_32778_1185.N1	06JUN2008 23:06:26	07JUN2008 00:01:52	0	GOOD
1	SCI_OL__2PRDPA20080607_004702_000033122069_00160_32779_1184.N1	07JUN2008 00:47:02	07JUN2008 01:42:15	0	GOOD
2	SCI_OL__2PRDPA20080607_022738_000033252069_00161_32780_1186.N1	07JUN2008 02:27:38	07JUN2008 03:23:03	0	GOOD
3	SCI_OL__2PRDPA20080607_040814_000033122069_00162_32781_1187.N1	07JUN2008 04:08:14	07JUN2008 05:03:27	0	GOOD
4	SCI_OL__2PRDPA20080607_054850_000033252069_00163_32782_1188.N1	07JUN2008 05:48:50	07JUN2008 06:44:15	0	GOOD
5	SCI_OL__2PRDPA20080607_072925_000033122069_00164_32783_1189.N1	07JUN2008 07:29:25	07JUN2008 08:24:38	0	GOOD
6	SCI_OL__2PRDPA20080607_091001_000033252069_00165_32784_1190.N1	07JUN2008 09:10:01	07JUN2008 10:05:27	0	GOOD
7	SCI_OL__2PRDPA20080607_105037_000033122069_00166_32785_1191.N1	07JUN2008 10:50:37	07JUN2008 11:45:50	0	GOOD
8	SCI_OL__2PRDPA20080607_123113_000033252069_00167_32786_1192.N1	07JUN2008 12:31:13	07JUN2008 13:26:38	0	GOOD
9	SCI_OL__2PRDPA20080607_141148_000033122069_00168_32787_1193.N1	07JUN2008 14:11:48	07JUN2008 15:07:01	0	GOOD
10	SCI_OL__2PRDPA20080607_155224_000033252069_00169_32788_1194.N1	07JUN2008 15:52:24	07JUN2008 16:47:50	0	GOOD
11	SCI_OL__2PRDPA20080607_173219_000033682069_00170_32789_1195.N1	07JUN2008 17:32:19	07JUN2008 18:28:28	0	GOOD
12	SCI_OL__2PRDPA20080607_191255_000033812069_00171_32790_1196.N1	07JUN2008 19:12:55	07JUN2008 20:09:17	0	GOOD
13	SCI_OL__2PRDPA20080607_205412_000033122069_00172_32791_1212.N1	07JUN2008 20:54:12	07JUN2008 21:49:25	0	GOOD
14	SCI_OL__2PRDPA20080607_223448_000033252069_00173_32792_1250.N1	07JUN2008 22:34:48	07JUN2008 23:30:13	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: 144131

Total number of cloud data DSRs with good quality flag (=0): 144131 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	144131	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	144131	0.17077	0.12500	0.12500	0.25000	0.060221	s
SURFACE_PRES	144131	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	144131	0.34212	0.30422	0.0000	1.0000	0.29867	-

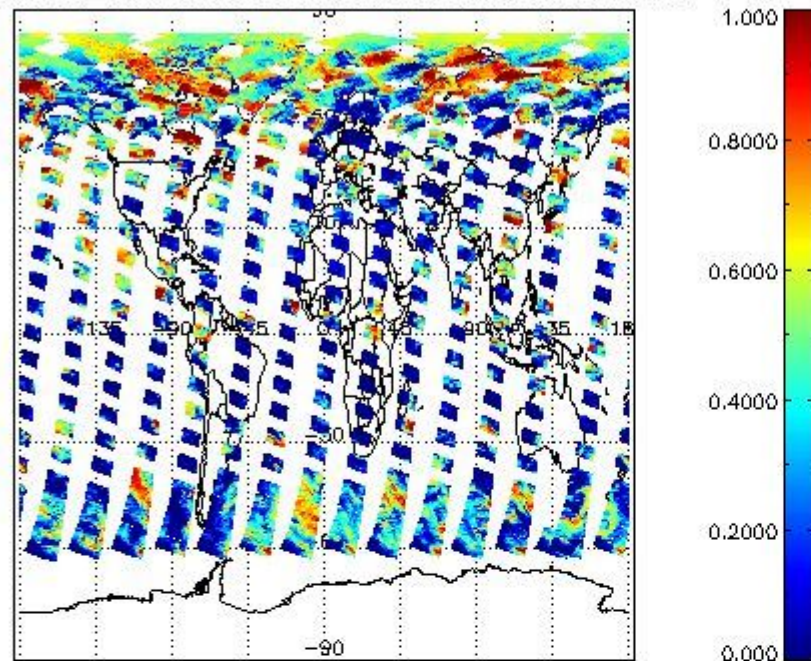
CL_FRAC_ERR	144131	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	144131	5.4648	4.0000	4.0000	8.0000	1.9271	
PMD_READ_CL[0]	144131	0.24689	0.0000	0.0000	8.0000	1.1672	-
PMD_READ_CL[1]	144131	1.5907	0.0000	0.0000	8.0000	2.5620	-
CL_TOP_HEIGHT	127716	3.1064	1.2010	0.0000	17.000	3.6396	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	127716	59.408	100.00	0.0000	101.00	44.439	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	144131	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	144131	11001100	11000100	11000000	11100000	3511.2	flags
AERO_ABSO_IND	144131	3.1792	3.5853	-1.4048	15.639	2.1668	
AERO_IND_DIAG	144131	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	144131	01011000	00000000	00000000	11000000	24505.	flags

Time and geolocation plots:

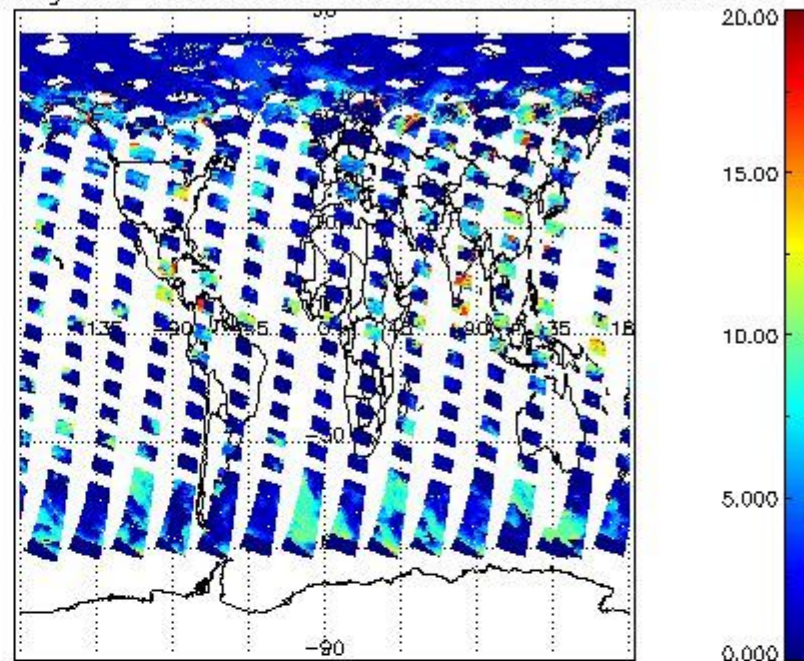
Plots are available for the following parameters:

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

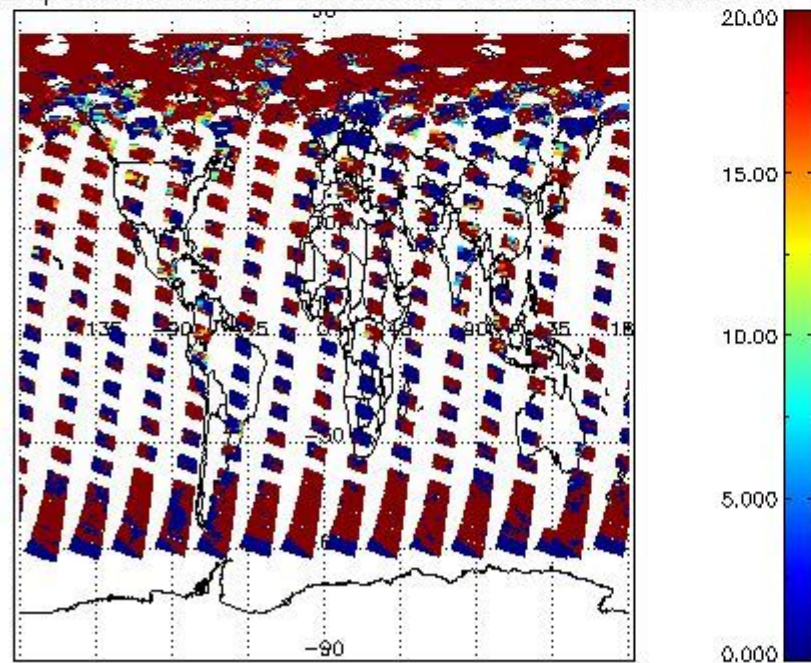
cL_frac for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



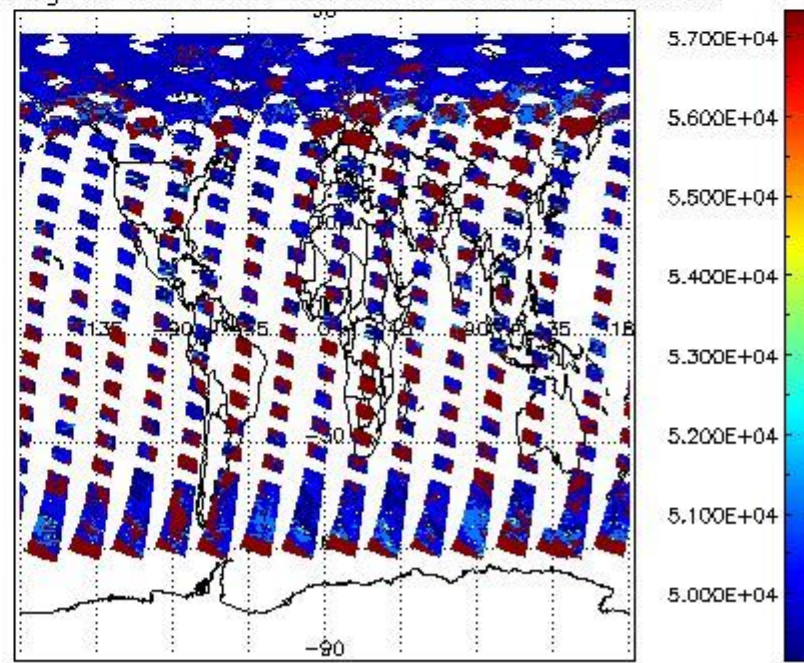
cL_top_height for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



cL_opt_depth for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



cloud_flags for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



2.2.2 Nadir

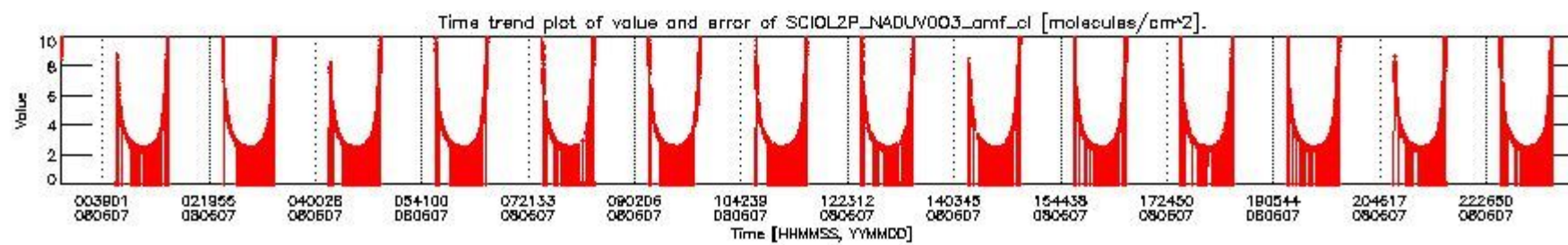
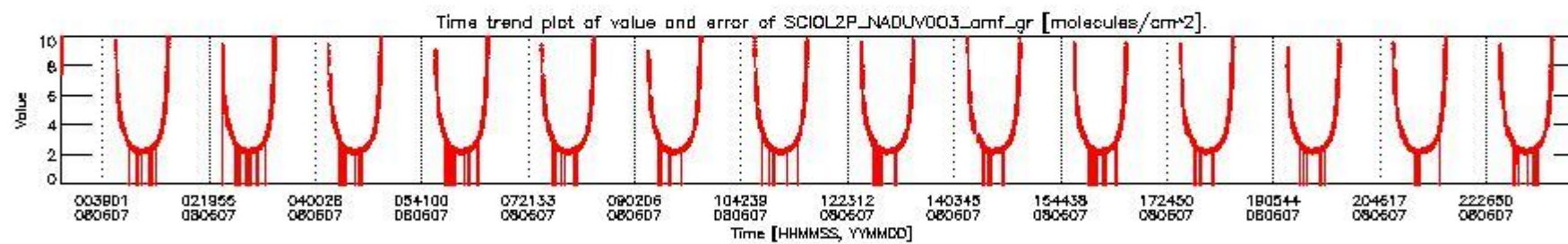
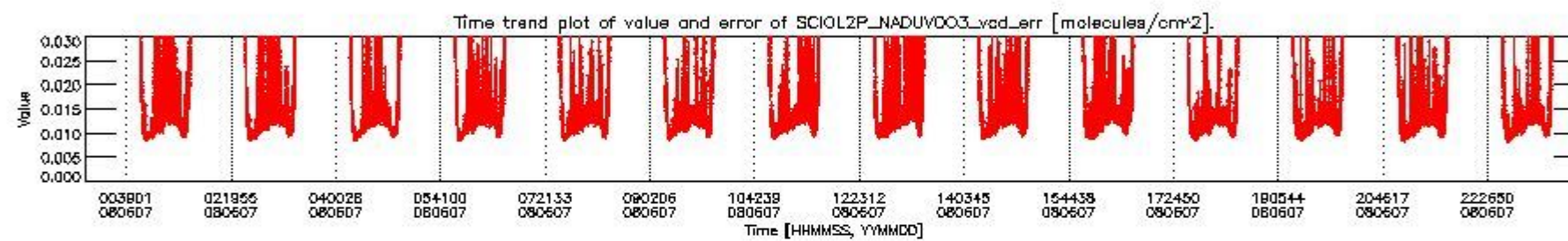
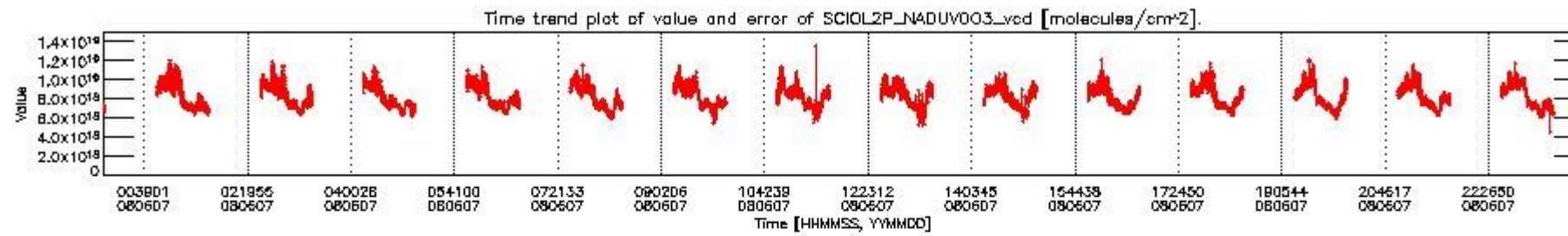
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

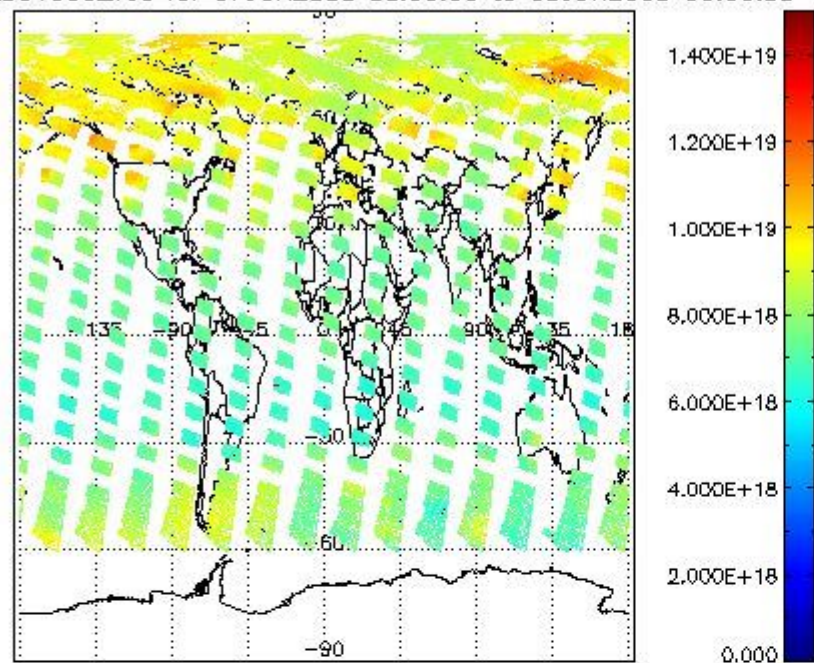
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

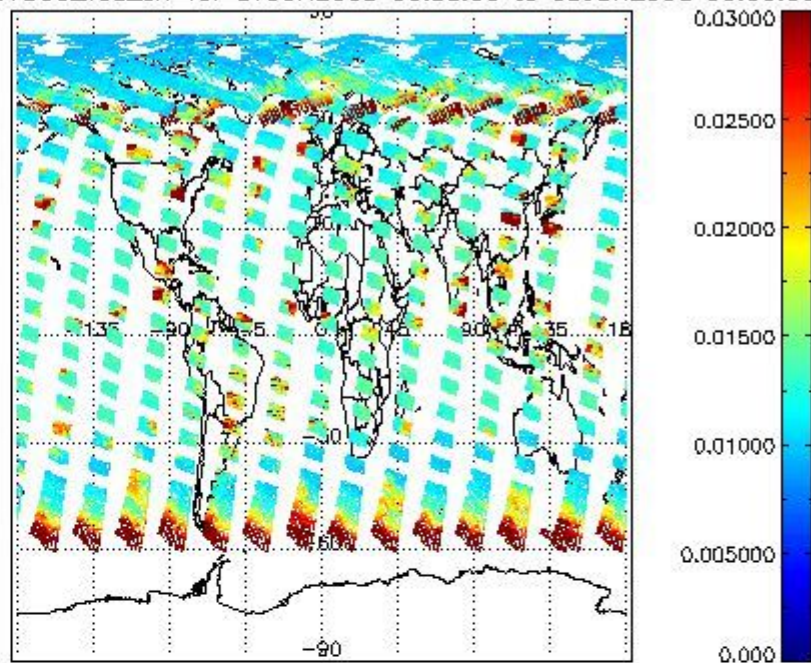
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



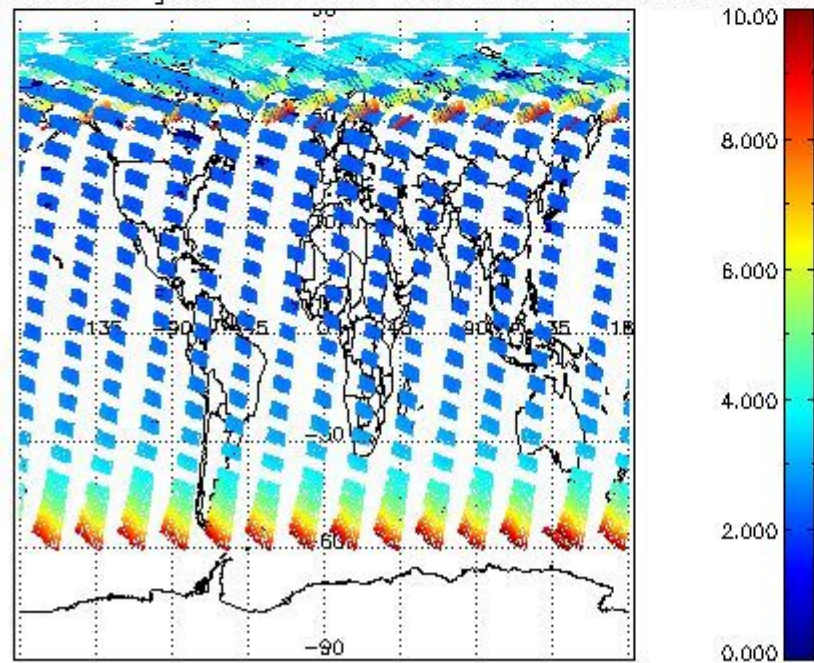
SCIOL2P_NADUV003_vcd for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



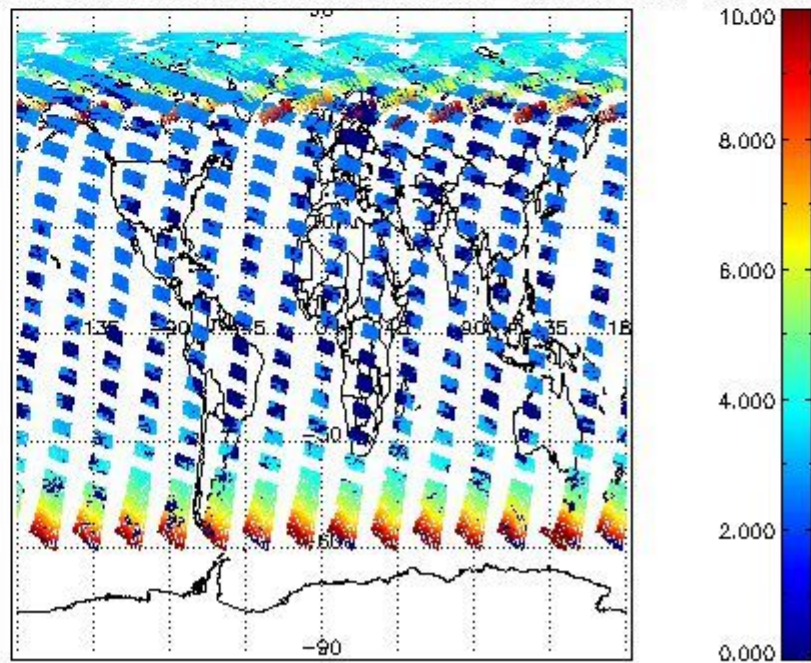
SCIOL2P_NADUV003_vcd_err for 07JUN2008 00:00:00 to 08JUN2008 00:00:00

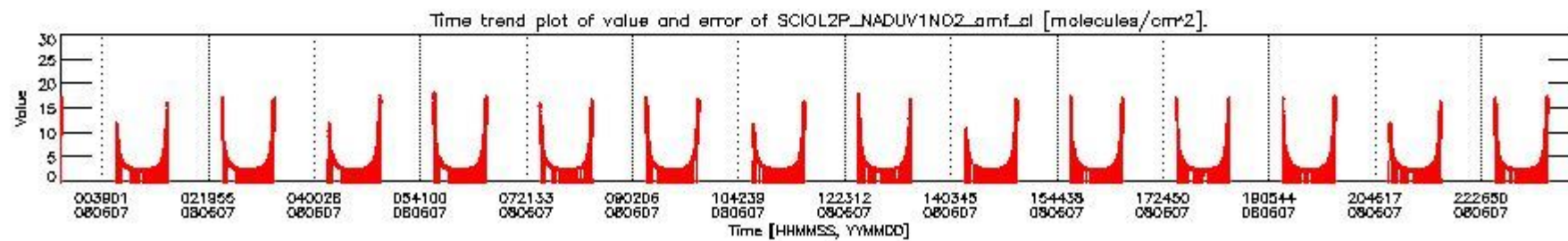
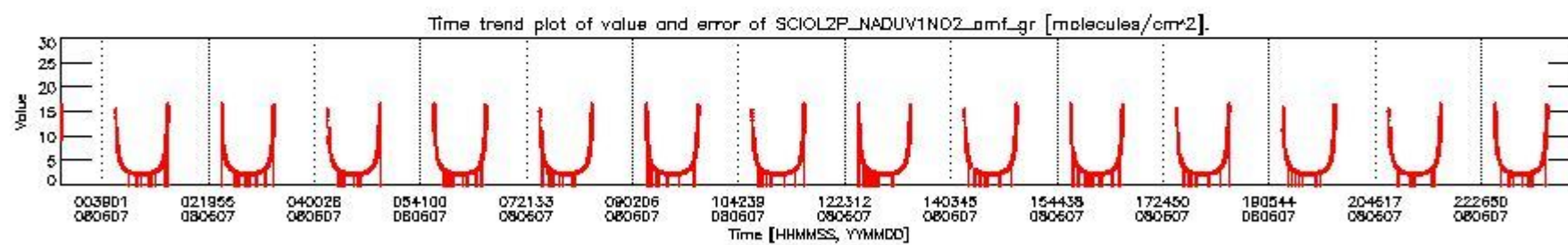
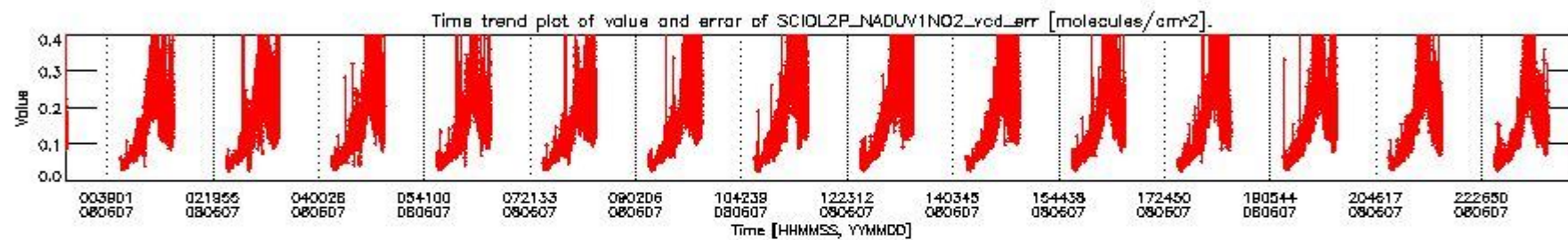
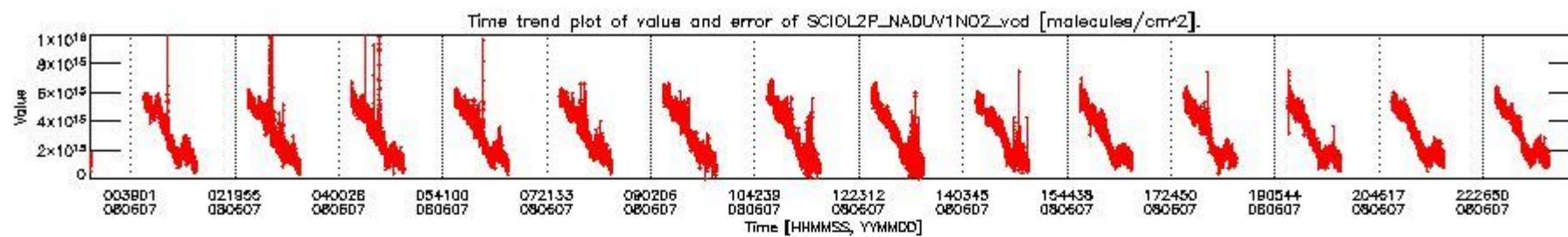


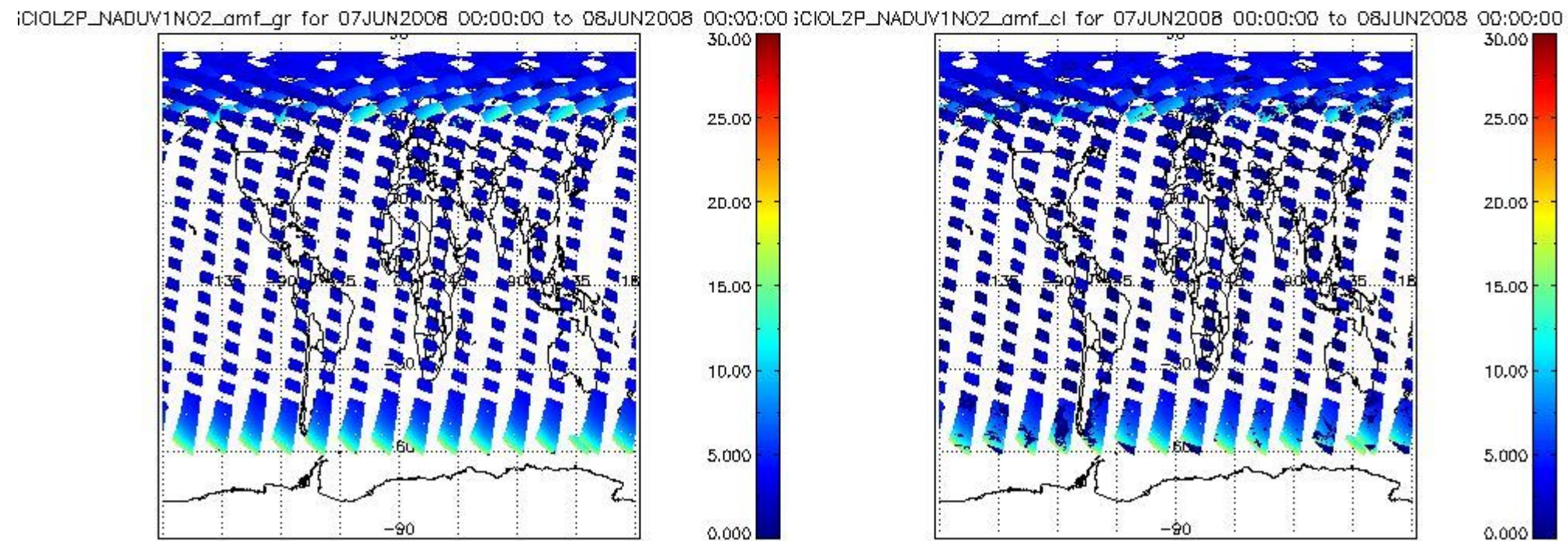
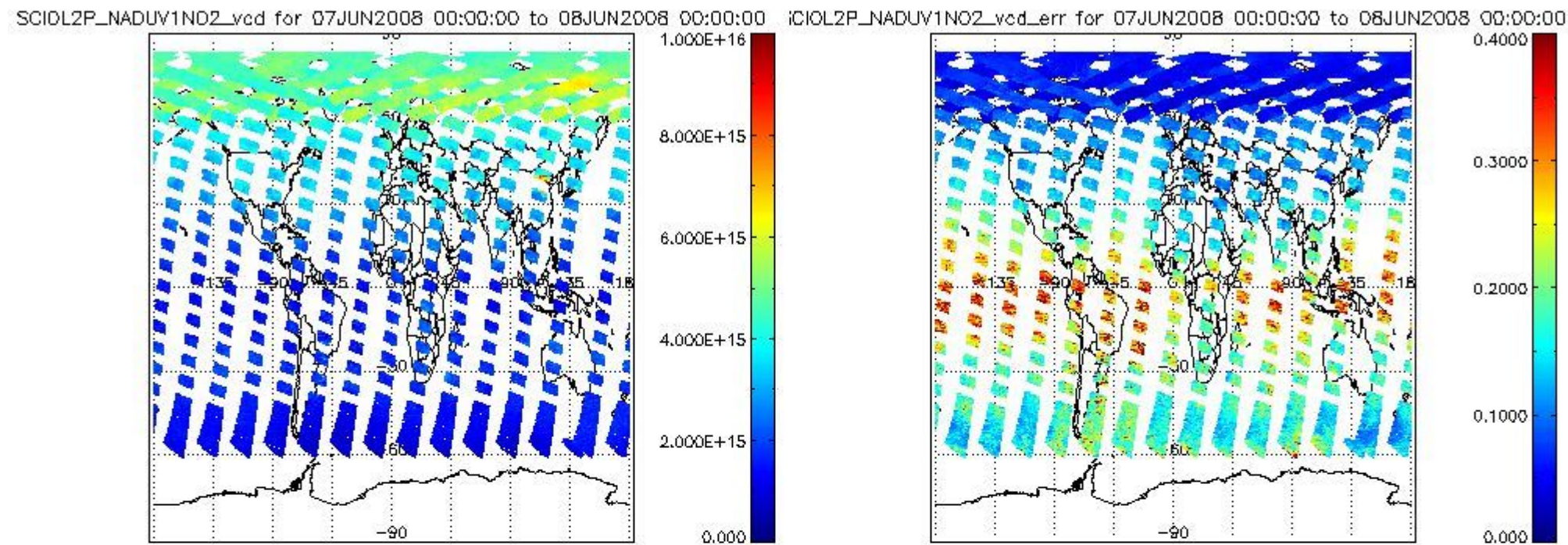
SCIOL2P_NADUV003_amf_gr for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 07JUN2008 00:00:00 to 08JUN2008 00:00:00







2.2.3 Limb

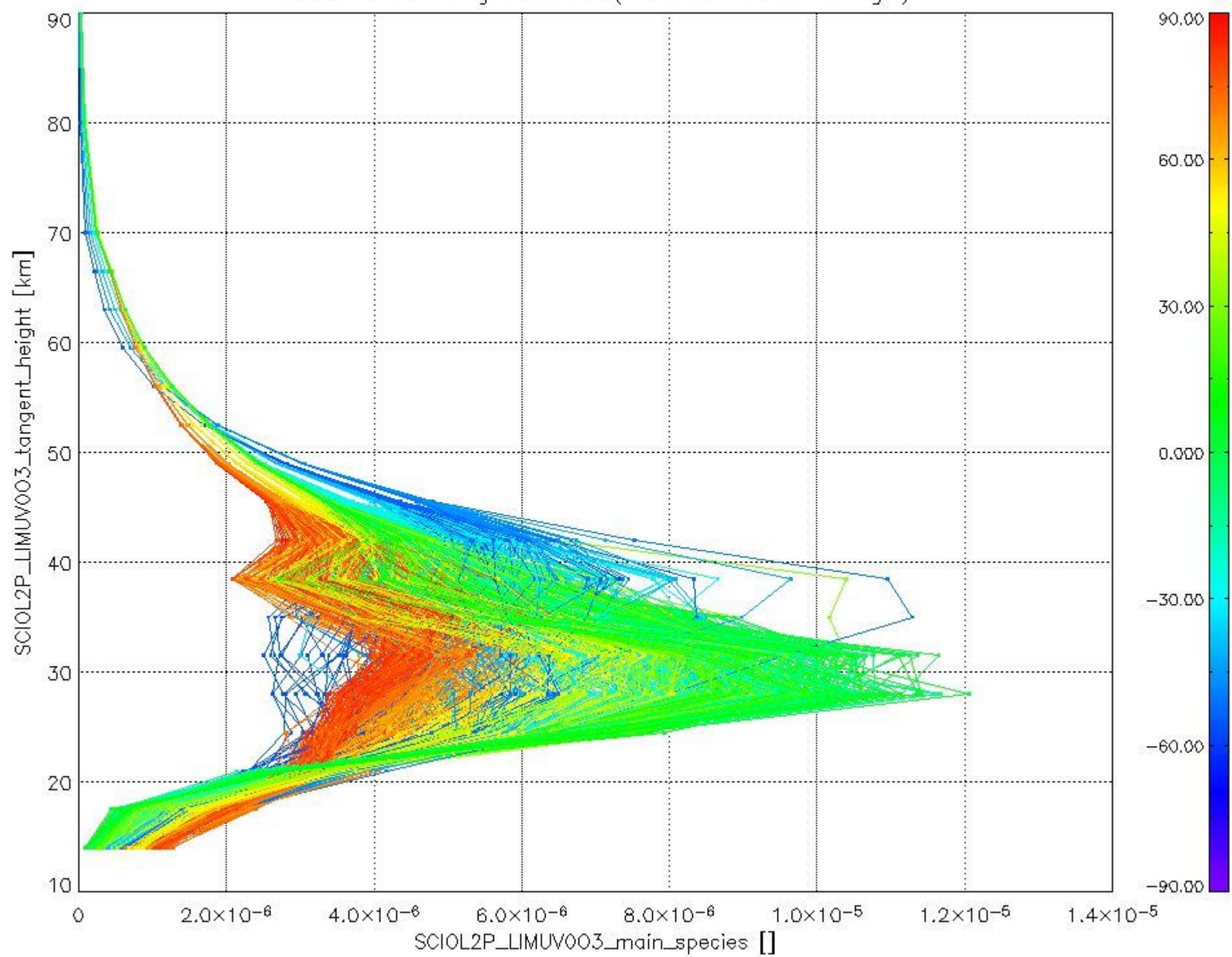
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

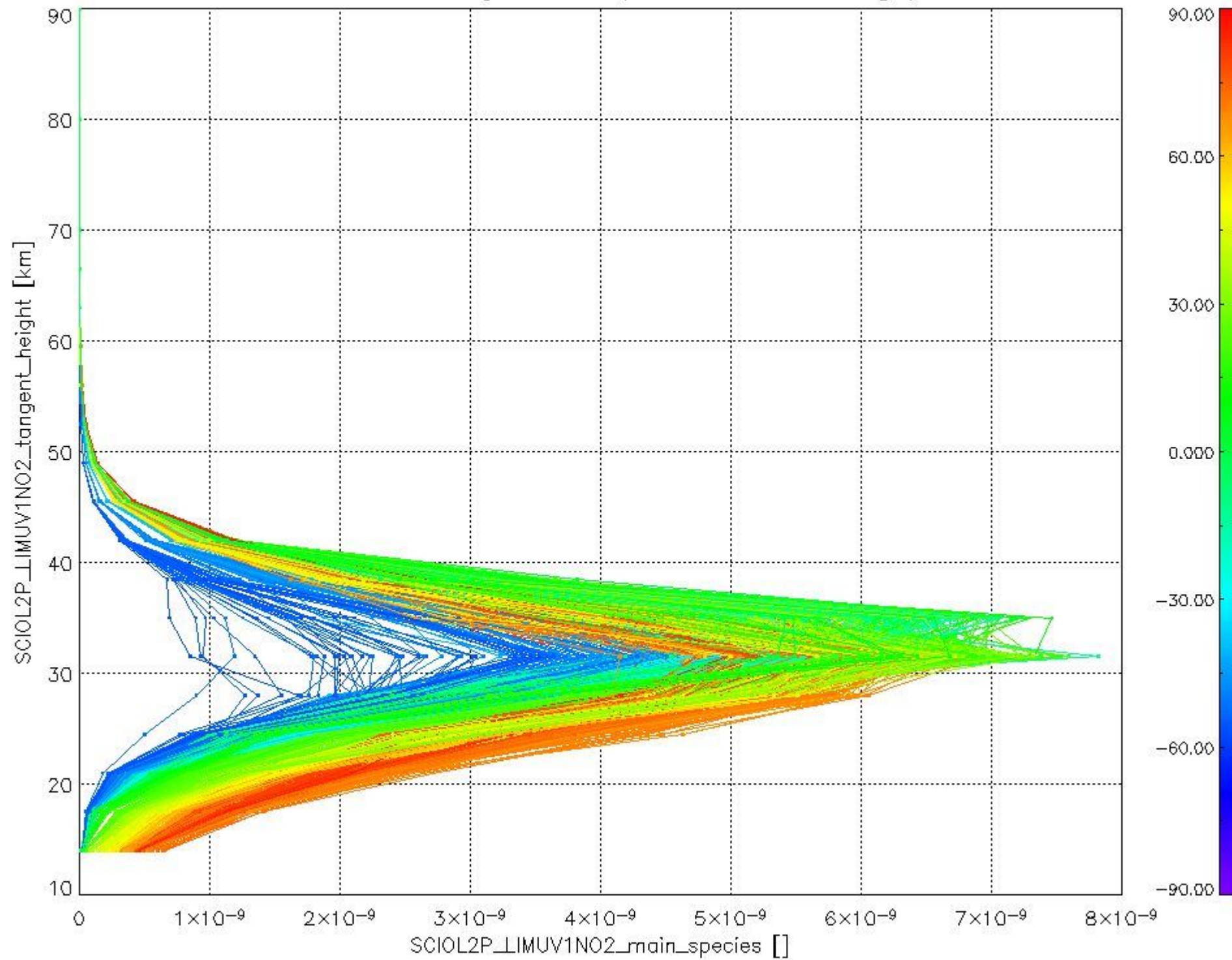
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



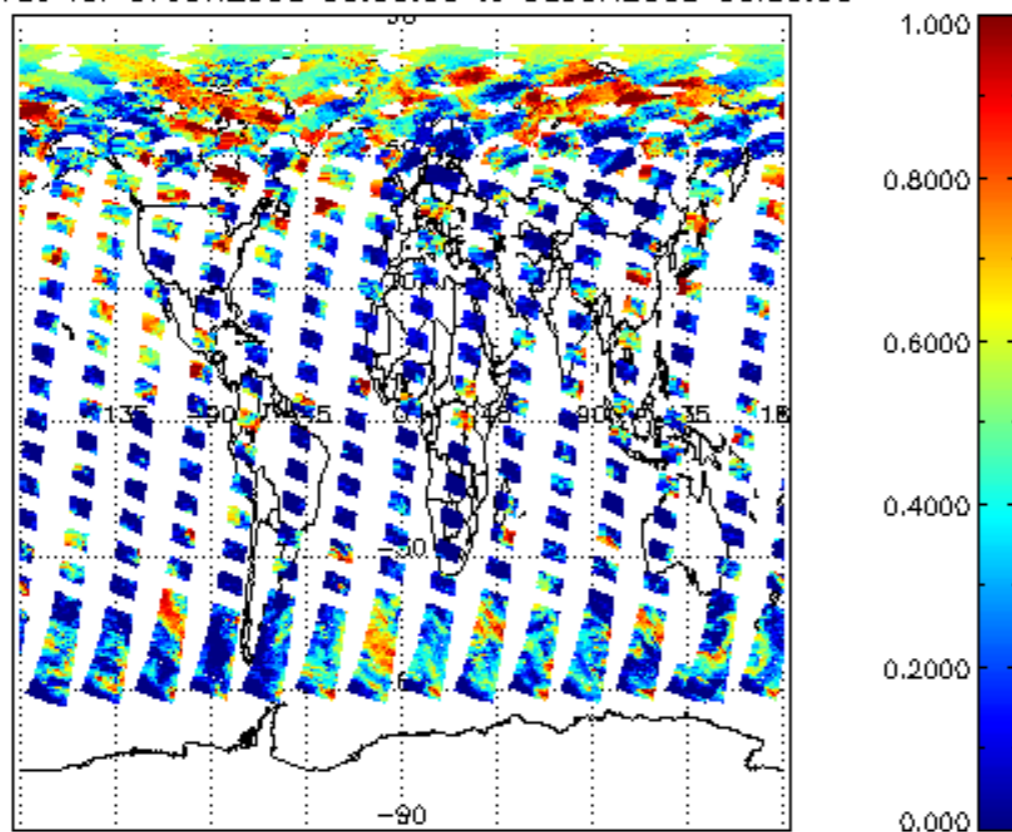
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



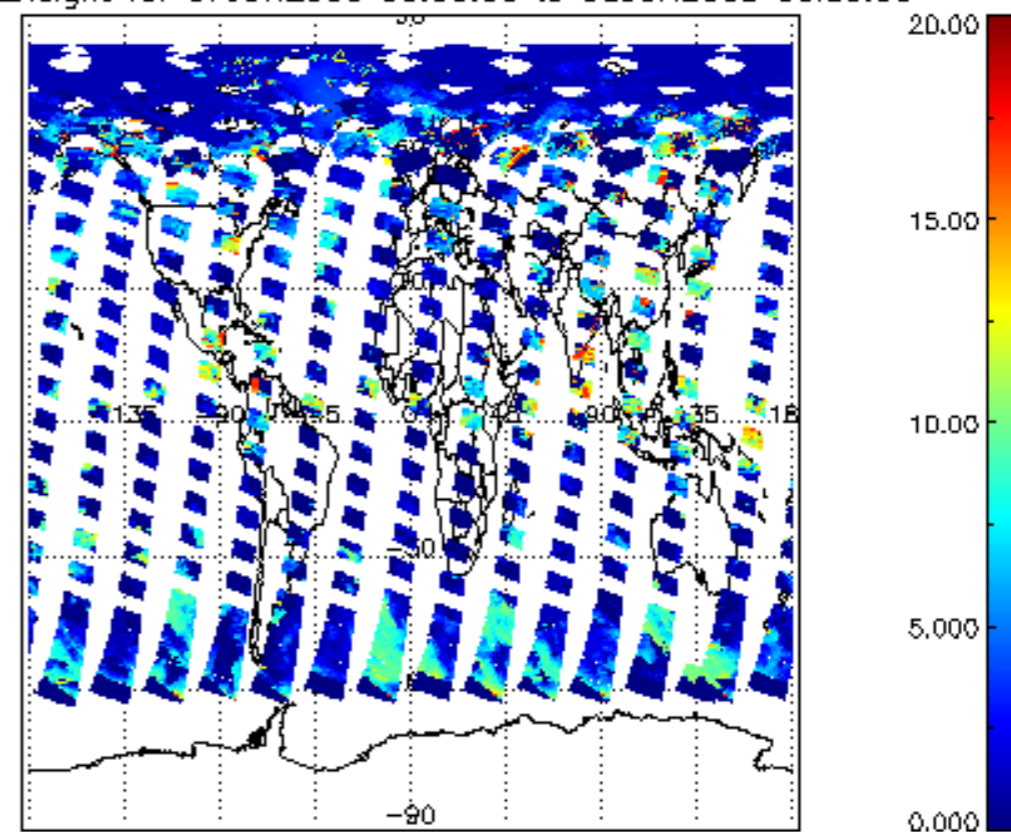
2.3 ADF monitoring

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

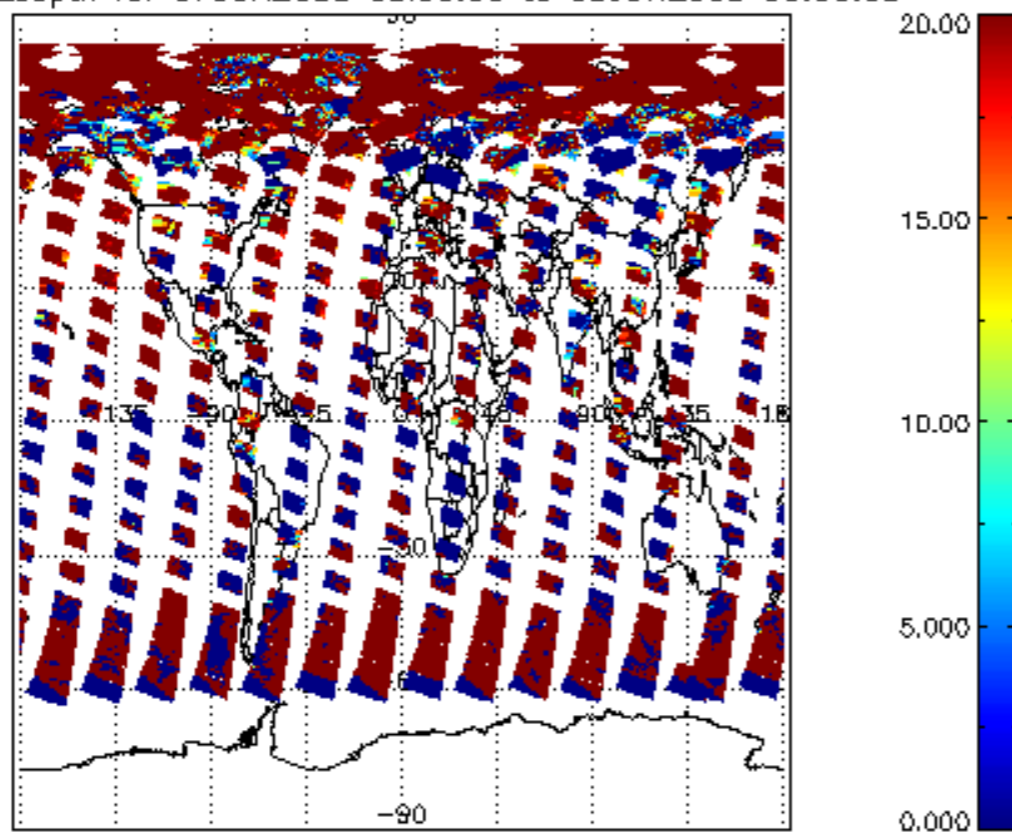
cl_frac for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



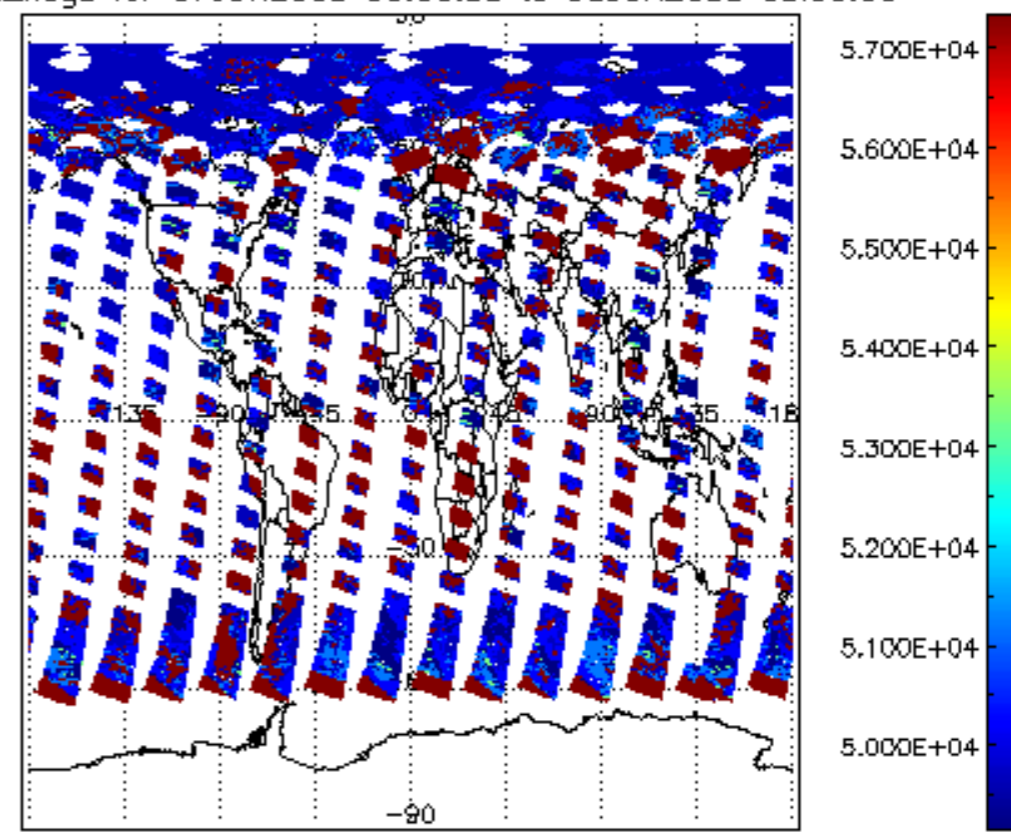
cl_top_height for 07JUN2008 00:00:00 to 08JUN2008 00:00:00

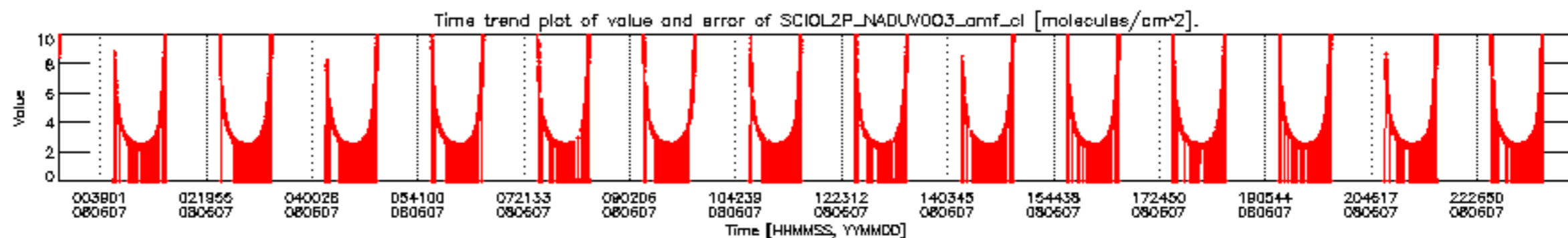
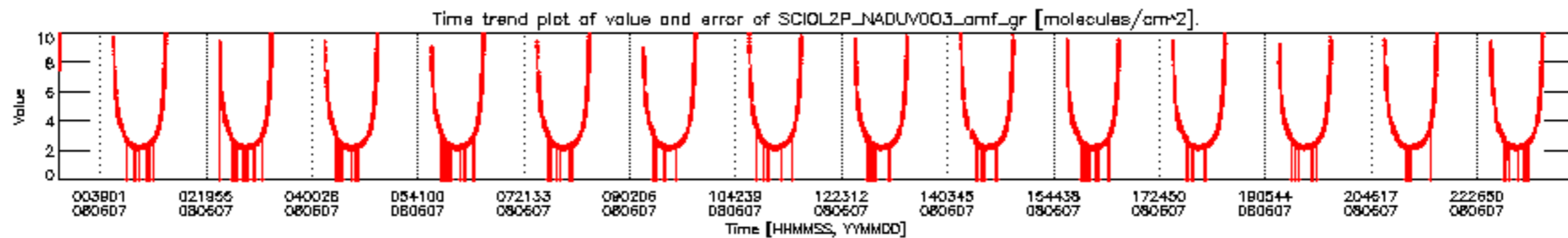
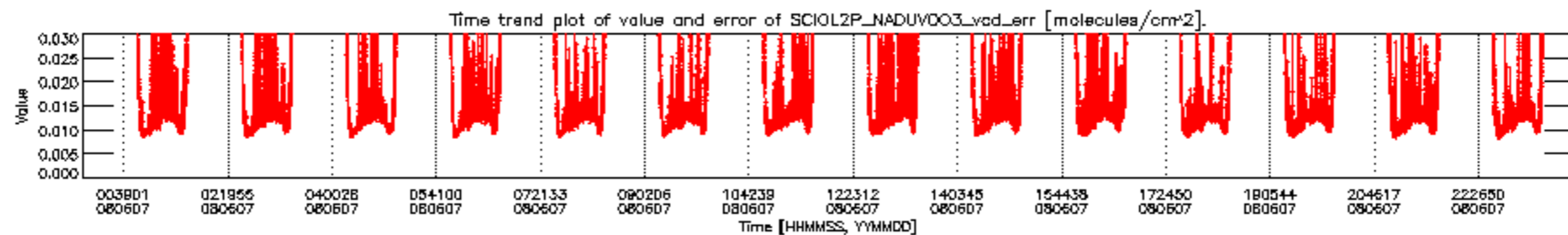
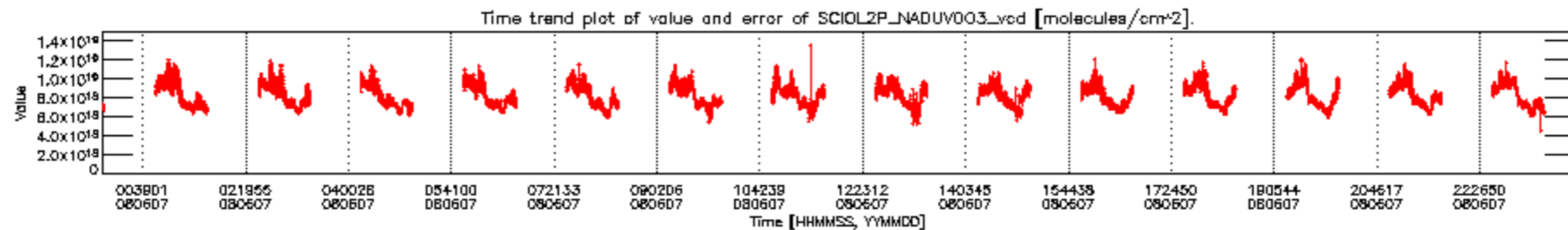


cl_opt_depth for 07JUN2008 00:00:00 to 08JUN2008 00:00:00

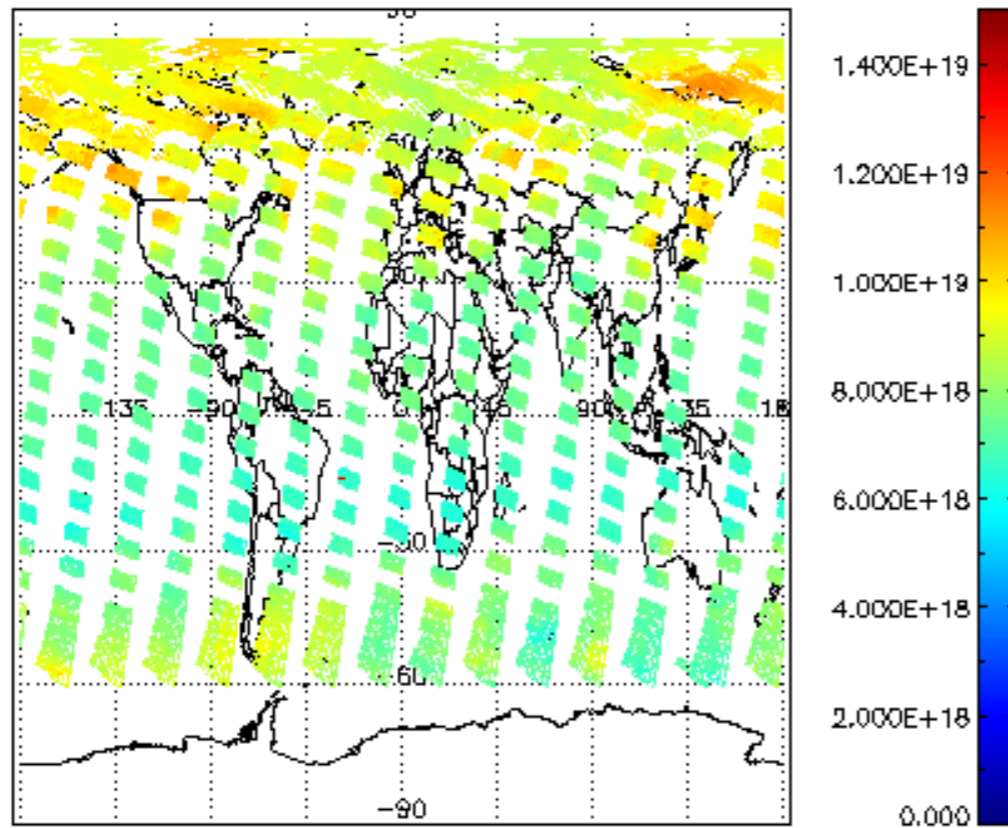


cloud_flags for 07JUN2008 00:00:00 to 08JUN2008 00:00:00

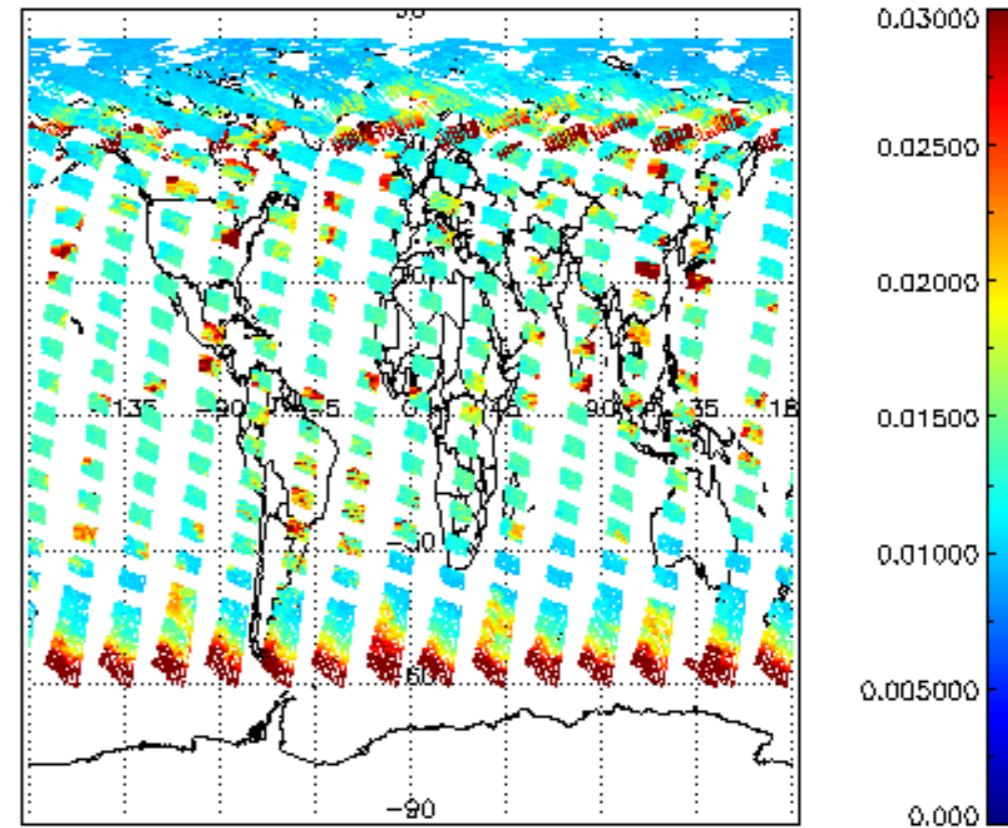




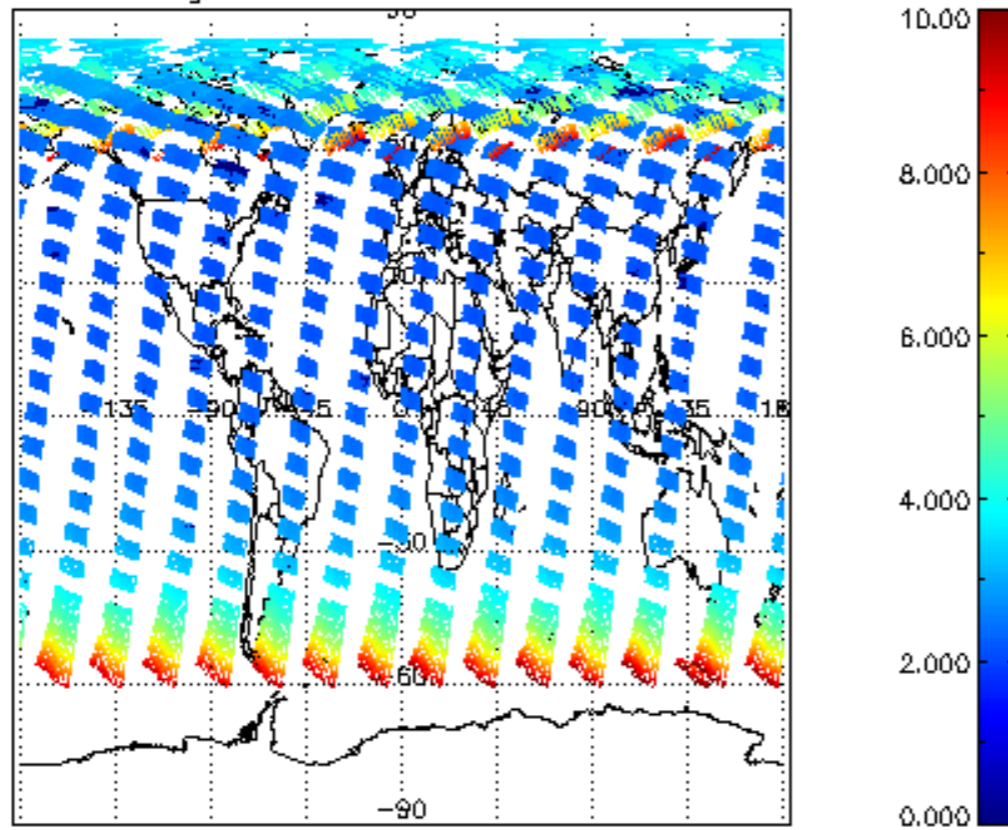
SCIOL2P_NADUV003_vcd for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



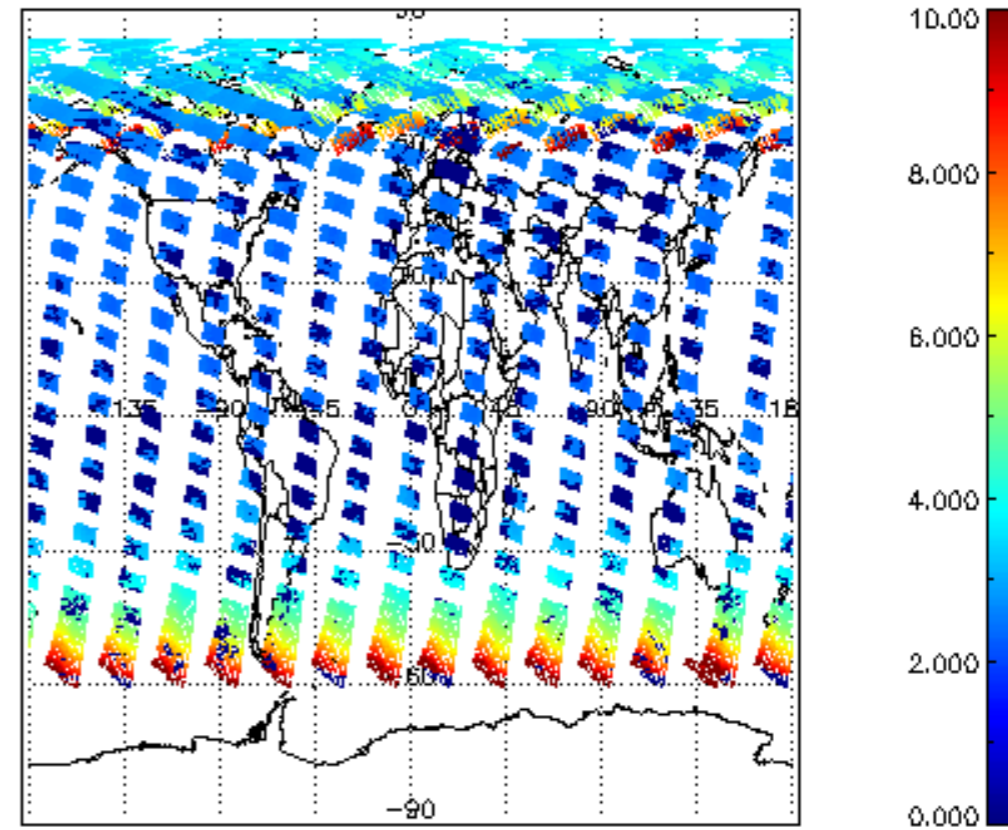
SCIOL2P_NADUV003_vcd_err for 07JUN2008 00:00:00 to 08JUN2008 00:00:00

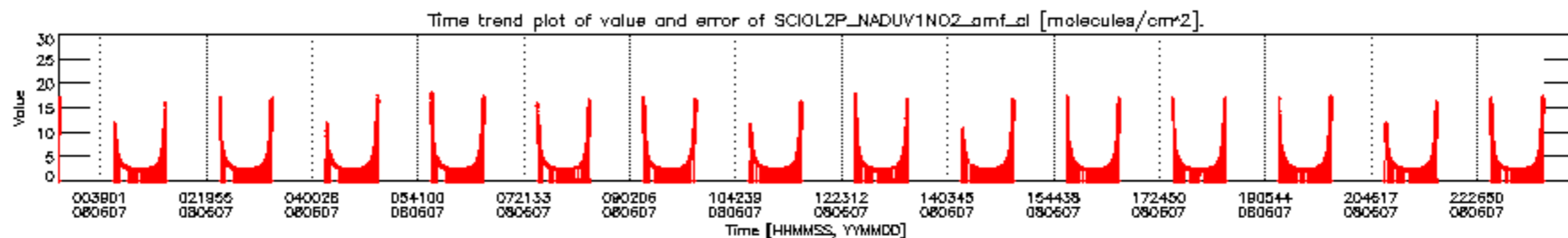
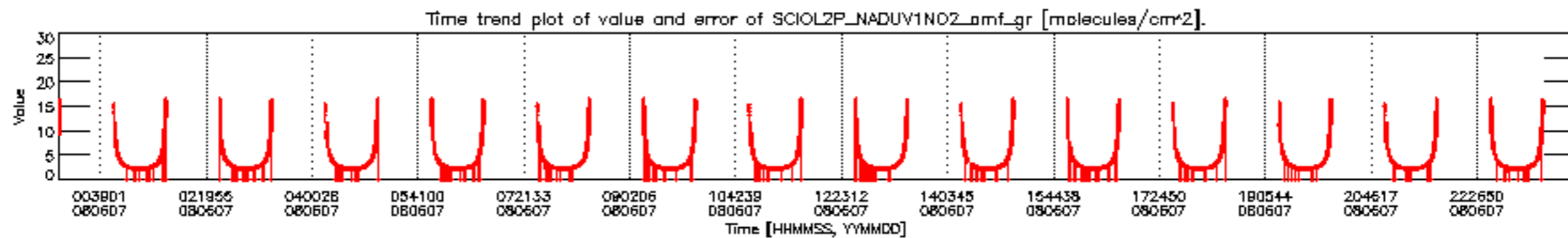
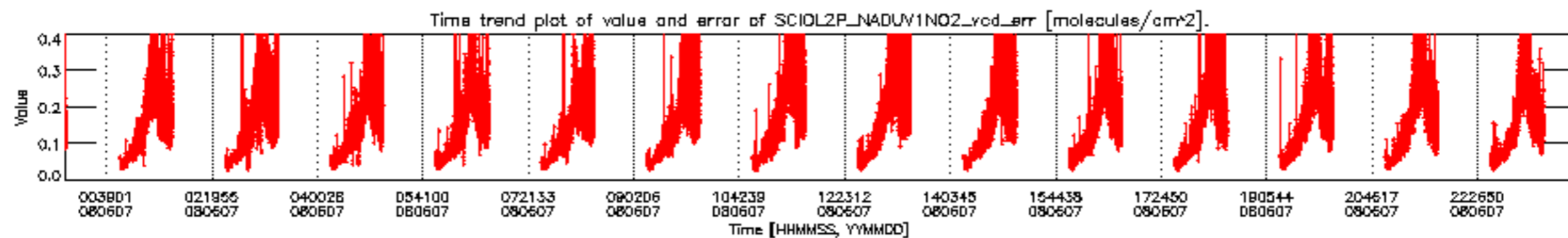
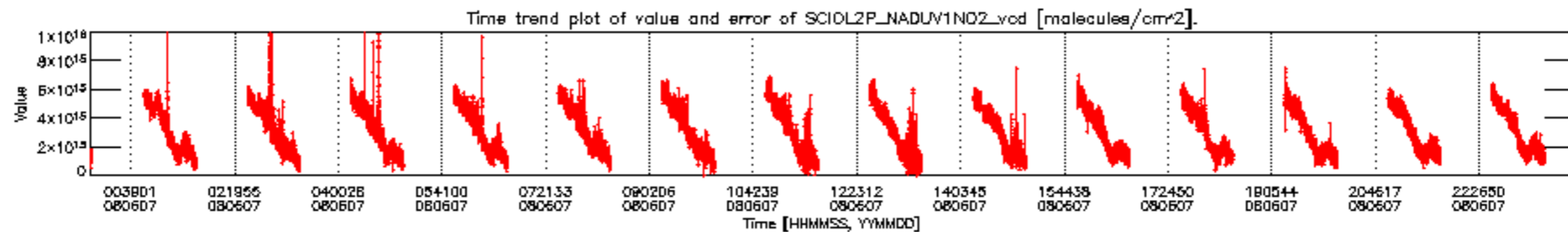


SCIOL2P_NADUV003_amf_gr for 07JUN2008 00:00:00 to 08JUN2008 00:00:00

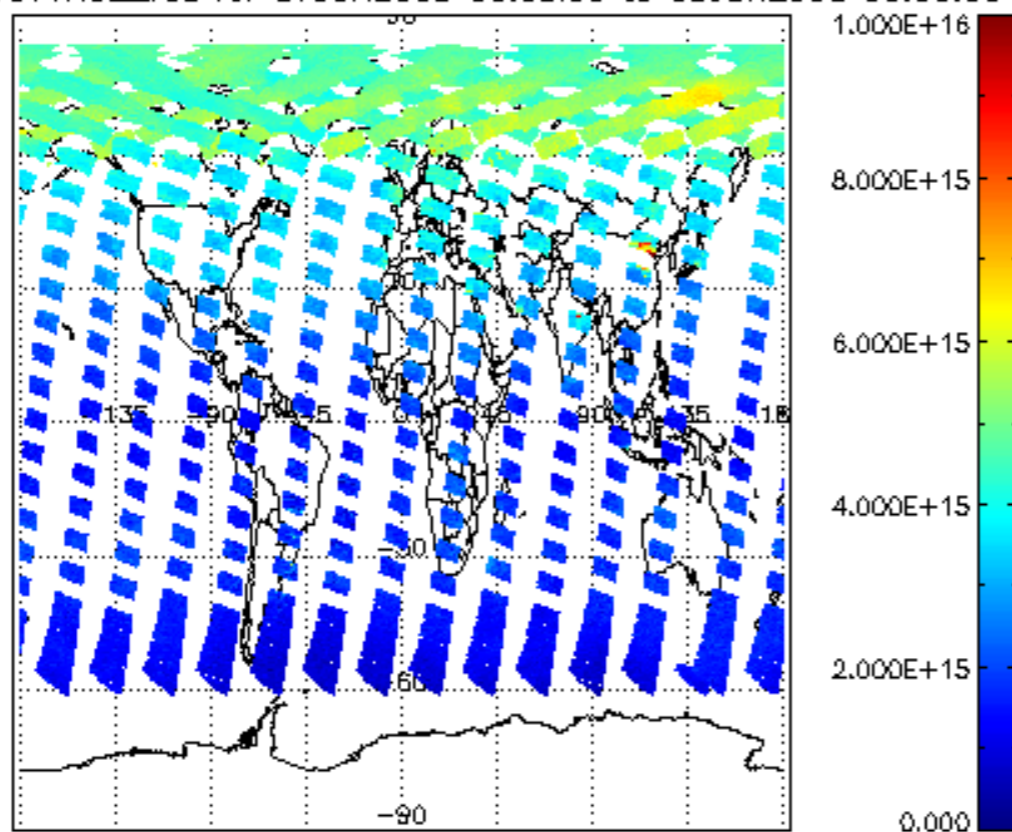


SCIOL2P_NADUV003_amf_cl for 07JUN2008 00:00:00 to 08JUN2008 00:00:00

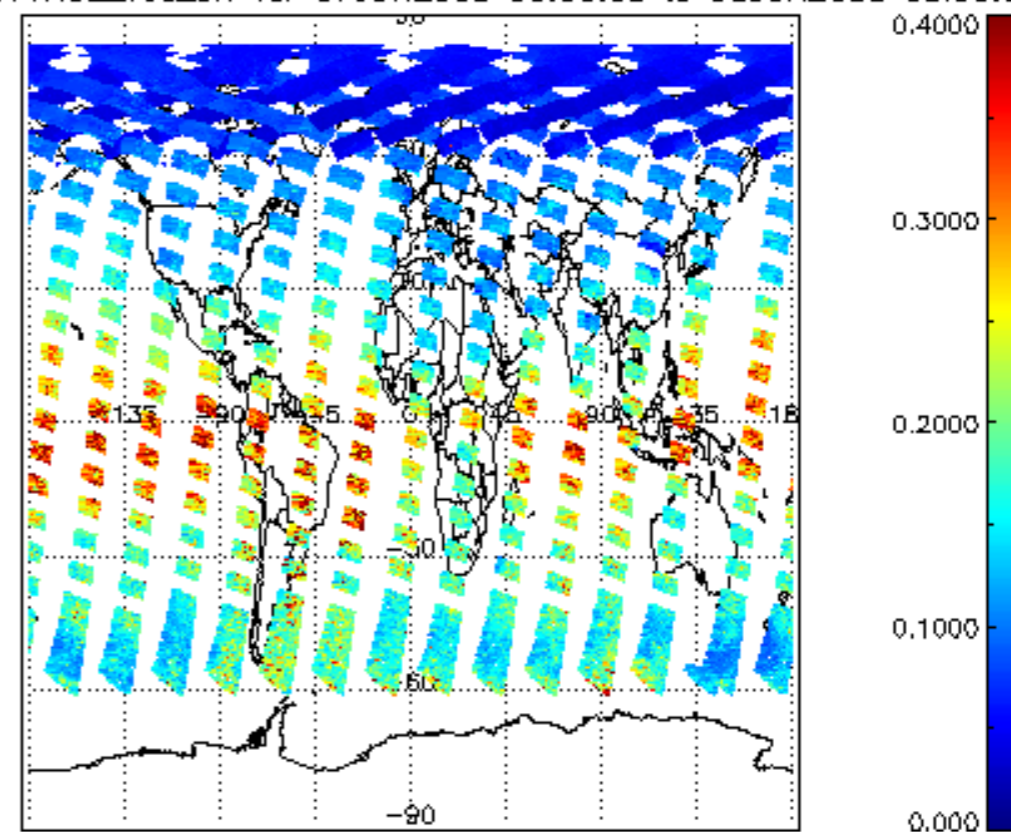




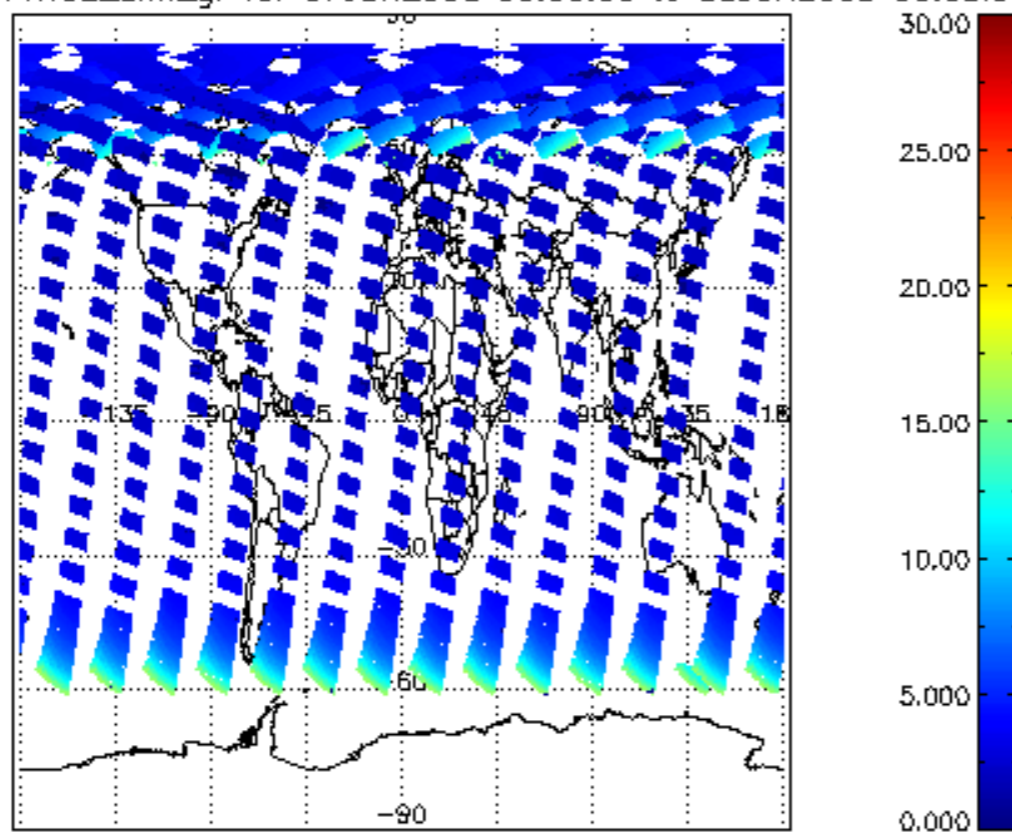
SCIOL2P_NADUV1NO2_vcd for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



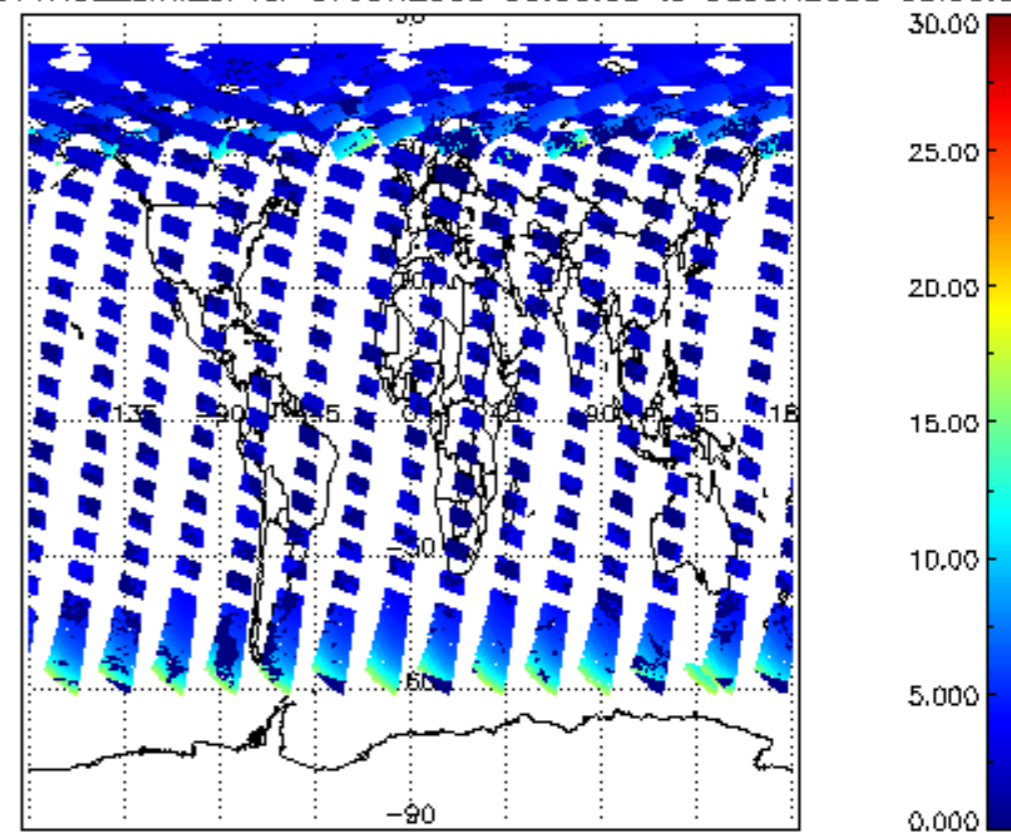
iCIOL2P_NADUV1NO2_vcd_err for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



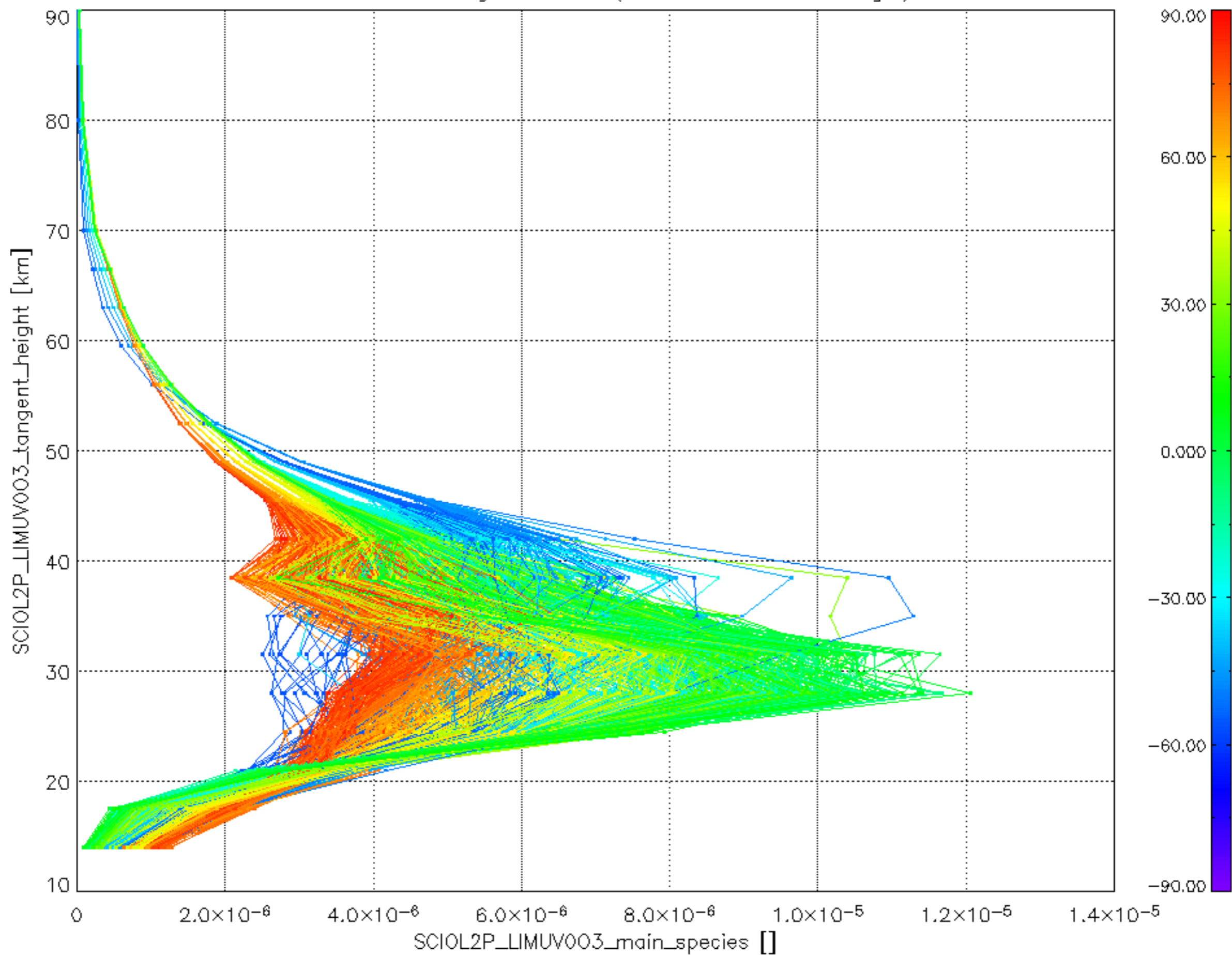
iCIOL2P_NADUV1NO2_amf_gr for 07JUN2008 00:00:00 to 08JUN2008 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 07JUN2008 00:00:00 to 08JUN2008 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).

