

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	09DEC2009 13:57:42
Data source version	SCIA-OL/3.01-R
Processing scope for products	24AUG2009 00:00:00 to 25AUG2009 00:00:00
Start time of first product within scope	23AUG2009 22:46:22
Stop time of last product within scope	25AUG2009 00:51:49
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__2PRDPA20090823_224622_000033252081_00488_39119_3930.N1	23AUG2009 22:46:22	23AUG2009 23:41:48	0	GOOD
1	SCI_OL__2PRDPA20090824_002659_000033812081_00489_39120_3931.N1	24AUG2009 00:26:59	24AUG2009 01:23:20	0	GOOD
2	SCI_OL__2PRDPA20090824_020735_000033252081_00490_39121_3932.N1	24AUG2009 02:07:35	24AUG2009 03:03:01	0	GOOD
3	SCI_OL__2PRDPA20090824_034811_000027212081_00491_39122_3933.N1	24AUG2009 03:48:11	24AUG2009 04:33:33	0	GOOD
4	SCI_OL__2PRDPA20090824_061425_000005882081_00492_39123_3934.N1	24AUG2009 06:14:25	24AUG2009 06:24:13	0	GOOD
5	SCI_OL__2PRDPA20090824_070924_000033812081_00493_39124_3935.N1	24AUG2009 07:09:24	24AUG2009 08:05:46	0	GOOD
6	SCI_OL__2PRDPA20090824_085001_000033252081_00494_39125_3936.N1	24AUG2009 08:50:01	24AUG2009 09:45:26	0	GOOD
7	SCI_OL__2PRDPA20090824_103037_000033812081_00495_39126_3937.N1	24AUG2009 10:30:37	24AUG2009 11:26:58	0	GOOD
8	SCI_OL__2PRDPA20090824_121113_000033252081_00496_39127_3938.N1	24AUG2009 12:11:13	24AUG2009 13:06:39	0	GOOD
9	SCI_OL__2PRDPA20090824_135150_000033812081_00497_39128_3939.N1	24AUG2009 13:51:50	24AUG2009 14:48:11	0	GOOD
10	SCI_OL__2PRDPA20090824_153226_000033252081_00498_39129_3940.N1	24AUG2009 15:32:26	24AUG2009 16:27:51	0	GOOD
11	SCI_OL__2PRDPA20090824_171322_000033122081_00499_39130_3941.N1	24AUG2009 17:13:22	24AUG2009 18:08:35	0	GOOD
12	SCI_OL__2PRDPA20090824_185358_000033252081_00500_39131_3942.N1	24AUG2009 18:53:58	24AUG2009 19:49:24	0	GOOD
13	SCI_OL__2PRDPA20090824_203415_000033812081_00501_39132_3943.N1	24AUG2009 20:34:15	24AUG2009 21:30:37	0	GOOD
14	SCI_OL__2PRDPA20090824_221452_000033252082_00001_39133_3944.N1	24AUG2009 22:14:52	24AUG2009 23:10:17	0	GOOD
15	SCI_OL__2PRDPA20090824_235528_000033812082_00002_39134_3945.N1	24AUG2009 23:55:28	25AUG2009 00:51:49	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: 134444

Total number of cloud data DSRs with good quality flag (=0): 134444 (100.0 %)

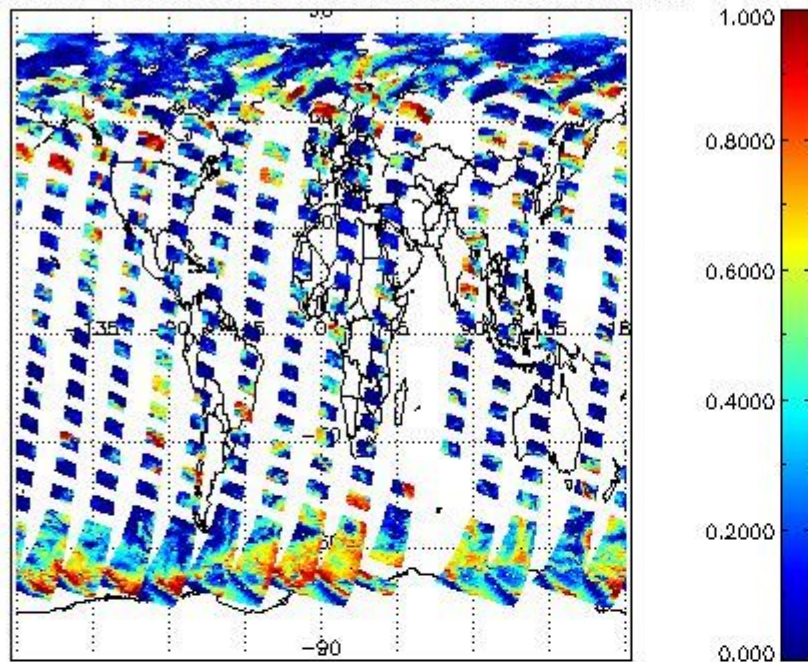
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	134444	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	134444	0.16996	0.12500	0.12500	0.25000	0.059989	s
CL_FRAC	134444	0.29340	0.22622	0.0000	1.0000	0.27855	-
CL_FRAC_ERR	134444	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	134444	5.4388	4.0000	4.0000	8.0000	1.9197	
PMD_READ_CL[0]	134444	0.13395	0.0000	0.0000	8.0000	0.82078	-
PMD_READ_CL[1]	134444	1.7827	0.0000	0.0000	8.0000	2.6497	-
CL_TOP_HEIGHT	114442	3.2049	1.4435	0.0000	17.000	3.8134	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	114442	58.269	84.605	0.0000	101.00	44.993	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	134444	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	134444	11001101	11000100	11000000	11100000	3601.3	flags
AERO_ABSO_IND	134444	4.2623	5.1621	-0.18752	16.399	2.8067	
AERO_IND_DIAG	134444	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	134444	01010111	00000000	00000000	11000000	24472.	flags

Time and geolocation plots:

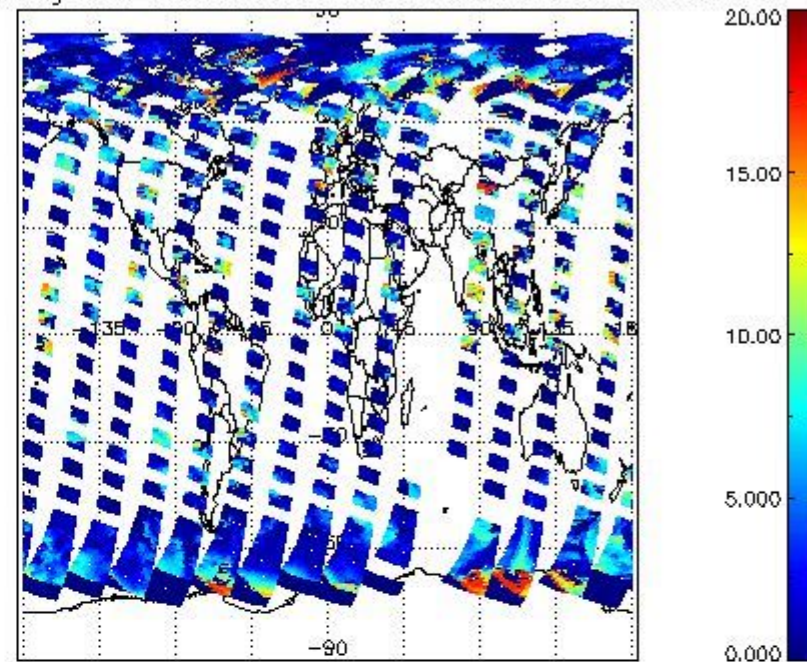
Plots are available for the following parameters:

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

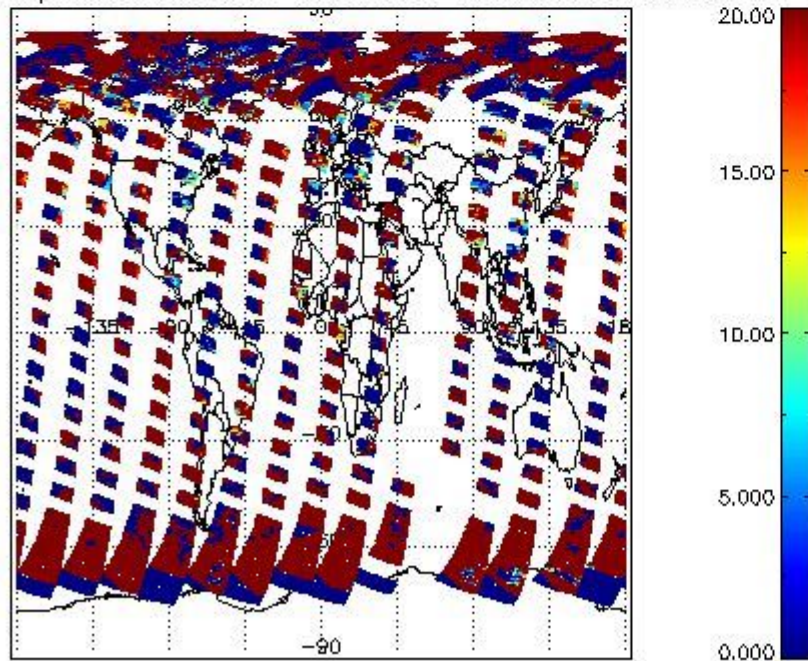
cL_frac for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



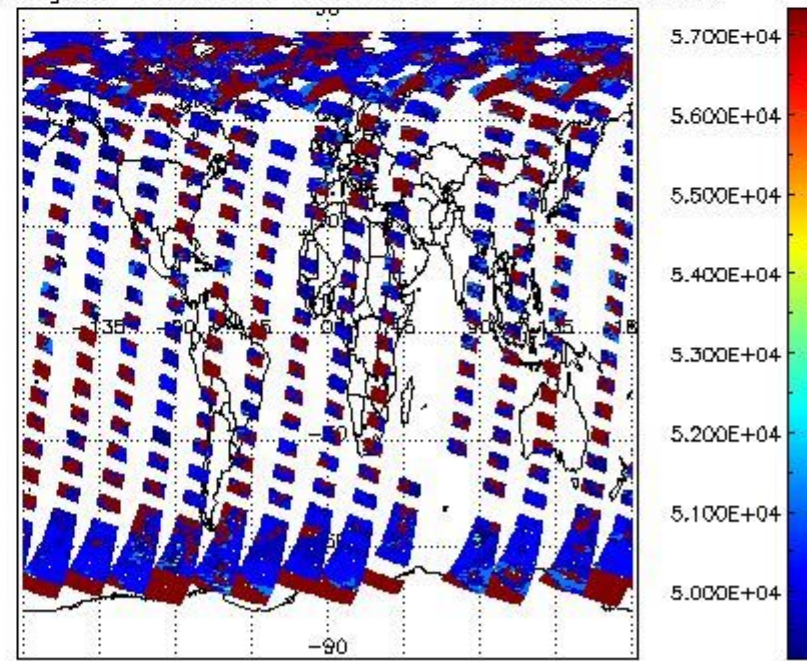
cL_top_height for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



cL_opt_depth for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



cloud_flags for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



2.2.2 Nadir

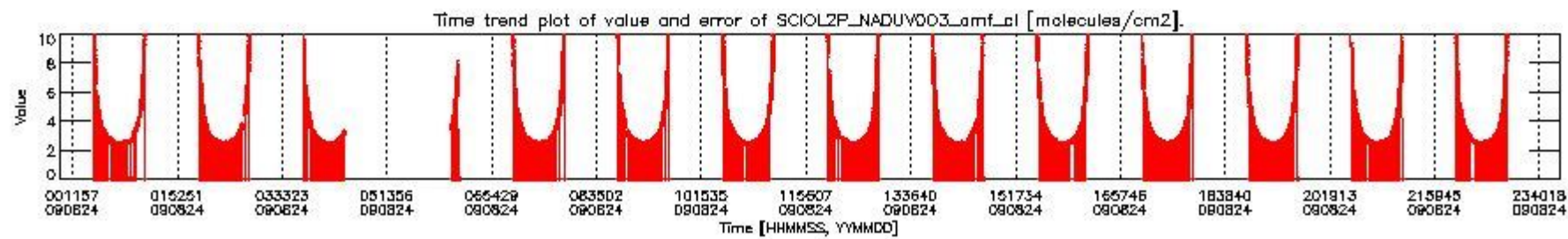
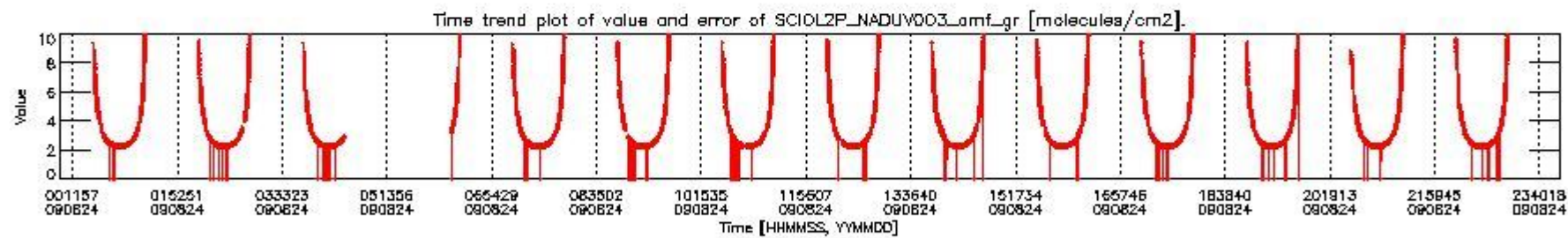
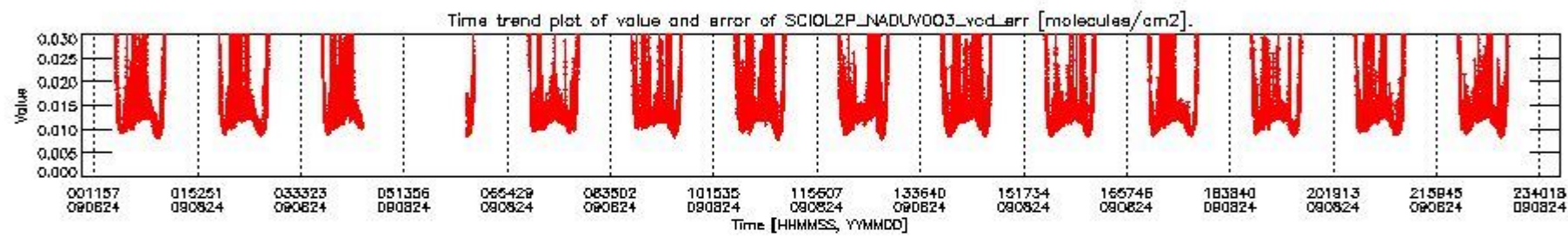
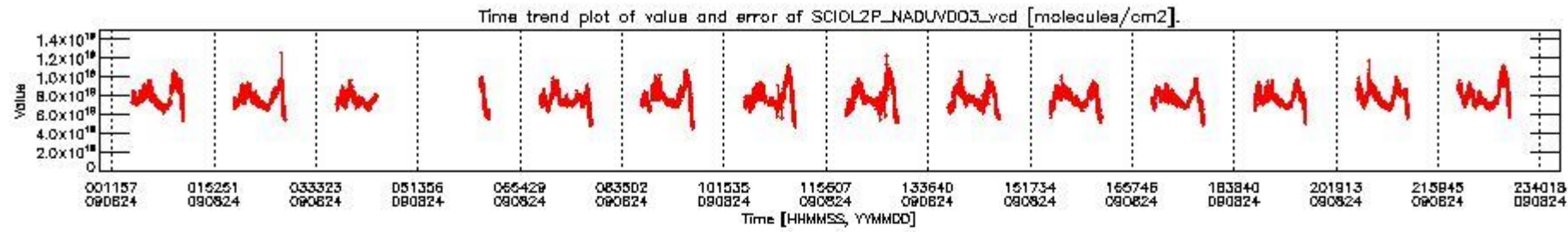
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

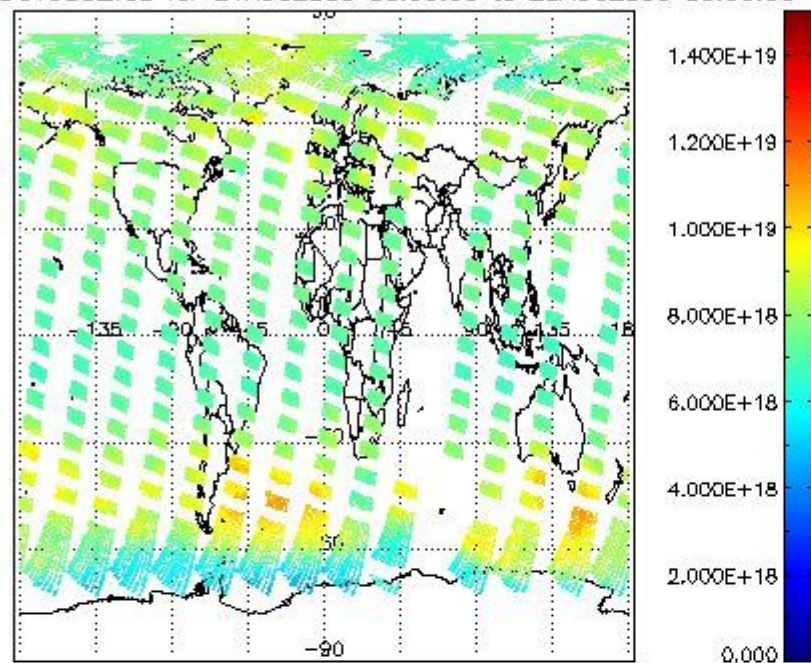
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

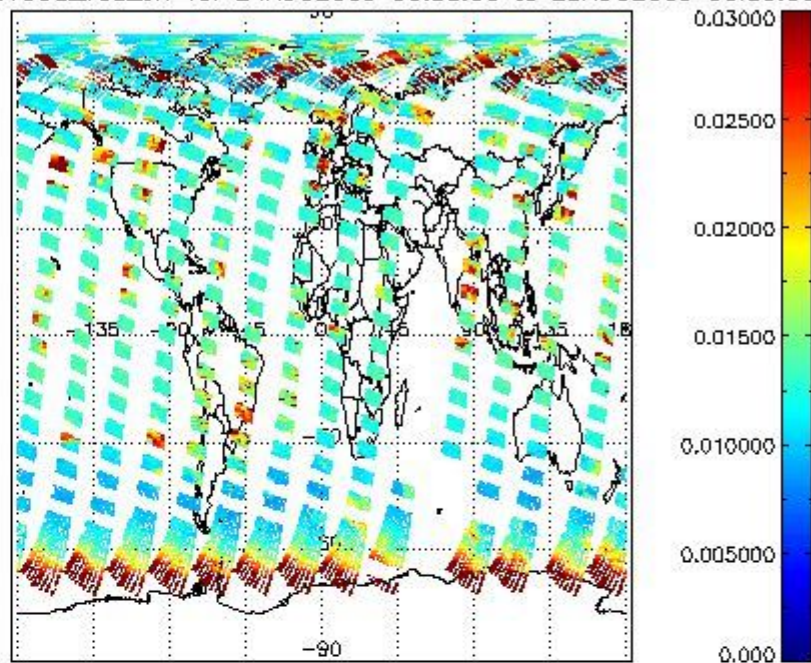
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



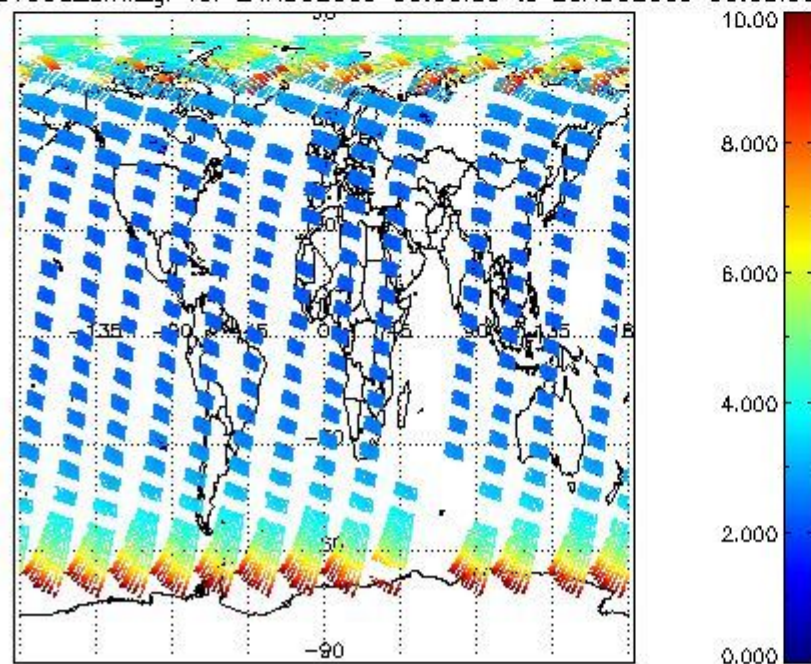
SCIOL2P_NADUV003_vcd for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



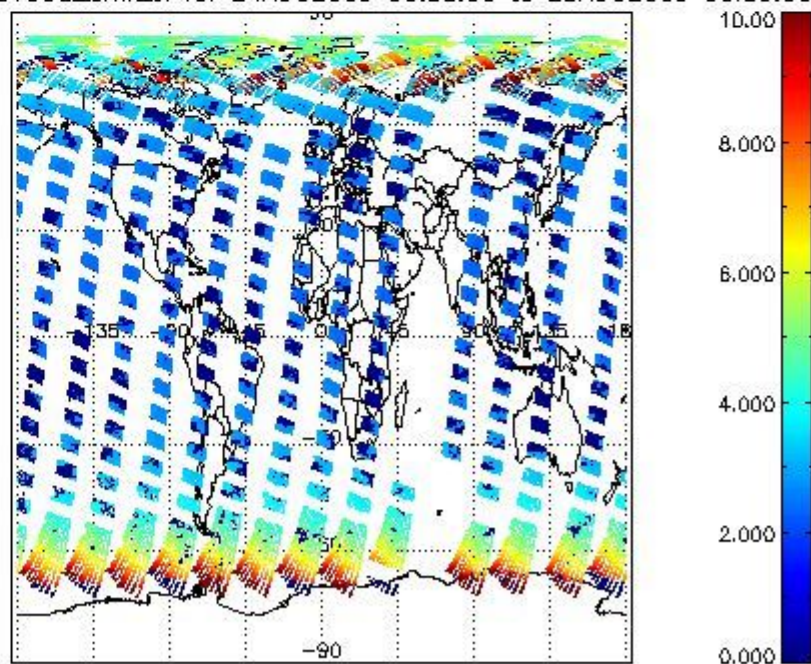
SCIOL2P_NADUV003_vcd_err for 24AUG2009 00:00:00 to 25AUG2009 00:00:00

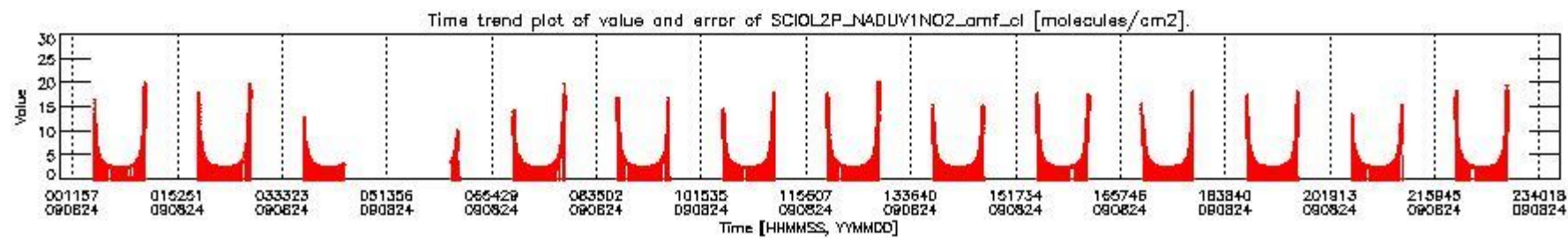
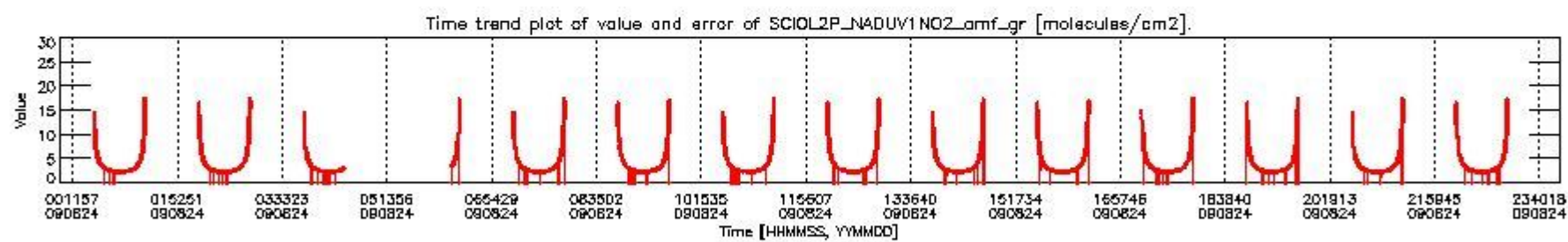
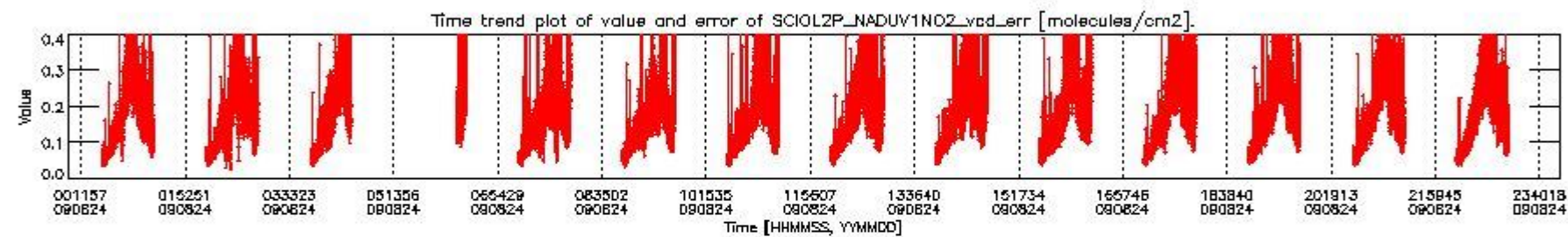
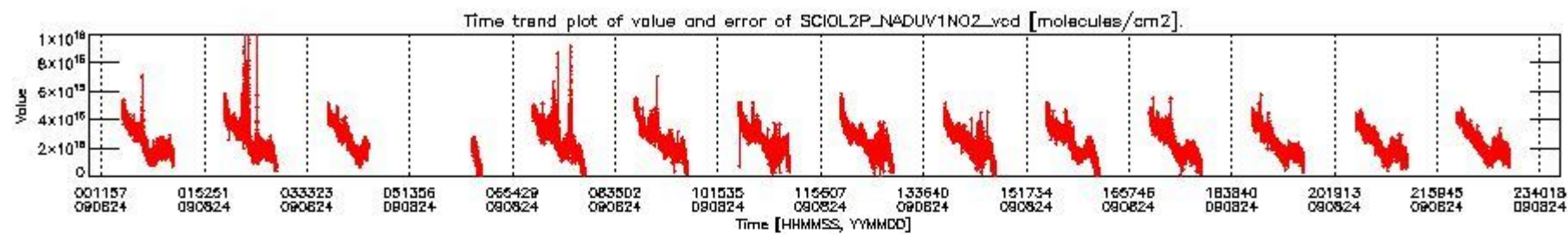


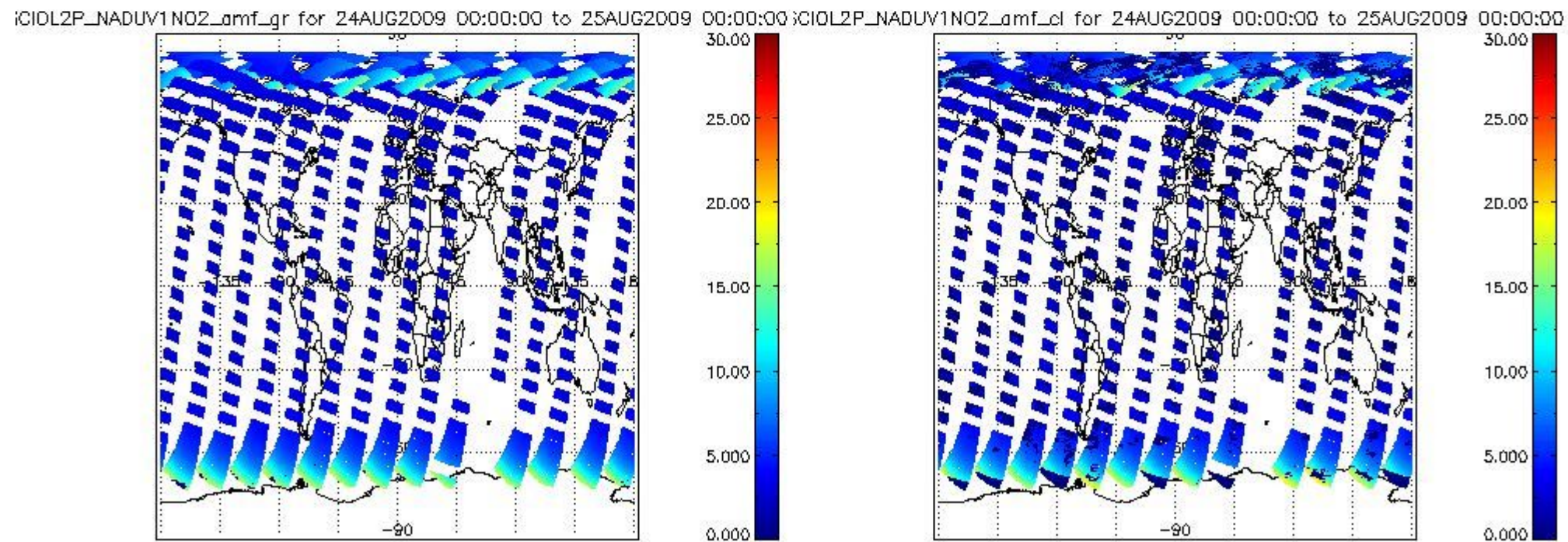
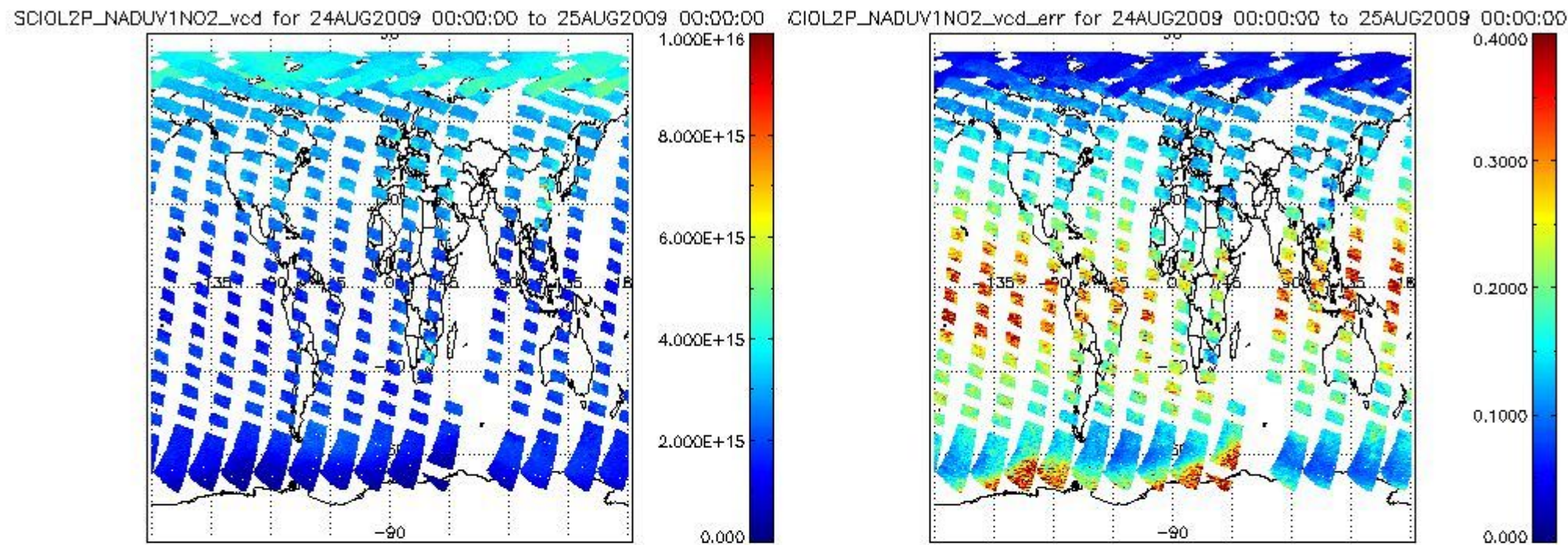
SCIOL2P_NADUV003_amf_gr for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



SCIOL2P_NADUV003_amf_sl for 24AUG2009 00:00:00 to 25AUG2009 00:00:00







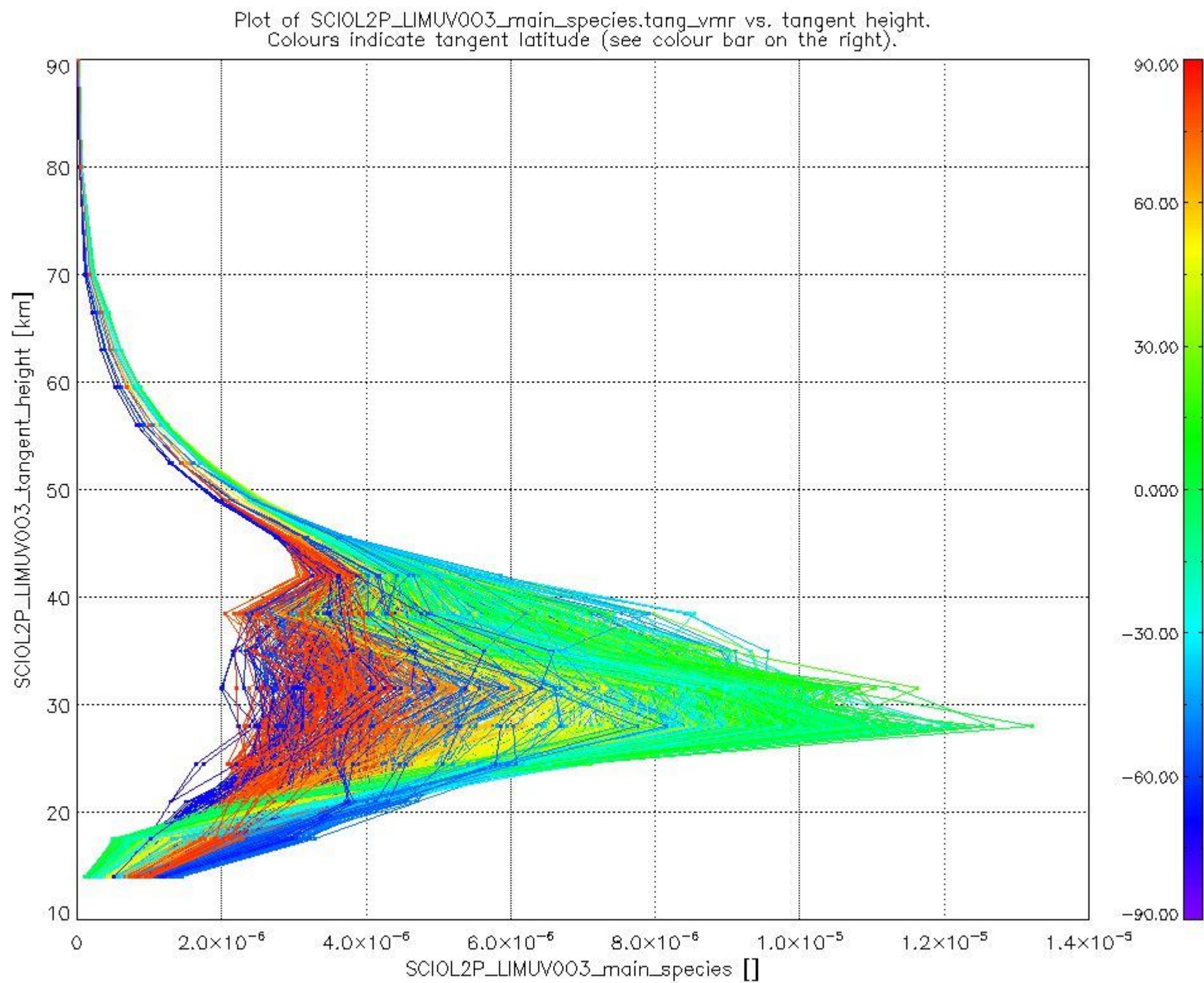
2.2.3 Limb

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

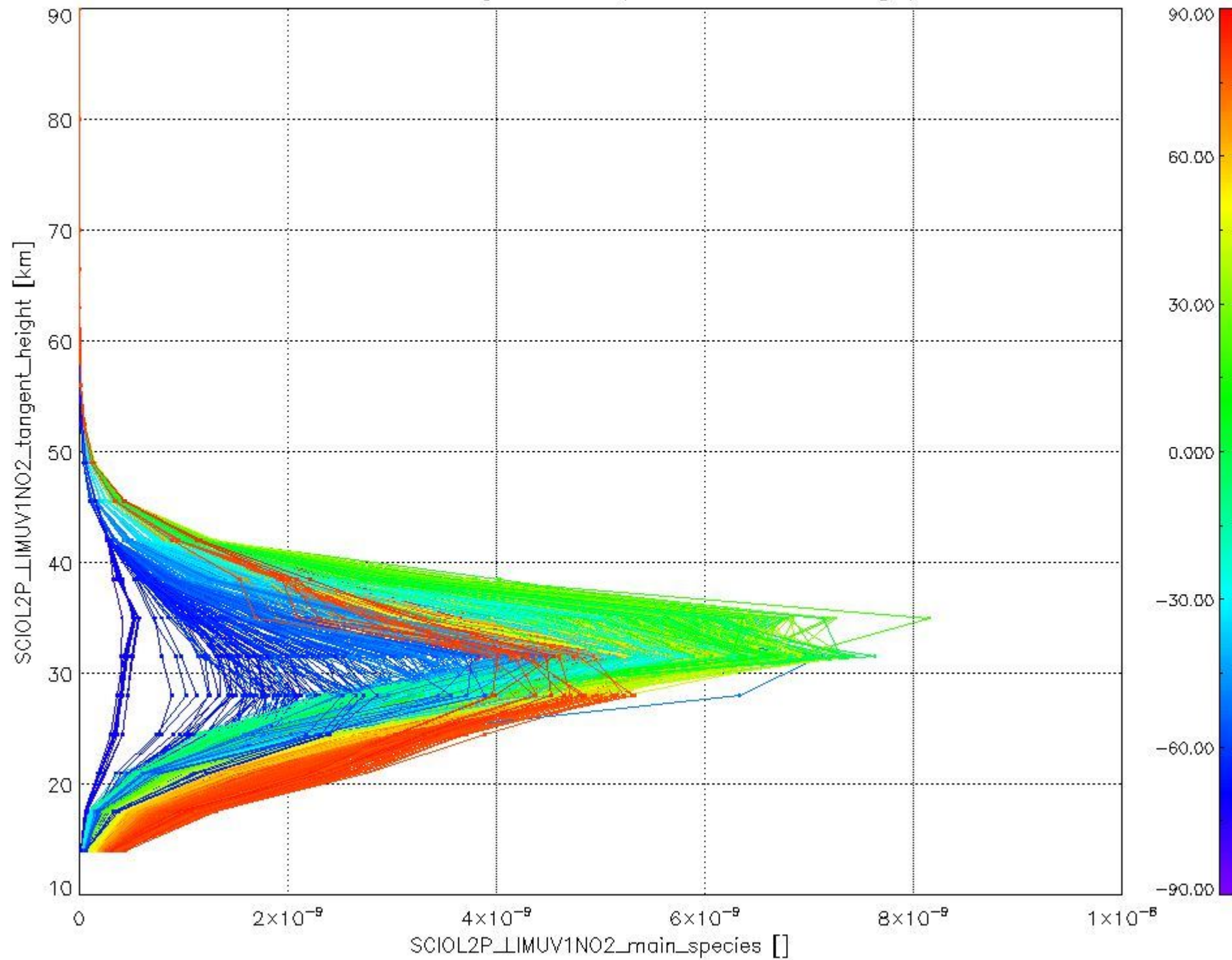
The following data items are currently included into this section:

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.



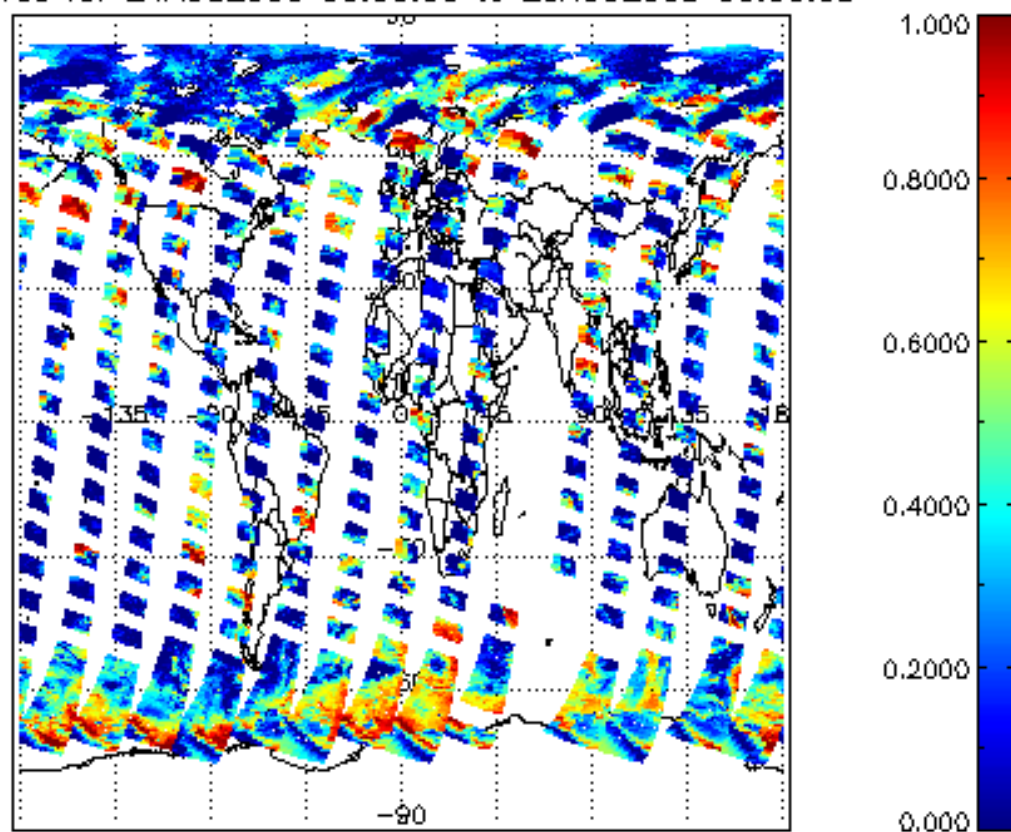
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



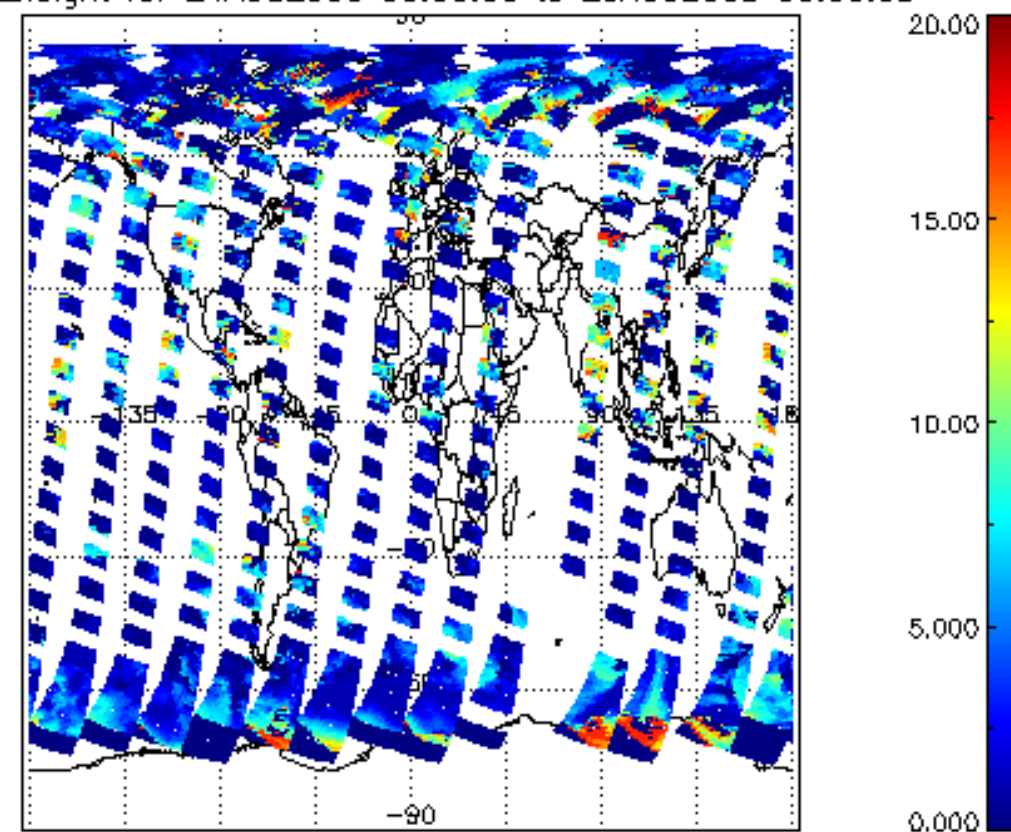
2.3 ADF monitoring

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

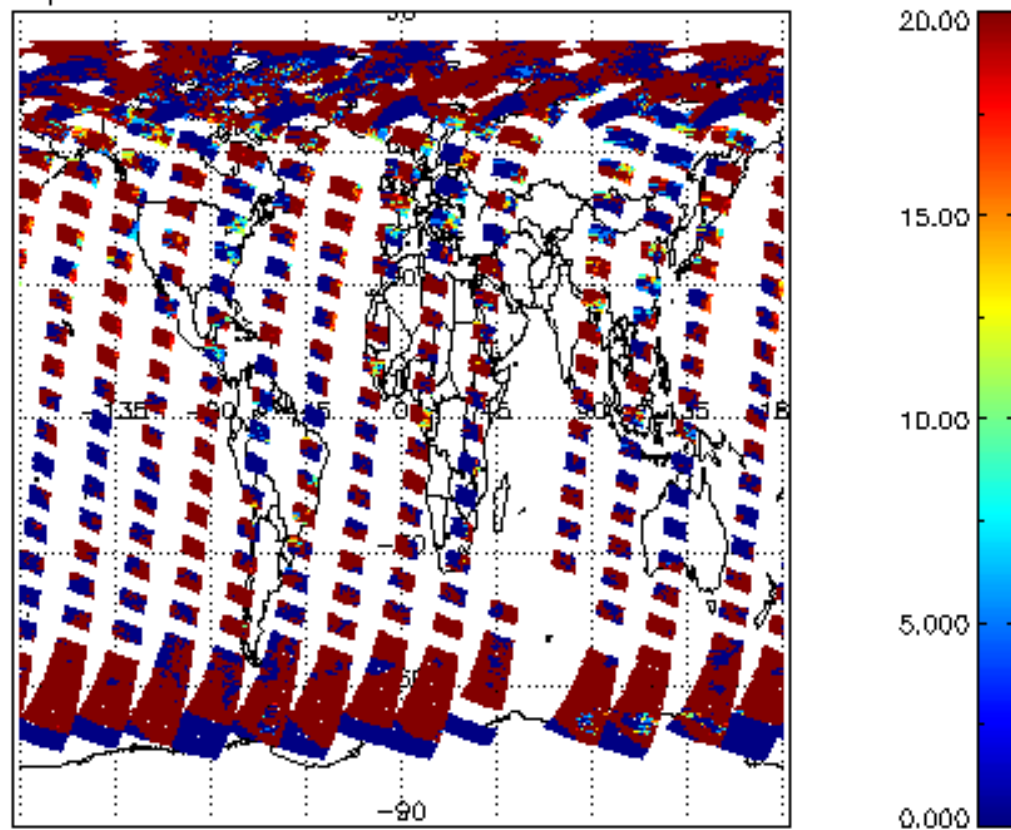
cL_frac for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



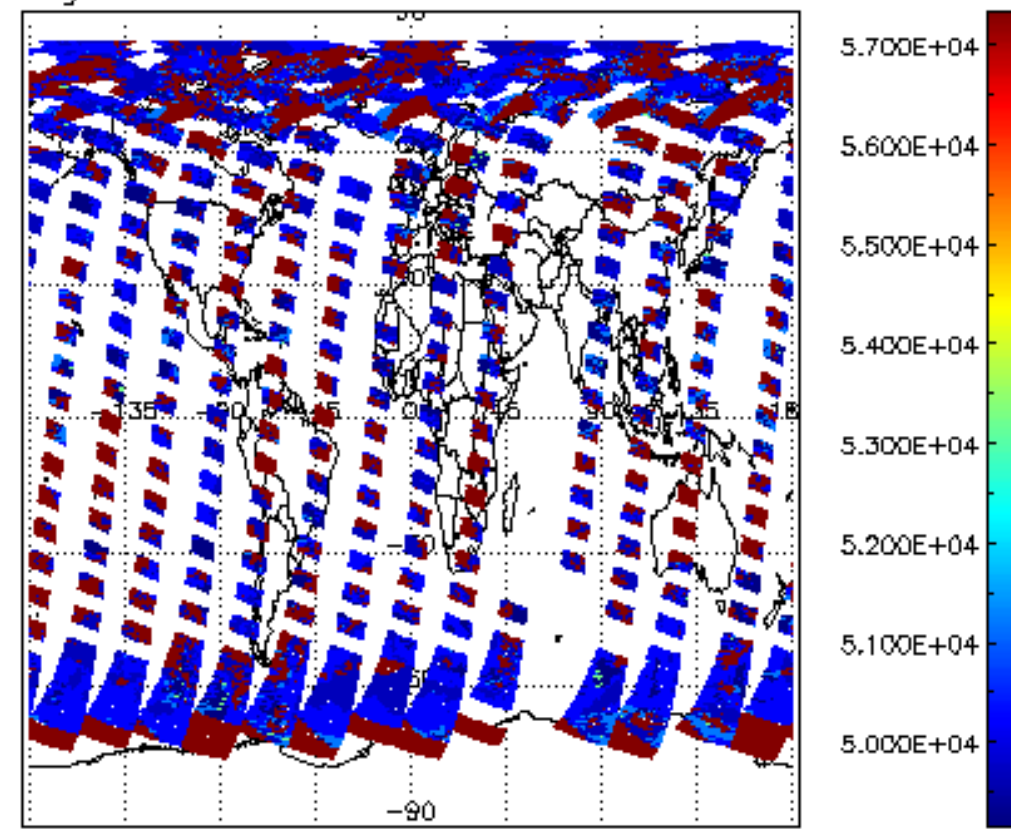
cL_top_height for 24AUG2009 00:00:00 to 25AUG2009 00:00:00

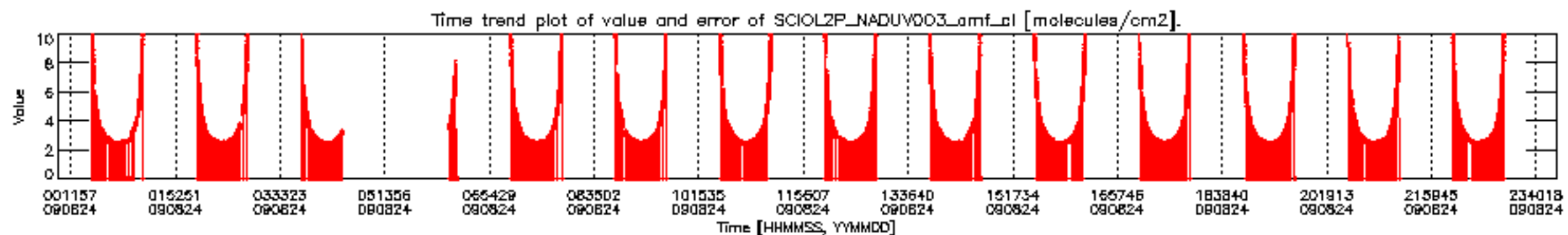
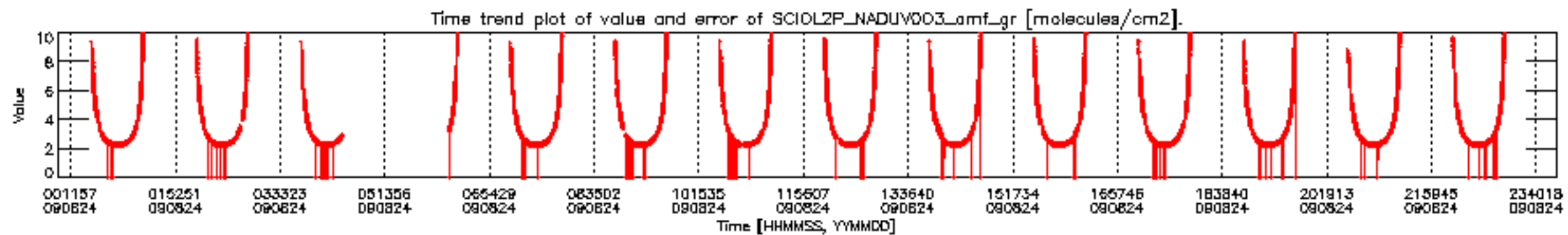
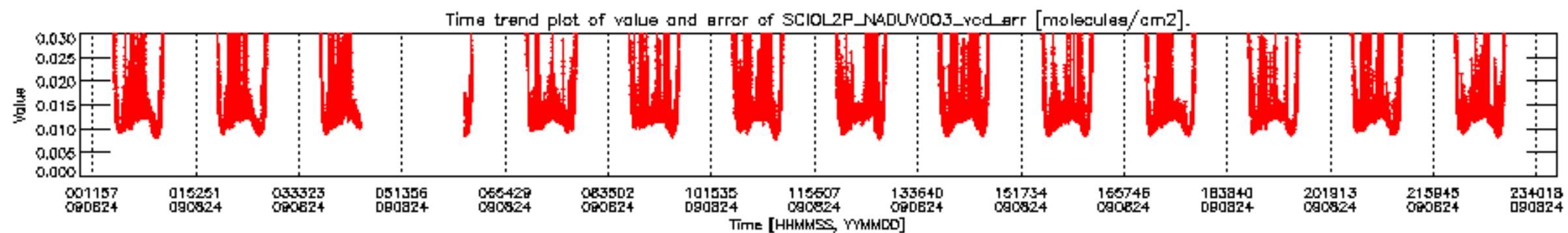
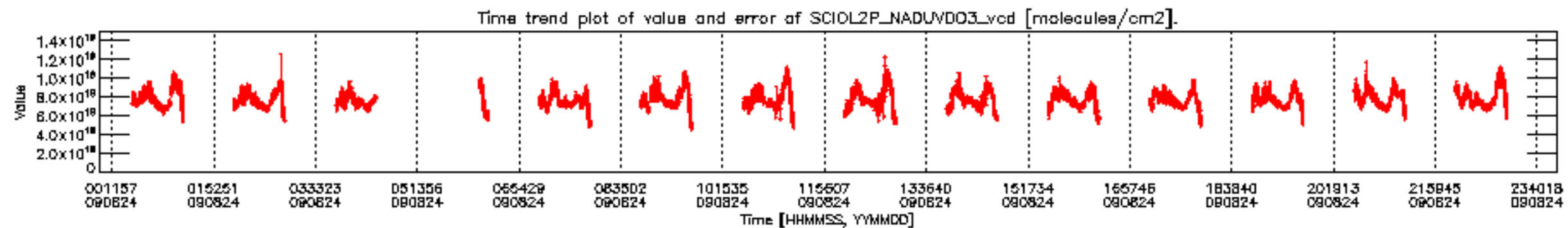


cL_opt_depth for 24AUG2009 00:00:00 to 25AUG2009 00:00:00

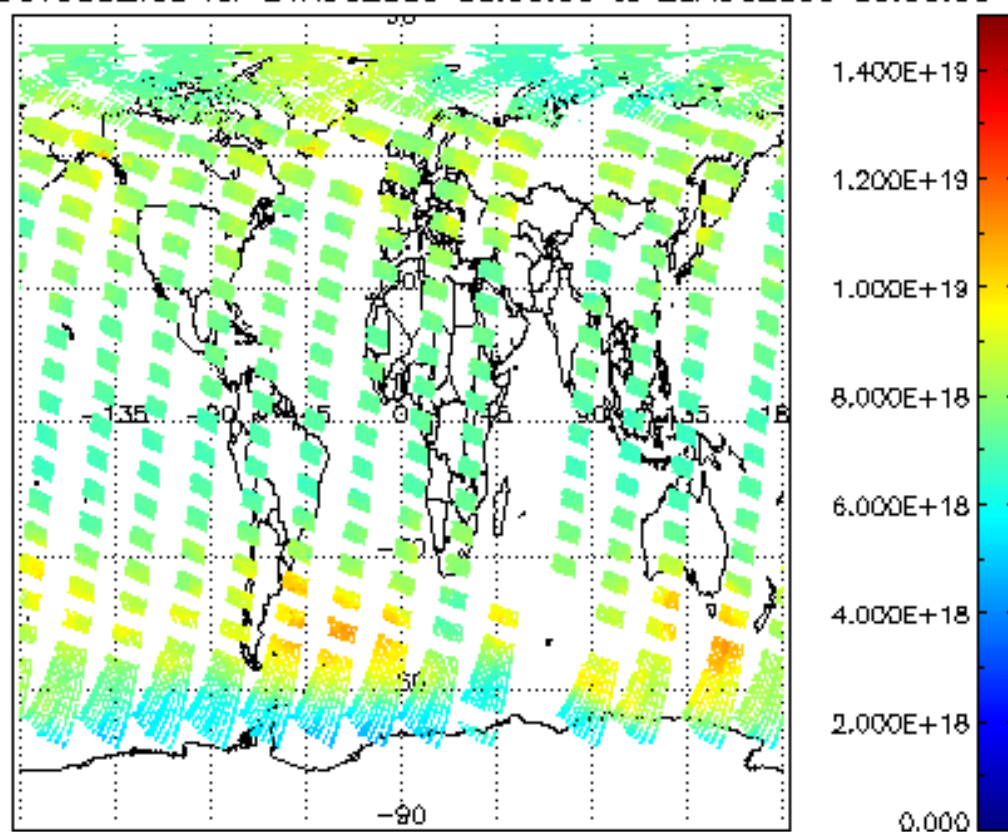


cloud_flags for 24AUG2009 00:00:00 to 25AUG2009 00:00:00

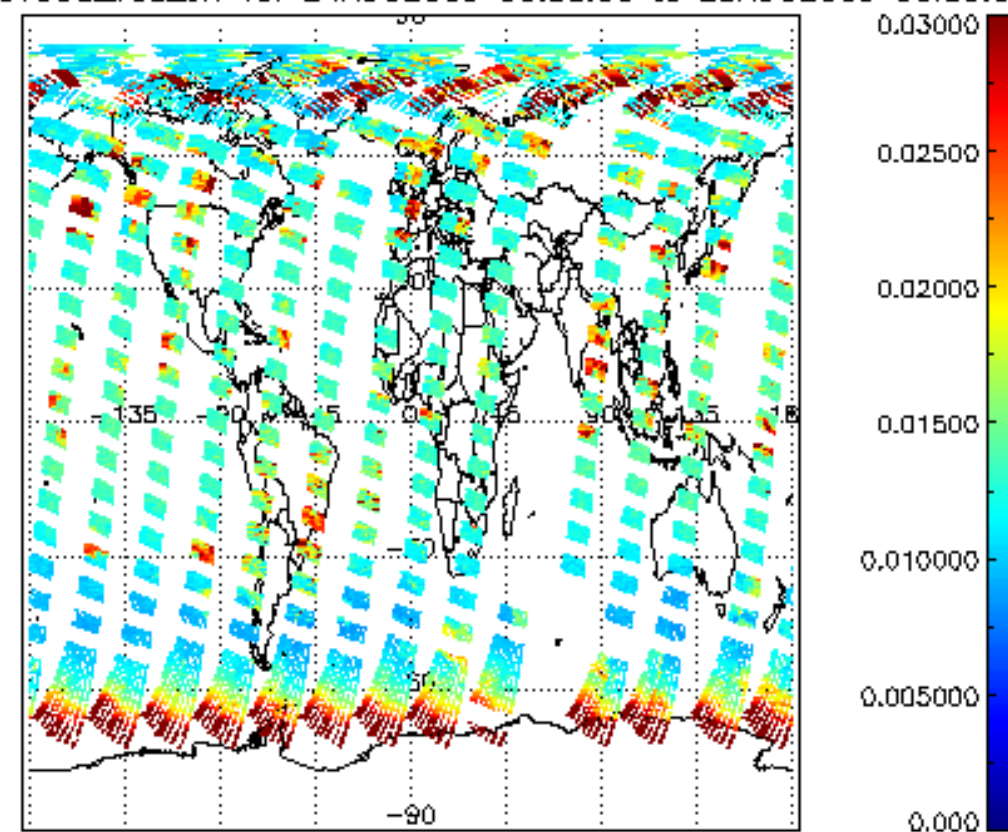




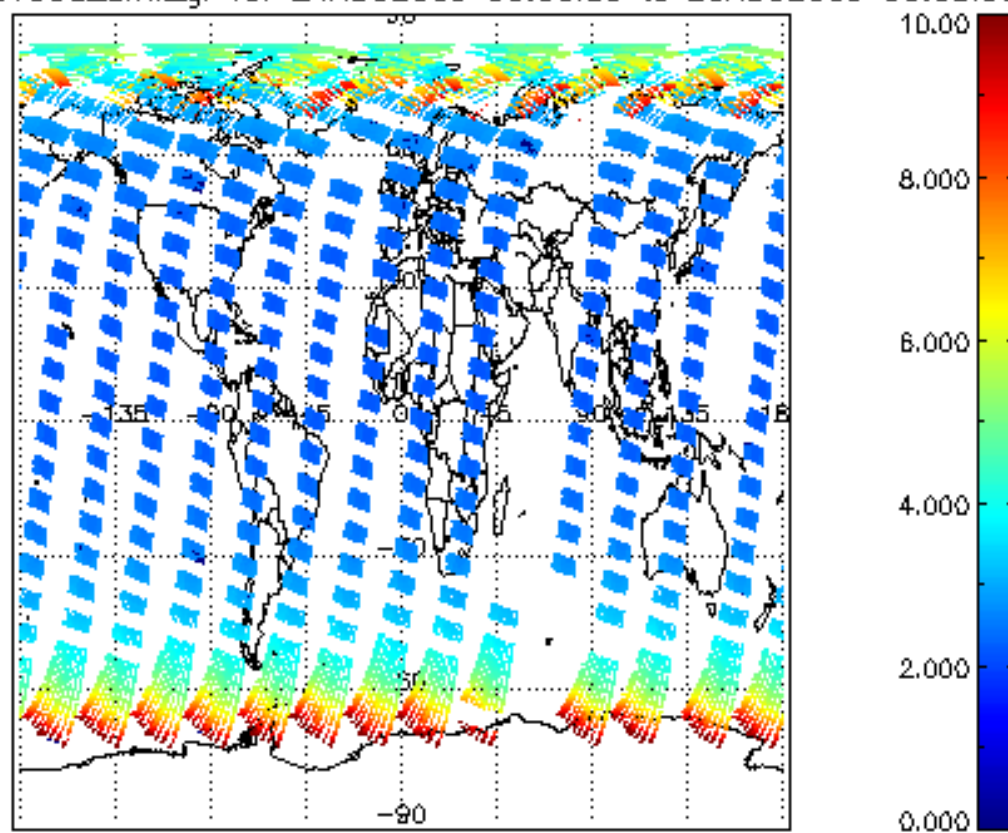
SCIOL2P_NADUV003_vcd for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



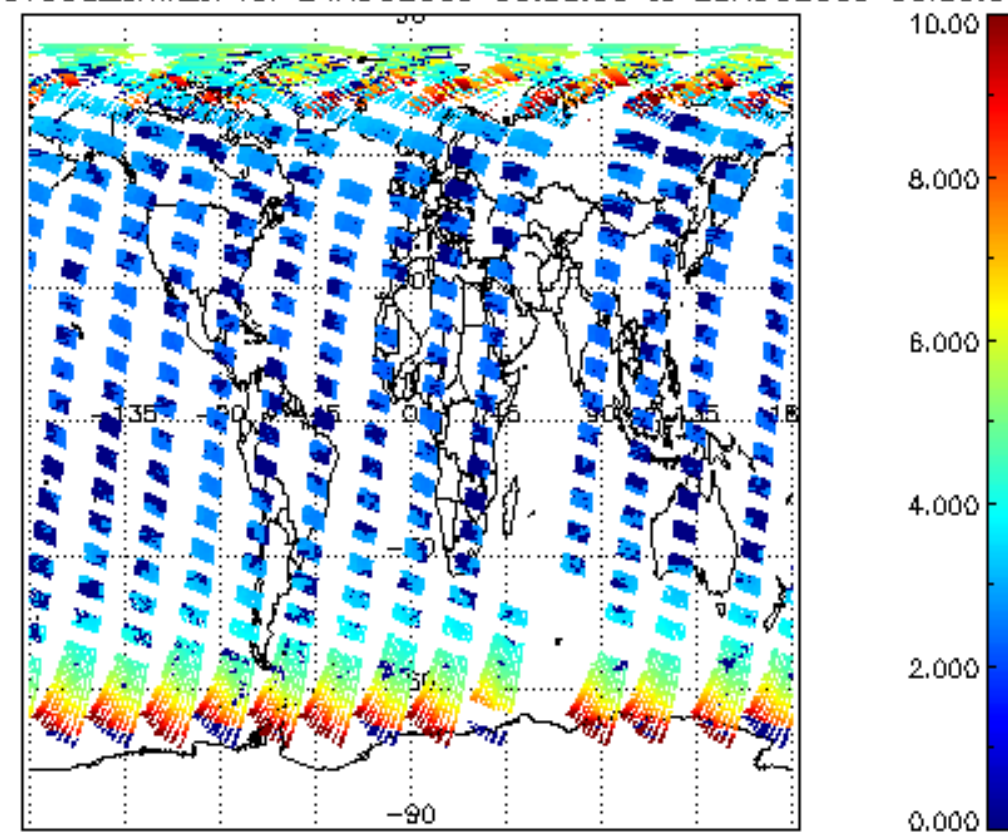
SCIOL2P_NADUV003_vcd_err for 24AUG2009 00:00:00 to 25AUG2009 00:00:00

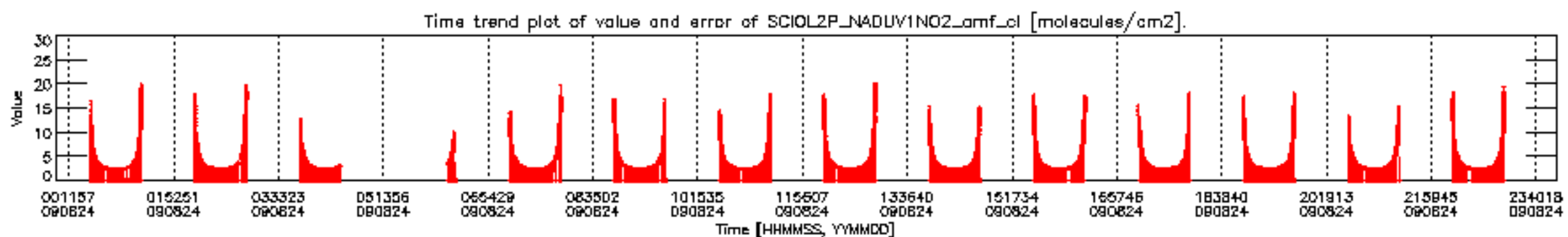
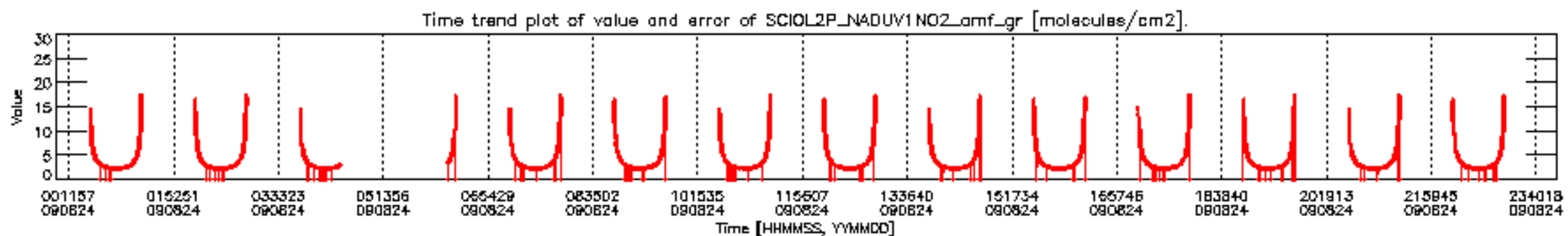
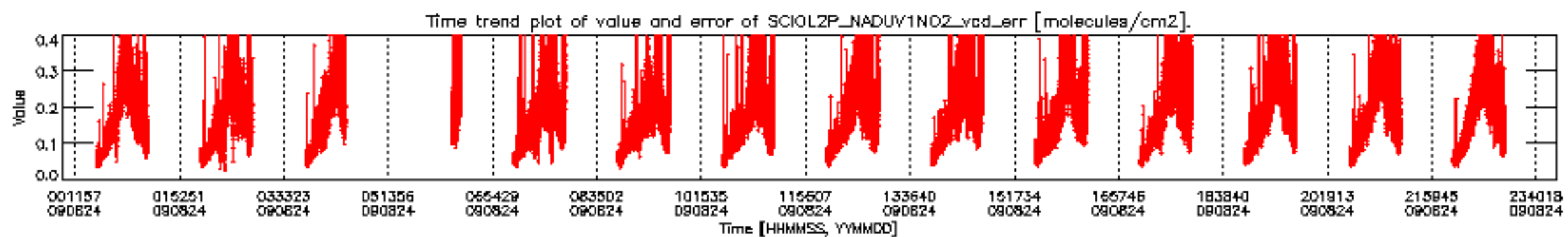
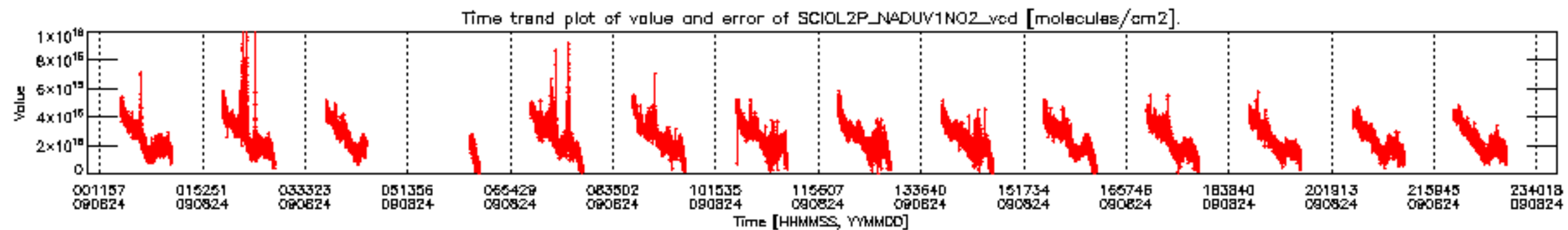


SCIOL2P_NADUV003_amf_gr for 24AUG2009 00:00:00 to 25AUG2009 00:00:00

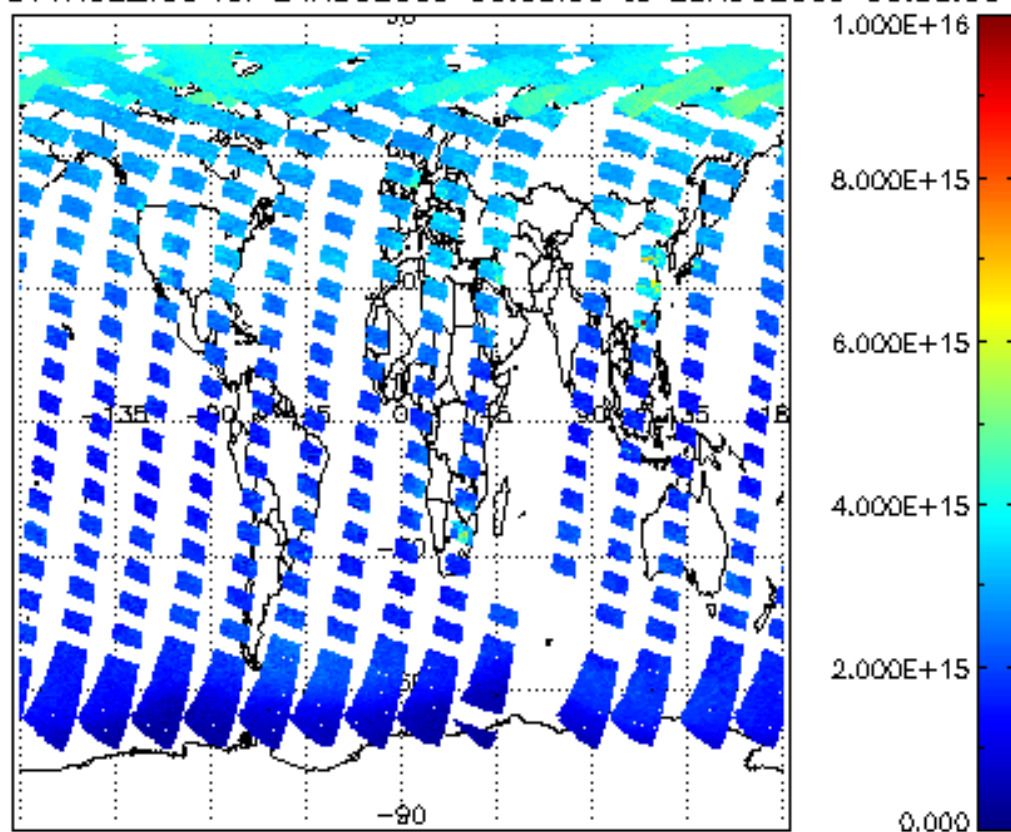


SCIOL2P_NADUV003_amf_cl for 24AUG2009 00:00:00 to 25AUG2009 00:00:00

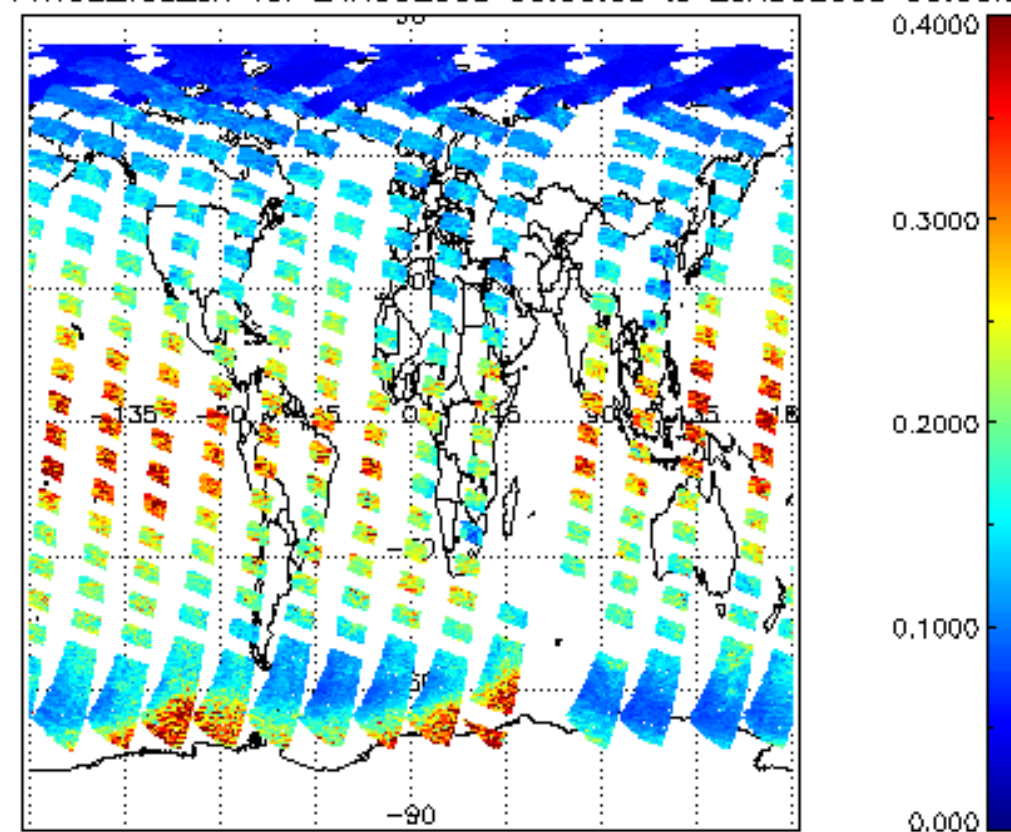




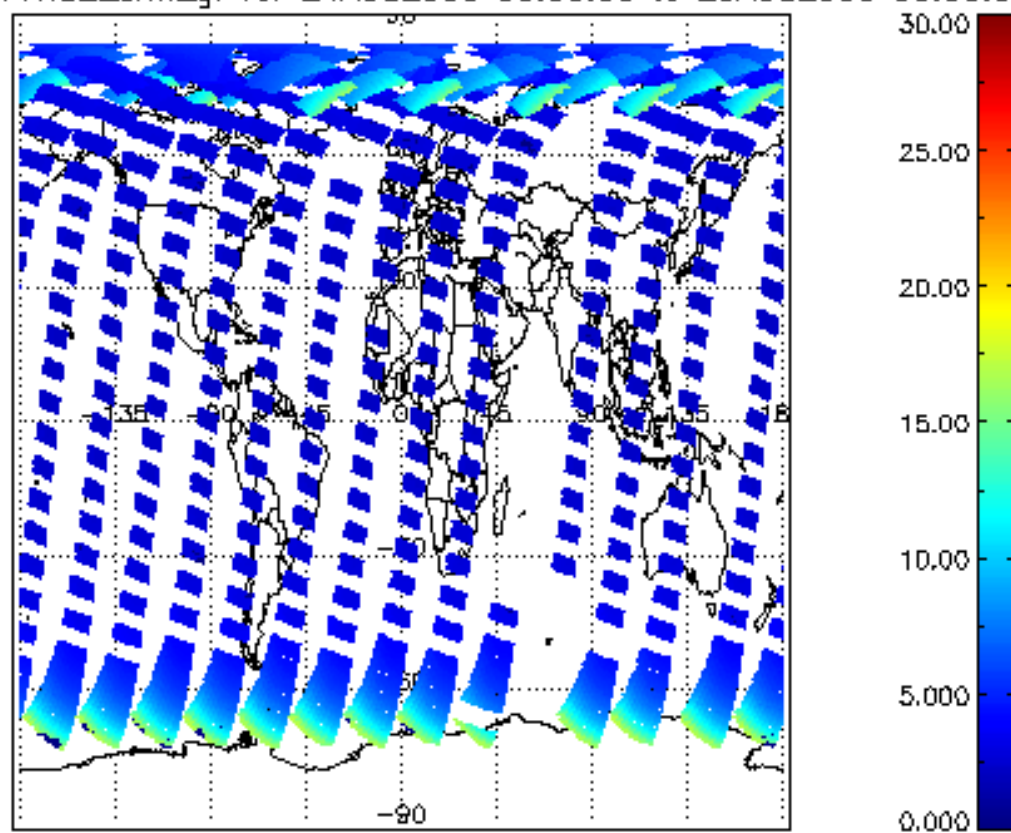
SCIOL2P_NADUV1NO2_vcd for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



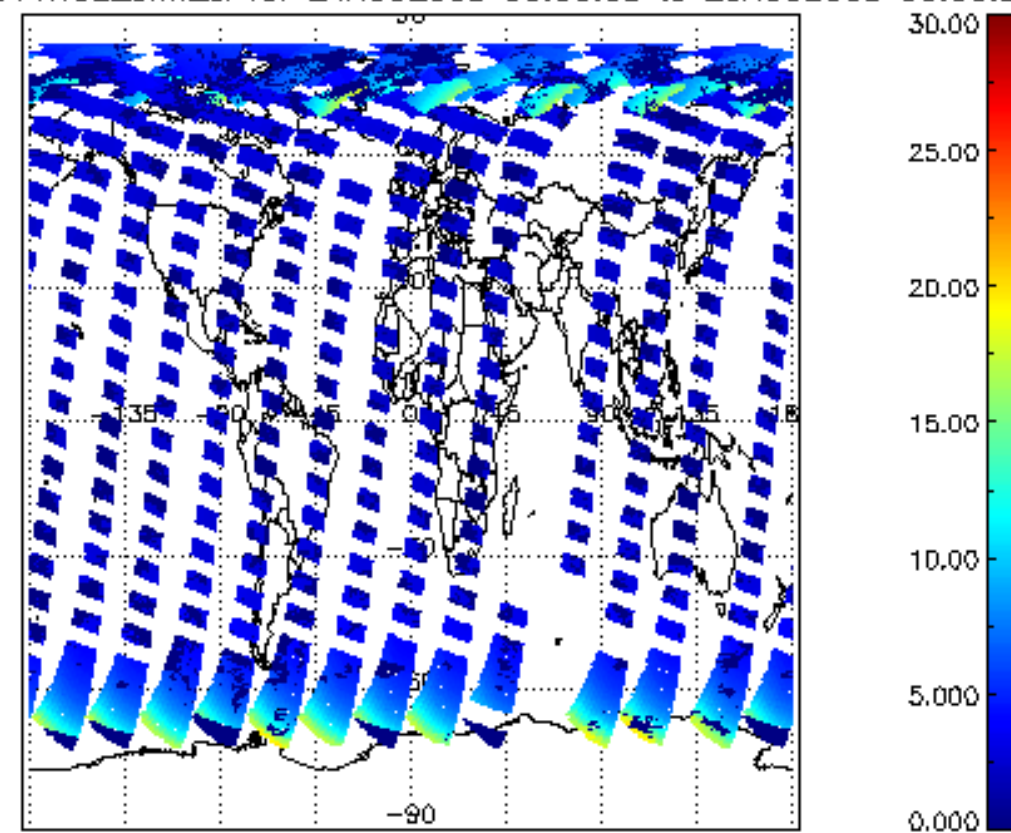
SCIOL2P_NADUV1NO2_vcd_err for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



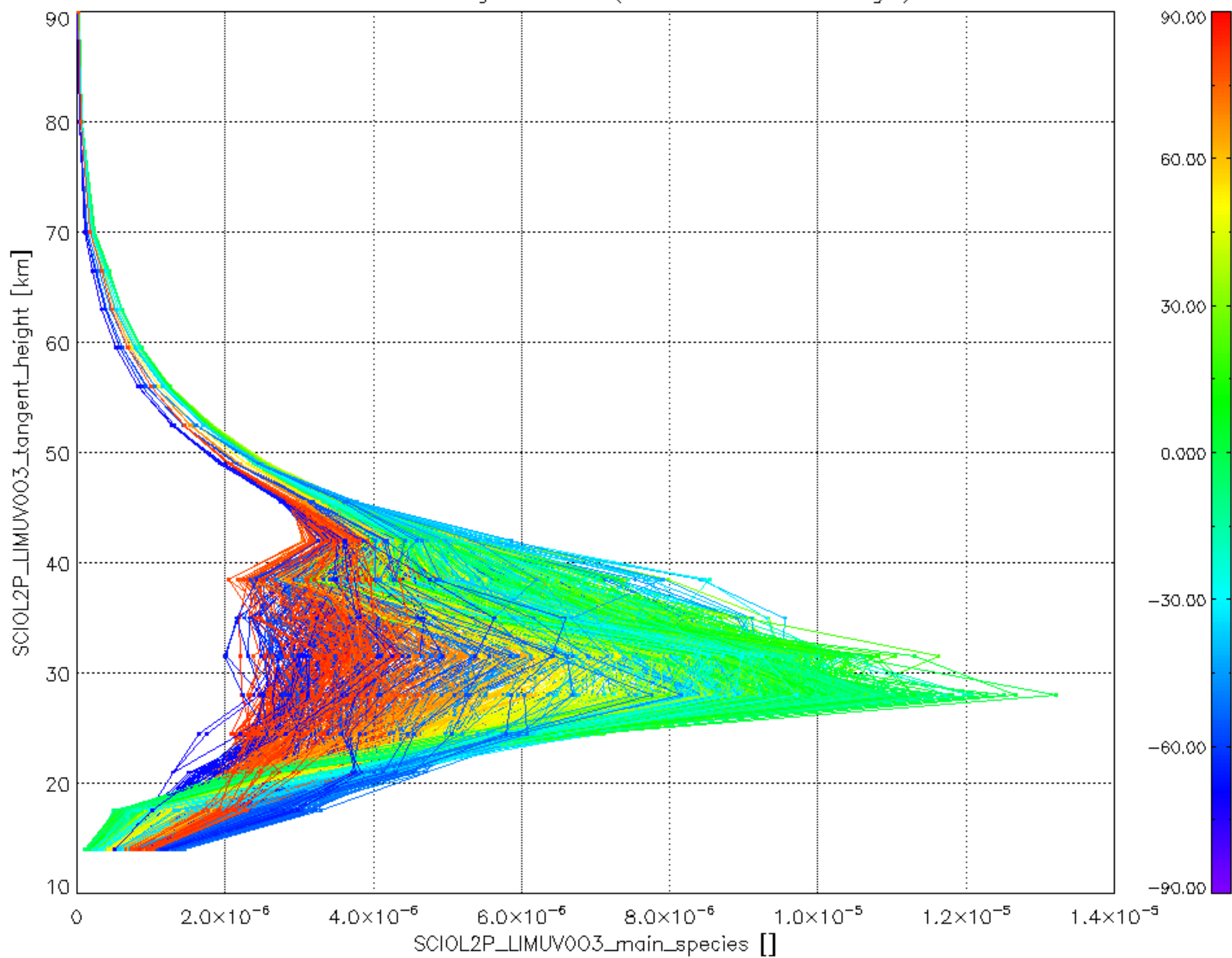
SCIOL2P_NADUV1NO2_amf_gr for 24AUG2009 00:00:00 to 25AUG2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 24AUG2009 00:00:00 to 25AUG2009 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).

