

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	05JUN2009 15:05:46
Data source version	SCIA-OL/3.01-R
Processing scope for products	12APR2009 00:00:00 to 13APR2009 00:00:00
Start time of first product within scope	11APR2009 22:58:35
Stop time of last product within scope	13APR2009 01:03:50
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__2PRDPA20090411_225835_000033252078_00073_37201_2031.N1	11APR2009 22:58:35	11APR2009 23:54:01	0	GOOD
1	SCI_OL__2PRDPA20090412_003911_000033812078_00074_37202_2032.N1	12APR2009 00:39:11	12APR2009 01:35:32	0	GOOD
2	SCI_OL__2PRDPA20090412_021946_000033252078_00075_37203_2033.N1	12APR2009 02:19:46	12APR2009 03:15:12	0	GOOD
3	SCI_OL__2PRDPA20090412_040022_000033812078_00076_37204_2034.N1	12APR2009 04:00:22	12APR2009 04:56:43	0	GOOD
4	SCI_OL__2PRDPA20090412_054057_000033252078_00077_37205_2035.N1	12APR2009 05:40:57	12APR2009 06:36:23	0	GOOD
5	SCI_OL__2PRDPA20090412_072133_000033812078_00078_37206_2036.N1	12APR2009 07:21:33	12APR2009 08:17:54	0	GOOD
6	SCI_OL__2PRDPA20090412_090209_000033252078_00079_37207_2037.N1	12APR2009 09:02:09	12APR2009 09:57:34	0	GOOD
7	SCI_OL__2PRDPA20090412_104244_000033812078_00080_37208_2038.N1	12APR2009 10:42:44	12APR2009 11:39:05	0	GOOD
8	SCI_OL__2PRDPA20090412_122319_000033252078_00081_37209_2039.N1	12APR2009 12:23:19	12APR2009 13:18:45	0	GOOD
9	SCI_OL__2PRDPA20090412_140355_000033812078_00082_37210_2040.N1	12APR2009 14:03:55	12APR2009 15:00:16	0	GOOD
10	SCI_OL__2PRDPA20090412_154431_000033252078_00083_37211_2041.N1	12APR2009 15:44:31	12APR2009 16:39:56	0	GOOD
11	SCI_OL__2PRDPA20090412_172526_000033122078_00084_37212_2042.N1	12APR2009 17:25:26	12APR2009 18:20:39	0	GOOD
12	SCI_OL__2PRDPA20090412_190601_000033252078_00085_37213_2043.N1	12APR2009 19:06:01	12APR2009 20:01:27	0	GOOD
13	SCI_OL__2PRDPA20090412_204617_000033812078_00086_37214_2044.N1	12APR2009 20:46:17	12APR2009 21:42:39	0	GOOD
14	SCI_OL__2PRDPA20090412_222653_000033252078_00087_37215_2045.N1	12APR2009 22:26:53	12APR2009 23:22:18	0	GOOD
15	SCI_OL__2PRDPA20090413_000728_000033812078_00088_37216_2046.N1	13APR2009 00:07:28	13APR2009 01:03:50	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: 145080

Total number of cloud data DSRs with good quality flag (=0): 145080 (100.0 %)

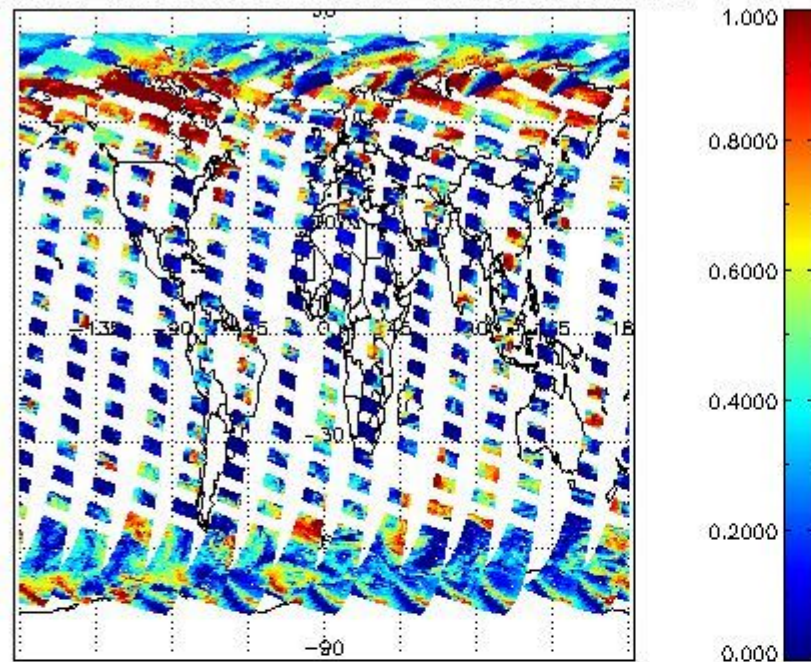
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	145080	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	145080	0.17025	0.12500	0.12500	0.25000	0.060073	s
CL_FRAC	145080	0.37580	0.34146	0.0000	1.0000	0.30877	-
CL_FRAC_ERR	145080	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	145080	5.4480	4.0000	4.0000	8.0000	1.9223	
PMD_READ_CL[0]	145080	0.31956	0.0000	0.0000	8.0000	1.2071	-
PMD_READ_CL[1]	145080	1.3839	0.0000	0.0000	8.0000	2.5484	-
CL_TOP_HEIGHT	125560	2.8837	1.2653	0.0000	17.000	3.3991	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	125560	64.261	100.00	0.0000	101.00	42.455	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	145080	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	145080	11001011	11000100	11000000	11100000	3419.1	flags
AERO_ABSO_IND	145080	3.6572	4.4173	-1.1004	15.057	2.4398	
AERO_IND_DIAG	145080	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	145080	01010111	00000000	00000000	11000000	24477.	flags

Time and geolocation plots:

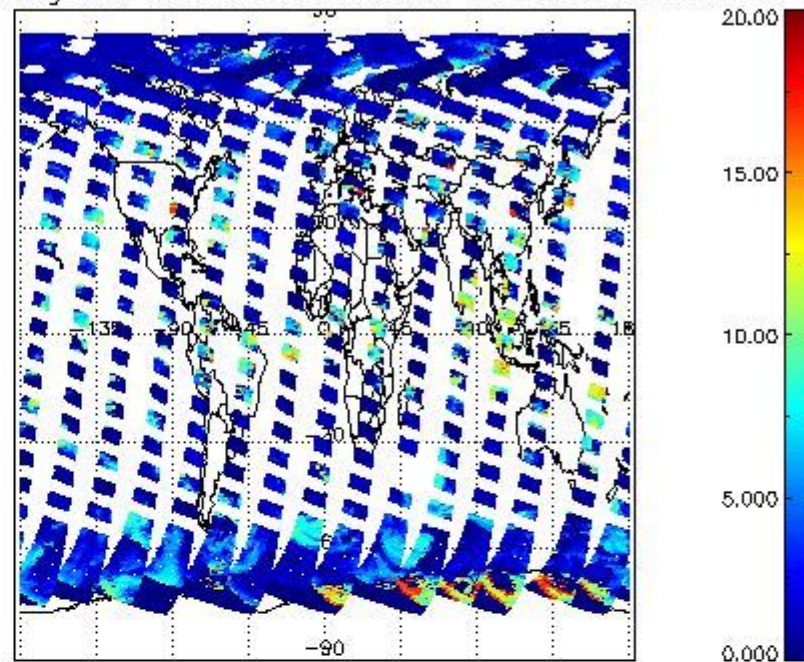
Plots are available for the following parameters:

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

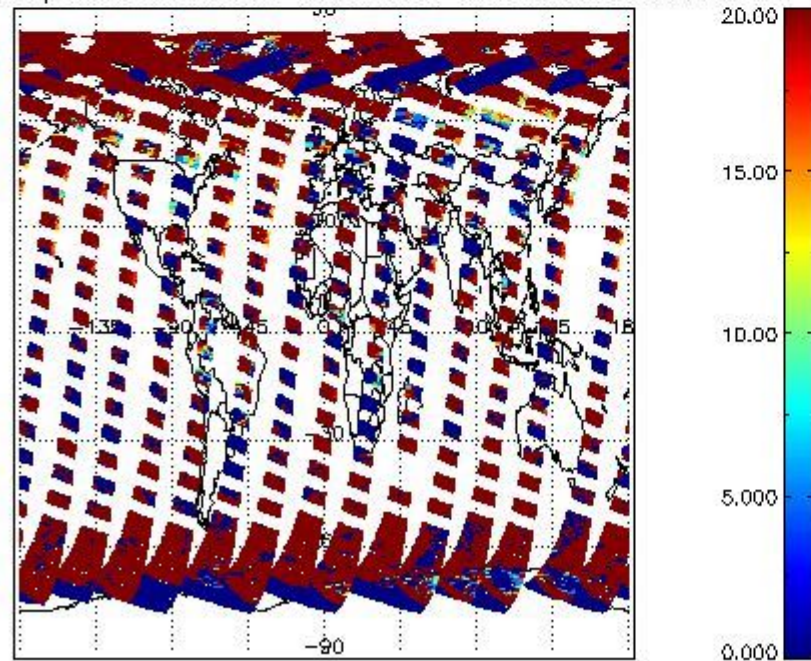
cL_frac for 12APR2009 00:00:00 to 13APR2009 00:00:00



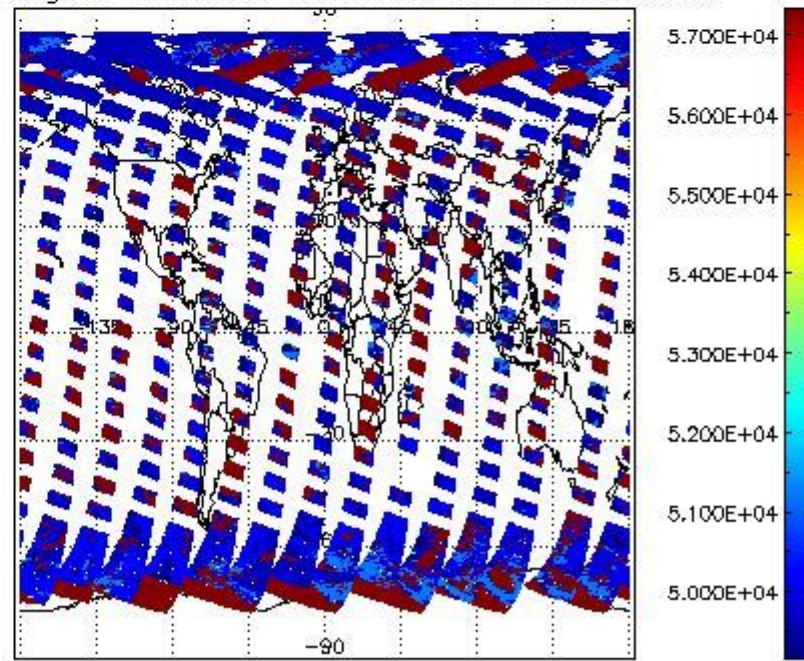
cL_top_height for 12APR2009 00:00:00 to 13APR2009 00:00:00



cL_opt_depth for 12APR2009 00:00:00 to 13APR2009 00:00:00



cloud_flags for 12APR2009 00:00:00 to 13APR2009 00:00:00



2.2.2 Nadir

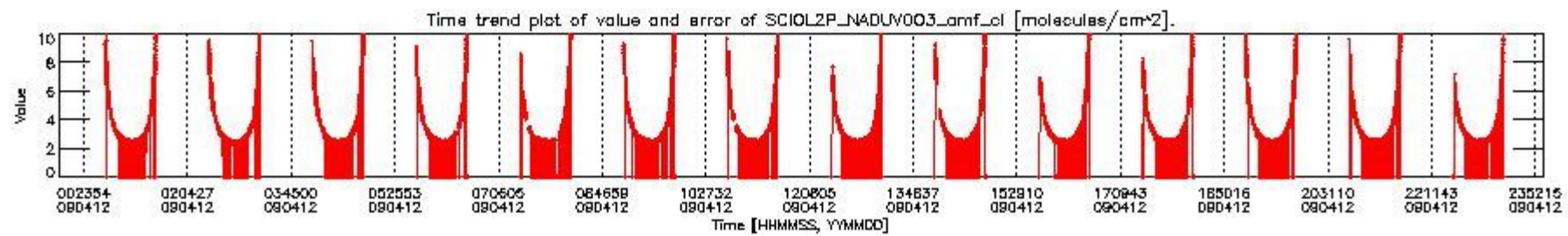
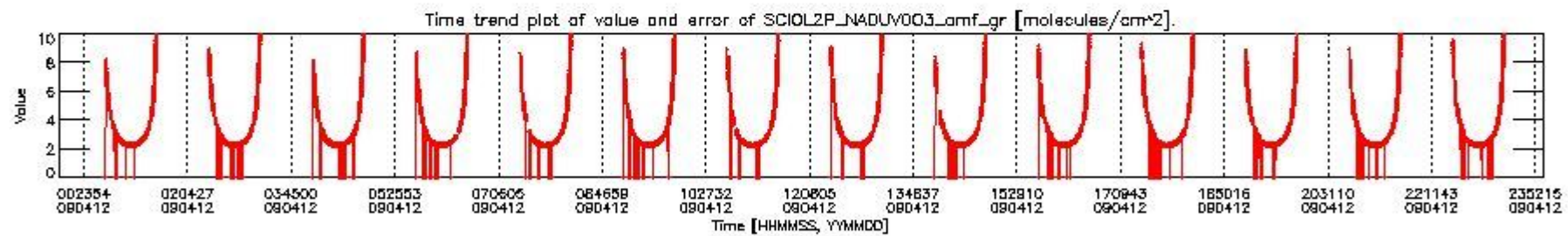
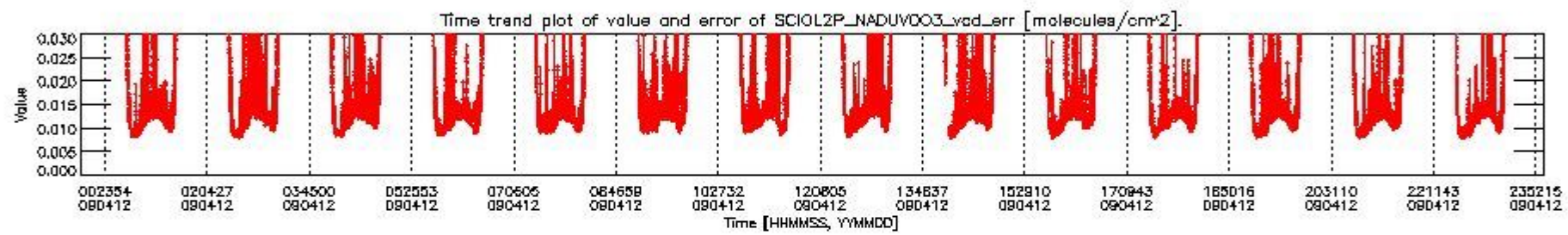
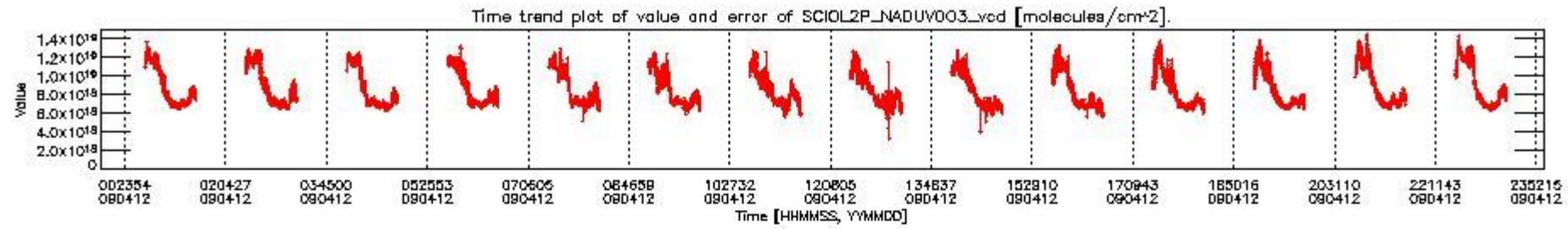
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

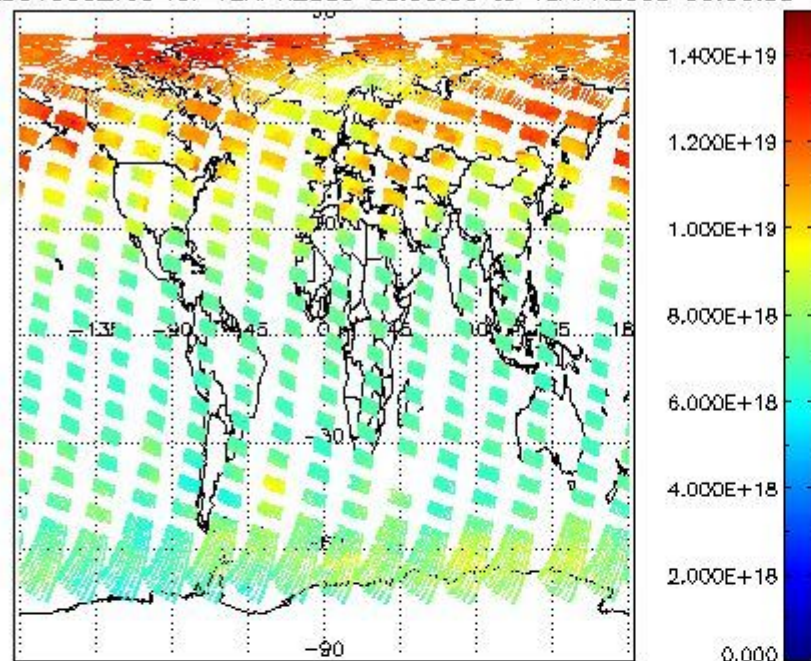
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

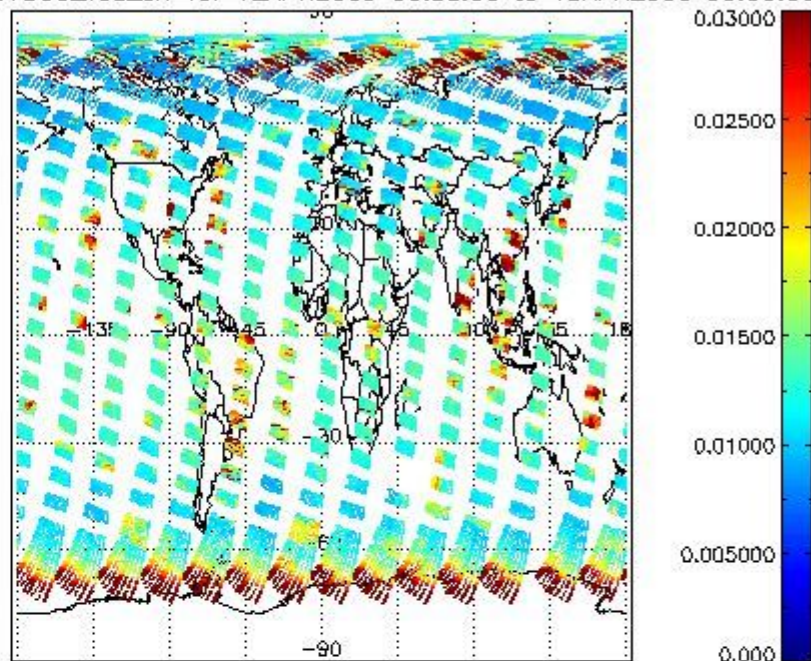
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



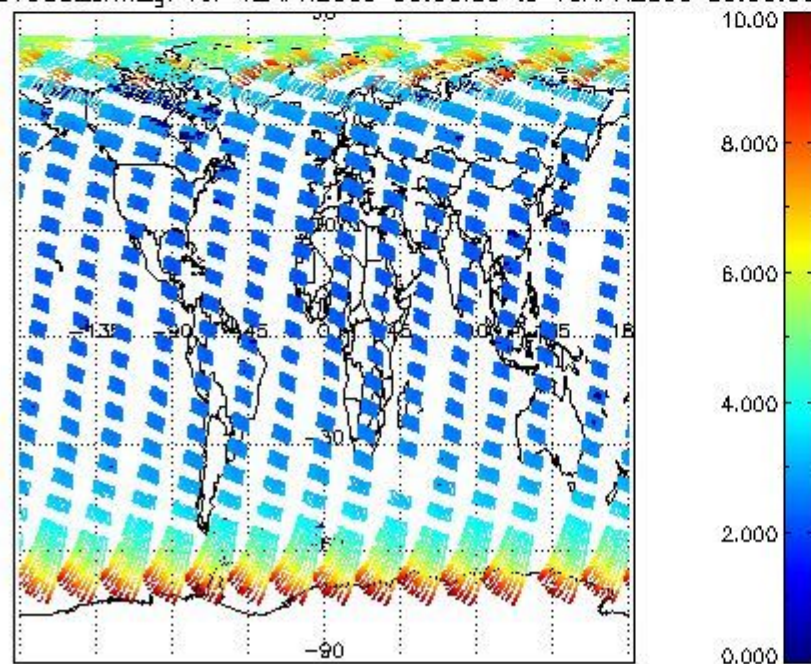
SCIOL2P_NADUV003_vcd for 12APR2009 00:00:00 to 13APR2009 00:00:00



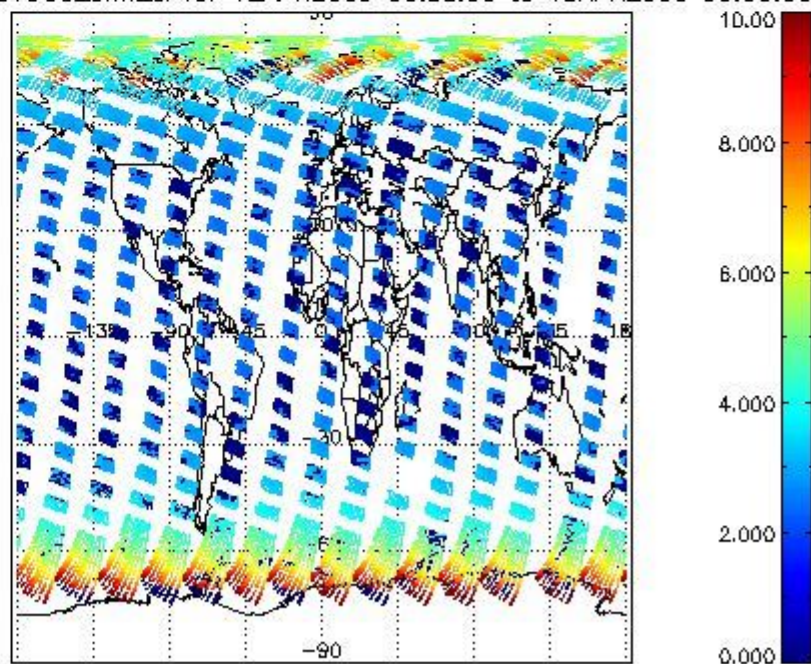
SCIOL2P_NADUV003_vcd_err for 12APR2009 00:00:00 to 13APR2009 00:00:00

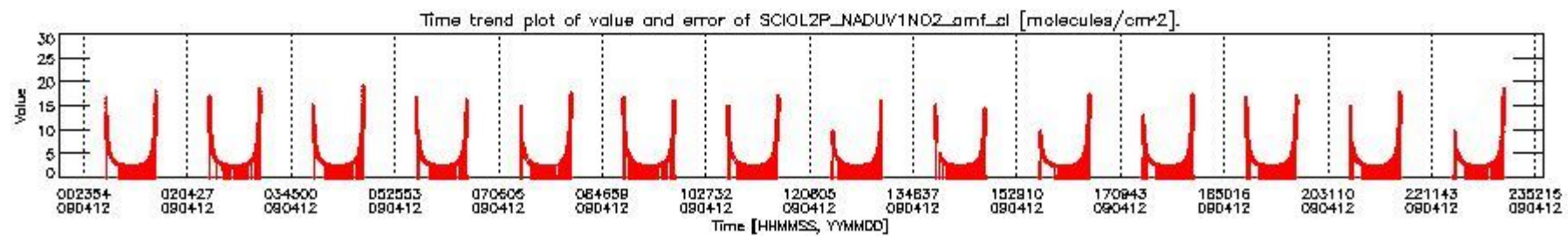
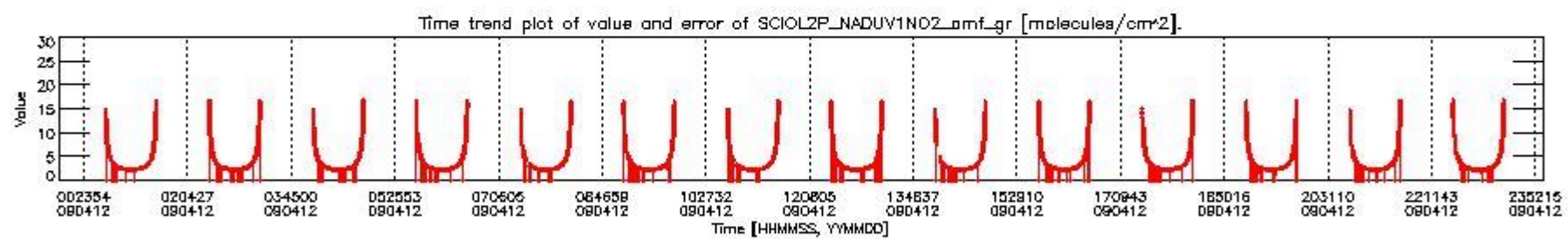
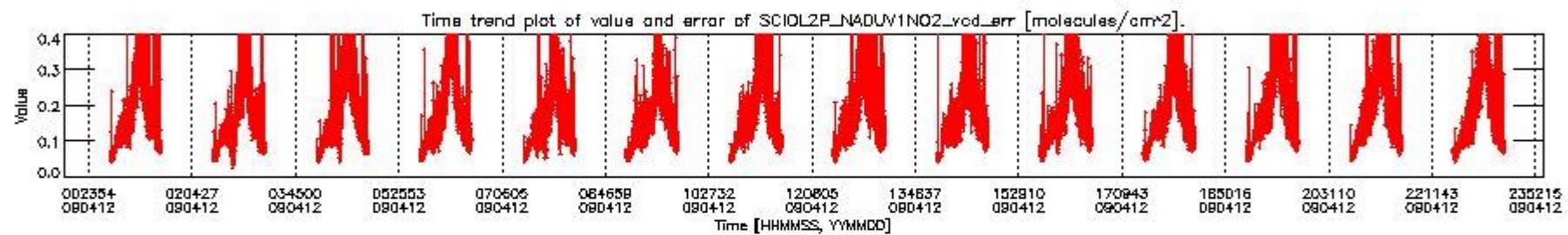
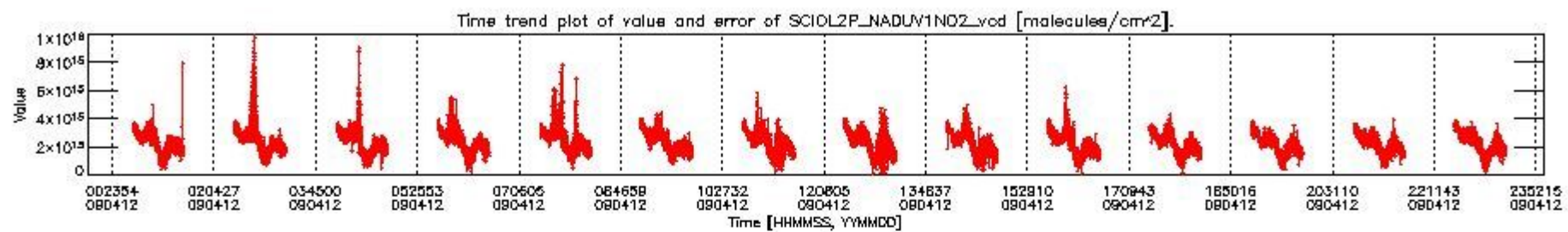


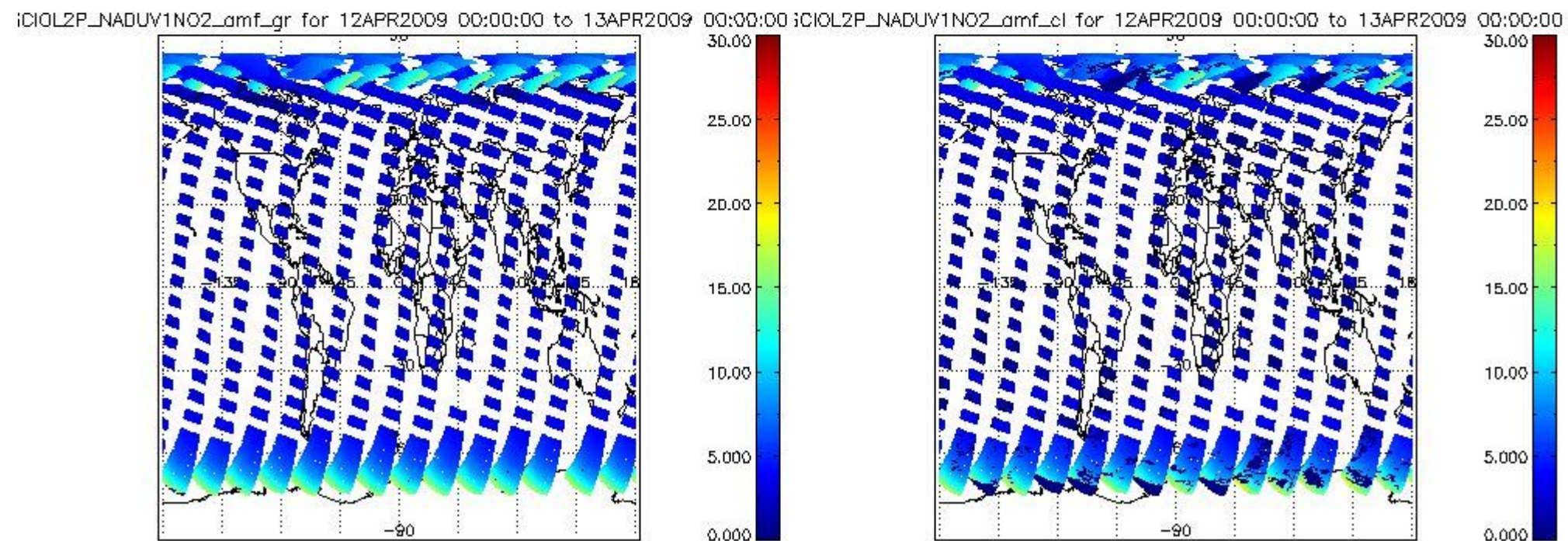
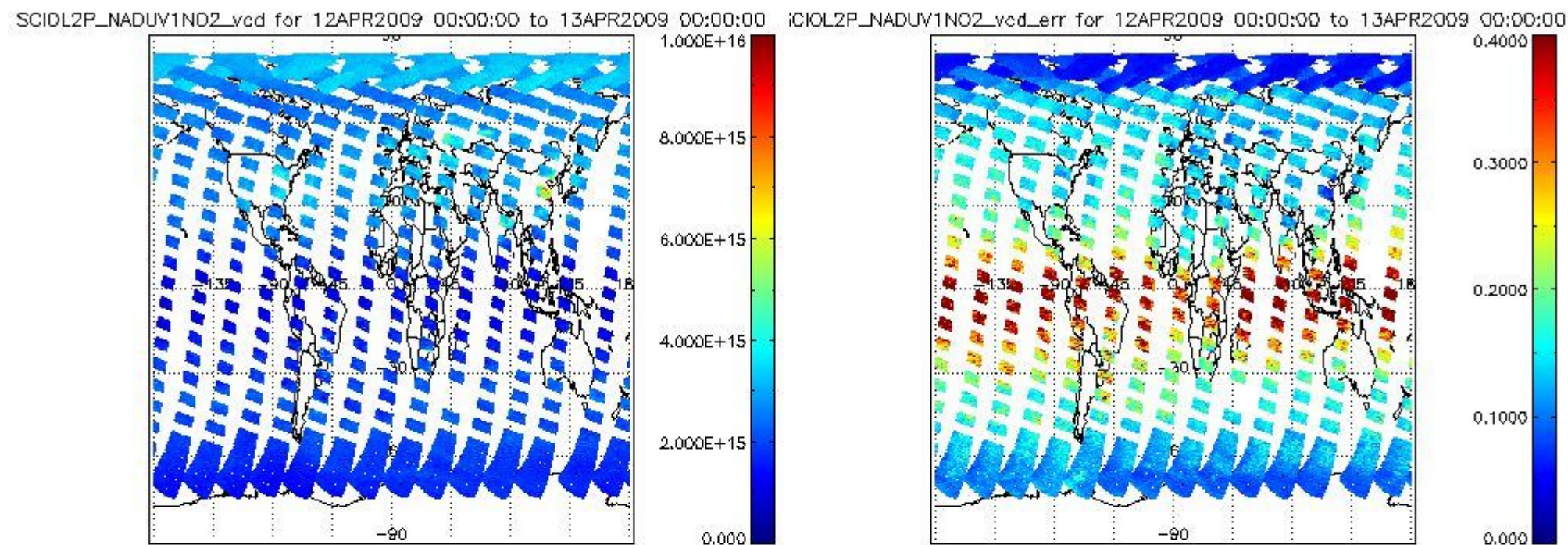
SCIOL2P_NADUV003_amf_gr for 12APR2009 00:00:00 to 13APR2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 12APR2009 00:00:00 to 13APR2009 00:00:00







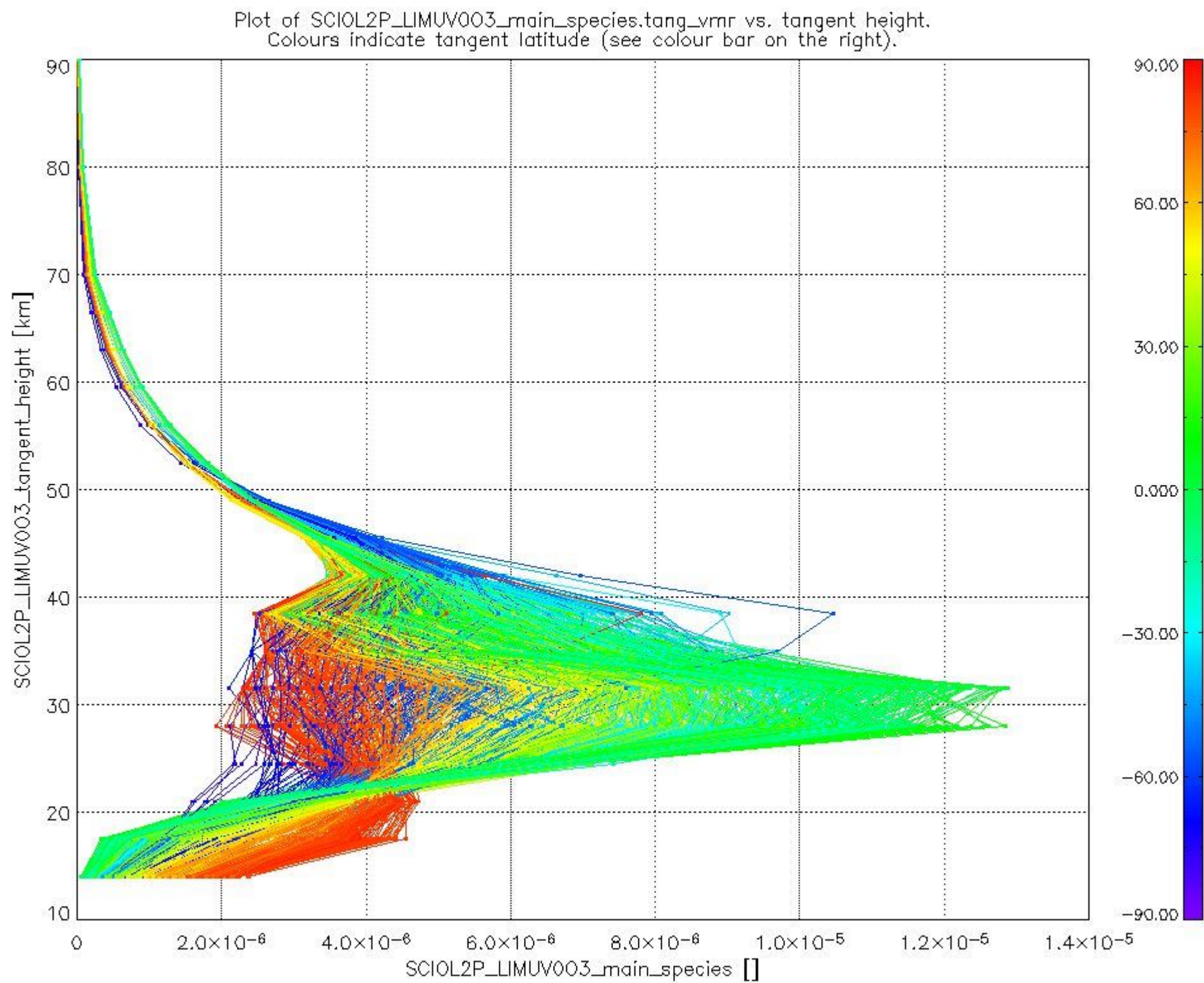
2.2.3 Limb

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

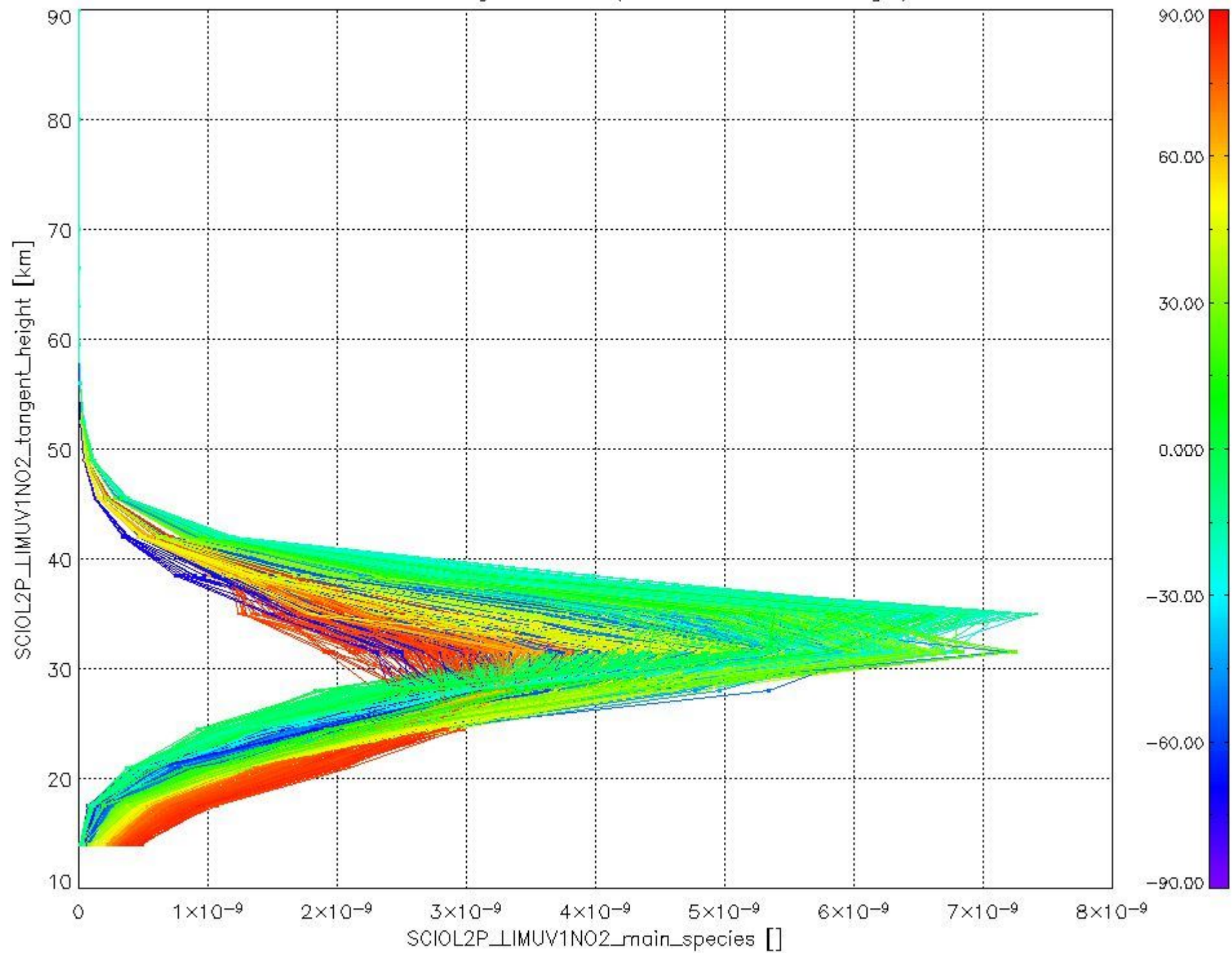
The following data items are currently included into this section:

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.



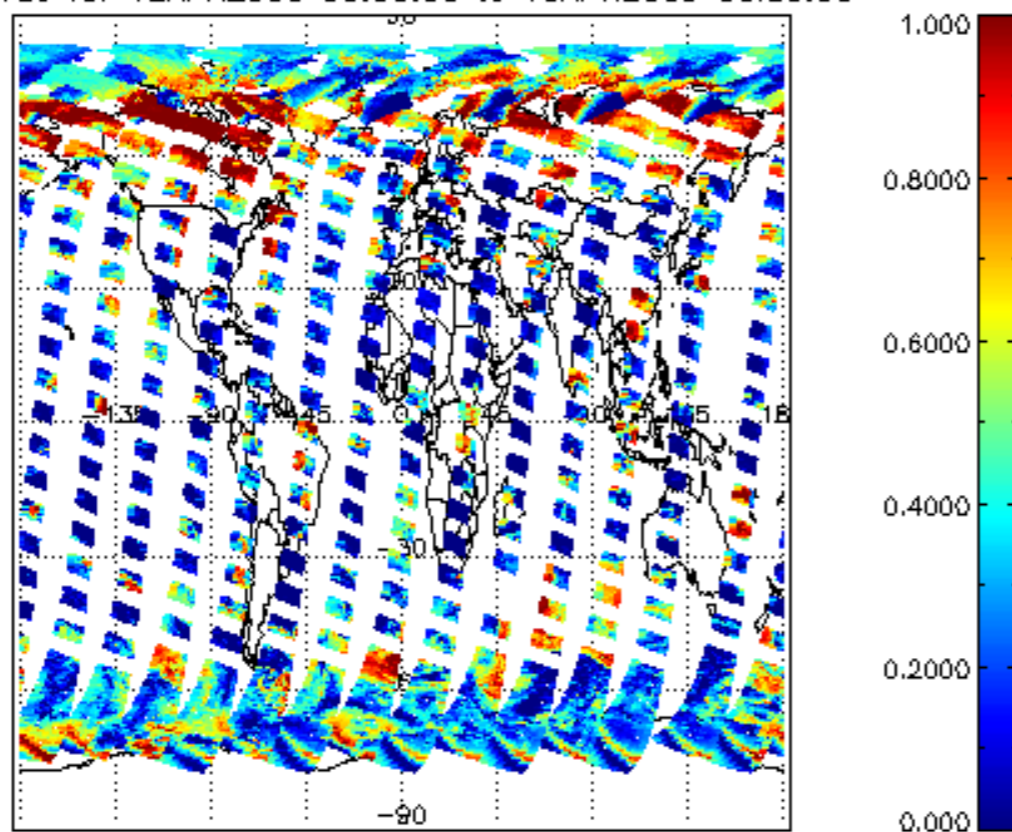
Plot of SCIOI2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



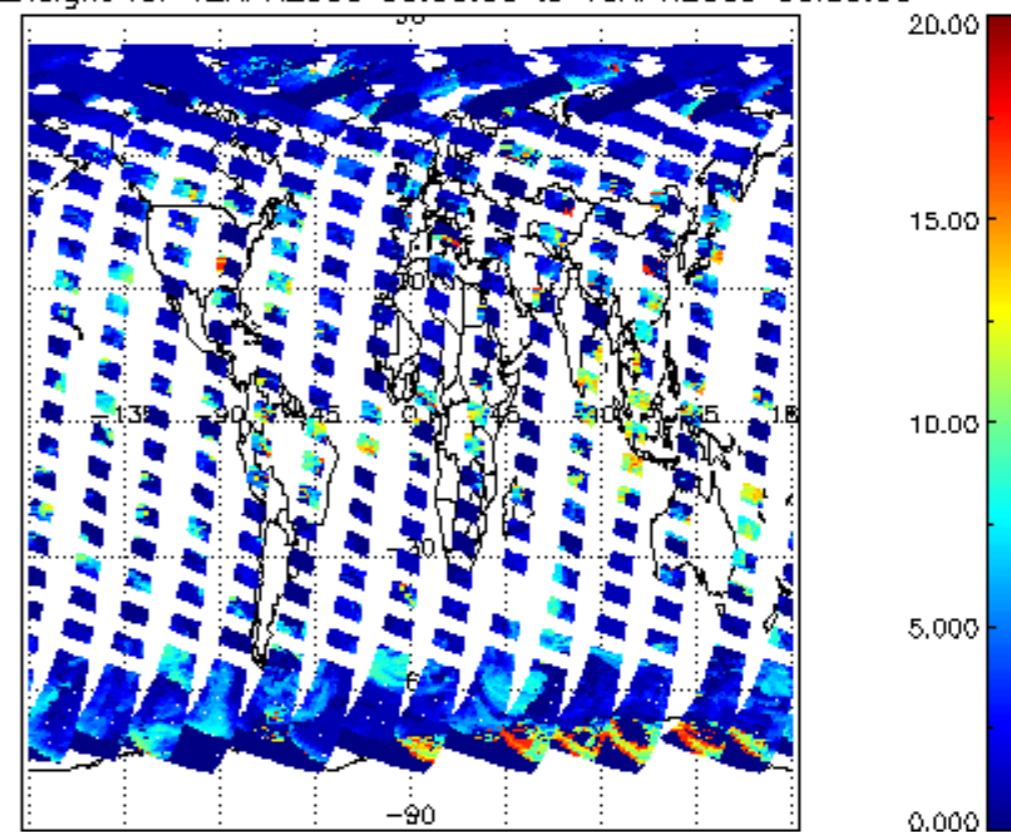
2.3 ADF monitoring

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

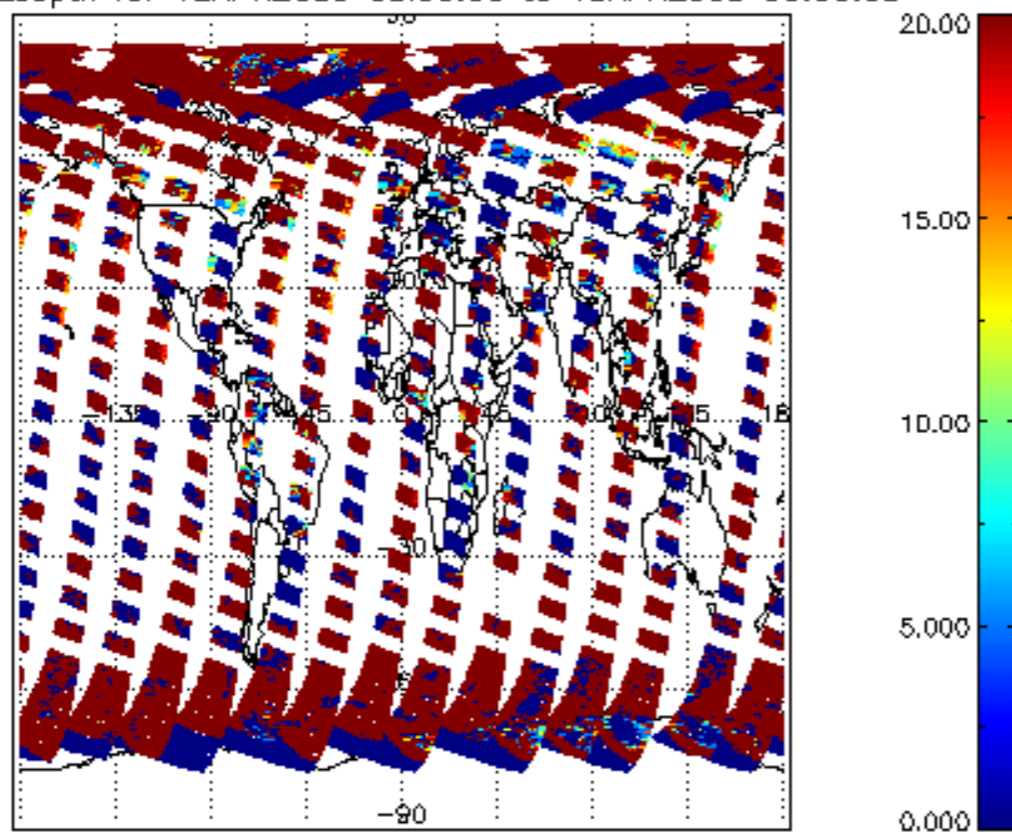
cL_frac for 12APR2009 00:00:00 to 13APR2009 00:00:00



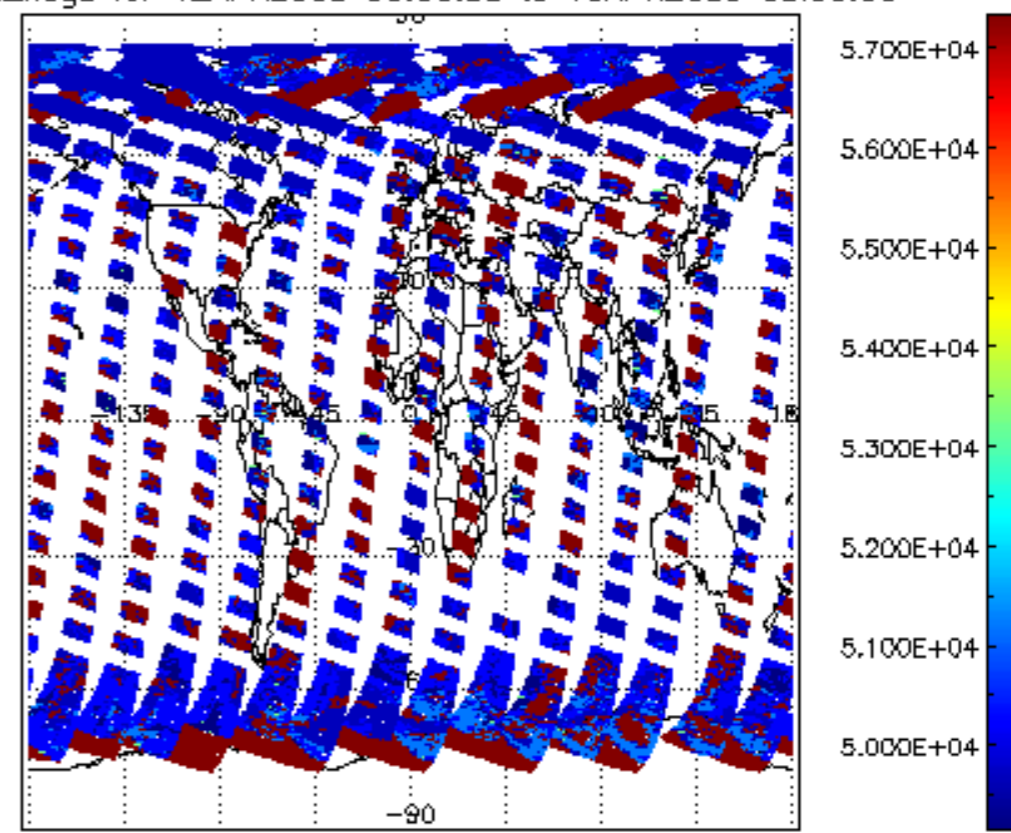
cL_top_height for 12APR2009 00:00:00 to 13APR2009 00:00:00

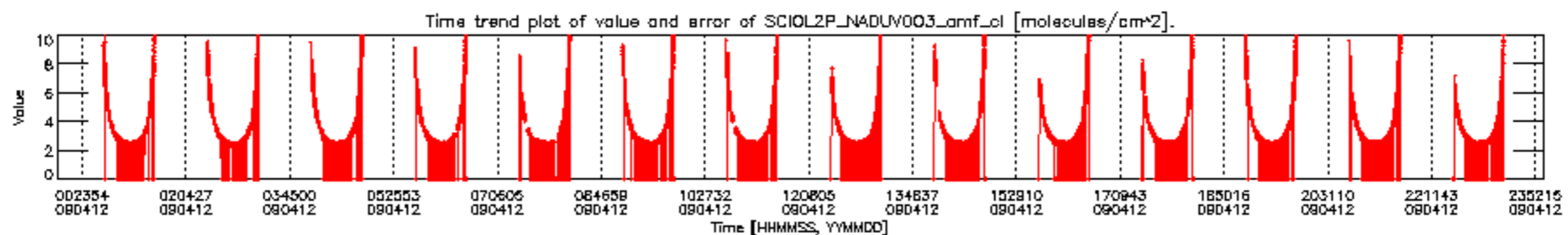
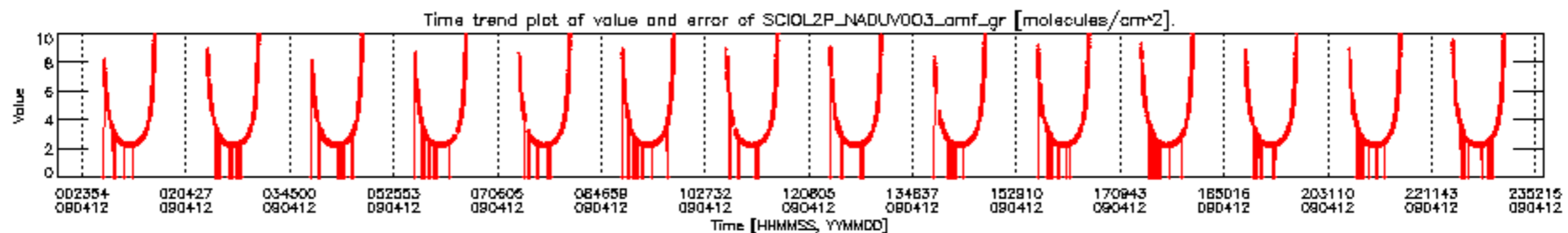
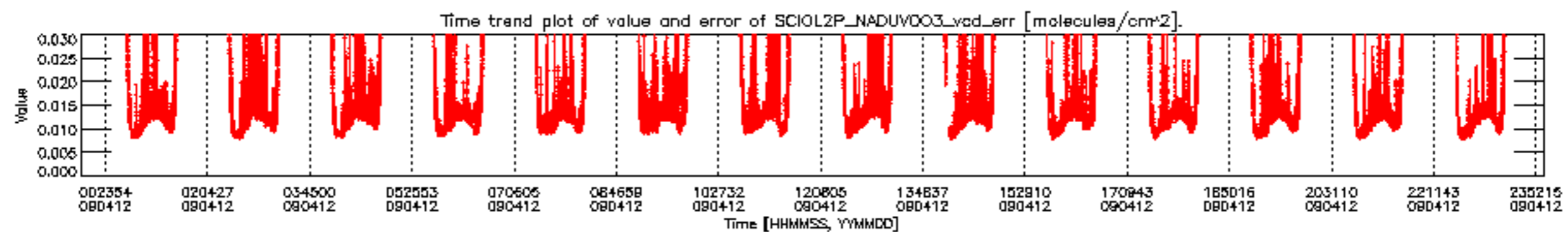
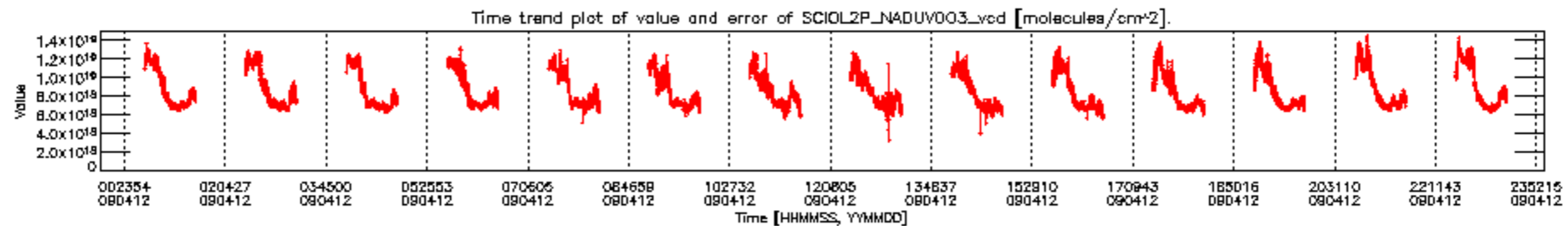


cL_opt_depth for 12APR2009 00:00:00 to 13APR2009 00:00:00

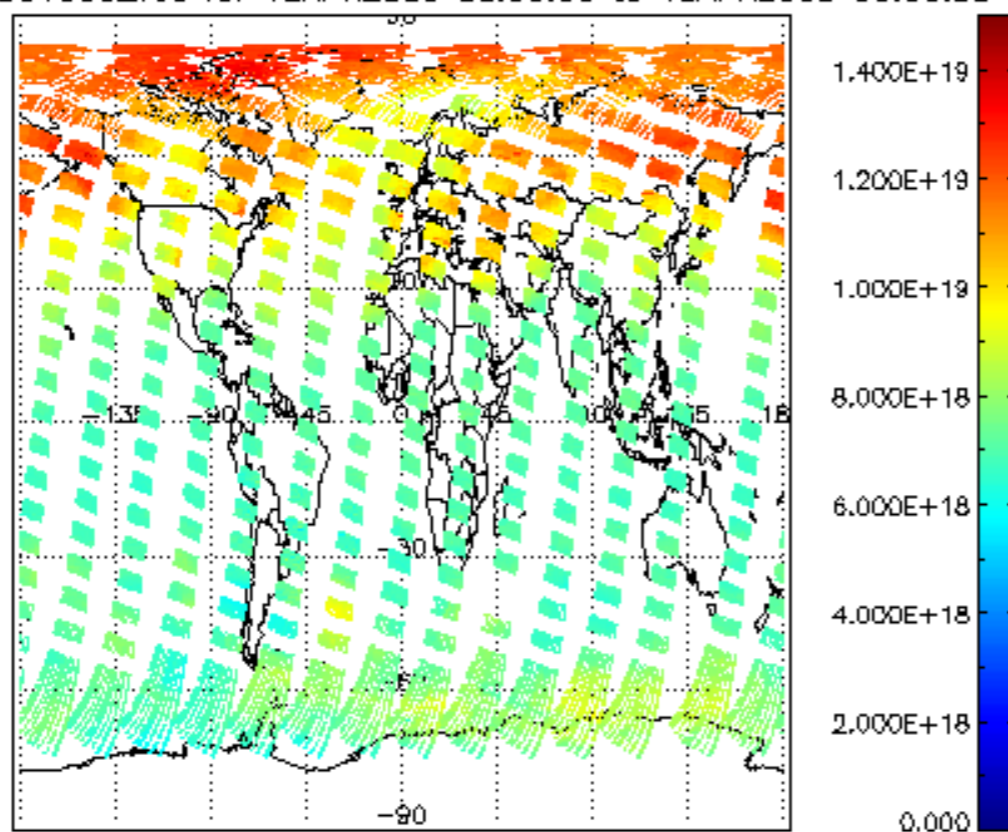


cloud_flags for 12APR2009 00:00:00 to 13APR2009 00:00:00

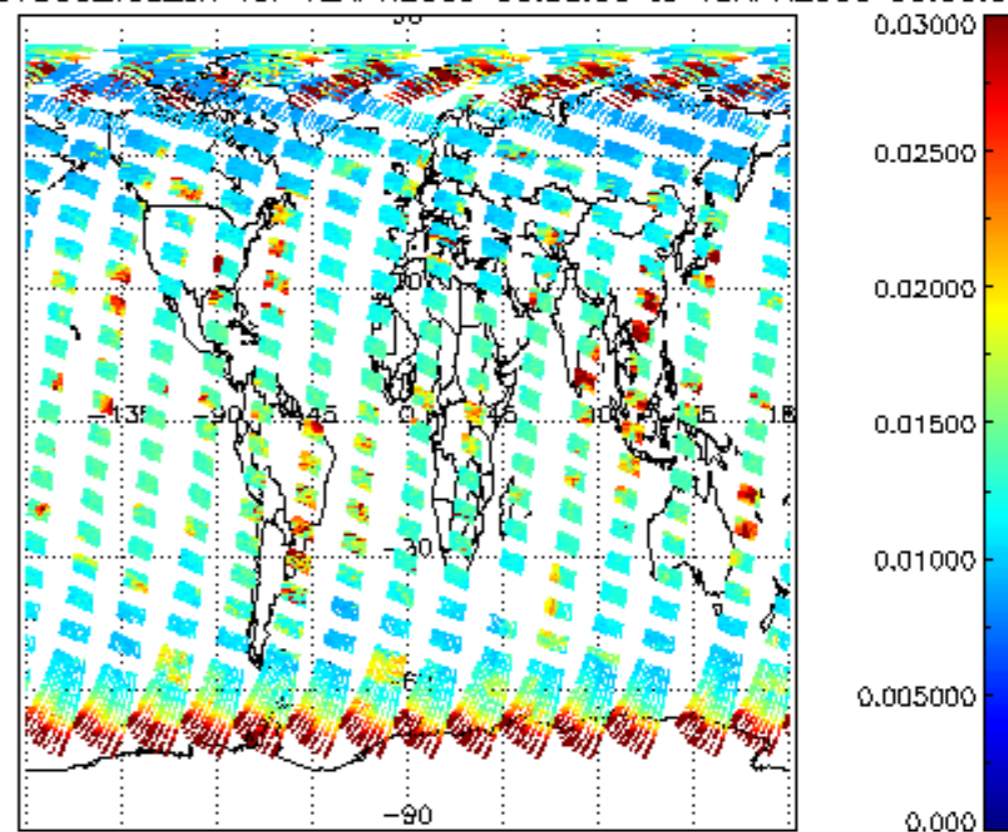




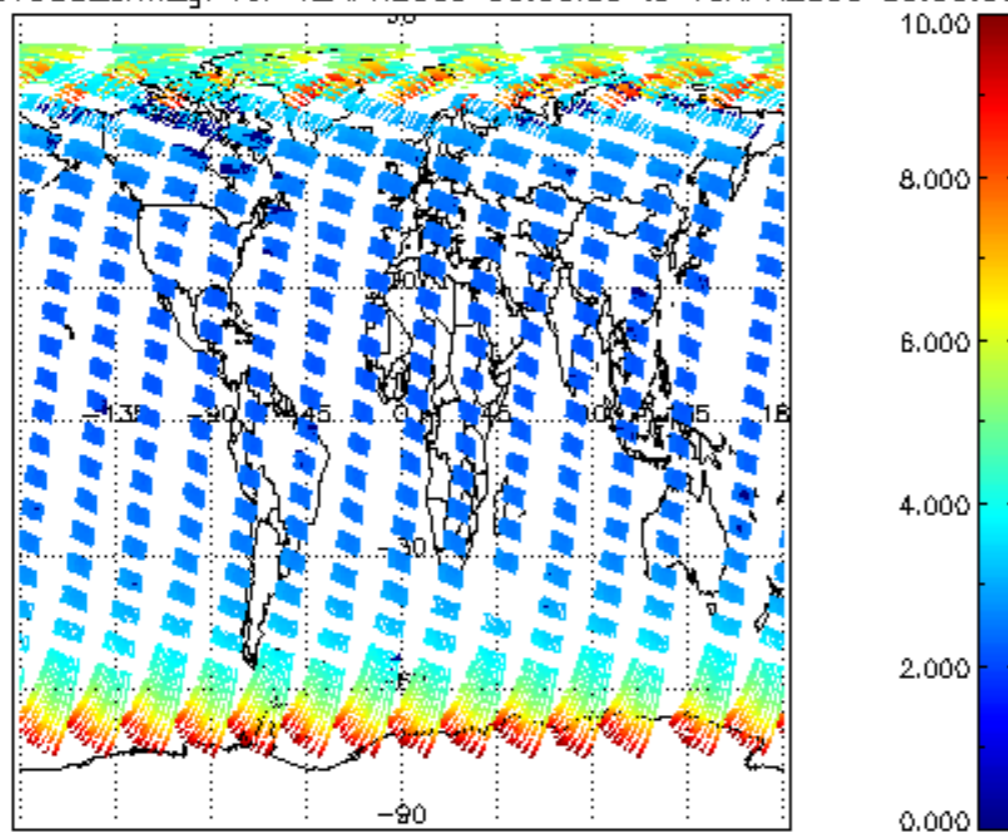
SCIOL2P_NADUV003_vcd for 12APR2009 00:00:00 to 13APR2009 00:00:00



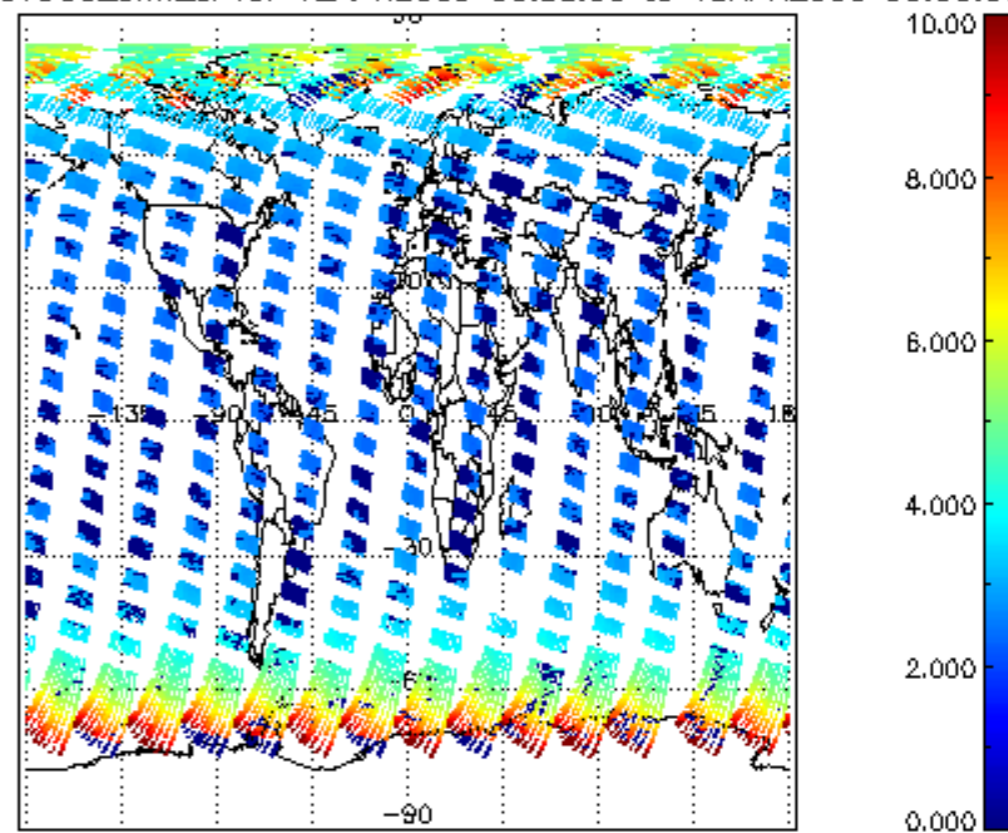
SCIOL2P_NADUV003_vcd_err for 12APR2009 00:00:00 to 13APR2009 00:00:00

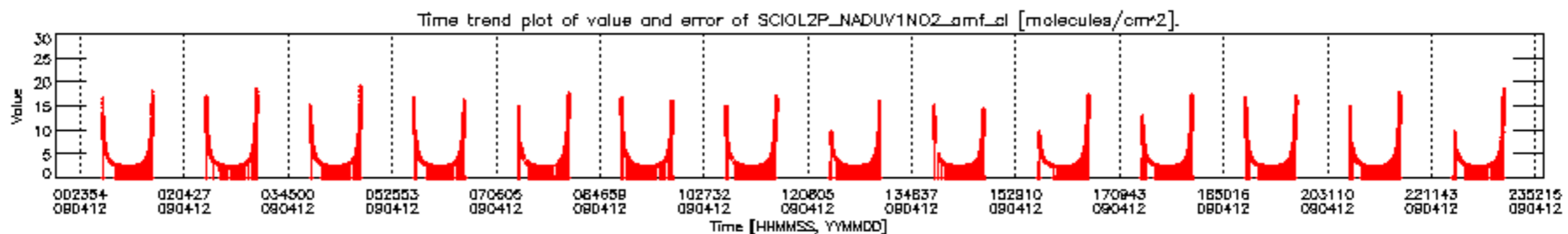
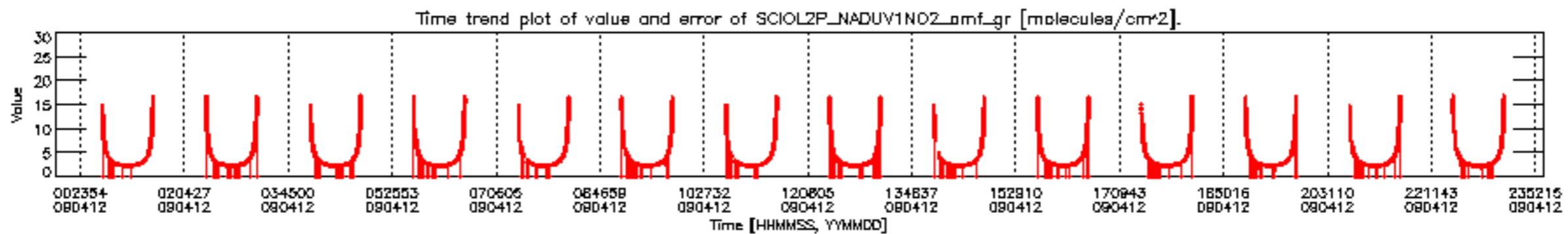
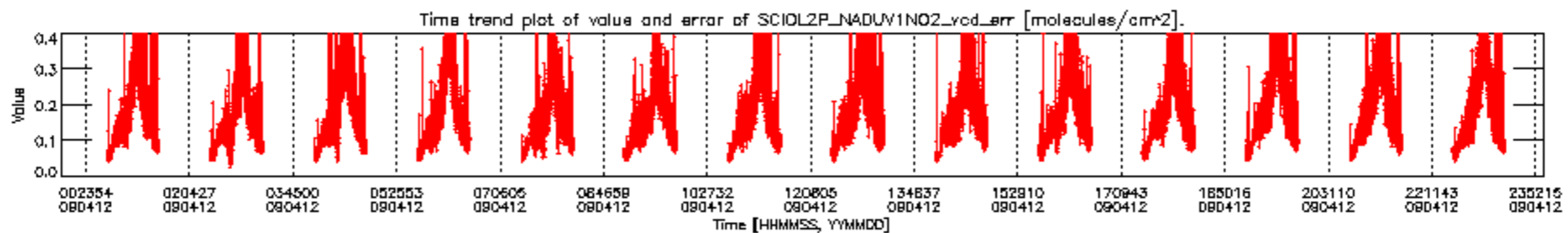
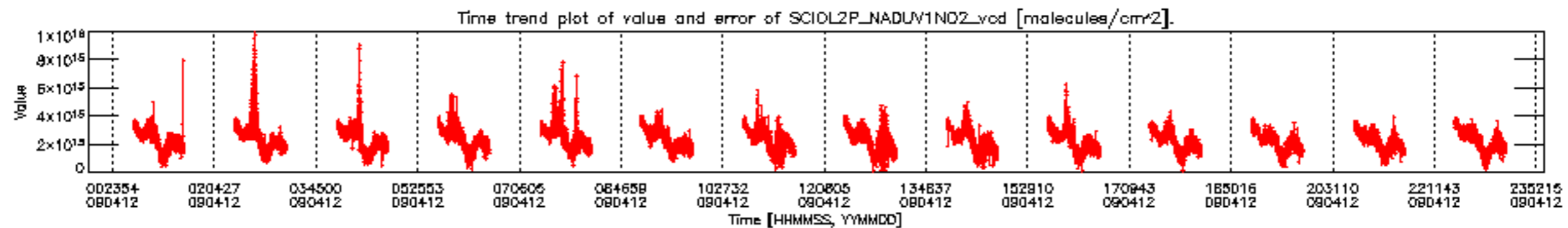


SCIOL2P_NADUV003_amf_gr for 12APR2009 00:00:00 to 13APR2009 00:00:00

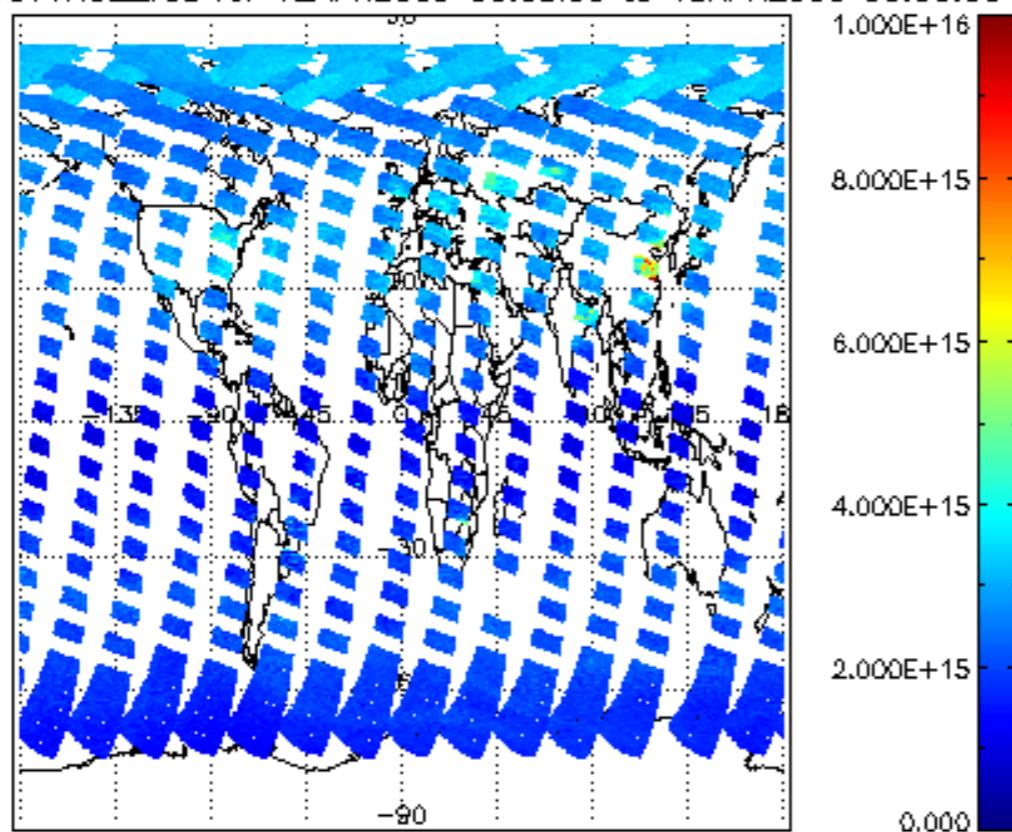


SCIOL2P_NADUV003_amf_cl for 12APR2009 00:00:00 to 13APR2009 00:00:00

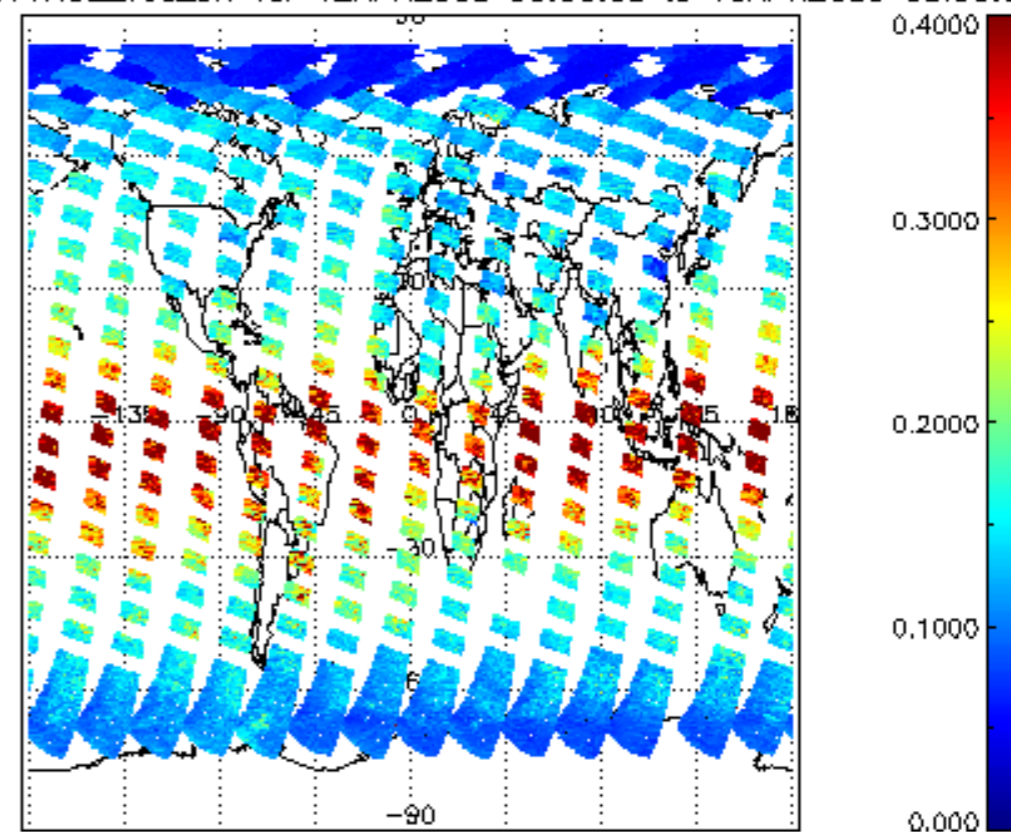




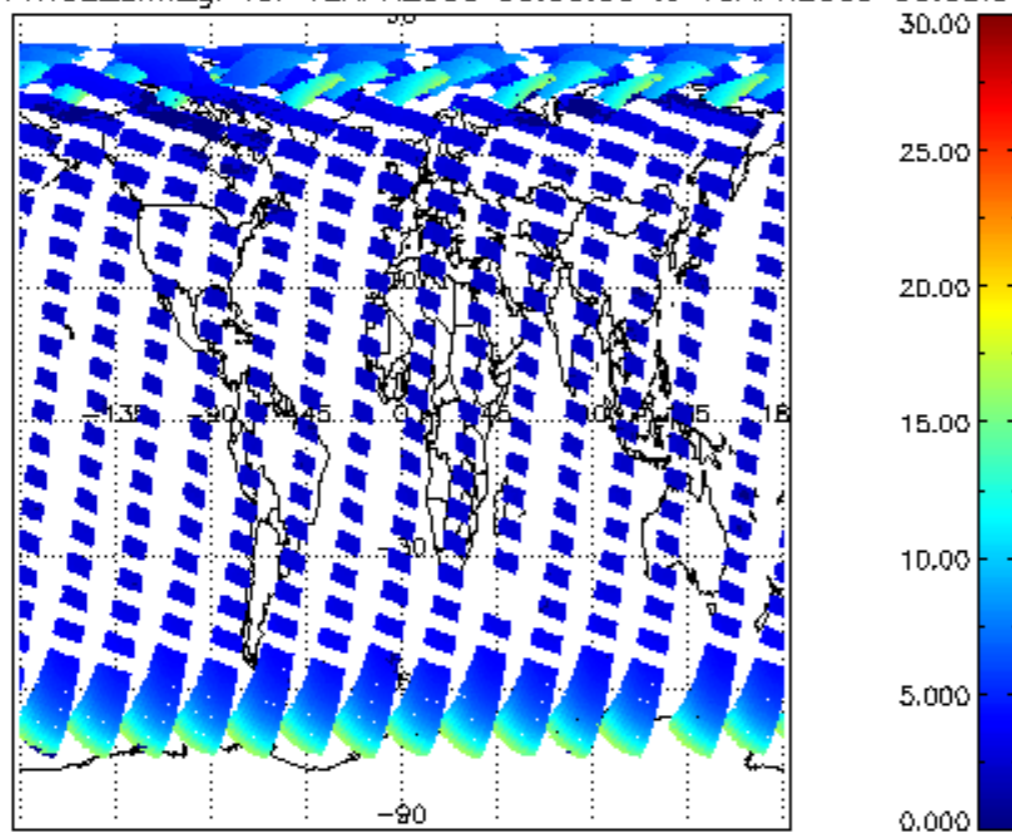
SCIOL2P_NADUV1NO2_vcd for 12APR2009 00:00:00 to 13APR2009 00:00:00



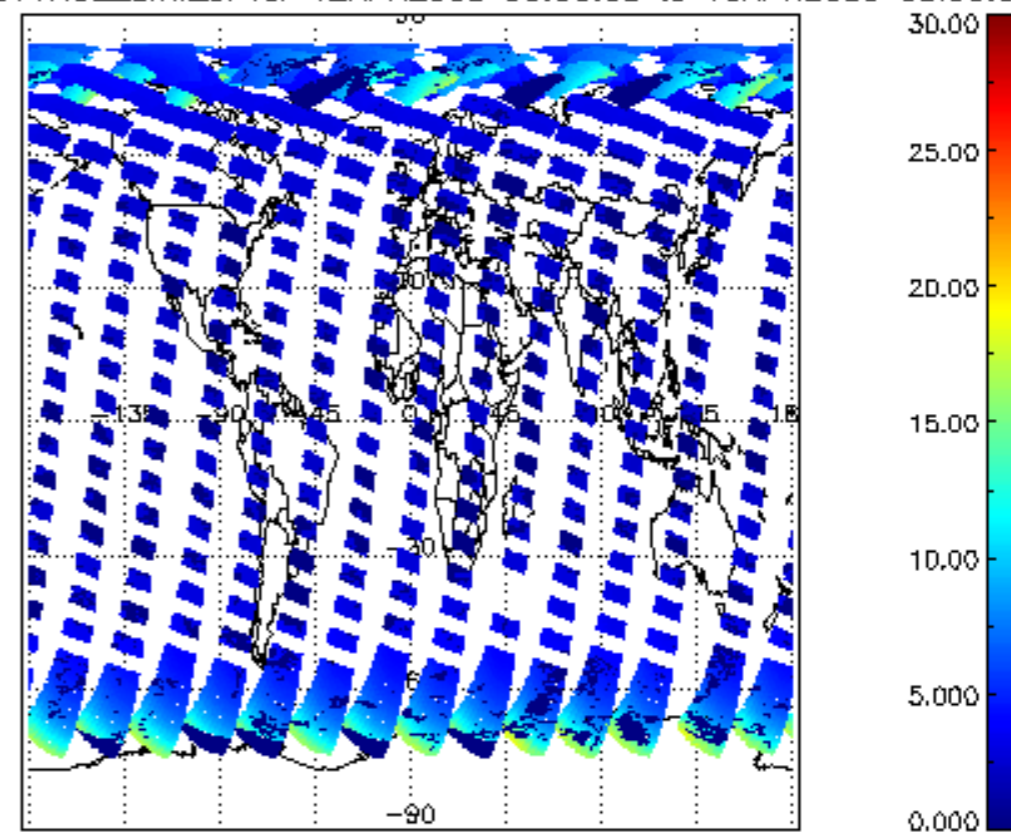
iCIOL2P_NADUV1NO2_vcd_err for 12APR2009 00:00:00 to 13APR2009 00:00:00



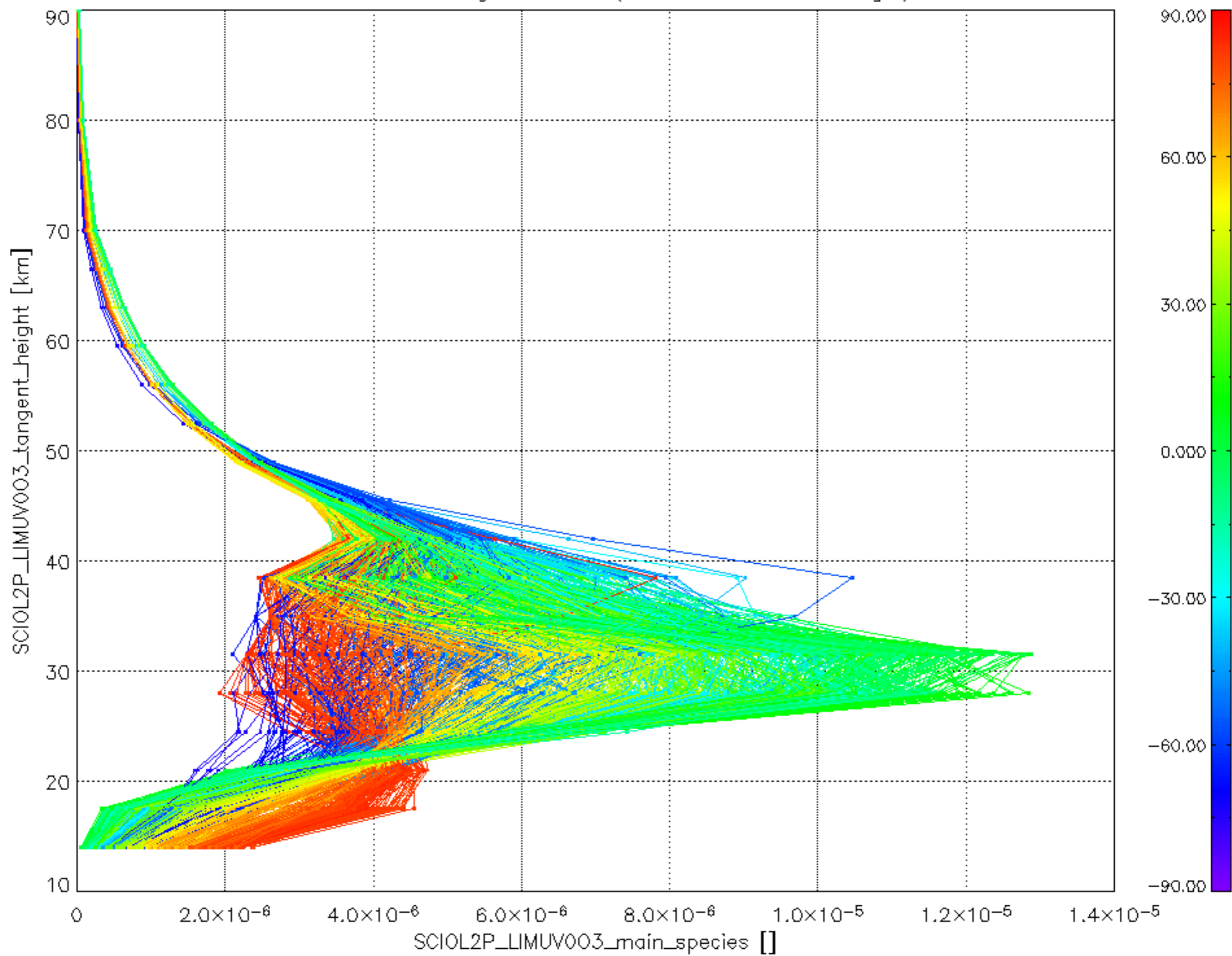
iCIOL2P_NADUV1NO2_amf_gr for 12APR2009 00:00:00 to 13APR2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 12APR2009 00:00:00 to 13APR2009 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).

