

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	12FEB2009 10:48:37
Data source version	SCIA-OL/3.01-R
Processing scope for products	20JAN2009 00:00:00 to 21JAN2009 00:00:00
Start time of first product within scope	19JAN2009 22:46:22
Stop time of last product within scope	21JAN2009 00:49:32
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__2PRDPA20090119_224622_000032692075_00402_36027_1997.N1	19JAN2009 22:46:22	19JAN2009 23:40:51	0	GOOD
1	SCI_OL__2PRDPA20090120_002549_000033252075_00403_36028_1998.N1	20JAN2009 00:25:49	20JAN2009 01:21:14	0	GOOD
2	SCI_OL__2PRDPA20090120_020733_000032692075_00404_36029_1999.N1	20JAN2009 02:07:33	20JAN2009 03:02:02	0	GOOD
3	SCI_OL__2PRDPA20090120_034700_000033252075_00405_36030_2000.N1	20JAN2009 03:47:00	20JAN2009 04:42:25	0	GOOD
4	SCI_OL__2PRDPA20090120_052844_000032692075_00406_36031_2001.N1	20JAN2009 05:28:44	20JAN2009 06:23:14	0	GOOD
5	SCI_OL__2PRDPA20090120_070811_000033252075_00407_36032_2002.N1	20JAN2009 07:08:11	20JAN2009 08:03:37	0	GOOD
6	SCI_OL__2PRDPA20090120_084955_000032692075_00408_36033_2003.N1	20JAN2009 08:49:55	20JAN2009 09:44:25	0	GOOD
7	SCI_OL__2PRDPA20090120_102922_000033252075_00409_36034_2004.N1	20JAN2009 10:29:22	20JAN2009 11:24:48	0	GOOD
8	SCI_OL__2PRDPA20090120_121106_000032692075_00410_36035_2005.N1	20JAN2009 12:11:06	20JAN2009 13:05:36	0	GOOD
9	SCI_OL__2PRDPA20090120_135033_000033252075_00411_36036_2006.N1	20JAN2009 13:50:33	20JAN2009 14:45:59	0	GOOD
10	SCI_OL__2PRDPA20090120_153217_000032692075_00412_36037_2007.N1	20JAN2009 15:32:17	20JAN2009 16:26:47	0	GOOD
11	SCI_OL__2PRDPA20090120_171145_000033252075_00413_36038_2008.N1	20JAN2009 17:11:45	20JAN2009 18:07:10	0	GOOD
12	SCI_OL__2PRDPA20090120_185153_000033942075_00414_36039_2009.N1	20JAN2009 18:51:53	20JAN2009 19:48:27	0	GOOD
13	SCI_OL__2PRDPA20090120_203228_000033812075_00415_36040_2010.N1	20JAN2009 20:32:28	20JAN2009 21:28:50	0	GOOD
14	SCI_OL__2PRDPA20090120_221440_000032692075_00416_36041_2011.N1	20JAN2009 22:14:40	20JAN2009 23:09:10	0	GOOD
15	SCI_OL__2PRDPA20090120_235407_000033252075_00417_36042_2012.N1	20JAN2009 23:54:07	21JAN2009 00:49:32	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: 148064

Total number of cloud data DSRs with good quality flag (=0): 148064 (100.0 %)

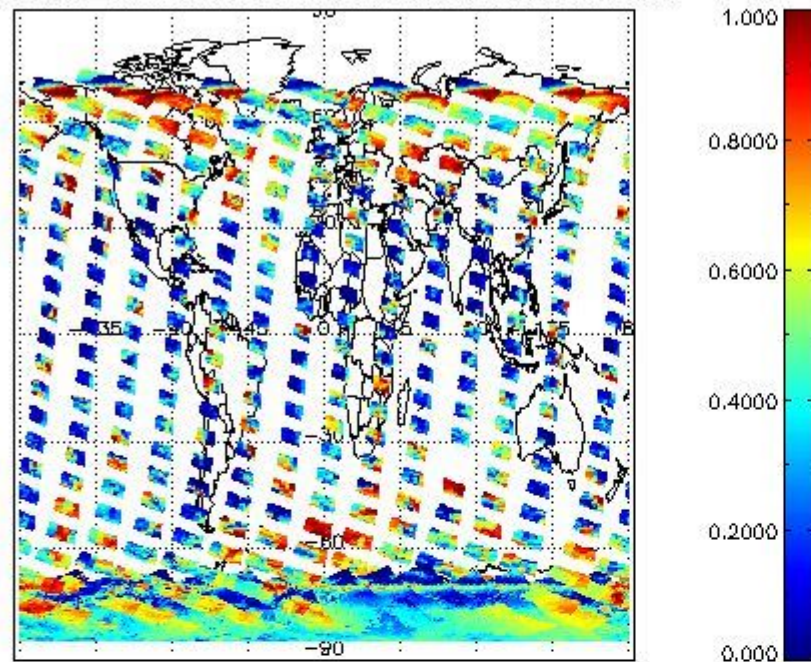
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	148064	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	148064	0.16934	0.12500	0.12500	0.25000	0.059803	s
CL_FRAC	148064	0.41674	0.40882	0.0000	1.0000	0.26799	-
CL_FRAC_ERR	148064	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	148064	5.4188	4.0000	4.0000	8.0000	1.9137	
PMD_READ_CL[0]	148064	0.18863	0.0000	0.0000	8.0000	0.94038	-
PMD_READ_CL[1]	148064	0.60371	0.0000	0.0000	8.0000	1.7006	-
CL_TOP_HEIGHT	124308	4.4053	3.5030	0.0000	17.000	3.7910	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	124308	53.551	42.221	0.0000	101.00	39.559	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	148064	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	148064	11001001	11000100	11000000	11100000	3117.5	flags
AERO_ABSO_IND	148064	3.1009	3.5389	-0.91944	15.233	2.2339	
AERO_IND_DIAG	148064	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	148064	01010110	00000000	00000000	11000000	24446.	flags

Time and geolocation plots:

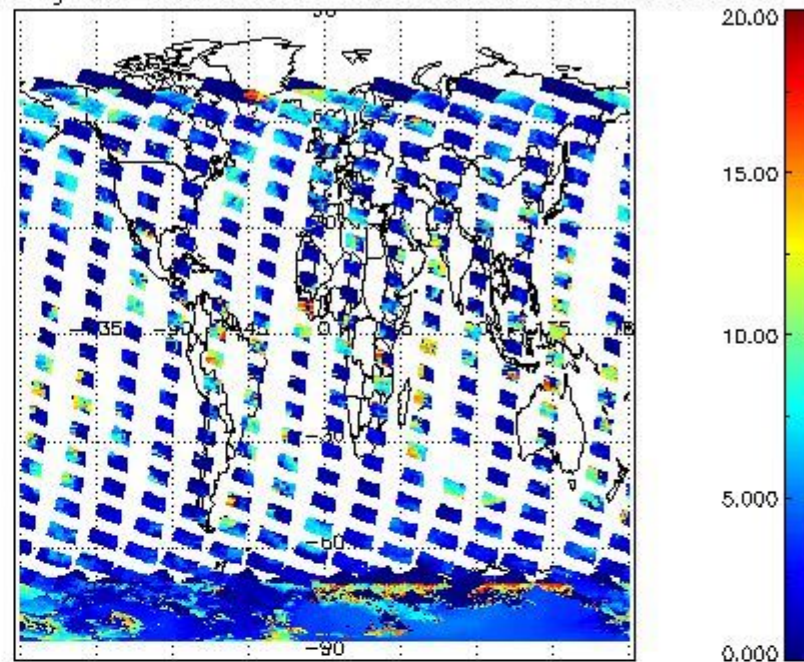
Plots are available for the following parameters:

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

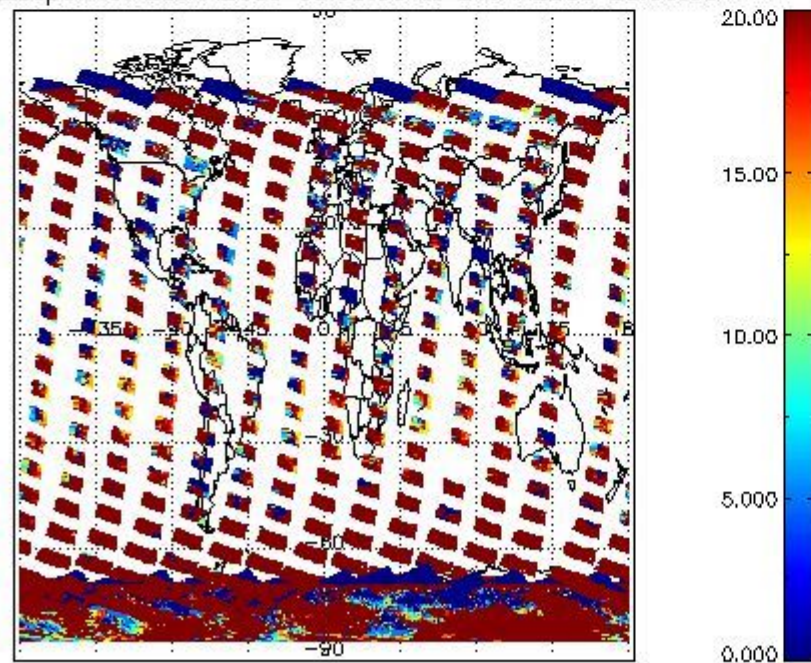
cL_frac for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



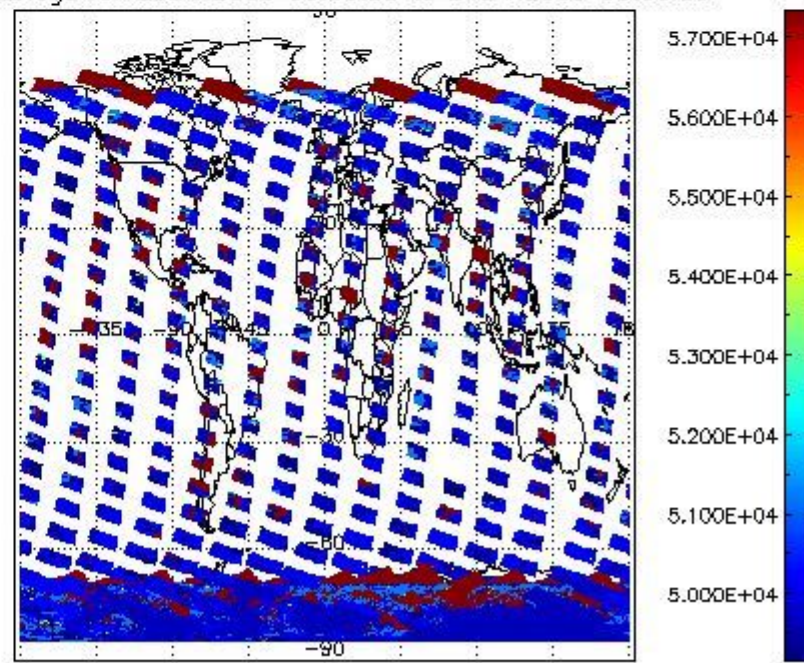
cL_top_height for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



cLopt_depth for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



cloud_flags for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



2.2.2 Nadir

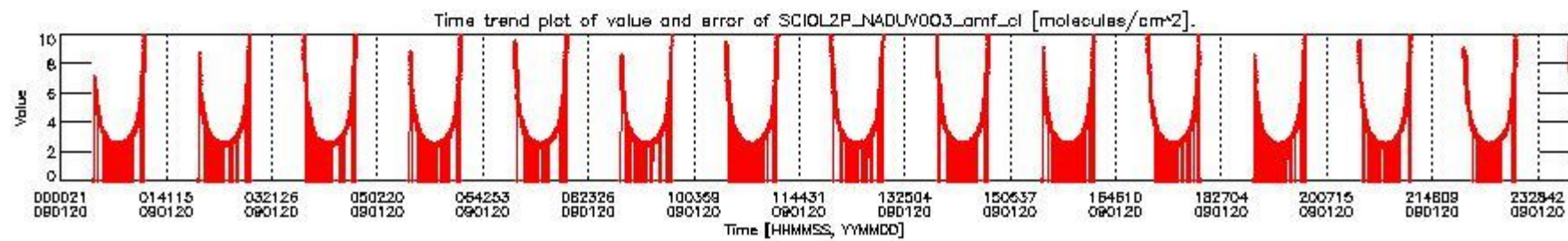
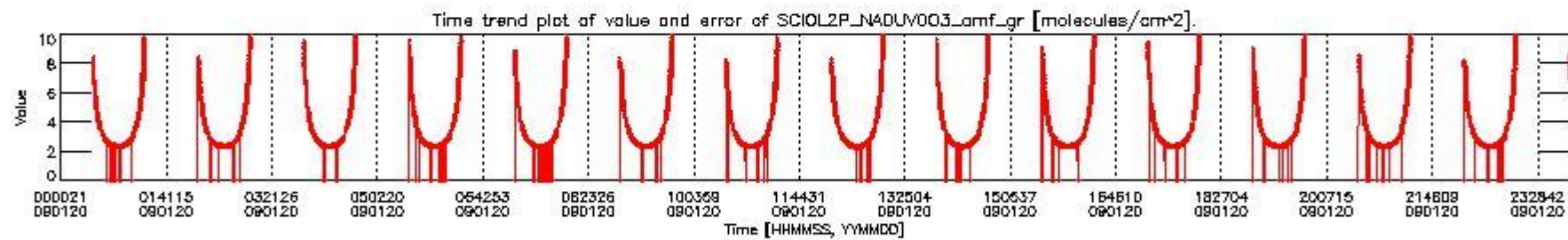
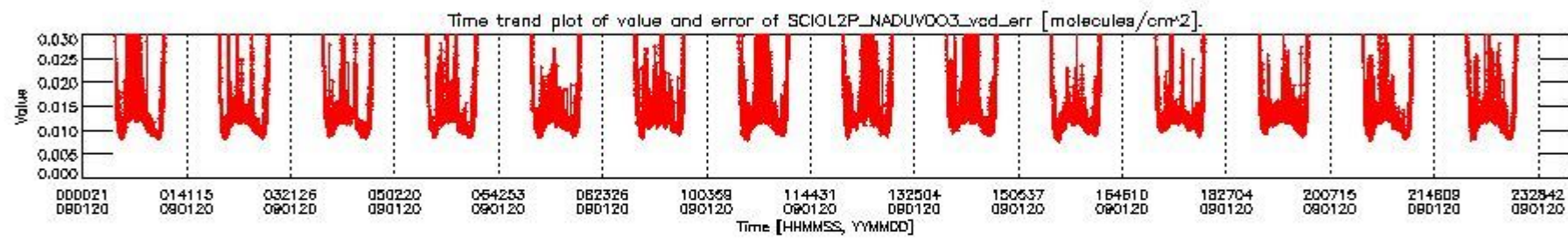
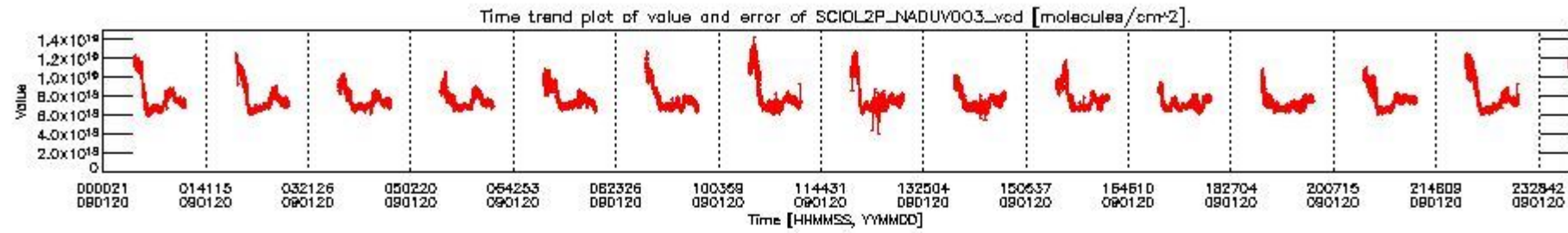
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

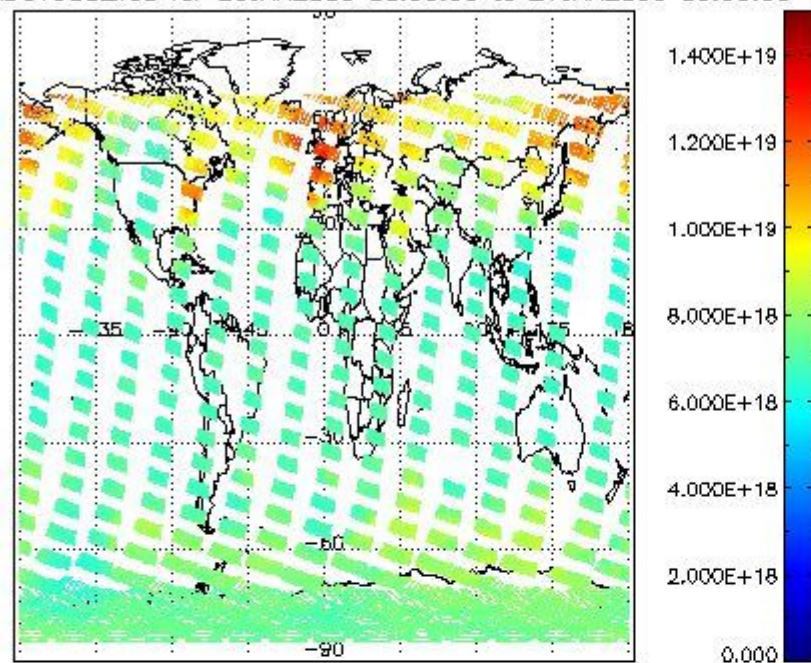
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

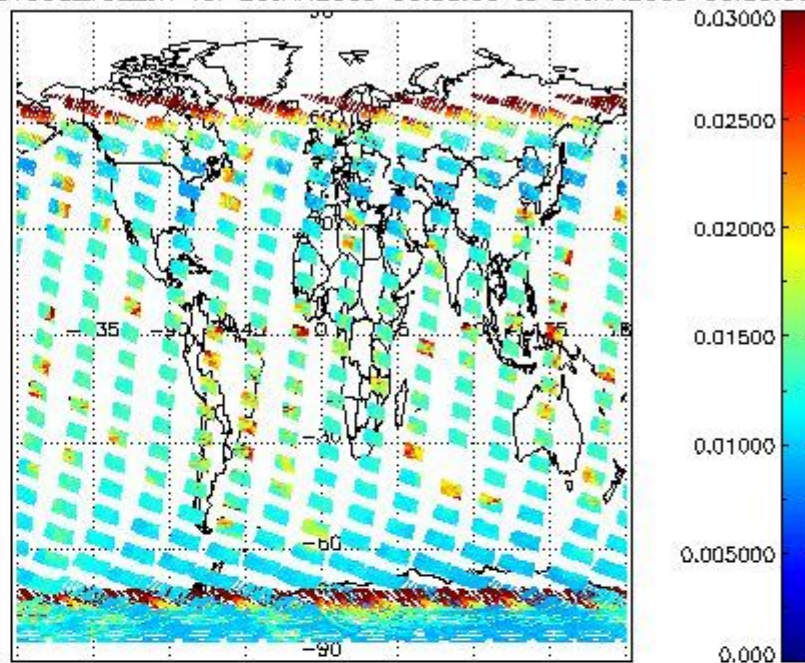
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



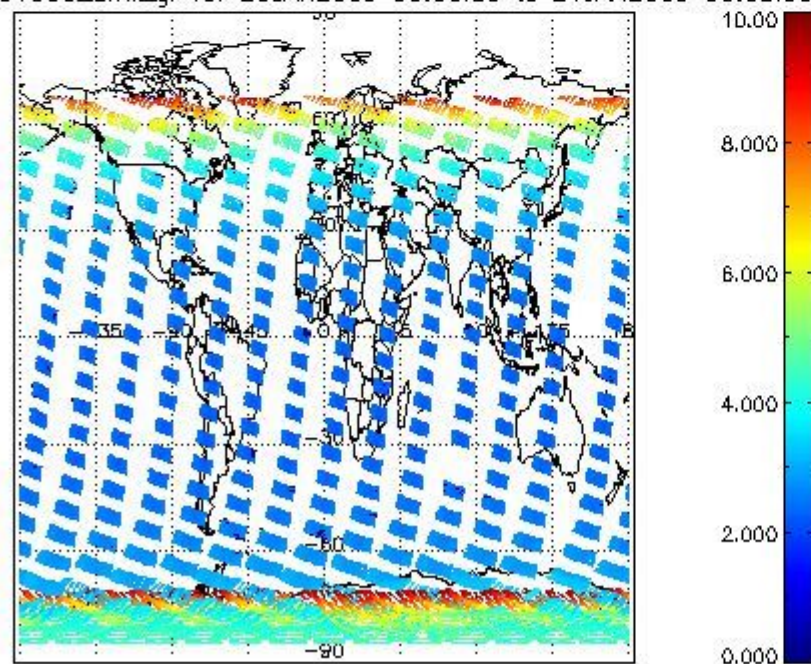
SCIOL2P_NADUV003_vcd for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



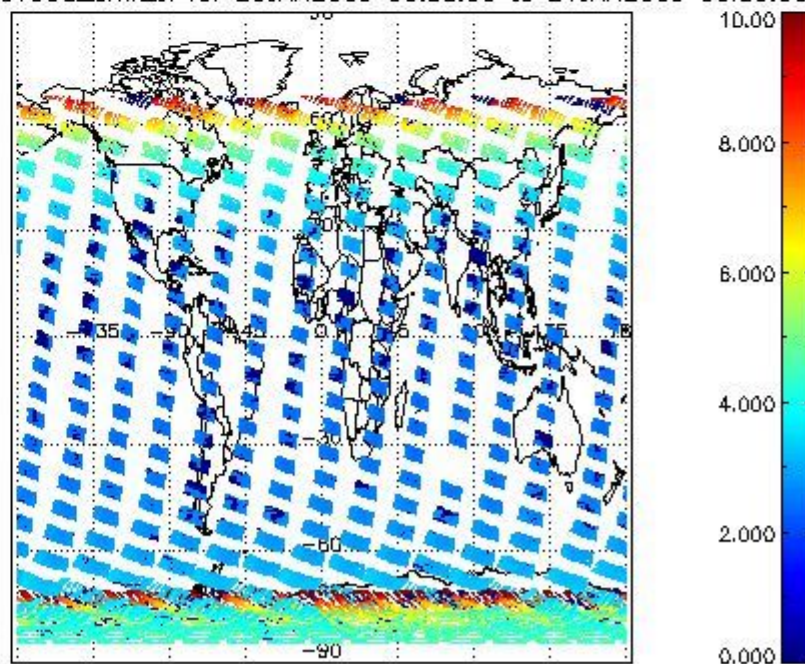
SCIOL2P_NADUV003_vcd_err for 20JAN2009 00:00:00 to 21JAN2009 00:00:00

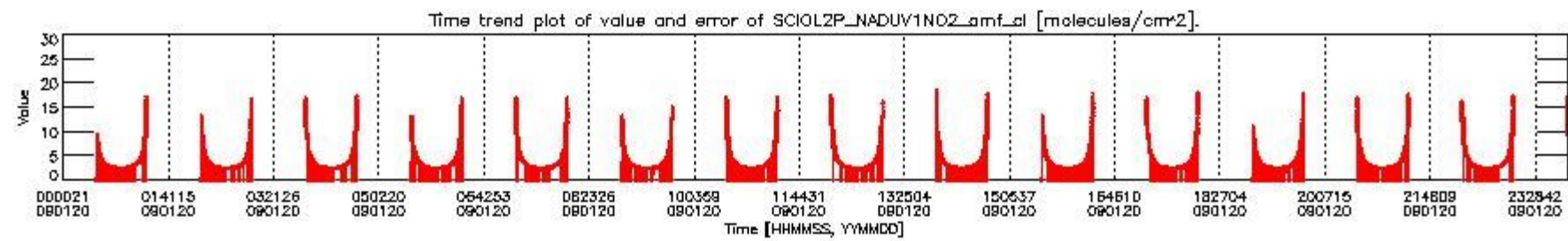
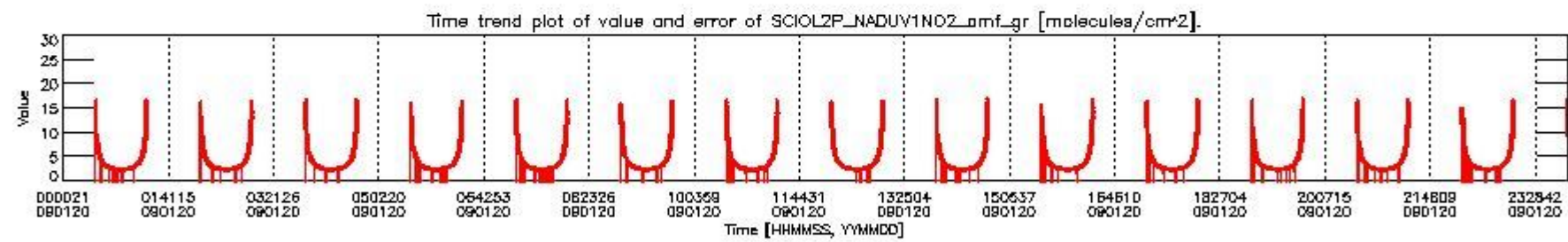
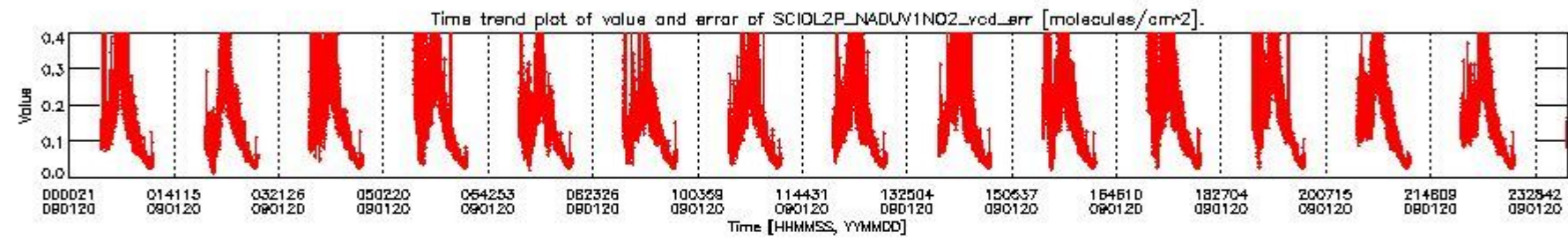
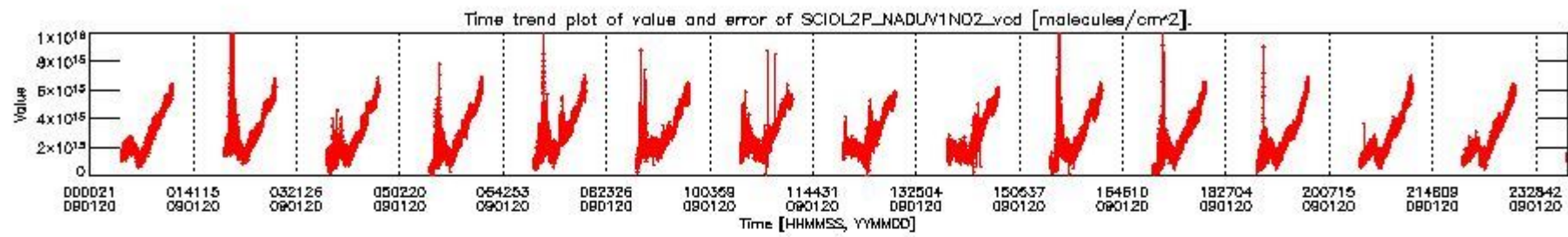


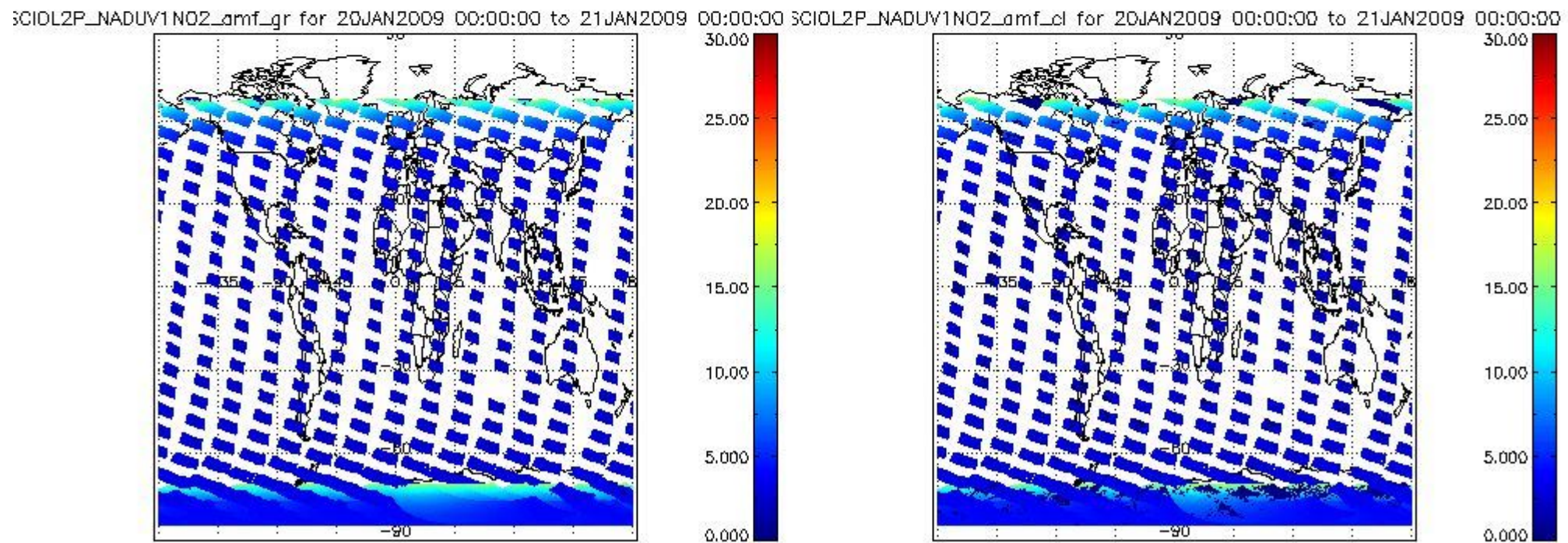
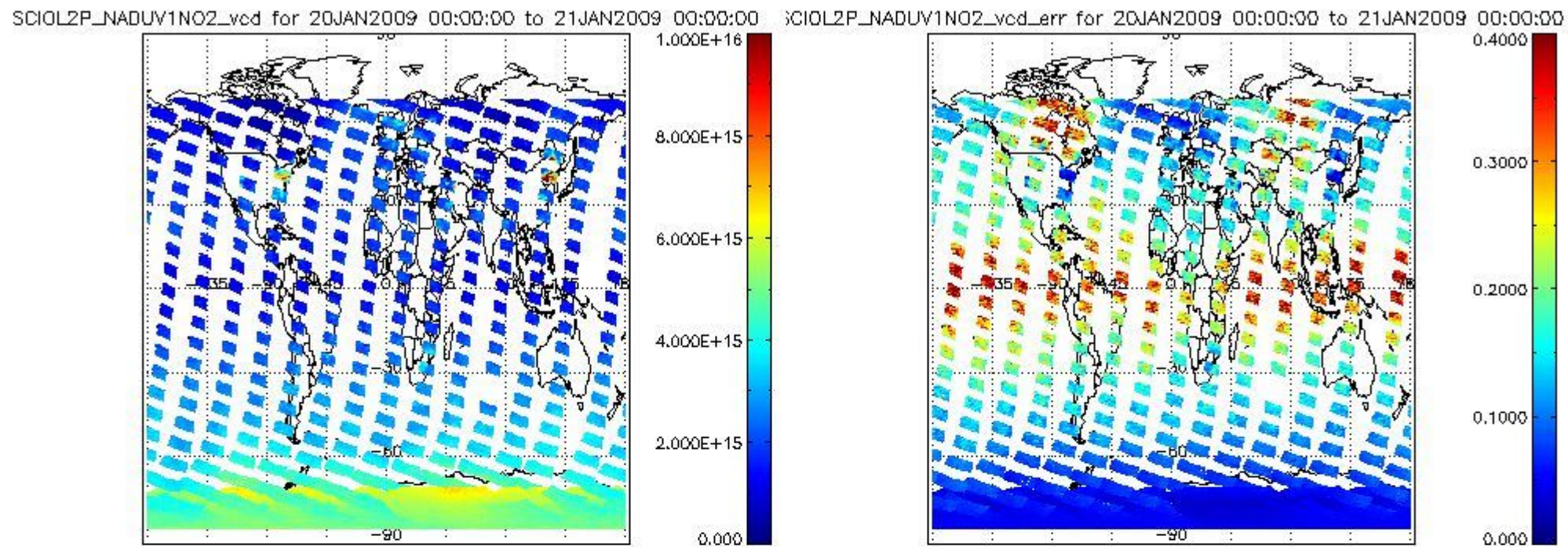
SCIOL2P_NADUV003_amf_gr for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 20JAN2009 00:00:00 to 21JAN2009 00:00:00







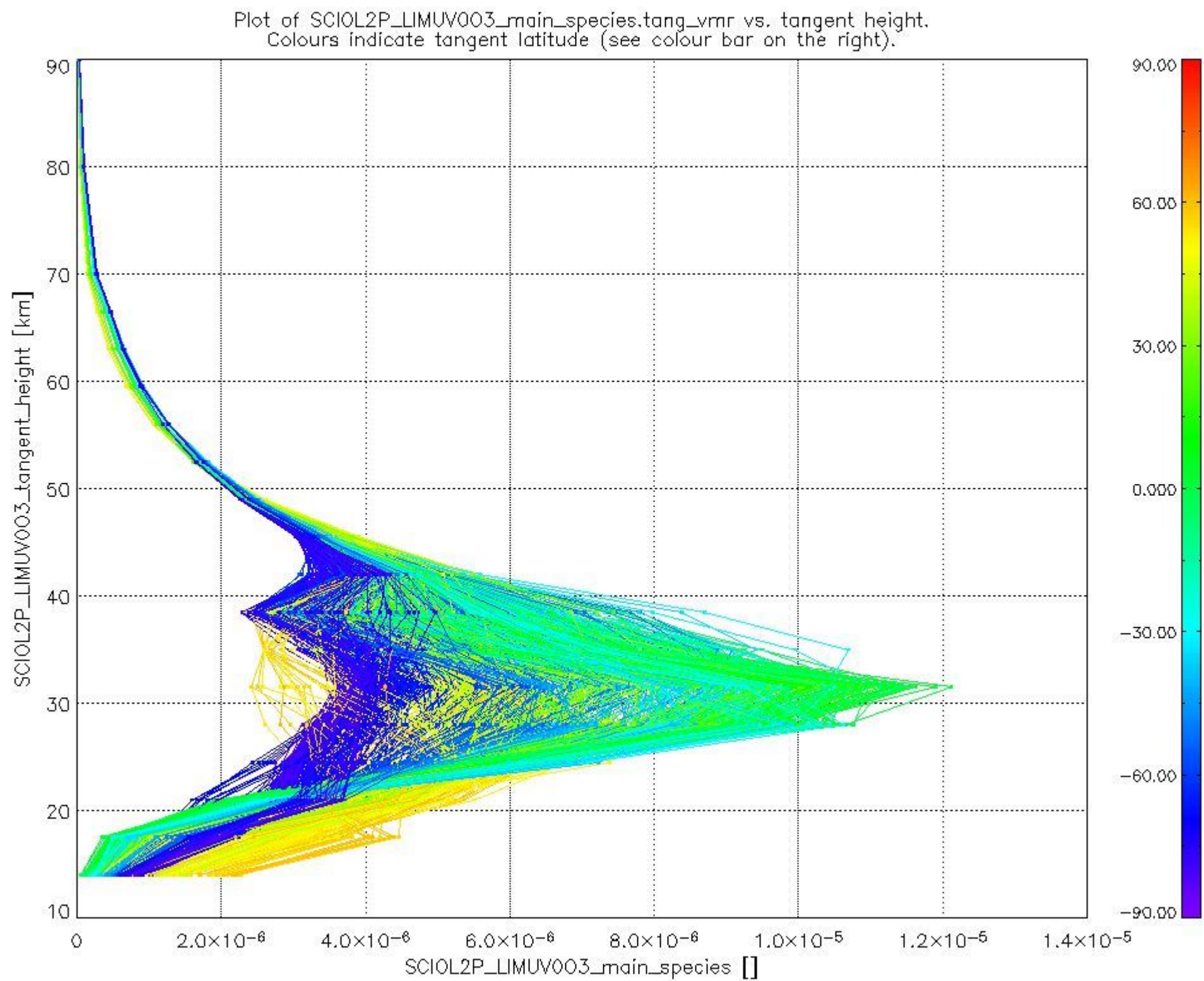
2.2.3 Limb

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

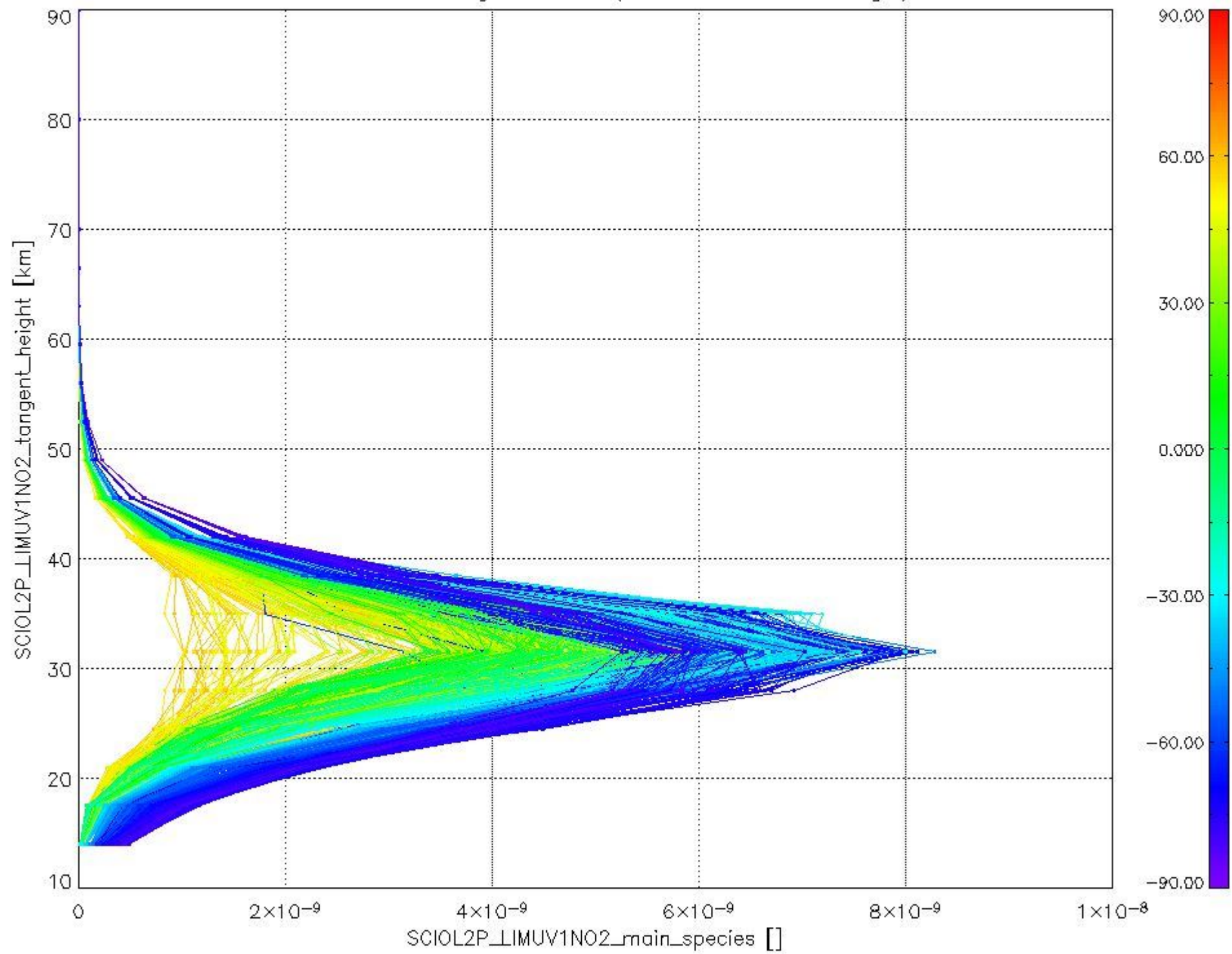
The following data items are currently included into this section:

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.



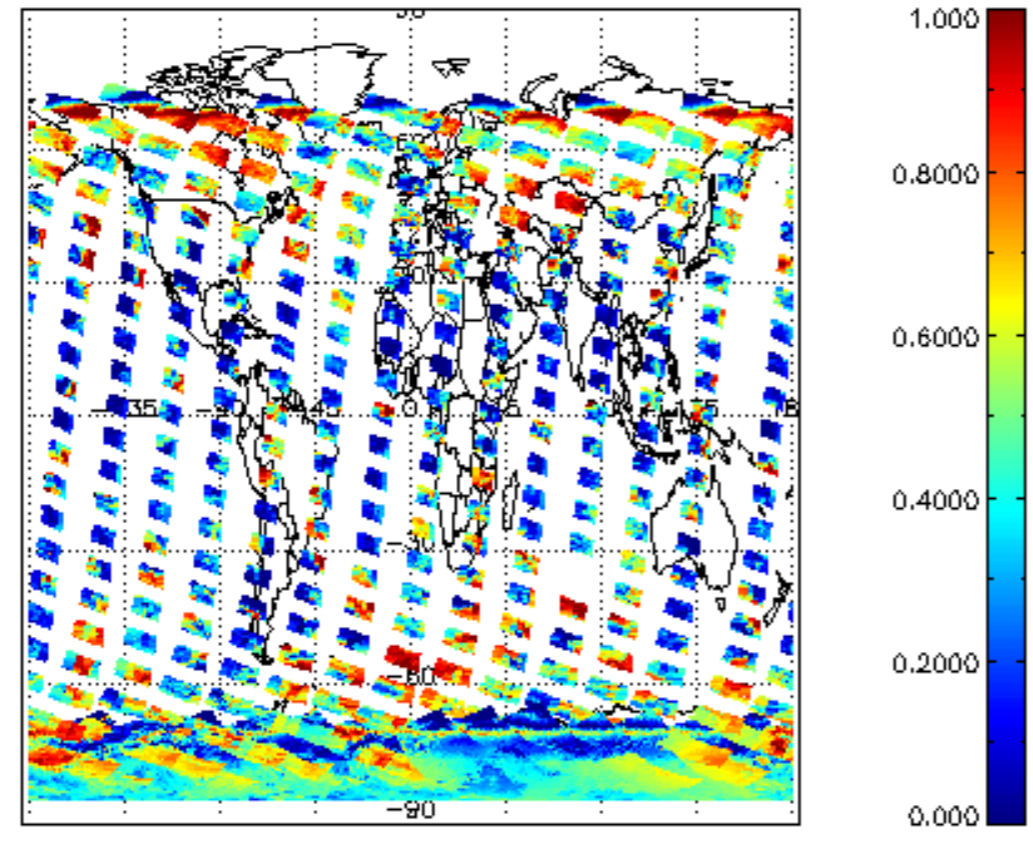
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



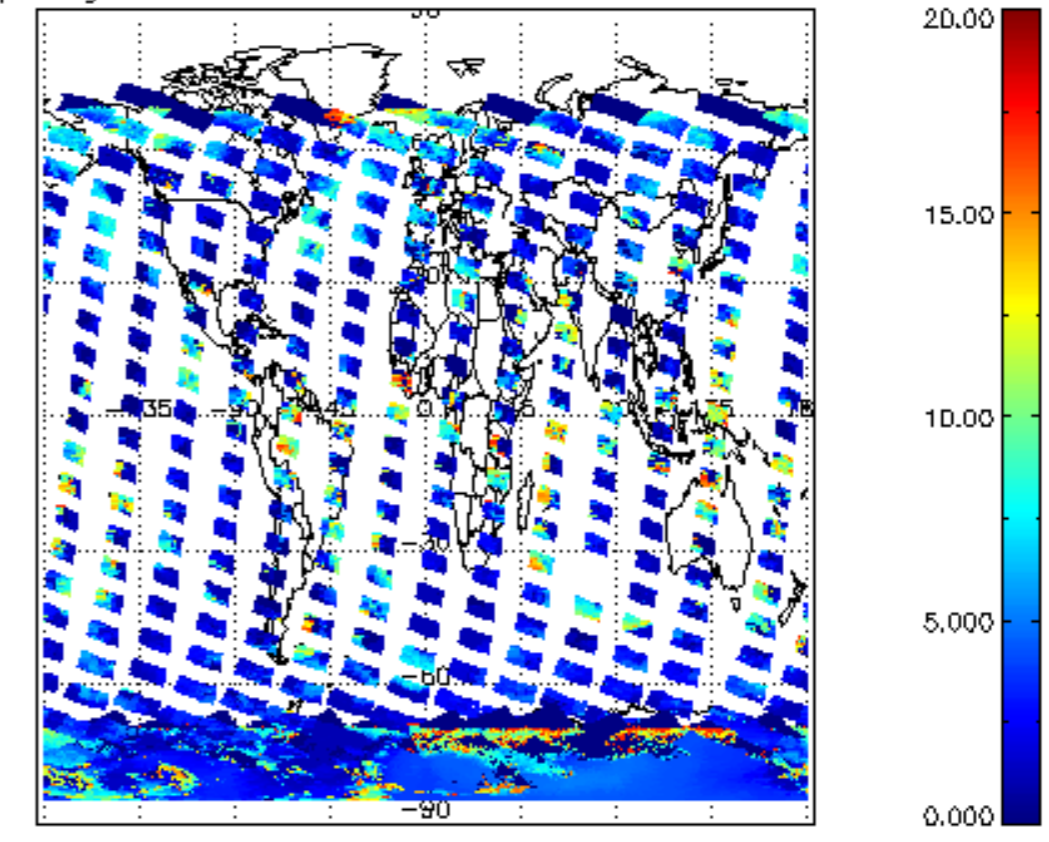
2.3 ADF monitoring

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

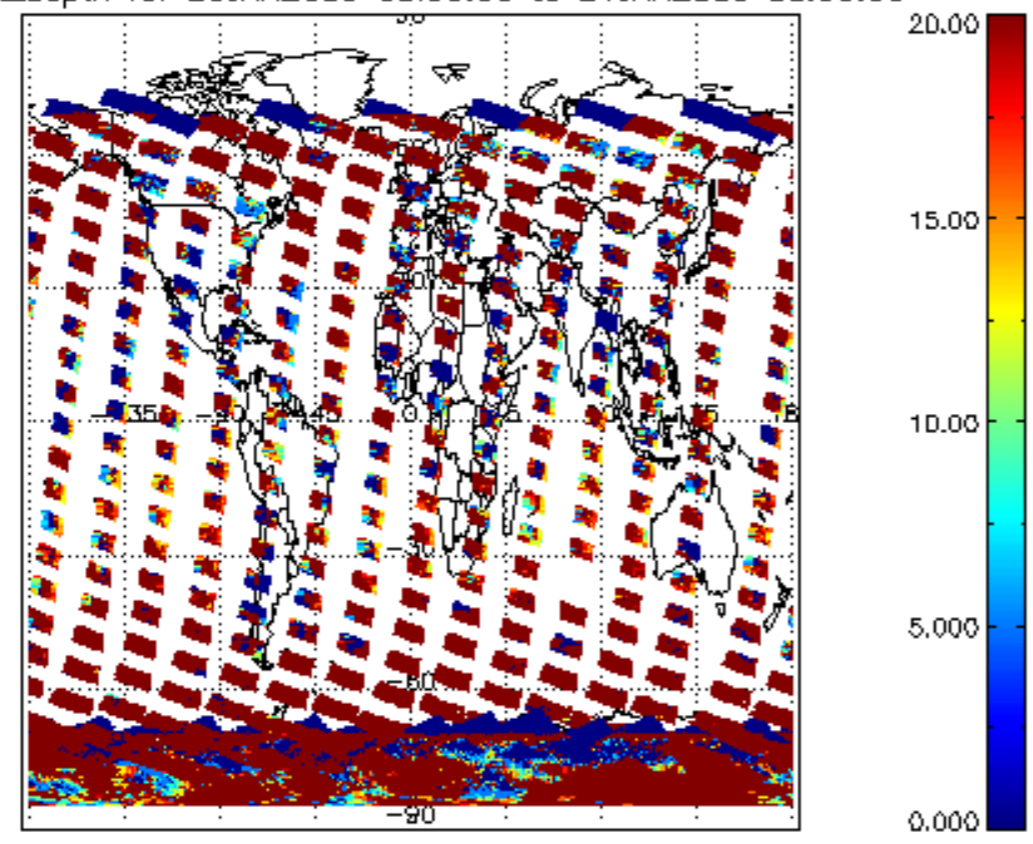
cL_frac for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



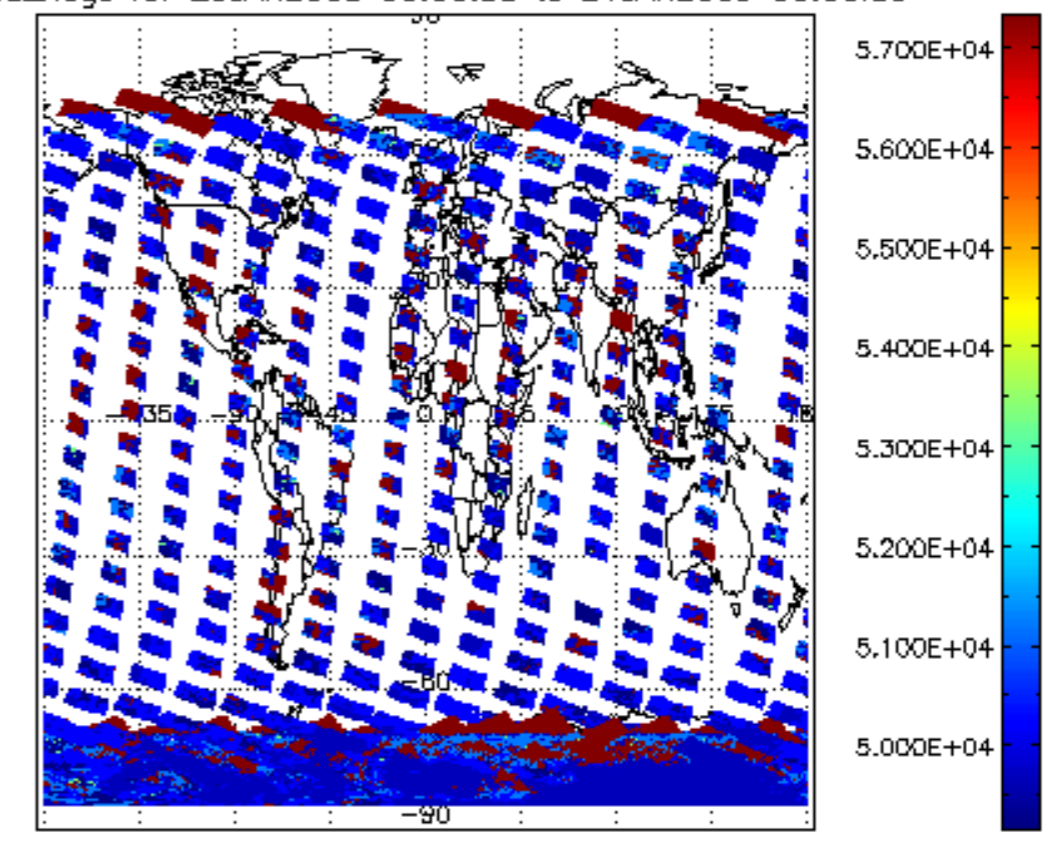
cL_top_height for 20JAN2009 00:00:00 to 21JAN2009 00:00:00

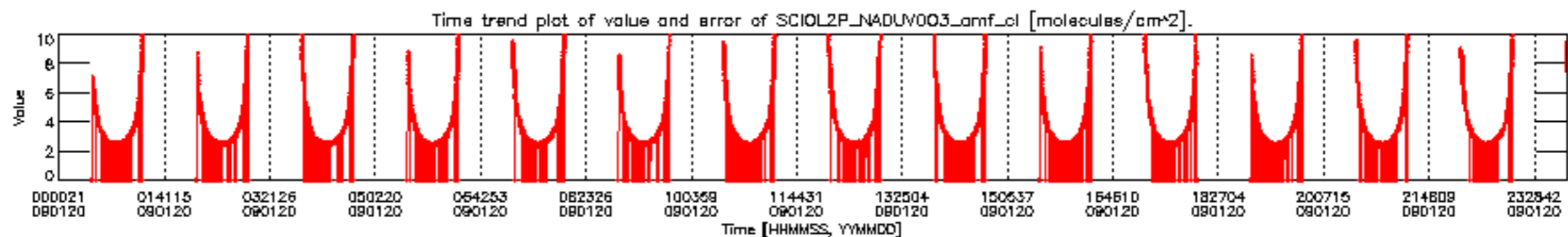
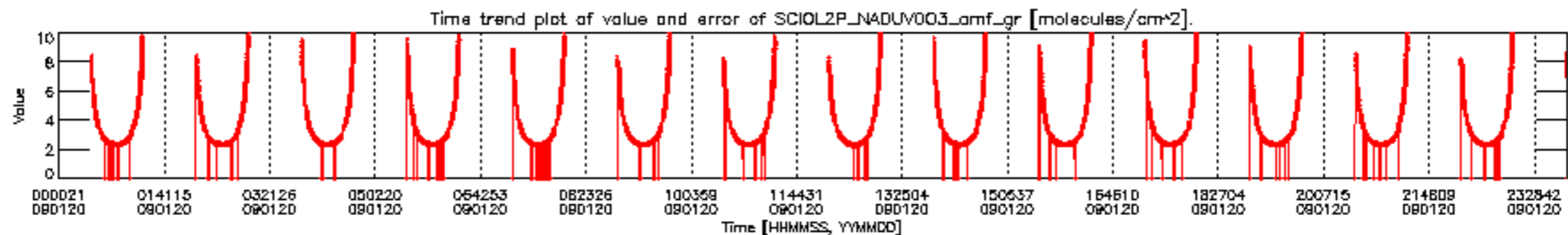
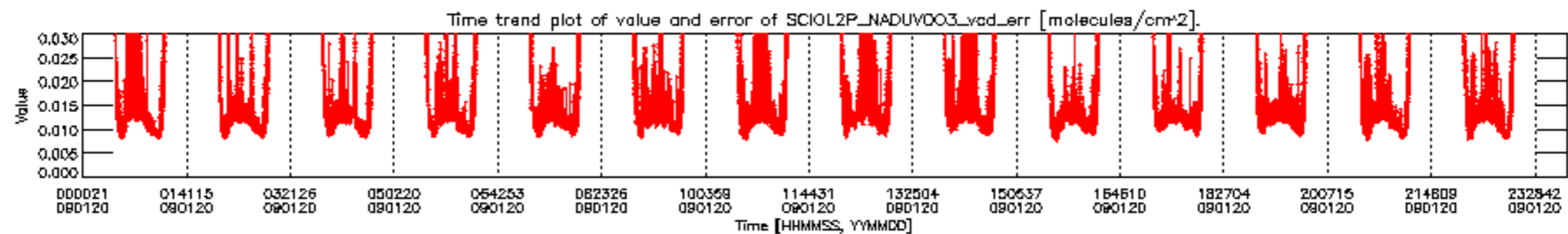
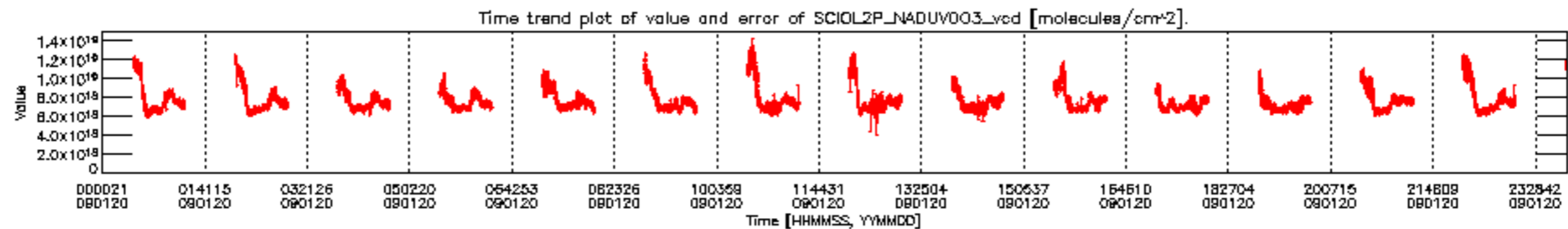


cLopt_depth for 20JAN2009 00:00:00 to 21JAN2009 00:00:00

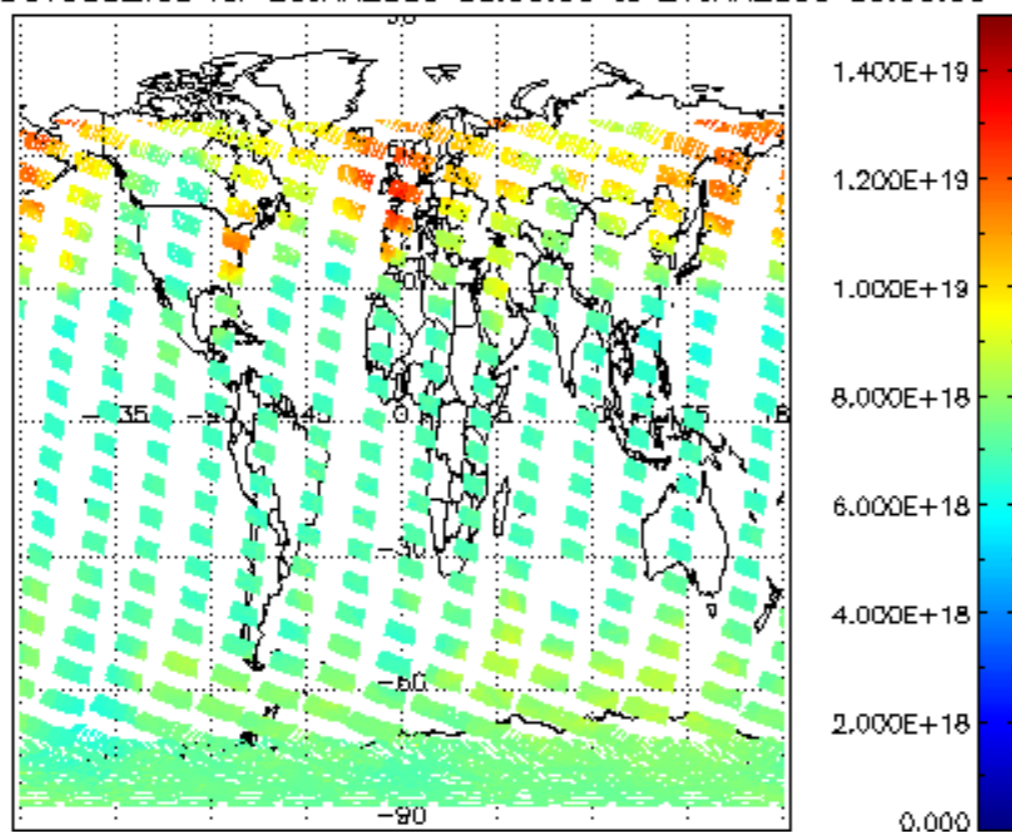


cloud_flags for 20JAN2009 00:00:00 to 21JAN2009 00:00:00

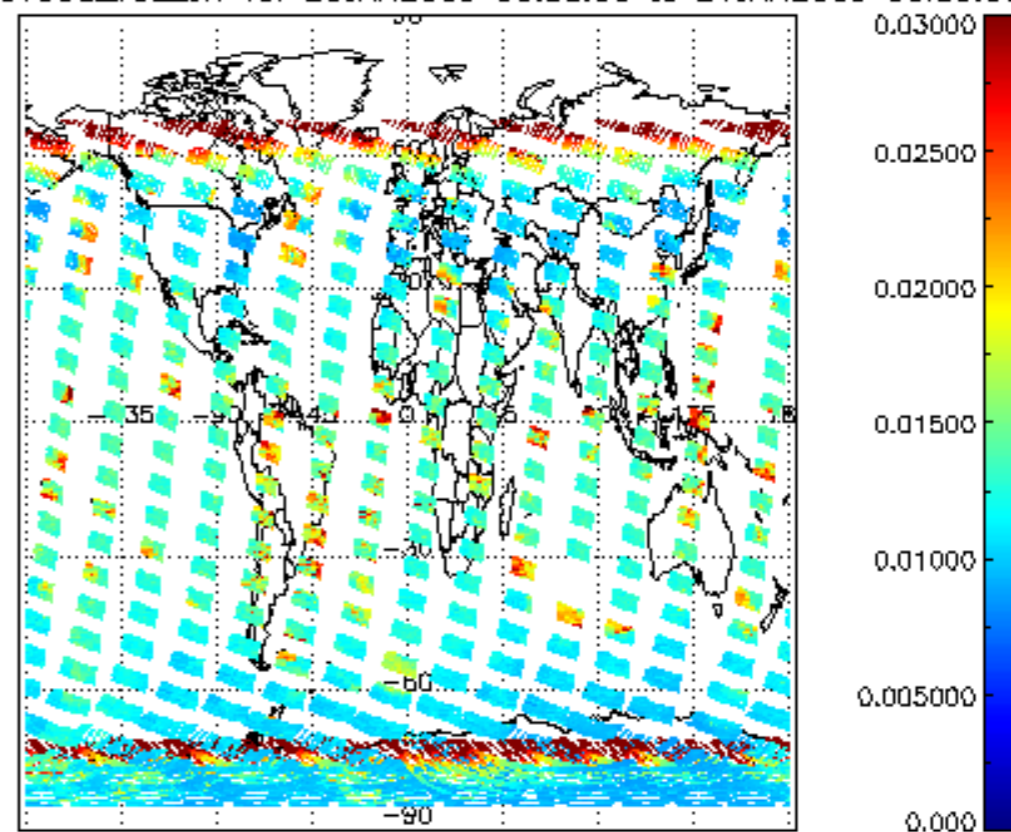




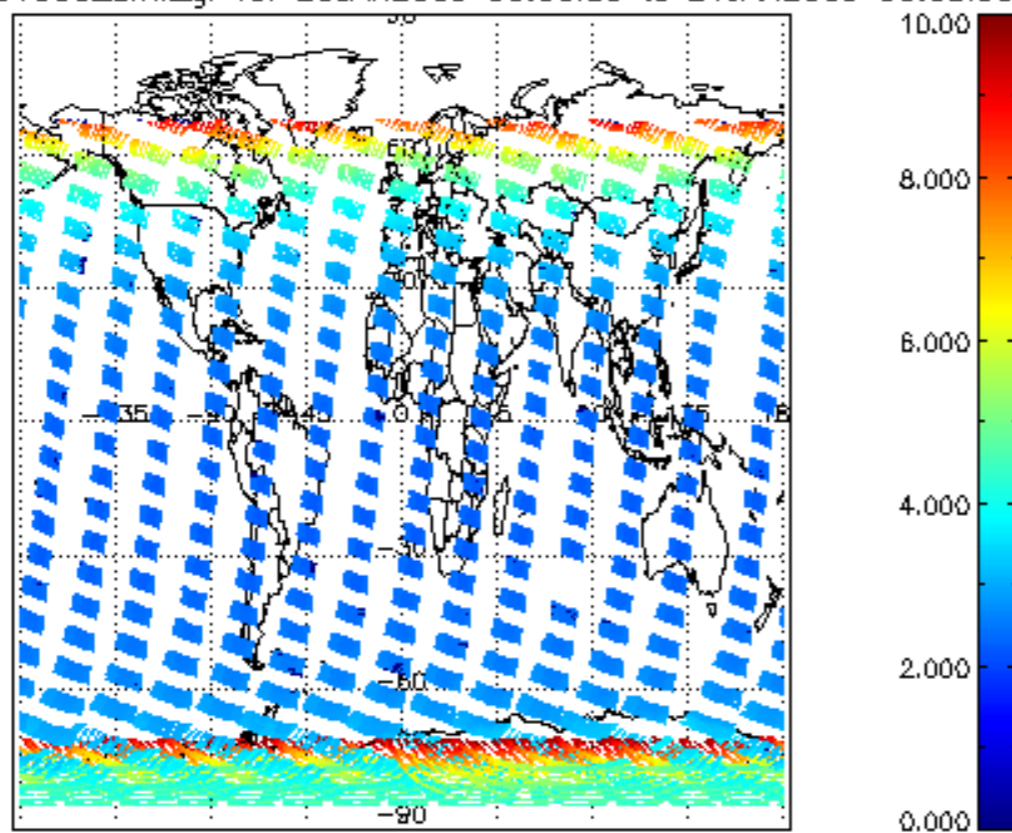
SCIOL2P_NADUV003_vcd for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



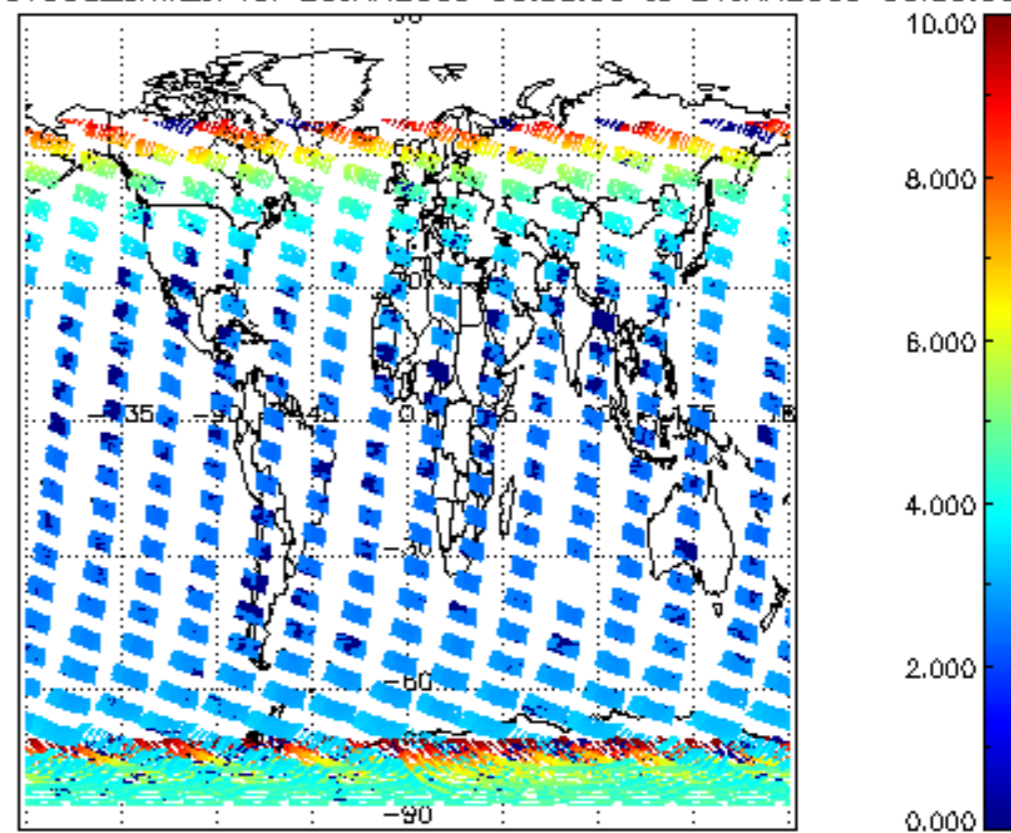
SCIOL2P_NADUV003_vcd_err for 20JAN2009 00:00:00 to 21JAN2009 00:00:00

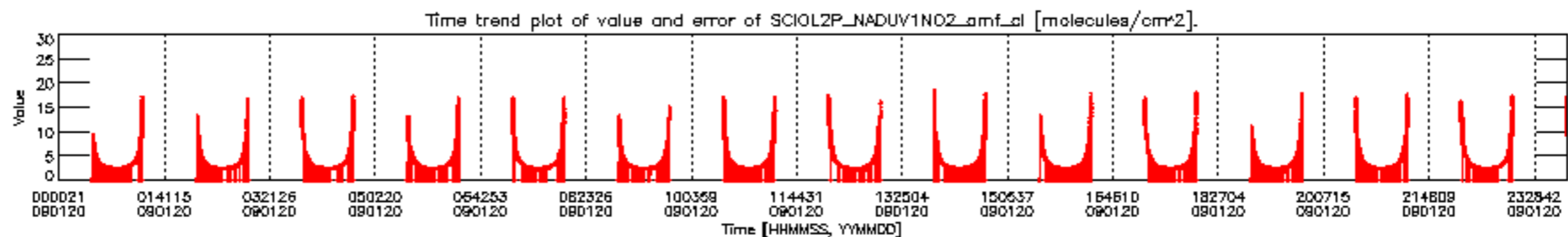
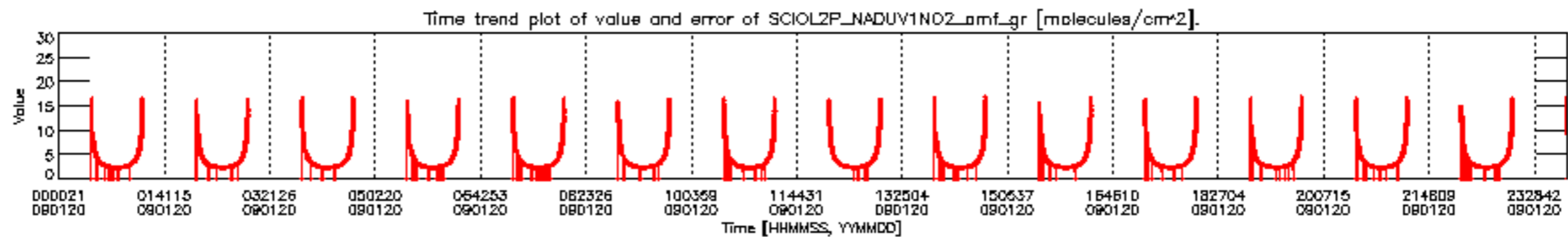
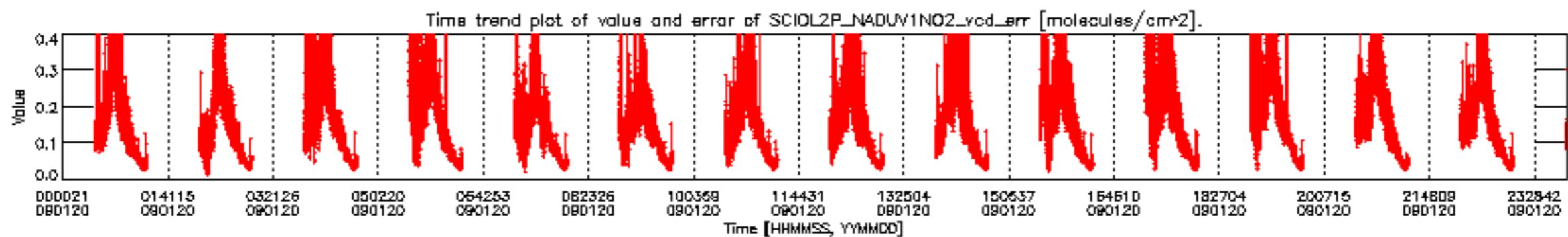
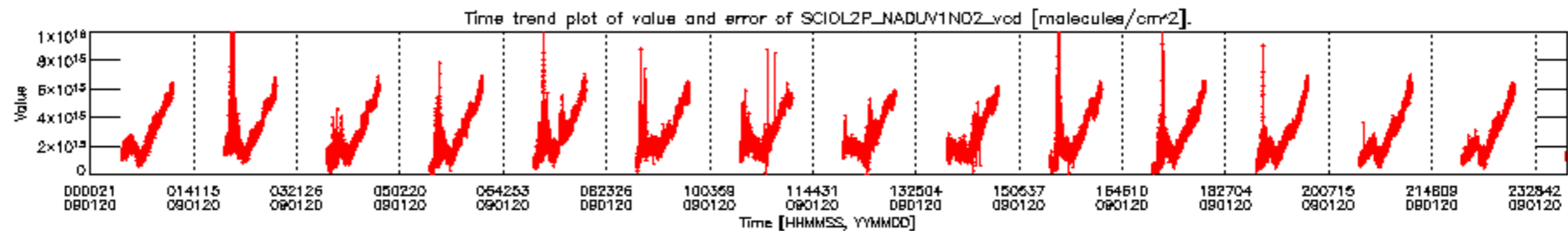


SCIOL2P_NADUV003_amf_gr for 20JAN2009 00:00:00 to 21JAN2009 00:00:00

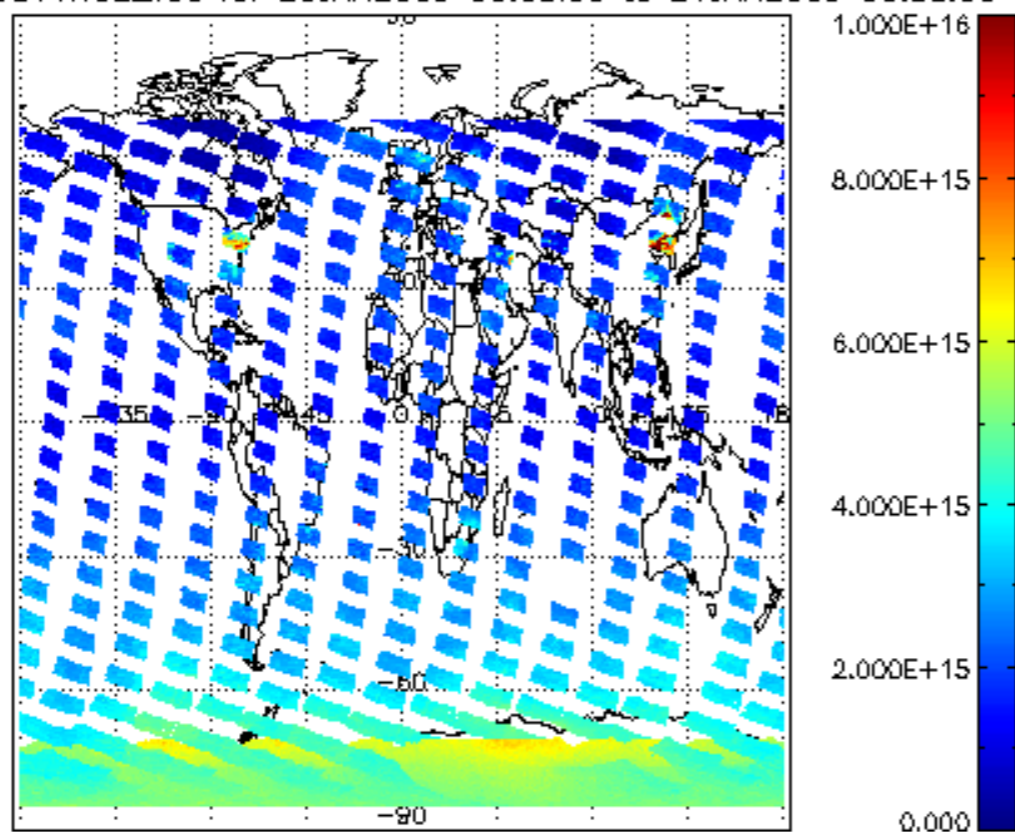


SCIOL2P_NADUV003_amf_cl for 20JAN2009 00:00:00 to 21JAN2009 00:00:00

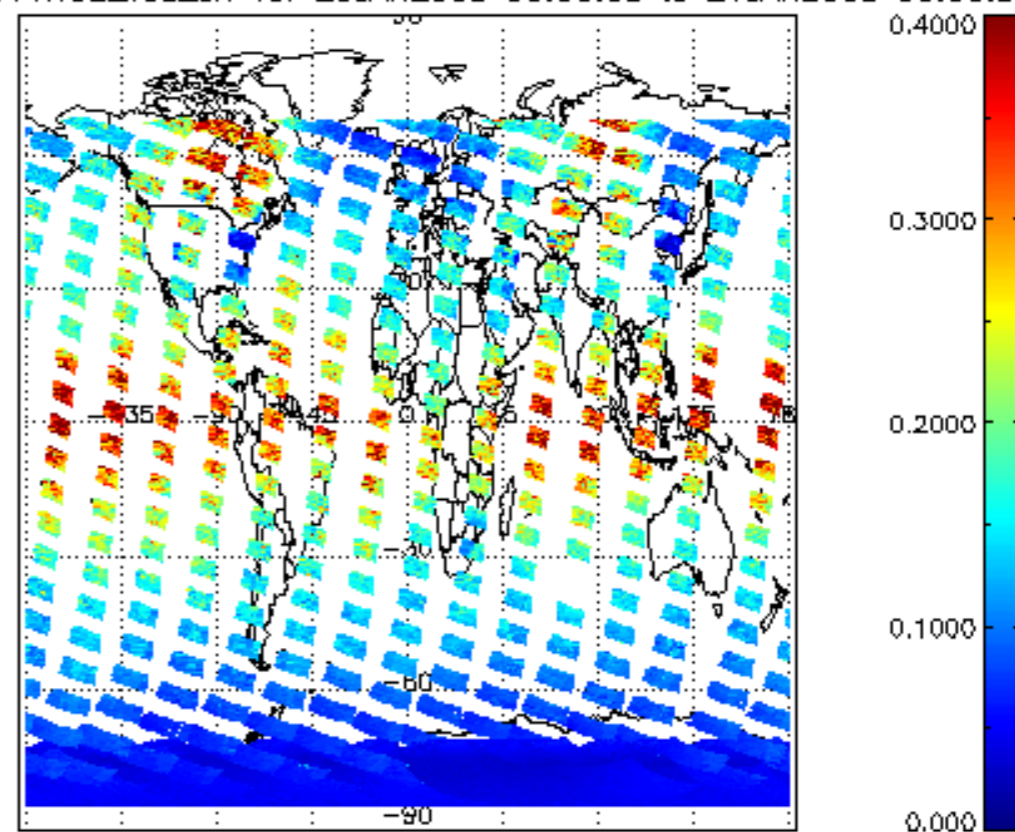




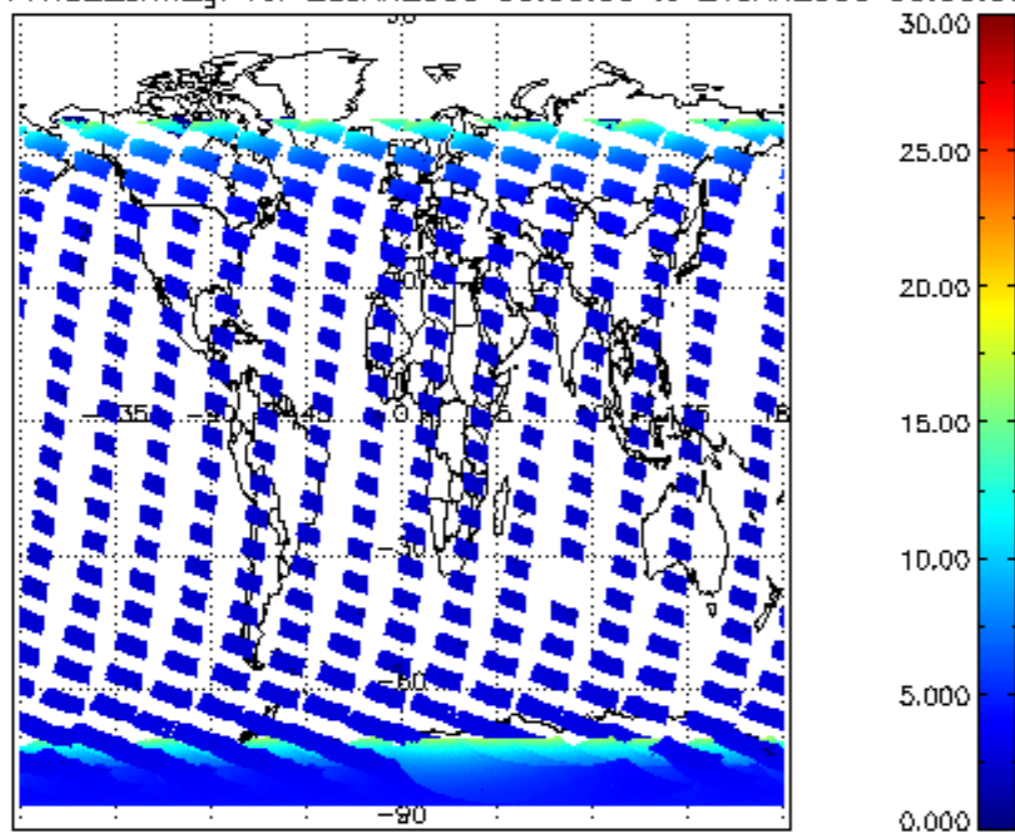
SCIOL2P_NADUV1NO2_vcd for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



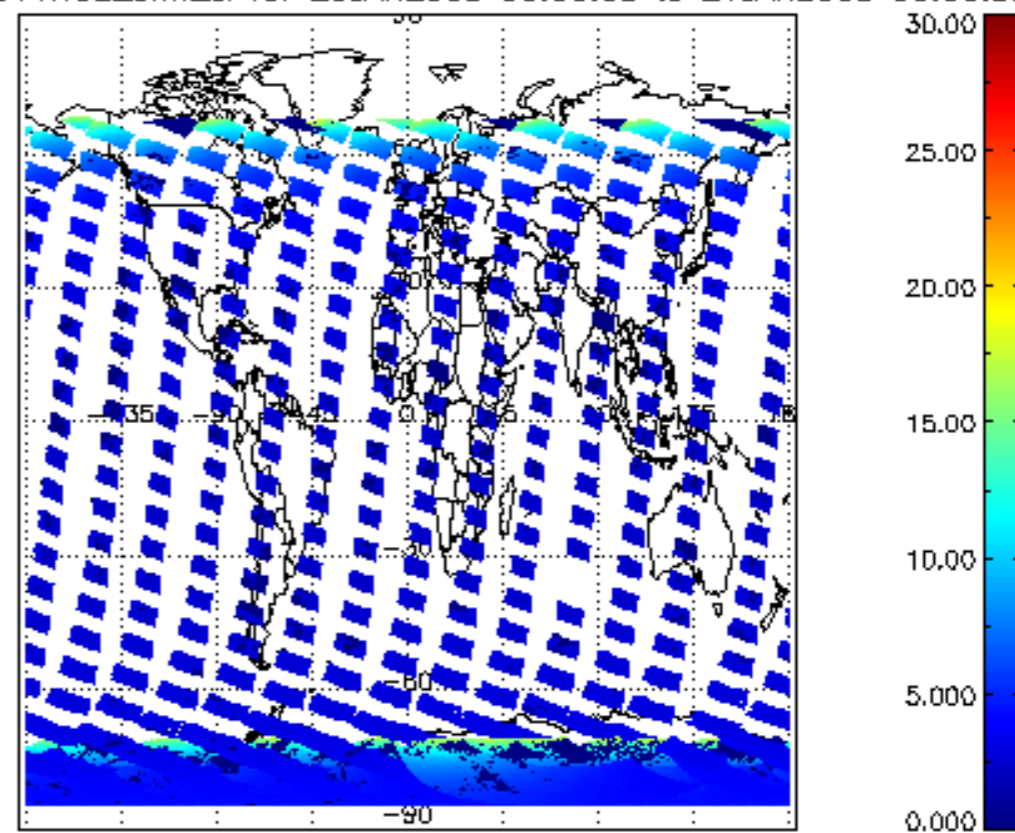
SCIOL2P_NADUV1NO2_vcd_err for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



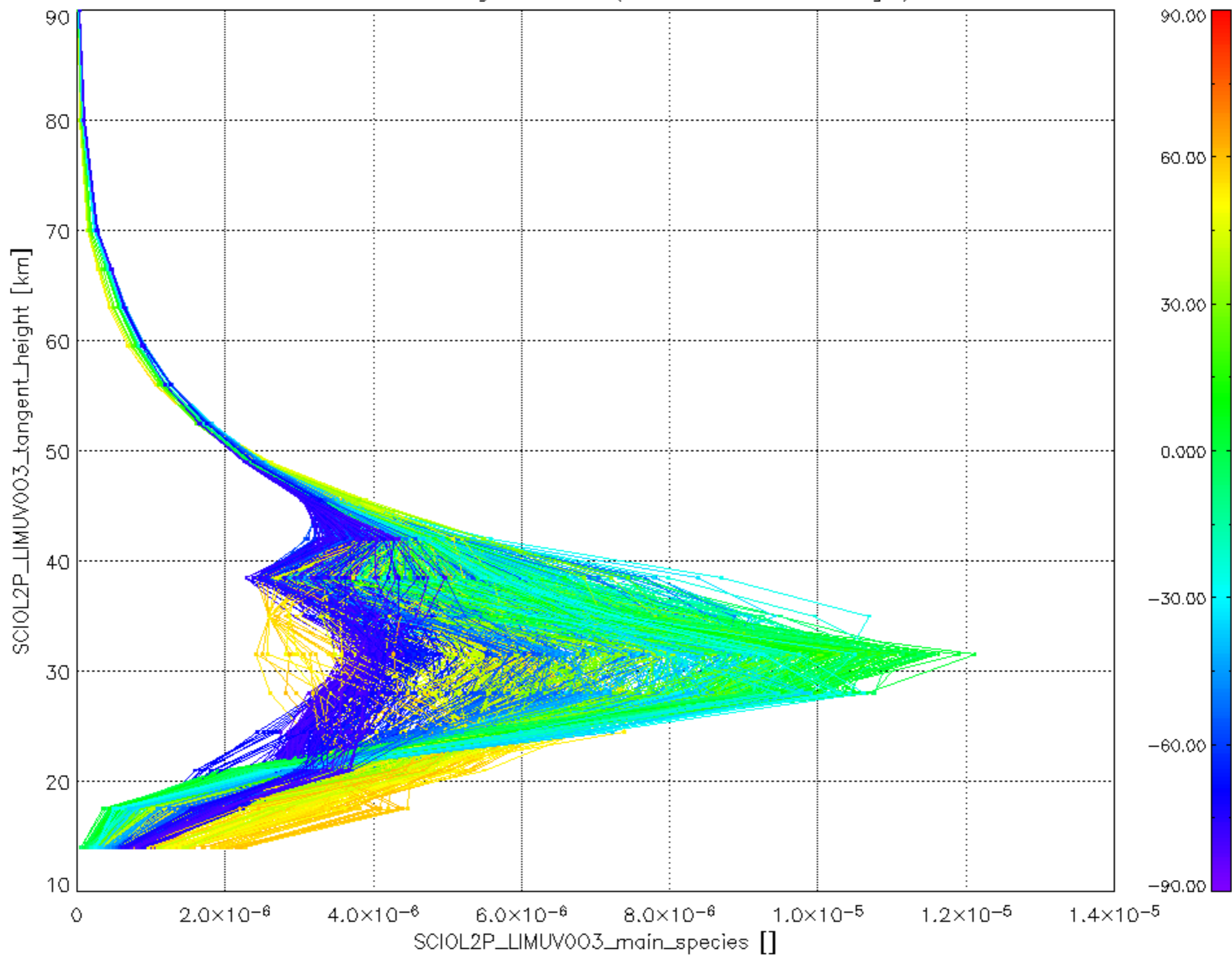
SCIOL2P_NADUV1NO2_amf_gr for 20JAN2009 00:00:00 to 21JAN2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 20JAN2009 00:00:00 to 21JAN2009 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).

