

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	03AUG2011 03:22:01
Data source version	SCIA-OL/5.01-U
Processing scope for products	21JUL2011 00:00:00 to 22JUL2011 00:00:00
Start time of first product within scope	21JUL2011 10:42:22
Stop time of last product within scope	22JUL2011 01:02:52
Total number of level 2 products	9
Number of level 2 products with errors	0

2.1.2 Summary per product

The following table shows a summary for each product used in this report.

Products are linked to a corresponding server directory for view/download. Note: Link access may be restricted by security settings of your internet browser or firewall.

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

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PUDPA20110721_104222_000035163104_00382_49103_5629.N1	21JUL2011 10:42:22	21JUL2011 11:40:59	0	GOOD
1	SCI_OL__2PUDPA20110721_122237_000035303104_00383_49104_5626.N1	21JUL2011 12:22:37	21JUL2011 13:21:27	0	GOOD
2	SCI_OL__2PUDPA20110721_140251_000035163104_00384_49105_5633.N1	21JUL2011 14:02:51	21JUL2011 15:01:27	0	GOOD
3	SCI_OL__2PUDPA20110721_154305_000035303104_00385_49106_5634.N1	21JUL2011 15:43:05	21JUL2011 16:41:55	0	GOOD
4	SCI_OL__2PUDPA20110721_172330_000035163104_00386_49107_5627.N1	21JUL2011 17:23:30	21JUL2011 18:22:06	0	GOOD

5	SCI_OL_2PUDPA20110721_190344_000035303104_00387_49108_5628.N1	21JUL2011 19:03:44	21JUL2011 20:02:35	0	GOOD
6	SCI_OL_2PUDPA20110721_204348_000035163104_00388_49109_5625.N1	21JUL2011 20:43:48	21JUL2011 21:42:24	0	GOOD
7	SCI_OL_2PUDPA20110721_222402_000035303104_00389_49110_5630.N1	21JUL2011 22:24:02	21JUL2011 23:22:52	0	GOOD
8	SCI_OL_2PUDPA20110722_000416_000035163104_00390_49111_5631.N1	22JUL2011 00:04:16	22JUL2011 01:02:52	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: 94640

Total number of cloud data DSRs with good quality flag (=0): 94640 (100.0 %)

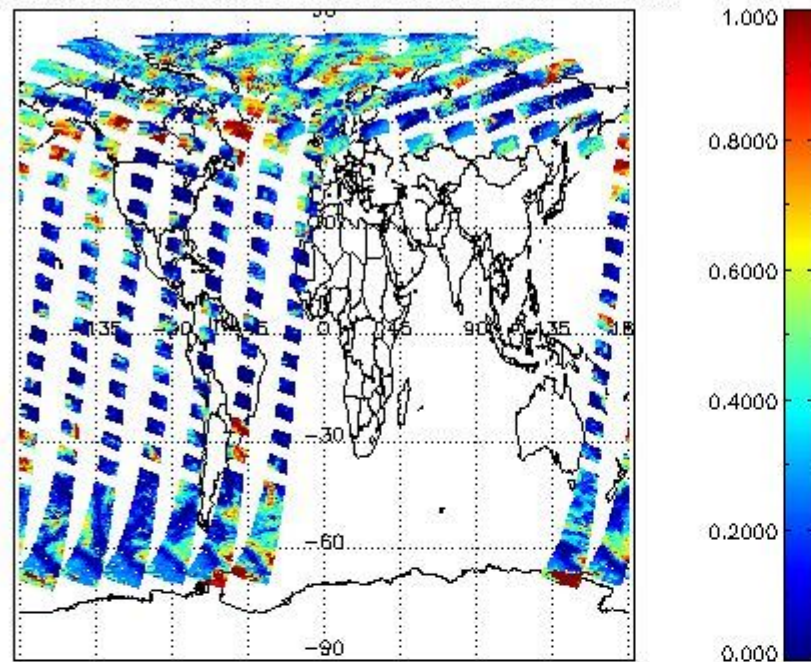
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	94640	0.0000	0.0000	0.0000	0.0000	0.0000	
INTEGR_TIME	94640	0.16484	0.12500	0.12500	0.25000	0.058246	s
CL_FRAC	94640	0.29785	0.25127	0.0000	1.0000	0.26255	
CL_FRAC_ERR	94640	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	94640	5.2747	4.0000	4.0000	8.0000	1.8639	
PMD_READ_CL[0]	94640	0.20600	0.0000	0.0000	8.0000	0.97585	-
PMD_READ_CL[1]	94640	1.4365	0.0000	0.0000	8.0000	2.4995	-
CL_TOP_HEIGHT	72254	3.1606	1.3197	0.0000	17.000	3.5618	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	72254	62.392	100.00	0.0000	101.00	43.384	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	94640	11100000	11100000	11100000	11100000	0.0000	
CLOUD_FLAGS	94640	11001110	11000100	11000000	11100000	3666.8	
AERO_ABSO_IND	94640	0.20432	0.0000	0.0000	15.268	0.44525	
AERO_IND_DIAG	94640	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	94640	01010010	00000000	00000000	11000000	24323.	

Time and geolocation plots:

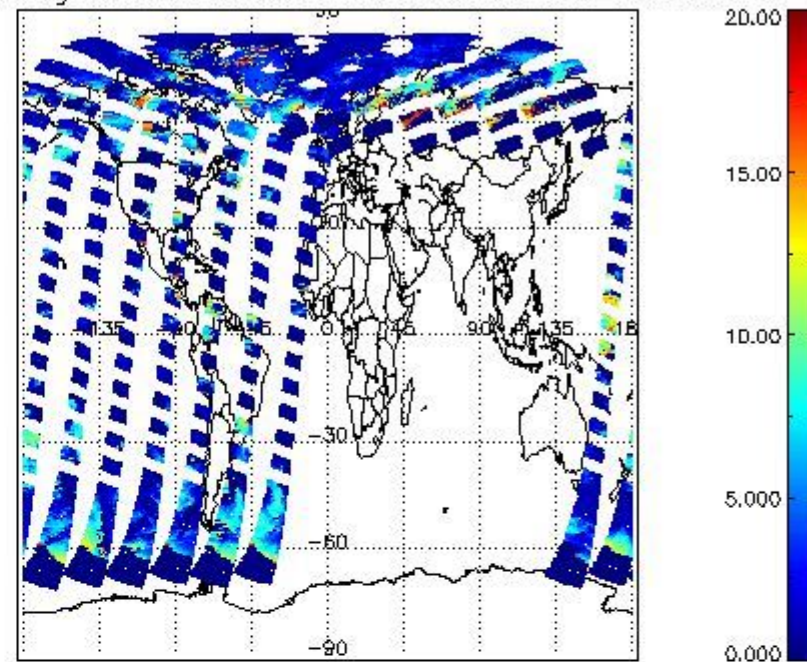
Plots are available for the following parameters:

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

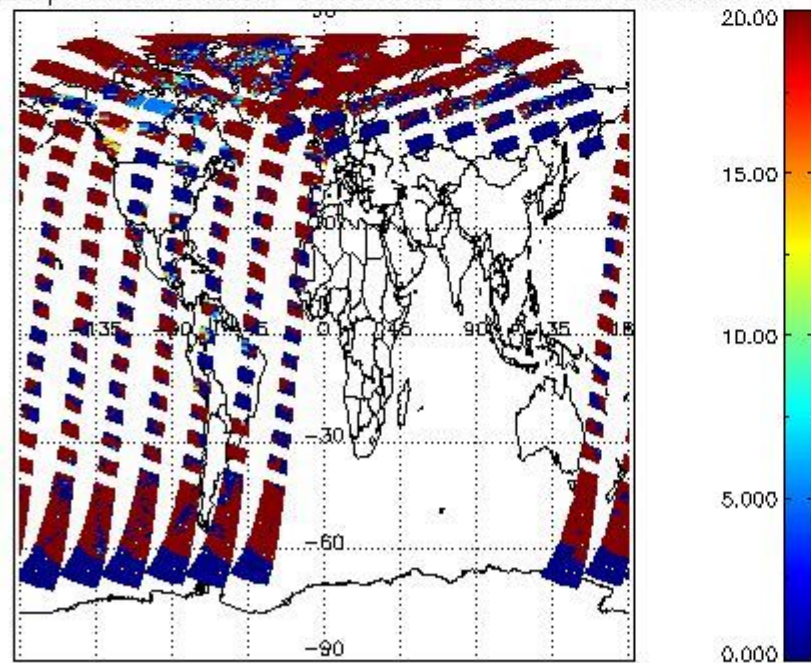
cL_frac for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



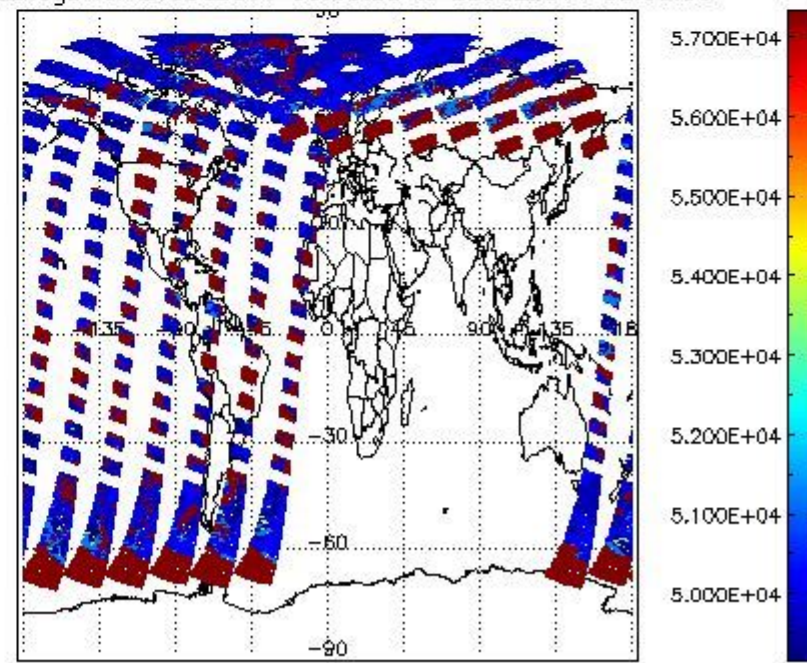
cL_top_height for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



cL_opt_depth for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



cloud_flags for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



2.2.2 Nadir

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

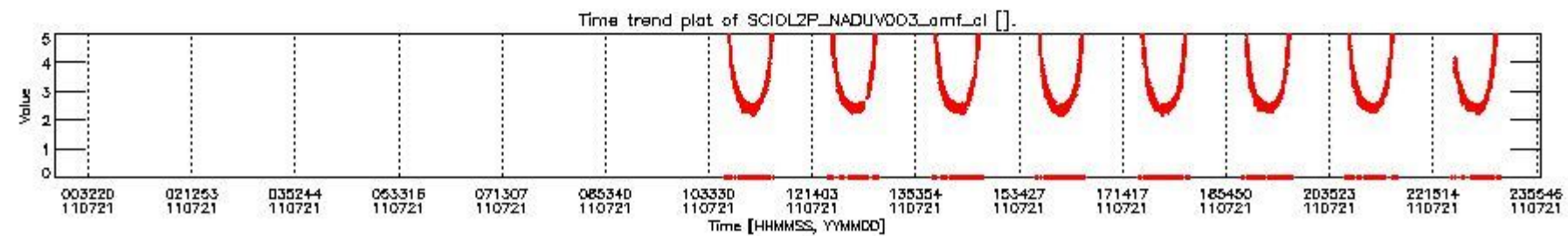
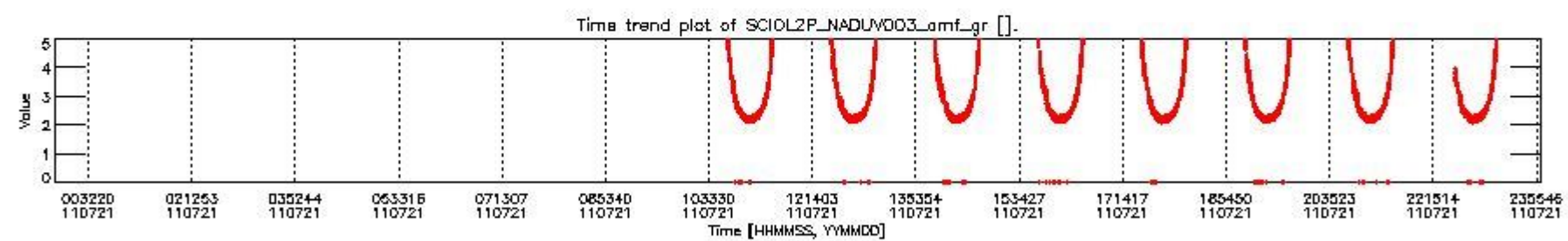
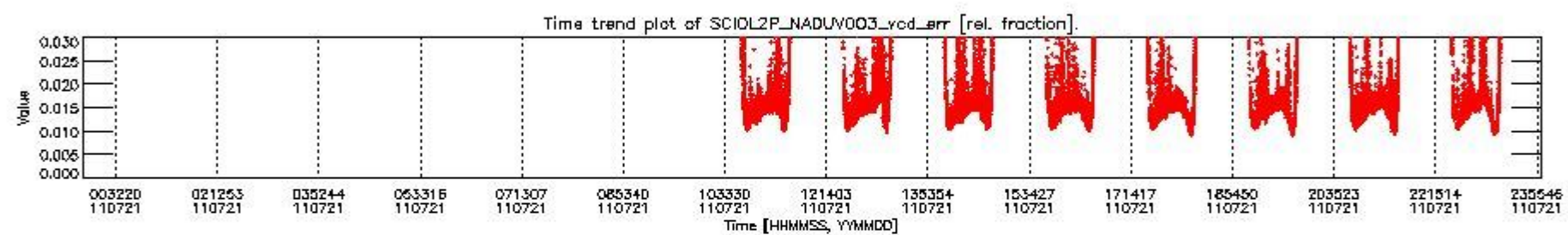
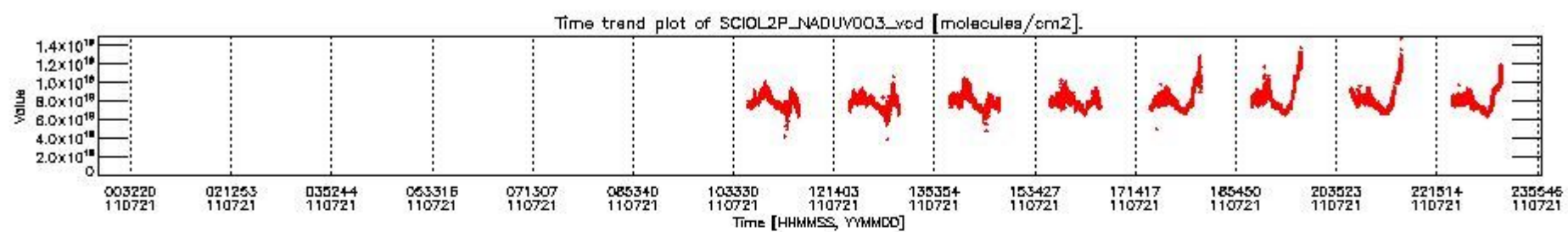
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

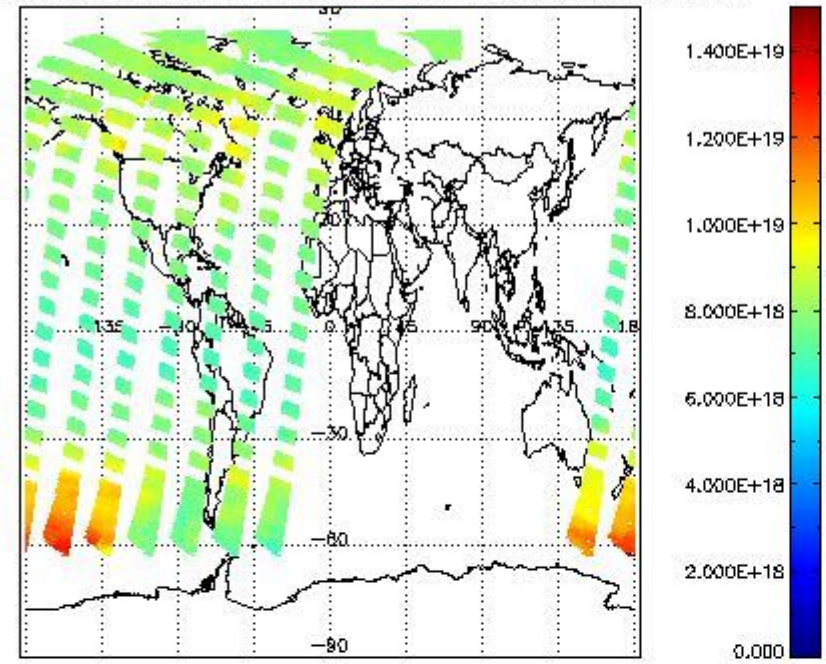
3	SCIOL2P_NADUV0O3_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl
8	SCIOL2P_NADUV3BRO_vcd
9	SCIOL2P_NADUV3BRO_vcd_err
10	SCIOL2P_NADUV3BRO_amf_gr
11	SCIOL2P_NADUV3BRO_amf_cl
12	SCIOL2P_NADUV5SO2_vcd
13	SCIOL2P_NADUV5SO2_vcd_err
14	SCIOL2P_NADUV5SO2_amf_gr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

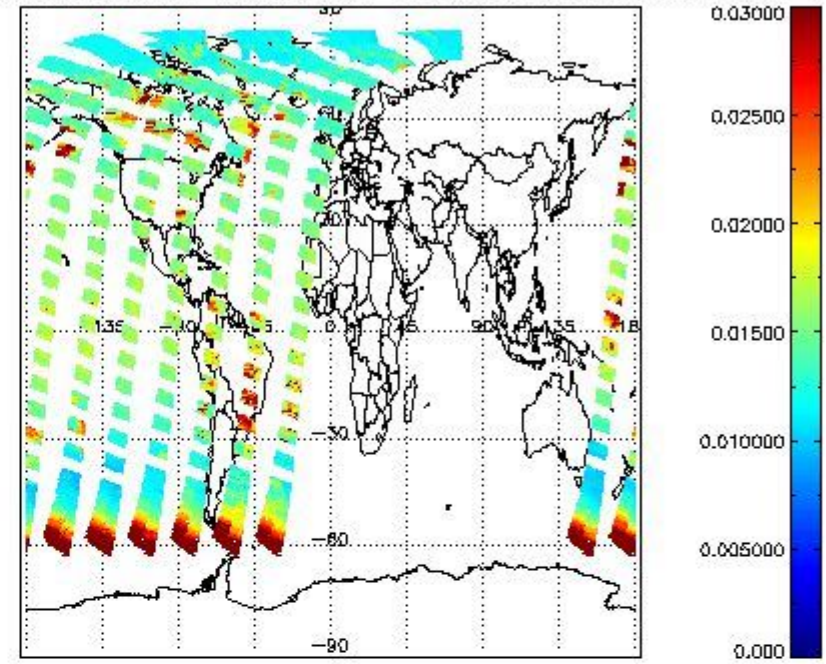
2.2.2.1 O3 (UV0)



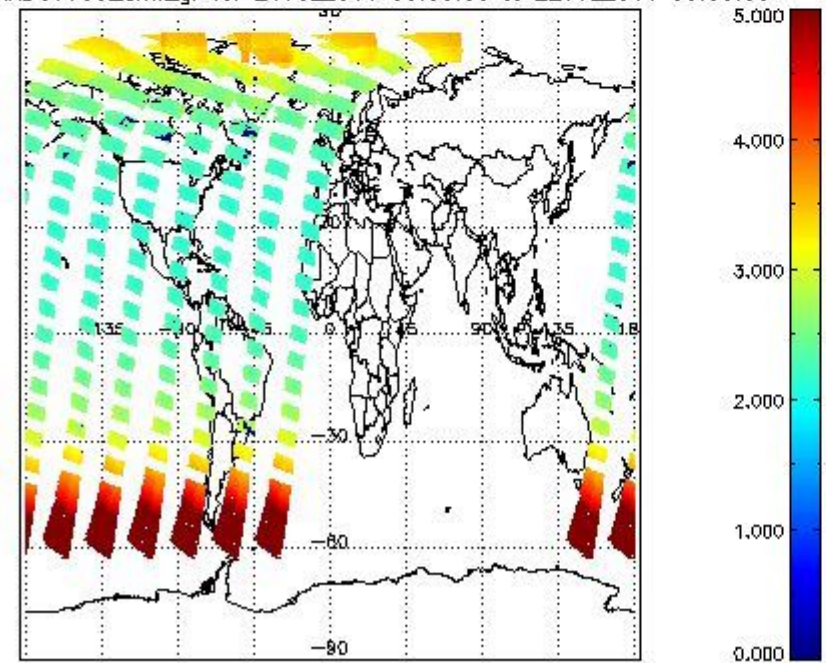
SCIOL2P_NADUV003_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



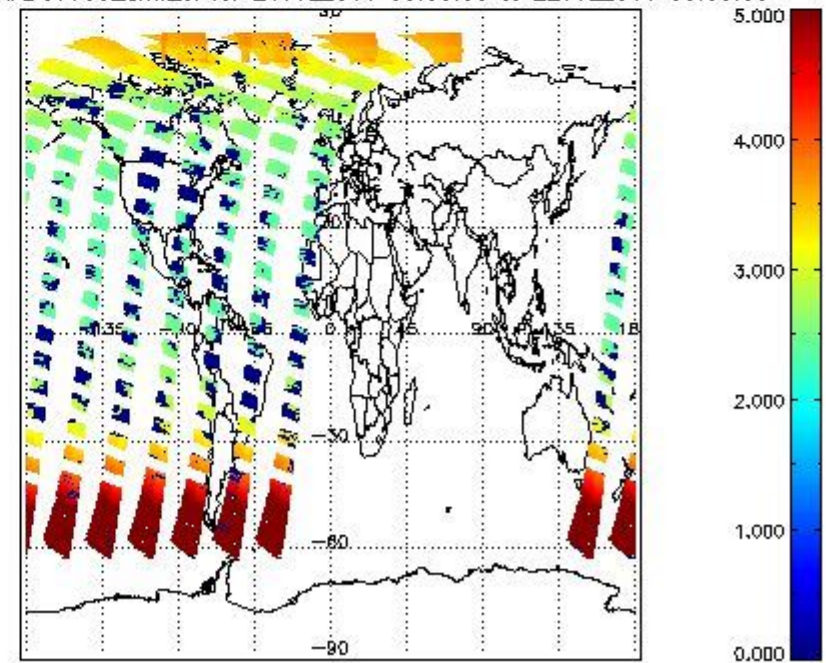
SCIOL2P_NADUV003_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



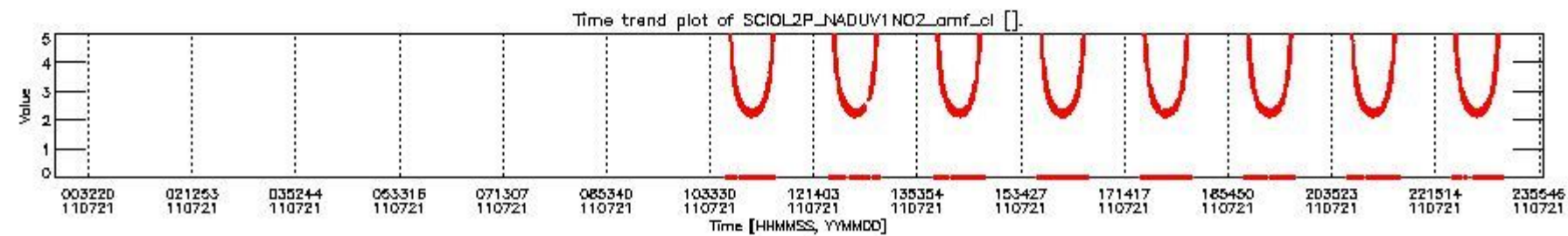
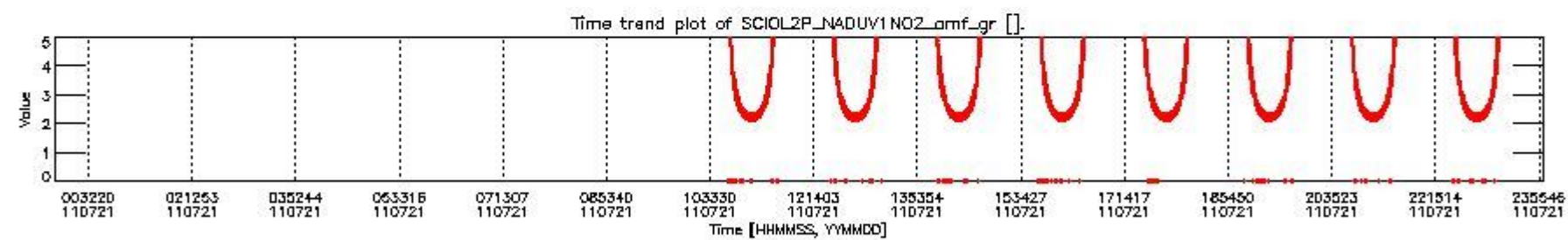
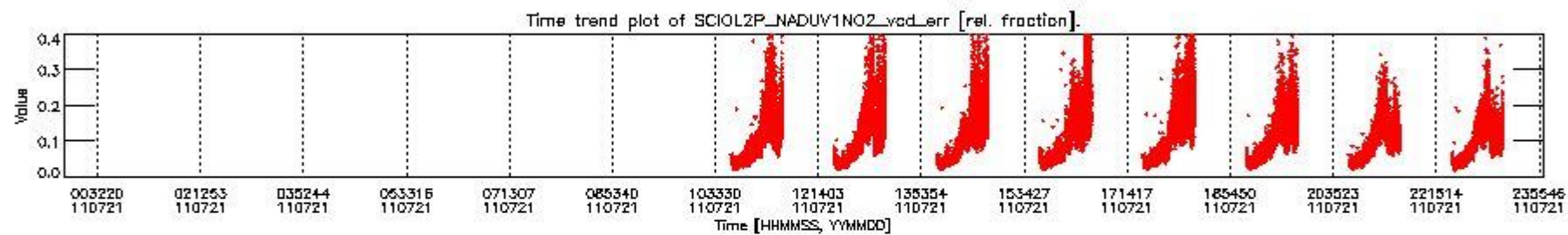
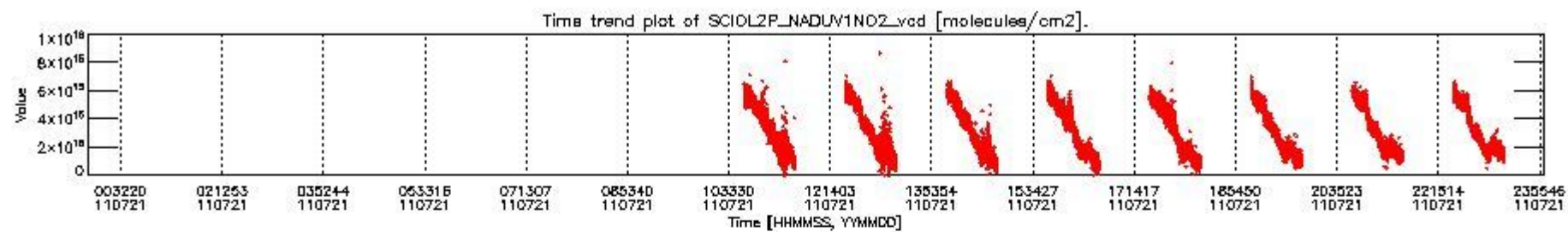
SCIOL2P_NADUV003_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

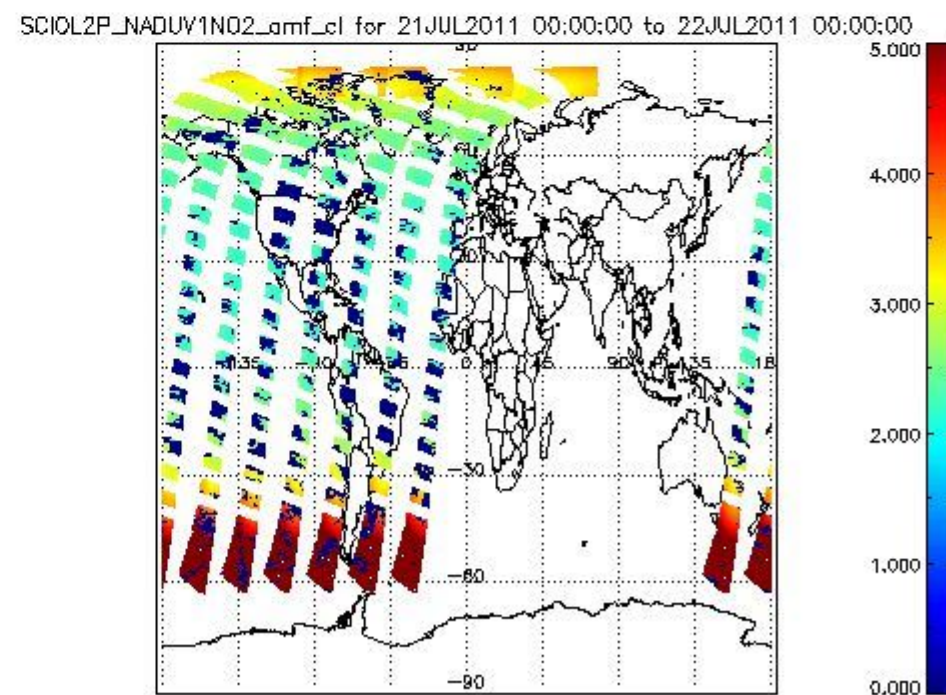
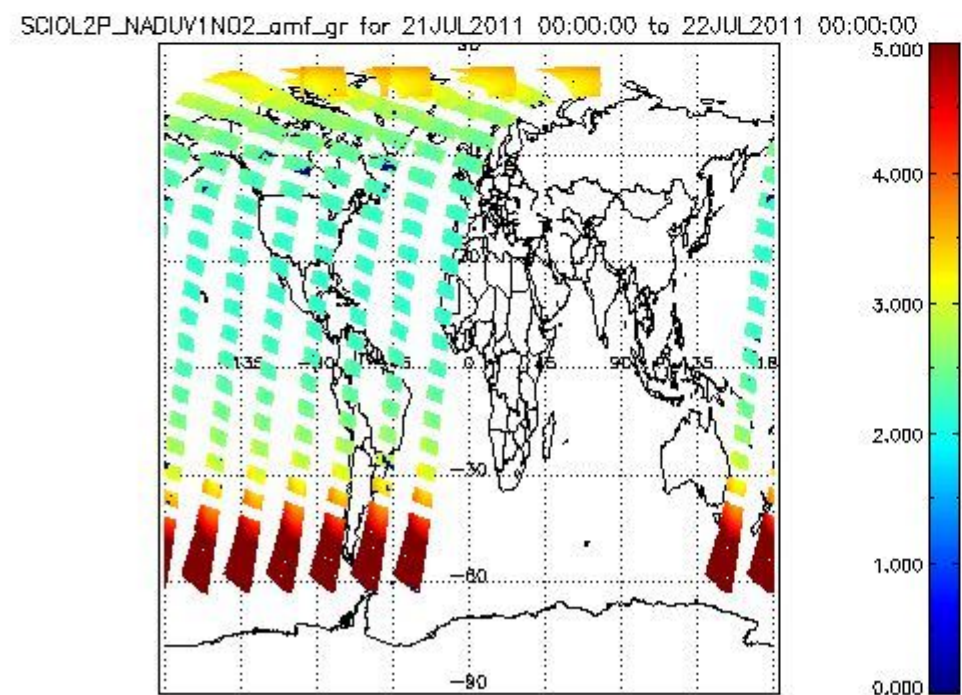
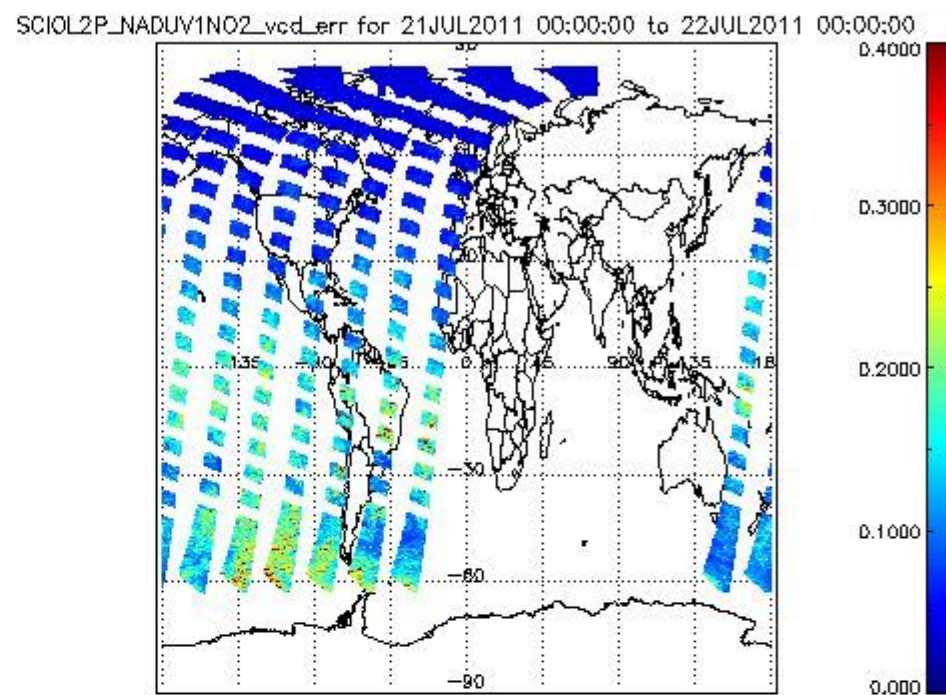
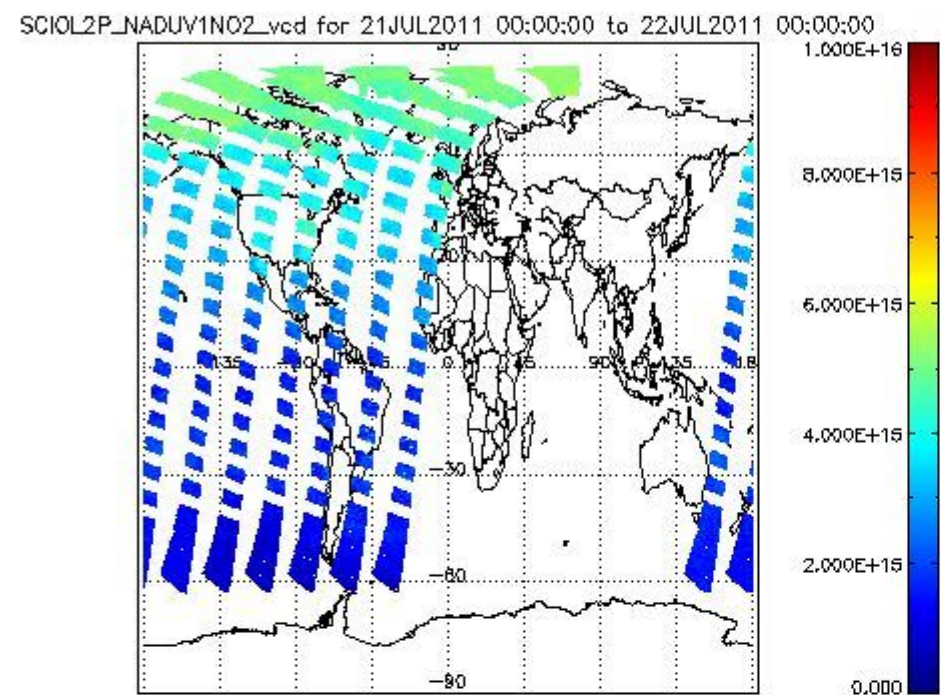


SCIOL2P_NADUV003_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

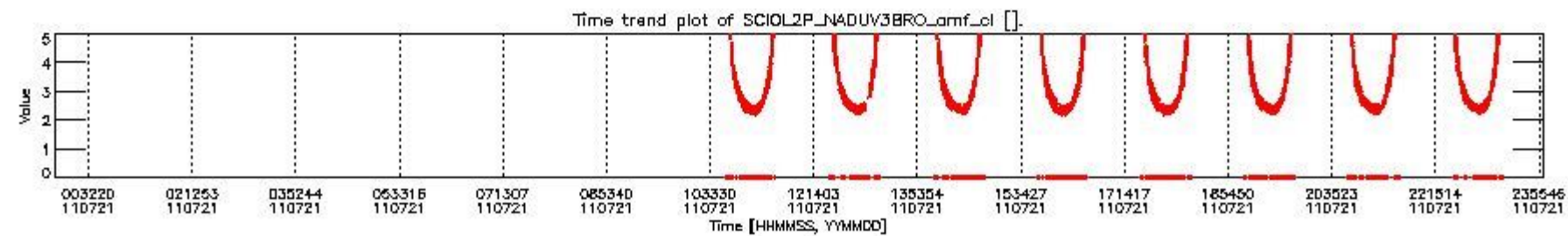
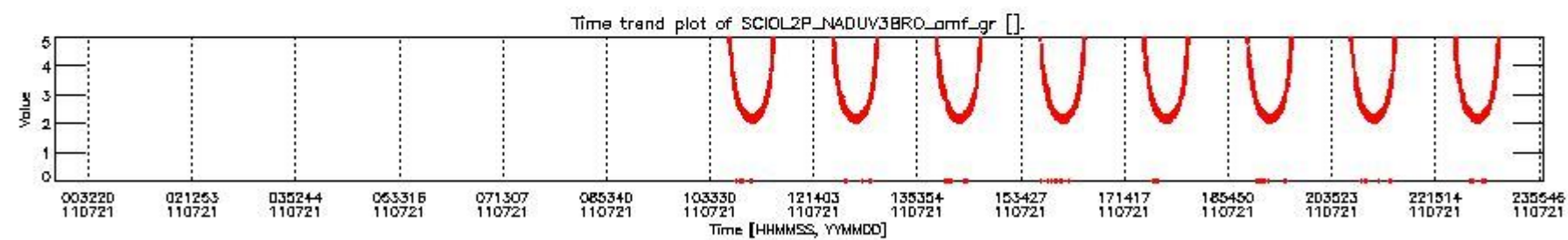
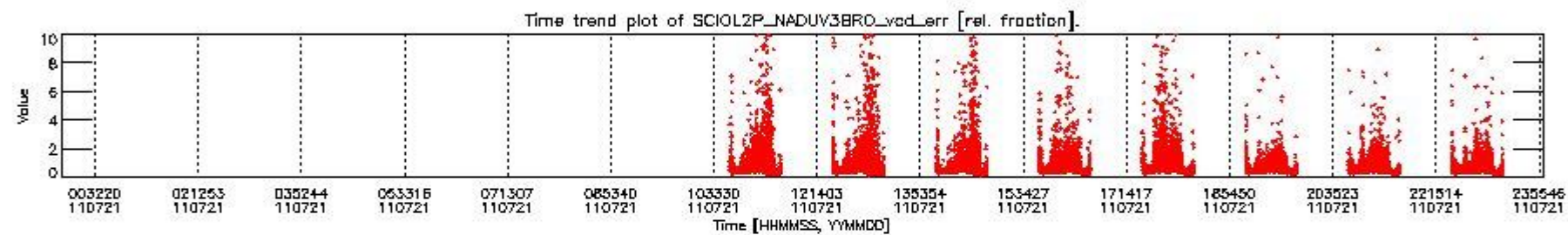
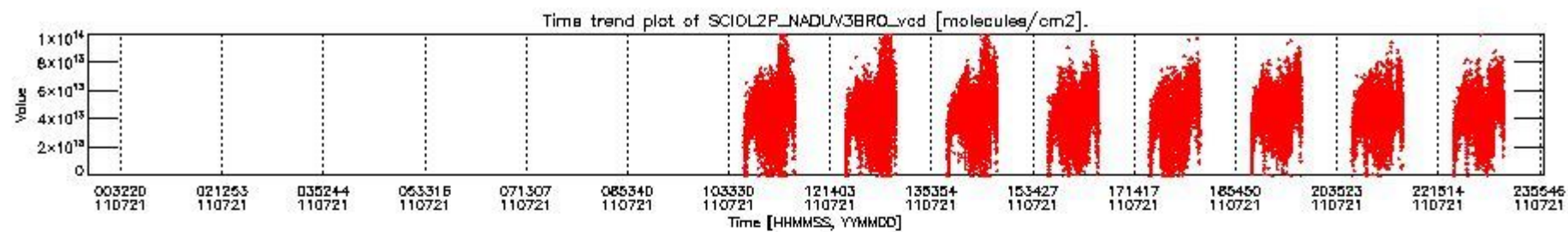


2.2.2.2 NO2 (UV1)

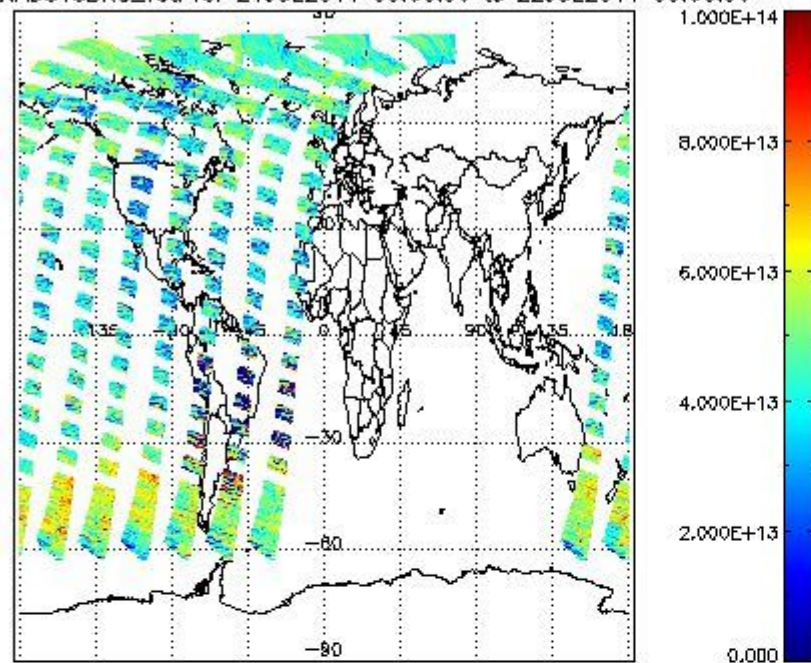




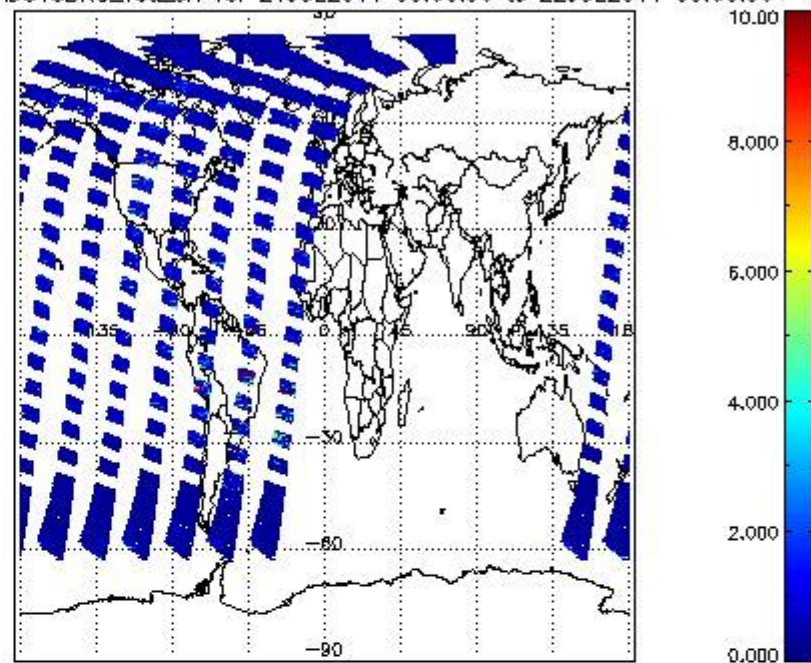
2.2.2.3 BrO (UV3)



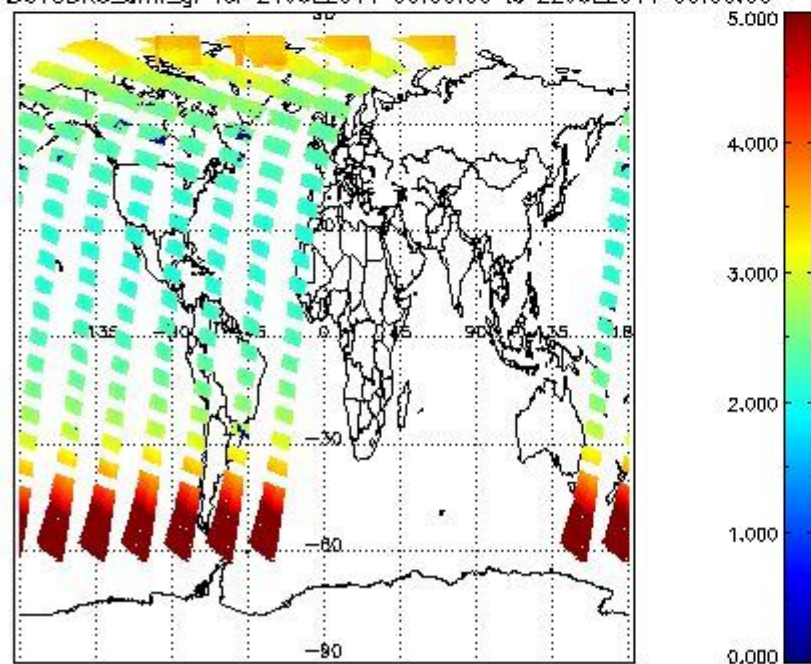
SCIOL2P_NADUV3BRO_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



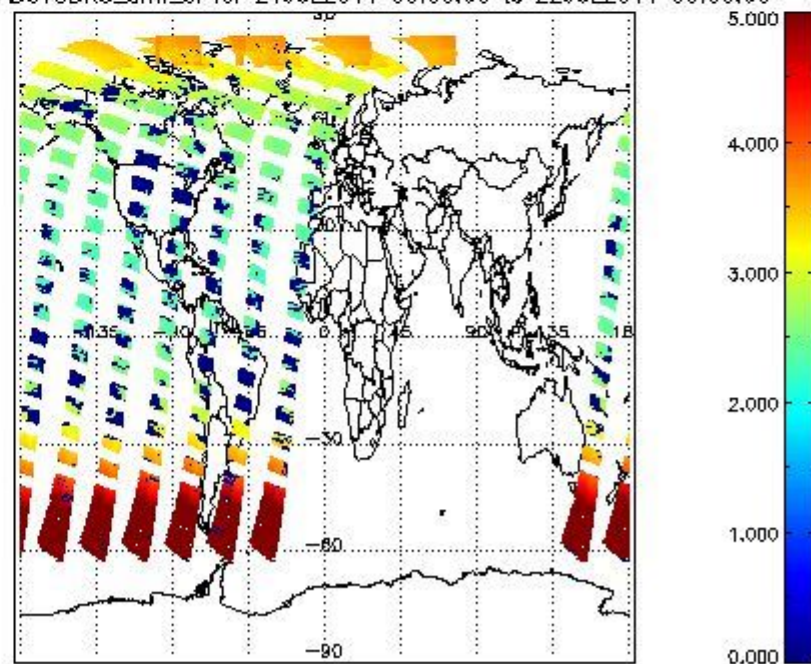
SCIOL2P_NADUV3BRO_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



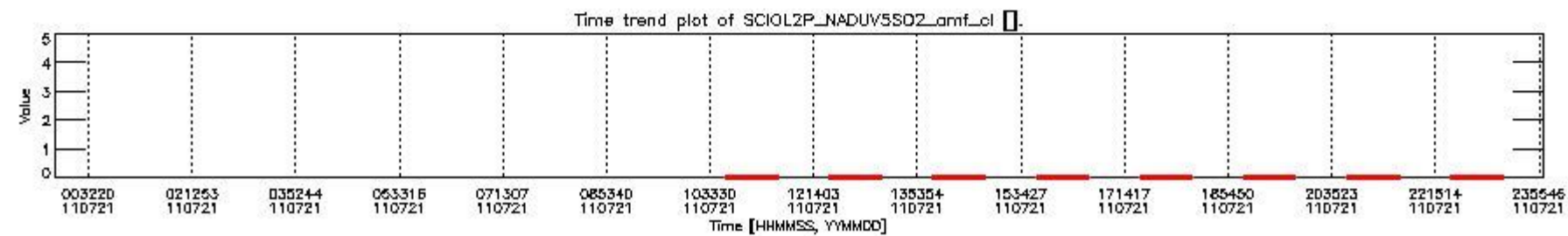
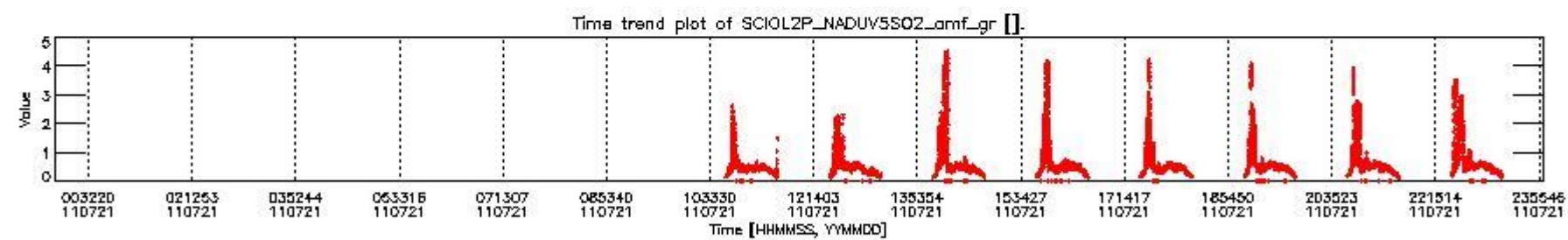
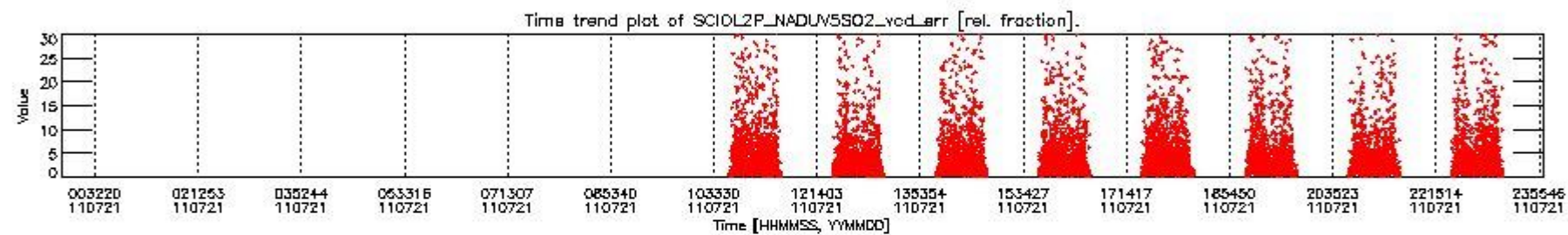
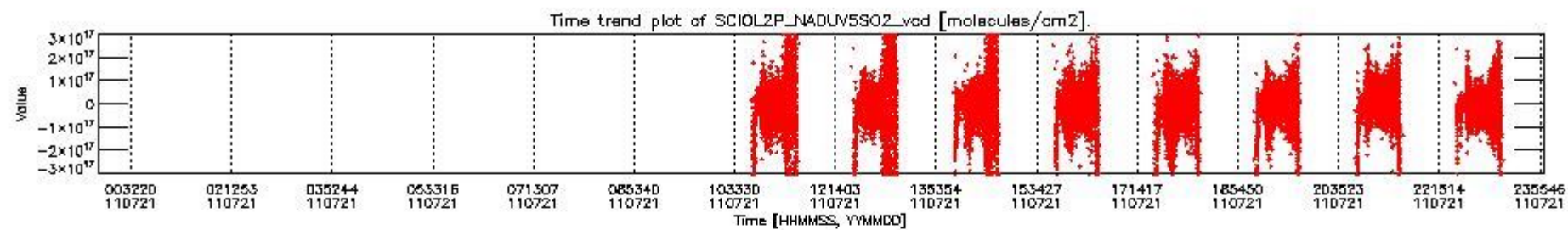
SCIOL2P_NADUV3BRO_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



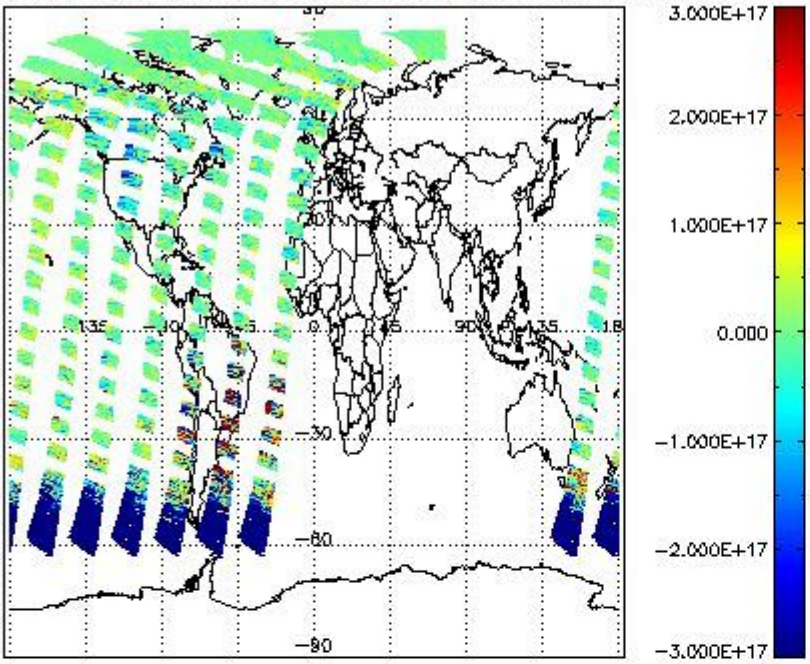
SCIOL2P_NADUV3BRO_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



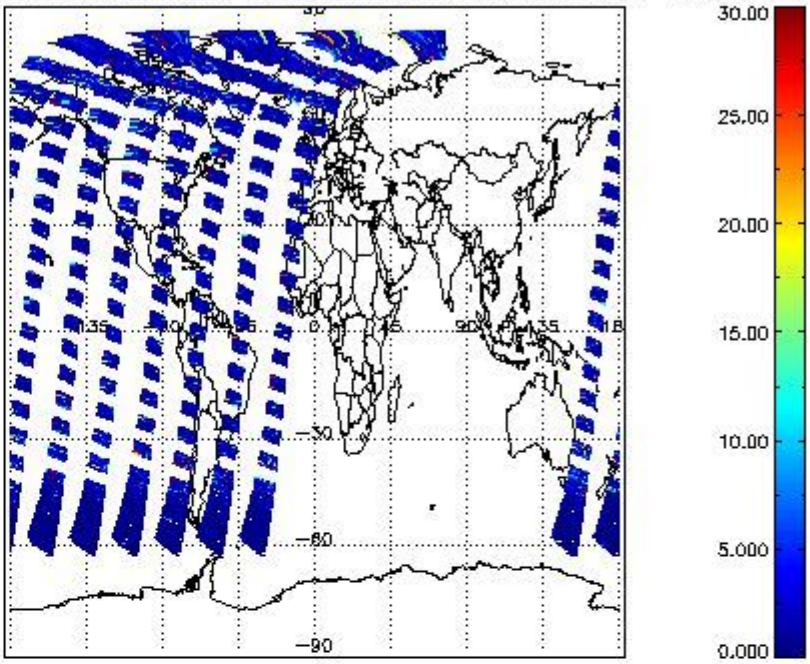
2.2.2.4 SO2 (UV5)



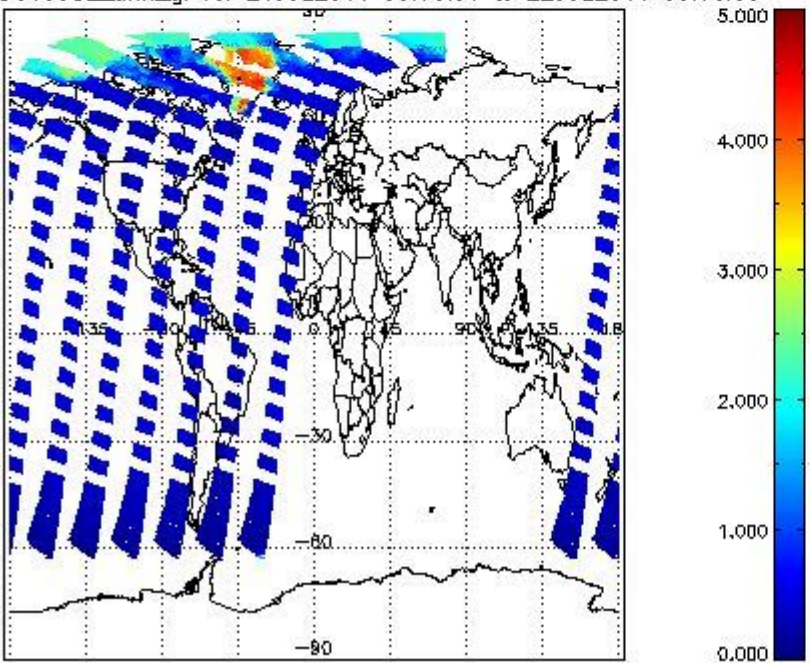
SCIOL2P_NADUV5S02_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



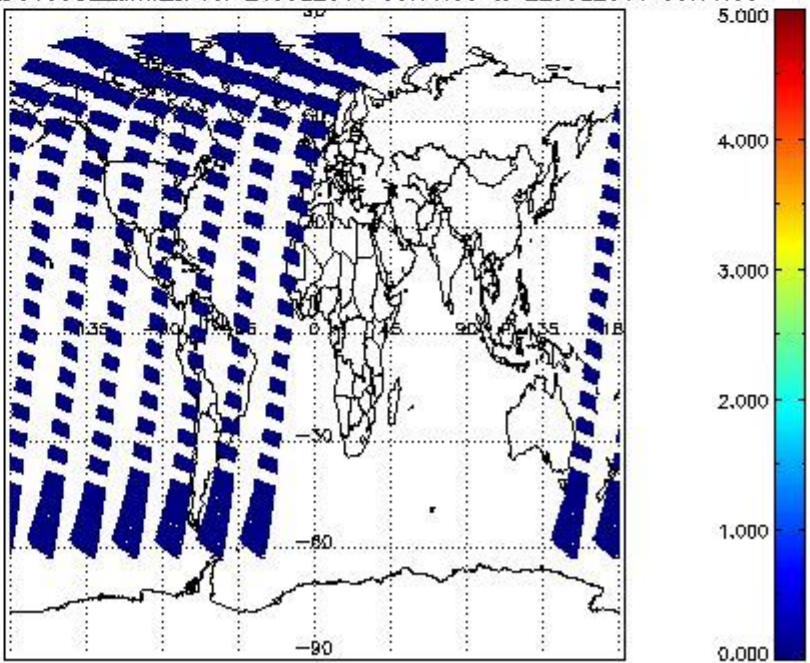
SCIOL2P_NADUV5S02_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



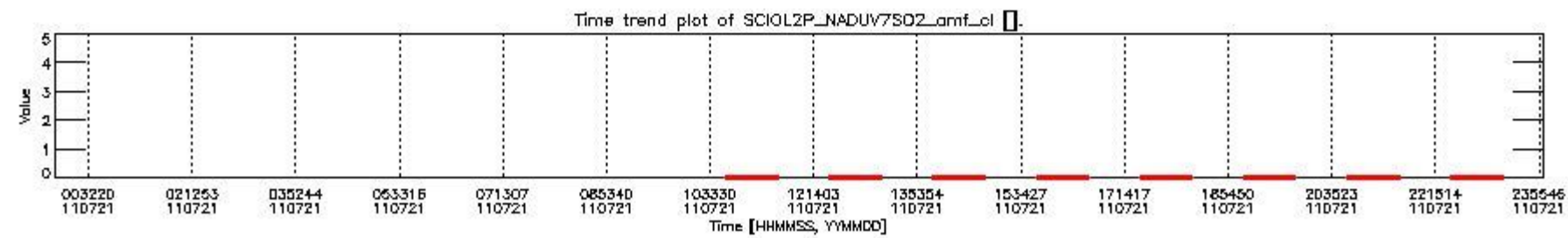
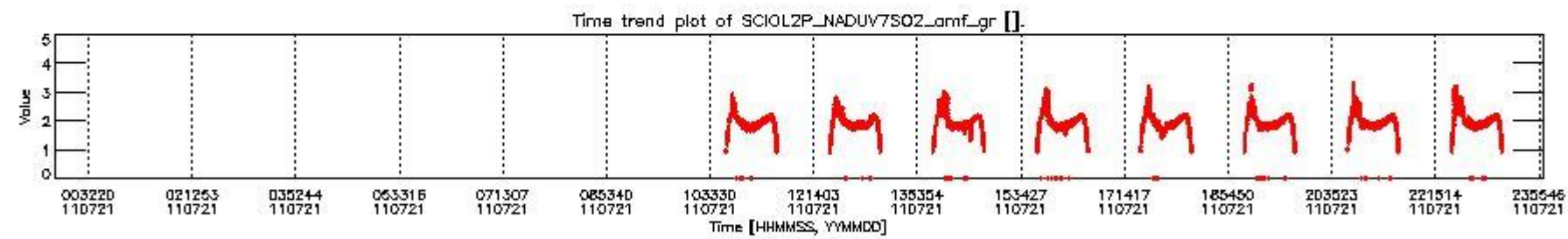
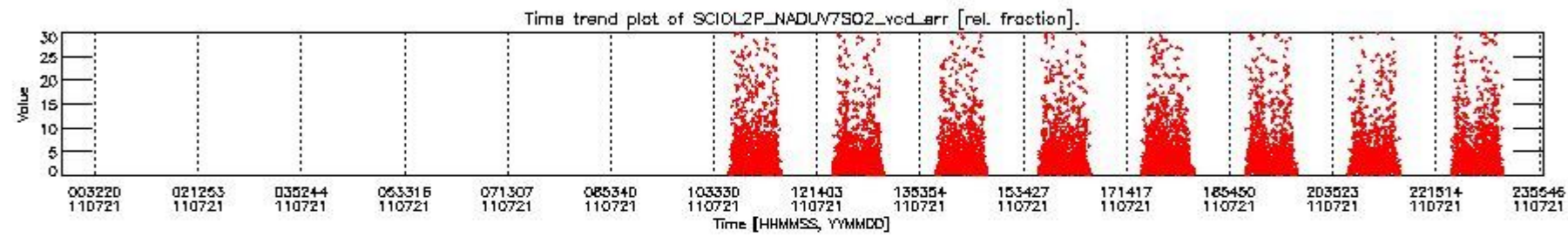
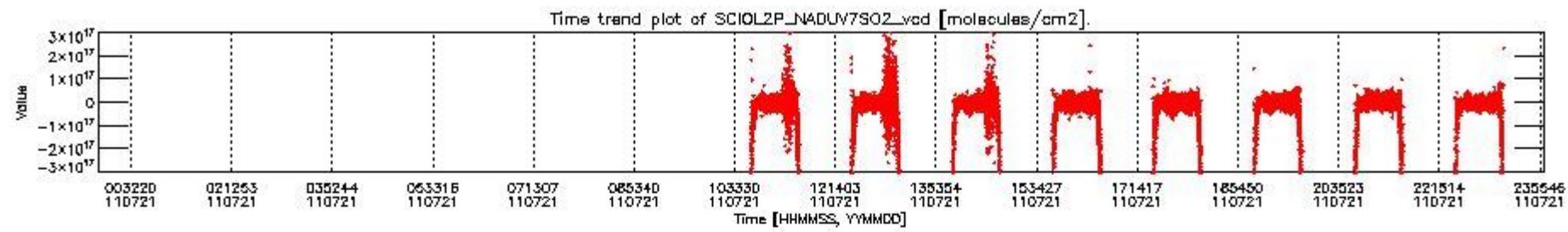
SCIOL2P_NADUV5S02_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



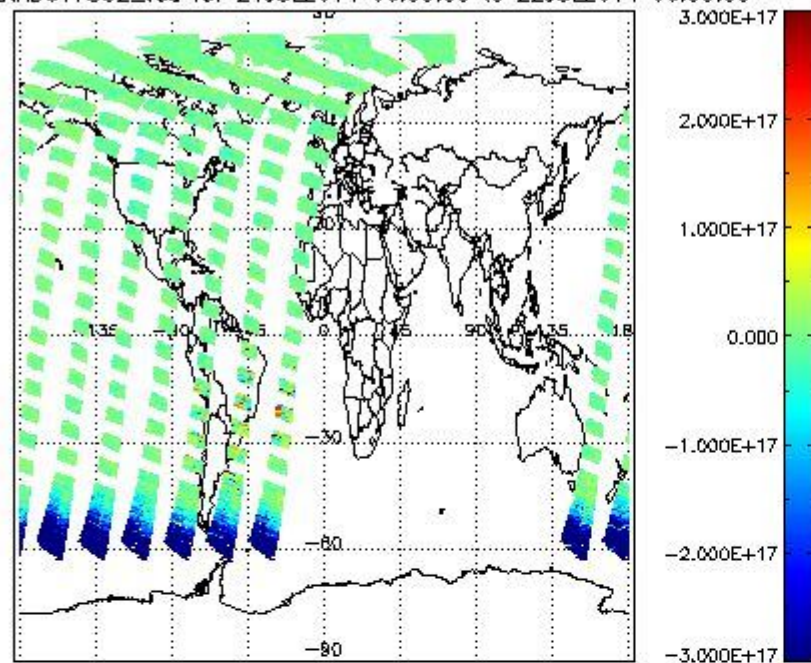
SCIOL2P_NADUV5S02_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



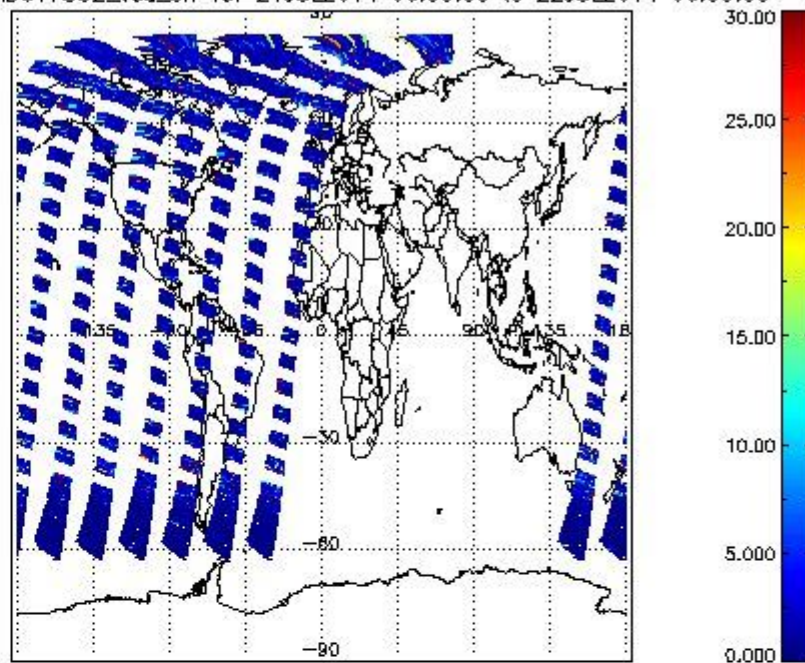
2.2.2.5 SO2 (UV7)



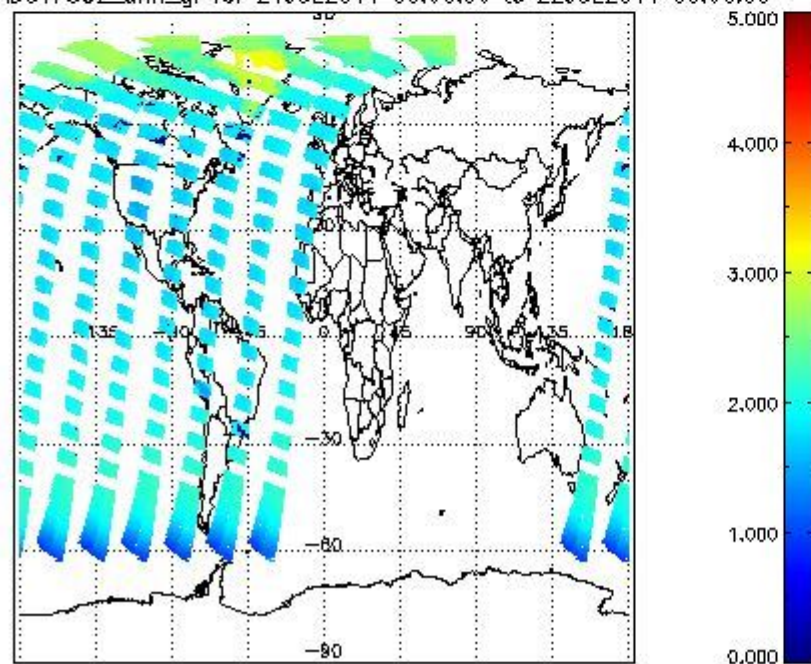
SCIOL2P_NADUV7S02_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



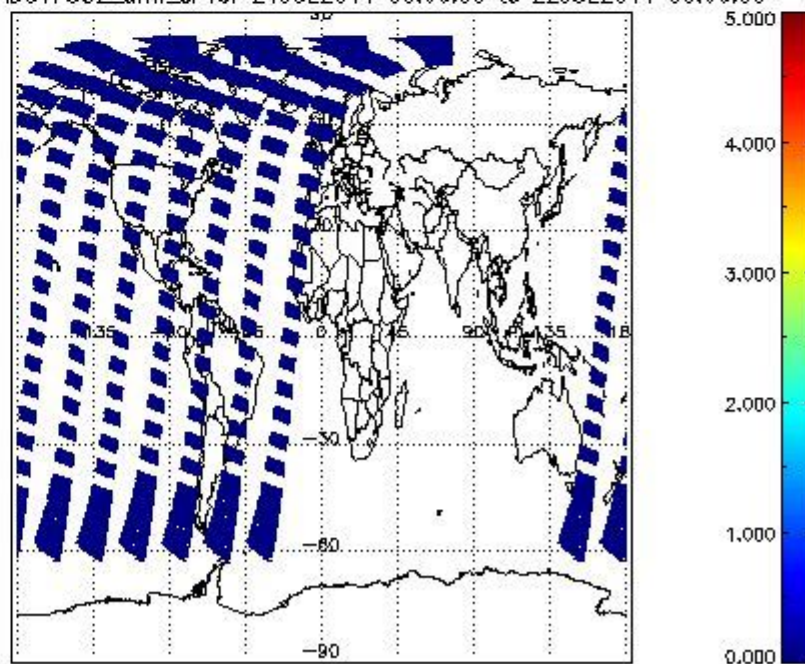
SCIOL2P_NADUV7S02_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



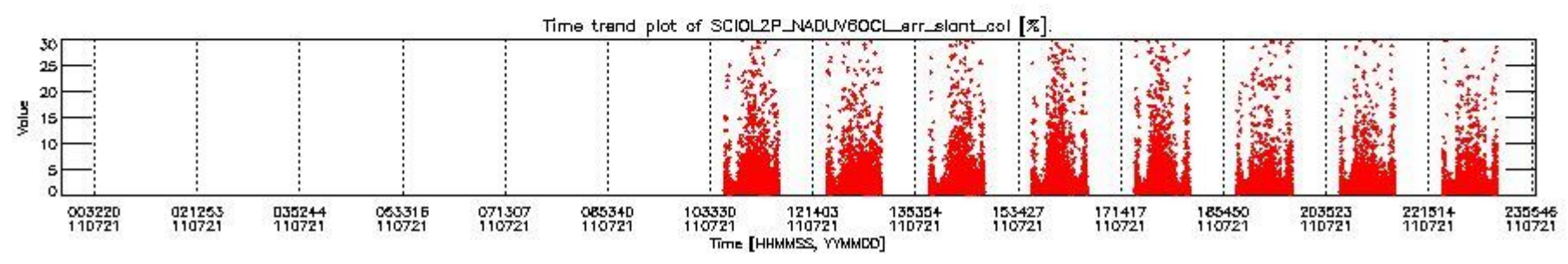
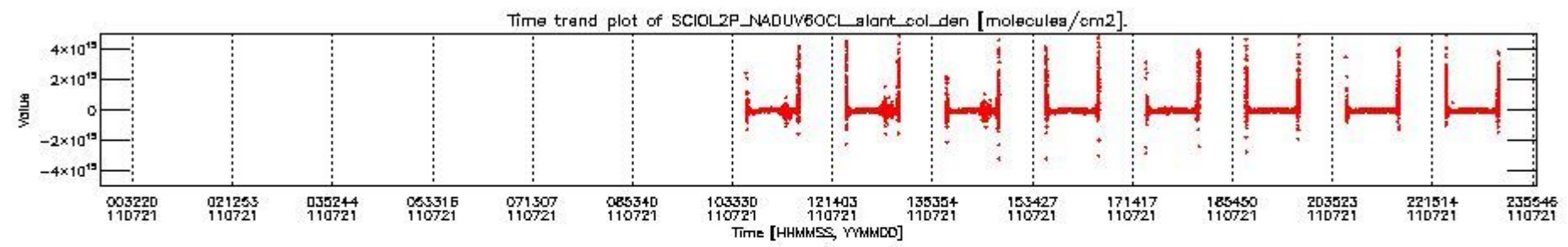
SCIOL2P_NADUV7S02_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



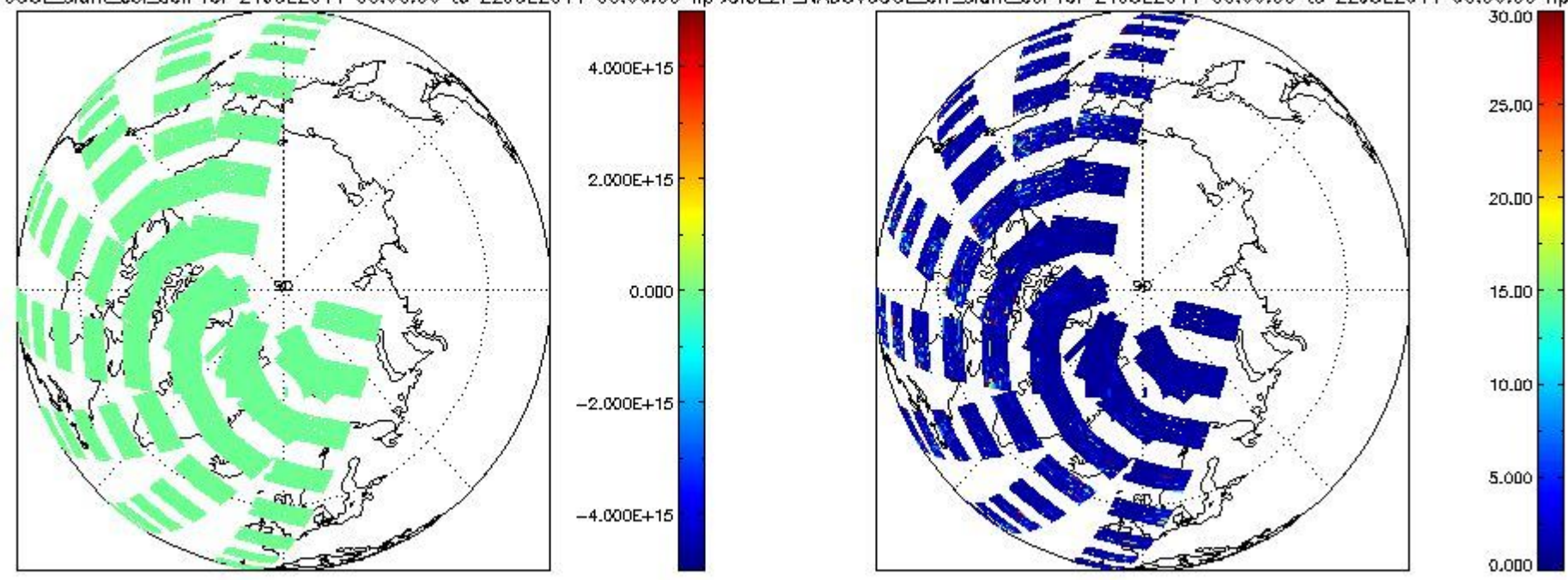
SCIOL2P_NADUV7S02_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



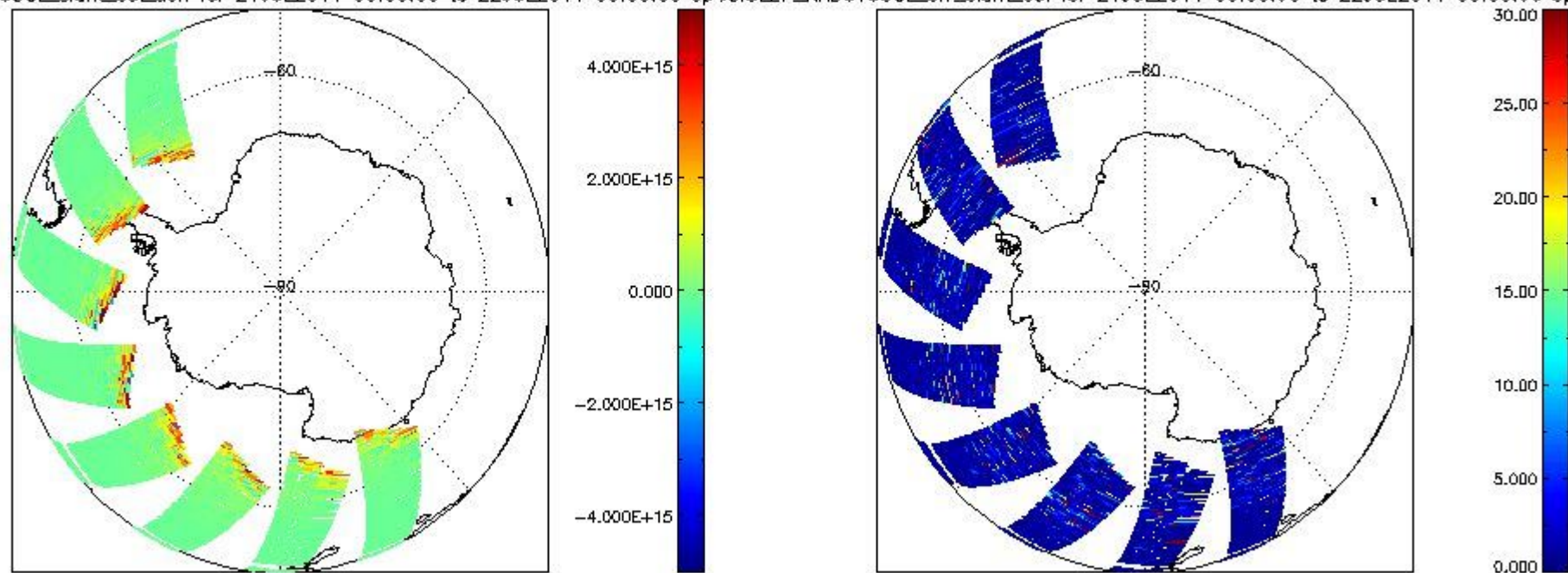
2.2.2.6 OCIO (UV6)



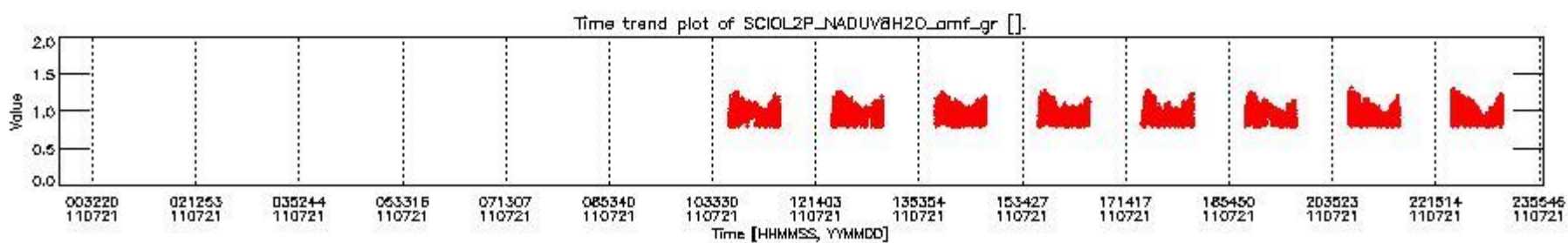
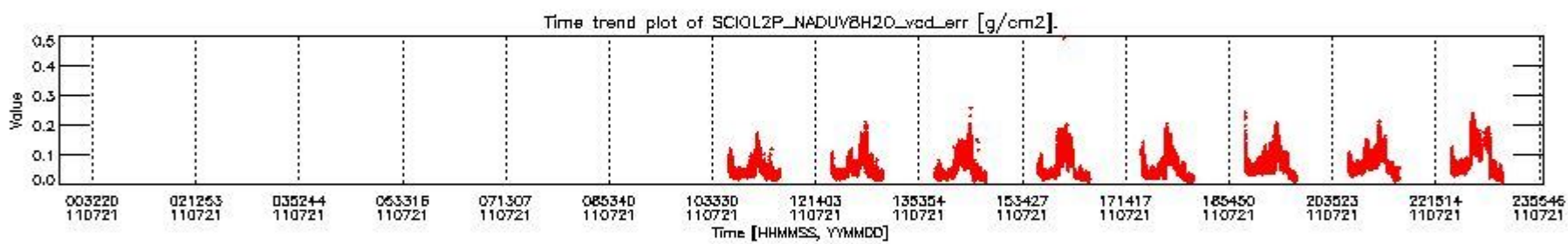
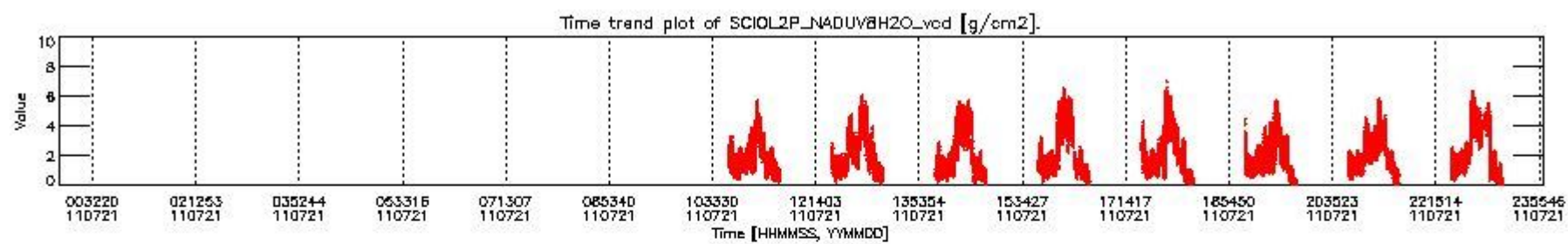
SCIOI2P_NADUV6OCLslant_col_den for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 np SCIOI2P_NADUV6OCLarr_slant_col for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 np



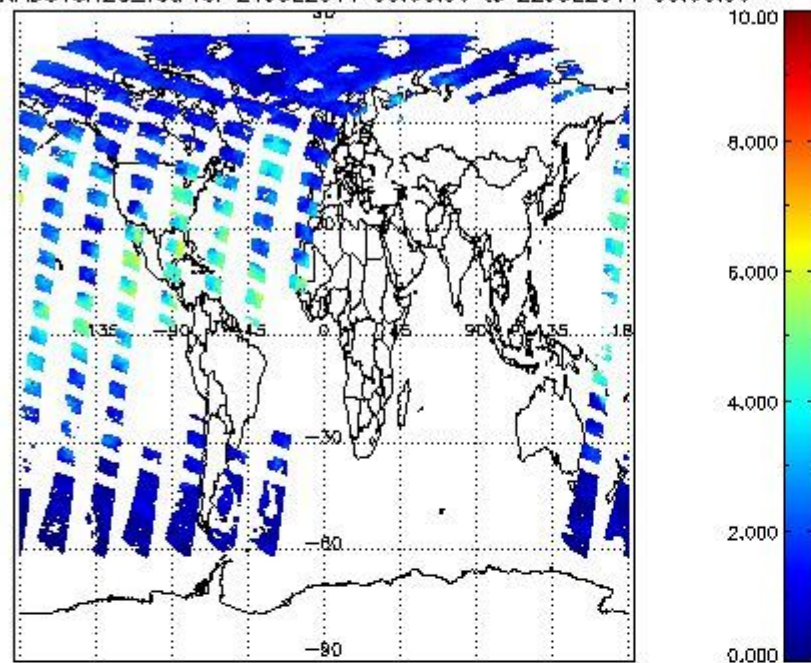
SCIOL2P_NADUV6OCL_slant_col_den for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 sp SCIOL2P_NADUV6OCL_err_slant_col for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 sp



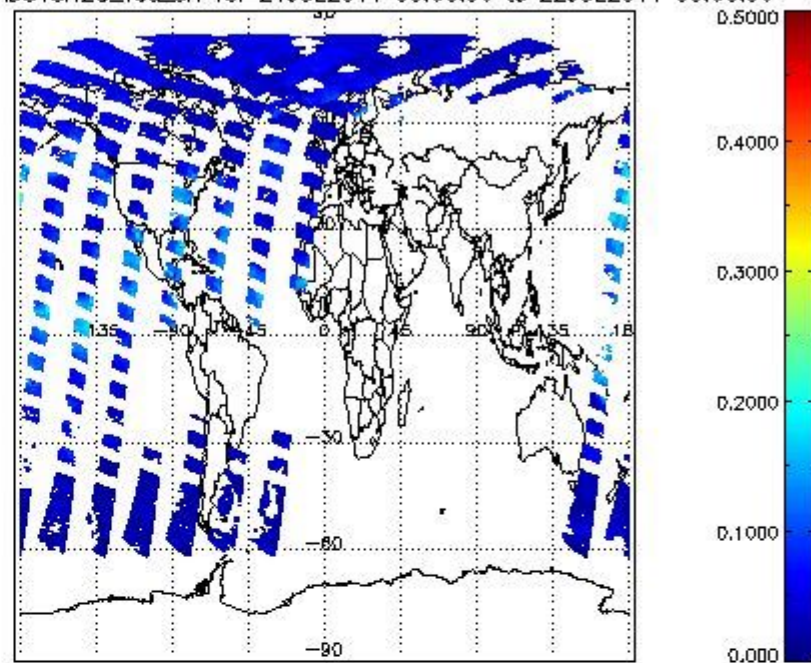
2.2.2.7 H2O (UV8)



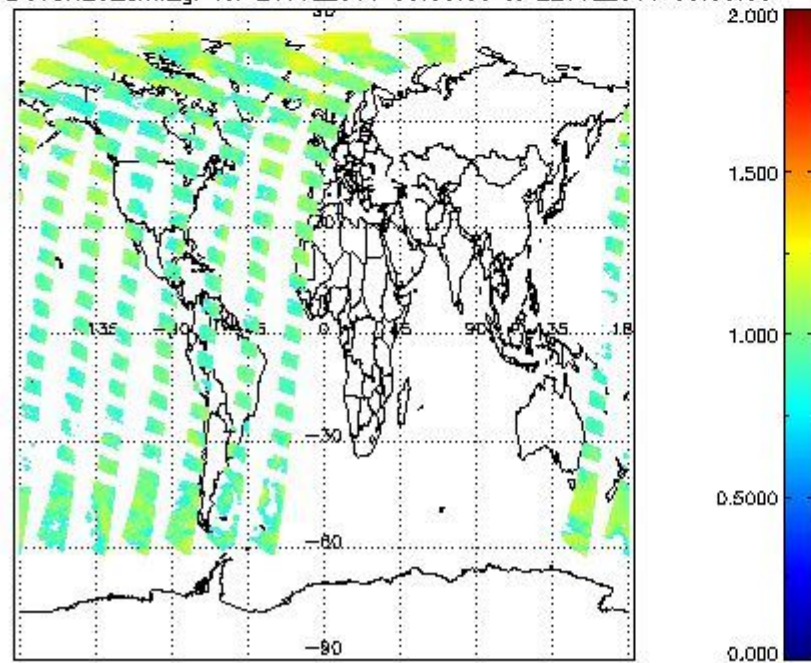
SCIOL2P_NADUV8H2O_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

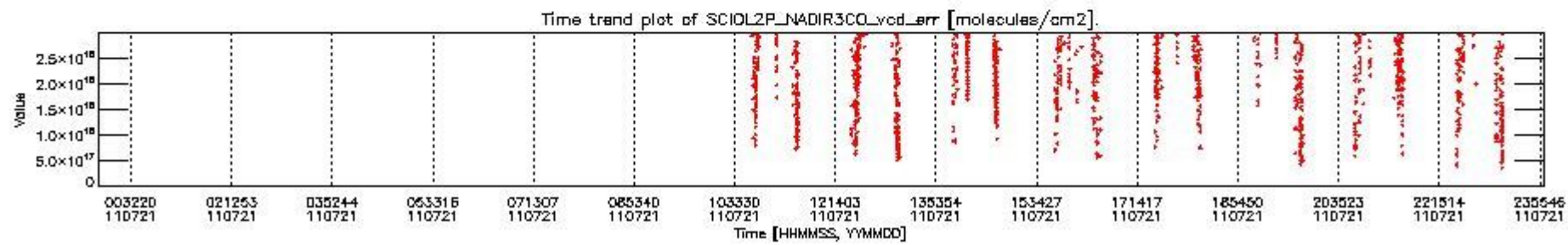
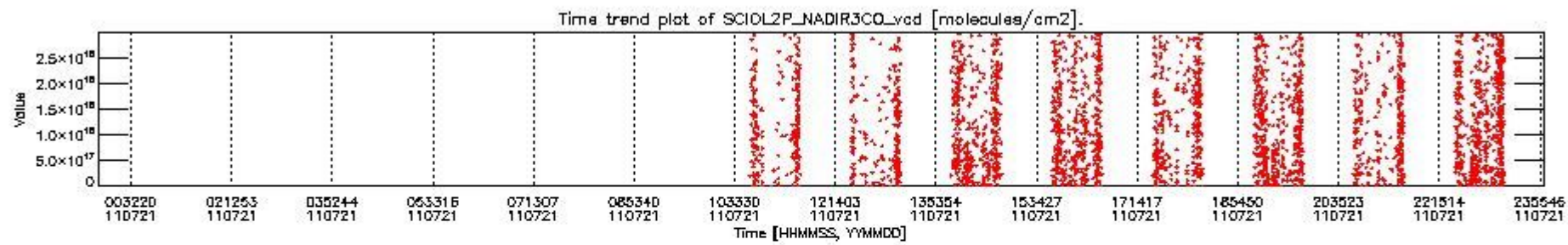


SCIOL2P_NADUV8H2O_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

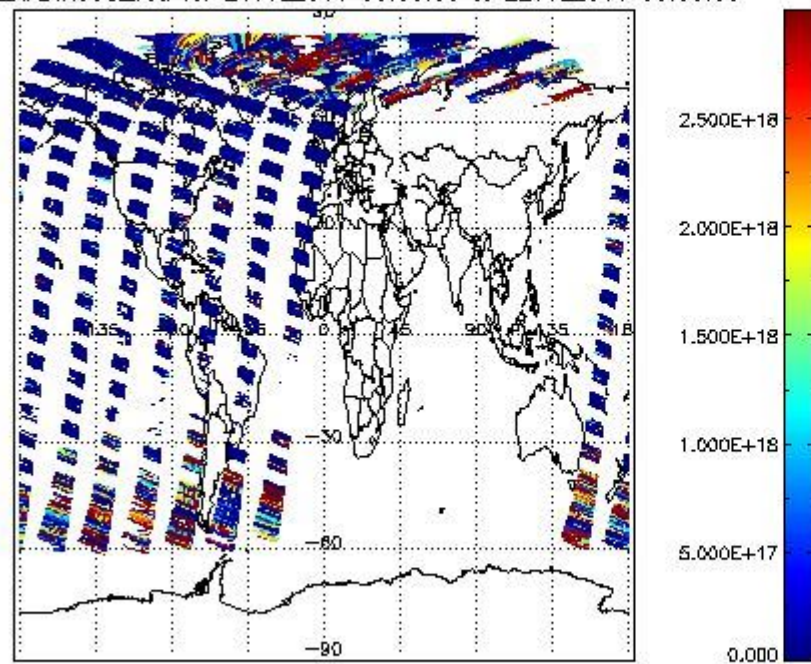


SCIOL2P_NADUV8H2O_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

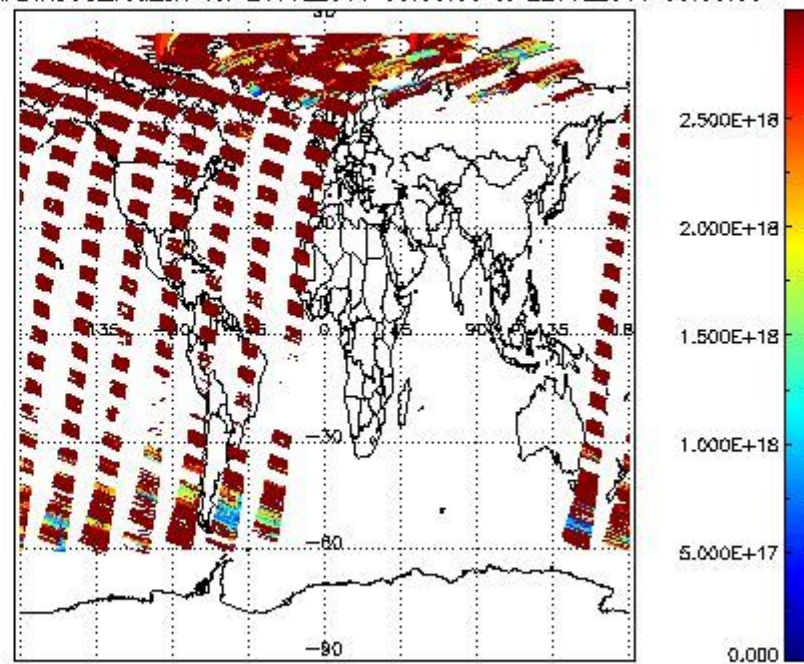




SCIDL2P_NADIR3CO_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



SCIDL2P_NADIR3CO_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



2.2.3 Limb

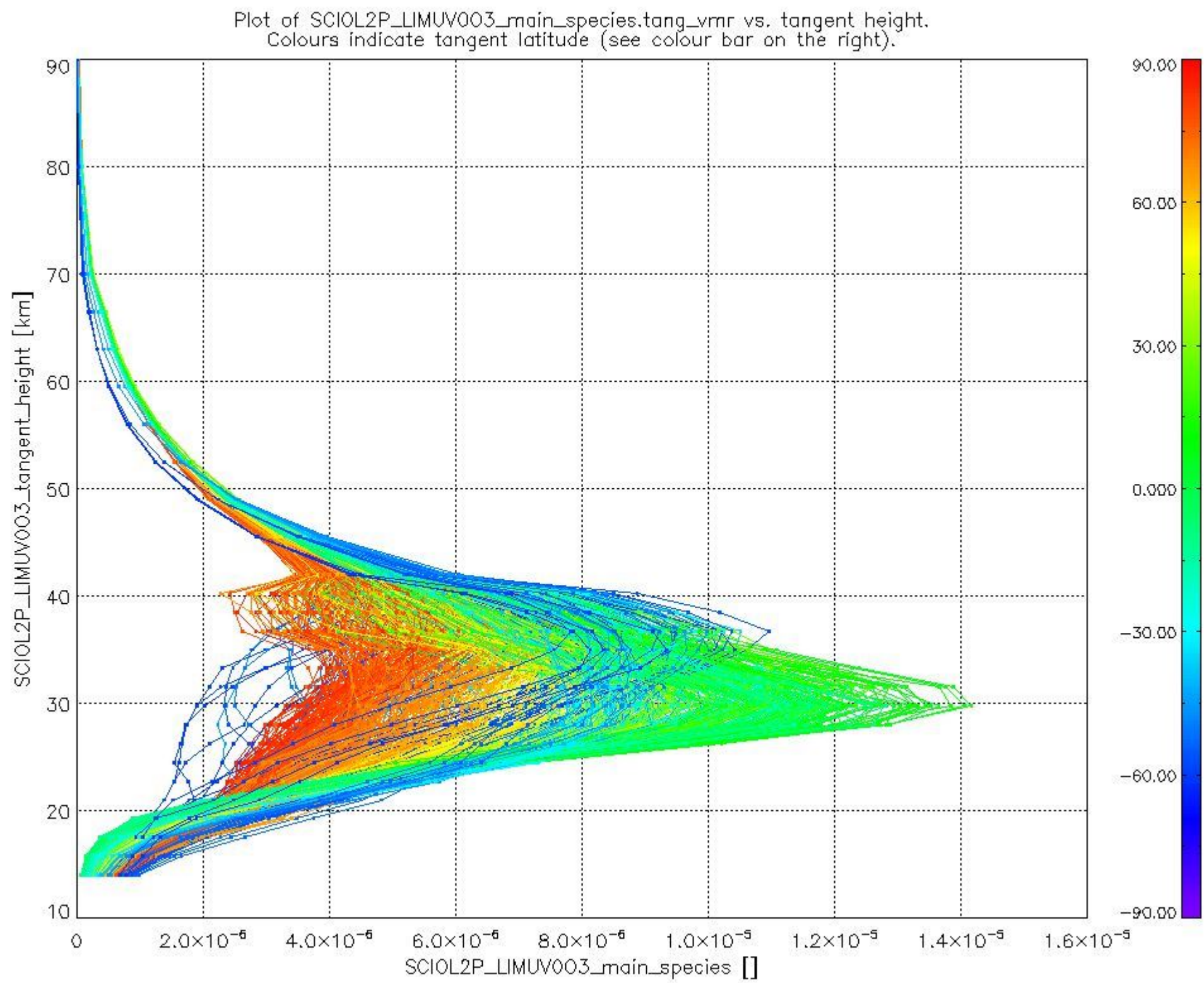
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

Number	Data item ID
0	SCIDL2P_LIMUV003_main_species
1	SCIDL2P_LIMUV1NO2_main_species
2	SCIDL2P_LIMUV3BRO_main_species

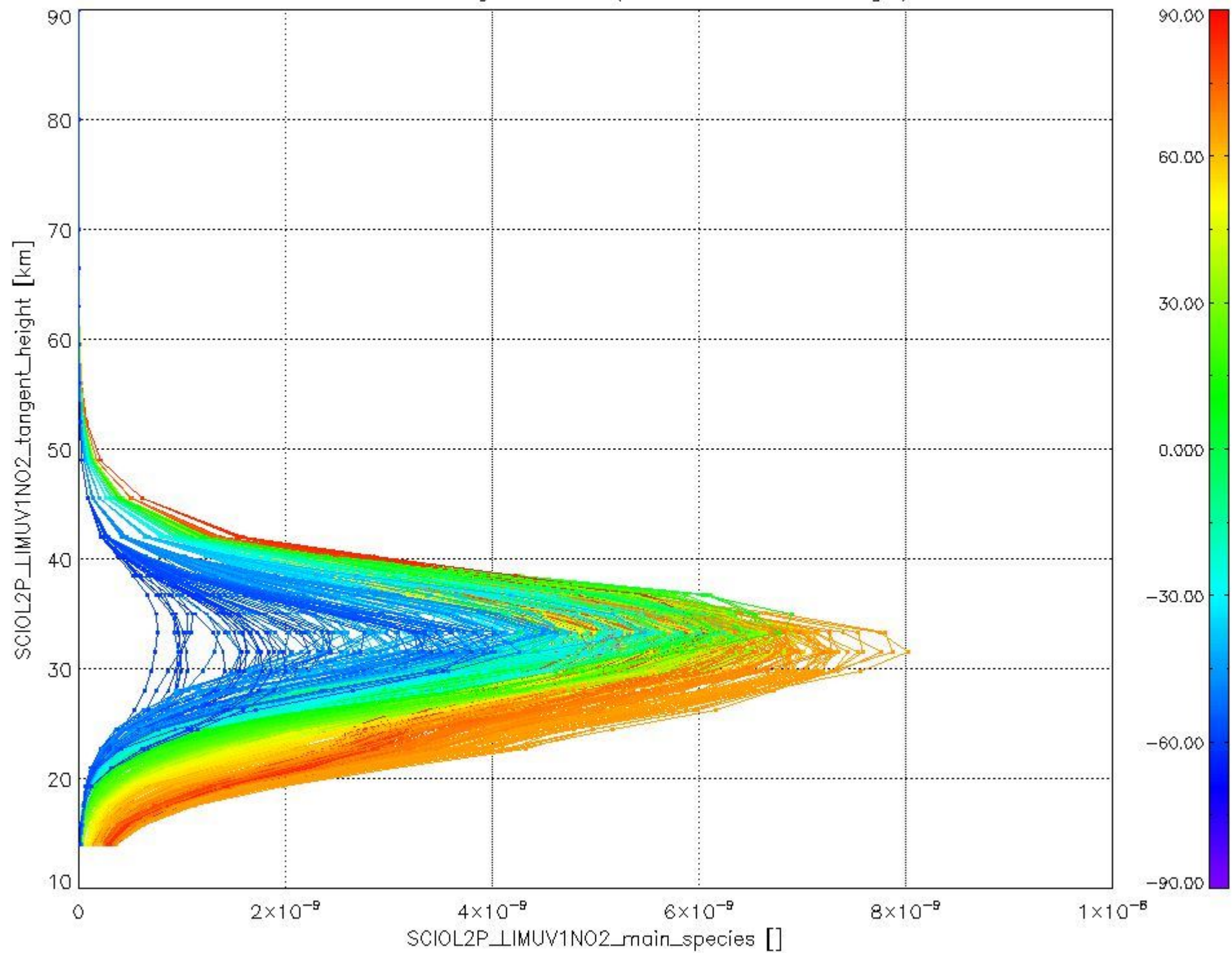
The following plots show for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

2.2.3.1 O3 (UV0)



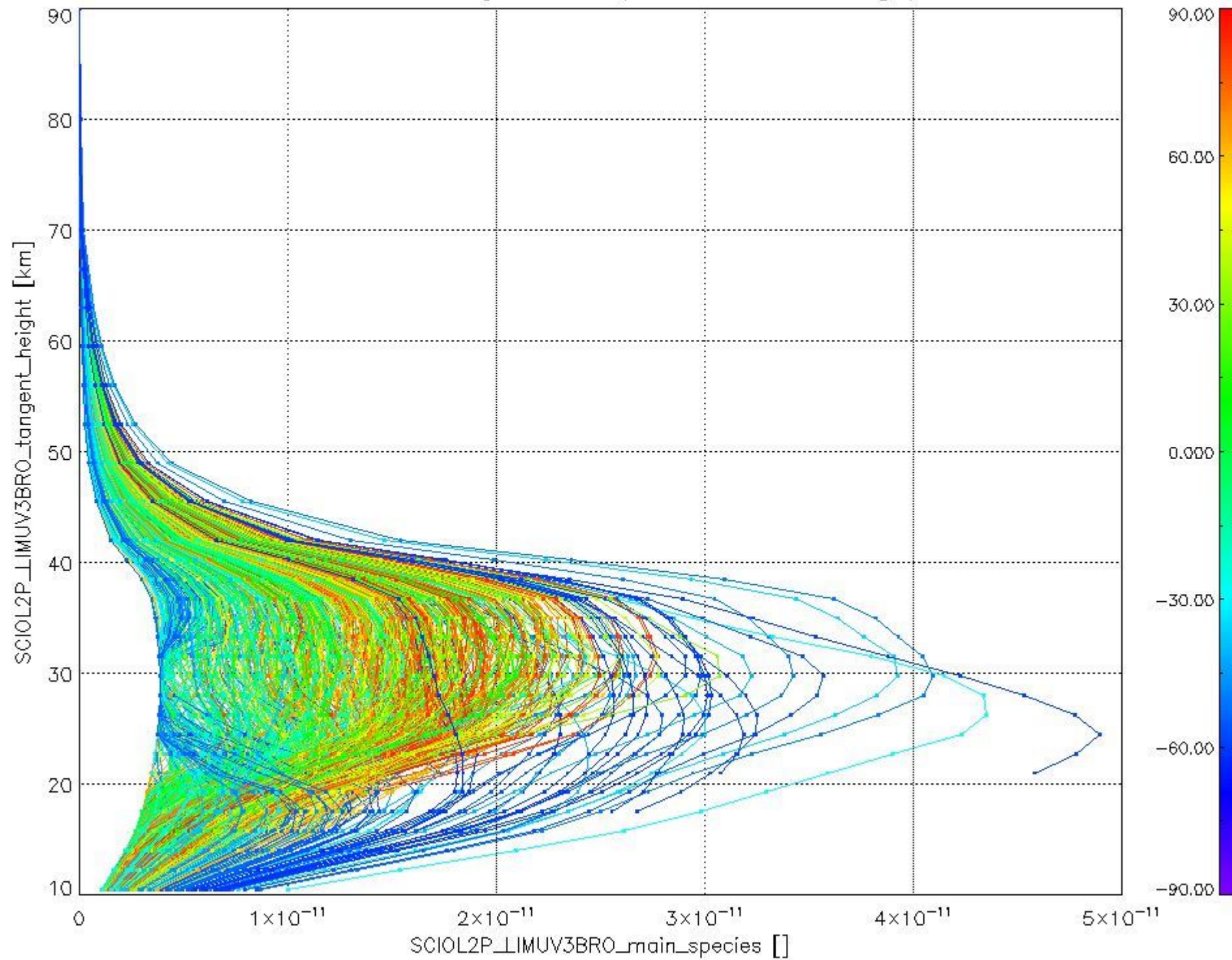
2.2.3.2 NO2 (UV1)

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



2.2.3.3 BrO (UV3)

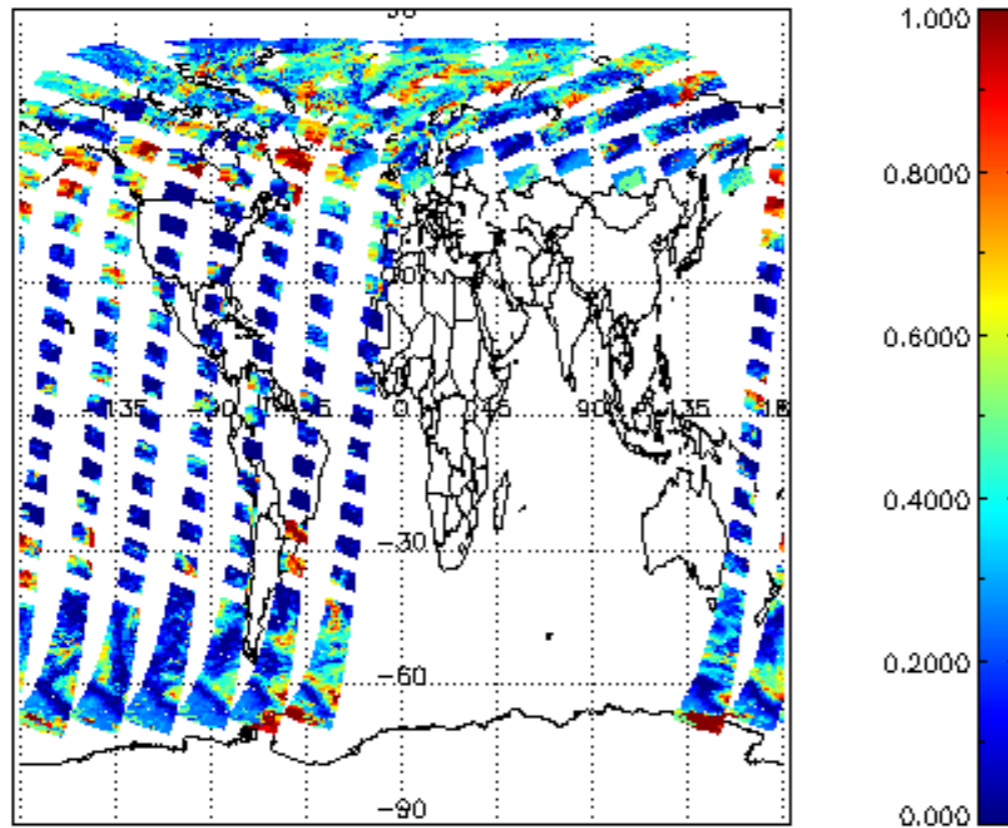
Plot of SCIOL2P_LIMUV3BRO_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



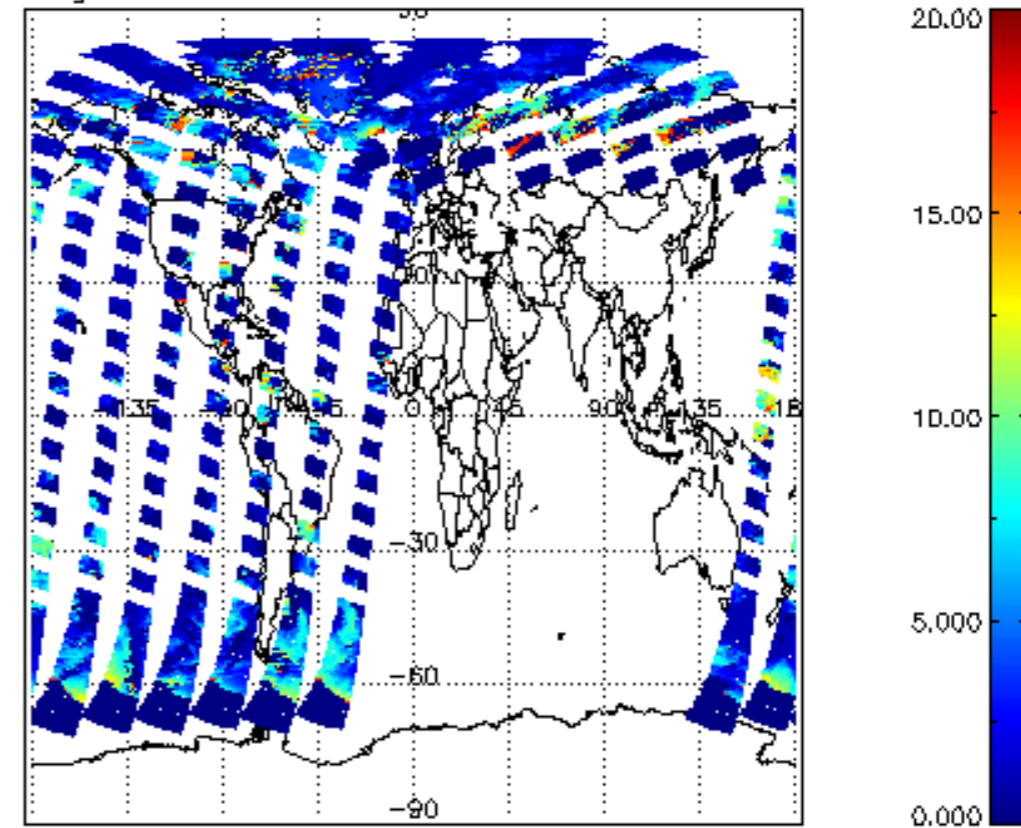
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20090615_120000_20090615_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED
	MF1 (M_FACTOR_FILE)
2	SCI_MF1_AXVIEC20110726_110134_20110720_191425_20110722_191425
3	SCI_MF1_AXVIEC20110726_110240_20110721_183740_20110723_183740

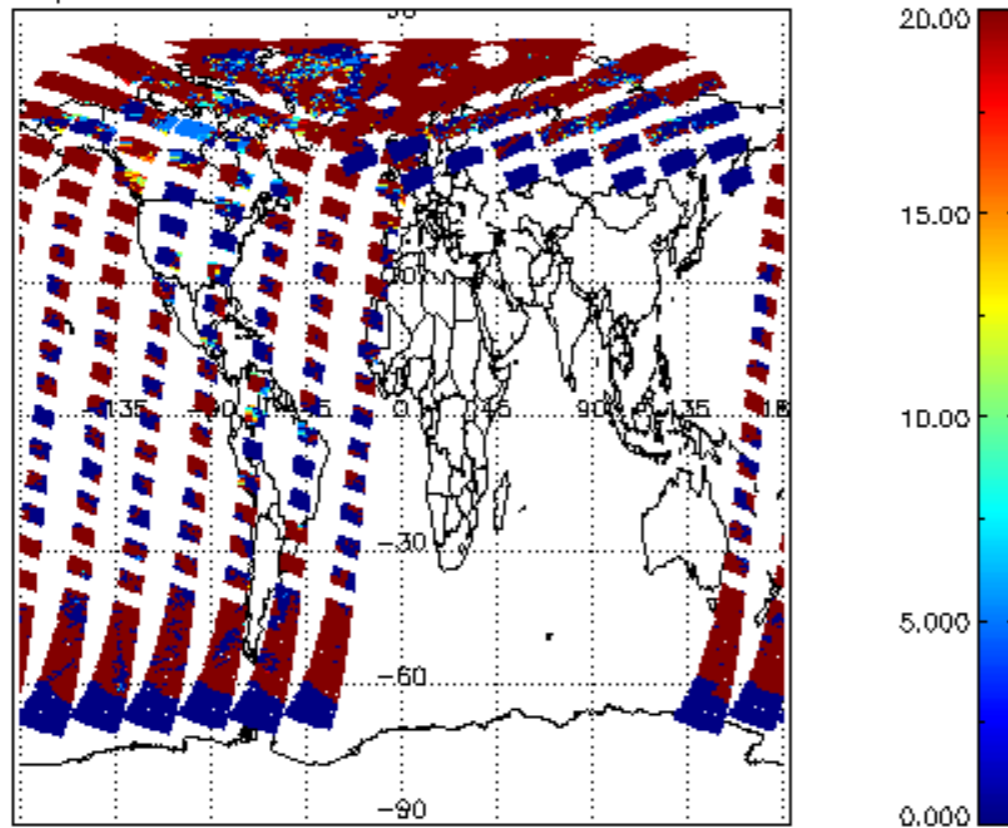
cl_frac for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



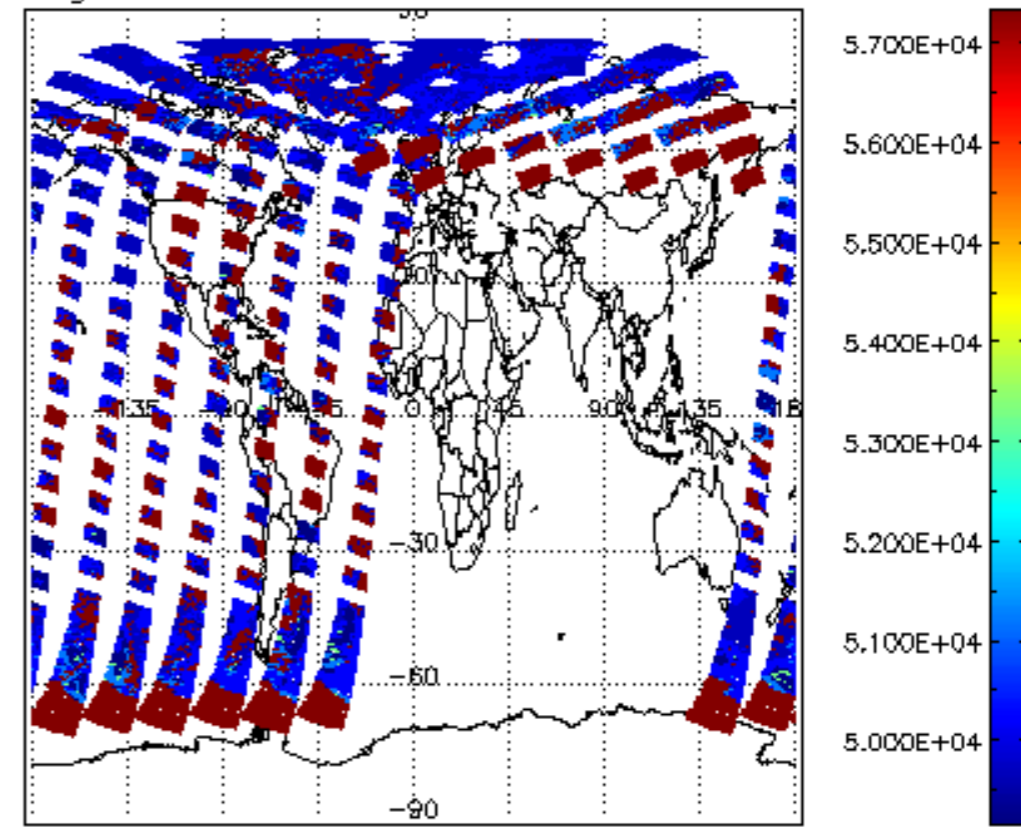
cl_top_height for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

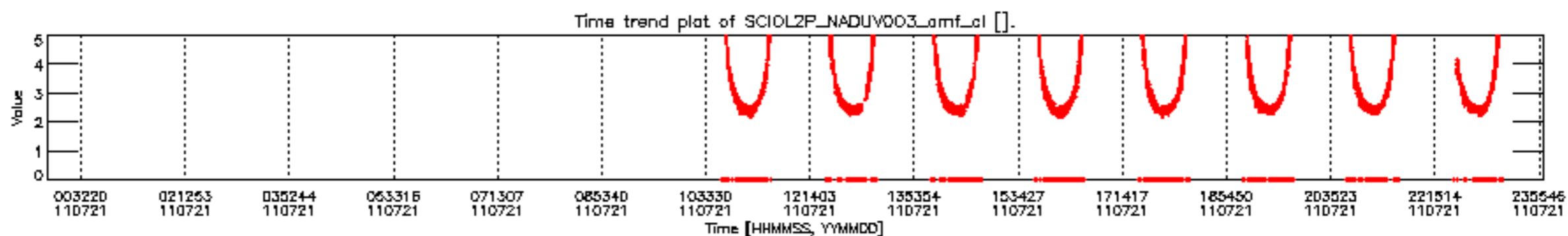
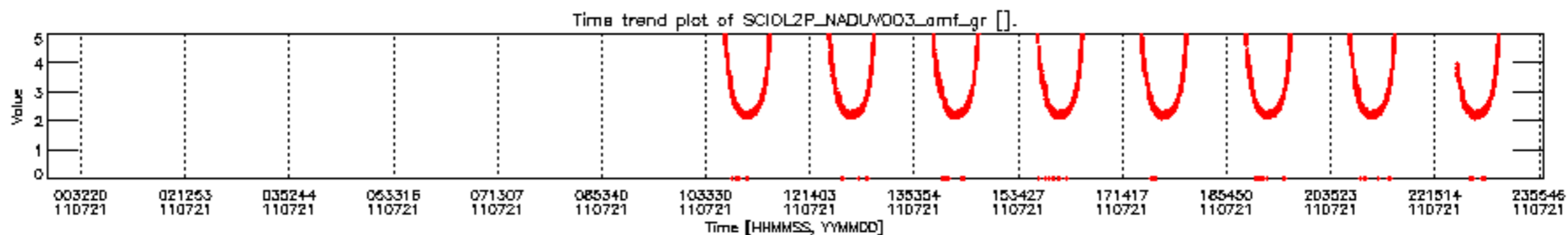
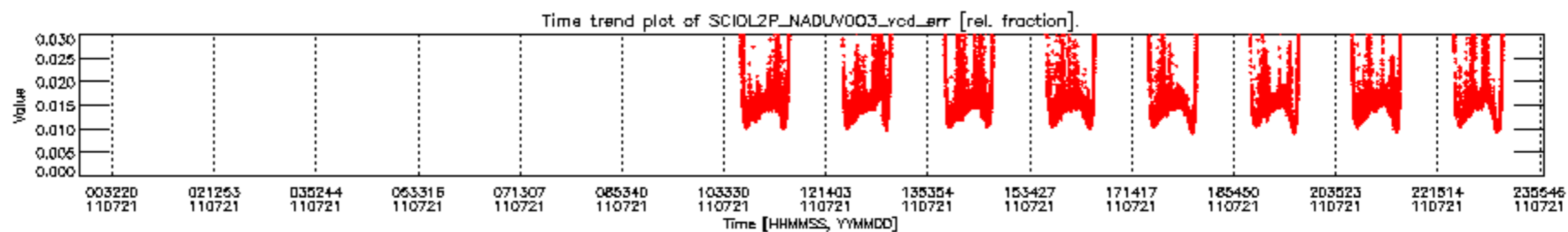
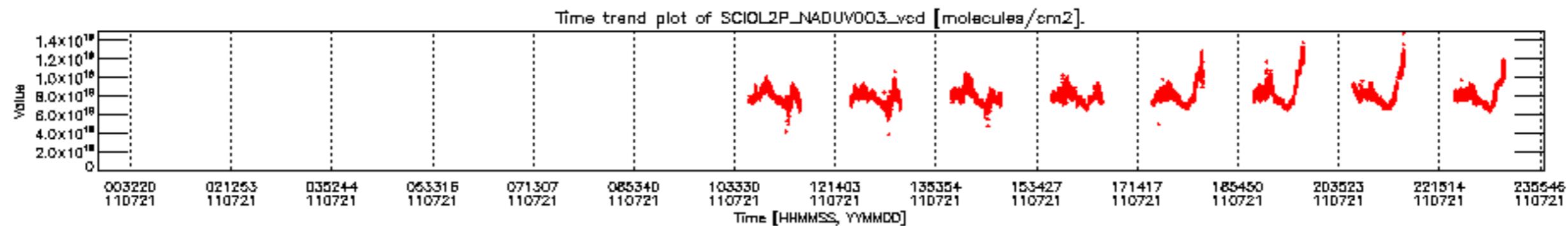


cl_lopt_depth for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

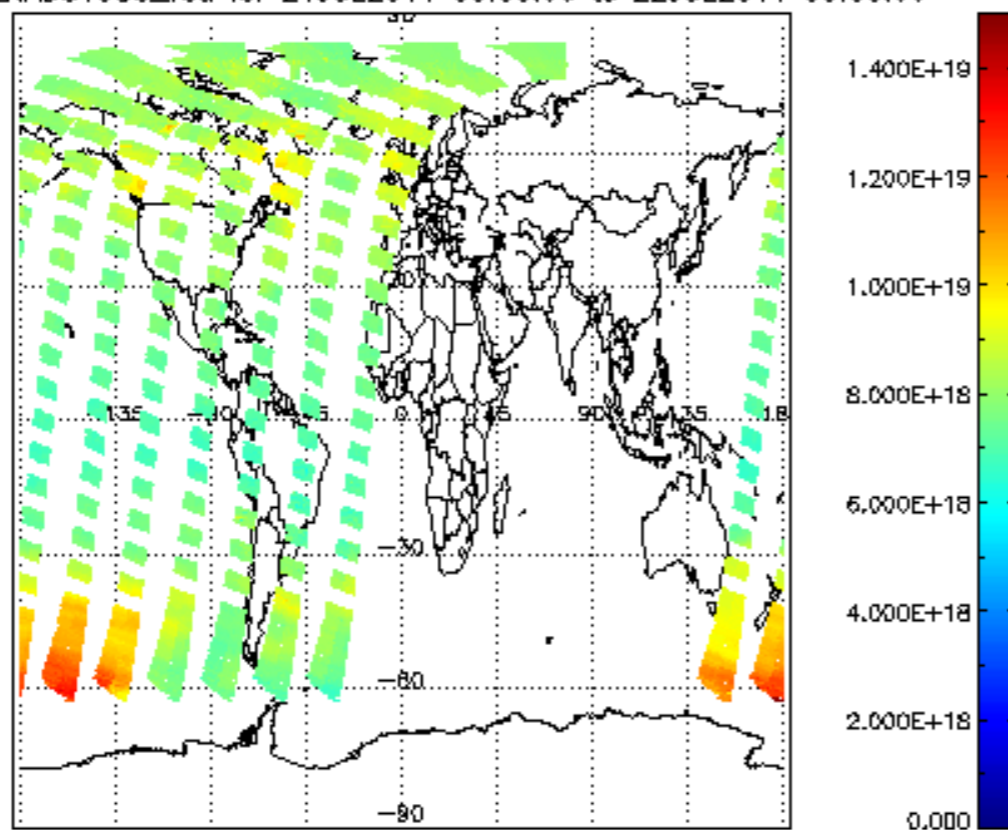


cloud_flags for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

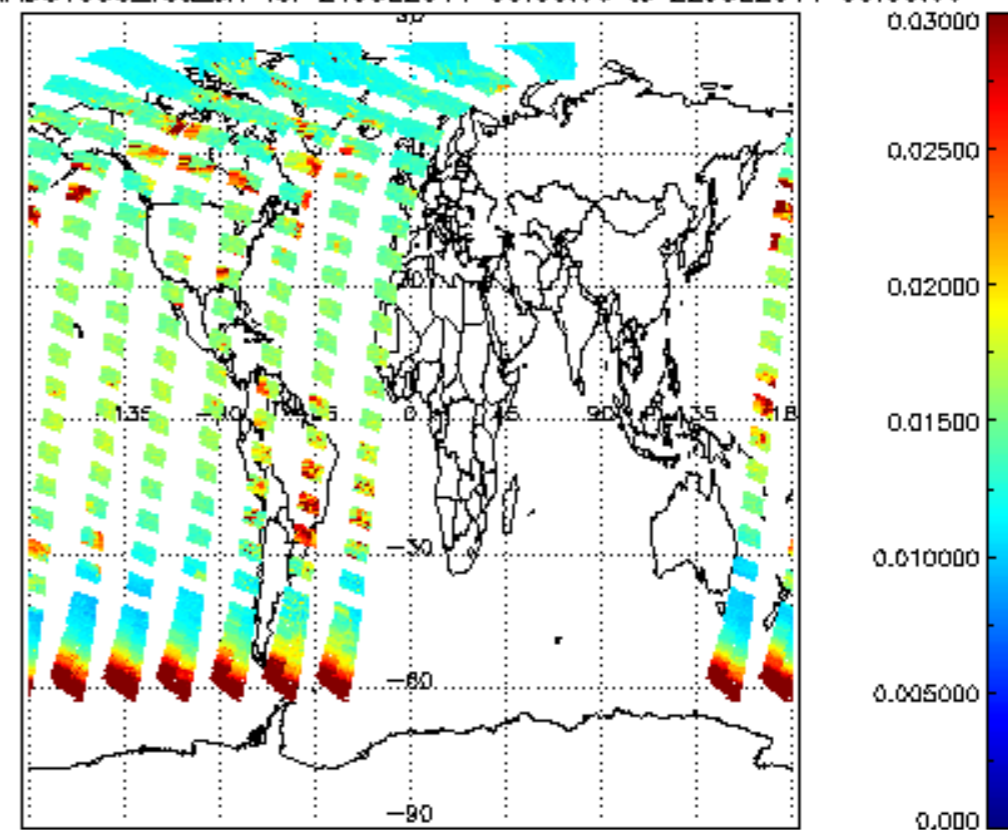




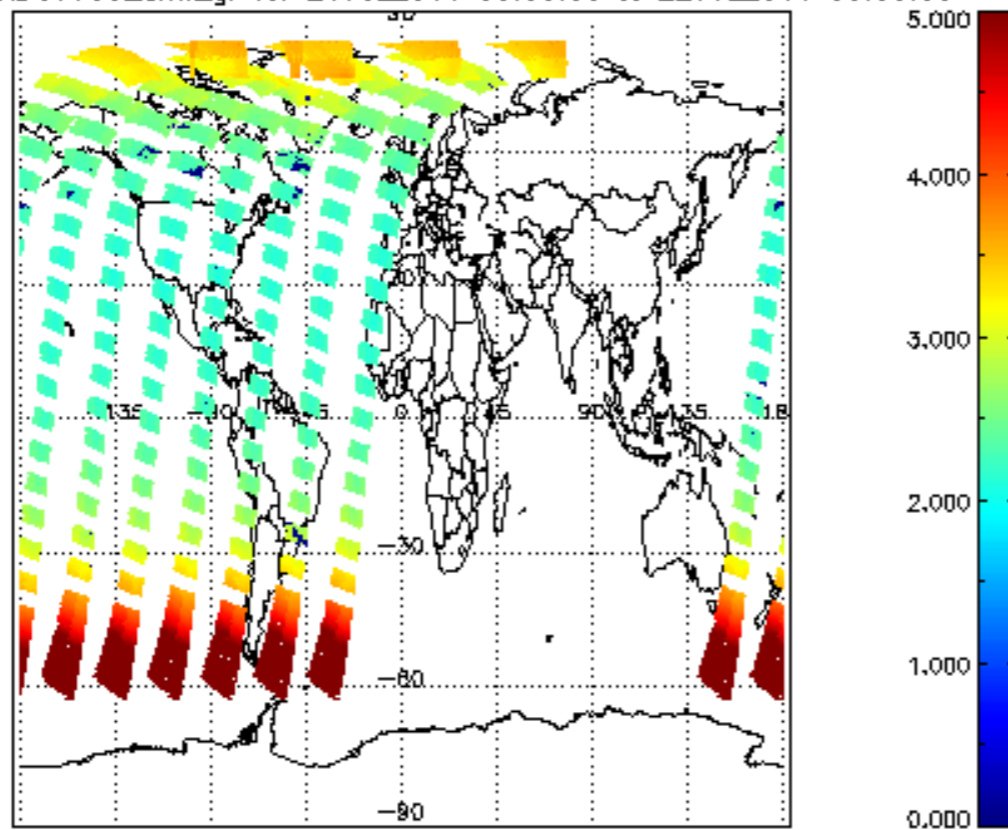
SCIOL2P_NADUV003_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



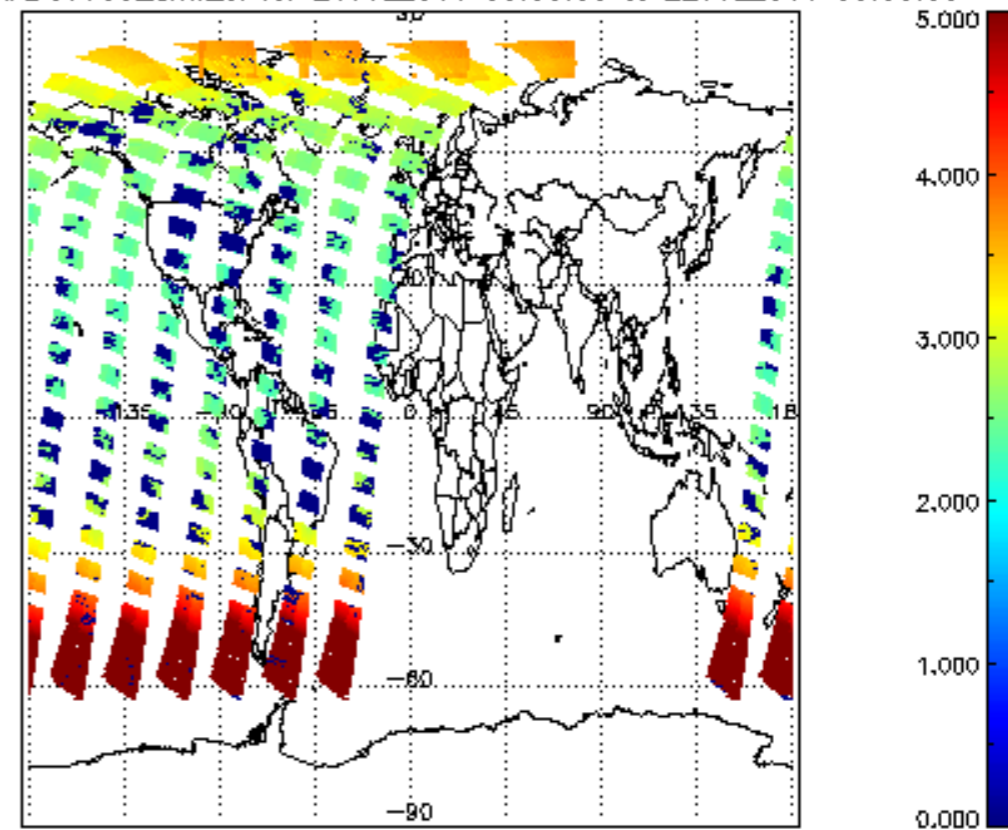
SCIOL2P_NADUV003_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

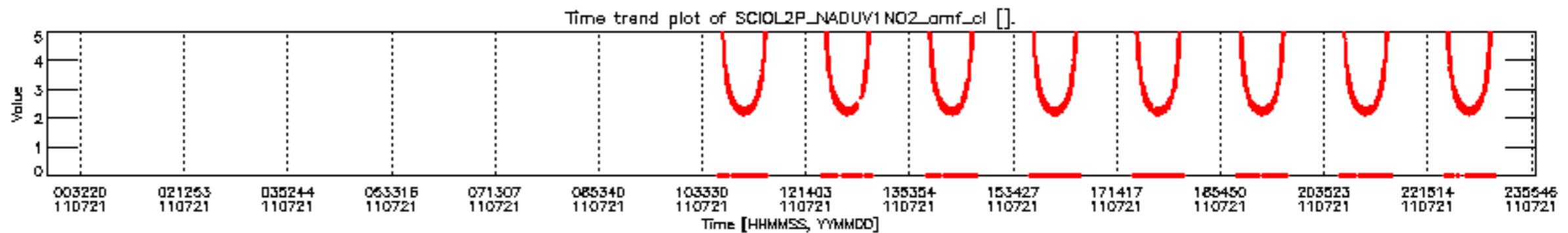
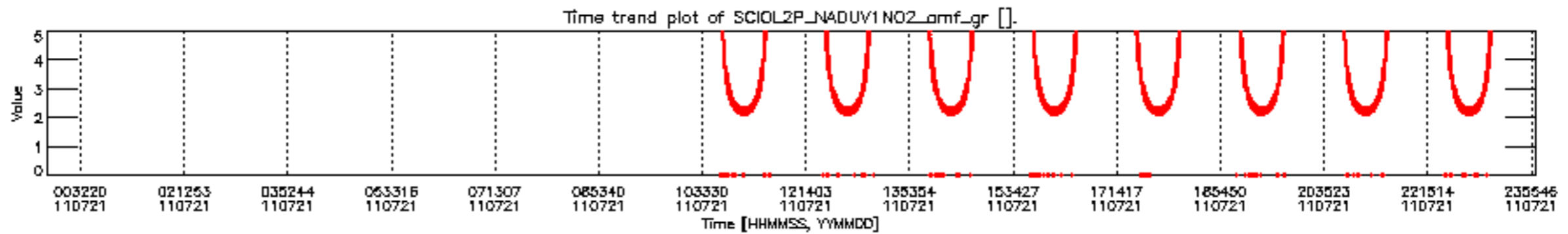
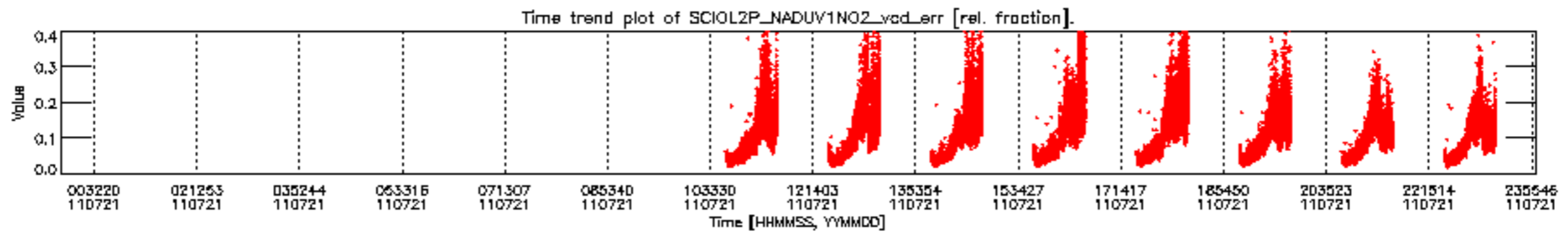
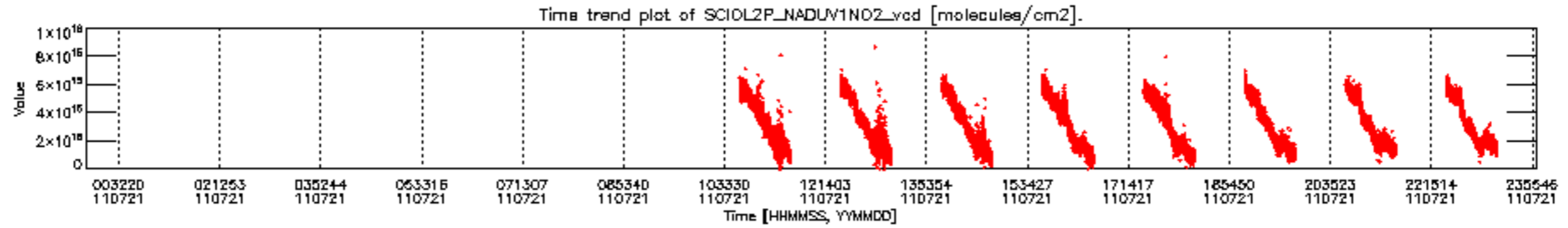


SCIOL2P_NADUV003_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

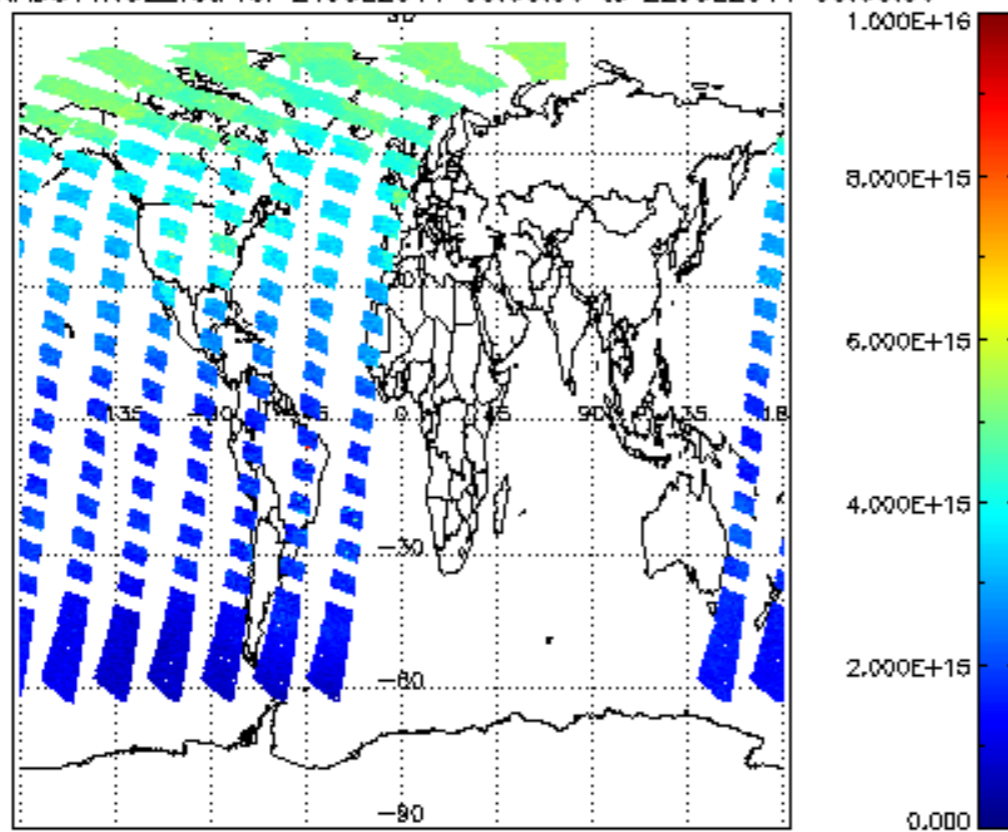


SCIOL2P_NADUV003_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

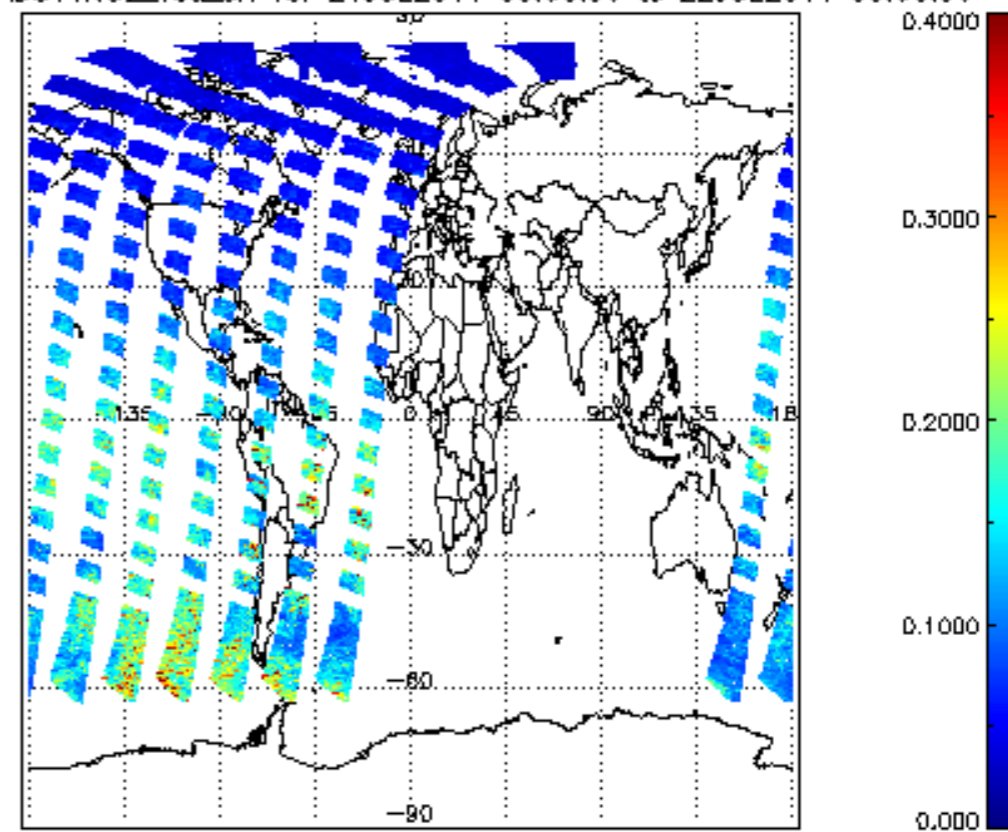




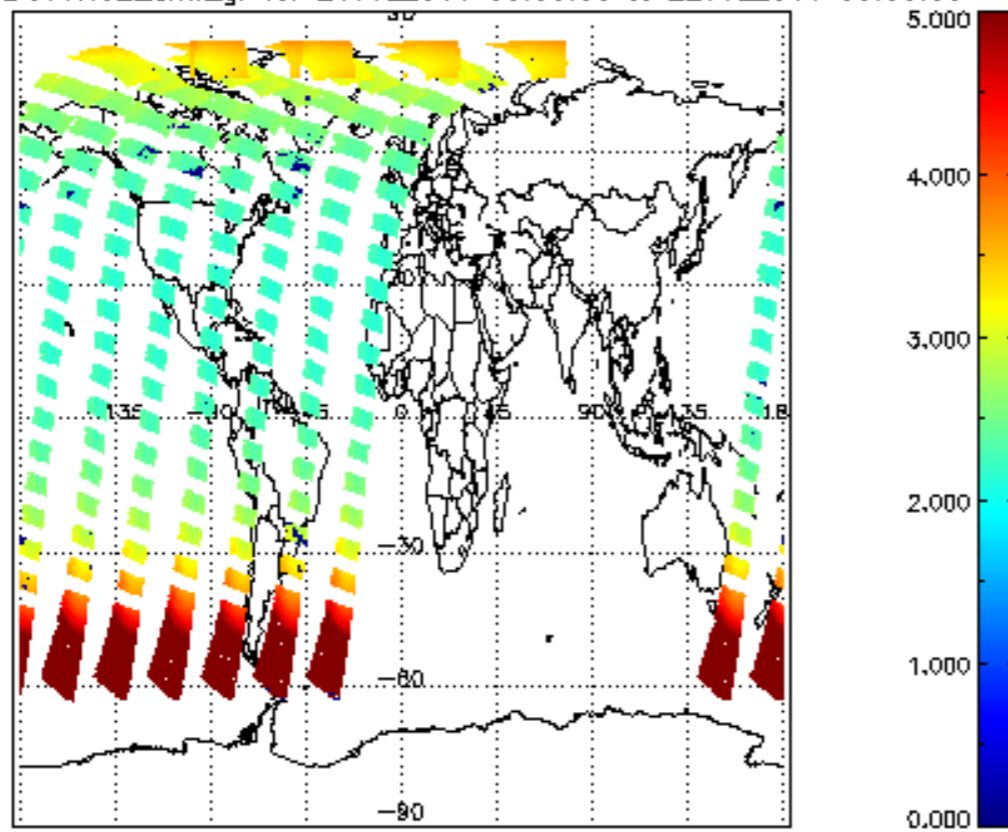
SCIOL2P_NADUV1NO2_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



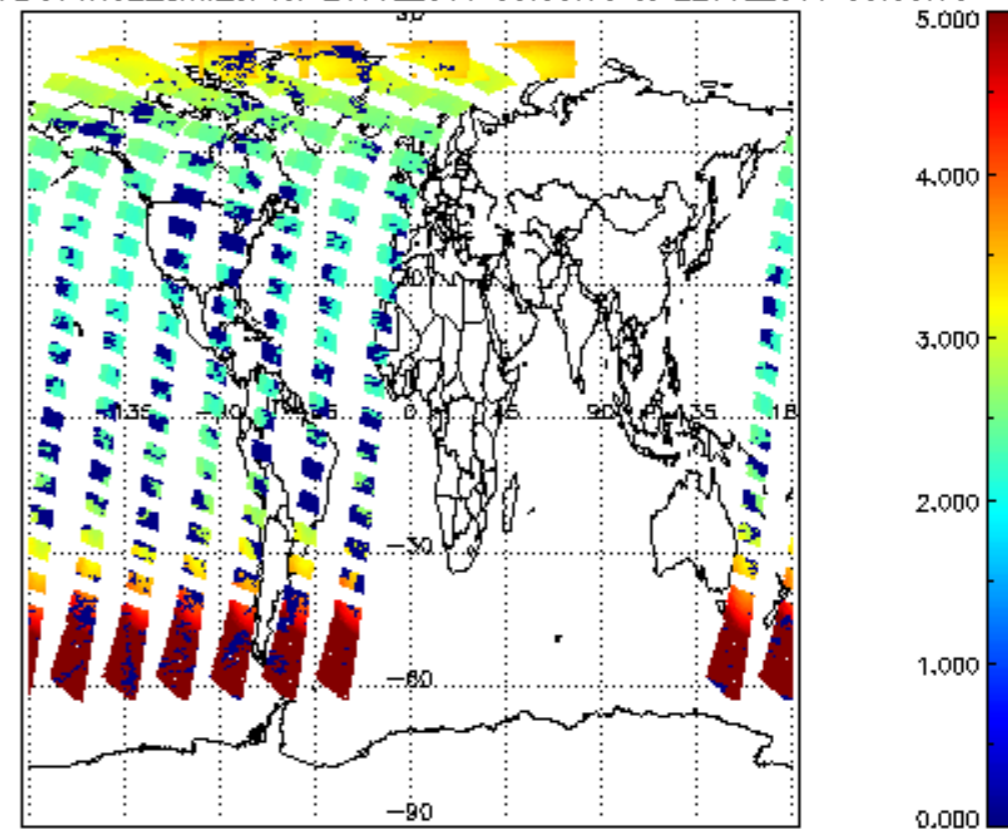
SCIOL2P_NADUV1NO2_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

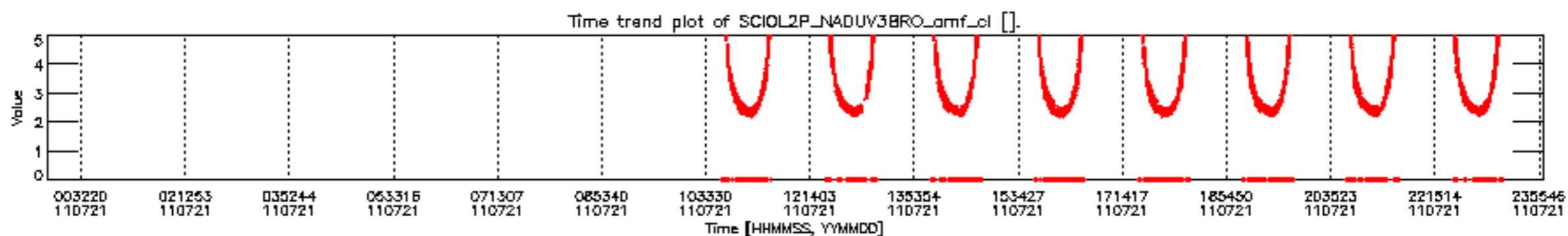
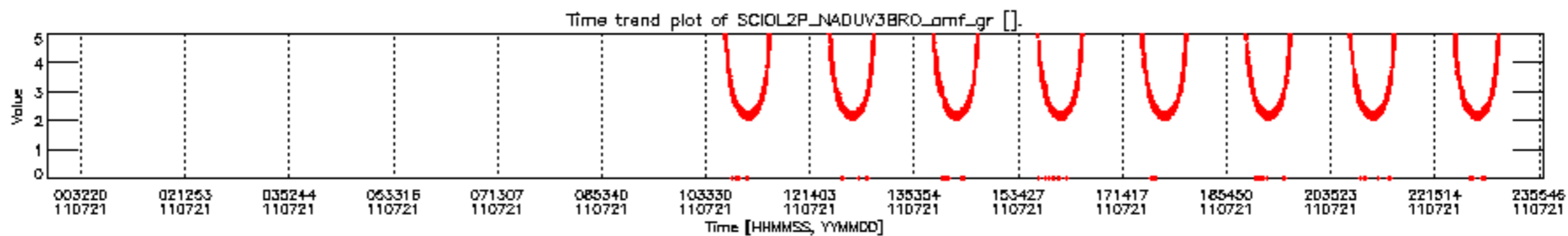
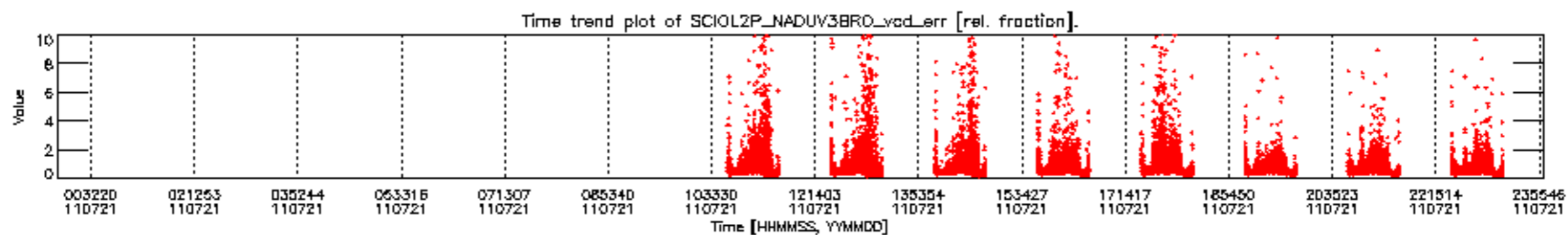
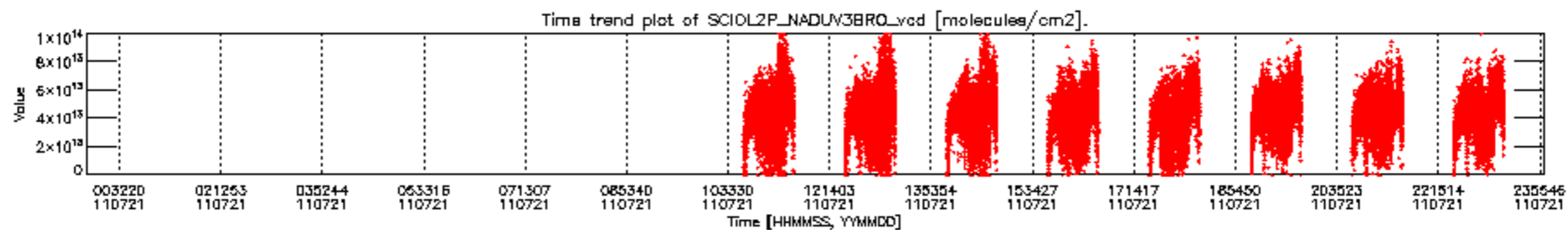


SCIOL2P_NADUV1NO2_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

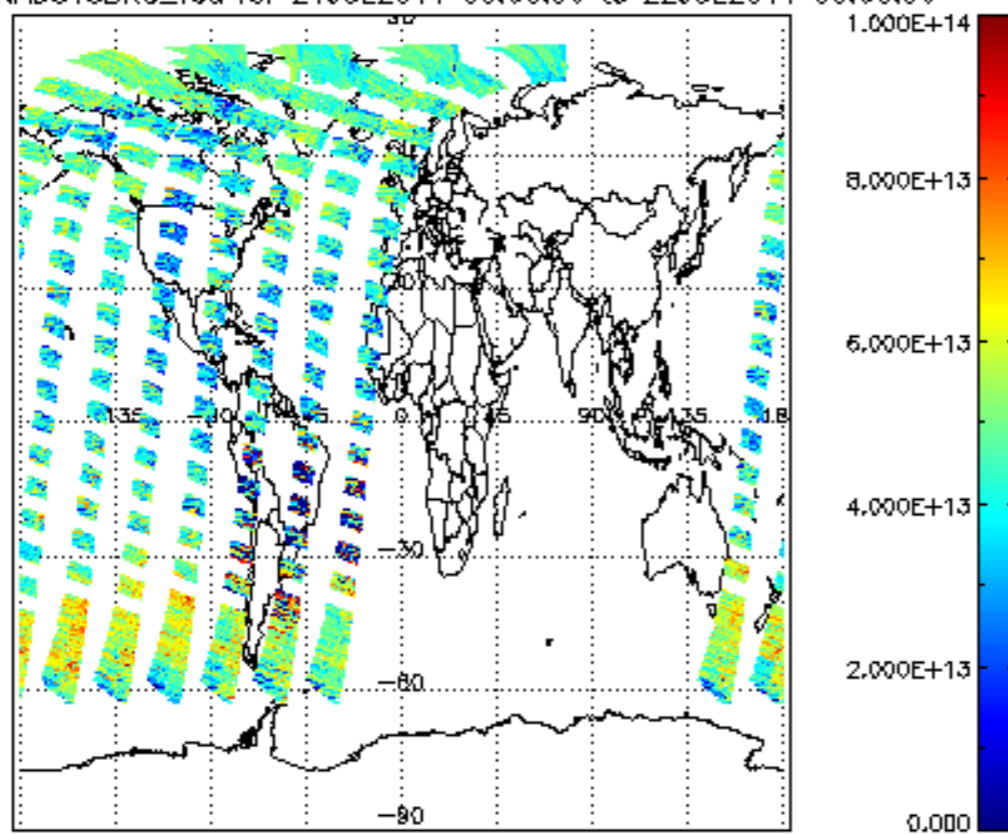


SCIOL2P_NADUV1NO2_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

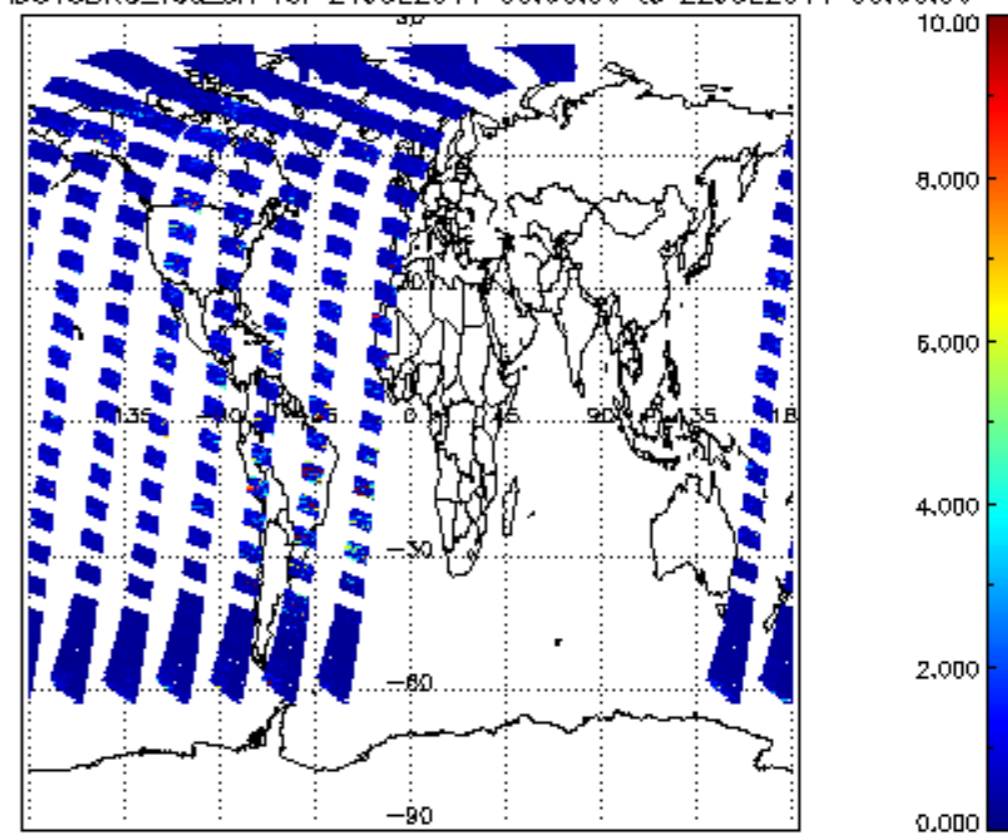




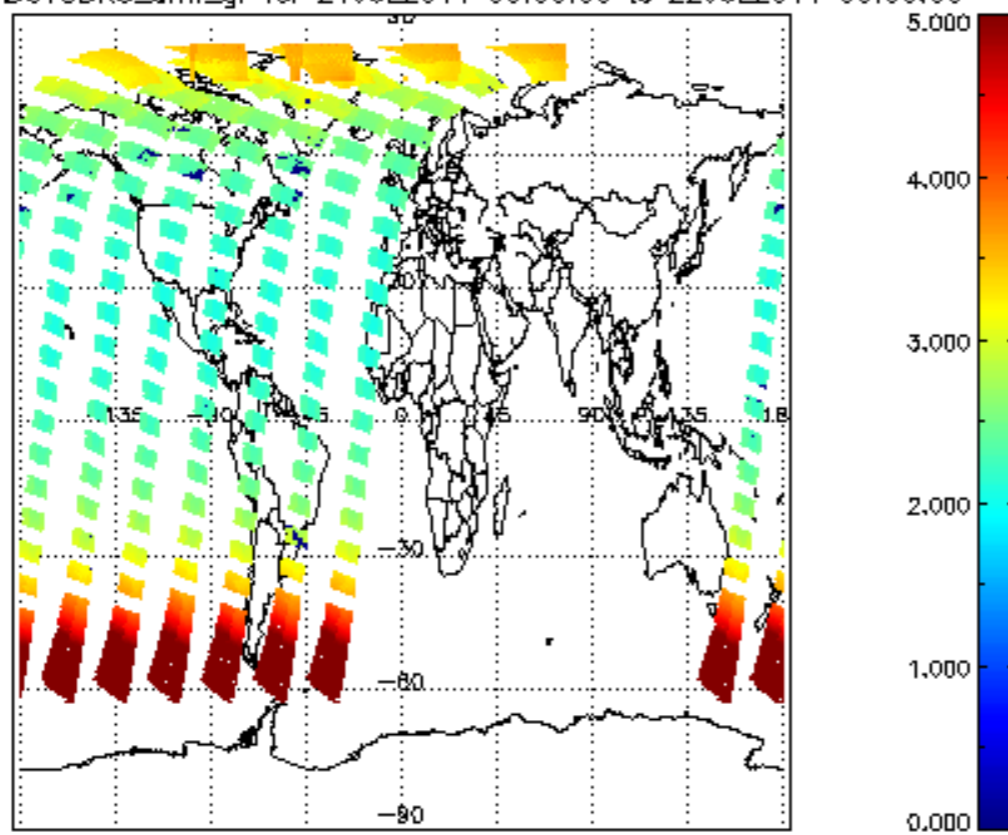
SCIOL2P_NADUV3BRO_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



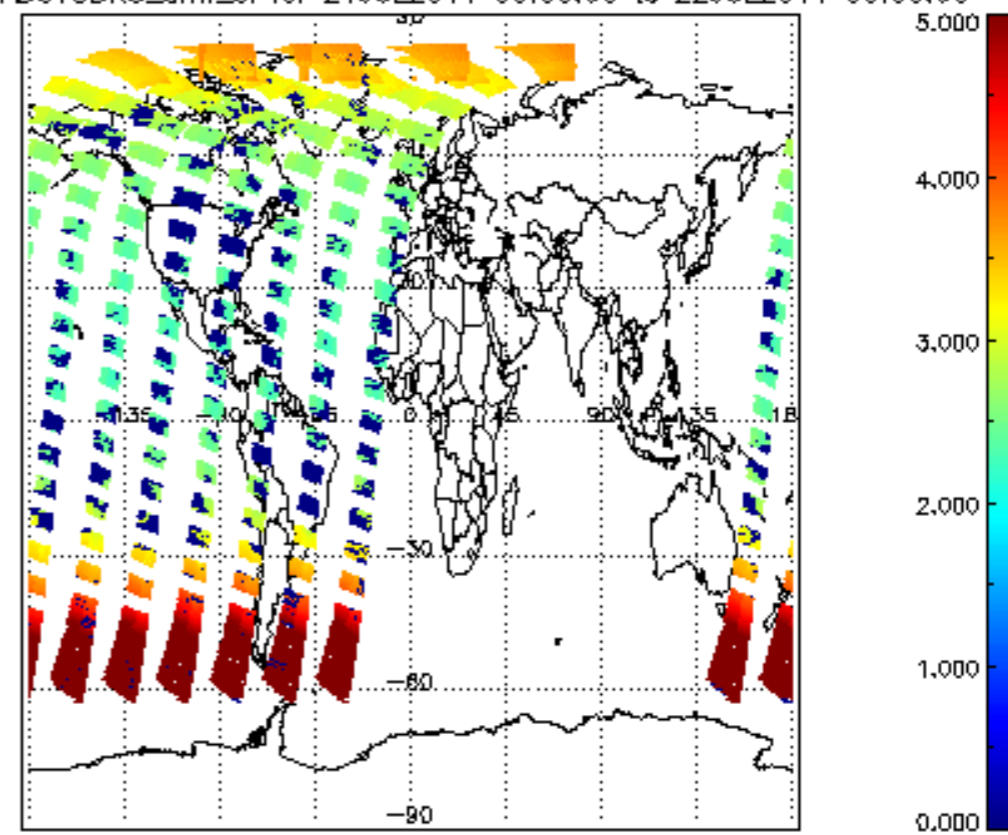
SCIOL2P_NADUV3BRO_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

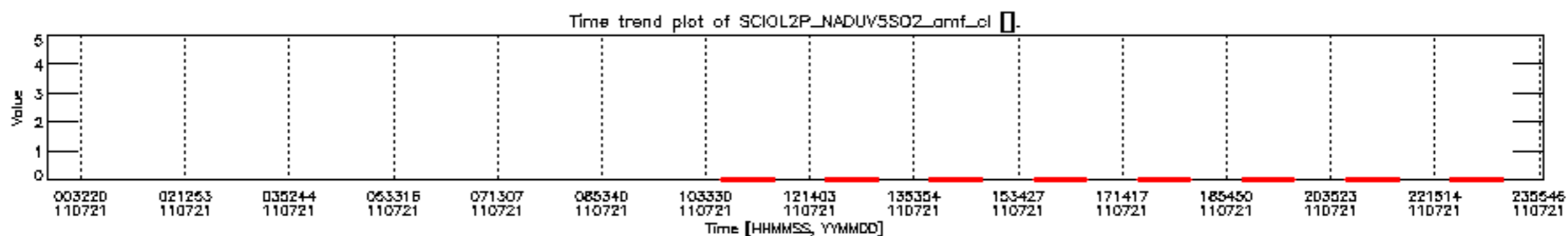
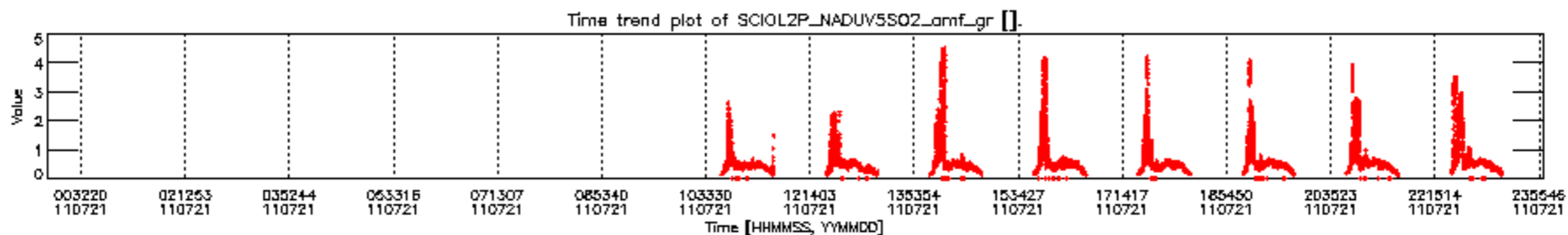
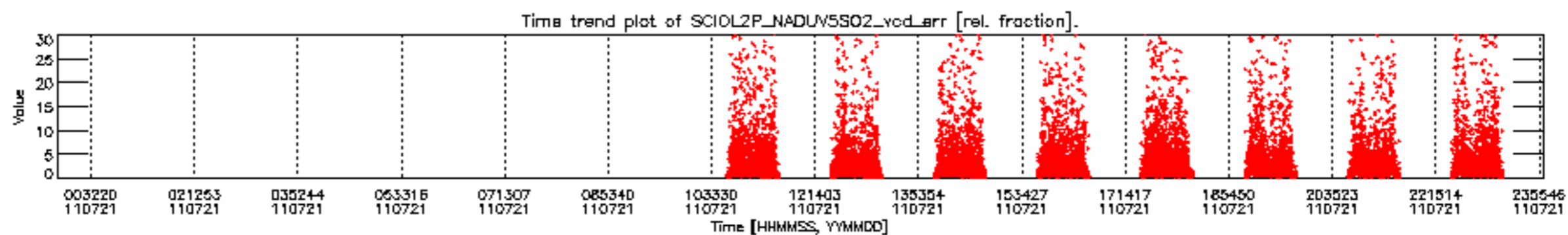
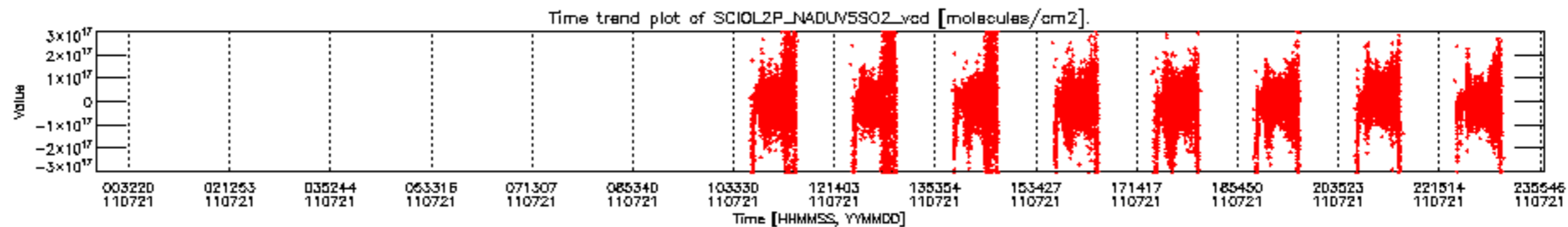


SCIOL2P_NADUV3BRO_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

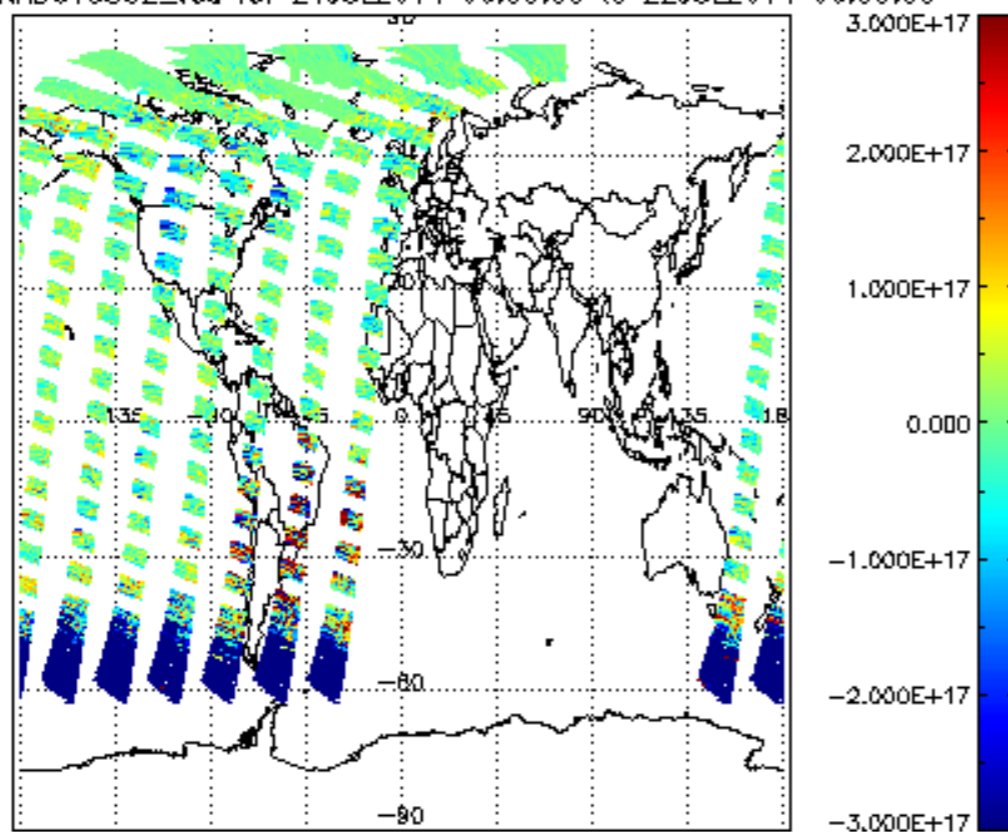


SCIOL2P_NADUV3BRO_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

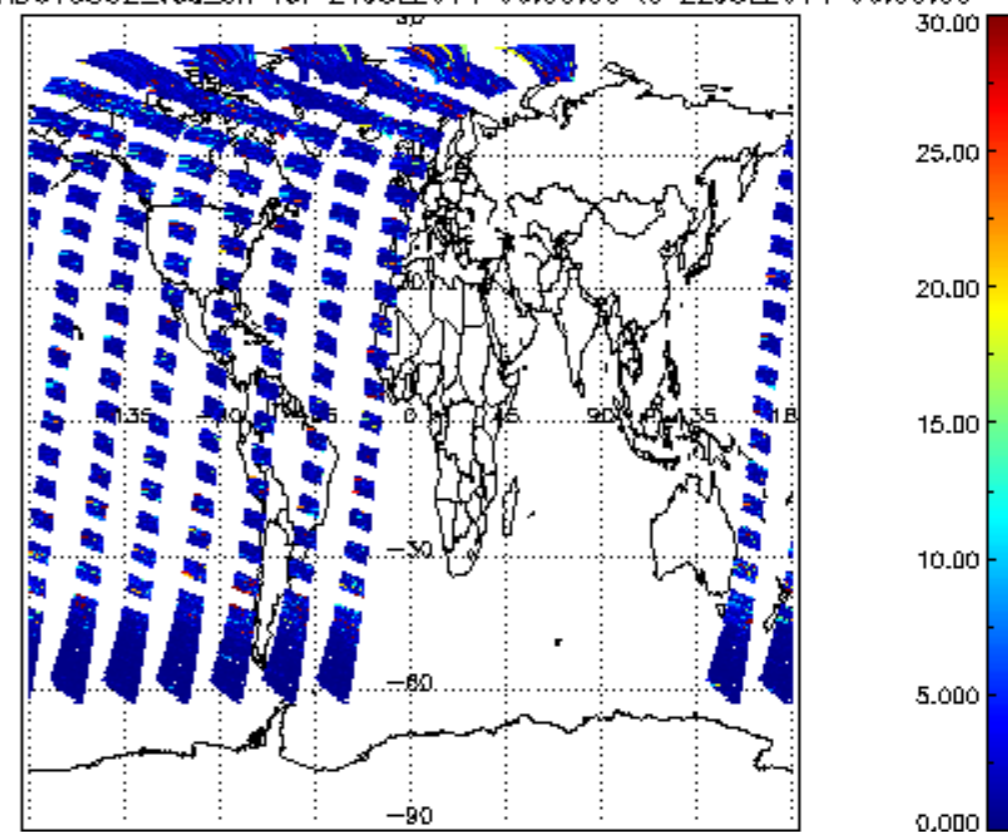




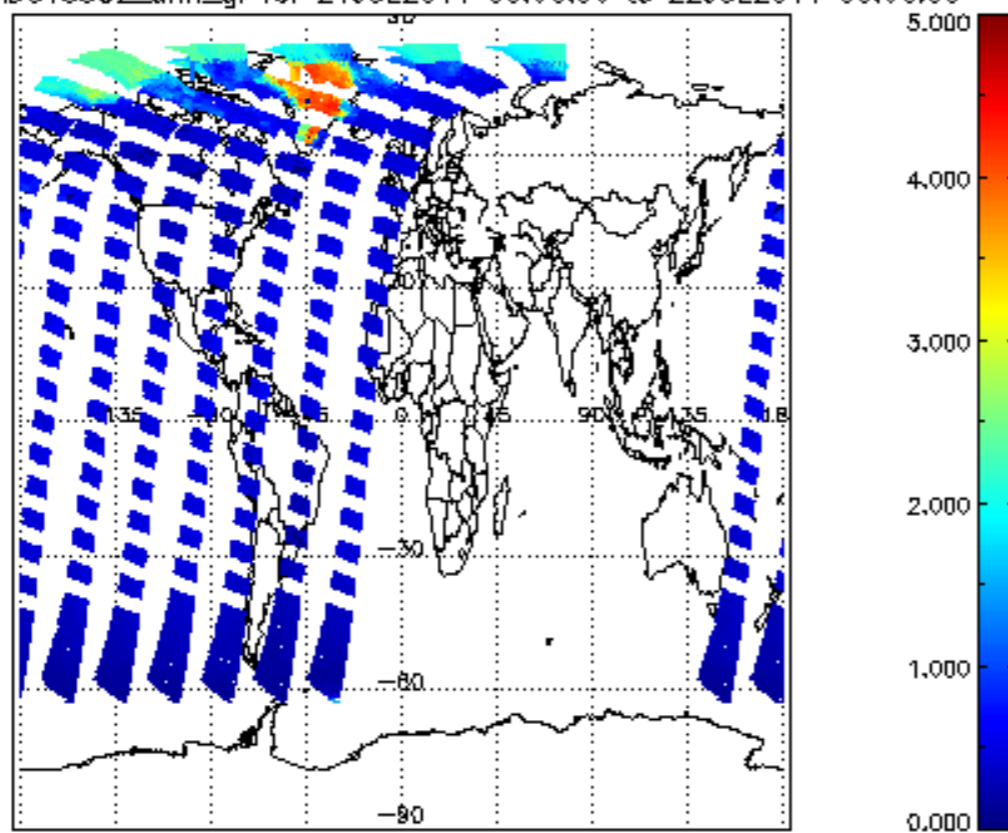
SCIOL2P_NADUV5S02_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



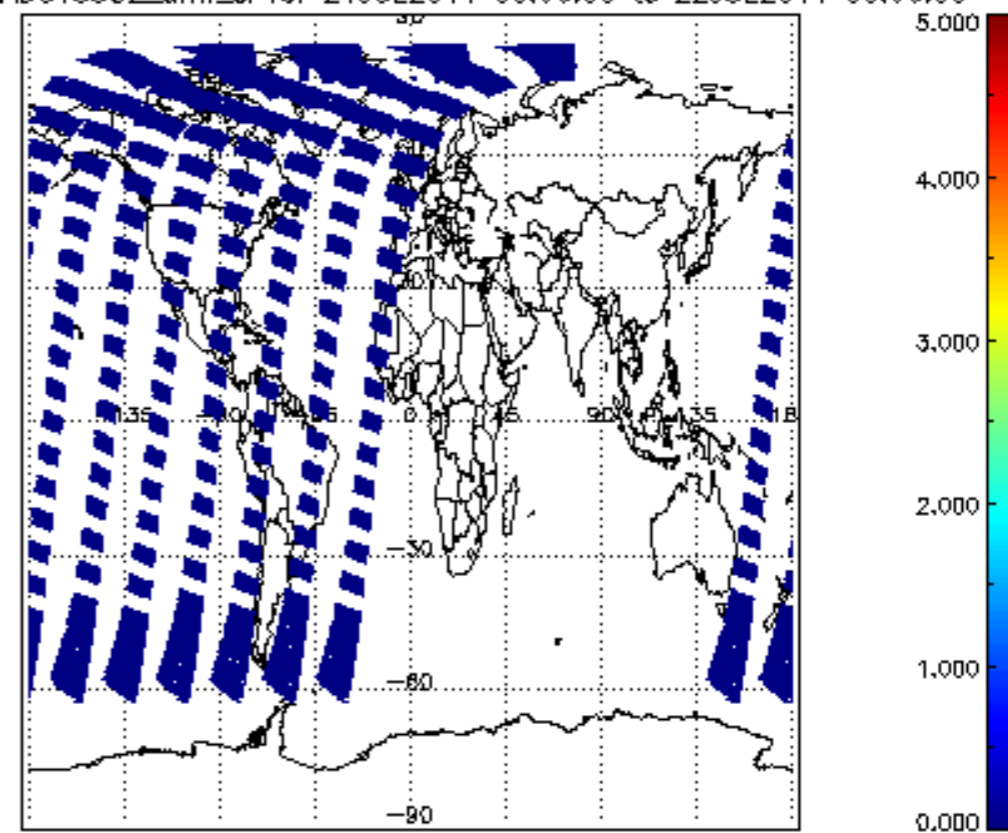
SCIOL2P_NADUV5S02_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

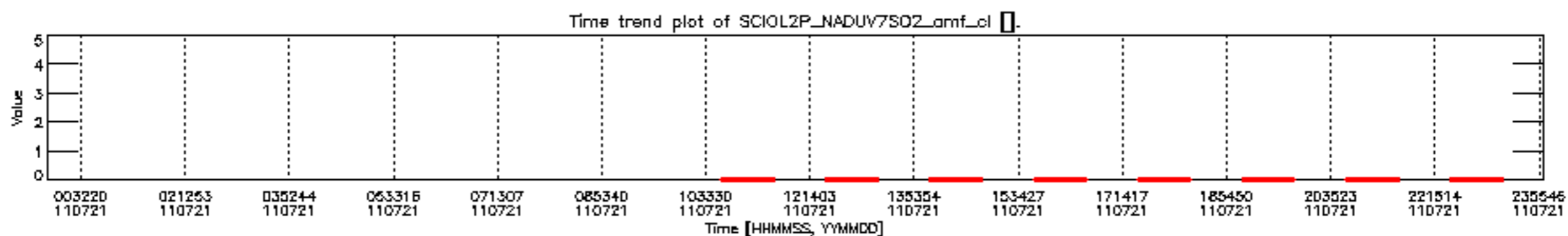
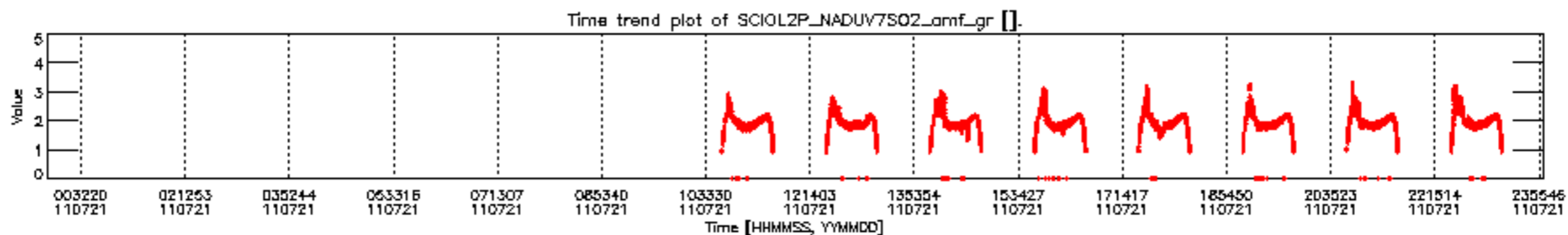
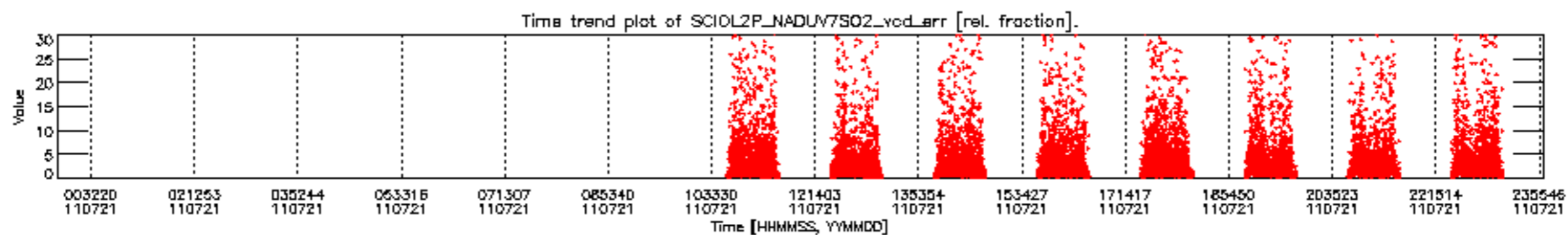
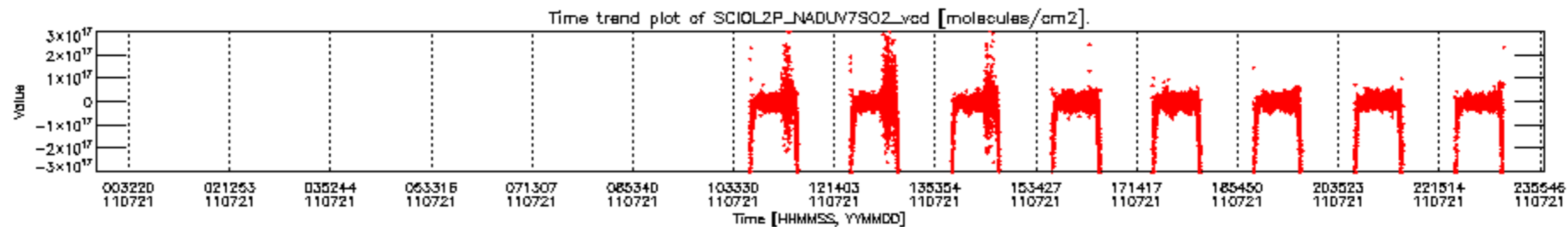


SCIOL2P_NADUV5S02_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

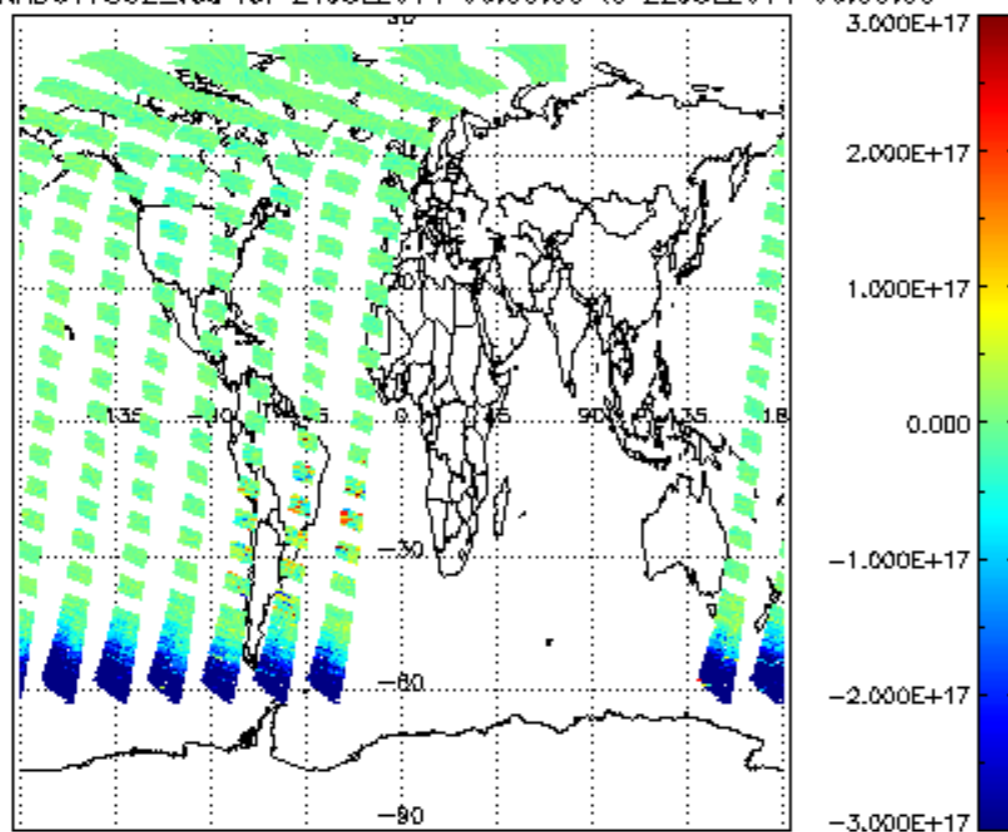


SCIOL2P_NADUV5S02_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

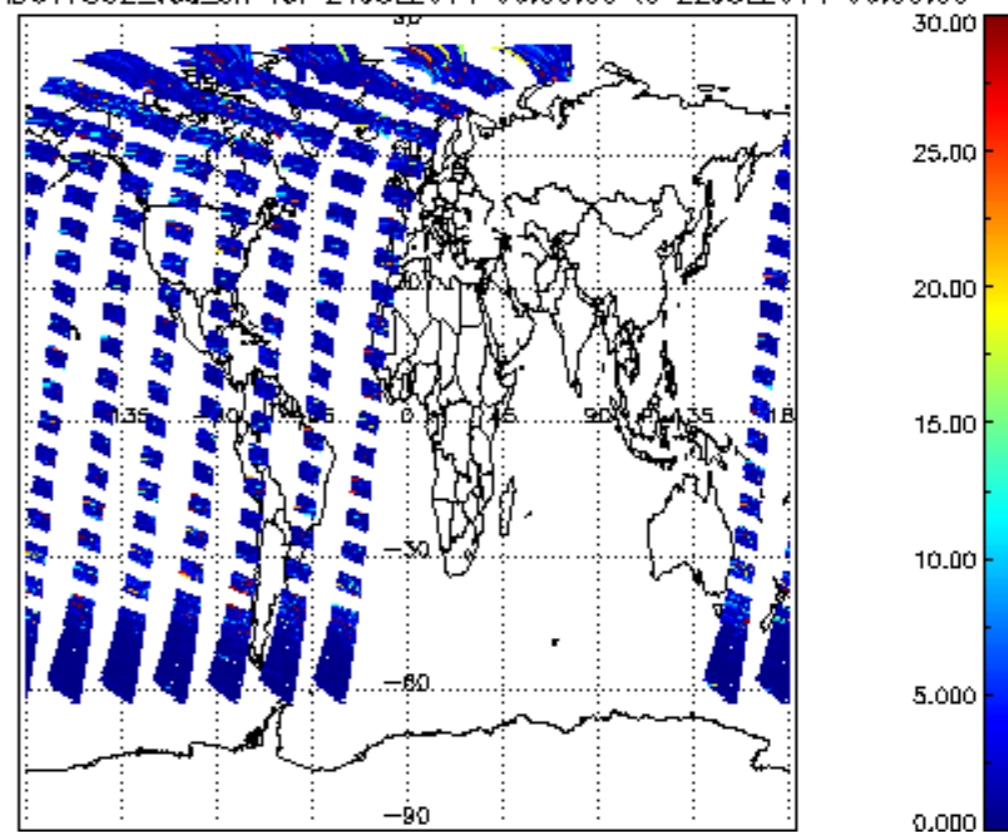




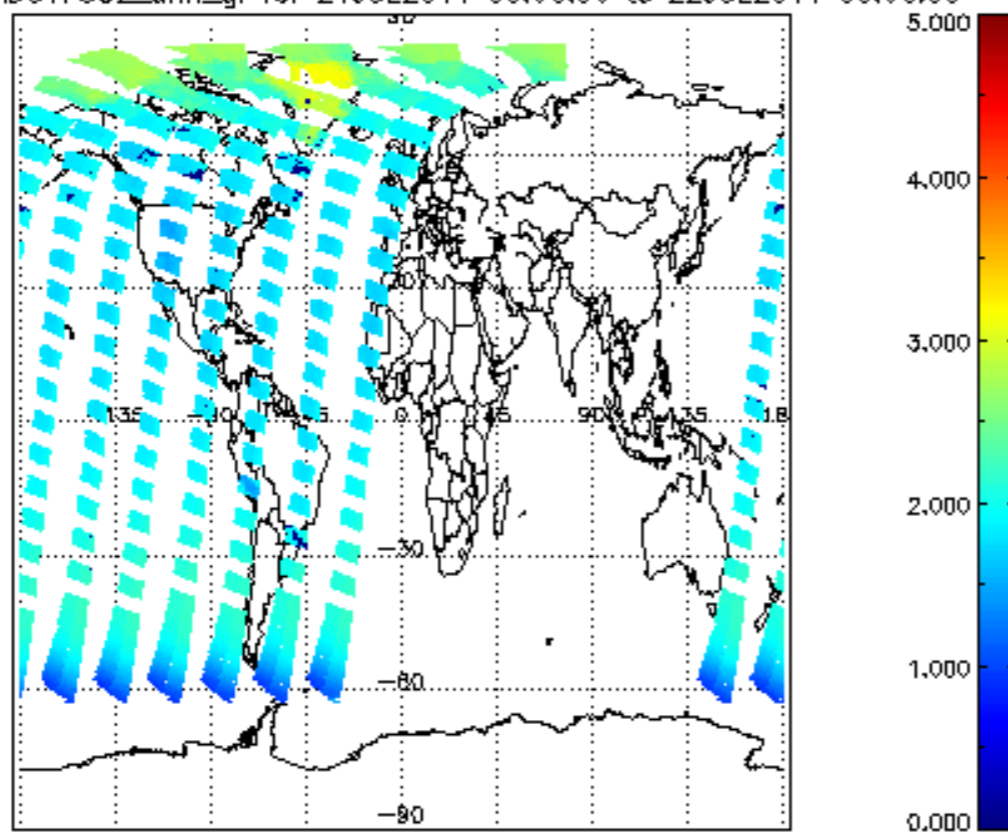
SCIOL2P_NADUV7S02_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



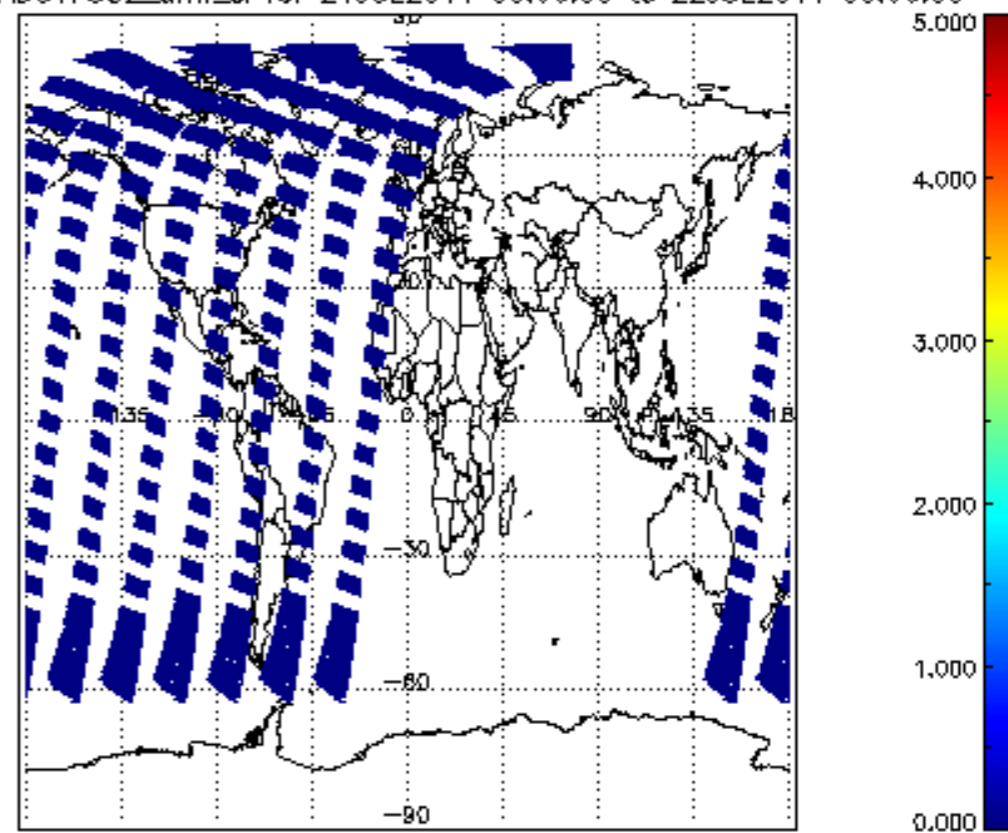
SCIOL2P_NADUV7S02_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

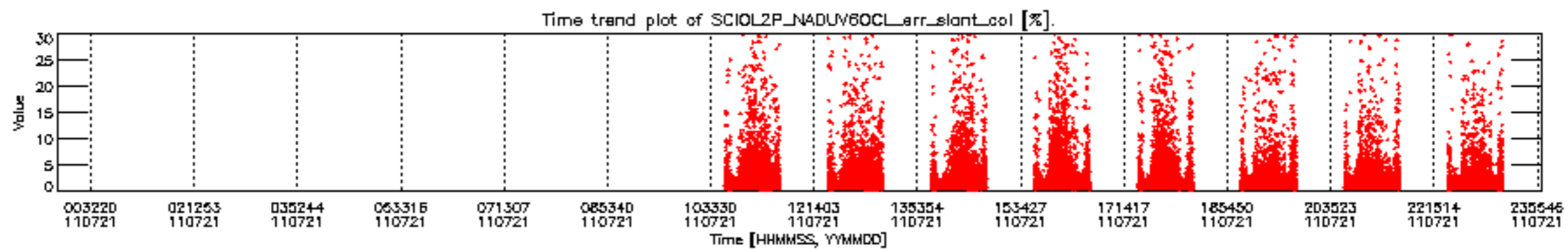
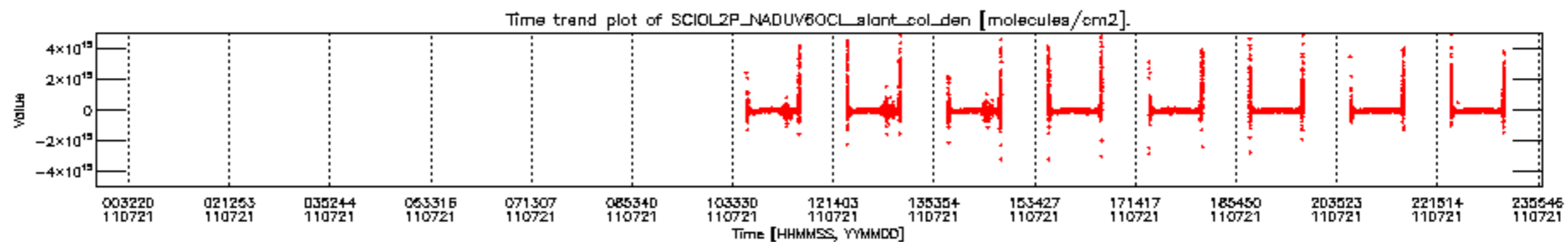


SCIOL2P_NADUV7S02_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

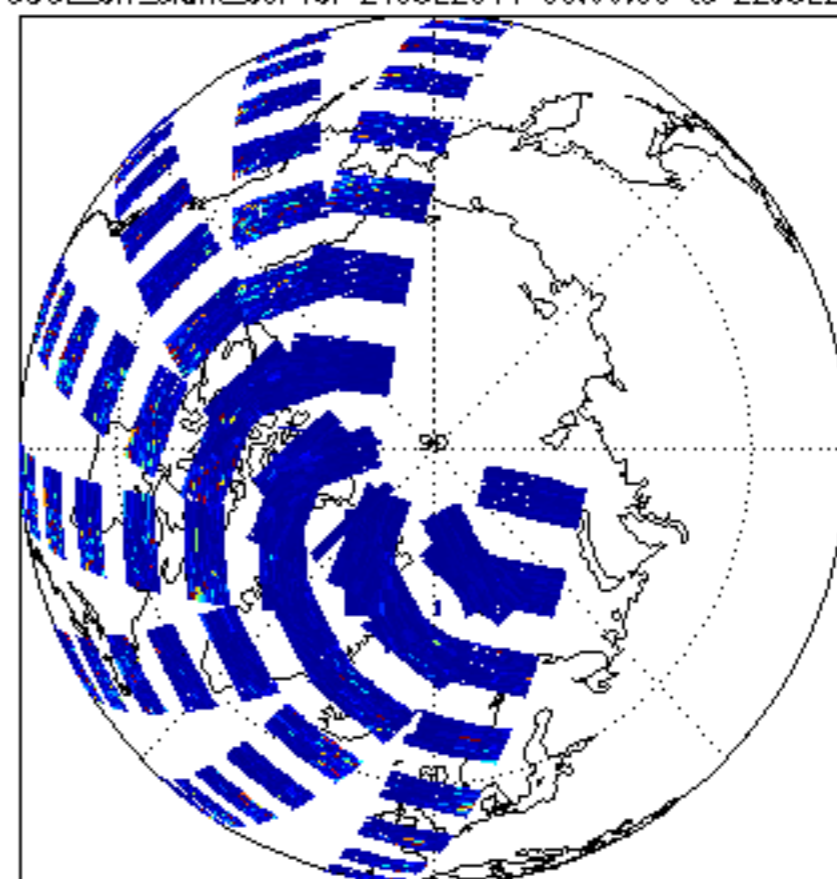
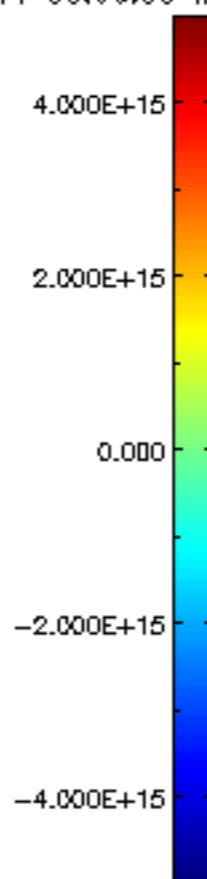
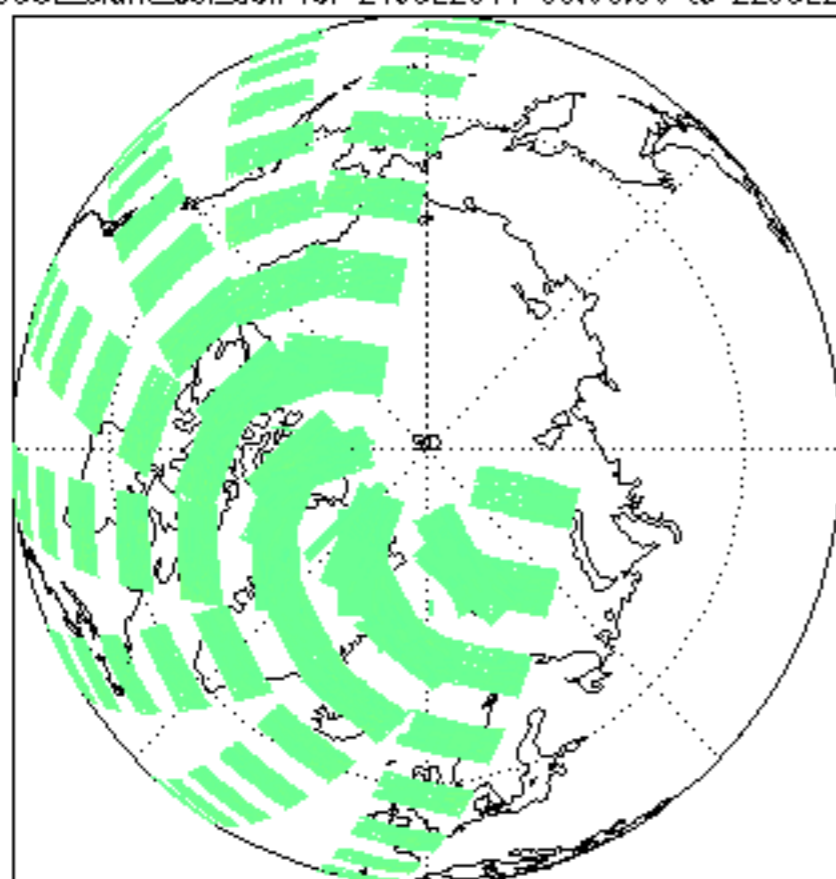


SCIOL2P_NADUV7S02_amf_cl for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

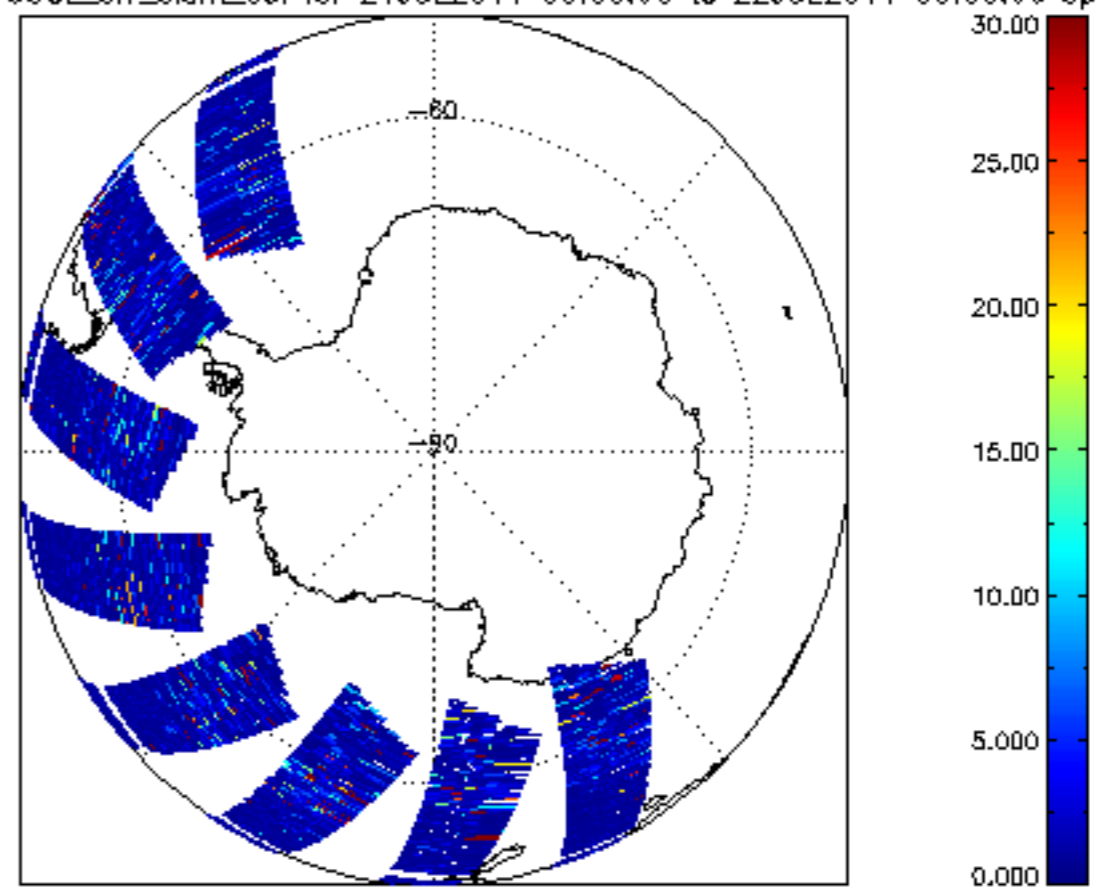
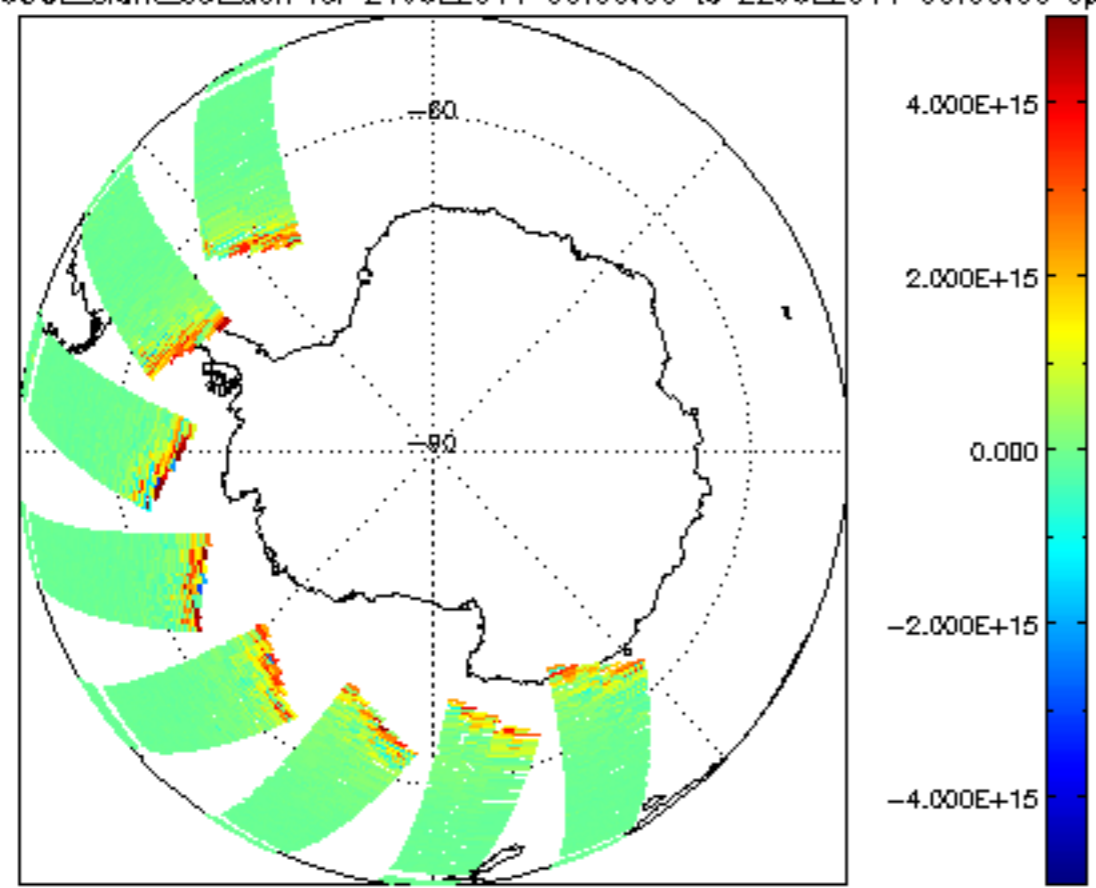


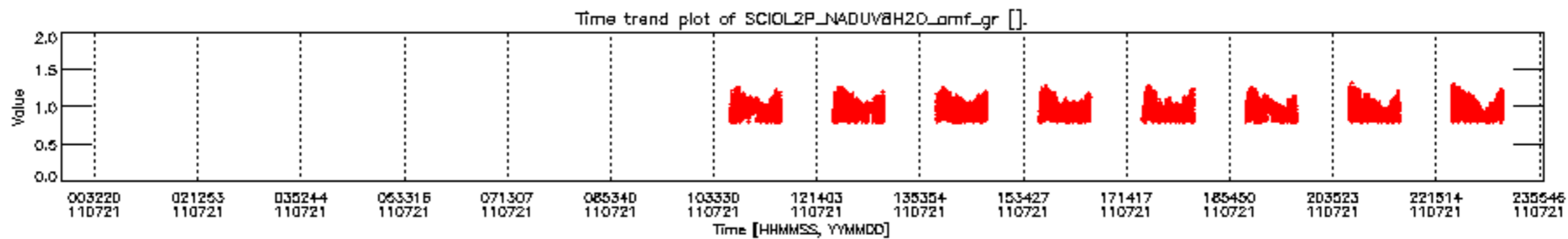
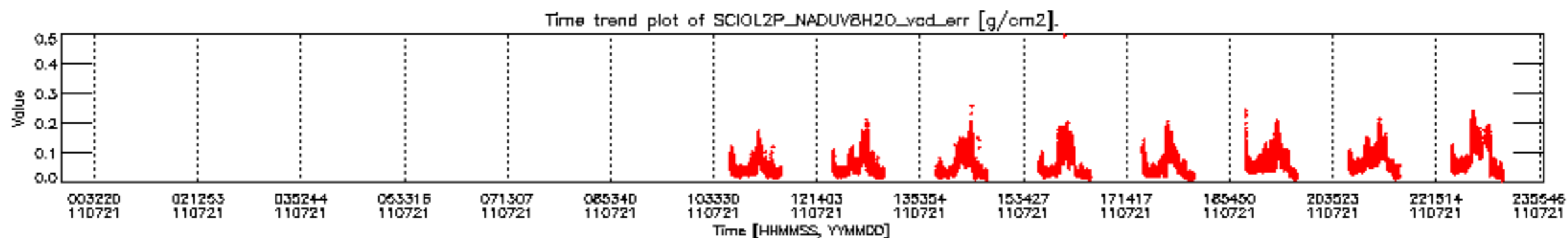
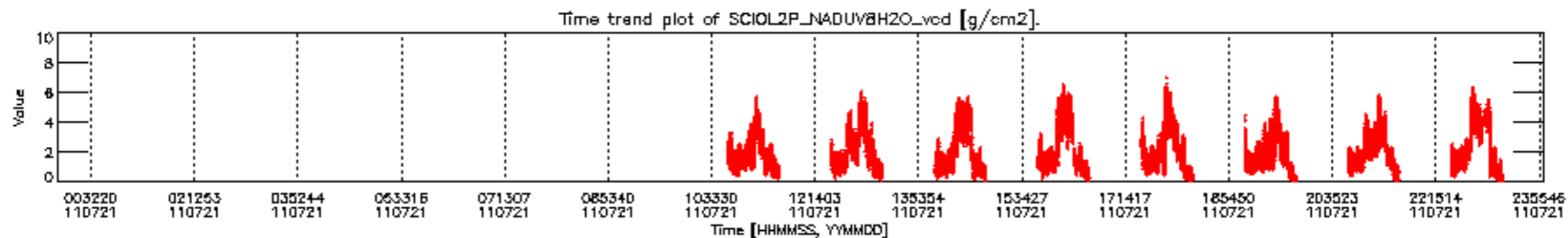


iCIOL2P_NADUV6OCL_slant_col_den for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 np iCIOL2P_NADUV6OCL_err_slant_col for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 np

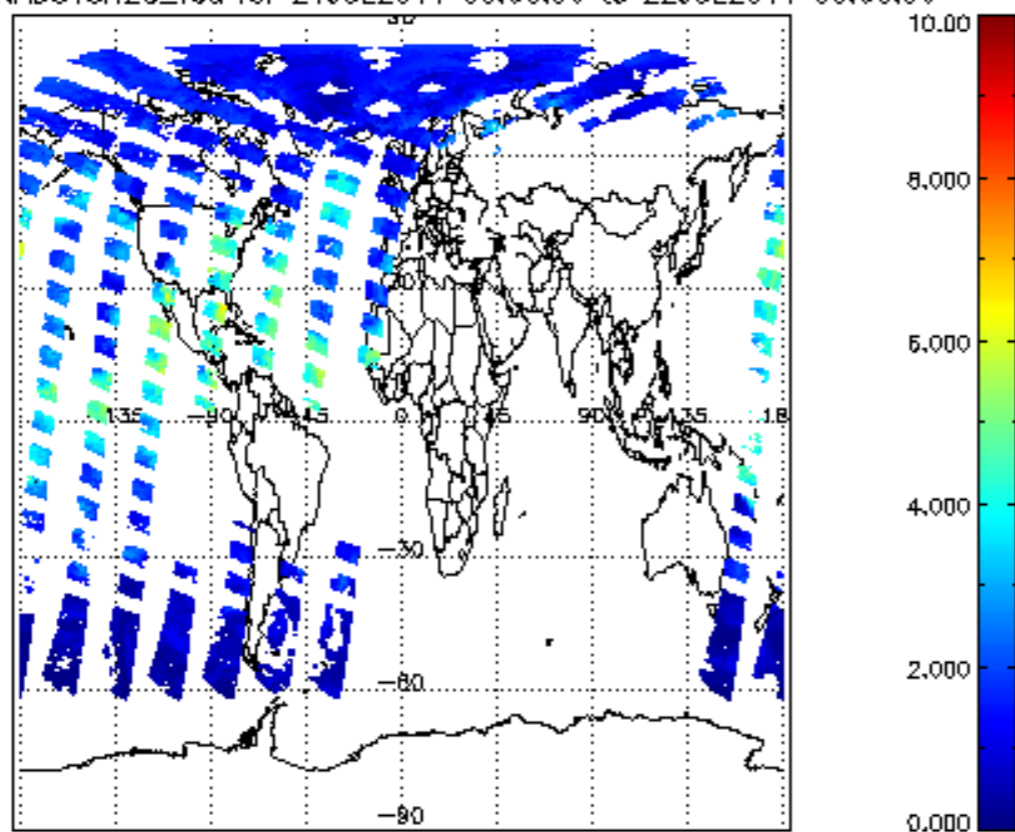


iCIOL2P_NADUV6OCL_slant_coLden for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 sp 3iCIOL2P_NADUV6OCL_em_slant_col for 21JUL2011 00:00:00 to 22JUL2011 00:00:00 sp

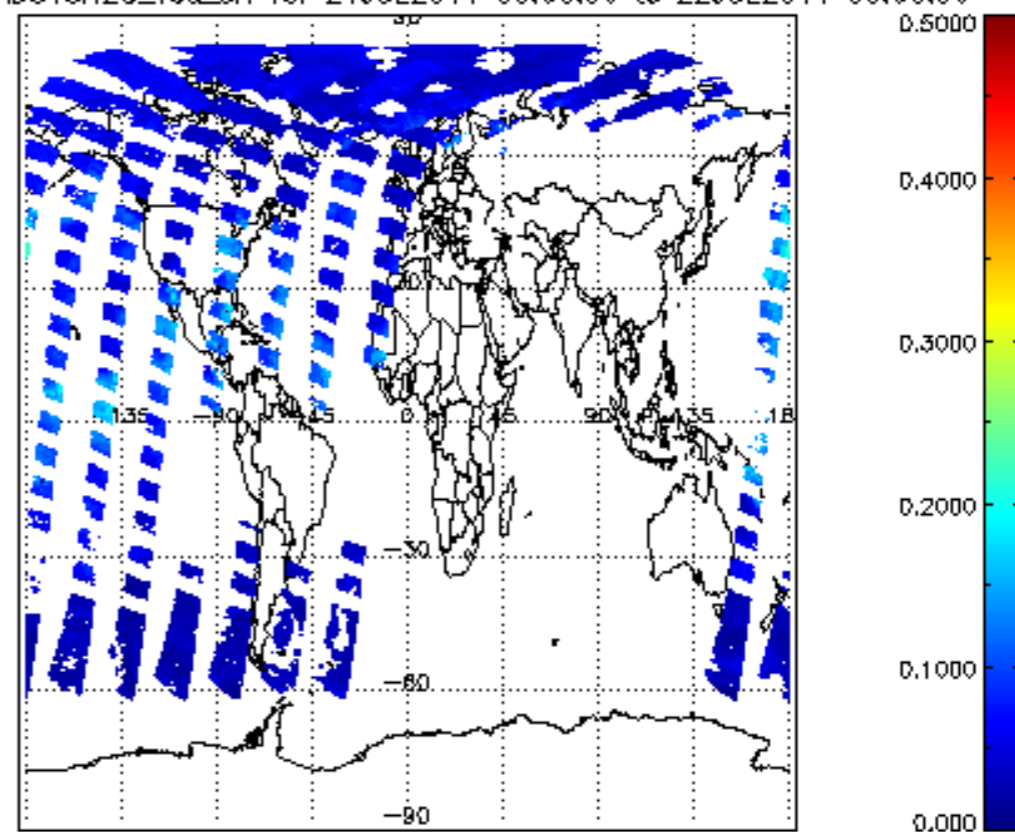




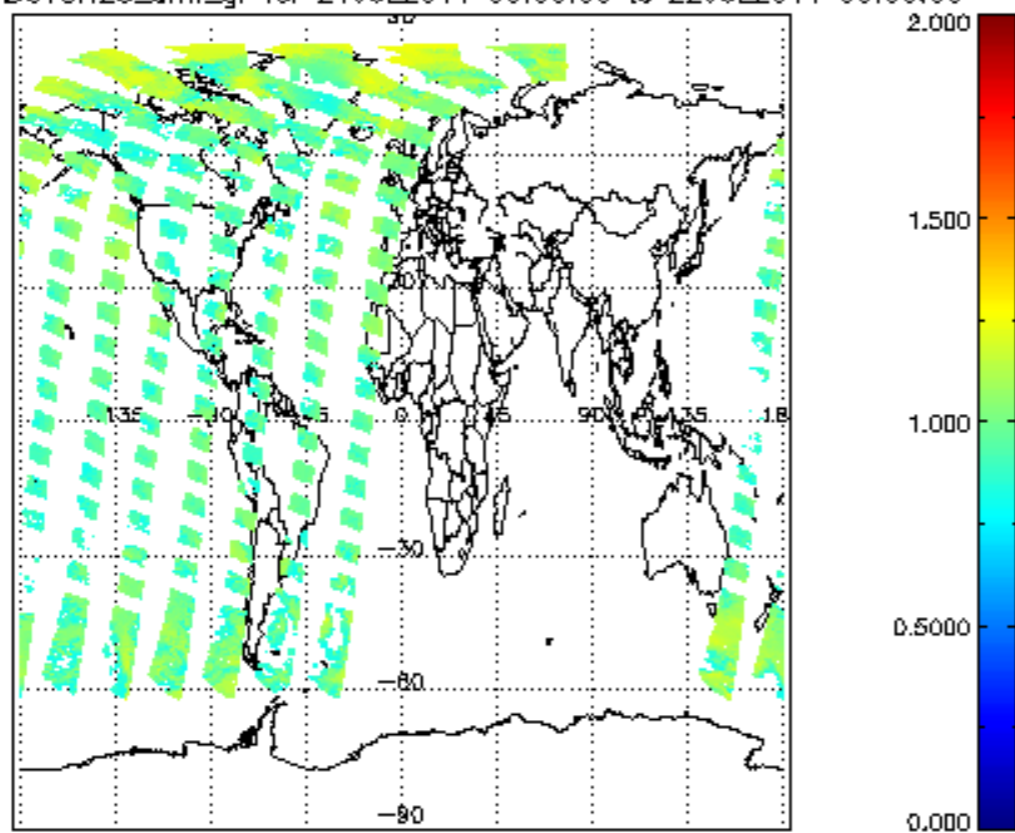
SCIOL2P_NADUV8H2O_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

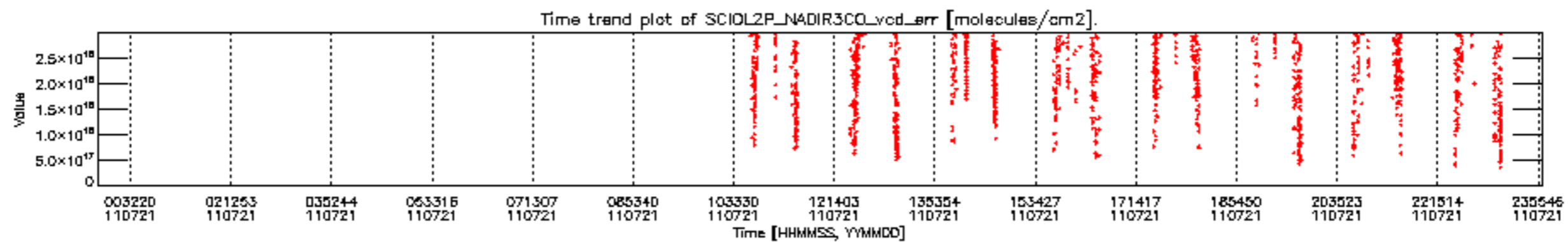
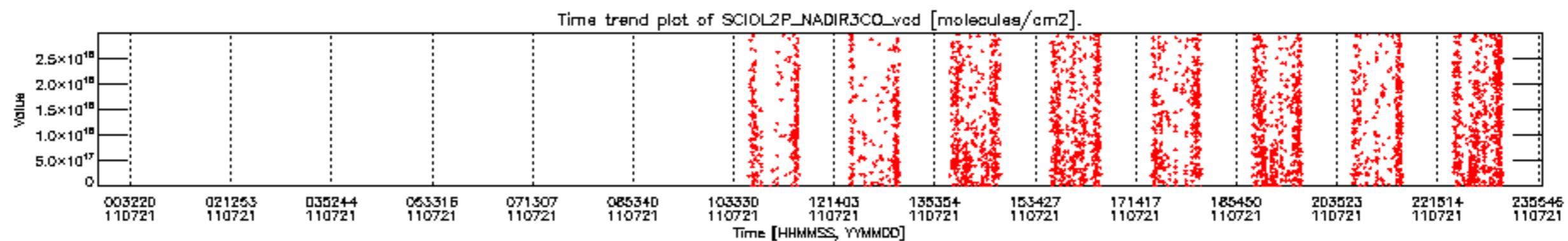


SCIOL2P_NADUV8H2O_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

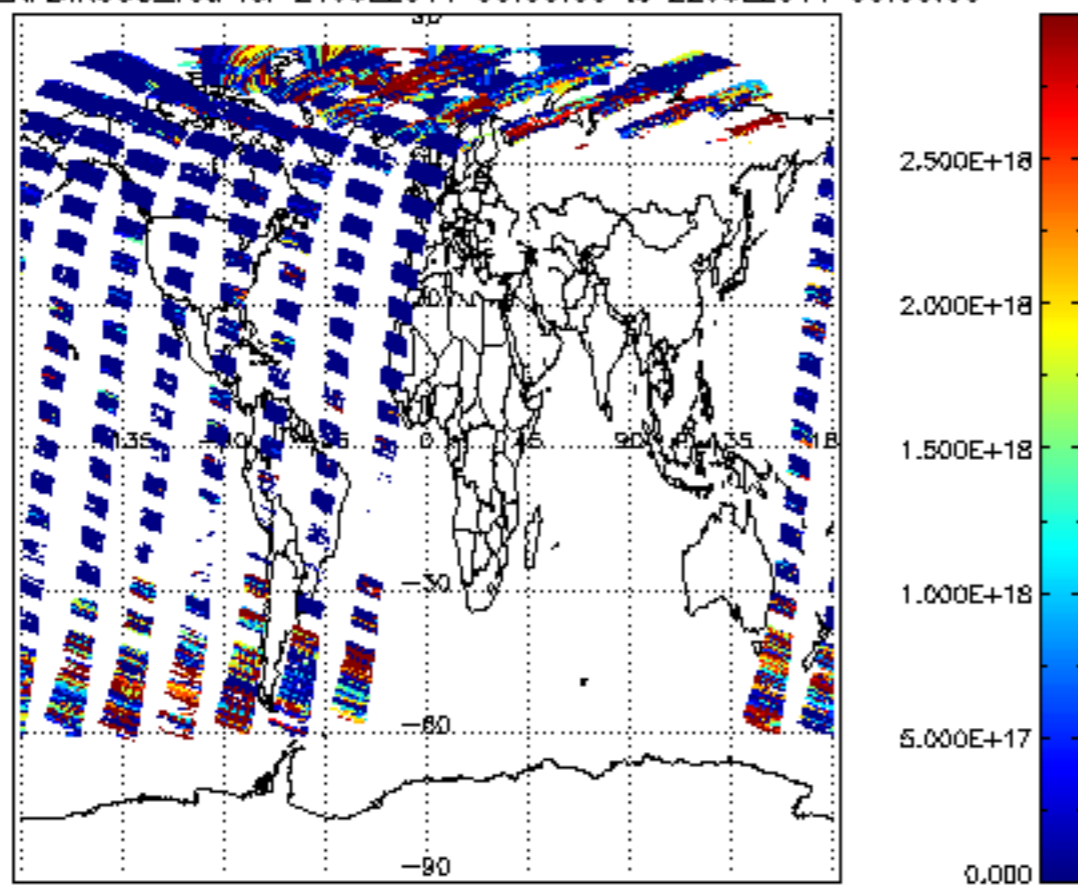


SCIOL2P_NADUV8H2O_amf_gr for 21JUL2011 00:00:00 to 22JUL2011 00:00:00

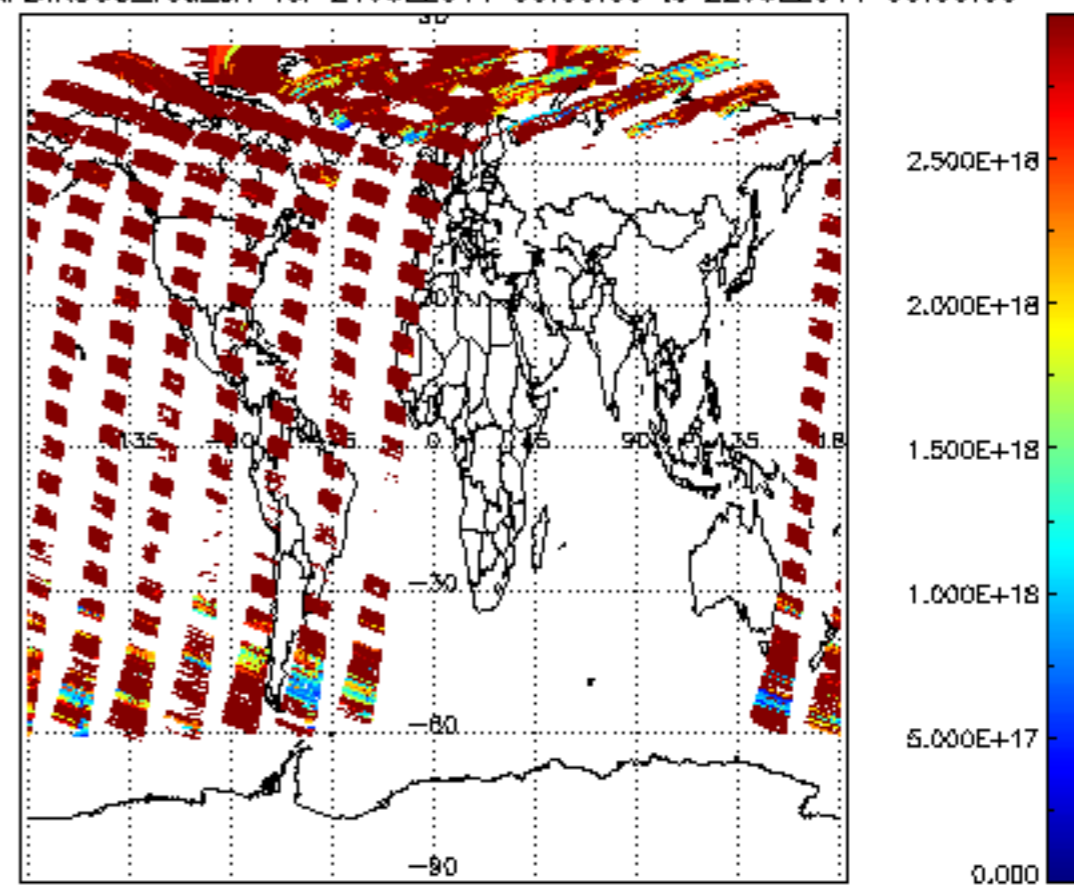




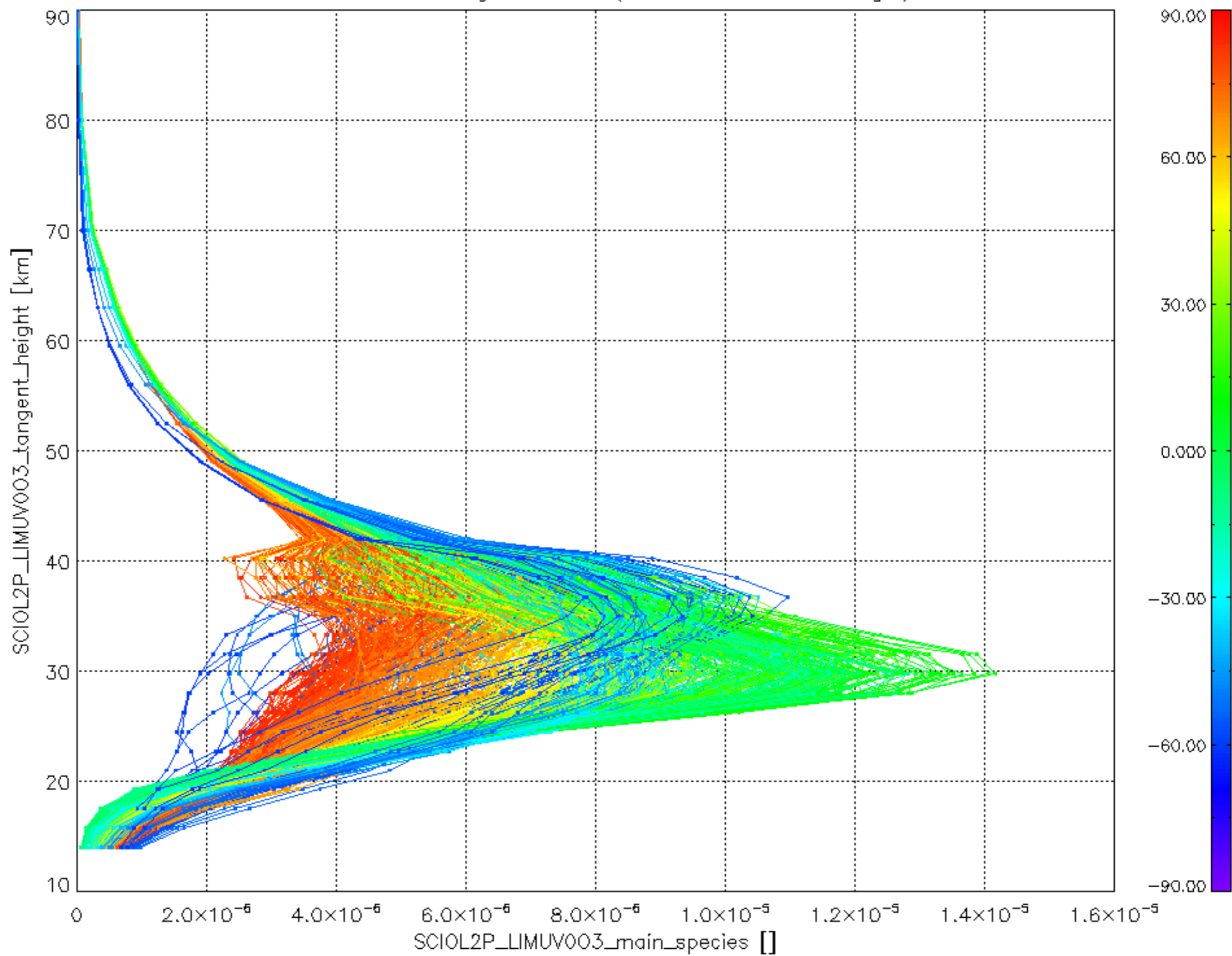
SCIOL2P_NADIR3CO_vcd for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



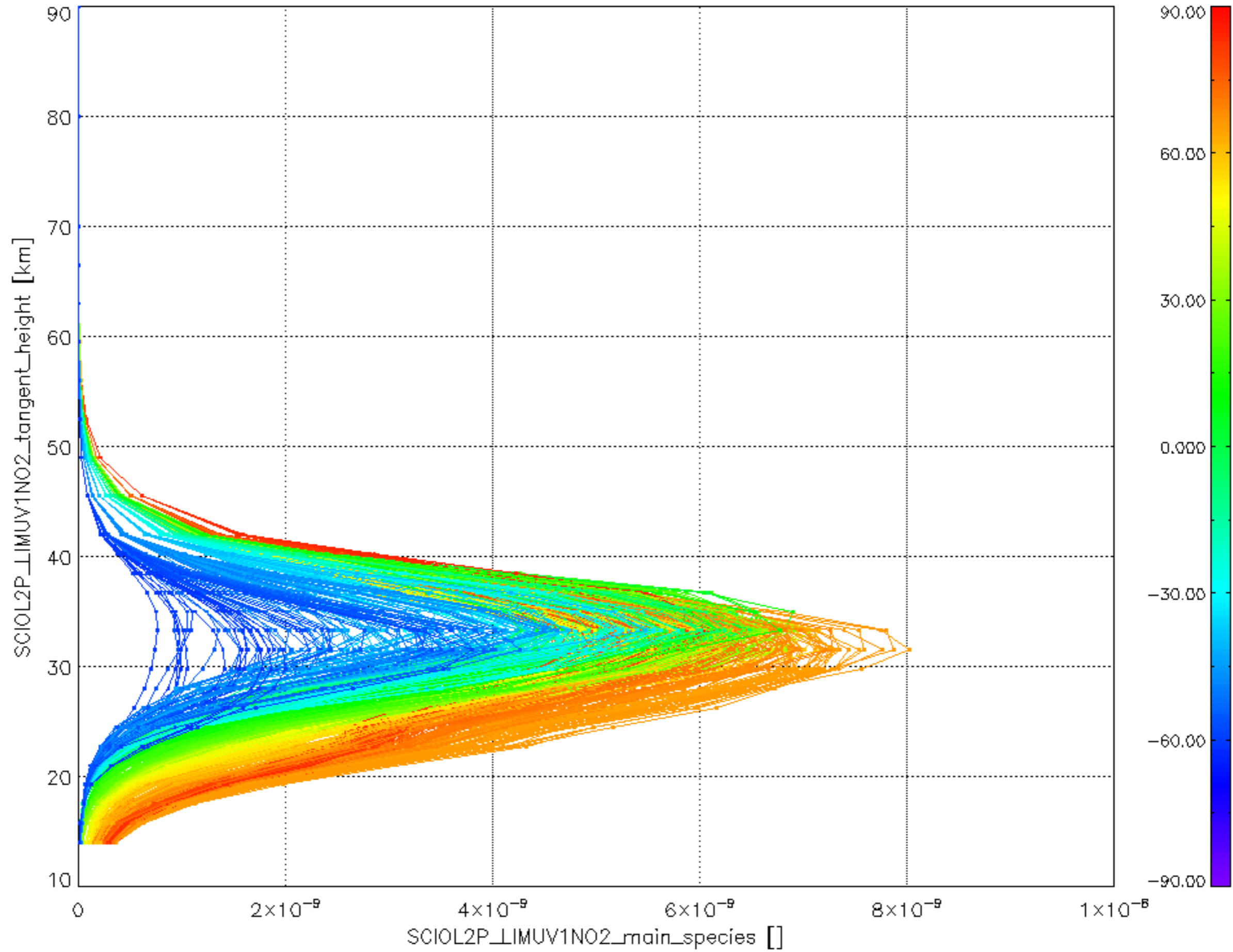
SCIOL2P_NADIR3CO_vcd_err for 21JUL2011 00:00:00 to 22JUL2011 00:00:00



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).

