

## 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	08FEB2012 03:51:04
Data source version	SCIA-OL/5.02-W
Processing scope for products	26JAN2012 00:00:00 to 27JAN2012 00:00:00
Start time of first product within scope	25JAN2012 22:43:50
Stop time of last product within scope	27JAN2012 00:46:04
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.

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 A20120125_224350_000035163111_00073_51811_3257.N1</a>	25JAN2012 22:43:50	25JAN2012 23:42:26	0	GOOD
1	<a href="#">SCI_OL__2PWDP A20120126_002403_000035303111_00074_51812_3258.N1</a>	26JAN2012 00:24:03	26JAN2012 01:22:54	0	GOOD
2	<a href="#">SCI_OL__2PWDP A20120126_020417_000035163111_00075_51813_3259.N1</a>	26JAN2012 02:04:17	26JAN2012 03:02:53	0	GOOD
3	<a href="#">SCI_OL__2PWDP A20120126_034430_000035303111_00076_51814_3260.N1</a>	26JAN2012 03:44:30	26JAN2012 04:43:21	0	GOOD
4	<a href="#">SCI_OL__2PWDP A20120126_052444_000035163111_00077_51815_3261.N1</a>	26JAN2012 05:24:44	26JAN2012 06:23:20	0	GOOD

5	SCI_OL__2PWDPA20120126_070458_000035303111_00078_51816_3262.N1	26JAN2012 07:04:58	26JAN2012 08:03:48	0	GOOD
6	SCI_OL__2PWDPA20120126_084511_000035163111_00079_51817_3263.N1	26JAN2012 08:45:11	26JAN2012 09:43:47	0	GOOD
7	SCI_OL__2PWDPA20120126_102525_000035303111_00080_51818_3264.N1	26JAN2012 10:25:25	26JAN2012 11:24:15	0	GOOD
8	SCI_OL__2PWDPA20120126_120538_000035163111_00081_51819_3265.N1	26JAN2012 12:05:38	26JAN2012 13:04:14	0	GOOD
9	SCI_OL__2PWDPA20120126_134552_000035303111_00082_51820_3266.N1	26JAN2012 13:45:52	26JAN2012 14:44:42	0	GOOD
10	SCI_OL__2PWDPA20120126_152605_000035163111_00083_51821_3267.N1	26JAN2012 15:26:05	26JAN2012 16:24:41	0	GOOD
11	SCI_OL__2PWDPA20120126_170619_000035303111_00084_51822_3268.N1	26JAN2012 17:06:19	26JAN2012 18:05:09	0	GOOD
12	SCI_OL__2PWDPA20120126_184739_000034863111_00085_51823_3269.N1	26JAN2012 18:47:39	26JAN2012 19:45:45	0	GOOD
13	SCI_OL__2PWDPA20120126_202706_000035303111_00086_51824_3270.N1	26JAN2012 20:27:06	26JAN2012 21:25:57	0	GOOD
14	SCI_OL__2PWDPA20120126_220659_000035163111_00087_51825_3271.N1	26JAN2012 22:06:59	26JAN2012 23:05:36	0	GOOD
15	SCI_OL__2PWDPA20120126_234713_000035303111_00088_51826_3275.N1	26JAN2012 23:47:13	27JAN2012 00:46:04	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: 135460

Total number of cloud data DSRs with good quality flag (=0): 135460 (100.0 %)

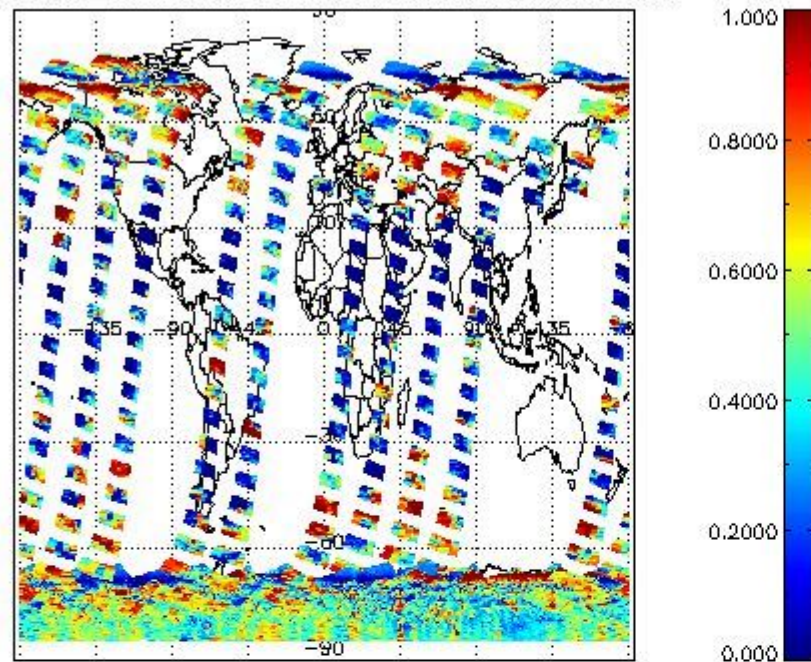
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	135460	0.0000	0.0000	0.0000	0.0000	0.0000	
INTEGR_TIME	135460	0.15979	0.12500	0.12500	0.25000	0.056021	s
CL_FRAC	135460	0.44445	0.43115	0.0000	1.0000	0.29523	
CL_FRAC_ERR	135460	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	135460	5.1132	4.0000	4.0000	8.0000	1.7927	
PMD_READ_CL[0]	135460	0.51194	0.0000	0.0000	8.0000	1.4133	-
PMD_READ_CL[1]	135460	0.93633	0.0000	0.0000	8.0000	2.2290	-
CL_TOP_HEIGHT	109278	4.0121	3.3386	0.0000	17.000	3.4902	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	109278	57.203	53.443	0.0000	101.00	40.705	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	135460	11100000	11100000	11100000	11100000	0.0000	
CLOUD_FLAGS	135460	11001011	11000100	11000000	11100000	3385.3	
AERO_ABSO_IND	135460	0.094409	0.0000	0.0000	9.7427	0.30934	
AERO_IND_DIAG	135460	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	135460	01001101	00000000	00000000	11000000	24120.	

#### Time and geolocation plots:

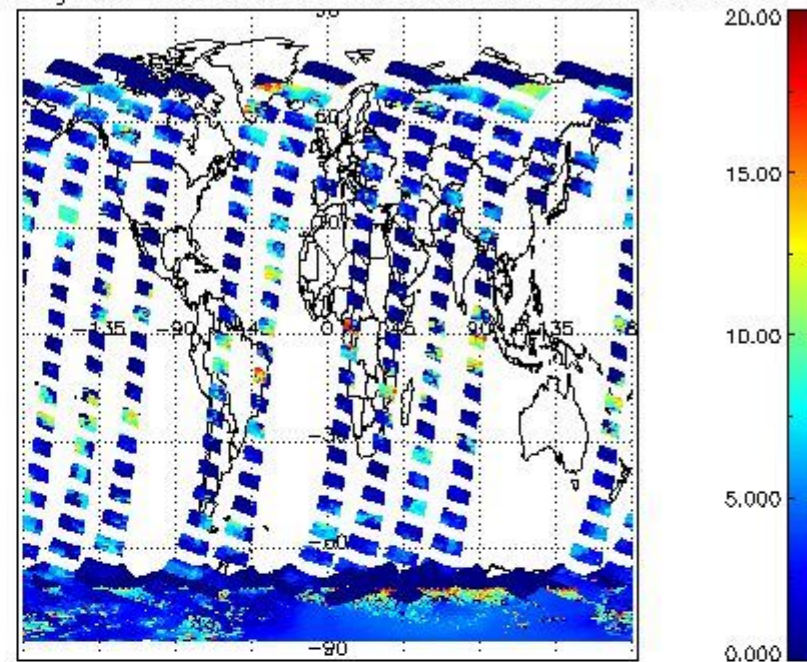
Plots are available for the following parameters:

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

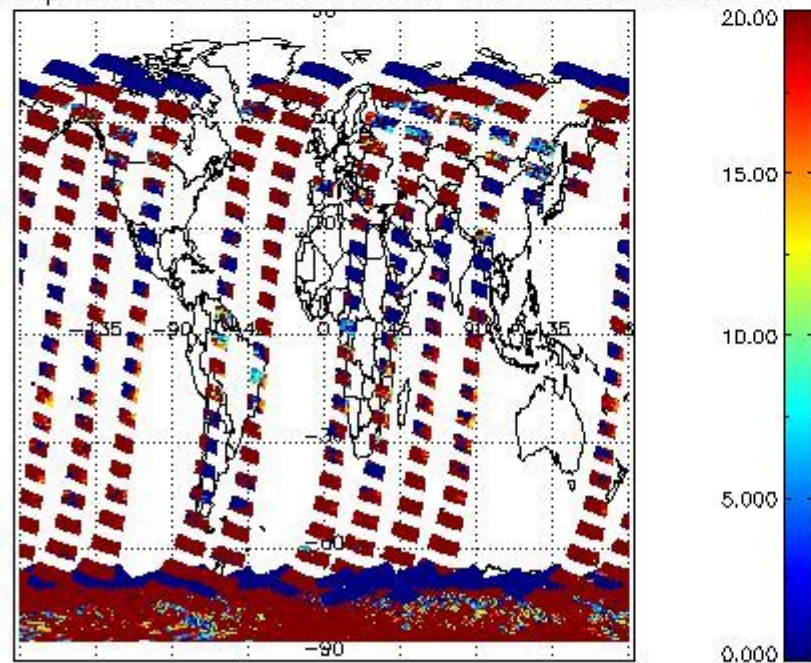
cL\_frac for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



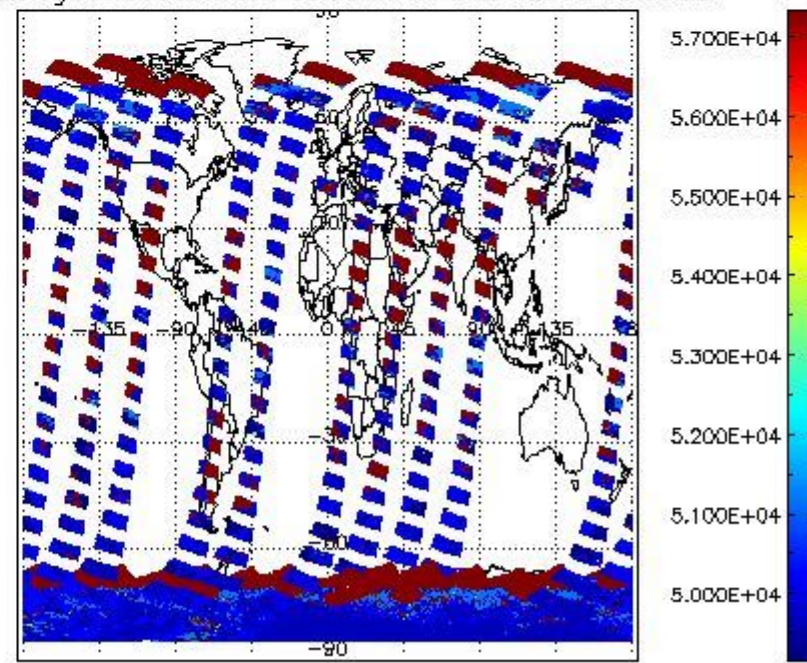
cL\_top\_height for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



cLopt\_depth for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



cloud\_flags for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



## 2.2.2 Nadir

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

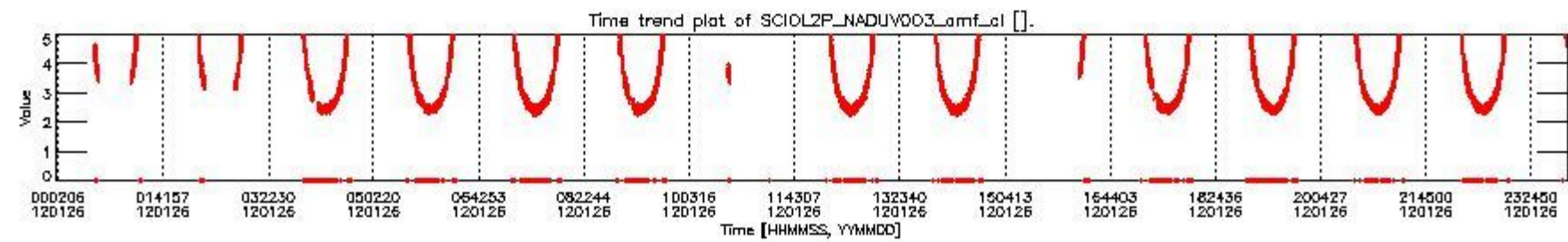
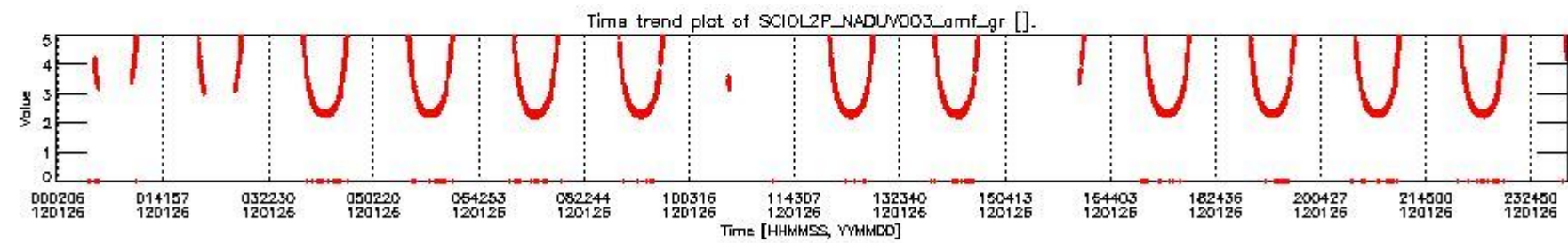
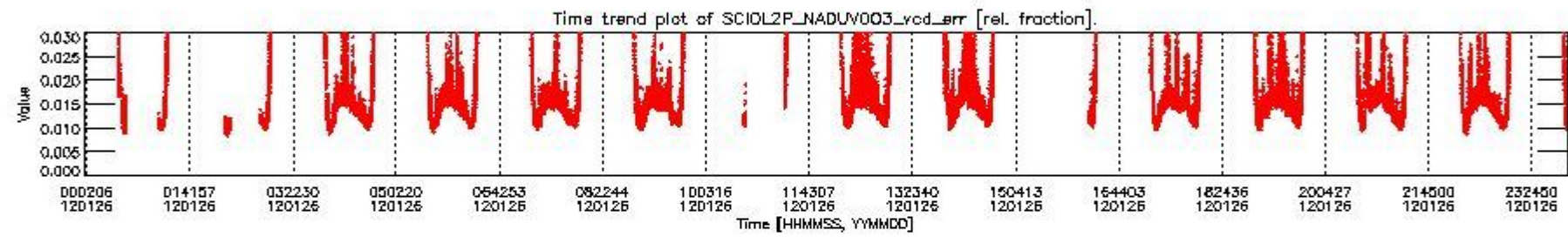
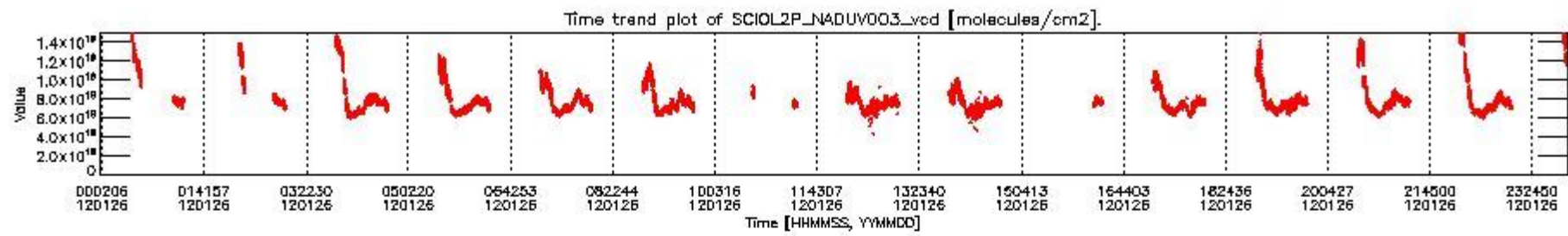
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

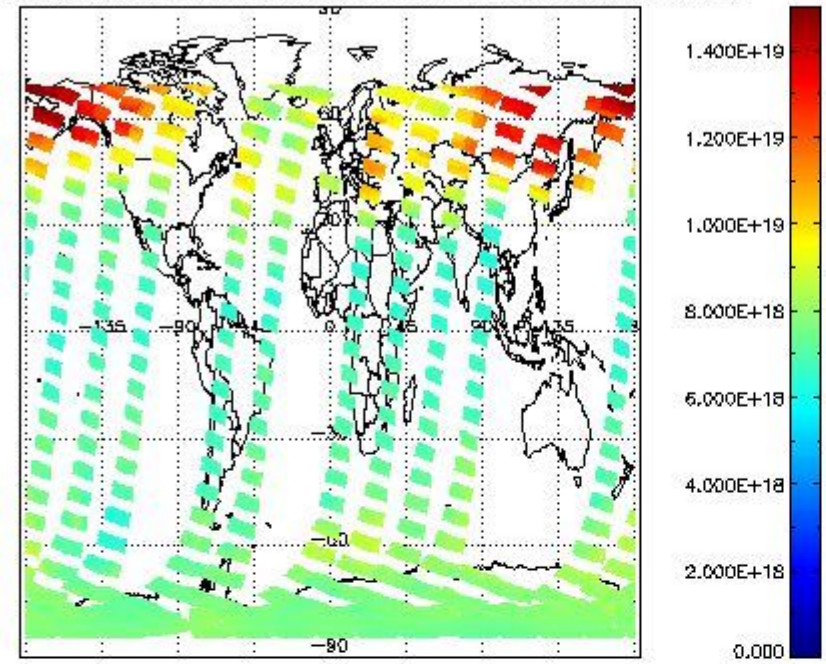
3	SCIOL2P_NADUV0O3_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl
8	SCIOL2P_NADUV3BRO_vcd
9	SCIOL2P_NADUV3BRO_vcd_err
10	SCIOL2P_NADUV3BRO_amf_gr
11	SCIOL2P_NADUV3BRO_amf_cl
12	SCIOL2P_NADUV5SO2_vcd
13	SCIOL2P_NADUV5SO2_vcd_err
14	SCIOL2P_NADUV5SO2_amf_gr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

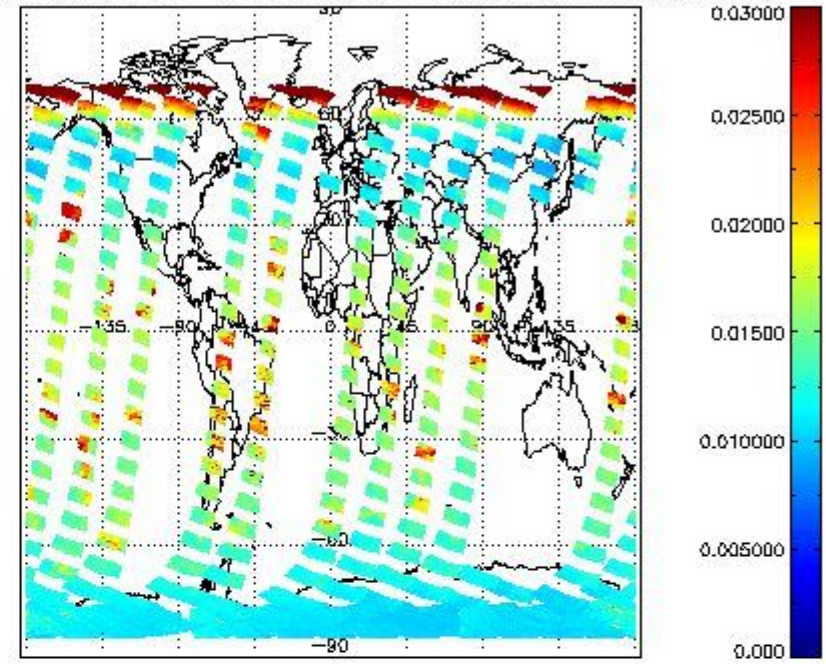
#### 2.2.2.1 O3 (UV0)



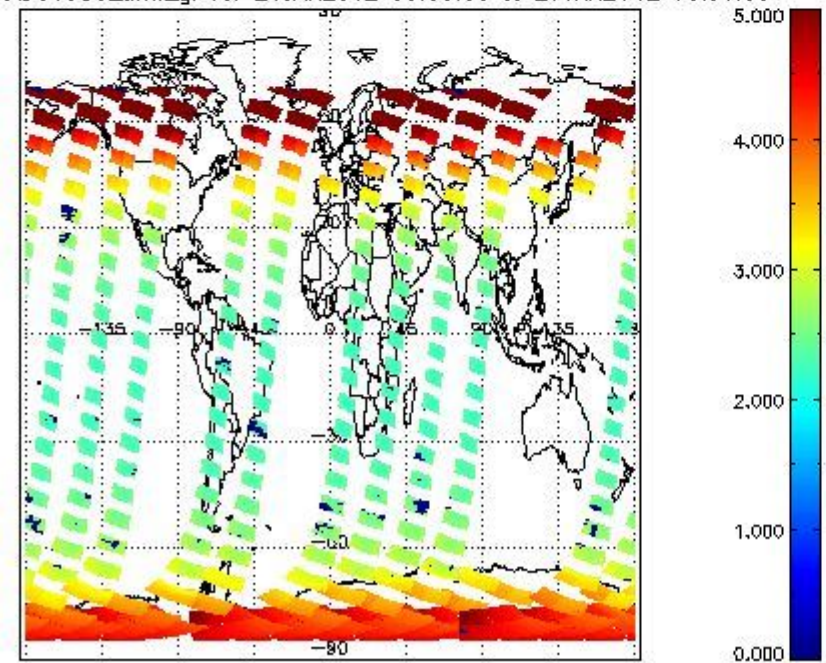
SCIOL2P\_NADUV003\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



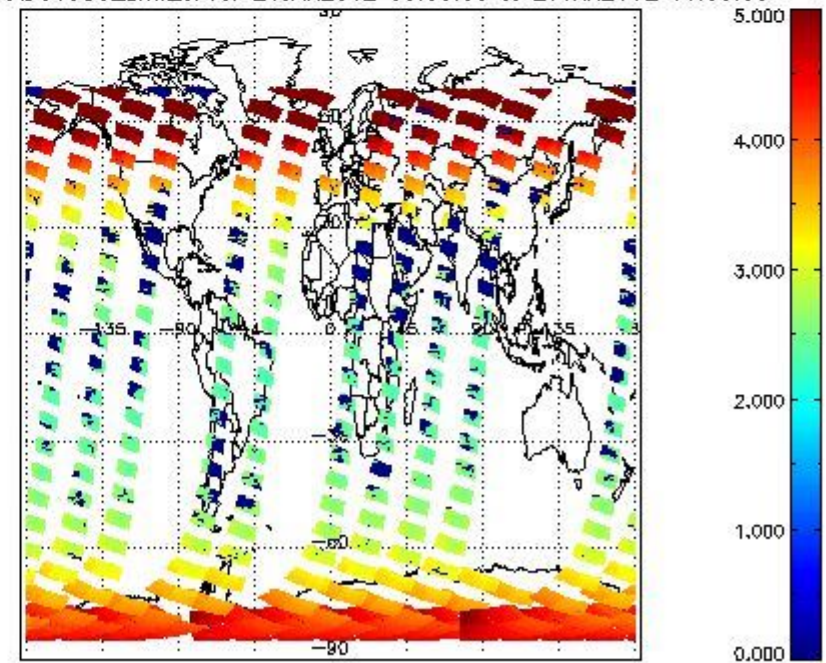
SCIOL2P\_NADUV003\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



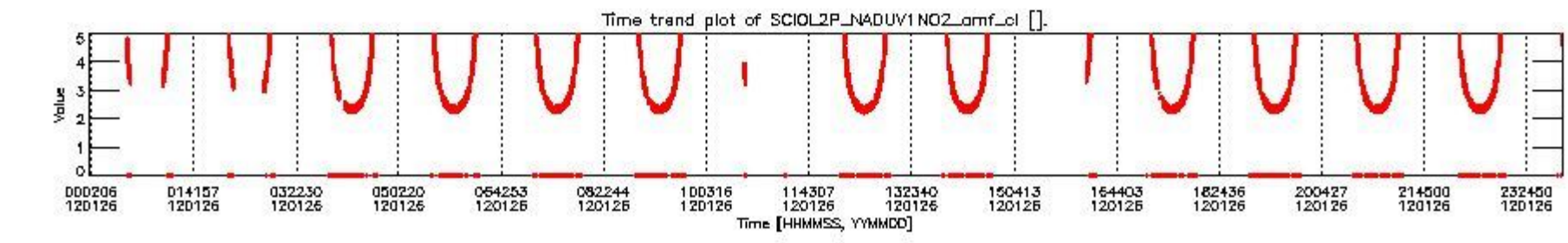
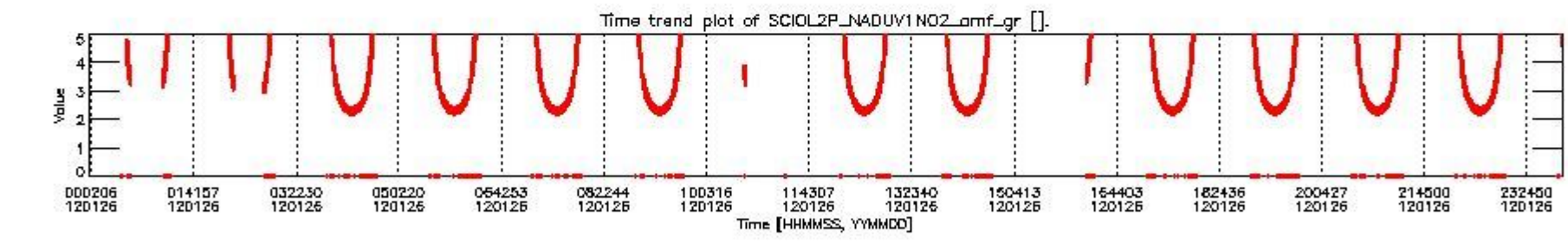
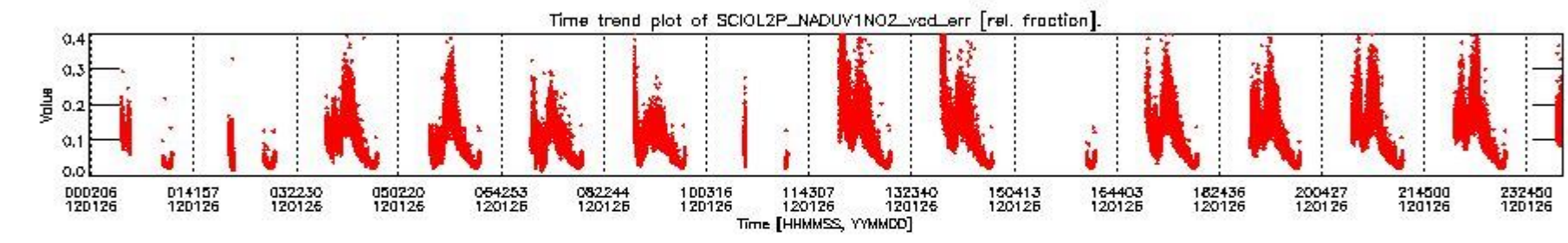
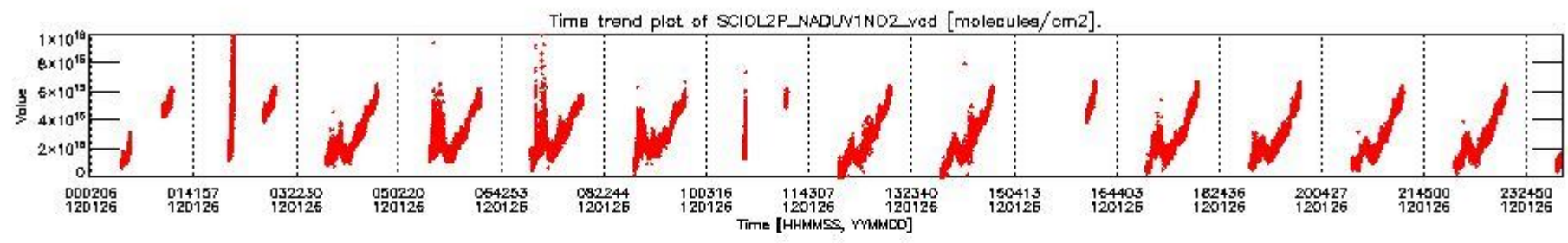
SCIOL2P\_NADUV003\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



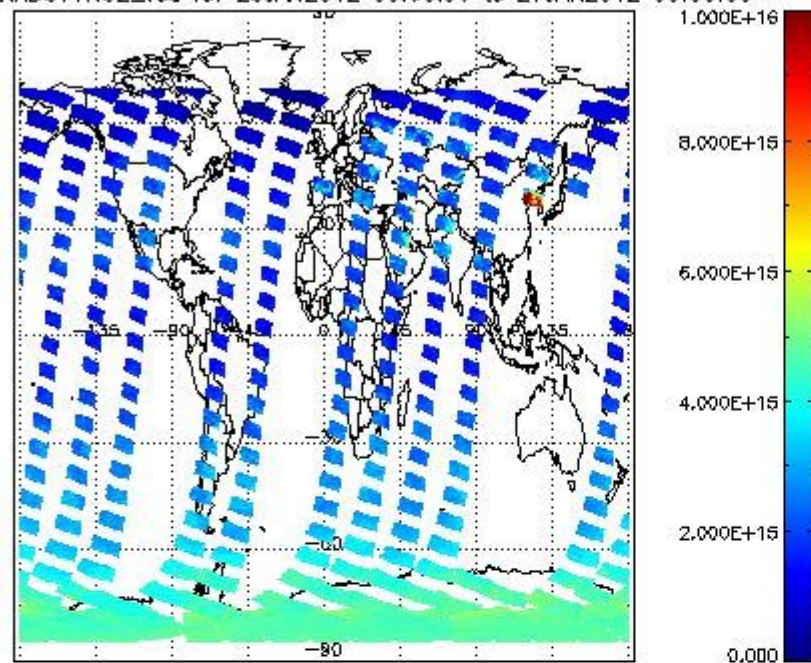
SCIOL2P\_NADUV003\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



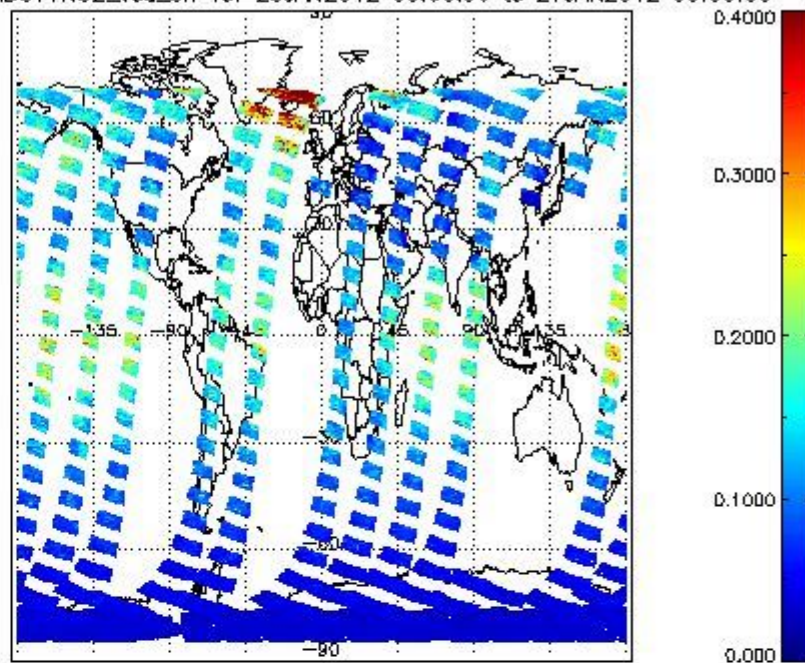
2.2.2.2 NO2 (UV1)



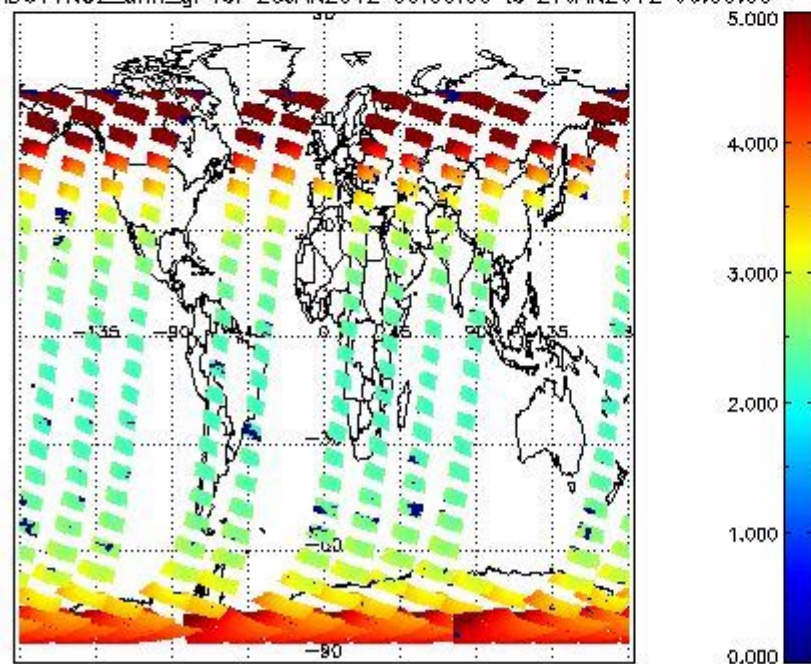
SCIOL2P\_NADUV1NO2\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



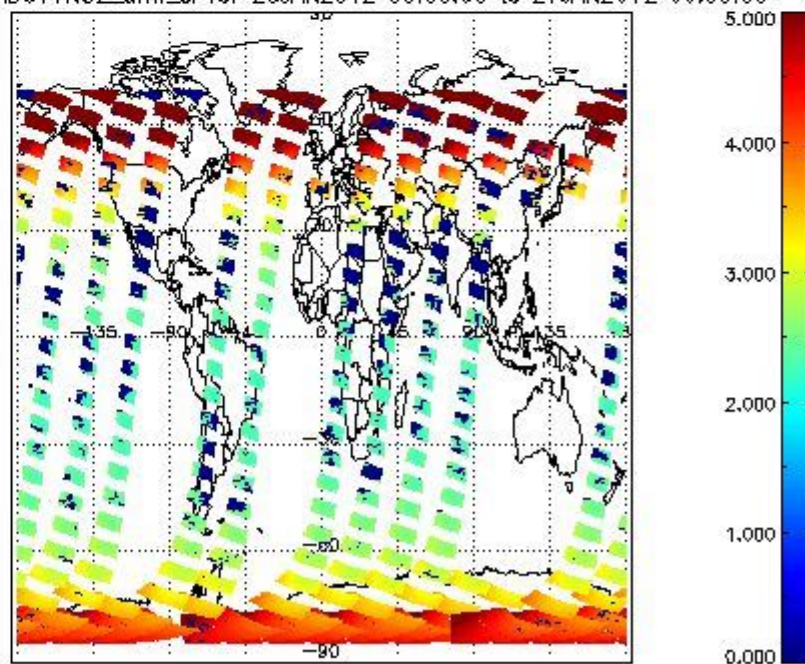
SCIOL2P\_NADUV1NO2\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



SCIOL2P\_NADUV1NO2\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

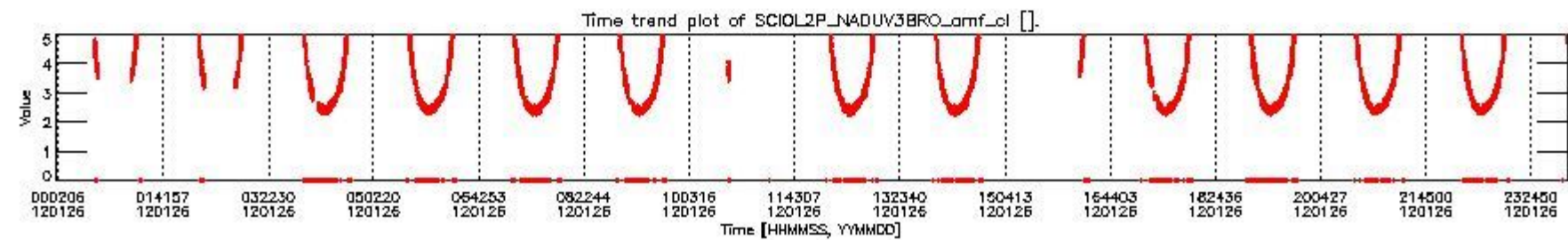
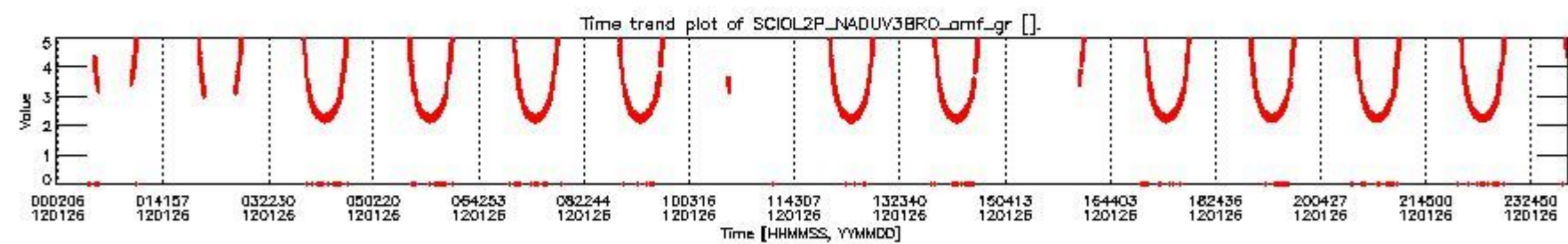
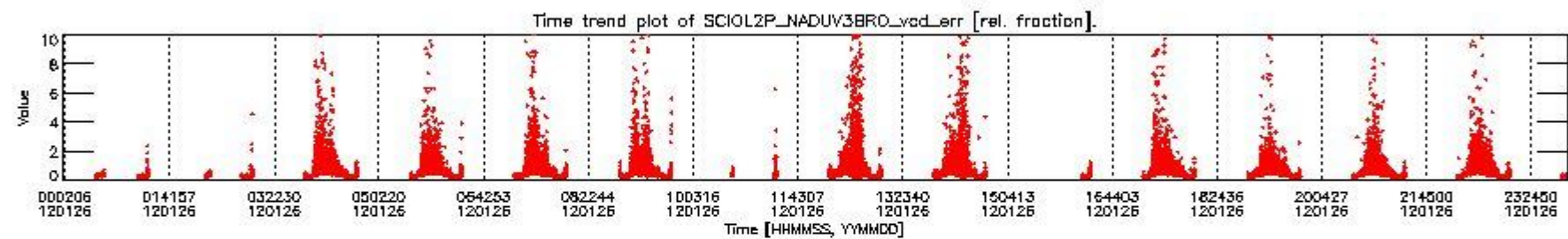
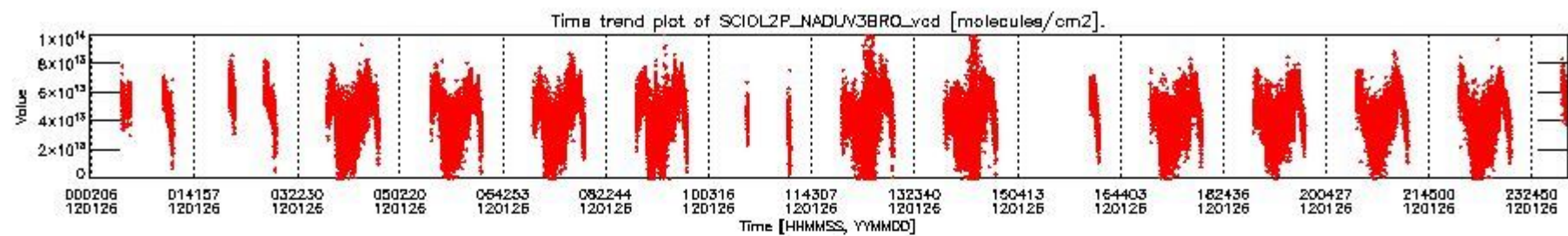


SCIOL2P\_NADUV1NO2\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

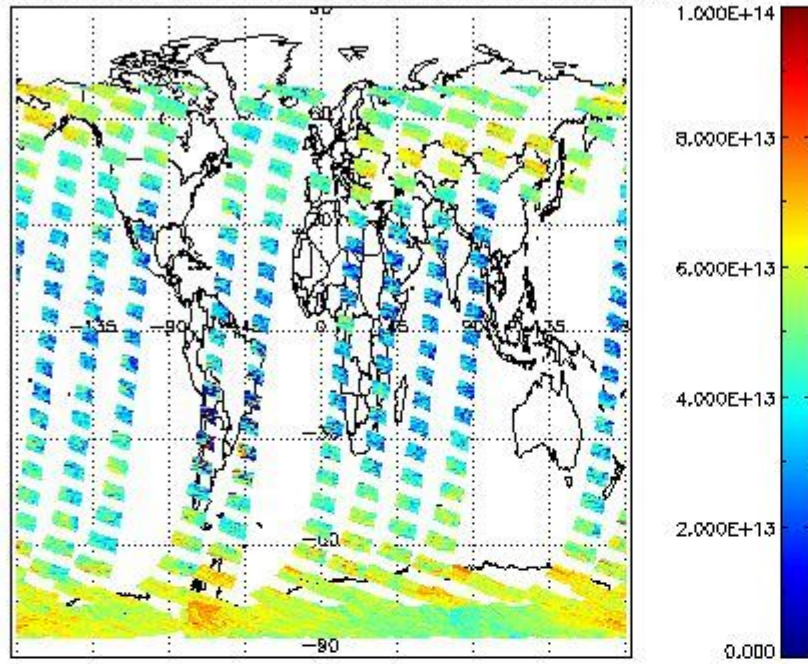


2.2.2.3 BrO (UV3)

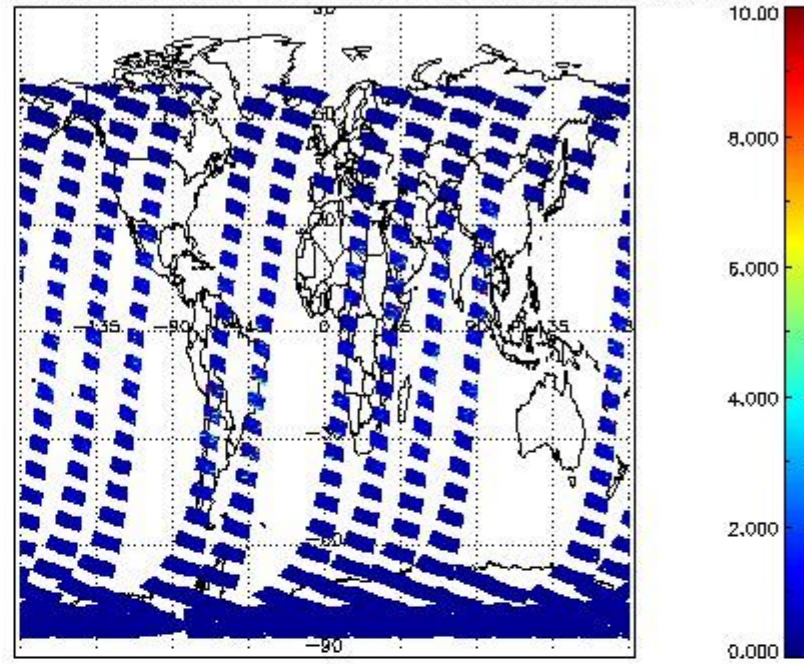




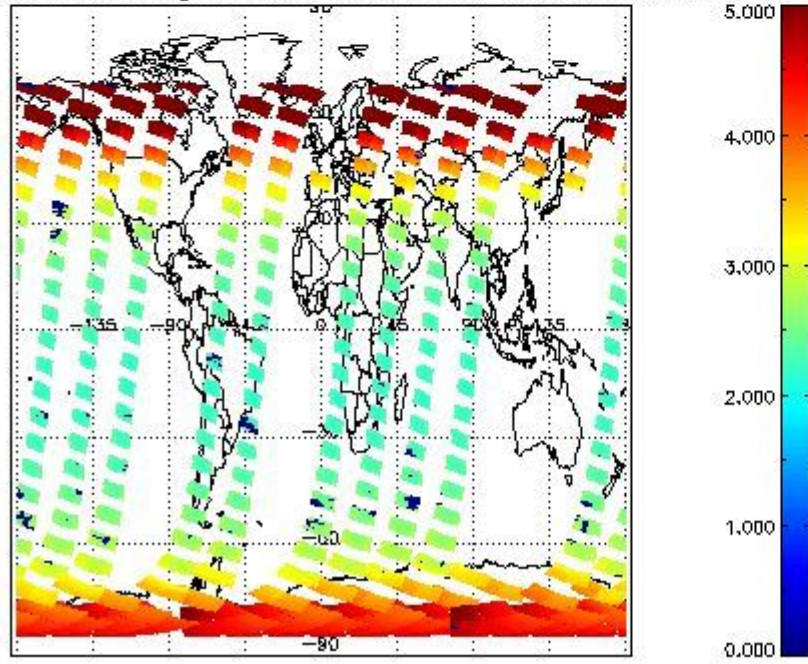
SCIOL2P\_NADUV3BRO\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



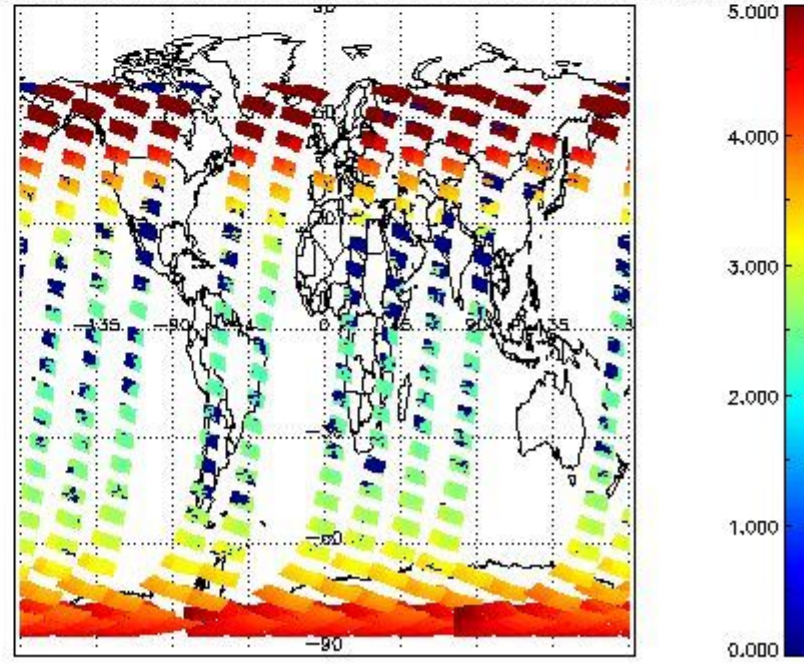
SCIOL2P\_NADUV3BRO\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



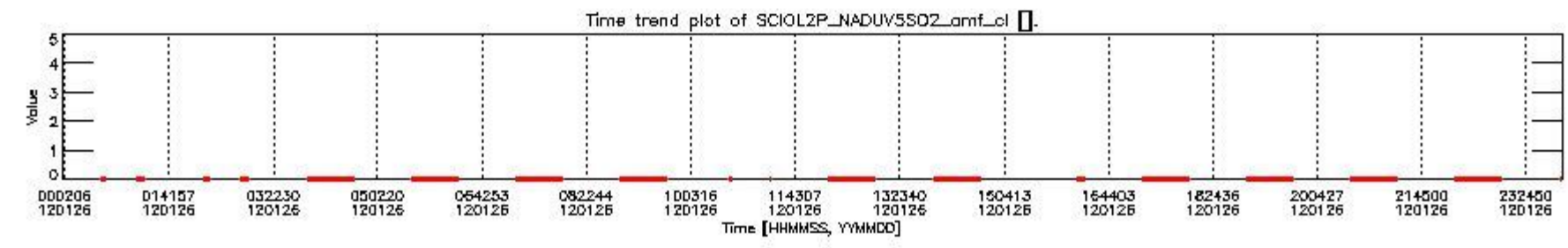
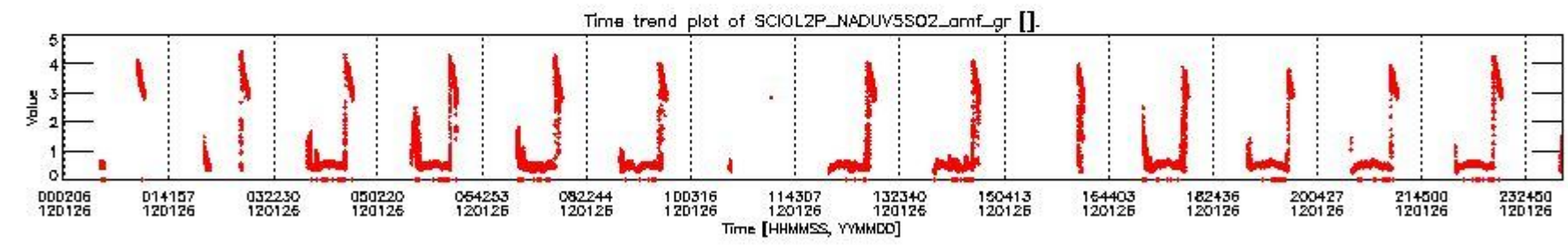
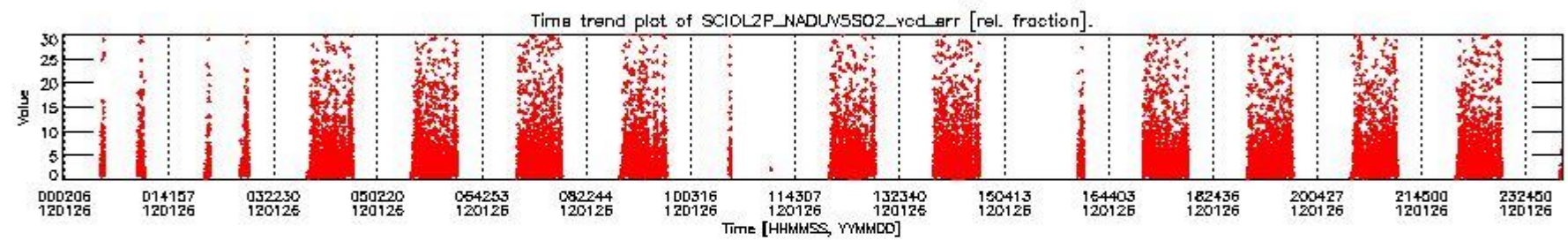
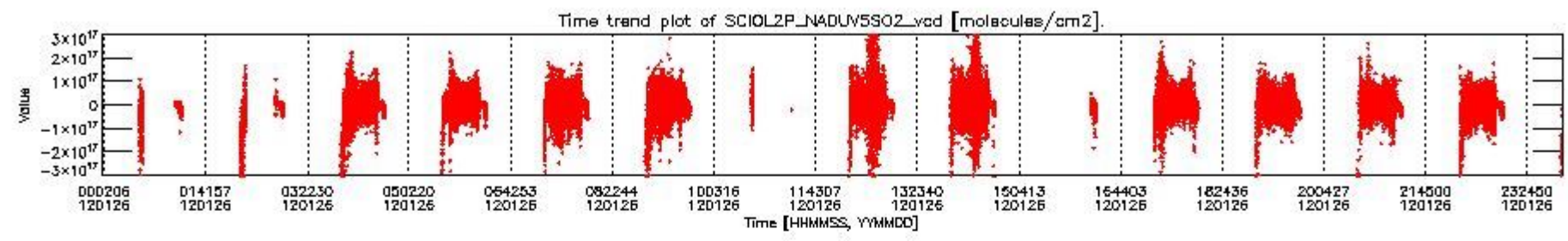
SCIOL2P\_NADUV3BRO\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



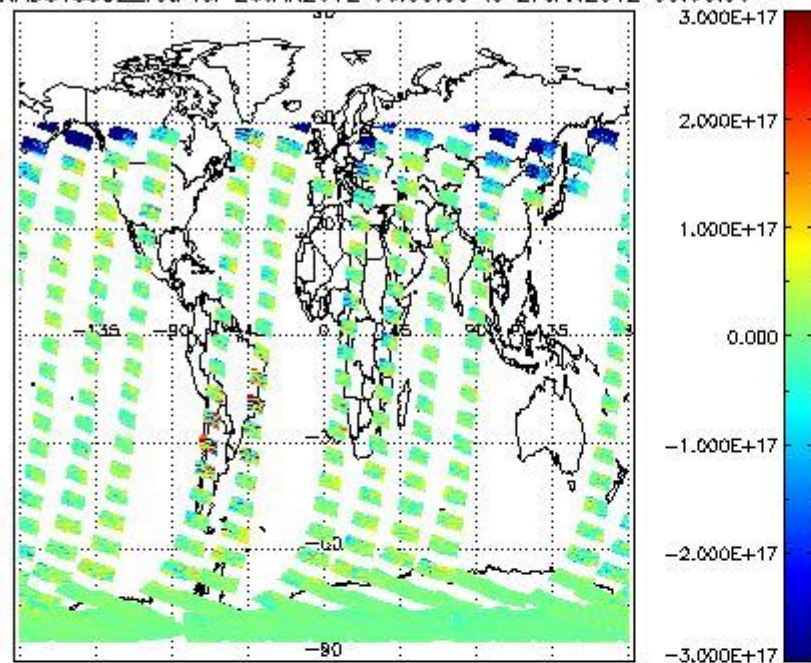
SCIOL2P\_NADUV3BRO\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



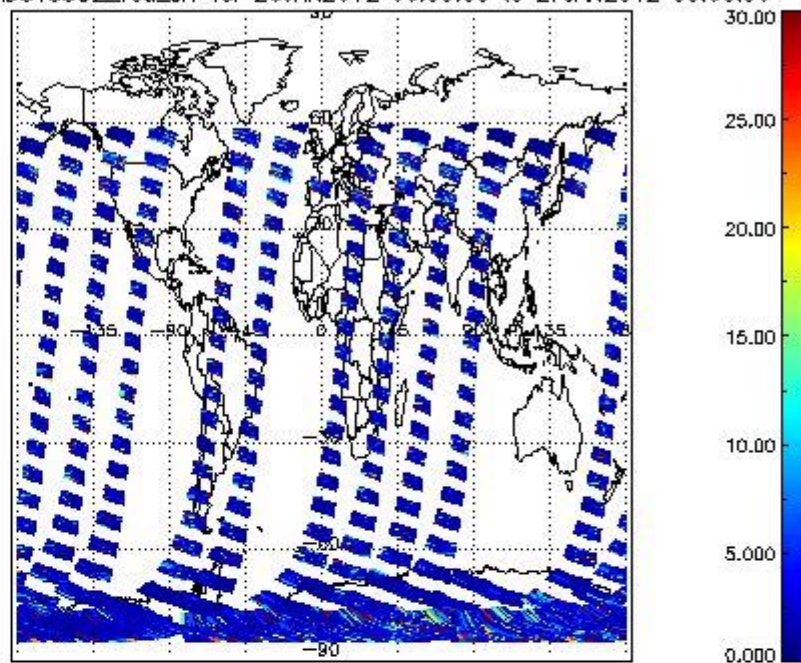
#### 2.2.2.4 SO2 (UV5)



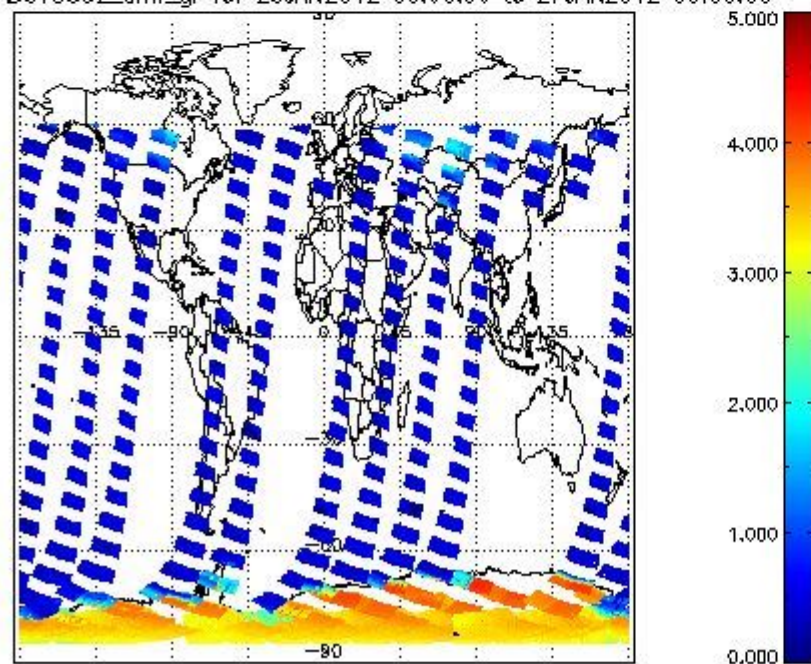
SCIOL2P\_NADUV5S02\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



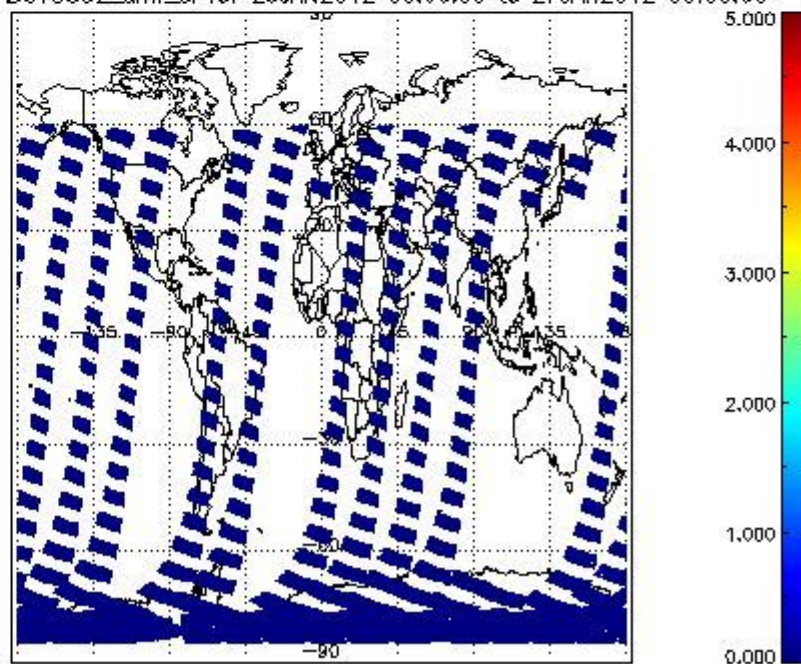
SCIOL2P\_NADUV5S02\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



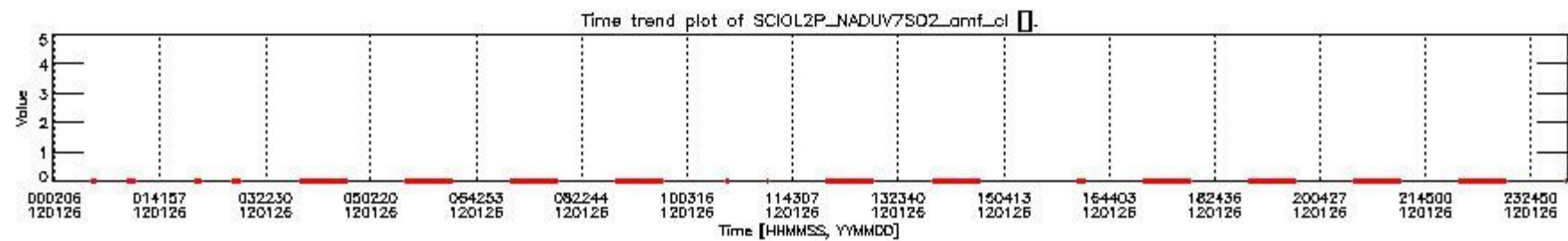
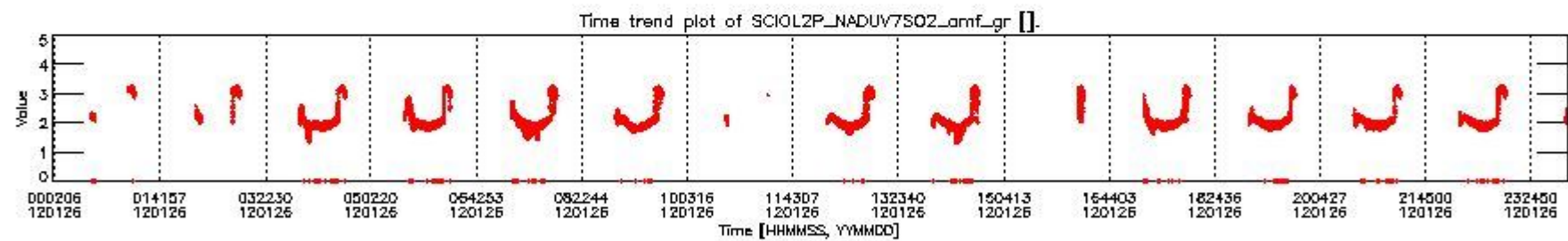
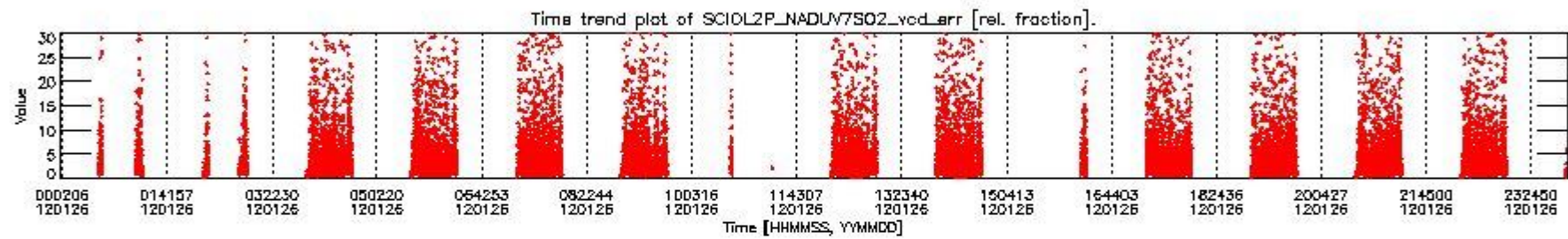
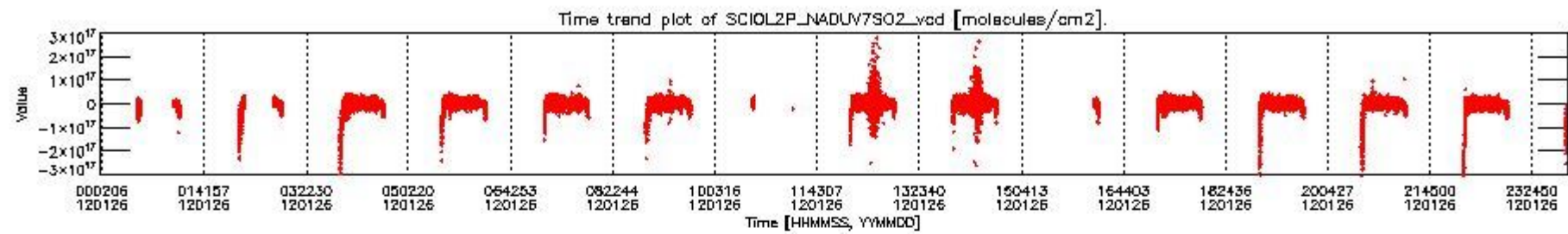
SCIOL2P\_NADUV5S02\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



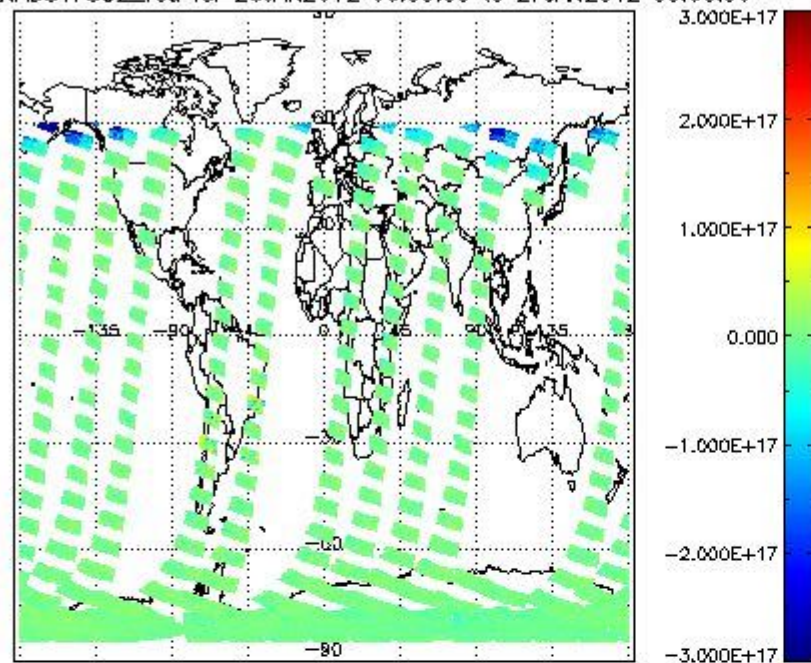
SCIOL2P\_NADUV5S02\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



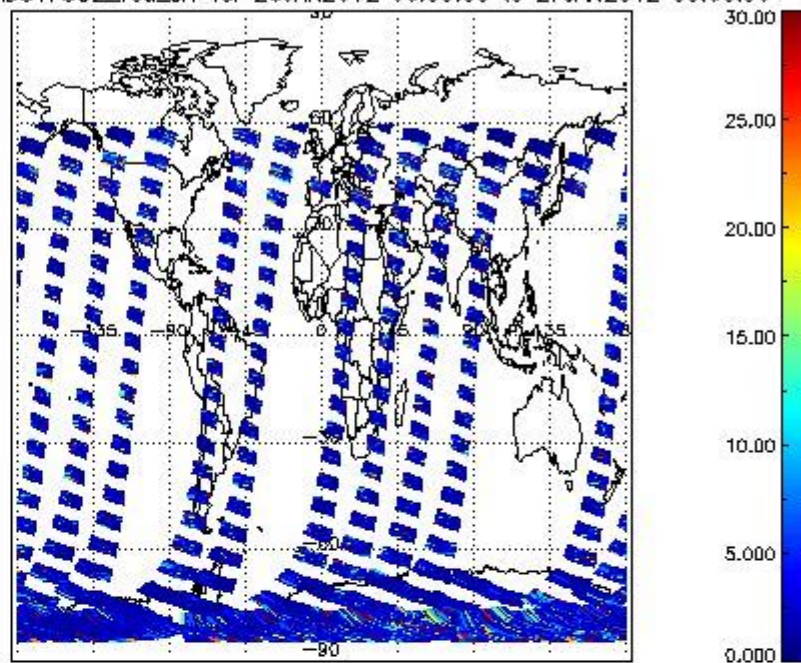
2.2.2.5 SO2 (UV7)



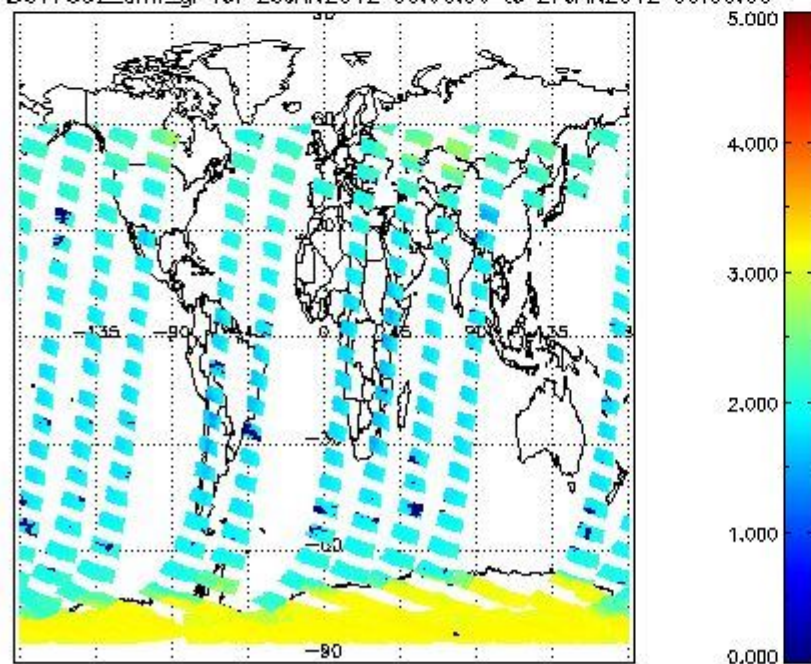
SCIOL2P\_NADUV7S02\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



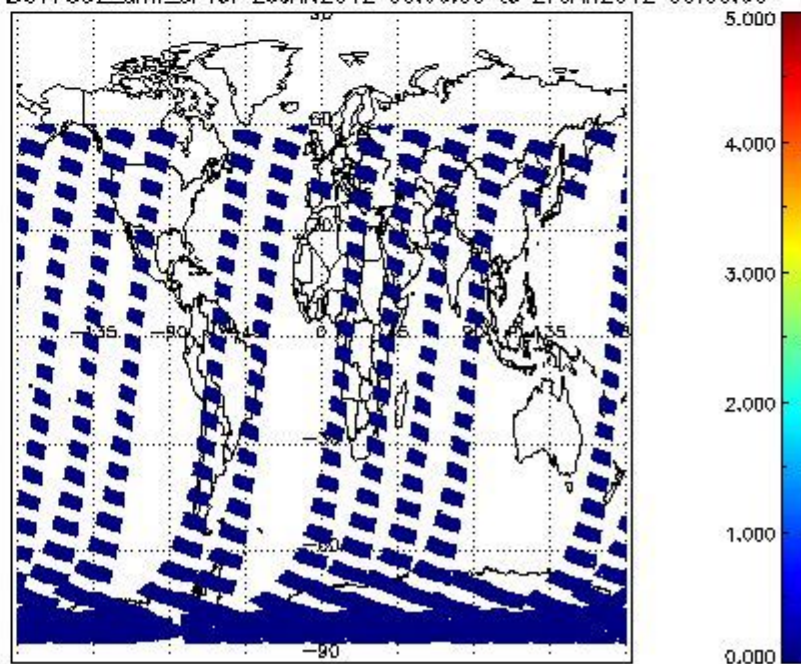
SCIOL2P\_NADUV7S02\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



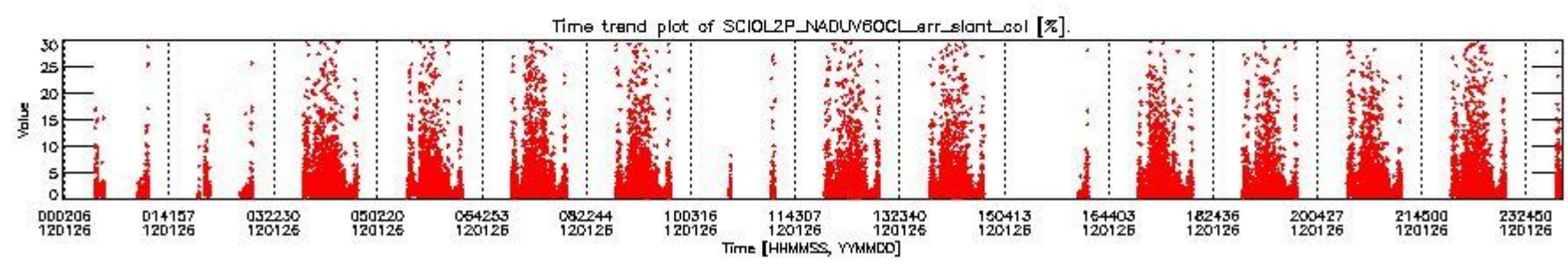
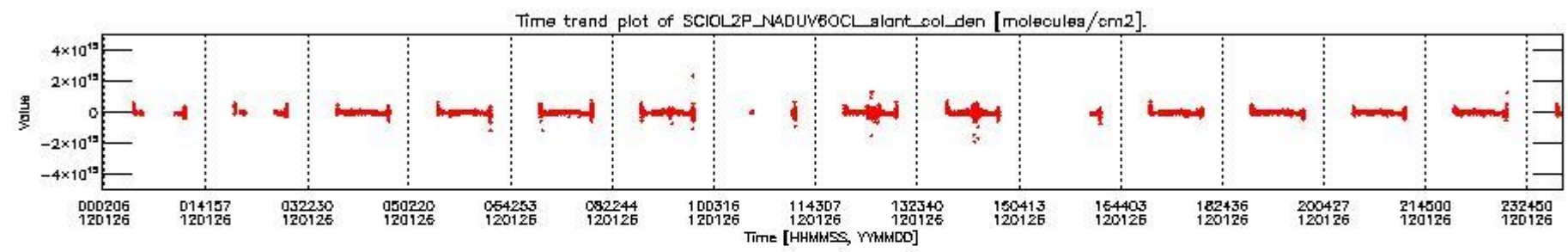
SCIOL2P\_NADUV7S02\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



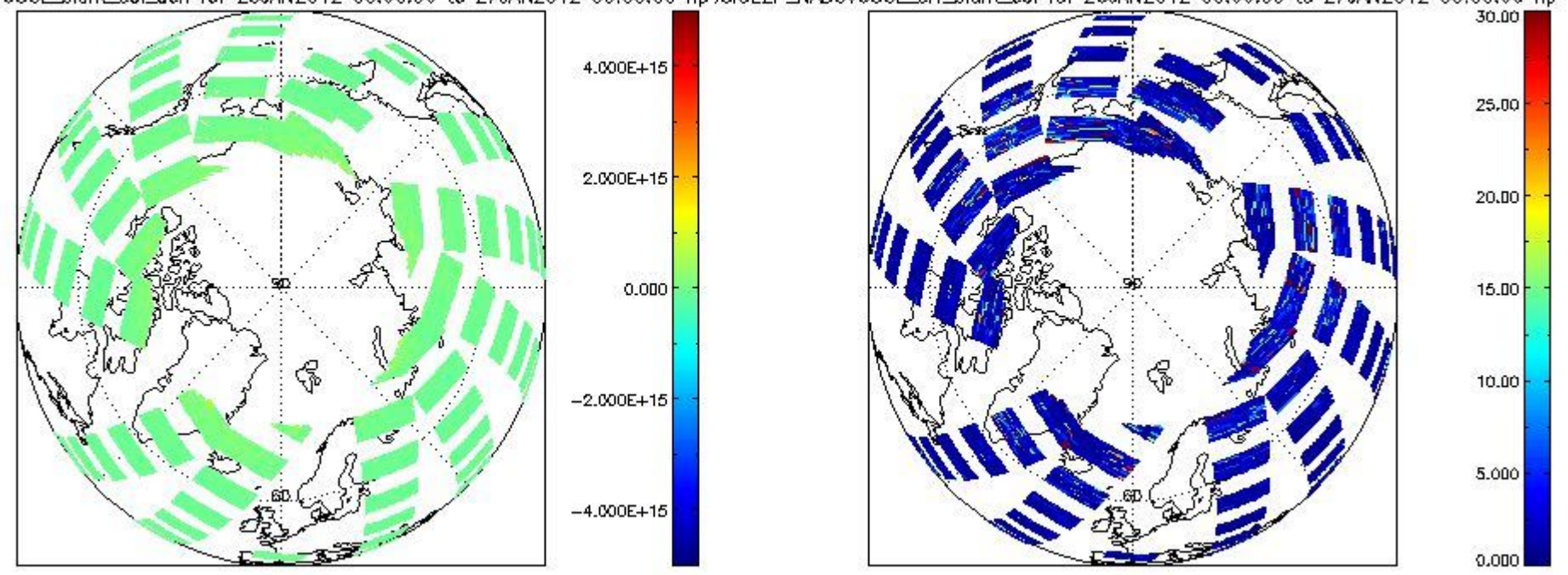
SCIOL2P\_NADUV7S02\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



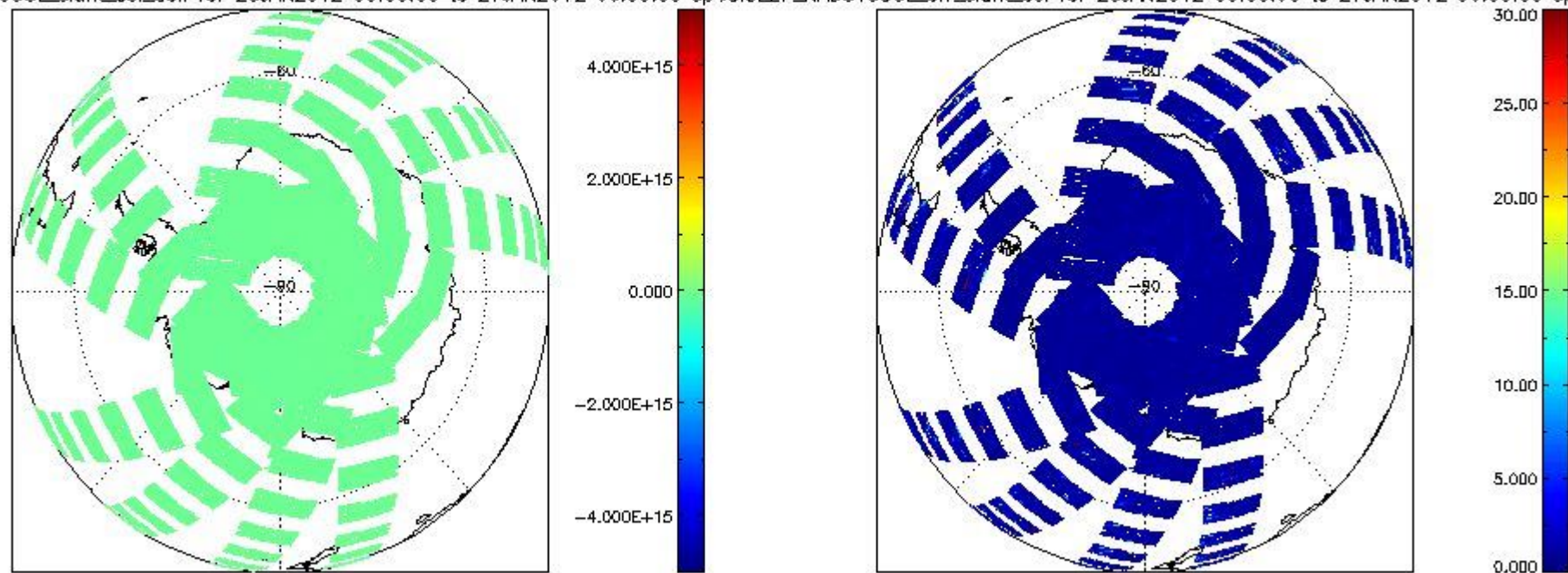
2.2.2.6 OCIO (UV6)



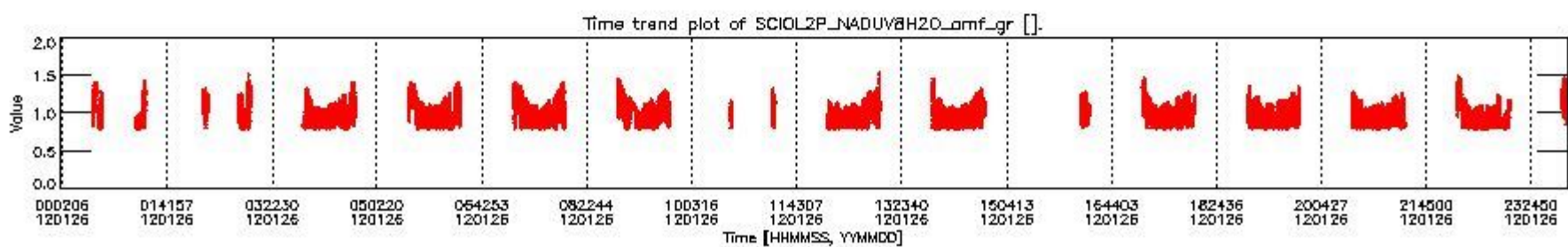
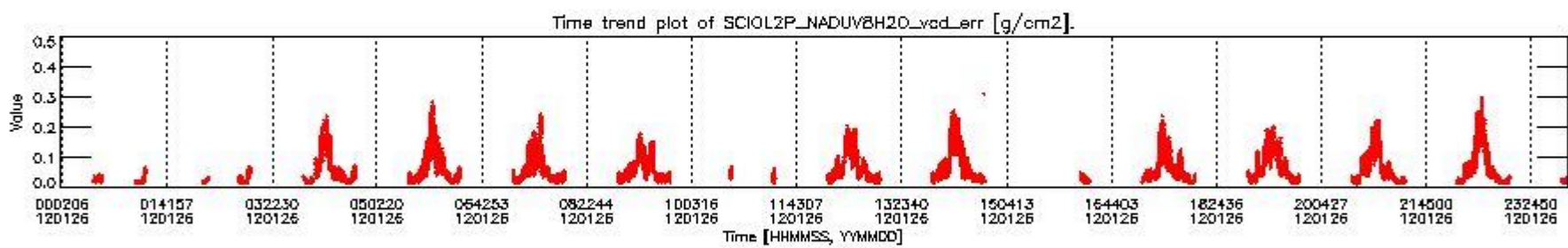
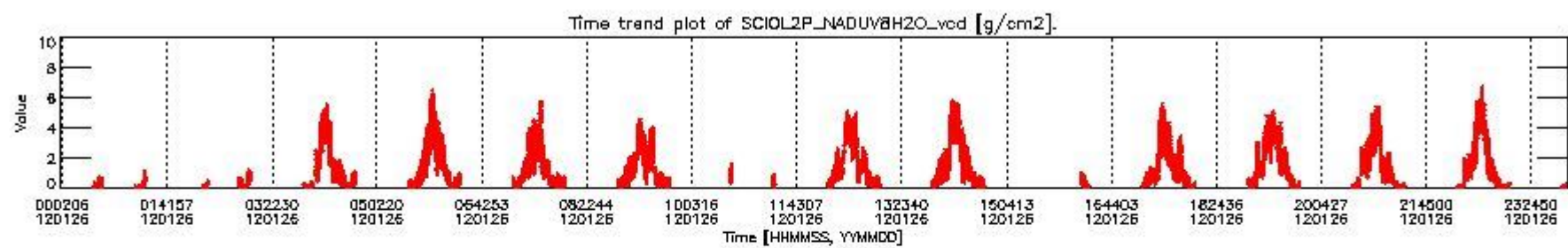
SCIDL2P\_NADUV60CL\_slant\_col\_den for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 np; SCIDL2P\_NADUV60CL\_err\_slant\_col for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 np



SCIOL2P\_NADUV6OCL\_slant\_col\_den for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 sp SCIOL2P\_NADUV6OCL\_err\_slant\_col for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 sp

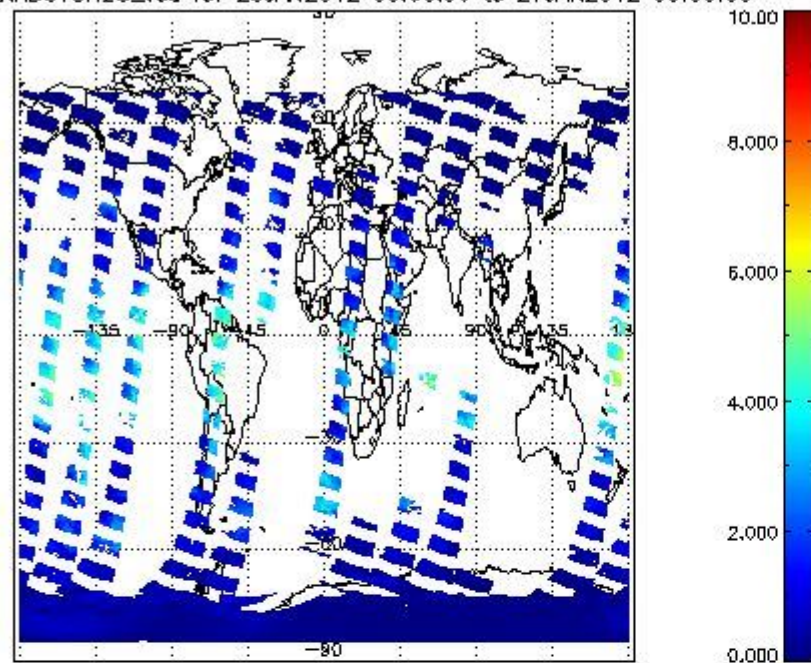


### 2.2.2.7 H2O (UV8)

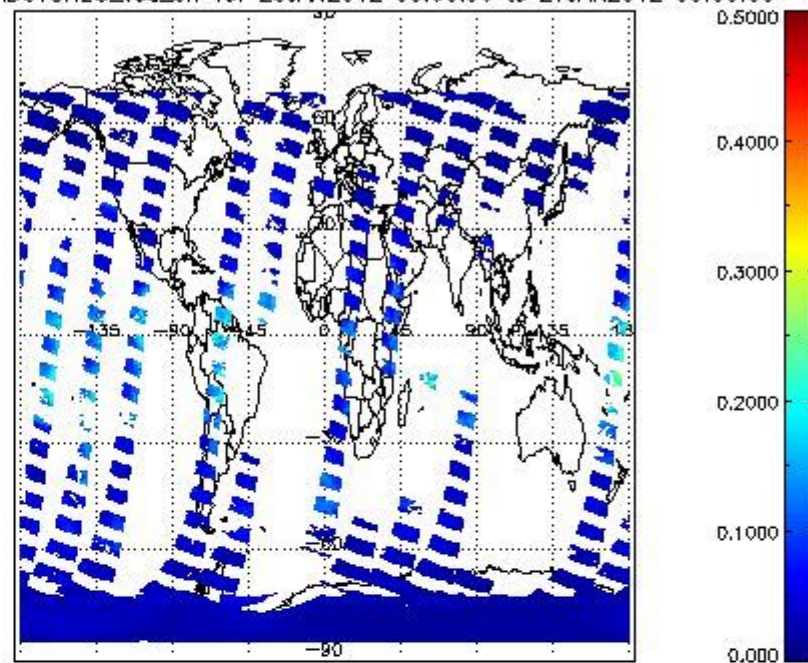




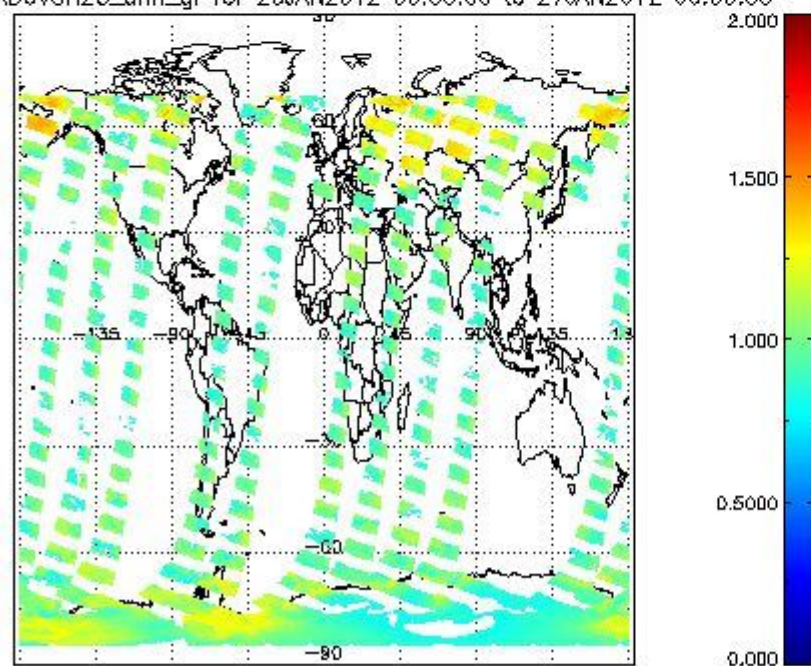
SCIOL2P\_NADUV8H20\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

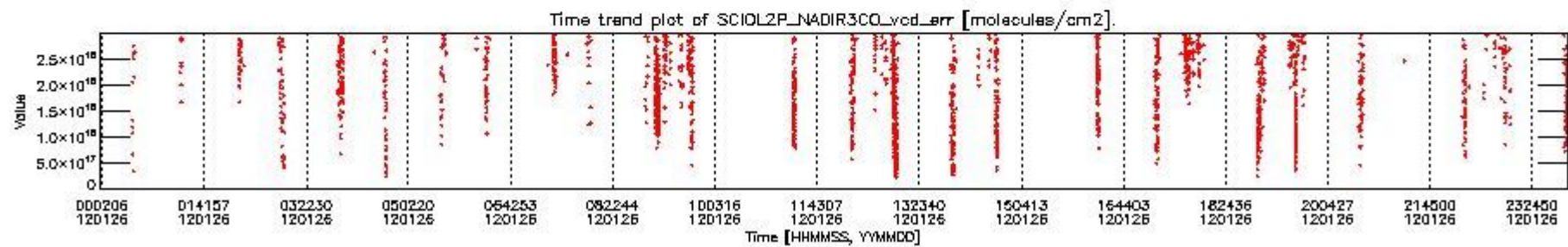
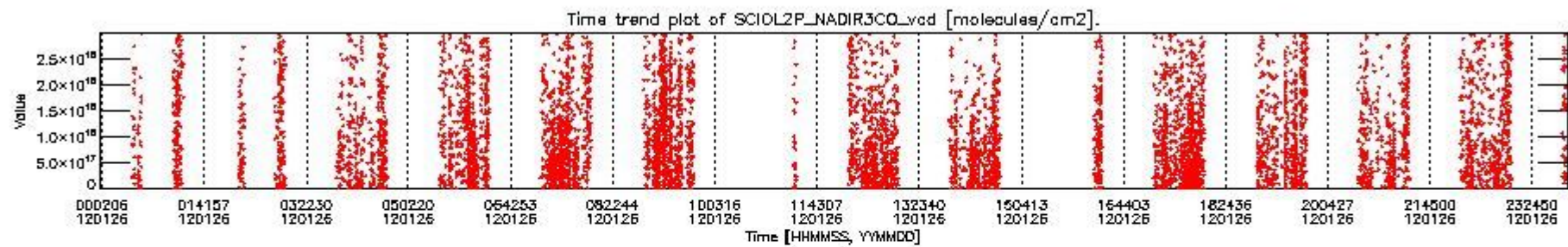


SCIOL2P\_NADUV8H20\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

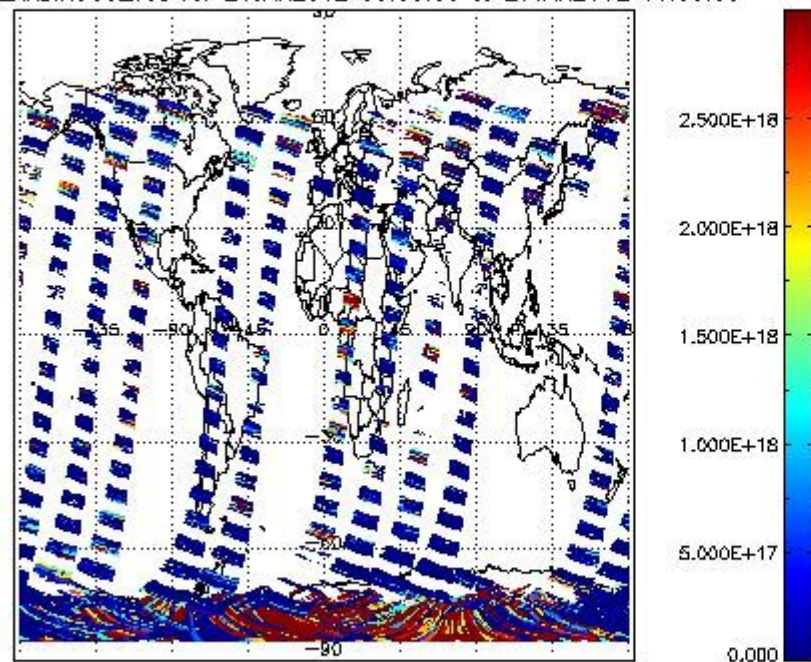


SCIOL2P\_NADUV8H20\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

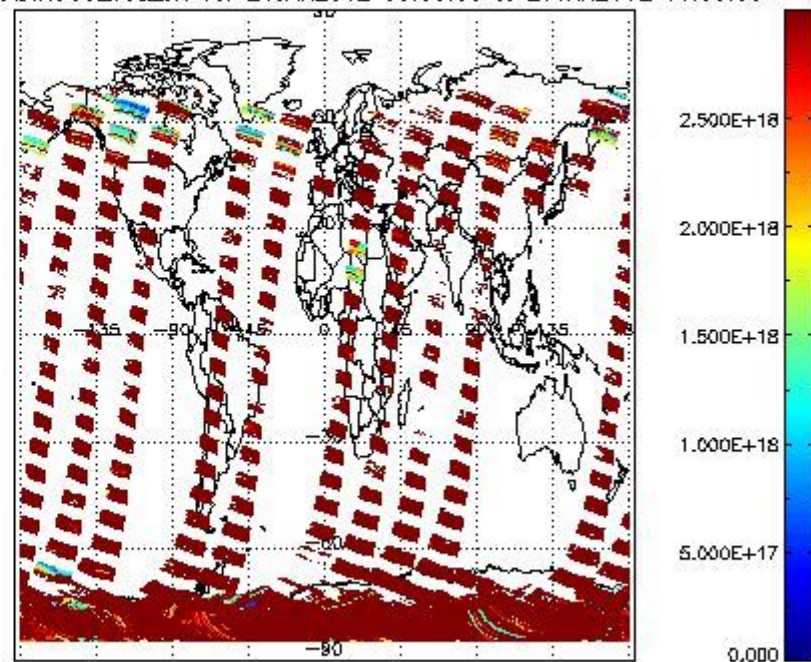




SCIDL2P\_NADIR3CO\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



SCIDL2P\_NADIR3CO\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



### 2.2.3 Limb

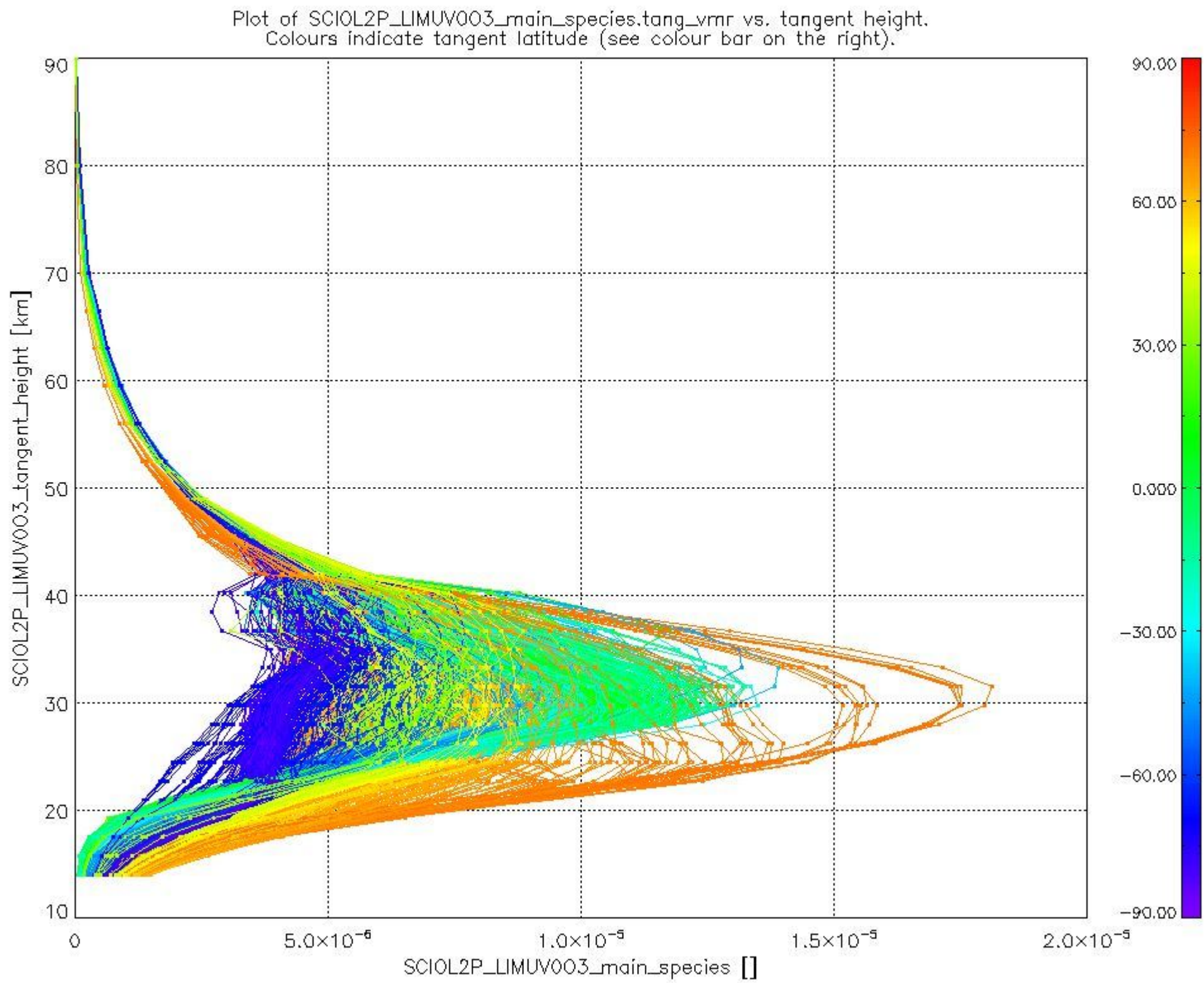
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

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

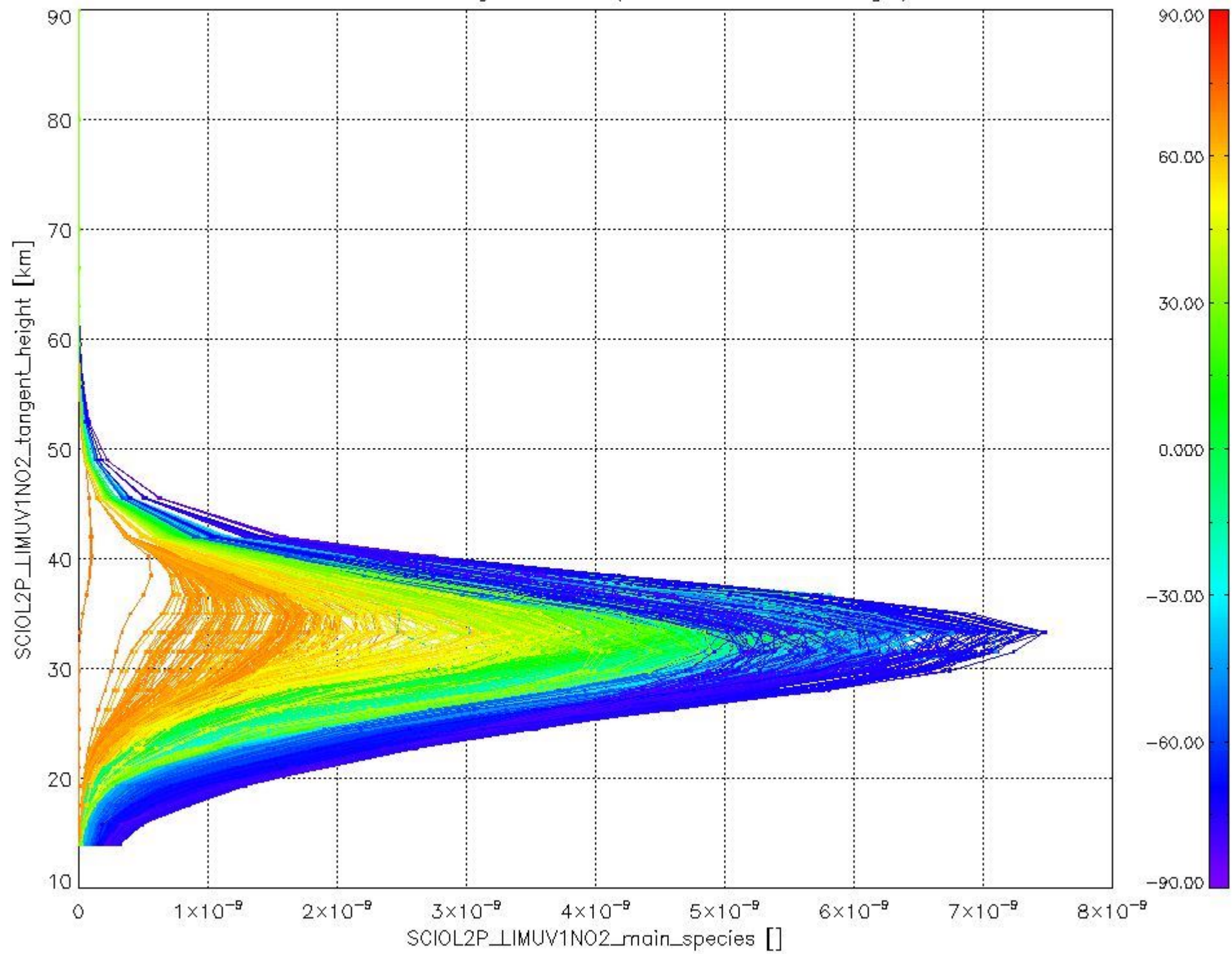
The following plots show for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

2.2.3.1 O3 (UV0)



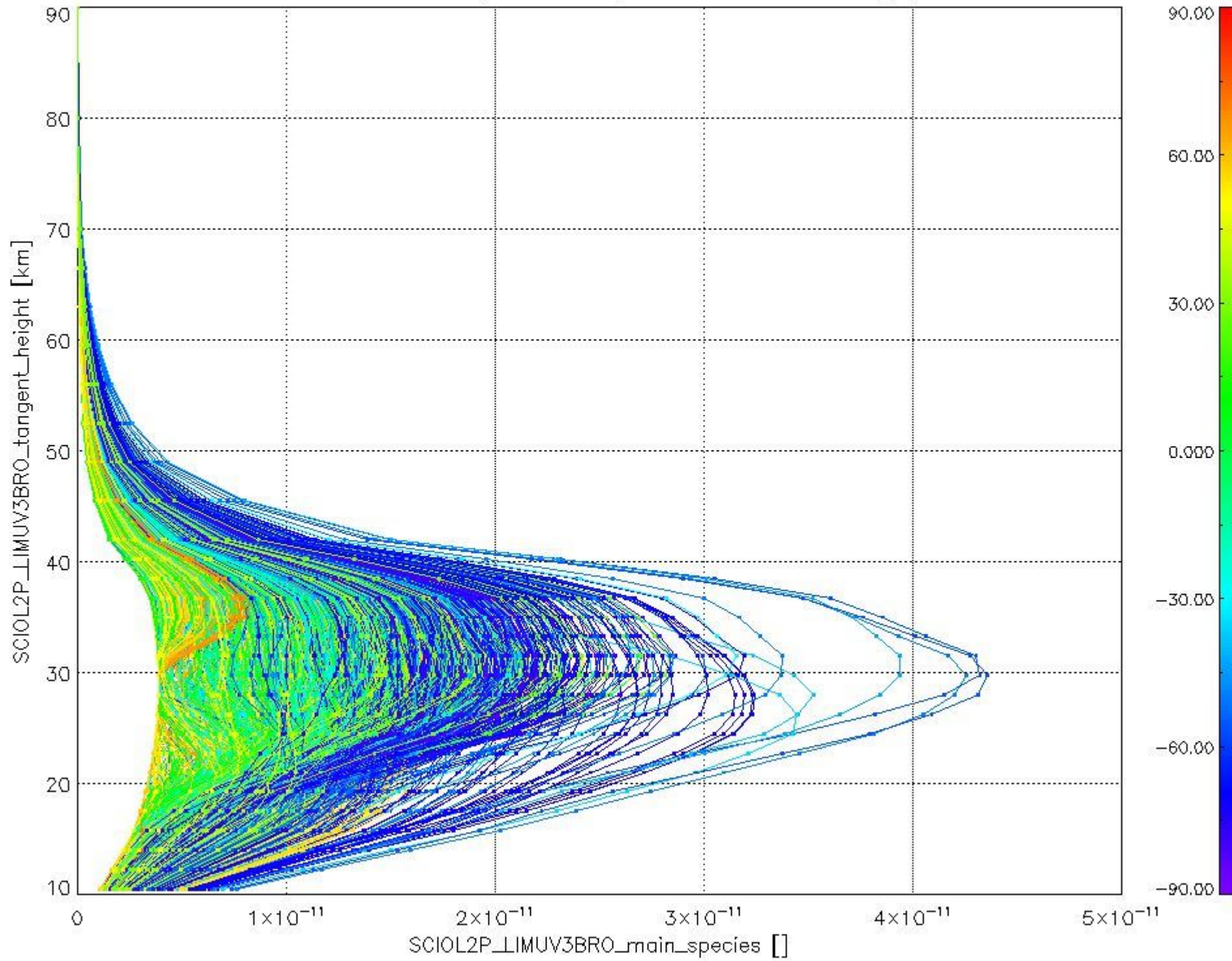
2.2.3.2 NO2 (UV1)

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).

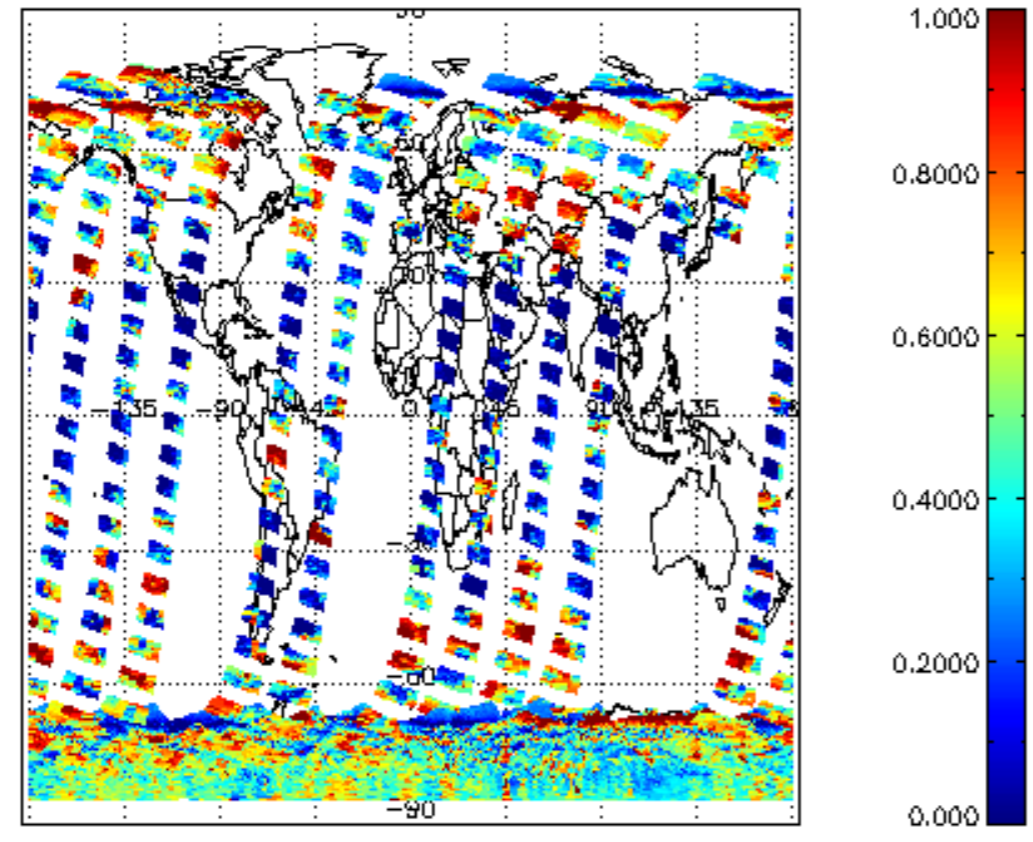


### 2.3 ADF monitoring

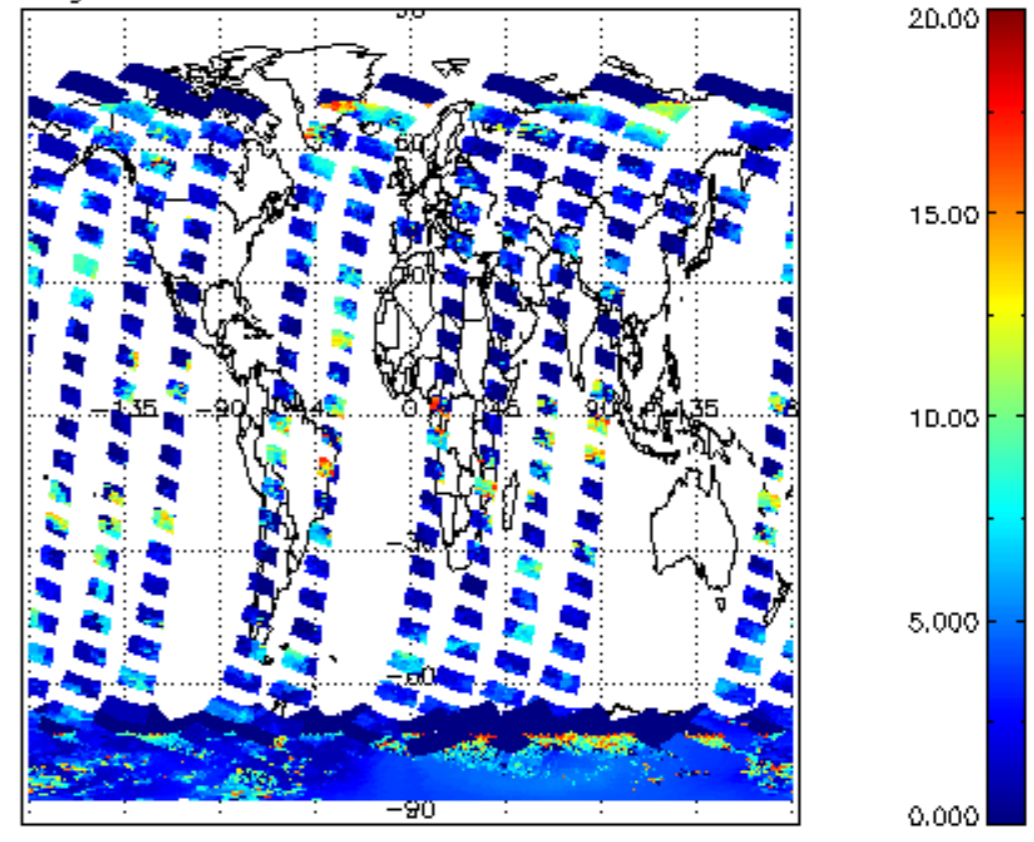
Number	ADF
	<b>IN_ (INITIALISATION_FILE)</b>
0	SCI_IN_AXNPDE20110201_120000_20020301_000000_20991231_235959
	<b>ECF (ECMWF_FILE)</b>
1	NOT USED
	<b>MF1 (M_FACTOR_FILE)</b>
2	SCI_MF1_AXVIEC20120131_132532_20120125_184312_20120127_184312
3	SCI_MF1_AXVIEC20120131_132639_20120126_180627_20120128_180627



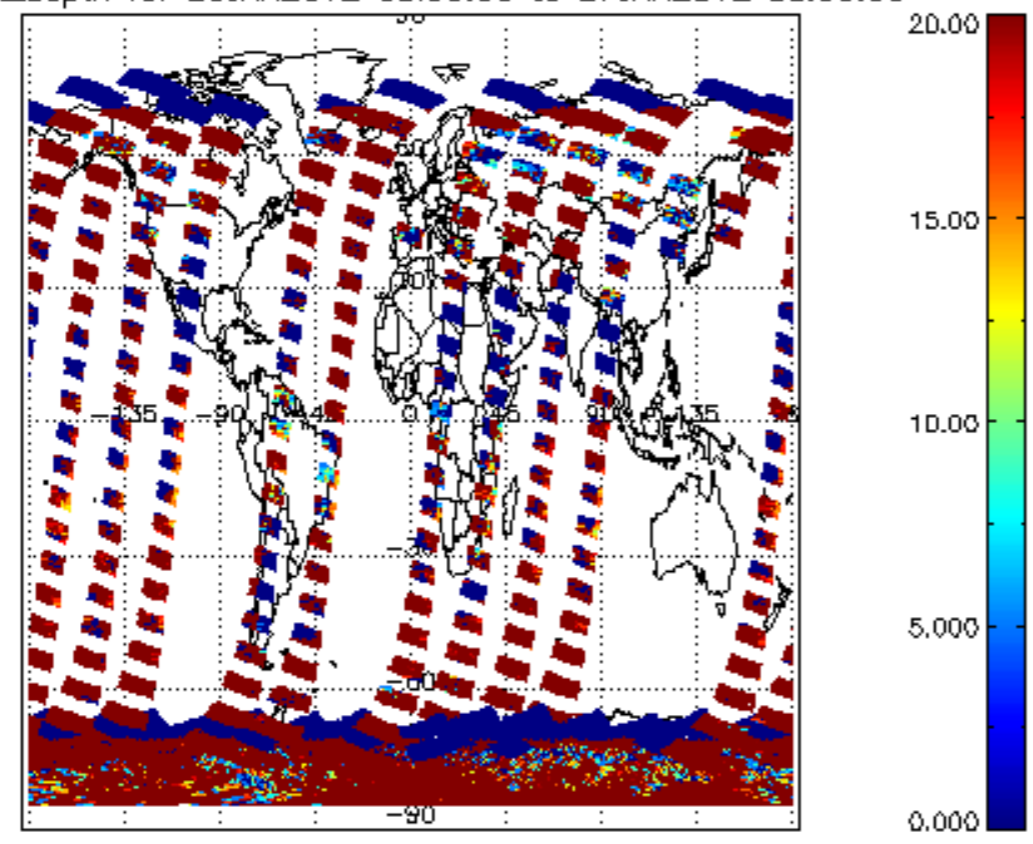
cL\_frac for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



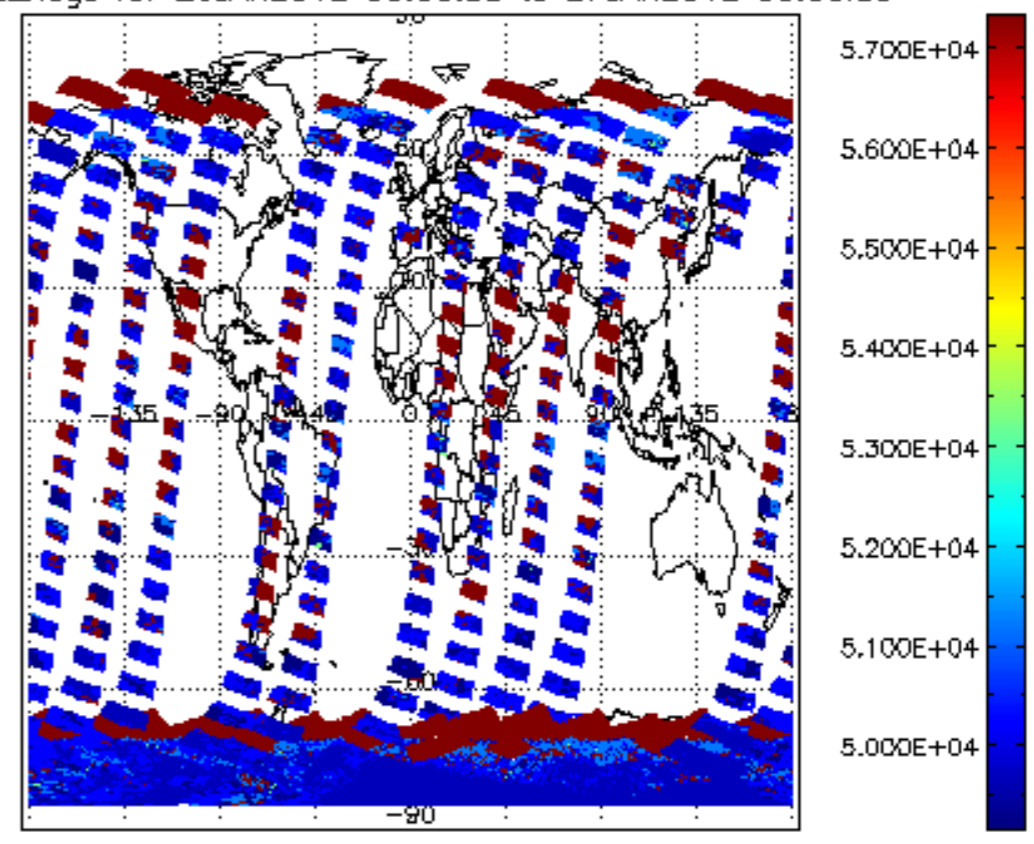
cL\_top\_height for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

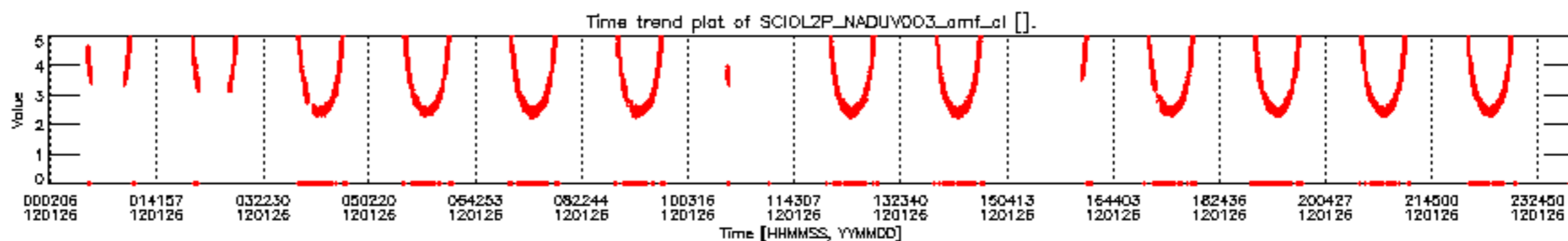
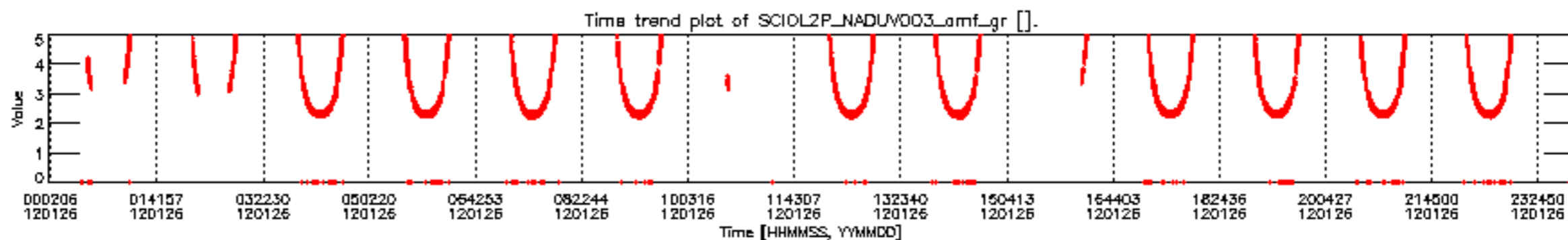
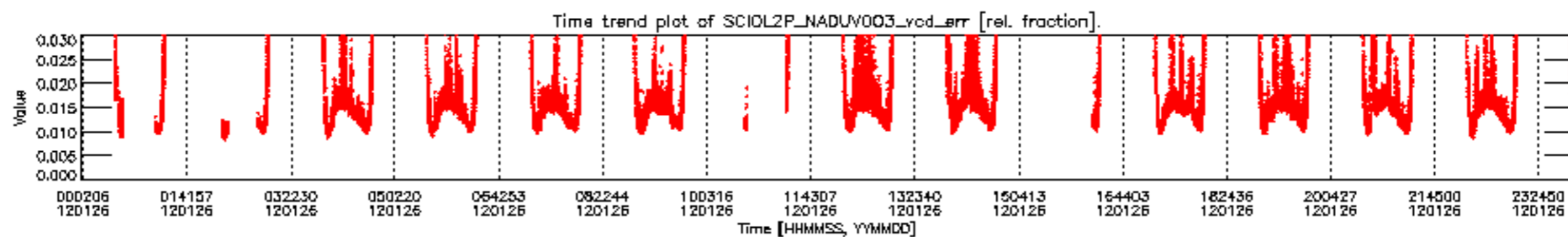
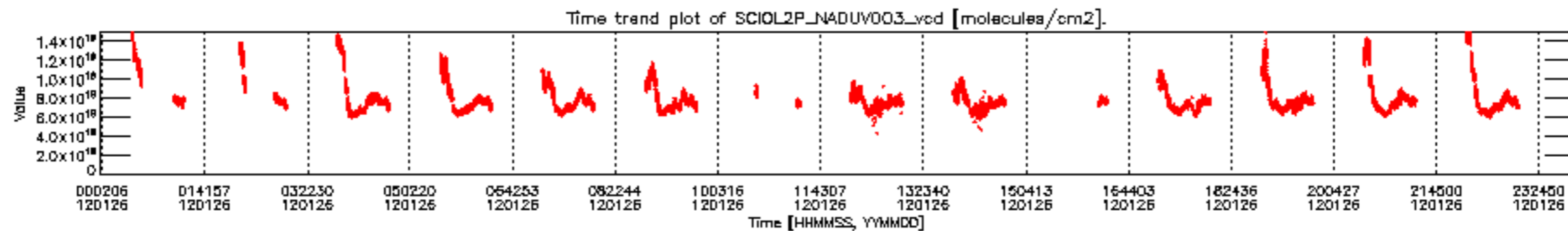


cLopt\_depth for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



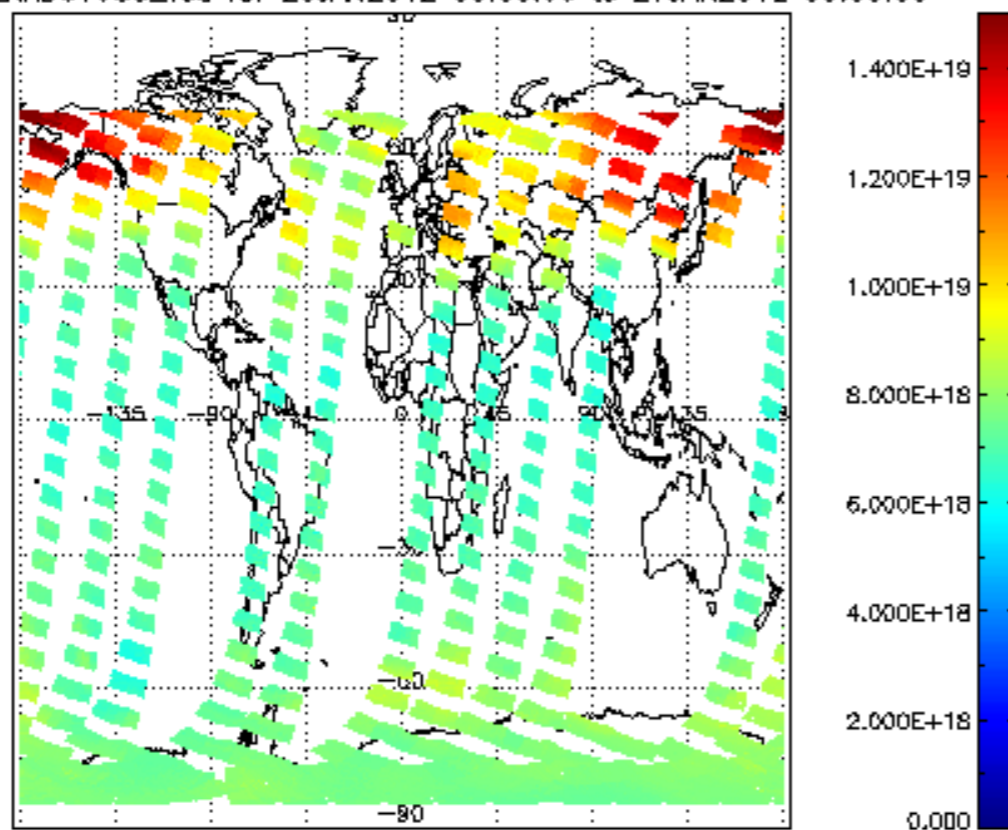
cloud\_flags for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



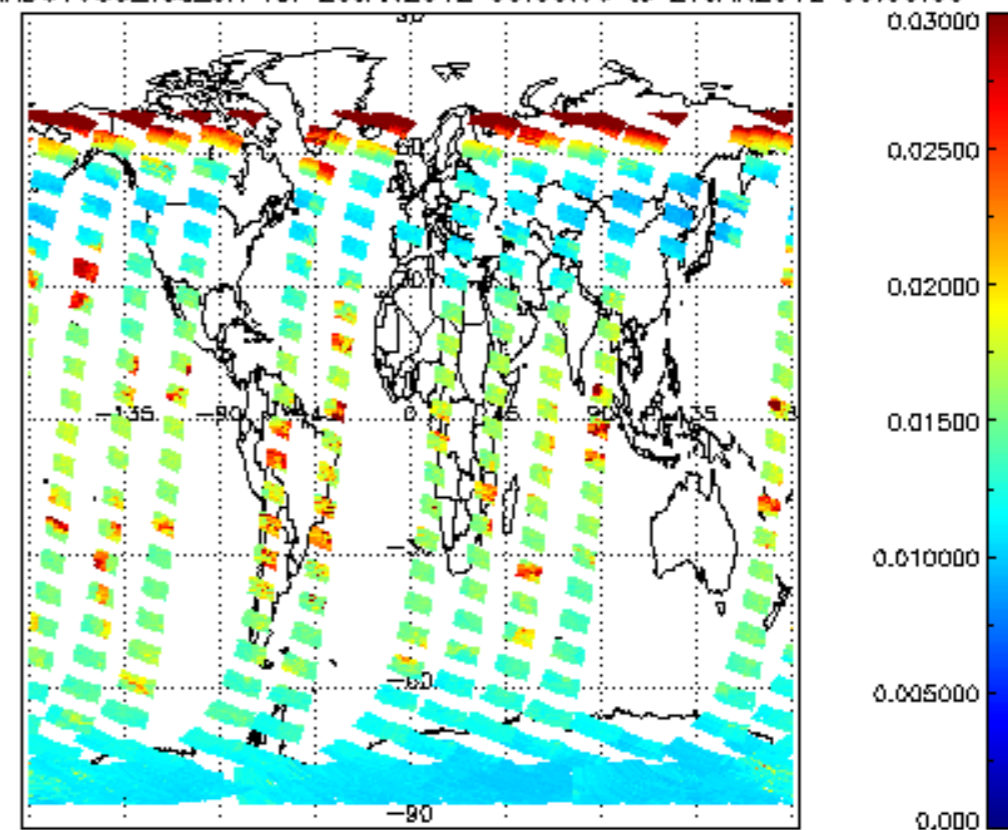




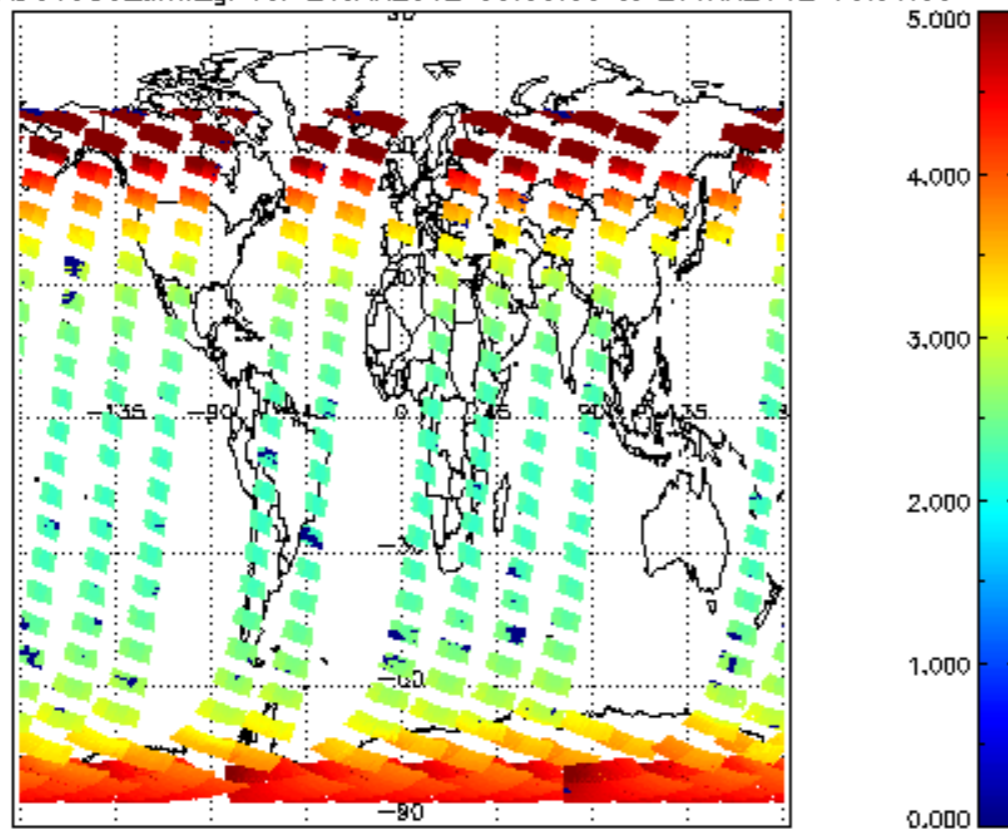
SCIOL2P\_NADUV003\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



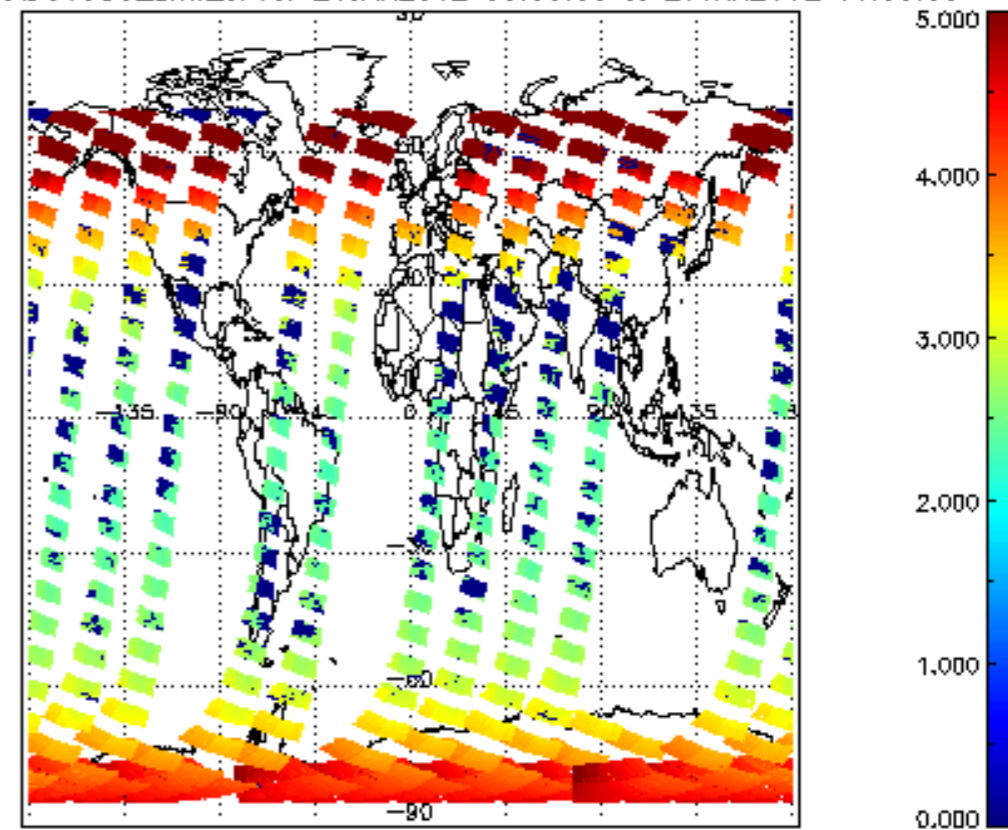
SCIOL2P\_NADUV003\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

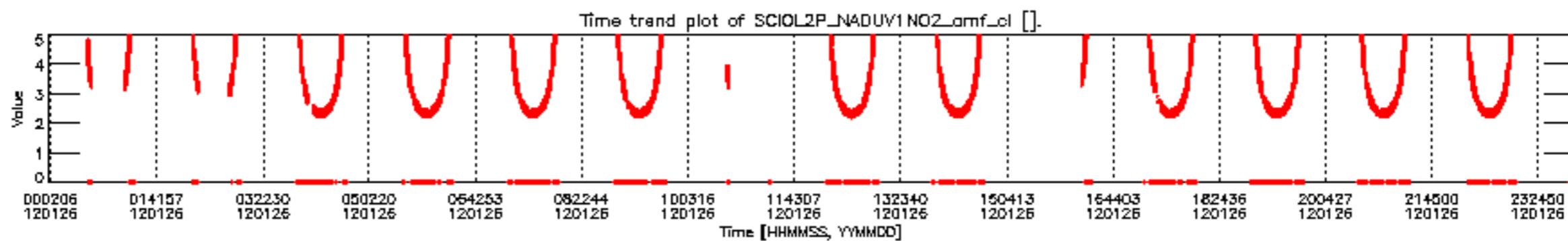
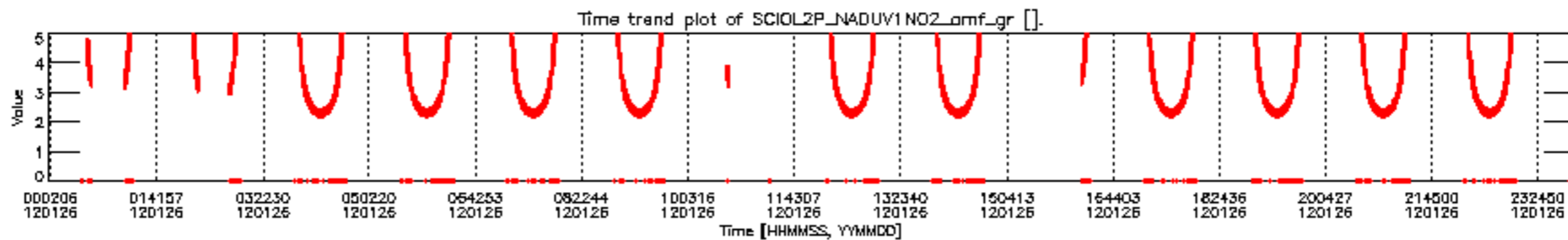
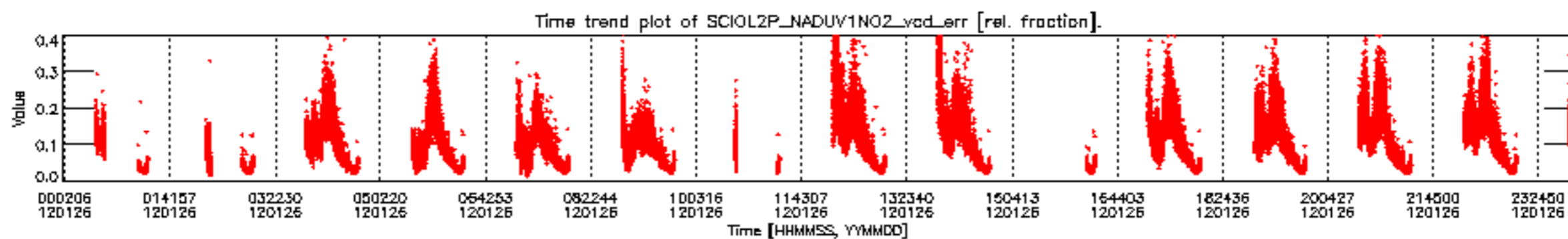
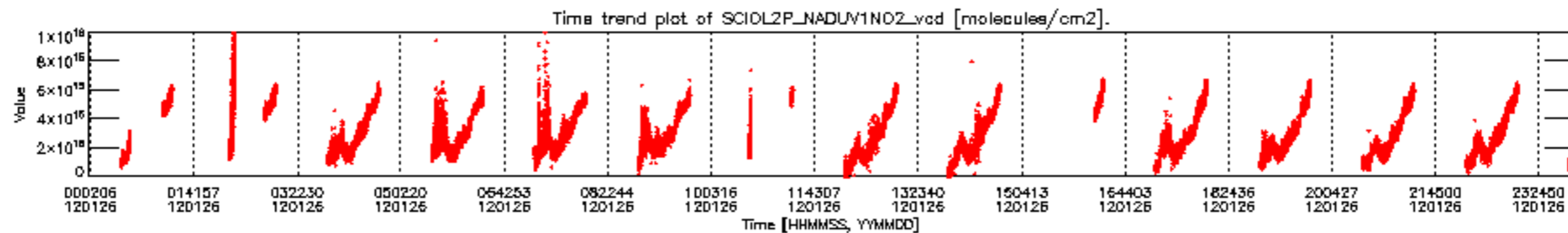


SCIOL2P\_NADUV003\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

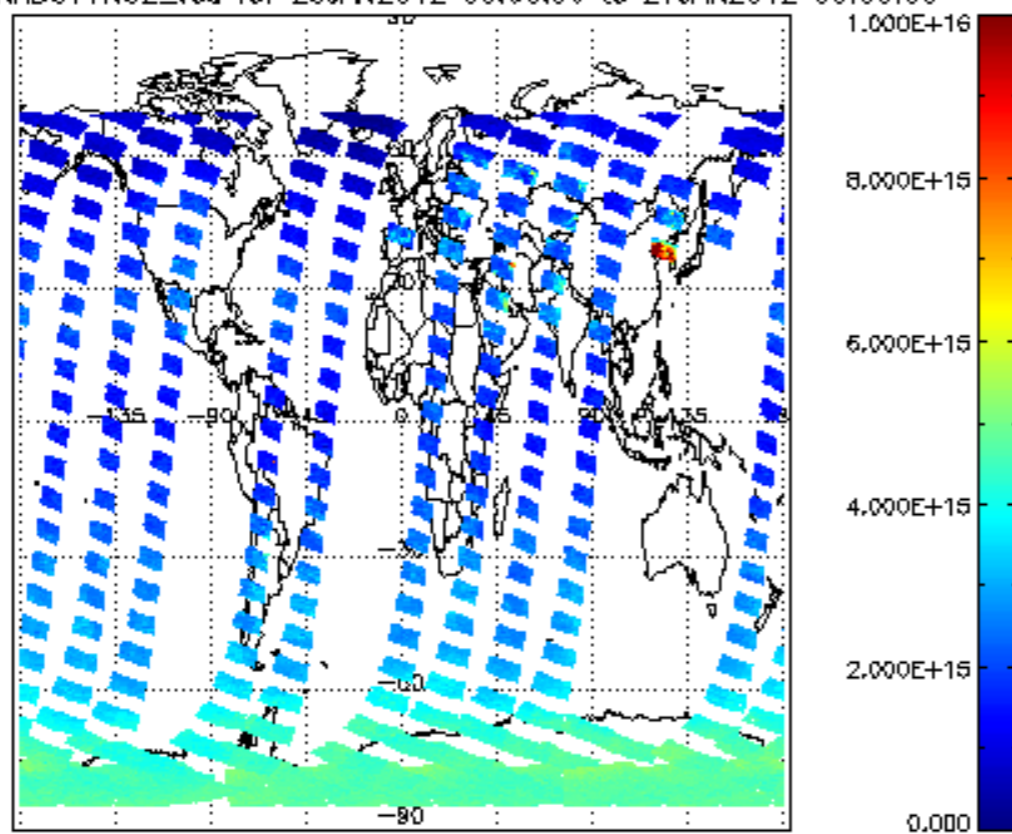


SCIOL2P\_NADUV003\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

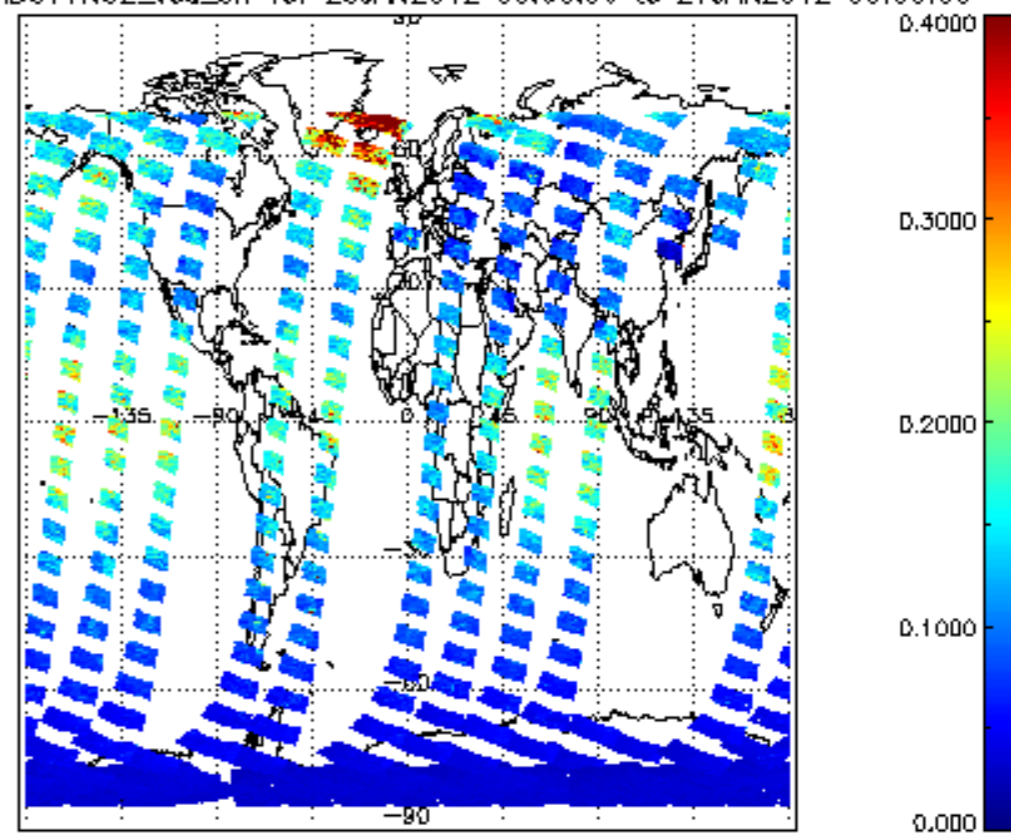




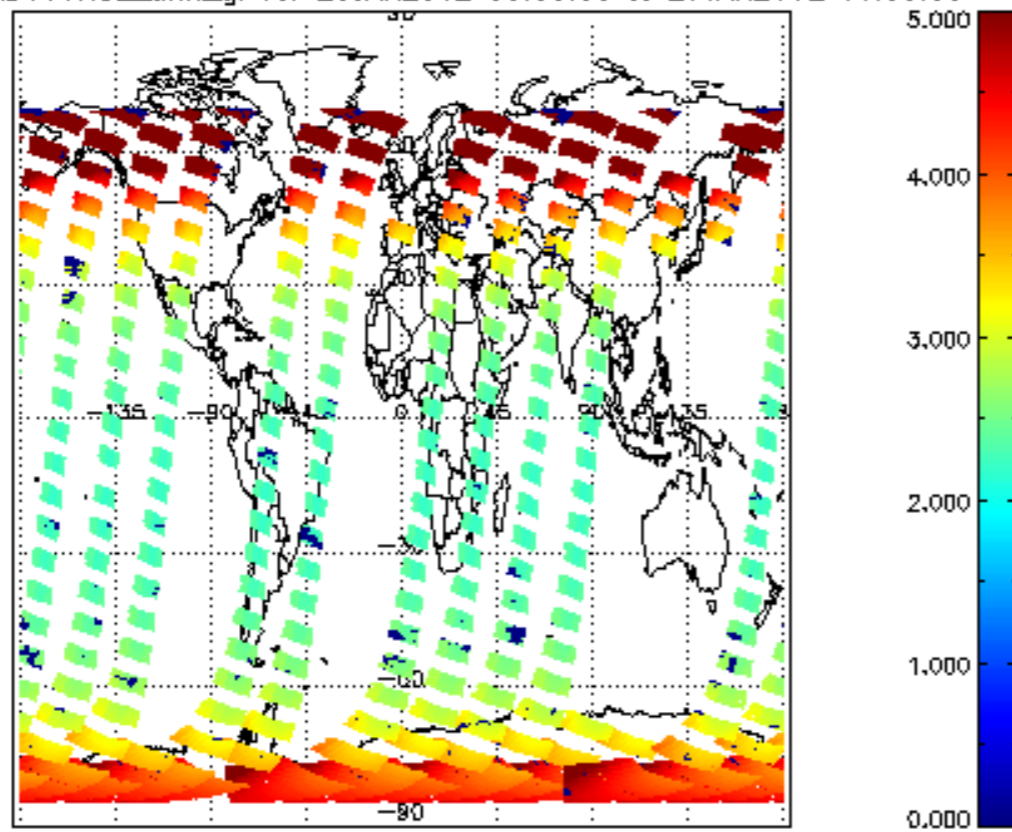
SCIOL2P\_NADUV1NO2\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



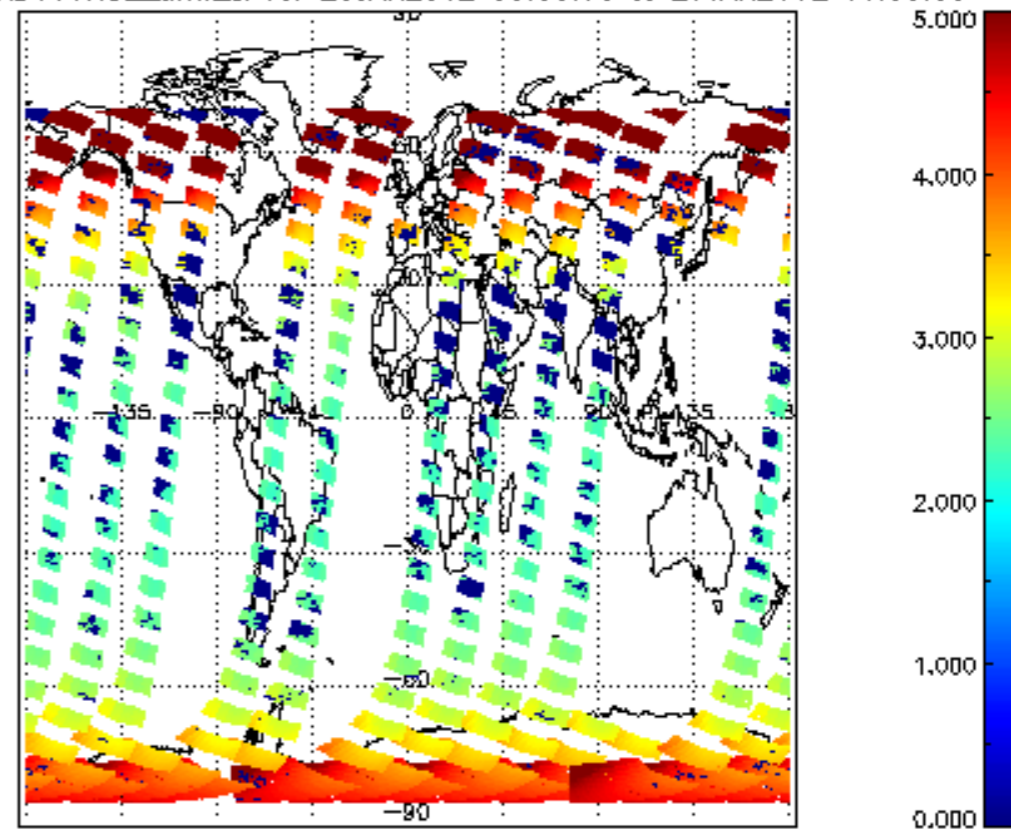
SCIOL2P\_NADUV1NO2\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

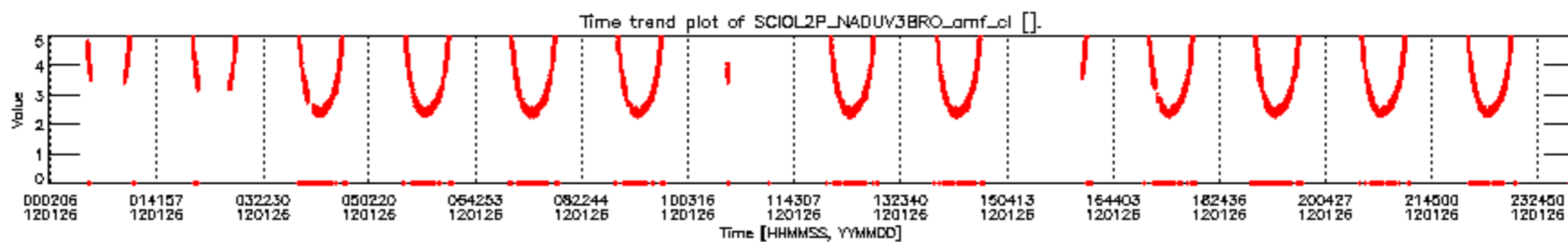
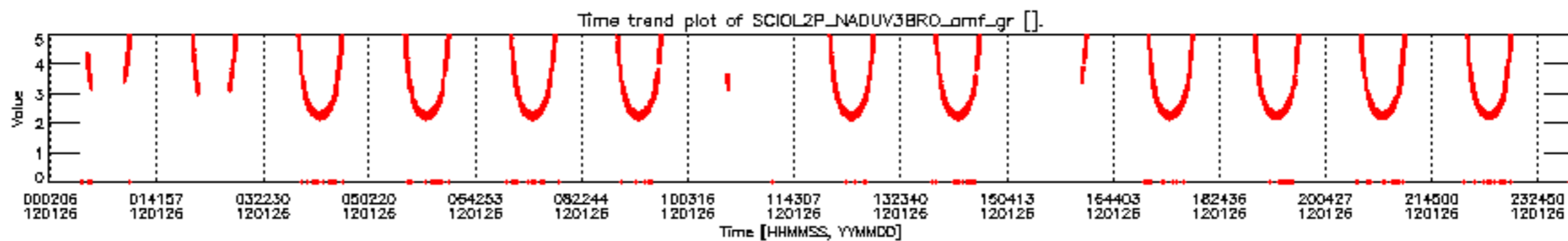
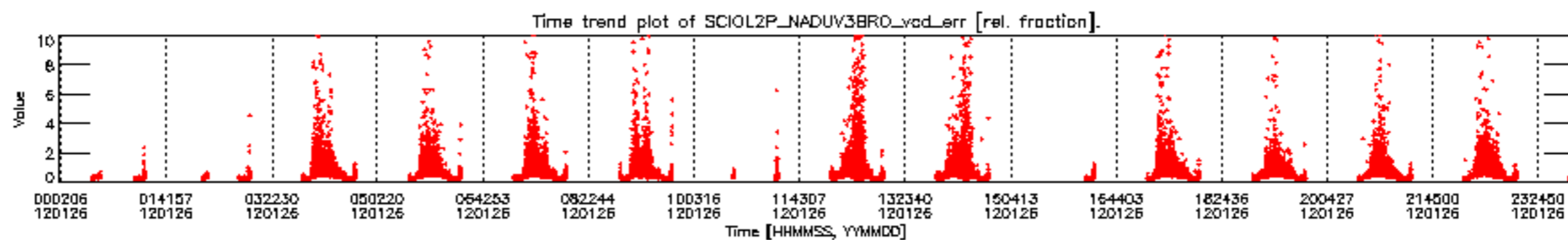
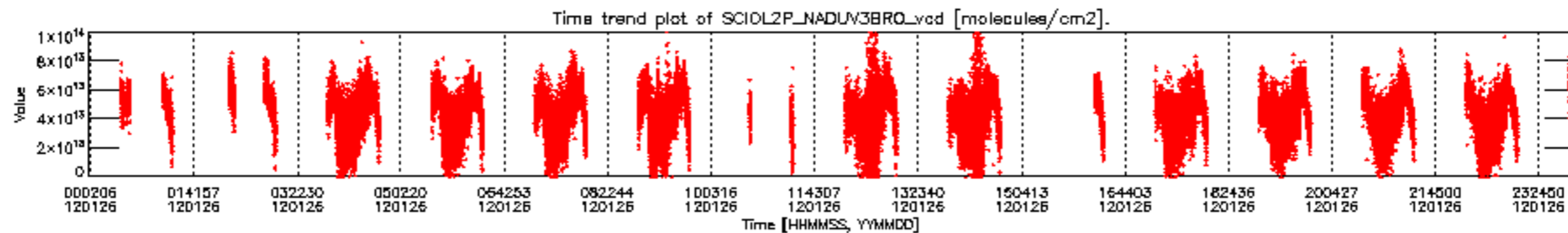


SCIOL2P\_NADUV1NO2\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

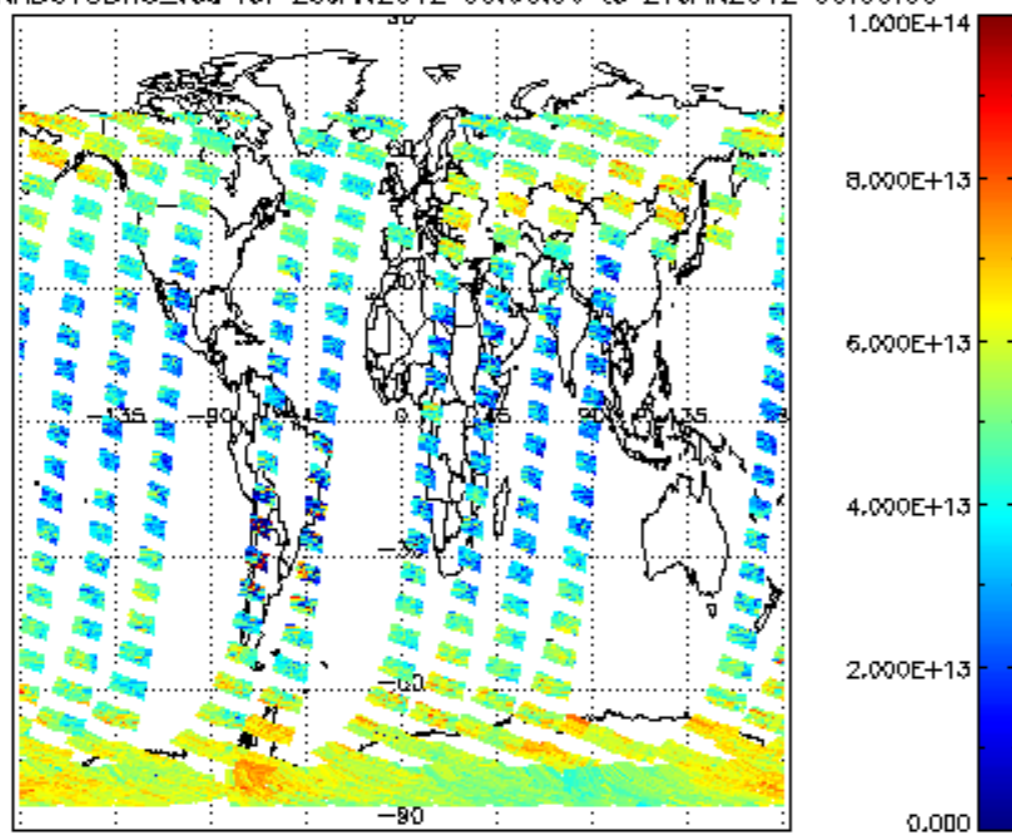


SCIOL2P\_NADUV1NO2\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

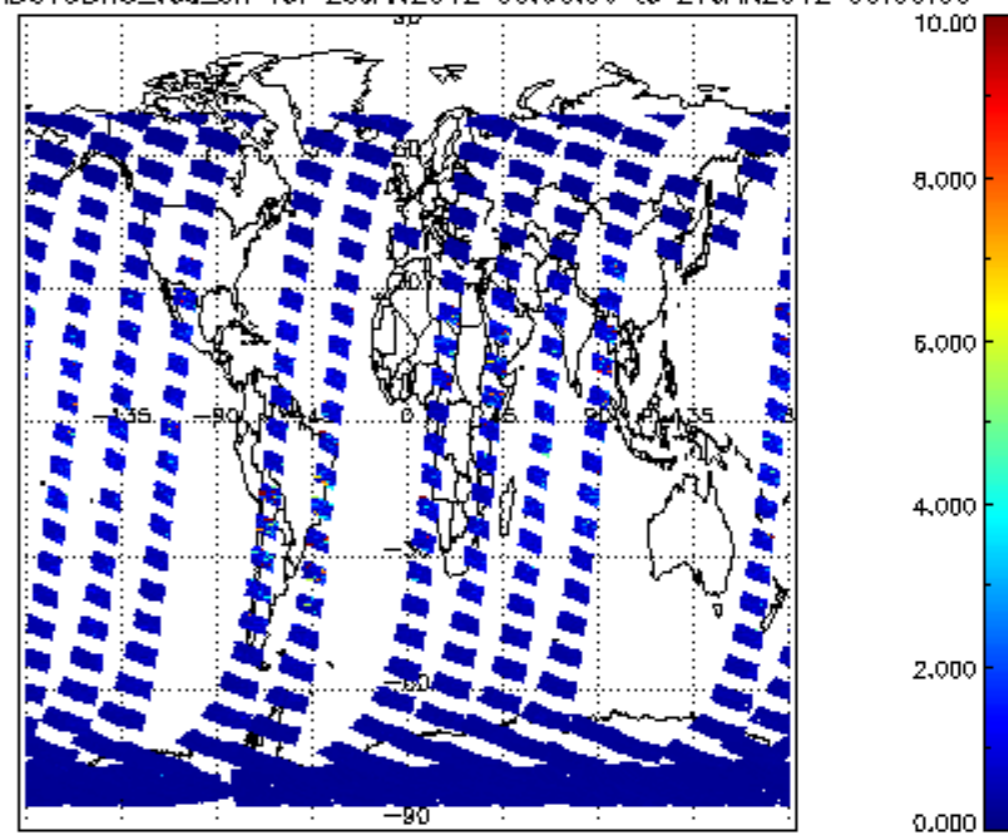




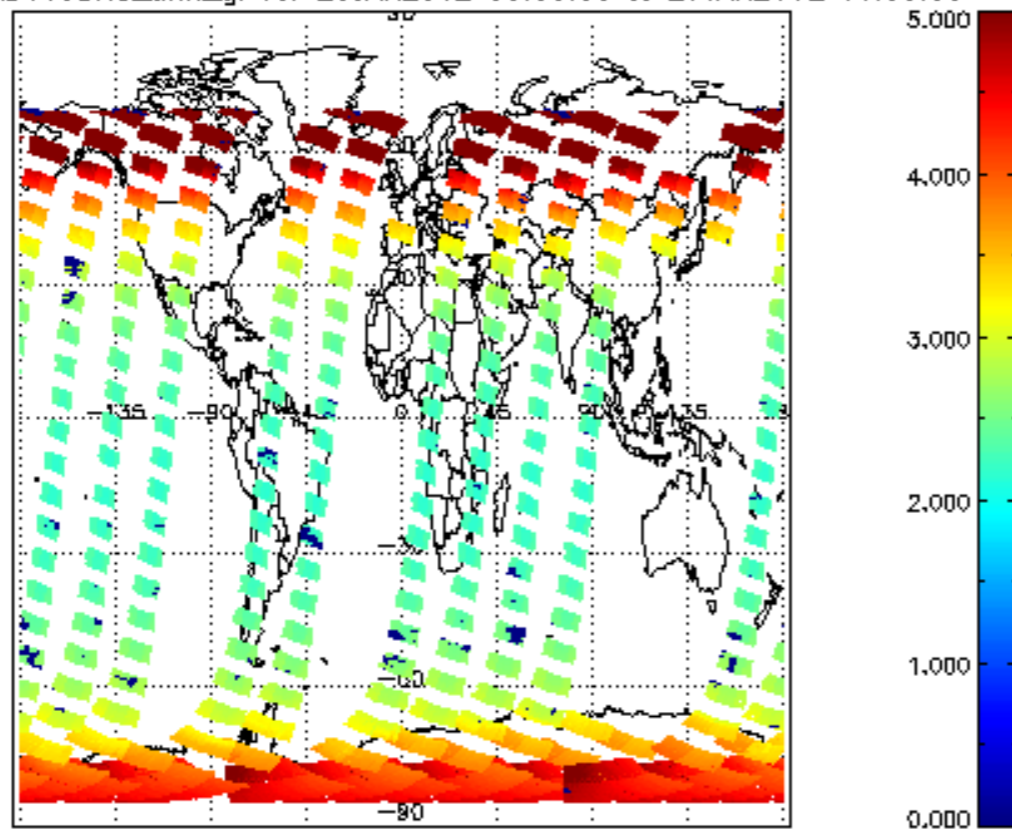
SCIOL2P\_NADUV3BRO\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



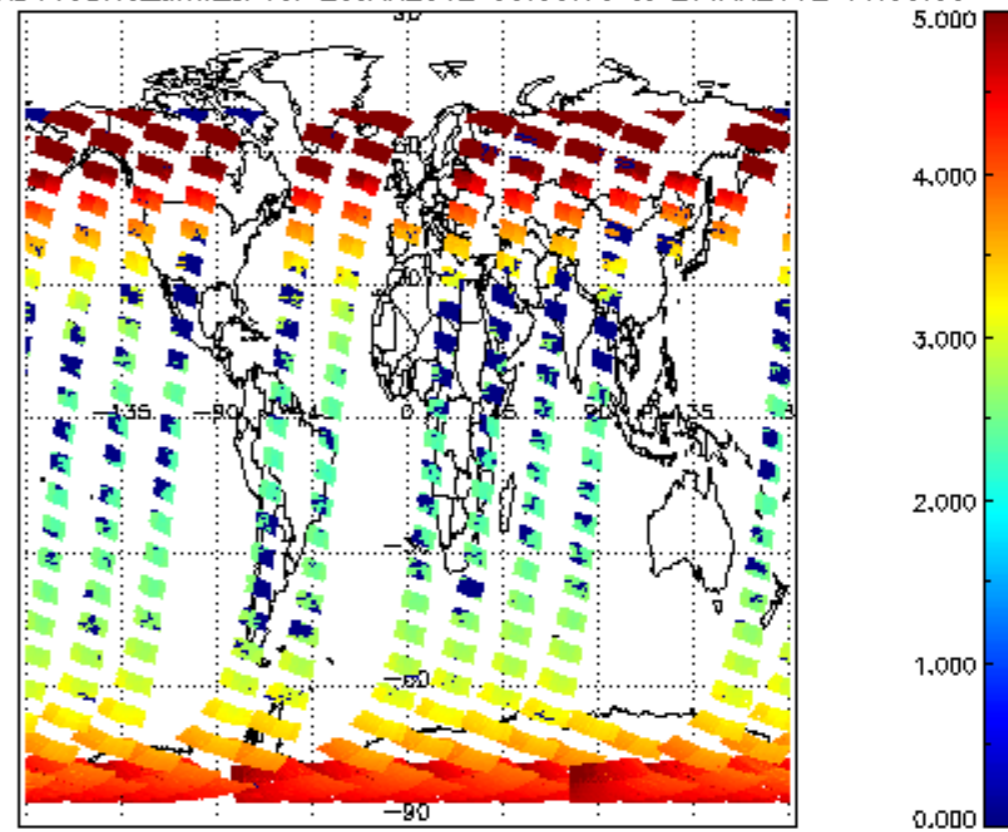
SCIOL2P\_NADUV3BRO\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

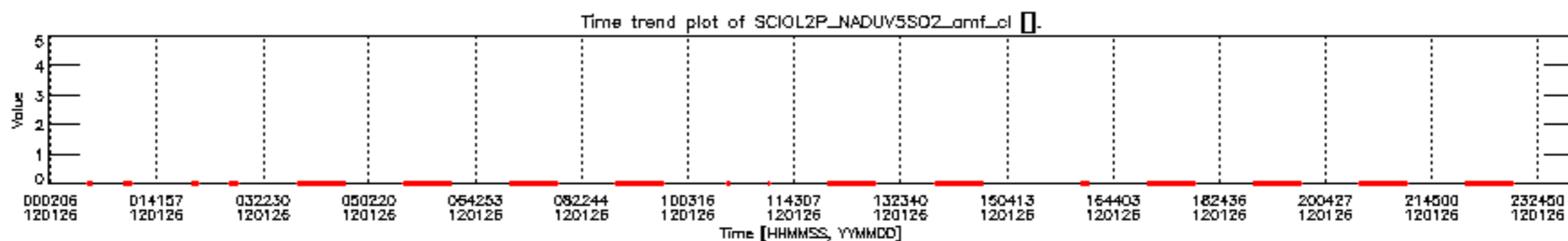
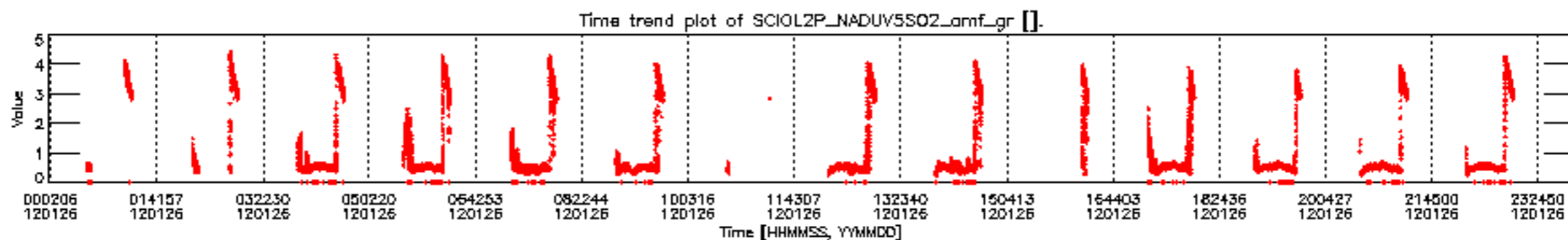
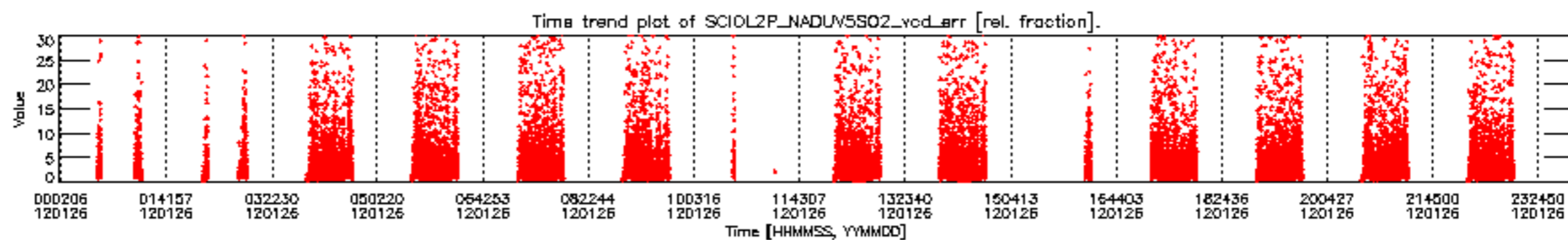
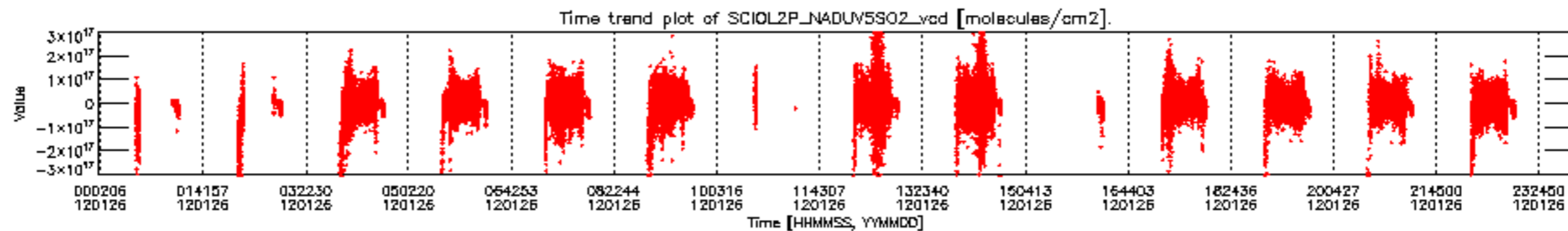


SCIOL2P\_NADUV3BRO\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

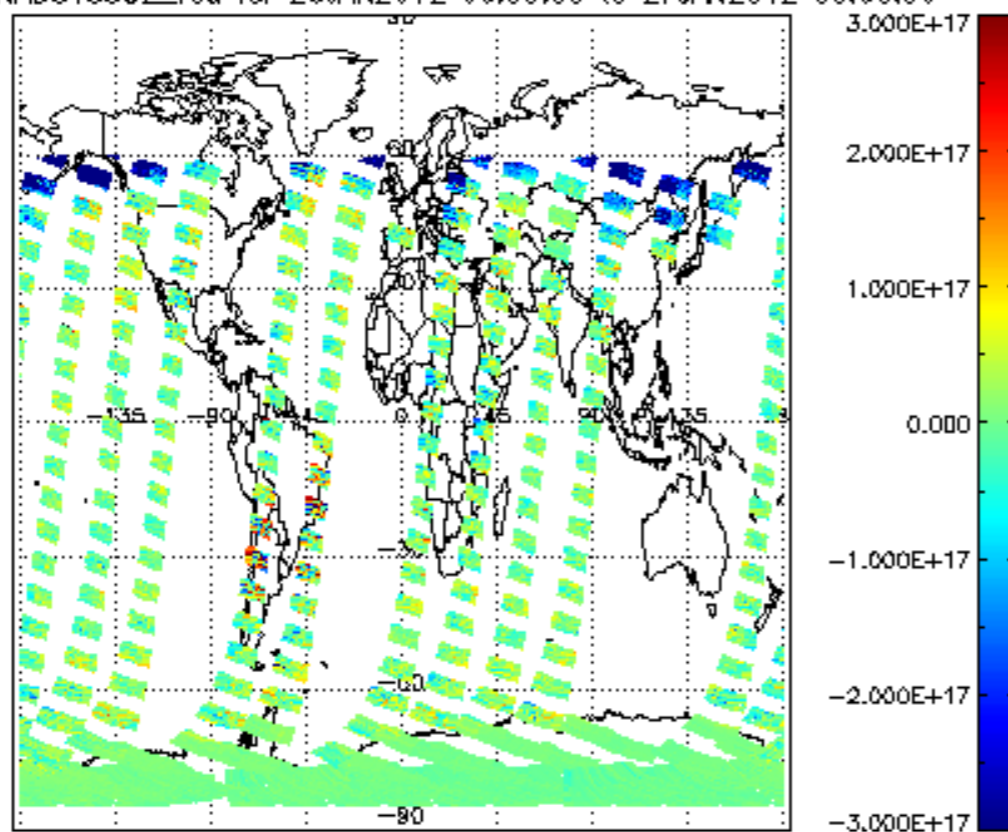


SCIOL2P\_NADUV3BRO\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

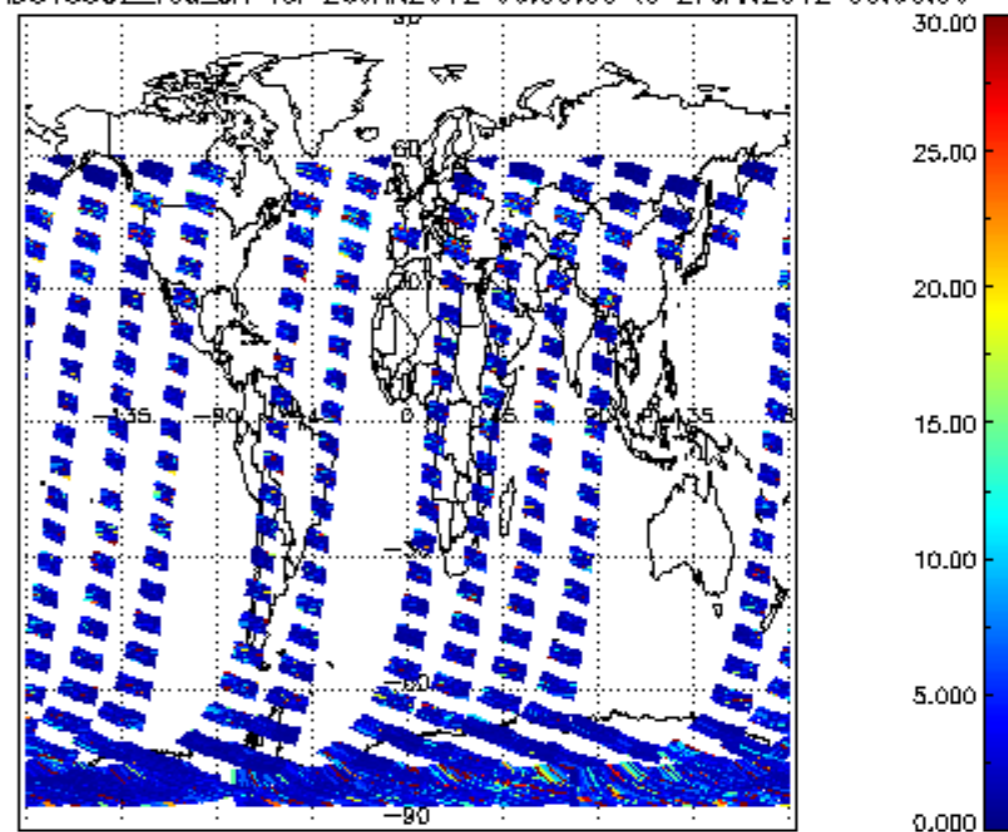




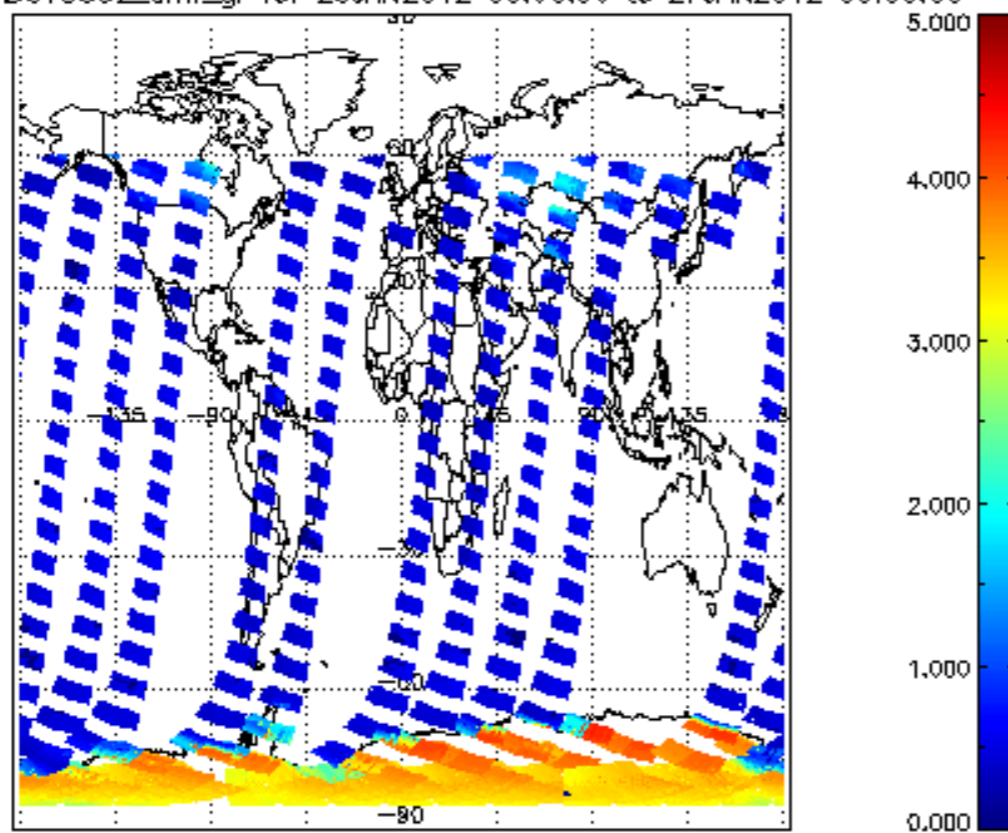
SCIOL2P\_NADUV5S02\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



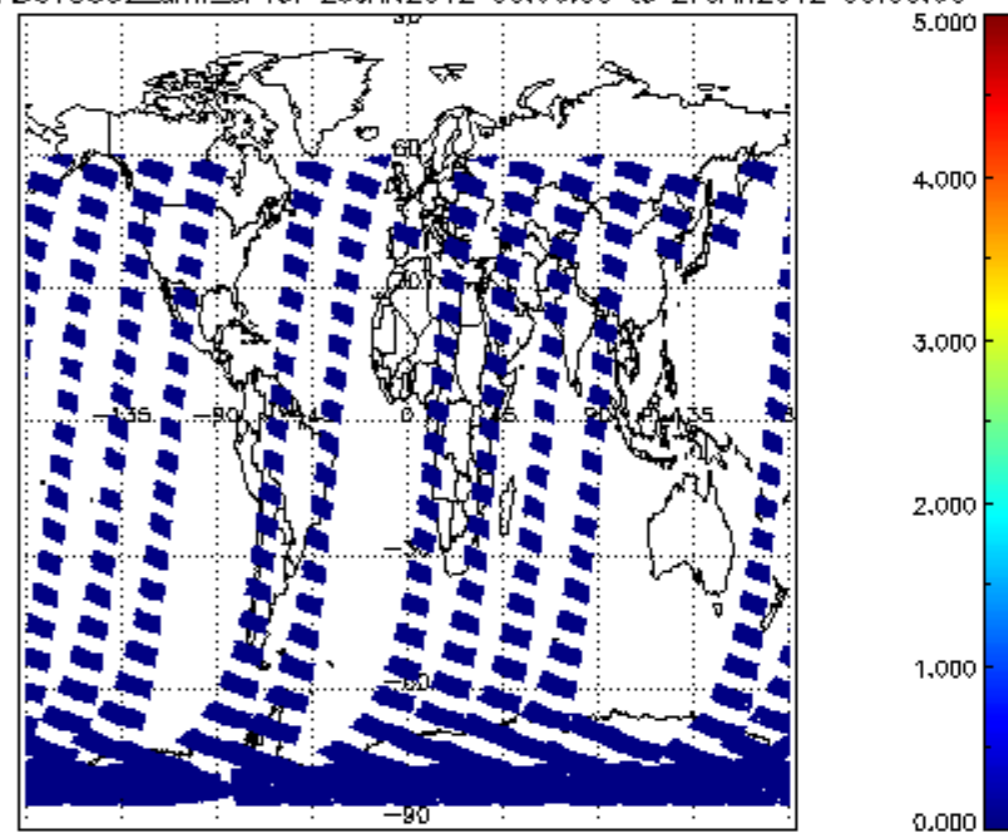
SCIOL2P\_NADUV5S02\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

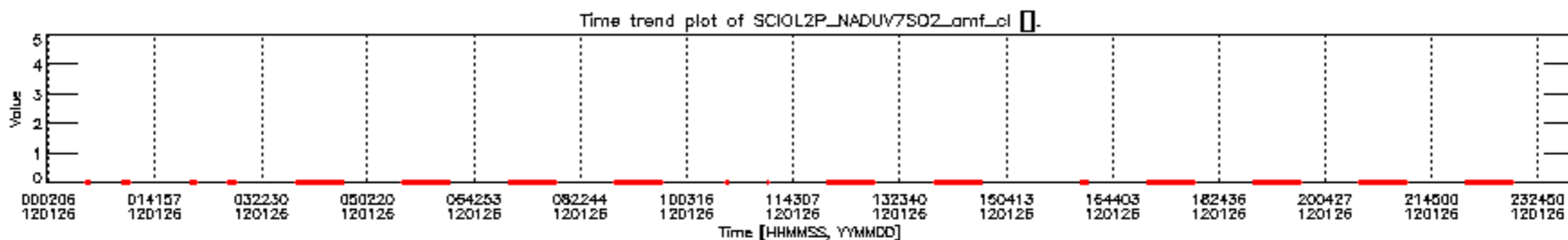
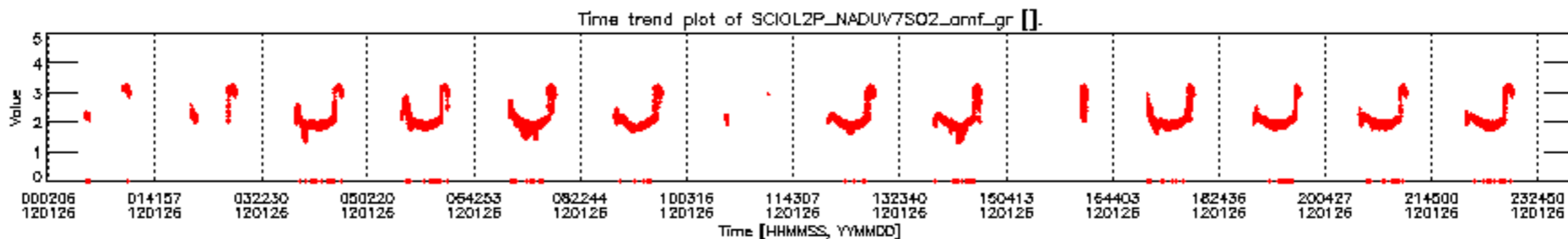
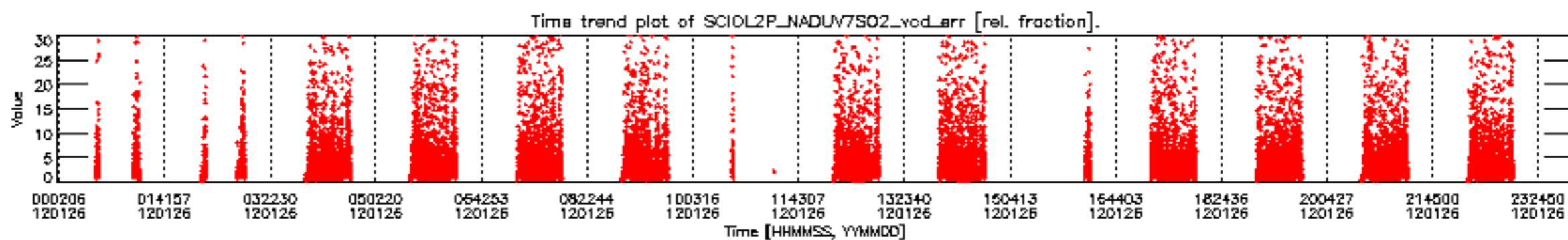
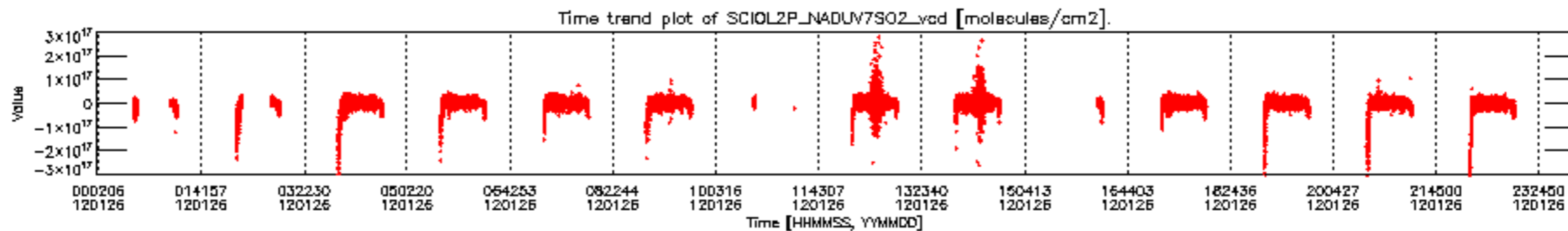


SCIOL2P\_NADUV5S02\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



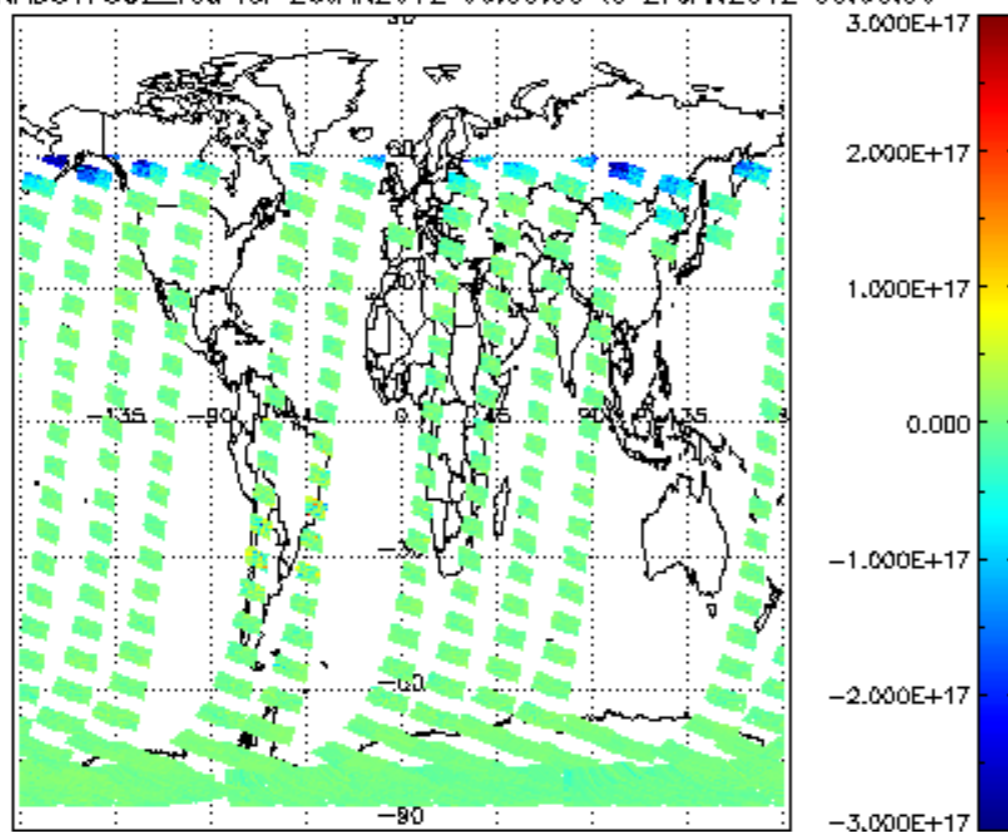
SCIOL2P\_NADUV5S02\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



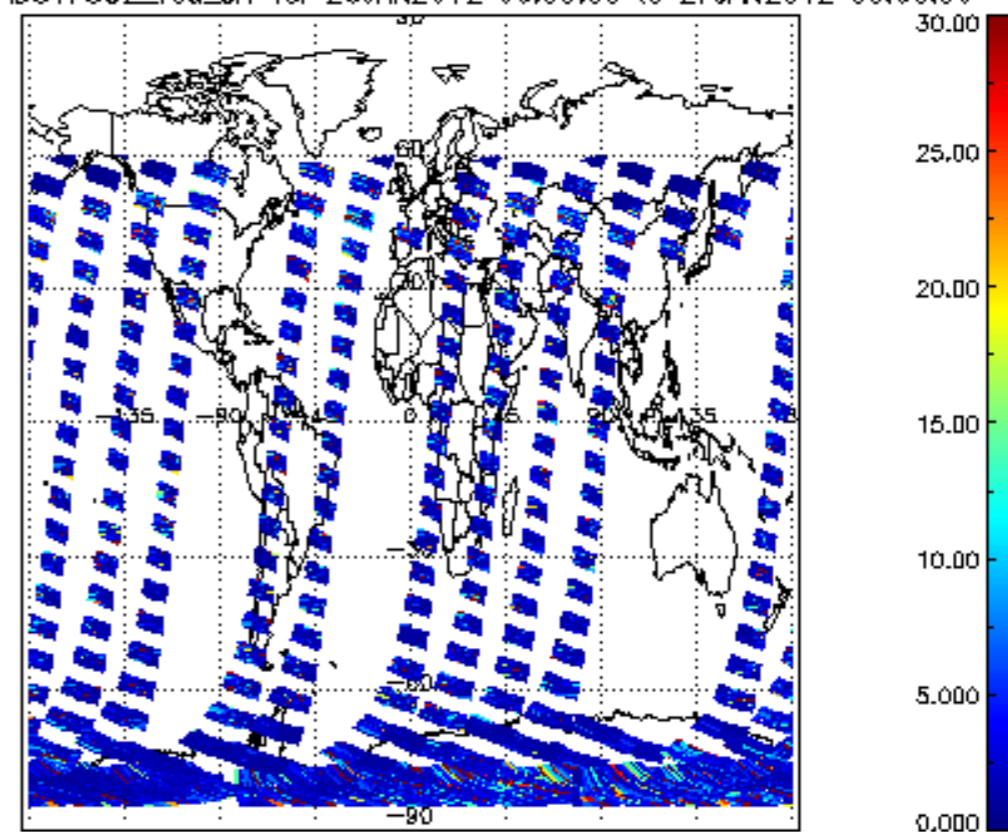




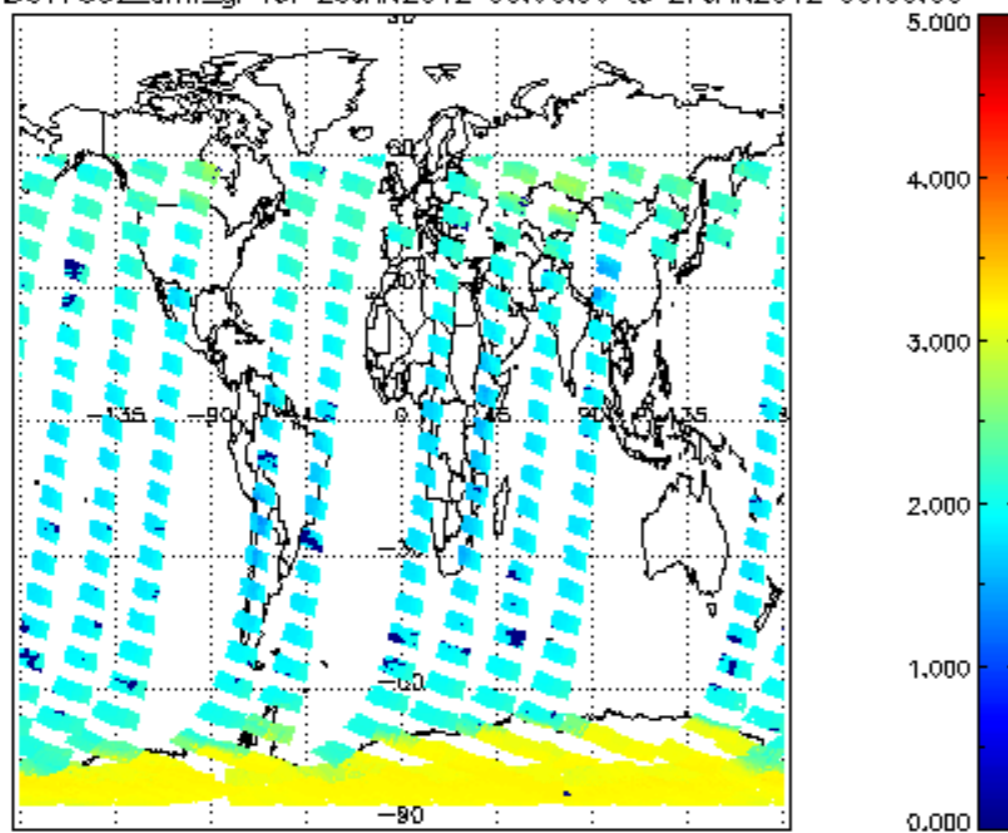
SCIOL2P\_NADUV7S02\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00



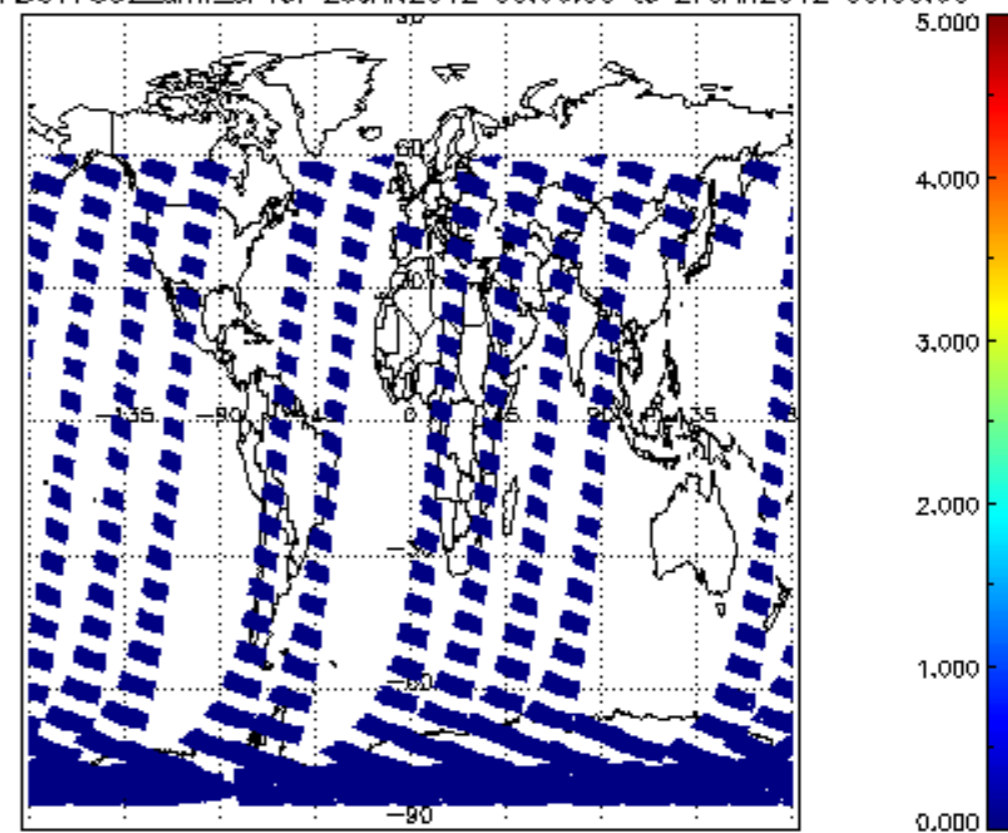
SCIOL2P\_NADUV7S02\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

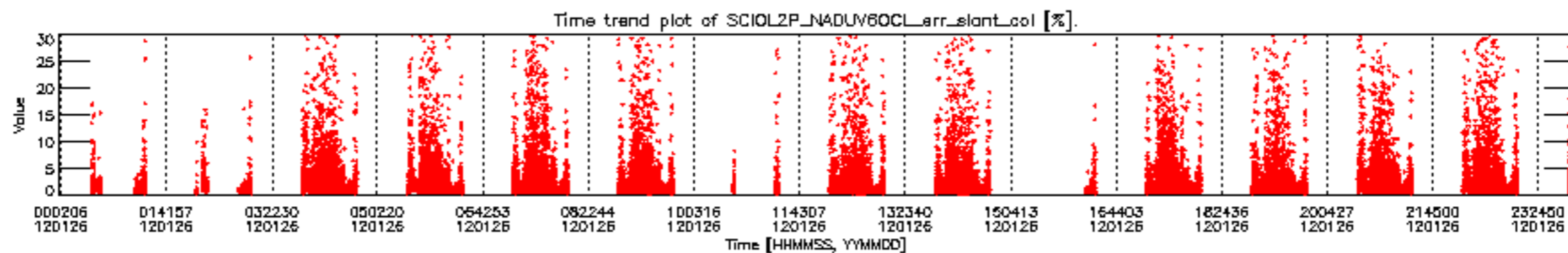
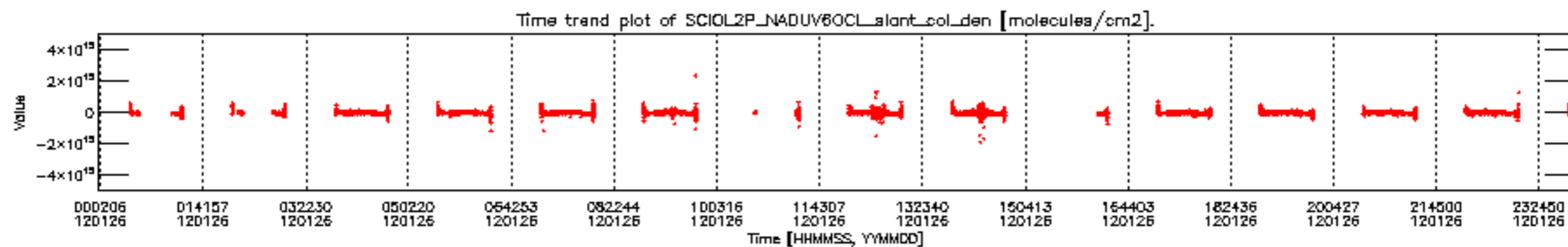


SCIOL2P\_NADUV7S02\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

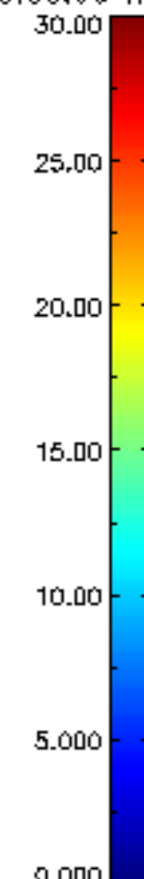
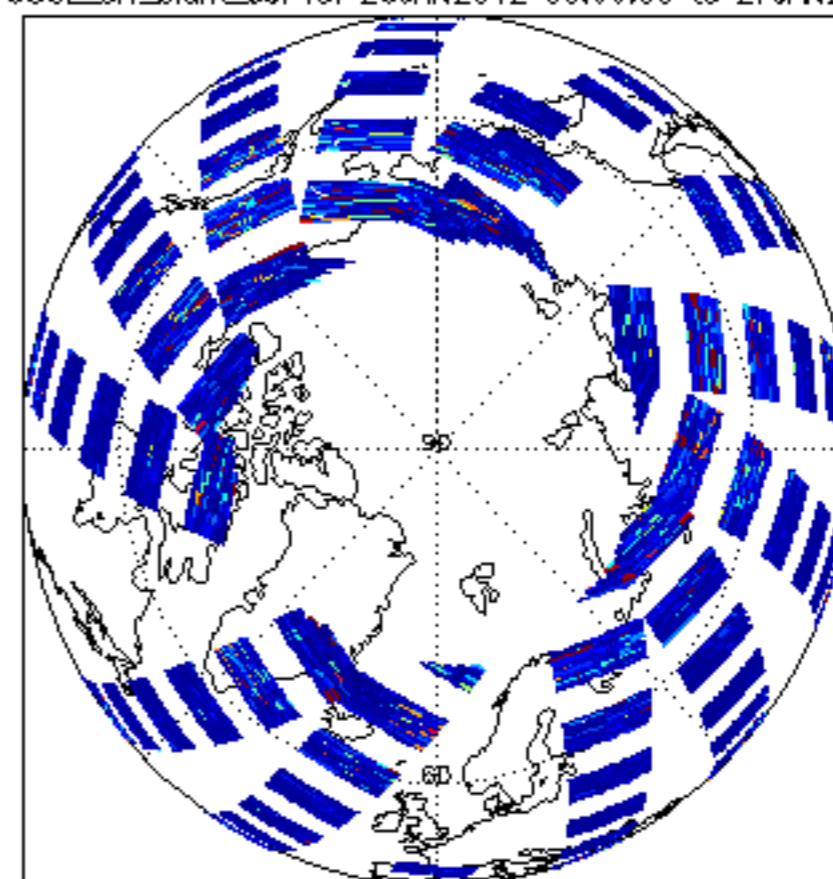
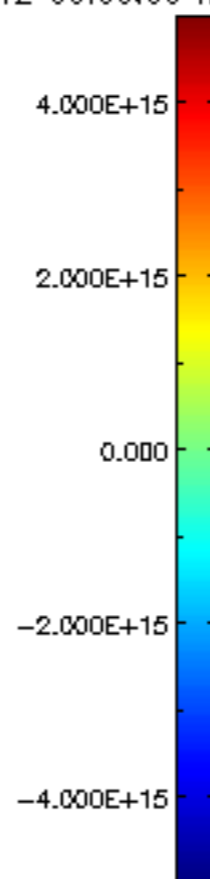
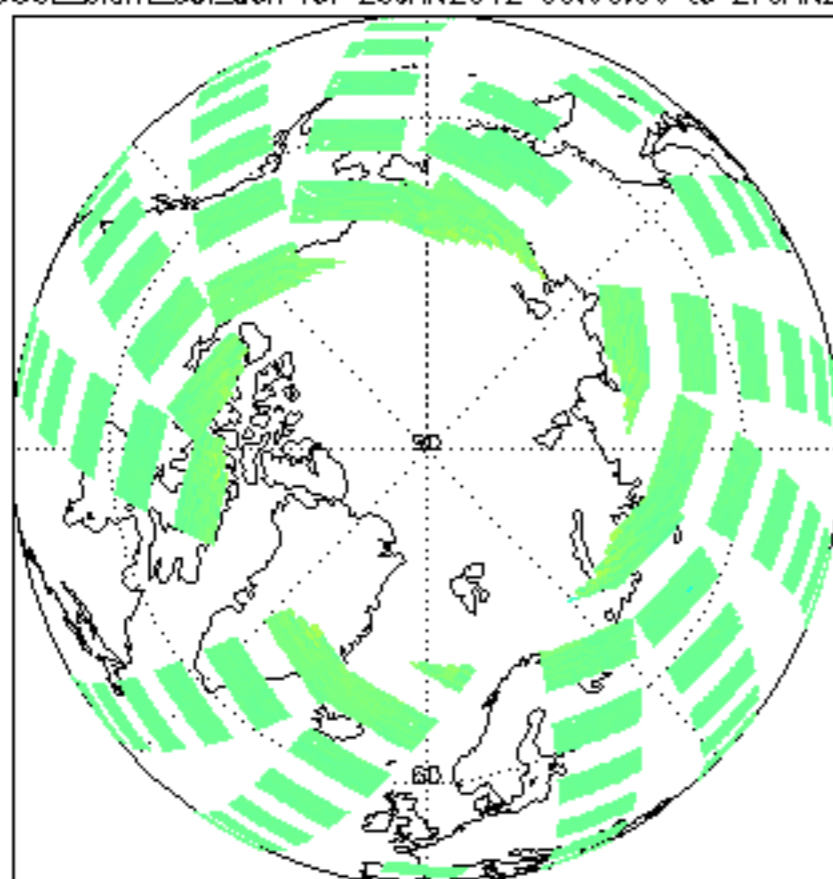


SCIOL2P\_NADUV7S02\_amf\_cl for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

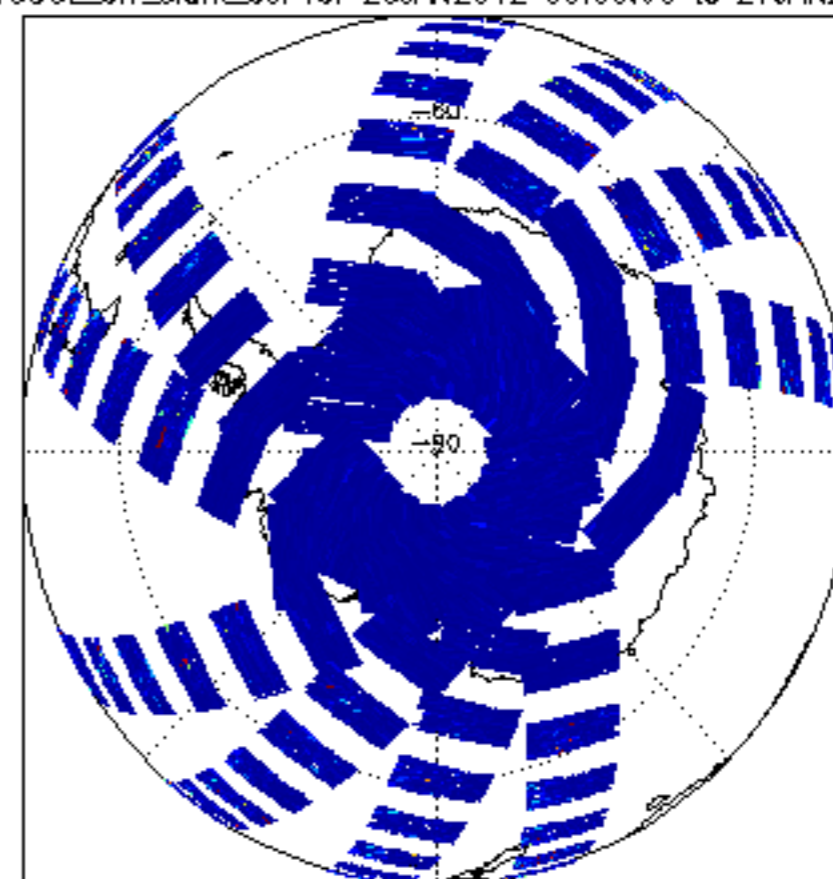
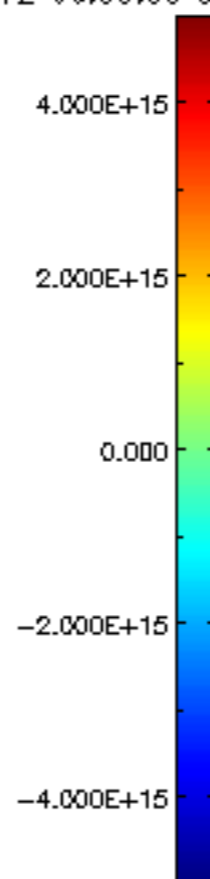
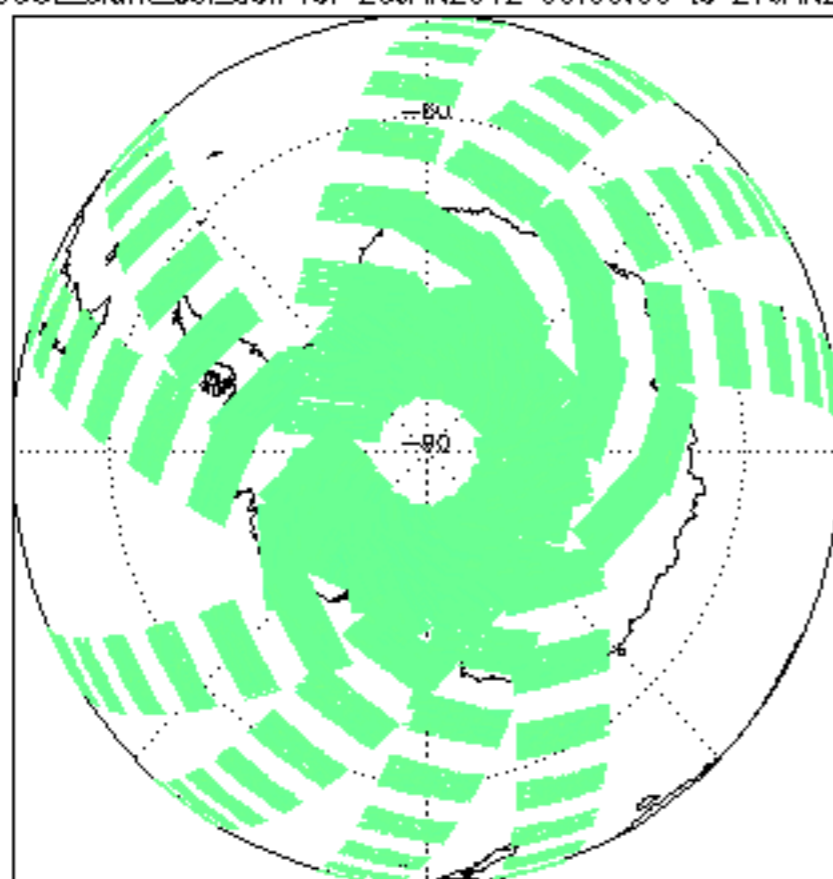




ICIOL2P\_NADUV6OCL\_slant\_col\_den for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 np;ICIOL2P\_NADUV6OCL\_err\_slant\_col for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 np

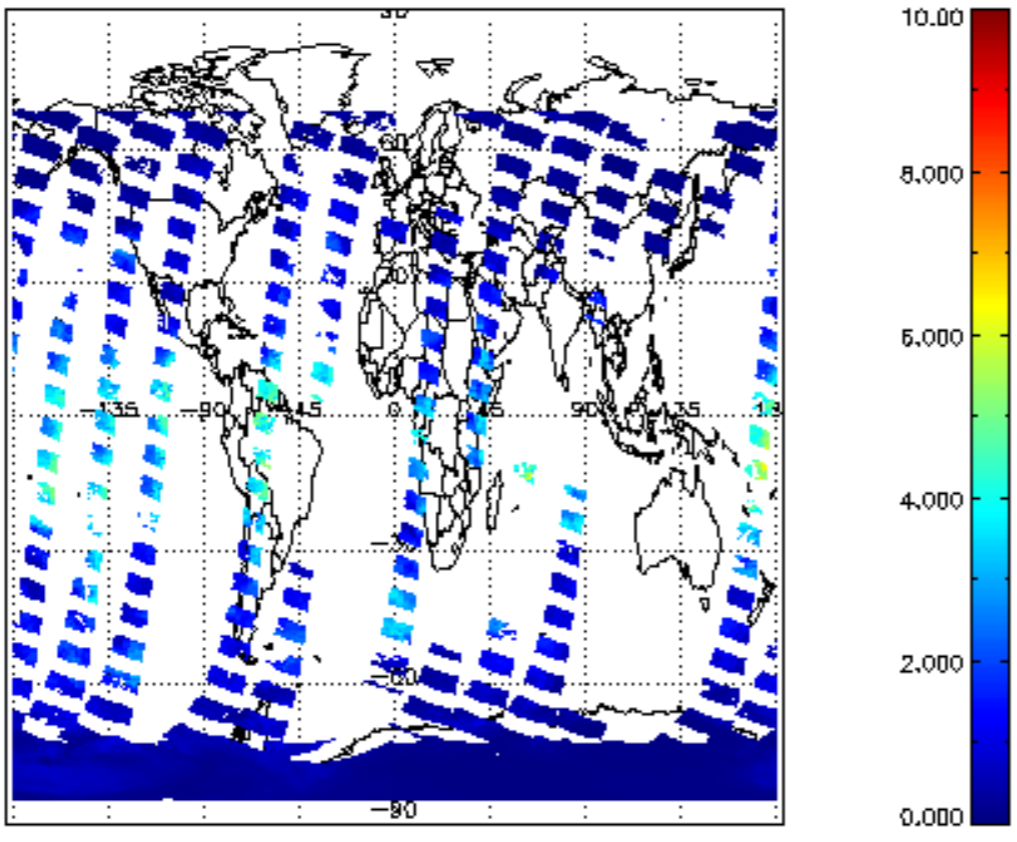


iCIOL2P\_NADUV6OCL\_slant\_col\_den for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 sp iCIOL2P\_NADUV6OCL\_err\_slant\_col for 26JAN2012 00:00:00 to 27JAN2012 00:00:00 sp

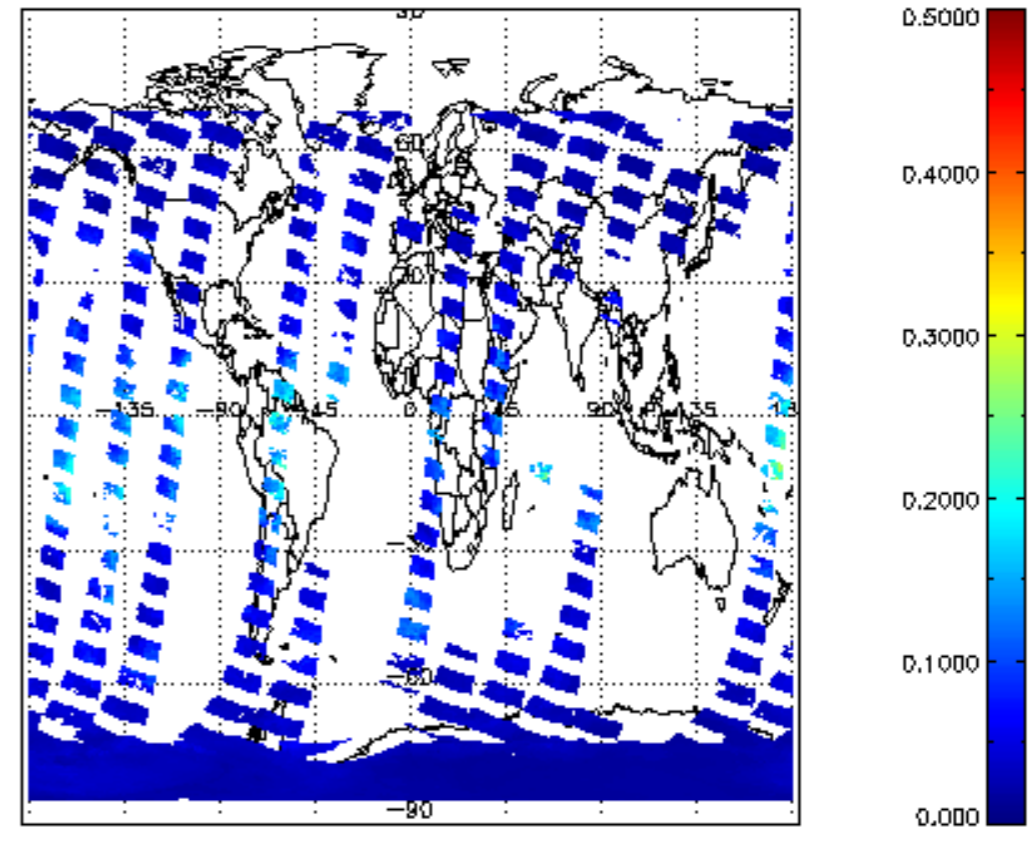




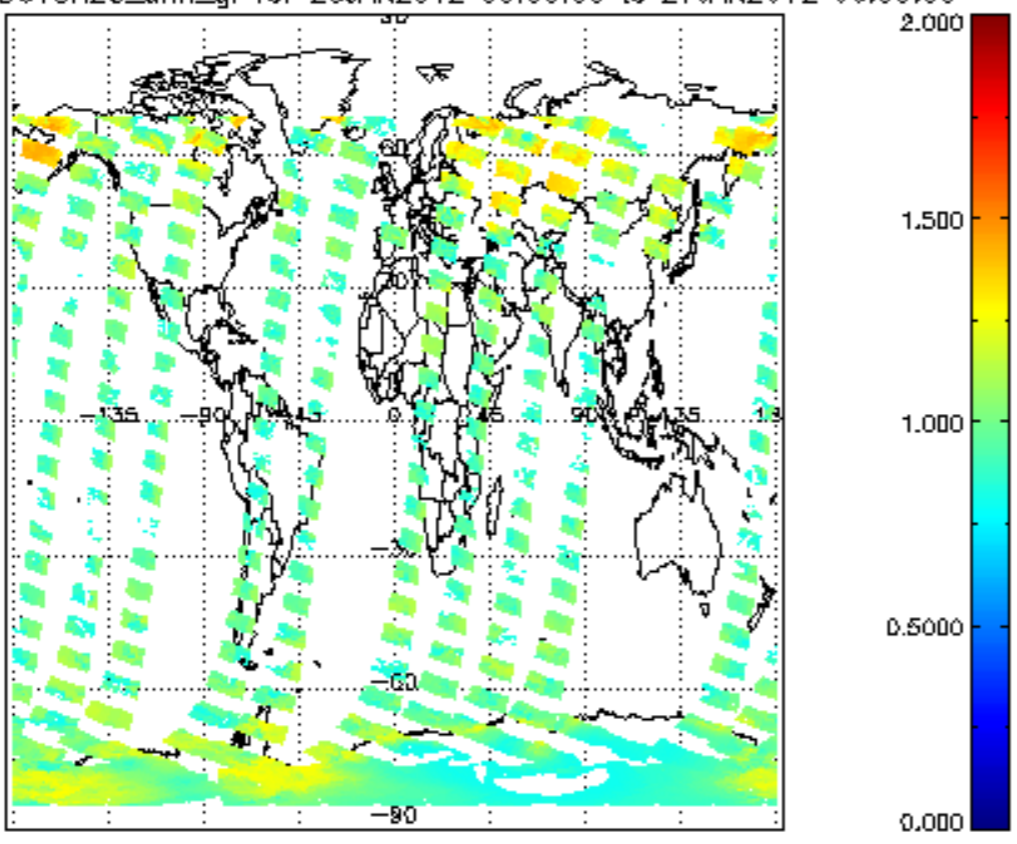
SCIOL2P\_NADUVBH20\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

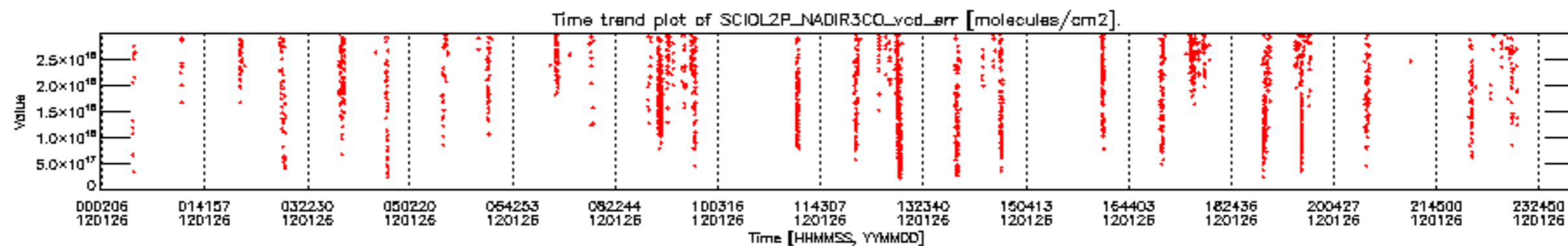
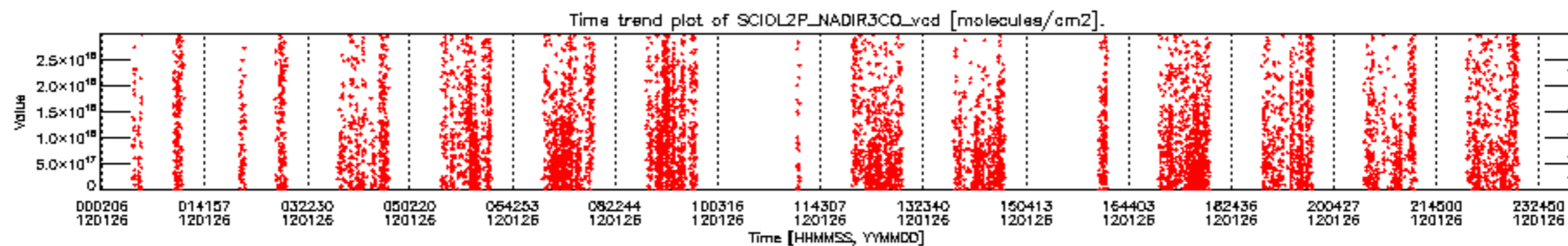


SCIOL2P\_NADUVBH20\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

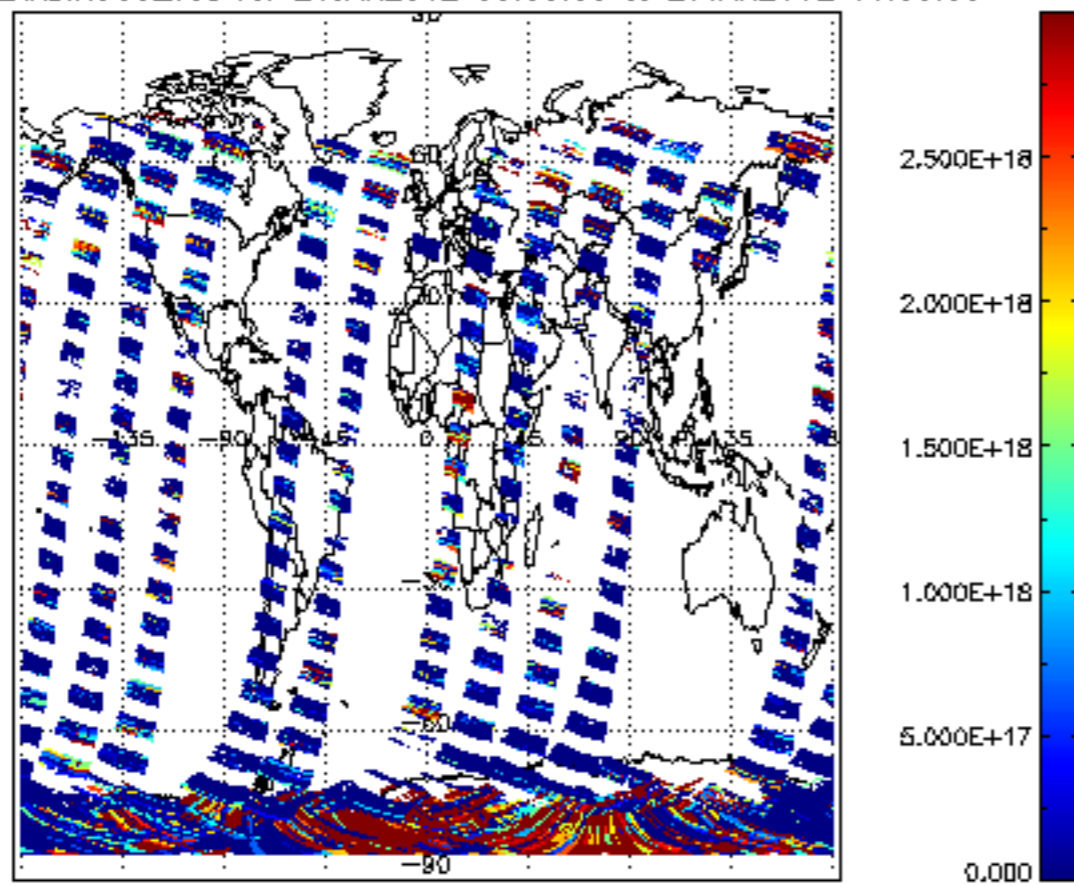


SCIOL2P\_NADUVBH20\_amf\_gr for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

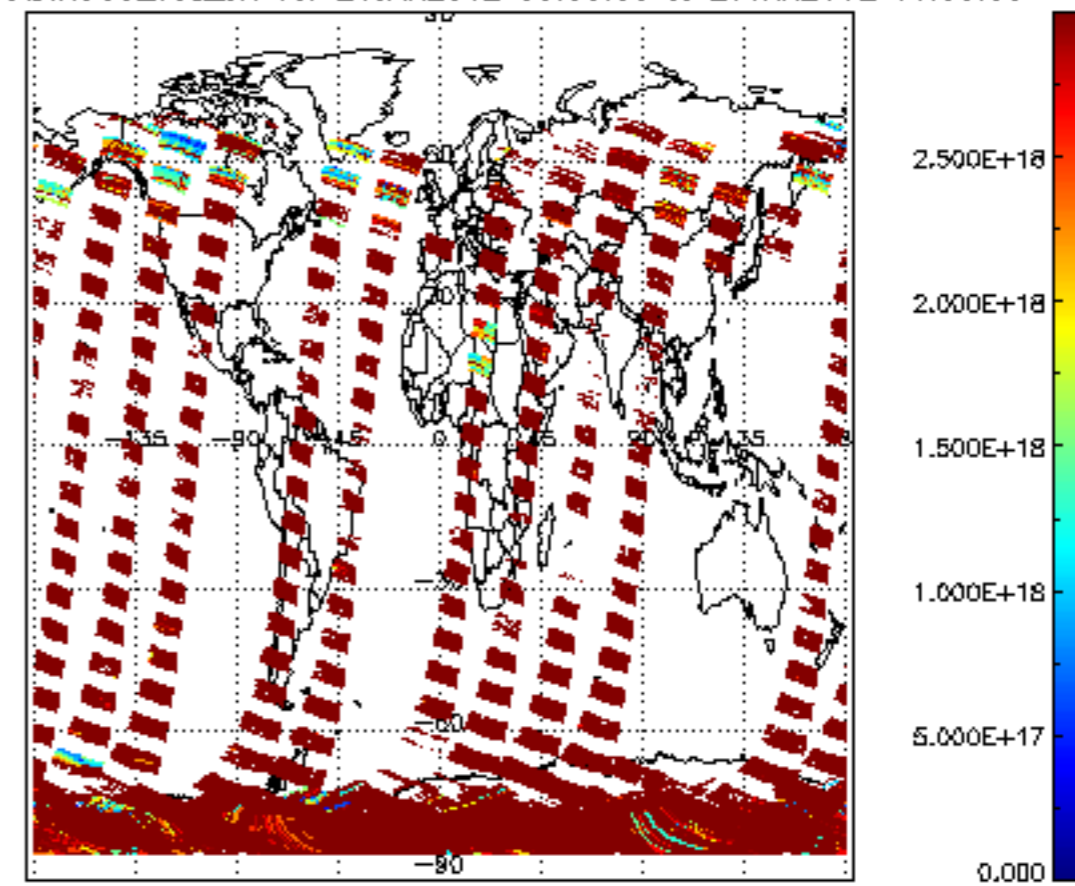




SCIOL2P\_NADIR3CO\_vcd for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

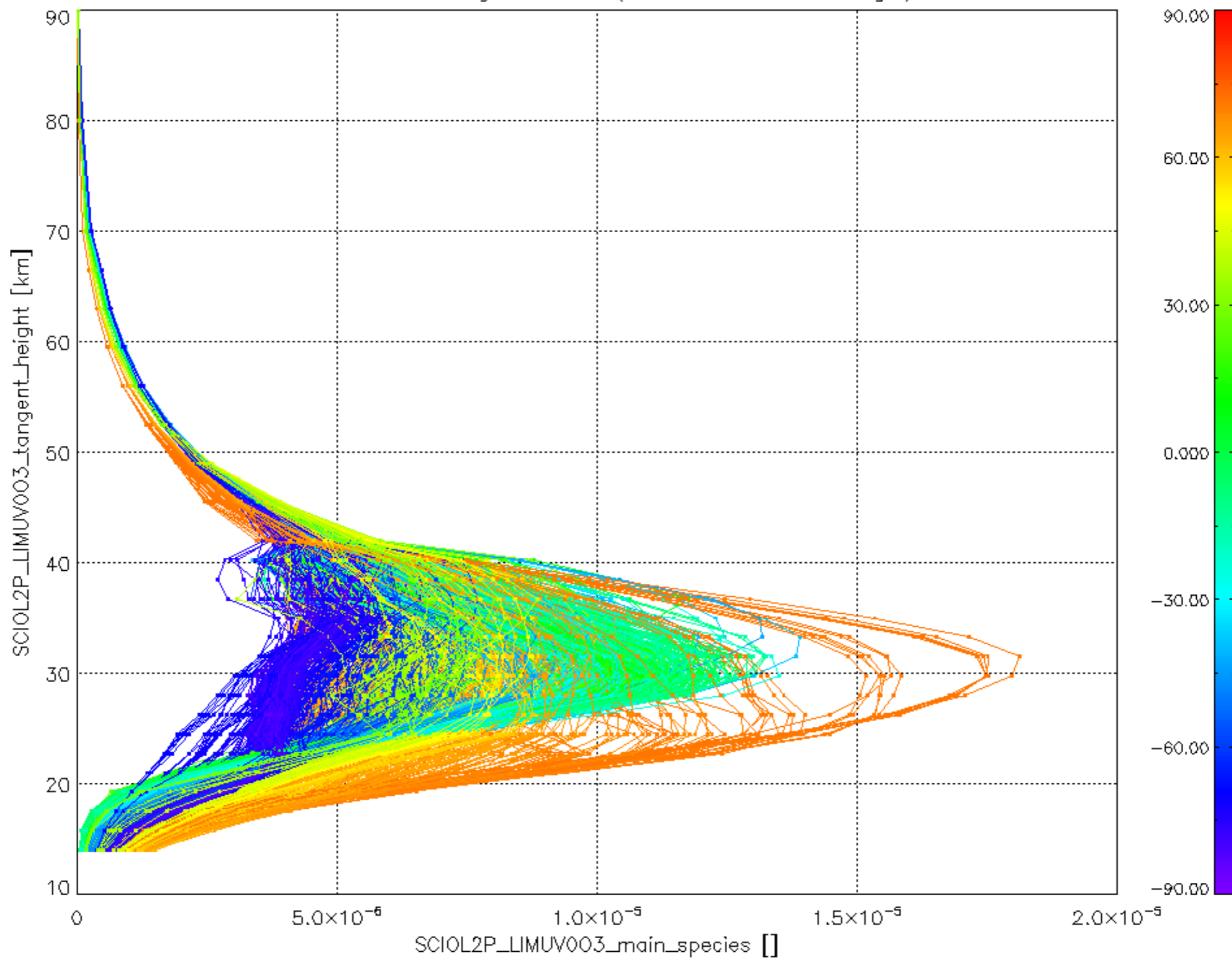


SCIOL2P\_NADIR3CO\_vcd\_err for 26JAN2012 00:00:00 to 27JAN2012 00:00:00

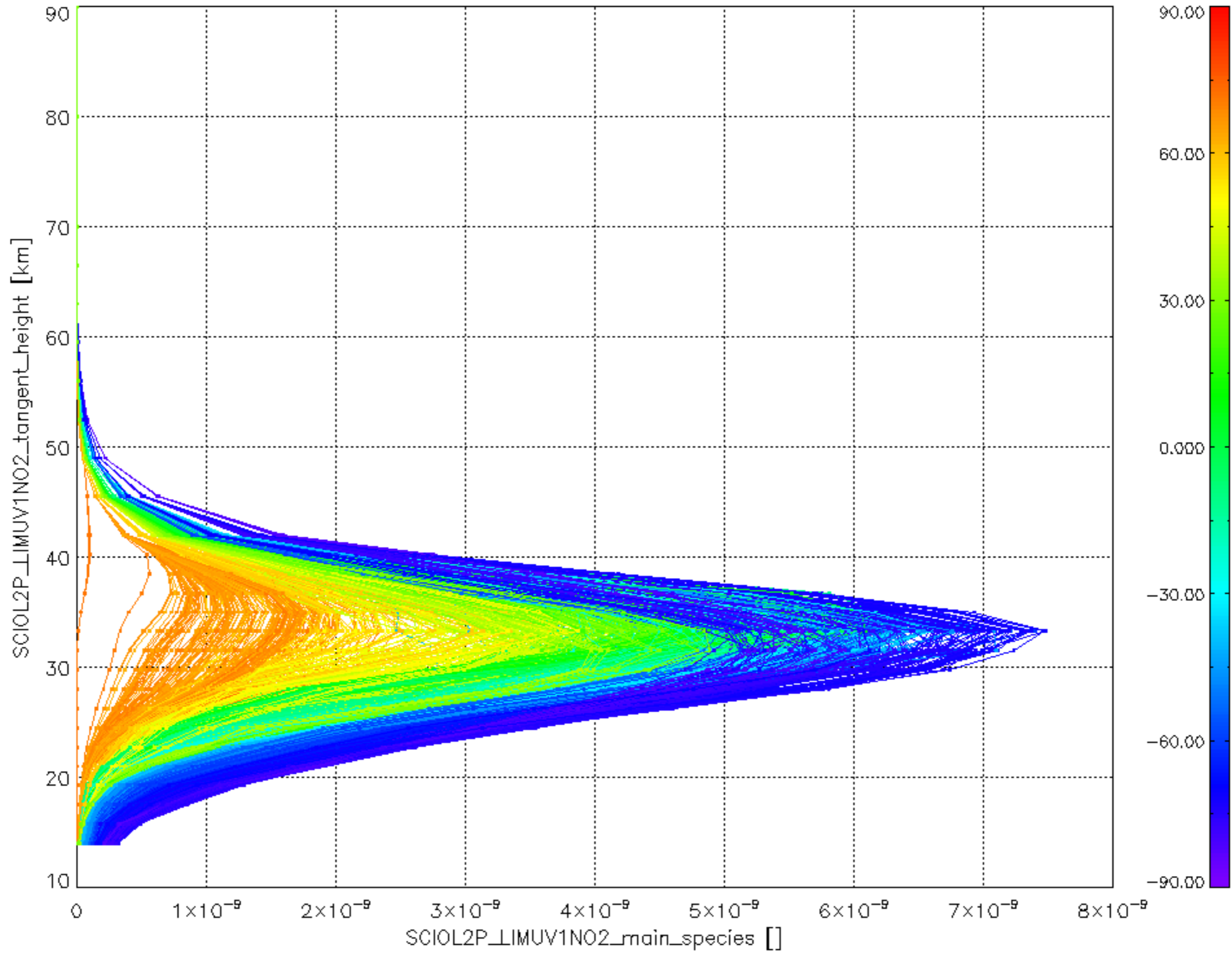




Plot of SCIOL2P\_LIMUV003\_main\_species.tang\_vmr vs. tangent height.  
 Colours indicate tangent latitude (see colour bar on the right).



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).

