

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	1.12 (24-06-2010)
Time of report generation	14FEB2011 03:03:41
Data source version	SCIA-OL/5.01-U
Processing scope for products	27JAN2011 00:00:00 to 28JAN2011 00:00:00
Start time of first product within scope	26JAN2011 23:25:50
Stop time of last product within scope	27JAN2011 23:48:45
Total number of level 2 products	15
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.

Products are checked for a minimum duration of 3500.0000 seconds and a maximum duration of 6000.0000 seconds. Products failing the duration test are highlighted in bold, and their stop time is highlighted in red.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PUDPA20110126_232550_000035843099_00016_46582_3030.N1	26JAN2011 23:25:50	27JAN2011 00:25:34	0	GOOD
1	SCI_OL__2PUDPA20110127_010603_000035993099_00017_46583_3031.N1	27JAN2011 01:06:03	27JAN2011 02:06:02	0	GOOD
2	SCI_OL__2PUDPA20110127_024617_000035843099_00018_46584_3032.N1	27JAN2011 02:46:17	27JAN2011 03:46:02	0	GOOD
3	SCI_OL__2PUDPA20110127_042631_000035993099_00019_46585_3033.N1	27JAN2011 04:26:31	27JAN2011 05:26:30	0	GOOD
4	SCI_OL__2PUDPA20110127_060644_000035843099_00020_46586_3034.N1	27JAN2011 06:06:44	27JAN2011 07:06:29	0	GOOD

5	SCI_OL__2PUDPA20110127_074658_000035993099_00021_46587_3035.N1	27JAN2011 07:46:58	27JAN2011 08:46:57	0	GOOD
6	SCI_OL__2PUDPA20110127_092711_000035843099_00022_46588_3036.N1	27JAN2011 09:27:11	27JAN2011 10:26:56	0	GOOD
7	SCI_OL__2PUDPA20110127_110725_000035993099_00023_46589_3037.N1	27JAN2011 11:07:25	27JAN2011 12:07:24	0	GOOD
8	SCI_OL__2PUDPA20110127_124739_000035843099_00024_46590_3038.N1	27JAN2011 12:47:39	27JAN2011 13:47:23	0	GOOD
9	SCI_OL__2PUDPA20110127_142752_000035993099_00025_46591_3039.N1	27JAN2011 14:27:52	27JAN2011 15:27:51	0	GOOD
10	SCI_OL__2PUDPA20110127_160806_000035843099_00026_46592_3040.N1	27JAN2011 16:08:06	27JAN2011 17:07:51	0	GOOD
11	SCI_OL__2PUDPA20110127_174841_000035993099_00027_46593_3041.N1	27JAN2011 17:48:41	27JAN2011 18:48:41	0	GOOD
12	SCI_OL__2PUDPA20110127_192855_000035843099_00028_46594_3042.N1	27JAN2011 19:28:55	27JAN2011 20:28:40	0	GOOD
13	SCI_OL__2PUDPA20110127_210847_000035993099_00029_46595_3043.N1	27JAN2011 21:08:47	27JAN2011 22:08:46	0	GOOD
14	SCI_OL__2PUDPA20110127_224901_000035843099_00030_46596_3044.N1	27JAN2011 22:49:01	27JAN2011 23:48:45	0	GOOD

2.2 Product Quality Indicators

2.2.1 Cloud parameters

This section 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: 176020

Total number of cloud data DSRs with good quality flag (=0): 176020 (100.0 %)

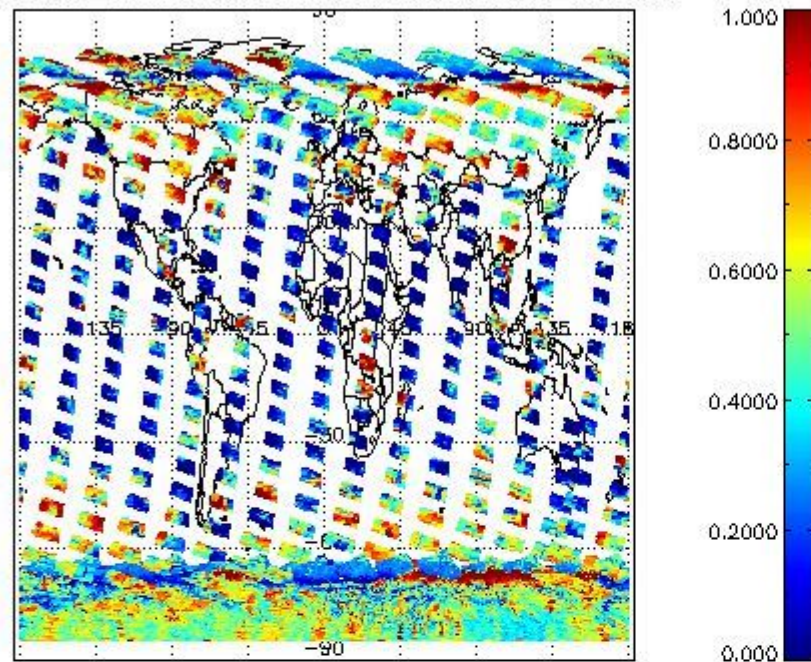
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	176020	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	176020	0.16359	0.12500	0.12500	0.25000	0.057746	s
CL_FRAC	176020	0.43349	0.43141	0.0000	1.0000	0.28445	-
CL_FRAC_ERR	176020	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	176020	5.2349	4.0000	4.0000	8.0000	1.8479	
PMD_READ_CL[0]	176020	0.38637	0.0000	0.0000	8.0000	1.1471	-
PMD_READ_CL[1]	176020	0.99811	0.0000	0.0000	8.0000	2.3205	-
CL_TOP_HEIGHT	136264	3.8777	3.1972	0.0000	17.000	3.4478	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	136264	59.549	62.054	0.0000	101.00	40.442	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	176020	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	176020	11001100	11000100	11000000	11100000	3493.2	flags
AERO_ABSO_IND	176020	0.44268	0.0000	0.0000	7.1764	0.77730	
AERO_IND_DIAG	176020	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	176020	01010000	00000000	00000000	11000000	24261.	flags

Time and geolocation plots:

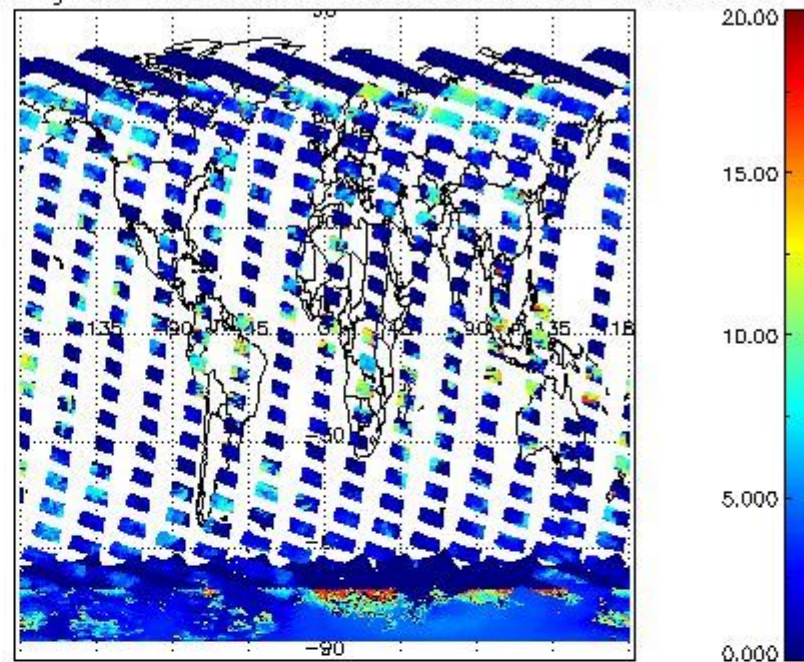
Plots are available for the following parameters:

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

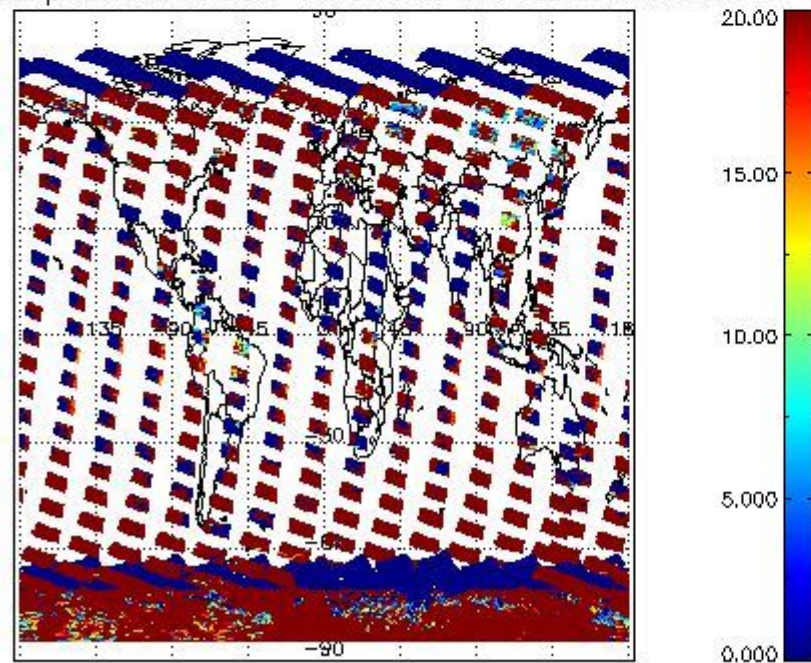
cL_frac for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



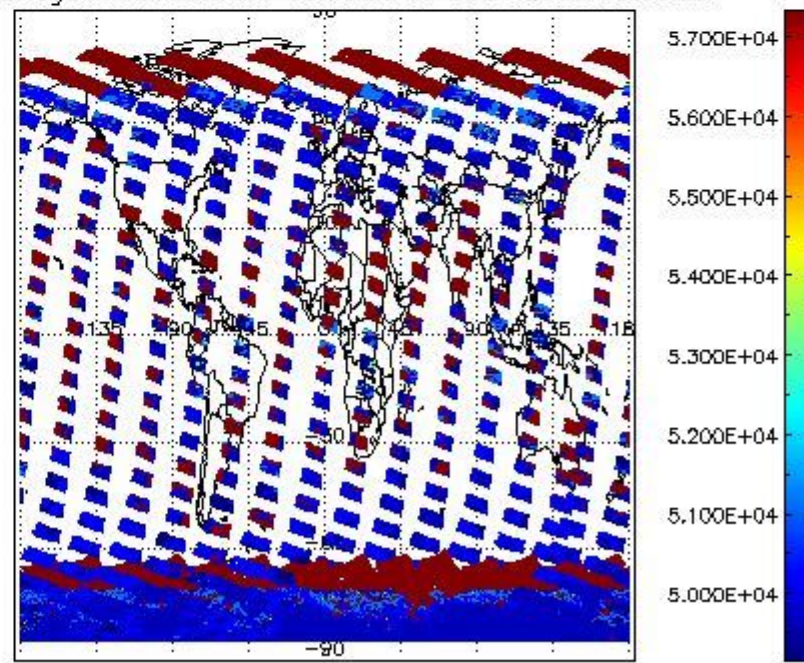
cL_top_height for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



cLopt_depth for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



cloud_flags for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



2.2.2 Nadir

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

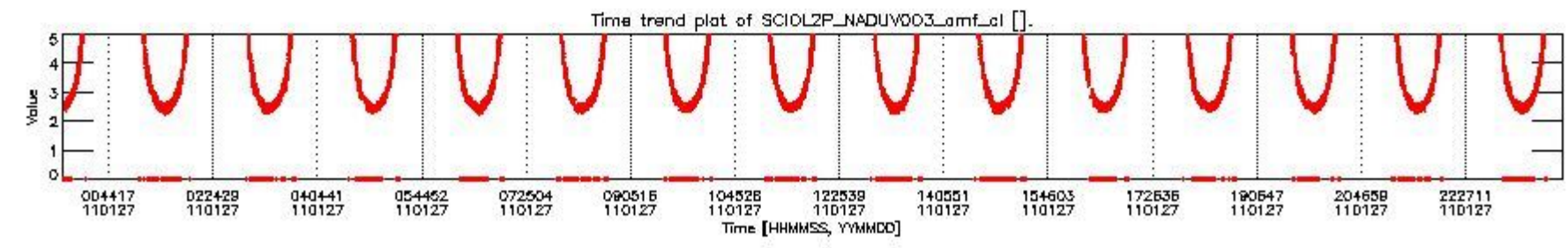
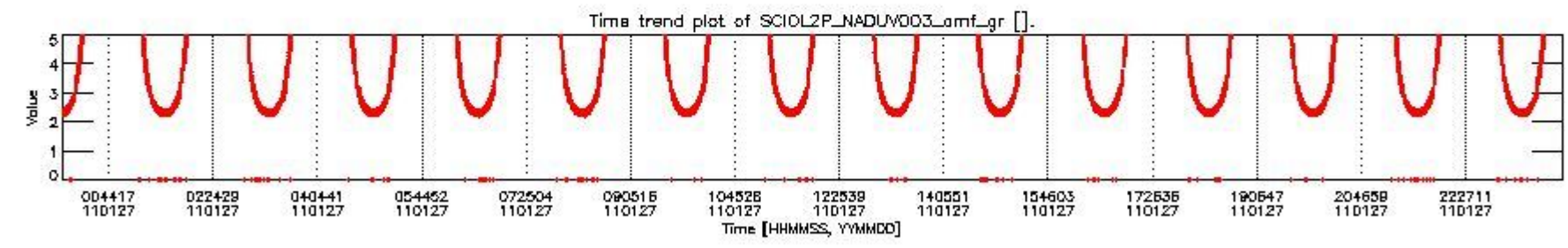
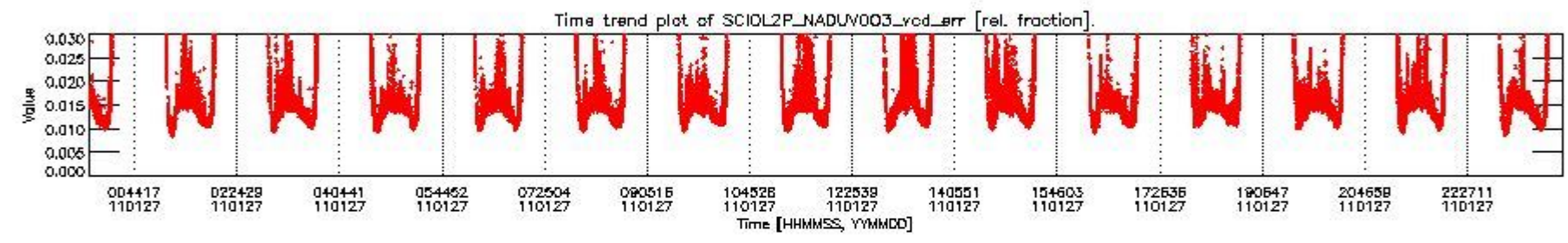
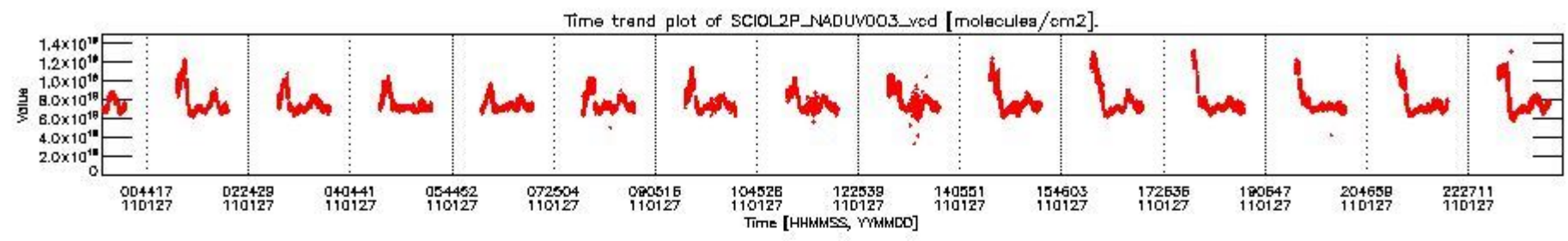
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

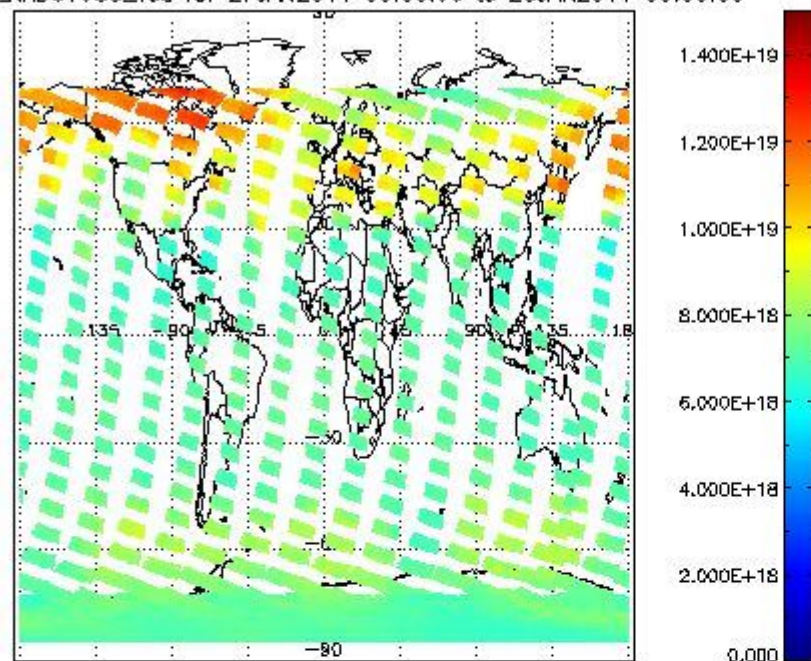
3	SCIOL2P_NADUV0O3_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl
8	SCIOL2P_NADUV3BRO_vcd
9	SCIOL2P_NADUV3BRO_vcd_err
10	SCIOL2P_NADUV3BRO_amf_gr
11	SCIOL2P_NADUV3BRO_amf_cl
12	SCIOL2P_NADUV5SO2_vcd
13	SCIOL2P_NADUV5SO2_vcd_err
14	SCIOL2P_NADUV5SO2_amf_gr
15	SCIOL2P_NADUV5SO2_amf_cl
16	SCIOL2P_NADUV7SO2_vcd
17	SCIOL2P_NADUV7SO2_vcd_err
18	SCIOL2P_NADUV7SO2_amf_gr
19	SCIOL2P_NADUV7SO2_amf_cl
20	SCIOL2P_NADUV6OCL_slant_col_den
21	SCIOL2P_NADUV6OCL_err_slant_col
22	SCIOL2P_NADUV8H2O_vcd
23	SCIOL2P_NADUV8H2O_vcd_err
24	SCIOL2P_NADUV8H2O_amf_gr
25	SCIOL2P_NADIR3CO_vcd
26	SCIOL2P_NADIR3CO_vcd_err

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.

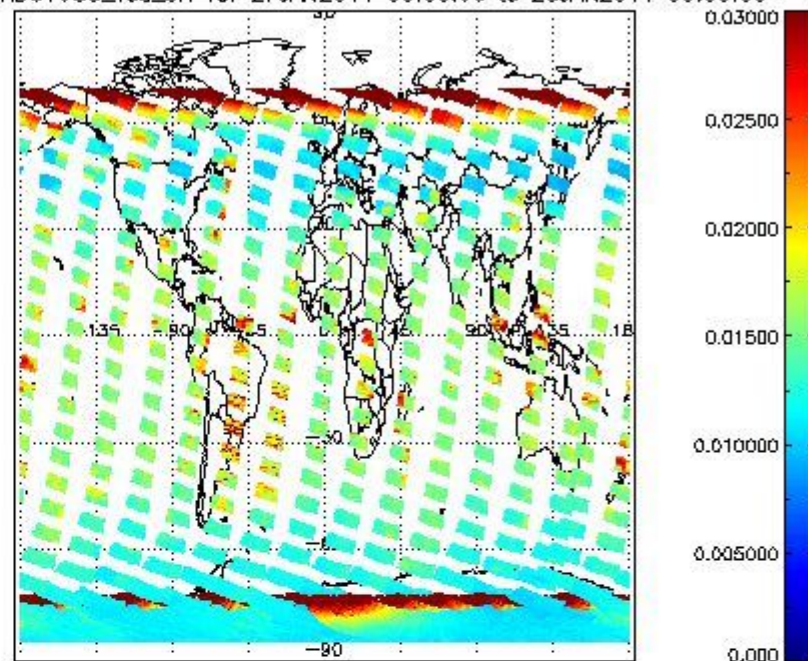
2.2.2.1 O3 (UV0)



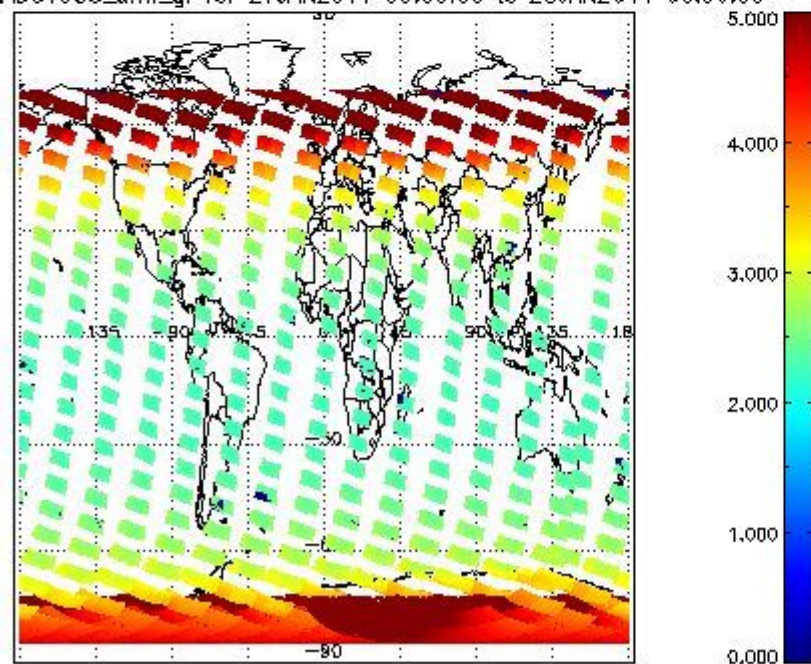
SCIOL2P_NADUV003_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



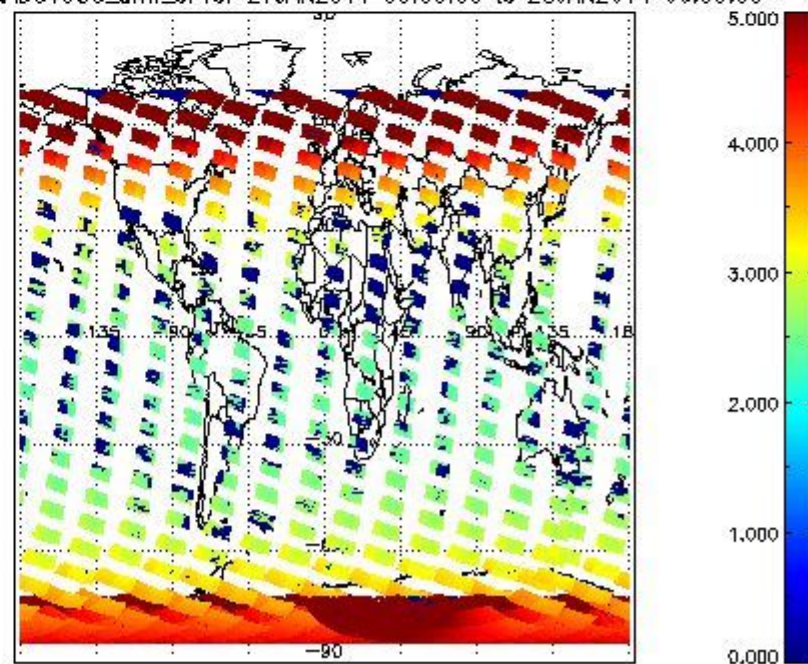
SCIOL2P_NADUV003_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



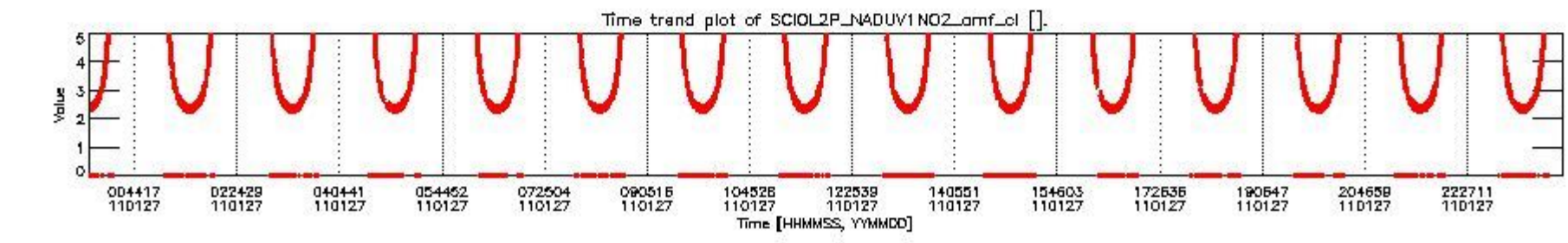
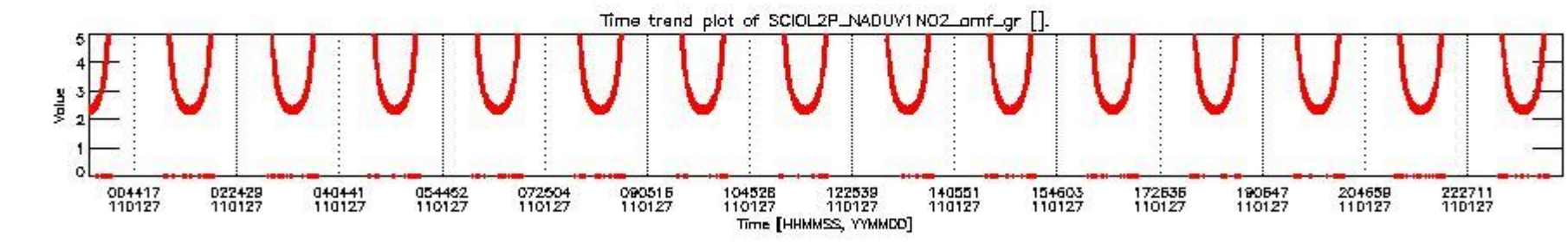
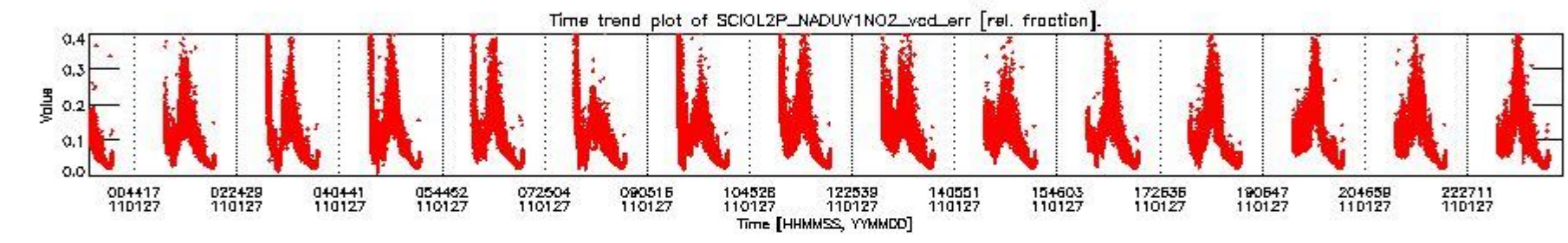
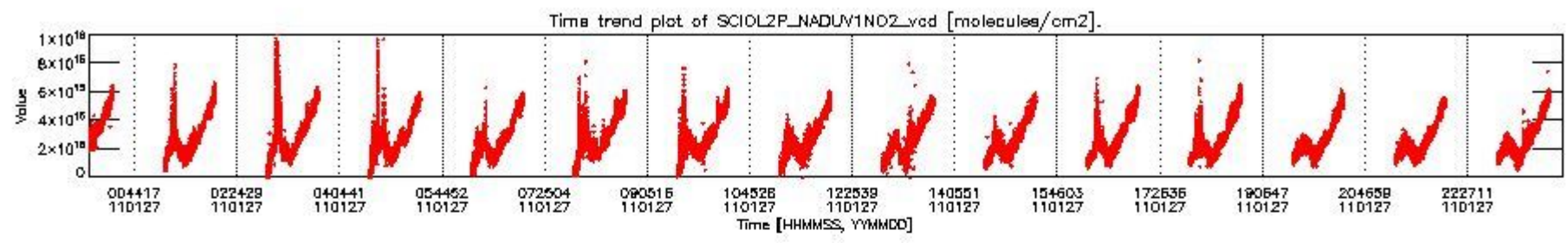
SCIOL2P_NADUV003_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

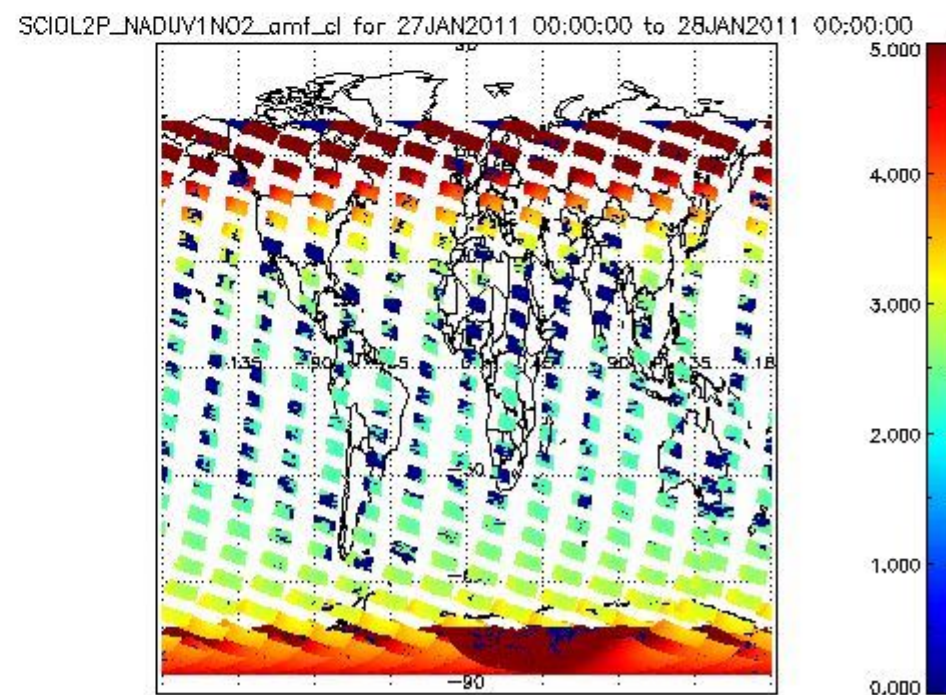
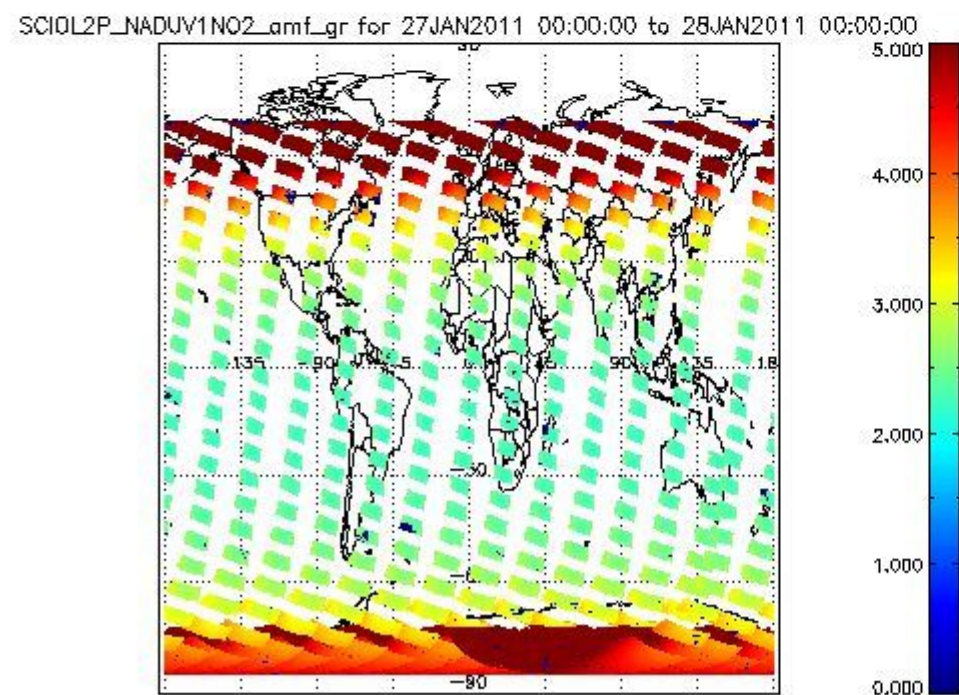
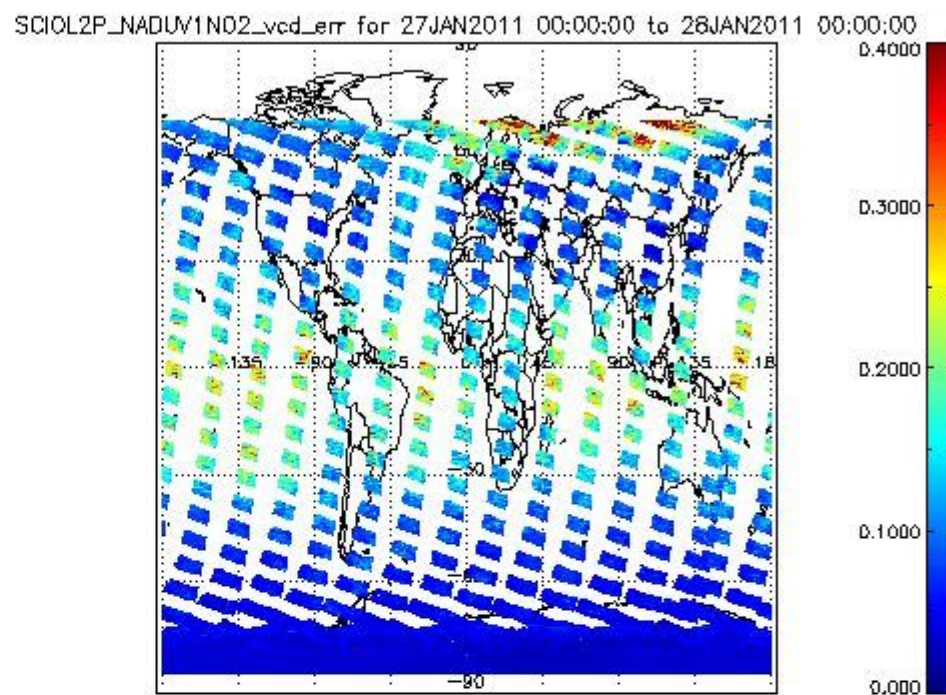
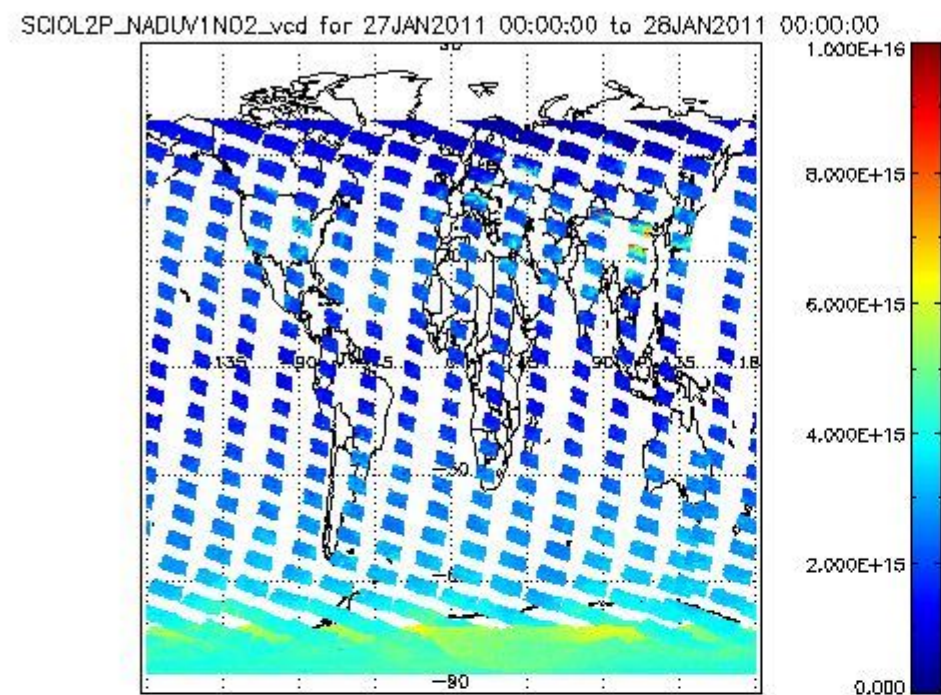


SCIOL2P_NADUV003_amf_cl for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

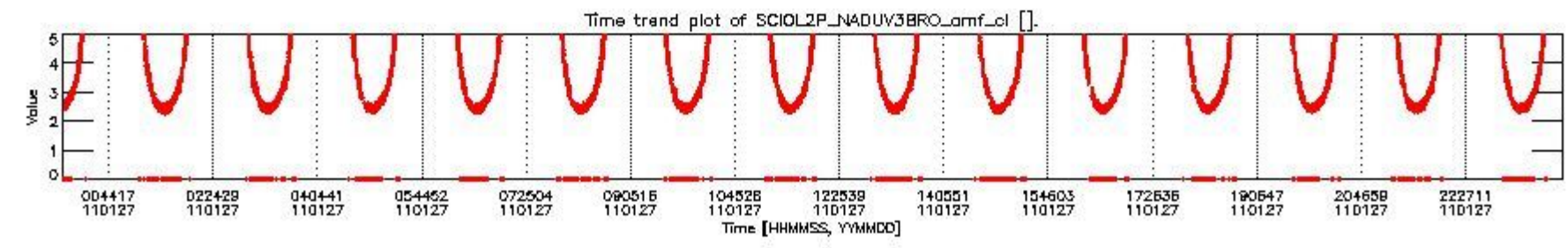
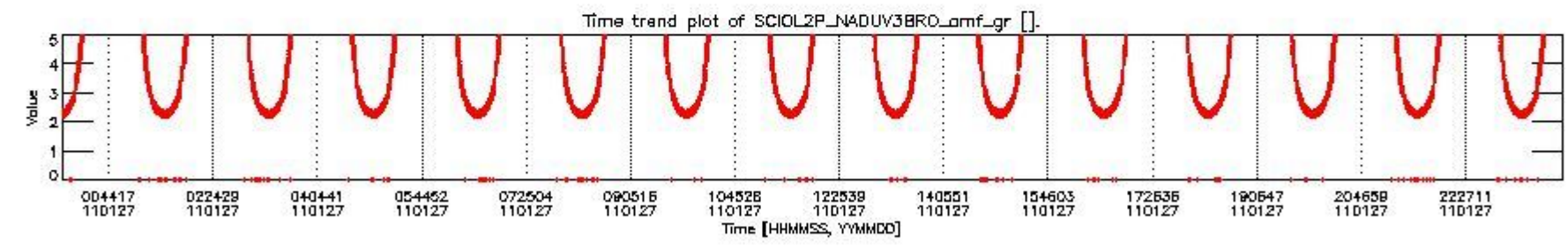
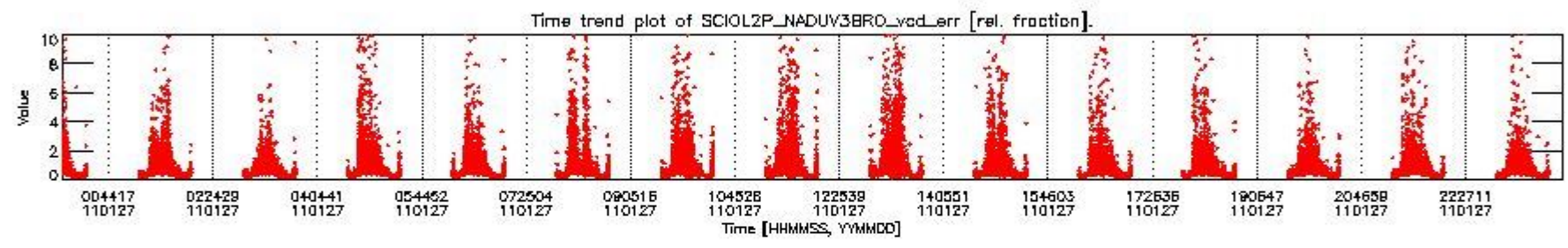
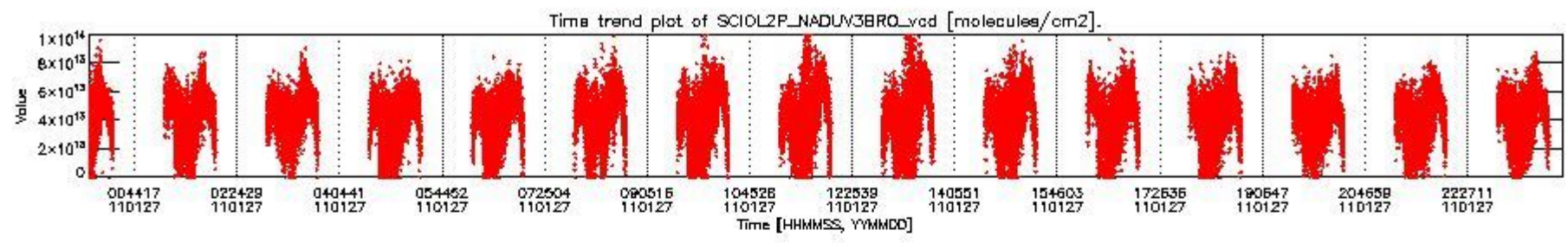


2.2.2.2 NO2 (UV1)

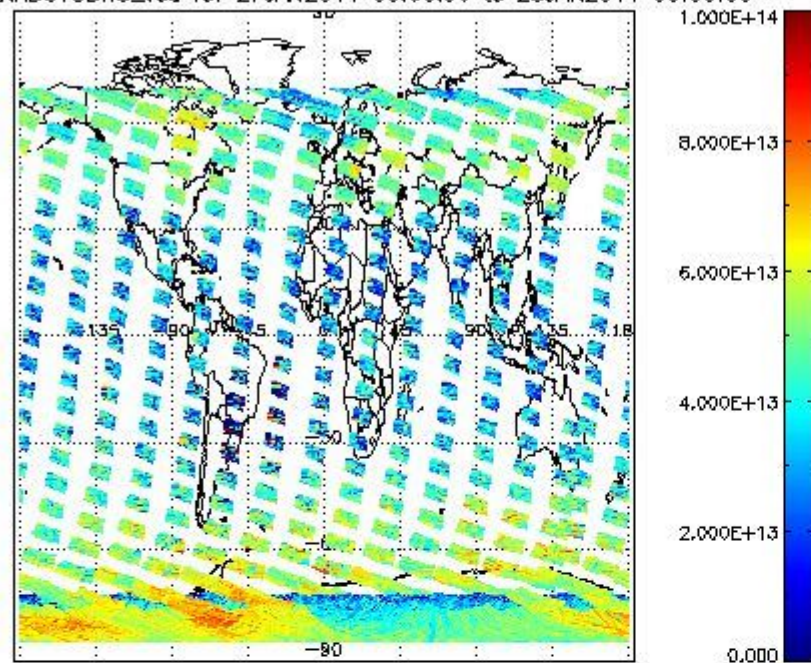




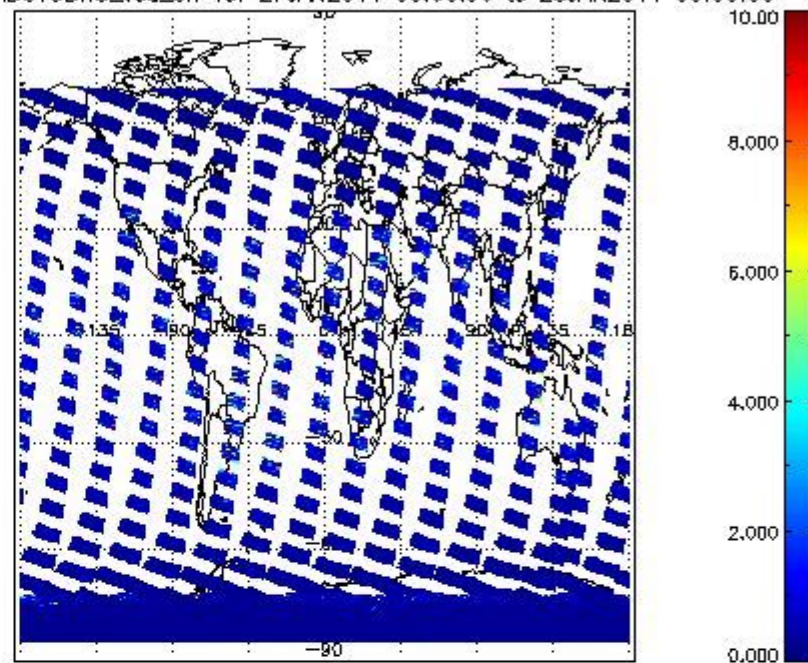
2.2.2.3 BrO (UV3)



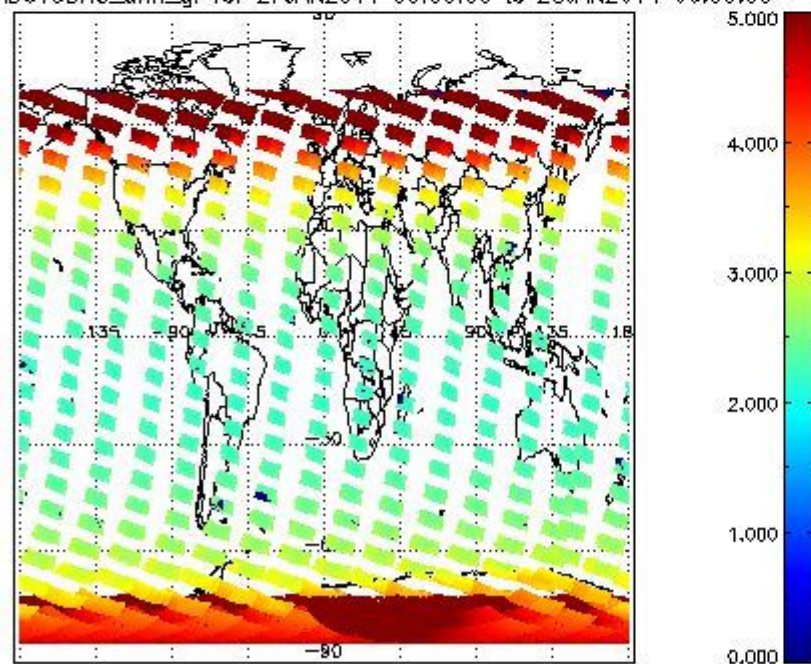
SCIOL2P_NADUV3BRO_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



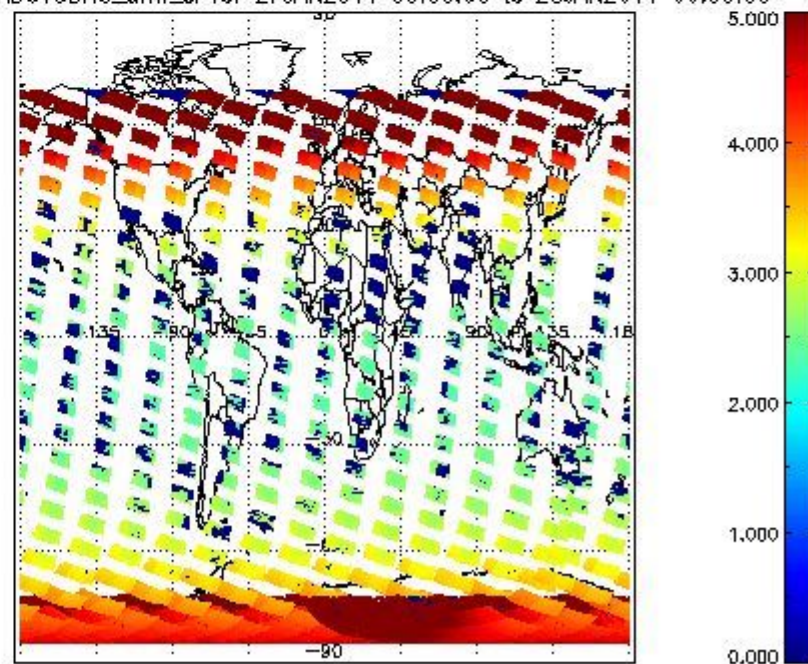
SCIOL2P_NADUV3BRO_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



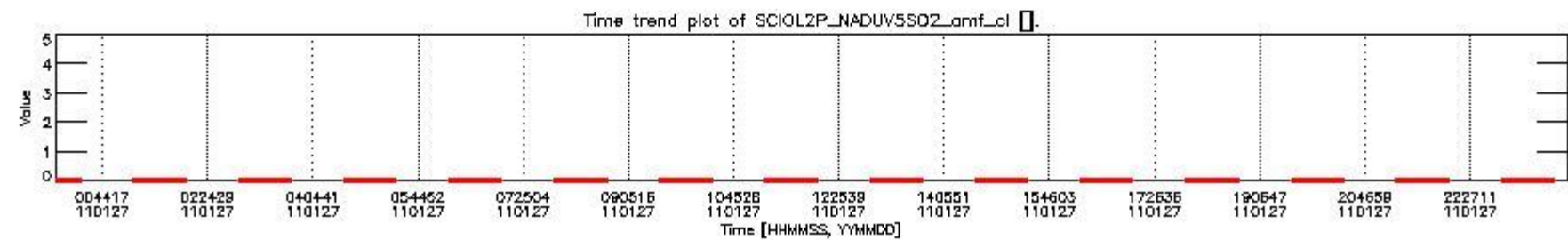
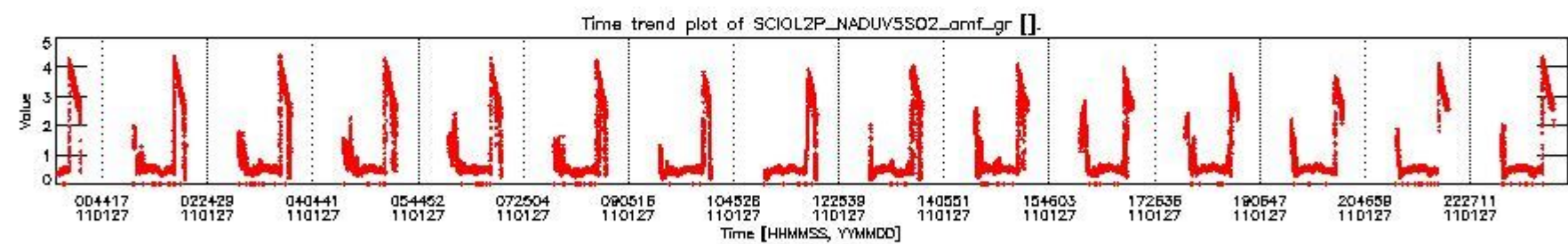
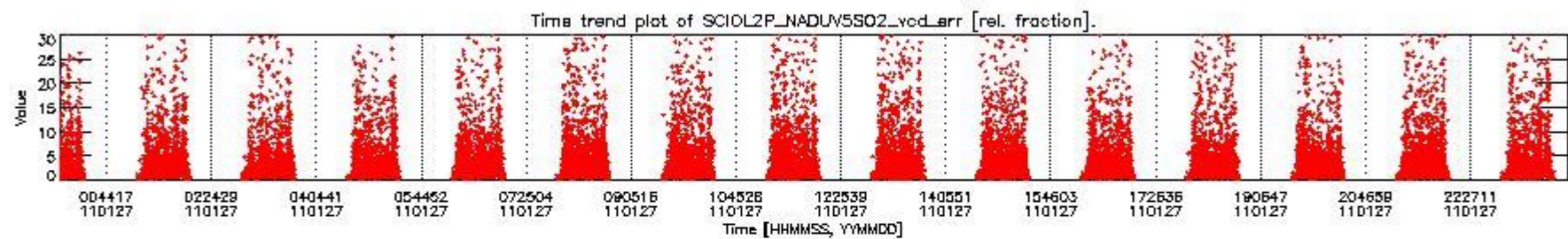
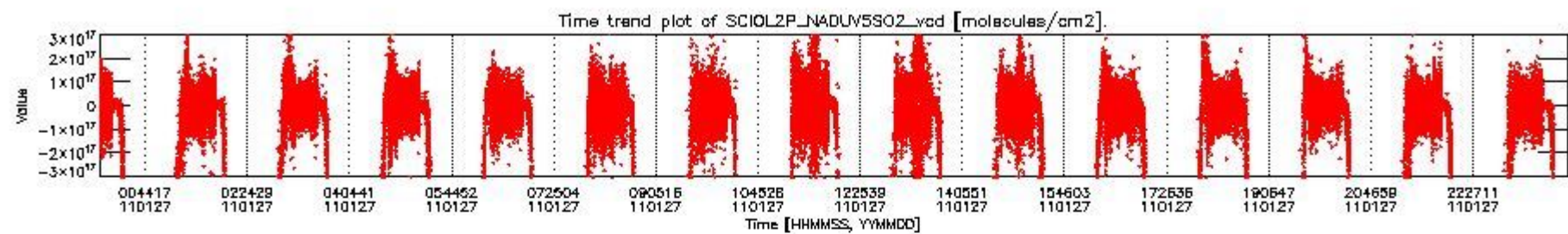
SCIOL2P_NADUV3BRO_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

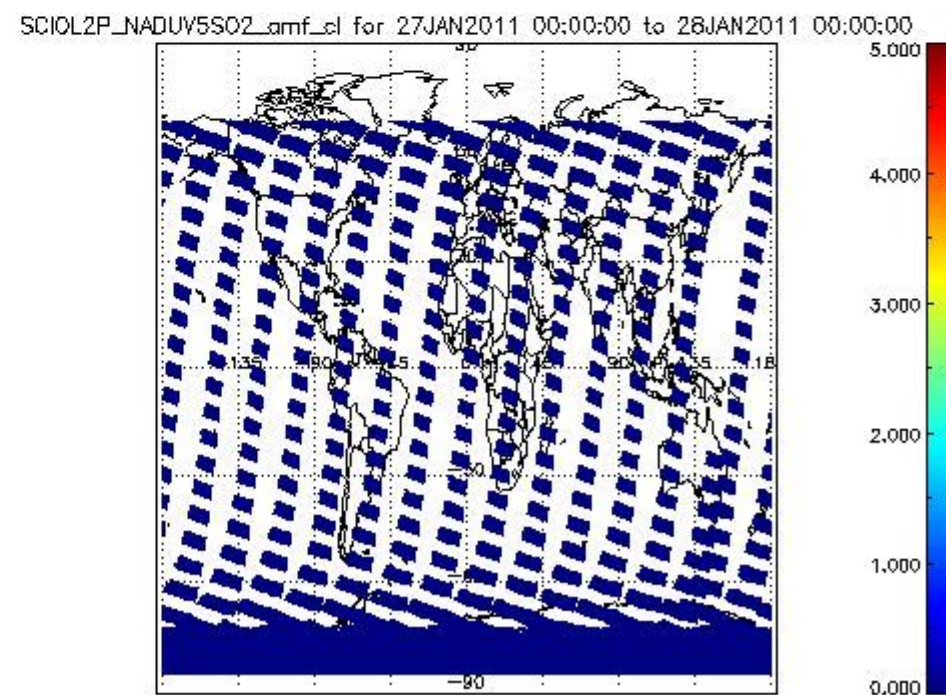
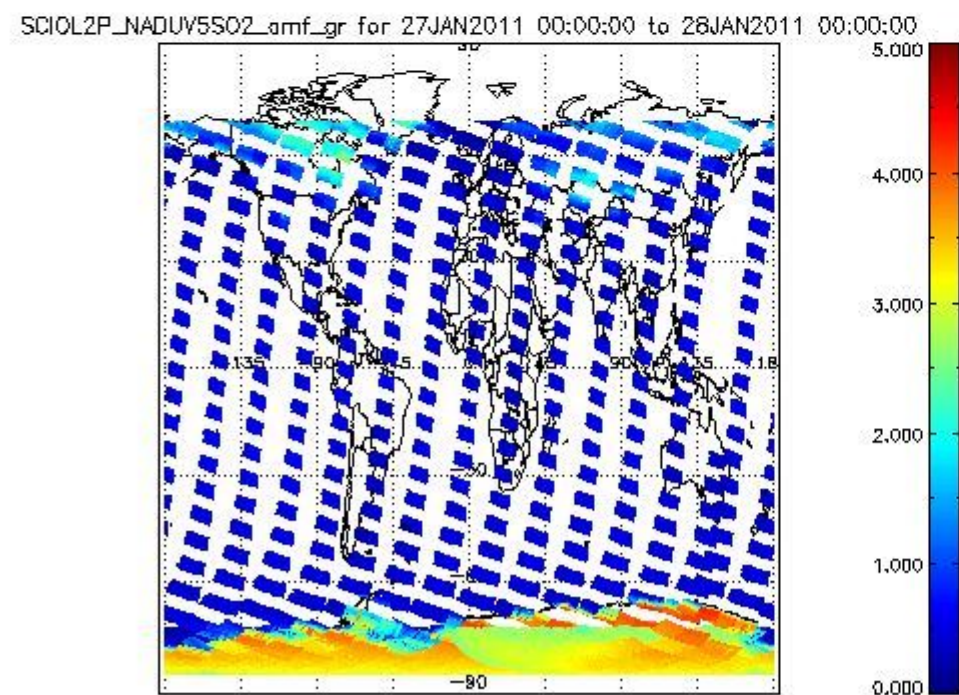
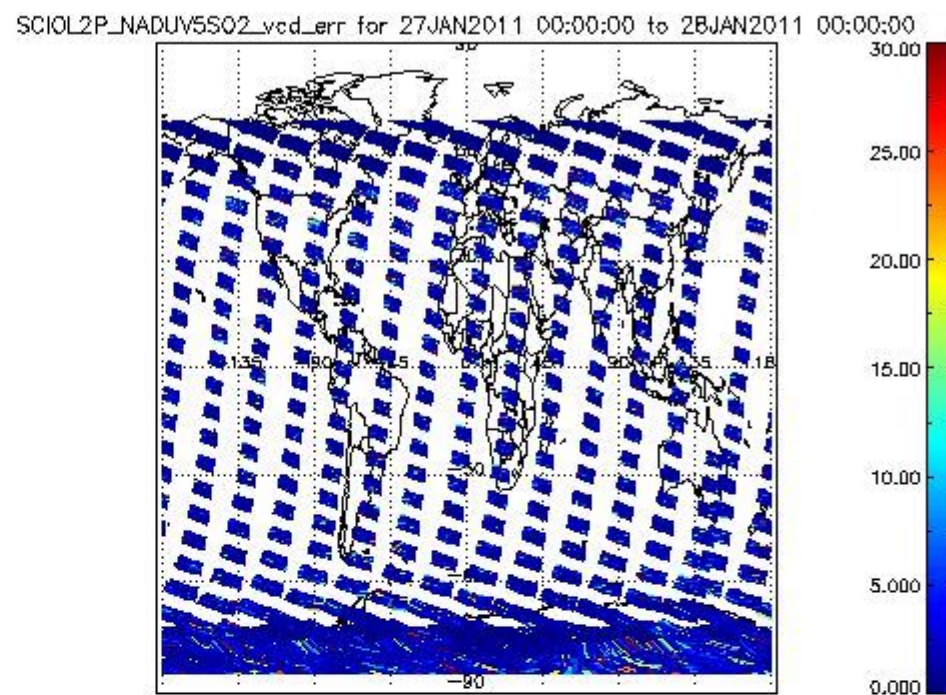
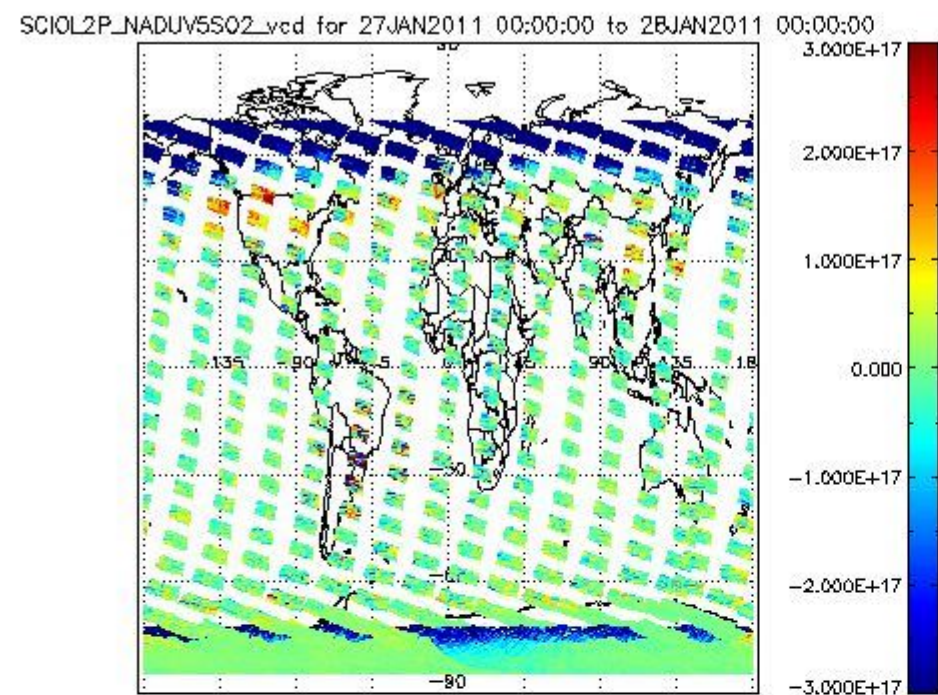


SCIOL2P_NADUV3BRO_amf_cl for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

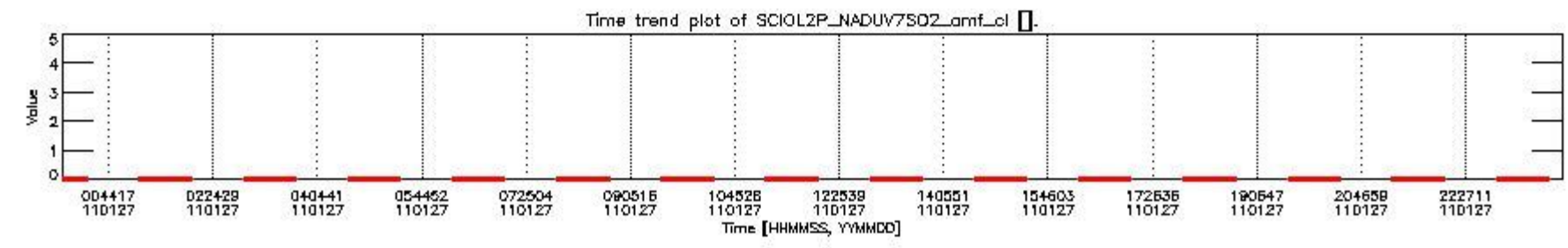
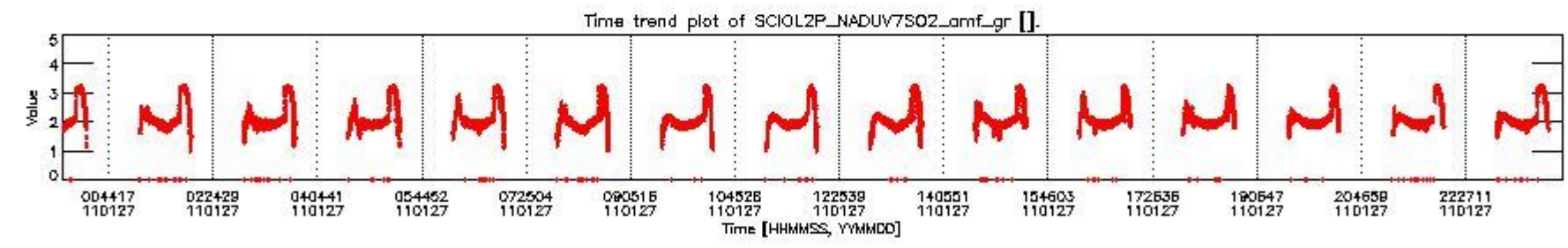
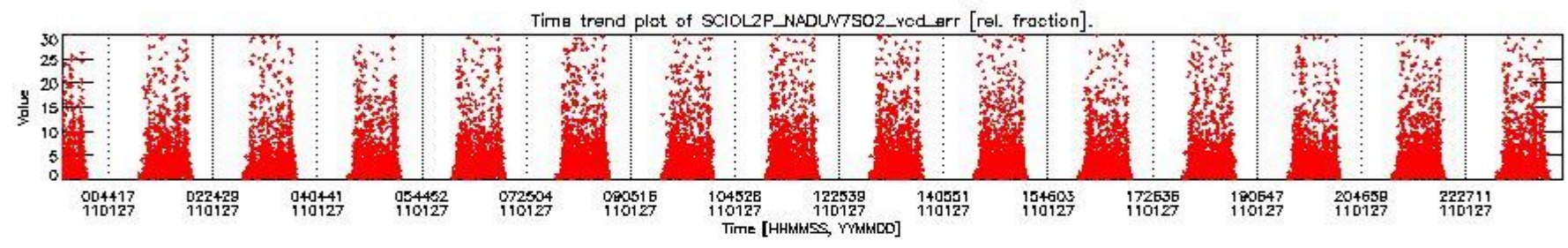
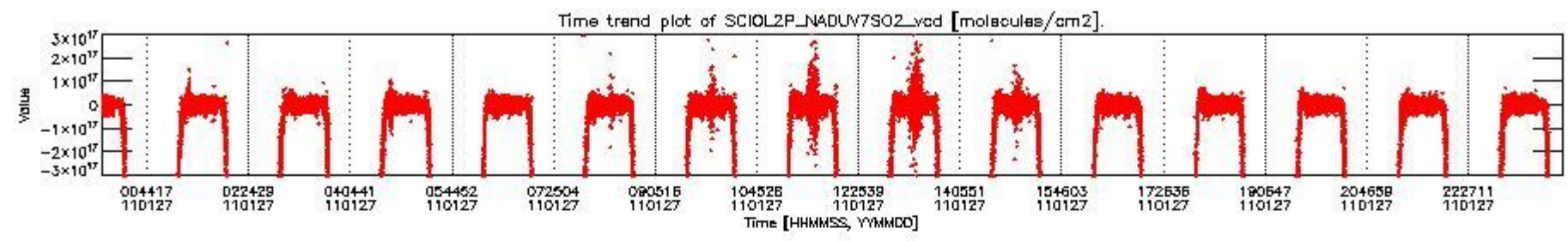


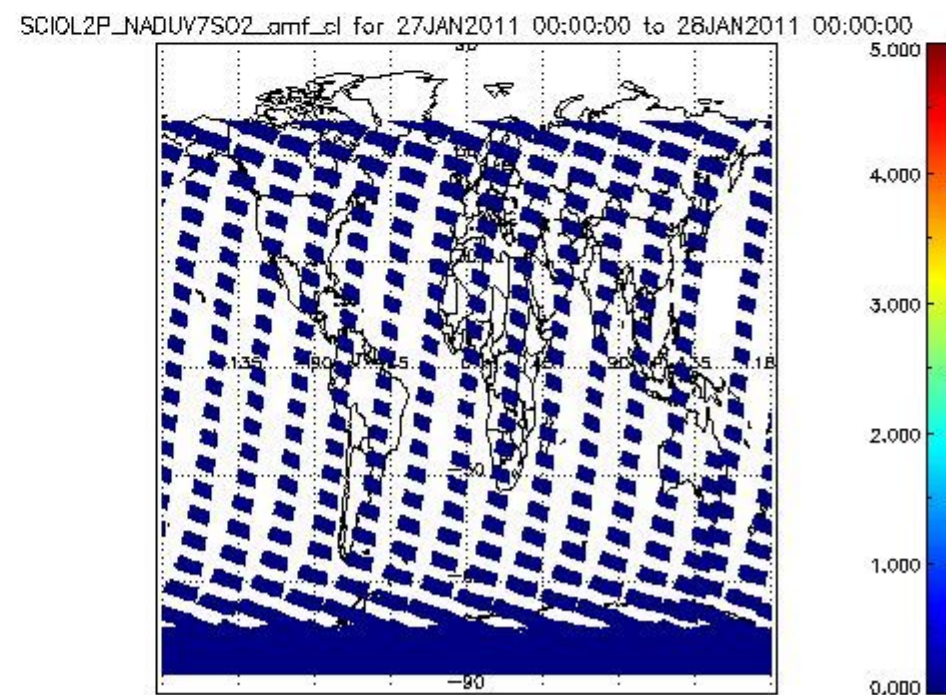
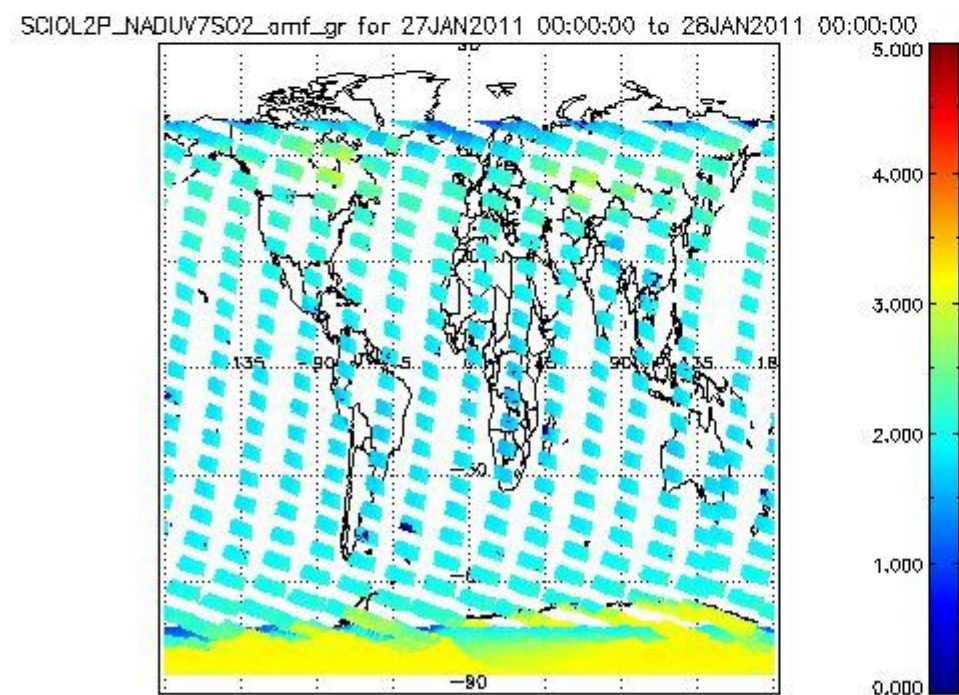
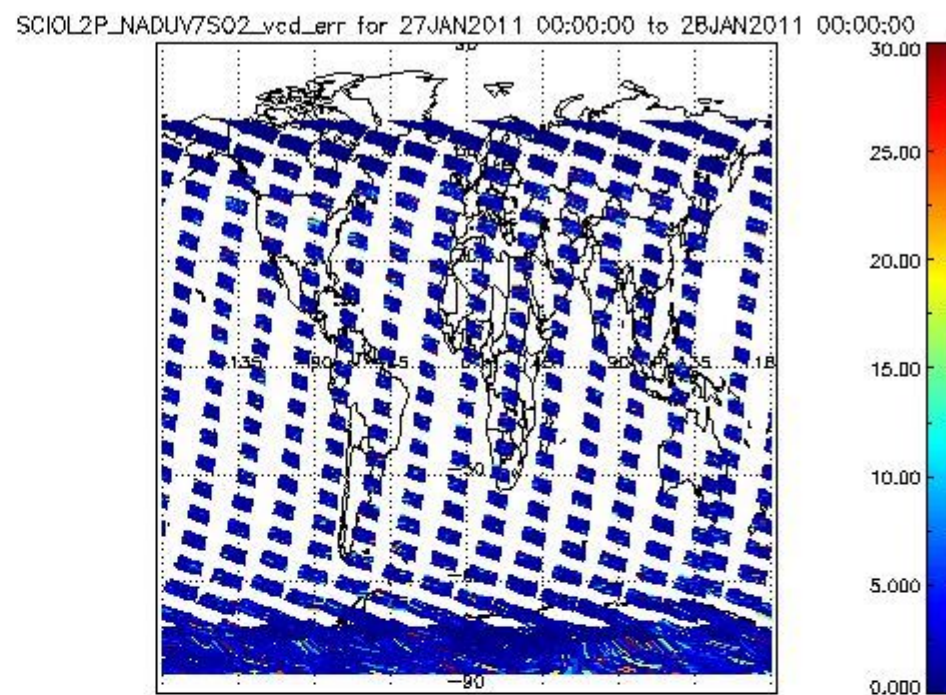
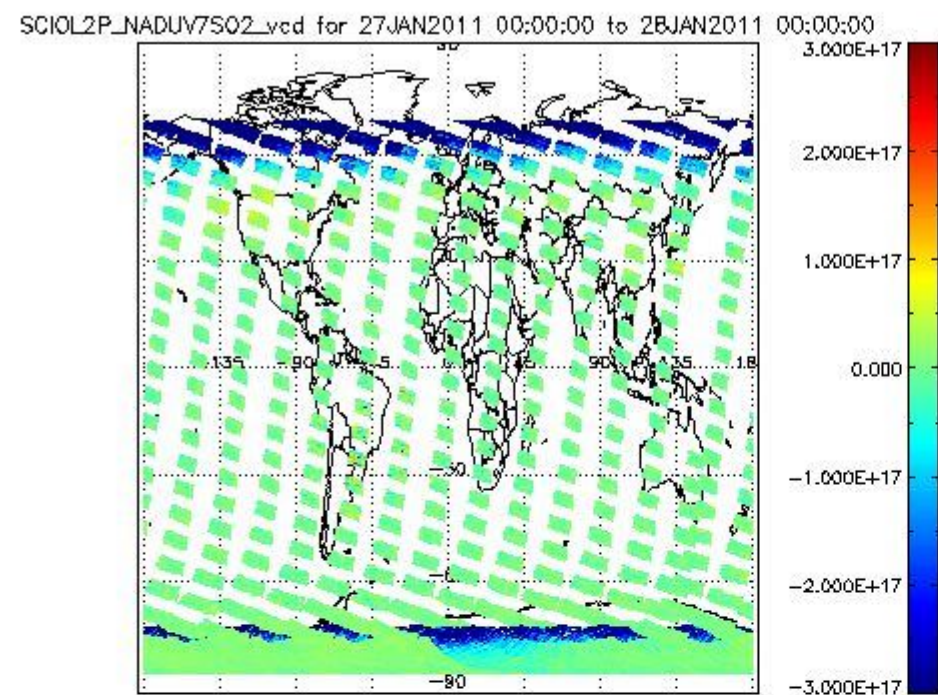
2.2.2.4 SO2 (UV5)



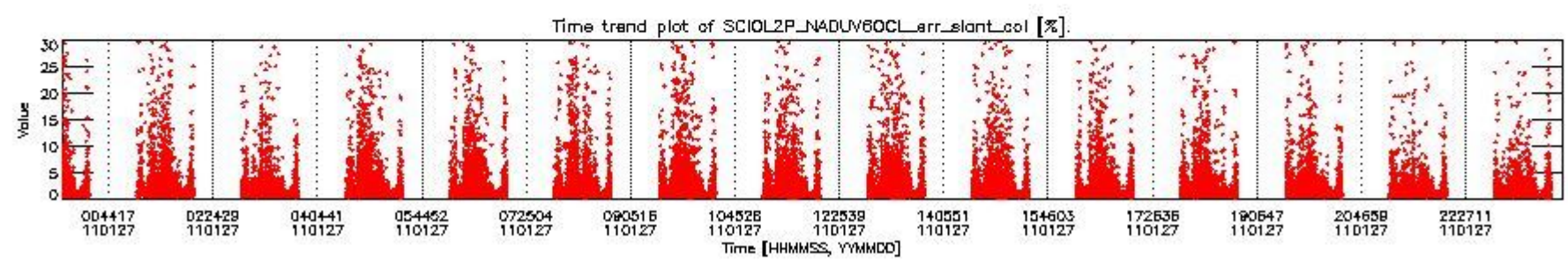
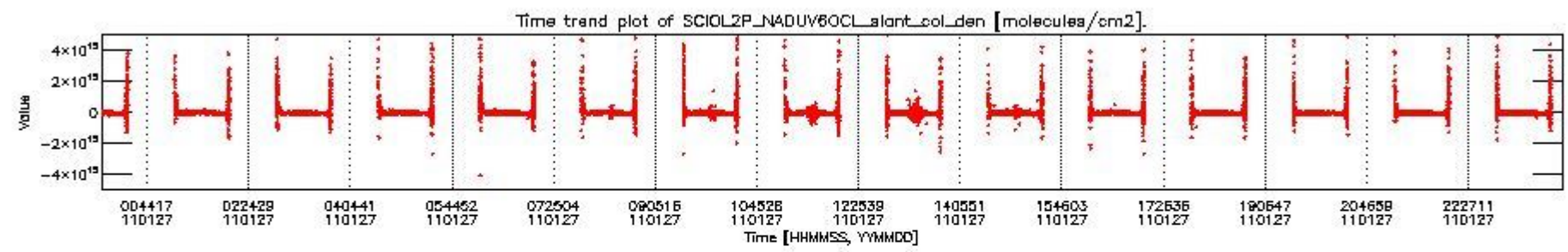


2.2.2.5 SO2 (UV7)

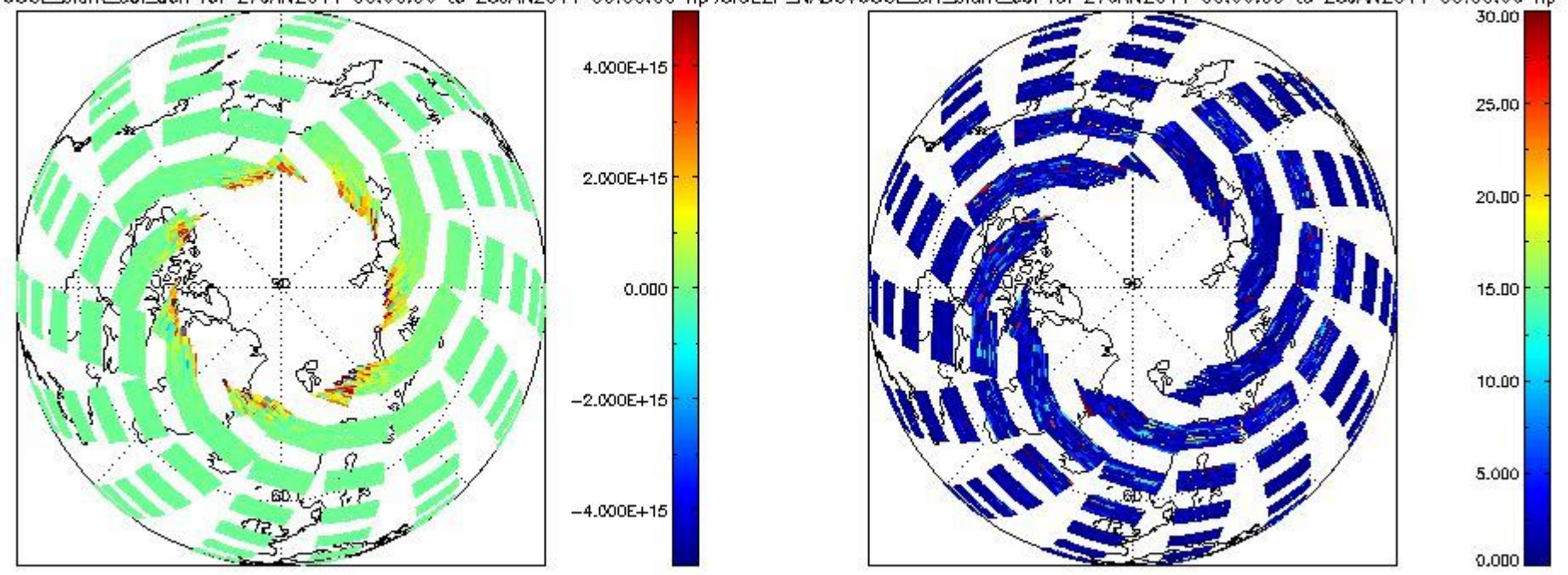




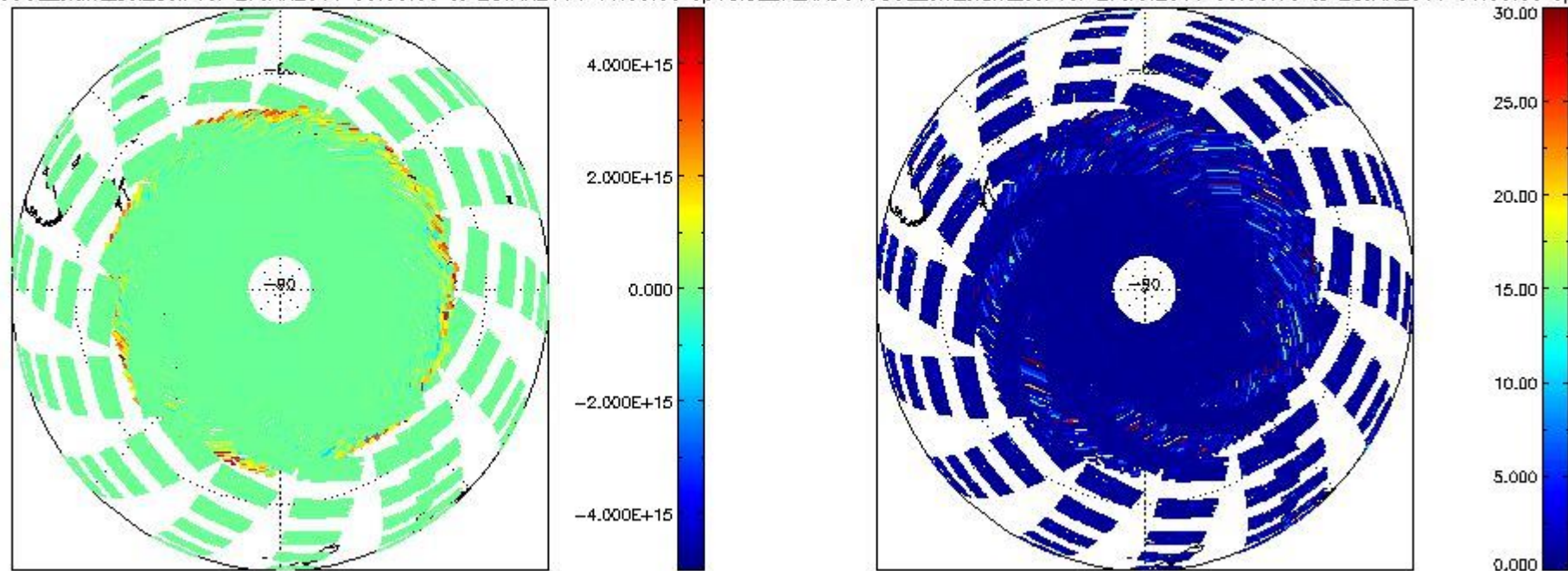
2.2.2.6 OCIO (UV6)



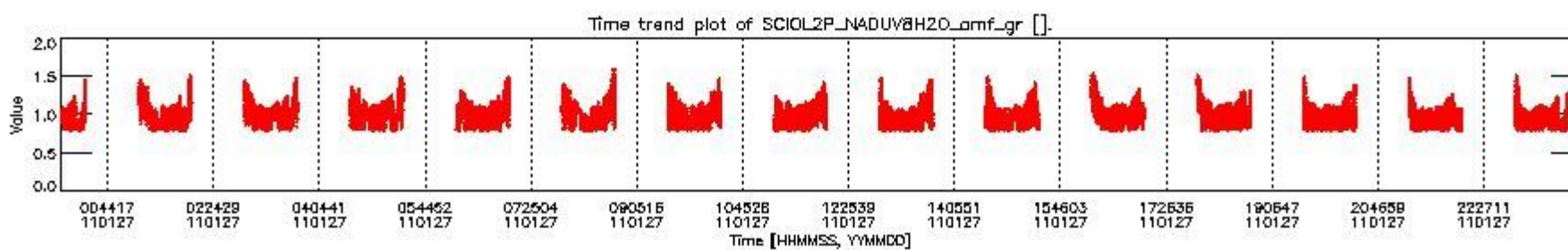
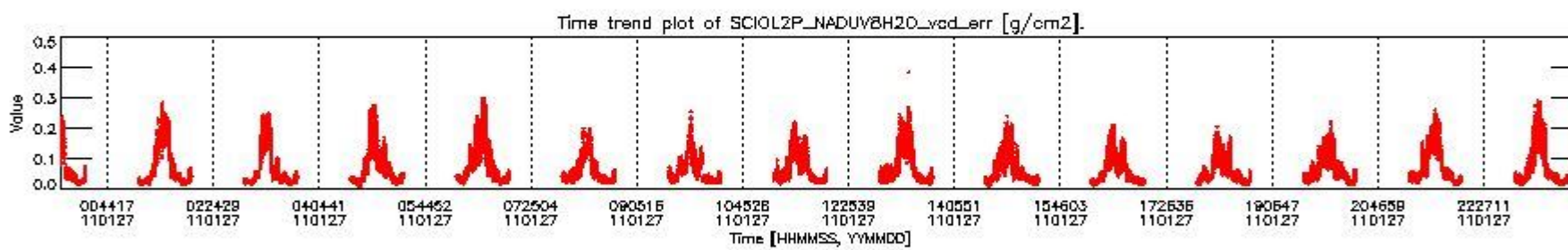
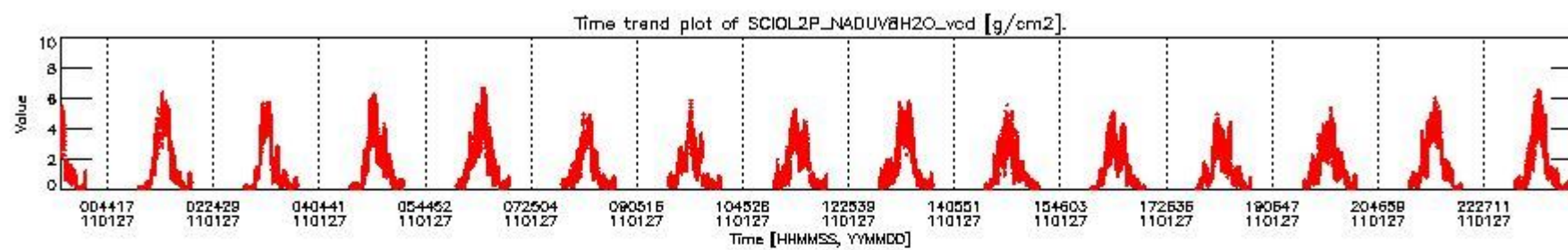
SCIOI2P_NADUV60CL_slant_col_den for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 np; SCIOI2P_NADUV60CL_err_slant_col for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 np



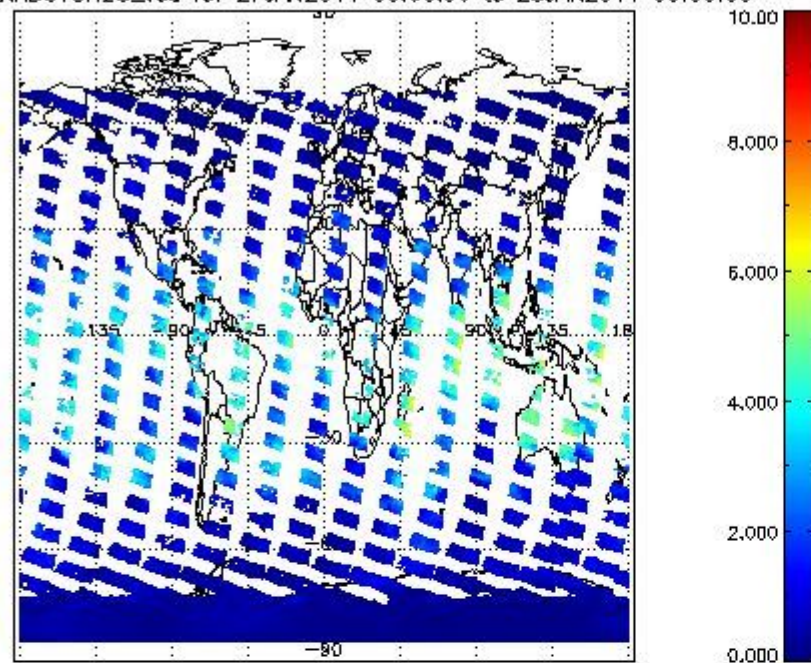
SCIOL2P_NADUV6OCL_slant_col_den for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 sp SCIOL2P_NADUV6OCL_err_slant_col for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 sp



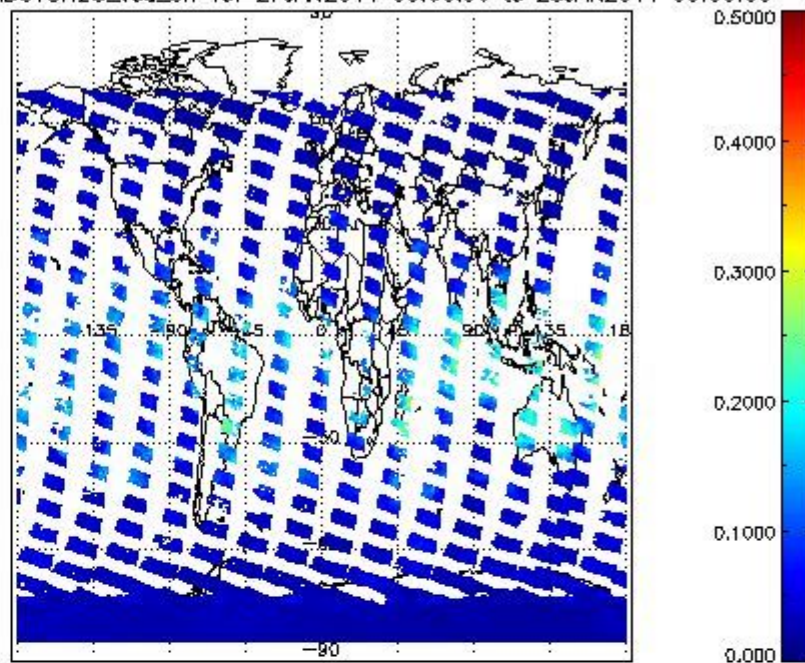
2.2.2.7 H2O (UV8)



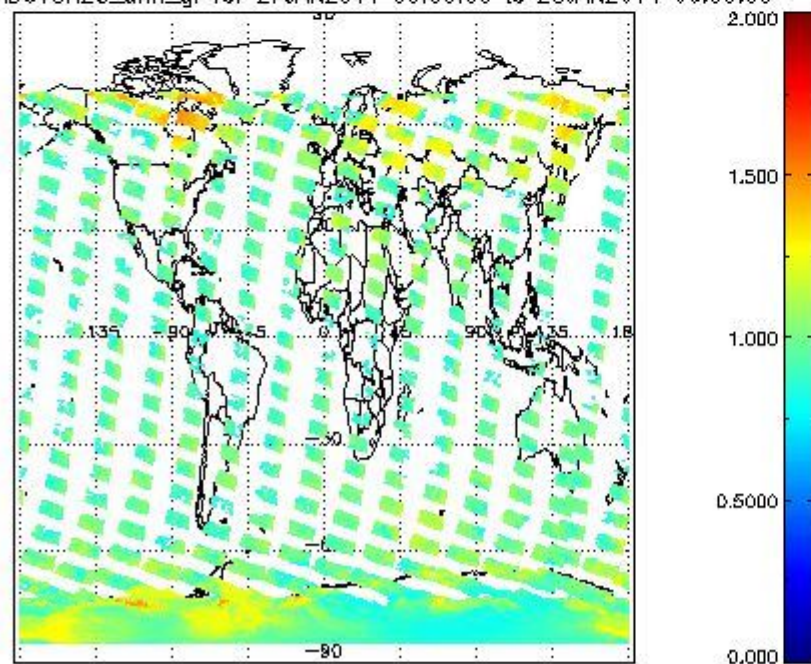
SCIOL2P_NADUV8H20_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

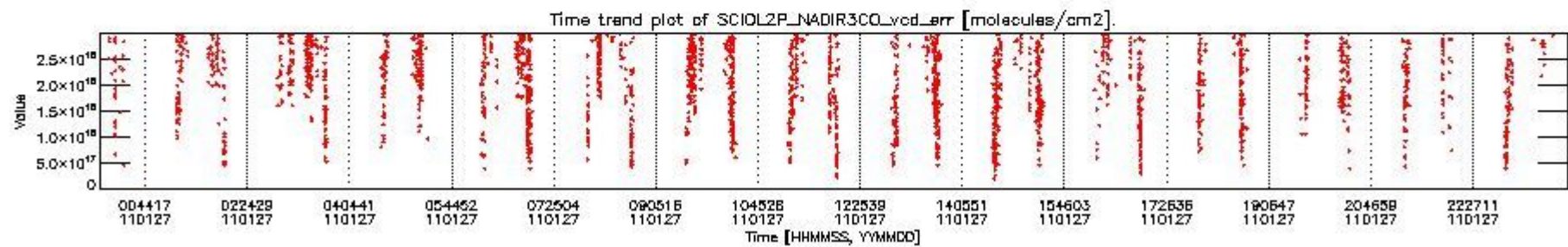
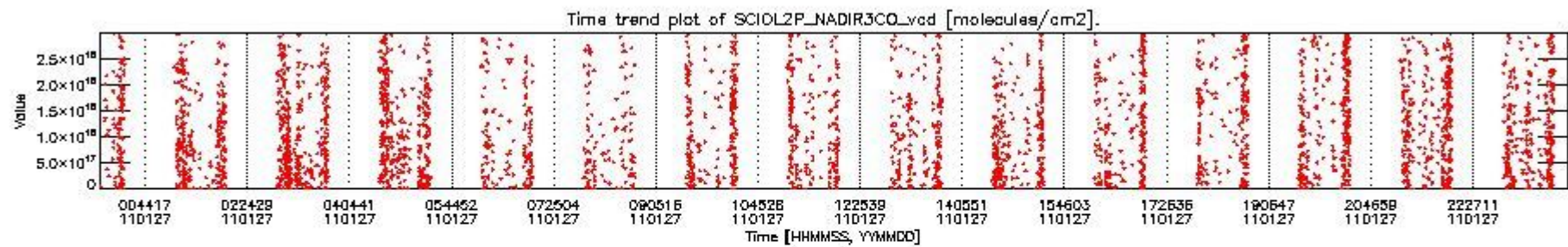


SCIOL2P_NADUV8H20_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

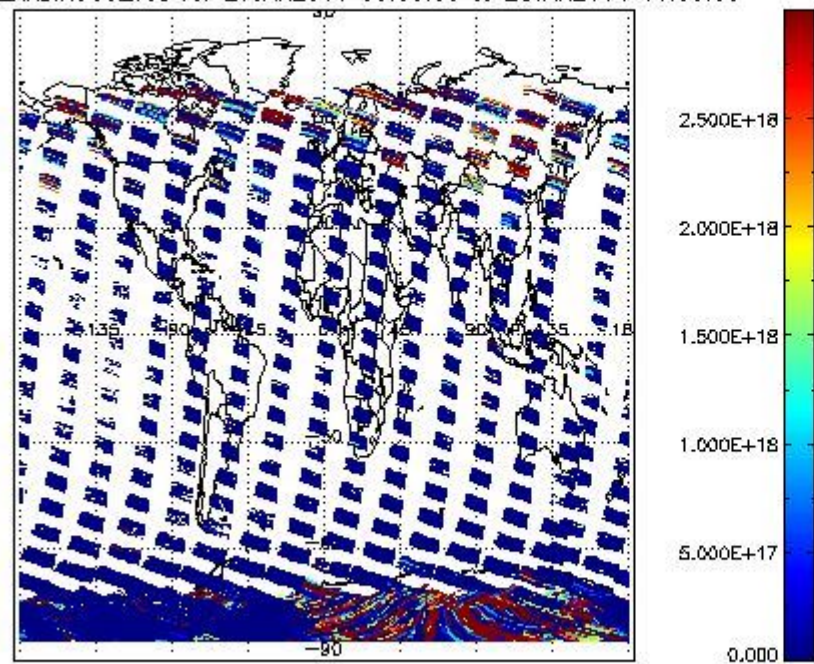


SCIOL2P_NADUV8H20_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

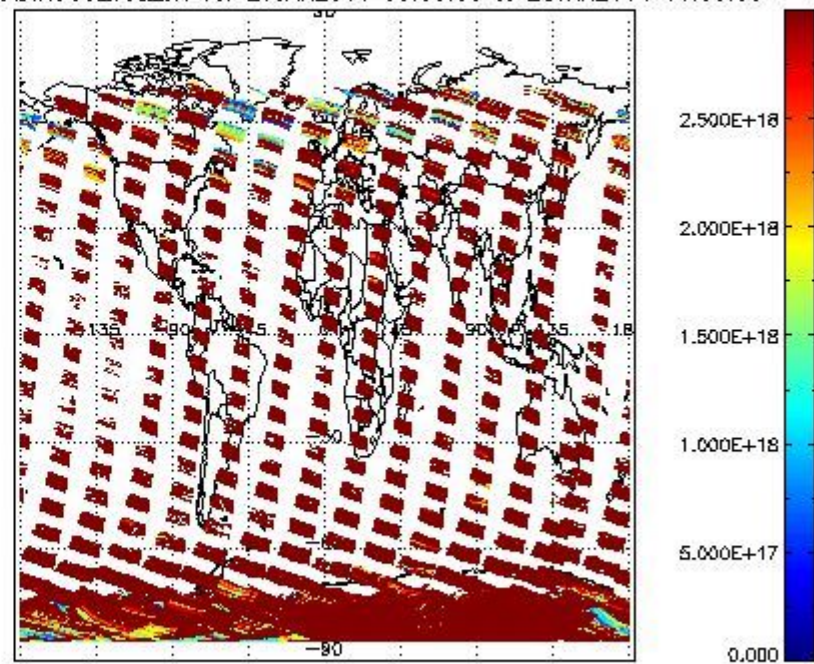




SCIDL2P_NADIR3CO_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



SCIDL2P_NADIR3CO_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



2.2.3 Limb

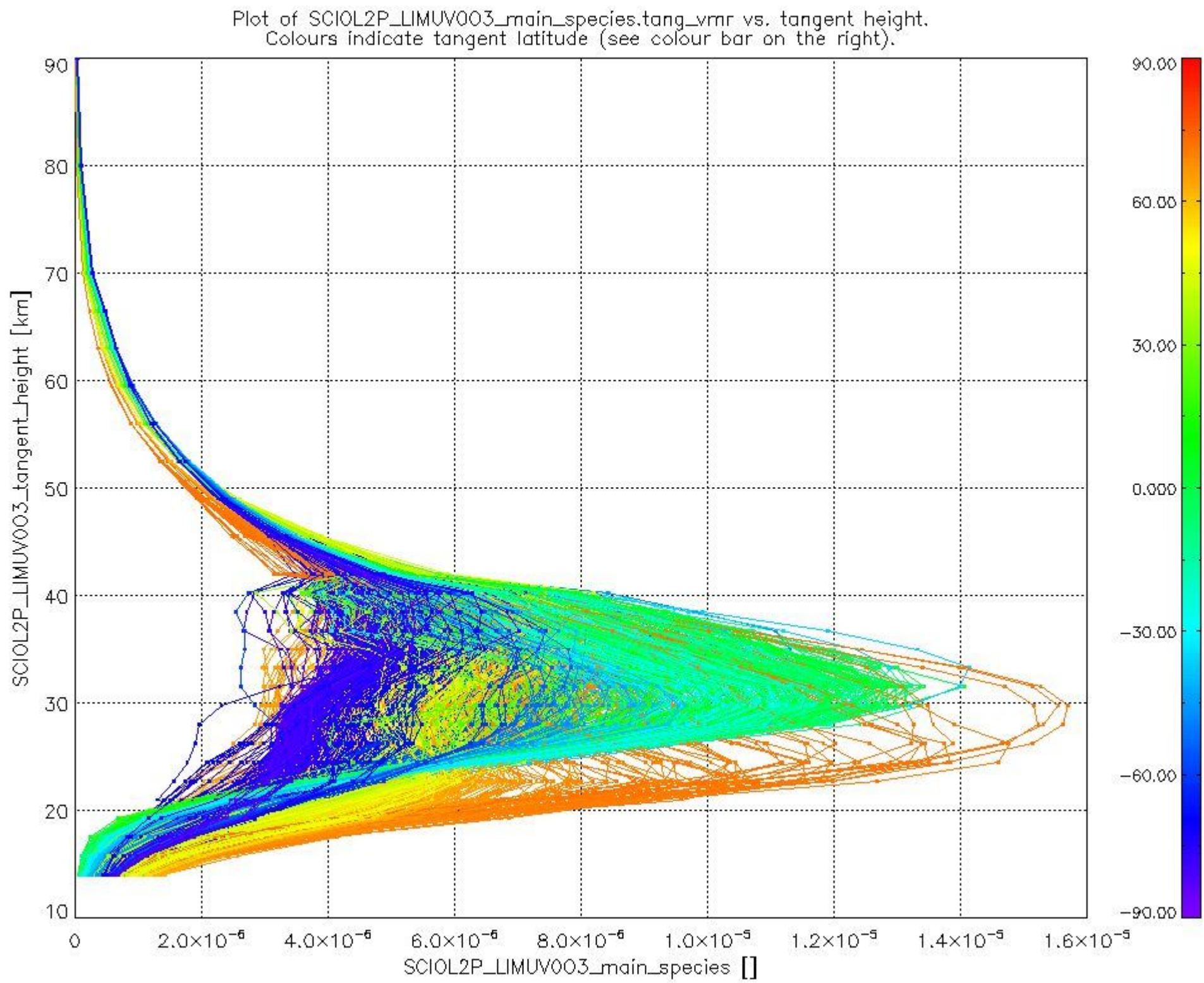
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

Number	Data item ID
0	SCIDL2P_LIMUV003_main_species
1	SCIDL2P_LIMUV1NO2_main_species
2	SCIDL2P_LIMUV3BRO_main_species

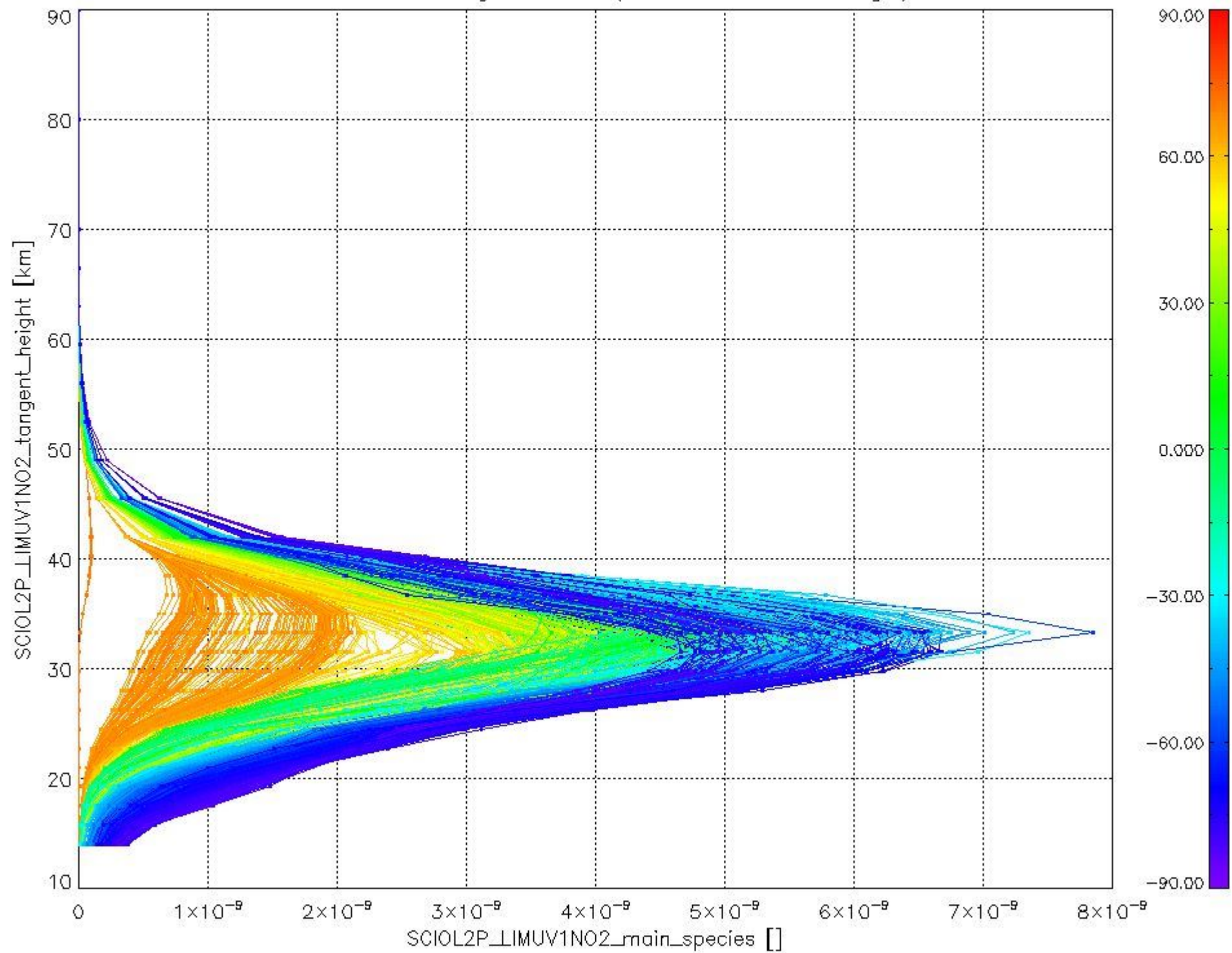
The following plots show for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

2.2.3.1 O3 (UV0)



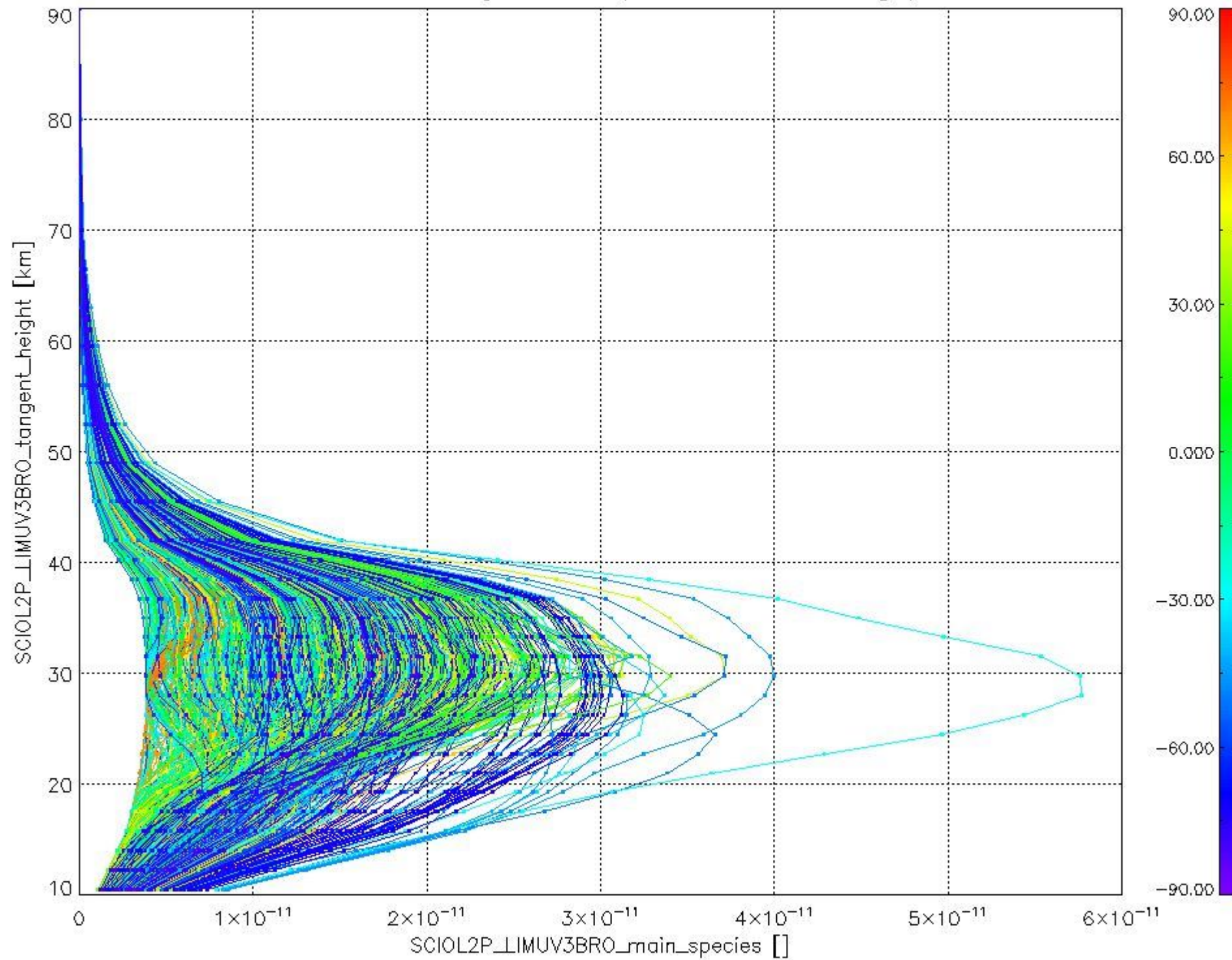
2.2.3.2 NO2 (UV1)

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



2.2.3.3 BrO (UV3)

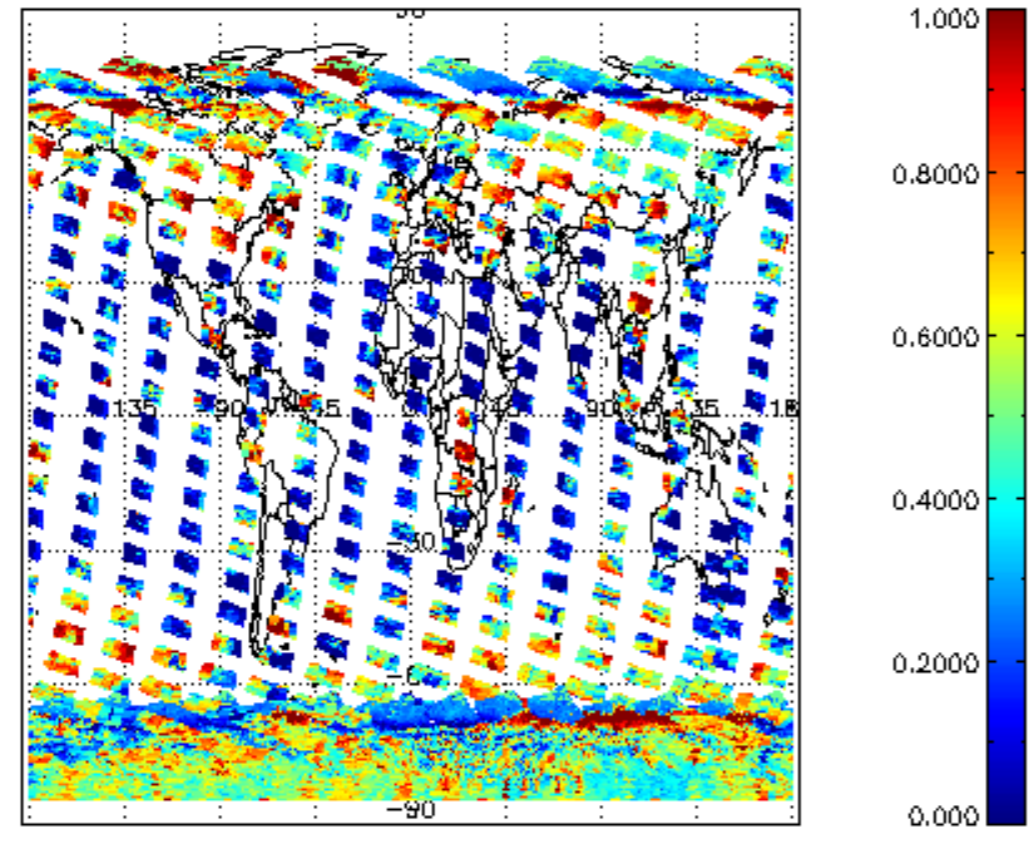
Plot of SCIOL2P_LIMUV3BRO_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



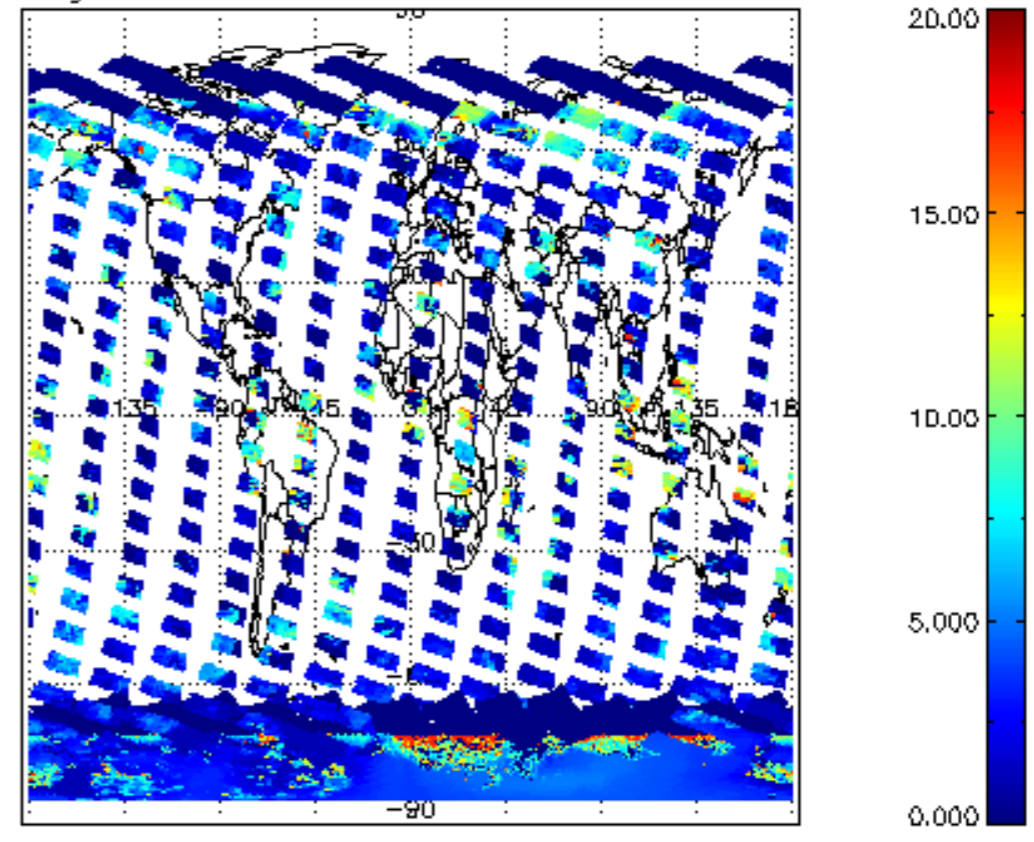
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20090615_120000_20090615_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED
	MF1 (M_FACTOR_FILE)
2	SCI_MF1_AXVIEC20110201_110139_20110126_193212_20110128_193212
3	SCI_MF1_AXVIEC20110201_110244_20110127_185526_20110129_185526

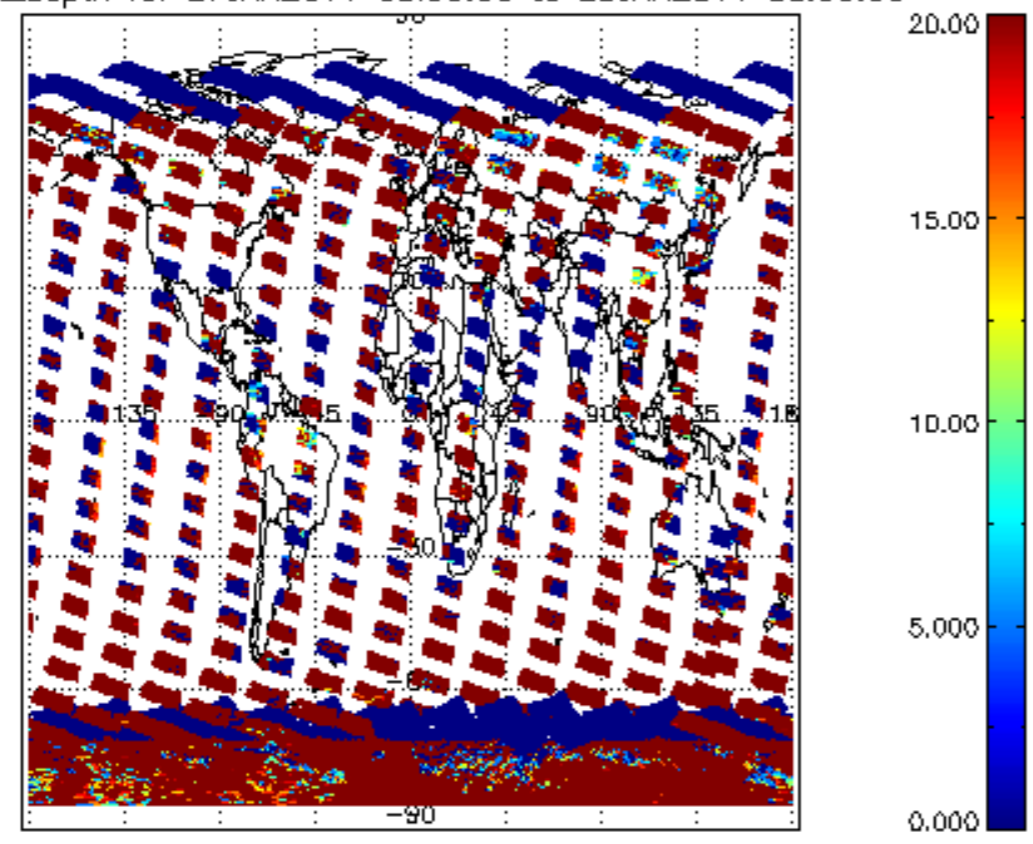
cL_frac for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



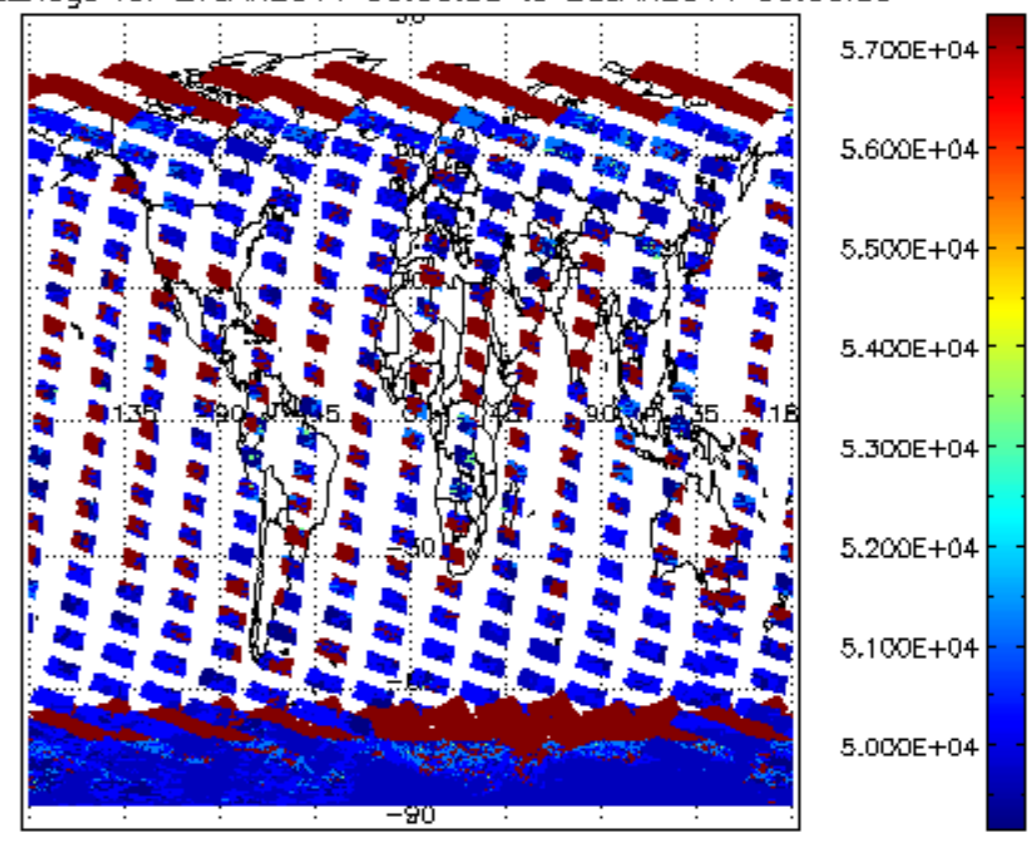
cL_top_height for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

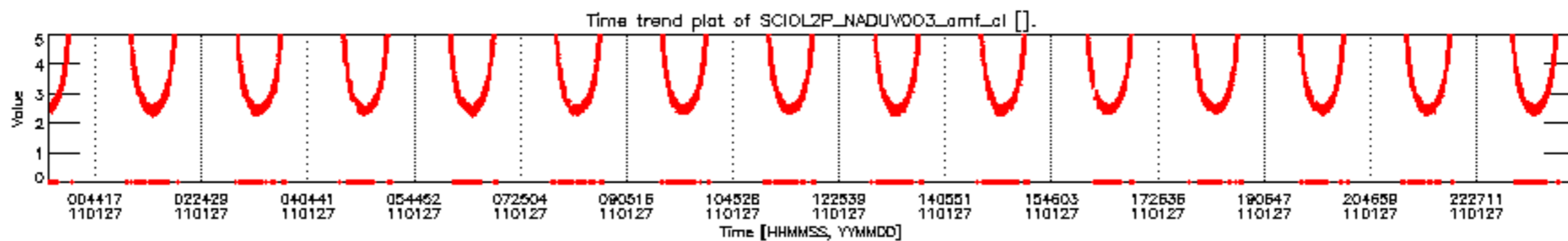
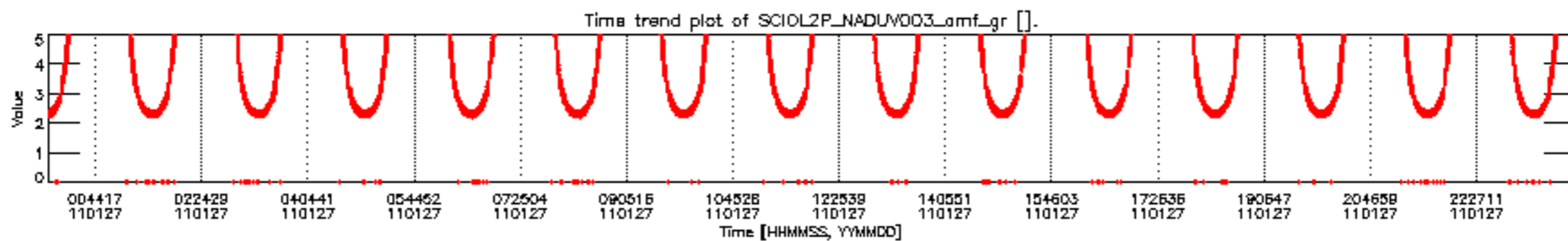
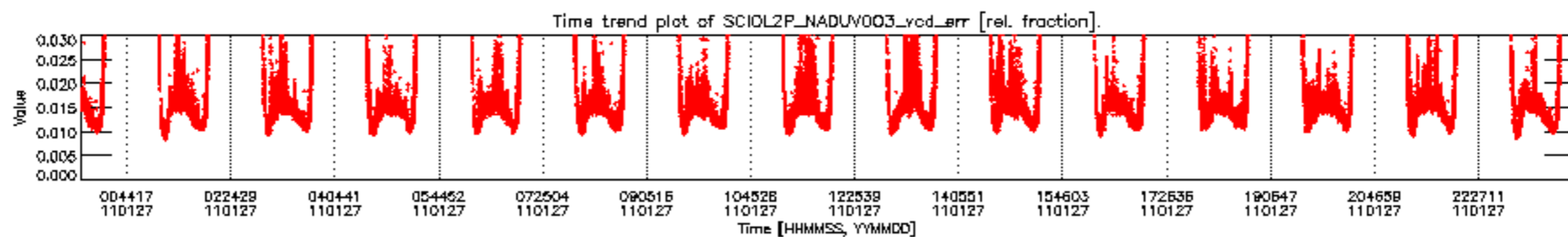
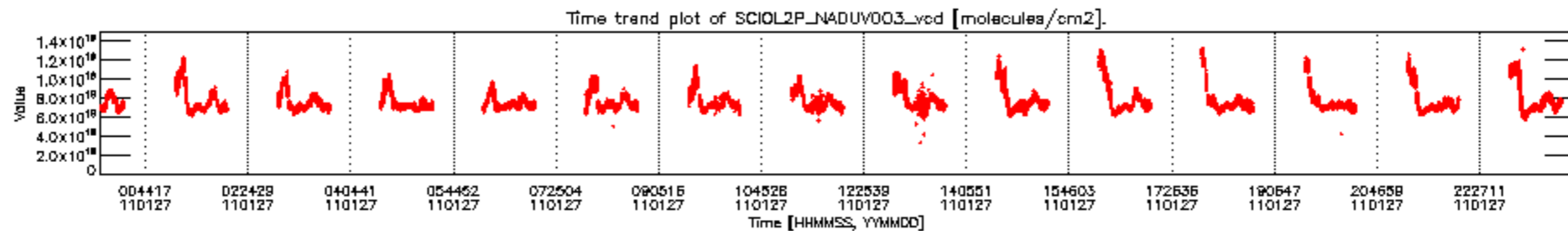


cLopt_depth for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

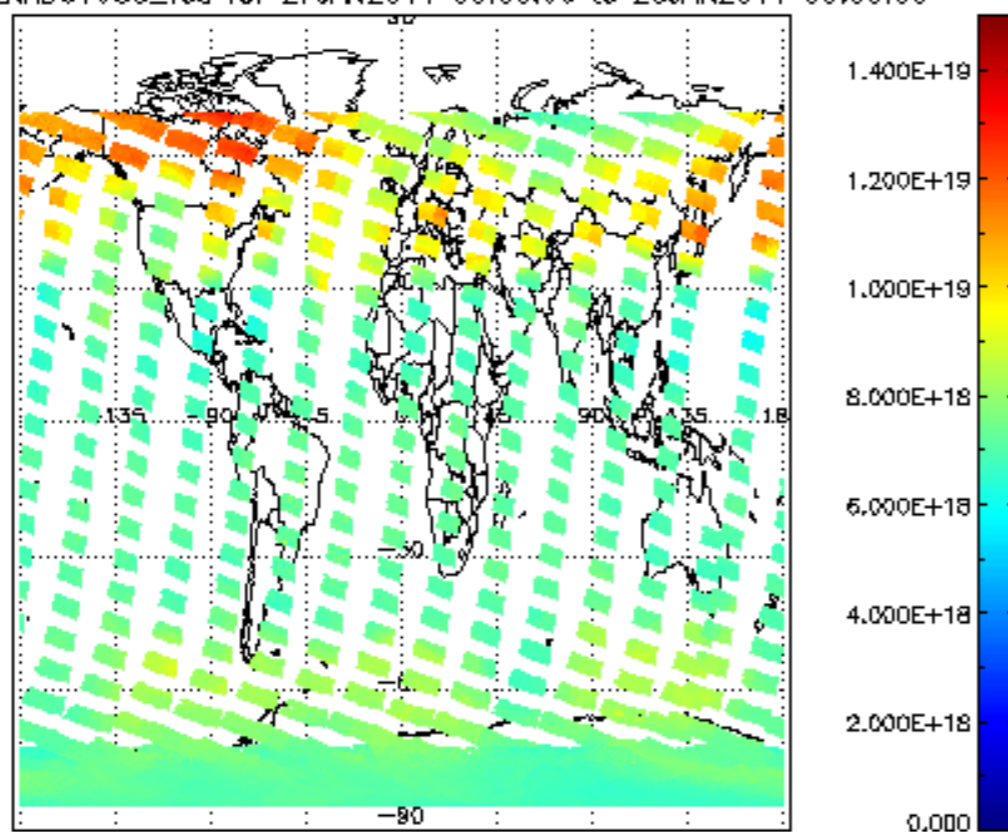


cloud_flags for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

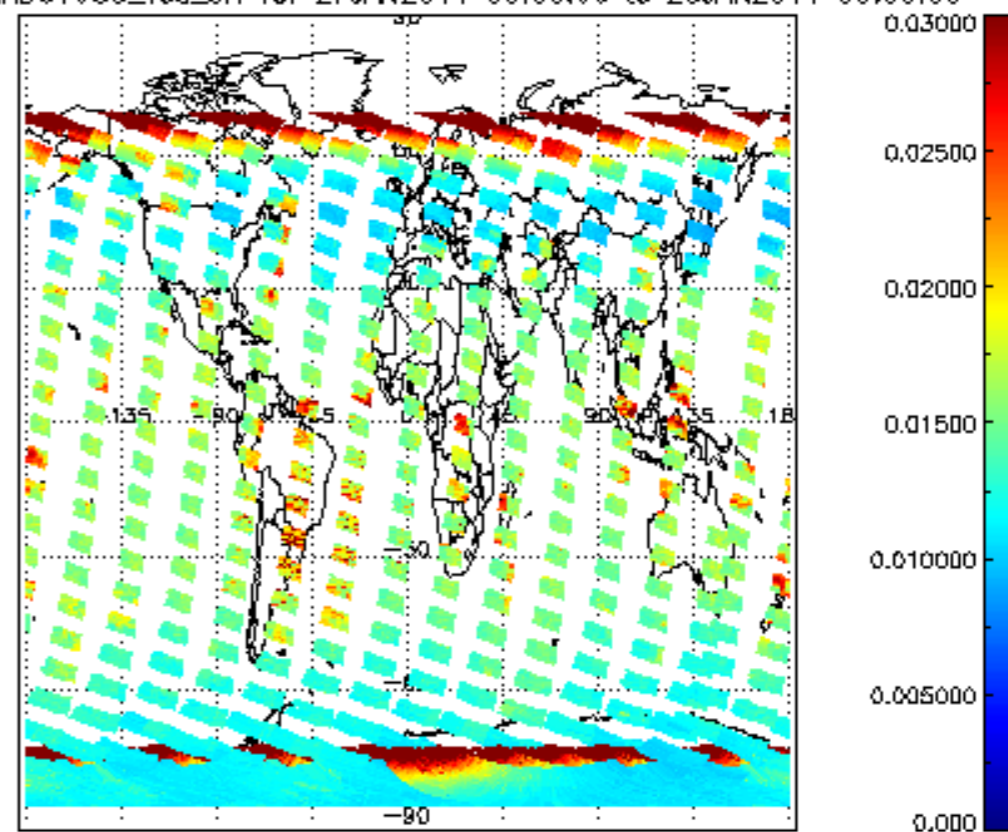




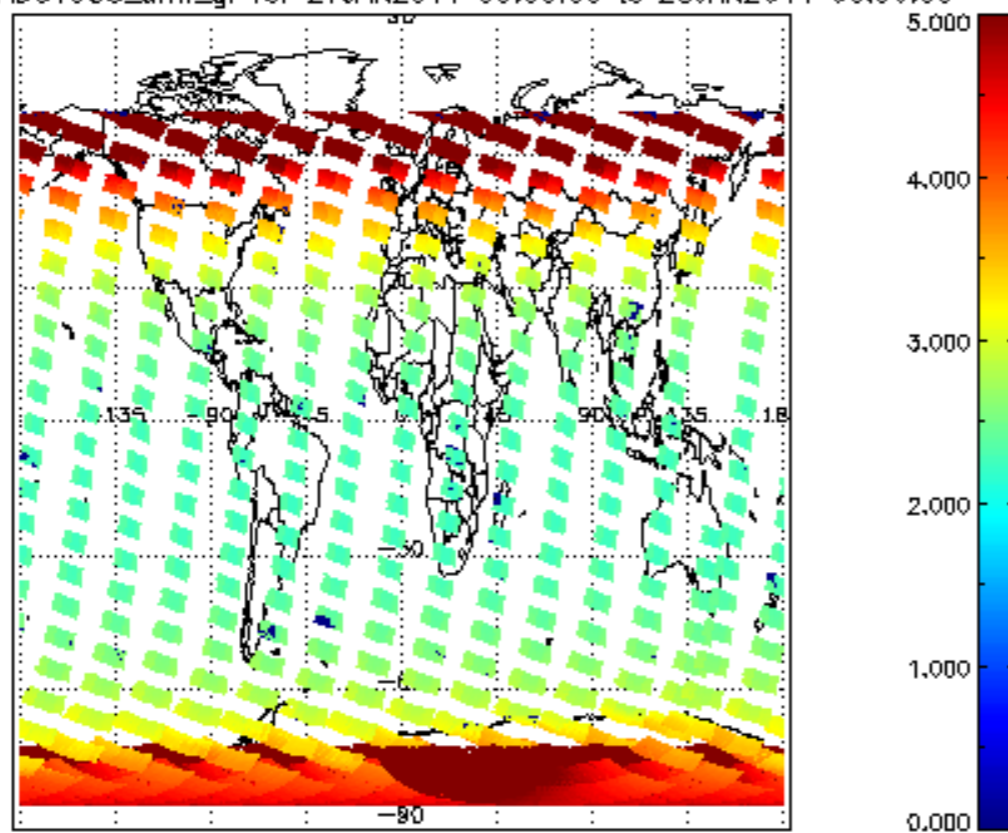
SCIOL2P_NADUV003_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



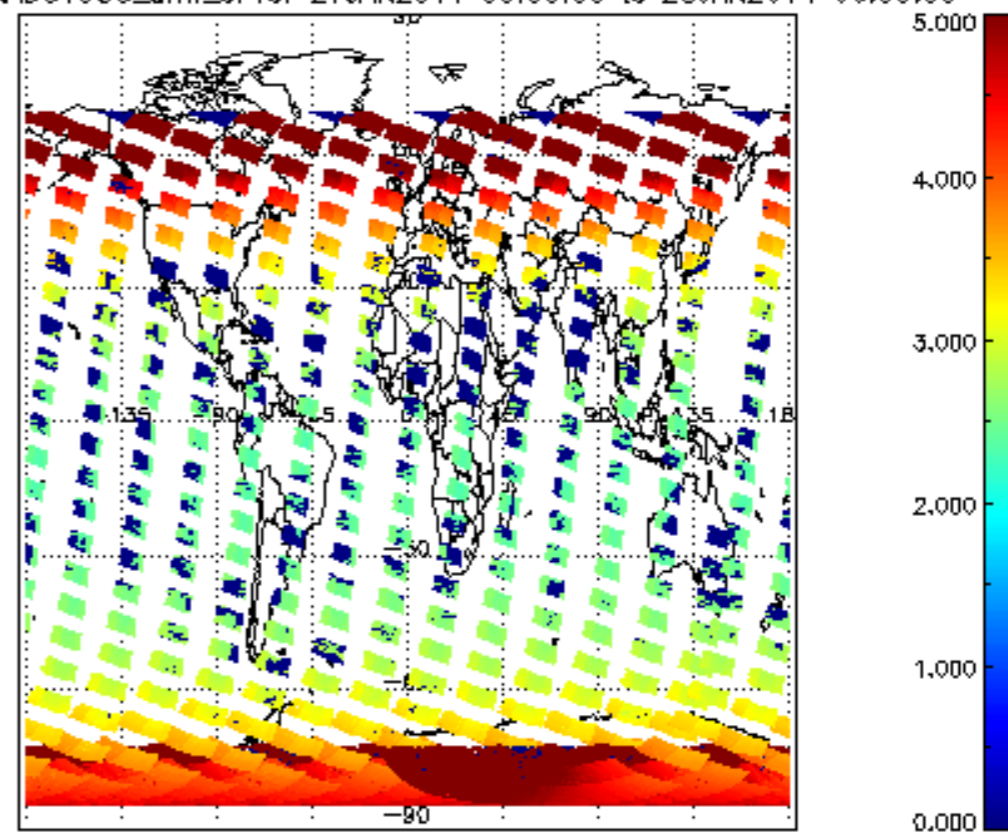
SCIOL2P_NADUV003_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

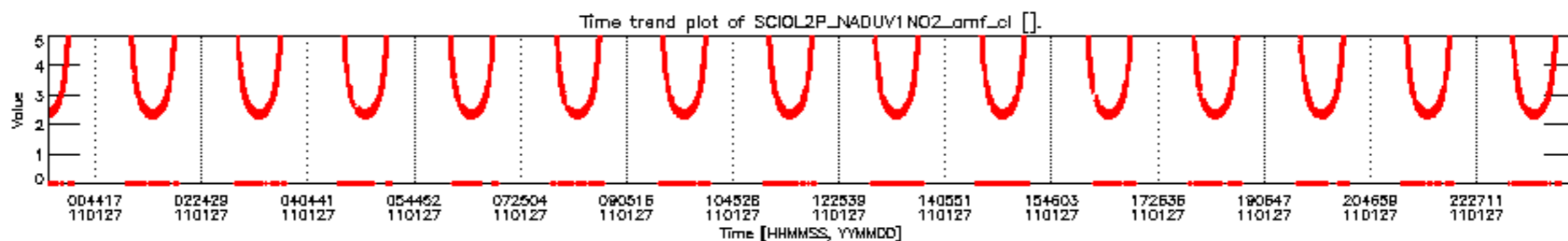
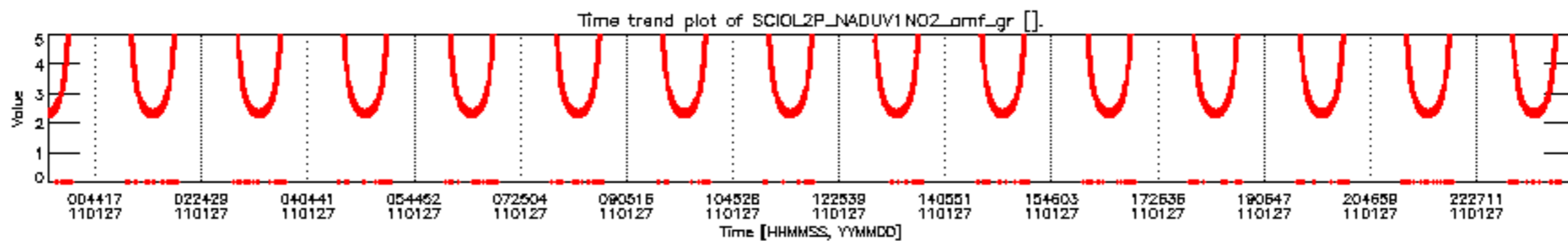
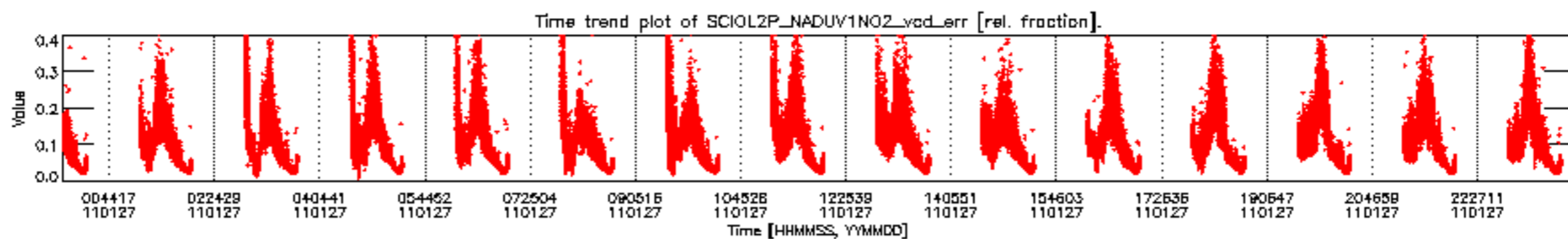
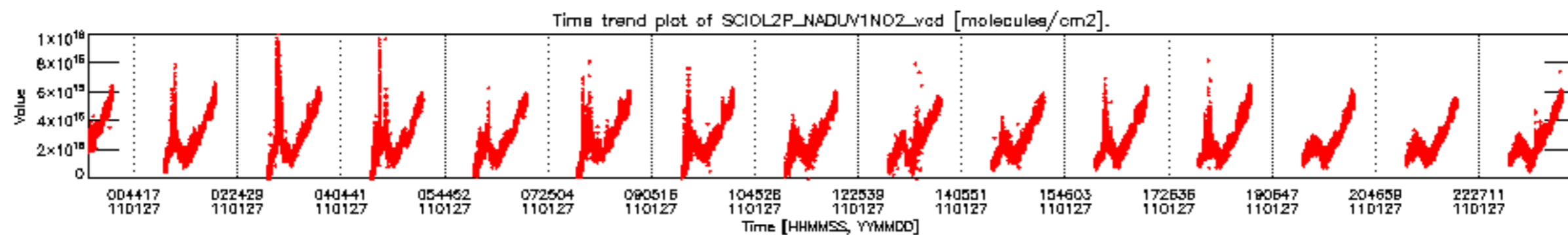


SCIOL2P_NADUV003_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

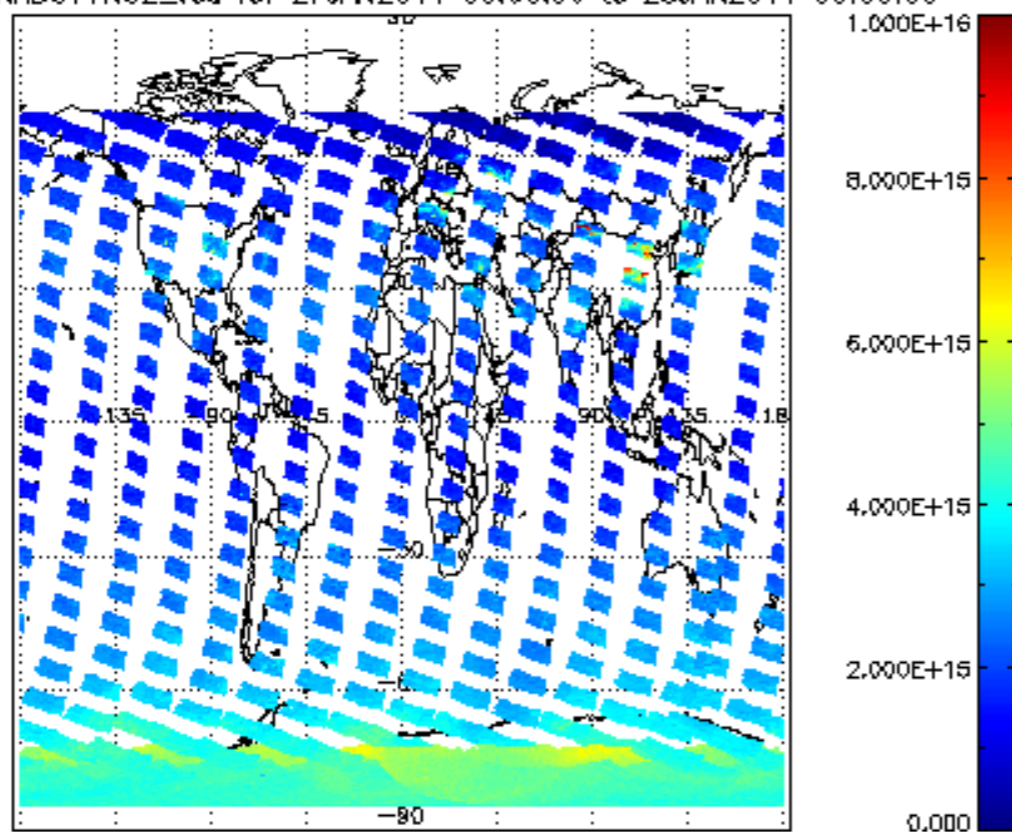


SCIOL2P_NADUV003_amf_cl for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

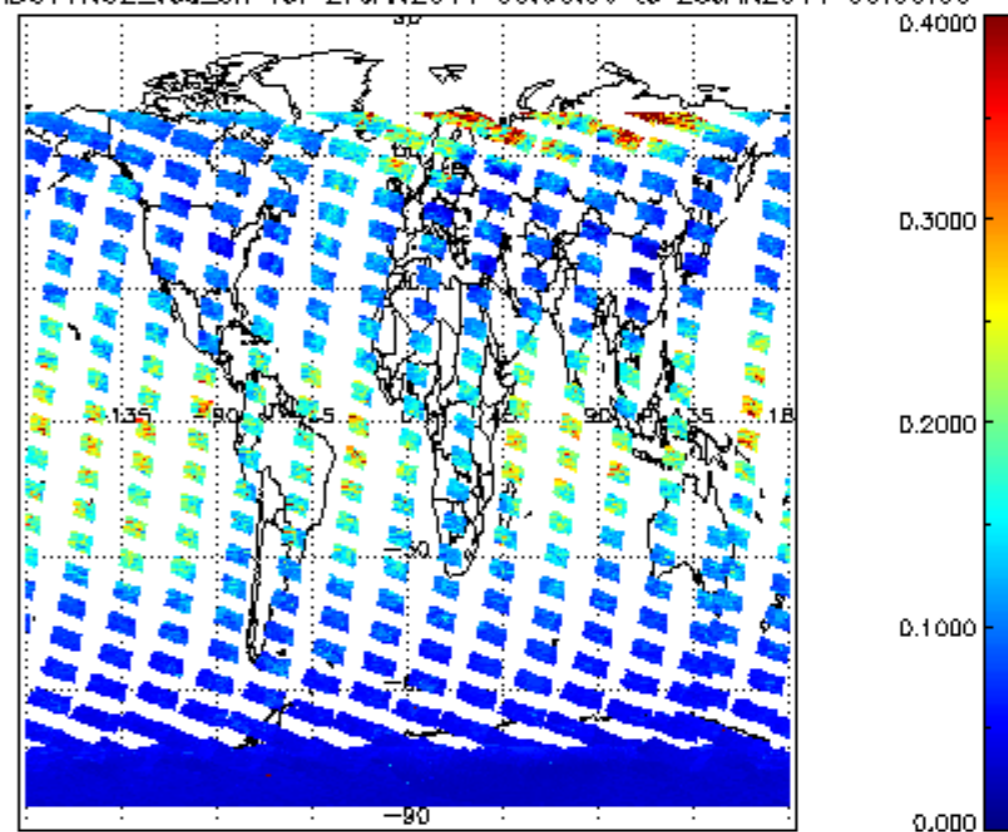




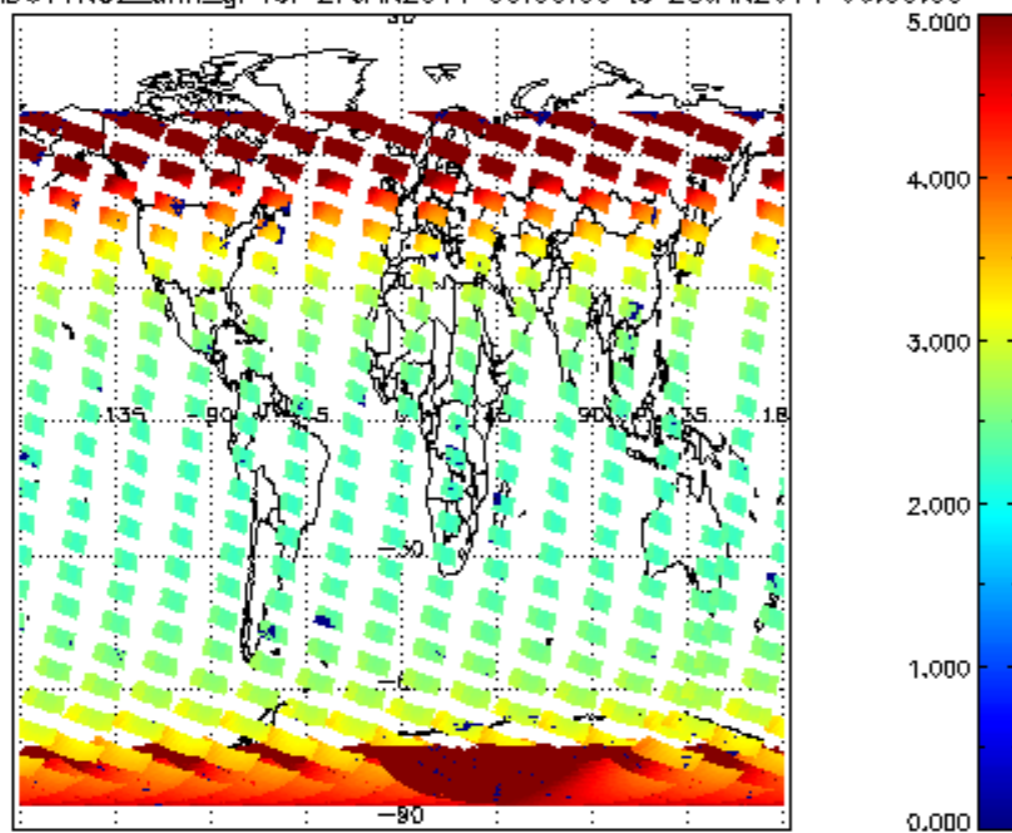
SCIOL2P_NADUV1NO2_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



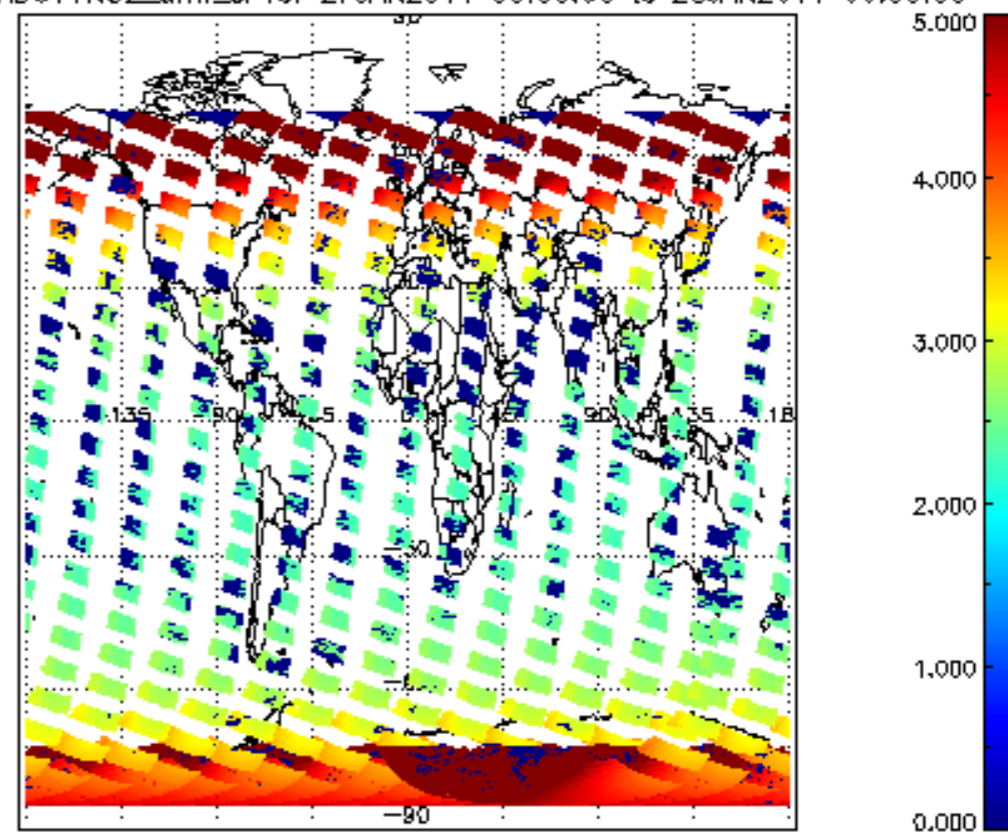
SCIOL2P_NADUV1NO2_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

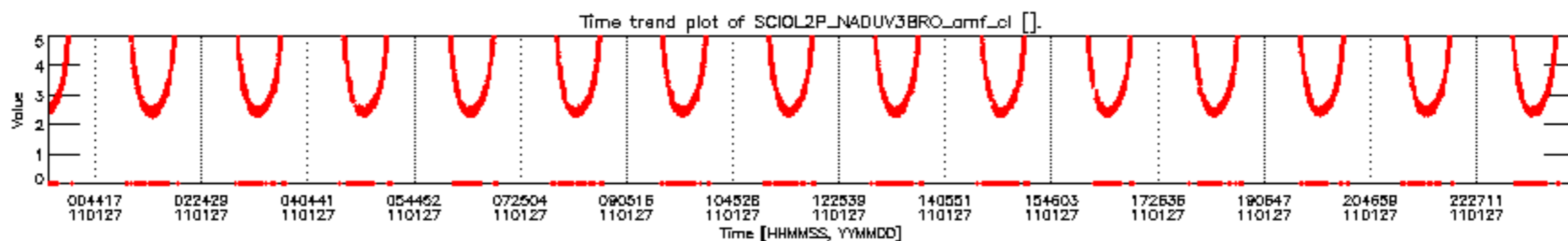
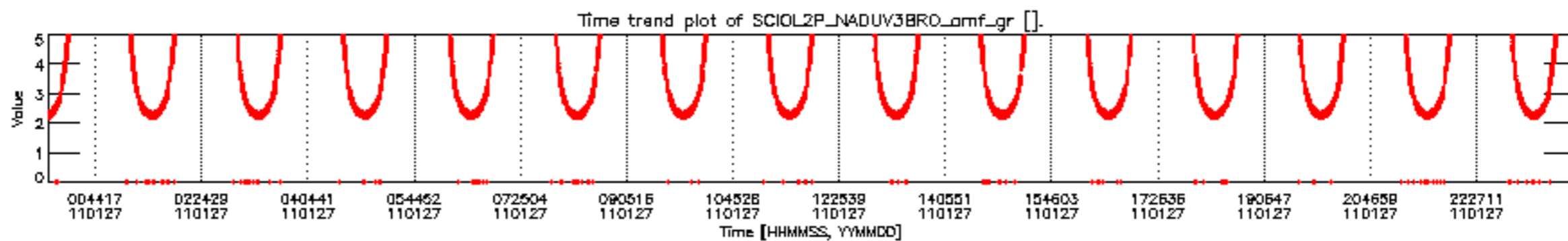
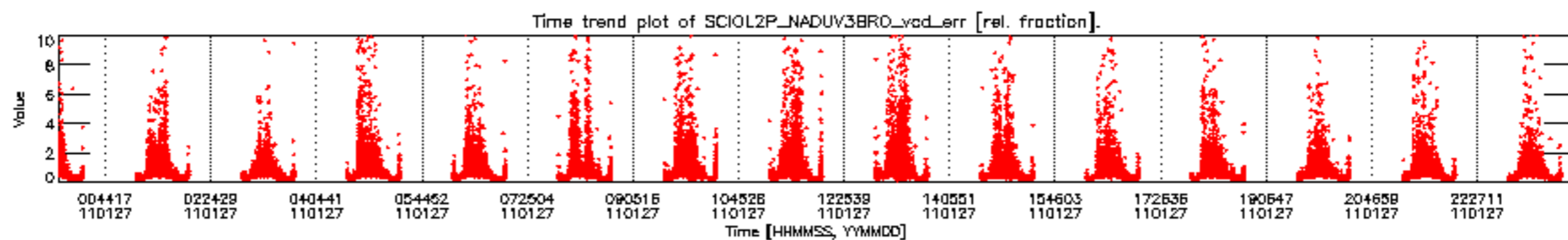
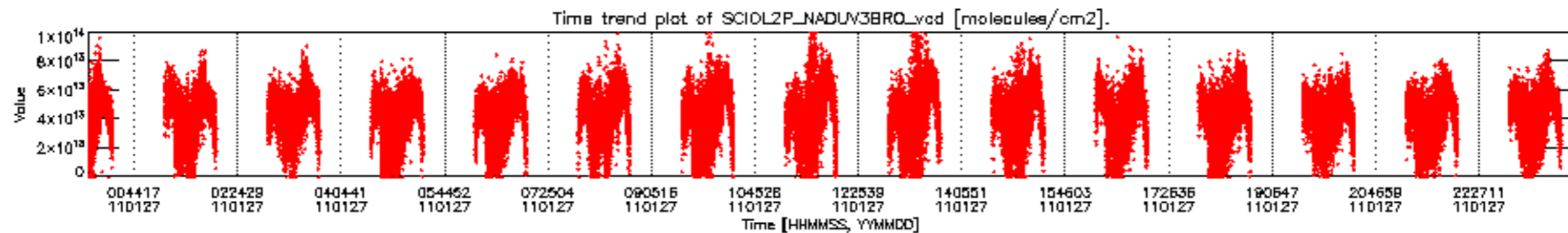


SCIOL2P_NADUV1NO2_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

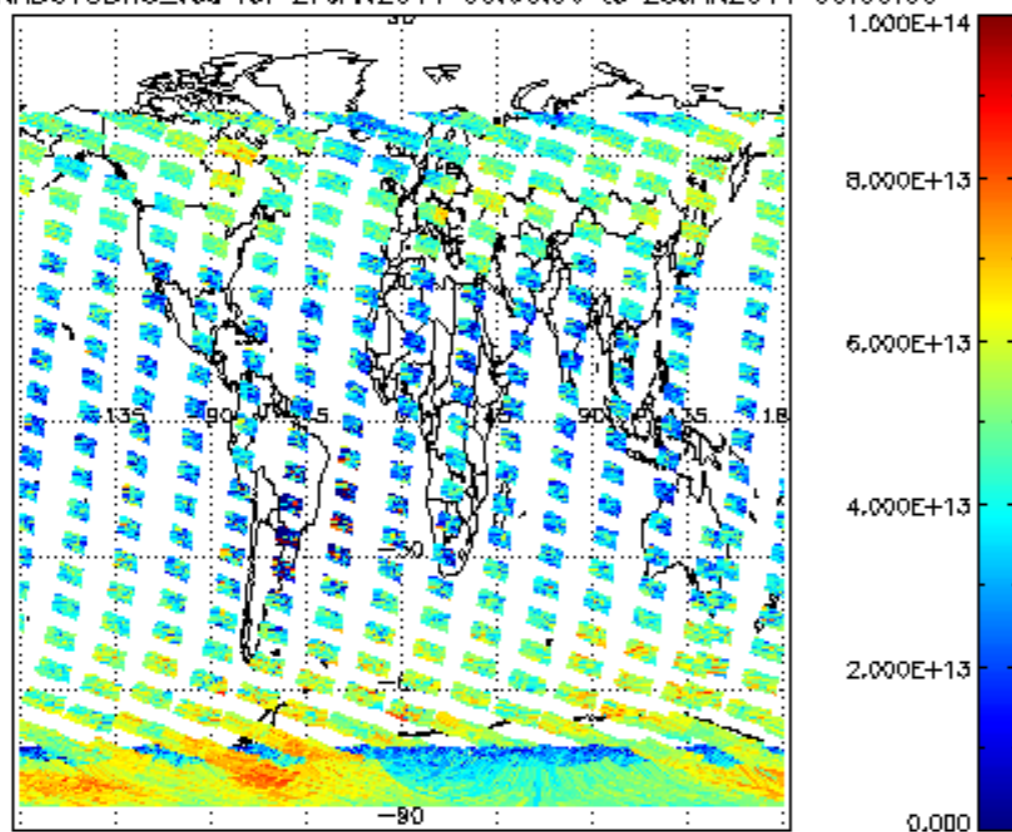


SCIOL2P_NADUV1NO2_amf_cl for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

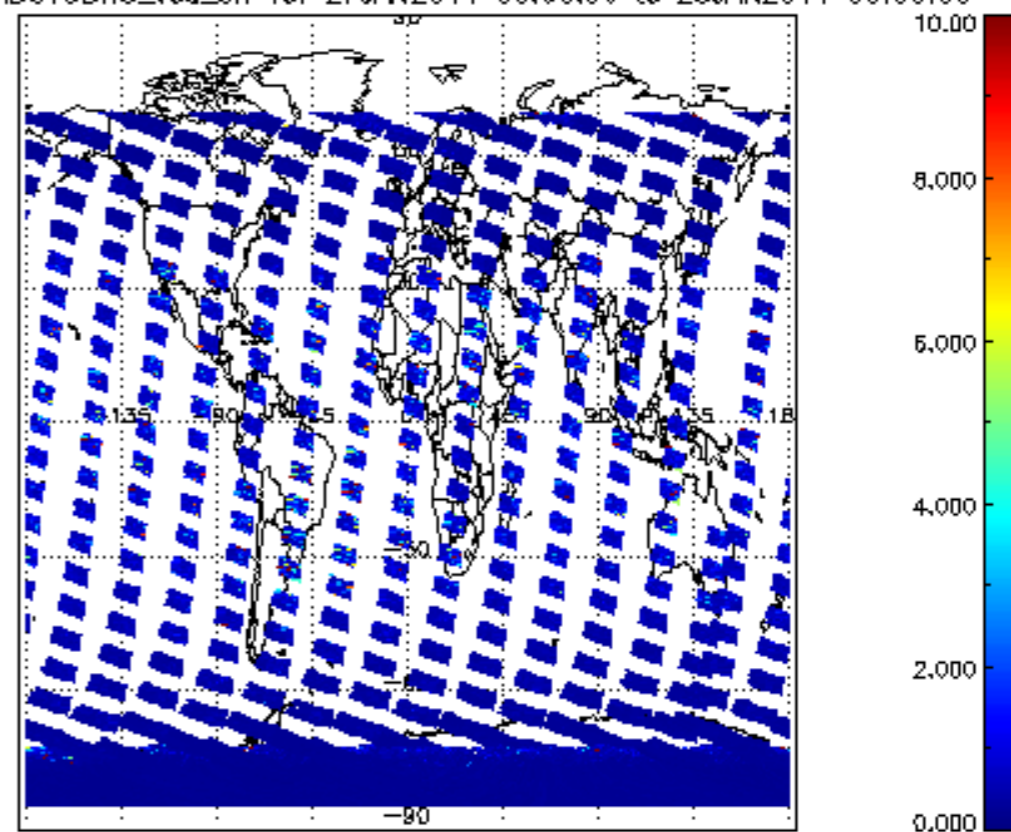




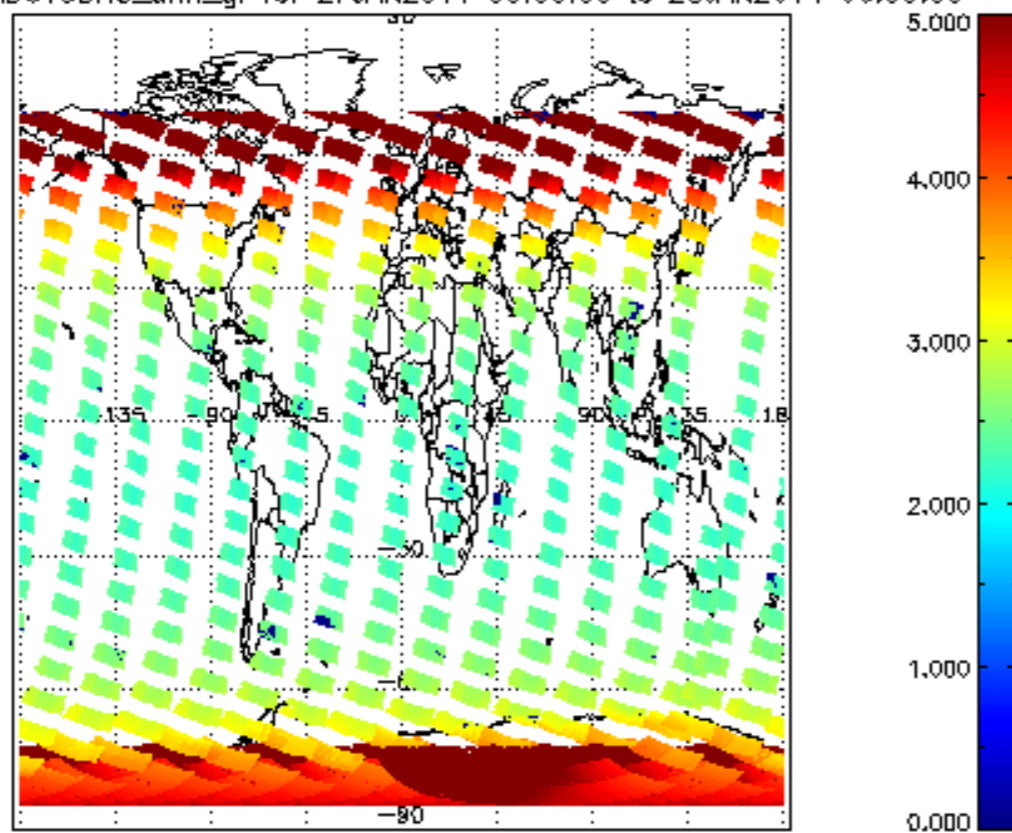
SCIOL2P_NADUV3BRO_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



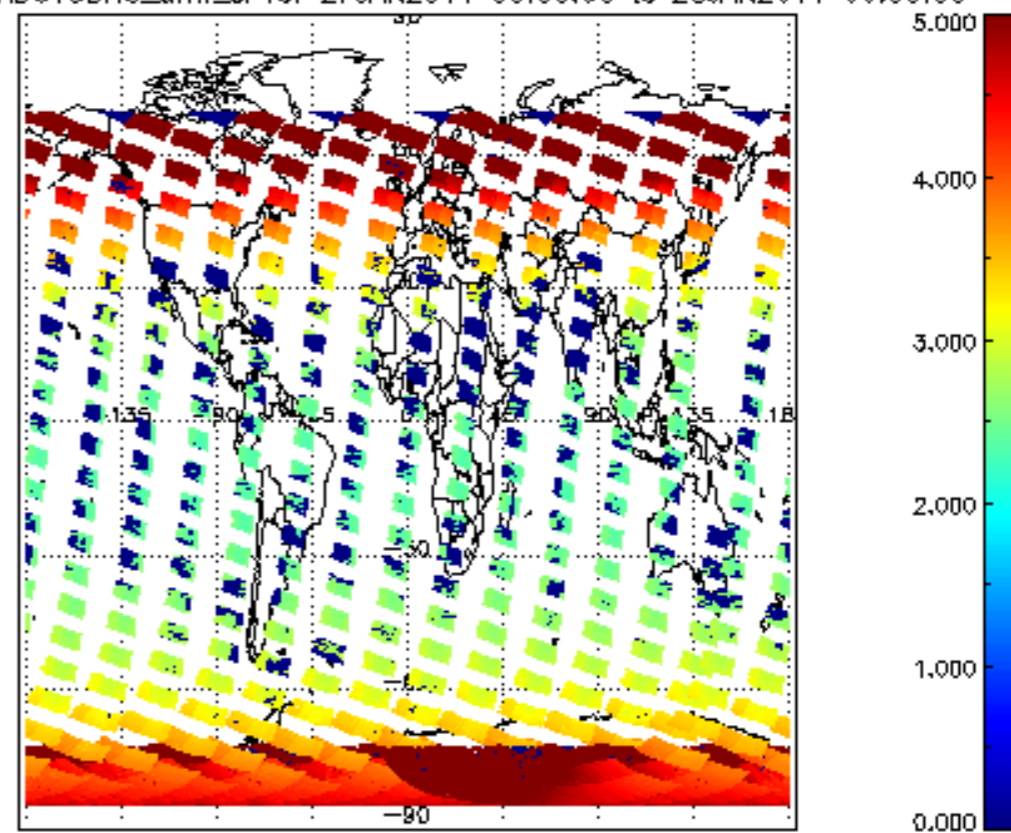
SCIOL2P_NADUV3BRO_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



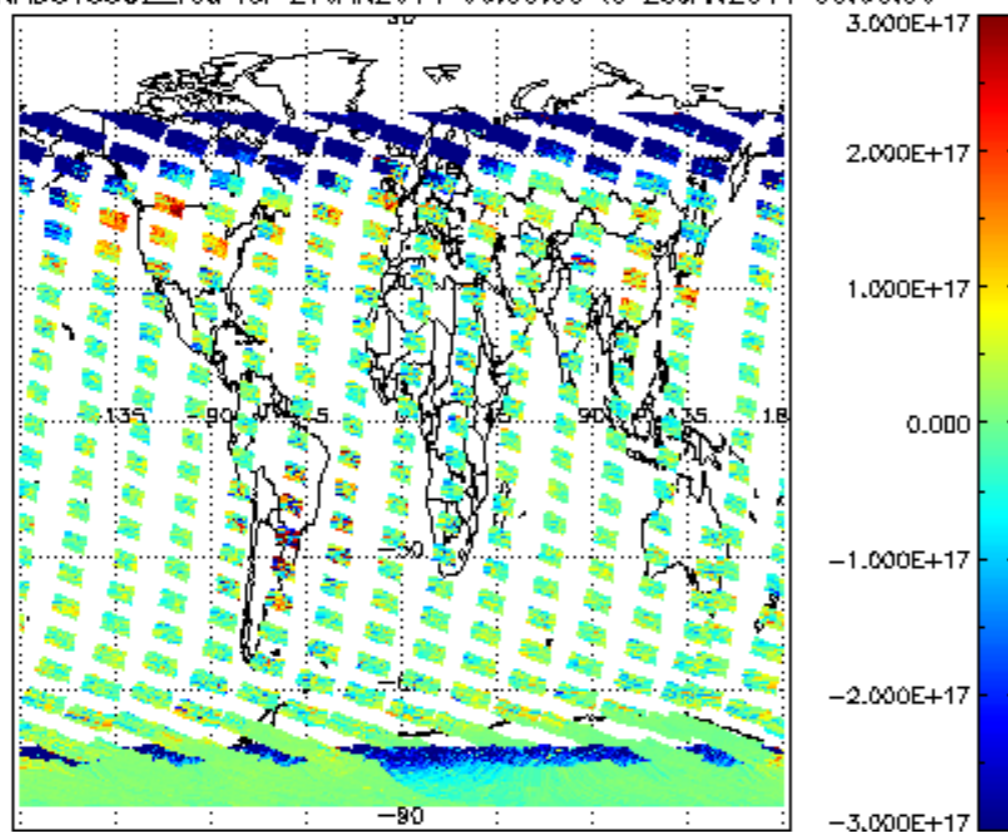
SCIOL2P_NADUV3BRO_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



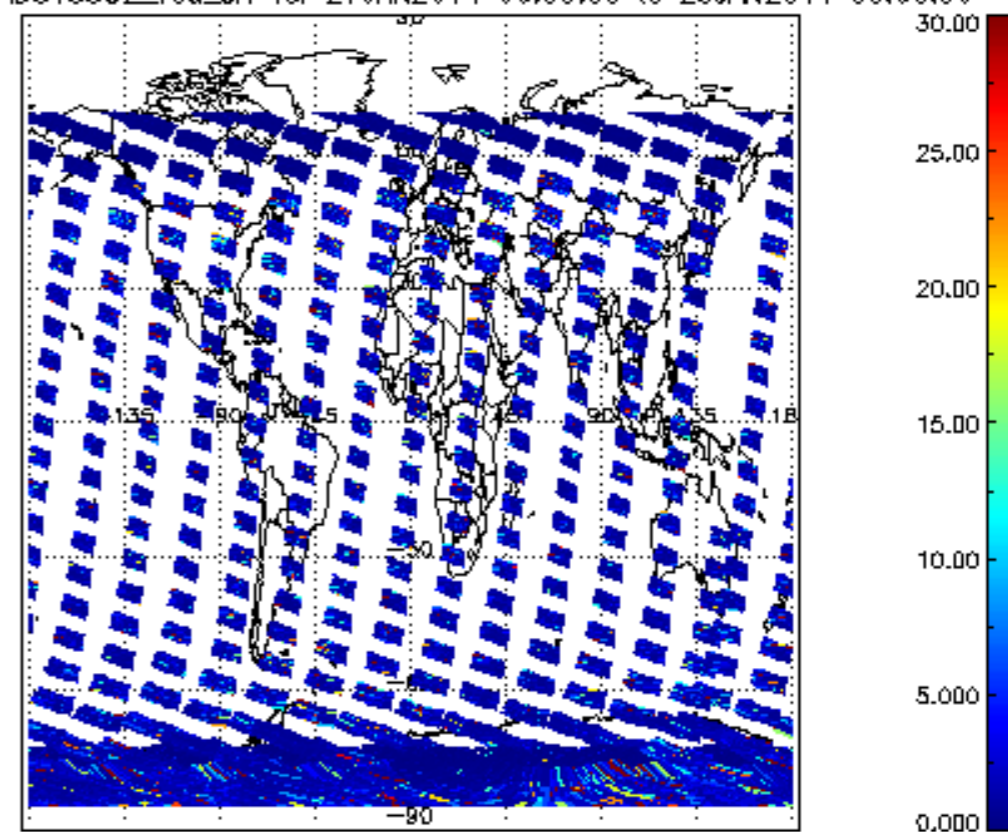
SCIOL2P_NADUV3BRO_amf_cl for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



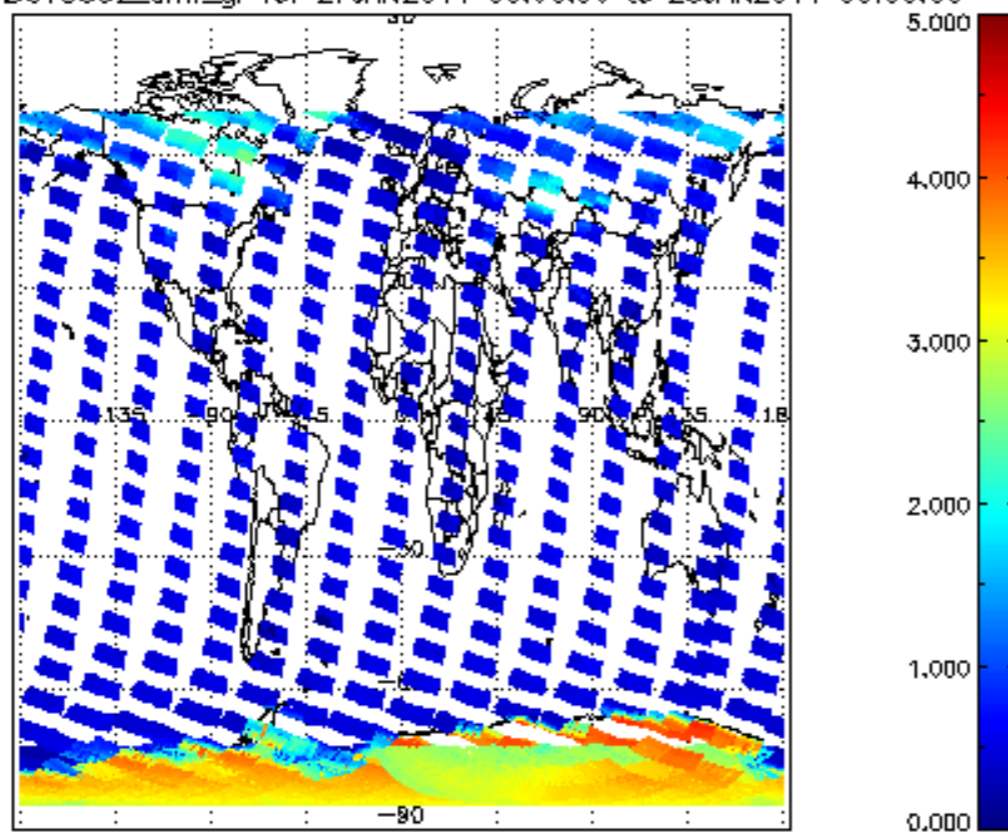
SCIOL2P_NADUV5S02_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



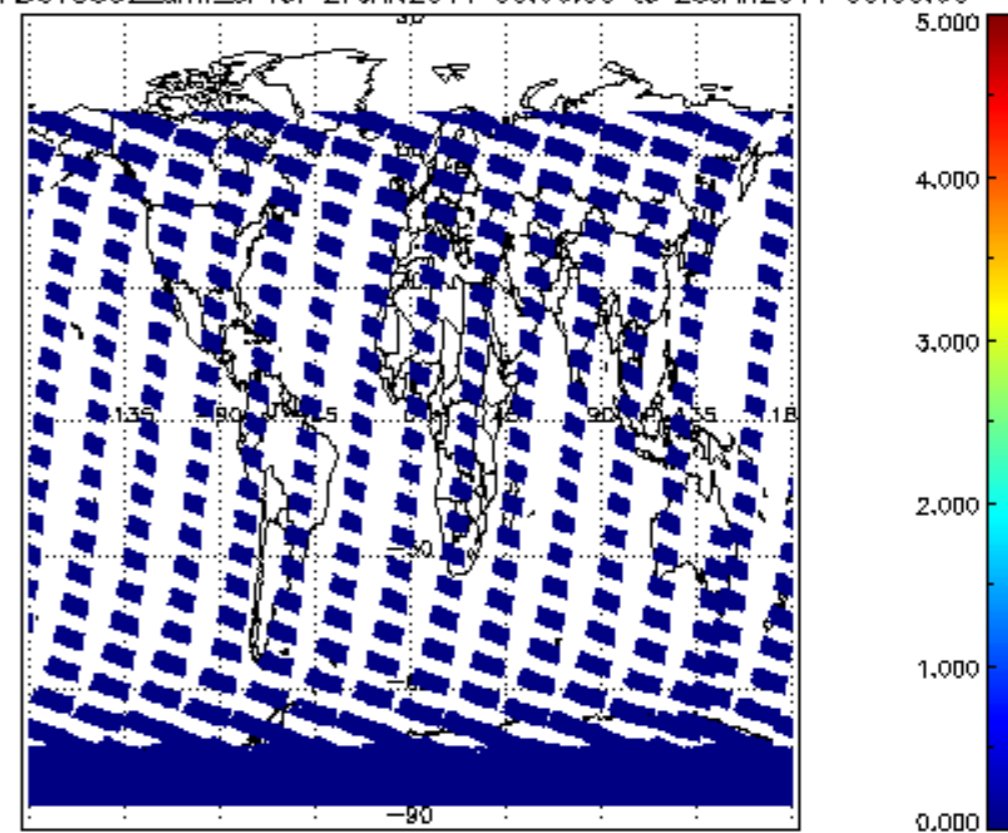
SCIOL2P_NADUV5S02_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

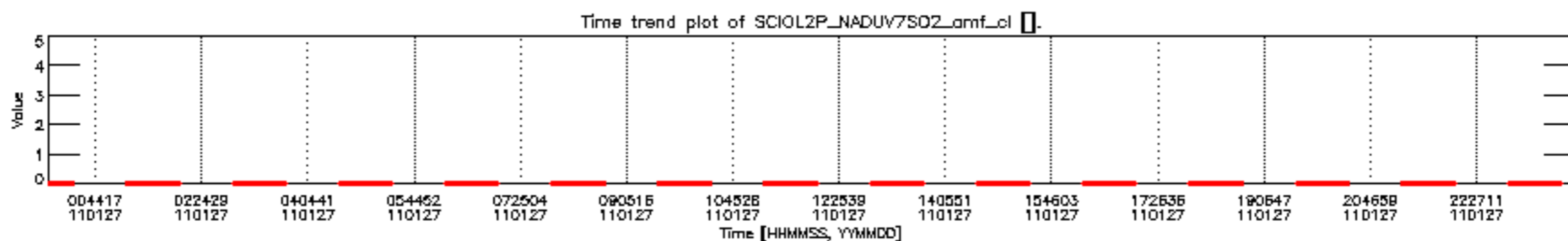
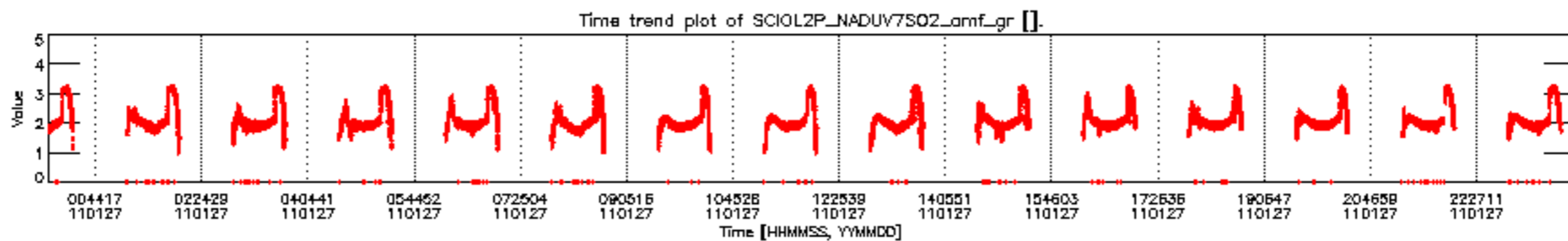
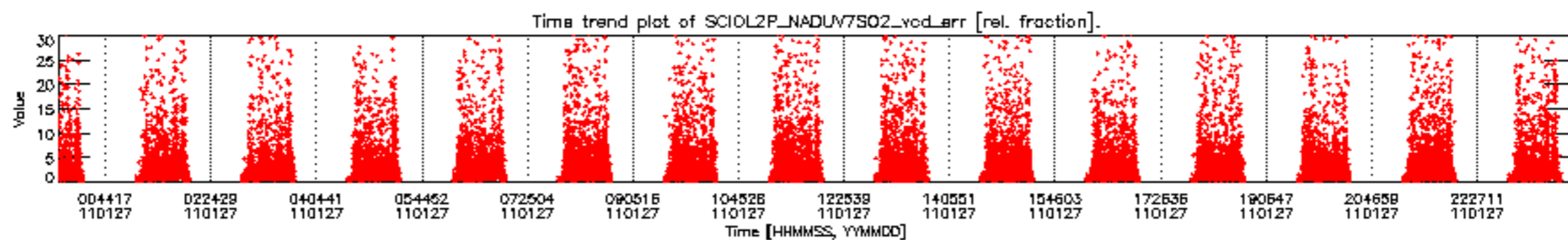
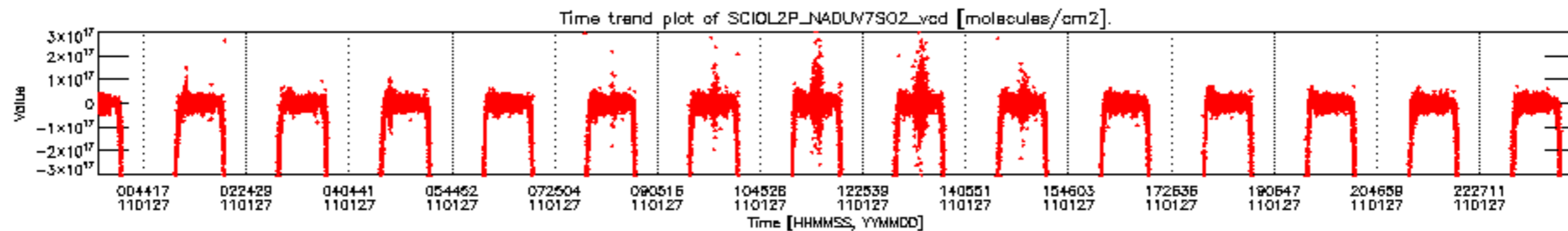


SCIOL2P_NADUV5S02_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

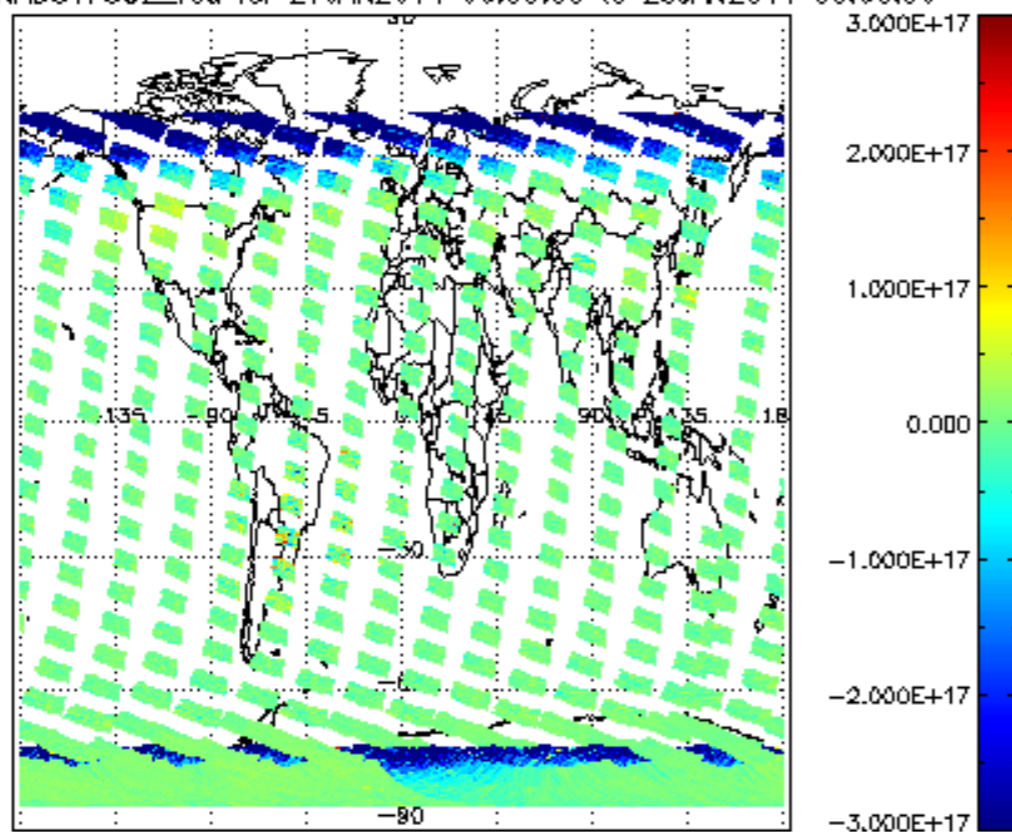


SCIOL2P_NADUV5S02_amf_cl for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

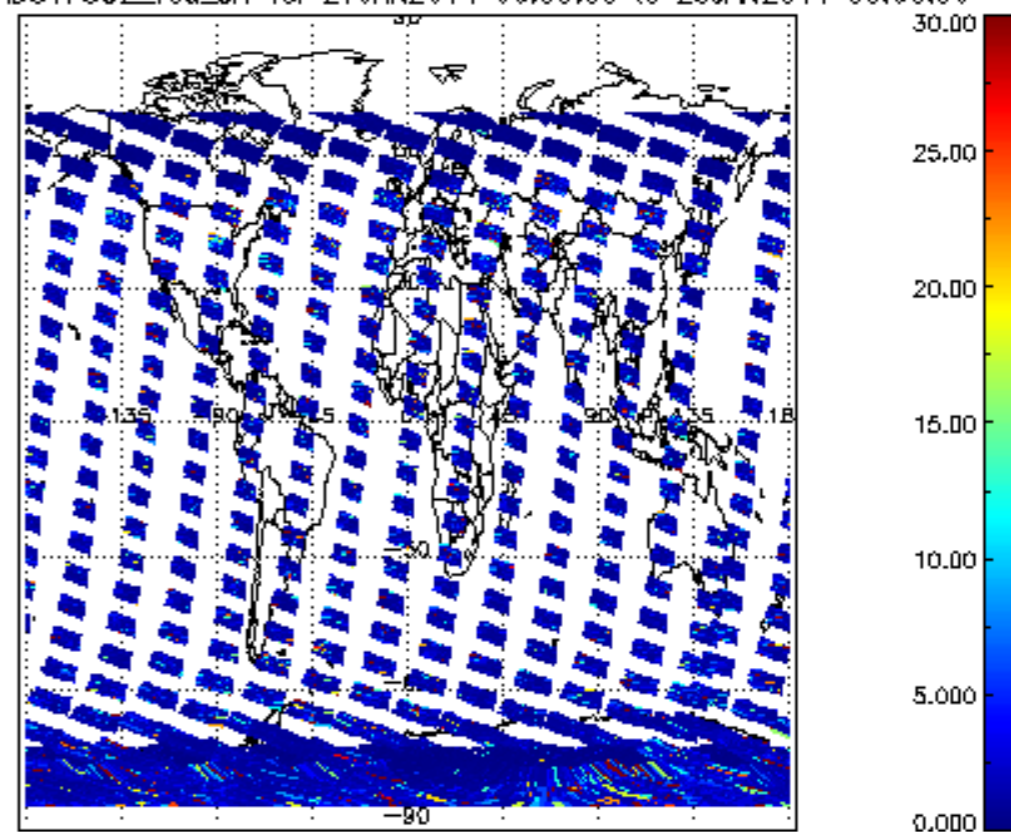




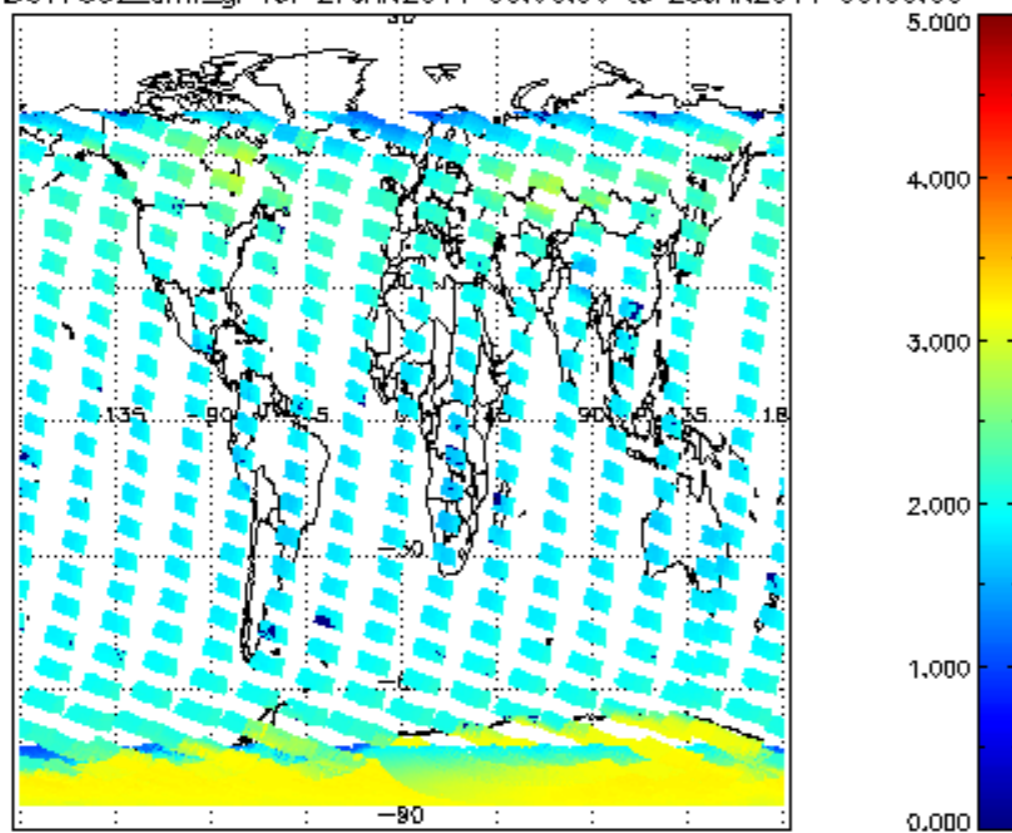
SCIOL2P_NADUV7S02_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



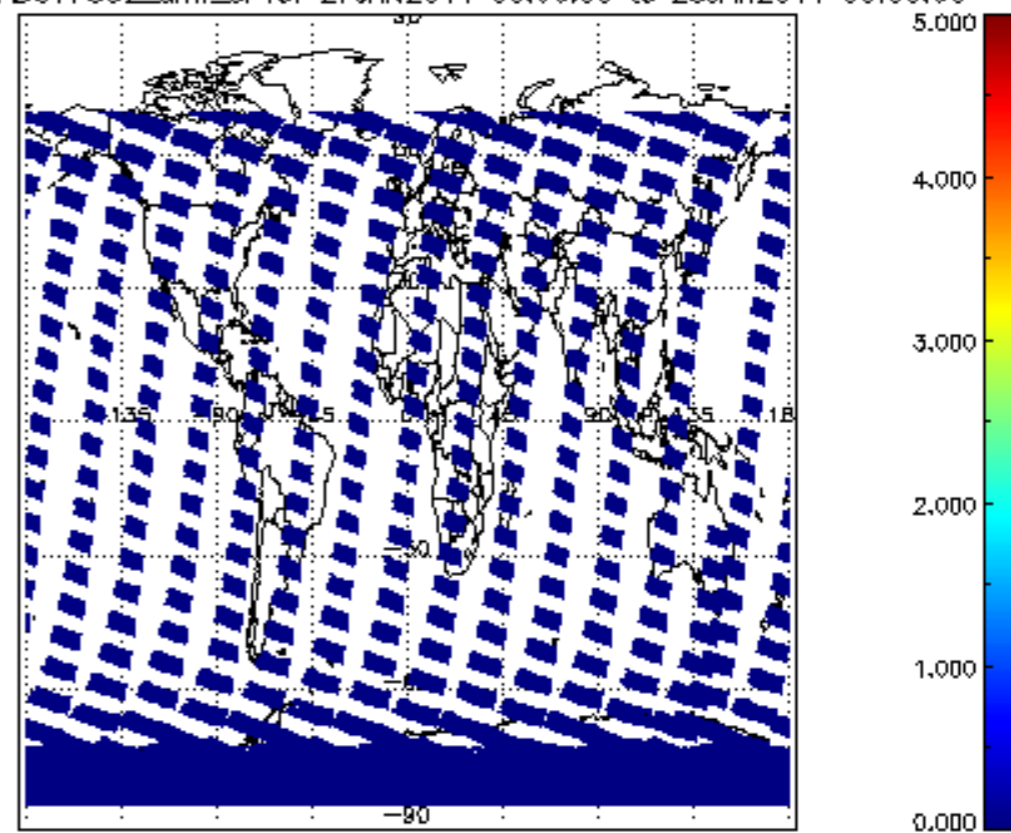
SCIOL2P_NADUV7S02_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

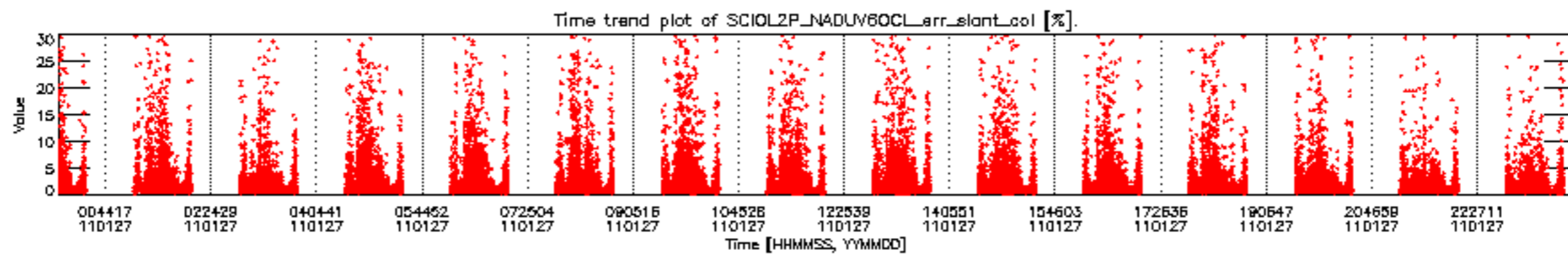
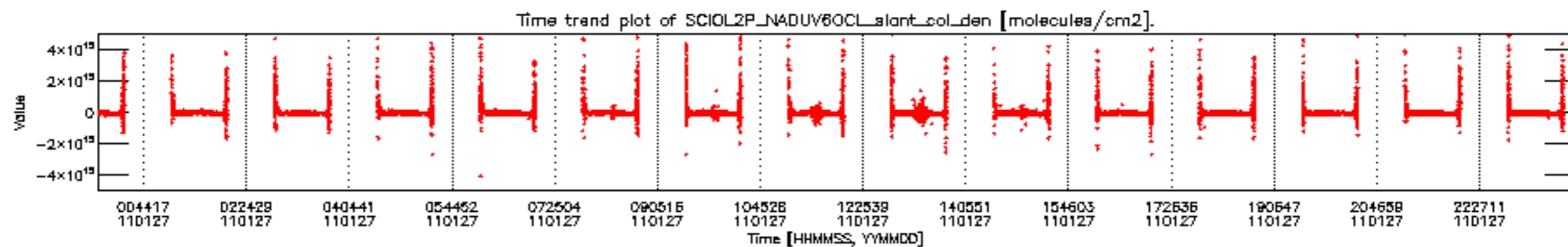


SCIOL2P_NADUV7S02_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

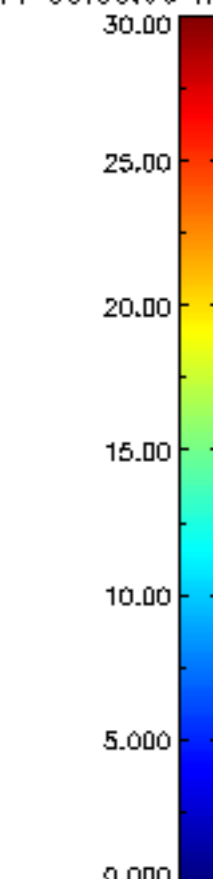
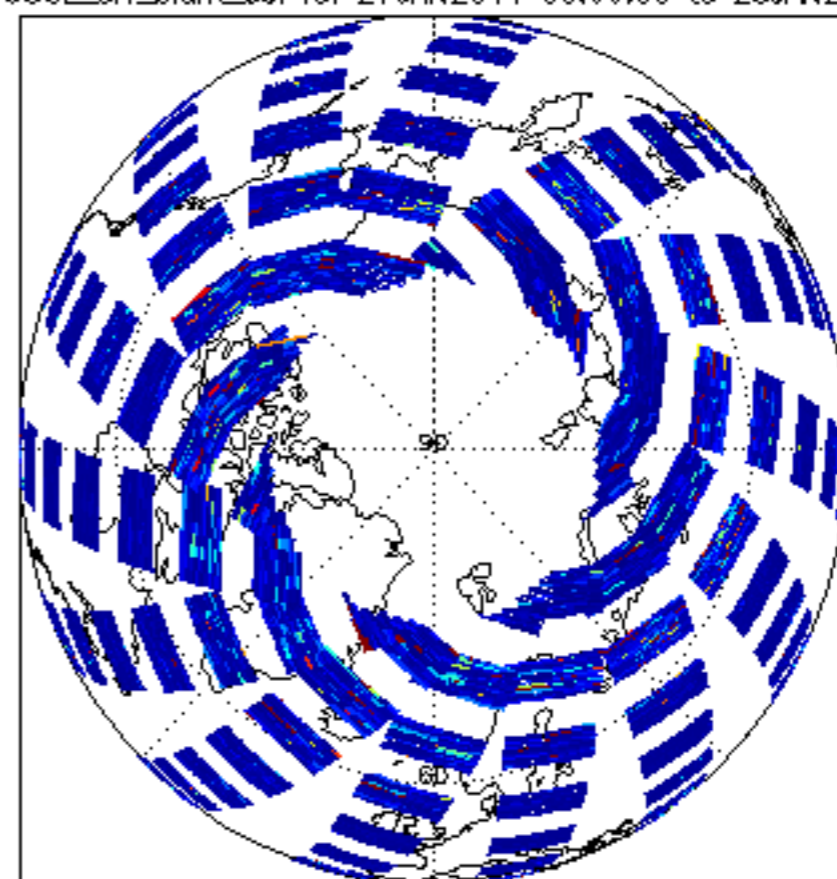
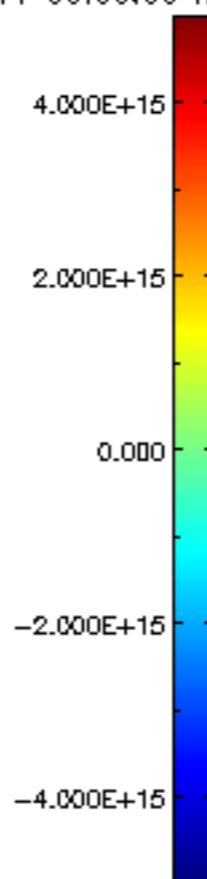
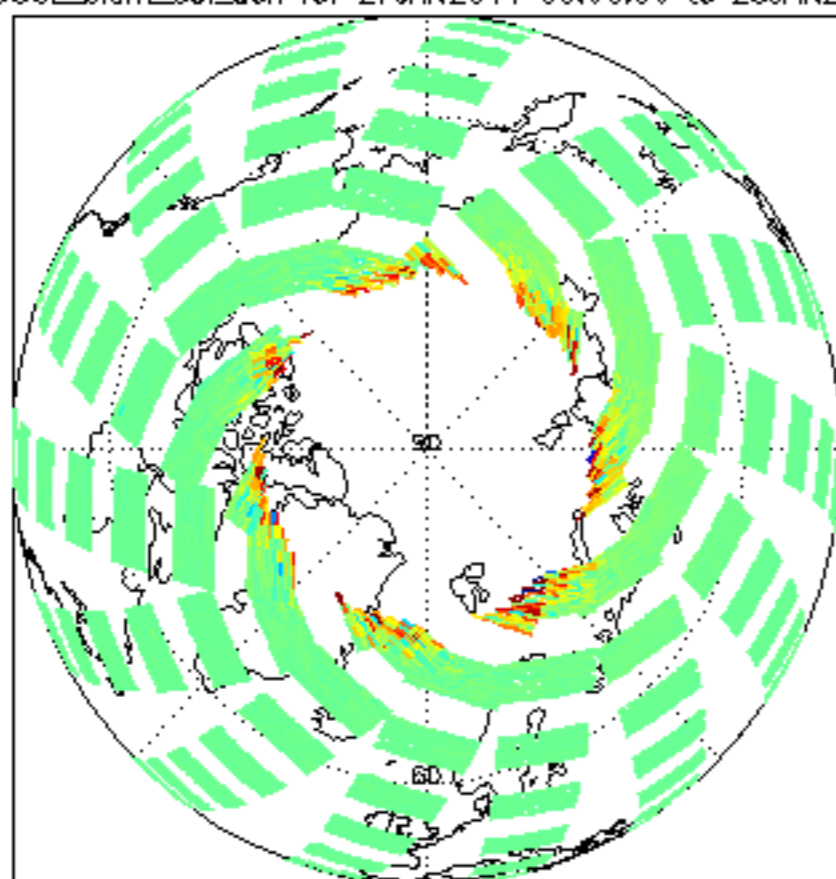


SCIOL2P_NADUV7S02_amf_sl for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

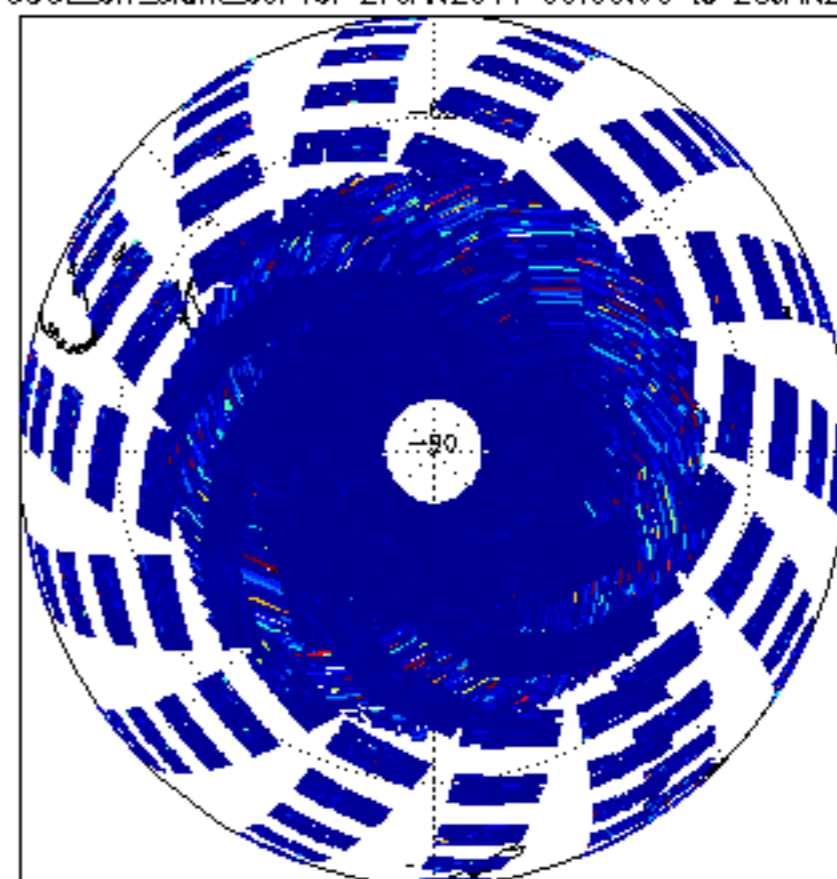
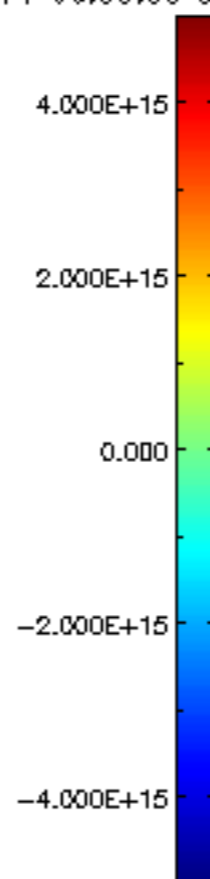
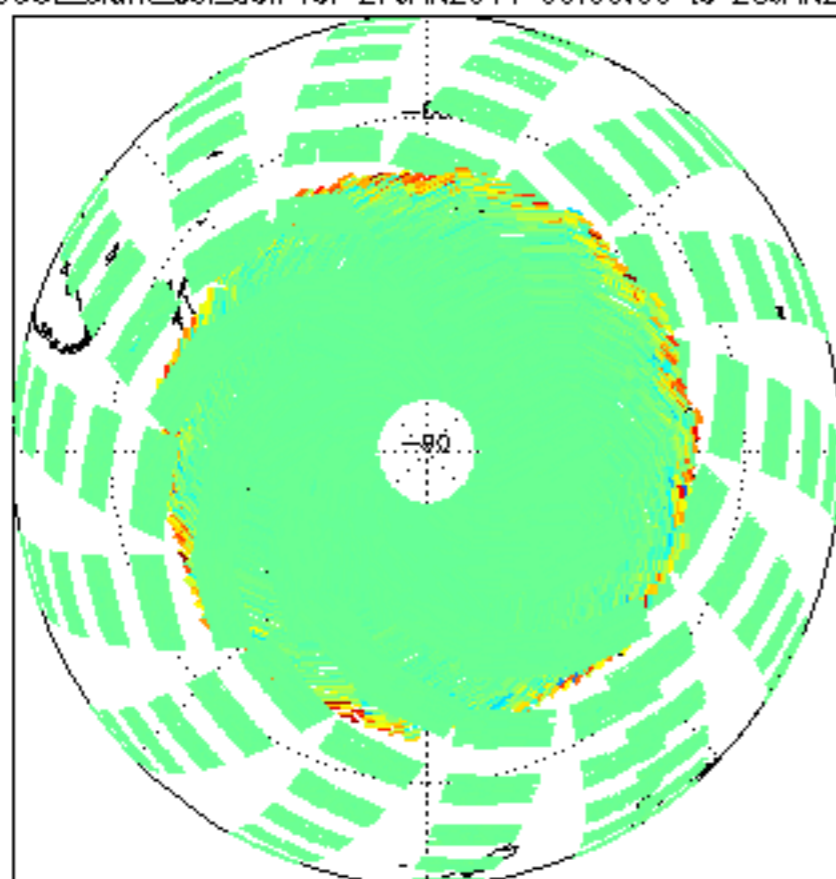


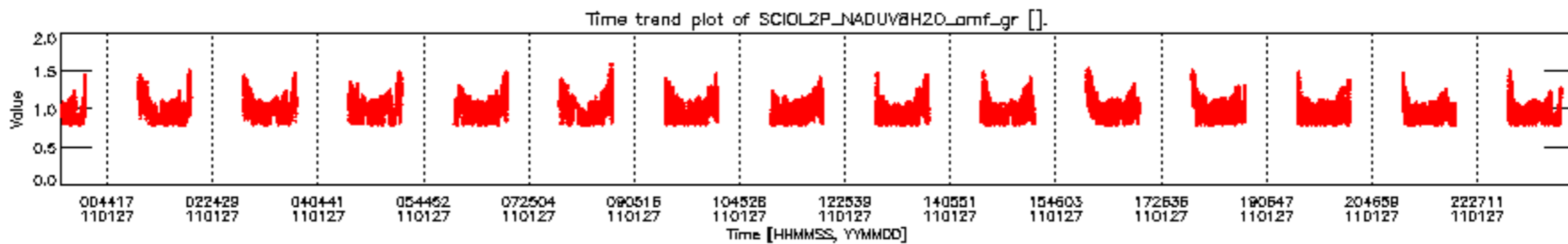
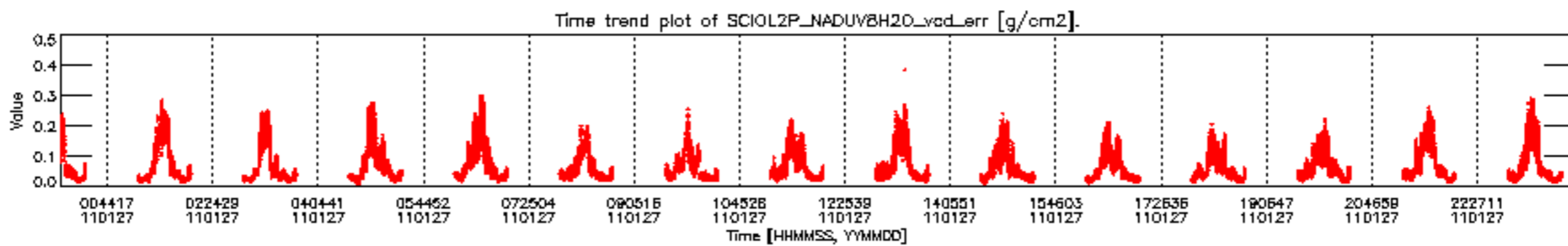
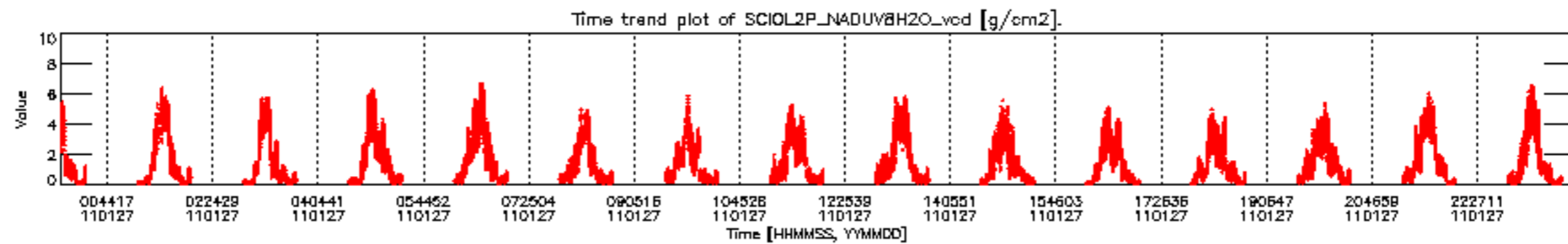


ICIOL2P_NADUV60CL_slant_col_den for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 np;ICIOL2P_NADUV60CL_err_slant_col for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 np

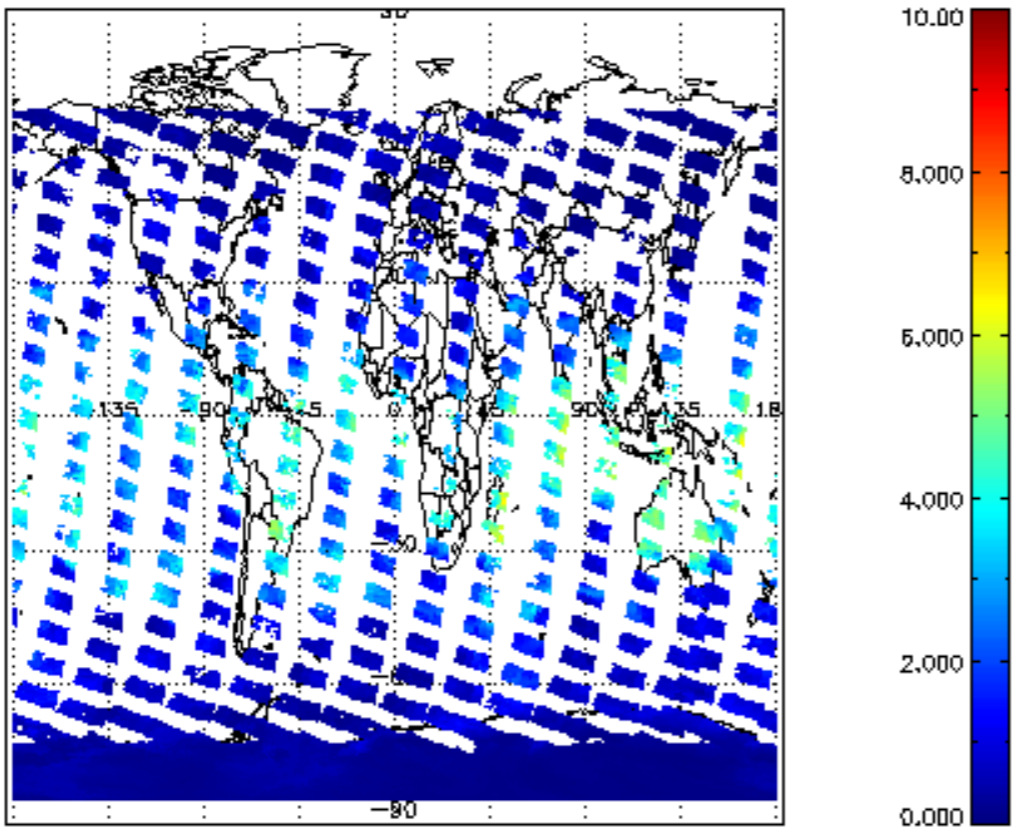


iCIOL2P_NADUV6OCL_slant_col_den for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 sp iCIOL2P_NADUV6OCL_err_slant_col for 27JAN2011 00:00:00 to 28JAN2011 00:00:00 sp

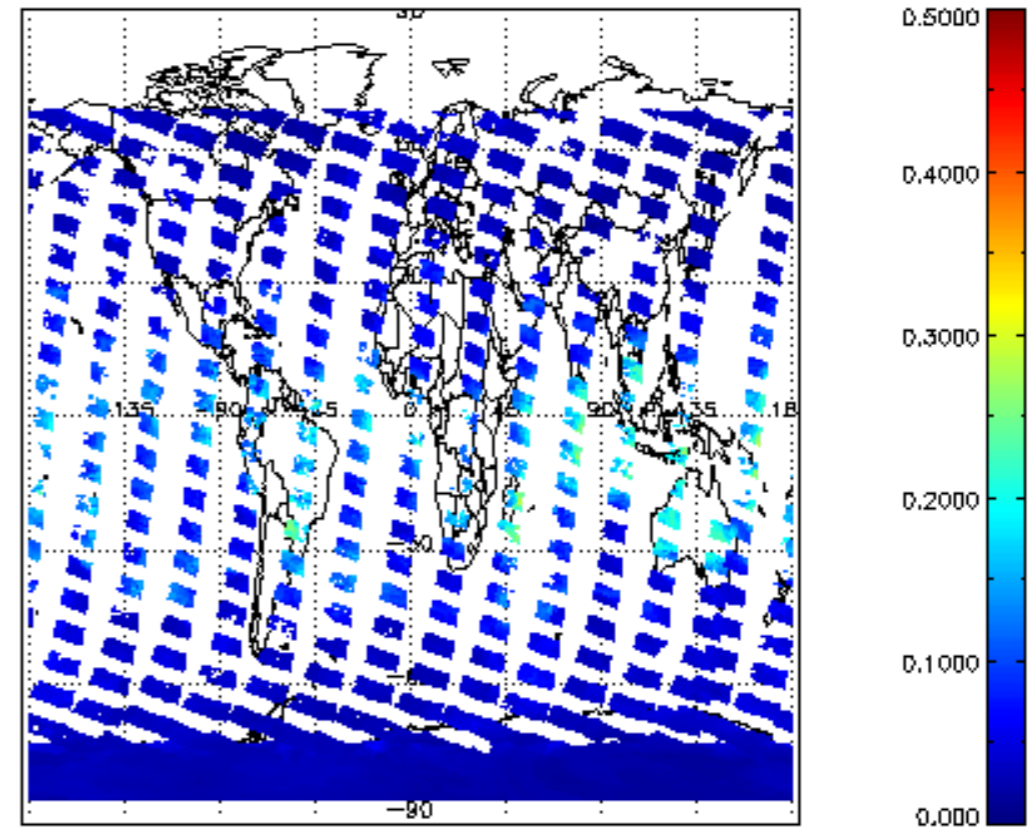




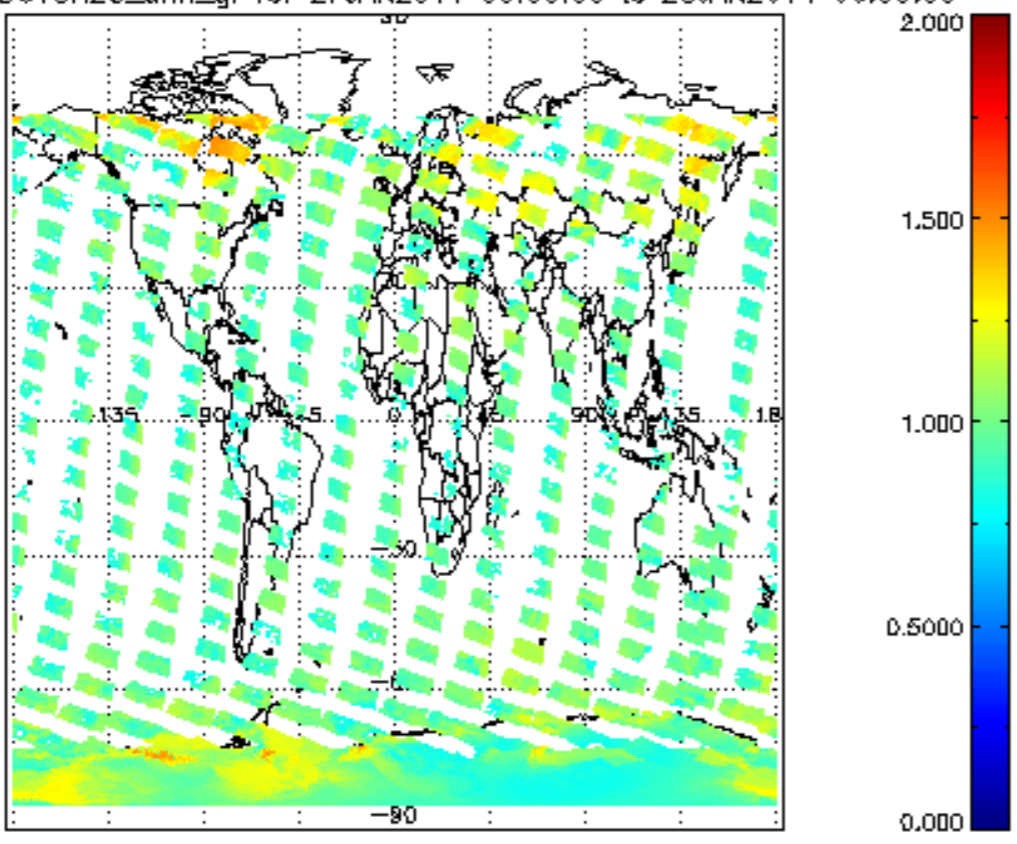
SCIOL2P_NADUV8H20_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

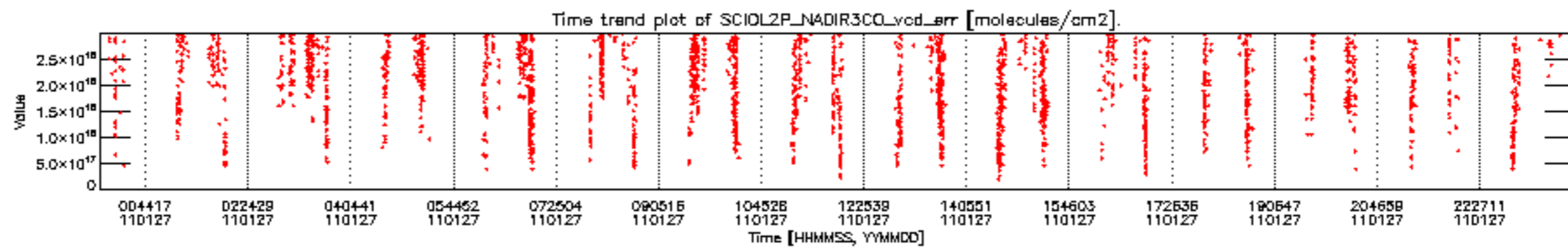
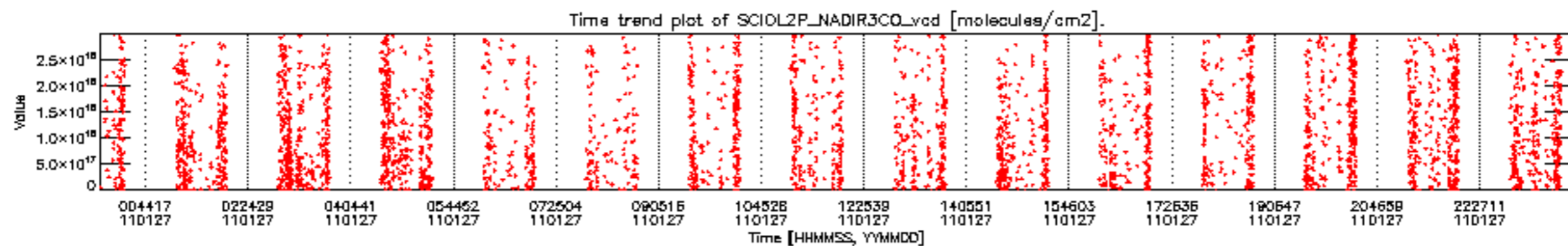


SCIOL2P_NADUV8H20_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

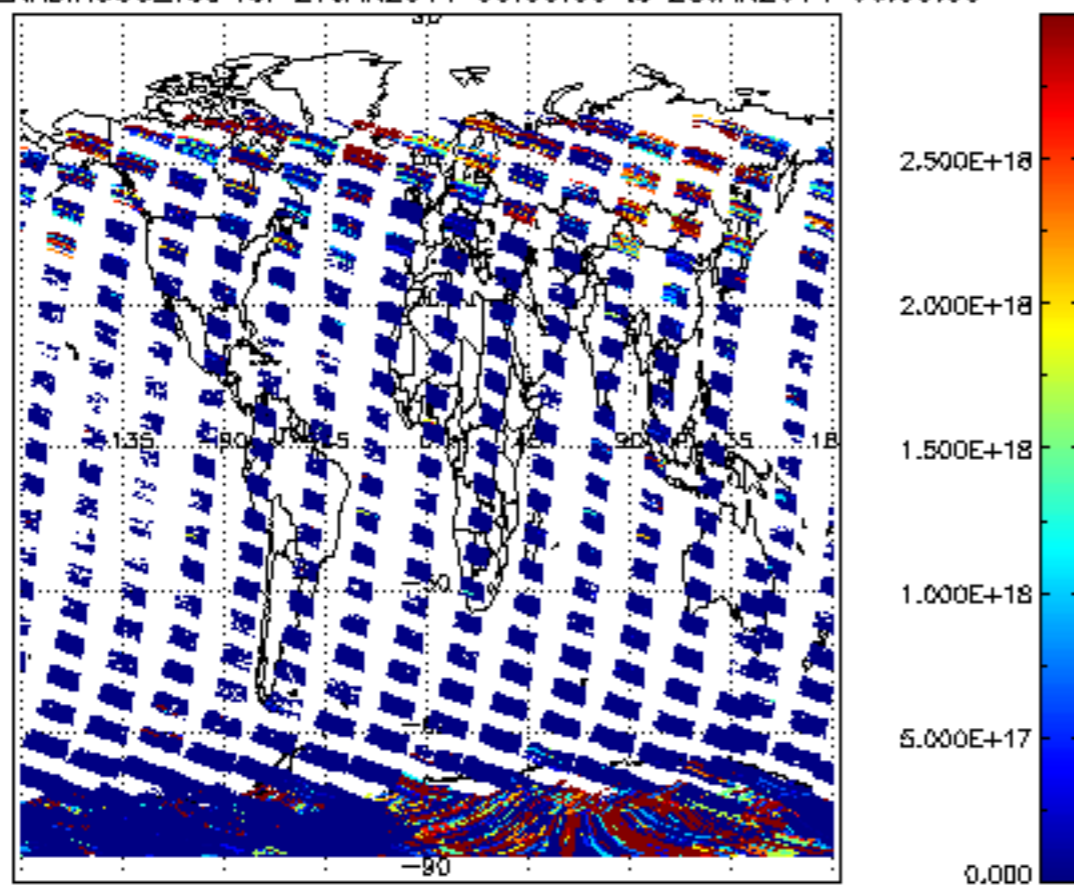


SCIOL2P_NADUV8H20_amf_gr for 27JAN2011 00:00:00 to 28JAN2011 00:00:00

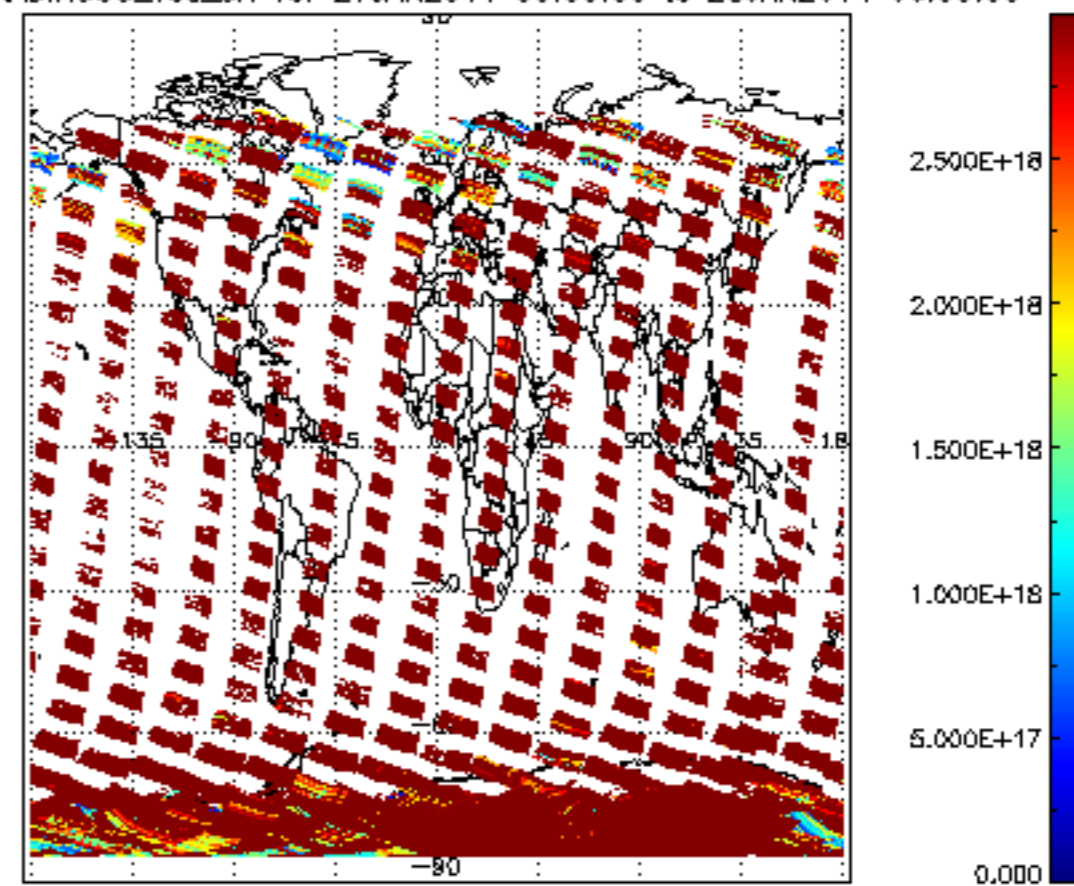




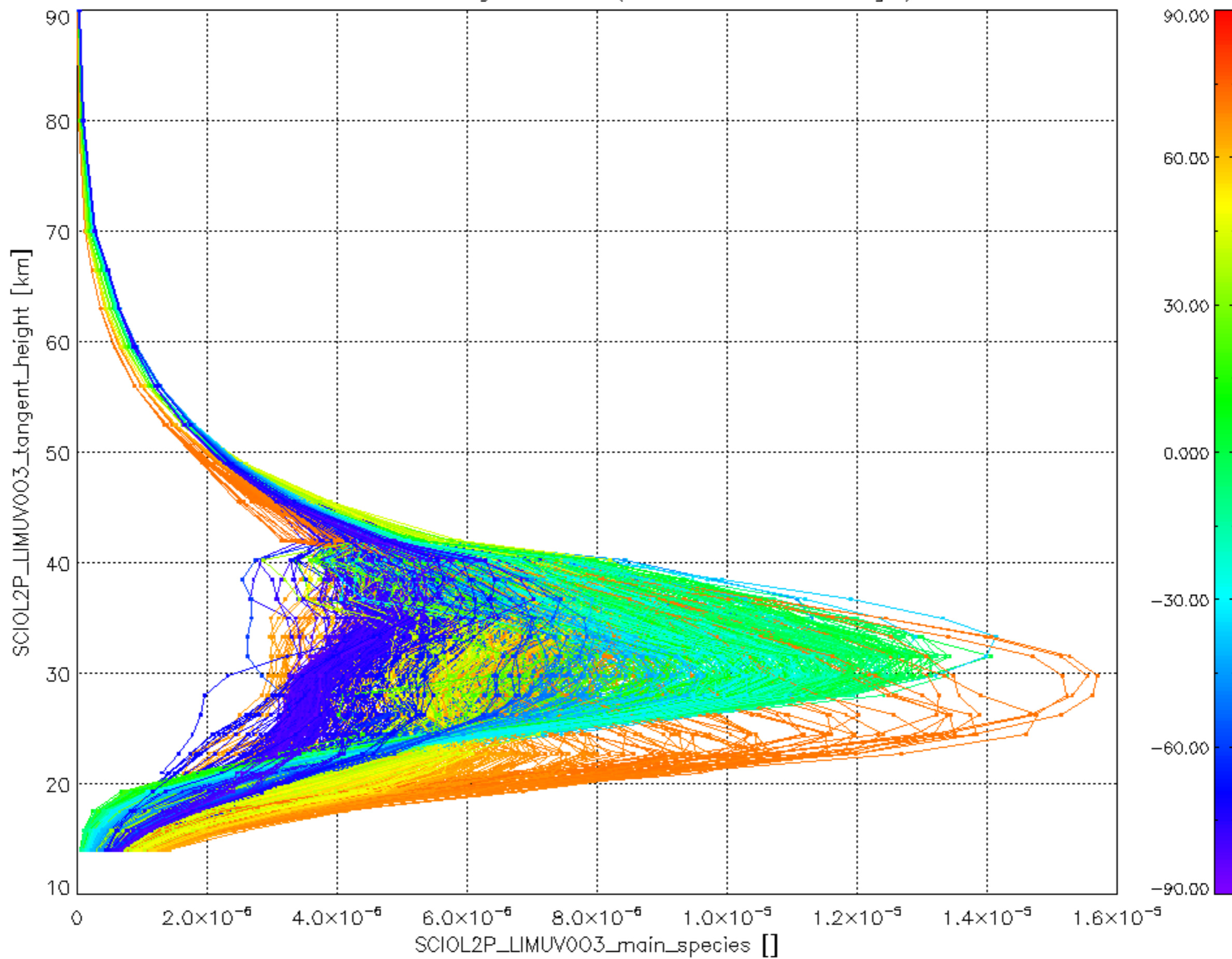
SCIOL2P_NADIR3CO_vcd for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



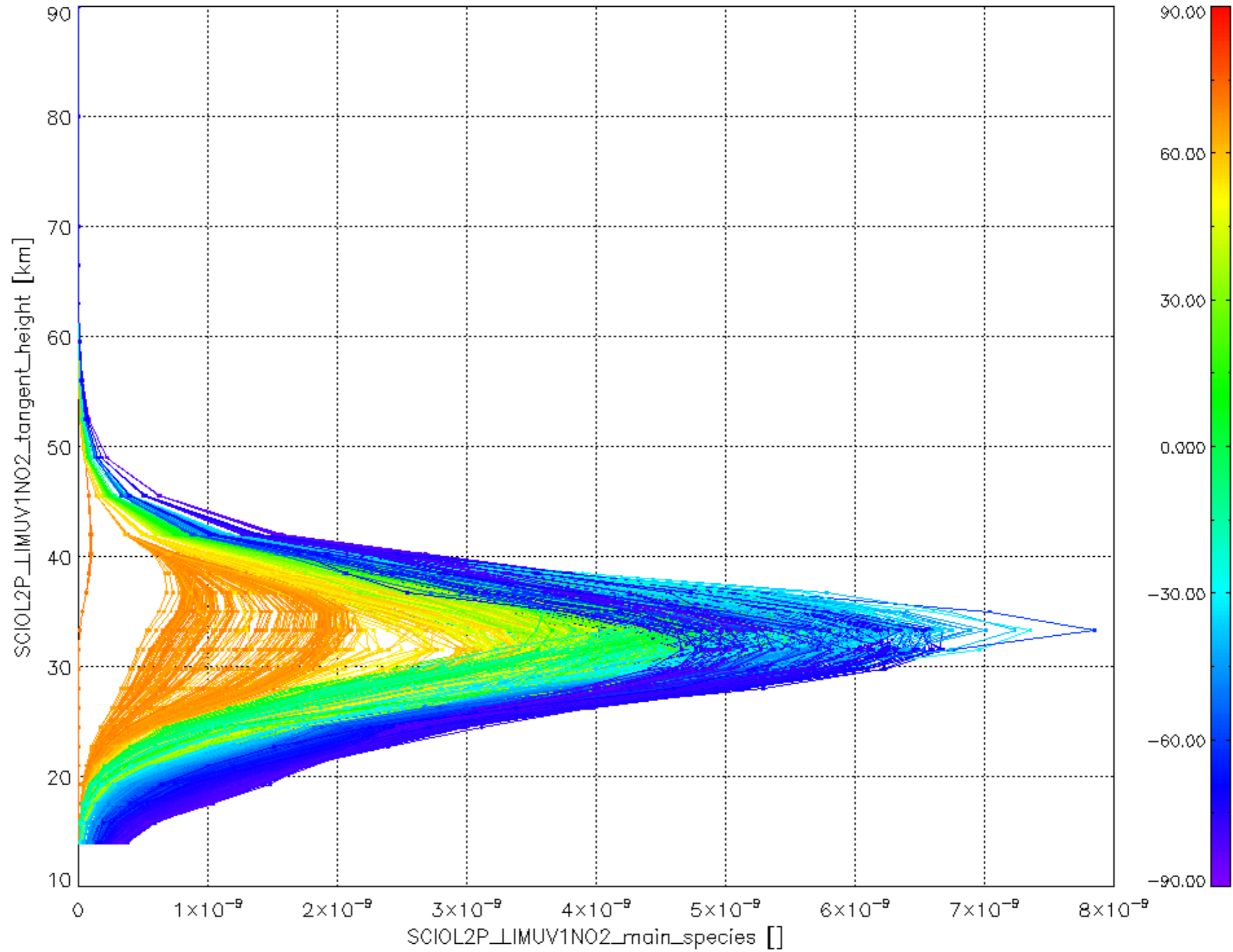
SCIOL2P_NADIR3CO_vcd_err for 27JAN2011 00:00:00 to 28JAN2011 00:00:00



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).



Plot of SCIOL2P_LIMUV3BRO_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

