

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	05JUN2009 16:04:49
Data source version	SCIA-OL/3.01-R
Processing scope for products	20APR2009 00:00:00 to 21APR2009 00:00:00
Start time of first product within scope	19APR2009 23:46:45
Stop time of last product within scope	21APR2009 00:10:16
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__2PRDPA20090419_234645_000033122078_00188_37316_2130.N1	19APR2009 23:46:45	20APR2009 00:41:58	0	GOOD
1	SCI_OL__2PRDPA20090420_012720_000033252078_00189_37317_2131.N1	20APR2009 01:27:20	20APR2009 02:22:46	0	GOOD
2	SCI_OL__2PRDPA20090420_030756_000033122078_00190_37318_2132.N1	20APR2009 03:07:56	20APR2009 04:03:09	0	GOOD
3	SCI_OL__2PRDPA20090420_044831_000033252078_00191_37319_2133.N1	20APR2009 04:48:31	20APR2009 05:43:57	0	GOOD
4	SCI_OL__2PRDPA20090420_080943_000033252078_00193_37321_2136.N1	20APR2009 08:09:43	20APR2009 09:05:08	0	GOOD
5	SCI_OL__2PRDPA20090420_095018_000033122078_00193_37321_2135.N1	20APR2009 09:50:18	20APR2009 10:45:31	0	GOOD
6	SCI_OL__2PRDPA20090420_113054_000033252078_00195_37323_2137.N1	20APR2009 11:30:54	20APR2009 12:26:19	0	GOOD
7	SCI_OL__2PRDPA20090420_145205_000033252078_00197_37325_2139.N1	20APR2009 14:52:05	20APR2009 15:47:30	0	GOOD
8	SCI_OL__2PRDPA20090420_163240_000033122078_00198_37326_2140.N1	20APR2009 16:32:40	20APR2009 17:27:53	0	GOOD
9	SCI_OL__2PRDPA20090420_181334_000033252078_00199_37327_2141.N1	20APR2009 18:13:34	20APR2009 19:09:00	0	GOOD
10	SCI_OL__2PRDPA20090420_195410_000033122078_00200_37328_2142.N1	20APR2009 19:54:10	20APR2009 20:49:23	0	GOOD
11	SCI_OL__2PRDPA20090420_213427_000033252078_00201_37329_2143.N1	20APR2009 21:34:27	20APR2009 22:29:53	0	GOOD
12	SCI_OL__2PRDPA20090420_231503_000033122078_00202_37330_2144.N1	20APR2009 23:15:03	21APR2009 00:10:16	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: 126653

Total number of cloud data DSRs with good quality flag (=0): 126653 (100.0 %)

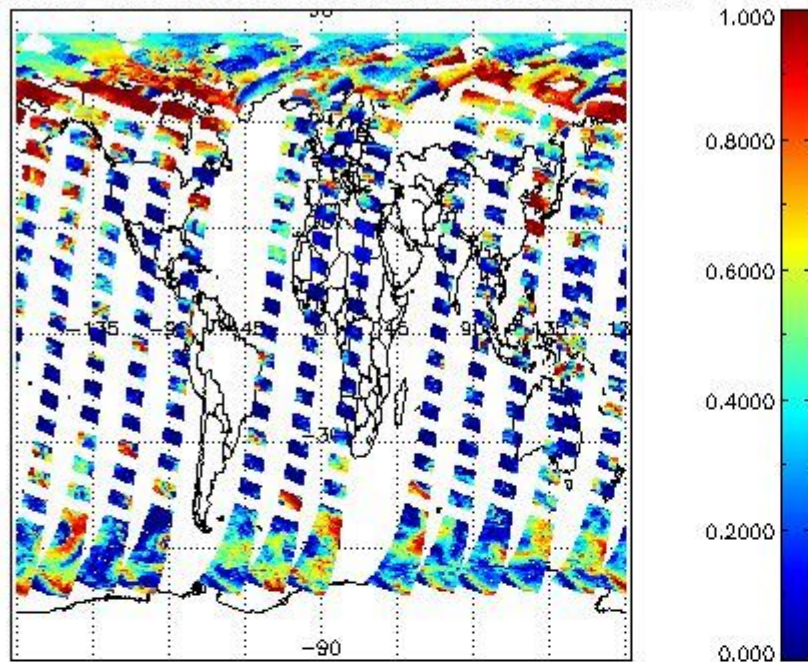
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	126653	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	126653	0.17350	0.12500	0.12500	0.25000	0.060912	s
CL_FRAC	126653	0.38611	0.36466	0.0000	1.0000	0.31430	-
CL_FRAC_ERR	126653	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	126653	5.5520	4.0000	4.0000	8.0000	1.9492	
PMD_READ_CL[0]	126653	0.36764	0.0000	0.0000	8.0000	1.3656	-
PMD_READ_CL[1]	126653	1.5049	0.0000	0.0000	8.0000	2.6719	-
CL_TOP_HEIGHT	111296	2.9282	1.3209	0.0000	17.000	3.3172	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	111296	63.973	100.00	0.0000	101.00	42.685	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	126653	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	126653	11001011	11000100	11000000	11100000	3414.2	flags
AERO_ABSO_IND	126653	3.7903	4.5088	-0.93319	14.792	2.3695	
AERO_IND_DIAG	126653	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	126653	01011100	00000000	00000000	11000000	24559.	flags

Time and geolocation plots:

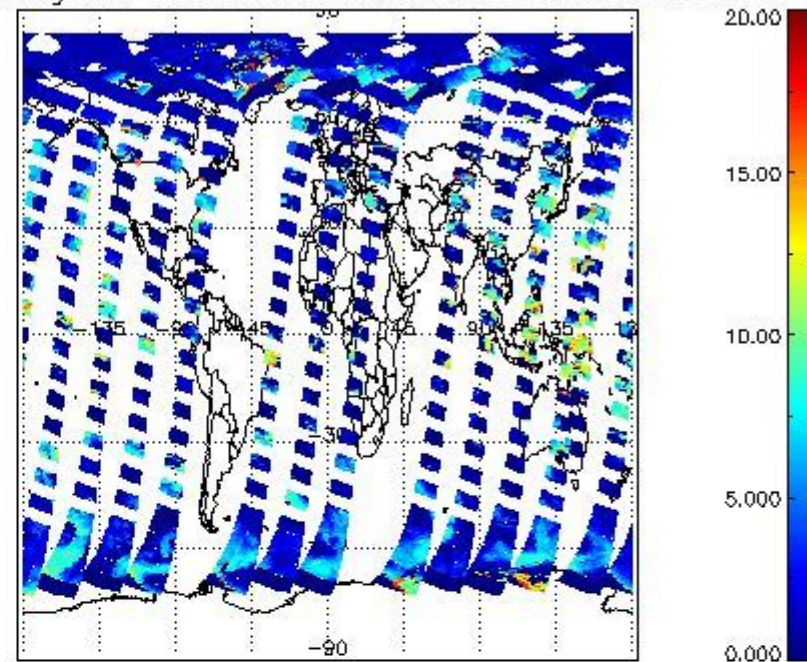
Plots are available for the following parameters:

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

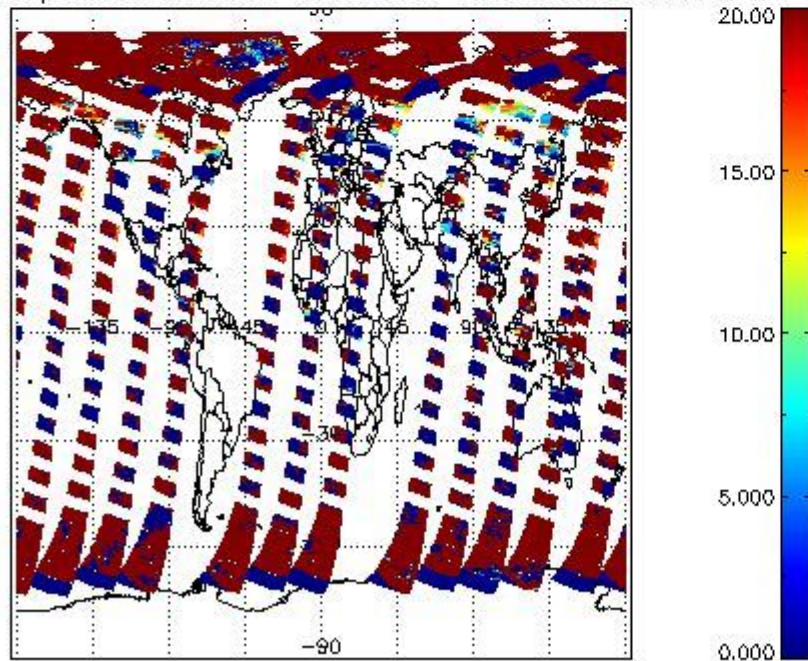
cL_frac for 20APR2009 00:00:00 to 21APR2009 00:00:00



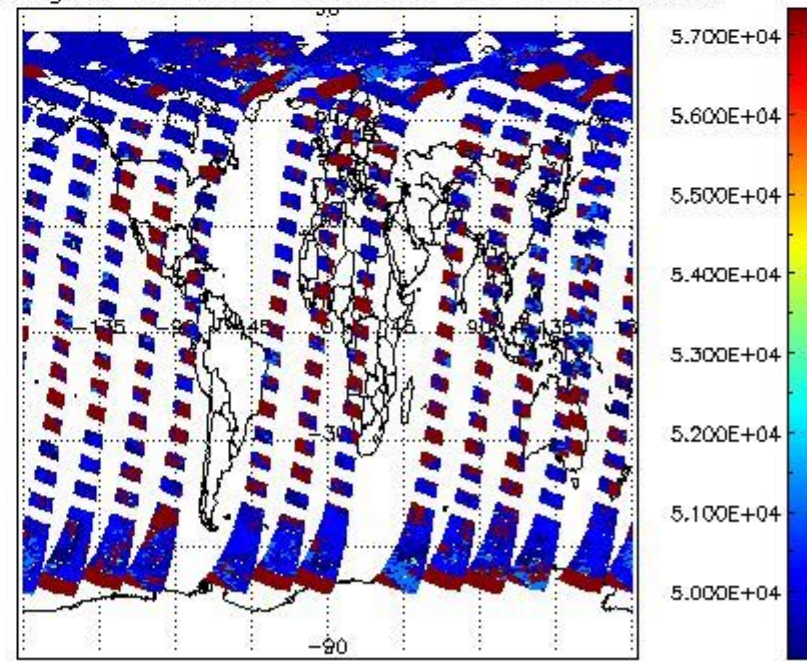
cL_top_height for 20APR2009 00:00:00 to 21APR2009 00:00:00



cL_opt_depth for 20APR2009 00:00:00 to 21APR2009 00:00:00



cloud_flags for 20APR2009 00:00:00 to 21APR2009 00:00:00



2.2.2 Nadir

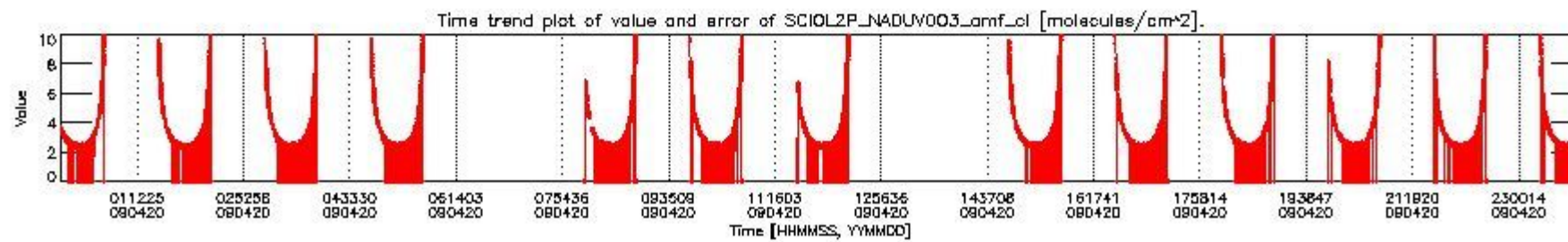
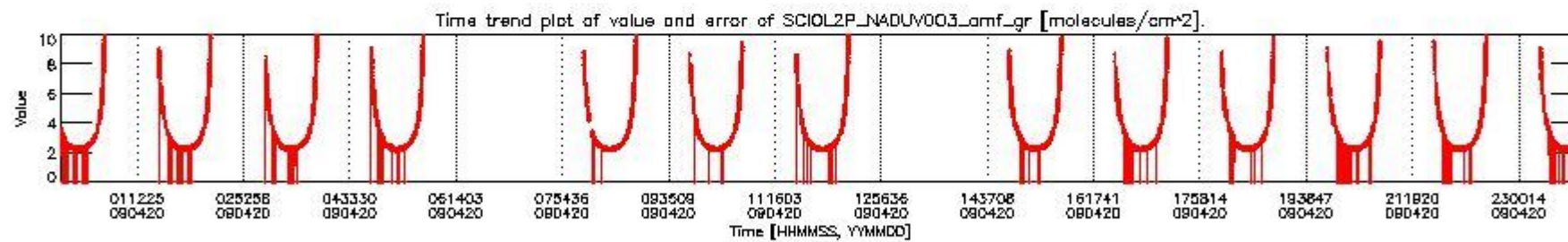
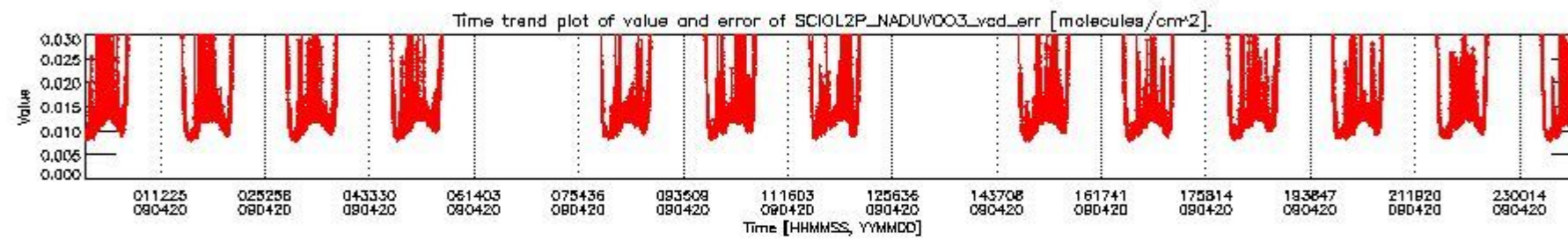
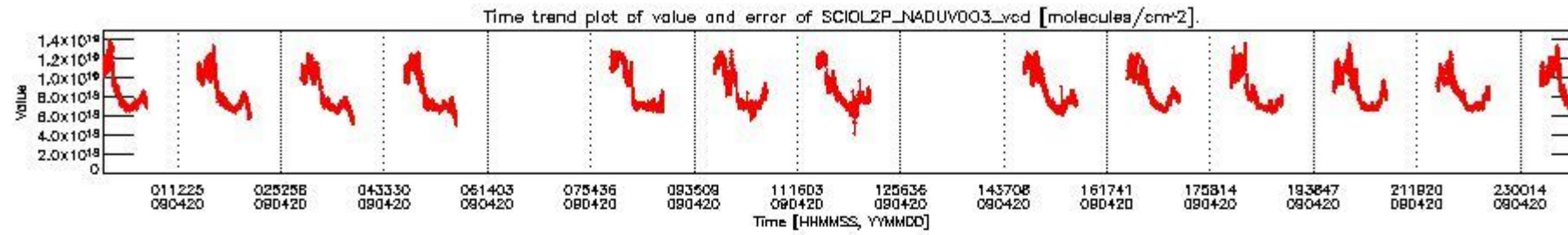
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

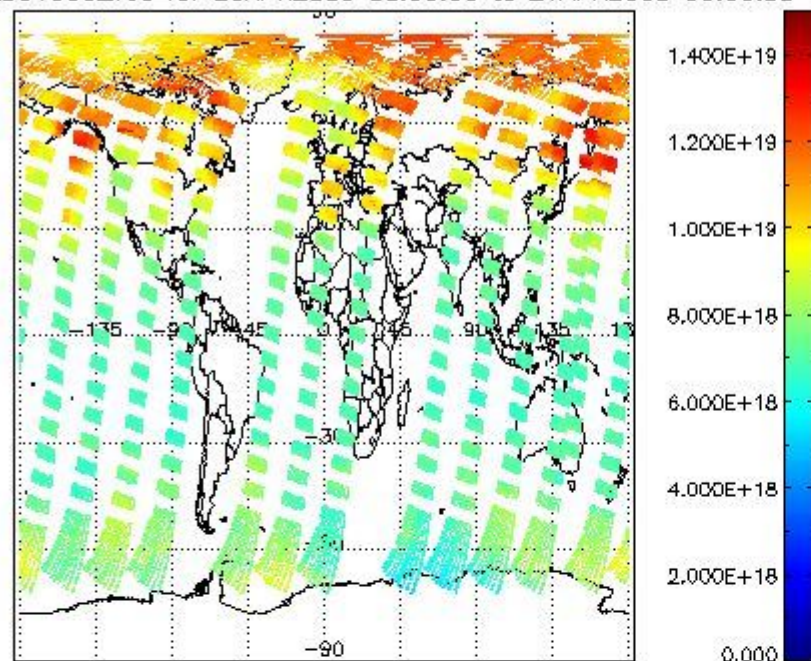
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

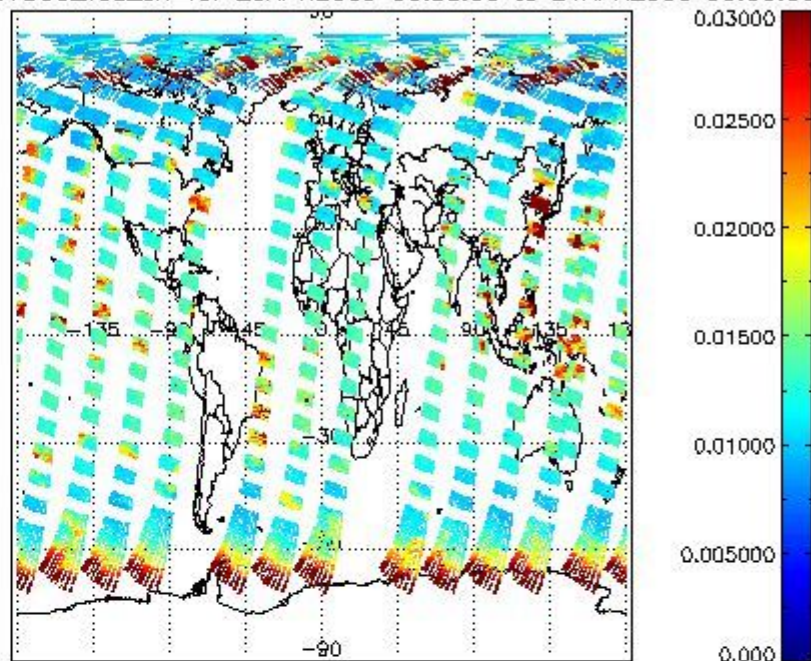
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



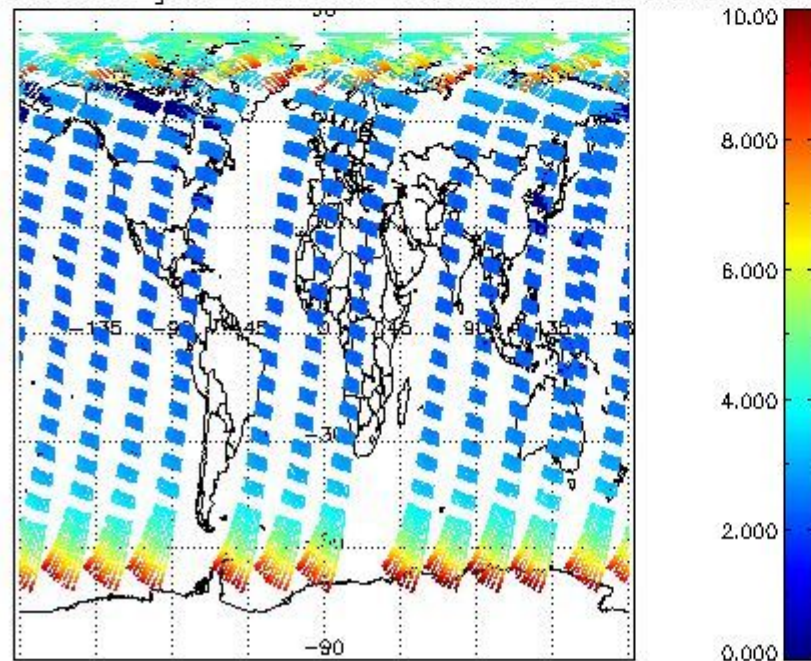
SCIOL2P_NADUV003_vcd for 20APR2009 00:00:00 to 21APR2009 00:00:00



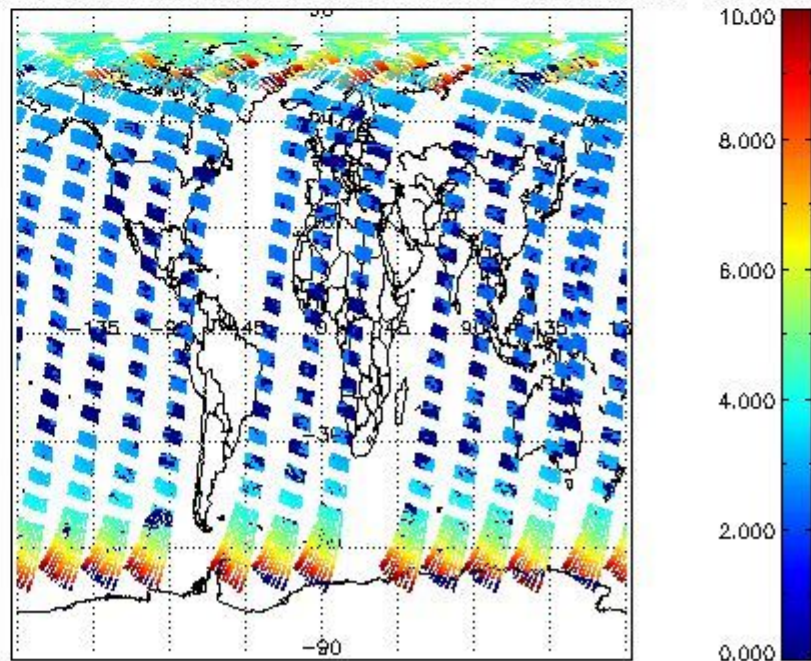
SCIOL2P_NADUV003_vcd_err for 20APR2009 00:00:00 to 21APR2009 00:00:00

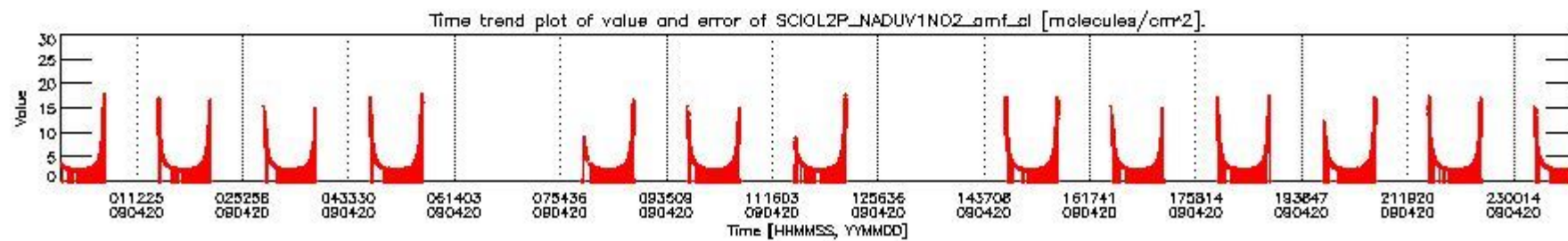
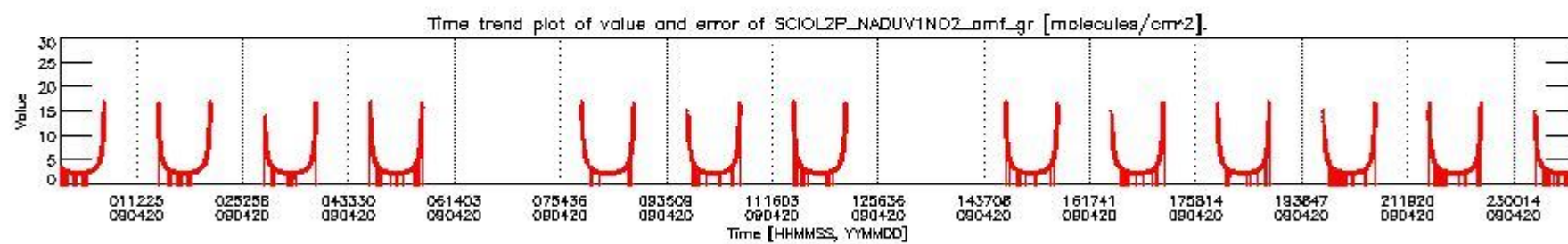
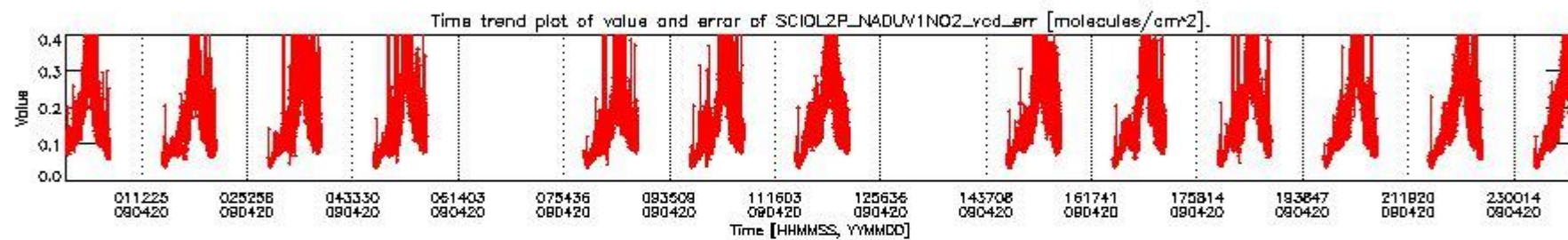
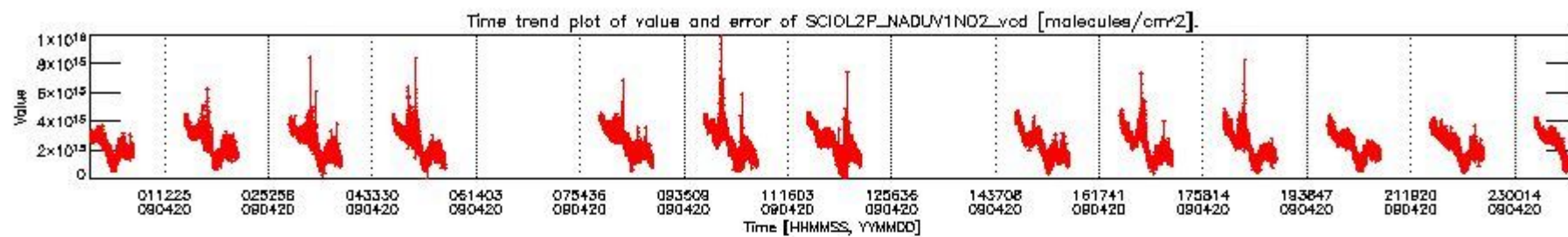


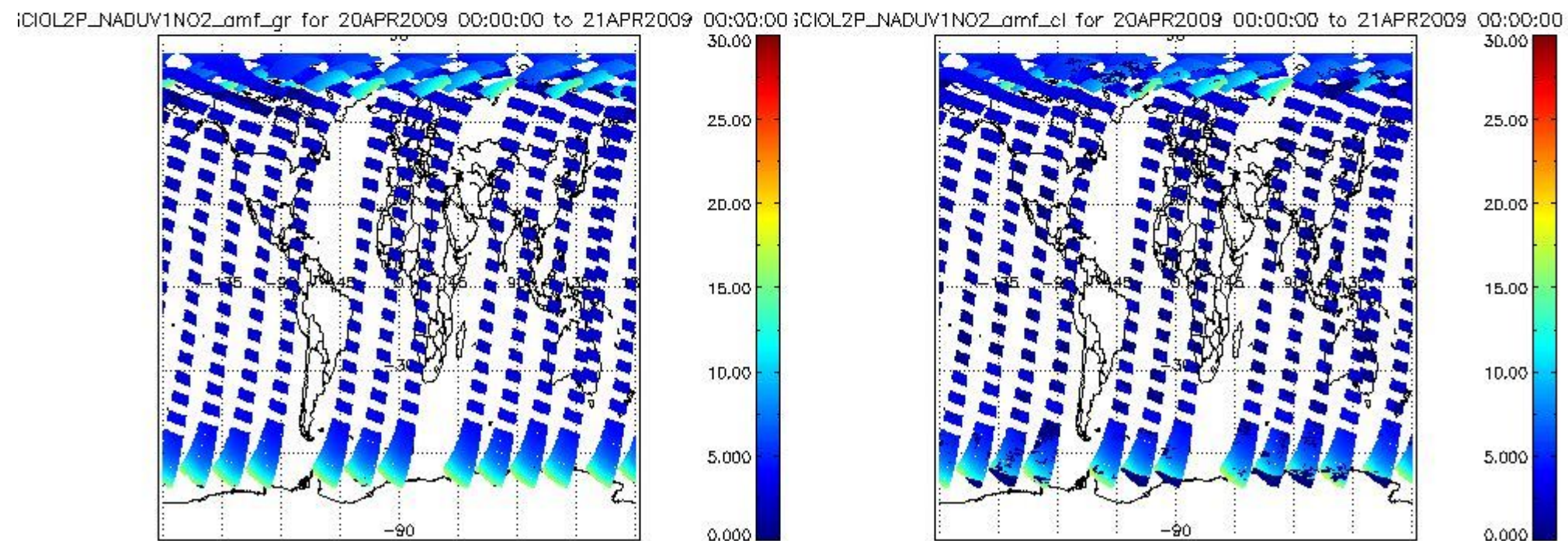
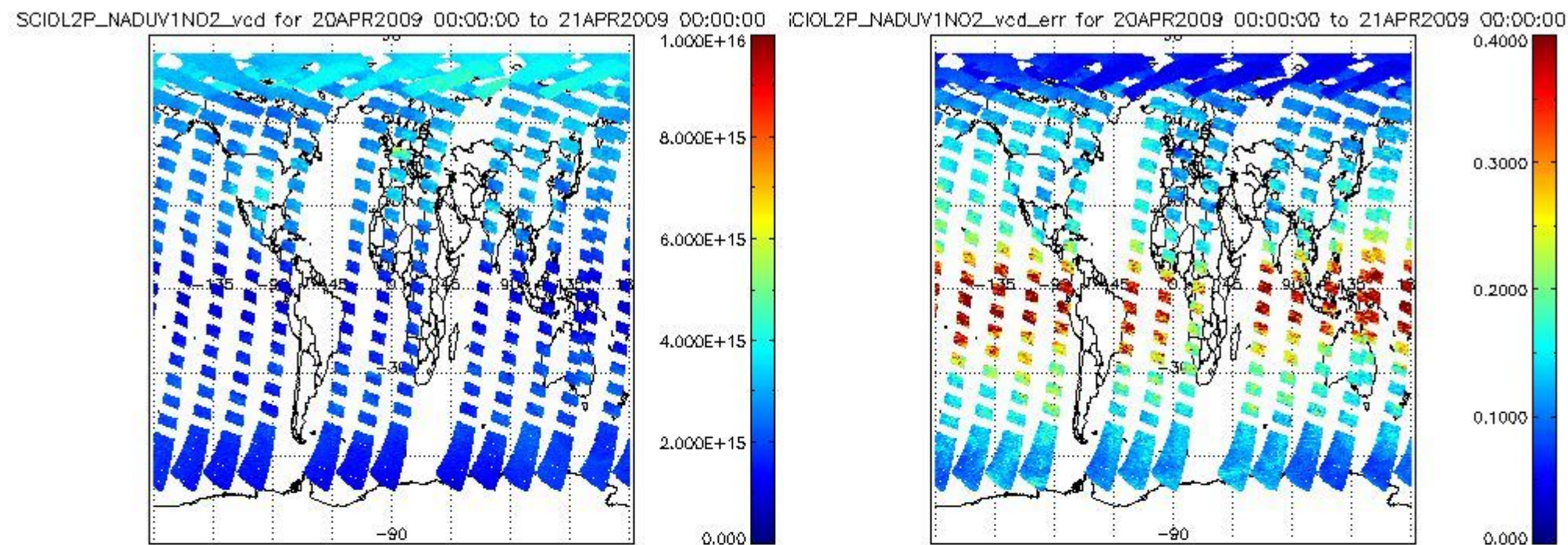
SCIOL2P_NADUV003_amf_gr for 20APR2009 00:00:00 to 21APR2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 20APR2009 00:00:00 to 21APR2009 00:00:00







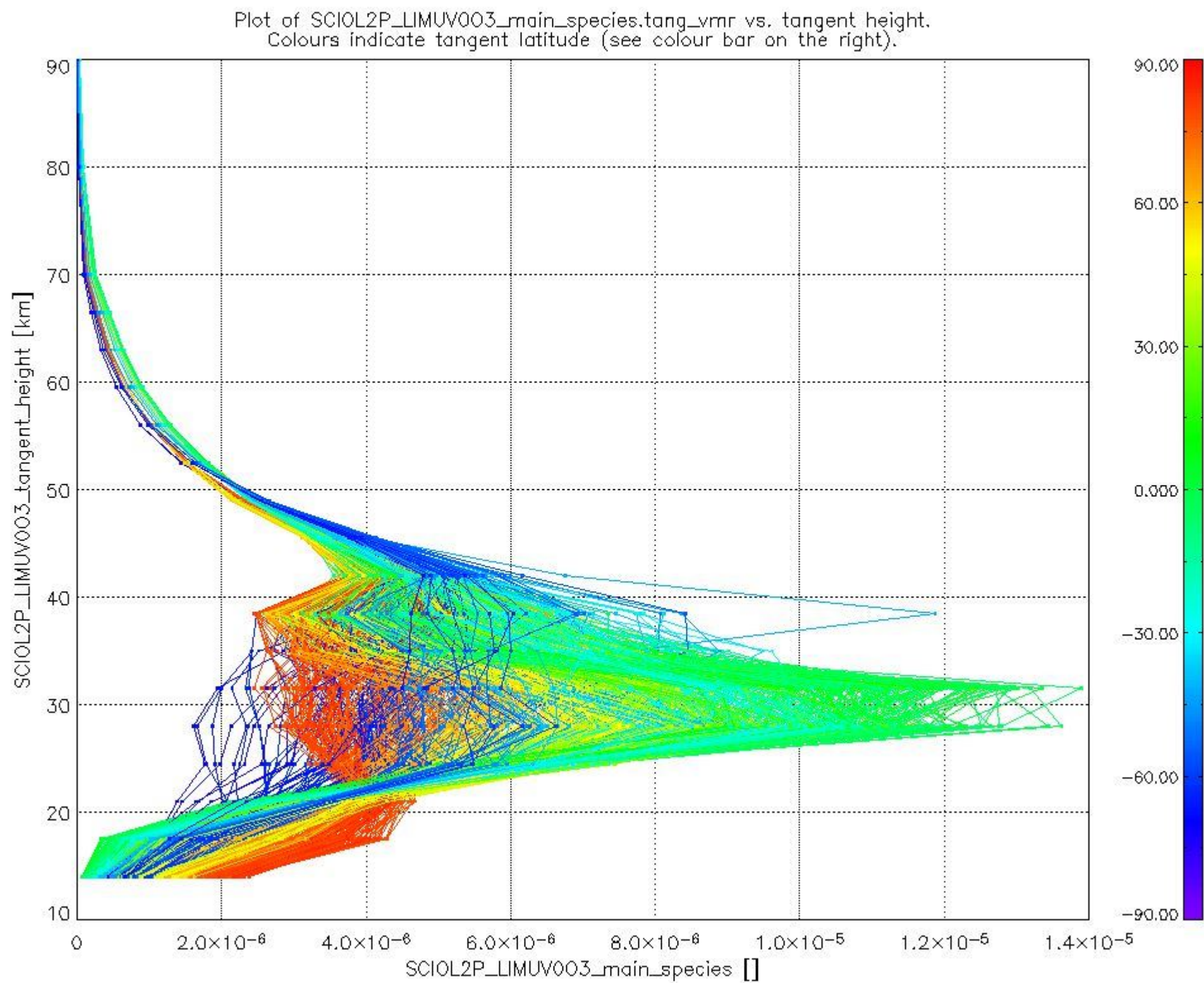
2.2.3 Limb

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

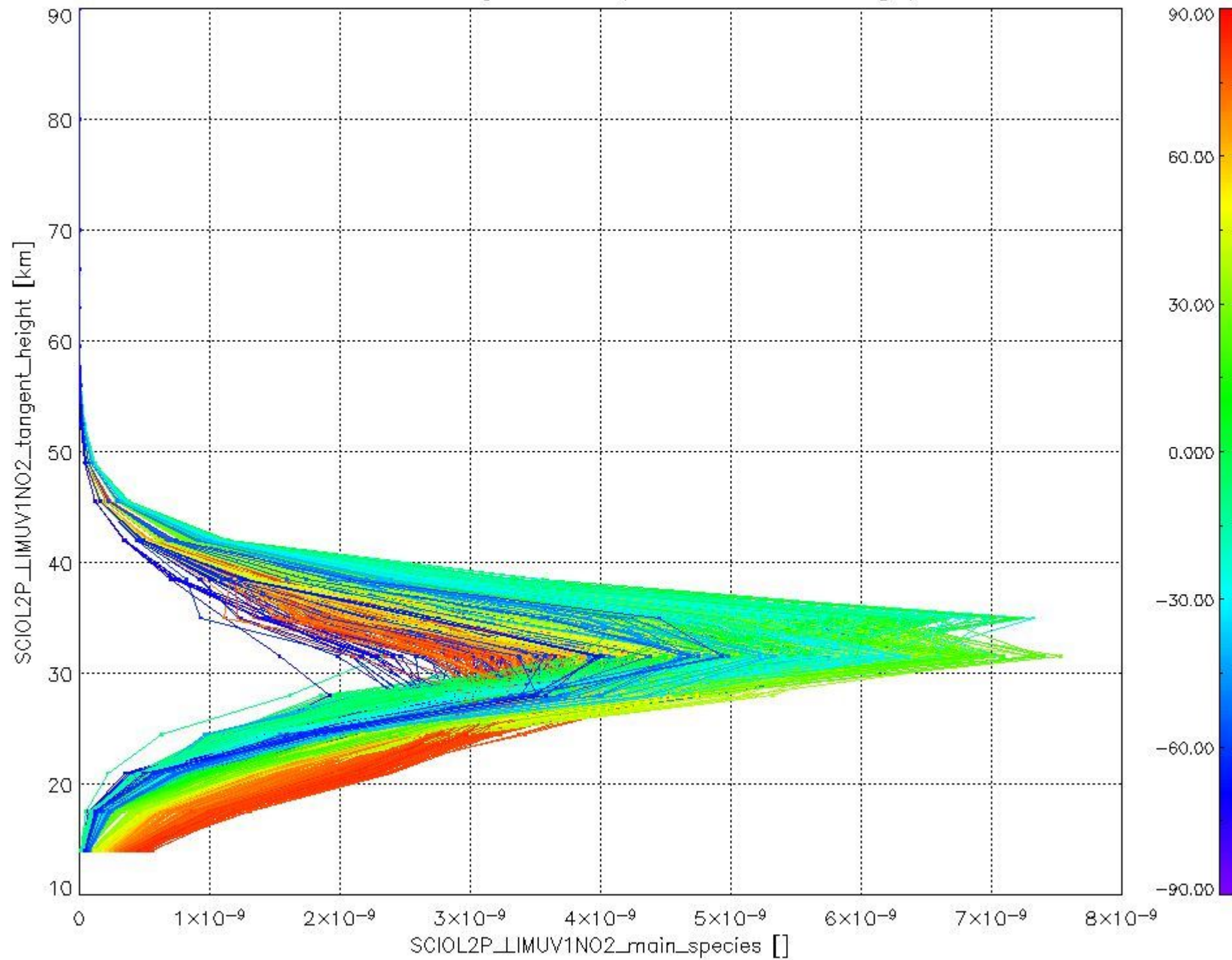
The following data items are currently included into this section:

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.



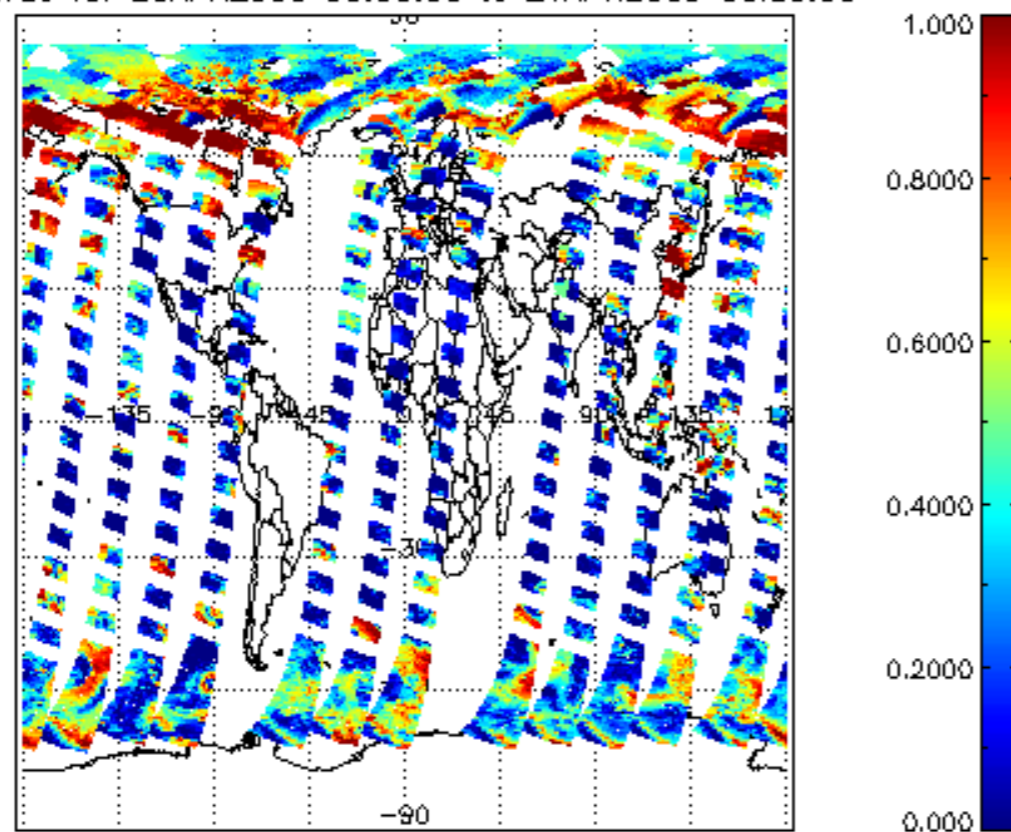
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



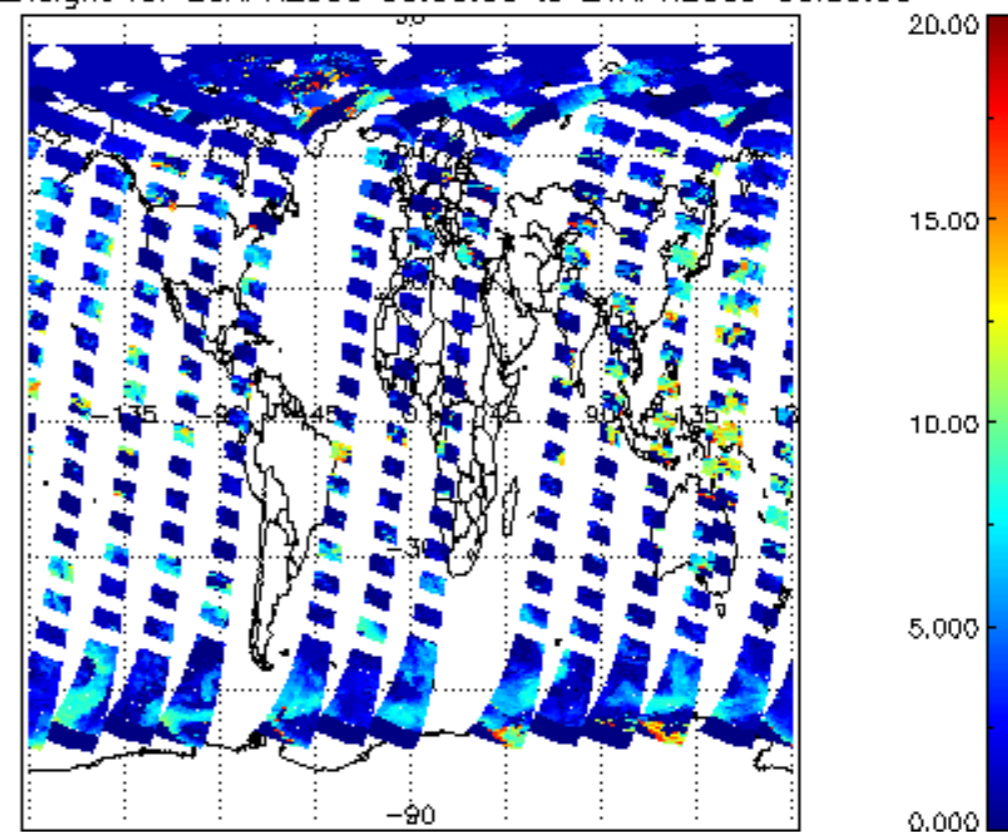
2.3 ADF monitoring

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

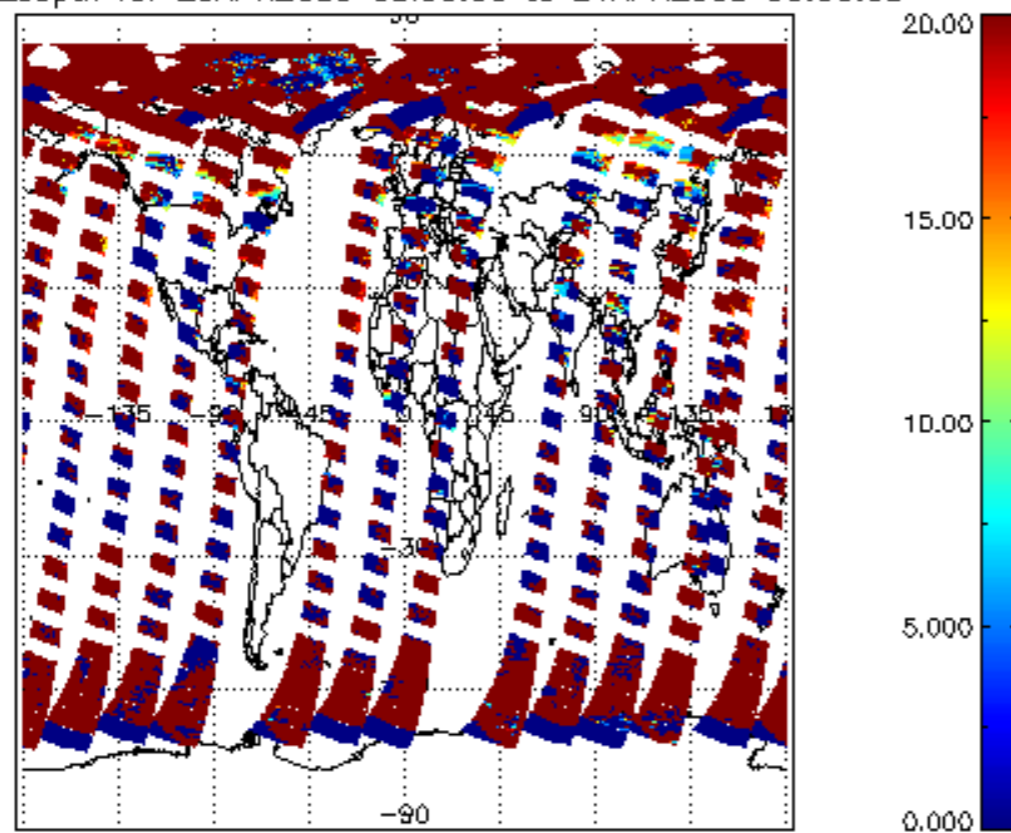
cL_frac for 20APR2009 00:00:00 to 21APR2009 00:00:00



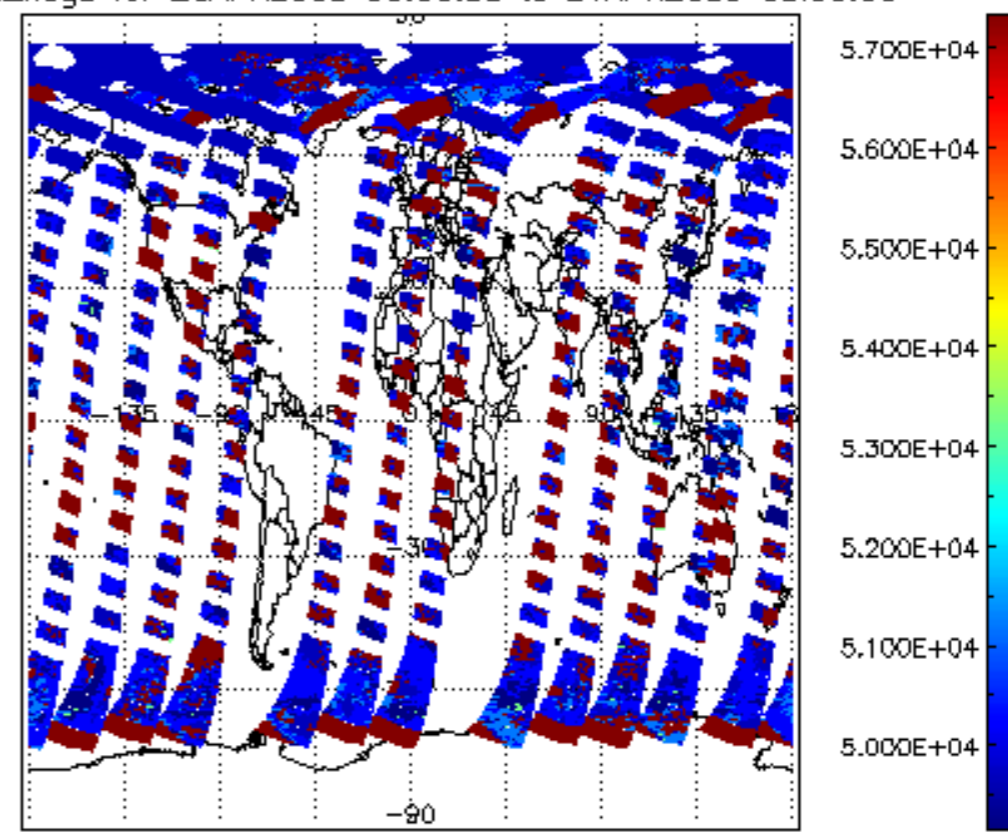
cL_top_height for 20APR2009 00:00:00 to 21APR2009 00:00:00

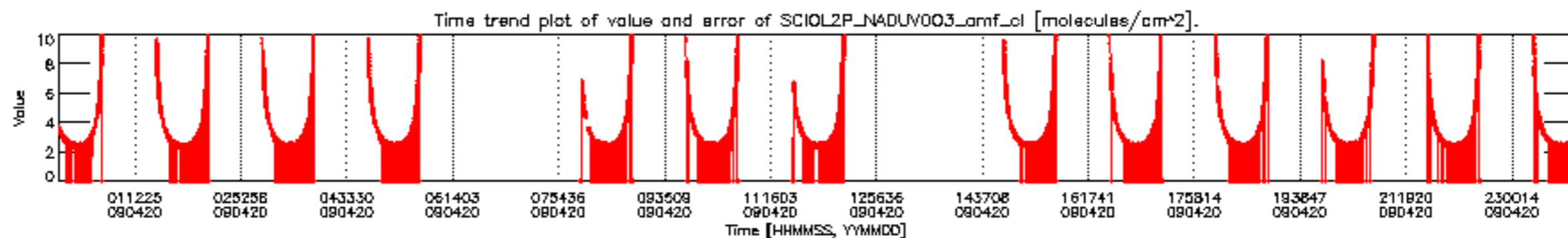
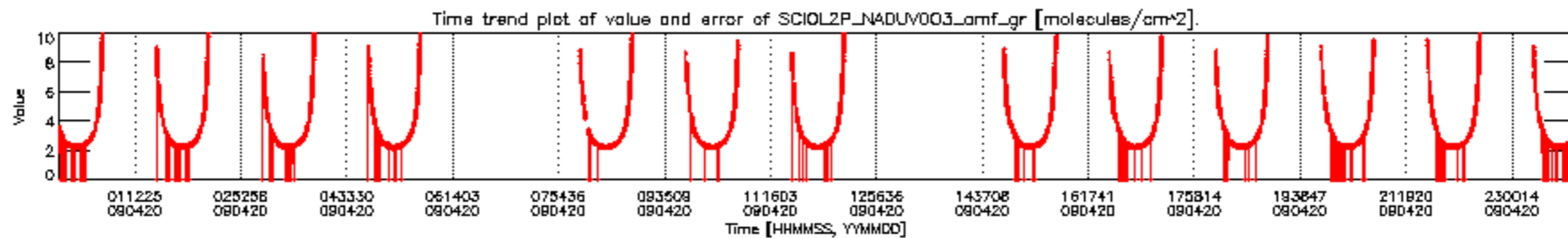
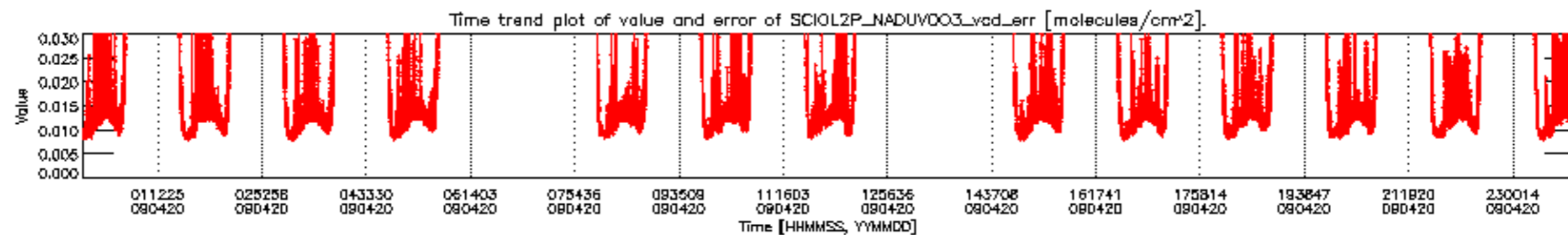
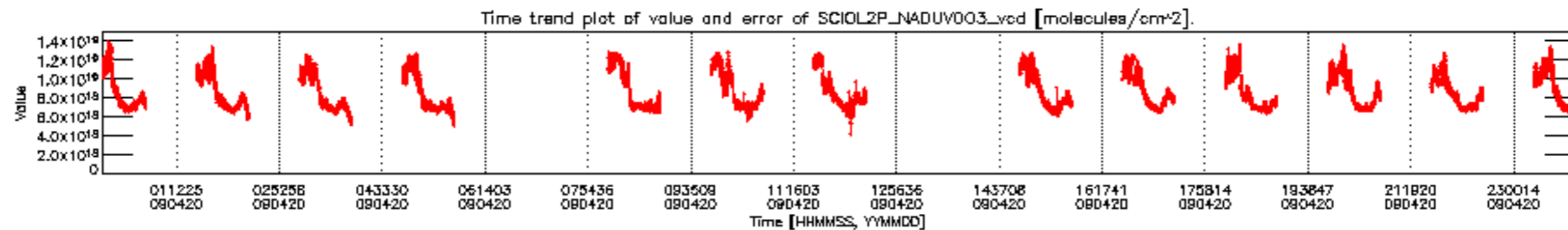


cL_opt_depth for 20APR2009 00:00:00 to 21APR2009 00:00:00

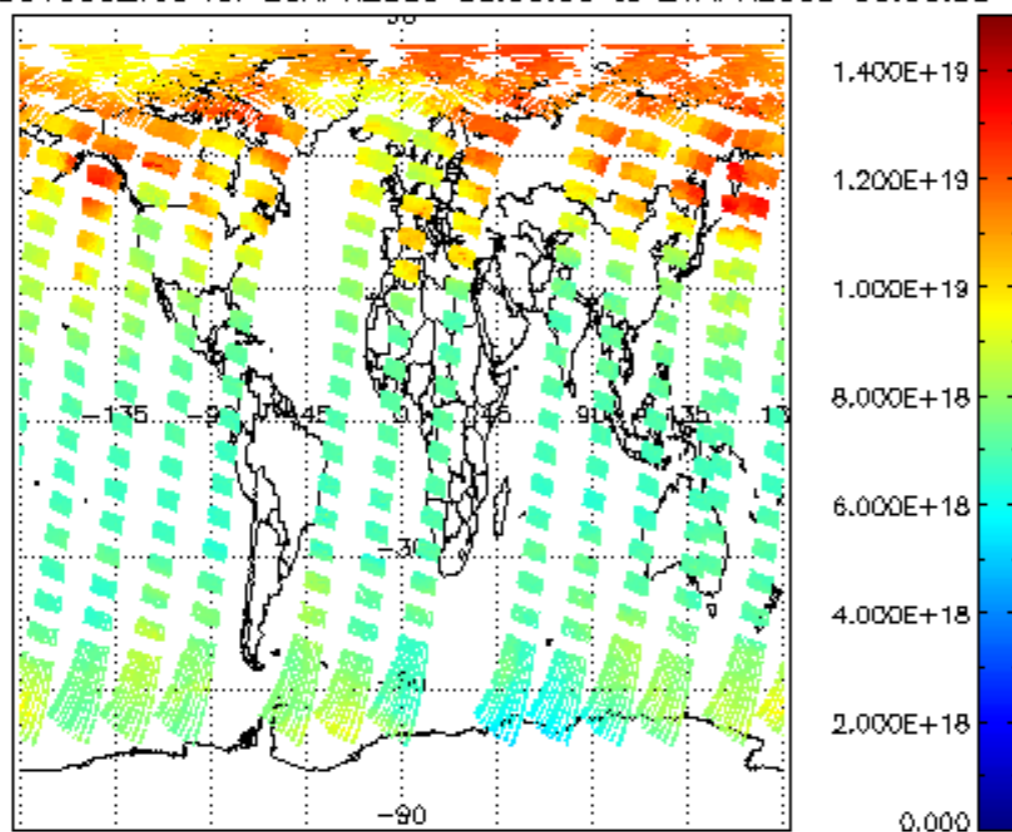


cloud_flags for 20APR2009 00:00:00 to 21APR2009 00:00:00

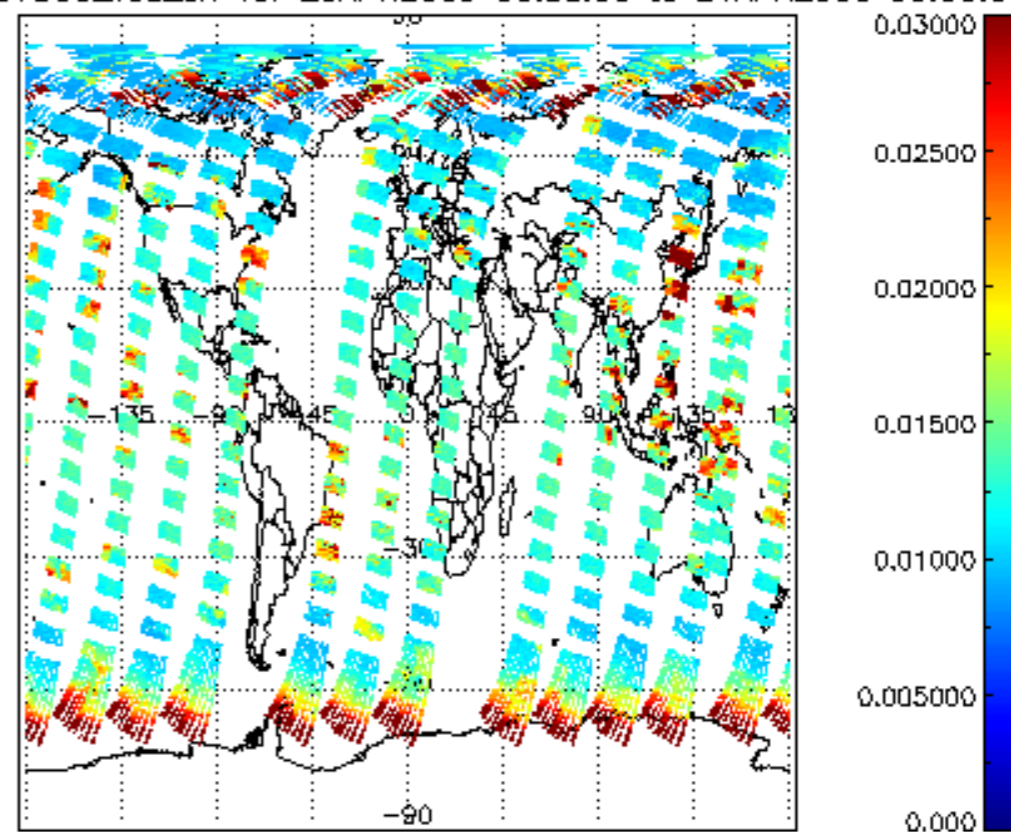




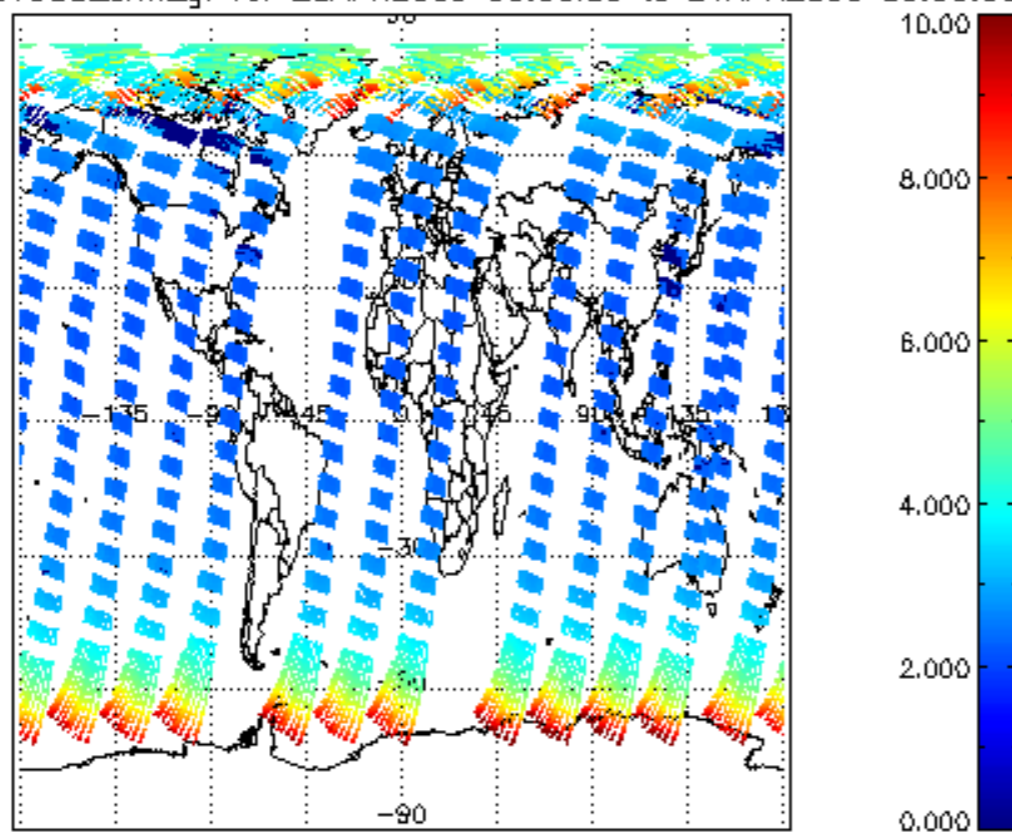
SCIOL2P_NADUV003_vcd for 20APR2009 00:00:00 to 21APR2009 00:00:00



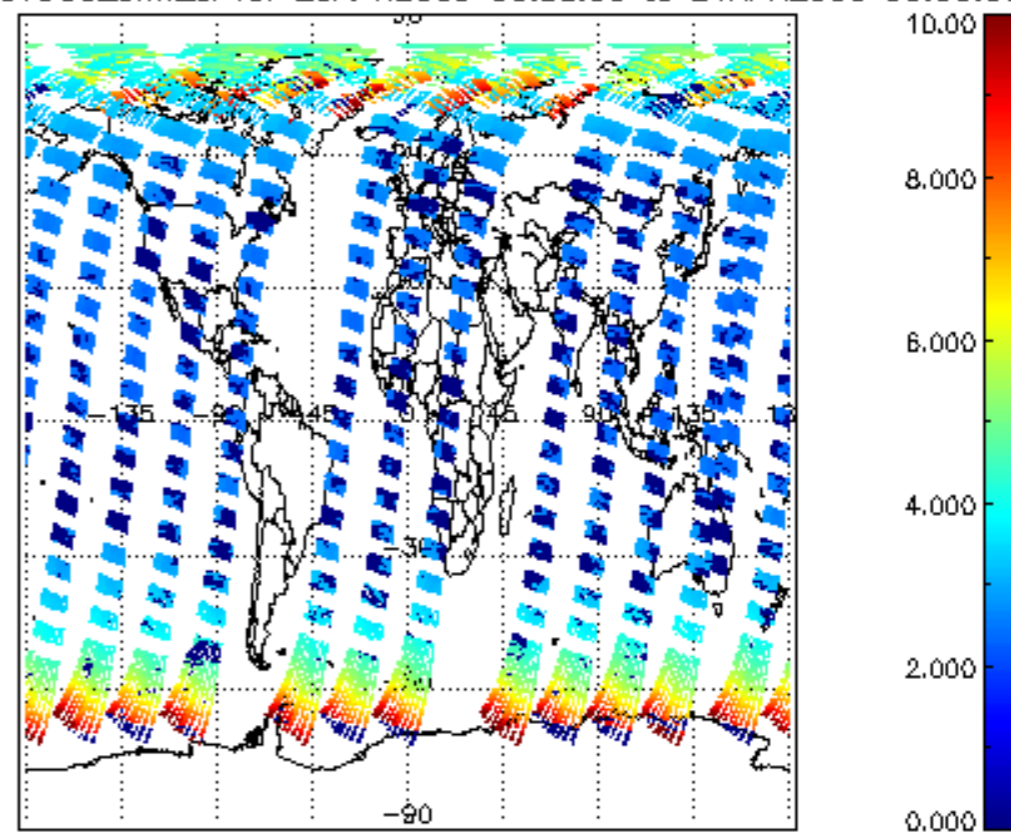
SCIOL2P_NADUV003_vcd_err for 20APR2009 00:00:00 to 21APR2009 00:00:00

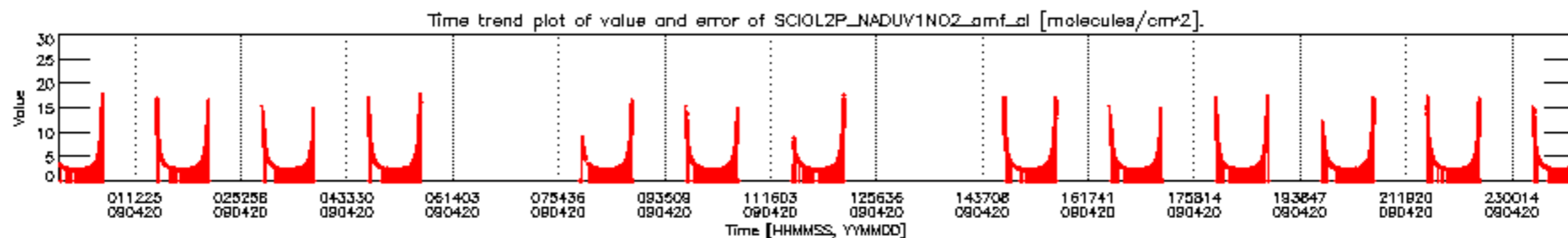
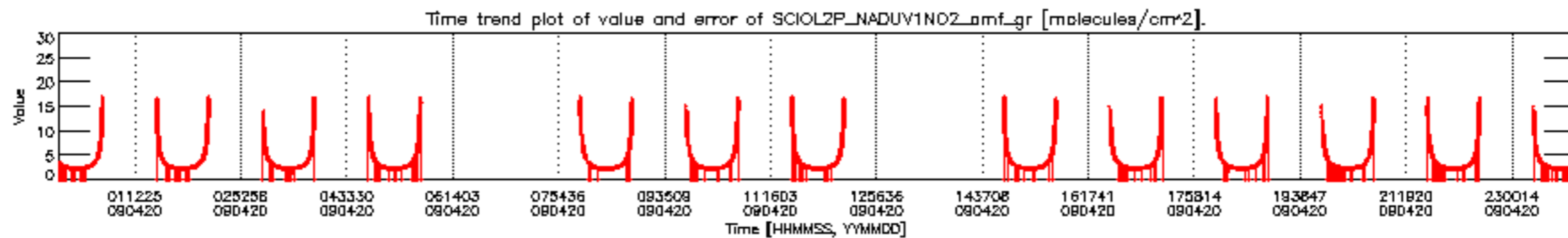
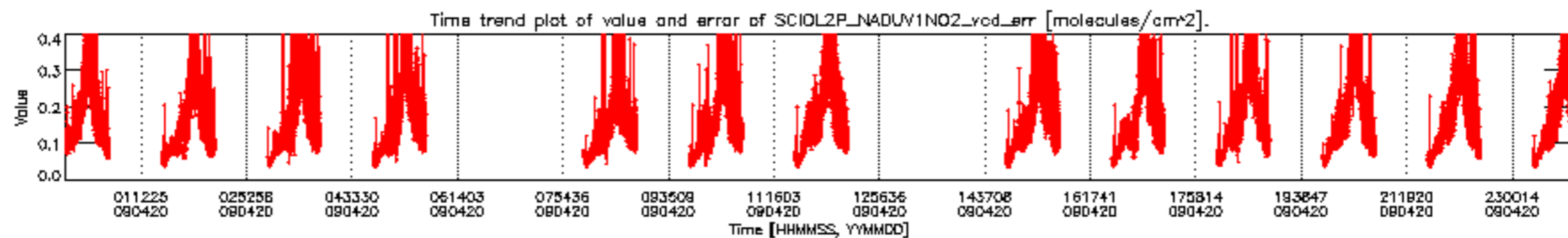
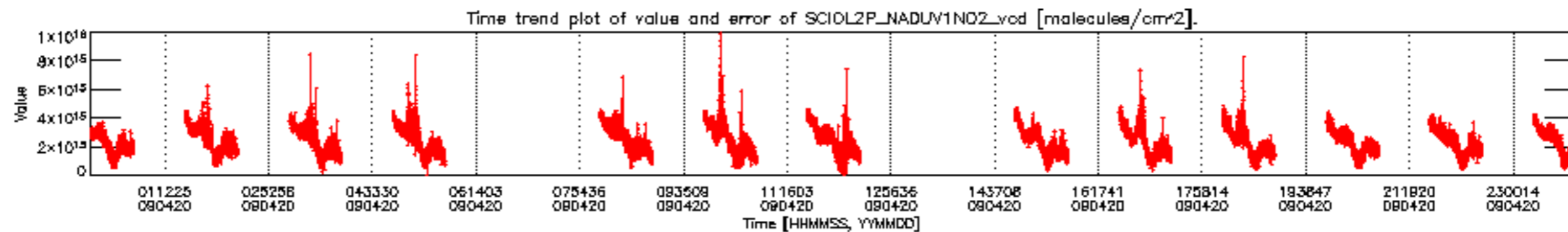


SCIOL2P_NADUV003_amf_gr for 20APR2009 00:00:00 to 21APR2009 00:00:00

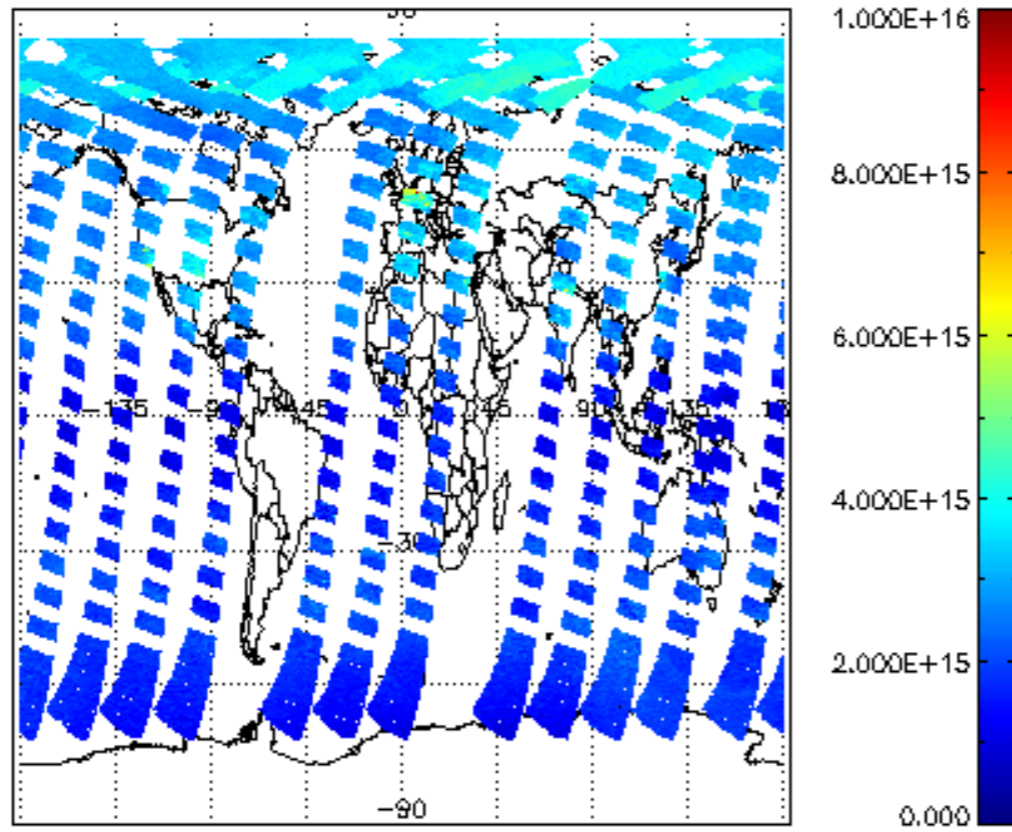


SCIOL2P_NADUV003_amf_cl for 20APR2009 00:00:00 to 21APR2009 00:00:00

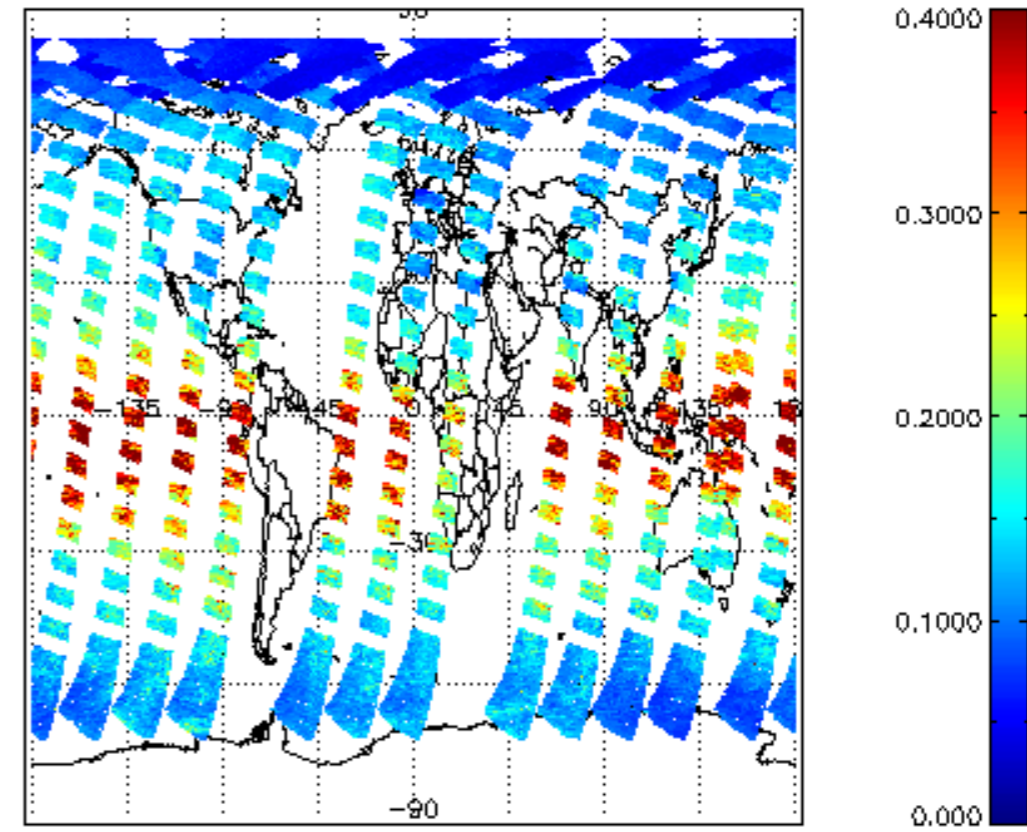




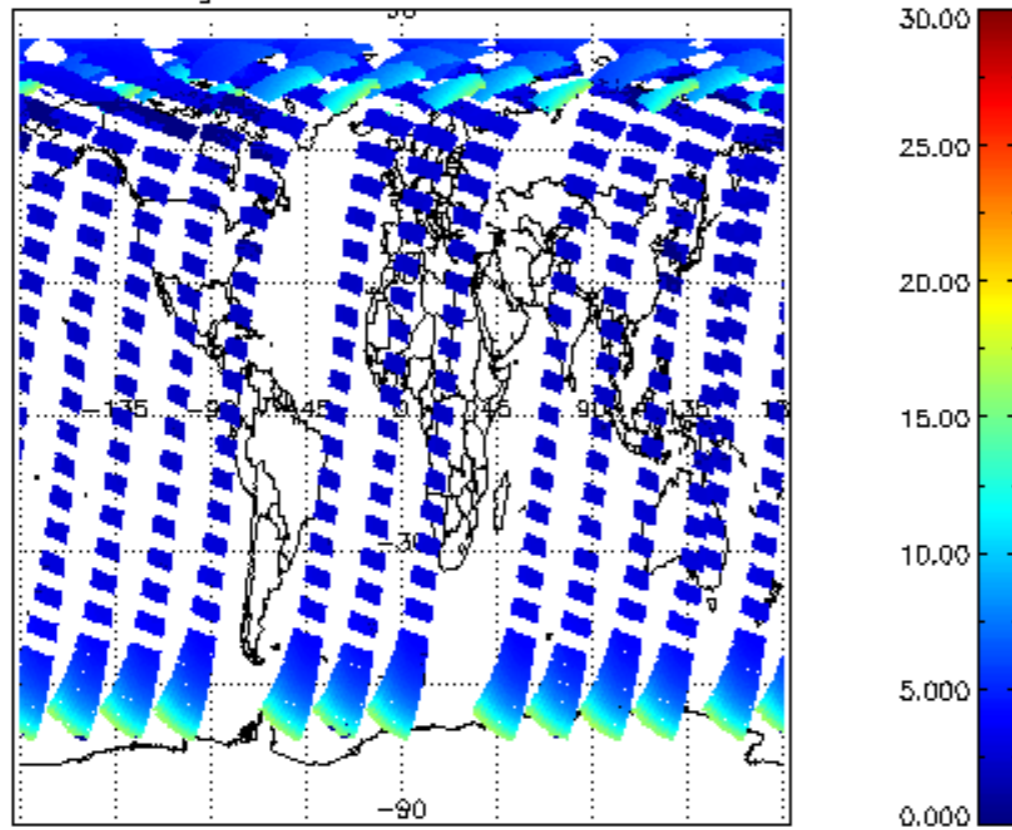
SCIOL2P_NADUV1NO2_vcd for 20APR2009 00:00:00 to 21APR2009 00:00:00



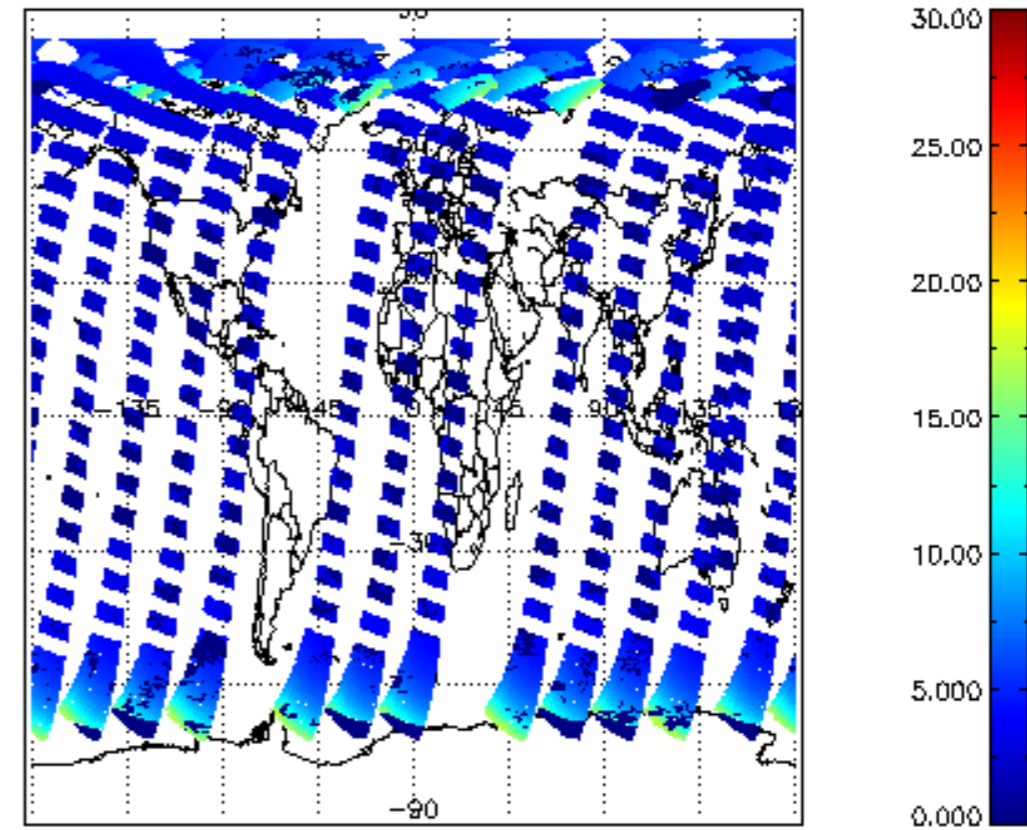
iCIOL2P_NADUV1NO2_vcd_err for 20APR2009 00:00:00 to 21APR2009 00:00:00



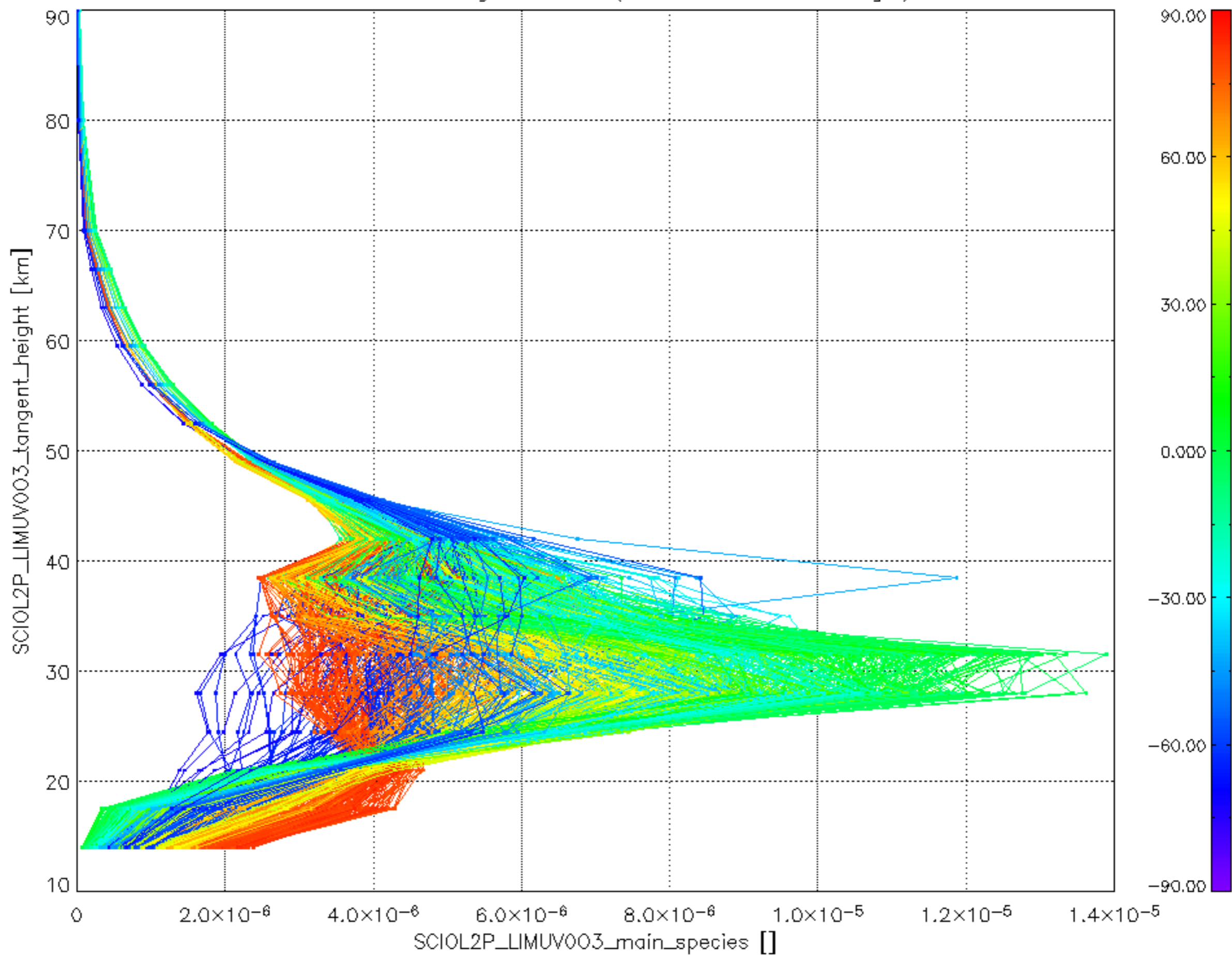
iCIOL2P_NADUV1NO2_amf_gr for 20APR2009 00:00:00 to 21APR2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 20APR2009 00:00:00 to 21APR2009 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).

