

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	01SEP2008 07:06:40
Data source version	SCIA-OL/3.01-R
Processing scope for products	02AUG2004 00:00:00 to 03AUG2004 00:00:00
Start time of first product within scope	02AUG2004 05:06:58
Stop time of last product within scope	03AUG2004 00:29:58
Total number of level 2 products	10
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__2PRDPA20040802_050658_000033252029_00091_12670_9598.N1	02AUG2004 05:06:58	02AUG2004 06:02:23	0	GOOD
1	SCI_OL__2PRDPA20040802_064734_000033812029_00092_12671_9434.N1	02AUG2004 06:47:34	02AUG2004 07:43:56	0	GOOD
2	SCI_OL__2PRDPA20040802_082810_000033252029_00093_12672_9584.N1	02AUG2004 08:28:10	02AUG2004 09:23:36	0	GOOD
3	SCI_OL__2PRDPA20040802_100847_000033812029_00094_12673_9575.N1	02AUG2004 10:08:47	02AUG2004 11:05:08	0	GOOD
4	SCI_OL__2PRDPA20040802_114923_000033252029_00095_12674_9638.N1	02AUG2004 11:49:23	02AUG2004 12:44:48	0	GOOD
5	SCI_OL__2PRDPA20040802_165111_000033812029_00098_12677_9623.N1	02AUG2004 16:51:11	02AUG2004 17:47:33	0	GOOD
6	SCI_OL__2PRDPA20040802_183140_000033882029_00099_12678_9494.N1	02AUG2004 18:31:40	02AUG2004 19:28:09	0	GOOD
7	SCI_OL__2PRDPA20040802_201242_000033122029_00100_12679_9370.N1	02AUG2004 20:12:42	02AUG2004 21:07:55	0	GOOD
8	SCI_OL__2PRDPA20040802_215300_000033252029_00101_12680_9568.N1	02AUG2004 21:53:00	02AUG2004 22:48:26	0	GOOD
9	SCI_OL__2PRDPA20040802_233336_000033812029_00102_12681_9465.N1	02AUG2004 23:33:36	03AUG2004 00:29:58	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: 97760

Total number of cloud data DSRs with good quality flag (=0): 97760 (100.0 %)

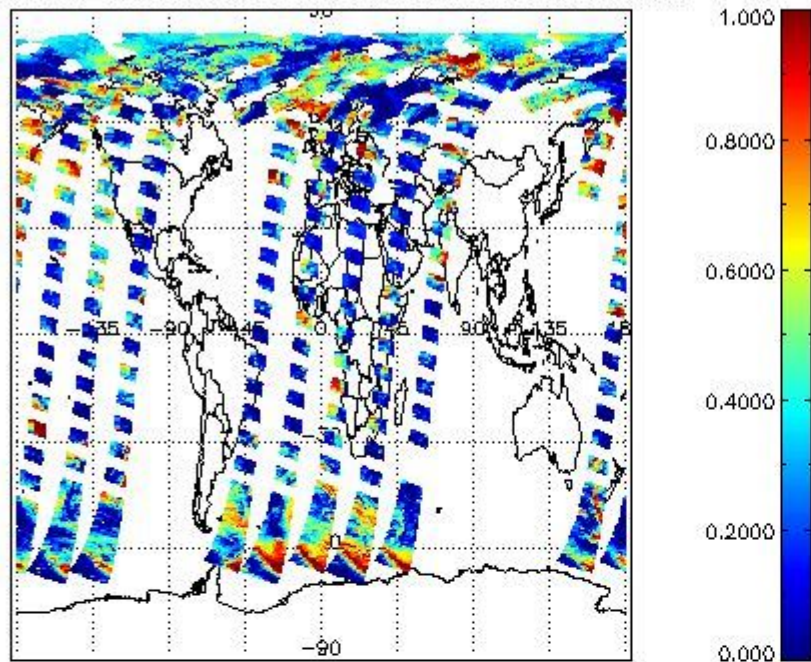
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	97760	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	97760	0.16955	0.12500	0.12500	0.25000	0.059867	s
CL_FRAC	97760	0.32214	0.26589	0.0000	1.0000	0.28056	-
CL_FRAC_ERR	97760	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	97760	5.4255	4.0000	4.0000	8.0000	1.9157	
PMD_READ_CL[0]	97760	0.19466	0.0000	0.0000	8.0000	0.99601	-
PMD_READ_CL[1]	97760	1.1607	0.0000	0.0000	8.0000	2.1144	-
CL_TOP_HEIGHT	83829	3.1538	1.4295	0.0000	17.000	3.5090	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	83829	58.644	77.292	0.0000	101.00	43.871	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	97760	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	97760	11001011	11000100	11000000	11100000	3429.9	flags
AERO_ABSO_IND	97760	0.77928	0.61610	-3.6864	7.2349	1.0136	
AERO_IND_DIAG	97760	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	97760	01010110	00000000	00000000	11000000	24457.	flags

Time and geolocation plots:

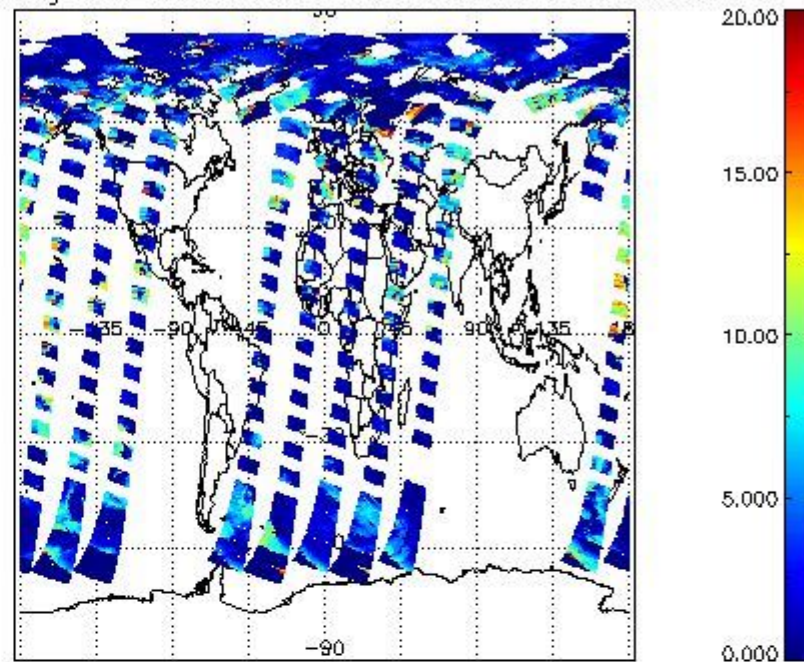
Plots are available for the following parameters:

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

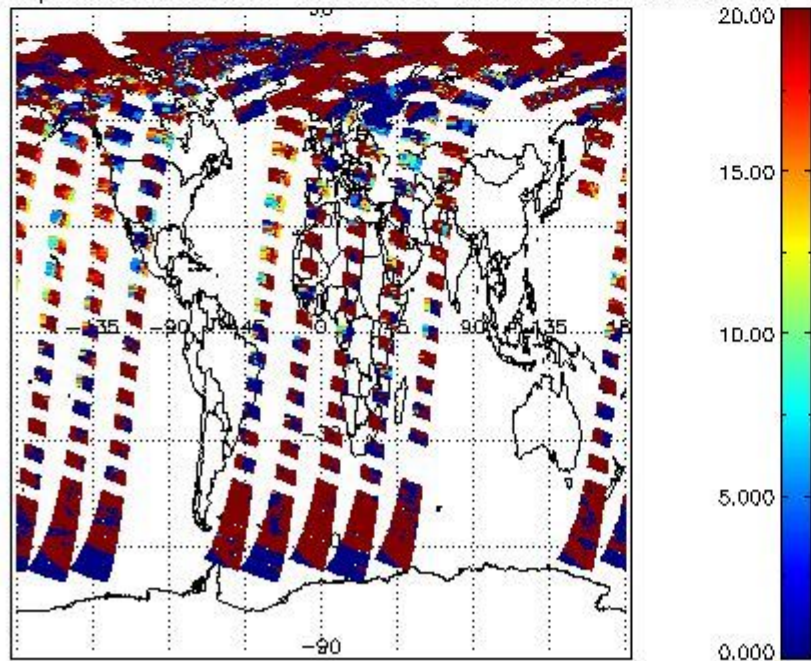
cL_frac for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



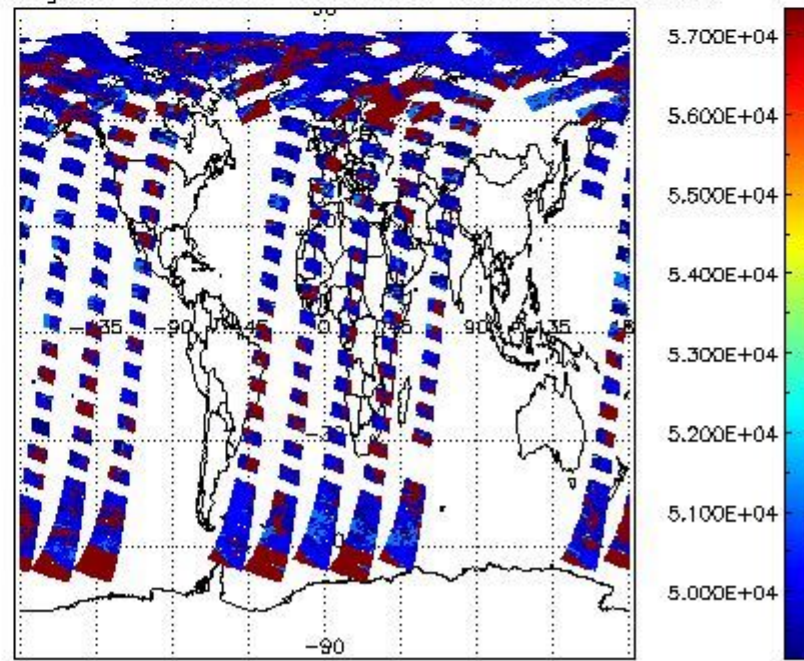
cL_top_height for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



cL_opt_depth for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



cloud_flags for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



2.2.2 Nadir

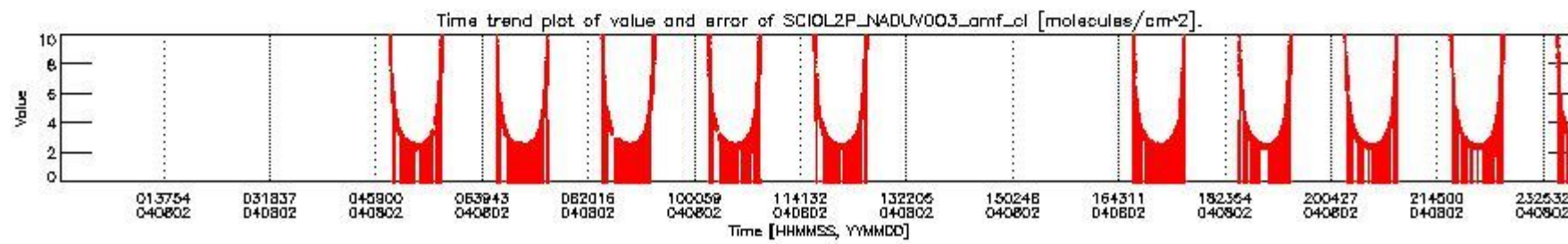
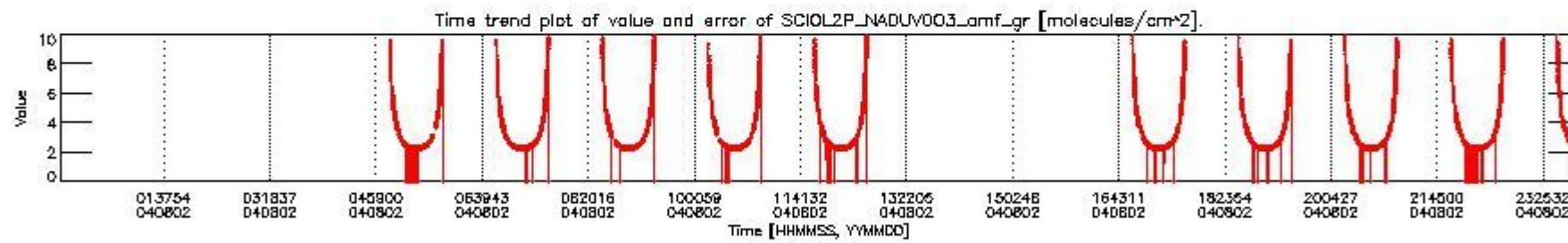
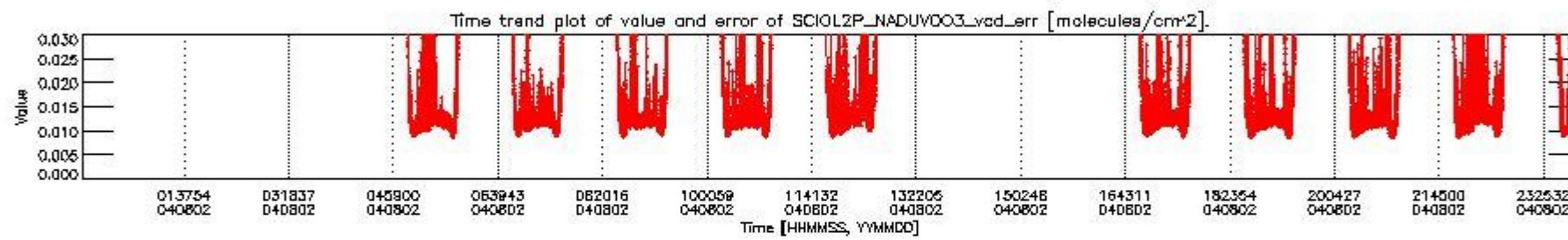
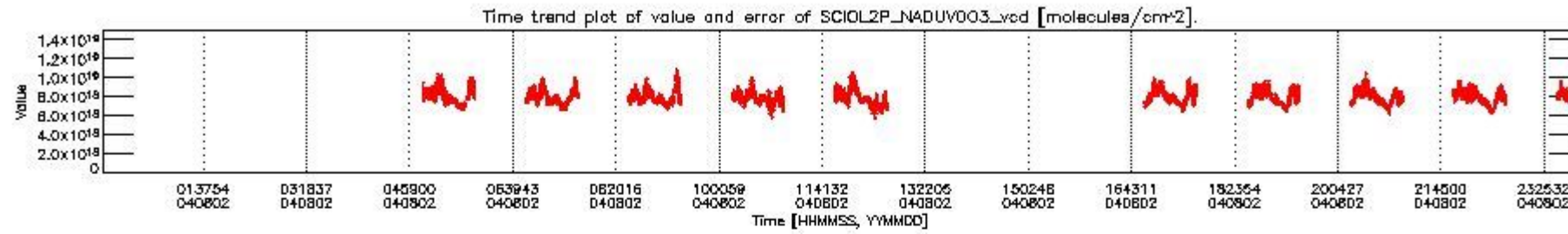
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

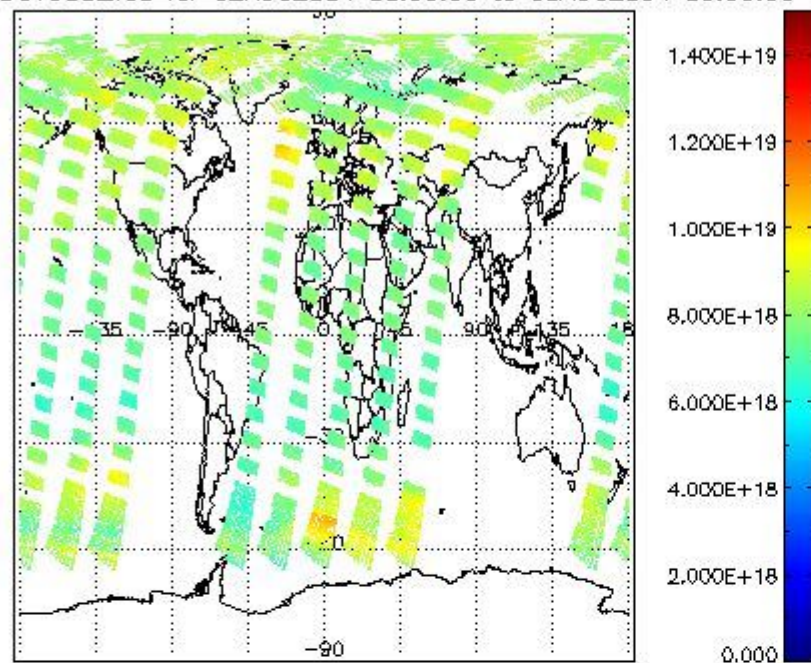
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

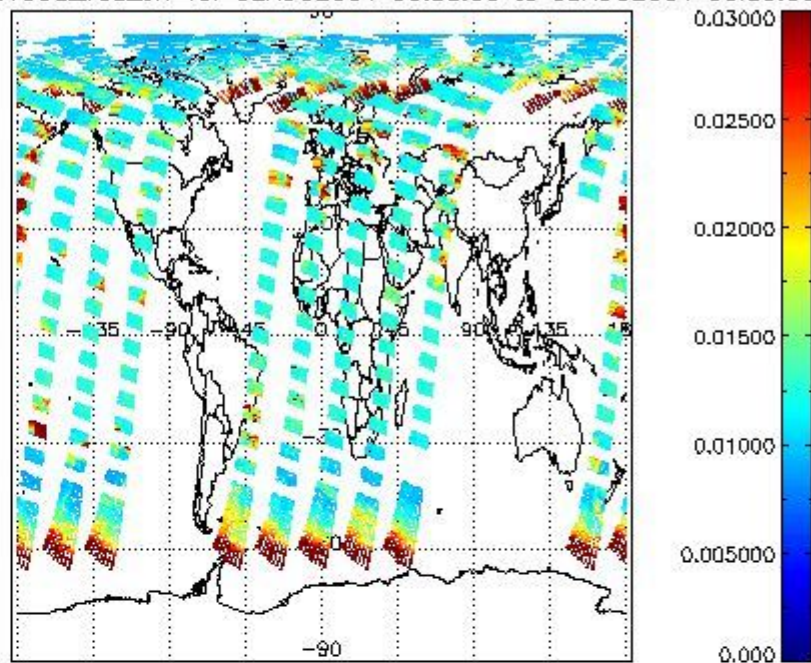
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



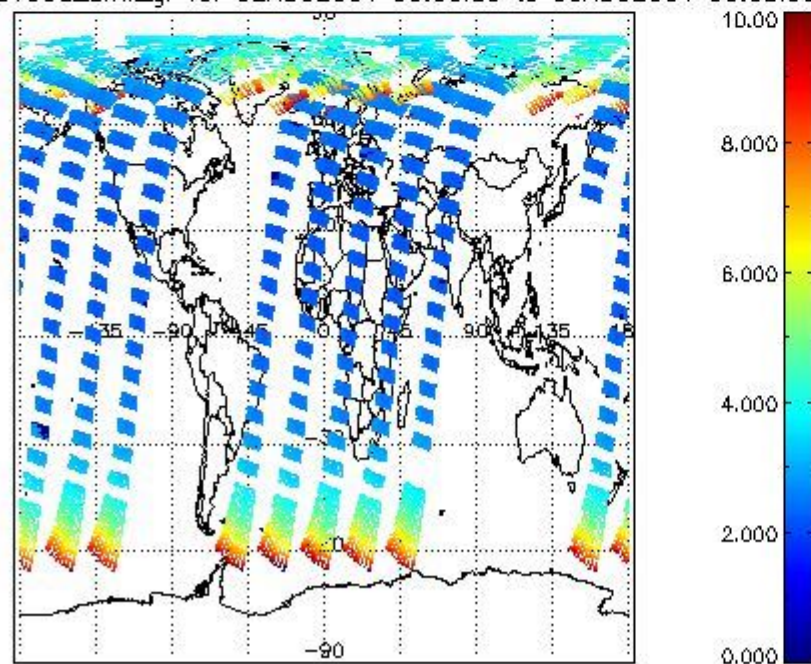
SCIOL2P_NADUV003_vcd for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



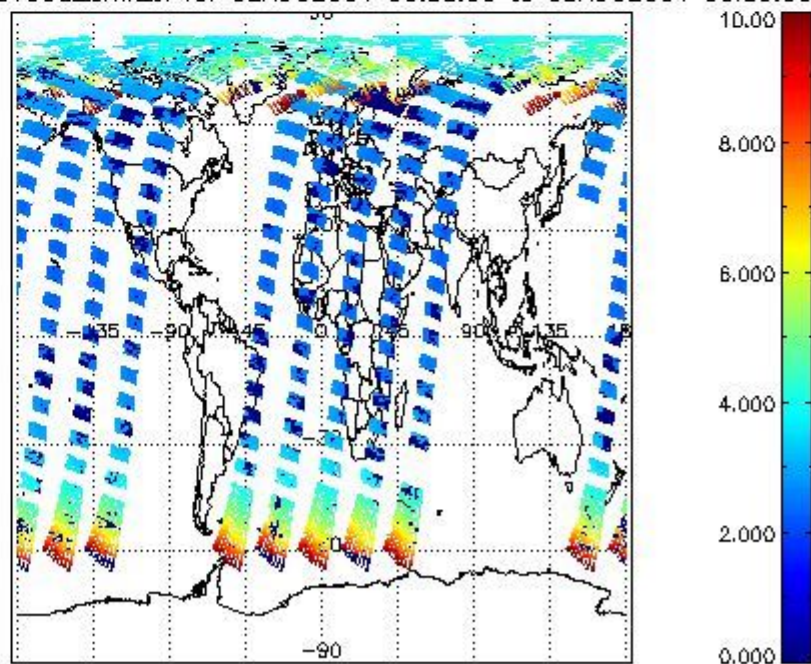
SCIOL2P_NADUV003_vcd_err for 02AUG2004 00:00:00 to 03AUG2004 00:00:00

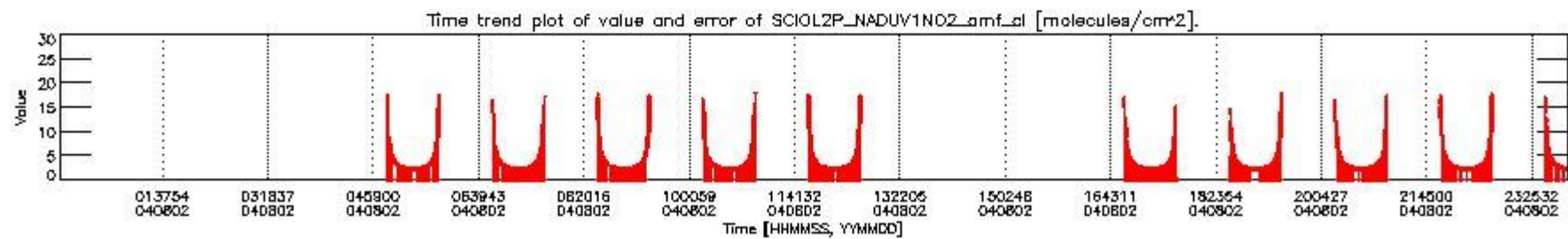
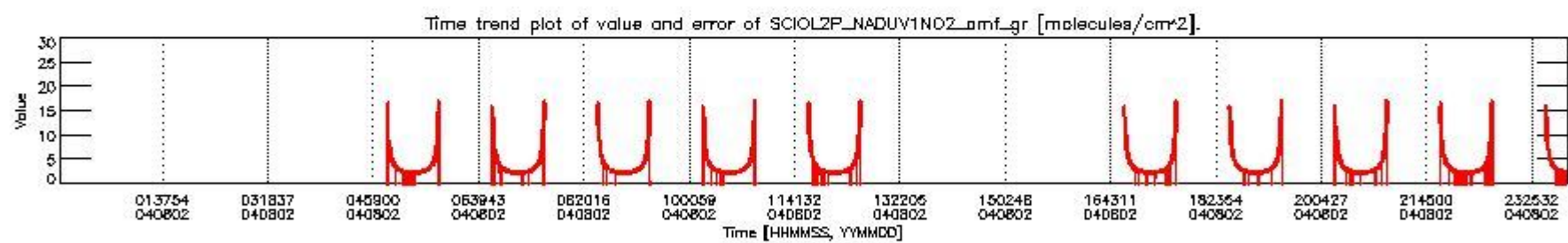
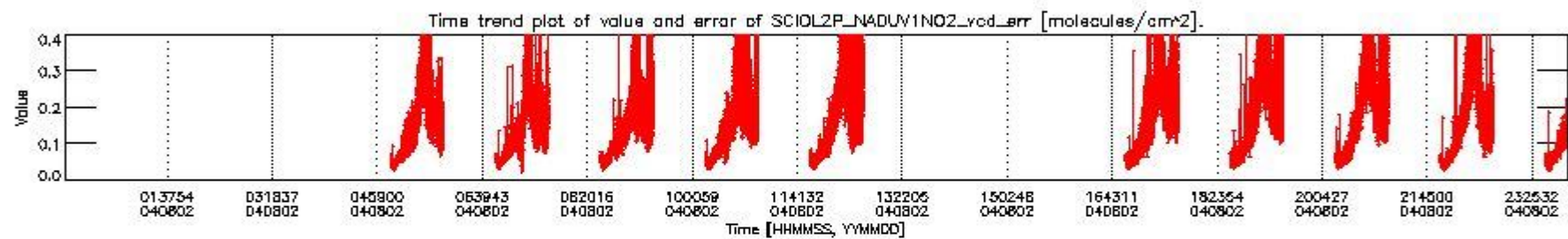
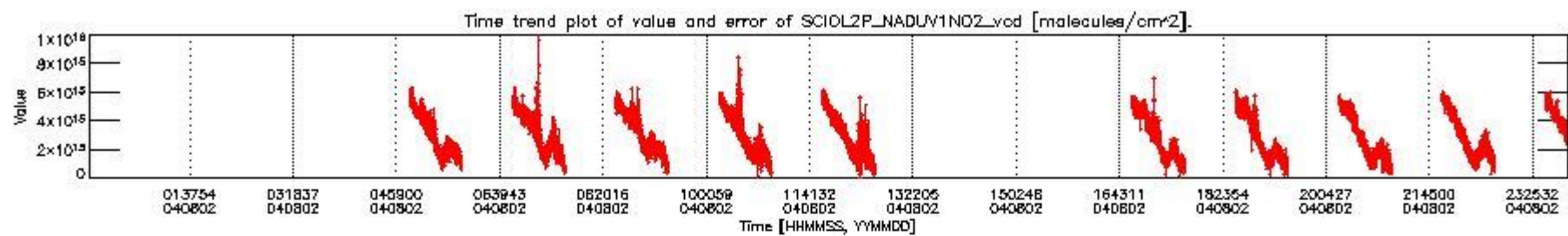


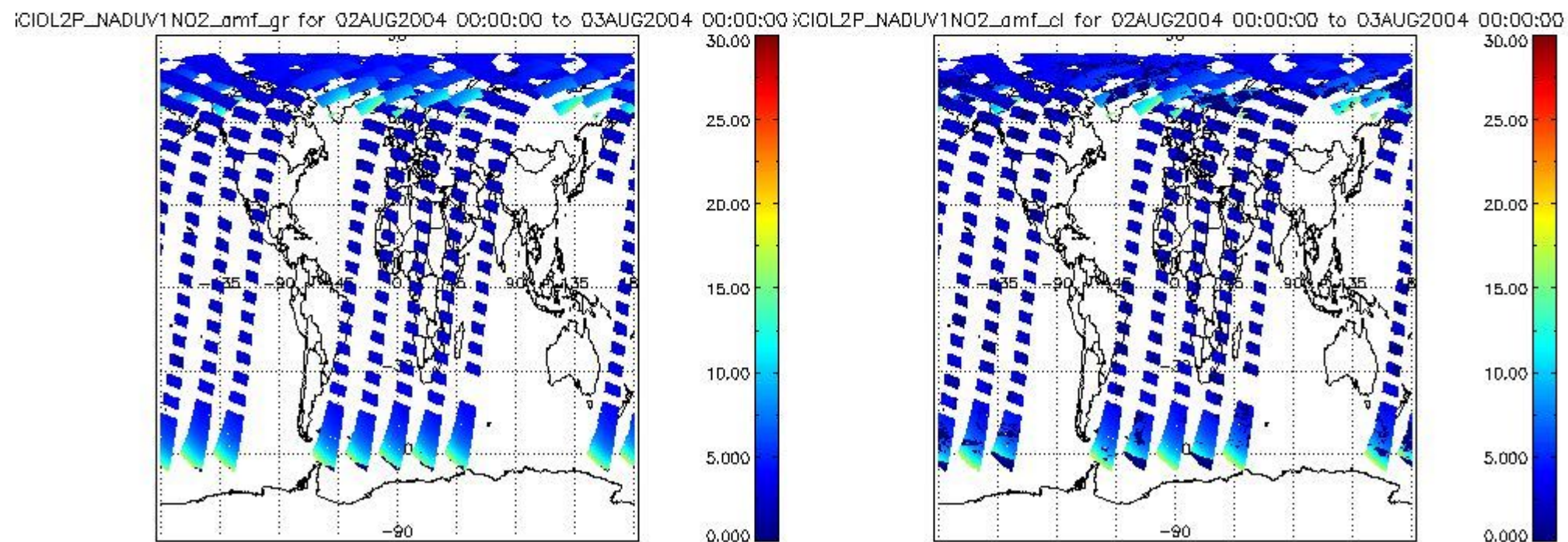
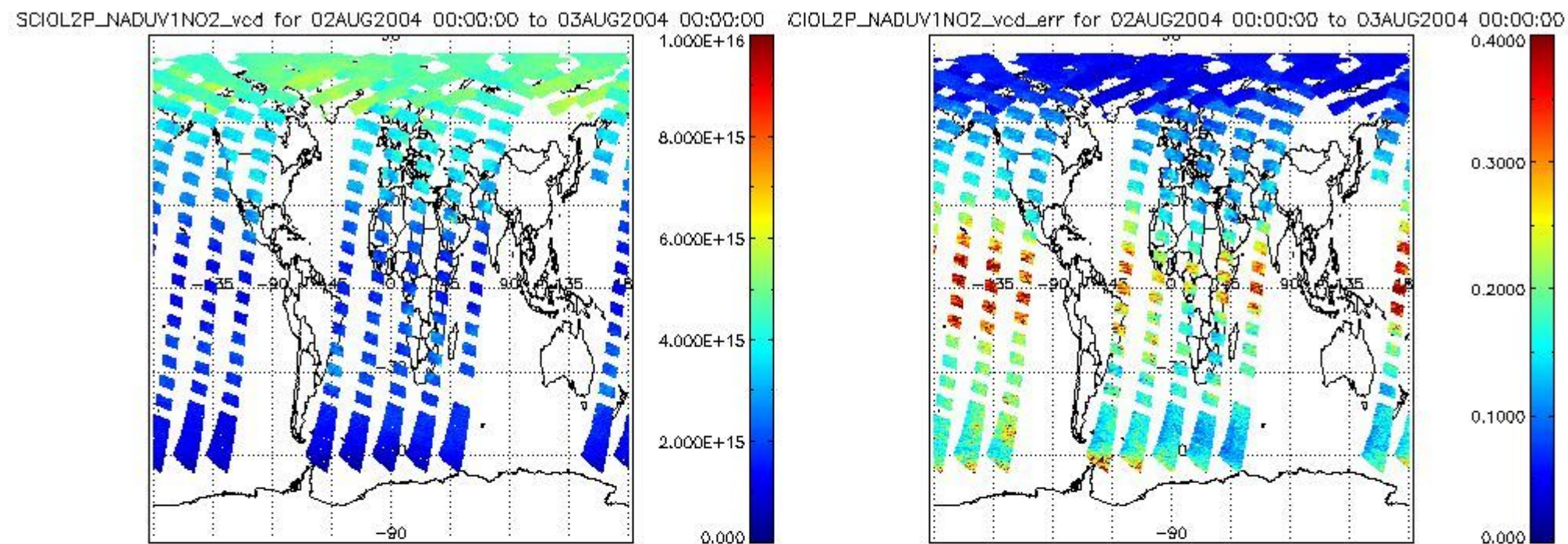
SCIOL2P_NADUV003_amf_gr for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 02AUG2004 00:00:00 to 03AUG2004 00:00:00







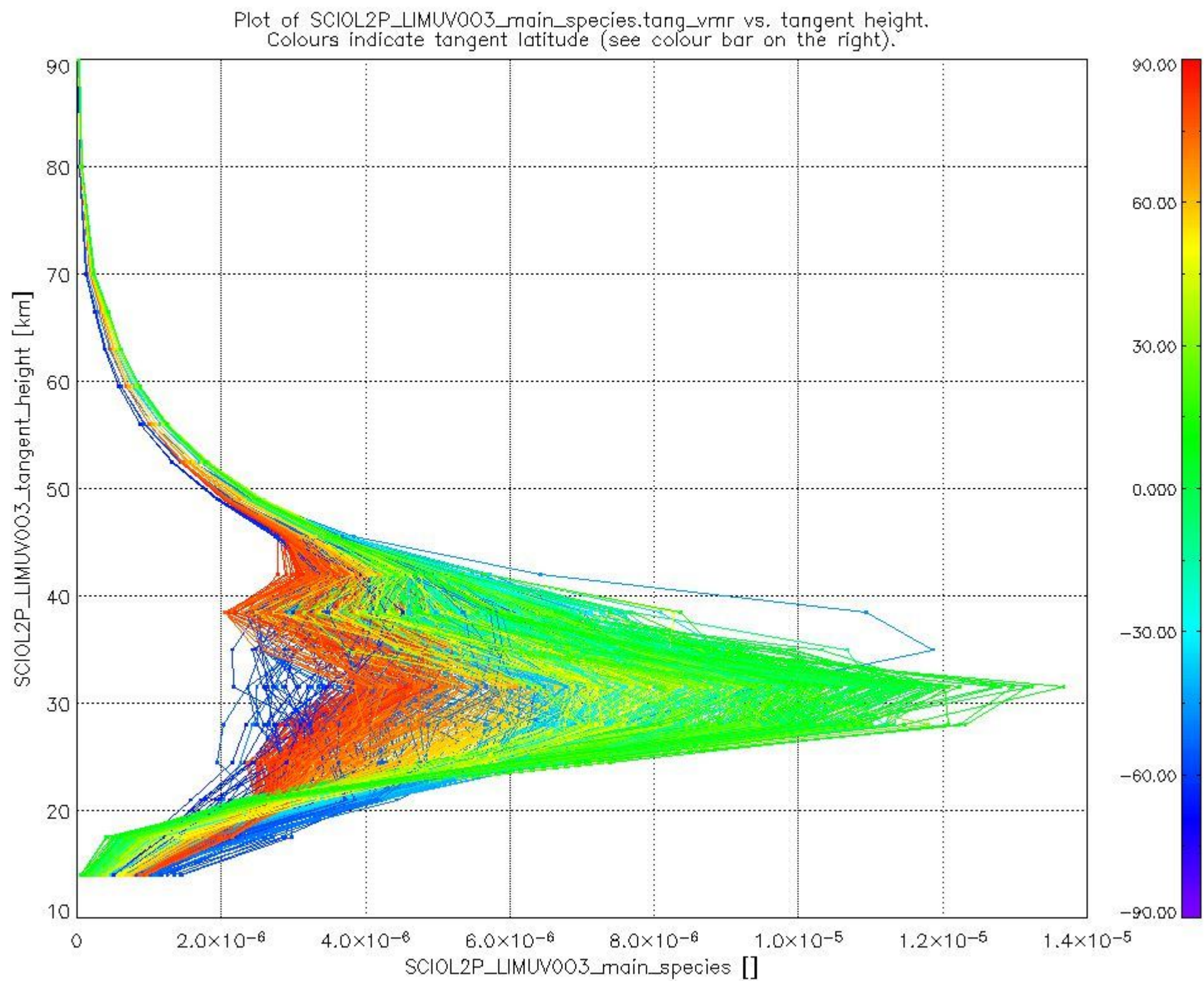
2.2.3 Limb

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

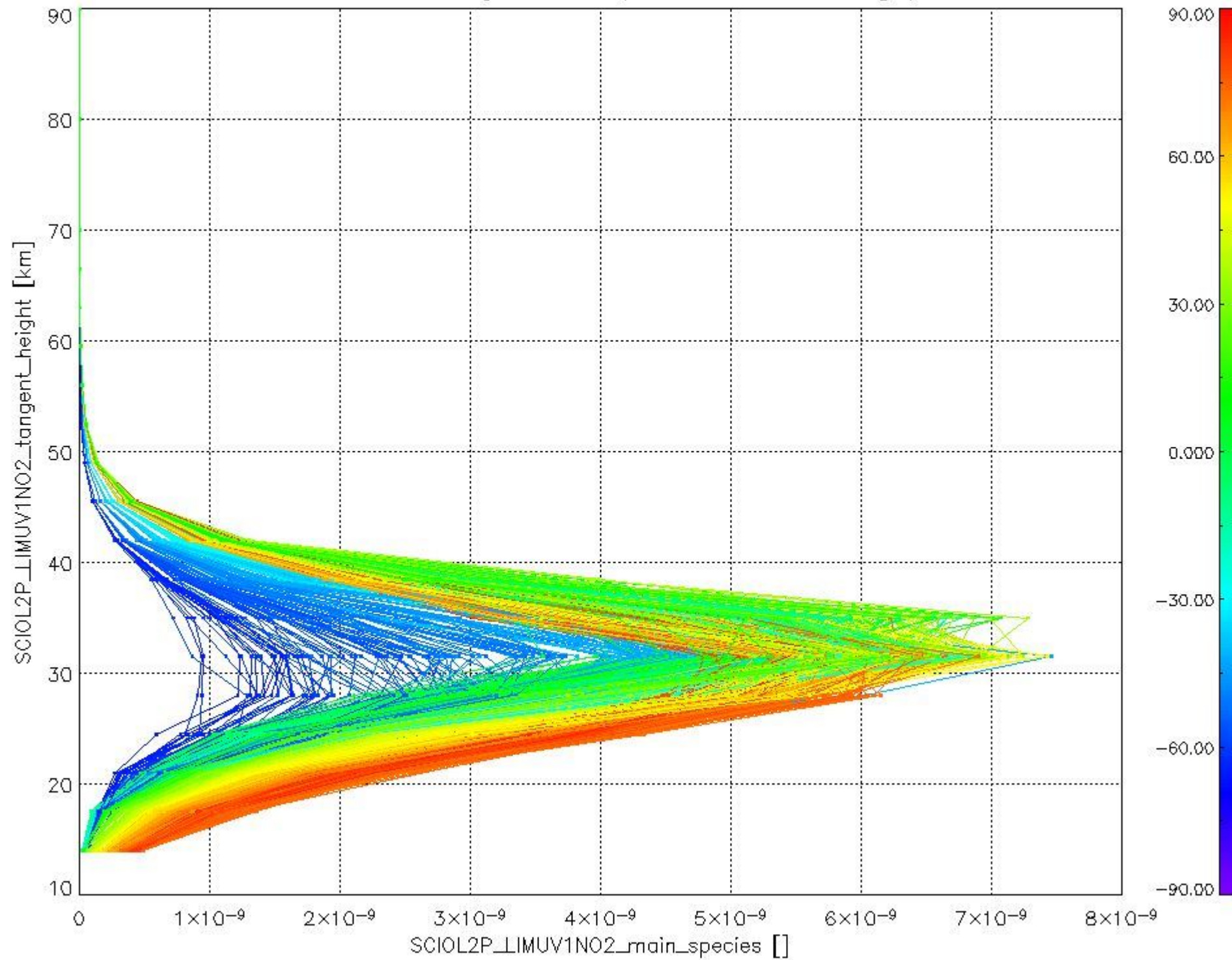
The following data items are currently included into this section:

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.



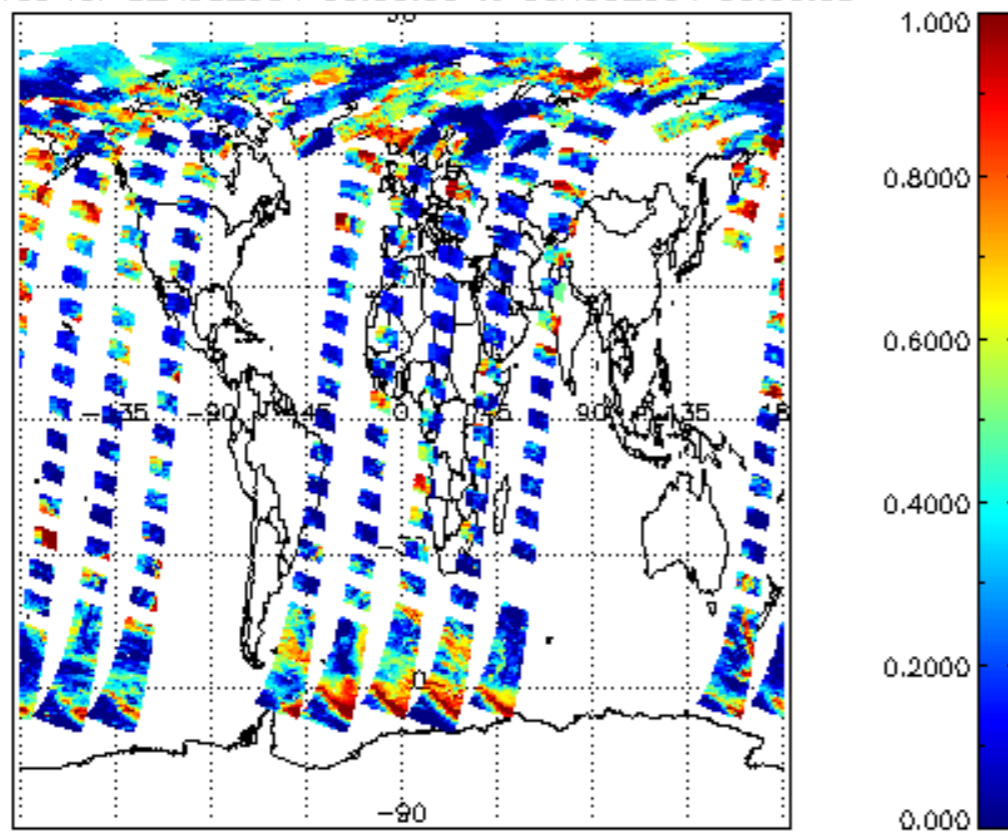
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



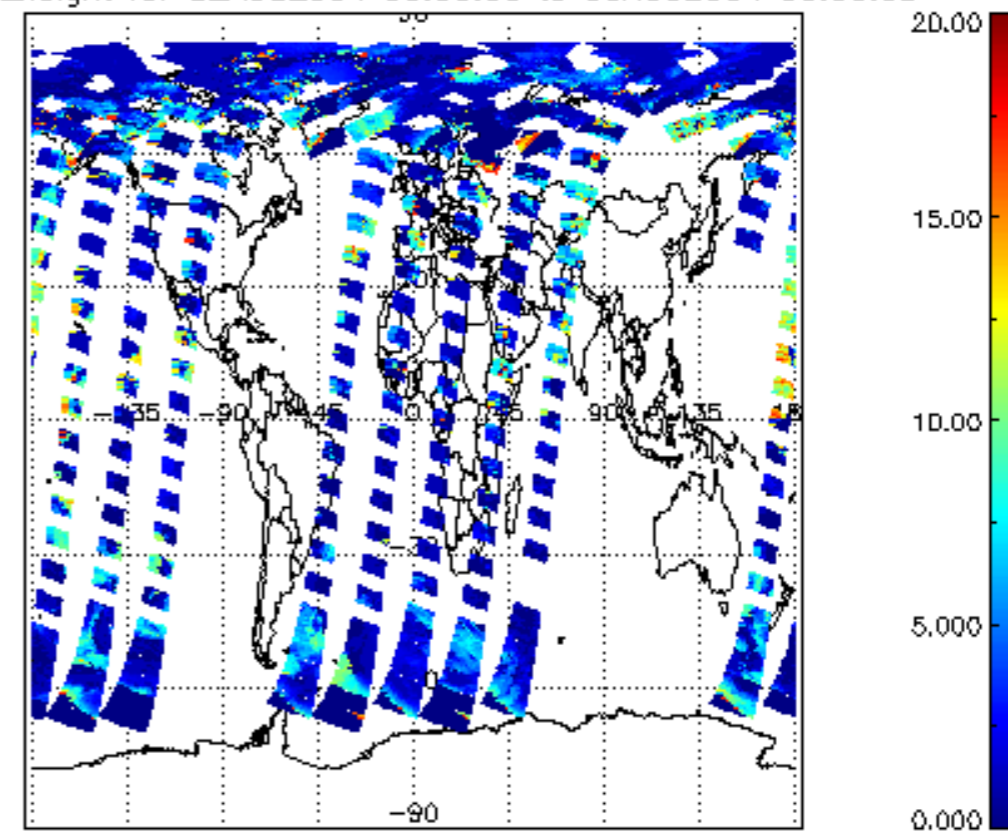
2.3 ADF monitoring

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

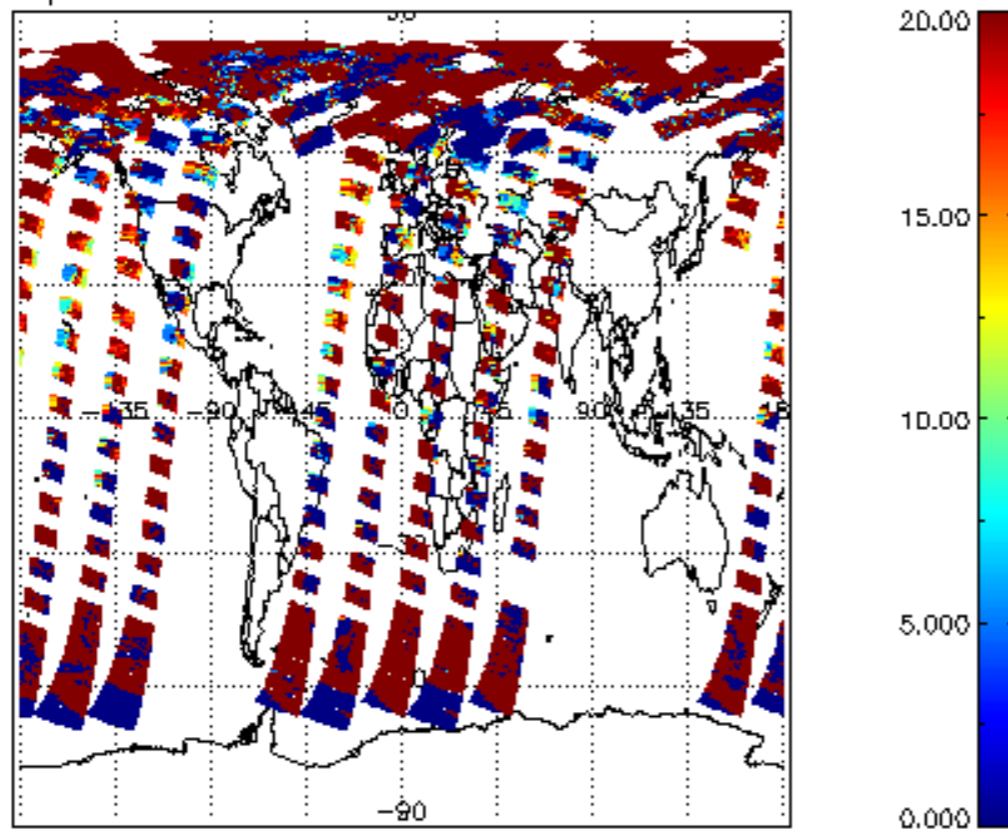
cI_frac for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



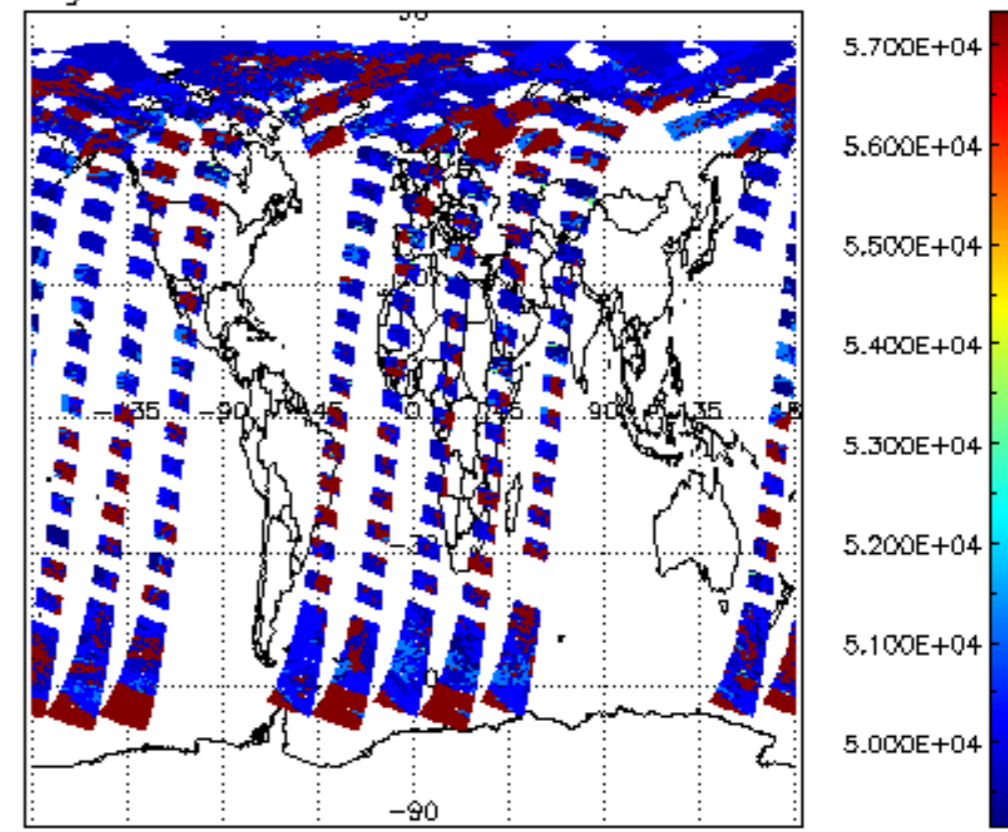
cI_top_height for 02AUG2004 00:00:00 to 03AUG2004 00:00:00

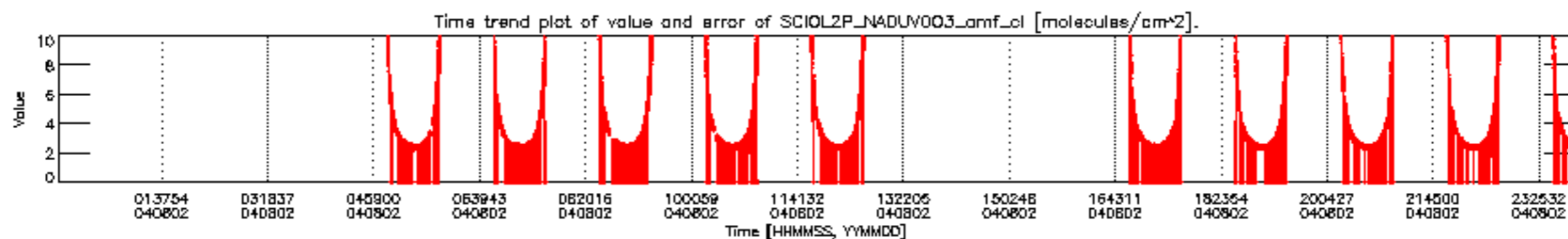
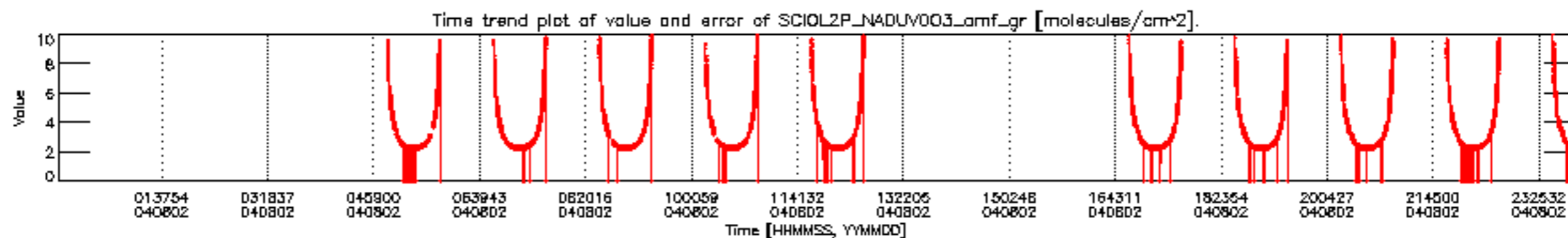
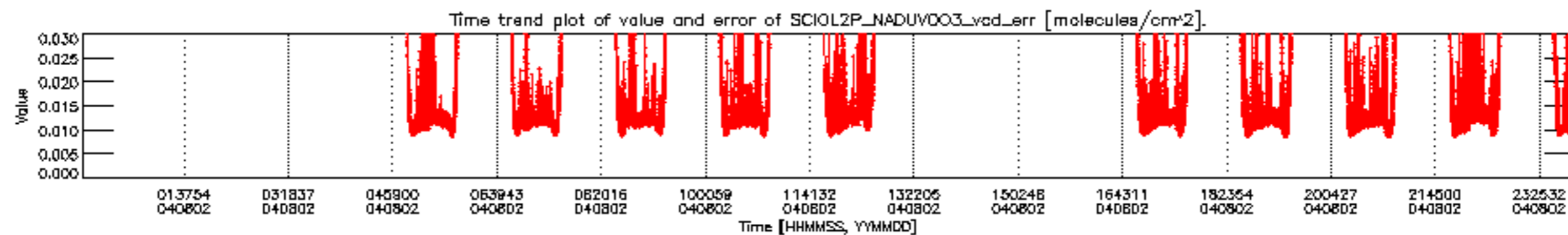
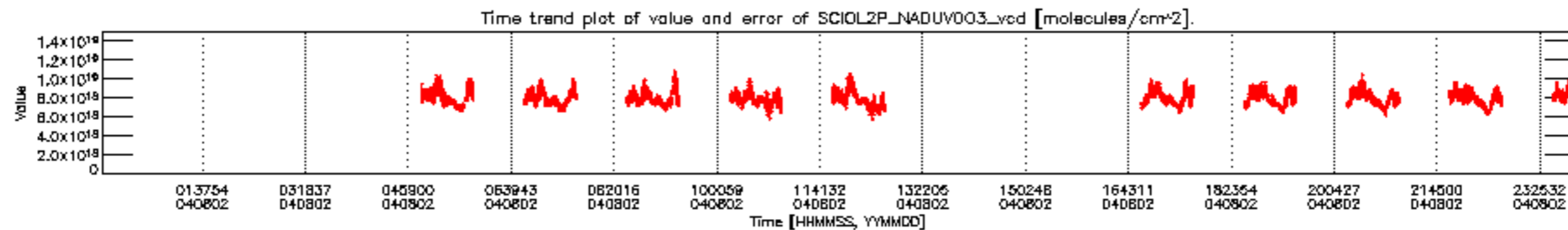


cI_opt_depth for 02AUG2004 00:00:00 to 03AUG2004 00:00:00

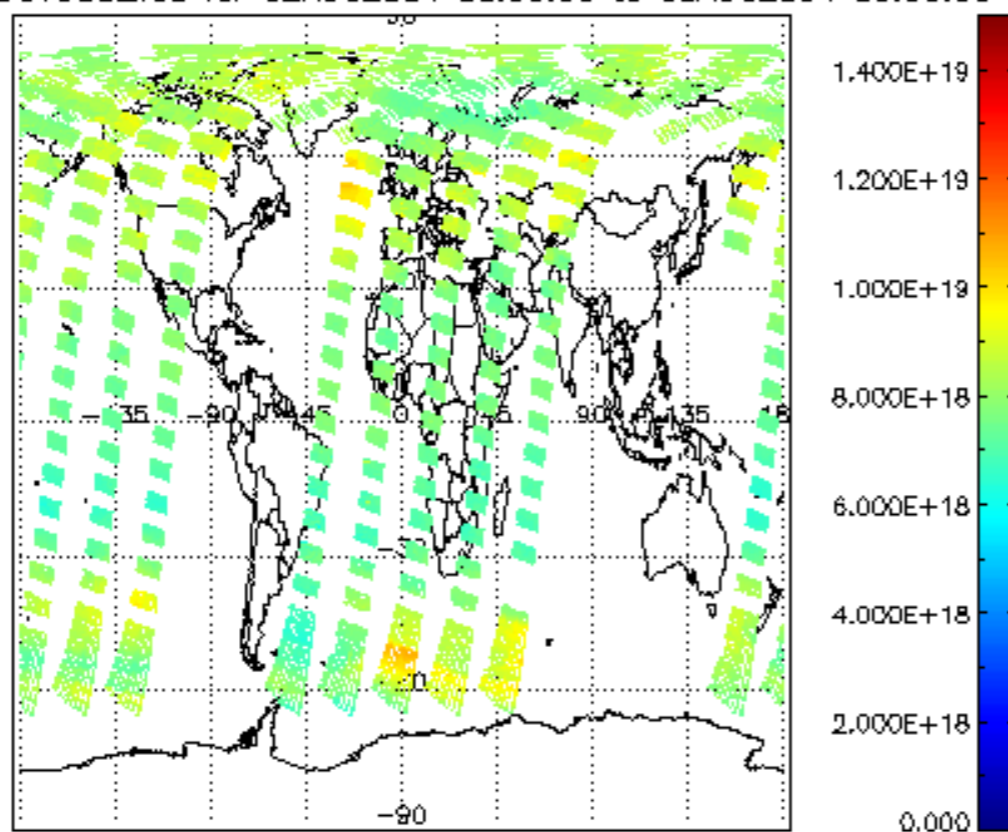


cloud_flags for 02AUG2004 00:00:00 to 03AUG2004 00:00:00

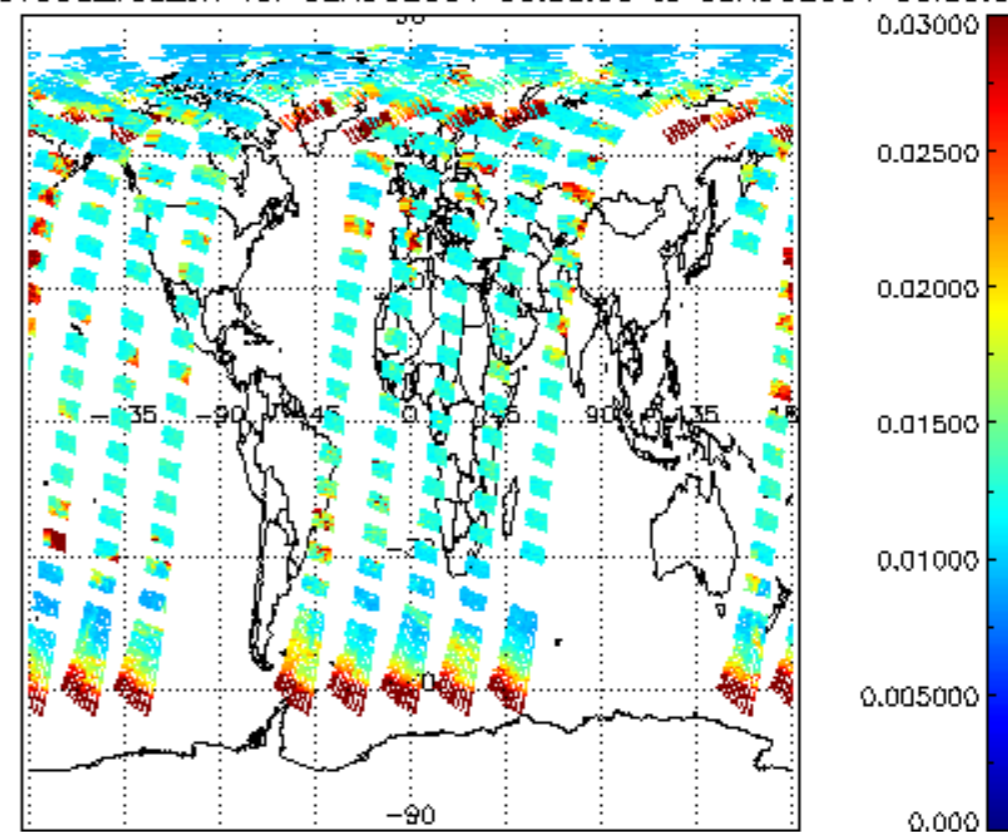




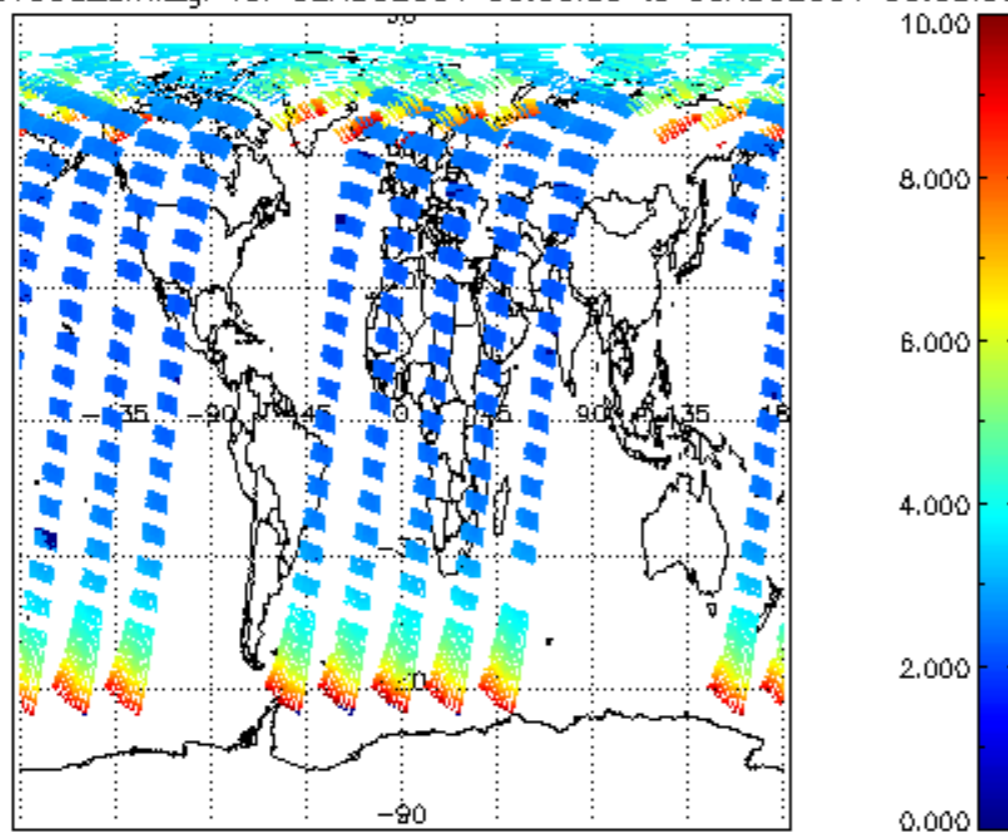
SCIOL2P_NADUV003_vcd for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



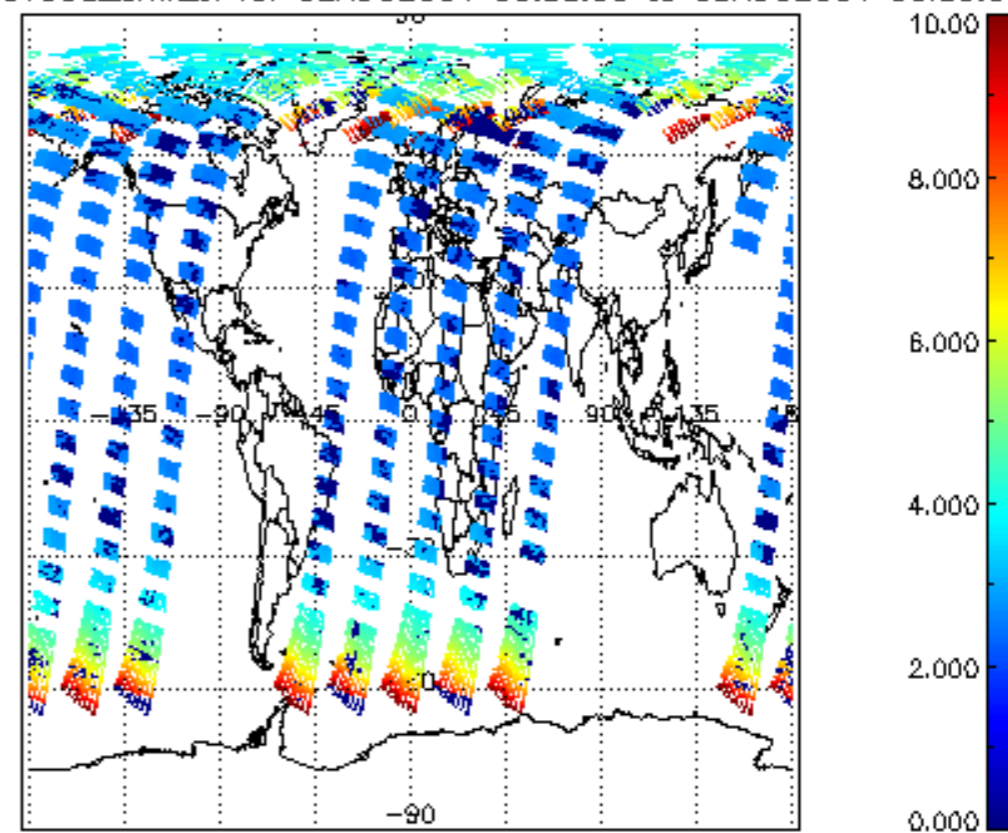
SCIOL2P_NADUV003_vcd_err for 02AUG2004 00:00:00 to 03AUG2004 00:00:00

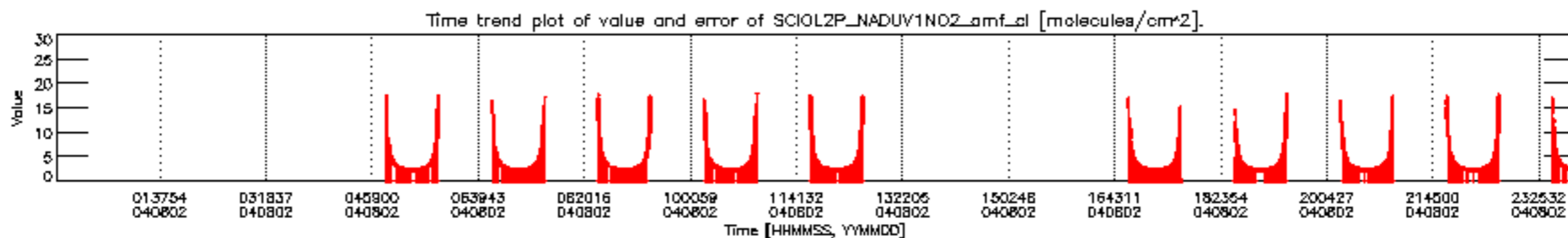
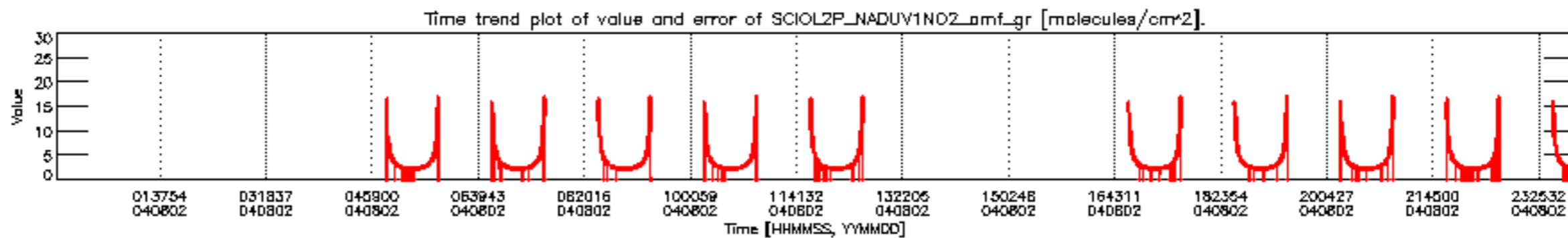
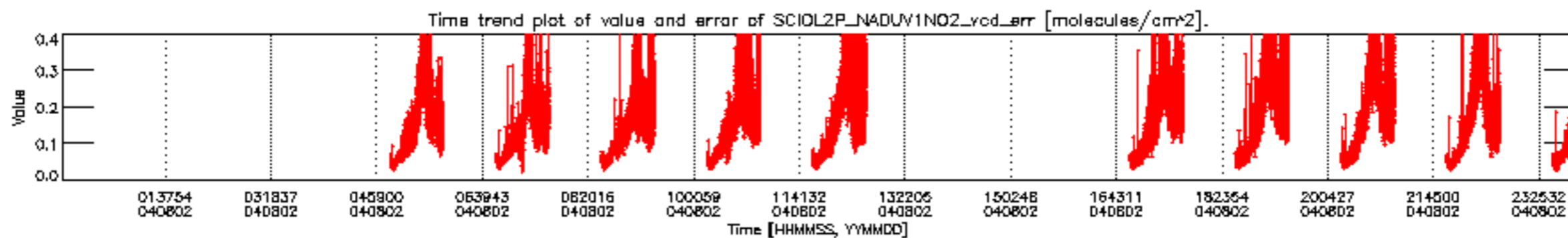
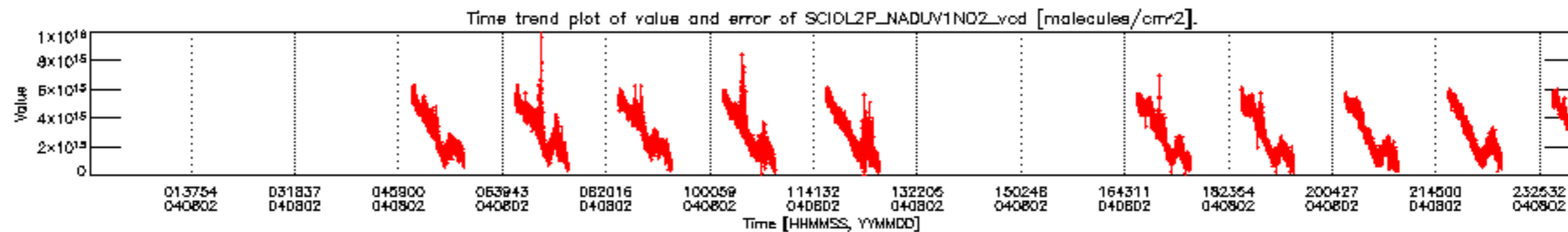


SCIOL2P_NADUV003_amf_gr for 02AUG2004 00:00:00 to 03AUG2004 00:00:00

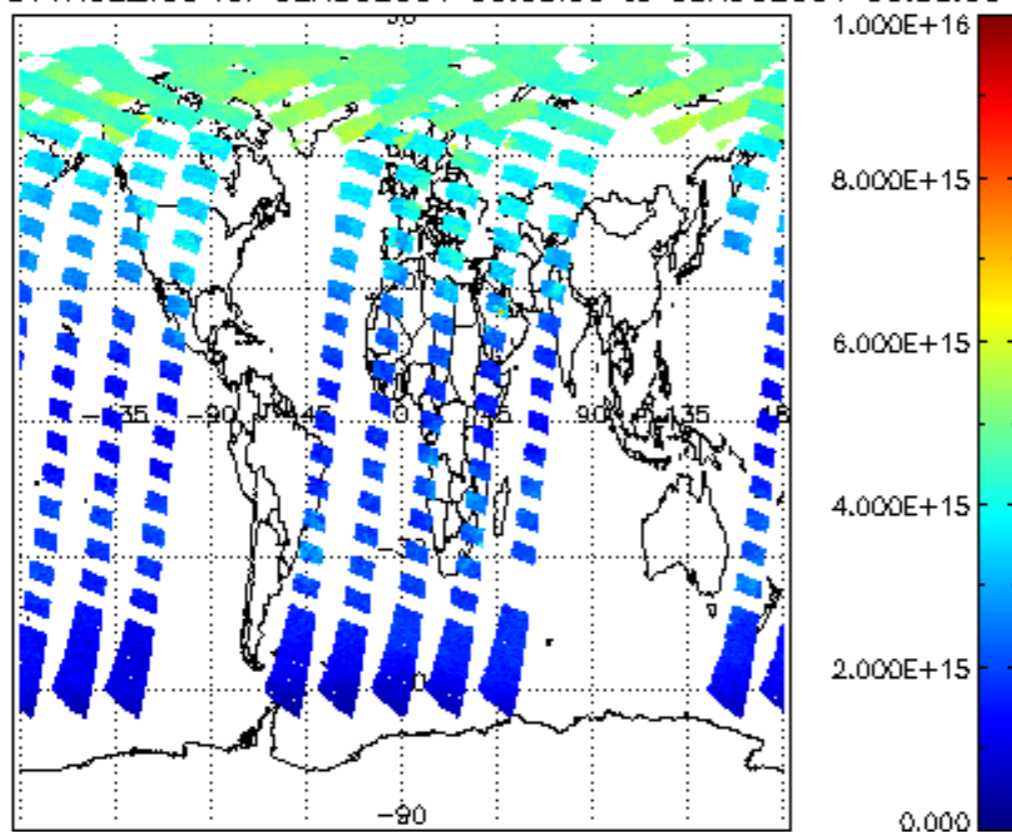


SCIOL2P_NADUV003_amf_cl for 02AUG2004 00:00:00 to 03AUG2004 00:00:00

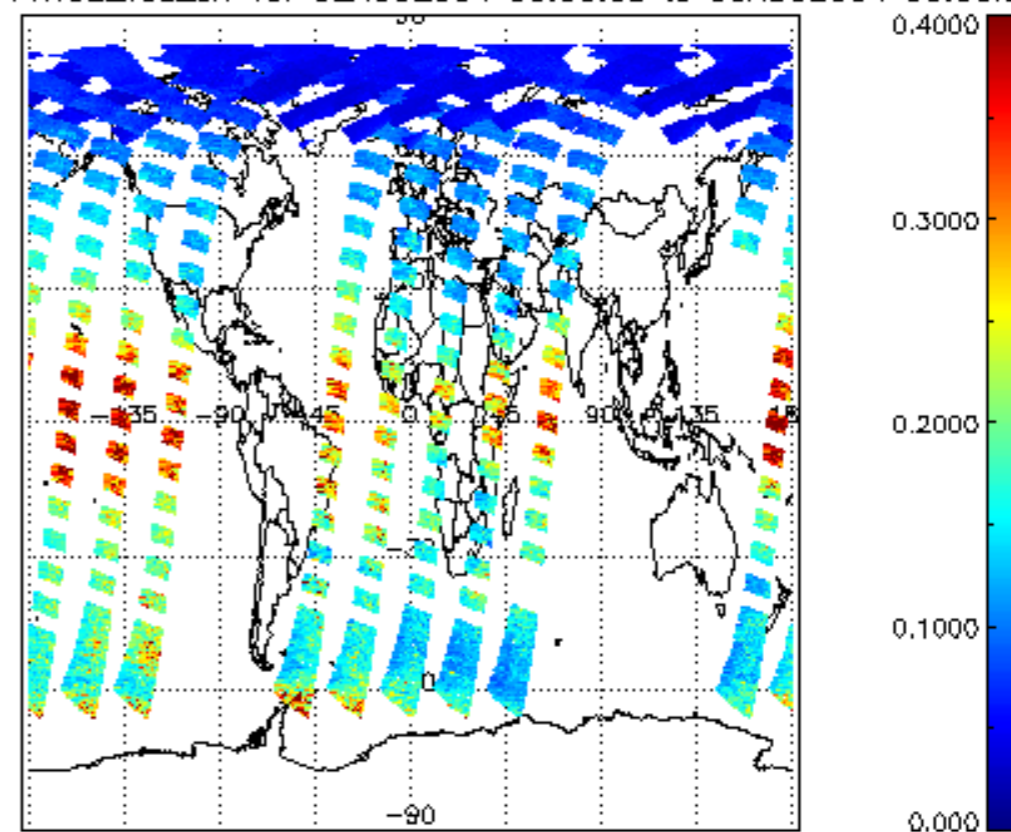




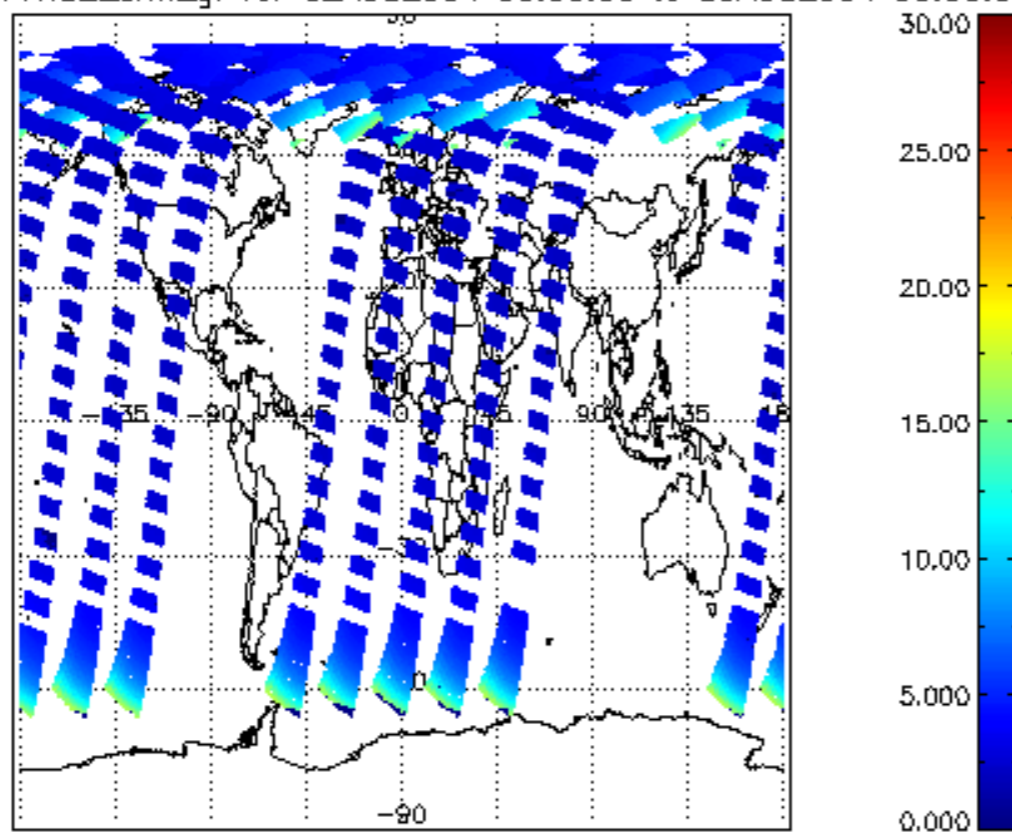
SCIOL2P_NADUV1NO2_vcd for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



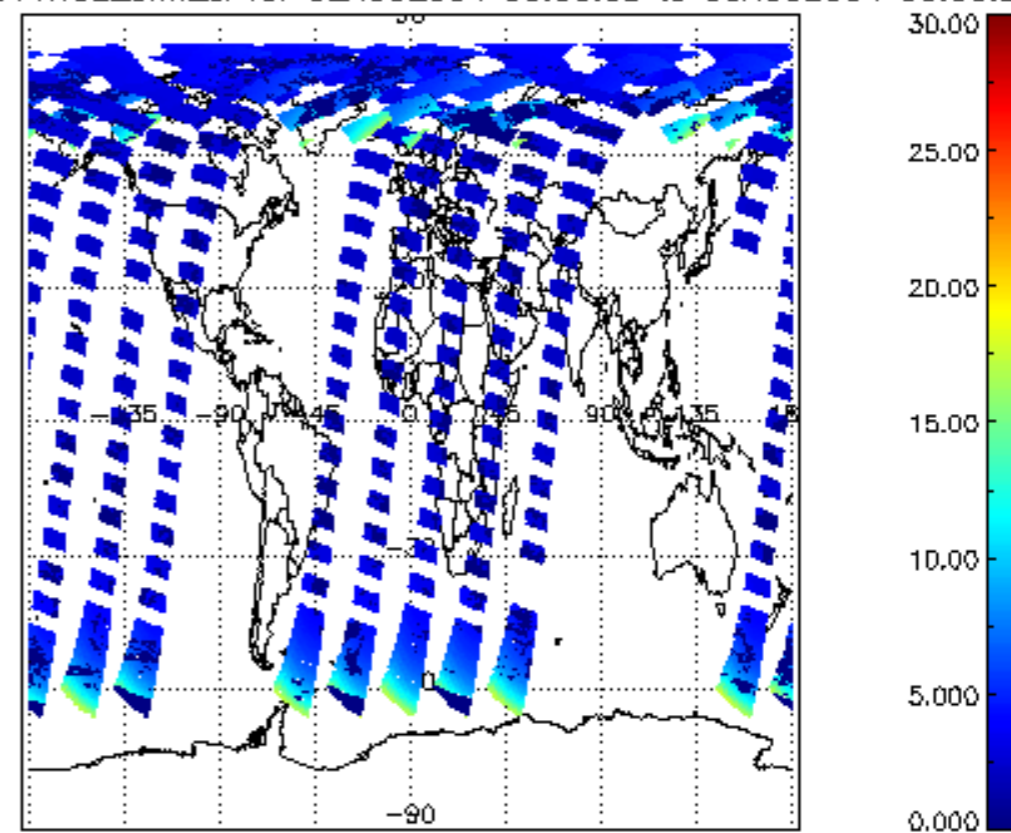
SCIOL2P_NADUV1NO2_vcd_err for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



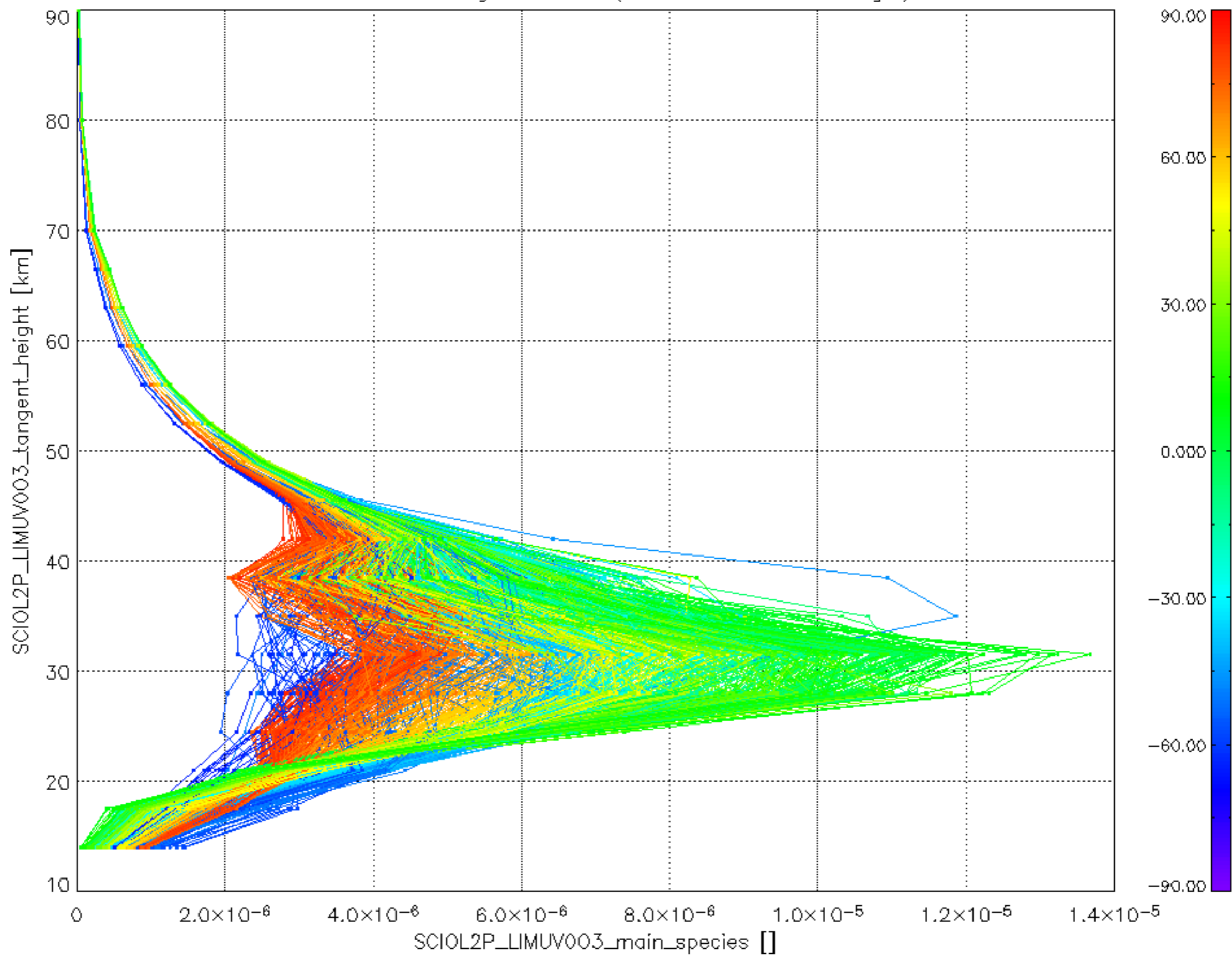
SCIOL2P_NADUV1NO2_amf_gr for 02AUG2004 00:00:00 to 03AUG2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 02AUG2004 00:00:00 to 03AUG2004 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).

