

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	29NOV2008 06:02:51
Data source version	SCIA-OL/3.01-R
Processing scope for products	11NOV2008 00:00:00 to 12NOV2008 00:00:00
Start time of first product within scope	10NOV2008 22:44:01
Stop time of last product within scope	12NOV2008 00:48:50
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__2PRDPA20081110_224401_000033532073_00402_35025_3978.N1	10NOV2008 22:44:01	10NOV2008 23:39:54	0	GOOD
1	SCI_OL__2PRDPA20081111_002437_000033582073_00403_35026_3979.N1	11NOV2008 00:24:37	11NOV2008 01:20:35	0	GOOD
2	SCI_OL__2PRDPA20081111_020513_000033632073_00404_35027_3982.N1	11NOV2008 02:05:13	11NOV2008 03:01:16	0	GOOD
3	SCI_OL__2PRDPA20081111_034550_000033672073_00405_35028_3983.N1	11NOV2008 03:45:50	11NOV2008 04:41:57	0	GOOD
4	SCI_OL__2PRDPA20081111_052626_000033722073_00406_35029_3984.N1	11NOV2008 05:26:26	11NOV2008 06:22:38	0	GOOD
5	SCI_OL__2PRDPA20081111_070702_000033762073_00407_35030_3985.N1	11NOV2008 07:07:02	11NOV2008 08:03:19	0	GOOD
6	SCI_OL__2PRDPA20081111_084738_000033802073_00408_35031_3986.N1	11NOV2008 08:47:38	11NOV2008 09:43:59	0	GOOD
7	SCI_OL__2PRDPA20081111_102815_000033842073_00409_35032_3987.N1	11NOV2008 10:28:15	11NOV2008 11:24:40	0	GOOD
8	SCI_OL__2PRDPA20081111_120851_000033202073_00410_35033_3973.N1	11NOV2008 12:08:51	11NOV2008 13:04:11	0	GOOD
9	SCI_OL__2PRDPA20081111_134927_000033242073_00411_35034_4051.N1	11NOV2008 13:49:27	11NOV2008 14:44:51	0	GOOD
10	SCI_OL__2PRDPA20081111_153003_000033272073_00412_35035_4052.N1	11NOV2008 15:30:03	11NOV2008 16:25:31	0	GOOD
11	SCI_OL__2PRDPA20081111_171040_000033312073_00413_35036_4106.N1	11NOV2008 17:10:40	11NOV2008 18:06:11	0	GOOD
12	SCI_OL__2PRDPA20081111_185109_000033612073_00414_35037_4107.N1	11NOV2008 18:51:09	11NOV2008 19:47:10	0	GOOD
13	SCI_OL__2PRDPA20081111_203213_000033172073_00415_35038_4109.N1	11NOV2008 20:32:13	11NOV2008 21:27:31	0	GOOD
14	SCI_OL__2PRDPA20081111_221229_000033412073_00416_35039_4112.N1	11NOV2008 22:12:29	11NOV2008 23:08:10	0	GOOD
15	SCI_OL__2PRDPA20081111_235305_000033442073_00417_35040_4113.N1	11NOV2008 23:53:05	12NOV2008 00:48:50	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: 143692

Total number of cloud data DSRs with good quality flag (=0): 143692 (100.0 %)

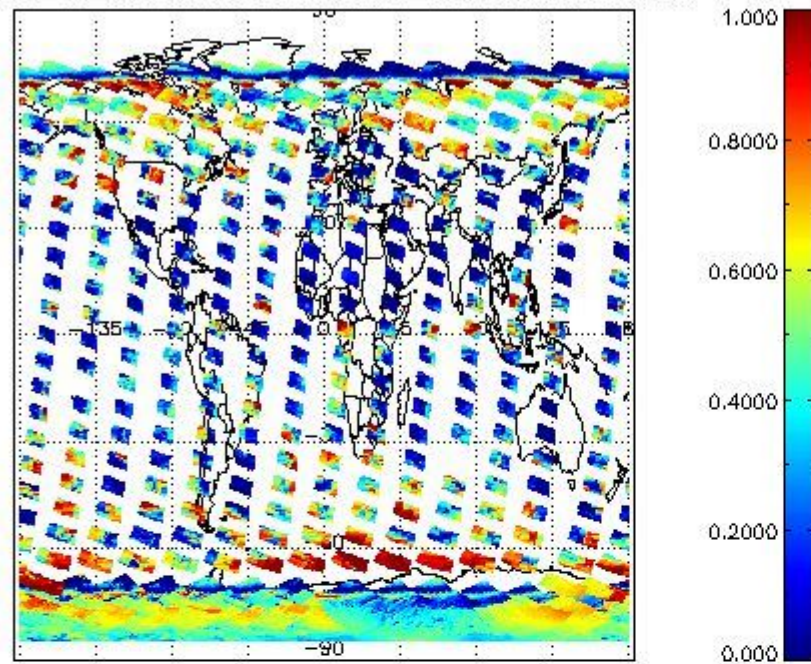
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	143692	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	143692	0.17499	0.12500	0.12500	0.25000	0.061234	s
CL_FRAC	143692	0.38138	0.37690	0.0000	1.0000	0.27631	-
CL_FRAC_ERR	143692	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	143692	5.5995	4.0000	4.0000	8.0000	1.9595	
PMD_READ_CL[0]	143692	0.20652	0.0000	0.0000	8.0000	1.0230	-
PMD_READ_CL[1]	143692	0.98069	0.0000	0.0000	8.0000	2.1507	-
CL_TOP_HEIGHT	118205	4.0445	3.0470	0.0000	17.000	3.8008	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	118205	51.452	38.835	0.0000	101.00	40.421	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	143692	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	143692	11001011	11000100	11000000	11100000	3395.2	flags
AERO_ABSO_IND	143692	2.9834	3.3739	-0.99289	14.176	2.2067	
AERO_IND_DIAG	143692	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	143692	01011100	00000000	00000000	11000000	24556.	flags

Time and geolocation plots:

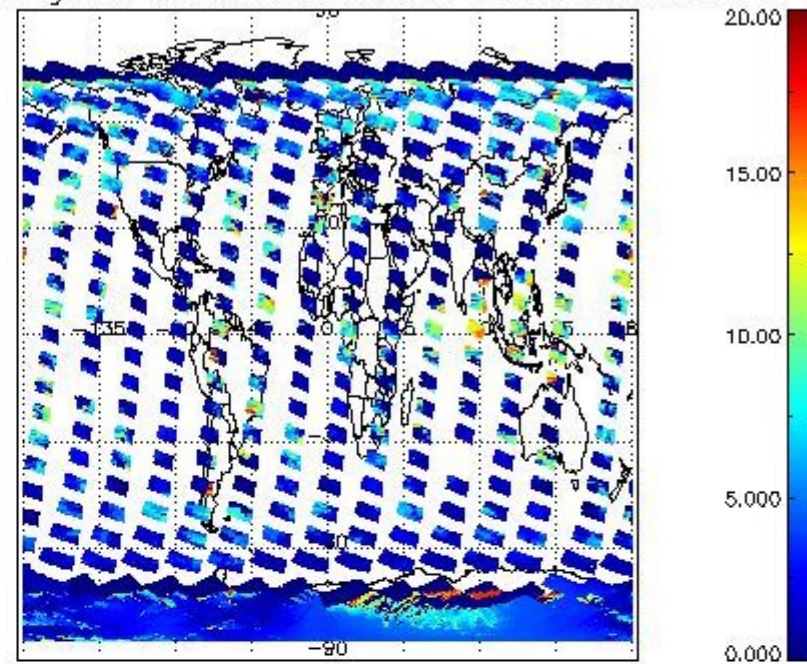
Plots are available for the following parameters:

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

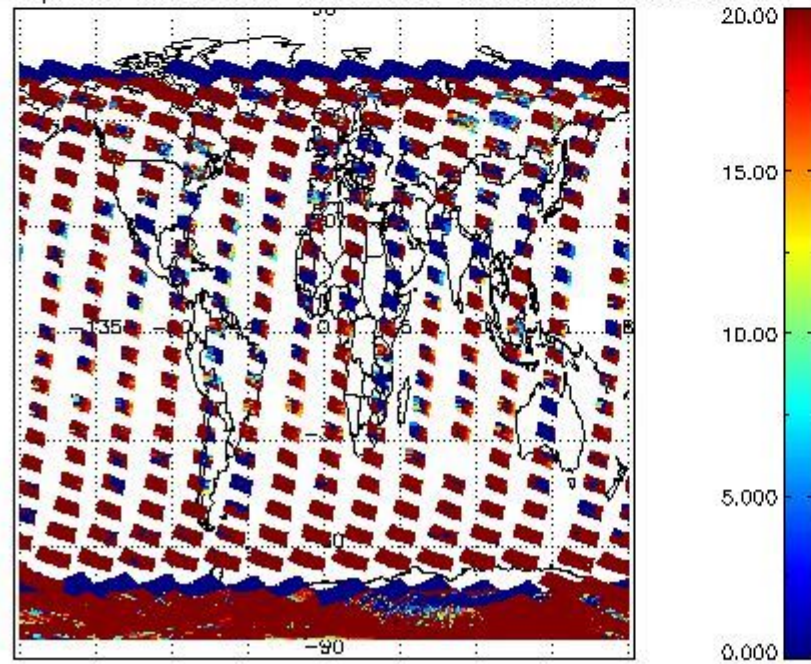
cLfrac for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



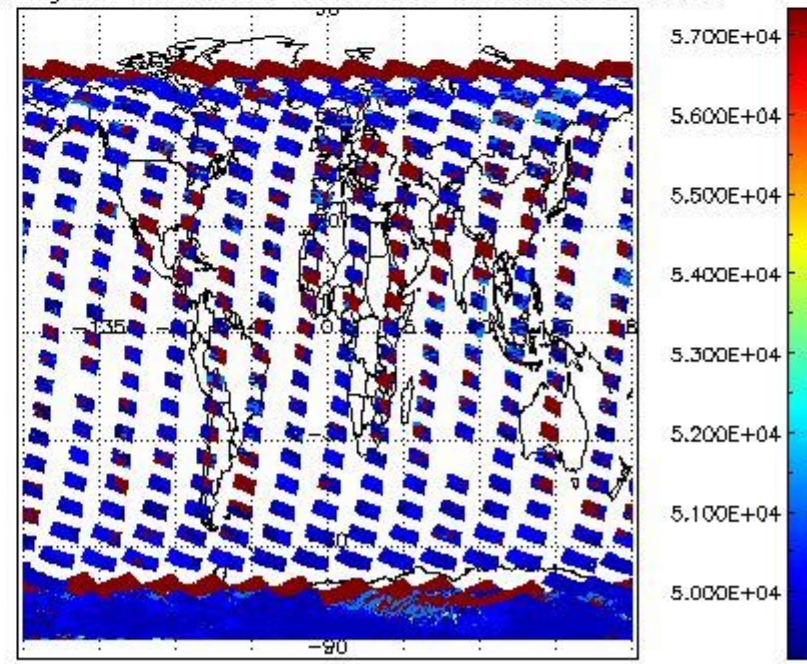
cL_top_height for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



cLopt_depth for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



cloud_flags for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



2.2.2 Nadir

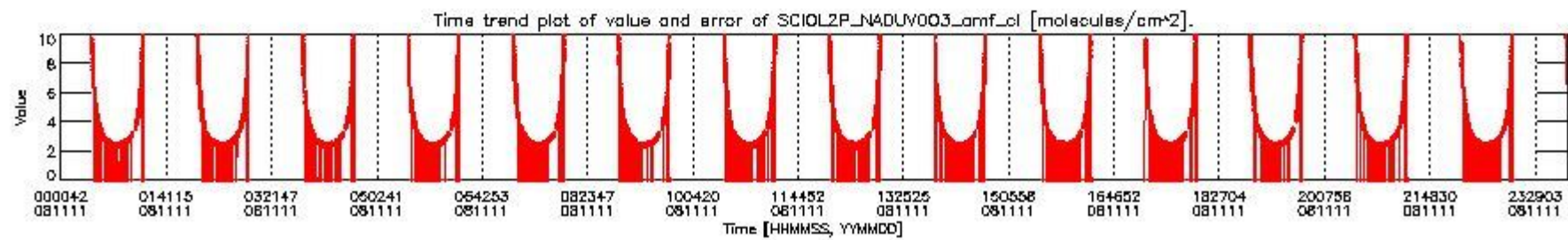
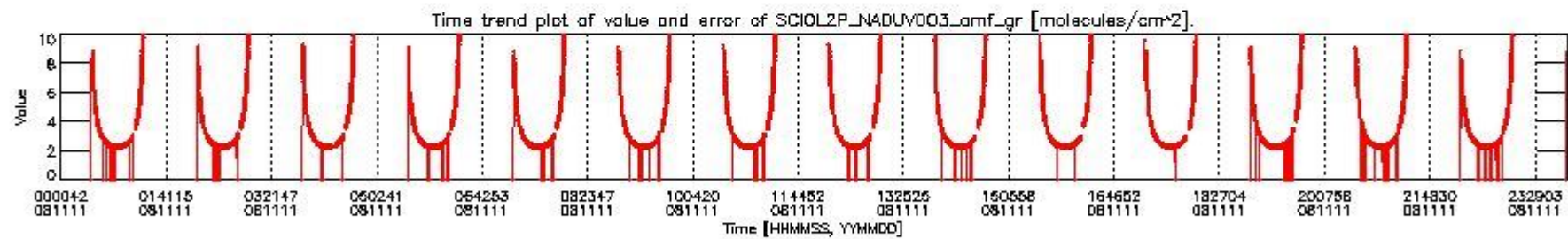
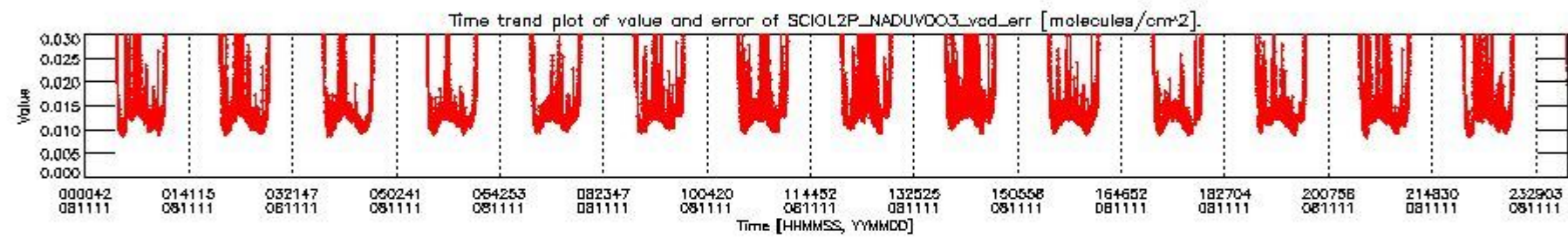
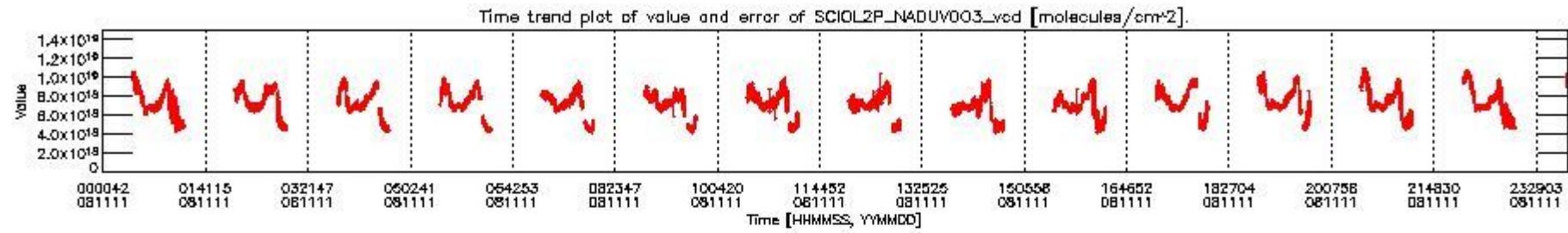
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

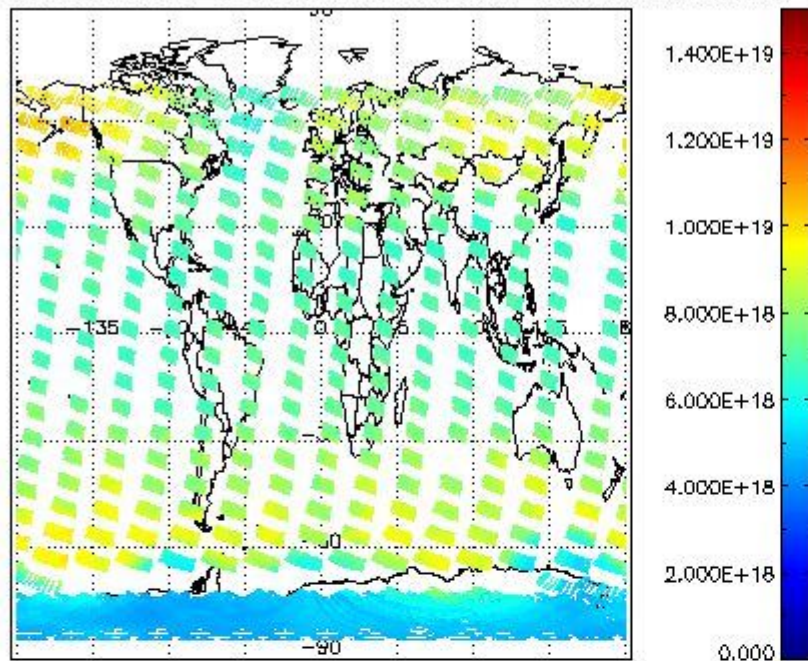
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

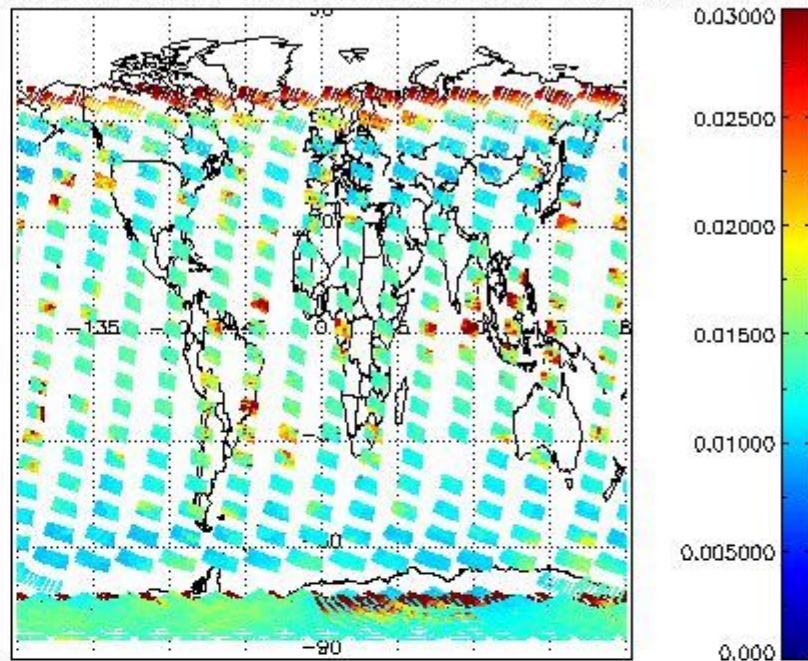
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



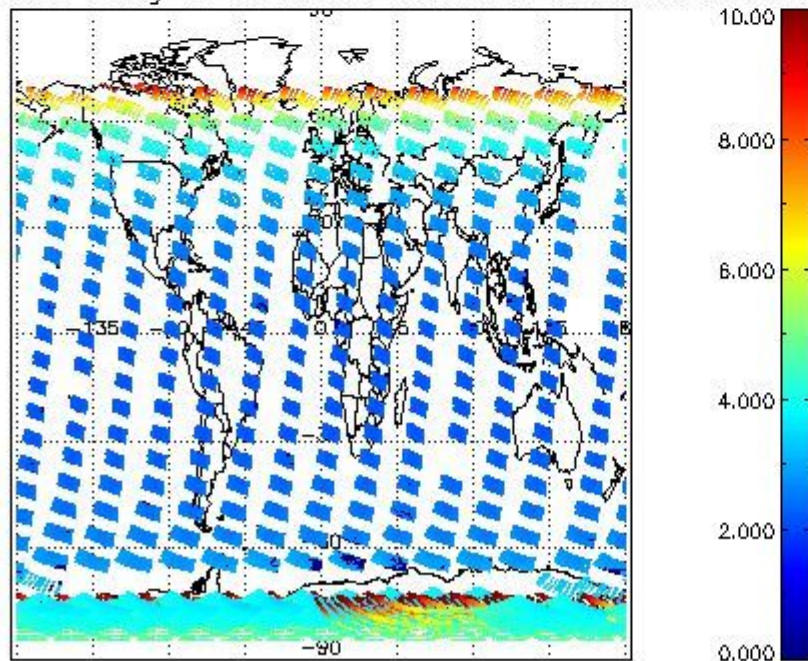
SCIOL2P_NADUV003_vcd for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



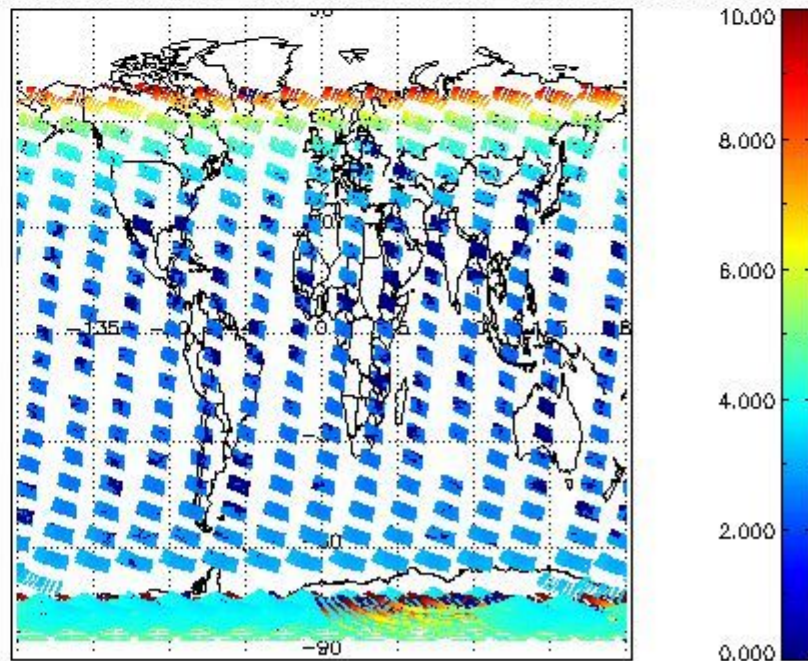
SCIOL2P_NADUV003_vcd_err for 11NOV2008 00:00:00 to 12NOV2008 00:00:00

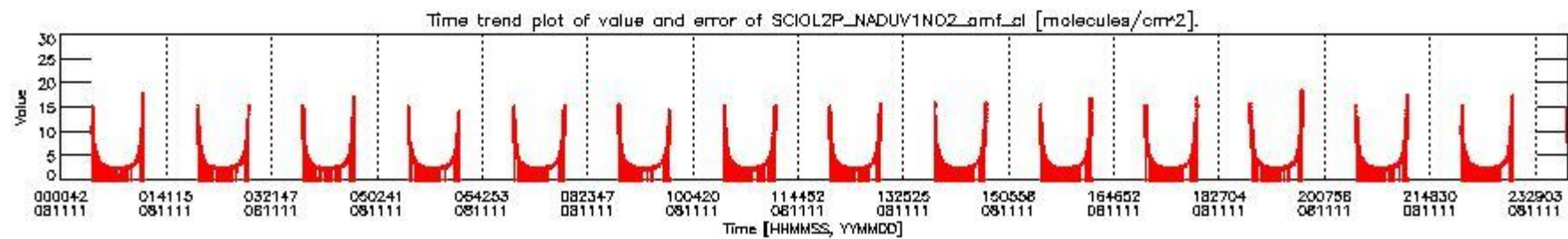
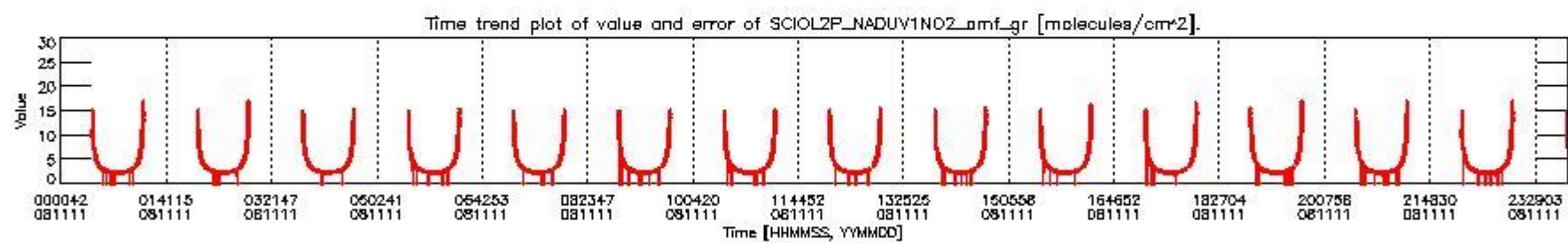
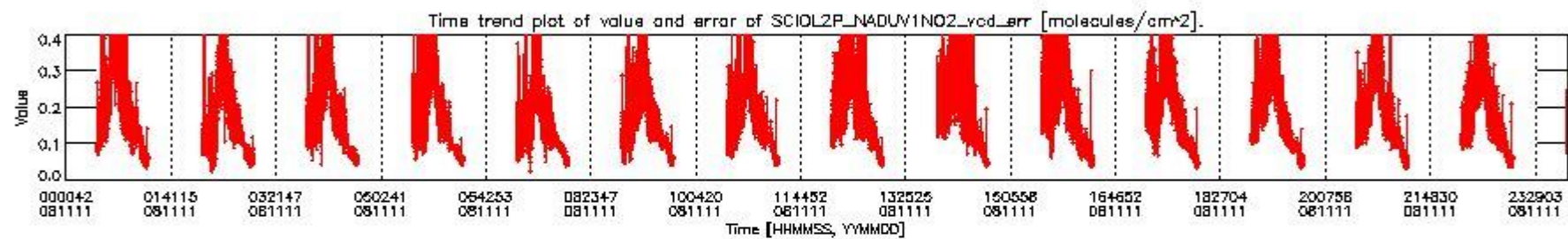
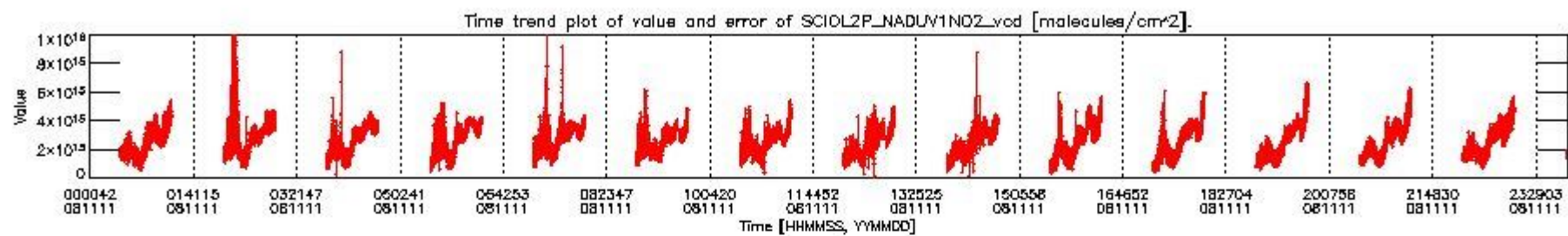


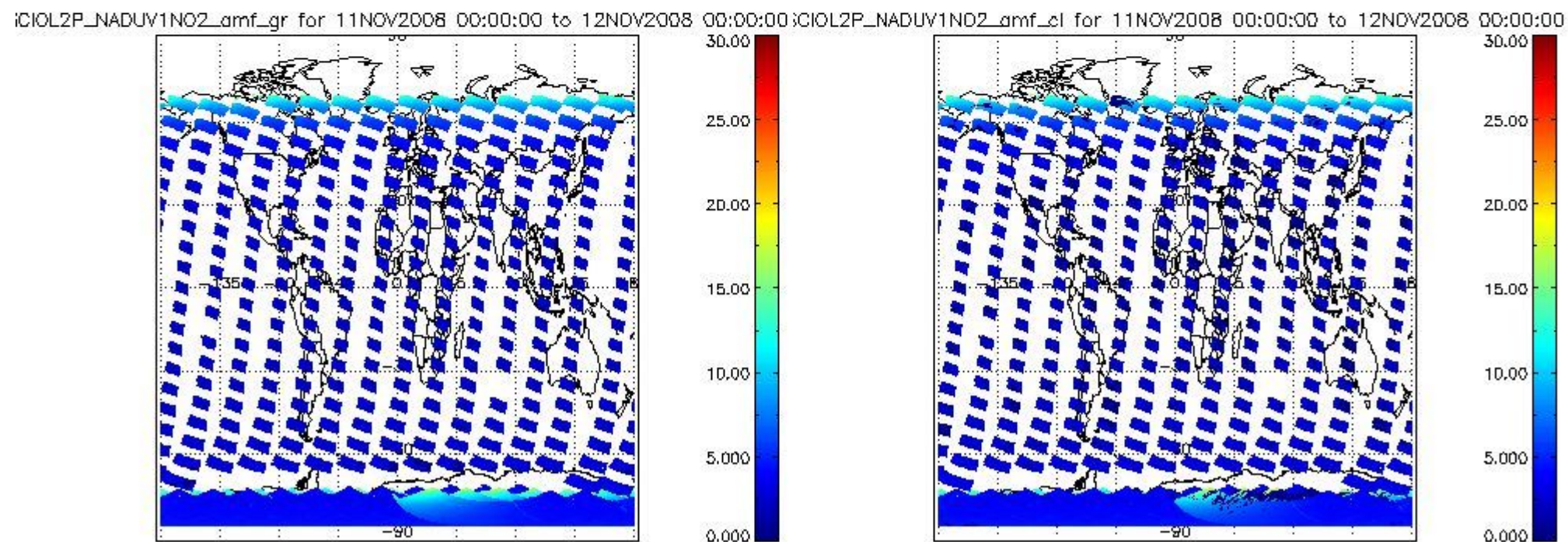
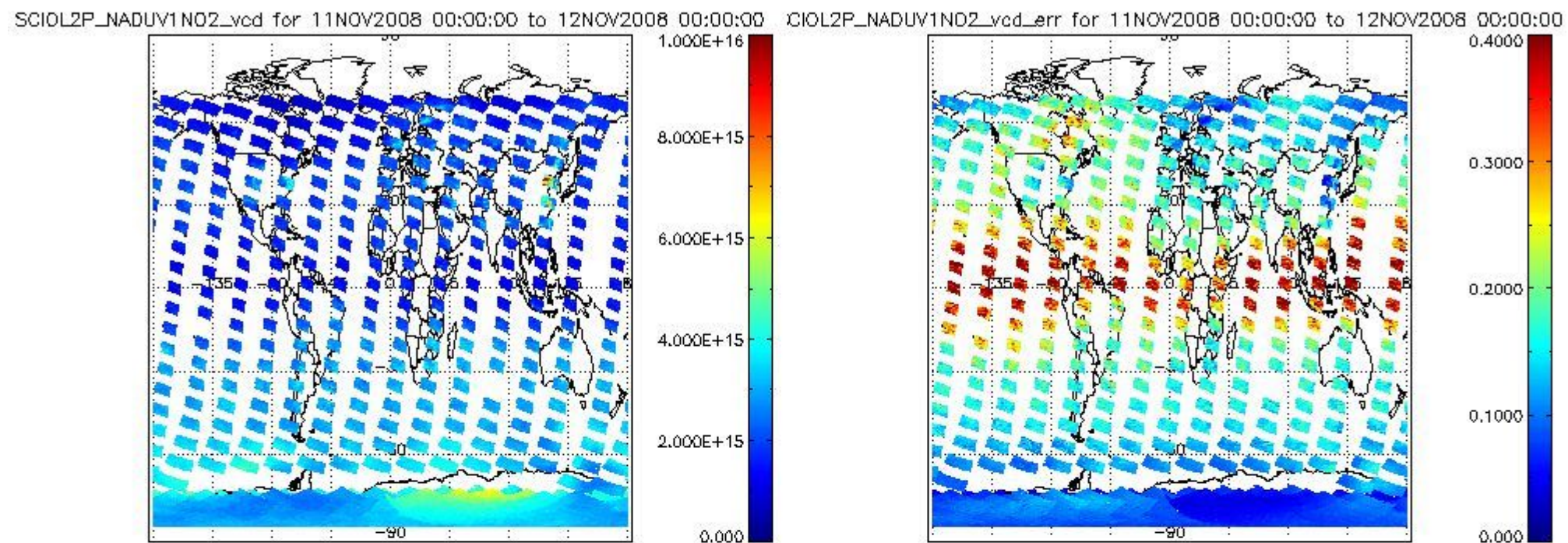
SCIOL2P_NADUV003_amf_gr for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 11NOV2008 00:00:00 to 12NOV2008 00:00:00







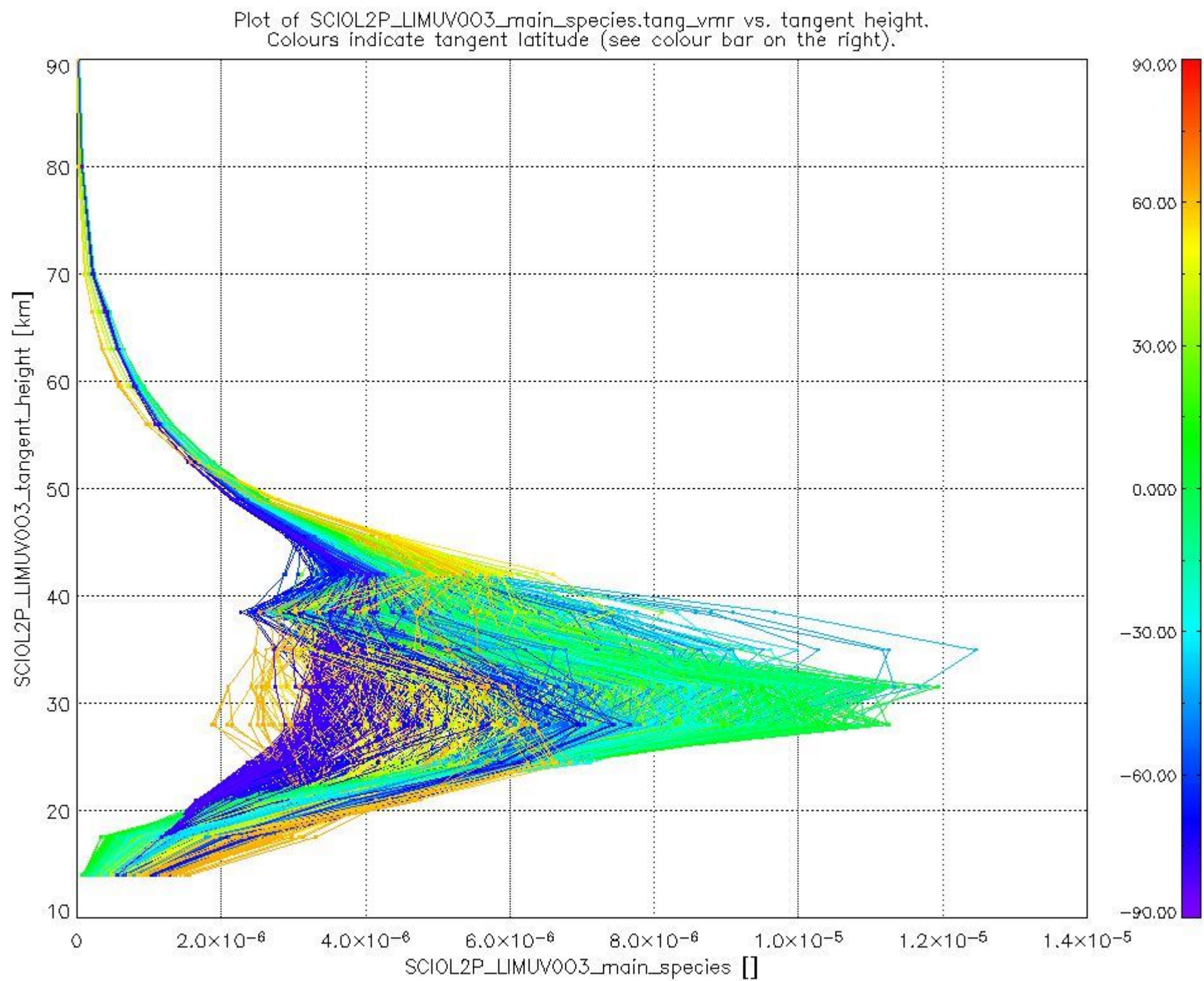
2.2.3 Limb

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

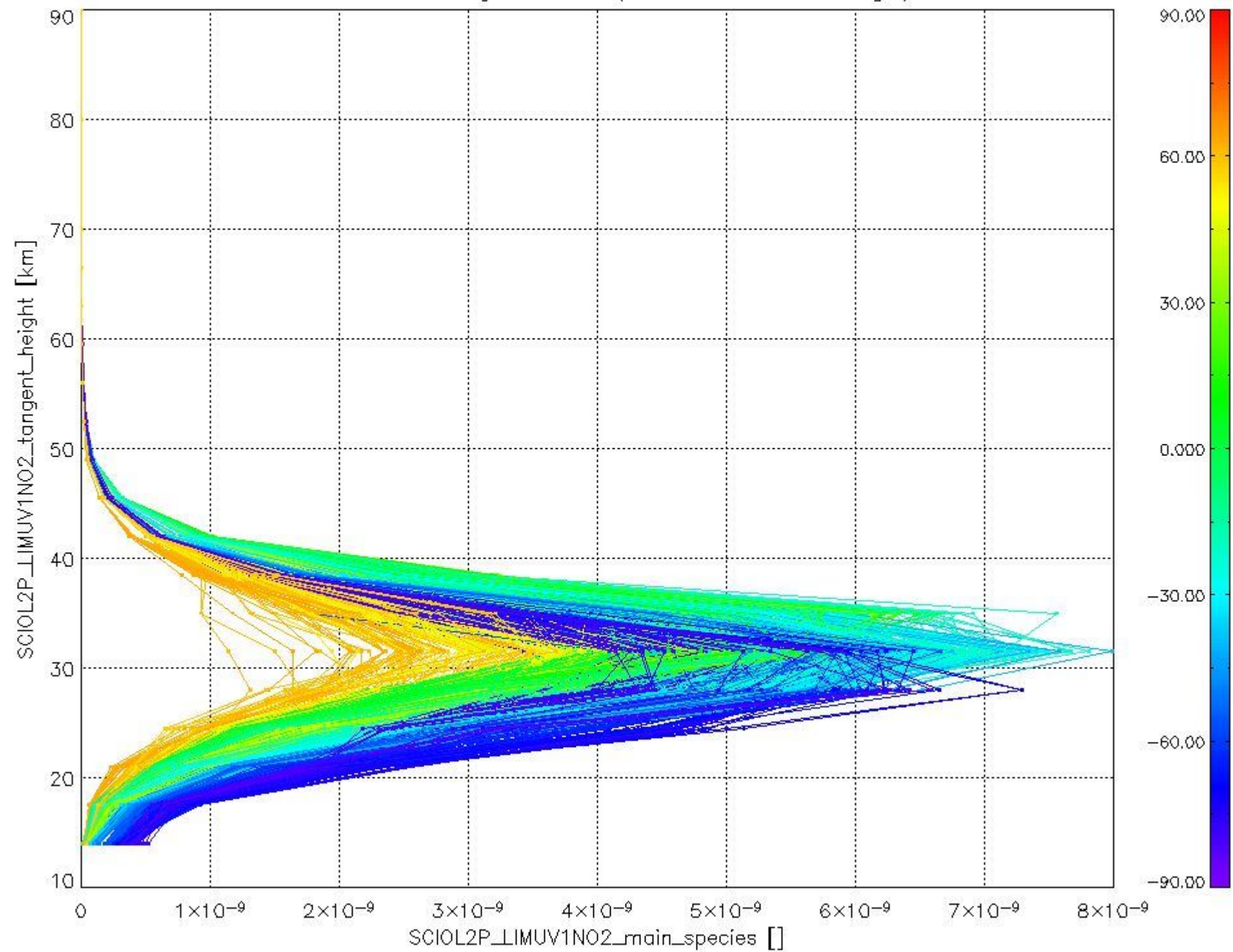
The following data items are currently included into this section:

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.



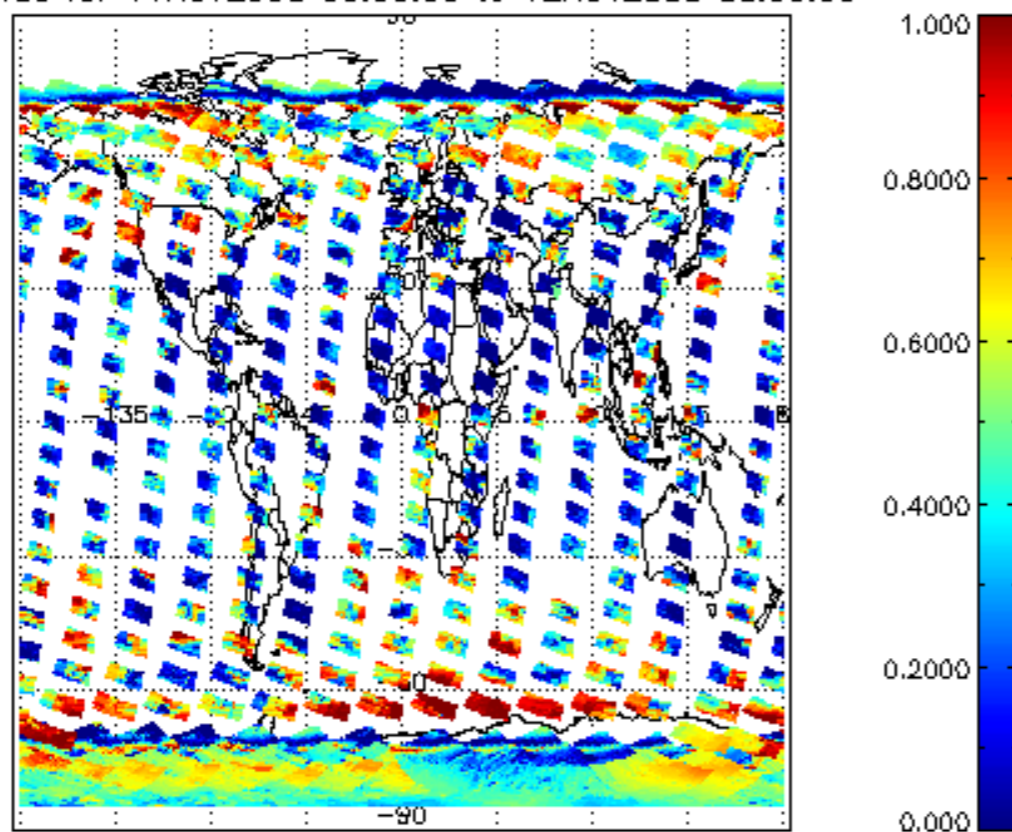
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



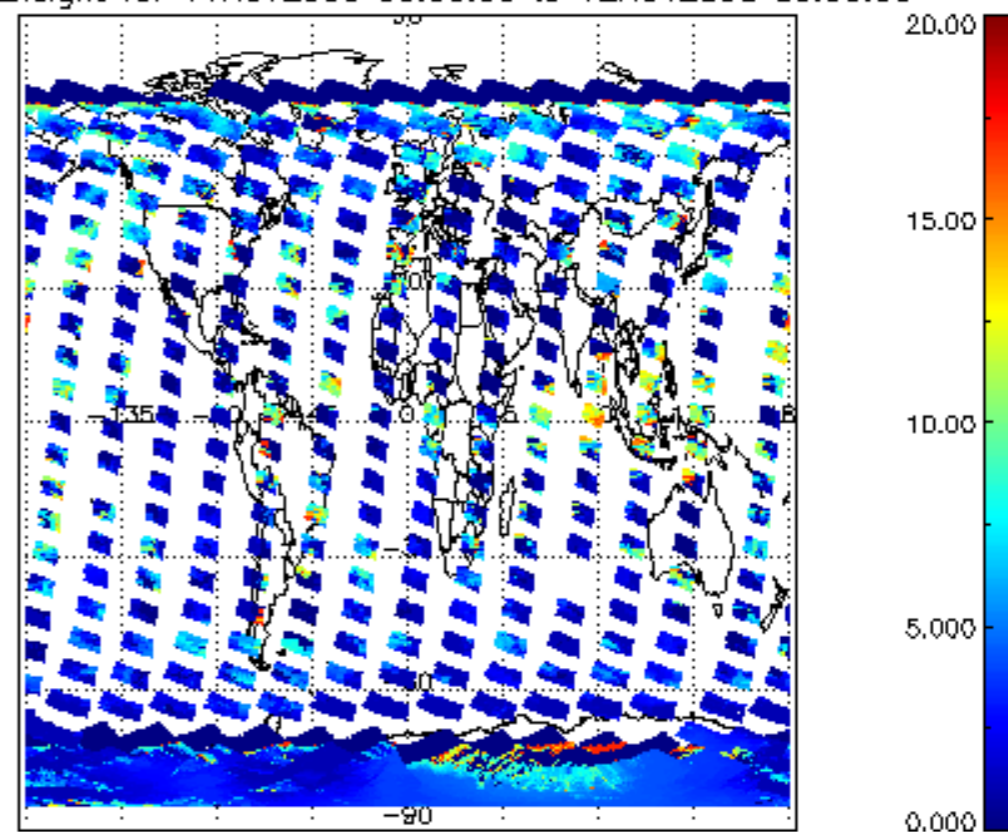
2.3 ADF monitoring

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

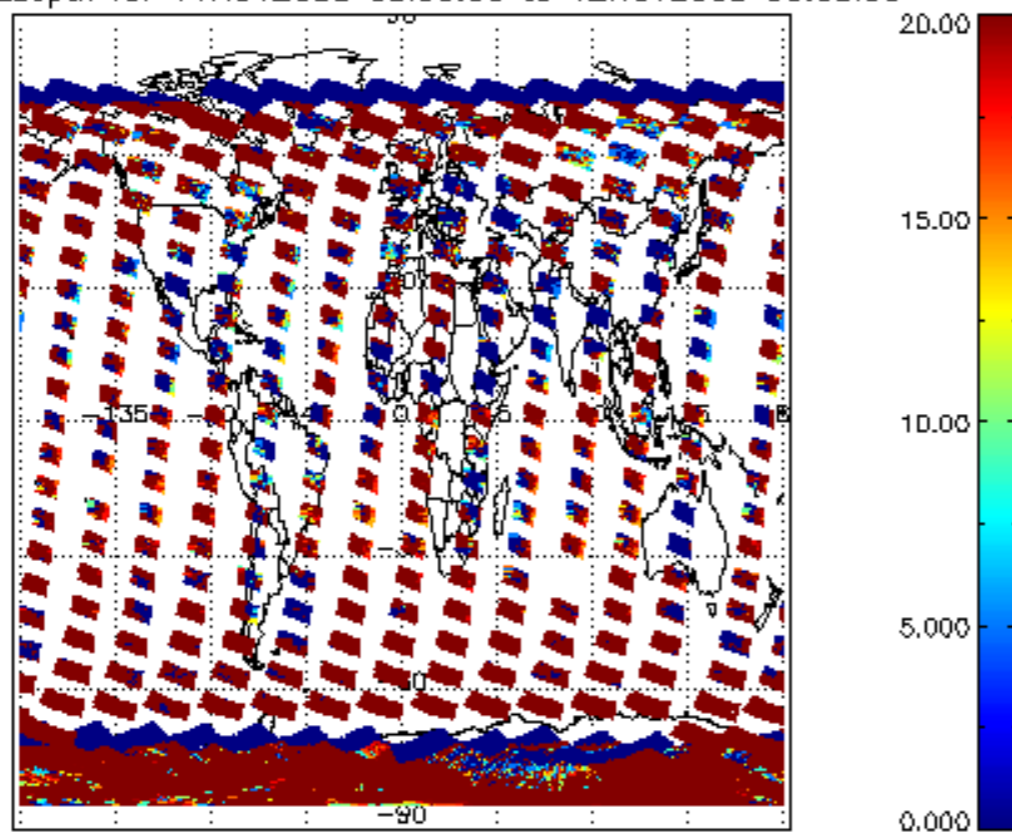
cLfrac for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



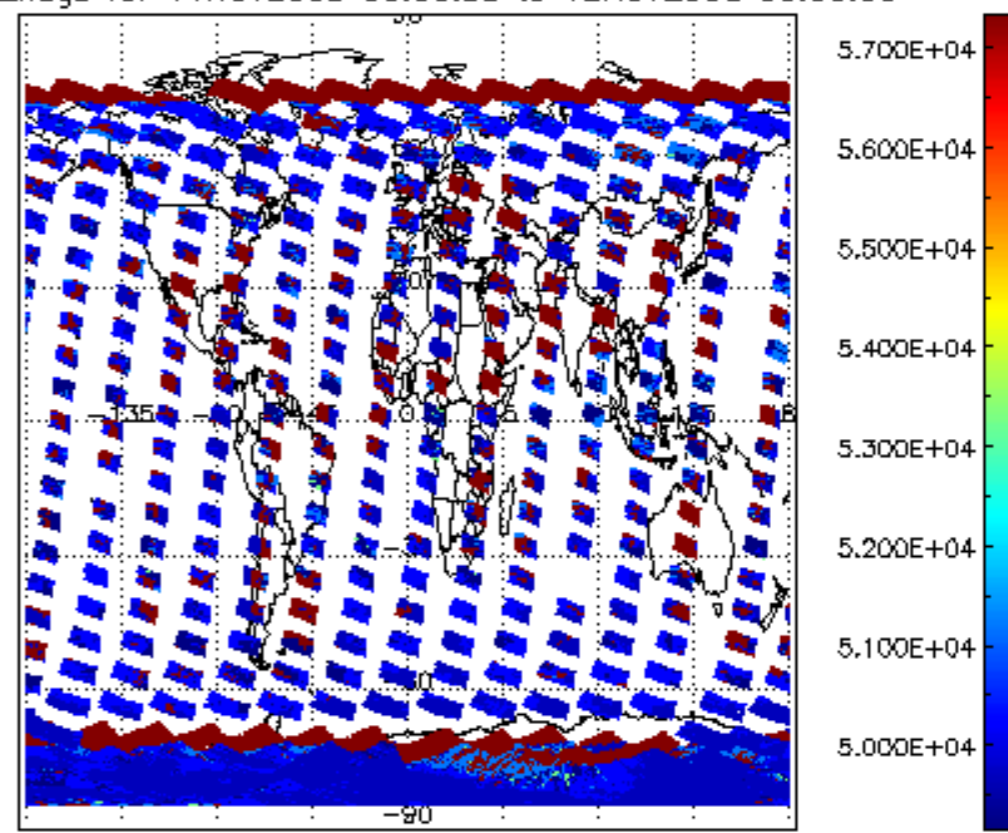
cL_top_height for 11NOV2008 00:00:00 to 12NOV2008 00:00:00

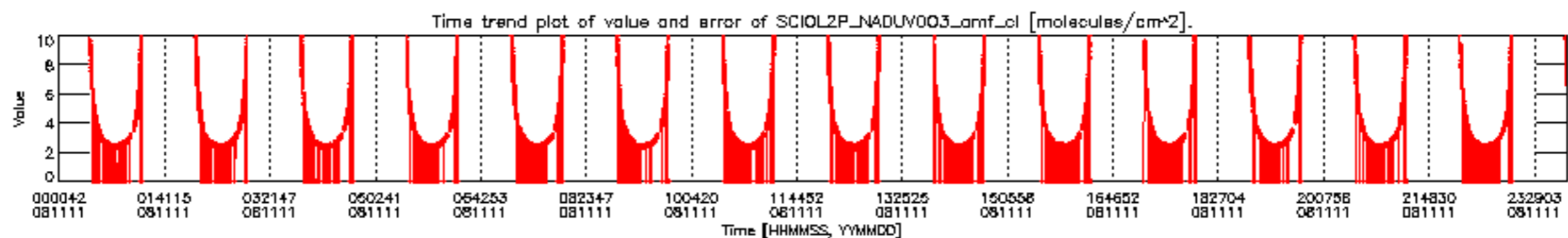
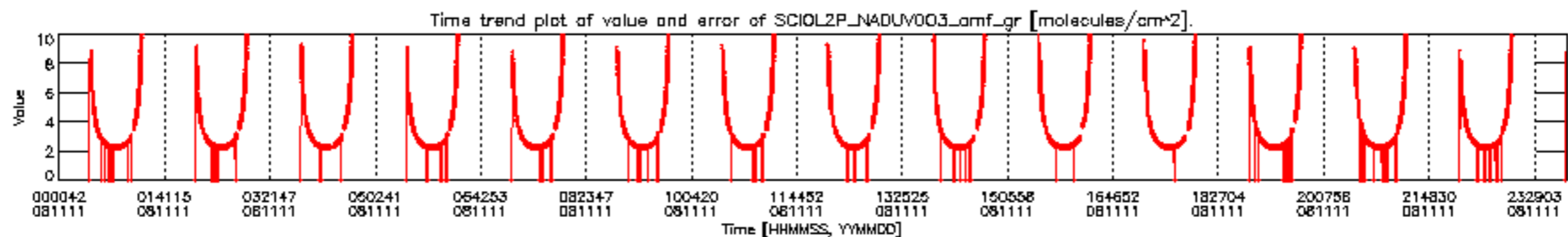
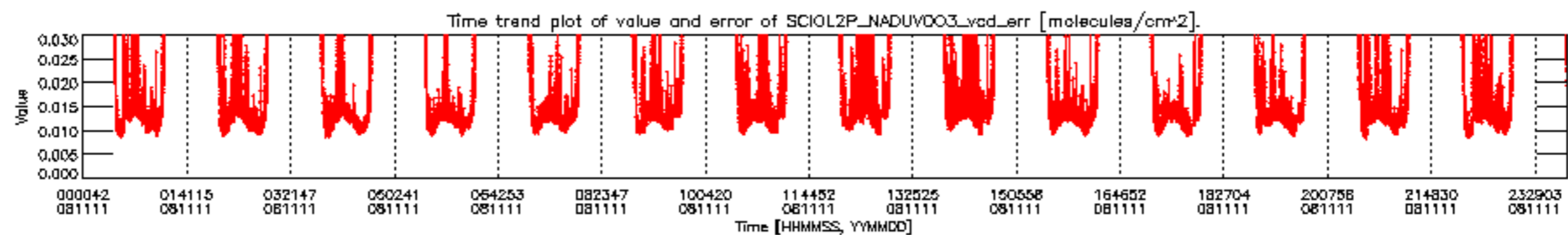
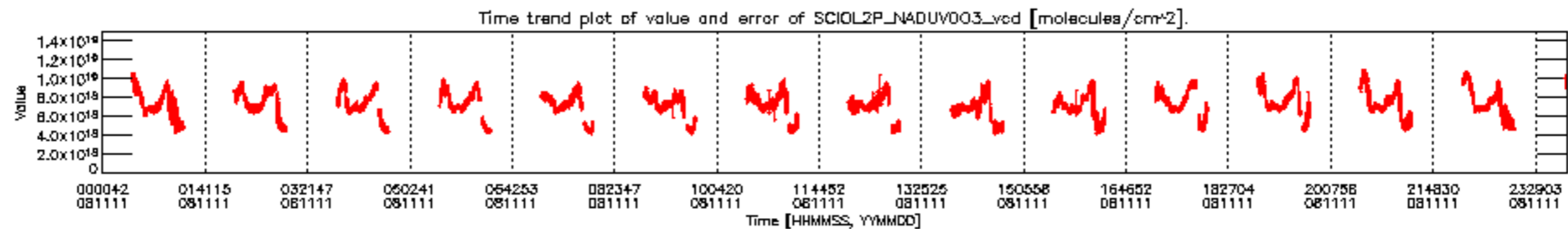


cL_opt_depth for 11NOV2008 00:00:00 to 12NOV2008 00:00:00

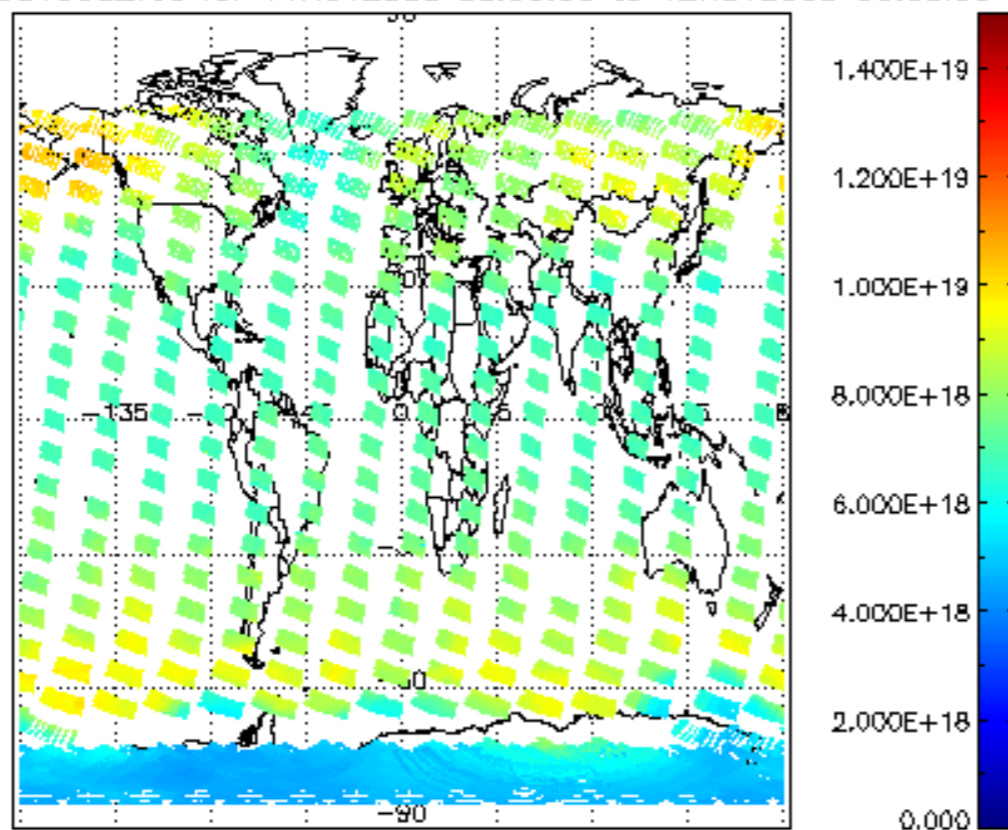


cloud_flags for 11NOV2008 00:00:00 to 12NOV2008 00:00:00

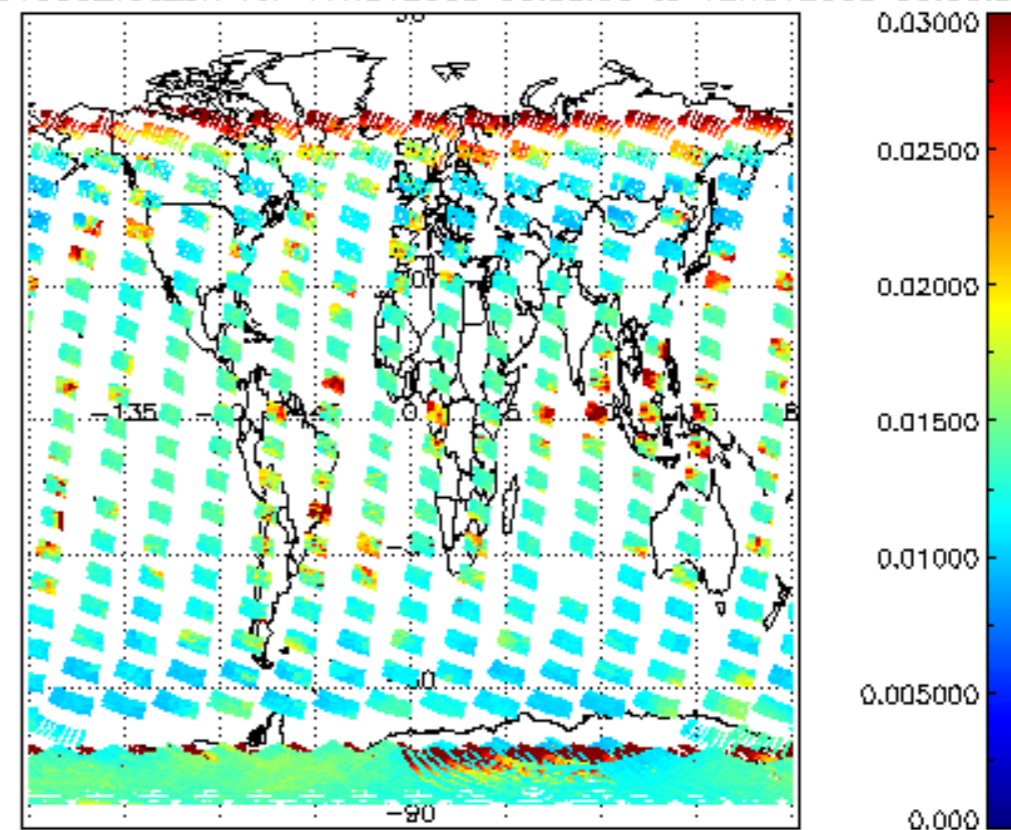




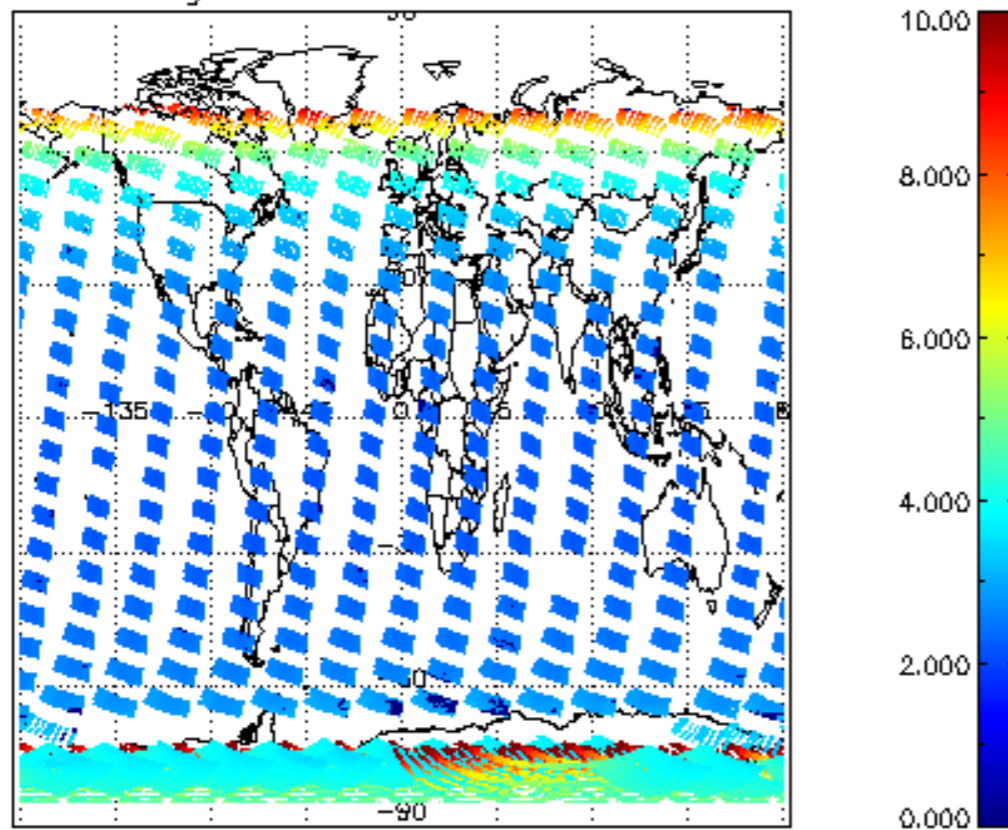
SCIOL2P_NADUV003_vcd for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



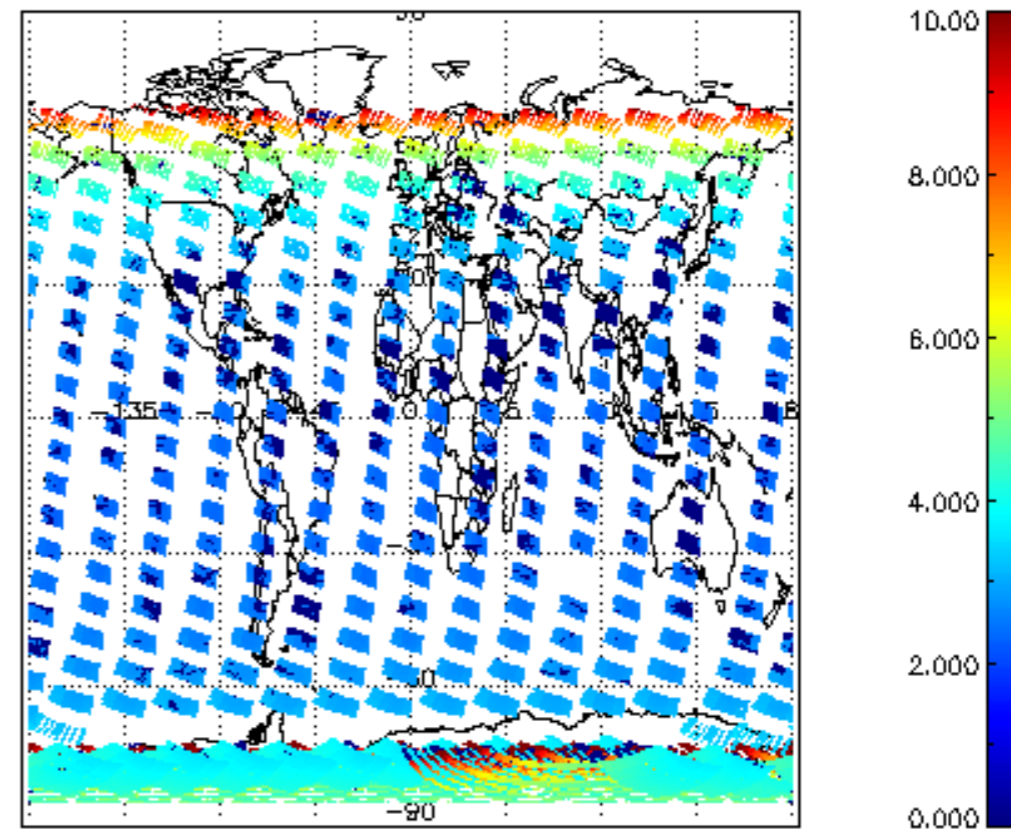
SCIOL2P_NADUV003_vcd_err for 11NOV2008 00:00:00 to 12NOV2008 00:00:00

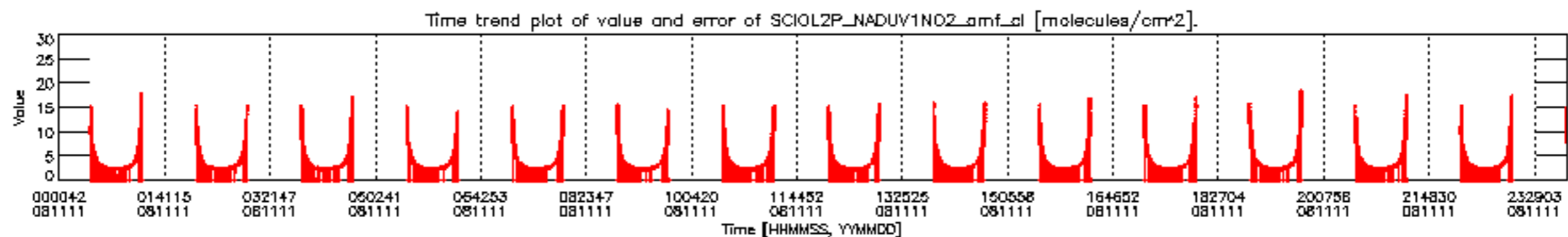
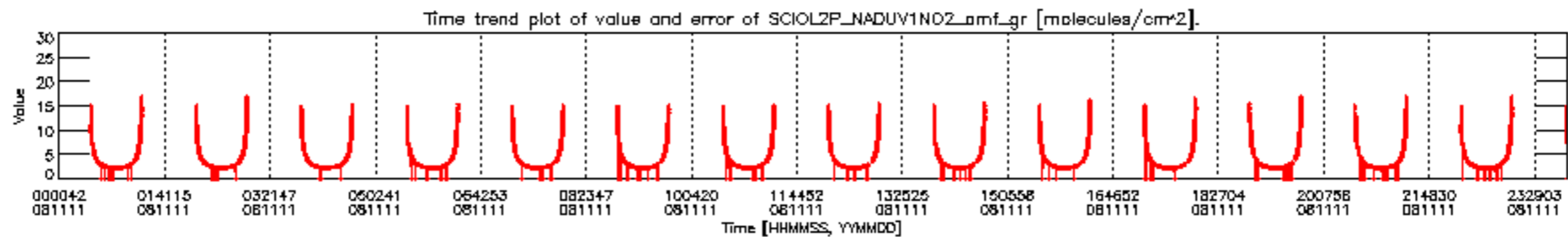
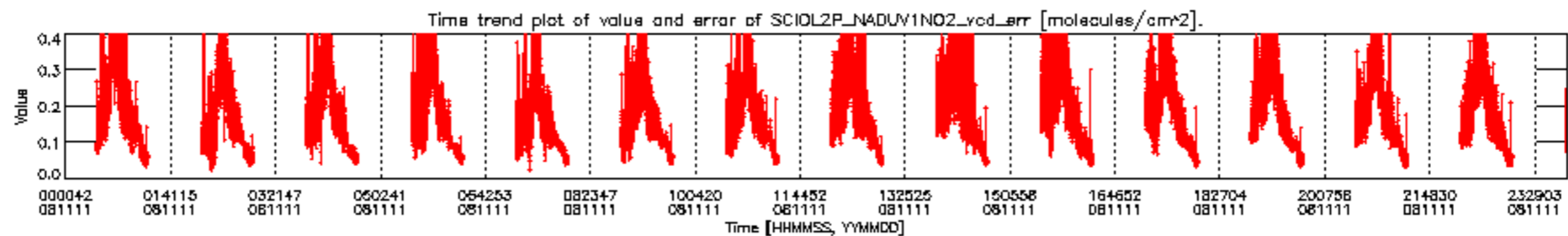
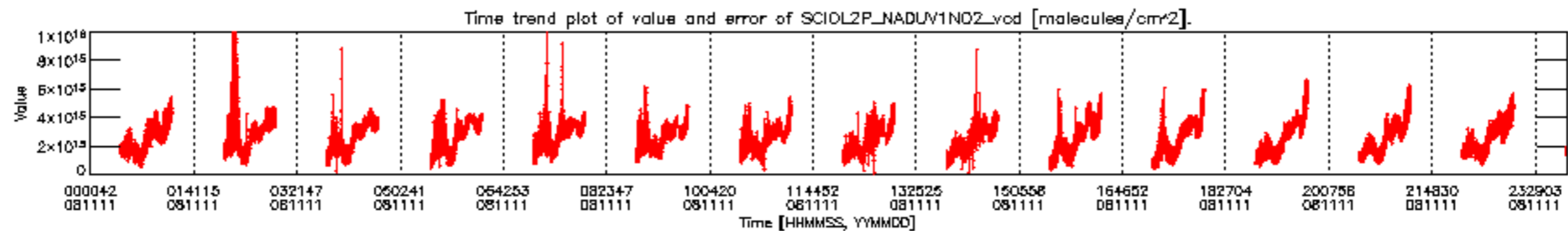


SCIOL2P_NADUV003_amf_gr for 11NOV2008 00:00:00 to 12NOV2008 00:00:00

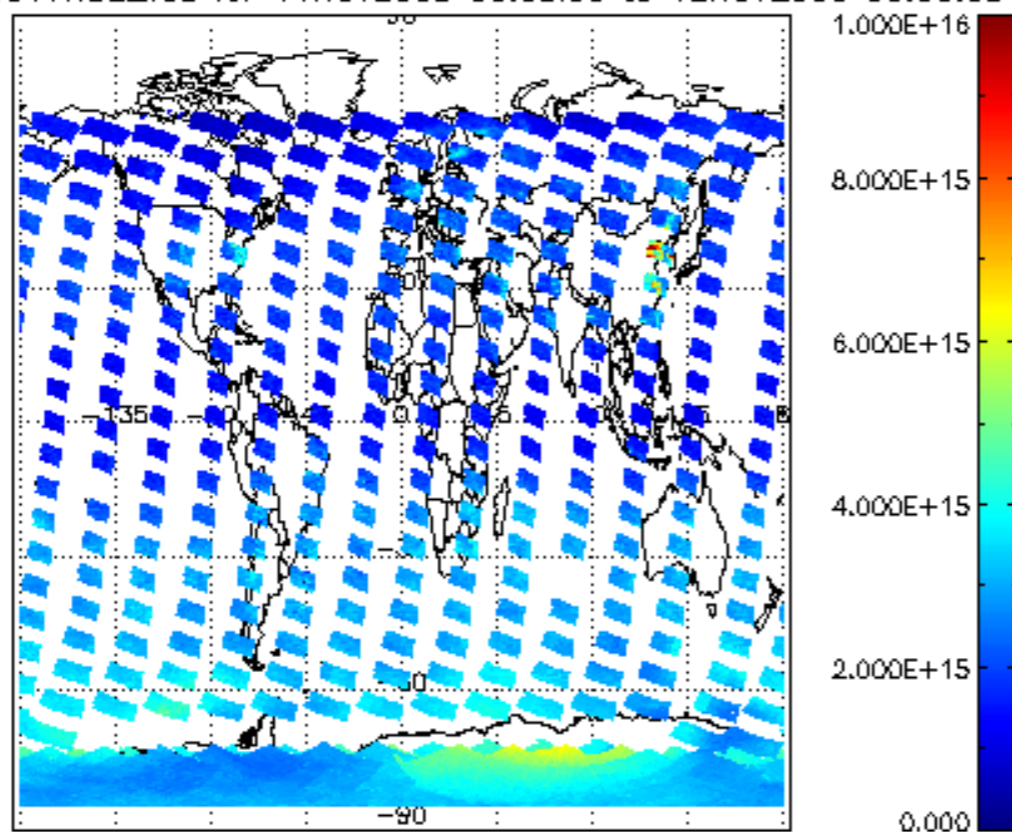


SCIOL2P_NADUV003_amf_cl for 11NOV2008 00:00:00 to 12NOV2008 00:00:00

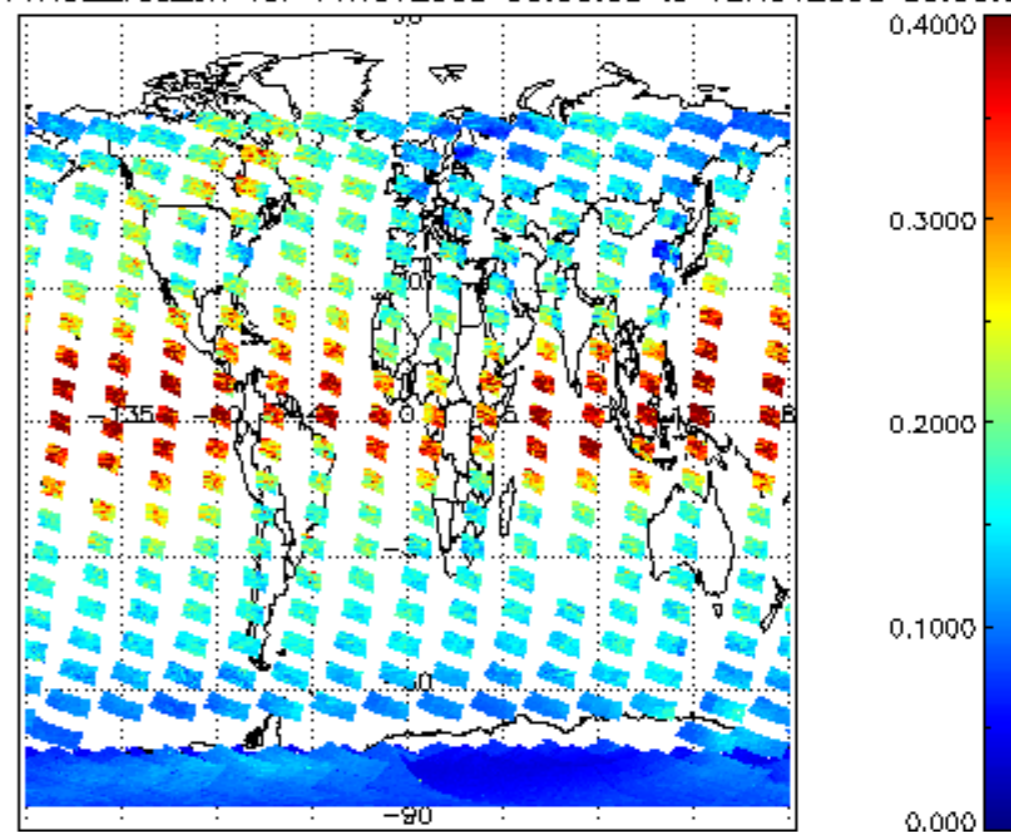




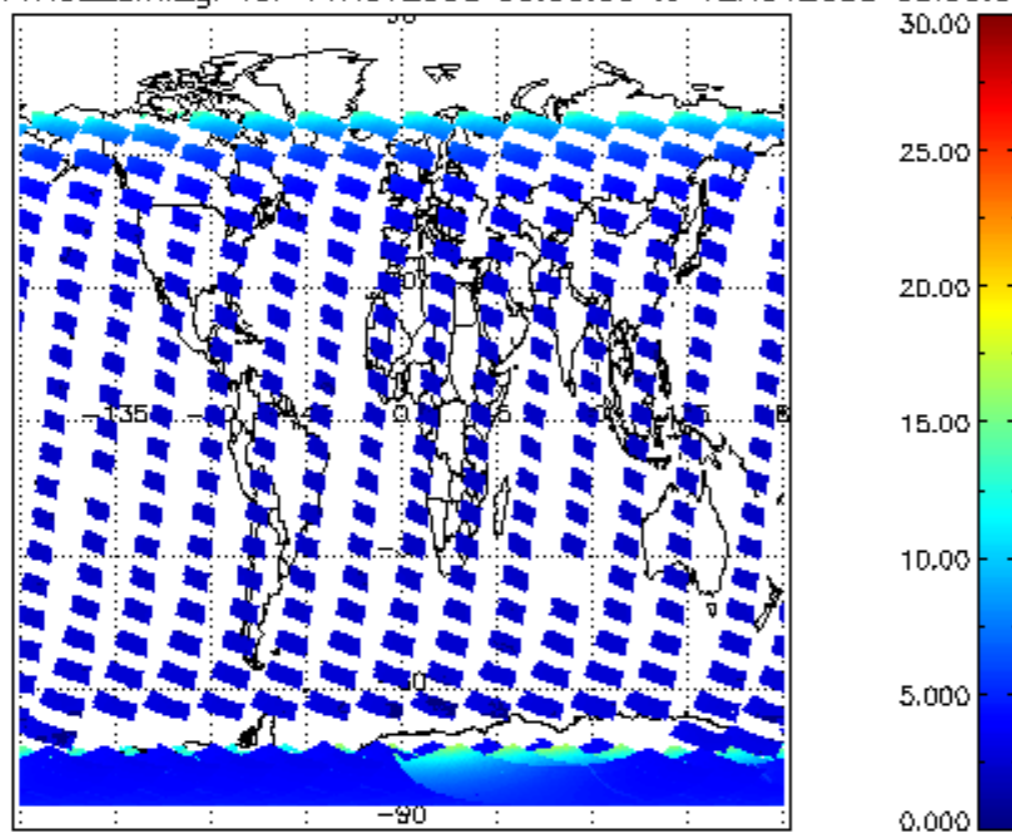
SCIOL2P_NADUV1NO2_vcd for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



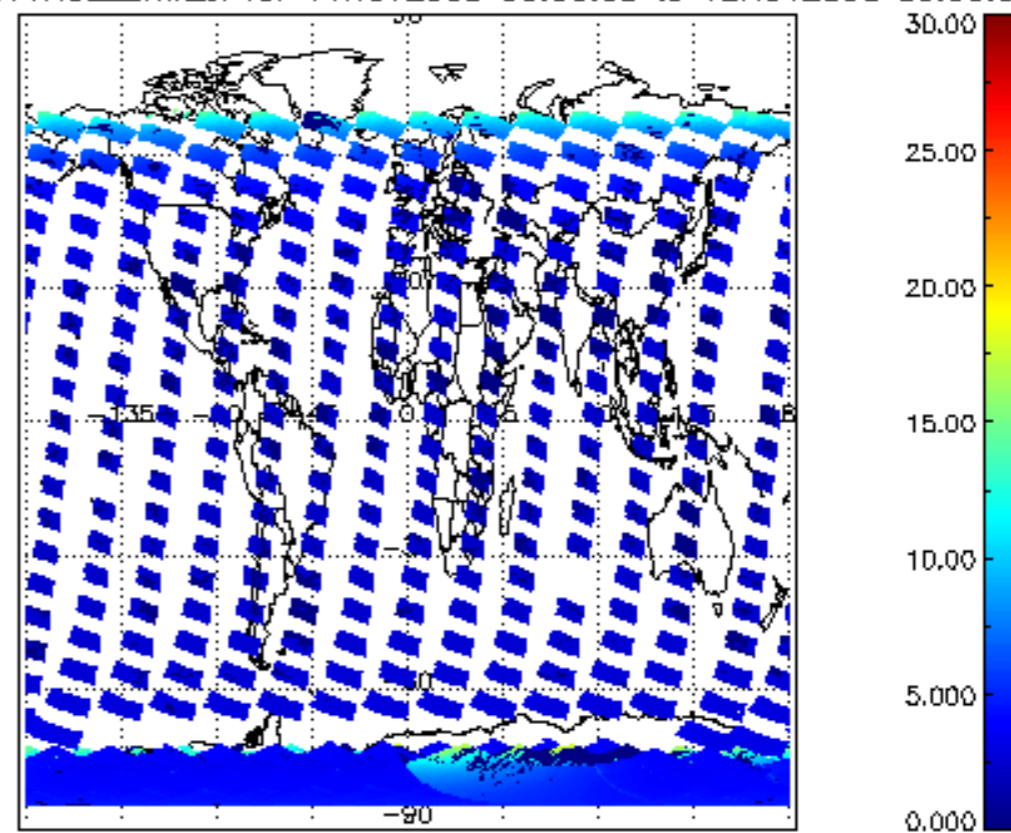
SCIOL2P_NADUV1NO2_vcd_err for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



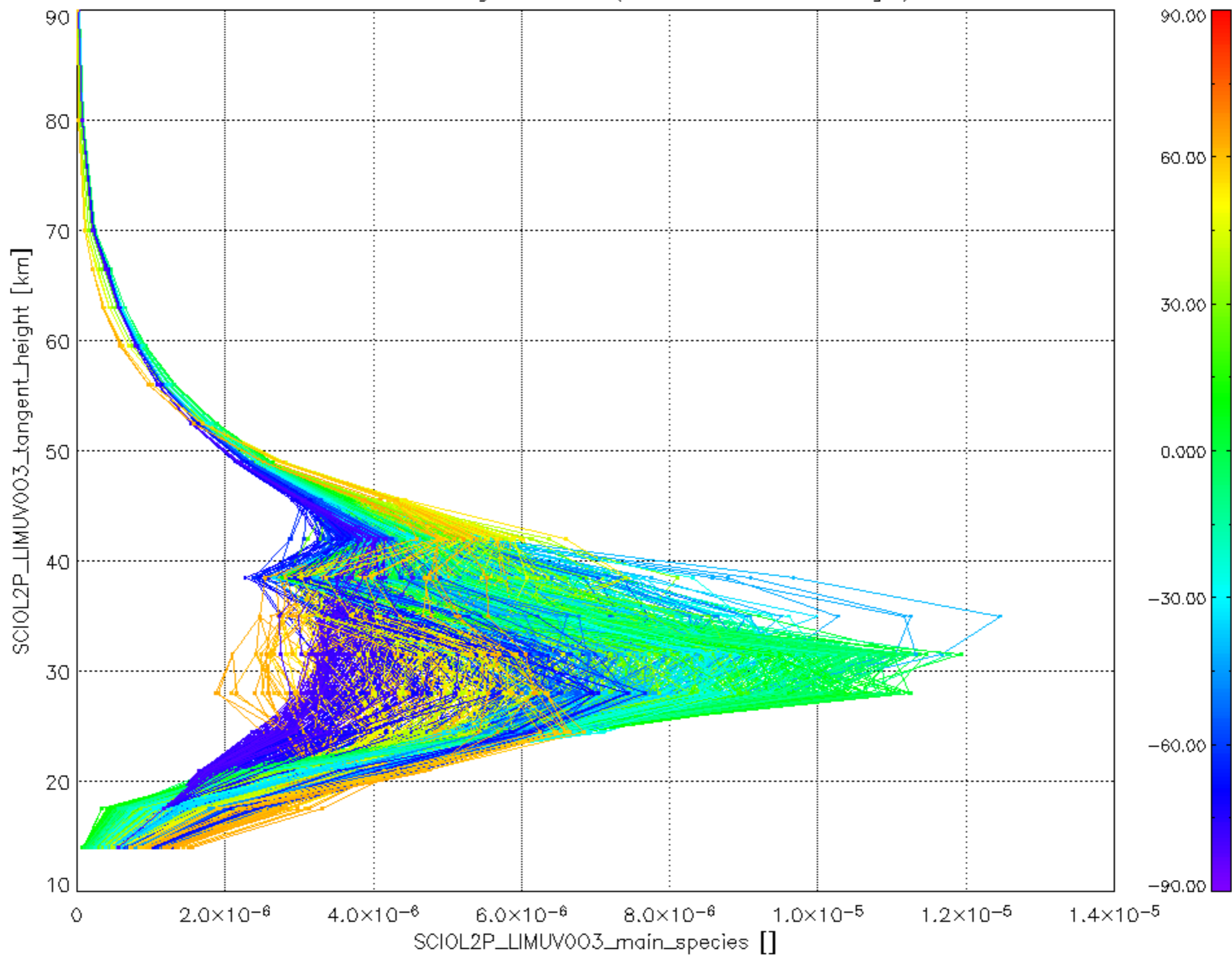
SCIOL2P_NADUV1NO2_amf_gr for 11NOV2008 00:00:00 to 12NOV2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 11NOV2008 00:00:00 to 12NOV2008 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_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

