

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	07AUG2008 11:15:53
Data source version	SCIA-OL/3.01-R
Processing scope for products	05MAR2004 00:00:00 to 06MAR2004 00:00:00
Start time of first product within scope	04MAR2004 22:46:28
Stop time of last product within scope	06MAR2004 00:50:51
Total number of level 2 products	14
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__2PRDPA20040304_224628_000033312024_00445_10519_6496.N1	04MAR2004 22:46:28	04MAR2004 23:42:00	0	GOOD
1	SCI_OL__2PRDPA20040305_002704_000033242024_00446_10520_6469.N1	05MAR2004 00:27:04	05MAR2004 01:22:28	0	GOOD
2	SCI_OL__2PRDPA20040305_020739_000033162024_00447_10521_6435.N1	05MAR2004 02:07:39	05MAR2004 03:02:56	0	GOOD
3	SCI_OL__2PRDPA20040305_034815_000033092024_00448_10522_6479.N1	05MAR2004 03:48:15	05MAR2004 04:43:24	0	GOOD
4	SCI_OL__2PRDPA20040305_052850_000033012024_00449_10523_6481.N1	05MAR2004 05:28:50	05MAR2004 06:23:51	0	GOOD
5	SCI_OL__2PRDPA20040305_070926_000032922024_00450_10524_6457.N1	05MAR2004 07:09:26	05MAR2004 08:04:19	0	GOOD
6	SCI_OL__2PRDPA20040305_085001_000033682024_00451_10525_6484.N1	05MAR2004 08:50:01	05MAR2004 09:46:09	0	GOOD
7	SCI_OL__2PRDPA20040305_103037_000033592024_00452_10526_6497.N1	05MAR2004 10:30:37	05MAR2004 11:26:36	0	GOOD
8	SCI_OL__2PRDPA20040305_121112_000033512024_00453_10527_6465.N1	05MAR2004 12:11:12	05MAR2004 13:07:03	0	GOOD
9	SCI_OL__2PRDPA20040305_135147_000033422024_00454_10528_6464.N1	05MAR2004 13:51:47	05MAR2004 14:47:30	0	GOOD
10	SCI_OL__2PRDPA20040305_153223_000033332024_00455_10529_6472.N1	05MAR2004 15:32:23	05MAR2004 16:27:56	0	GOOD
11	SCI_OL__2PRDPA20040305_171221_000033912024_00456_10530_6493.N1	05MAR2004 17:12:21	05MAR2004 18:08:53	0	GOOD
12	SCI_OL__2PRDPA20040305_221813_000031502024_00459_10533_6421.N1	05MAR2004 22:18:13	05MAR2004 23:10:43	0	GOOD
13	SCI_OL__2PRDPA20040305_235929_000030812024_00460_10534_6470.N1	05MAR2004 23:59:29	06MAR2004 00:50:51	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: 87641

Total number of cloud data DSRs with good quality flag (=0): 87641 (100.0 %)

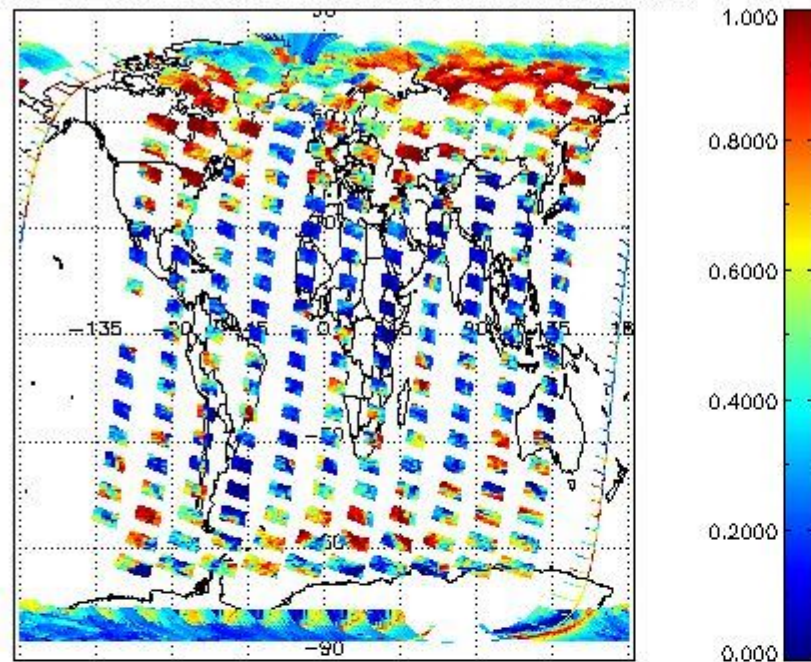
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	87641	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	87641	0.21999	0.25000	0.12500	1.0000	0.076458	s
CL_FRAC	87641	0.46332	0.42179	0.0000	1.0000	0.30306	-
CL_FRAC_ERR	87641	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	87641	7.0397	8.0000	4.0000	32.000	2.4467	
PMD_READ_CL[0]	87641	0.46259	0.0000	0.0000	15.000	1.5589	-
PMD_READ_CL[1]	87641	0.39744	0.0000	0.0000	26.000	1.5526	-
CL_TOP_HEIGHT	80630	3.8846	1.9250	0.0000	17.000	3.9743	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	80630	44.451	28.267	0.0000	101.00	37.621	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	87641	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	87641	11000110	11000010	11000000	11100000	2416.0	flags
AERO_ABSO_IND	87641	0.74466	0.38275	-4.3392	11.497	1.2856	
AERO_IND_DIAG	87641	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	87641	01100111	11000000	00000000	11000000	24498.	flags

Time and geolocation plots:

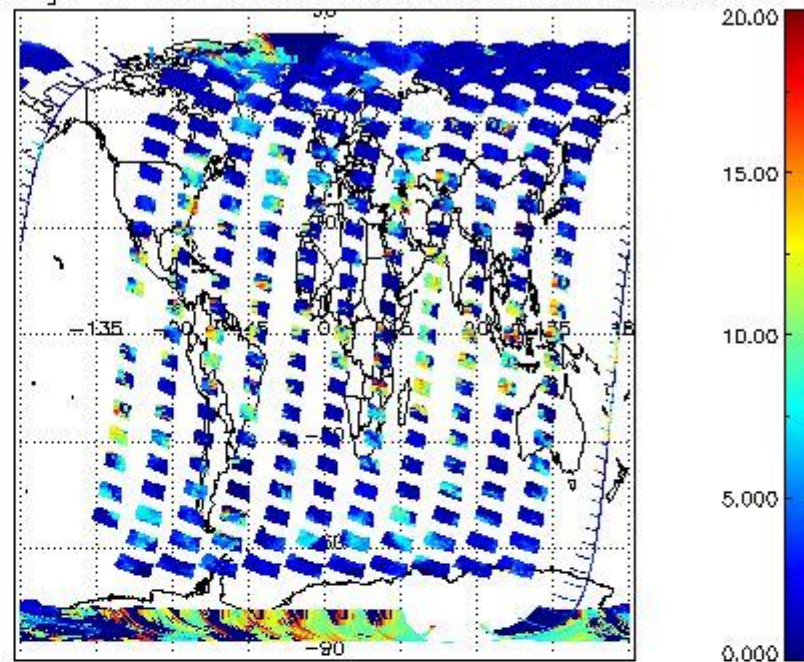
Plots are available for the following parameters:

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

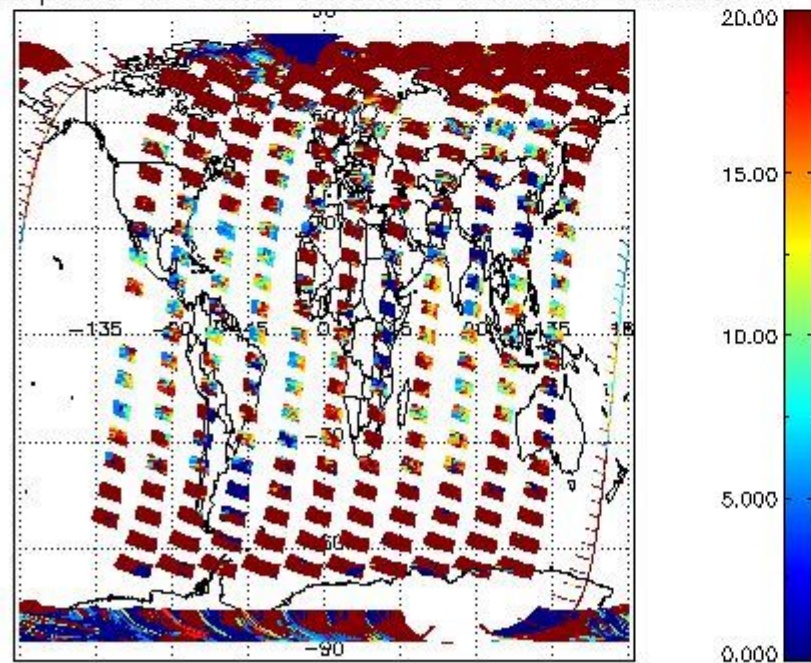
cL_frac for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



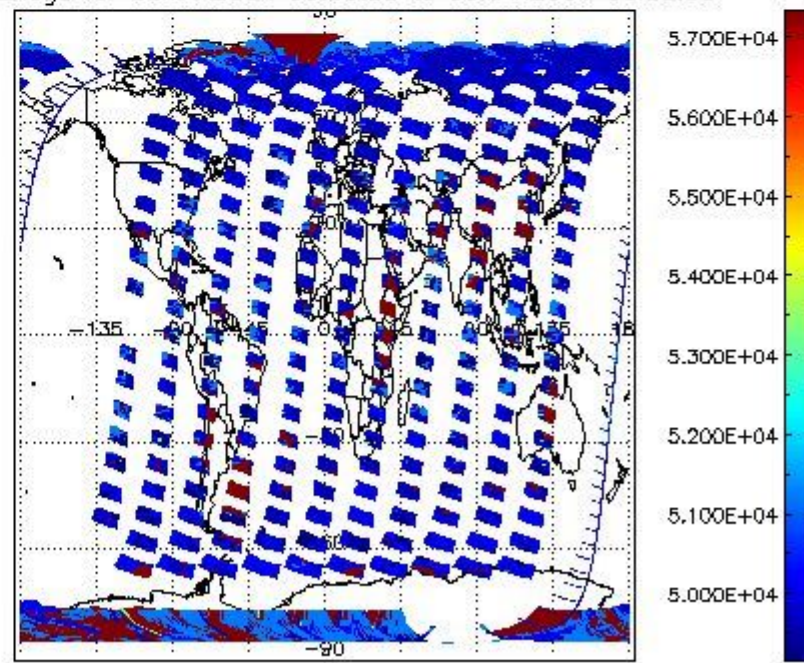
cL_top_height for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



cL_opt_depth for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



cloud_flags for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



2.2.2 Nadir

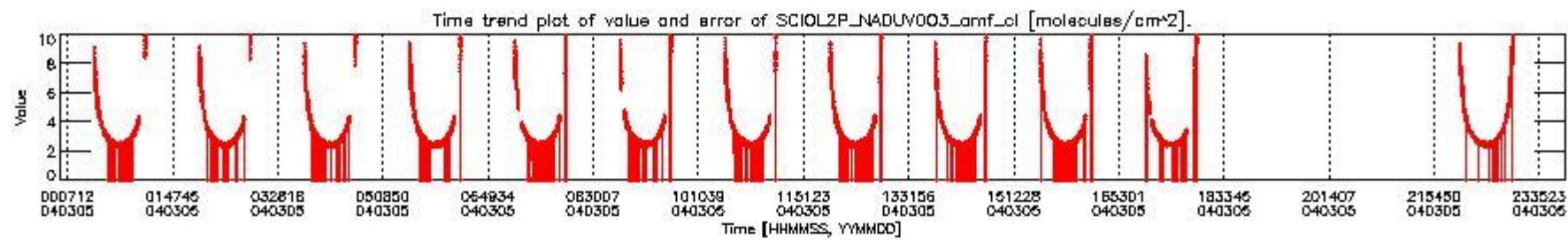
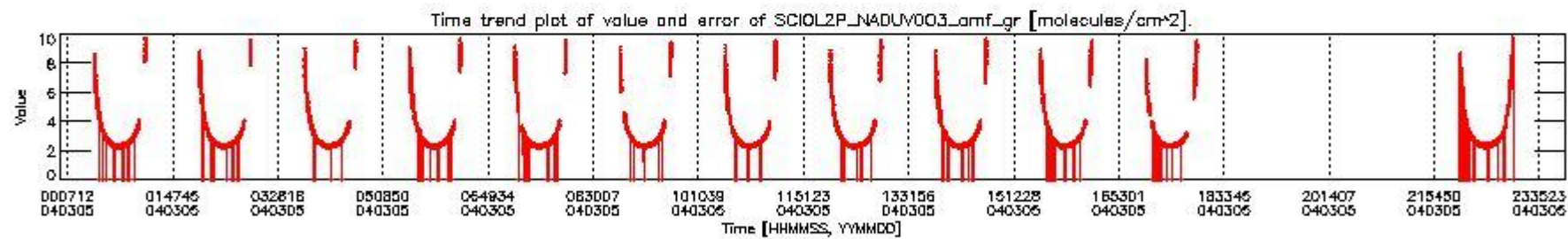
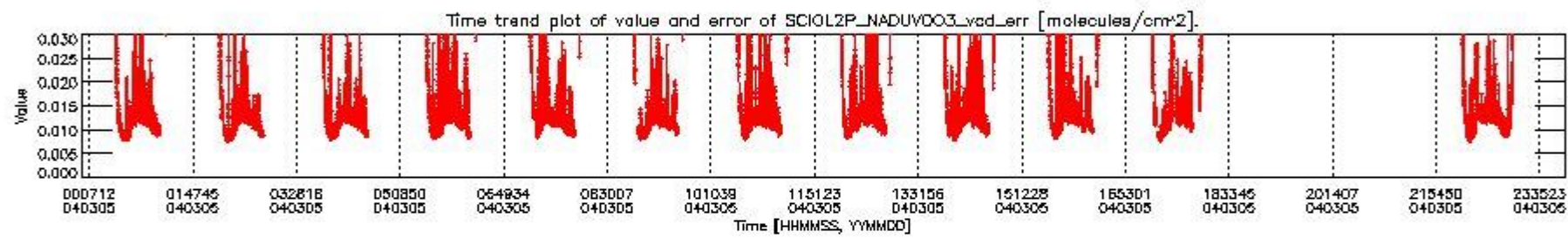
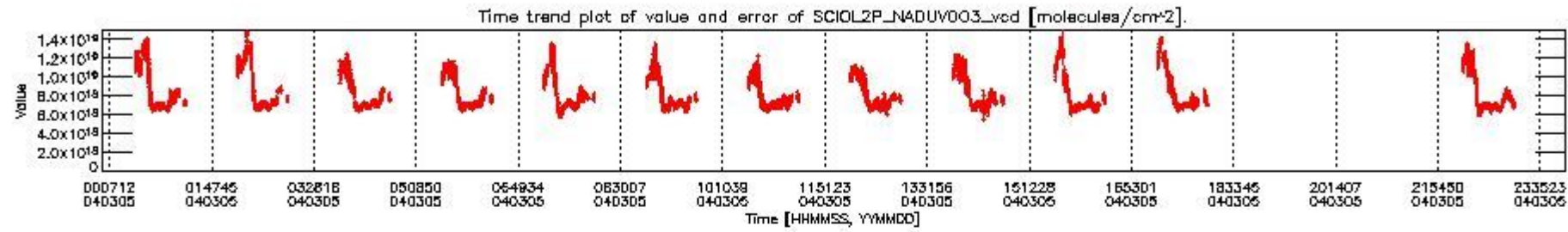
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

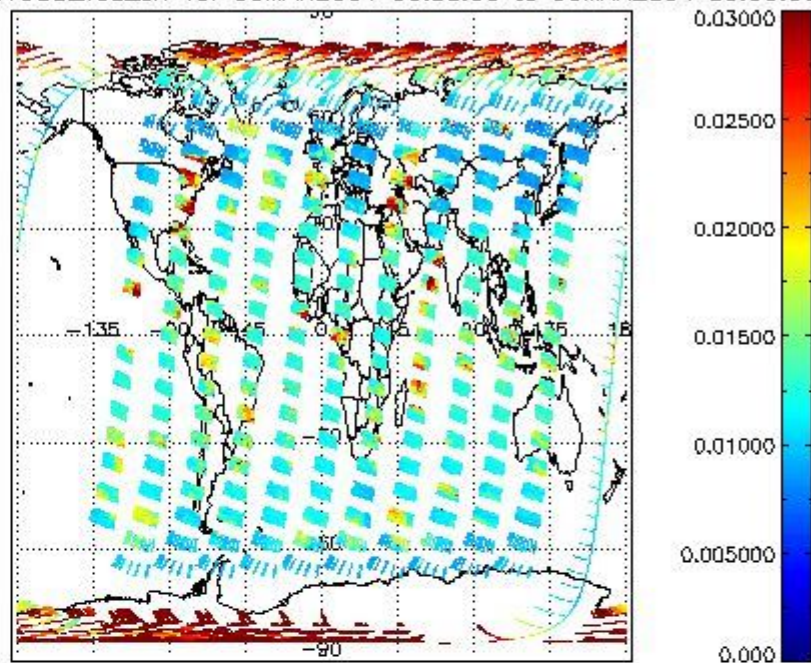
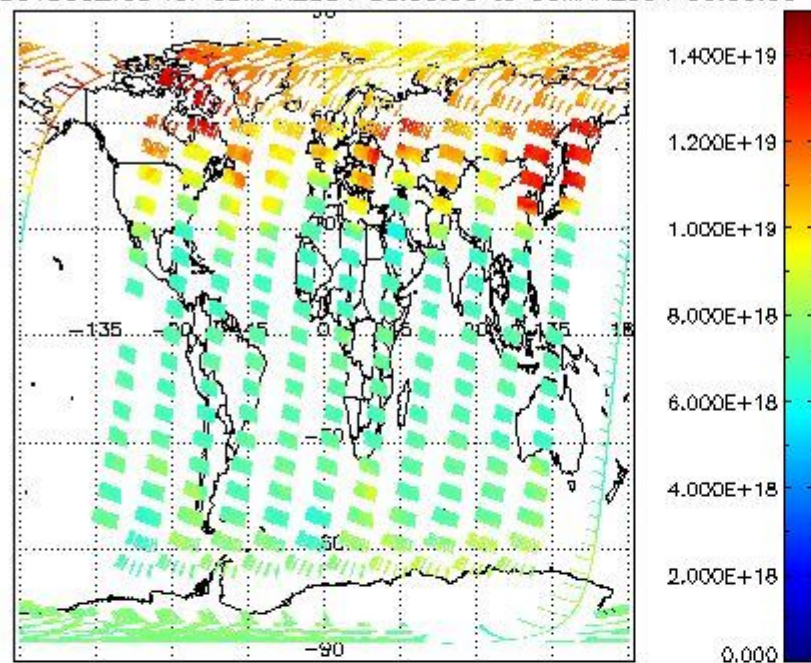
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

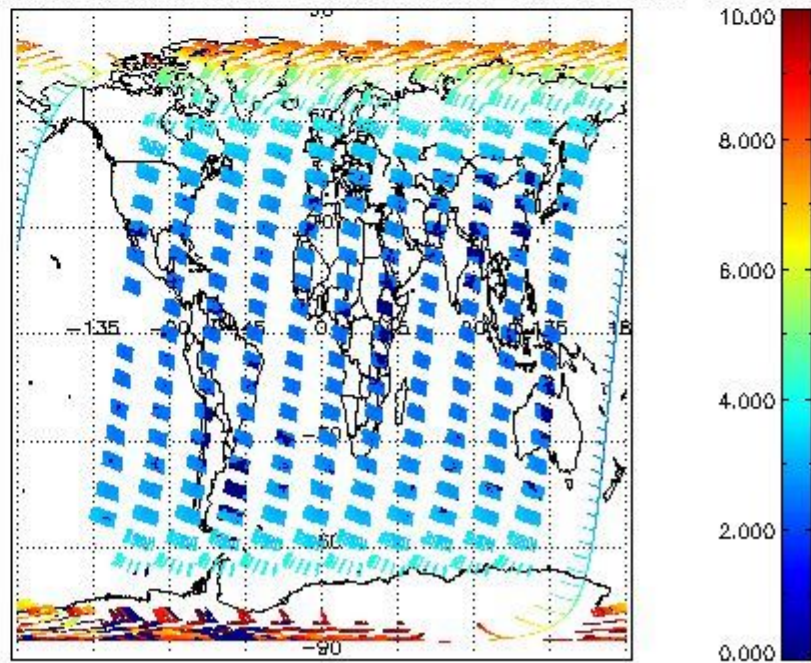
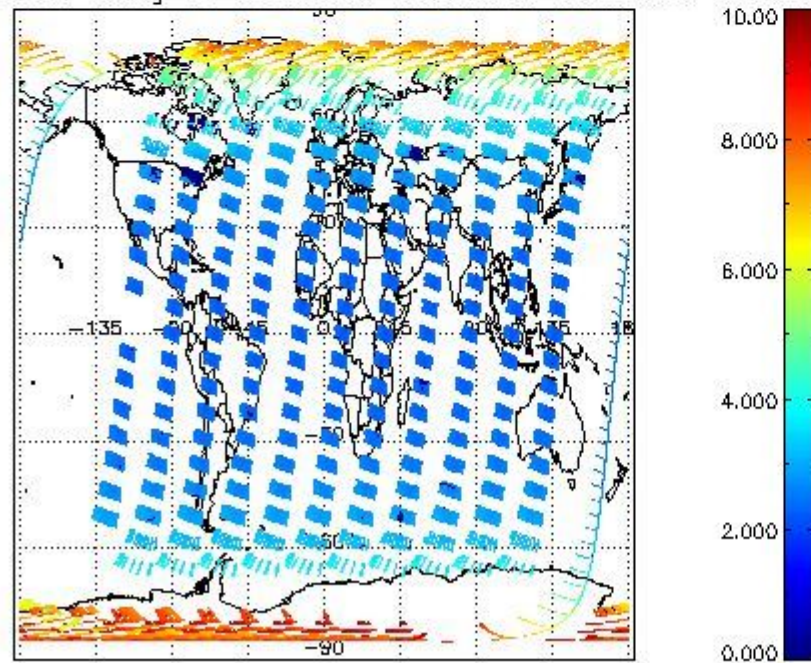
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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

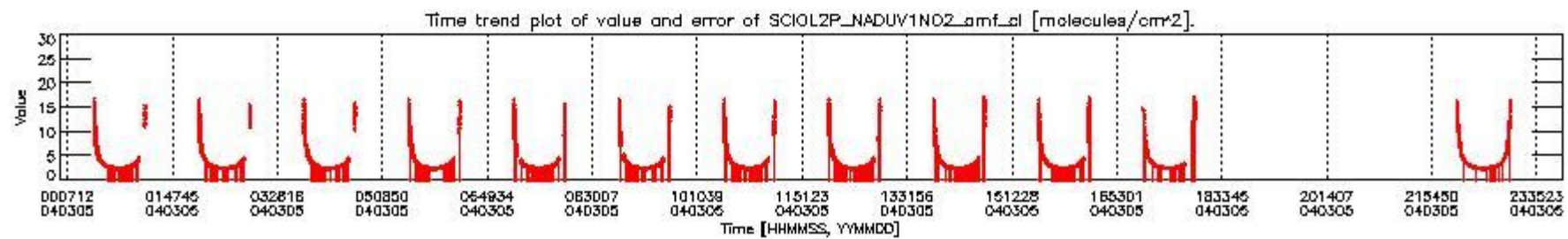
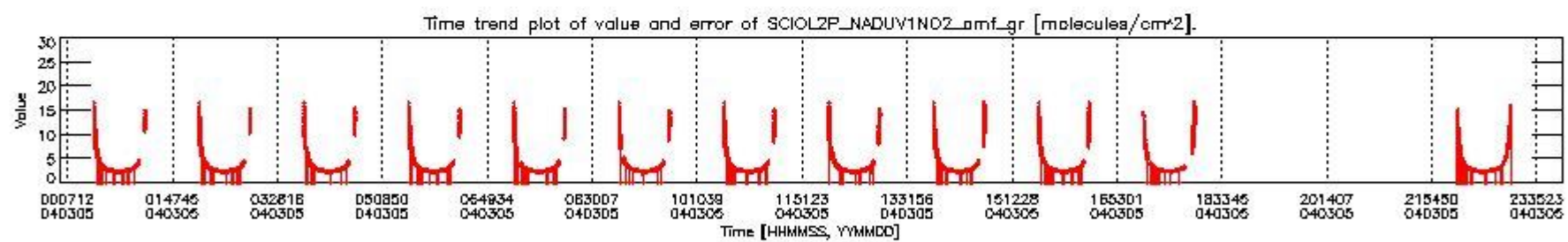
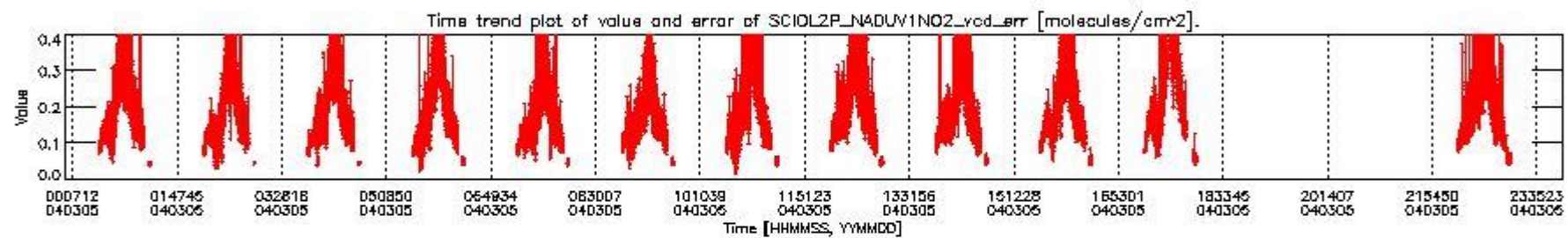
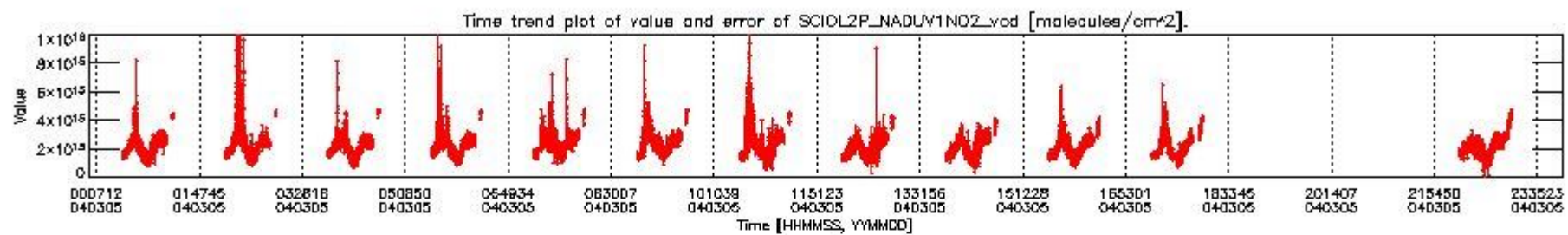


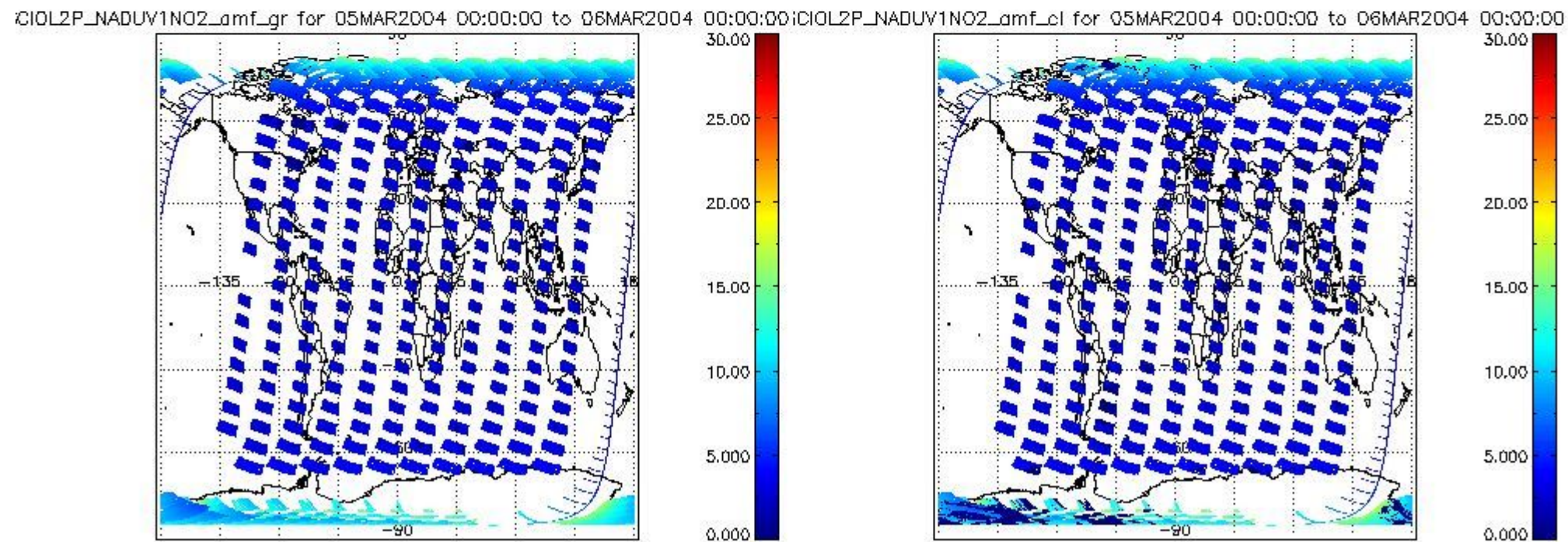
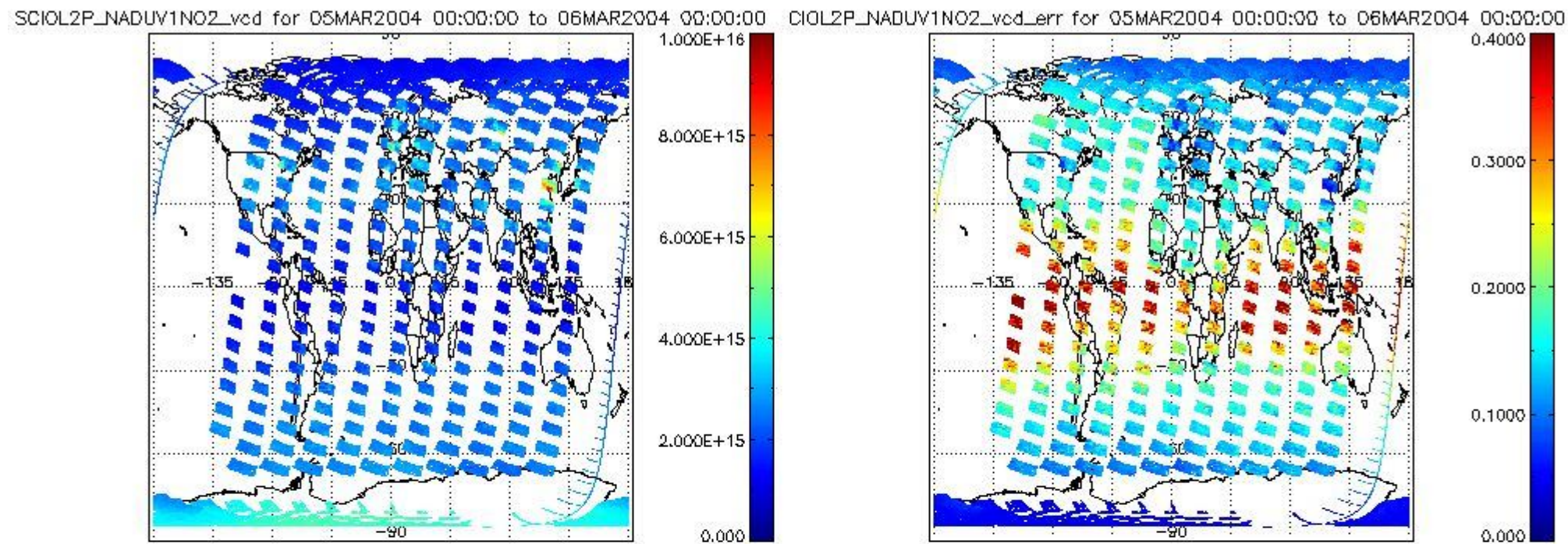
SCIOL2P_NADUV003_vcd for 05MAR2004 00:00:00 to 06MAR2004 00:00:00 SCIOL2P_NADUV003_vcd_err for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



SCIOL2P_NADUV003_amf_gr for 05MAR2004 00:00:00 to 06MAR2004 00:00:00 SCIOL2P_NADUV003_amf_cl for 05MAR2004 00:00:00 to 06MAR2004 00:00:00







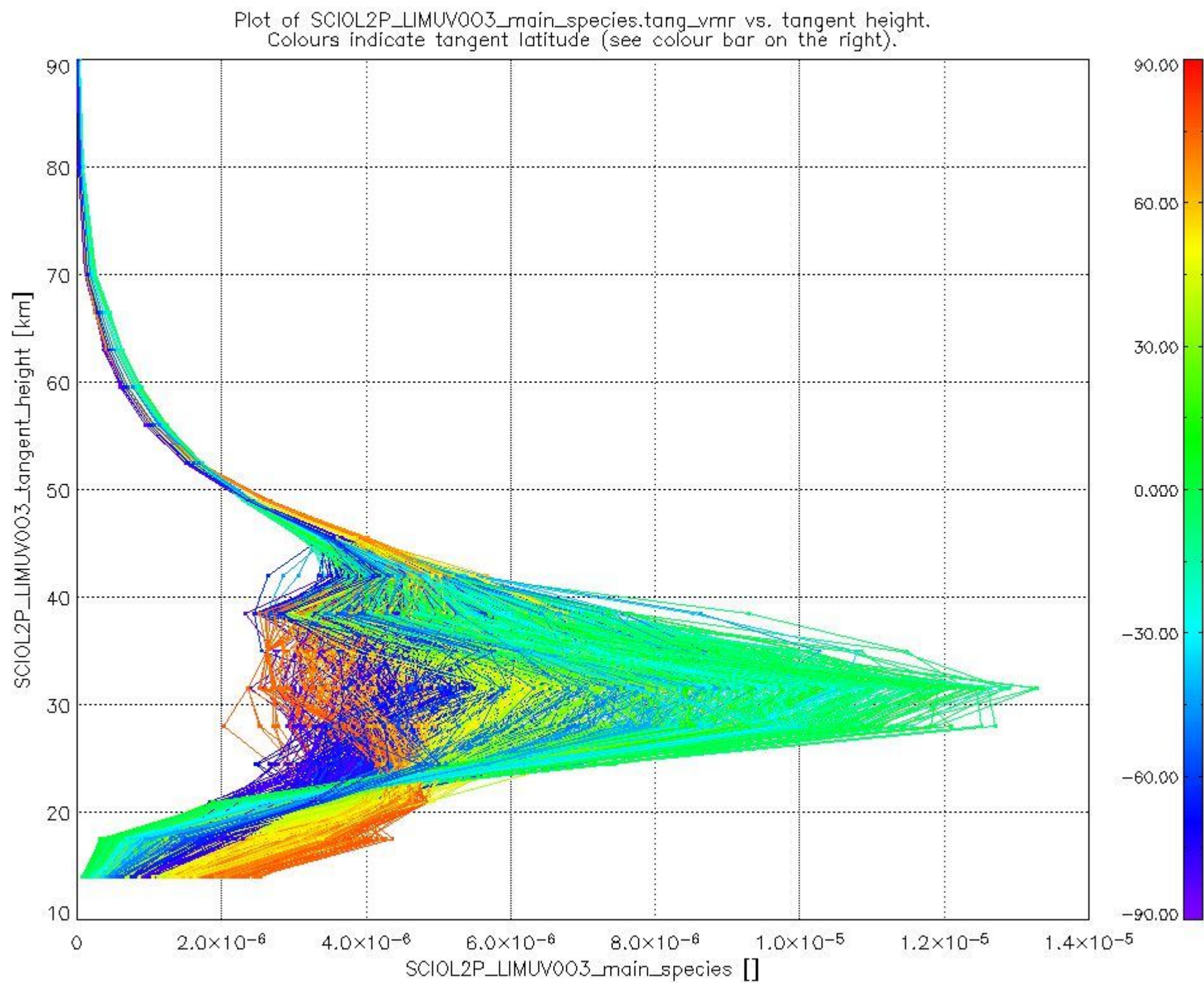
2.2.3 Limb

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

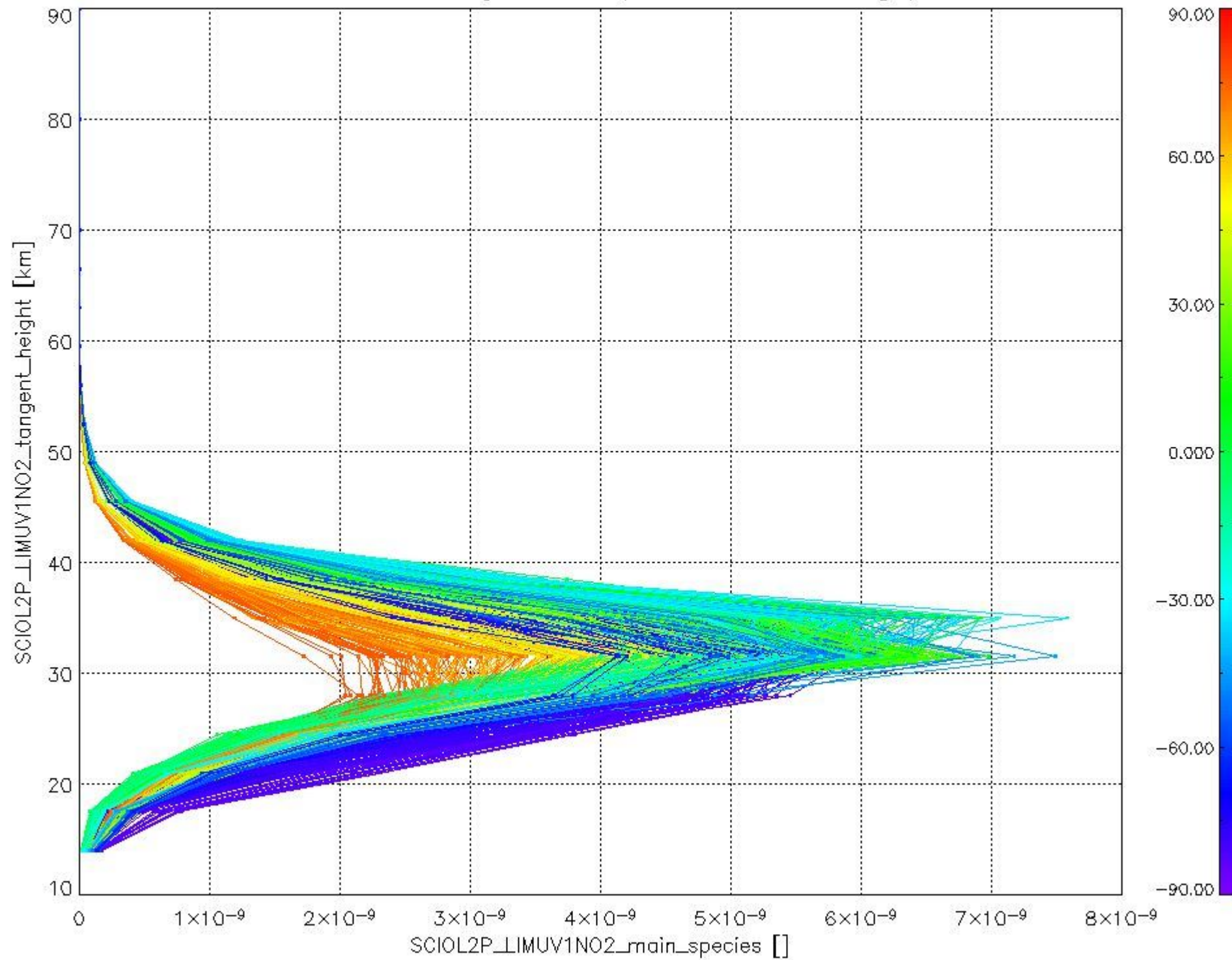
The following data items are currently included into this section:

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.



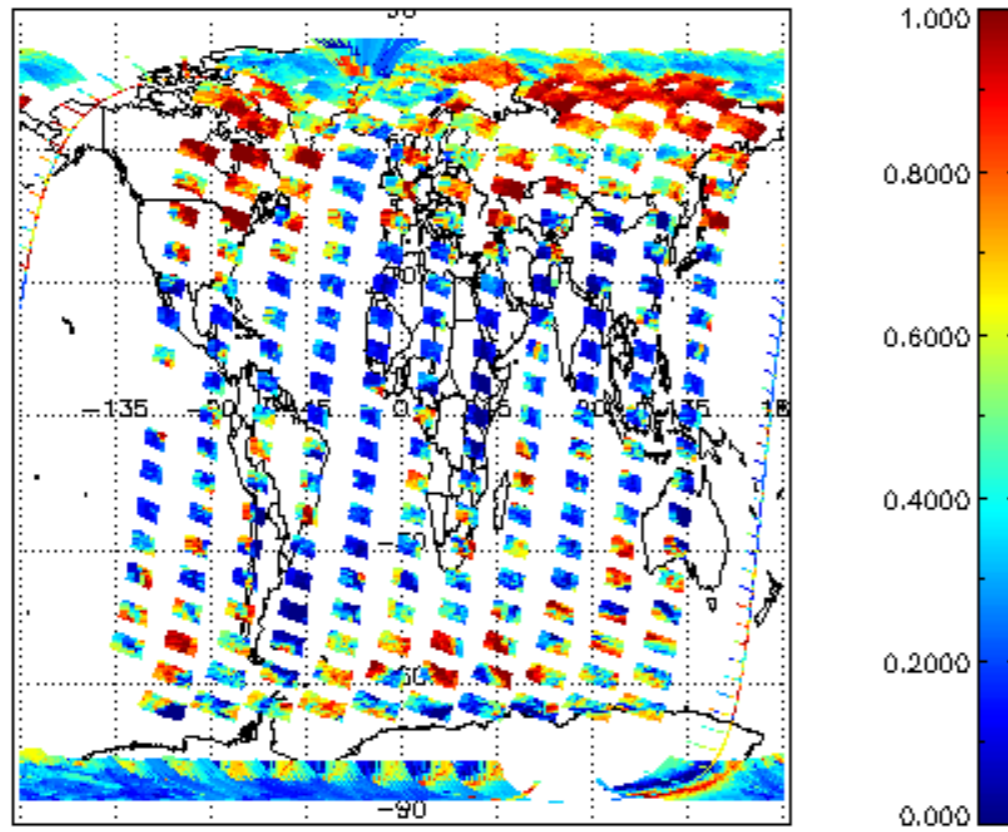
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



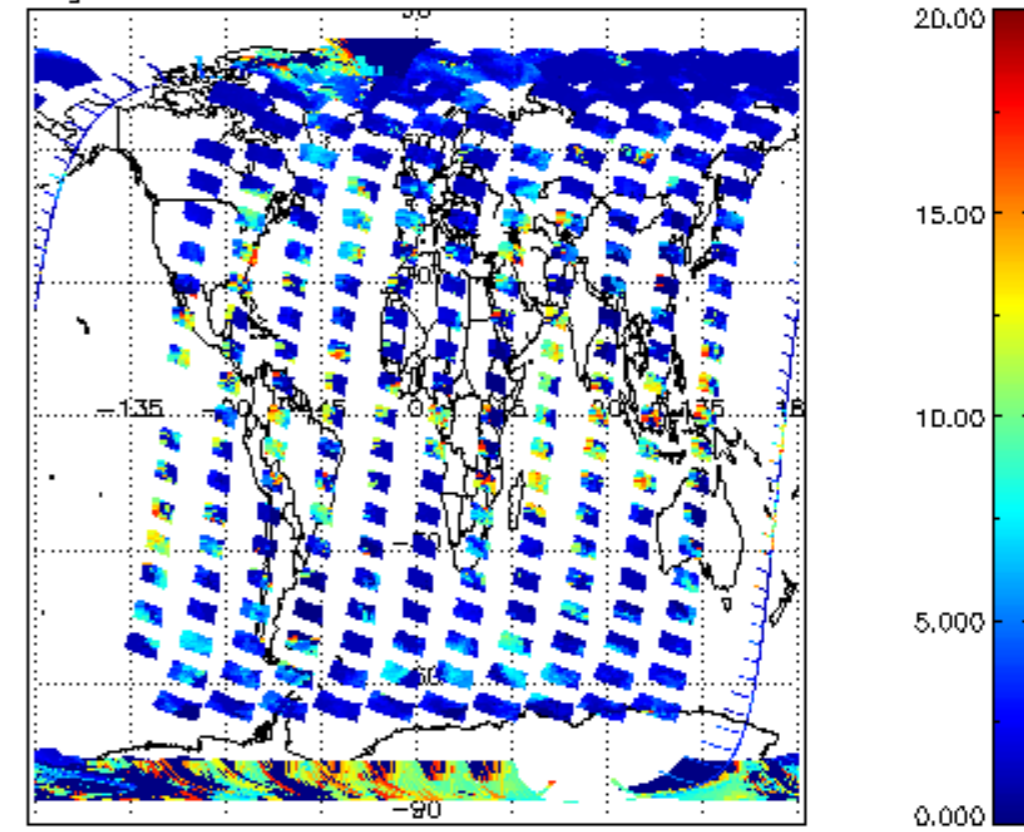
2.3 ADF monitoring

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

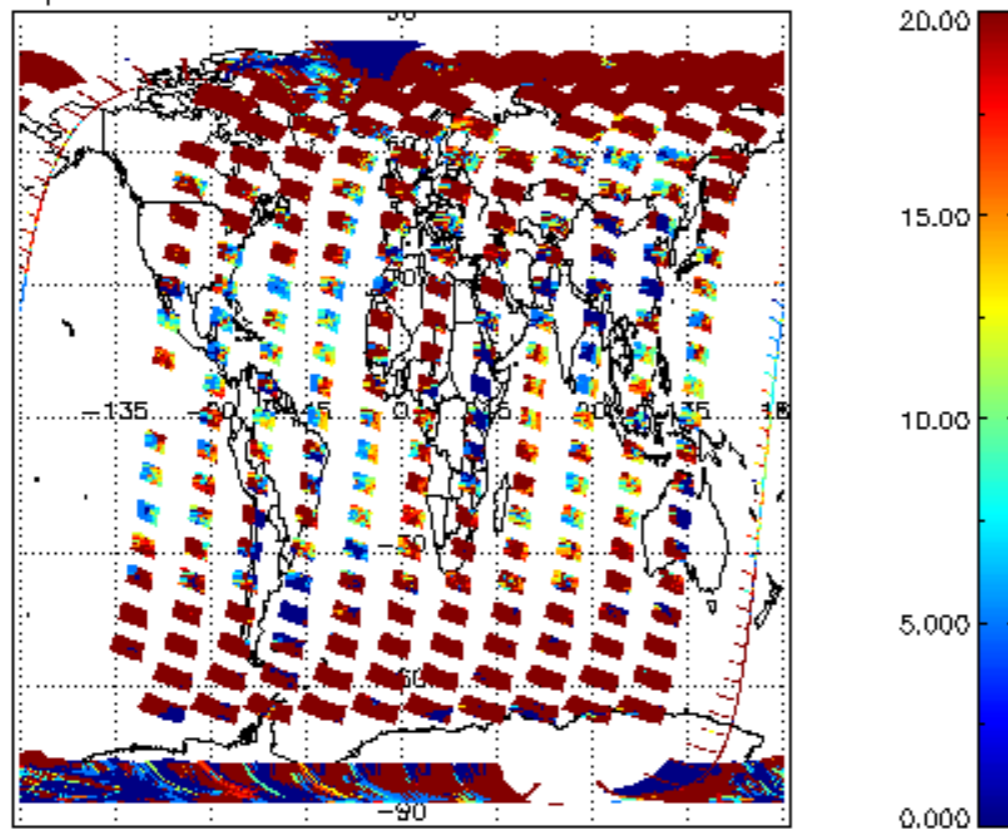
cL_frac for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



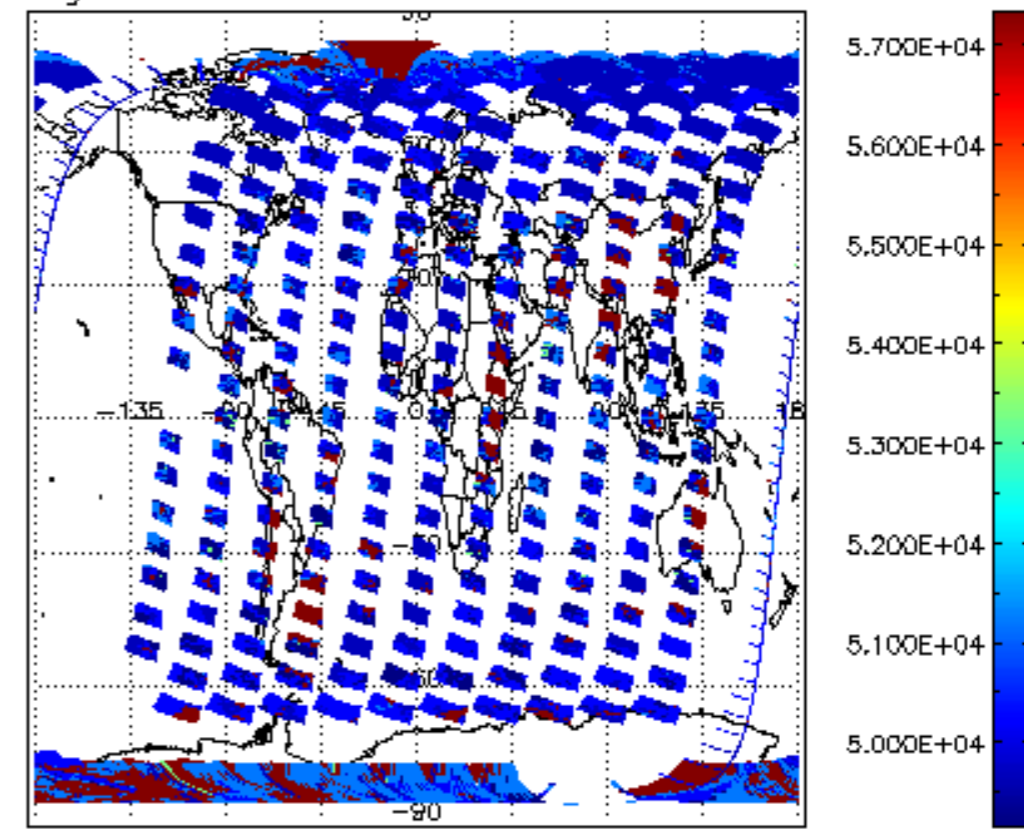
cL_top_height for 05MAR2004 00:00:00 to 06MAR2004 00:00:00

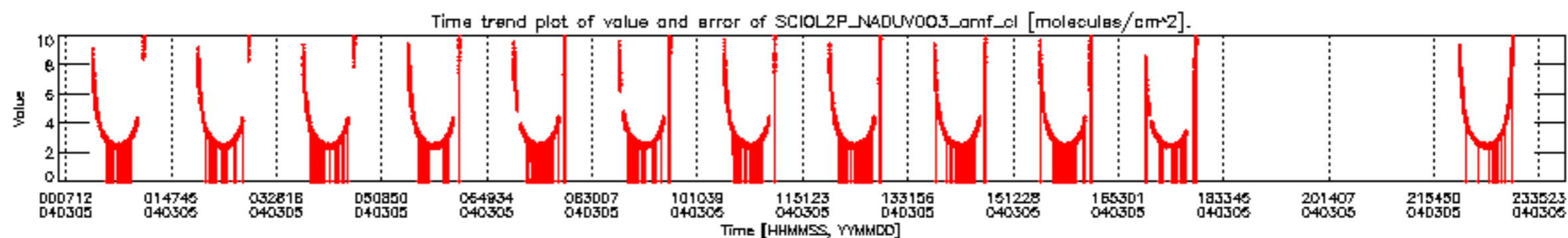
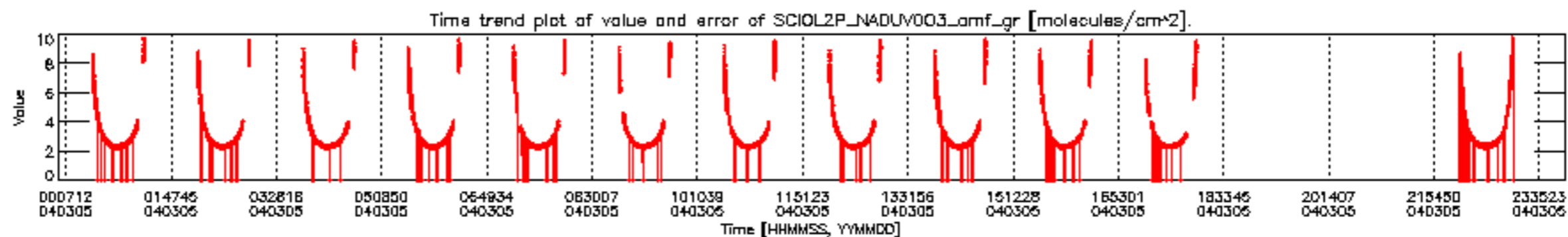
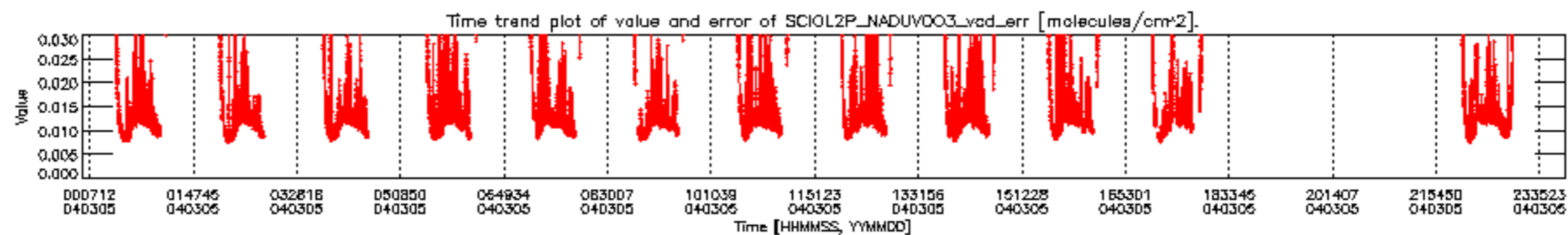
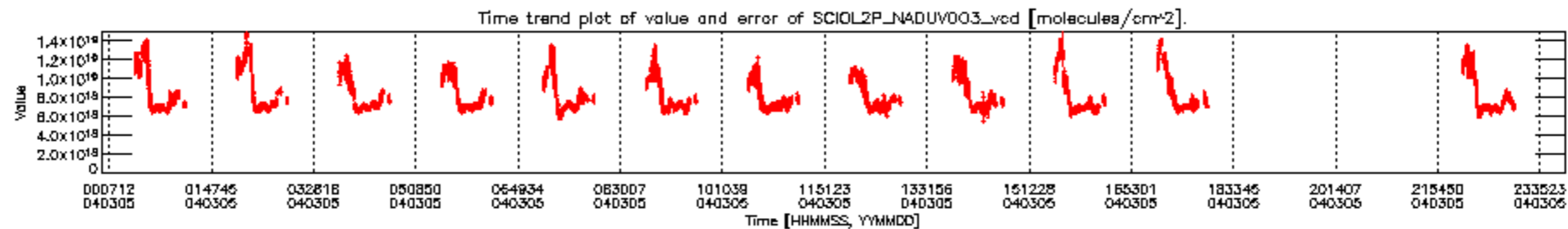


cL_opt_depth for 05MAR2004 00:00:00 to 06MAR2004 00:00:00

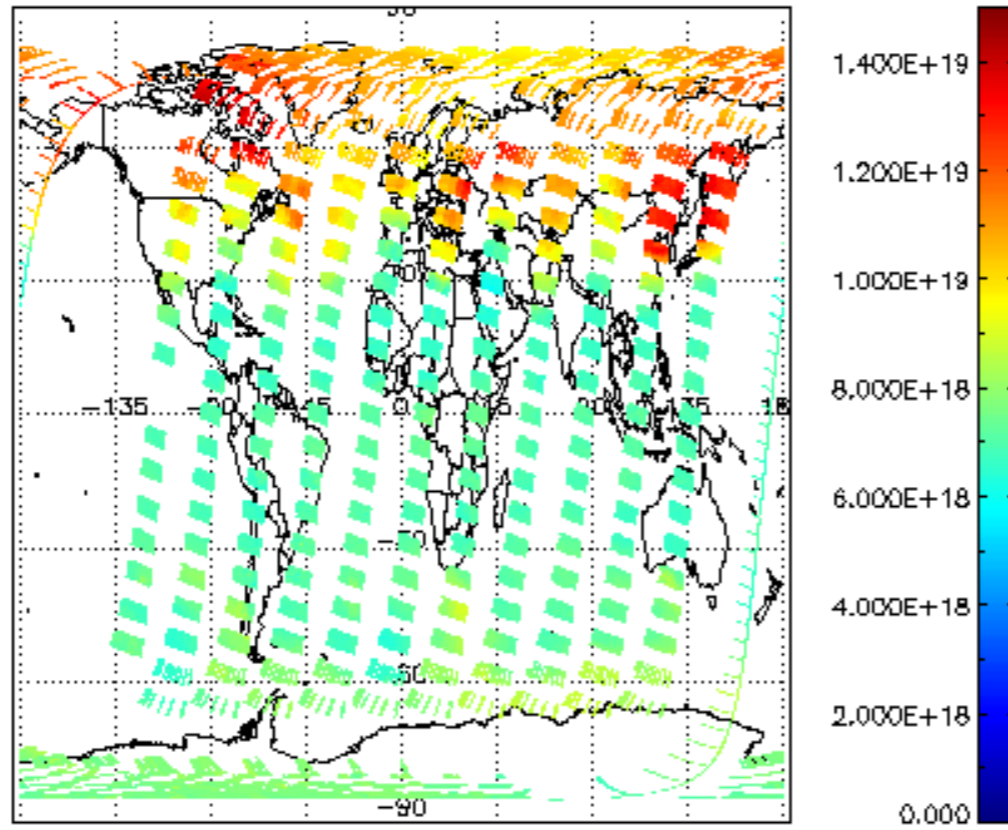


cloud_flags for 05MAR2004 00:00:00 to 06MAR2004 00:00:00

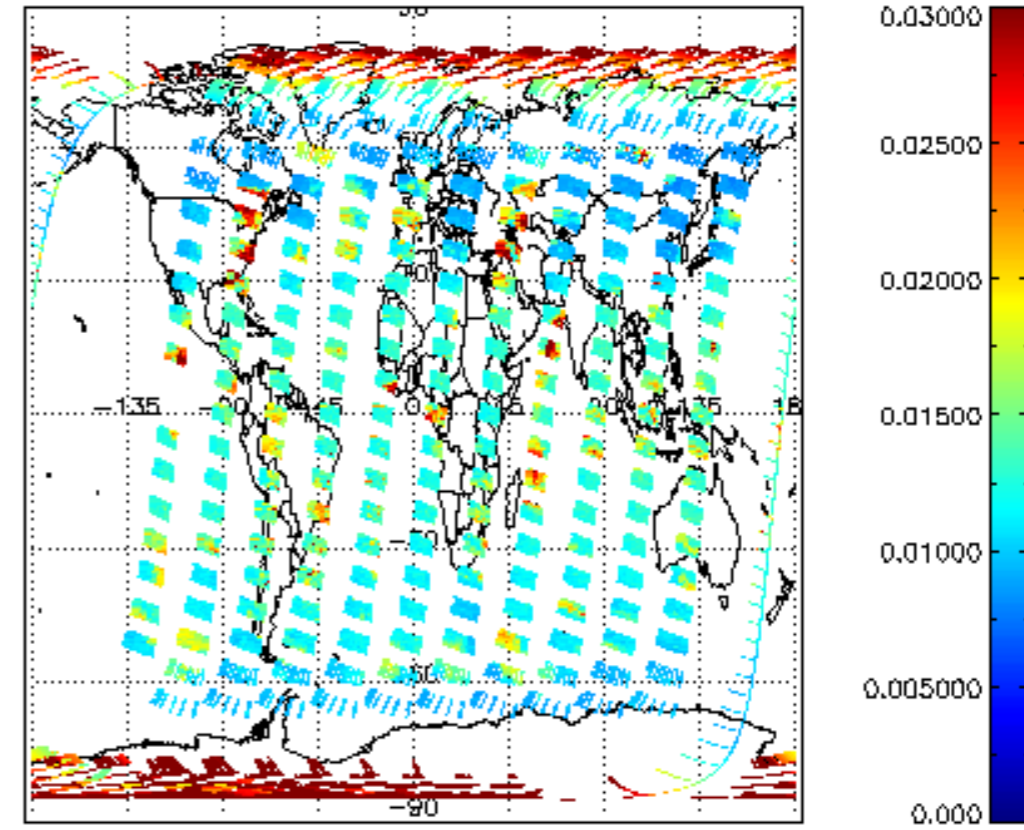




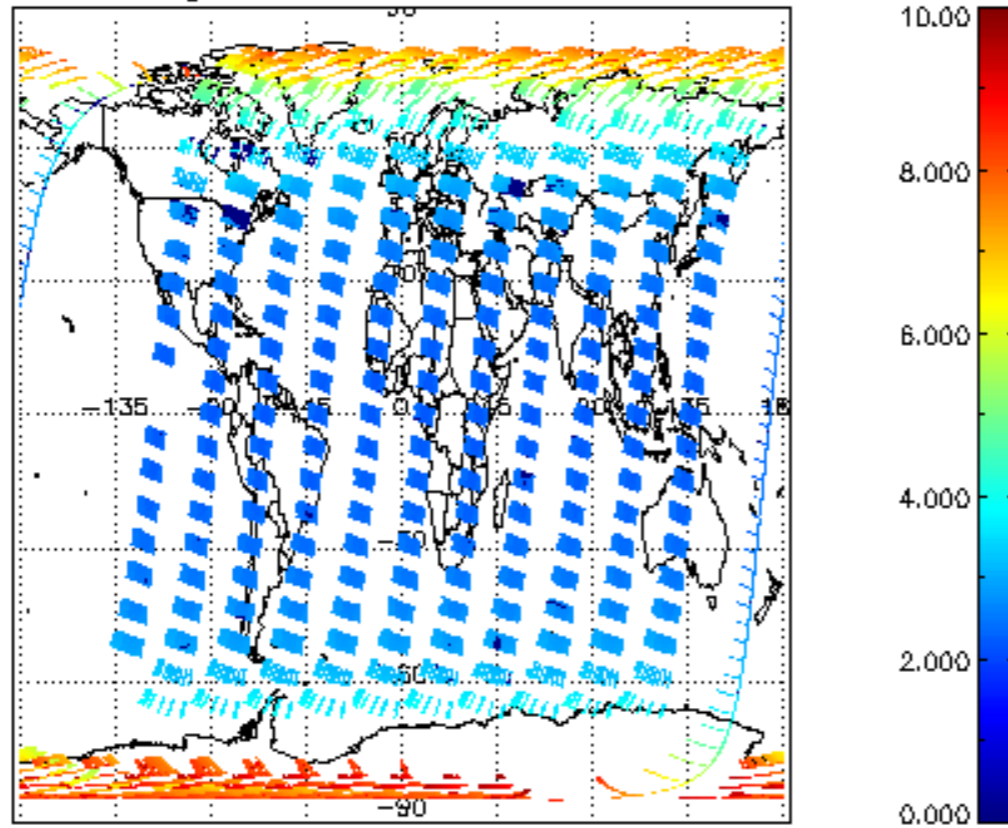
SCIOL2P_NADUV003_vcd for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



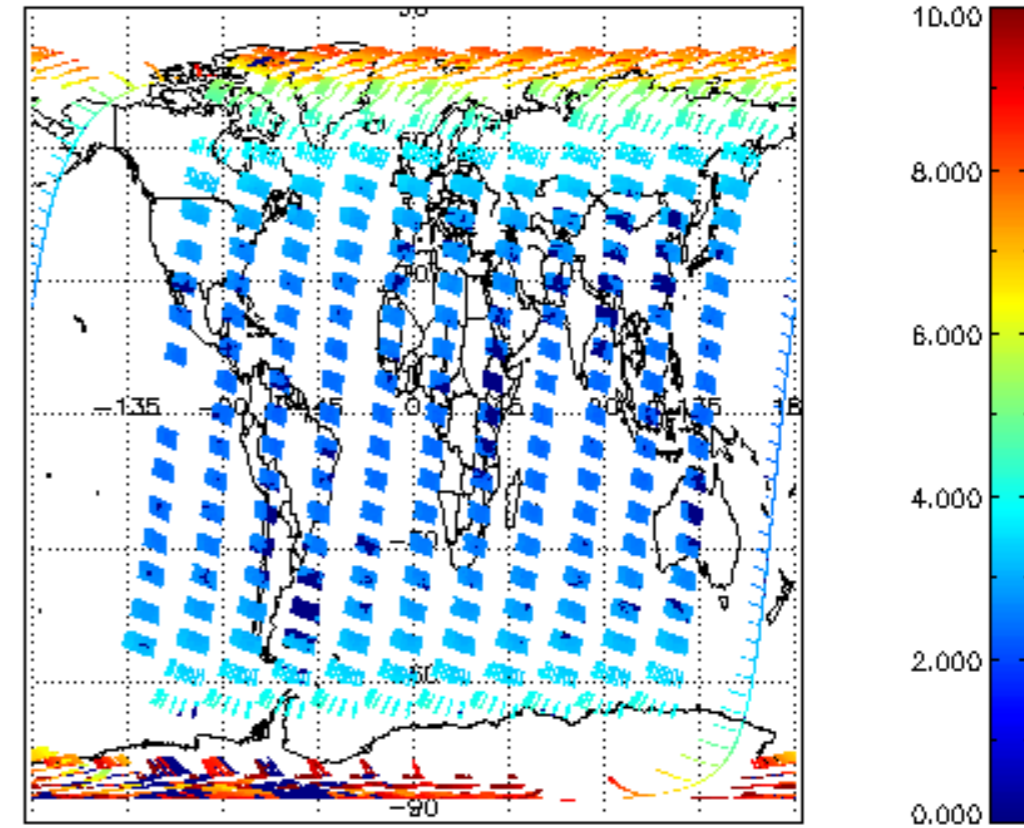
SCIOL2P_NADUV003_vcd_err for 05MAR2004 00:00:00 to 06MAR2004 00:00:00

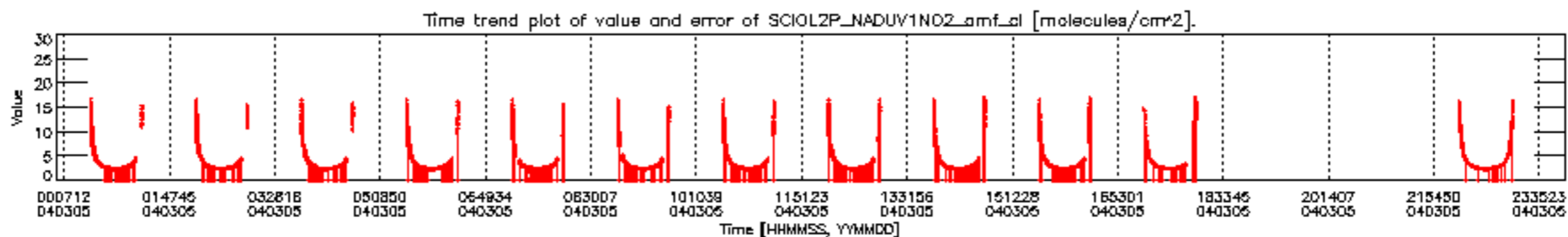
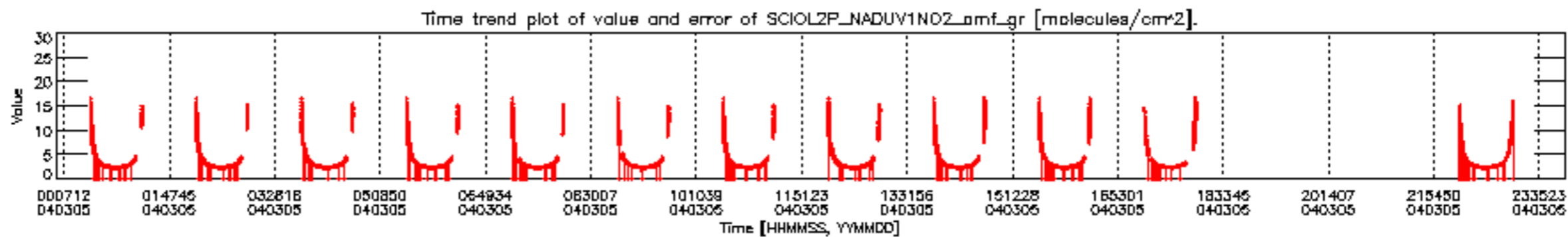
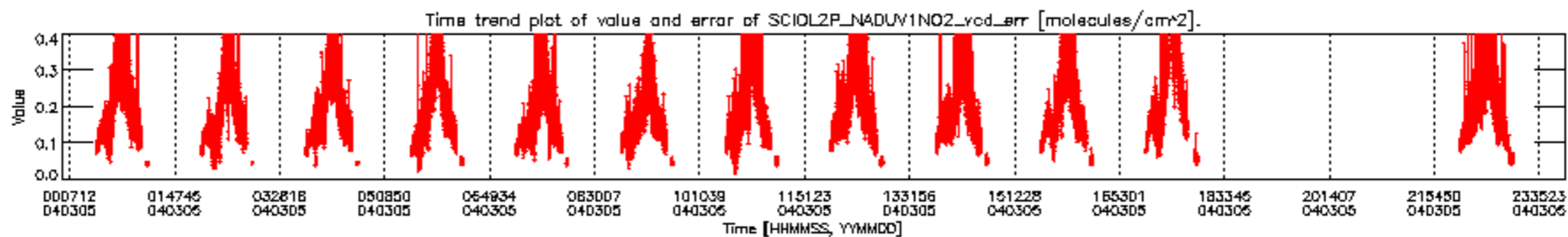
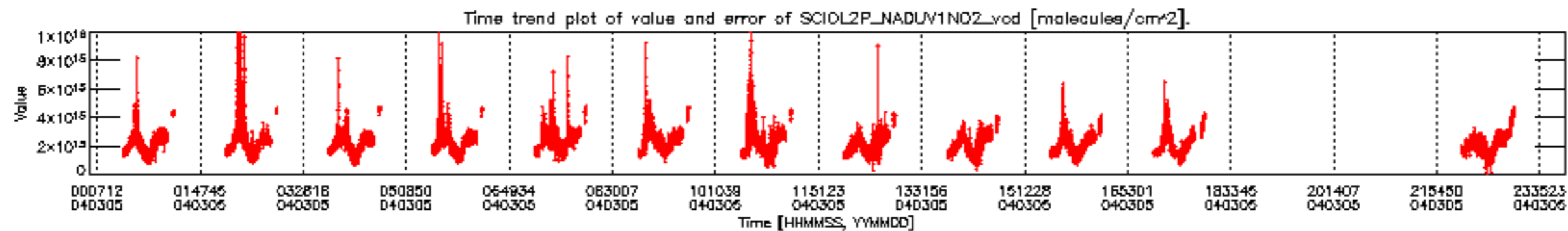


SCIOL2P_NADUV003_amf_gr for 05MAR2004 00:00:00 to 06MAR2004 00:00:00

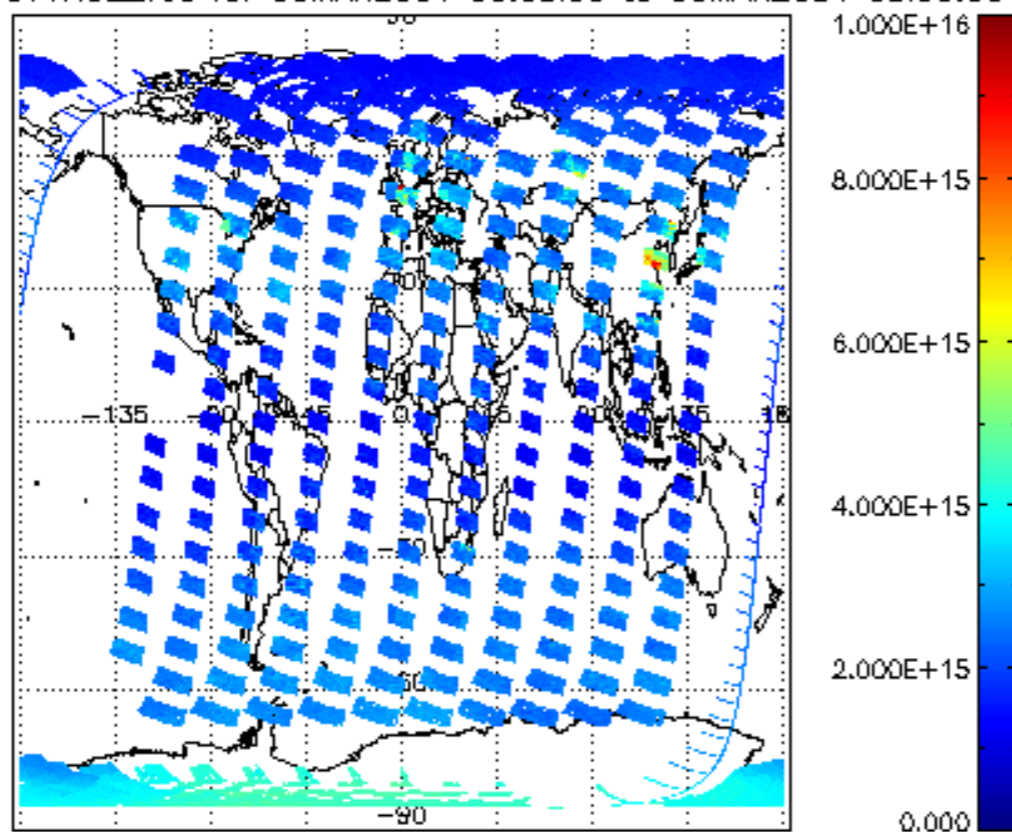


SCIOL2P_NADUV003_amf_cl for 05MAR2004 00:00:00 to 06MAR2004 00:00:00

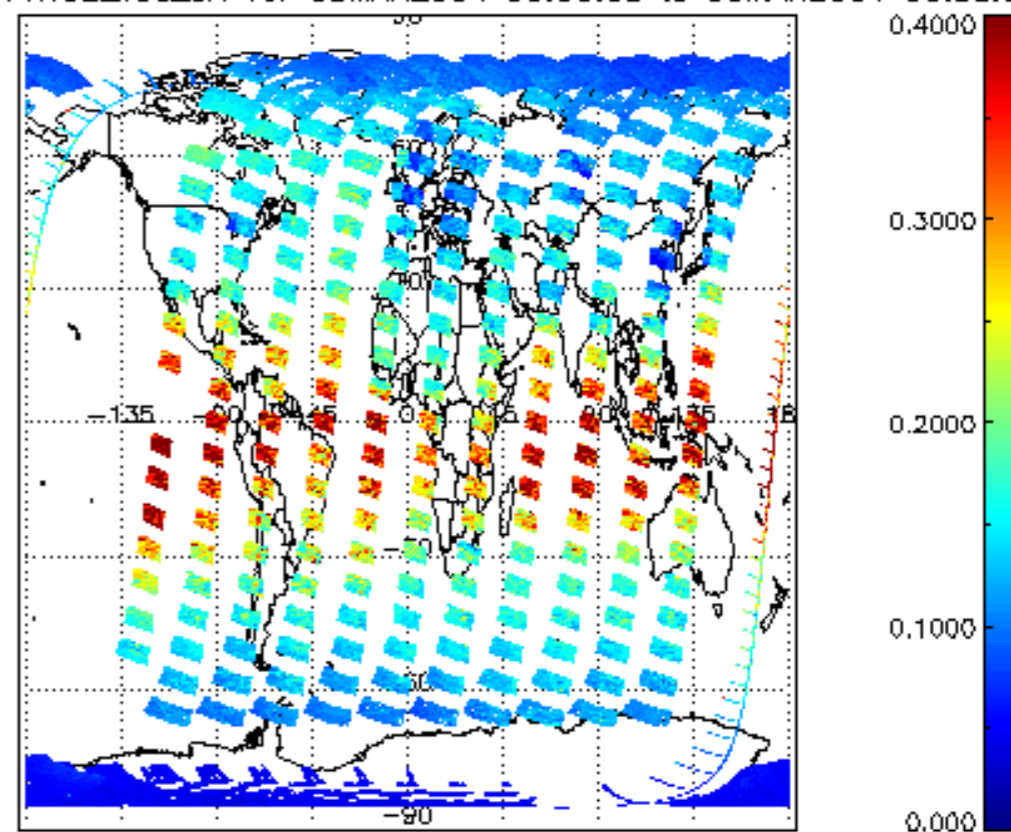




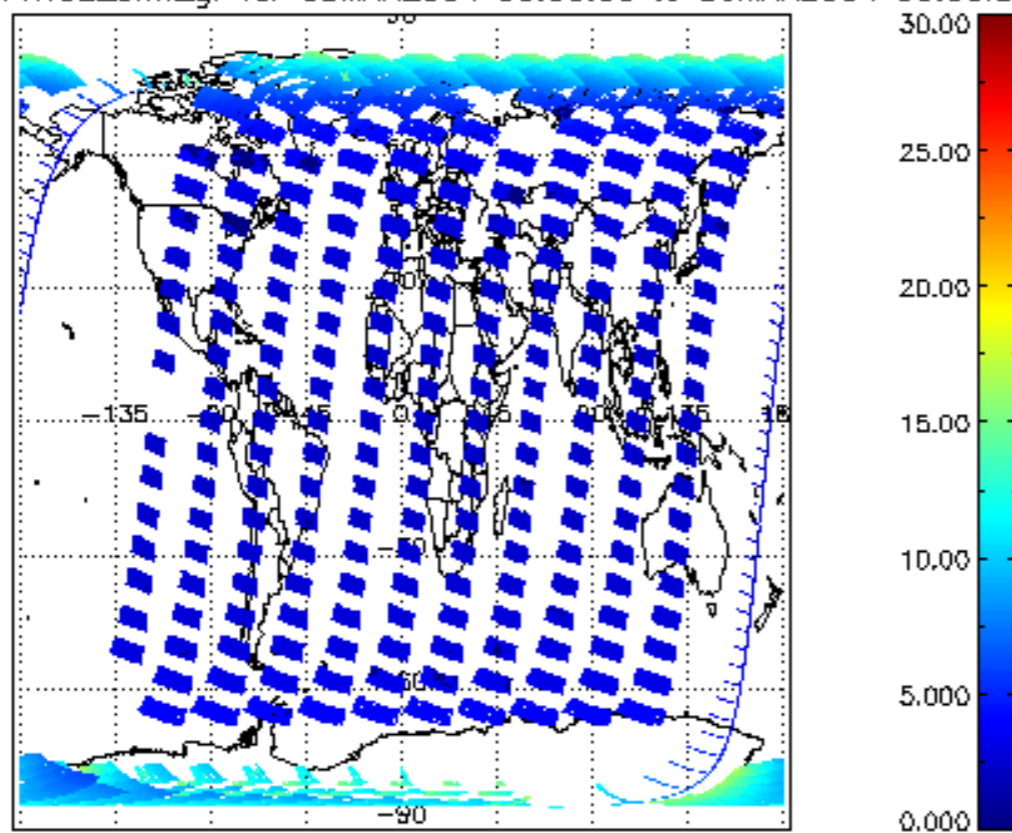
SCIOL2P_NADUV1NO2_vcd for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



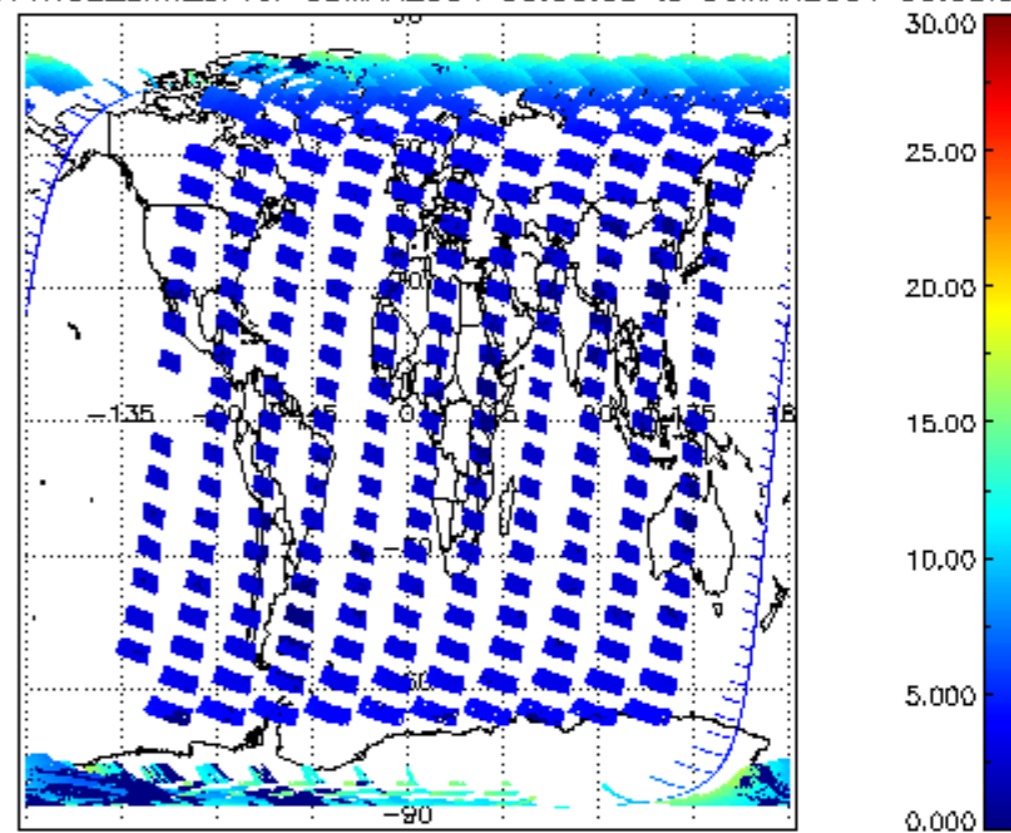
SCIOL2P_NADUV1NO2_vcd_err for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



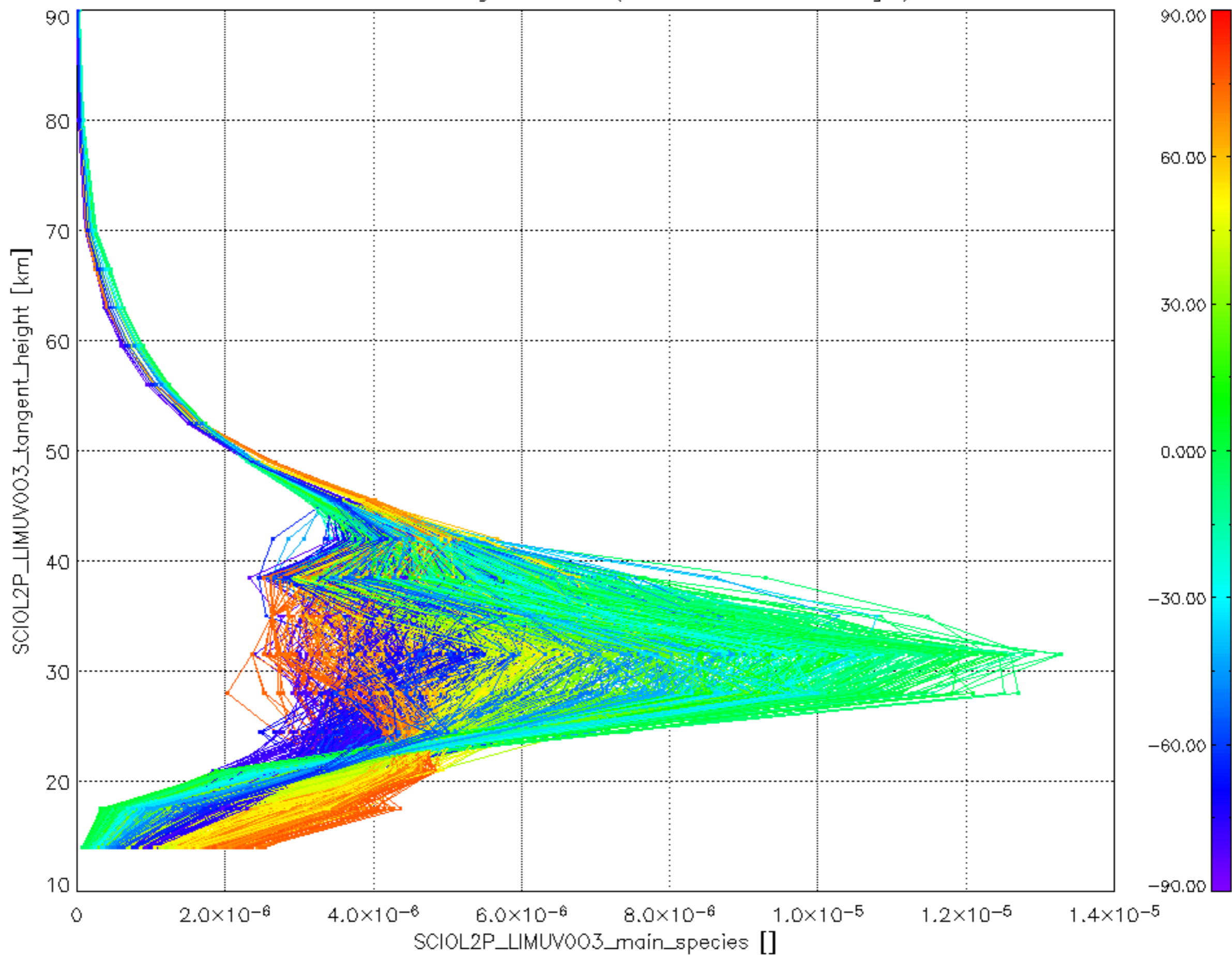
SCIOL2P_NADUV1NO2_amf_gr for 05MAR2004 00:00:00 to 06MAR2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 05MAR2004 00:00:00 to 06MAR2004 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_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

