

## 2. SCIAMACHY Daily Report for level 2 products

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

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

### [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	1.6 (28-07-2008)
Time of report generation	19NOV2008 16:23:40
Data source version	SCIA-OL/3.01-R
Processing scope for products	12NOV2004 00:00:00 to 13NOV2004 00:00:00
Start time of first product within scope	12NOV2004 00:10:33
Stop time of last product within scope	12NOV2004 17:52:57
Total number of level 2 products	10
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.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	<a href="#">SCI_OL__2PRDPA20041112_001033_000033812032_00045_14127_0530.N1</a>	12NOV2004 00:10:33	12NOV2004 01:06:54	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20041112_015109_000033252032_00046_14128_0489.N1</a>	12NOV2004 01:51:09	12NOV2004 02:46:34	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20041112_051221_000033252032_00048_14130_0446.N1</a>	12NOV2004 05:12:21	12NOV2004 06:07:47	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20041112_065258_000033812032_00049_14131_0559.N1</a>	12NOV2004 06:52:58	12NOV2004 07:49:19	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20041112_083334_000033252032_00050_14132_0447.N1</a>	12NOV2004 08:33:34	12NOV2004 09:28:59	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20041112_101410_000033812032_00051_14133_0442.N1</a>	12NOV2004 10:14:10	12NOV2004 11:10:32	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20041112_115446_000033252032_00052_14134_0556.N1</a>	12NOV2004 11:54:46	12NOV2004 12:50:12	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20041112_133523_000033812032_00053_14135_0517.N1</a>	12NOV2004 13:35:23	12NOV2004 14:31:44	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20041112_151559_000033252032_00054_14136_0495.N1</a>	12NOV2004 15:15:59	12NOV2004 16:11:25	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20041112_165635_000033812032_00055_14137_0436.N1</a>	12NOV2004 16:56:35	12NOV2004 17:52:57	0	GOOD

## 2.2 Product Quality Indicators

### 2.2.1 Cloud parameters

This is a new section that 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: 105040

Total number of cloud data DSRs with good quality flag (=0): 105040 (100.0 %)

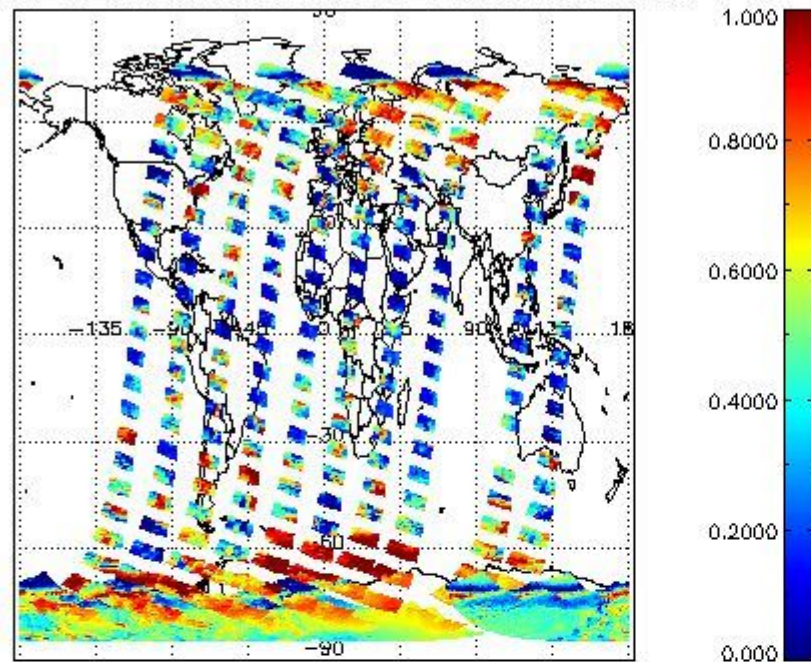
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	105040	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	105040	0.16955	0.12500	0.12500	0.25000	0.059869	s
CL_FRAC	105040	0.46488	0.46417	0.0000	1.0000	0.28278	-
CL_FRAC_ERR	105040	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	105040	5.4257	4.0000	4.0000	8.0000	1.9158	
PMD_READ_CL[0]	105040	0.35796	0.0000	0.0000	8.0000	1.3441	-
PMD_READ_CL[1]	105040	0.39662	0.0000	0.0000	8.0000	1.3719	-
CL_TOP_HEIGHT	89242	4.6286	3.5980	0.0000	17.000	4.0503	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	89242	52.595	39.339	0.0000	101.00	39.638	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	105040	11100000	11100000	11100000	11100000	0.0000	flags. Bit definition = 0: low or high cloud; 1: ice or water cloud; 2: thick or thin cloud; 3-15: not used
CLOUD_FLAGS	105040	11001000	11000100	11000000	11100000	2998.9	flags
AERO_ABSO_IND	105040	0.56031	0.24138	-3.4328	12.660	0.98429	
AERO_IND_DIAG	105040	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	105040	01010110	00000000	00000000	11000000	24461.	flags

### Time and geolocation plots:

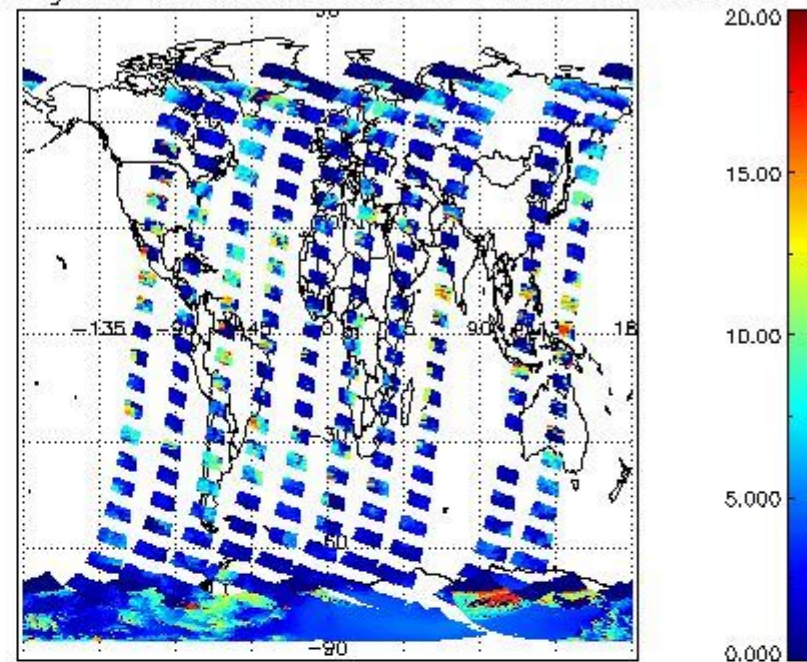
Plots are available for the following parameters:

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

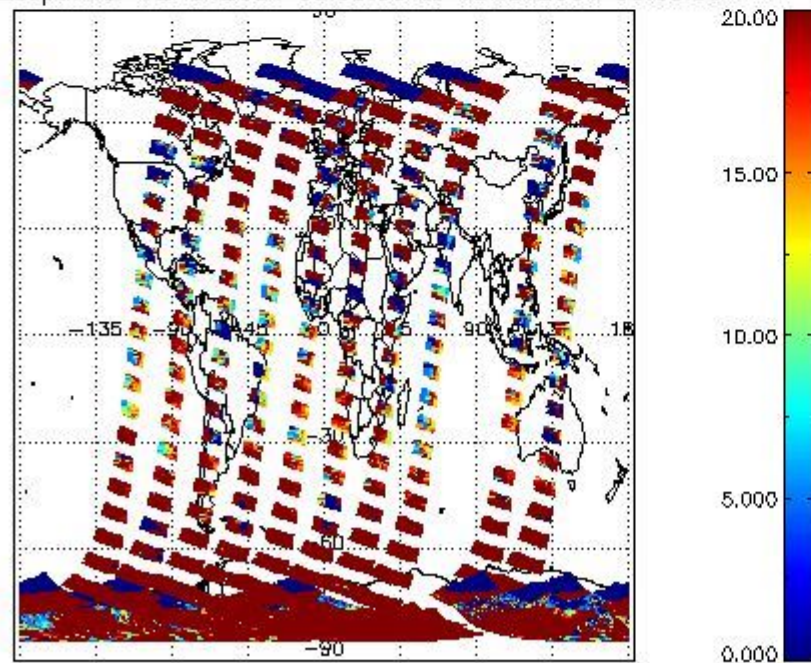
cLfrac for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



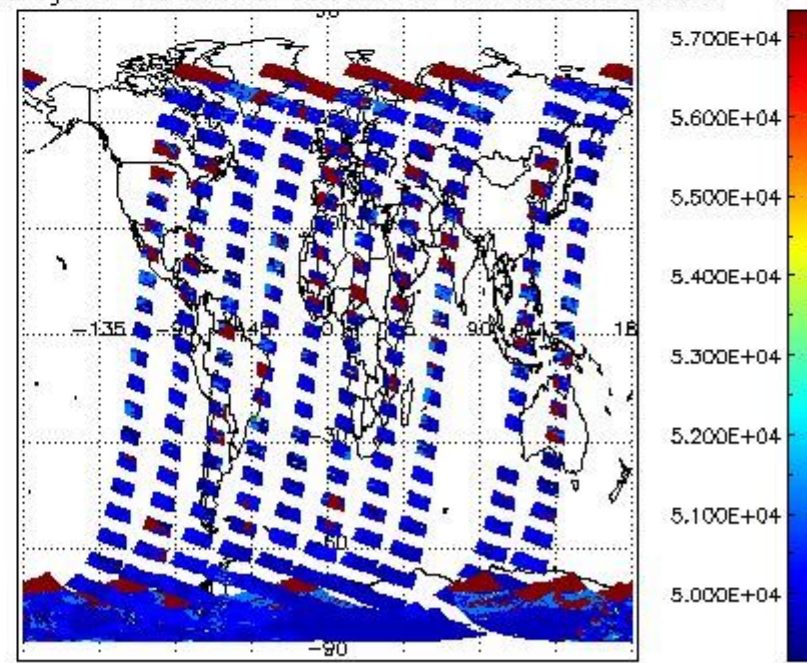
cL\_top\_height for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



cLopt\_depth for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



cloud\_flags for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



## 2.2.2 Nadir

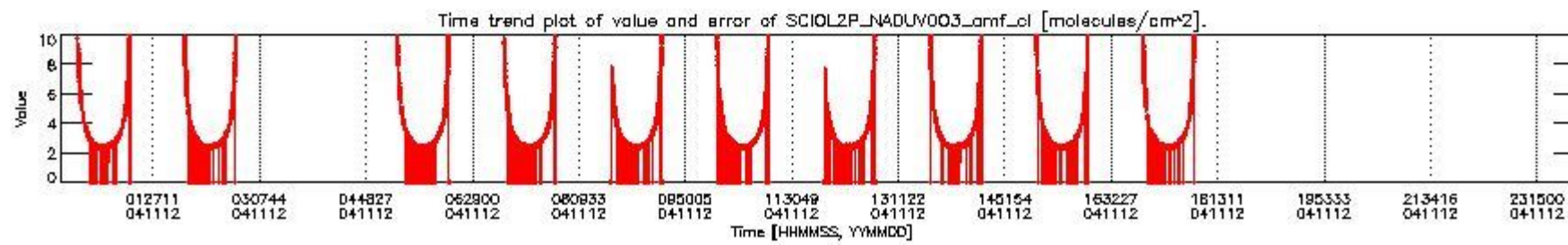
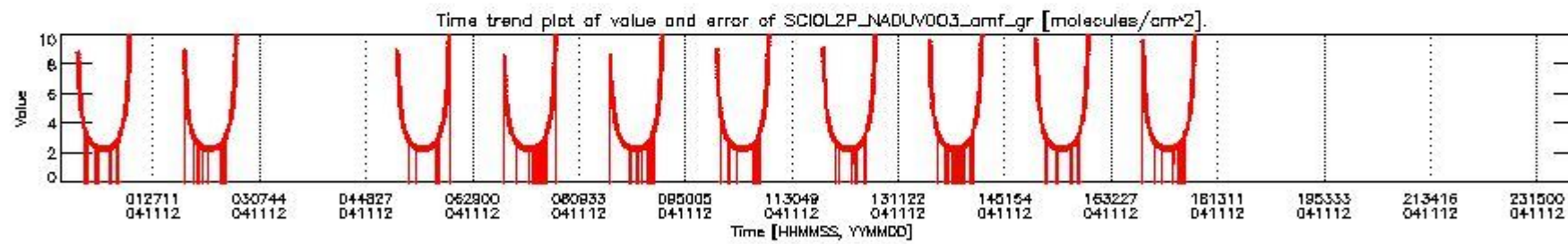
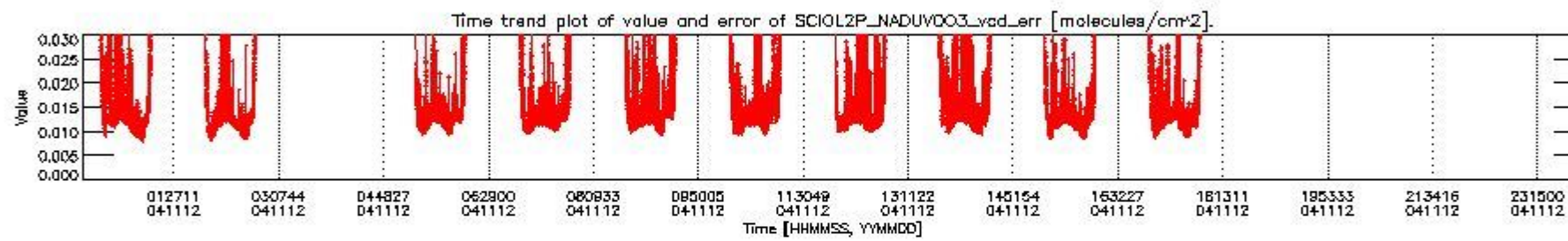
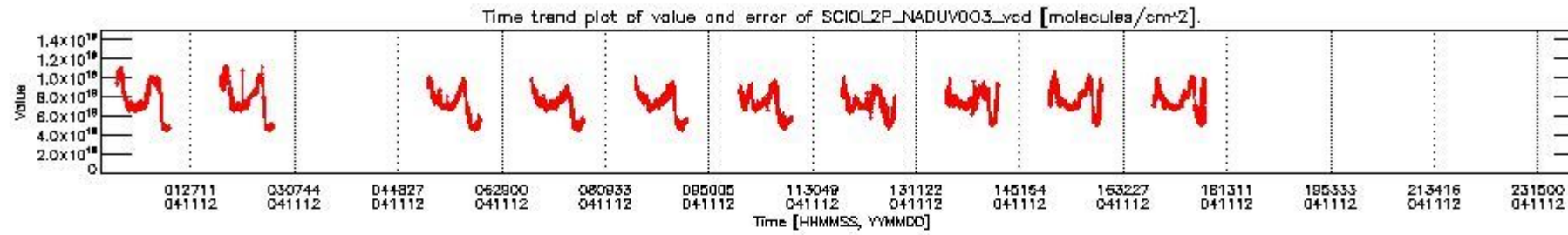
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

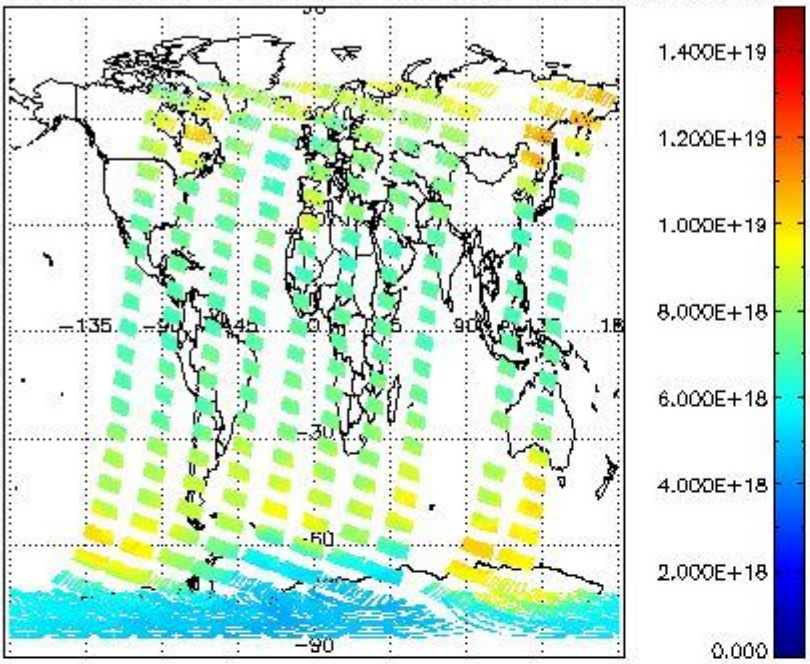
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

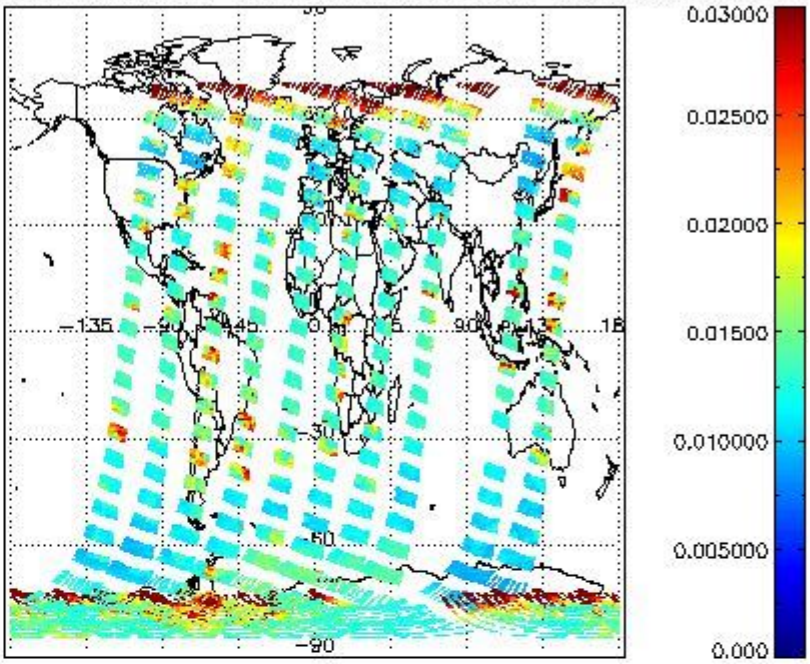
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing\_start time as suggested by the product sensing\_start time in the MPH.



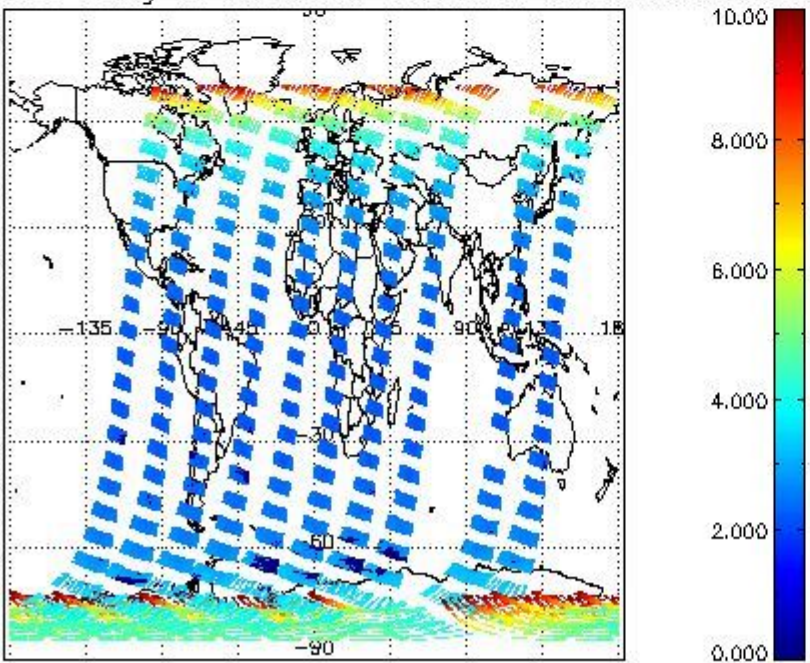
SCIOL2P\_NADUV003\_vcd for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



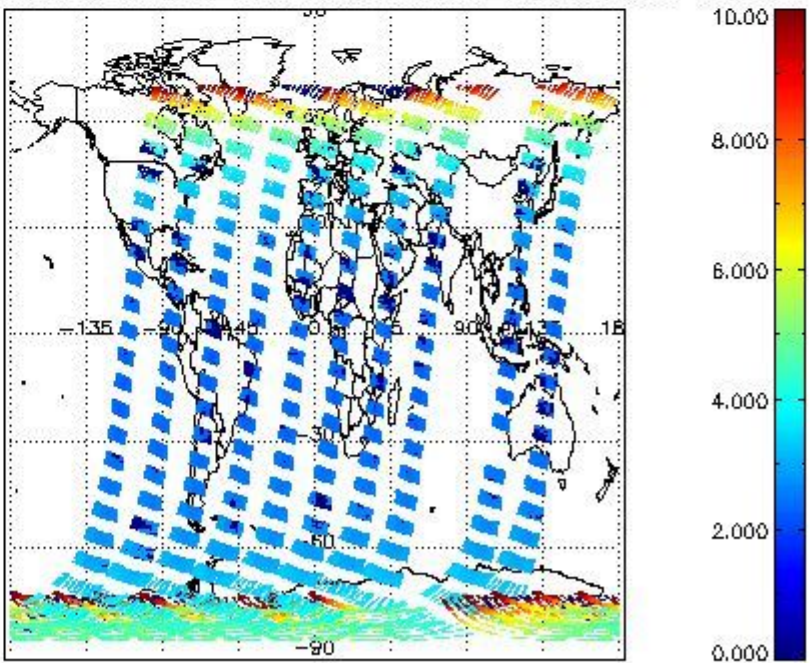
SCIOL2P\_NADUV003\_vcd\_err for 12NOV2004 00:00:00 to 13NOV2004 00:00:00

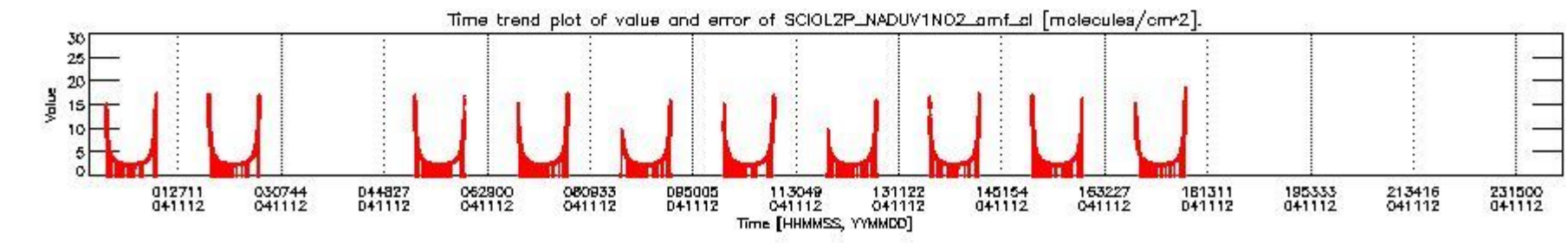
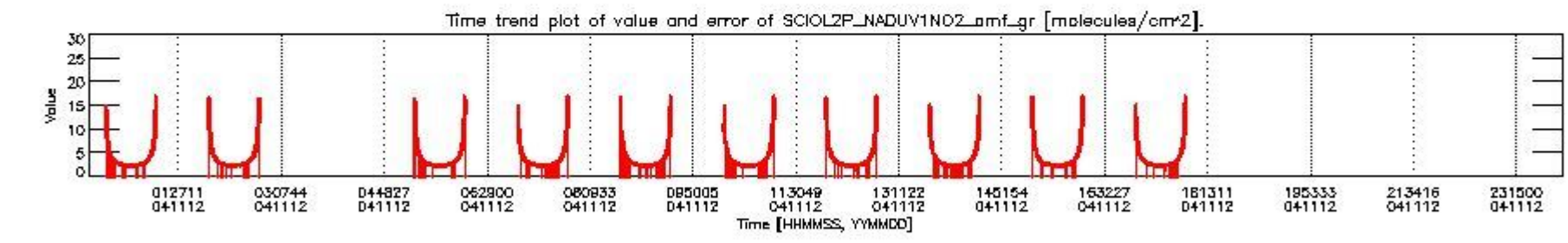
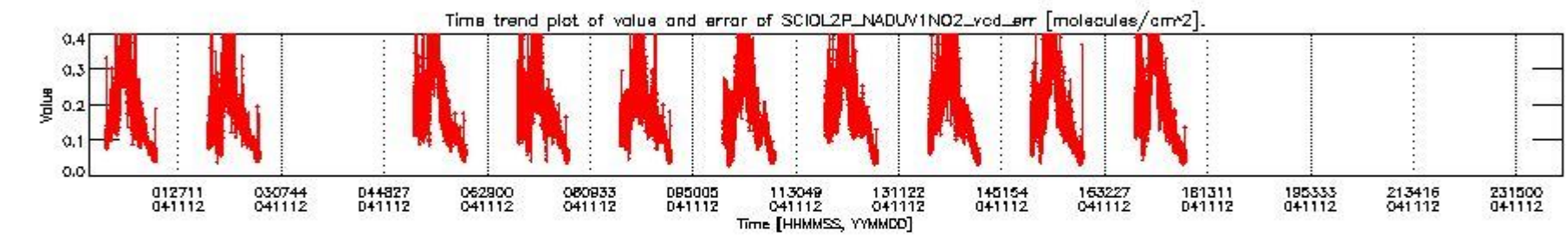
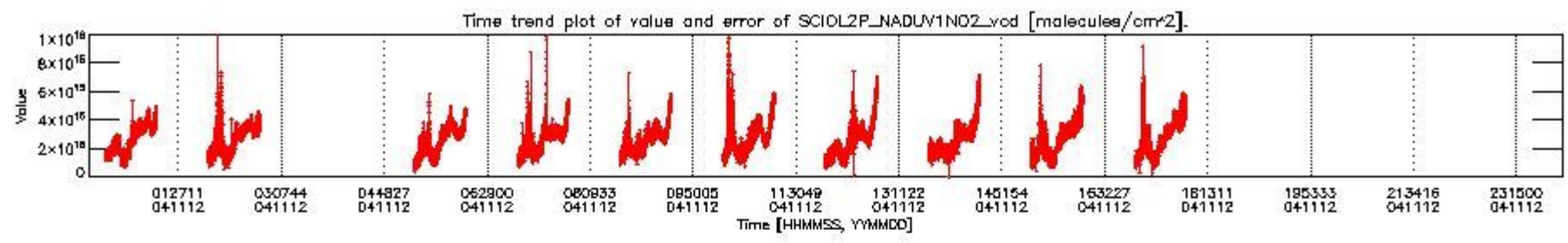


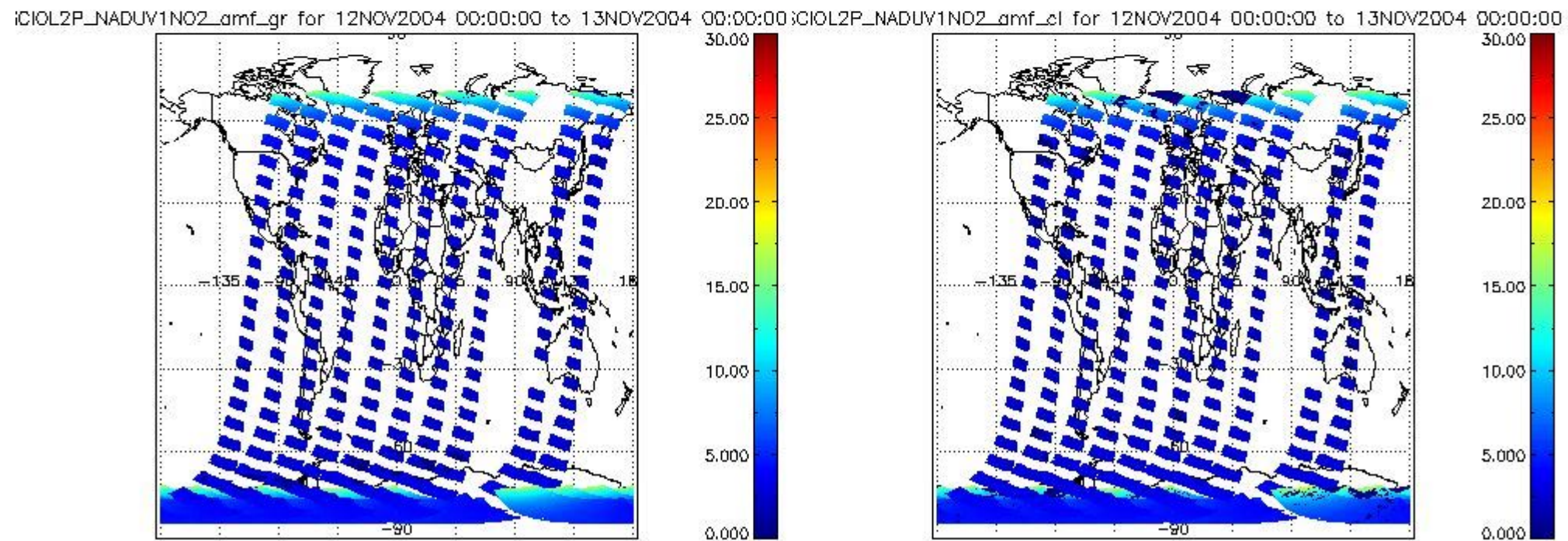
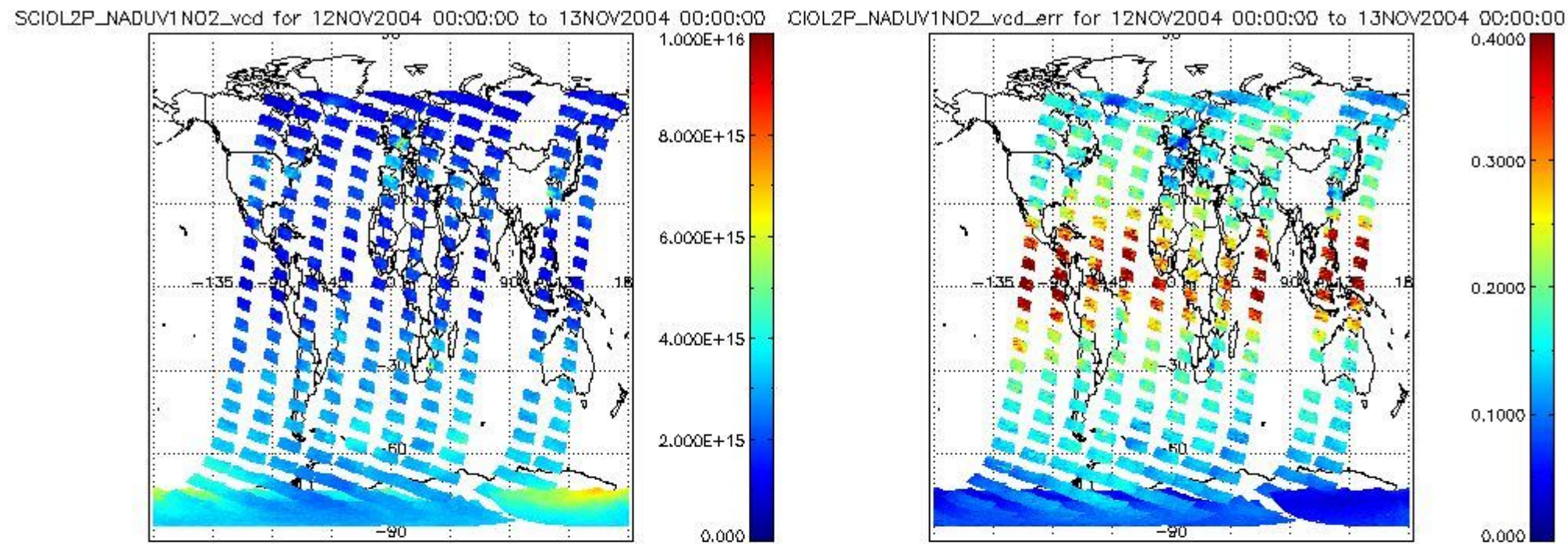
SCIOL2P\_NADUV003\_amf\_gr for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



SCIOL2P\_NADUV003\_amf\_cl for 12NOV2004 00:00:00 to 13NOV2004 00:00:00







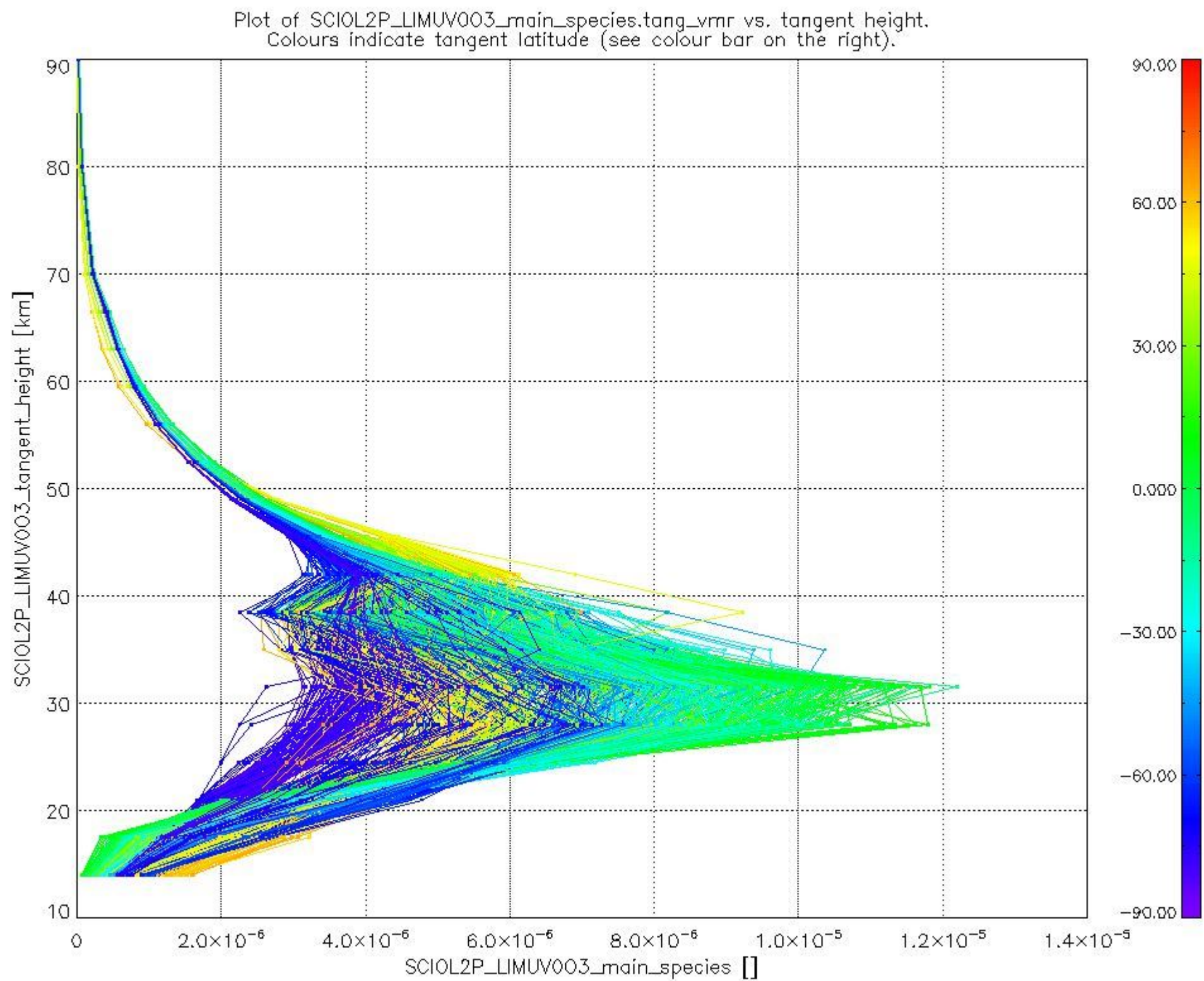
### 2.2.3 Limb

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:

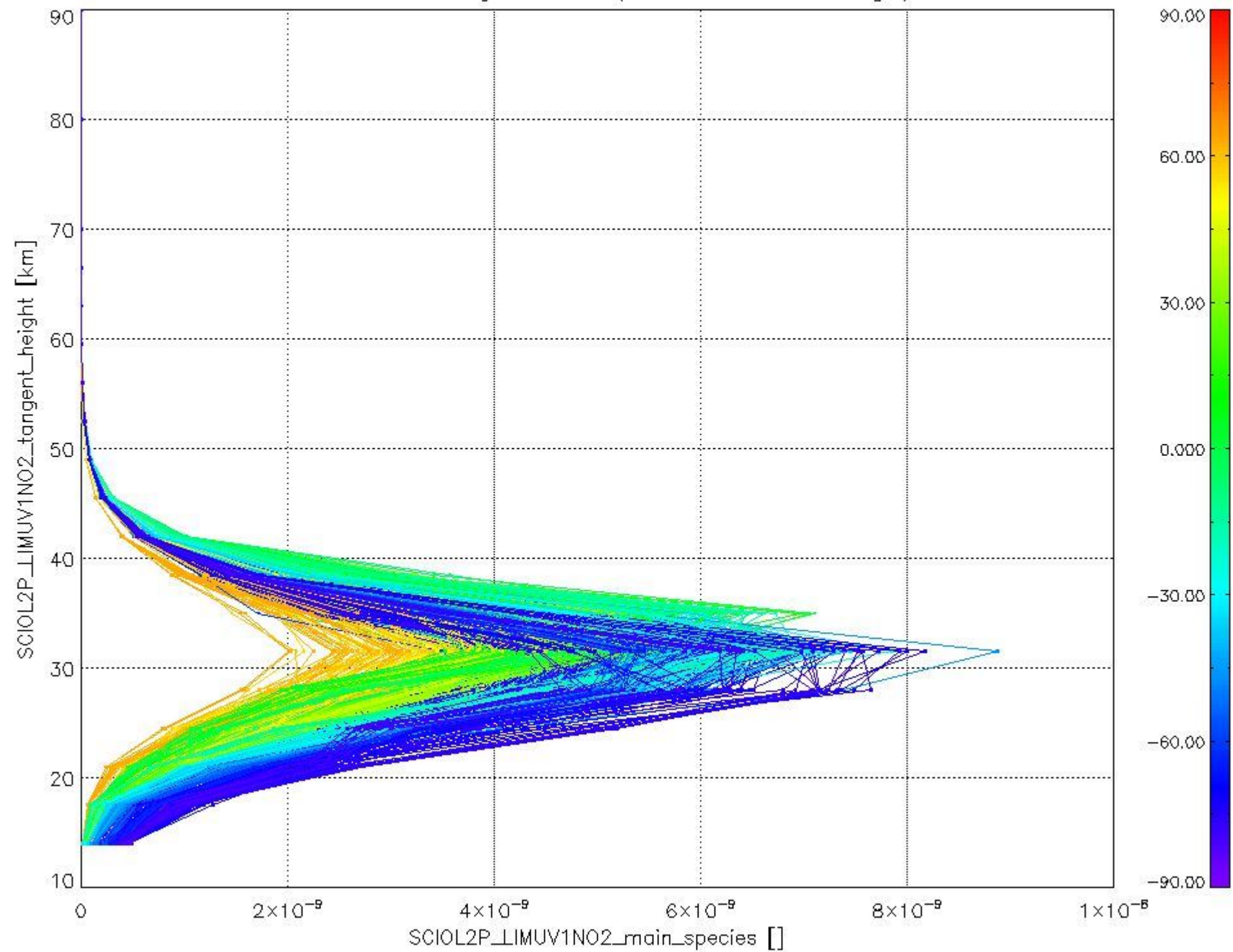
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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





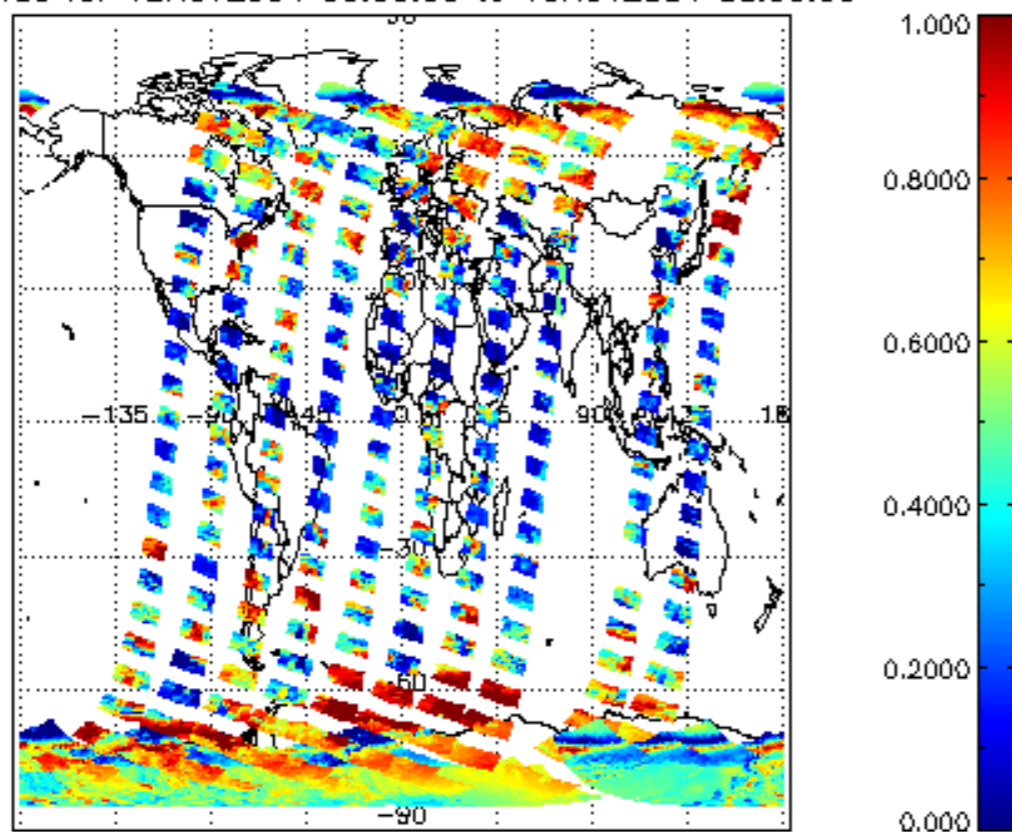
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



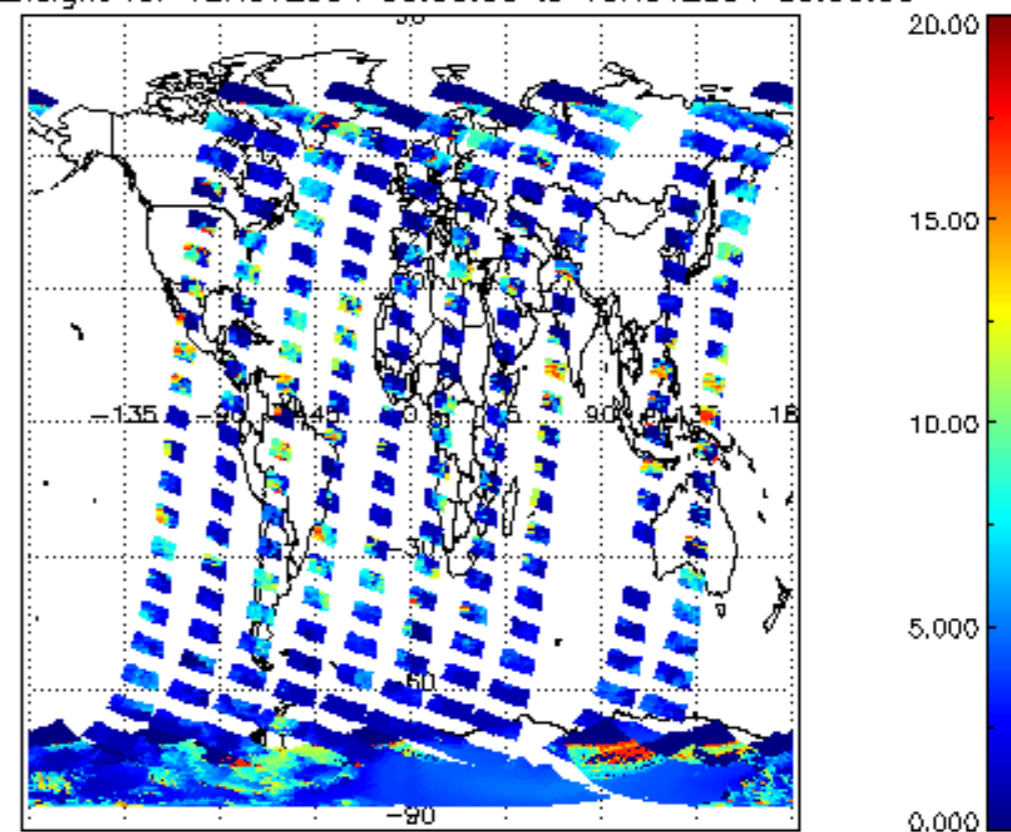
## 2.3 ADF monitoring

Number	ADF
	<b>IN_ (INITIALISATION_FILE)</b>
0	SCI_IN__AXNPDE20070629_092400_20070720_000000_20991231_235959
	<b>ECF (ECMWF_FILE)</b>
1	NOT USED

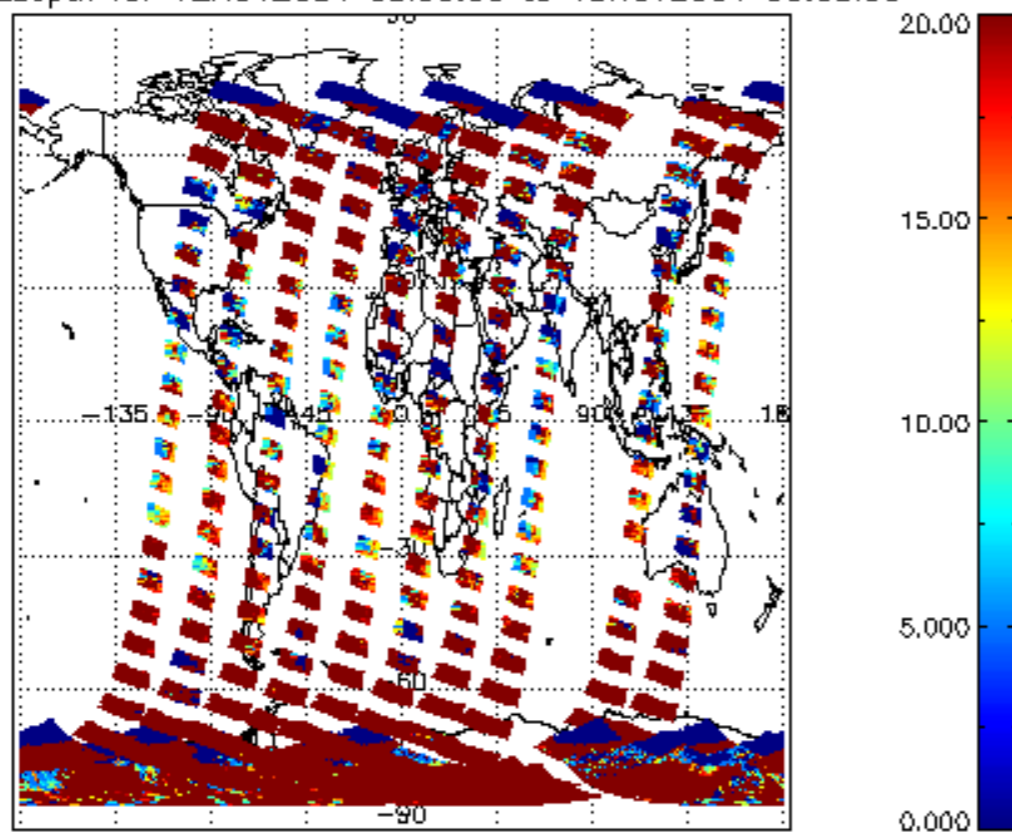
cLfrac for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



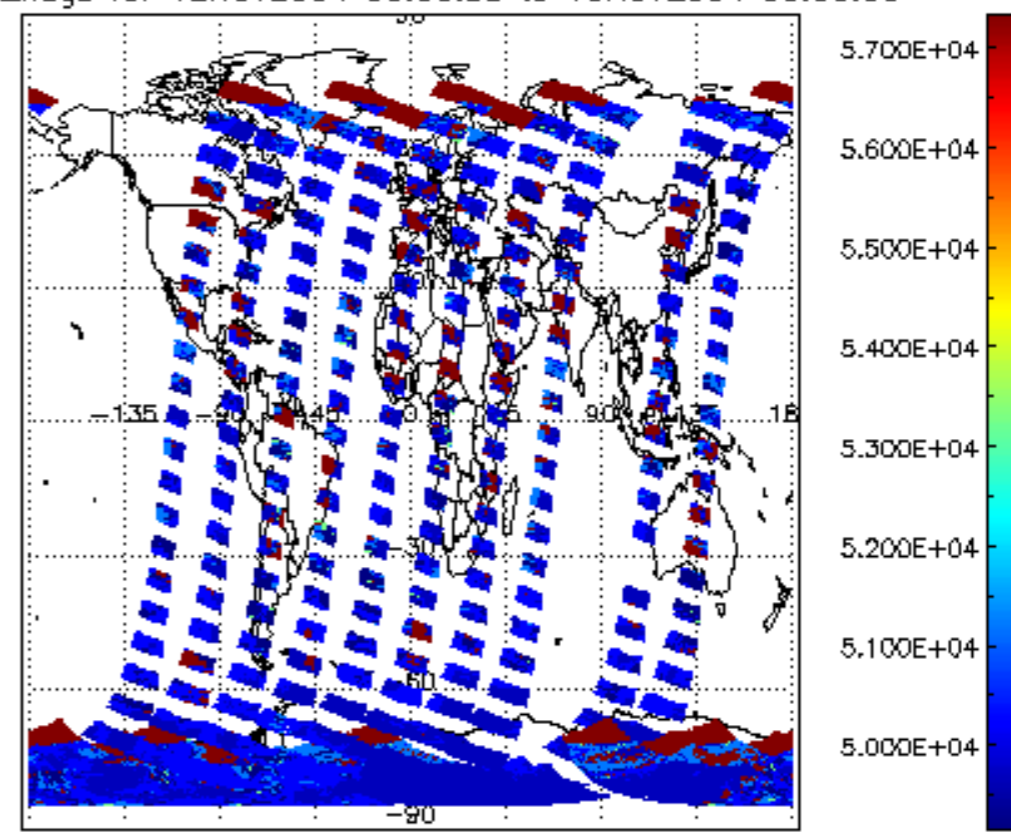
cL\_top\_height for 12NOV2004 00:00:00 to 13NOV2004 00:00:00

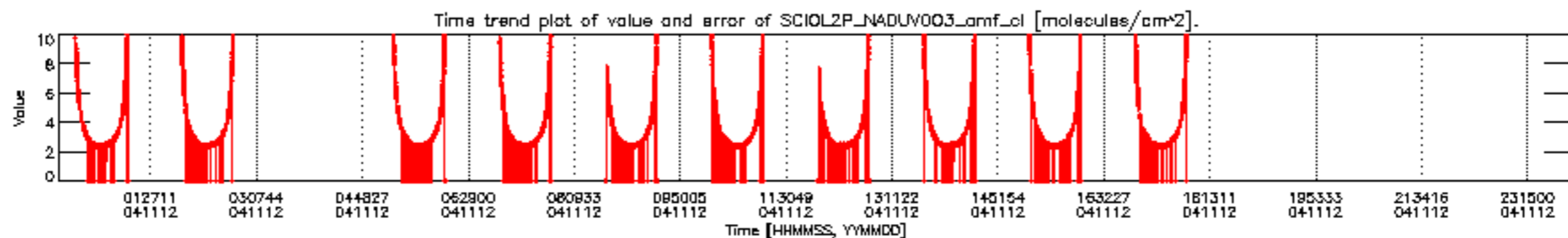
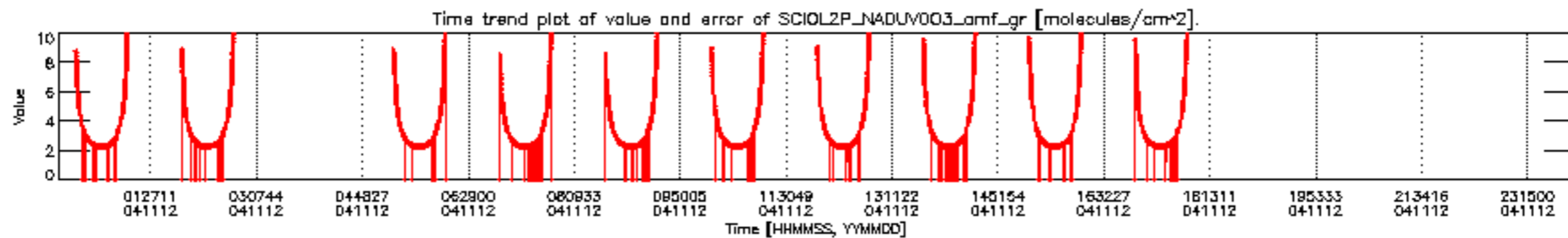
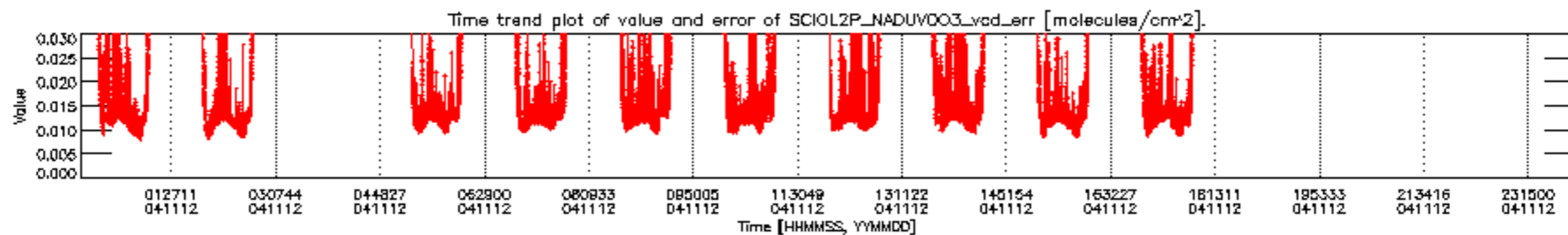
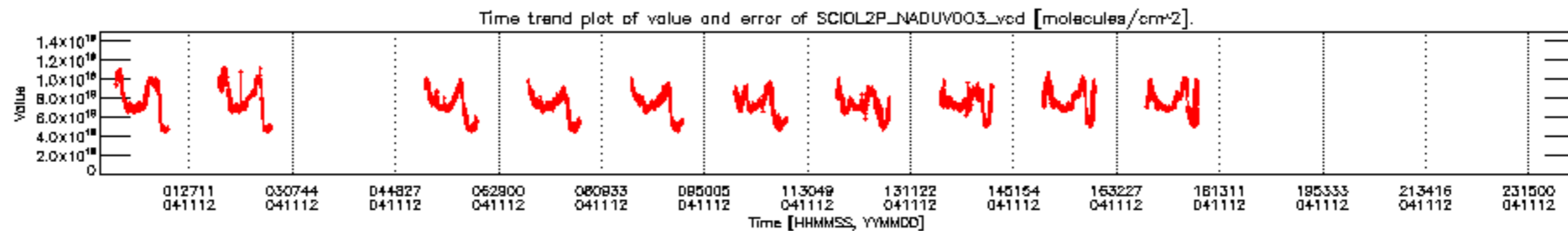


cL\_opt\_depth for 12NOV2004 00:00:00 to 13NOV2004 00:00:00

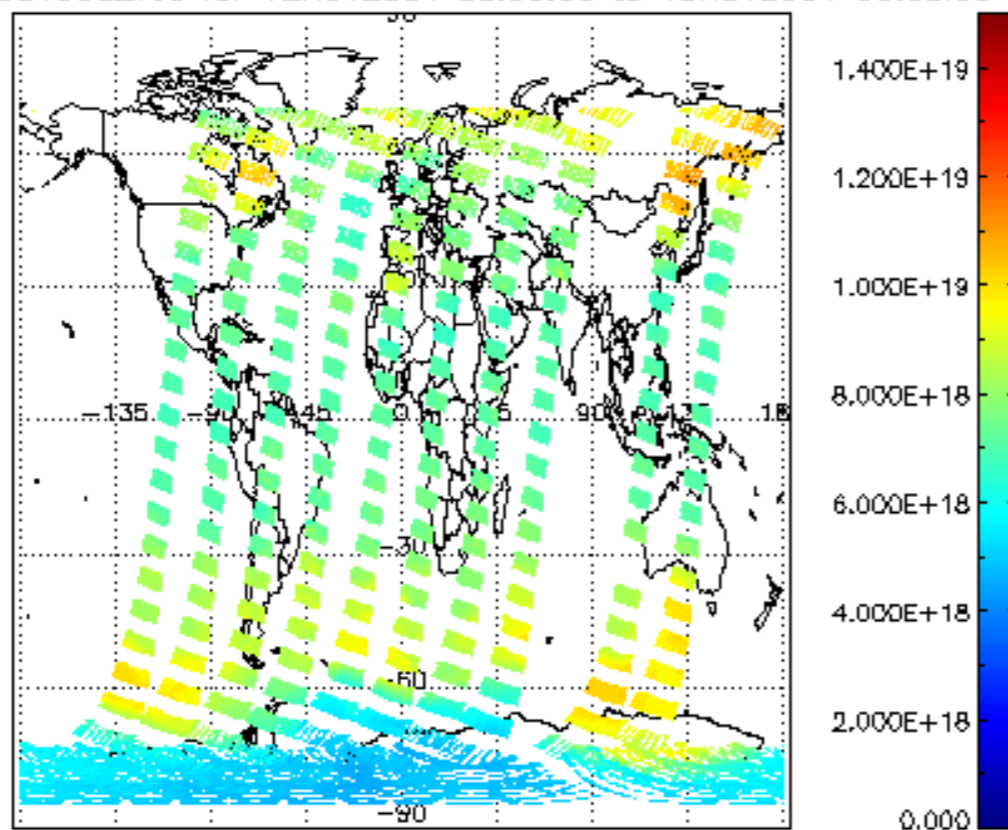


cloud\_flags for 12NOV2004 00:00:00 to 13NOV2004 00:00:00

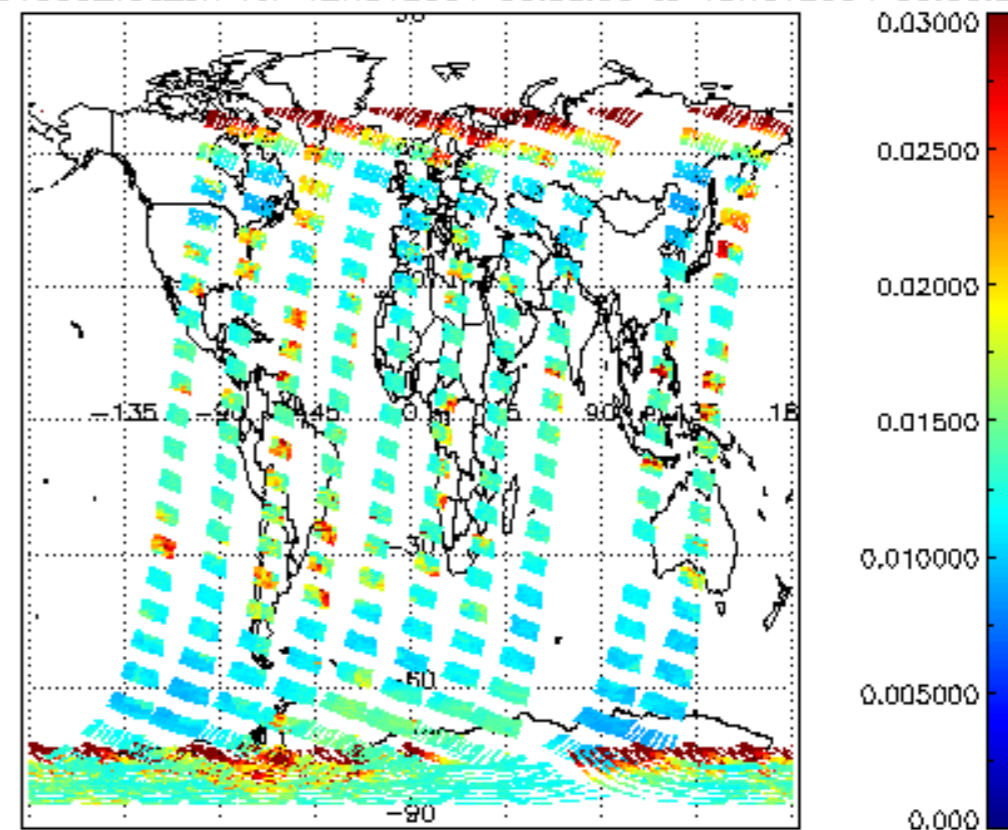




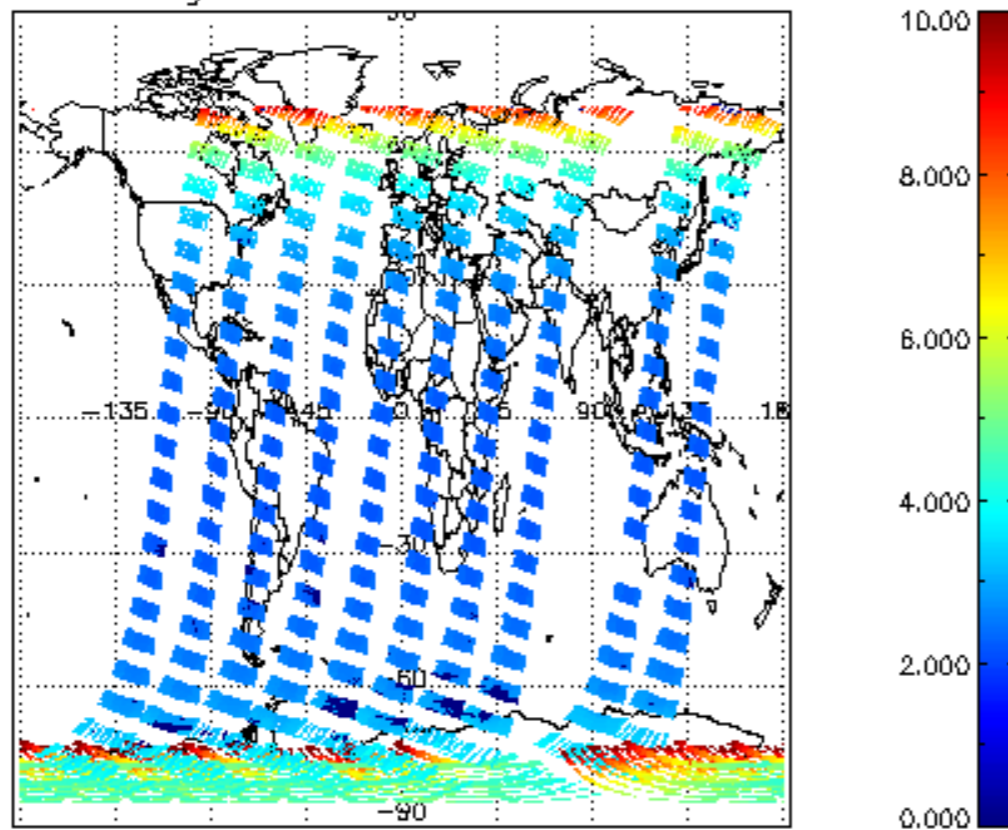
SCIOL2P\_NADUV003\_vcd for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



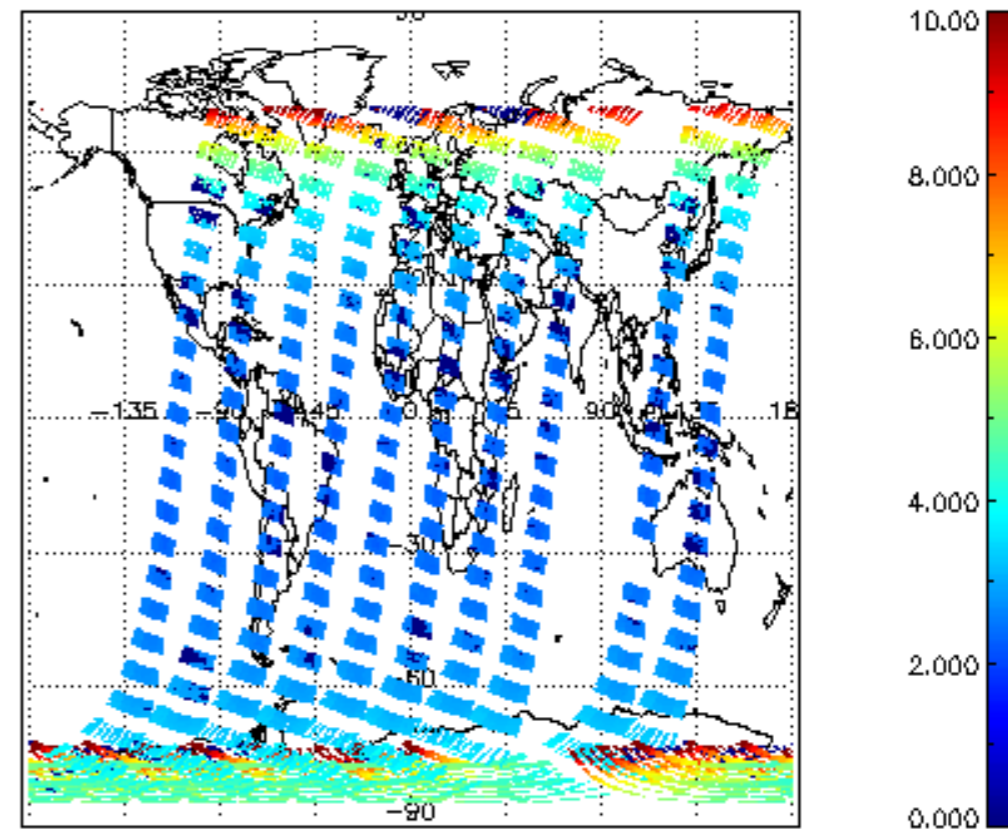
SCIOL2P\_NADUV003\_vcd\_err for 12NOV2004 00:00:00 to 13NOV2004 00:00:00

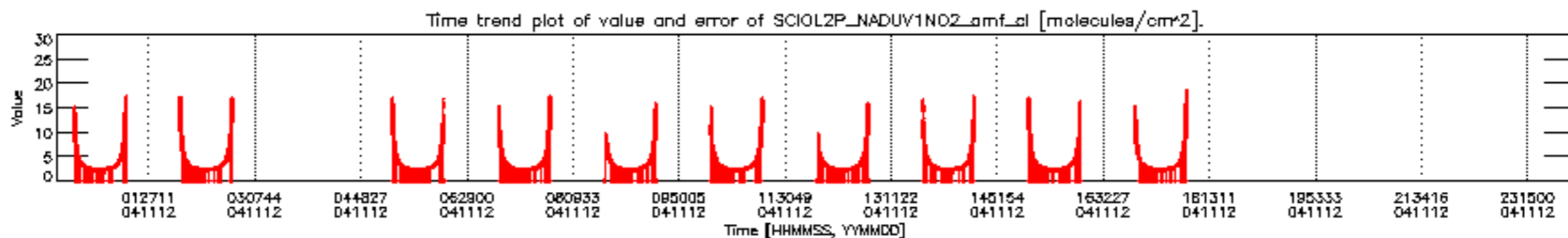
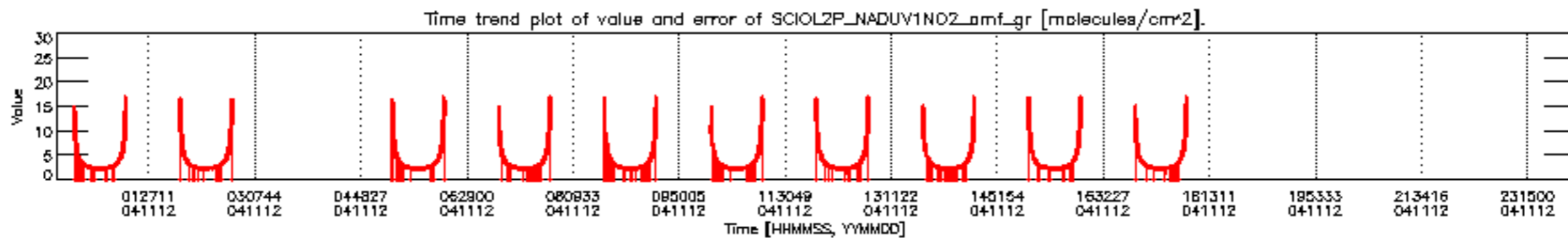
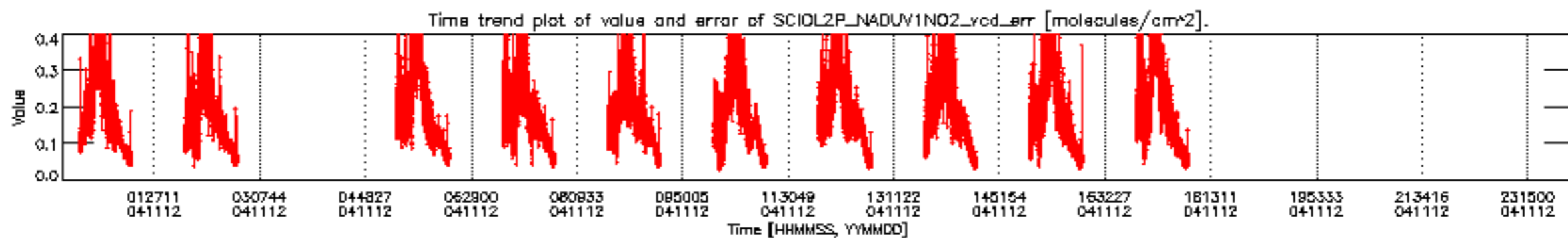
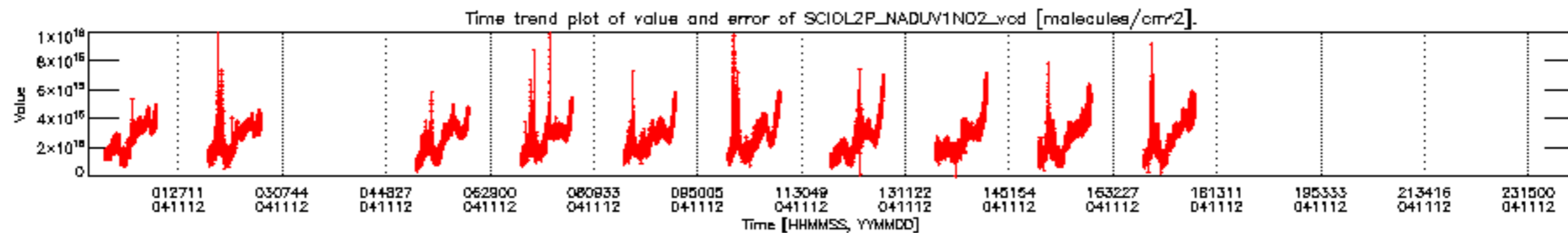


SCIOL2P\_NADUV003\_amf\_gr for 12NOV2004 00:00:00 to 13NOV2004 00:00:00

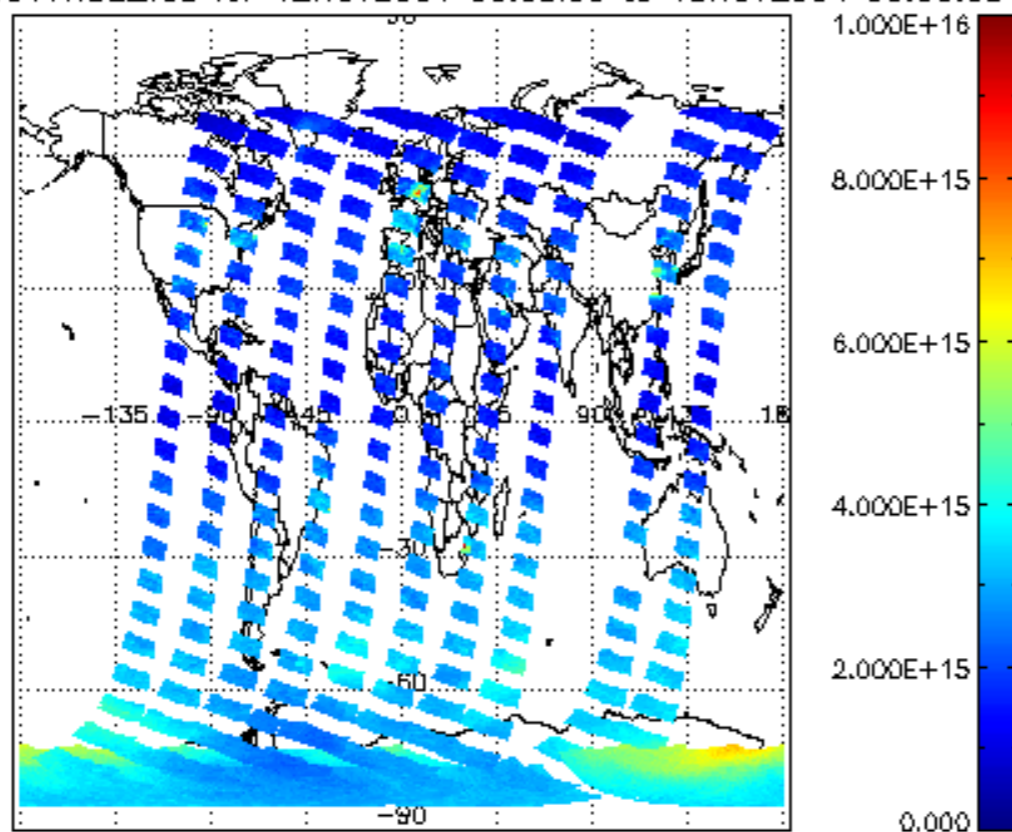


SCIOL2P\_NADUV003\_amf\_cl for 12NOV2004 00:00:00 to 13NOV2004 00:00:00

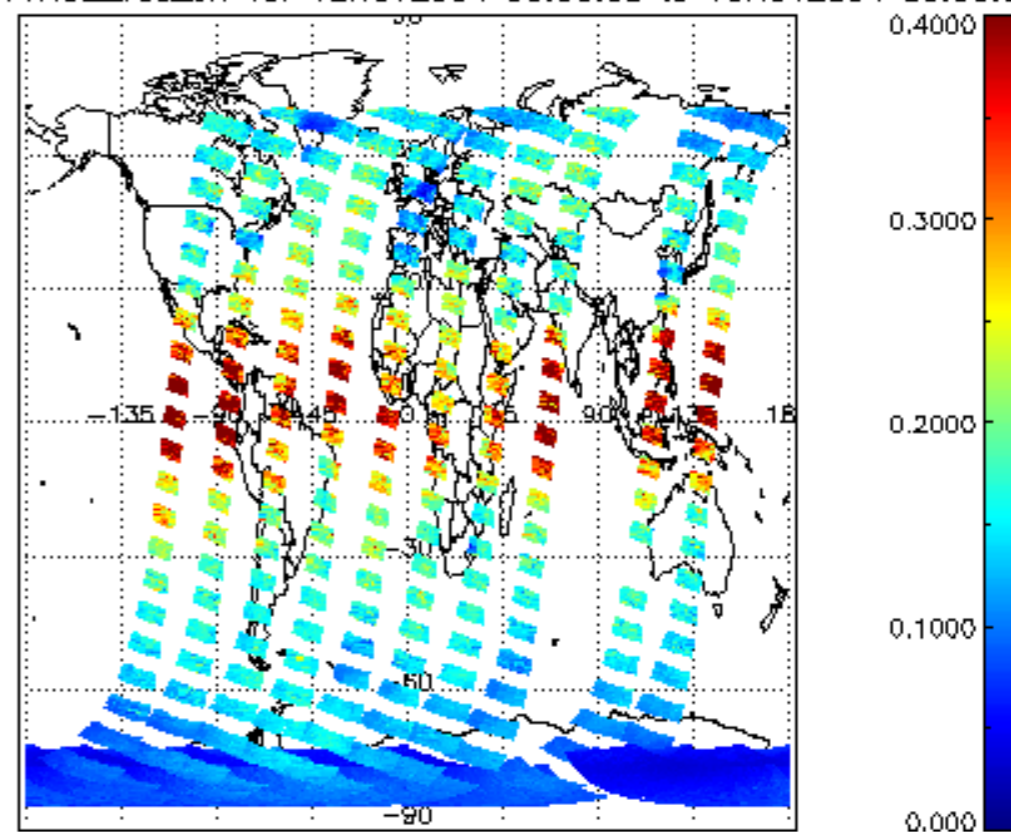




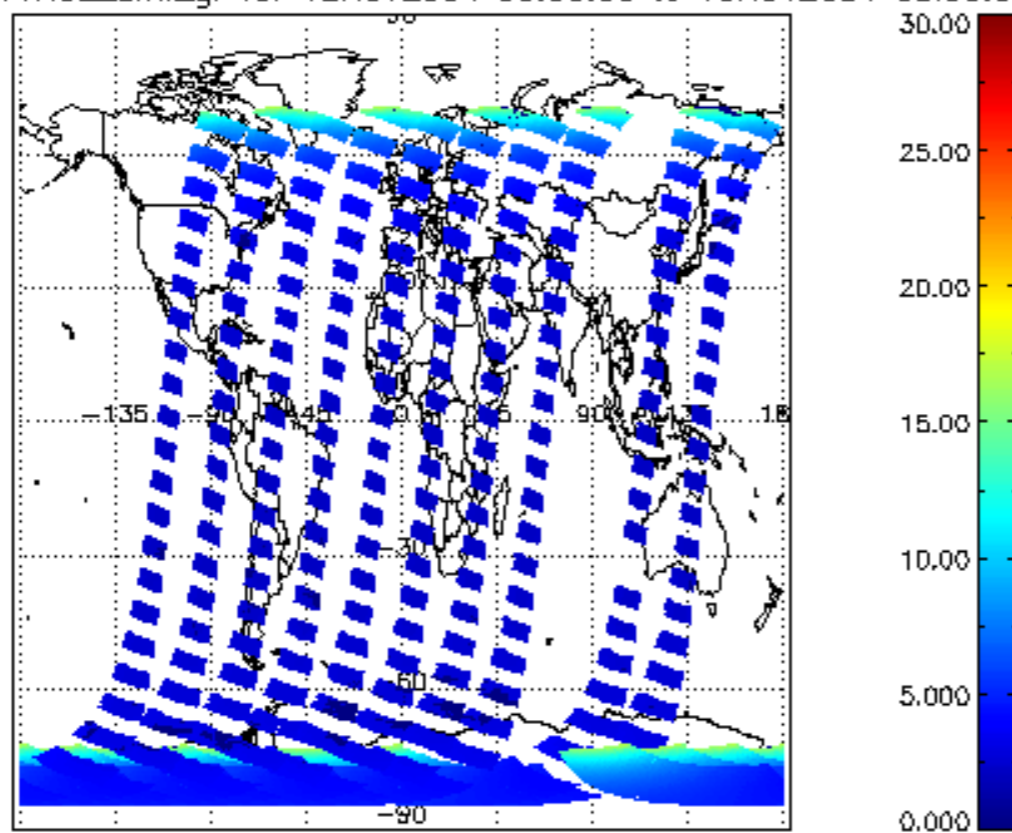
SCIOL2P\_NADUV1NO2\_vcd for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



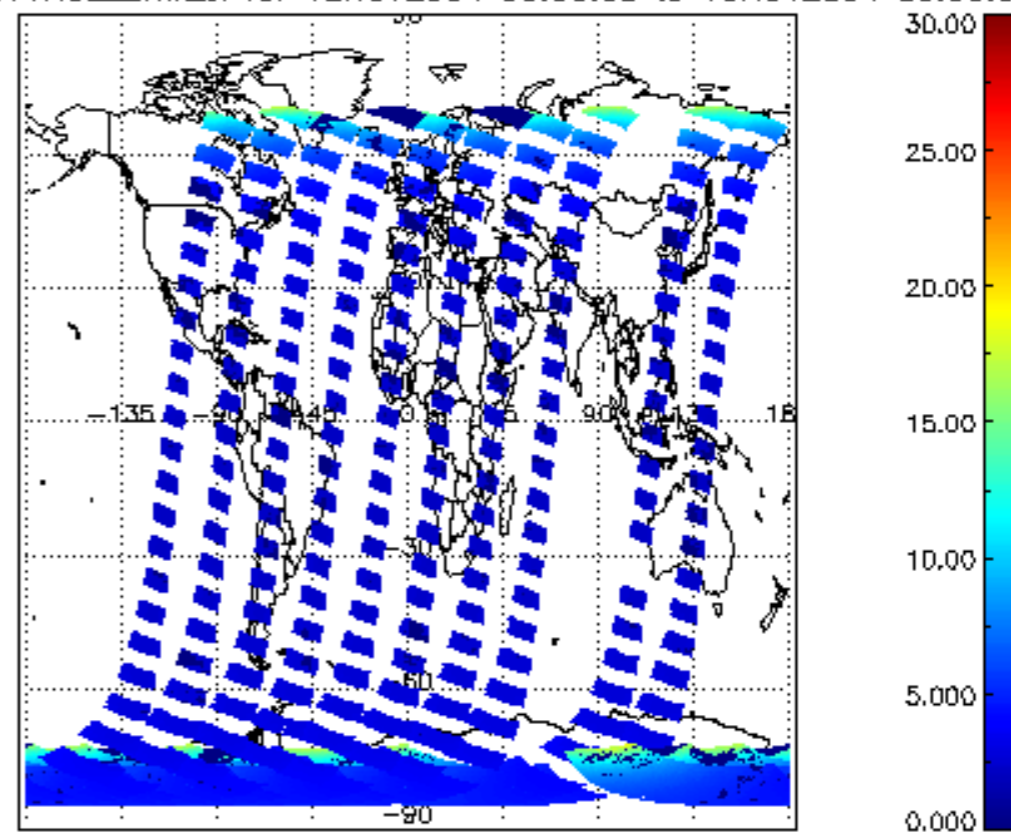
SCIOL2P\_NADUV1NO2\_vcd\_err for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



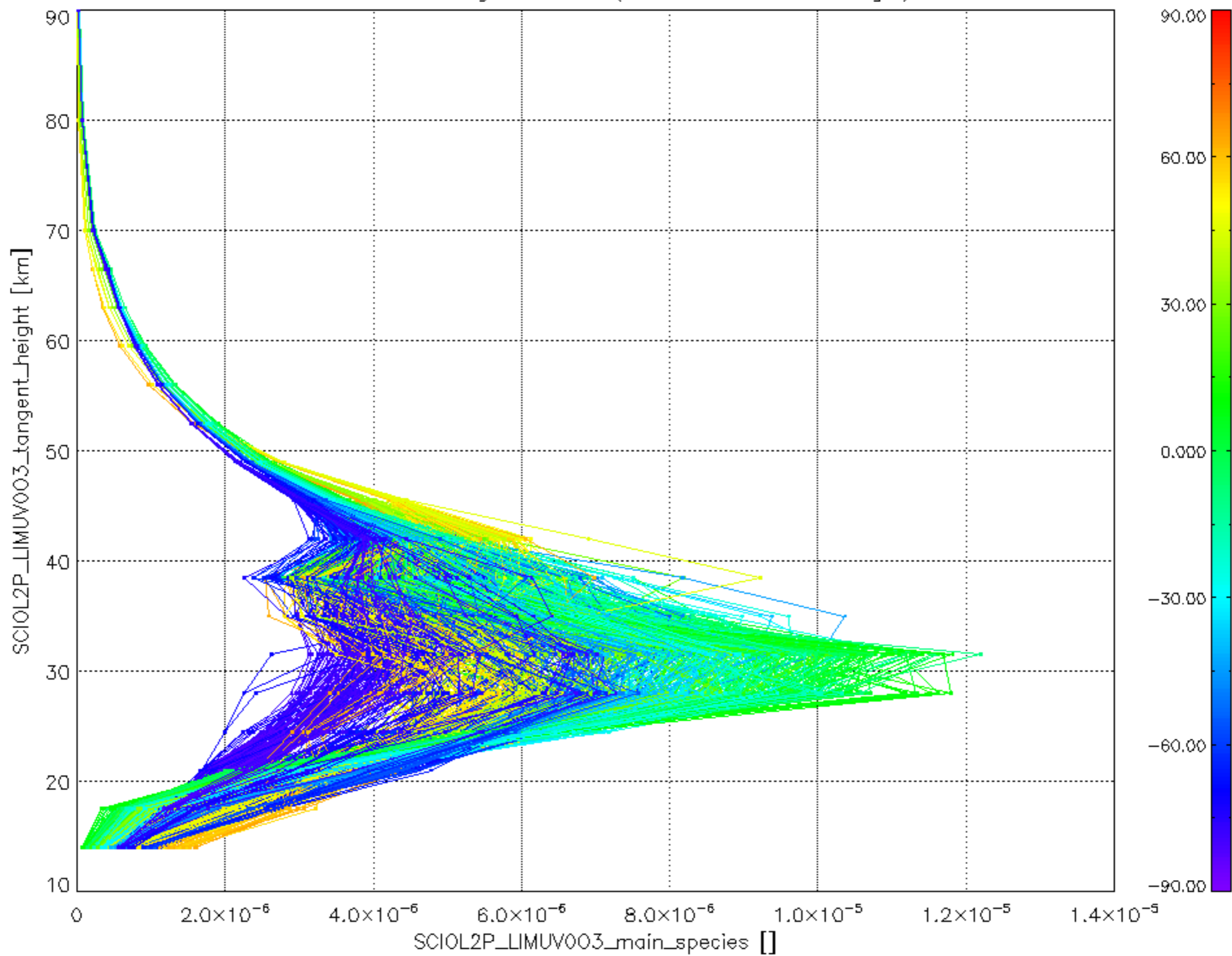
SCIOL2P\_NADUV1NO2\_amf\_gr for 12NOV2004 00:00:00 to 13NOV2004 00:00:00



SCIOL2P\_NADUV1NO2\_amf\_cl for 12NOV2004 00:00:00 to 13NOV2004 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 SCIOI2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
 Colours indicate tangent latitude (see colour bar on the right).

