

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	1.4 (06-11-2007)
Time of report generation	28JUN2008 06:02:55
Data source version	SCIA-OL/3.01-R
Processing scope for products	10JUN2008 00:00:00 to 11JUN2008 00:00:00
Start time of first product within scope	09JUN2008 23:12:06
Stop time of last product within scope	10JUN2008 23:35:40
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__2PRDPA20080609_231206_000033122069_00202_32821_1406.N1	09JUN2008 23:12:06	10JUN2008 00:07:19	0	GOOD
1	SCI_OL__2PRDPA20080610_005242_000033252069_00203_32822_1408.N1	10JUN2008 00:52:42	10JUN2008 01:48:07	0	GOOD
2	SCI_OL__2PRDPA20080610_023318_000033122069_00204_32823_1410.N1	10JUN2008 02:33:18	10JUN2008 03:28:30	0	GOOD
3	SCI_OL__2PRDPA20080610_041353_000033252069_00205_32824_1412.N1	10JUN2008 04:13:53	10JUN2008 05:09:19	0	GOOD
4	SCI_OL__2PRDPA20080610_055429_000033122069_00206_32825_1415.N1	10JUN2008 05:54:29	10JUN2008 06:49:42	0	GOOD
5	SCI_OL__2PRDPA20080610_073505_000033252069_00207_32826_1416.N1	10JUN2008 07:35:05	10JUN2008 08:30:31	0	GOOD
6	SCI_OL__2PRDPA20080610_091541_000033122069_00208_32827_1418.N1	10JUN2008 09:15:41	10JUN2008 10:10:54	0	GOOD
7	SCI_OL__2PRDPA20080610_105617_000033252069_00209_32828_1428.N1	10JUN2008 10:56:17	10JUN2008 11:51:42	0	GOOD
8	SCI_OL__2PRDPA20080610_123653_000033252069_00210_32829_1427.N1	10JUN2008 12:36:53	10JUN2008 13:32:18	0	GOOD
9	SCI_OL__2PRDPA20080610_141728_000033252069_00211_32830_1432.N1	10JUN2008 14:17:28	10JUN2008 15:12:54	0	GOOD
10	SCI_OL__2PRDPA20080610_155804_000033122069_00212_32831_1433.N1	10JUN2008 15:58:04	10JUN2008 16:53:17	0	GOOD
11	SCI_OL__2PRDPA20080610_173759_000033812069_00213_32832_1434.N1	10JUN2008 17:37:59	10JUN2008 18:34:21	0	GOOD
12	SCI_OL__2PRDPA20080610_191835_000033682069_00214_32833_1436.N1	10JUN2008 19:18:35	10JUN2008 20:14:44	0	GOOD
13	SCI_OL__2PRDPA20080610_205952_000033252069_00215_32834_1439.N1	10JUN2008 20:59:52	10JUN2008 21:55:17	0	GOOD
14	SCI_OL__2PRDPA20080610_224028_000033122069_00216_32835_1441.N1	10JUN2008 22:40:28	10JUN2008 23:35:40	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: 145666

Total number of cloud data DSRs with good quality flag (=0): 145666 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	145666	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	145666	0.16985	0.12500	0.12500	0.25000	0.059955	s
SURFACE_PRES	145666	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	145666	0.33927	0.29029	0.0000	1.0000	0.30058	-

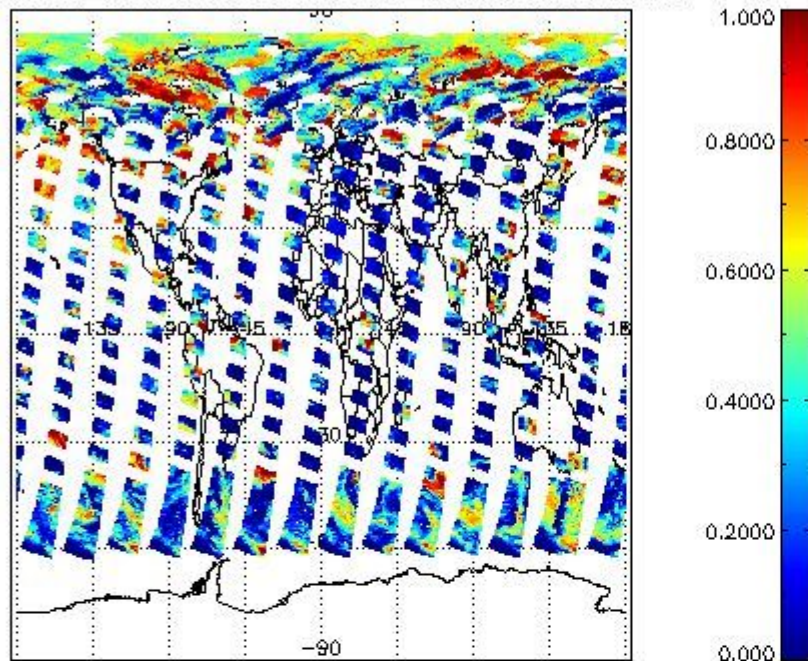
CL_FRAC_ERR	145666	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	145666	5.4351	4.0000	4.0000	8.0000	1.9186	
PMD_READ_CL[0]	145666	0.25227	0.0000	0.0000	8.0000	1.1583	-
PMD_READ_CL[1]	145666	1.5635	0.0000	0.0000	8.0000	2.5028	-
CL_TOP_HEIGHT	128773	3.3118	1.2290	0.0000	17.000	3.7595	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	128773	60.407	100.00	0.0000	101.00	44.336	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	145666	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	145666	11001100	11000100	11000000	11100000	3504.0	flags
AERO_ABSO_IND	145666	3.1986	3.5858	-1.1961	15.029	2.1691	
AERO_IND_DIAG	145666	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	145666	01010111	00000000	00000000	11000000	24482.	flags

Time and geolocation plots:

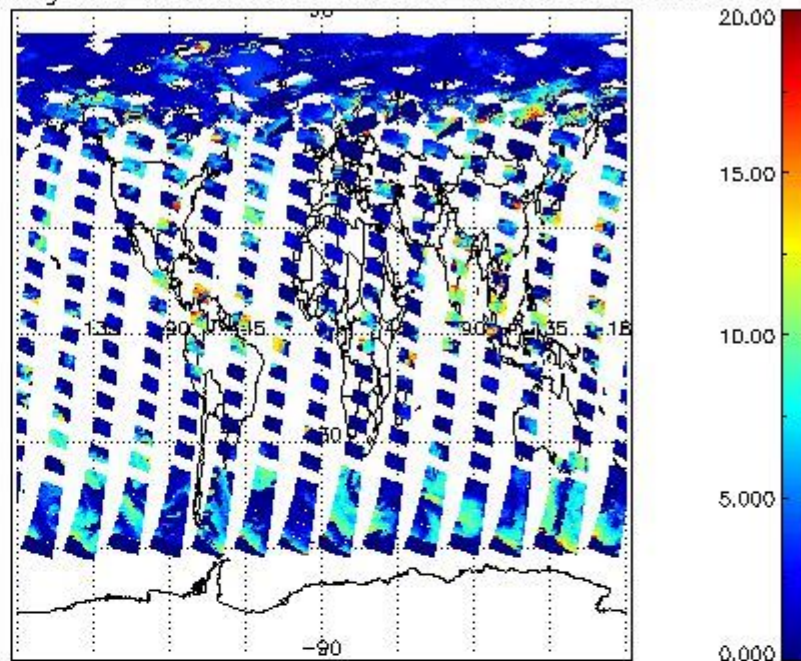
Plots are available for the following parameters:

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

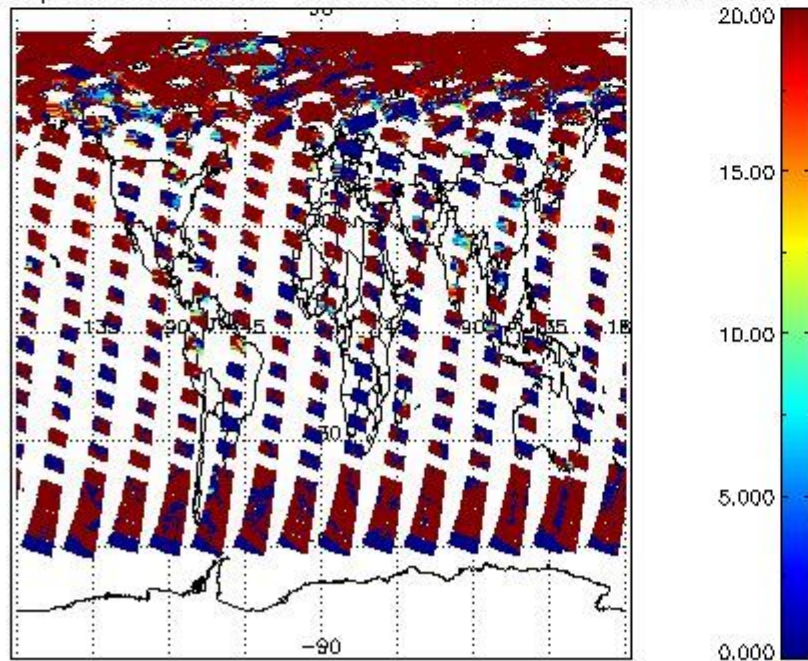
cL_frac for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



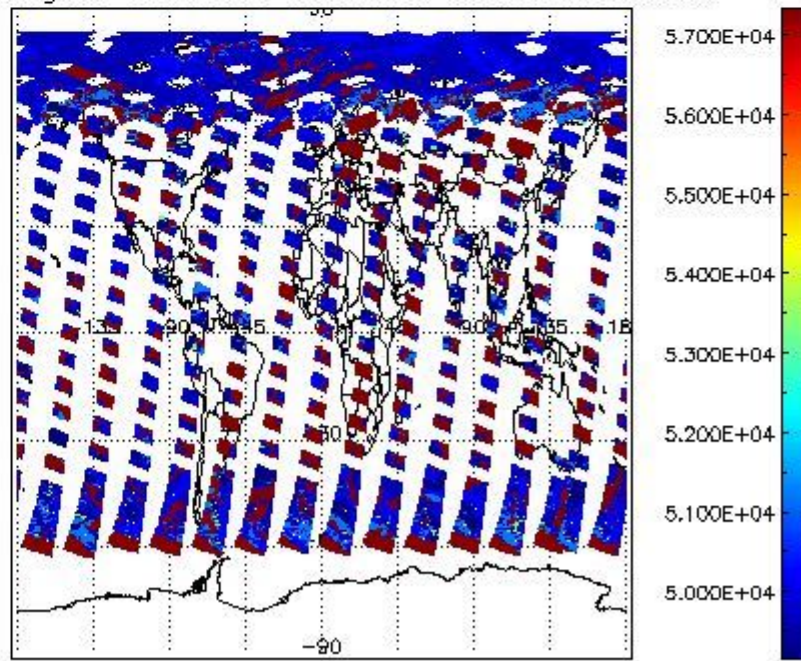
cL_top_height for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



cL_opt_depth for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



cloud_flags for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



2.2.2 Nadir

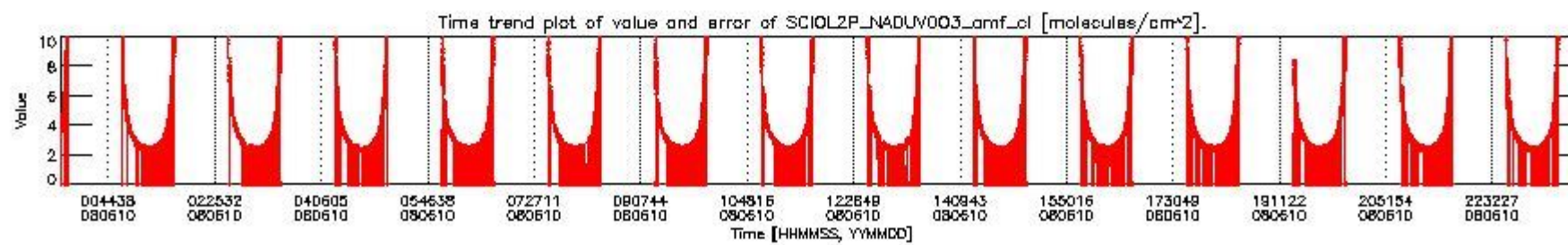
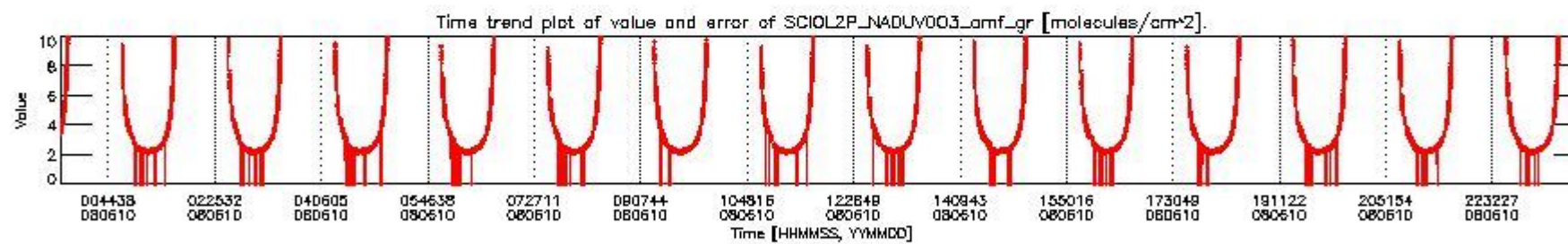
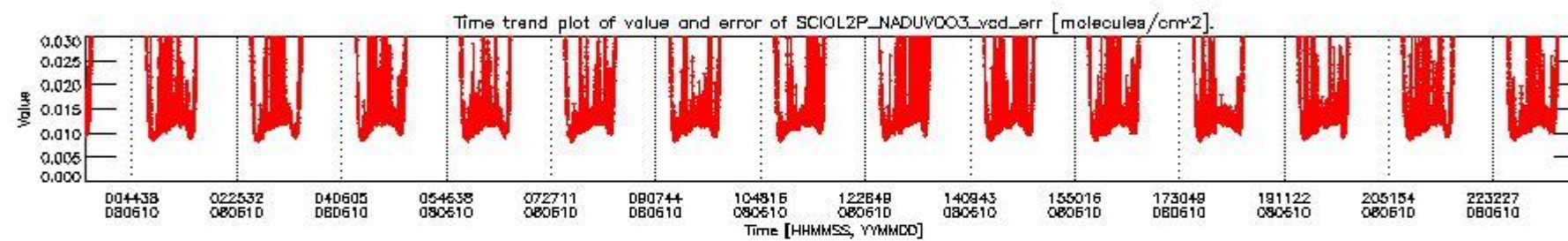
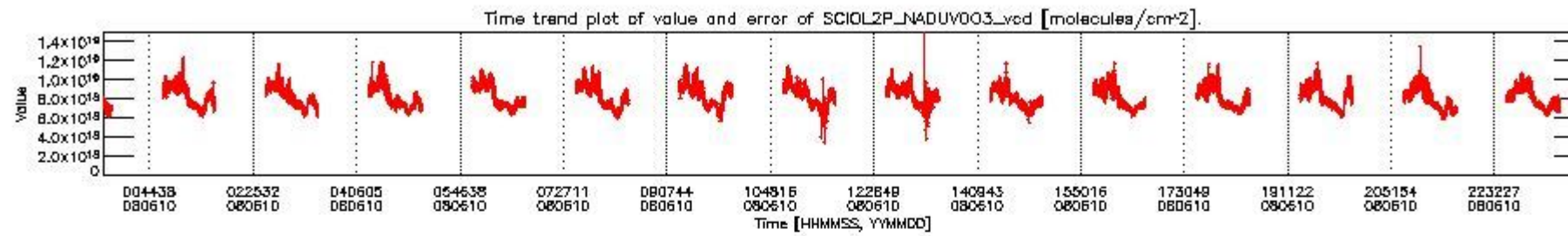
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

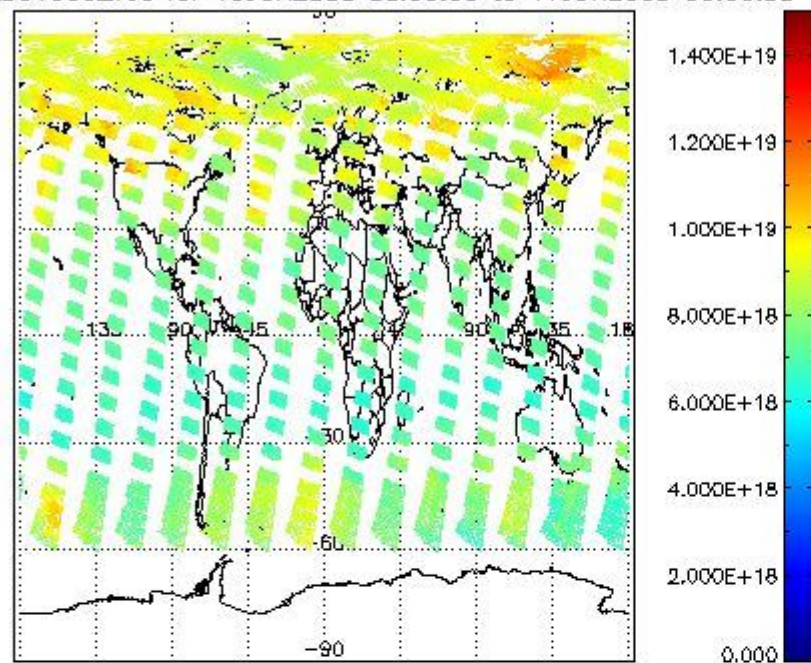
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

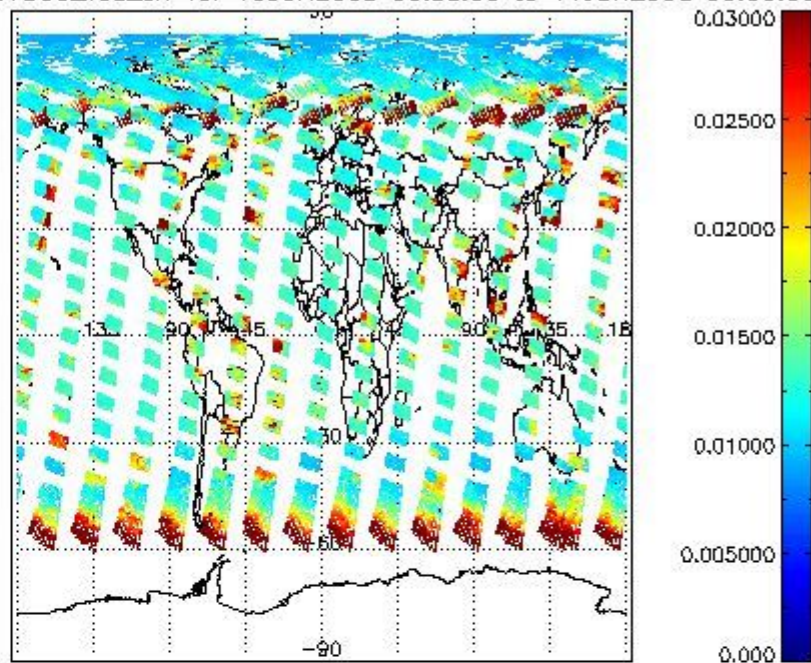
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



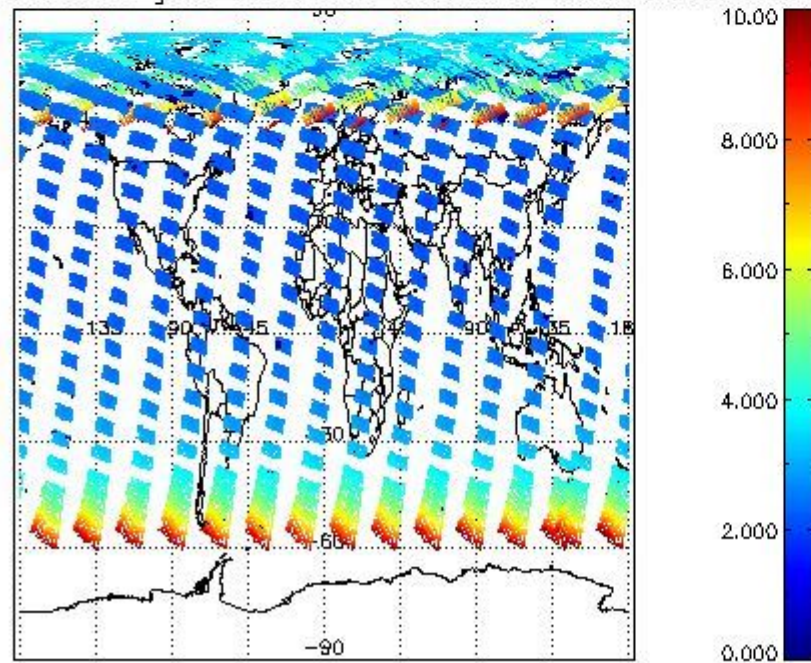
SCIOL2P_NADUV003_vcd for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



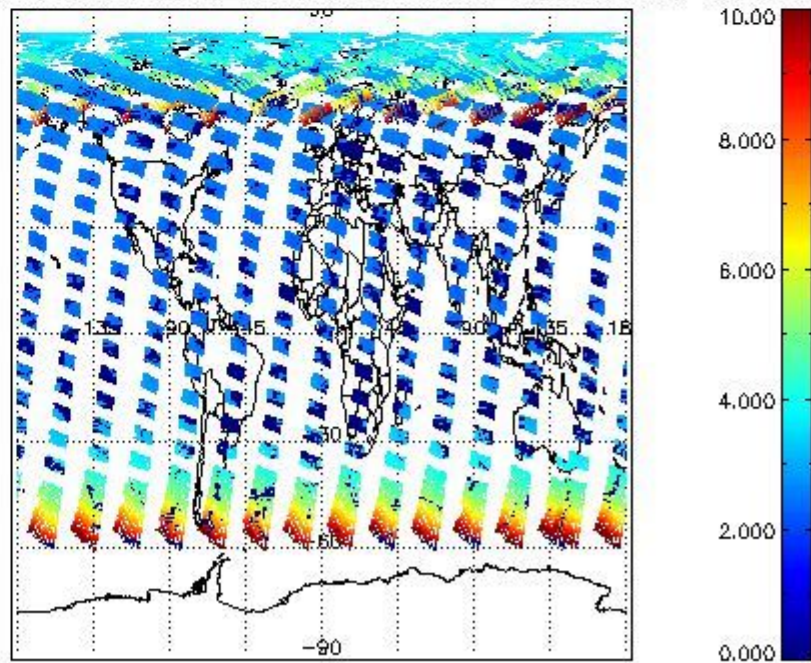
SCIOL2P_NADUV003_vcd_err for 10JUN2008 00:00:00 to 11JUN2008 00:00:00

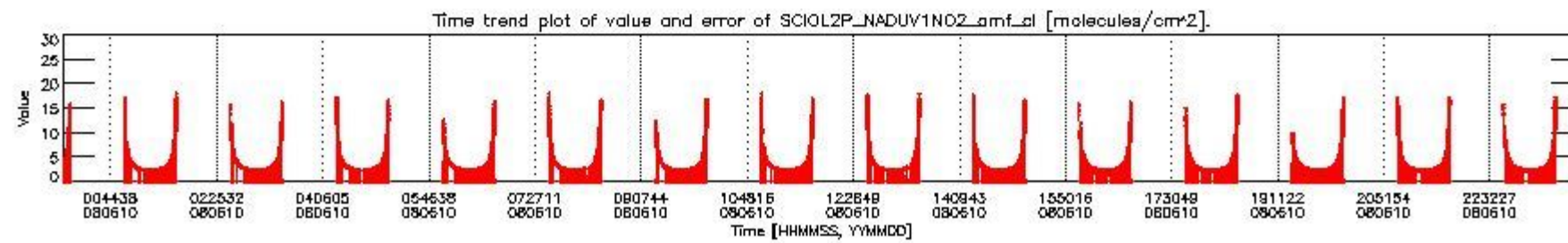
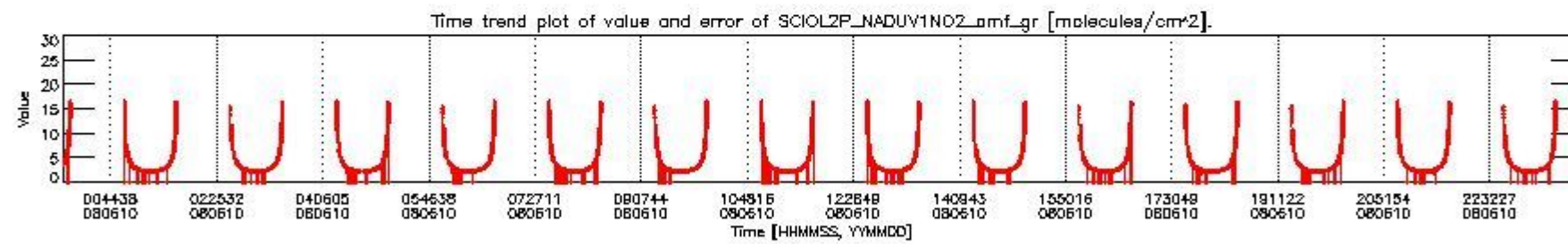
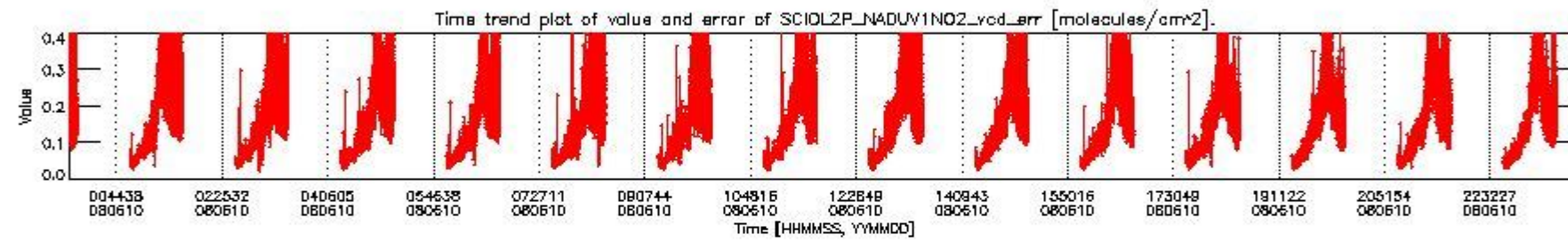
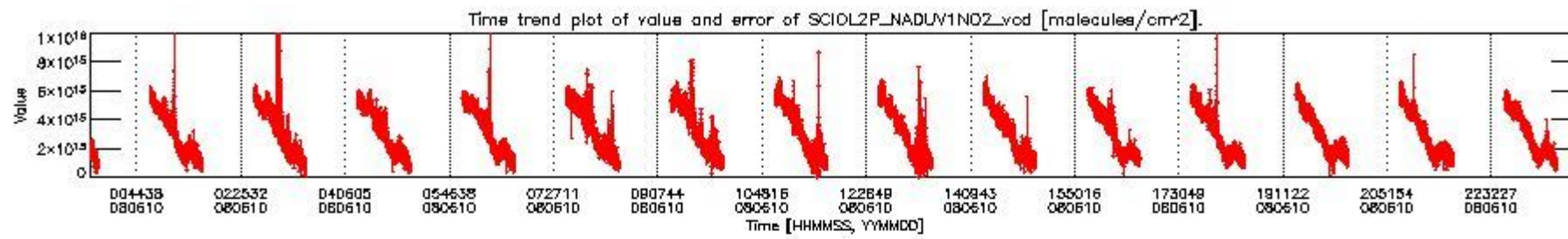


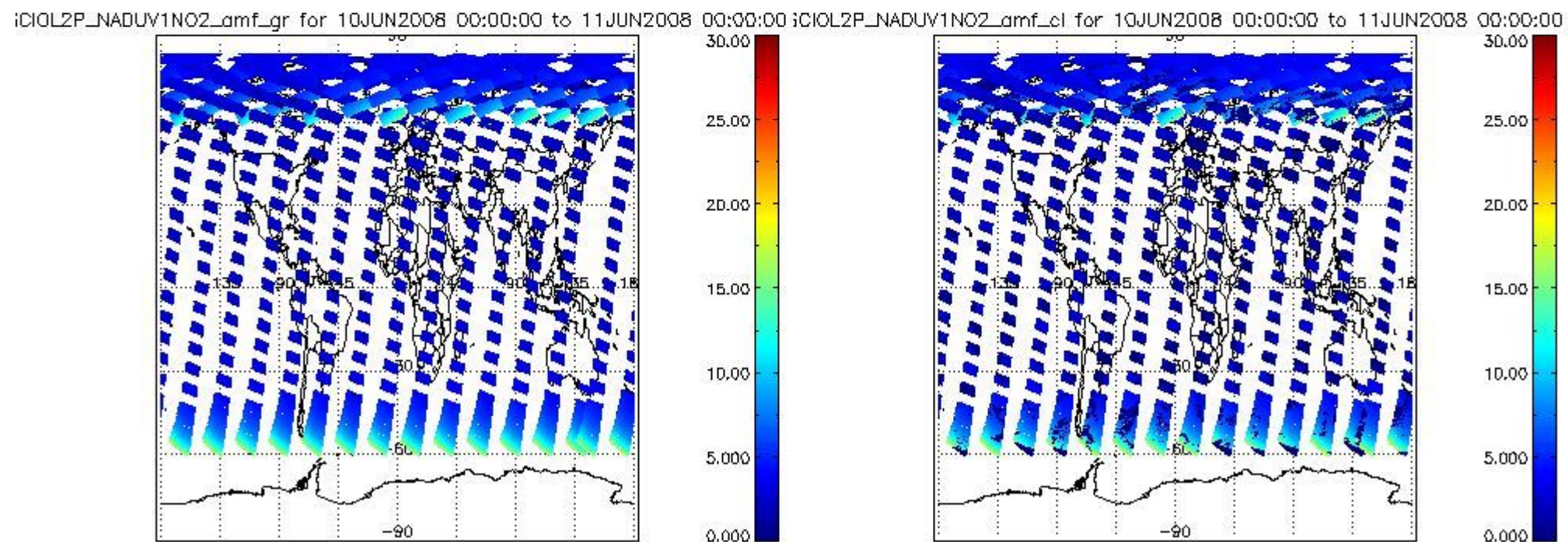
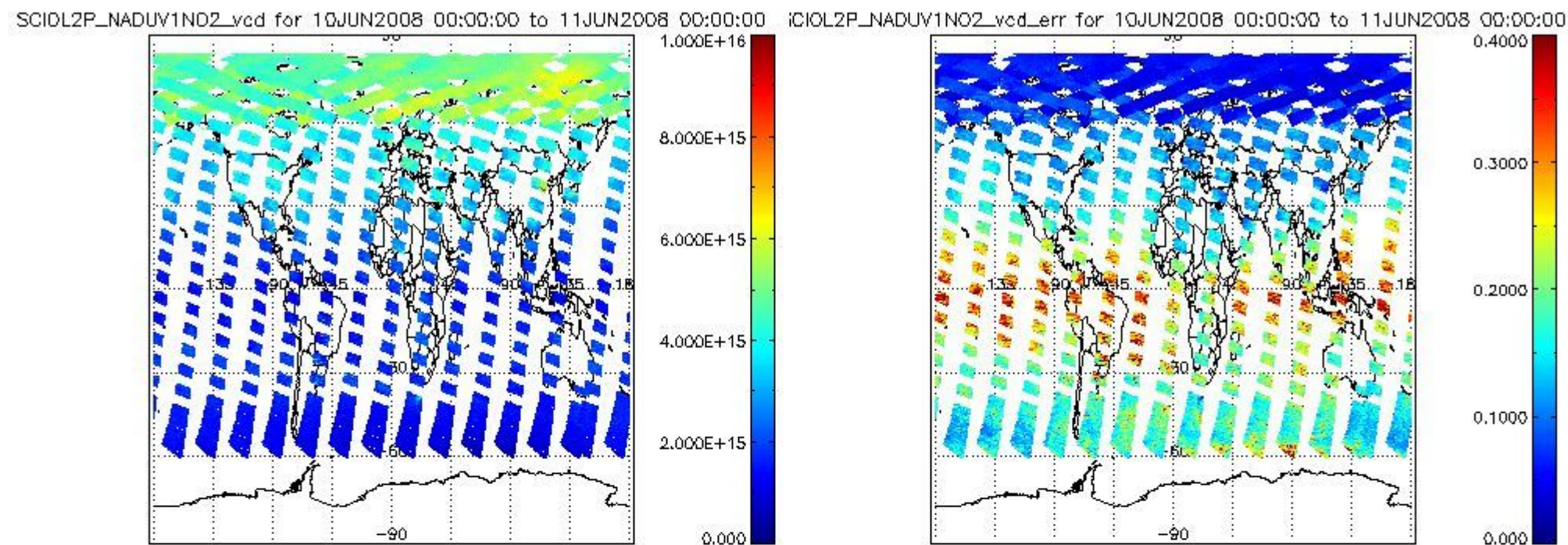
SCIOL2P_NADUV003_amf_gr for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 10JUN2008 00:00:00 to 11JUN2008 00:00:00







2.2.3 Limb

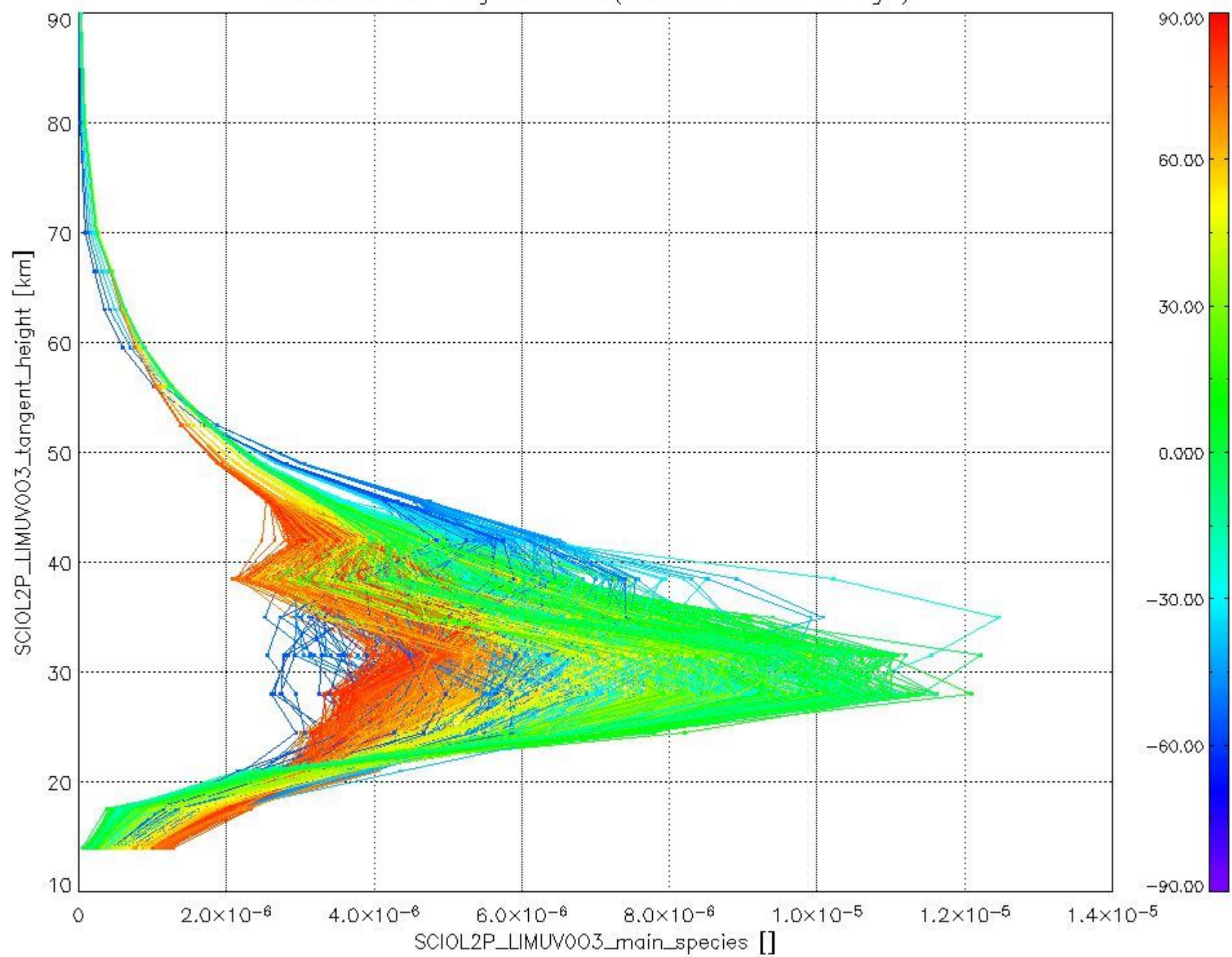
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

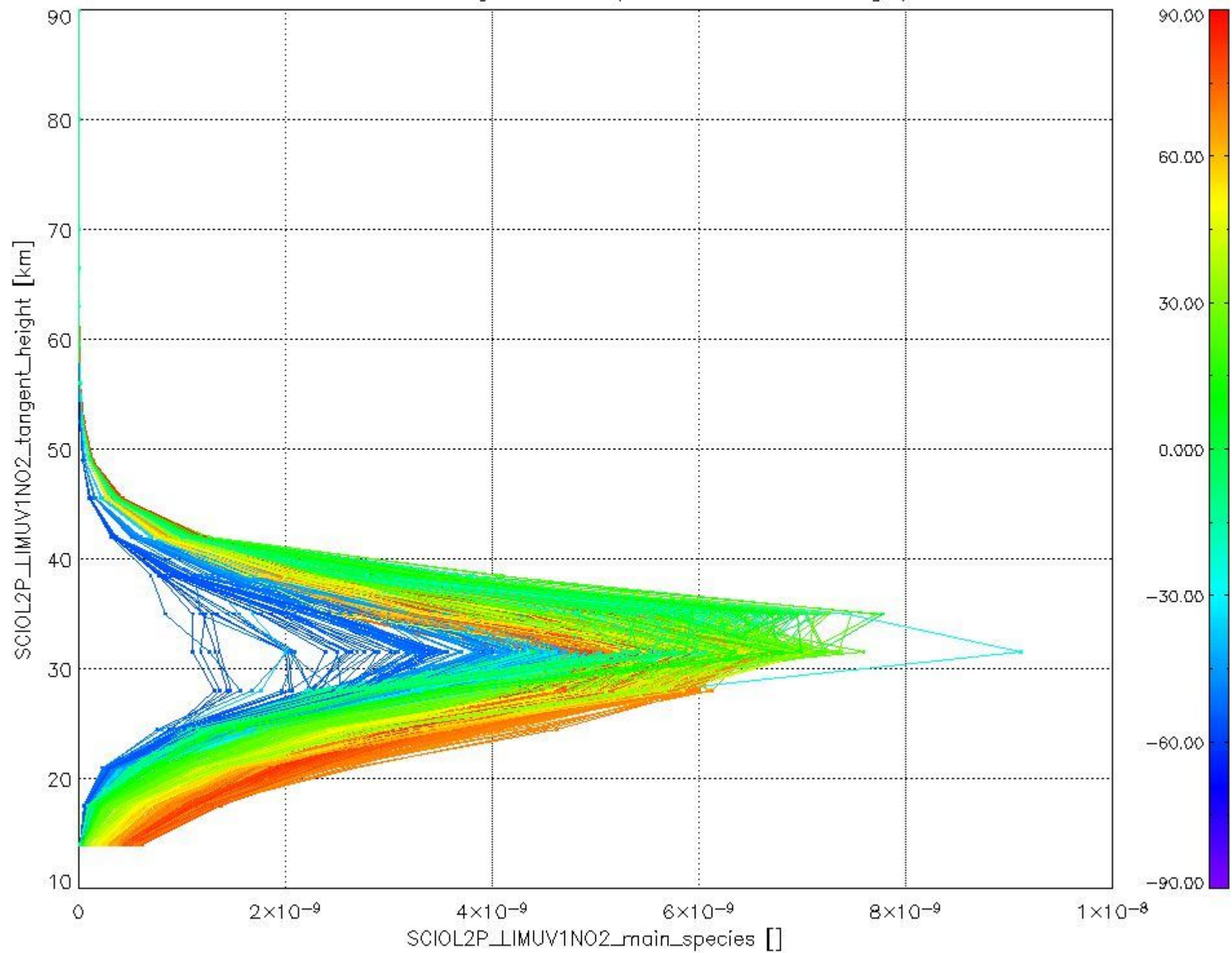
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



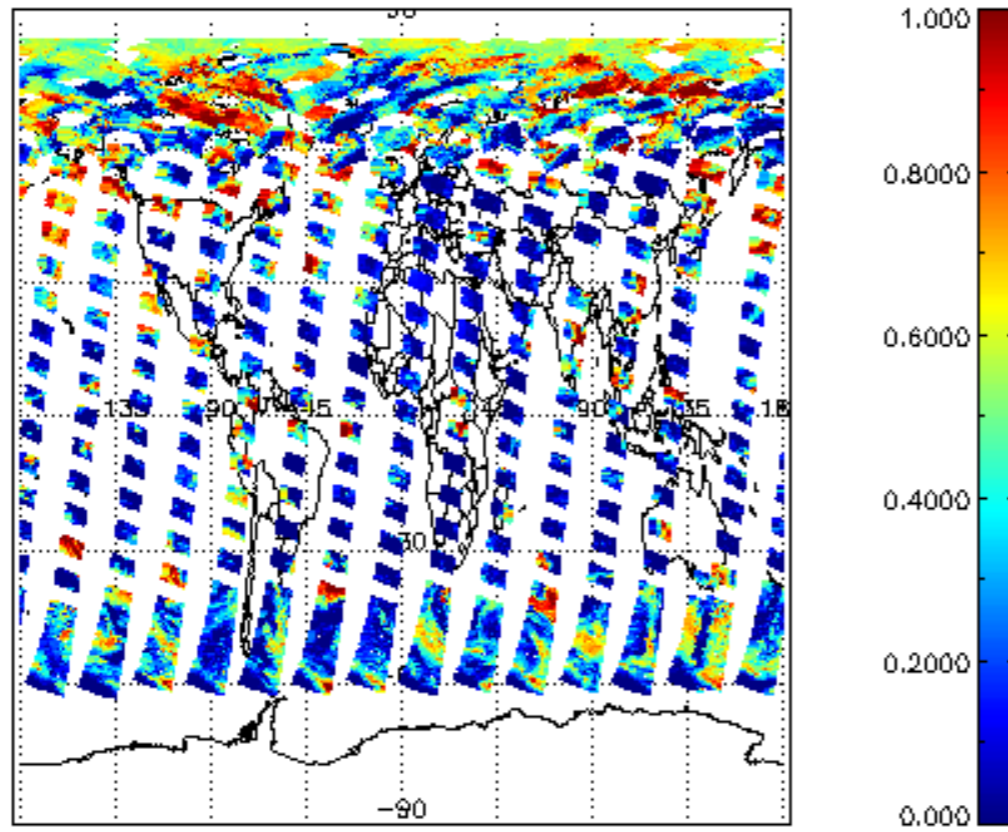
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



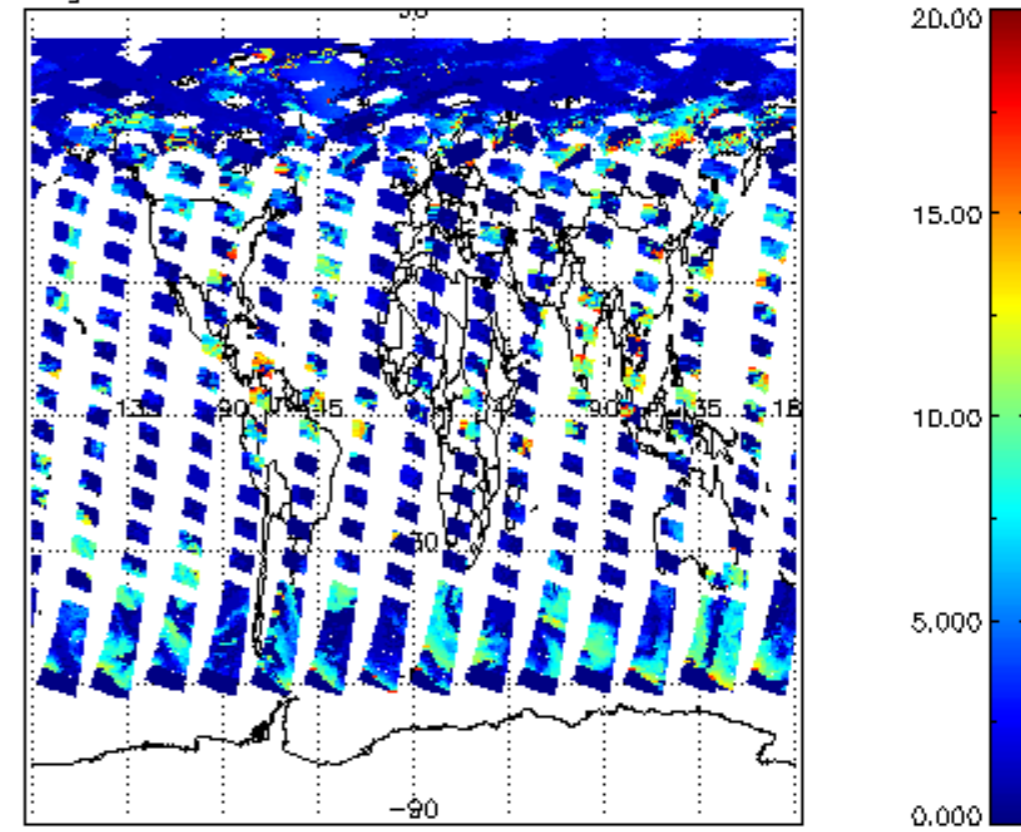
2.3 ADF monitoring

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

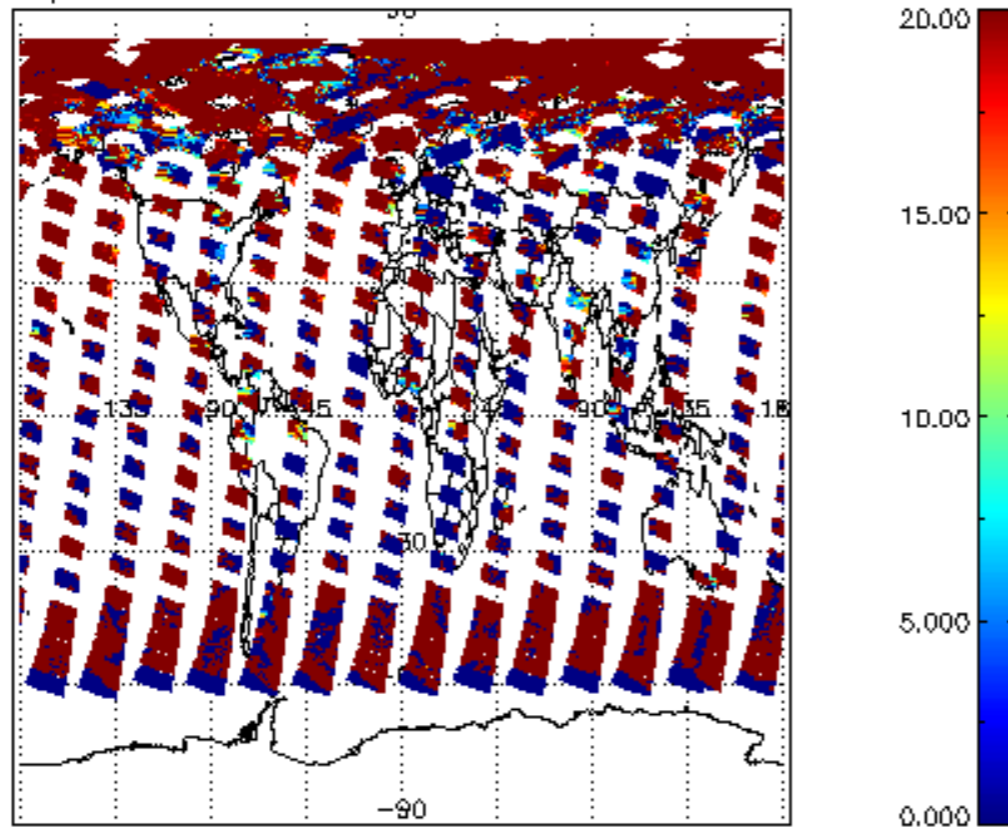
cl_frac for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



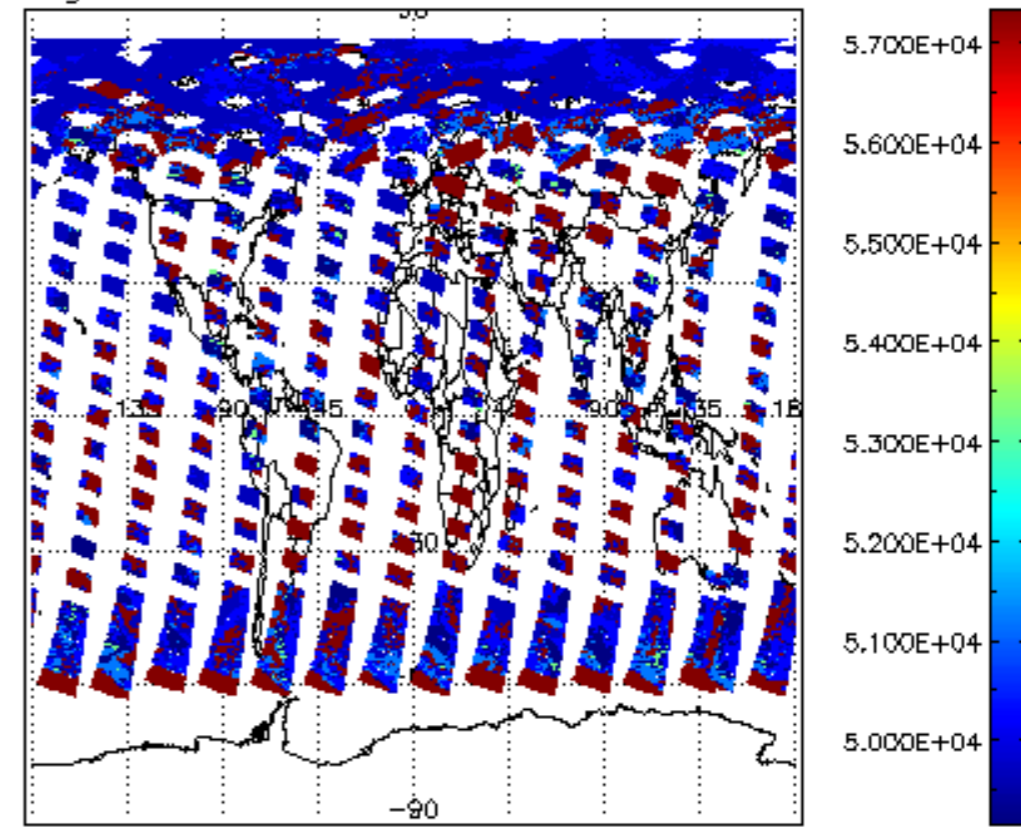
cl_top_height for 10JUN2008 00:00:00 to 11JUN2008 00:00:00

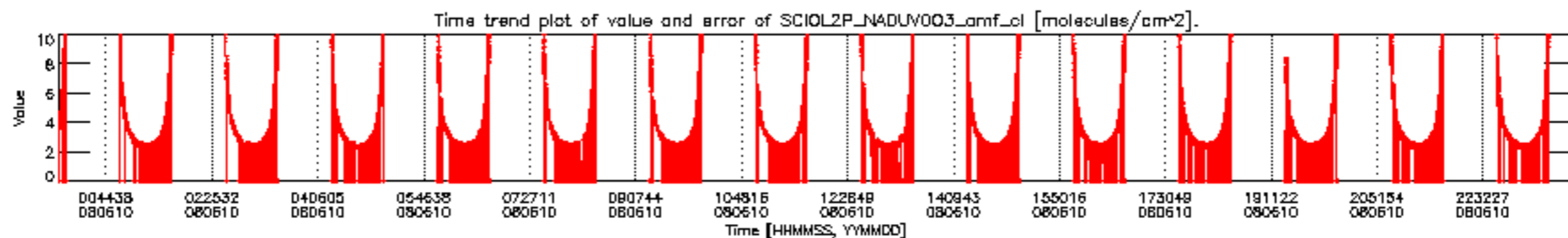
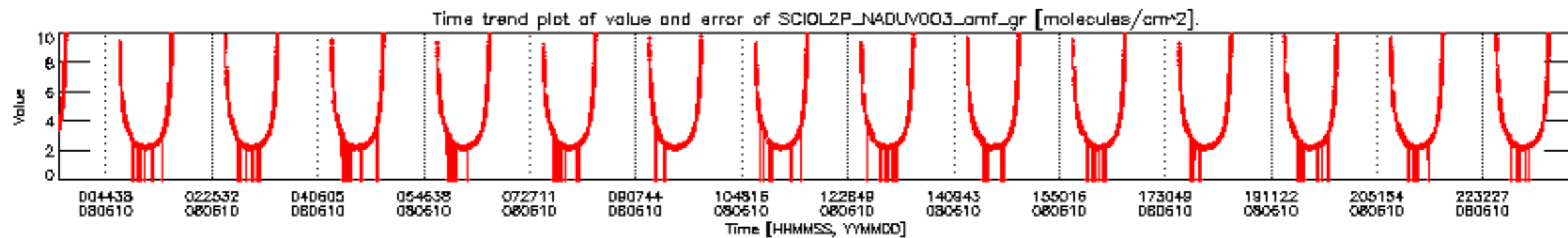
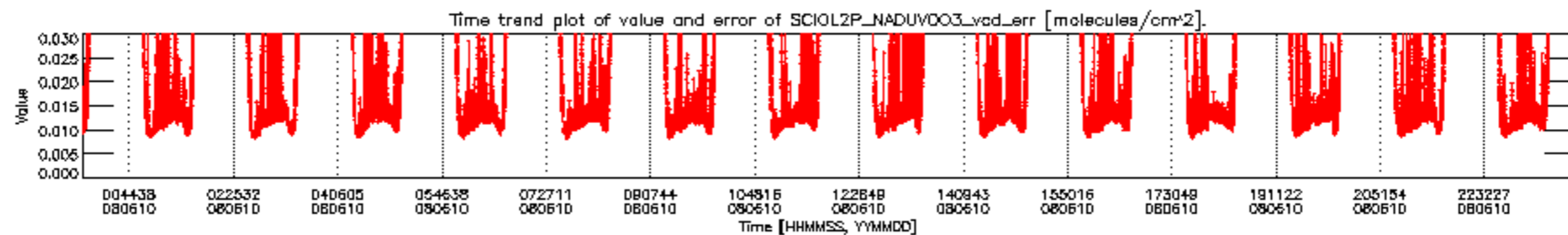
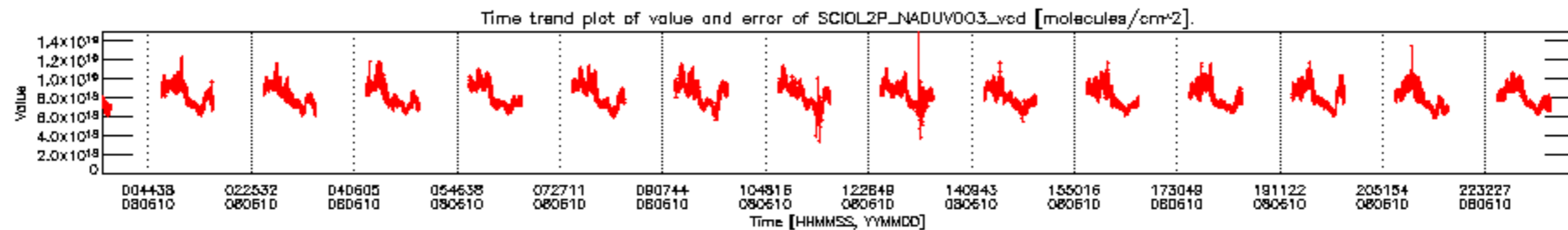


cl_opt_depth for 10JUN2008 00:00:00 to 11JUN2008 00:00:00

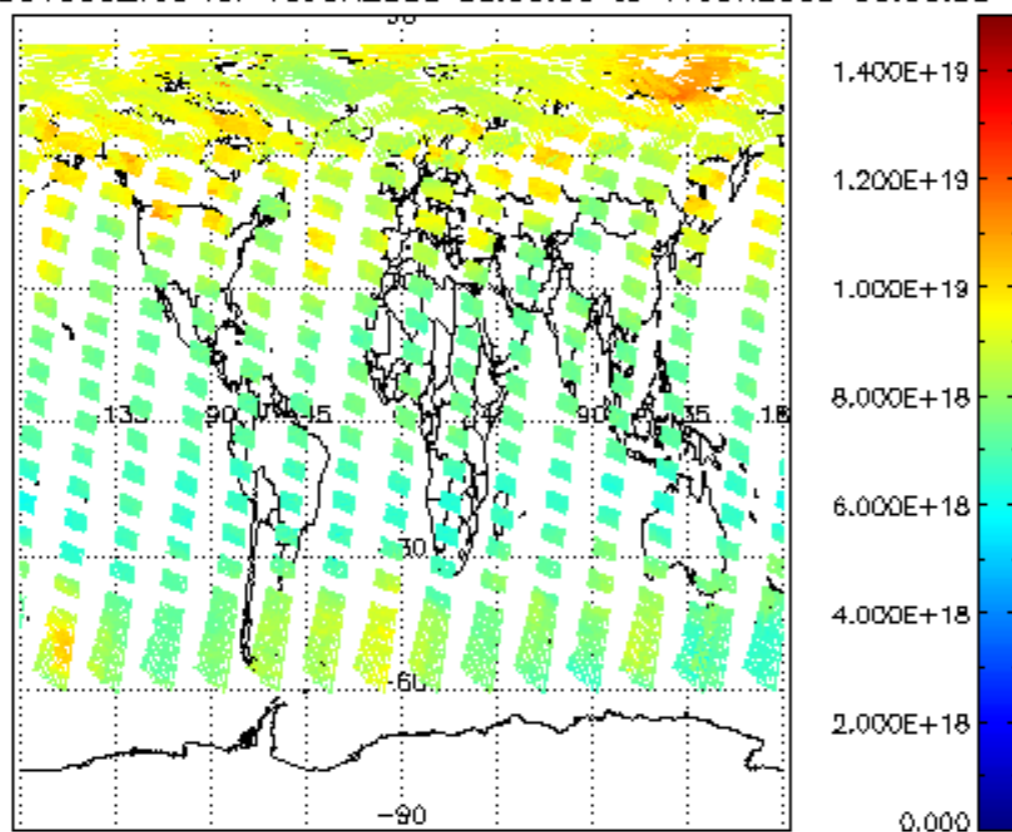


cloud_flags for 10JUN2008 00:00:00 to 11JUN2008 00:00:00

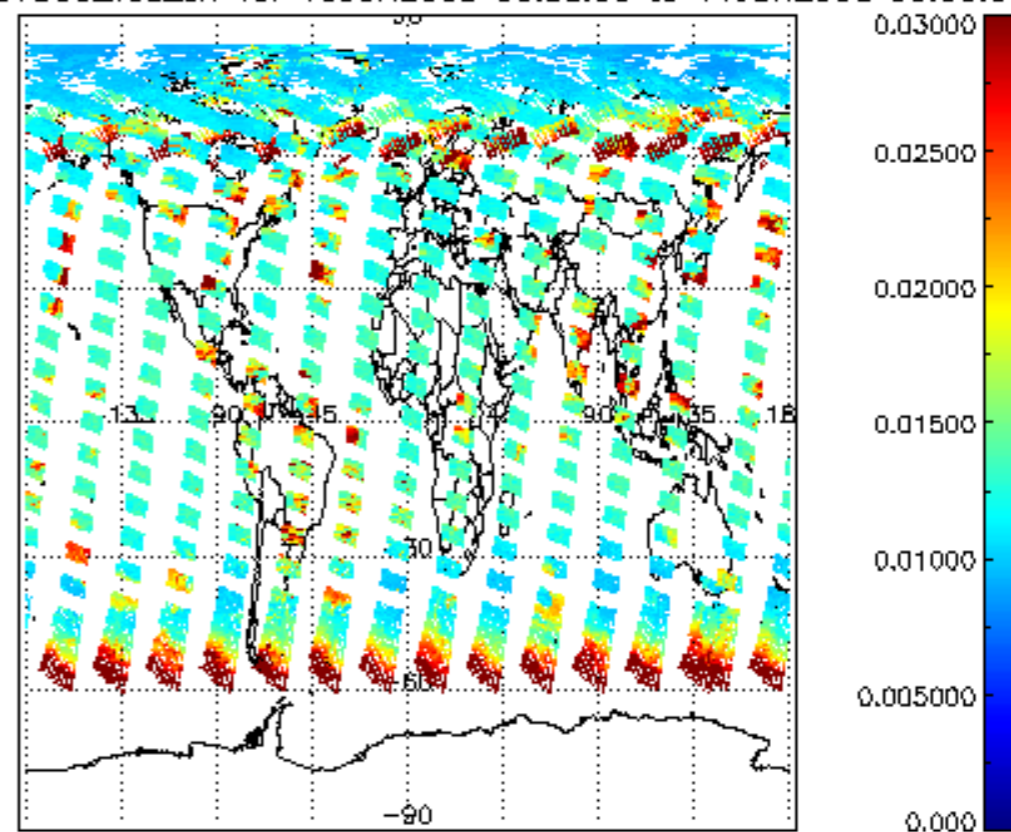




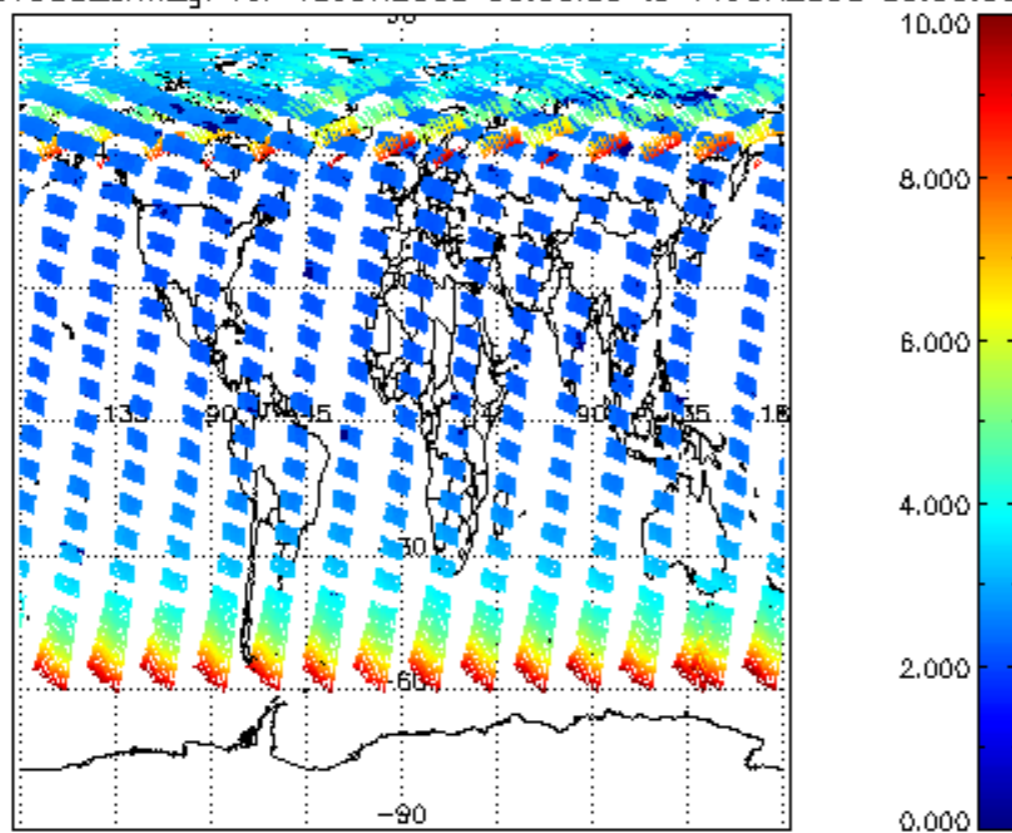
SCIOL2P_NADUV003_vcd for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



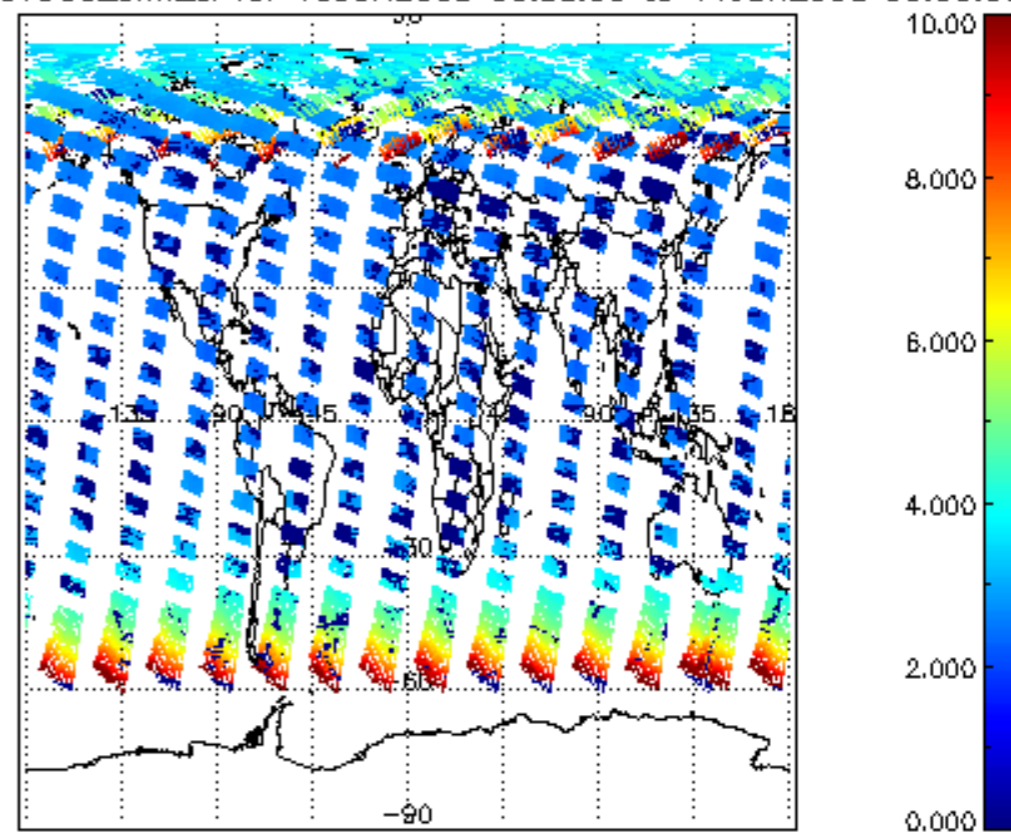
SCIOL2P_NADUV003_vcd_err for 10JUN2008 00:00:00 to 11JUN2008 00:00:00

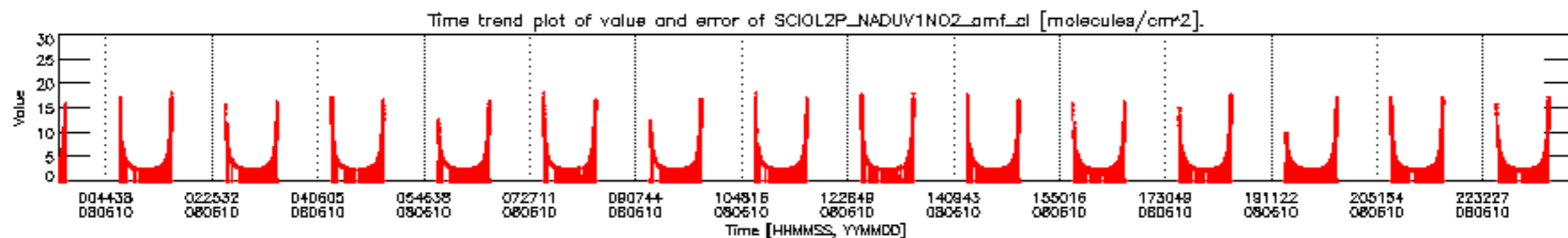
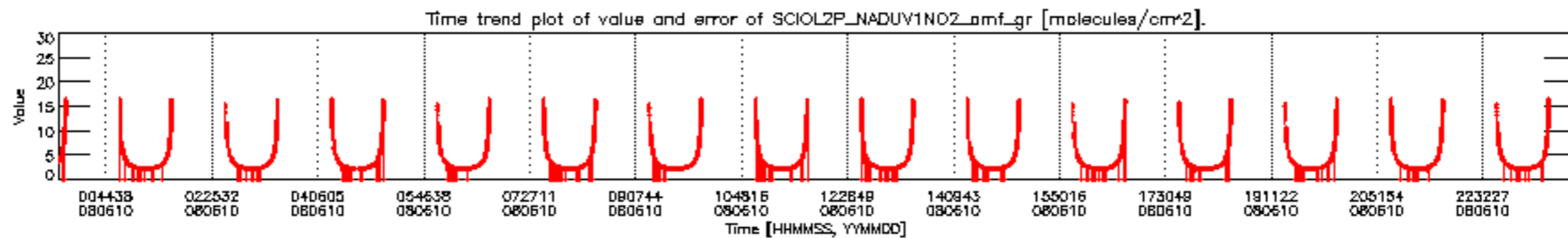
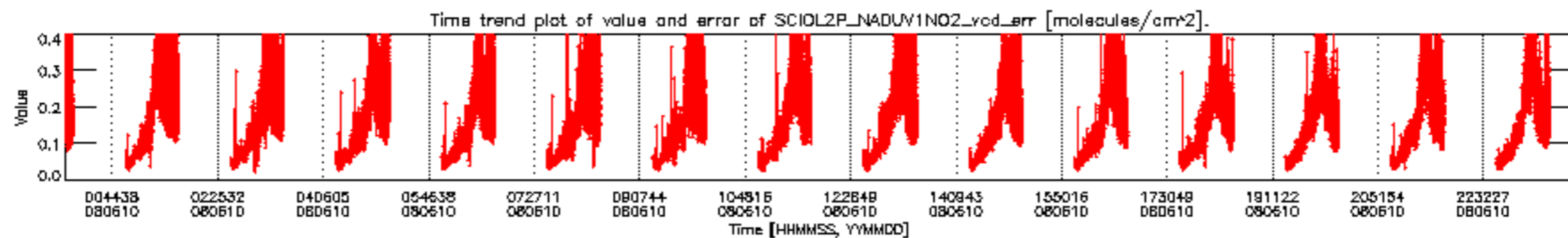
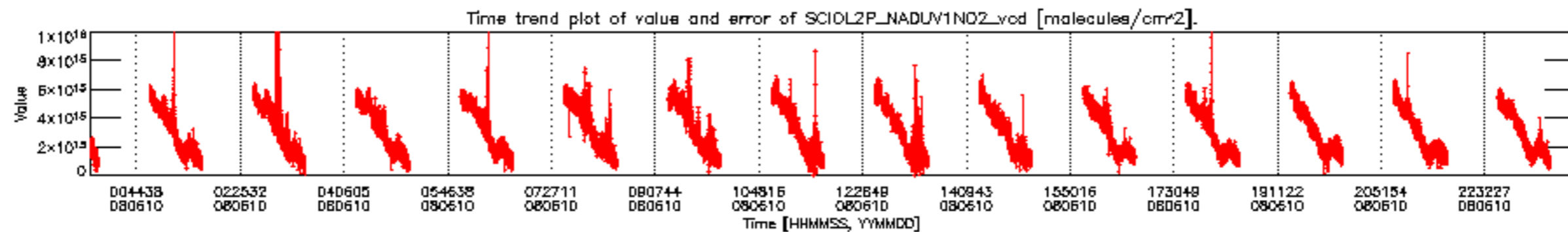


SCIOL2P_NADUV003_amf_gr for 10JUN2008 00:00:00 to 11JUN2008 00:00:00

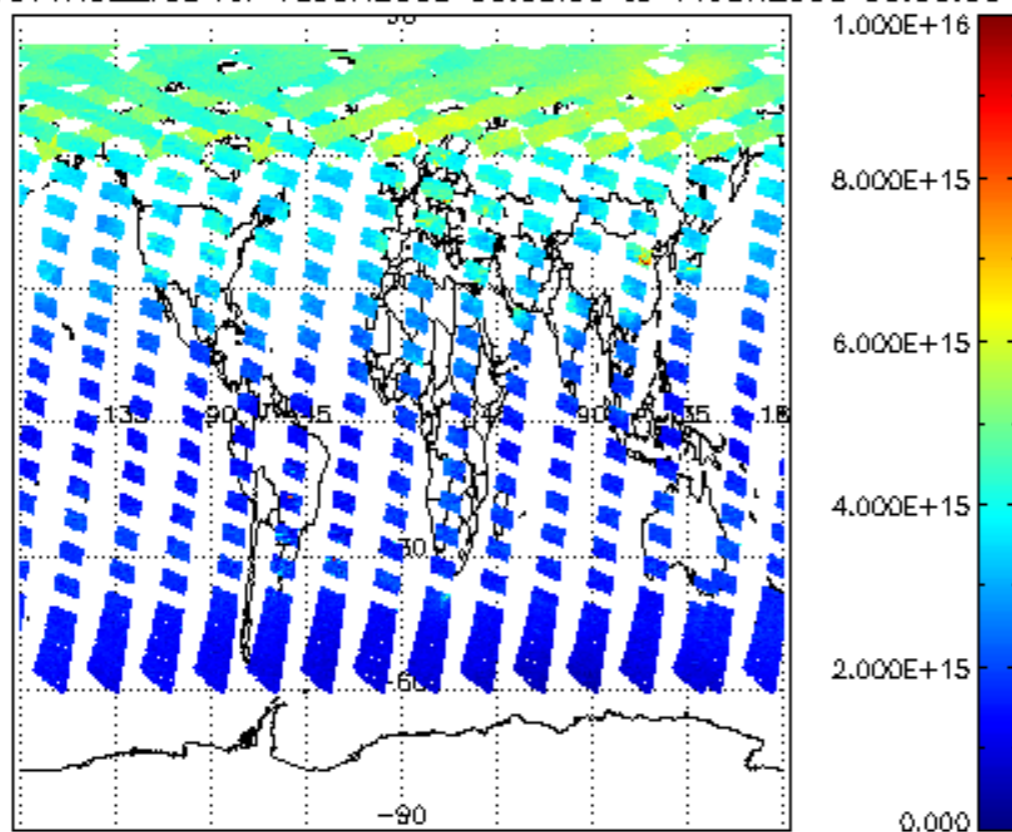


SCIOL2P_NADUV003_amf_cl for 10JUN2008 00:00:00 to 11JUN2008 00:00:00

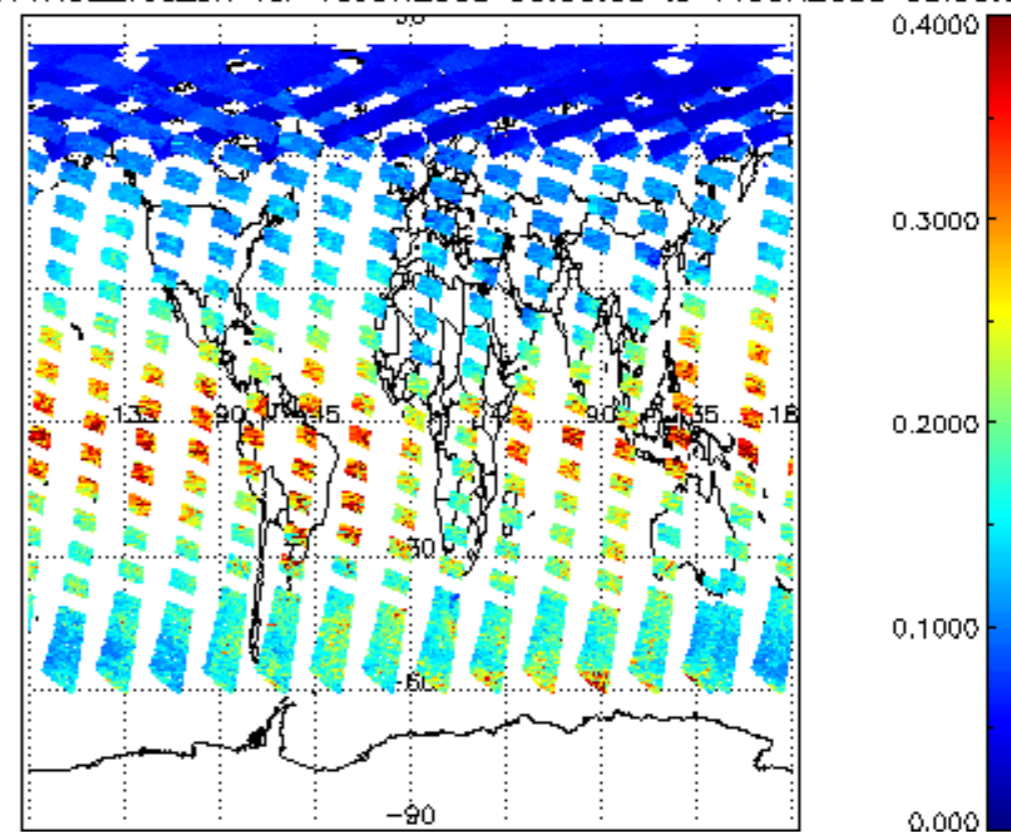




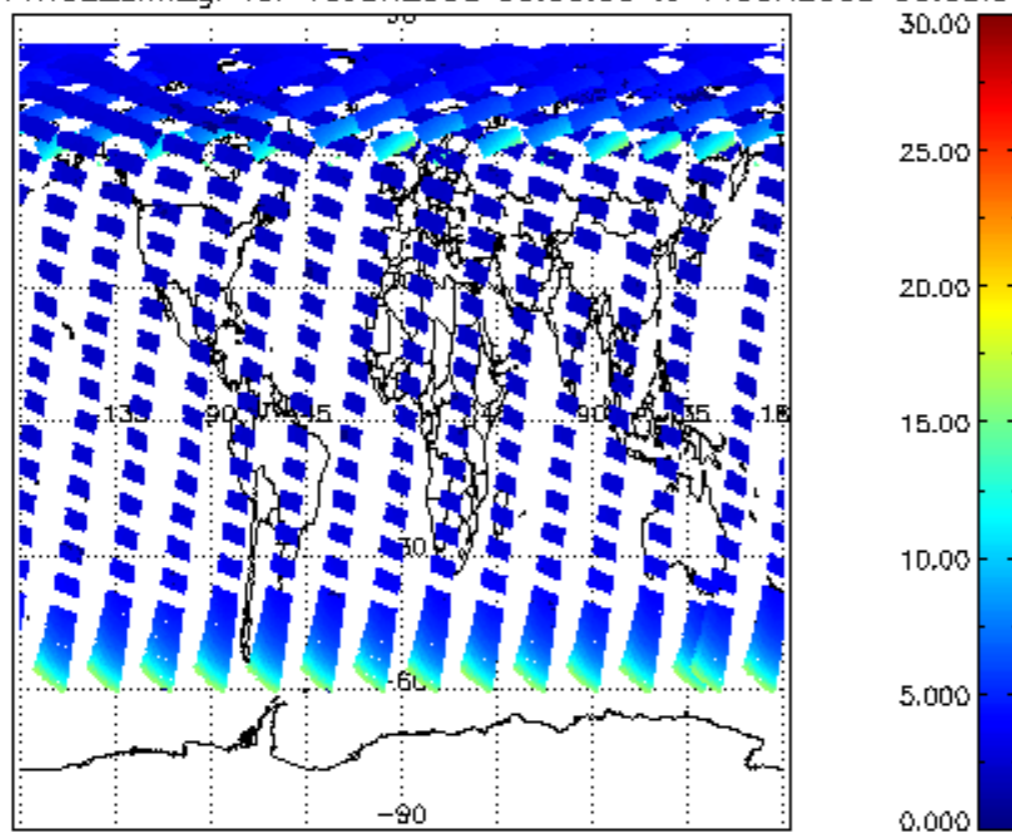
SCIOL2P_NADUV1NO2_vcd for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



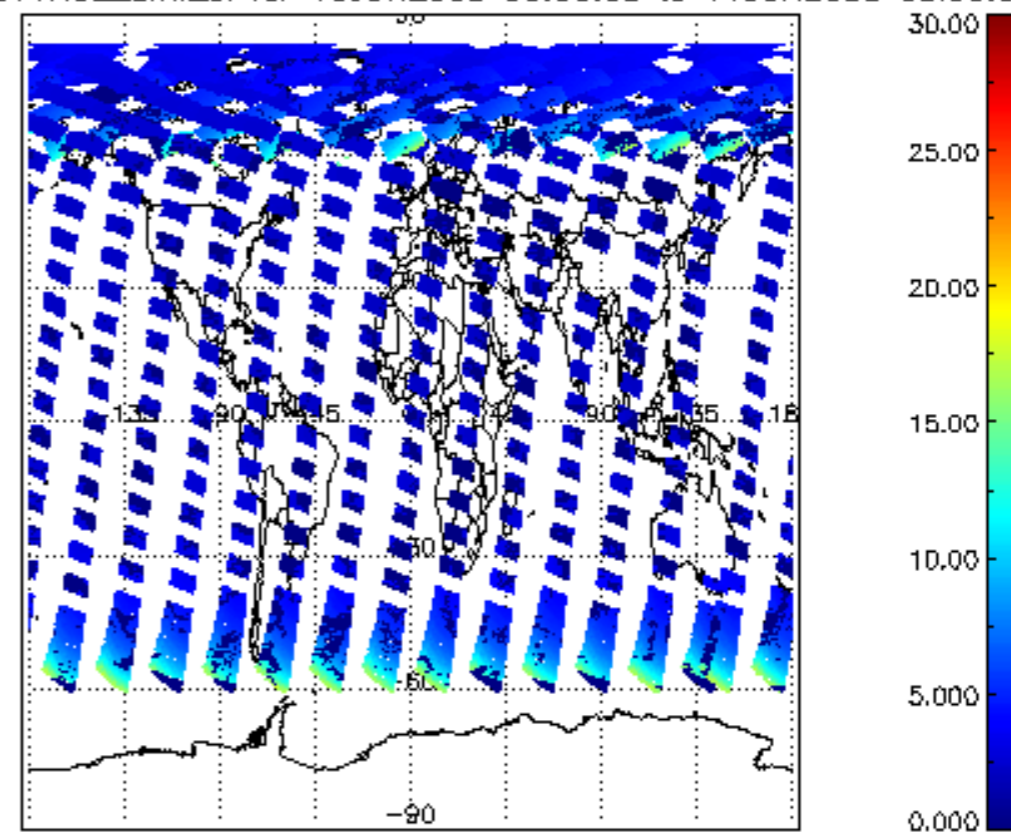
iCIOL2P_NADUV1NO2_vcd_err for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



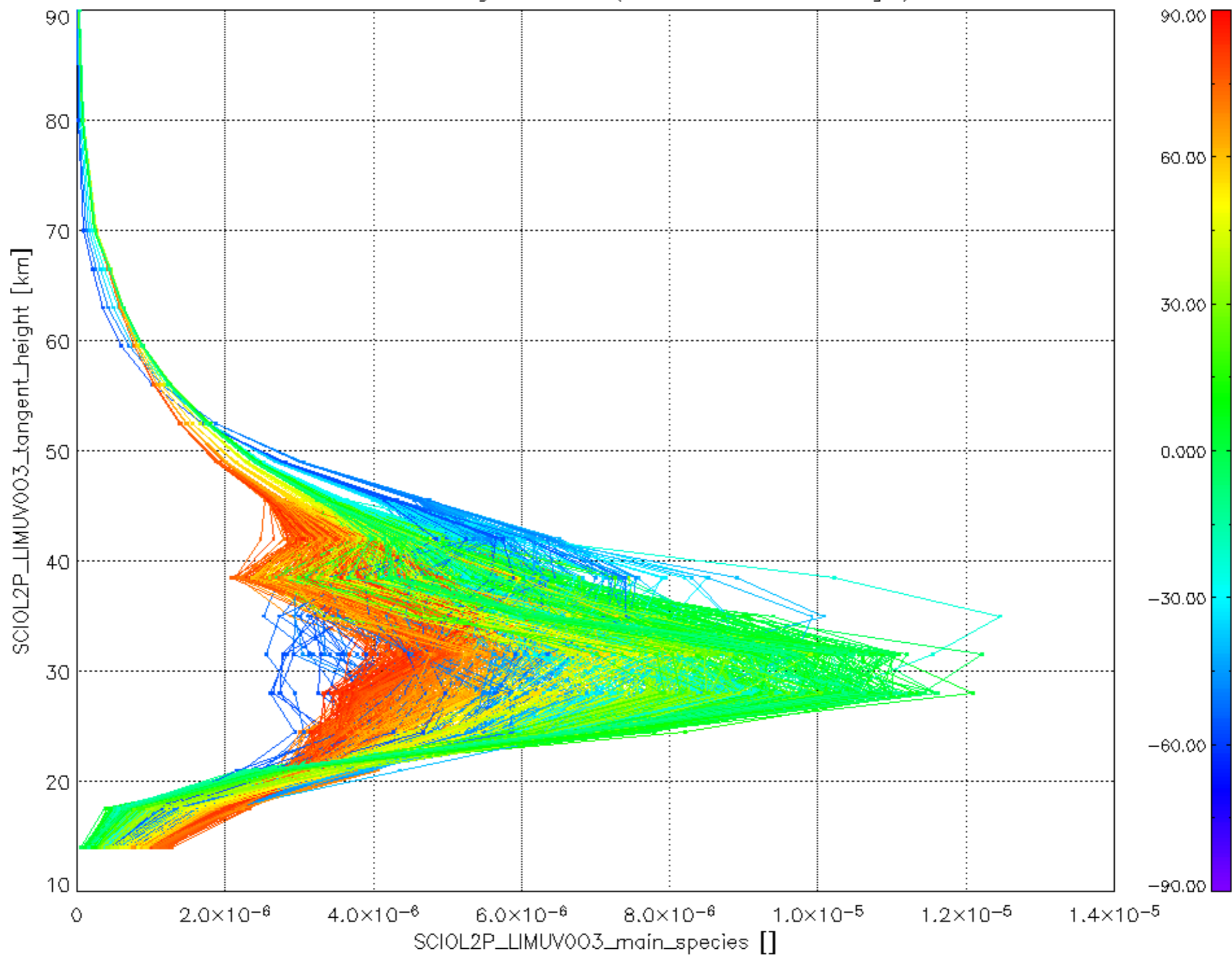
iCIOL2P_NADUV1NO2_amf_gr for 10JUN2008 00:00:00 to 11JUN2008 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 10JUN2008 00:00:00 to 11JUN2008 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).

