

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	12AUG2008 08:32:24
Data source version	SCIA-OL/3.01-R
Processing scope for products	02APR2004 00:00:00 to 03APR2004 00:00:00
Start time of first product within scope	01APR2004 23:02:38
Stop time of last product within scope	03APR2004 01:03:09
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.

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__2PRDPA20040401_230238_000032652025_00345_10920_7400.N1	01APR2004 23:02:38	01APR2004 23:57:04	0	GOOD
1	SCI_OL__2PRDPA20040402_004314_000032652025_00346_10921_7557.N1	02APR2004 00:43:14	02APR2004 01:37:40	0	GOOD
2	SCI_OL__2PRDPA20040402_022349_000032652025_00347_10922_7588.N1	02APR2004 02:23:49	02APR2004 03:18:15	0	GOOD
3	SCI_OL__2PRDPA20040402_040425_000031822025_00348_10923_7537.N1	02APR2004 04:04:25	02APR2004 04:57:27	0	GOOD
4	SCI_OL__2PRDPA20040402_054500_000031822025_00349_10924_7567.N1	02APR2004 05:45:00	02APR2004 06:38:03	0	GOOD
5	SCI_OL__2PRDPA20040402_072536_000031822025_00350_10925_7261.N1	02APR2004 07:25:36	02APR2004 08:18:38	0	GOOD
6	SCI_OL__2PRDPA20040402_090611_000031822025_00351_10926_7364.N1	02APR2004 09:06:11	02APR2004 09:59:14	0	GOOD
7	SCI_OL__2PRDPA20040402_104647_000031822025_00352_10927_7201.N1	02APR2004 10:46:47	02APR2004 11:39:49	0	GOOD
8	SCI_OL__2PRDPA20040402_122722_000031822025_00353_10928_7264.N1	02APR2004 12:27:22	02APR2004 13:20:24	0	GOOD
9	SCI_OL__2PRDPA20040402_140758_000031822025_00354_10929_7543.N1	02APR2004 14:07:58	02APR2004 15:01:00	0	GOOD
10	SCI_OL__2PRDPA20040402_154833_000031822025_00355_10930_7483.N1	02APR2004 15:48:33	02APR2004 16:41:35	0	GOOD
11	SCI_OL__2PRDPA20040402_172919_000031902025_00356_10931_7503.N1	02APR2004 17:29:19	02APR2004 18:22:29	0	GOOD
12	SCI_OL__2PRDPA20040402_191006_000031822025_00357_10932_7471.N1	02APR2004 19:10:06	02APR2004 20:03:08	0	GOOD
13	SCI_OL__2PRDPA20040402_205020_000030982025_00358_10933_7349.N1	02APR2004 20:50:20	02APR2004 21:41:58	0	GOOD
14	SCI_OL__2PRDPA20040402_223055_000030982025_00359_10934_7241.N1	02APR2004 22:30:55	02APR2004 23:22:34	0	GOOD
15	SCI_OL__2PRDPA20040403_001131_000030982025_00360_10935_7244.N1	03APR2004 00:11:31	03APR2004 01:03:09	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: 106360

Total number of cloud data DSRs with good quality flag (=0): 106360 (100.0 %)

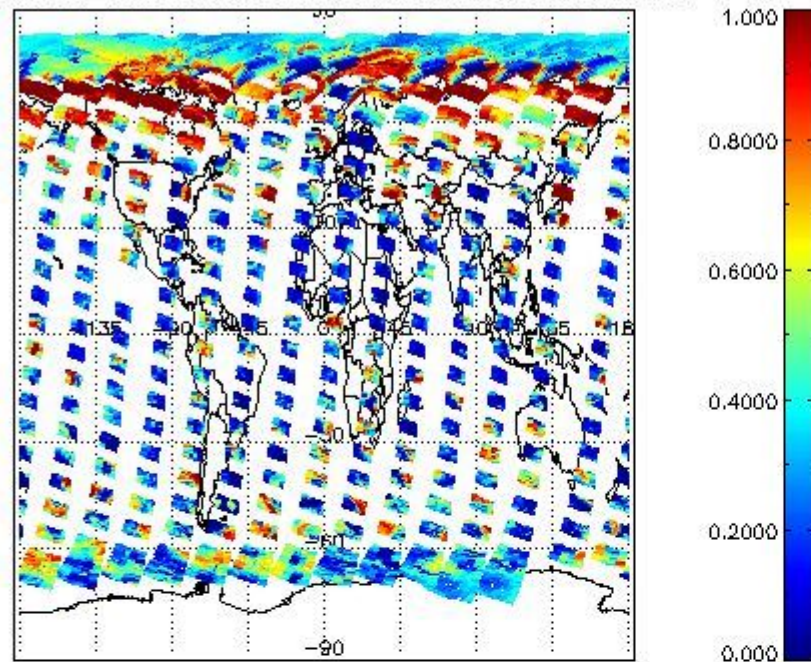
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	106360	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	106360	0.21263	0.25000	0.12500	0.50000	0.074374	s
CL_FRAC	106360	0.43408	0.38885	0.0000	1.0000	0.31756	-
CL_FRAC_ERR	106360	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	106360	6.8041	8.0000	4.0000	16.000	2.3800	
PMD_READ_CL[0]	106360	0.58467	0.0000	0.0000	16.000	1.6932	-
PMD_READ_CL[1]	106360	0.67935	0.0000	0.0000	16.000	1.9155	-
CL_TOP_HEIGHT	97134	3.4648	1.6460	0.0000	17.000	3.6985	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	97134	54.693	43.298	0.0000	101.00	40.125	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	106360	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	106360	11000111	11000010	11000000	11100000	2661.6	flags
AERO_ABSO_IND	106360	0.83121	0.82725	-3.7781	11.719	1.1249	
AERO_IND_DIAG	106360	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	106360	01101111	11000000	00000000	11000000	24233.	flags

Time and geolocation plots:

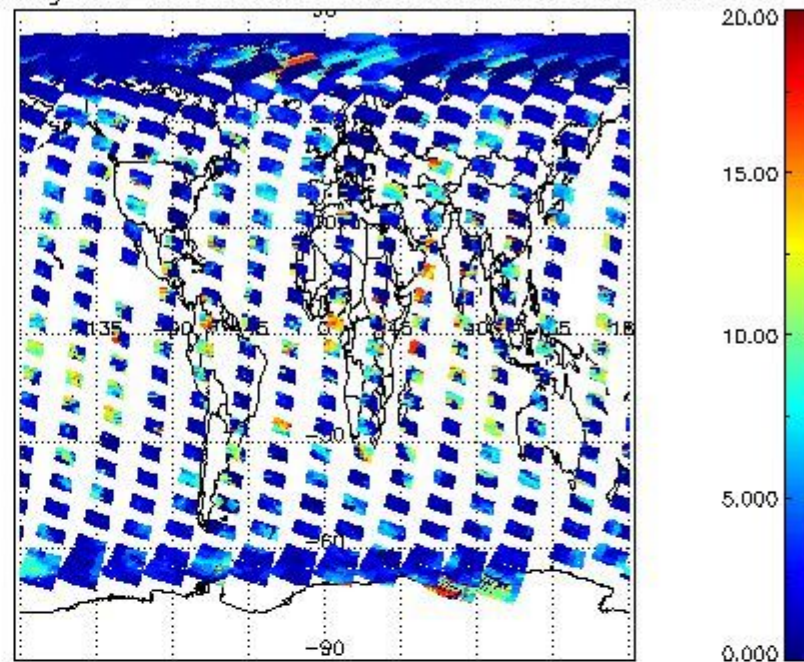
Plots are available for the following parameters:

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

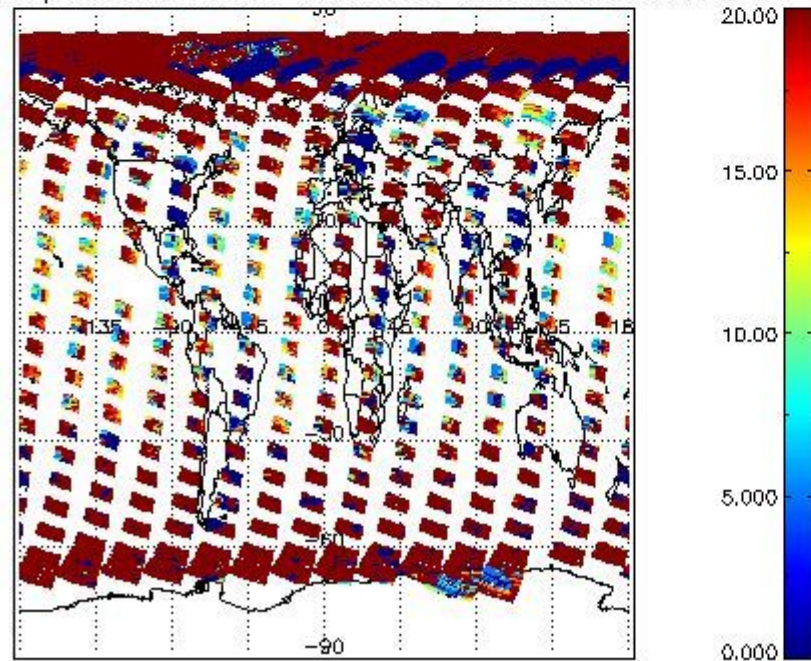
cL_frac for 02APR2004 00:00:00 to 03APR2004 00:00:00



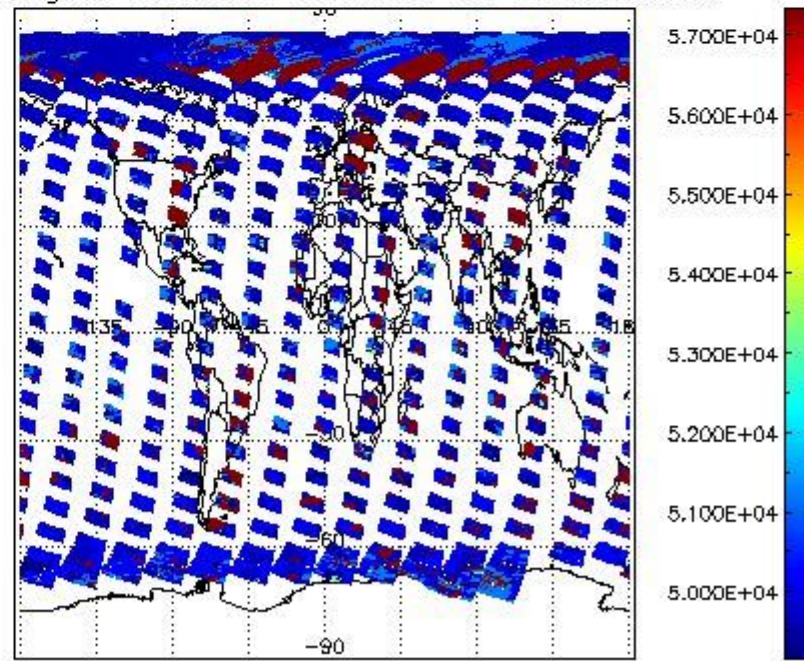
cL_top_height for 02APR2004 00:00:00 to 03APR2004 00:00:00



cL_opt_depth for 02APR2004 00:00:00 to 03APR2004 00:00:00



cloud_flags for 02APR2004 00:00:00 to 03APR2004 00:00:00



2.2.2 Nadir

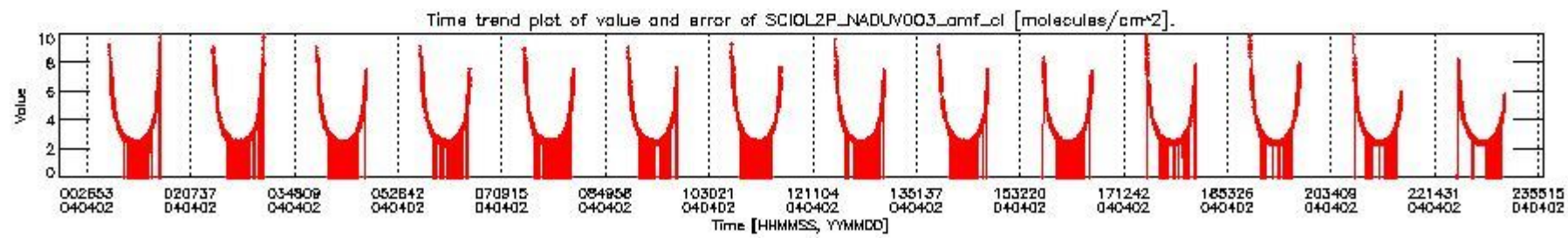
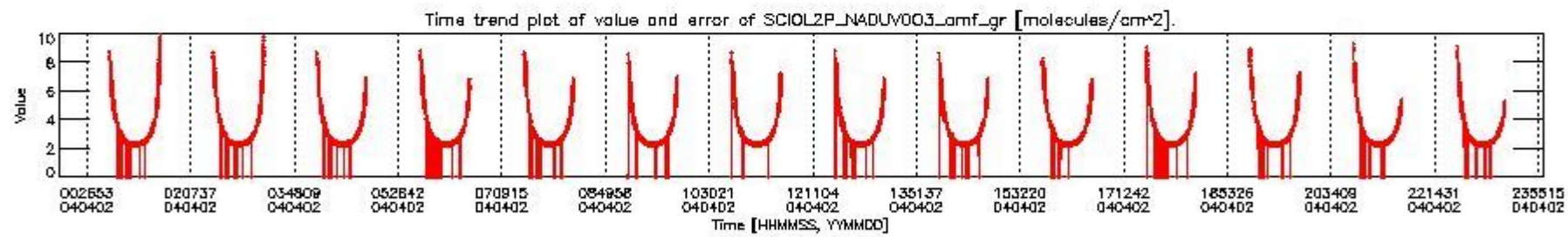
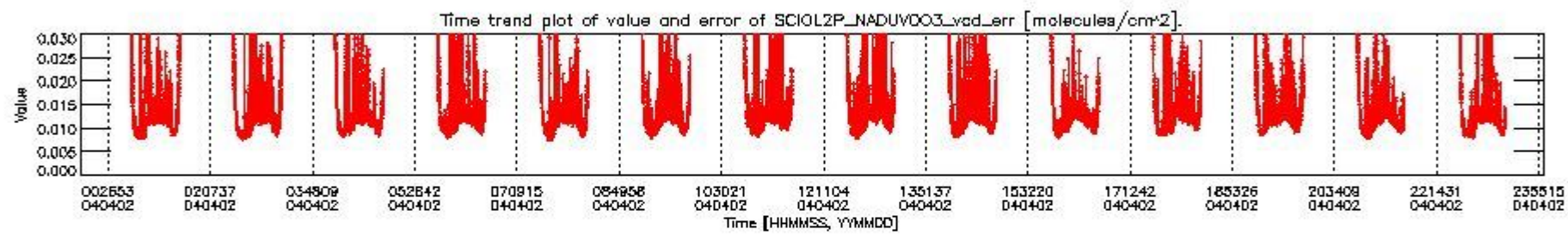
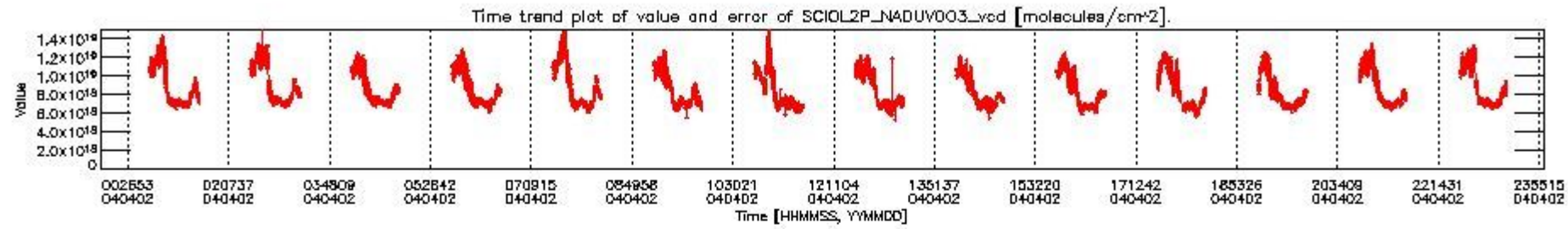
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

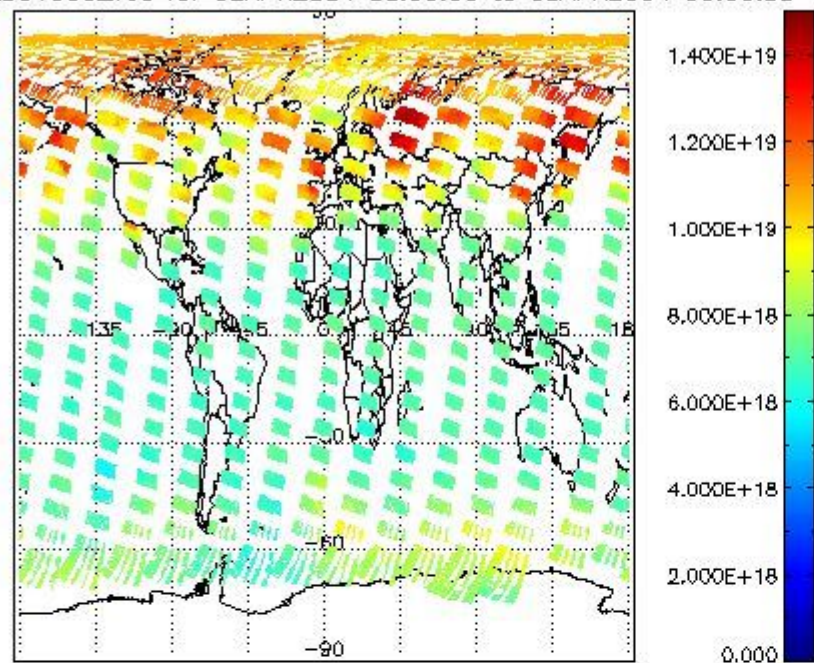
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

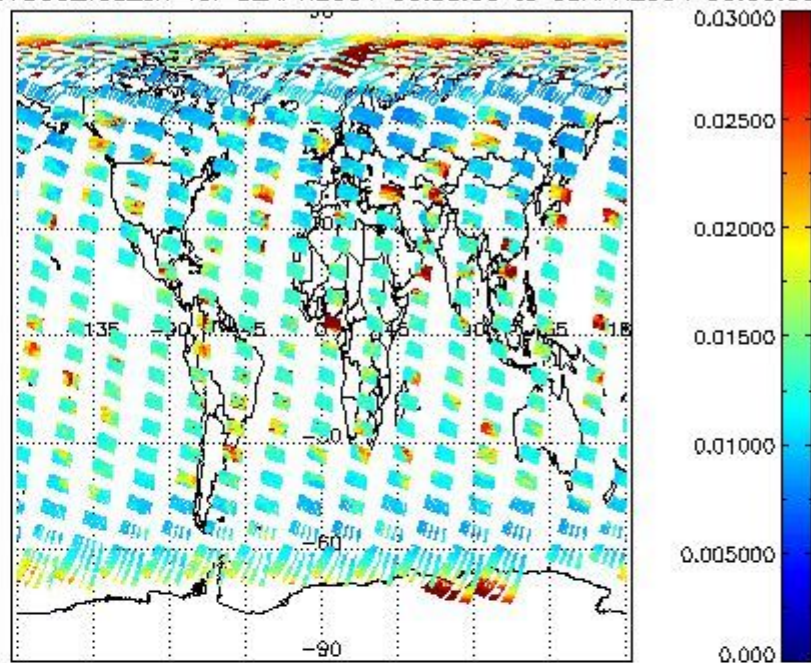
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



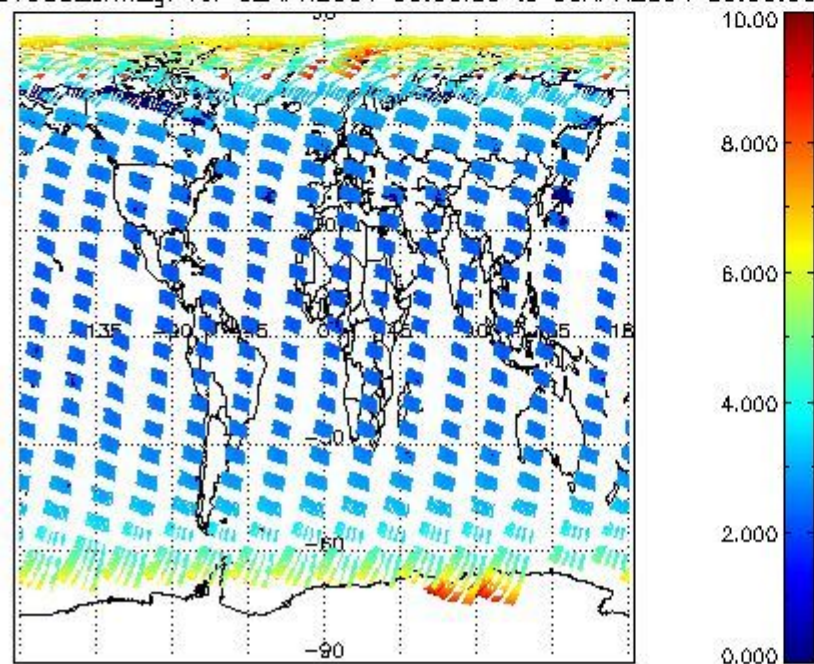
SCIOL2P_NADUV003_vcd for 02APR2004 00:00:00 to 03APR2004 00:00:00



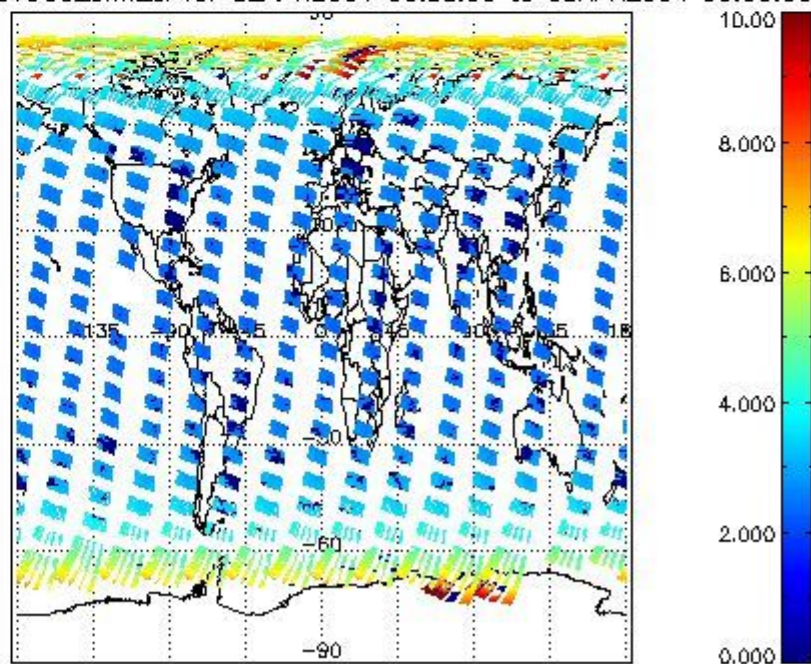
SCIOL2P_NADUV003_vcd_err for 02APR2004 00:00:00 to 03APR2004 00:00:00

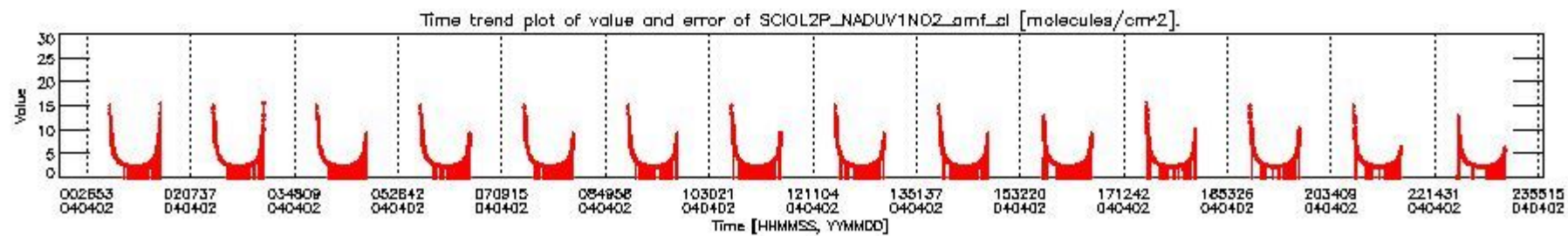
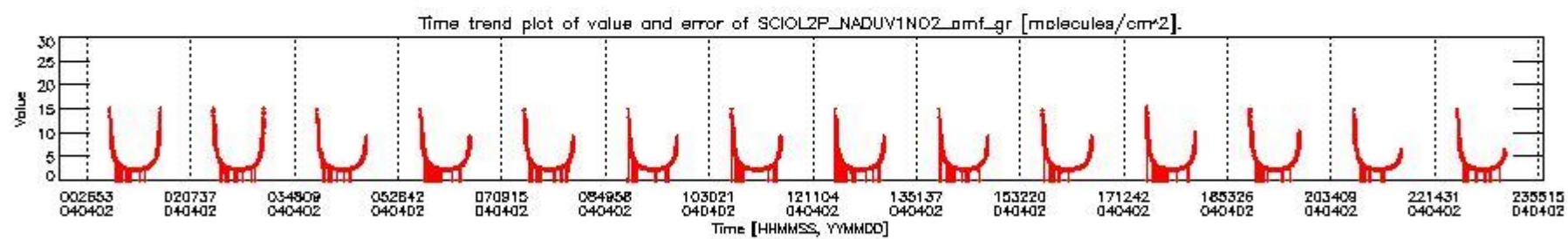
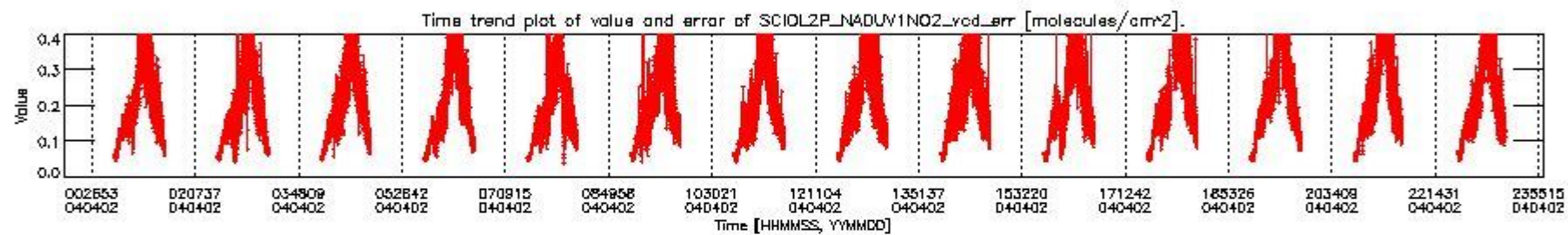
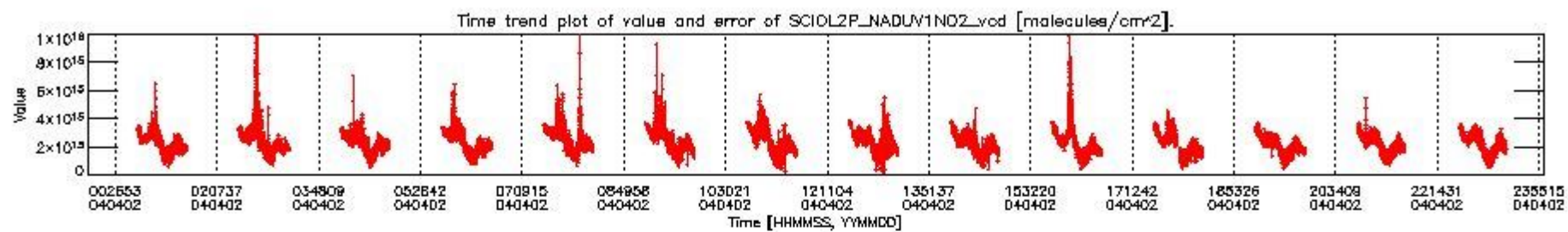


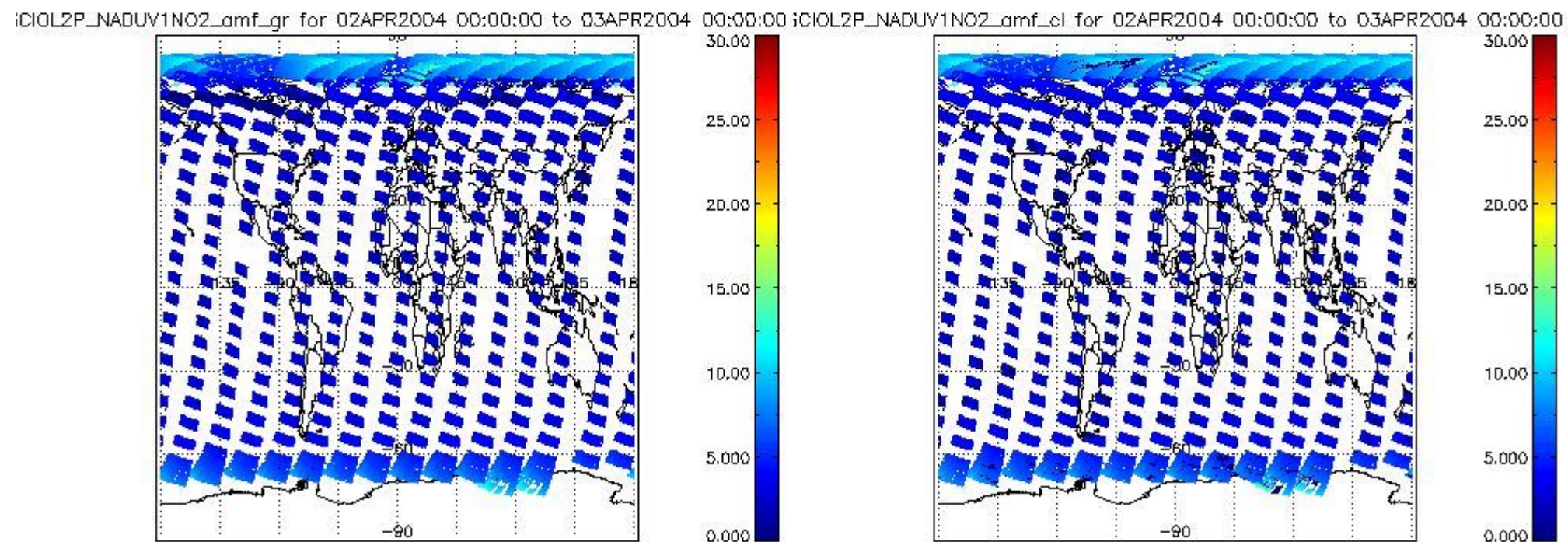
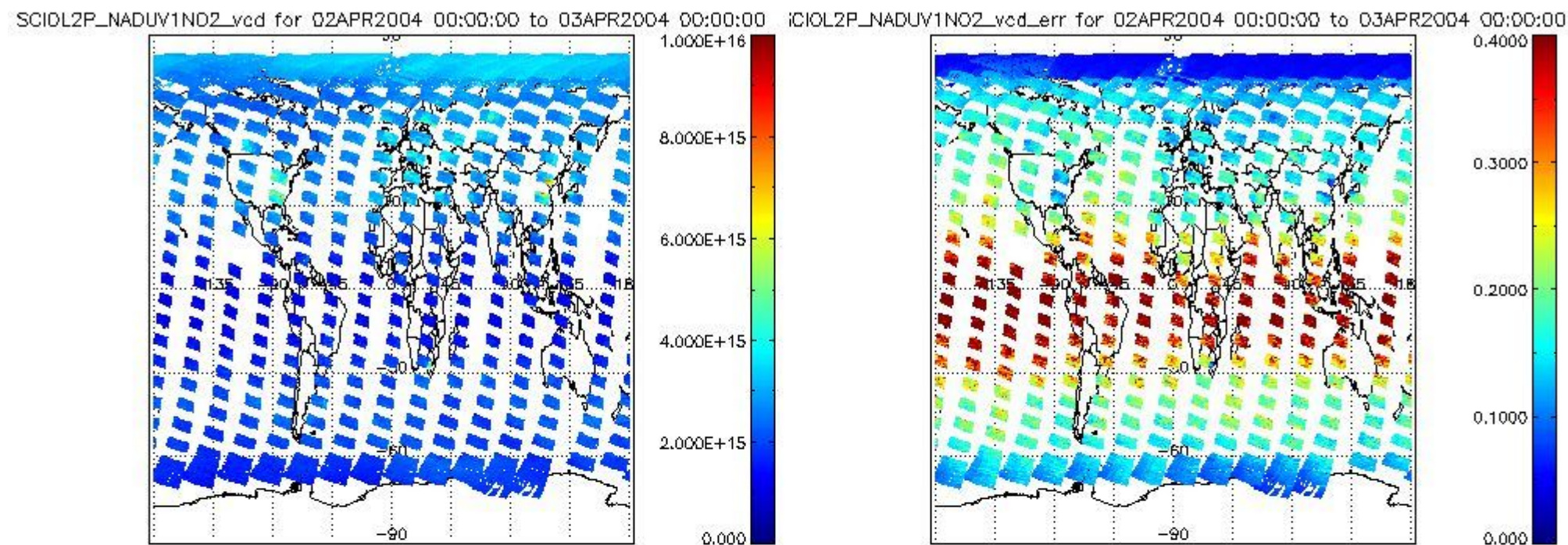
SCIOL2P_NADUV003_amf_gr for 02APR2004 00:00:00 to 03APR2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 02APR2004 00:00:00 to 03APR2004 00:00:00







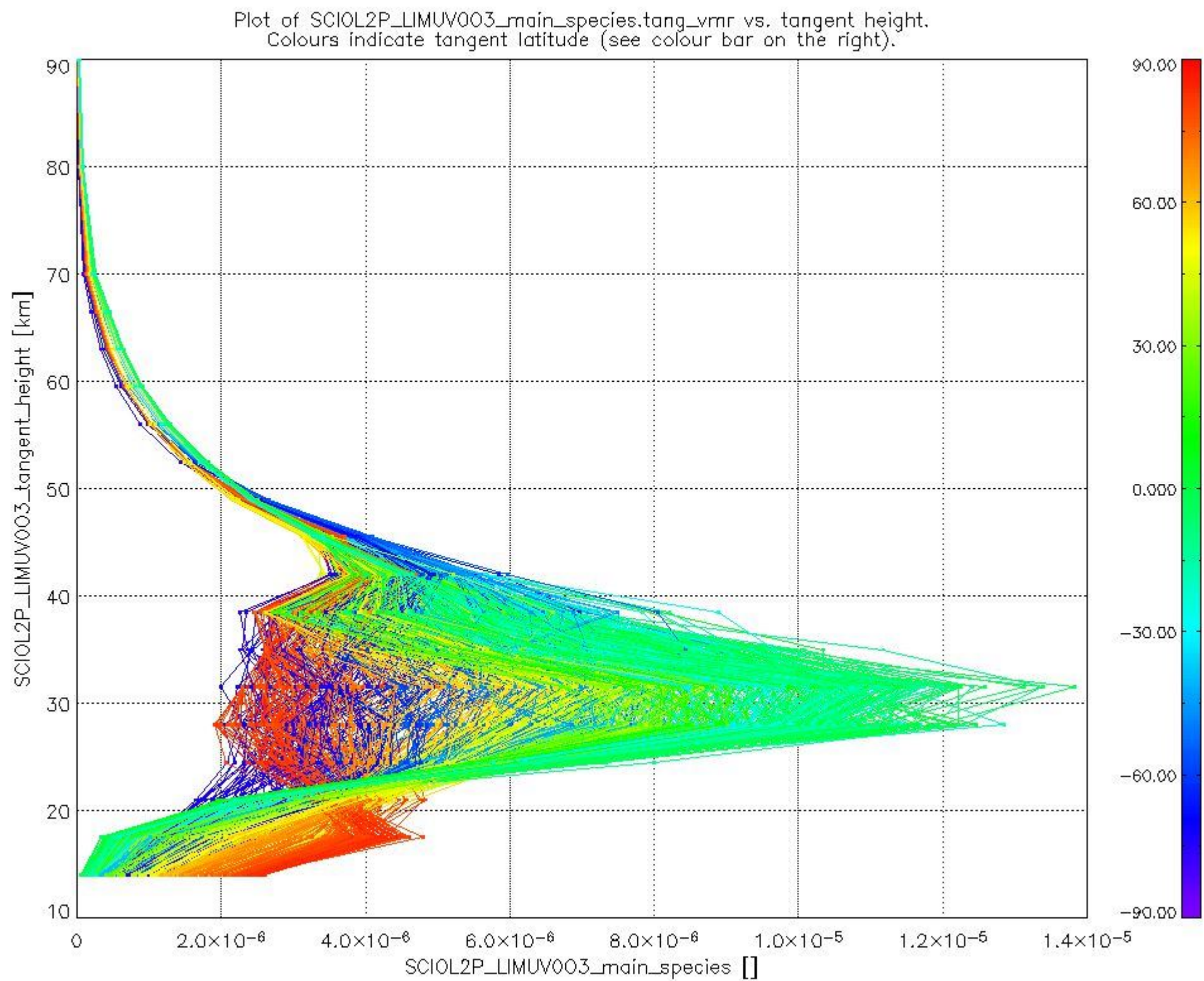
2.2.3 Limb

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

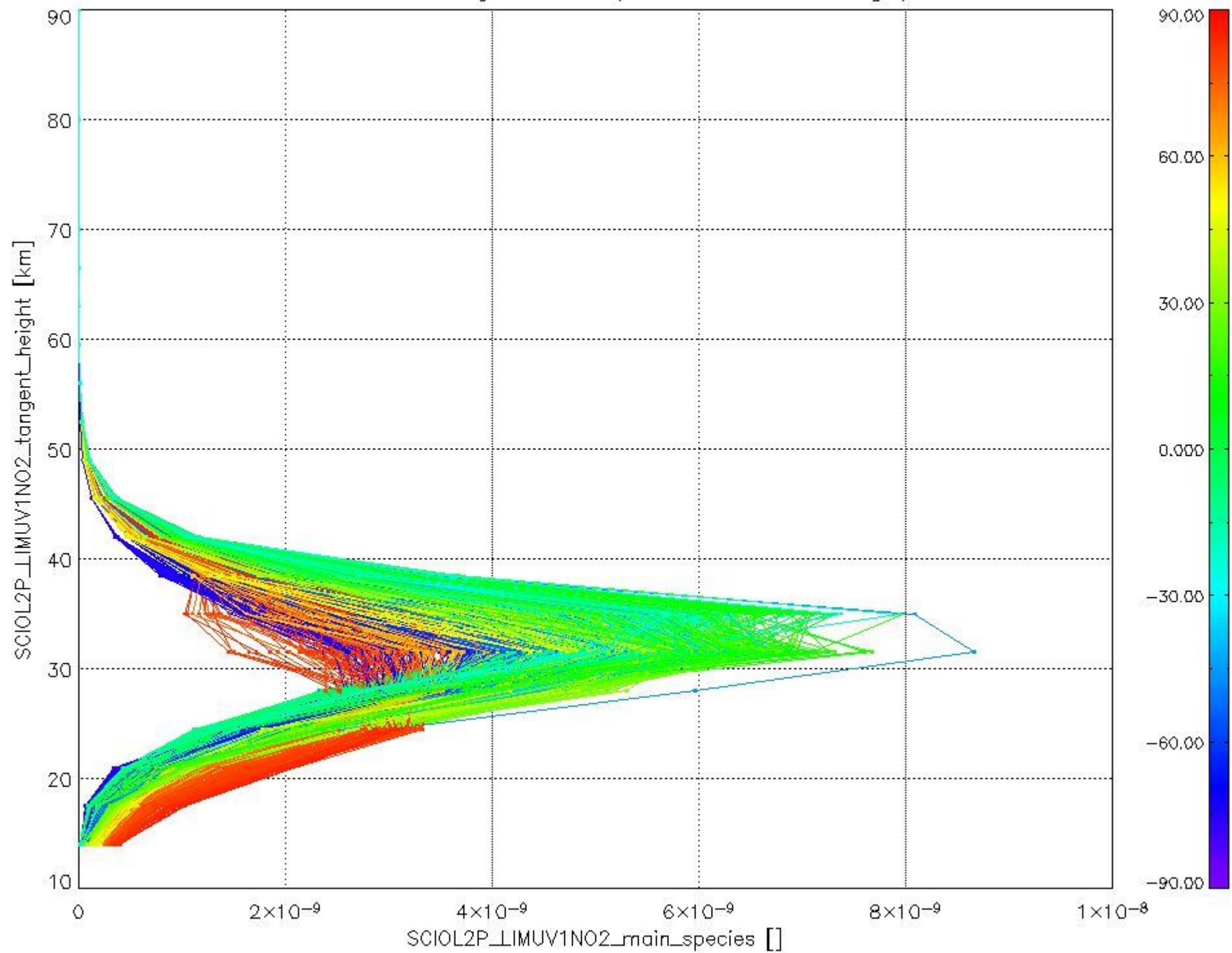
The following data items are currently included into this section:

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.



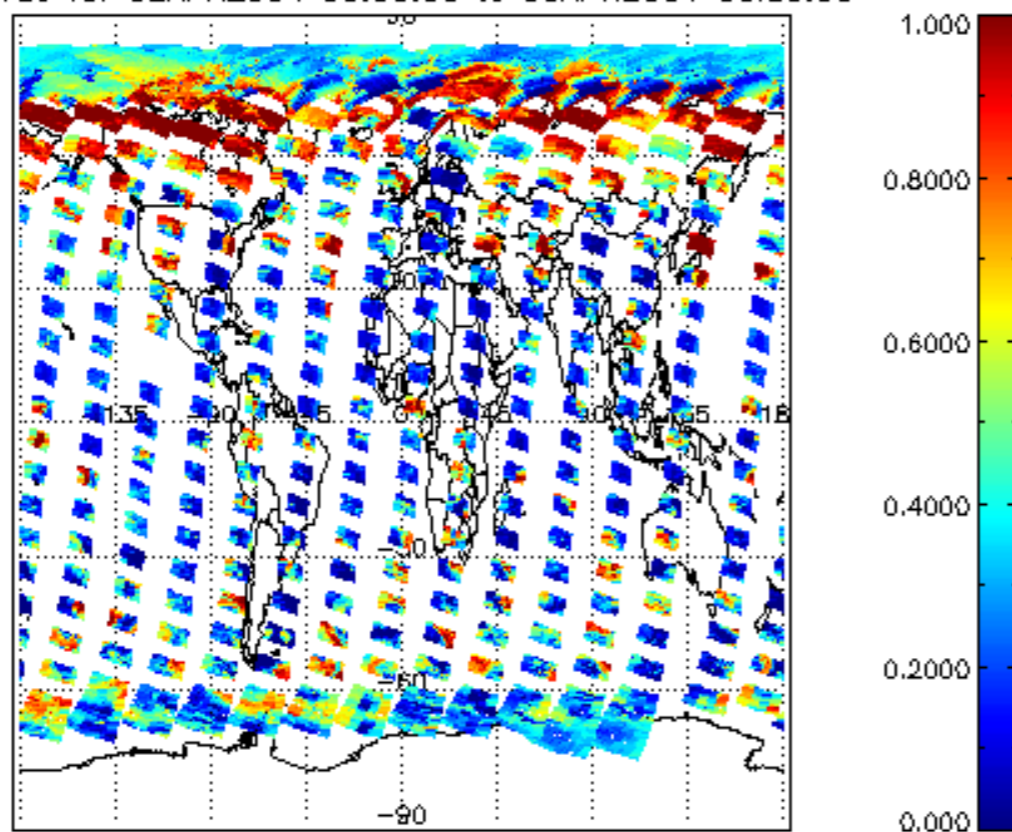
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



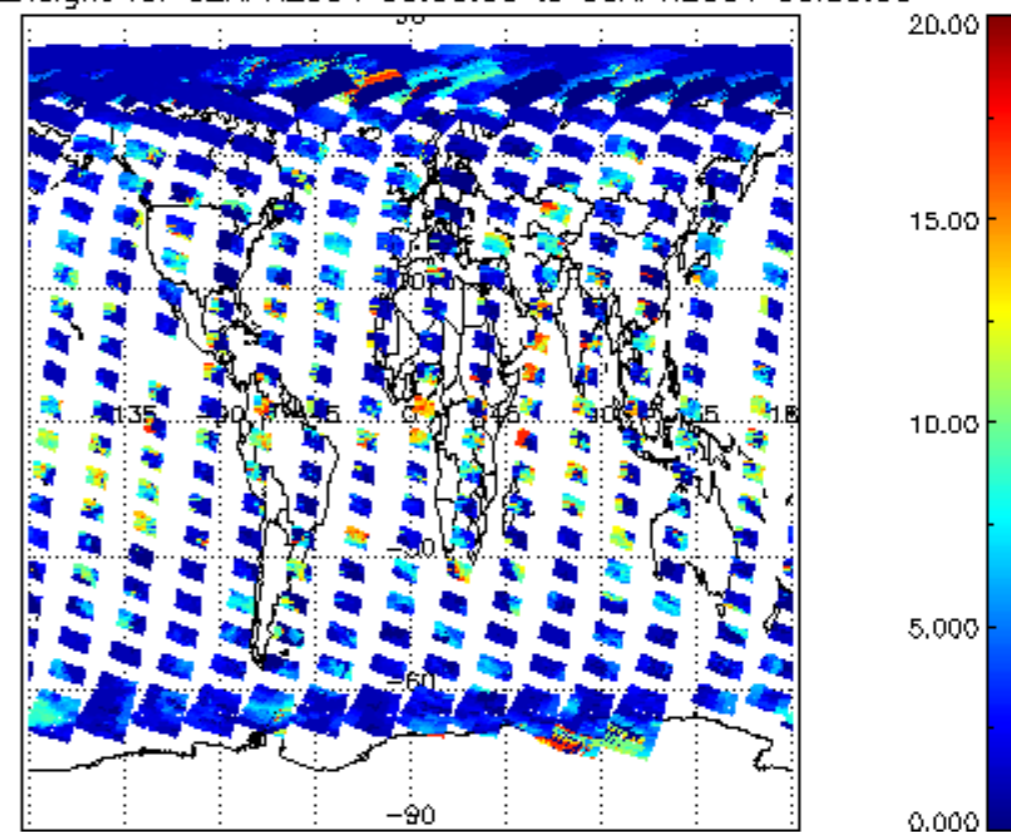
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN__AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

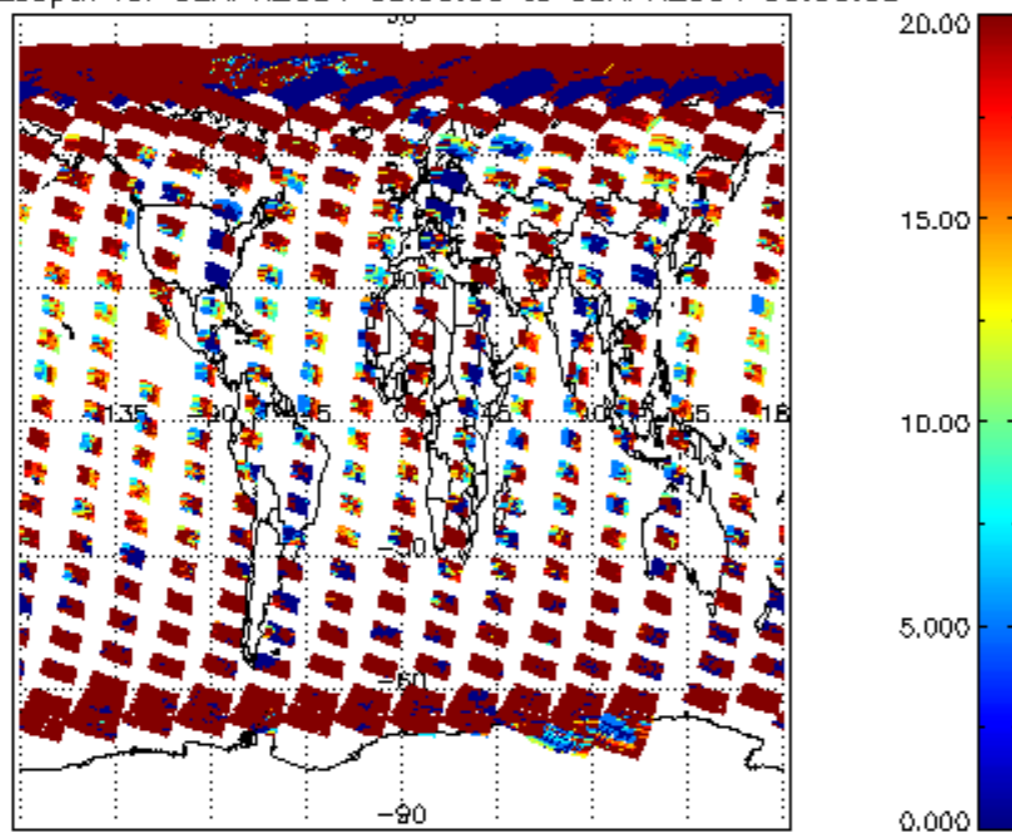
cl_frac for 02APR2004 00:00:00 to 03APR2004 00:00:00



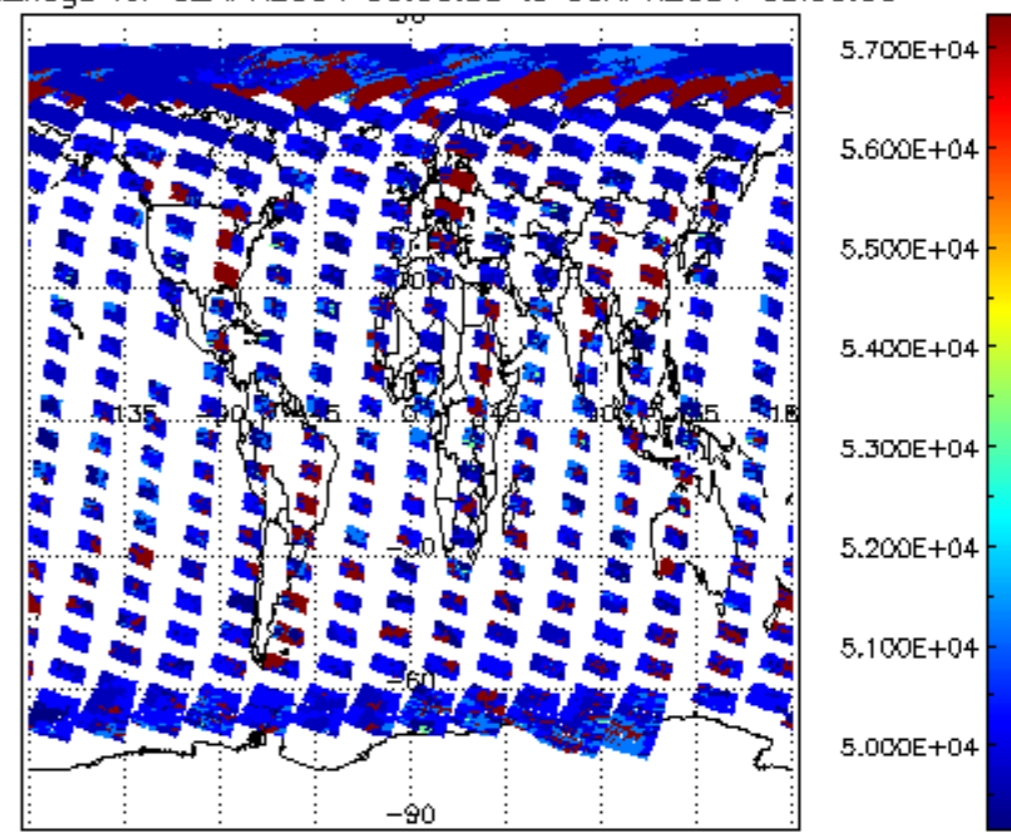
cl_top_height for 02APR2004 00:00:00 to 03APR2004 00:00:00

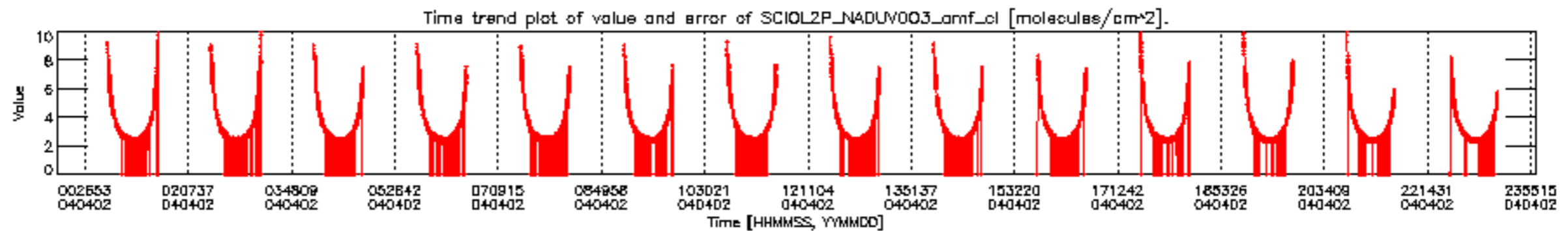
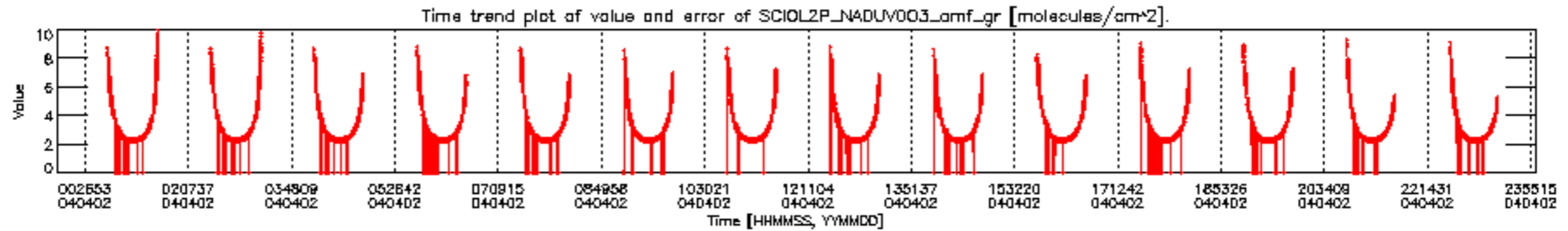
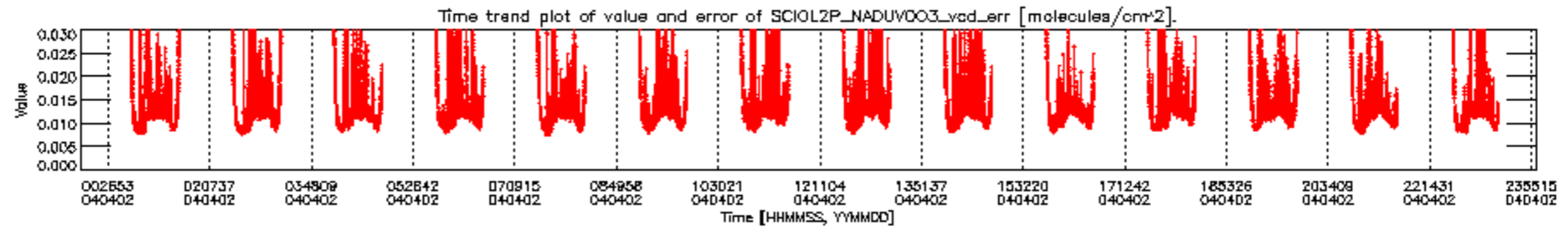
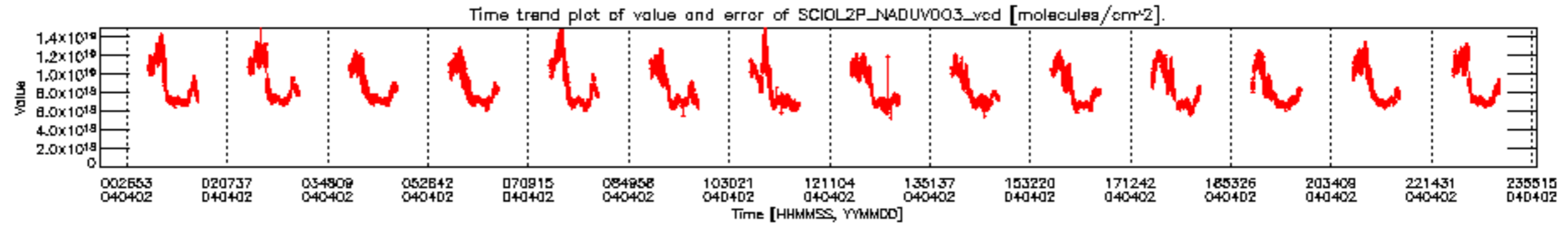


cl_opt_depth for 02APR2004 00:00:00 to 03APR2004 00:00:00

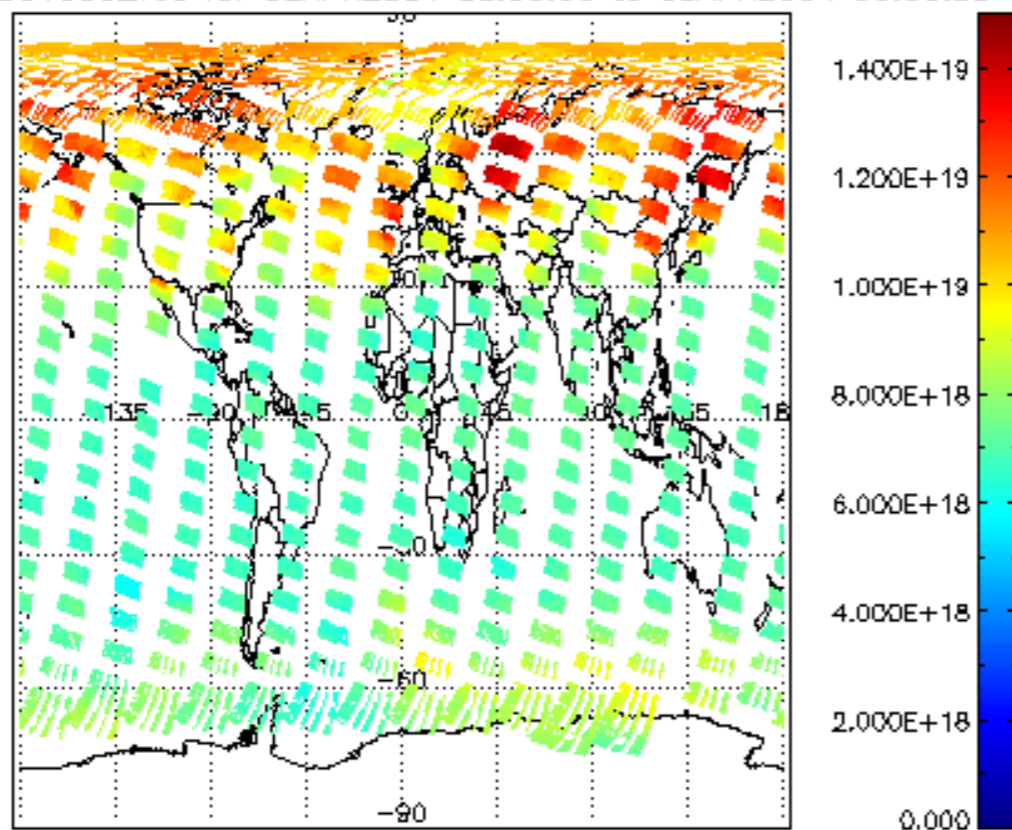


cloud_flags for 02APR2004 00:00:00 to 03APR2004 00:00:00

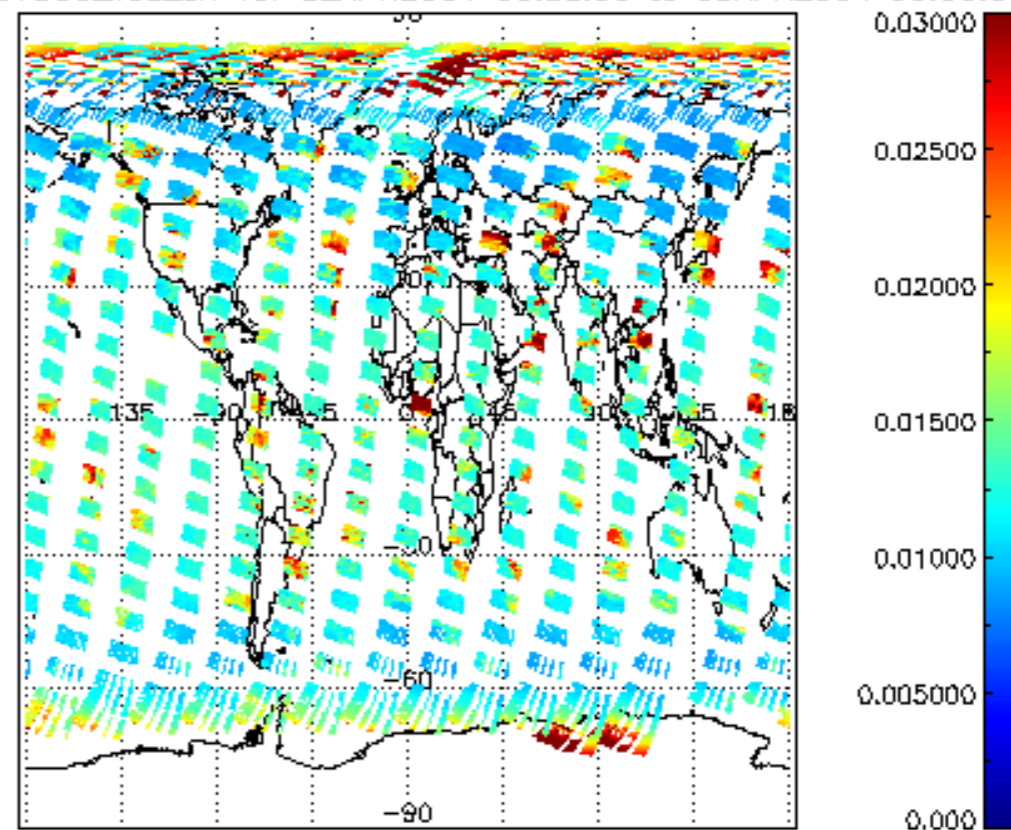




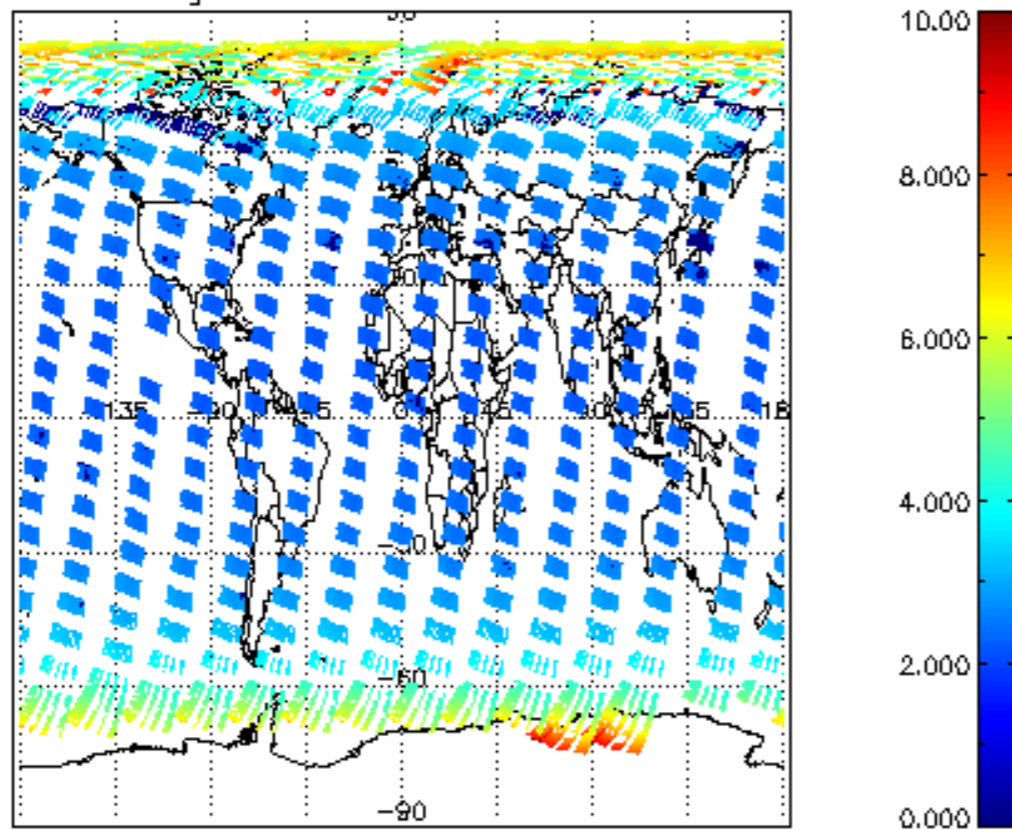
SCIOL2P_NADUV003_vcd for 02APR2004 00:00:00 to 03APR2004 00:00:00



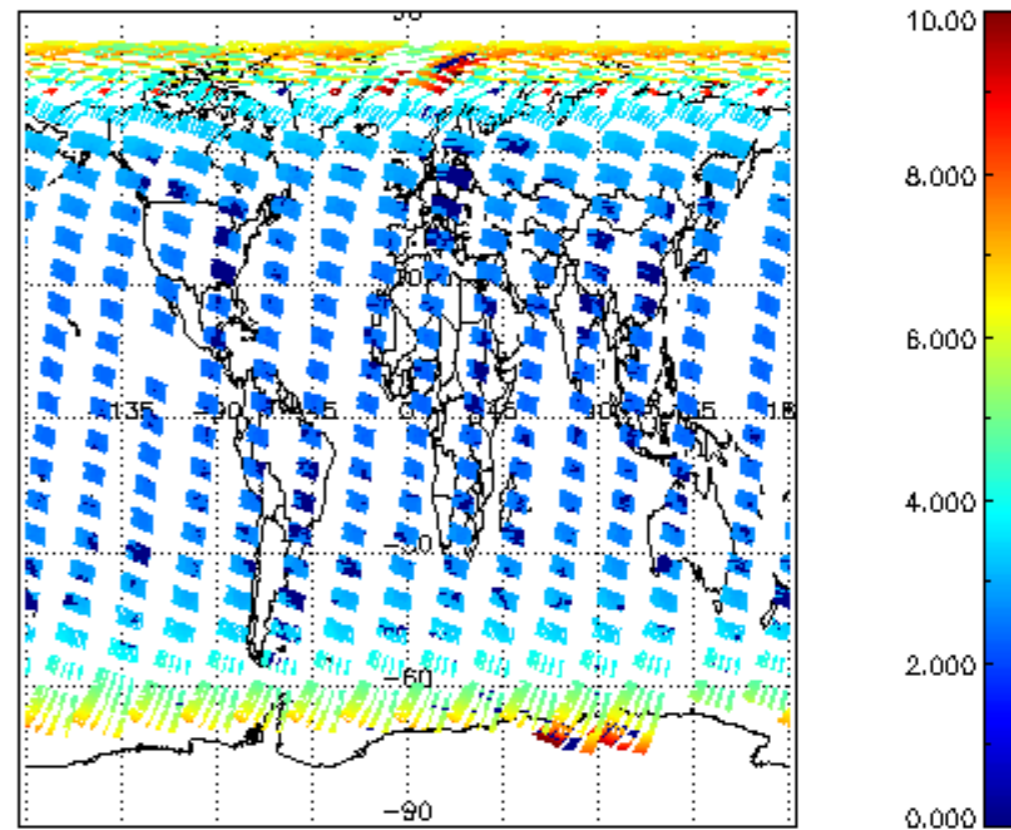
SCIOL2P_NADUV003_vcd_err for 02APR2004 00:00:00 to 03APR2004 00:00:00

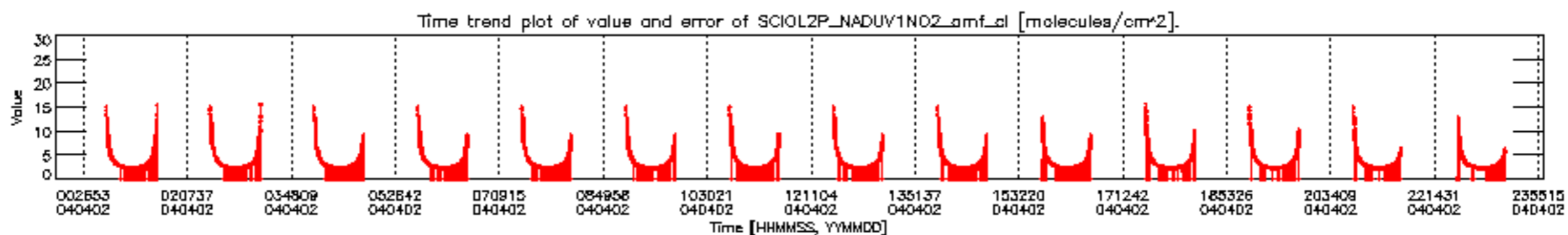
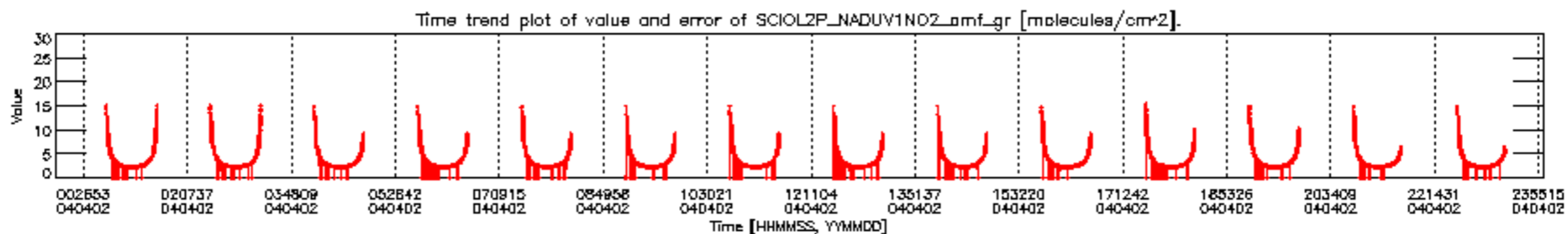
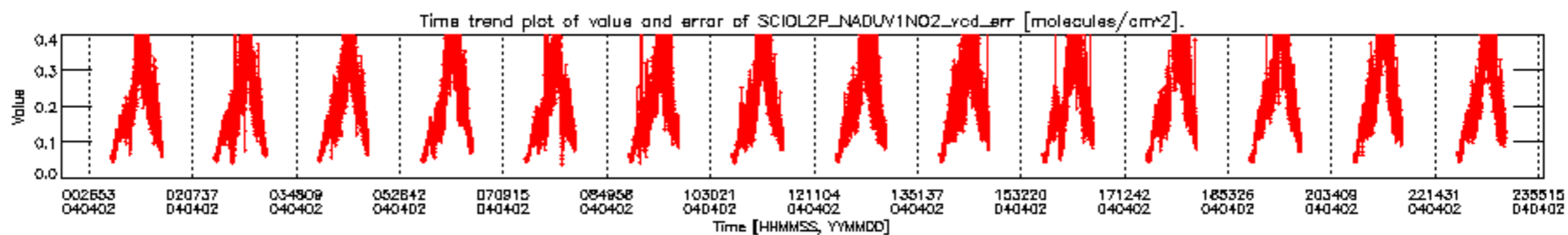
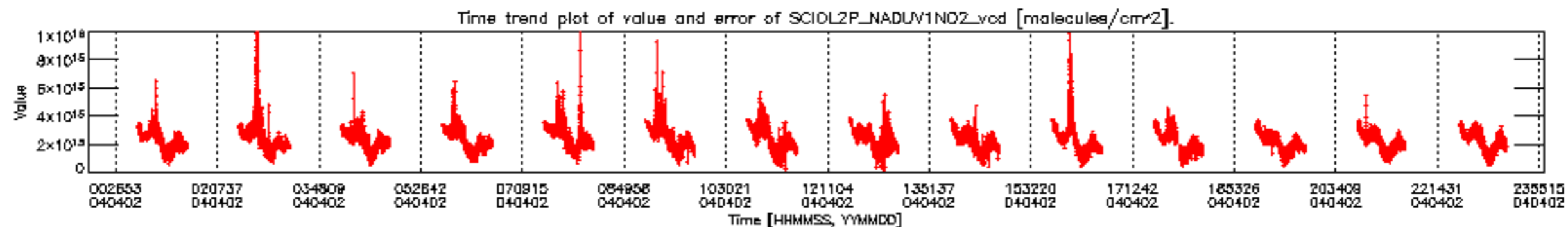


SCIOL2P_NADUV003_amf_gr for 02APR2004 00:00:00 to 03APR2004 00:00:00

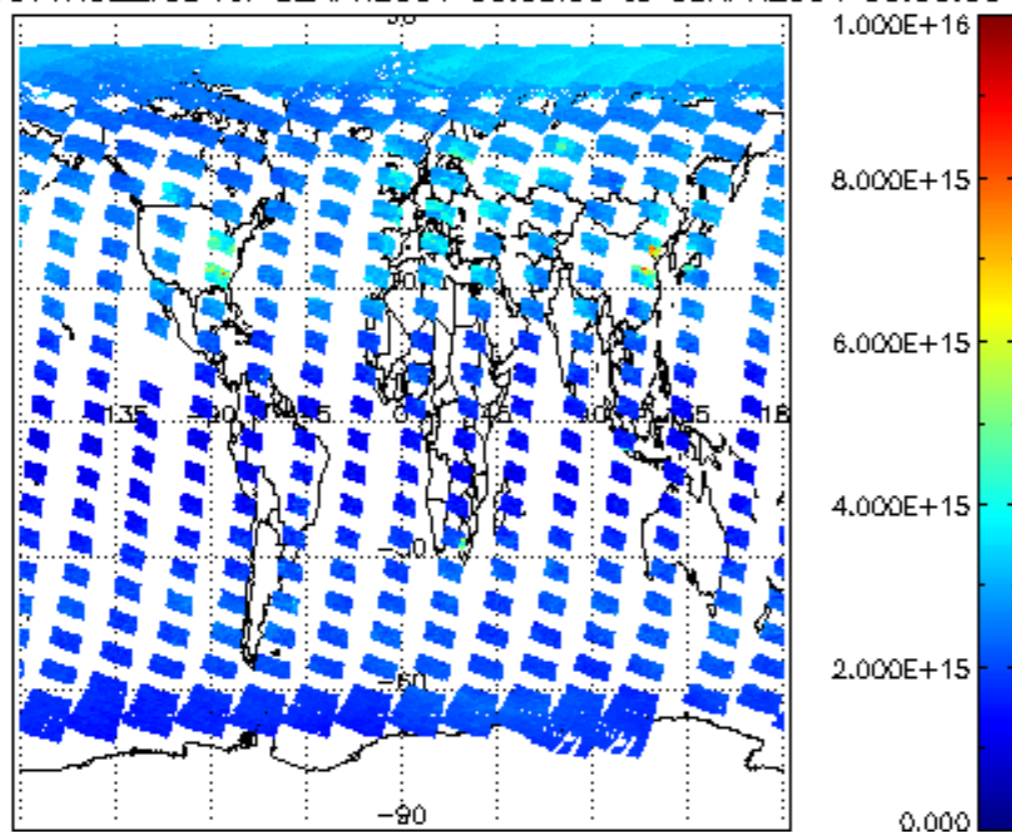


SCIOL2P_NADUV003_amf_cl for 02APR2004 00:00:00 to 03APR2004 00:00:00

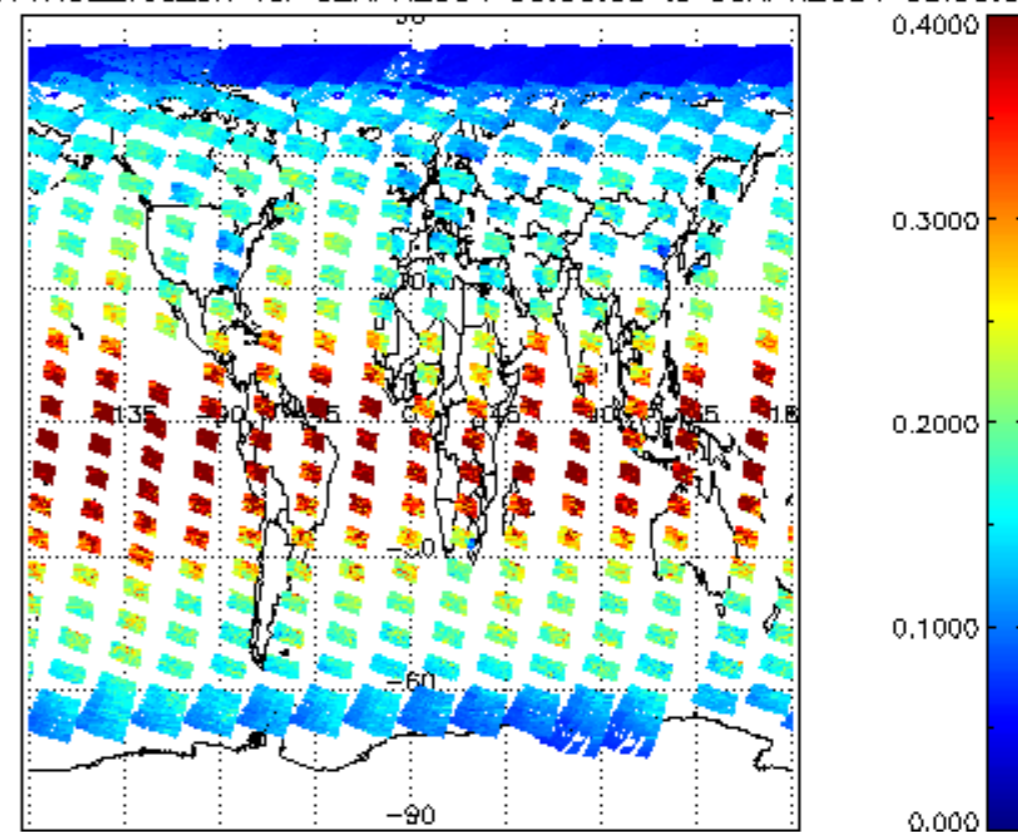




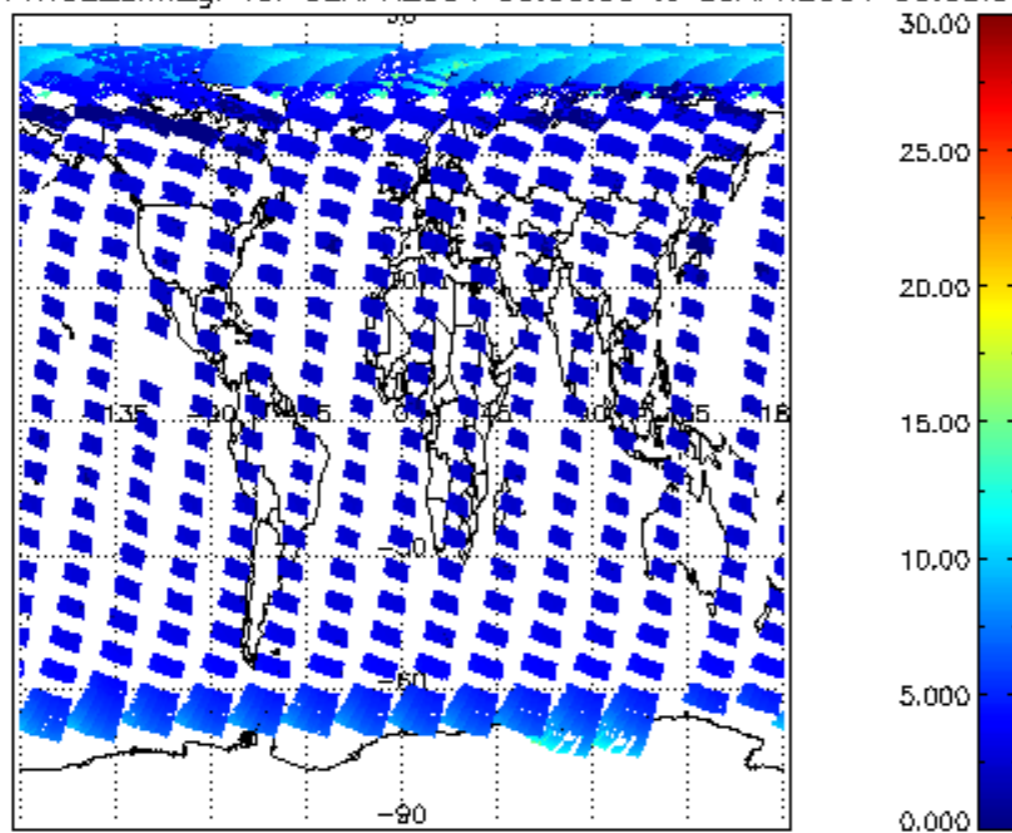
SCIOL2P_NADUV1NO2_vcd for 02APR2004 00:00:00 to 03APR2004 00:00:00



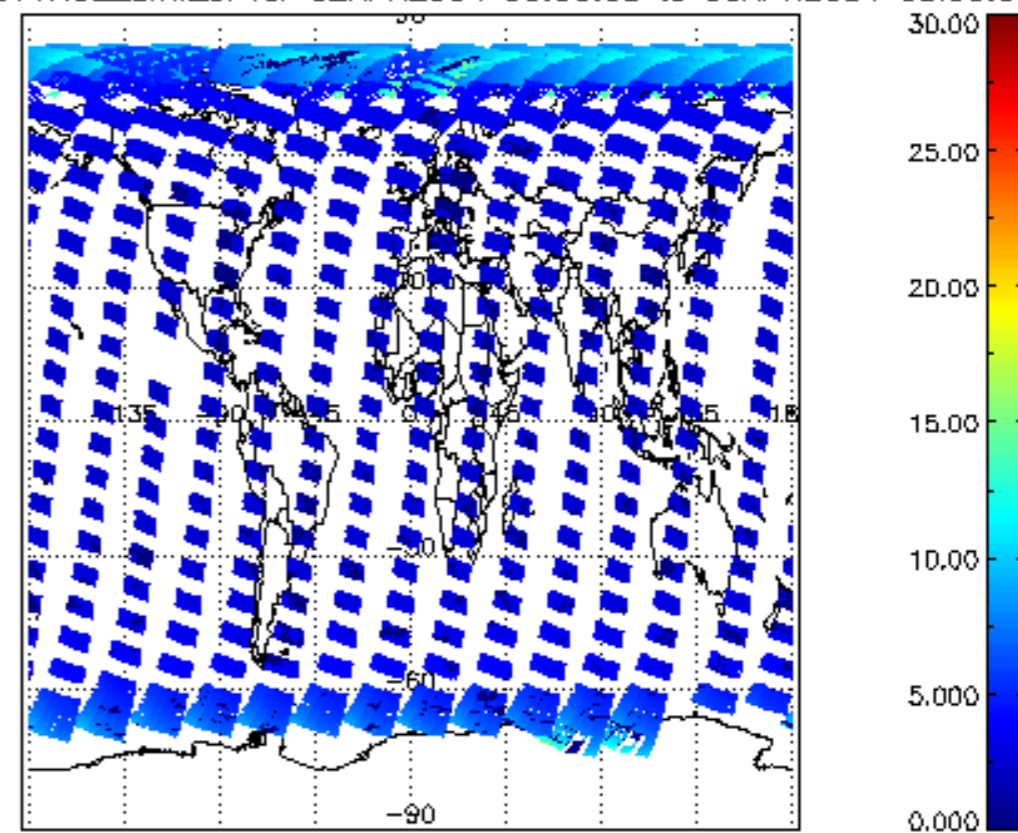
iCIOL2P_NADUV1NO2_vcd_err for 02APR2004 00:00:00 to 03APR2004 00:00:00



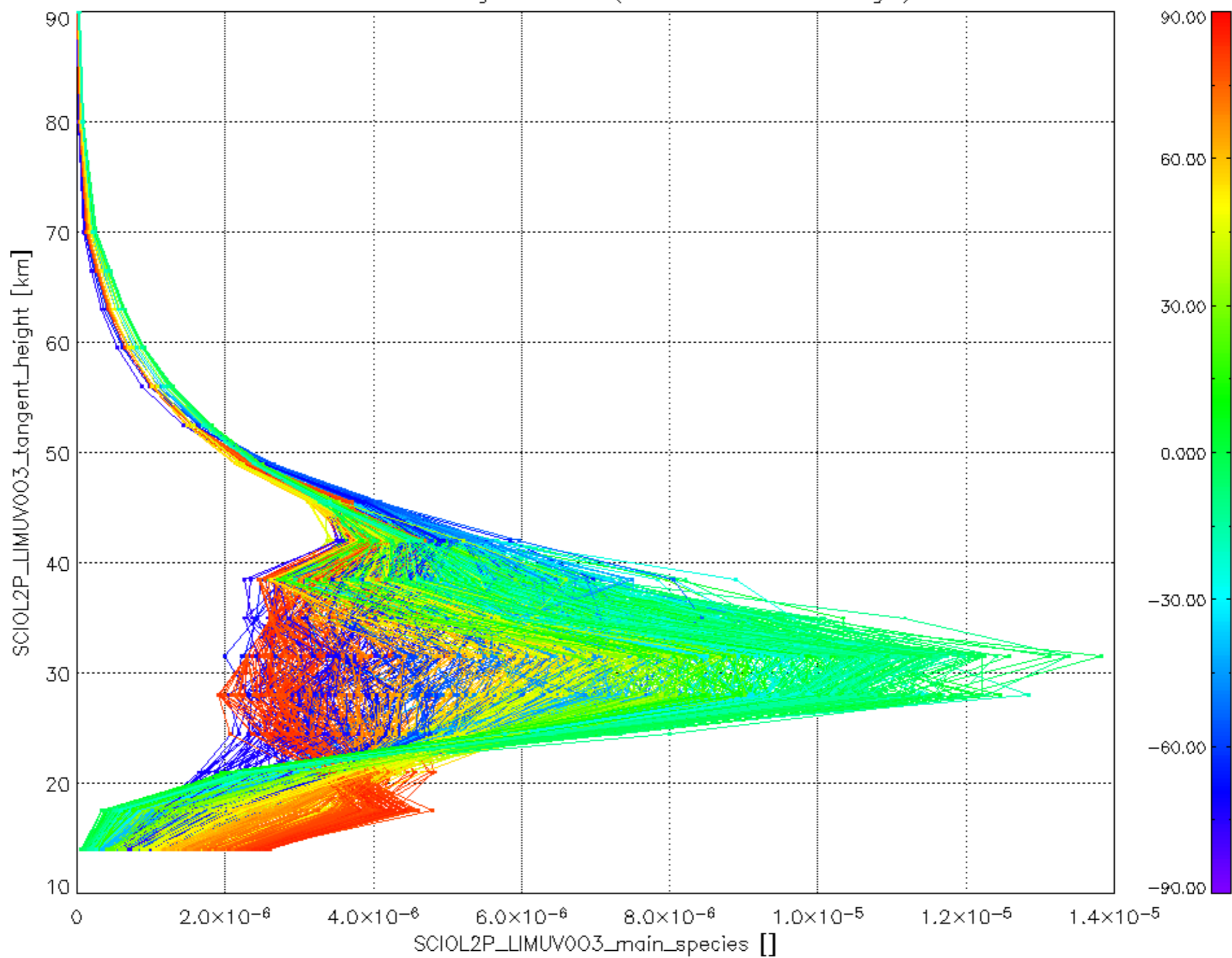
iCIOL2P_NADUV1NO2_amf_gr for 02APR2004 00:00:00 to 03APR2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 02APR2004 00:00:00 to 03APR2004 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).

