

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 15:28:15
Data source version	SCIA-OL/3.01-R
Processing scope for products	15APR2009 00:00:00 to 16APR2009 00:00:00
Start time of first product within scope	14APR2009 23:04:04
Stop time of last product within scope	16APR2009 01:08:23
Total number of level 2 products	16
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__2PRDPA20090414_230404_000033812078_00116_37244_2362.N1	14APR2009 23:04:04	15APR2009 00:00:25	0	GOOD
1	SCI_OL__2PRDPA20090415_004439_000033252078_00117_37245_2363.N1	15APR2009 00:44:39	15APR2009 01:40:05	0	GOOD
2	SCI_OL__2PRDPA20090415_022515_000033812078_00118_37246_2360.N1	15APR2009 02:25:15	15APR2009 03:21:36	0	GOOD
3	SCI_OL__2PRDPA20090415_040550_000033252078_00119_37247_2368.N1	15APR2009 04:05:50	15APR2009 05:01:16	0	GOOD
4	SCI_OL__2PRDPA20090415_054626_000033812078_00120_37248_2364.N1	15APR2009 05:46:26	15APR2009 06:42:47	0	GOOD
5	SCI_OL__2PRDPA20090415_072702_000033252078_00121_37249_2366.N1	15APR2009 07:27:02	15APR2009 08:22:27	0	GOOD
6	SCI_OL__2PRDPA20090415_090737_000033812078_00122_37250_2369.N1	15APR2009 09:07:37	15APR2009 10:03:59	0	GOOD
7	SCI_OL__2PRDPA20090415_104813_000033252078_00123_37251_2370.N1	15APR2009 10:48:13	15APR2009 11:43:38	0	GOOD
8	SCI_OL__2PRDPA20090415_122848_000033812078_00124_37252_2374.N1	15APR2009 12:28:48	15APR2009 13:25:09	0	GOOD
9	SCI_OL__2PRDPA20090415_140924_000033252078_00124_37252_2373.N1	15APR2009 14:09:24	15APR2009 15:04:49	0	GOOD
10	SCI_OL__2PRDPA20090415_154959_000033812078_00126_37254_2371.N1	15APR2009 15:49:59	15APR2009 16:46:21	0	GOOD
11	SCI_OL__2PRDPA20090415_173028_000033752078_00126_37254_2375.N1	15APR2009 17:30:28	15APR2009 18:26:44	0	GOOD
12	SCI_OL__2PRDPA20090415_191129_000033122078_00128_37256_2359.N1	15APR2009 19:11:29	15APR2009 20:06:42	0	GOOD
13	SCI_OL__2PRDPA20090415_205146_000033252078_00128_37256_2372.N1	15APR2009 20:51:46	15APR2009 21:47:12	0	GOOD
14	SCI_OL__2PRDPA20090415_223222_000033122078_00130_37258_2367.N1	15APR2009 22:32:22	15APR2009 23:27:34	0	GOOD
15	SCI_OL__2PRDPA20090416_001257_000033252078_00131_37259_2365.N1	16APR2009 00:12:57	16APR2009 01:08:23	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: 144766

Total number of cloud data DSRs with good quality flag (=0): 144766 (100.0 %)

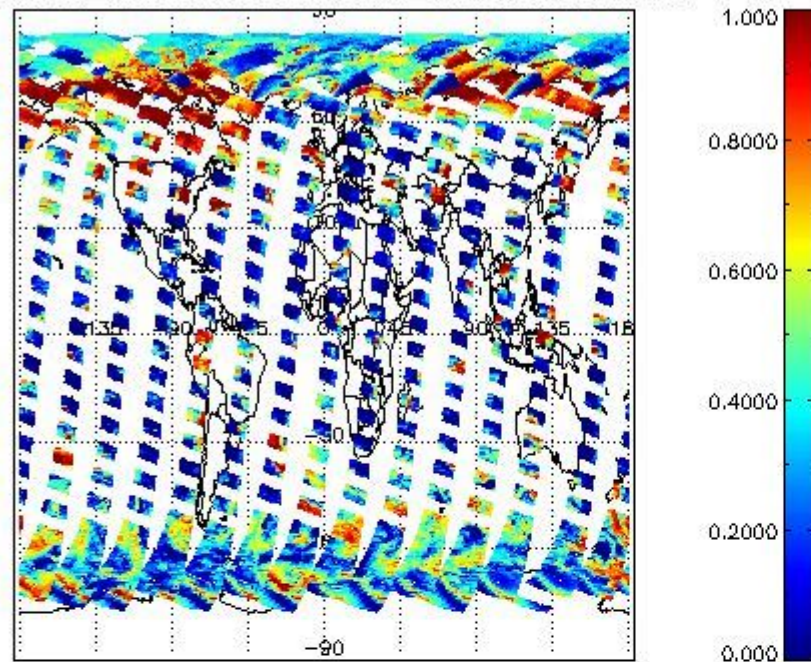
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	144766	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	144766	0.16990	0.12500	0.12500	0.25000	0.059971	s
CL_FRAC	144766	0.38271	0.36032	0.0000	1.0000	0.30646	-
CL_FRAC_ERR	144766	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	144766	5.4368	4.0000	4.0000	8.0000	1.9191	
PMD_READ_CL[0]	144766	0.33499	0.0000	0.0000	8.0000	1.2776	-
PMD_READ_CL[1]	144766	1.3761	0.0000	0.0000	8.0000	2.5622	-
CL_TOP_HEIGHT	126645	2.9697	1.3203	0.0000	17.000	3.4020	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	126645	66.378	100.00	0.0000	101.00	42.041	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	144766	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	144766	11001010	11000100	11000000	11100000	3365.2	flags
AERO_ABSO_IND	144766	3.6158	4.4264	-0.74347	15.722	2.3949	
AERO_IND_DIAG	144766	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	144766	01010111	00000000	00000000	11000000	24469.	flags

Time and geolocation plots:

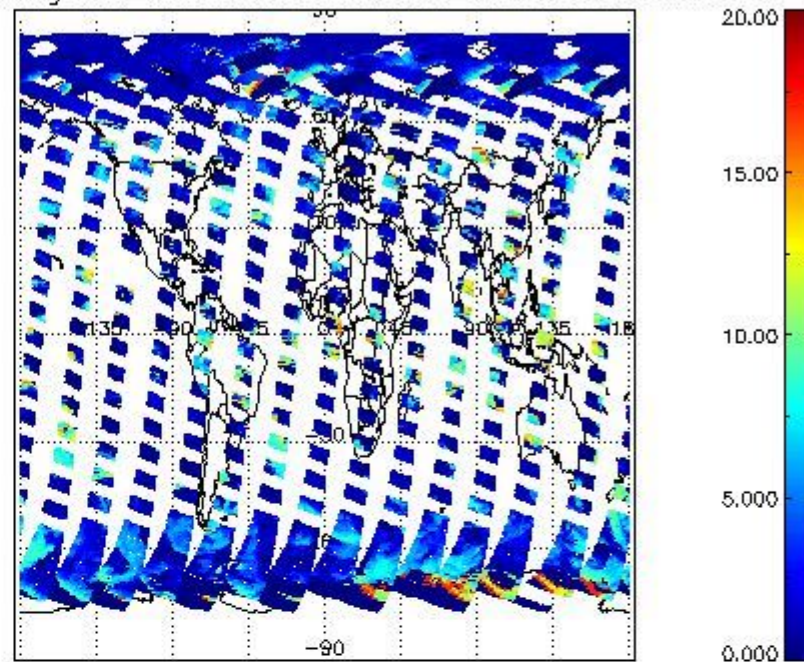
Plots are available for the following parameters:

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

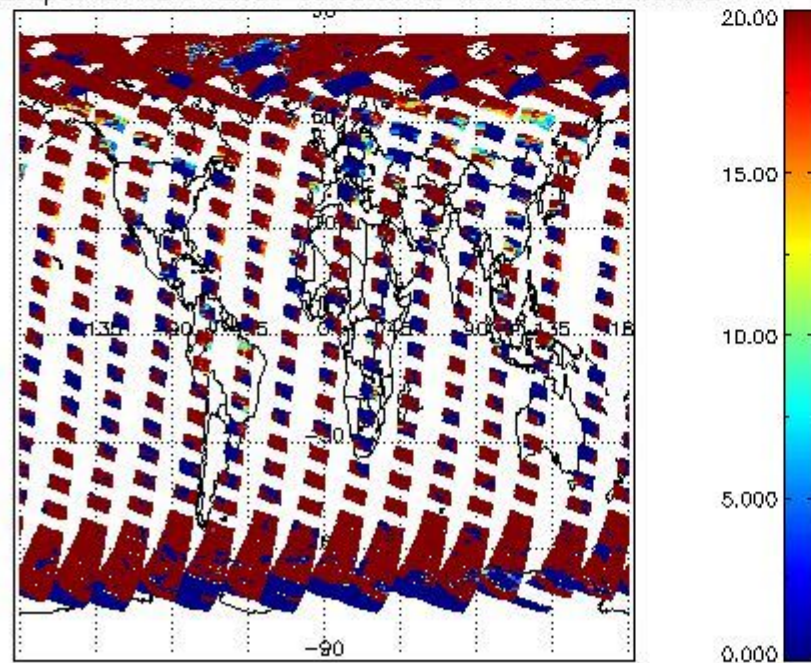
cL_frac for 15APR2009 00:00:00 to 16APR2009 00:00:00



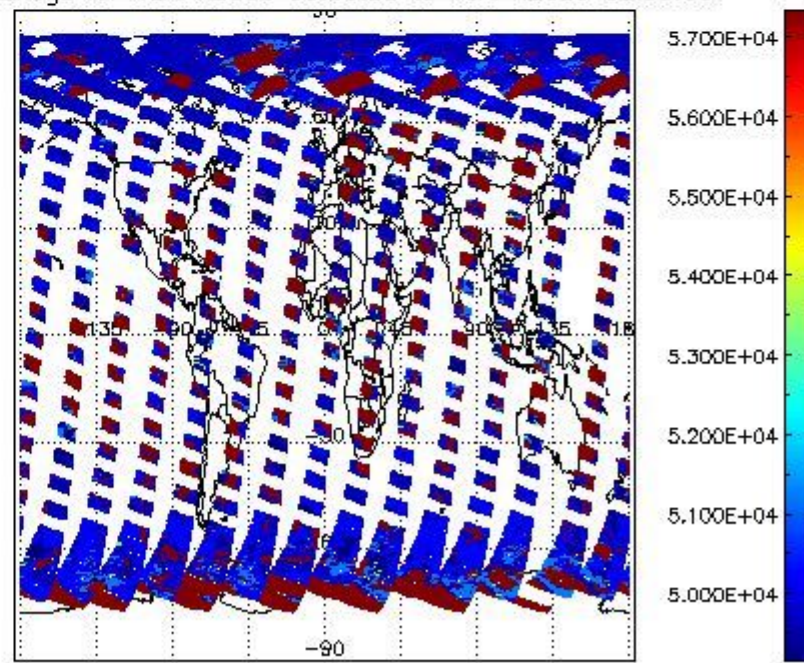
cL_top_height for 15APR2009 00:00:00 to 16APR2009 00:00:00



cL_opt_depth for 15APR2009 00:00:00 to 16APR2009 00:00:00



cloud_flags for 15APR2009 00:00:00 to 16APR2009 00:00:00



2.2.2 Nadir

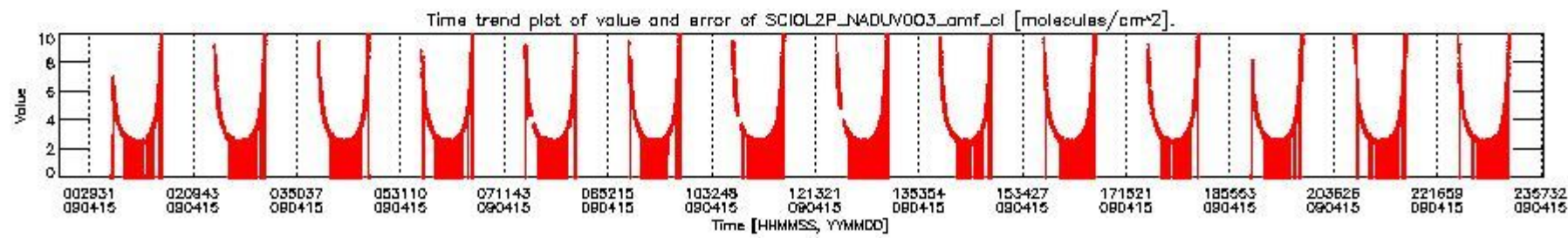
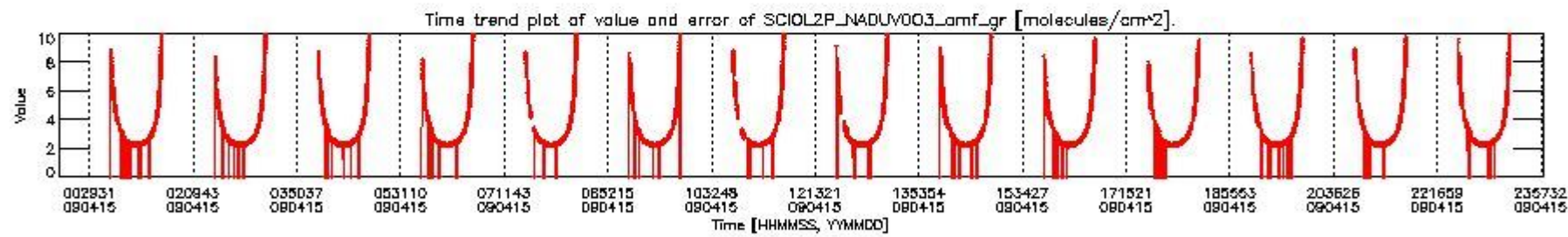
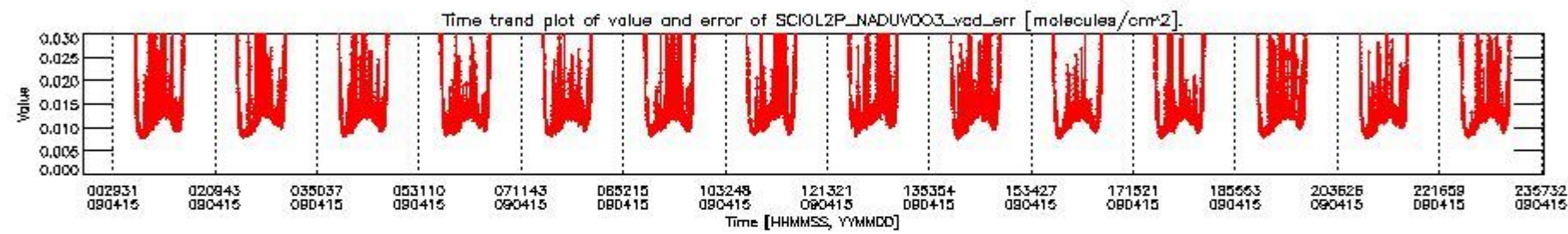
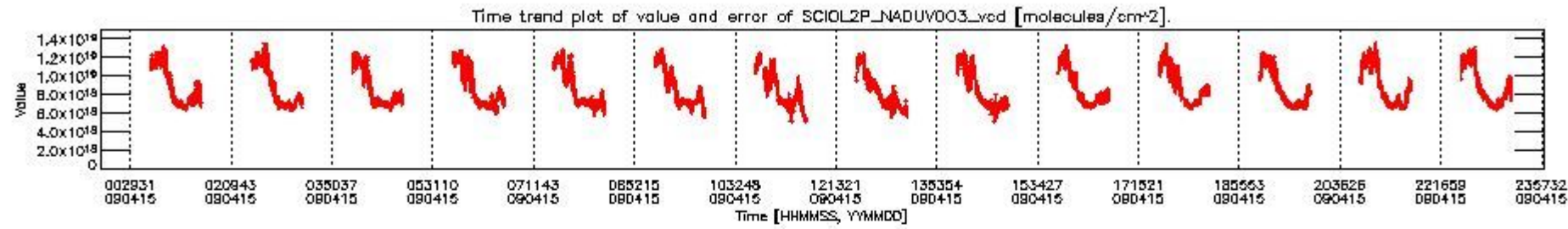
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

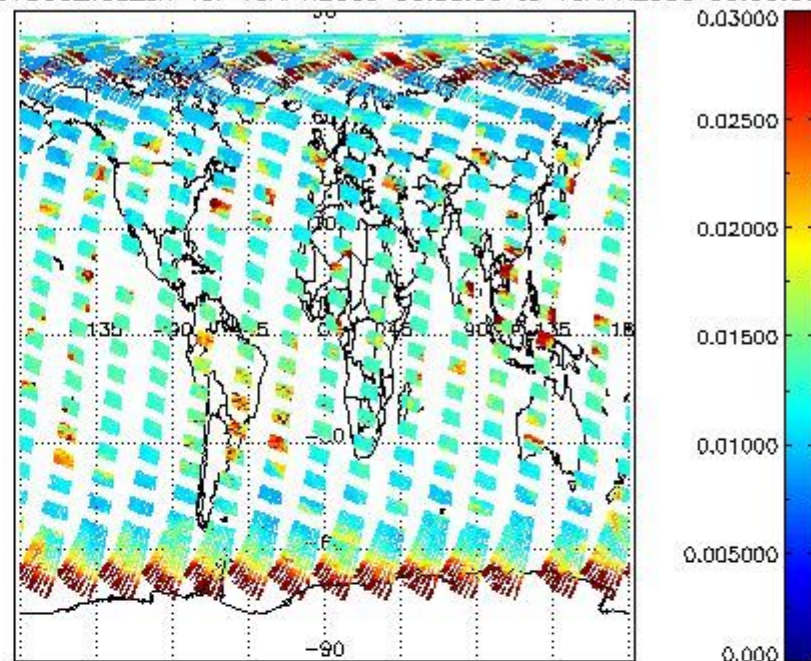
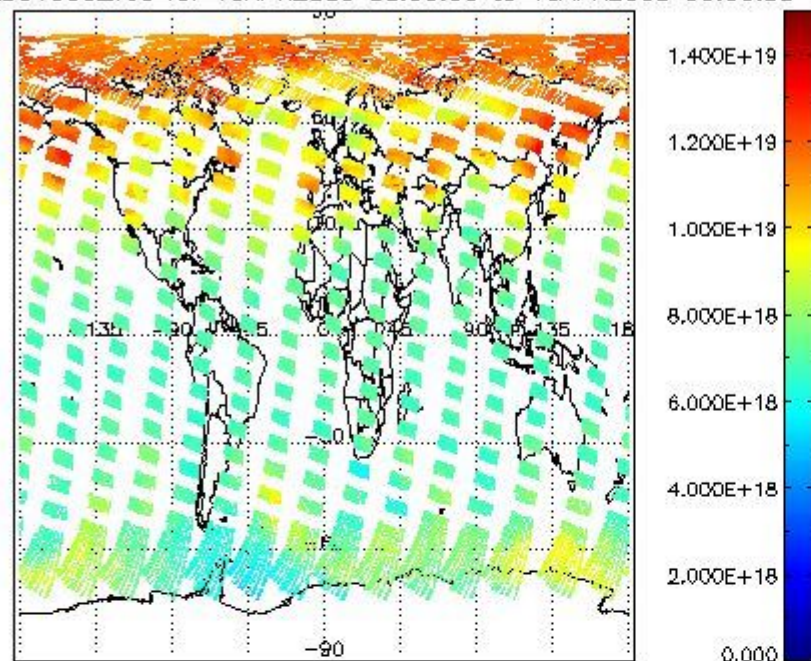
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

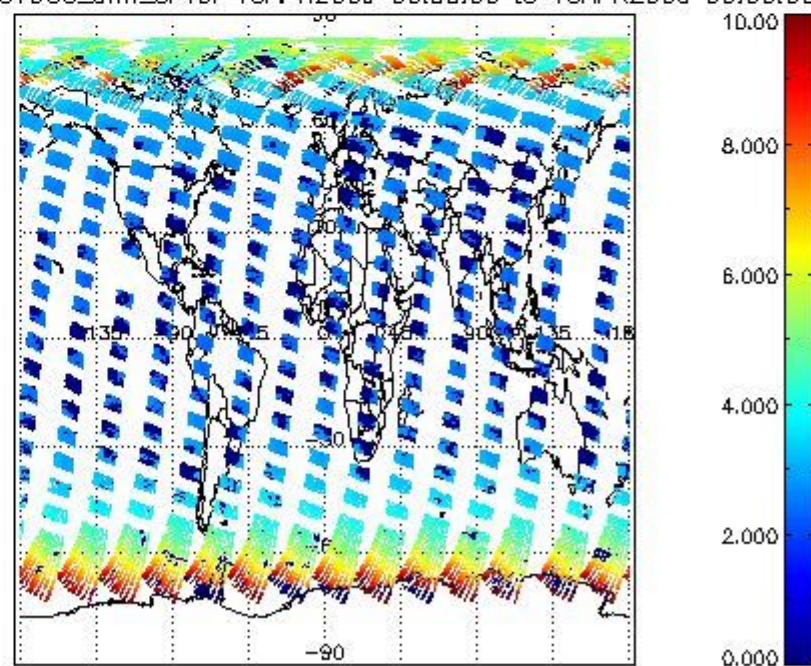
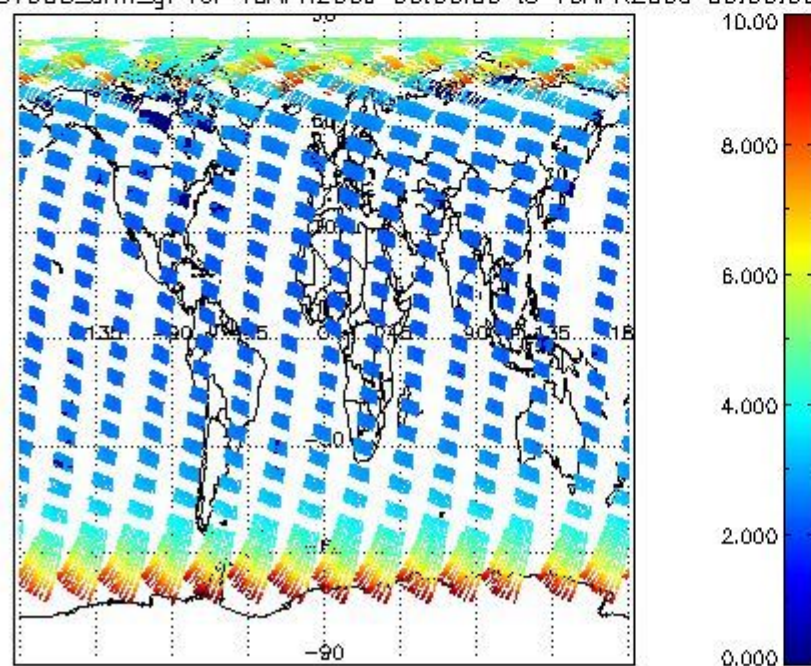
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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

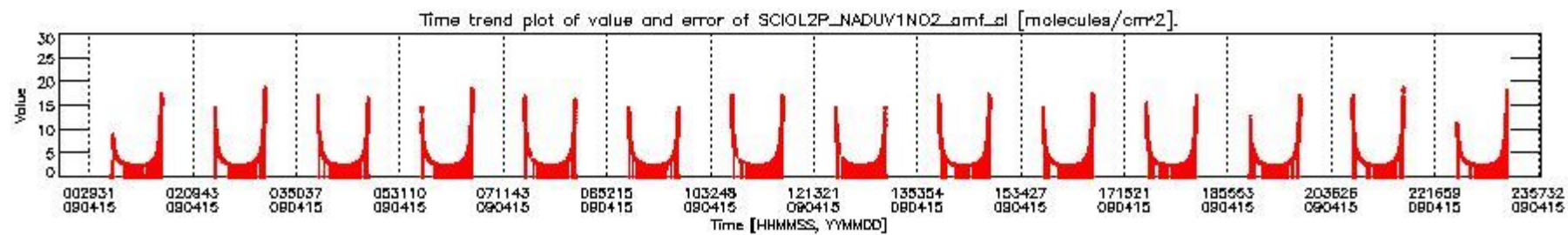
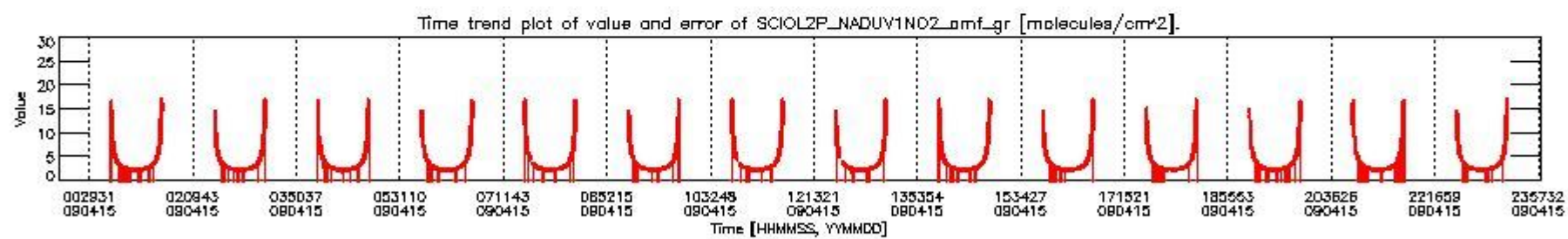
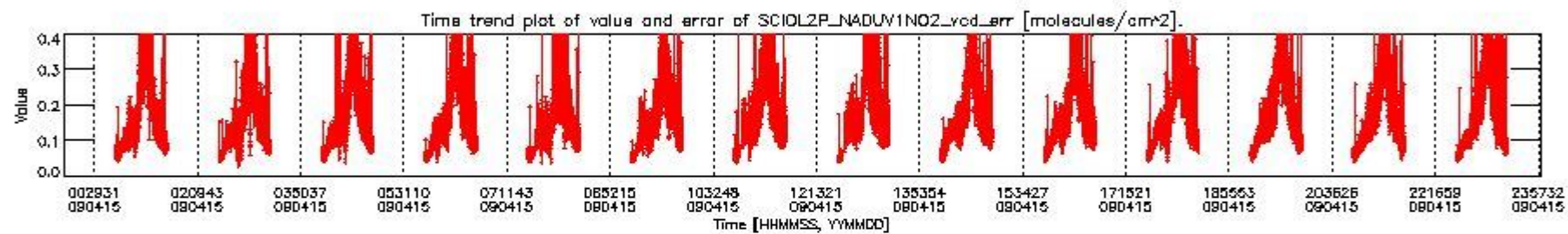
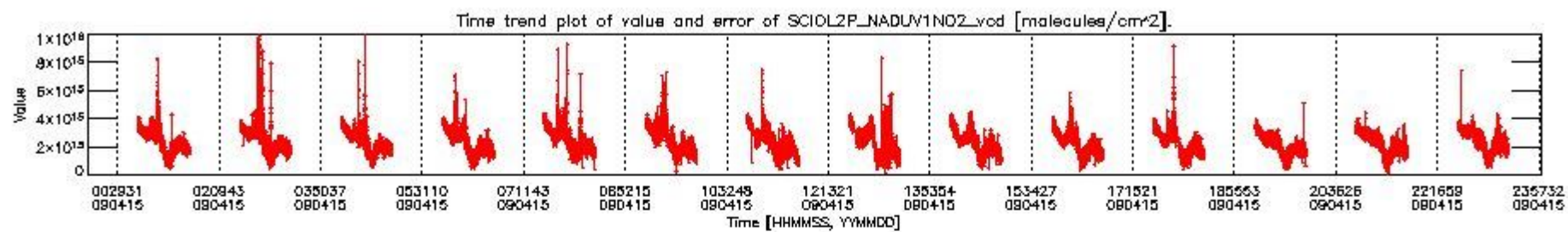


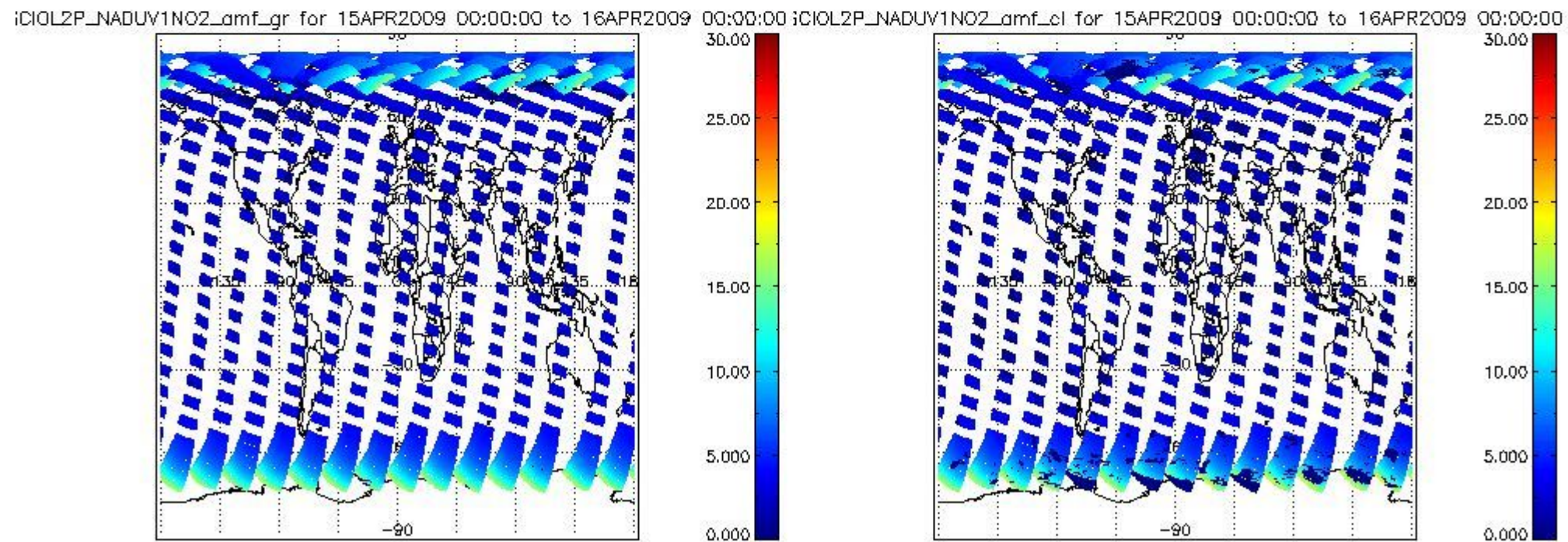
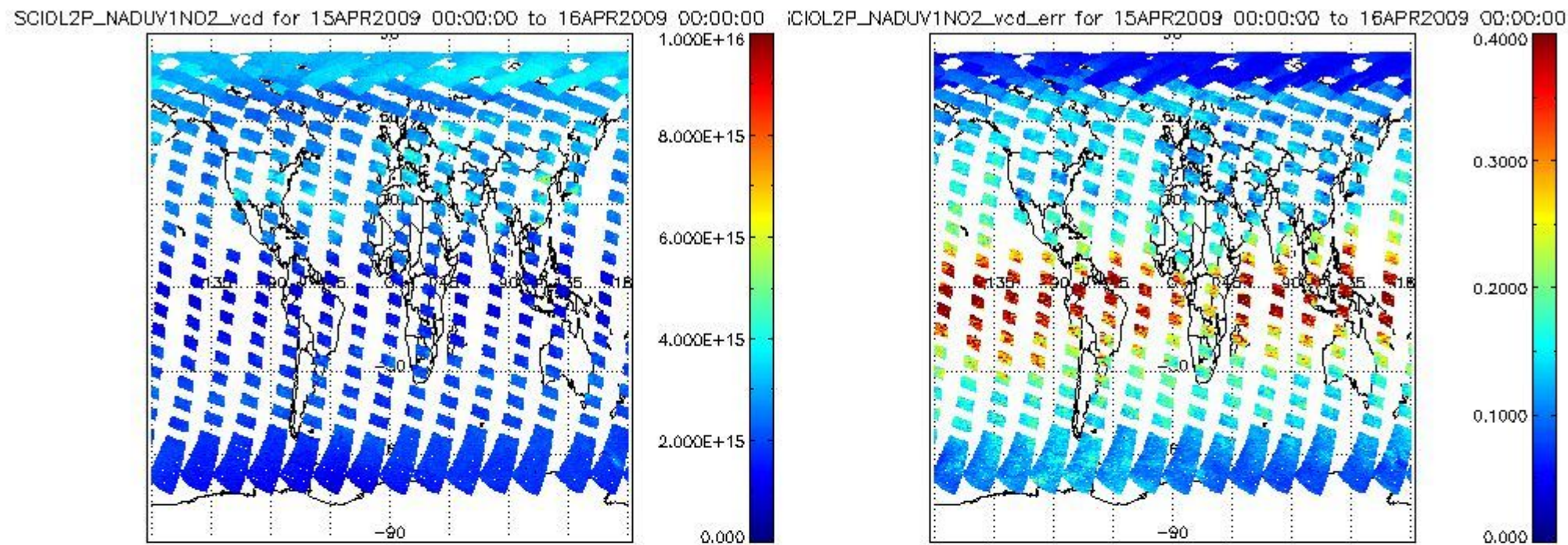
SCIOL2P_NADUV003_vcd for 15APR2009 00:00:00 to 16APR2009 00:00:00 SCIOL2P_NADUV003_vcd_err for 15APR2009 00:00:00 to 16APR2009 00:00:00



SCIOL2P_NADUV003_amf_gr for 15APR2009 00:00:00 to 16APR2009 00:00:00 SCIOL2P_NADUV003_amf_cl for 15APR2009 00:00:00 to 16APR2009 00:00:00







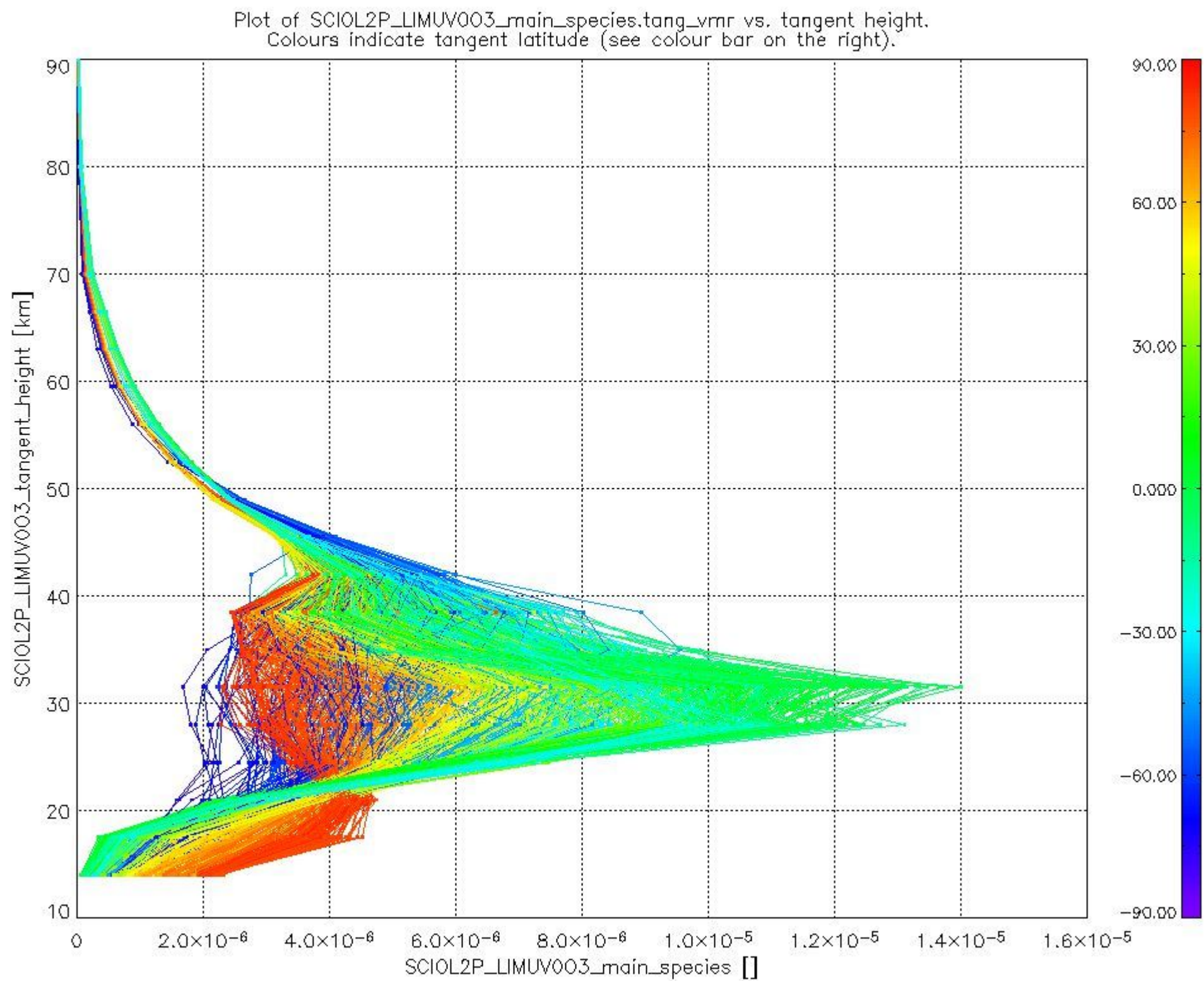
2.2.3 Limb

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

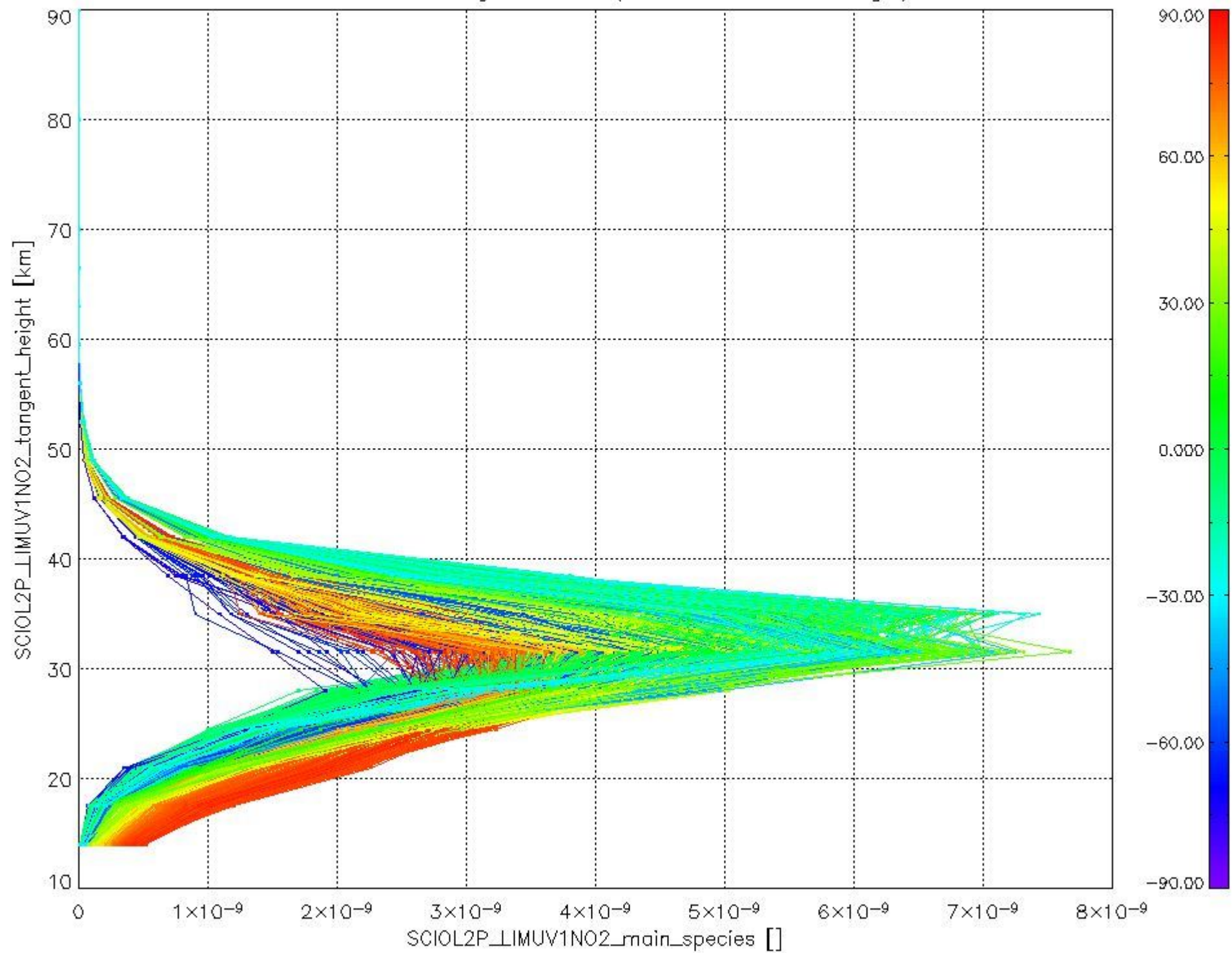
The following data items are currently included into this section:

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.



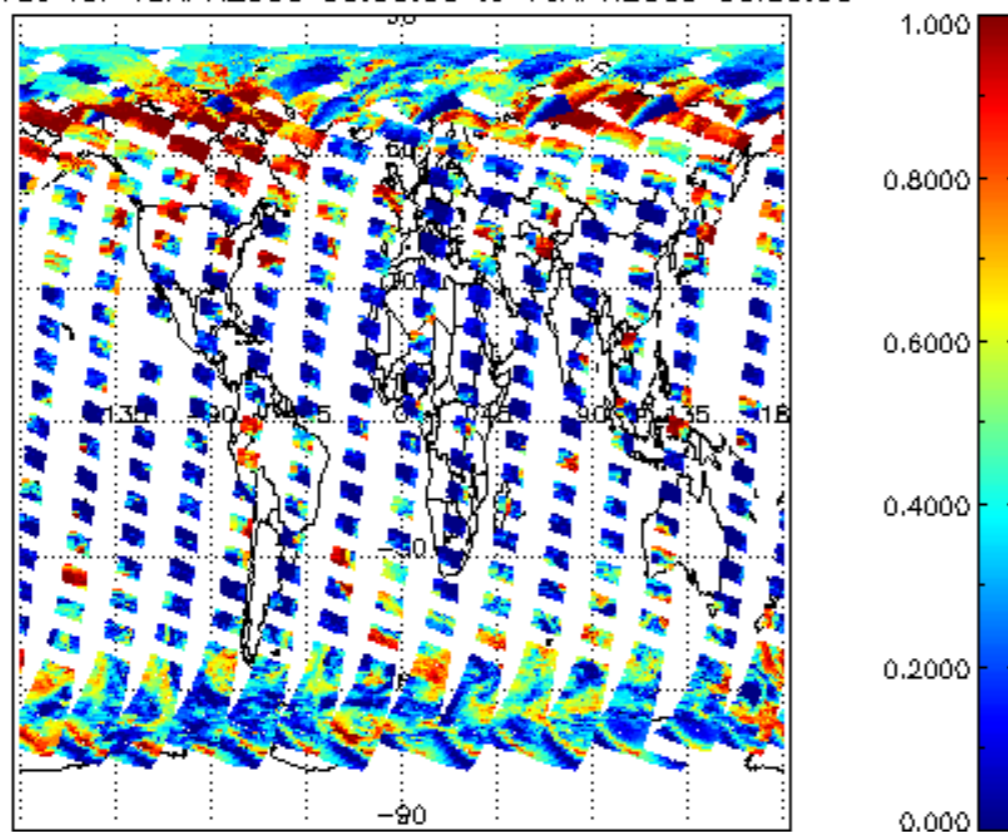
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



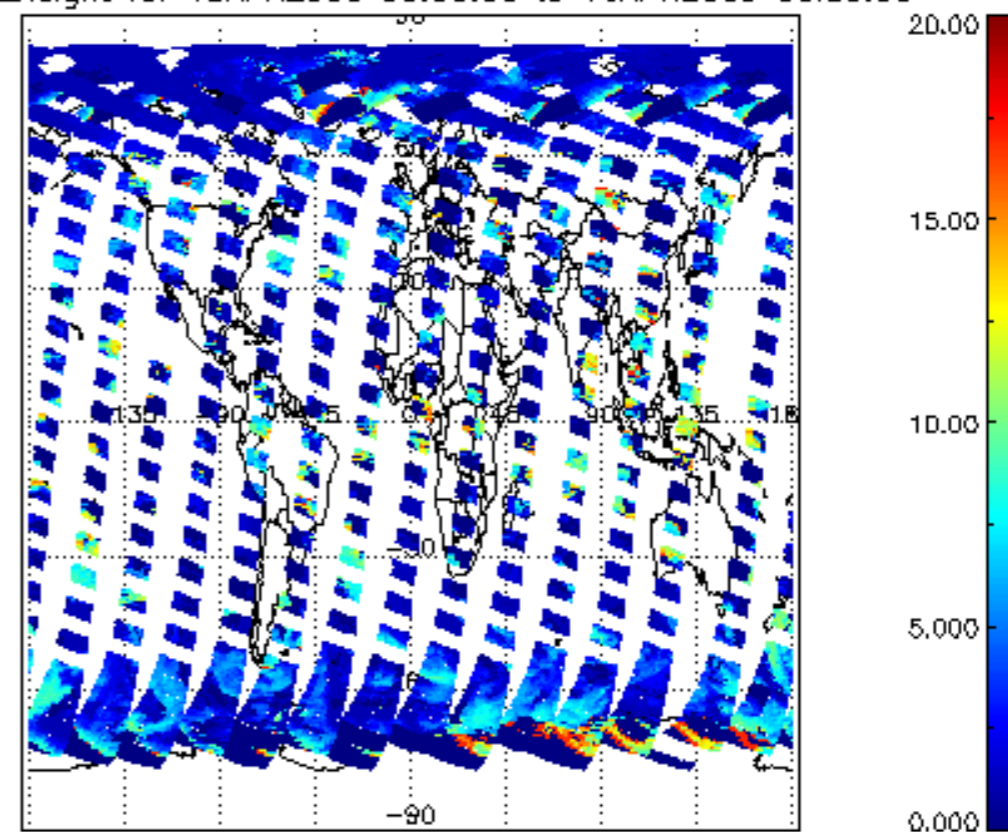
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

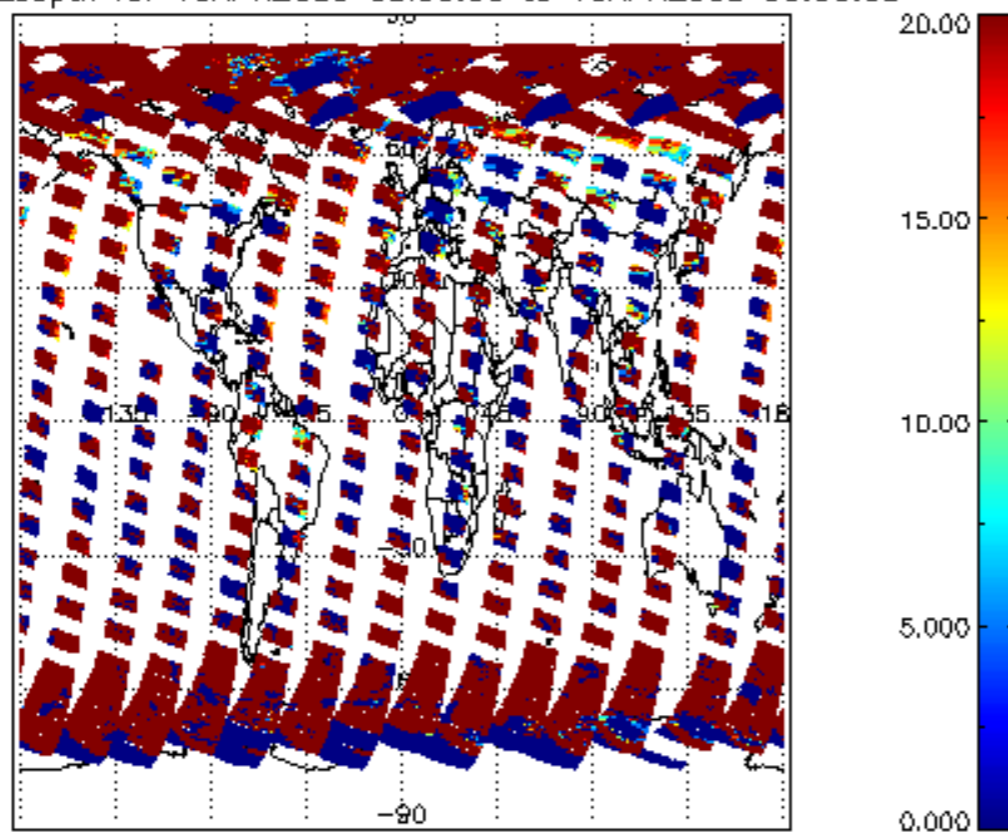
cl_frac for 15APR2009 00:00:00 to 16APR2009 00:00:00



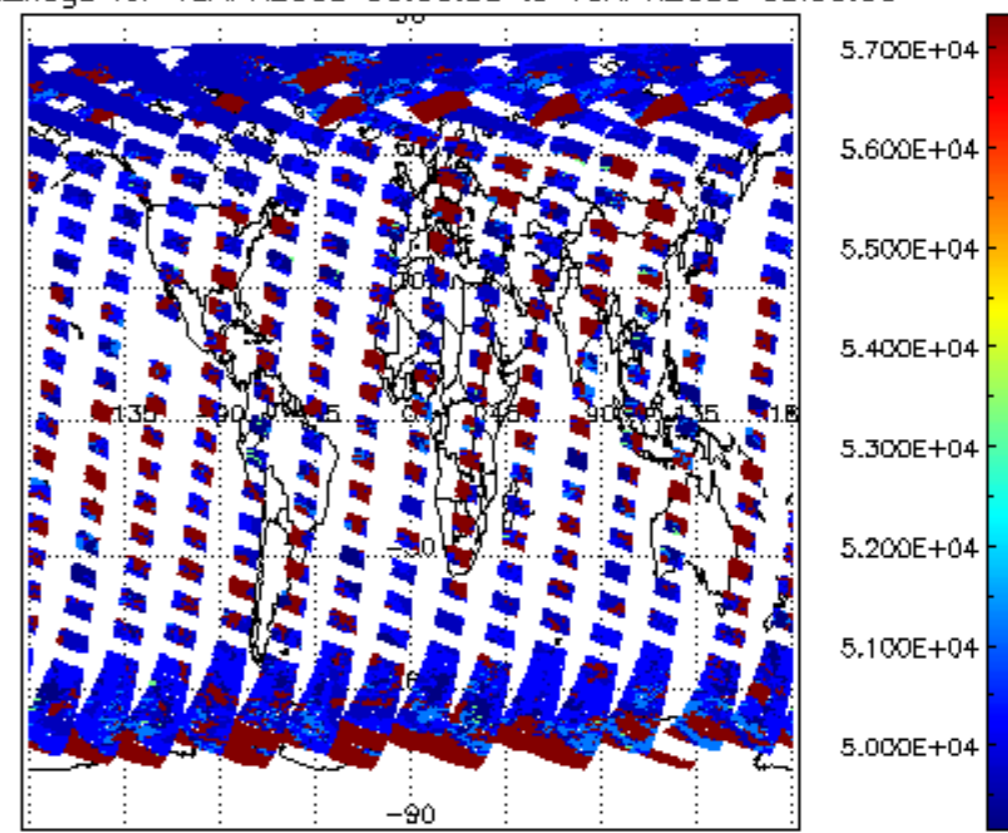
cl_top_height for 15APR2009 00:00:00 to 16APR2009 00:00:00

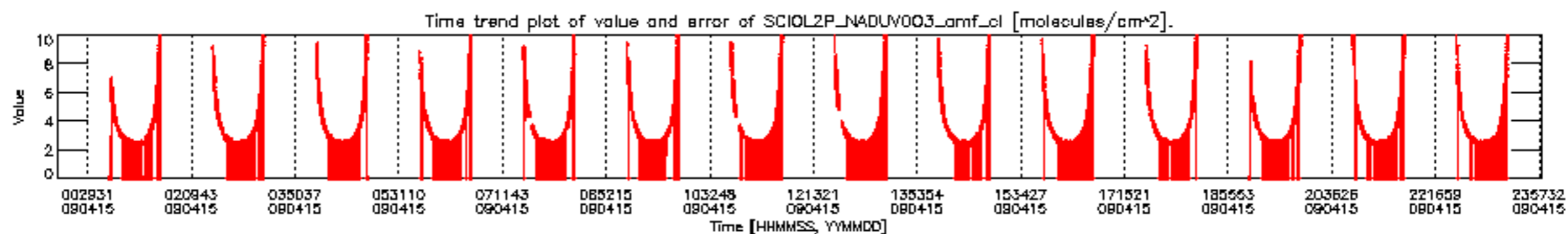
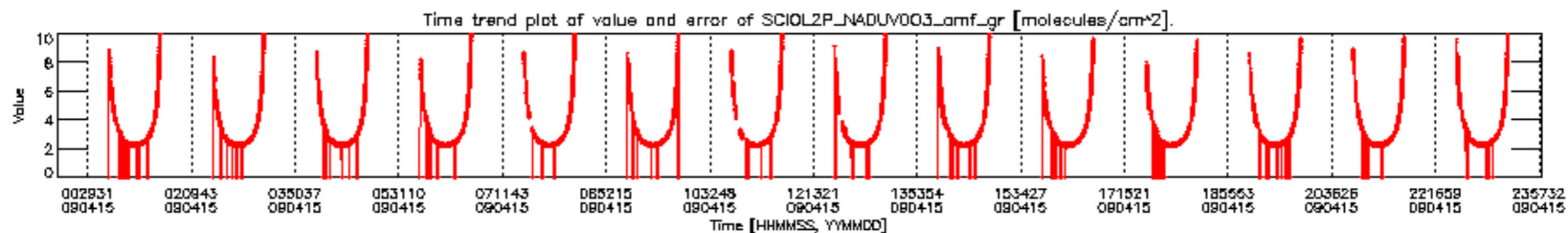
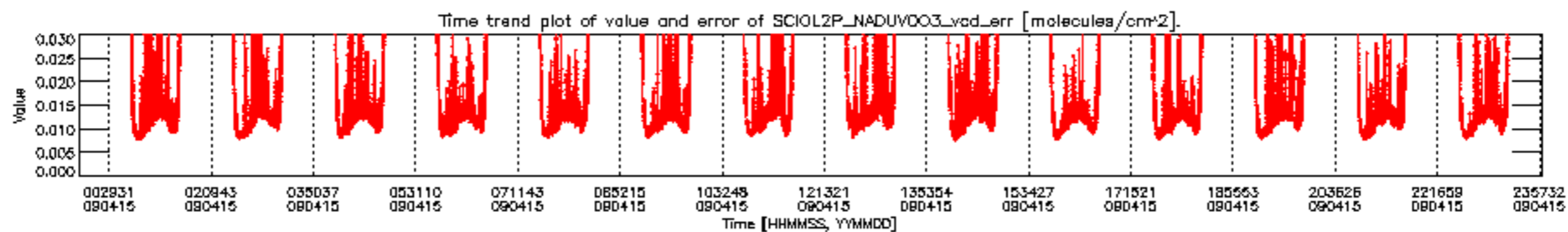
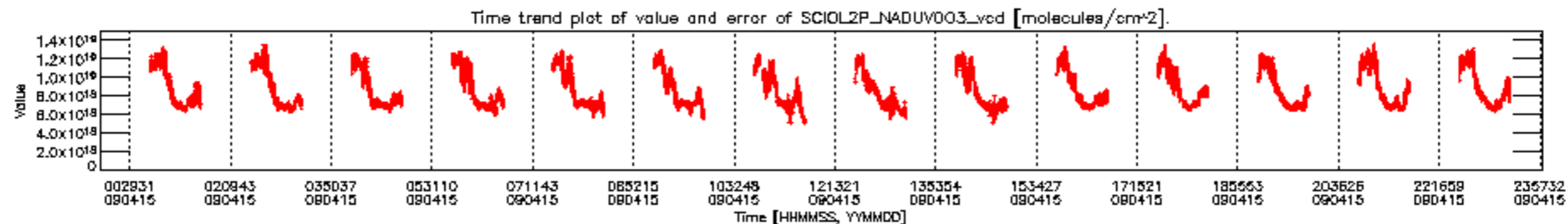


cl_opt_depth for 15APR2009 00:00:00 to 16APR2009 00:00:00

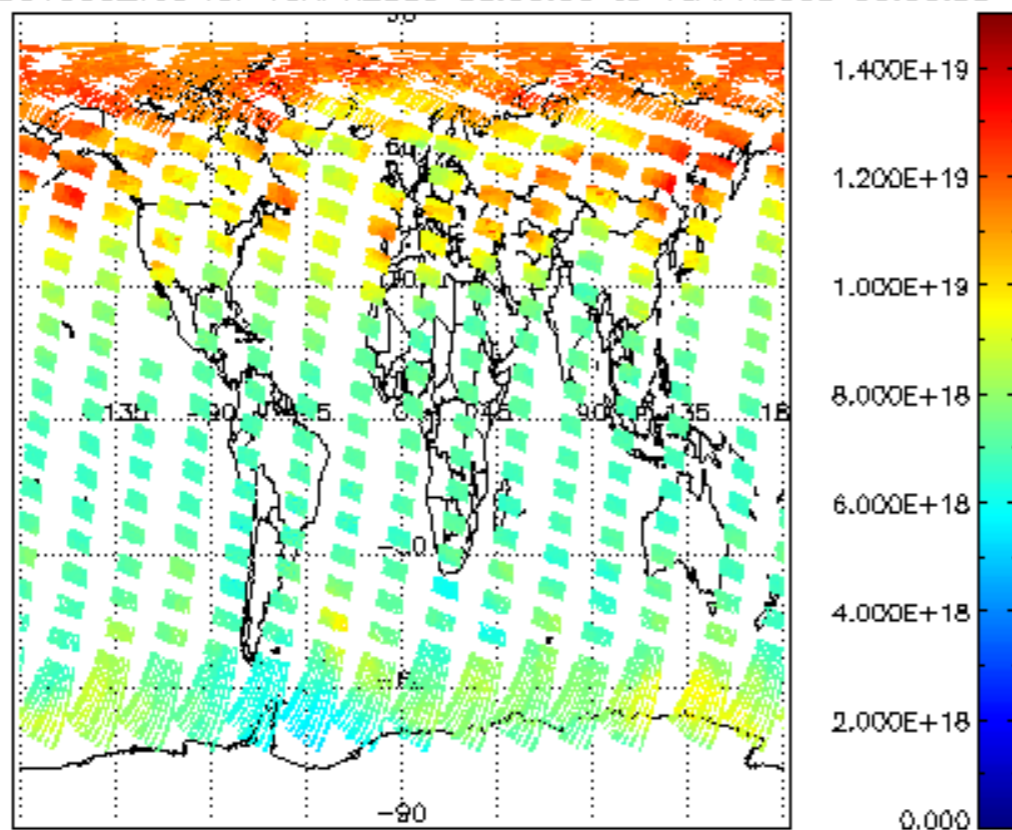


cloud_flags for 15APR2009 00:00:00 to 16APR2009 00:00:00

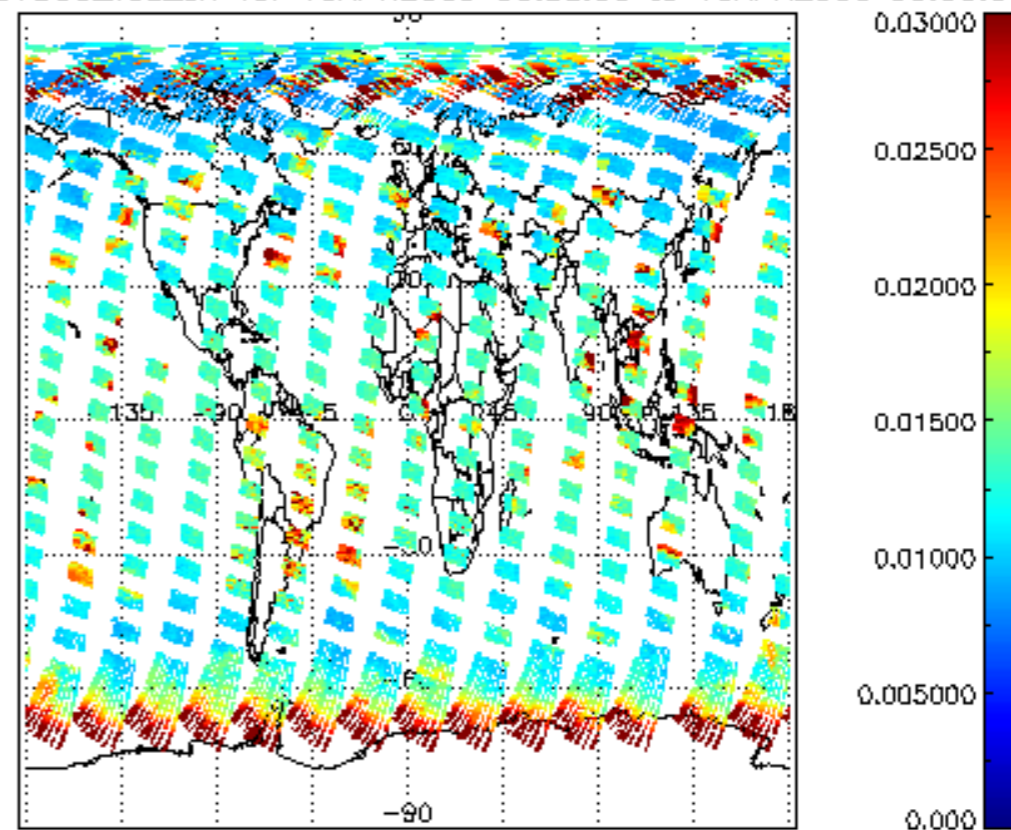




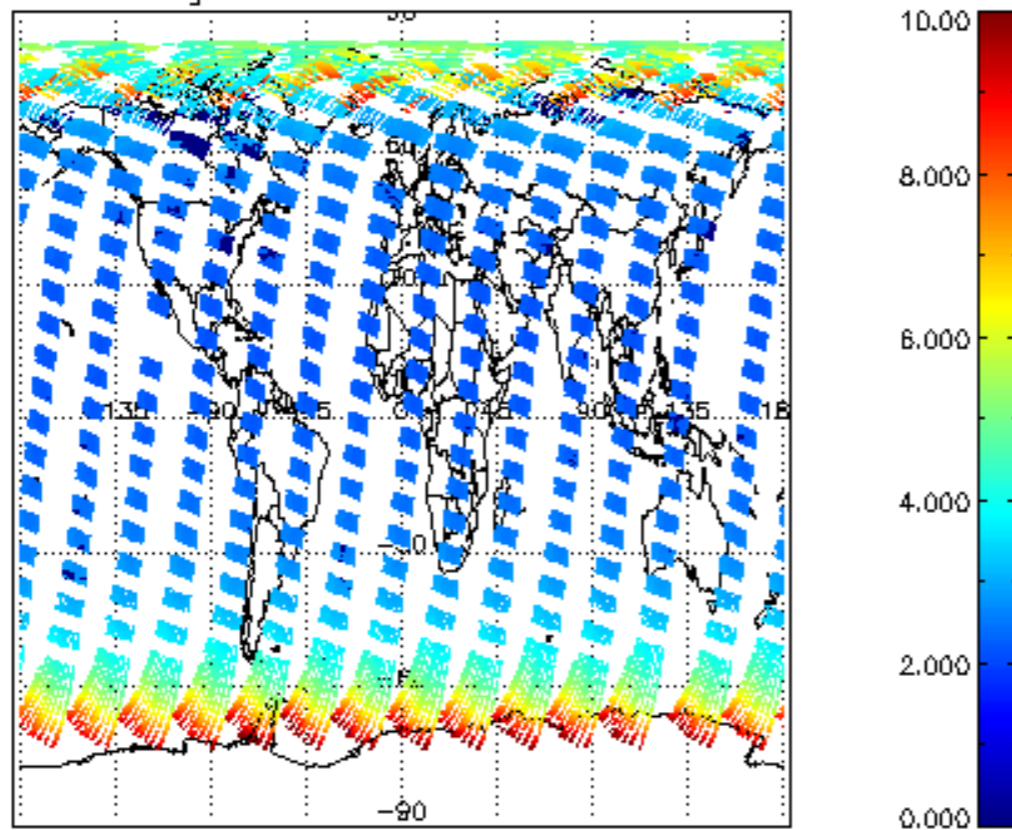
SCIOL2P_NADUV003_vcd for 15APR2009 00:00:00 to 16APR2009 00:00:00



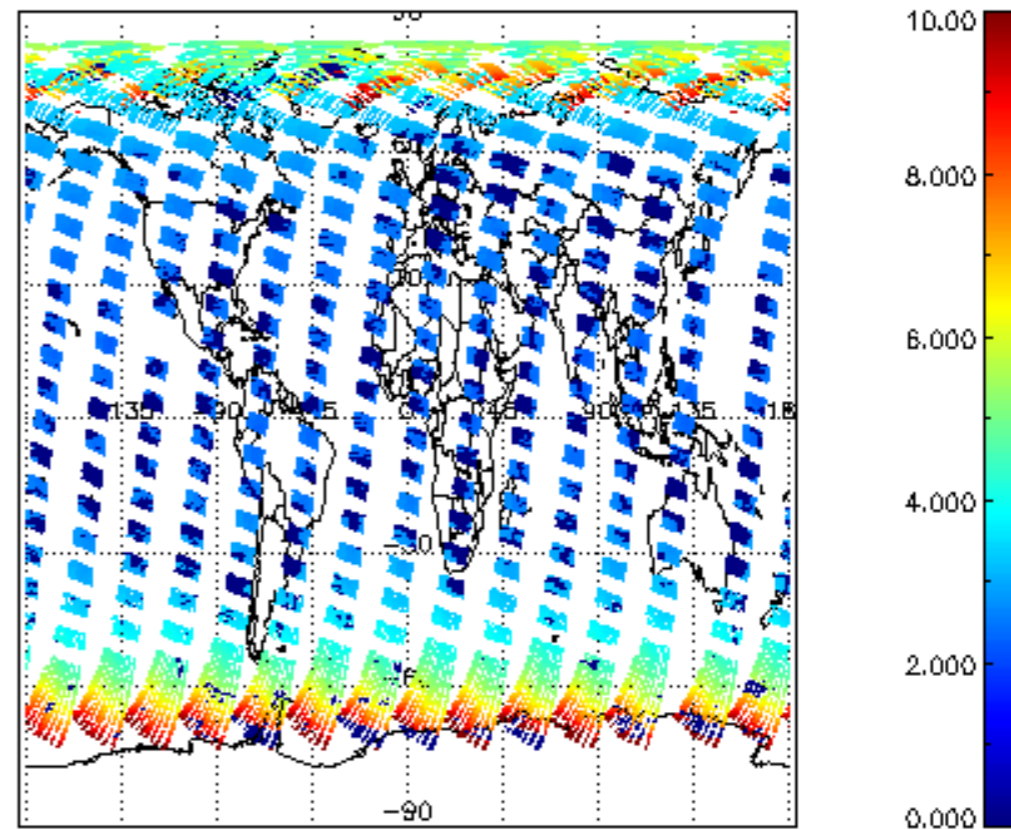
SCIOL2P_NADUV003_vcd_err for 15APR2009 00:00:00 to 16APR2009 00:00:00

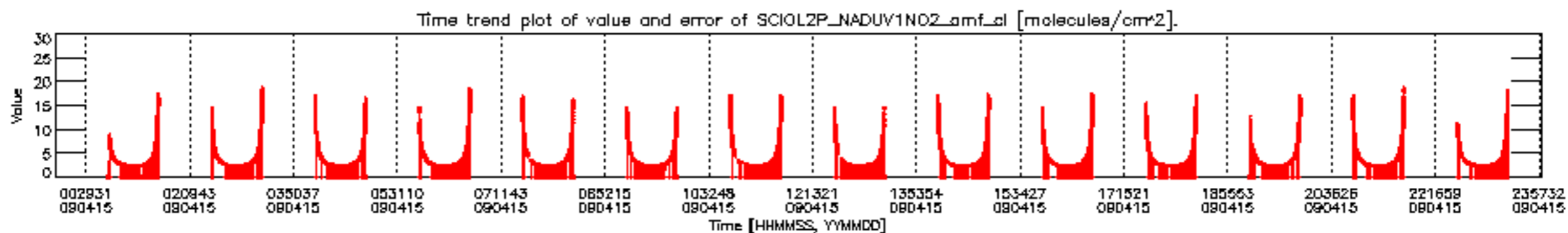
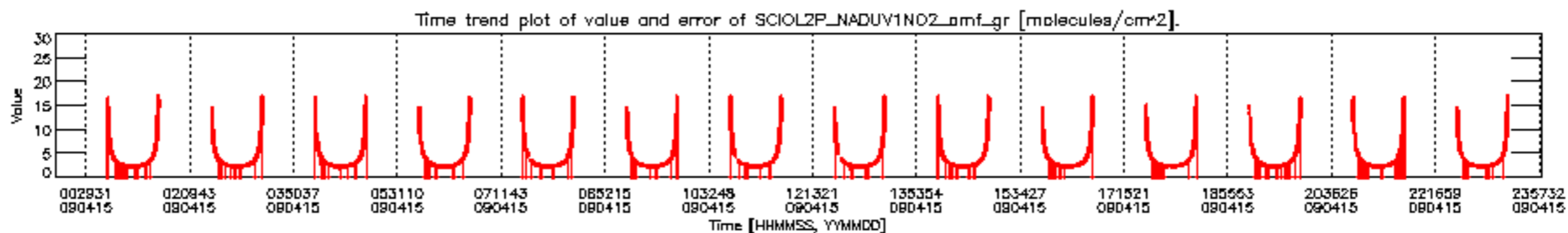
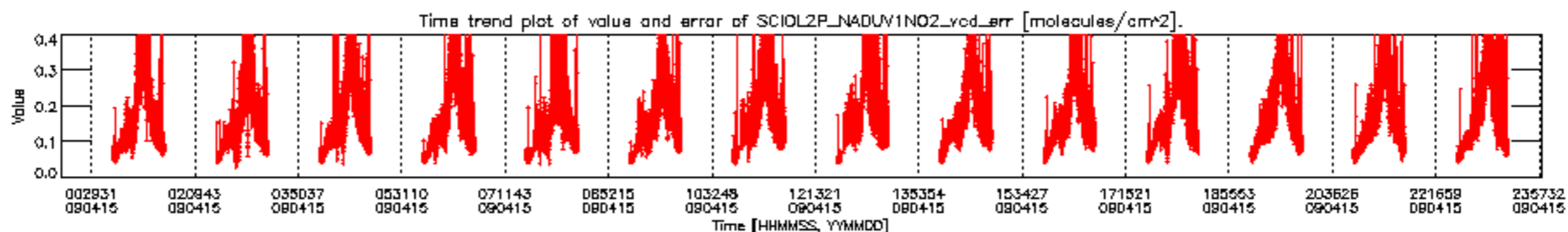
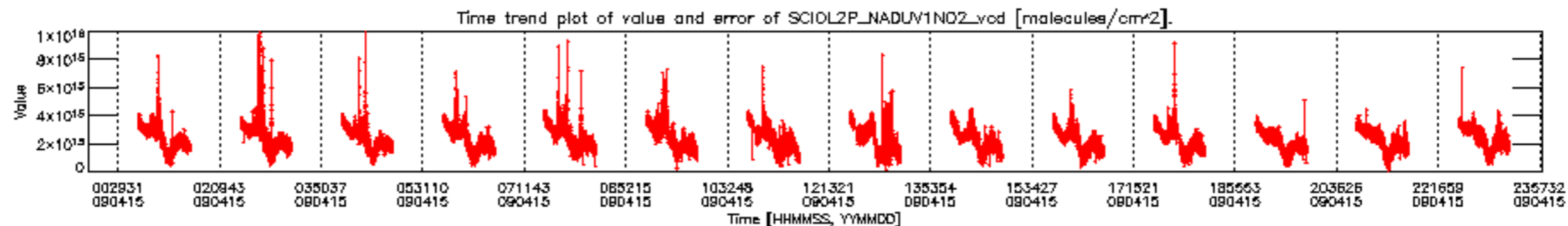


SCIOL2P_NADUV003_amf_gr for 15APR2009 00:00:00 to 16APR2009 00:00:00

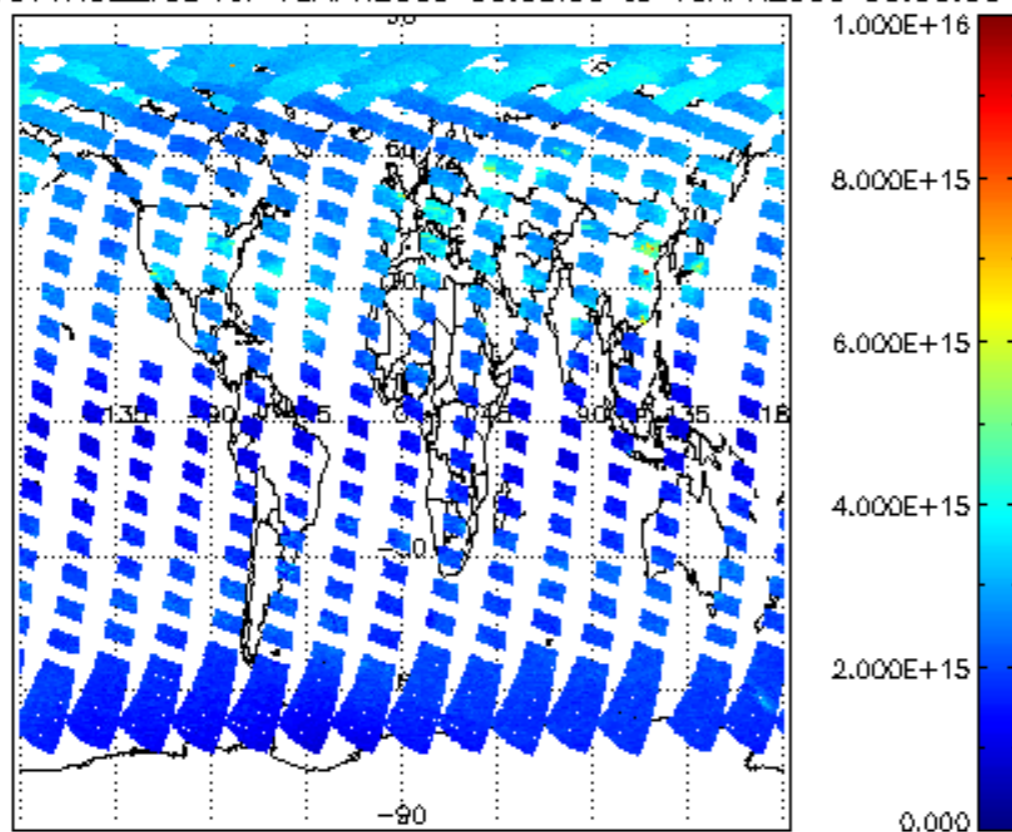


SCIOL2P_NADUV003_amf_cl for 15APR2009 00:00:00 to 16APR2009 00:00:00

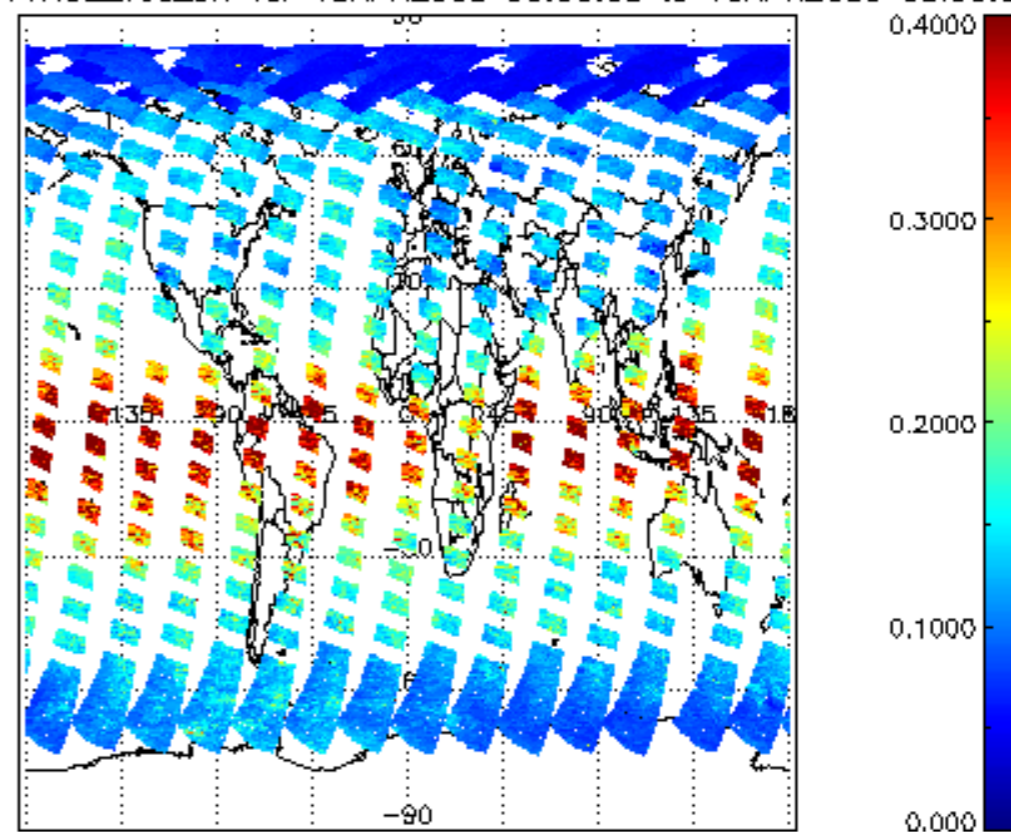




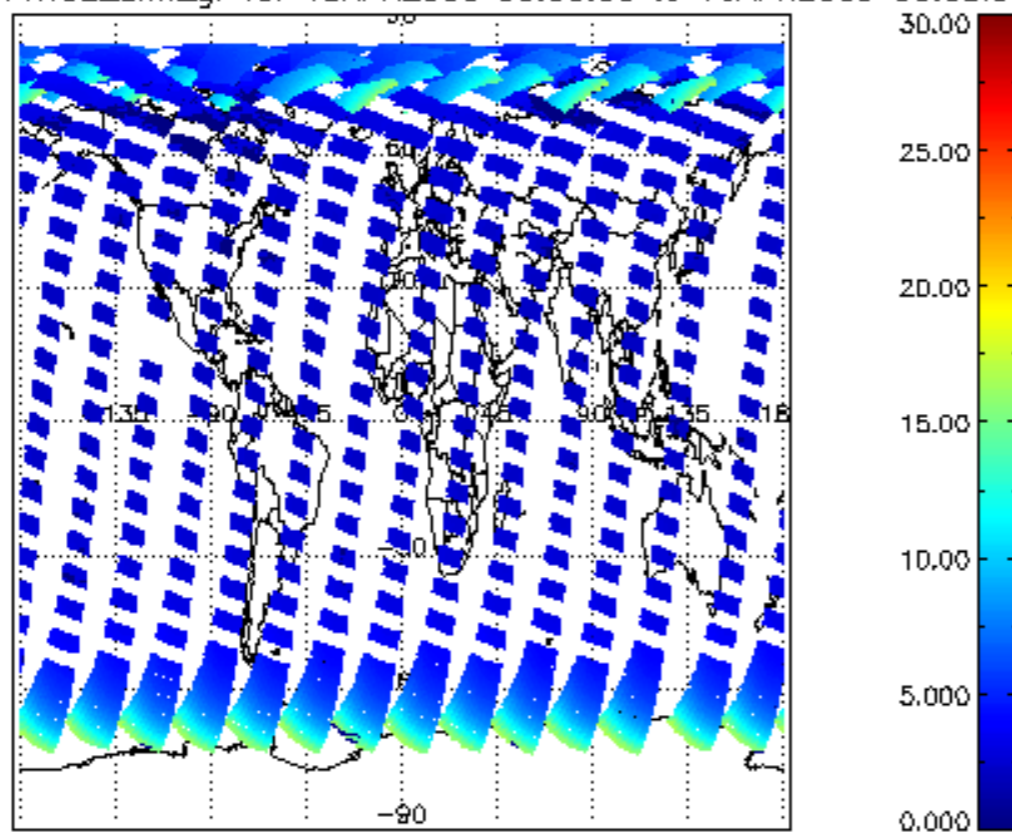
SCIOL2P_NADUV1NO2_vcd for 15APR2009 00:00:00 to 16APR2009 00:00:00



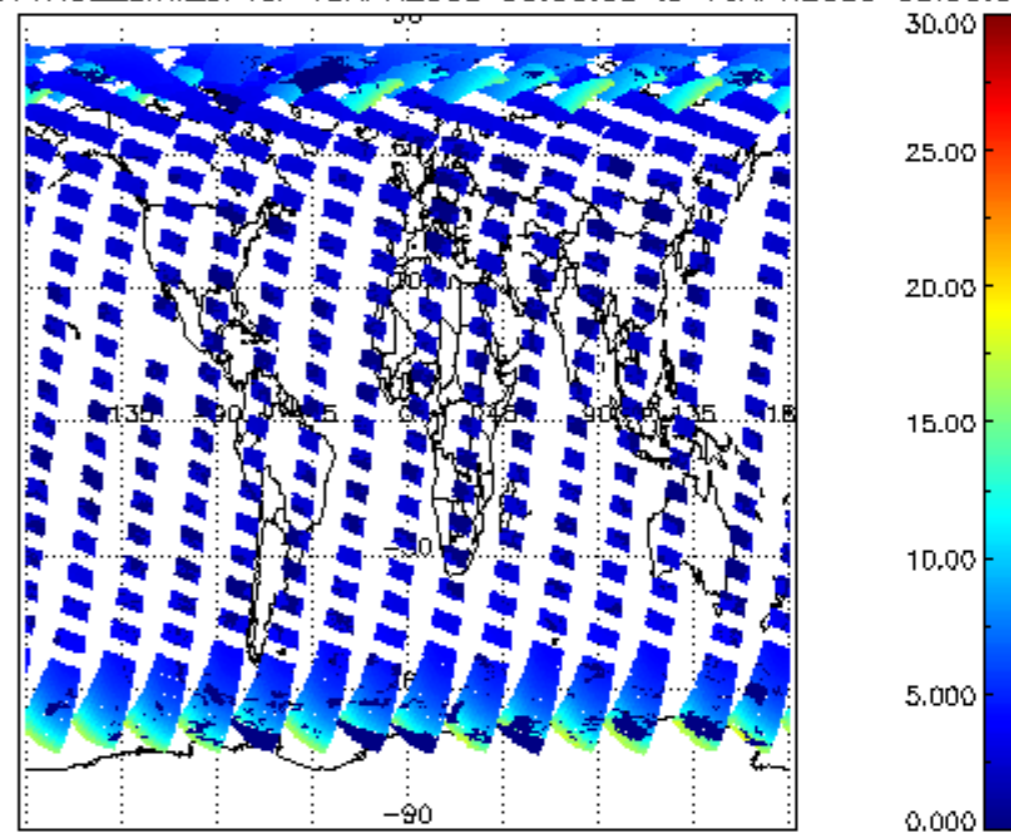
iCIOL2P_NADUV1NO2_vcd_err for 15APR2009 00:00:00 to 16APR2009 00:00:00



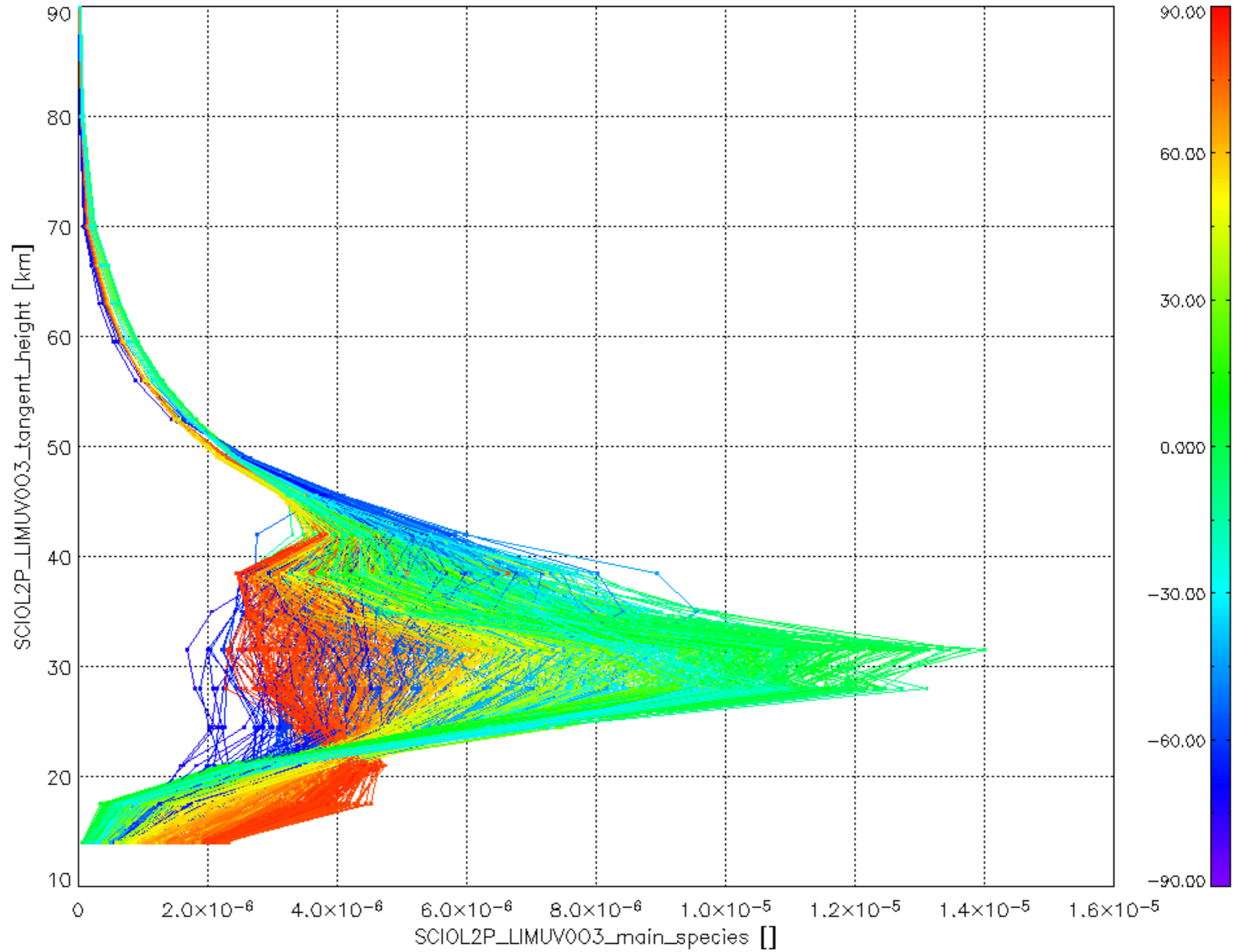
iCIOL2P_NADUV1NO2_amf_gr for 15APR2009 00:00:00 to 16APR2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 15APR2009 00:00:00 to 16APR2009 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).

