

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	12FEB2009 10:20:08
Data source version	SCIA-OL/3.01-R
Processing scope for products	16JAN2009 00:00:00 to 17JAN2009 00:00:00
Start time of first product within scope	15JAN2009 23:11:24
Stop time of last product within scope	17JAN2009 01:15:56
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__2PRDPA20090115_231124_000033252075_00345_35970_1927.N1	15JAN2009 23:11:24	16JAN2009 00:06:50	0	GOOD
1	SCI_OL__2PRDPA20090116_005308_000032692075_00346_35971_1928.N1	16JAN2009 00:53:08	16JAN2009 01:47:38	0	GOOD
2	SCI_OL__2PRDPA20090116_023235_000033252075_00347_35972_1929.N1	16JAN2009 02:32:35	16JAN2009 03:28:01	0	GOOD
3	SCI_OL__2PRDPA20090116_041419_000032692075_00348_35973_1930.N1	16JAN2009 04:14:19	16JAN2009 05:08:49	0	GOOD
4	SCI_OL__2PRDPA20090116_055347_000033252075_00349_35974_1931.N1	16JAN2009 05:53:47	16JAN2009 06:49:12	0	GOOD
5	SCI_OL__2PRDPA20090116_073531_000032692075_00350_35975_1932.N1	16JAN2009 07:35:31	16JAN2009 08:30:00	0	GOOD
6	SCI_OL__2PRDPA20090116_091458_000033252075_00351_35976_1933.N1	16JAN2009 09:14:58	16JAN2009 10:10:23	0	GOOD
7	SCI_OL__2PRDPA20090116_105642_000032692075_00352_35977_1934.N1	16JAN2009 10:56:42	16JAN2009 11:51:11	0	GOOD
8	SCI_OL__2PRDPA20090116_123609_000033252075_00353_35978_1935.N1	16JAN2009 12:36:09	16JAN2009 13:31:34	0	GOOD
9	SCI_OL__2PRDPA20090116_141753_000032692075_00354_35979_1937.N1	16JAN2009 14:17:53	16JAN2009 15:12:23	0	GOOD
10	SCI_OL__2PRDPA20090116_155720_000033252075_00355_35980_1936.N1	16JAN2009 15:57:20	16JAN2009 16:52:46	0	GOOD
11	SCI_OL__2PRDPA20090116_173728_000033942075_00356_35981_1938.N1	16JAN2009 17:37:28	16JAN2009 18:34:02	0	GOOD
12	SCI_OL__2PRDPA20090116_191803_000033812075_00357_35982_1939.N1	16JAN2009 19:18:03	16JAN2009 20:14:25	0	GOOD
13	SCI_OL__2PRDPA20090116_210016_000032692075_00358_35983_1940.N1	16JAN2009 21:00:16	16JAN2009 21:54:45	0	GOOD
14	SCI_OL__2PRDPA20090116_223943_000033252075_00359_35984_1941.N1	16JAN2009 22:39:43	16JAN2009 23:35:08	0	GOOD
15	SCI_OL__2PRDPA20090117_002127_000032692075_00360_35985_1942.N1	17JAN2009 00:21:27	17JAN2009 01:15:56	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: 151060

Total number of cloud data DSRs with good quality flag (=0): 151060 (100.0 %)

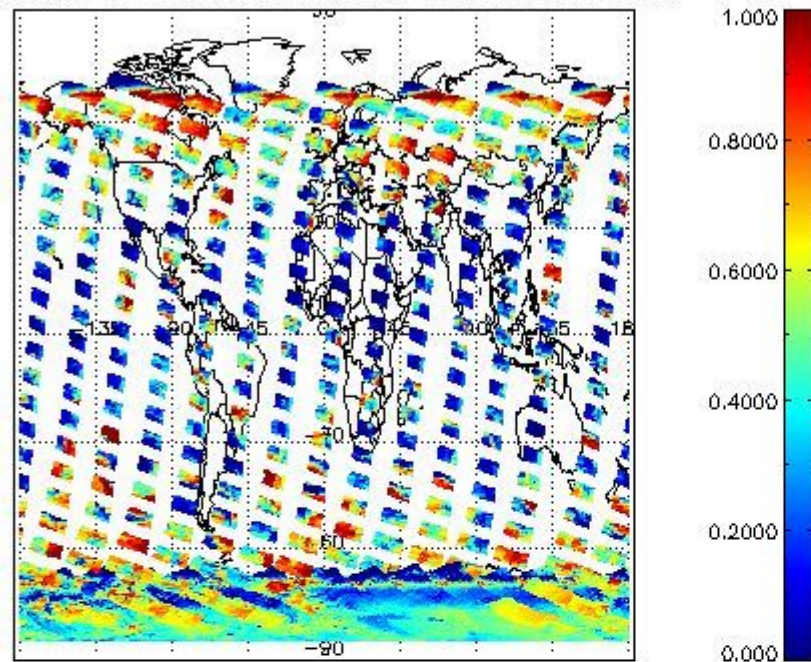
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	151060	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	151060	0.16867	0.12500	0.12500	0.25000	0.059598	s
CL_FRAC	151060	0.40873	0.40834	0.0000	1.0000	0.27153	-
CL_FRAC_ERR	151060	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	151060	5.3976	4.0000	4.0000	8.0000	1.9071	
PMD_READ_CL[0]	151060	0.19466	0.0000	0.0000	8.0000	0.98667	-
PMD_READ_CL[1]	151060	0.68922	0.0000	0.0000	8.0000	1.8274	-
CL_TOP_HEIGHT	129332	4.2083	3.2755	0.0000	17.000	3.7280	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	129332	55.028	45.487	0.0000	101.00	39.968	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	151060	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	151060	11001001	11000100	11000000	11100000	3101.2	flags
AERO_ABSO_IND	151060	3.1071	3.5813	-1.0093	16.309	2.2432	
AERO_IND_DIAG	151060	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	151060	01010101	00000000	00000000	11000000	24419.	flags

Time and geolocation plots:

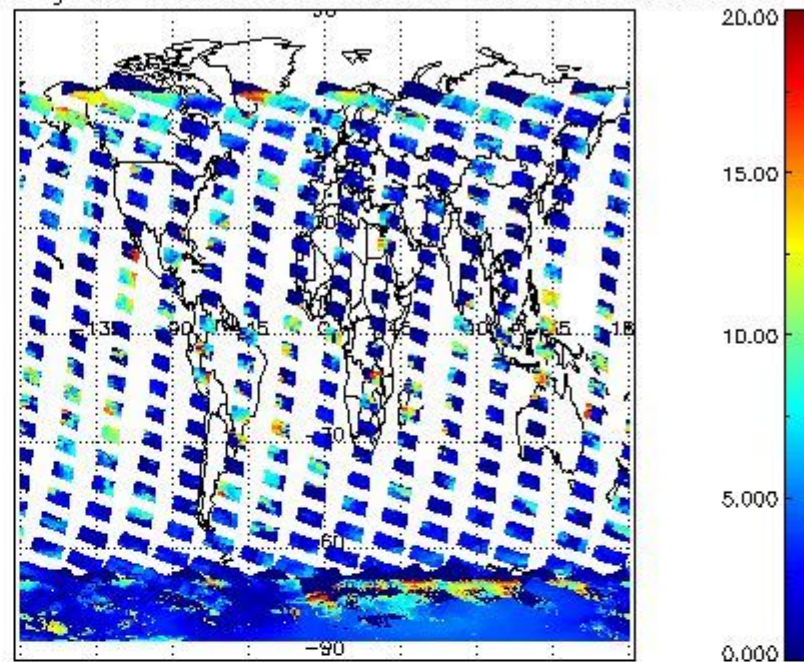
Plots are available for the following parameters:

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

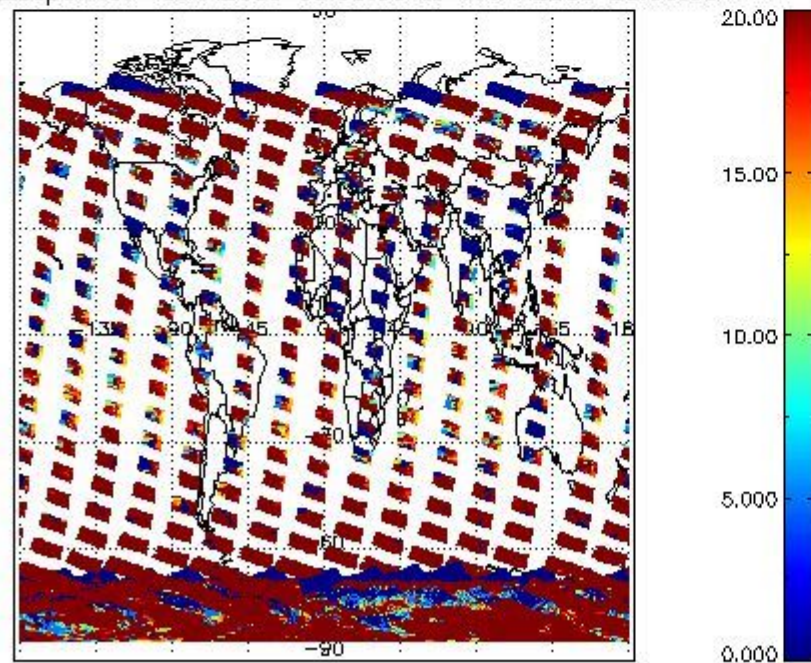
cL_frac for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



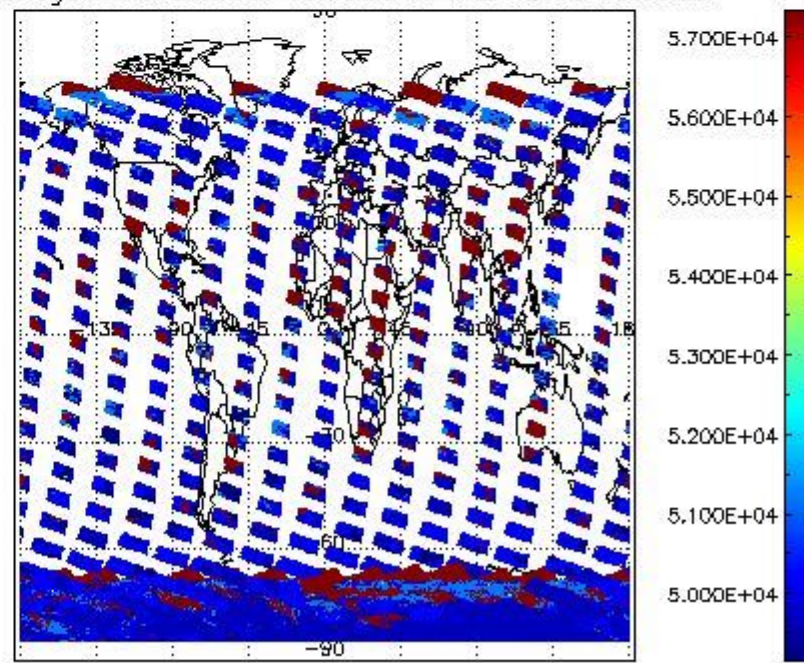
cL_top_height for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



cLopt_depth for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



cloud_flags for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



2.2.2 Nadir

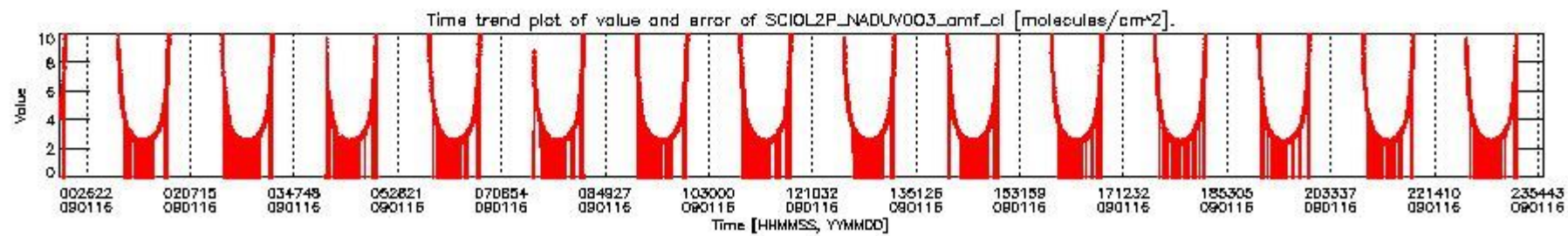
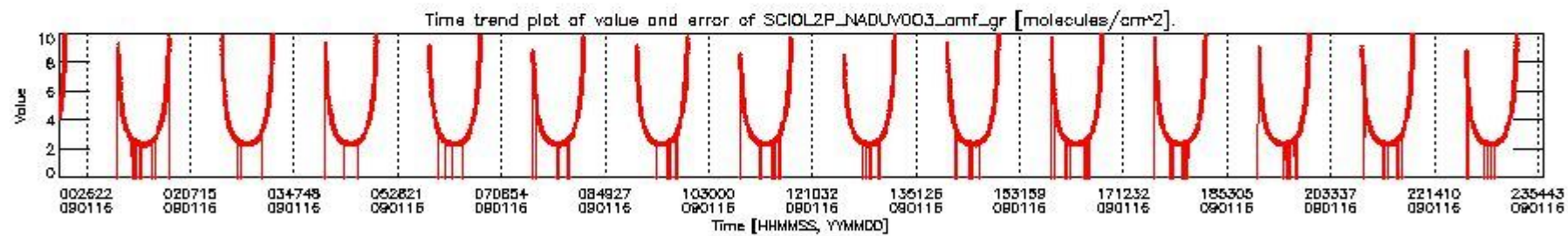
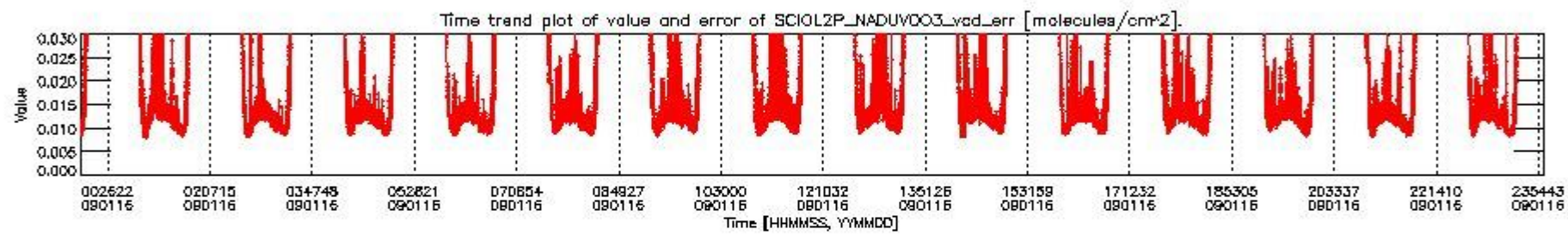
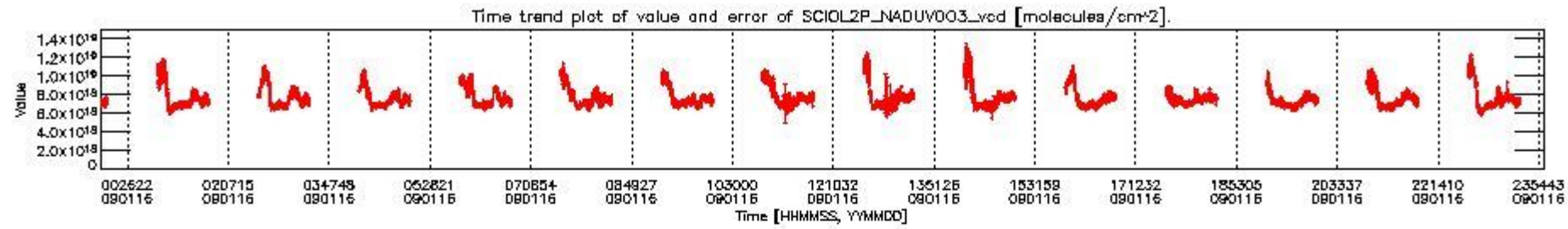
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

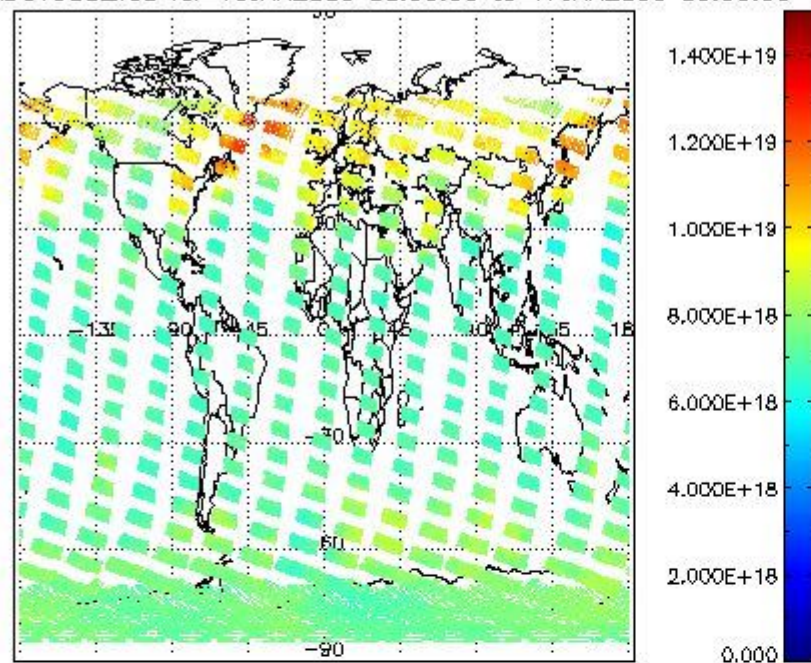
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

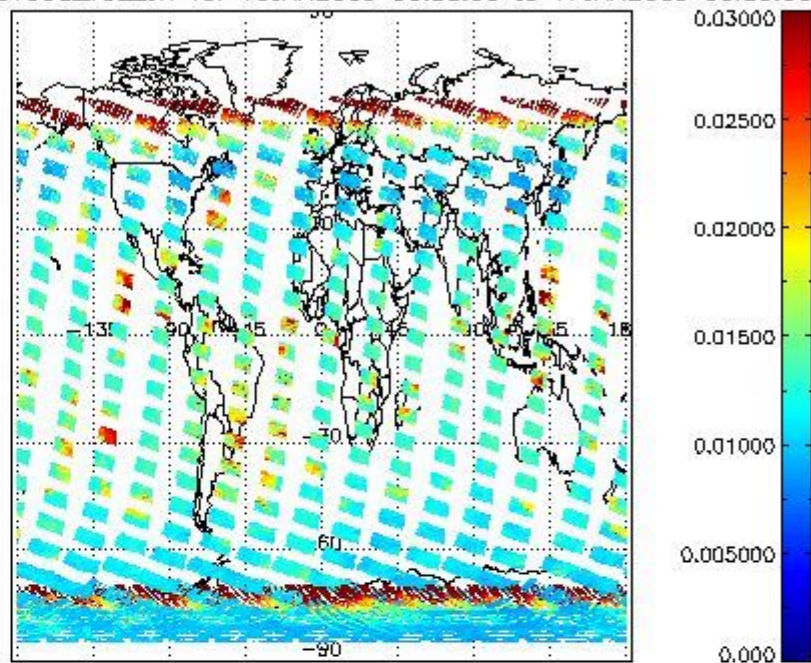
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



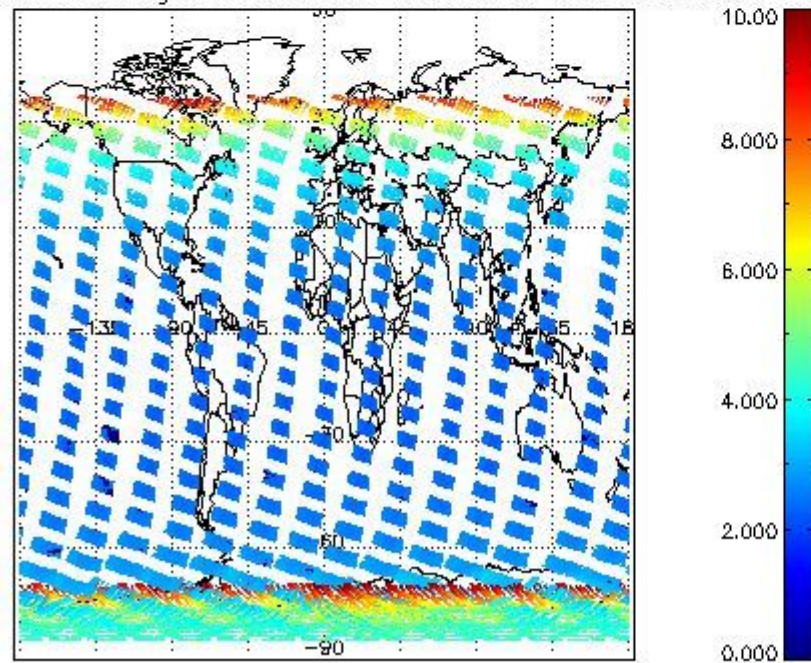
SCIOL2P_NADUV003_vcd for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



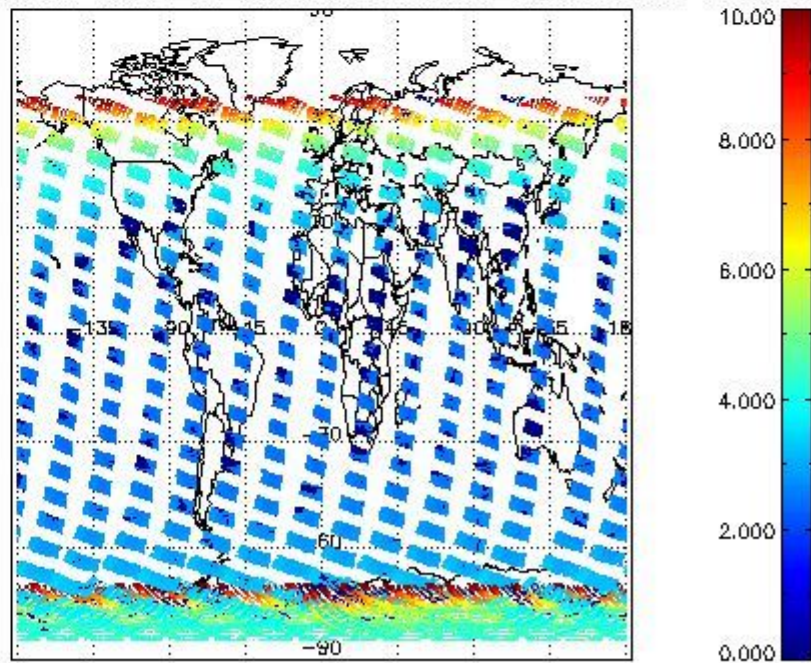
SCIOL2P_NADUV003_vcd_err for 16JAN2009 00:00:00 to 17JAN2009 00:00:00

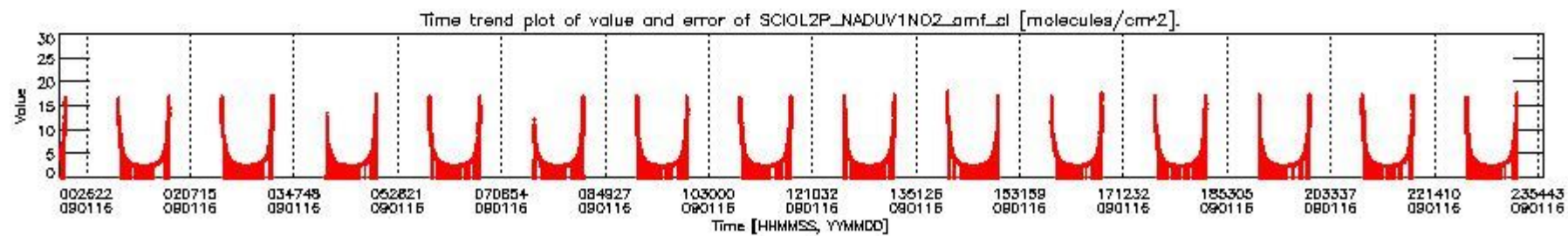
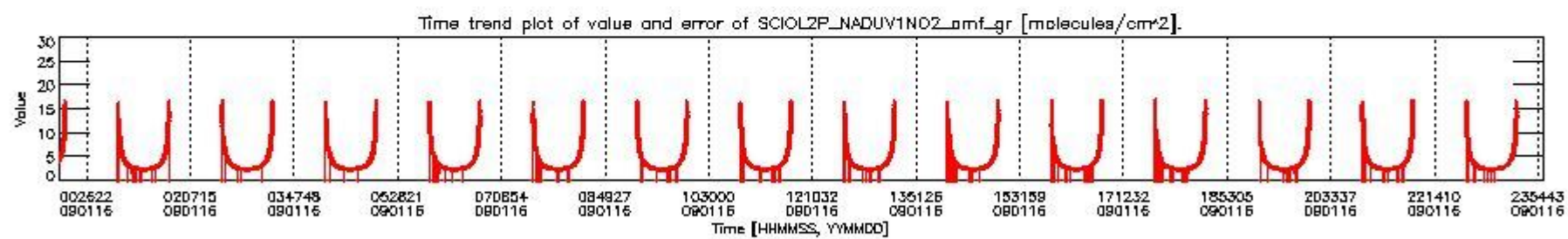
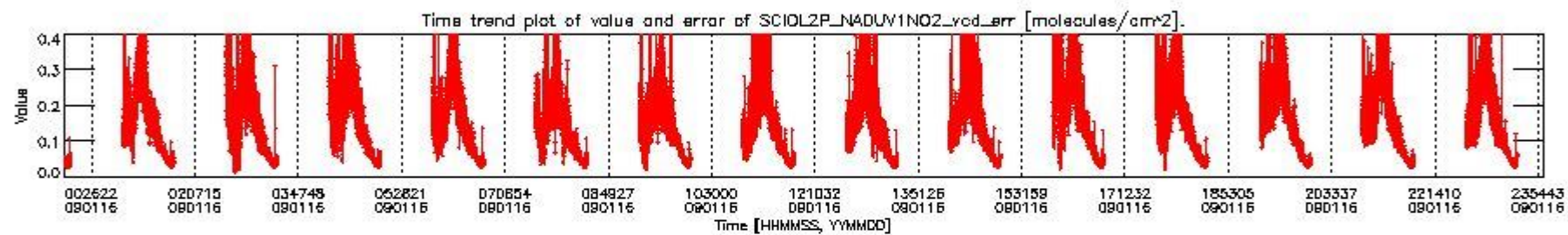
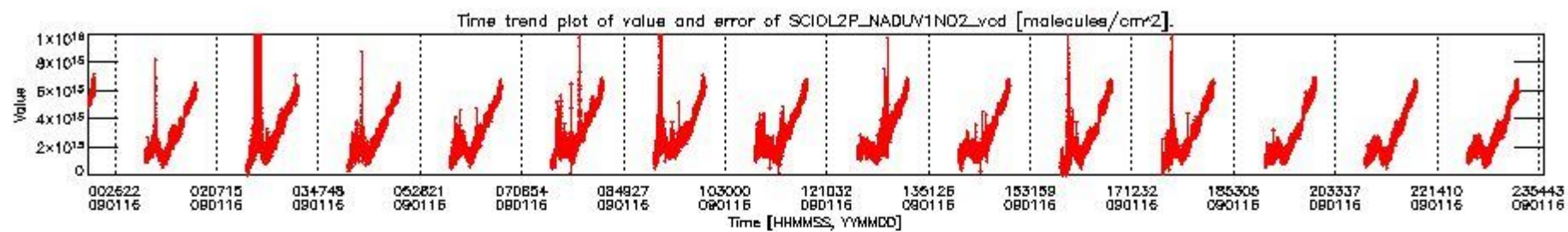


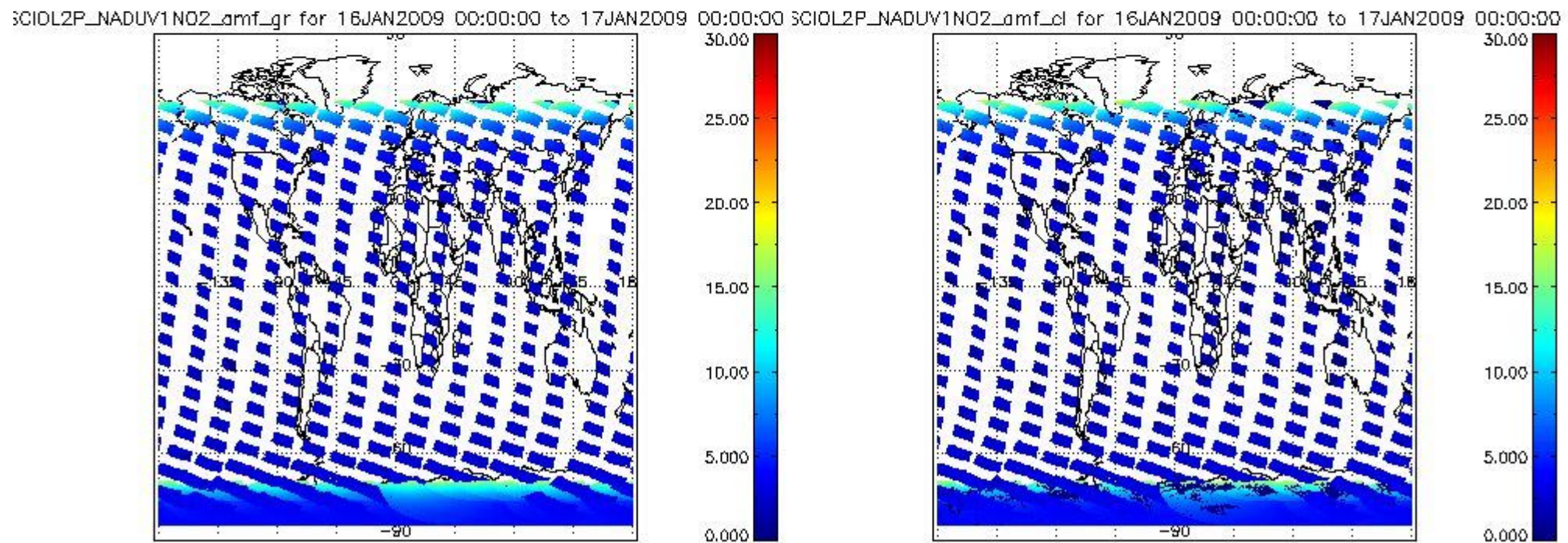
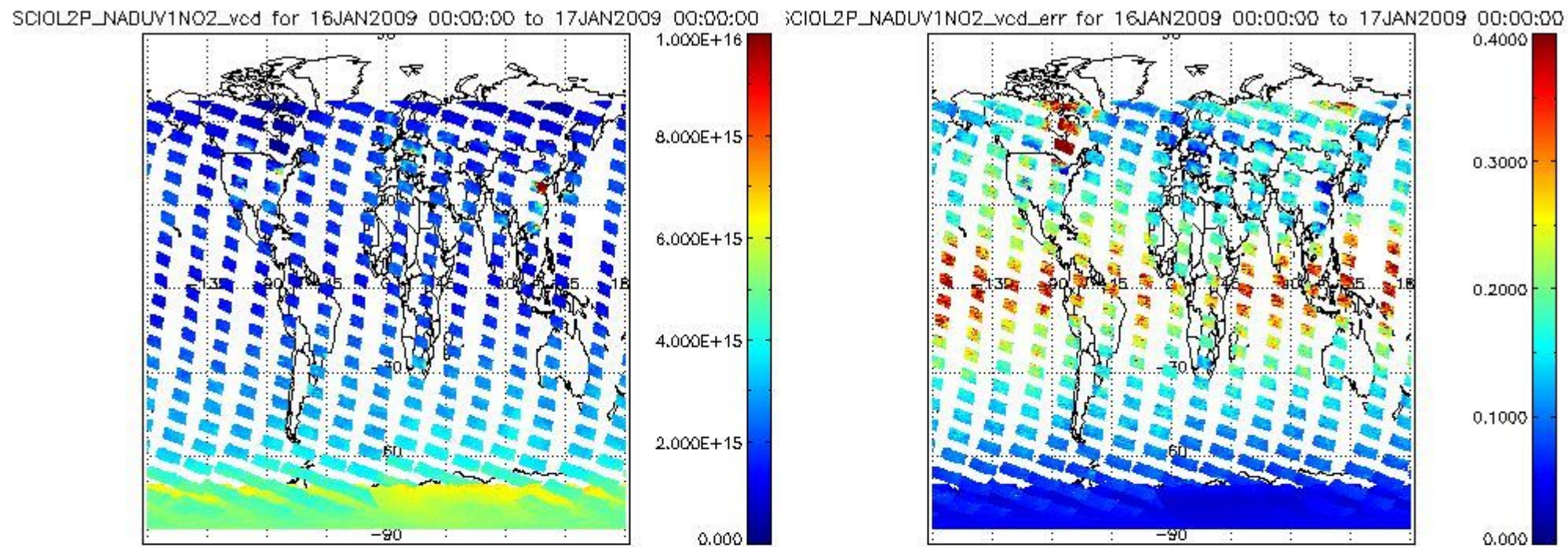
SCIOL2P_NADUV003_amf_gr for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 16JAN2009 00:00:00 to 17JAN2009 00:00:00







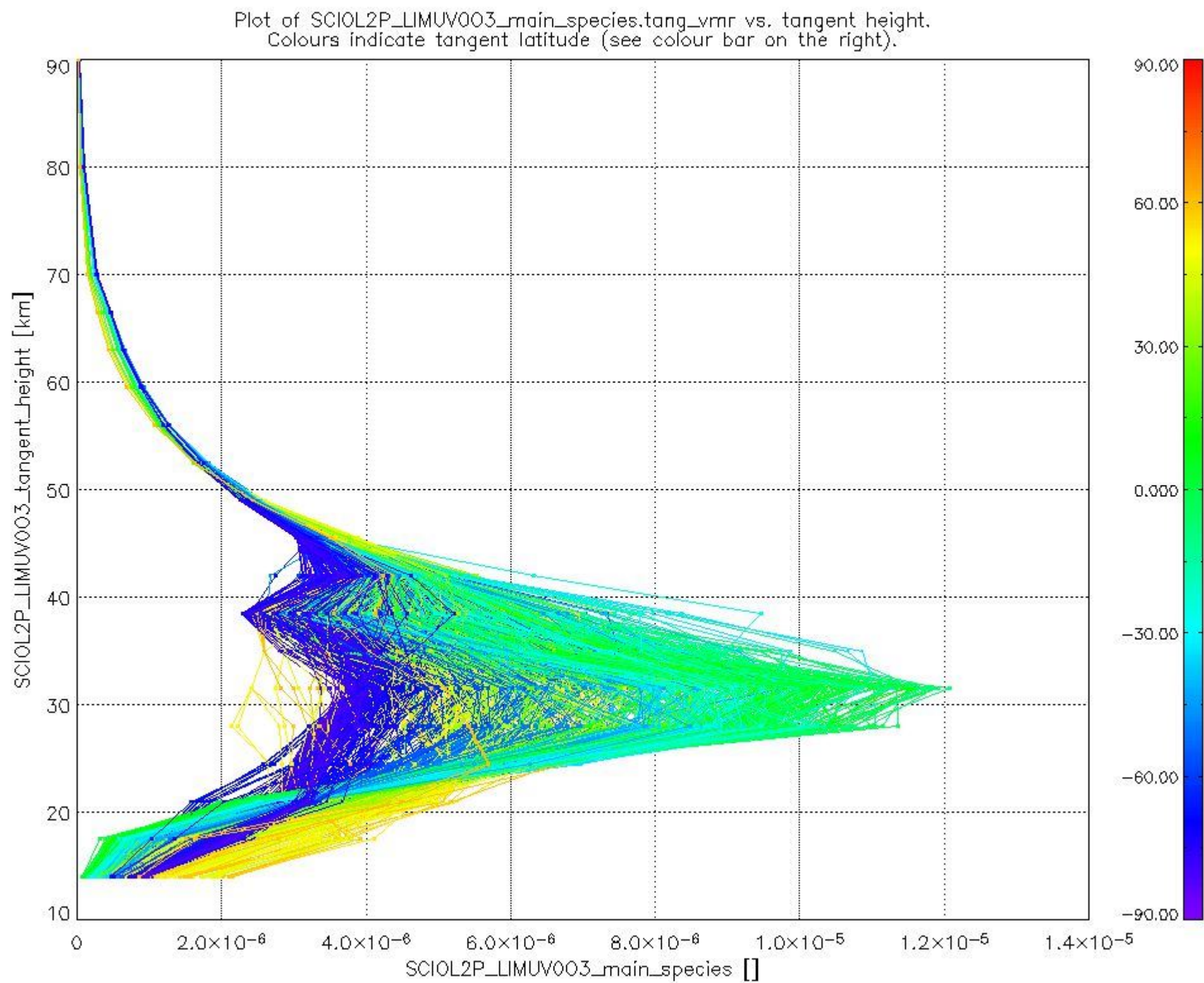
2.2.3 Limb

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

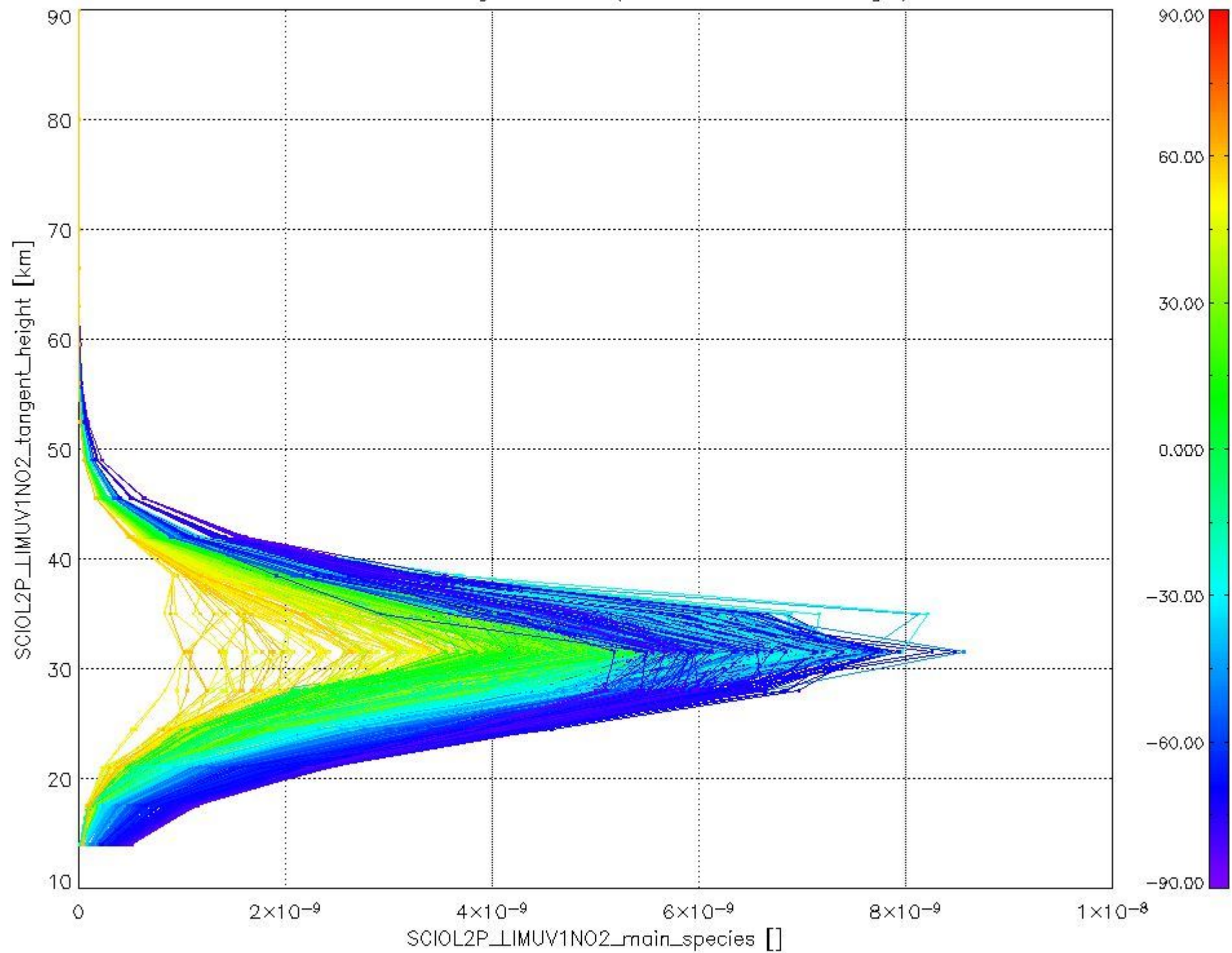
The following data items are currently included into this section:

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.



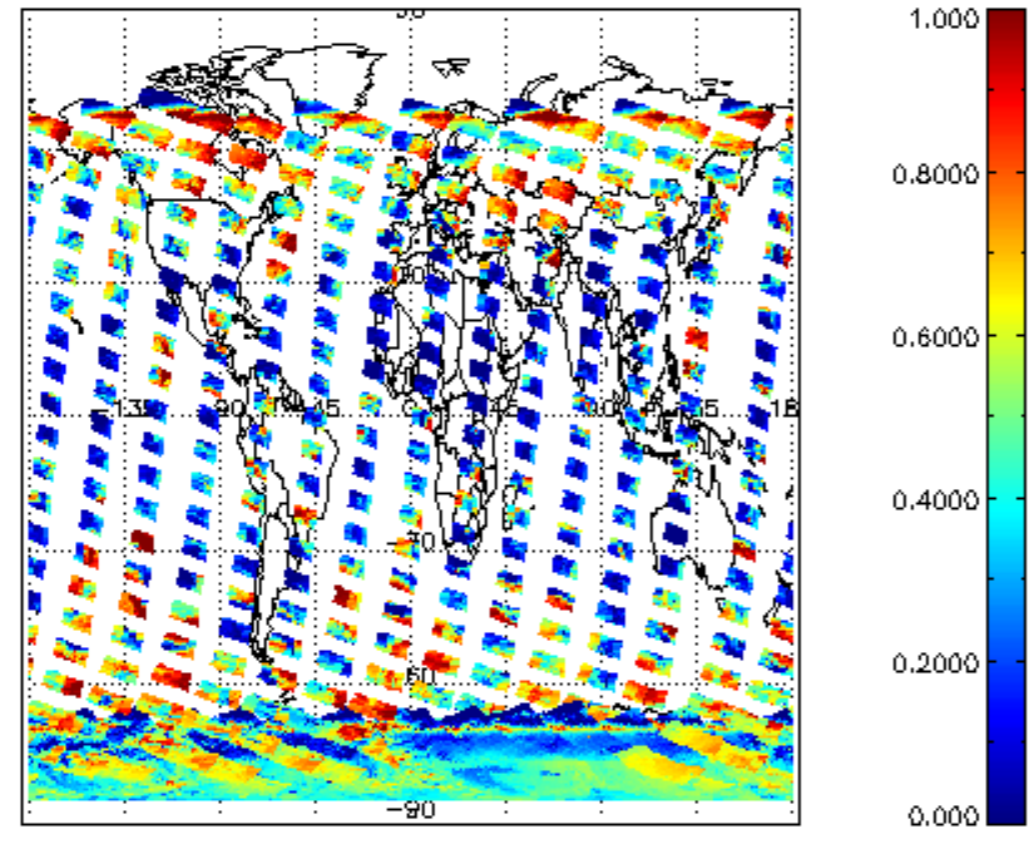
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



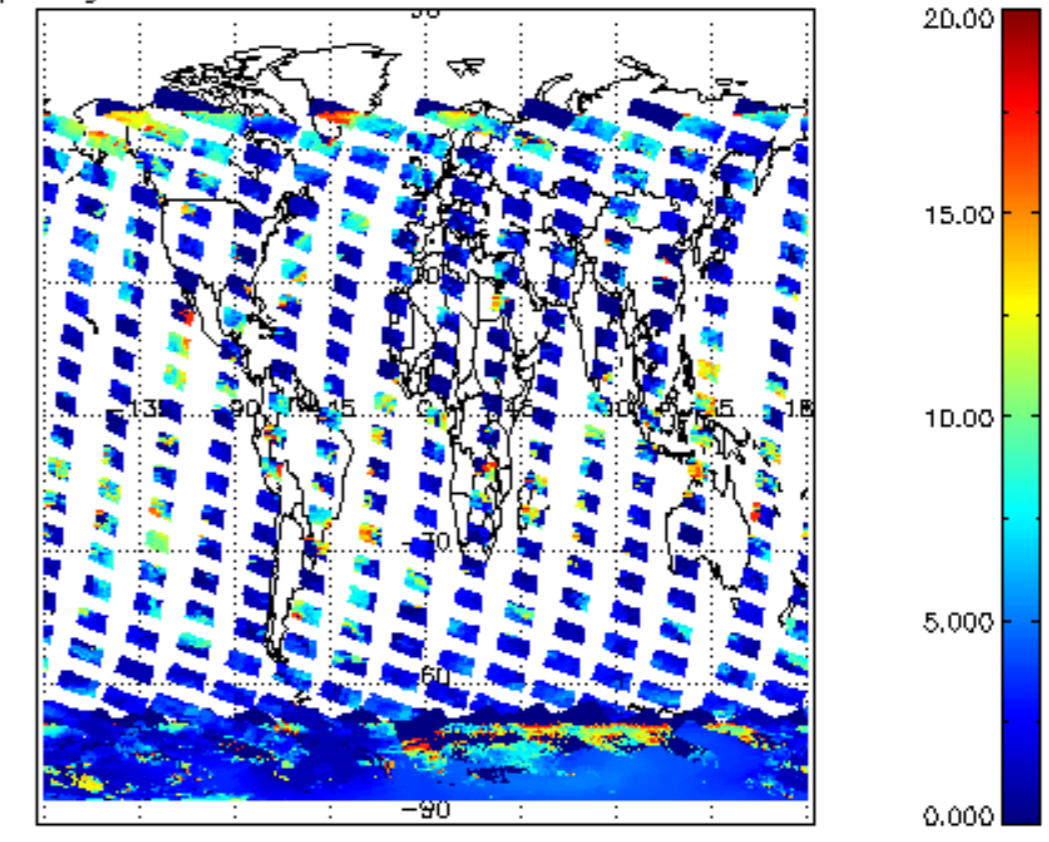
2.3 ADF monitoring

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

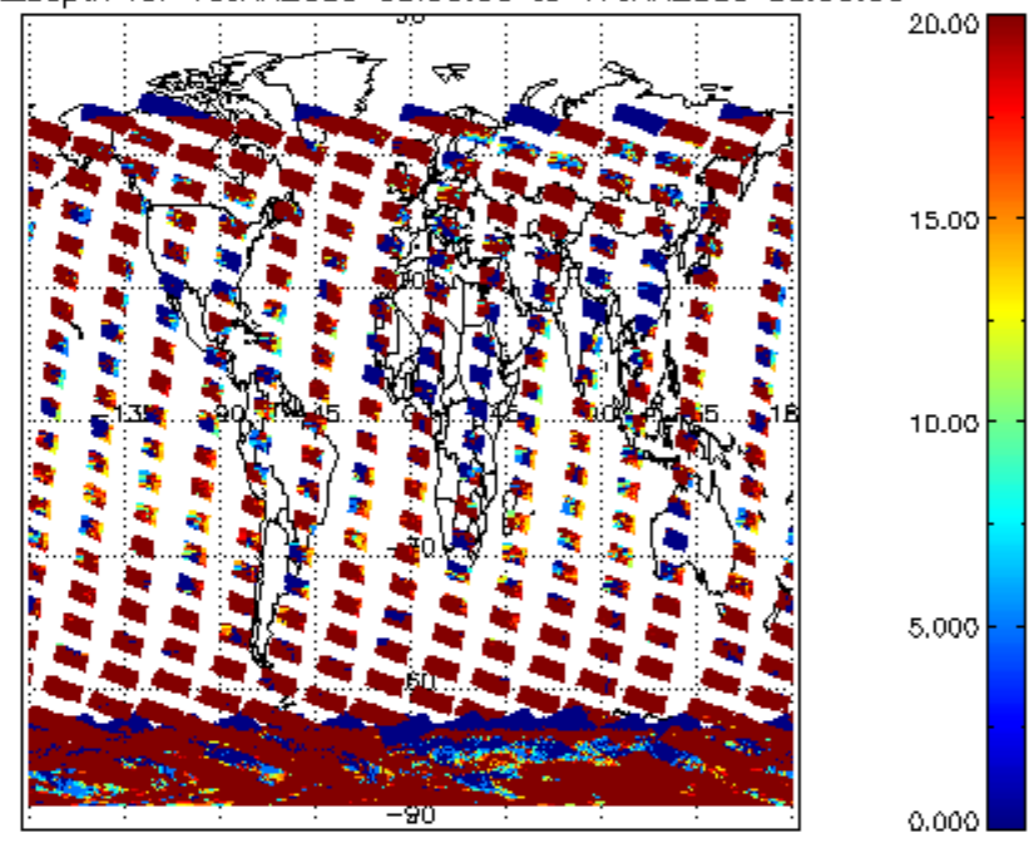
cL_frac for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



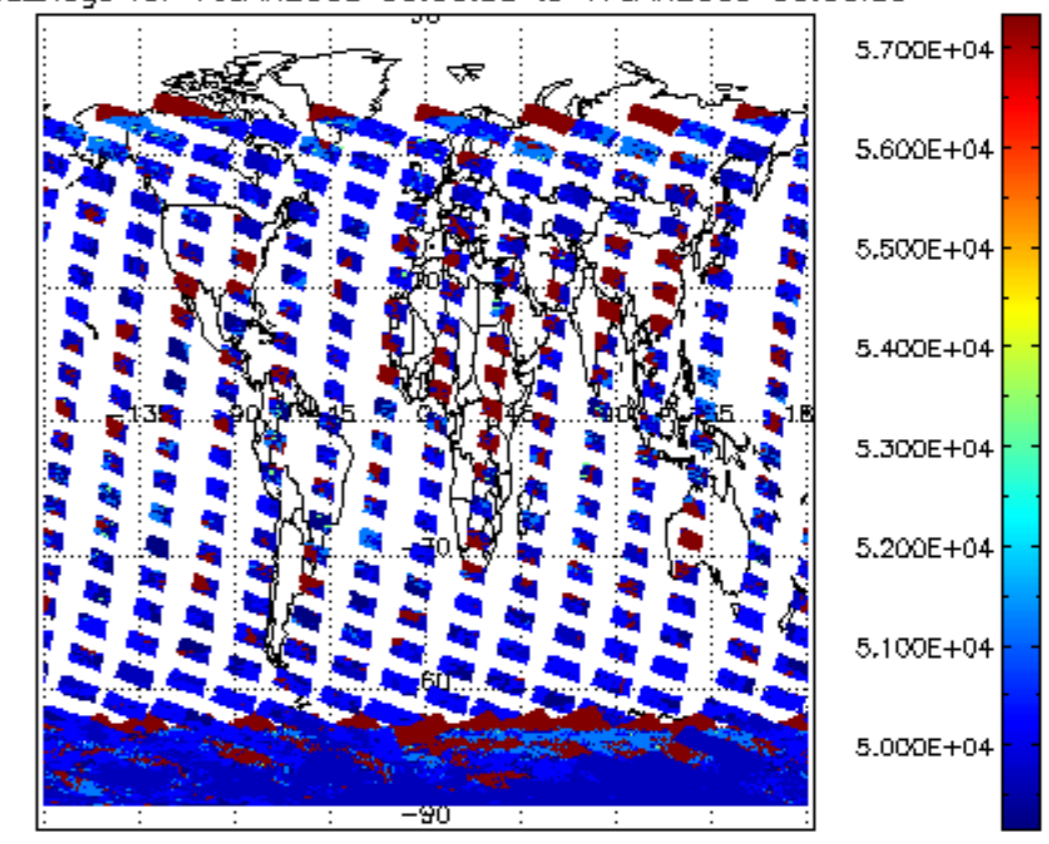
cL_top_height for 16JAN2009 00:00:00 to 17JAN2009 00:00:00

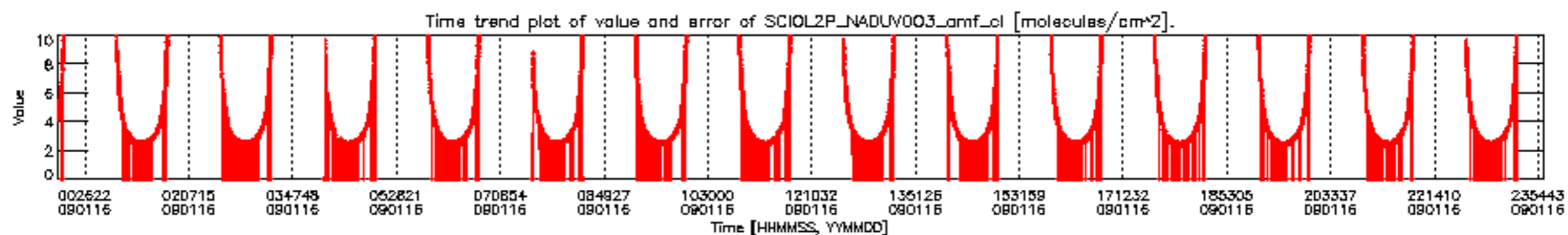
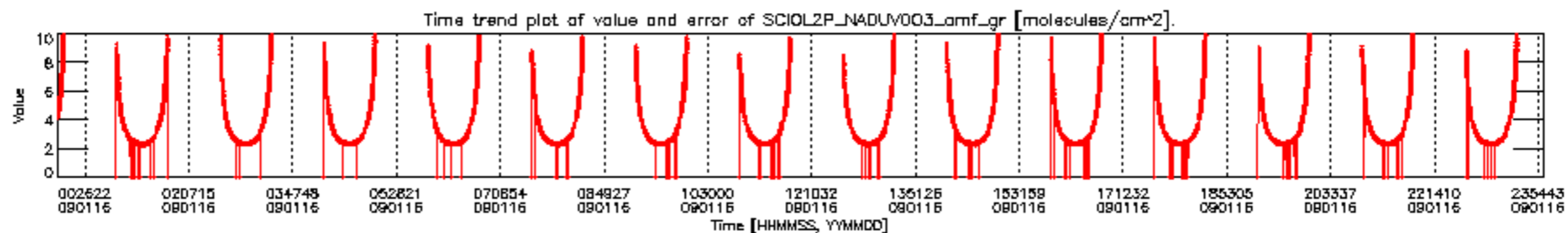
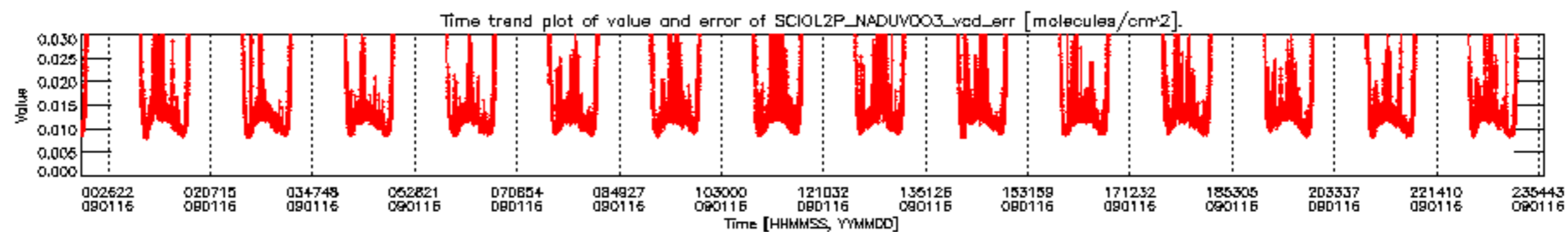
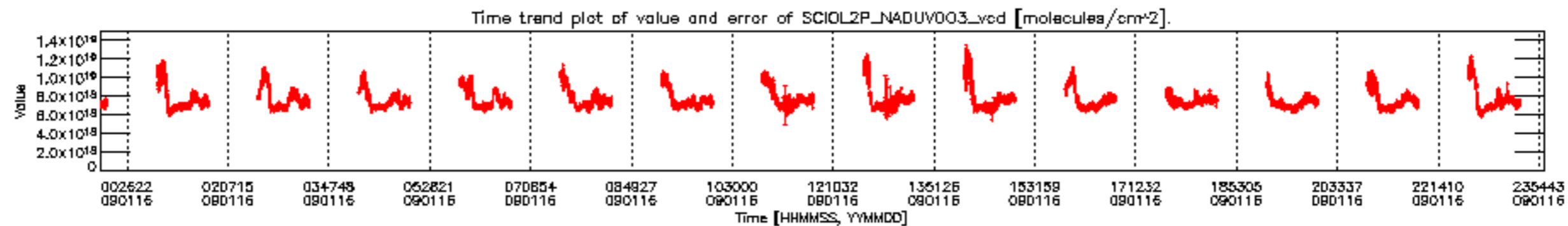


cL_opt_depth for 16JAN2009 00:00:00 to 17JAN2009 00:00:00

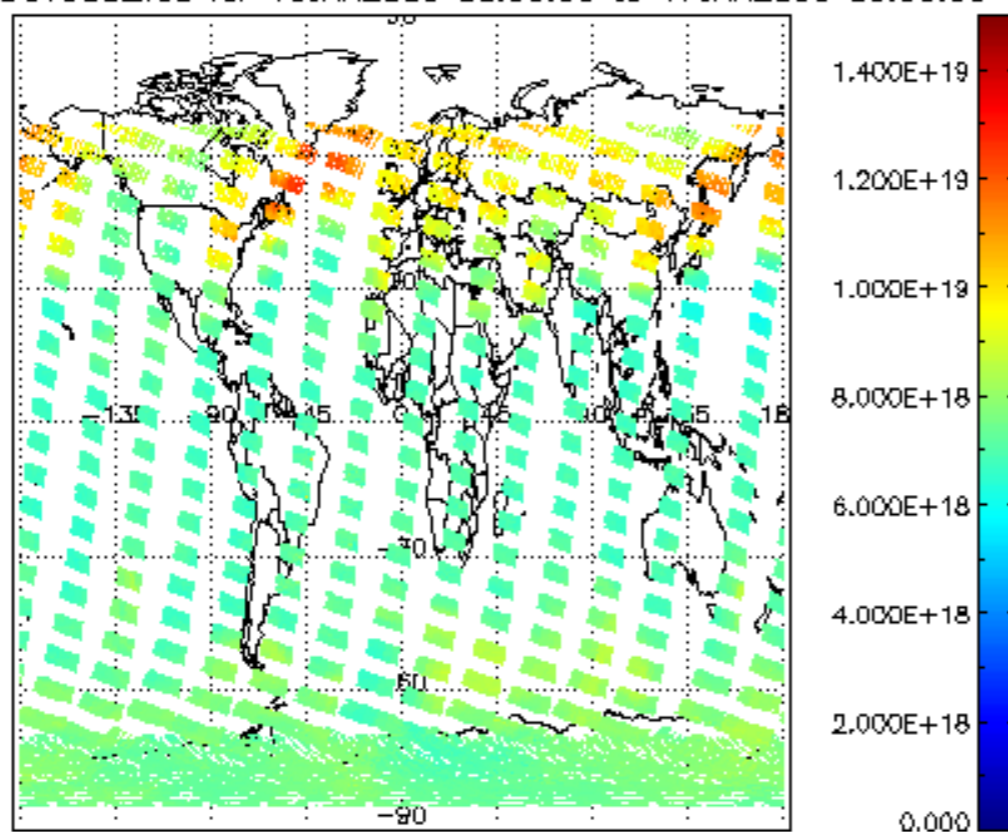


cloud_flags for 16JAN2009 00:00:00 to 17JAN2009 00:00:00

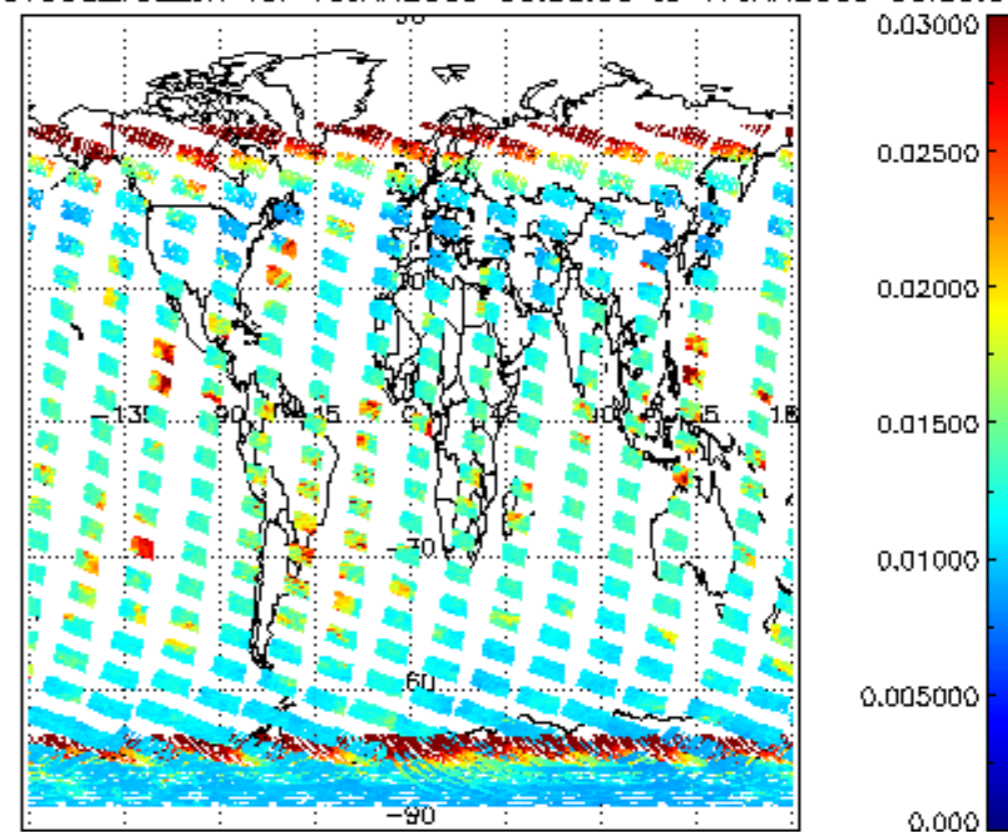




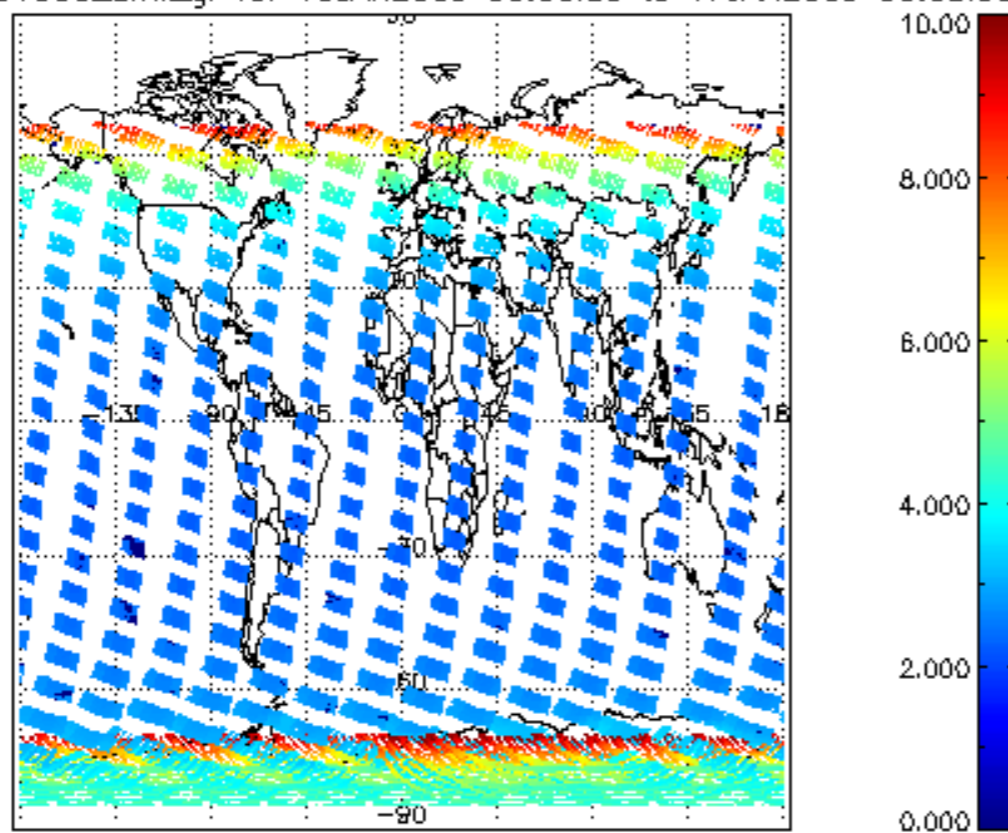
SCIOL2P_NADUV003_vcd for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



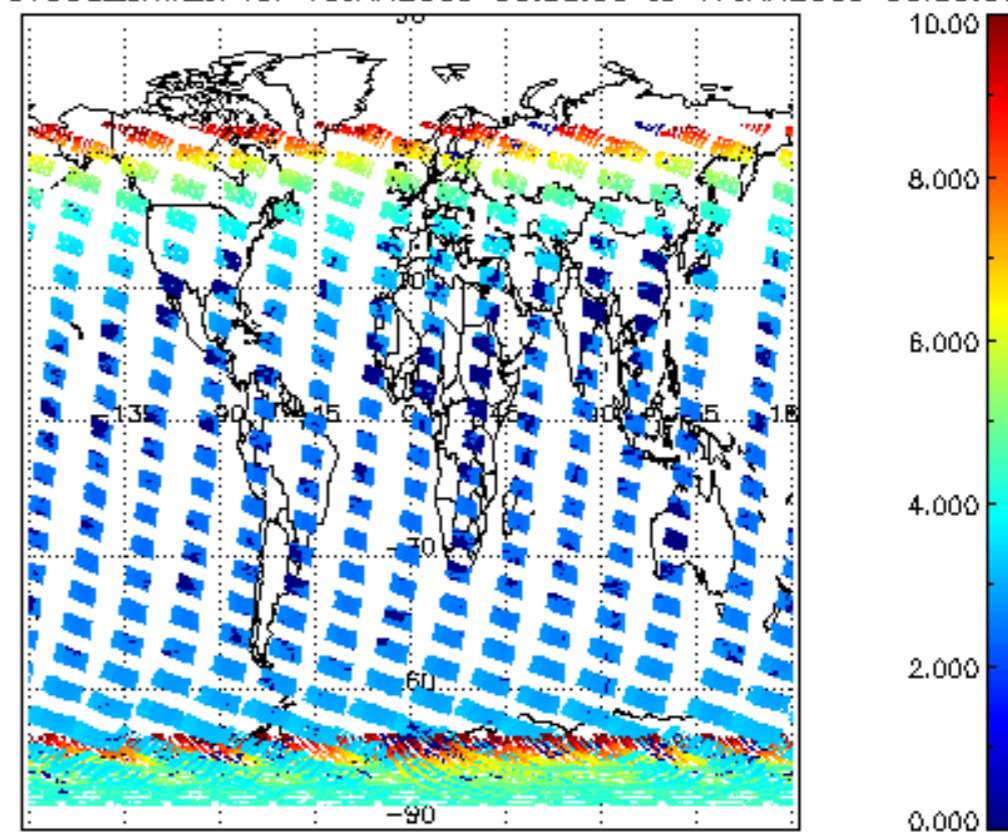
SCIOL2P_NADUV003_vcd_err for 16JAN2009 00:00:00 to 17JAN2009 00:00:00

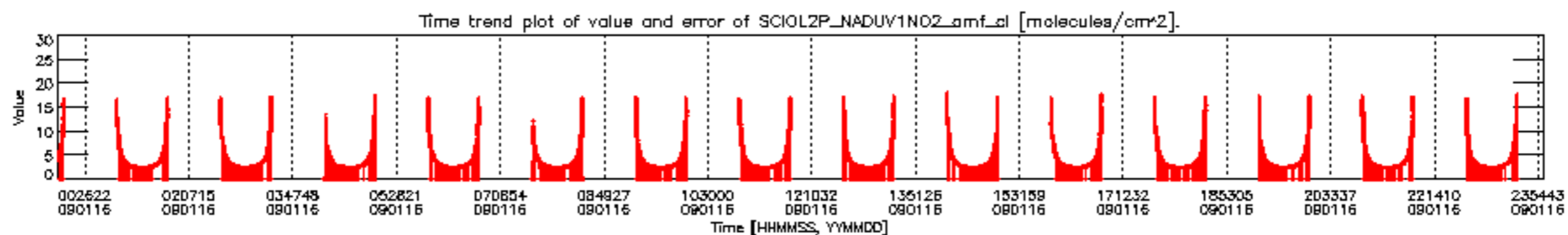
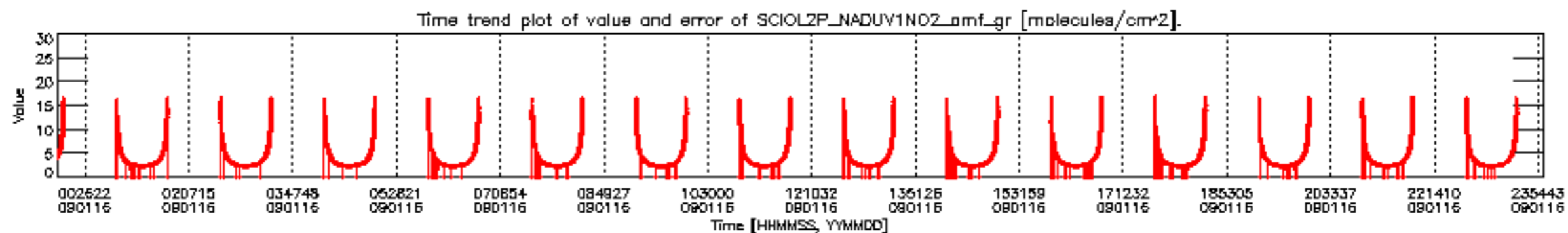
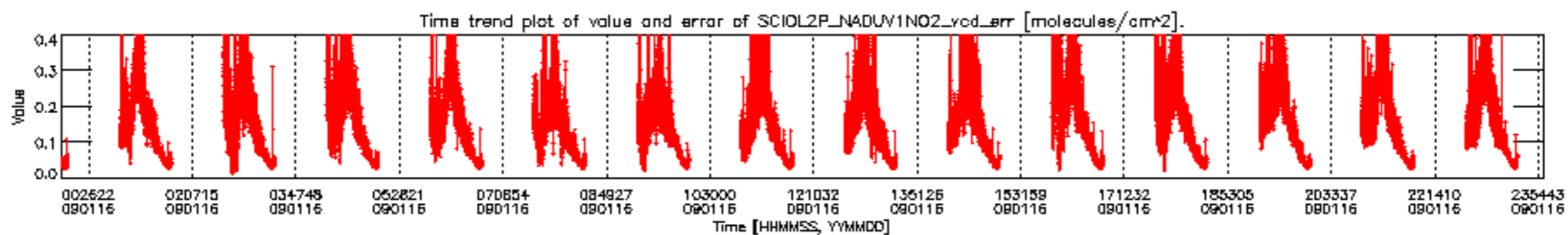
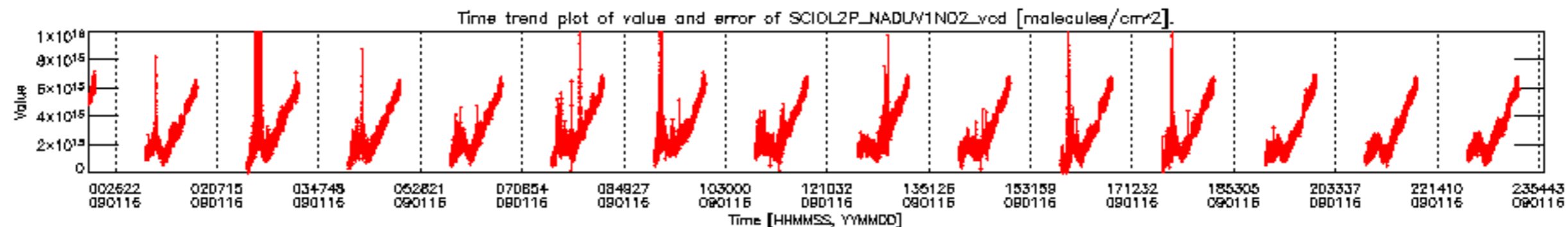


SCIOL2P_NADUV003_amf_gr for 16JAN2009 00:00:00 to 17JAN2009 00:00:00

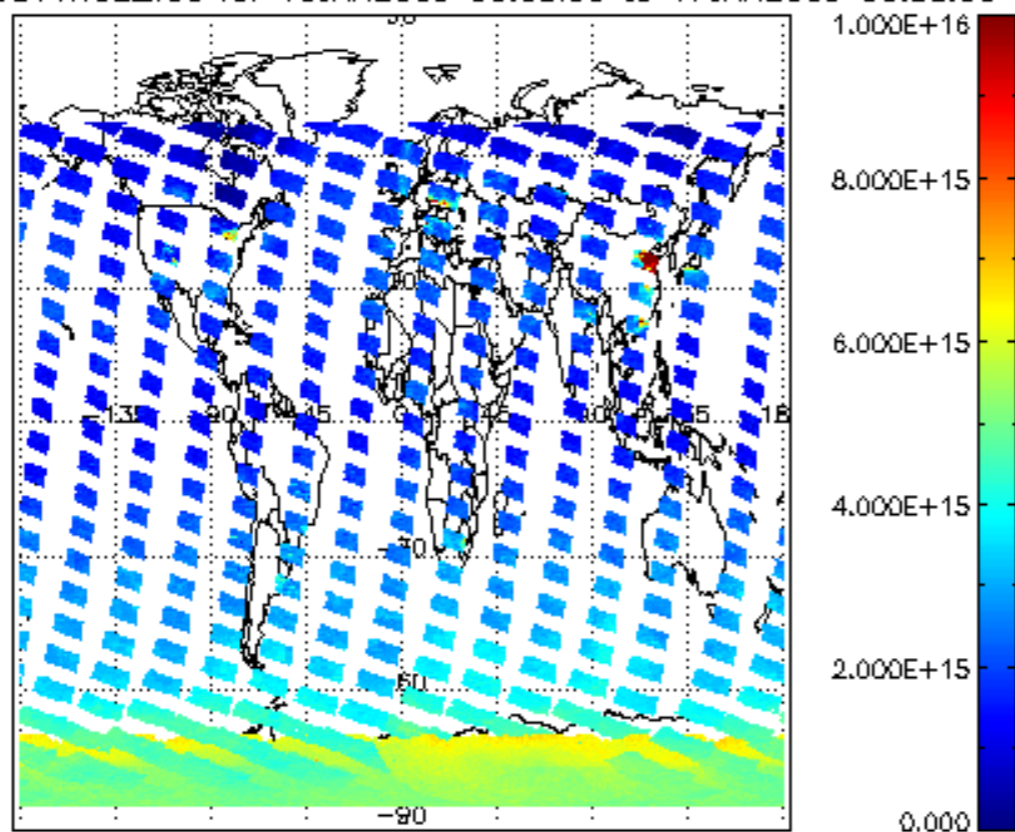


SCIOL2P_NADUV003_amf_cl for 16JAN2009 00:00:00 to 17JAN2009 00:00:00

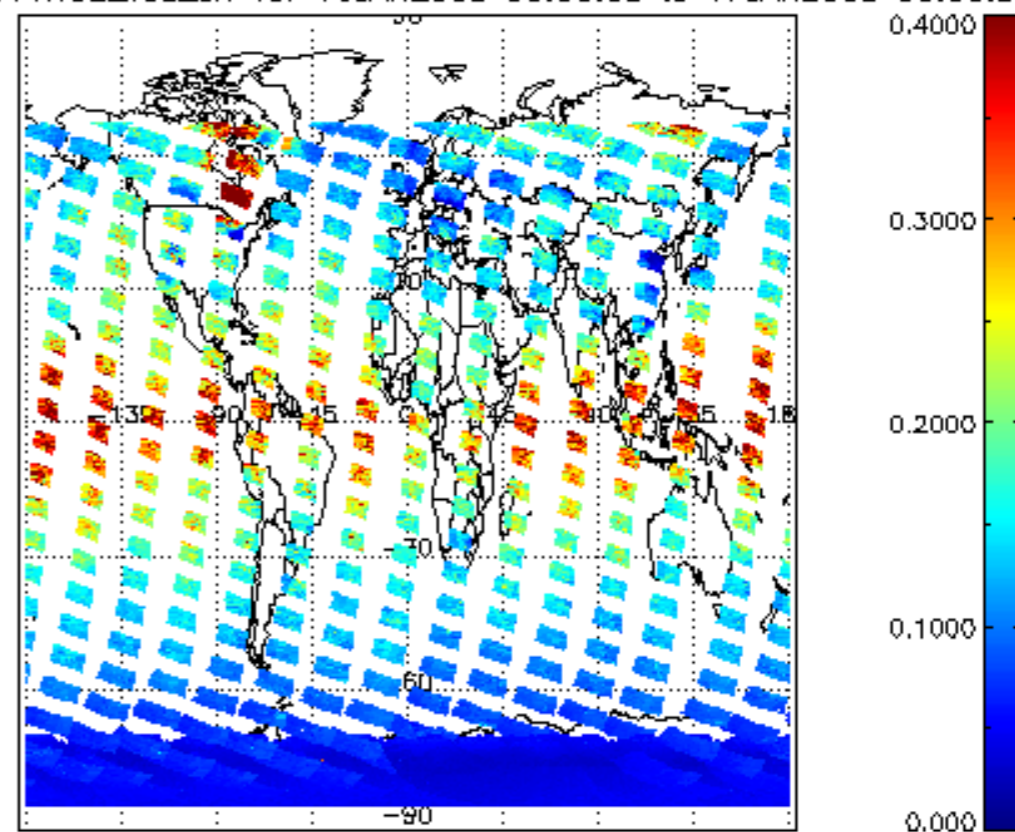




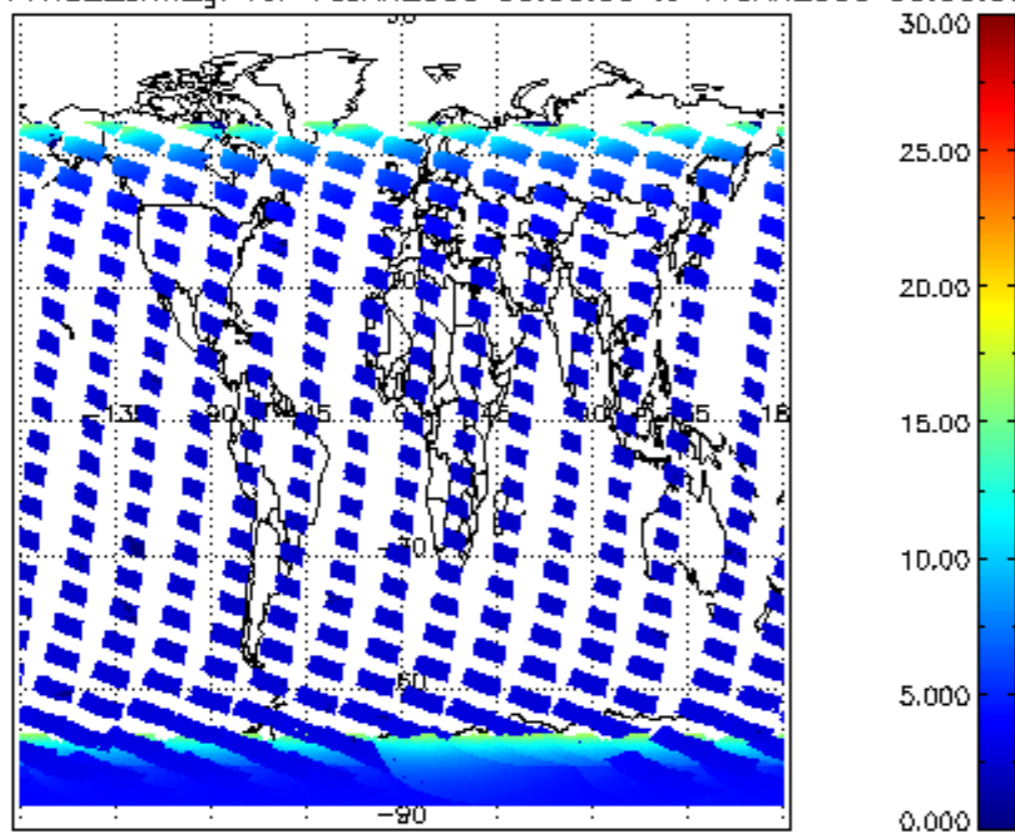
SCIOL2P_NADUV1NO2_vcd for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



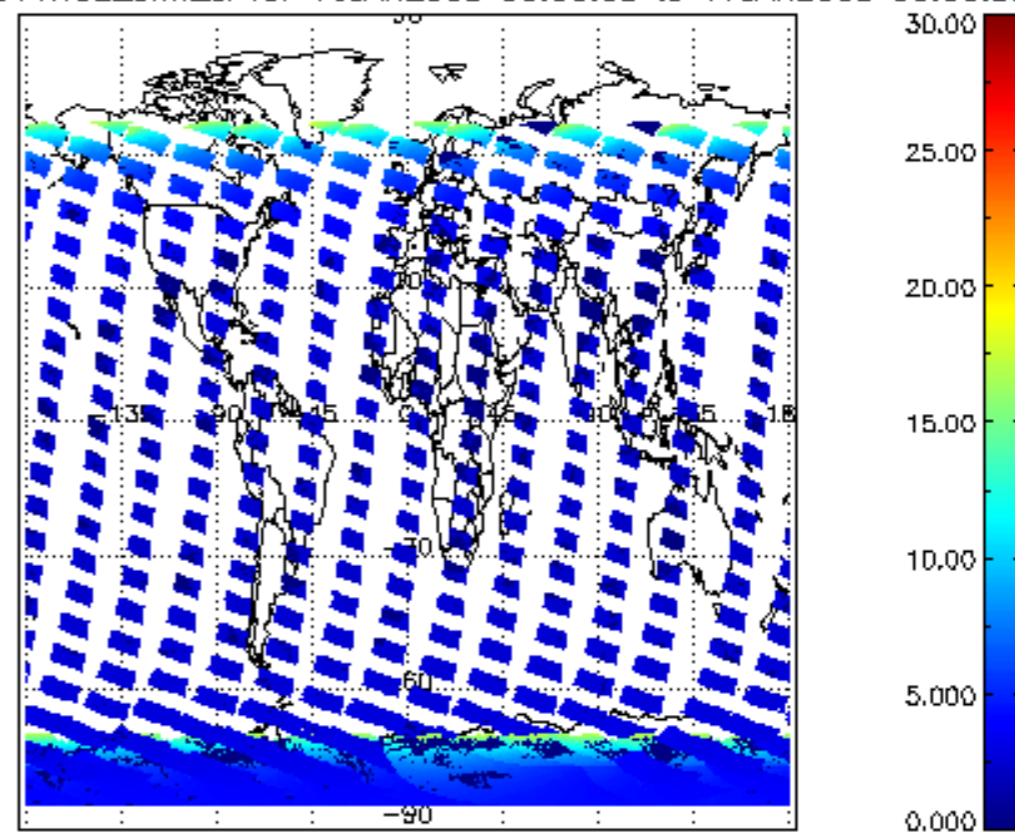
SCIOL2P_NADUV1NO2_vcd_err for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



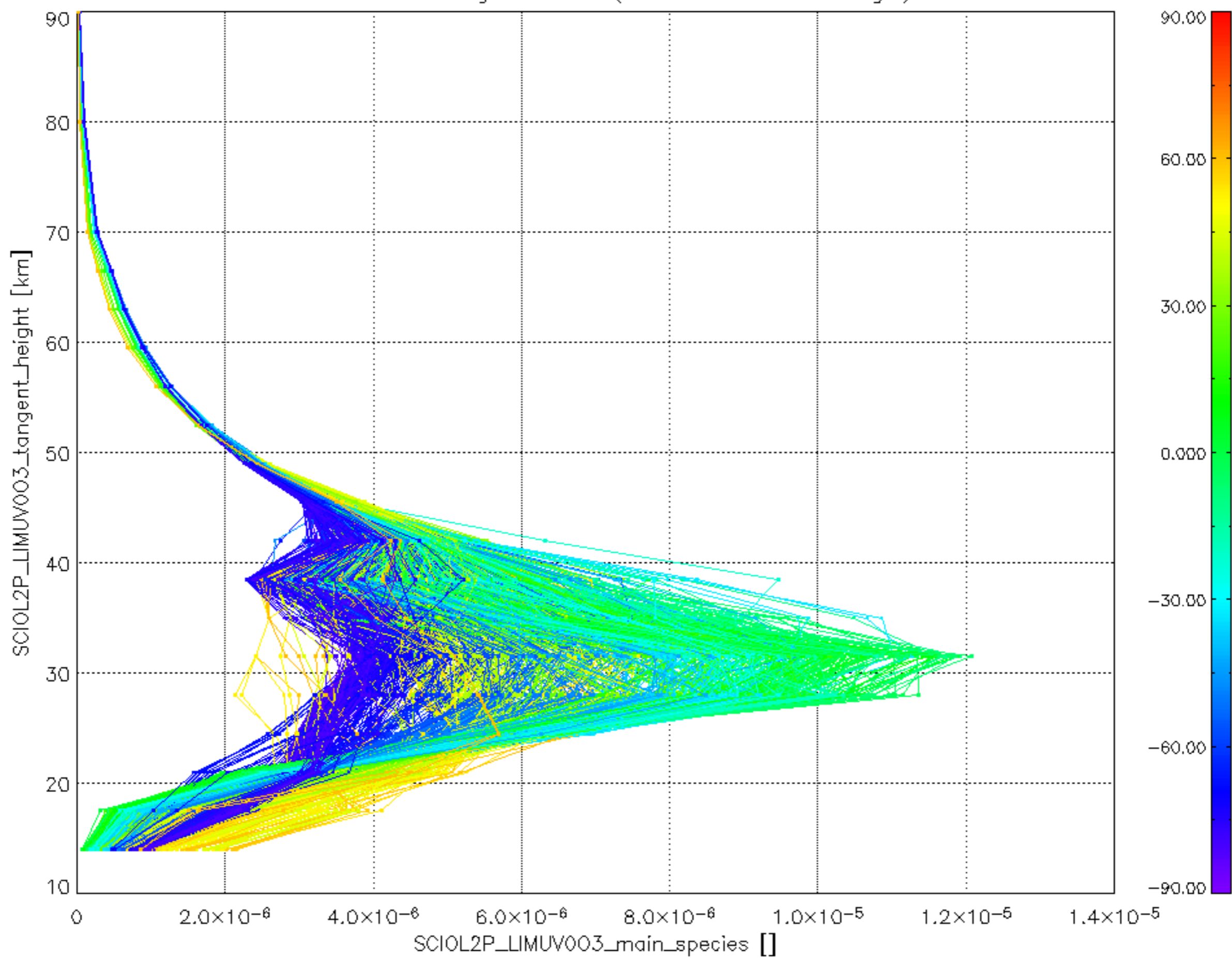
SCIOL2P_NADUV1NO2_amf_gr for 16JAN2009 00:00:00 to 17JAN2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 16JAN2009 00:00:00 to 17JAN2009 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).

