

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 13:51:51
Data source version	SCIA-OL/3.01-R
Processing scope for products	14AUG2009 00:00:00 to 15AUG2009 00:00:00
Start time of first product within scope	13AUG2009 22:59:46
Stop time of last product within scope	15AUG2009 01:04:16
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__2PRDPA20090813_225946_000033122081_00345_38976_3781.N1	13AUG2009 22:59:46	13AUG2009 23:54:59	0	GOOD
1	SCI_OL__2PRDPA20090814_004022_000033252081_00346_38977_3782.N1	14AUG2009 00:40:22	14AUG2009 01:35:47	0	GOOD
2	SCI_OL__2PRDPA20090814_022058_000033122081_00347_38978_3783.N1	14AUG2009 02:20:58	14AUG2009 03:16:11	0	GOOD
3	SCI_OL__2PRDPA20090814_040135_000033252081_00348_38979_3784.N1	14AUG2009 04:01:35	14AUG2009 04:57:00	0	GOOD
4	SCI_OL__2PRDPA20090814_054211_000033122081_00349_38980_3785.N1	14AUG2009 05:42:11	14AUG2009 06:37:24	0	GOOD
5	SCI_OL__2PRDPA20090814_072247_000033252081_00350_38981_3786.N1	14AUG2009 07:22:47	14AUG2009 08:18:13	0	GOOD
6	SCI_OL__2PRDPA20090814_090324_000033122081_00351_38982_3787.N1	14AUG2009 09:03:24	14AUG2009 09:58:36	0	GOOD
7	SCI_OL__2PRDPA20090814_104400_000033252081_00352_38983_3788.N1	14AUG2009 10:44:00	14AUG2009 11:39:25	0	GOOD
8	SCI_OL__2PRDPA20090814_122436_000033122081_00353_38984_3789.N1	14AUG2009 12:24:36	14AUG2009 13:19:49	0	GOOD
9	SCI_OL__2PRDPA20090814_140512_000033252081_00354_38985_3790.N1	14AUG2009 14:05:12	14AUG2009 15:00:38	0	GOOD
10	SCI_OL__2PRDPA20090814_154549_000033122081_00355_38986_3791.N1	14AUG2009 15:45:49	14AUG2009 16:41:02	0	GOOD
11	SCI_OL__2PRDPA20090814_172644_000033252081_00356_38987_3792.N1	14AUG2009 17:26:44	14AUG2009 18:22:09	0	GOOD
12	SCI_OL__2PRDPA20090814_190720_000033122081_00357_38988_3793.N1	14AUG2009 19:07:20	14AUG2009 20:02:33	0	GOOD
13	SCI_OL__2PRDPA20090814_204738_000033252081_00358_38989_3794.N1	14AUG2009 20:47:38	14AUG2009 21:43:03	0	GOOD
14	SCI_OL__2PRDPA20090814_222814_000033122081_00359_38990_3795.N1	14AUG2009 22:28:14	14AUG2009 23:23:27	0	GOOD
15	SCI_OL__2PRDPA20090815_000850_000033252081_00360_38991_3796.N1	15AUG2009 00:08:50	15AUG2009 01:04:16	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: 143260

Total number of cloud data DSRs with good quality flag (=0): 143260 (100.0 %)

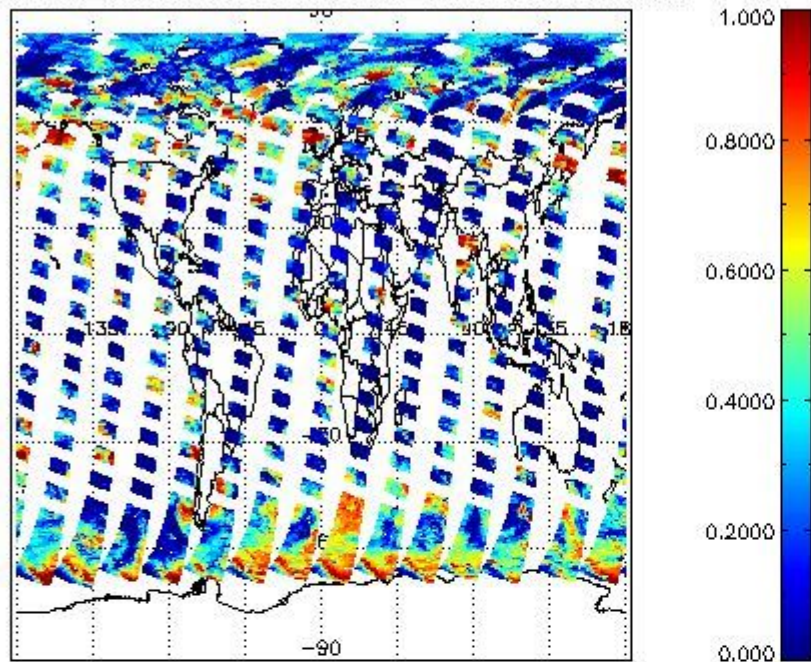
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	143260	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	143260	0.17105	0.12500	0.12500	0.25000	0.060297	s
CL_FRAC	143260	0.29825	0.24266	0.0000	1.0000	0.27862	-
CL_FRAC_ERR	143260	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	143260	5.4737	4.0000	4.0000	8.0000	1.9295	
PMD_READ_CL[0]	143260	0.13685	0.0000	0.0000	8.0000	0.83775	-
PMD_READ_CL[1]	143260	1.8206	0.0000	0.0000	8.0000	2.7335	-
CL_TOP_HEIGHT	123756	3.1155	1.5805	0.0000	17.000	3.5128	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	123756	59.163	100.00	0.0000	101.00	45.005	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	143260	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	143260	11001101	11000100	11000000	11100000	3585.6	flags
AERO_ABSO_IND	143260	4.3261	5.1666	-0.75193	20.294	2.7568	
AERO_IND_DIAG	143260	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	143260	01011001	00000000	00000000	11000000	24514.	flags

Time and geolocation plots:

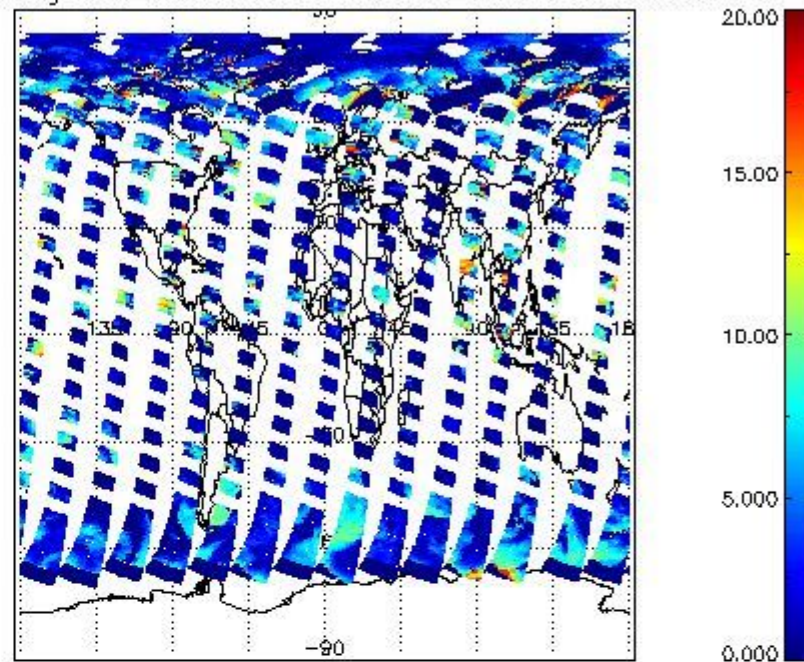
Plots are available for the following parameters:

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

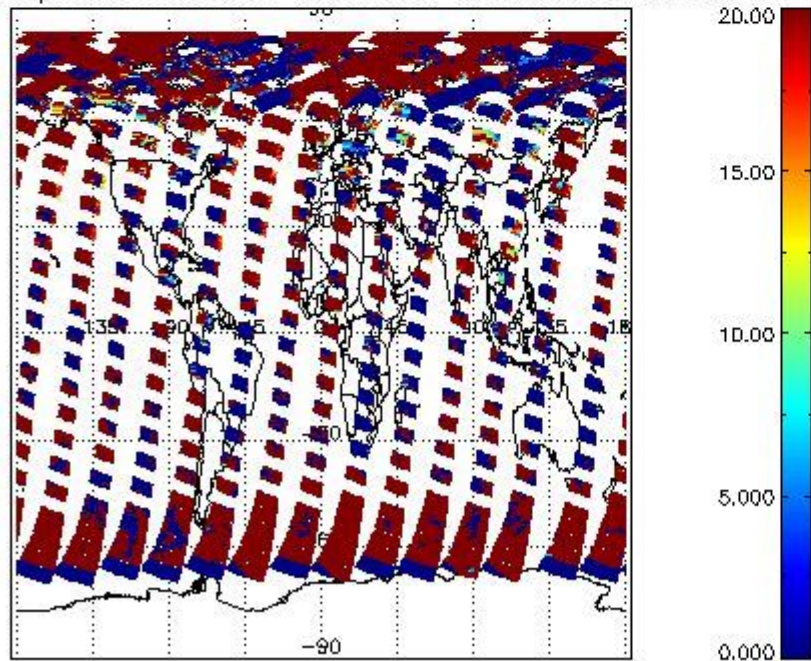
cL_frac for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



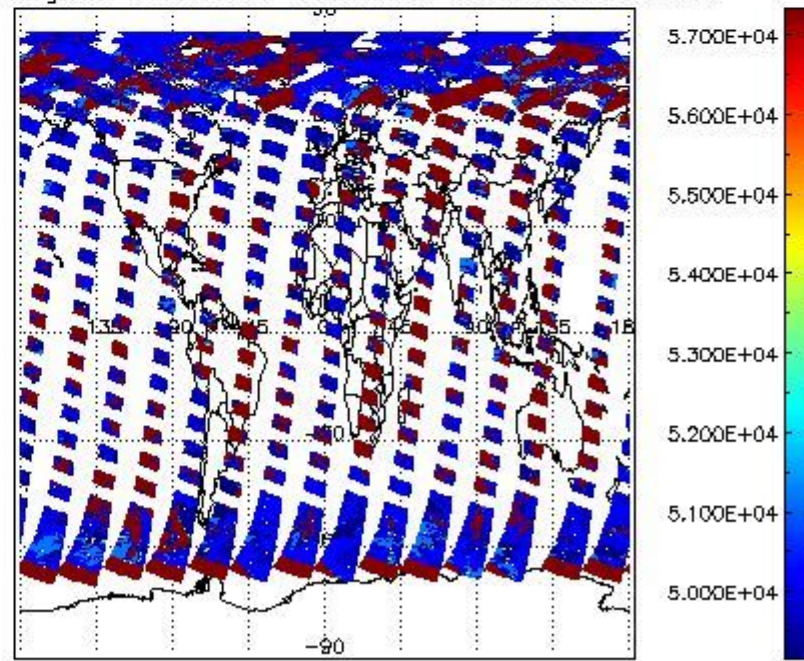
cL_top_height for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



cL_opt_depth for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



cloud_flags for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



2.2.2 Nadir

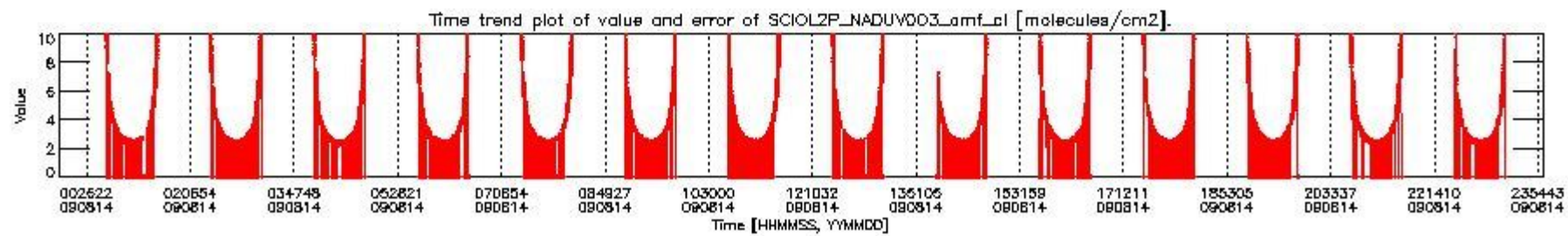
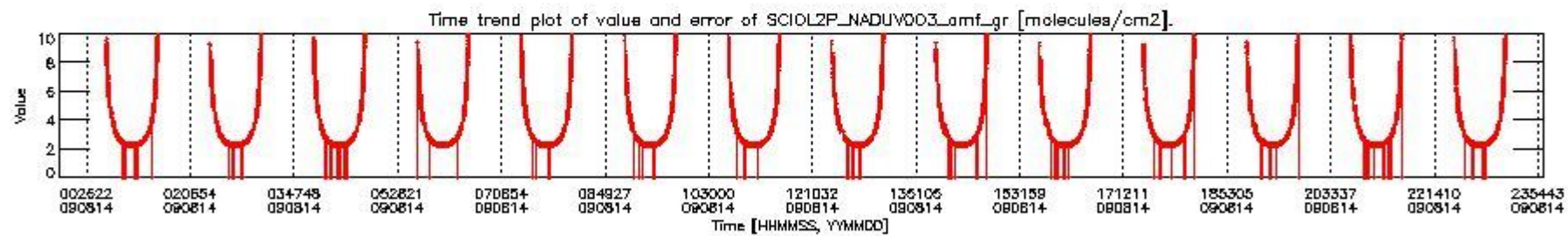
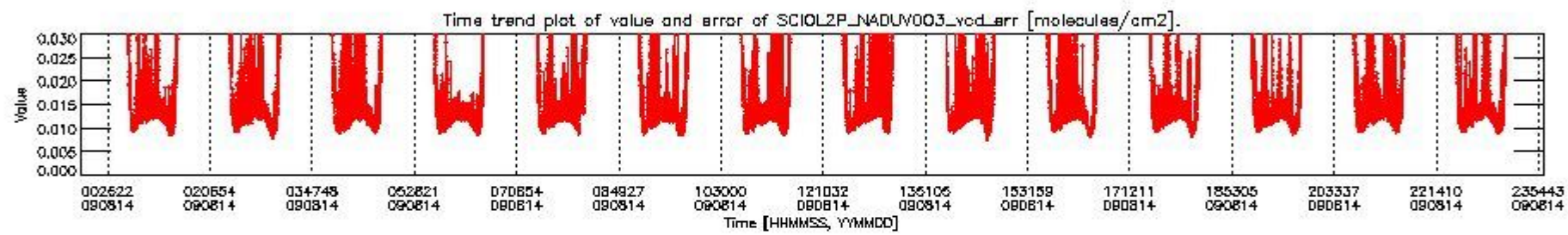
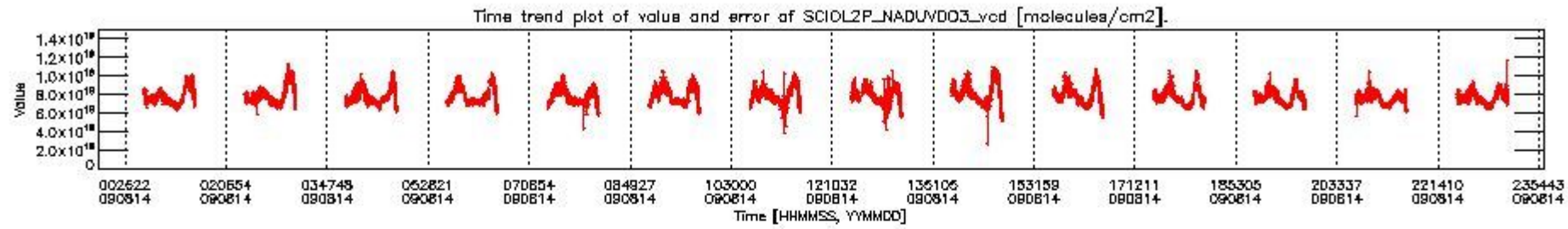
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

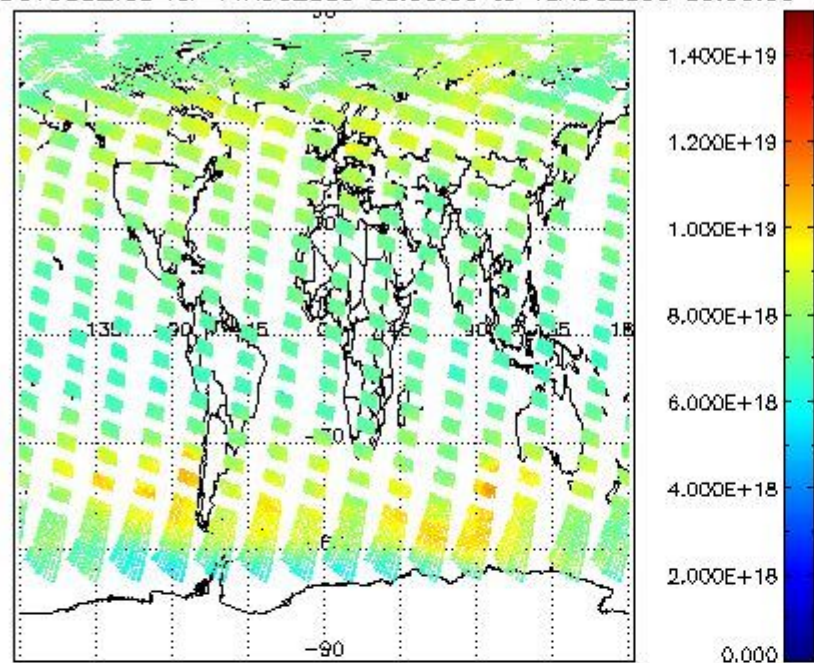
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

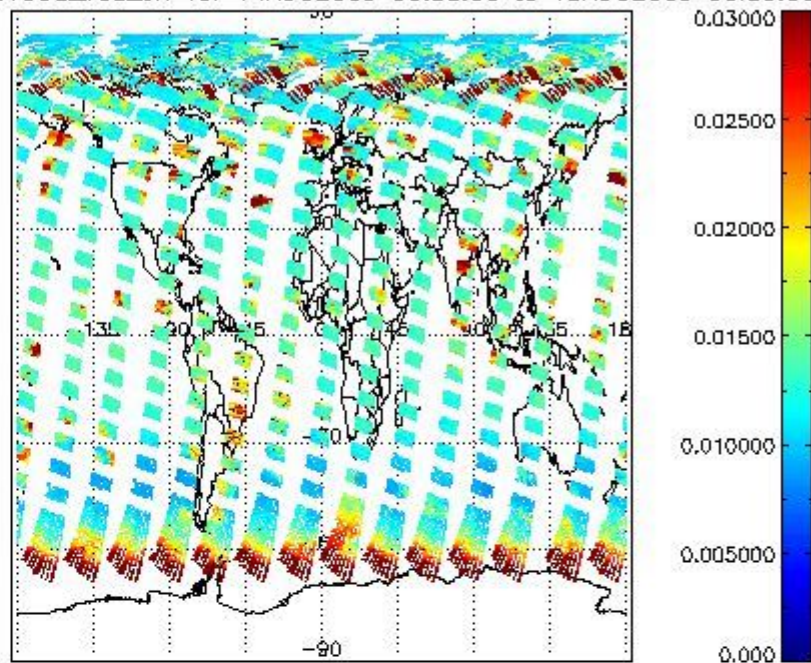
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



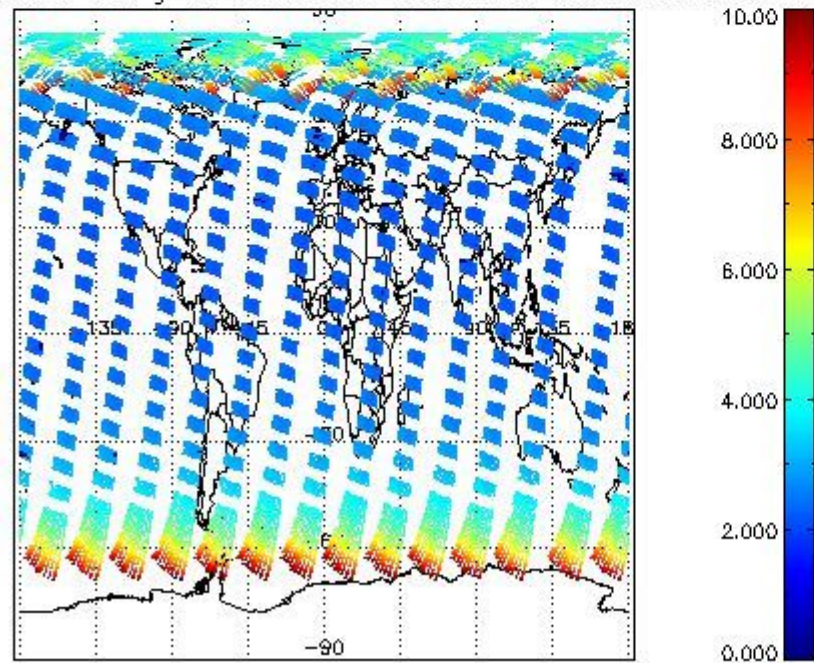
SCIOL2P_NADUV003_vcd for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



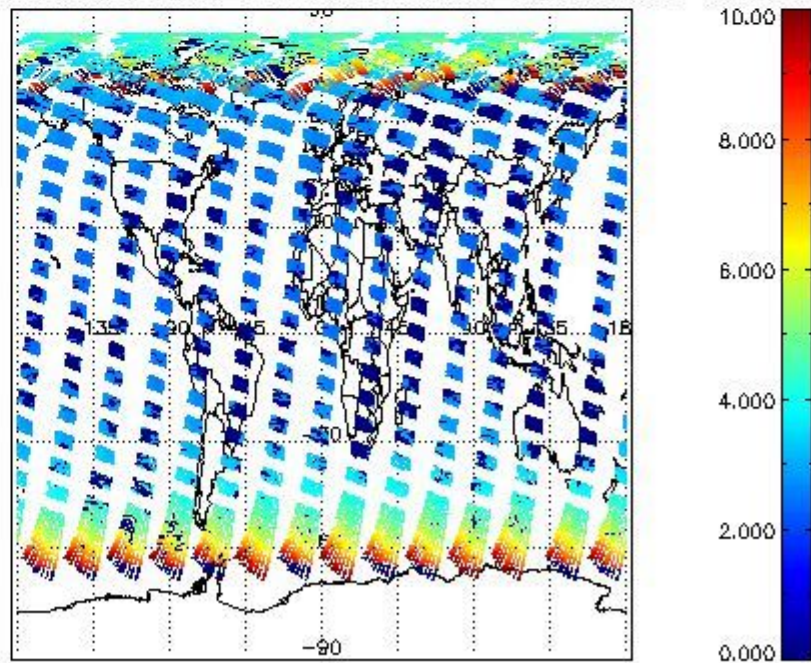
SCIOL2P_NADUV003_vcd_err for 14AUG2009 00:00:00 to 15AUG2009 00:00:00

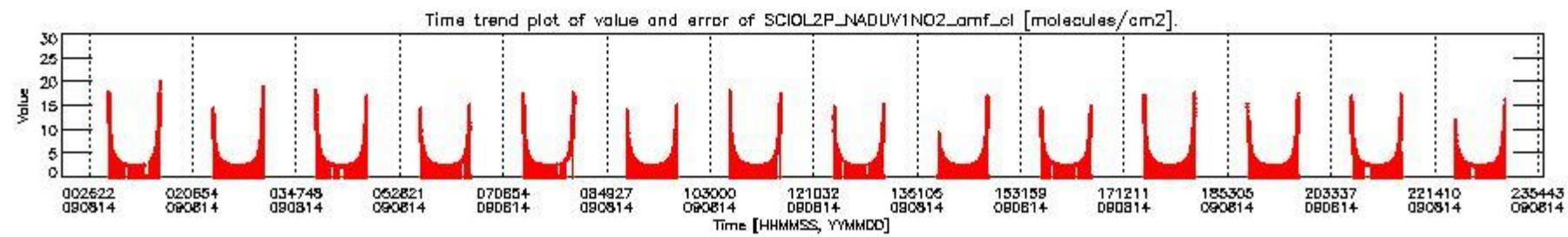
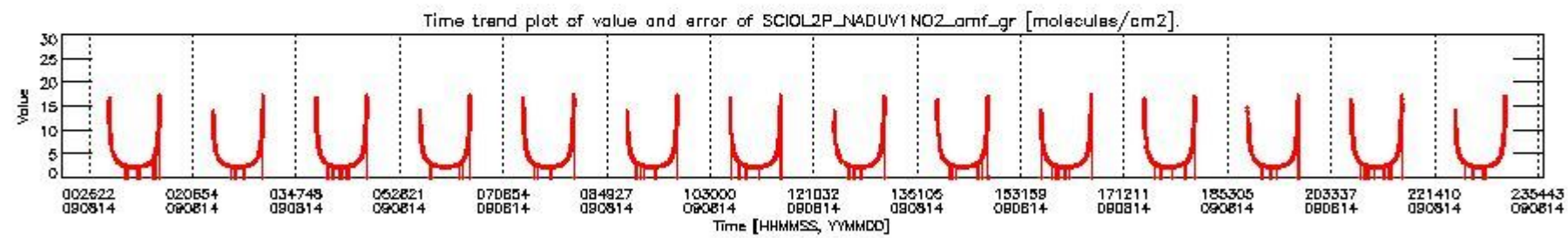
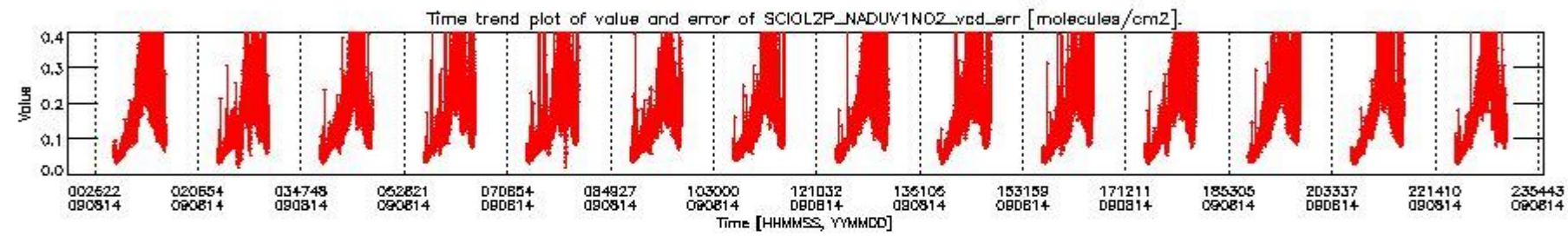
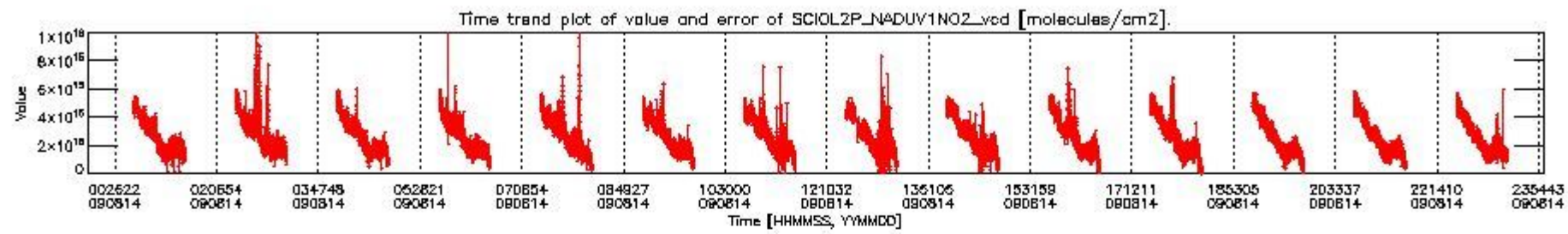


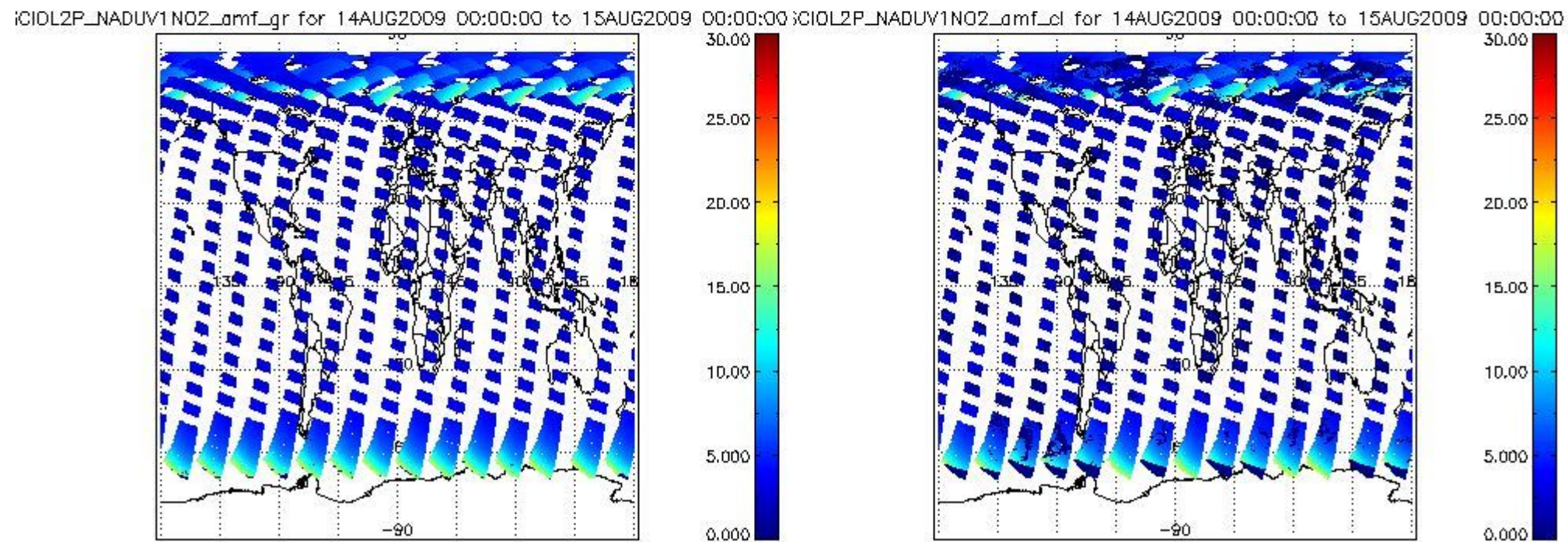
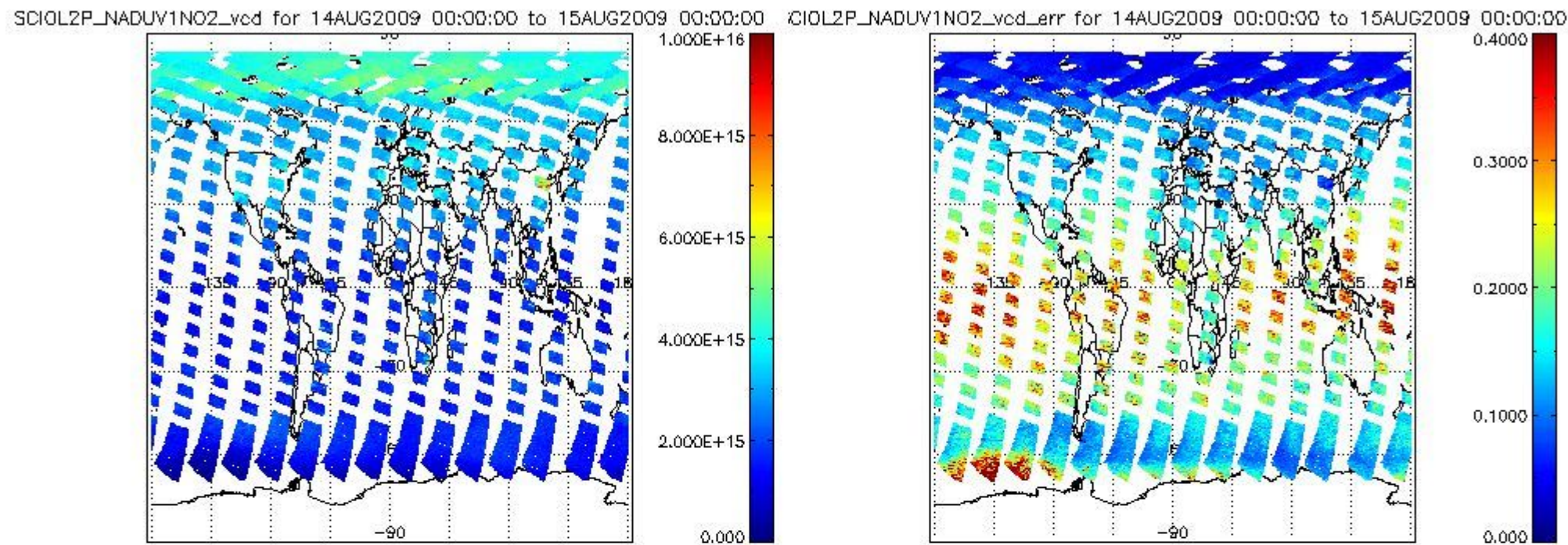
SCIOL2P_NADUV003_amf_gr for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



SCIOL2P_NADUV003_amf_cl for 14AUG2009 00:00:00 to 15AUG2009 00:00:00







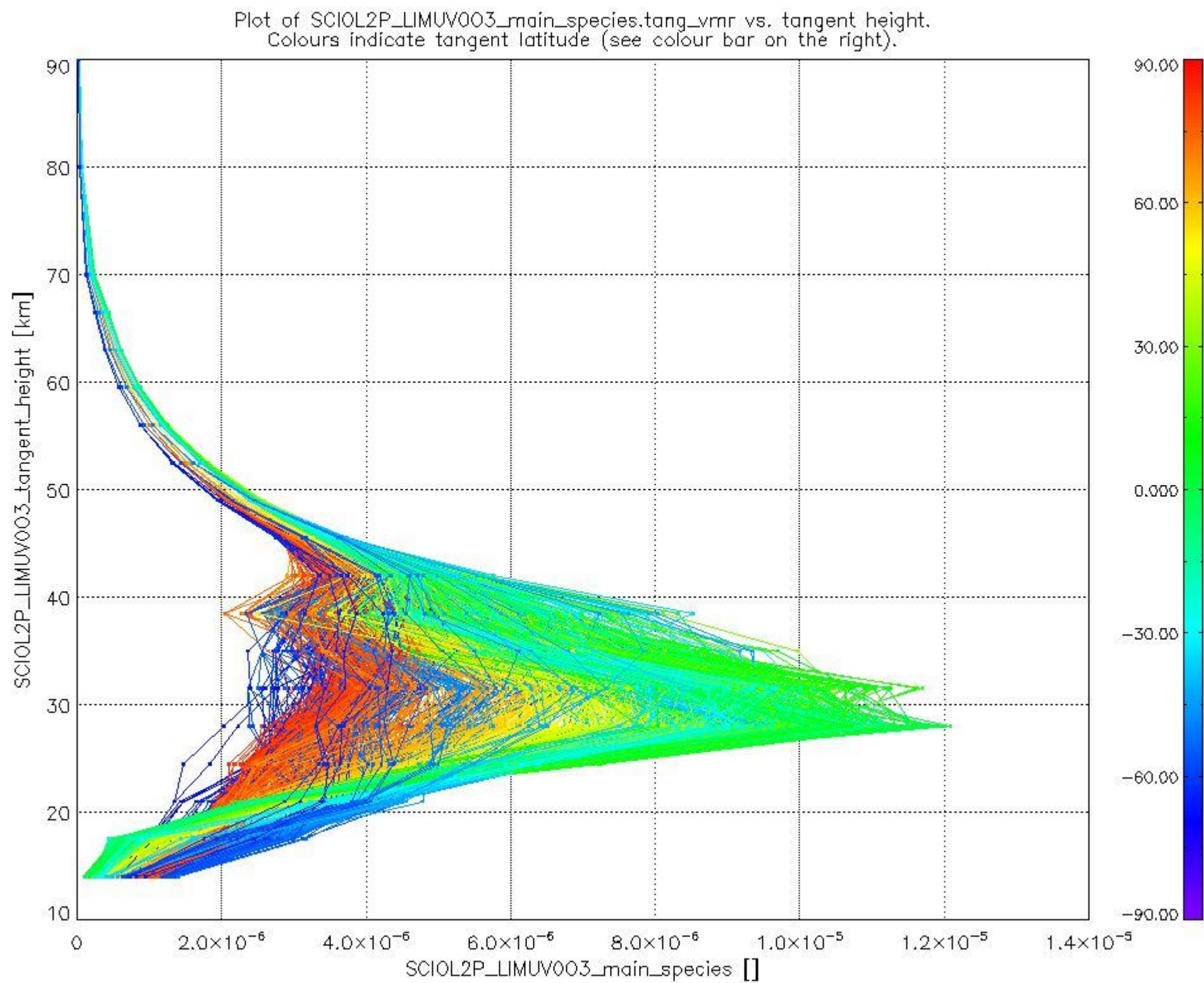
2.2.3 Limb

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

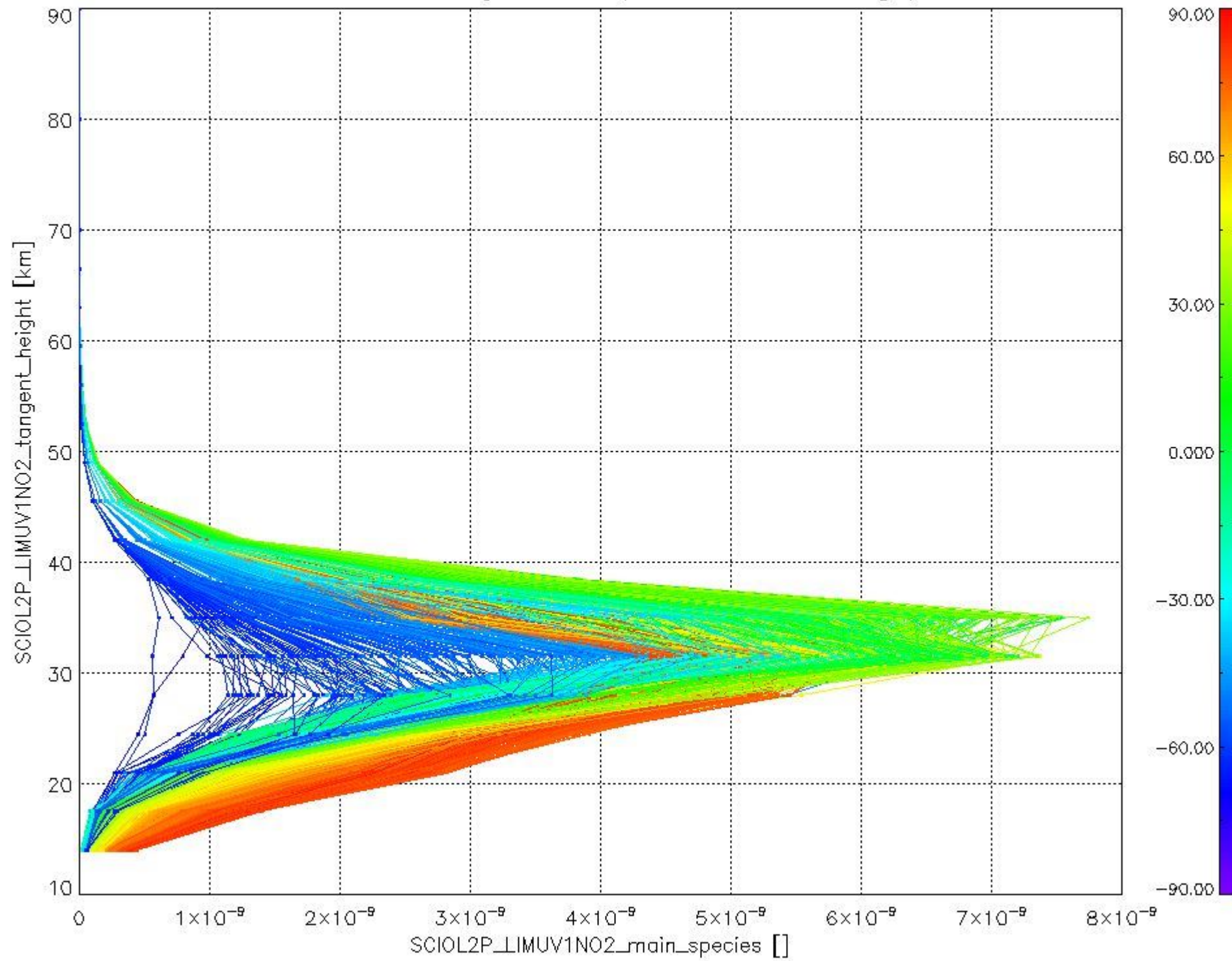
The following data items are currently included into this section:

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.



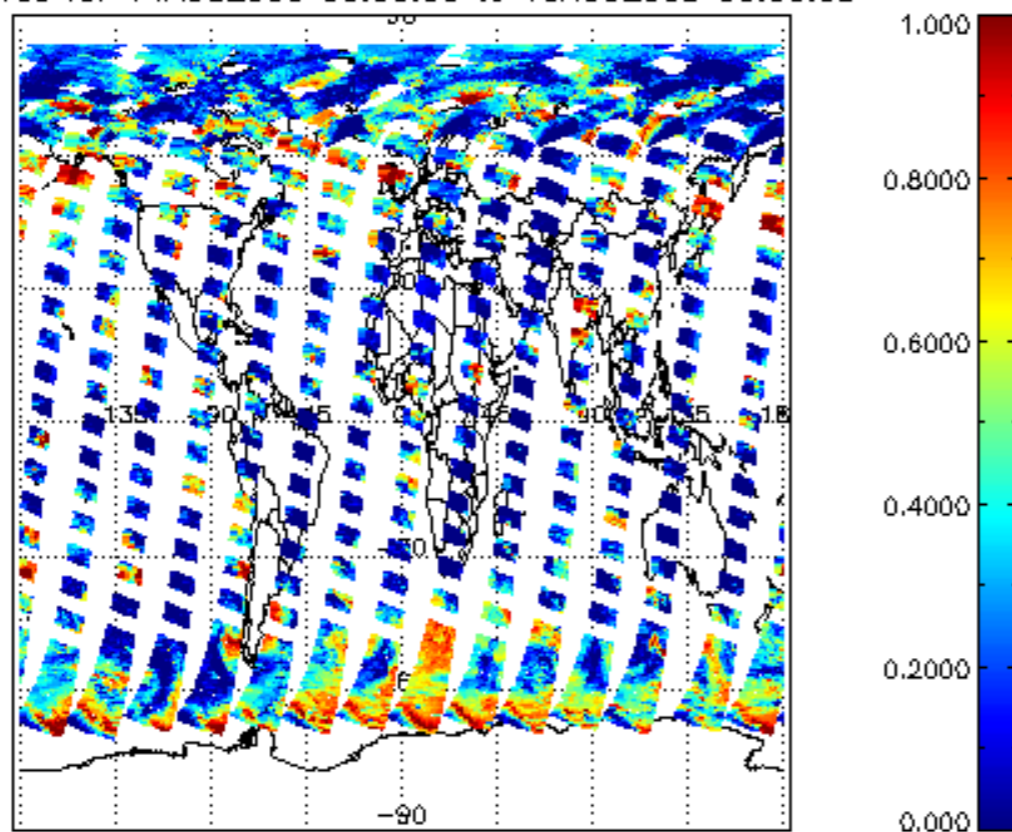
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



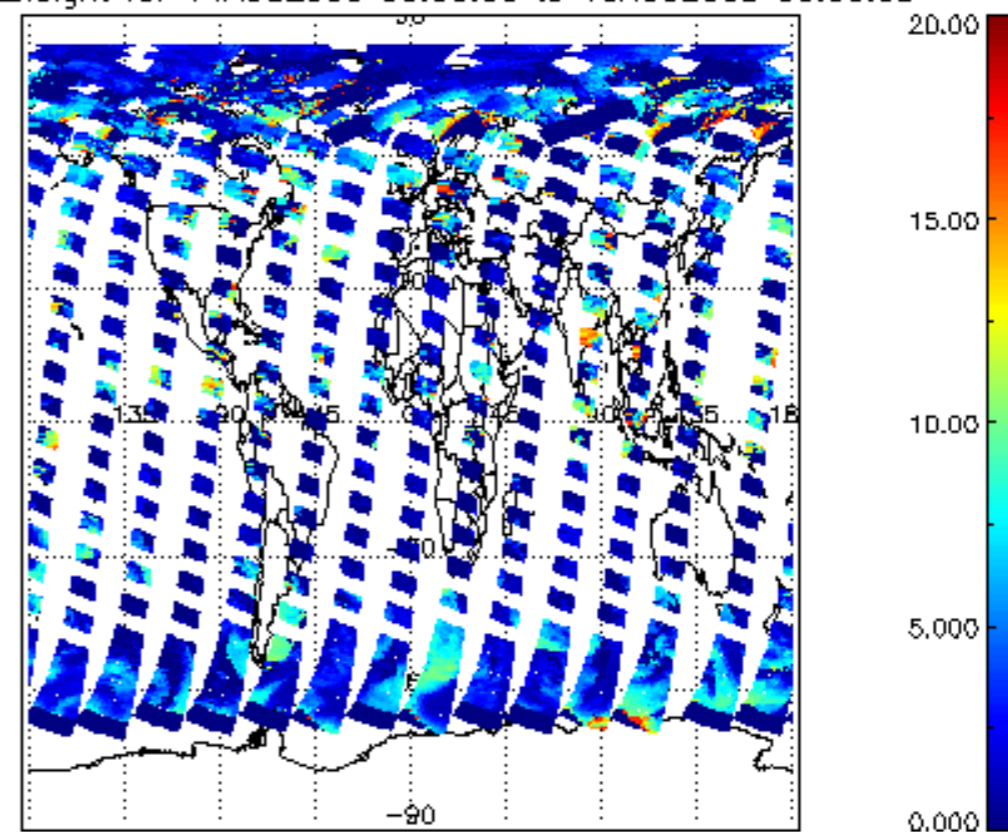
2.3 ADF monitoring

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

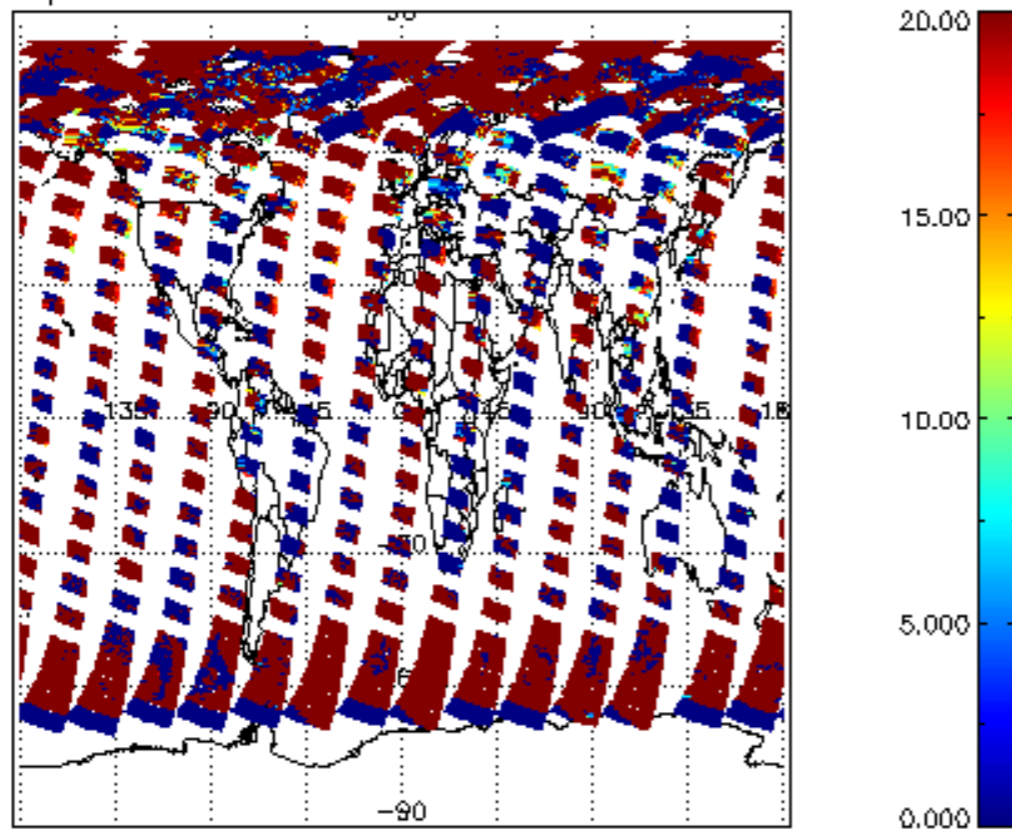
cL_frac for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



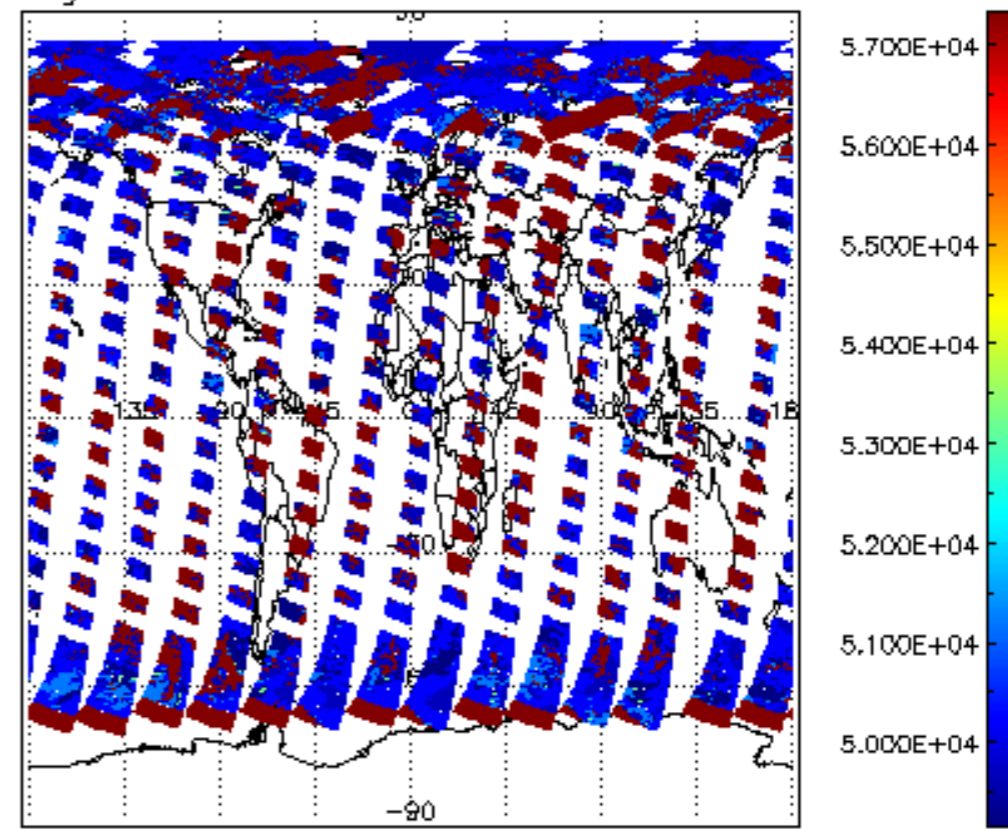
cL_top_height for 14AUG2009 00:00:00 to 15AUG2009 00:00:00

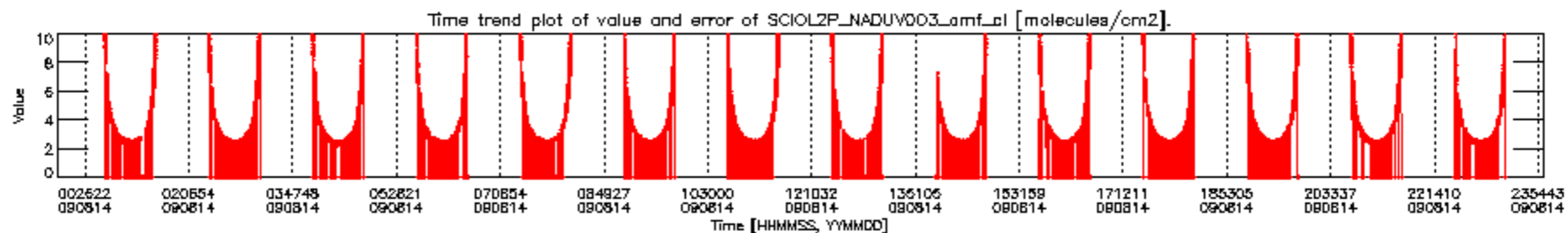
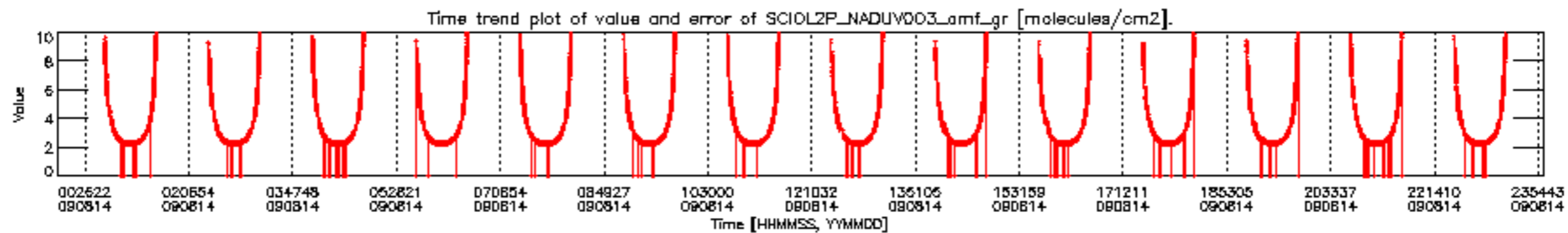
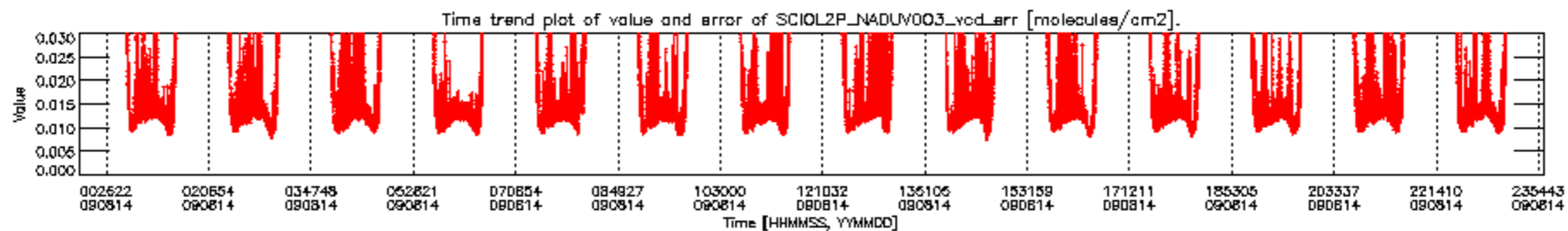
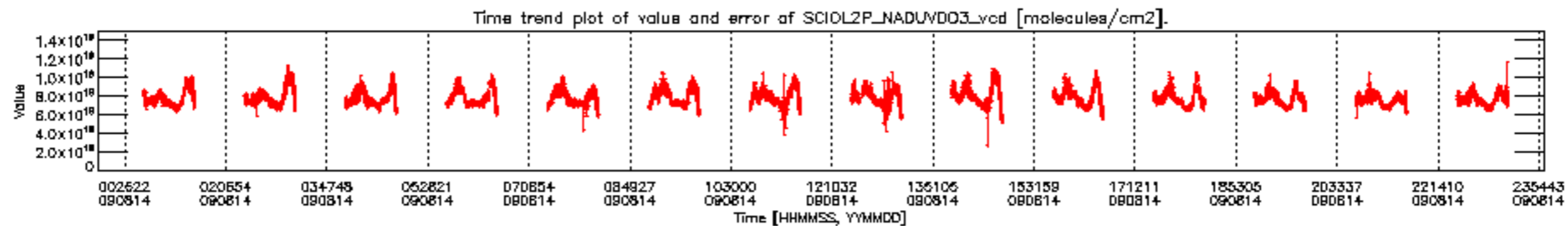


cL_opt_depth for 14AUG2009 00:00:00 to 15AUG2009 00:00:00

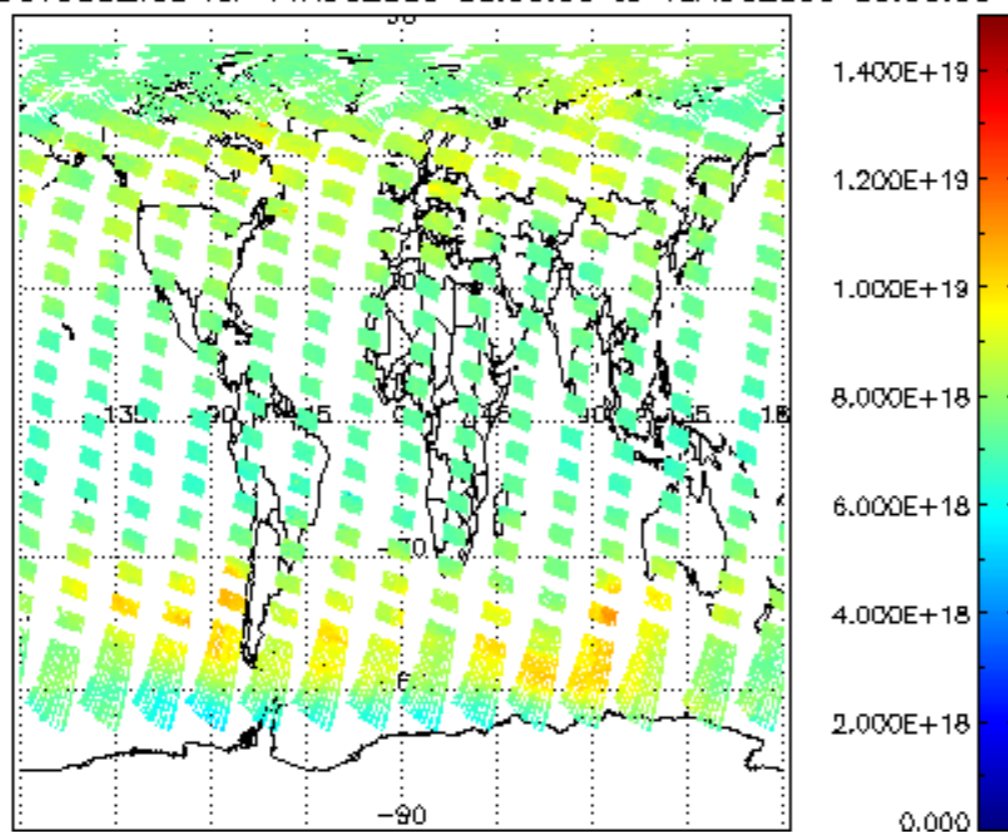


cloud_flags for 14AUG2009 00:00:00 to 15AUG2009 00:00:00

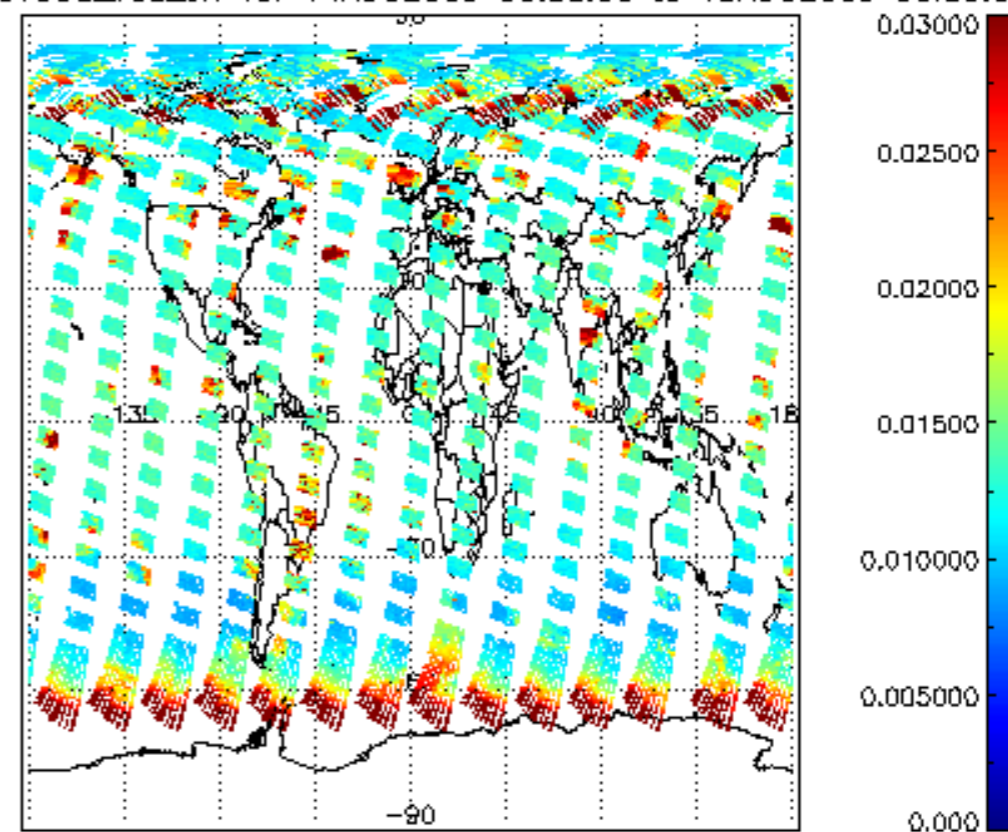




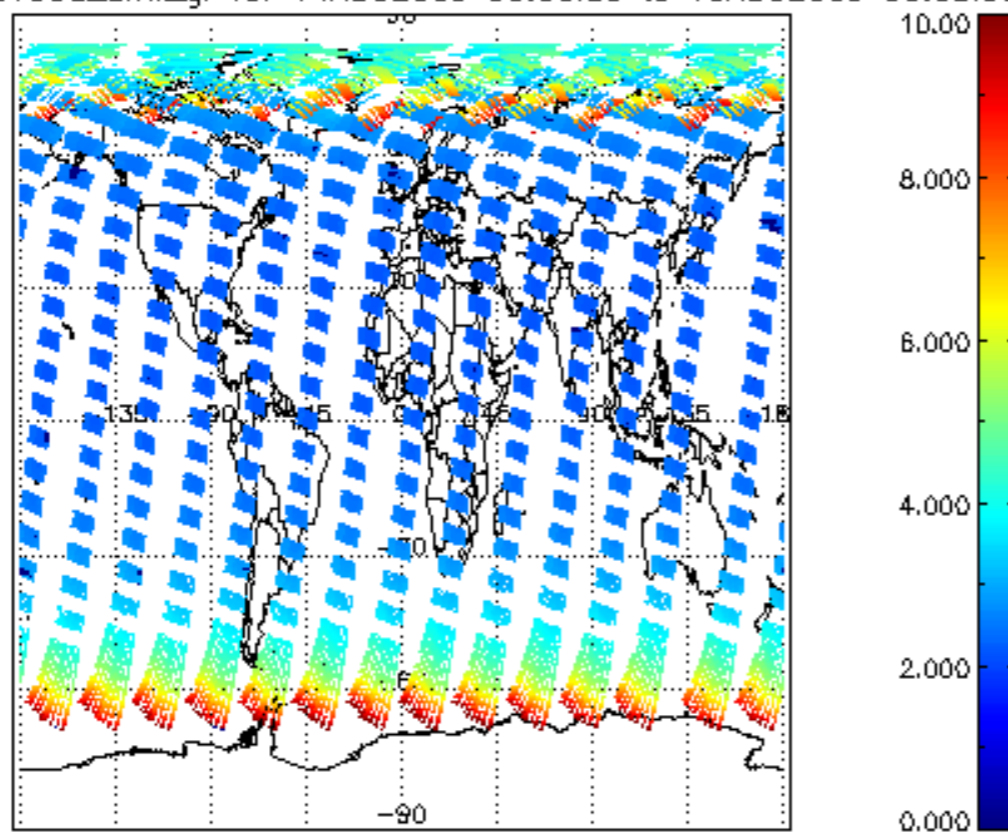
SCIOL2P_NADUV003_vcd for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



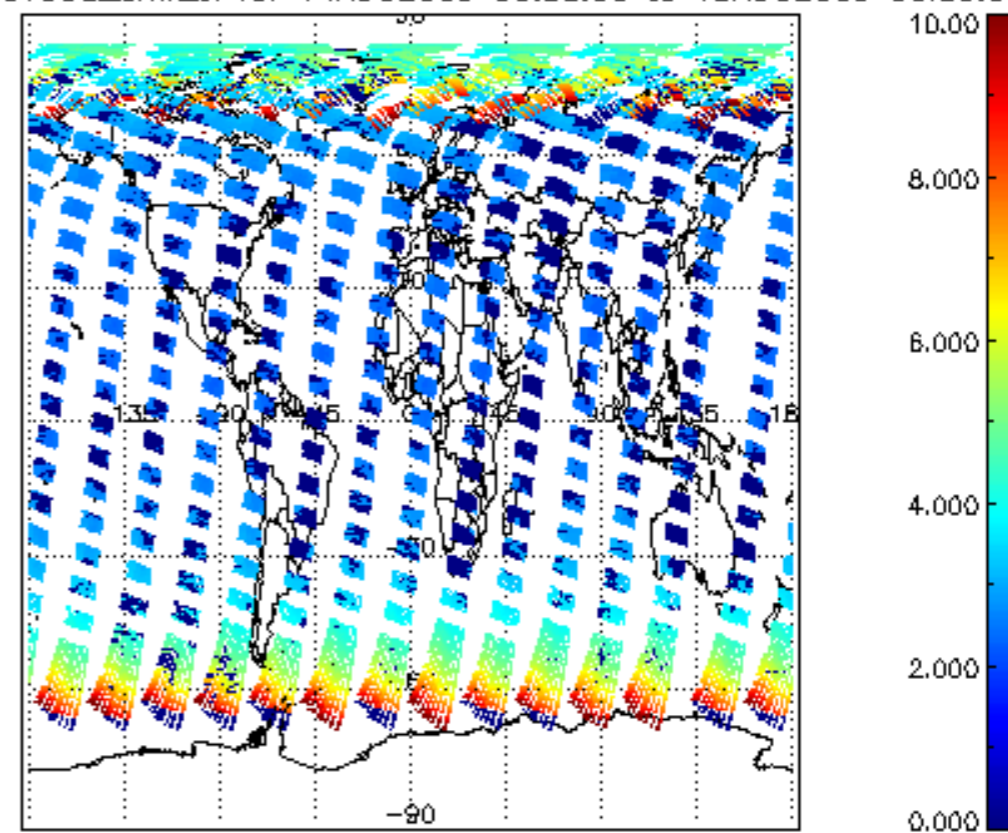
SCIOL2P_NADUV003_vcd_err for 14AUG2009 00:00:00 to 15AUG2009 00:00:00

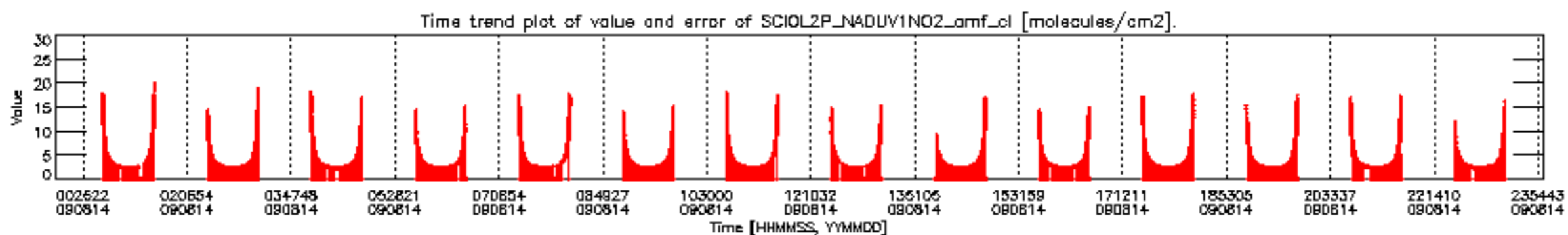
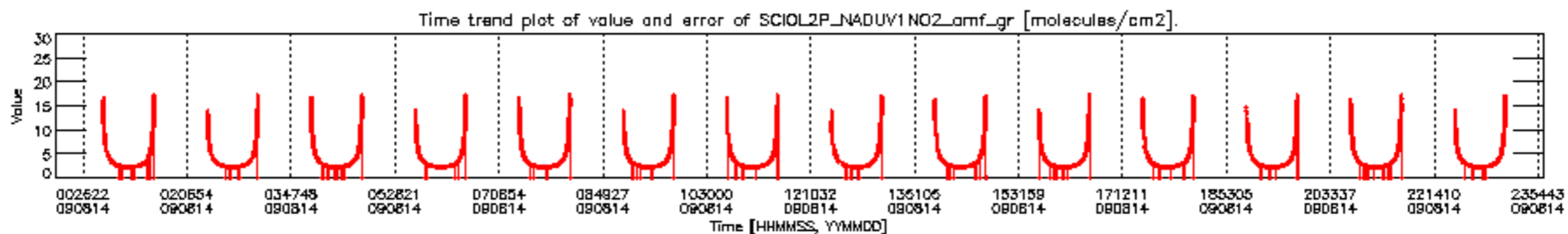
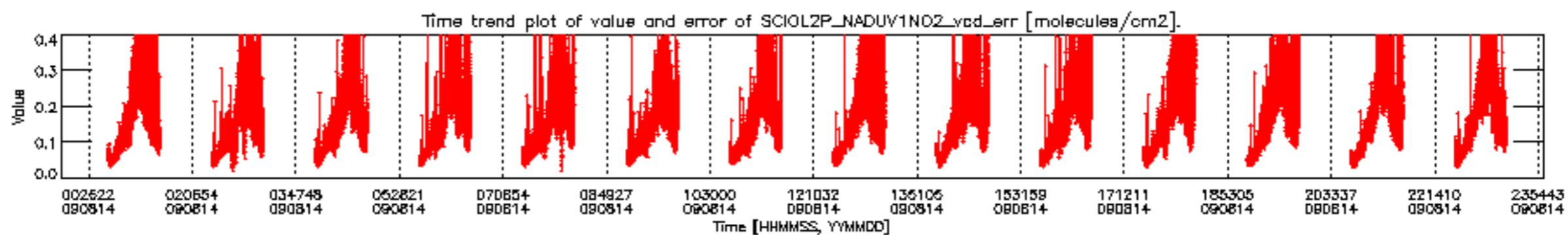
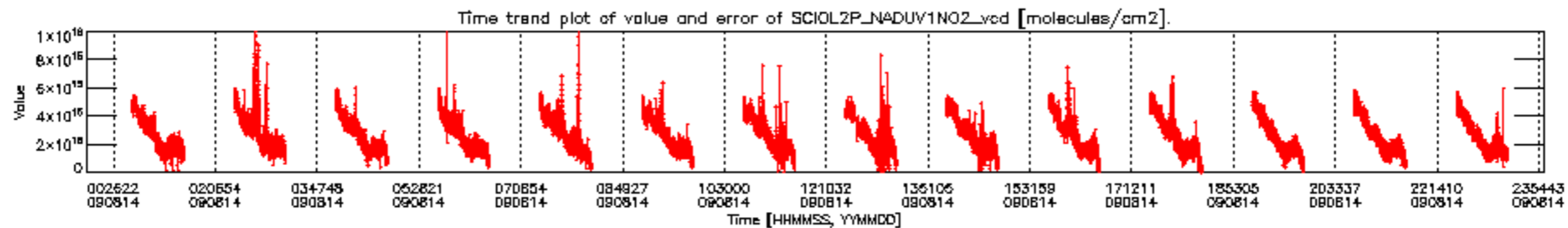


SCIOL2P_NADUV003_amf_gr for 14AUG2009 00:00:00 to 15AUG2009 00:00:00

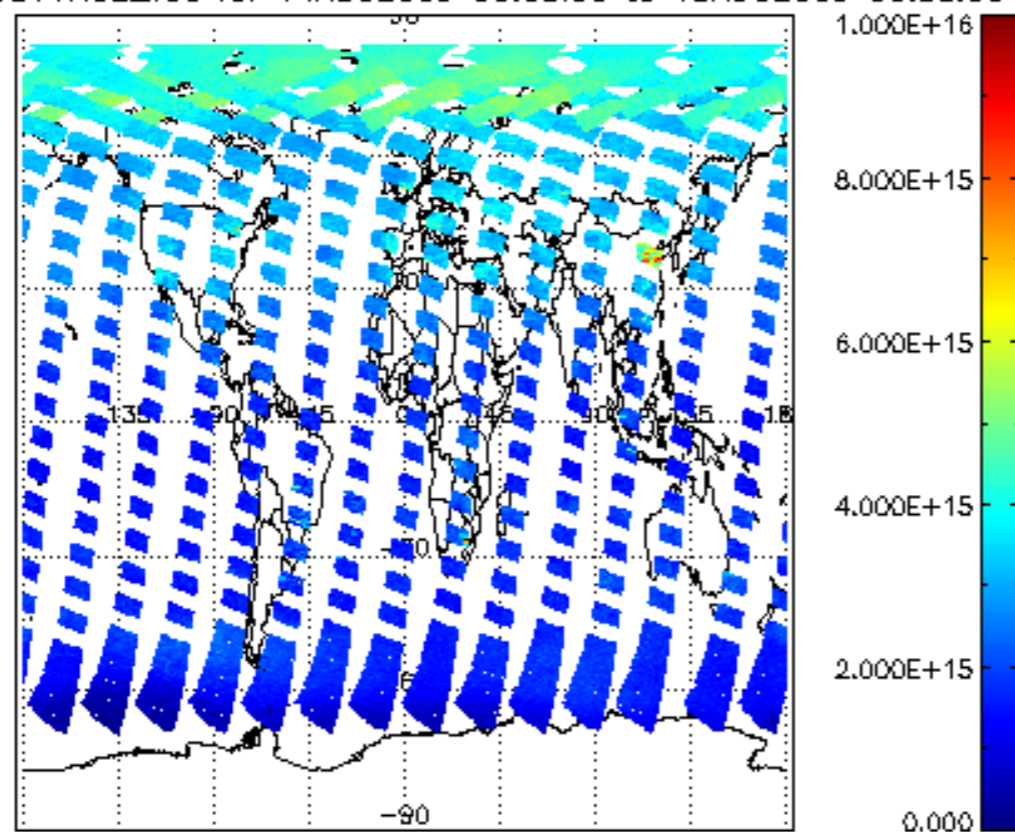


SCIOL2P_NADUV003_amf_cl for 14AUG2009 00:00:00 to 15AUG2009 00:00:00

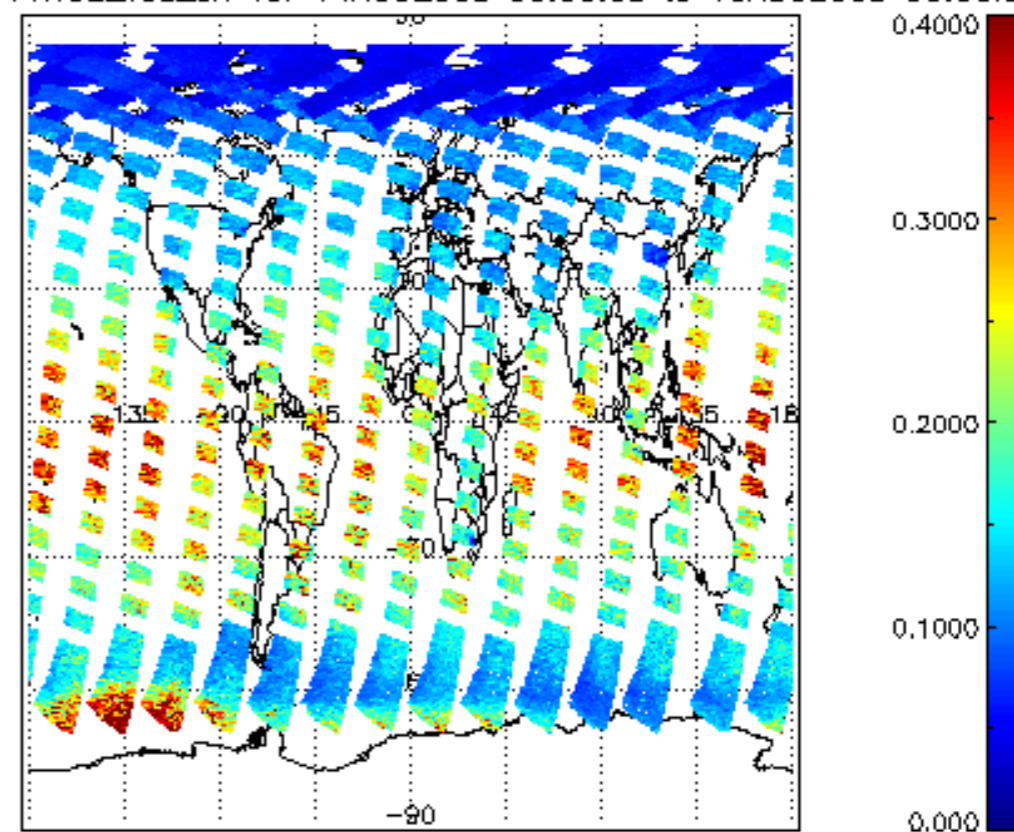




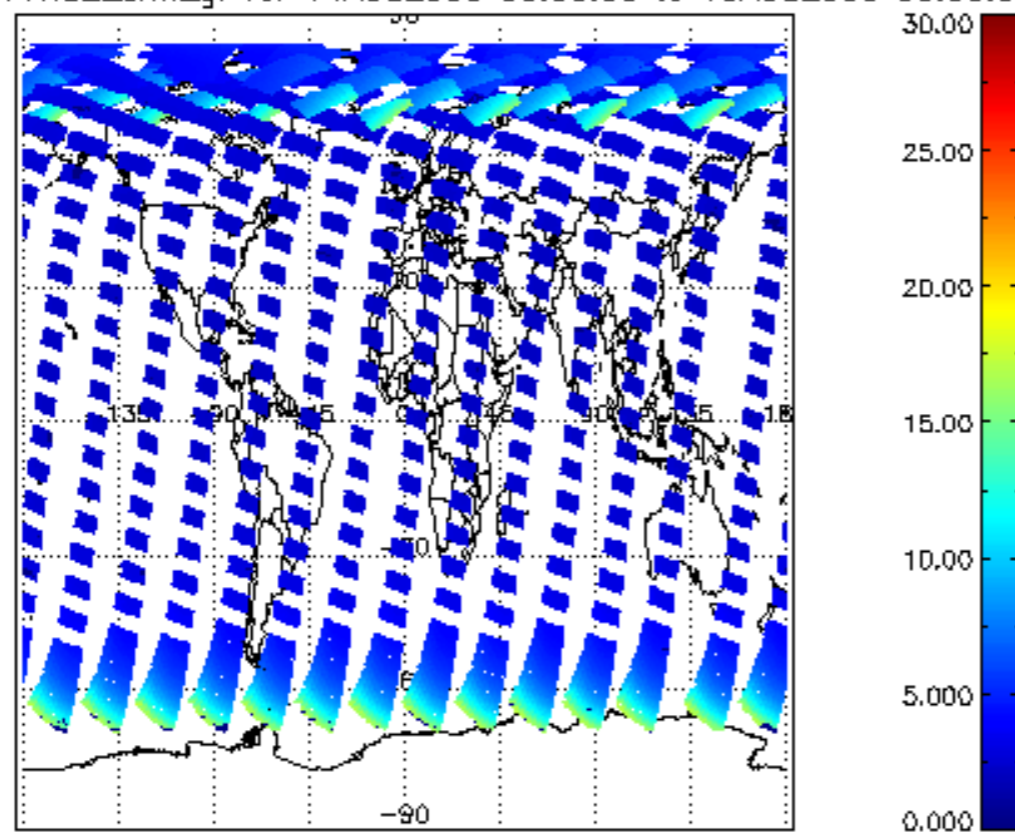
SCIOL2P_NADUV1NO2_vcd for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



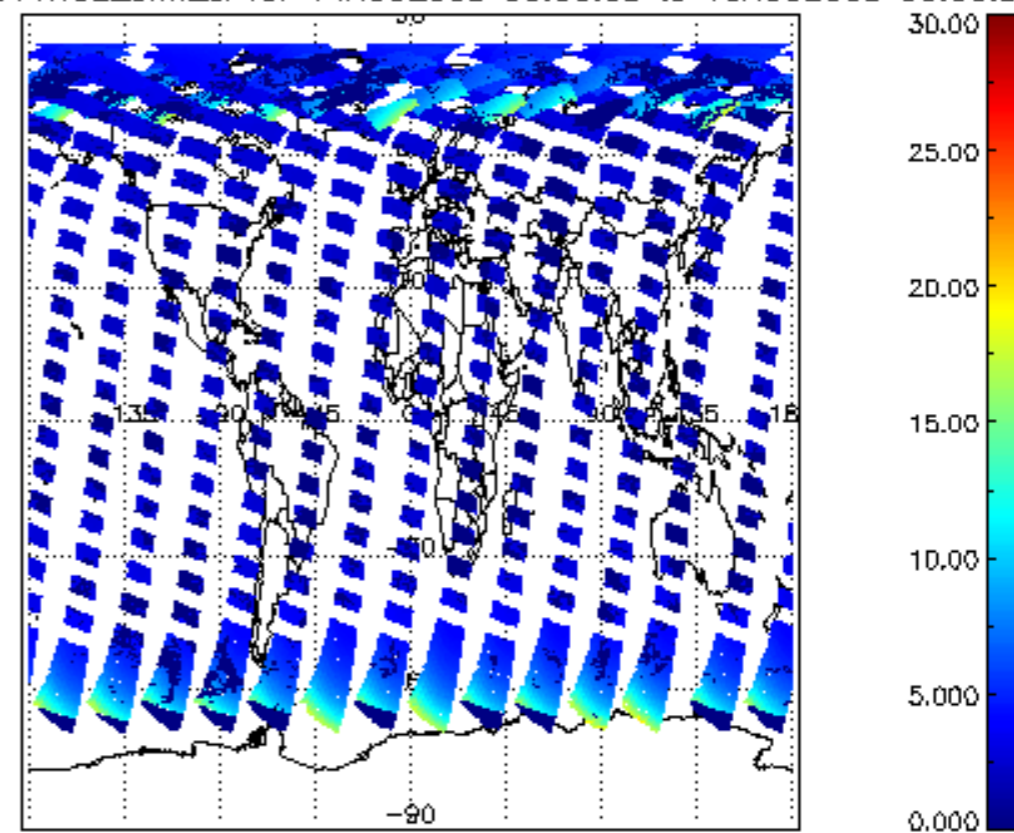
SCIOL2P_NADUV1NO2_vcd_err for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



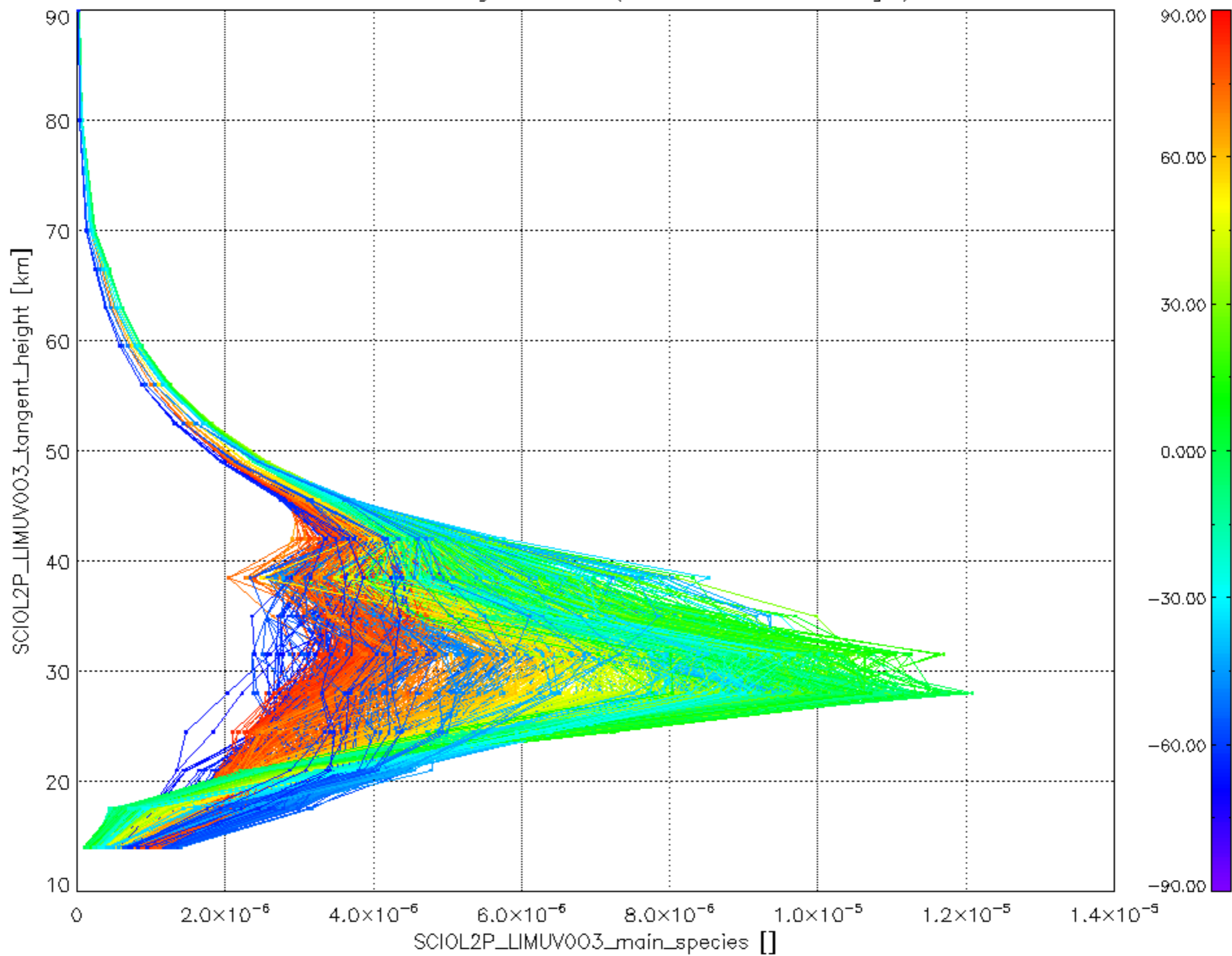
SCIOL2P_NADUV1NO2_amf_gr for 14AUG2009 00:00:00 to 15AUG2009 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 14AUG2009 00:00:00 to 15AUG2009 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).

