

## 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	09DEC2009 13:46:49
Data source version	SCIA-OL/3.01-R
Processing scope for products	03AUG2009 00:00:00 to 04AUG2009 00:00:00
Start time of first product within scope	02AUG2009 23:44:51
Stop time of last product within scope	04AUG2009 00:08:59
Total number of level 2 products	15
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__2PRDPA20090802_234451_000033342081_00188_38819_3648.N1</a>	02AUG2009 23:44:51	03AUG2009 00:40:25	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20090803_012527_000033352081_00189_38820_3652.N1</a>	03AUG2009 01:25:27	03AUG2009 02:21:02	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20090803_030603_000033362081_00190_38821_3653.N1</a>	03AUG2009 03:06:03	03AUG2009 04:01:39	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20090803_044639_000033362081_00191_38822_3655.N1</a>	03AUG2009 04:46:39	03AUG2009 05:42:16	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20090803_062716_000033372081_00192_38823_3651.N1</a>	03AUG2009 06:27:16	03AUG2009 07:22:53	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20090803_080752_000033382081_00193_38824_3654.N1</a>	03AUG2009 08:07:52	03AUG2009 09:03:30	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20090803_100451_000023552081_00194_38825_3656.N1</a>	03AUG2009 10:04:51	03AUG2009 10:44:07	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20090803_112904_000033392081_00195_38826_3658.N1</a>	03AUG2009 11:29:04	03AUG2009 12:24:44	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20090803_130941_000033392081_00196_38827_3657.N1</a>	03AUG2009 13:09:41	03AUG2009 14:05:20	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20090803_145017_000033392081_00197_38828_3659.N1</a>	03AUG2009 14:50:17	03AUG2009 15:45:57	0	GOOD
10	<a href="#">SCI_OL__2PRDPA20090803_163053_000033402081_00198_38829_3660.N1</a>	03AUG2009 16:30:53	03AUG2009 17:26:33	0	GOOD
11	<a href="#">SCI_OL__2PRDPA20090803_181122_000033652081_00199_38830_3661.N1</a>	03AUG2009 18:11:22	03AUG2009 19:07:28	0	GOOD
12	<a href="#">SCI_OL__2PRDPA20090803_195224_000033402081_00200_38831_3662.N1</a>	03AUG2009 19:52:24	03AUG2009 20:48:04	0	GOOD
13	<a href="#">SCI_OL__2PRDPA20090803_213242_000033402081_00201_38832_3663.N1</a>	03AUG2009 21:32:42	03AUG2009 22:28:22	0	GOOD
14	<a href="#">SCI_OL__2PRDPA20090803_231318_000033402081_00202_38833_3664.N1</a>	03AUG2009 23:13:18	04AUG2009 00:08:59	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: 144417

Total number of cloud data DSRs with good quality flag (=0): 144417 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	144417	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	144417	0.17789	0.12500	0.12500	0.25000	0.061756	s
CL_FRAC	144417	0.27806	0.20173	0.0000	1.0000	0.27990	-
CL_FRAC_ERR	144417	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	144417	5.6923	4.0000	4.0000	8.0000	1.9762	
PMD_READ_CL[0]	144417	0.16099	0.0000	0.0000	8.0000	0.90603	-
PMD_READ_CL[1]	144417	2.0018	0.0000	0.0000	8.0000	2.7715	-
CL_TOP_HEIGHT	125431	3.1753	1.4070	0.0000	17.000	3.6665	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	125431	54.335	51.116	0.0000	101.00	45.321	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	144417	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	144417	11001110	11000100	11000000	11100000	3646.4	flags
AERO_ABSO_IND	144417	4.2390	5.0469	-1.2805	15.412	2.8081	
AERO_IND_DIAG	144417	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	144417	01100000	11000000	00000000	11000000	24576.	flags

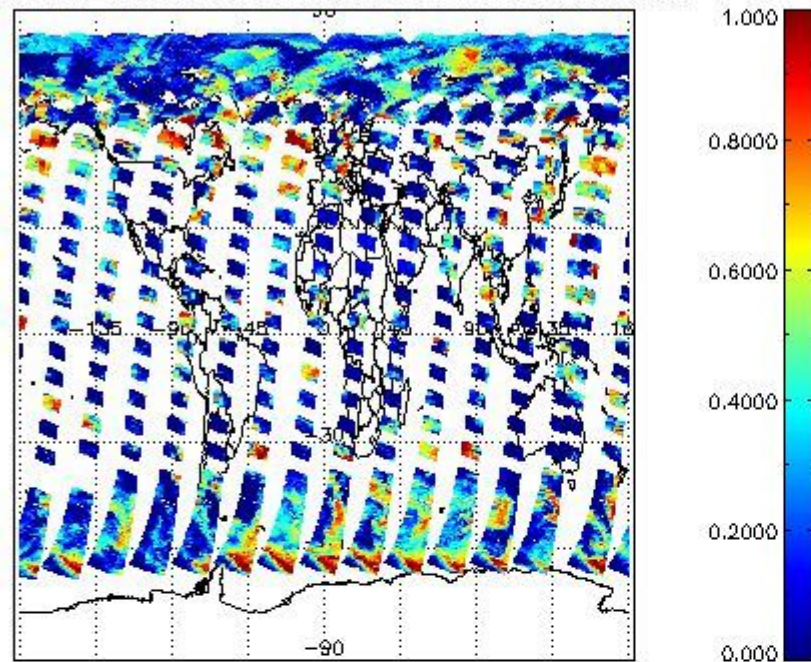
### Time and geolocation plots:

Plots are available for the following parameters:

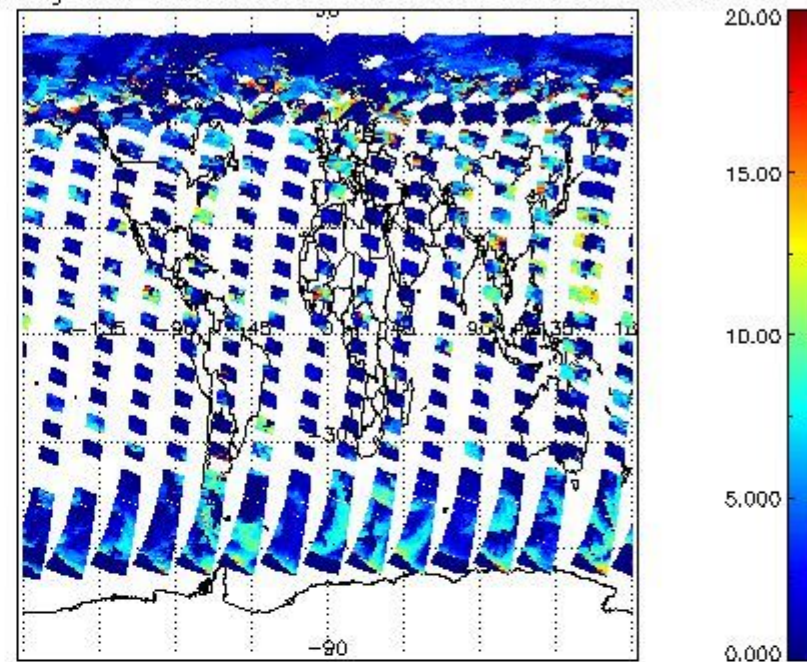
Number	Data item ID
0	cl_frac
1	cl_top_height
2	cl_opt_depth
3	cloud_flags



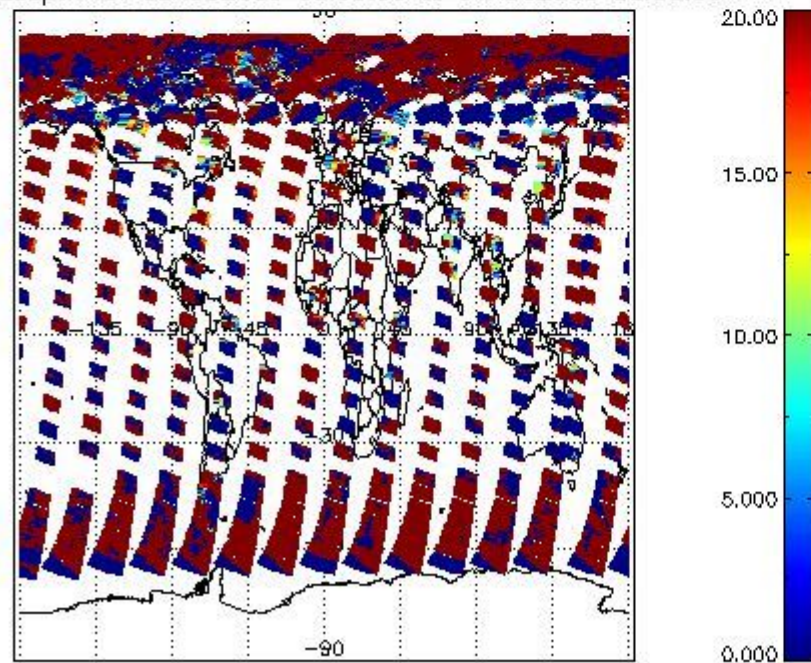
cL\_frac for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



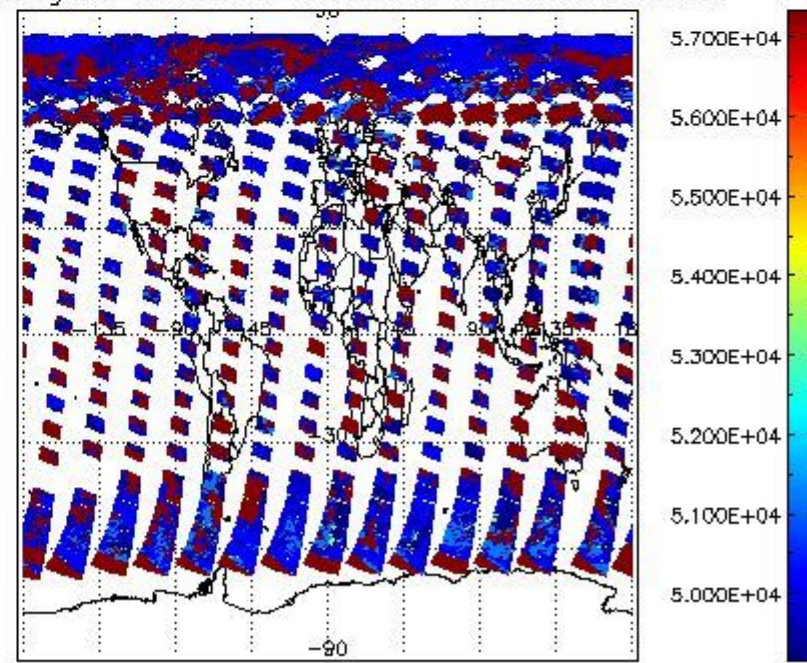
cL\_top\_height for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



cL\_opt\_depth for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



cloud\_flags for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



## 2.2.2 Nadir

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

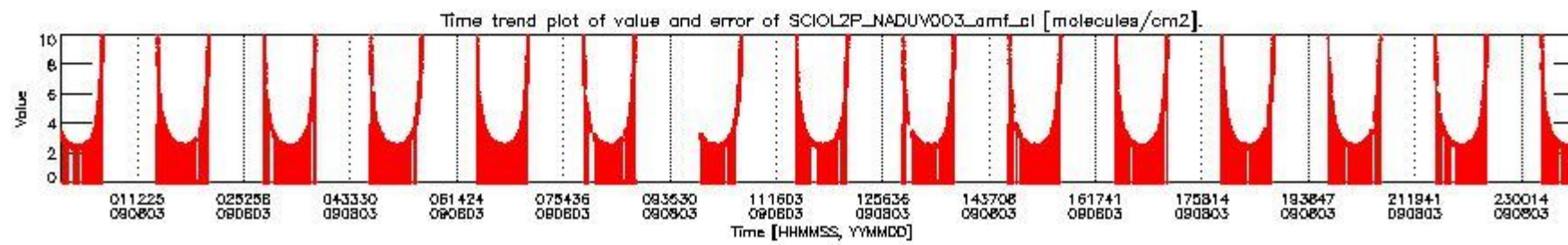
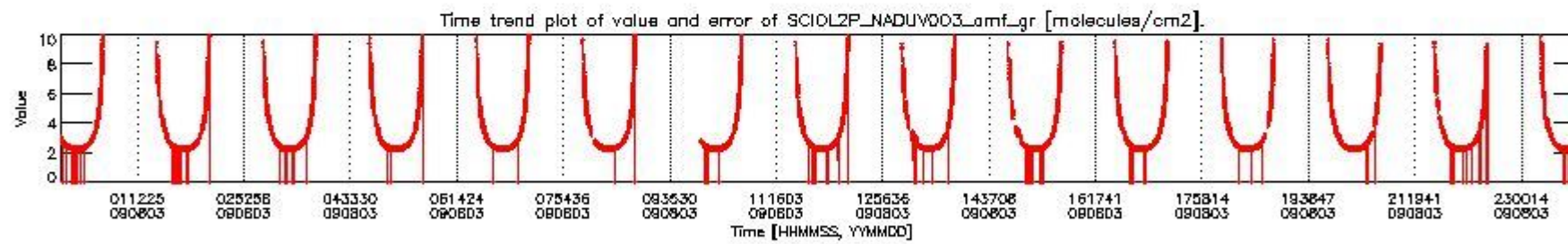
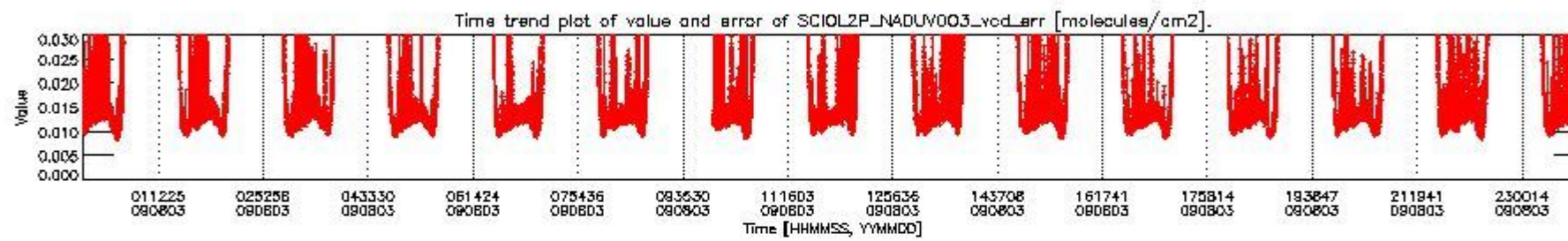
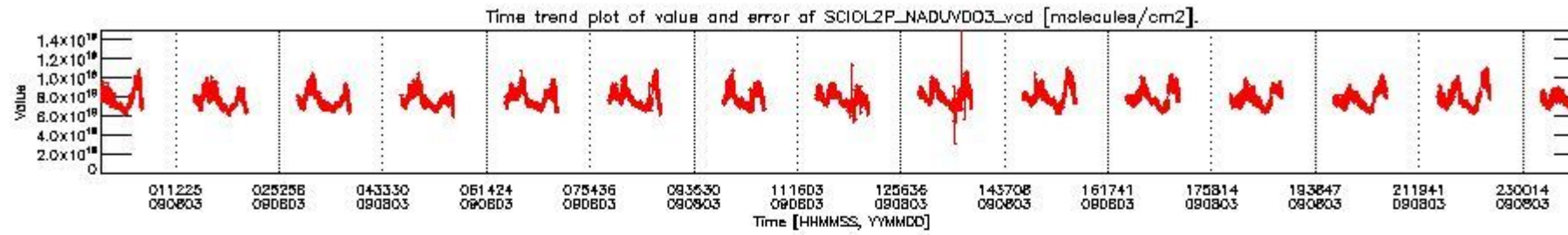
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr



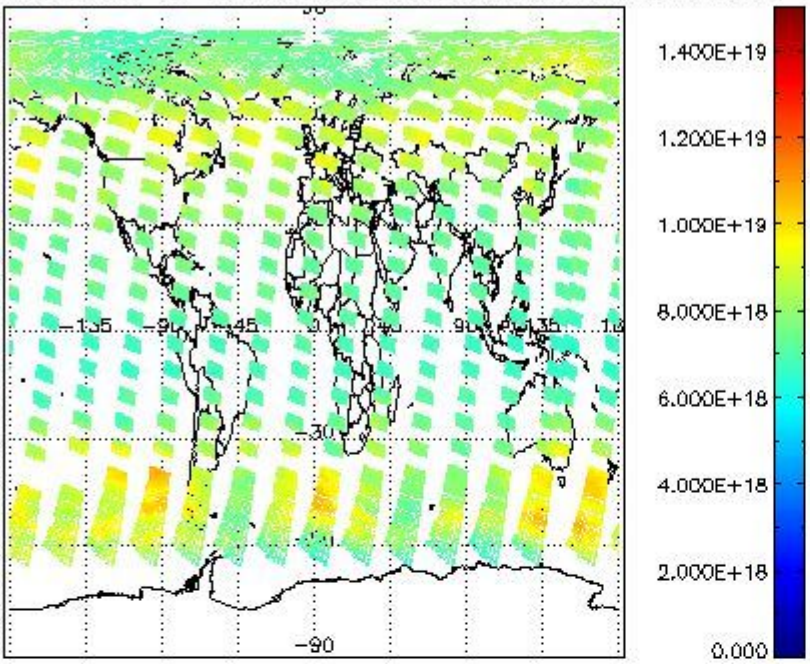
3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

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.

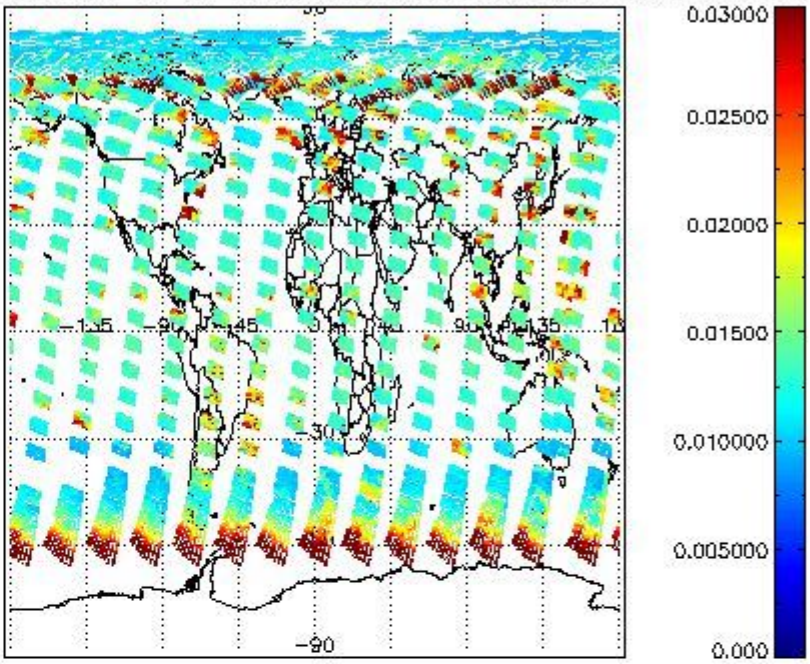




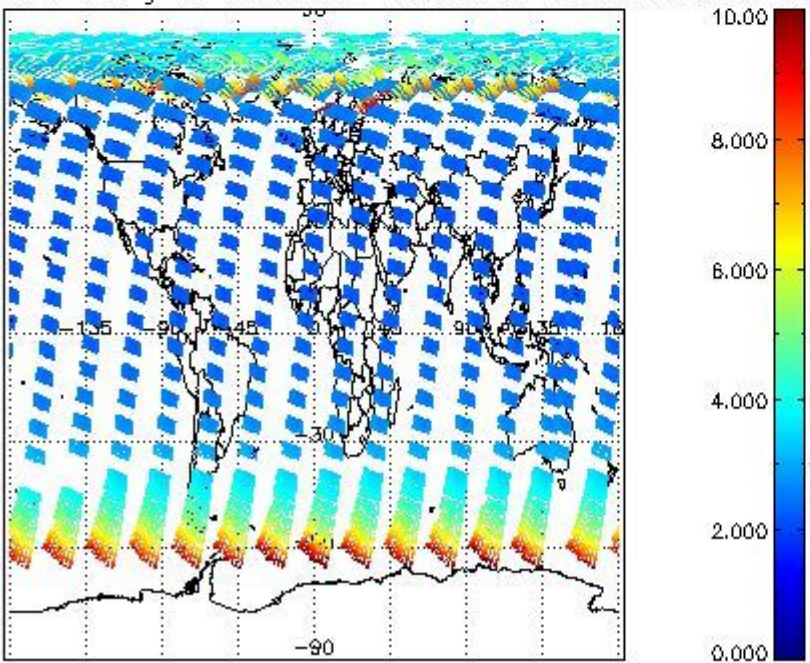
SCIOL2P\_NADUV003\_vcd for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



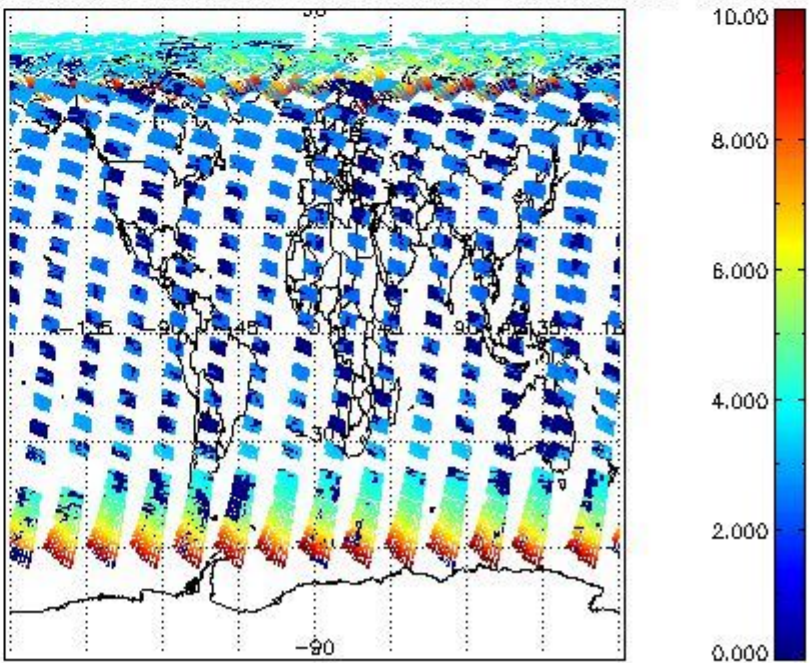
SCIOL2P\_NADUV003\_vcd\_err for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



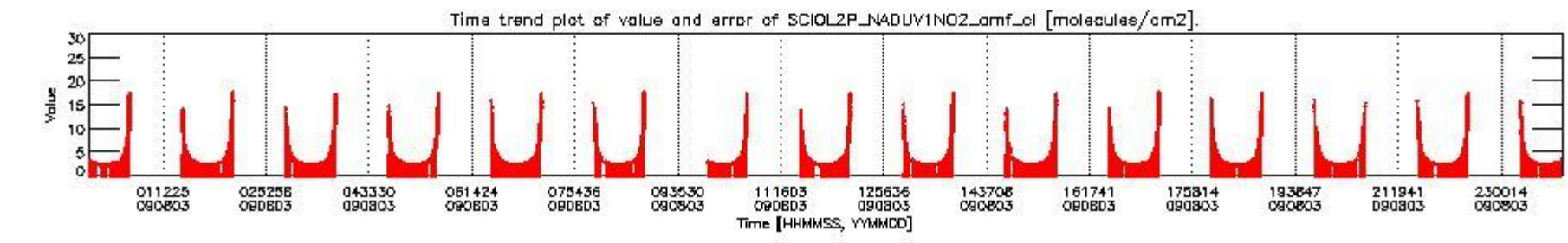
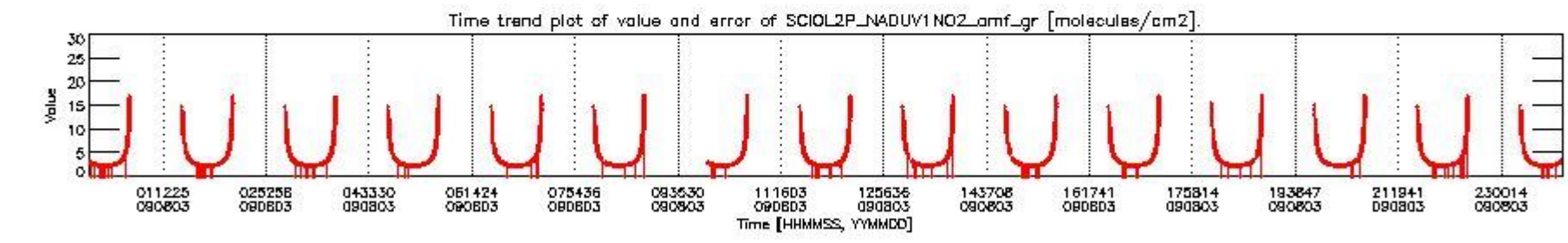
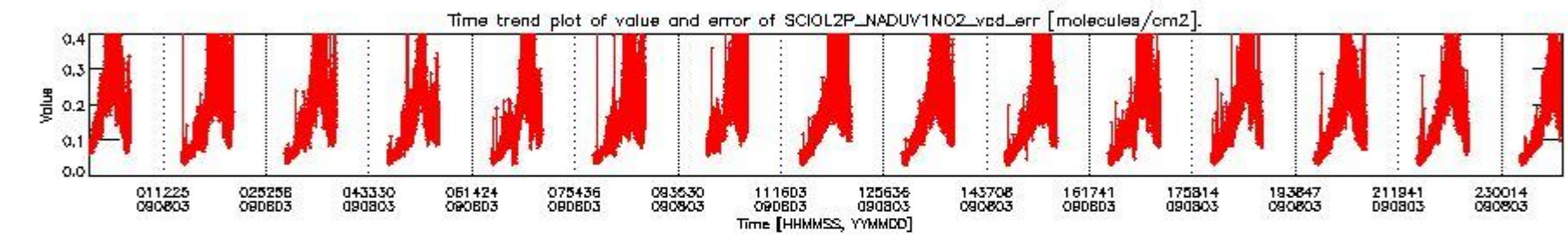
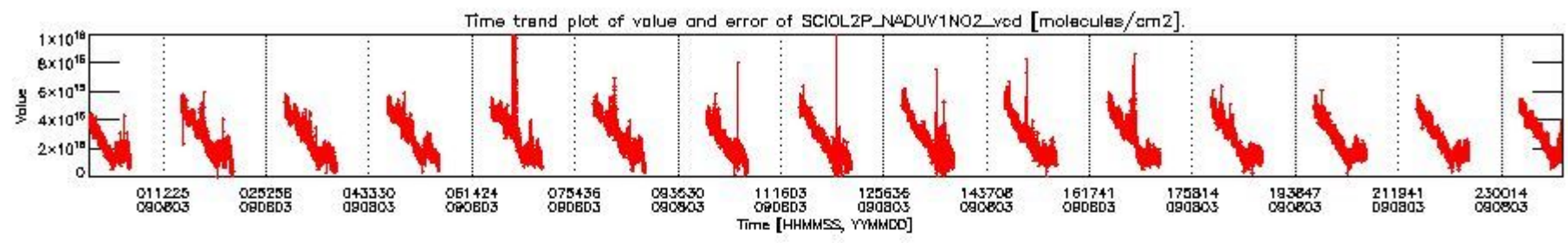
SCIOL2P\_NADUV003\_amf\_gr for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



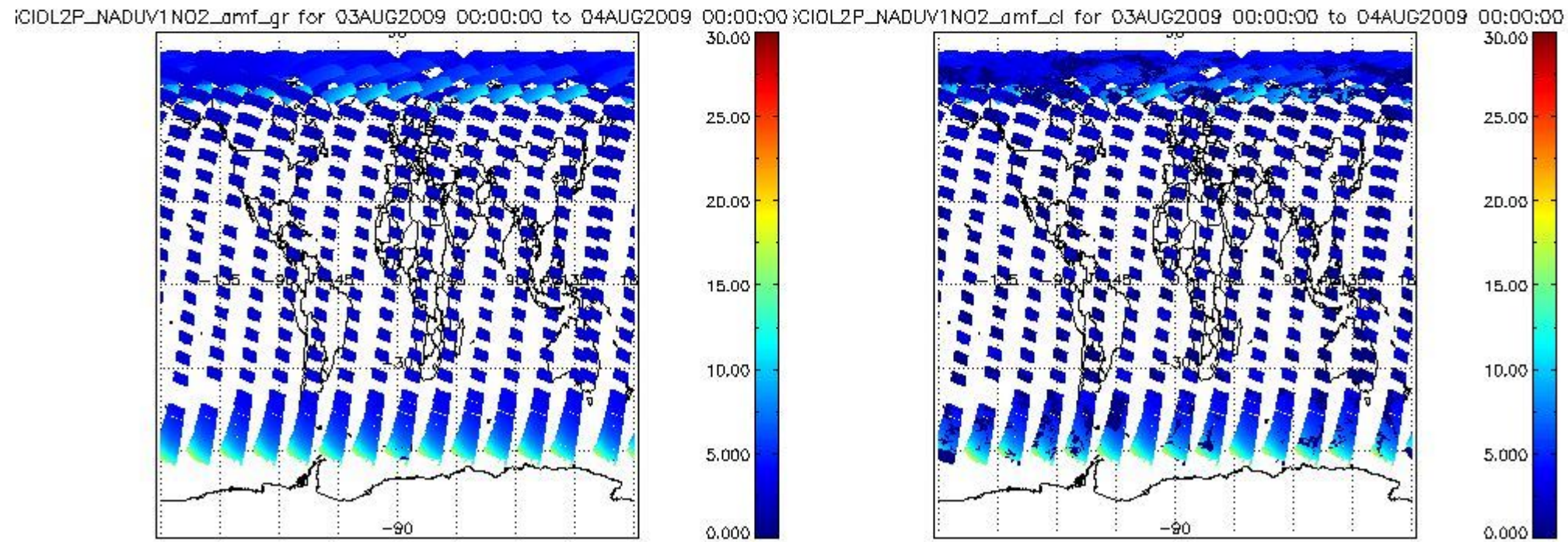
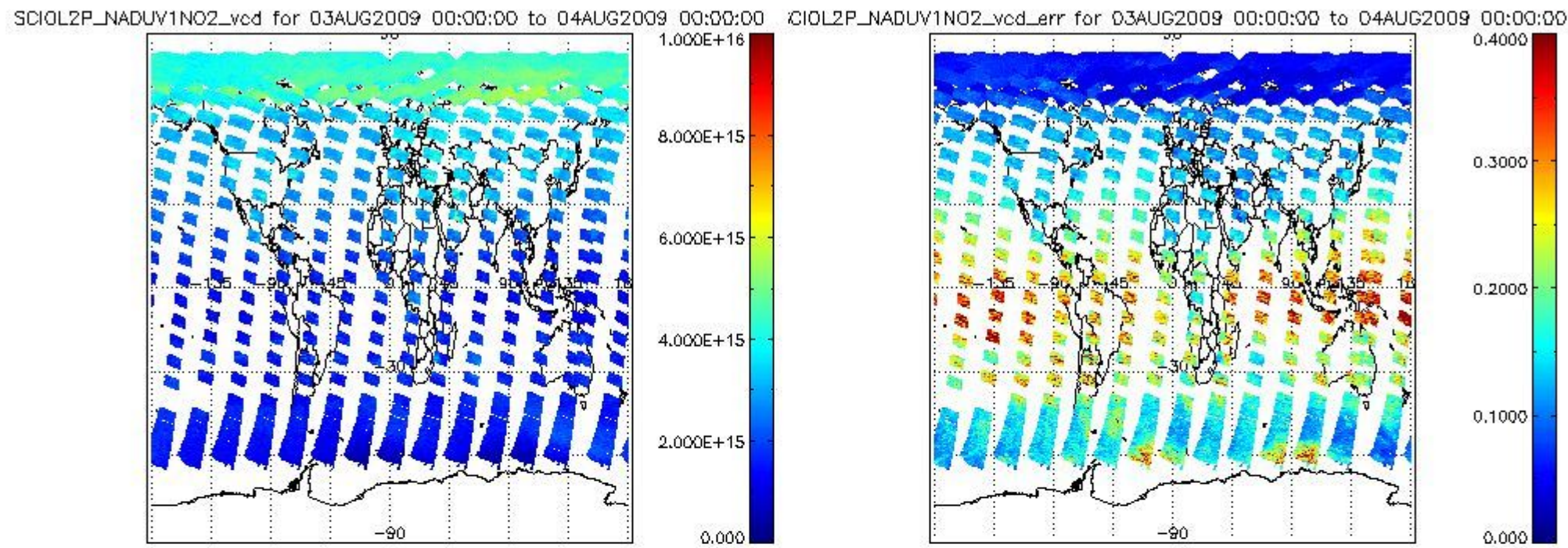
SCIOL2P\_NADUV003\_amf\_cl for 03AUG2009 00:00:00 to 04AUG2009 00:00:00











### 2.2.3 Limb

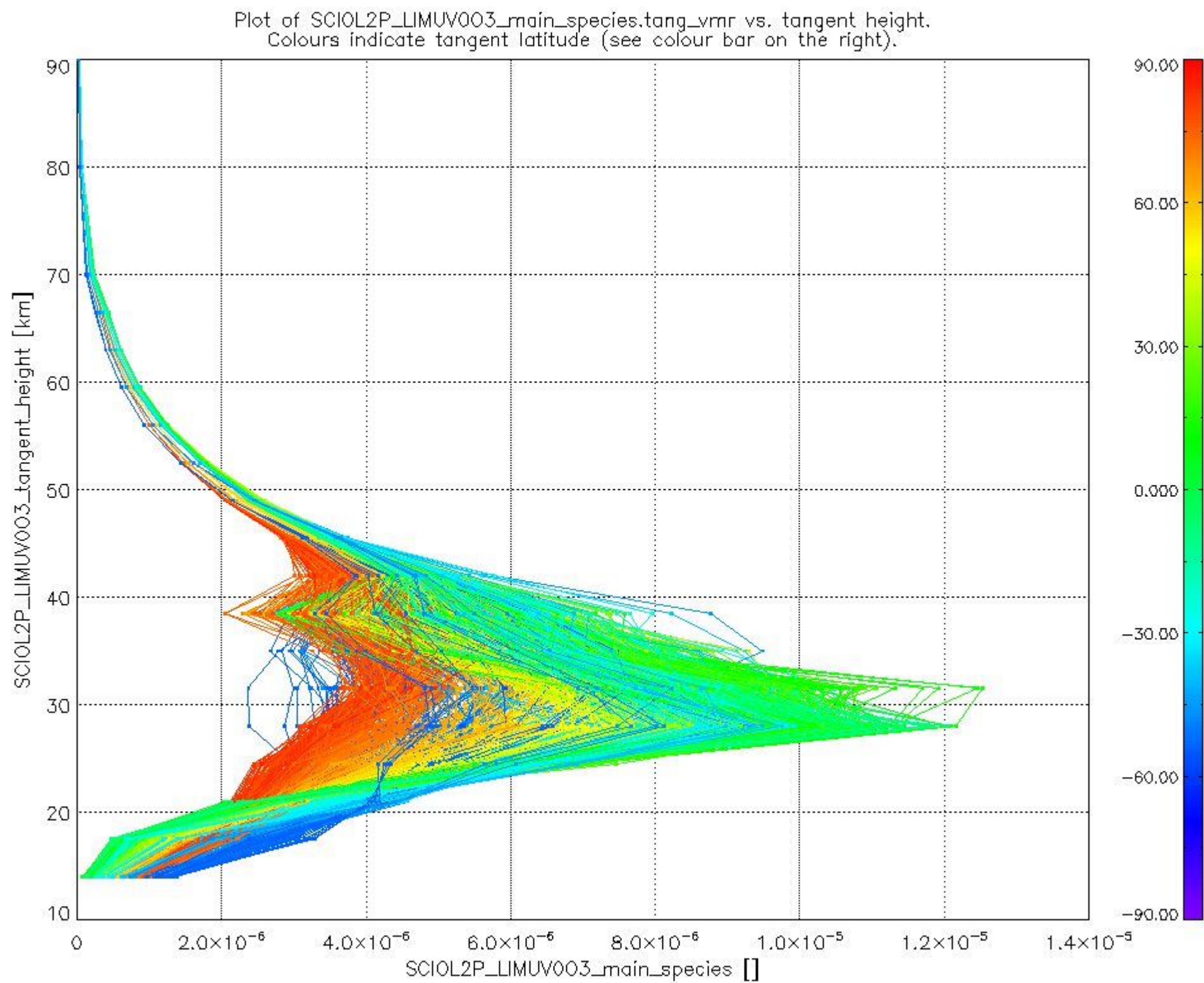
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

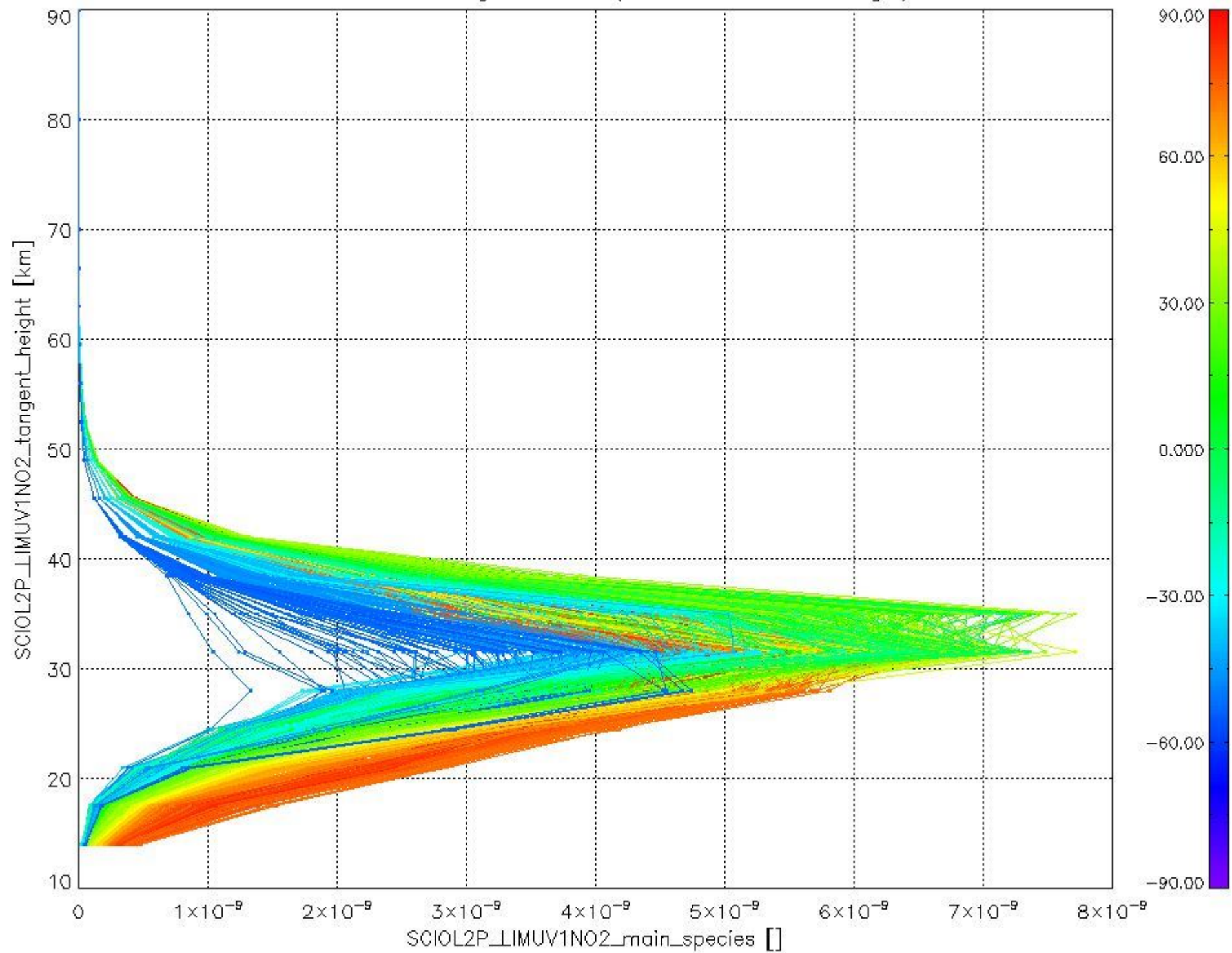


The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.





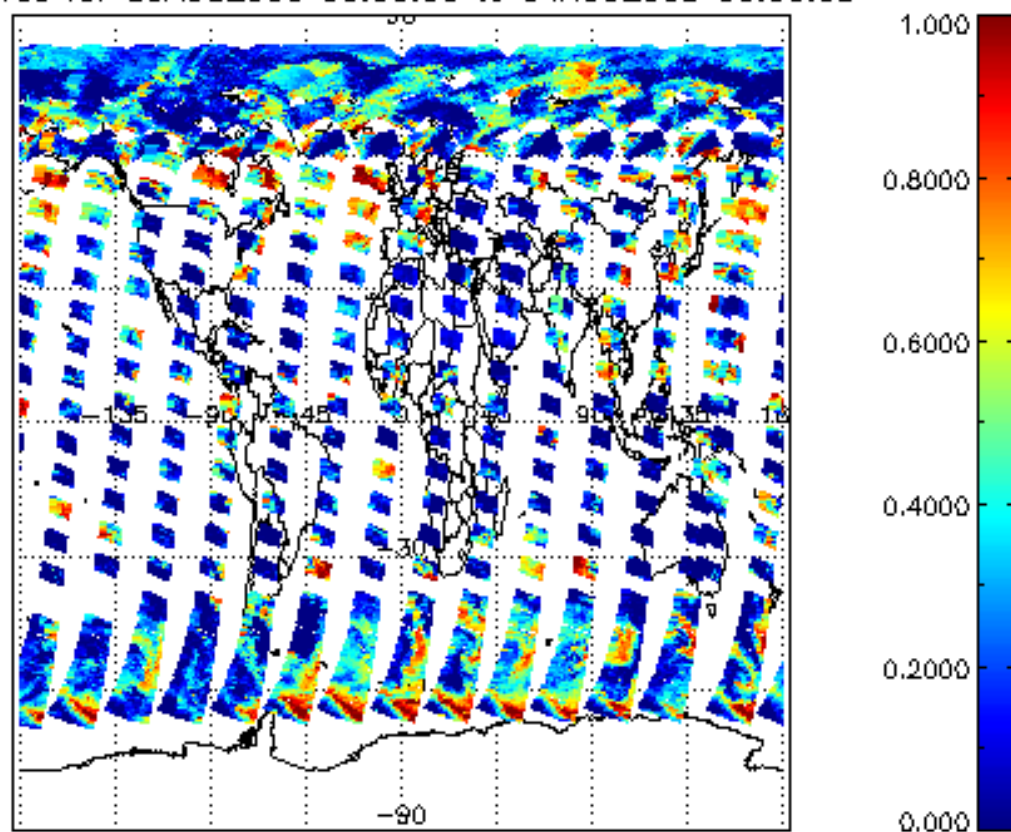
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



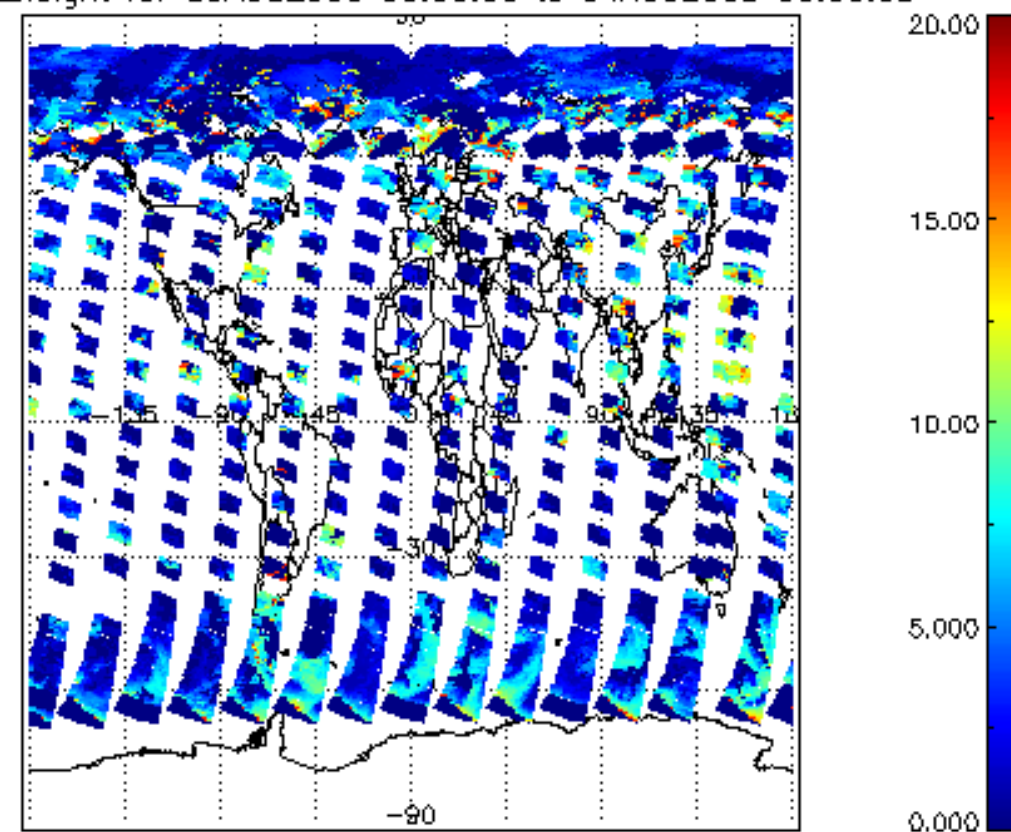
## 2.3 ADF monitoring

Number	ADF
	<b>IN_ (INITIALISATION_FILE)</b>
0	SCI_IN_AXNPDE20070629_092400_20070720_000000_20991231_235959
	<b>ECF (ECMWF_FILE)</b>
1	NOT USED

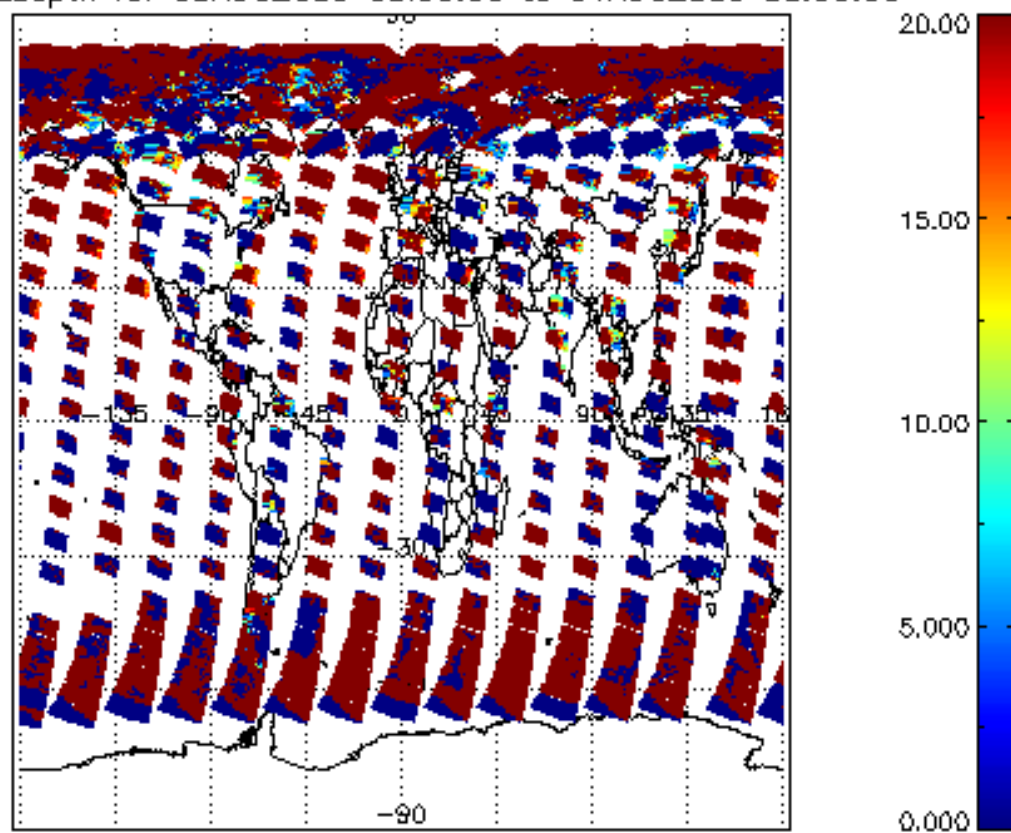
cL\_frac for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



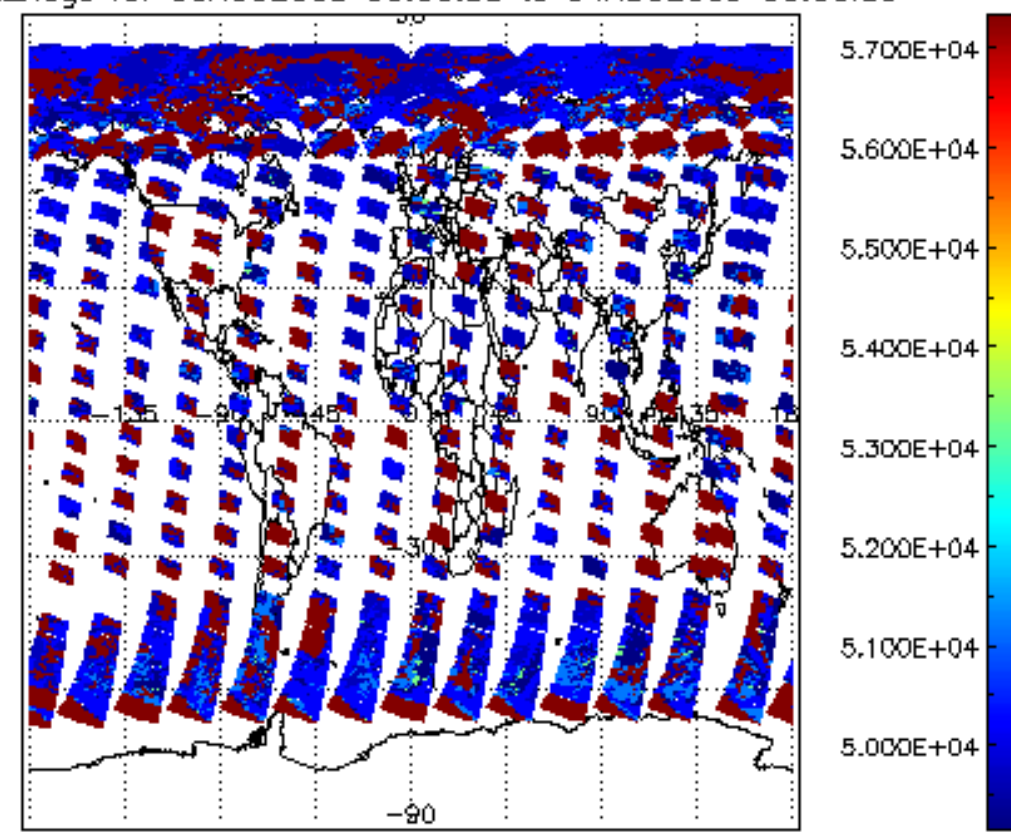
cL\_top\_height for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



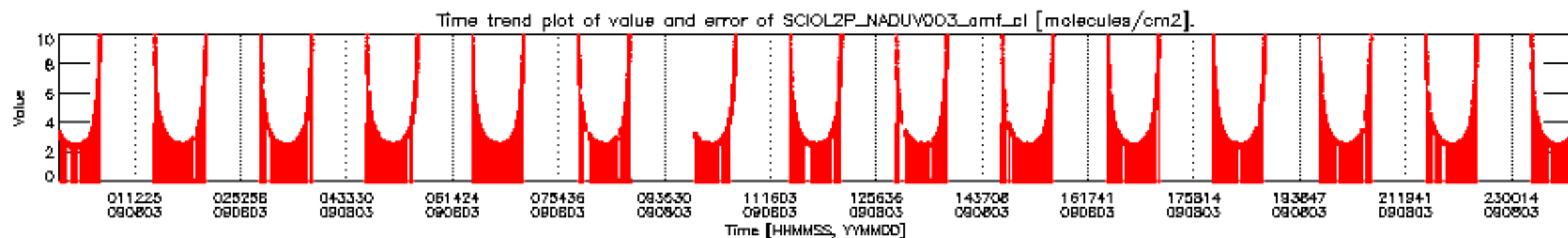
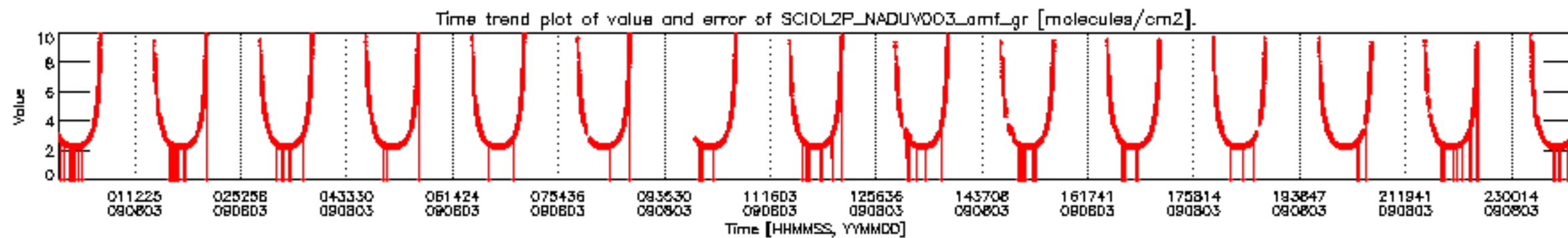
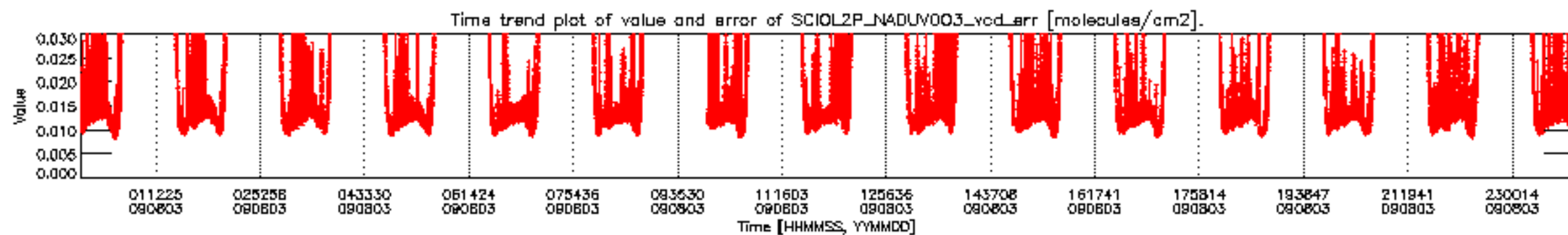
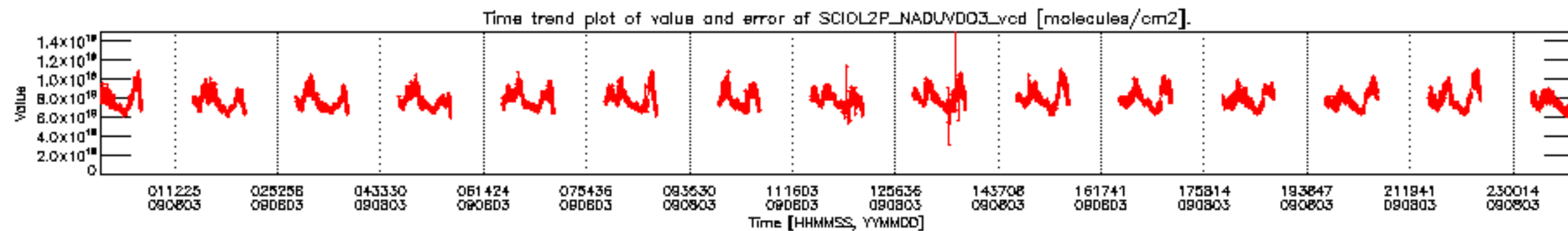
cL\_opt\_depth for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



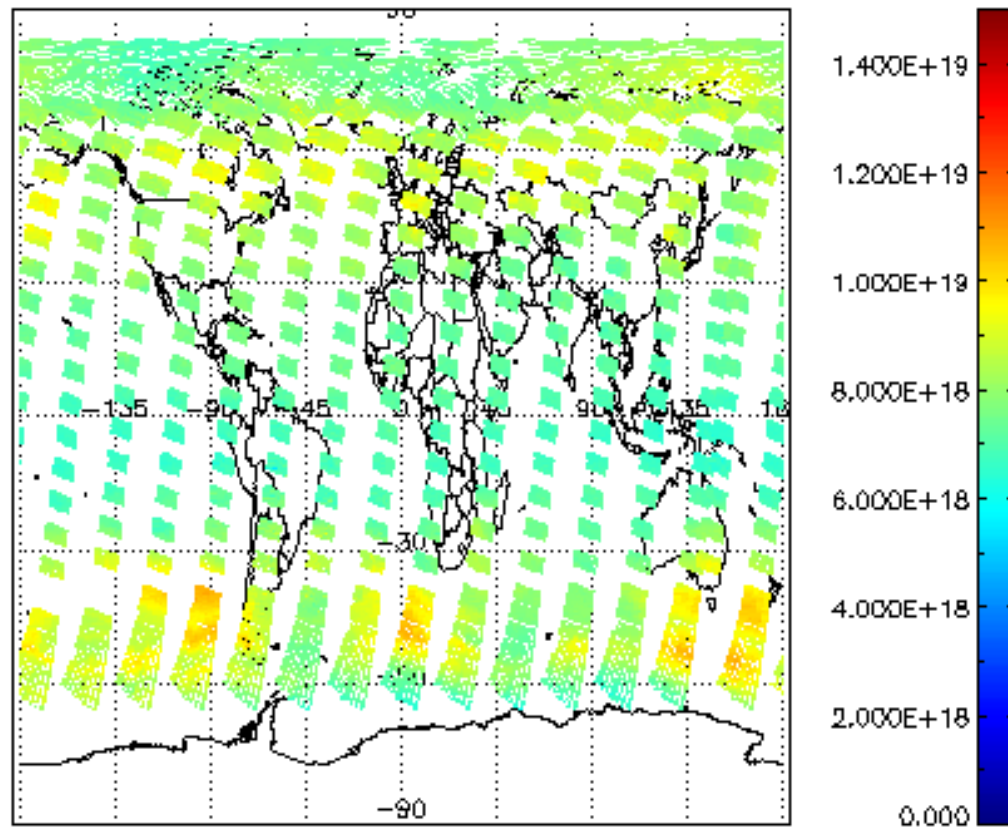
cloud\_flags for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



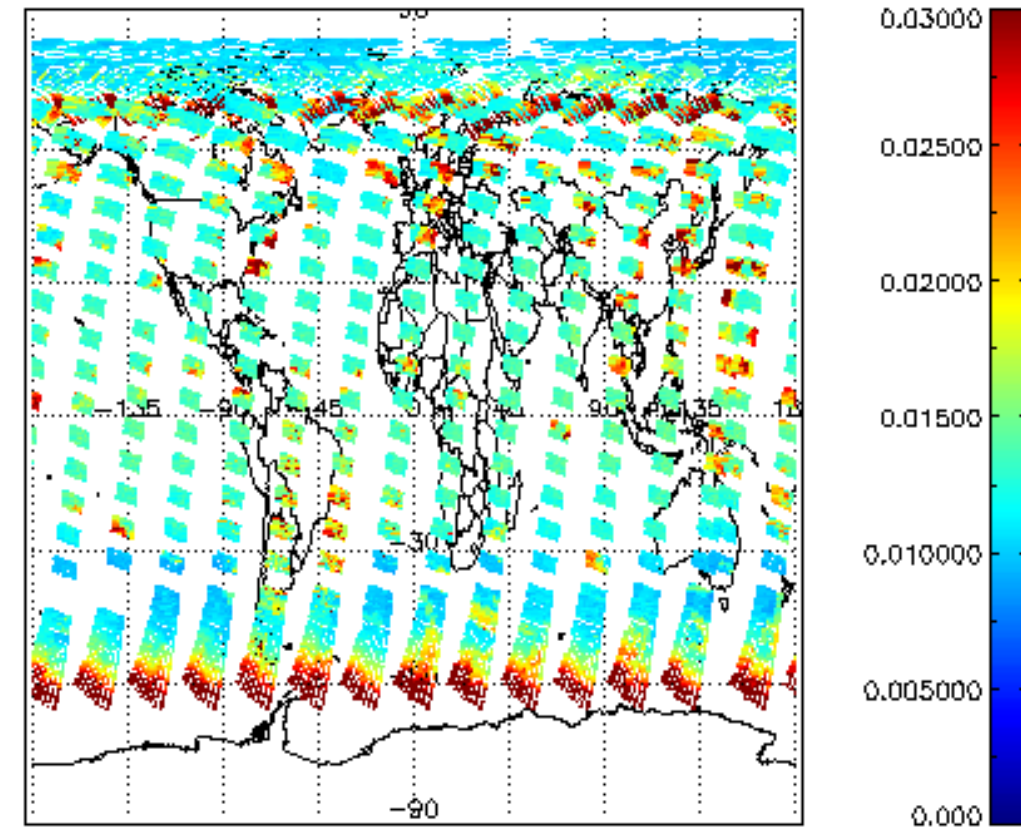




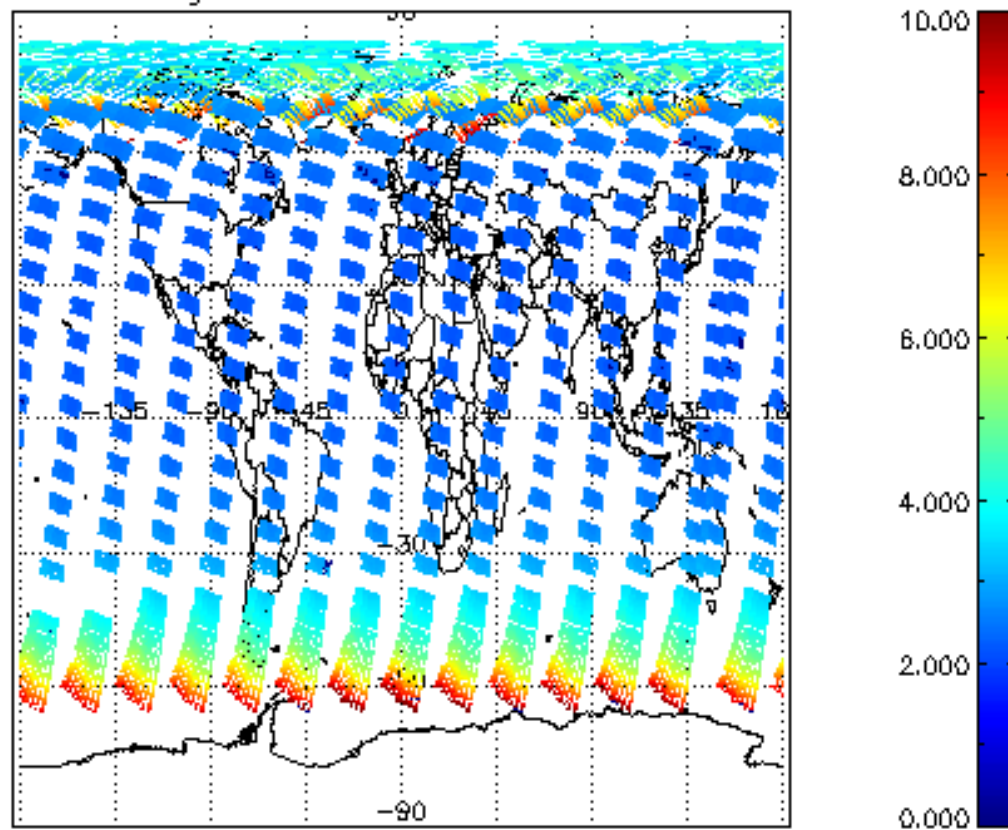
SCIOL2P\_NADUV003\_vcd for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



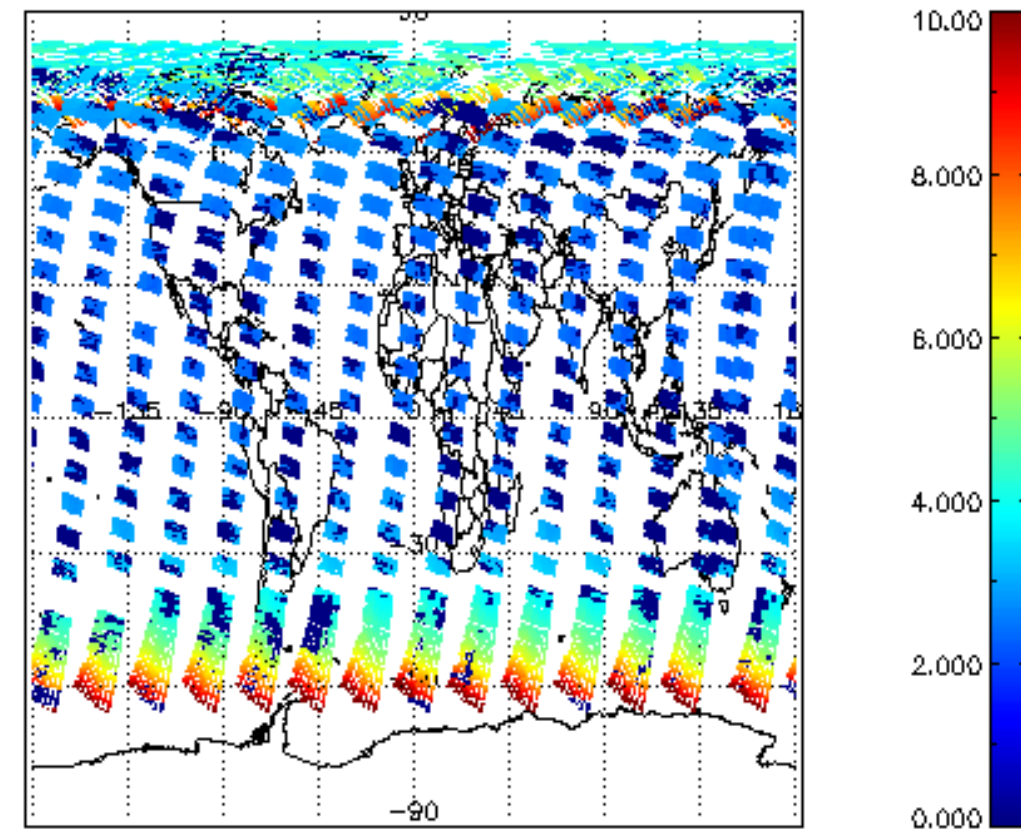
SCIOL2P\_NADUV003\_vcd\_err for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



SCIOL2P\_NADUV003\_amf\_gr for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



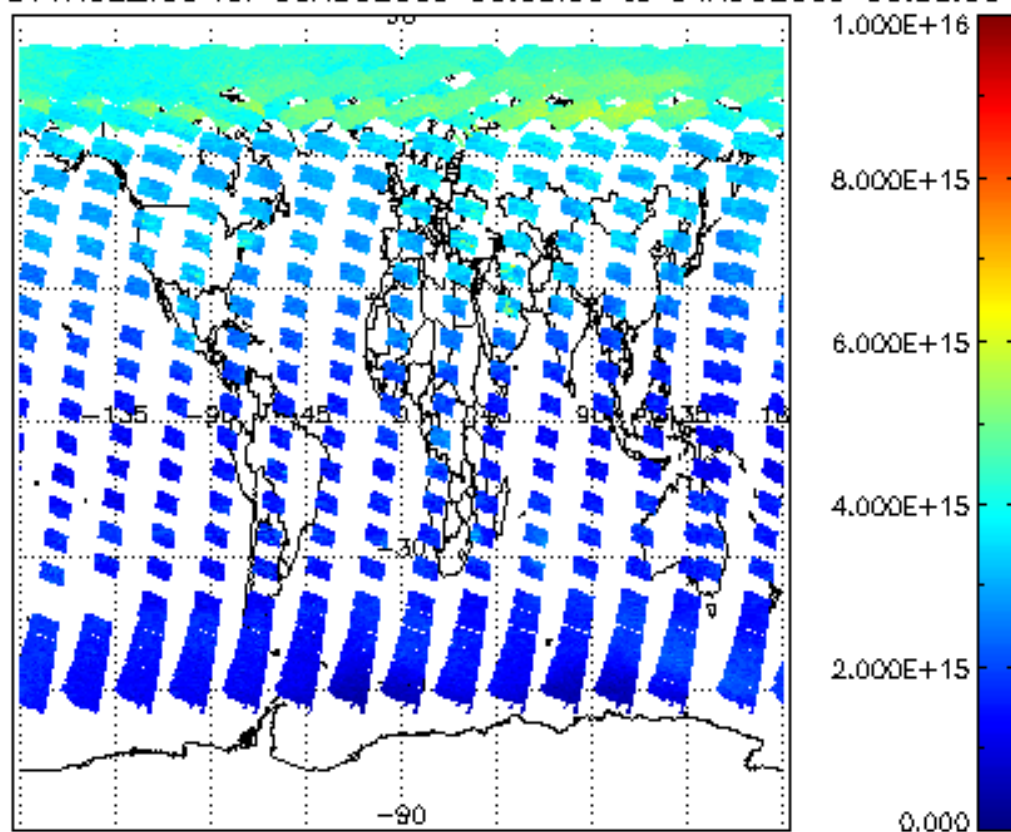
SCIOL2P\_NADUV003\_amf\_cl for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



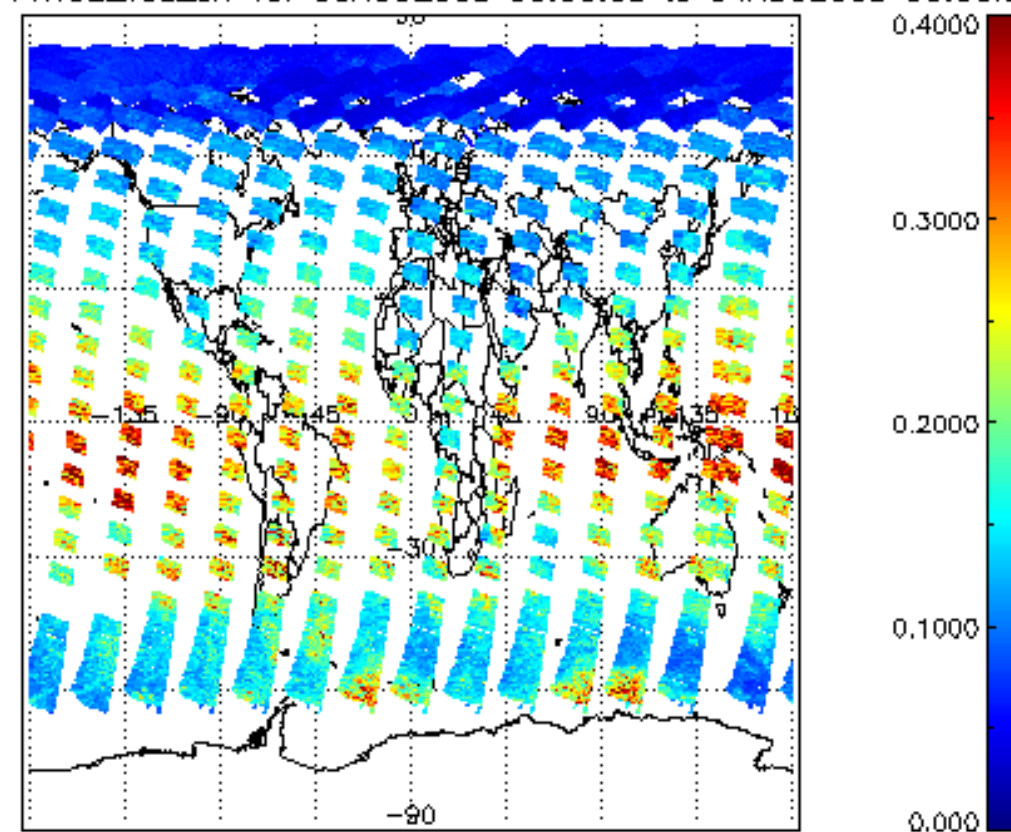




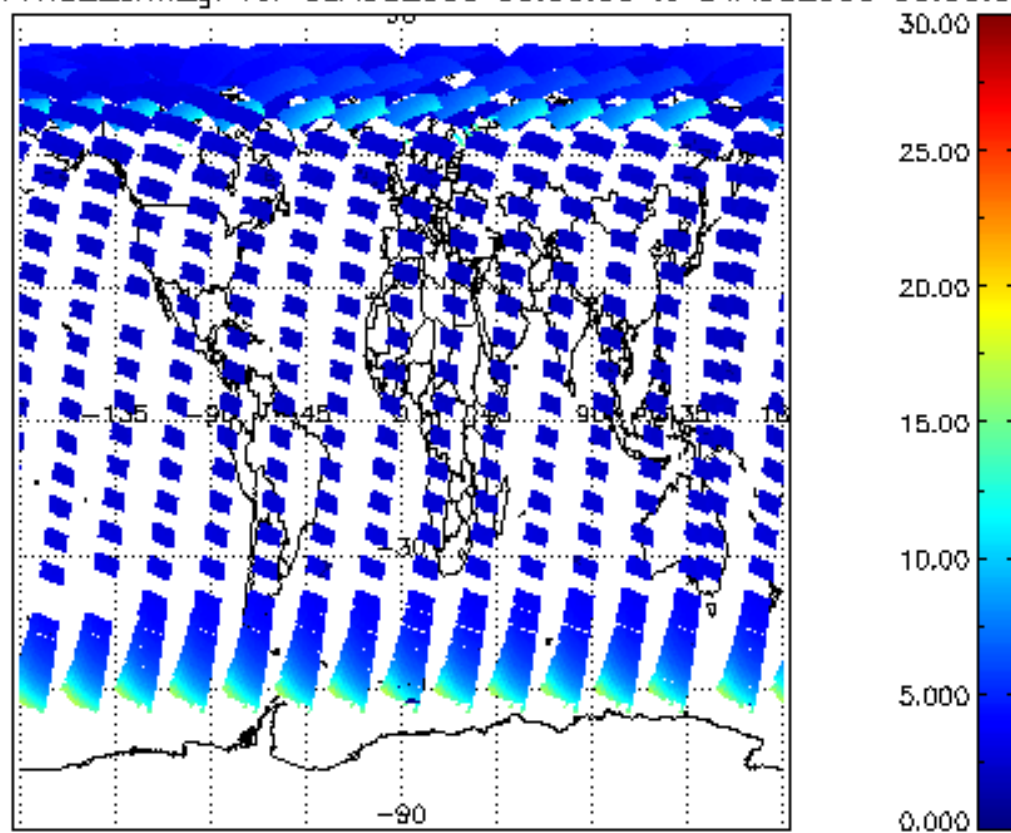
SCIOL2P\_NADUV1NO2\_vcd for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



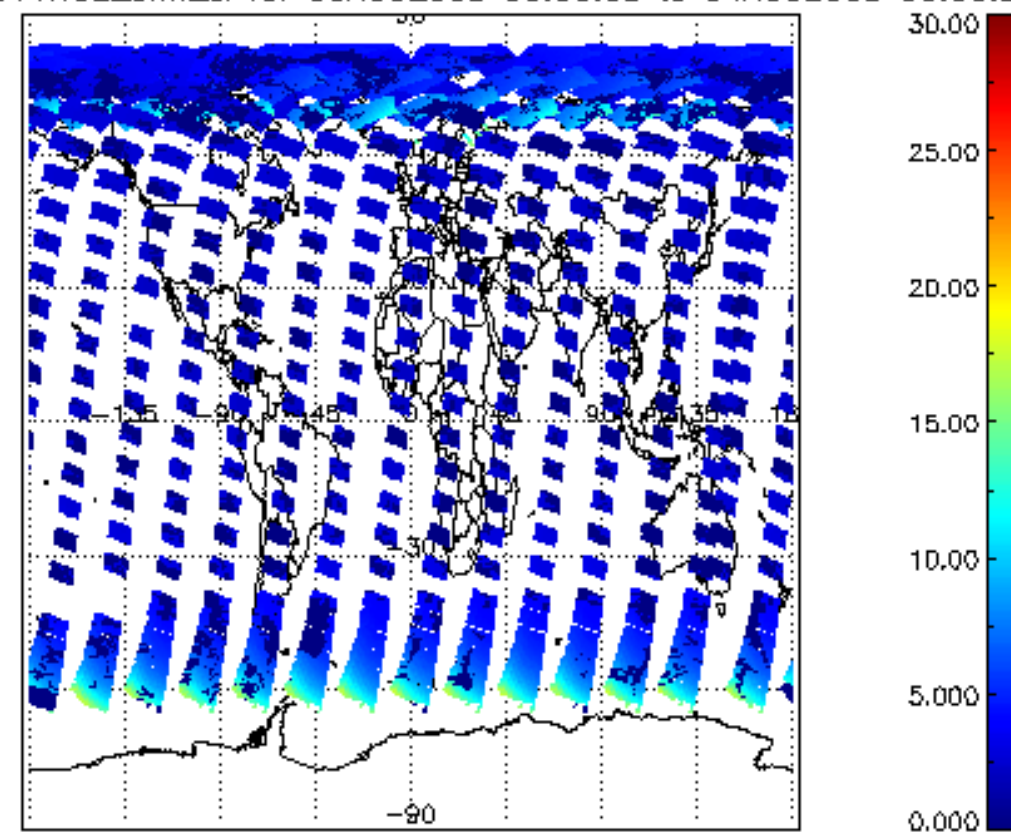
SCIOL2P\_NADUV1NO2\_vcd\_err for 03AUG2009 00:00:00 to 04AUG2009 00:00:00



SCIOL2P\_NADUV1NO2\_amf\_gr for 03AUG2009 00:00:00 to 04AUG2009 00:00:00

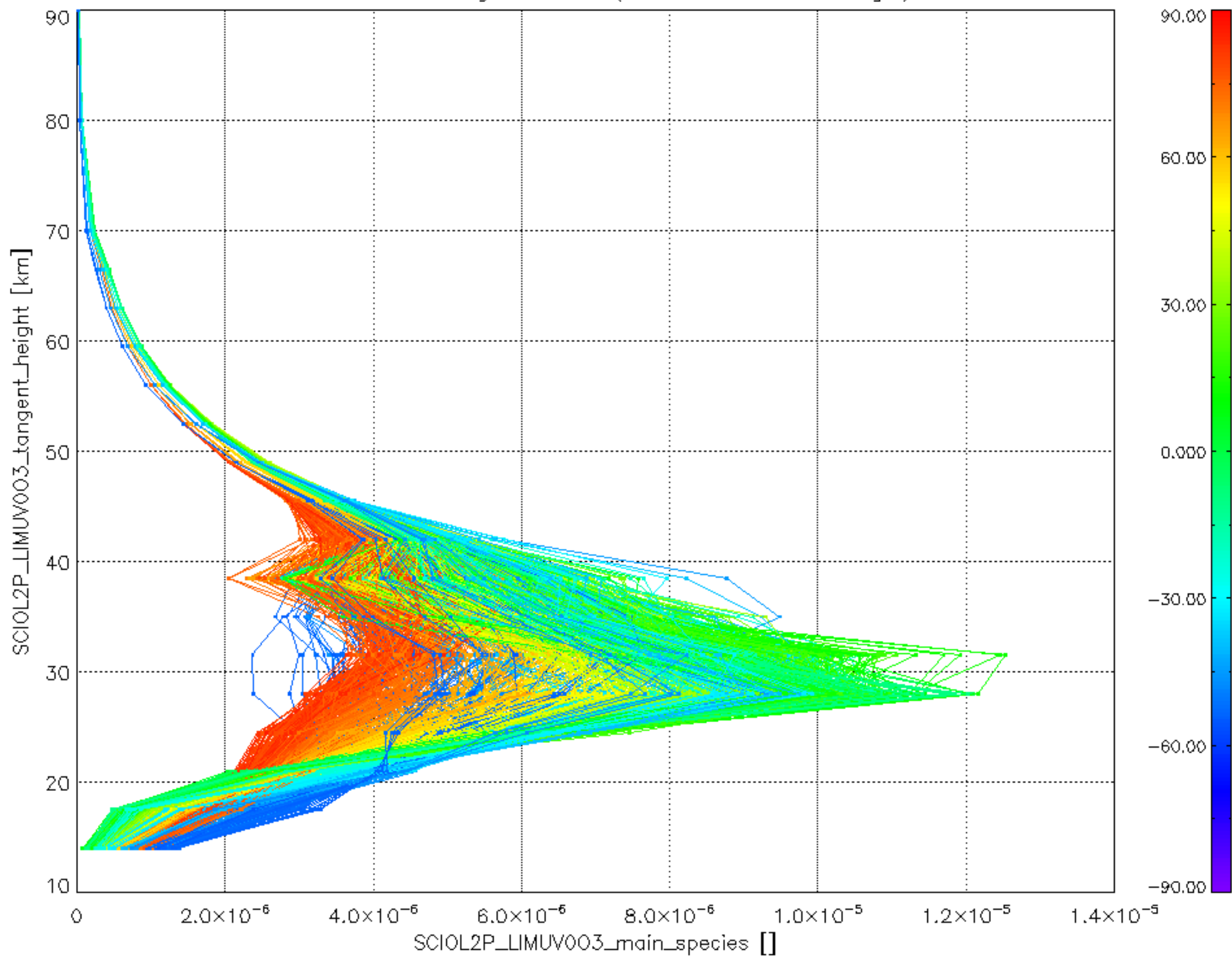


SCIOL2P\_NADUV1NO2\_amf\_cl for 03AUG2009 00:00:00 to 04AUG2009 00:00:00





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).

