

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	1.5 (01-07-2008)
Time of report generation	01AUG2008 16:39:40
Data source version	SCIA-OL/3.01-R
Processing scope for products	11FEB2004 00:00:00 to 12FEB2004 00:00:00
Start time of first product within scope	10FEB2004 23:12:05
Stop time of last product within scope	12FEB2004 01:16:18
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.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PRDPA20040210_231205_000033772024_00116_10190_6545.N1	10FEB2004 23:12:05	11FEB2004 00:08:22	0	GOOD
1	SCI_OL__2PRDPA20040211_005403_000032372024_00117_10191_6616.N1	11FEB2004 00:54:03	11FEB2004 01:48:01	0	GOOD
2	SCI_OL__2PRDPA20040211_023315_000033772024_00118_10192_6512.N1	11FEB2004 02:33:15	11FEB2004 03:29:32	0	GOOD
3	SCI_OL__2PRDPA20040211_041514_000032372024_00119_10193_6566.N1	11FEB2004 04:15:14	11FEB2004 05:09:12	0	GOOD
4	SCI_OL__2PRDPA20040211_055426_000033772024_00120_10194_6867.N1	11FEB2004 05:54:26	11FEB2004 06:50:43	0	GOOD
5	SCI_OL__2PRDPA20040211_073625_000032372024_00121_10195_6770.N1	11FEB2004 07:36:25	11FEB2004 08:30:23	0	GOOD
6	SCI_OL__2PRDPA20040211_091537_000033772024_00122_10196_6858.N1	11FEB2004 09:15:37	11FEB2004 10:11:54	0	GOOD
7	SCI_OL__2PRDPA20040211_105736_000032372024_00123_10197_6833.N1	11FEB2004 10:57:36	11FEB2004 11:51:34	0	GOOD
8	SCI_OL__2PRDPA20040211_123648_000033772024_00124_10198_6868.N1	11FEB2004 12:36:48	11FEB2004 13:33:05	0	GOOD
9	SCI_OL__2PRDPA20040211_191843_000033492024_00128_10202_6687.N1	11FEB2004 19:18:43	11FEB2004 20:14:33	0	GOOD
10	SCI_OL__2PRDPA20040211_210109_000032372024_00129_10203_6772.N1	11FEB2004 21:01:09	11FEB2004 21:55:07	0	GOOD
11	SCI_OL__2PRDPA20040211_224021_000033772024_00130_10204_6762.N1	11FEB2004 22:40:21	11FEB2004 23:36:38	0	GOOD
12	SCI_OL__2PRDPA20040212_002220_000032372024_00131_10205_6873.N1	12FEB2004 00:22:20	12FEB2004 01:16:18	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: 90307

Total number of cloud data DSRs with good quality flag (=0): 90307 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	90307	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	90307	0.22156	0.25000	0.12500	1.0000	0.10192	s
CL_FRAC	90307	0.45983	0.45187	0.0000	1.0000	0.27481	-
CL_FRAC_ERR	90307	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	90307	7.0899	8.0000	4.0000	32.000	3.2613	
PMD_READ_CL[0]	90307	0.32101	0.0000	0.0000	31.000	1.3312	-

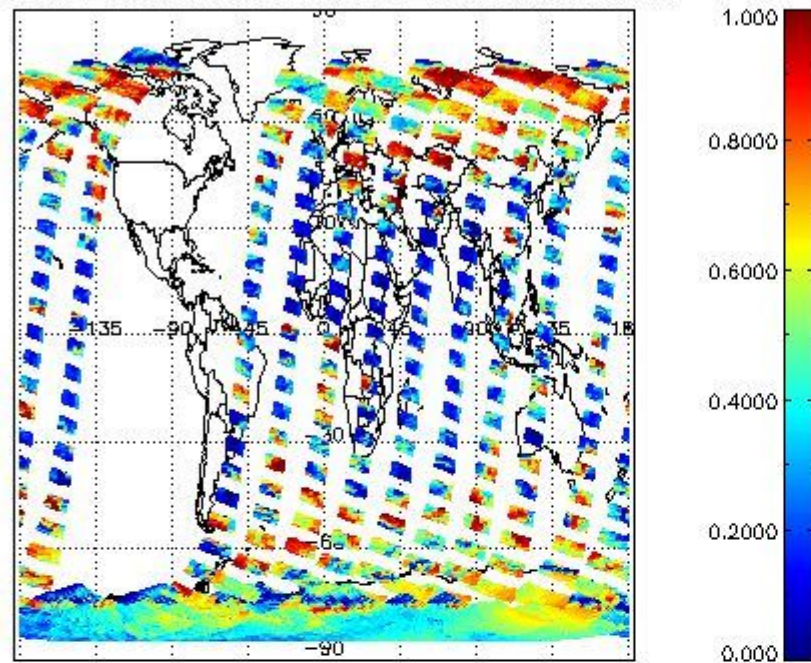
PMD_READ_CL[1]	90307	0.25128	0.0000	0.0000	32.000	1.3316	-
CL_TOP_HEIGHT	82208	4.2052	3.1078	0.0000	17.000	3.6157	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	82208	48.197	32.578	0.0000	101.00	38.569	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	90307	11100000	11100000	11100000	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	90307	11000110	11000010	11000000	11100000	2337.8	flags
AERO_ABSO_IND	90307	0.72651	0.43434	-3.8025	12.236	1.2342	
AERO_IND_DIAG	90307	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	90307	01100111	11000000	00000000	11000000	24500.	flags

Time and geolocation plots:

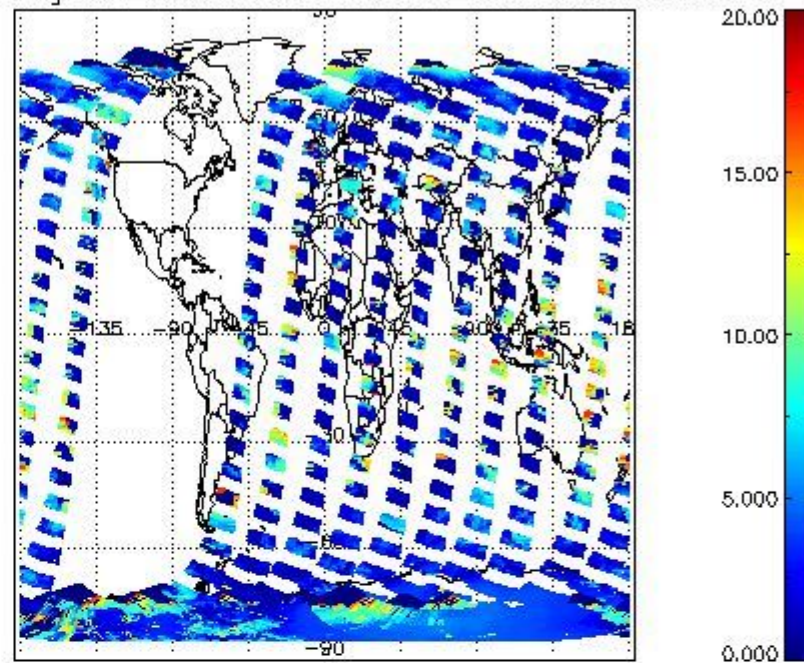
Plots are available for the following parameters:

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

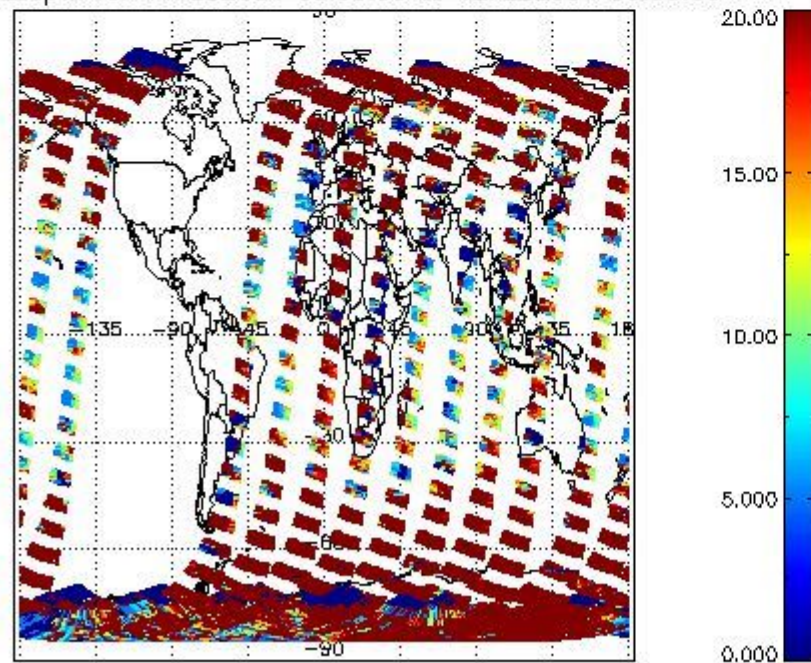
cLfrac for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



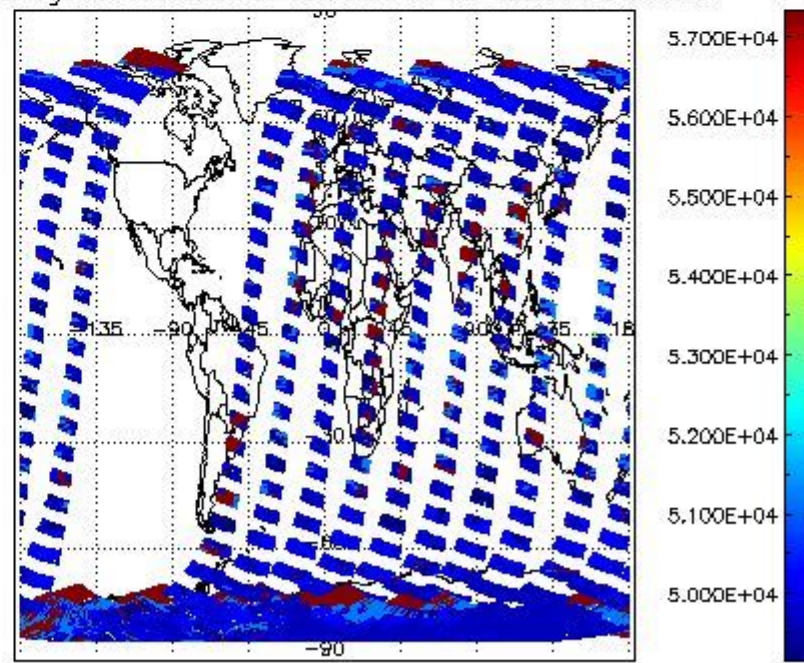
cL_top_height for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



cLopt_depth for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



cloud_flags for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



2.2.2 Nadir

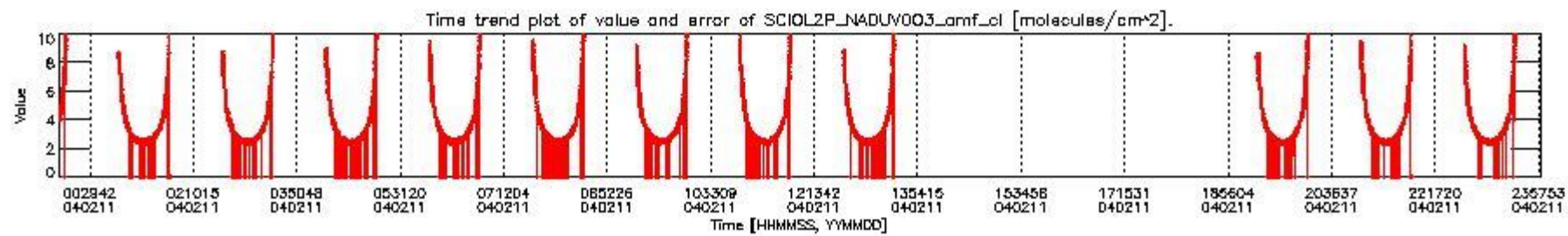
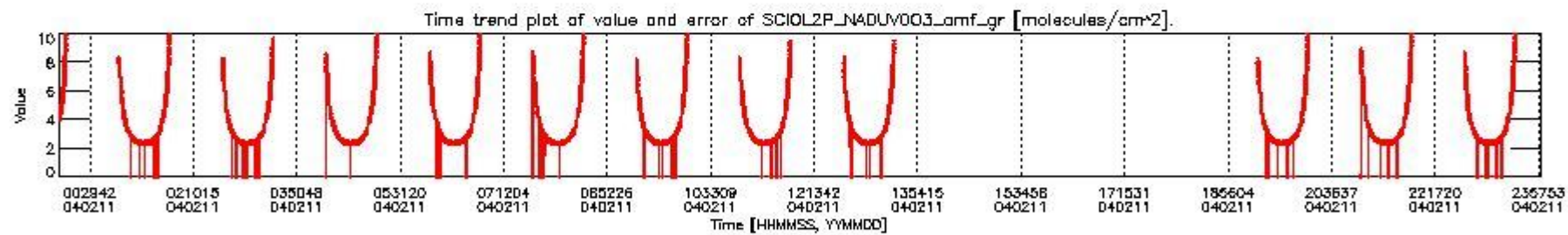
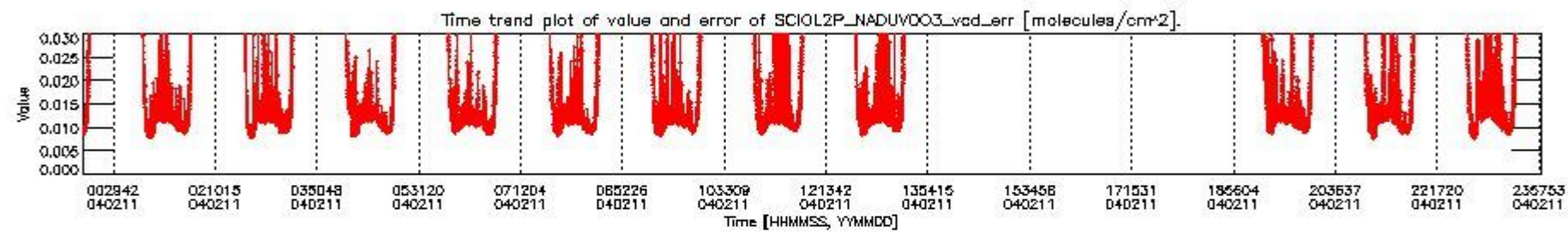
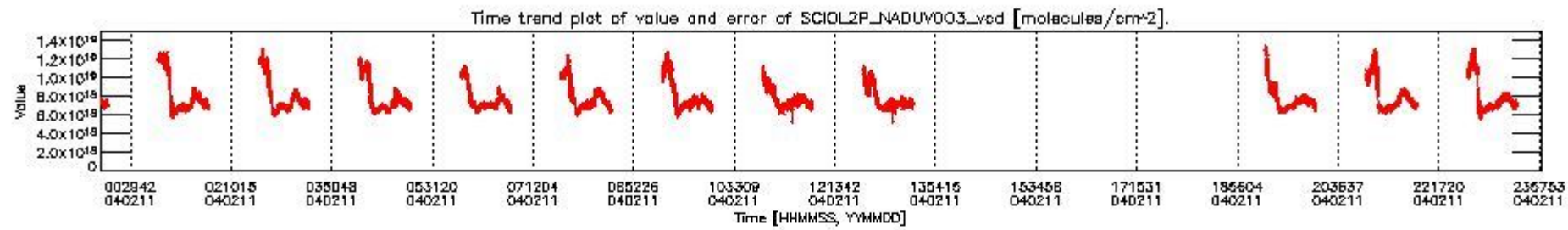
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

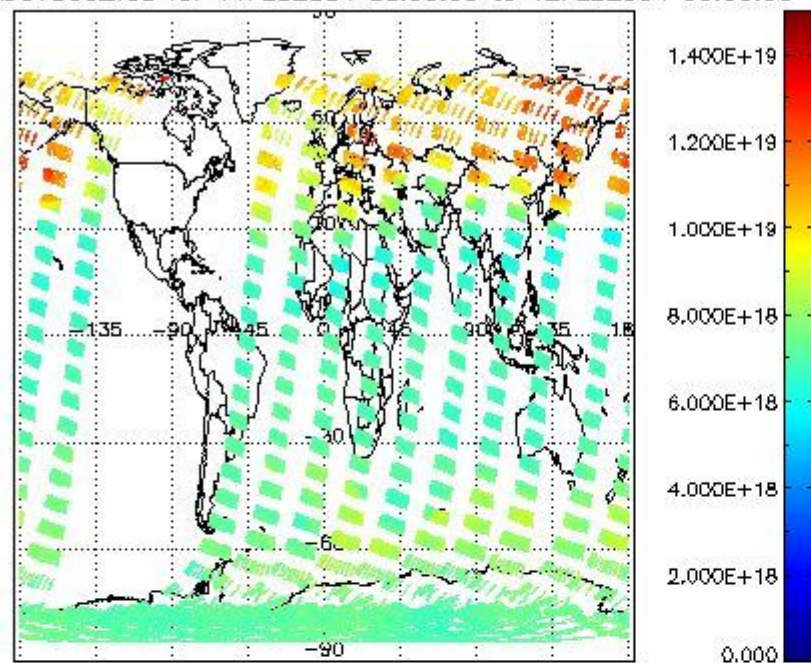
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

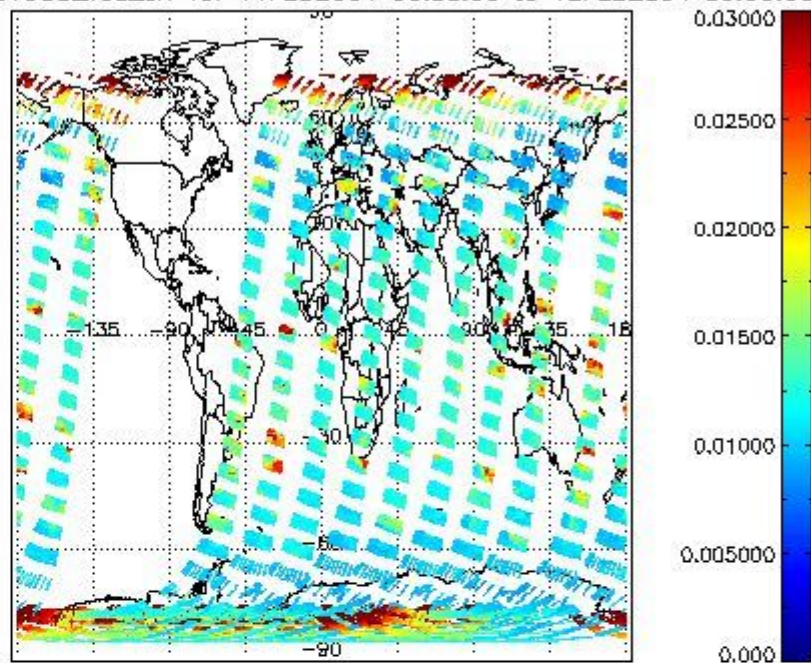
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



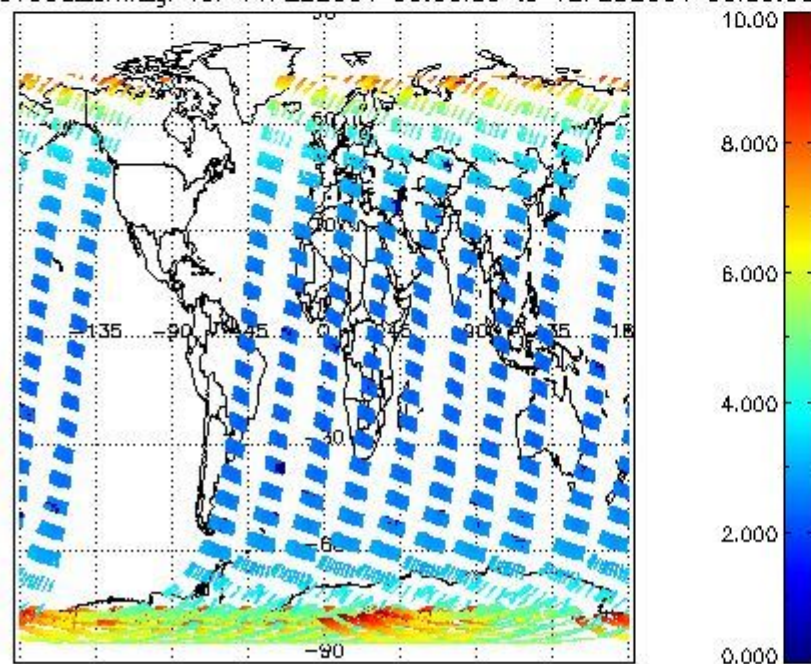
SCIOL2P_NADUV003_vcd for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



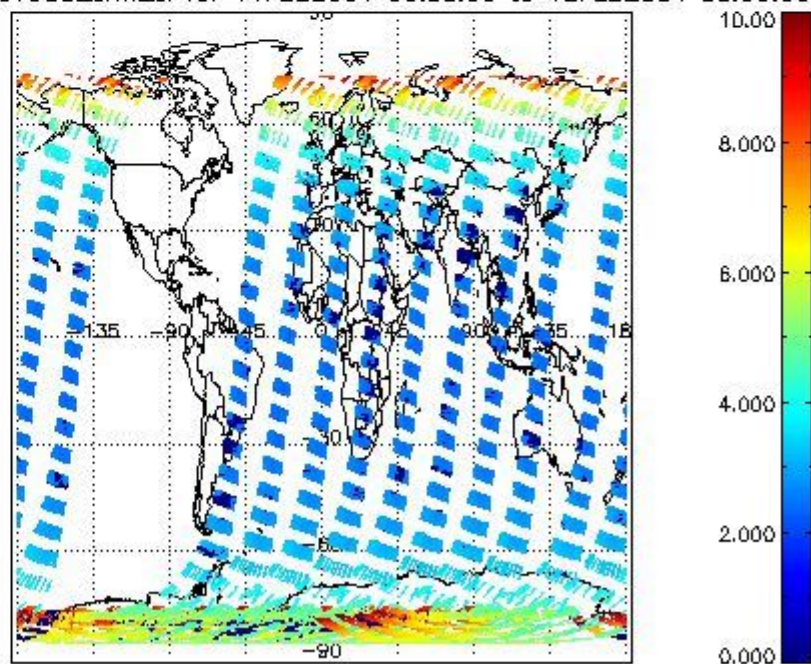
SCIOL2P_NADUV003_vcd_err for 11FEB2004 00:00:00 to 12FEB2004 00:00:00

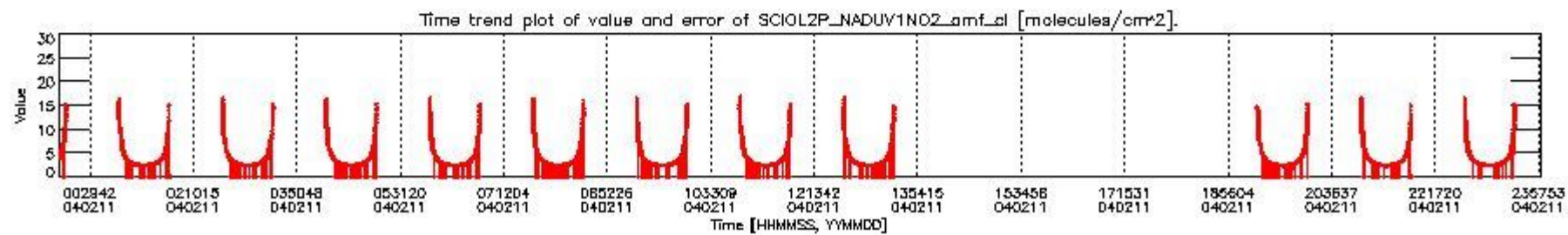
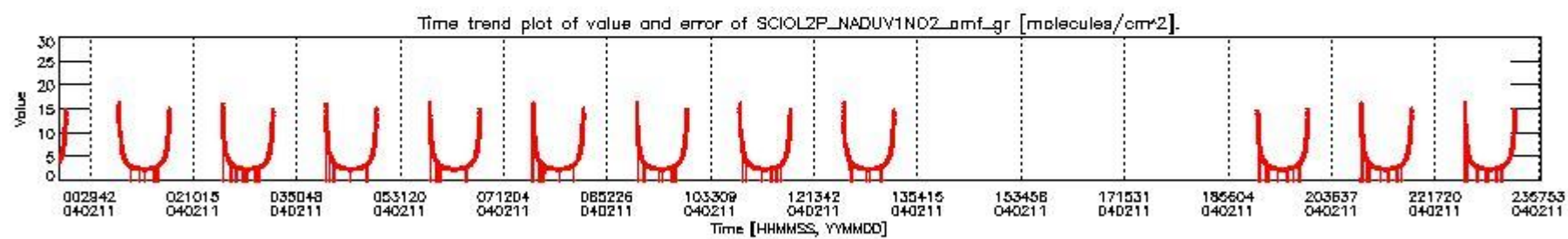
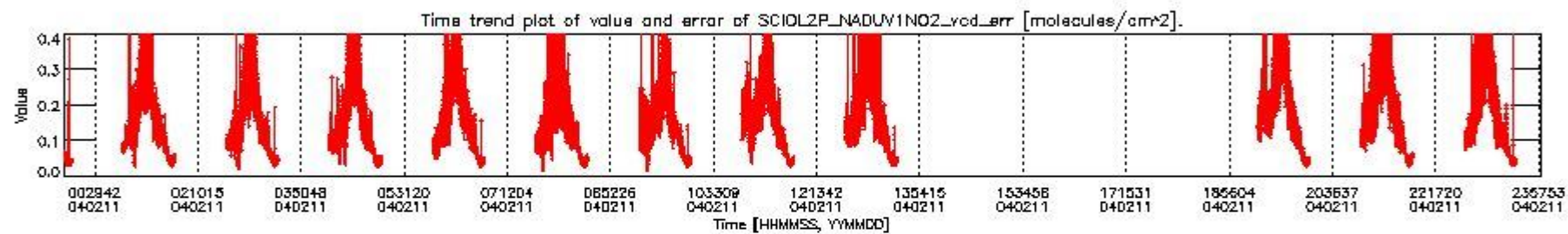
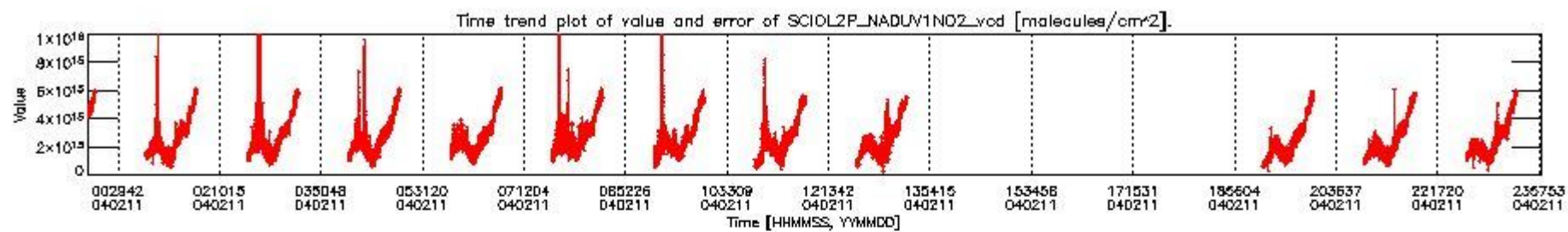


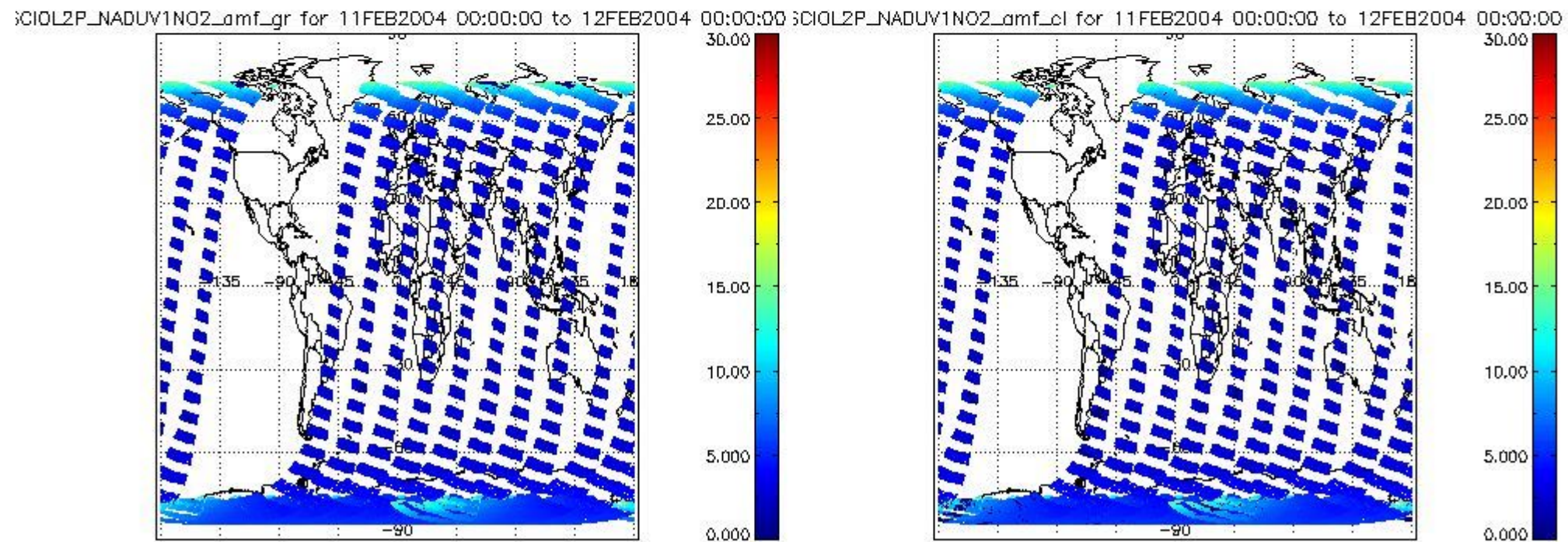
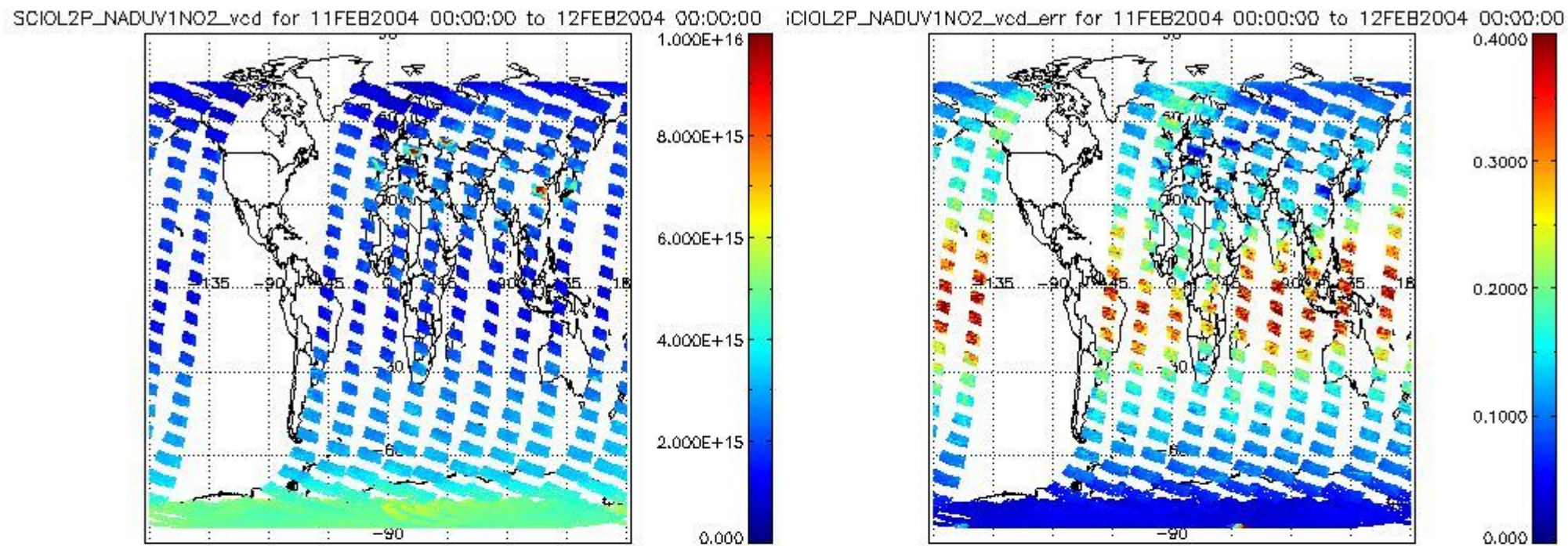
SCIOL2P_NADUV003_amf_gr for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 11FEB2004 00:00:00 to 12FEB2004 00:00:00







2.2.3 Limb

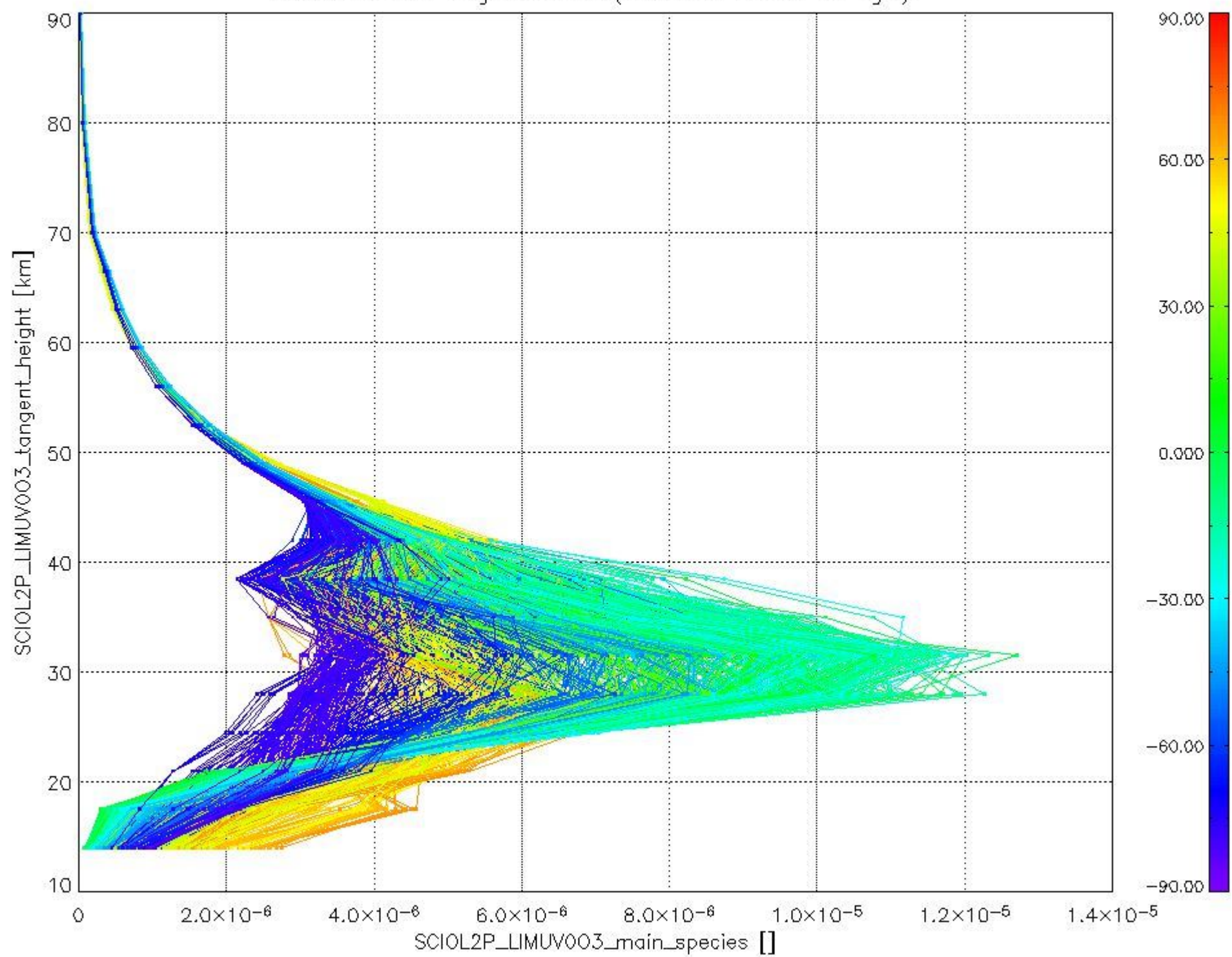
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

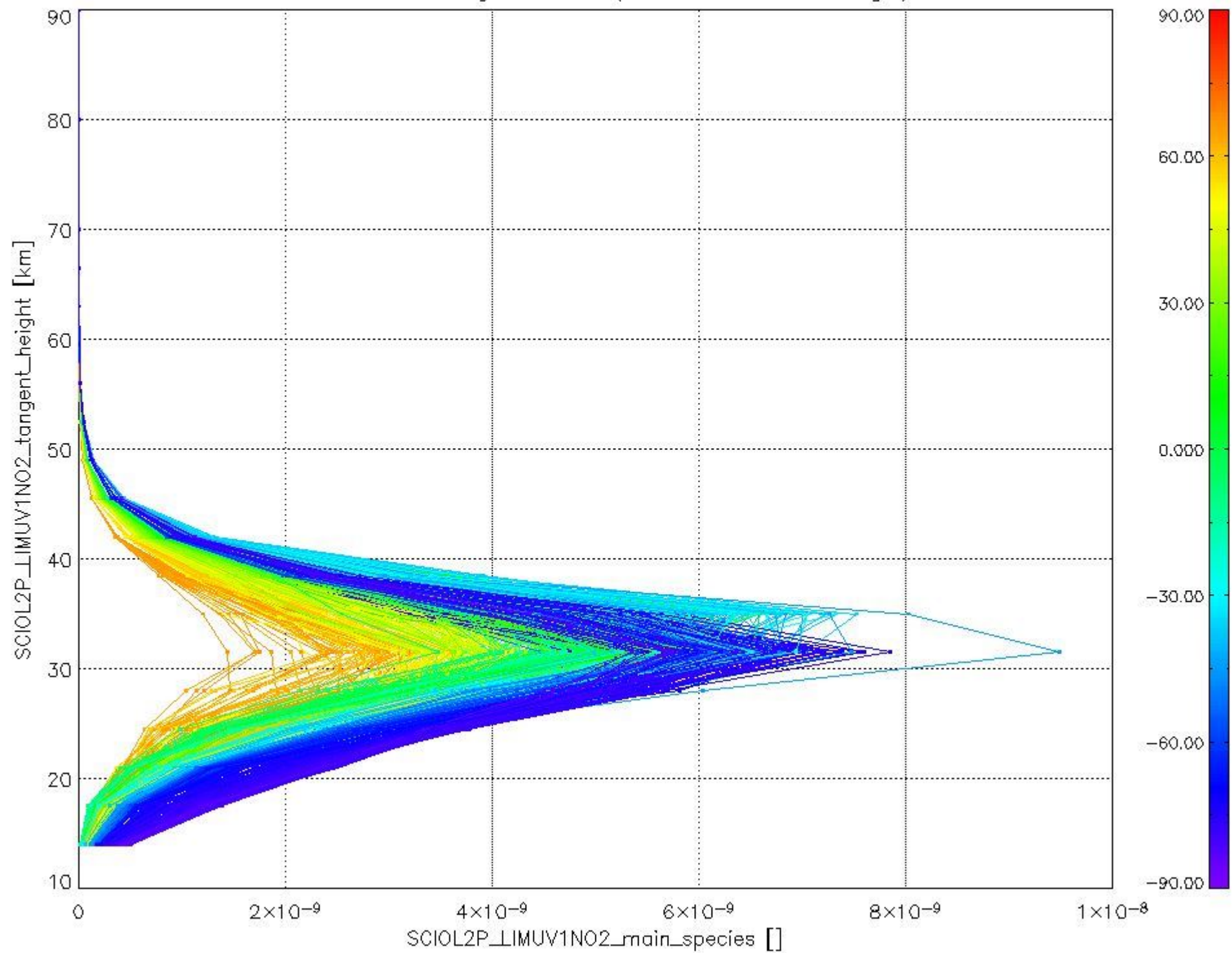
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



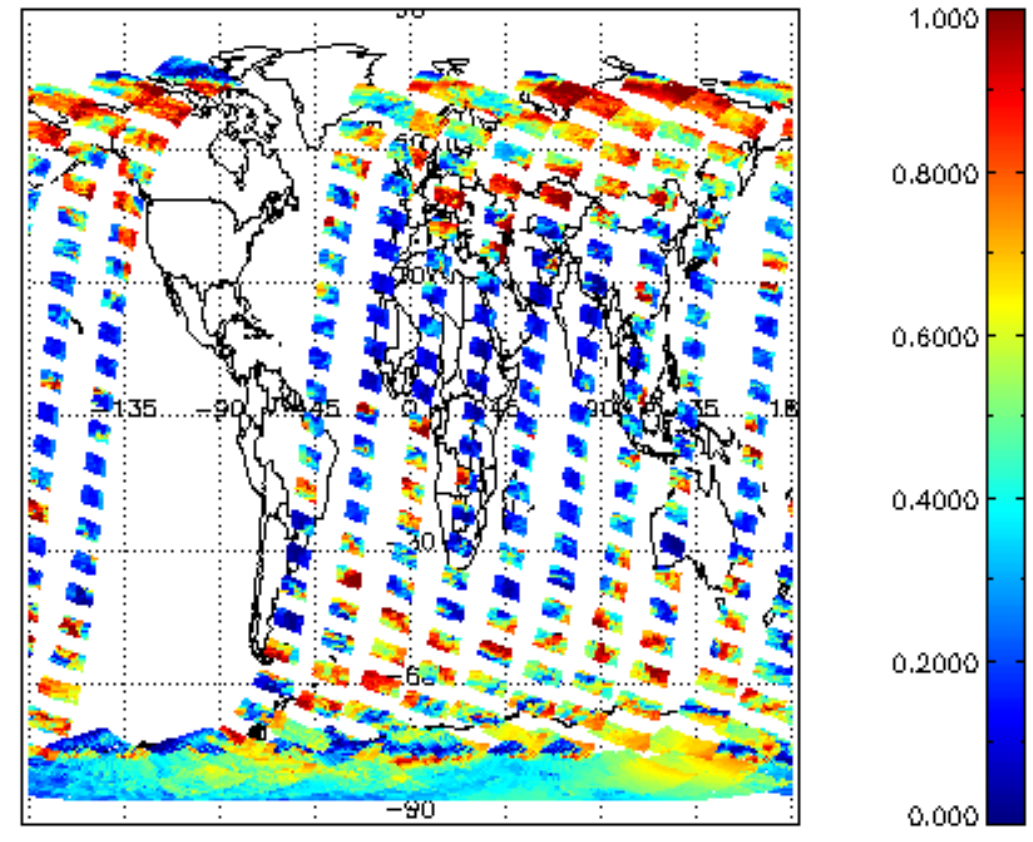
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



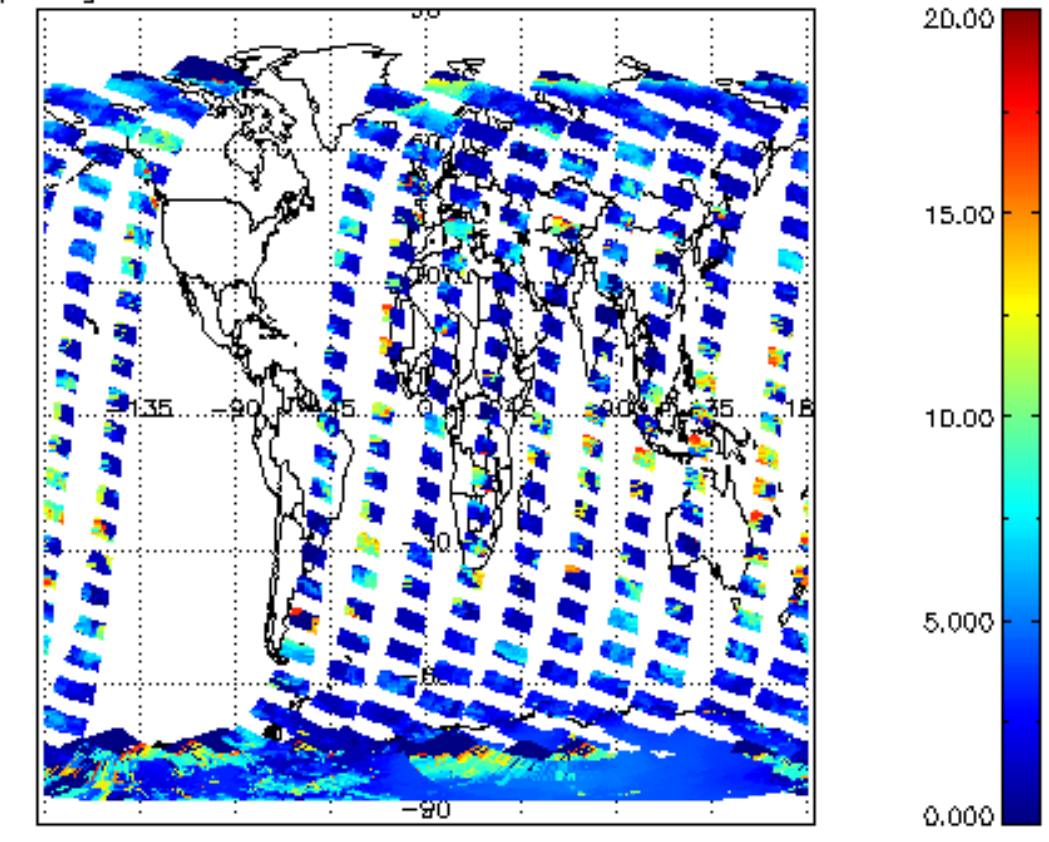
2.3 ADF monitoring

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

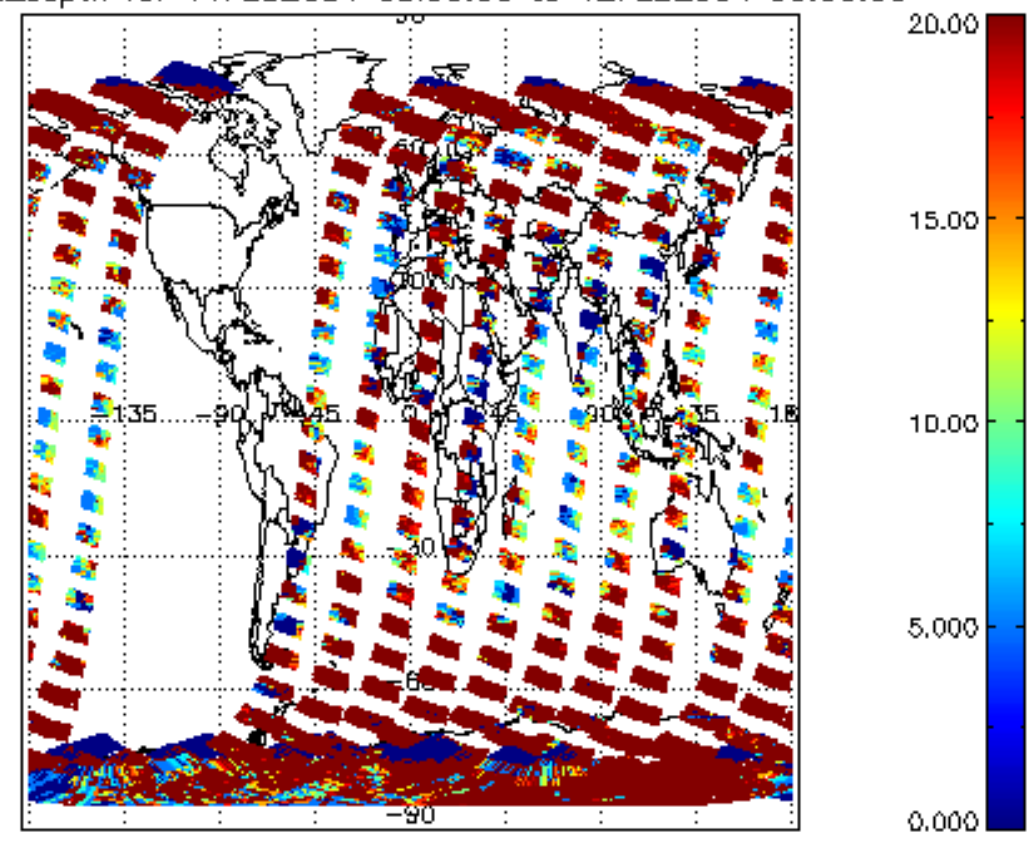
cl_frac for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



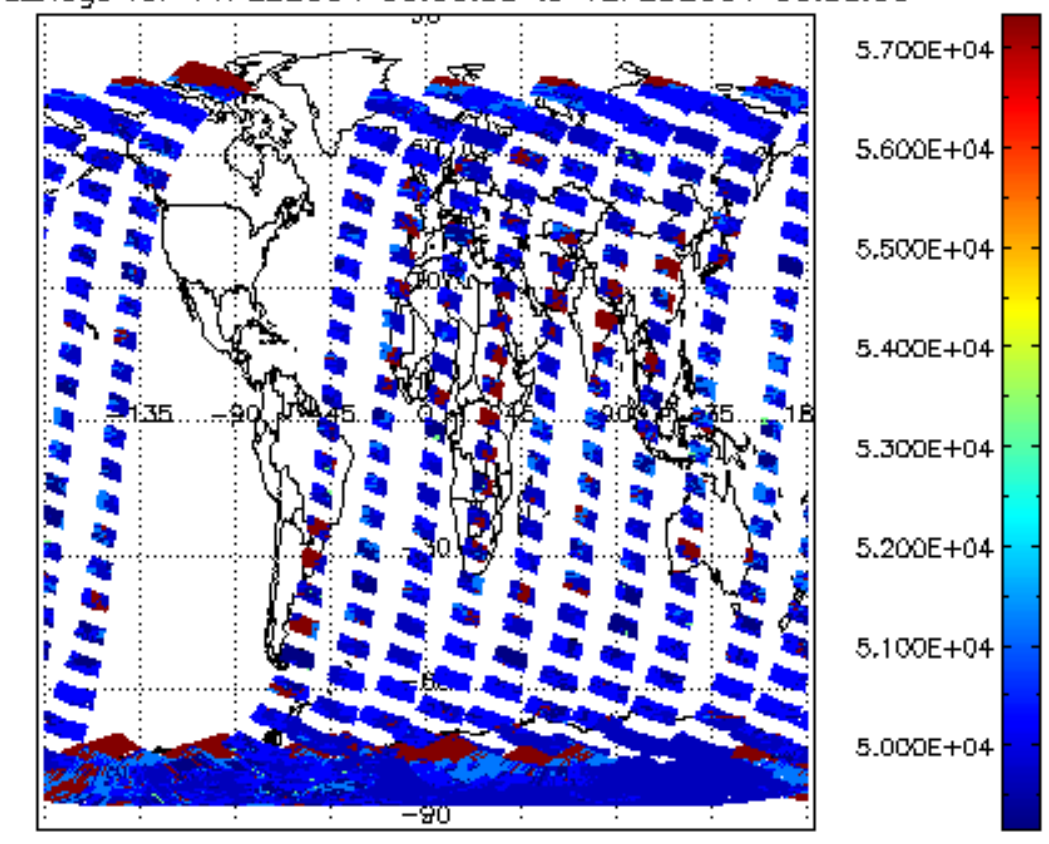
cl_top_height for 11FEB2004 00:00:00 to 12FEB2004 00:00:00

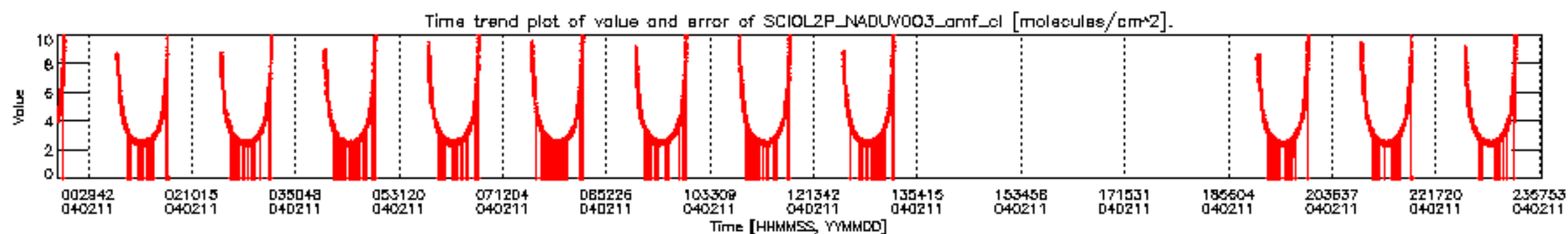
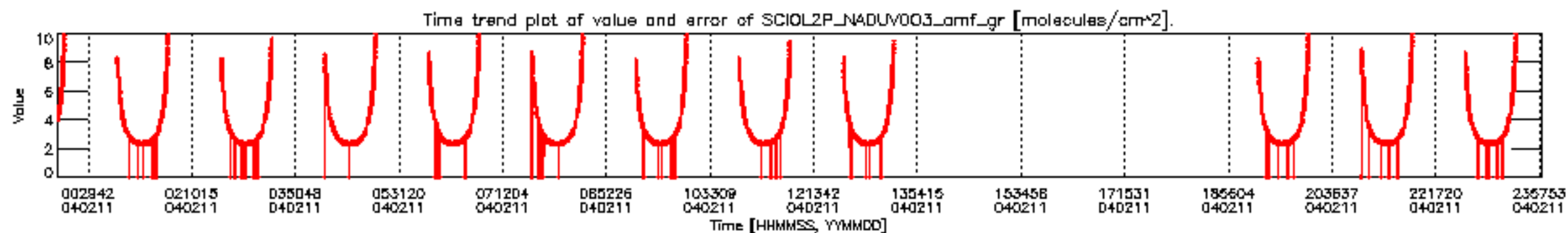
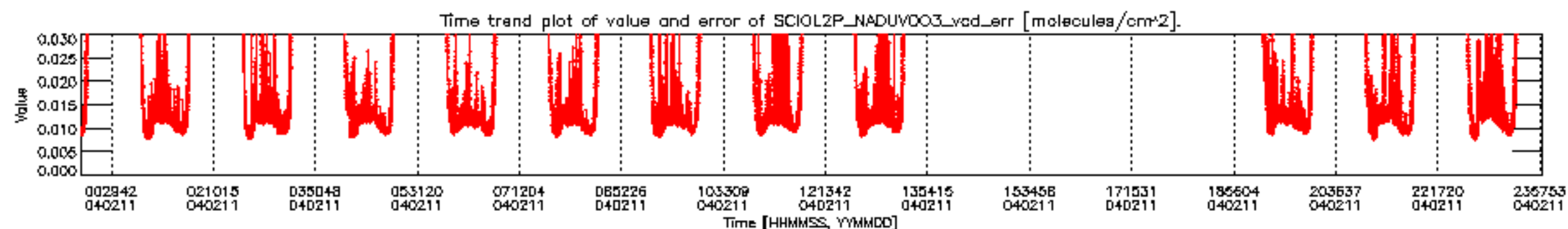
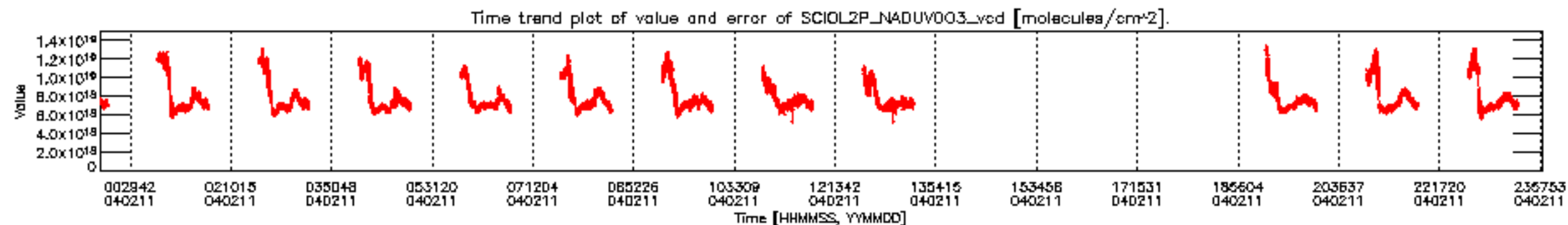


cl_opt_depth for 11FEB2004 00:00:00 to 12FEB2004 00:00:00

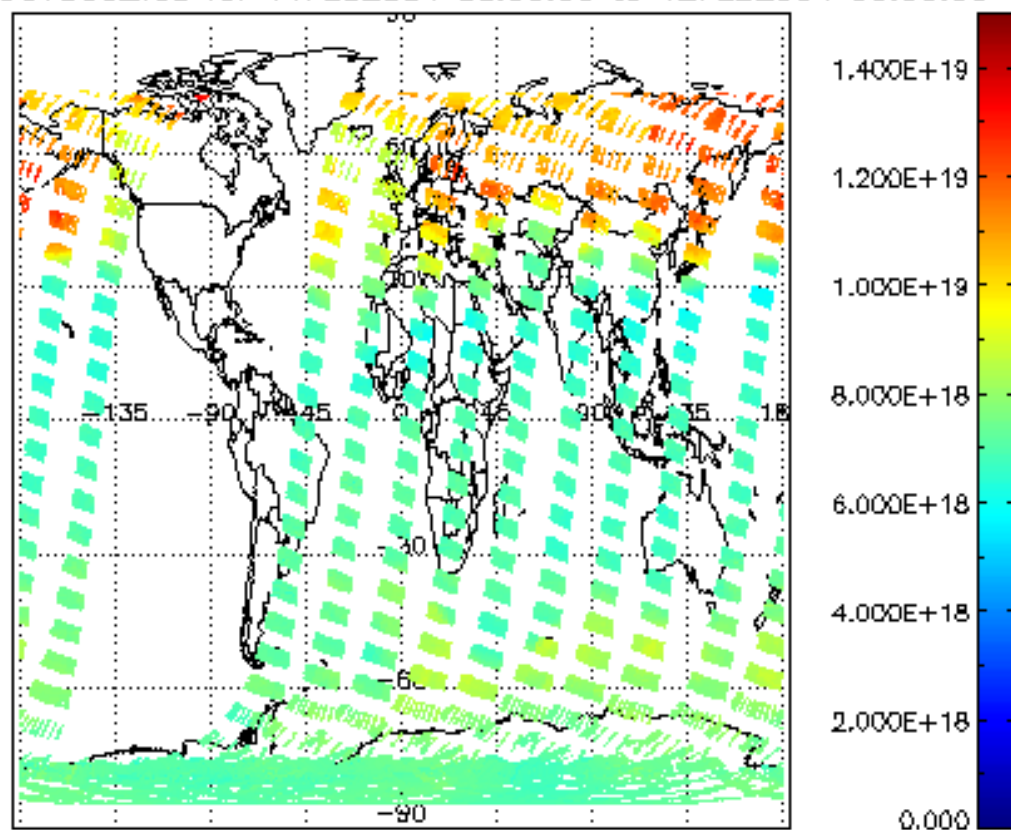


cloud_flags for 11FEB2004 00:00:00 to 12FEB2004 00:00:00

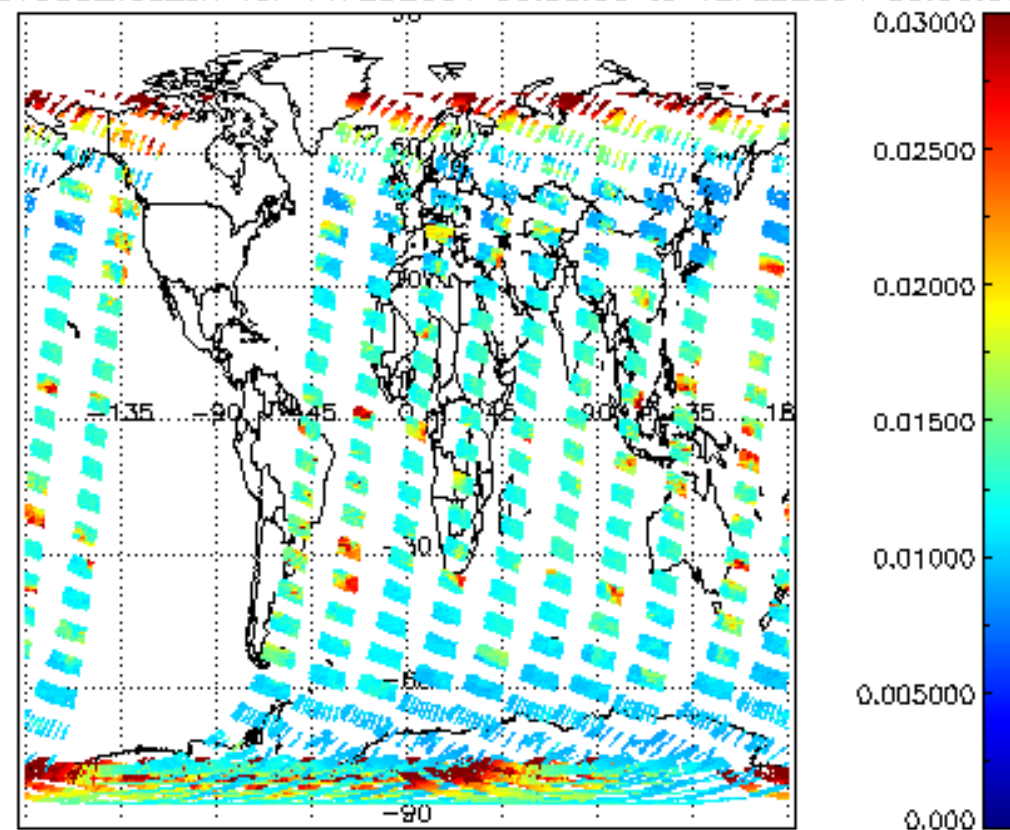




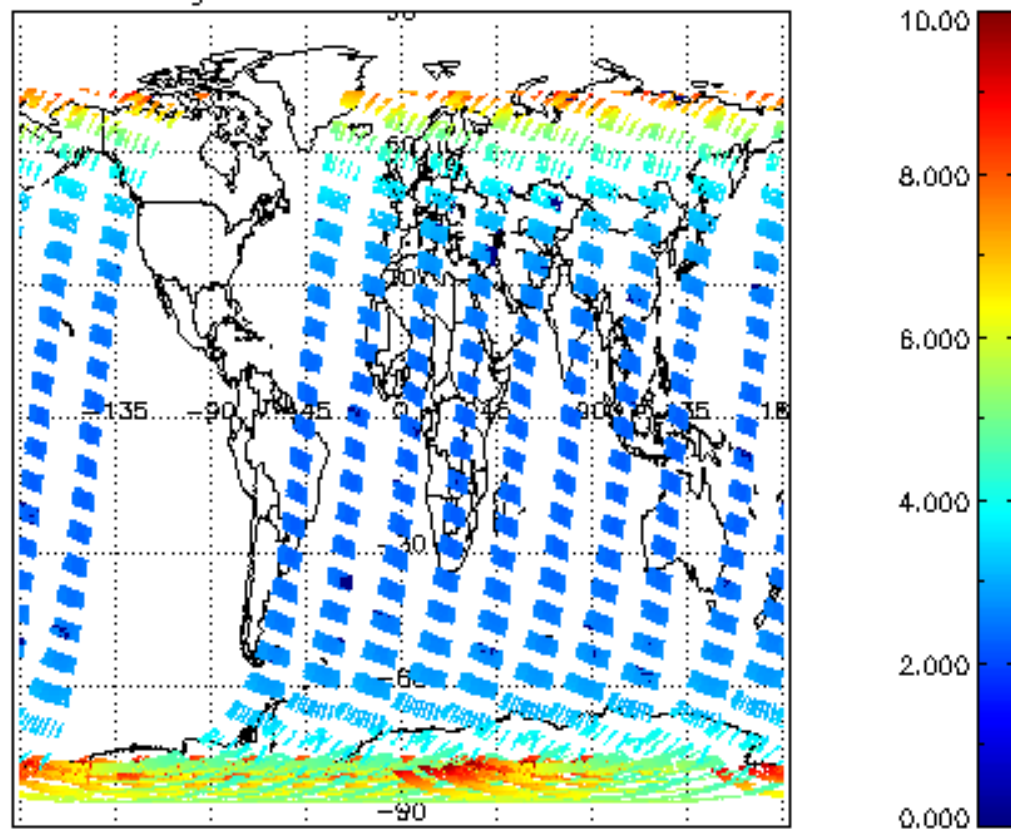
SCIOL2P_NADUV003_vcd for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



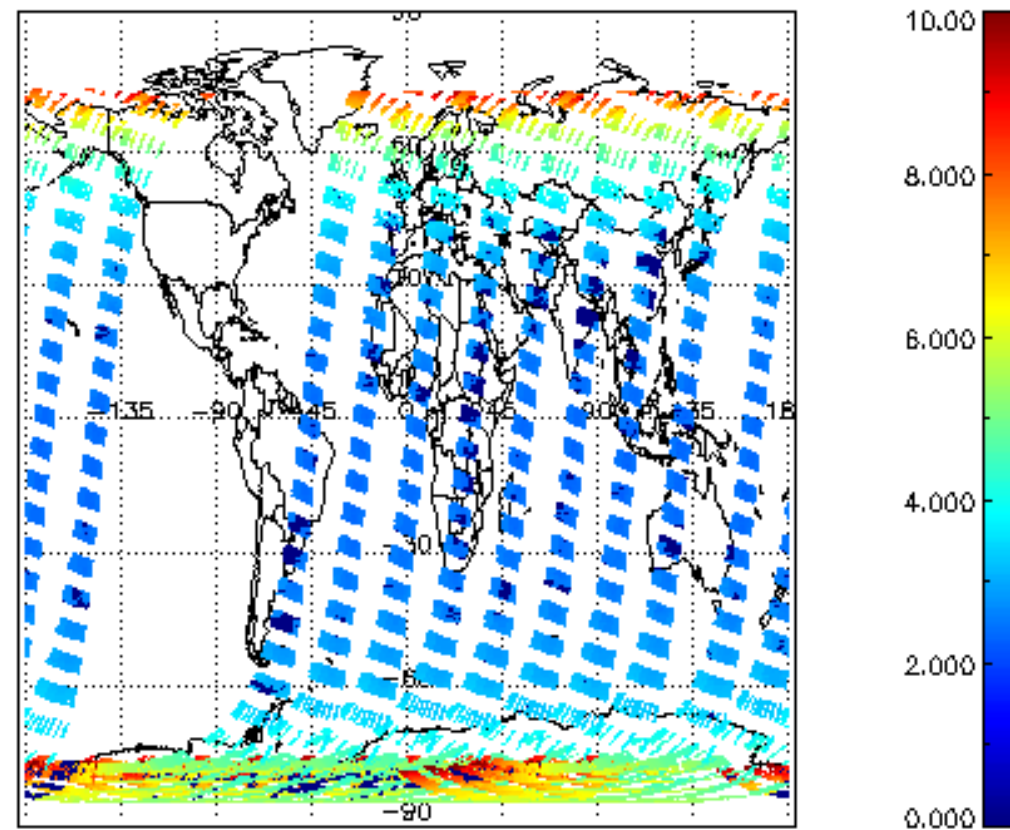
SCIOL2P_NADUV003_vcd_err for 11FEB2004 00:00:00 to 12FEB2004 00:00:00

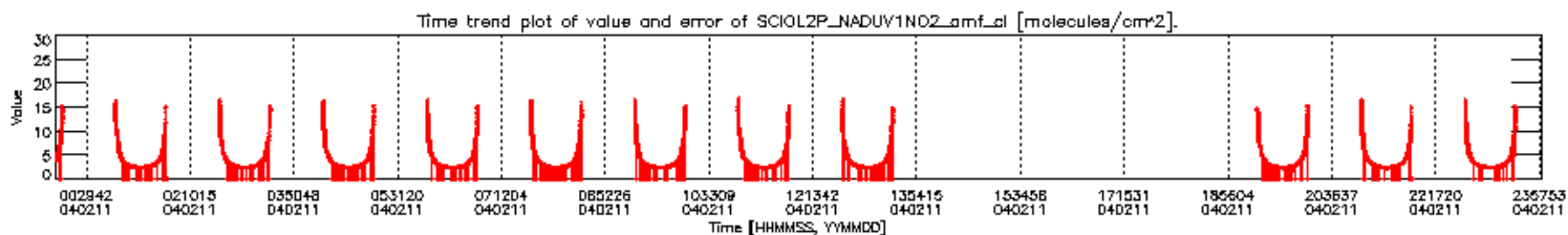
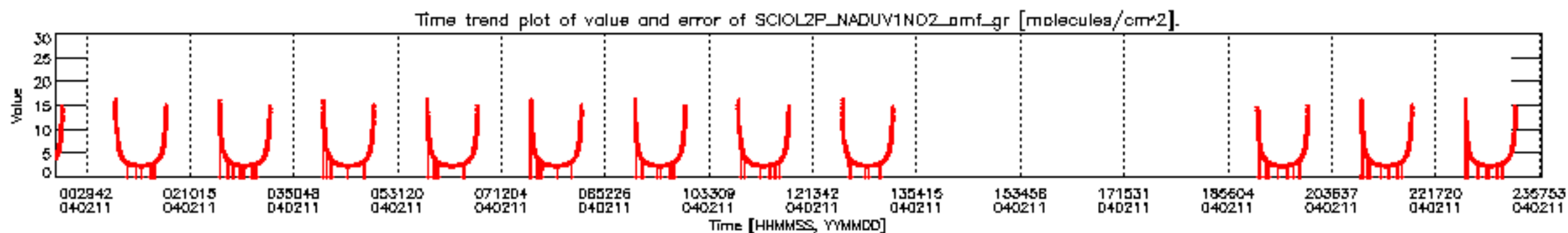
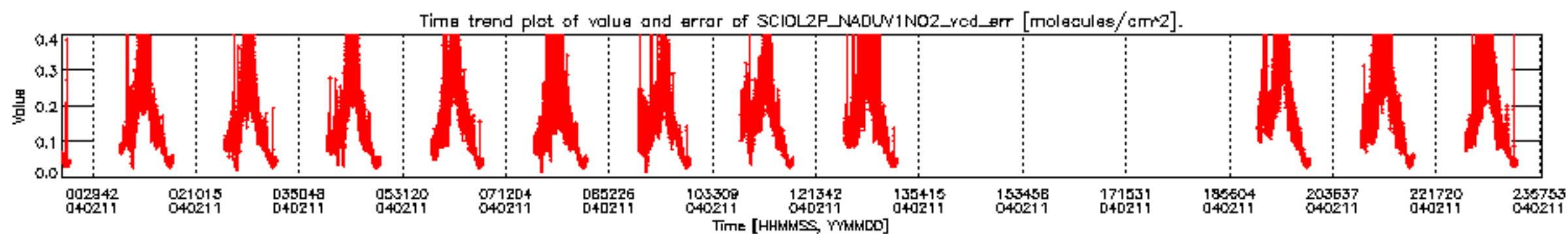
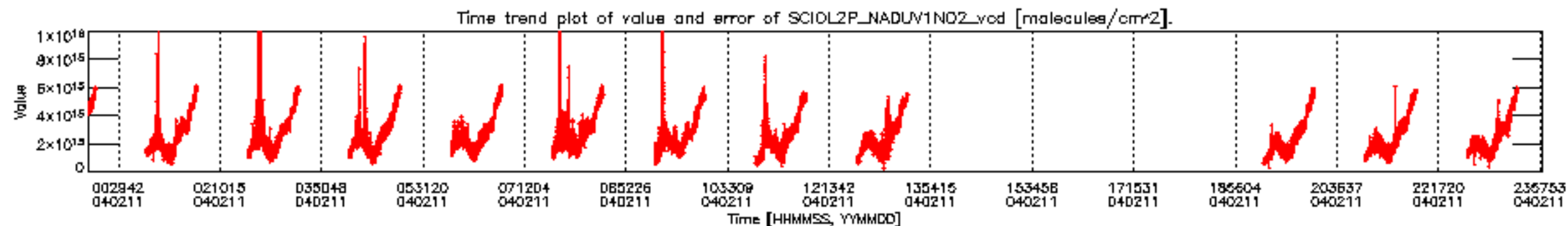


SCIOL2P_NADUV003_amf_gr for 11FEB2004 00:00:00 to 12FEB2004 00:00:00

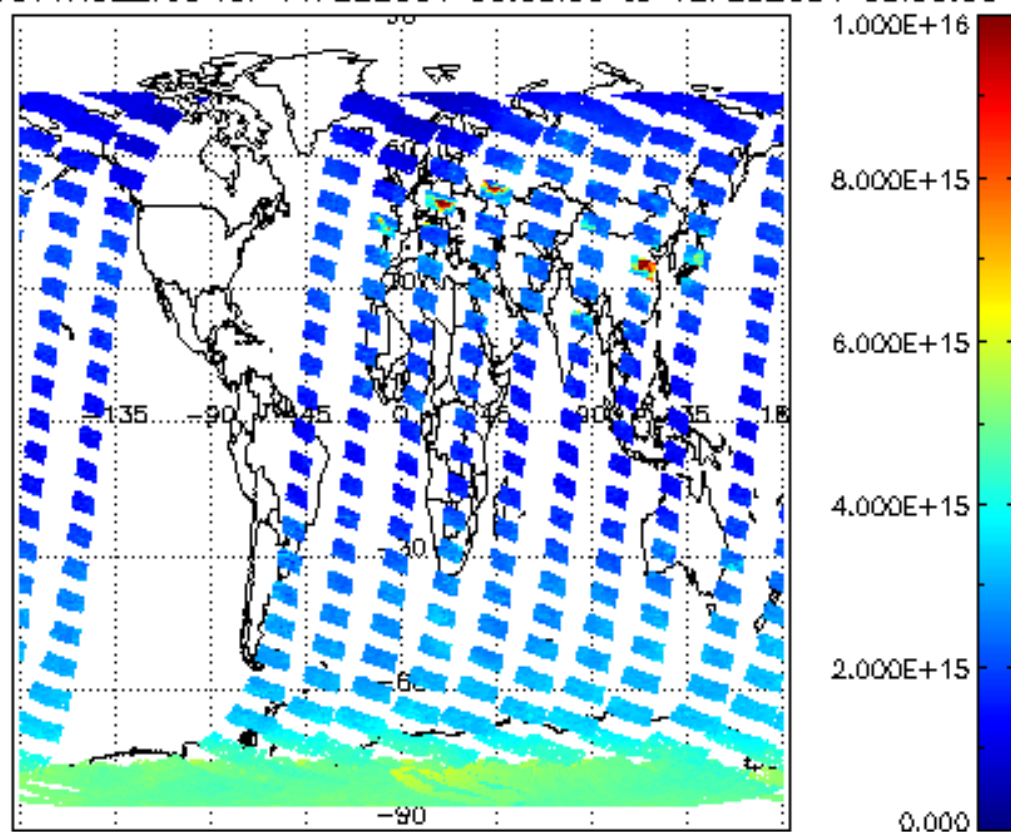


SCIOL2P_NADUV003_amf_cl for 11FEB2004 00:00:00 to 12FEB2004 00:00:00

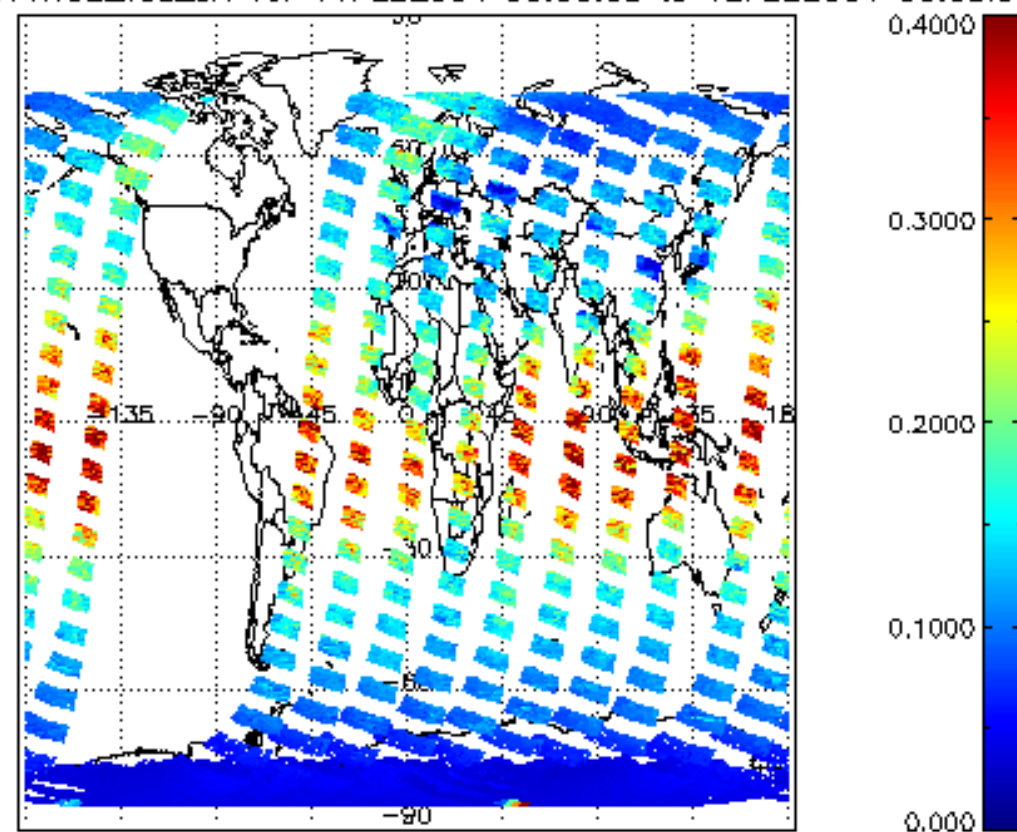




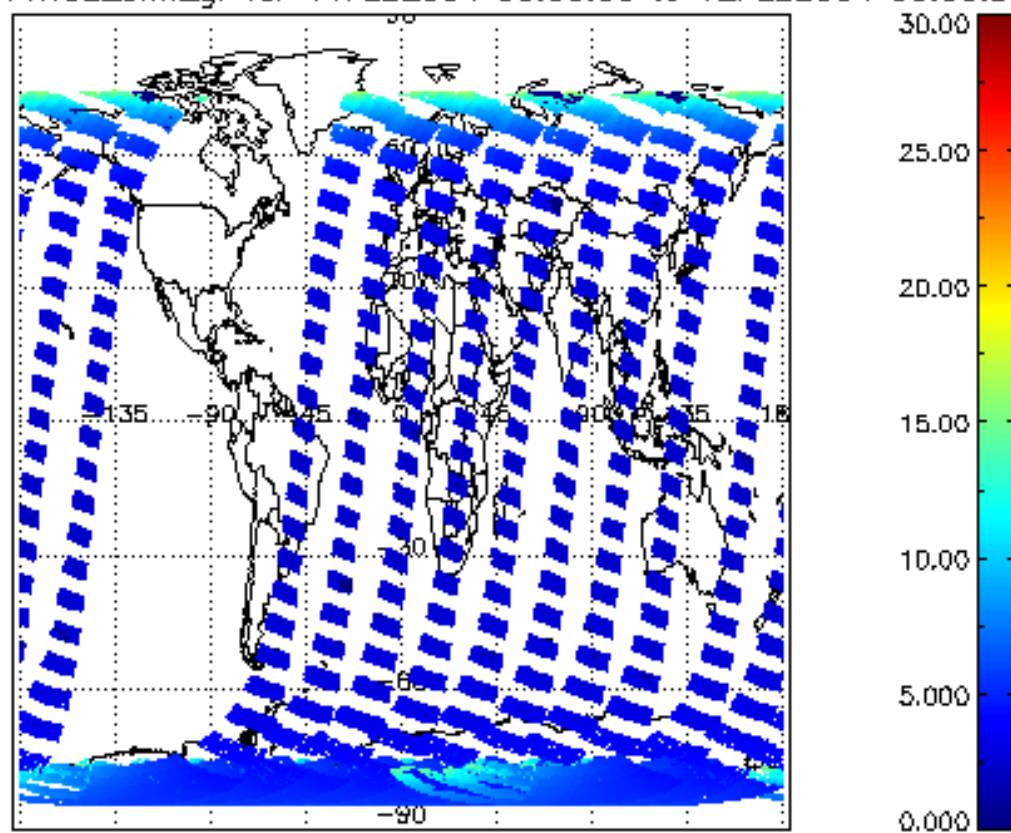
SCIOL2P_NADUV1NO2_vcd for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



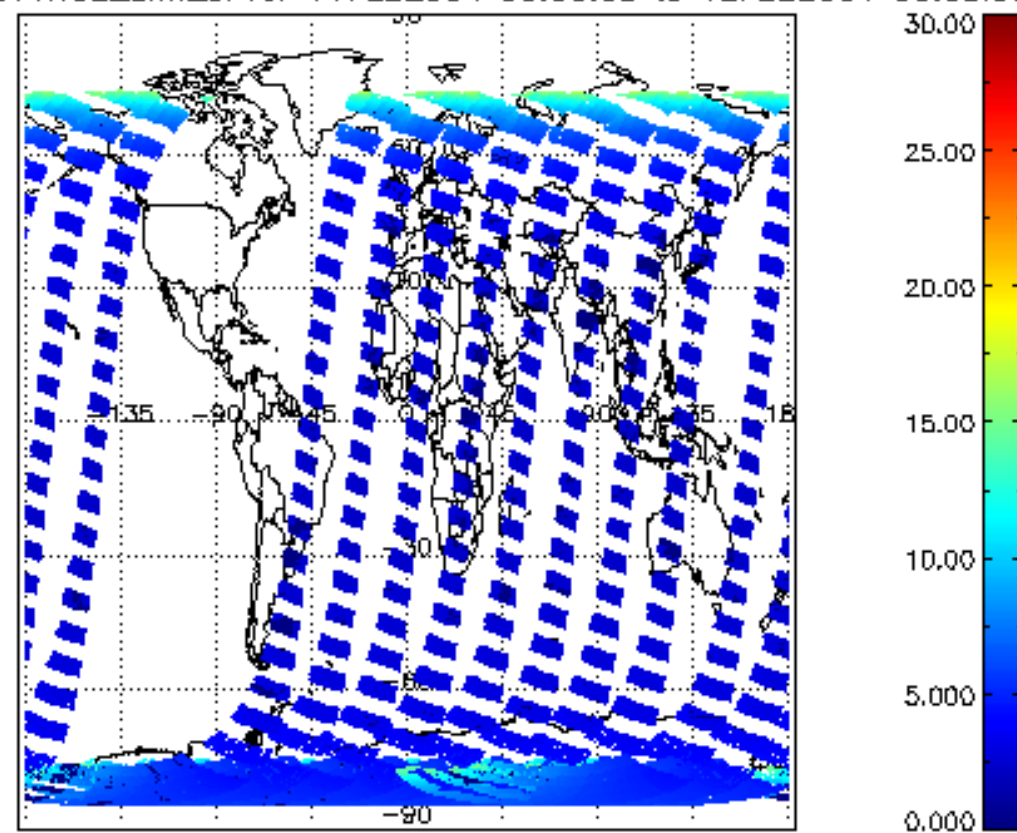
SCIOL2P_NADUV1NO2_vcd_err for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



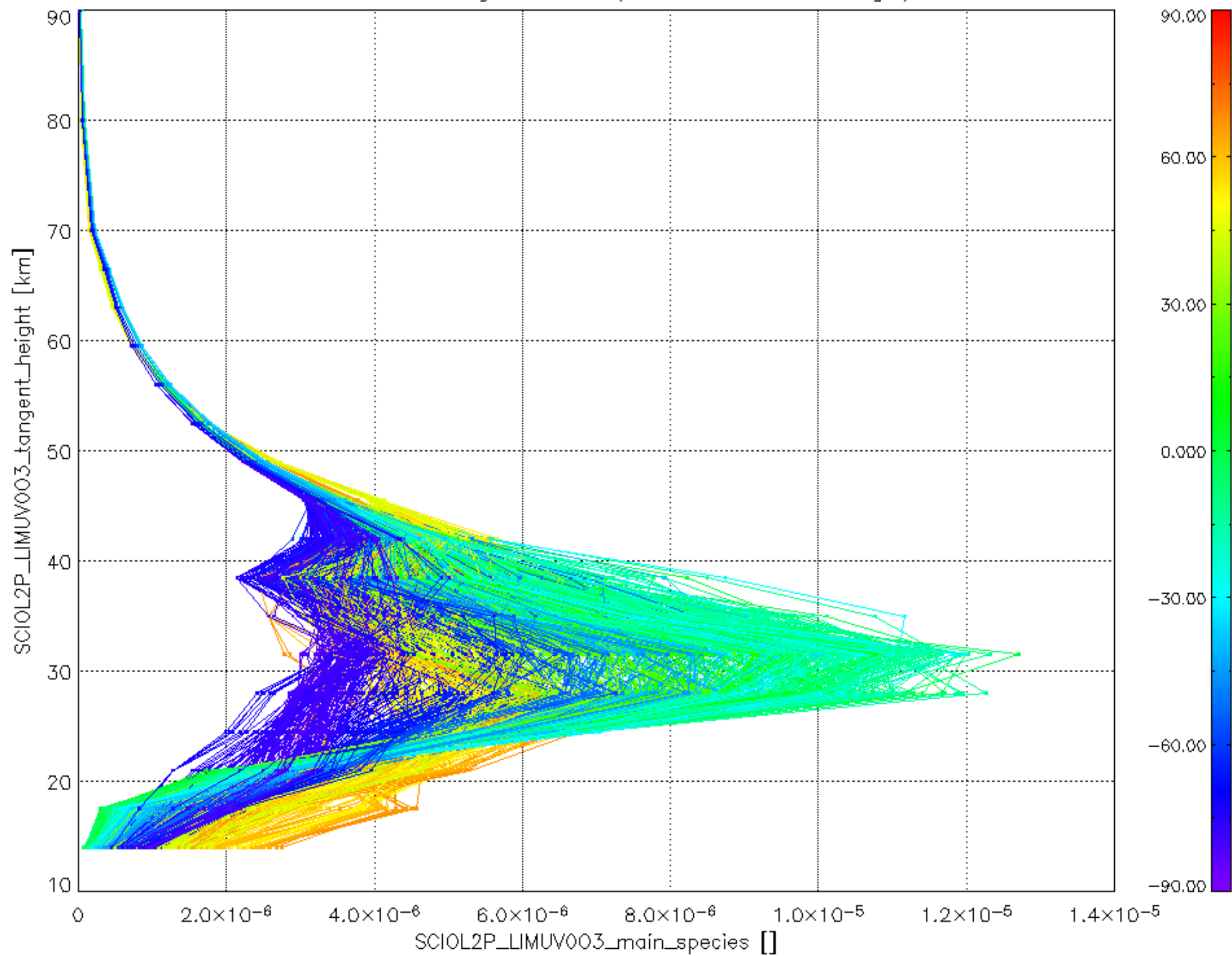
SCIOL2P_NADUV1NO2_amf_gr for 11FEB2004 00:00:00 to 12FEB2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 11FEB2004 00:00:00 to 12FEB2004 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).

