

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	18APR2008 06:03:11
Data source version	SCIA-OL/3.01-R
Processing scope for products	26MAR2008 00:00:00 to 27MAR2008 00:00:00
Start time of first product within scope	26MAR2008 00:46:41
Stop time of last product within scope	27MAR2008 01:11:19
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__2PRDPA20080326_004641_000033812067_00117_31734_5403.N1	26MAR2008 00:46:41	26MAR2008 01:43:02	0	GOOD
1	SCI_OL__2PRDPA20080326_022716_000033942067_00118_31735_5404.N1	26MAR2008 02:27:16	26MAR2008 03:23:50	0	GOOD
2	SCI_OL__2PRDPA20080326_040752_000033812067_00119_31736_5406.N1	26MAR2008 04:07:52	26MAR2008 05:04:13	0	GOOD
3	SCI_OL__2PRDPA20080326_054827_000033942067_00120_31737_5411.N1	26MAR2008 05:48:27	26MAR2008 06:45:02	0	GOOD
4	SCI_OL__2PRDPA20080326_072903_000033812067_00121_31738_5408.N1	26MAR2008 07:29:03	26MAR2008 08:25:24	0	GOOD
5	SCI_OL__2PRDPA20080326_090938_000033942067_00122_31739_5426.N1	26MAR2008 09:09:38	26MAR2008 10:06:13	0	GOOD
6	SCI_OL__2PRDPA20080326_105014_000033812067_00123_31740_5438.N1	26MAR2008 10:50:14	26MAR2008 11:46:35	0	GOOD
7	SCI_OL__2PRDPA20080326_123049_000033942067_00124_31741_5439.N1	26MAR2008 12:30:49	26MAR2008 13:27:23	0	GOOD
8	SCI_OL__2PRDPA20080326_141125_000033812067_00125_31742_5440.N1	26MAR2008 14:11:25	26MAR2008 15:07:46	0	GOOD
9	SCI_OL__2PRDPA20080326_155200_000033942067_00126_31743_5441.N1	26MAR2008 15:52:00	26MAR2008 16:48:34	0	GOOD
10	SCI_OL__2PRDPA20080326_173259_000033122067_00127_31744_5443.N1	26MAR2008 17:32:59	26MAR2008 18:28:11	0	GOOD
11	SCI_OL__2PRDPA20080326_191334_000033252067_00128_31745_5444.N1	26MAR2008 19:13:34	26MAR2008 20:09:00	0	GOOD
12	SCI_OL__2PRDPA20080326_205347_000033812067_00129_31746_5445.N1	26MAR2008 20:53:47	26MAR2008 21:50:08	0	GOOD
13	SCI_OL__2PRDPA20080326_223422_000033942067_00130_31747_5446.N1	26MAR2008 22:34:22	26MAR2008 23:30:56	0	GOOD
14	SCI_OL__2PRDPA20080327_001458_000033812067_00131_31748_5447.N1	27MAR2008 00:14:58	27MAR2008 01:11:19	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: 141700

Total number of cloud data DSRs with good quality flag (=0): 141700 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	141700	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	141700	0.17156	0.12500	0.12500	0.25000	0.060433	s
SURFACE_PRES	141700	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	141700	0.38509	0.34556	0.0000	1.0000	0.29804	-

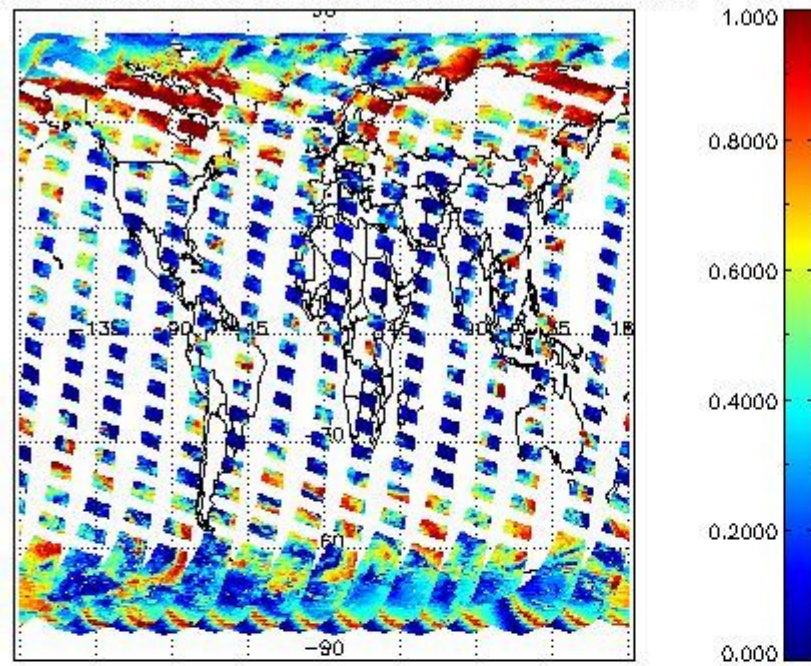
CL_FRAC_ERR	141700	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	141700	5.4899	4.0000	4.0000	8.0000	1.9339	
PMD_READ_CL[0]	141700	0.24179	0.0000	0.0000	8.0000	1.0399	-
PMD_READ_CL[1]	141700	1.0654	0.0000	0.0000	8.0000	2.2598	-
CL_TOP_HEIGHT	118536	3.5202	1.7290	0.0000	17.000	3.8501	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	118536	61.687	78.863	0.0000	101.00	41.296	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	141700	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	141700	11001010	11000100	11000000	11100000	3328.1	flags
AERO_ABSO_IND	141700	2.9991	3.5050	-1.0110	13.944	2.0668	
AERO_IND_DIAG	141700	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	141700	01011000	00000000	00000000	11000000	24509.	flags

Time and geolocation plots:

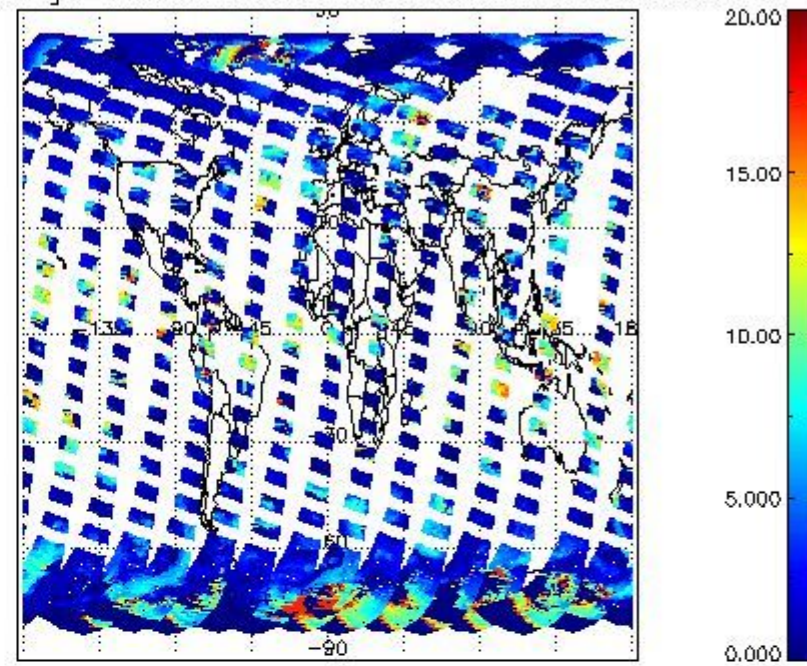
Plots are available for the following parameters:

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

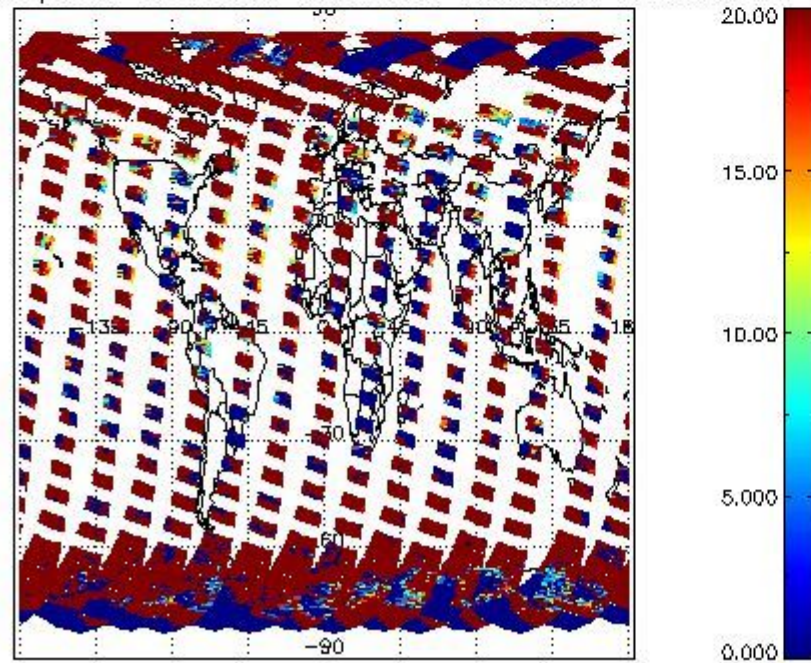
cLfrac for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



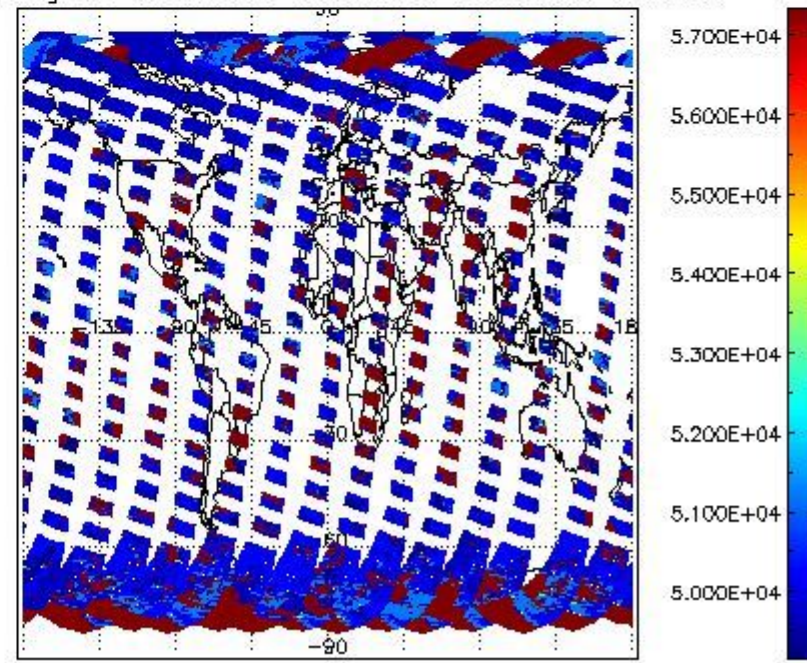
cLtop_height for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



cLopt_depth for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



cloud_flags for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



2.2.2 Nadir

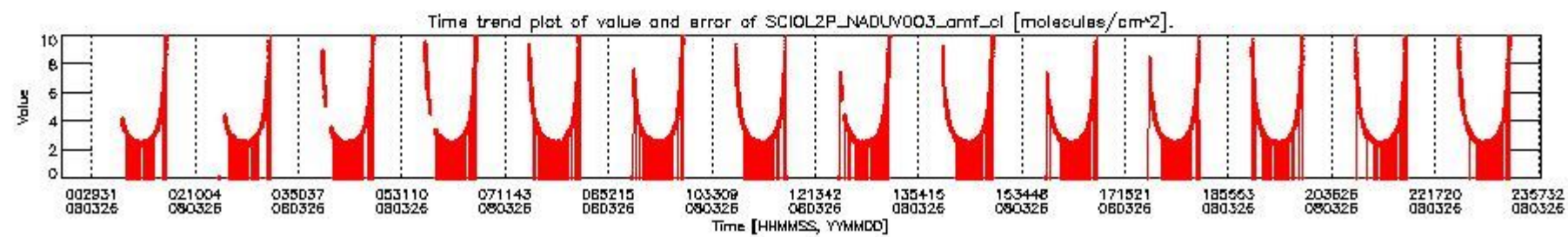
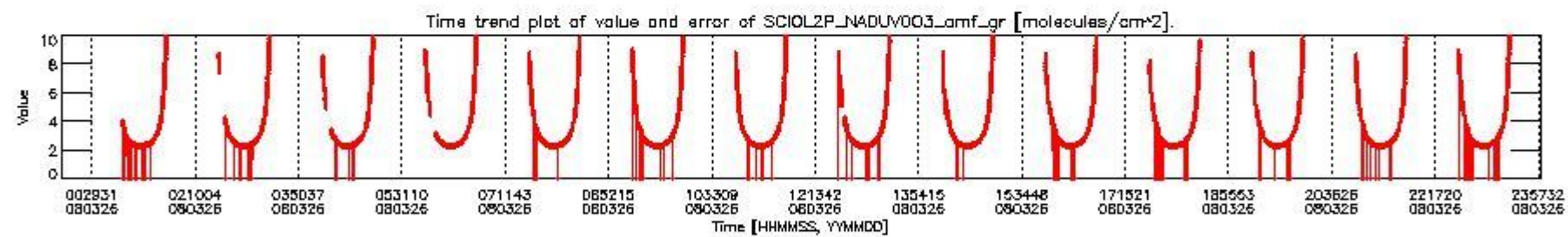
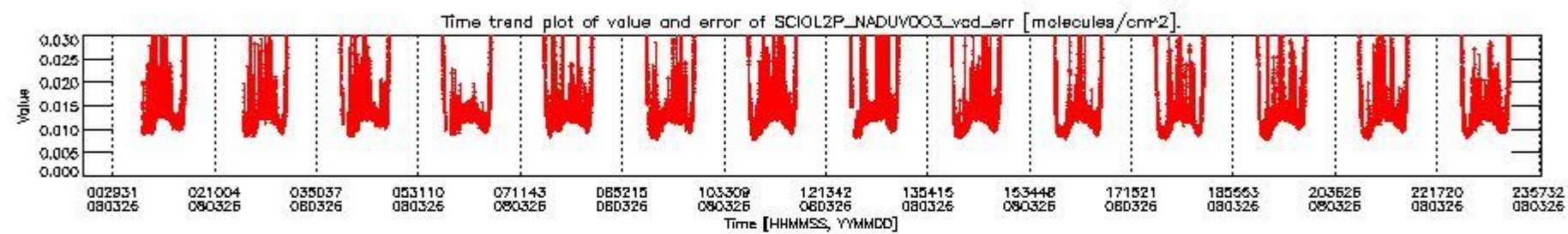
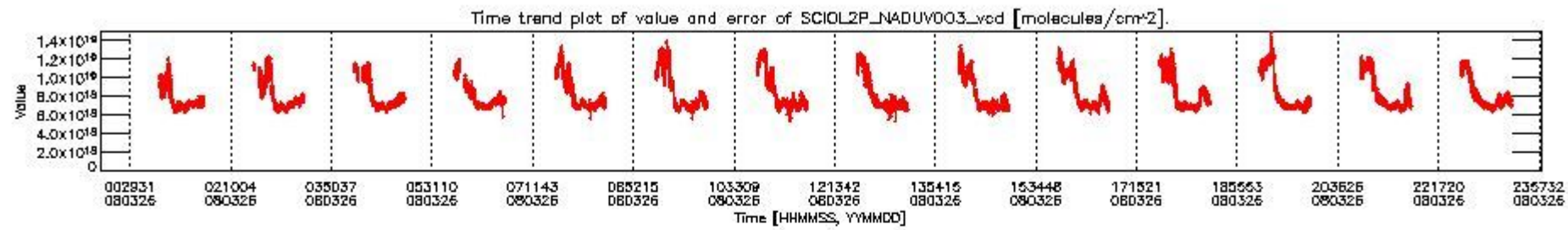
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

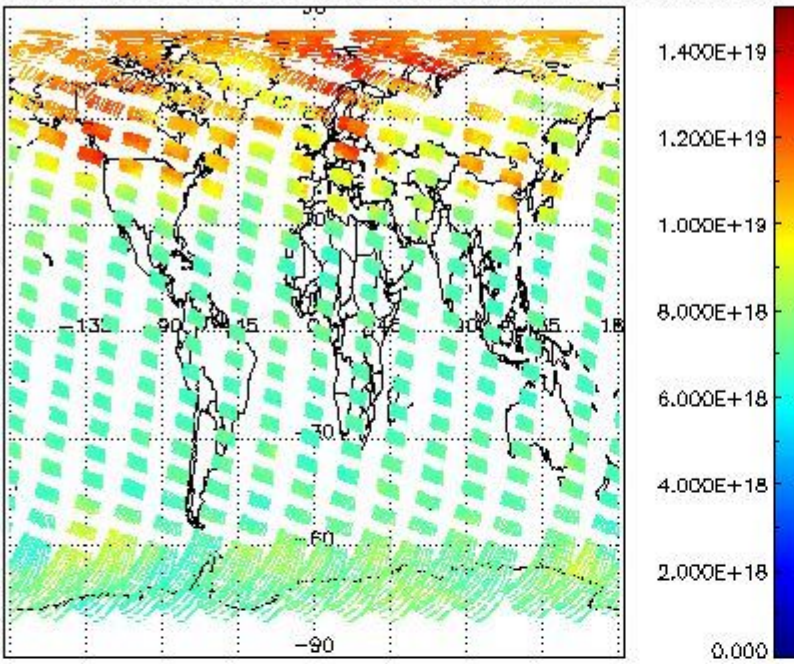
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

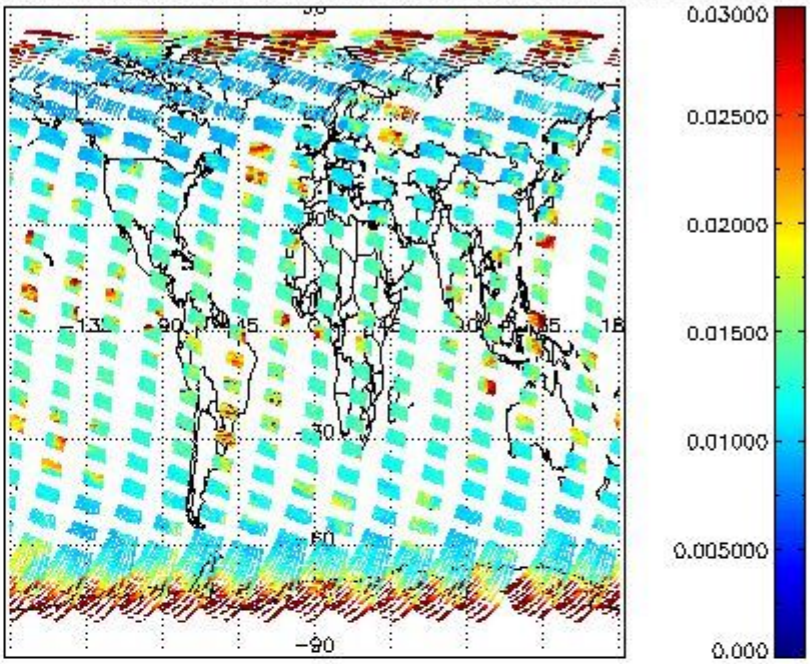
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



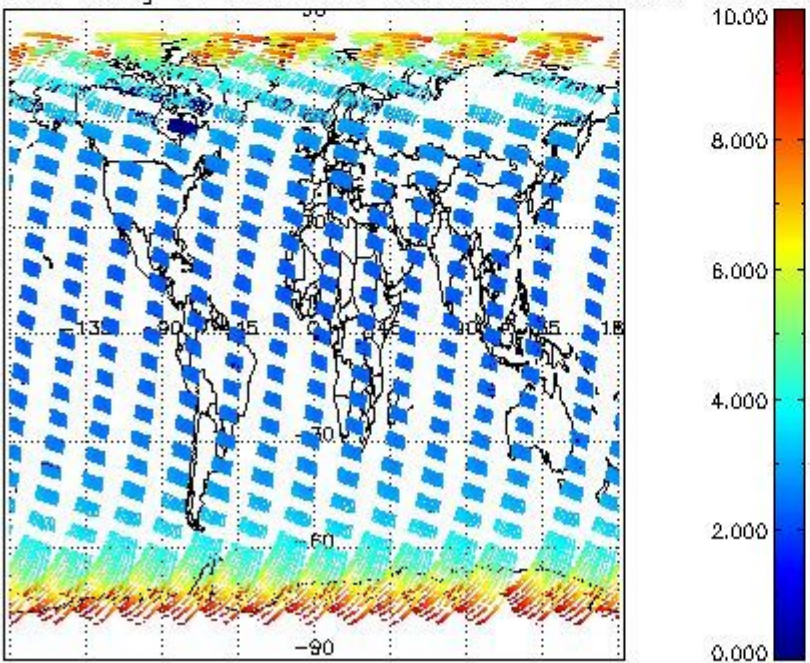
SCIOL2P_NADUV003_vcd for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



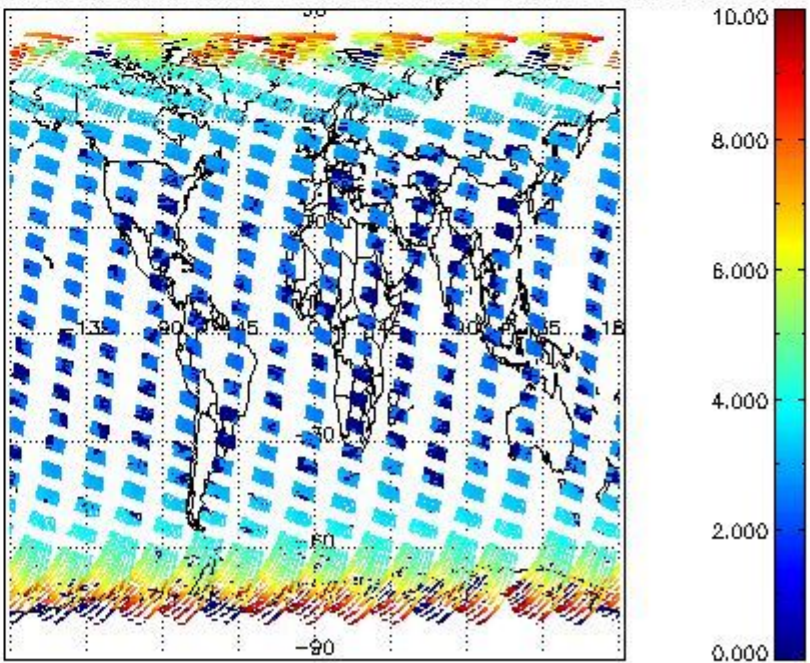
SCIOL2P_NADUV003_vcd_err for 26MAR2008 00:00:00 to 27MAR2008 00:00:00

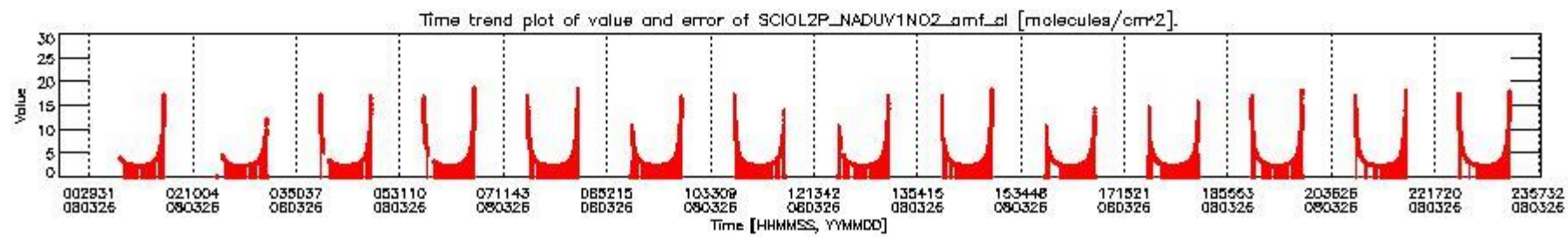
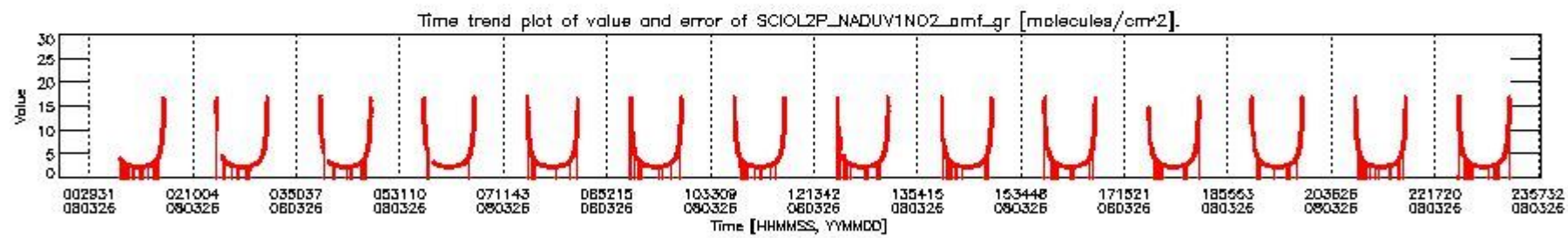
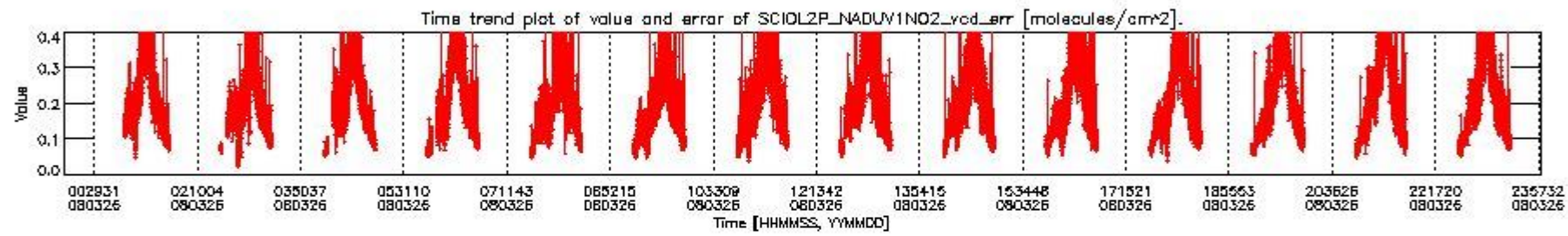
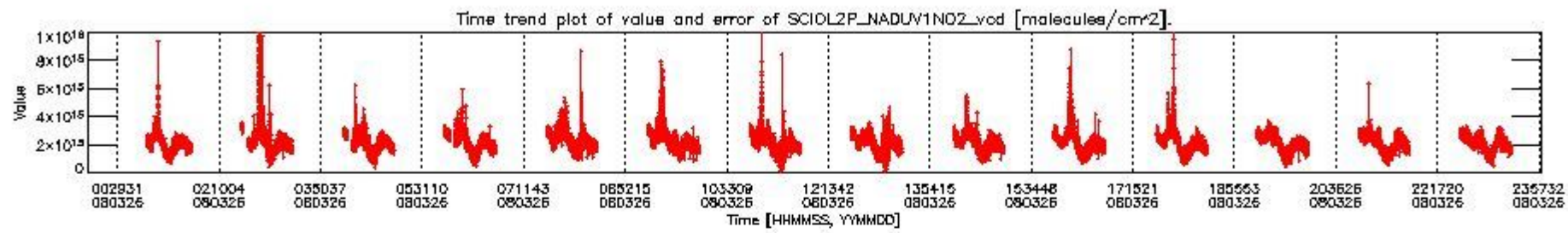


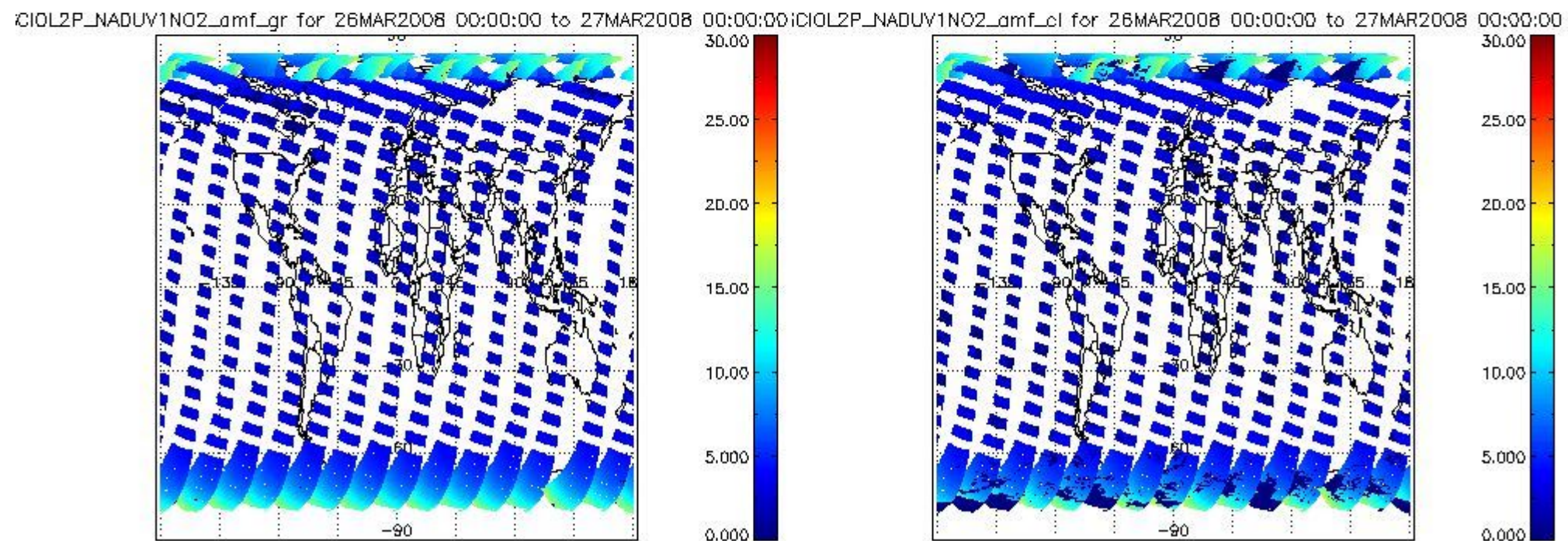
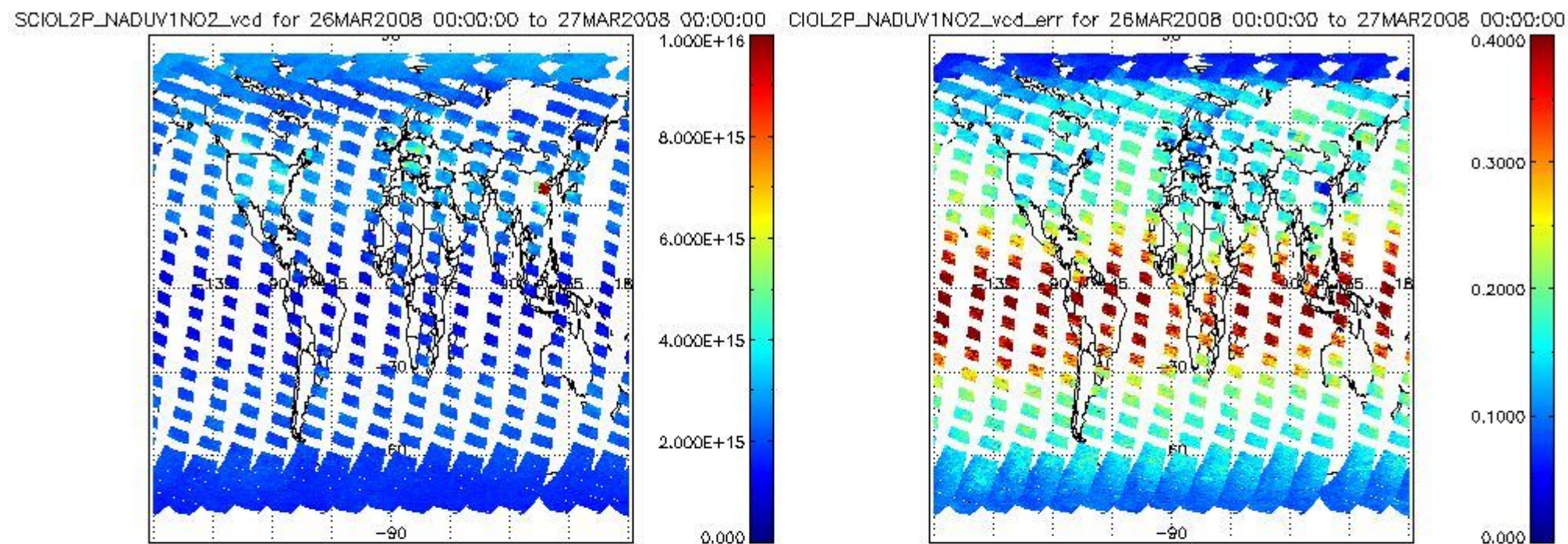
SCIOL2P_NADUV003_amf_gr for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 26MAR2008 00:00:00 to 27MAR2008 00:00:00







2.2.3 Limb

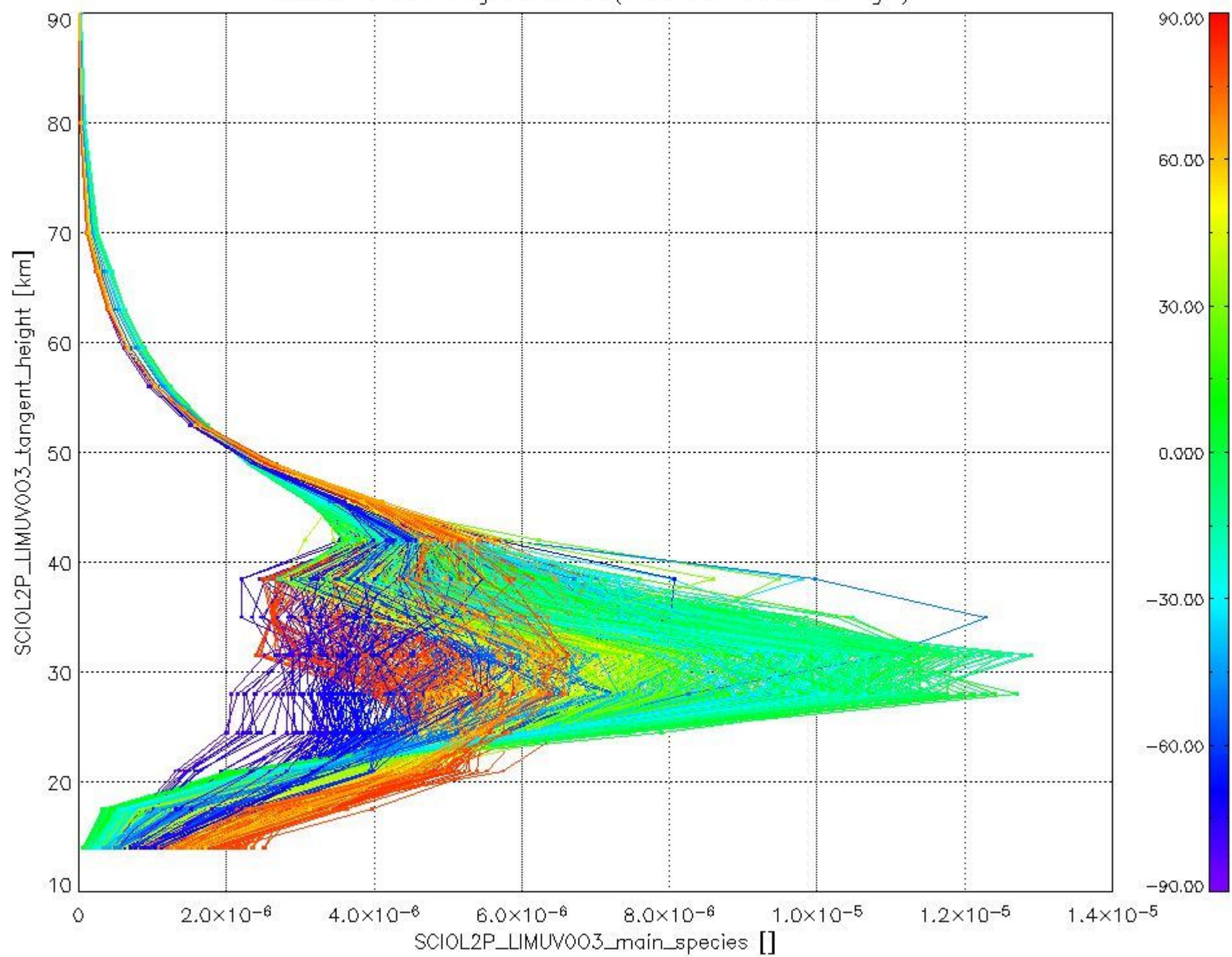
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

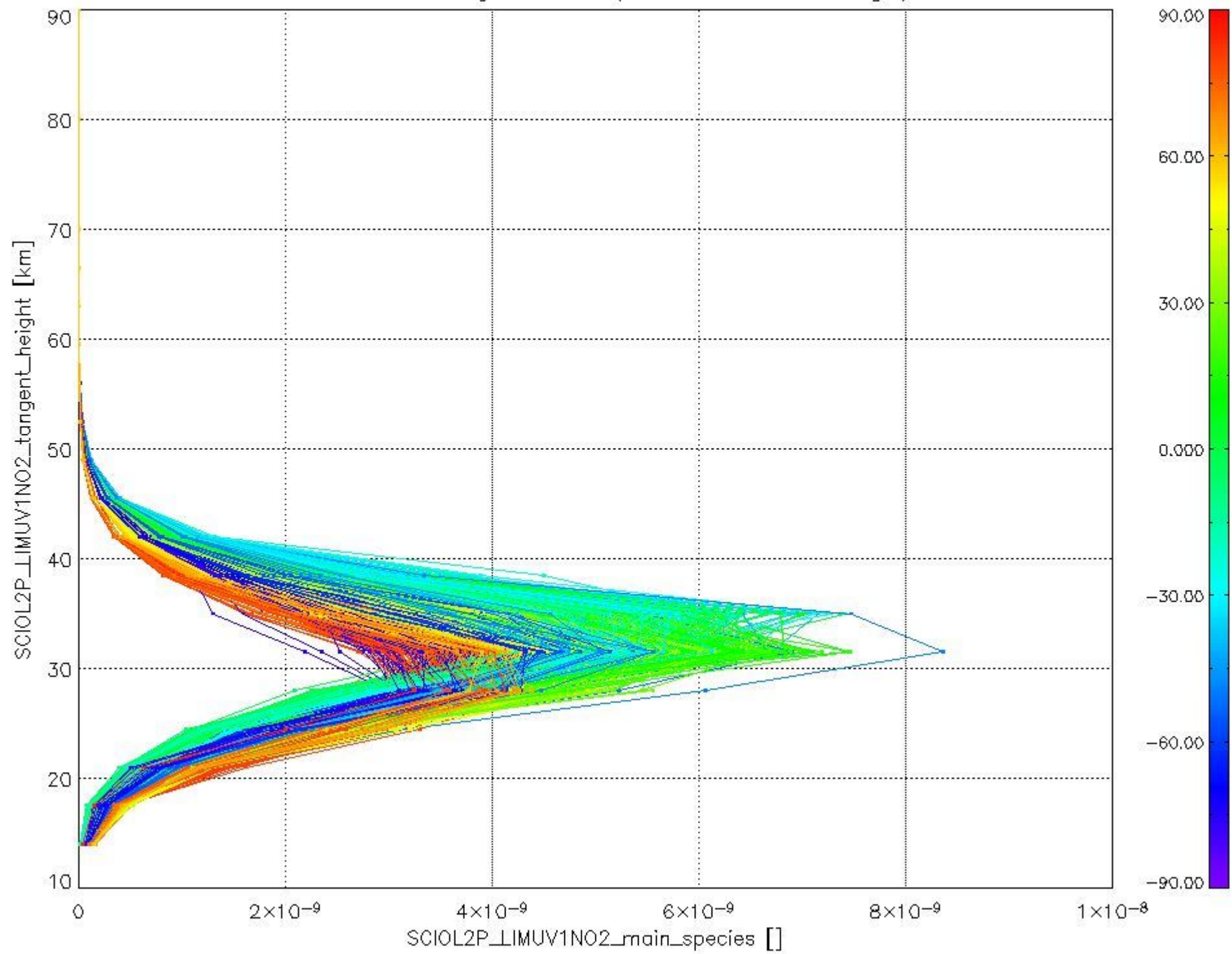
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



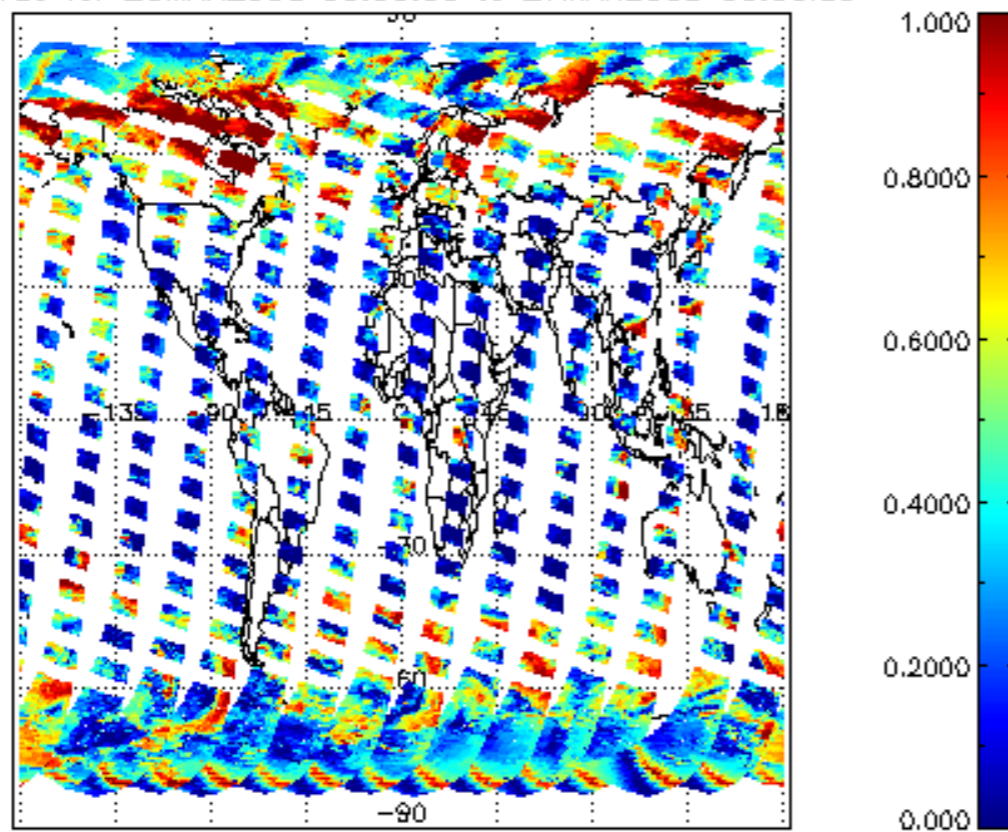
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



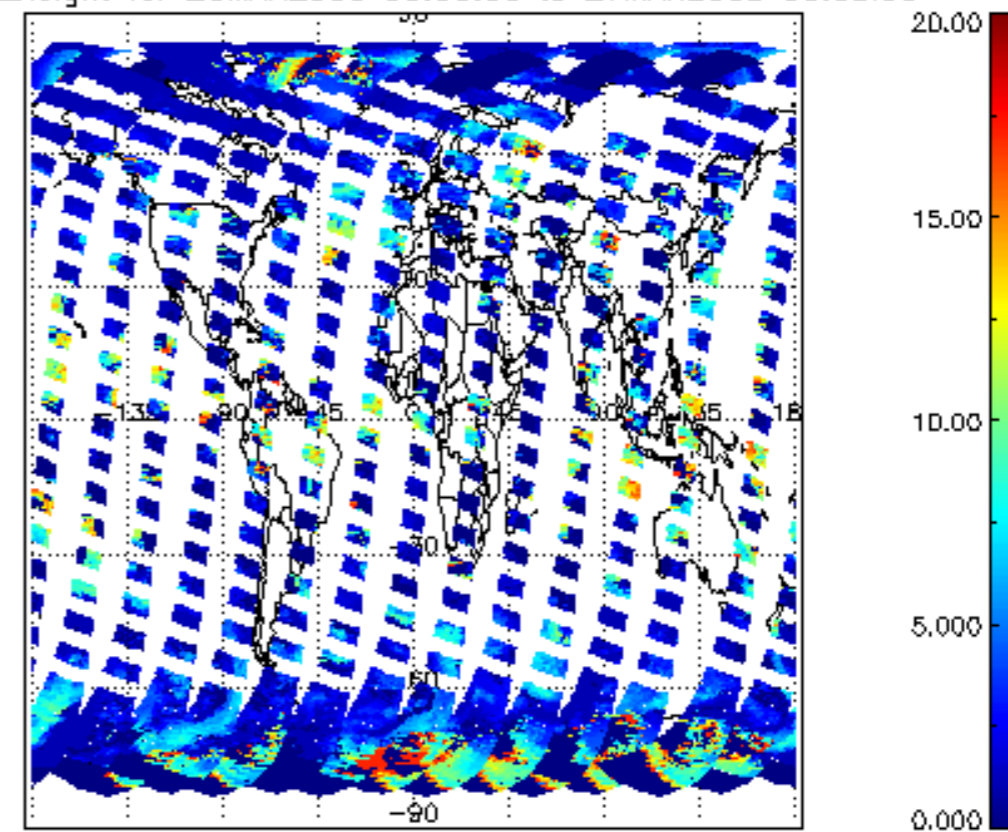
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

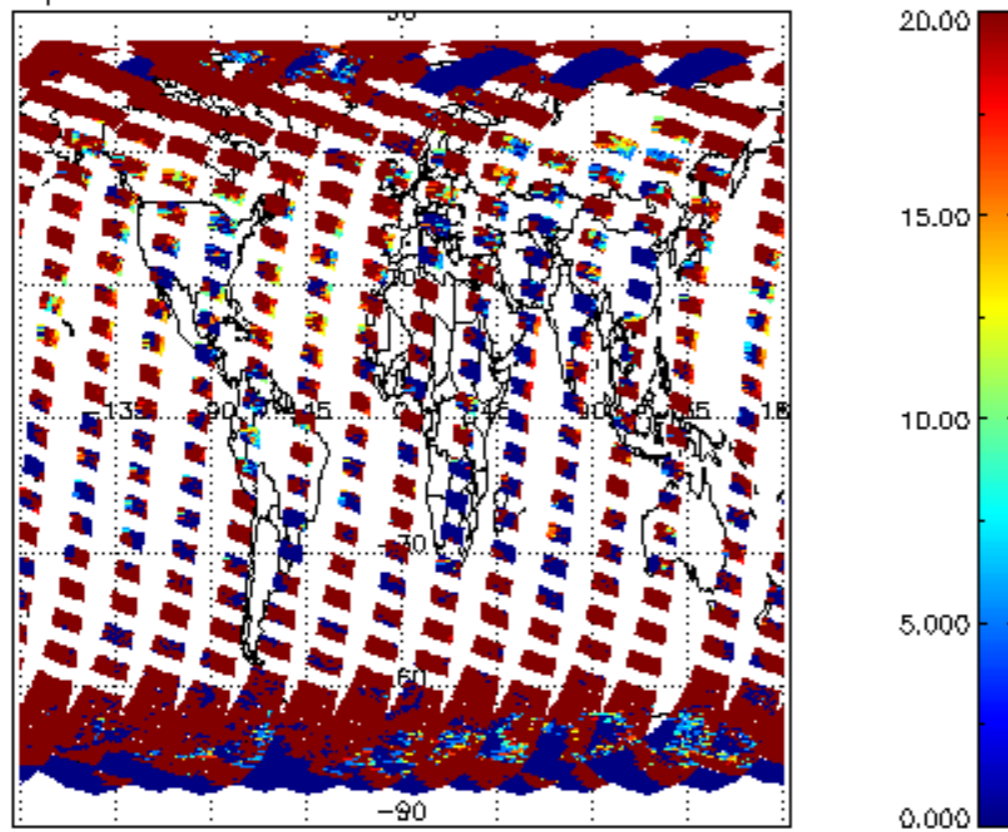
cL_frac for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



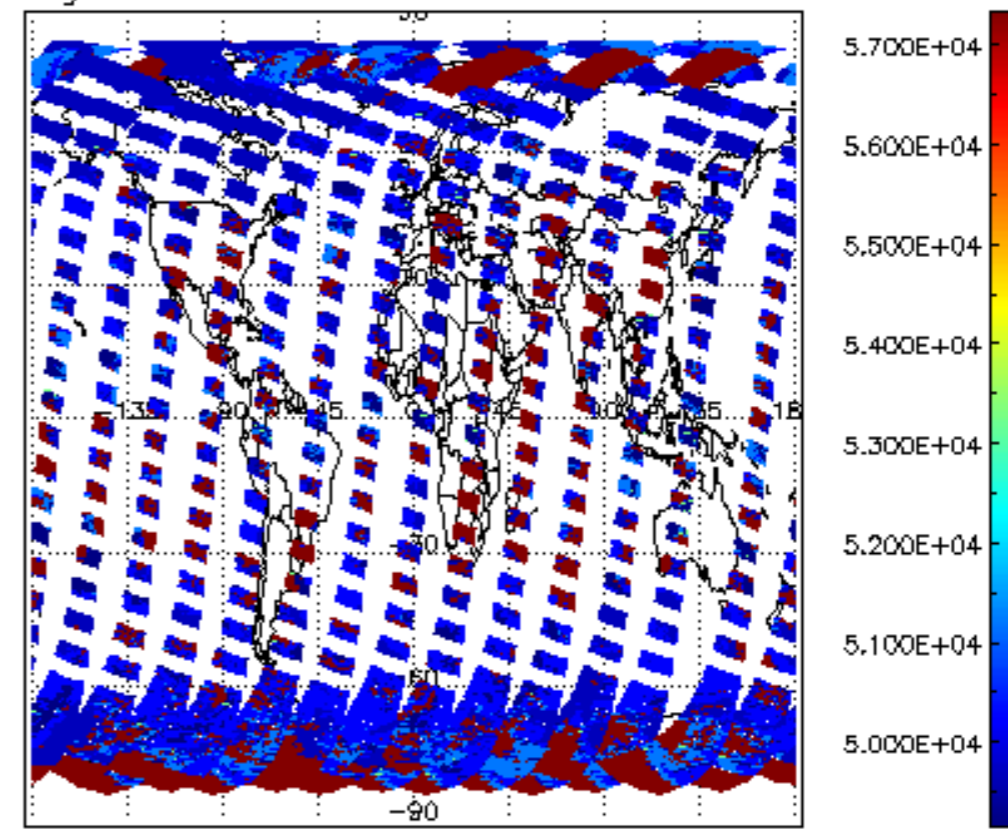
cL_top_height for 26MAR2008 00:00:00 to 27MAR2008 00:00:00

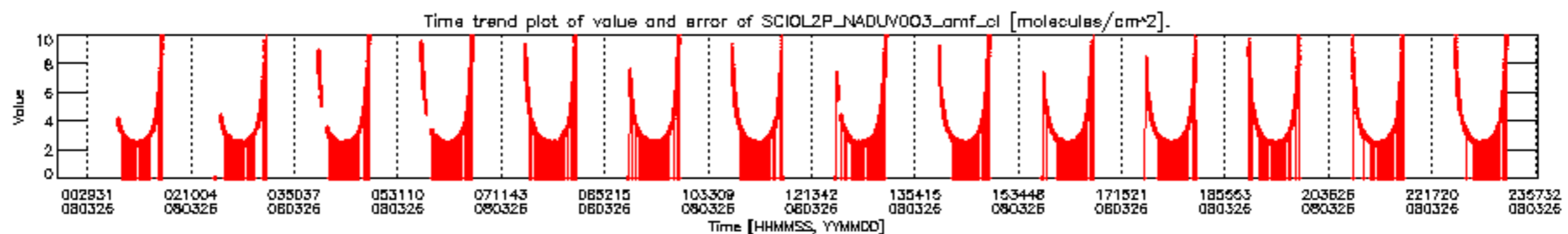
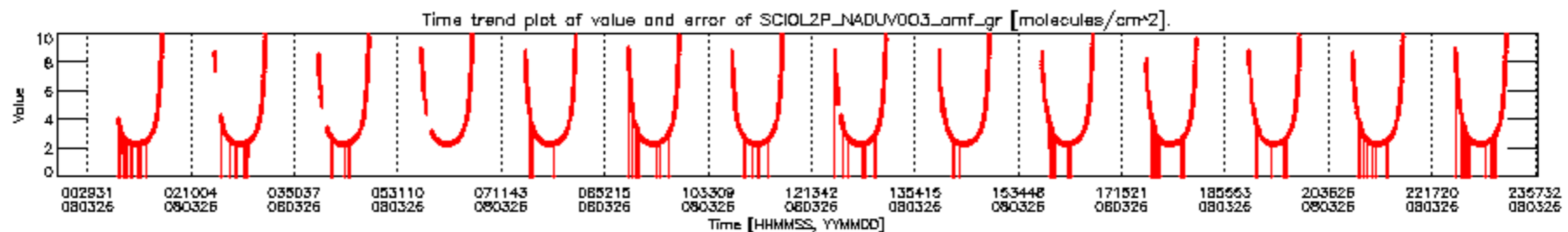
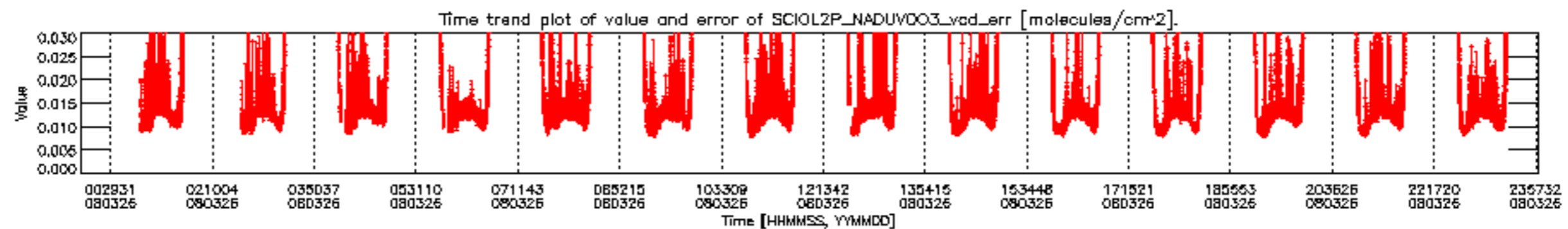
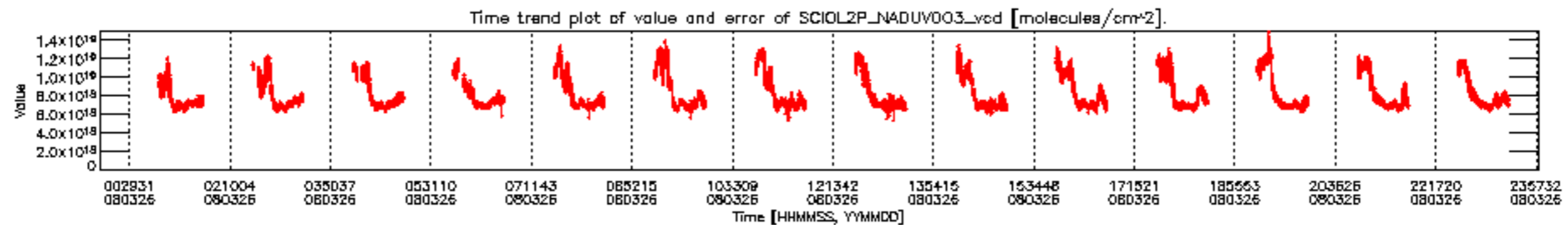


cL_opt_depth for 26MAR2008 00:00:00 to 27MAR2008 00:00:00

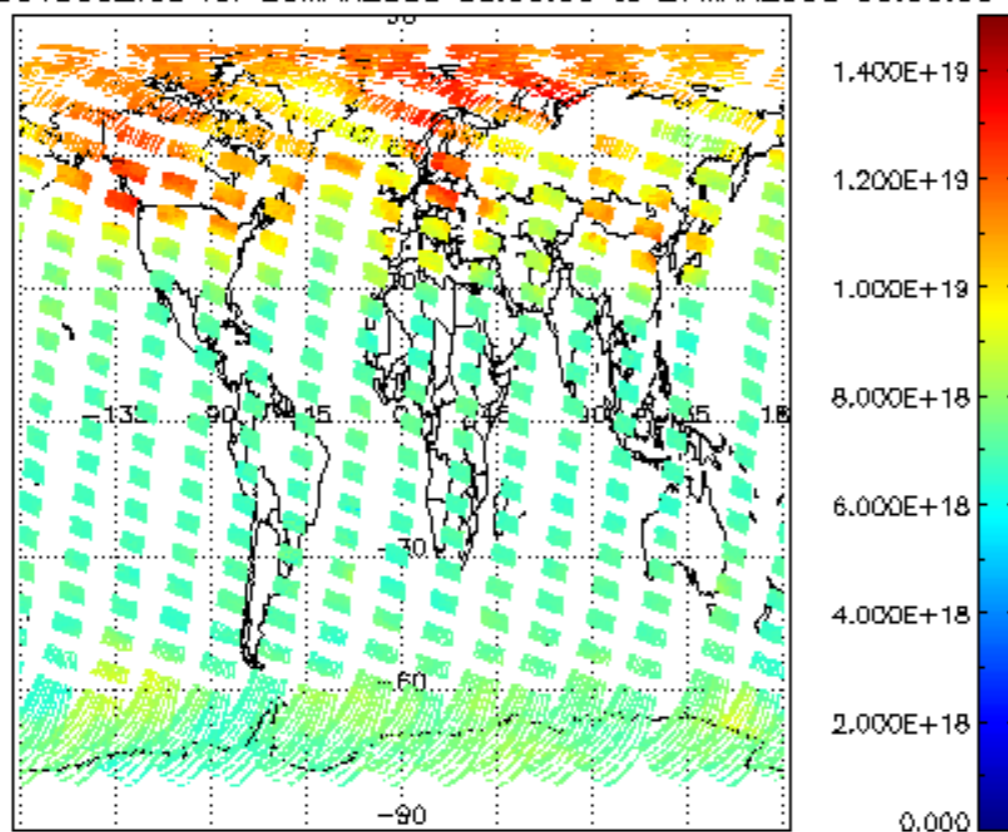


cloud_flags for 26MAR2008 00:00:00 to 27MAR2008 00:00:00

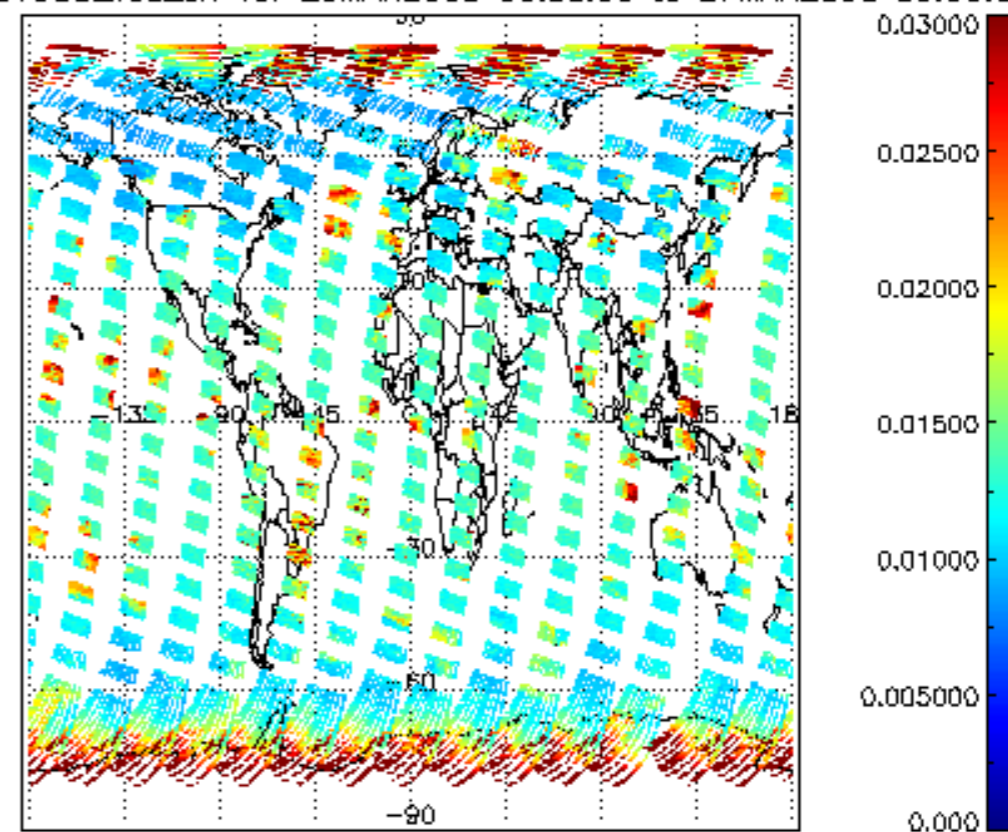




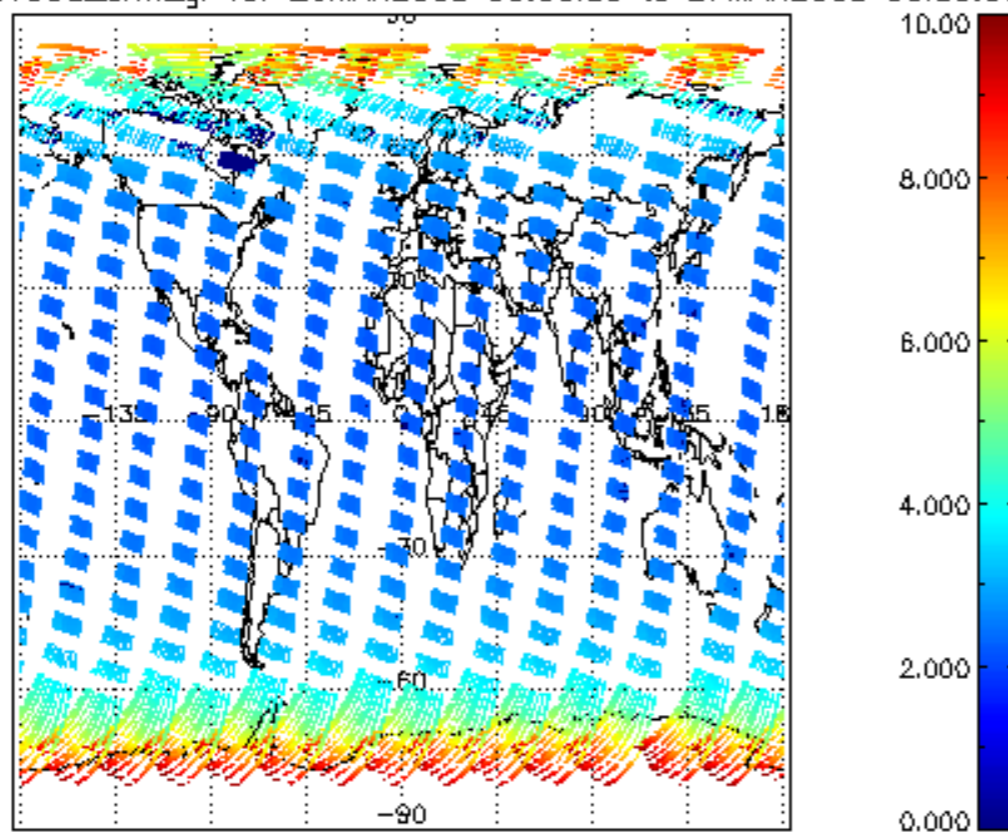
SCIOL2P_NADUV003_vcd for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



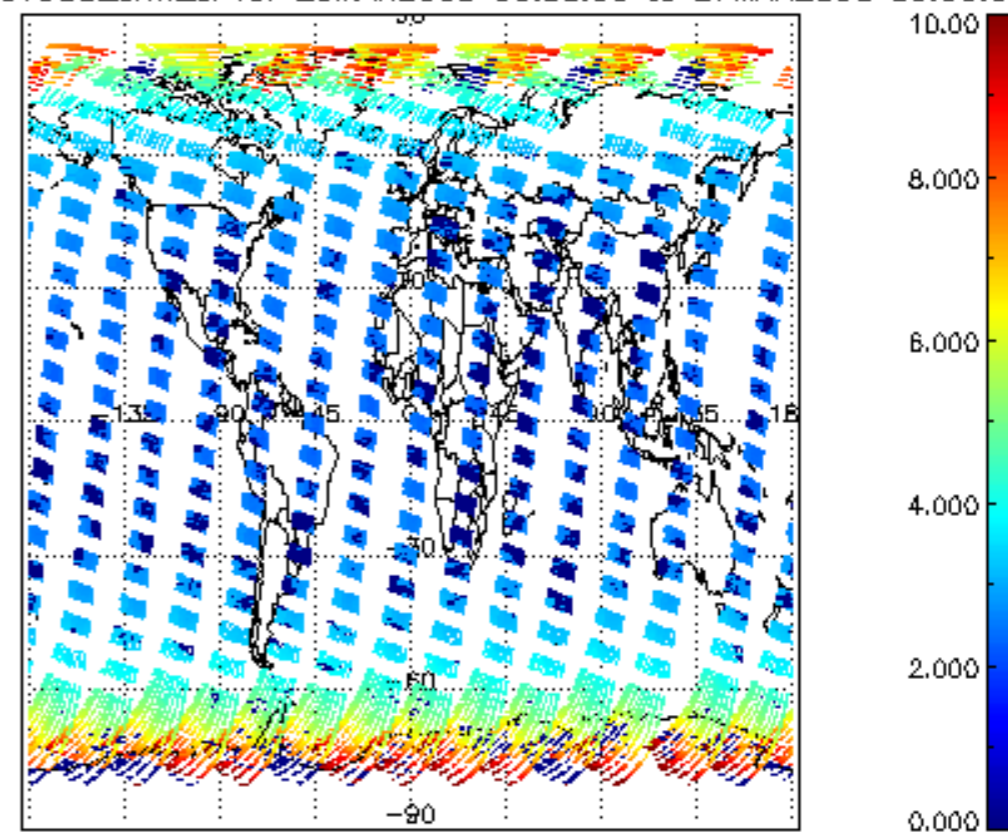
SCIOL2P_NADUV003_vcd_err for 26MAR2008 00:00:00 to 27MAR2008 00:00:00

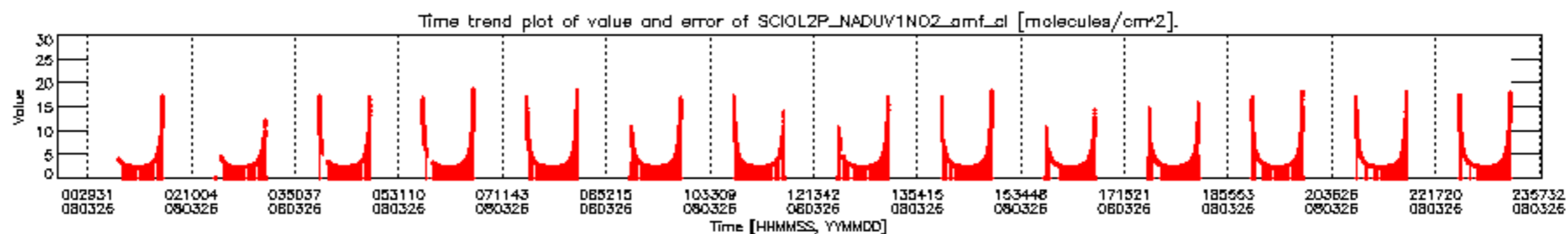
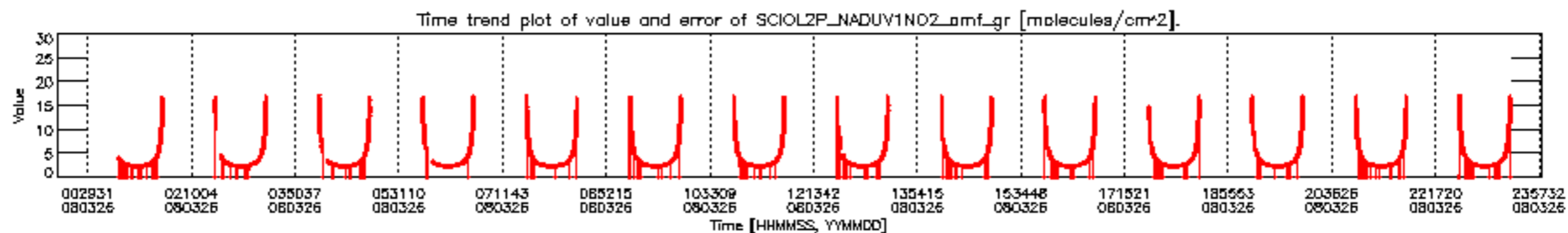
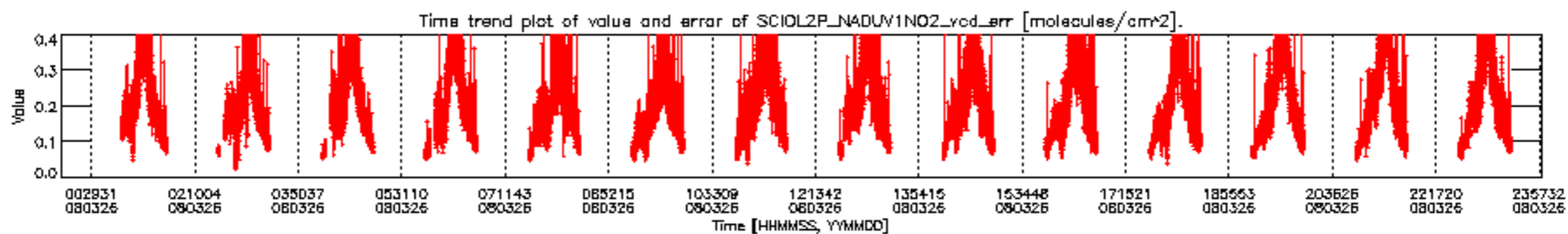
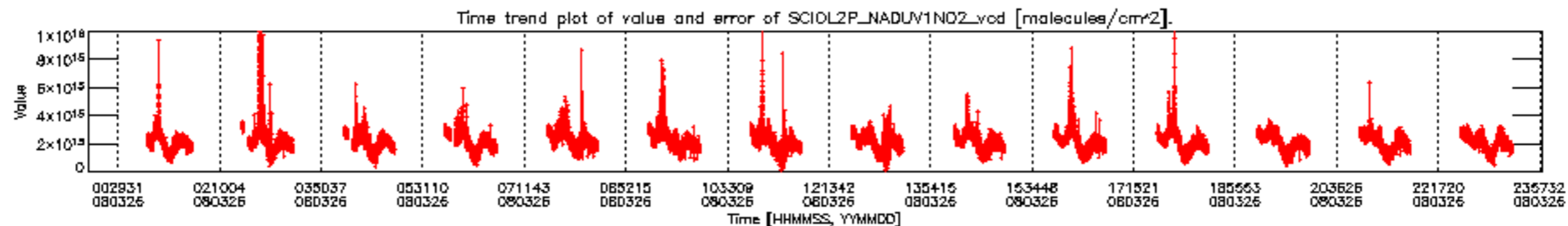


SCIOL2P_NADUV003_amf_gr for 26MAR2008 00:00:00 to 27MAR2008 00:00:00

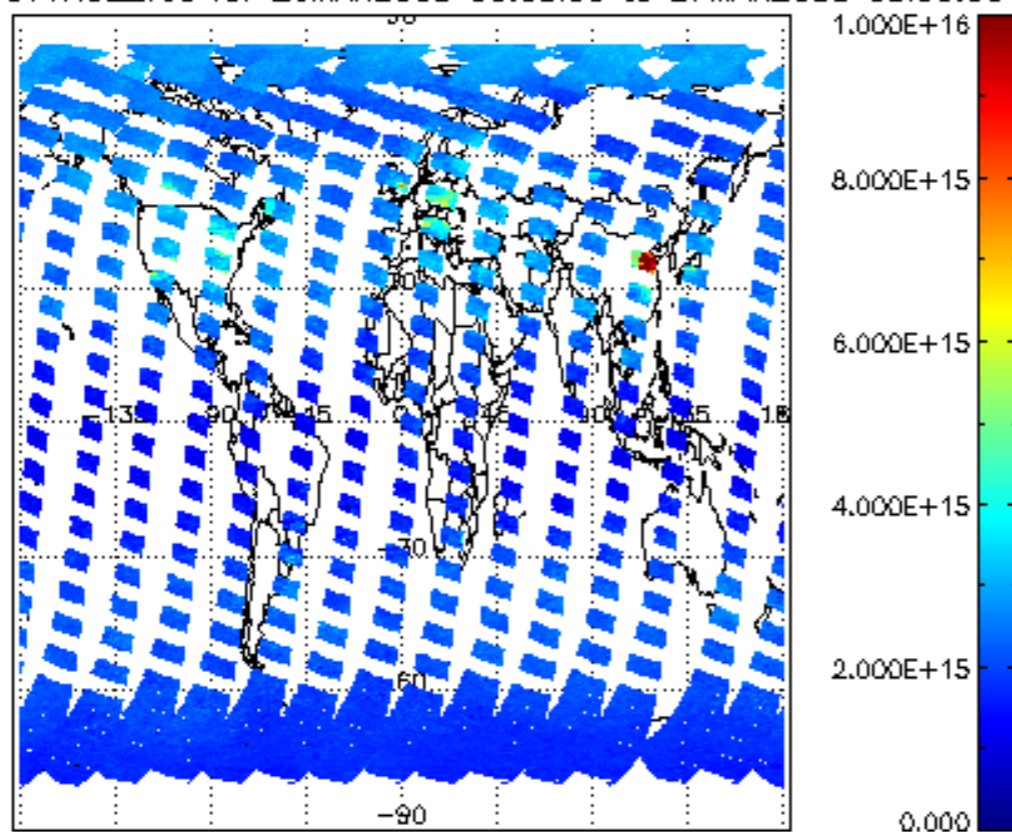


SCIOL2P_NADUV003_amf_cl for 26MAR2008 00:00:00 to 27MAR2008 00:00:00

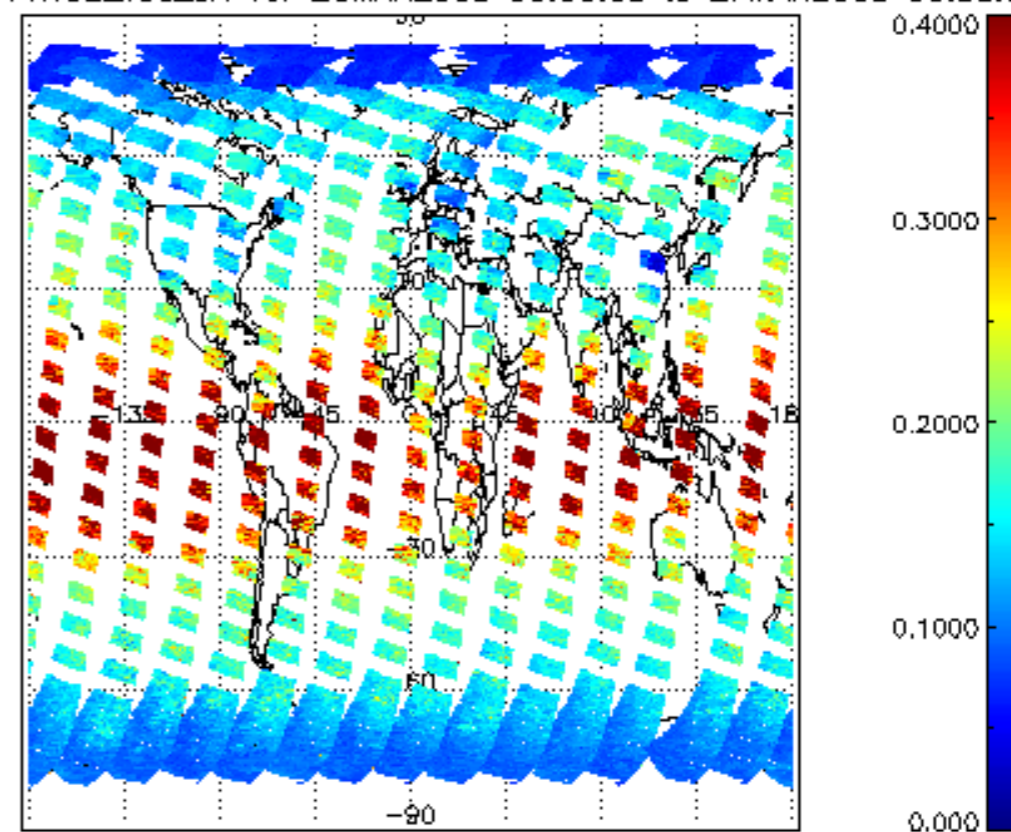




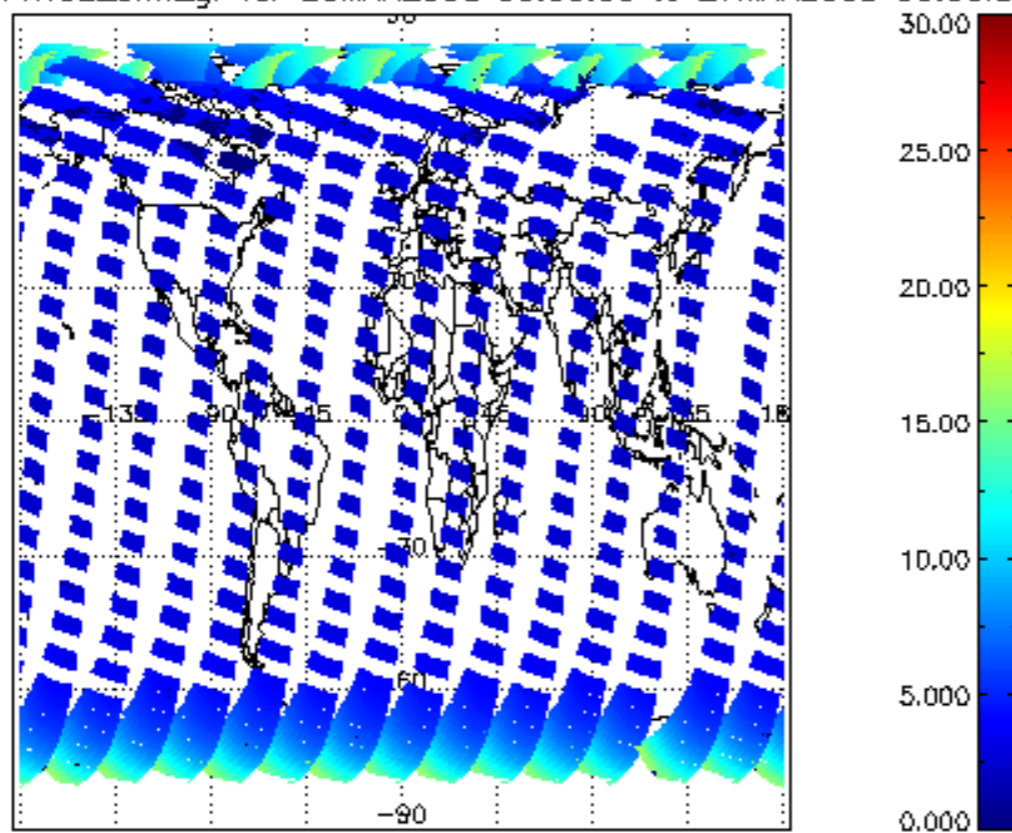
SCIOL2P_NADUV1NO2_vcd for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



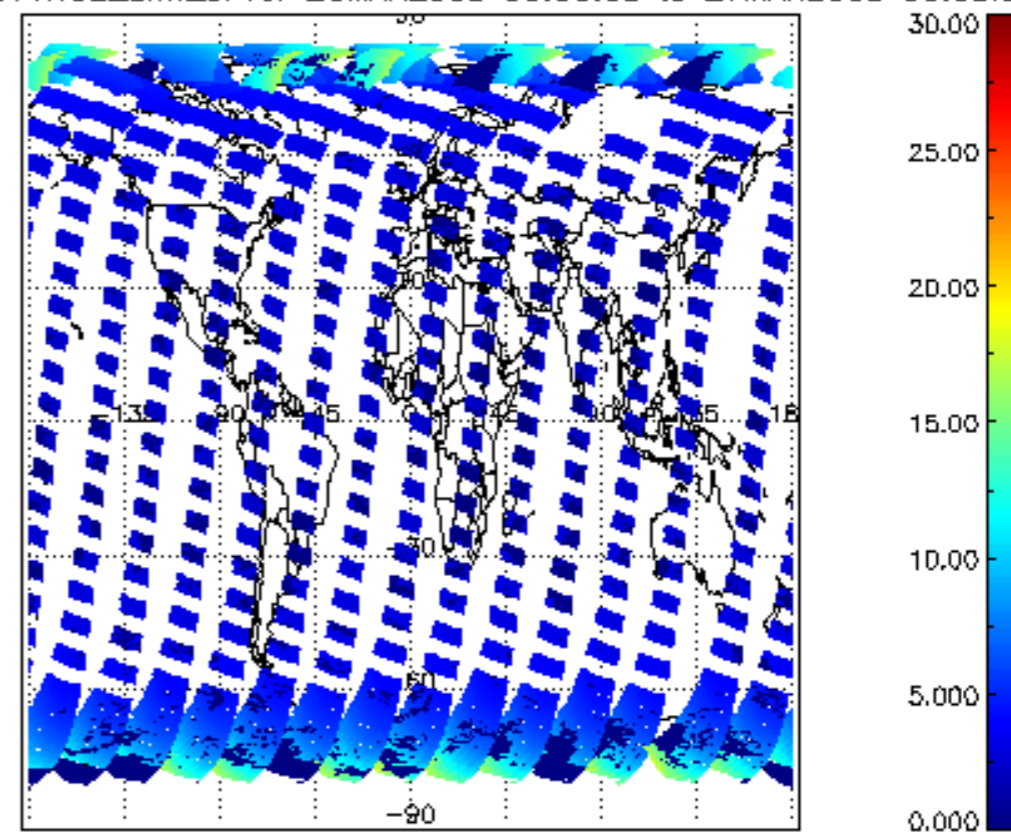
SCIOL2P_NADUV1NO2_vcd_err for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



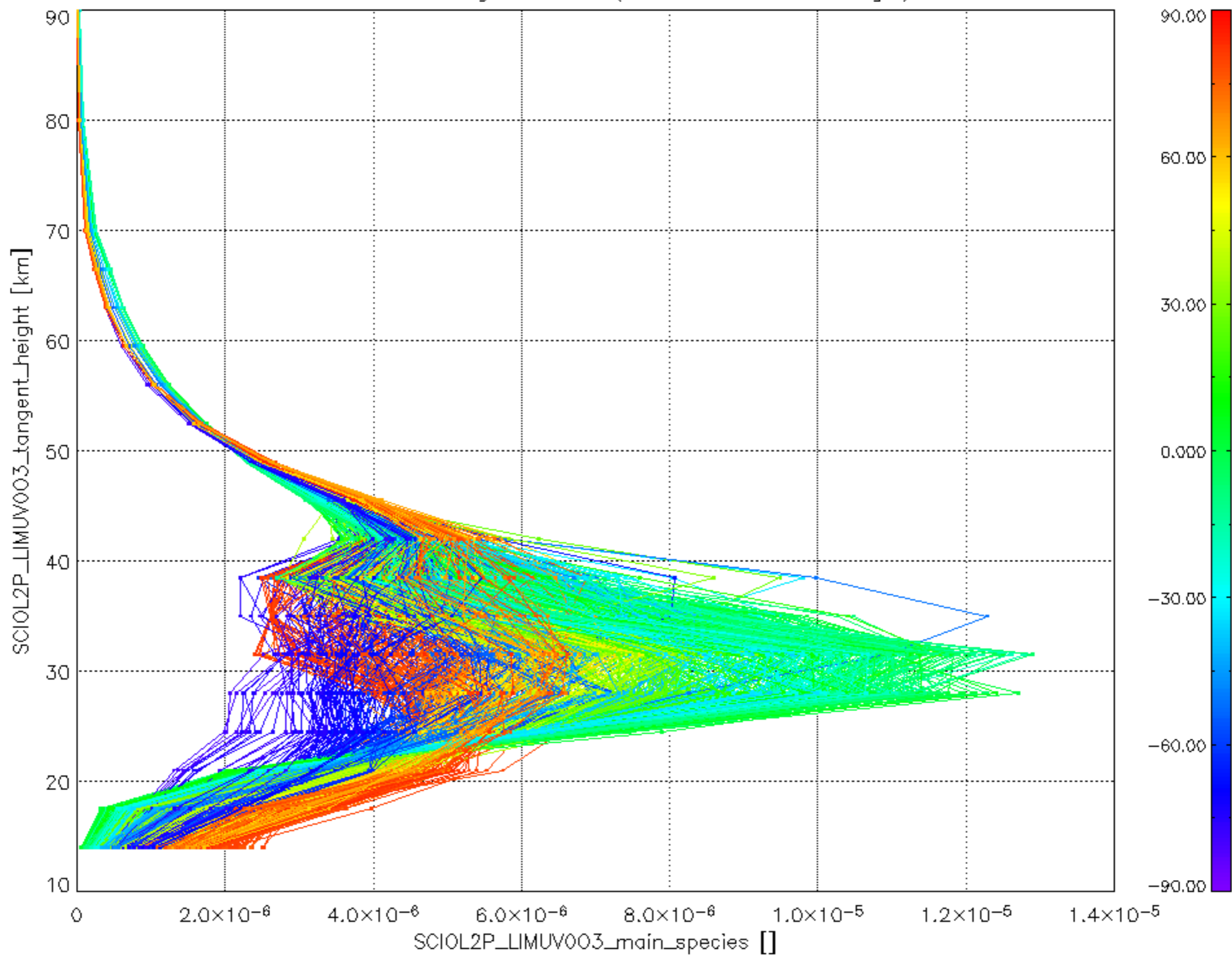
SCIOL2P_NADUV1NO2_amf_gr for 26MAR2008 00:00:00 to 27MAR2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 26MAR2008 00:00:00 to 27MAR2008 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).

