

## 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	30SEP2011 03:02:07
Data source version	SCIA-OL/5.01-U
Processing scope for products	17SEP2011 00:00:00 to 18SEP2011 00:00:00
Start time of first product within scope	16SEP2011 22:43:53
Stop time of last product within scope	18SEP2011 00:42:37
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__2PUDPA20110916_224353_000033383106_00346_49929_6577.N1</a>	16SEP2011 22:43:53	16SEP2011 23:39:31	0	GOOD
1	<a href="#">SCI_OL__2PUDPA20110917_002516_000032823106_00347_49930_6578.N1</a>	17SEP2011 00:25:16	17SEP2011 01:19:59	0	GOOD
2	<a href="#">SCI_OL__2PUDPA20110917_020039_000035843106_00348_49931_6579.N1</a>	17SEP2011 02:00:39	17SEP2011 03:00:23	0	GOOD
3	<a href="#">SCI_OL__2PUDPA20110917_034053_000035303106_00349_49932_6580.N1</a>	17SEP2011 03:40:53	17SEP2011 04:39:44	0	GOOD
4	<a href="#">SCI_OL__2PUDPA20110917_052108_000035843106_00350_49933_6581.N1</a>	17SEP2011 05:21:08	17SEP2011 06:20:52	0	GOOD

5	SCI_OL__2PUDPA20110917_070122_000035303106_00351_49934_6582.N1	17SEP2011 07:01:22	17SEP2011 08:00:13	0	GOOD
6	SCI_OL__2PUDPA20110917_084137_000035843106_00352_49935_6583.N1	17SEP2011 08:41:37	17SEP2011 09:41:21	0	GOOD
7	SCI_OL__2PUDPA20110917_102151_000035303106_00353_49936_6584.N1	17SEP2011 10:21:51	17SEP2011 11:20:42	0	GOOD
8	SCI_OL__2PUDPA20110917_120206_000035843106_00354_49937_6585.N1	17SEP2011 12:02:06	17SEP2011 13:01:50	0	GOOD
9	SCI_OL__2PUDPA20110917_134220_000035303106_00355_49938_6586.N1	17SEP2011 13:42:20	17SEP2011 14:41:10	0	GOOD
10	SCI_OL__2PUDPA20110917_152234_000035843106_00356_49939_6587.N1	17SEP2011 15:22:34	17SEP2011 16:22:19	0	GOOD
11	SCI_OL__2PUDPA20110917_170249_000035303106_00357_49940_6588.N1	17SEP2011 17:02:49	17SEP2011 18:01:40	0	GOOD
12	SCI_OL__2PUDPA20110917_184316_000035163106_00358_49941_6589.N1	17SEP2011 18:43:16	17SEP2011 19:41:53	0	GOOD
13	SCI_OL__2PUDPA20110917_202331_000035303106_00359_49942_6590.N1	17SEP2011 20:23:31	17SEP2011 21:22:22	0	GOOD
14	SCI_OL__2PUDPA20110917_220333_000035843106_00360_49943_6591.N1	17SEP2011 22:03:33	17SEP2011 23:03:17	0	GOOD
15	SCI_OL__2PUDPA20110917_234347_000035303106_00361_49944_6592.N1	17SEP2011 23:43:47	18SEP2011 00:42:37	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: 168740

Total number of cloud data DSRs with good quality flag (=0): 168740 (100.0 %)

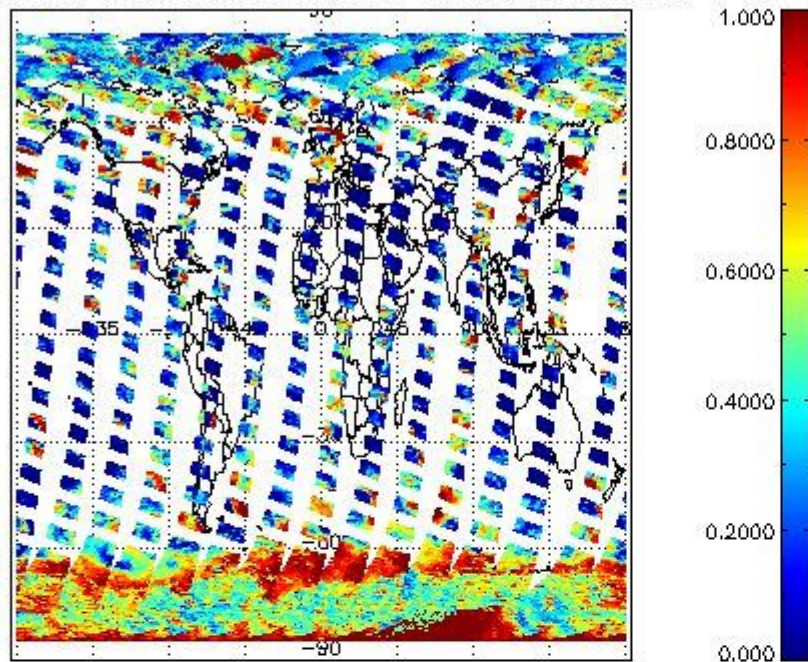
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	168740	0.0000	0.0000	0.0000	0.0000	0.0000	
INTEGR_TIME	168740	0.16410	0.12500	0.12500	0.25000	0.057954	s
CL_FRAC	168740	0.45108	0.43711	0.0000	1.0000	0.32618	
CL_FRAC_ERR	168740	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	168740	5.2512	4.0000	4.0000	8.0000	1.8545	
PMD_READ_CL[0]	168740	0.53109	0.0000	0.0000	8.0000	1.3423	-
PMD_READ_CL[1]	168740	1.2379	0.0000	0.0000	8.0000	2.5313	-
CL_TOP_HEIGHT	131683	3.6056	2.0287	0.0000	17.000	3.8579	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	131683	64.931	100.00	0.0000	101.00	41.773	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	168740	11100000	11100000	11100000	11100000	0.0000	
CLOUD_FLAGS	168740	11001101	11000100	11000000	11100000	3532.3	
AERO_ABSO_IND	168740	0.18560	0.0000	0.0000	6.4795	0.47352	
AERO_IND_DIAG	168740	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	168740	01010000	00000000	00000000	11000000	24255.	

#### Time and geolocation plots:

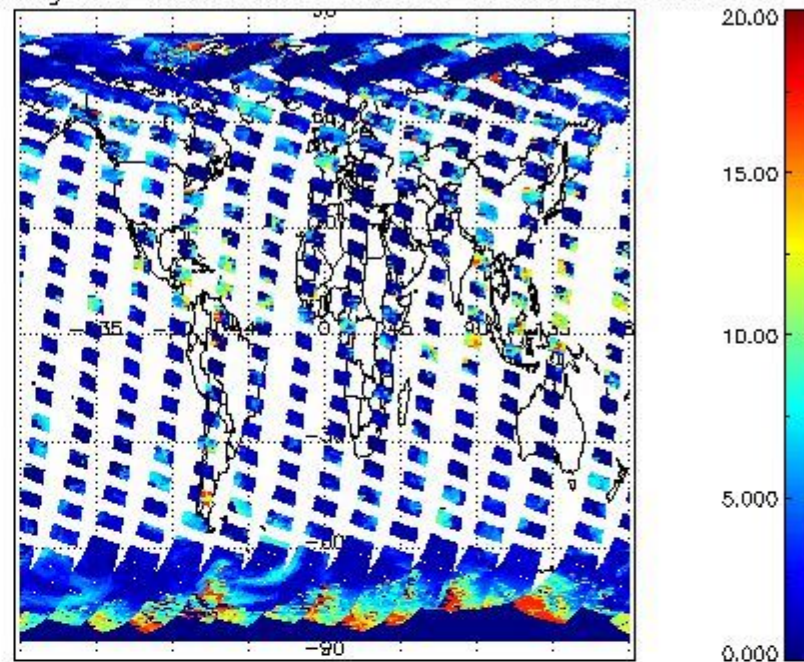
Plots are available for the following parameters:

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

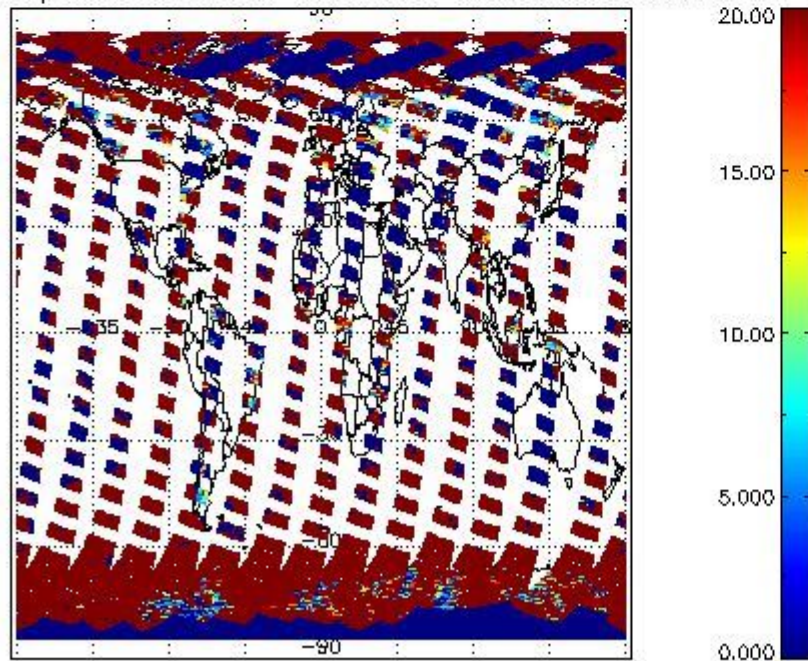
cL\_frac for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



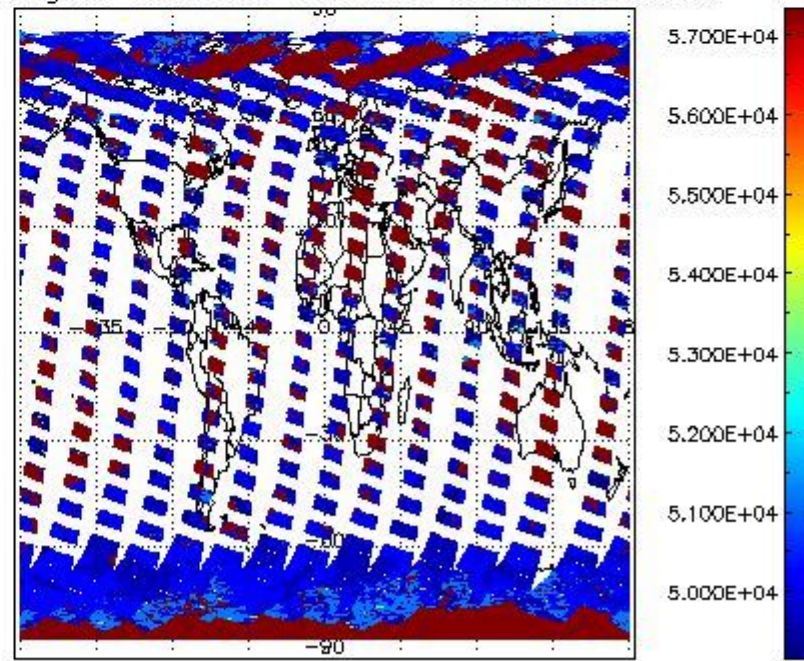
cL\_top\_height for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



cL\_opt\_depth for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



cloud\_flags for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



## 2.2.2 Nadir

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

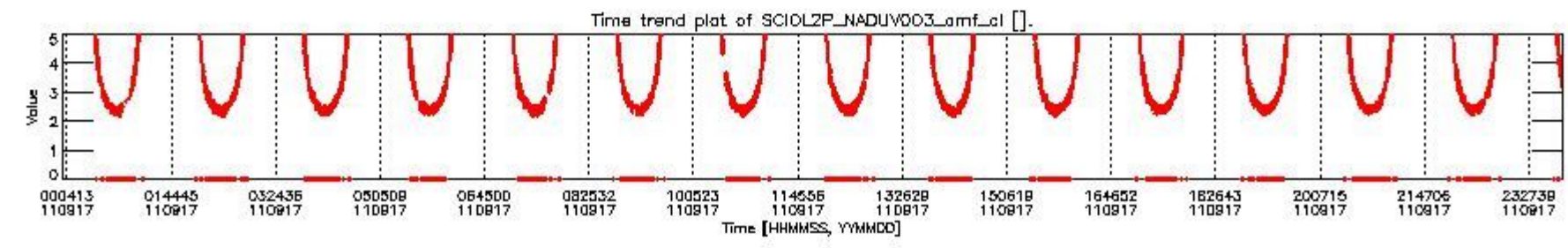
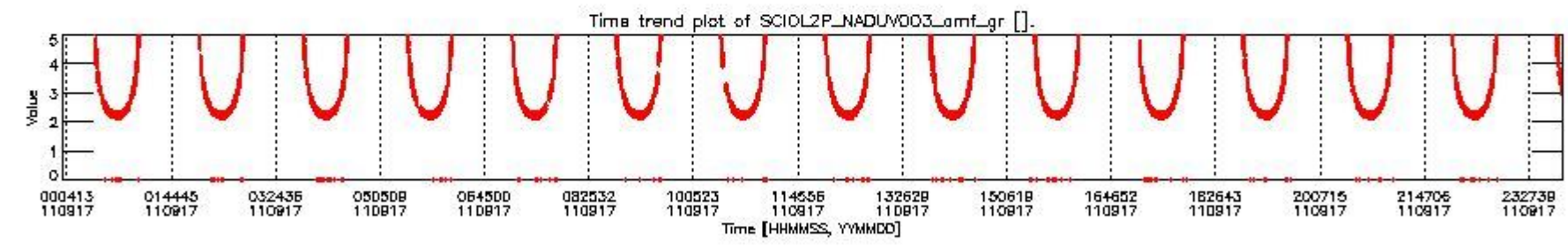
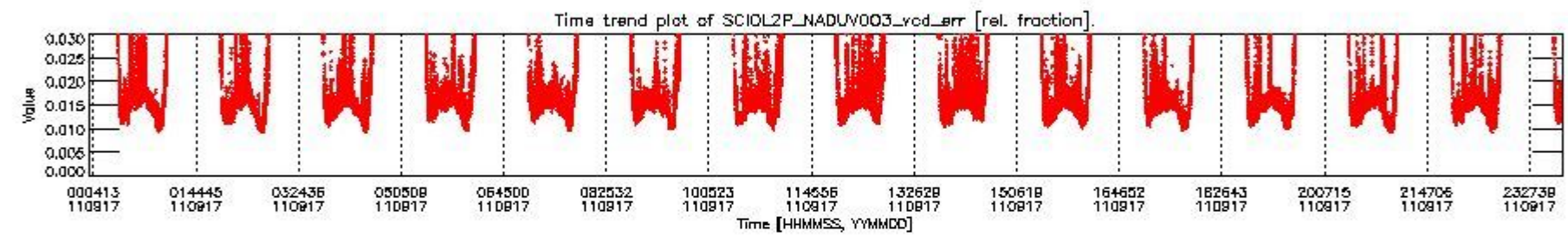
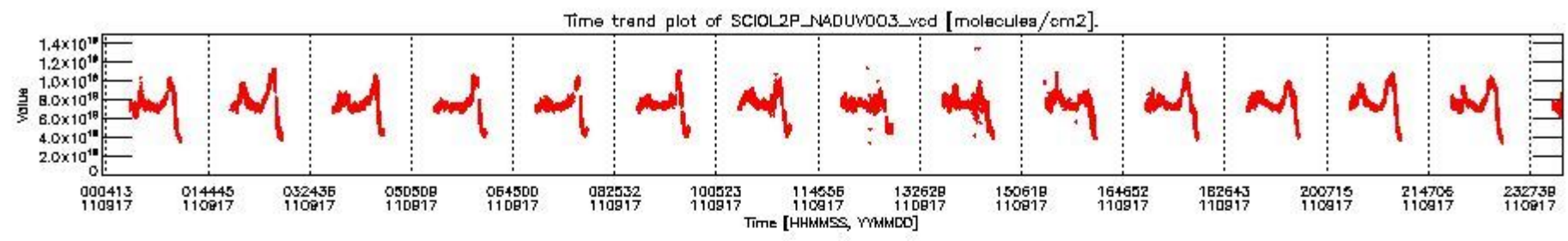
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

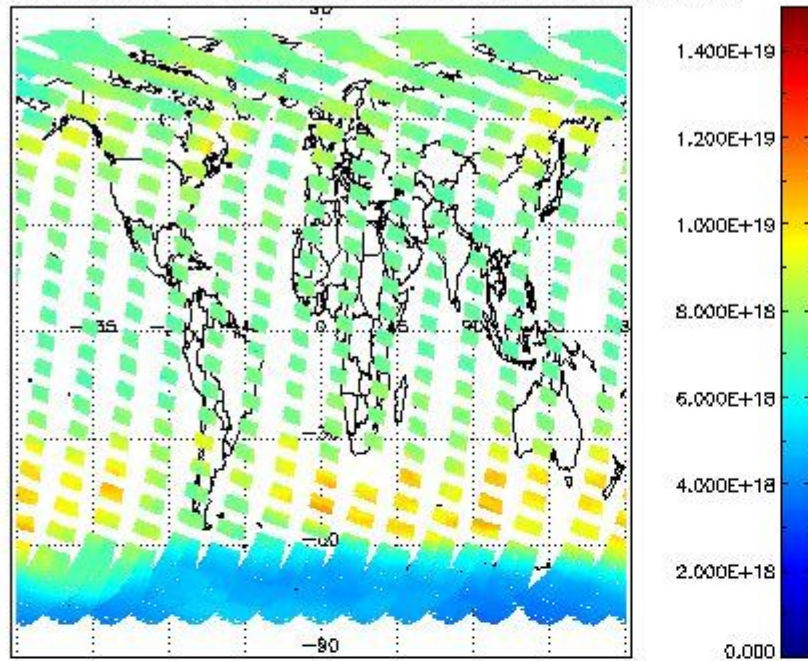
3	SCIOL2P_NADUV0O3_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl
8	SCIOL2P_NADUV3BRO_vcd
9	SCIOL2P_NADUV3BRO_vcd_err
10	SCIOL2P_NADUV3BRO_amf_gr
11	SCIOL2P_NADUV3BRO_amf_cl
12	SCIOL2P_NADUV5SO2_vcd
13	SCIOL2P_NADUV5SO2_vcd_err
14	SCIOL2P_NADUV5SO2_amf_gr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

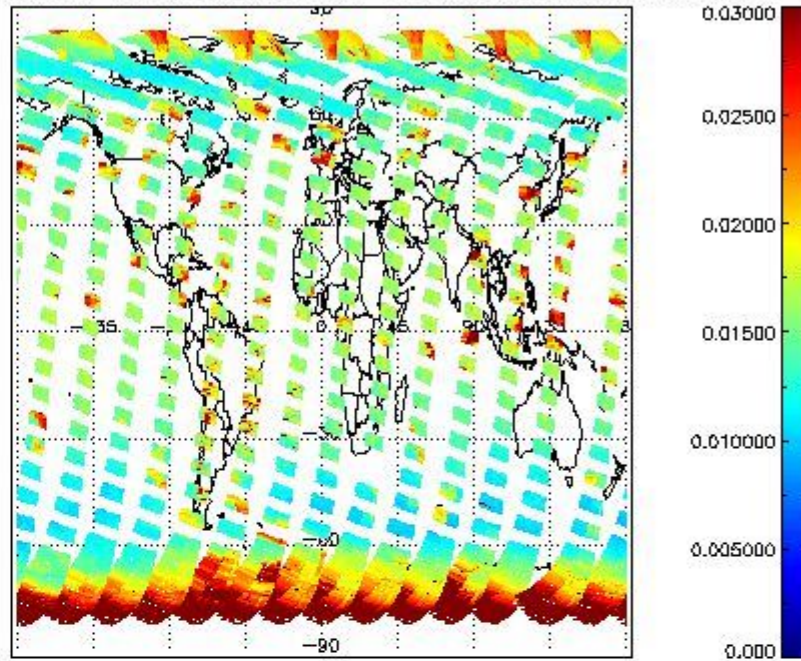
#### 2.2.2.1 O3 (UV0)



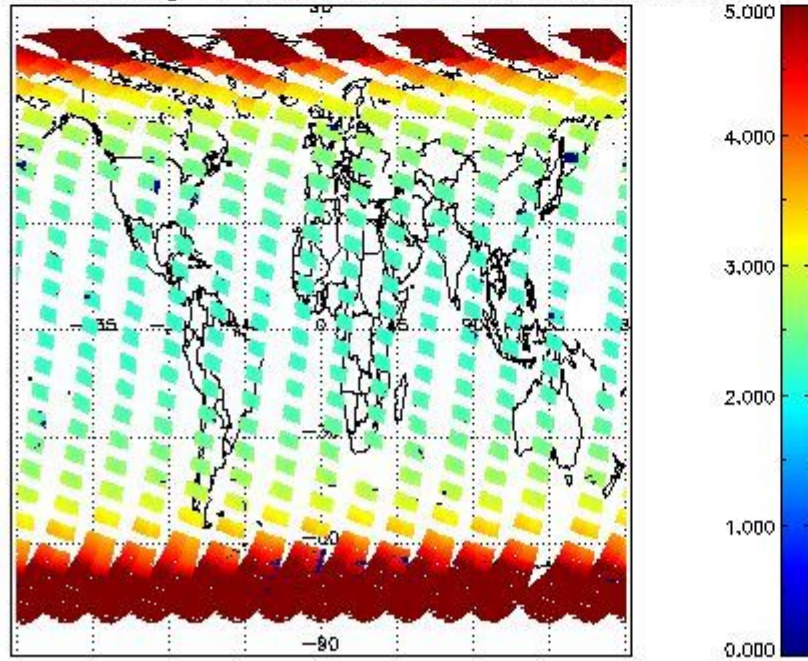
SCIOL2P\_NADUV003\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



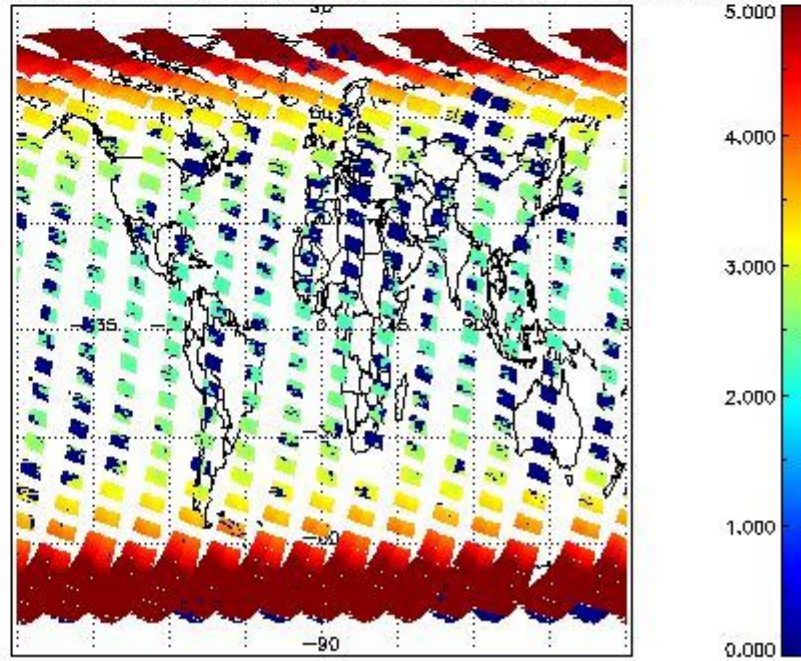
SCIOL2P\_NADUV003\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



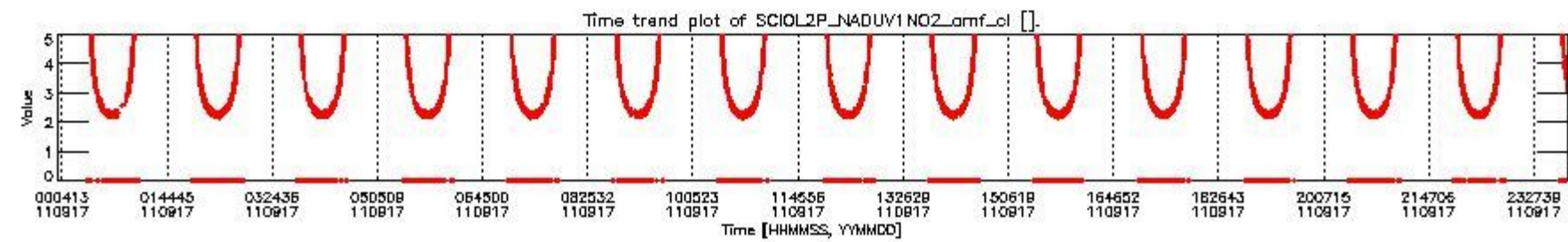
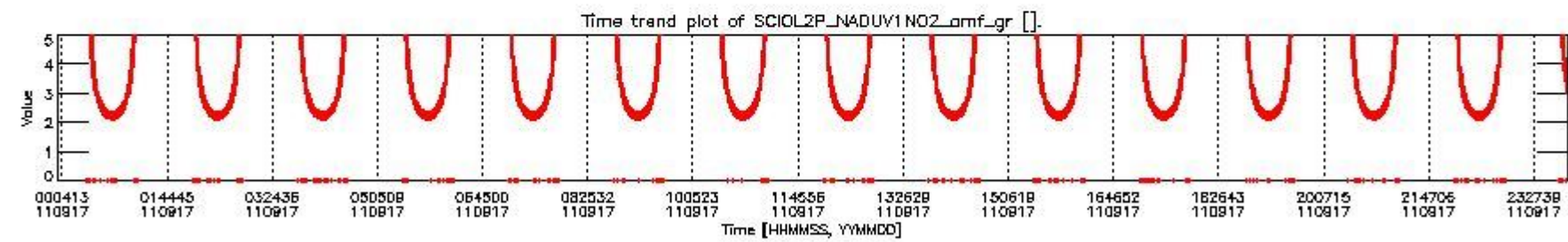
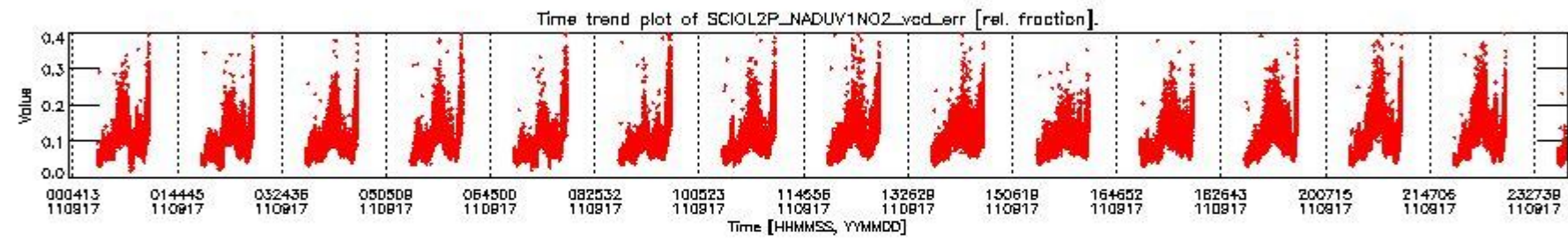
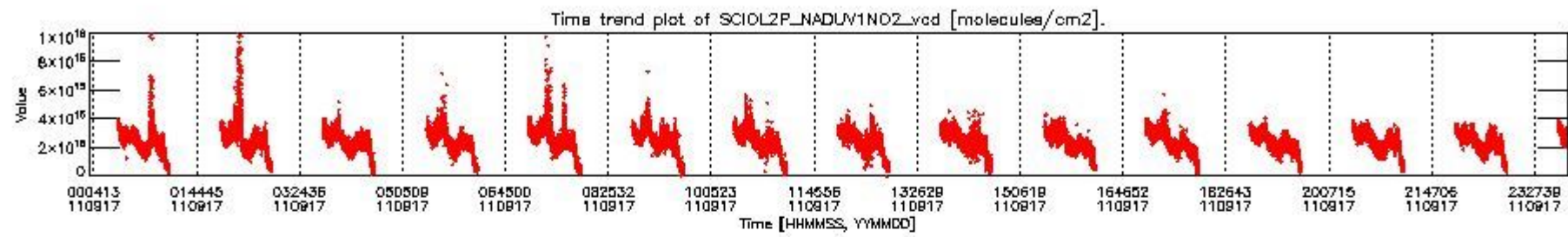
SCIOL2P\_NADUV003\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



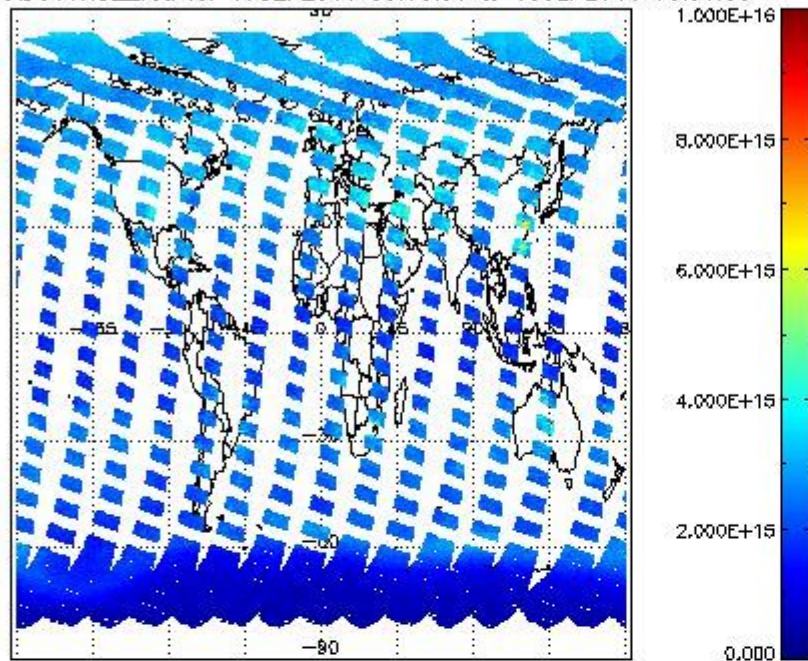
SCIOL2P\_NADUV003\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



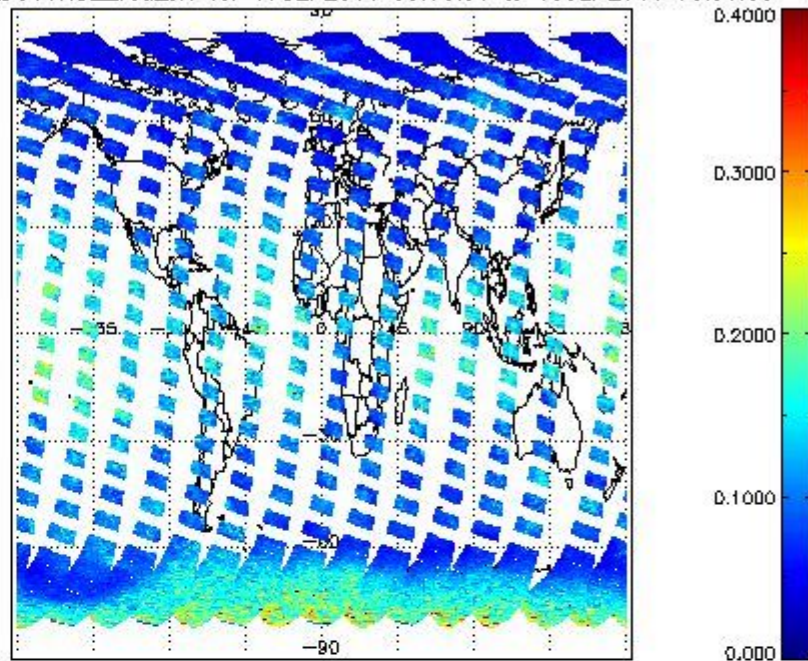
2.2.2.2 NO2 (UV1)



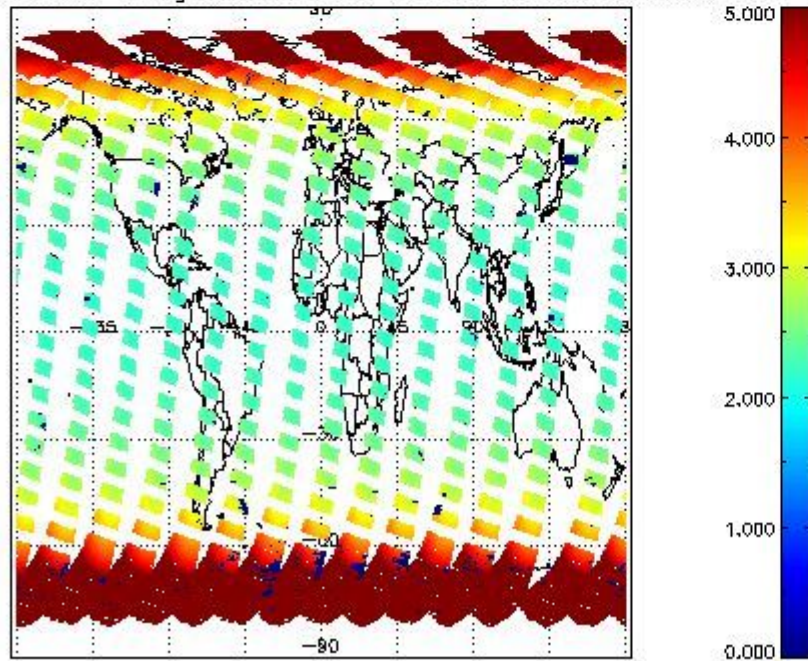
SCIOL2P\_NADUV1N02\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



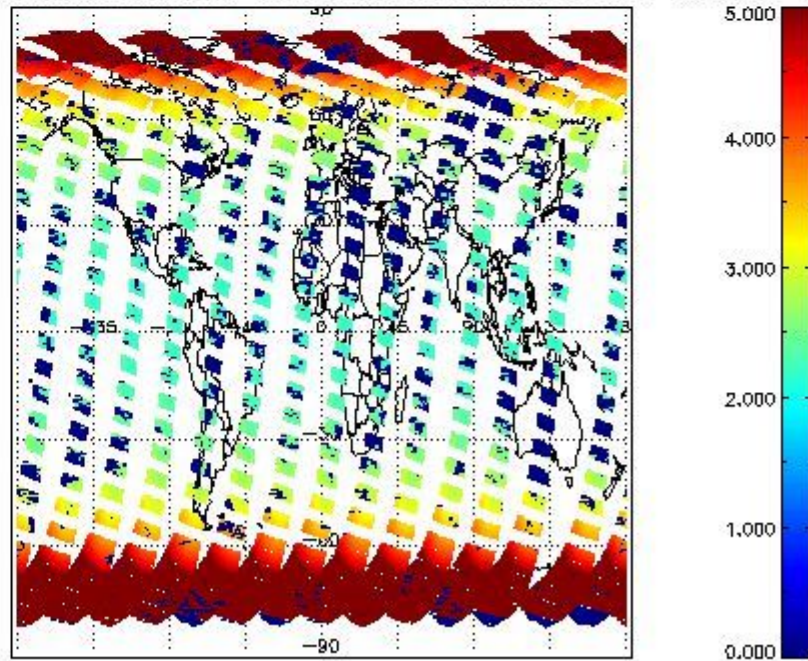
SCIOL2P\_NADUV1N02\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



SCIOL2P\_NADUV1N02\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

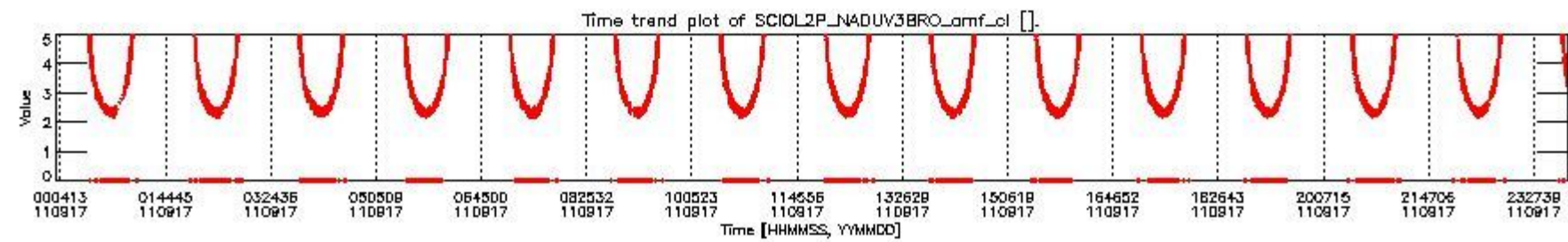
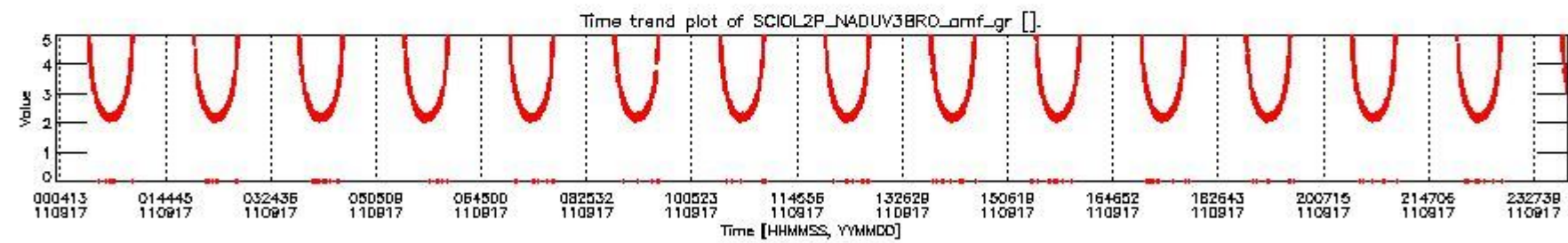
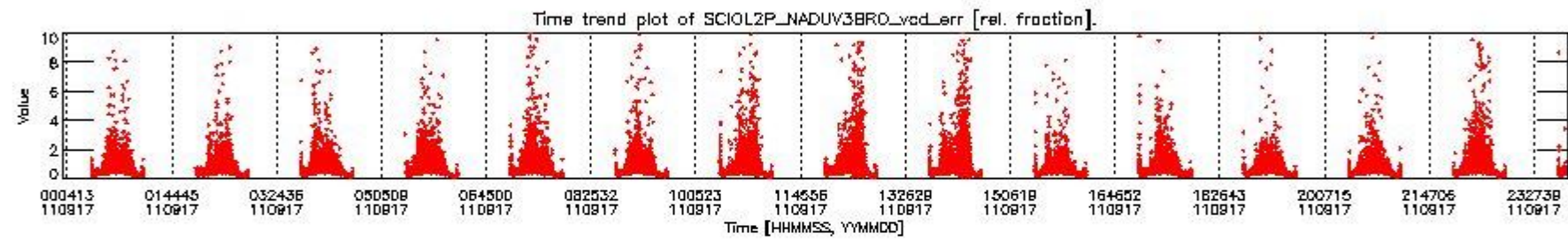
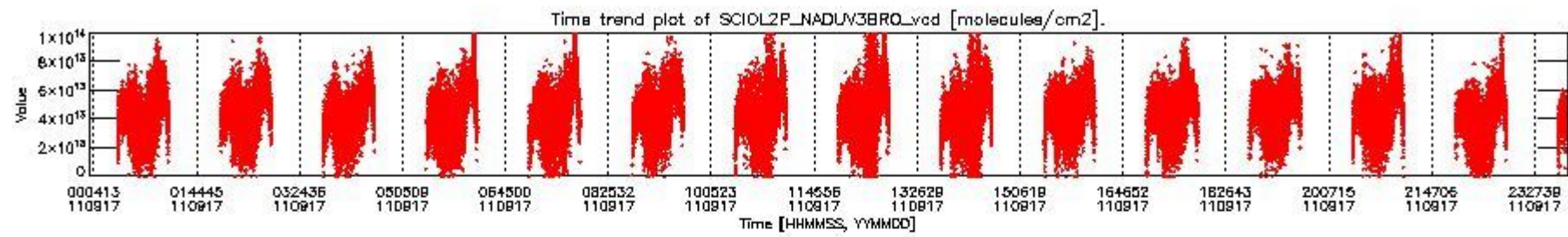


SCIOL2P\_NADUV1N02\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

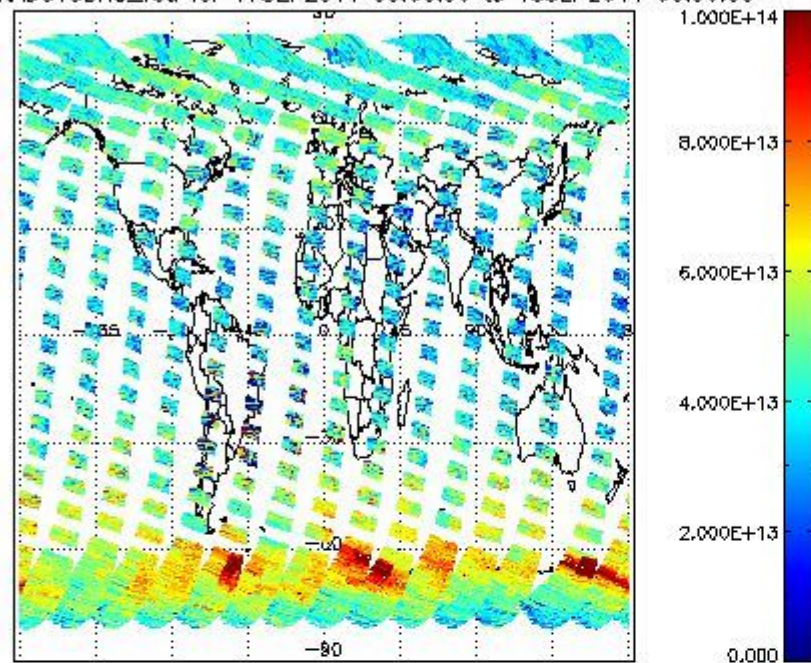


2.2.2.3 BrO (UV3)

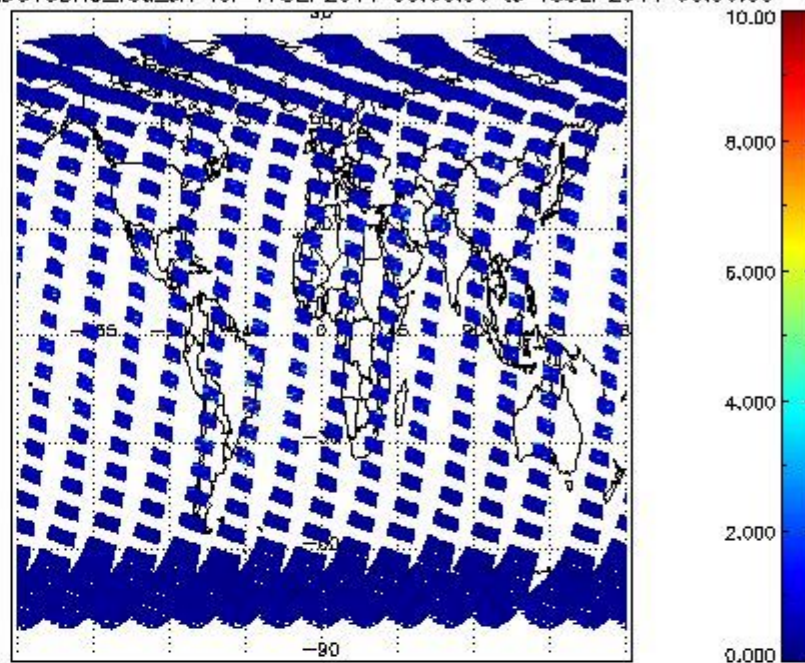




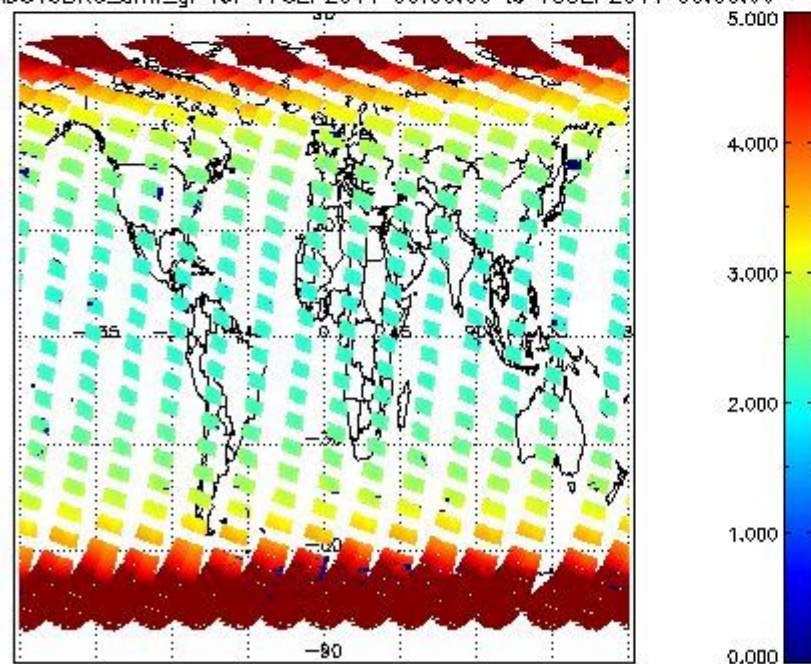
SCIOL2P\_NADUV3BRO\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



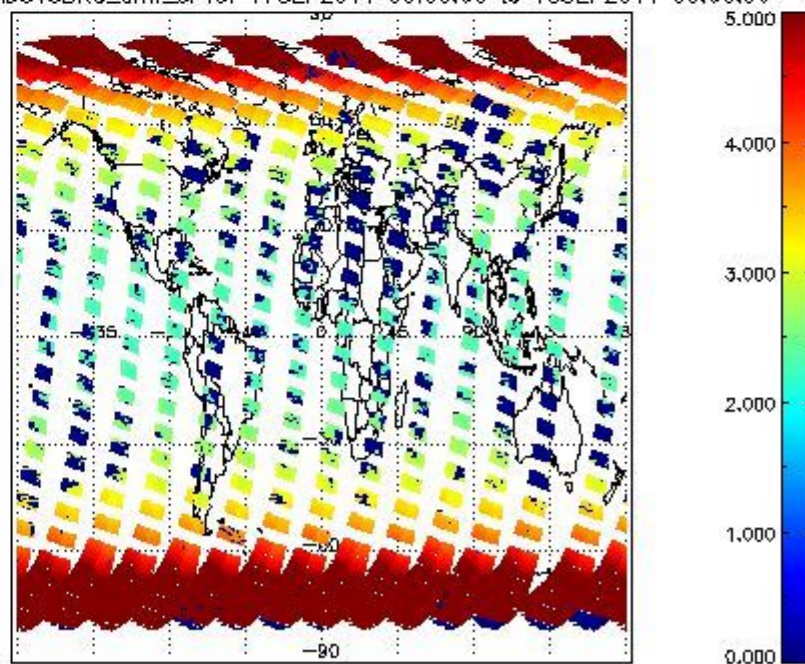
SCIOL2P\_NADUV3BRO\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



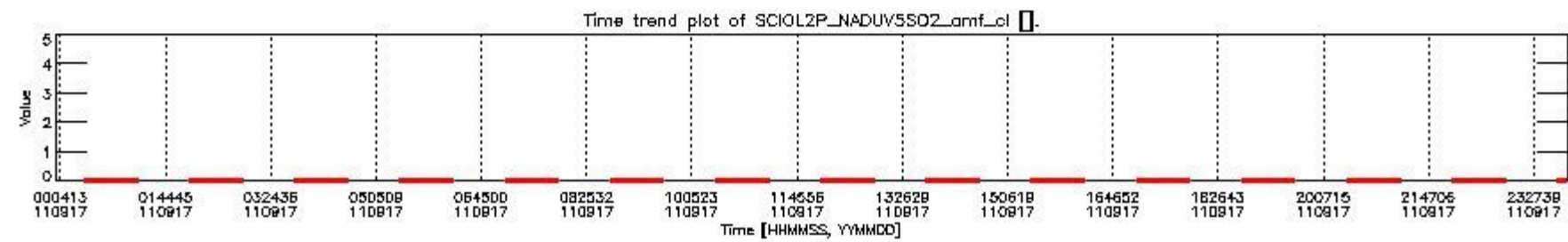
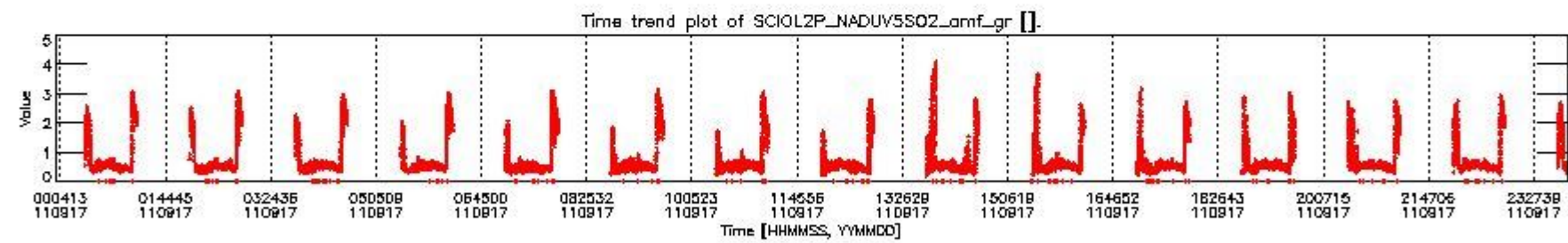
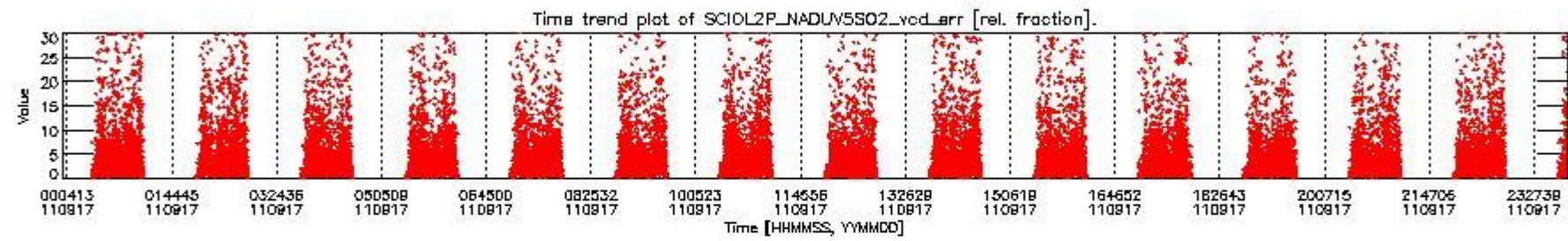
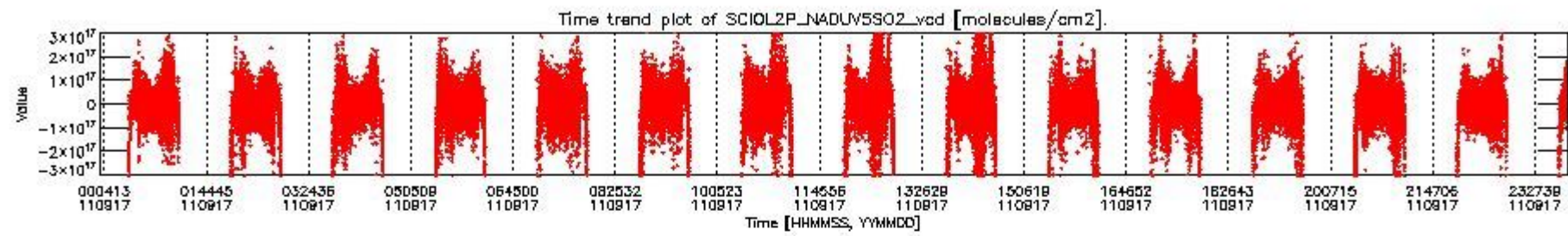
SCIOL2P\_NADUV3BRO\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



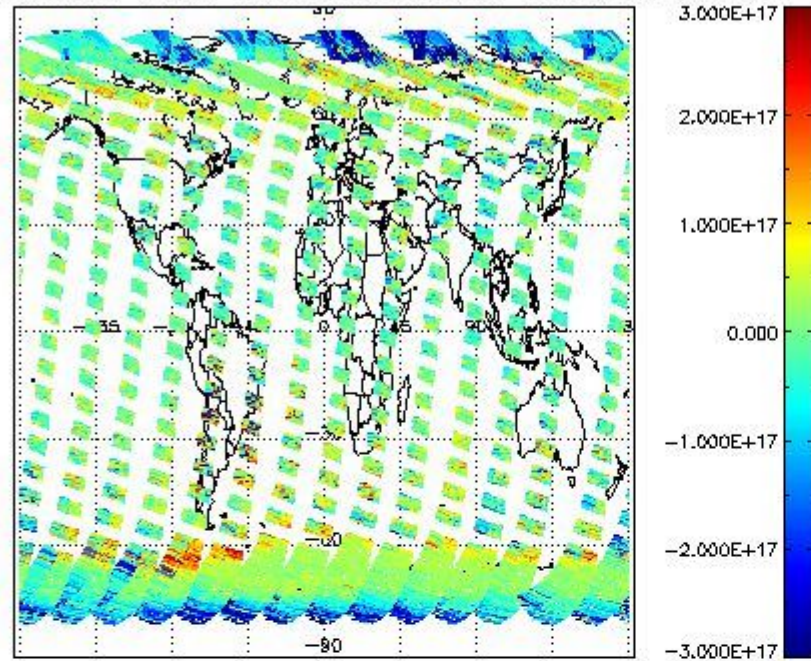
SCIOL2P\_NADUV3BRO\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



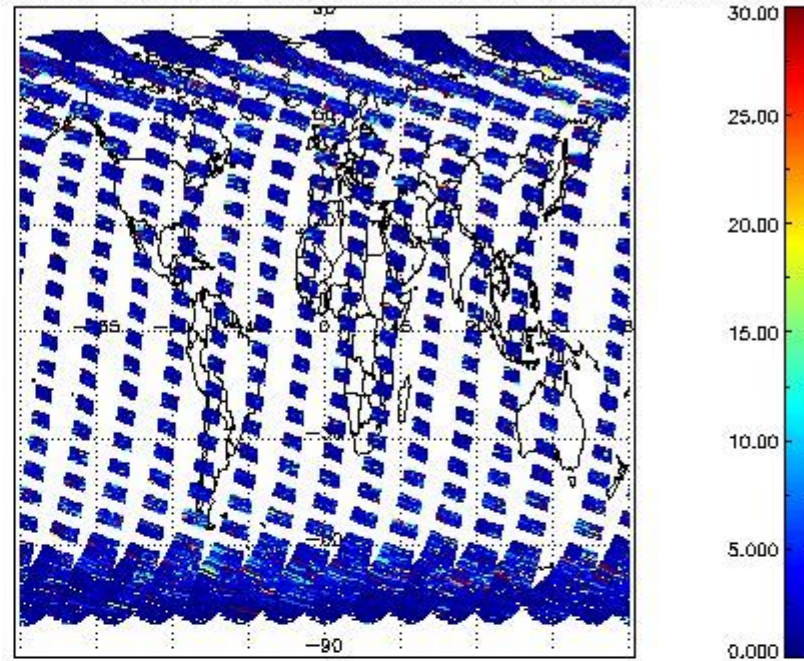
2.2.2.4 SO2 (UV5)



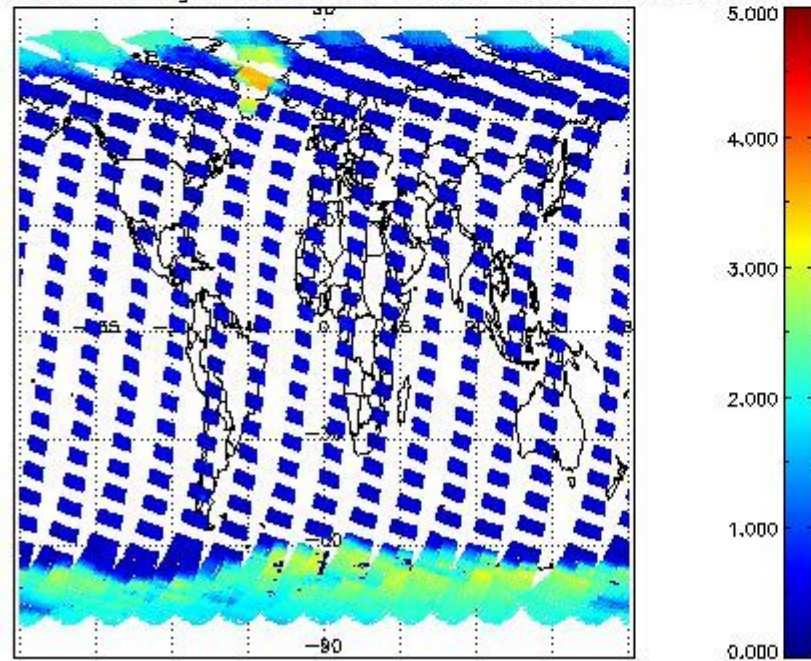
SCIOL2P\_NADUV5S02\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



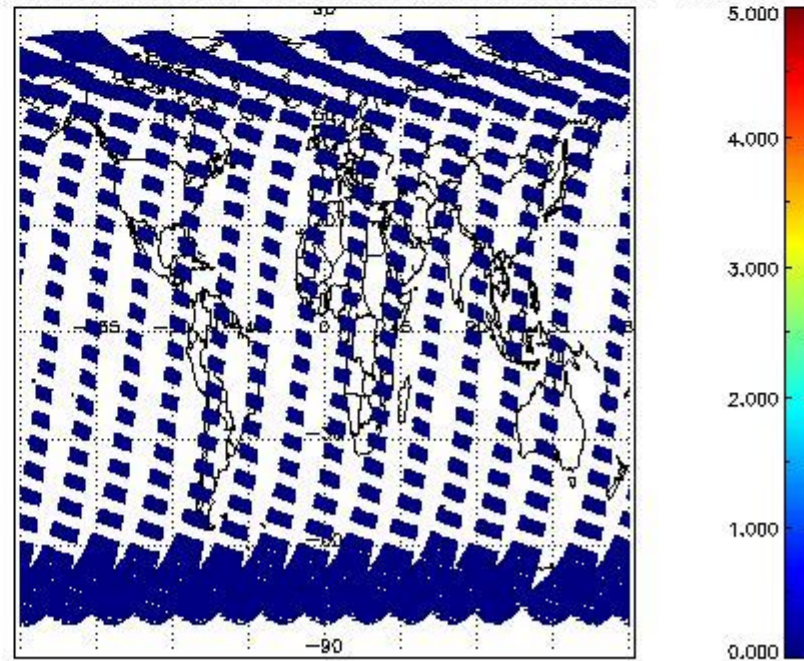
SCIOL2P\_NADUV5S02\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



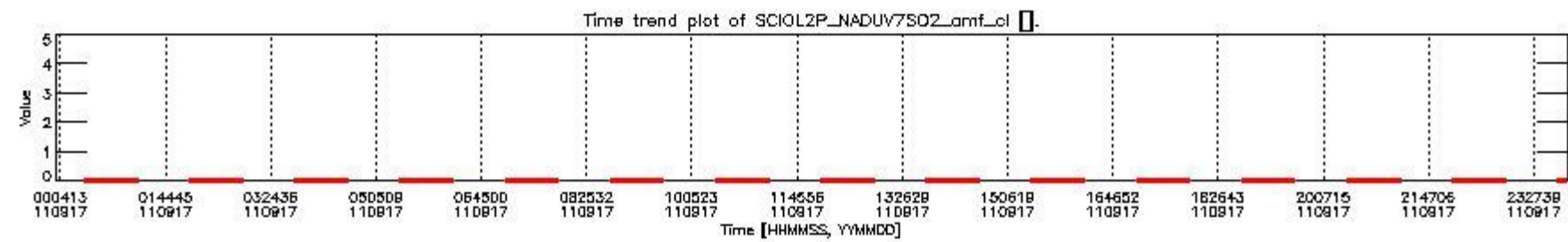
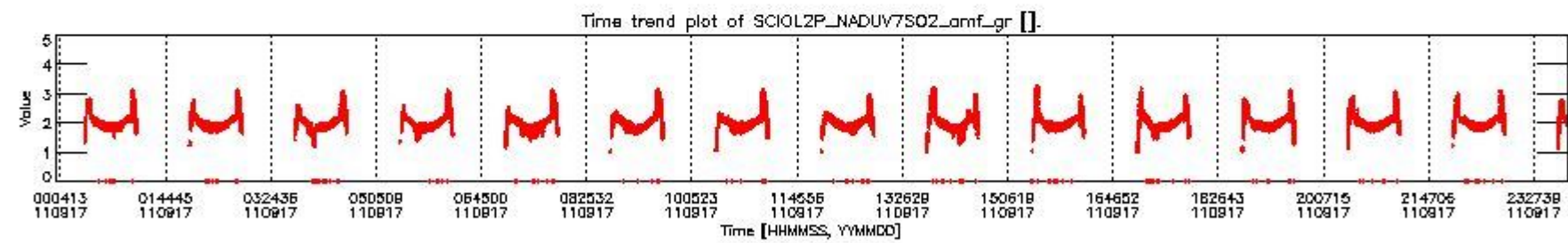
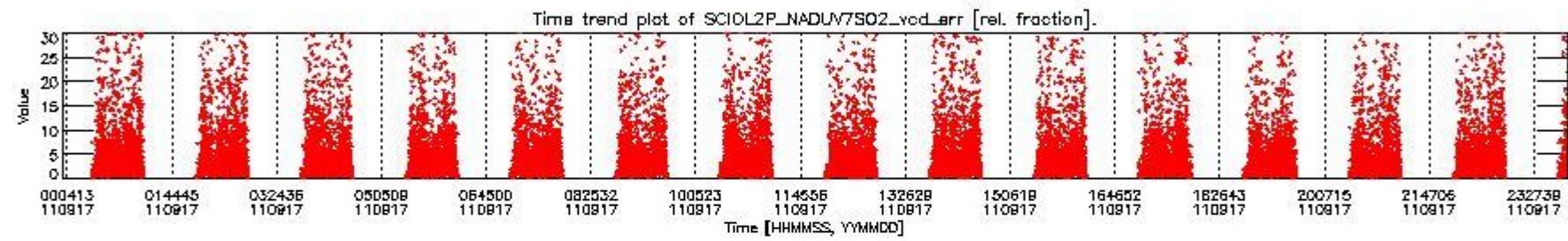
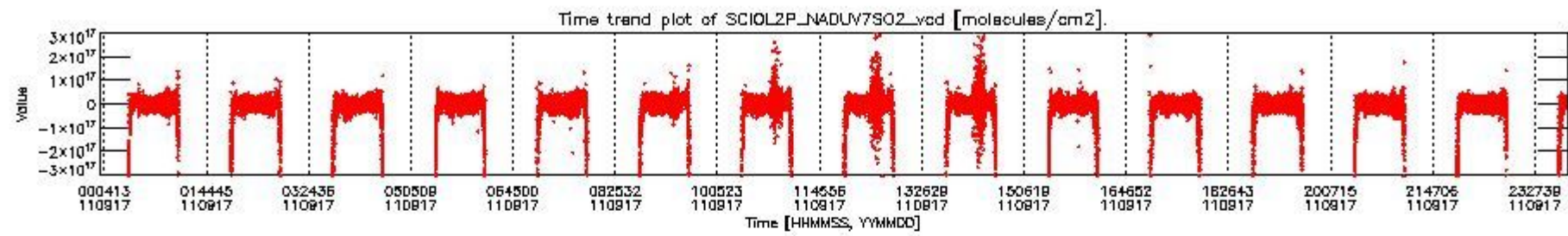
SCIOL2P\_NADUV5S02\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



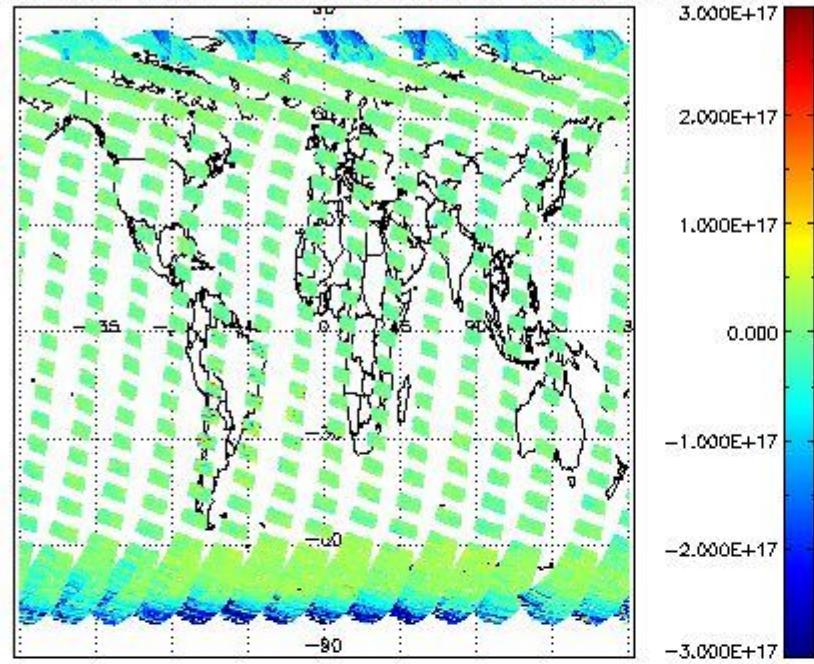
SCIOL2P\_NADUV5S02\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



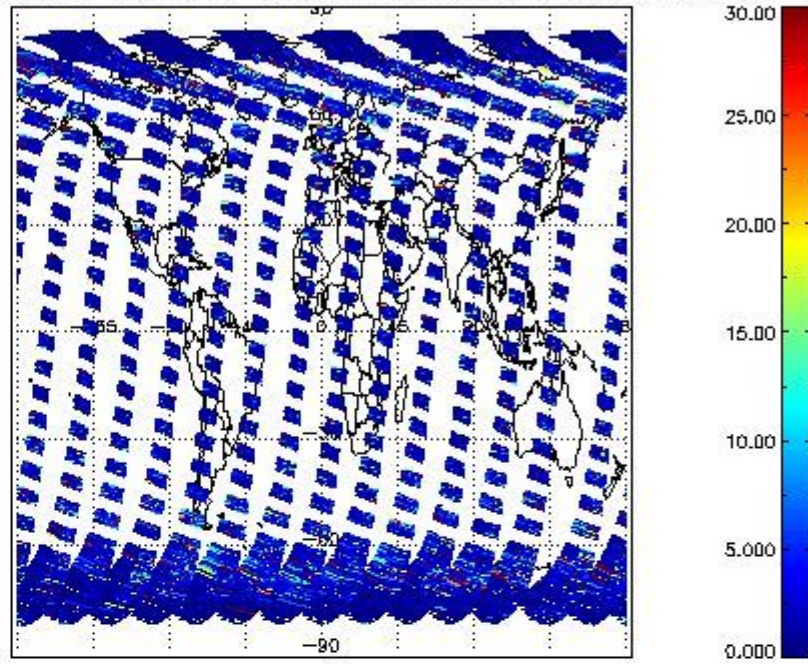
2.2.2.5 SO2 (UV7)



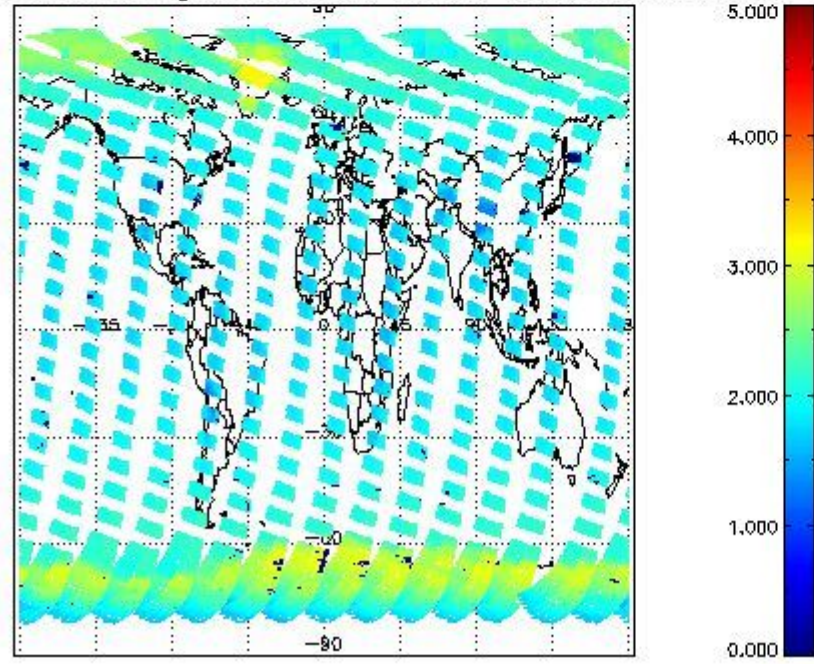
SCIOL2P\_NADUV7S02\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



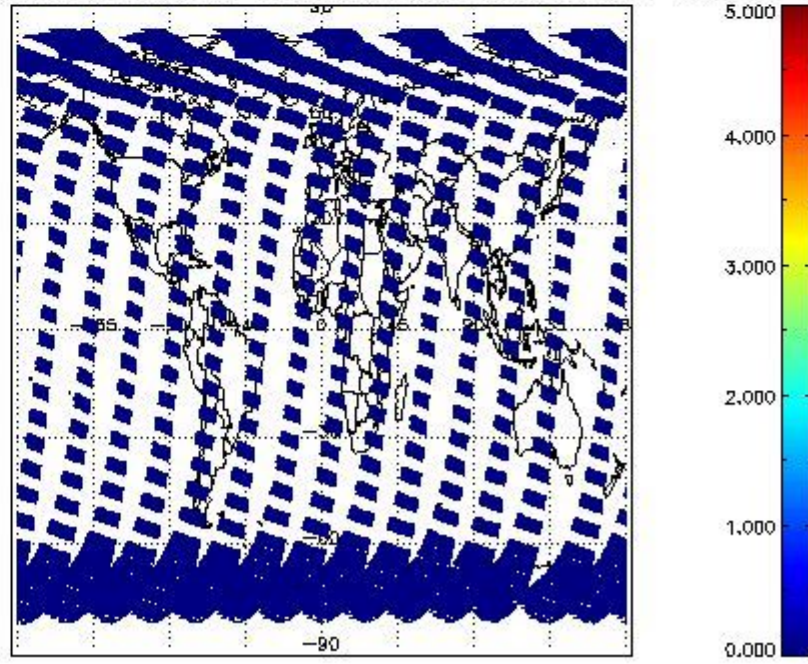
SCIOL2P\_NADUV7S02\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



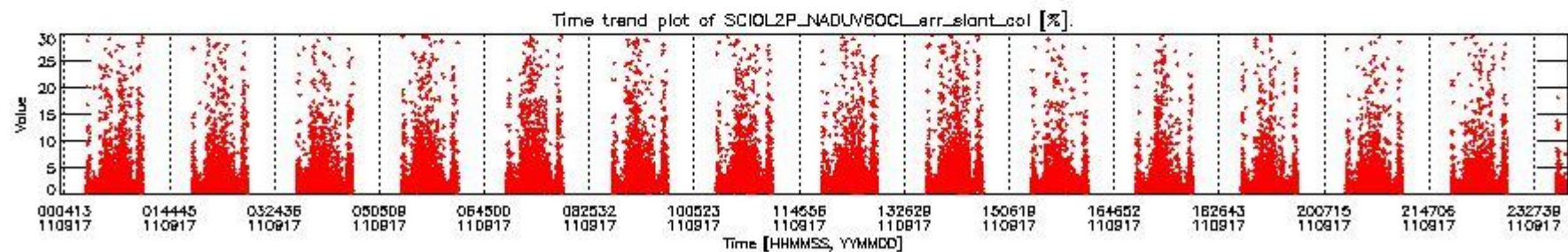
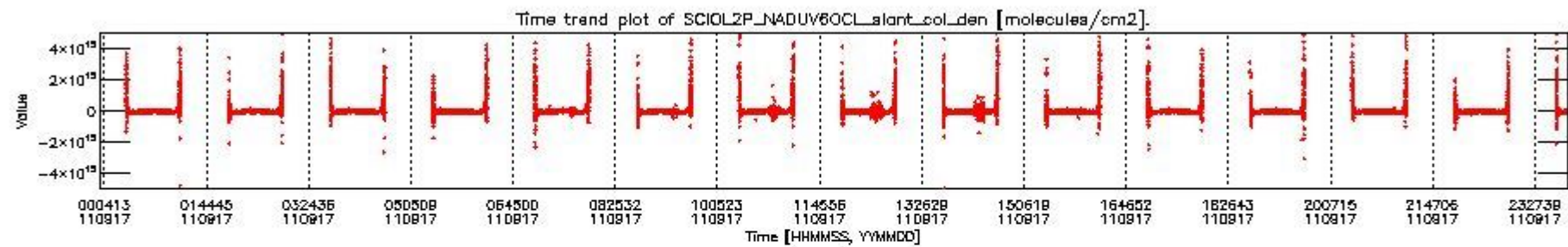
SCIOL2P\_NADUV7S02\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



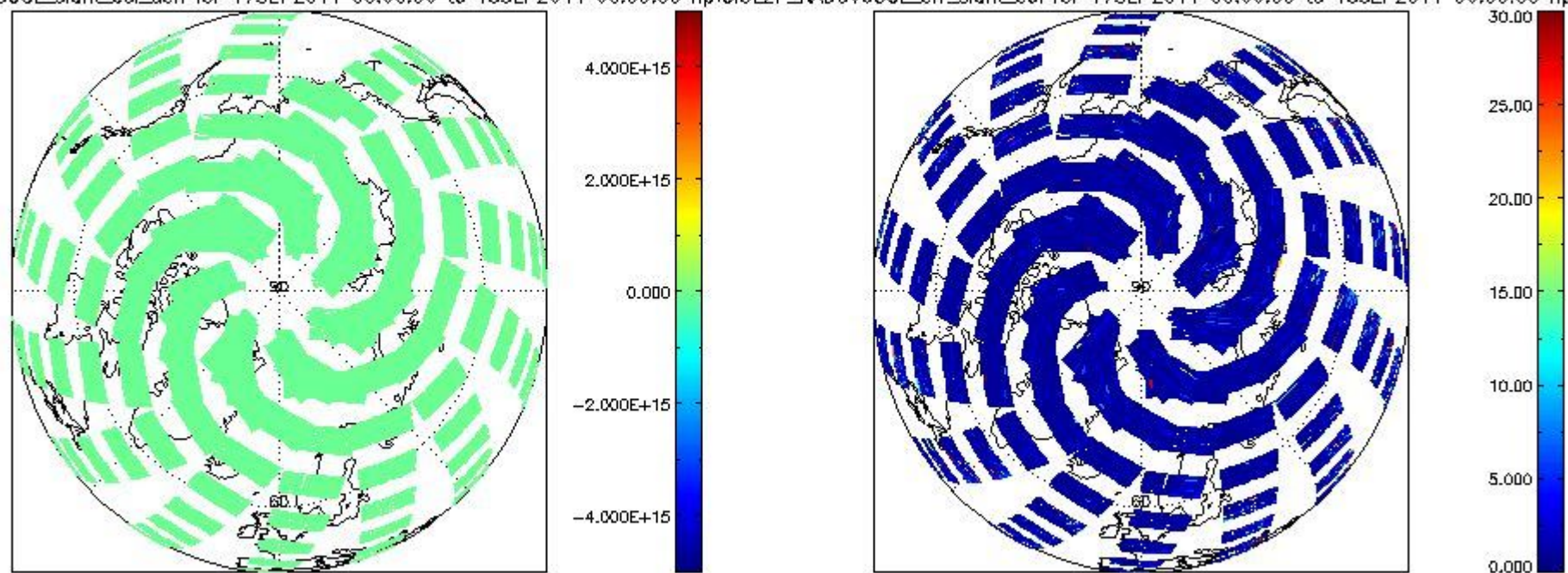
SCIOL2P\_NADUV7S02\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



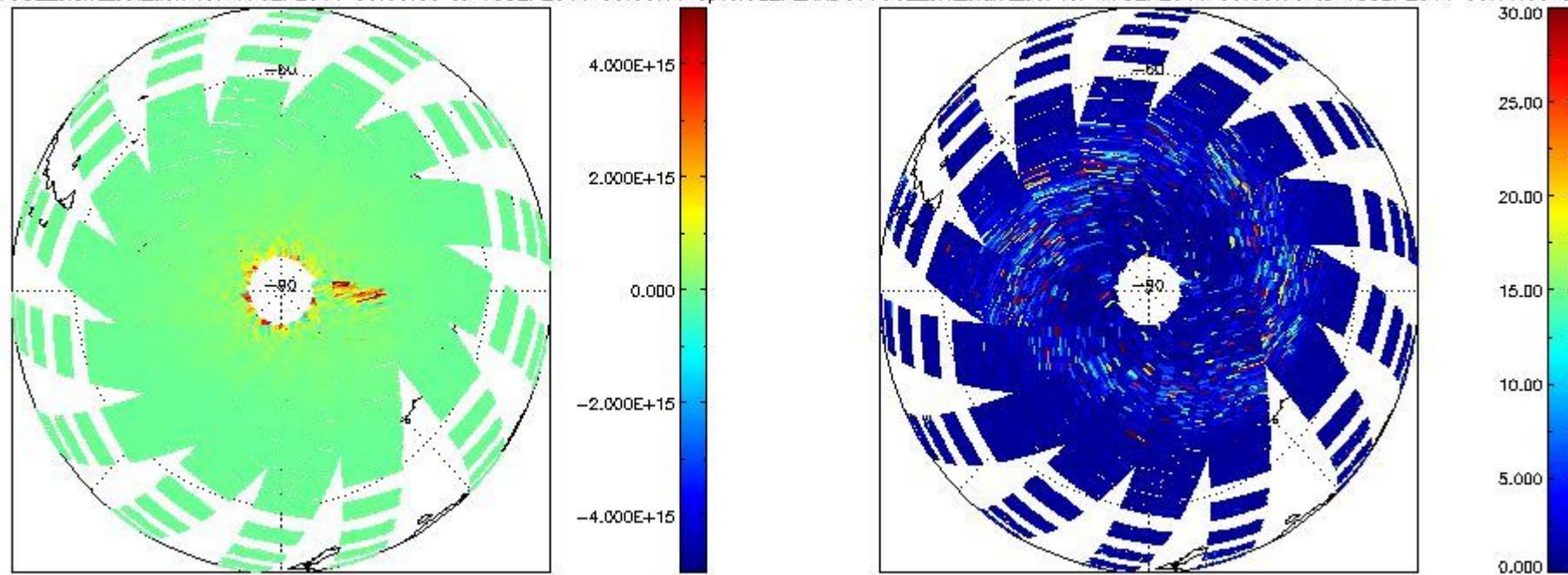
2.2.2.6 OCIO (UV6)



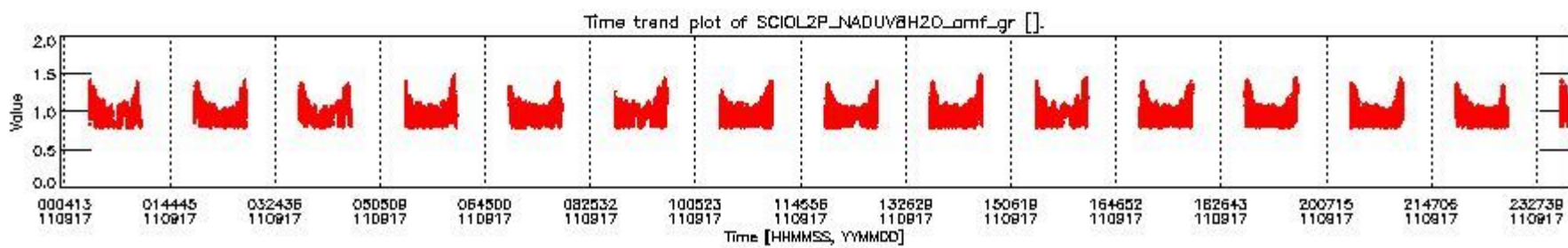
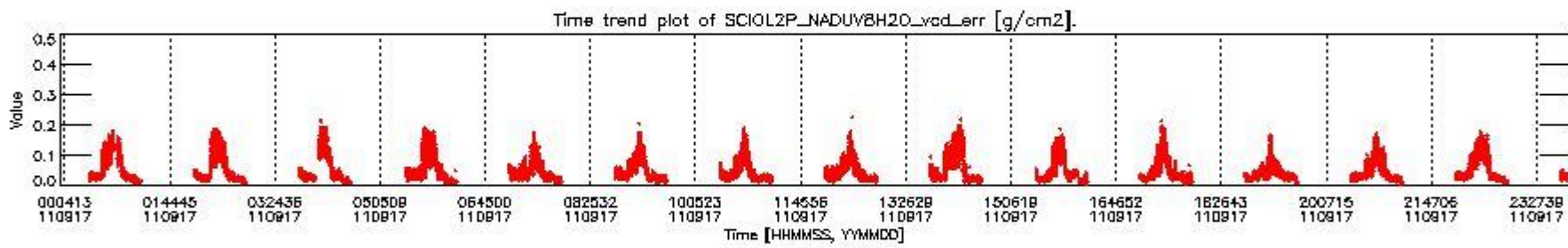
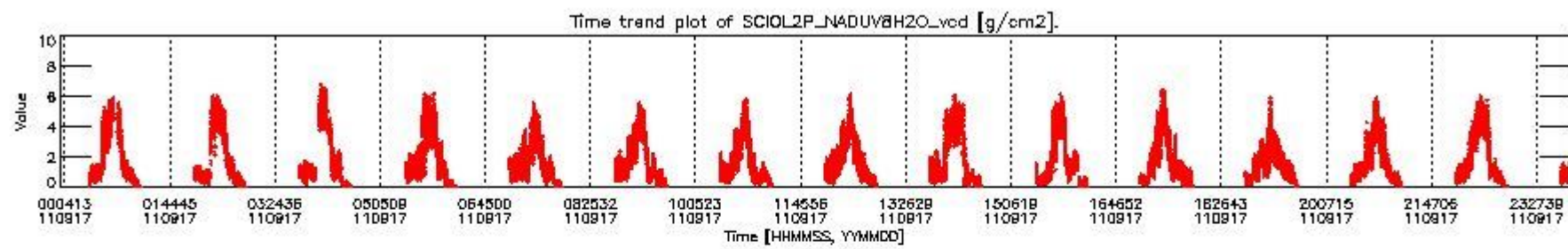
CIOL2P\_NADUV60CLslant\_col\_den for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 np; CIOL2P\_NADUV60CLerr\_slant\_col for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 np



CIOL2P\_NADUV60CL\_slant\_col\_den for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 sp; CIOL2P\_NADUV60CL\_err\_slant\_col for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 sp

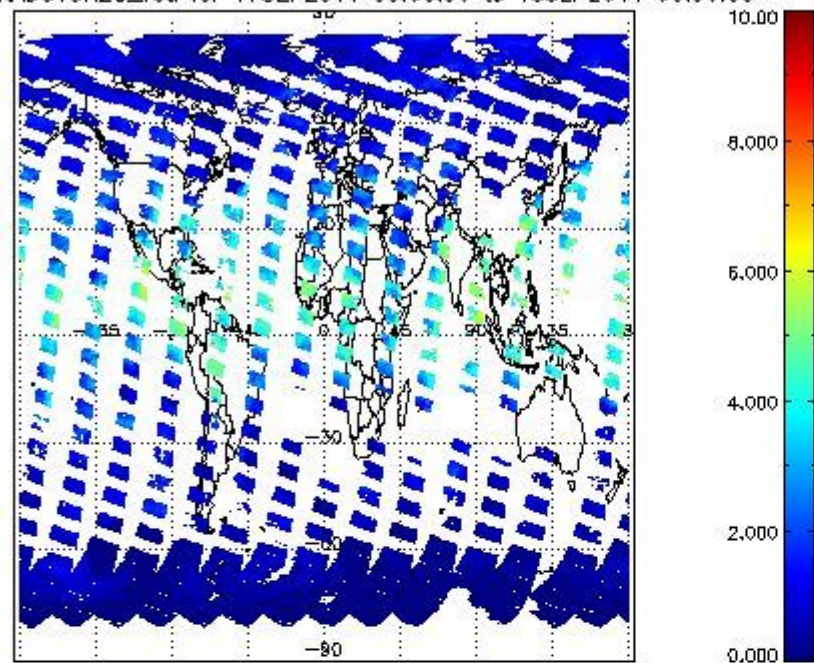


### 2.2.2.7 H2O (UV8)

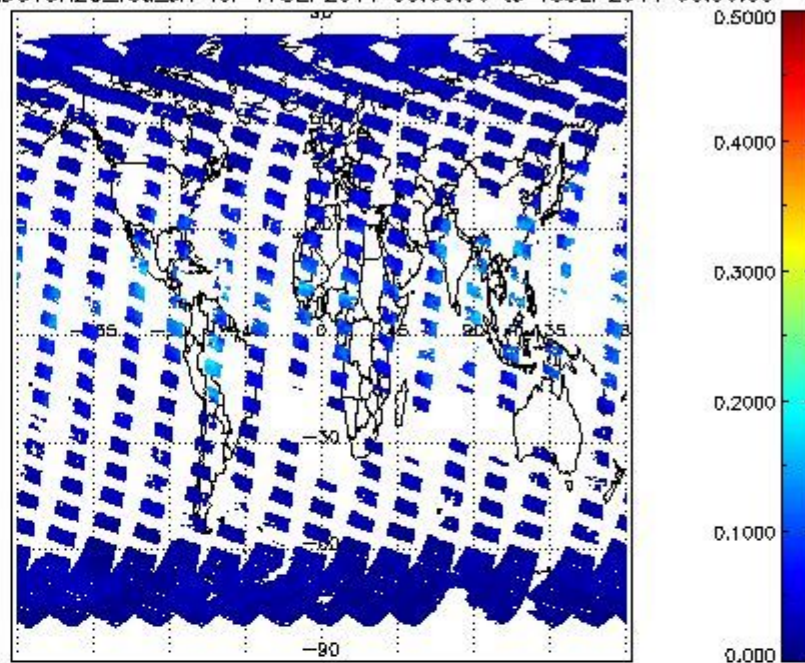




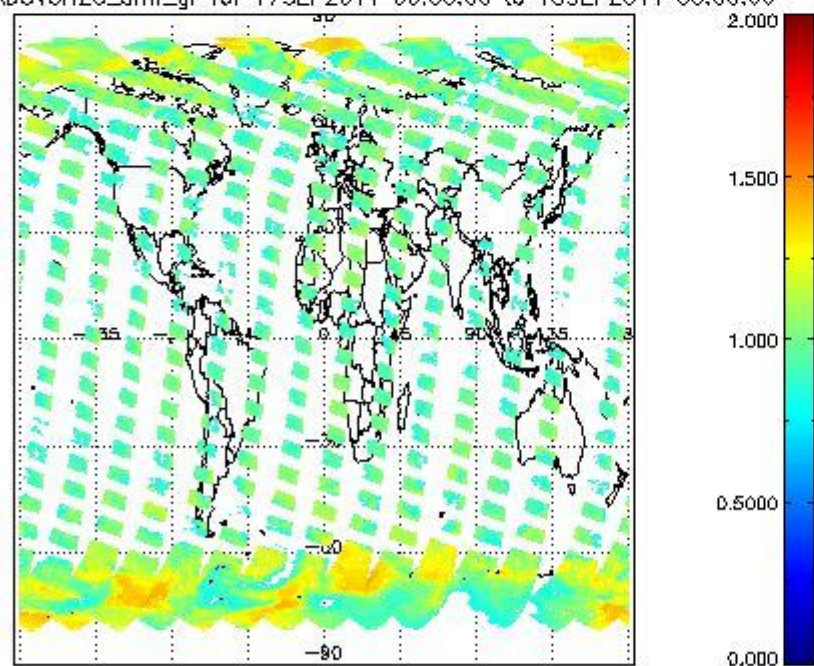
SCIOL2P\_NADUV8H2O\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

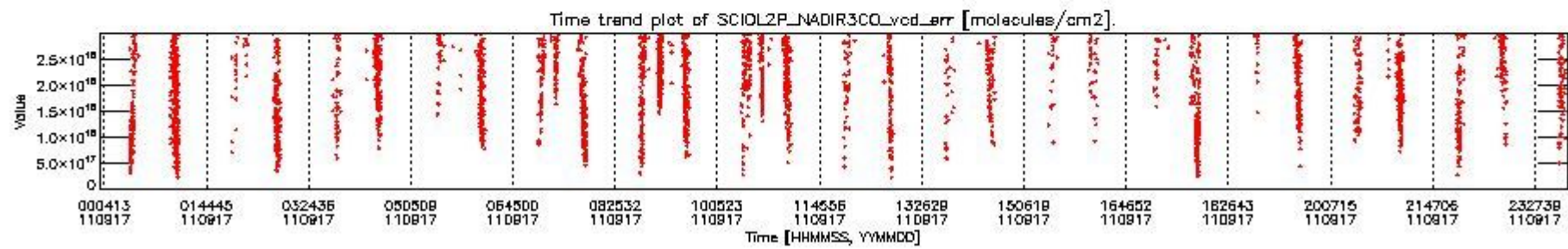
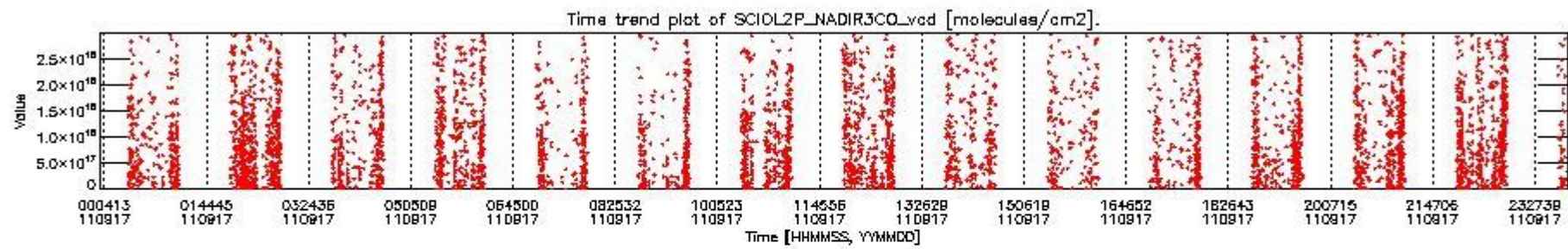


SCIOL2P\_NADUV8H2O\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

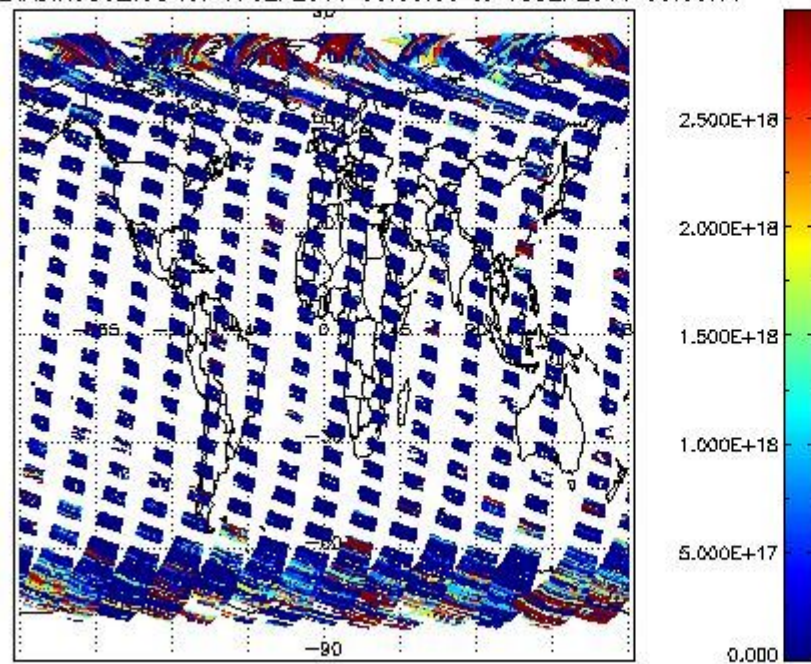


SCIOL2P\_NADUV8H2O\_arnf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

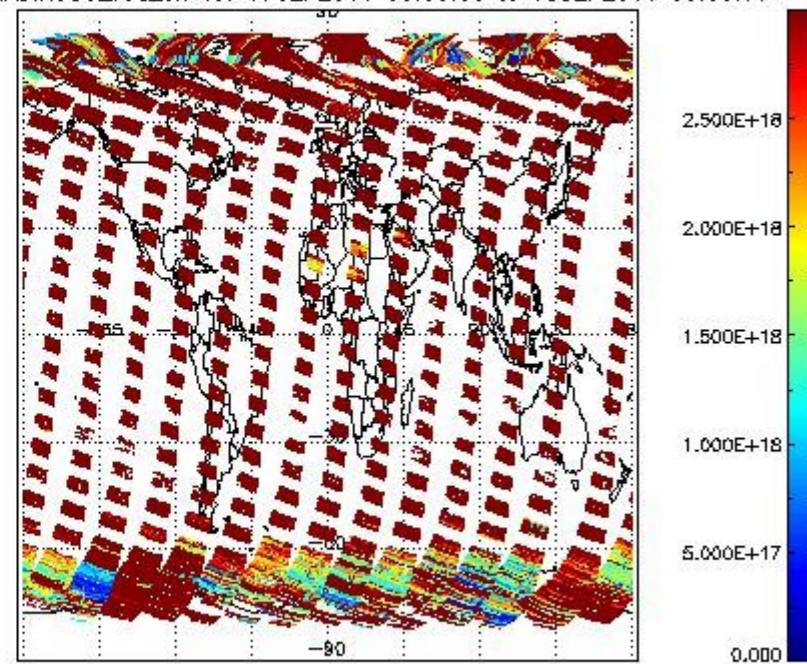




SCIDL2P\_NADIR3CO\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



SCIDL2P\_NADIR3CO\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



### 2.2.3 Limb

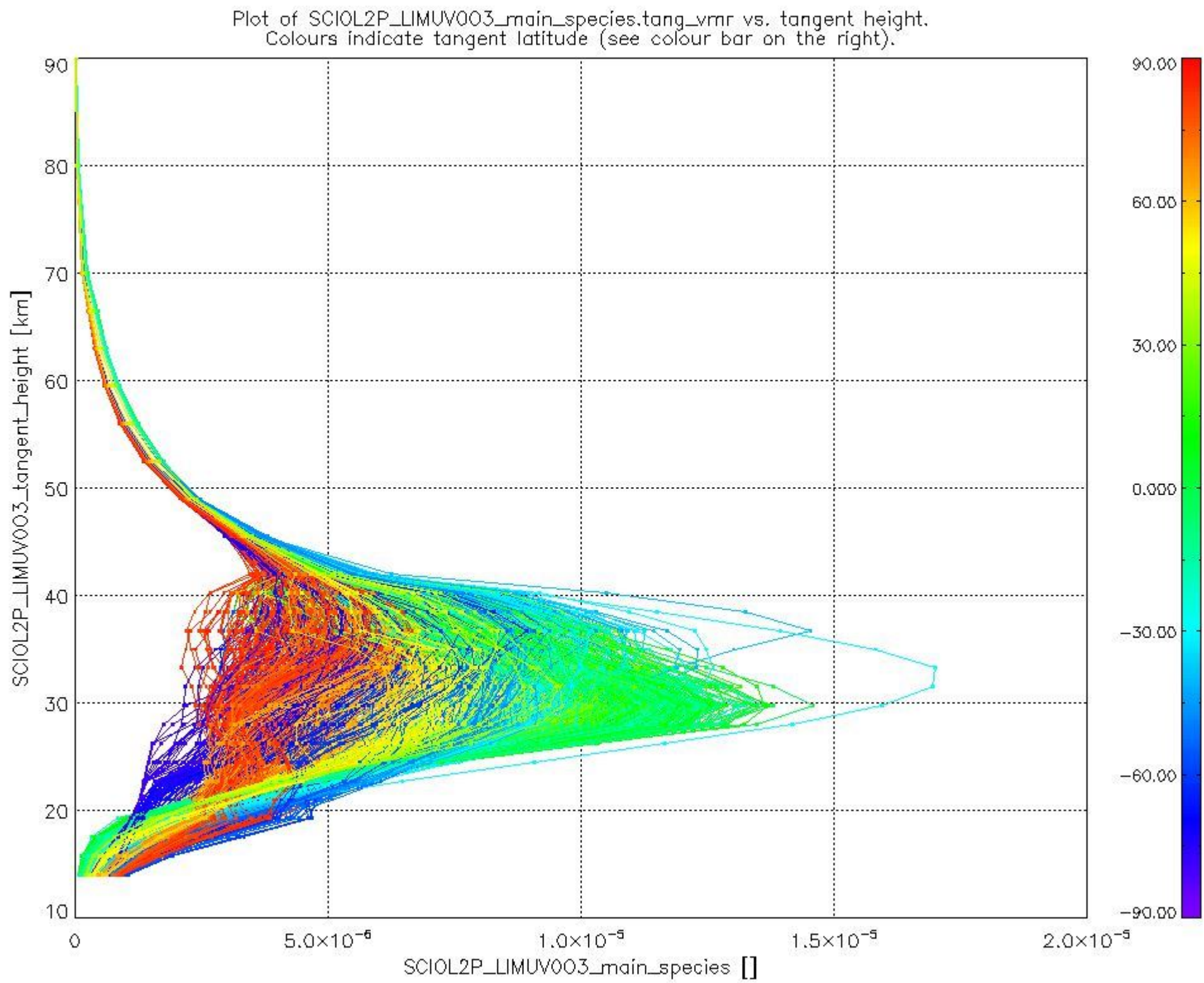
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

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

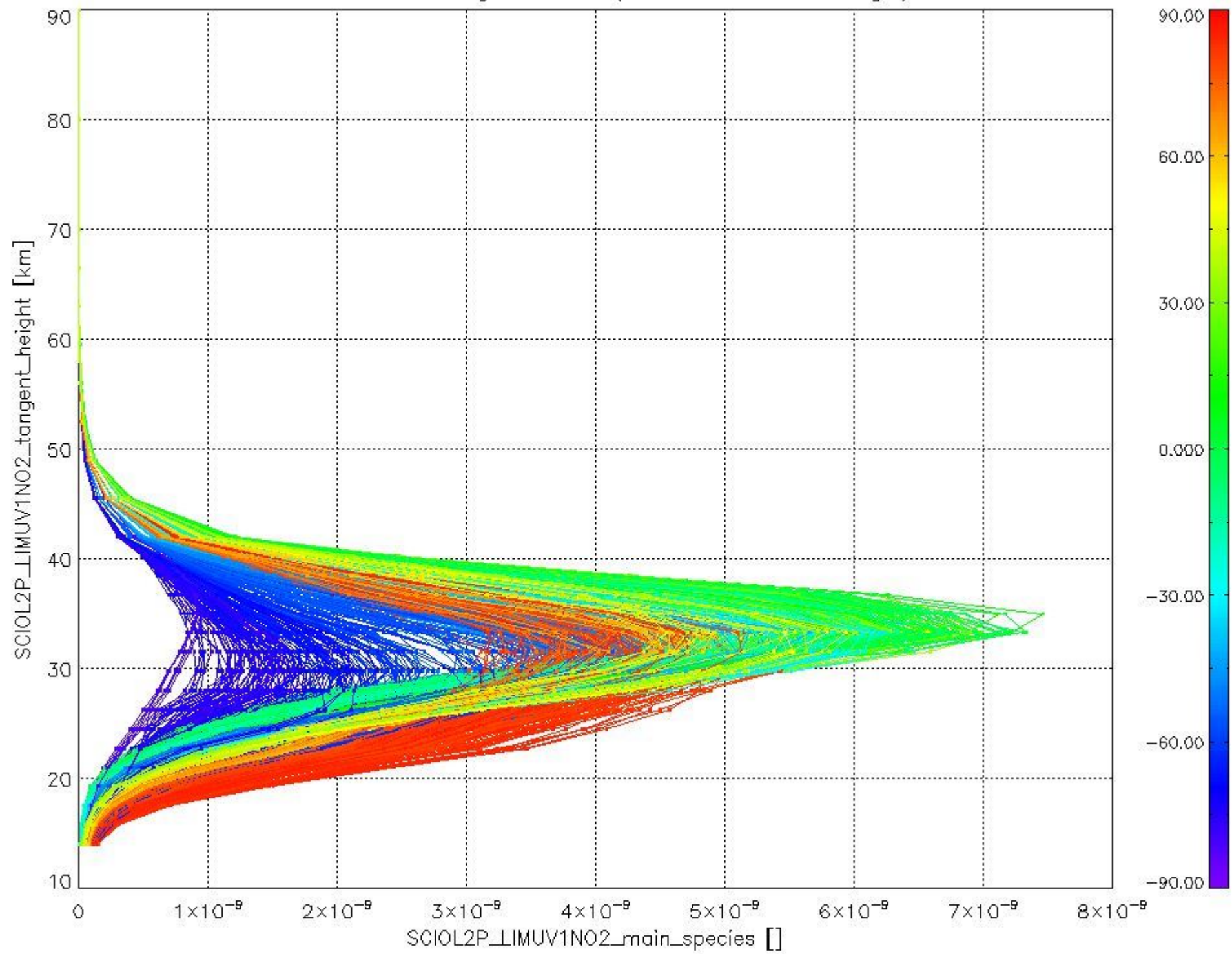
The following plots show for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

2.2.3.1 O3 (UV0)



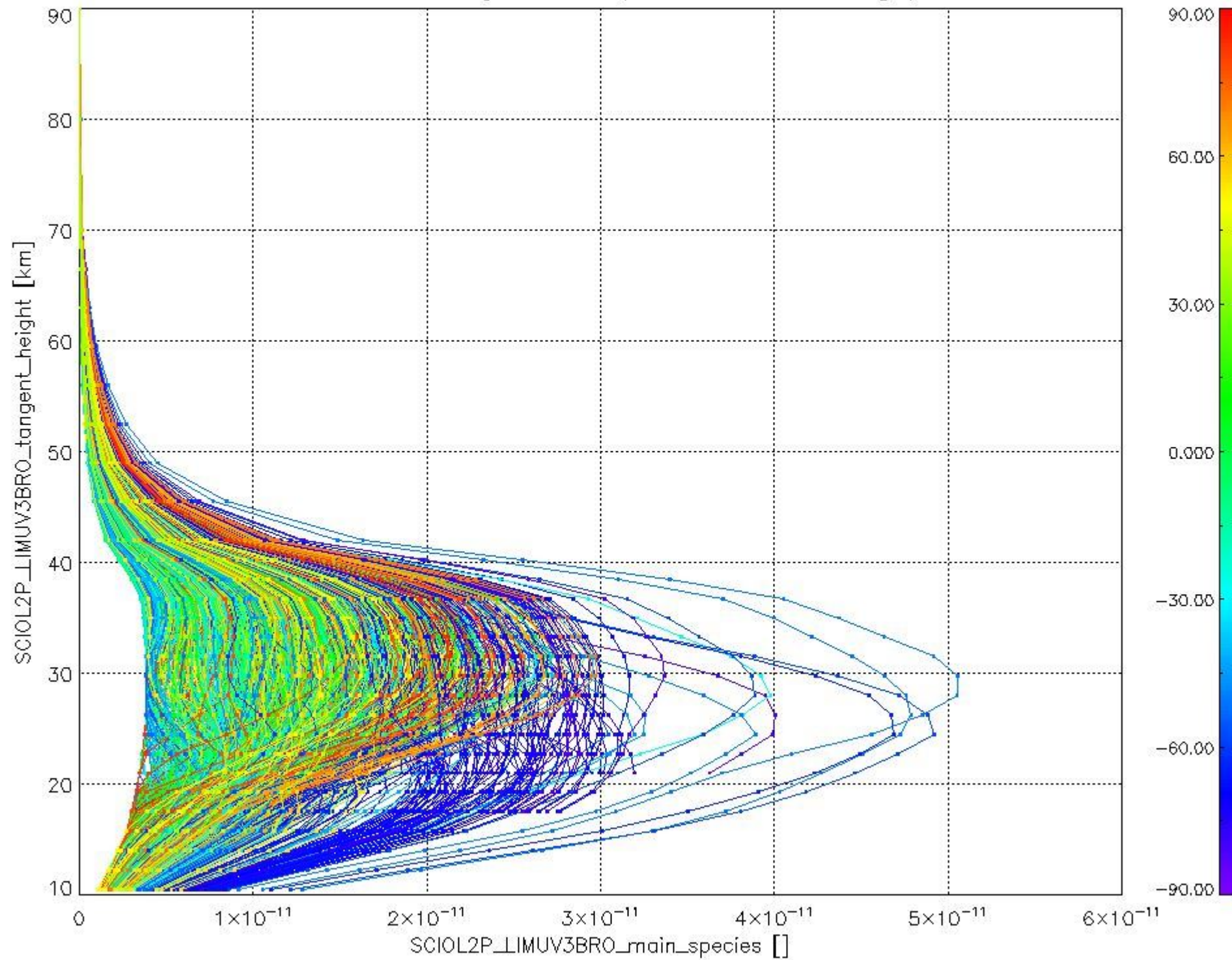
2.2.3.2 NO2 (UV1)

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).

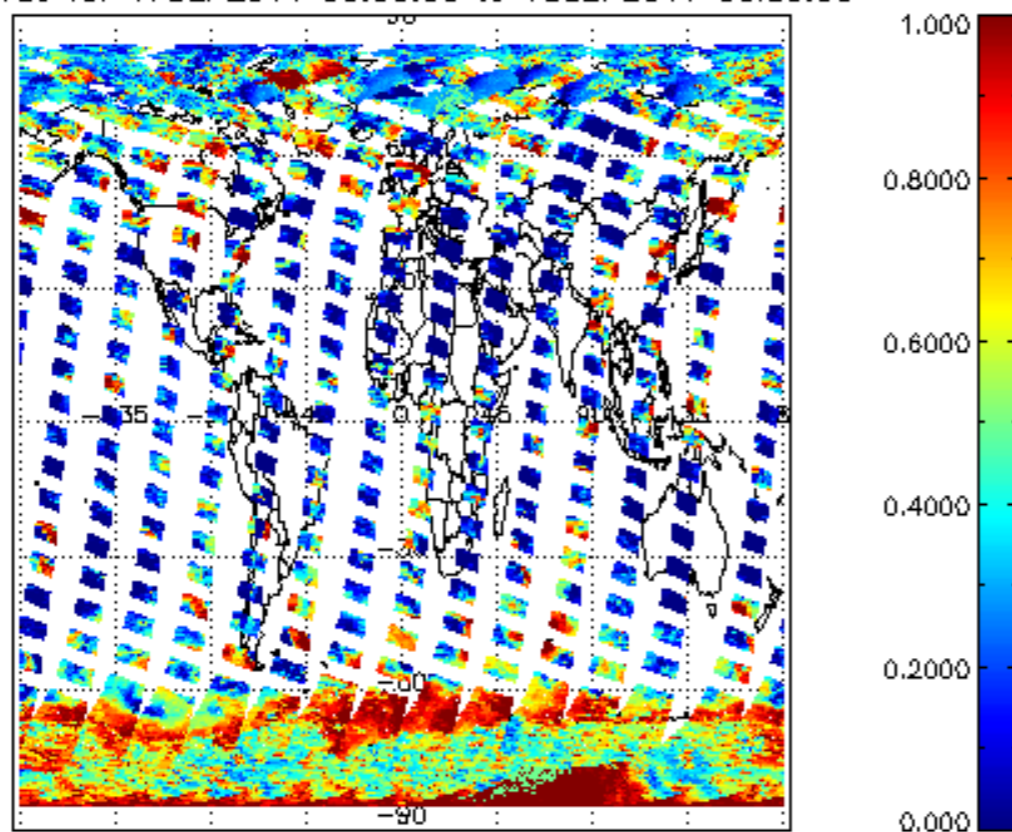


### 2.3 ADF monitoring

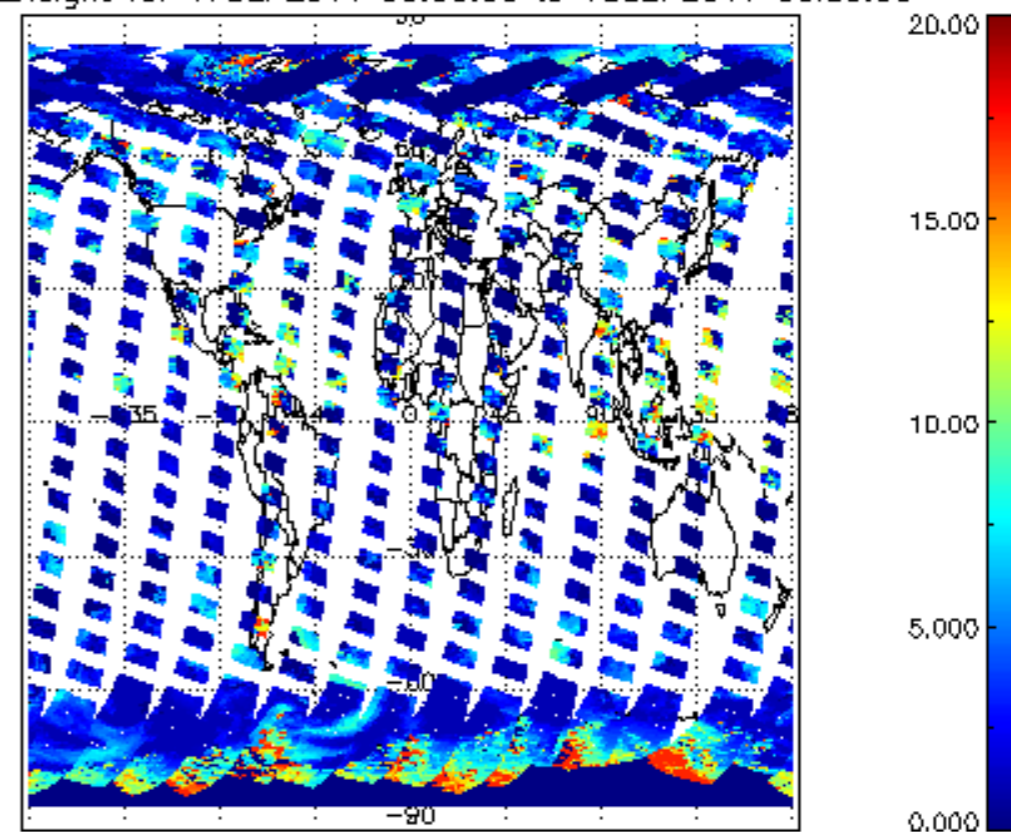
Number	ADF
	<b>IN_ (INITIALISATION_FILE)</b>
0	SCI_IN_AXNPDE20090615_120000_20090615_000000_20991231_235959
	<b>ECF (ECMWF_FILE)</b>
1	NOT USED
	<b>MF1 (M_FACTOR_FILE)</b>
2	SCI_MF1_AXVIEC20110920_110234_20110916_184721_20110918_184721
3	SCI_MF1_AXVIEC20110920_110301_20110917_181035_20110919_181035



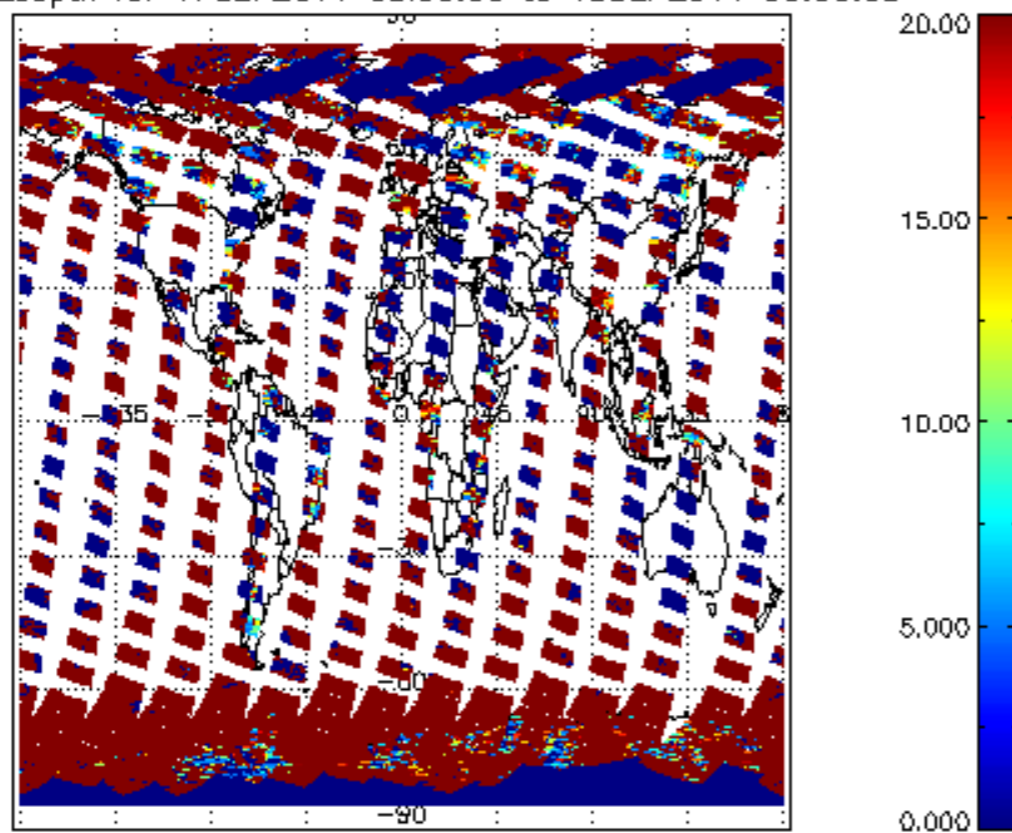
cL\_frac for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



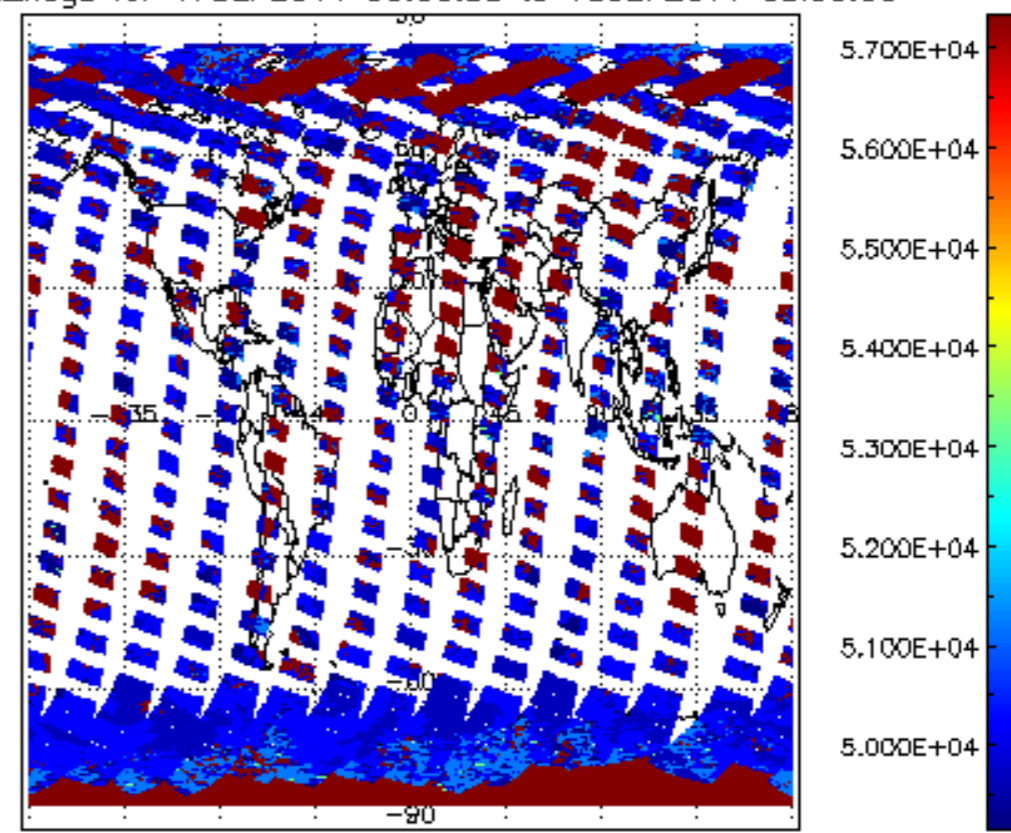
cL\_top\_height for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

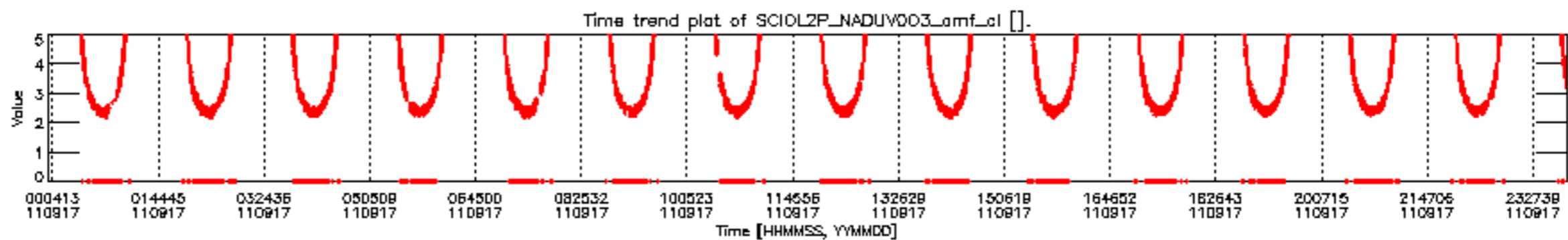
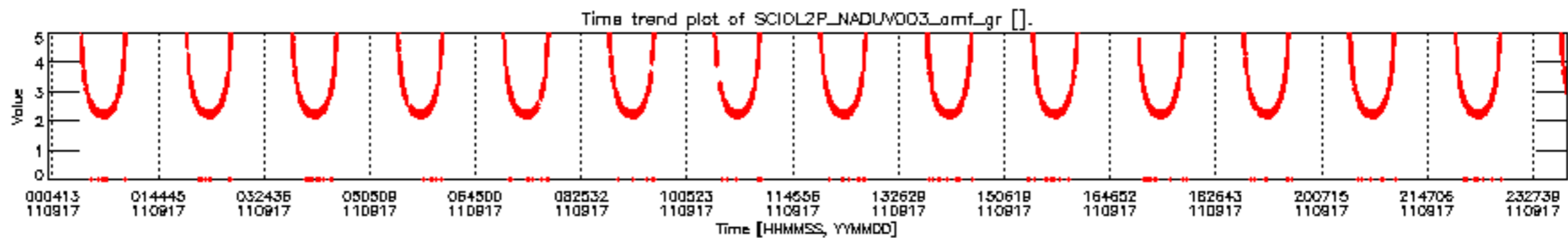
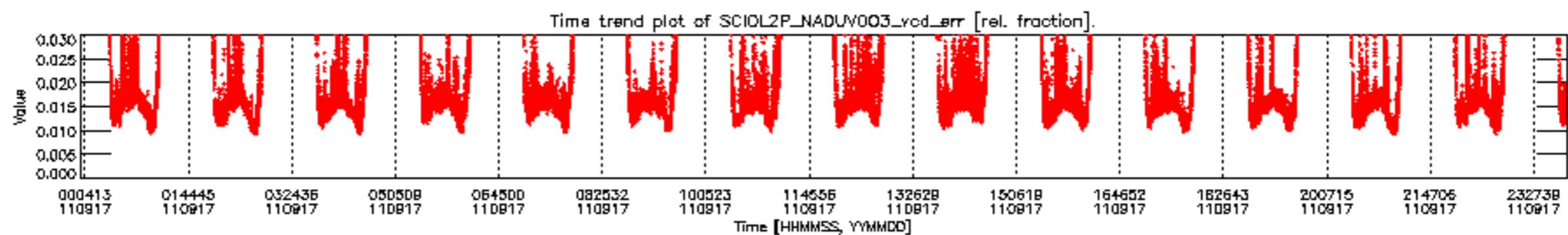
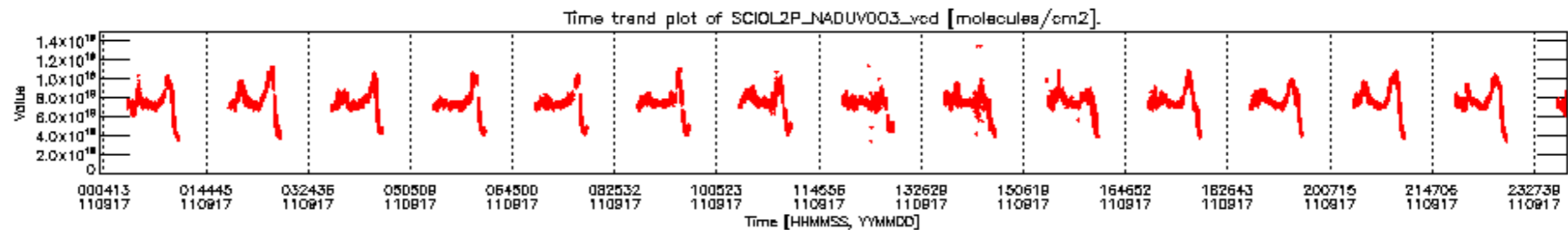


cL\_opt\_depth for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



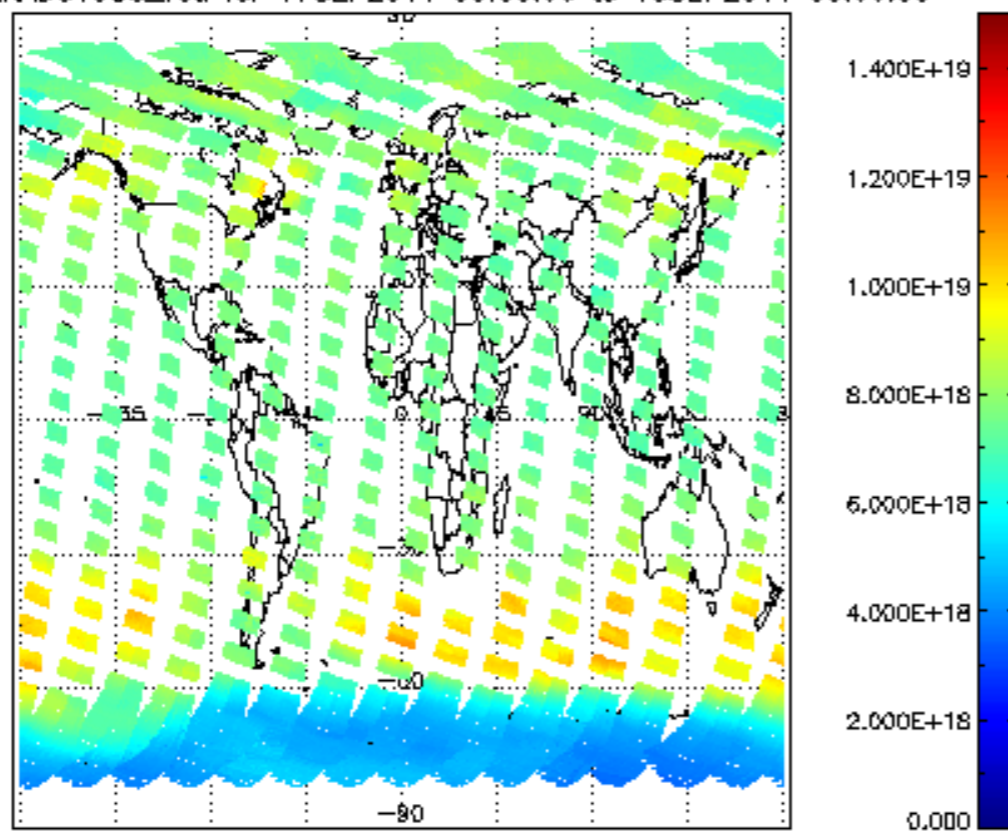
cloud\_flags for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



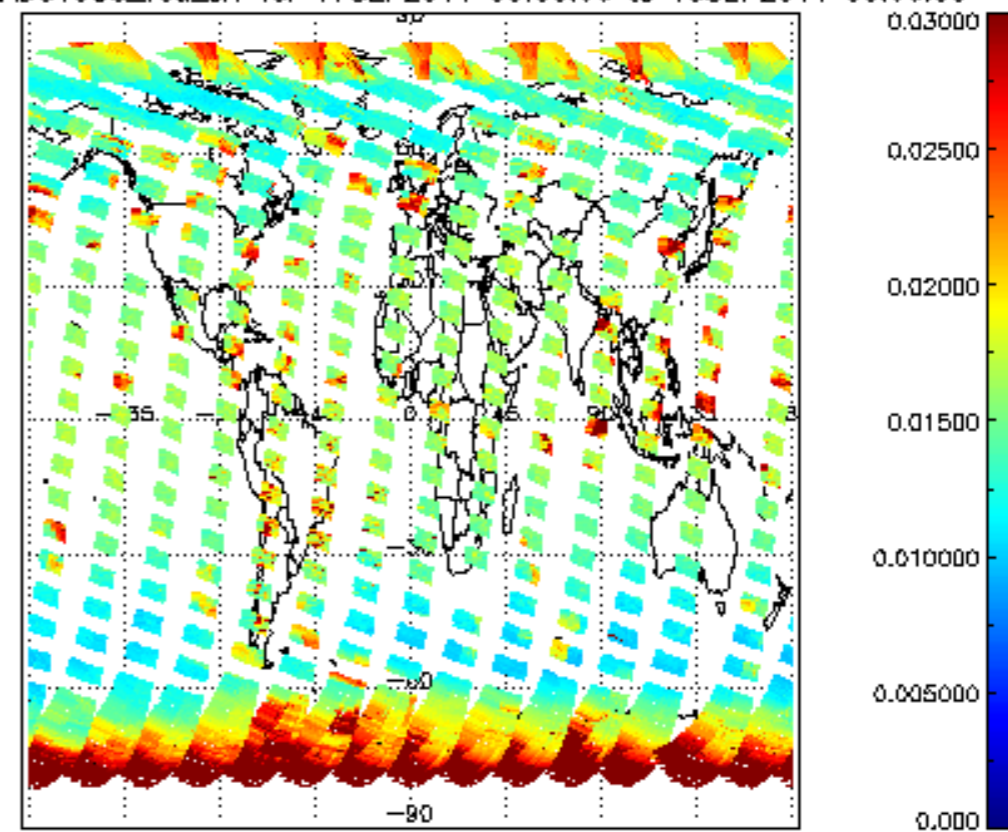




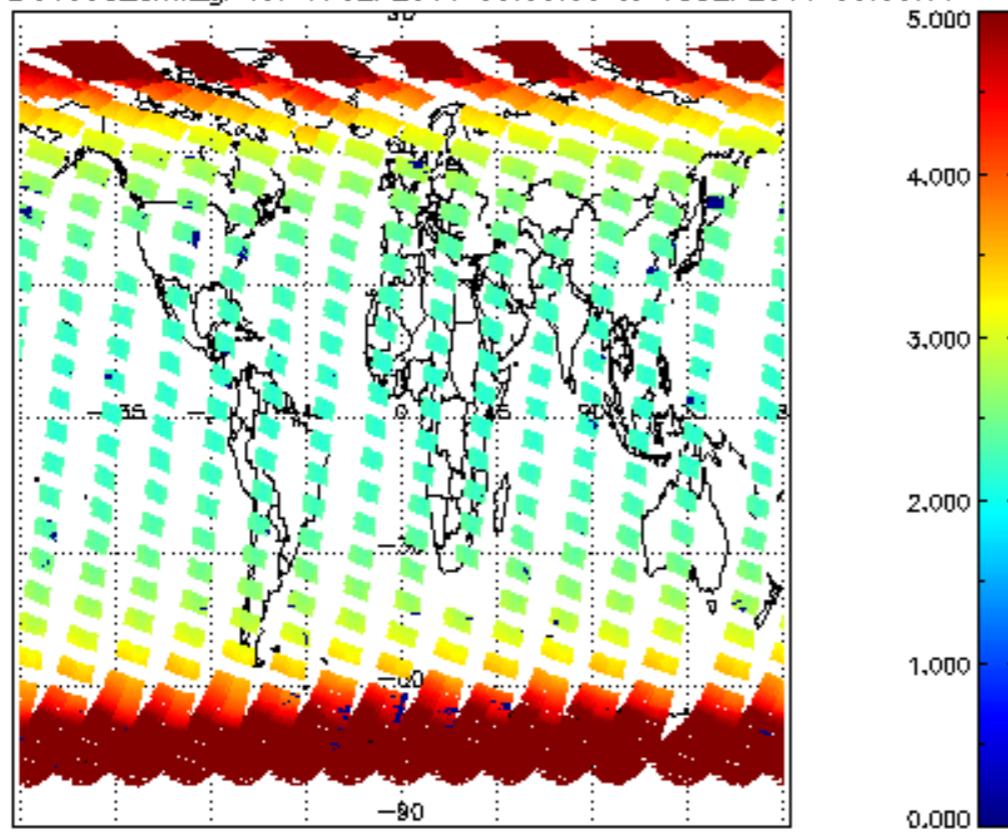
SCIOL2P\_NADUV003\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



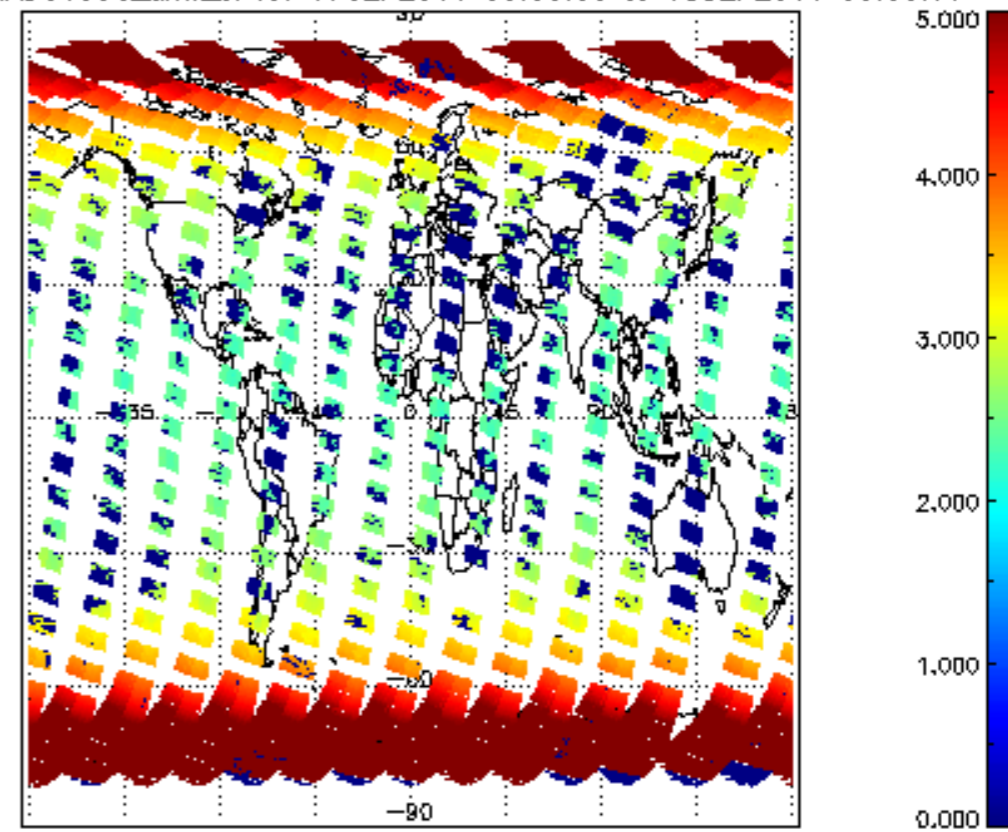
SCIOL2P\_NADUV003\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

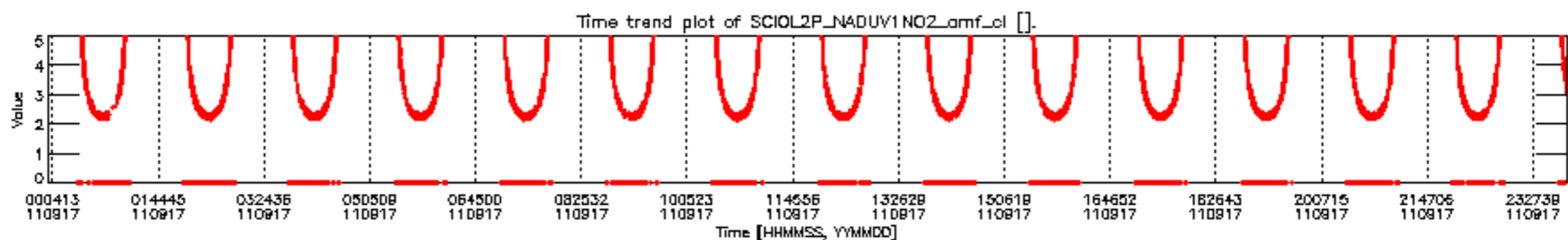
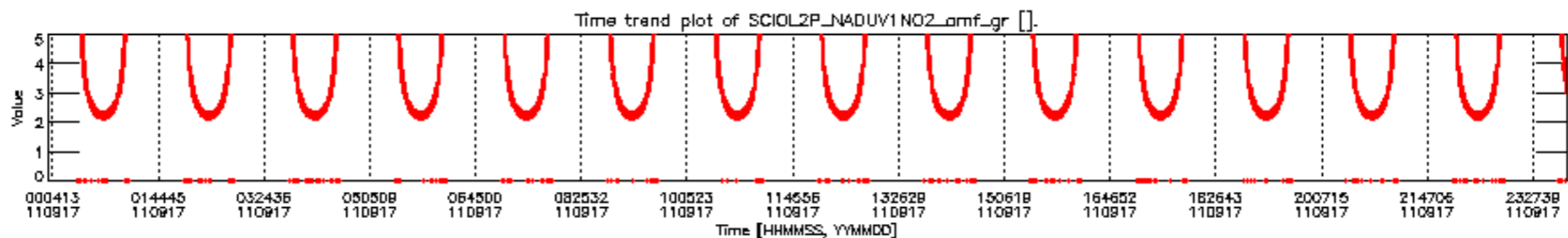
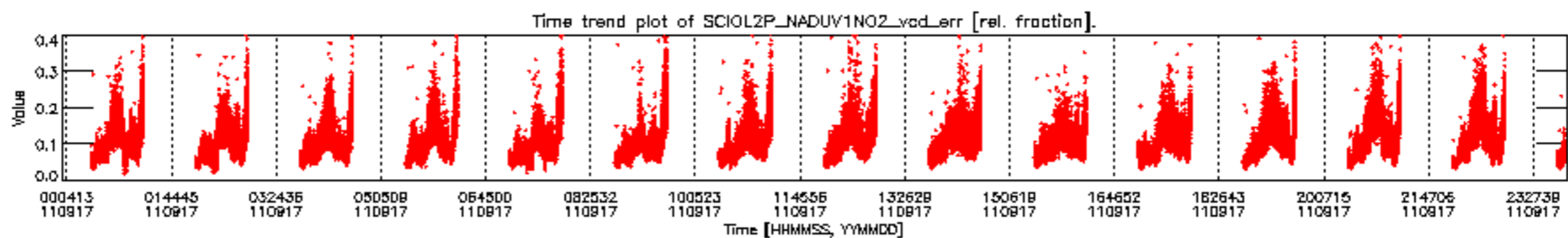
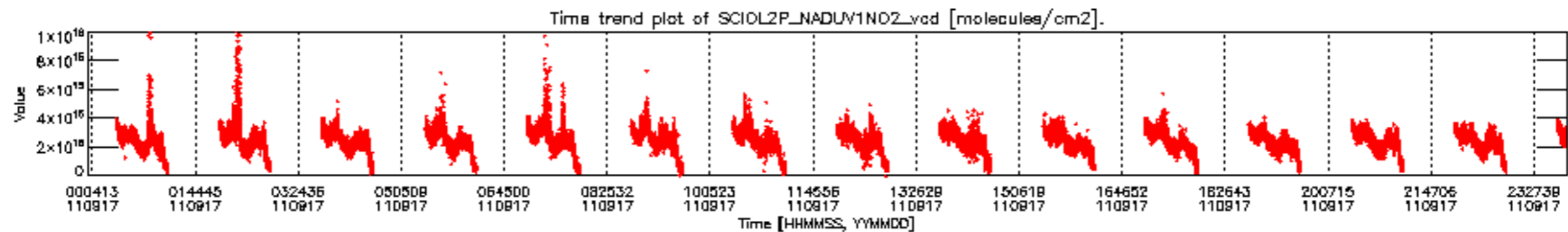


SCIOL2P\_NADUV003\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

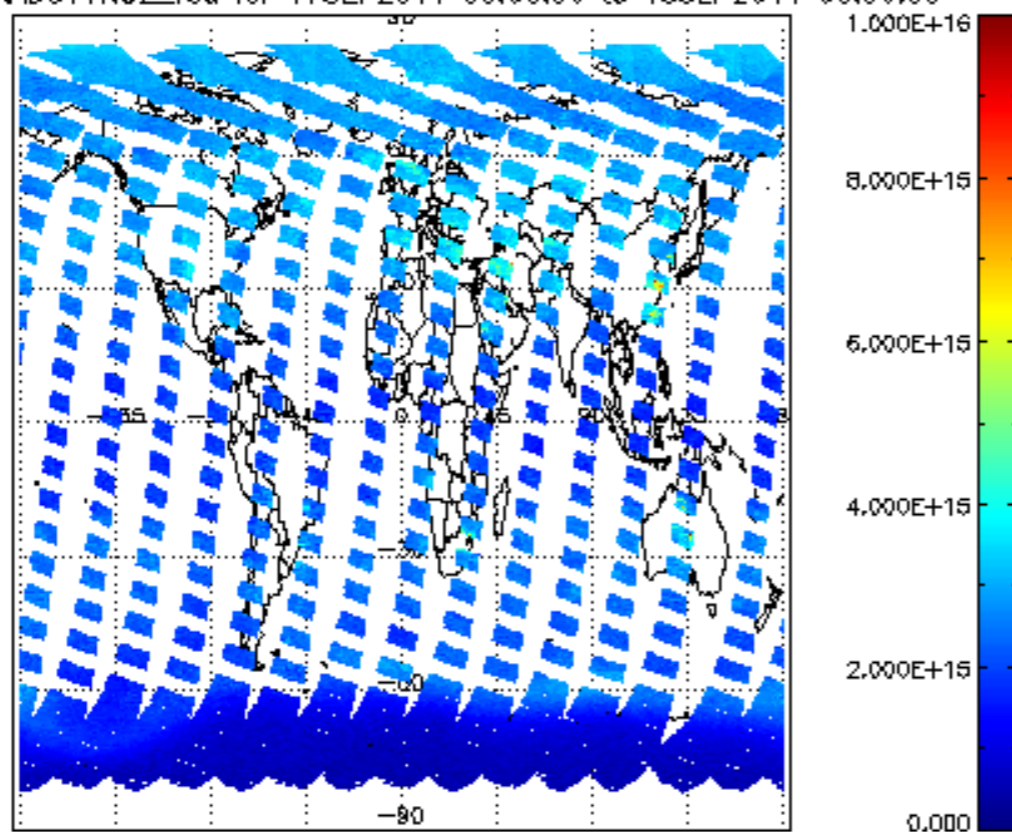


SCIOL2P\_NADUV003\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

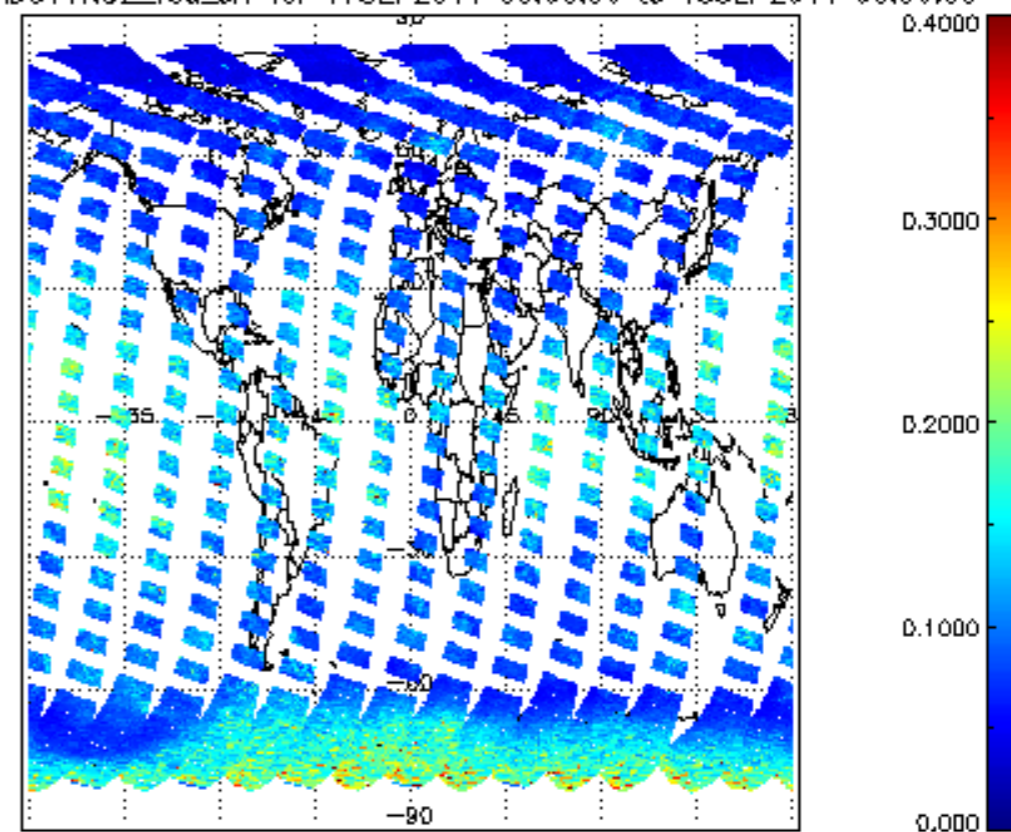




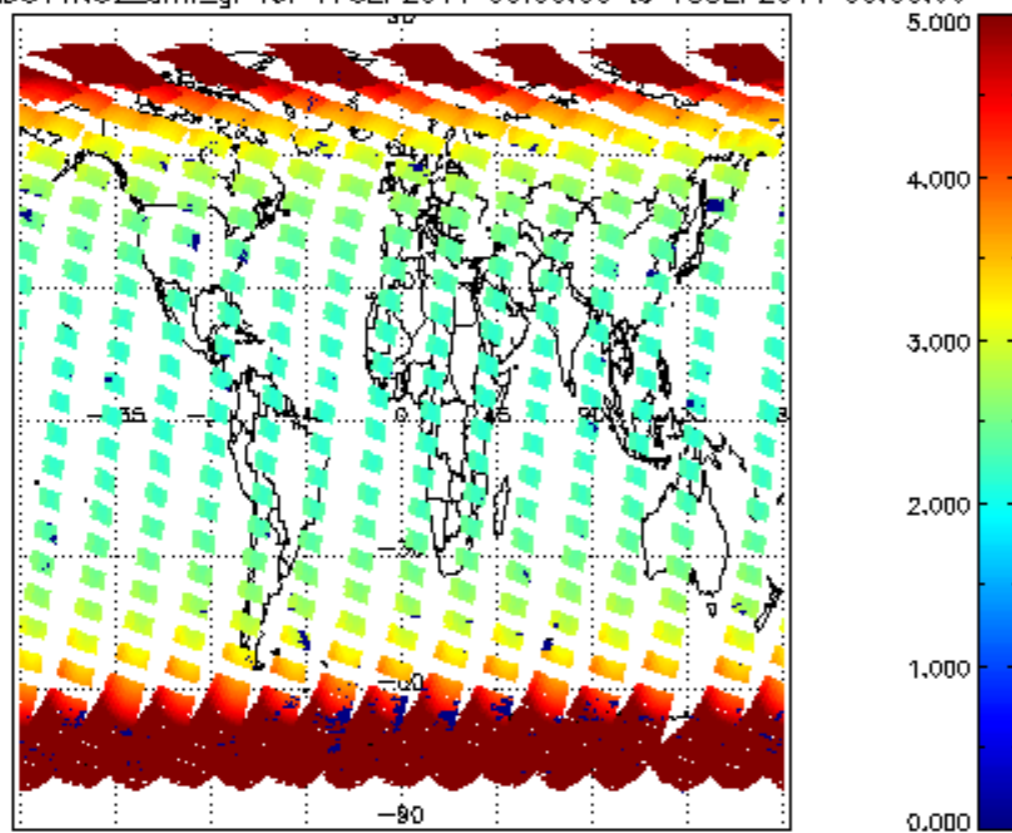
SCIOL2P\_NADUV1NO2\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



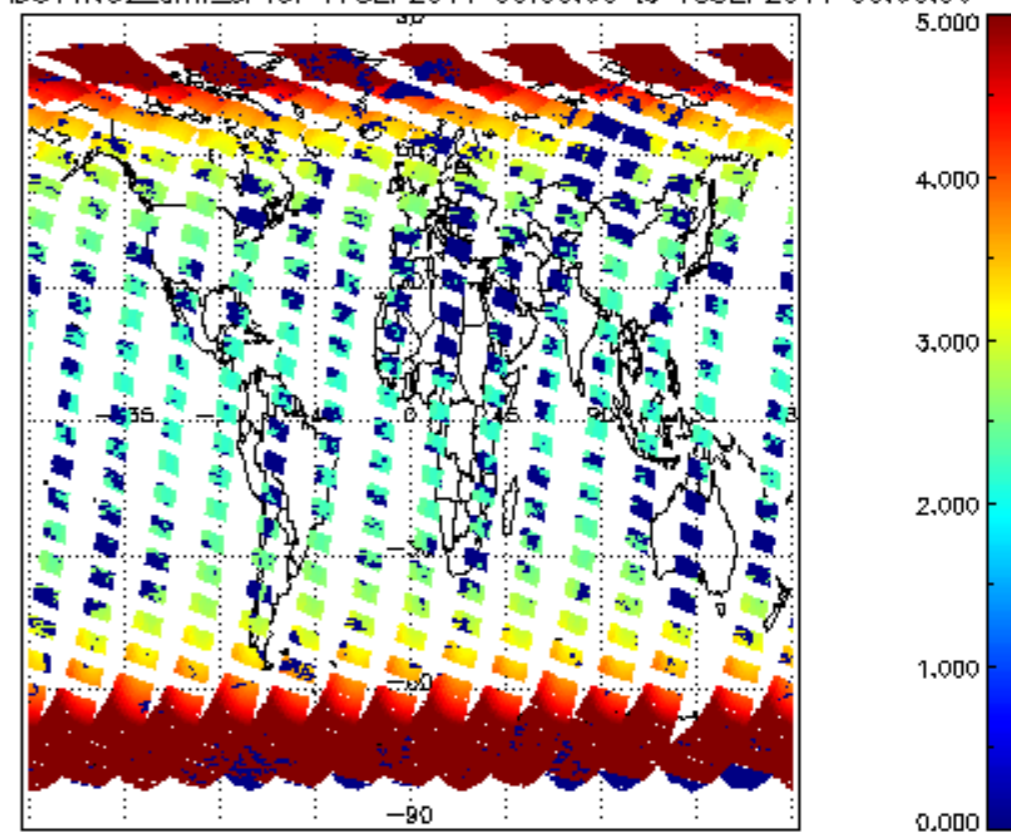
SCIOL2P\_NADUV1NO2\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



SCIOL2P\_NADUV1NO2\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

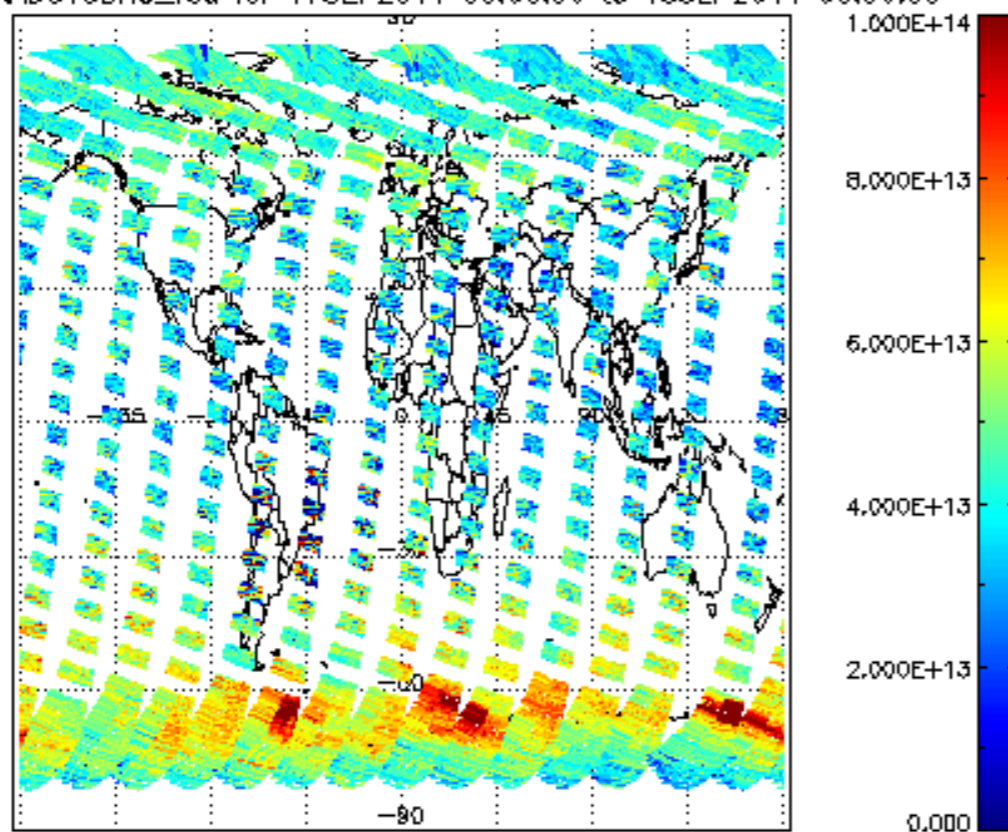


SCIOL2P\_NADUV1NO2\_amf\_sl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

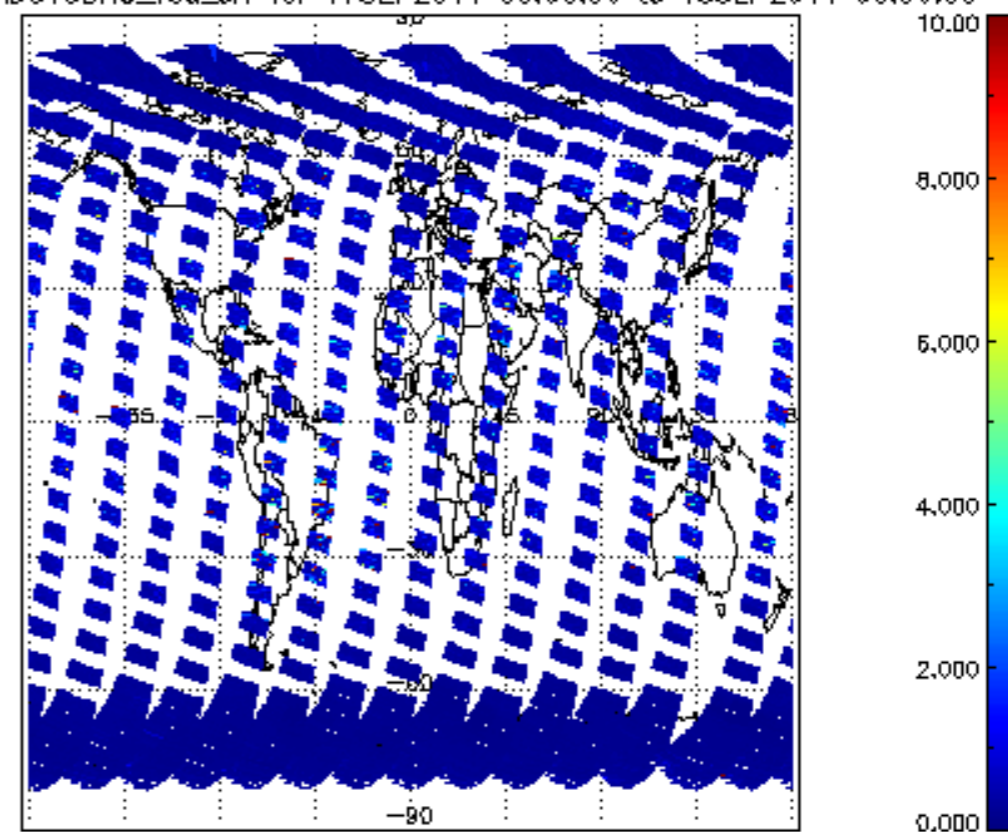




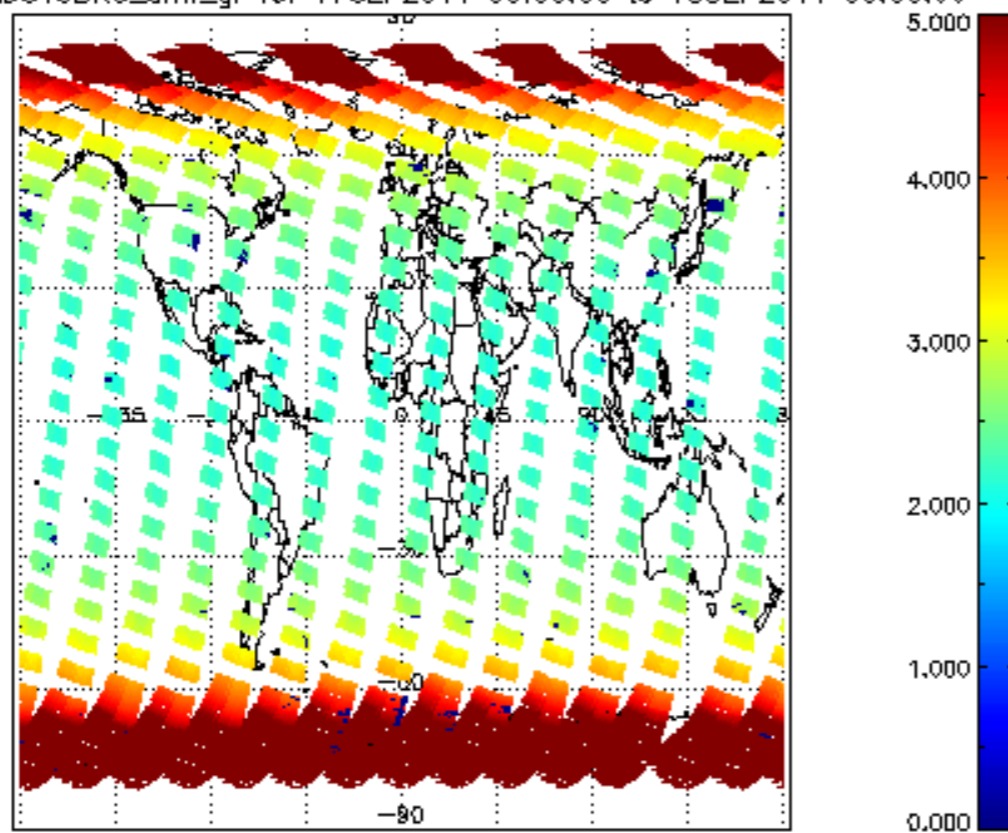
SCIOL2P\_NADUV3BRO\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



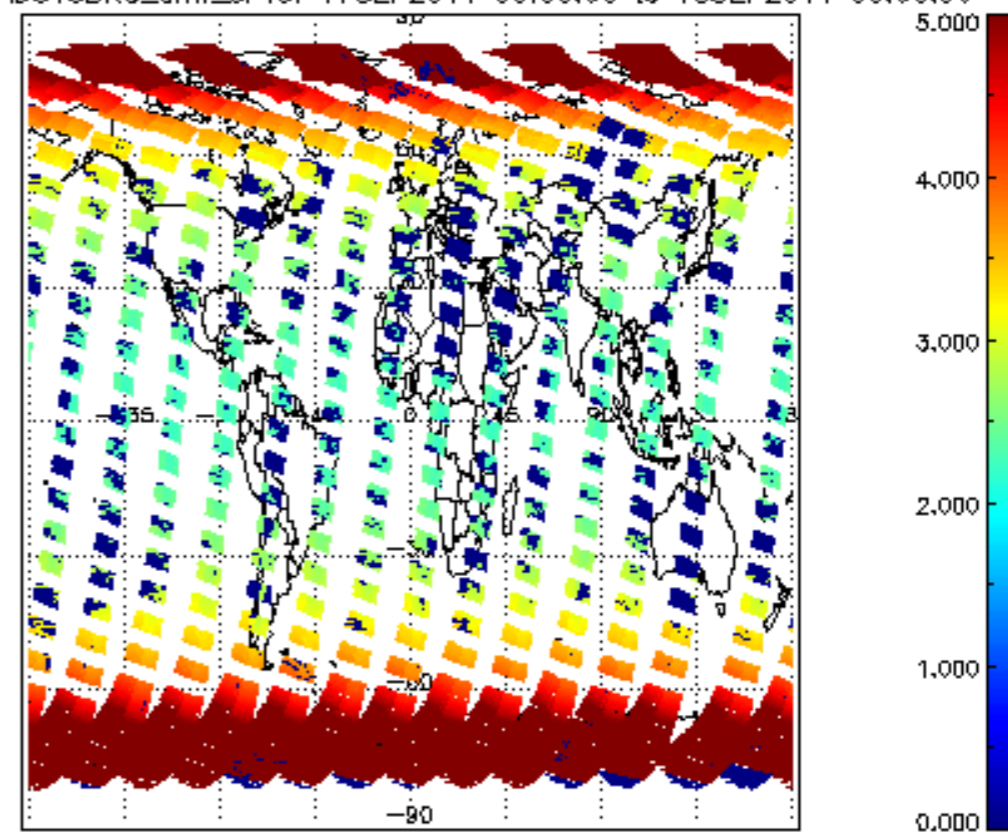
SCIOL2P\_NADUV3BRO\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

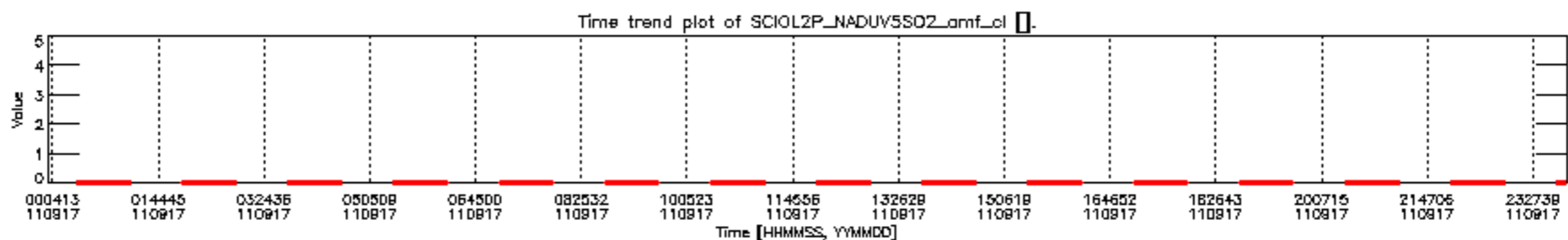
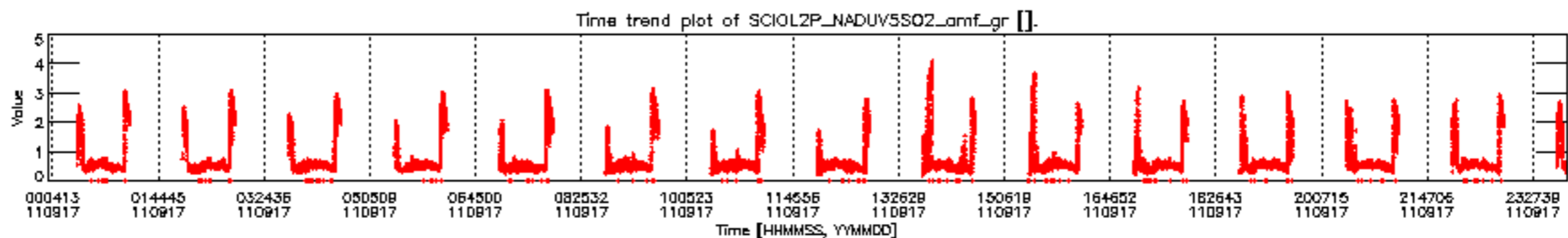
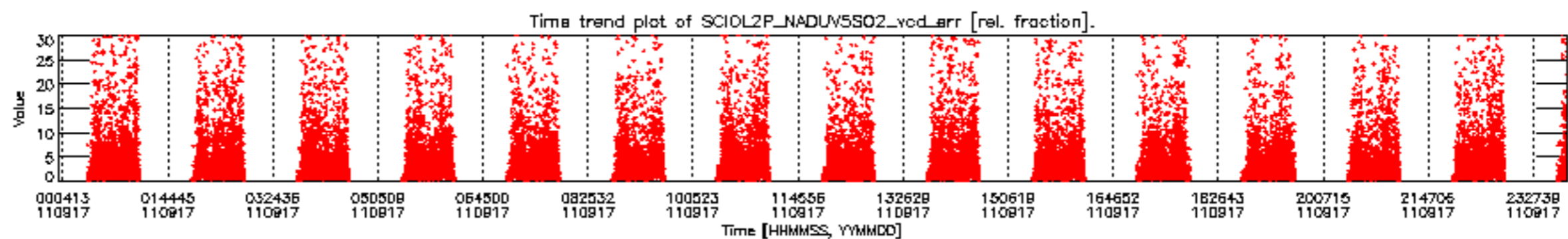
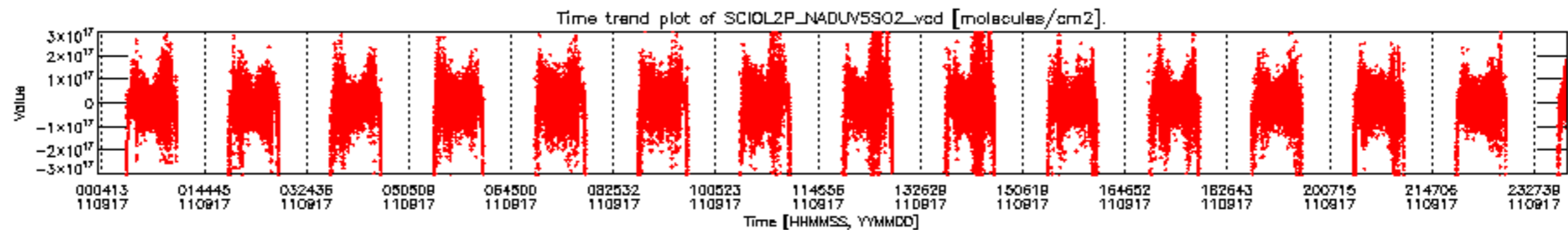


SCIOL2P\_NADUV3BRO\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

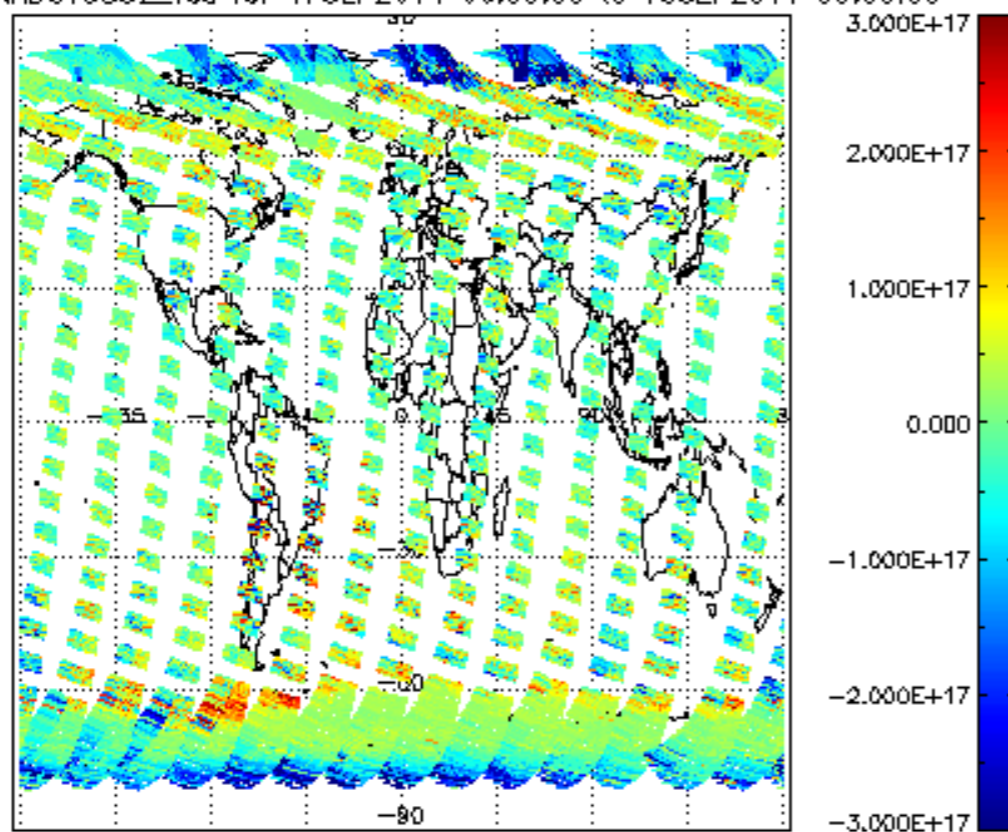


SCIOL2P\_NADUV3BRO\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

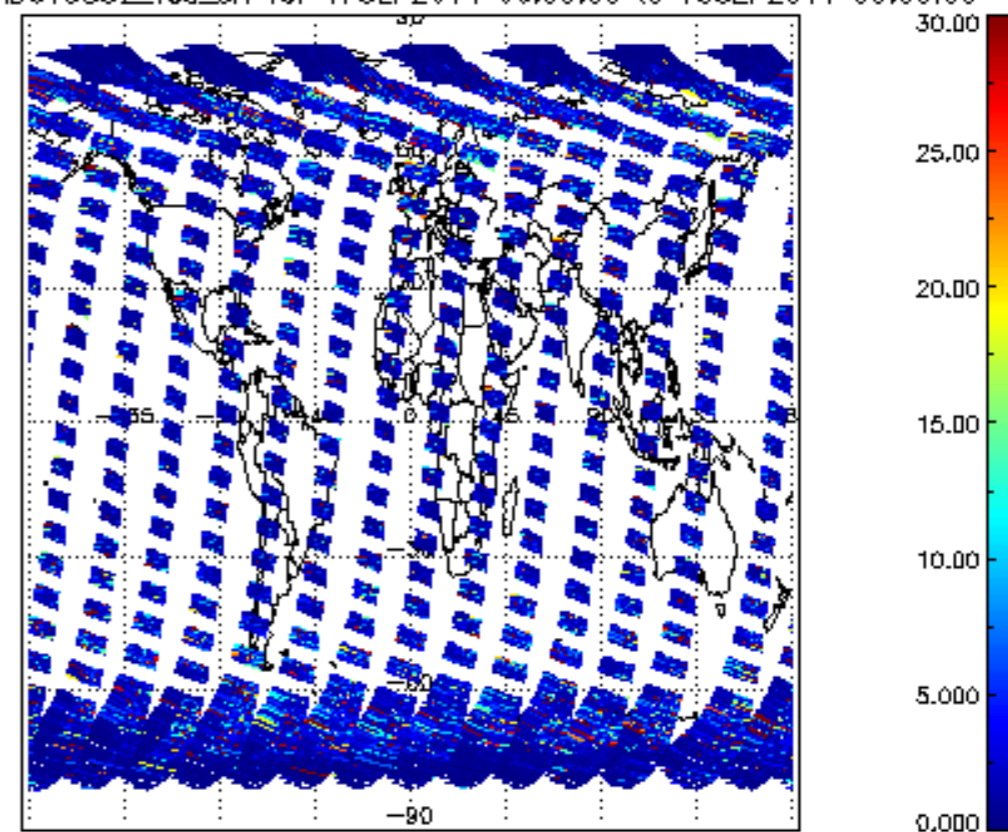




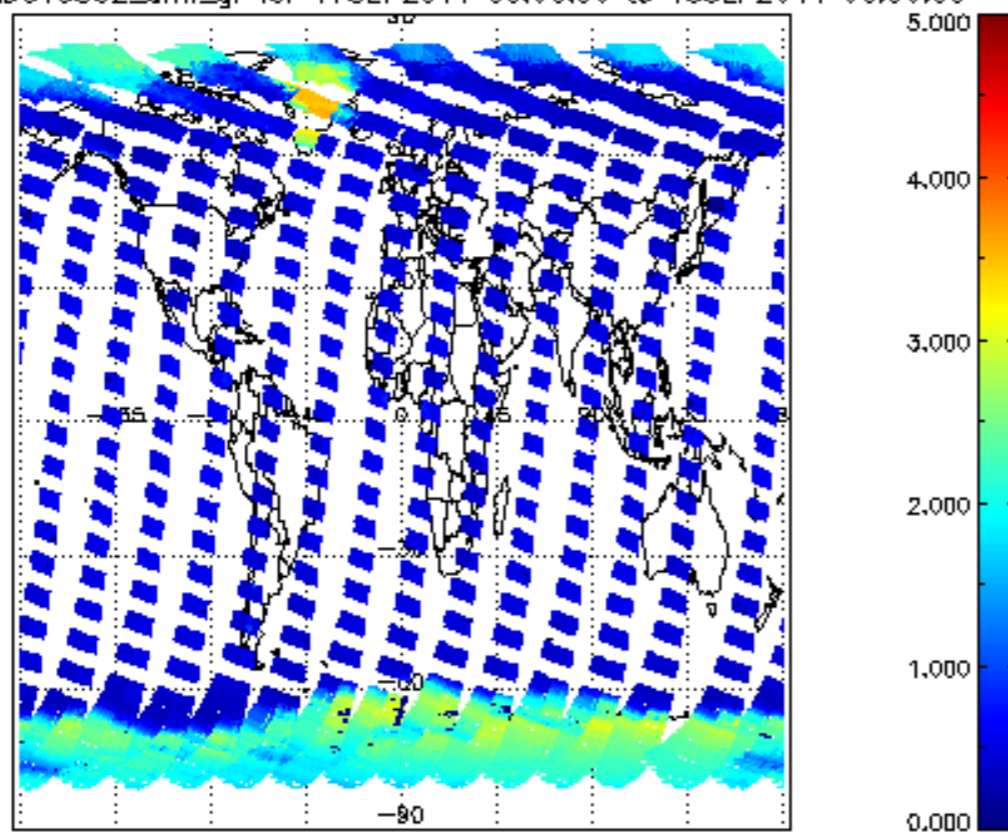
SCIOL2P\_NADUV5S02\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



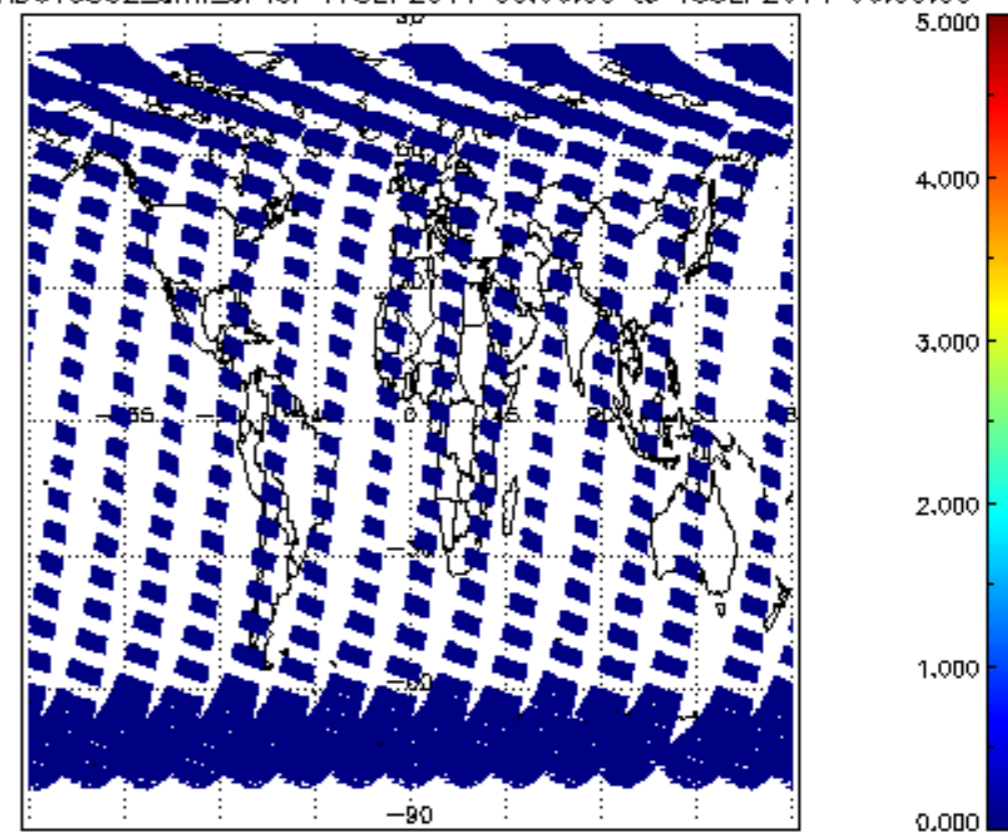
SCIOL2P\_NADUV5S02\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

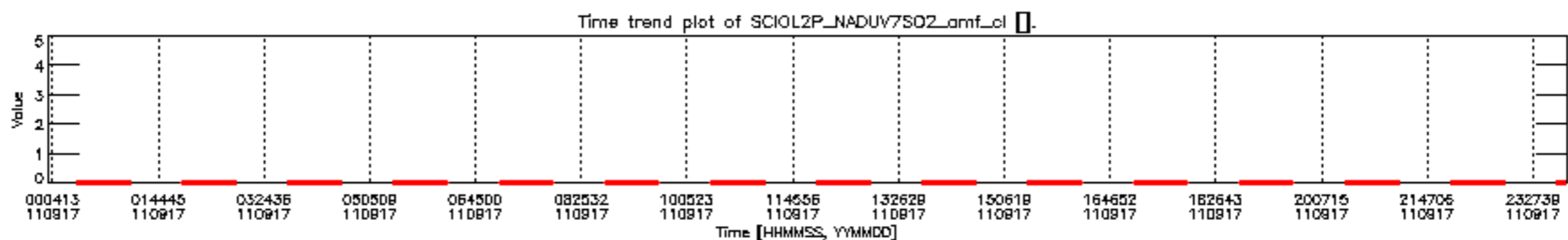
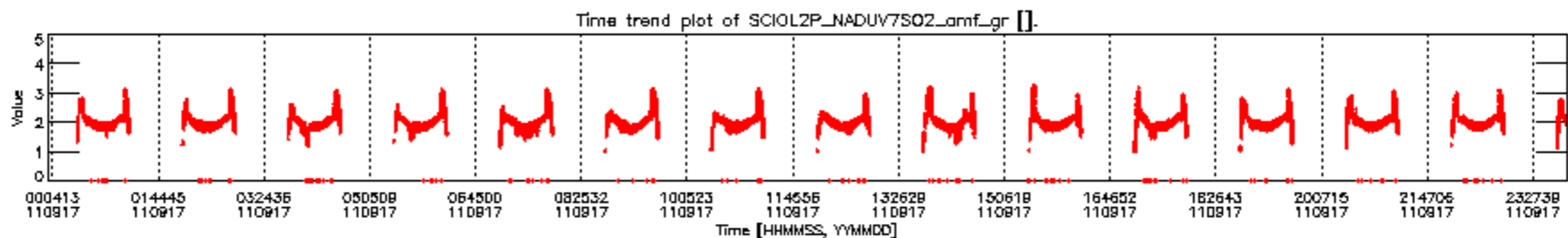
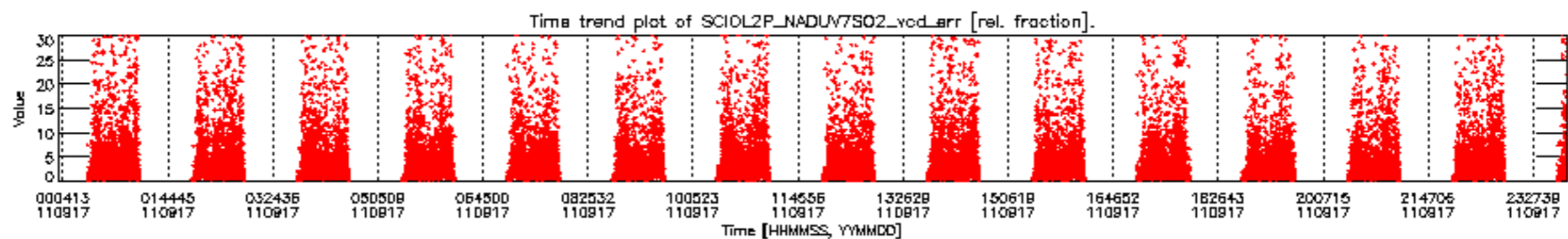
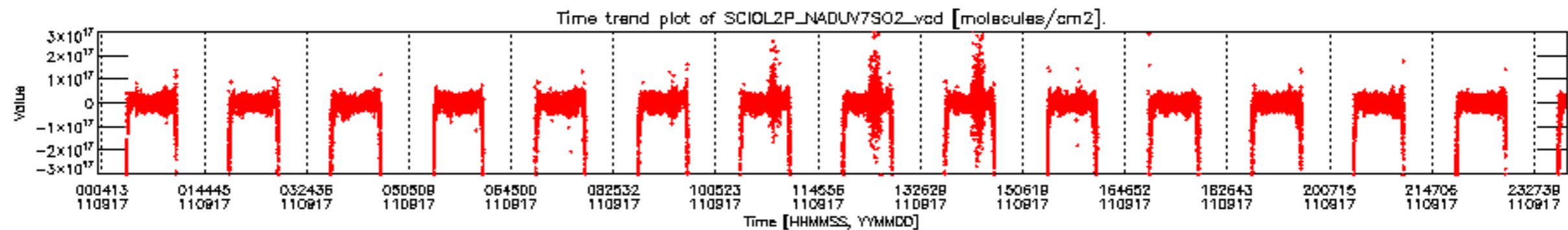


SCIOL2P\_NADUV5S02\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



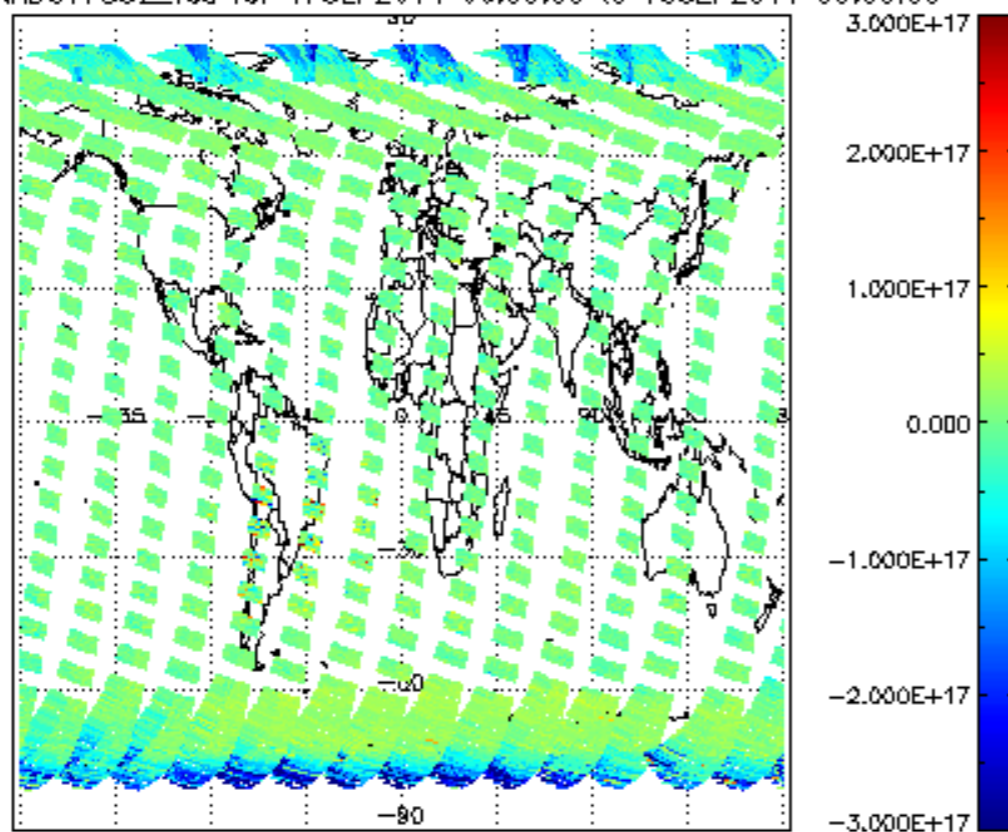
SCIOL2P\_NADUV5S02\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



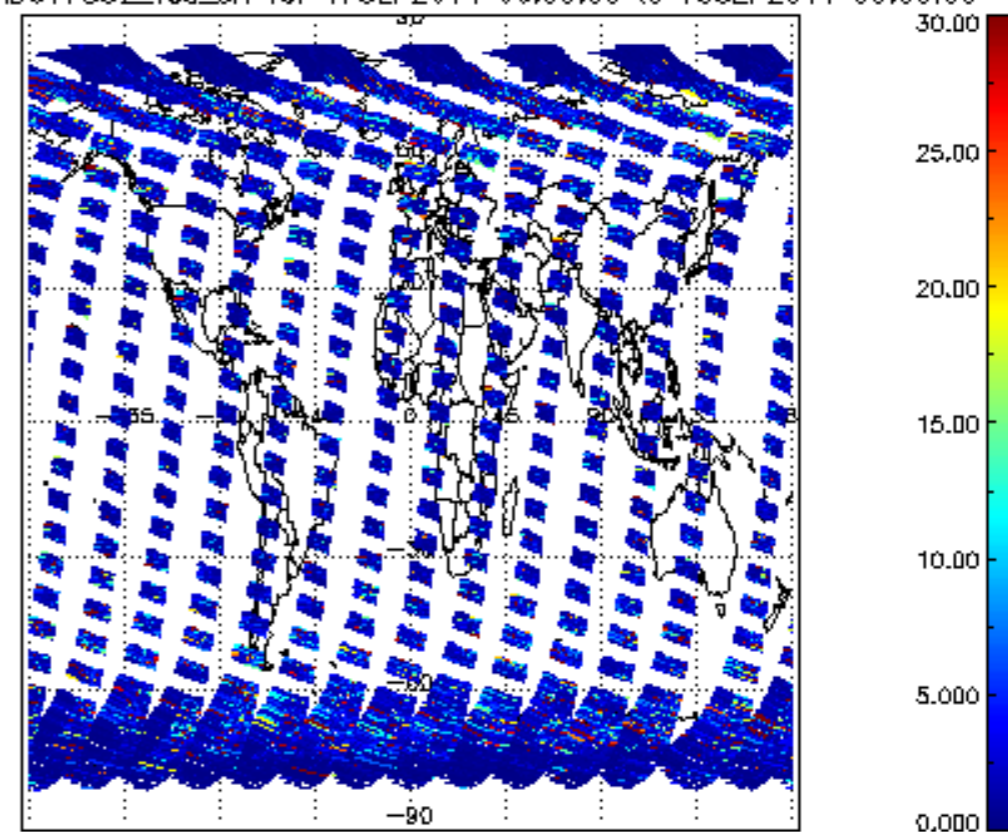




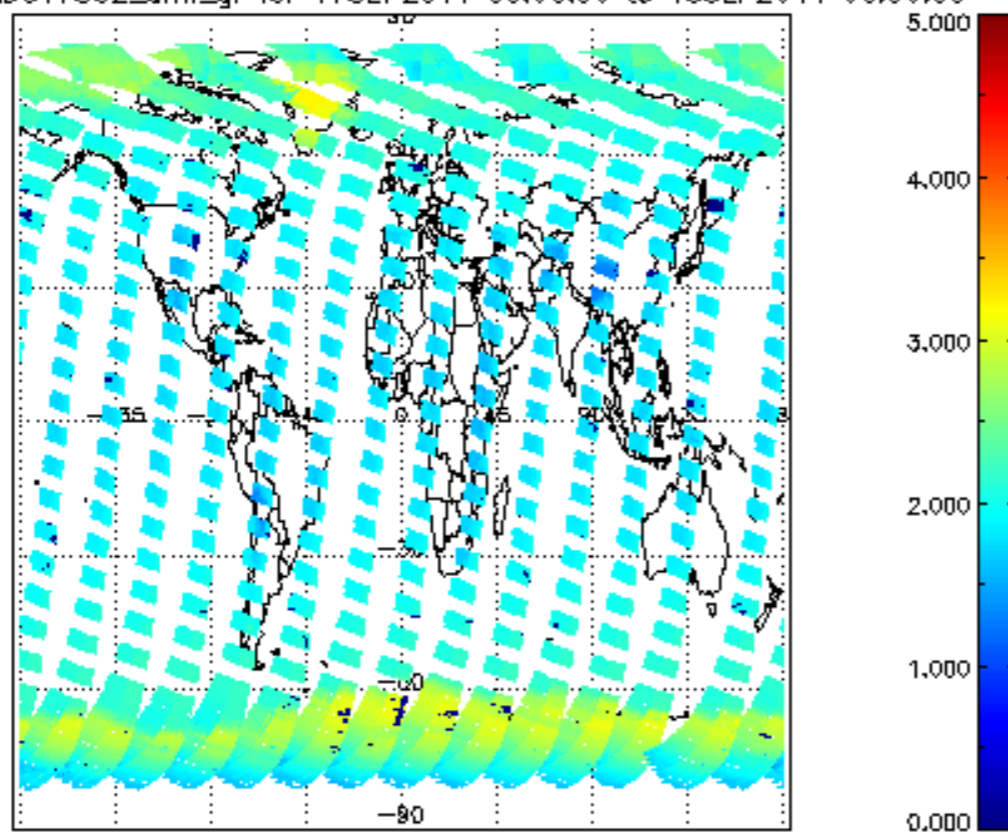
SCIOL2P\_NADUV7S02\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00



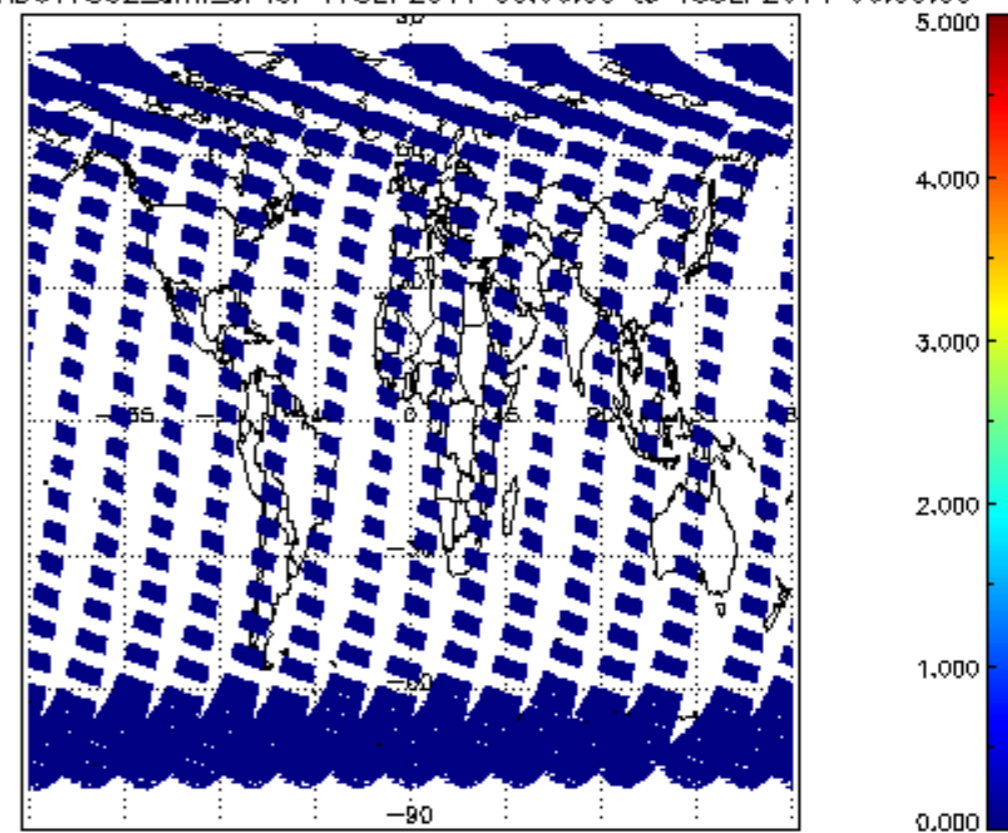
SCIOL2P\_NADUV7S02\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

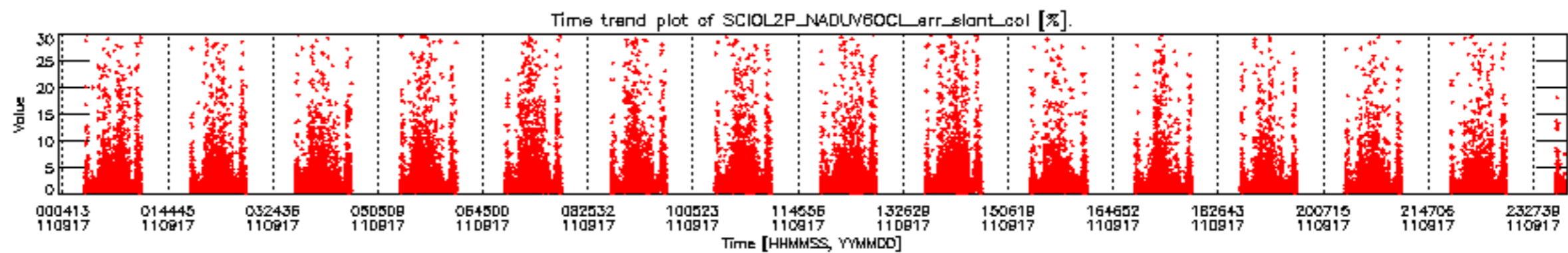
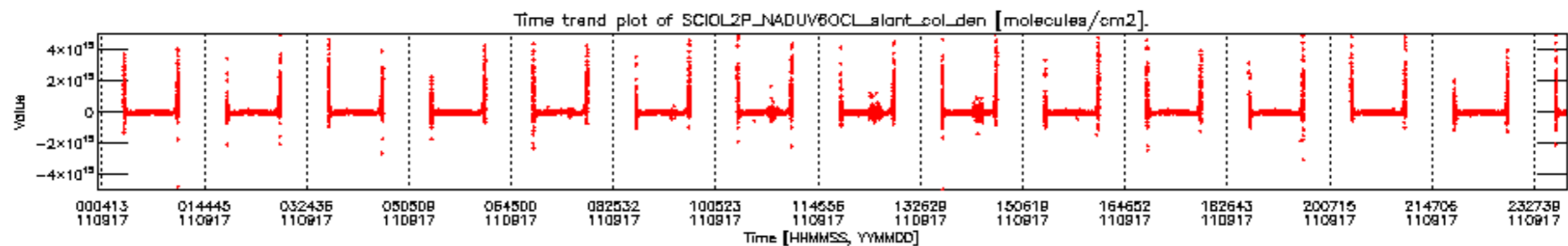


SCIOL2P\_NADUV7S02\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

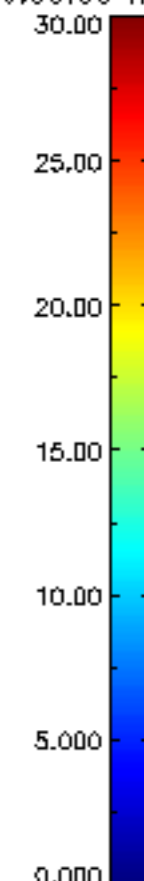
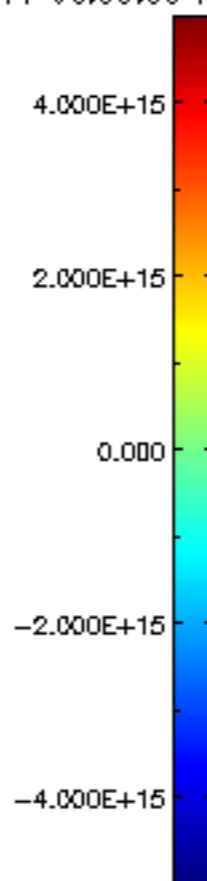
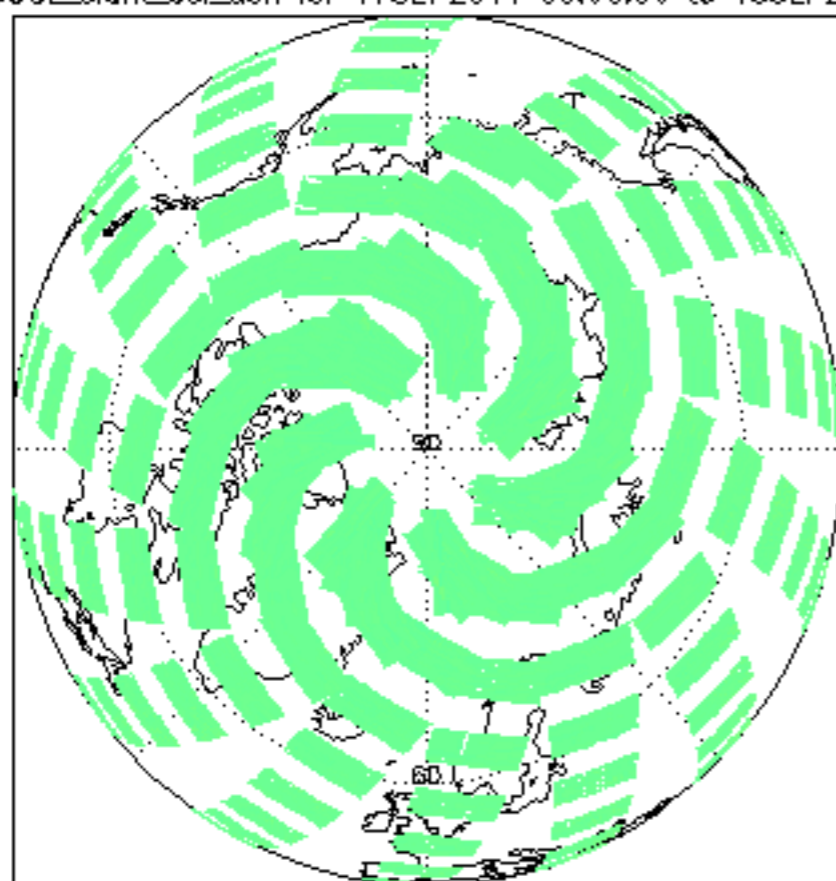


SCIOL2P\_NADUV7S02\_amf\_cl for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

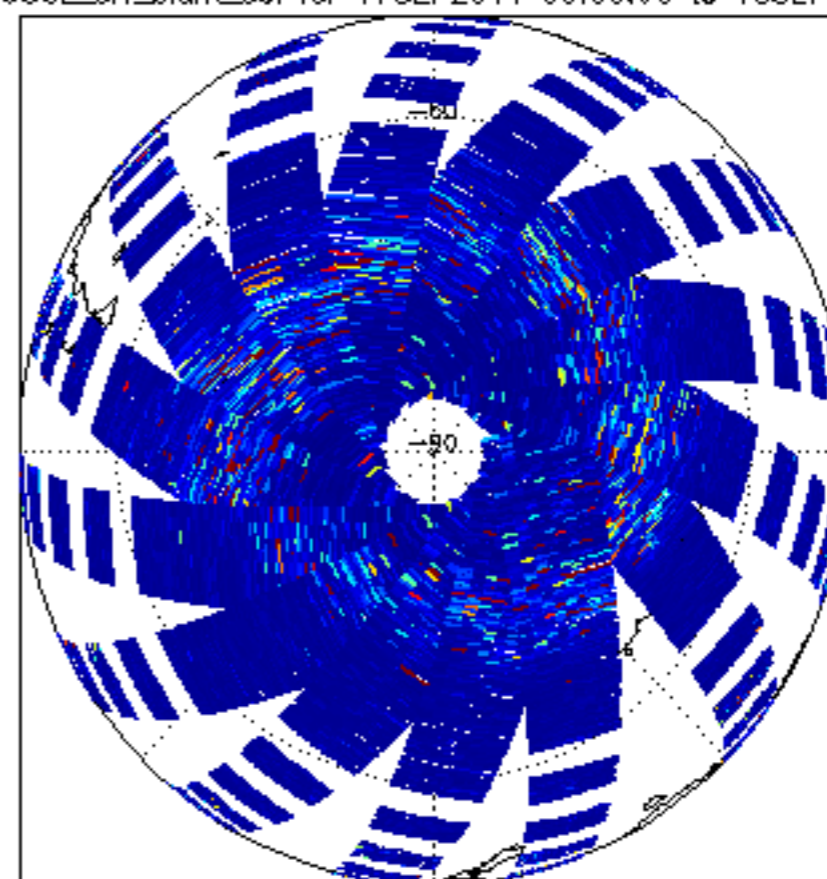
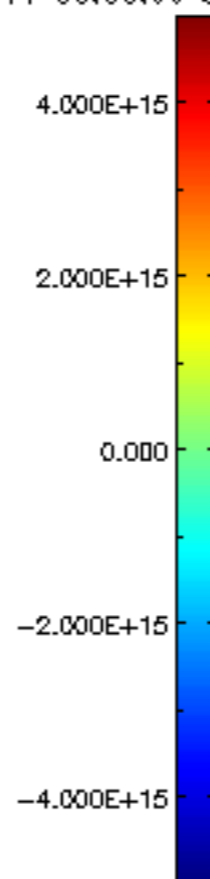
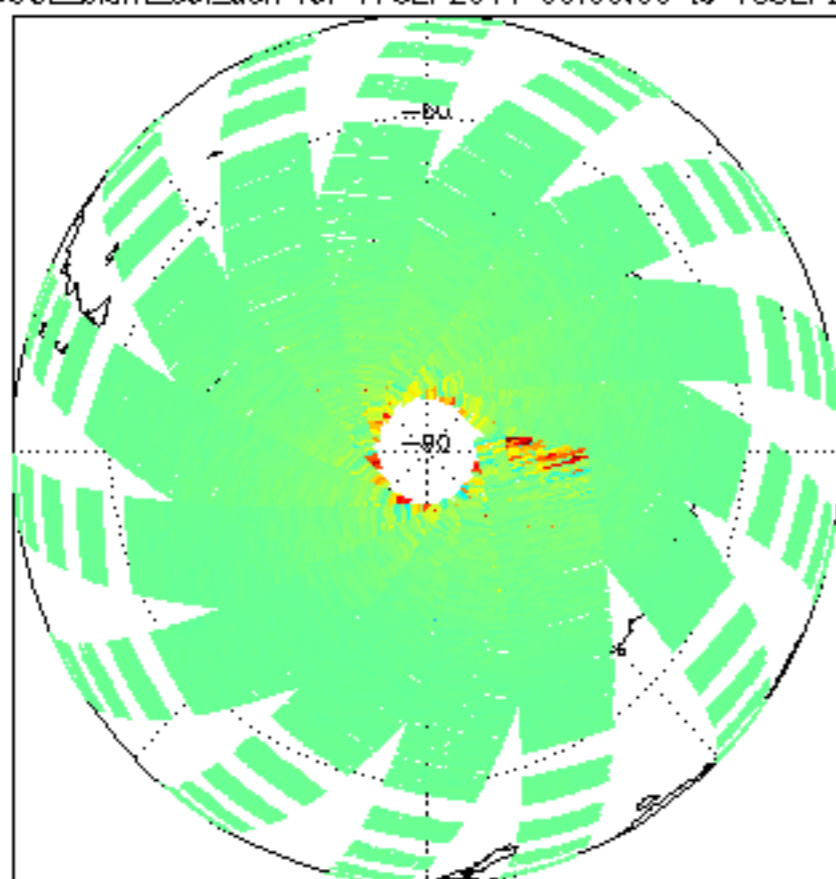




CIOL2P\_NADUV6OCL\_slant\_col\_den for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 np iCIOL2P\_NADUV6OCL\_err\_slant\_col for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 np

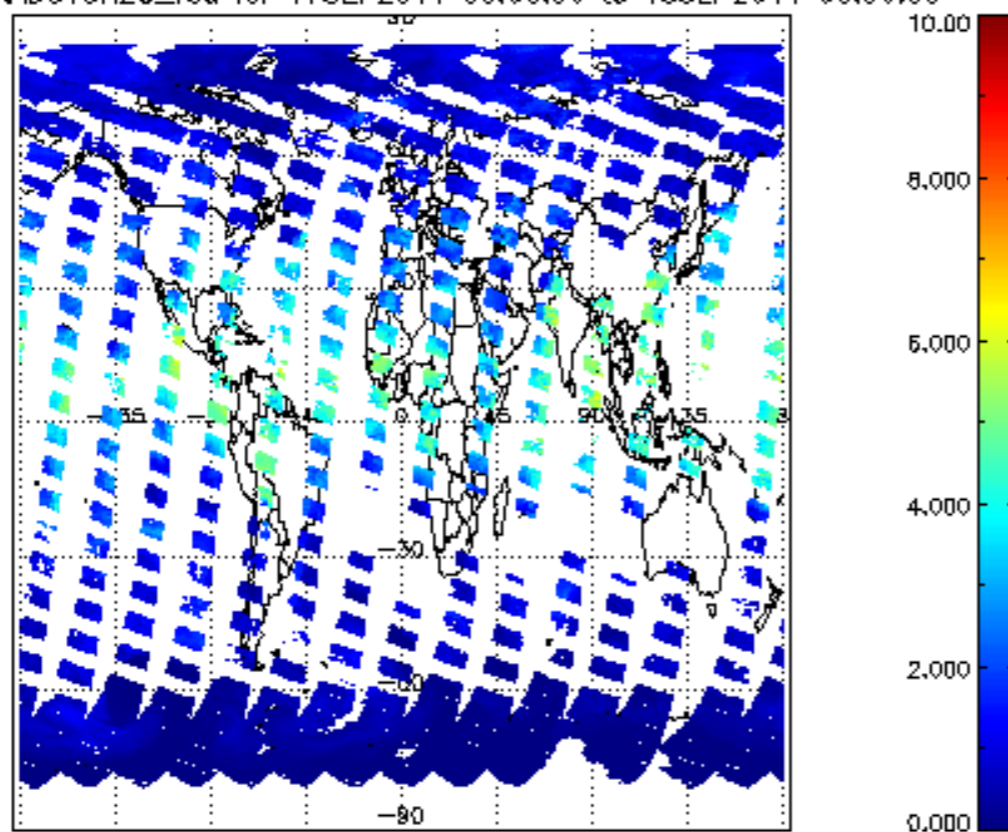


CIOL2P\_NADUV60CL\_slant\_col\_den for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 sp iCIOL2P\_NADUV60CL\_err\_slant\_col for 17SEP2011 00:00:00 to 18SEP2011 00:00:00 sp

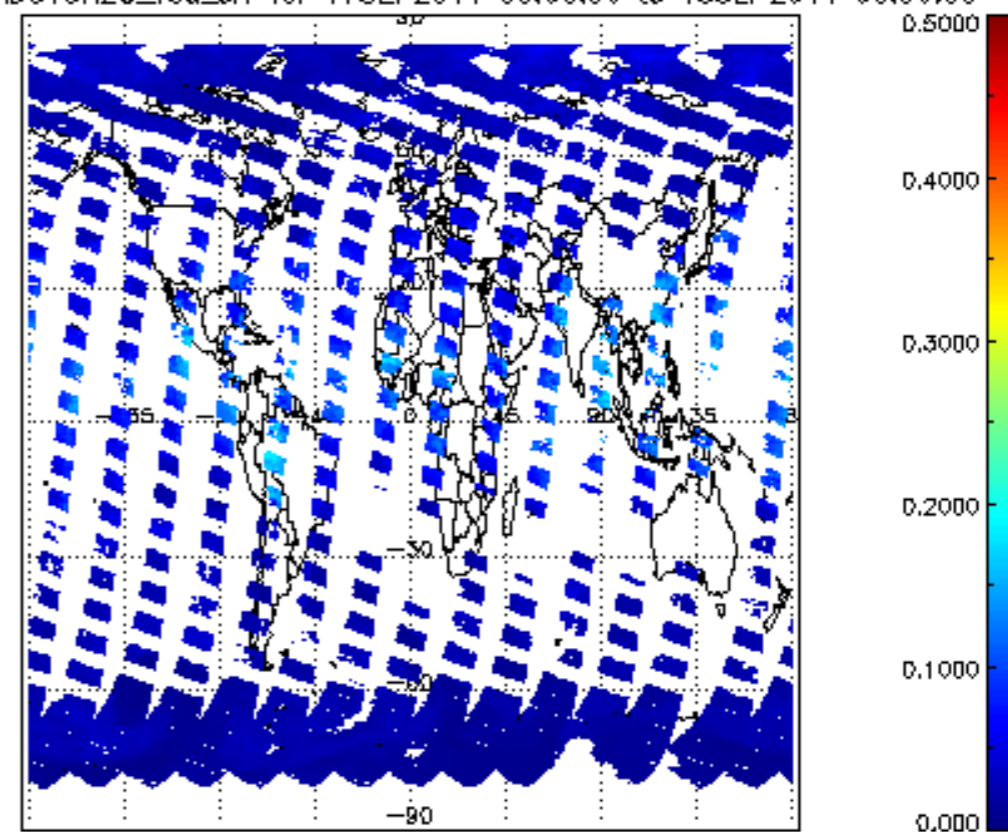




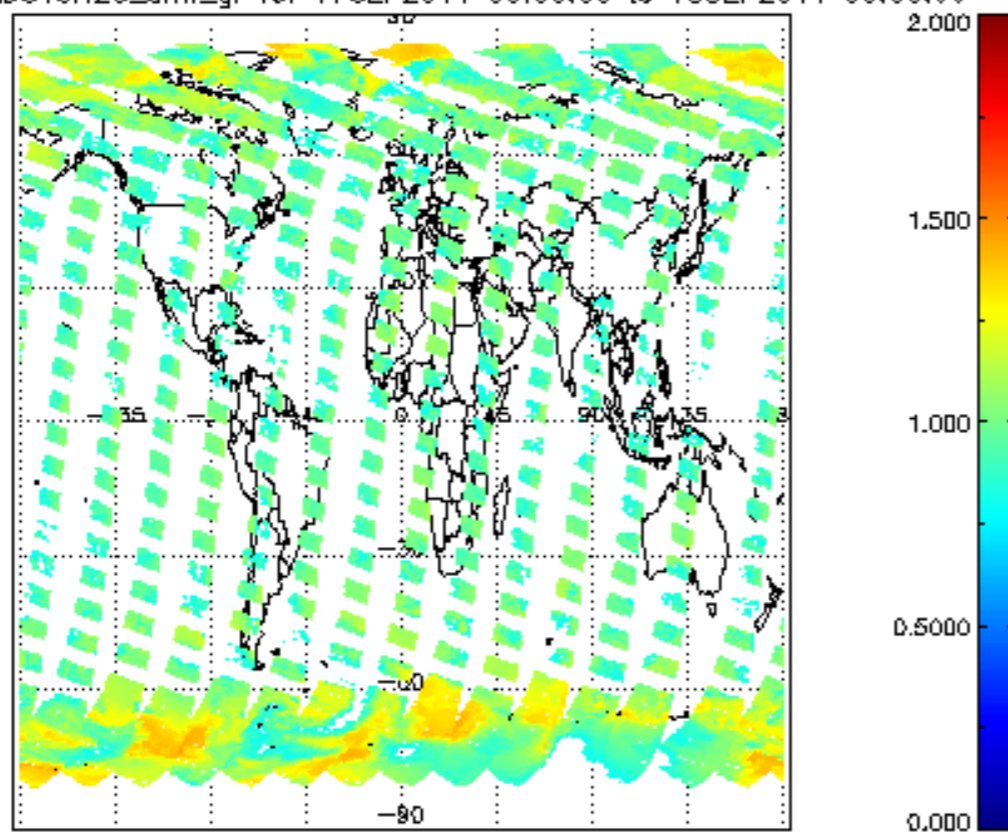
SCIOL2P\_NADUV8H2O\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

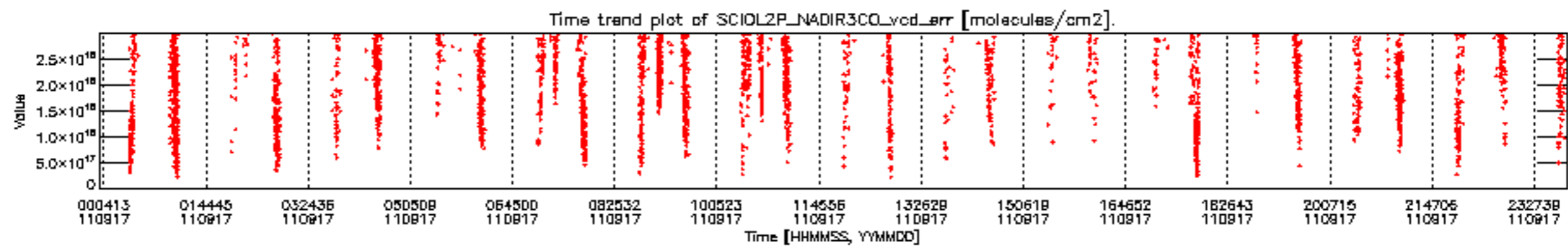
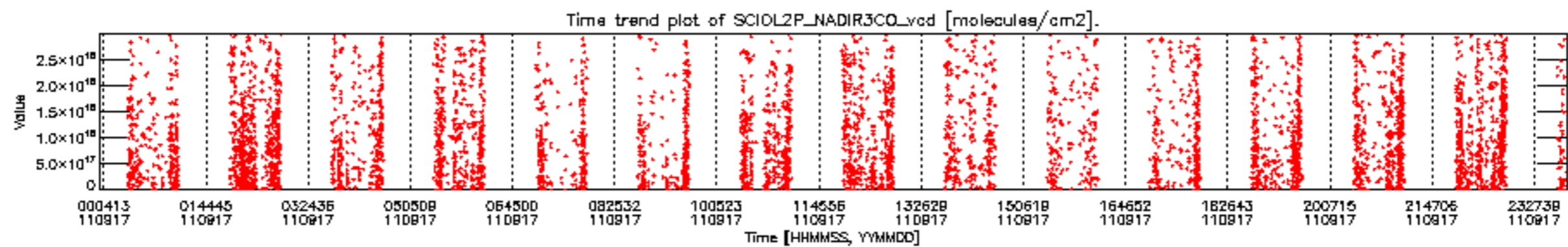


SCIOL2P\_NADUV8H2O\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

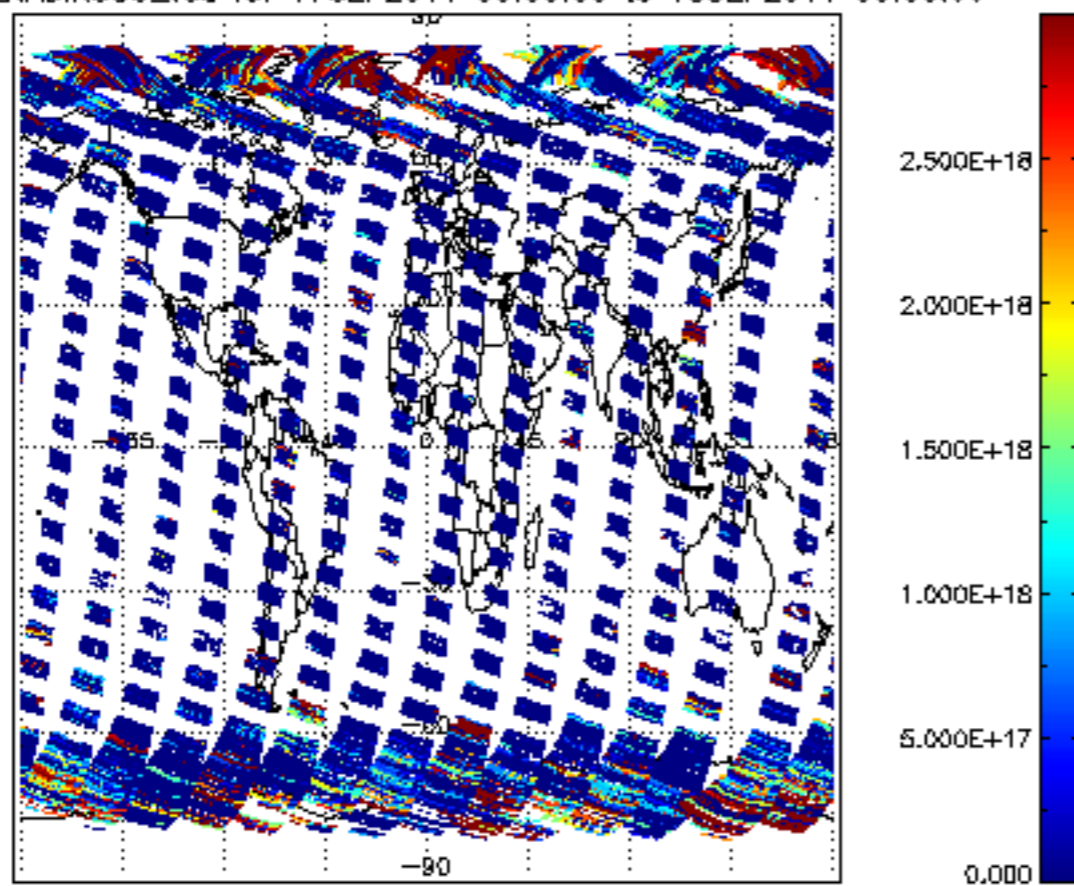


SCIOL2P\_NADUV8H2O\_amf\_gr for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

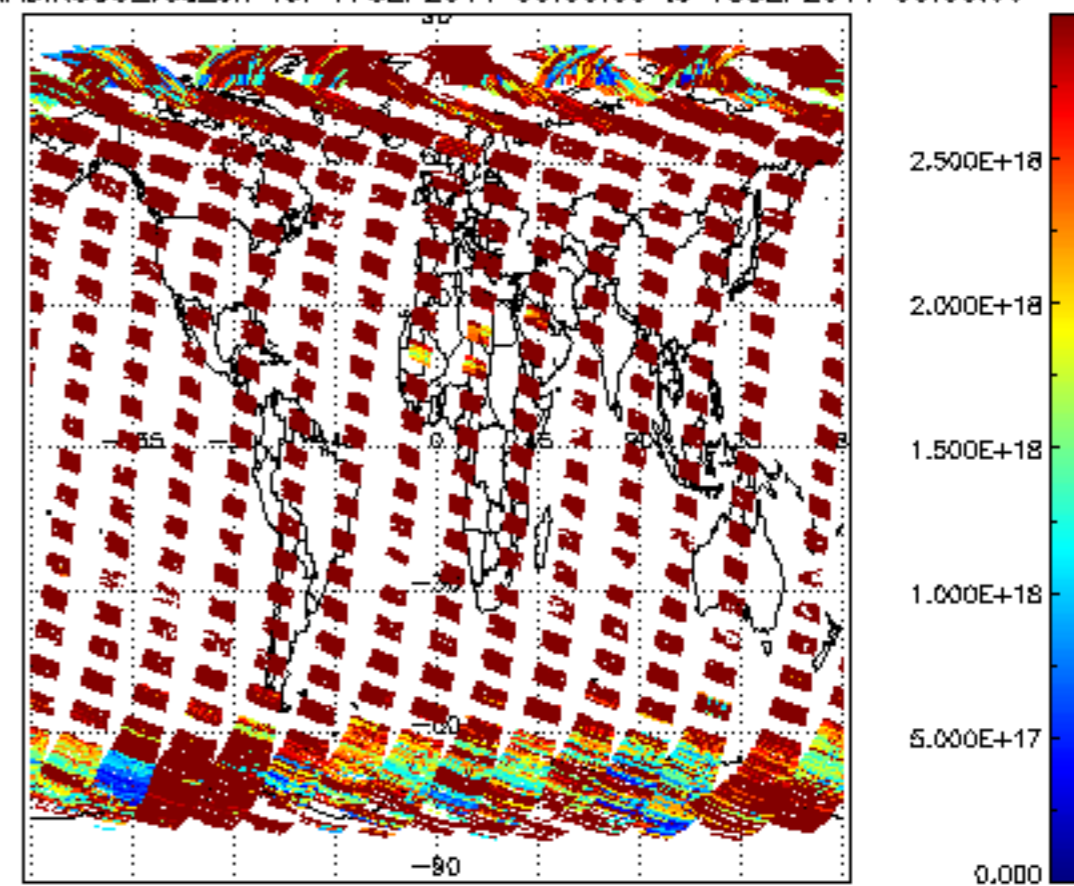




SCIOL2P\_NADIR3CO\_vcd for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

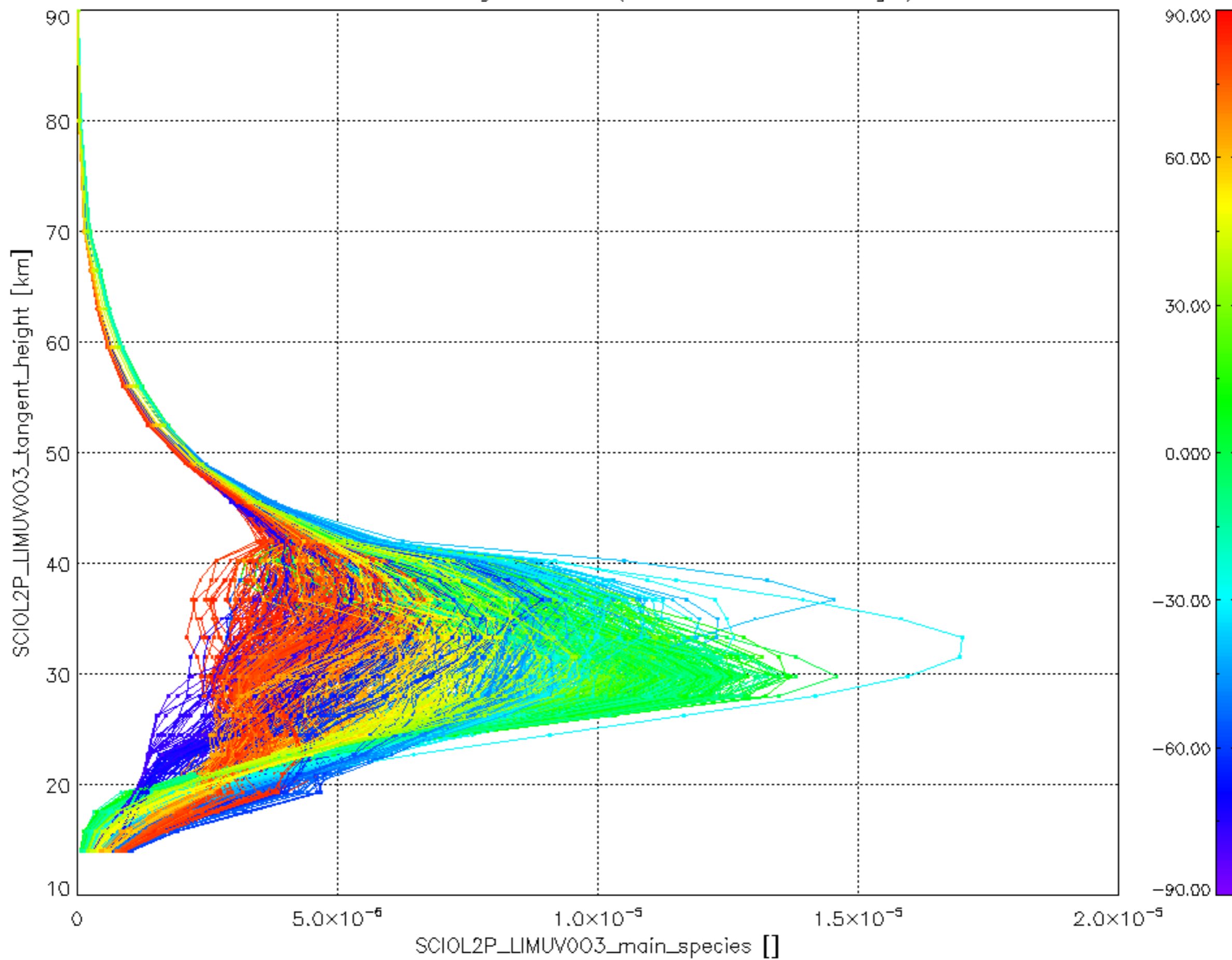


SCIOL2P\_NADIR3CO\_vcd\_err for 17SEP2011 00:00:00 to 18SEP2011 00:00:00

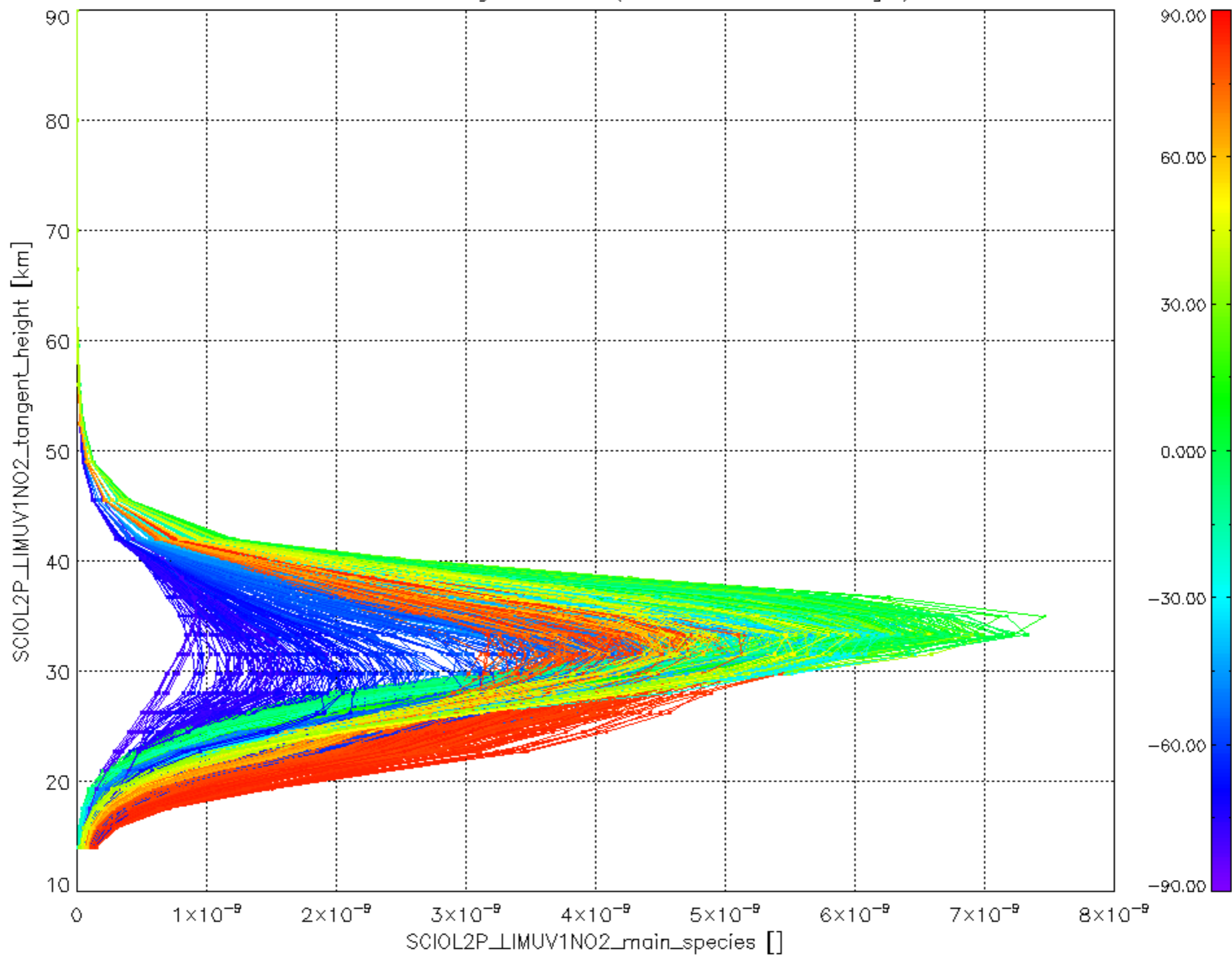




Plot of SCIOL2P\_LIMUV003\_main\_species.tang\_vmr vs. tangent height.  
 Colours indicate tangent latitude (see colour bar on the right).



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).

