

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 07:19:39
Data source version	SCIA-OL/3.01-R
Processing scope for products	04AUG2004 00:00:00 to 05AUG2004 00:00:00
Start time of first product within scope	03AUG2004 23:02:03
Stop time of last product within scope	04AUG2004 23:26:52
Total number of level 2 products	15
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__2PRDPA20040803_230203_000033812029_00116_12695_9483.N1	03AUG2004 23:02:03	03AUG2004 23:58:25	0	GOOD
1	SCI_OL__2PRDPA20040804_004240_000033252029_00117_12696_9518.N1	04AUG2004 00:42:40	04AUG2004 01:38:05	0	GOOD
2	SCI_OL__2PRDPA20040804_022316_000033812029_00118_12697_9591.N1	04AUG2004 02:23:16	04AUG2004 03:19:37	0	GOOD
3	SCI_OL__2PRDPA20040804_040352_000033252029_00119_12698_9318.N1	04AUG2004 04:03:52	04AUG2004 04:59:18	0	GOOD
4	SCI_OL__2PRDPA20040804_054428_000033812029_00120_12699_9381.N1	04AUG2004 05:44:28	04AUG2004 06:40:50	0	GOOD
5	SCI_OL__2PRDPA20040804_072505_000033252029_00121_12700_9611.N1	04AUG2004 07:25:05	04AUG2004 08:20:30	0	GOOD
6	SCI_OL__2PRDPA20040804_090541_000033812029_00122_12701_9316.N1	04AUG2004 09:05:41	04AUG2004 10:02:02	0	GOOD
7	SCI_OL__2PRDPA20040804_104617_000033252029_00123_12702_9233.N1	04AUG2004 10:46:17	04AUG2004 11:41:43	0	GOOD
8	SCI_OL__2PRDPA20040804_122653_000033812029_00124_12703_9367.N1	04AUG2004 12:26:53	04AUG2004 13:23:15	0	GOOD
9	SCI_OL__2PRDPA20040804_140729_000033252029_00125_12704_9581.N1	04AUG2004 14:07:29	04AUG2004 15:02:55	0	GOOD
10	SCI_OL__2PRDPA20040804_154806_000033812029_00126_12705_9303.N1	04AUG2004 15:48:06	04AUG2004 16:44:27	0	GOOD
11	SCI_OL__2PRDPA20040804_172835_000033882029_00127_12706_9498.N1	04AUG2004 17:28:35	04AUG2004 18:25:04	0	GOOD
12	SCI_OL__2PRDPA20040804_190936_000033122029_00128_12707_9422.N1	04AUG2004 19:09:36	04AUG2004 20:04:49	0	GOOD
13	SCI_OL__2PRDPA20040804_204955_000033252029_00129_12708_9346.N1	04AUG2004 20:49:55	04AUG2004 21:45:20	0	GOOD
14	SCI_OL__2PRDPA20040804_223031_000033812029_00130_12709_9564.N1	04AUG2004 22:30:31	04AUG2004 23:26:52	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: 145600

Total number of cloud data DSRs with good quality flag (=0): 145600 (100.0 %)

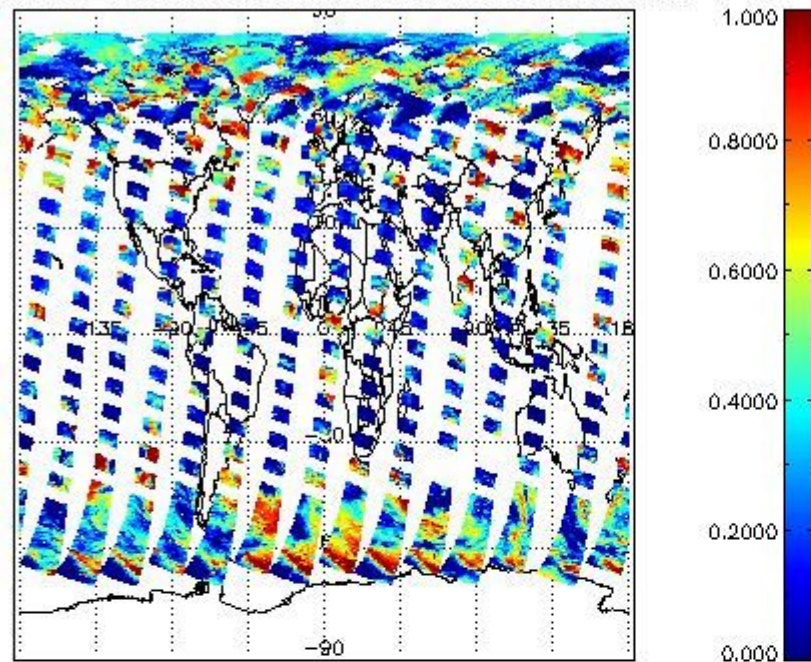
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	145600	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	145600	0.17009	0.12500	0.12500	0.25000	0.060026	s
CL_FRAC	145600	0.34792	0.30354	0.0000	1.0000	0.28522	-
CL_FRAC_ERR	145600	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	145600	5.4429	4.0000	4.0000	8.0000	1.9208	
PMD_READ_CL[0]	145600	0.22098	0.0000	0.0000	8.0000	1.0577	-
PMD_READ_CL[1]	145600	1.0619	0.0000	0.0000	8.0000	2.1548	-
CL_TOP_HEIGHT	126008	3.5463	1.7814	0.0000	17.000	3.7701	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	126008	59.839	90.182	0.0000	101.00	43.369	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	145600	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	145600	11001010	11000100	11000000	11100000	3340.6	flags
AERO_ABSO_IND	145600	0.74219	0.54704	-4.3628	11.661	1.0450	
AERO_IND_DIAG	145600	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	145600	01010111	00000000	00000000	11000000	24469.	flags

Time and geolocation plots:

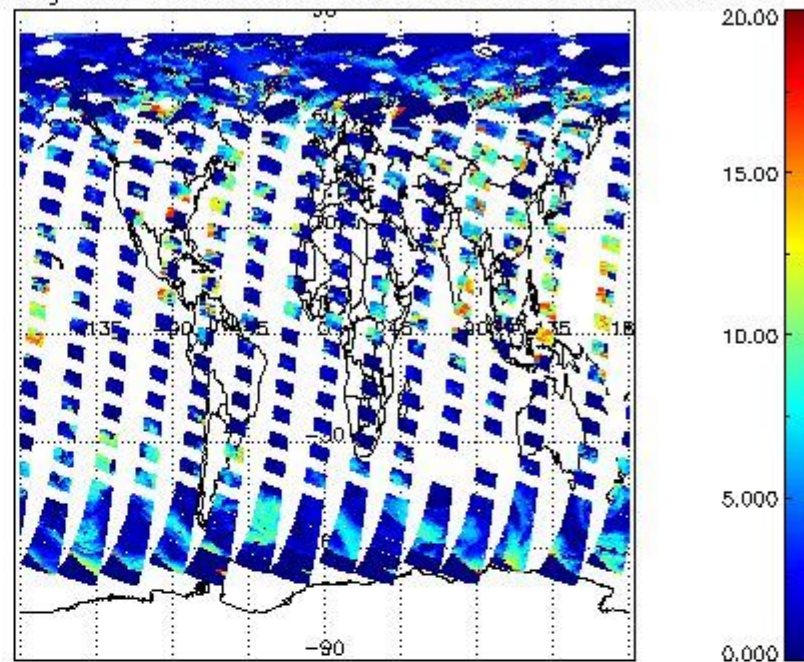
Plots are available for the following parameters:

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

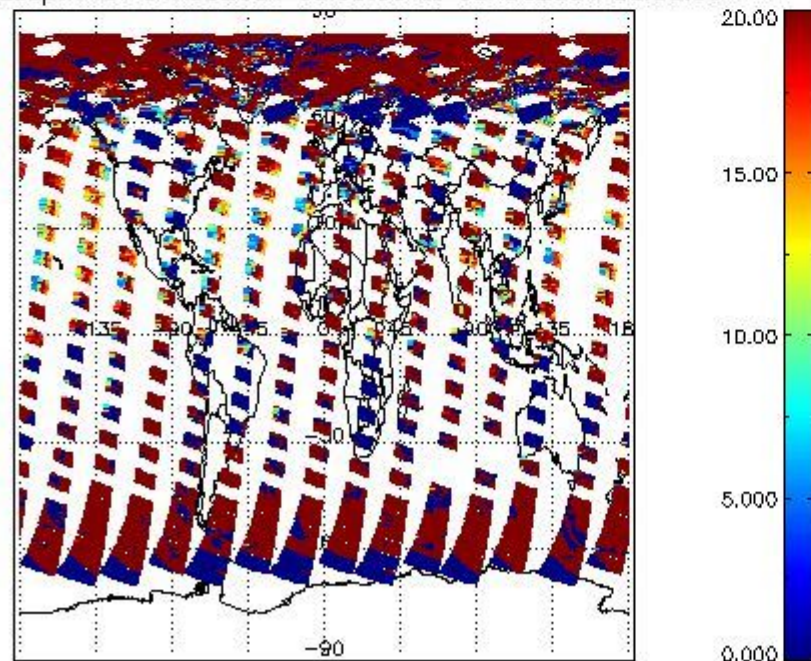
cL_frac for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



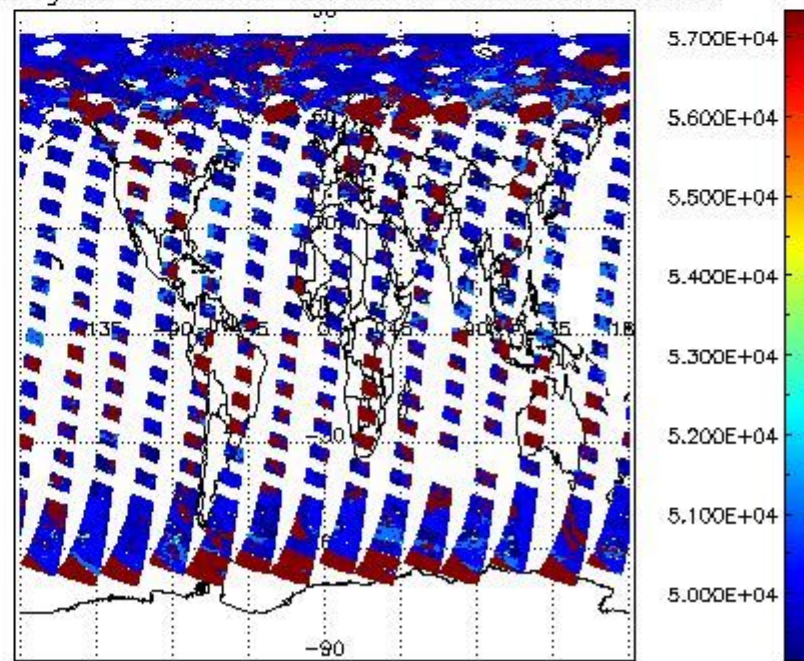
cL_top_height for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



cL_opt_depth for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



cloud_flags for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



2.2.2 Nadir

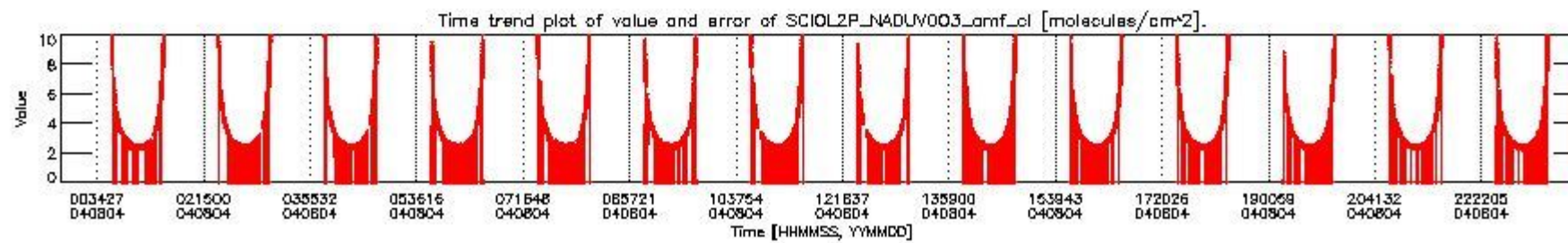
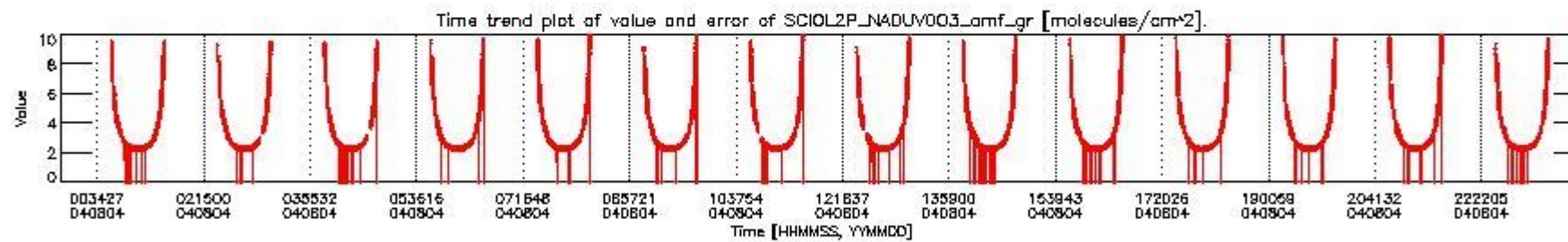
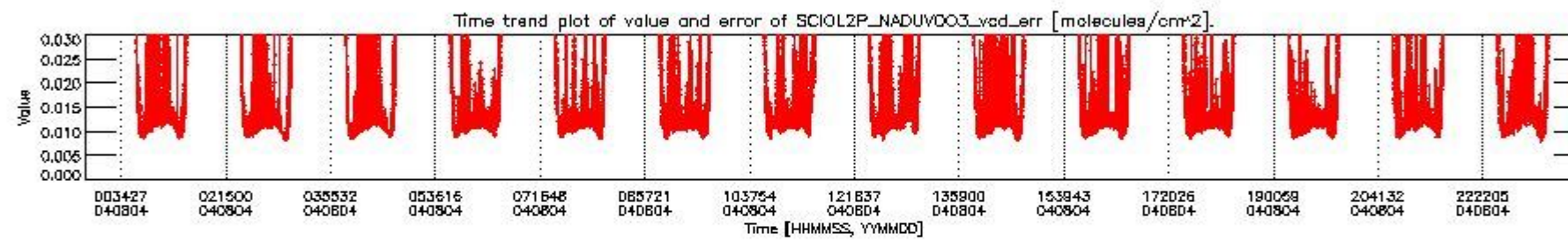
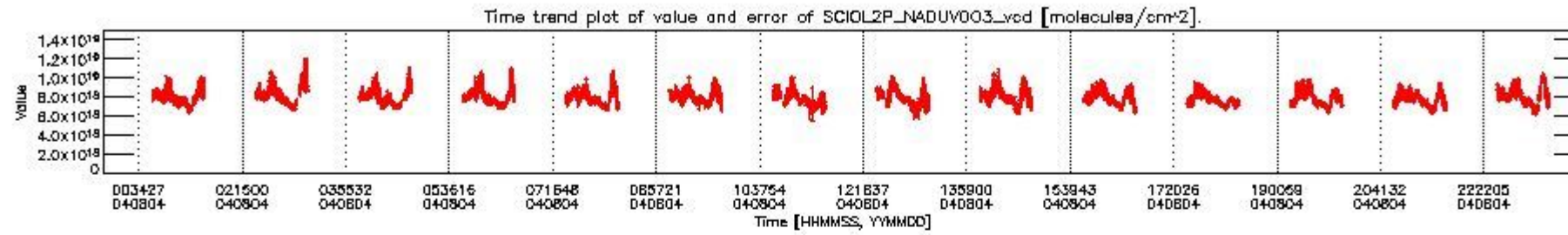
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

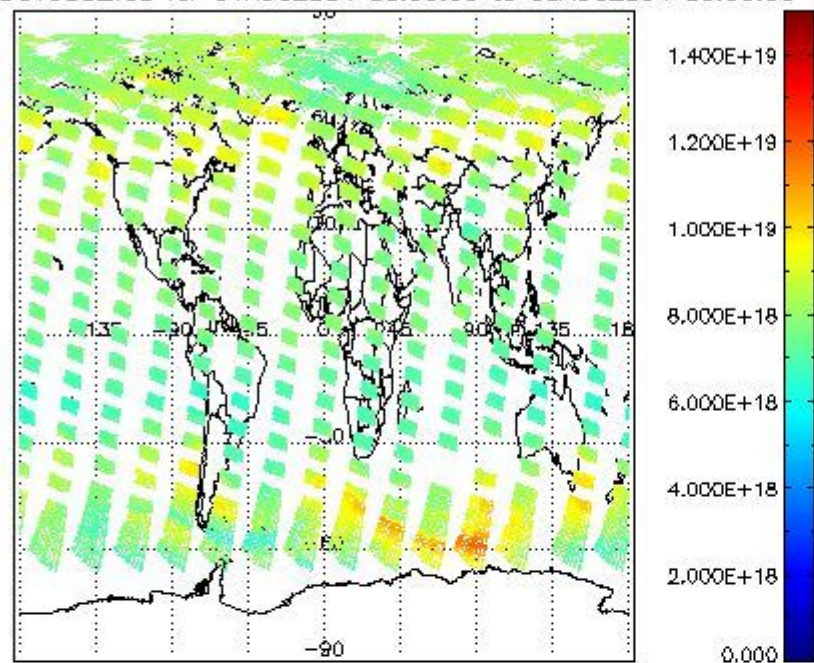
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

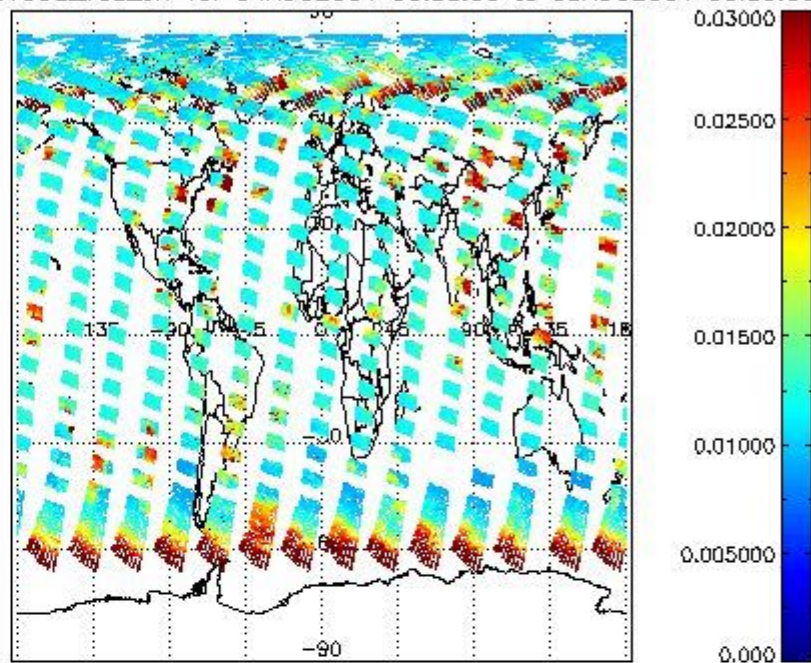
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



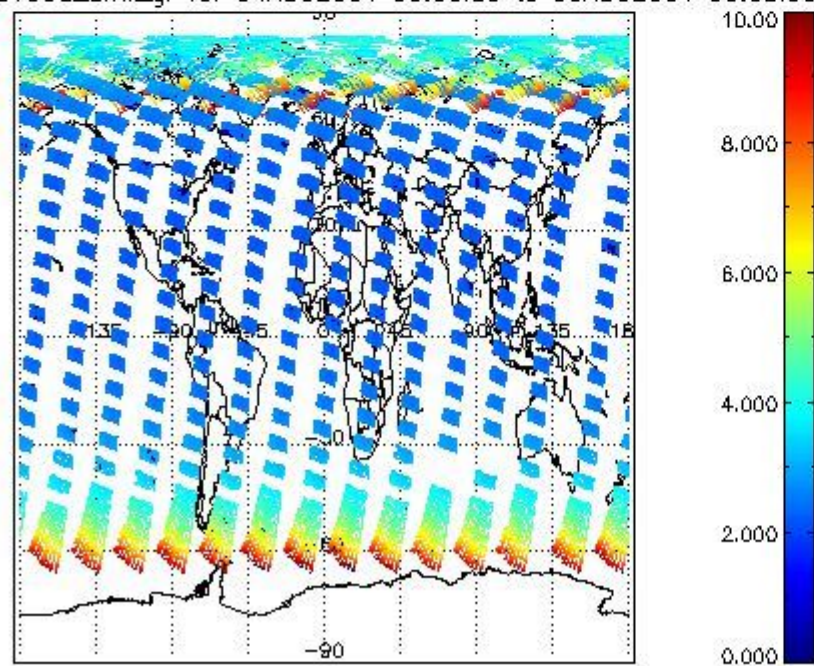
SCIOL2P_NADUV003_vcd for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



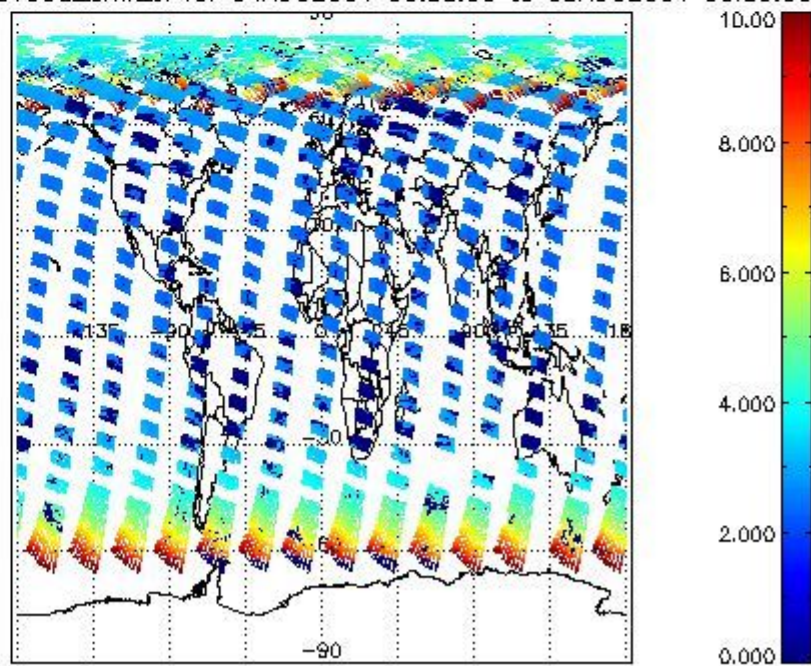
SCIOL2P_NADUV003_vcd_err for 04AUG2004 00:00:00 to 05AUG2004 00:00:00

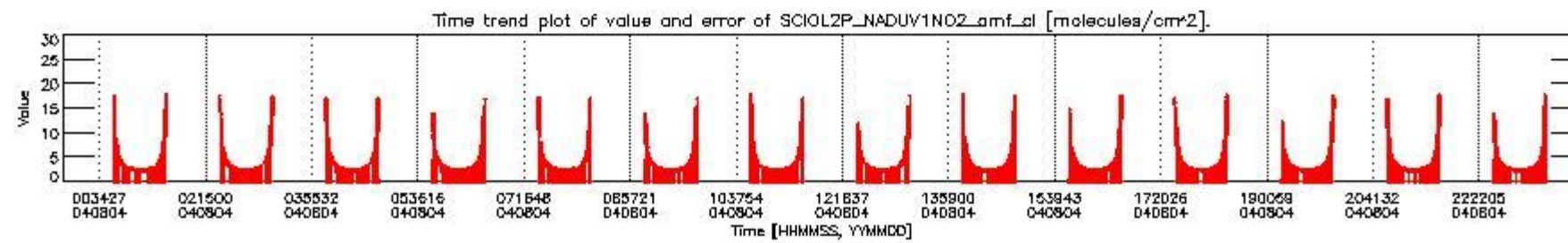
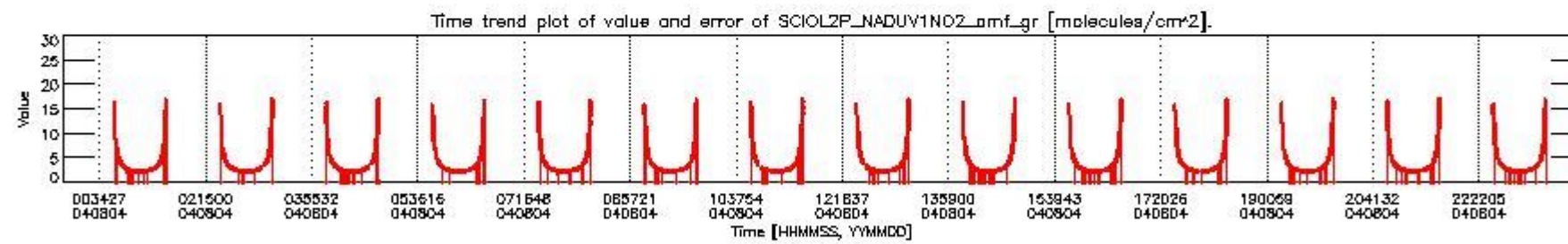
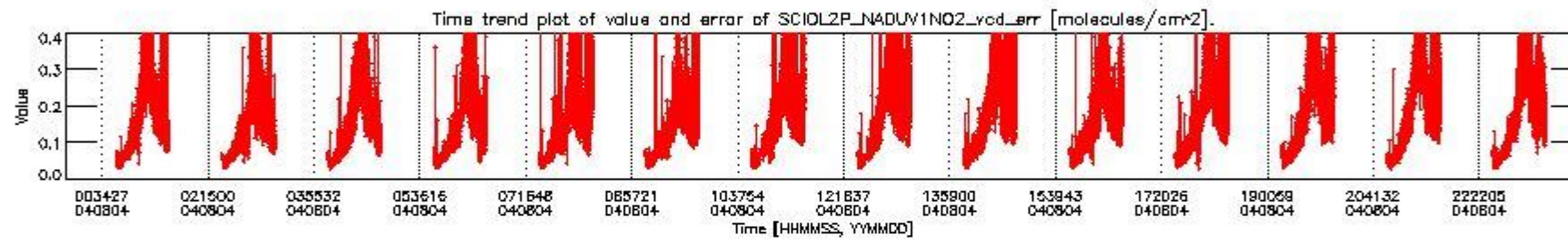
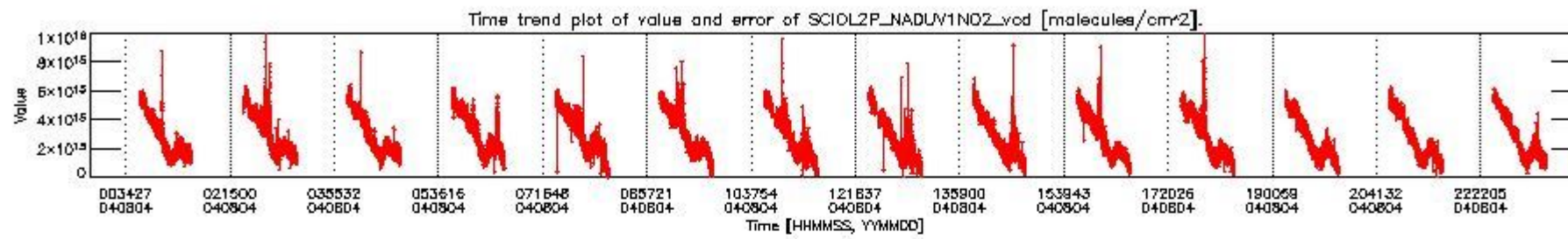


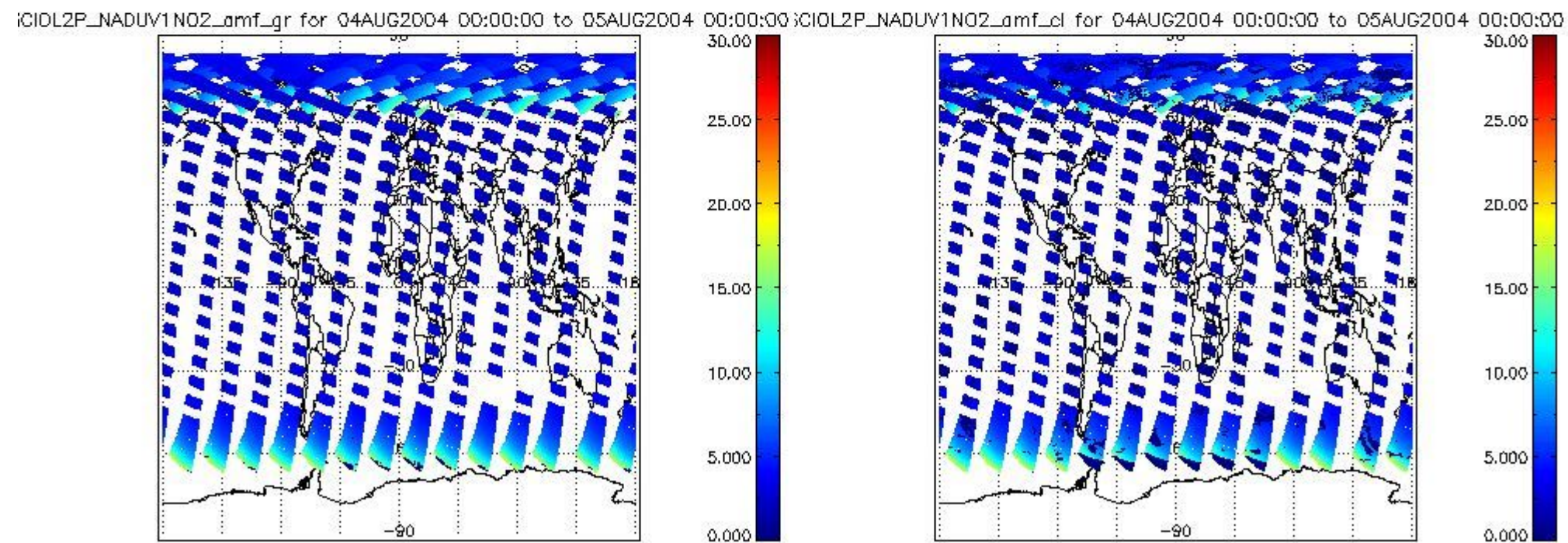
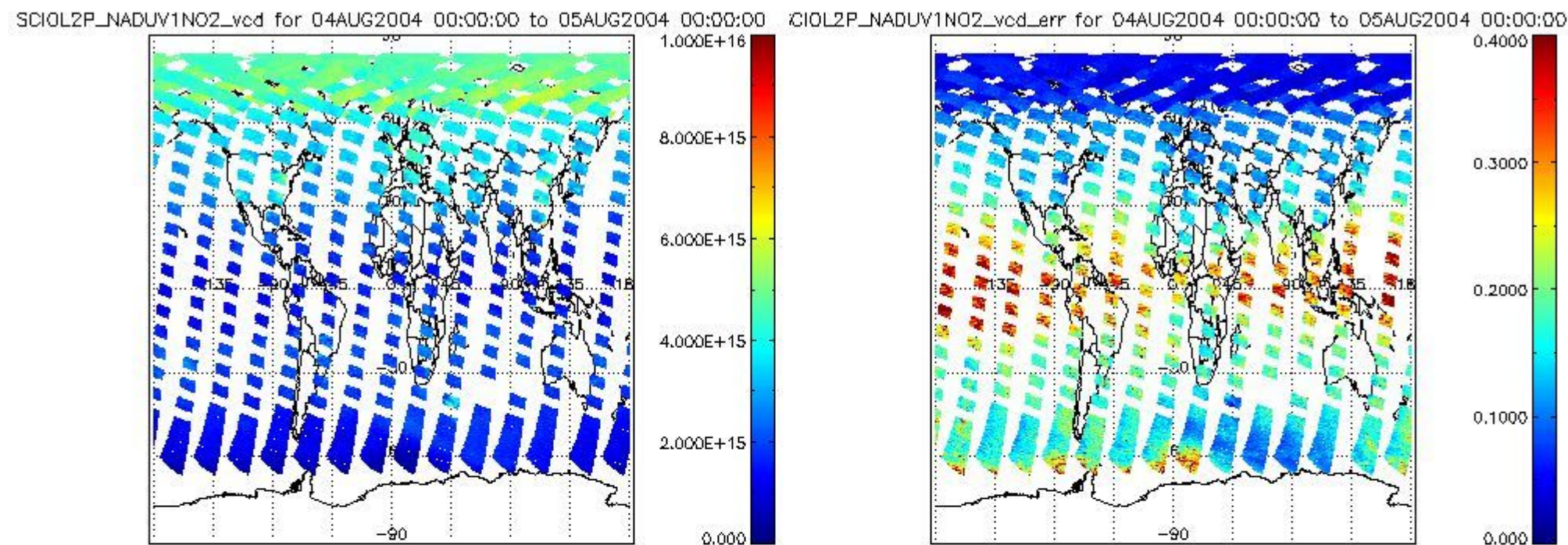
SCIOL2P_NADUV003_amf_gr for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 04AUG2004 00:00:00 to 05AUG2004 00:00:00







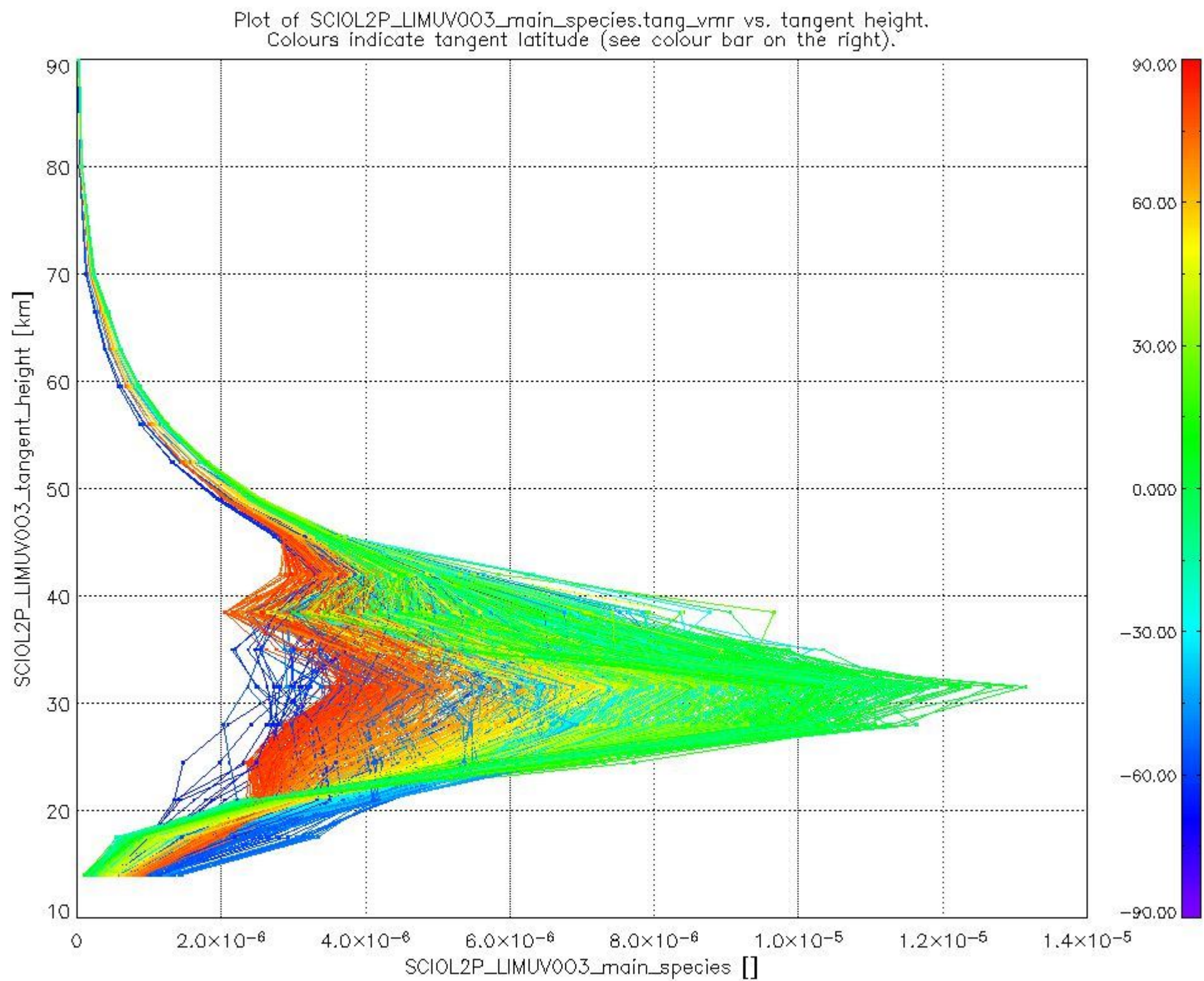
2.2.3 Limb

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

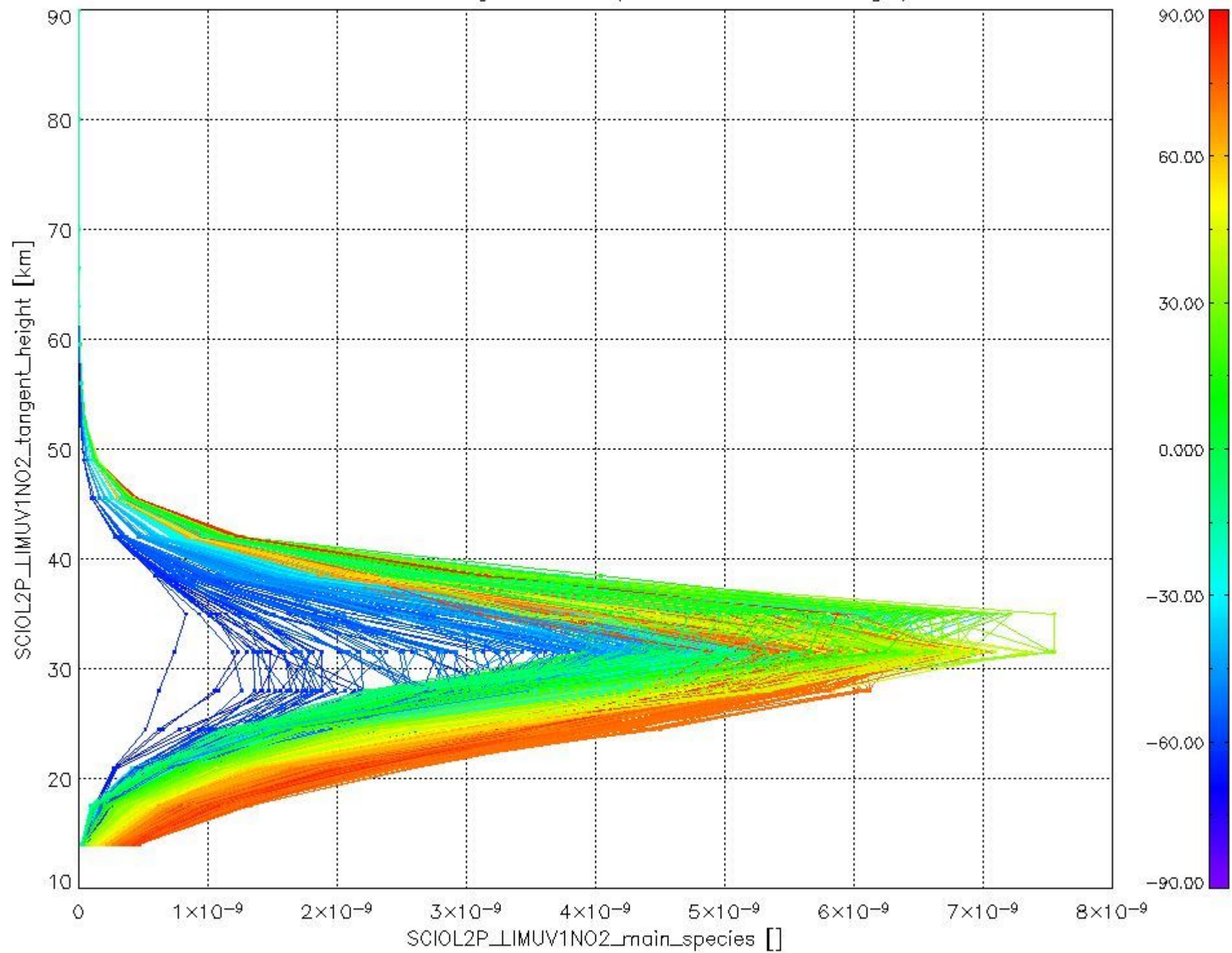
The following data items are currently included into this section:

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.



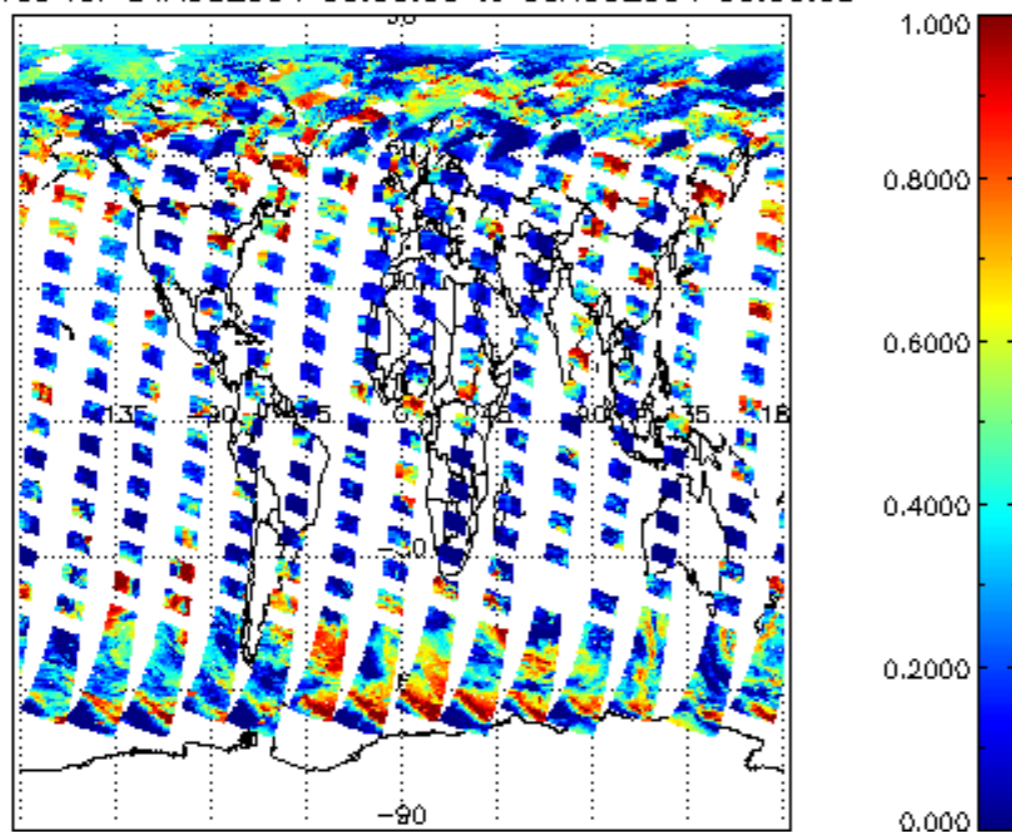
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



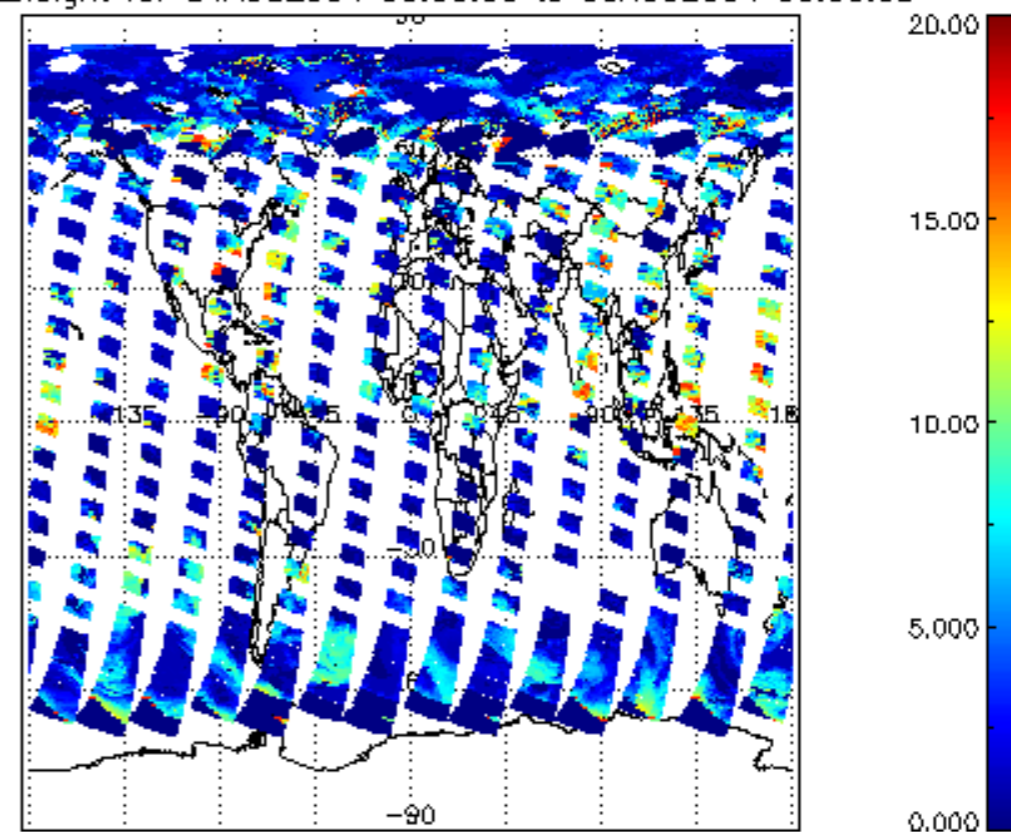
2.3 ADF monitoring

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

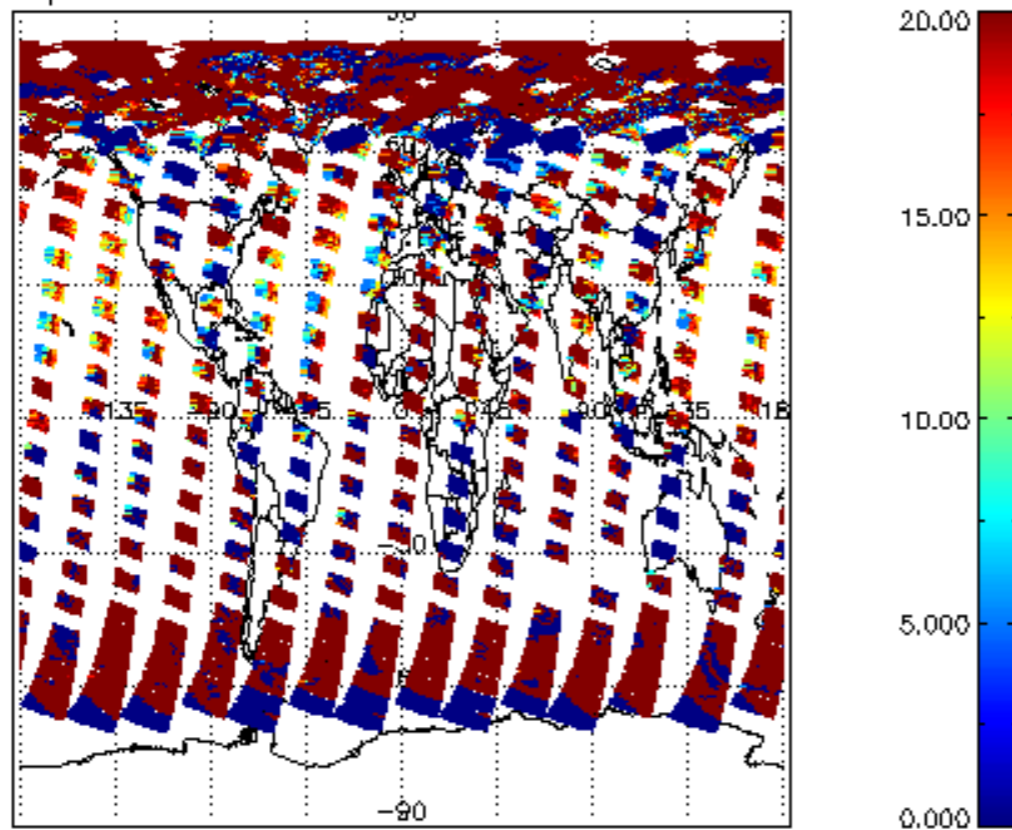
cL_frac for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



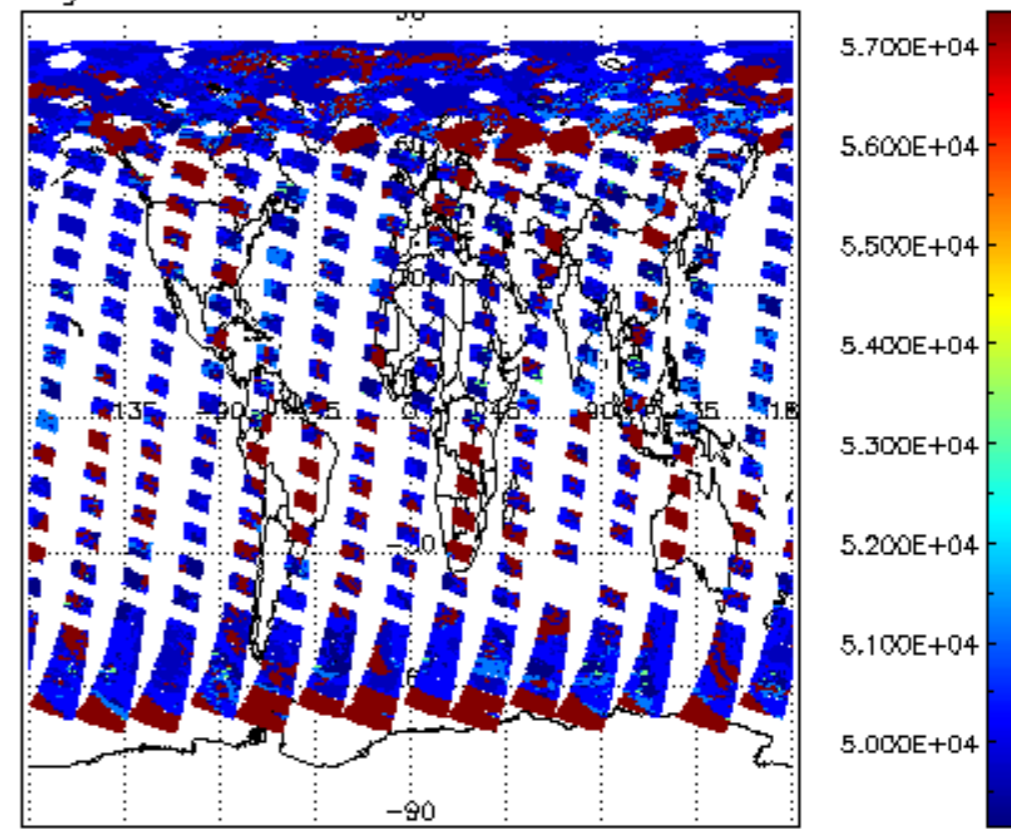
cL_top_height for 04AUG2004 00:00:00 to 05AUG2004 00:00:00

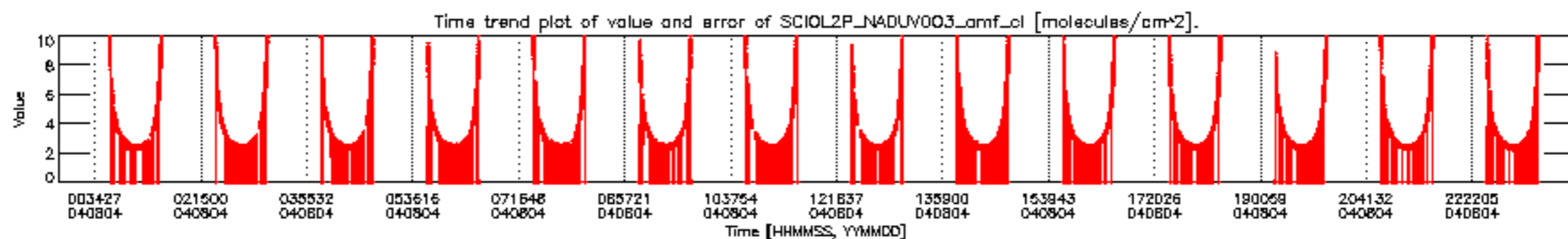
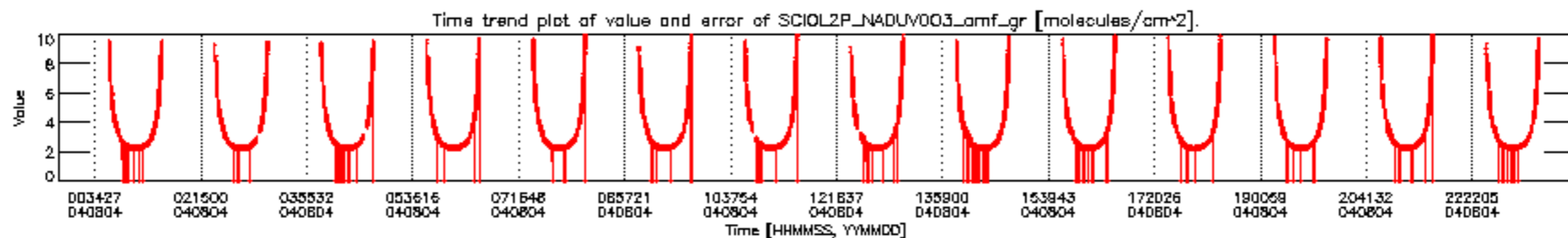
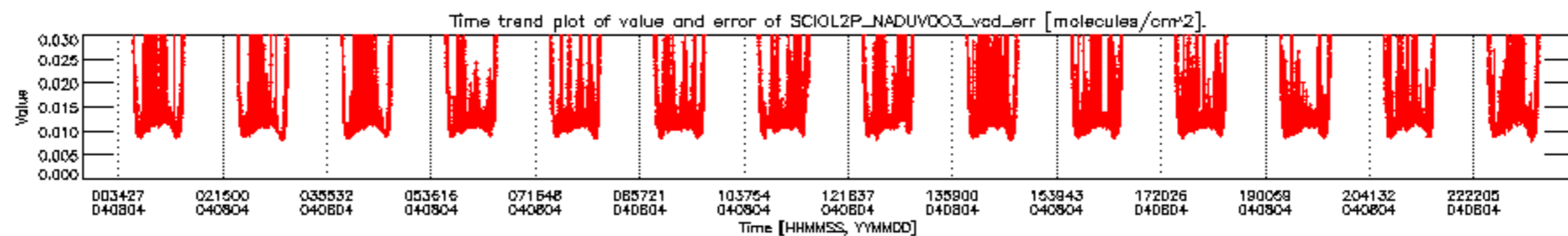
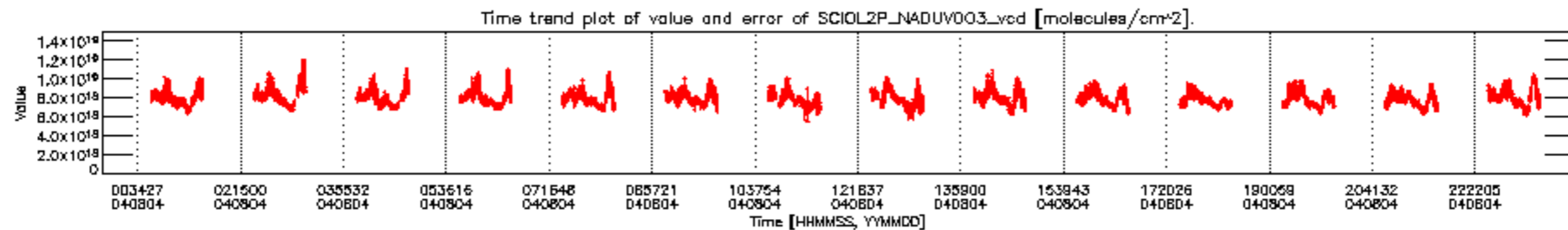


cL_opt_depth for 04AUG2004 00:00:00 to 05AUG2004 00:00:00

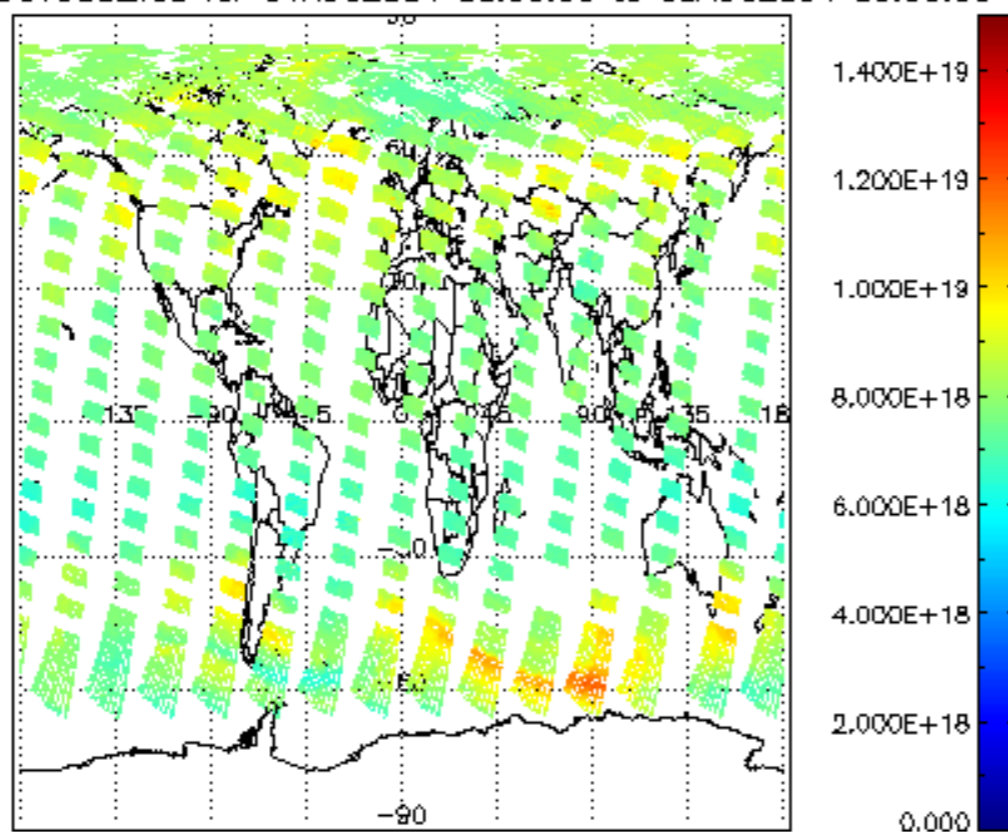


cloud_flags for 04AUG2004 00:00:00 to 05AUG2004 00:00:00

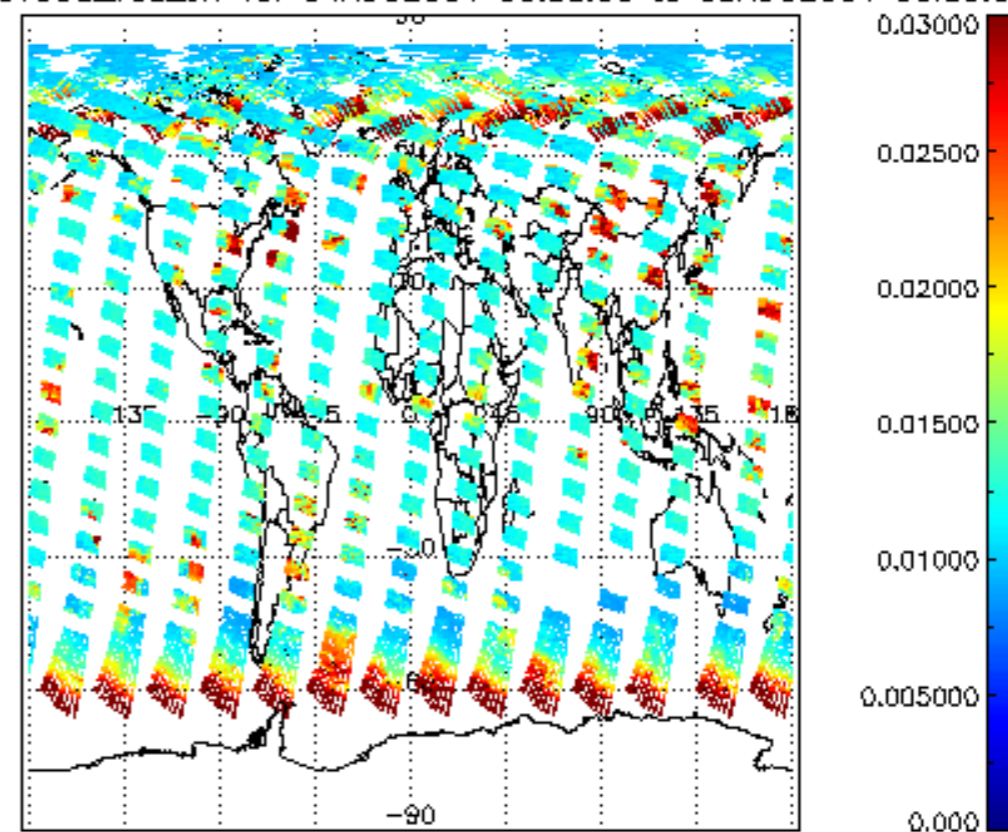




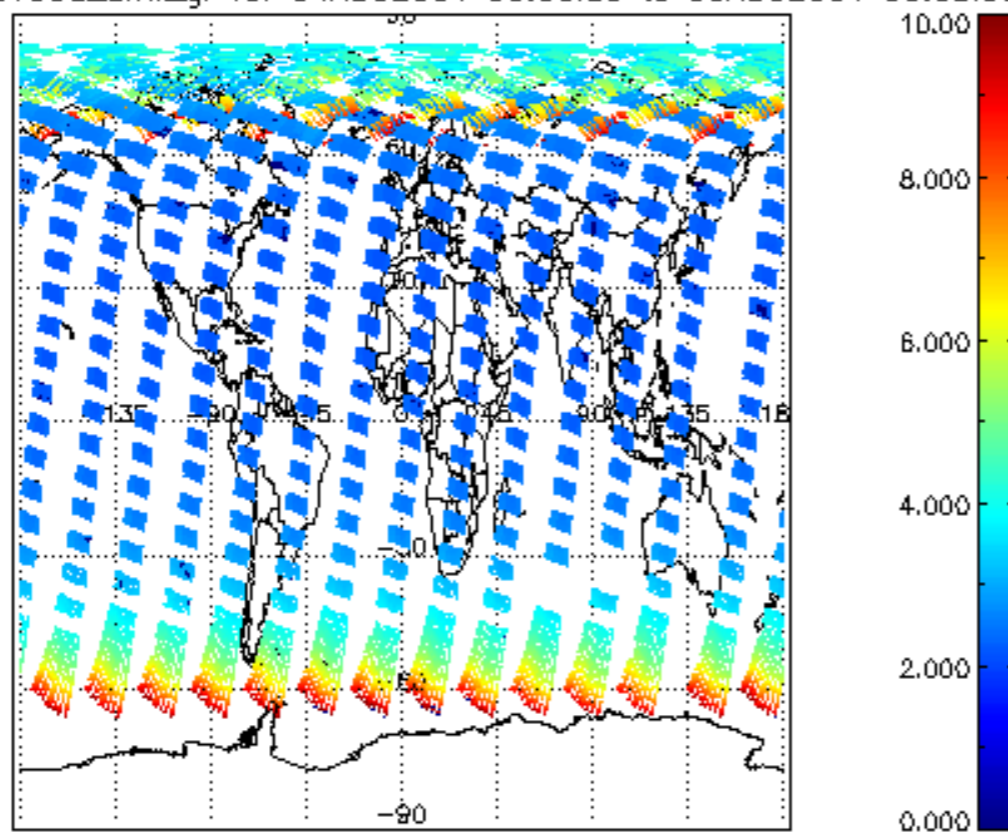
SCIOL2P_NADUV003_vcd for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



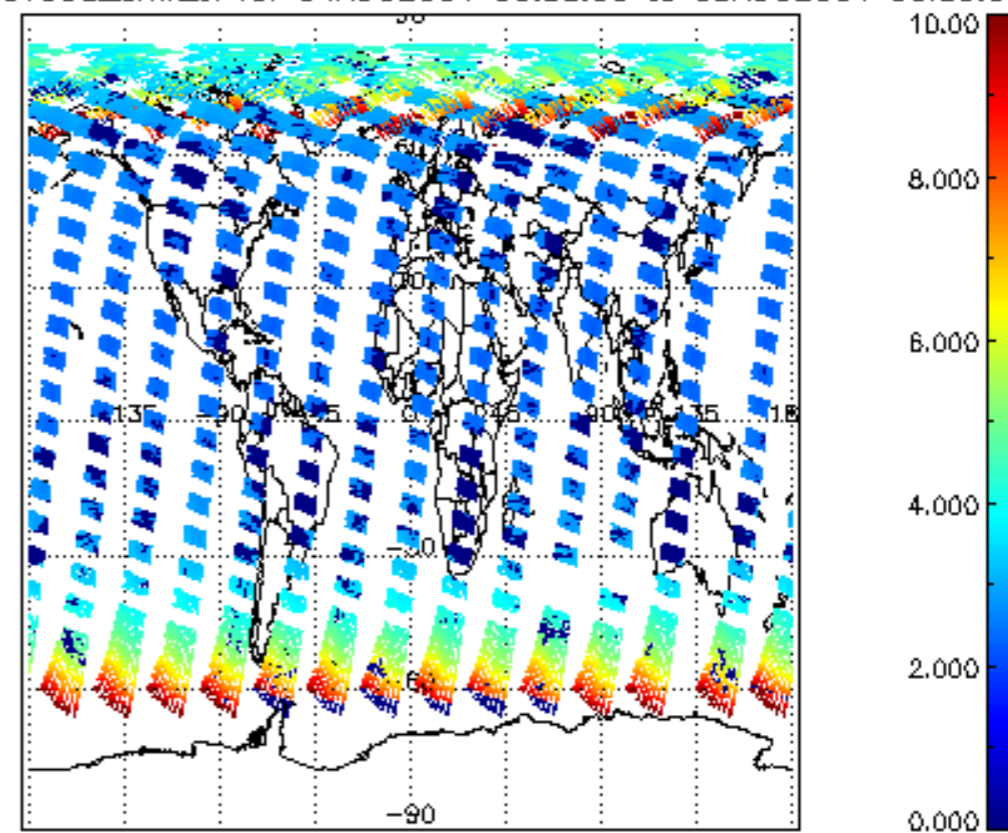
SCIOL2P_NADUV003_vcd_err for 04AUG2004 00:00:00 to 05AUG2004 00:00:00

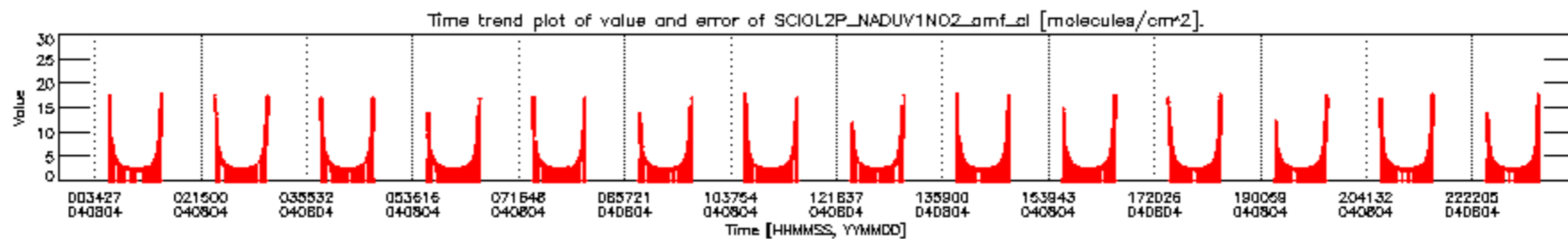
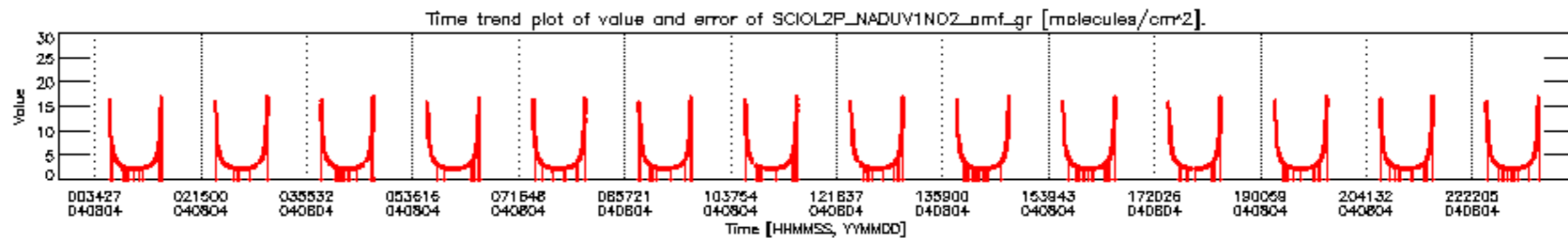
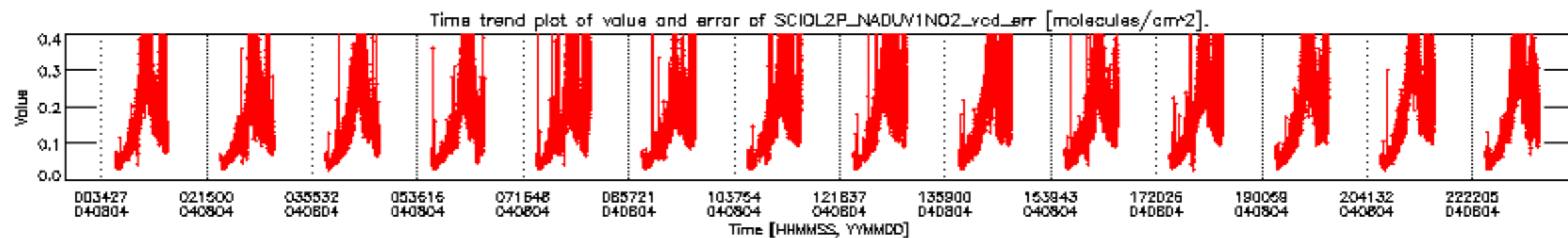
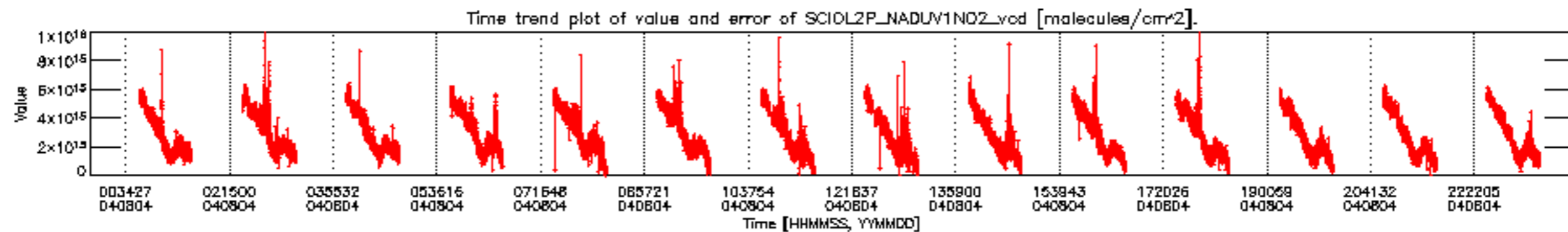


SCIOL2P_NADUV003_amf_gr for 04AUG2004 00:00:00 to 05AUG2004 00:00:00

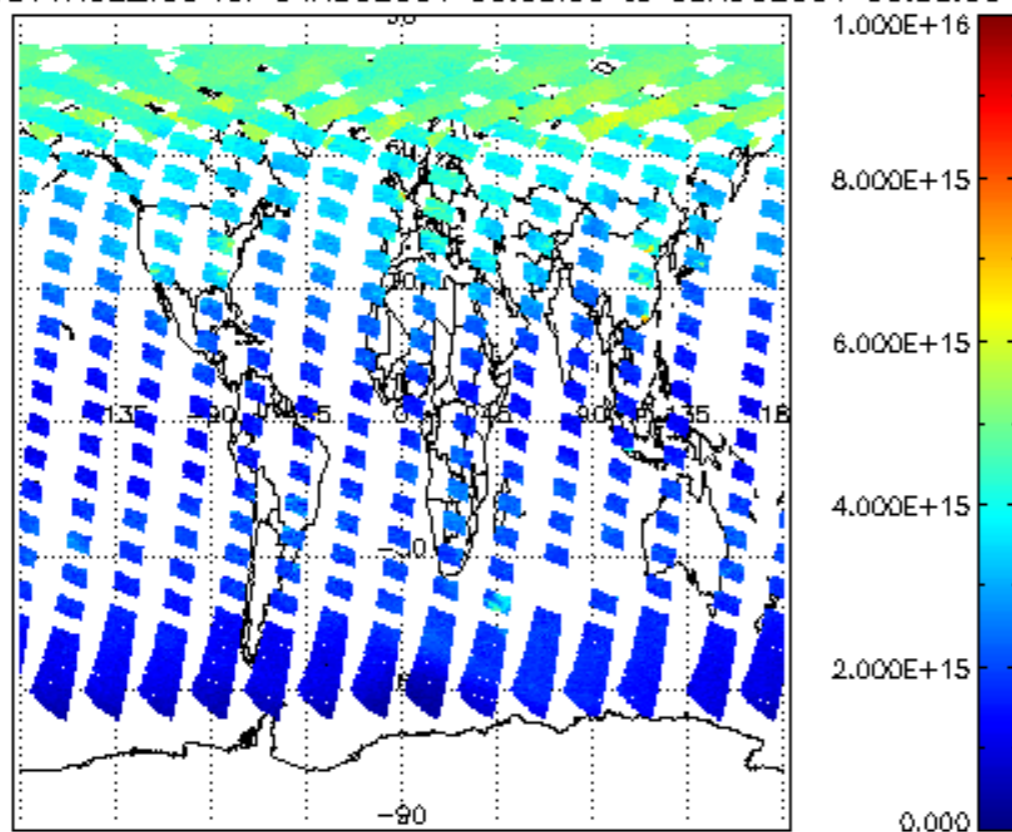


SCIOL2P_NADUV003_amf_cl for 04AUG2004 00:00:00 to 05AUG2004 00:00:00

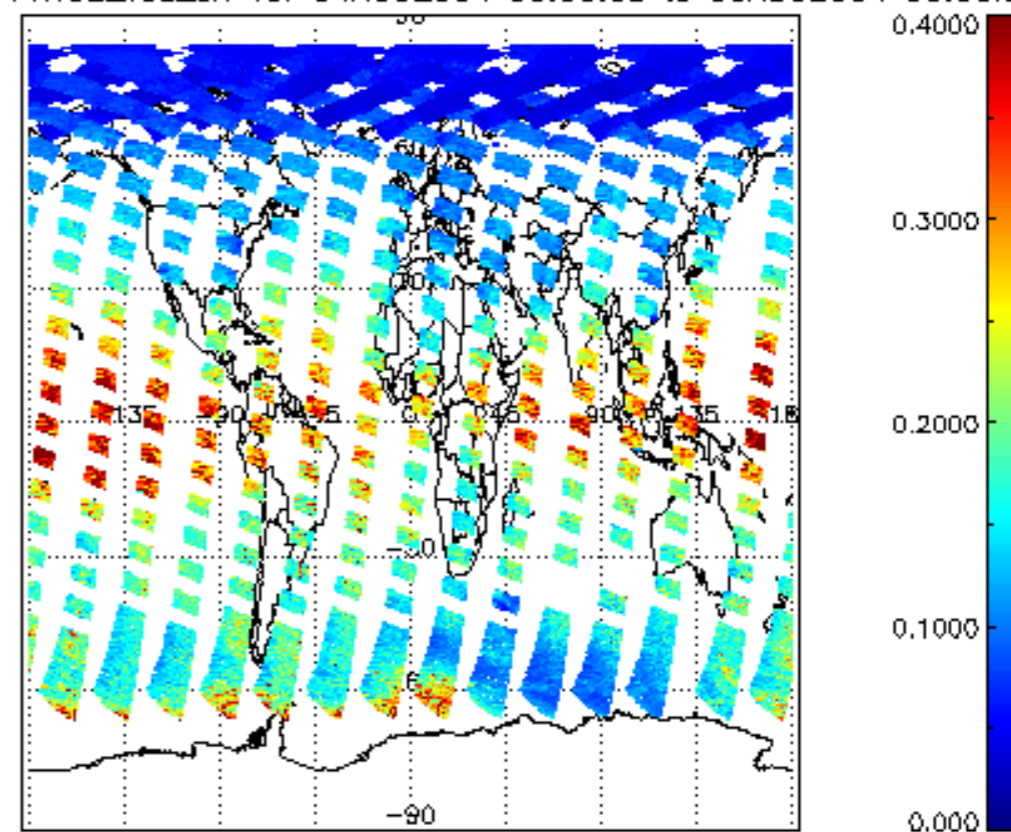




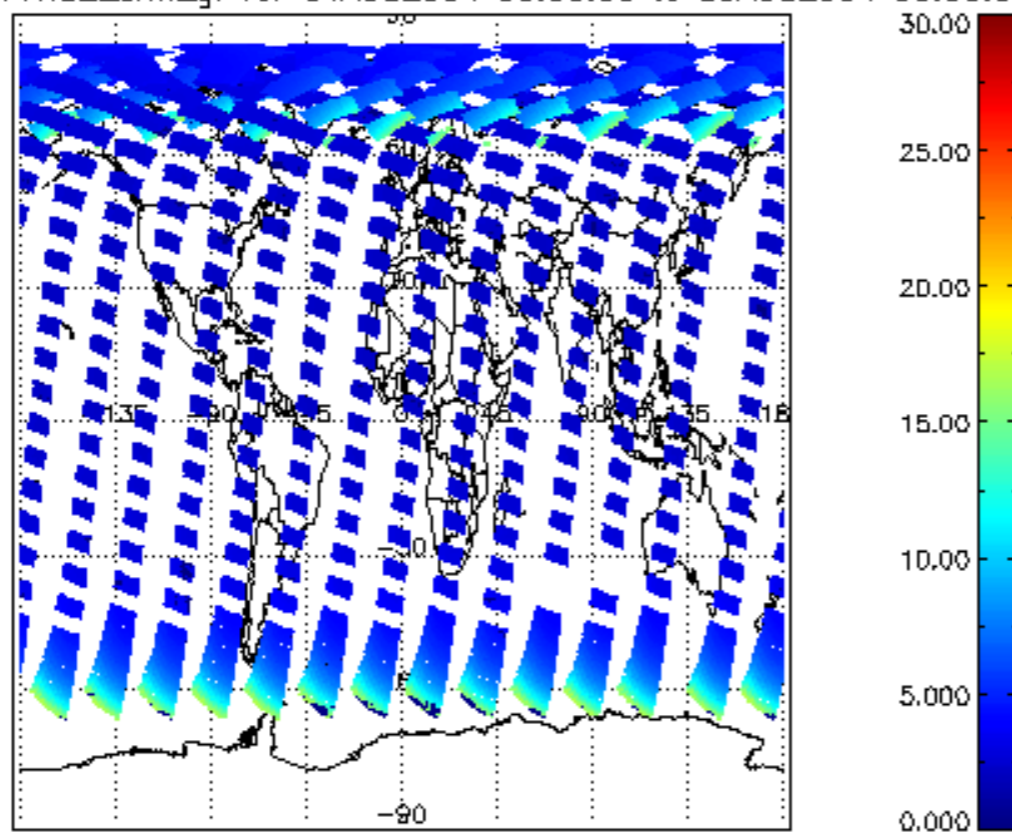
SCIOL2P_NADUV1NO2_vcd for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



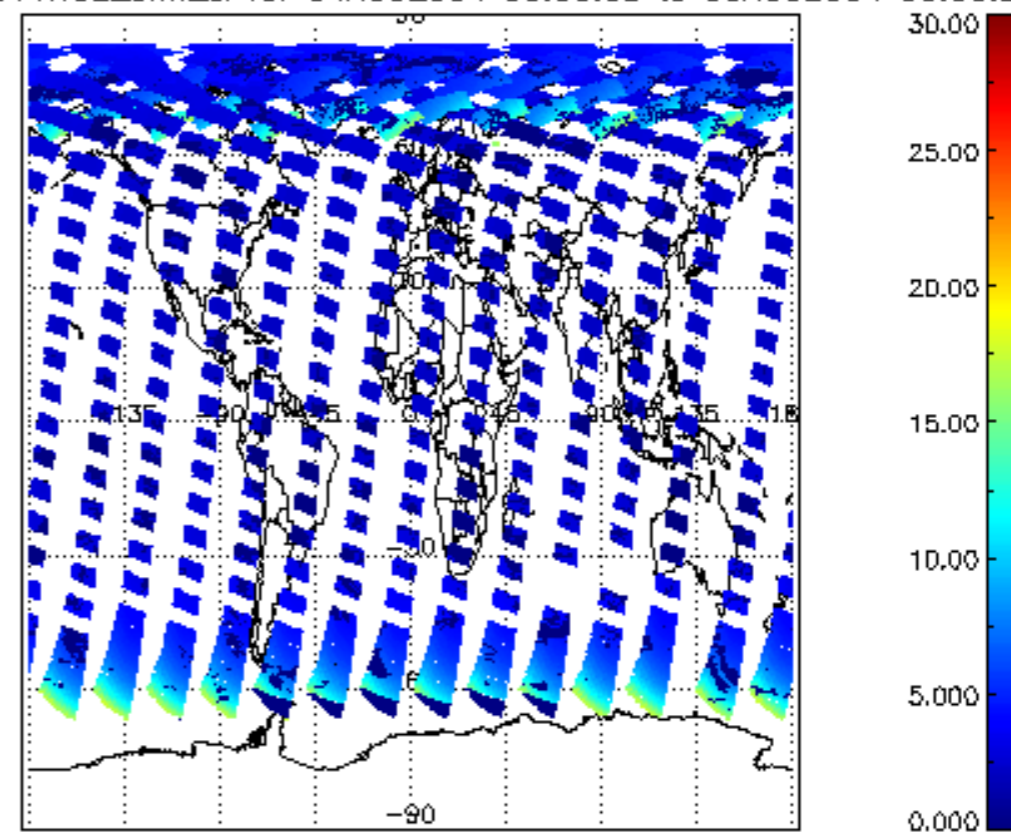
SCIOL2P_NADUV1NO2_vcd_err for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



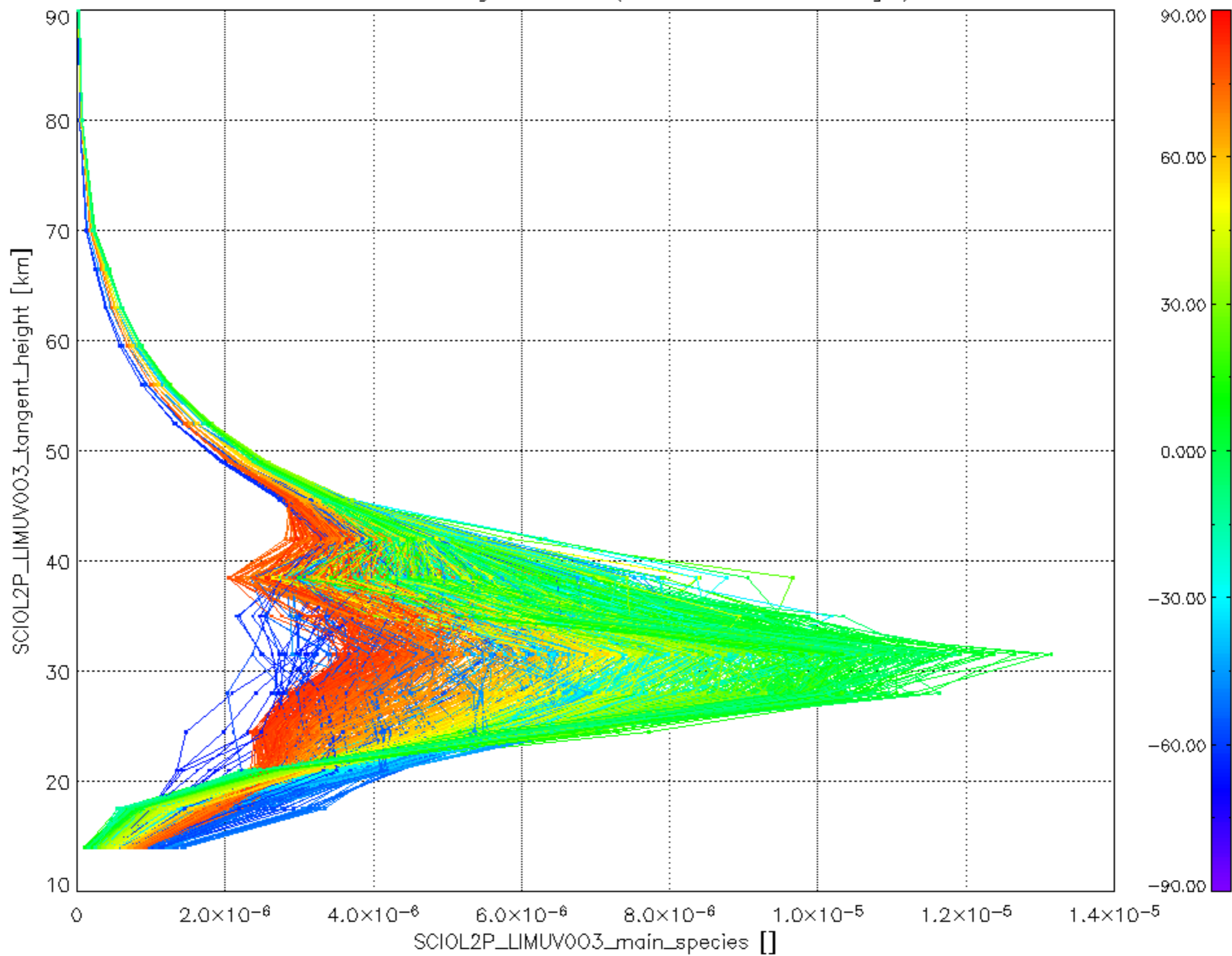
SCIOL2P_NADUV1NO2_amf_gr for 04AUG2004 00:00:00 to 05AUG2004 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 04AUG2004 00:00:00 to 05AUG2004 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).

