

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	1.6 (28-07-2008)
Time of report generation	08AUG2008 16:38:06
Data source version	SCIA-OL/3.01-R
Processing scope for products	17MAR2004 00:00:00 to 18MAR2004 00:00:00
Start time of first product within scope	17MAR2004 00:47:48
Stop time of last product within scope	18MAR2004 01:11:54
Total number of level 2 products	13
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.

Products are linked to a corresponding server directory for view/download. Note: Link access may be restricted by security settings of your internet browser or firewall.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PRDPA20040317_004748_000033492025_00117_10692_6896.N1	17MAR2004 00:47:48	17MAR2004 01:43:38	0	GOOD
1	SCI_OL__2PRDPA20040317_022824_000033772025_00118_10693_7144.N1	17MAR2004 02:28:24	17MAR2004 03:24:41	0	GOOD
2	SCI_OL__2PRDPA20040317_040859_000033492025_00119_10694_7123.N1	17MAR2004 04:08:59	17MAR2004 05:04:48	0	GOOD
3	SCI_OL__2PRDPA20040317_054935_000033772025_00120_10695_7138.N1	17MAR2004 05:49:35	17MAR2004 06:45:52	0	GOOD
4	SCI_OL__2PRDPA20040317_073010_000033492025_00121_10696_7114.N1	17MAR2004 07:30:10	17MAR2004 08:26:00	0	GOOD
5	SCI_OL__2PRDPA20040317_091046_000033772025_00122_10697_7163.N1	17MAR2004 09:10:46	17MAR2004 10:07:03	0	GOOD
6	SCI_OL__2PRDPA20040317_123156_000033772025_00124_10699_7142.N1	17MAR2004 12:31:56	17MAR2004 13:28:13	0	GOOD
7	SCI_OL__2PRDPA20040317_141232_000033492025_00125_10700_6996.N1	17MAR2004 14:12:32	17MAR2004 15:08:21	0	GOOD
8	SCI_OL__2PRDPA20040317_155307_000033772025_00126_10701_7145.N1	17MAR2004 15:53:07	17MAR2004 16:49:24	0	GOOD
9	SCI_OL__2PRDPA20040317_191443_000033772025_00128_10703_7177.N1	17MAR2004 19:14:43	17MAR2004 20:11:00	0	GOOD
10	SCI_OL__2PRDPA20040317_205454_000033492025_00129_10704_6916.N1	17MAR2004 20:54:54	17MAR2004 21:50:43	0	GOOD
11	SCI_OL__2PRDPA20040317_223529_000033772025_00130_10705_7022.N1	17MAR2004 22:35:29	17MAR2004 23:31:46	0	GOOD
12	SCI_OL__2PRDPA20040318_001605_000033492025_00131_10706_7012.N1	18MAR2004 00:16:05	18MAR2004 01:11:54	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: 96400

Total number of cloud data DSRs with good quality flag (=0): 96400 (100.0 %)

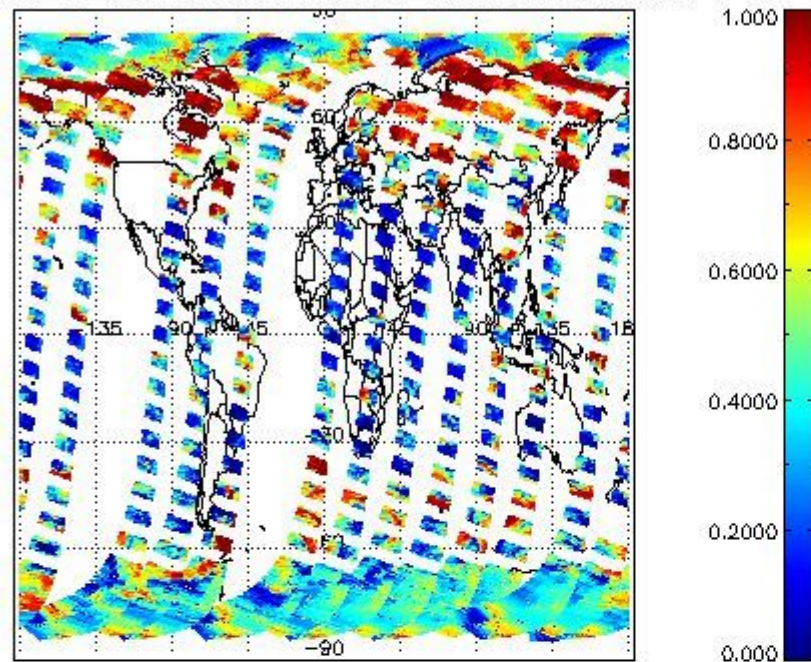
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	96400	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	96400	0.21888	0.25000	0.12500	0.50000	0.086221	s
CL_FRAC	96400	0.45130	0.40898	0.0000	1.0000	0.30554	-
CL_FRAC_ERR	96400	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	96400	7.0041	8.0000	4.0000	16.000	2.7591	
PMD_READ_CL[0]	96400	0.46775	0.0000	0.0000	16.000	1.5140	-
PMD_READ_CL[1]	96400	0.49249	0.0000	0.0000	16.000	1.6386	-
CL_TOP_HEIGHT	87741	3.6704	1.9122	0.0000	17.000	3.8327	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	87741	52.716	39.437	0.0000	101.00	39.187	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	96400	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	96400	11000110	11000100	11000000	11100000	2533.9	flags
AERO_ABSO_IND	96400	0.85953	0.71994	-3.6802	11.186	1.1974	
AERO_IND_DIAG	96400	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	96400	01101000	11000000	00000000	11000000	24488.	flags

Time and geolocation plots:

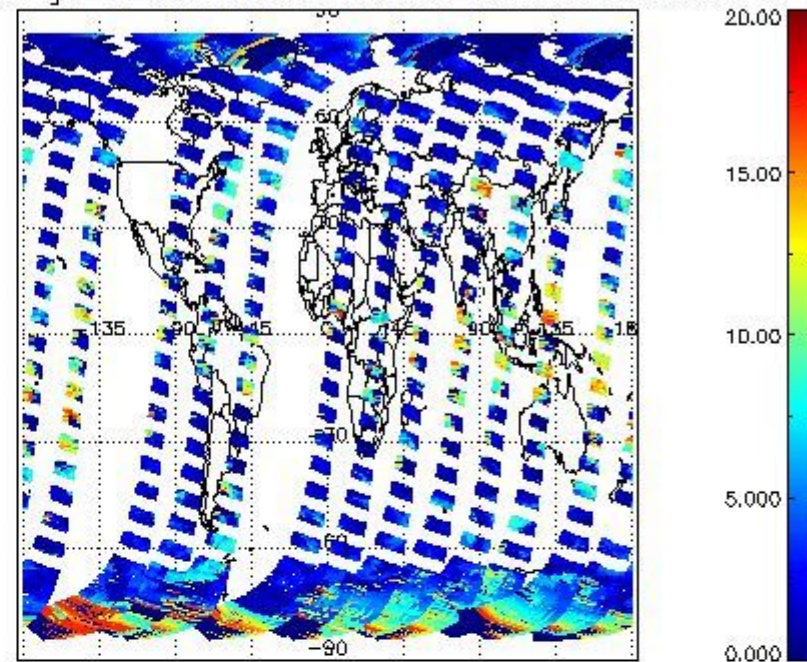
Plots are available for the following parameters:

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

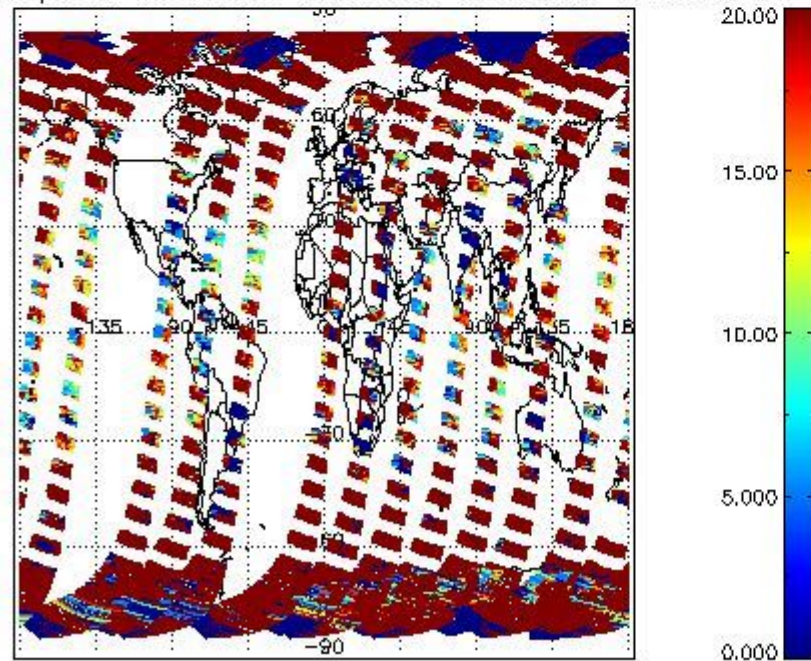
cL_frac for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



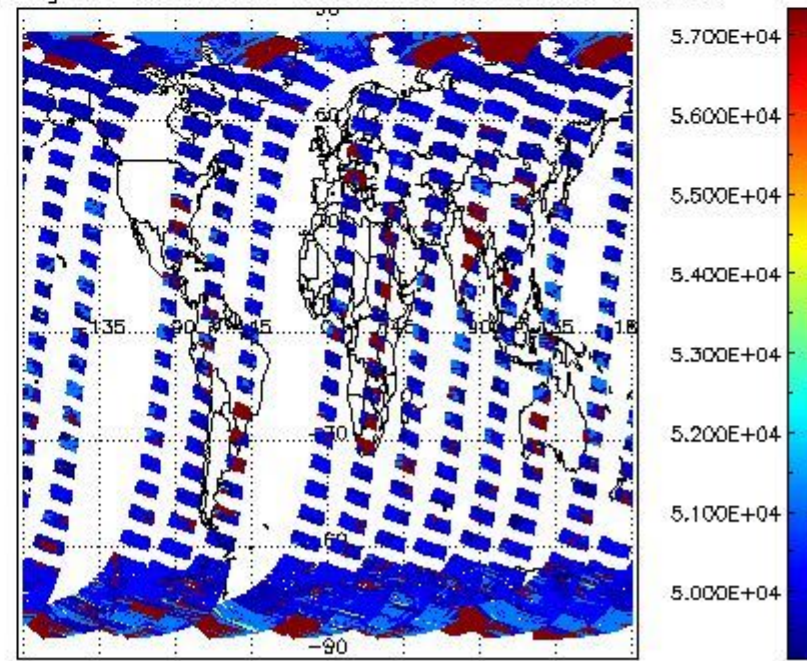
cL_top_height for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



cL_opt_depth for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



cloud_flags for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



2.2.2 Nadir

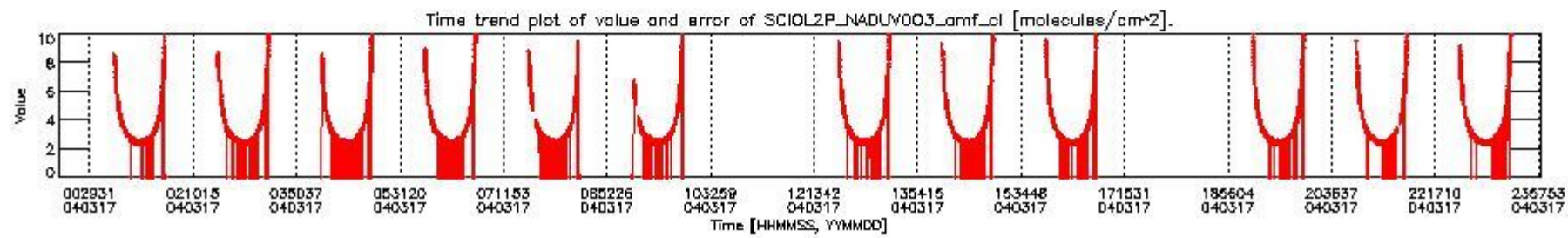
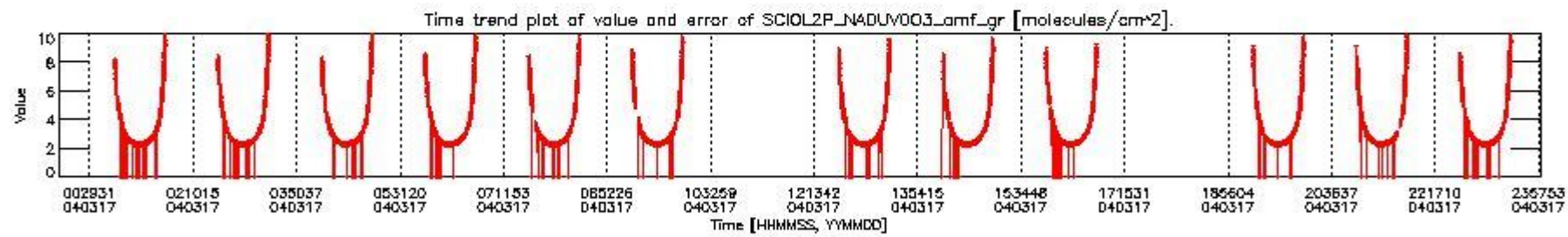
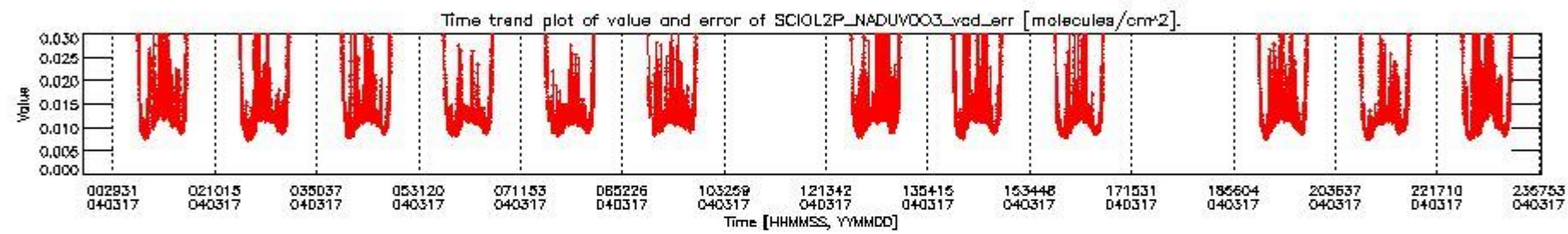
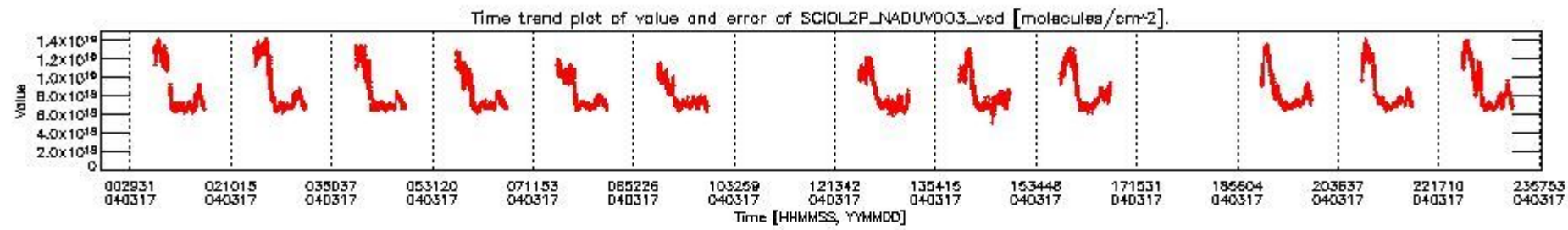
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

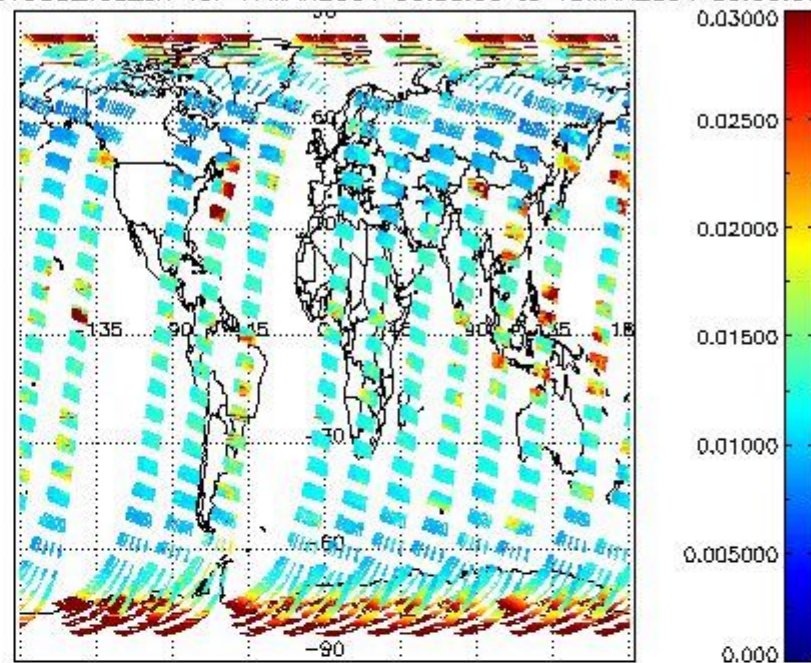
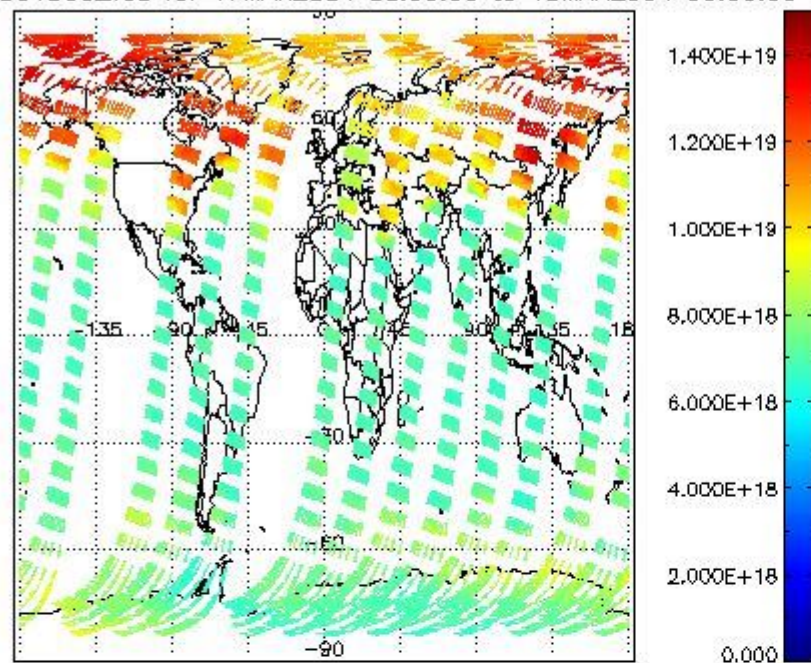
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

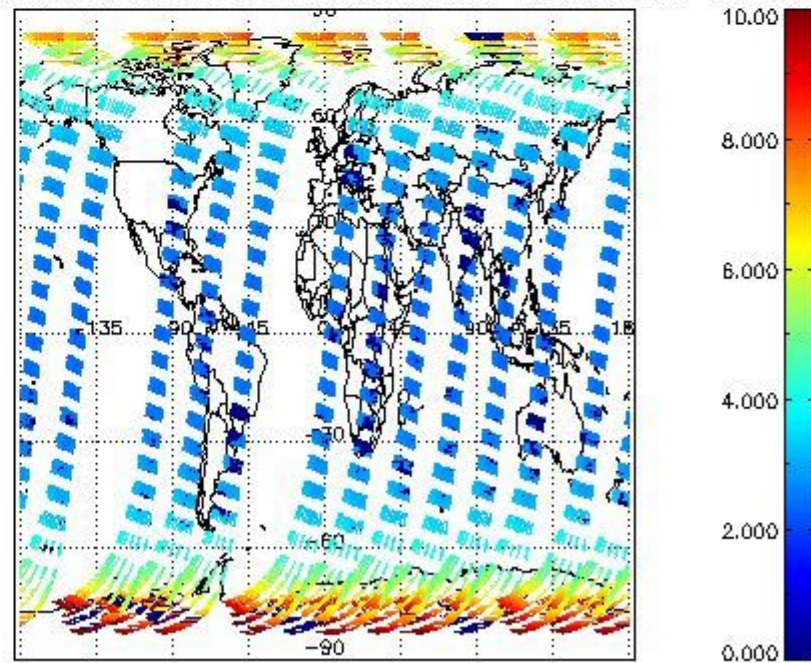
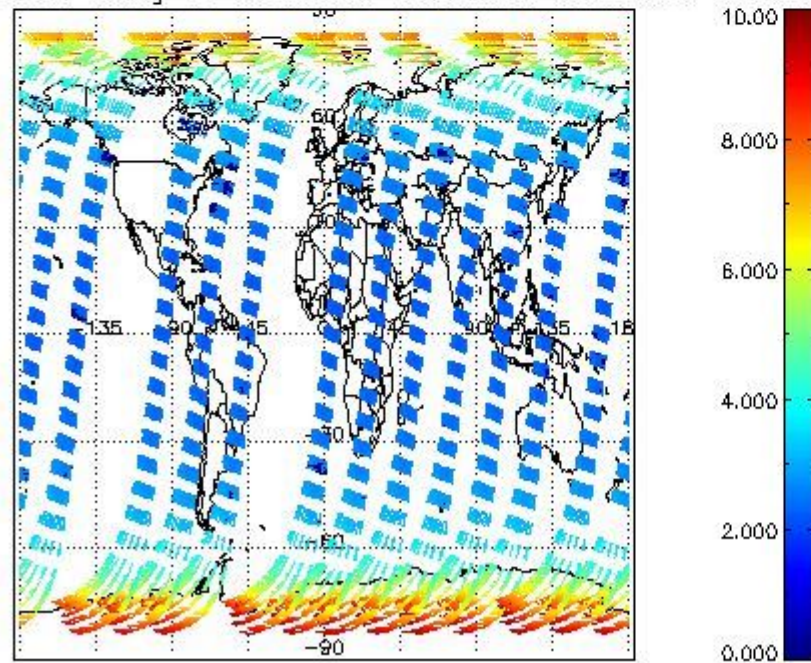
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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

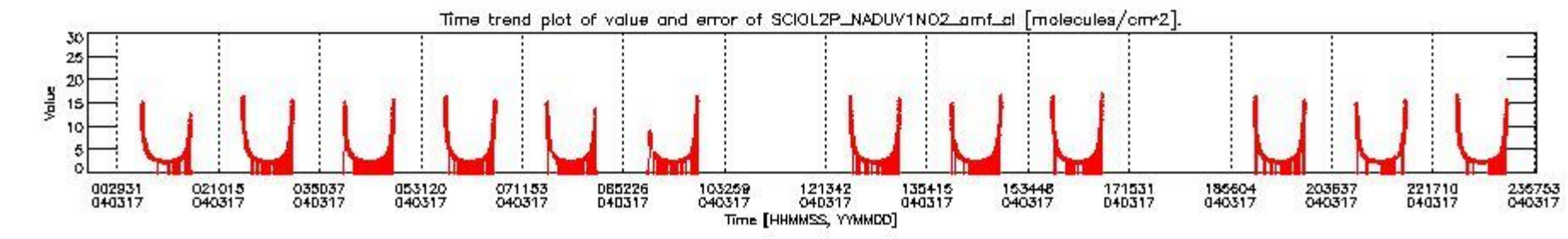
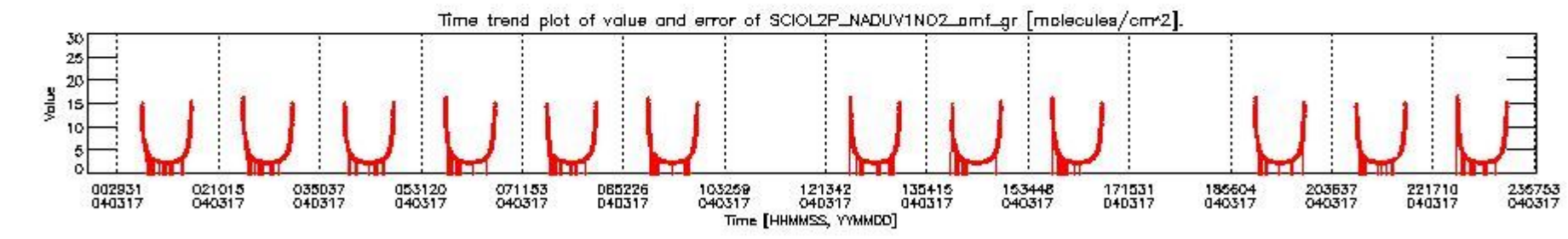
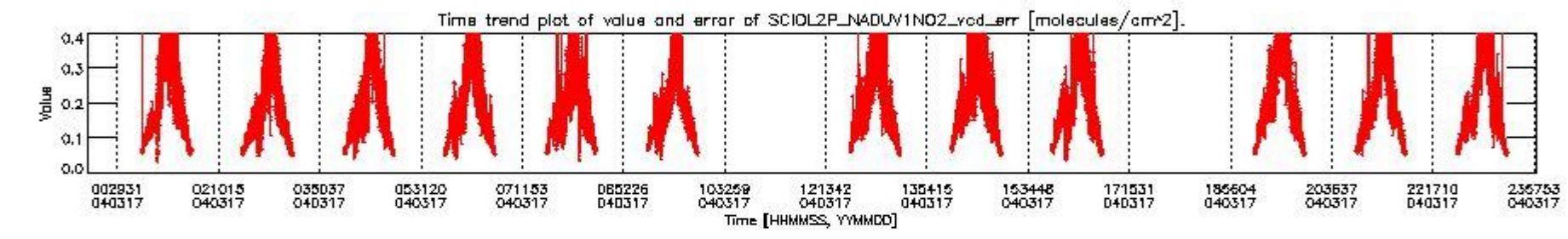
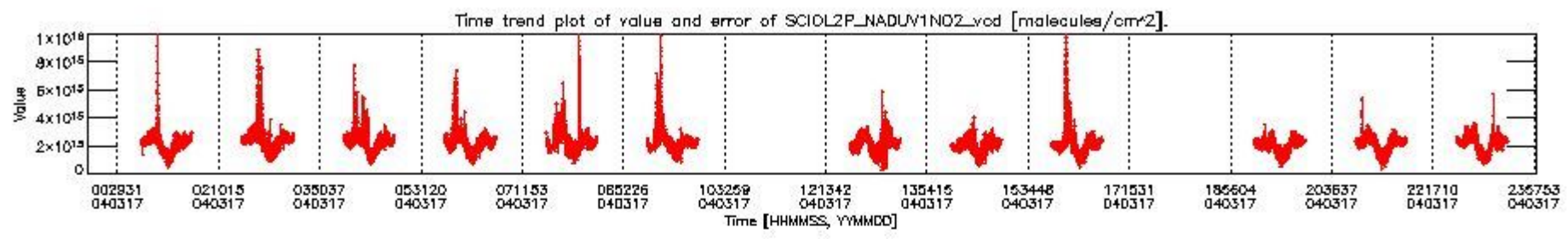


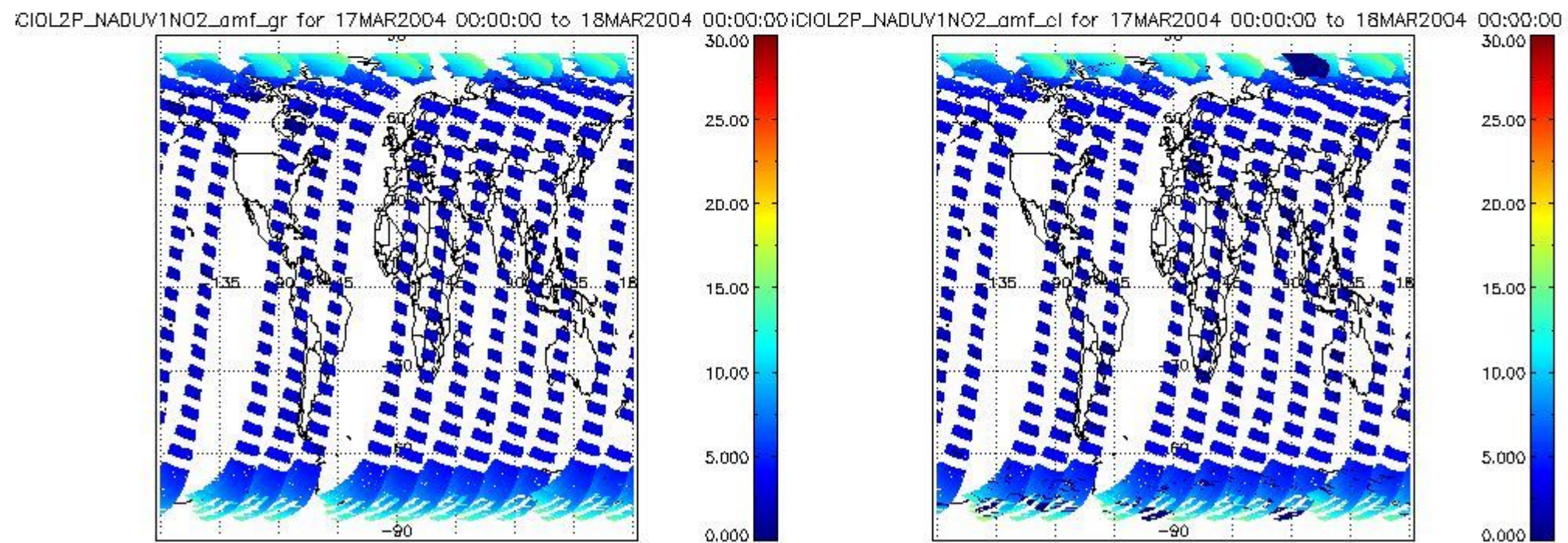
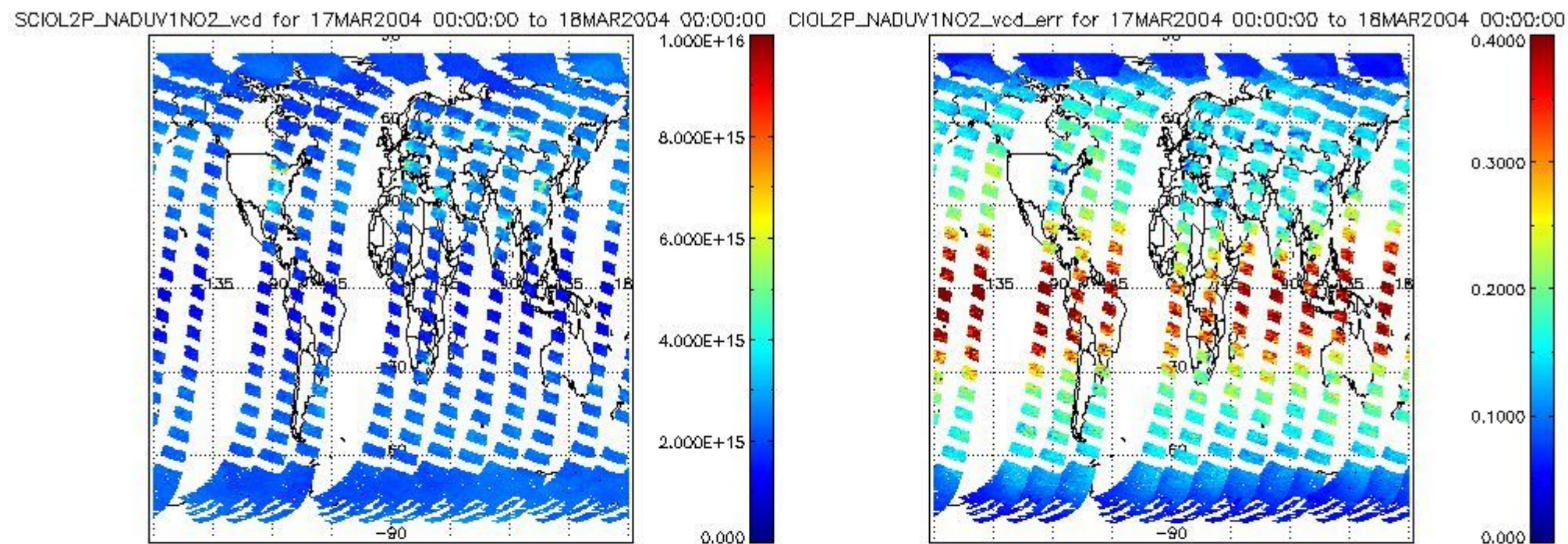
SCIOL2P_NADUV003_vcd for 17MAR2004 00:00:00 to 18MAR2004 00:00:00 SCIOL2P_NADUV003_vcd_err for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



SCIOL2P_NADUV003_amf_gr for 17MAR2004 00:00:00 to 18MAR2004 00:00:00 SCIOL2P_NADUV003_amf_cl for 17MAR2004 00:00:00 to 18MAR2004 00:00:00







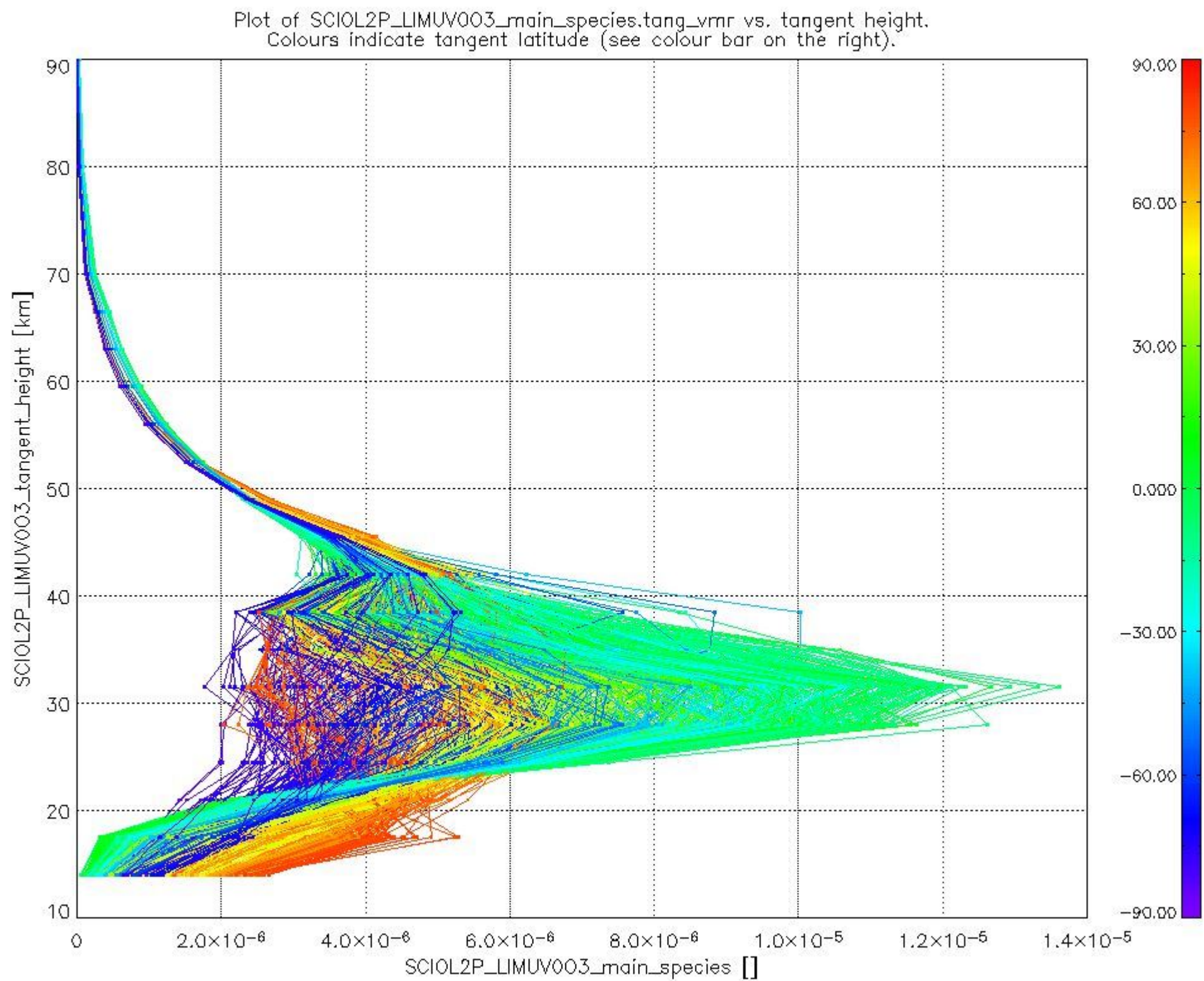
2.2.3 Limb

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

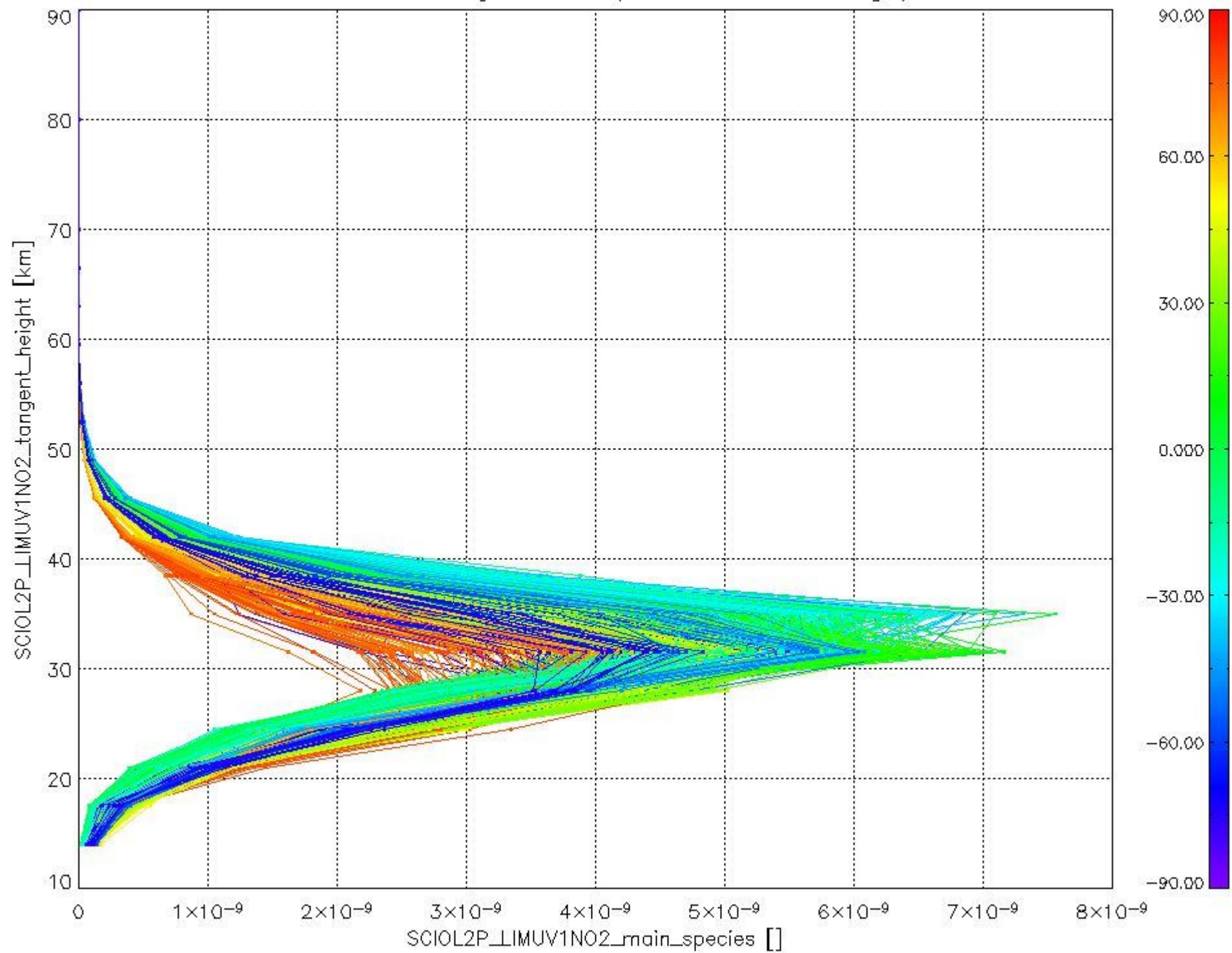
The following data items are currently included into this section:

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.



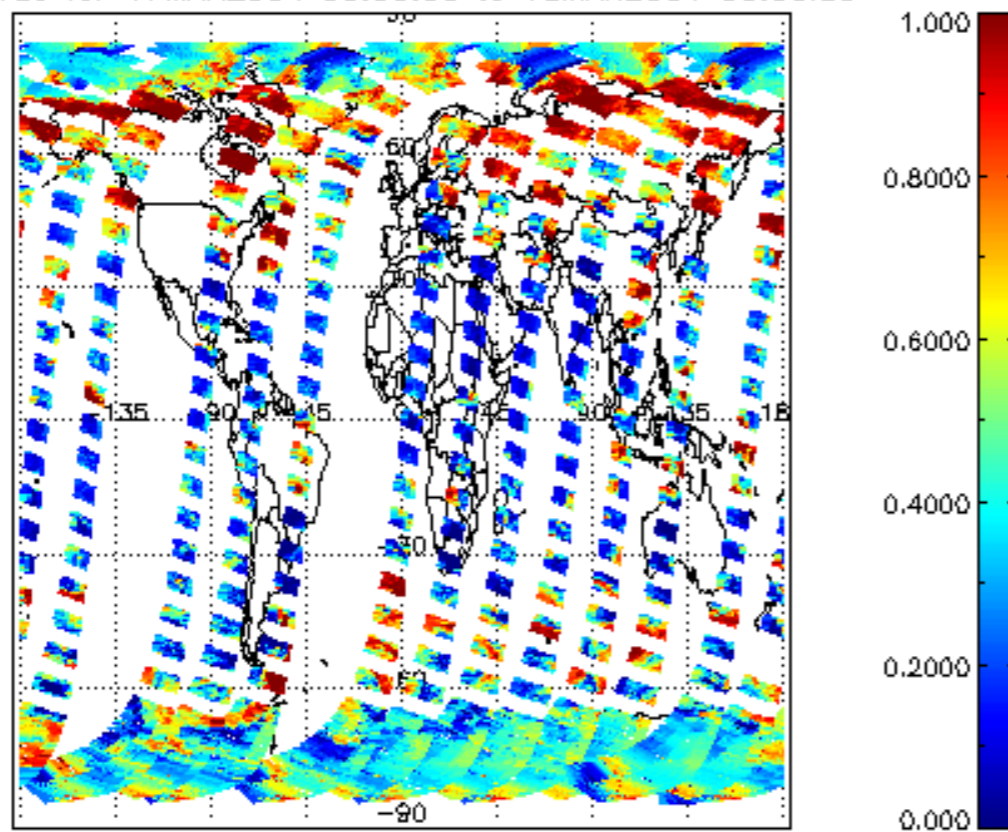
Plot of SCIO2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



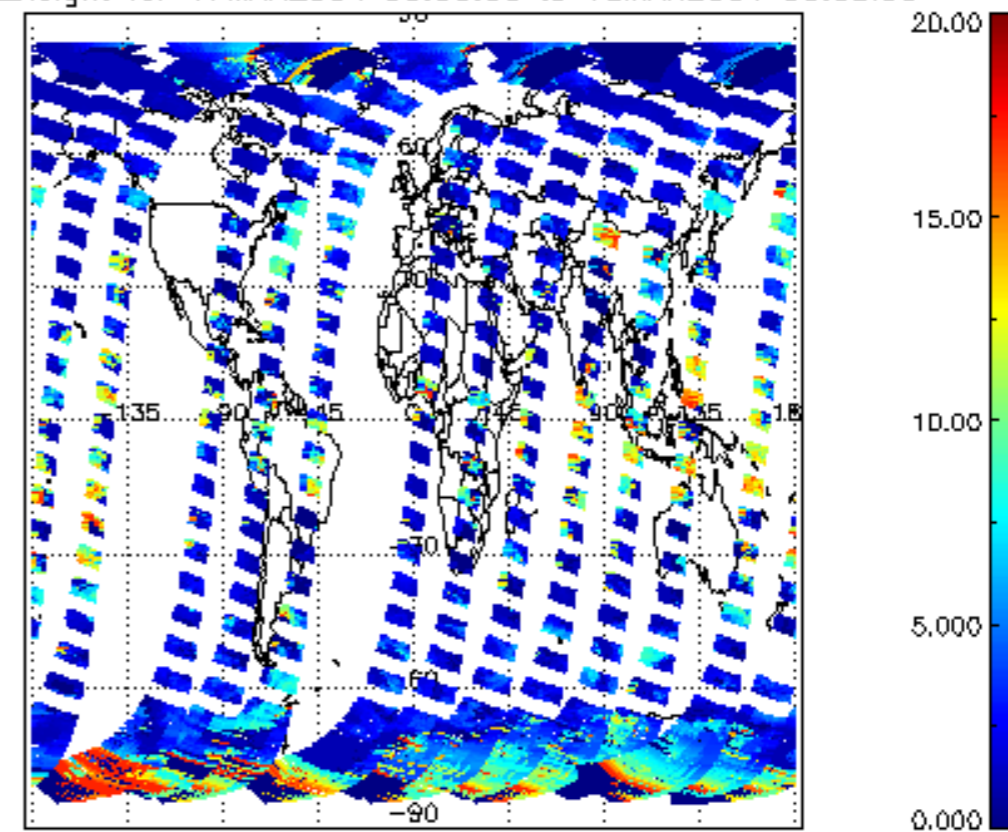
2.3 ADF monitoring

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

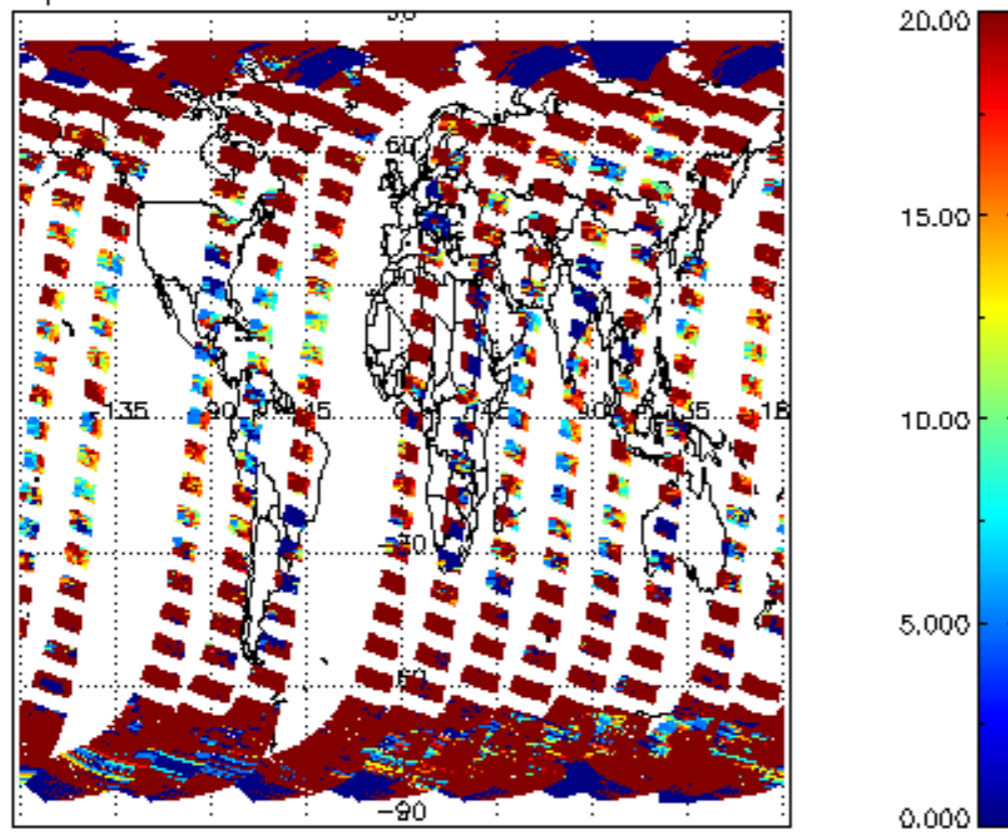
cL_frac for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



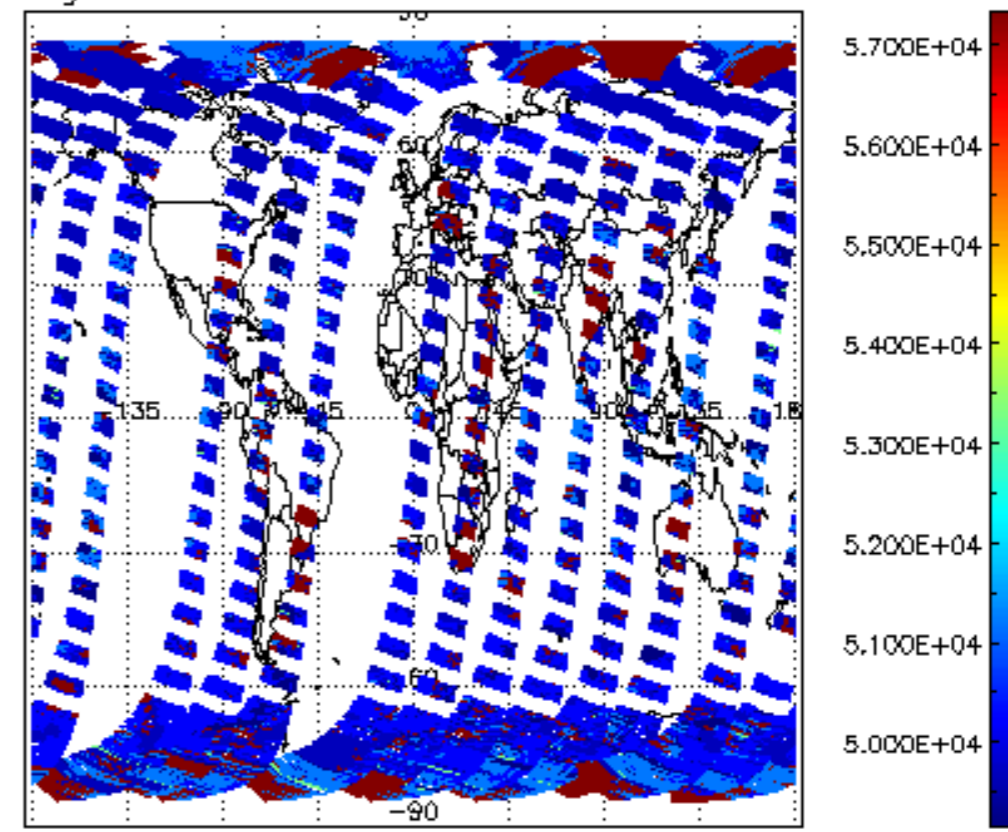
cL_top_height for 17MAR2004 00:00:00 to 18MAR2004 00:00:00

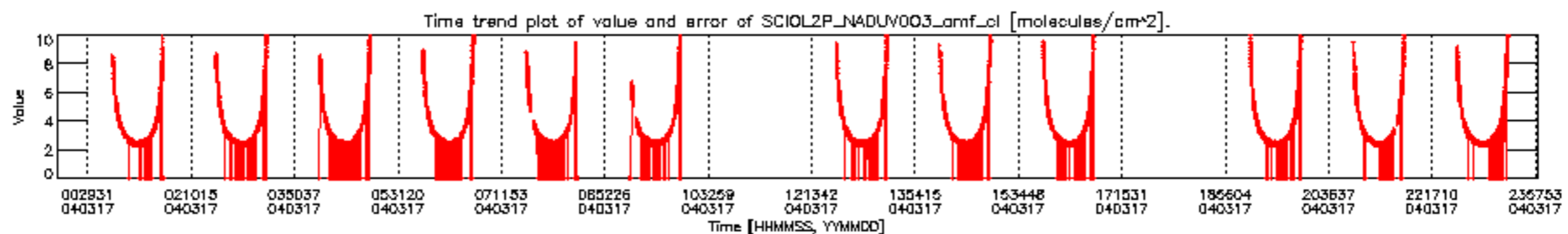
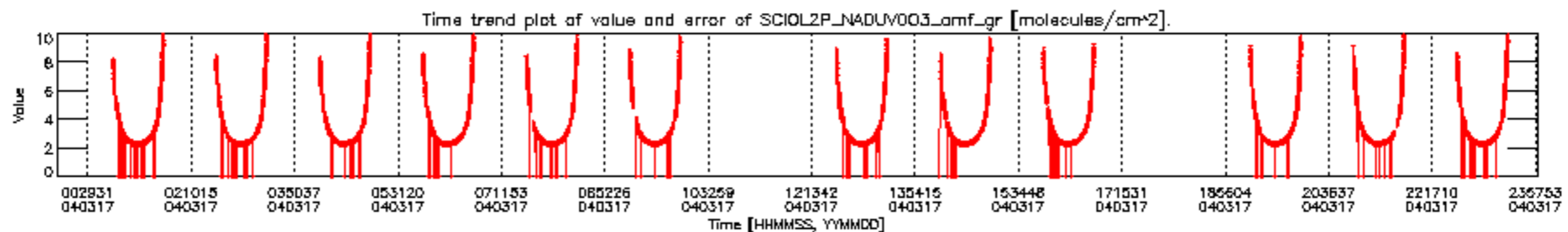
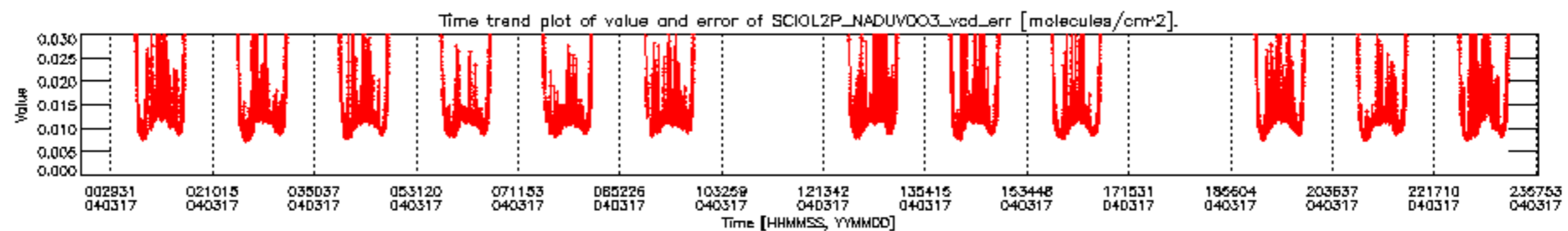
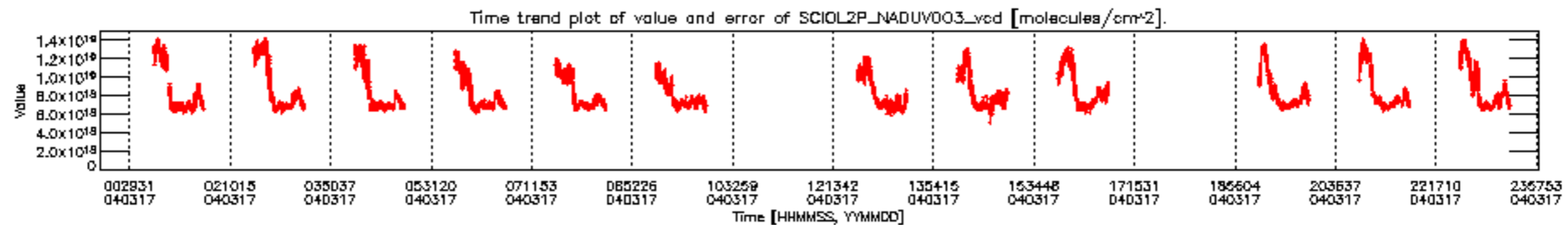


cL_opt_depth for 17MAR2004 00:00:00 to 18MAR2004 00:00:00

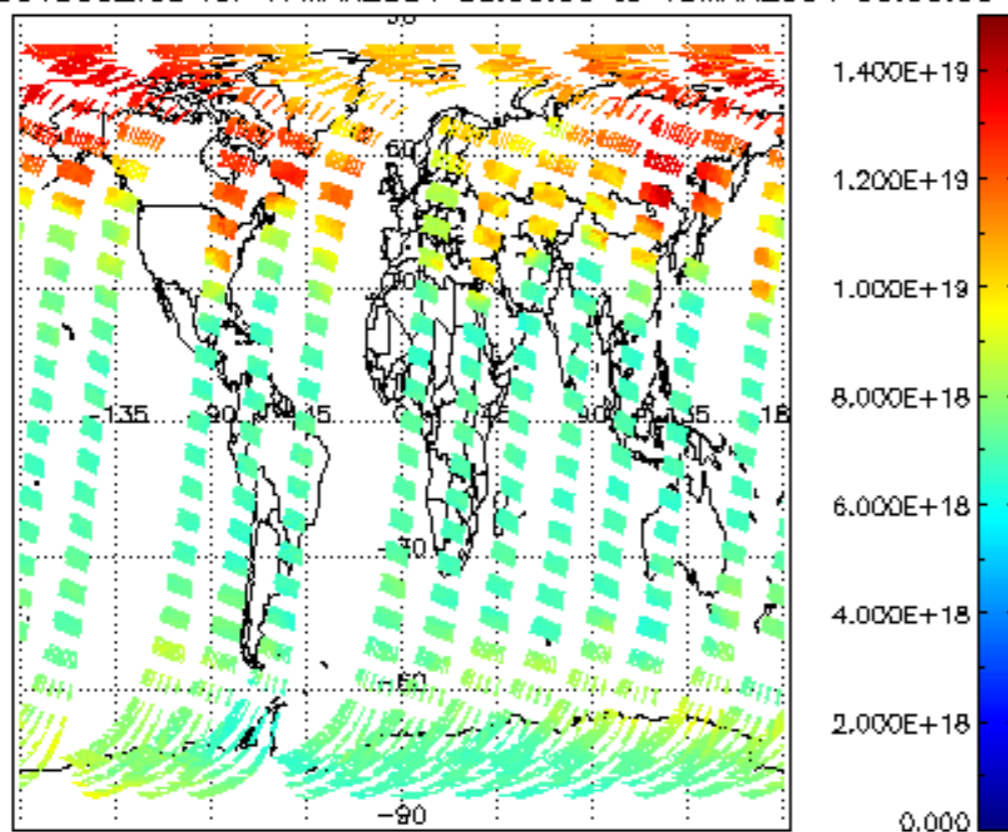


cloud_flags for 17MAR2004 00:00:00 to 18MAR2004 00:00:00

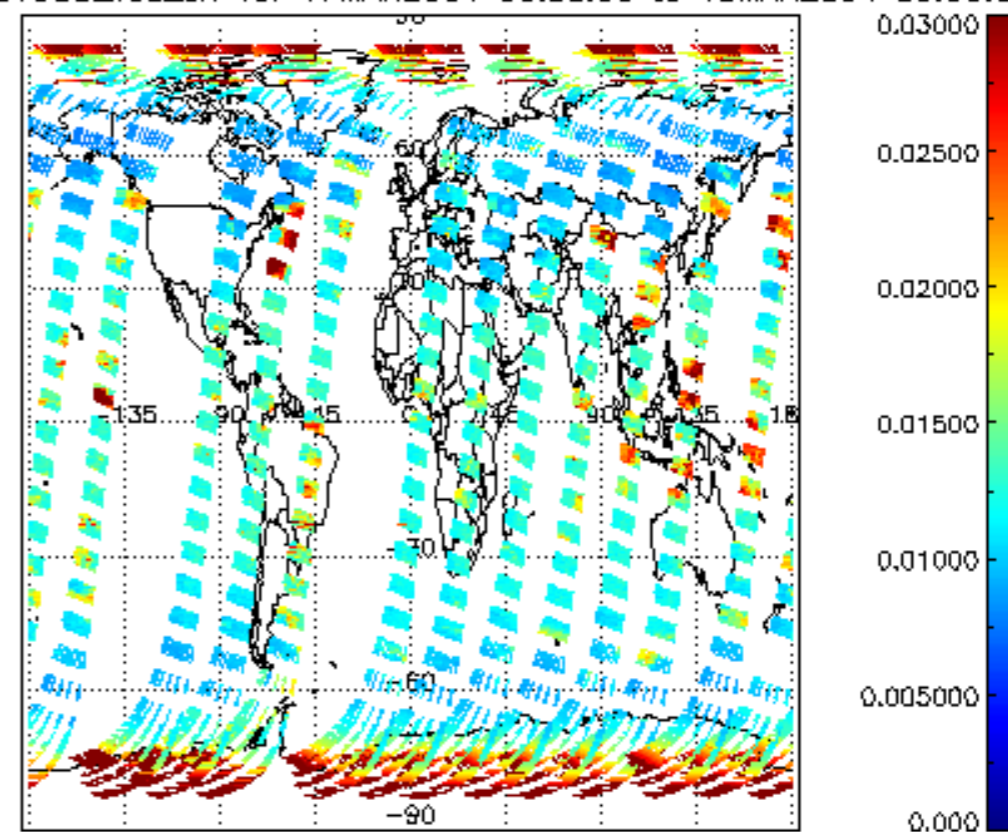




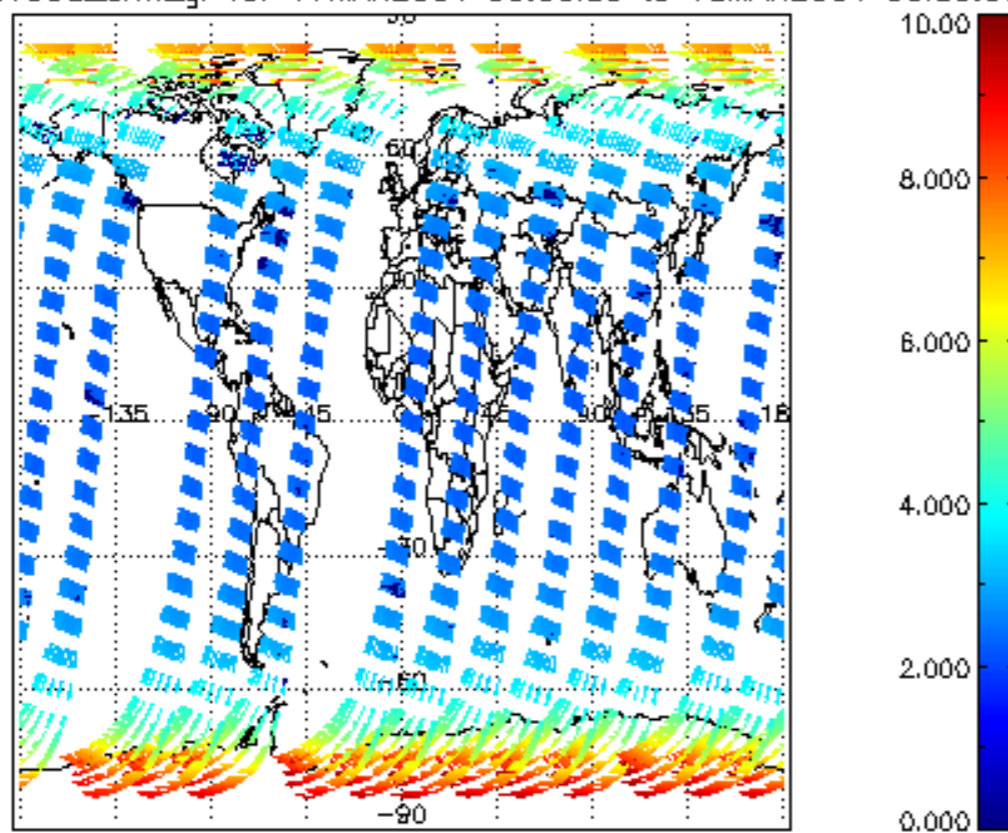
SCIOL2P_NADUV003_vcd for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



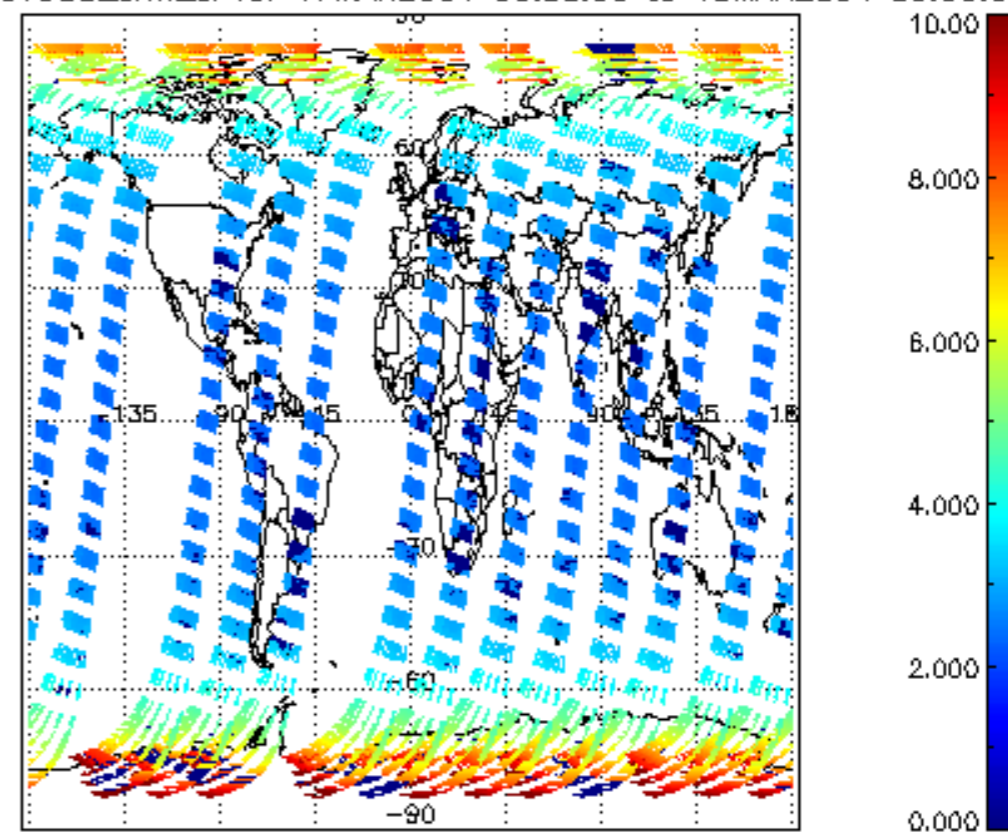
SCIOL2P_NADUV003_vcd_err for 17MAR2004 00:00:00 to 18MAR2004 00:00:00

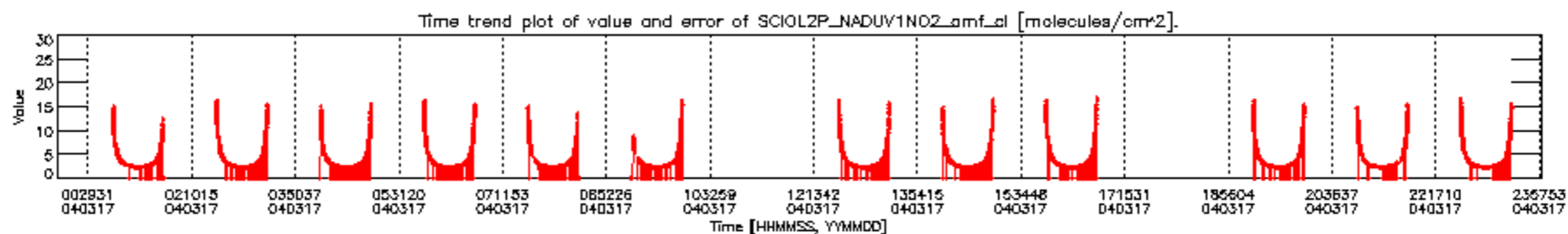
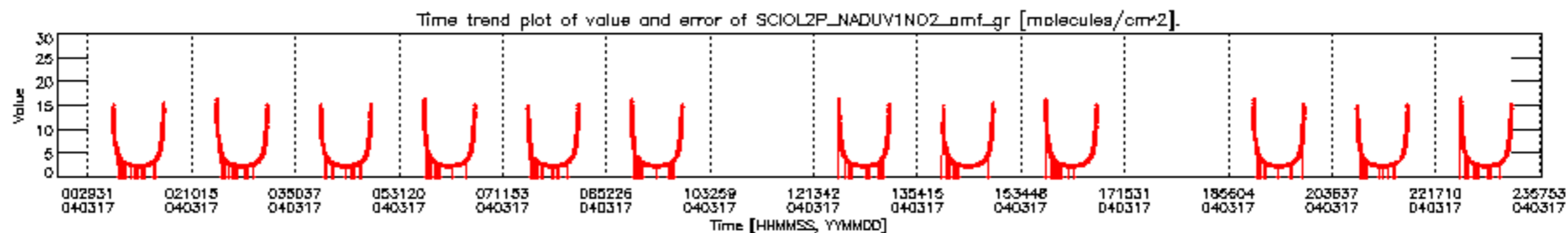
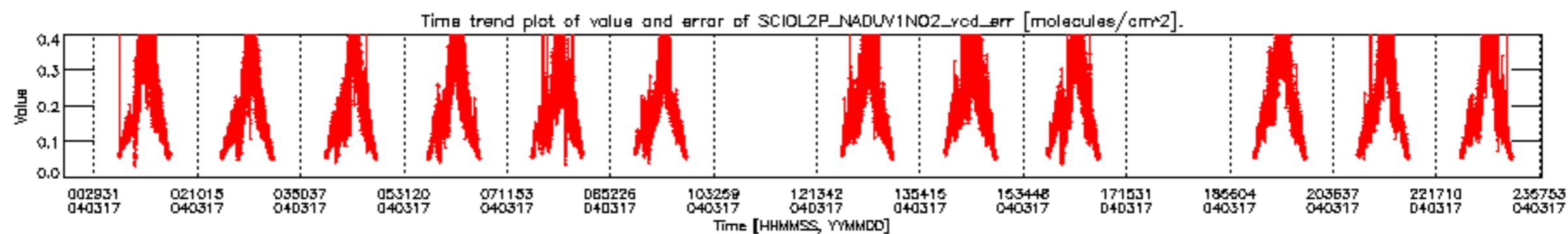
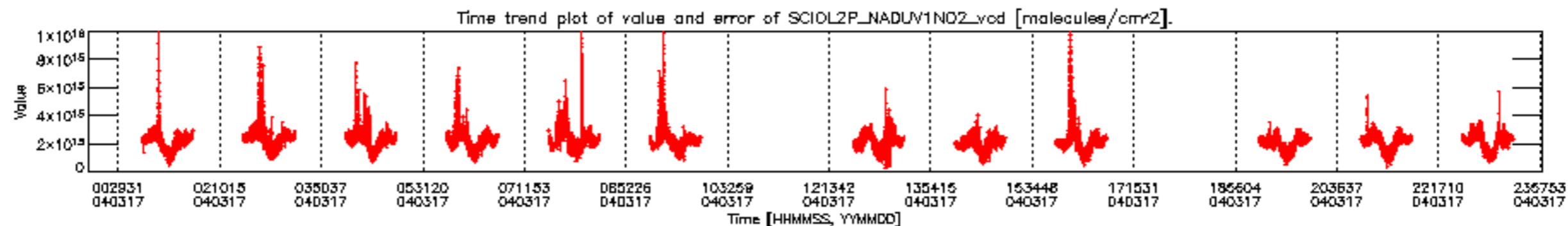


SCIOL2P_NADUV003_amf_gr for 17MAR2004 00:00:00 to 18MAR2004 00:00:00

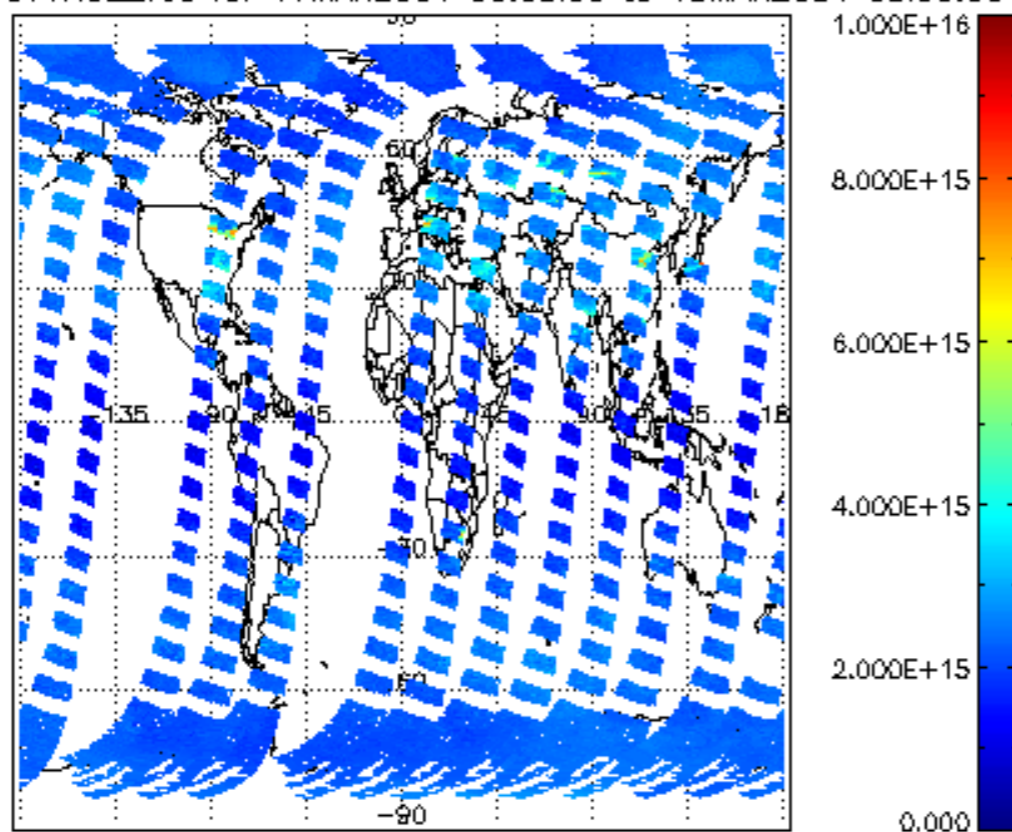


SCIOL2P_NADUV003_amf_cl for 17MAR2004 00:00:00 to 18MAR2004 00:00:00

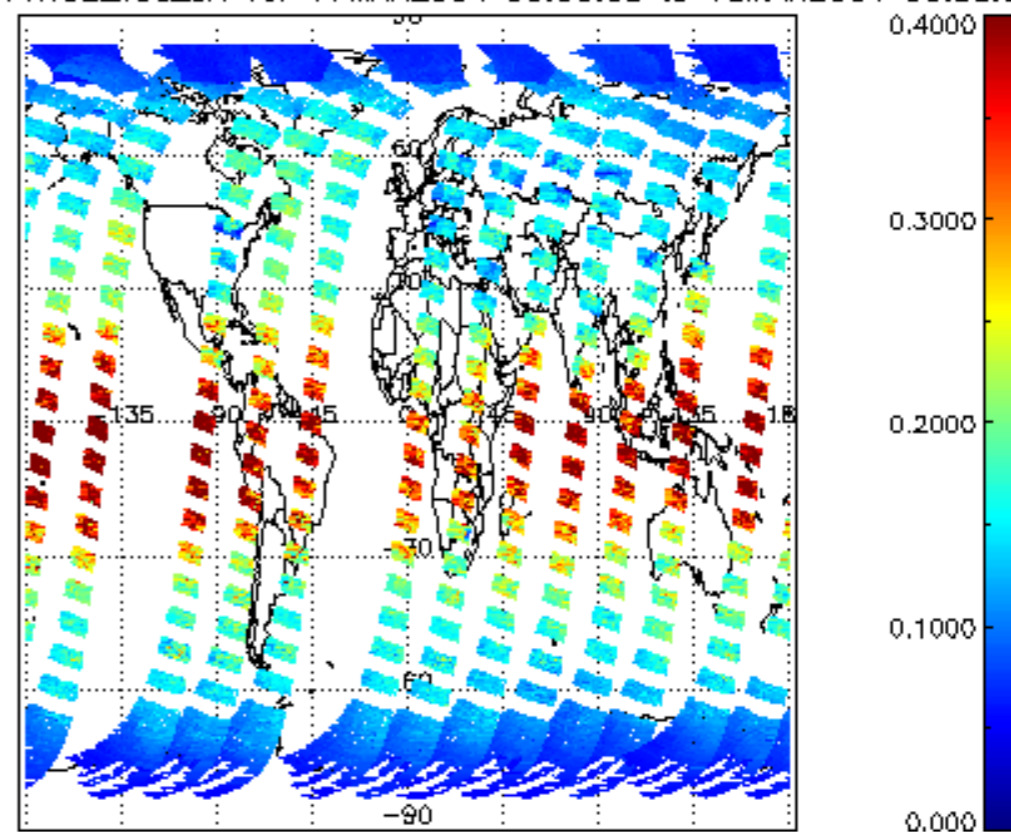




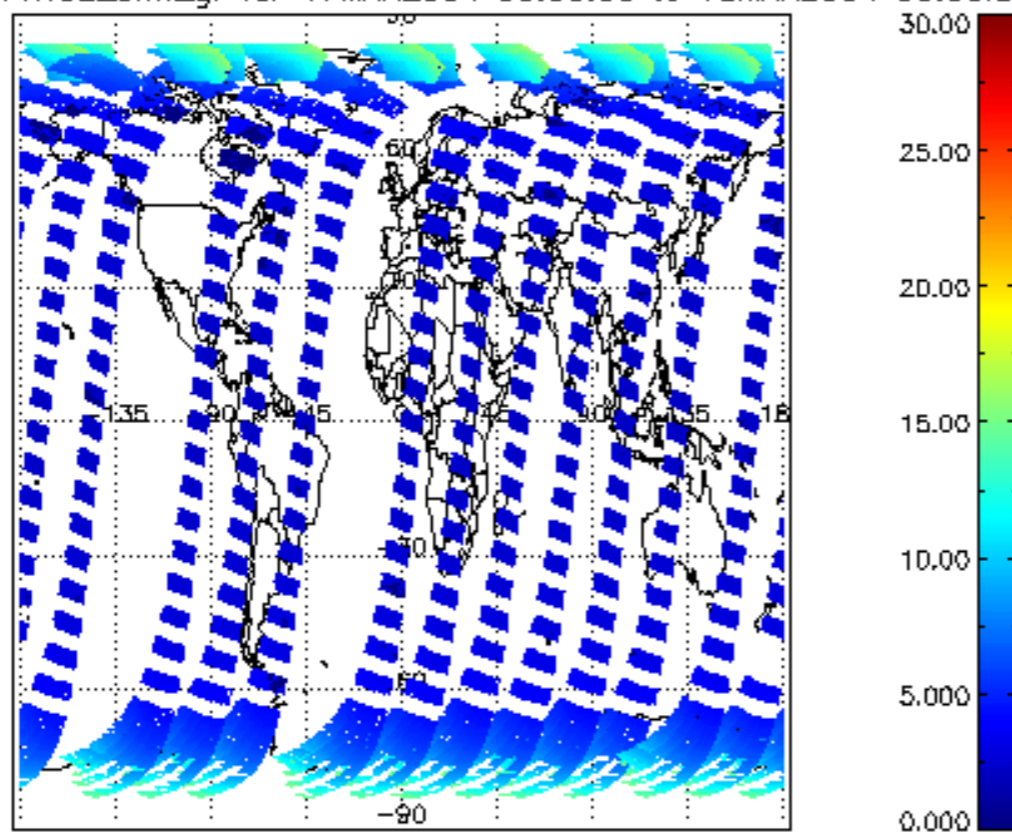
SCIOL2P_NADUV1NO2_vcd for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



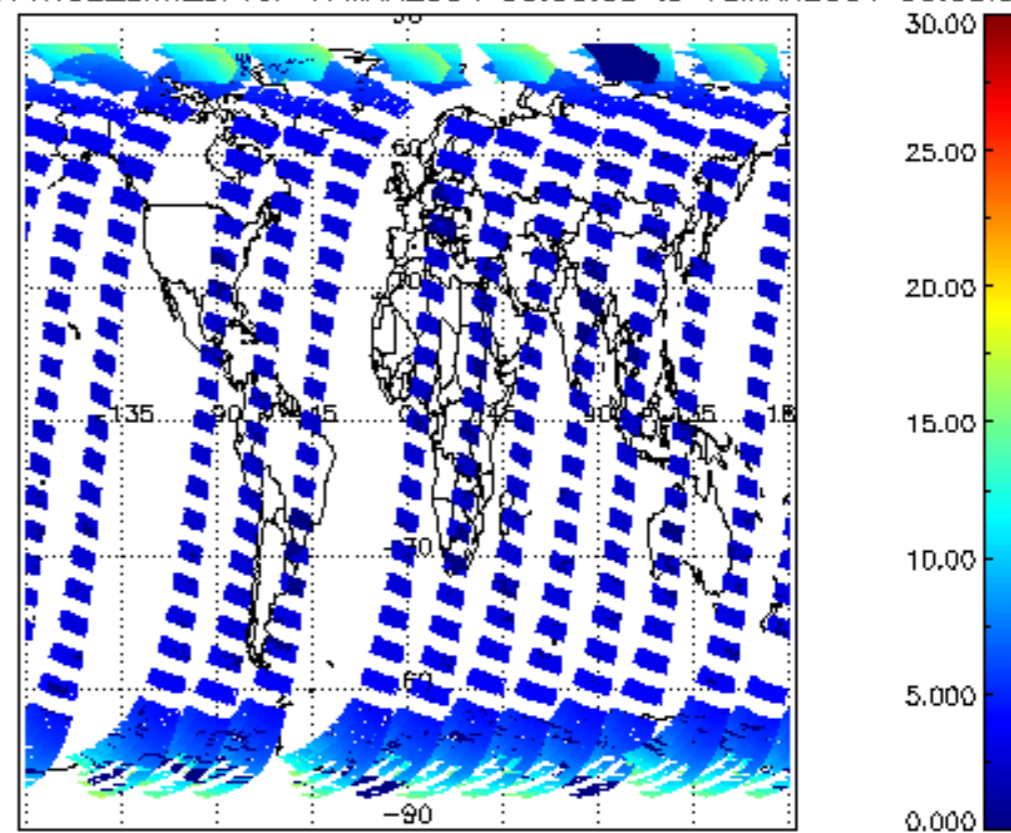
SCIOL2P_NADUV1NO2_vcd_err for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



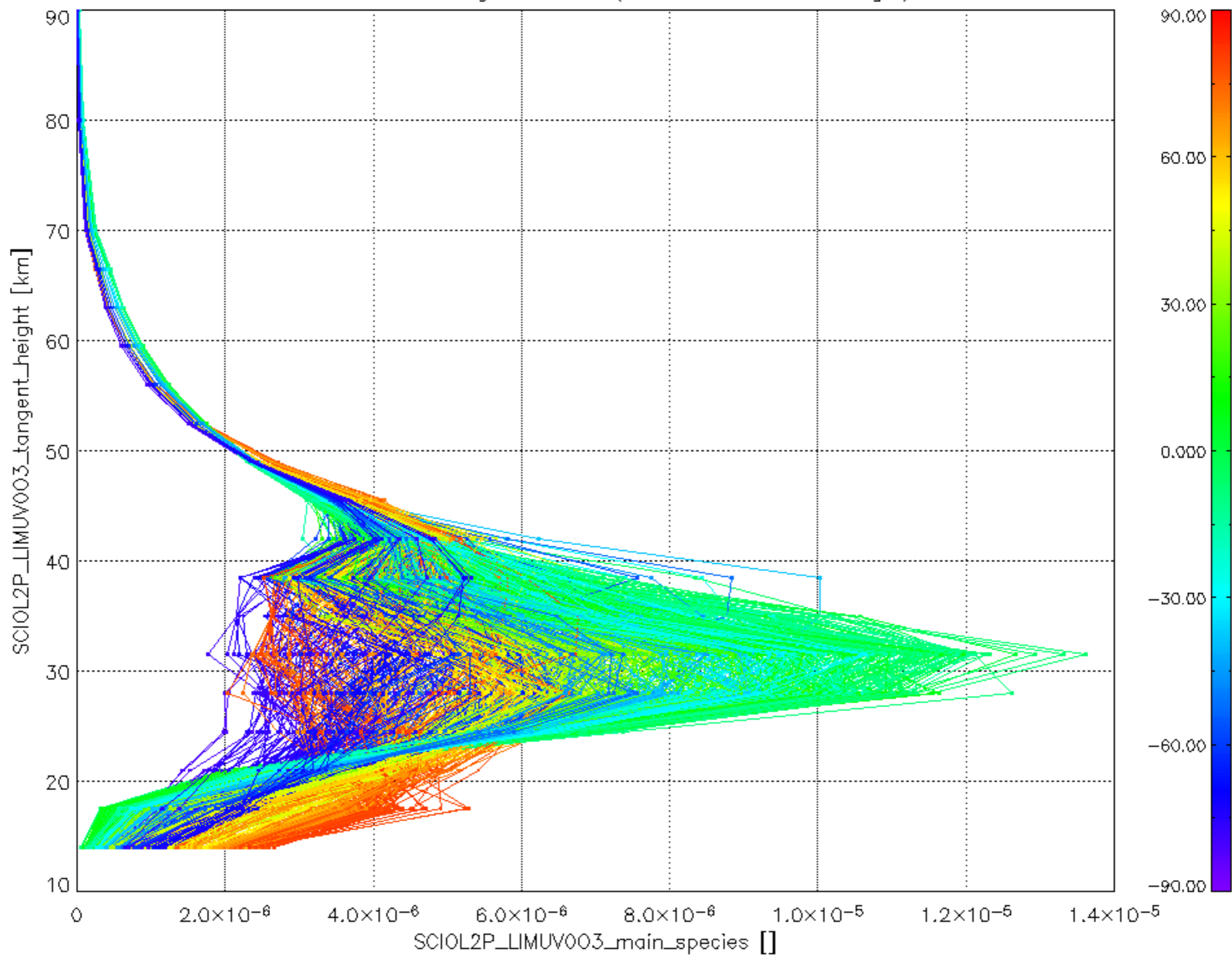
SCIOL2P_NADUV1NO2_amf_gr for 17MAR2004 00:00:00 to 18MAR2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 17MAR2004 00:00:00 to 18MAR2004 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).

