

## 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 13:46:14
Data source version	SCIA-OL/3.01-R
Processing scope for products	02AUG2009 00:00:00 to 03AUG2009 00:00:00
Start time of first product within scope	01AUG2009 22:35:47
Stop time of last product within scope	03AUG2009 00:40:25
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.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	<a href="#">SCI_OL__2PRDPA20090801_223547_000033122081_00173_38804_3636.N1</a>	01AUG2009 22:35:47	01AUG2009 23:31:00	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20090802_001623_000033252081_00174_38805_3634.N1</a>	02AUG2009 00:16:23	02AUG2009 01:11:49	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20090802_015700_000033122081_00175_38806_3635.N1</a>	02AUG2009 01:57:00	02AUG2009 02:52:13	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20090802_033736_000033252081_00176_38807_3637.N1</a>	02AUG2009 03:37:36	02AUG2009 04:33:01	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20090802_051812_000033122081_00177_38808_3639.N1</a>	02AUG2009 05:18:12	02AUG2009 06:13:25	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20090802_065849_000033252081_00178_38809_3640.N1</a>	02AUG2009 06:58:49	02AUG2009 07:54:14	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20090802_083925_000033122081_00179_38810_3641.N1</a>	02AUG2009 08:39:25	02AUG2009 09:34:38	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20090802_102001_000033252081_00180_38811_3642.N1</a>	02AUG2009 10:20:01	02AUG2009 11:15:26	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20090802_120037_000033122081_00181_38812_3643.N1</a>	02AUG2009 12:00:37	02AUG2009 12:55:50	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20090802_134113_000033252081_00182_38813_3644.N1</a>	02AUG2009 13:41:13	02AUG2009 14:36:39	0	GOOD
10	<a href="#">SCI_OL__2PRDPA20090802_152149_000033122081_00183_38814_3645.N1</a>	02AUG2009 15:21:49	02AUG2009 16:17:02	0	GOOD
11	<a href="#">SCI_OL__2PRDPA20090802_170244_000033312081_00184_38815_3649.N1</a>	02AUG2009 17:02:44	02AUG2009 17:58:15	0	GOOD
12	<a href="#">SCI_OL__2PRDPA20090802_184320_000033122081_00185_38816_3650.N1</a>	02AUG2009 18:43:20	02AUG2009 19:38:33	0	GOOD
13	<a href="#">SCI_OL__2PRDPA20090802_202338_000033252081_00186_38817_3646.N1</a>	02AUG2009 20:23:38	02AUG2009 21:19:04	0	GOOD
14	<a href="#">SCI_OL__2PRDPA20090802_220415_000033122081_00187_38818_3647.N1</a>	02AUG2009 22:04:15	02AUG2009 22:59:27	0	GOOD
15	<a href="#">SCI_OL__2PRDPA20090802_234451_000033342081_00188_38819_3648.N1</a>	02AUG2009 23:44:51	03AUG2009 00:40:25	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: 145224

Total number of cloud data DSRs with good quality flag (=0): 145224 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	145224	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	145224	0.17043	0.12500	0.12500	0.25000	0.060124	s
CL_FRAC	145224	0.28267	0.21591	0.0000	1.0000	0.27385	-
CL_FRAC_ERR	145224	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	145224	5.4538	4.0000	4.0000	8.0000	1.9240	
PMD_READ_CL[0]	145224	0.15701	0.0000	0.0000	8.0000	0.90807	-
PMD_READ_CL[1]	145224	1.8061	0.0000	0.0000	8.0000	2.6529	-
CL_TOP_HEIGHT	125841	3.3299	1.5026	0.0000	17.000	3.8238	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	125841	57.957	82.544	0.0000	101.00	45.080	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	145224	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	145224	11001101	11000100	11000000	11100000	3594.0	flags
AERO_ABSO_IND	145224	4.2876	5.0837	-5.9465	19.416	2.8050	
AERO_IND_DIAG	145224	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	145224	01011000	00000000	00000000	11000000	24494.	flags

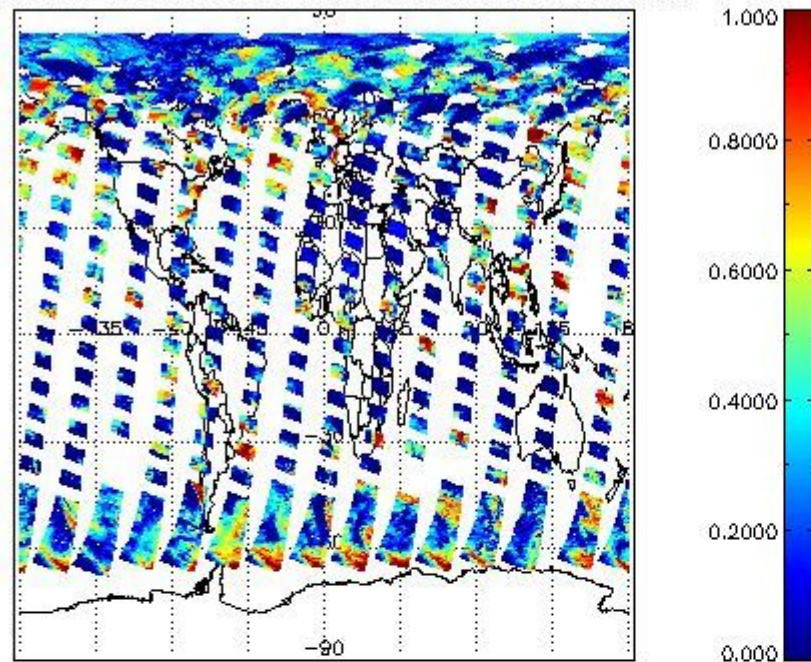
### Time and geolocation plots:

Plots are available for the following parameters:

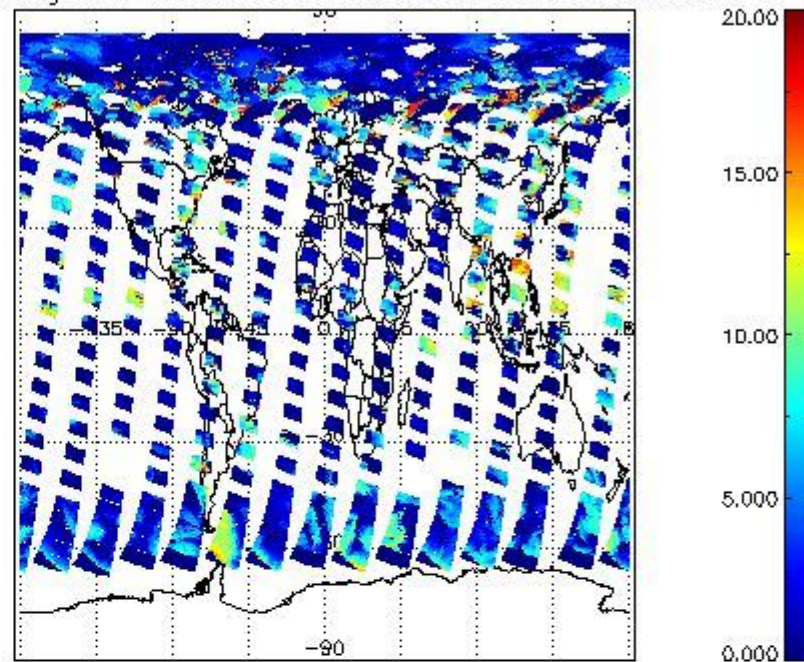
Number	Data item ID
0	cl_frac
1	cl_top_height
2	cl_opt_depth
3	cloud_flags



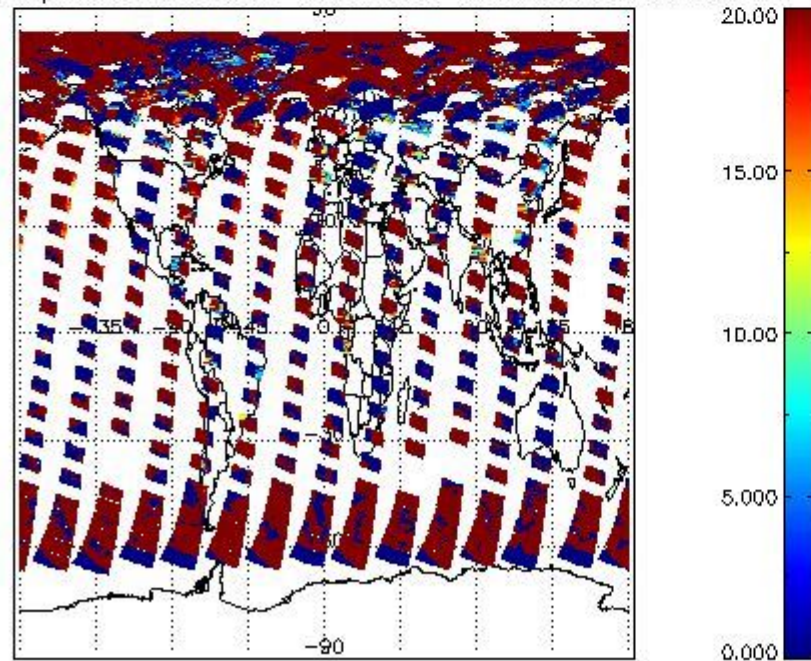
cL\_frac for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



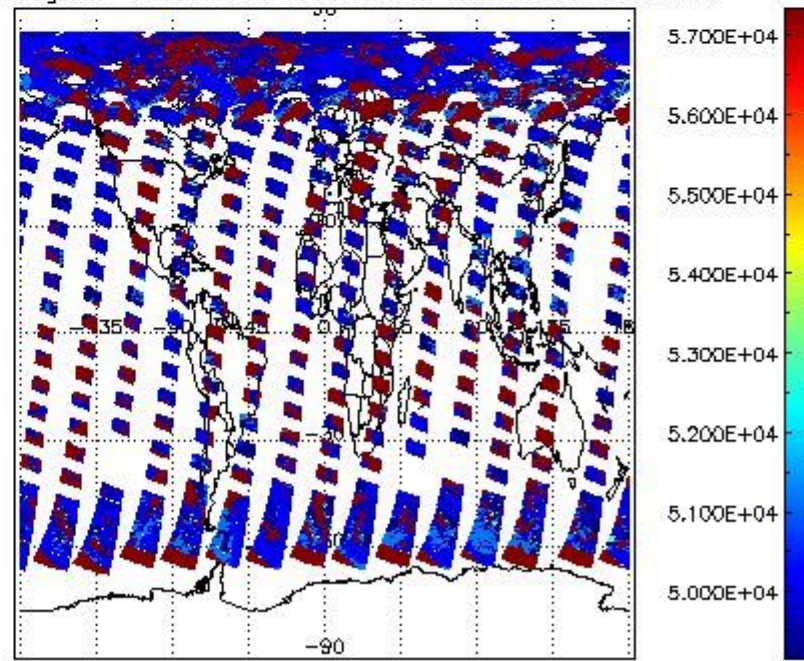
cL\_top\_height for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



cL\_opt\_depth for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



cloud\_flags for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



## 2.2.2 Nadir

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

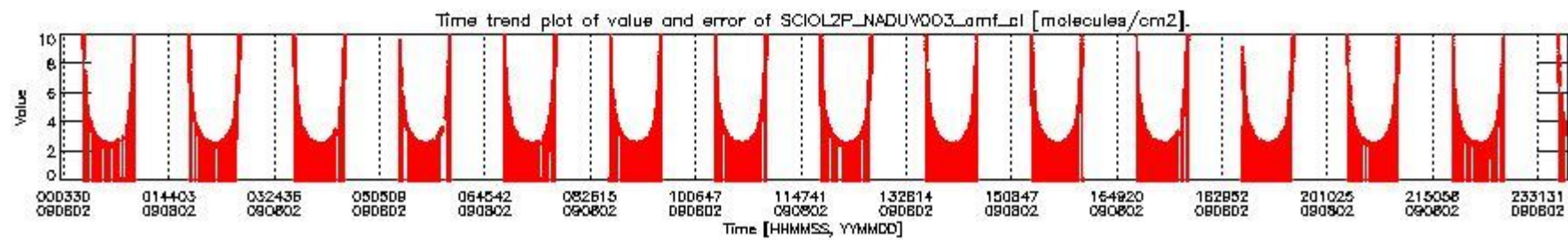
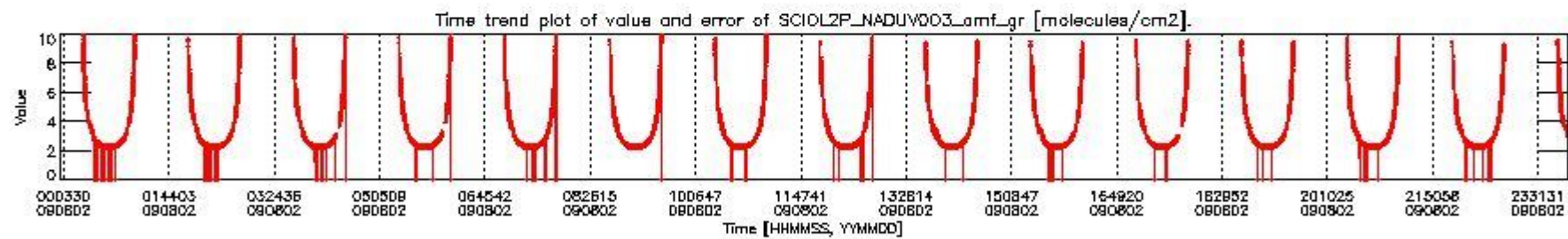
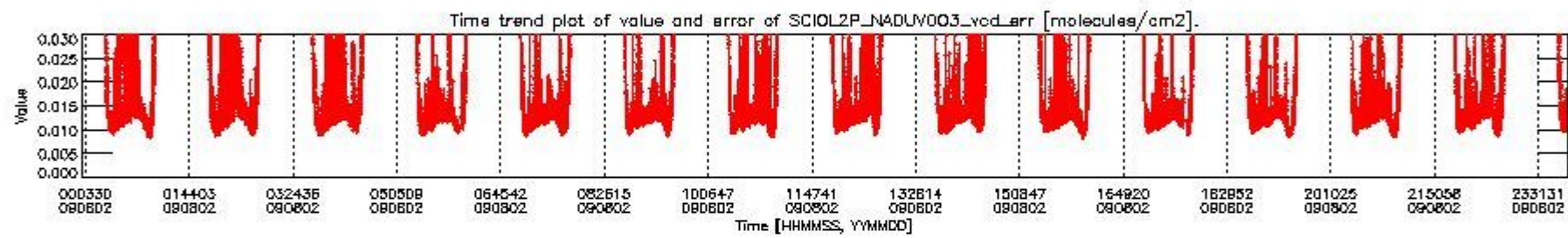
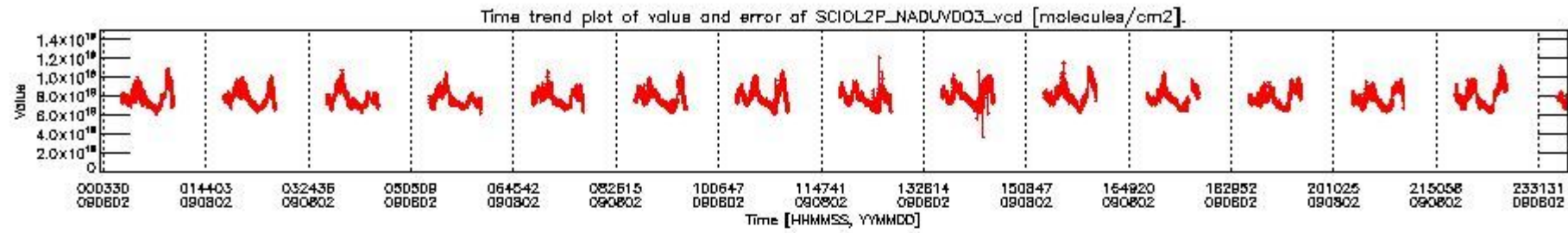
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr



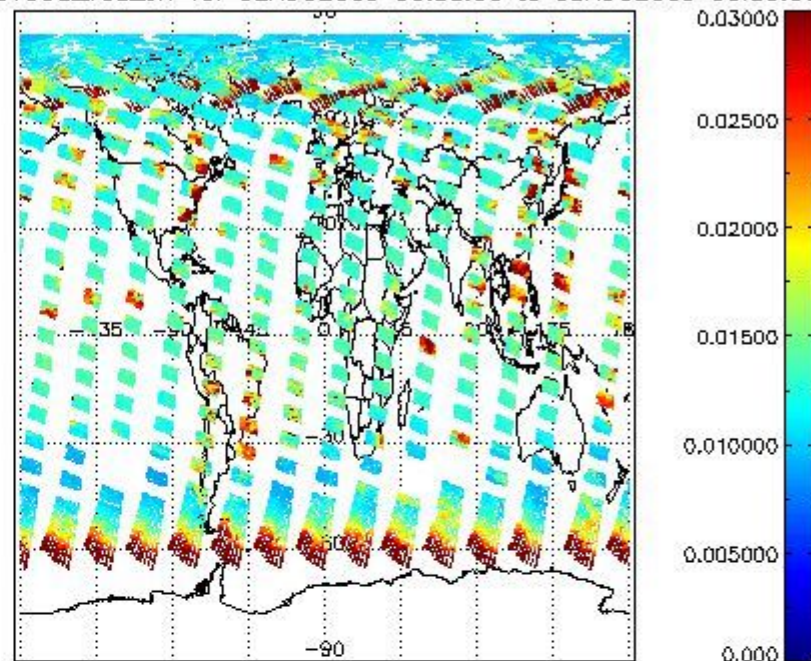
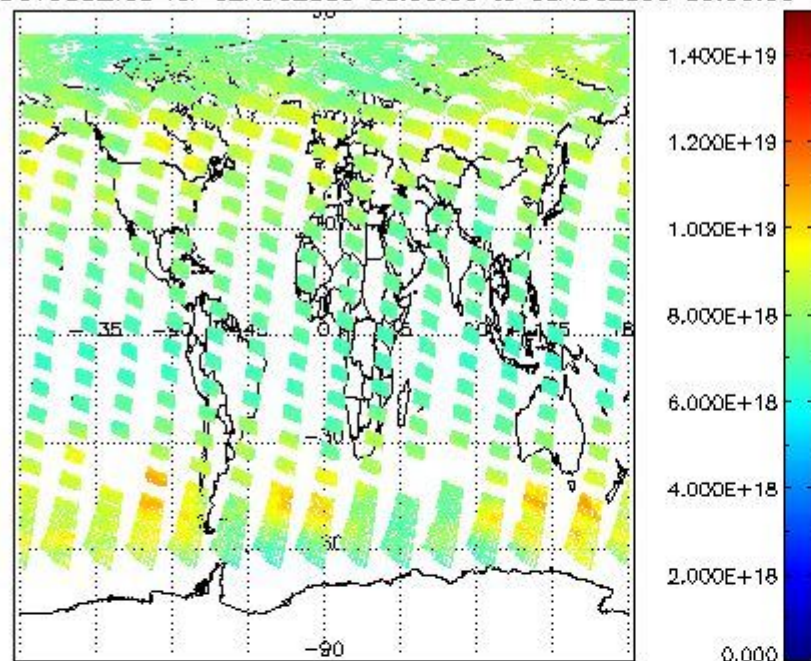
3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

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.

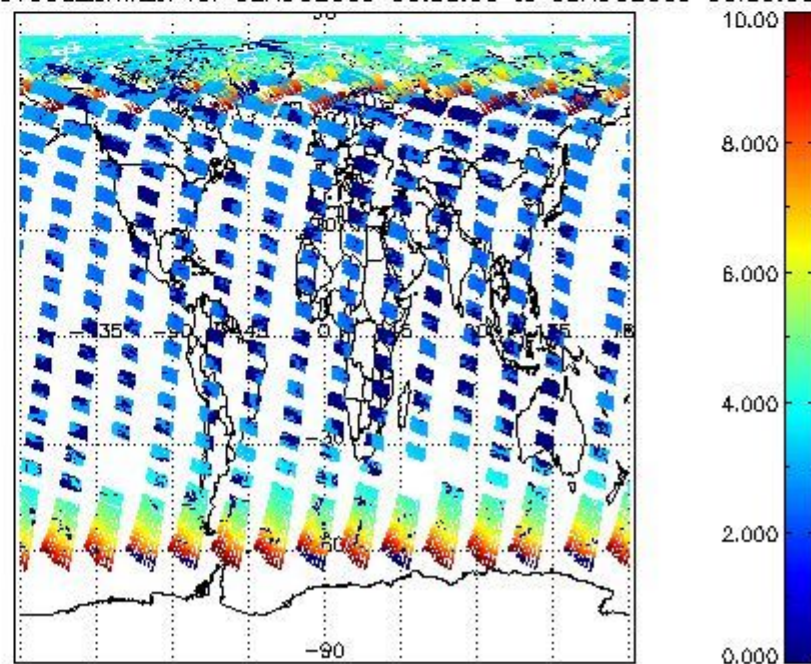
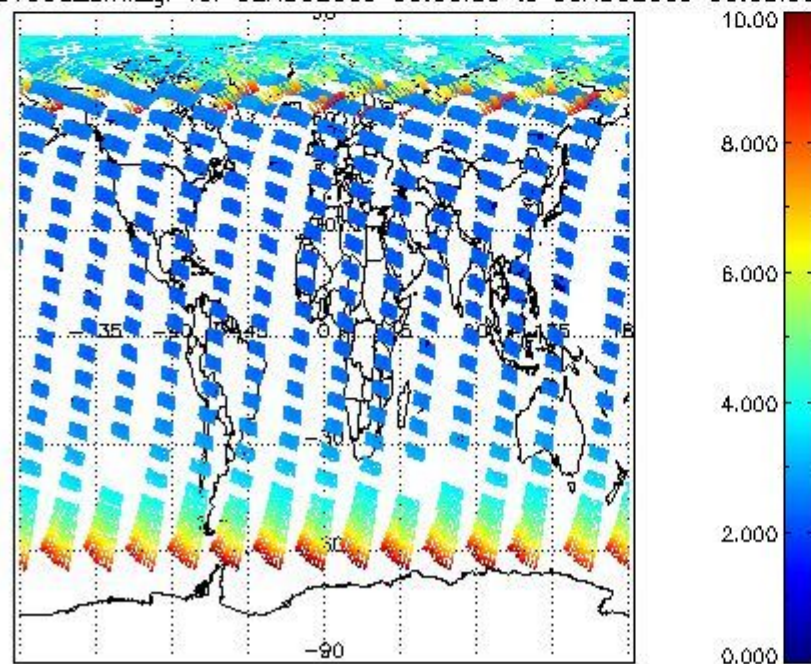




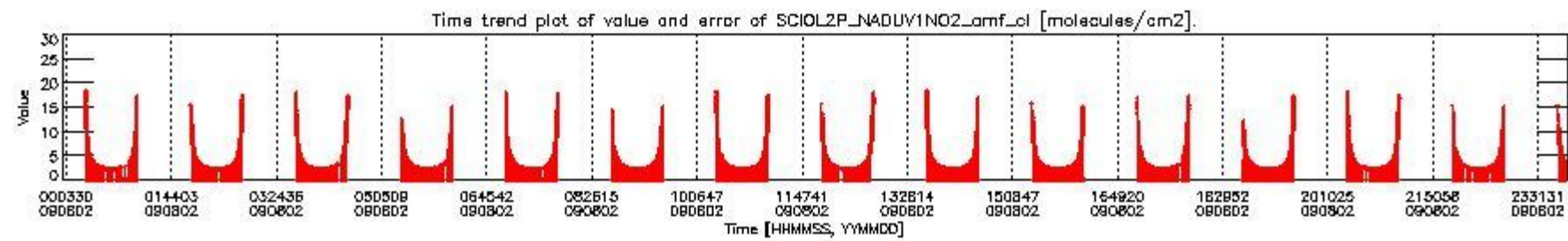
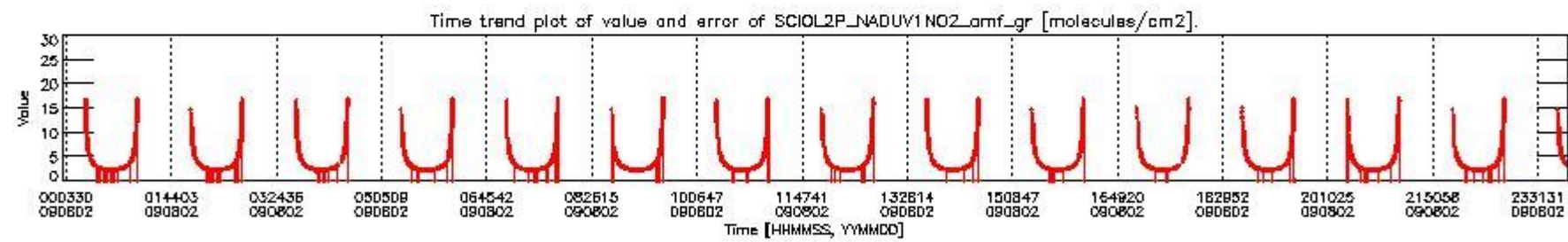
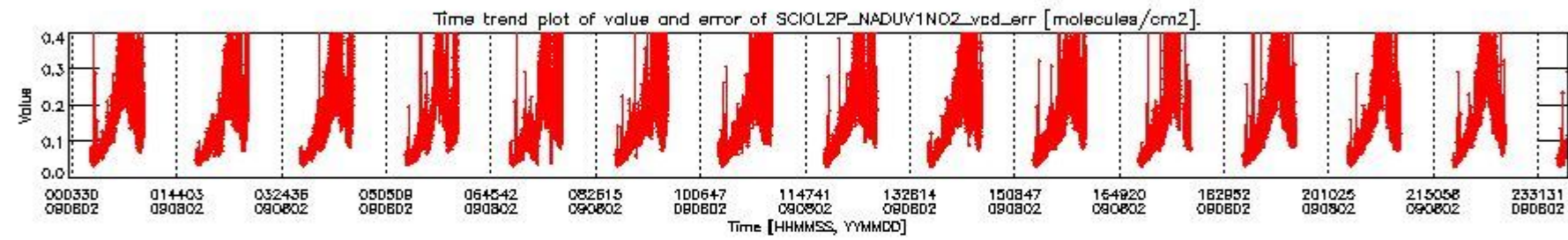
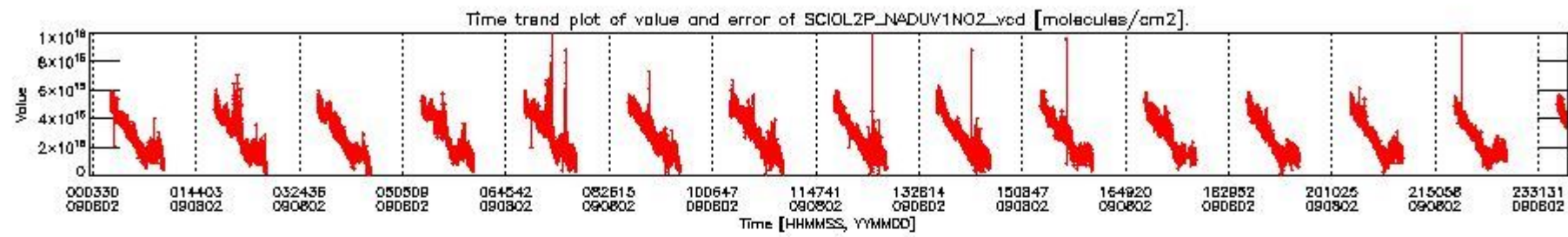
SCIOL2P\_NADUV003\_vcd for 02AUG2009 00:00:00 to 03AUG2009 00:00:00    SCIOL2P\_NADUV003\_vcd\_err for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



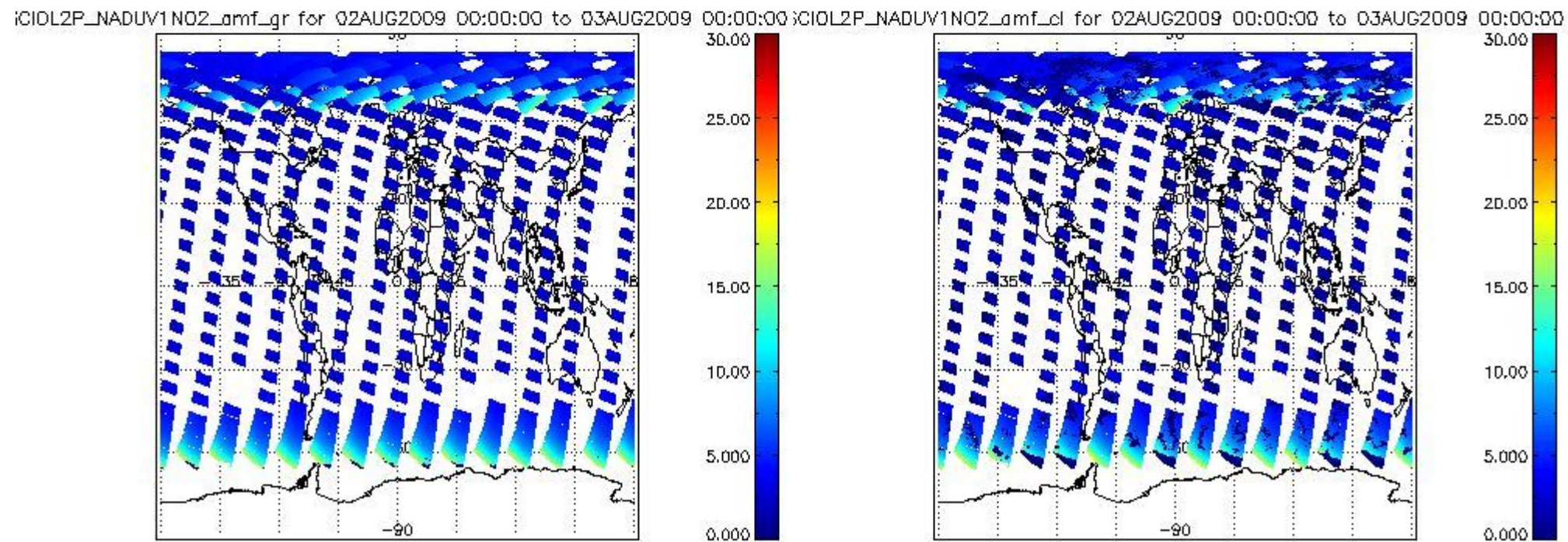
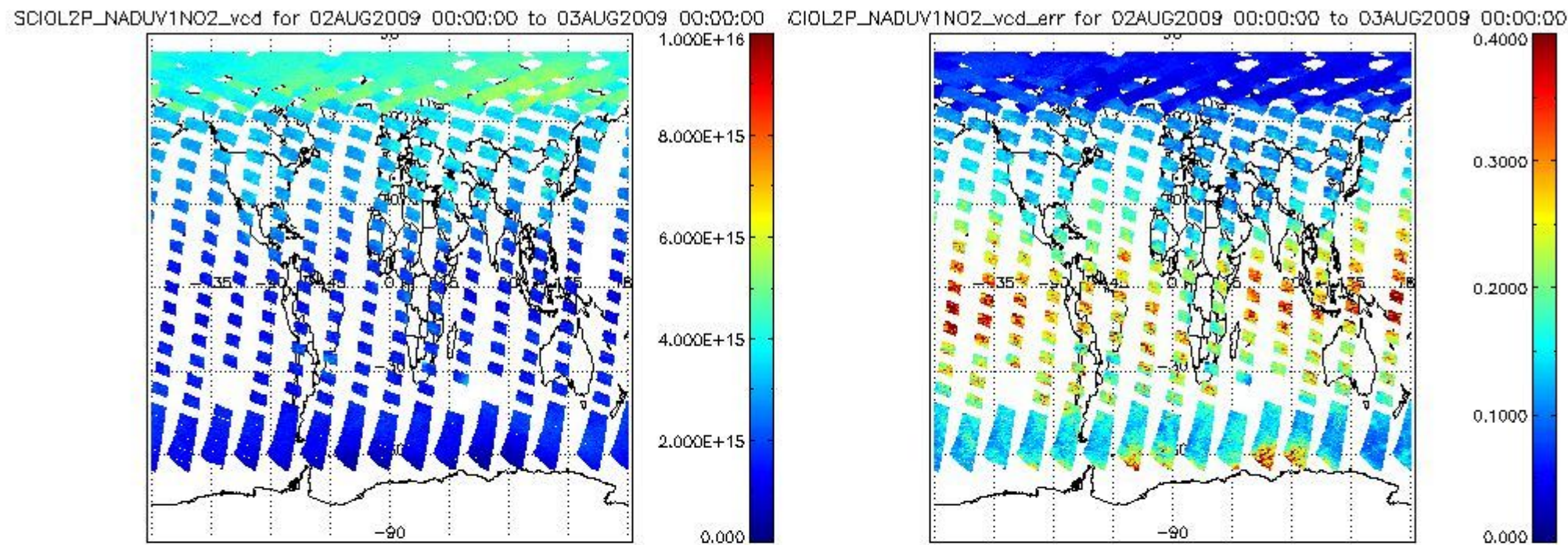
SCIOL2P\_NADUV003\_amf\_gr for 02AUG2009 00:00:00 to 03AUG2009 00:00:00    SCIOL2P\_NADUV003\_amf\_cl for 02AUG2009 00:00:00 to 03AUG2009 00:00:00











### 2.2.3 Limb

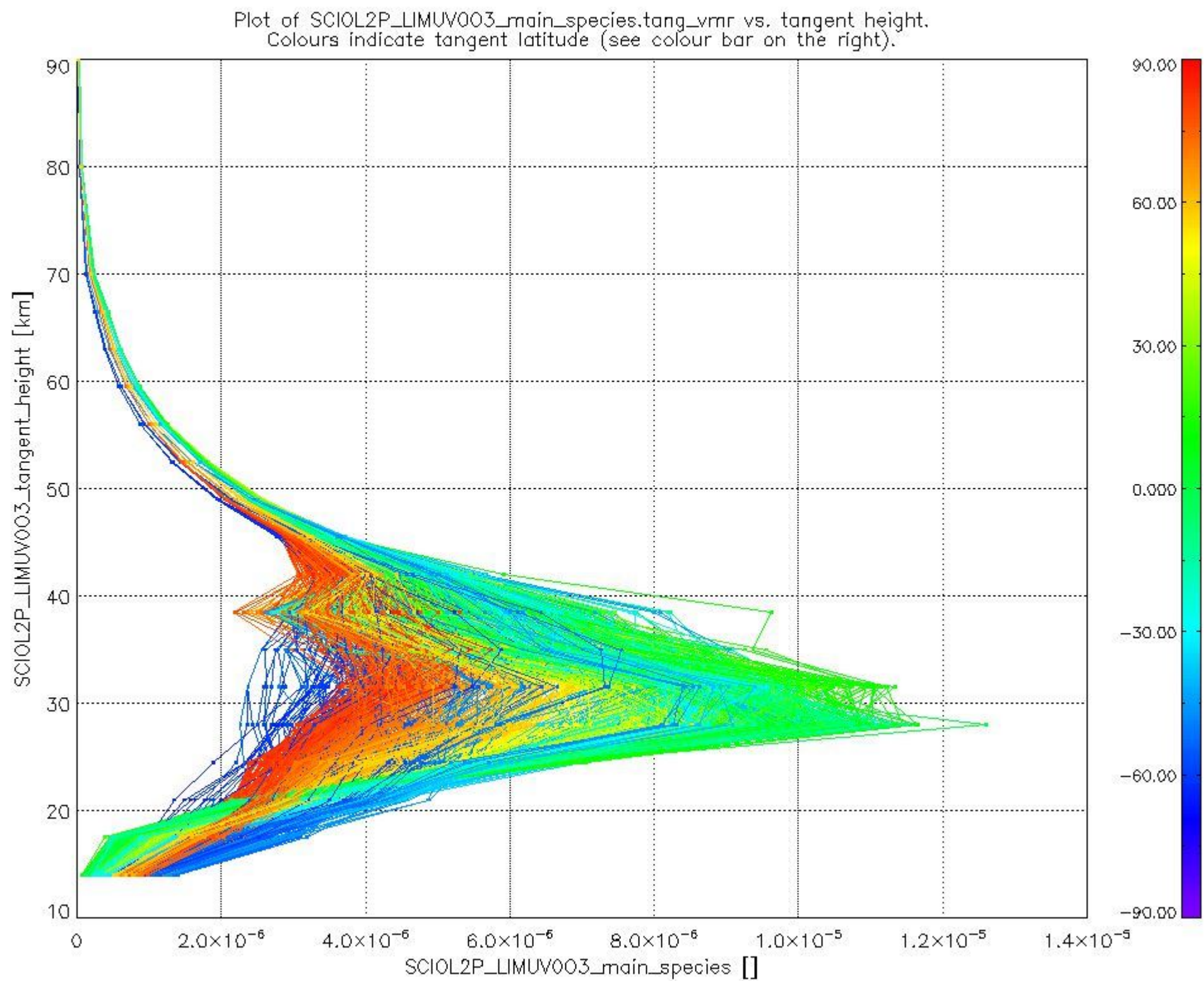
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

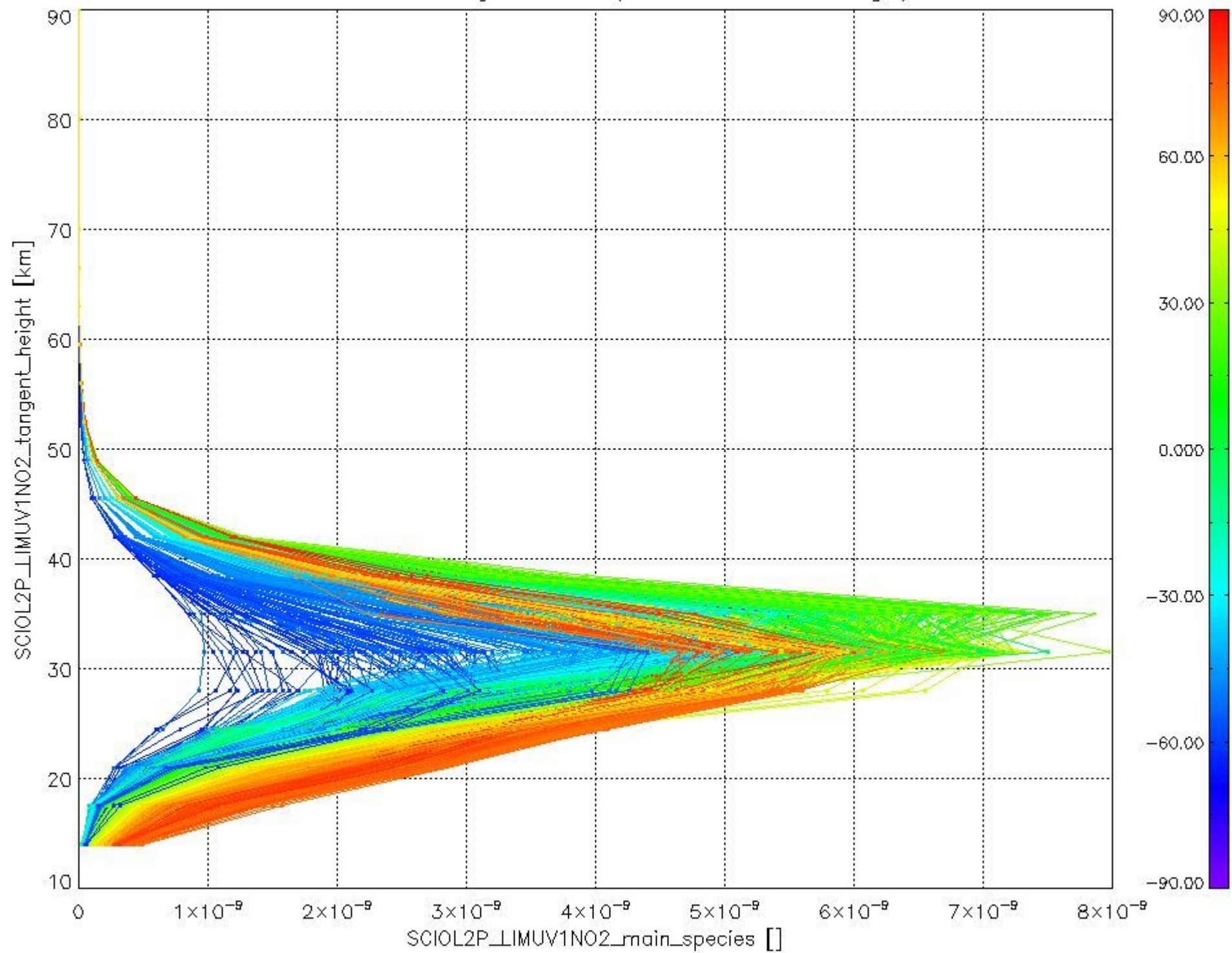


The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.





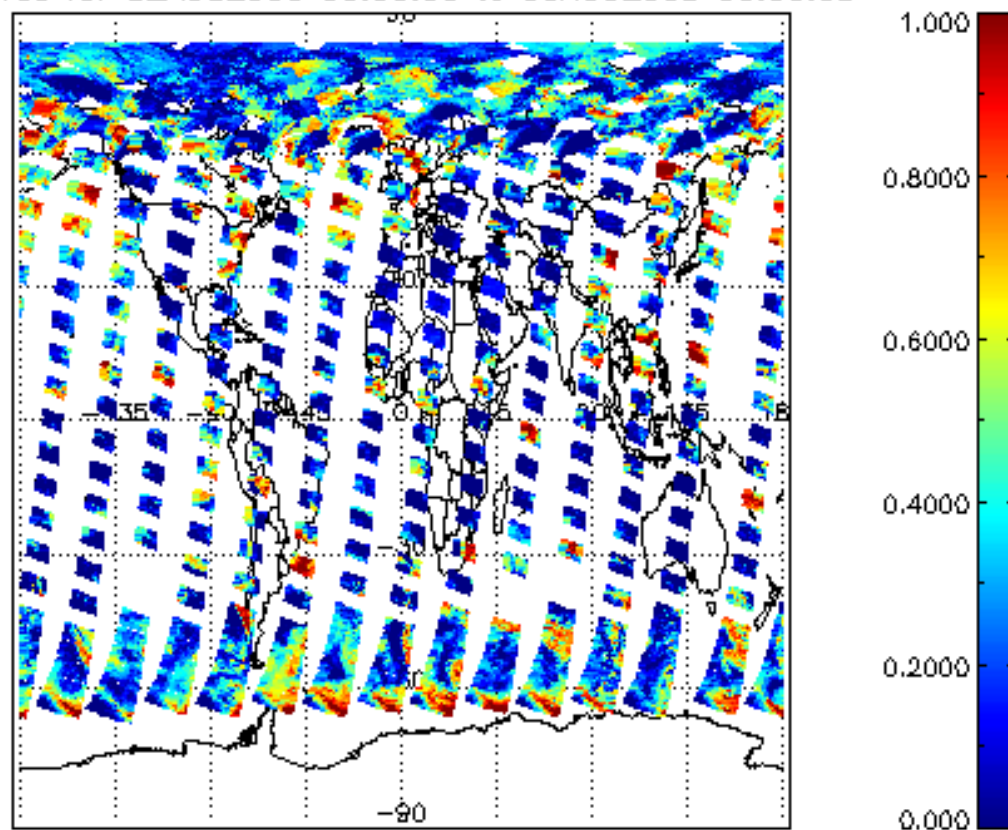
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



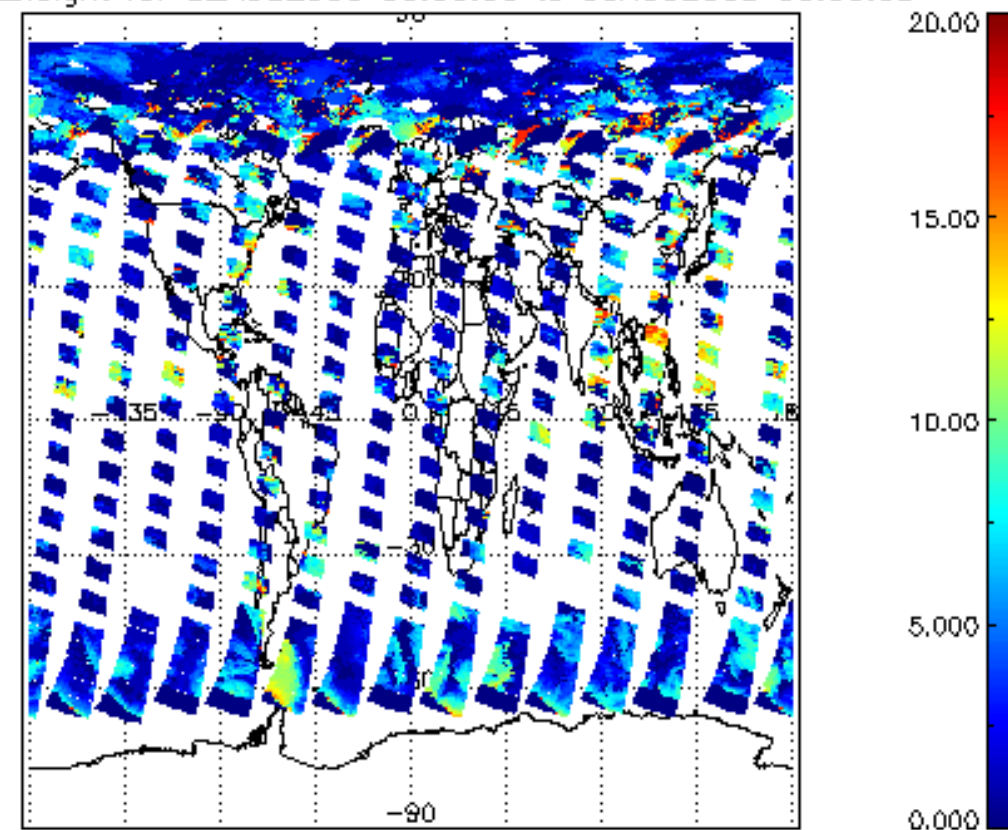
### 2.3 ADF monitoring

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

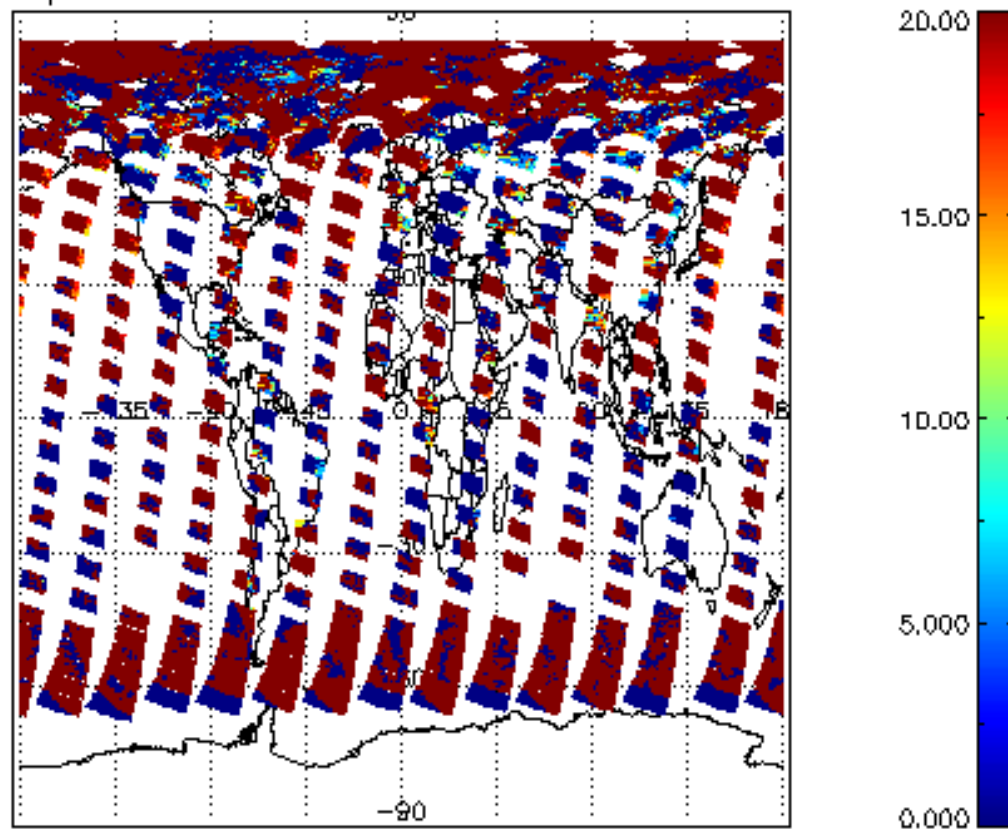
cL\_frac for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



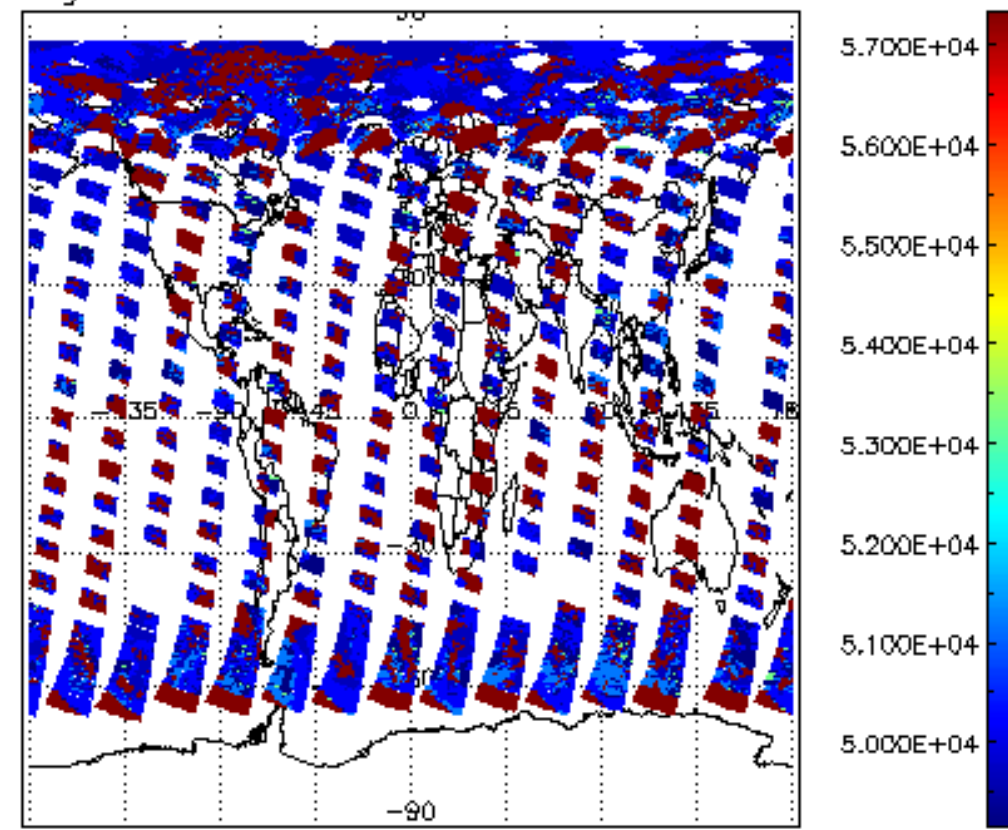
cL\_top\_height for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



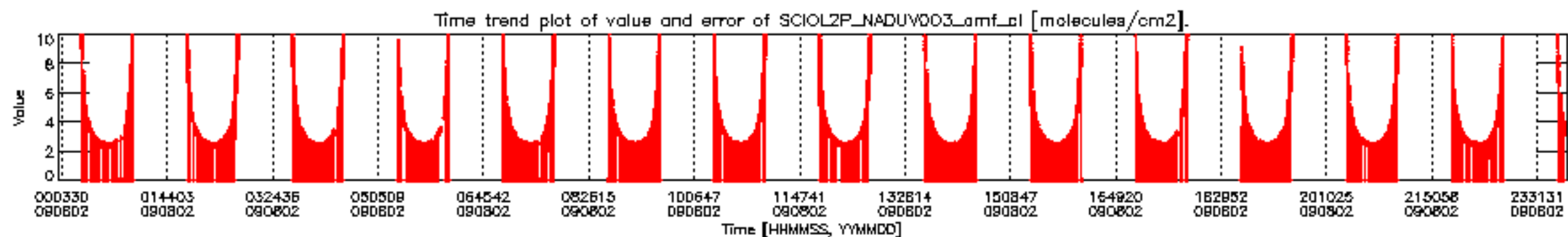
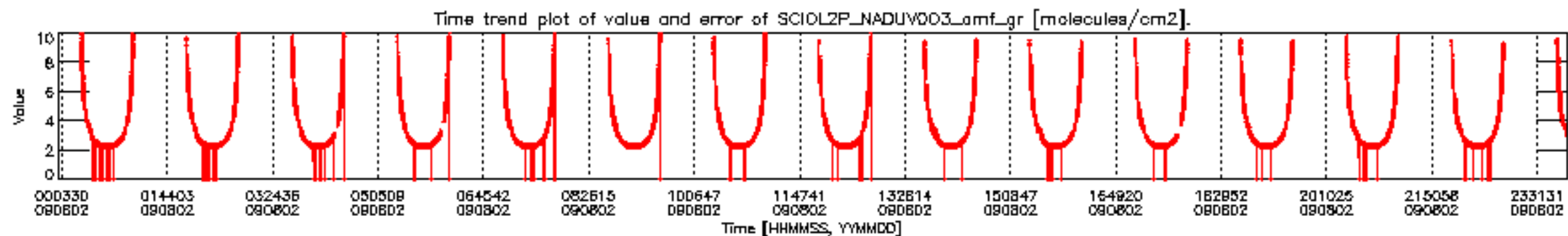
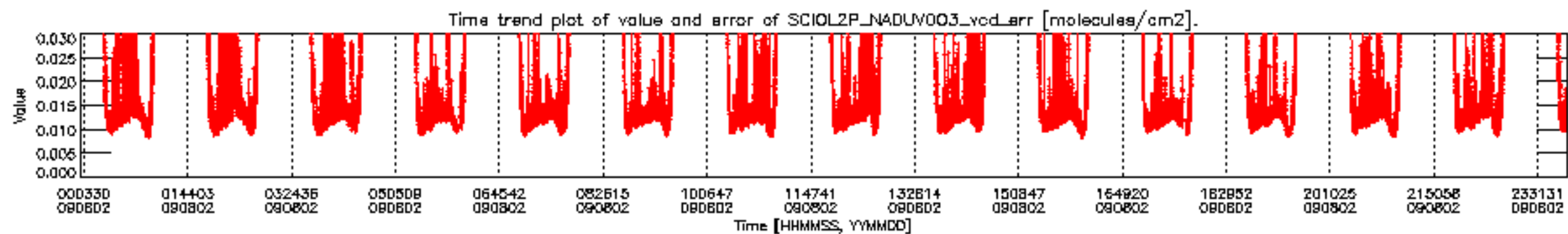
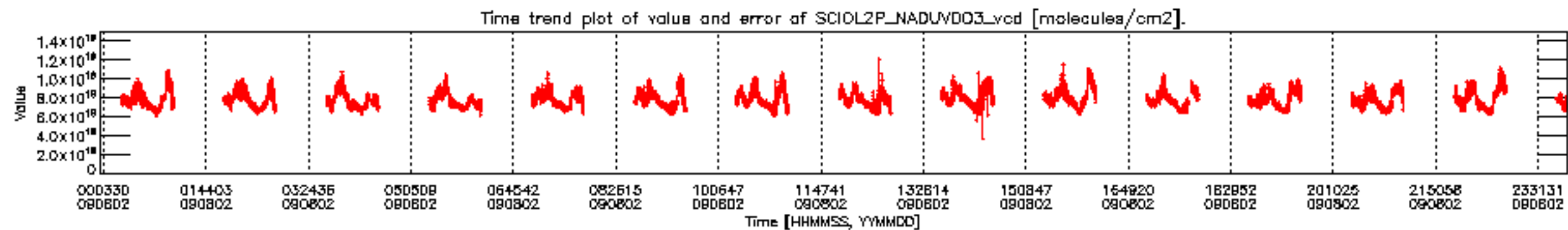
cL\_opt\_depth for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



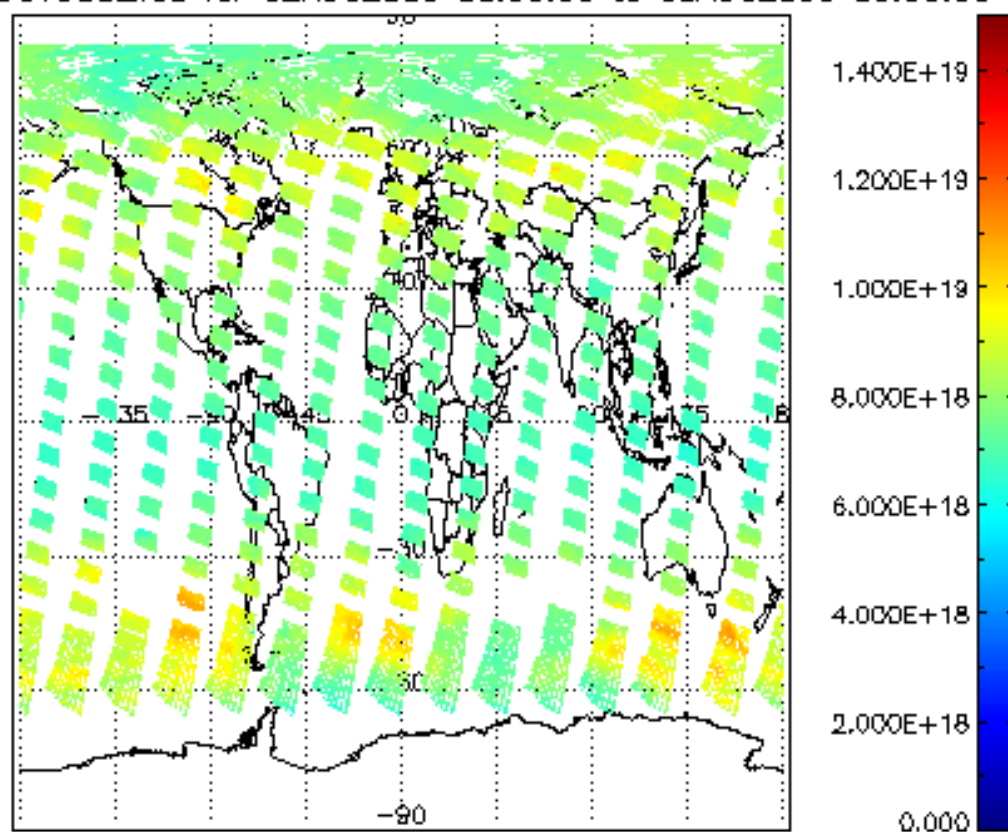
cloud\_flags for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



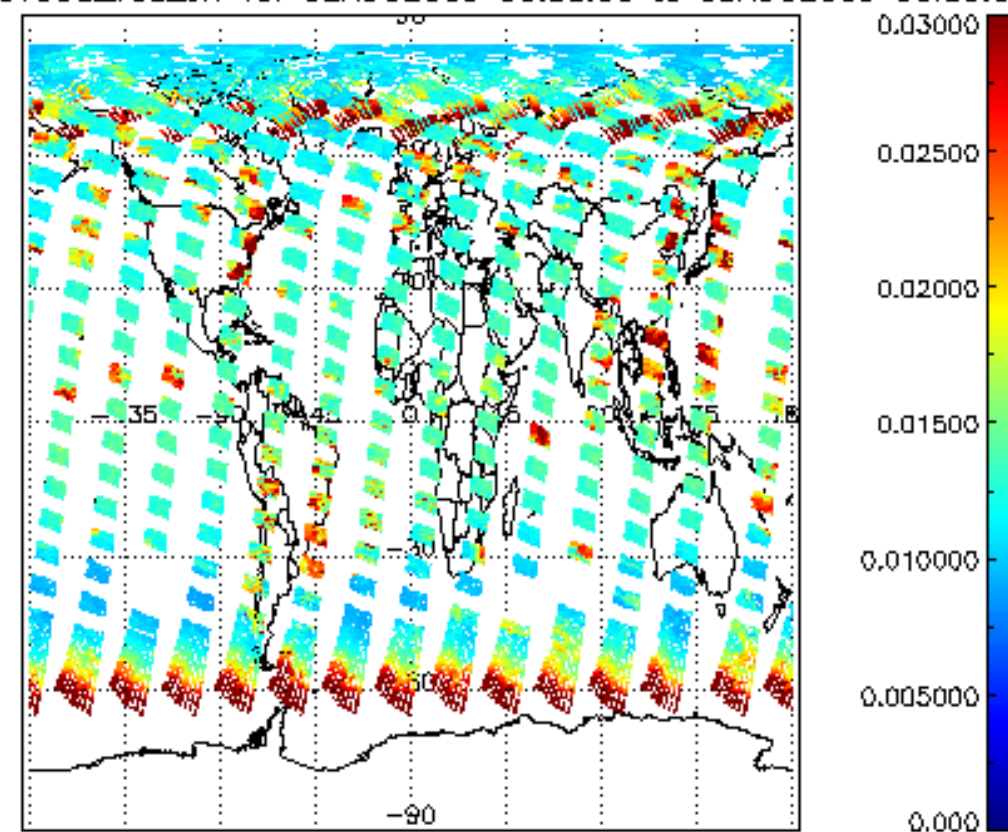




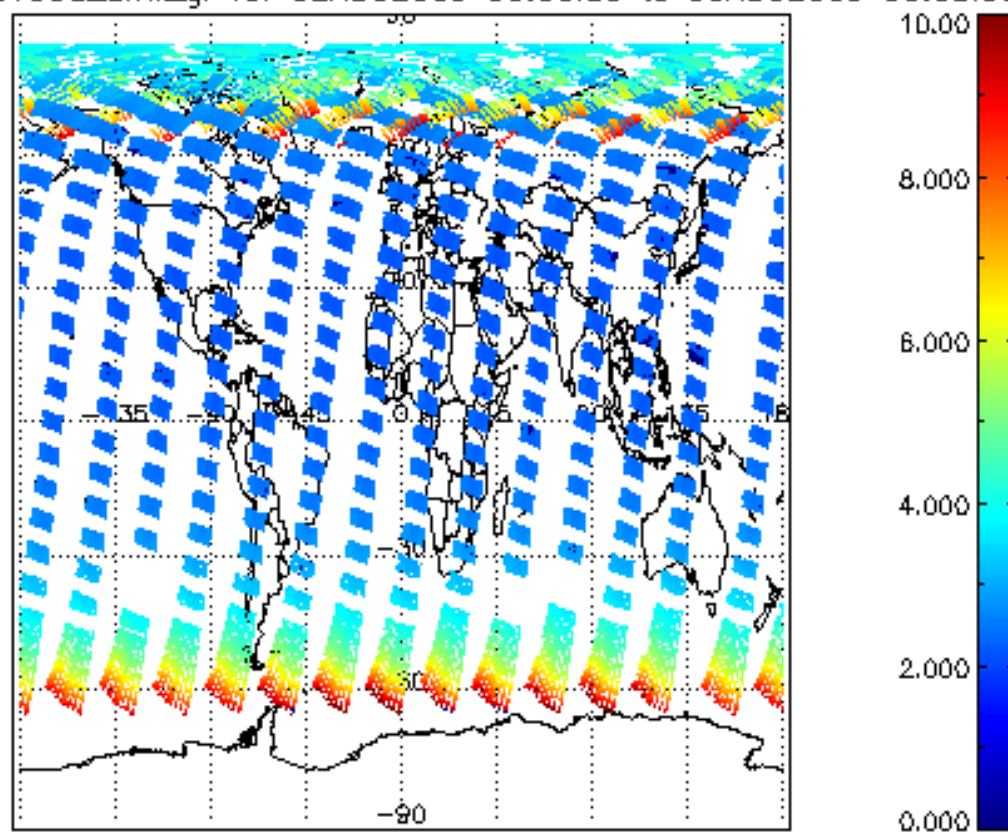
SCIOL2P\_NADUV003\_vcd for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



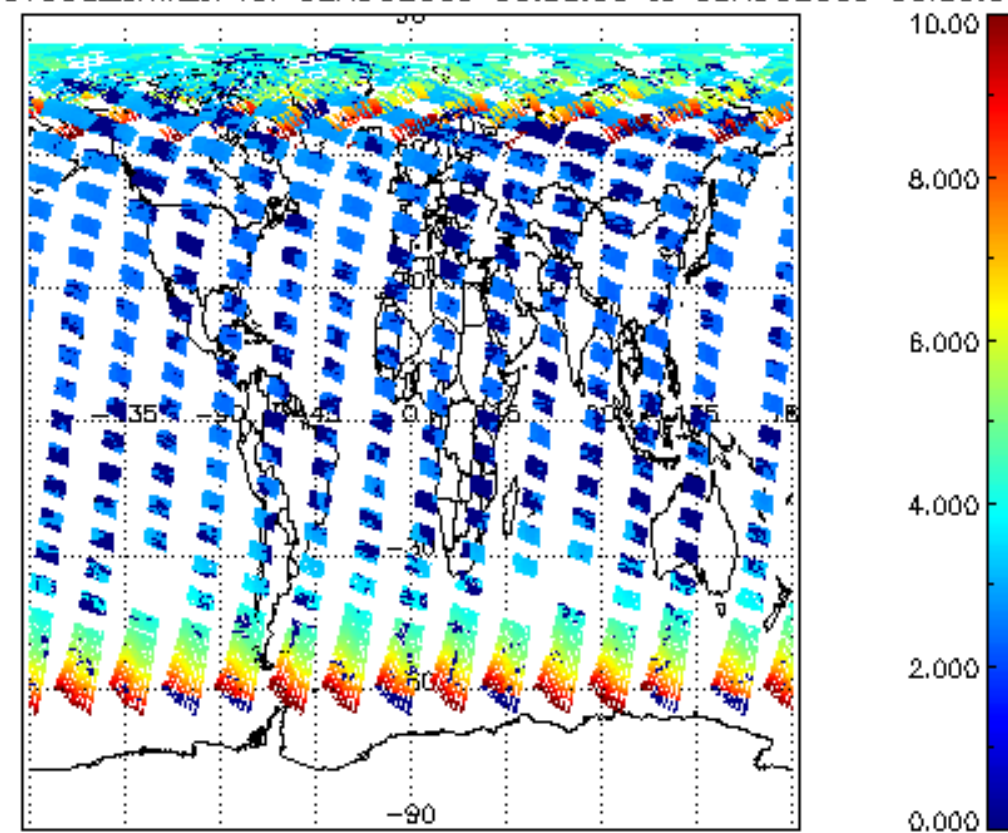
SCIOL2P\_NADUV003\_vcd\_err for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



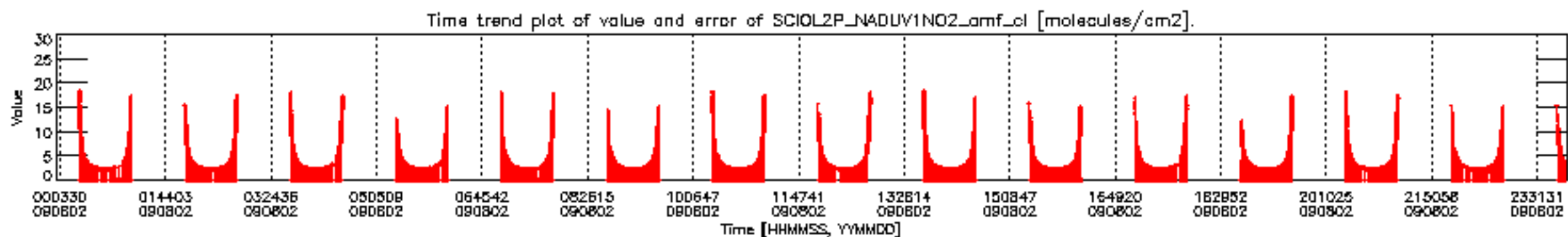
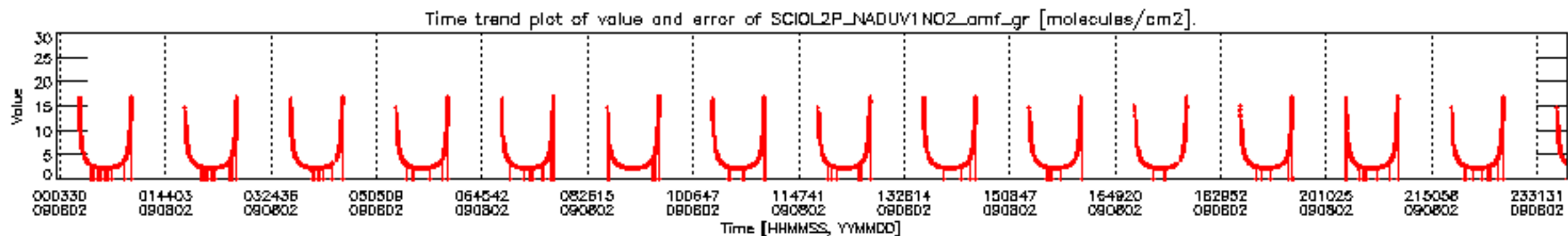
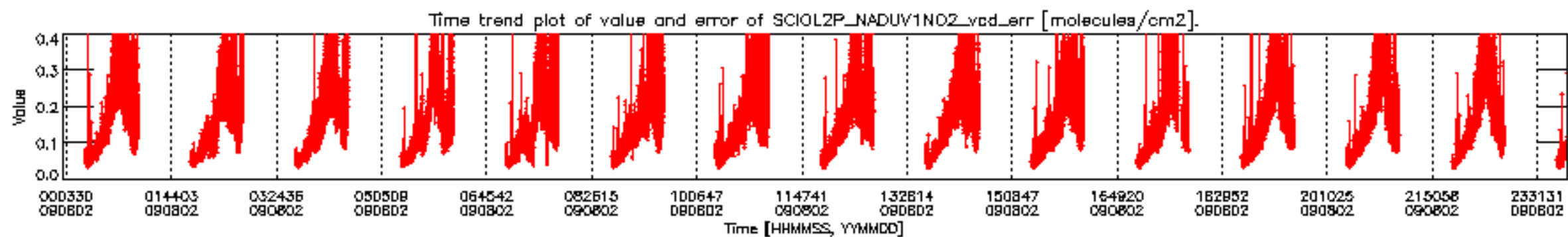
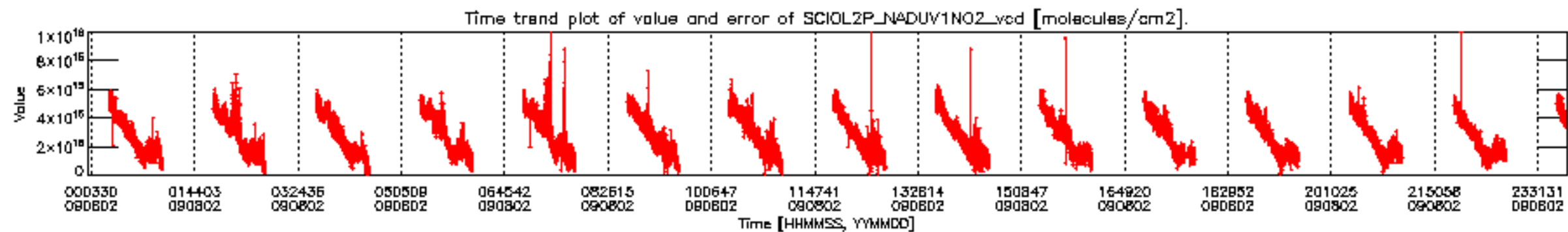
SCIOL2P\_NADUV003\_amf\_gr for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



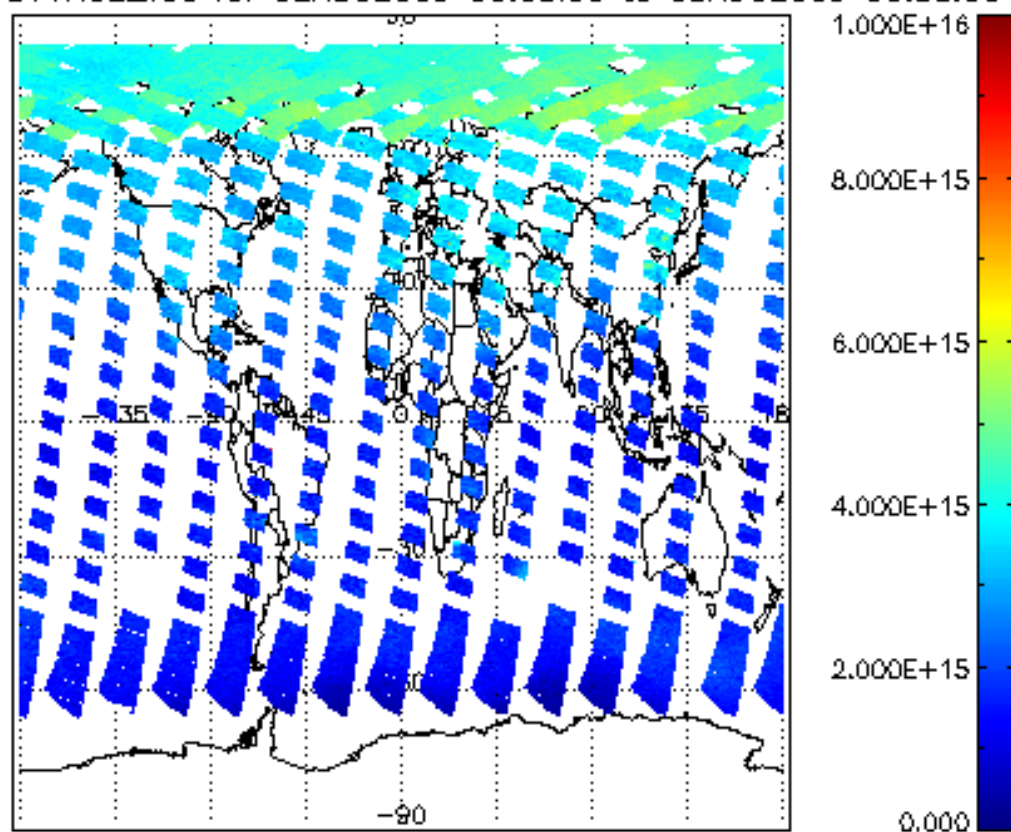
SCIOL2P\_NADUV003\_amf\_cl for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



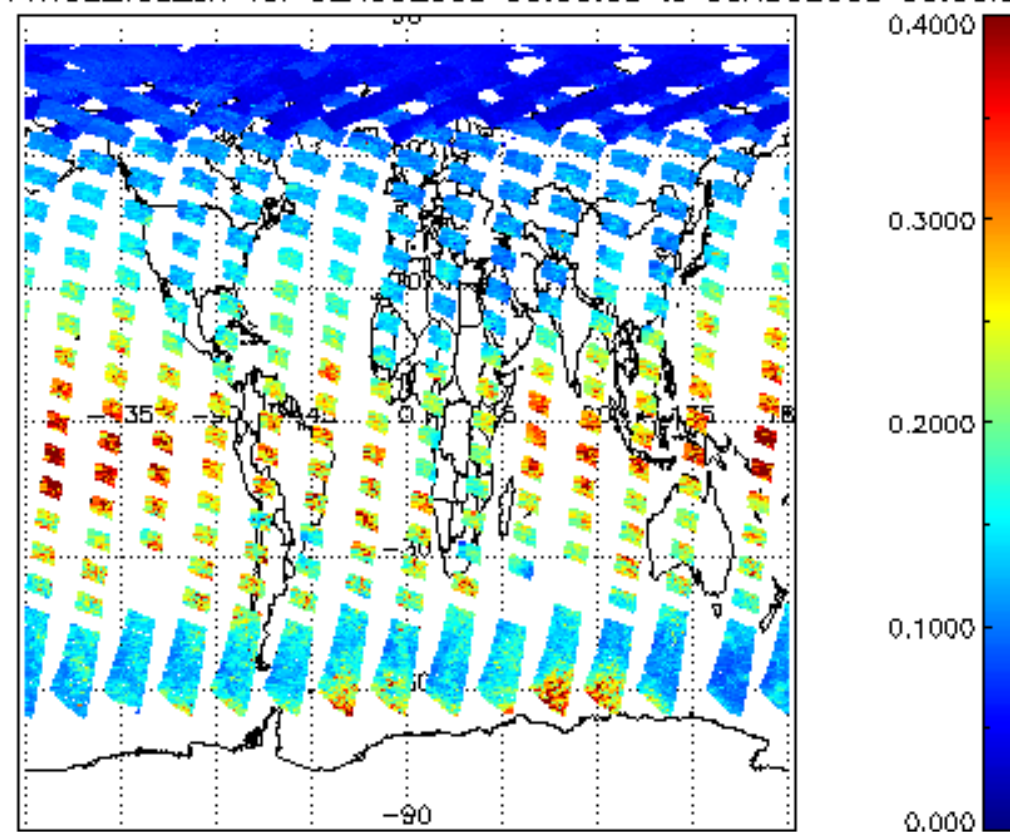




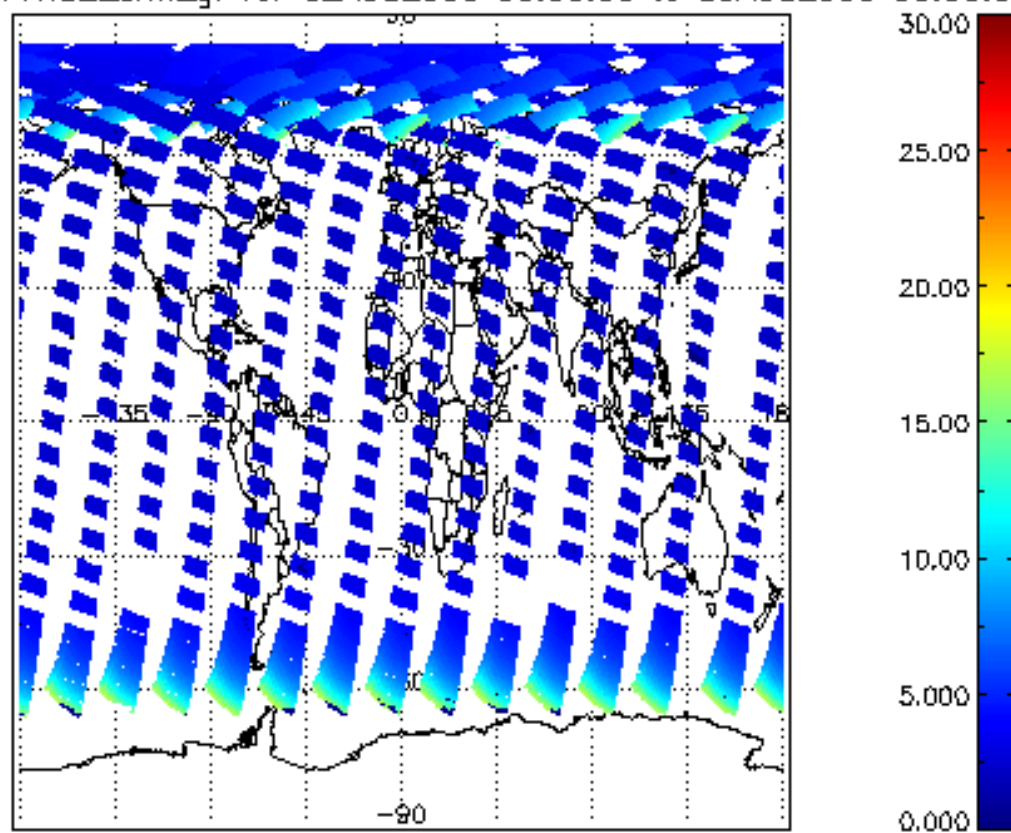
SCIOL2P\_NADUV1NO2\_vcd for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



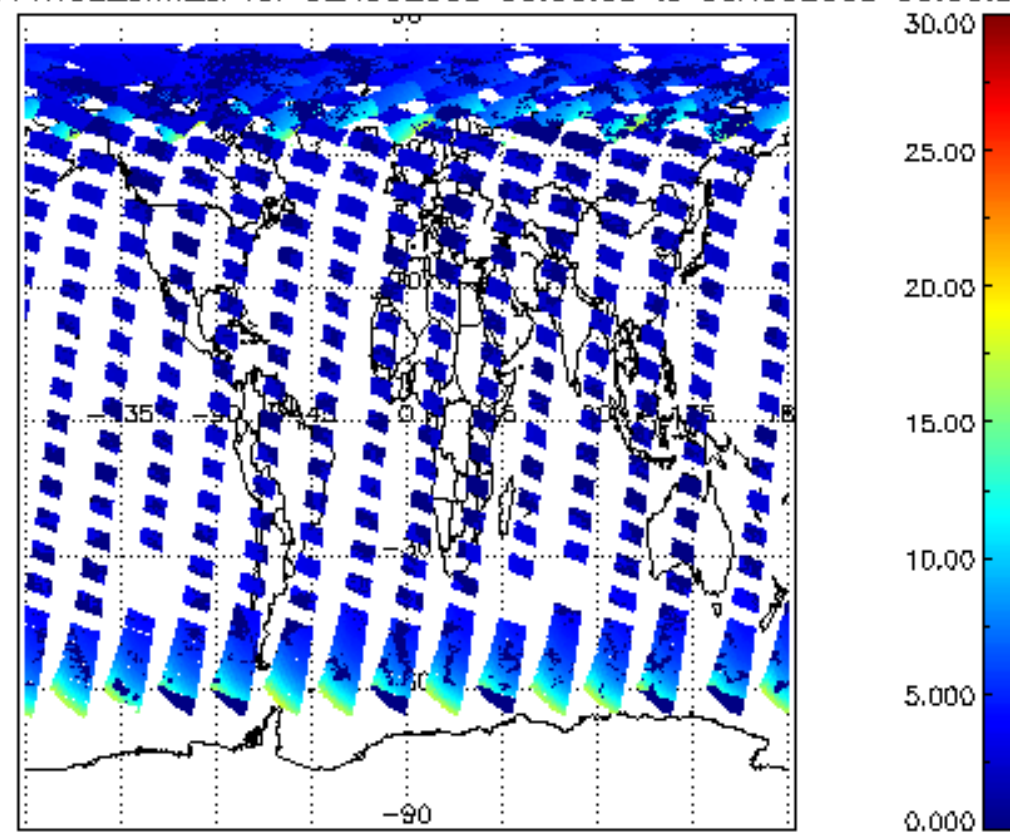
SCIOL2P\_NADUV1NO2\_vcd\_err for 02AUG2009 00:00:00 to 03AUG2009 00:00:00



SCIOL2P\_NADUV1NO2\_amf\_gr for 02AUG2009 00:00:00 to 03AUG2009 00:00:00

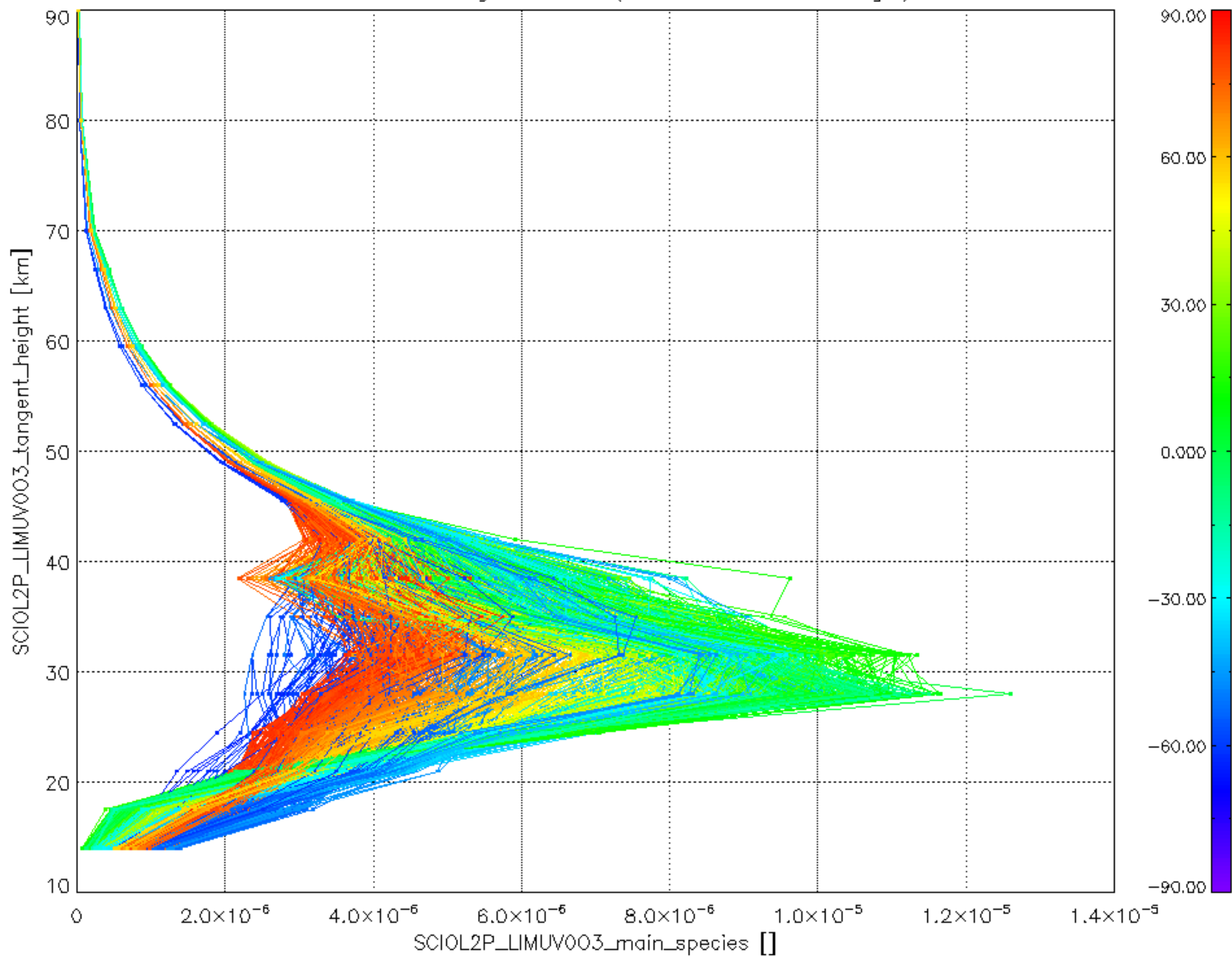


SCIOL2P\_NADUV1NO2\_amf\_cl for 02AUG2009 00:00:00 to 03AUG2009 00:00:00





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).

