

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 09:42:16
Data source version	SCIA-OL/3.01-R
Processing scope for products	10JAN2009 00:00:00 to 11JAN2009 00:00:00
Start time of first product within scope	10JAN2009 00:45:03
Stop time of last product within scope	11JAN2009 01:04:52
Total number of level 2 products	14
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__2PRDPA20090110_004503_000030812075_00260_35885_1898.N1	10JAN2009 00:45:03	10JAN2009 01:36:24	0	GOOD
1	SCI_OL__2PRDPA20090110_022130_000033022075_00261_35886_1900.N1	10JAN2009 02:21:30	10JAN2009 03:16:32	0	GOOD
2	SCI_OL__2PRDPA20090110_040205_000033662075_00262_35887_1901.N1	10JAN2009 04:02:05	10JAN2009 04:58:11	0	GOOD
3	SCI_OL__2PRDPA20090110_054241_000033602075_00263_35888_1902.N1	10JAN2009 05:42:41	10JAN2009 06:38:42	0	GOOD
4	SCI_OL__2PRDPA20090110_072317_000033542075_00264_35889_1903.N1	10JAN2009 07:23:17	10JAN2009 08:19:12	0	GOOD
5	SCI_OL__2PRDPA20090110_090352_000033482075_00265_35890_1904.N1	10JAN2009 09:03:52	10JAN2009 09:59:41	0	GOOD
6	SCI_OL__2PRDPA20090110_104428_000033422075_00266_35891_1905.N1	10JAN2009 10:44:28	10JAN2009 11:40:11	0	GOOD
7	SCI_OL__2PRDPA20090110_122504_000033352075_00267_35892_1907.N1	10JAN2009 12:25:04	10JAN2009 13:20:40	0	GOOD
8	SCI_OL__2PRDPA20090110_140539_000033292075_00268_35893_1908.N1	10JAN2009 14:05:39	10JAN2009 15:01:08	0	GOOD
9	SCI_OL__2PRDPA20090110_154615_000033212075_00269_35894_1906.N1	10JAN2009 15:46:15	10JAN2009 16:41:37	0	GOOD
10	SCI_OL__2PRDPA20090110_172622_000033662075_00270_35895_1909.N1	10JAN2009 17:26:22	10JAN2009 18:22:28	0	GOOD
11	SCI_OL__2PRDPA20090110_190658_000033812075_00271_35896_1910.N1	10JAN2009 19:06:58	10JAN2009 20:03:19	0	GOOD
12	SCI_OL__2PRDPA20090110_204911_000032692075_00272_35897_1911.N1	10JAN2009 20:49:11	10JAN2009 21:43:40	0	GOOD
13	SCI_OL__2PRDPA20090111_001022_000032692075_00274_35899_1912.N1	11JAN2009 00:10:22	11JAN2009 01:04:52	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: 125840

Total number of cloud data DSRs with good quality flag (=0): 125840 (100.0 %)

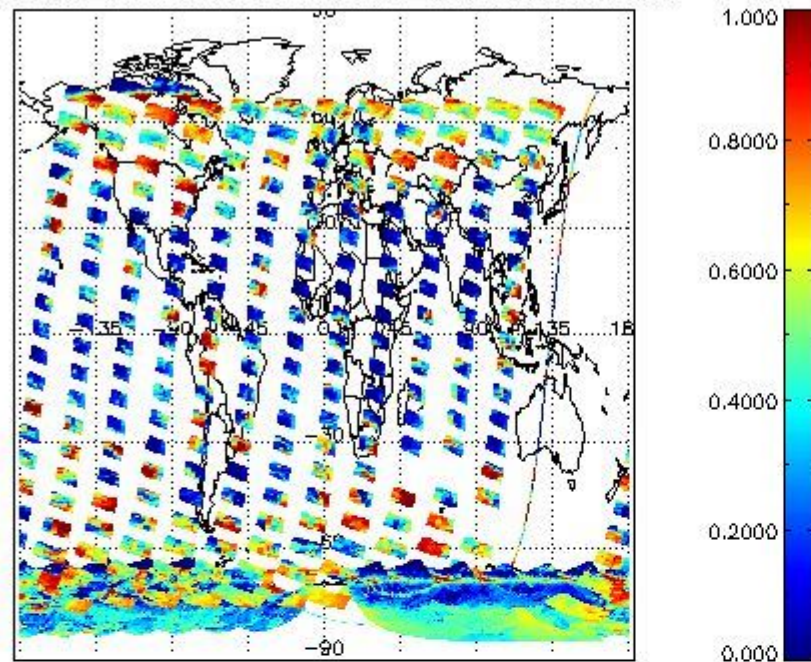
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	125840	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	125840	0.17924	0.12500	0.12500	0.25000	0.061951	s
CL_FRAC	125840	0.40263	0.38685	0.0000	1.0000	0.29063	-
CL_FRAC_ERR	125840	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	125840	5.7355	4.0000	4.0000	8.0000	1.9824	
PMD_READ_CL[0]	125840	0.27525	0.0000	0.0000	8.0000	1.2521	-
PMD_READ_CL[1]	125840	0.85490	0.0000	0.0000	8.0000	2.0494	-
CL_TOP_HEIGHT	107011	4.1104	2.9256	0.0000	17.000	3.8593	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	107011	52.693	39.943	0.0000	101.00	40.239	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	125840	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	125840	11001010	11000100	11000000	11100000	3245.3	flags
AERO_ABSO_IND	125840	3.1445	3.6018	-0.67172	16.582	2.3330	
AERO_IND_DIAG	125840	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	125840	01011110	00000000	00000000	11000000	24574.	flags

Time and geolocation plots:

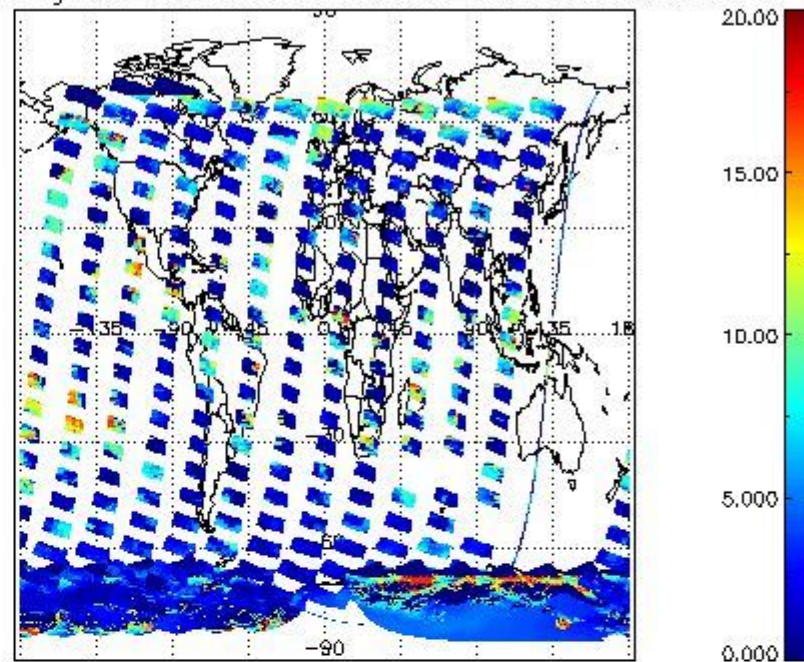
Plots are available for the following parameters:

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

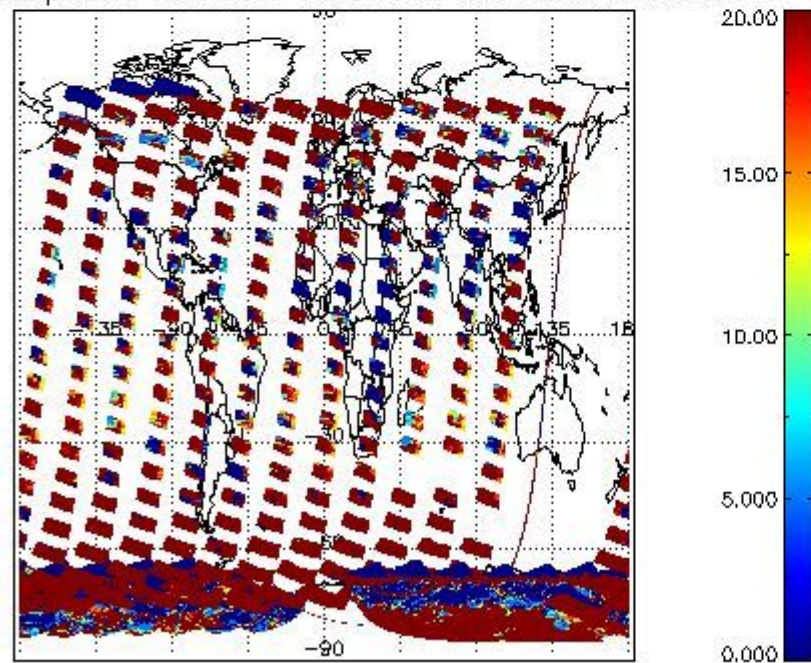
cL_frac for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



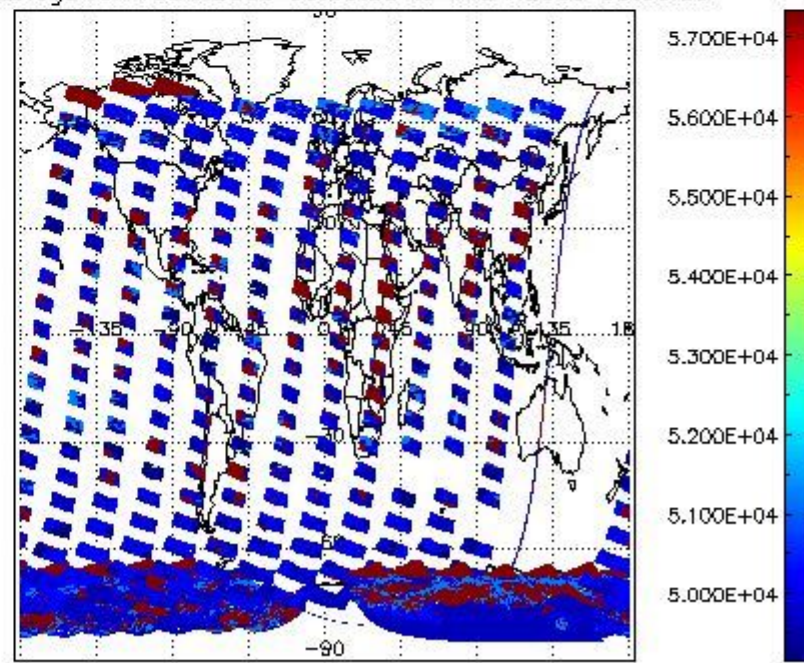
cL_top_height for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



cLopt_depth for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



cloud_flags for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



2.2.2 Nadir

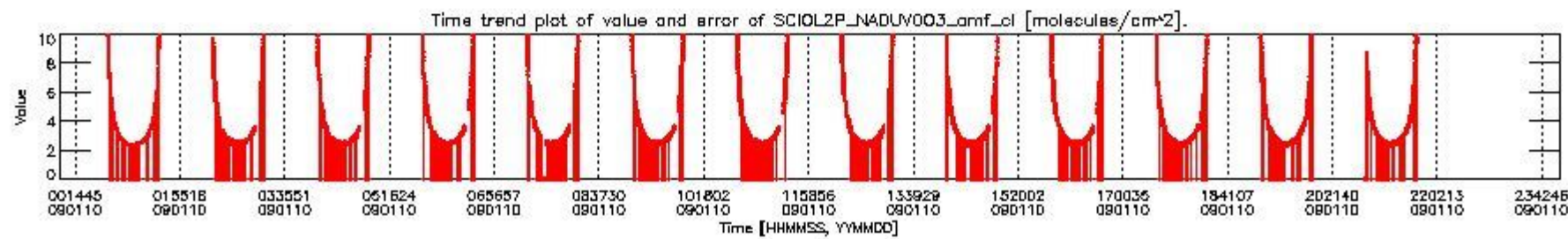
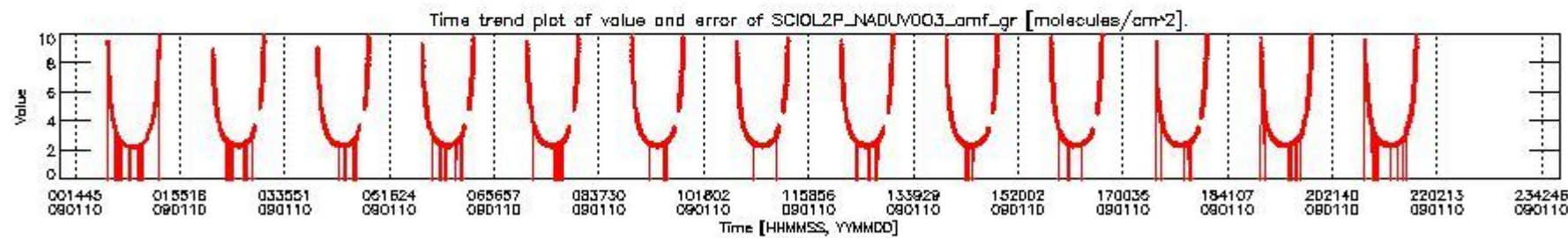
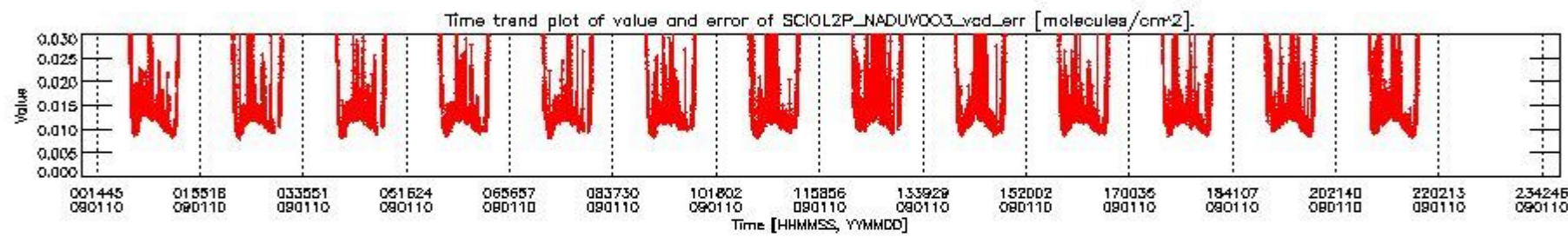
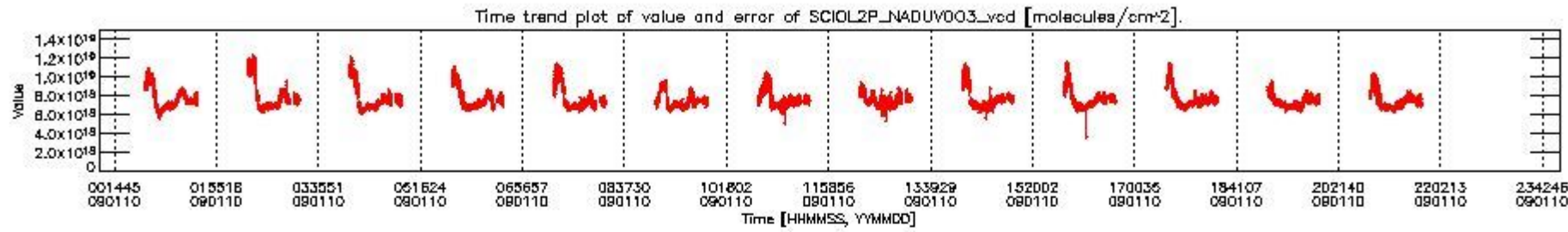
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

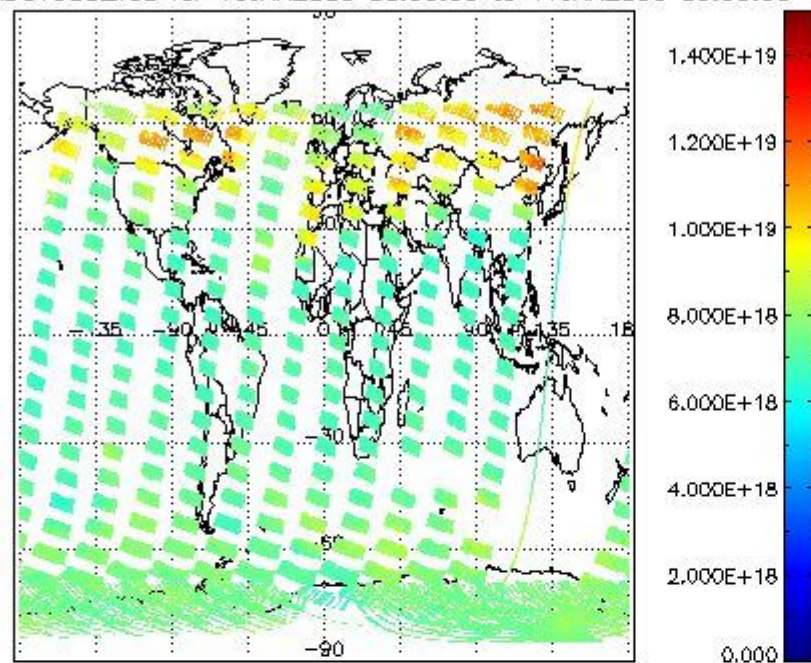
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

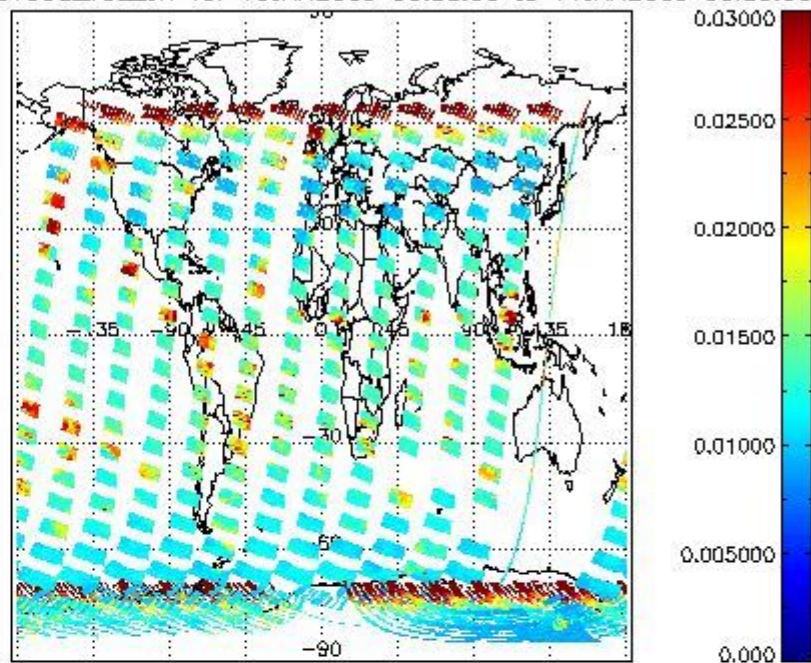
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



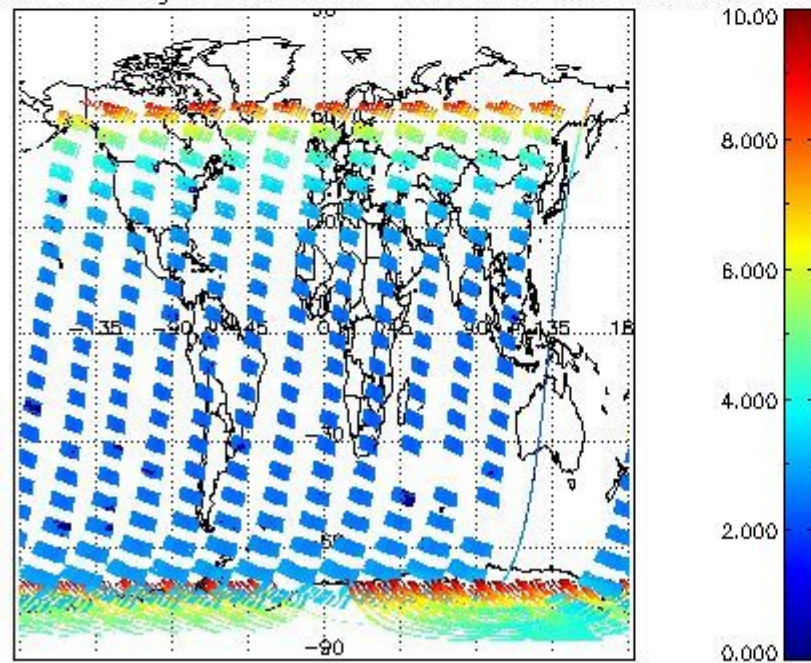
SCIOL2P_NADUV003_vcd for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



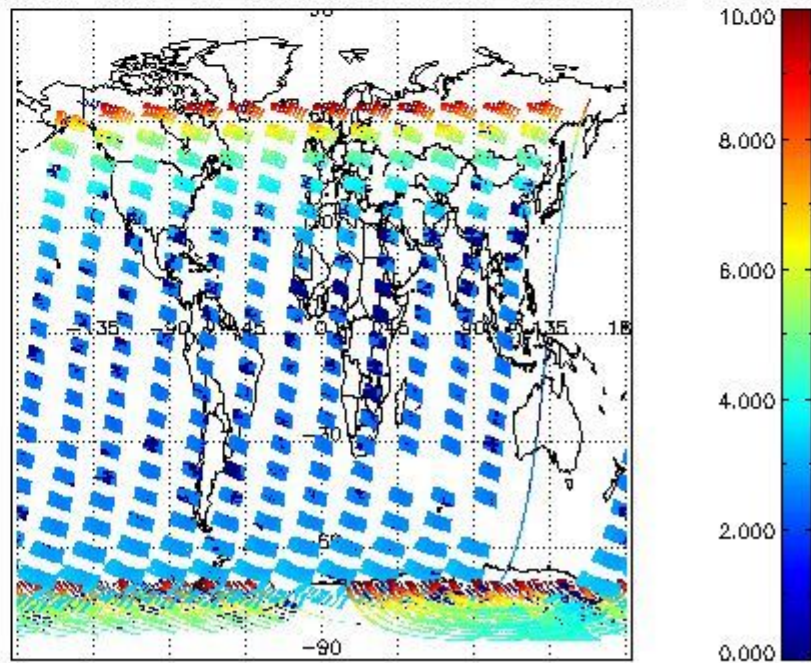
SCIOL2P_NADUV003_vcd_err for 10JAN2009 00:00:00 to 11JAN2009 00:00:00

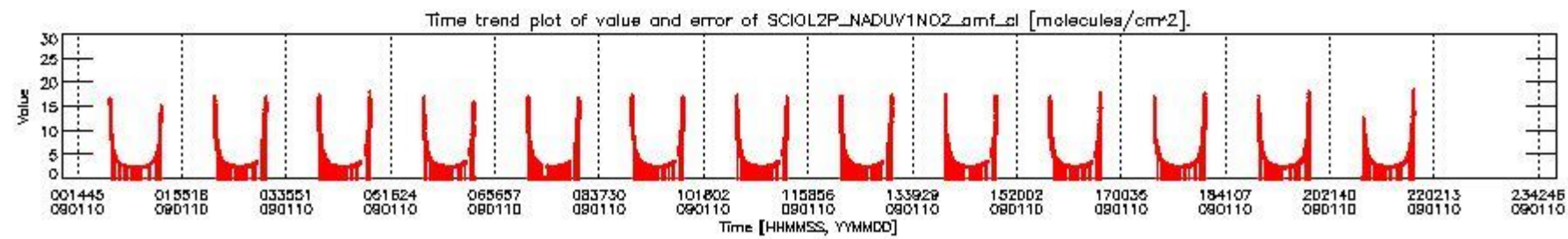
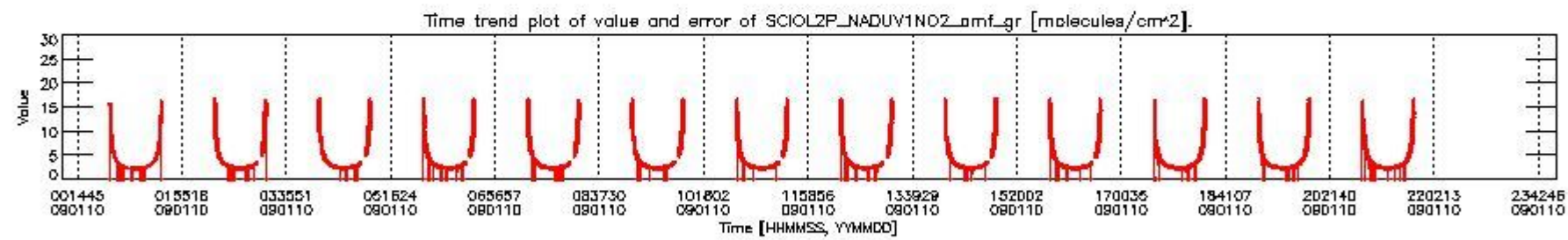
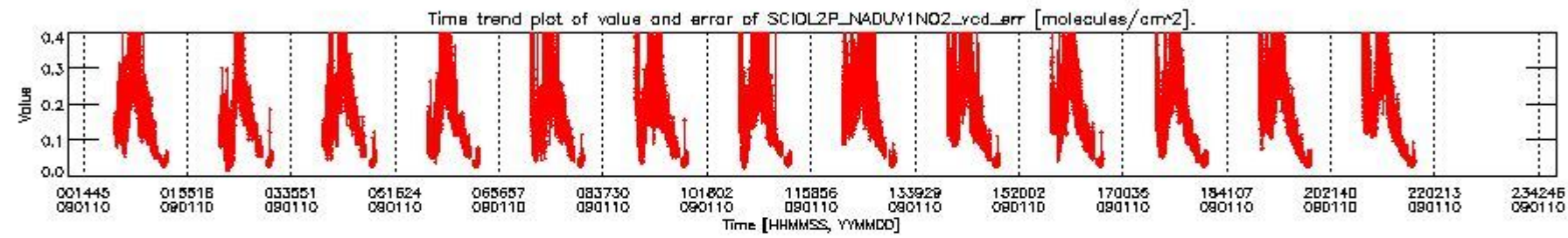
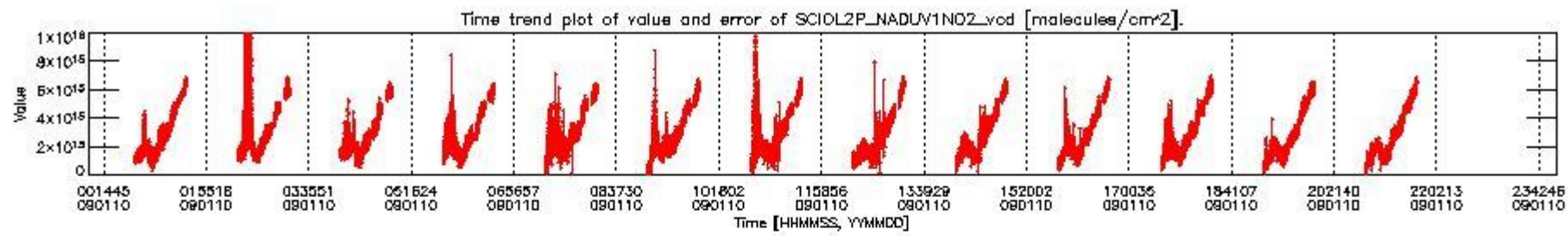


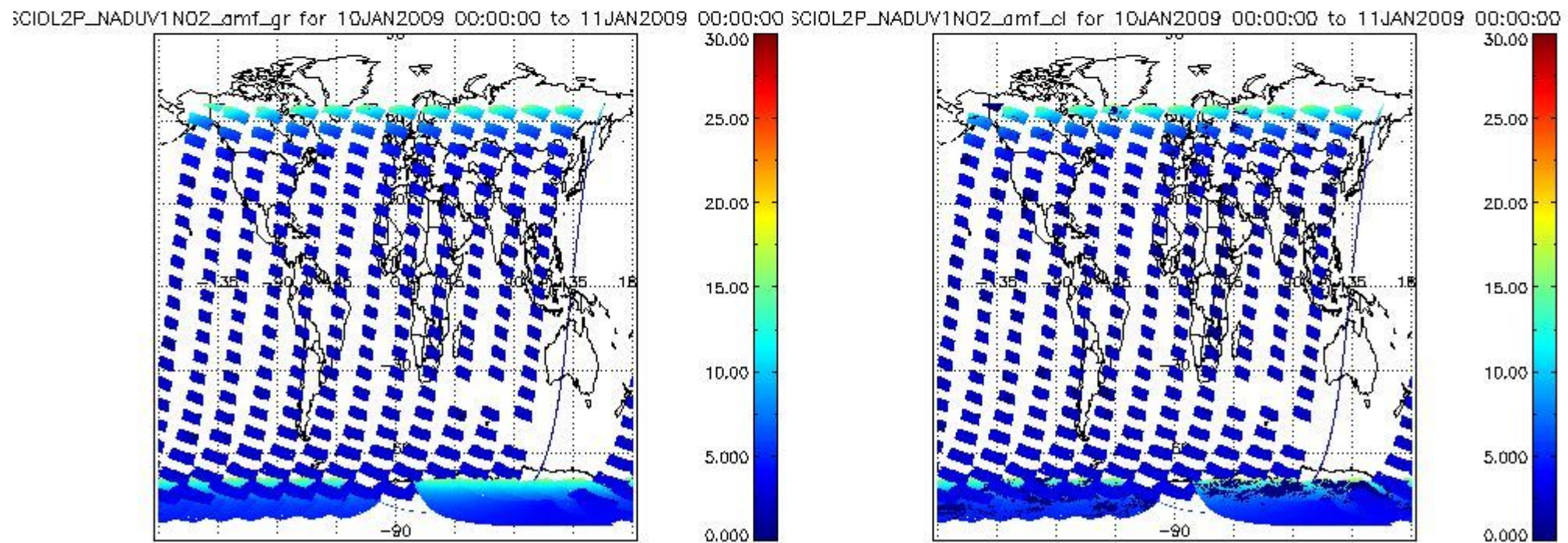
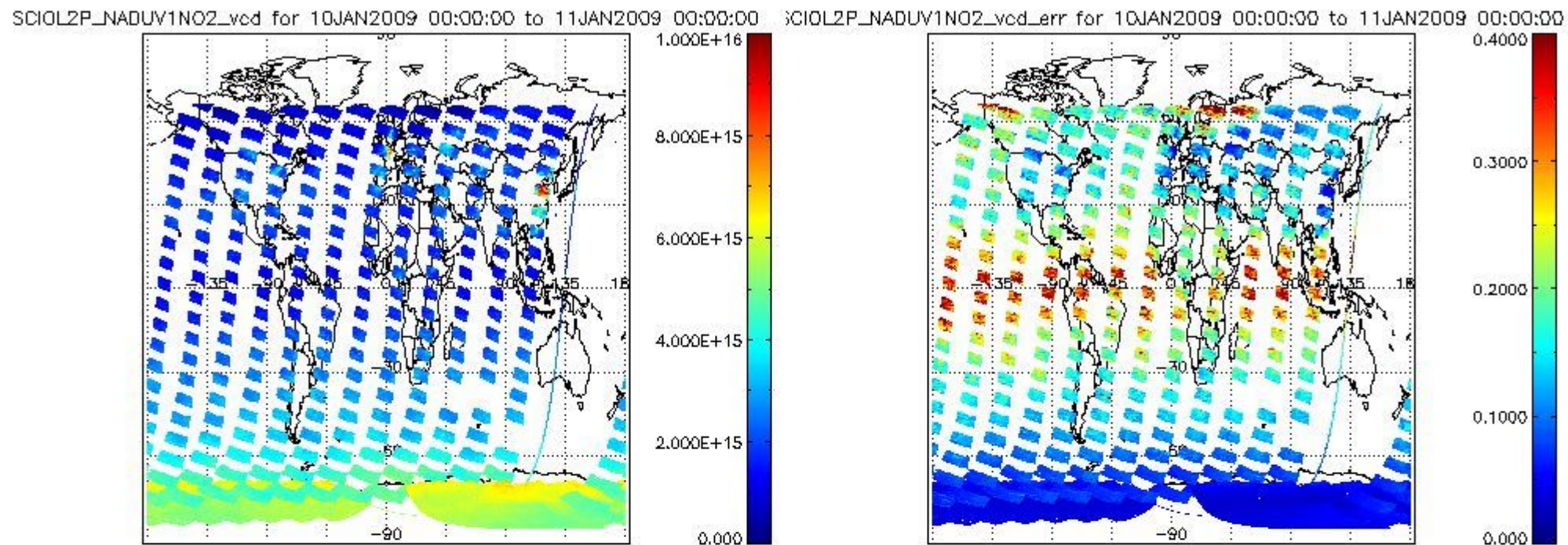
SCIOL2P_NADUV003_amf_gr for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 10JAN2009 00:00:00 to 11JAN2009 00:00:00







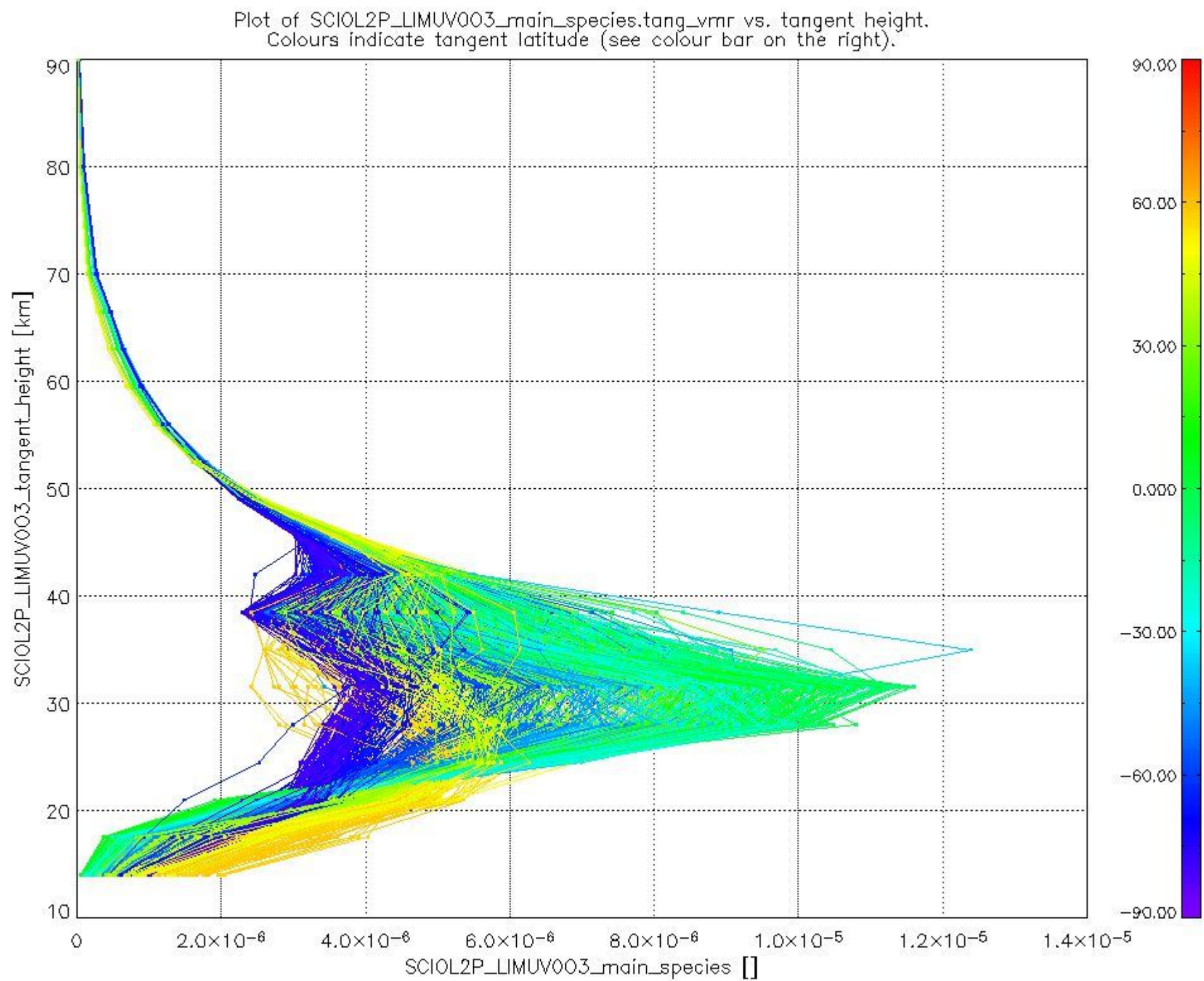
2.2.3 Limb

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

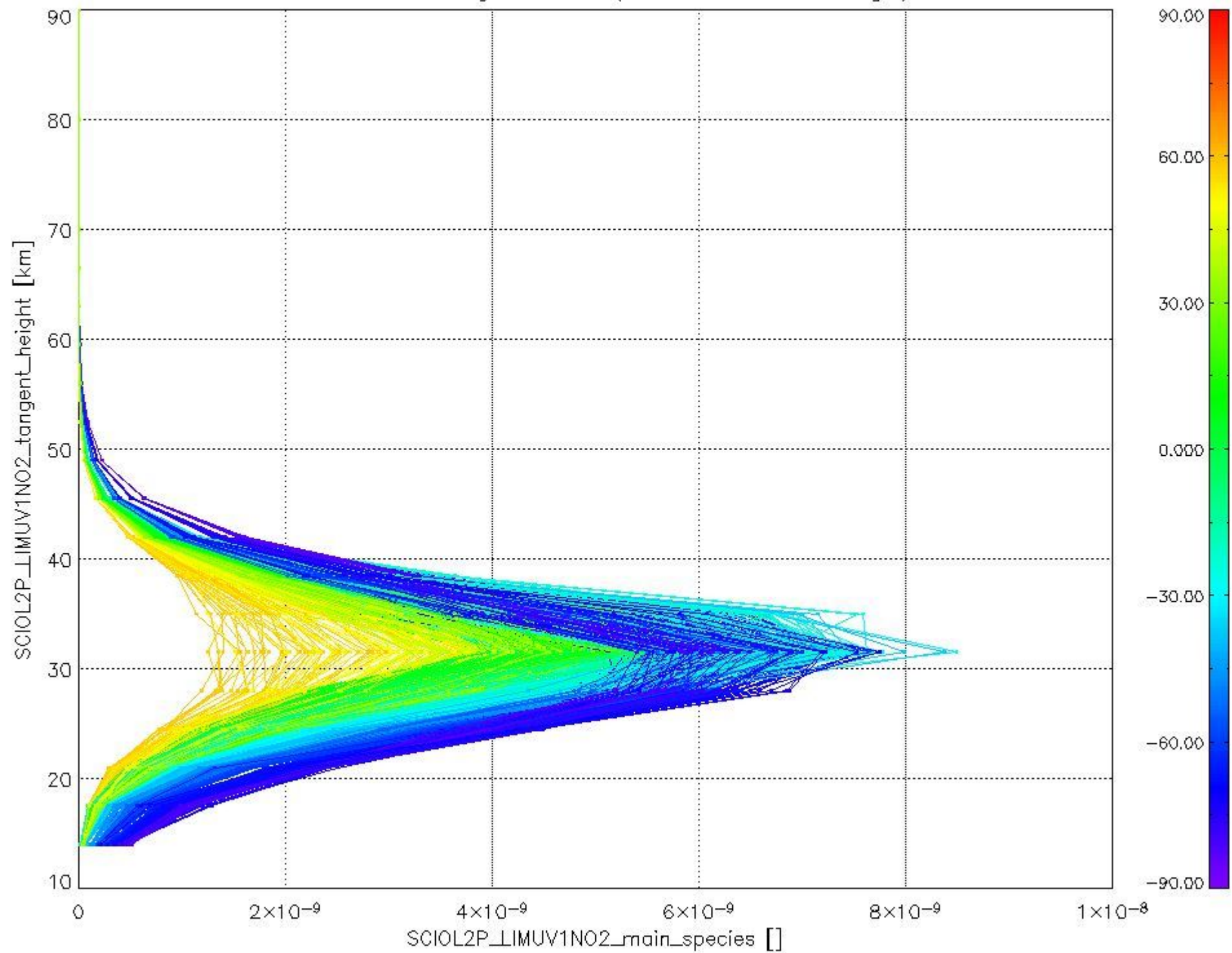
The following data items are currently included into this section:

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.



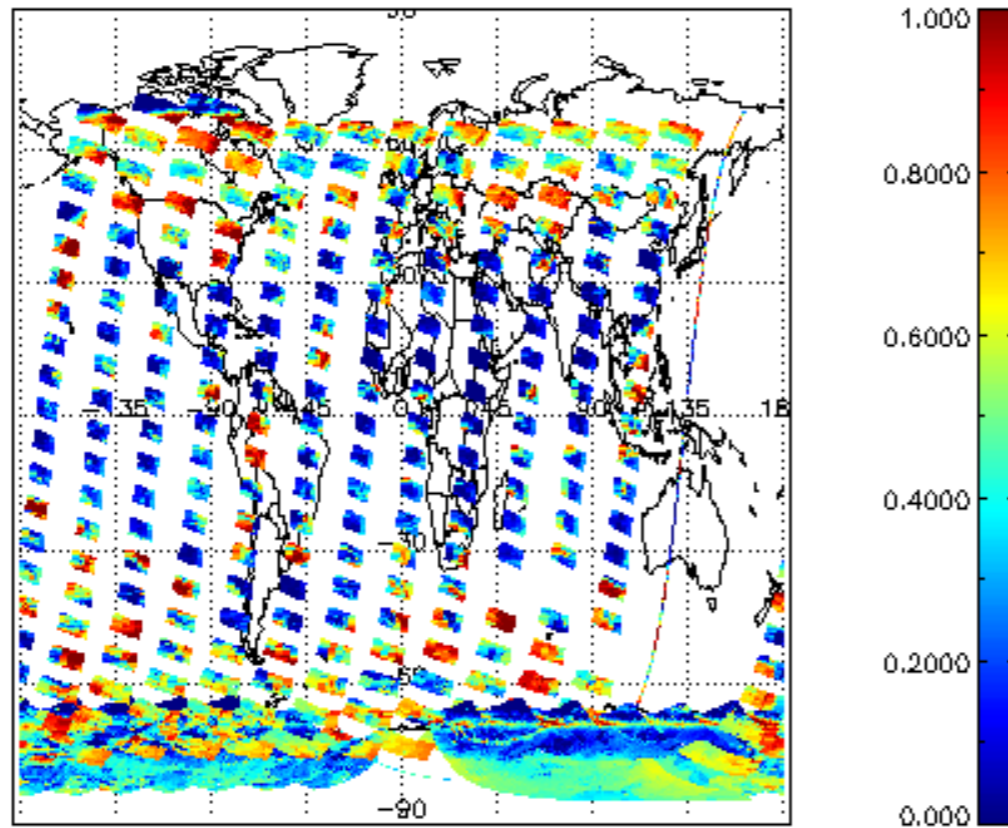
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



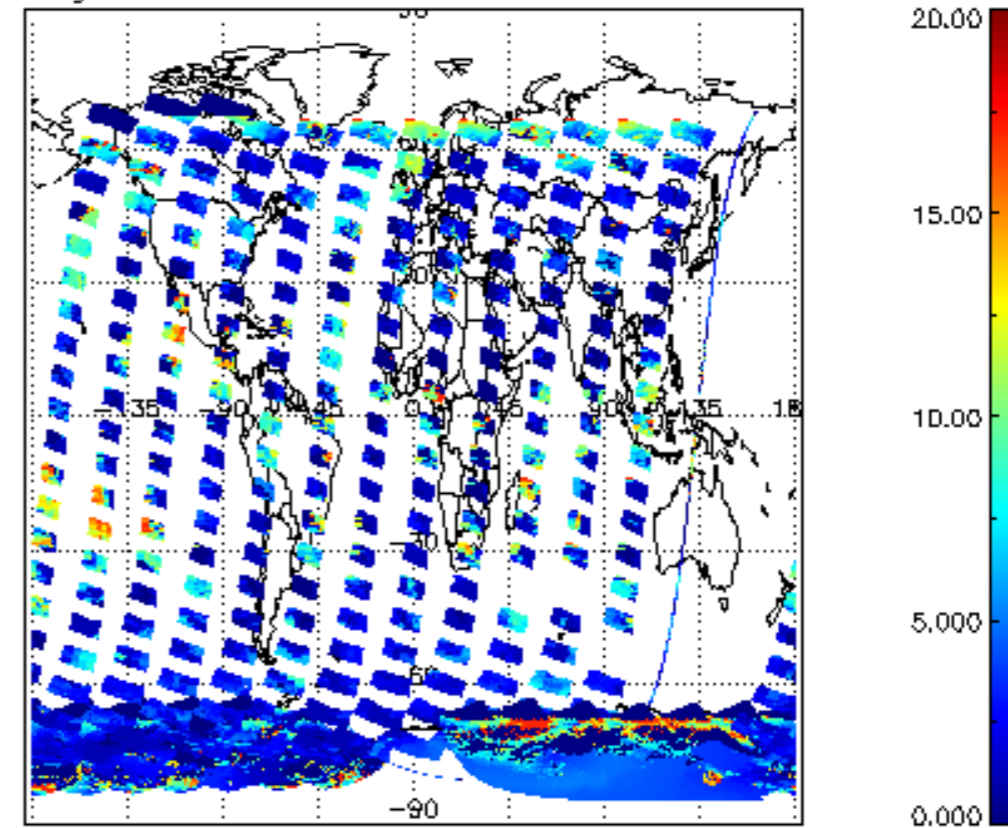
2.3 ADF monitoring

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

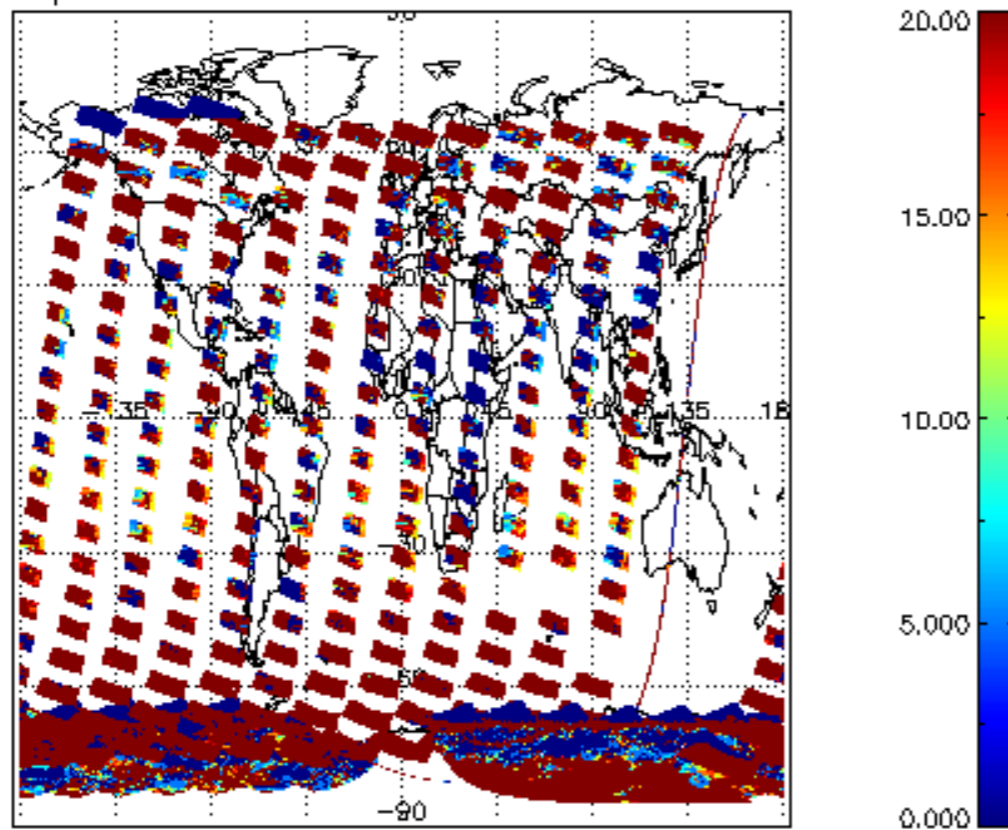
cL_frac for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



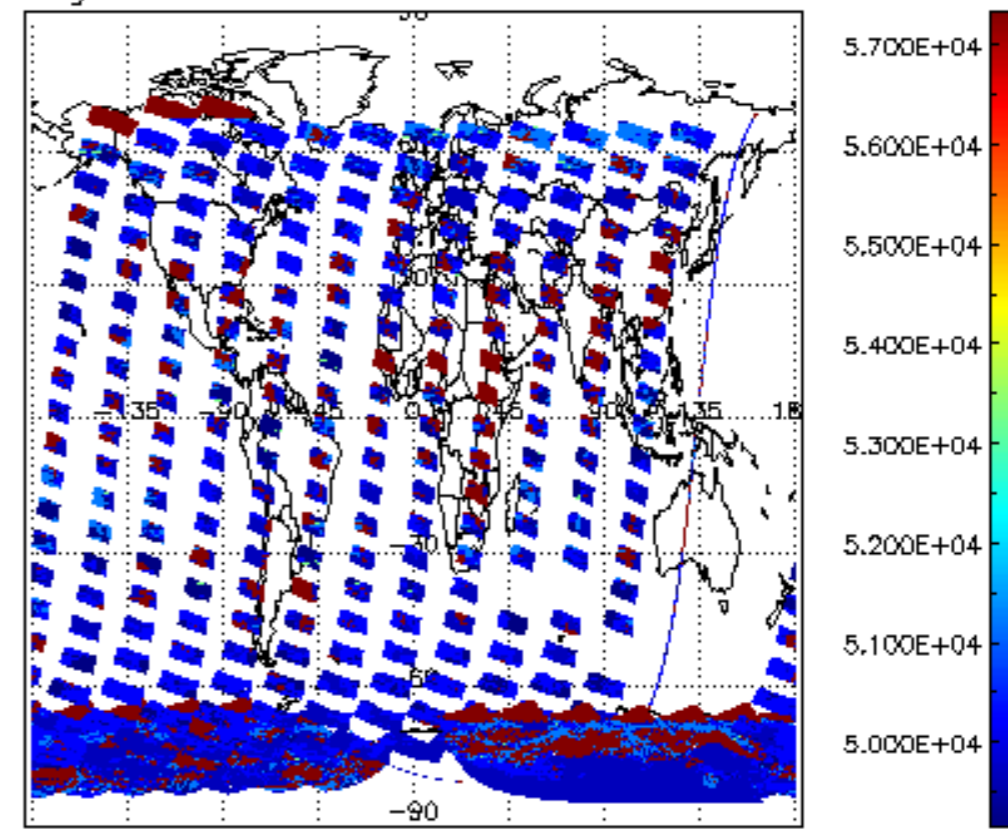
cL_top_height for 10JAN2009 00:00:00 to 11JAN2009 00:00:00

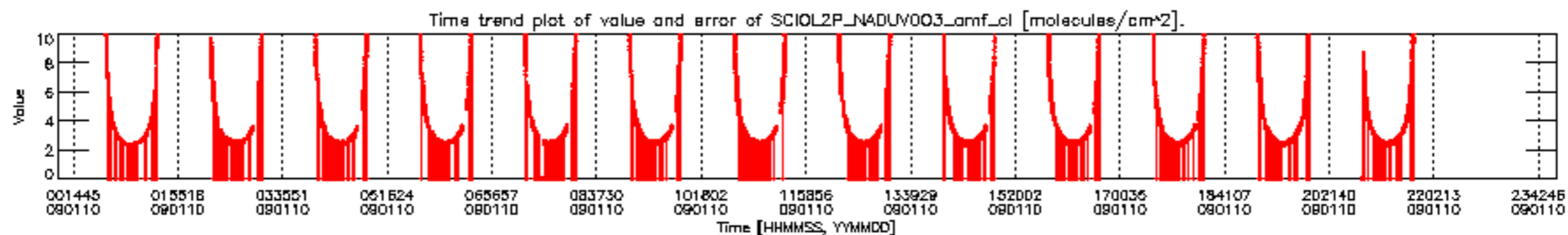
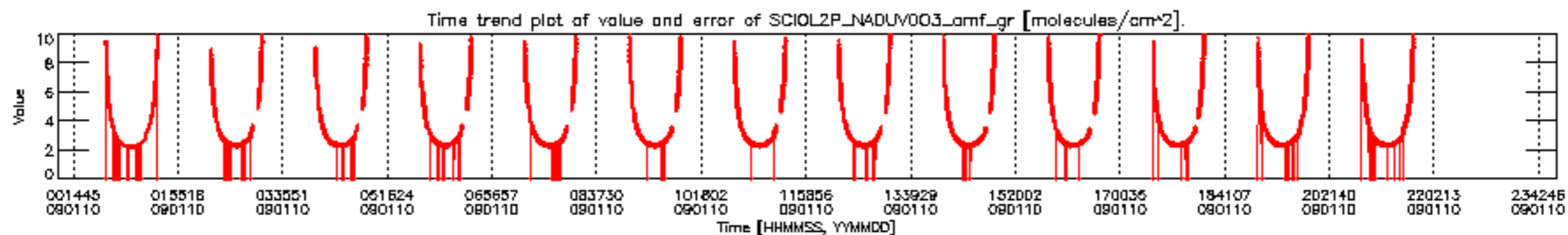
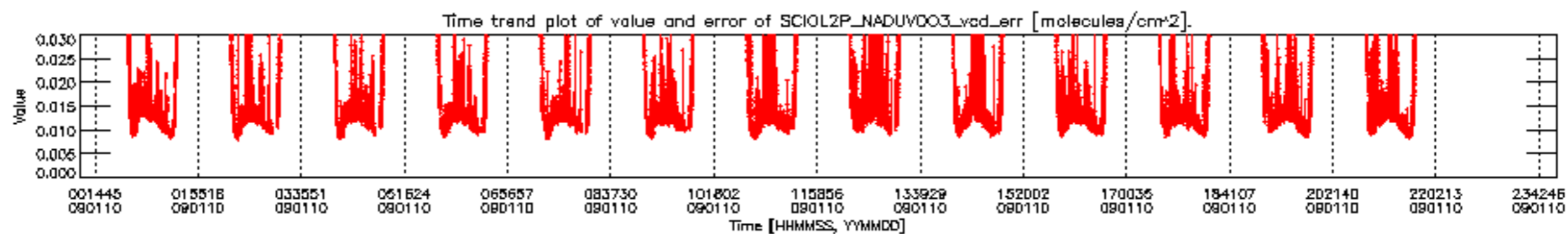
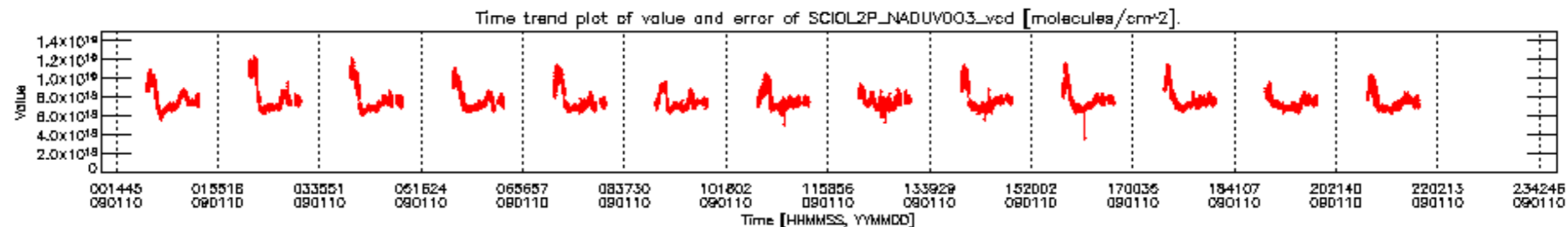


cLopt_depth for 10JAN2009 00:00:00 to 11JAN2009 00:00:00

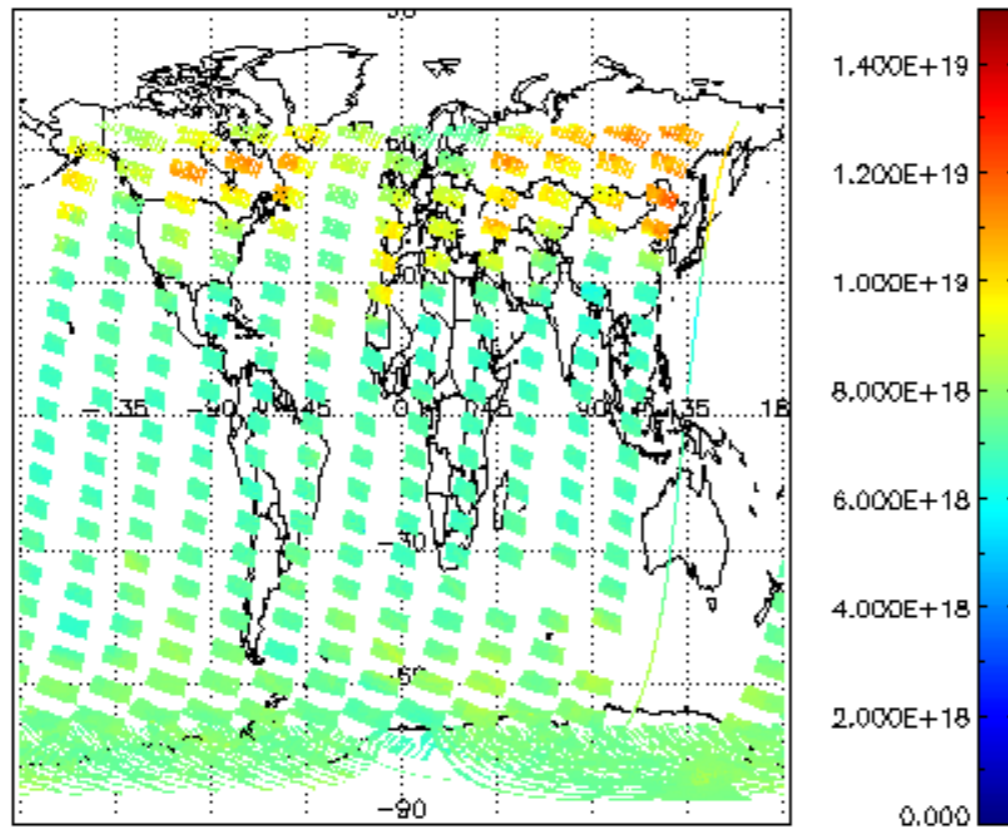


cloud_flags for 10JAN2009 00:00:00 to 11JAN2009 00:00:00

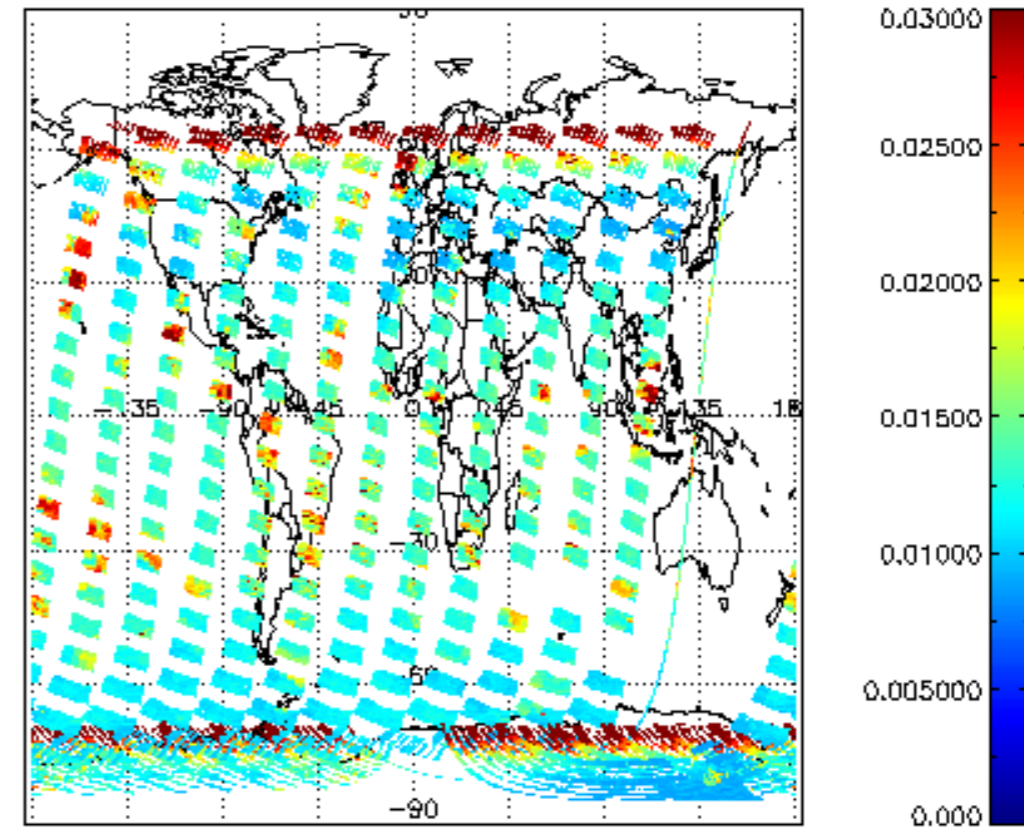




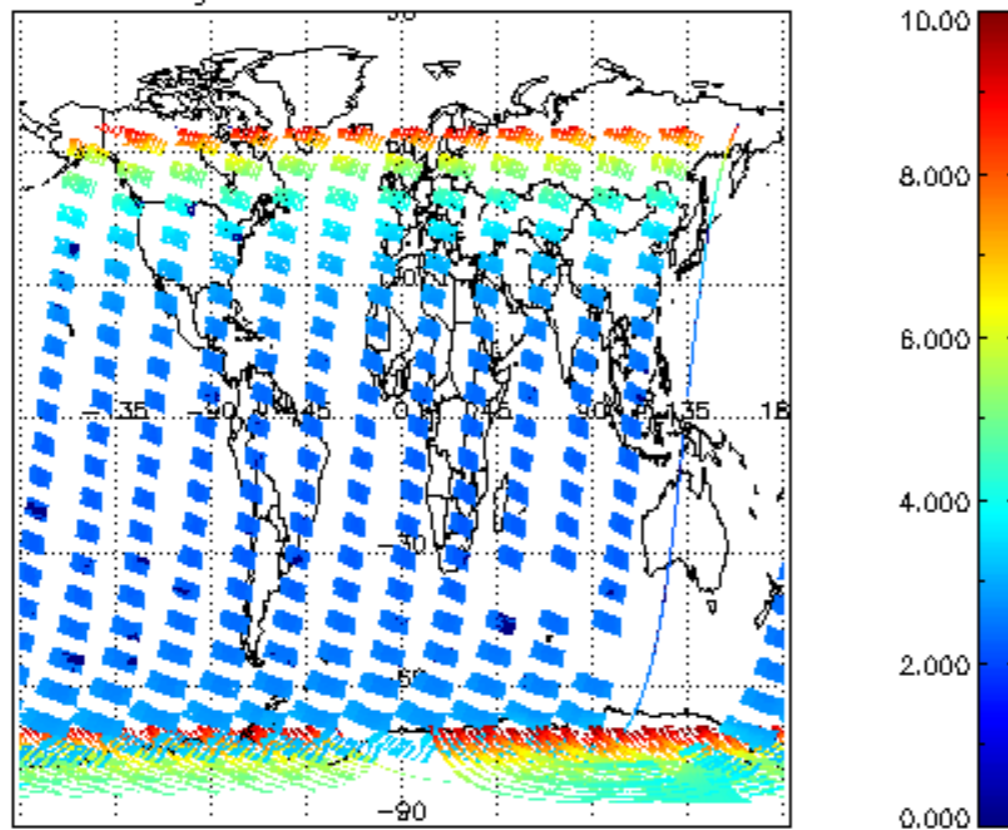
SCIOL2P_NADUV003_vcd for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



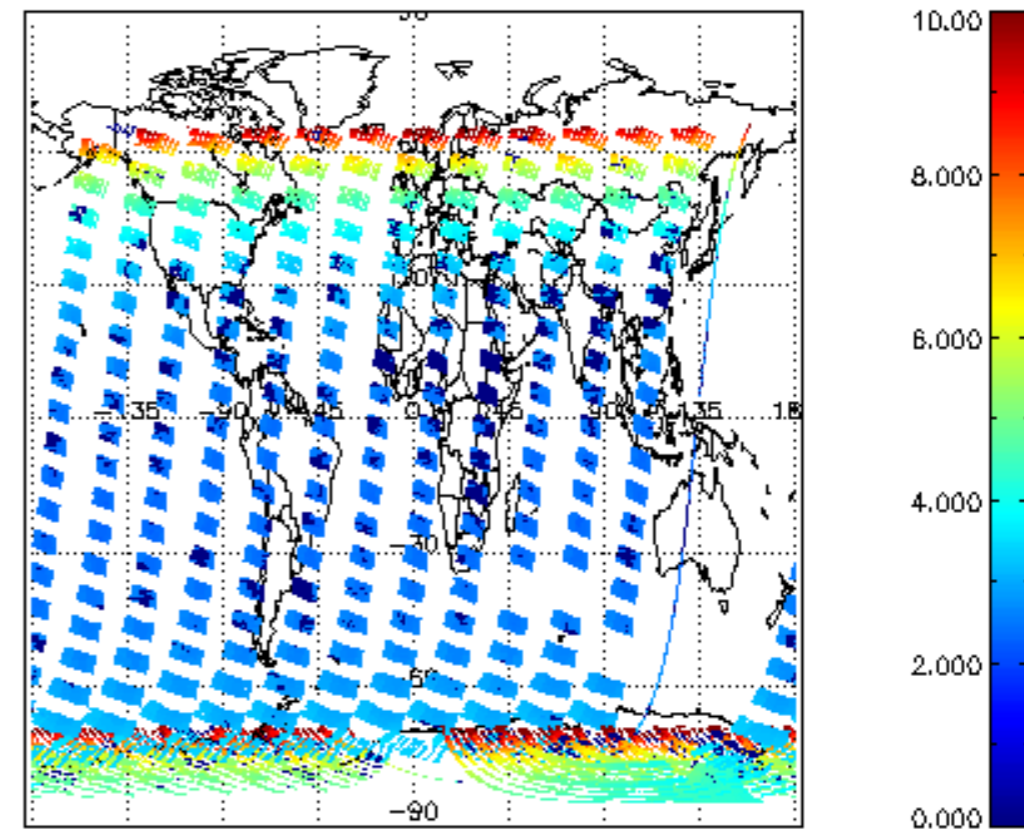
SCIOL2P_NADUV003_vcd_err for 10JAN2009 00:00:00 to 11JAN2009 00:00:00

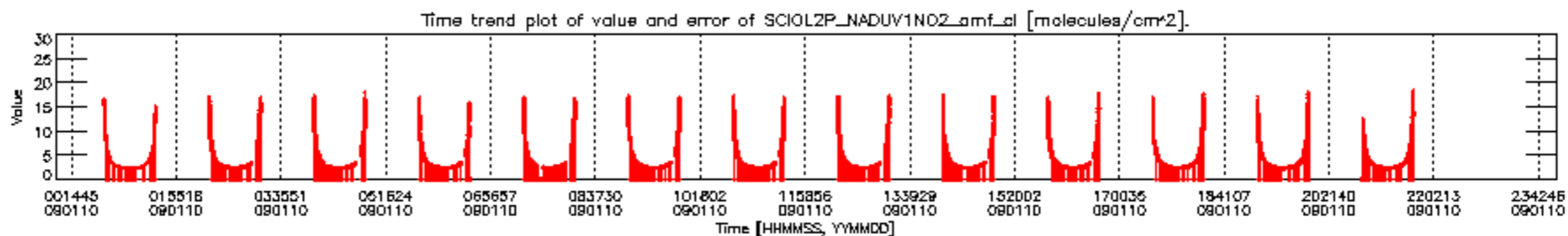
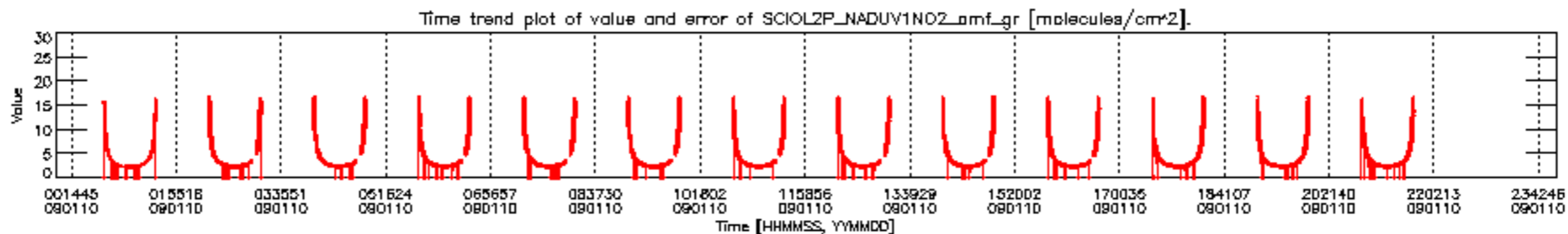
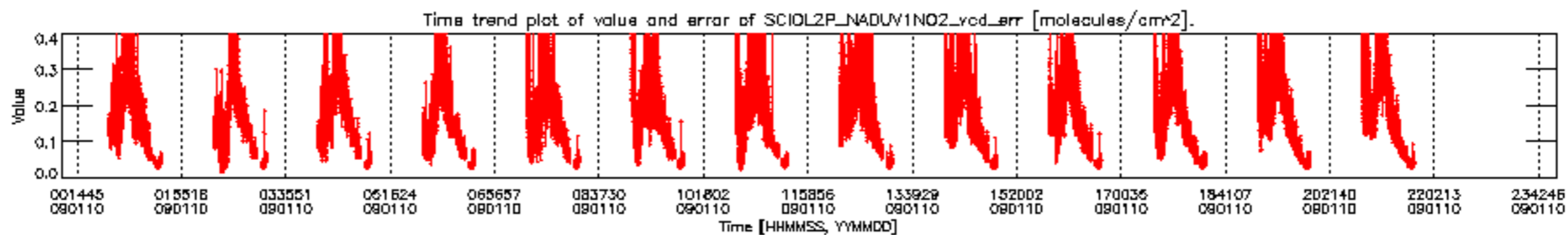
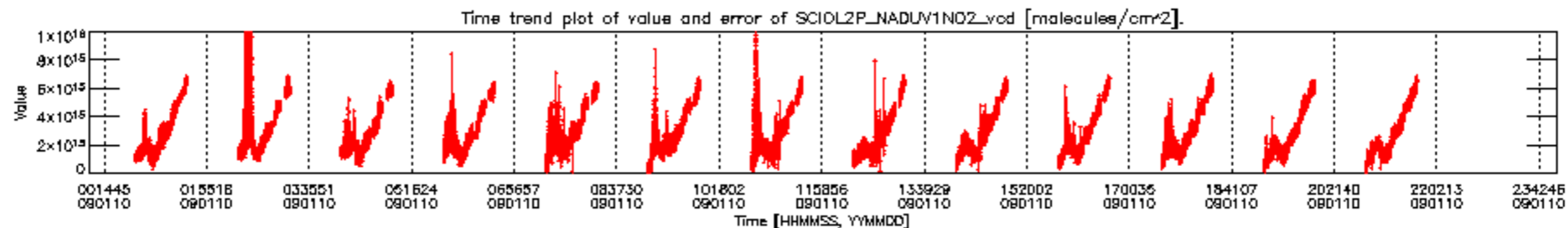


SCIOL2P_NADUV003_amf_gr for 10JAN2009 00:00:00 to 11JAN2009 00:00:00

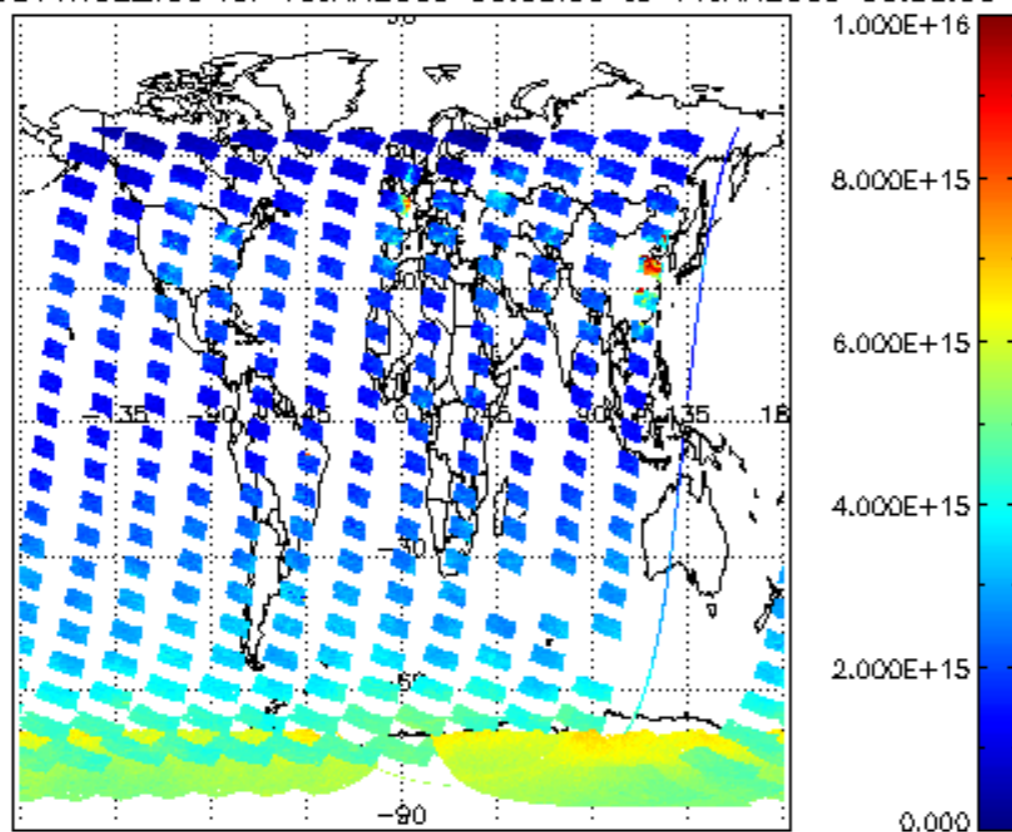


SCIOL2P_NADUV003_amf_cl for 10JAN2009 00:00:00 to 11JAN2009 00:00:00

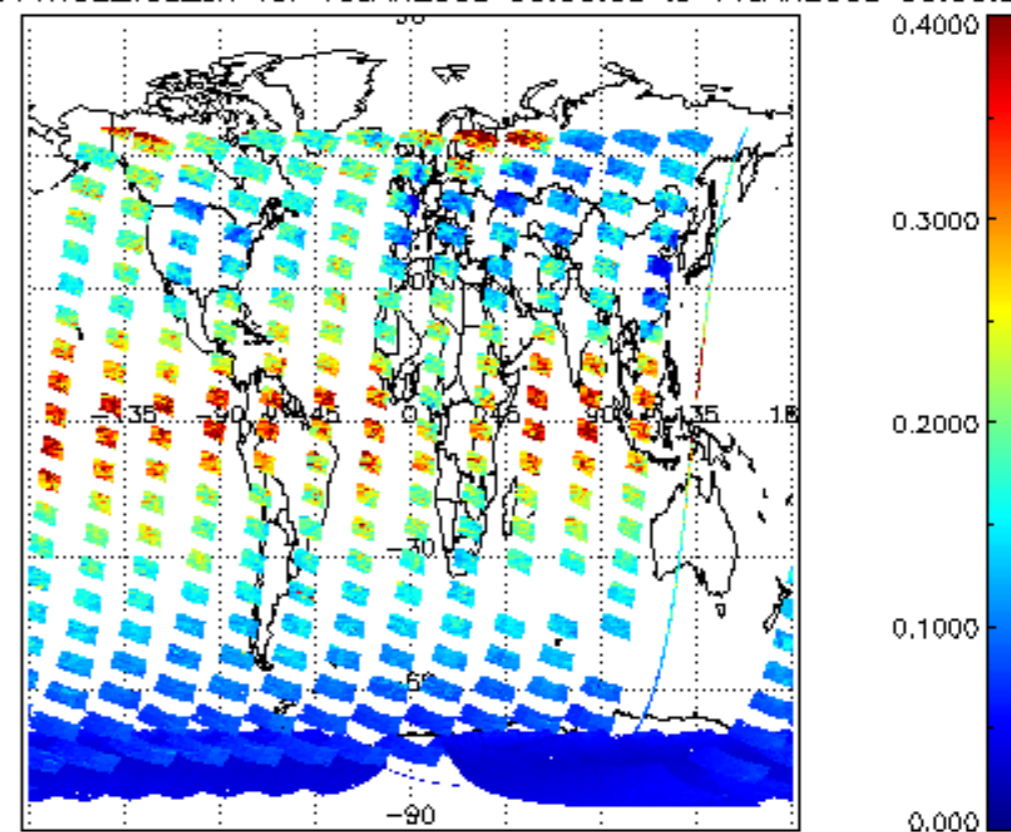




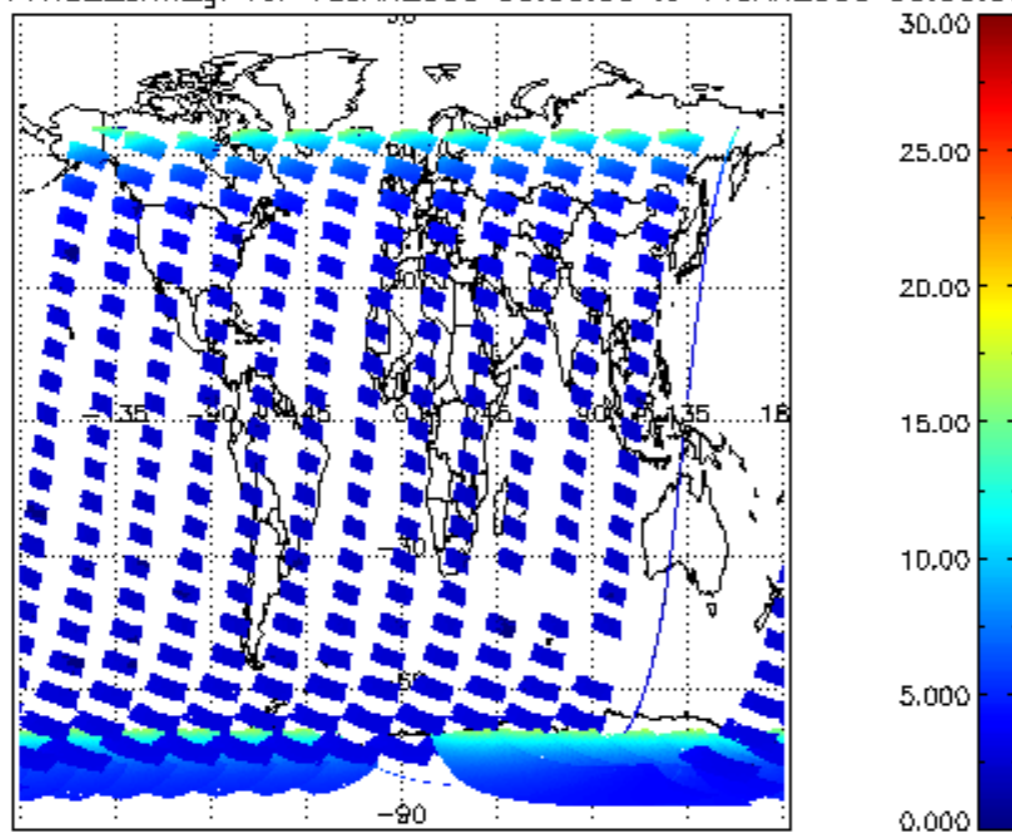
SCIOL2P_NADUV1NO2_vcd for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



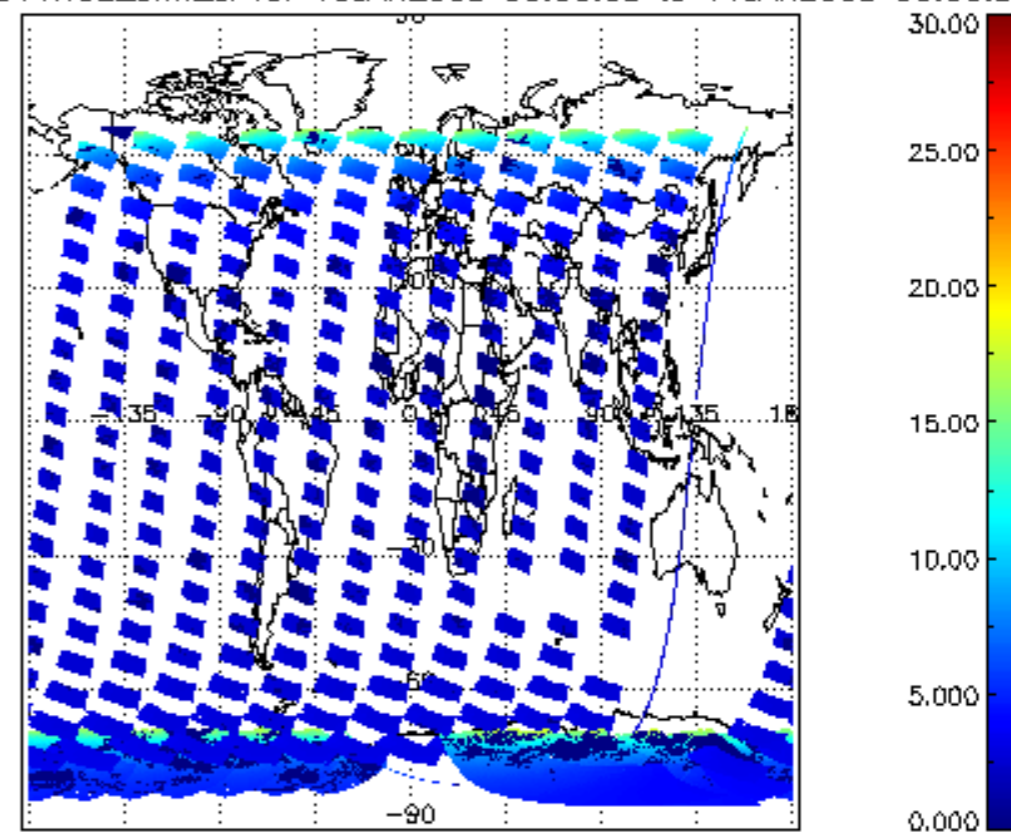
SCIOL2P_NADUV1NO2_vcd_err for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



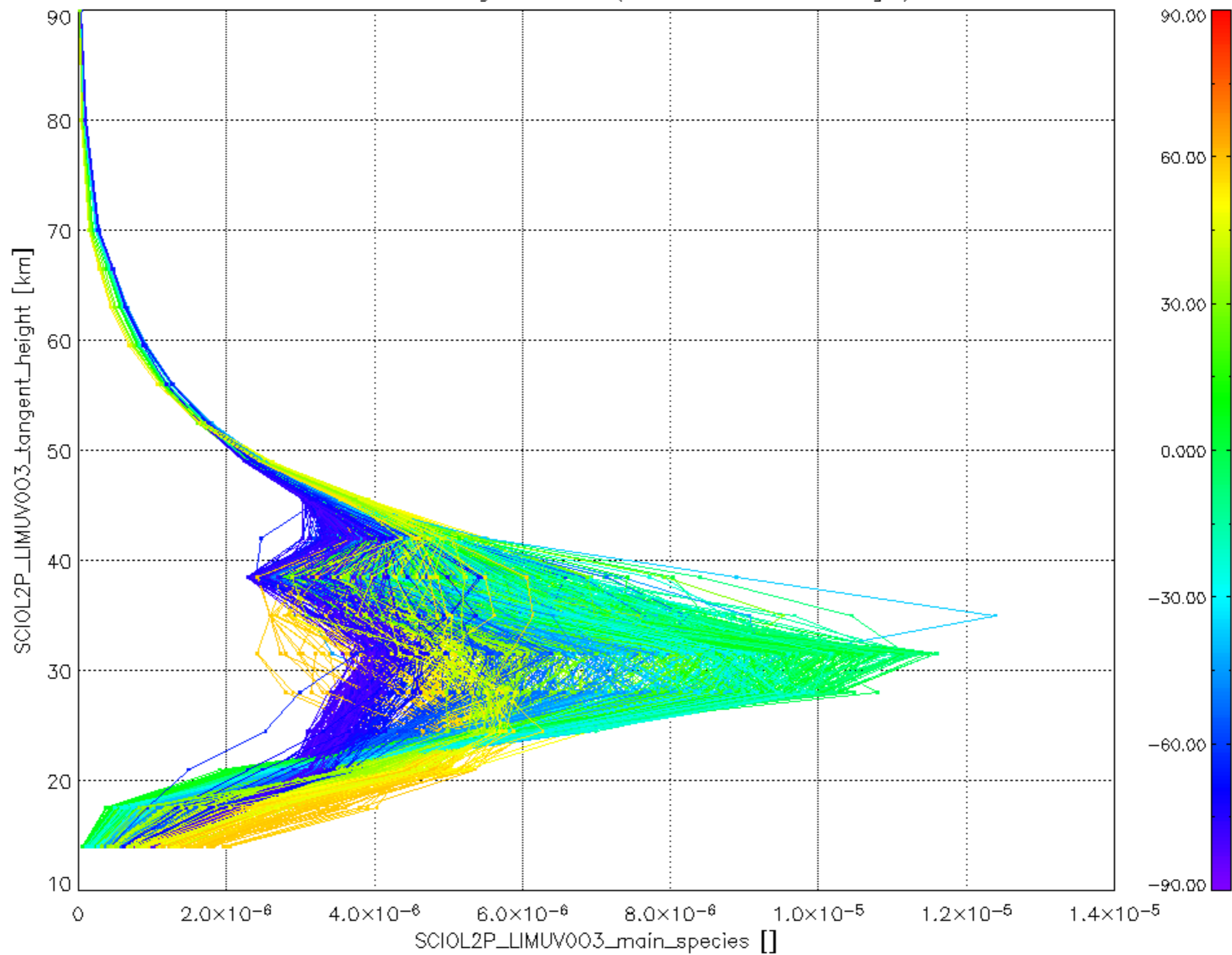
SCIOL2P_NADUV1NO2_amf_gr for 10JAN2009 00:00:00 to 11JAN2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 10JAN2009 00:00:00 to 11JAN2009 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).

