

## 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 19:25:28
Data source version	SCIA-OL/3.01-R
Processing scope for products	21NOV2004 00:00:00 to 22NOV2004 00:00:00
Start time of first product within scope	20NOV2004 22:47:52
Stop time of last product within scope	22NOV2004 00:53:16
Total number of level 2 products	14
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__2PRDPA20041120_224752_000033812032_00173_14255_0666.N1</a>	20NOV2004 22:47:52	20NOV2004 23:44:14	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20041121_002828_000033252032_00174_14256_0692.N1</a>	21NOV2004 00:28:28	21NOV2004 01:23:54	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20041121_020904_000033812032_00175_14257_0757.N1</a>	21NOV2004 02:09:04	21NOV2004 03:05:26	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20041121_034941_000033252032_00176_14258_0657.N1</a>	21NOV2004 03:49:41	21NOV2004 04:45:06	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20041121_053017_000033812032_00177_14259_0617.N1</a>	21NOV2004 05:30:17	21NOV2004 06:26:38	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20041121_071053_000033252032_00178_14260_0669.N1</a>	21NOV2004 07:10:53	21NOV2004 08:06:19	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20041121_085129_000033812032_00179_14261_0658.N1</a>	21NOV2004 08:51:29	21NOV2004 09:47:51	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20041121_135318_000033252032_00182_14264_0776.N1</a>	21NOV2004 13:53:18	21NOV2004 14:48:43	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20041121_153354_000033812032_00183_14265_0650.N1</a>	21NOV2004 15:33:54	21NOV2004 16:30:15	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20041121_171424_000033602032_00184_14266_0718.N1</a>	21NOV2004 17:14:24	21NOV2004 18:10:24	0	GOOD
10	<a href="#">SCI_OL__2PRDPA20041121_185528_000033252032_00185_14267_0649.N1</a>	21NOV2004 18:55:28	21NOV2004 19:50:53	0	GOOD
11	<a href="#">SCI_OL__2PRDPA20041121_203543_000033812032_00186_14268_0744.N1</a>	21NOV2004 20:35:43	21NOV2004 21:32:04	0	GOOD
12	<a href="#">SCI_OL__2PRDPA20041121_221619_000033252032_00187_14269_0668.N1</a>	21NOV2004 22:16:19	21NOV2004 23:11:44	0	GOOD
13	<a href="#">SCI_OL__2PRDPA20041121_235655_000033812032_00188_14270_0616.N1</a>	21NOV2004 23:56:55	22NOV2004 00:53:16	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: 125060

Total number of cloud data DSRs with good quality flag (=0): 125060 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	125060	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	125060	0.16944	0.12500	0.12500	0.25000	0.059834	s
CL_FRAC	125060	0.43154	0.42524	0.0000	1.0000	0.27750	-
CL_FRAC_ERR	125060	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	125060	5.4220	4.0000	4.0000	8.0000	1.9147	
PMD_READ_CL[0]	125060	0.29443	0.0000	0.0000	8.0000	1.2202	-
PMD_READ_CL[1]	125060	0.39693	0.0000	0.0000	8.0000	1.3301	-
CL_TOP_HEIGHT	105817	4.4053	3.5270	0.0000	17.000	3.8429	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	105817	51.585	36.586	0.0000	101.00	39.929	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	125060	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	125060	11001000	11000100	11000000	11100000	3023.1	flags
AERO_ABSO_IND	125060	0.77957	0.54475	-4.3847	10.564	1.0871	
AERO_IND_DIAG	125060	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	125060	01010110	00000000	00000000	11000000	24458.	flags

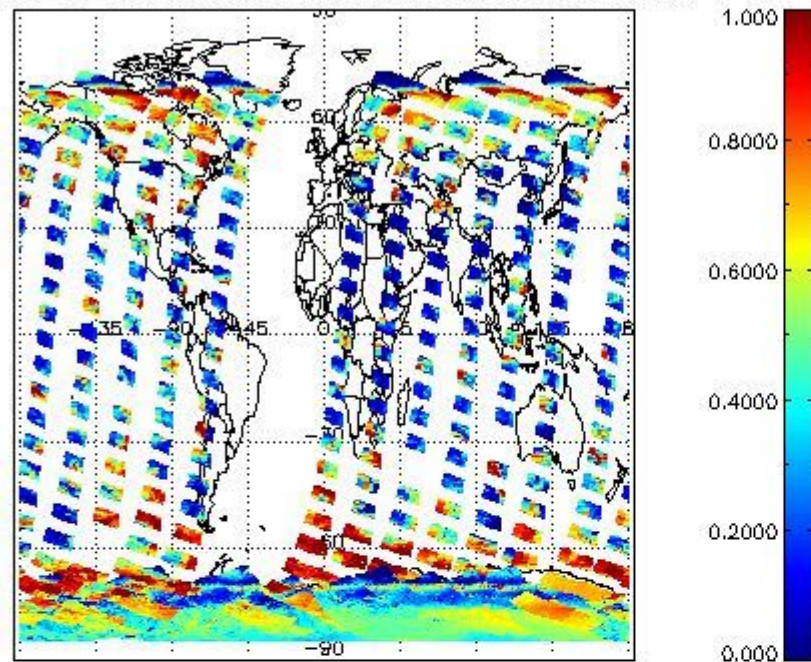
### Time and geolocation plots:

Plots are available for the following parameters:

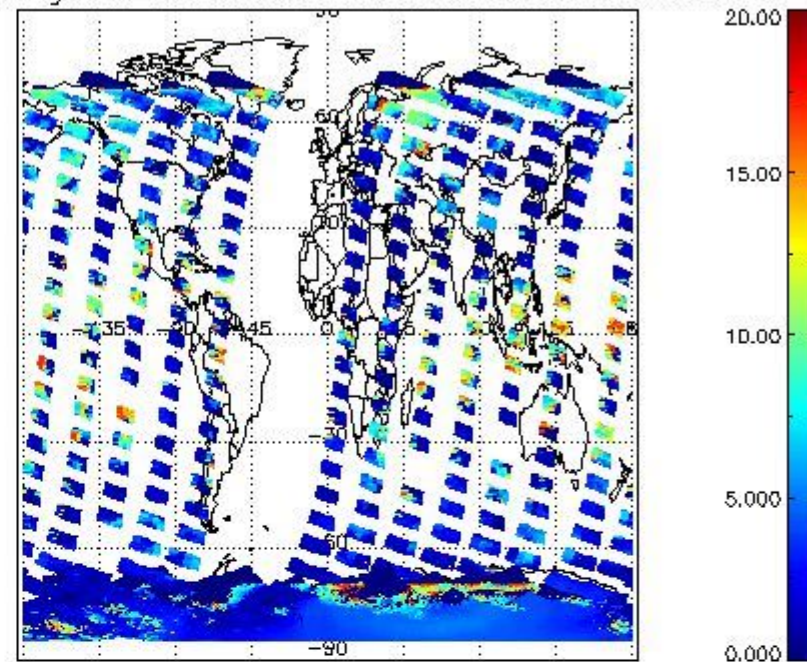
Number	Data item ID
0	cl_frac
1	cl_top_height
2	cl_opt_depth
3	cloud_flags



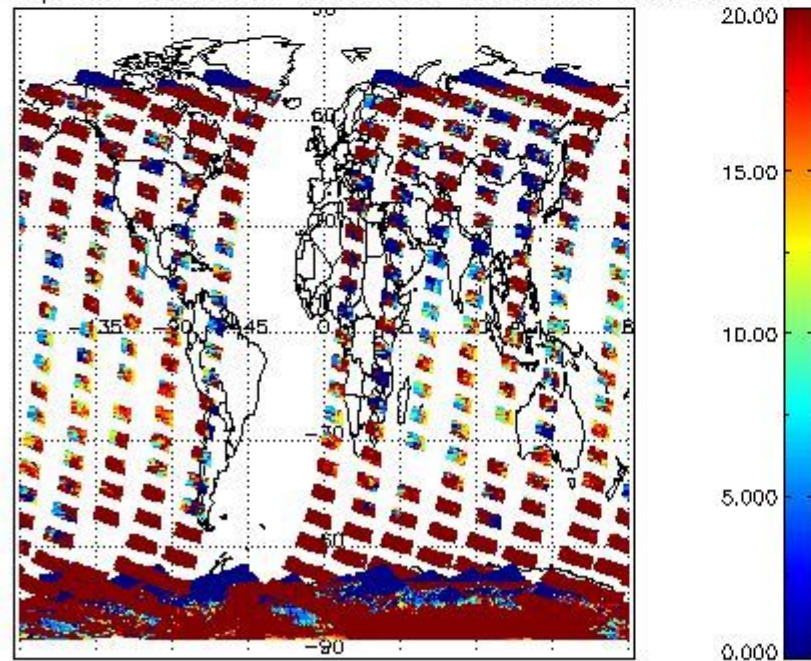
cLfrac for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



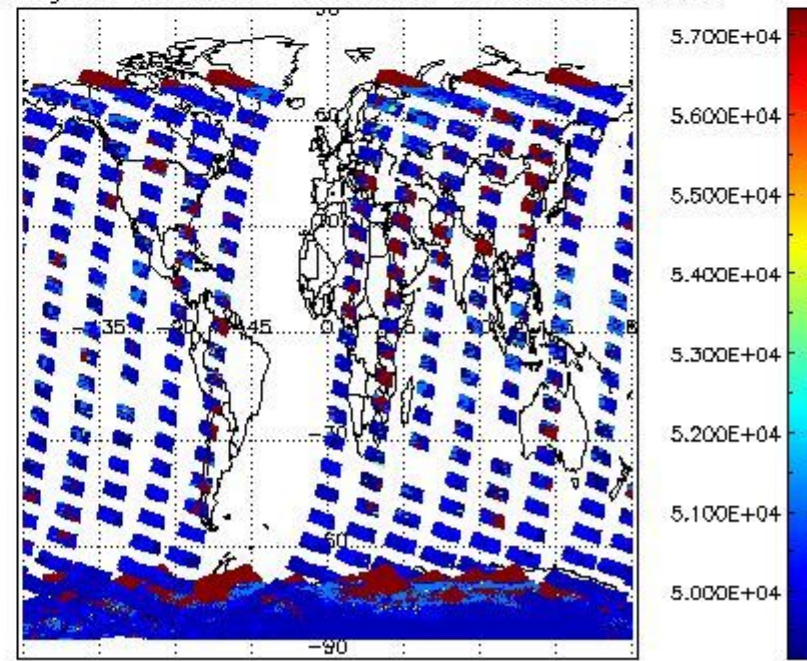
cL\_top\_height for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



cLopt\_depth for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



cloud\_flags for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



## 2.2.2 Nadir

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

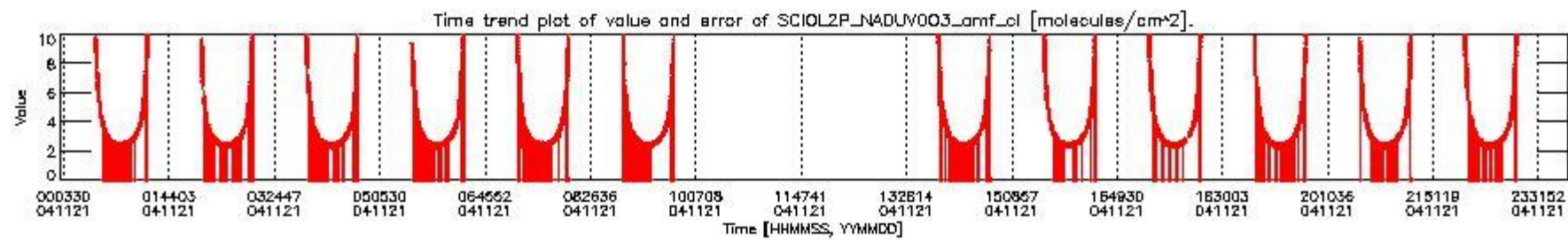
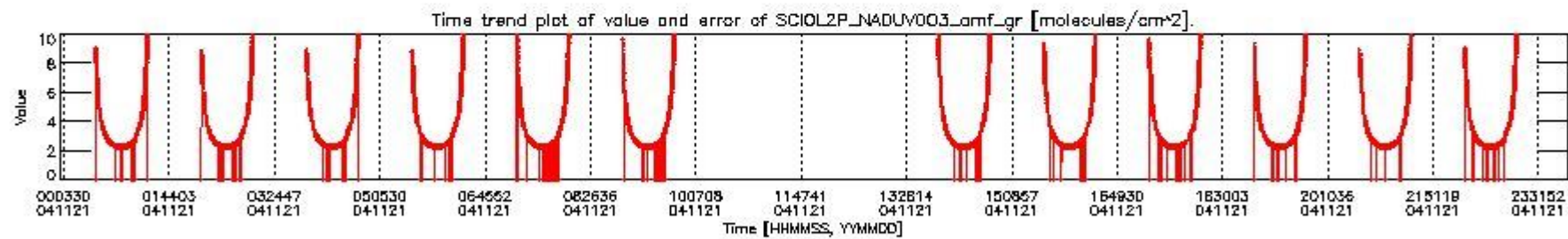
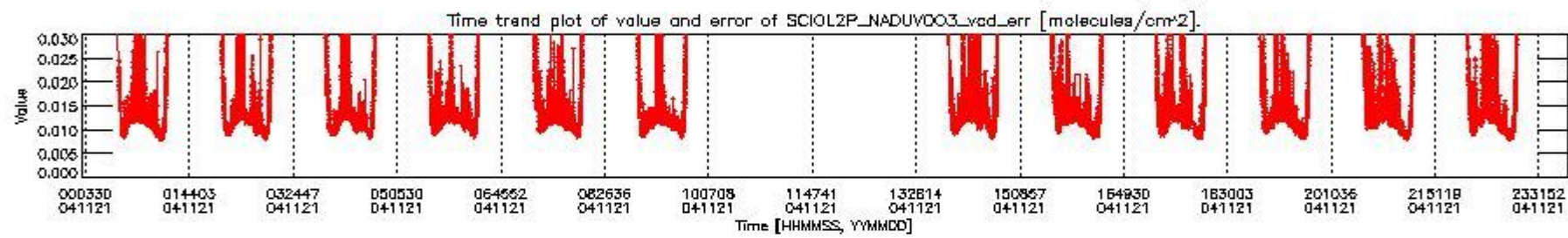
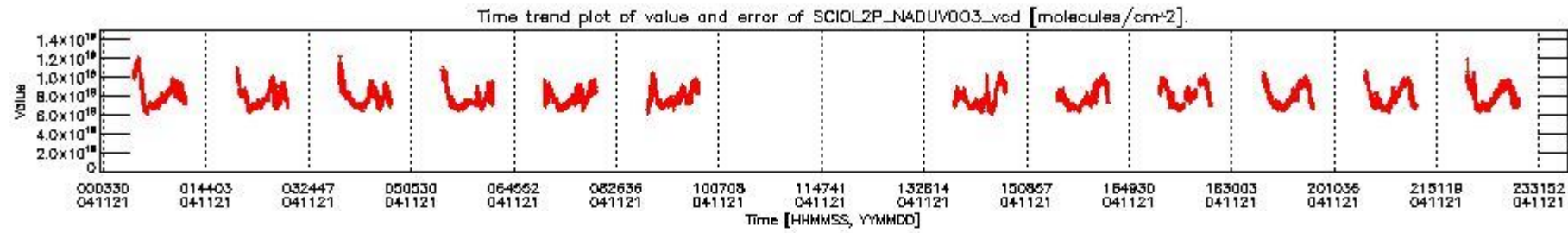
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr



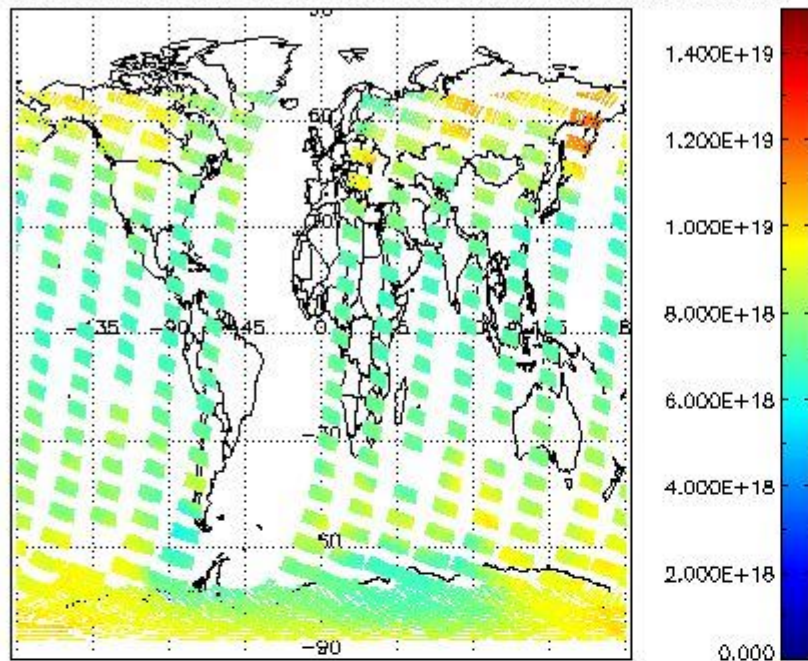
3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

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.

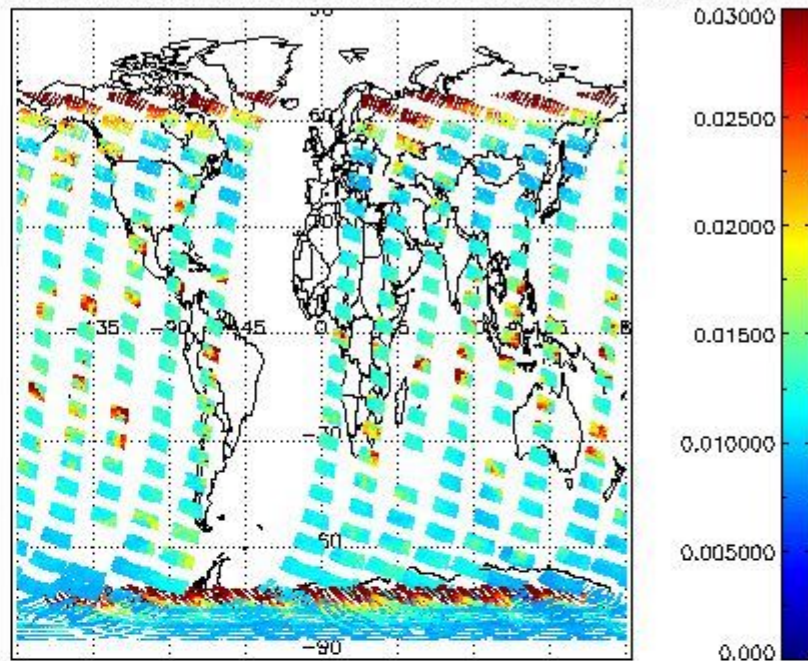




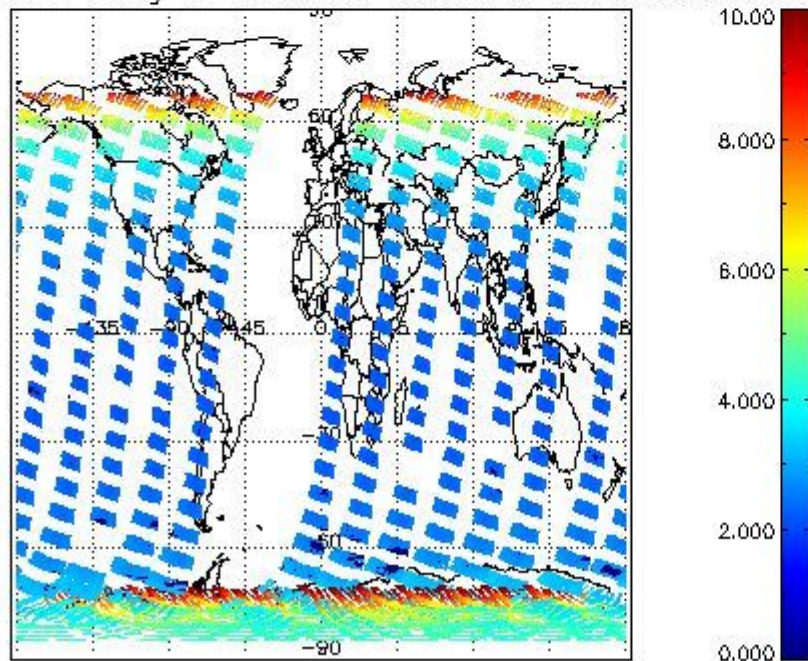
SCIOL2P\_NADUV003\_vcd for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



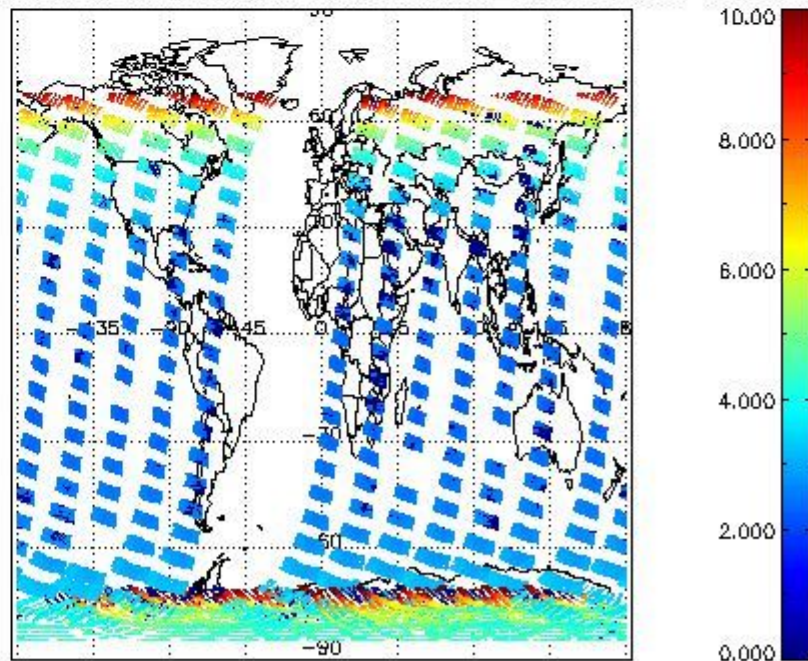
SCIOL2P\_NADUV003\_vcd\_err for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



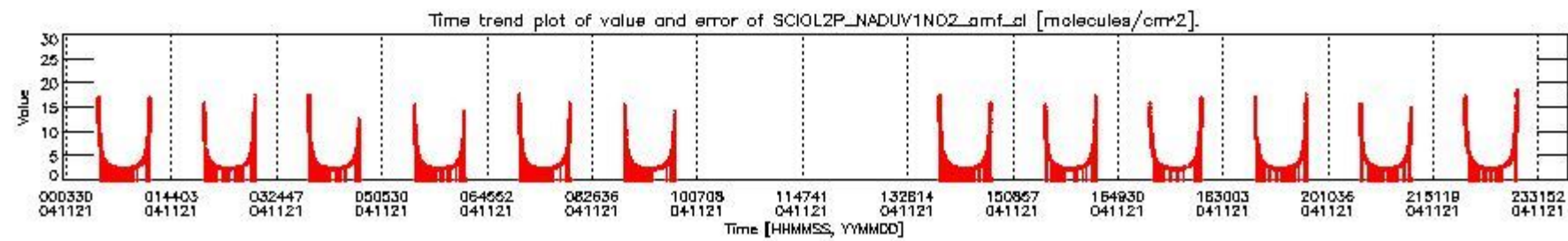
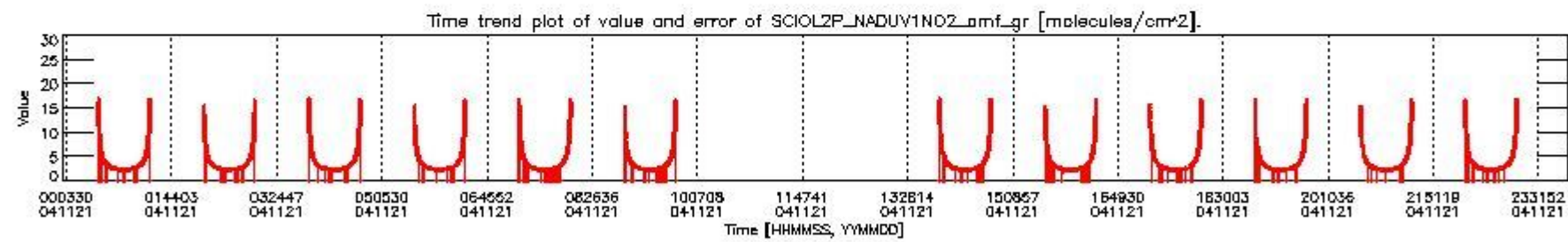
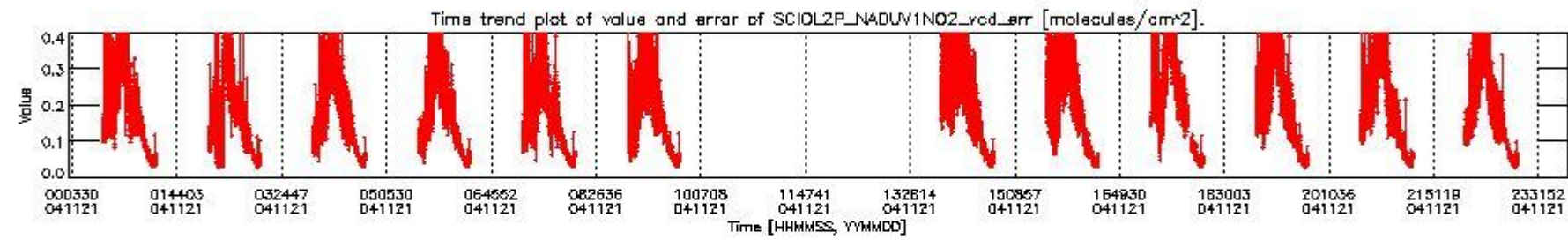
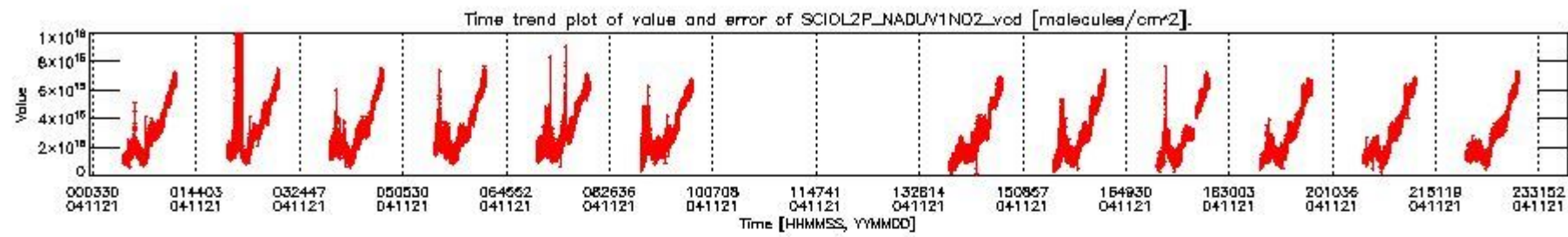
SCIOL2P\_NADUV003\_amf\_gr for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



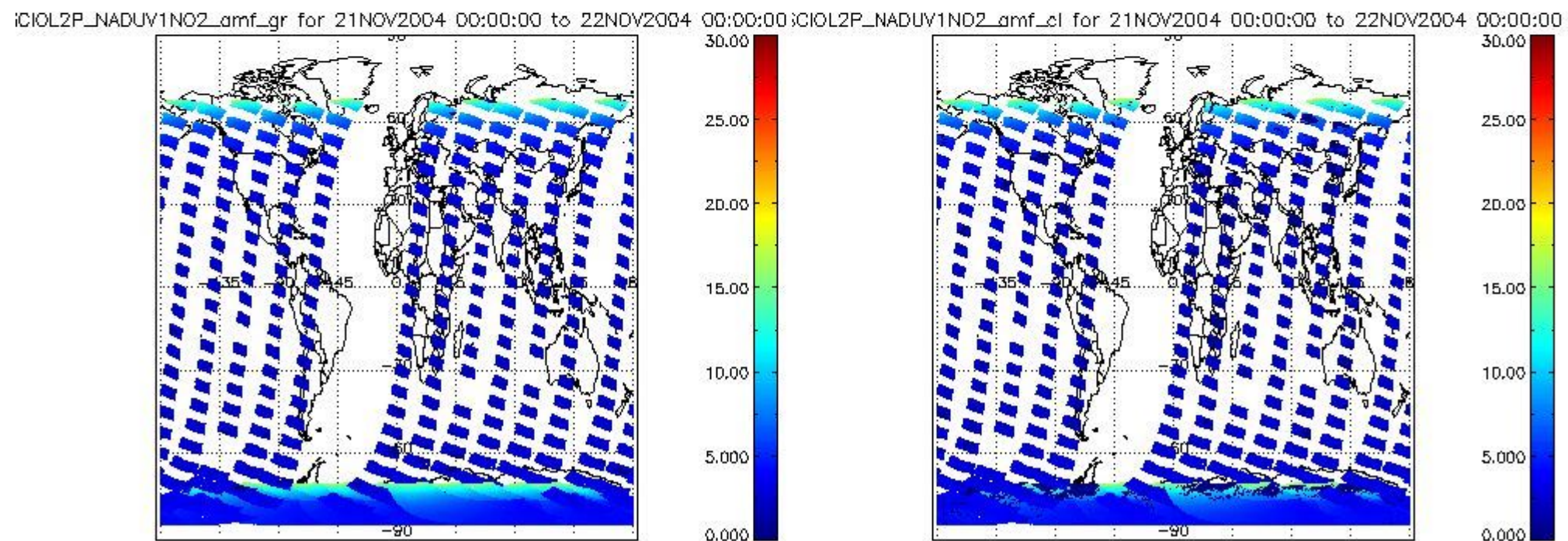
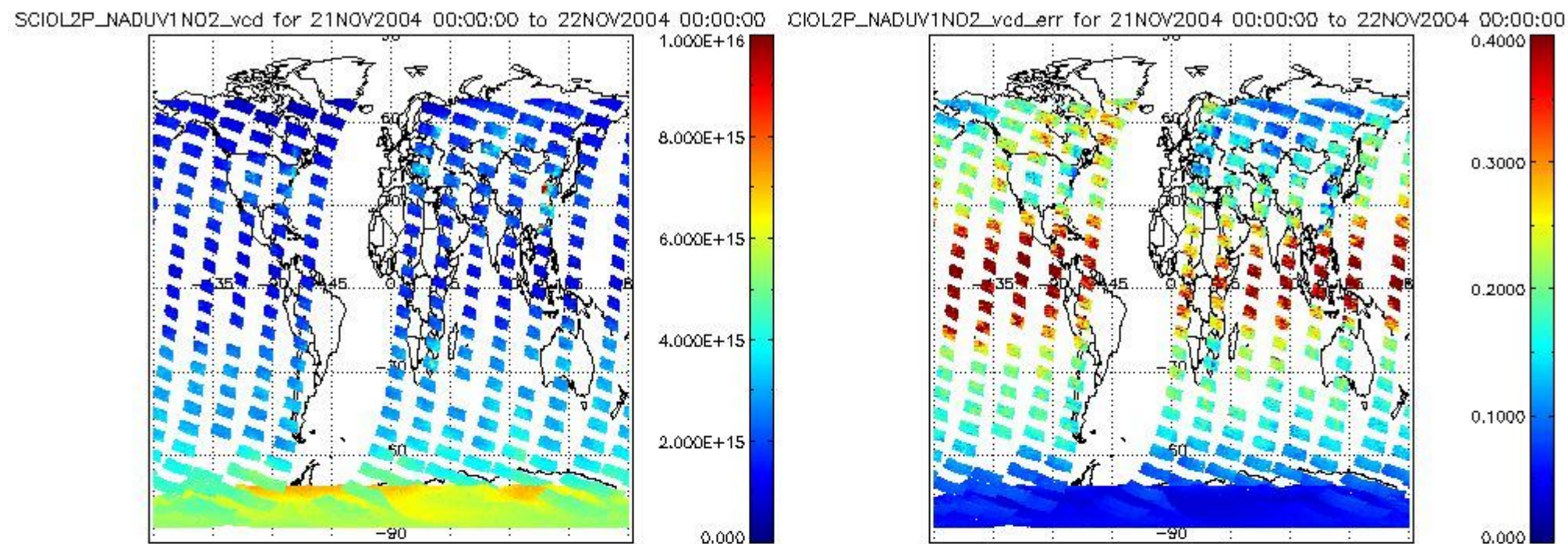
SCIOL2P\_NADUV003\_amf\_cl for 21NOV2004 00:00:00 to 22NOV2004 00:00:00











### 2.2.3 Limb

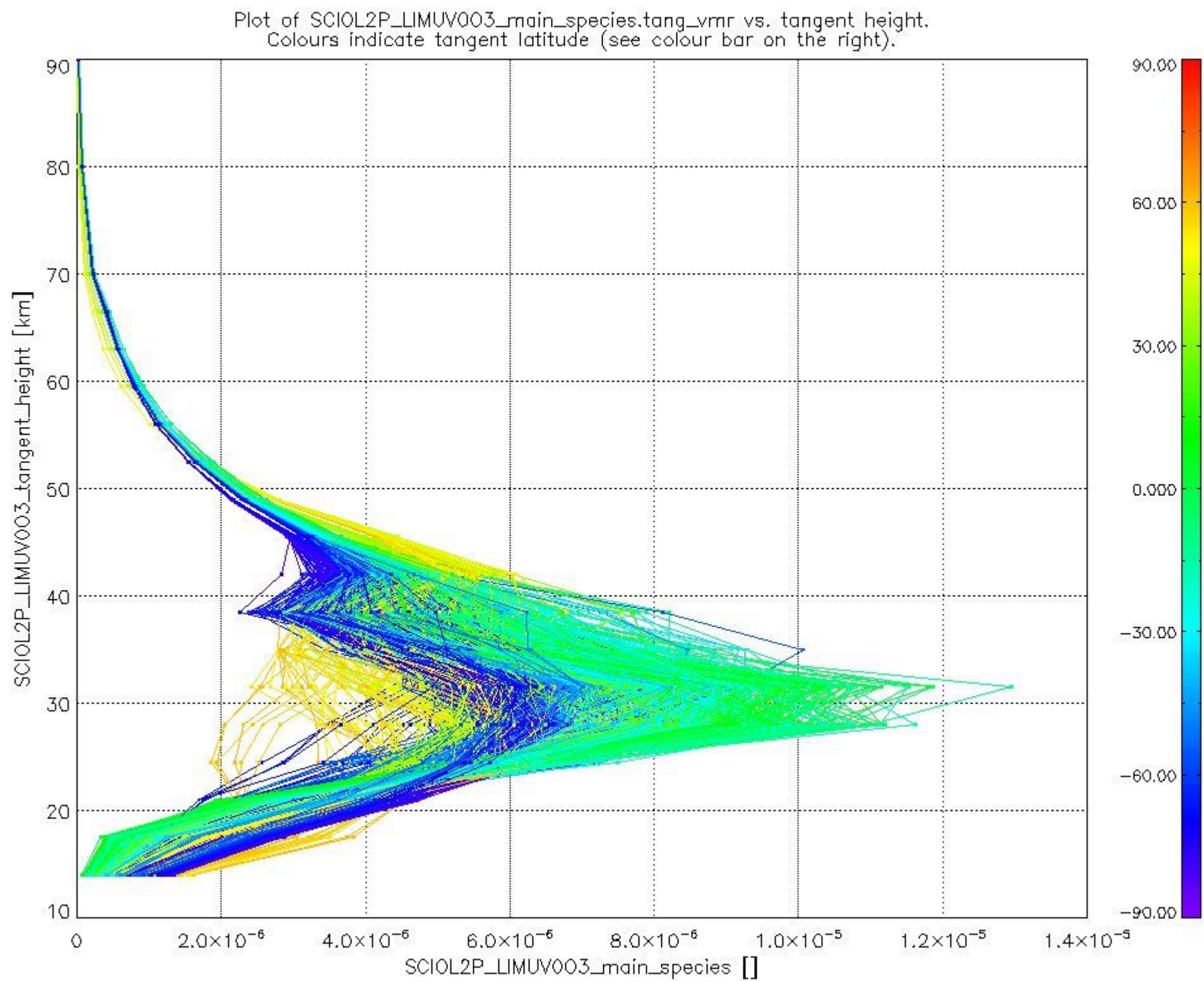
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

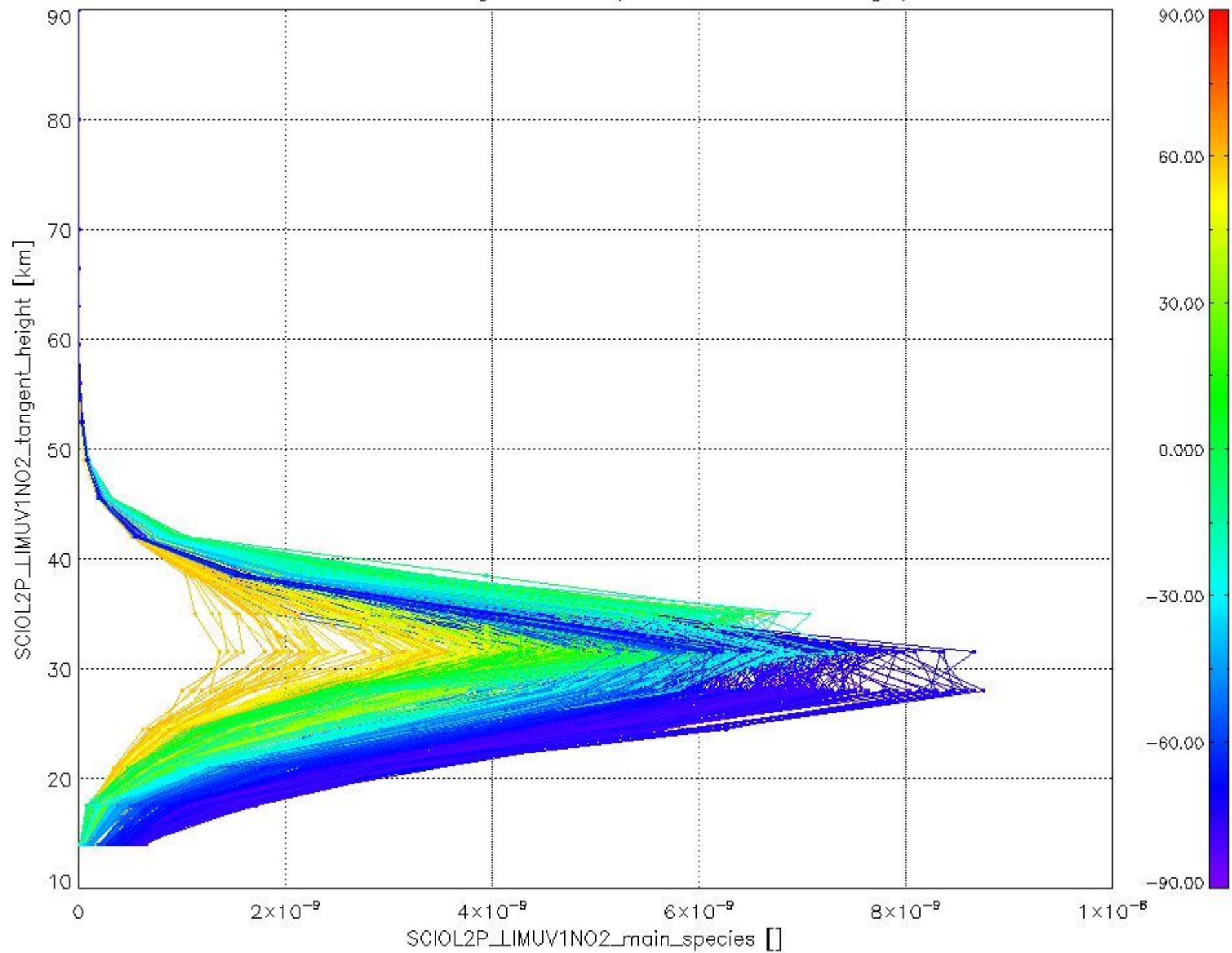


The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.





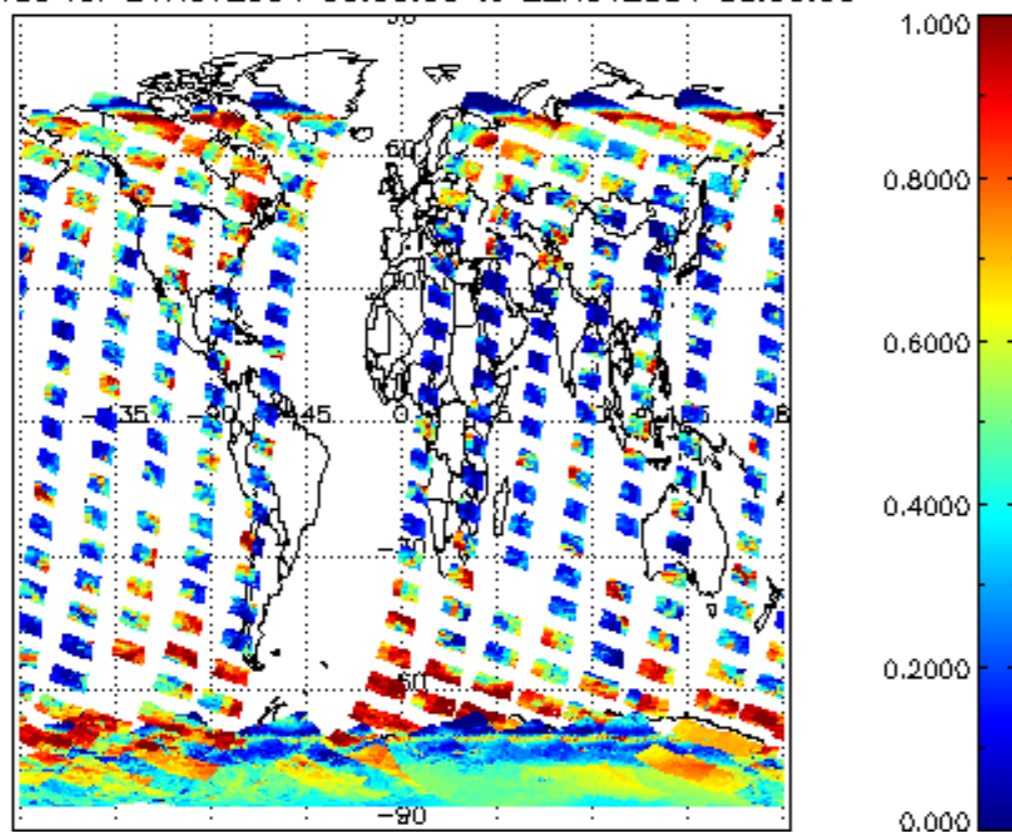
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



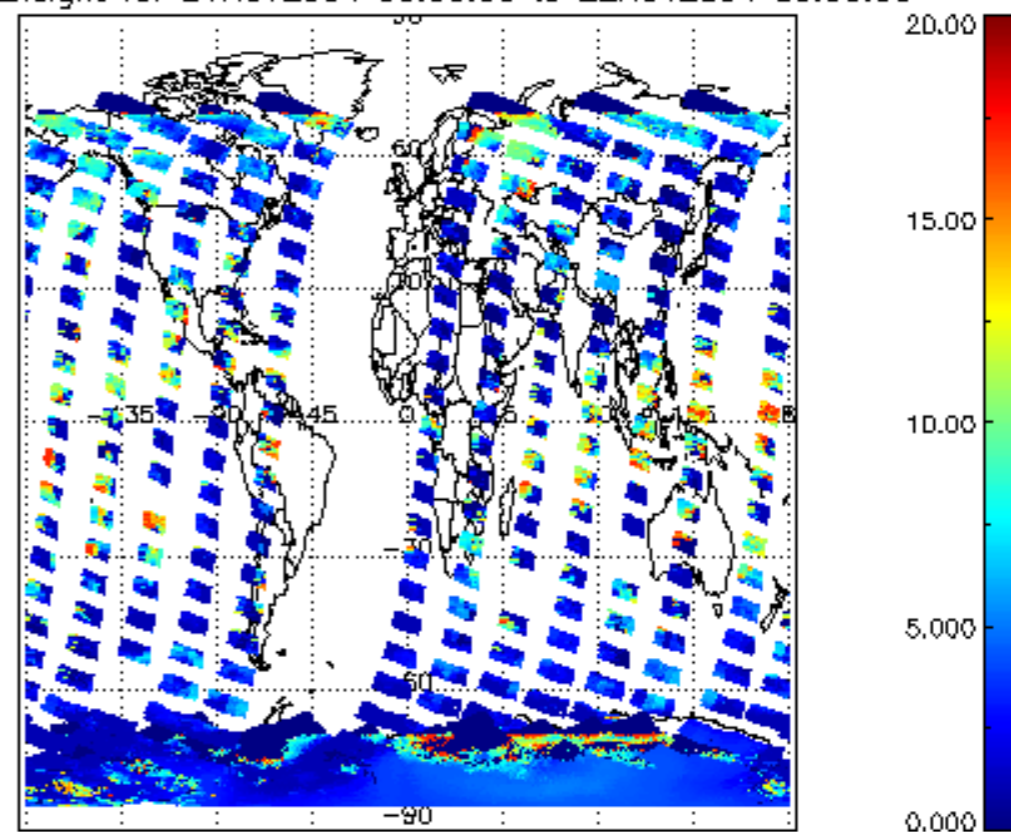
### 2.3 ADF monitoring

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

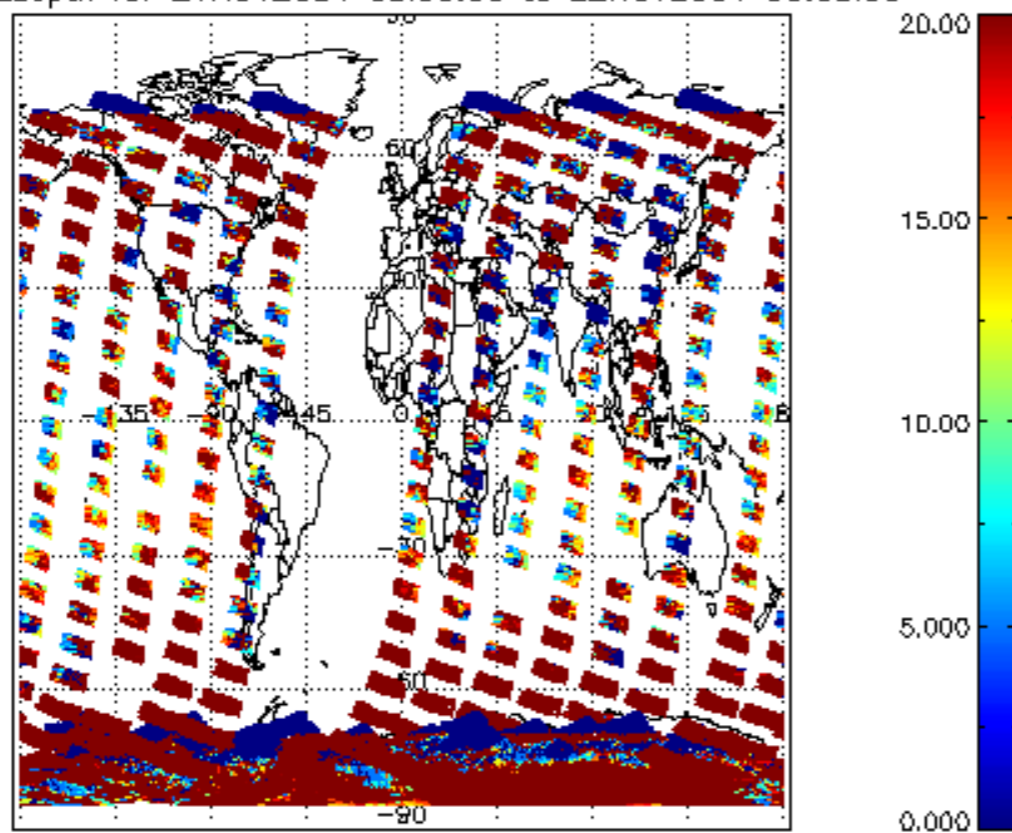
cLfrac for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



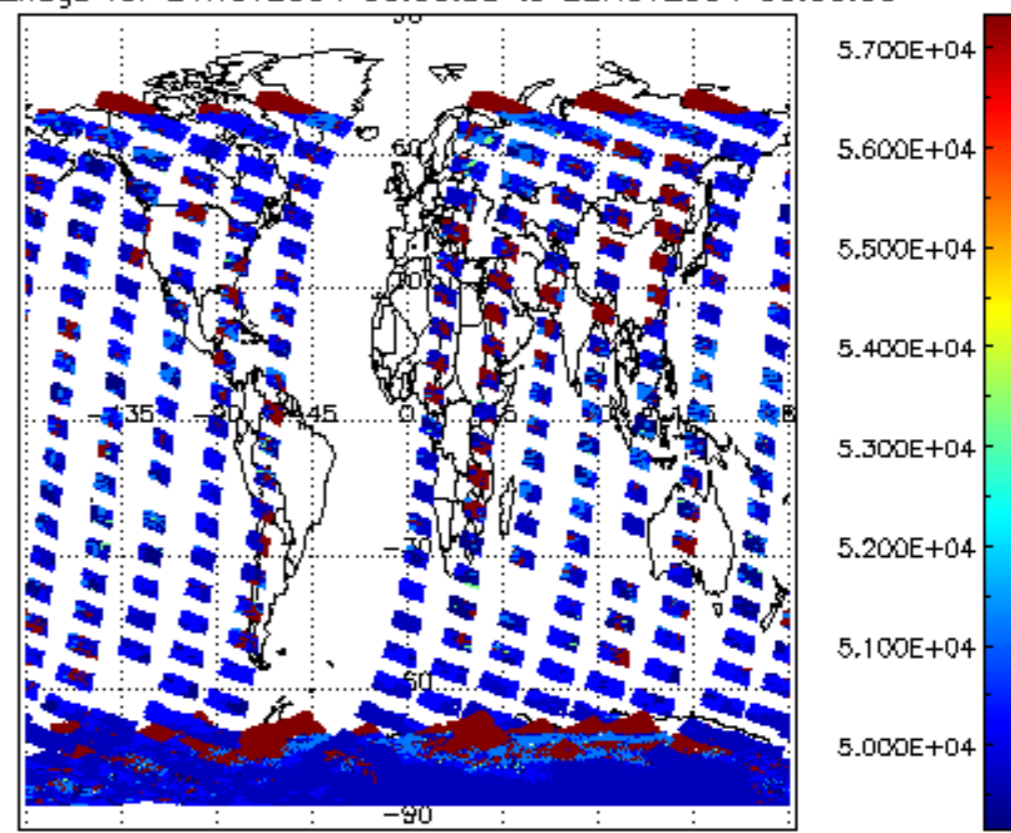
cL\_top\_height for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



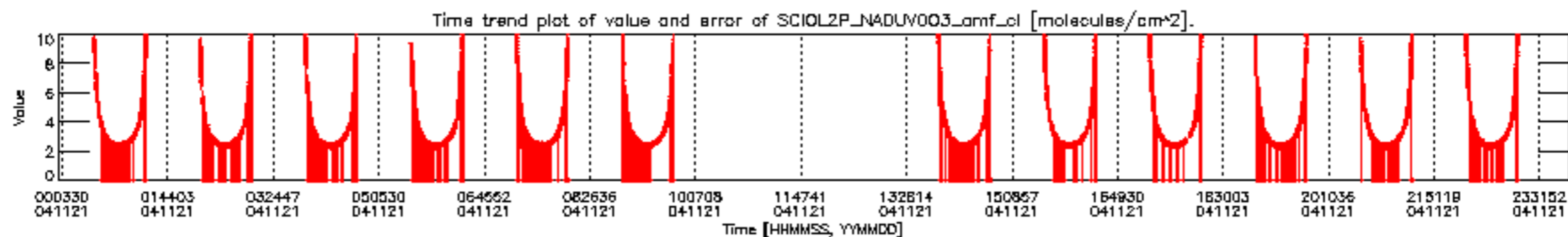
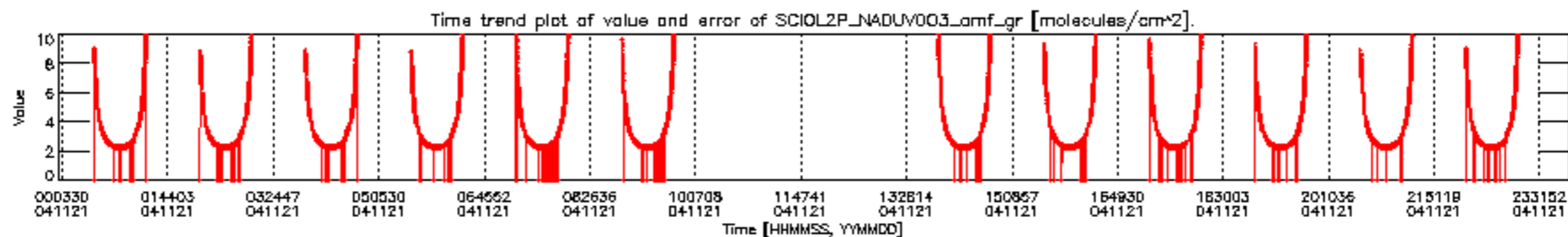
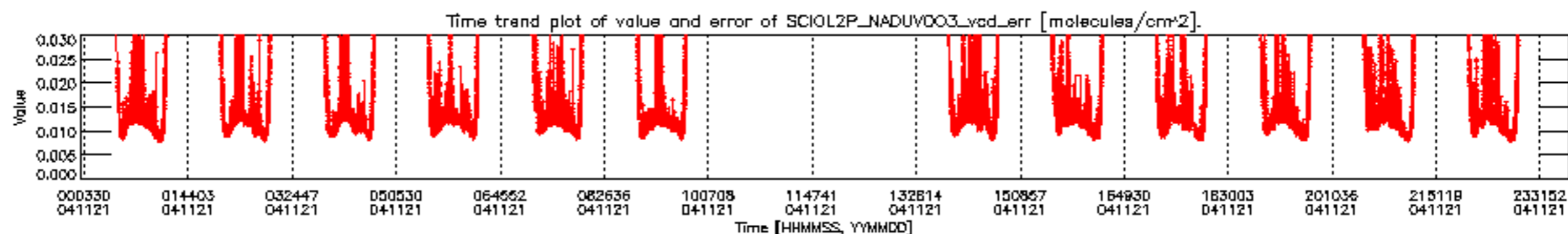
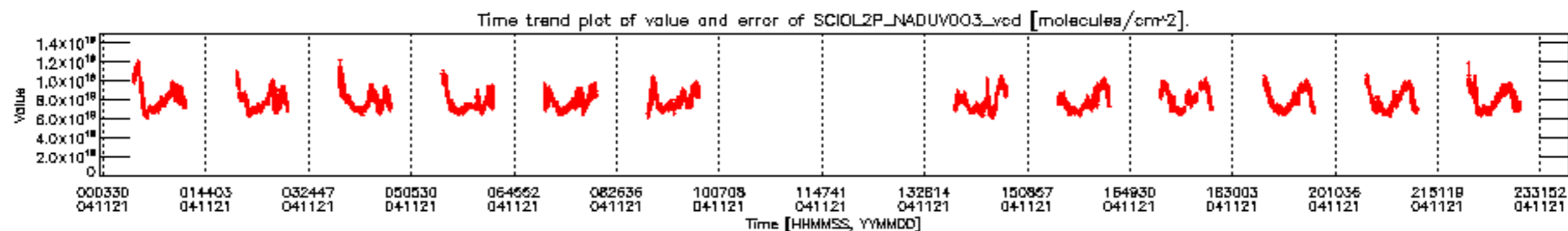
cL\_opt\_depth for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



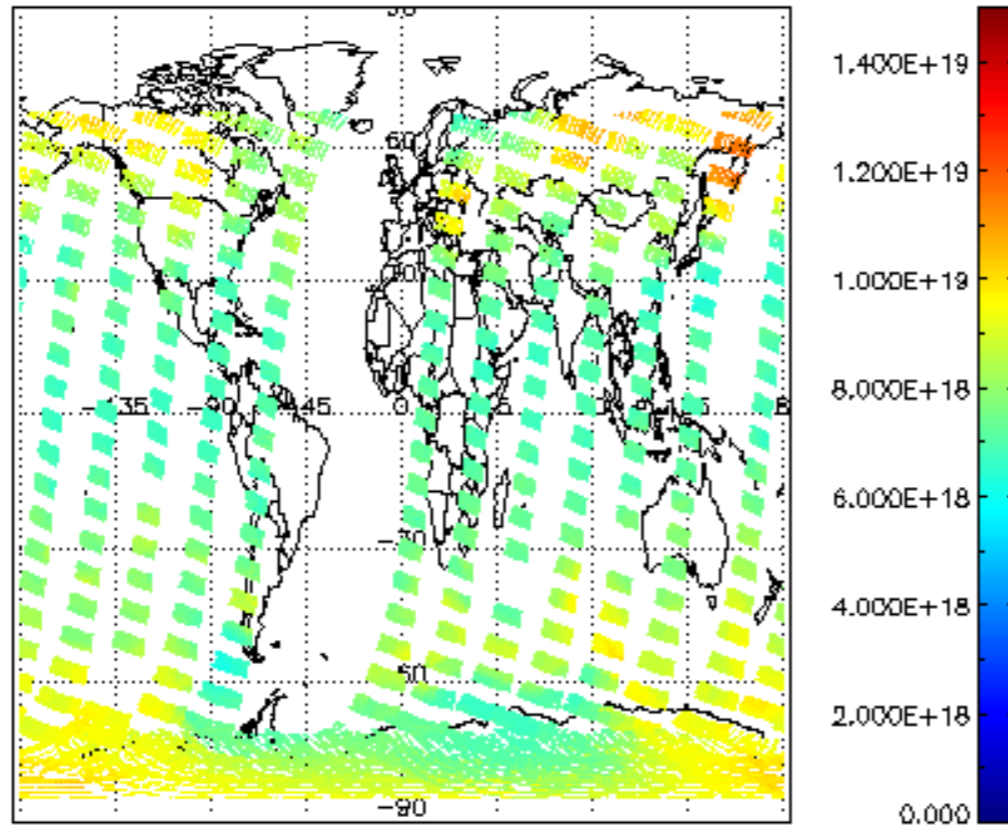
cloud\_flags for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



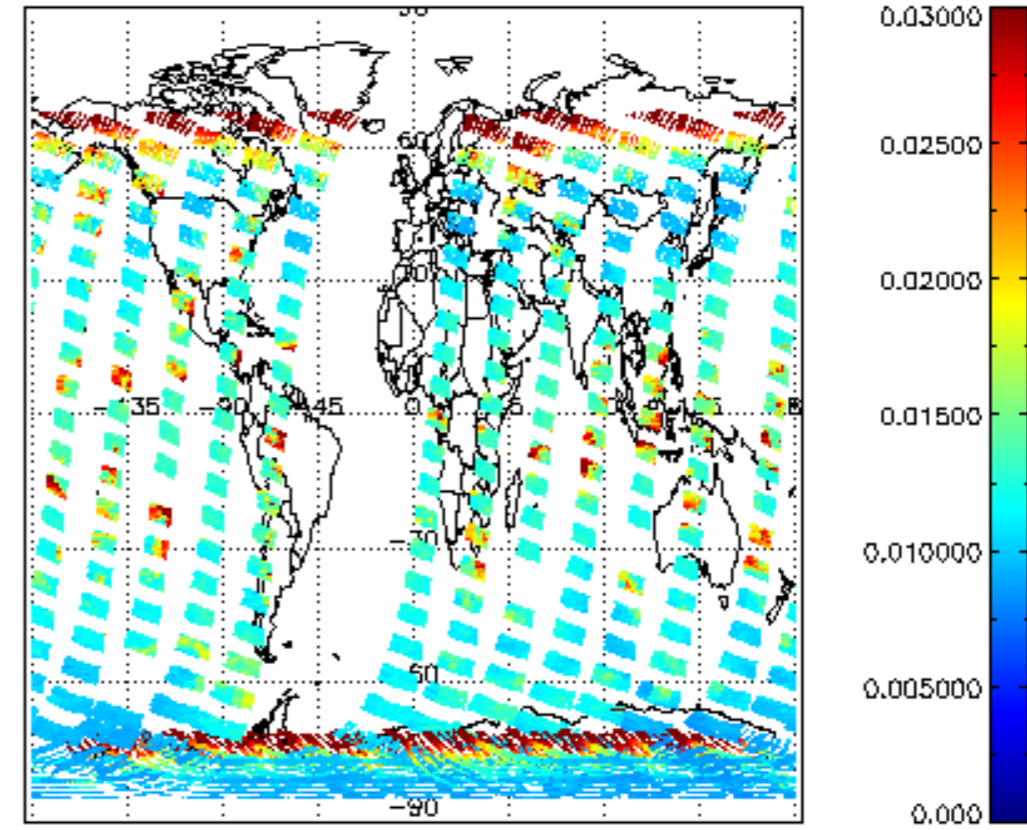




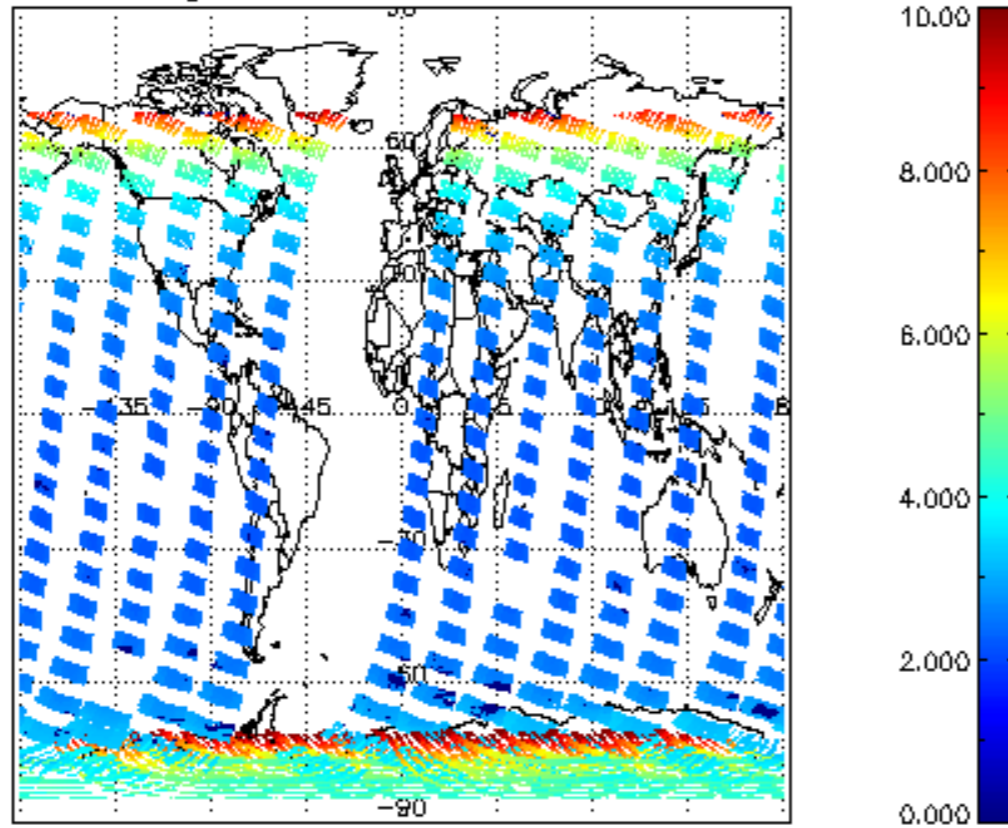
SCIOL2P\_NADUV003\_vcd for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



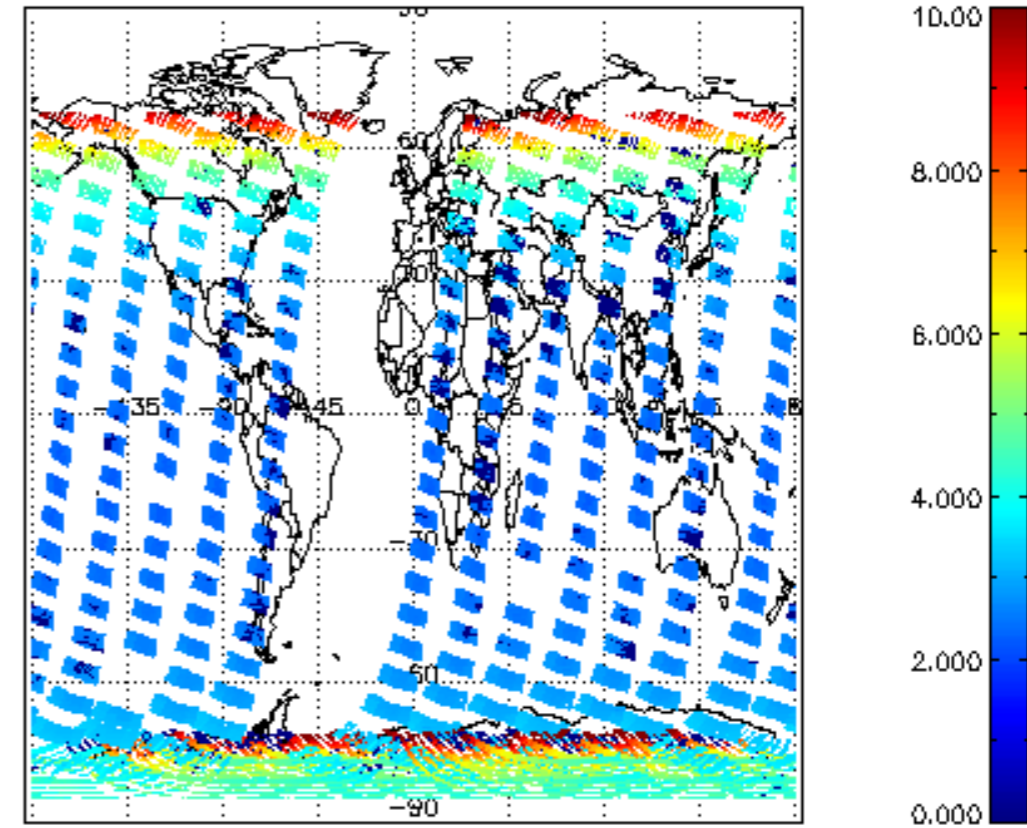
SCIOL2P\_NADUV003\_vcd\_err for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



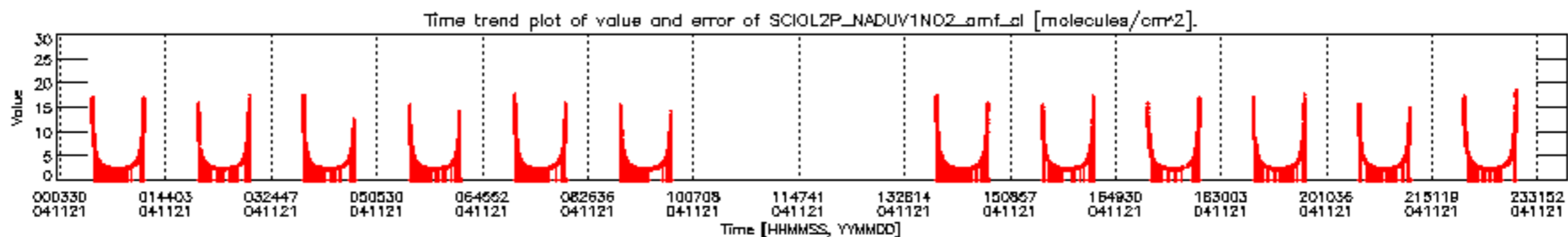
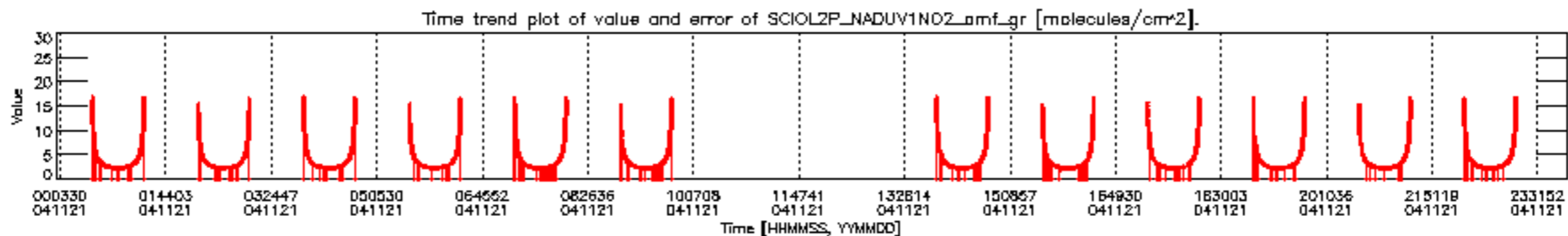
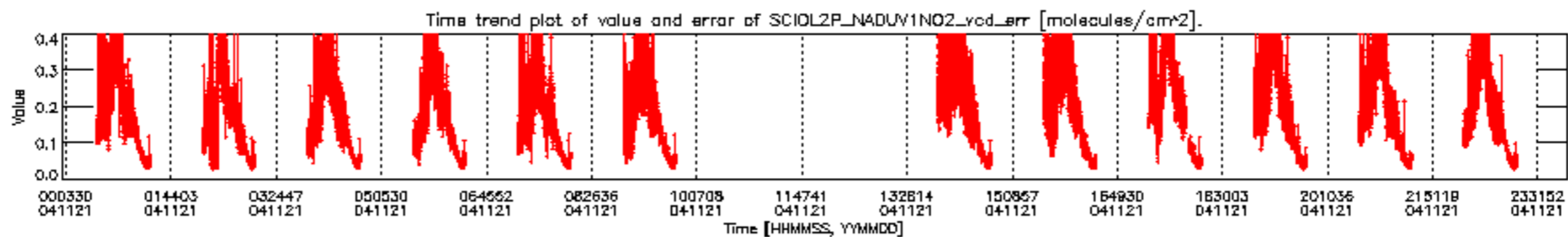
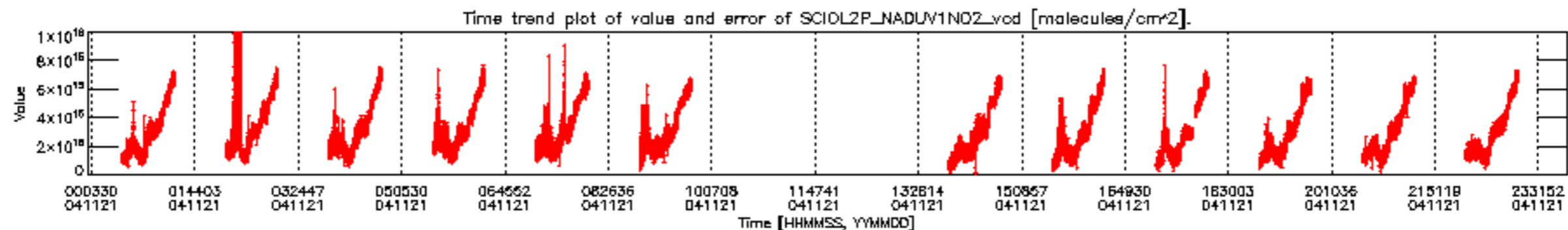
SCIOL2P\_NADUV003\_amf\_gr for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



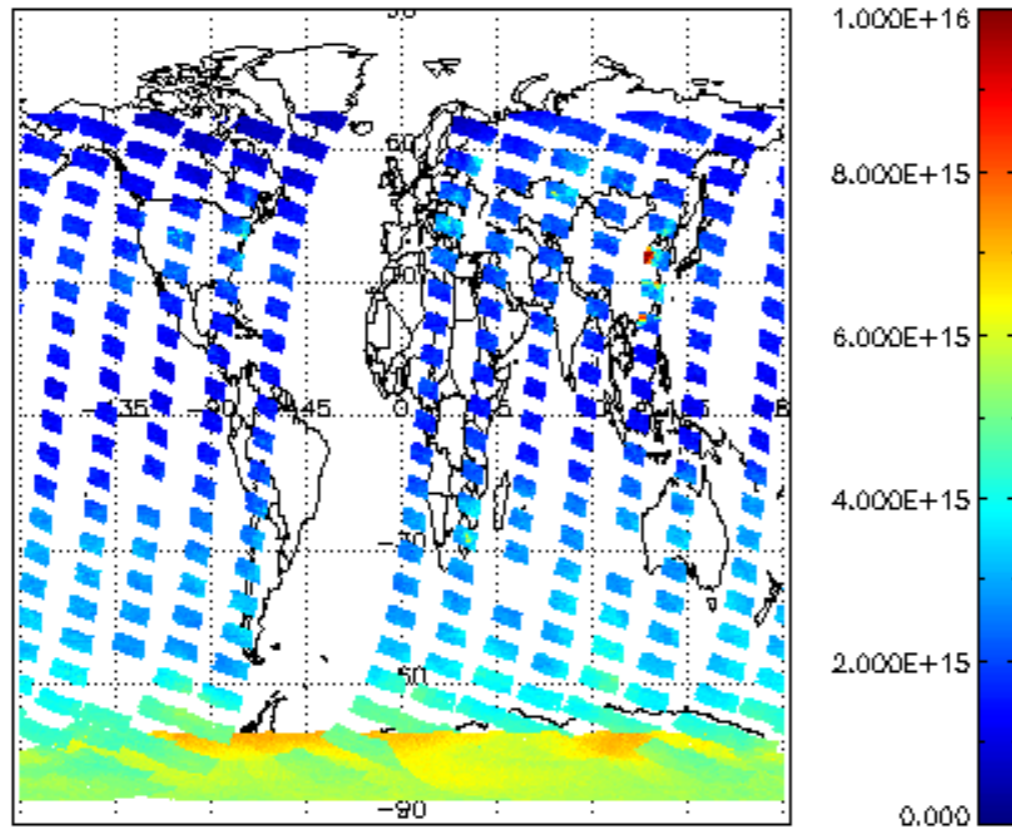
SCIOL2P\_NADUV003\_amf\_cl for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



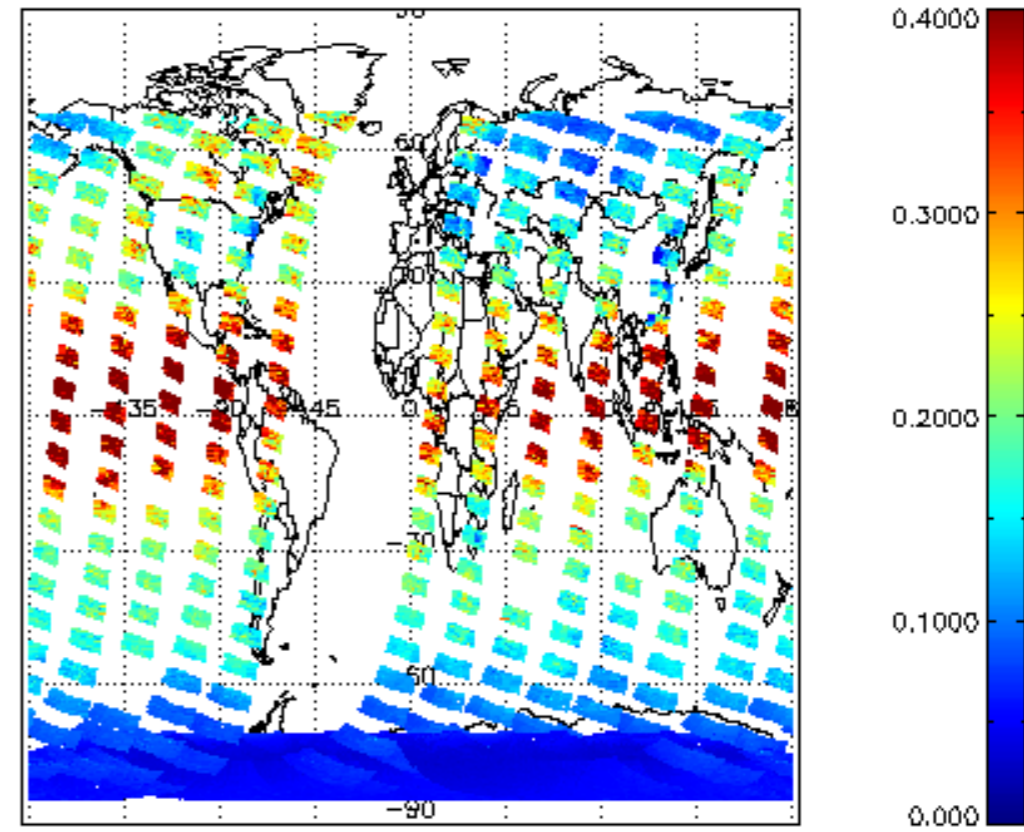




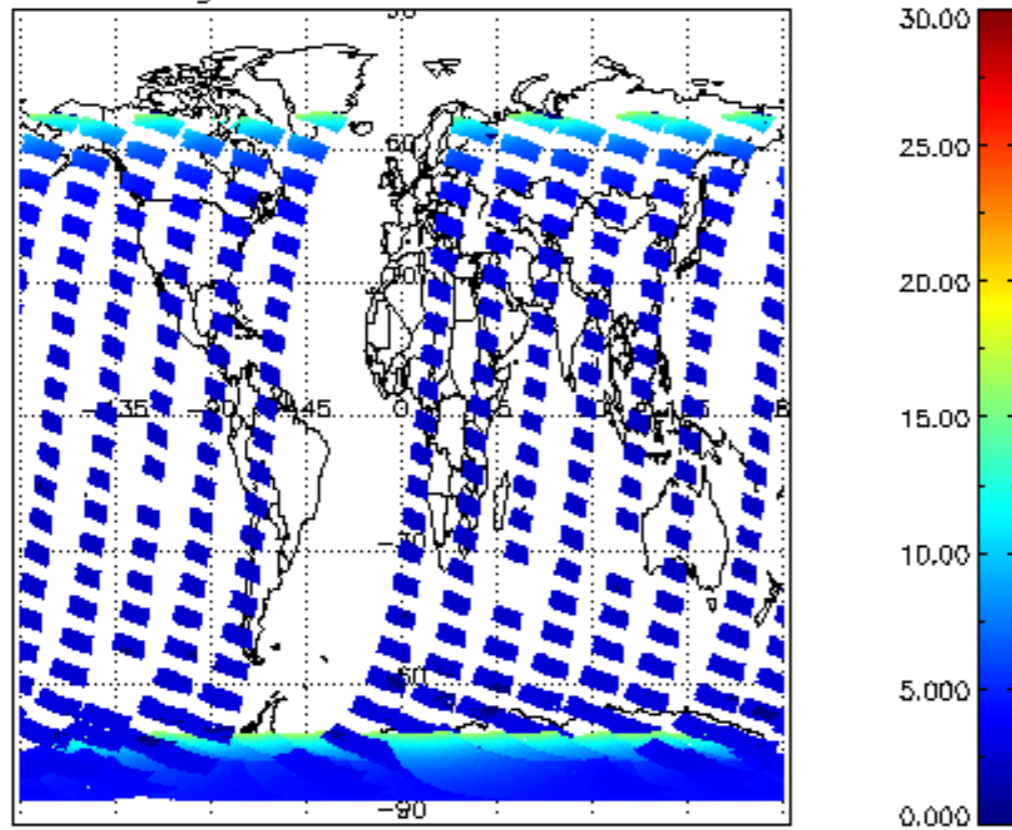
SCIOL2P\_NADUV1NO2\_vcd for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



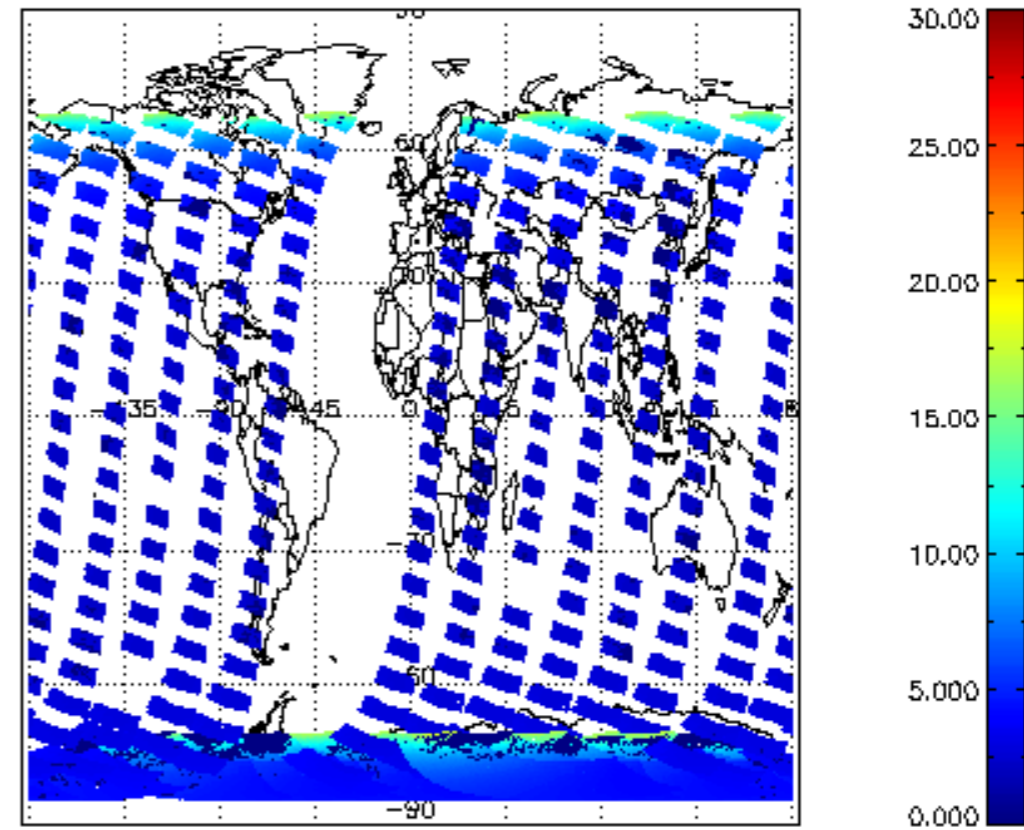
SCIOL2P\_NADUV1NO2\_vcd\_err for 21NOV2004 00:00:00 to 22NOV2004 00:00:00



SCIOL2P\_NADUV1NO2\_amf\_gr for 21NOV2004 00:00:00 to 22NOV2004 00:00:00

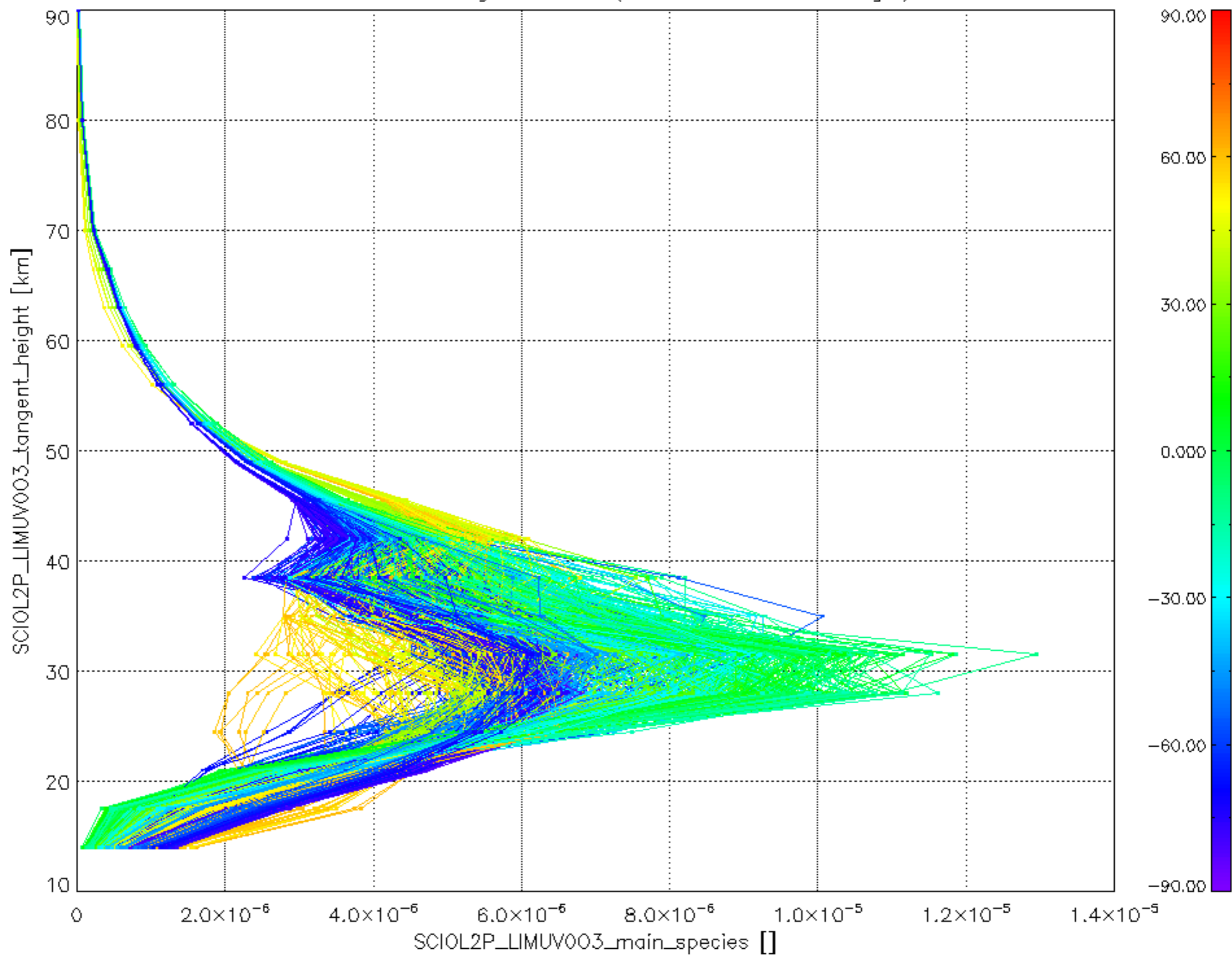


SCIOL2P\_NADUV1NO2\_amf\_cl for 21NOV2004 00:00:00 to 22NOV2004 00:00:00





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).

