

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 09:00:49
Data source version	SCIA-OL/3.01-R
Processing scope for products	03JAN2009 00:00:00 to 04JAN2009 00:00:00
Start time of first product within scope	02JAN2009 23:21:55
Stop time of last product within scope	03JAN2009 23:44:46
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__2PRDPA20090102_232155_000032692075_00159_35784_1691.N1	02JAN2009 23:21:55	03JAN2009 00:16:25	0	GOOD
1	SCI_OL__2PRDPA20090103_010123_000033252075_00160_35785_1692.N1	03JAN2009 01:01:23	03JAN2009 01:56:48	0	GOOD
2	SCI_OL__2PRDPA20090103_024307_000032692075_00161_35786_1694.N1	03JAN2009 02:43:07	03JAN2009 03:37:37	0	GOOD
3	SCI_OL__2PRDPA20090103_042234_000033252075_00162_35787_1695.N1	03JAN2009 04:22:34	03JAN2009 05:18:00	0	GOOD
4	SCI_OL__2PRDPA20090103_060418_000032692075_00163_35788_1696.N1	03JAN2009 06:04:18	03JAN2009 06:58:48	0	GOOD
5	SCI_OL__2PRDPA20090103_074346_000033252075_00164_35789_1697.N1	03JAN2009 07:43:46	03JAN2009 08:39:11	0	GOOD
6	SCI_OL__2PRDPA20090103_092530_000032692075_00165_35790_1706.N1	03JAN2009 09:25:30	03JAN2009 10:20:00	0	GOOD
7	SCI_OL__2PRDPA20090103_110457_000033252075_00166_35791_1698.N1	03JAN2009 11:04:57	03JAN2009 12:00:23	0	GOOD
8	SCI_OL__2PRDPA20090103_124641_000032692075_00167_35792_1699.N1	03JAN2009 12:46:41	03JAN2009 13:41:11	0	GOOD
9	SCI_OL__2PRDPA20090103_142609_000033252075_00168_35793_1700.N1	03JAN2009 14:26:09	03JAN2009 15:21:34	0	GOOD
10	SCI_OL__2PRDPA20090103_160753_000032692075_00169_35794_1701.N1	03JAN2009 16:07:53	03JAN2009 17:02:23	0	GOOD
11	SCI_OL__2PRDPA20090103_174650_000033812075_00170_35795_1702.N1	03JAN2009 17:46:50	03JAN2009 18:43:12	0	GOOD
12	SCI_OL__2PRDPA20090103_192726_000033252075_00171_35796_1703.N1	03JAN2009 19:27:26	03JAN2009 20:22:52	0	GOOD
13	SCI_OL__2PRDPA20090103_210832_000033252075_00172_35797_1704.N1	03JAN2009 21:08:32	03JAN2009 22:03:57	0	GOOD
14	SCI_OL__2PRDPA20090103_225016_000032692075_00173_35798_1705.N1	03JAN2009 22:50:16	03JAN2009 23:44:46	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: 152360

Total number of cloud data DSRs with good quality flag (=0): 152360 (100.0 %)

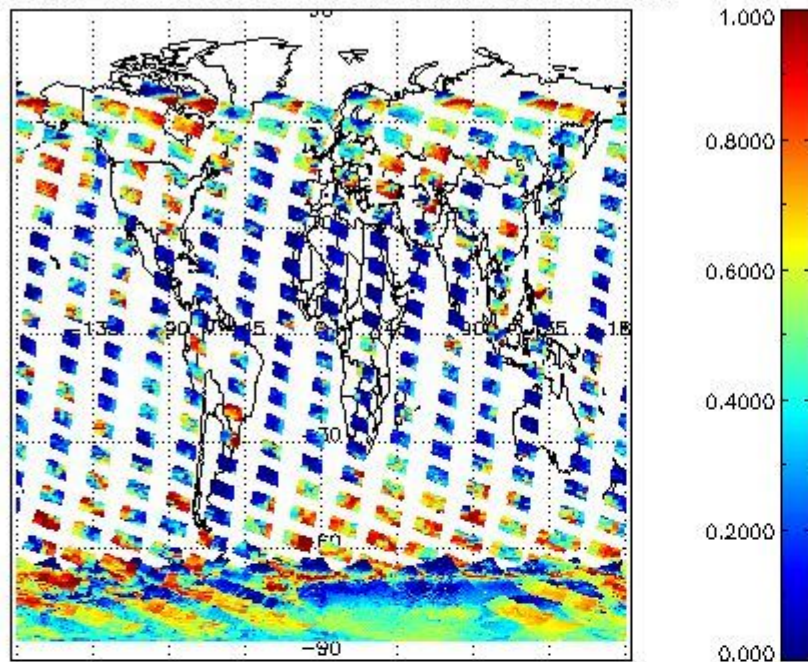
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	152360	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	152360	0.16894	0.12500	0.12500	0.25000	0.059681	s
CL_FRAC	152360	0.40026	0.39462	0.0000	1.0000	0.27468	-
CL_FRAC_ERR	152360	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	152360	5.4061	4.0000	4.0000	8.0000	1.9098	
PMD_READ_CL[0]	152360	0.18271	0.0000	0.0000	8.0000	0.95126	-
PMD_READ_CL[1]	152360	0.79369	0.0000	0.0000	8.0000	1.9535	-
CL_TOP_HEIGHT	128032	4.2167	3.2493	0.0000	17.000	3.8748	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	128032	53.209	41.823	0.0000	101.00	40.737	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	152360	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	152360	11001010	11000100	11000000	11100000	3230.4	flags
AERO_ABSO_IND	152360	3.0444	3.4301	-1.0017	14.621	2.2015	
AERO_IND_DIAG	152360	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	152360	01010101	00000000	00000000	11000000	24436.	flags

Time and geolocation plots:

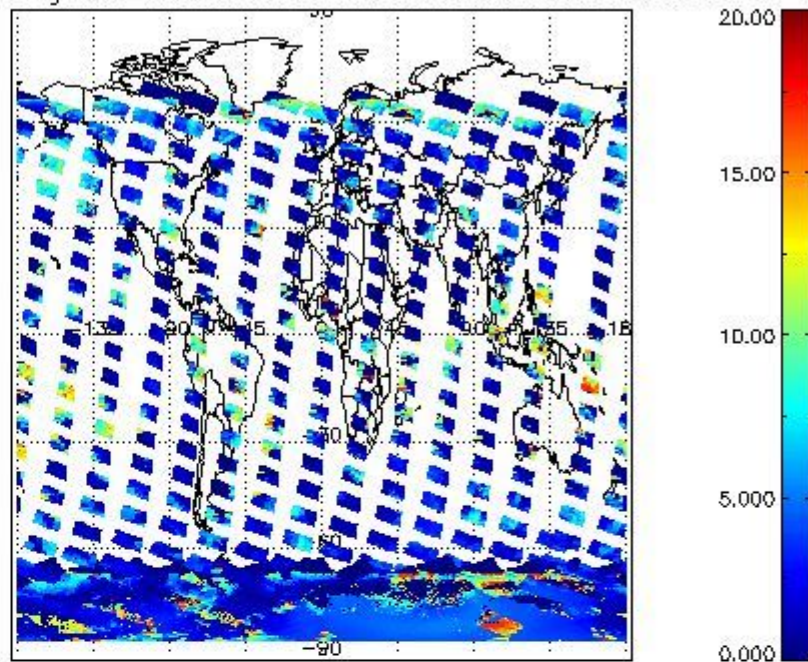
Plots are available for the following parameters:

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

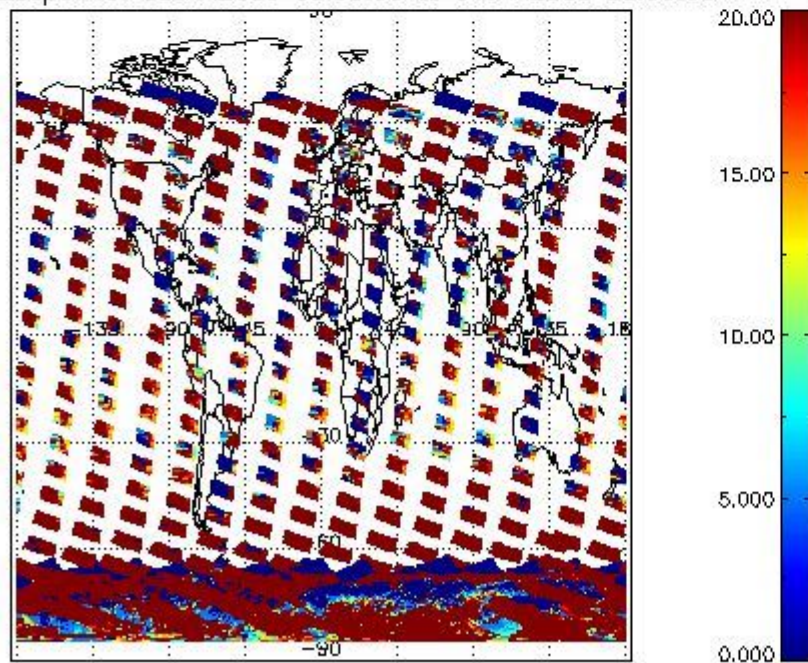
cL_frac for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



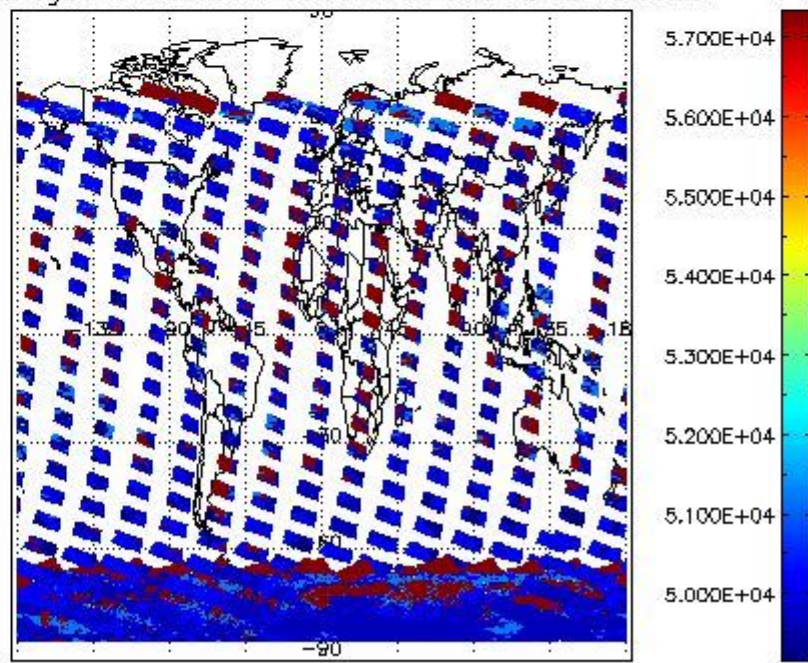
cL_top_height for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



cLopt_depth for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



cloud_flags for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



2.2.2 Nadir

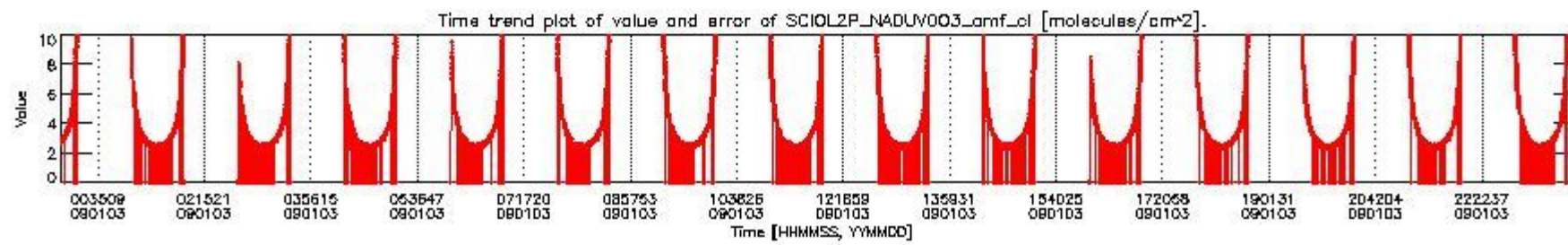
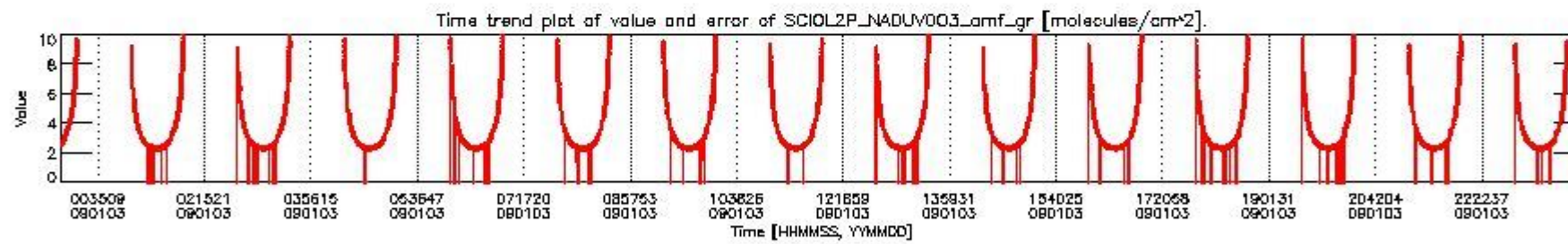
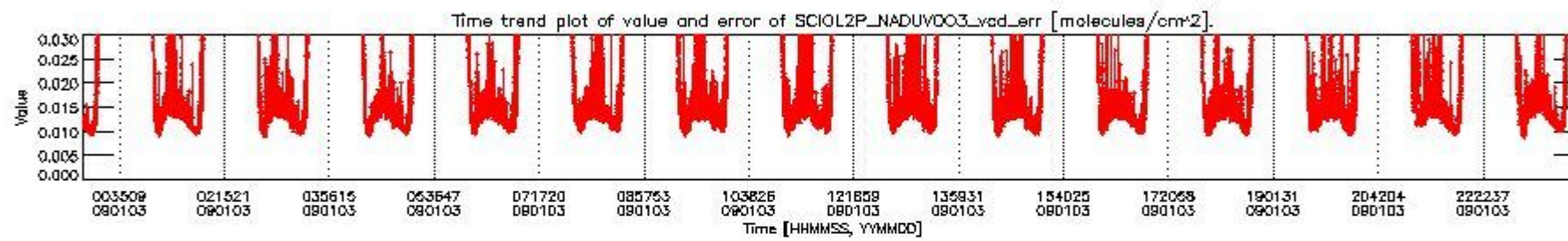
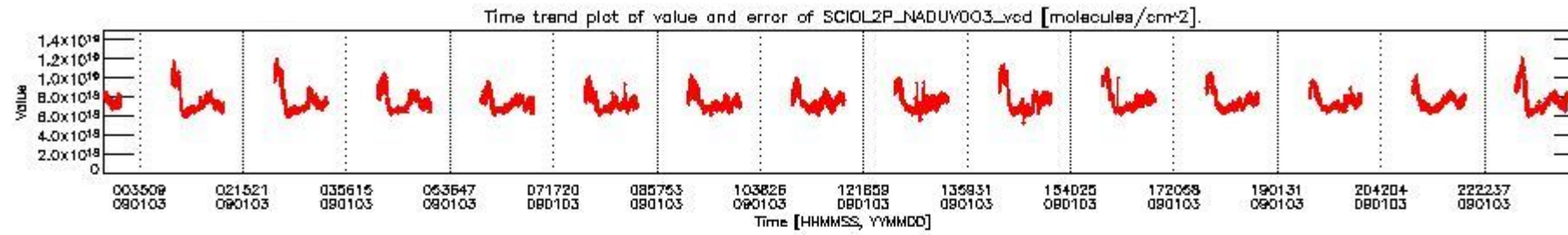
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

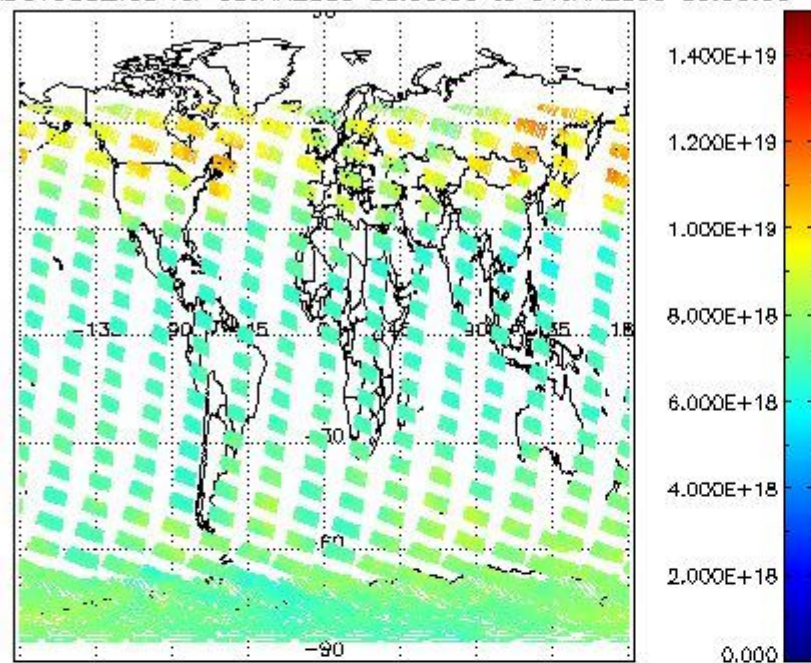
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

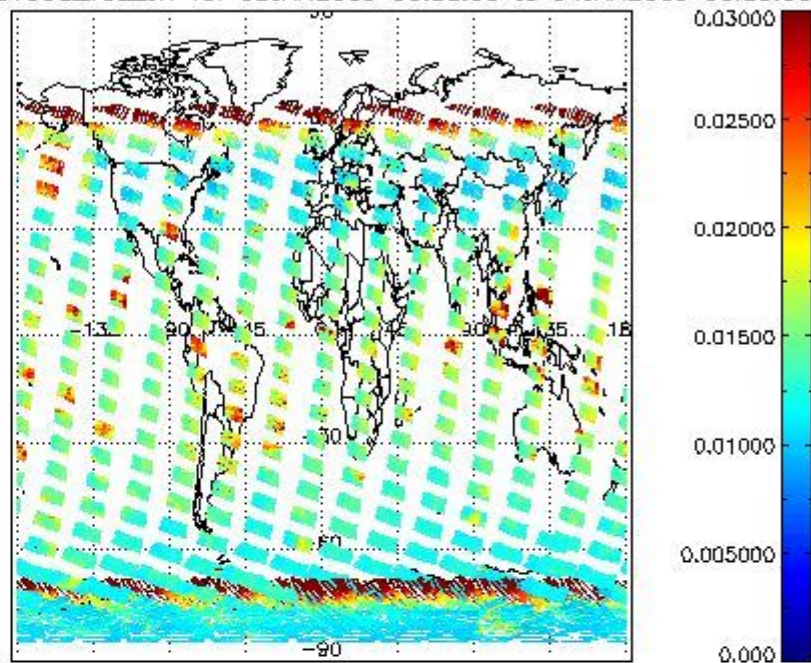
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



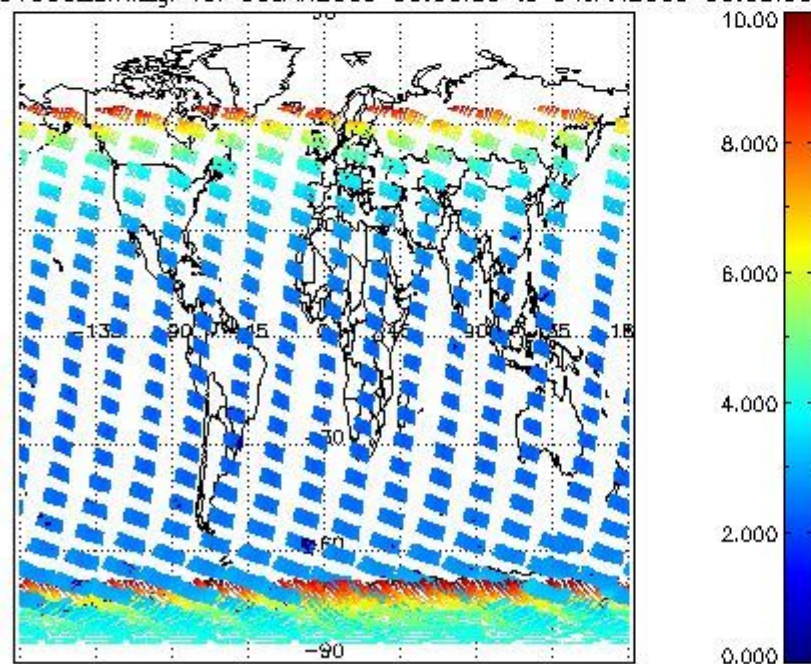
SCIOL2P_NADUV003_vcd for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



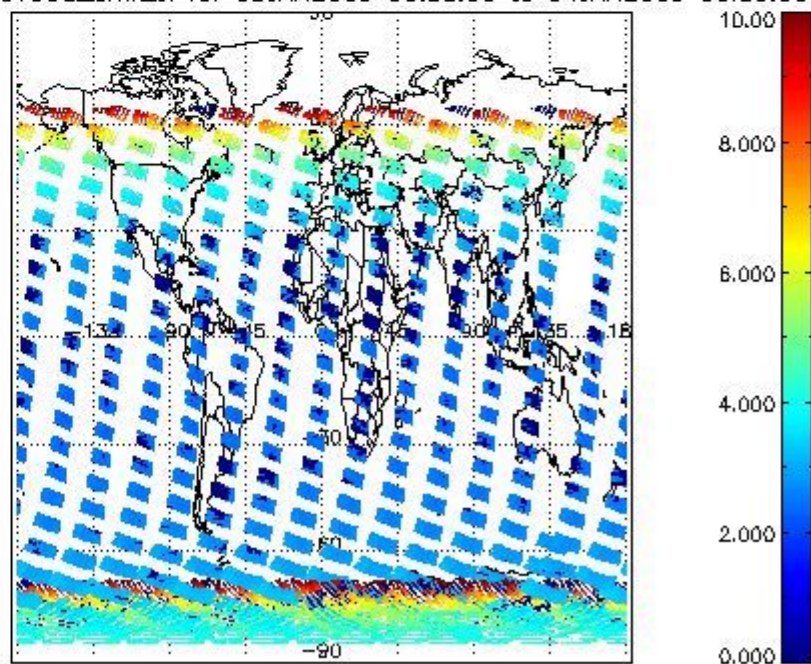
SCIOL2P_NADUV003_vcd_err for 03JAN2009 00:00:00 to 04JAN2009 00:00:00

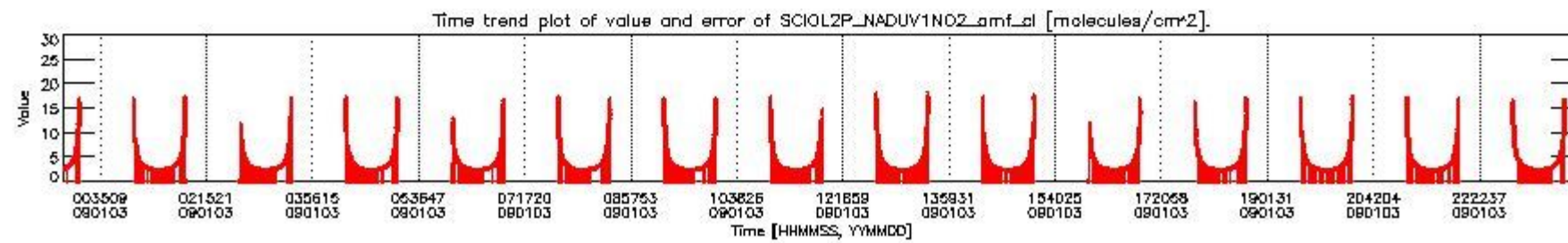
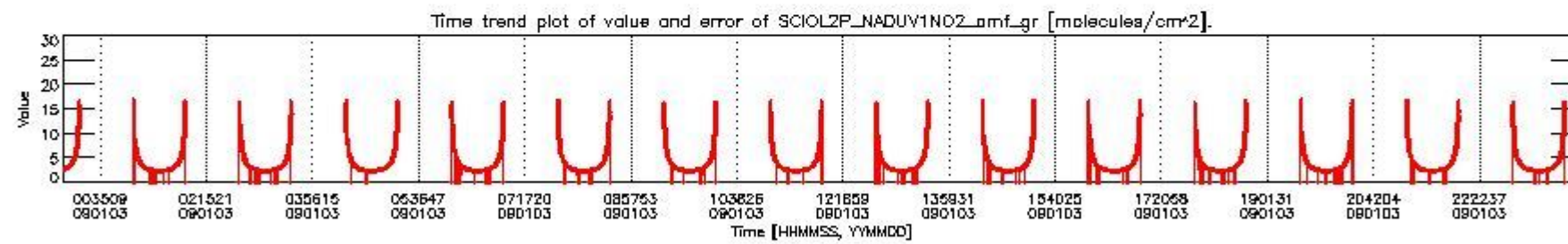
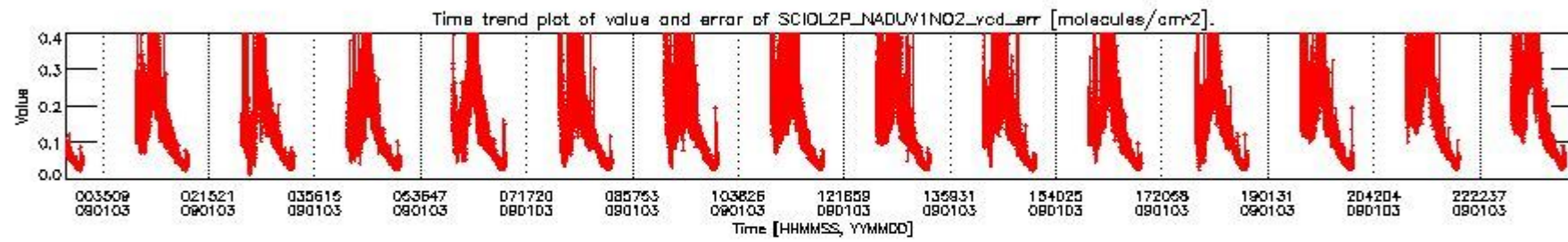
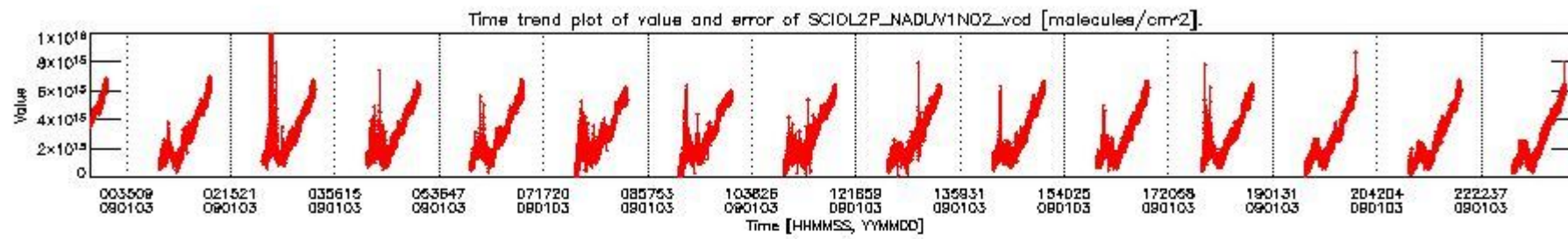


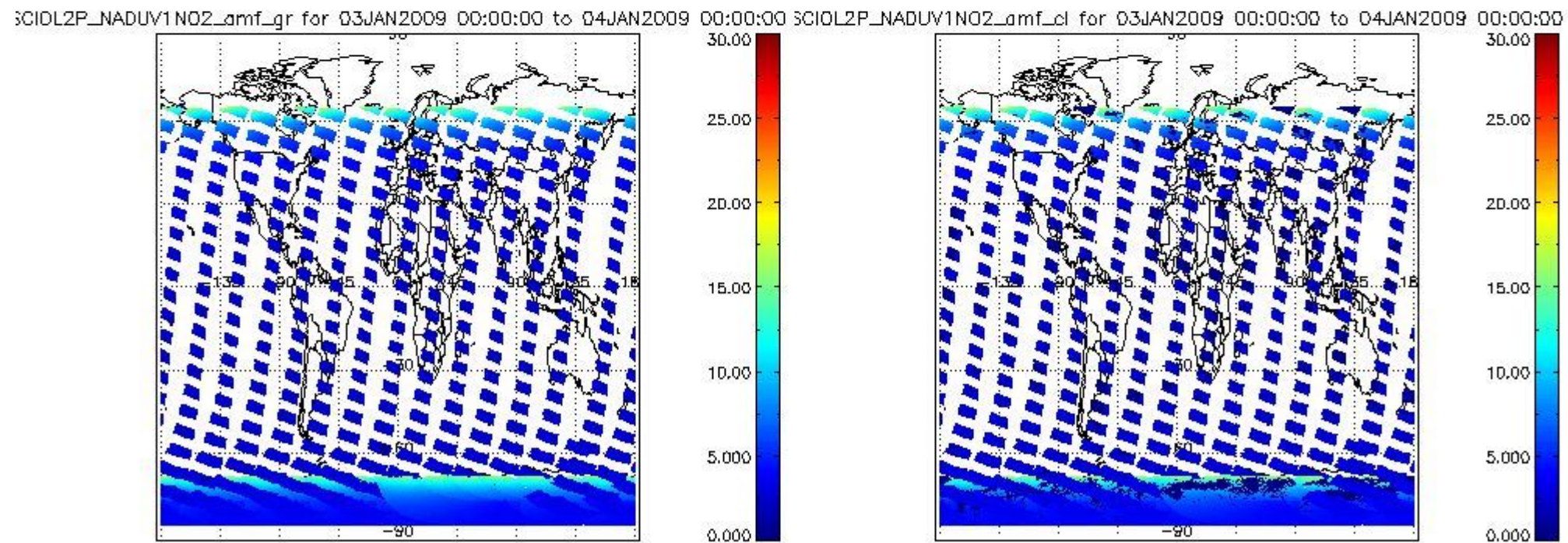
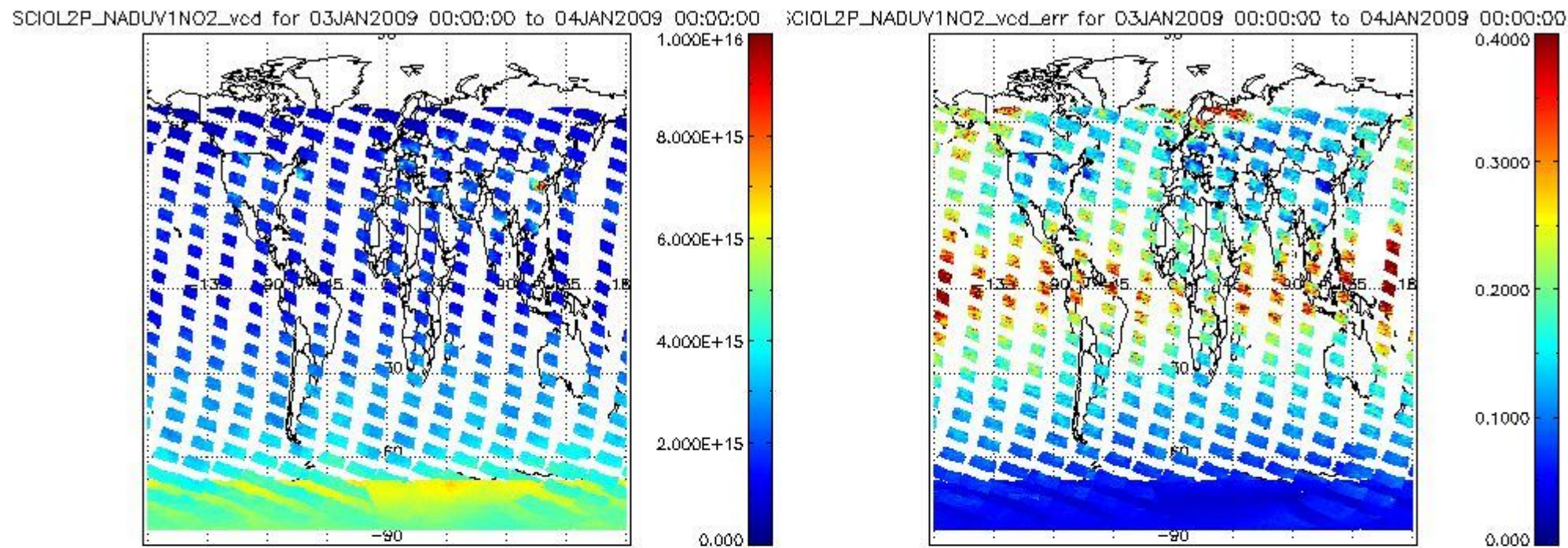
SCIOL2P_NADUV003_amf_gr for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 03JAN2009 00:00:00 to 04JAN2009 00:00:00







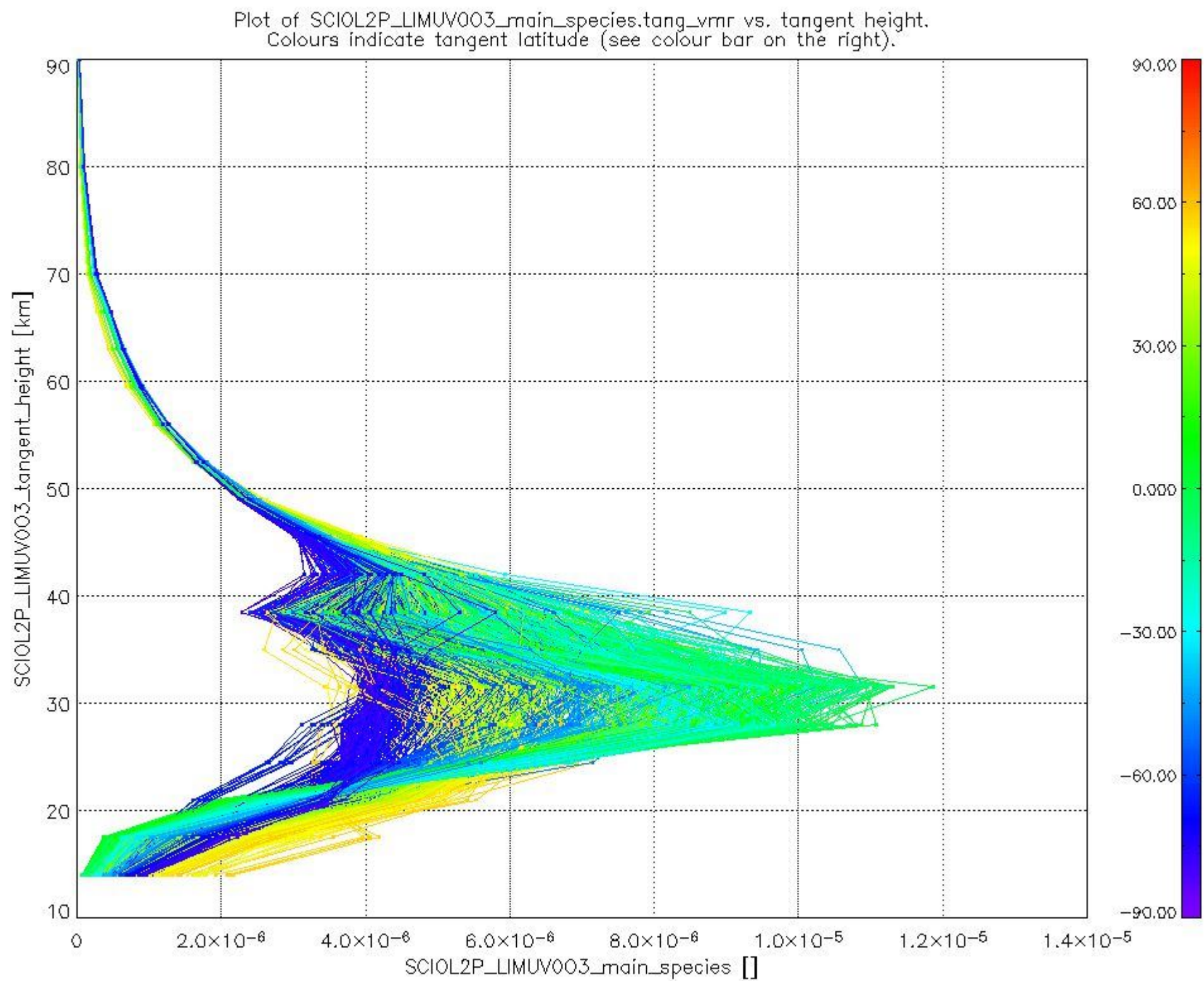
2.2.3 Limb

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

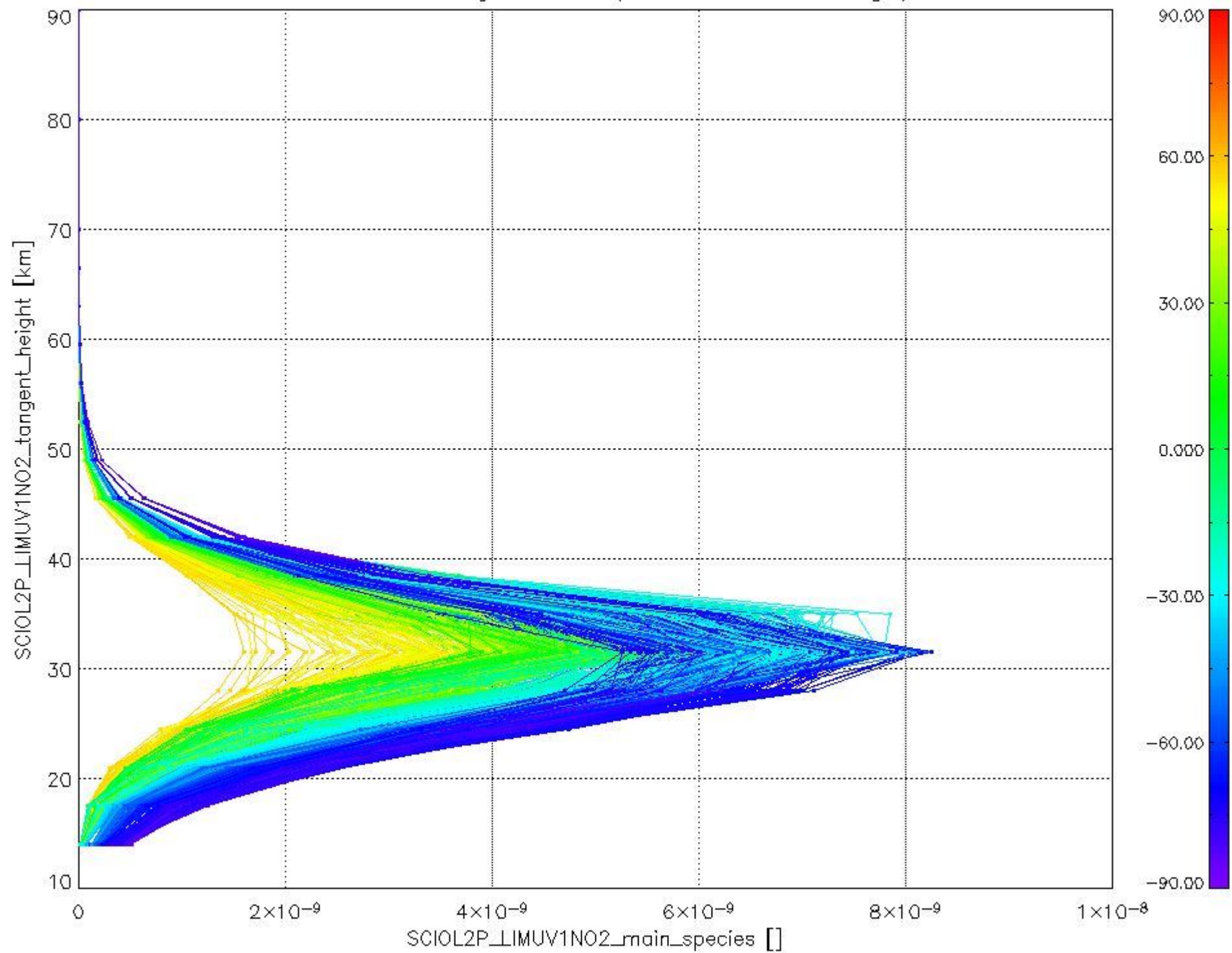
The following data items are currently included into this section:

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.



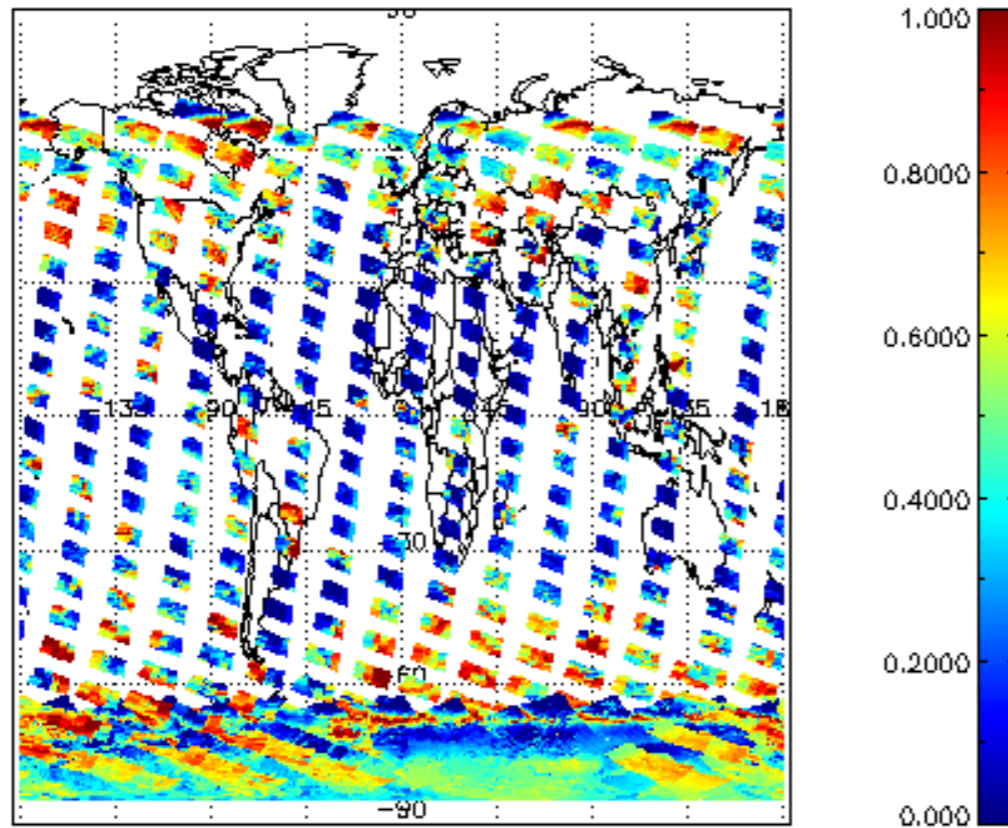
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



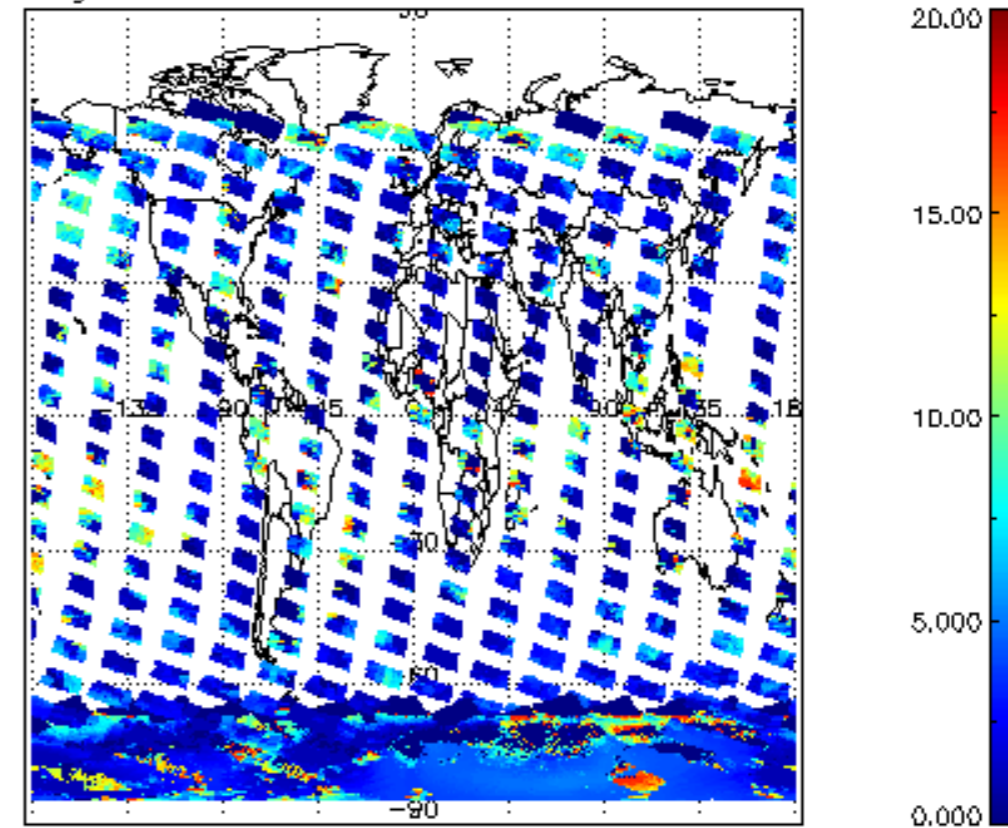
2.3 ADF monitoring

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

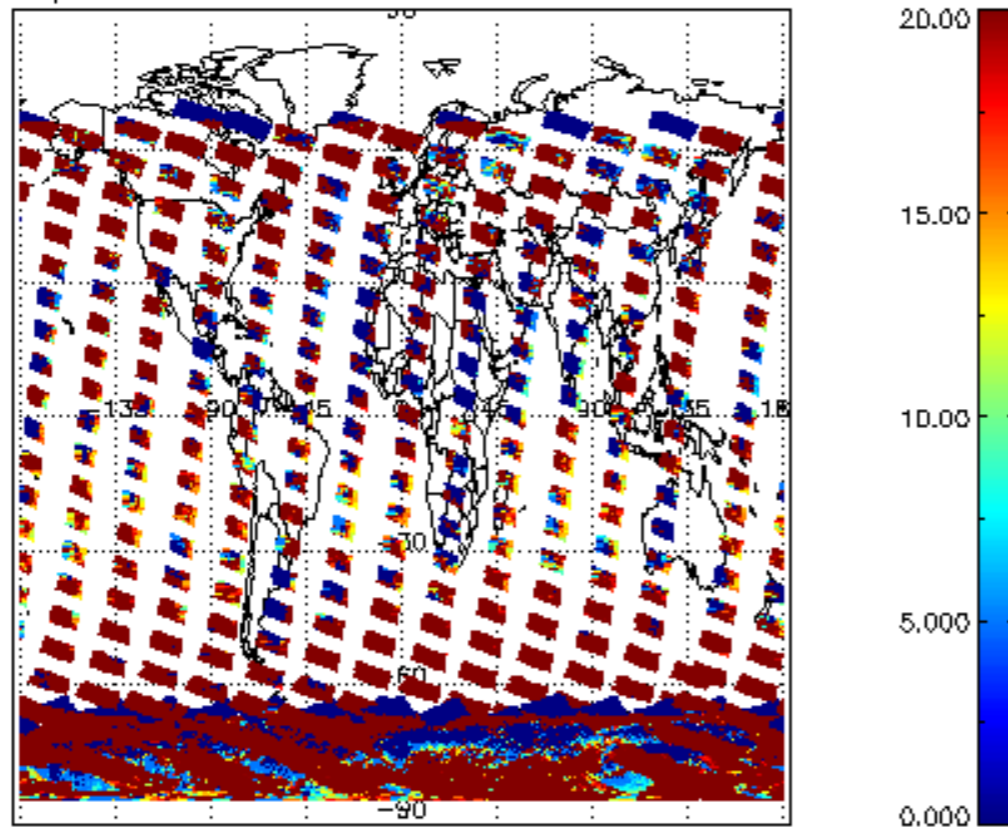
cL_frac for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



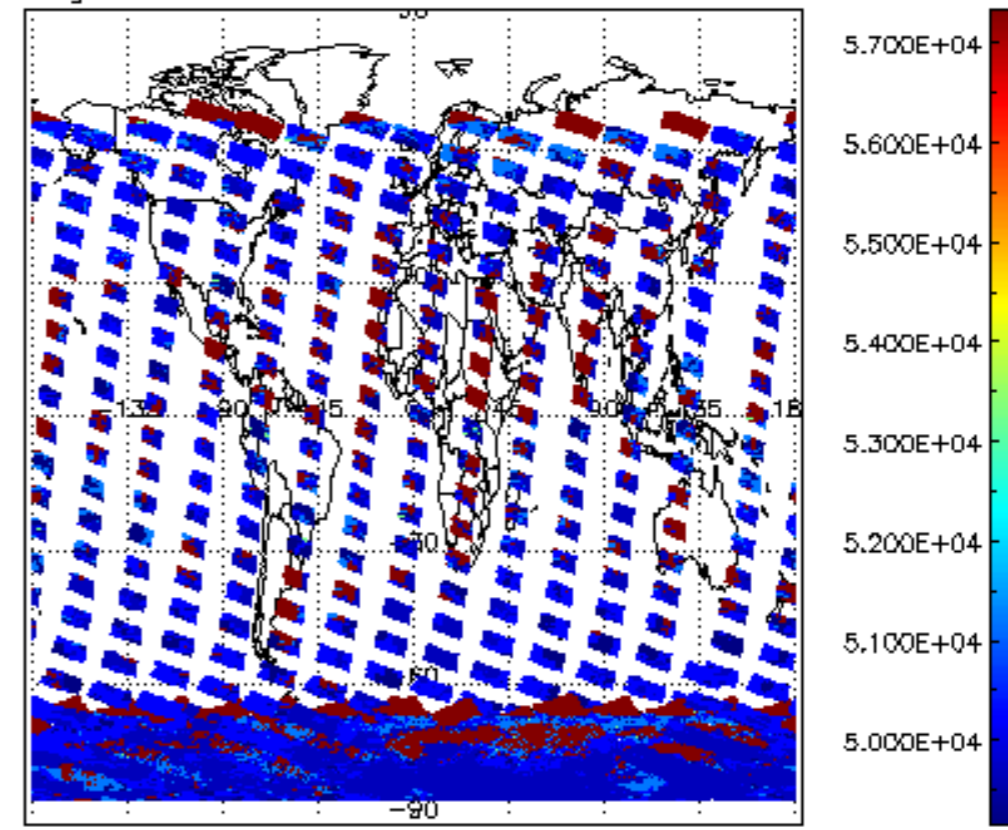
cL_top_height for 03JAN2009 00:00:00 to 04JAN2009 00:00:00

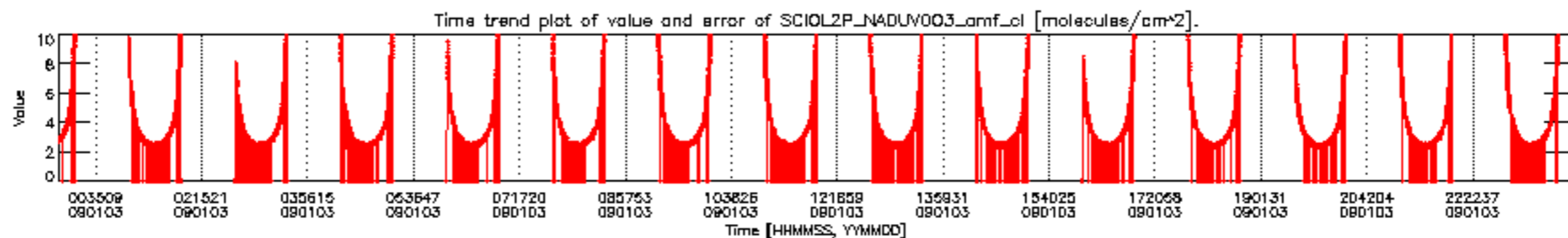
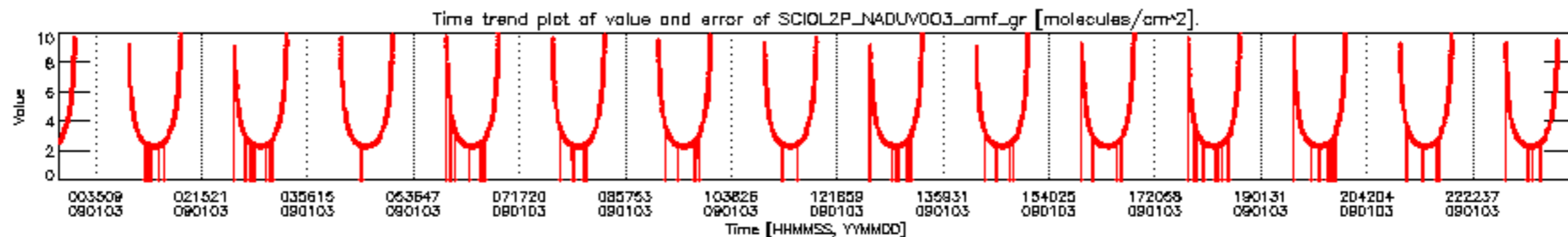
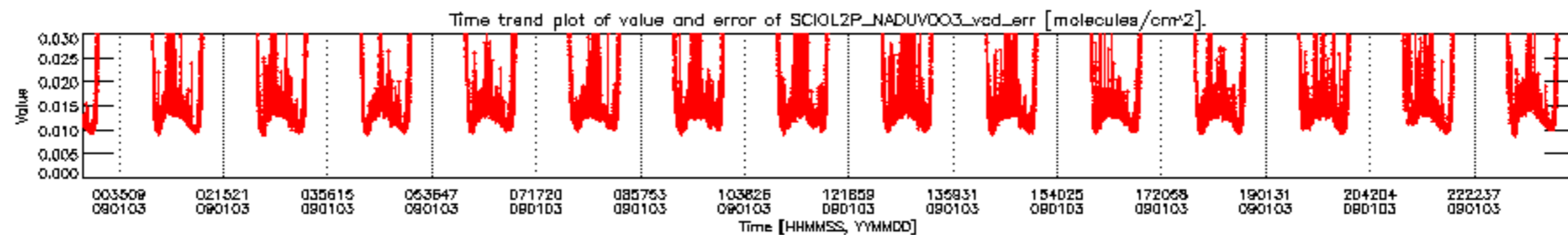
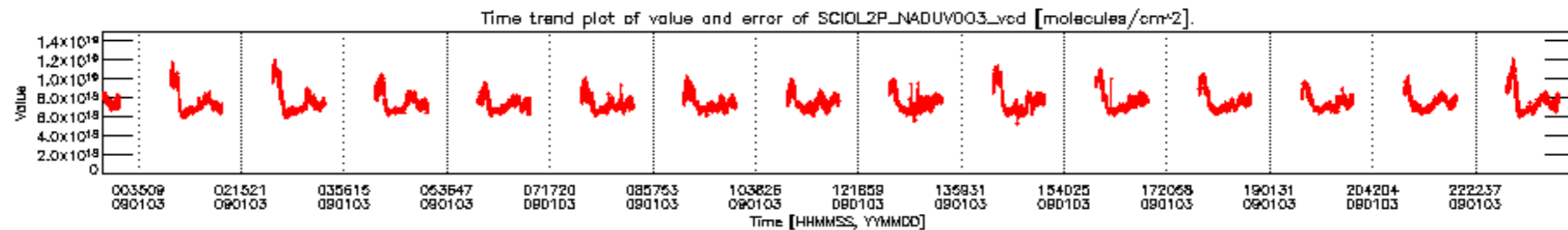


cLopt_depth for 03JAN2009 00:00:00 to 04JAN2009 00:00:00

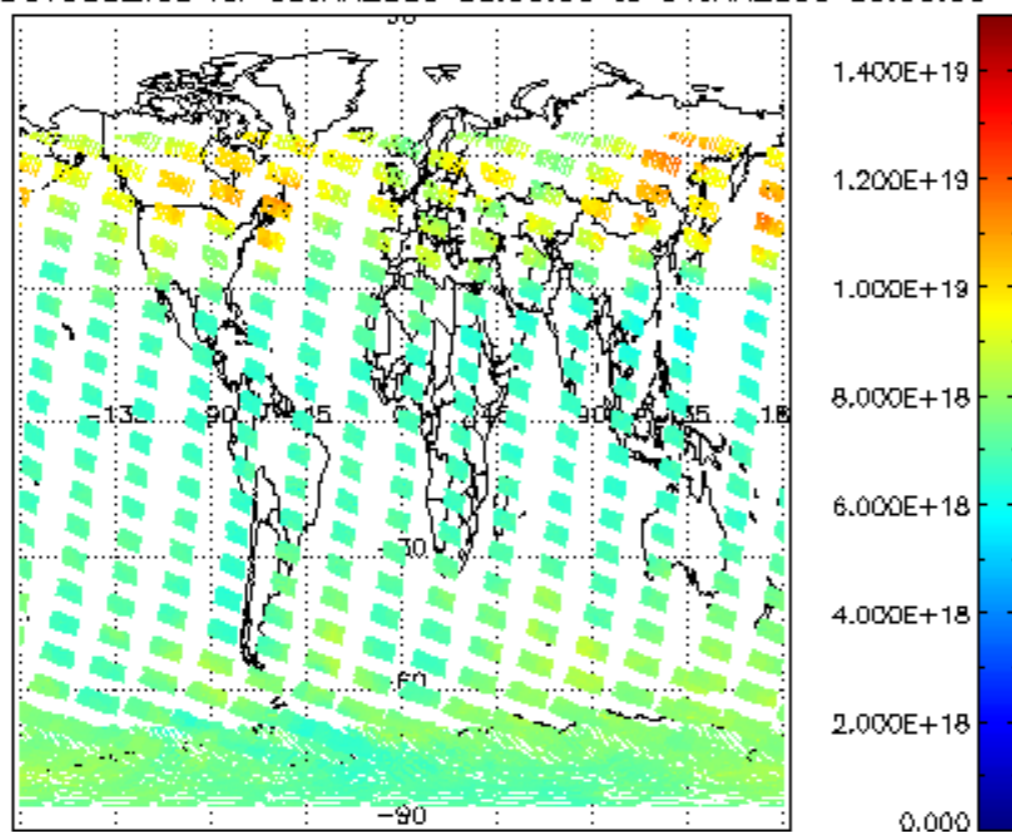


cloud_flags for 03JAN2009 00:00:00 to 04JAN2009 00:00:00

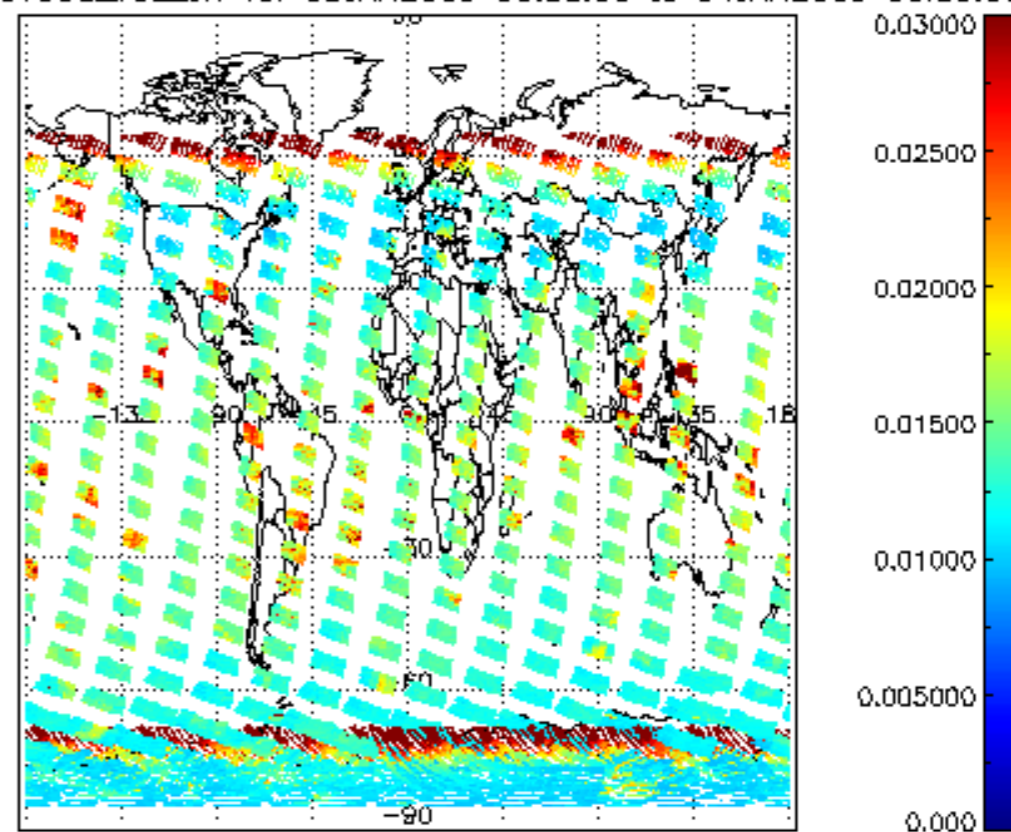




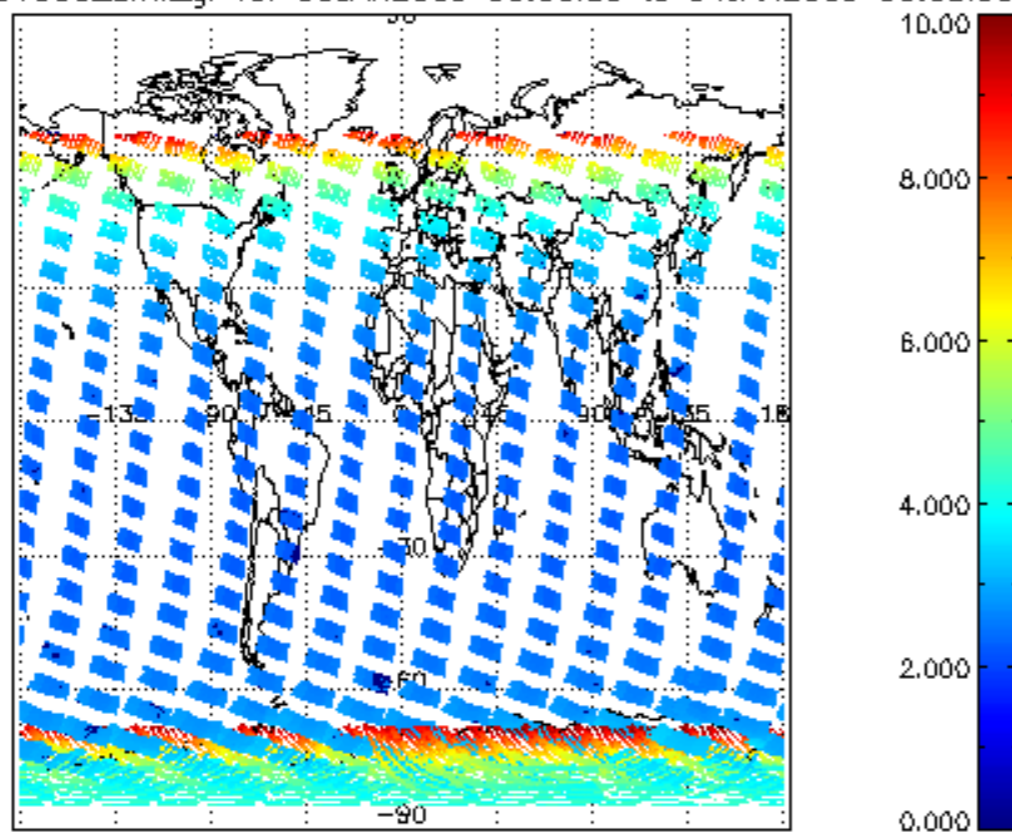
SCIOL2P_NADUV003_vcd for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



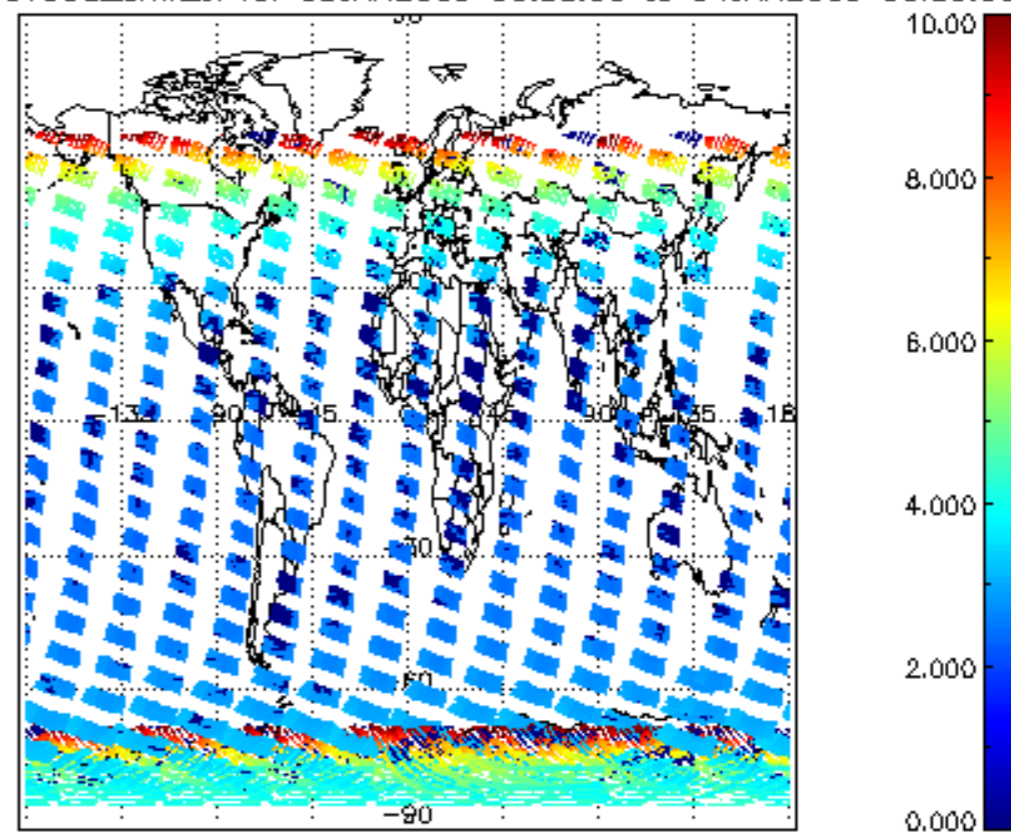
SCIOL2P_NADUV003_vcd_err for 03JAN2009 00:00:00 to 04JAN2009 00:00:00

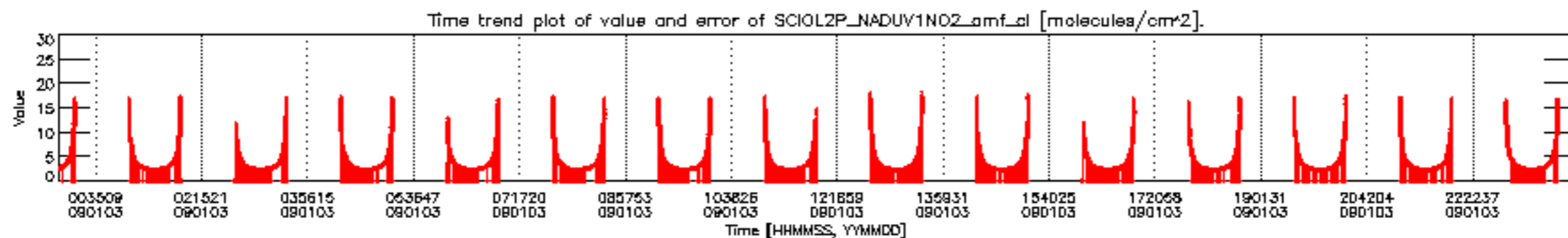
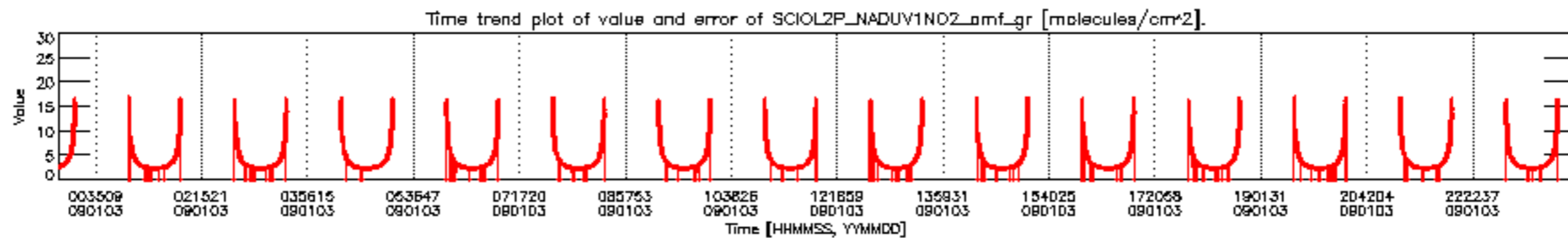
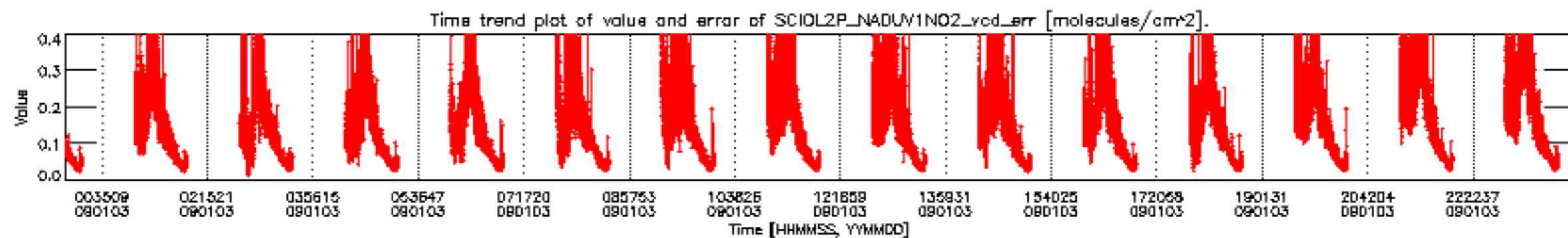
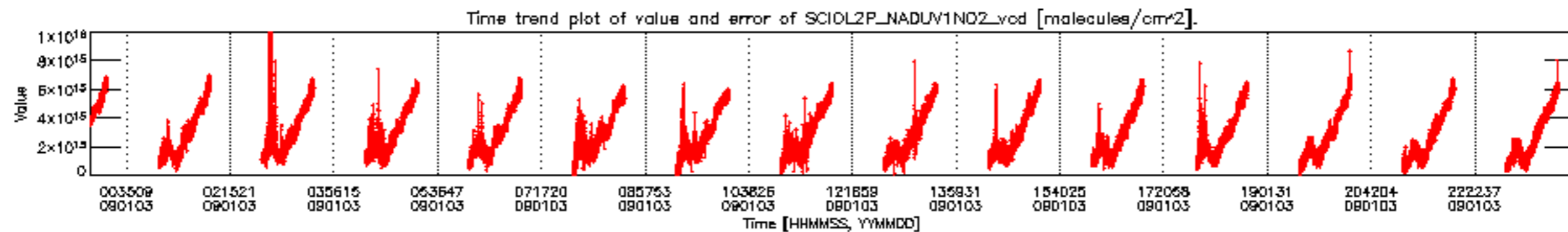


SCIOL2P_NADUV003_amf_gr for 03JAN2009 00:00:00 to 04JAN2009 00:00:00

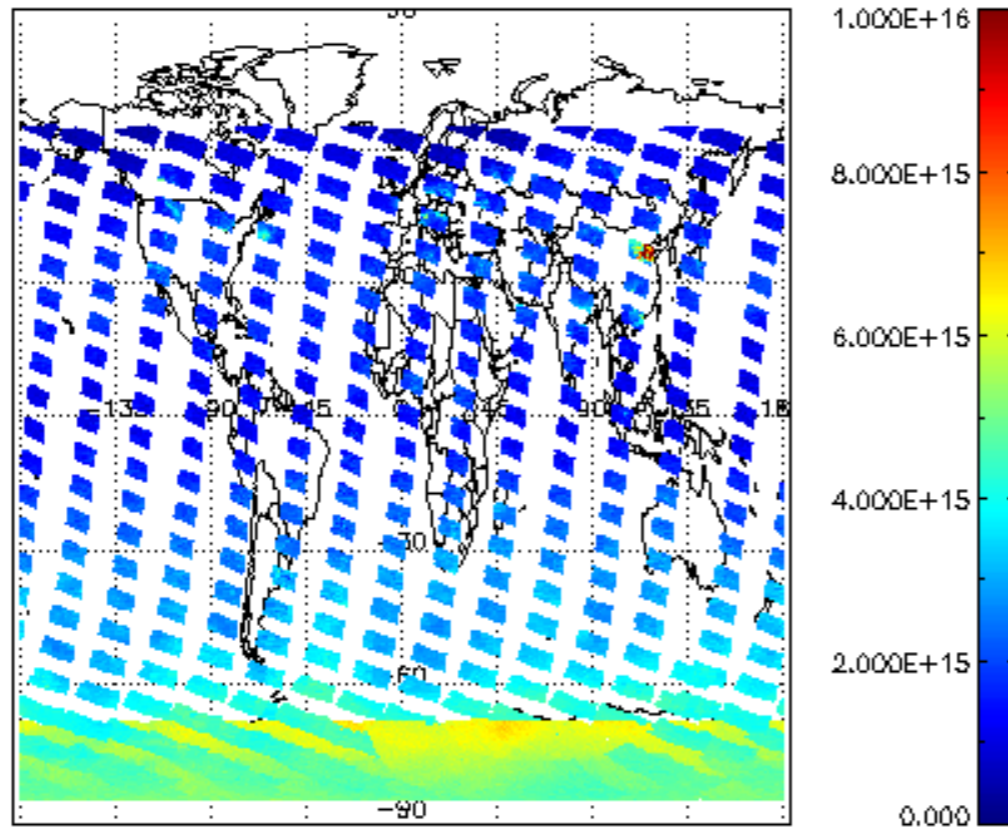


SCIOL2P_NADUV003_amf_cl for 03JAN2009 00:00:00 to 04JAN2009 00:00:00

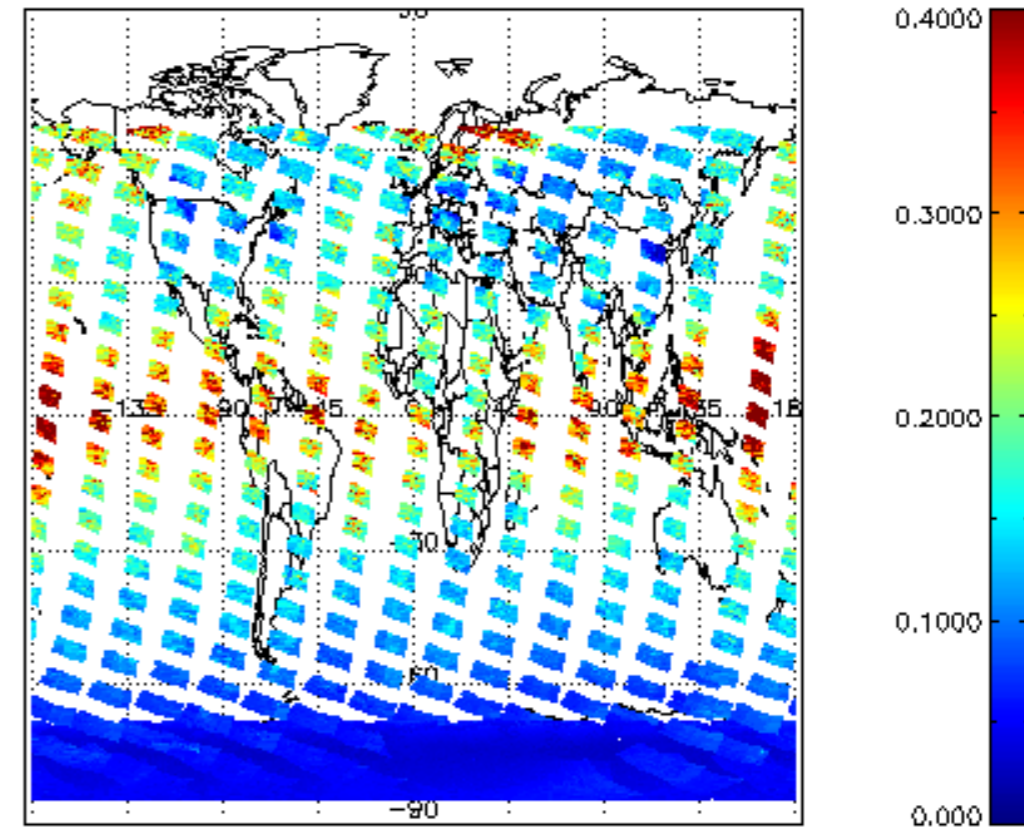




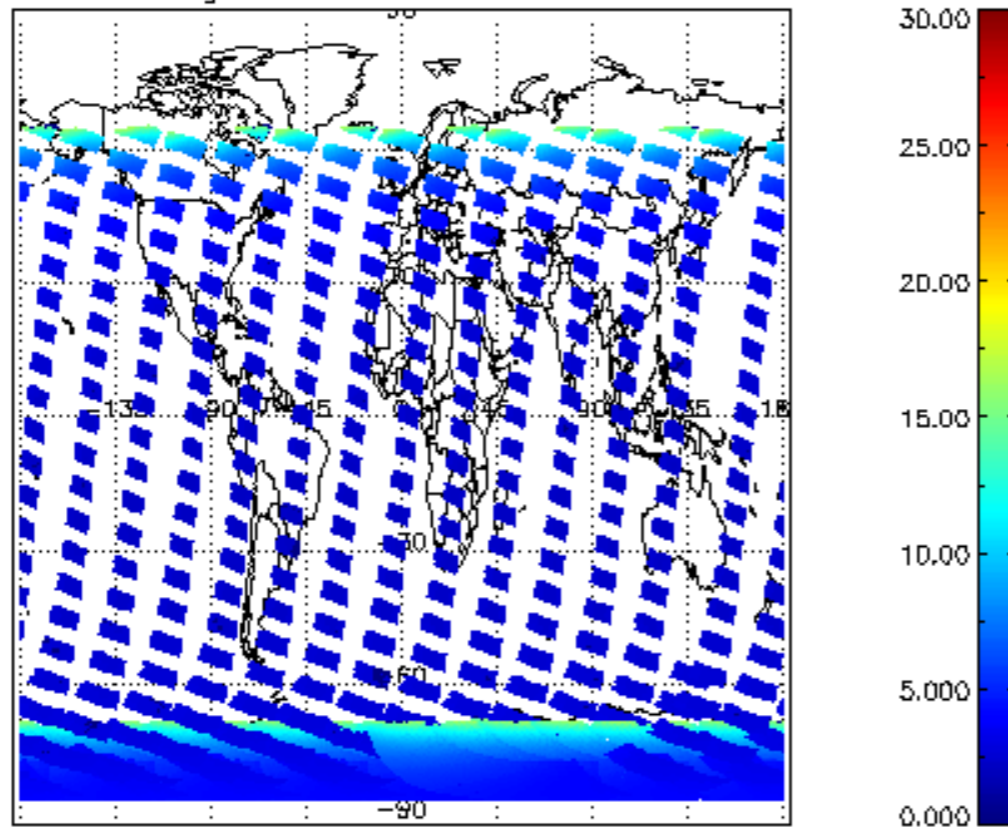
SCIOL2P_NADUV1NO2_vcd for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



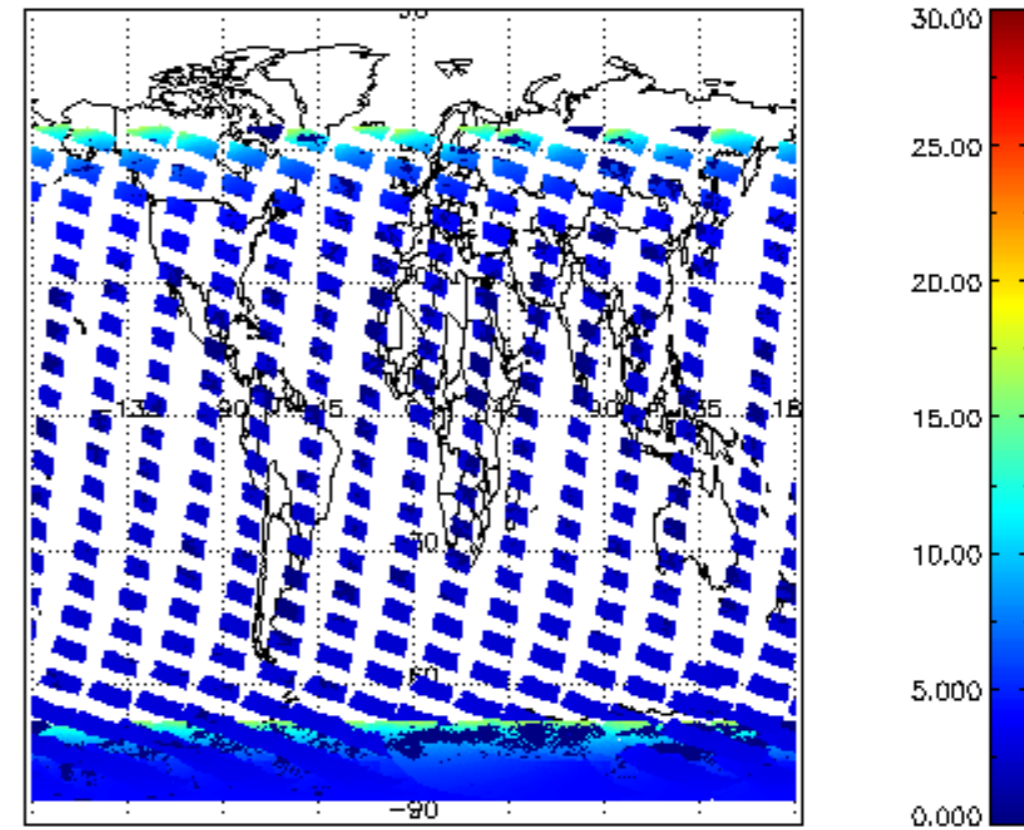
SCIOL2P_NADUV1NO2_vcd_err for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



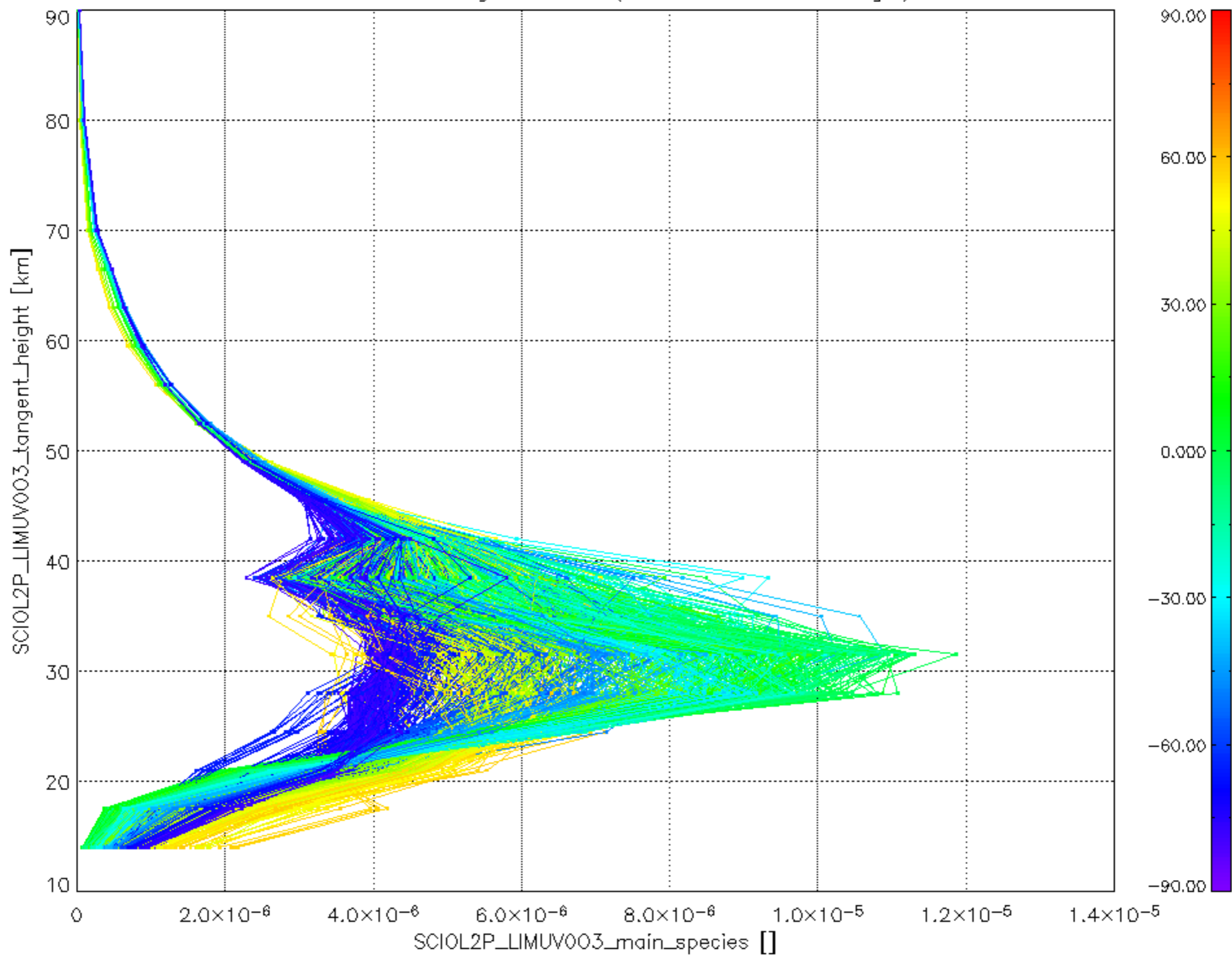
SCIOL2P_NADUV1NO2_amf_gr for 03JAN2009 00:00:00 to 04JAN2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 03JAN2009 00:00:00 to 04JAN2009 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).

