

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	07JUN2009 06:03:39
Data source version	SCIA-OL/3.01-R
Processing scope for products	20MAY2009 00:00:00 to 21MAY2009 00:00:00
Start time of first product within scope	19MAY2009 23:01:28
Stop time of last product within scope	20MAY2009 23:25:01
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__2PRDPA20090519_230128_000033122079_00116_37745_2611.N1	19MAY2009 23:01:28	19MAY2009 23:56:41	0	GOOD
1	SCI_OL__2PRDPA20090520_004204_000033252079_00117_37746_2612.N1	20MAY2009 00:42:04	20MAY2009 01:37:30	0	GOOD
2	SCI_OL__2PRDPA20090520_022240_000033122079_00118_37747_2613.N1	20MAY2009 02:22:40	20MAY2009 03:17:53	0	GOOD
3	SCI_OL__2PRDPA20090520_040315_000033252079_00119_37748_2614.N1	20MAY2009 04:03:15	20MAY2009 04:58:41	0	GOOD
4	SCI_OL__2PRDPA20090520_054351_000033122079_00120_37749_2615.N1	20MAY2009 05:43:51	20MAY2009 06:39:04	0	GOOD
5	SCI_OL__2PRDPA20090520_072427_000033252079_00121_37750_2616.N1	20MAY2009 07:24:27	20MAY2009 08:19:53	0	GOOD
6	SCI_OL__2PRDPA20090520_090503_000033122079_00122_37751_2617.N1	20MAY2009 09:05:03	20MAY2009 10:00:16	0	GOOD
7	SCI_OL__2PRDPA20090520_104538_000033252079_00123_37752_2618.N1	20MAY2009 10:45:38	20MAY2009 11:41:04	0	GOOD
8	SCI_OL__2PRDPA20090520_122614_000033122079_00124_37753_2619.N1	20MAY2009 12:26:14	20MAY2009 13:21:27	0	GOOD
9	SCI_OL__2PRDPA20090520_140650_000033252079_00125_37754_2620.N1	20MAY2009 14:06:50	20MAY2009 15:02:15	0	GOOD
10	SCI_OL__2PRDPA20090520_154725_000033122079_00126_37755_2621.N1	20MAY2009 15:47:25	20MAY2009 16:42:38	0	GOOD
11	SCI_OL__2PRDPA20090520_172748_000033042079_00127_37756_2622.N1	20MAY2009 17:27:48	20MAY2009 18:22:52	0	GOOD
12	SCI_OL__2PRDPA20090520_190756_000033682079_00128_37757_2623.N1	20MAY2009 19:07:56	20MAY2009 20:04:05	0	GOOD
13	SCI_OL__2PRDPA20090520_204913_000033252079_00129_37758_2624.N1	20MAY2009 20:49:13	20MAY2009 21:44:38	0	GOOD
14	SCI_OL__2PRDPA20090520_222948_000033122079_00130_37759_2625.N1	20MAY2009 22:29:48	20MAY2009 23:25:01	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: 141700

Total number of cloud data DSRs with good quality flag (=0): 141700 (100.0 %)

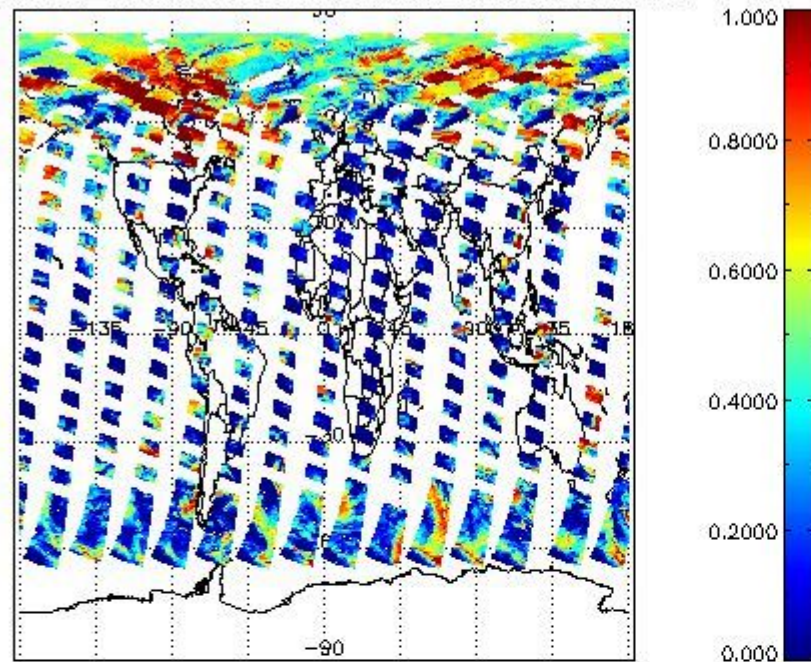
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	141700	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	141700	0.17064	0.12500	0.12500	0.25000	0.060184	s
CL_FRAC	141700	0.34927	0.30581	0.0000	1.0000	0.30474	-
CL_FRAC_ERR	141700	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	141700	5.4606	4.0000	4.0000	8.0000	1.9259	
PMD_READ_CL[0]	141700	0.29417	0.0000	0.0000	8.0000	1.2892	-
PMD_READ_CL[1]	141700	1.6509	0.0000	0.0000	8.0000	2.6886	-
CL_TOP_HEIGHT	125101	2.7438	1.1090	0.0000	17.000	3.3222	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	125101	61.779	100.00	0.0000	101.00	43.951	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	141700	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	141700	11001011	11000100	11000000	11100000	3514.8	flags
AERO_ABSO_IND	141700	3.8757	4.5257	-0.70359	15.981	2.5381	
AERO_IND_DIAG	141700	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	141700	01011000	00000000	00000000	11000000	24504.	flags

Time and geolocation plots:

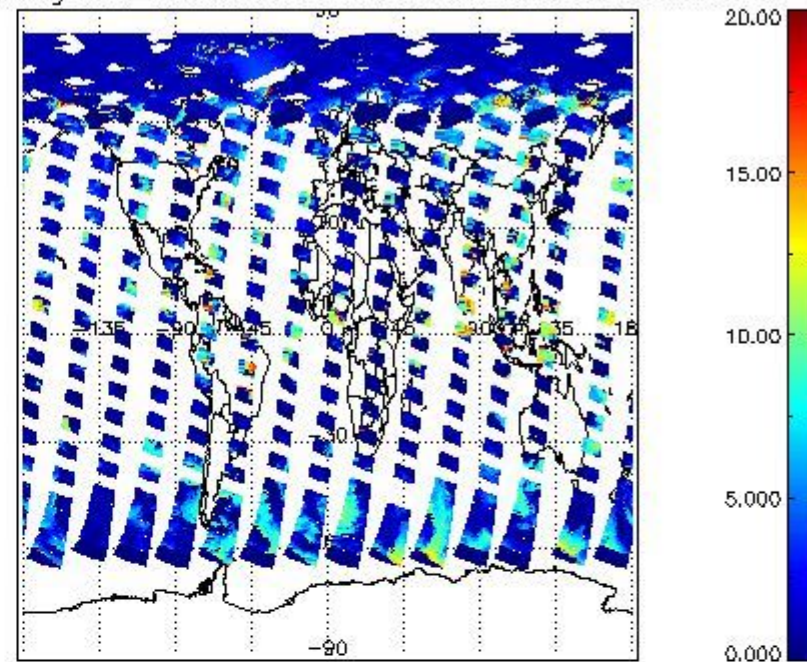
Plots are available for the following parameters:

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

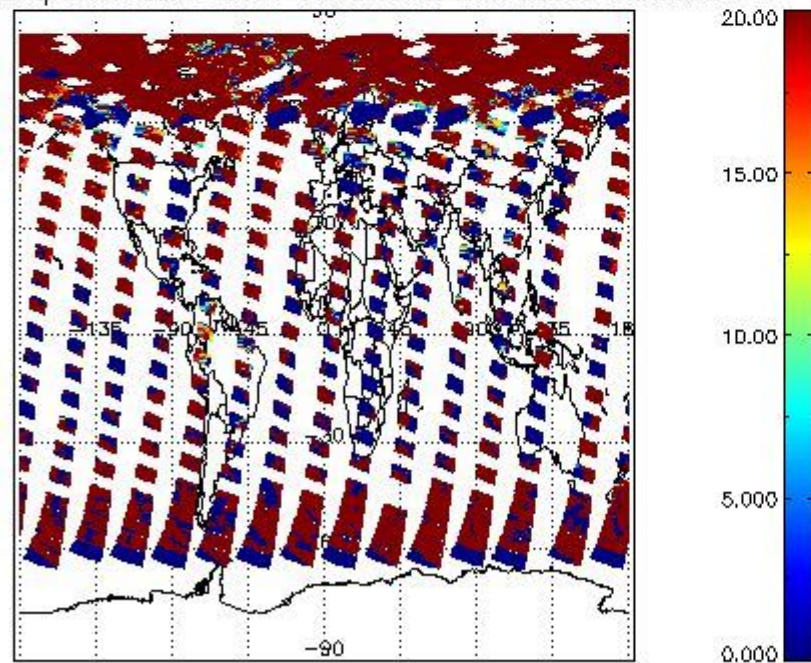
cL_frac for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



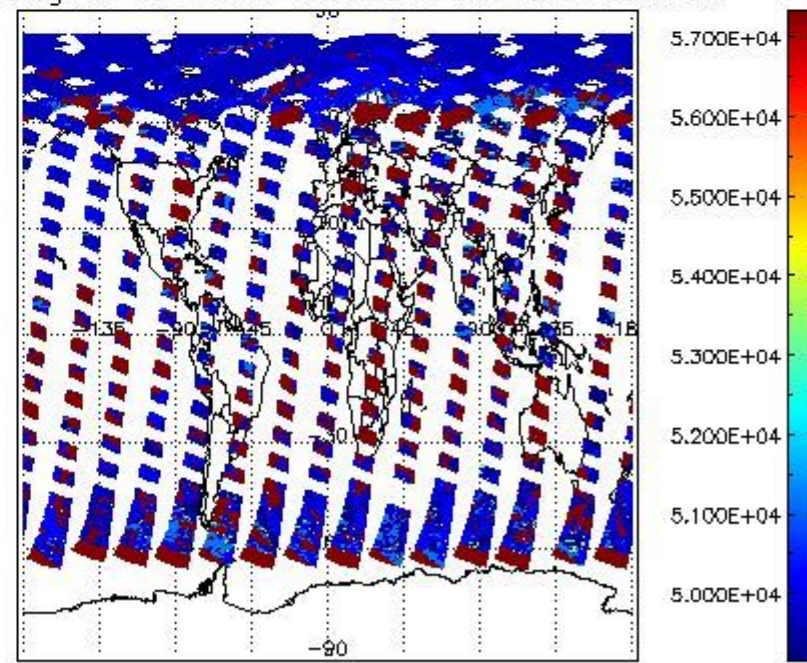
cL_top_height for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



cL_opt_depth for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



cloud_flags for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



2.2.2 Nadir

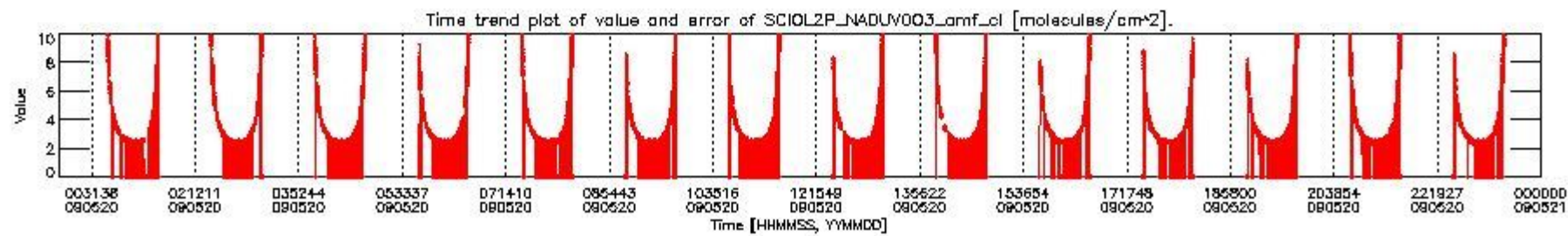
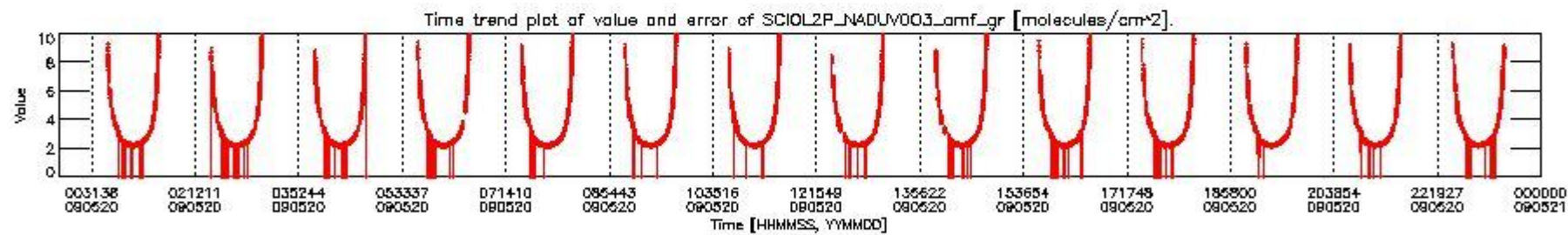
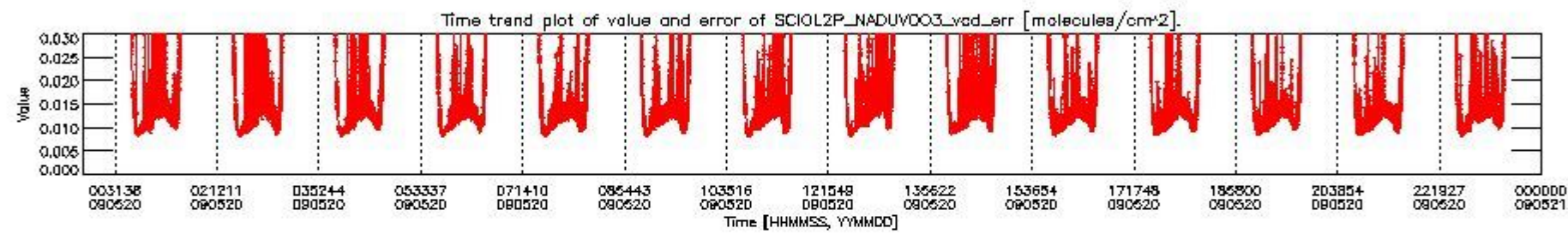
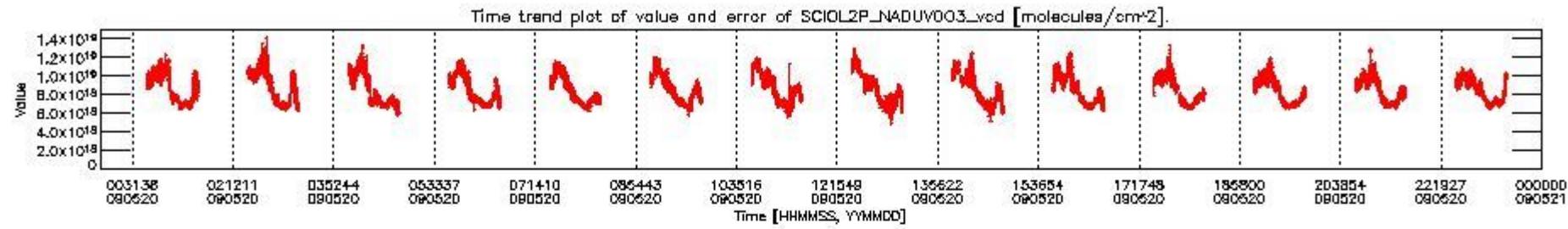
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

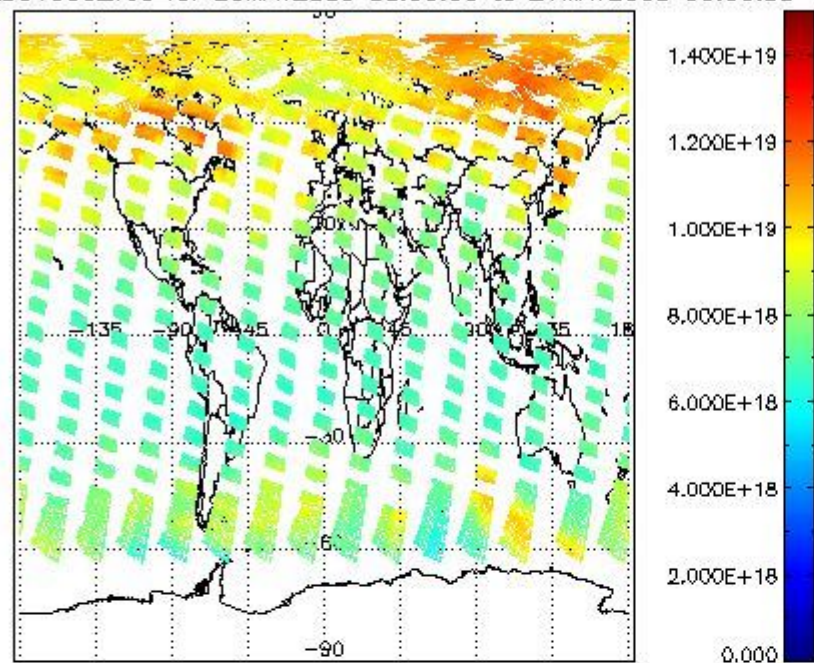
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

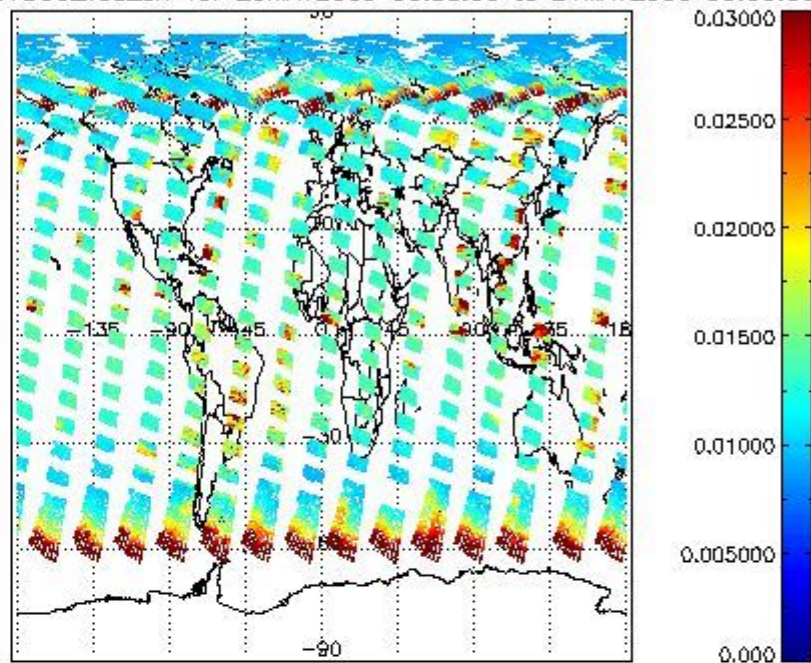
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



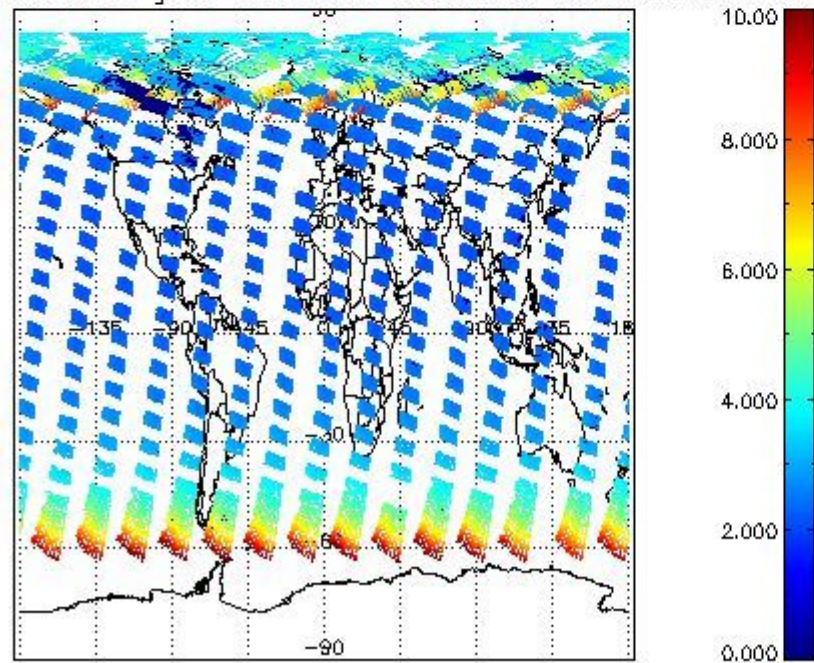
SCIOL2P_NADUV003_vcd for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



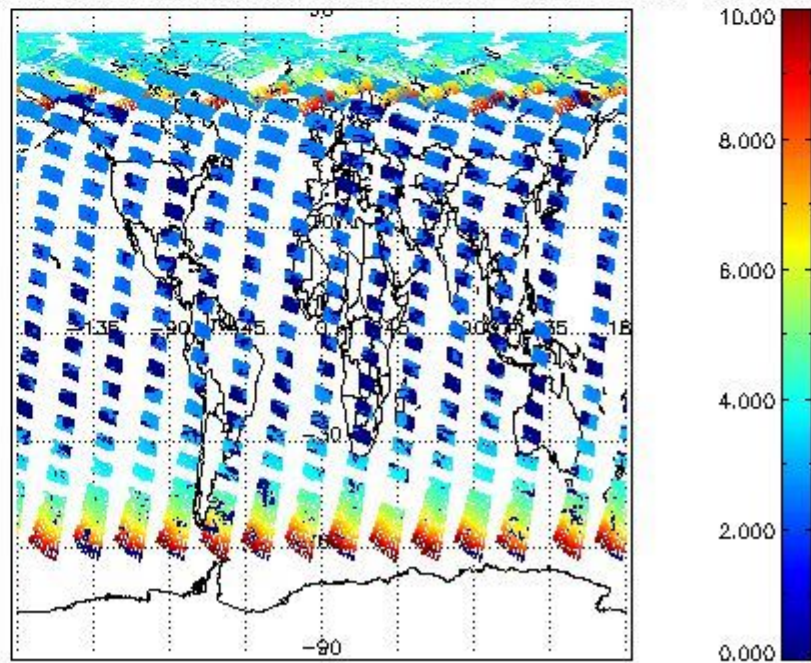
SCIOL2P_NADUV003_vcd_err for 20MAY2009 00:00:00 to 21MAY2009 00:00:00

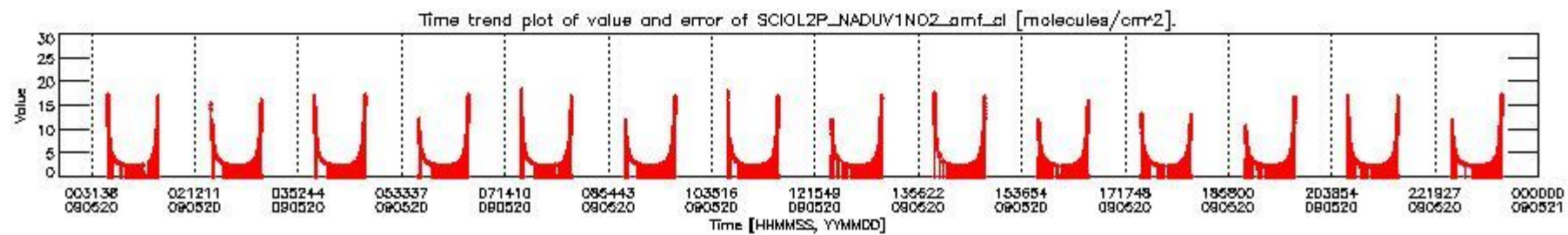
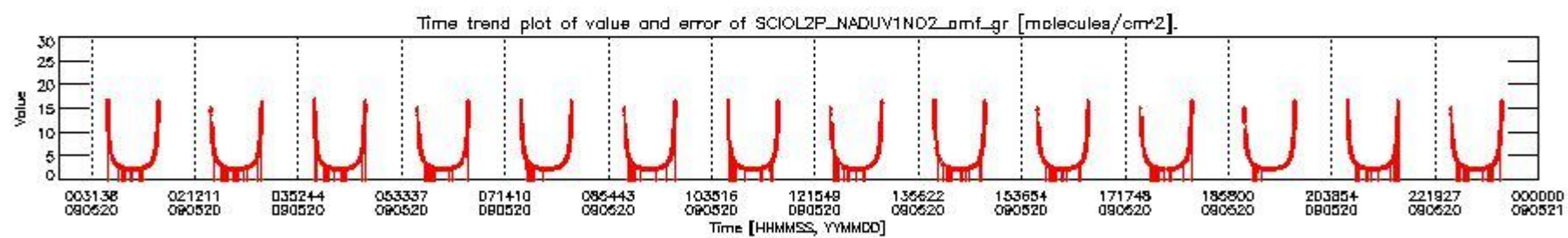
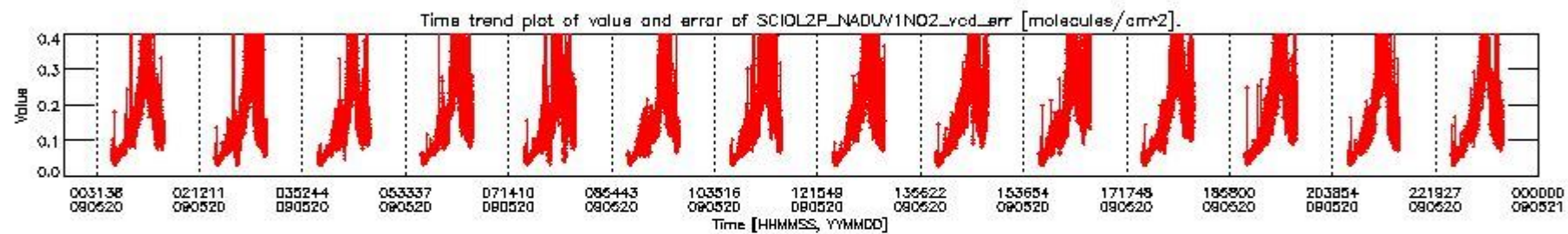
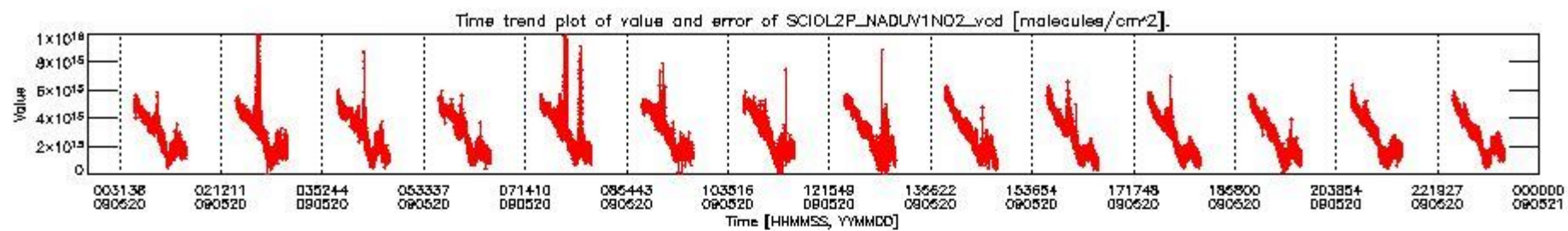


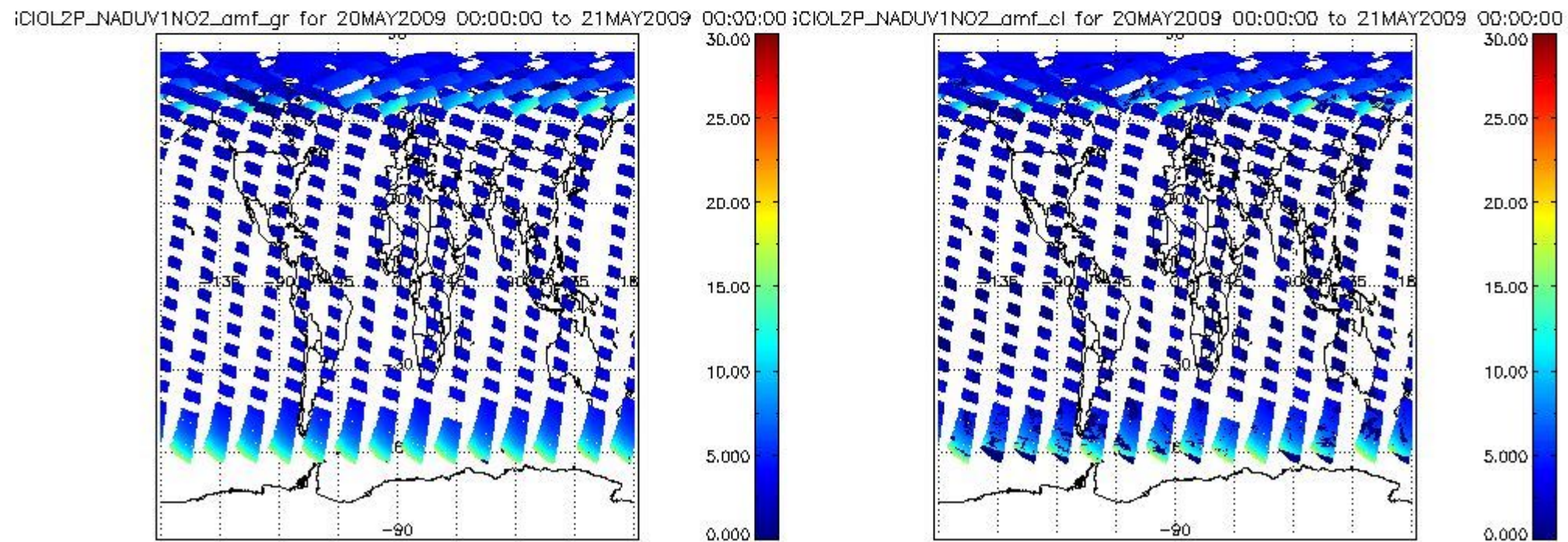
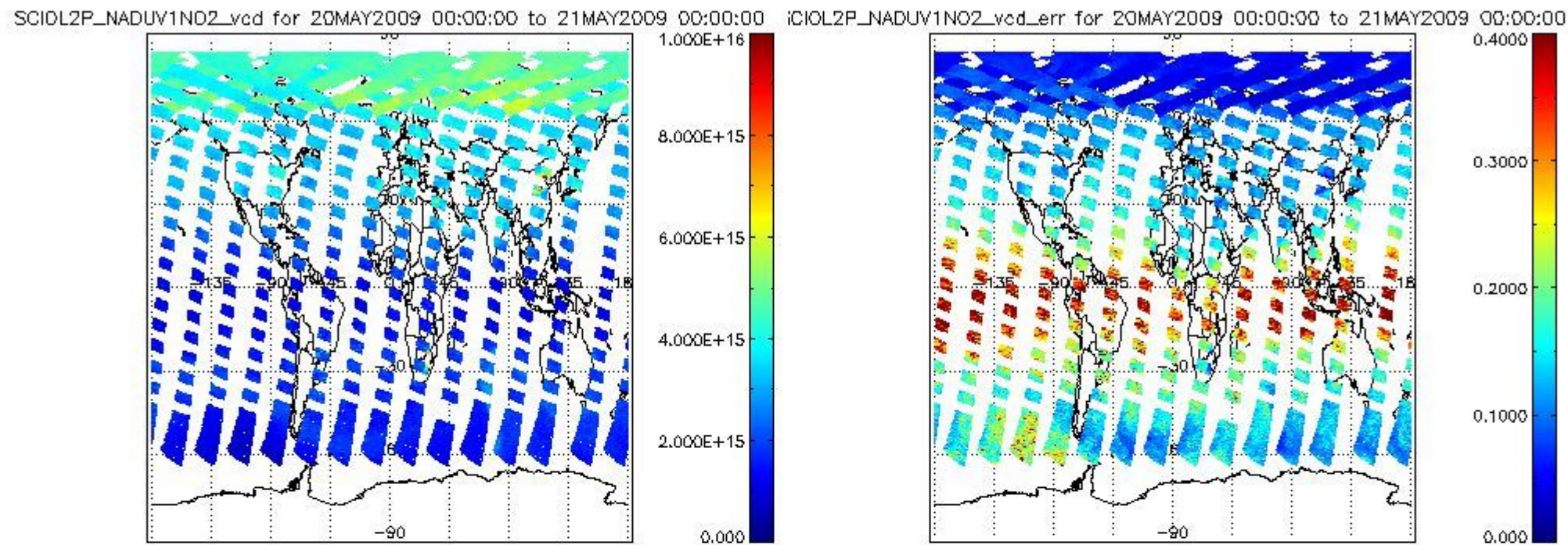
SCIOL2P_NADUV003_amf_gr for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 20MAY2009 00:00:00 to 21MAY2009 00:00:00







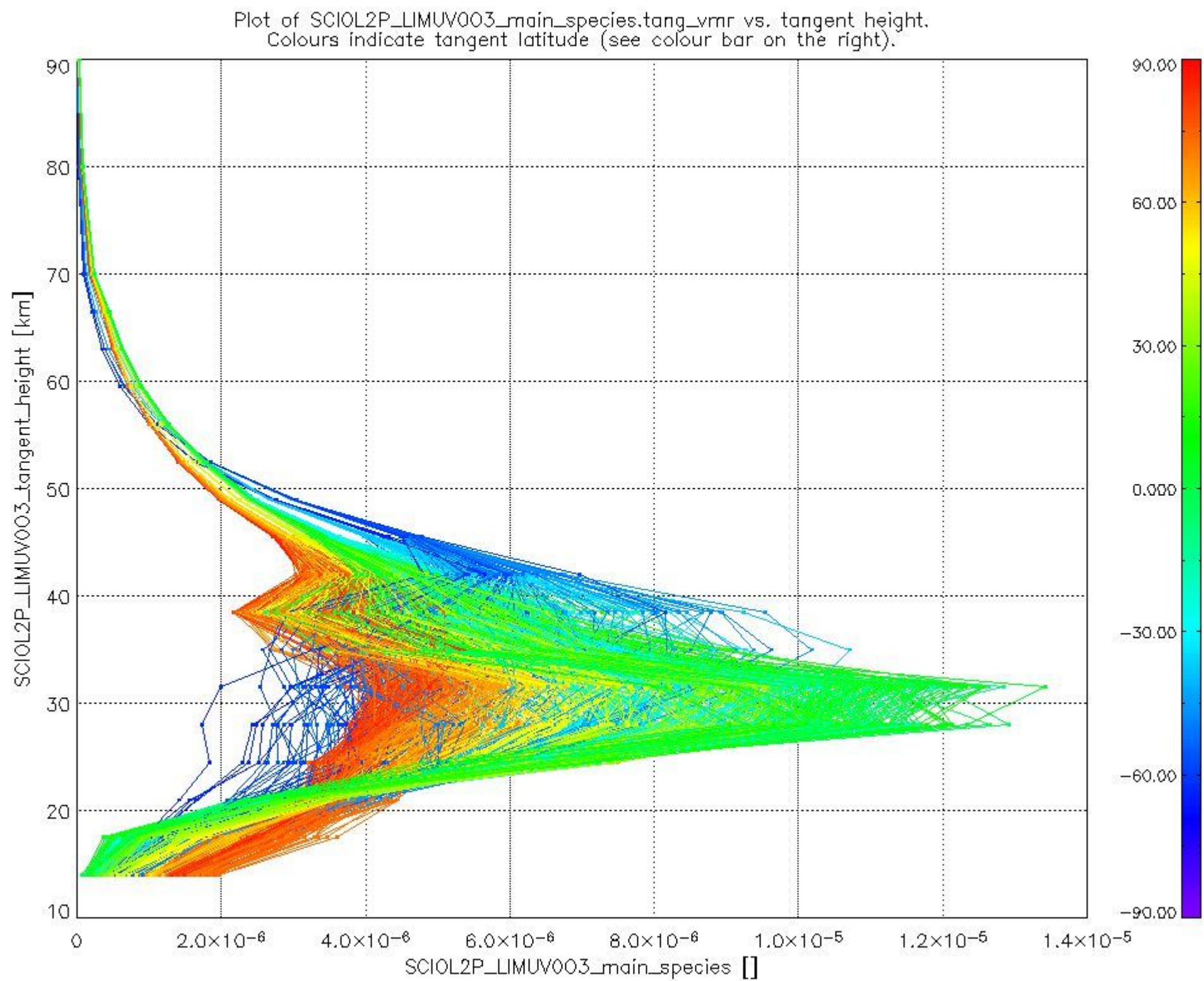
2.2.3 Limb

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

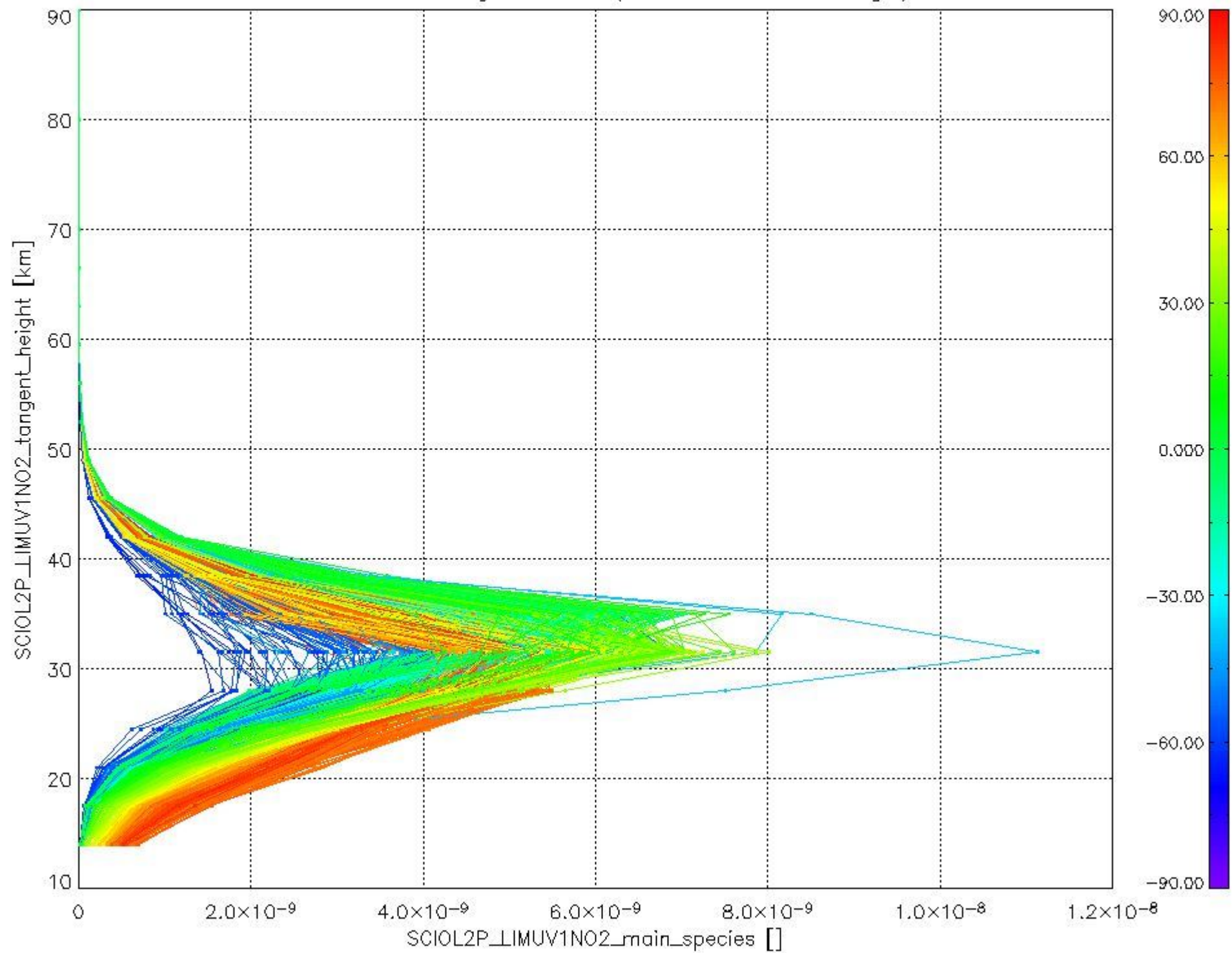
The following data items are currently included into this section:

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.



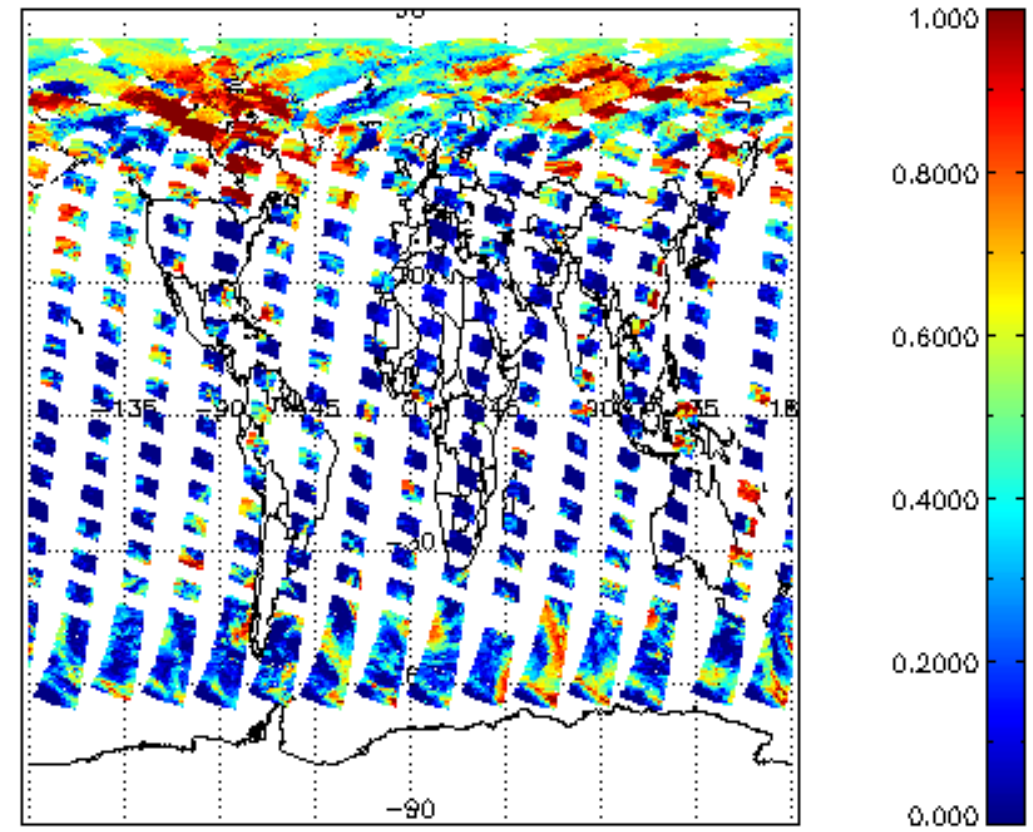
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



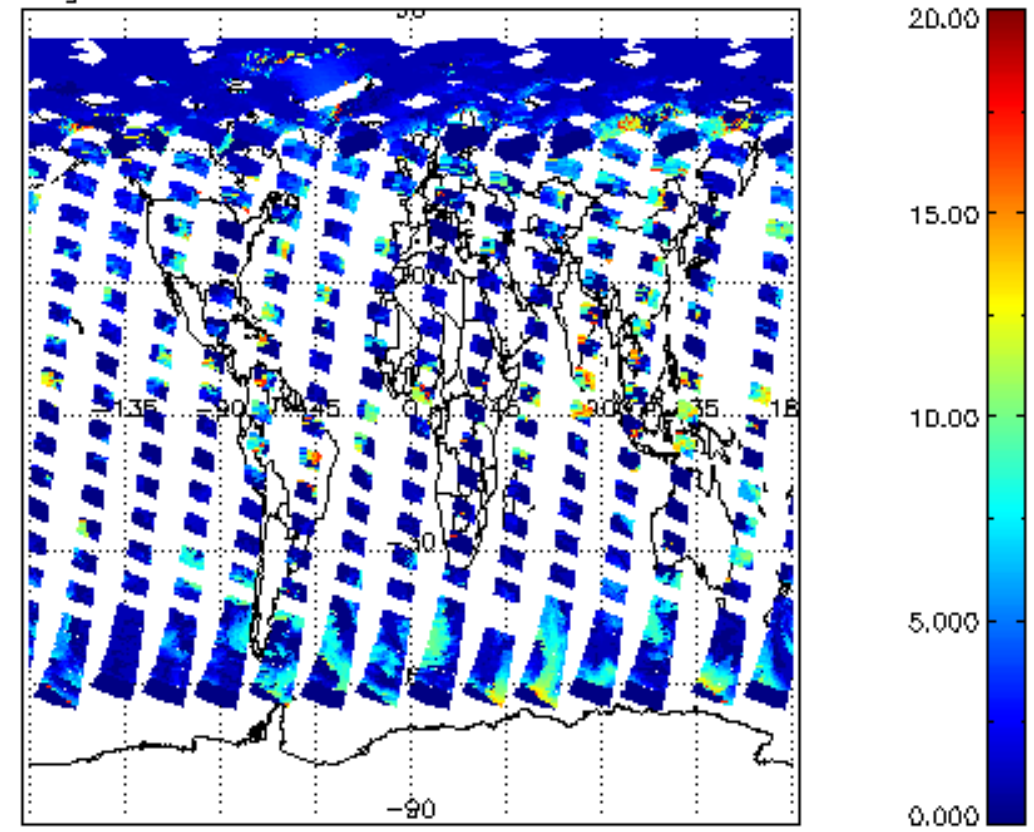
2.3 ADF monitoring

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

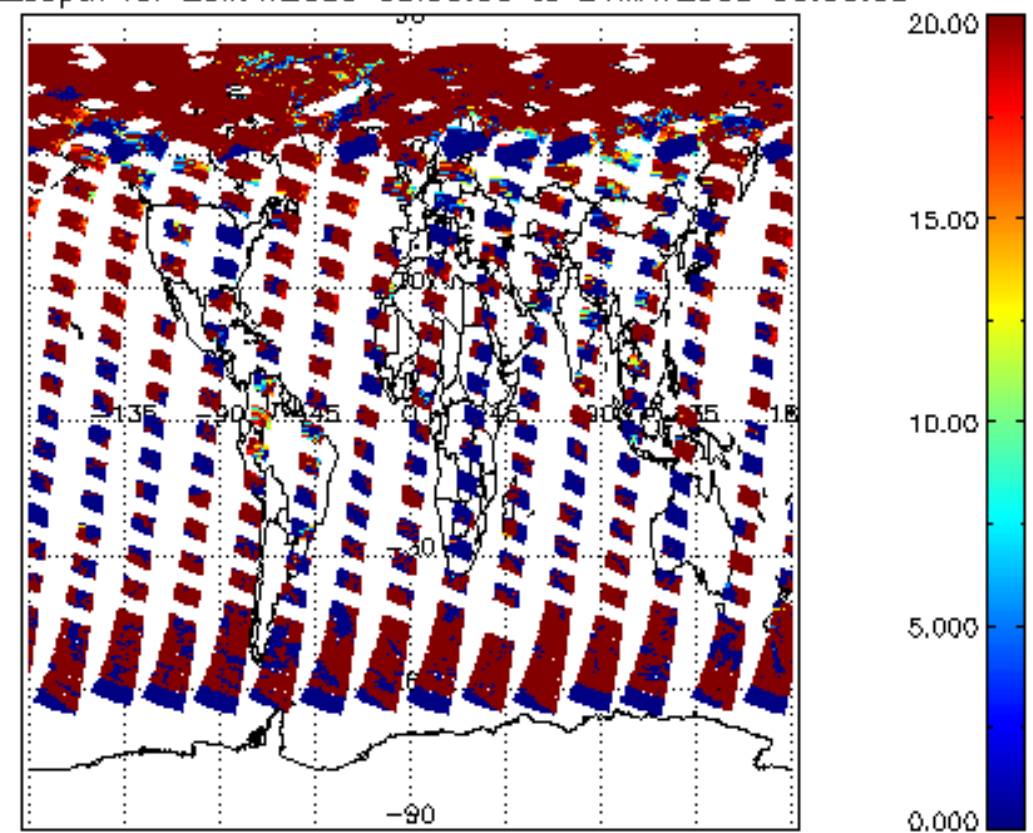
cl_frac for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



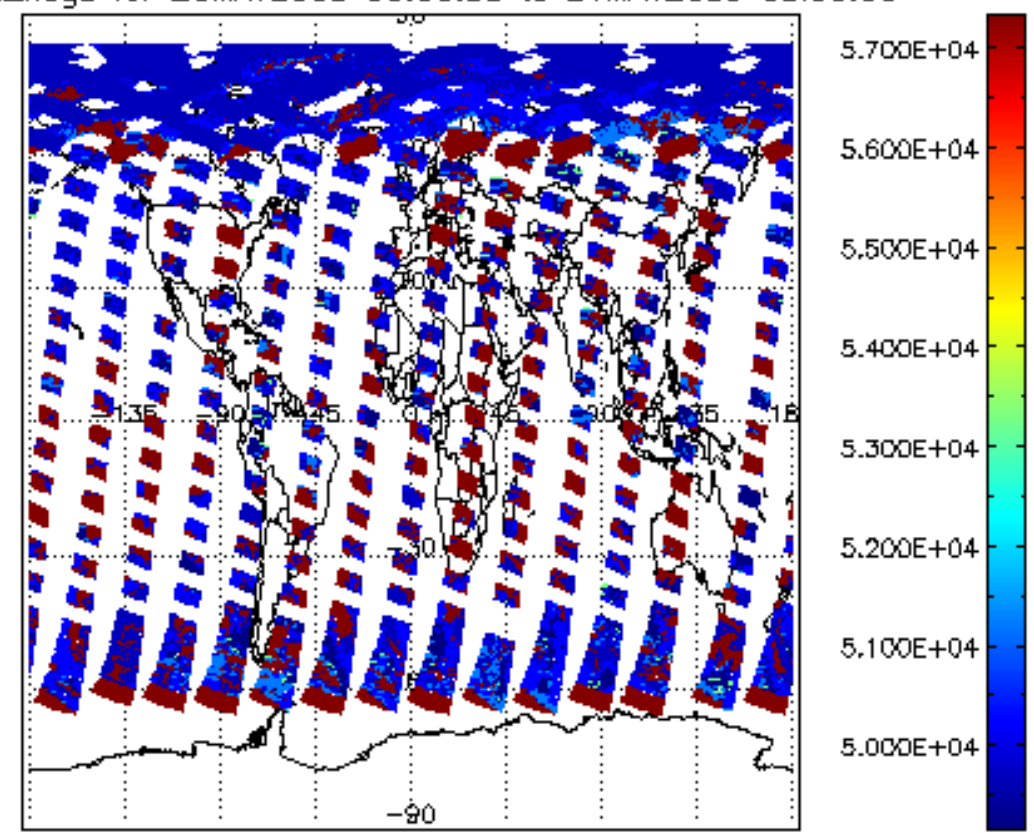
cl_top_height for 20MAY2009 00:00:00 to 21MAY2009 00:00:00

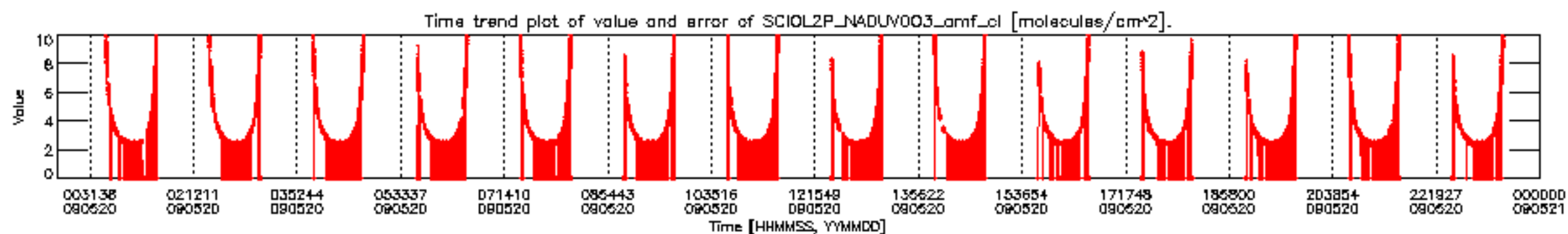
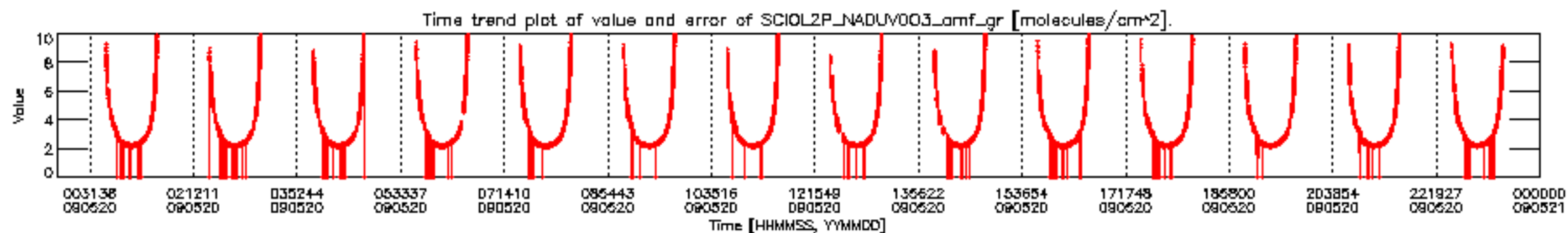
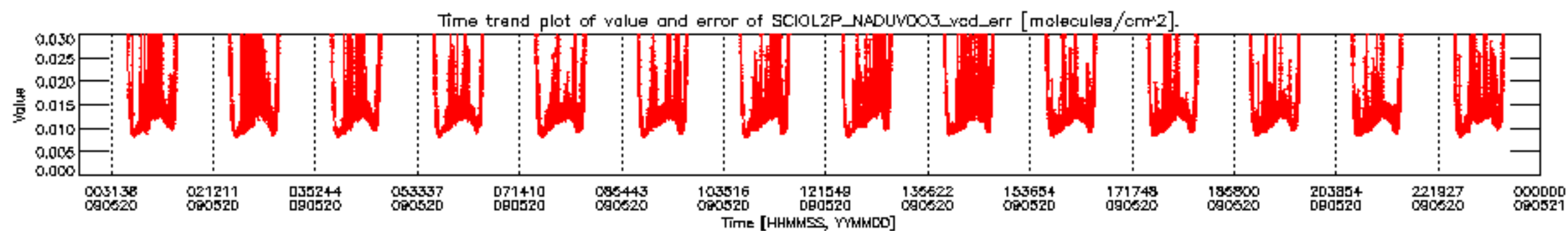
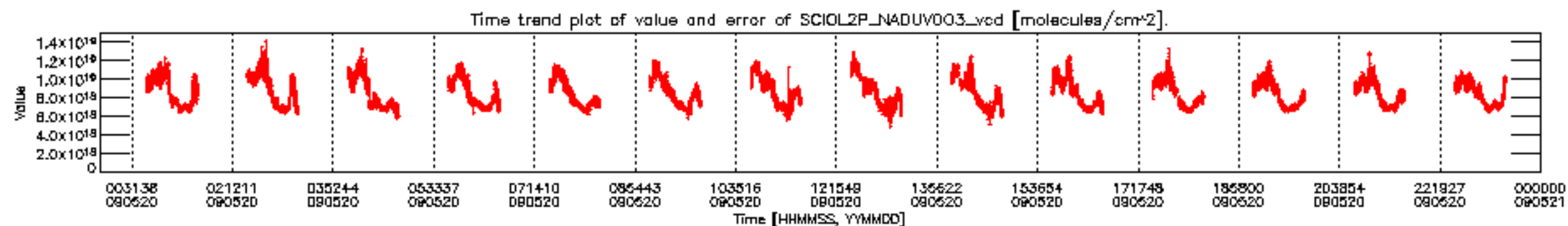


cl_opt_depth for 20MAY2009 00:00:00 to 21MAY2009 00:00:00

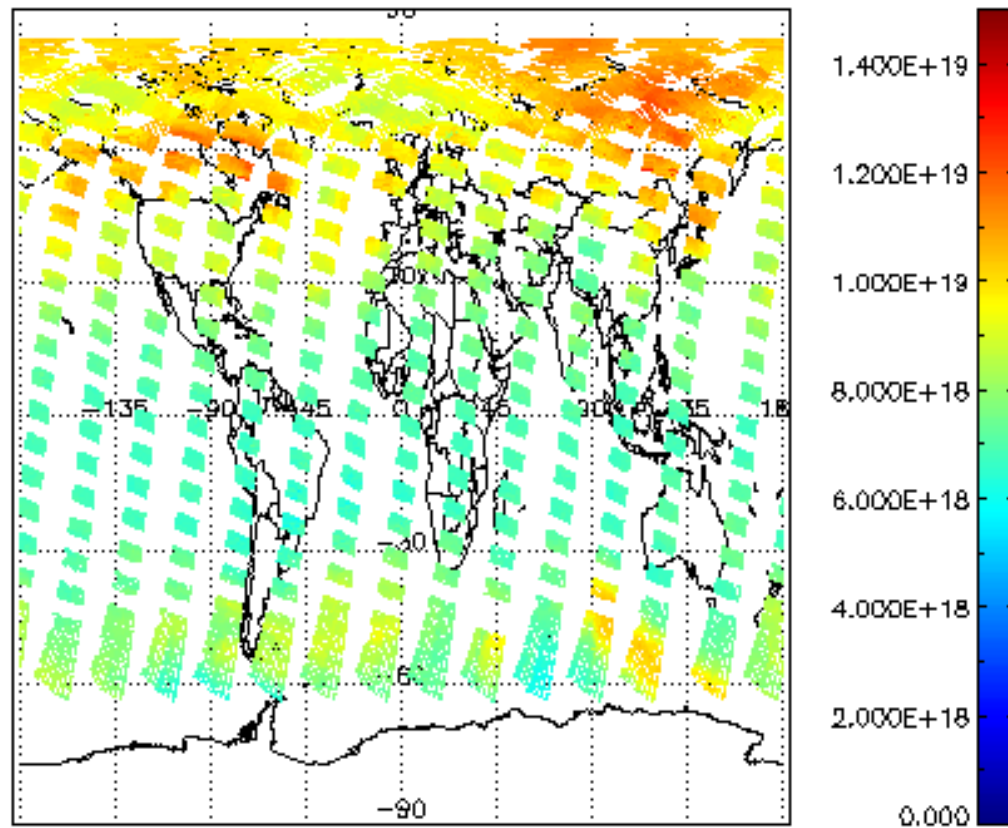


cloud_flags for 20MAY2009 00:00:00 to 21MAY2009 00:00:00

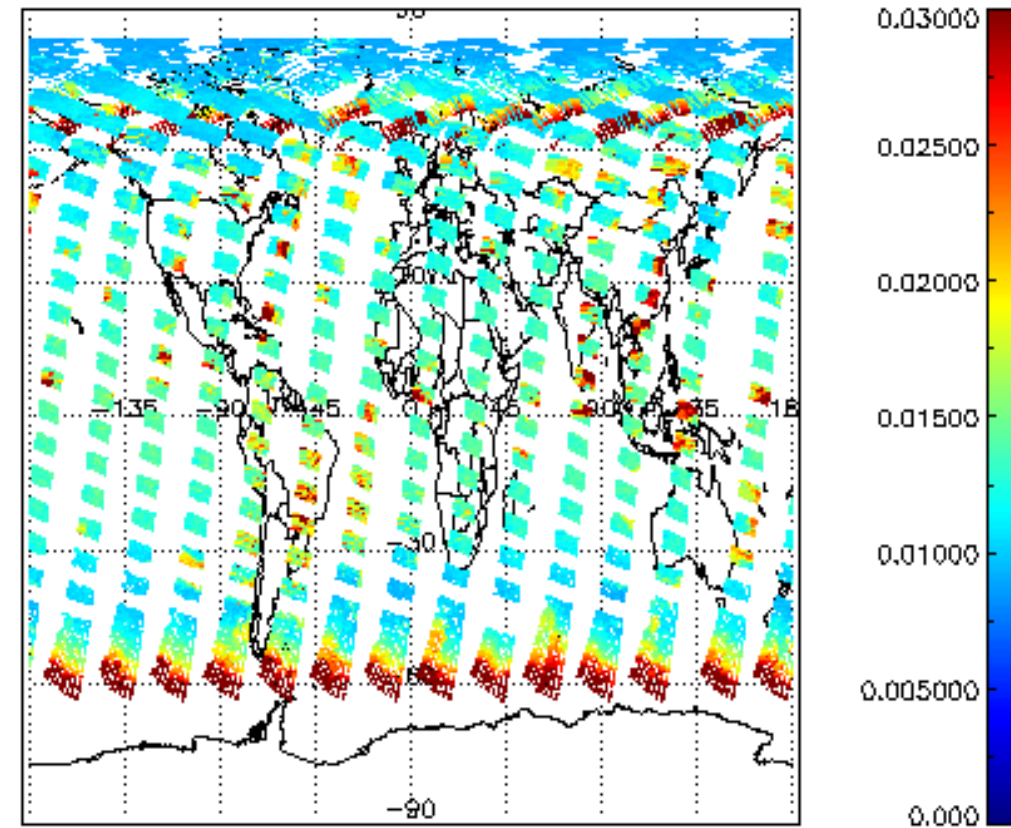




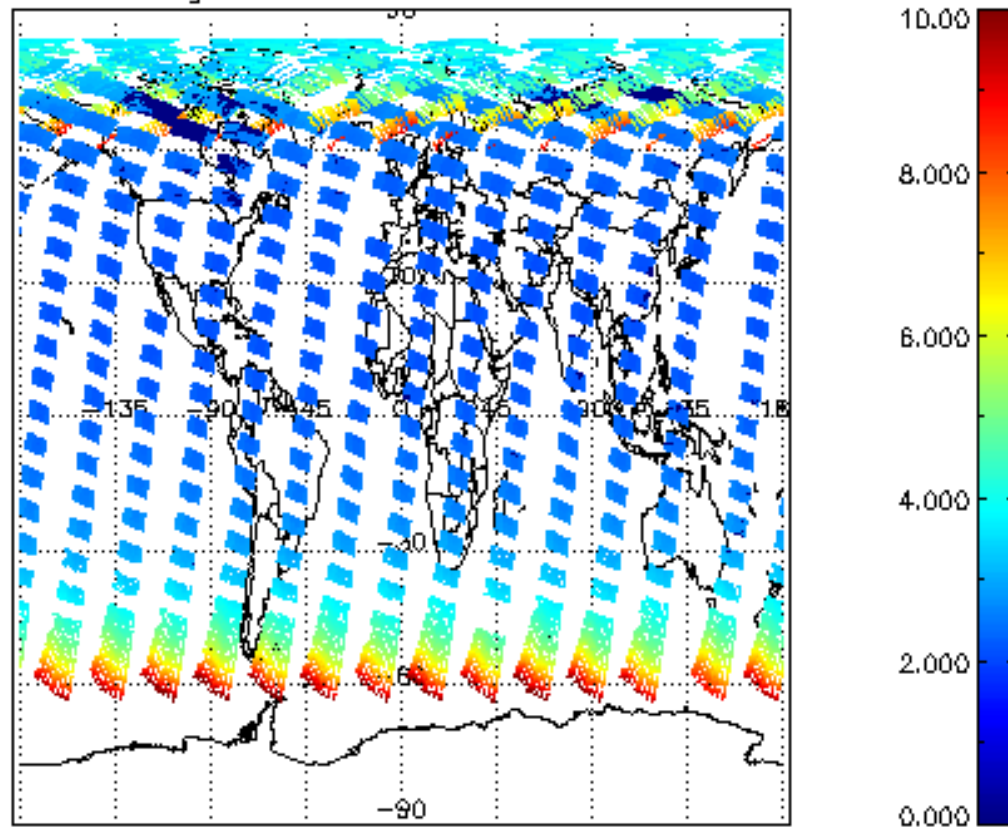
SCIOL2P_NADUV003_vcd for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



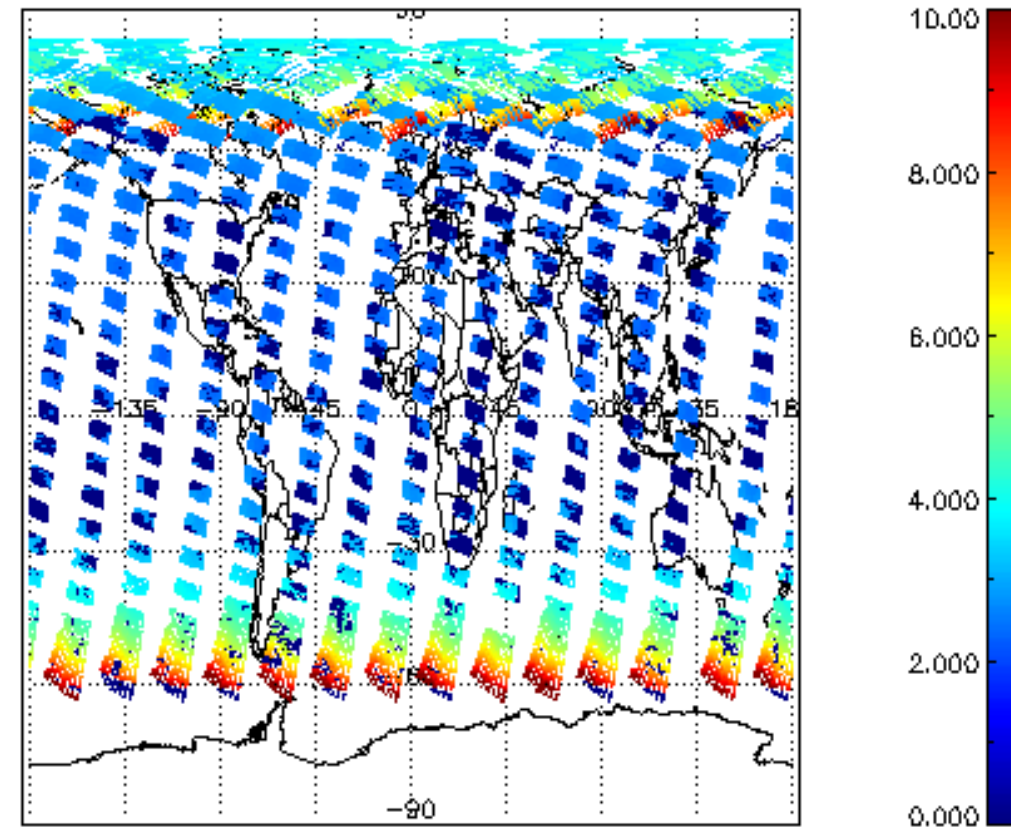
SCIOL2P_NADUV003_vcd_err for 20MAY2009 00:00:00 to 21MAY2009 00:00:00

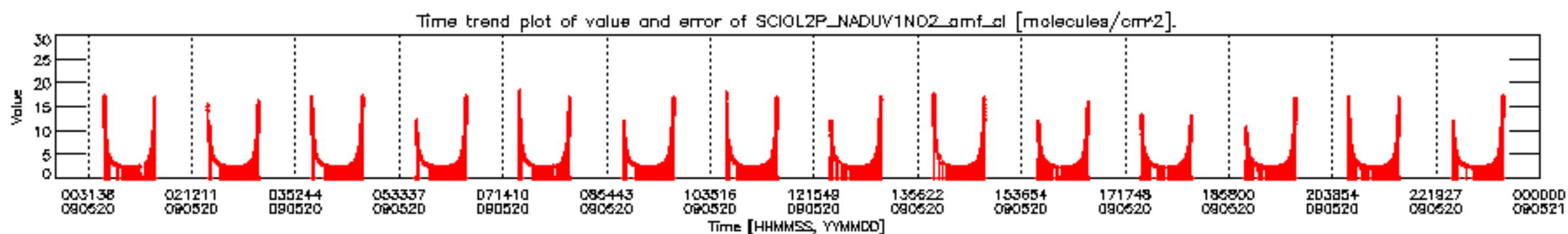
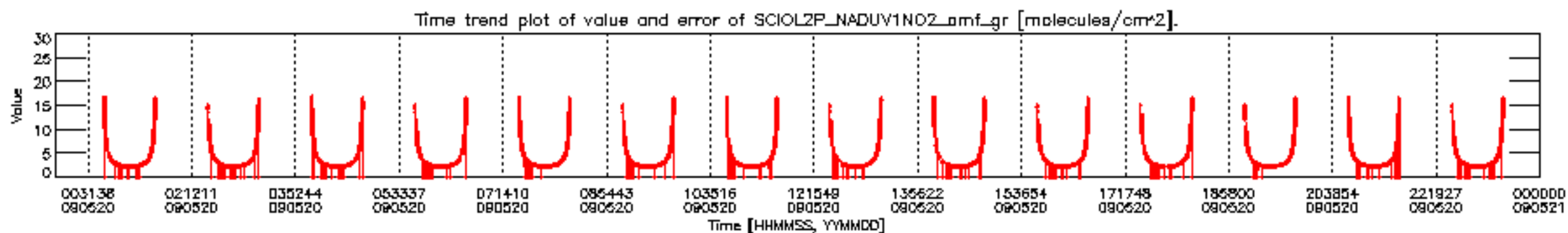
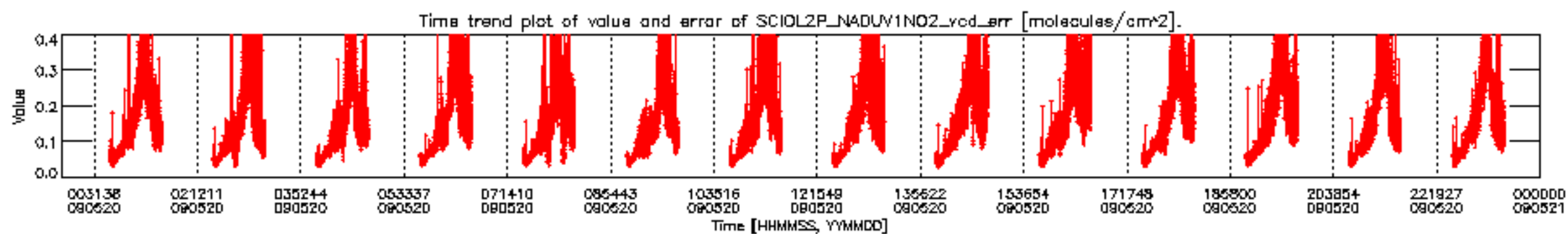
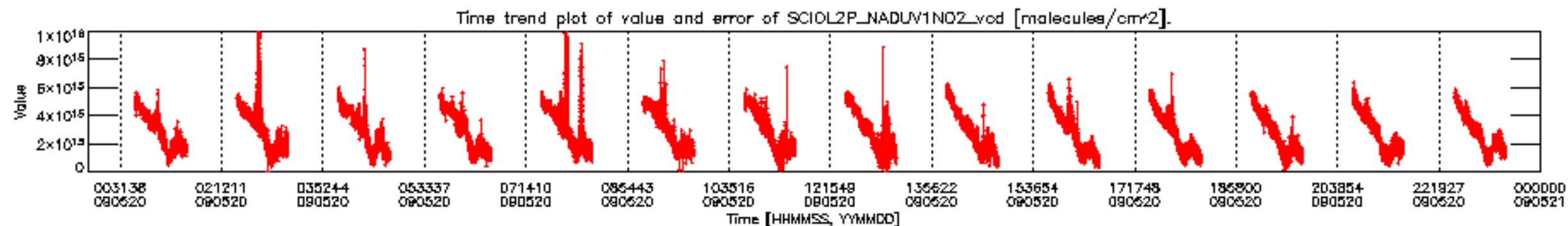


SCIOL2P_NADUV003_amf_gr for 20MAY2009 00:00:00 to 21MAY2009 00:00:00

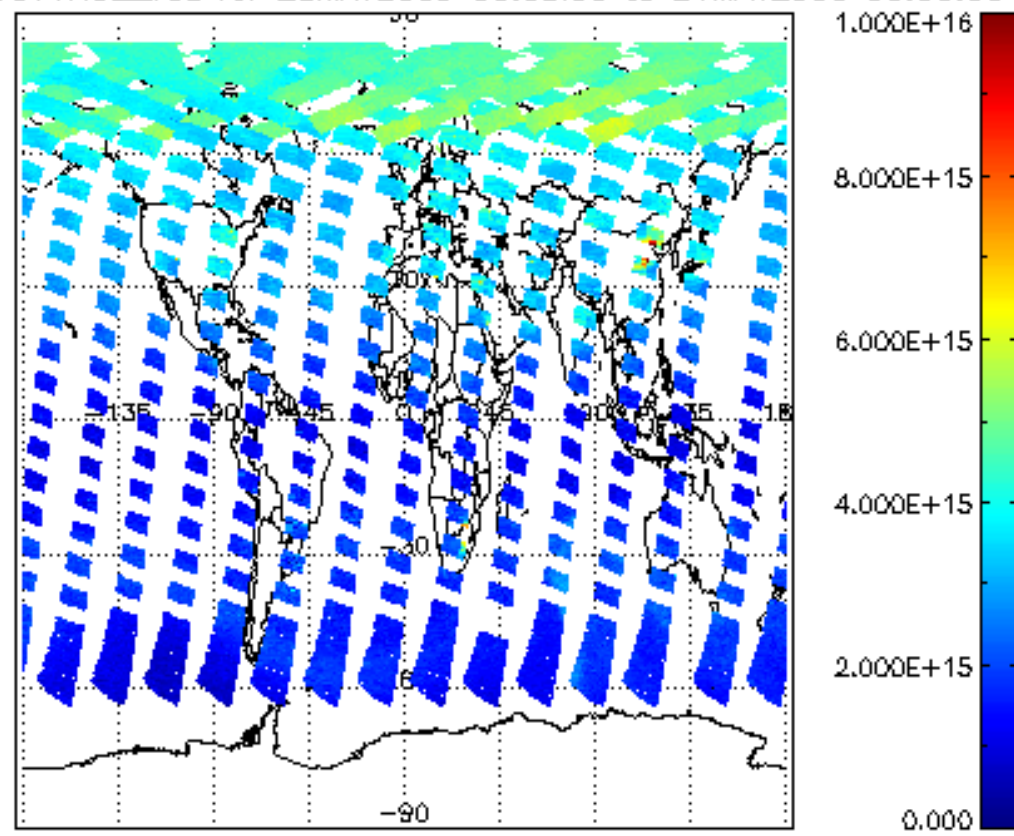


SCIOL2P_NADUV003_amf_cl for 20MAY2009 00:00:00 to 21MAY2009 00:00:00

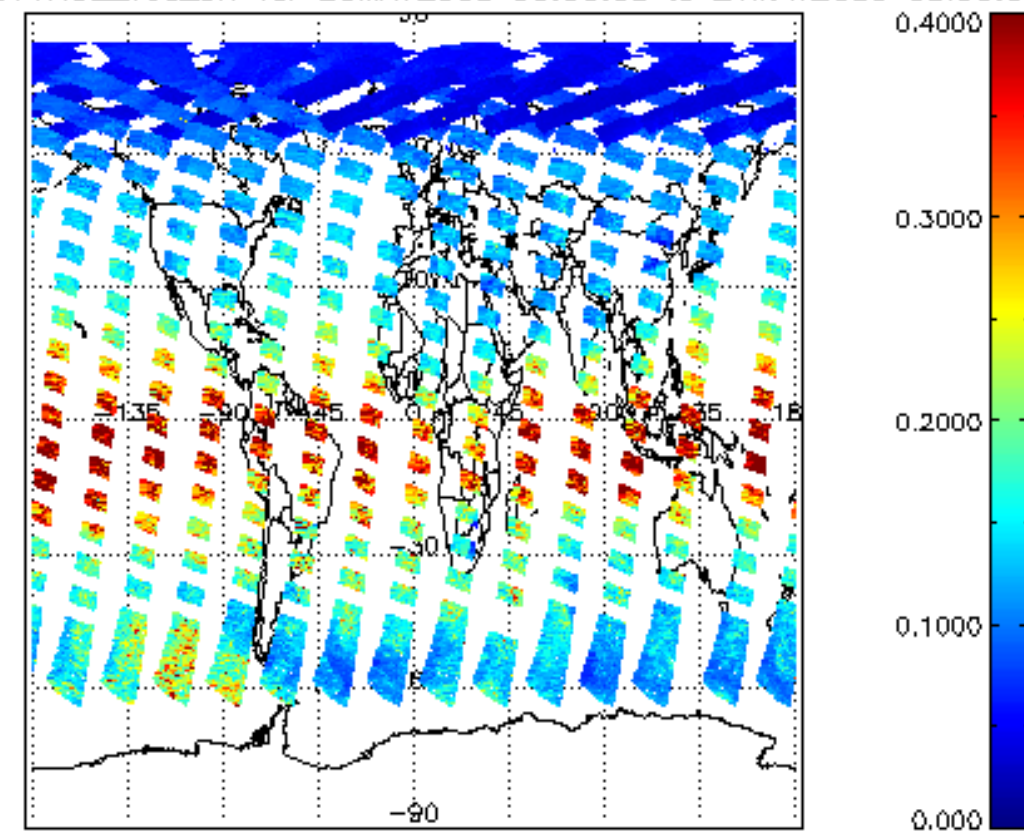




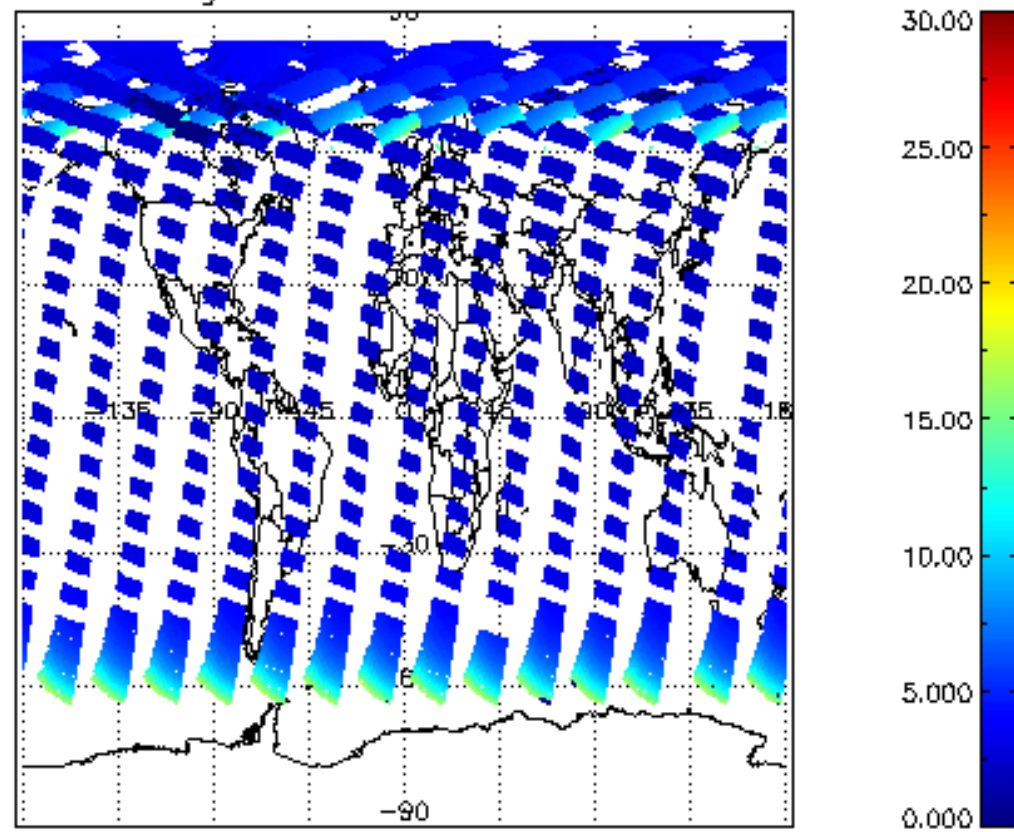
SCIOL2P_NADUV1NO2_vcd for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



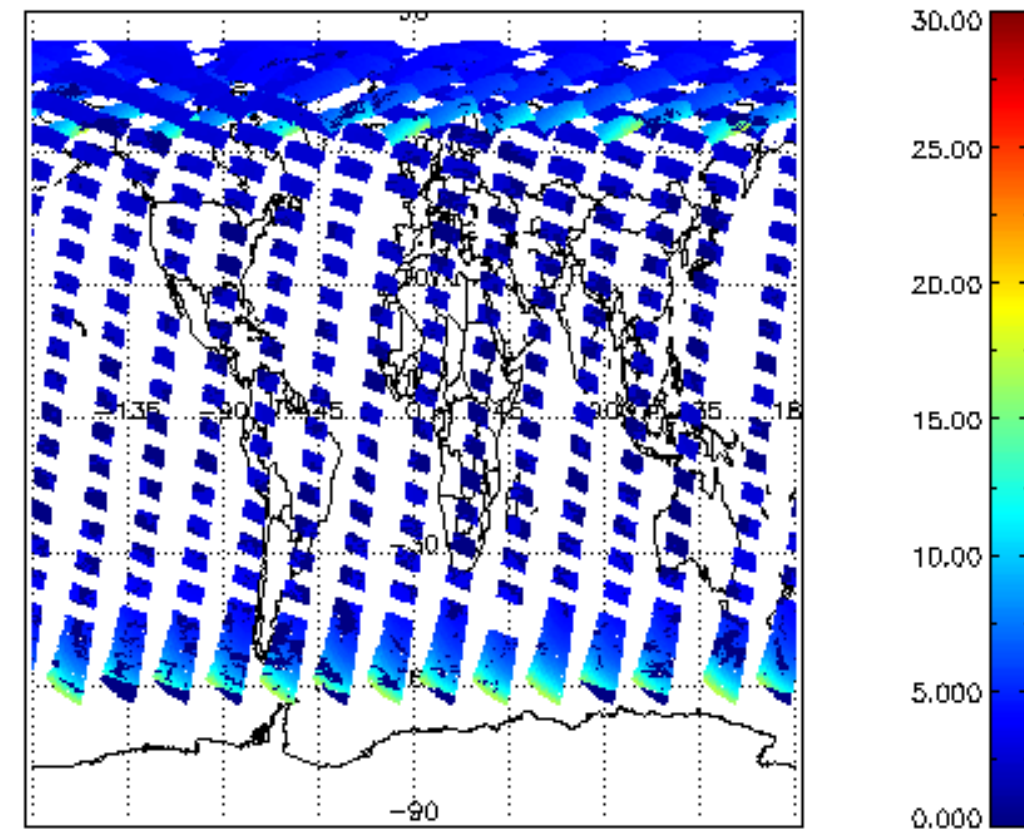
iCIOL2P_NADUV1NO2_vcd_err for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



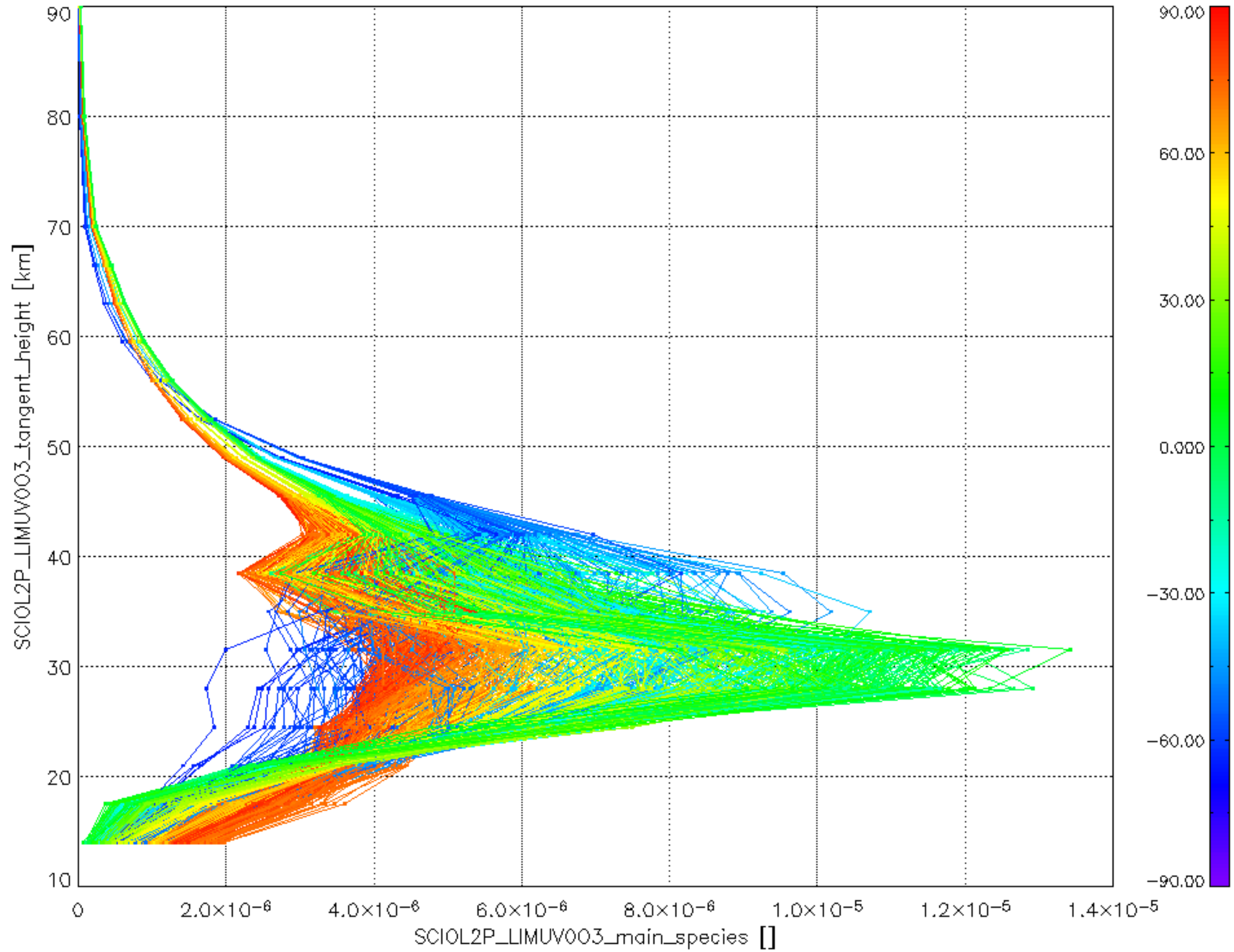
iCIOL2P_NADUV1NO2_amf_gr for 20MAY2009 00:00:00 to 21MAY2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 20MAY2009 00:00:00 to 21MAY2009 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).

