

2. SCIAMACHY Daily Report for level 2 products

[2.1. General Info](#)

[2.2 Product Quality Indicators](#)

[2.3 ADF monitoring](#)

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	25AUG2008 16:02:56
Data source version	SCIA-OL/3.01-R
Processing scope for products	20JUN2004 00:00:00 to 21JUN2004 00:00:00
Start time of first product within scope	19JUN2004 23:14:59
Stop time of last product within scope	20JUN2004 23:38:47
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.

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__2PRDPA20040619_231459_000033252027_00474_12051_8772.N1	19JUN2004 23:14:59	20JUN2004 00:10:24	0	GOOD
1	SCI_OL__2PRDPA20040620_041646_000033122027_00477_12054_8480.N1	20JUN2004 04:16:46	20JUN2004 05:11:59	0	GOOD
2	SCI_OL__2PRDPA20040620_055722_000033252027_00478_12055_8536.N1	20JUN2004 05:57:22	20JUN2004 06:52:48	0	GOOD
3	SCI_OL__2PRDPA20040620_073758_000033122027_00479_12056_8529.N1	20JUN2004 07:37:58	20JUN2004 08:33:11	0	GOOD
4	SCI_OL__2PRDPA20040620_091834_000033252027_00480_12057_8805.N1	20JUN2004 09:18:34	20JUN2004 10:13:59	0	GOOD
5	SCI_OL__2PRDPA20040620_105910_000033122027_00481_12058_8519.N1	20JUN2004 10:59:10	20JUN2004 11:54:23	0	GOOD
6	SCI_OL__2PRDPA20040620_123946_000033252027_00482_12059_8517.N1	20JUN2004 12:39:46	20JUN2004 13:35:11	0	GOOD
7	SCI_OL__2PRDPA20040620_142021_000033122027_00483_12060_8474.N1	20JUN2004 14:20:21	20JUN2004 15:15:34	0	GOOD
8	SCI_OL__2PRDPA20040620_160057_000033252027_00484_12061_8472.N1	20JUN2004 16:00:57	20JUN2004 16:56:23	0	GOOD
9	SCI_OL__2PRDPA20040620_174120_000033732027_00485_12062_8796.N1	20JUN2004 17:41:20	20JUN2004 18:37:33	0	GOOD
10	SCI_OL__2PRDPA20040620_192129_000033812027_00486_12063_8597.N1	20JUN2004 19:21:29	20JUN2004 20:17:50	0	GOOD
11	SCI_OL__2PRDPA20040620_210245_000033122027_00487_12064_8539.N1	20JUN2004 21:02:45	20JUN2004 21:57:58	0	GOOD
12	SCI_OL__2PRDPA20040620_224321_000033252027_00488_12065_8648.N1	20JUN2004 22:43:21	20JUN2004 23:38:47	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: 126753

Total number of cloud data DSRs with good quality flag (=0): 126753 (100.0 %)

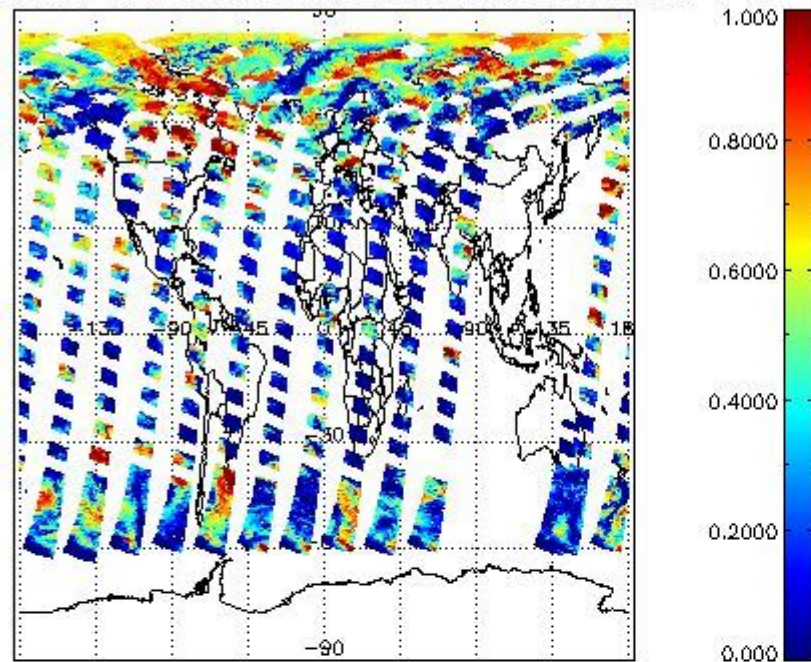
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	126753	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	126753	0.16949	0.12500	0.12500	0.25000	0.059849	s
CL_FRAC	126753	0.34416	0.28513	0.0000	1.0000	0.30101	-
CL_FRAC_ERR	126753	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	126753	5.4237	4.0000	4.0000	8.0000	1.9152	
PMD_READ_CL[0]	126753	0.26870	0.0000	0.0000	8.0000	1.1913	-
PMD_READ_CL[1]	126753	1.2271	0.0000	0.0000	8.0000	2.1470	-
CL_TOP_HEIGHT	112100	3.4318	1.3550	0.0000	17.000	3.8311	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	112100	56.924	58.967	0.0000	101.00	43.885	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	126753	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	126753	11001011	11000100	11000000	11100000	3408.6	flags
AERO_ABSO_IND	126753	0.72110	0.54670	-20.456	10.300	1.0606	
AERO_IND_DIAG	126753	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	126753	01010111	00000000	00000000	11000000	24471.	flags

Time and geolocation plots:

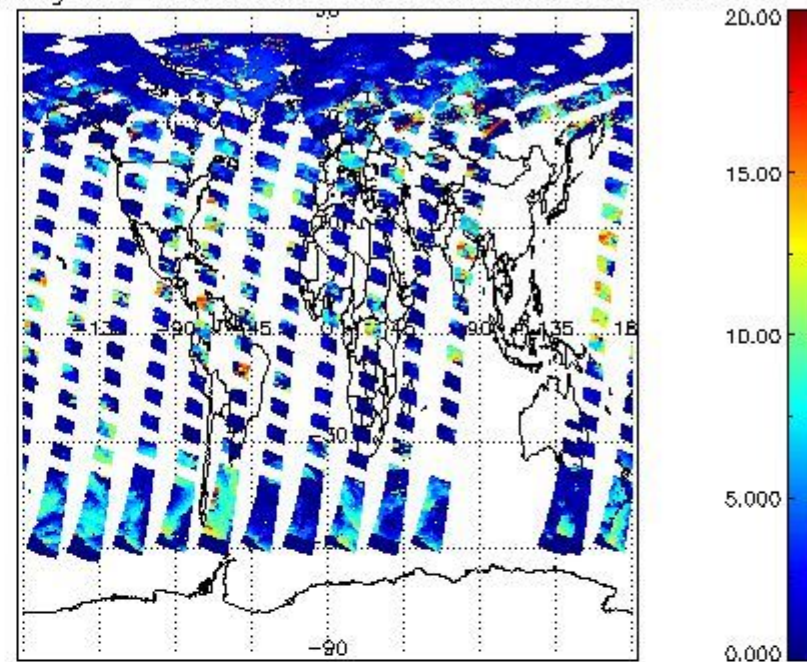
Plots are available for the following parameters:

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

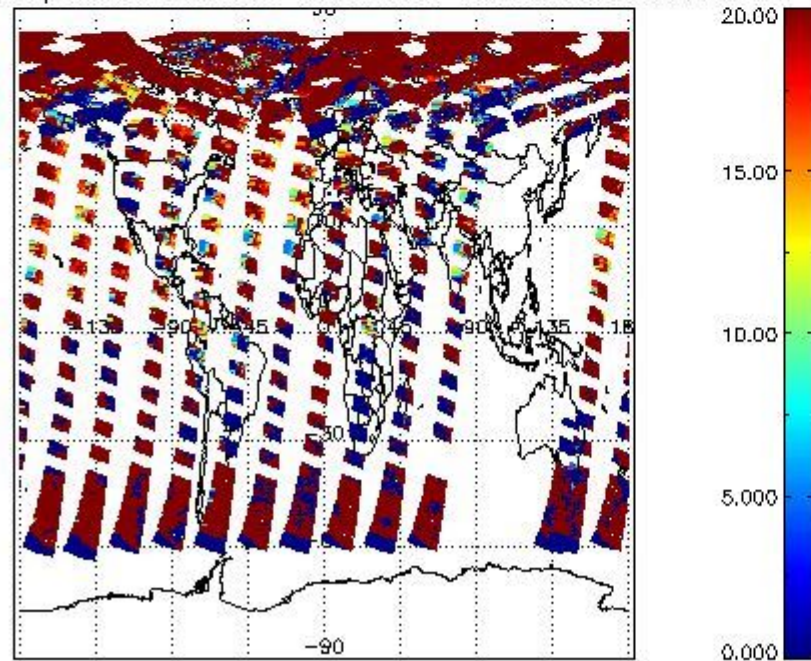
cL_frac for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



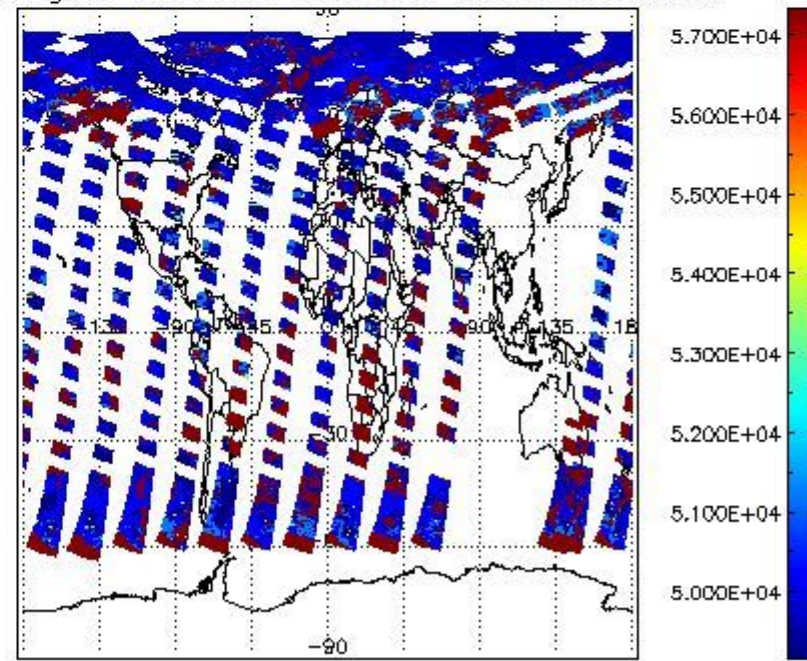
cL_top_height for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



cL_opt_depth for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



cloud_flags for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



2.2.2 Nadir

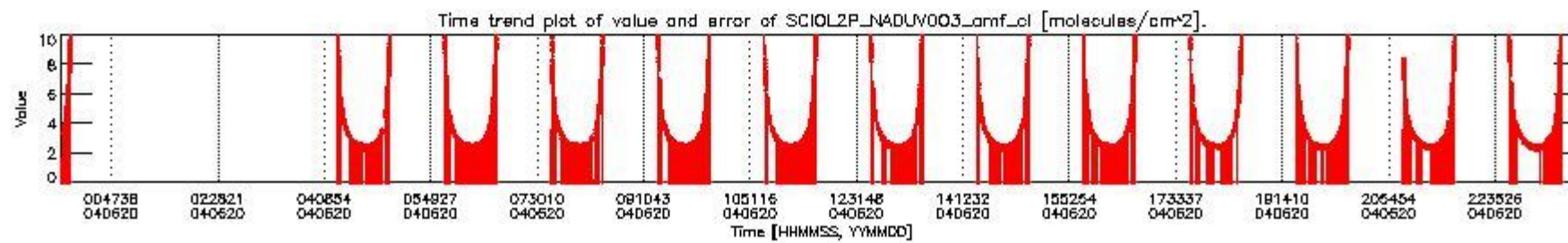
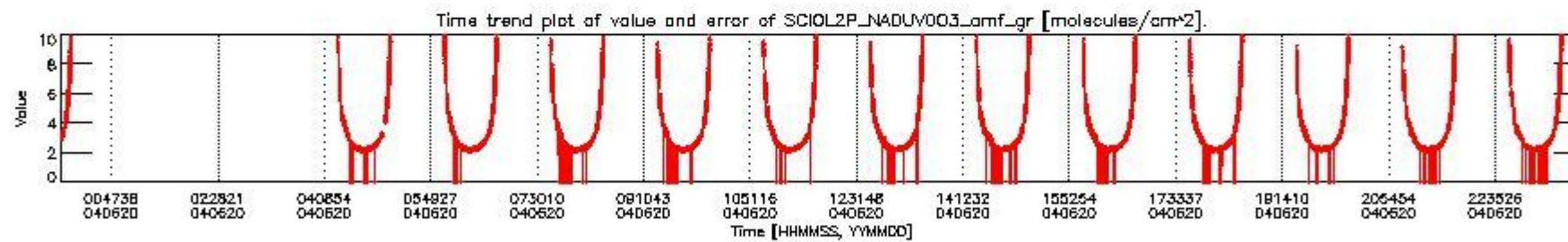
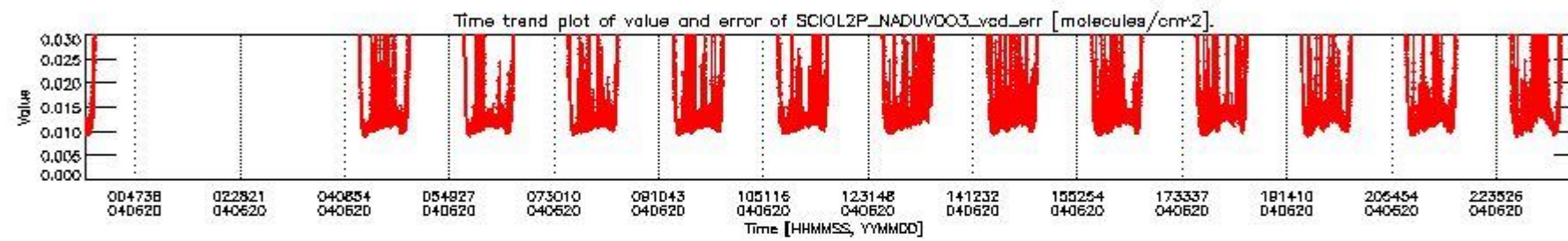
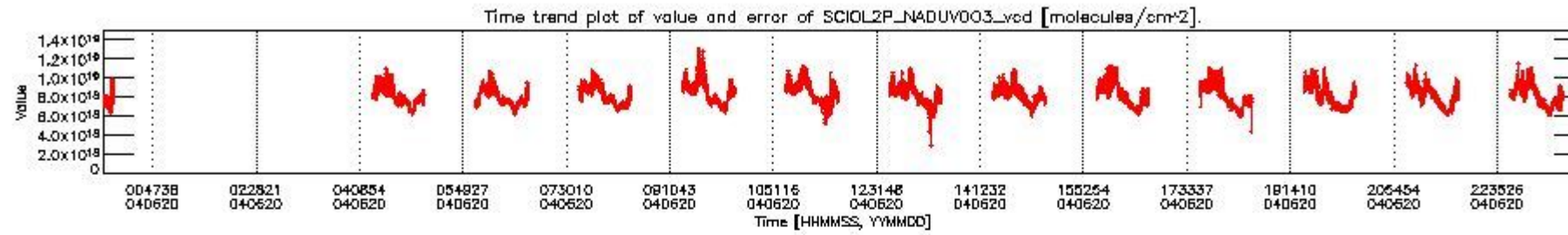
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

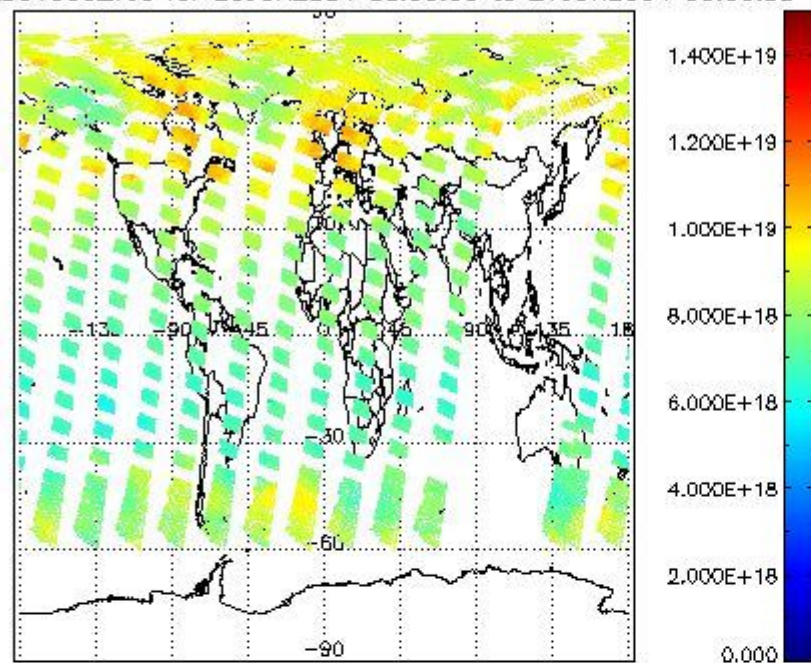
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

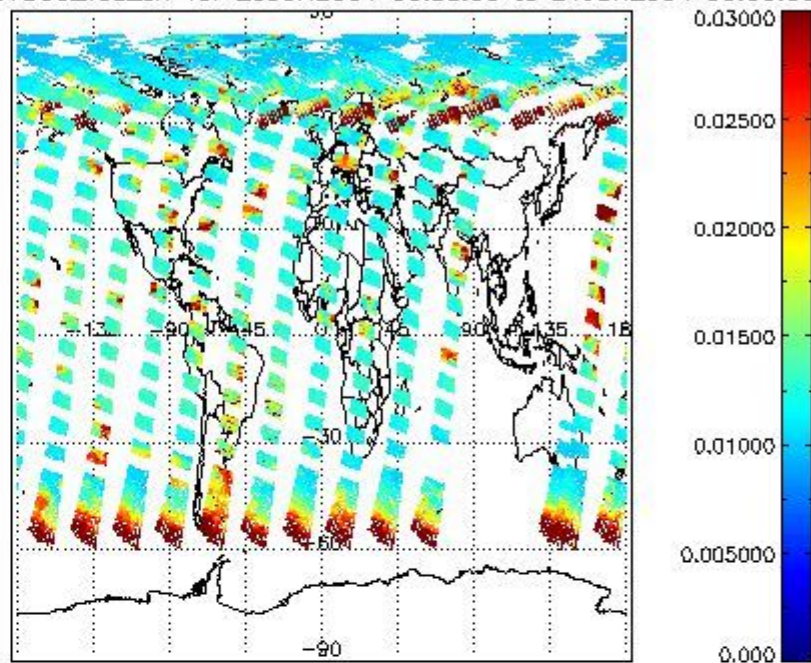
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



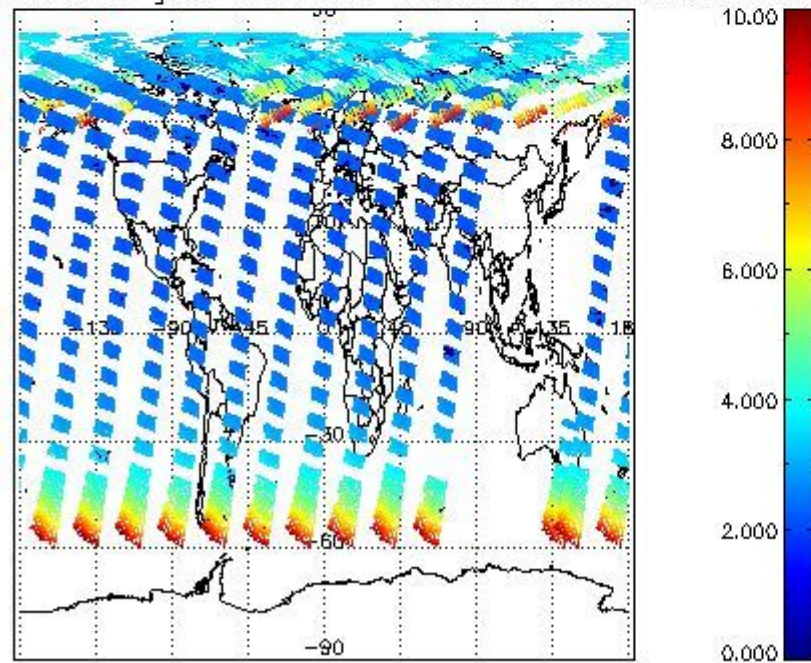
SCIOL2P_NADUV003_vcd for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



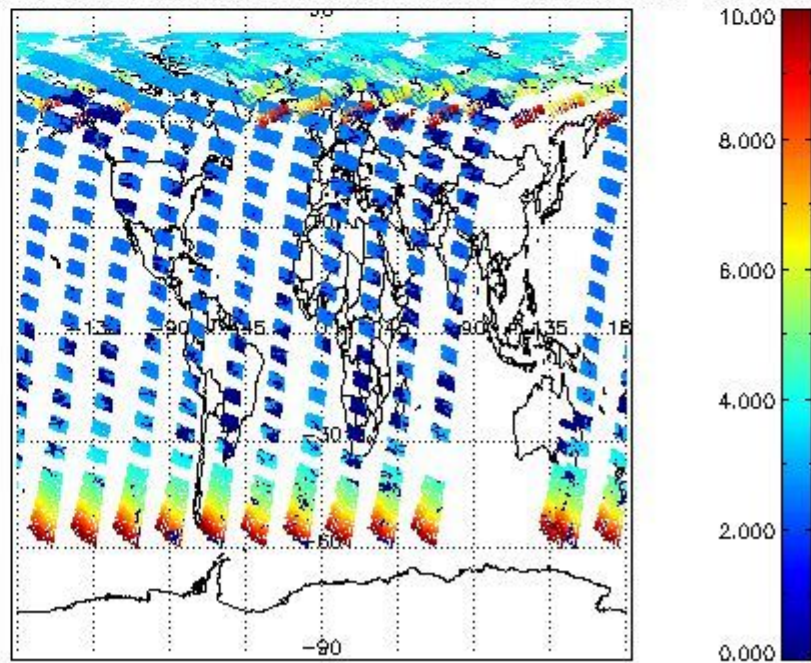
SCIOL2P_NADUV003_vcd_err for 20JUN2004 00:00:00 to 21JUN2004 00:00:00

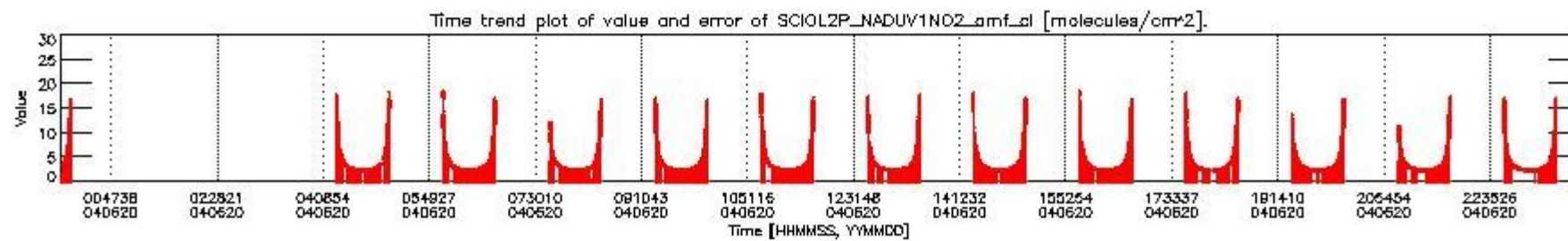
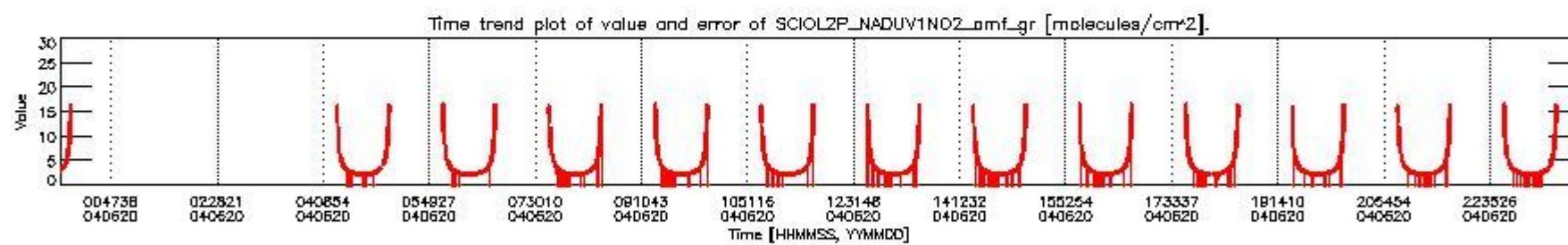
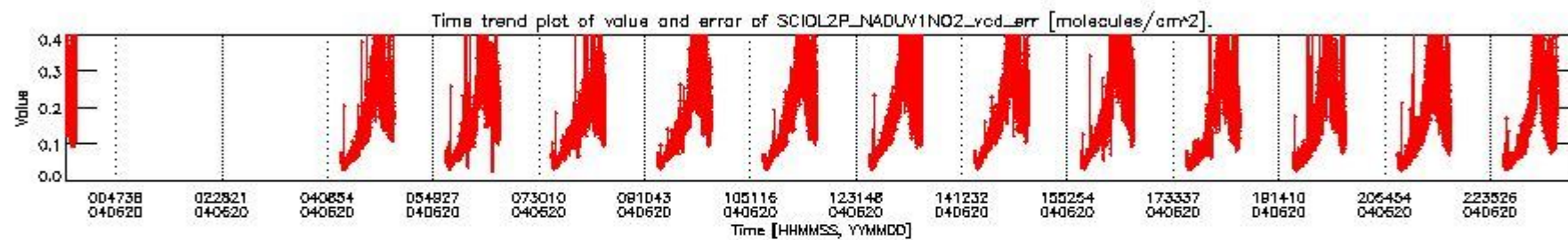
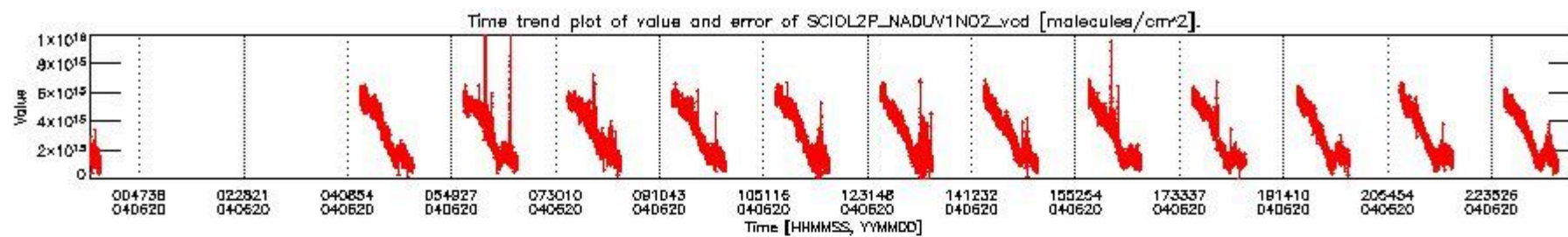


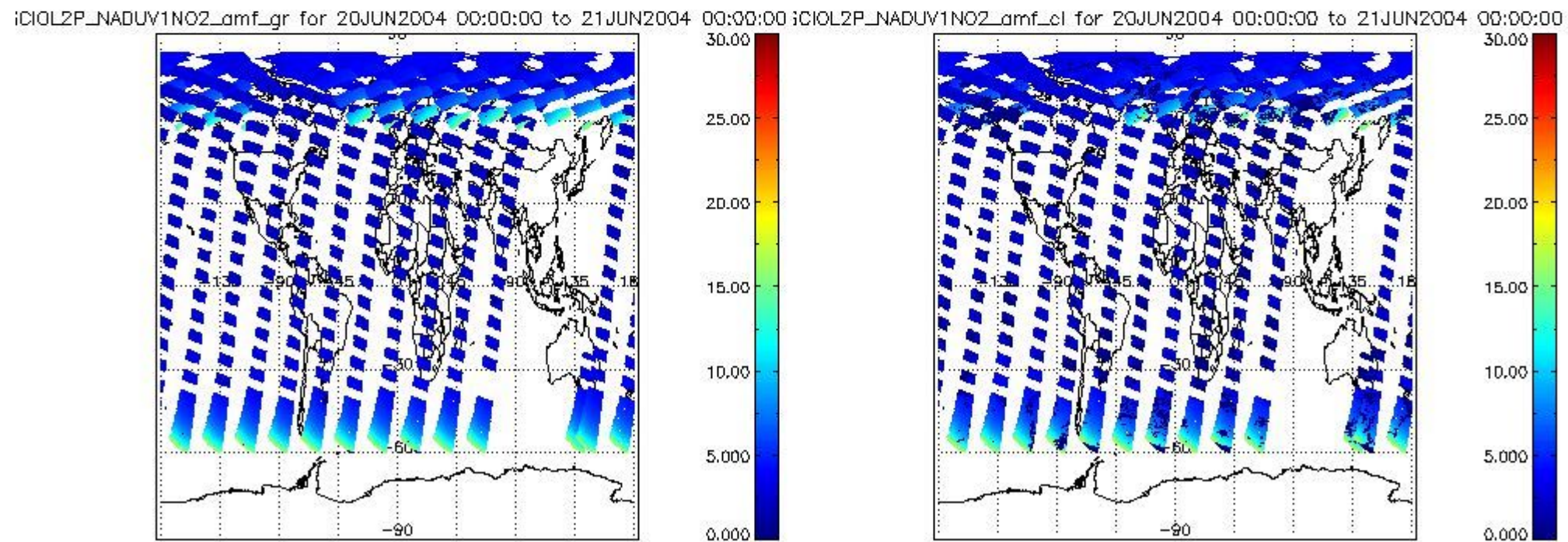
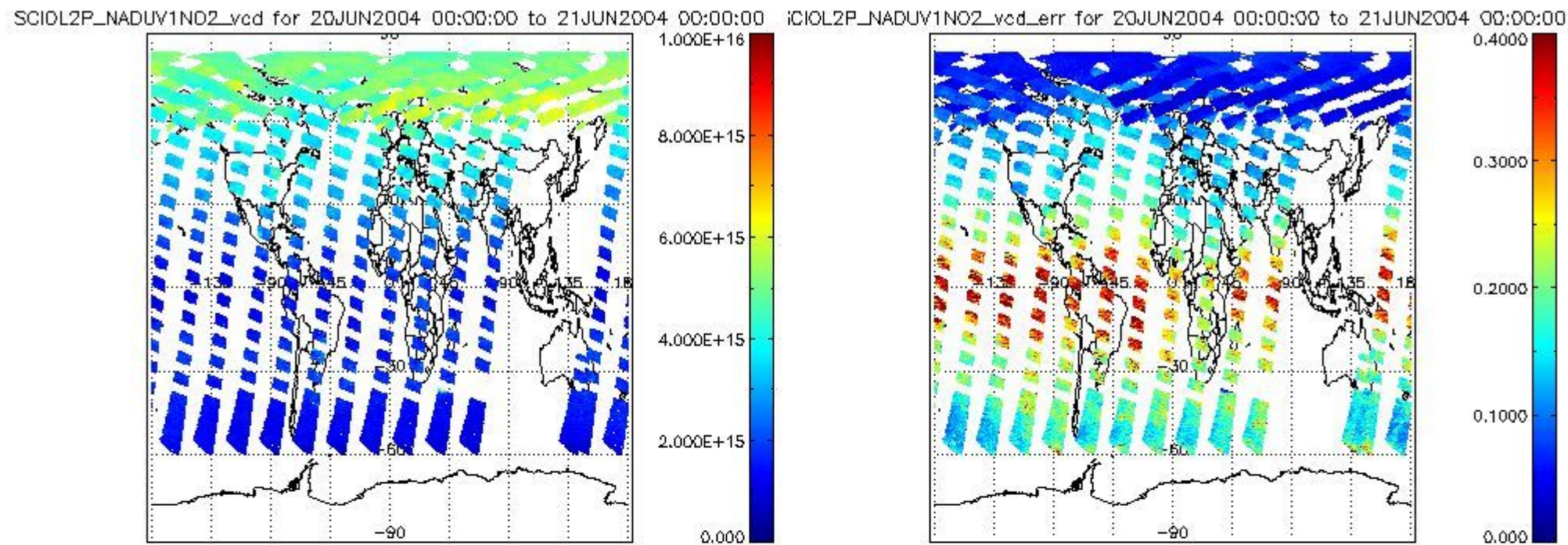
SCIOL2P_NADUV003_amf_gr for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



SCIOL2P_NADUV003_amf_cl for 20JUN2004 00:00:00 to 21JUN2004 00:00:00







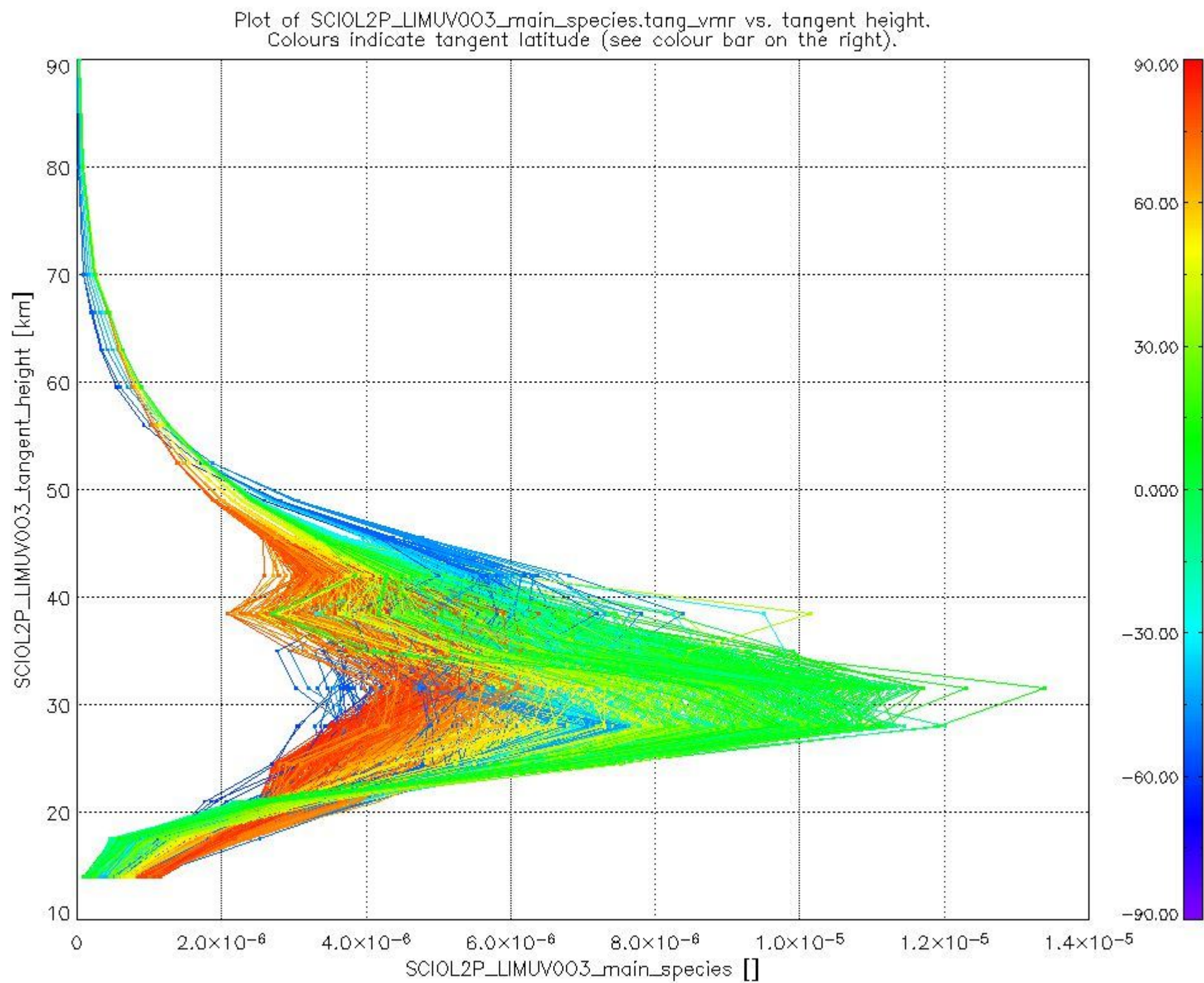
2.2.3 Limb

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

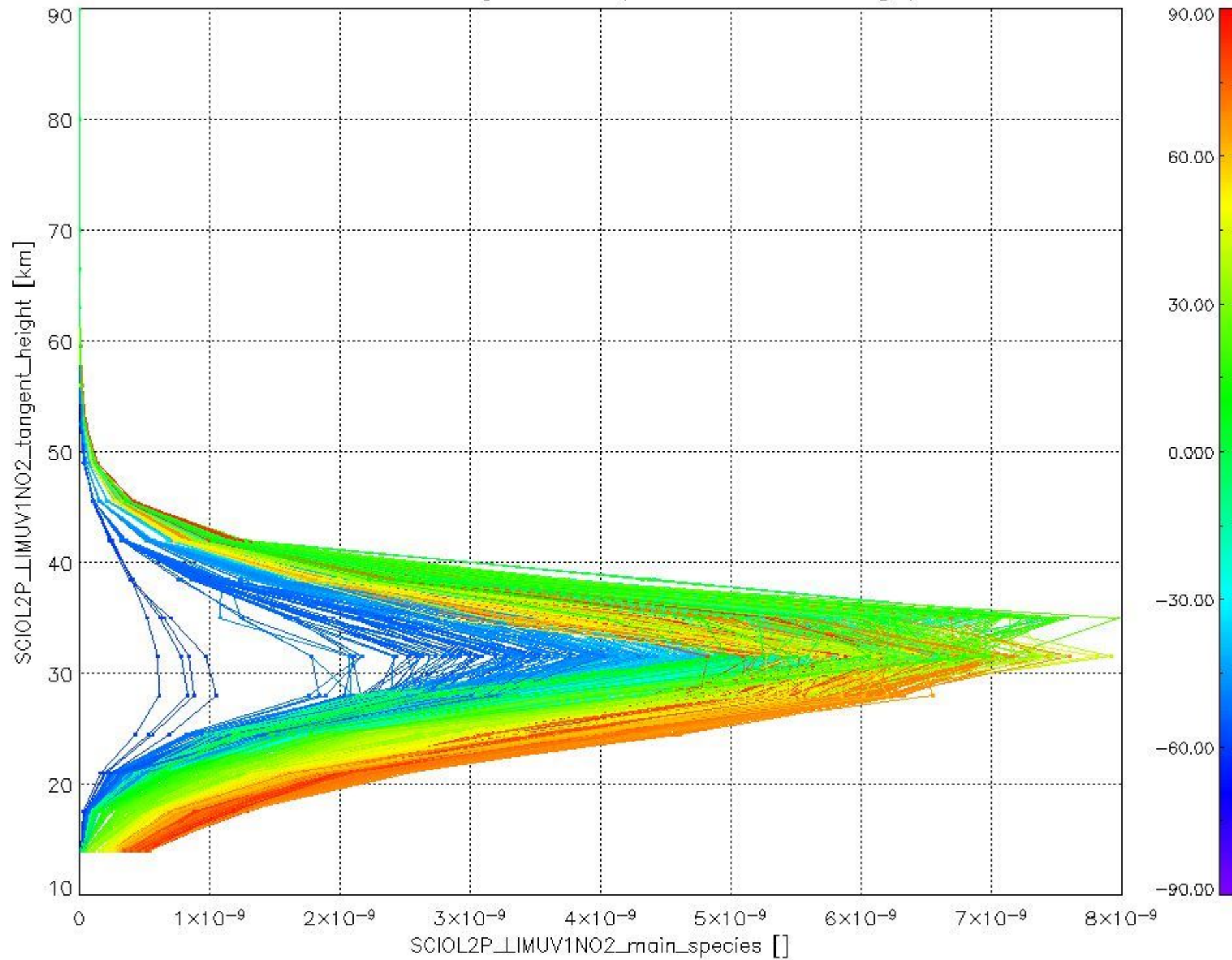
The following data items are currently included into this section:

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.



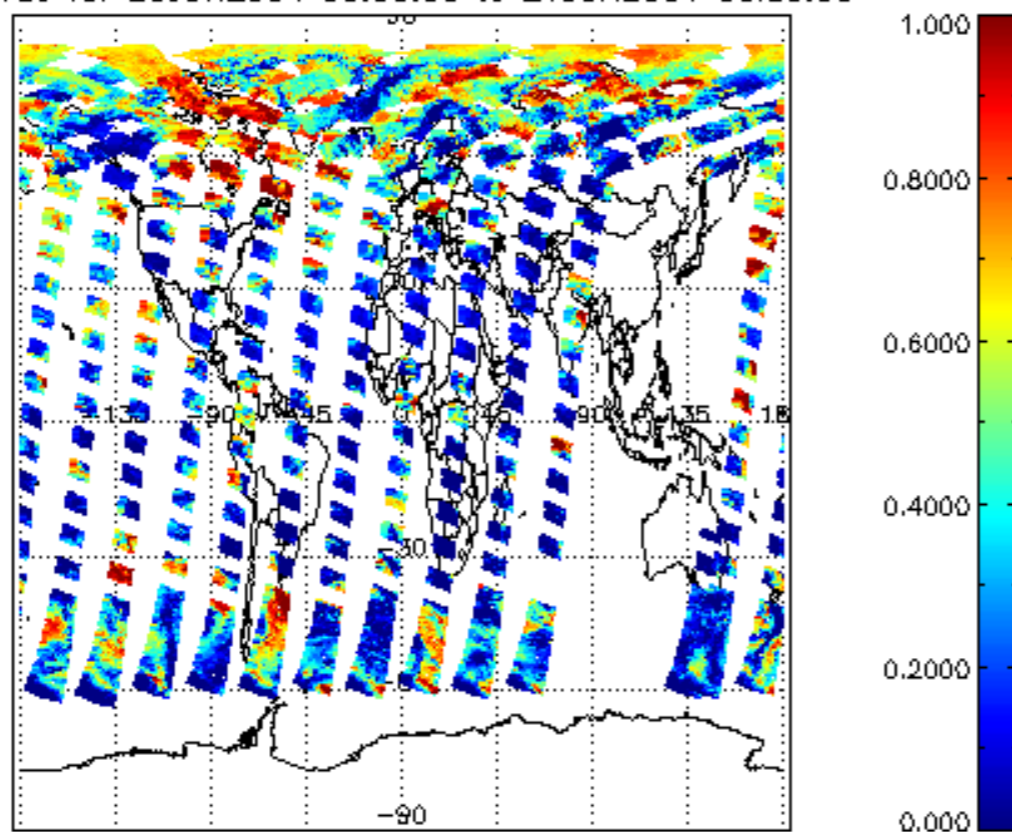
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



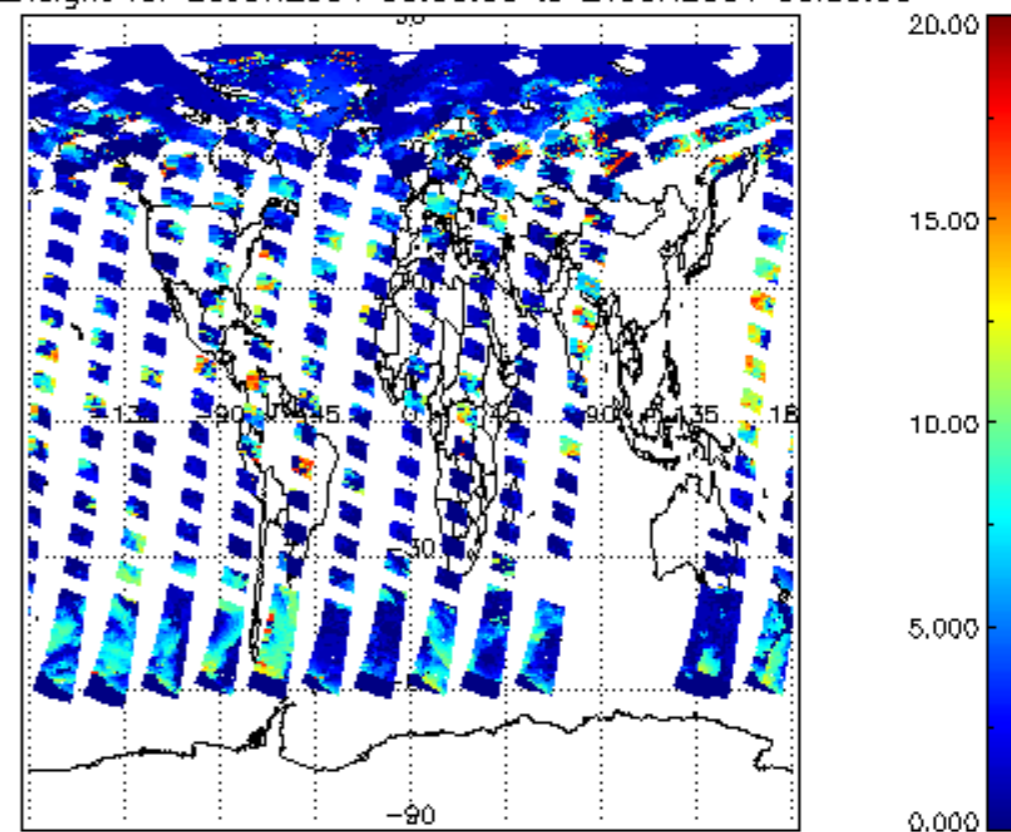
2.3 ADF monitoring

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

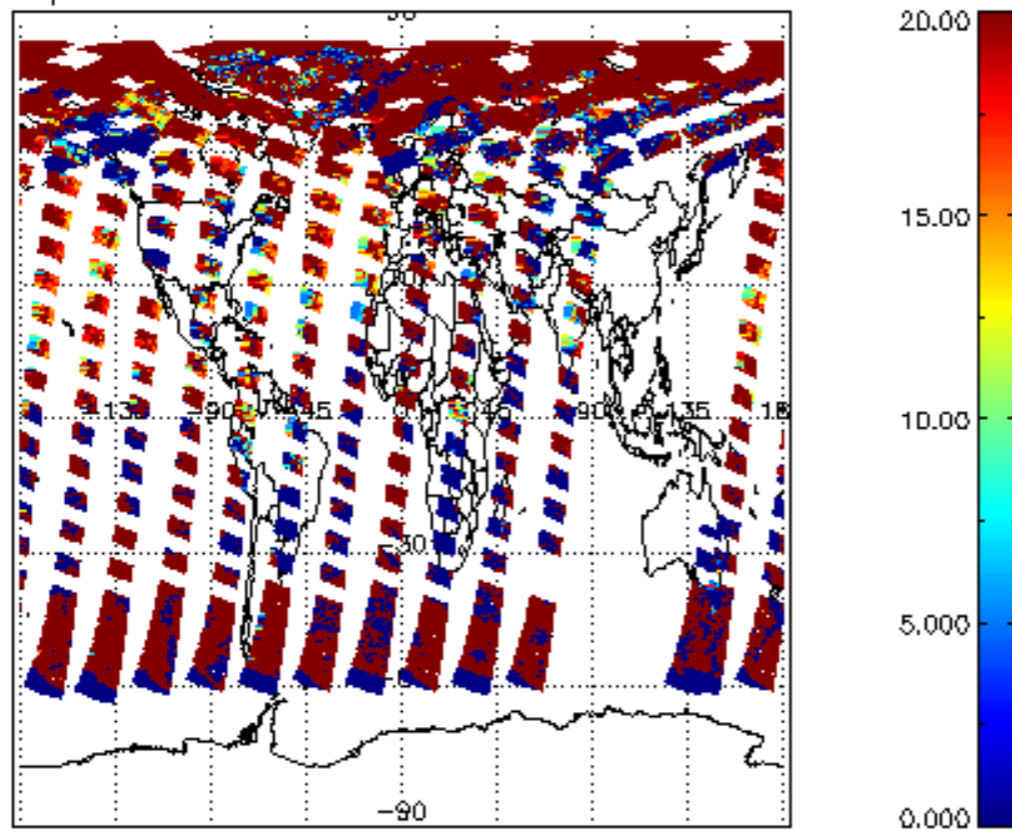
cl_frac for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



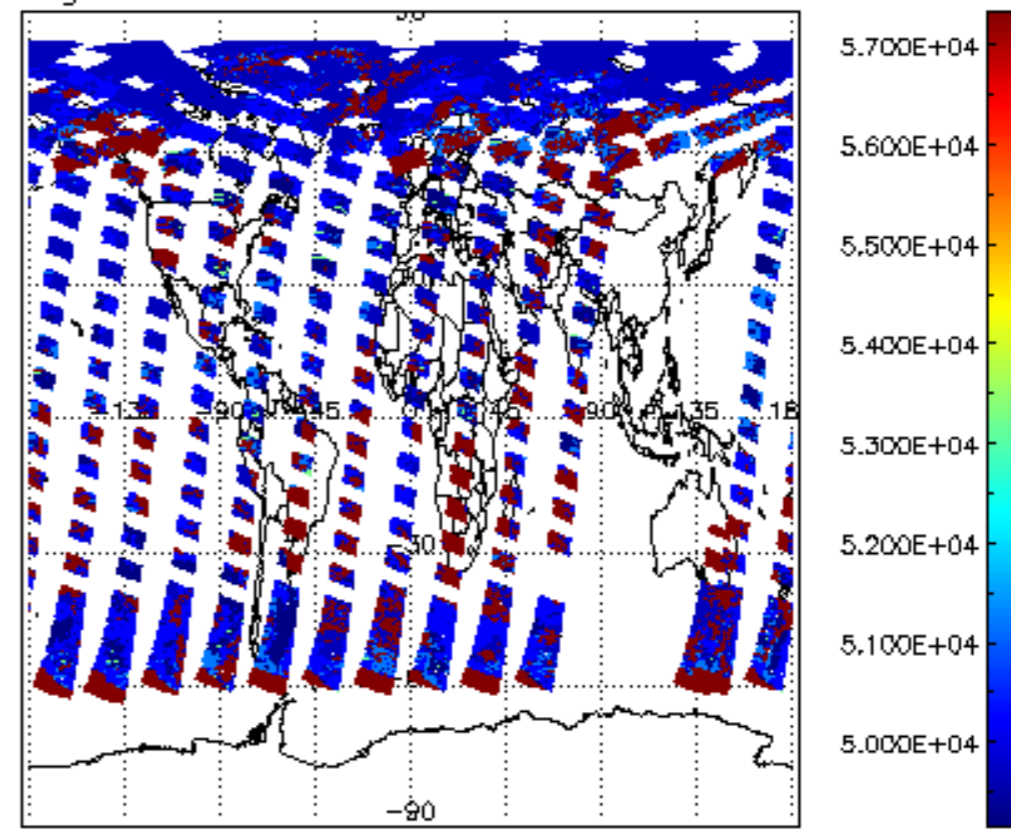
cl_top_height for 20JUN2004 00:00:00 to 21JUN2004 00:00:00

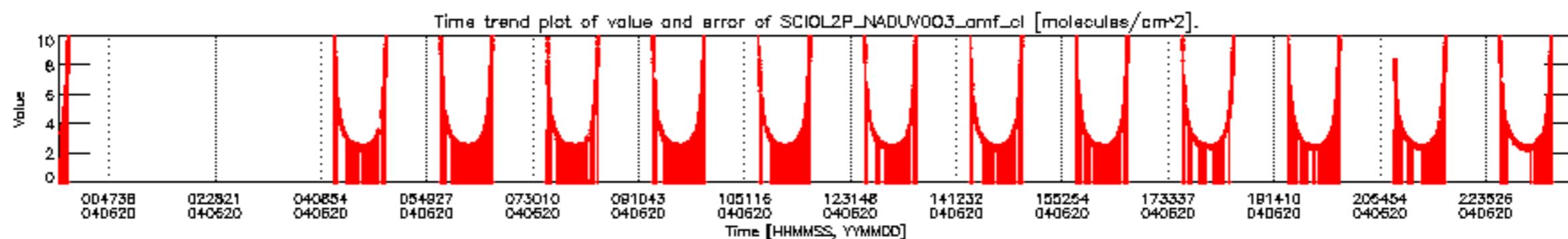
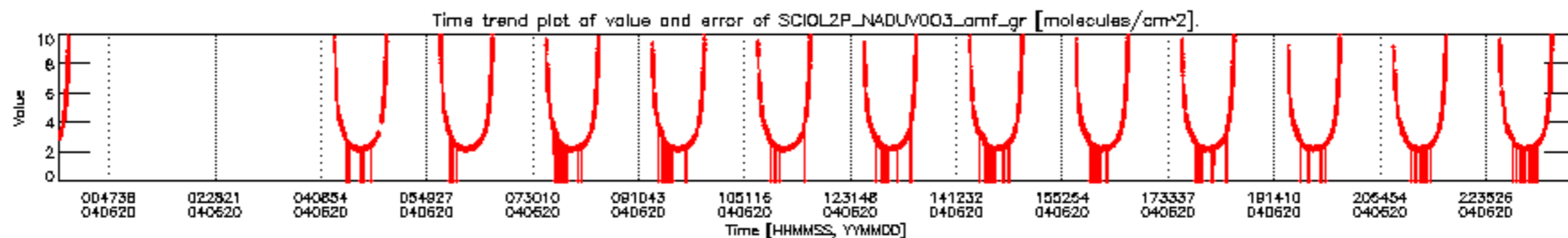
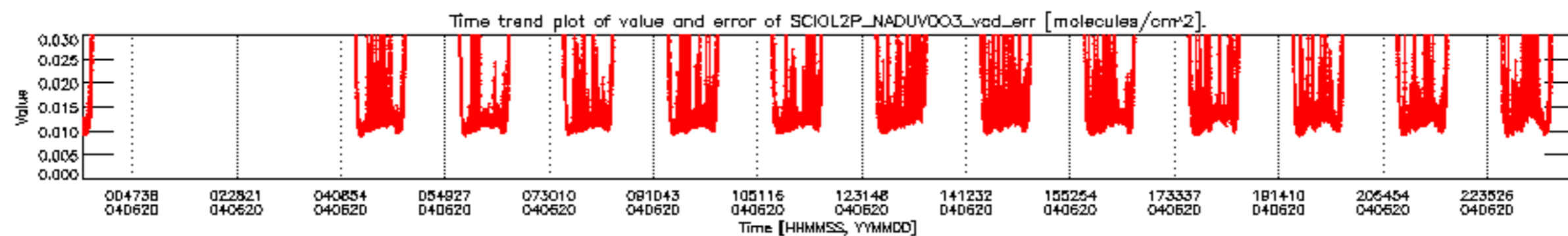
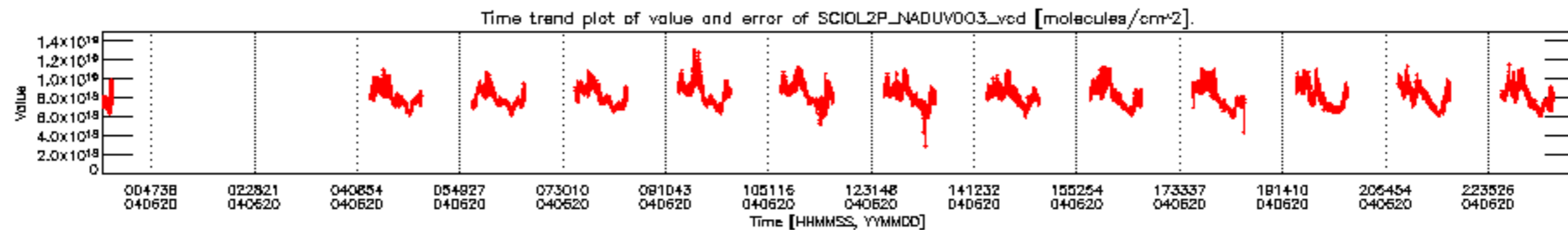


cl_opt_depth for 20JUN2004 00:00:00 to 21JUN2004 00:00:00

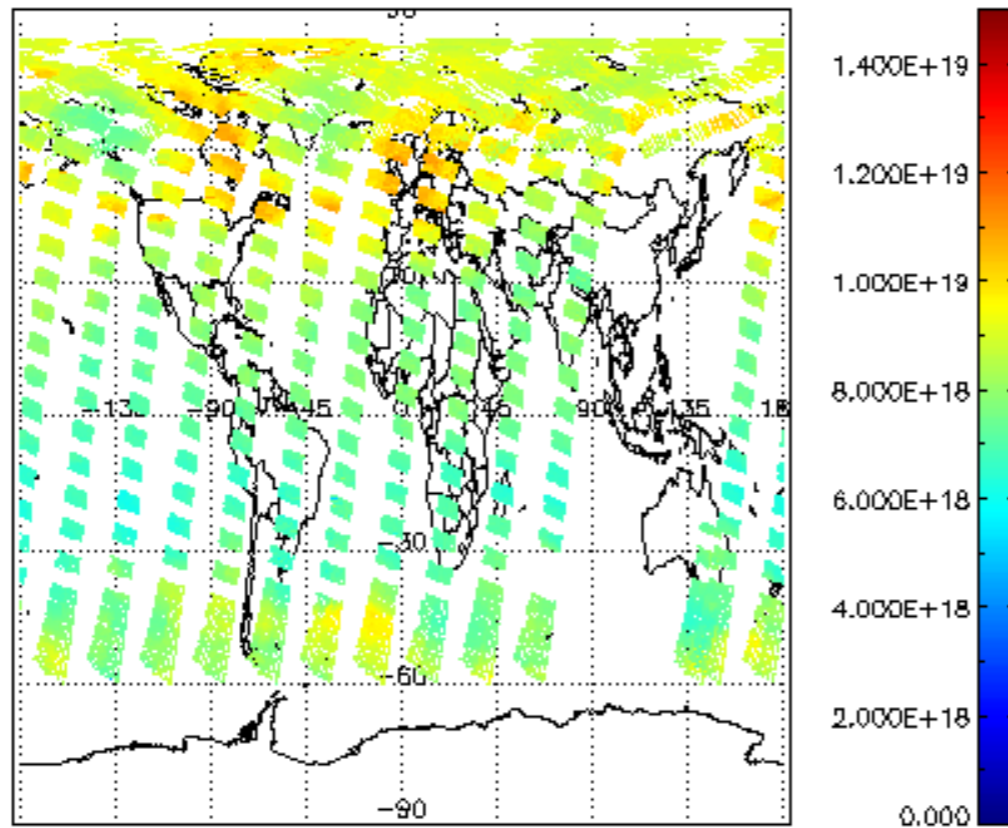


cloud_flags for 20JUN2004 00:00:00 to 21JUN2004 00:00:00

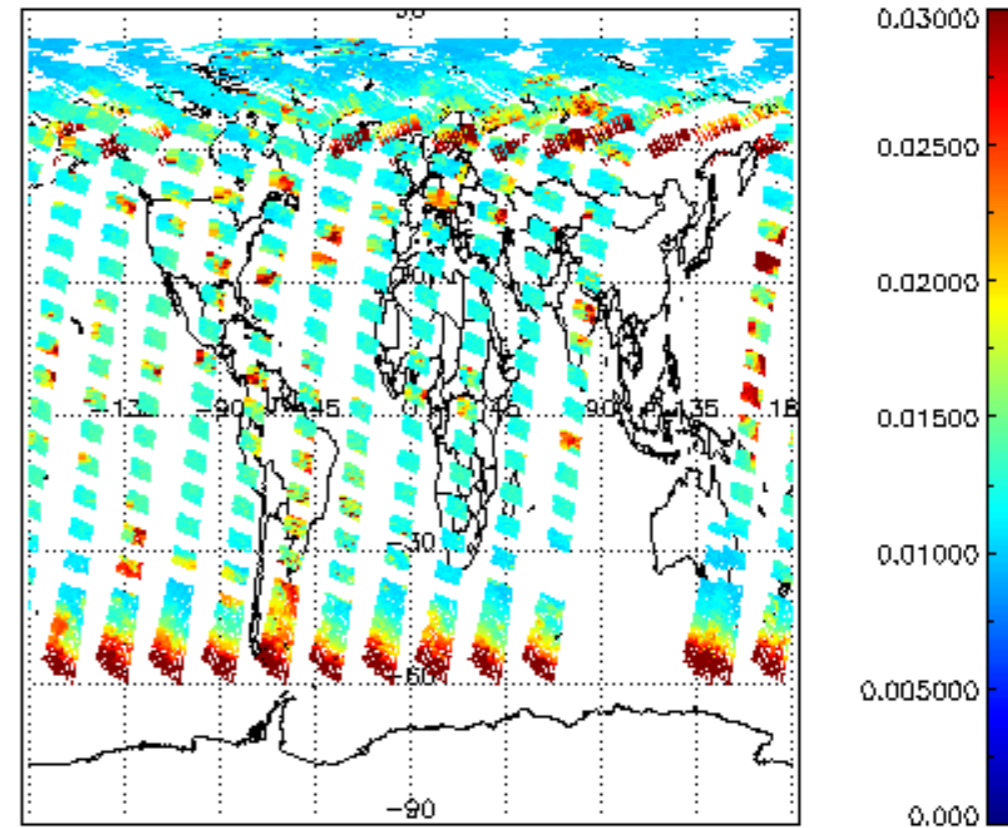




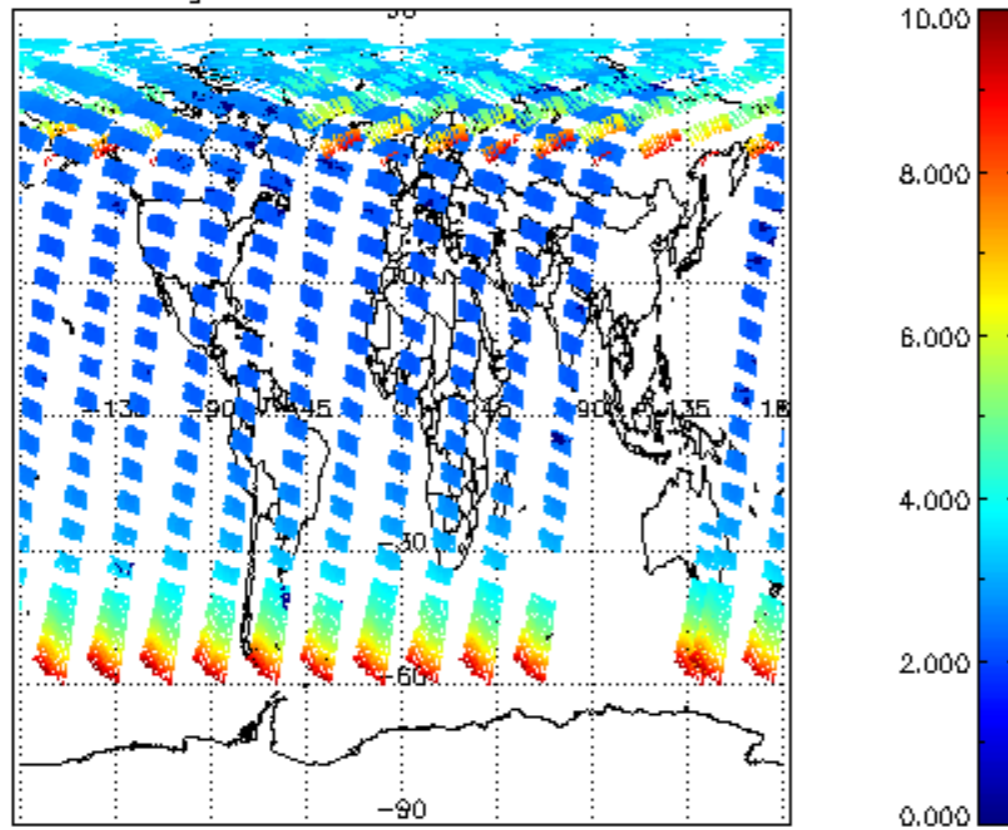
SCIOL2P_NADUV003_vcd for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



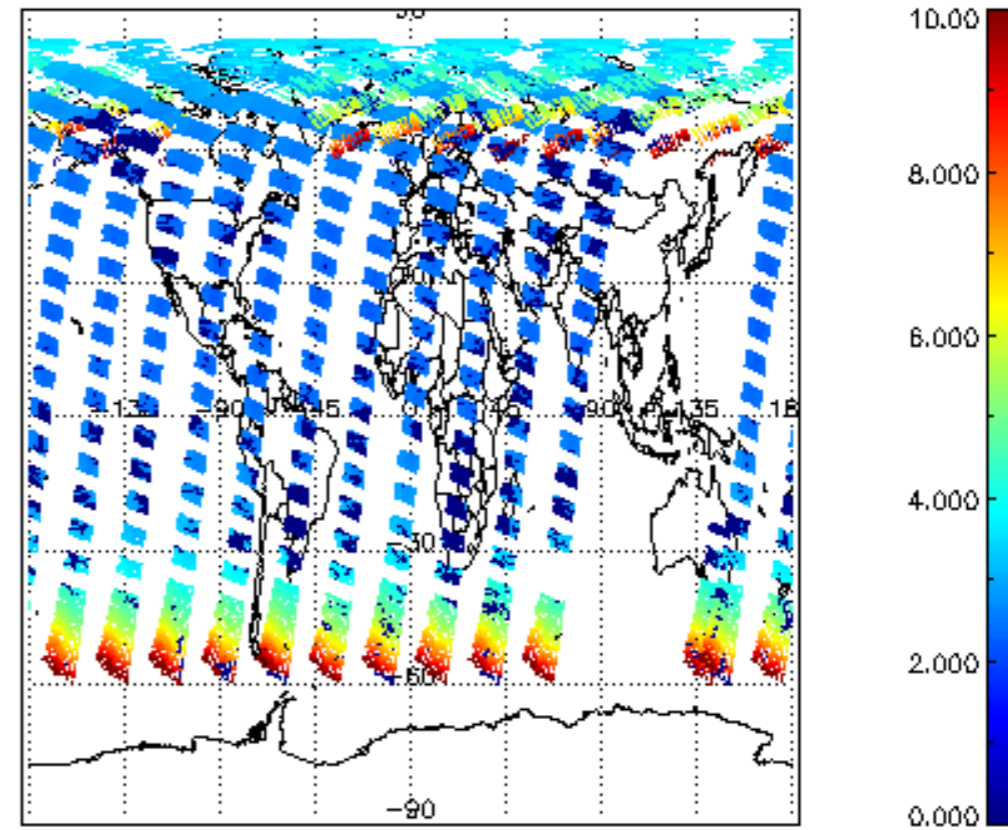
SCIOL2P_NADUV003_vcd_err for 20JUN2004 00:00:00 to 21JUN2004 00:00:00

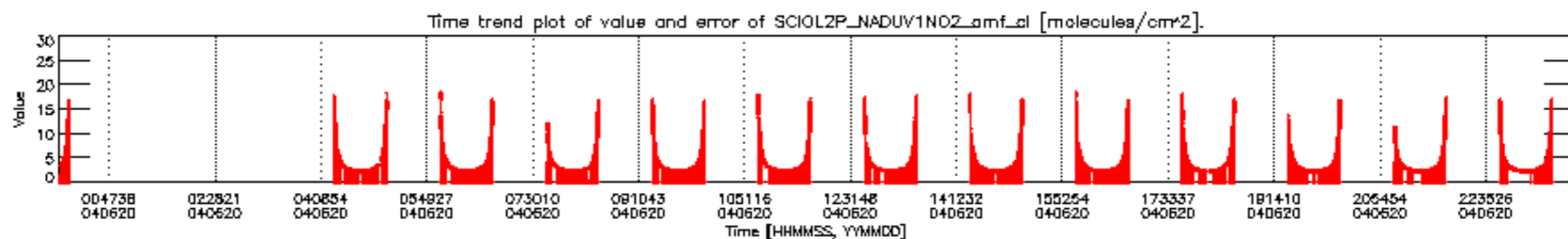
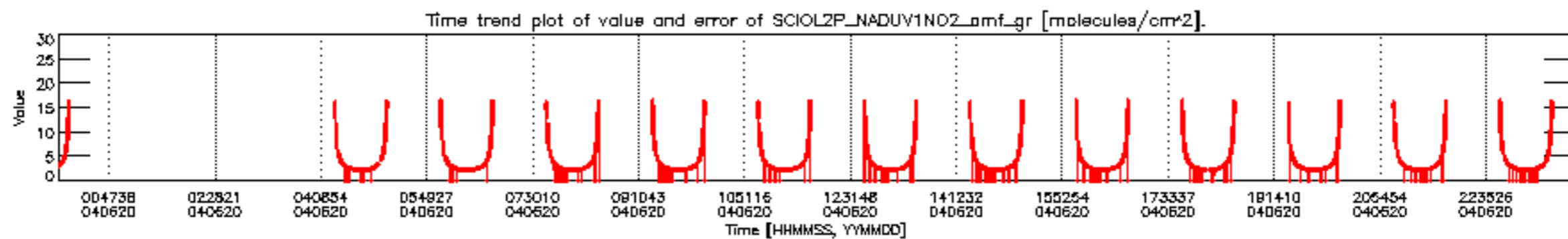
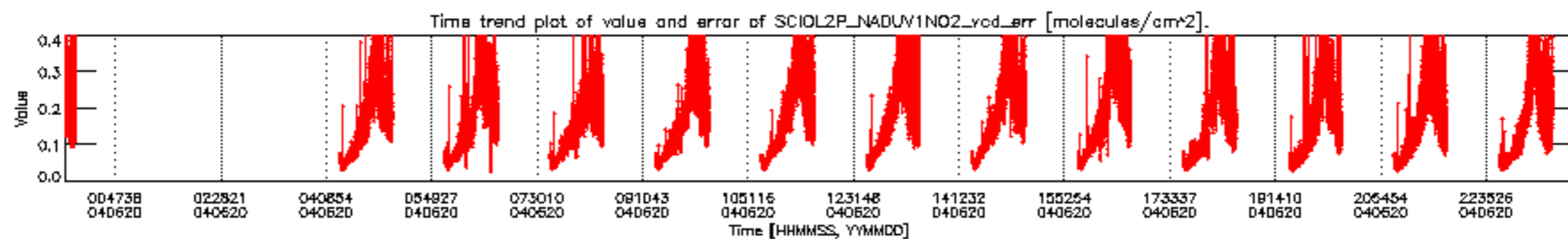
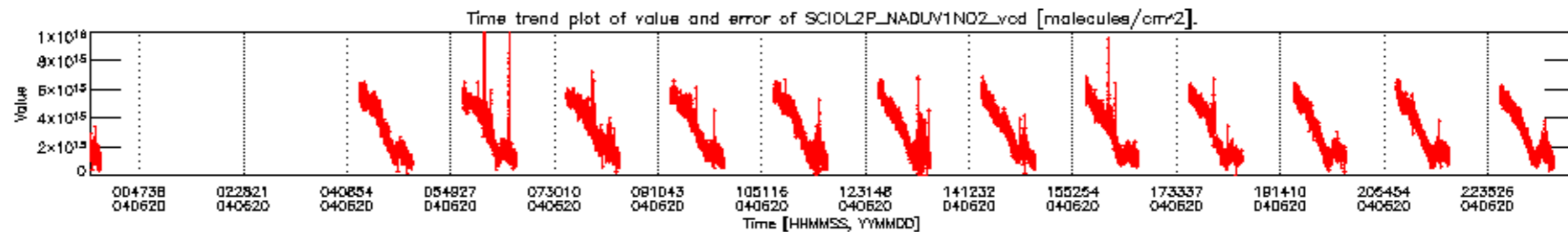


SCIOL2P_NADUV003_amf_gr for 20JUN2004 00:00:00 to 21JUN2004 00:00:00

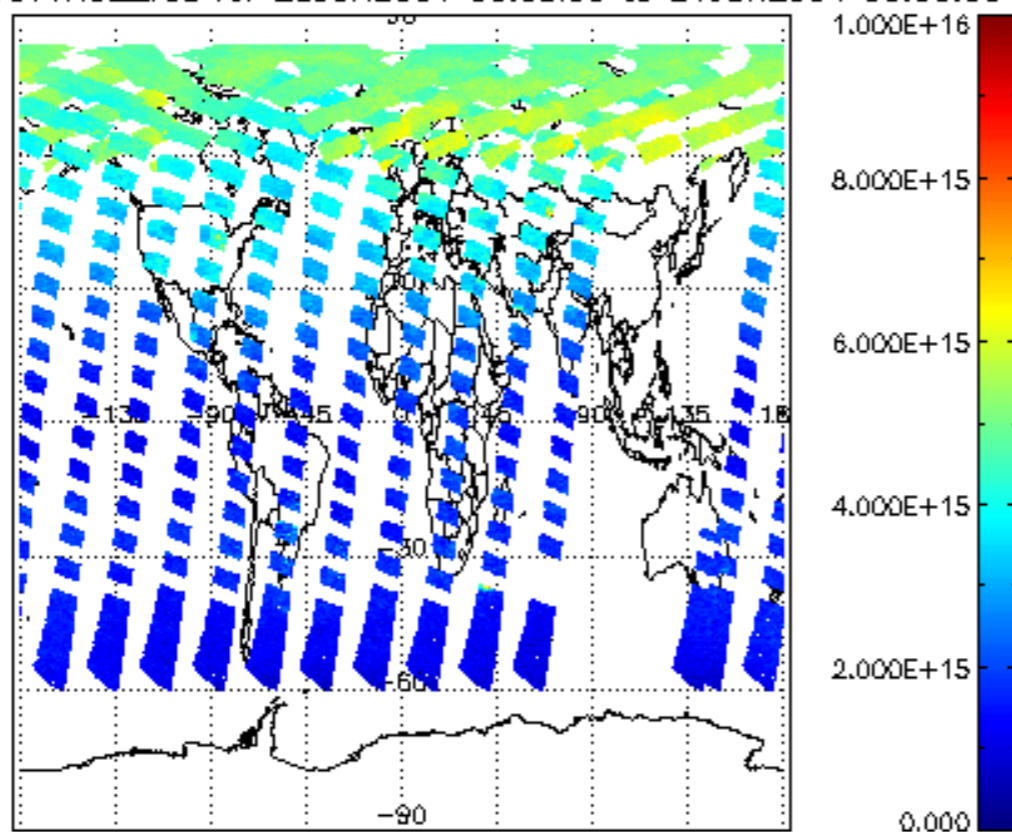


SCIOL2P_NADUV003_amf_cl for 20JUN2004 00:00:00 to 21JUN2004 00:00:00

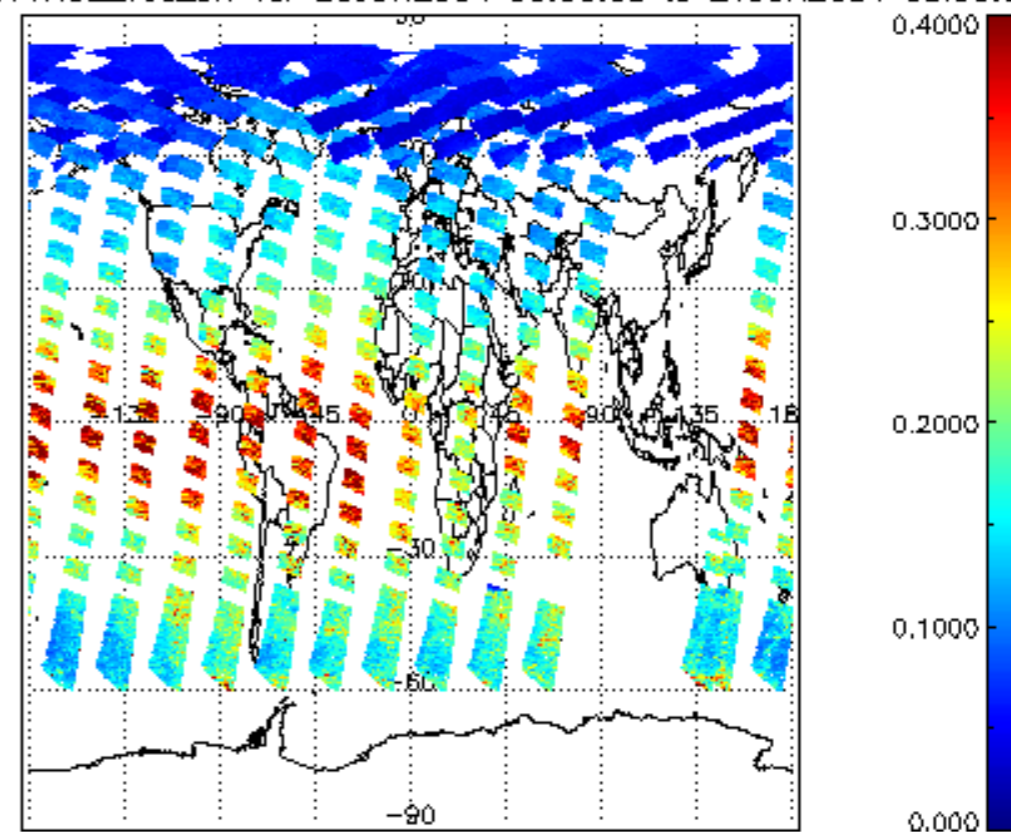




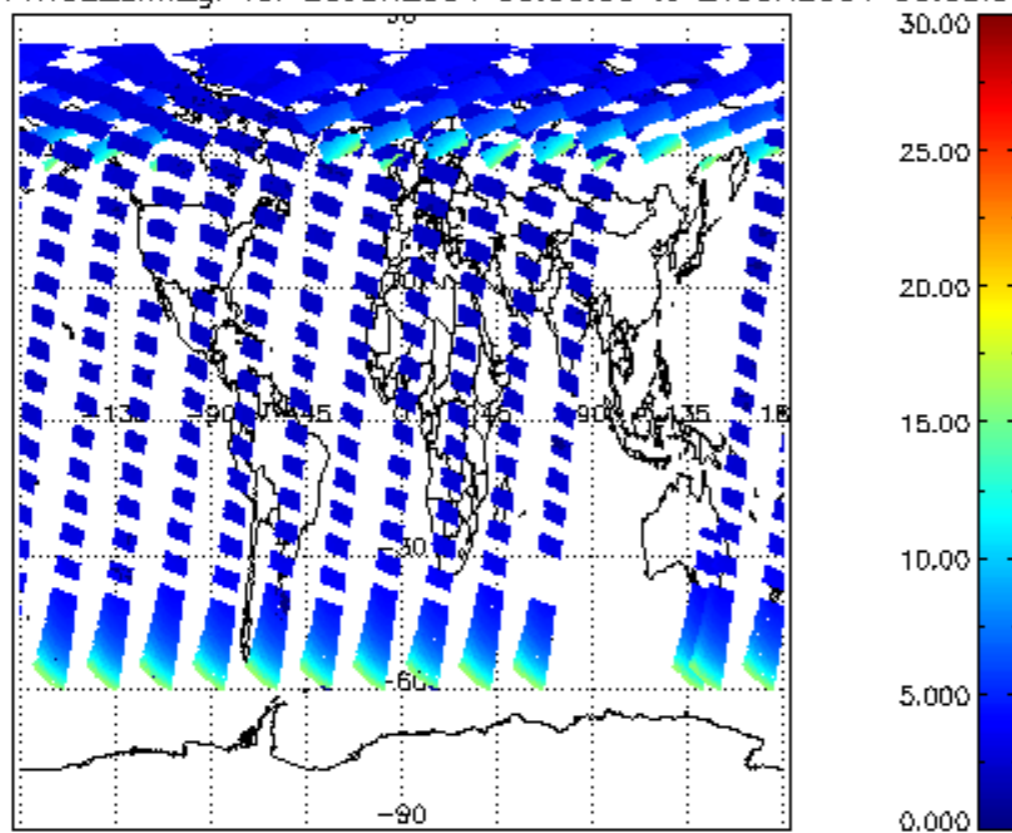
SCIOL2P_NADUV1NO2_vcd for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



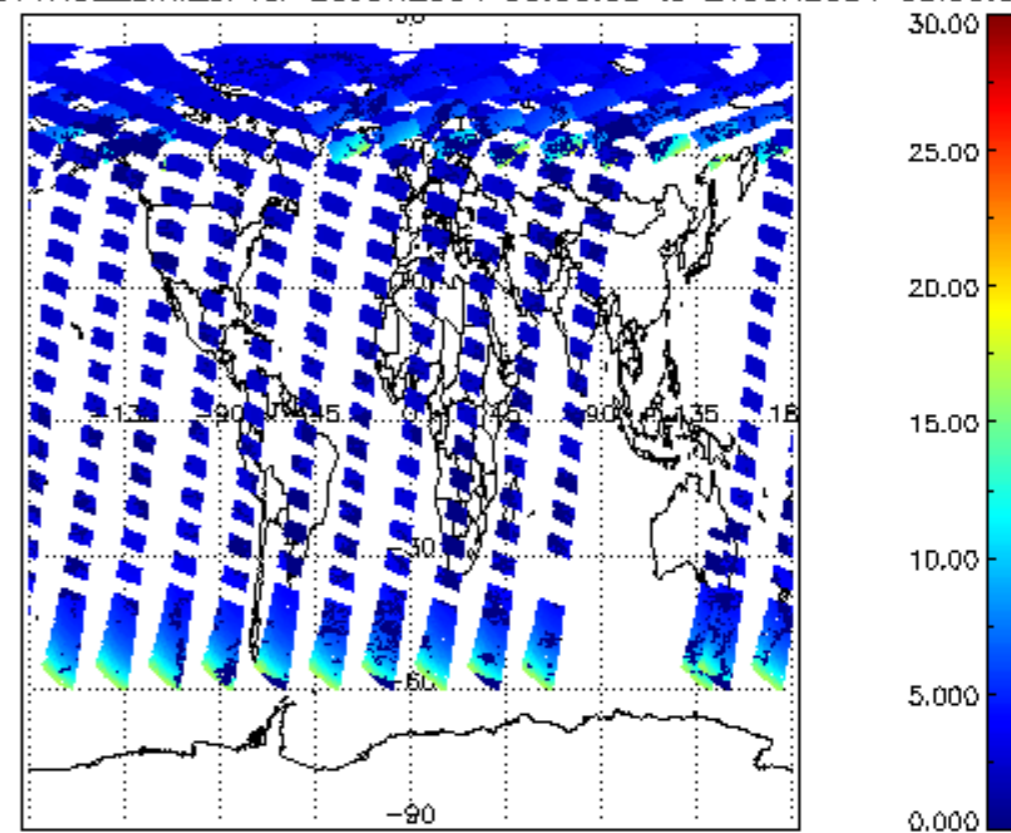
iCIOL2P_NADUV1NO2_vcd_err for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



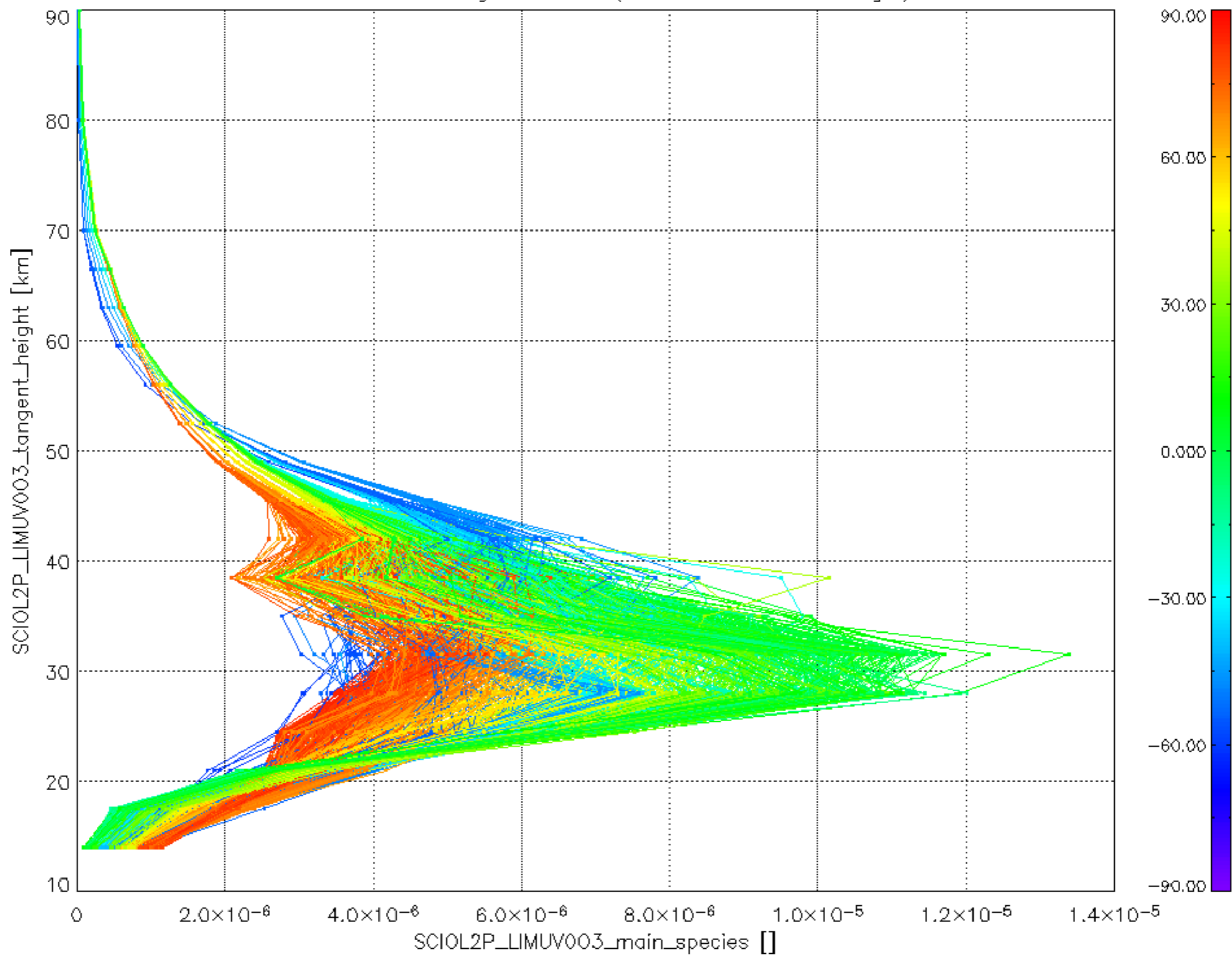
iCIOL2P_NADUV1NO2_amf_gr for 20JUN2004 00:00:00 to 21JUN2004 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 20JUN2004 00:00:00 to 21JUN2004 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).

