

## 2. SCIAMACHY Daily Report for Level 2 products

### [2.1. General Info](#)

### [2.2 Product Quality Indicators](#)

- [2.2.1 Cloud parameters](#)
- [2.2.2 Nadir](#)
  - [2.2.2.1 O3 \(UV0\)](#)
  - [2.2.2.2 NO2 \(UV1\)](#)
  - [2.2.2.3 BrO \(UV3\)](#)
  - [2.2.2.4 SO2 \(UV5\)](#)
  - [2.2.2.5 SO2 \(UV7\)](#)
  - [2.2.2.6 OCIO \(UV6\)](#)
  - [2.2.2.7 H2O \(UV8\)](#)
  - [2.2.2.8 CO \(IR3\)](#)
- [2.2.3 Limb](#)
  - [2.2.3.1 O3 \(UV0\)](#)
  - [2.2.3.2 NO2 \(UV1\)](#)
  - [2.2.3.3 BrO \(UV3\)](#)

### [2.3 ADF monitoring](#)

## 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	1.13 (28-02-2011)
Time of report generation	10FEB2012 03:28:08
Data source version	SCIA-OL/5.02-W
Processing scope for products	28JAN2012 00:00:00 to 29JAN2012 00:00:00
Start time of first product within scope	28JAN2012 00:50:36
Stop time of last product within scope	29JAN2012 01:12:22
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	<a href="#">SCI_OL__2PWDP A20120128_005036_000035163111_00103_51841_3299.N1</a>	28JAN2012 00:50:36	28JAN2012 01:49:12	0	GOOD
1	<a href="#">SCI_OL__2PWDP A20120128_023050_000035303111_00104_51842_3300.N1</a>	28JAN2012 02:30:50	28JAN2012 03:29:40	0	GOOD
2	<a href="#">SCI_OL__2PWDP A20120128_041103_000035163111_00105_51843_3302.N1</a>	28JAN2012 04:11:03	28JAN2012 05:09:39	0	GOOD
3	<a href="#">SCI_OL__2PWDP A20120128_055117_000035303111_00106_51844_3304.N1</a>	28JAN2012 05:51:17	28JAN2012 06:50:07	0	GOOD
4	<a href="#">SCI_OL__2PWDP A20120128_073130_000035163111_00107_51845_3292.N1</a>	28JAN2012 07:31:30	28JAN2012 08:30:06	0	GOOD

5	SCI_OL__2PWDP20120128_091144_000035303111_00108_51846_3303.N1	28JAN2012 09:11:44	28JAN2012 10:10:34	0	GOOD
6	SCI_OL__2PWDP20120128_105157_000035163111_00109_51847_3308.N1	28JAN2012 10:51:57	28JAN2012 11:50:33	0	GOOD
7	SCI_OL__2PWDP20120128_123211_000035303111_00110_51848_3307.N1	28JAN2012 12:32:11	28JAN2012 13:31:01	0	GOOD
8	SCI_OL__2PWDP20120128_141224_000035163111_00111_51849_3306.N1	28JAN2012 14:12:24	28JAN2012 15:11:00	0	GOOD
9	SCI_OL__2PWDP20120128_155238_000035303111_00112_51850_3305.N1	28JAN2012 15:52:38	28JAN2012 16:51:28	0	GOOD
10	SCI_OL__2PWDP20120128_173358_000034863111_00113_51851_3330.N1	28JAN2012 17:33:58	28JAN2012 18:32:04	0	GOOD
11	SCI_OL__2PWDP20120128_191326_000035303111_00114_51852_3328.N1	28JAN2012 19:13:26	28JAN2012 20:12:16	0	GOOD
12	SCI_OL__2PWDP20120128_205319_000035163111_00115_51853_3310.N1	28JAN2012 20:53:19	28JAN2012 21:51:55	0	GOOD
13	SCI_OL__2PWDP20120128_223332_000035303111_00116_51854_3309.N1	28JAN2012 22:33:32	28JAN2012 23:32:23	0	GOOD
14	SCI_OL__2PWDP20120129_001346_000035163111_00117_51855_3312.N1	29JAN2012 00:13:46	29JAN2012 01:12:22	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: 158860

Total number of cloud data DSRs with good quality flag (=0): 158860 (100.0 %)

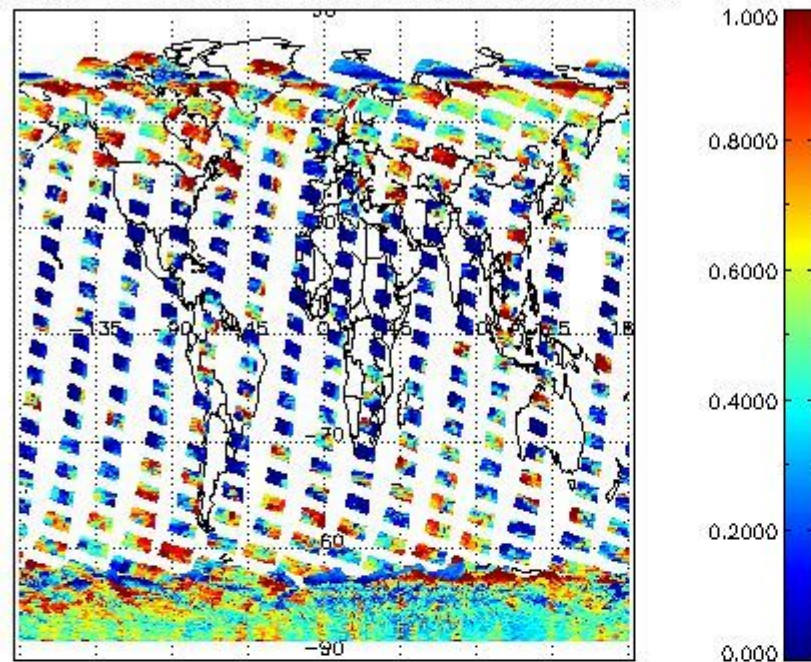
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	158860	0.0000	0.0000	0.0000	0.0000	0.0000	
INTEGR_TIME	158860	0.16653	0.12500	0.12500	0.25000	0.058877	s
CL_FRAC	158860	0.43918	0.42525	0.0000	1.0000	0.30207	
CL_FRAC_ERR	158860	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	158860	5.3290	4.0000	4.0000	8.0000	1.8841	
PMD_READ_CL[0]	158860	0.48330	0.0000	0.0000	8.0000	1.3281	-
PMD_READ_CL[1]	158860	1.1042	0.0000	0.0000	8.0000	2.4121	-
CL_TOP_HEIGHT	130068	4.0094	3.2414	0.0000	17.000	3.6146	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	130068	55.763	49.218	0.0000	101.00	40.761	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	158860	11100000	11100000	11100000	11100000	0.0000	
CLOUD_FLAGS	158860	11001011	11000100	11000000	11100000	3387.2	
AERO_ABSO_IND	158860	0.086573	0.0000	0.0000	8.7657	0.28301	
AERO_IND_DIAG	158860	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	158860	01010110	00000000	00000000	11000000	24455.	

#### Time and geolocation plots:

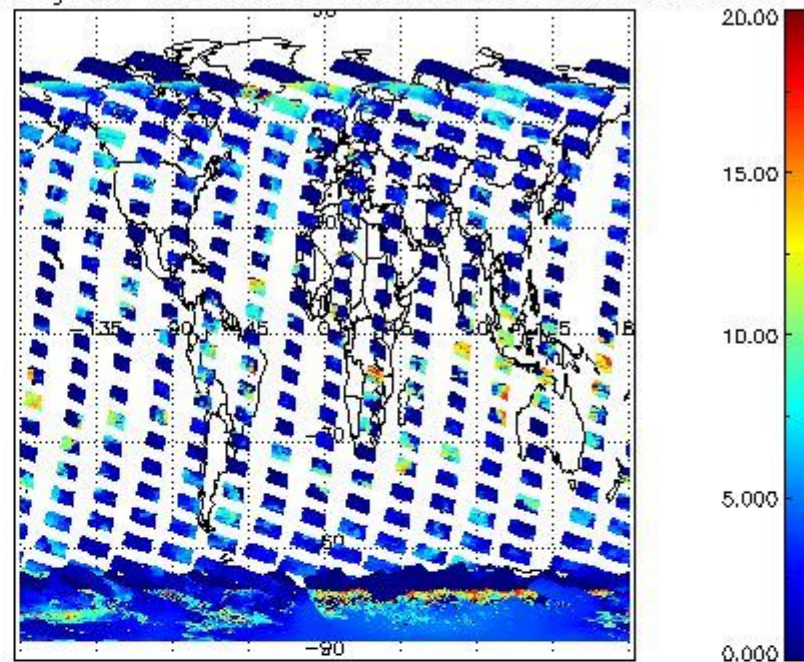
Plots are available for the following parameters:

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

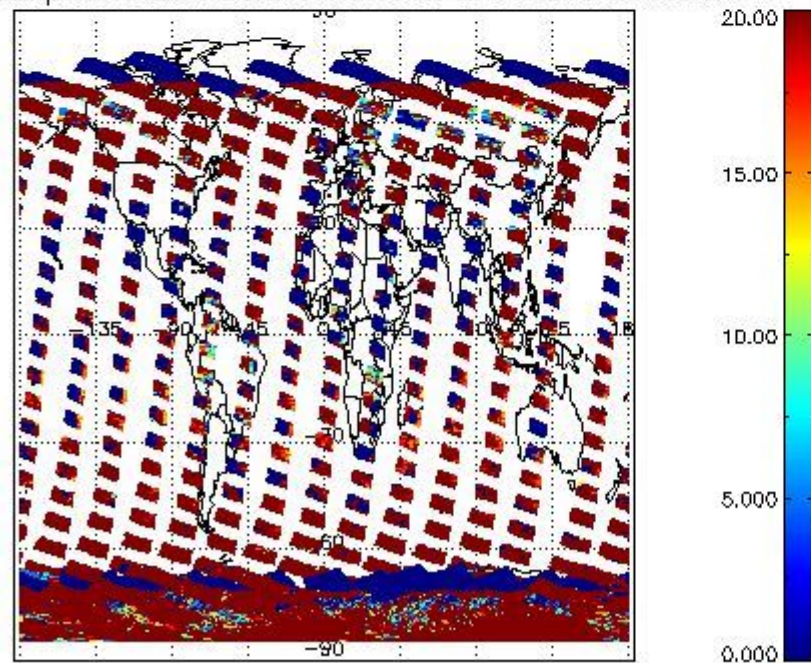
cL\_frac for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



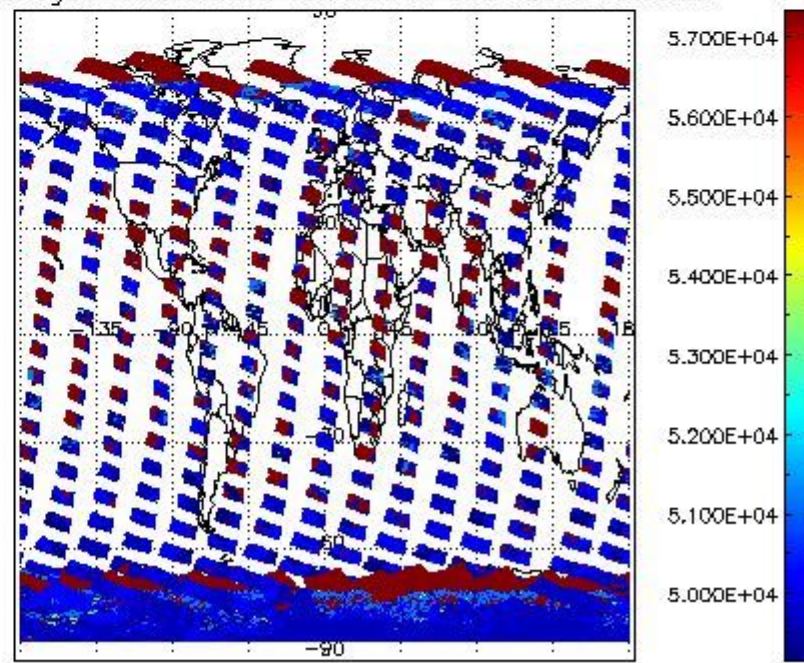
cL\_top\_height for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



cLopt\_depth for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



cloud\_flags for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



## 2.2.2 Nadir

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

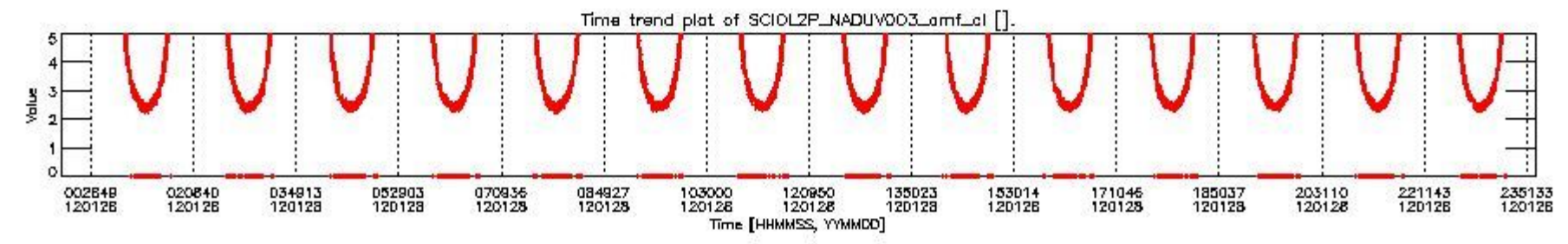
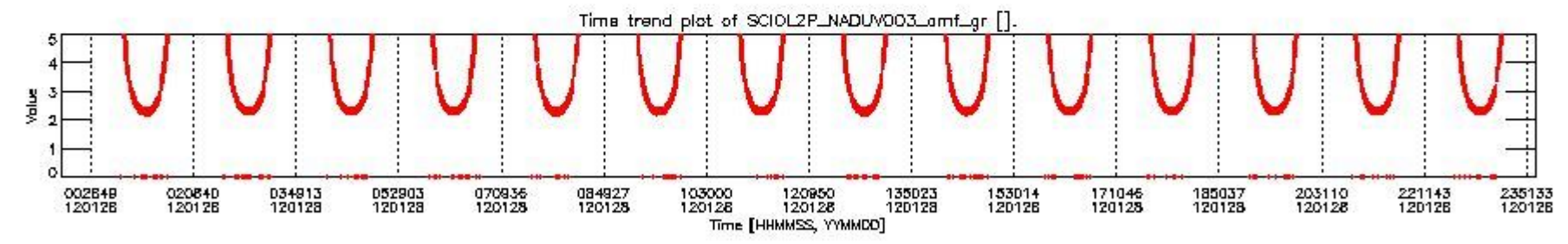
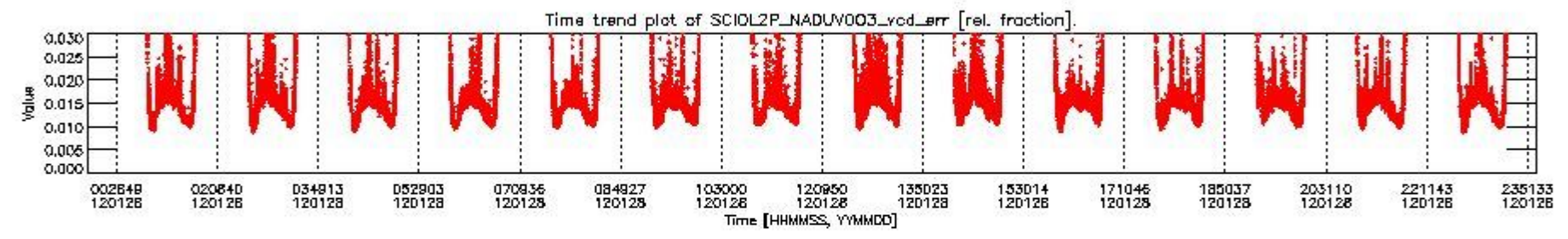
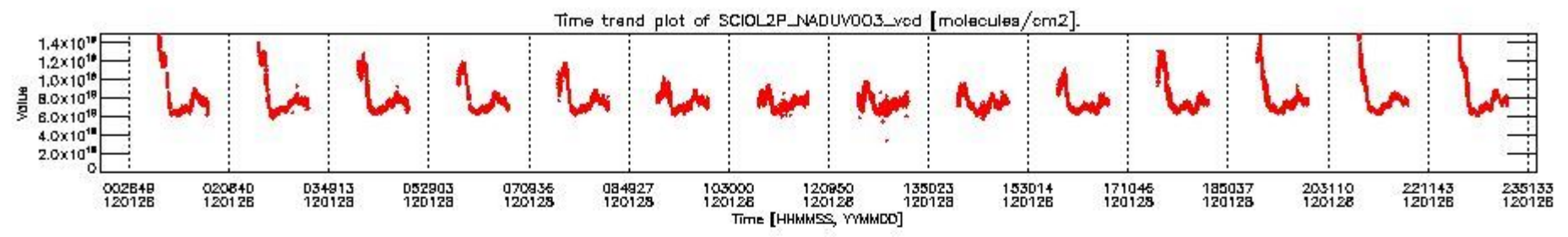
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

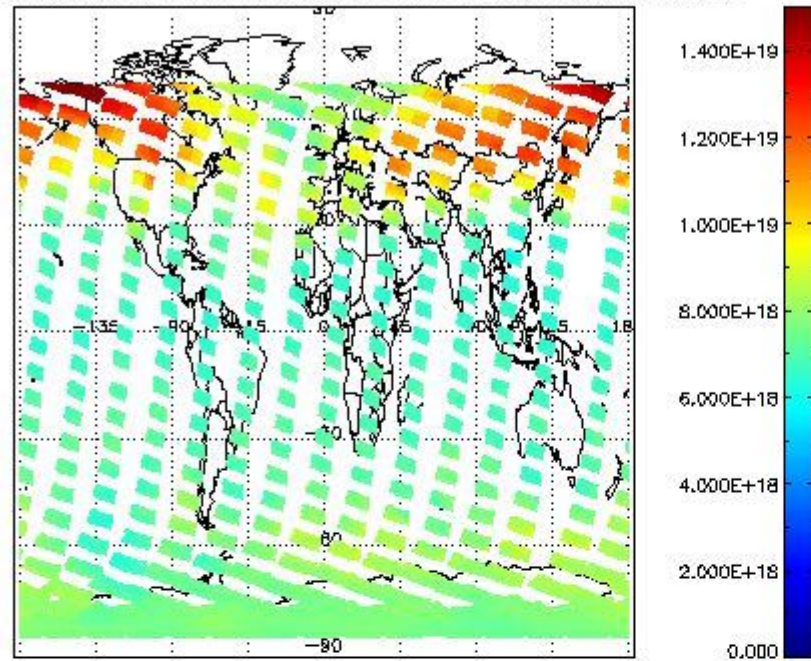
3	SCIOL2P_NADUV0O3_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl
8	SCIOL2P_NADUV3BRO_vcd
9	SCIOL2P_NADUV3BRO_vcd_err
10	SCIOL2P_NADUV3BRO_amf_gr
11	SCIOL2P_NADUV3BRO_amf_cl
12	SCIOL2P_NADUV5SO2_vcd
13	SCIOL2P_NADUV5SO2_vcd_err
14	SCIOL2P_NADUV5SO2_amf_gr
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.

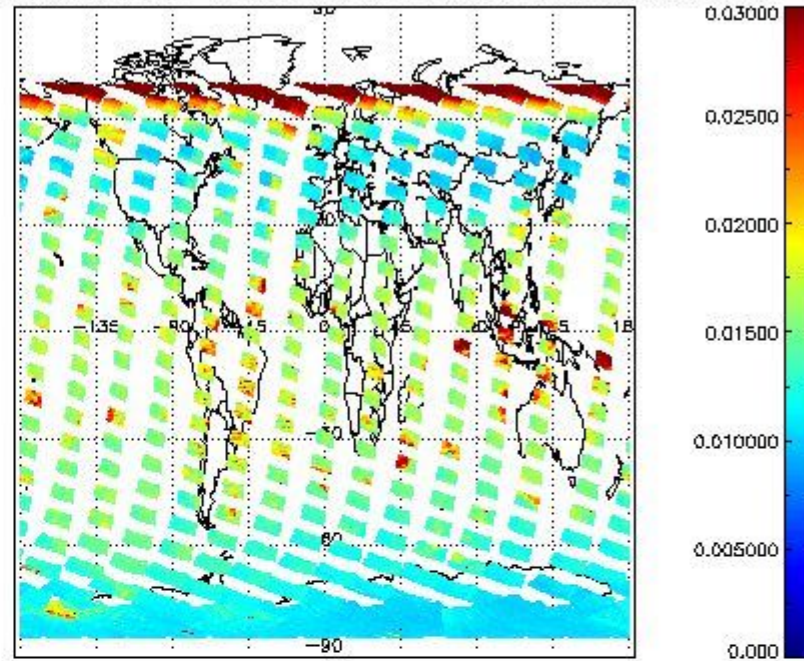
#### 2.2.2.1 O3 (UV0)



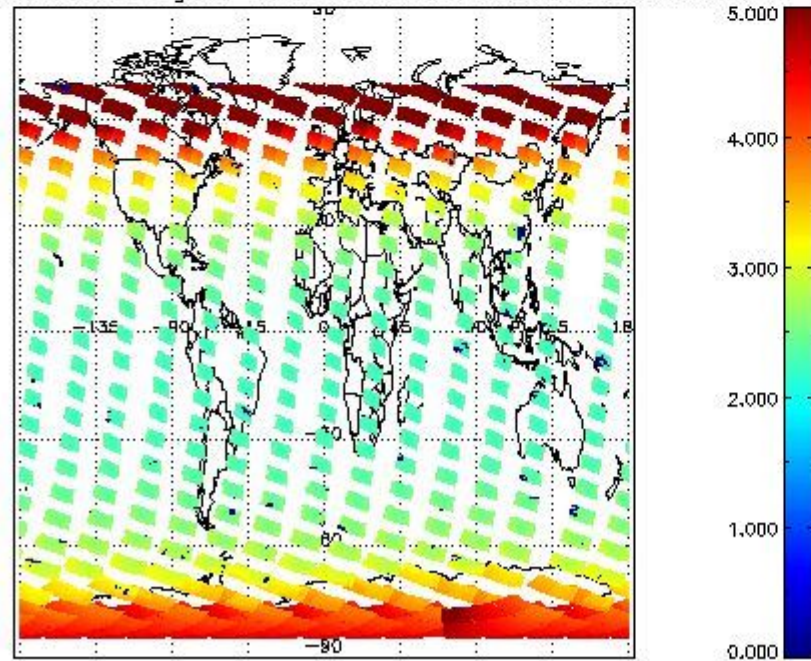
SCIOL2P\_NADUV003\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



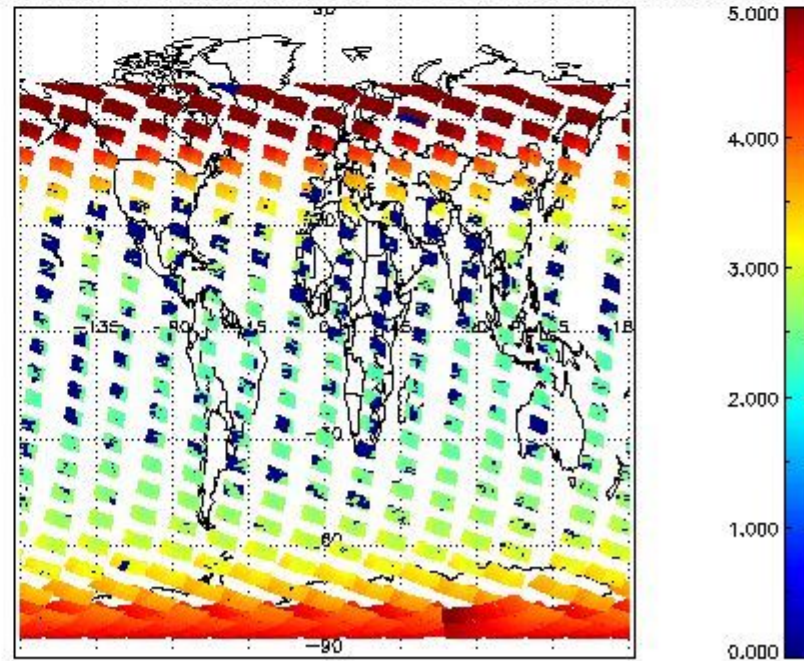
SCIOL2P\_NADUV003\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



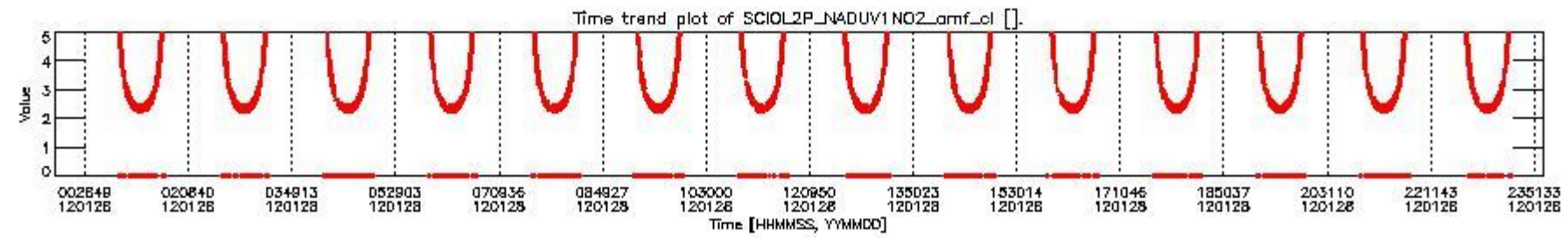
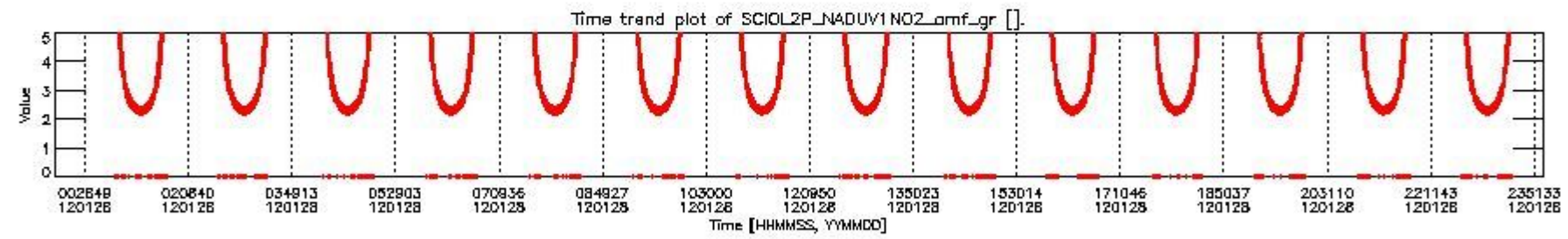
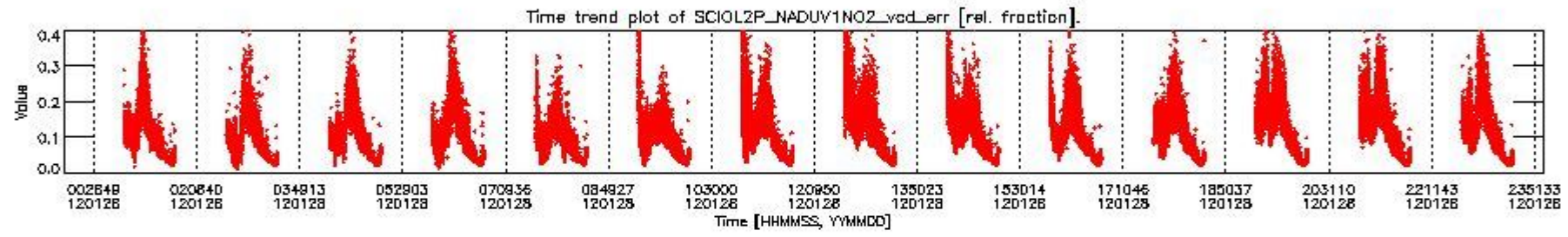
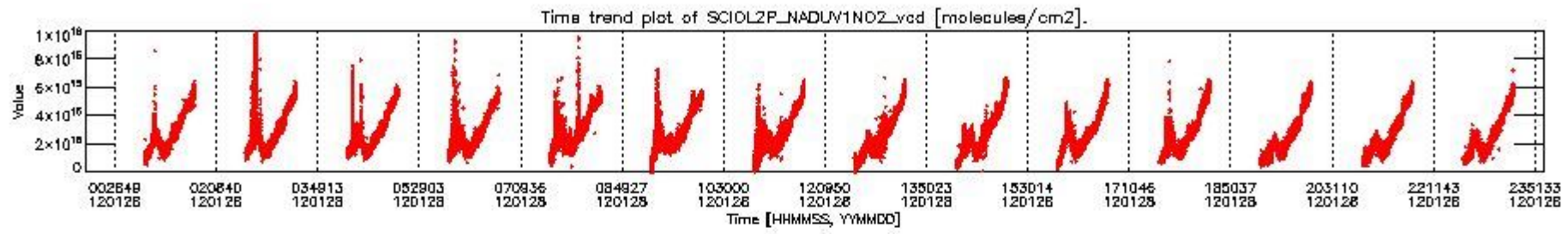
SCIOL2P\_NADUV003\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



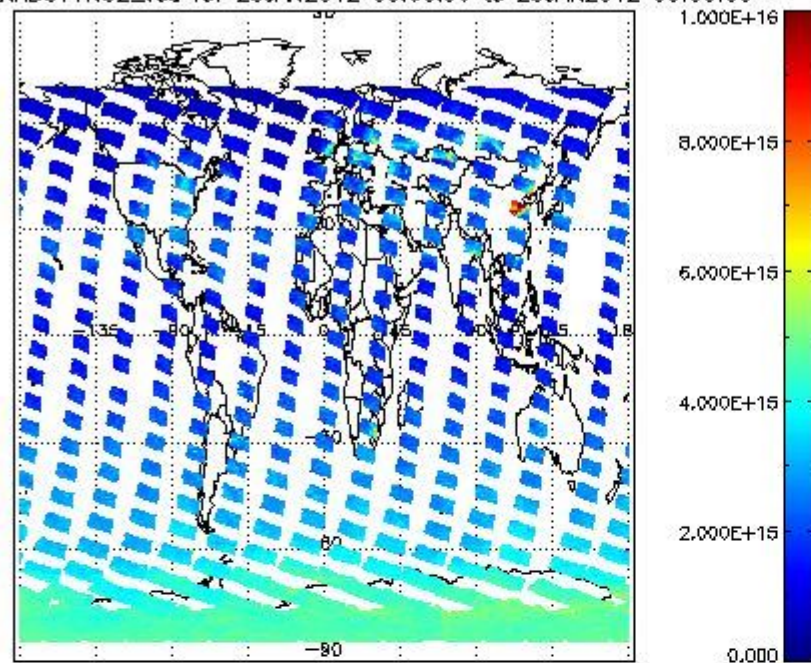
SCIOL2P\_NADUV003\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



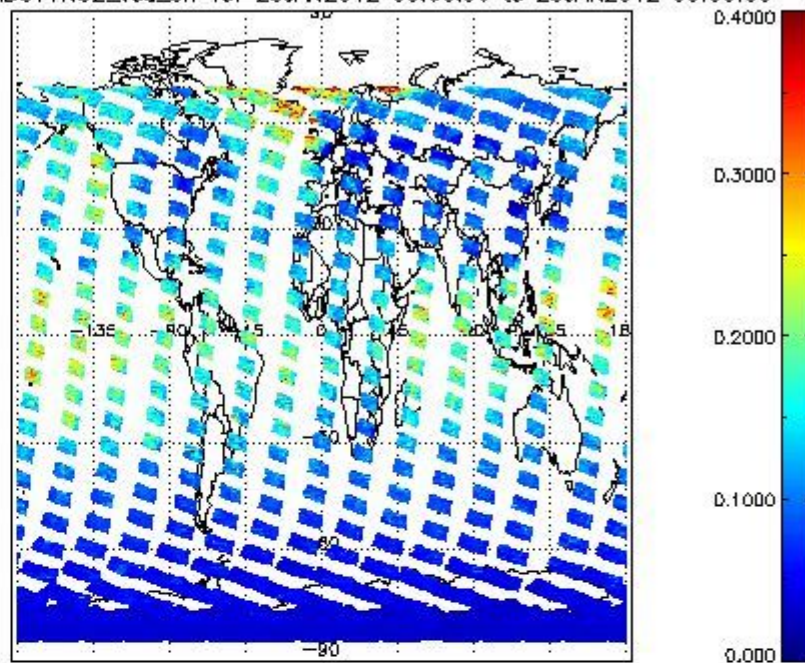
### 2.2.2.2 NO2 (UV1)



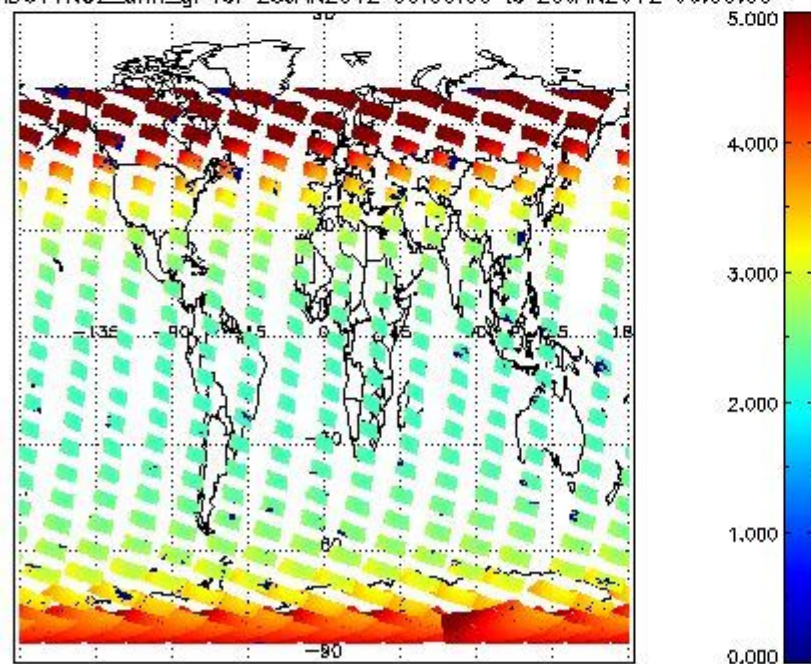
SCIOL2P\_NADUV1N02\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



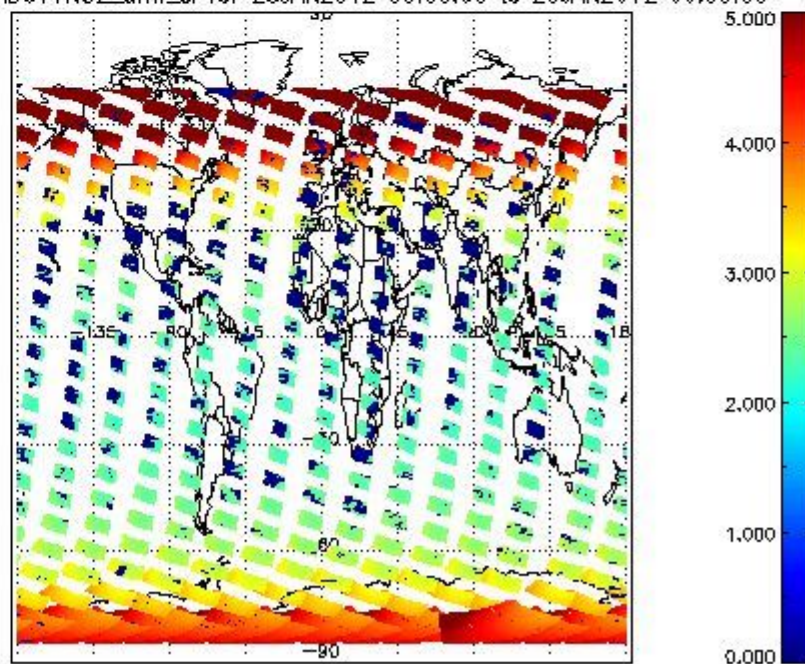
SCIOL2P\_NADUV1N02\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



SCIOL2P\_NADUV1N02\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

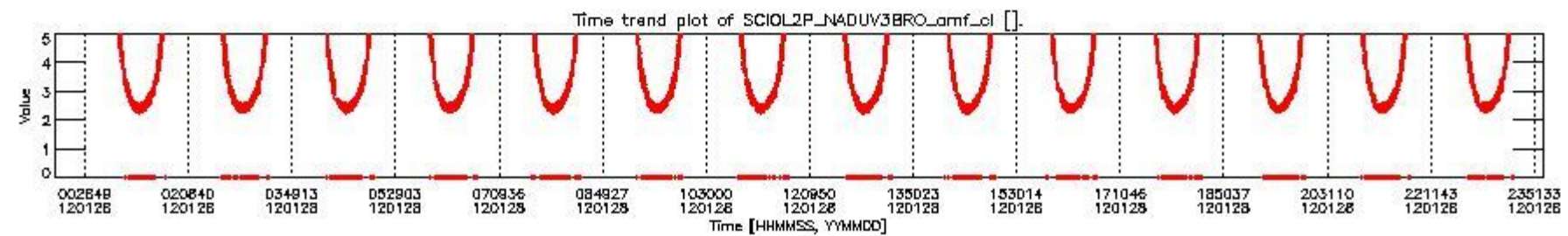
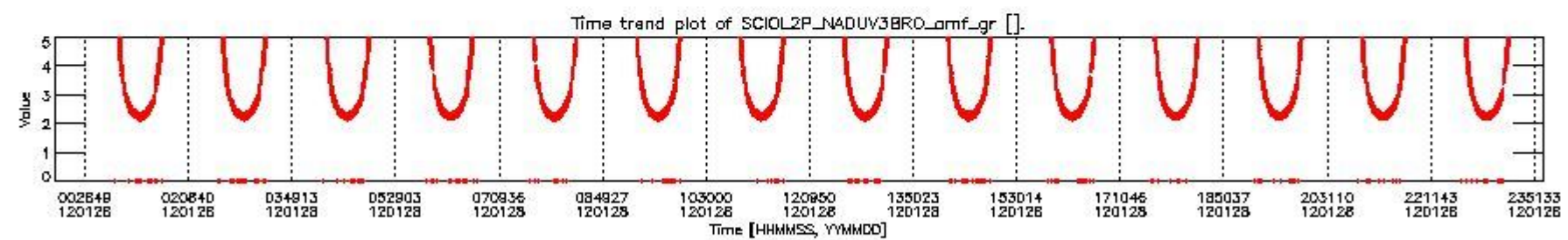
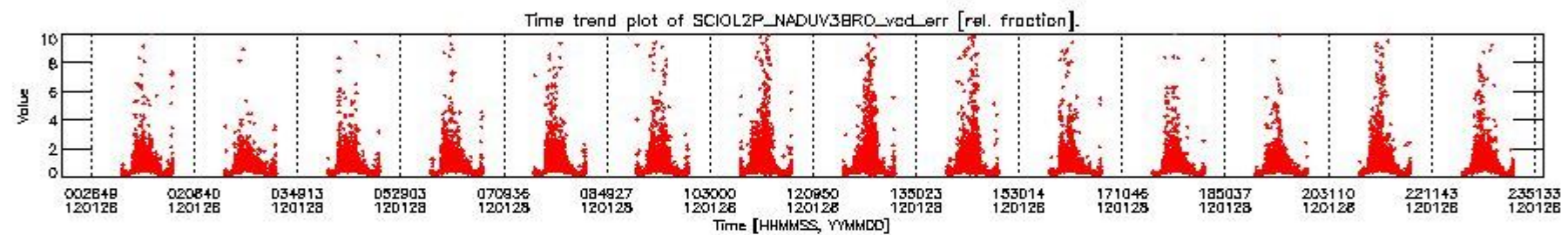
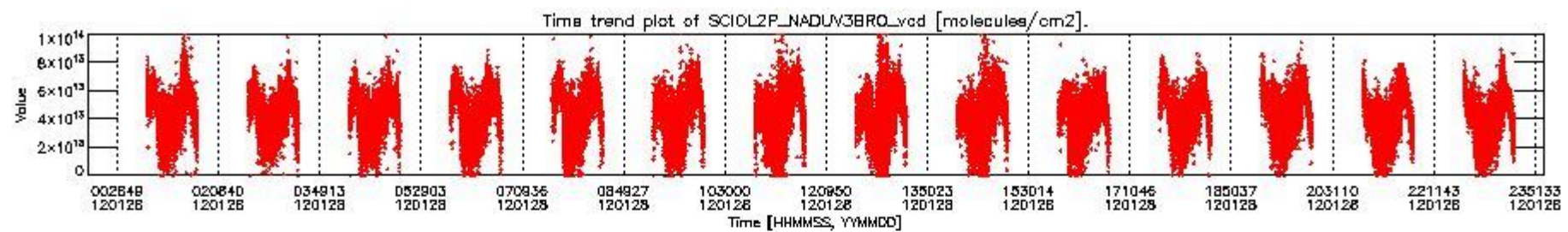


SCIOL2P\_NADUV1N02\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

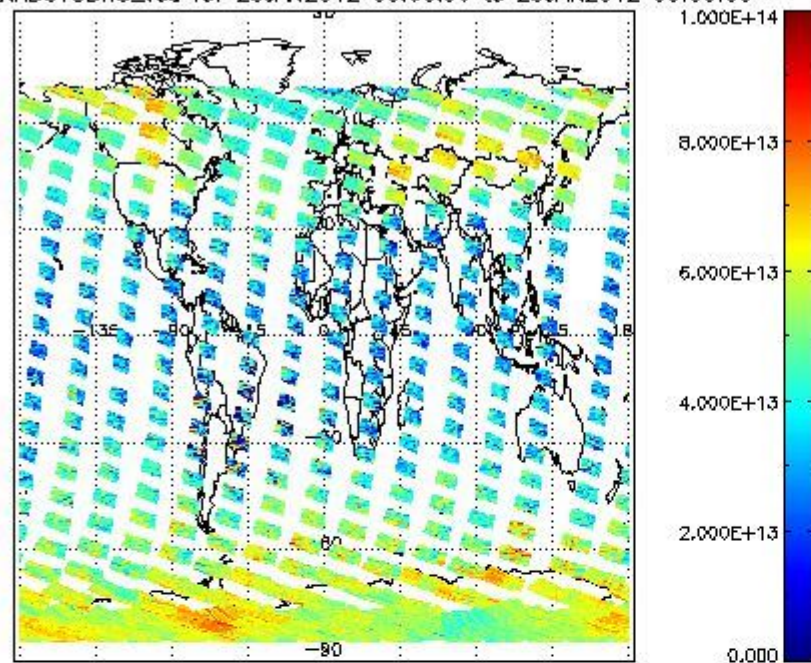


2.2.2.3 BrO (UV3)

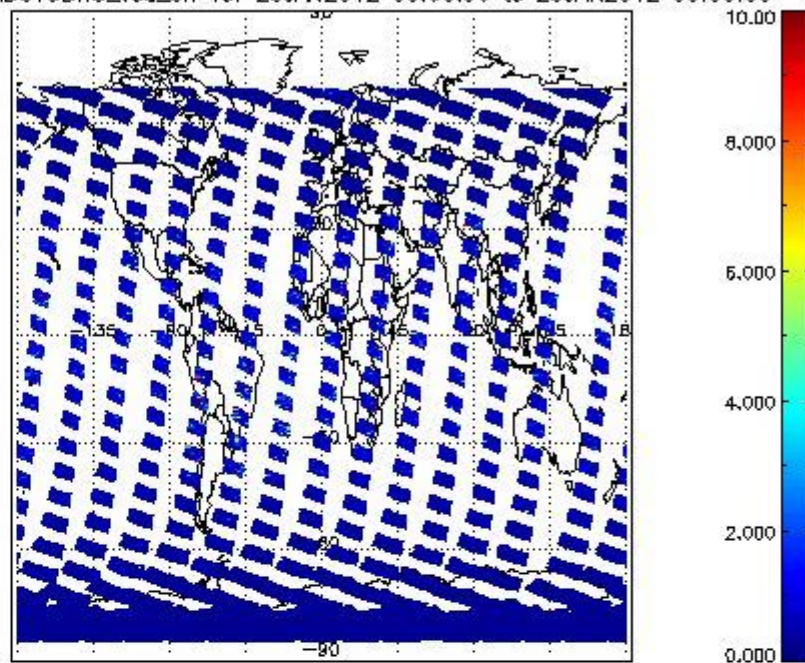




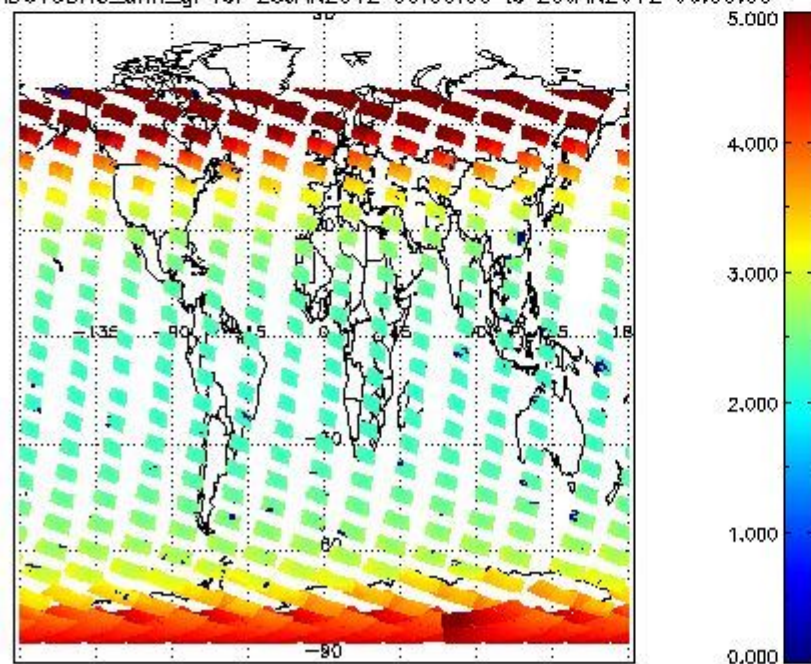
SCIOL2P\_NADUV3BRO\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



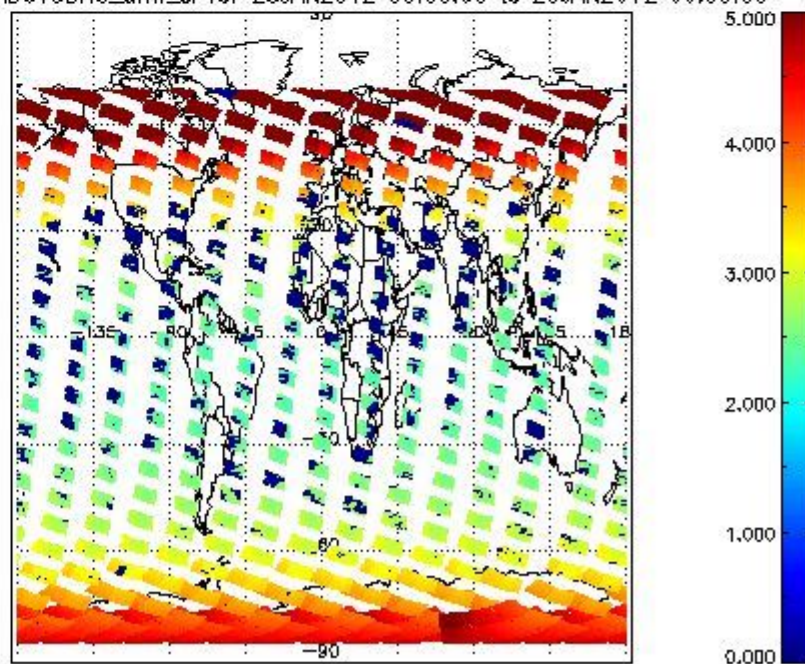
SCIOL2P\_NADUV3BRO\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



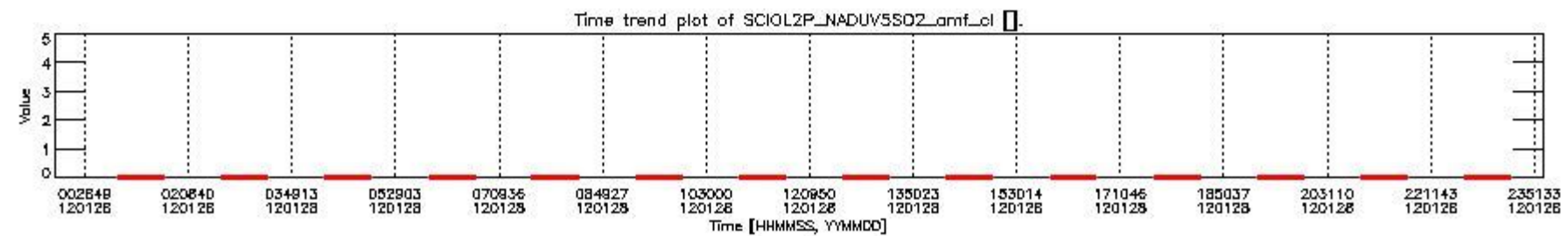
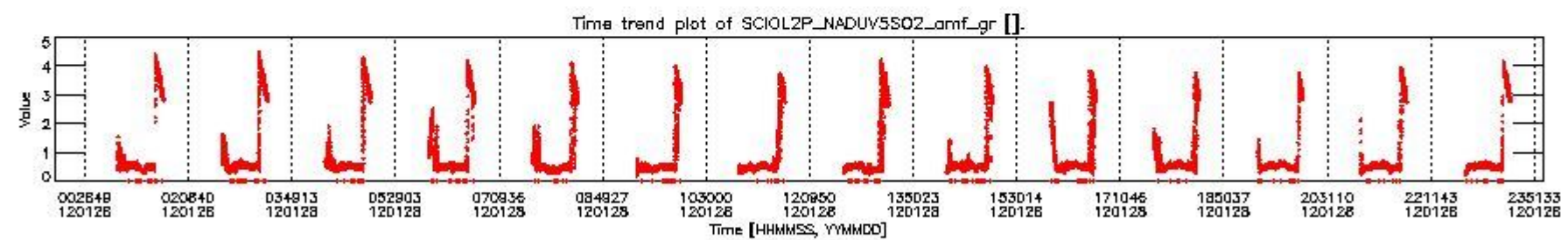
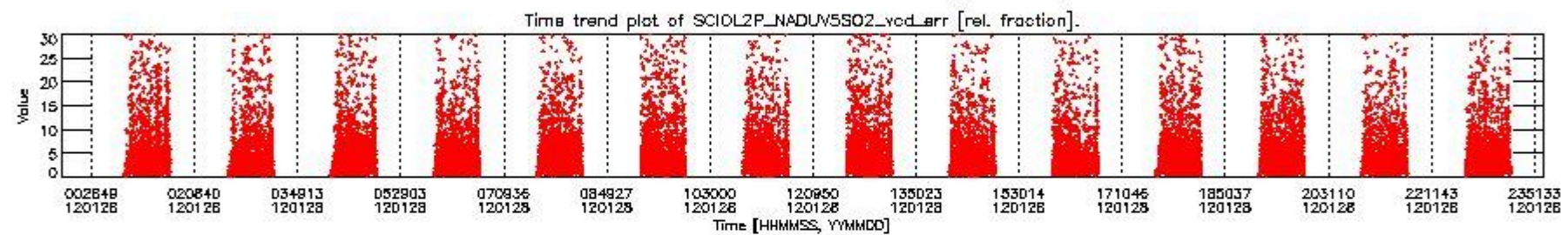
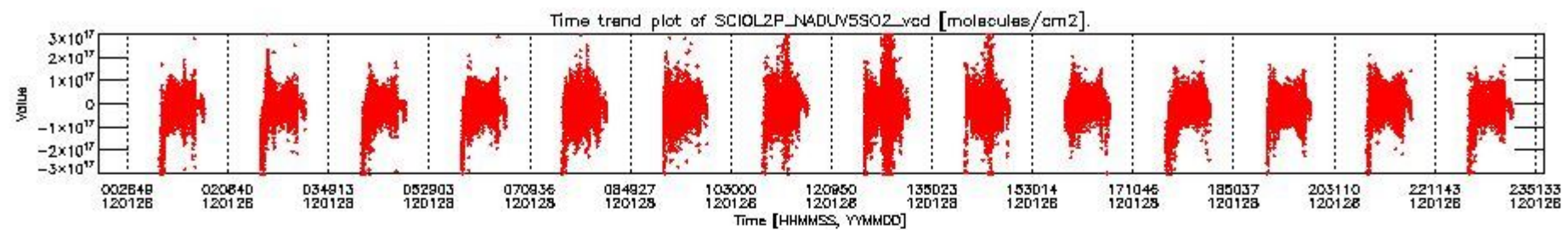
SCIOL2P\_NADUV3BRO\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



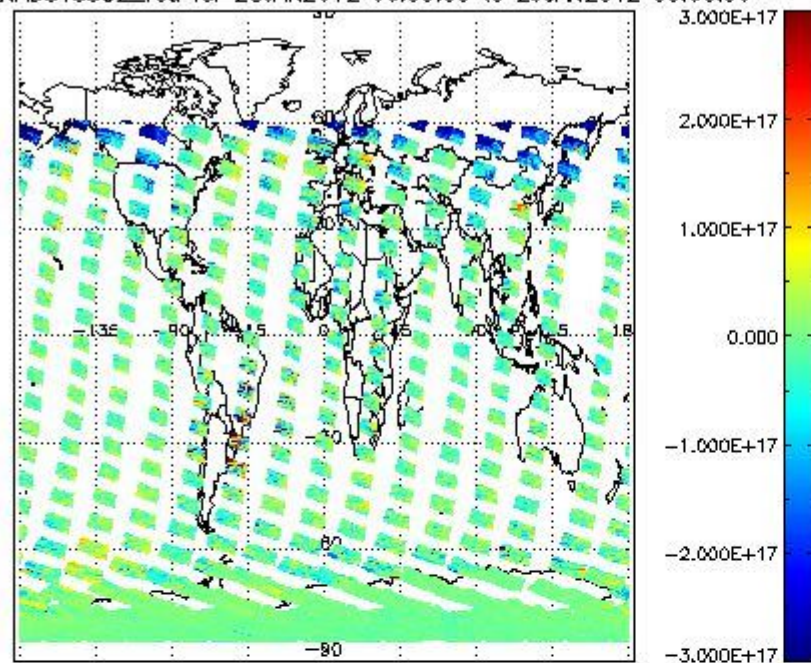
SCIOL2P\_NADUV3BRO\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



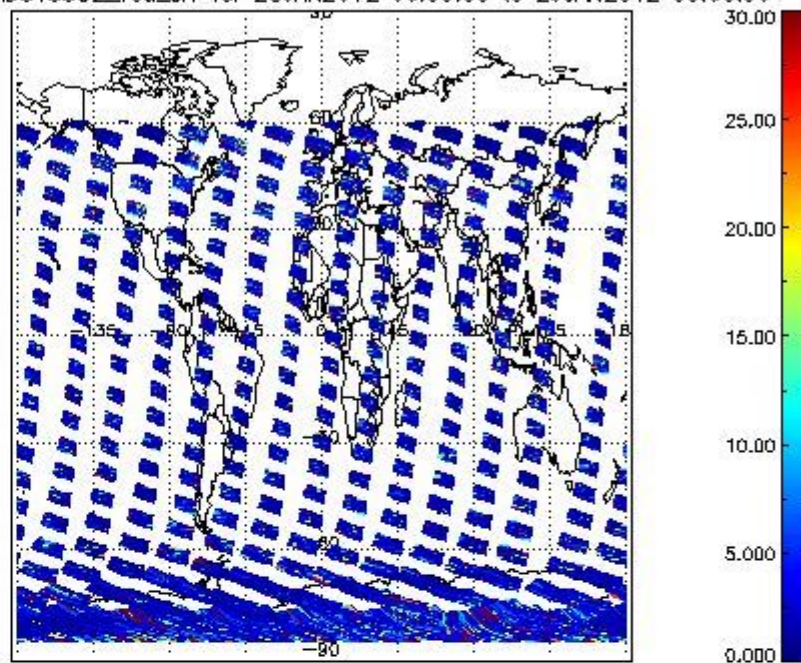
2.2.2.4 SO2 (UV5)



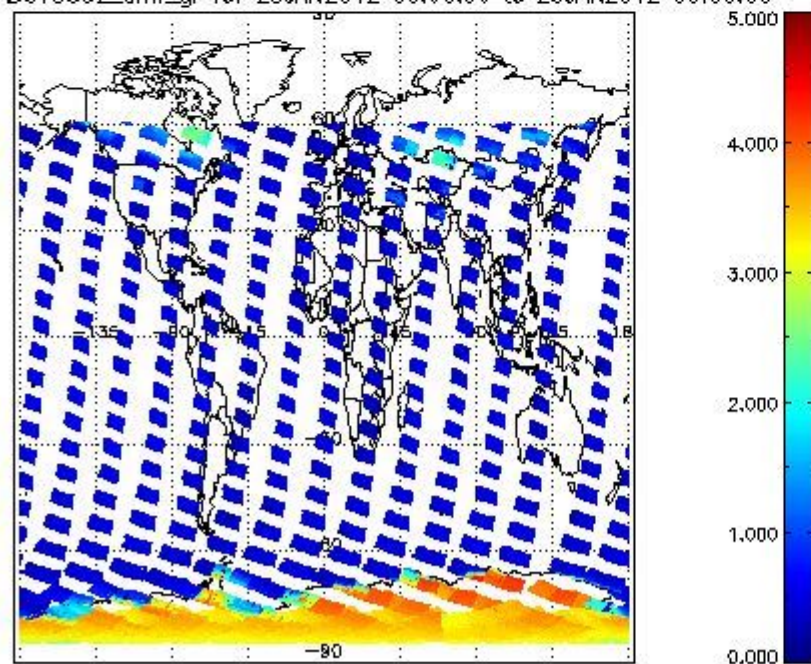
SCIOL2P\_NADUV5SO2\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



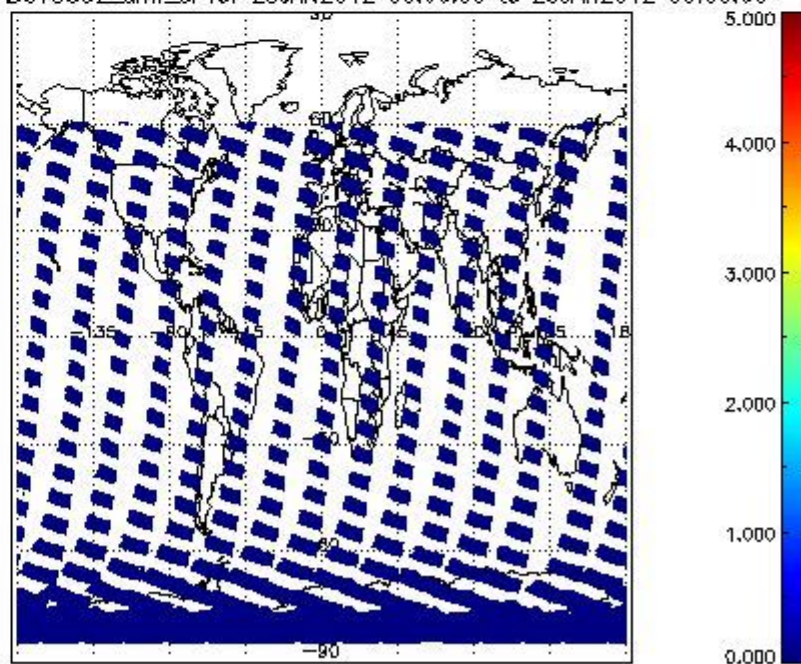
SCIOL2P\_NADUV5SO2\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



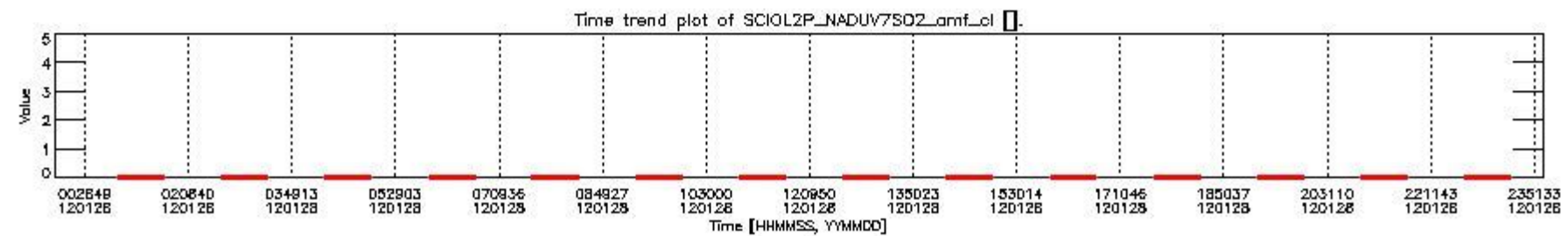
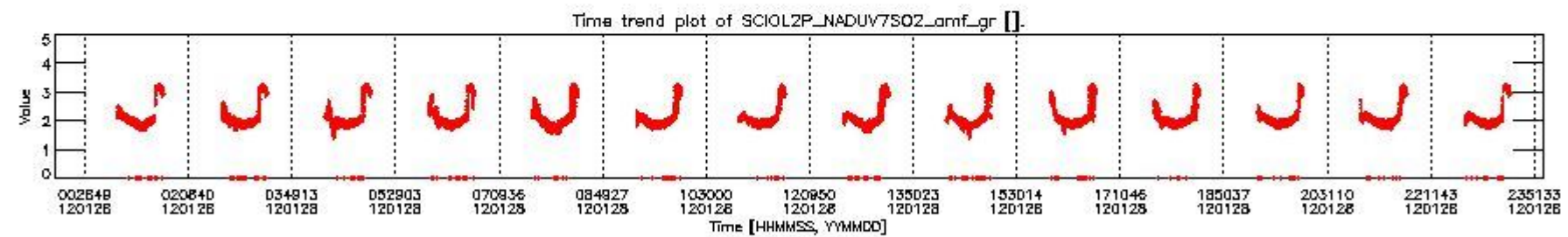
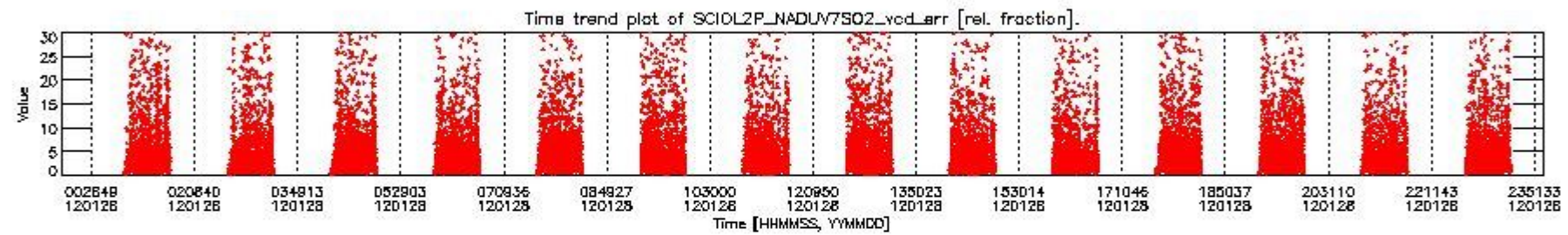
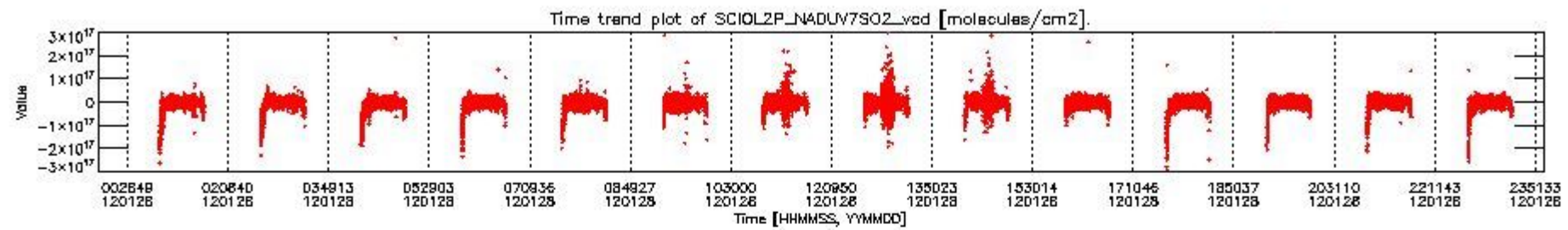
SCIOL2P\_NADUV5SO2\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



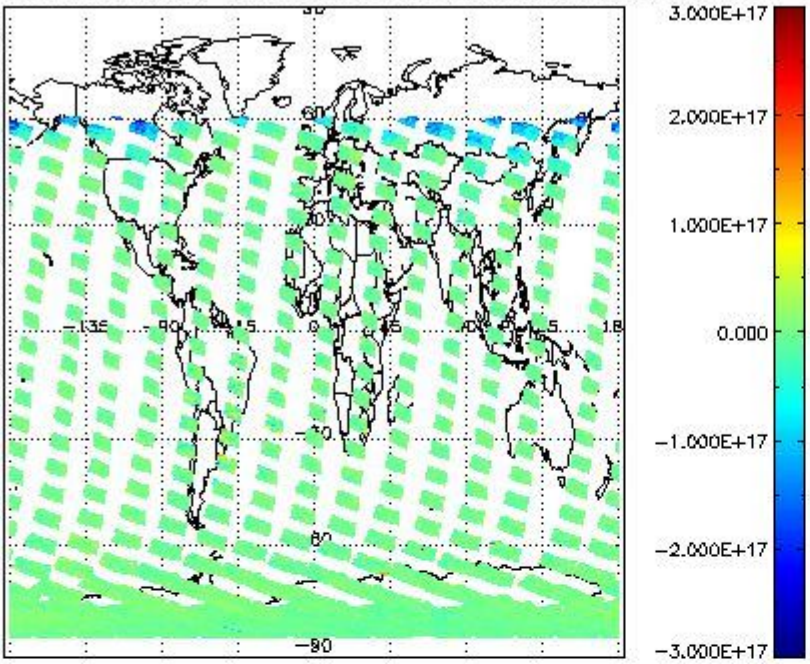
SCIOL2P\_NADUV5SO2\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



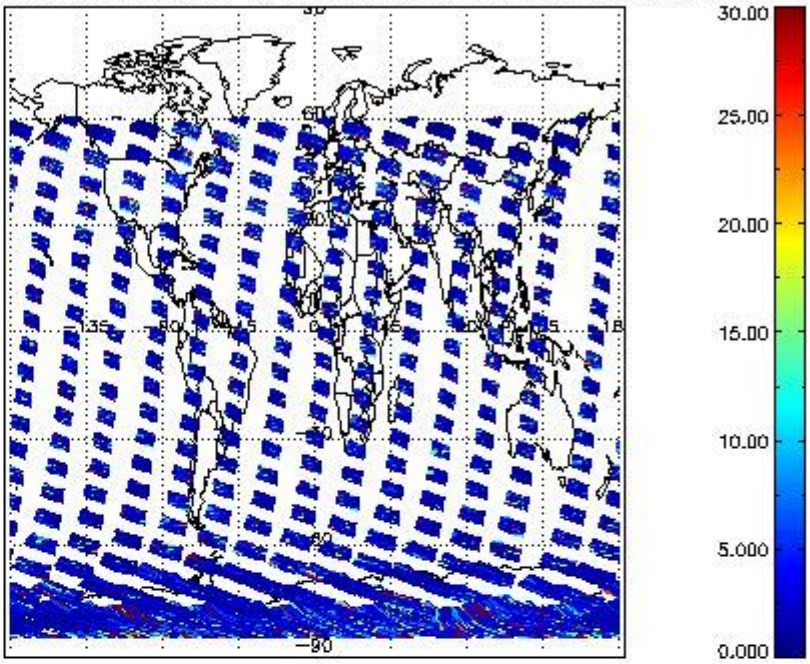
2.2.2.5 SO2 (UV7)



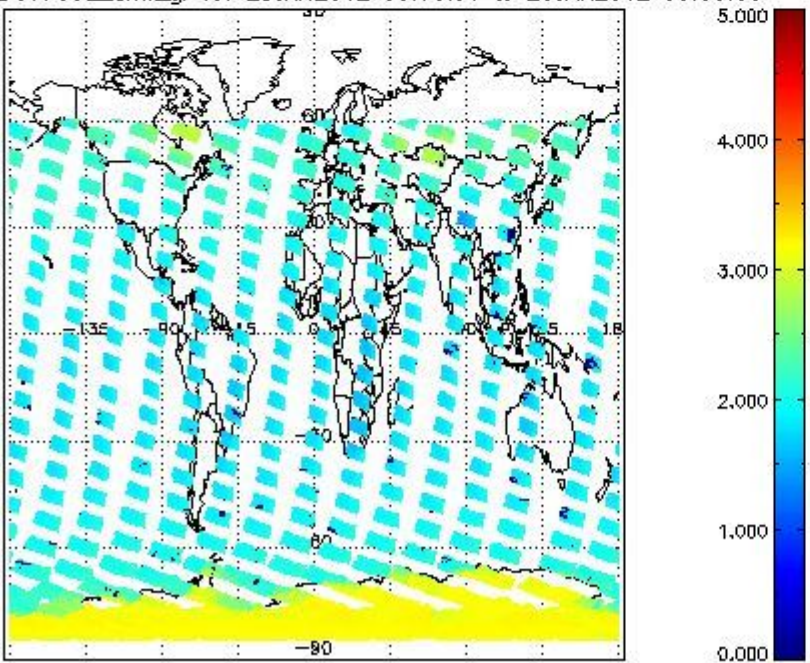
SCIOL2P\_NADUV7S02\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



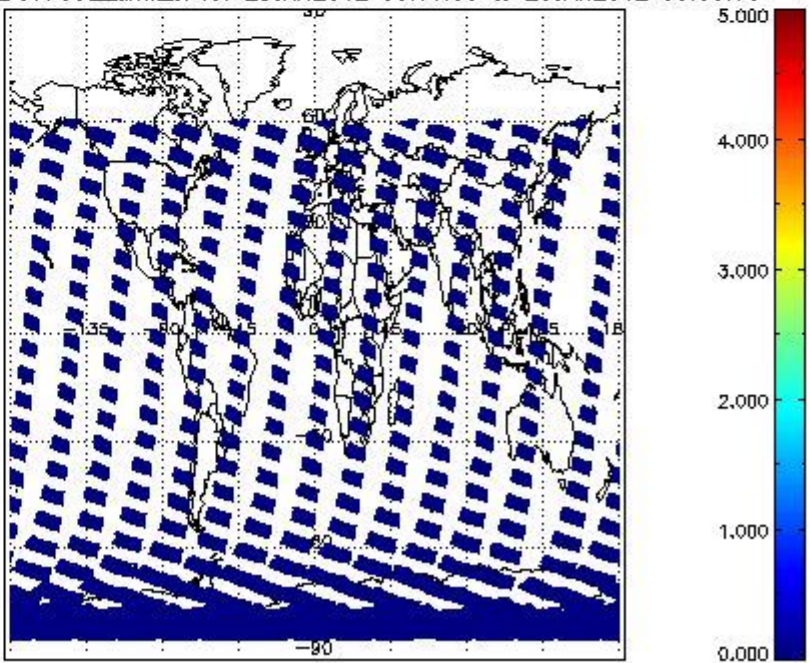
SCIOL2P\_NADUV7S02\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



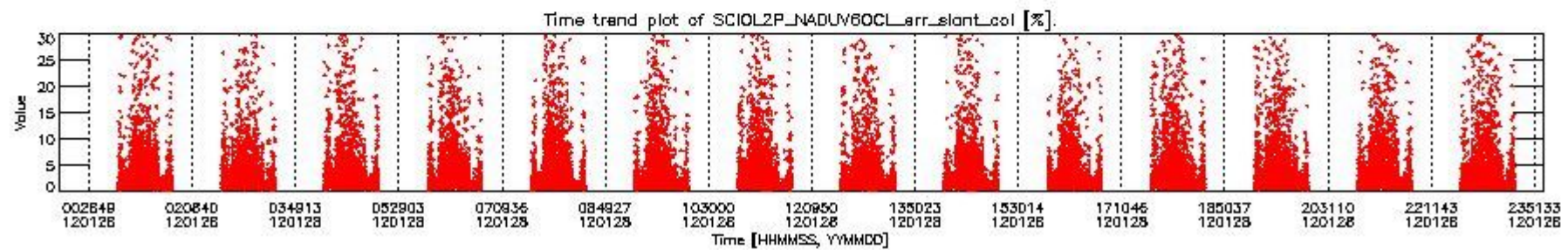
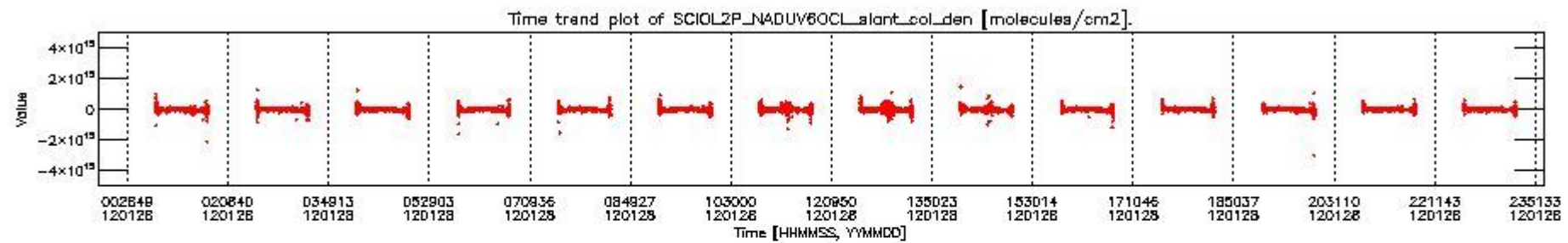
SCIOL2P\_NADUV7S02\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



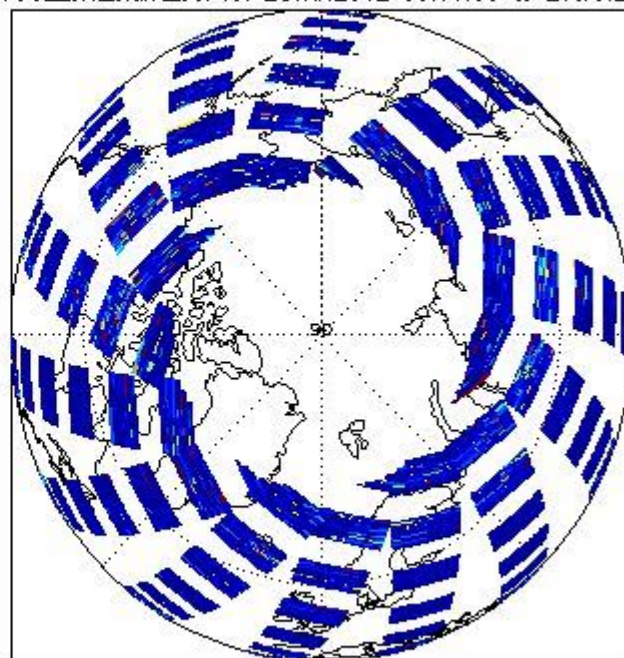
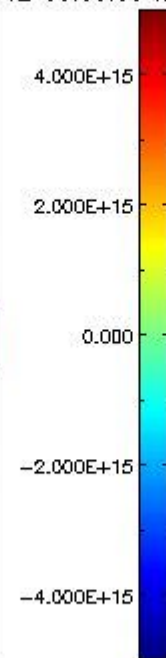
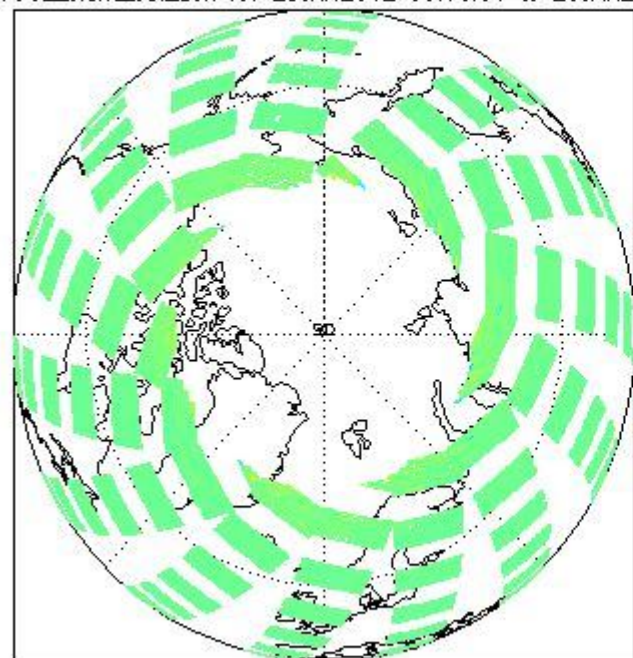
SCIOL2P\_NADUV7S02\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



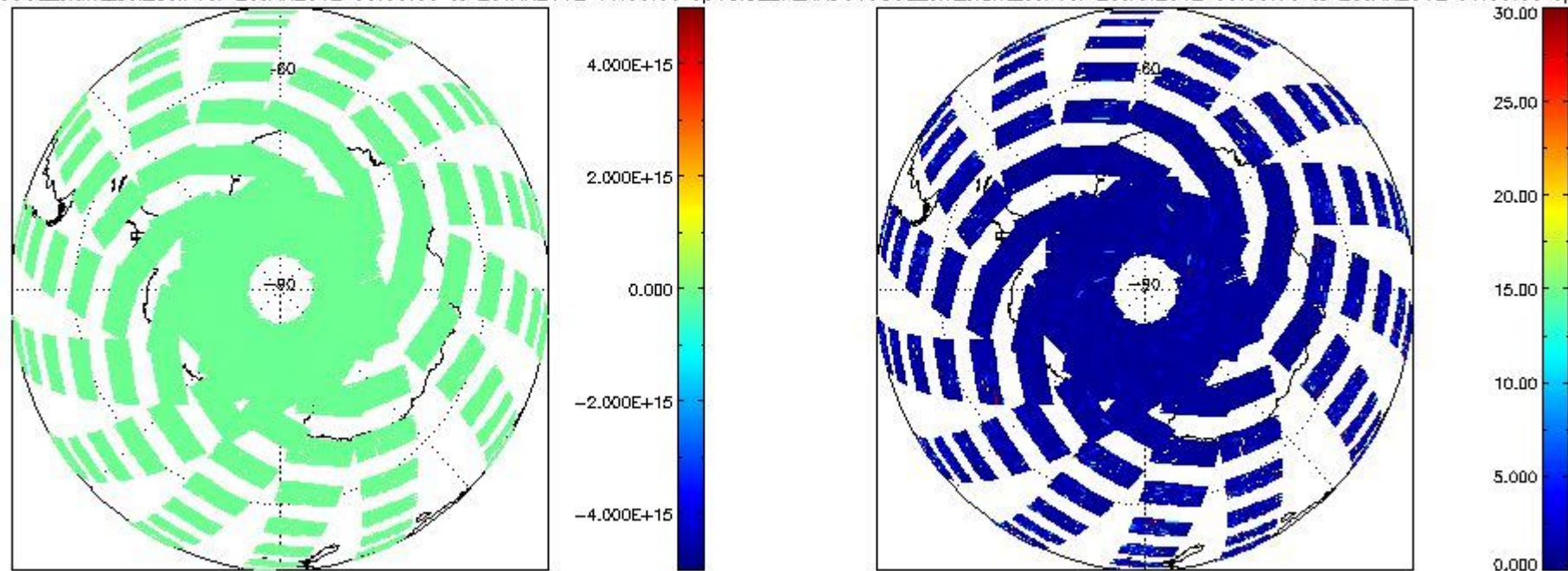
2.2.2.6 OCIO (UV6)



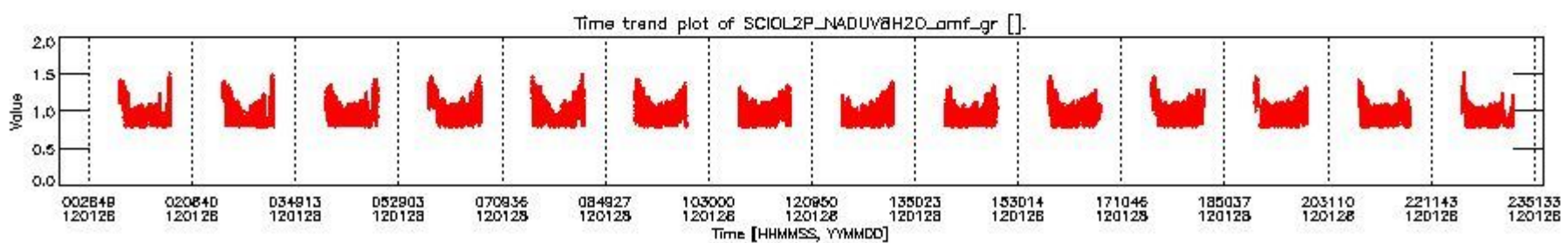
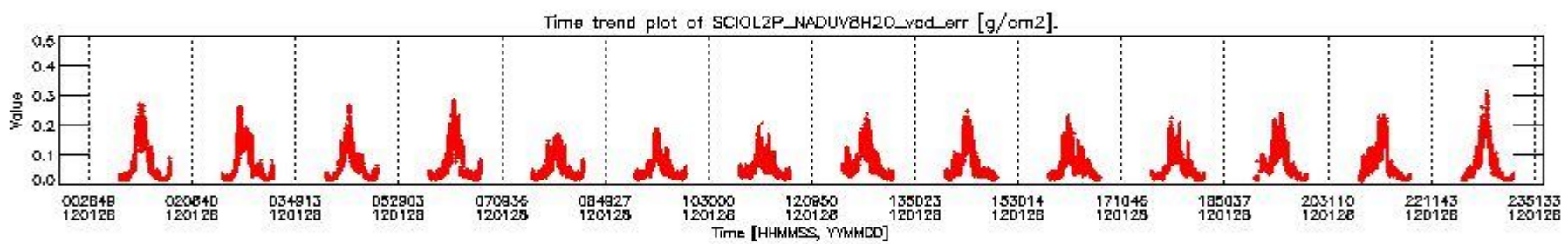
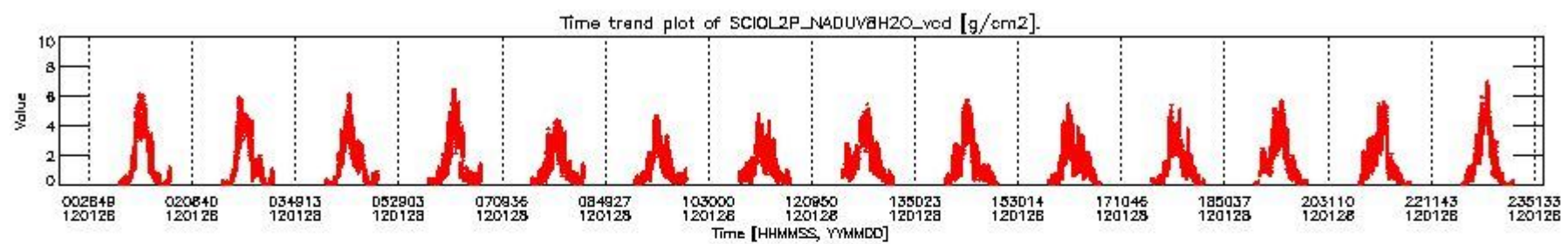
SCIOI2P\_NADUV6OCLslant\_col\_den for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 np; SCIOI2P\_NADUV6OCL\_err\_slant\_col for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 np



SCIOL2P\_NADUV6OCL\_slant\_col\_den for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 sp SCIOL2P\_NADUV6OCL\_err\_slant\_col for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 sp

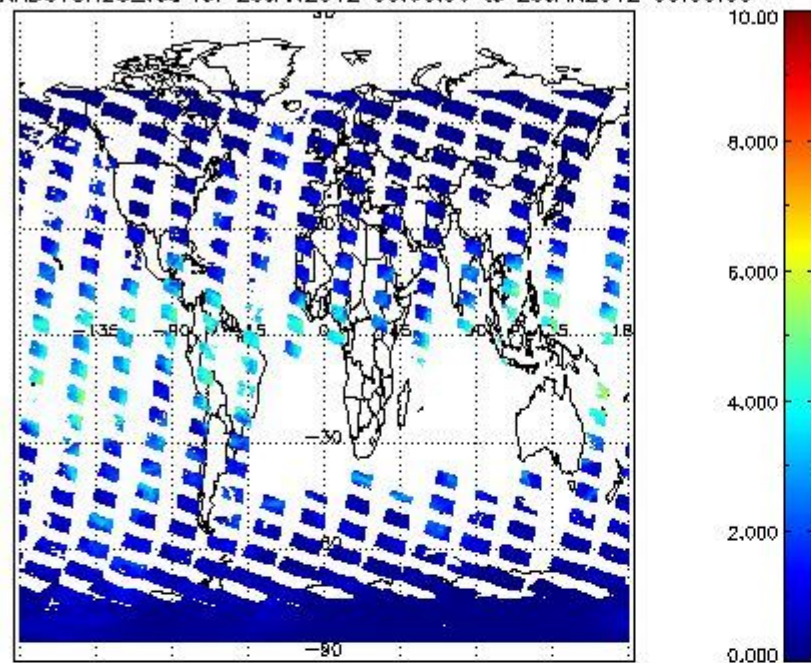


### 2.2.2.7 H2O (UV8)

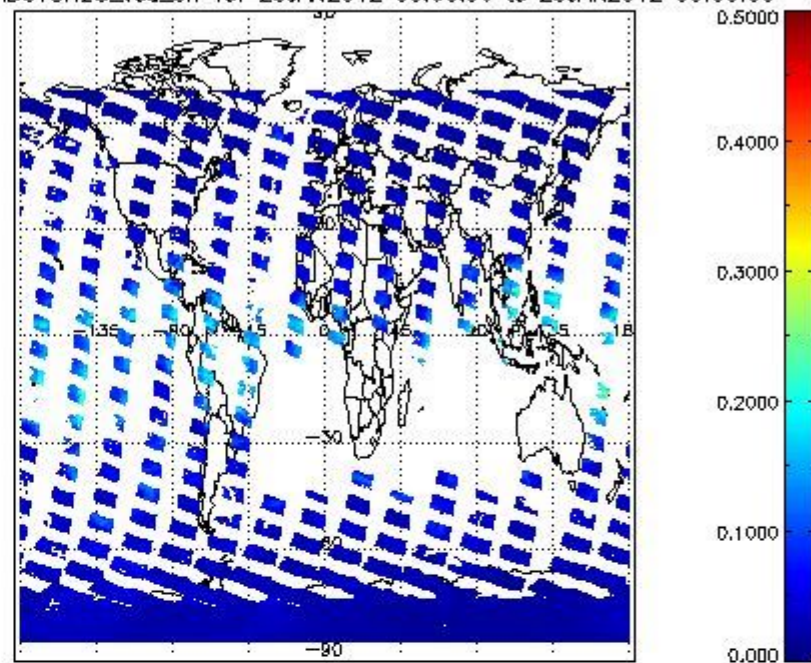




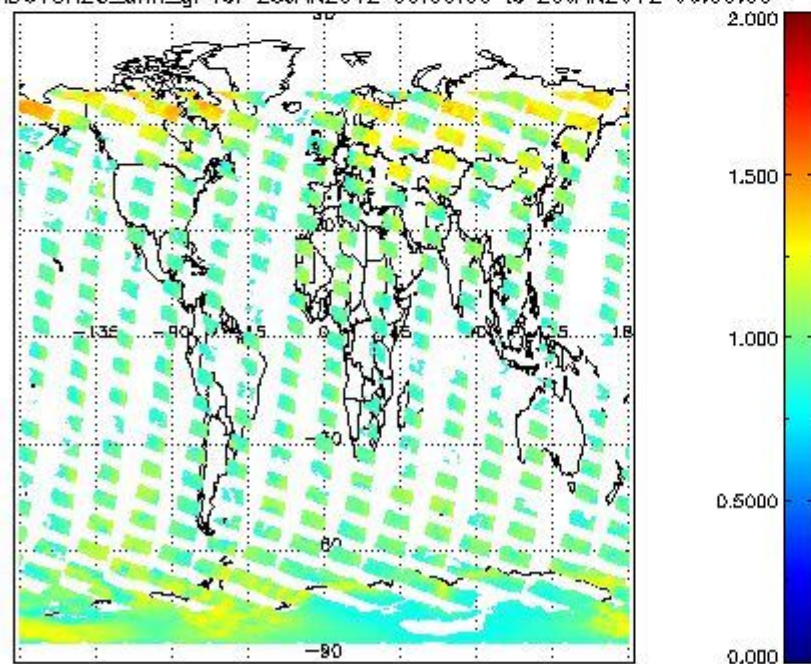
SCIOL2P\_NADUV8H20\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

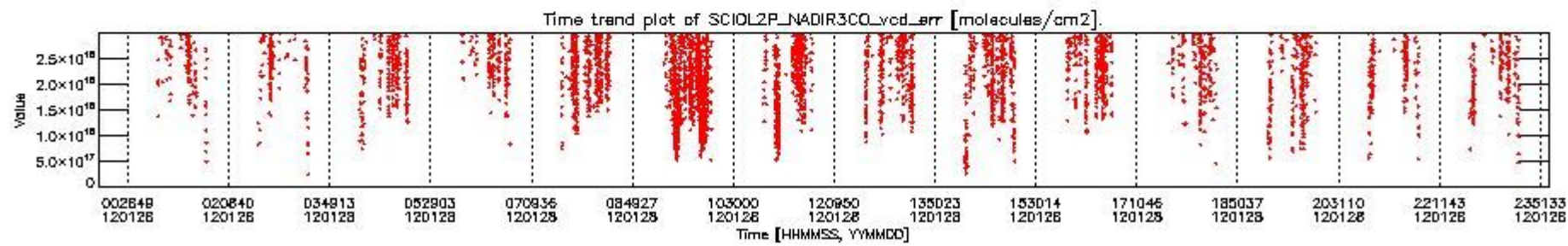
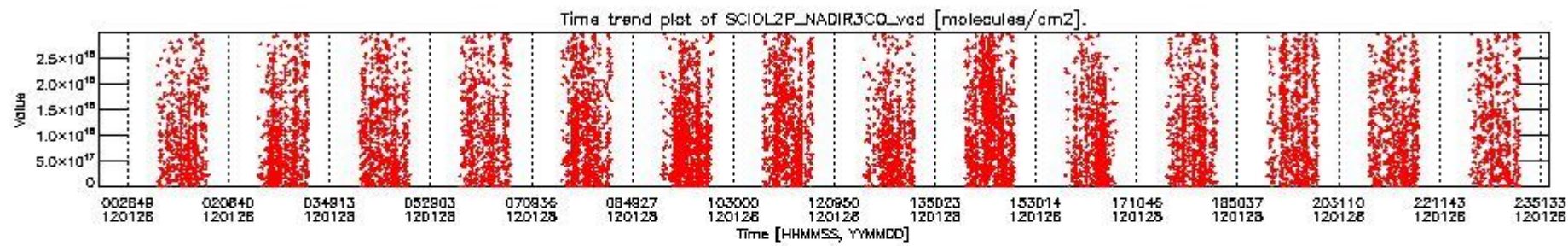


SCIOL2P\_NADUV8H20\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

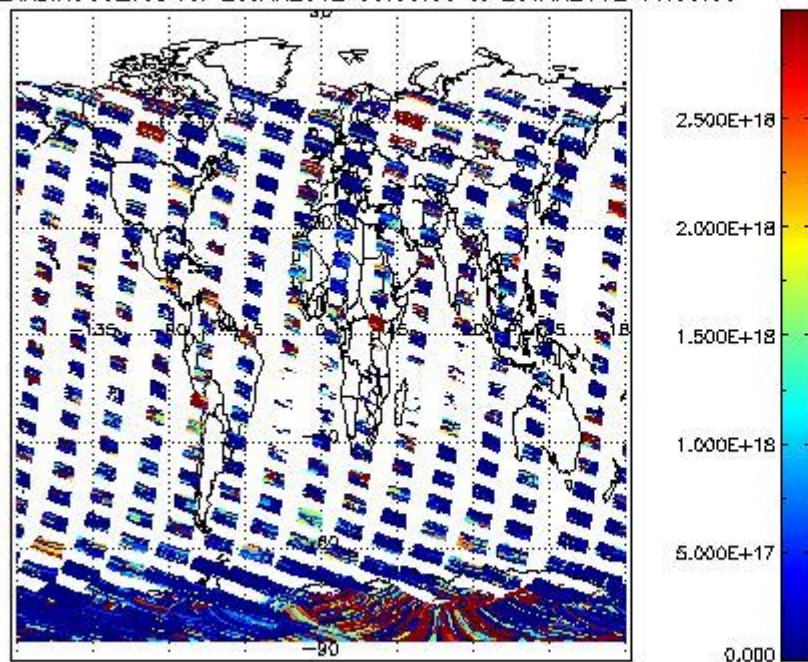


SCIOL2P\_NADUV8H20\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

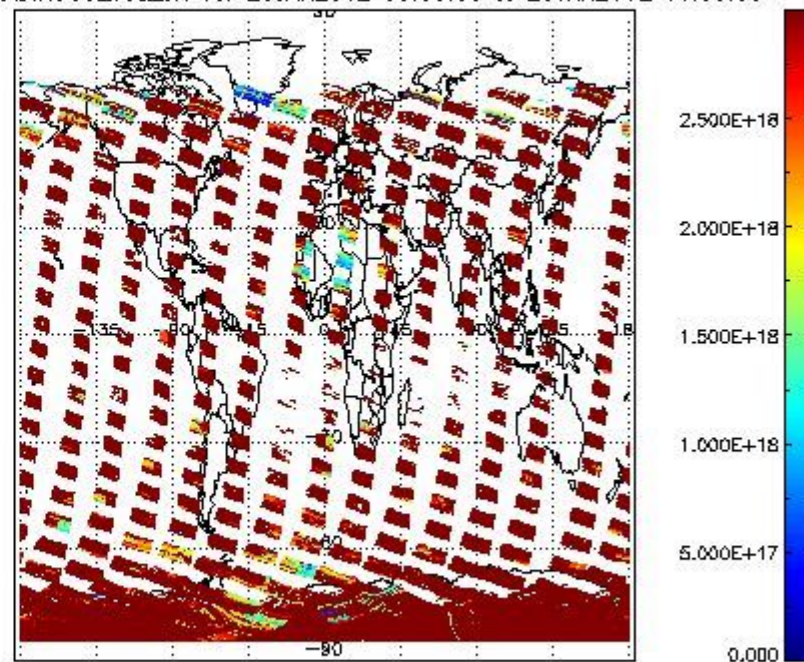




SCIDL2P\_NADIR3CO\_vcd for 26JAN2012 00:00:00 to 29JAN2012 00:00:00



SCIDL2P\_NADIR3CO\_vcd\_err for 26JAN2012 00:00:00 to 29JAN2012 00:00:00



### 2.2.3 Limb

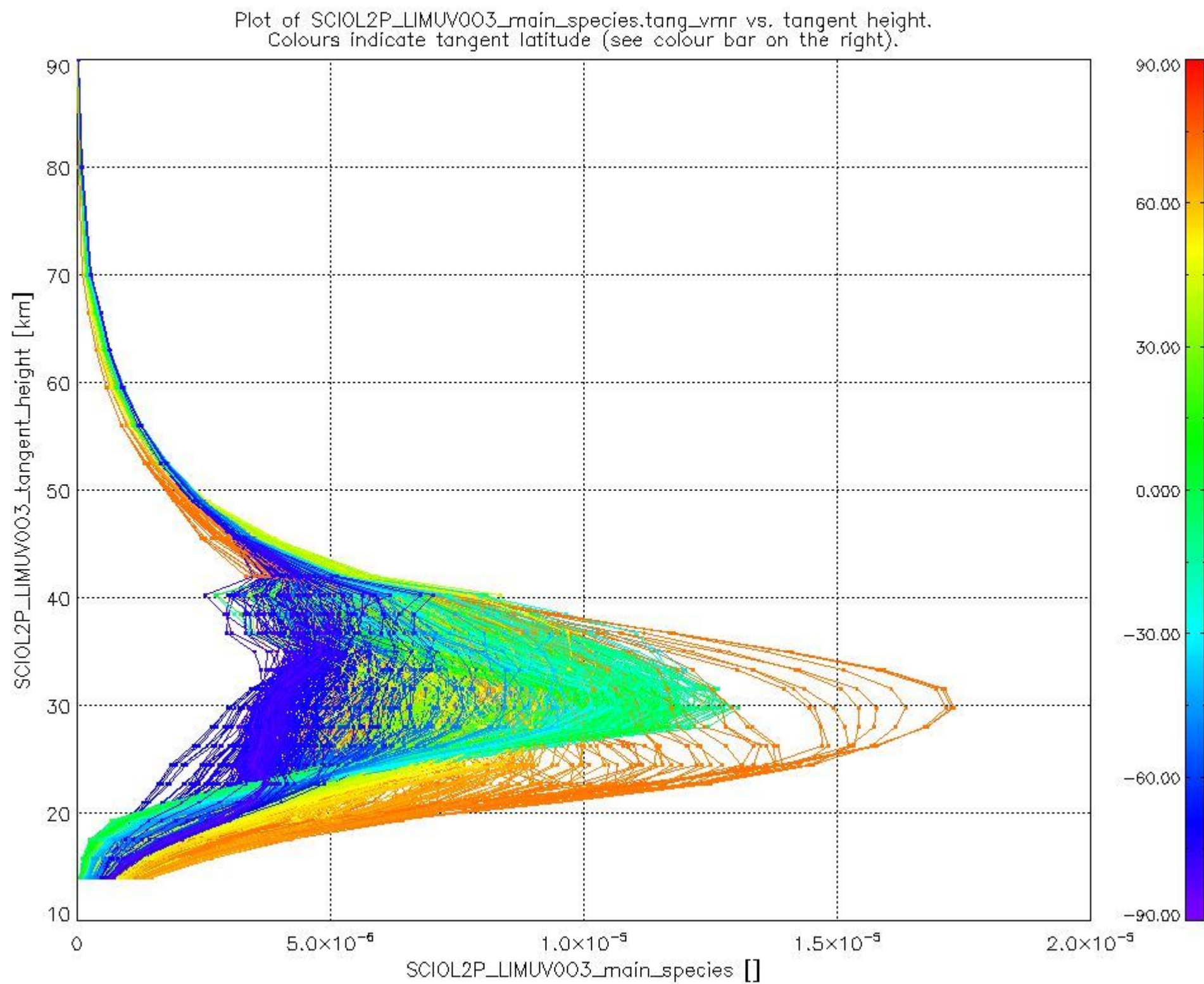
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

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

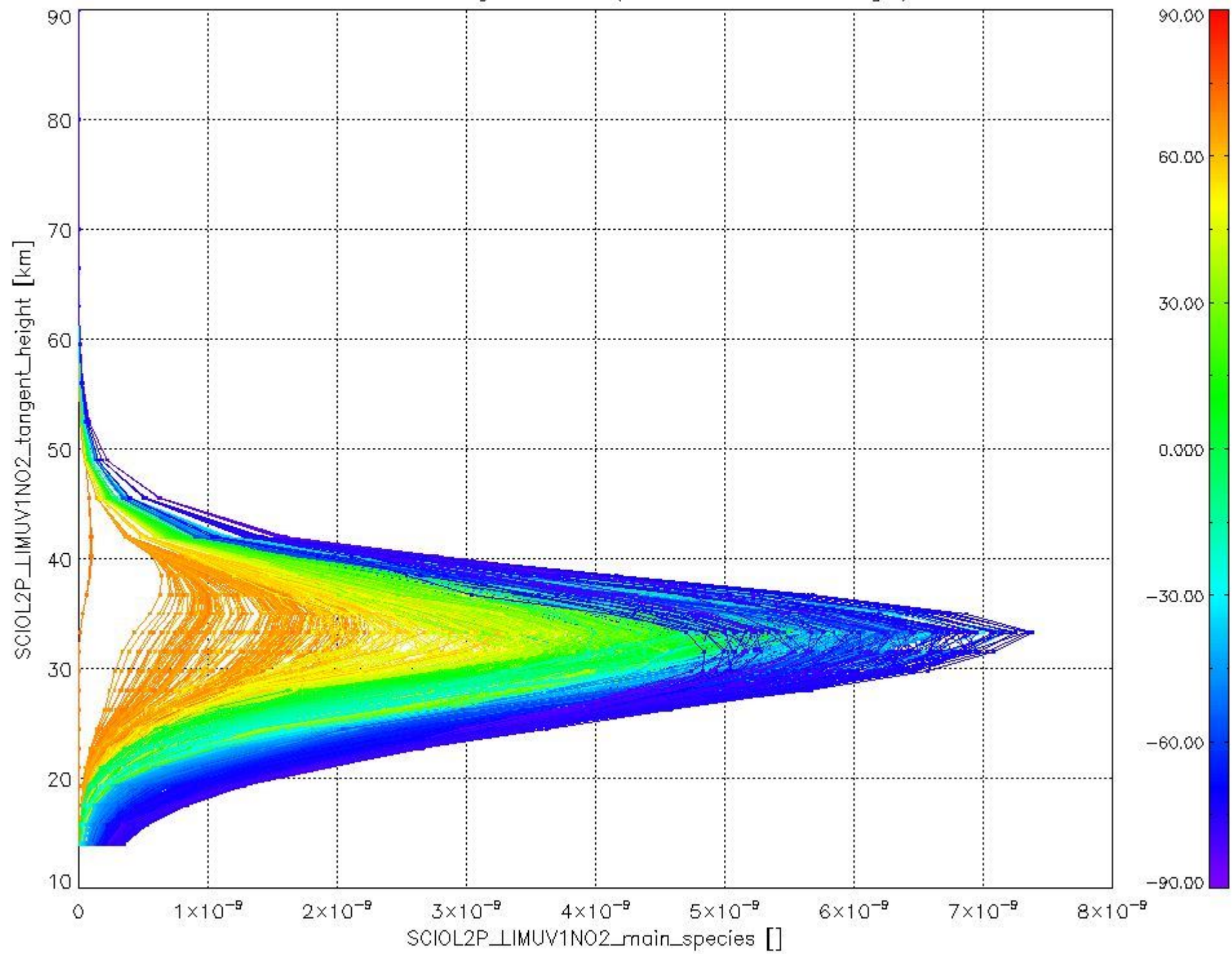
The following plots show for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

### 2.2.3.1 O3 (UV0)



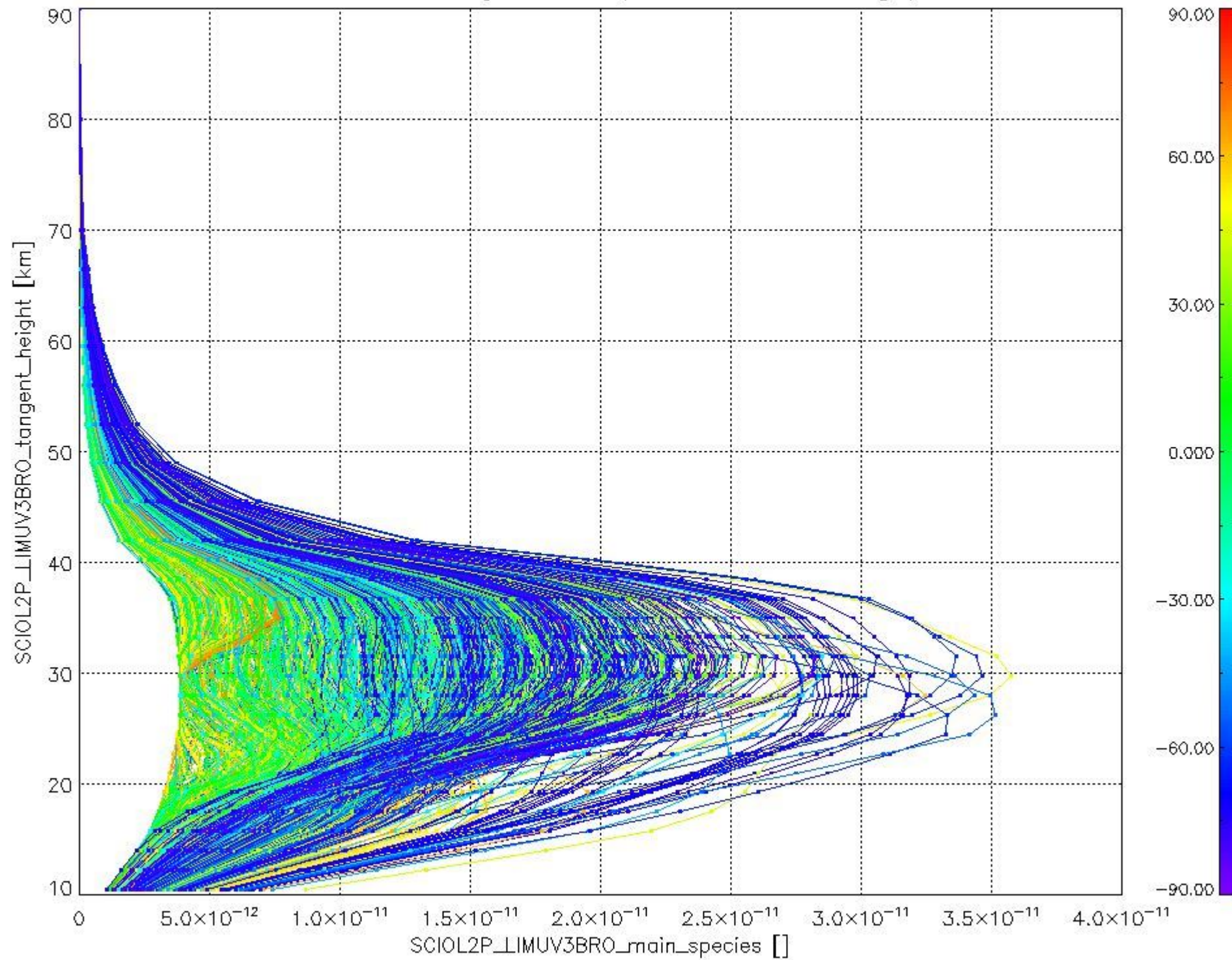
### 2.2.3.2 NO2 (UV1)

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).

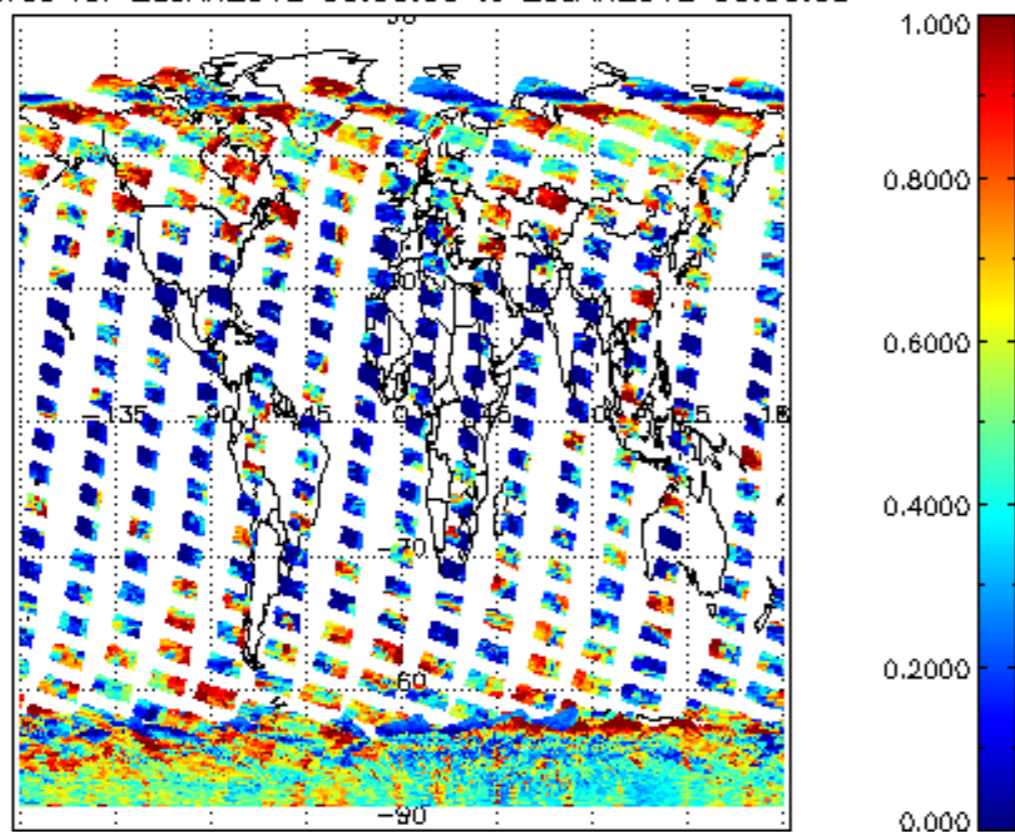


### 2.3 ADF monitoring

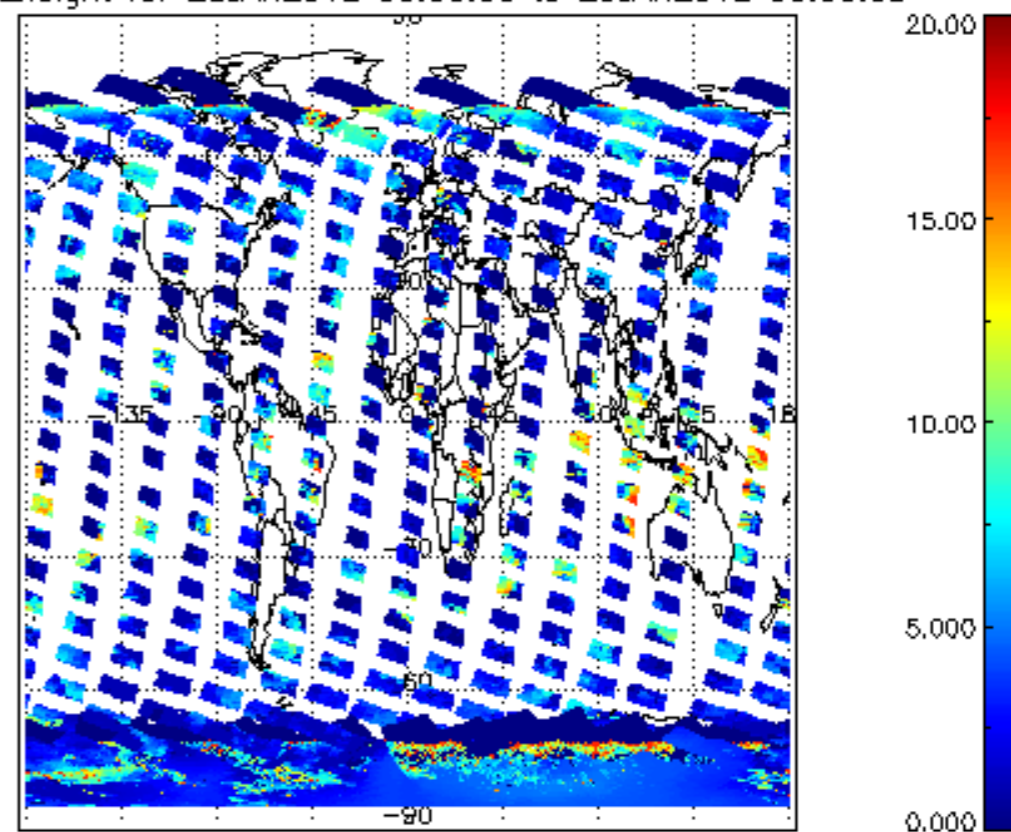
Number	ADF
	<b>IN_ (INITIALISATION_FILE)</b>
0	SCI_IN_AXNPDE20110201_120000_20020301_000000_20991231_235959
	<b>ECF (ECMWF_FILE)</b>
1	NOT USED
	<b>MF1 (M_FACTOR_FILE)</b>
2	SCI_MF1_AXVIEC20120131_132744_20120127_190955_20120129_190955
3	SCI_MF1_AXVIEC20120131_132847_20120128_183310_20120130_183310



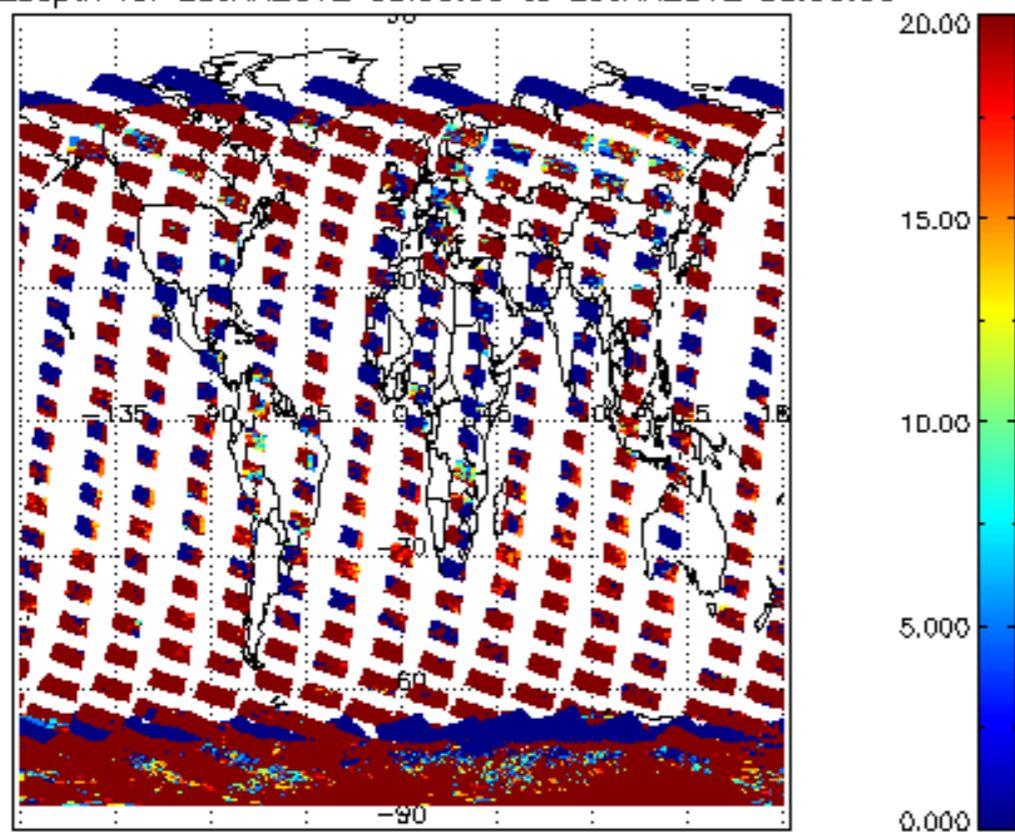
cL\_frac for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



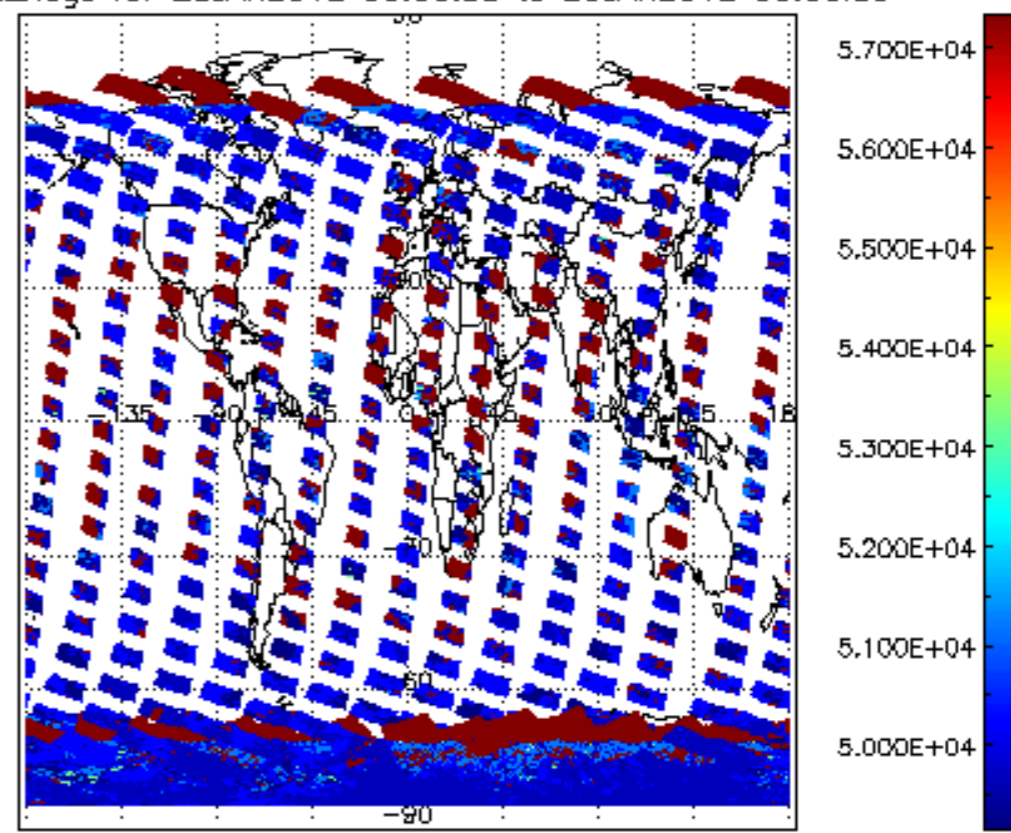
cL\_top\_height for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

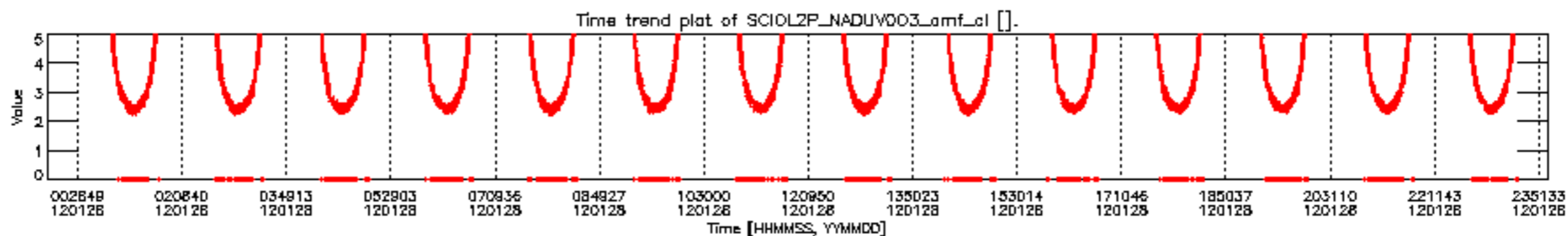
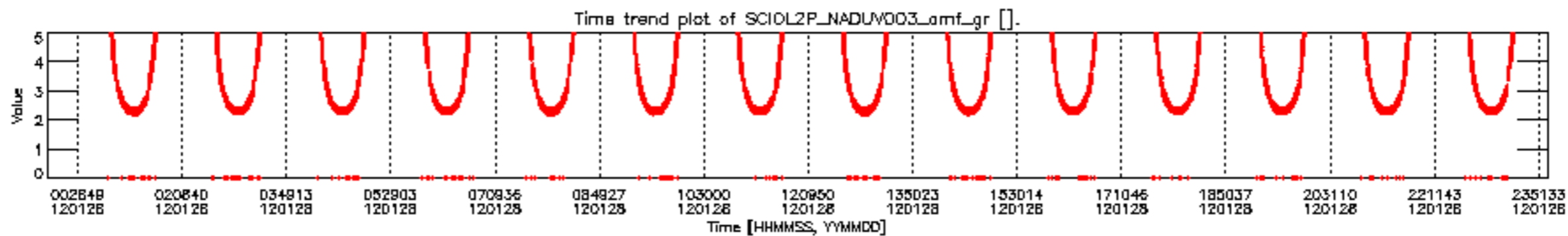
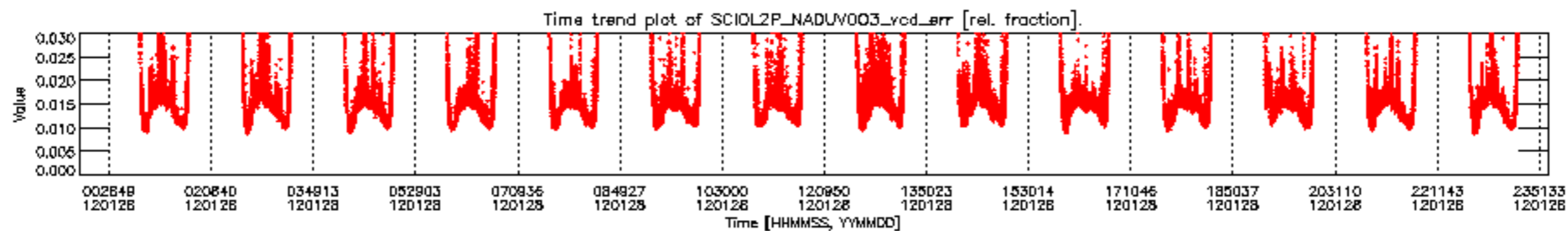
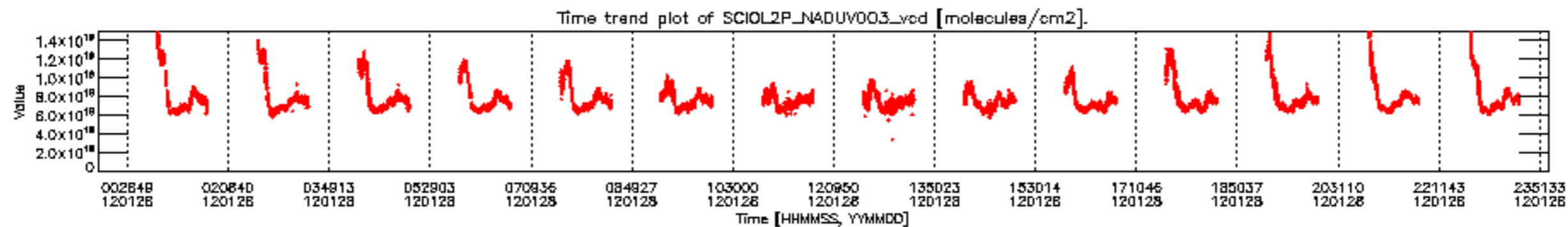


cLopt\_depth for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



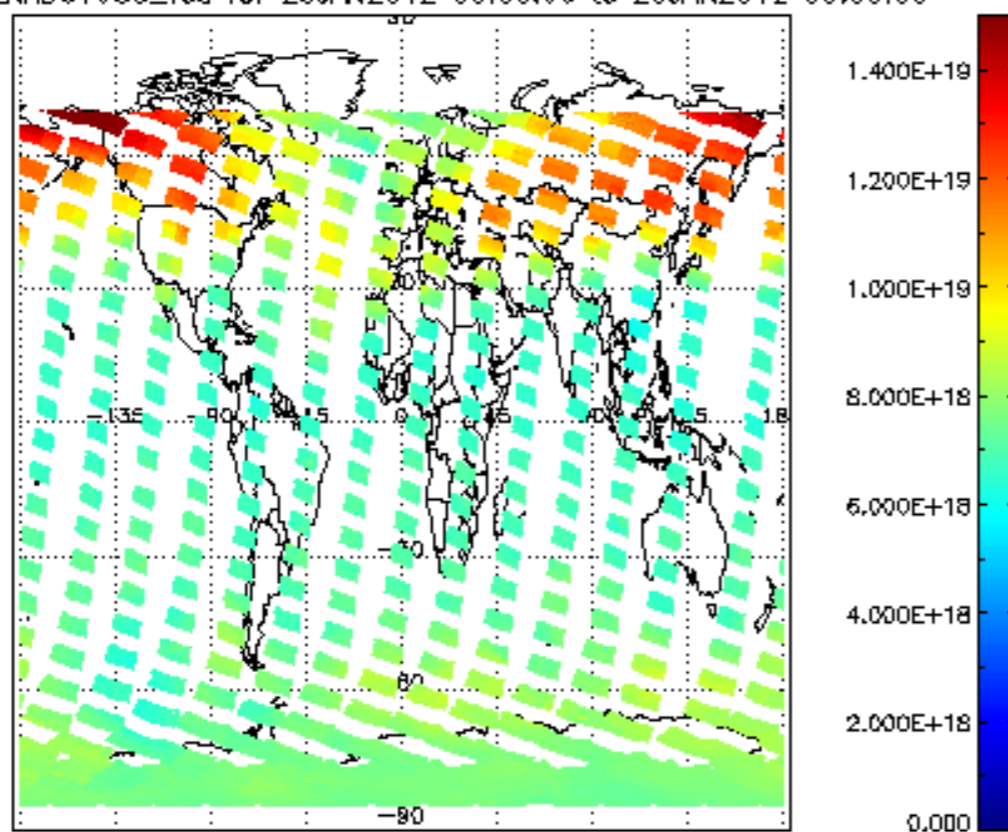
cloud\_flags for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



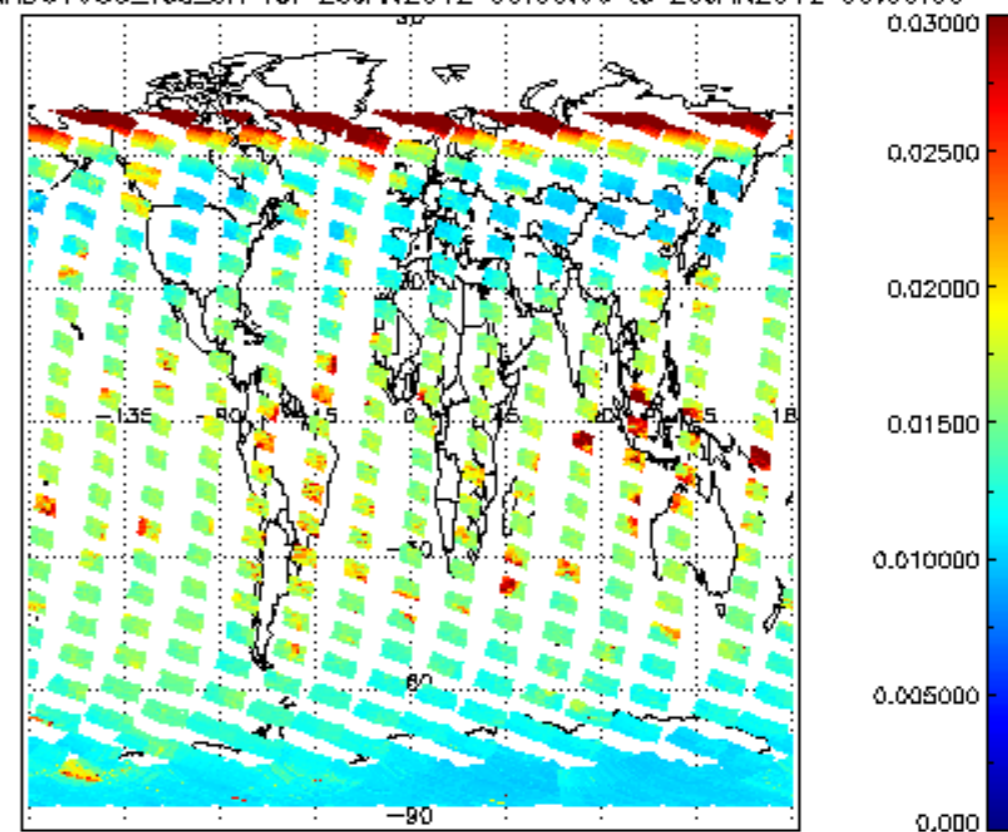




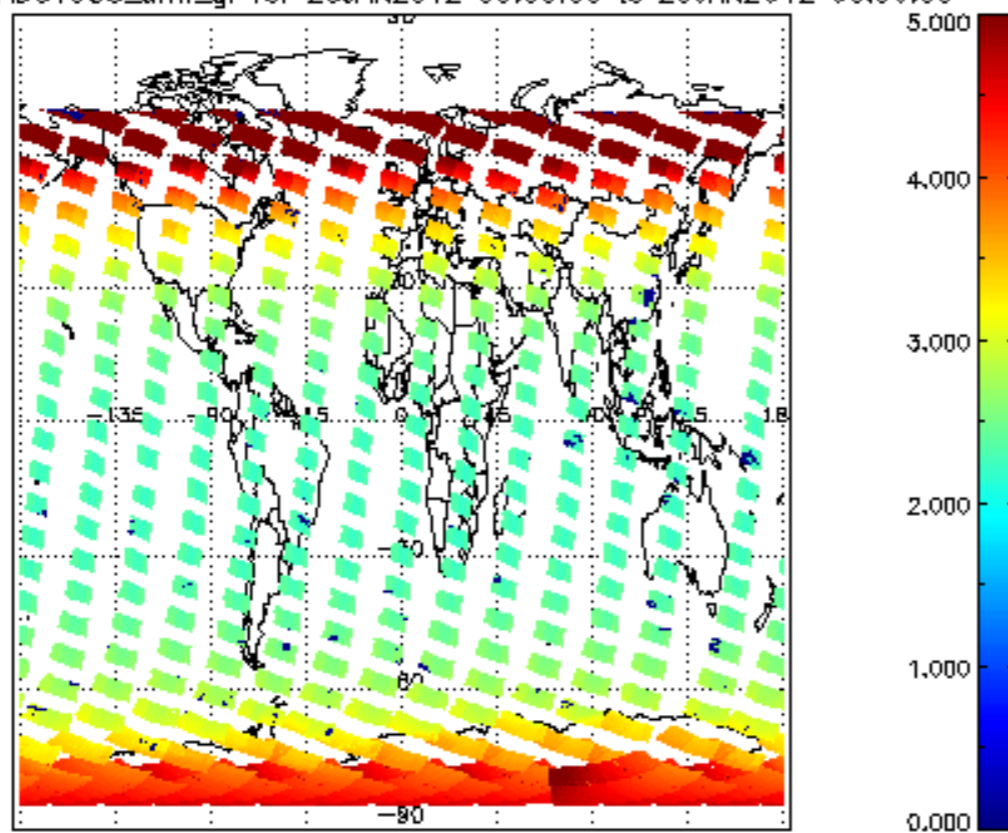
SCIOL2P\_NADUV003\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



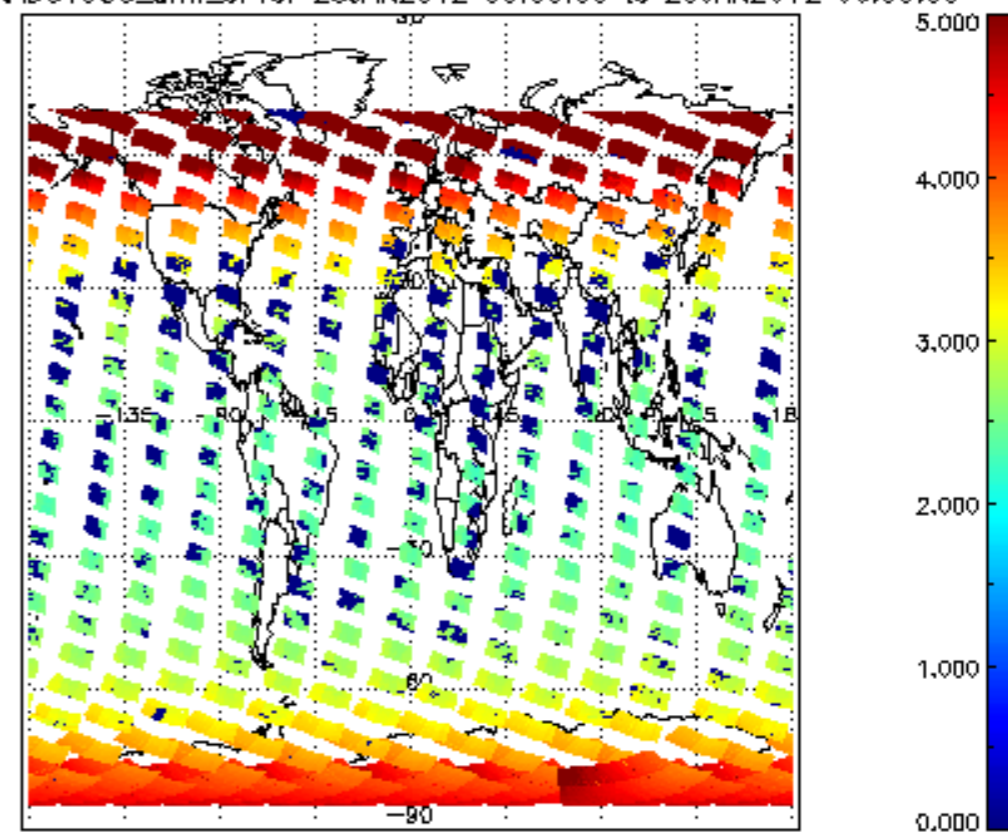
SCIOL2P\_NADUV003\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



SCIOL2P\_NADUV003\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

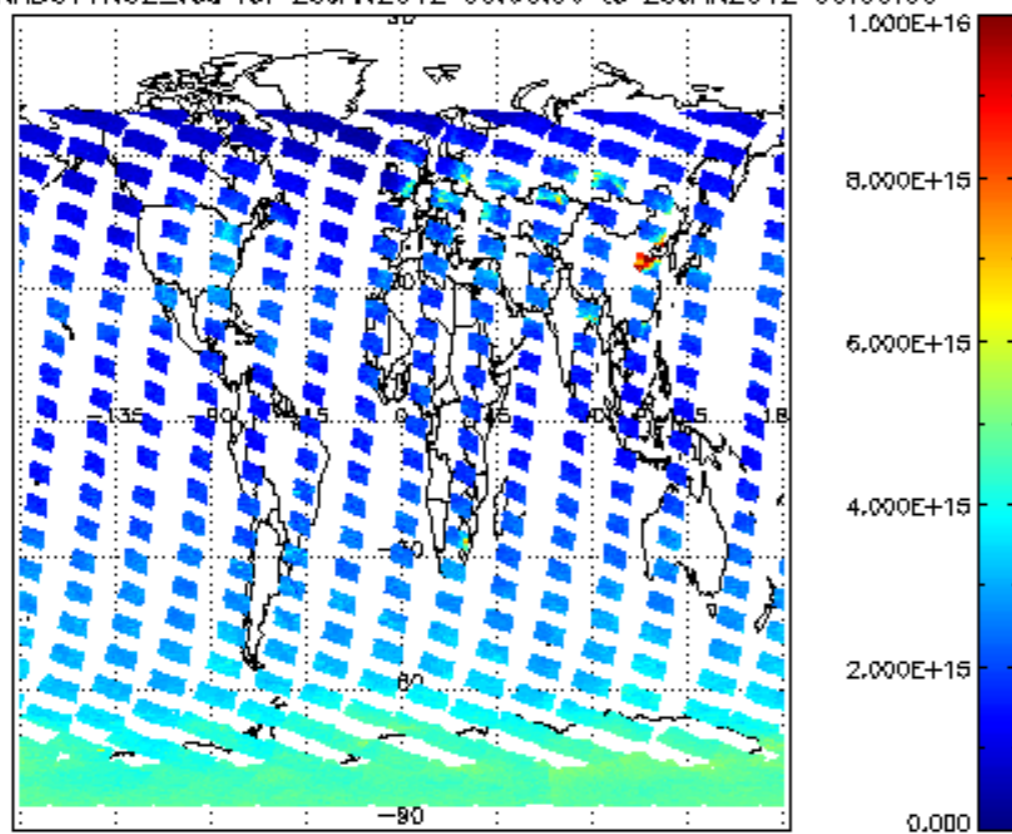


SCIOL2P\_NADUV003\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

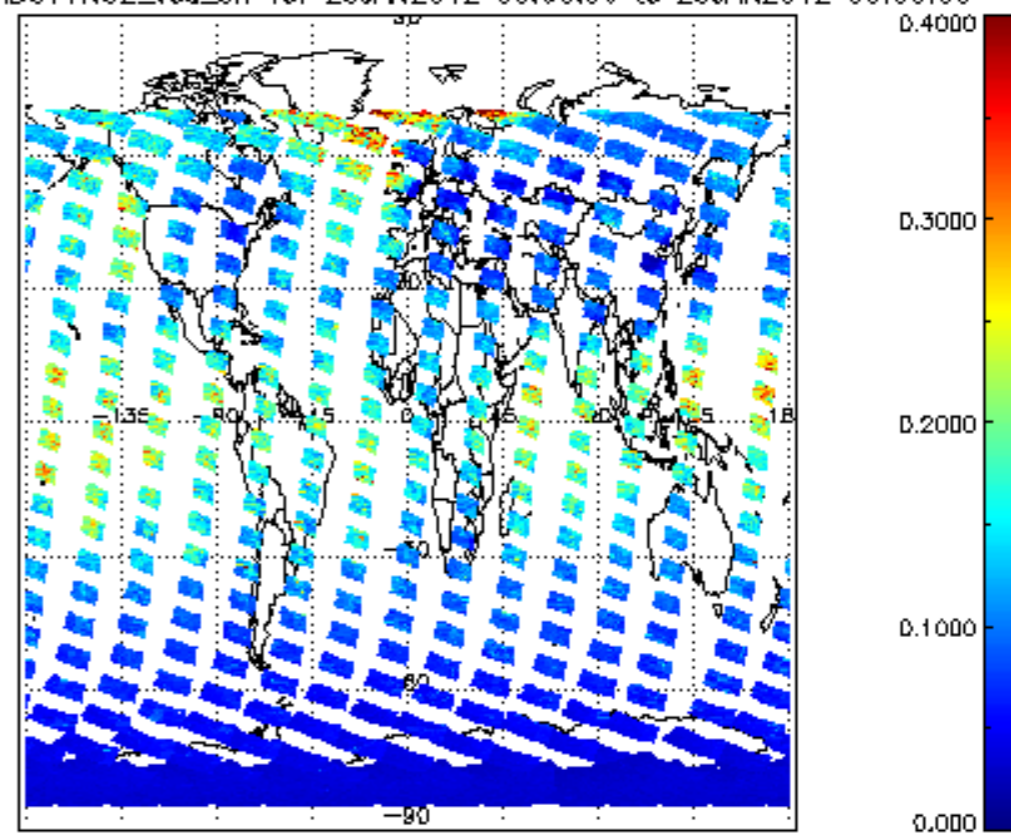




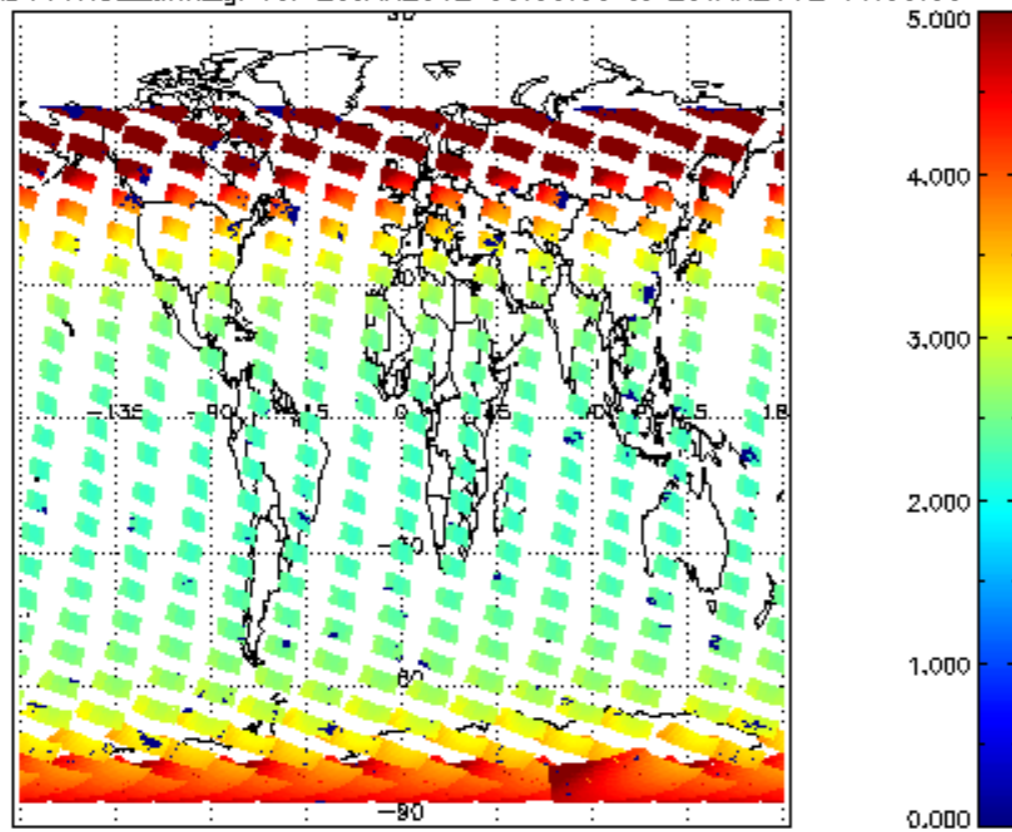
SCIOL2P\_NADUV1NO2\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



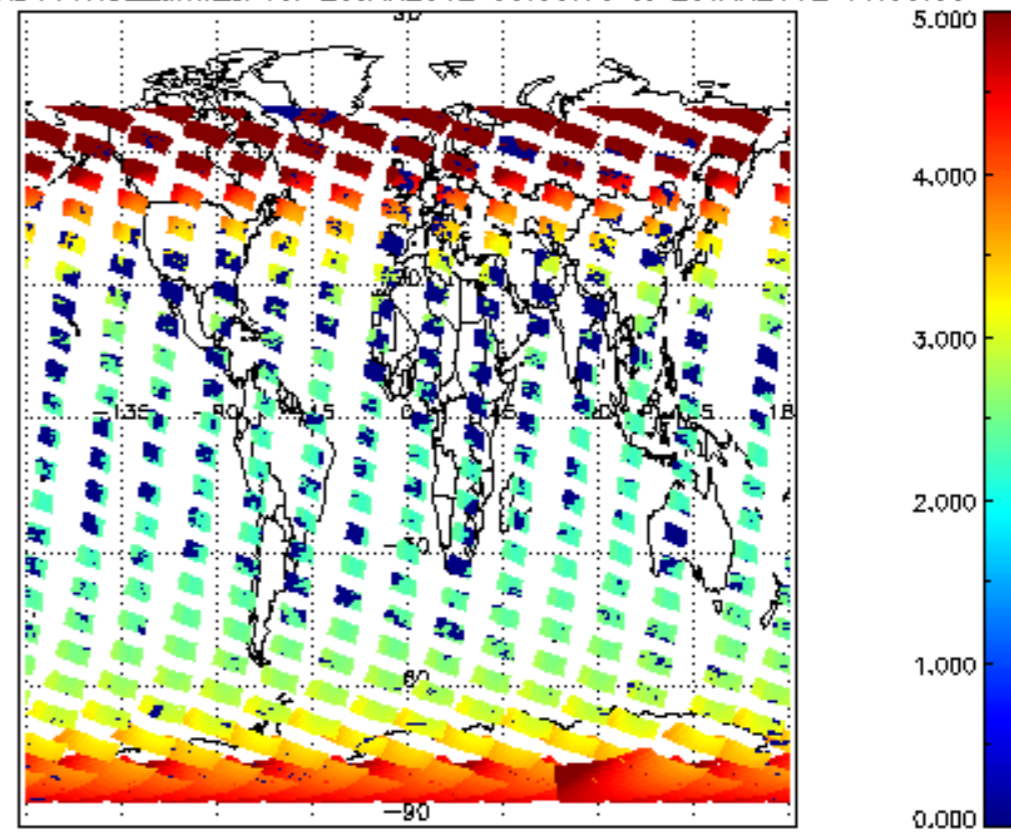
SCIOL2P\_NADUV1NO2\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

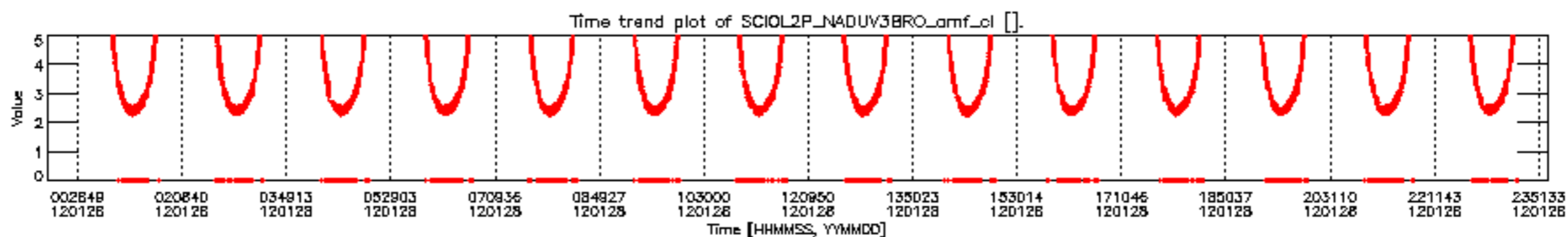
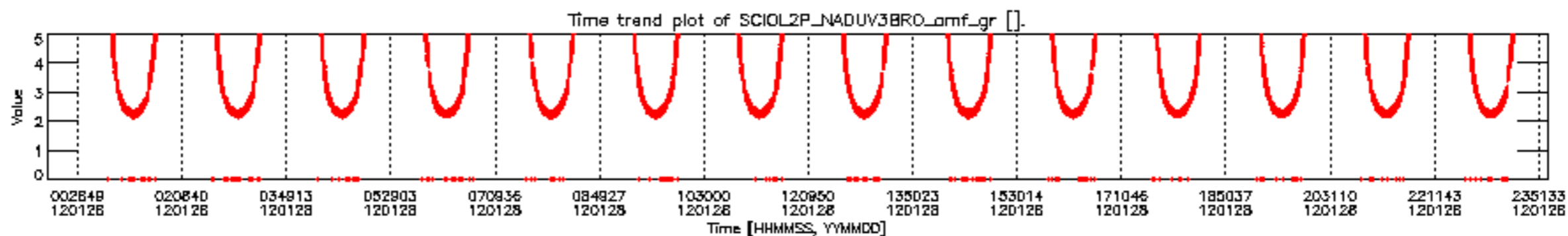
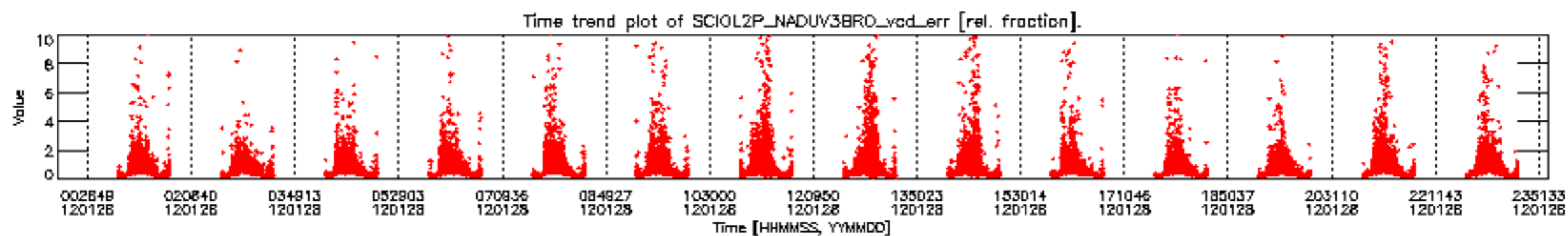
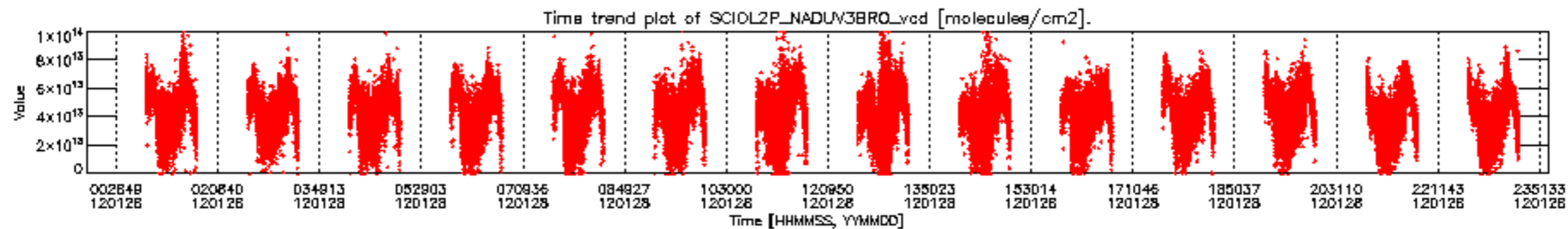


SCIOL2P\_NADUV1NO2\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

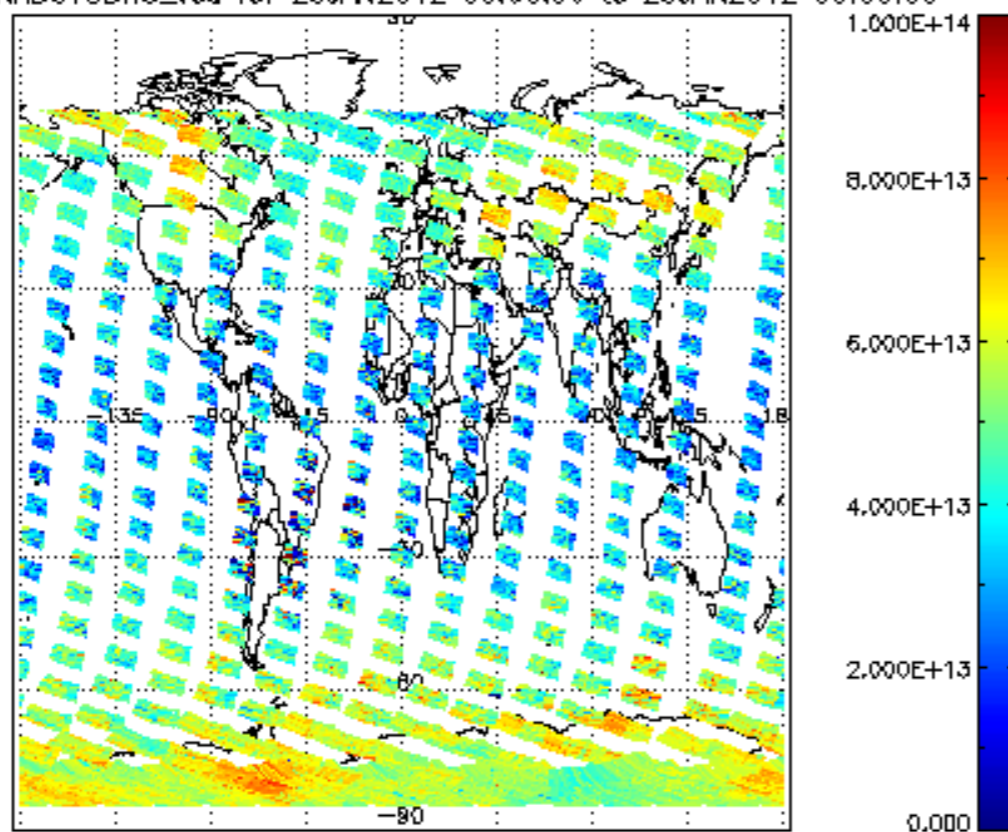


SCIOL2P\_NADUV1NO2\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

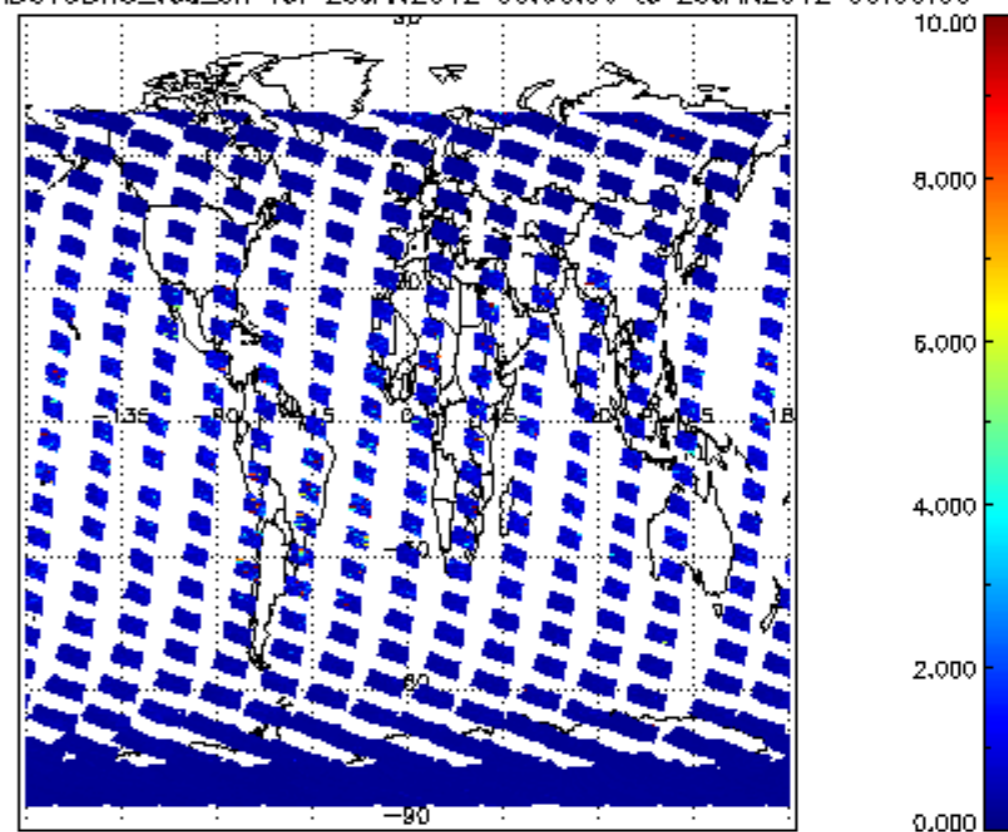




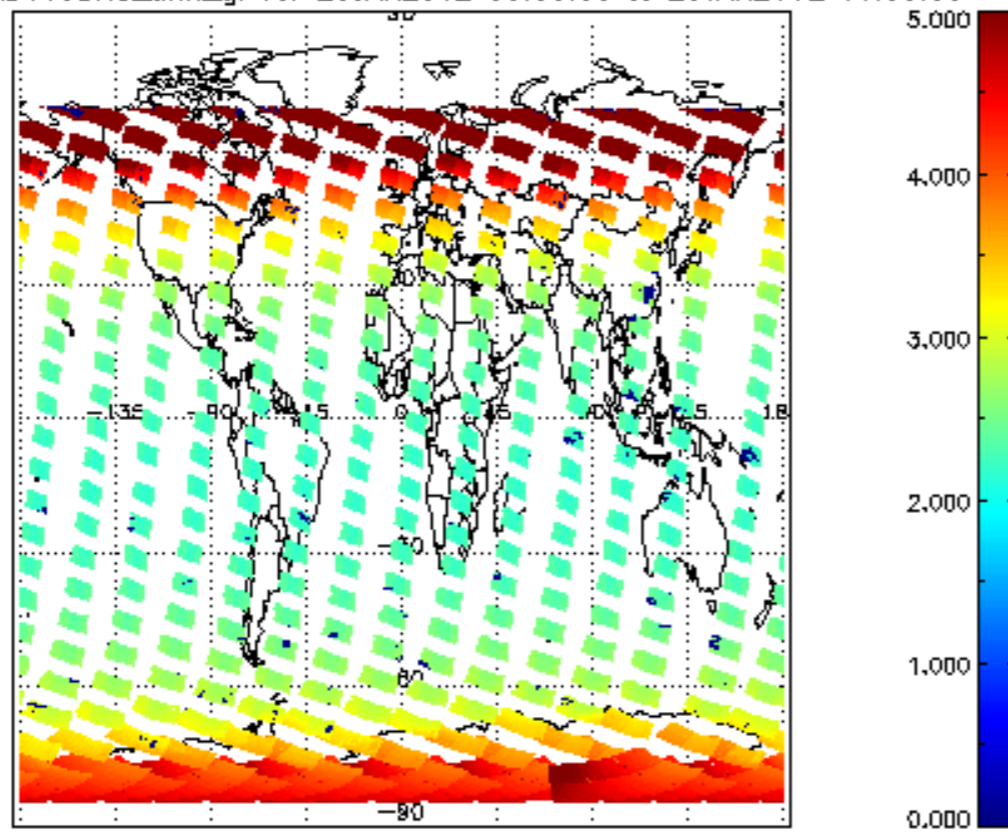
SCIOL2P\_NADUV3BRO\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



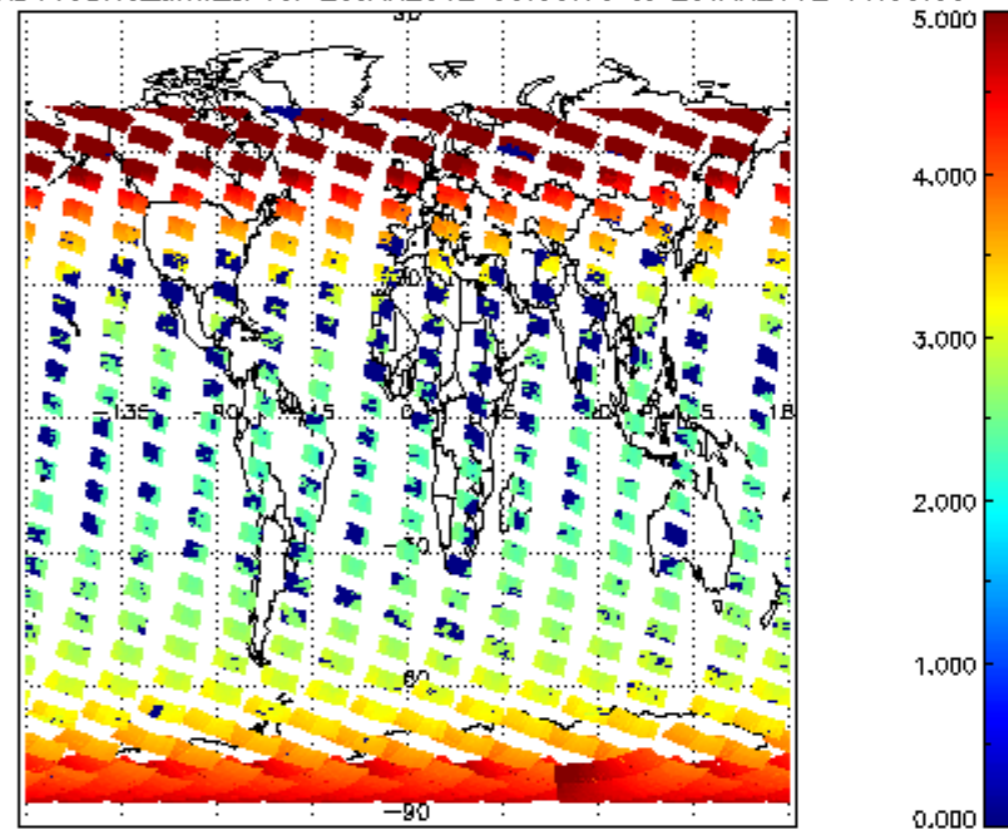
SCIOL2P\_NADUV3BRO\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

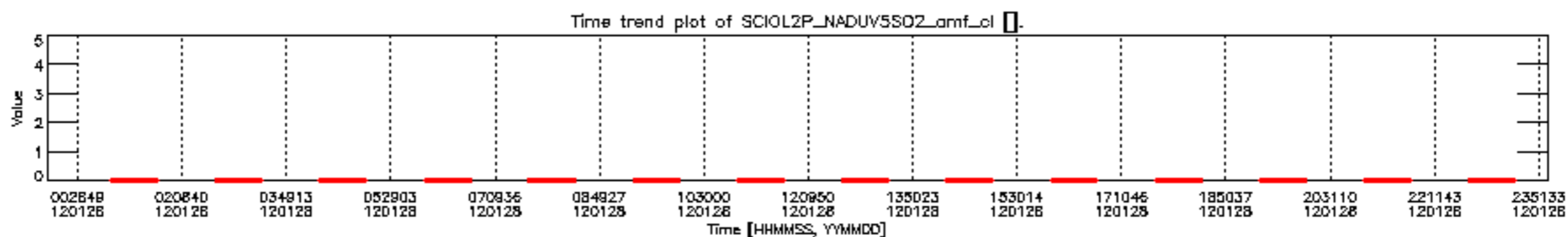
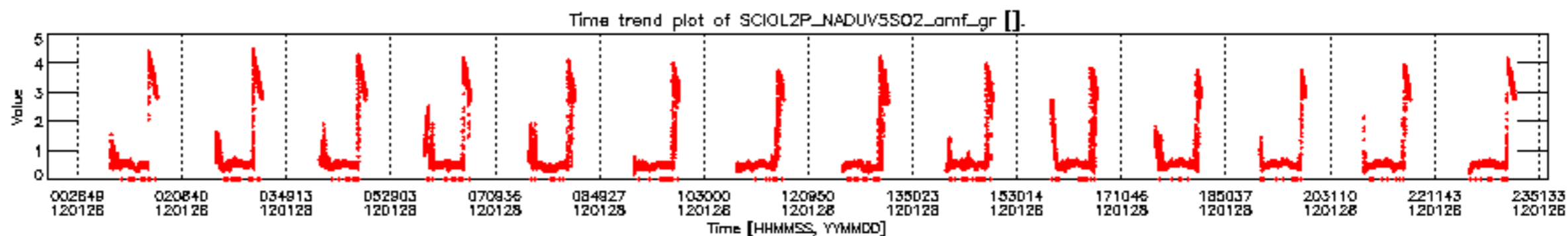
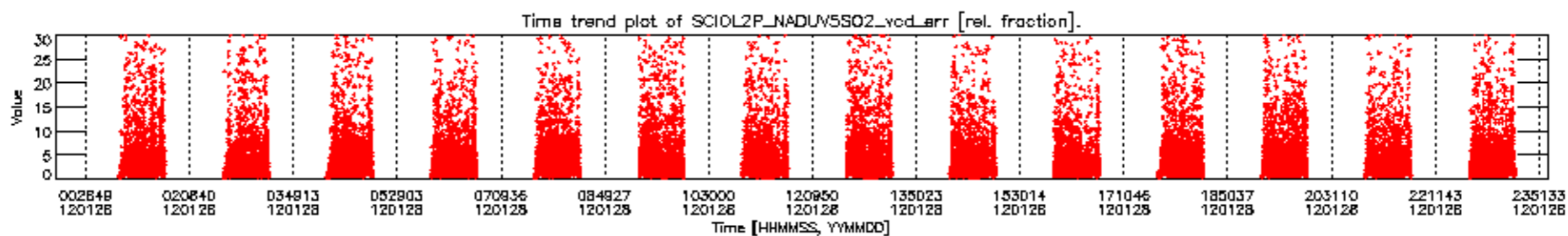
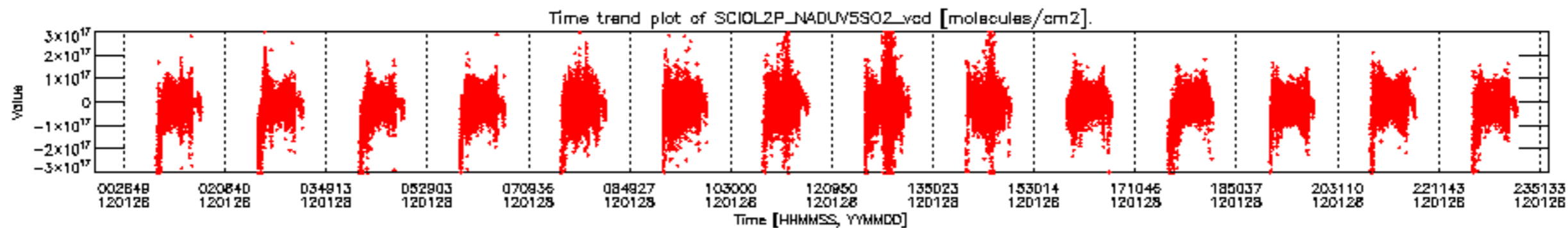


SCIOL2P\_NADUV3BRO\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

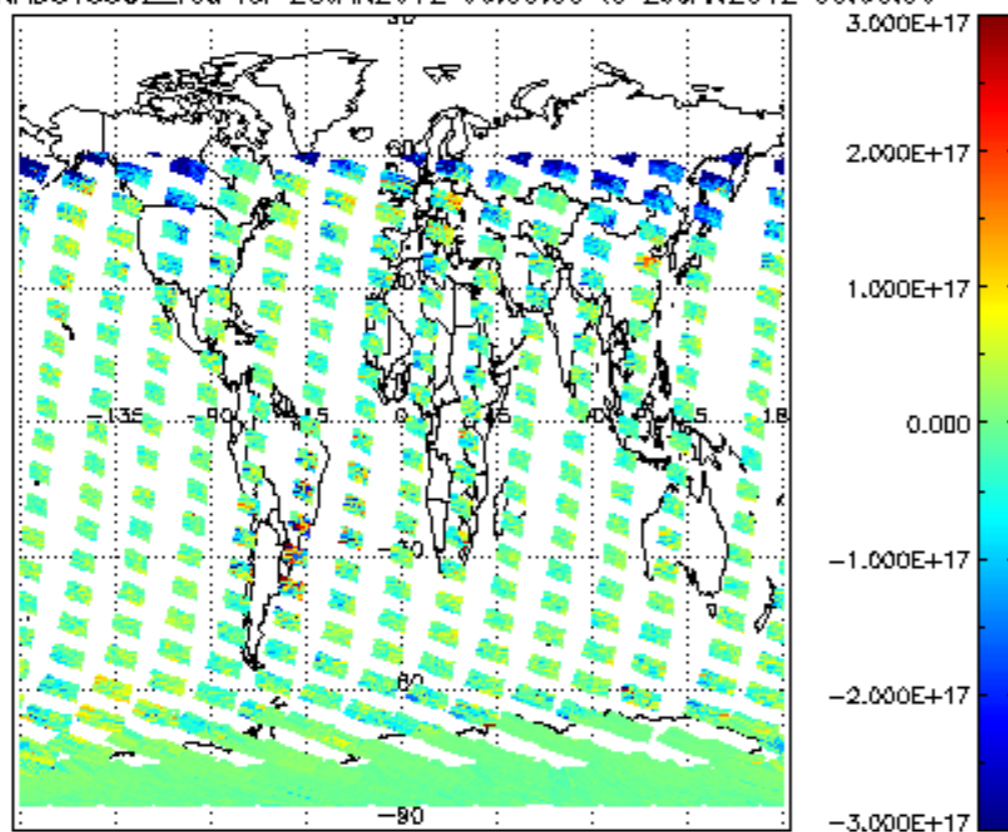


SCIOL2P\_NADUV3BRO\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

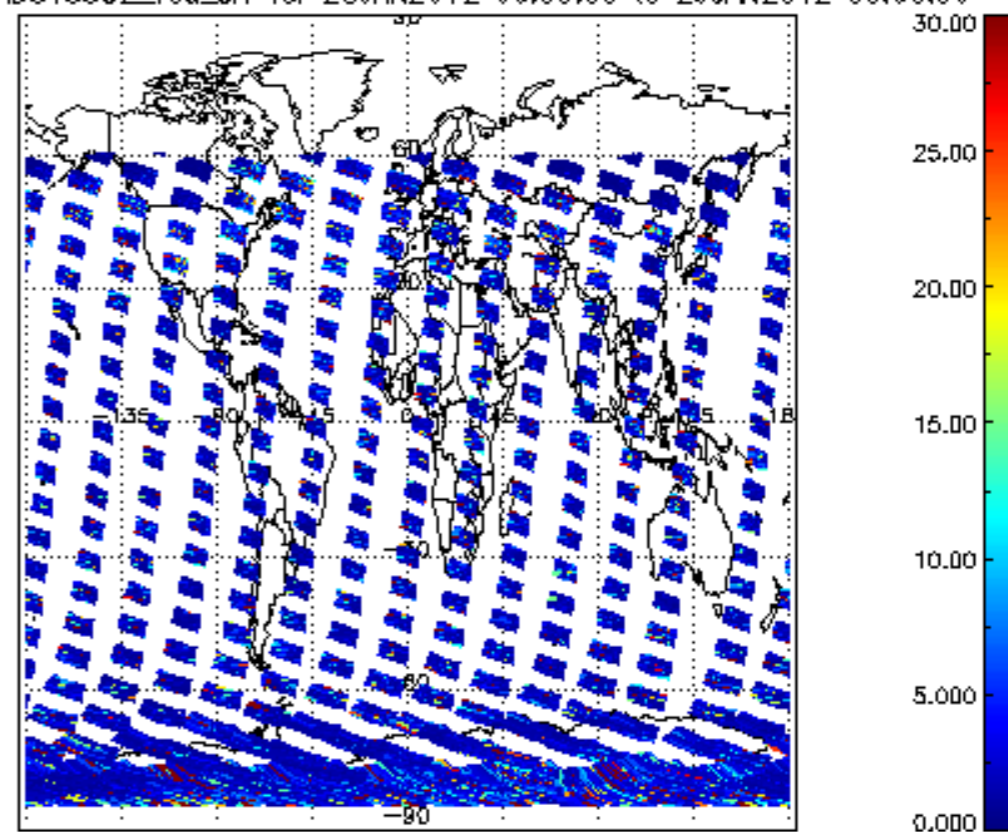




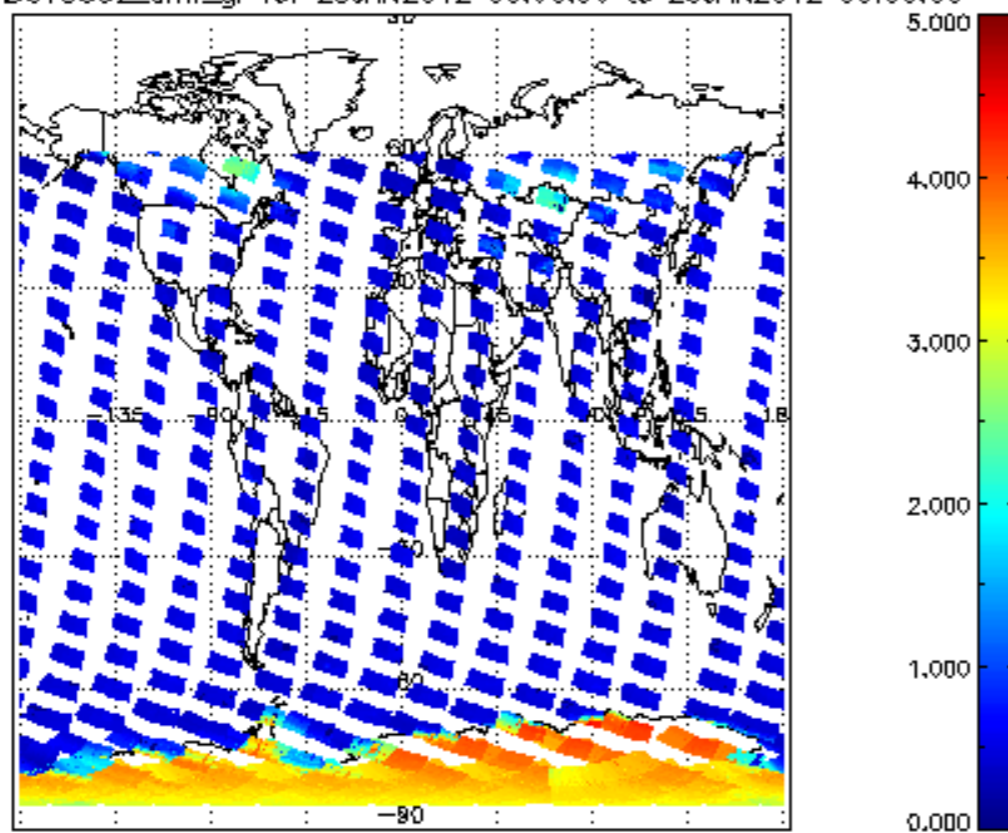
SCIOL2P\_NADUV5S02\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



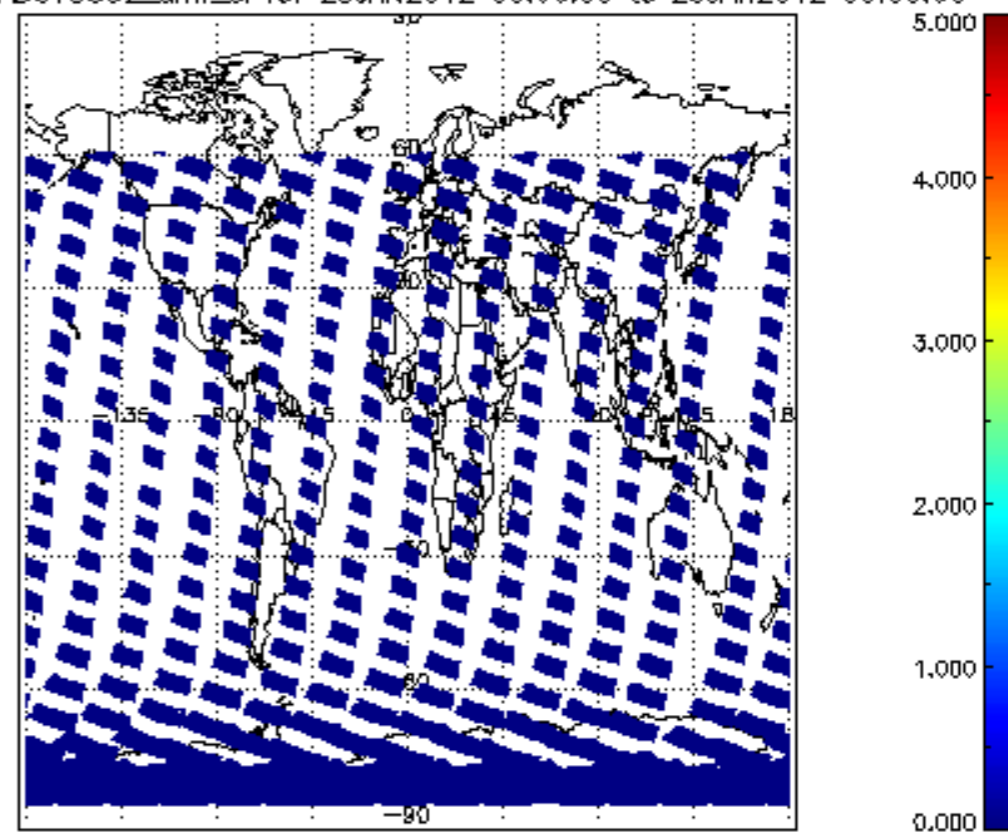
SCIOL2P\_NADUV5S02\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



SCIOL2P\_NADUV5S02\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



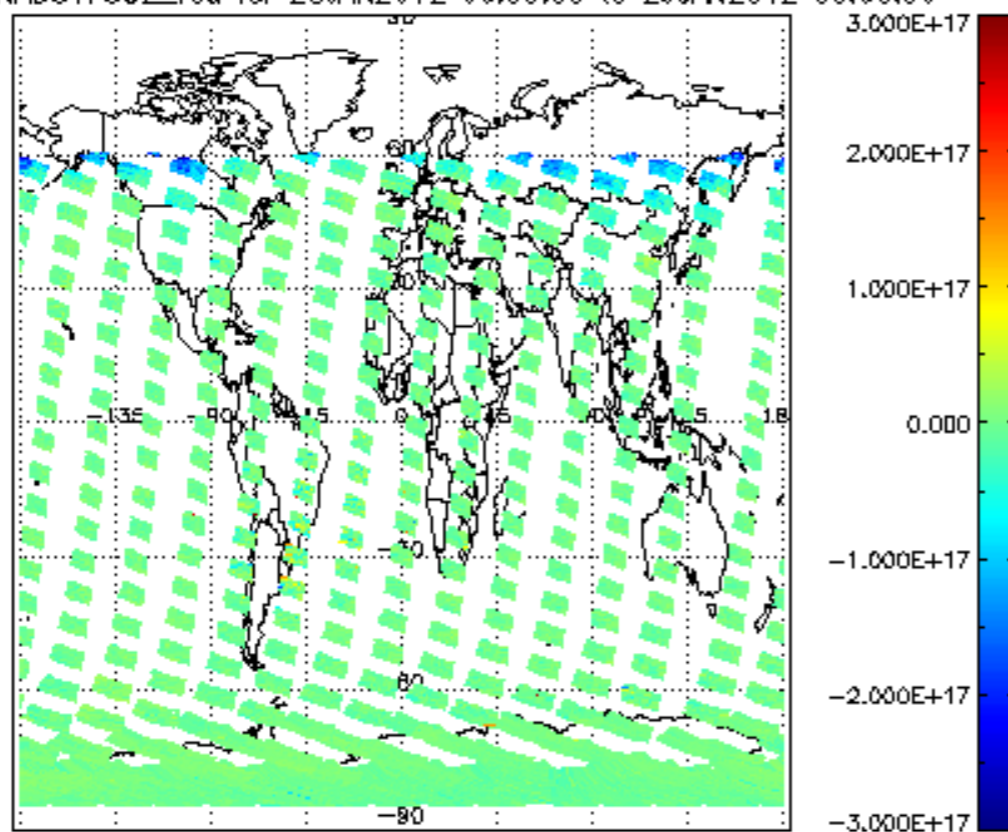
SCIOL2P\_NADUV5S02\_amf\_sl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



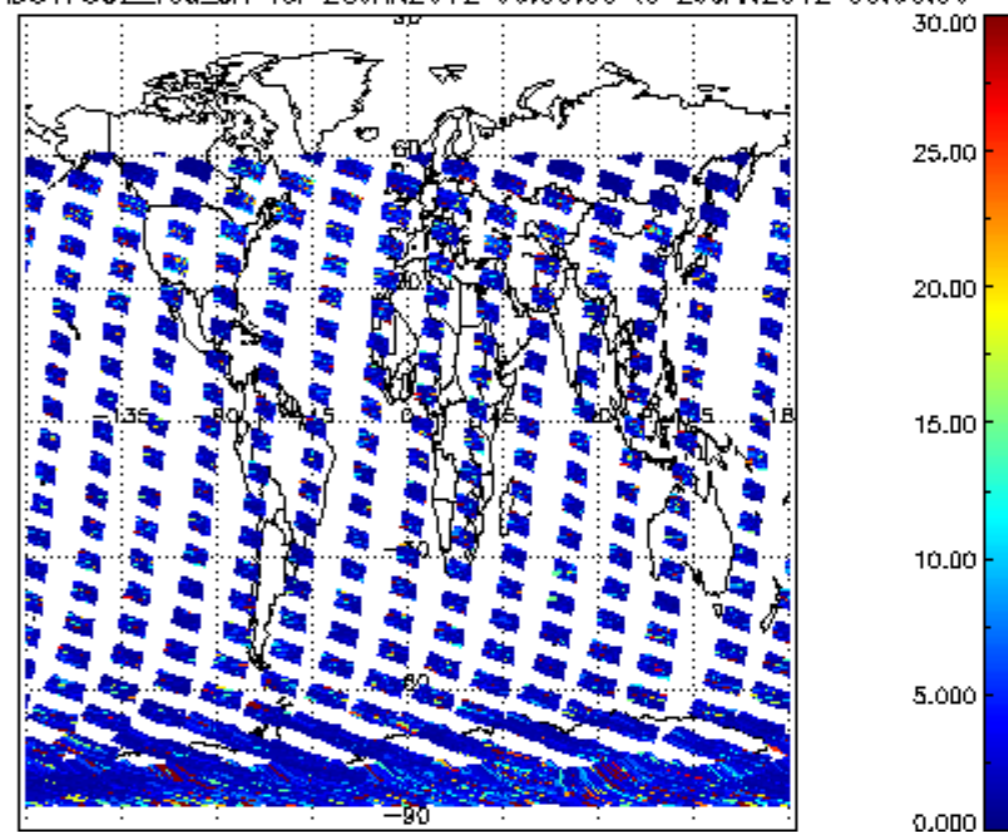




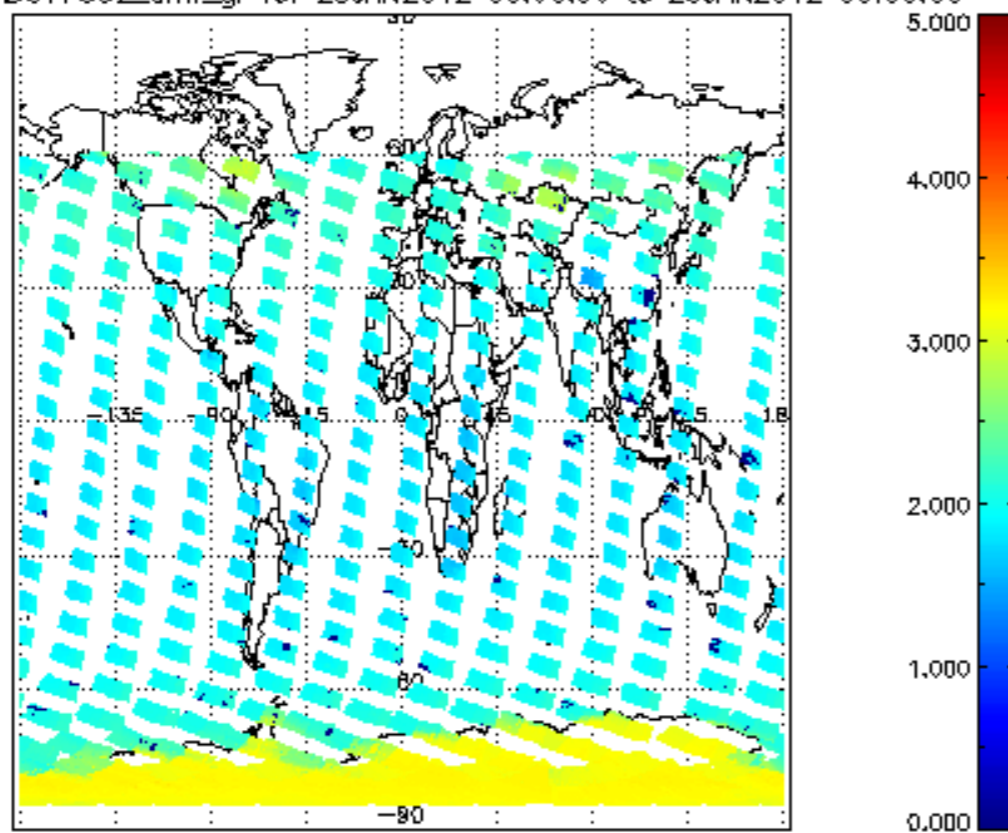
SCIOL2P\_NADUV7S02\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00



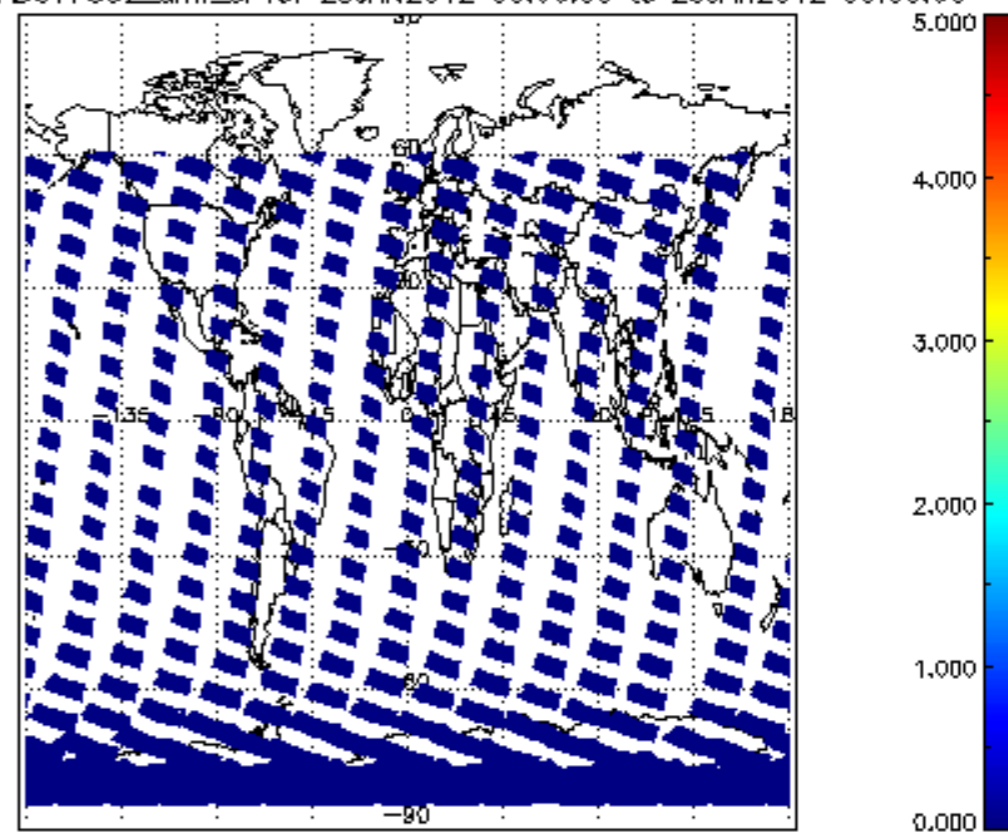
SCIOL2P\_NADUV7S02\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

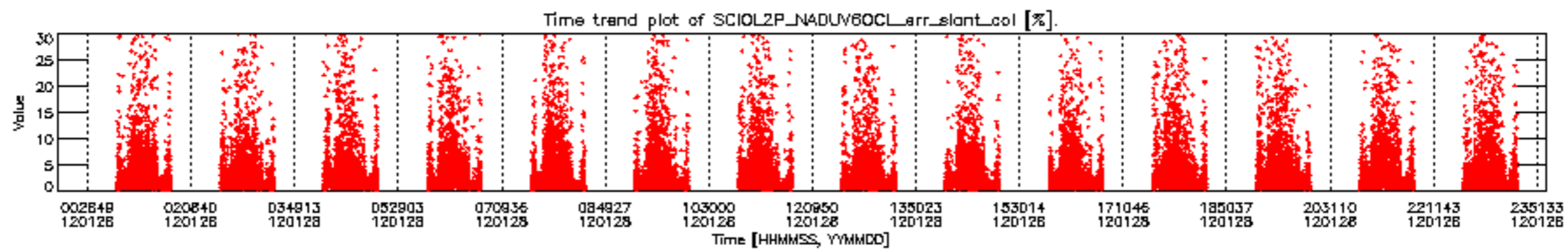
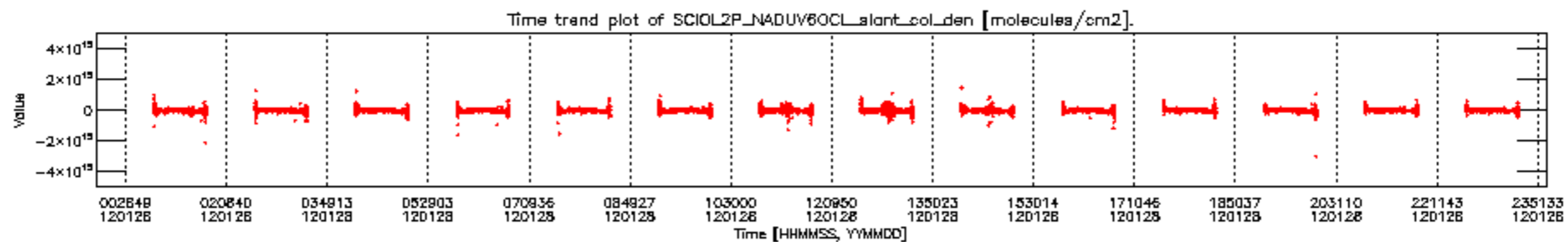


SCIOL2P\_NADUV7S02\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

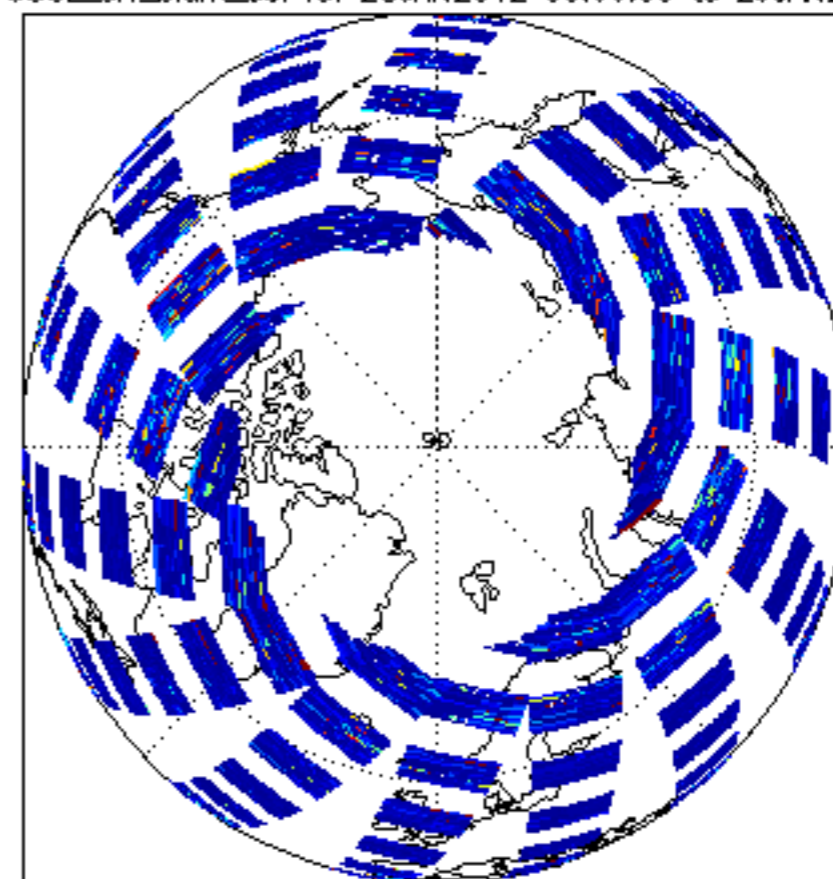
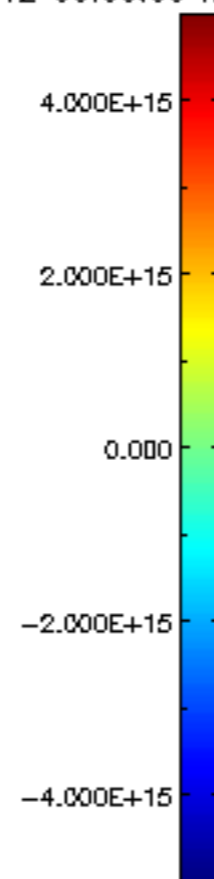
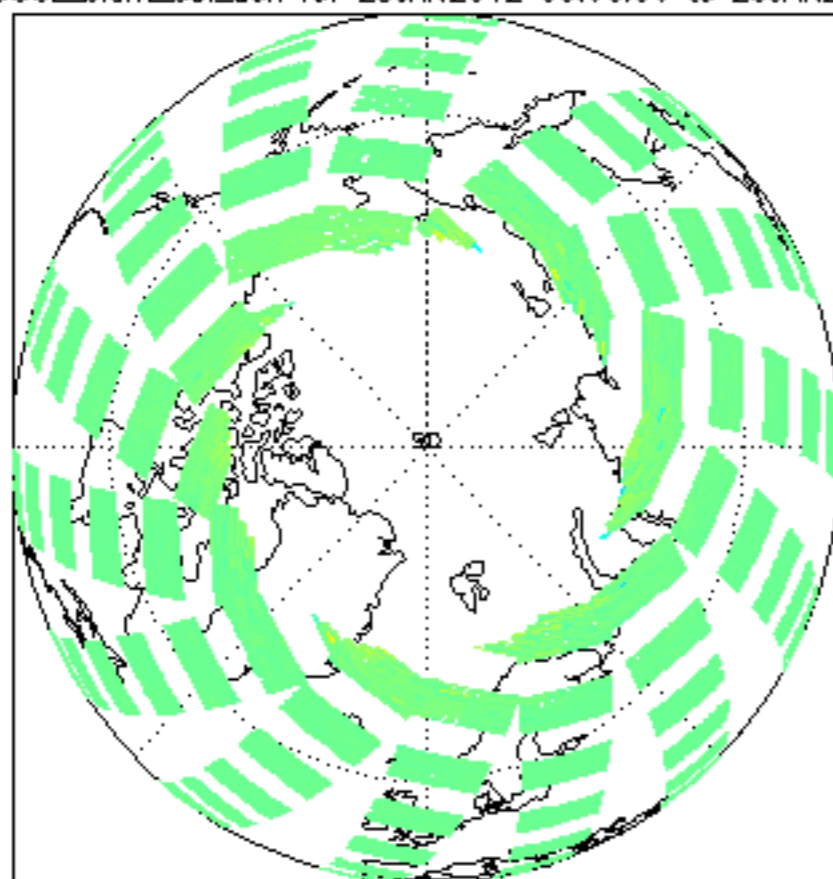


SCIOL2P\_NADUV7S02\_amf\_cl for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

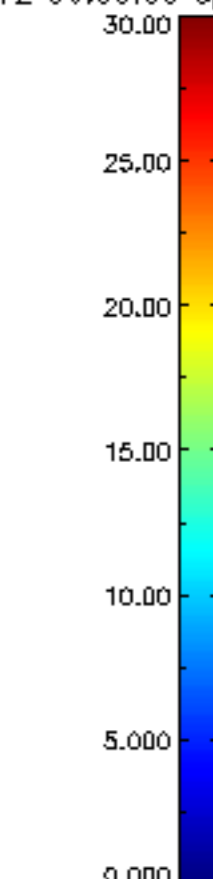
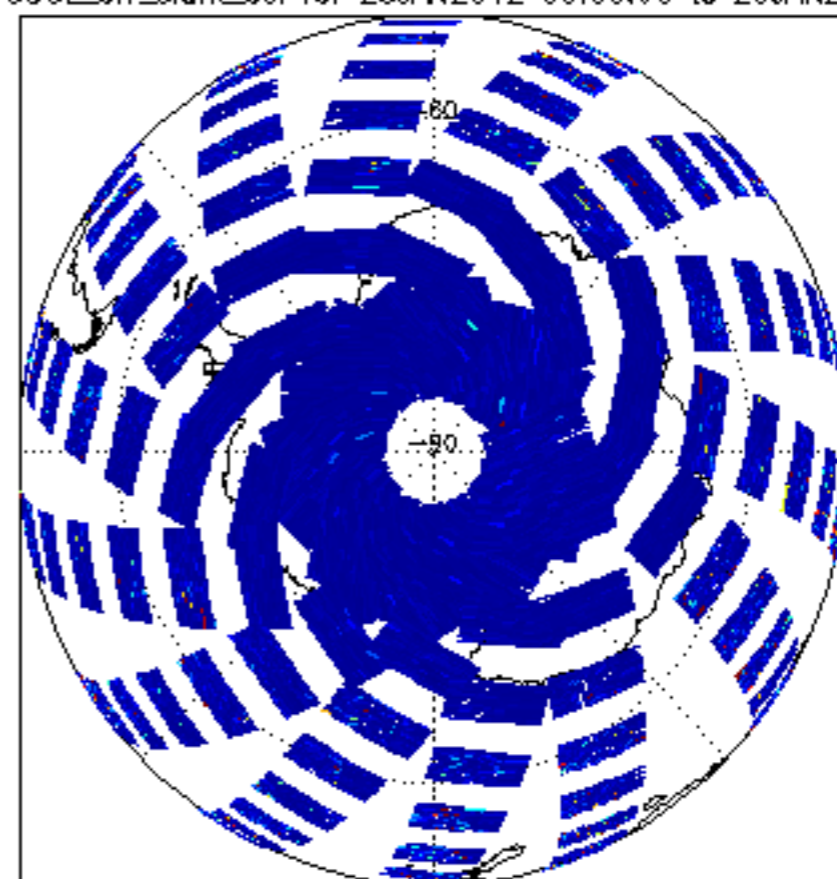
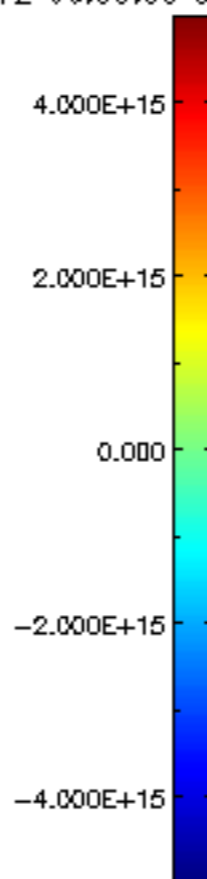
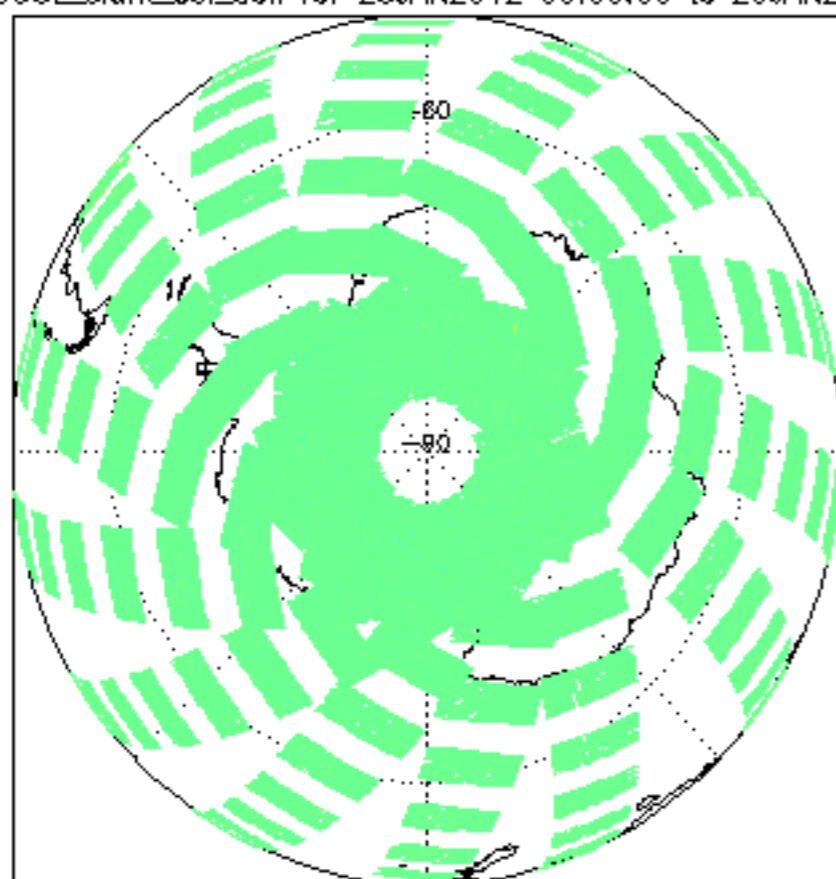


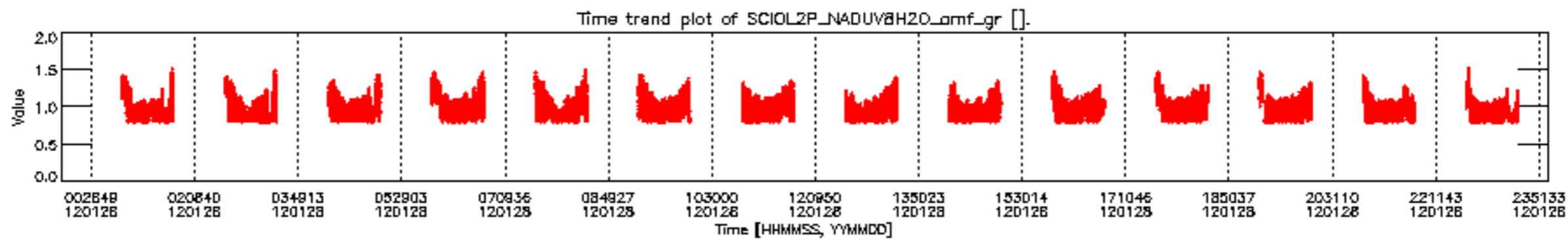
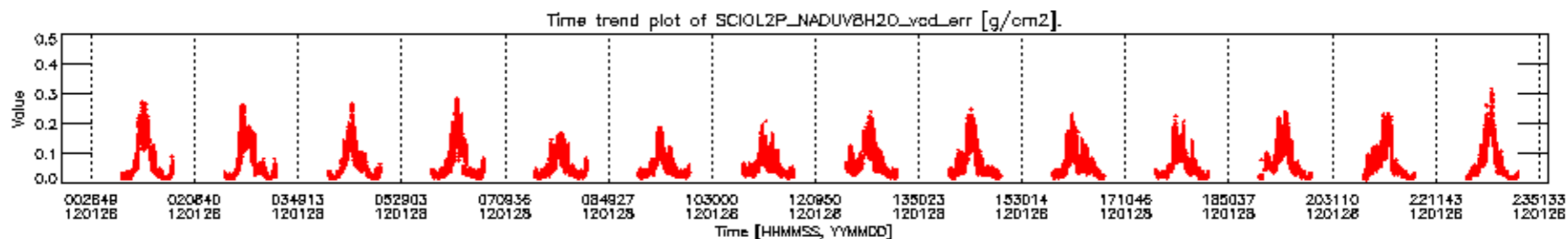
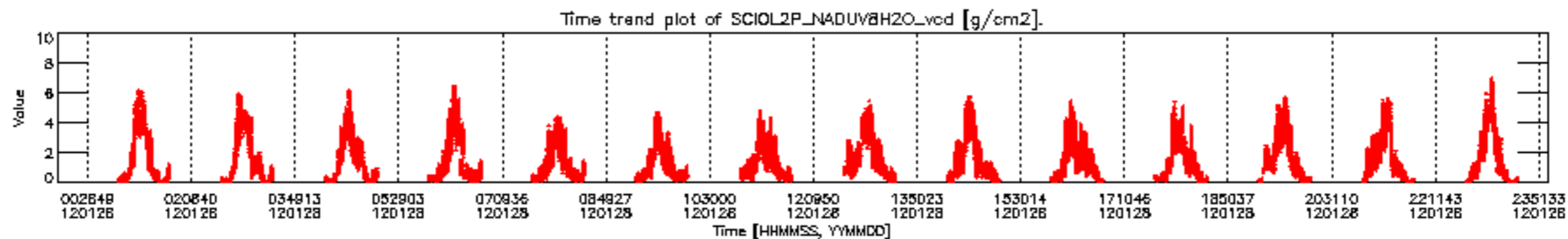


ICIOL2P\_NADUV60CL\_slant\_col\_den for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 np;ICIOL2P\_NADUV60CL\_err\_slant\_col for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 np

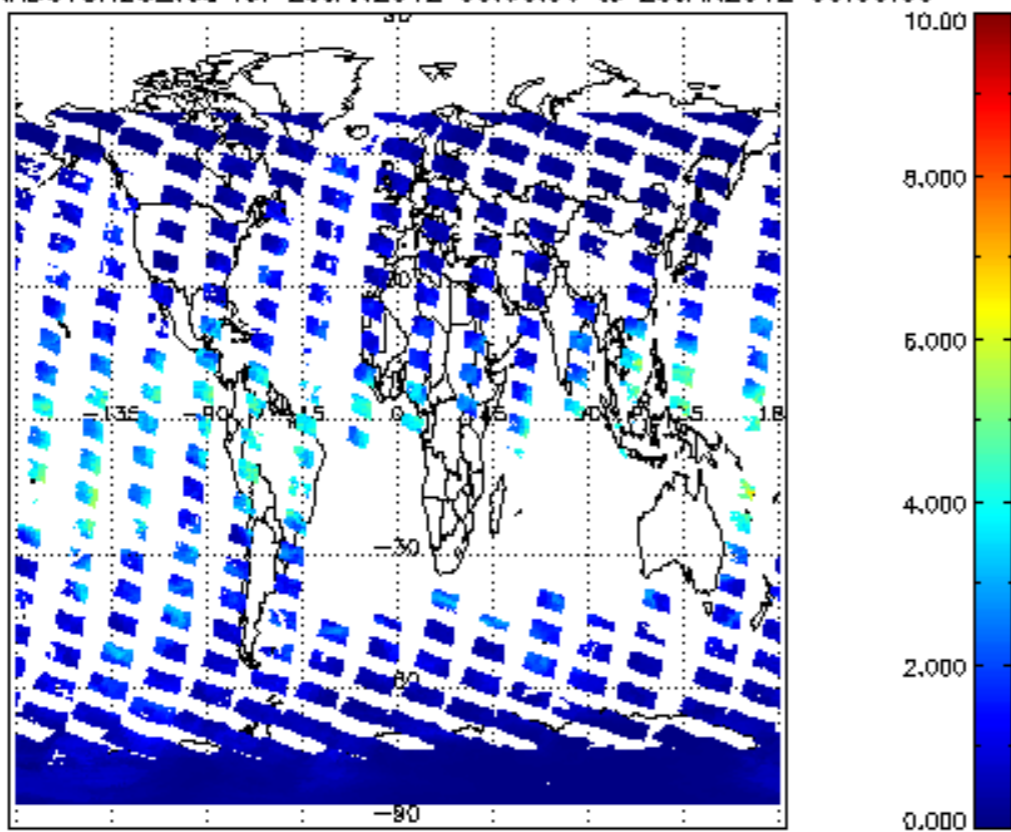


iCIOL2P\_NADUV60CL\_slant\_col\_den for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 sp iCIOL2P\_NADUV60CL\_err\_slant\_col for 28JAN2012 00:00:00 to 29JAN2012 00:00:00 sp

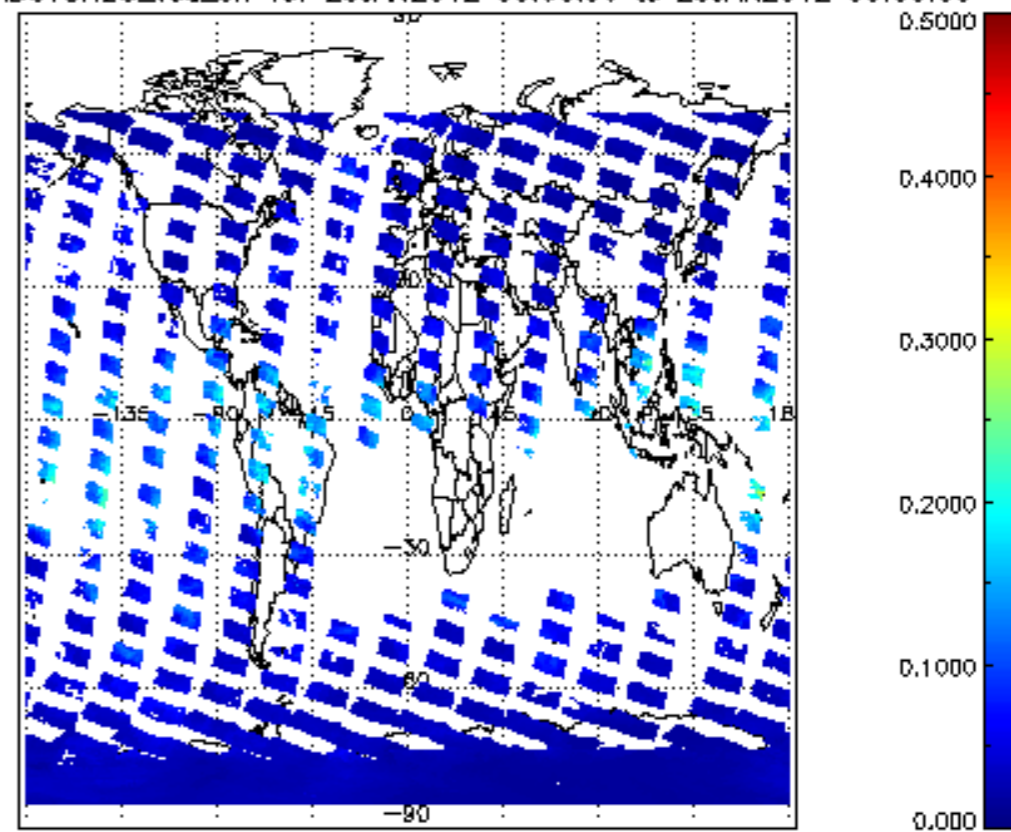




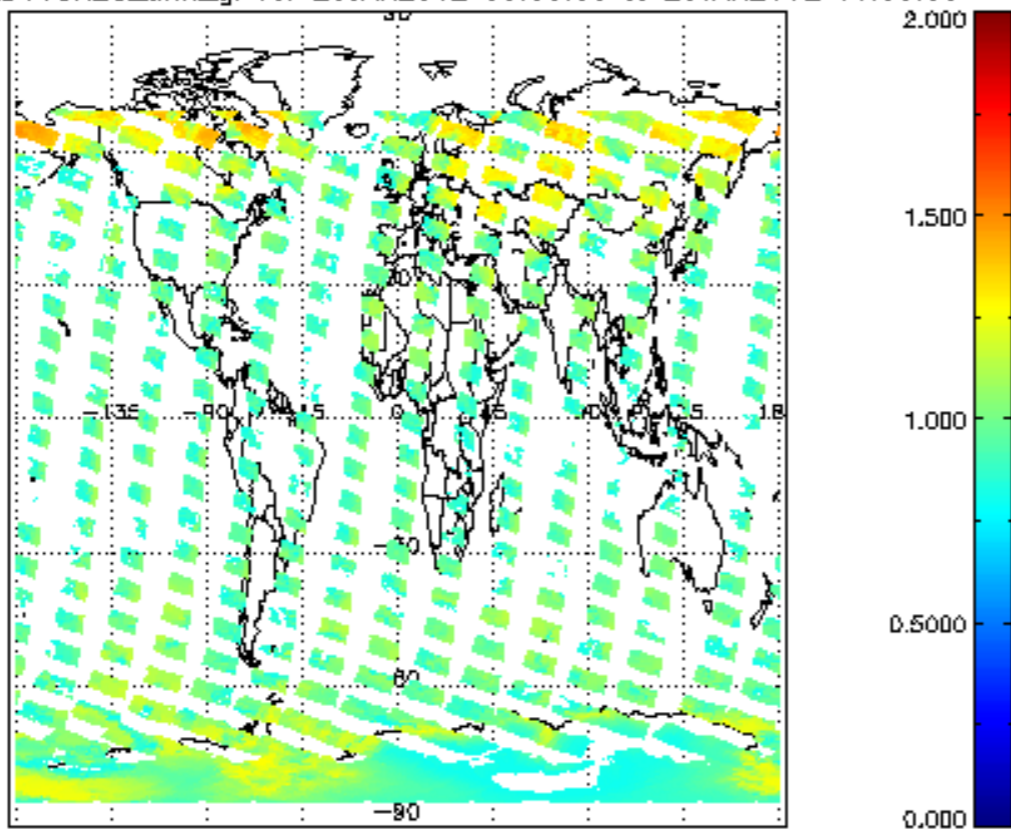
SCIOL2P\_NADUV8H20\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

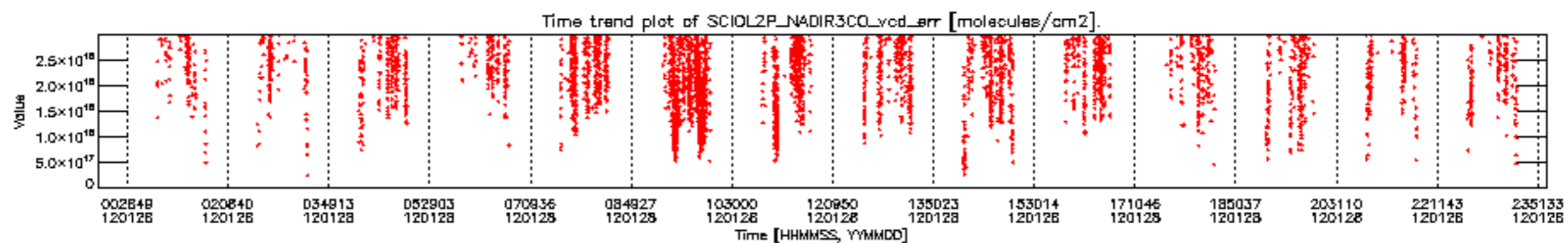
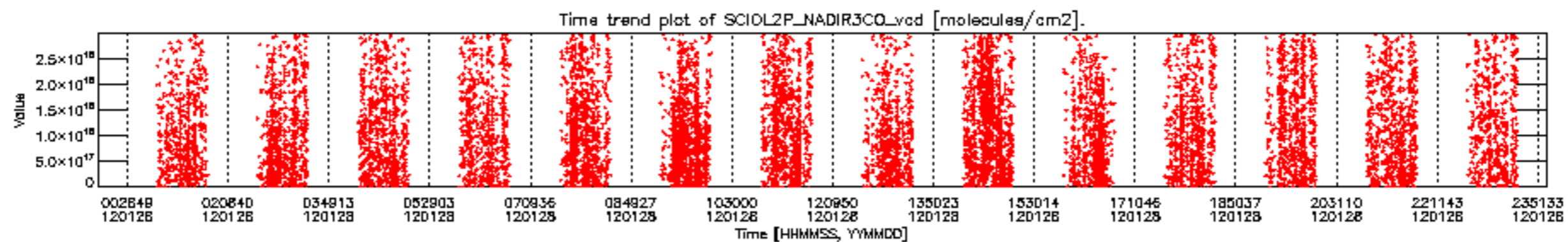


SCIOL2P\_NADUV8H20\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

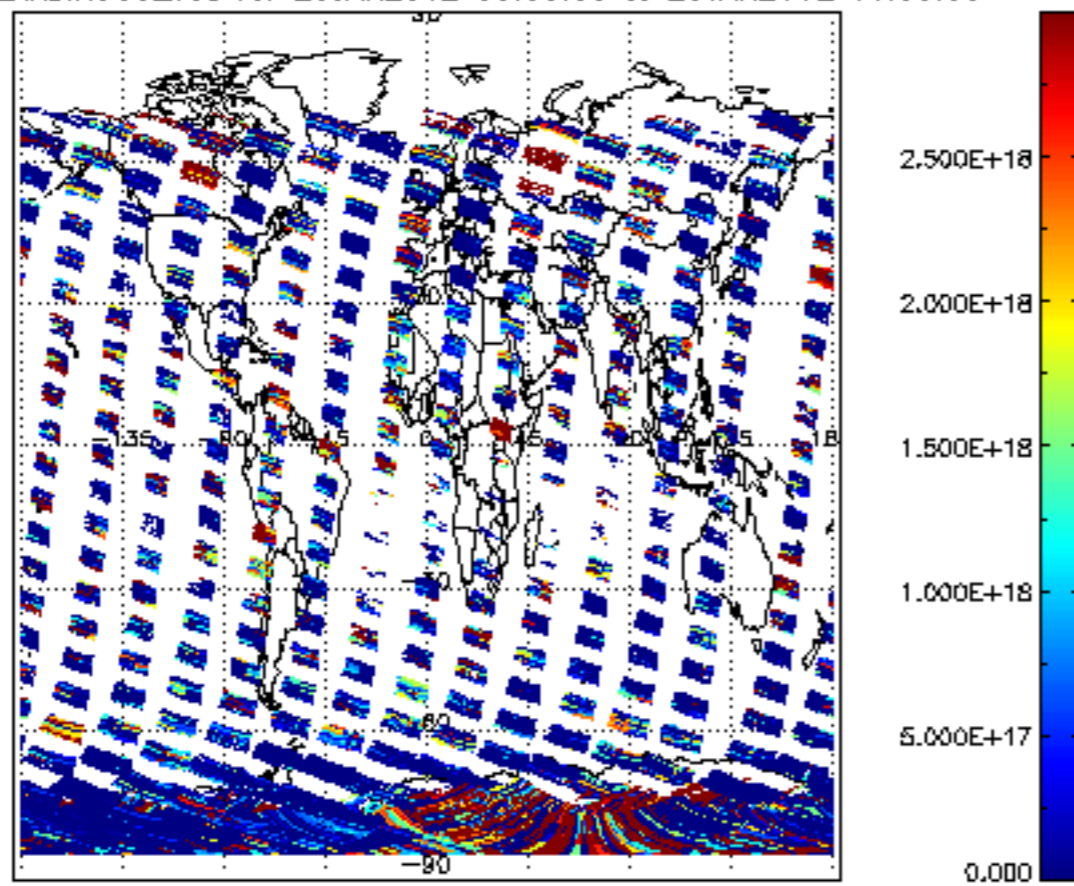


SCIOL2P\_NADUV8H20\_amf\_gr for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

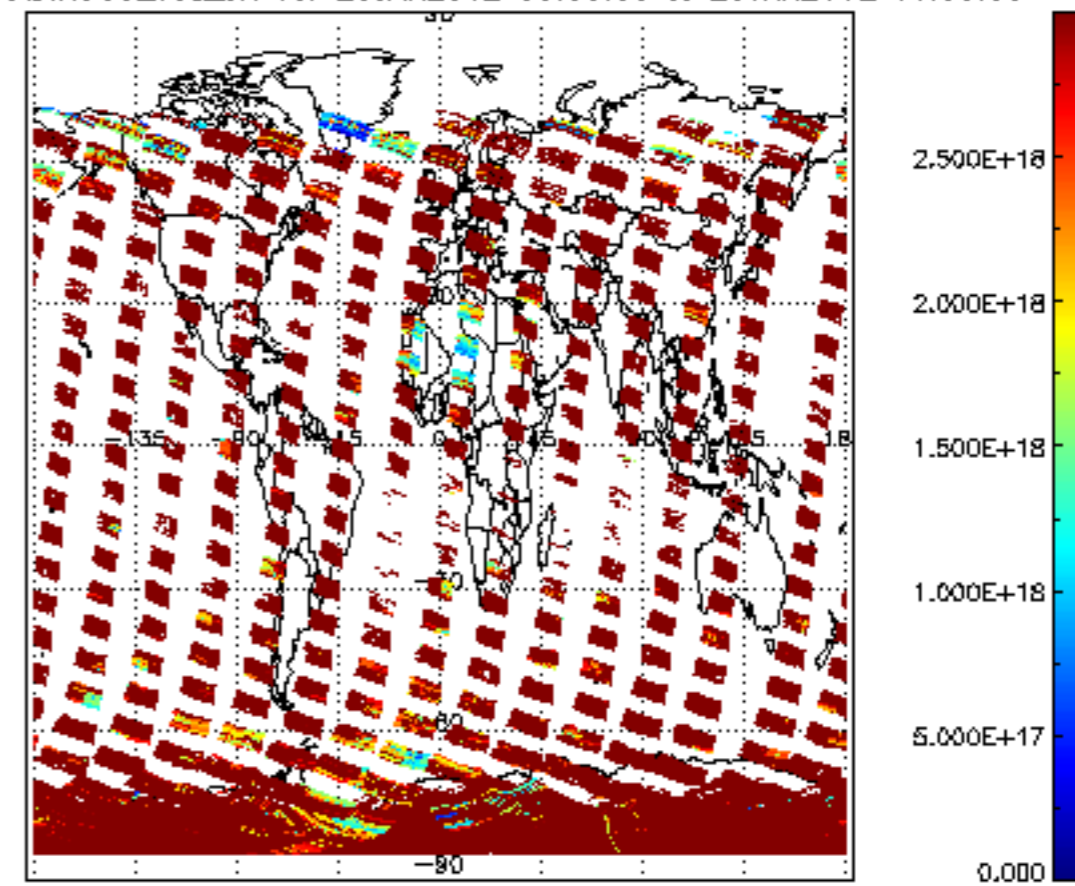




SCIOL2P\_NADIR3CO\_vcd for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

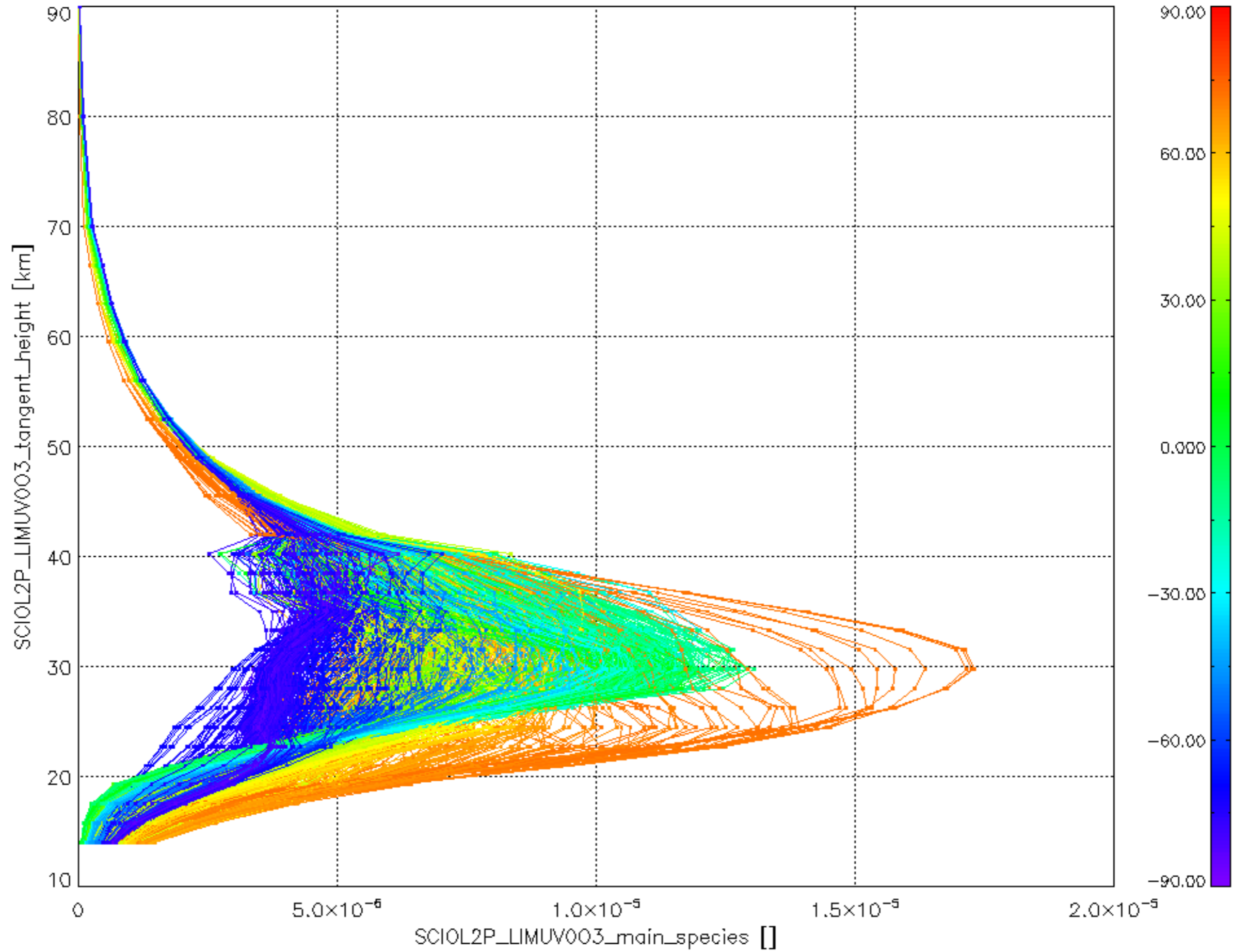


SCIOL2P\_NADIR3CO\_vcd\_err for 28JAN2012 00:00:00 to 29JAN2012 00:00:00

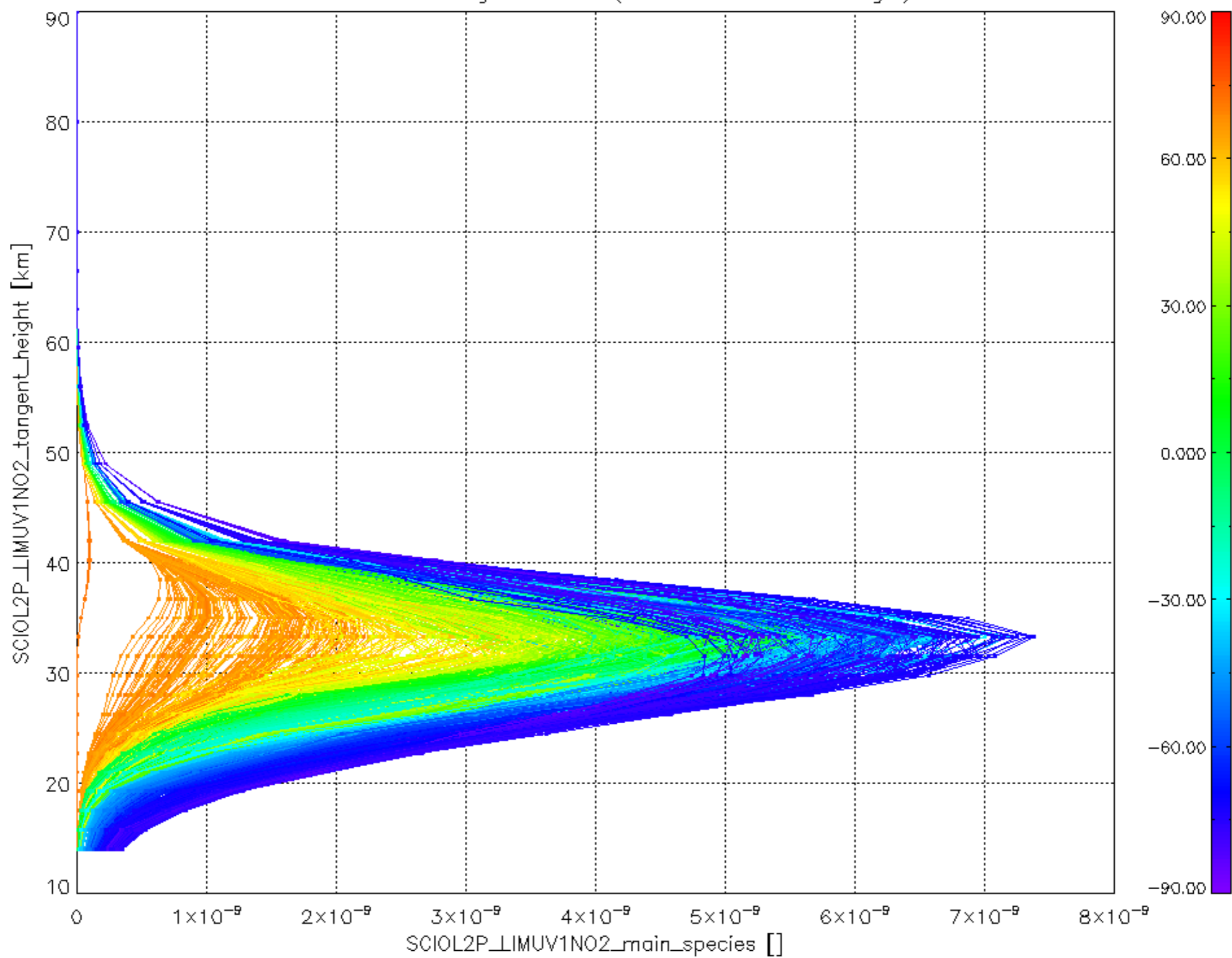




Plot of SCIOL2P\_LIMUV003\_main\_species.tang\_vmr vs. tangent height.  
 Colours indicate tangent latitude (see colour bar on the right).



Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
 Colours indicate tangent latitude (see colour bar on the right).



Plot of SCIOL2P\_LIMUV3BRO\_main\_species.tang\_vmr vs. tangent height.  
 Colours indicate tangent latitude (see colour bar on the right).

