

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	23SEP2008 06:02:21
Data source version	SCIA-OL/3.01-R
Processing scope for products	05SEP2008 00:00:00 to 06SEP2008 00:00:00
Start time of first product within scope	04SEP2008 22:41:59
Stop time of last product within scope	06SEP2008 00:46:31
Total number of level 2 products	13
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__2PRDPA20080904_224159_000033812071_00445_34066_6539.N1	04SEP2008 22:41:59	04SEP2008 23:38:21	0	GOOD
1	SCI_OL__2PRDPA20080905_002236_000033252071_00446_34067_6540.N1	05SEP2008 00:22:36	05SEP2008 01:18:01	0	GOOD
2	SCI_OL__2PRDPA20080905_020312_000033812071_00447_34068_6541.N1	05SEP2008 02:03:12	05SEP2008 02:59:34	0	GOOD
3	SCI_OL__2PRDPA20080905_034349_000033252071_00448_34069_6544.N1	05SEP2008 03:43:49	05SEP2008 04:39:14	0	GOOD
4	SCI_OL__2PRDPA20080905_052425_000033812071_00449_34070_6545.N1	05SEP2008 05:24:25	05SEP2008 06:20:47	0	GOOD
5	SCI_OL__2PRDPA20080905_120651_000033812071_00453_34074_0064.N1	05SEP2008 12:06:51	05SEP2008 13:03:12	0	GOOD
6	SCI_OL__2PRDPA20080905_134727_000033252071_00454_34075_0066.N1	05SEP2008 13:47:27	05SEP2008 14:42:53	0	GOOD
7	SCI_OL__2PRDPA20080905_152804_000033812071_00455_34076_0042.N1	05SEP2008 15:28:04	05SEP2008 16:24:25	0	GOOD
8	SCI_OL__2PRDPA20080905_170900_000033252071_00456_34077_0057.N1	05SEP2008 17:09:00	05SEP2008 18:04:25	0	GOOD
9	SCI_OL__2PRDPA20080905_184936_000033122071_00457_34078_0058.N1	05SEP2008 18:49:36	05SEP2008 19:44:49	0	GOOD
10	SCI_OL__2PRDPA20080905_202953_000033252071_00458_34079_0062.N1	05SEP2008 20:29:53	05SEP2008 21:25:18	0	GOOD
11	SCI_OL__2PRDPA20080905_221029_000033812071_00459_34080_0047.N1	05SEP2008 22:10:29	05SEP2008 23:06:51	0	GOOD
12	SCI_OL__2PRDPA20080905_235106_000033252071_00460_34081_0048.N1	05SEP2008 23:51:06	06SEP2008 00:46:31	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: 115960

Total number of cloud data DSRs with good quality flag (=0): 115960 (100.0 %)

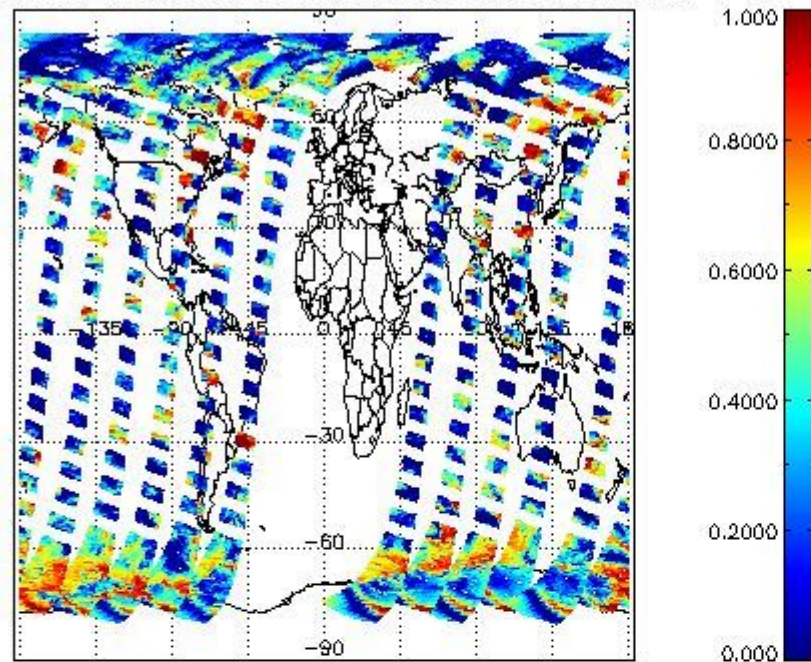
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	115960	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	115960	0.16928	0.12500	0.12500	0.25000	0.059786	s
CL_FRAC	115960	0.32735	0.28040	0.0000	1.0000	0.28175	-
CL_FRAC_ERR	115960	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	115960	5.4170	4.0000	4.0000	8.0000	1.9132	
PMD_READ_CL[0]	115960	0.16538	0.0000	0.0000	8.0000	0.94189	-
PMD_READ_CL[1]	115960	1.4145	0.0000	0.0000	8.0000	2.4253	-
CL_TOP_HEIGHT	95589	3.2872	1.8069	0.0000	17.000	3.6467	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	95589	57.338	59.048	0.0000	101.00	43.438	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	115960	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	115960	11001101	11000100	11000000	11100000	3543.2	flags
AERO_ABSO_IND	115960	3.1541	3.7540	-1.3244	14.733	2.1810	
AERO_IND_DIAG	115960	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	115960	01010101	00000000	00000000	11000000	24442.	flags

Time and geolocation plots:

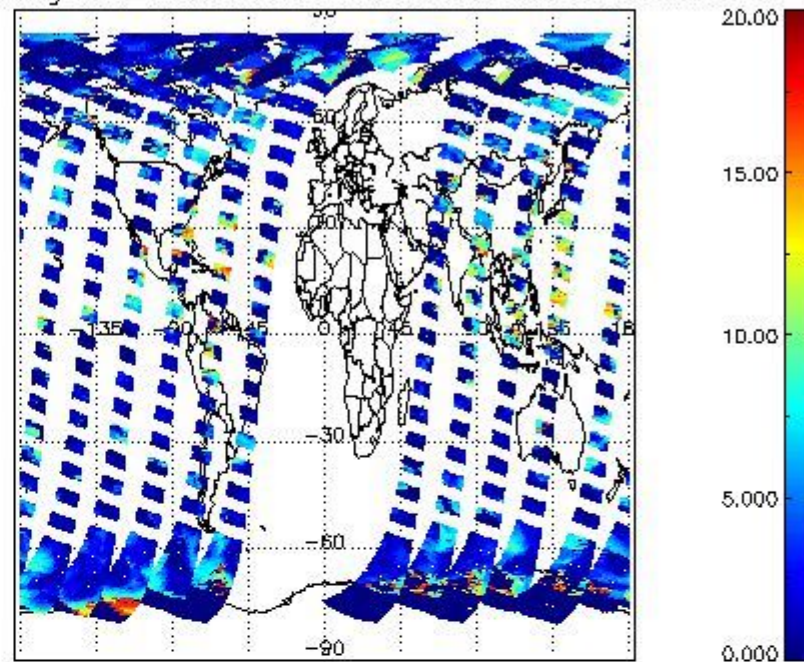
Plots are available for the following parameters:

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

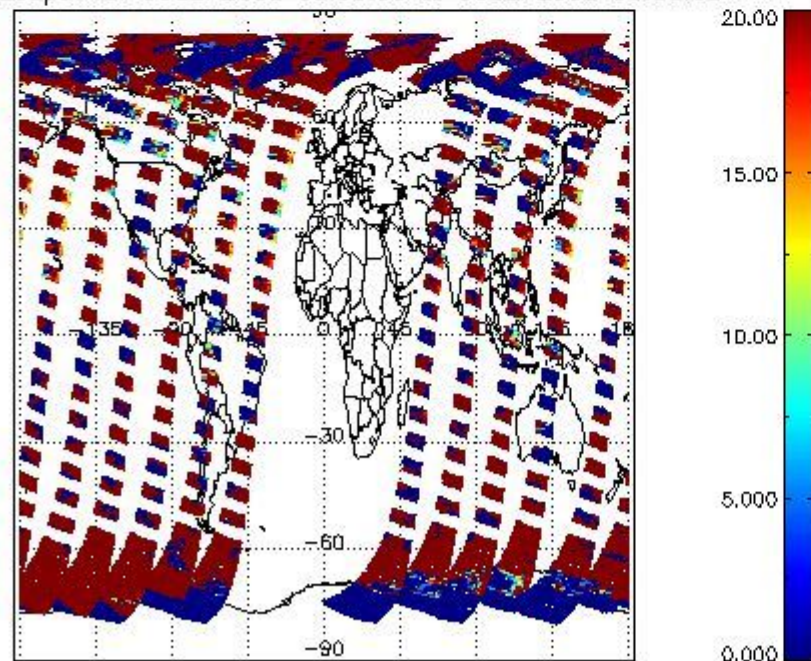
cLfrac for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



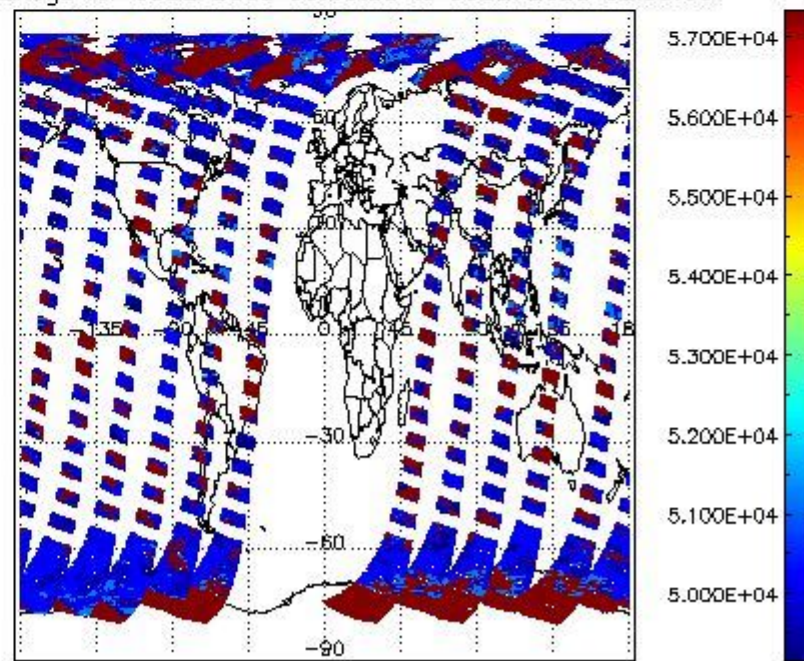
cL_top_height for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



cLopt_depth for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



cloud_flags for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



2.2.2 Nadir

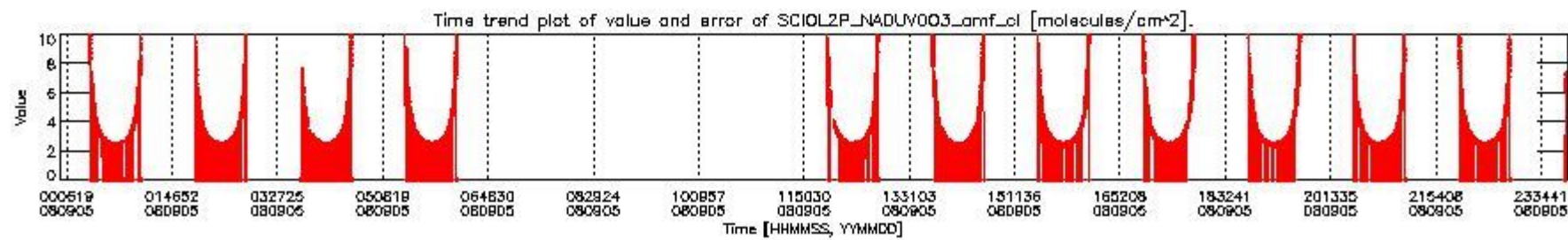
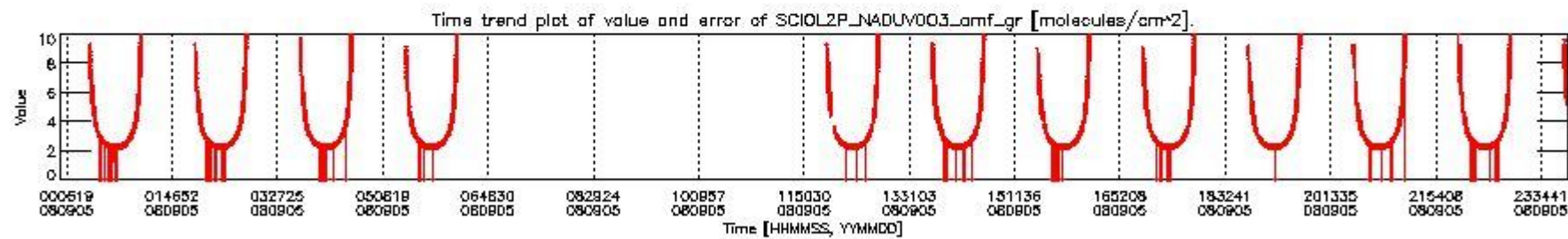
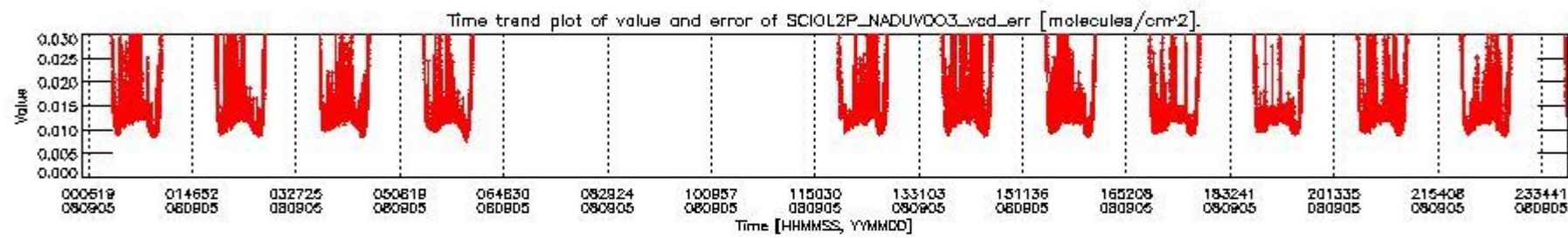
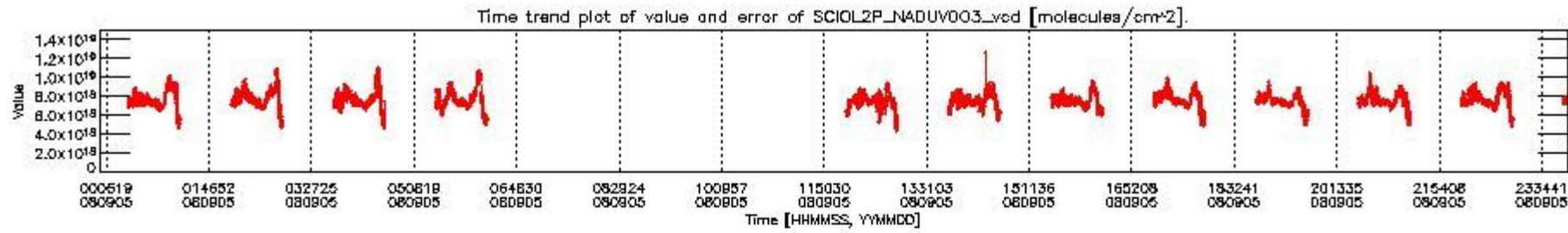
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

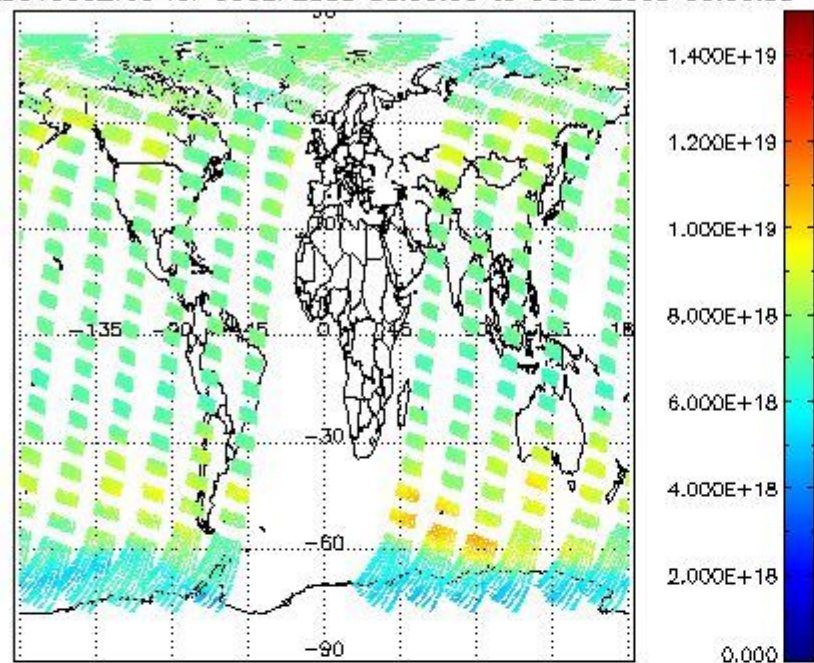
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

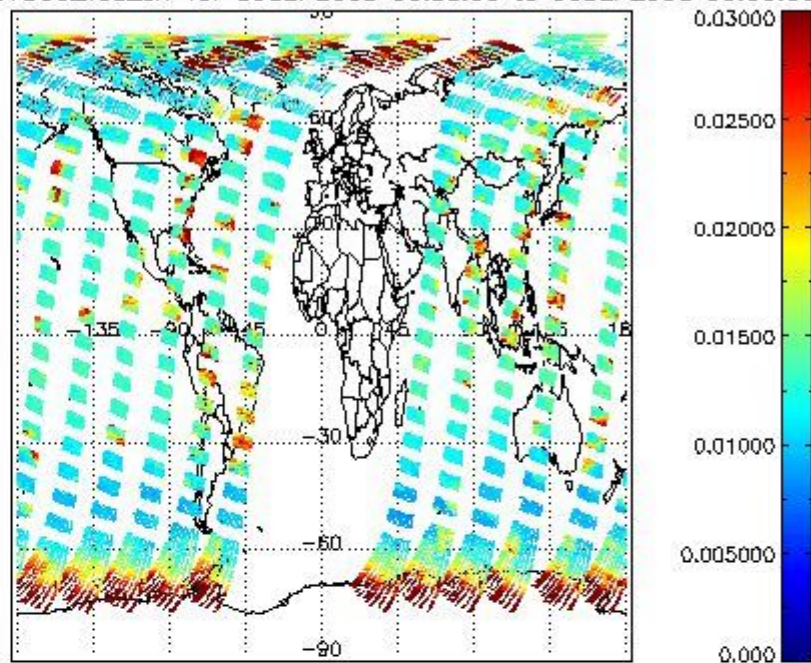
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



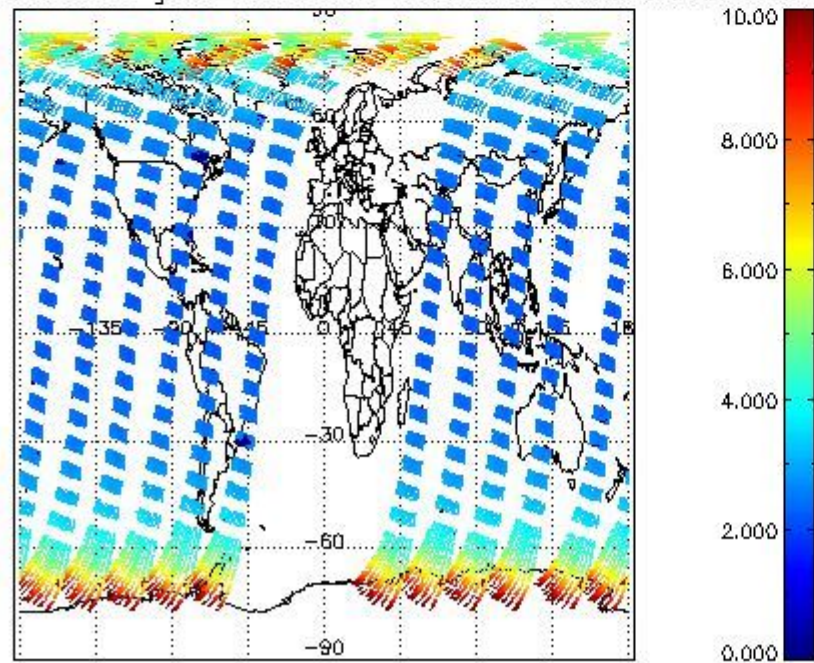
SCIOL2P_NADUV003_vcd for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



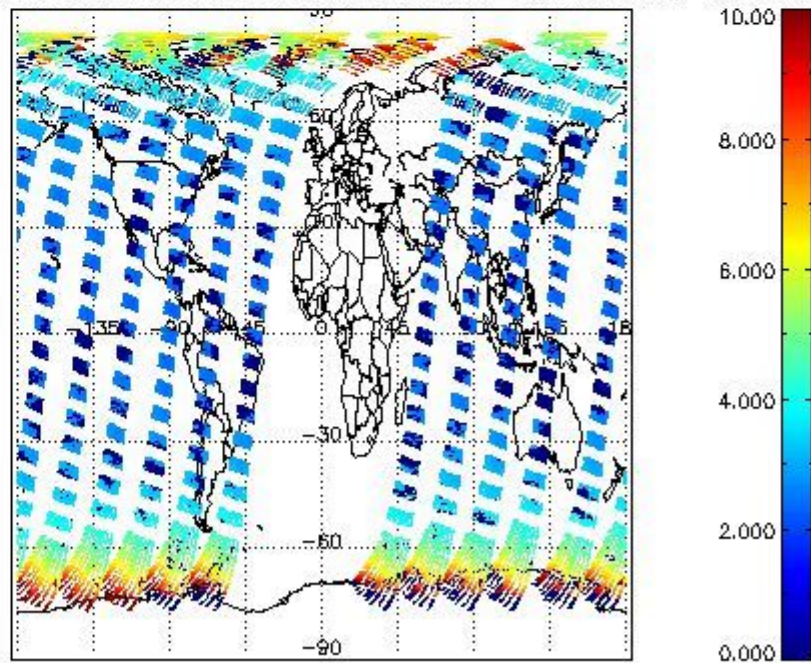
SCIOL2P_NADUV003_vcd_err for 05SEP2008 00:00:00 to 06SEP2008 00:00:00

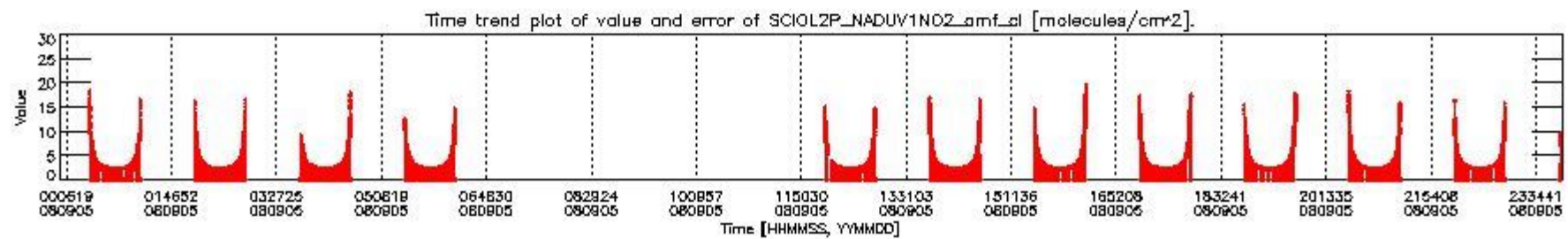
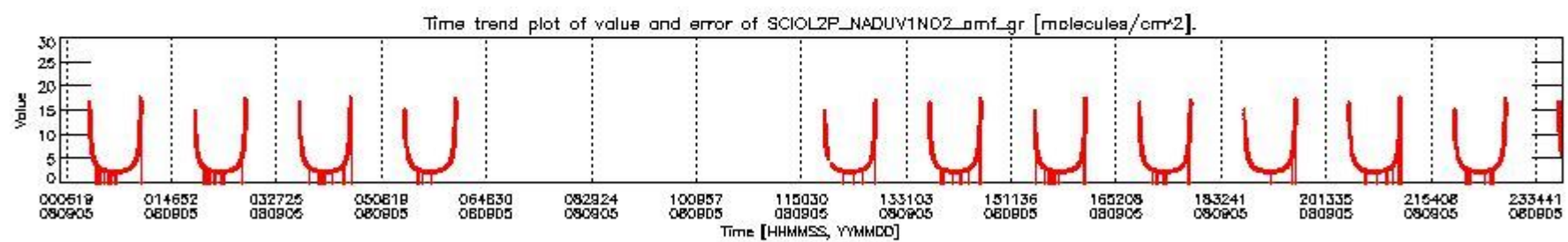
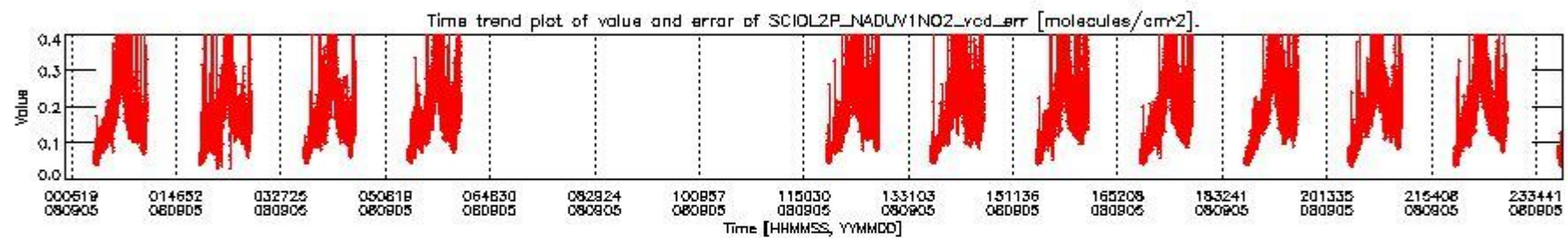
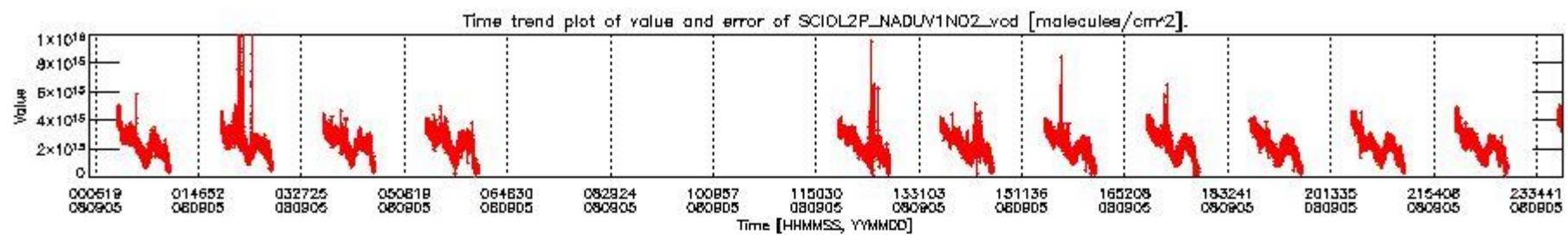


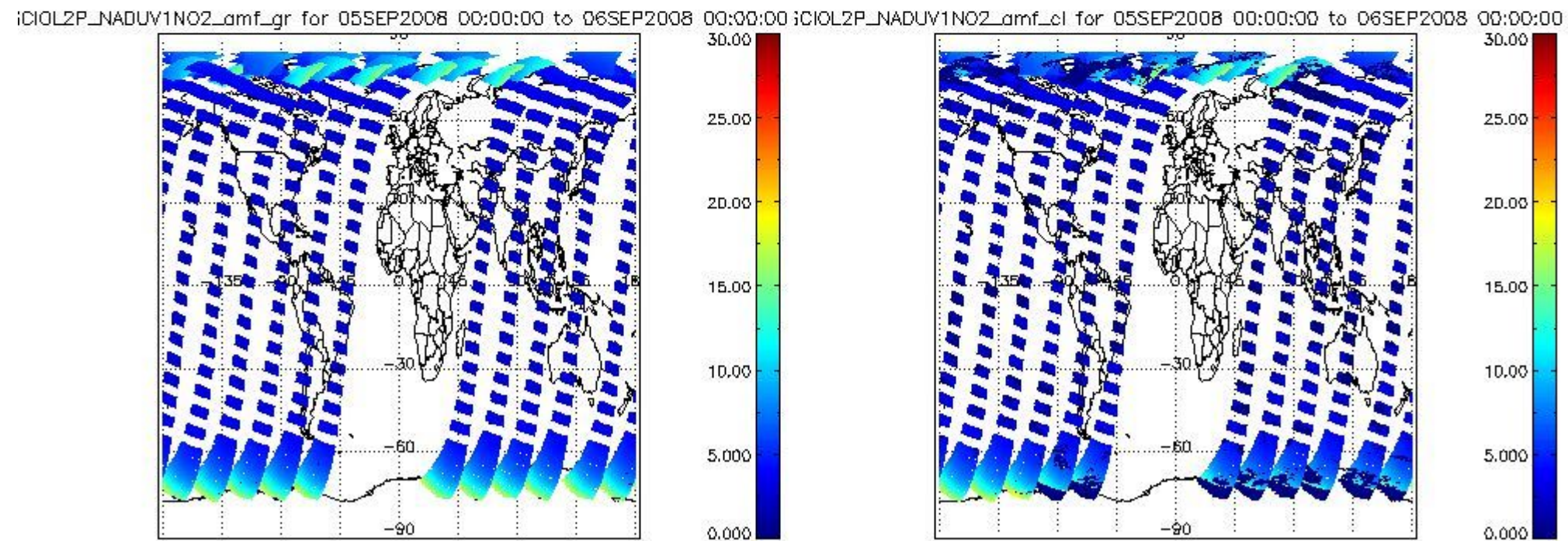
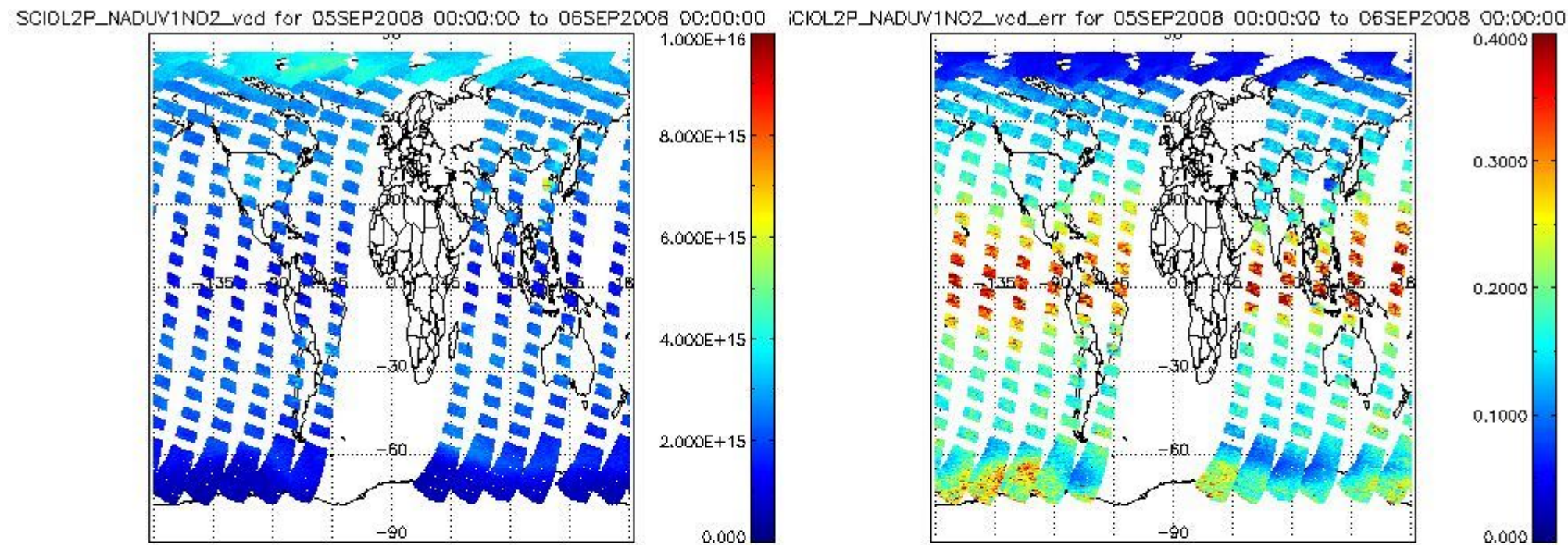
SCIOL2P_NADUV003_amf_gr for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 05SEP2008 00:00:00 to 06SEP2008 00:00:00







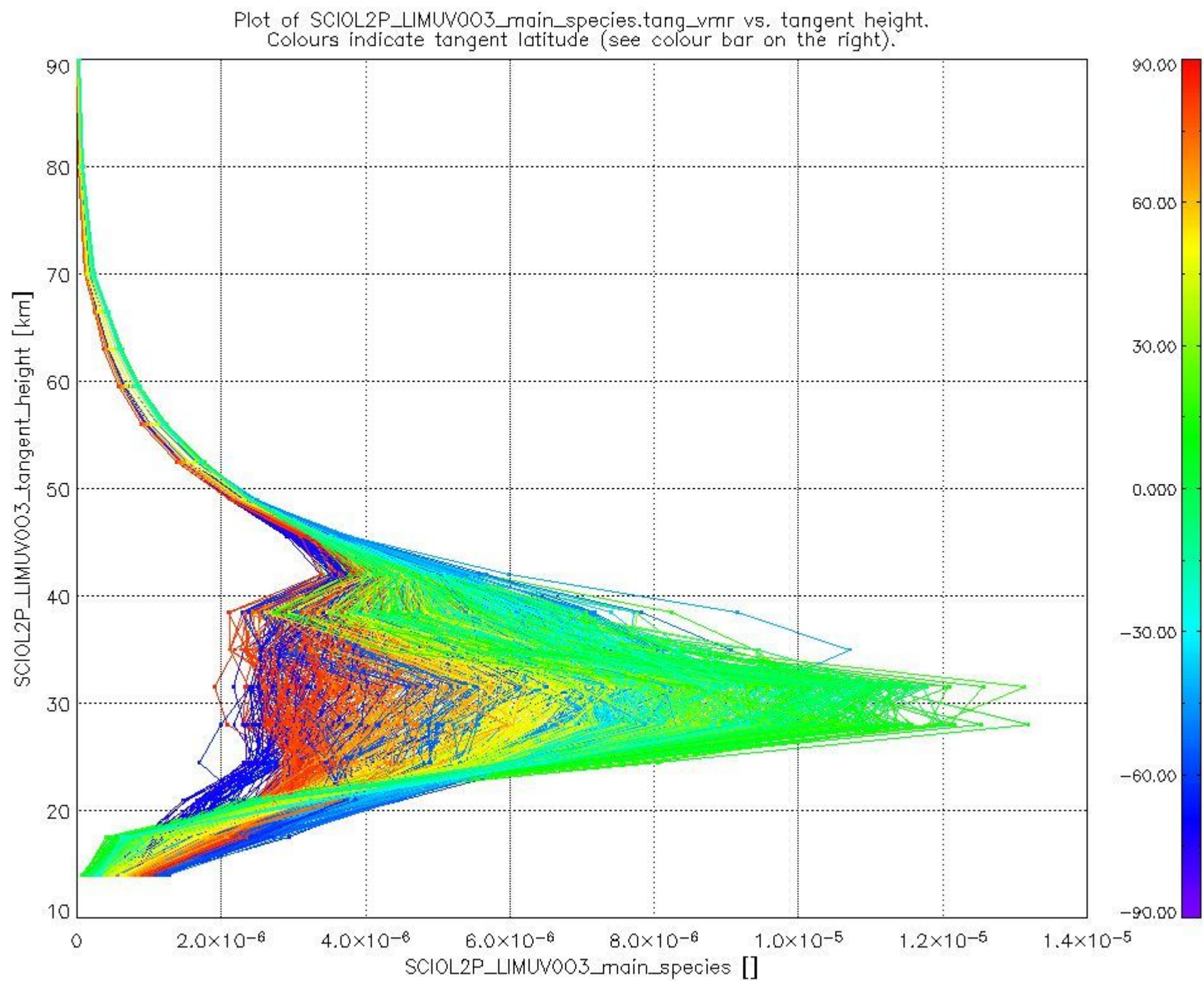
2.2.3 Limb

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

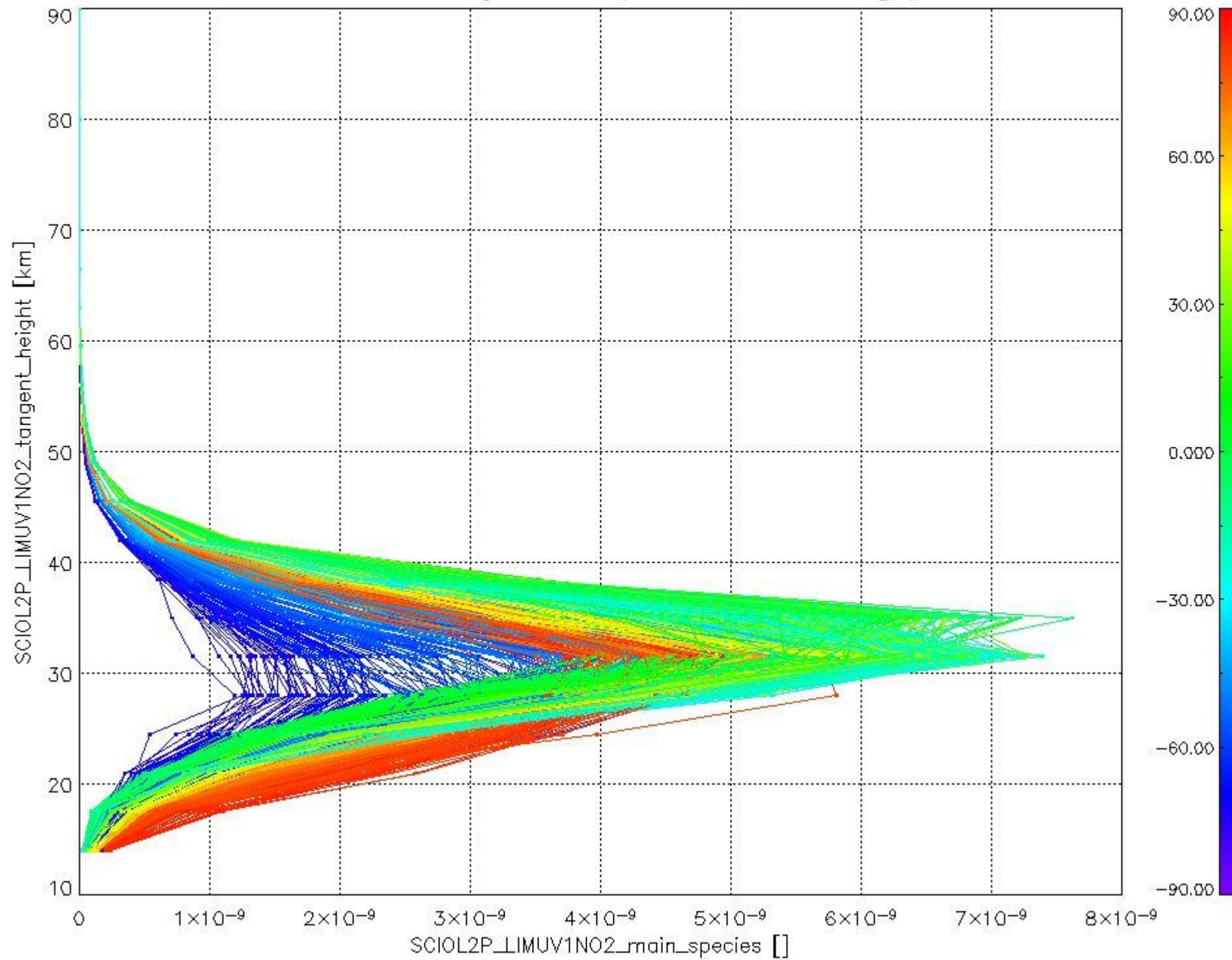
The following data items are currently included into this section:

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.



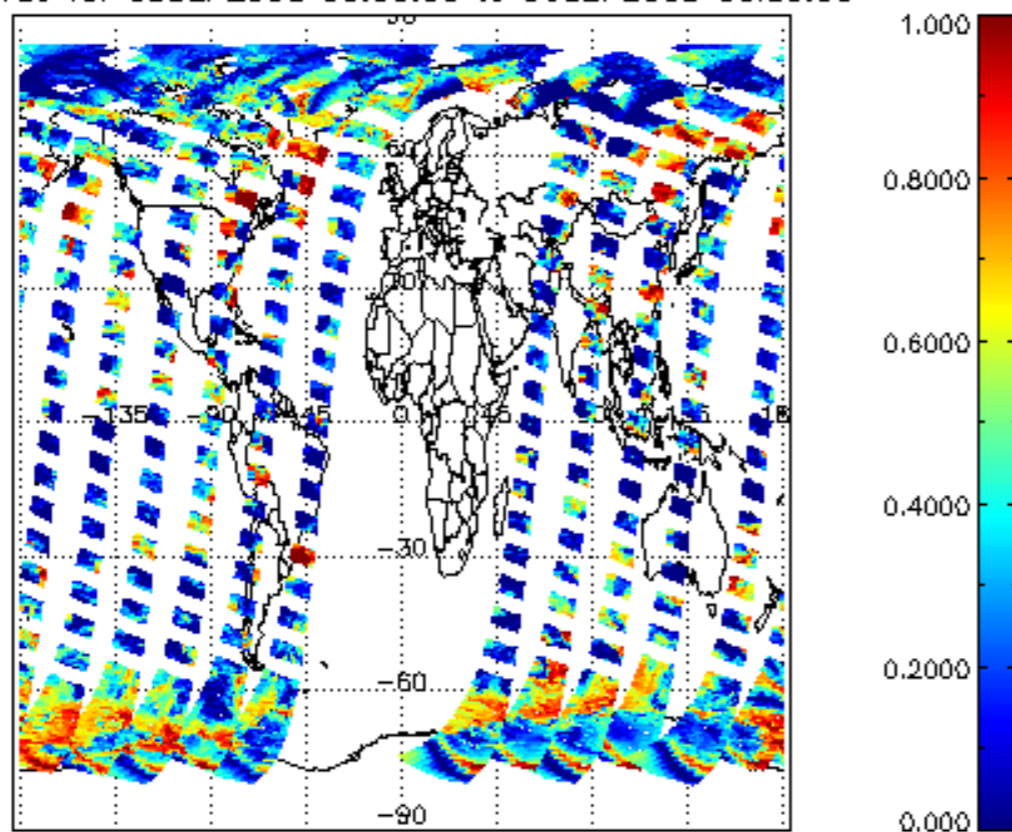
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



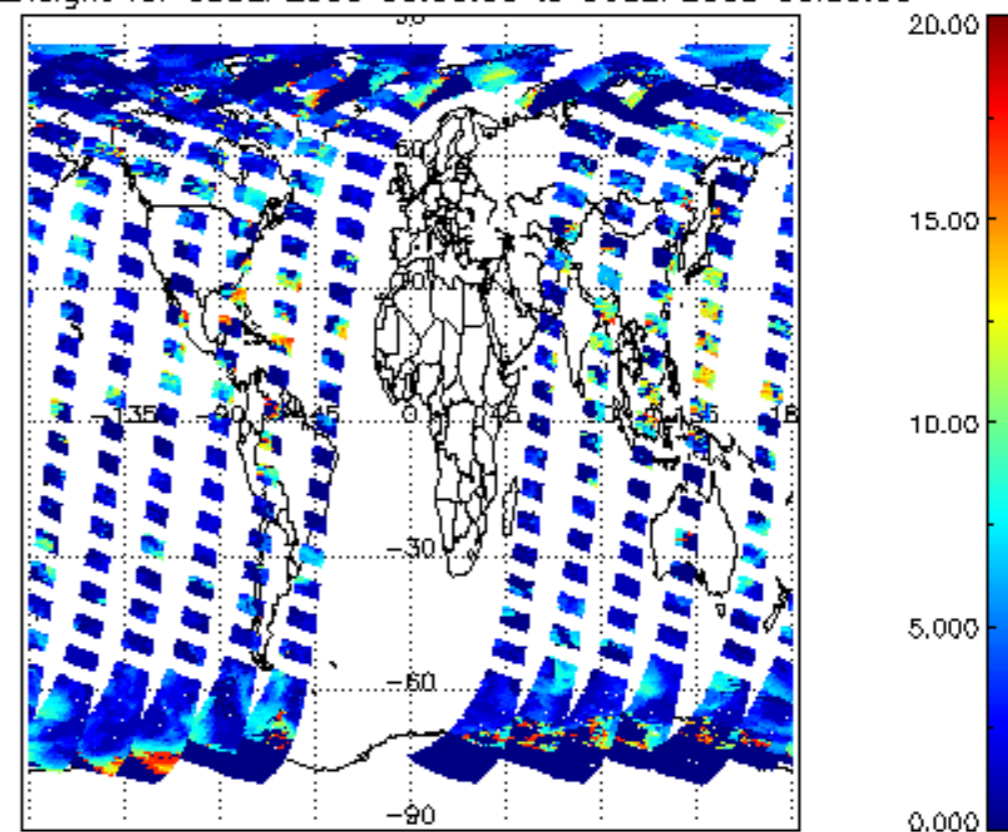
2.3 ADF monitoring

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

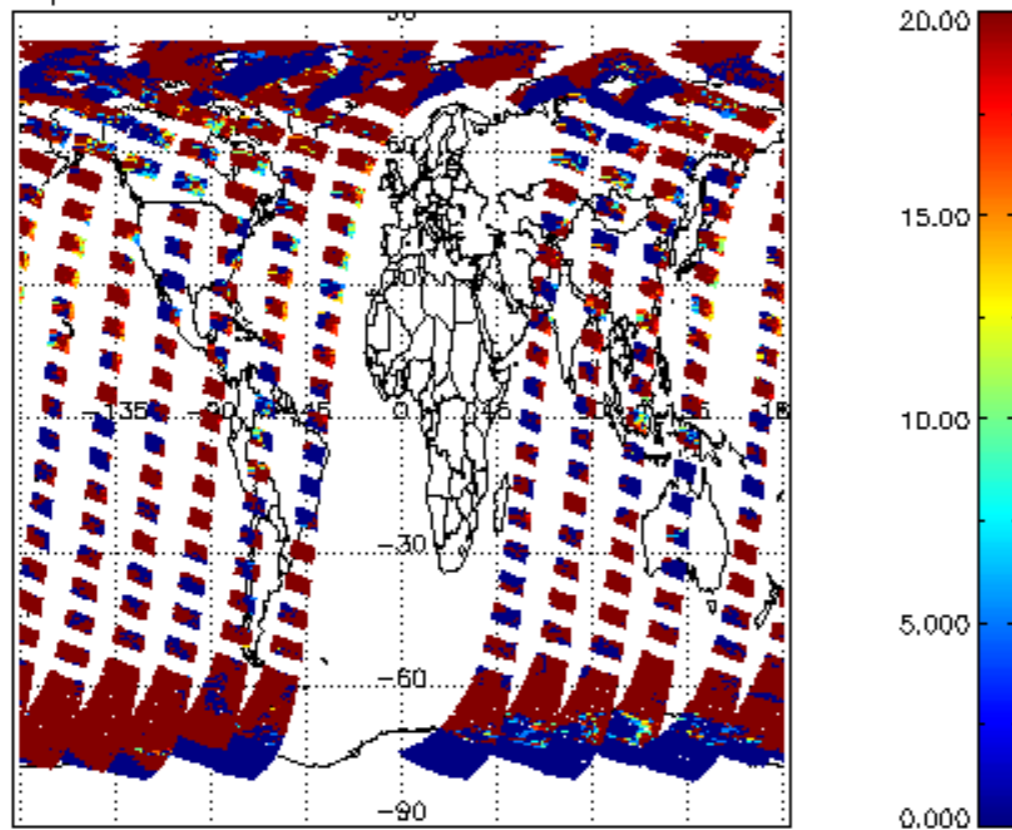
cl_frac for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



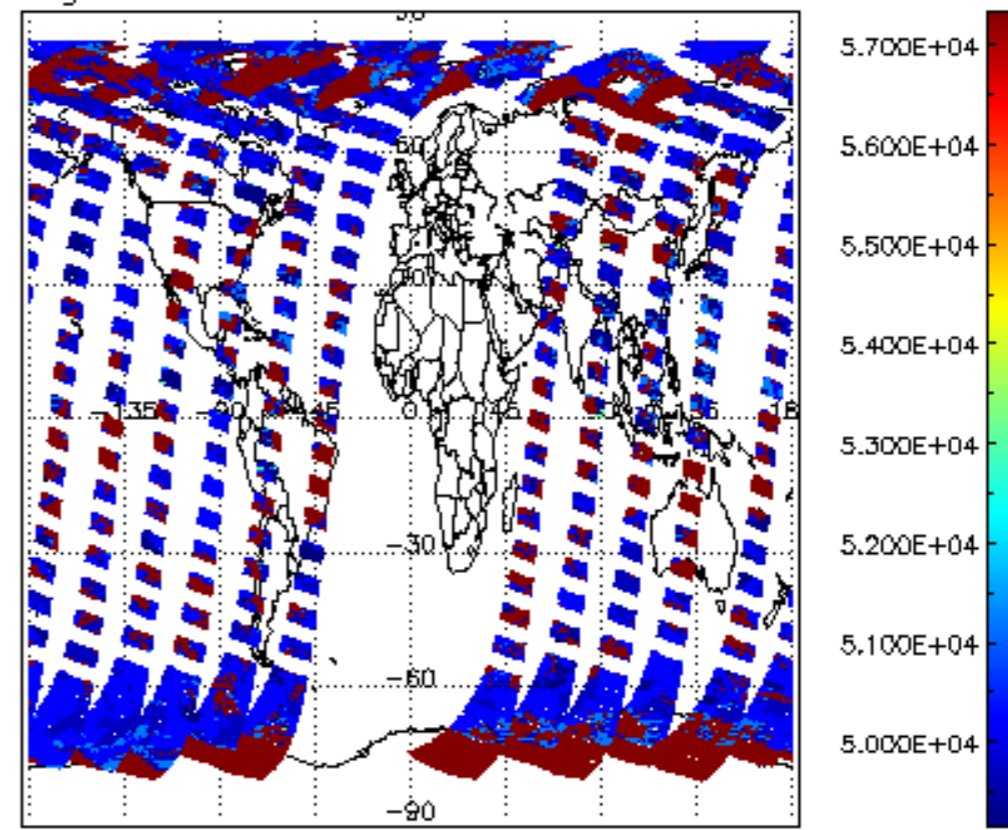
cl_top_height for 05SEP2008 00:00:00 to 06SEP2008 00:00:00

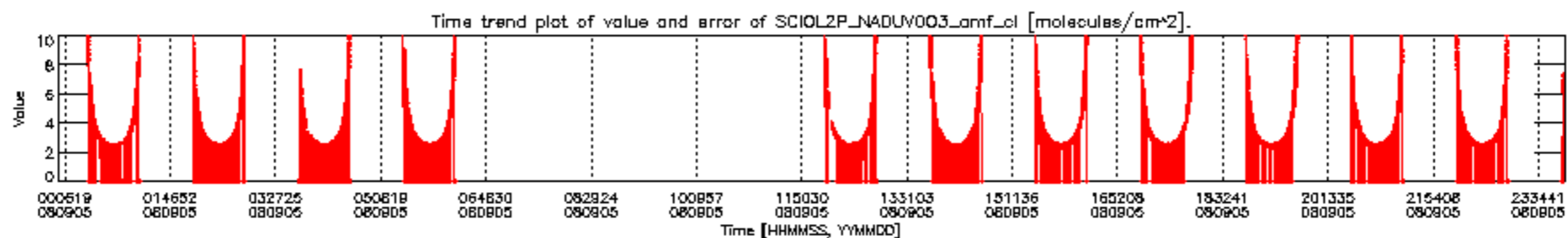
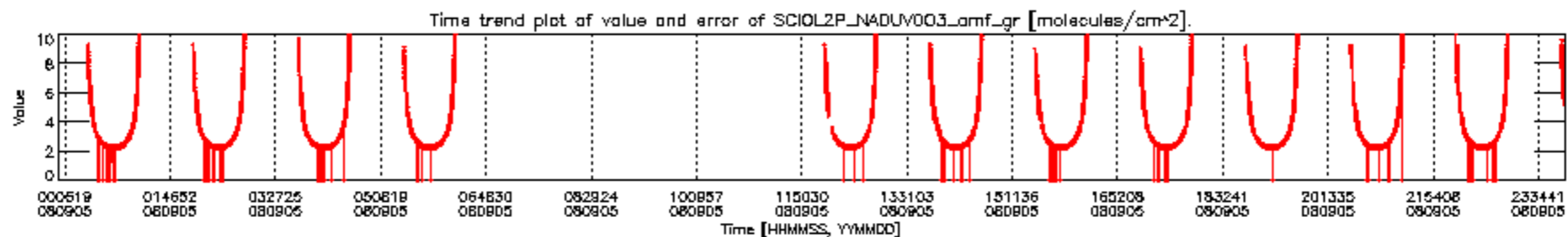
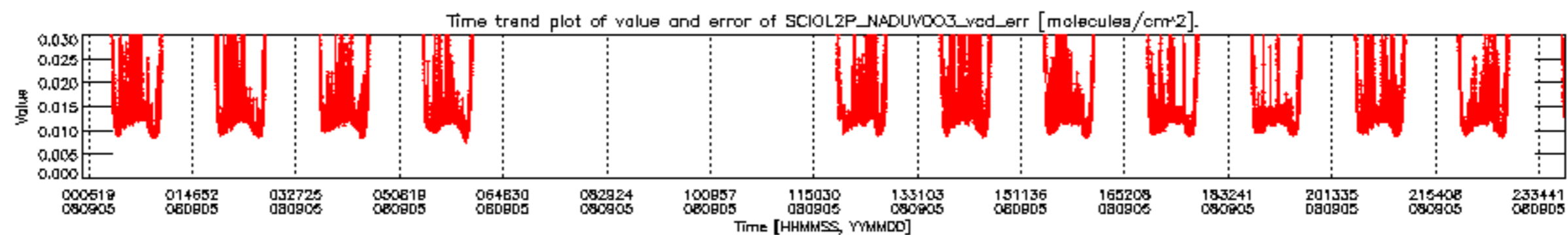
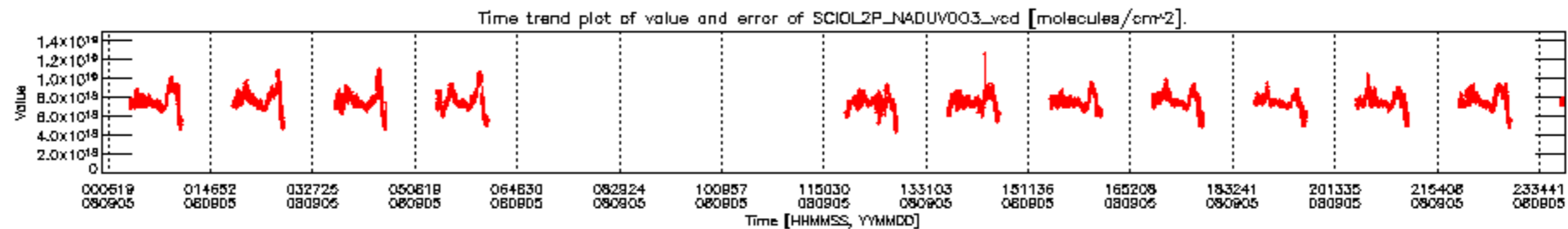


cl_opt_depth for 05SEP2008 00:00:00 to 06SEP2008 00:00:00

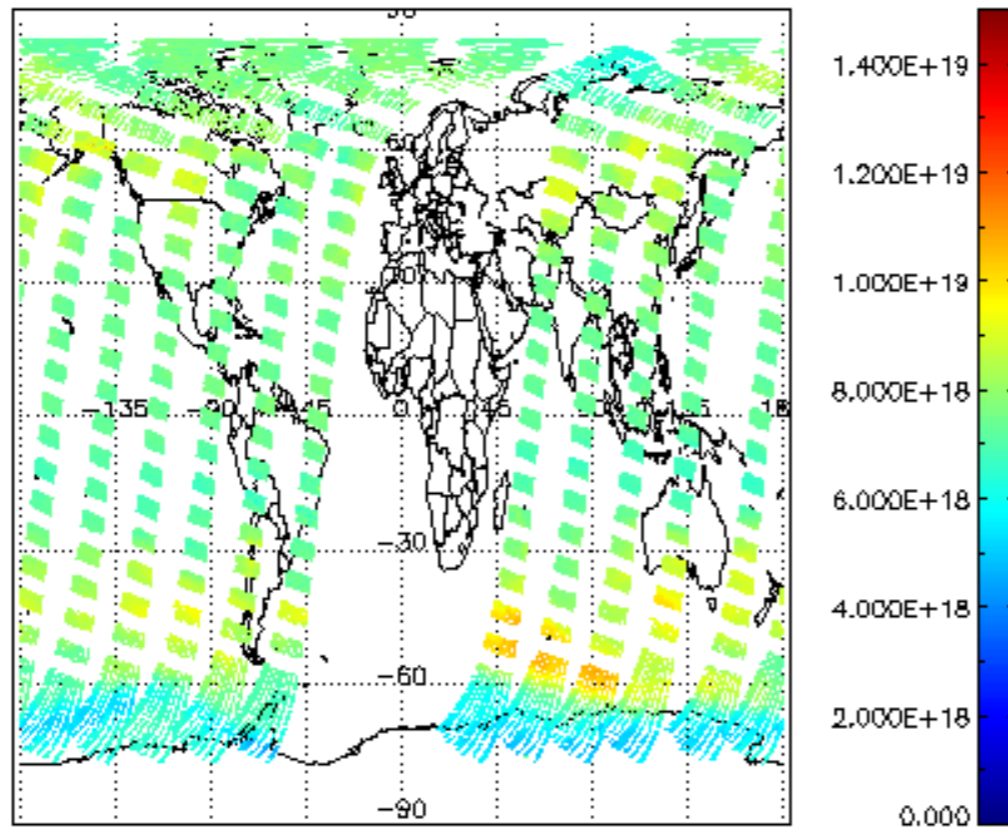


cloud_flags for 05SEP2008 00:00:00 to 06SEP2008 00:00:00

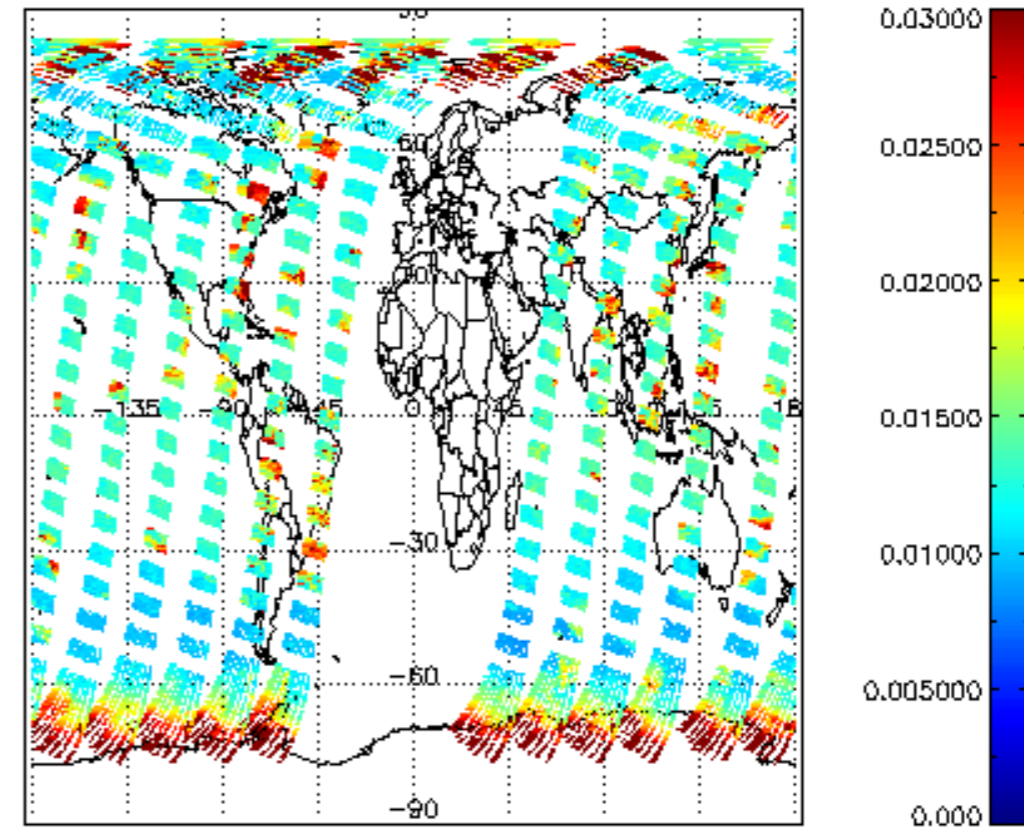




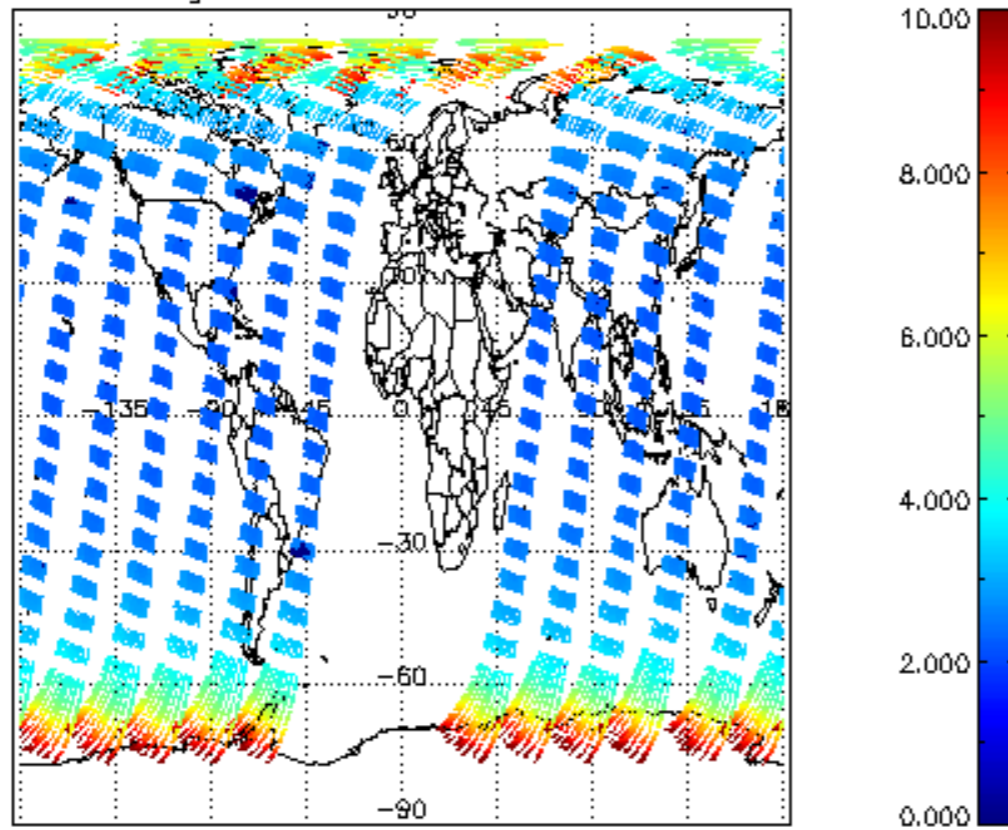
SCIOL2P_NADUV003_vcd for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



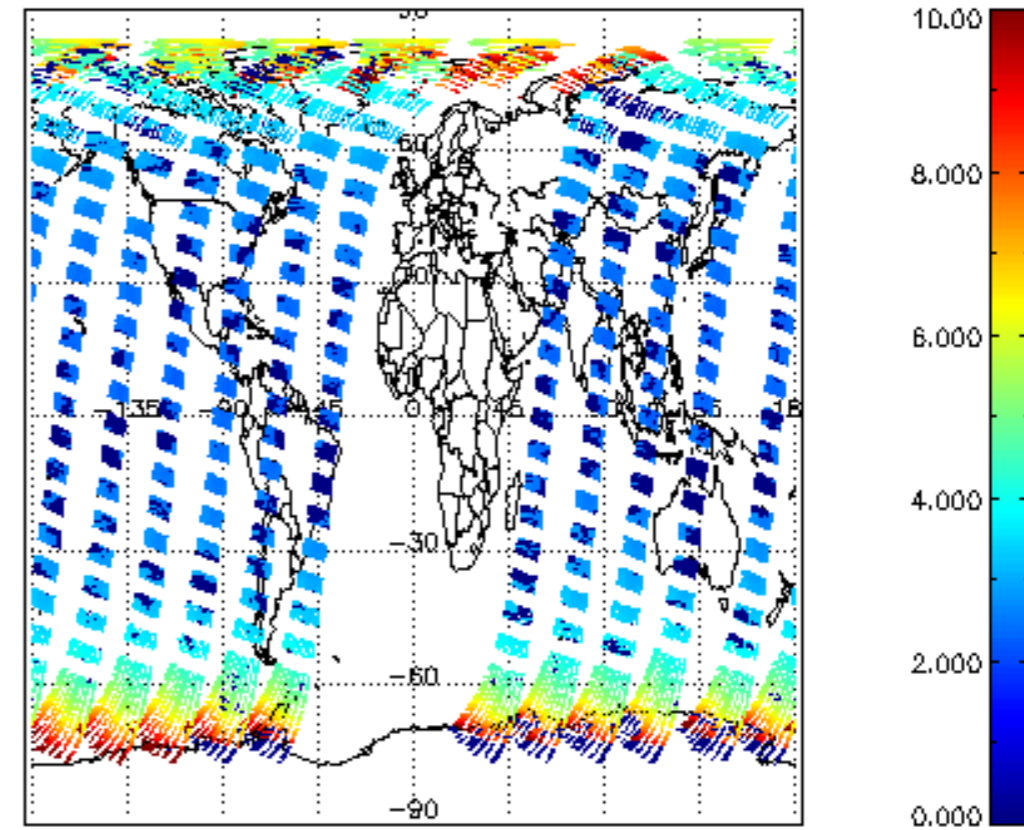
SCIOL2P_NADUV003_vcd_err for 05SEP2008 00:00:00 to 06SEP2008 00:00:00

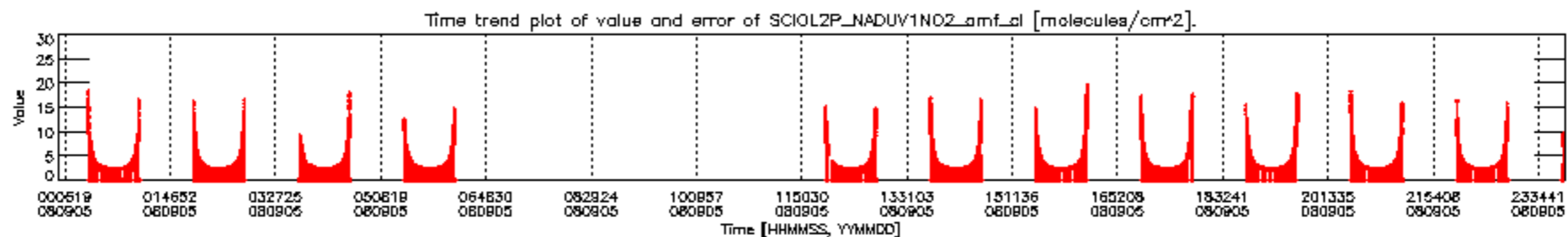
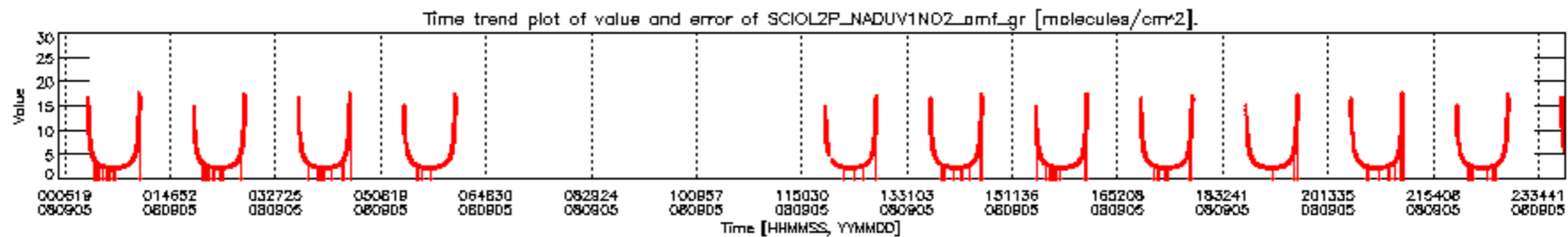
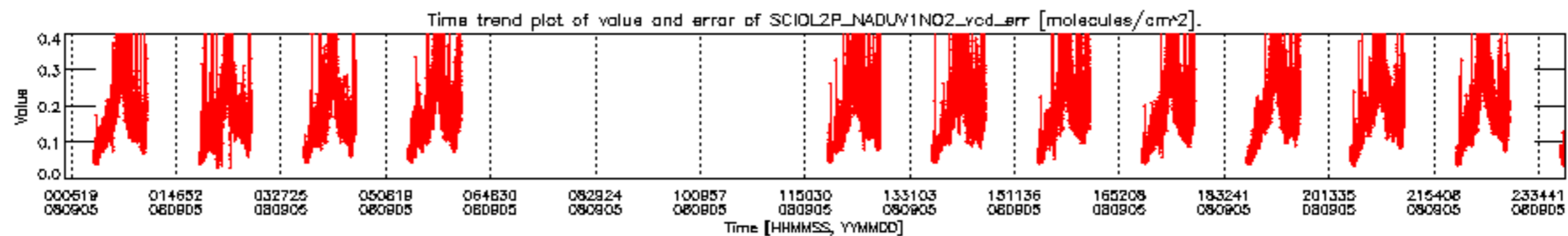
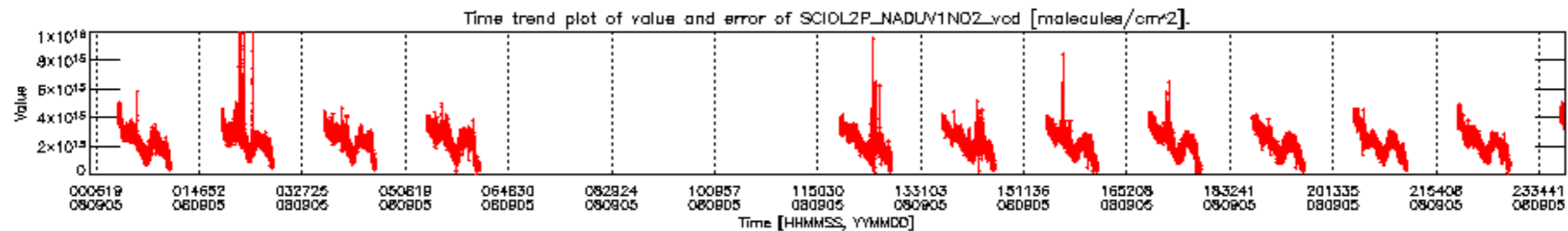


SCIOL2P_NADUV003_amf_gr for 05SEP2008 00:00:00 to 06SEP2008 00:00:00

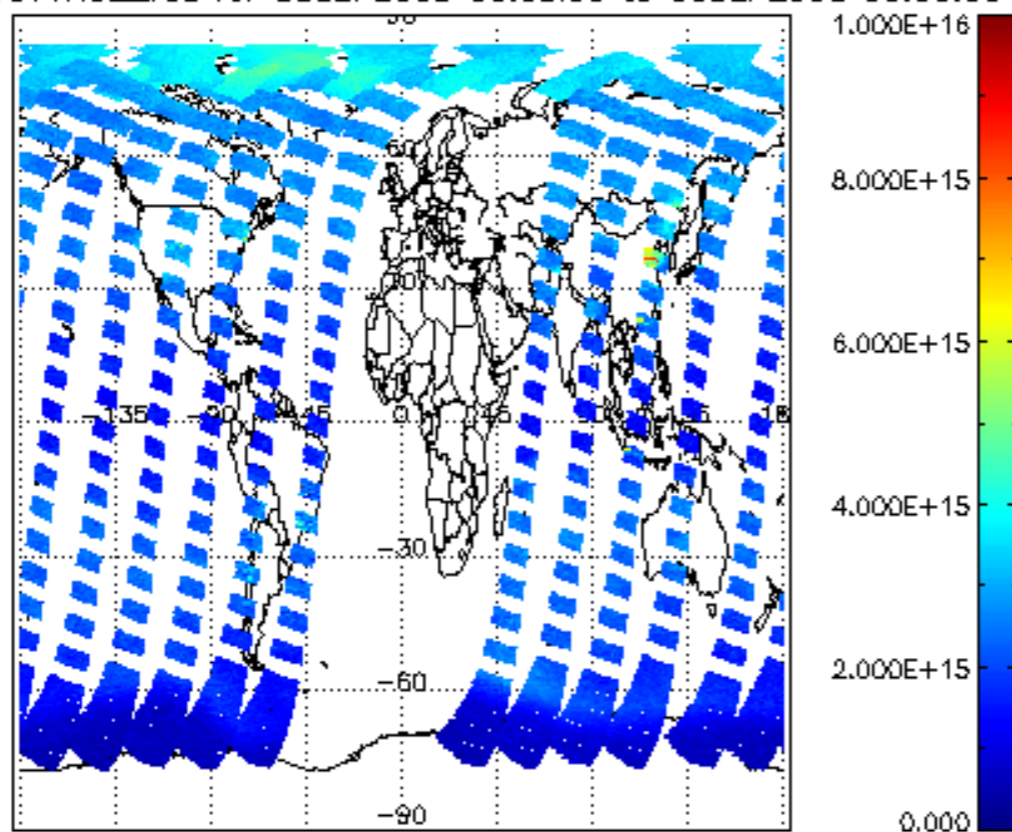


SCIOL2P_NADUV003_amf_cl for 05SEP2008 00:00:00 to 06SEP2008 00:00:00

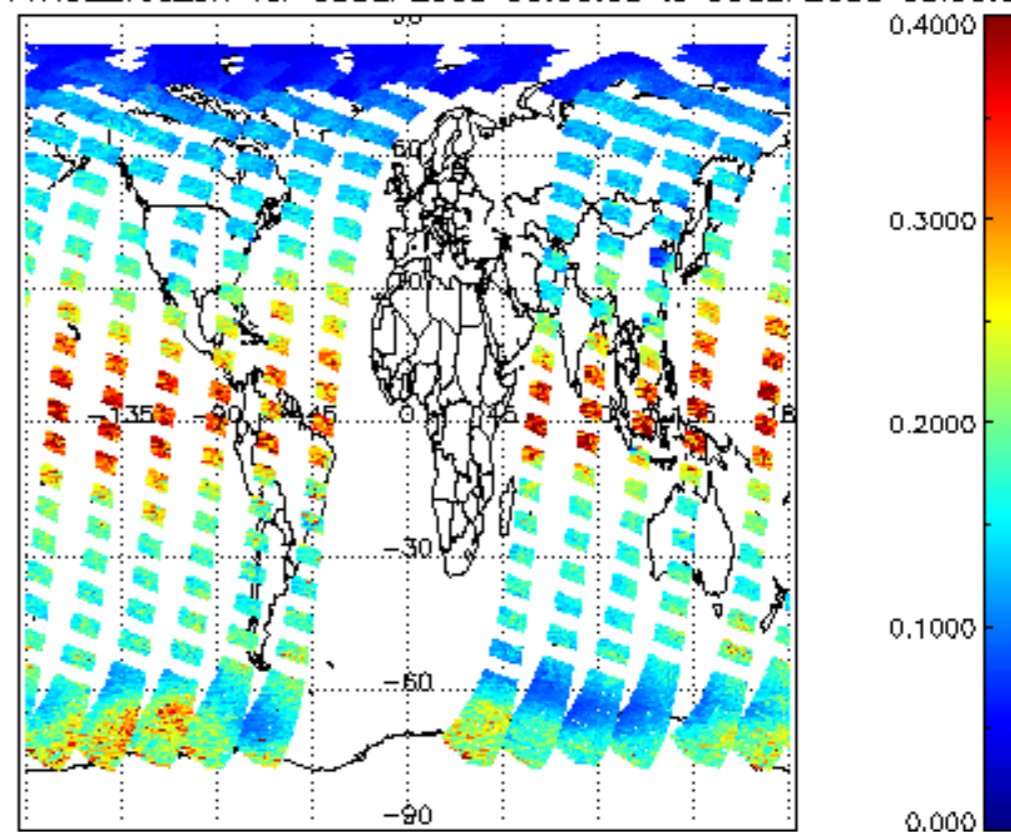




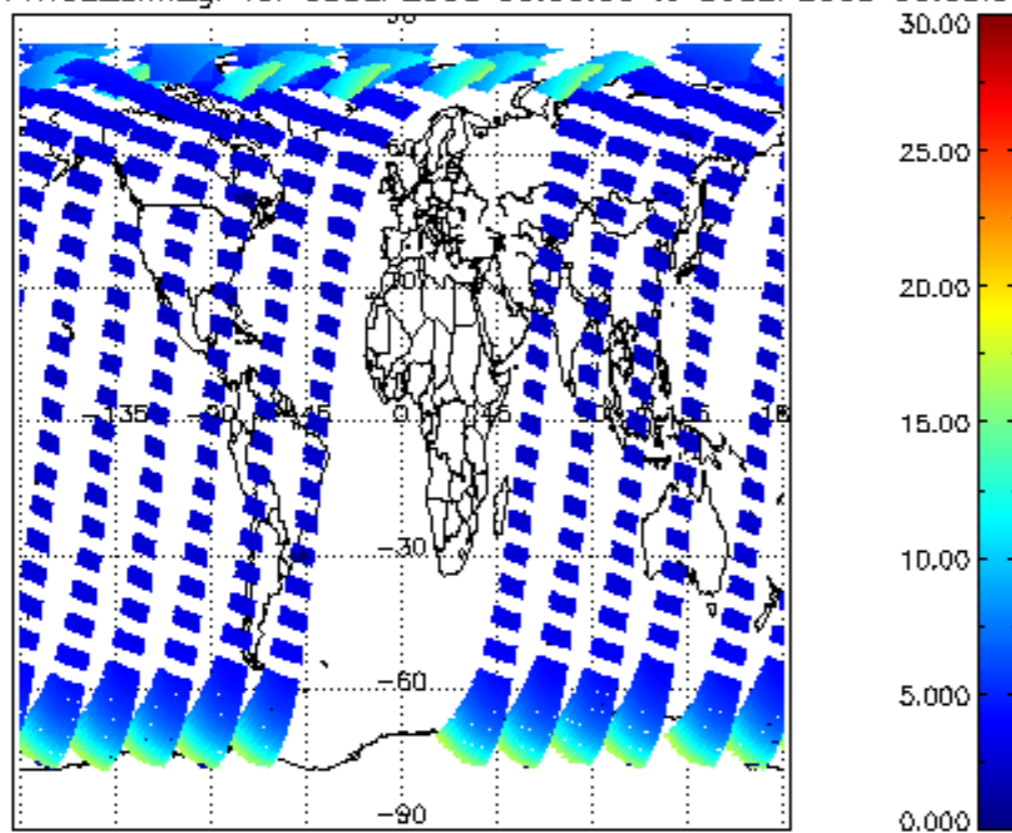
SCIOL2P_NADUV1NO2_vcd for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



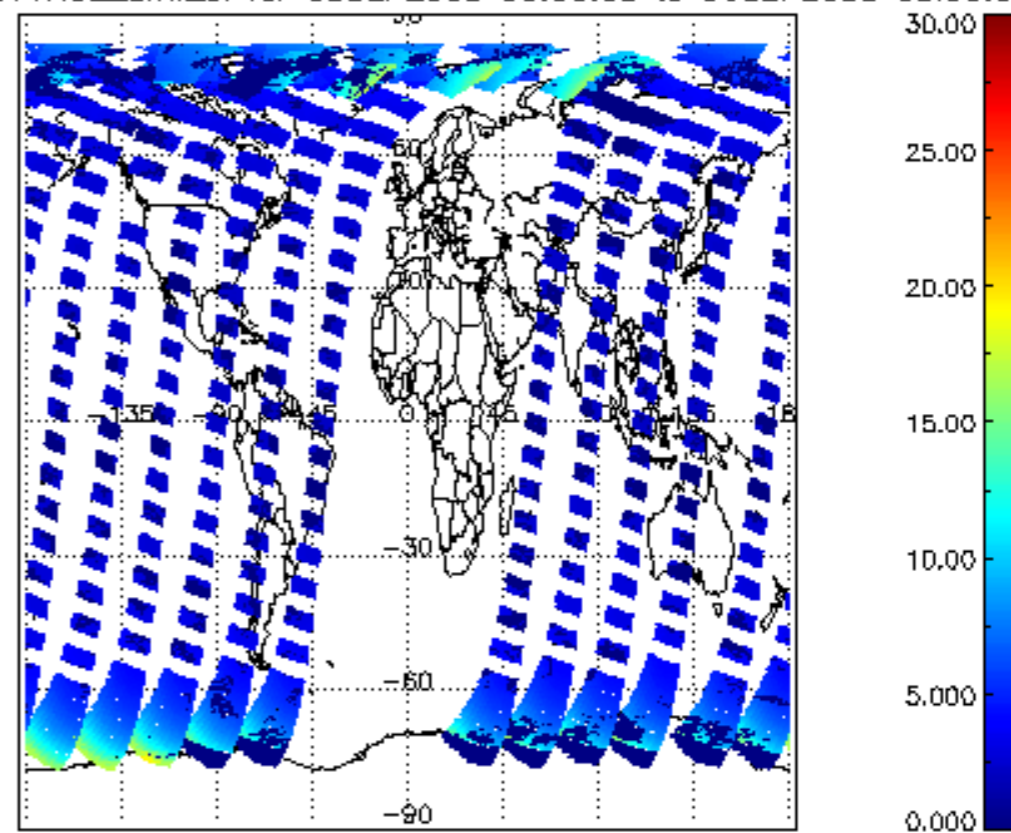
iCIOL2P_NADUV1NO2_vcd_err for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



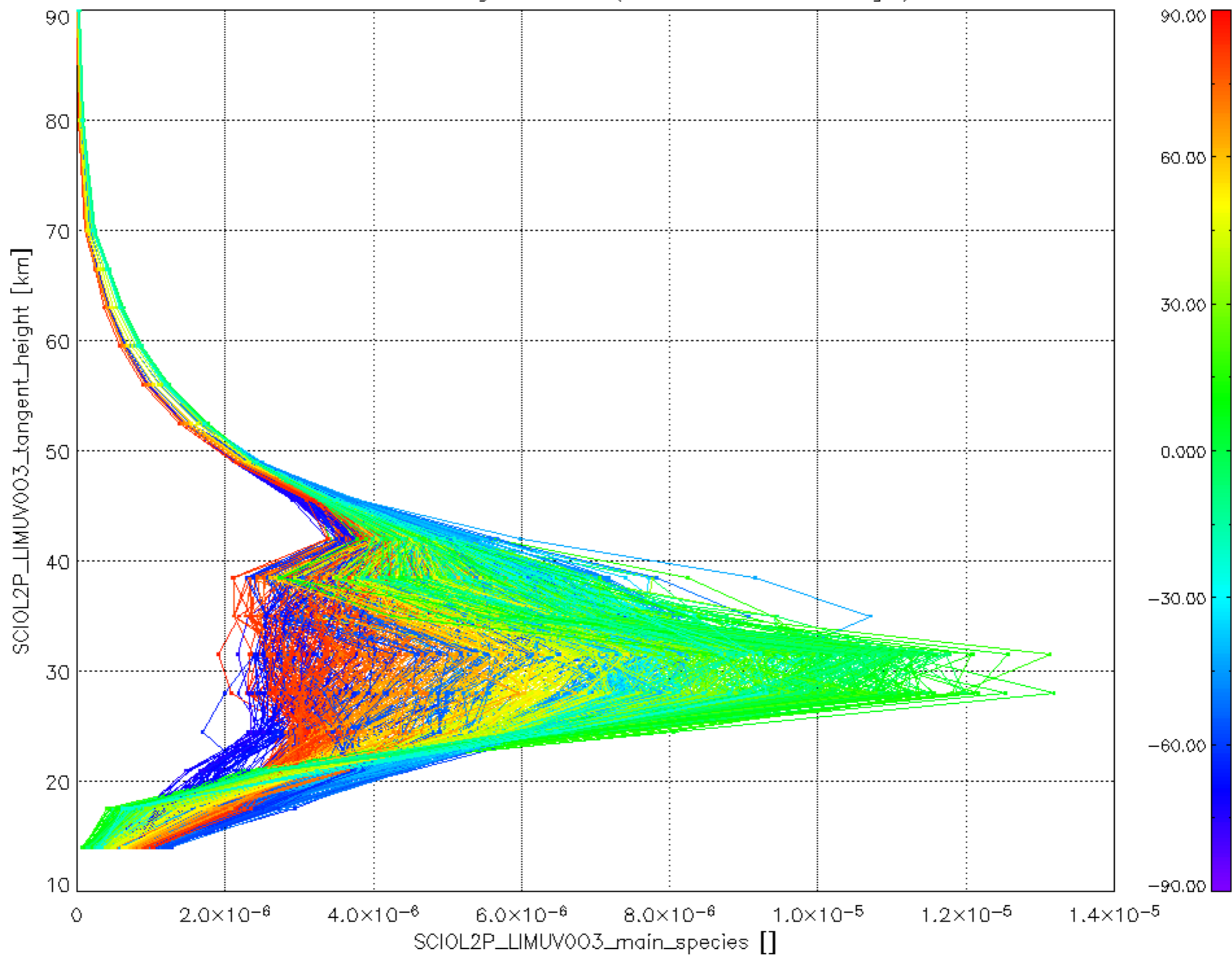
iCIOL2P_NADUV1NO2_amf_gr for 05SEP2008 00:00:00 to 06SEP2008 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 05SEP2008 00:00:00 to 06SEP2008 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).

