

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	22APR2008 06:03:14
Data source version	SCIA-OL/3.01-R
Processing scope for products	30MAR2008 00:00:00 to 31MAR2008 00:00:00
Start time of first product within scope	29MAR2008 22:39:49
Stop time of last product within scope	31MAR2008 00:45:15
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__2PRDPA20080329_223949_000033812067_00173_31790_5814.N1	29MAR2008 22:39:49	29MAR2008 23:36:10	0	GOOD
1	SCI_OL__2PRDPA20080330_002024_000033942067_00174_31791_5817.N1	30MAR2008 00:20:24	30MAR2008 01:16:58	0	GOOD
2	SCI_OL__2PRDPA20080330_020059_000033812067_00175_31792_5818.N1	30MAR2008 02:00:59	30MAR2008 02:57:21	0	GOOD
3	SCI_OL__2PRDPA20080330_034135_000033942067_00176_31793_5820.N1	30MAR2008 03:41:35	30MAR2008 04:38:09	0	GOOD
4	SCI_OL__2PRDPA20080330_052211_000033812067_00177_31794_5821.N1	30MAR2008 05:22:11	30MAR2008 06:18:32	0	GOOD
5	SCI_OL__2PRDPA20080330_070246_000033942067_00178_31795_5823.N1	30MAR2008 07:02:46	30MAR2008 07:59:20	0	GOOD
6	SCI_OL__2PRDPA20080330_084322_000033812067_00179_31796_5825.N1	30MAR2008 08:43:22	30MAR2008 09:39:43	0	GOOD
7	SCI_OL__2PRDPA20080330_102357_000033942067_00180_31797_5828.N1	30MAR2008 10:23:57	30MAR2008 11:20:31	0	GOOD
8	SCI_OL__2PRDPA20080330_120432_000033812067_00181_31798_5831.N1	30MAR2008 12:04:32	30MAR2008 13:00:54	0	GOOD
9	SCI_OL__2PRDPA20080330_134508_000033942067_00182_31799_5833.N1	30MAR2008 13:45:08	30MAR2008 14:41:42	0	GOOD
10	SCI_OL__2PRDPA20080330_152543_000033812067_00183_31800_5834.N1	30MAR2008 15:25:43	30MAR2008 16:22:05	0	GOOD
11	SCI_OL__2PRDPA20080330_170641_000033252067_00184_31801_5836.N1	30MAR2008 17:06:41	30MAR2008 18:02:06	0	GOOD
12	SCI_OL__2PRDPA20080330_184716_000033122067_00185_31802_5838.N1	30MAR2008 18:47:16	30MAR2008 19:42:29	0	GOOD
13	SCI_OL__2PRDPA20080330_202730_000033942067_00186_31803_5840.N1	30MAR2008 20:27:30	30MAR2008 21:24:04	0	GOOD
14	SCI_OL__2PRDPA20080330_220806_000033812067_00187_31804_5842.N1	30MAR2008 22:08:06	30MAR2008 23:04:27	0	GOOD
15	SCI_OL__2PRDPA20080330_234841_000033942067_00188_31805_5844.N1	30MAR2008 23:48:41	31MAR2008 00:45:15	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: 142224

Total number of cloud data DSRs with good quality flag (=0): 142224 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	142224	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	142224	0.17139	0.12500	0.12500	0.25000	0.060388	s
SURFACE_PRES	142224	0.0000	0.0000	0.0000	0.0000	0.0000	hPa

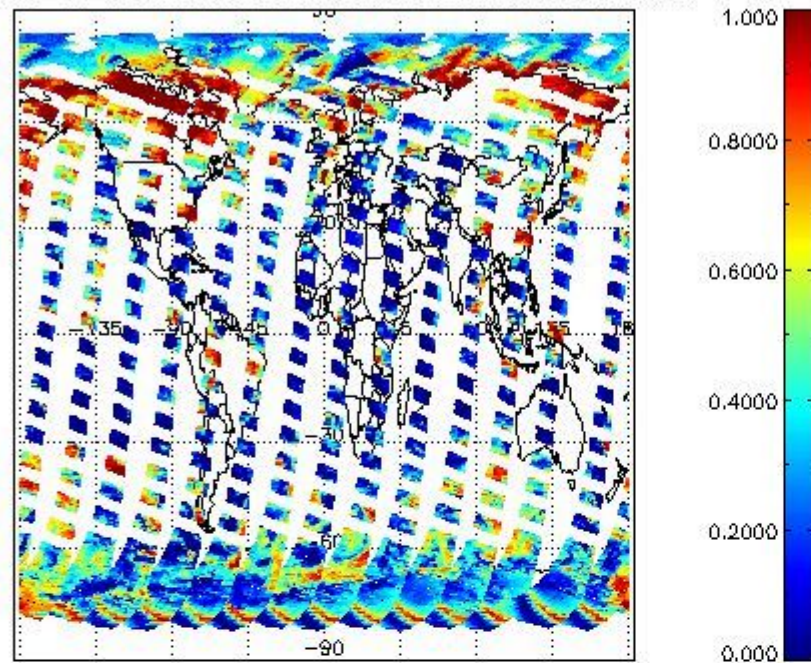
CL_FRAC	142224	0.37893	0.34189	0.0000	1.0000	0.29889	-
CL_FRAC_ERR	142224	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	142224	5.4844	4.0000	4.0000	8.0000	1.9324	
PMD_READ_CL[0]	142224	0.28672	0.0000	0.0000	8.0000	1.1673	-
PMD_READ_CL[1]	142224	1.1602	0.0000	0.0000	8.0000	2.3466	-
CL_TOP_HEIGHT	120367	3.1040	1.4776	0.0000	17.000	3.5950	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	120367	62.652	92.782	0.0000	101.00	41.668	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	142224	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	142224	11001010	11000100	11000000	11100000	3351.4	flags
AERO_ABSO_IND	142224	3.0443	3.5939	-1.6820	14.969	2.0907	
AERO_IND_DIAG	142224	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	142224	01011000	00000000	00000000	11000000	24505.	flags

Time and geolocation plots:

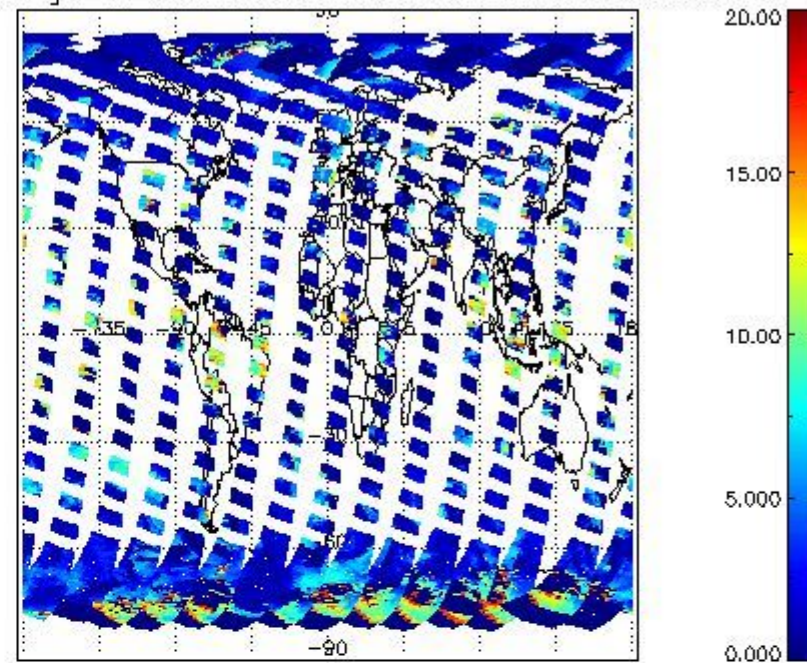
Plots are available for the following parameters:

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

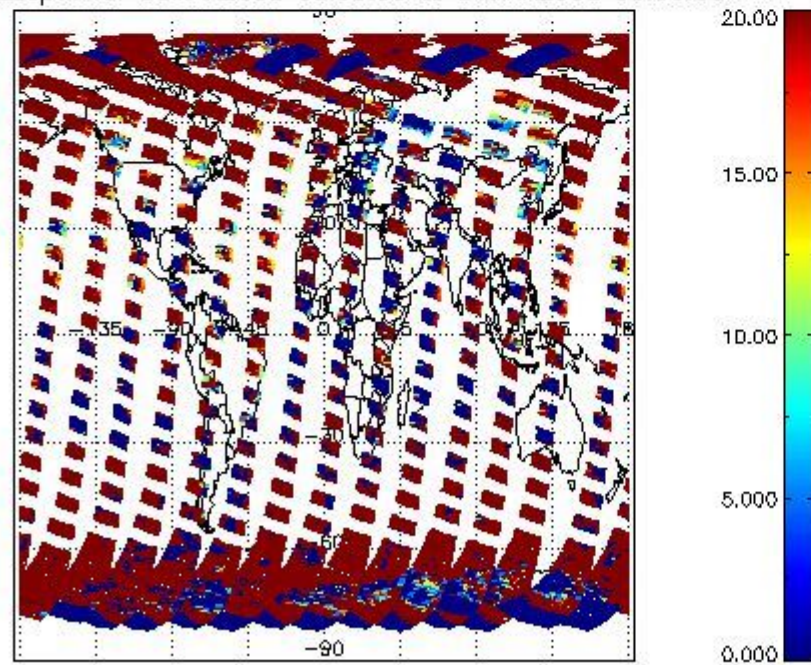
cL_frac for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



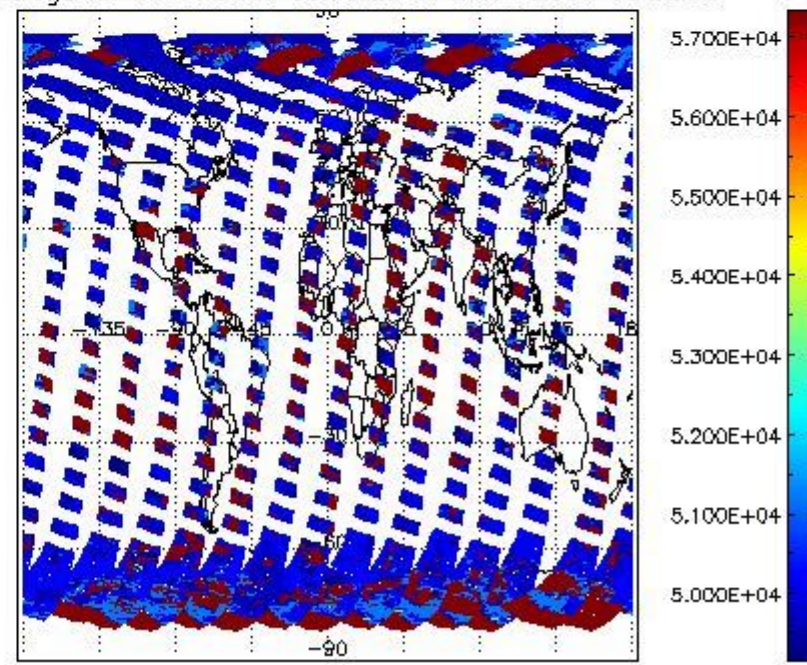
cL_top_height for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



cL_opt_depth for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



cloud_flags for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



2.2.2 Nadir

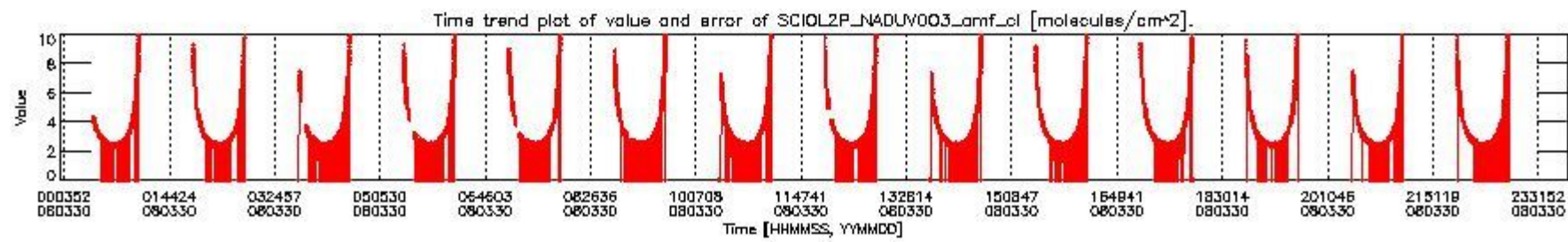
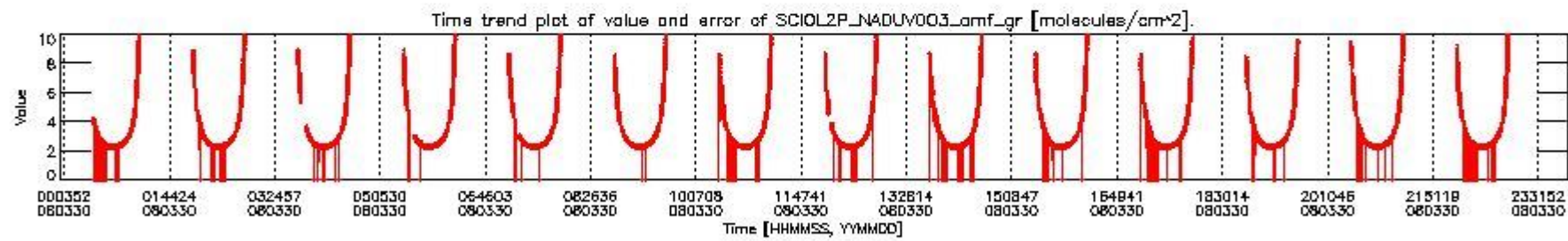
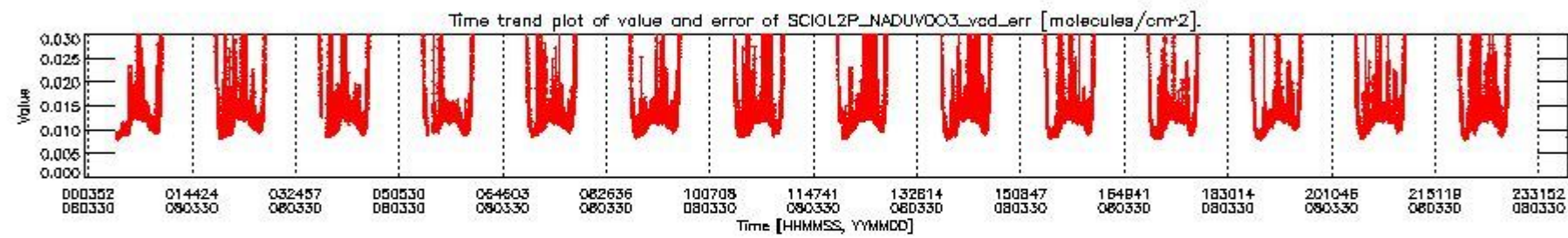
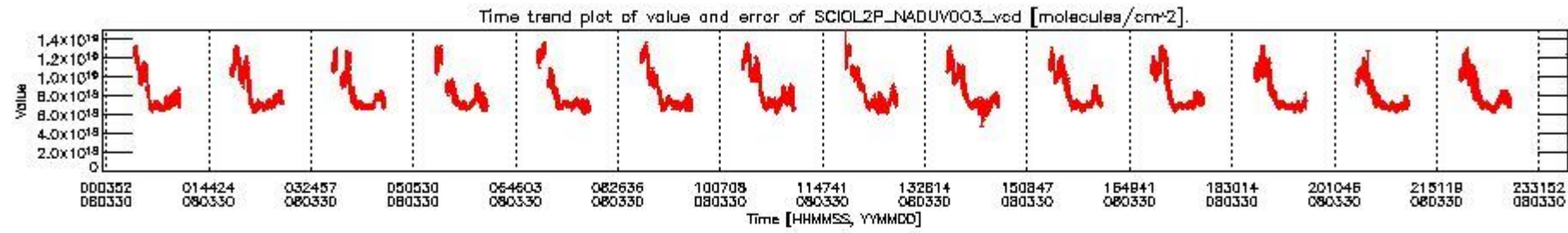
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

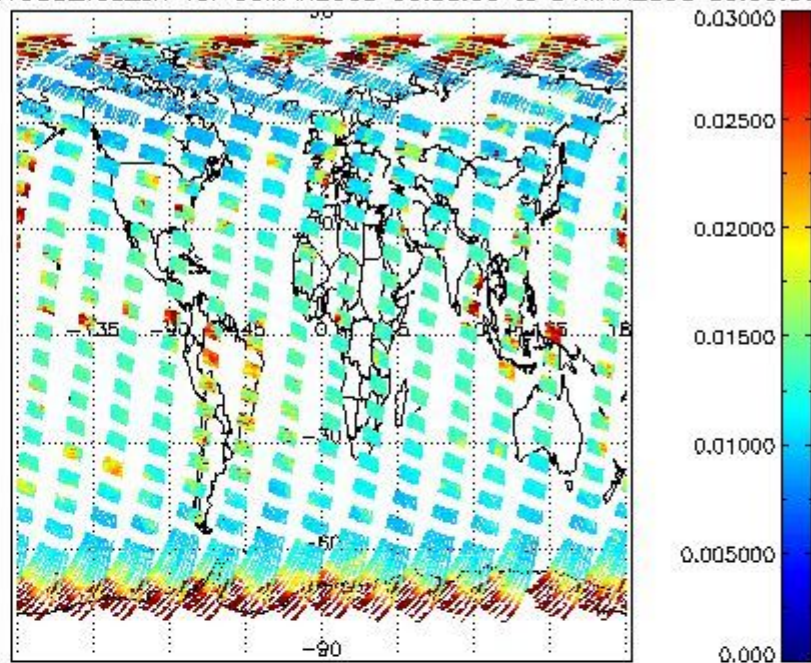
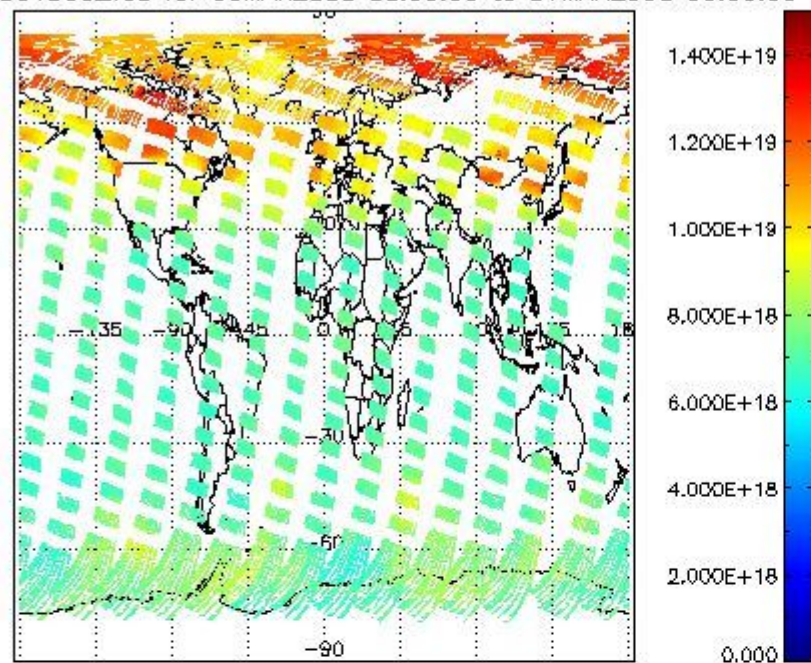
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

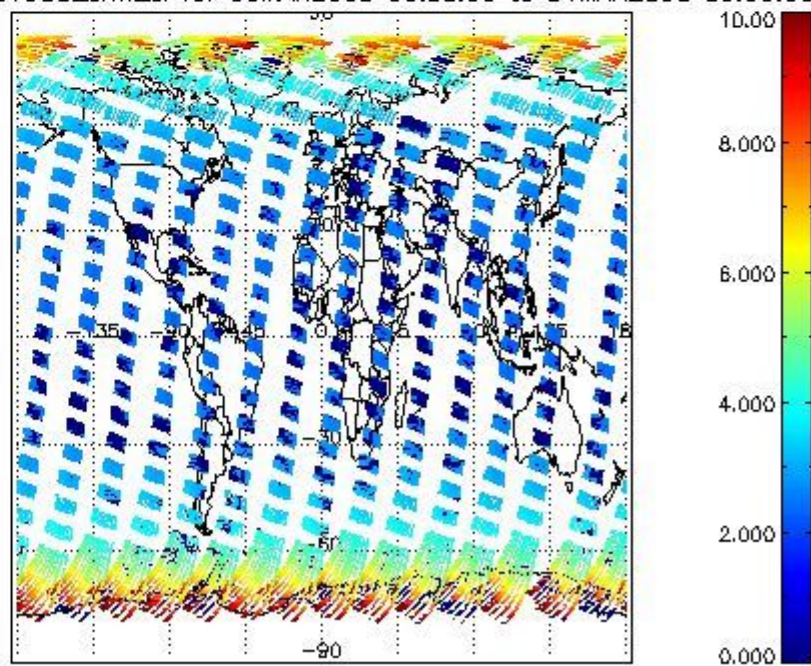
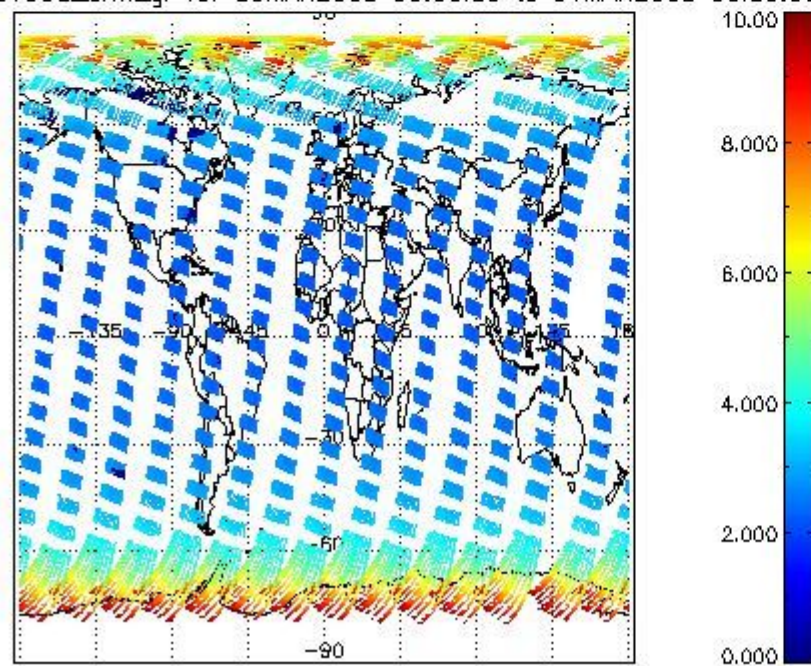
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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

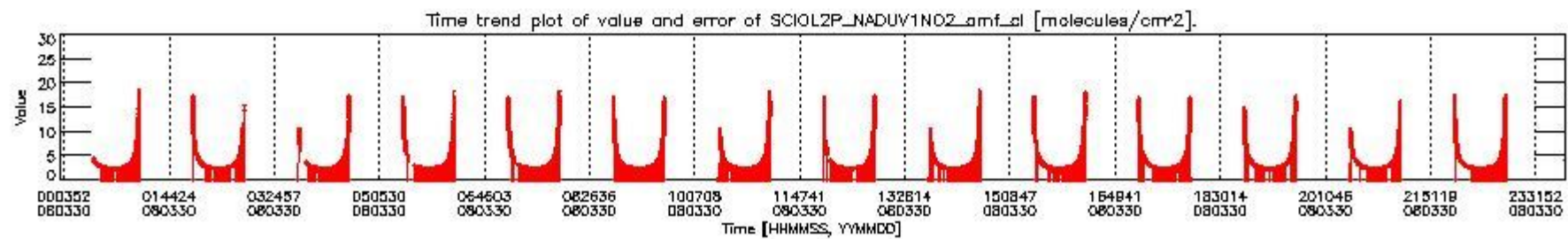
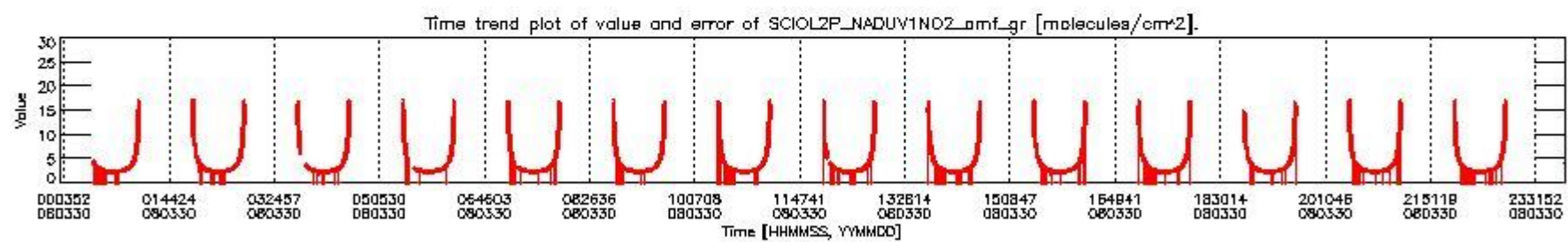
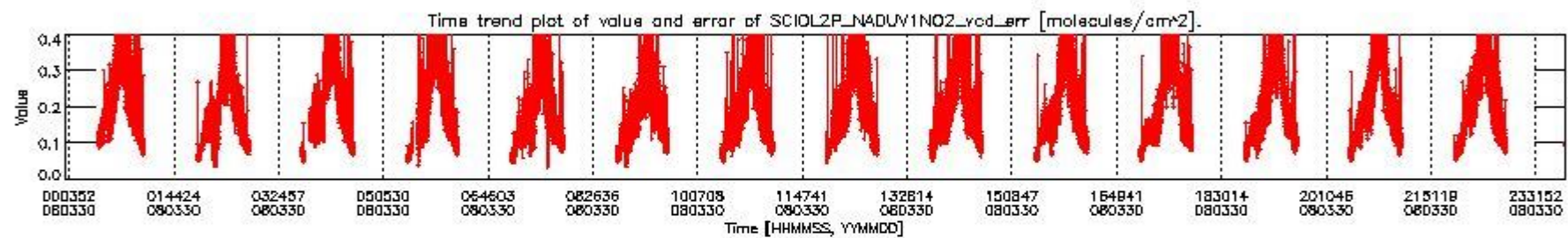
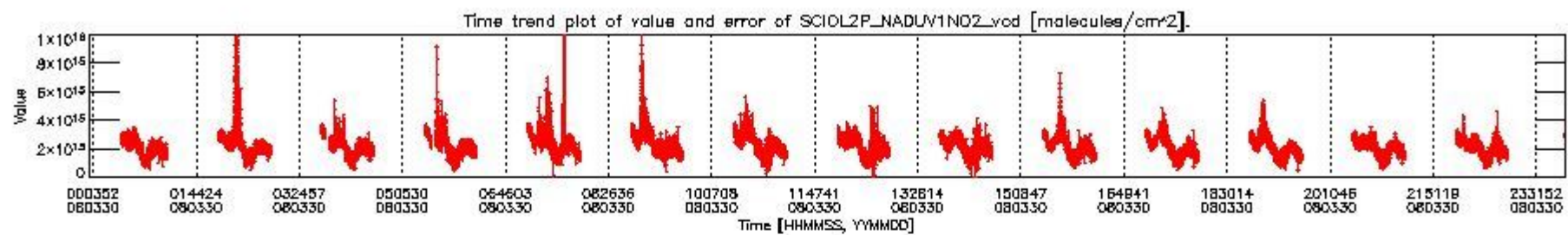


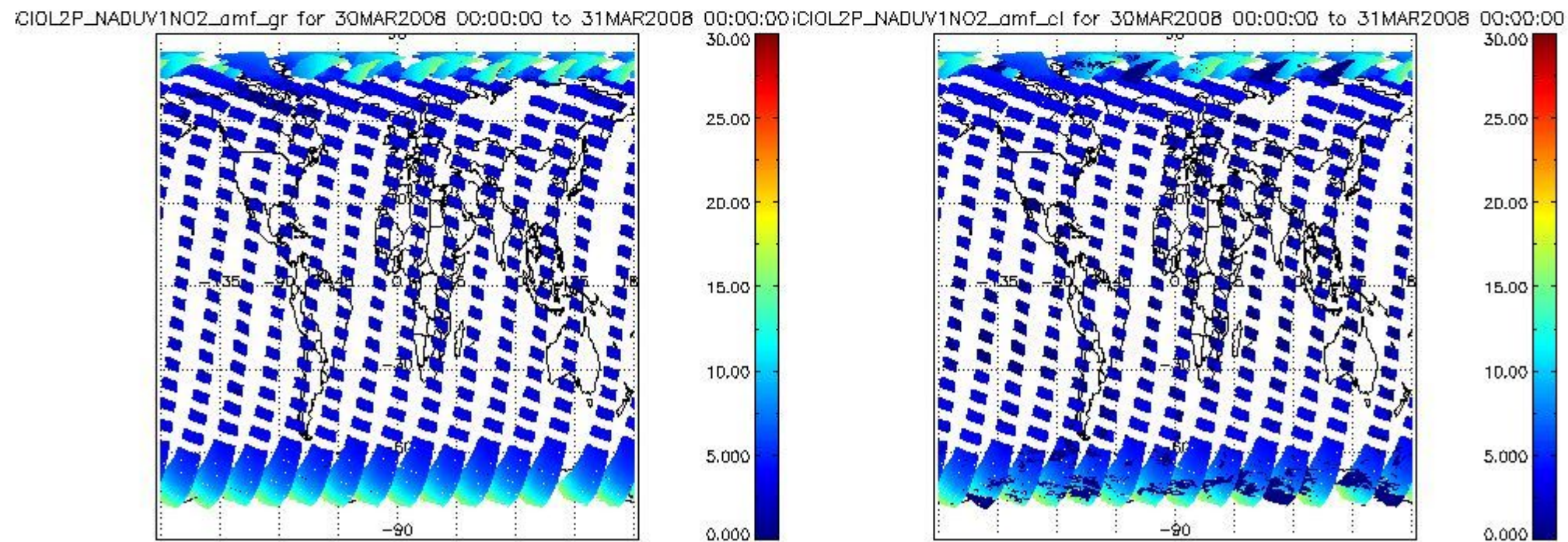
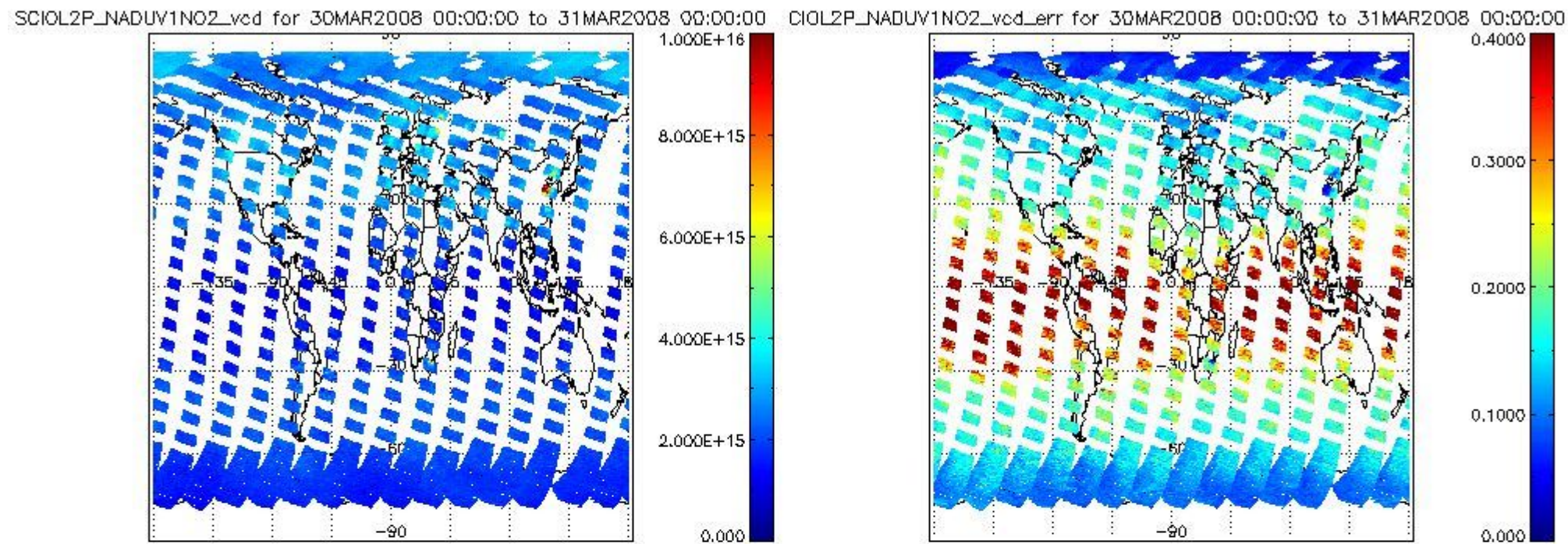
SCIOL2P_NADUV003_vcd for 30MAR2008 00:00:00 to 31MAR2008 00:00:00 SCIOL2P_NADUV003_vcd_err for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



SCIOL2P_NADUV003_amf_gr for 30MAR2008 00:00:00 to 31MAR2008 00:00:00 SCIOL2P_NADUV003_amf_cl for 30MAR2008 00:00:00 to 31MAR2008 00:00:00







2.2.3 Limb

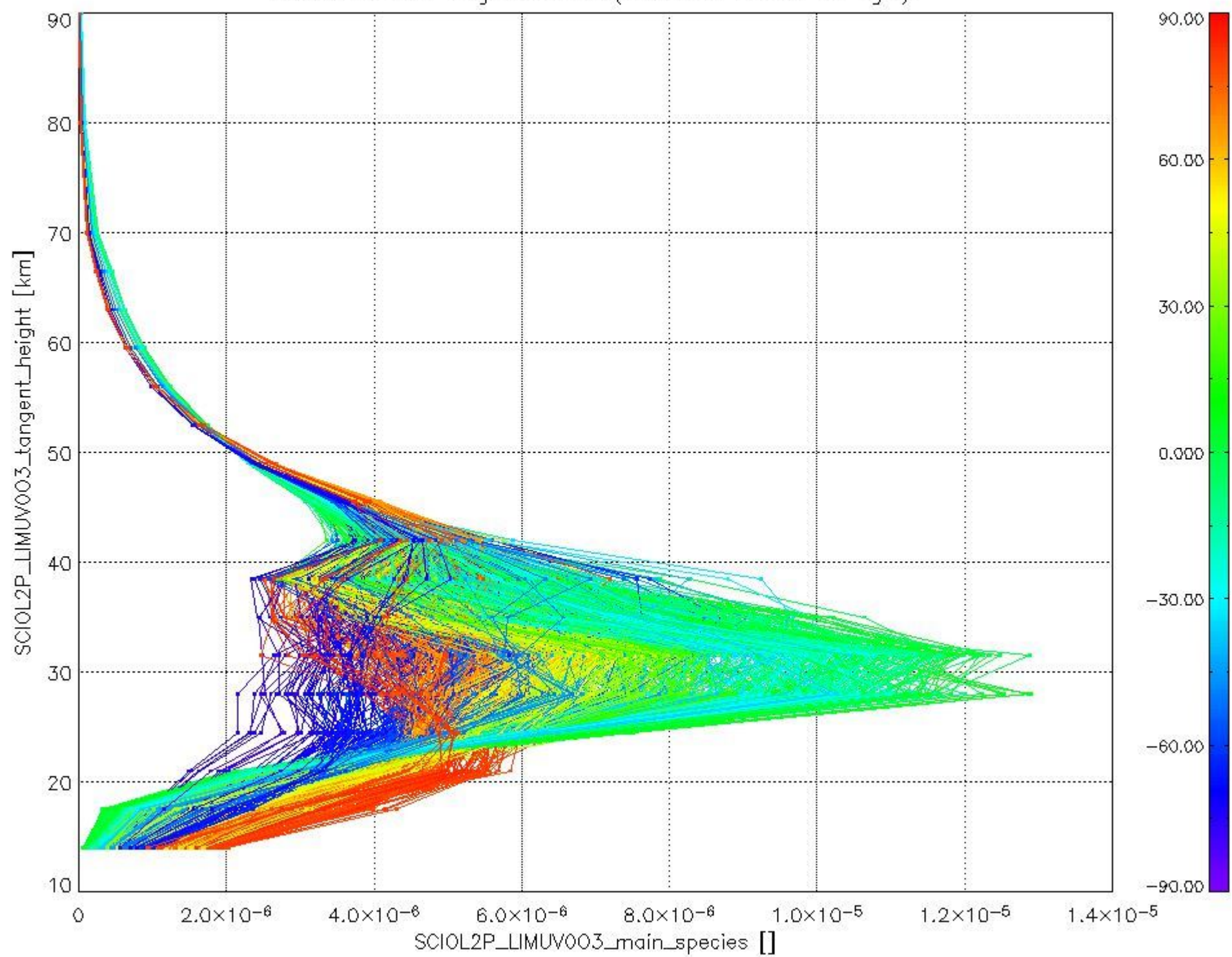
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

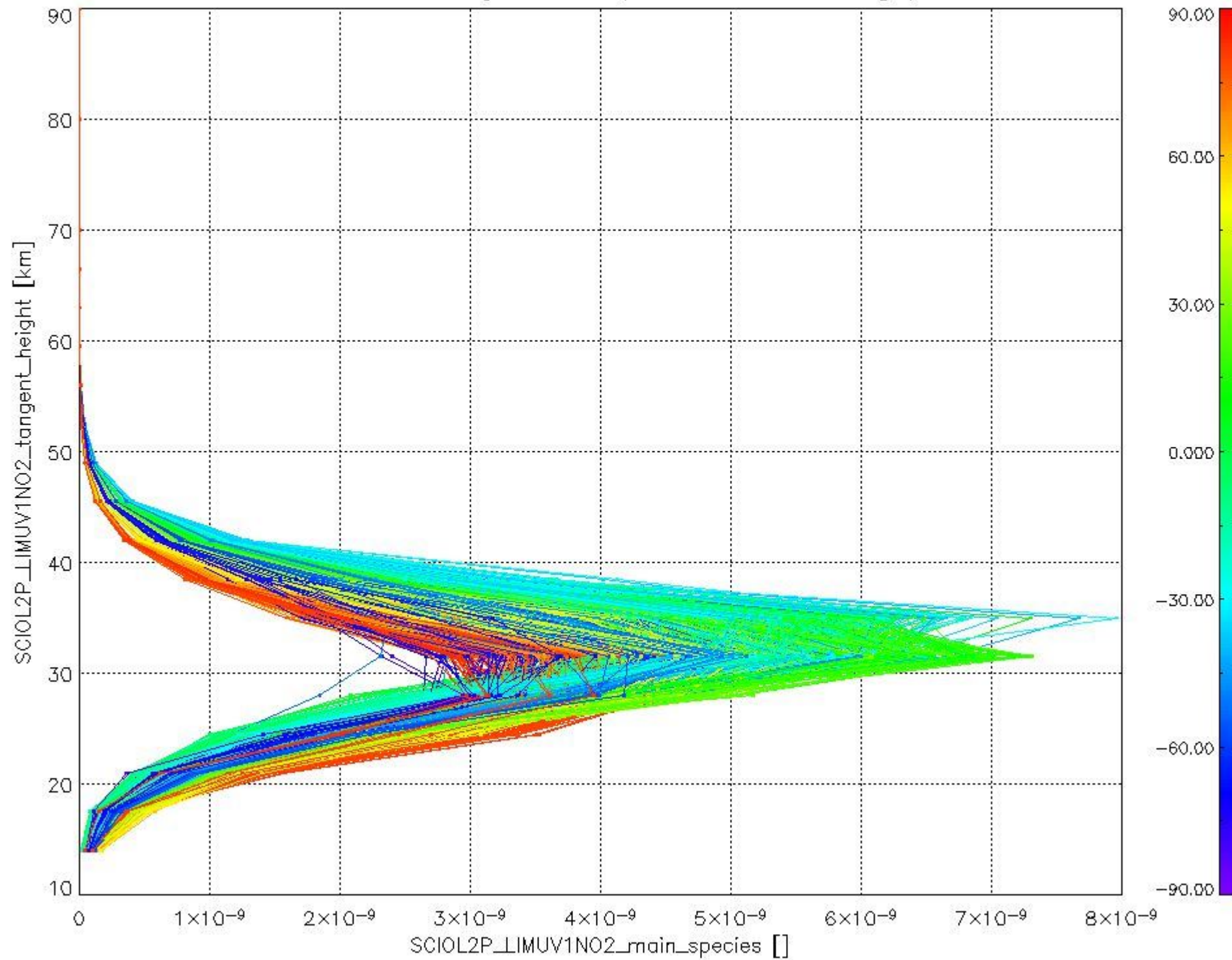
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



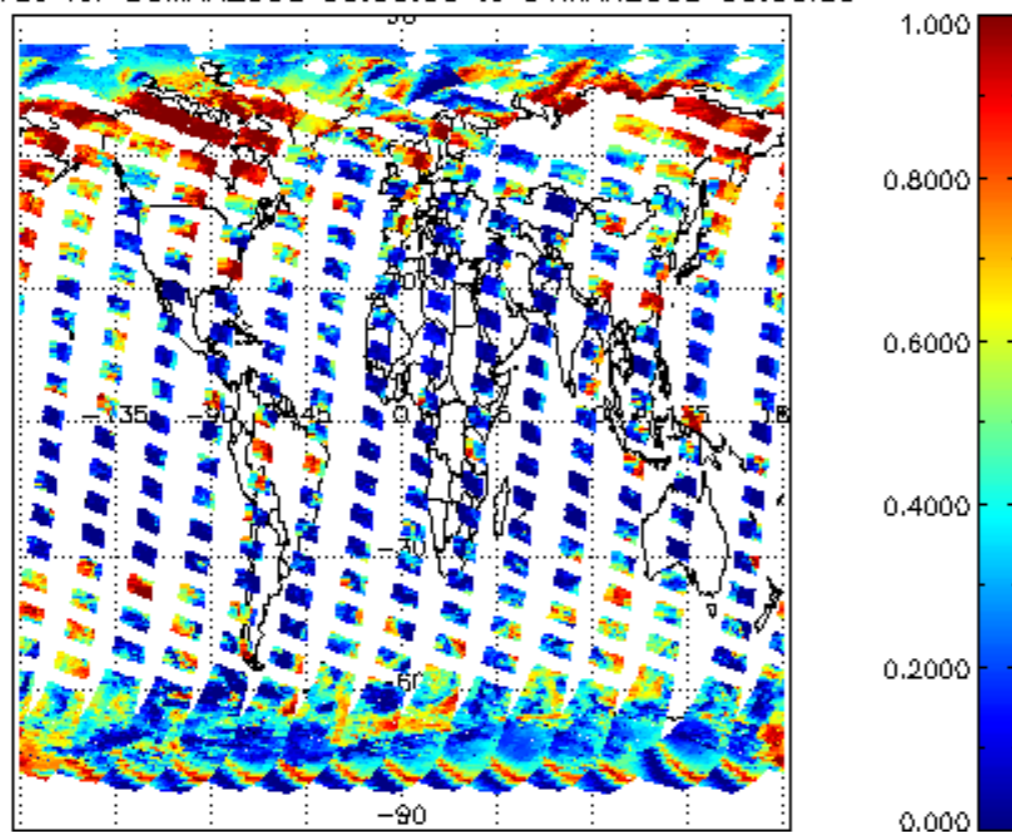
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



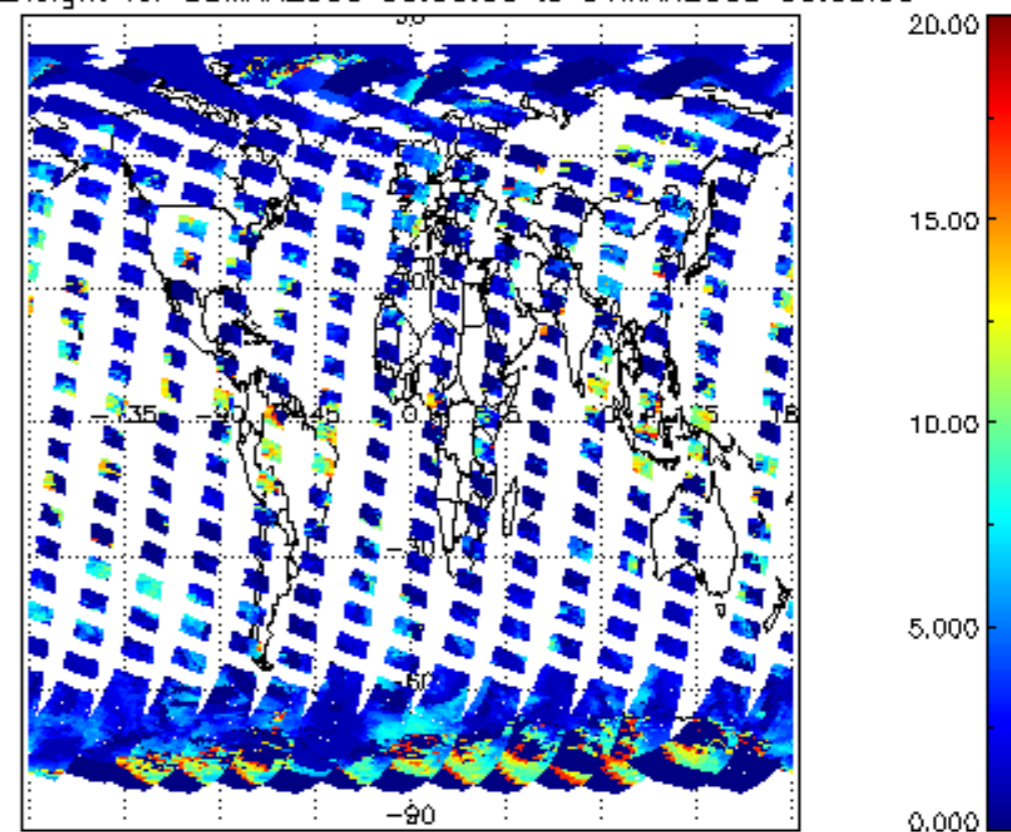
2.3 ADF monitoring

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

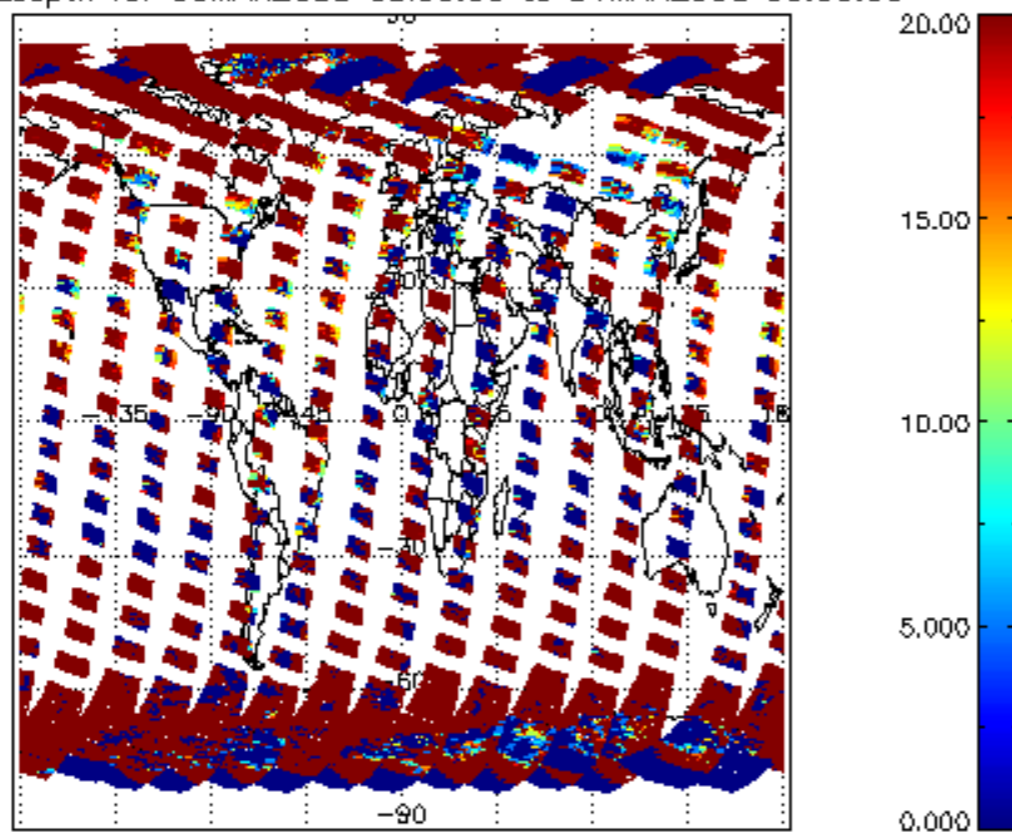
cL_frac for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



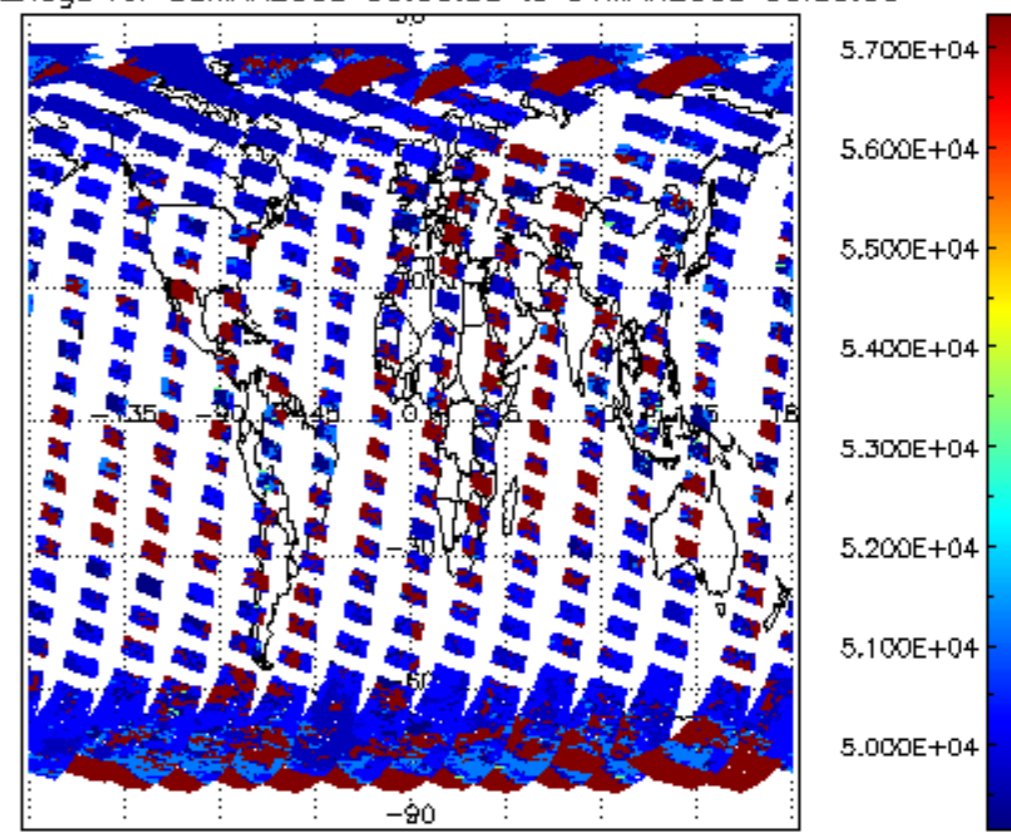
cL_top_height for 30MAR2008 00:00:00 to 31MAR2008 00:00:00

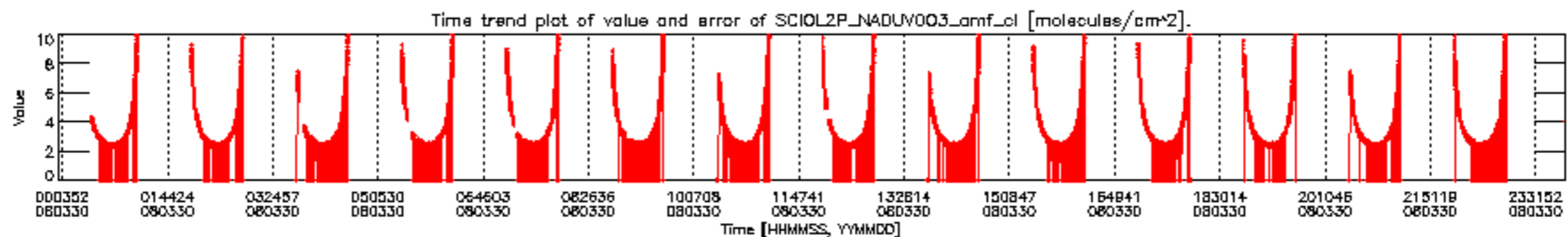
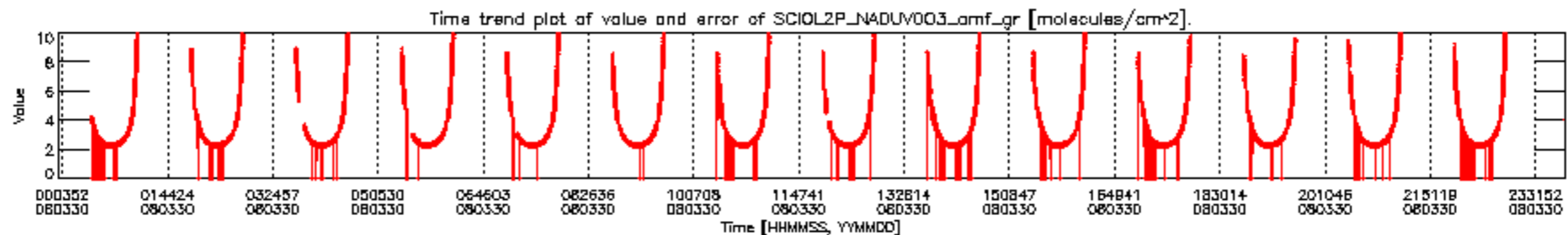
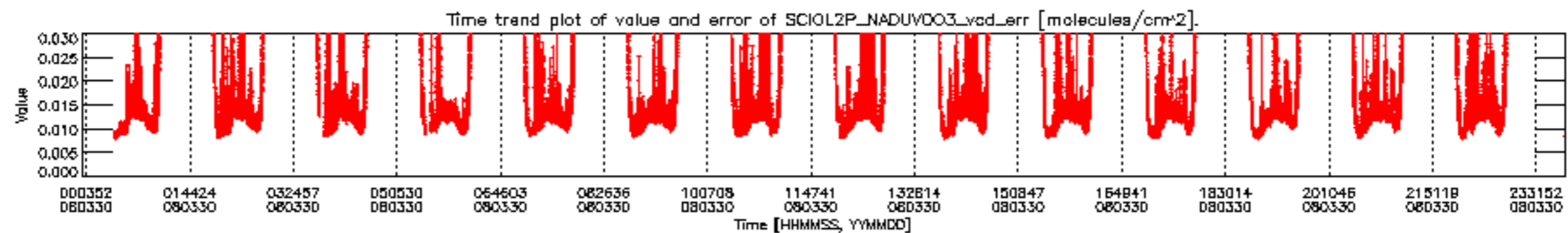
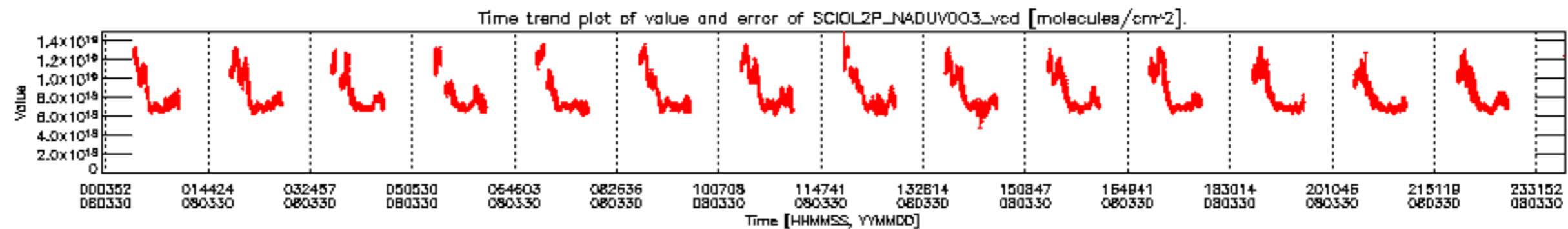


cL_opt_depth for 30MAR2008 00:00:00 to 31MAR2008 00:00:00

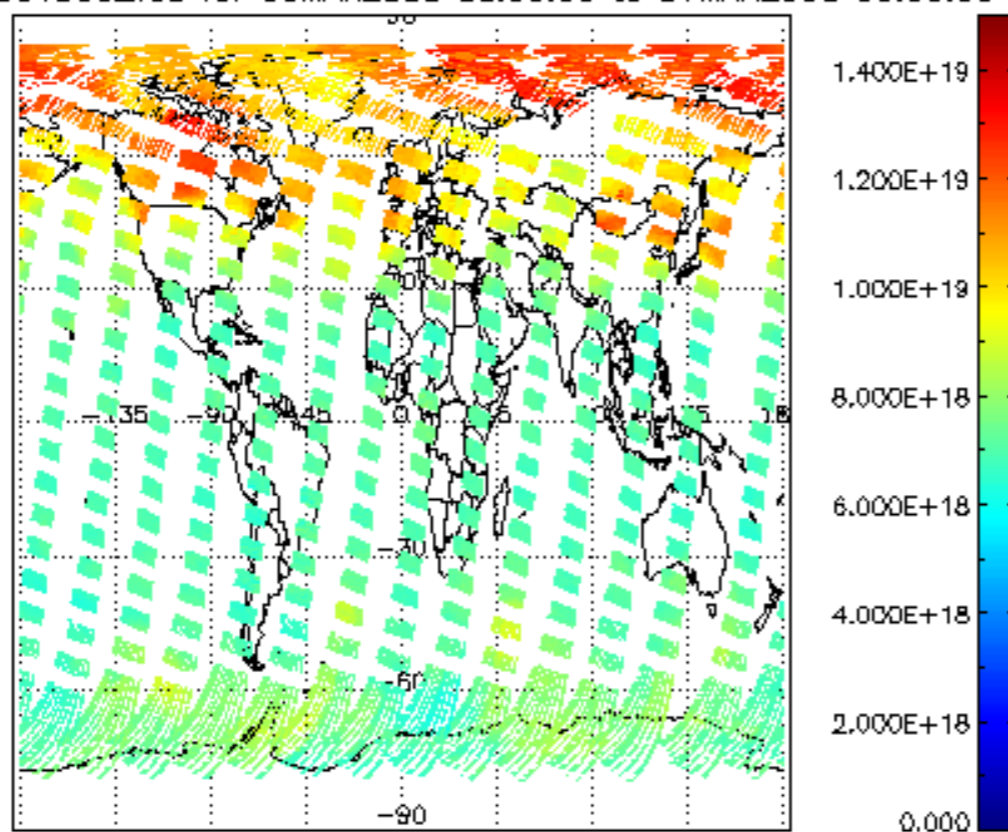


cloud_flags for 30MAR2008 00:00:00 to 31MAR2008 00:00:00

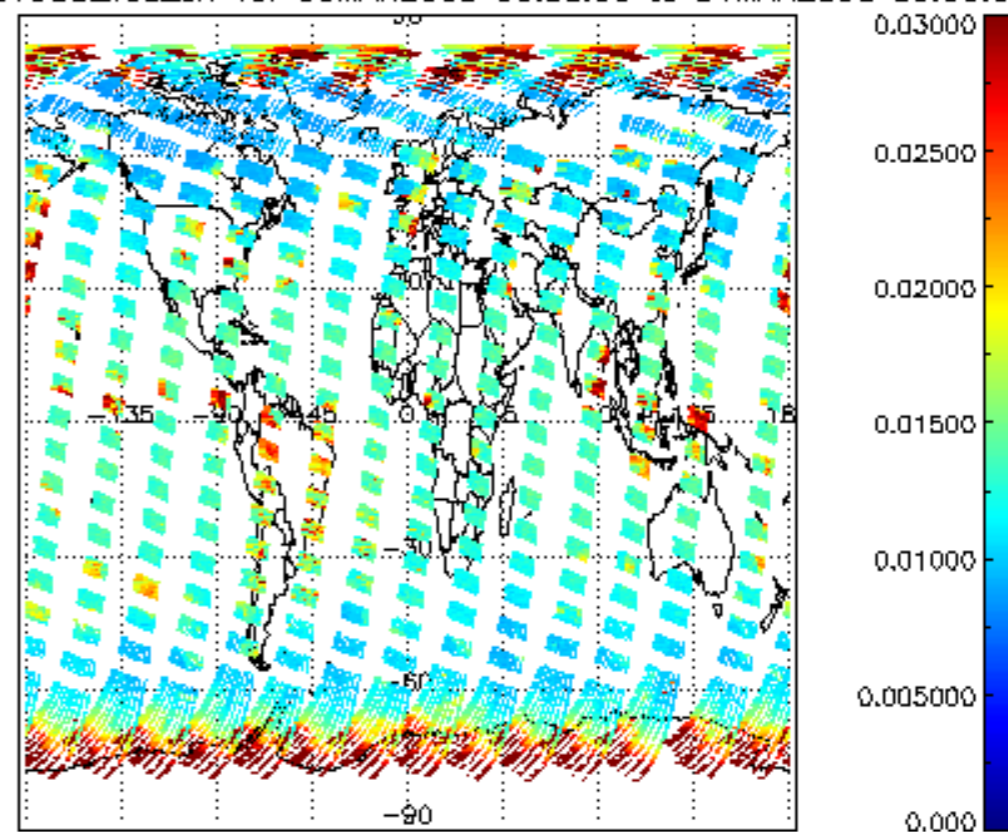




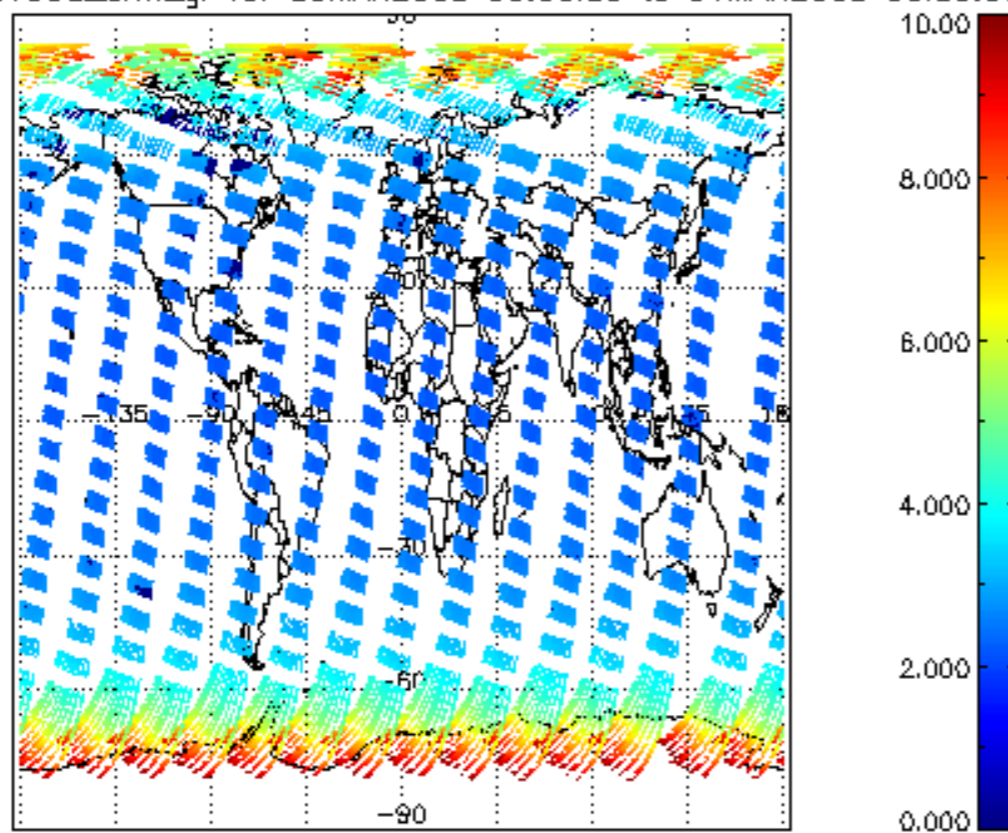
SCIOL2P_NADUV003_vcd for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



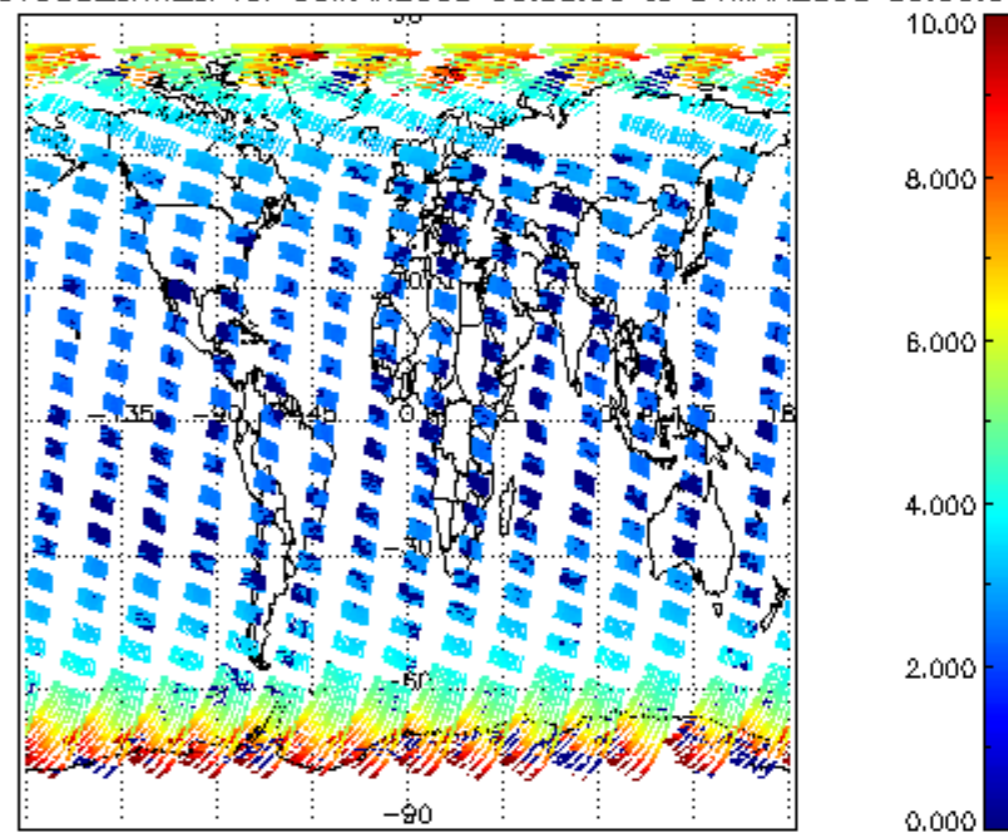
SCIOL2P_NADUV003_vcd_err for 30MAR2008 00:00:00 to 31MAR2008 00:00:00

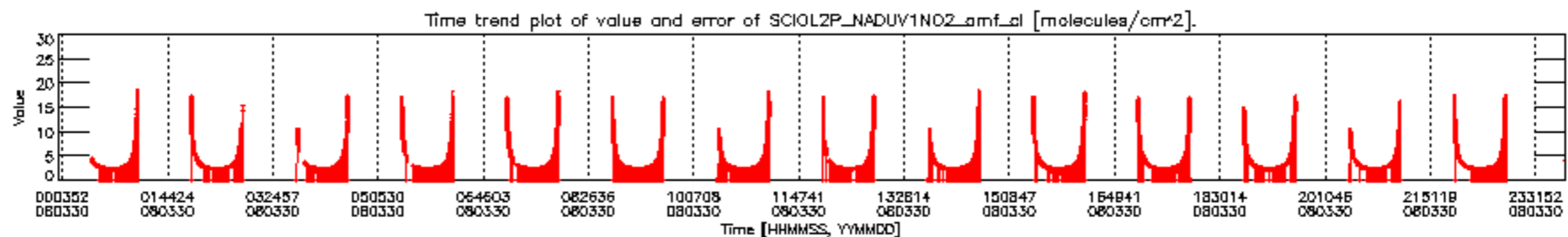
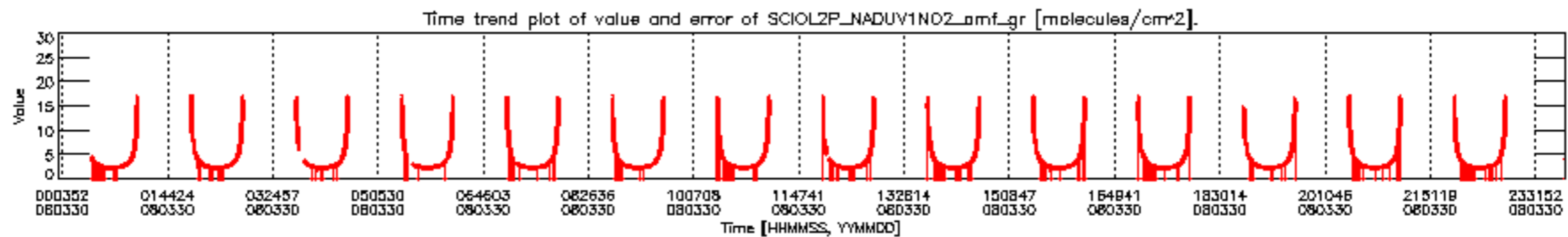
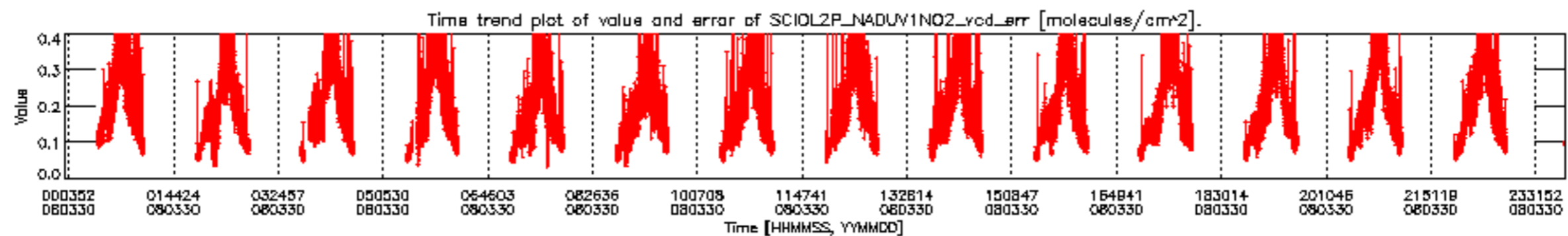
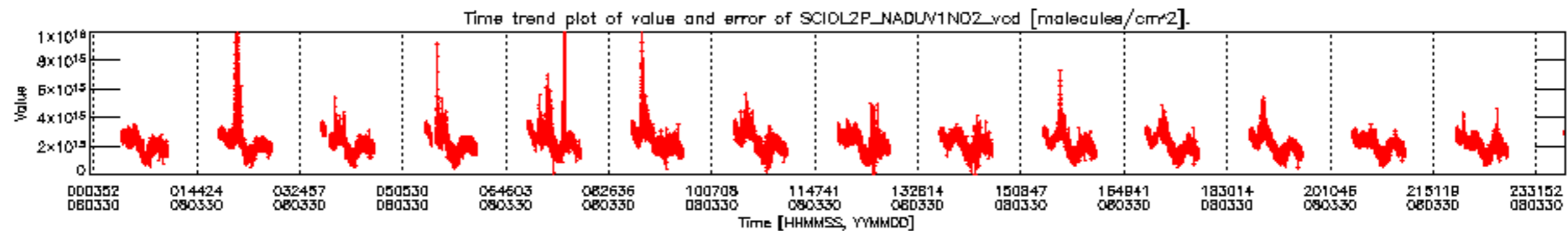


SCIOL2P_NADUV003_amf_gr for 30MAR2008 00:00:00 to 31MAR2008 00:00:00

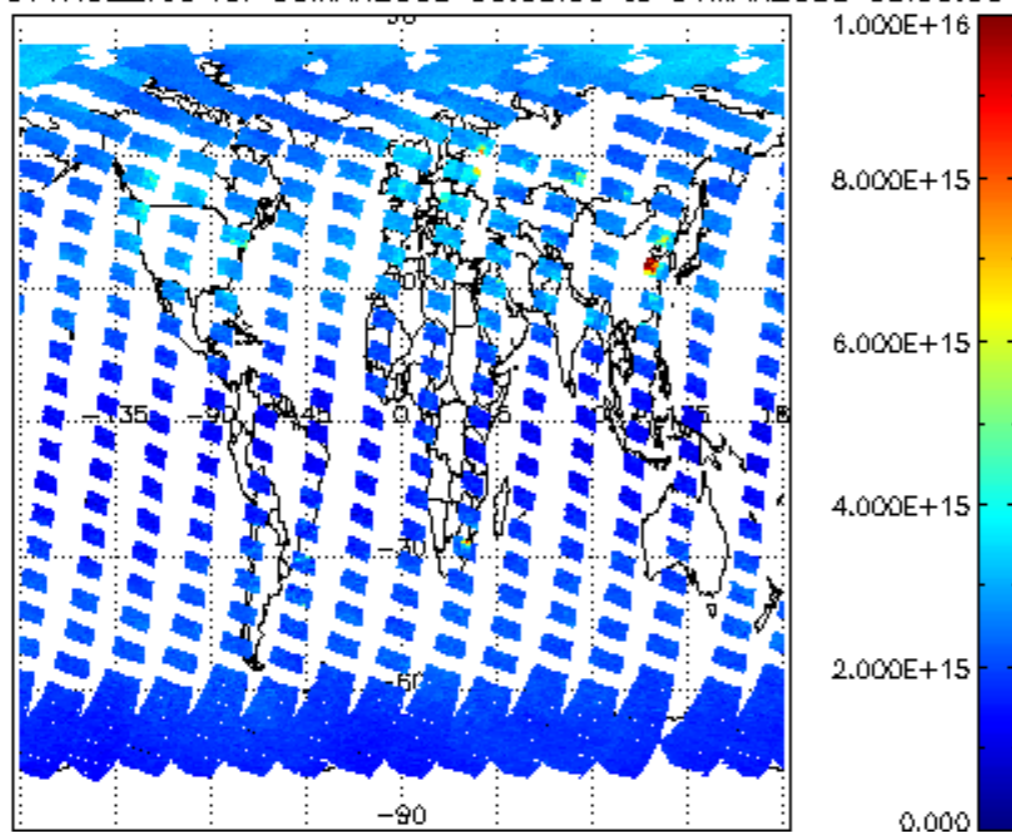


SCIOL2P_NADUV003_amf_cl for 30MAR2008 00:00:00 to 31MAR2008 00:00:00

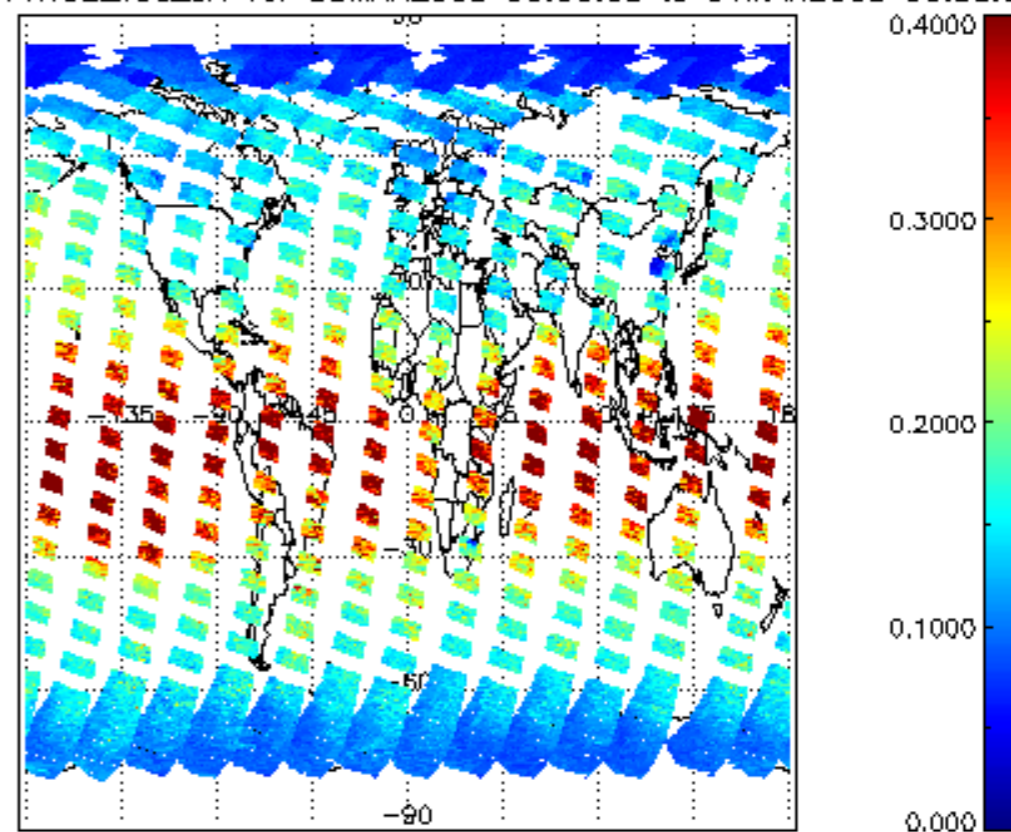




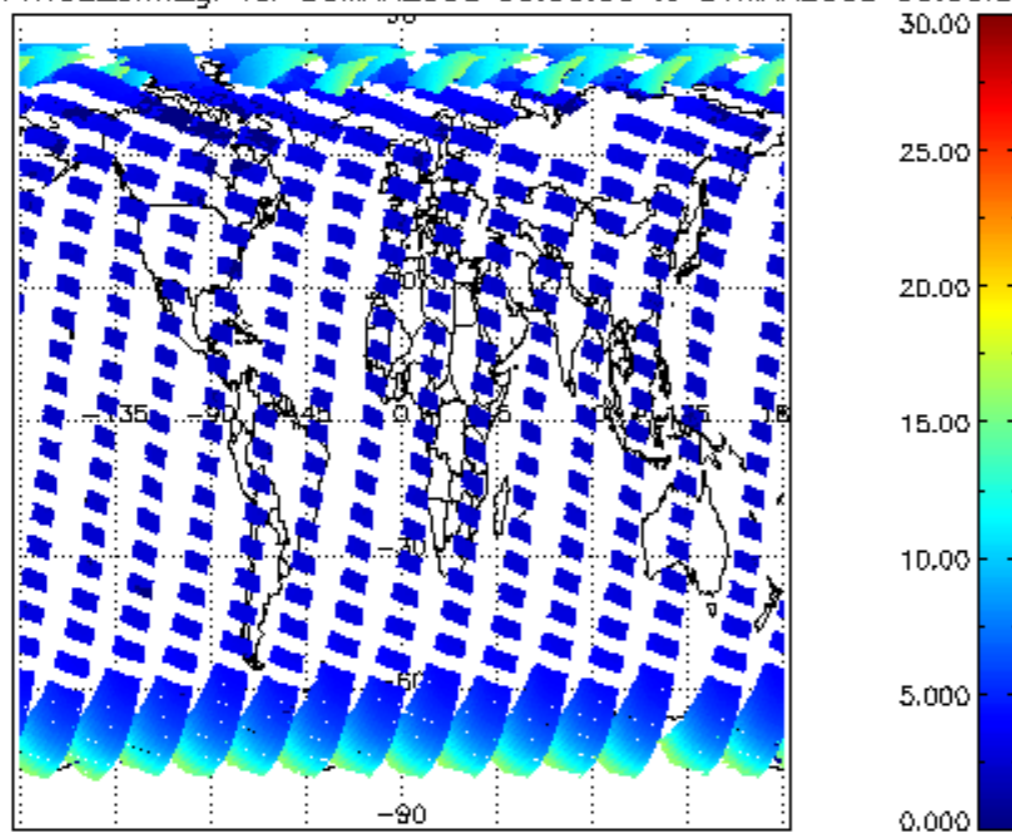
SCIOL2P_NADUV1NO2_vcd for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



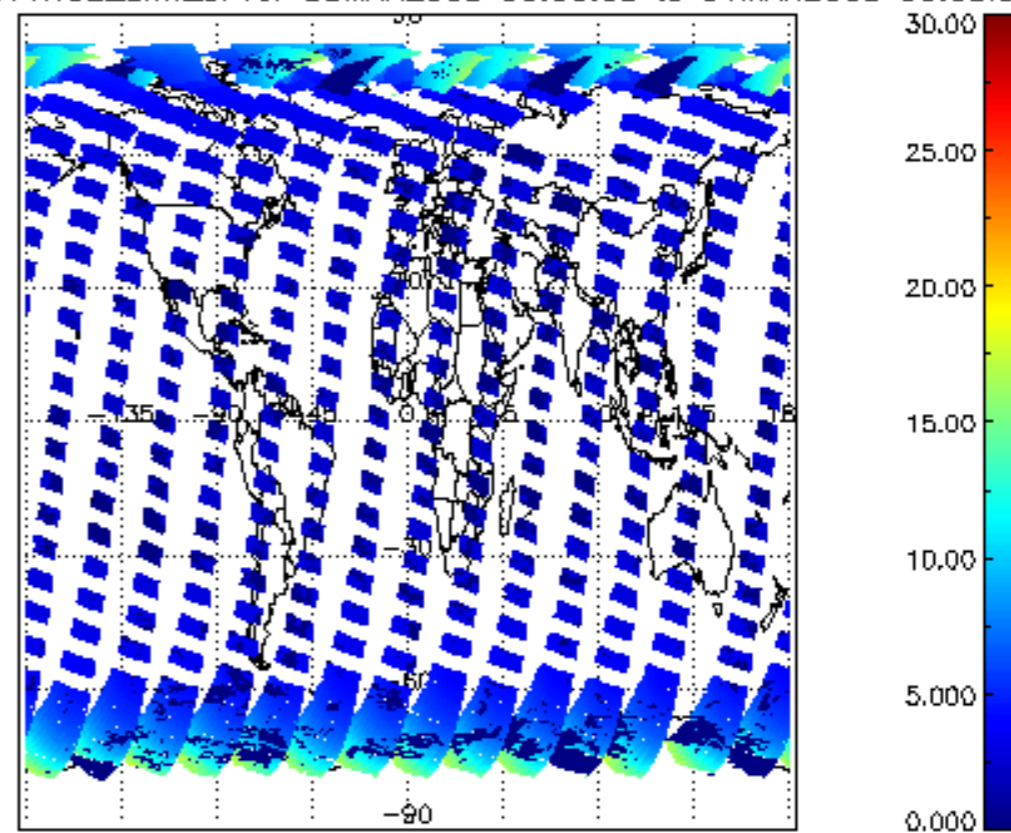
CIOL2P_NADUV1NO2_vcd_err for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



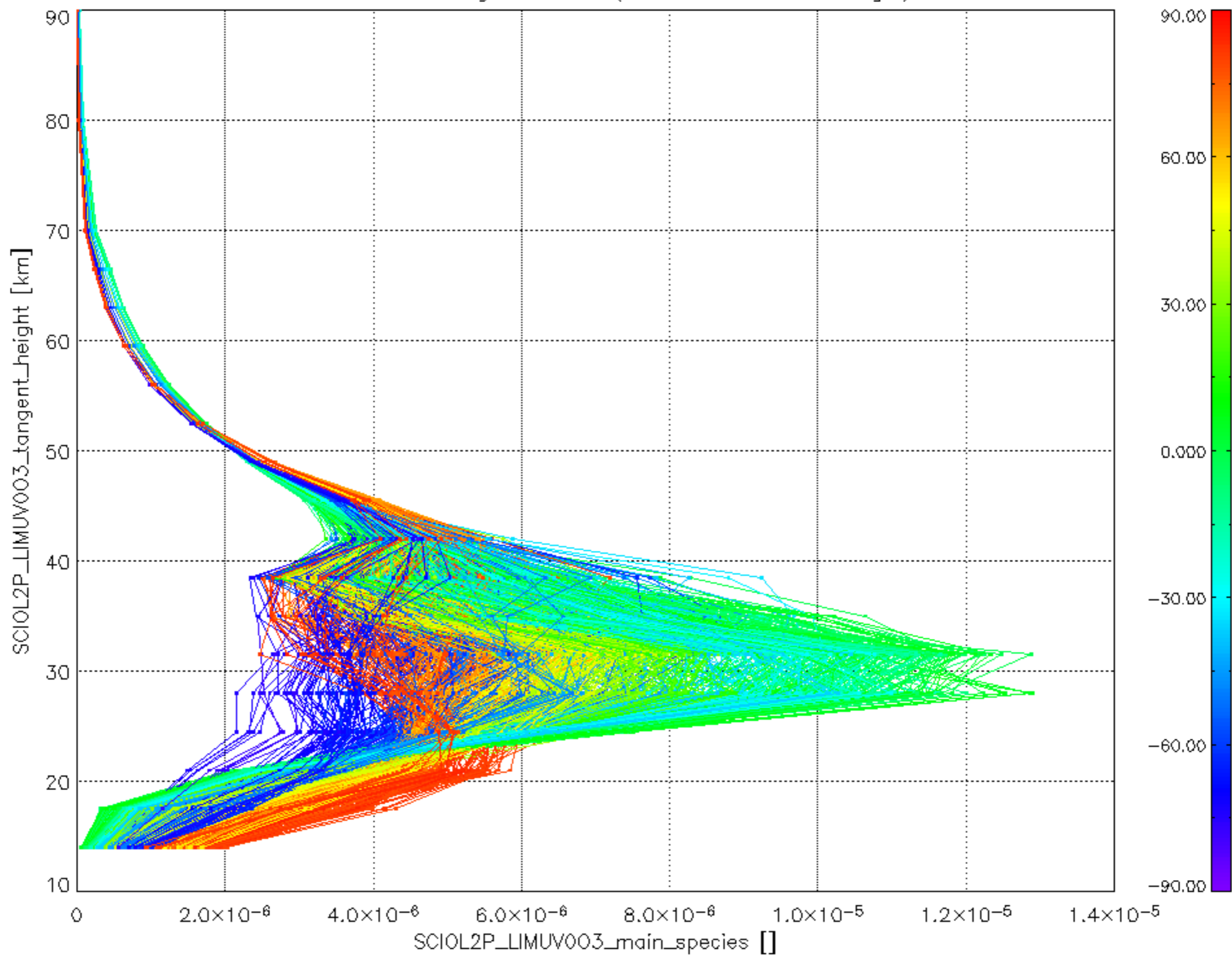
CIOL2P_NADUV1NO2_amf_gr for 30MAR2008 00:00:00 to 31MAR2008 00:00:00



CIOL2P_NADUV1NO2_amf_cl for 30MAR2008 00:00:00 to 31MAR2008 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).

