

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	1.4 (06-11-2007)
Time of report generation	26MAR2008 06:00:34
Data source version	SCIA-OL/3.01-R
Processing scope for products	03MAR2008 00:00:00 to 04MAR2008 00:00:00
Start time of first product within scope	02MAR2008 23:32:33
Stop time of last product within scope	03MAR2008 00:27:58
Total number of level 2 products	1
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.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PRDPA20080302_233233_000033252066_00288_31404_4145.N1	02MAR2008 23:32:33	03MAR2008 00:27:58	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: 6240

Total number of cloud data DSRs with good quality flag (=0): 6240 (100.0 %)

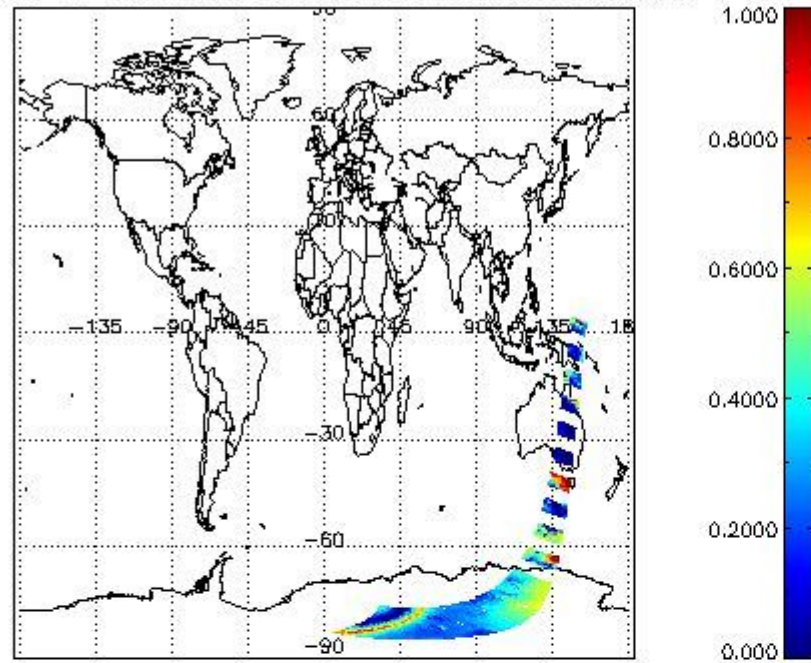
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	6240	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	6240	0.16667	0.12500	0.12500	0.25000	0.058930	s
SURFACE_PRES	6240	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	6240	0.34403	0.32656	0.0000	1.0000	0.24583	-
CL_FRAC_ERR	6240	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	6240	5.3333	4.0000	4.0000	8.0000	1.8858	
PMD_READ_CL[0]	6240	0.18157	0.0000	0.0000	8.0000	0.96345	-
PMD_READ_CL[1]	6240	1.1771	0.0000	0.0000	8.0000	2.5511	-
CL_TOP_HEIGHT	5256	5.2598	4.0870	0.0000	17.000	4.6982	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	5256	52.626	43.536	0.0000	101.00	42.195	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	6240	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	6240	11001011	11000100	11000000	11100000	3347.4	flags
AERO_ABSO_IND	6240	2.6017	3.2055	-0.62575	13.904	1.8514	
AERO_IND_DIAG	6240	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	6240	01010010	00000000	00000000	11000000	24330.	flags

Time and geolocation plots:

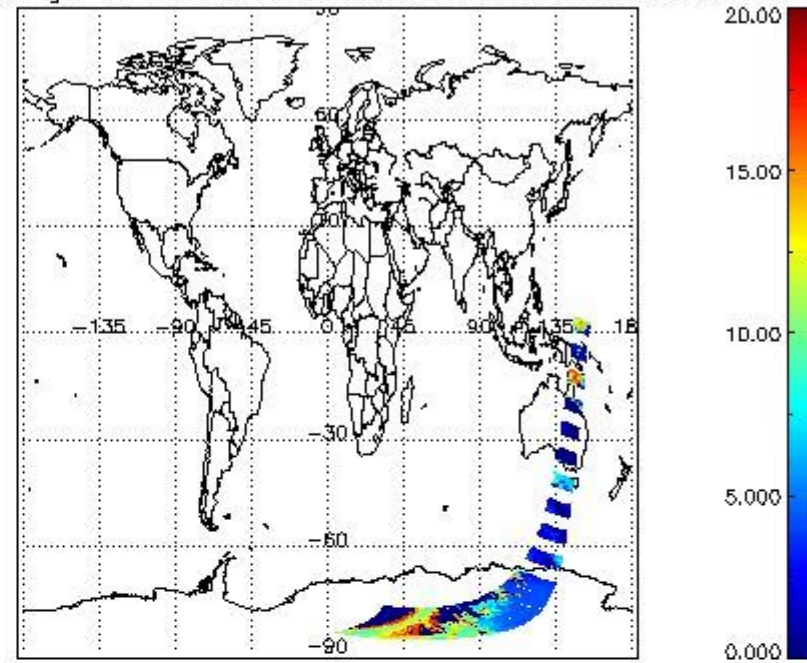
Plots are available for the following parameters:

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

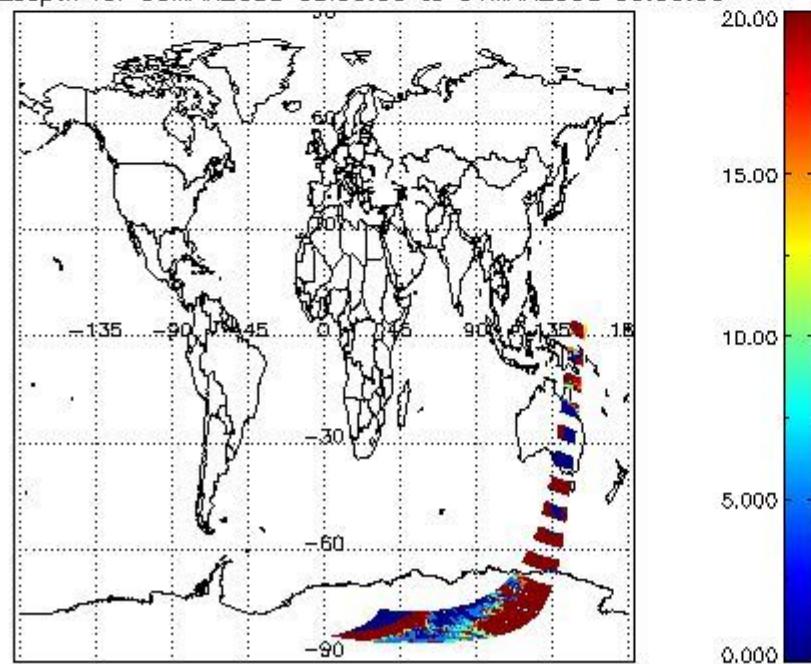
cl_frac for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



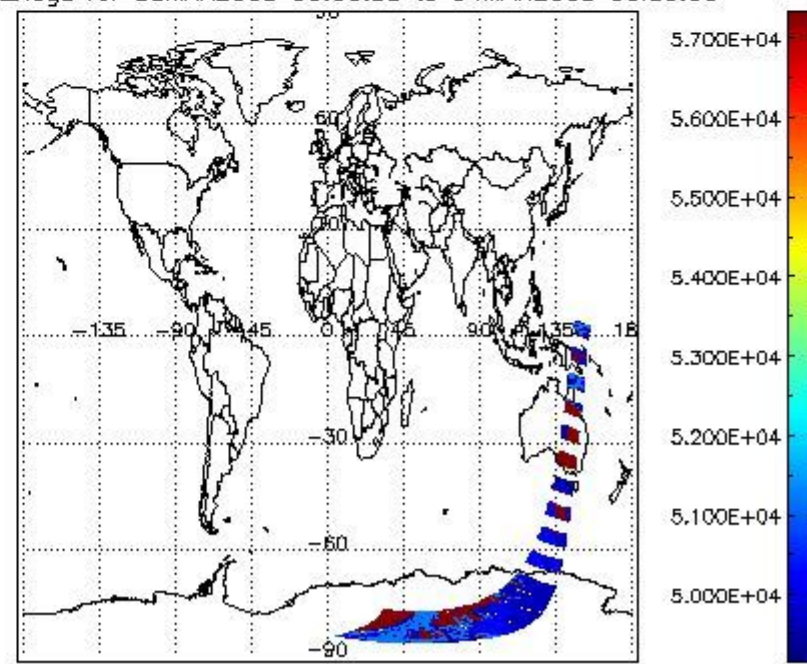
cl_top_height for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



cl_opt_depth for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



cloud_flags for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

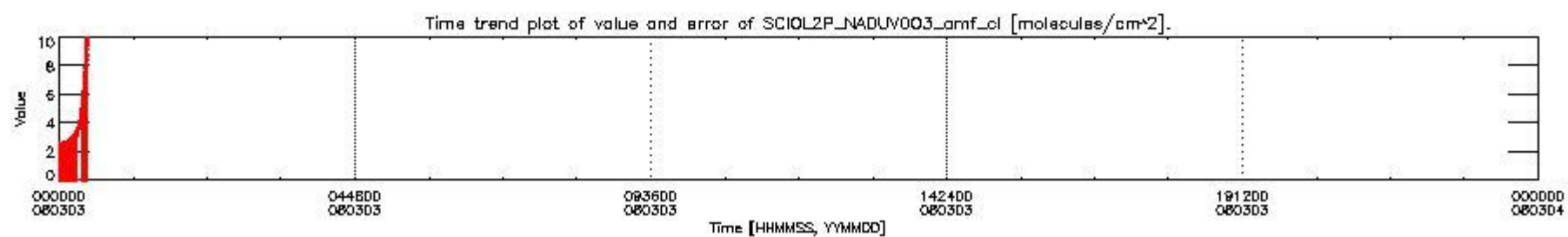
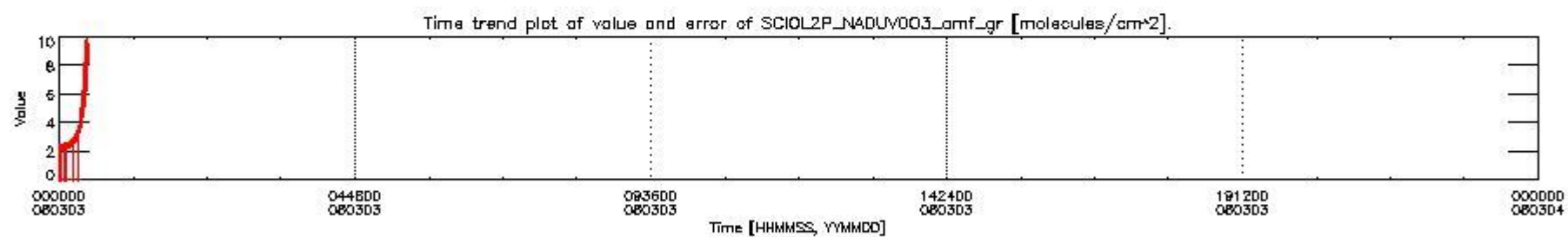
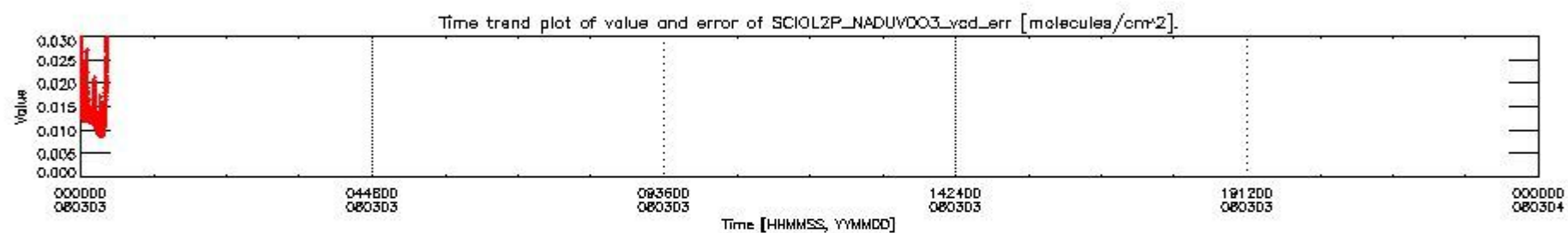
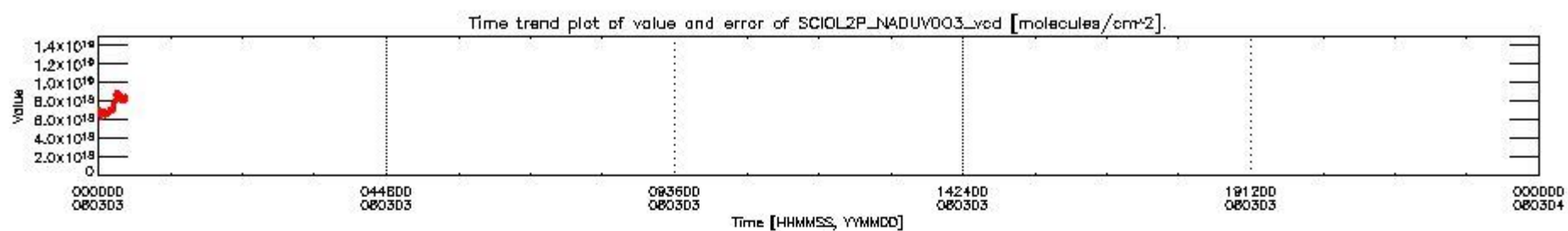


This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

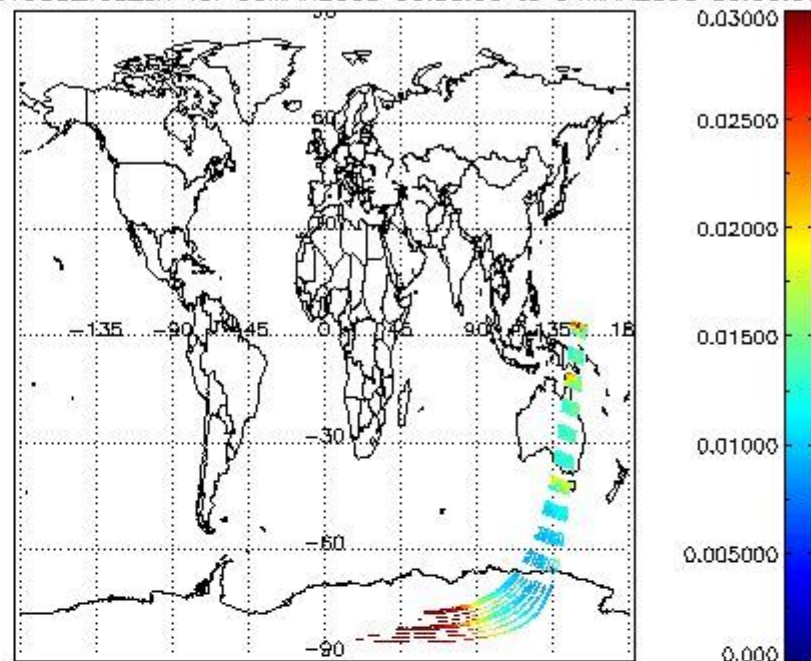
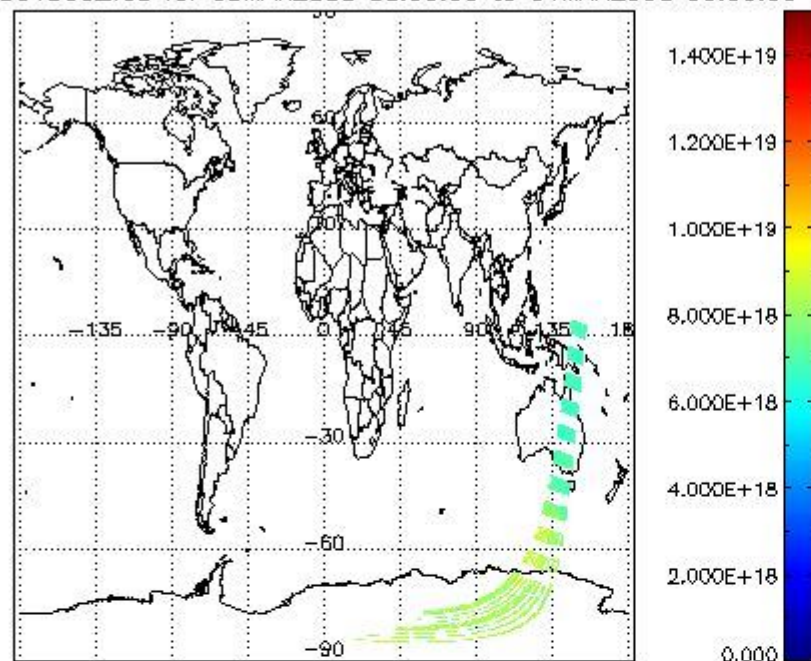
The following data items are currently included into this section:

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

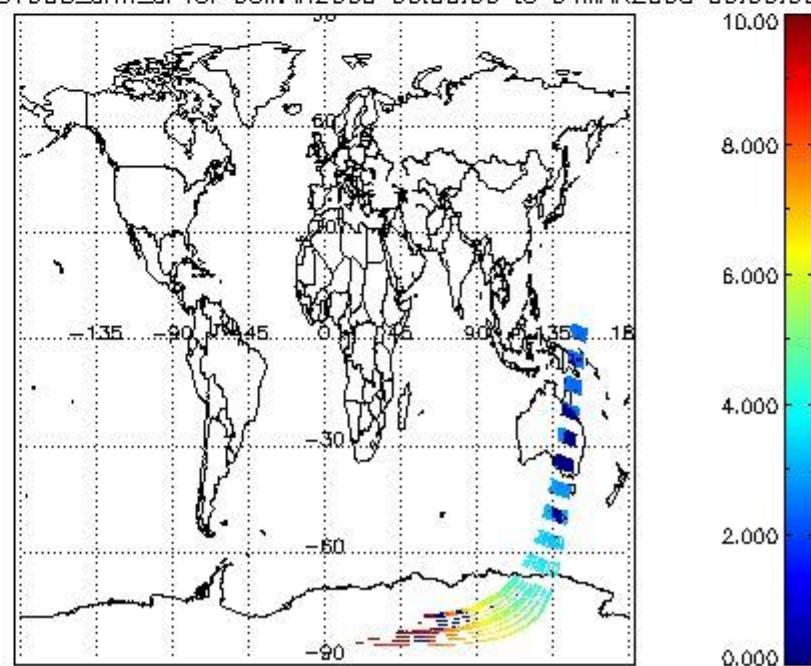
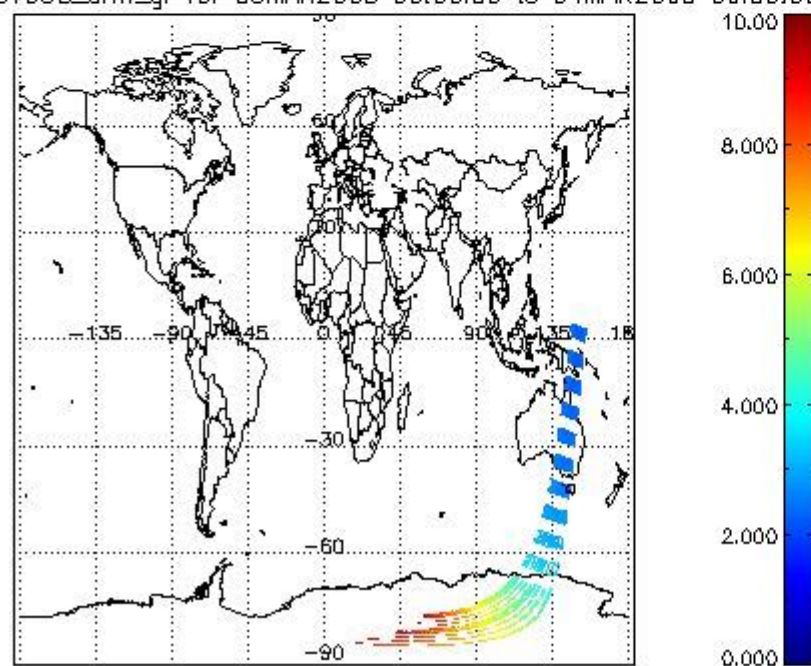
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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

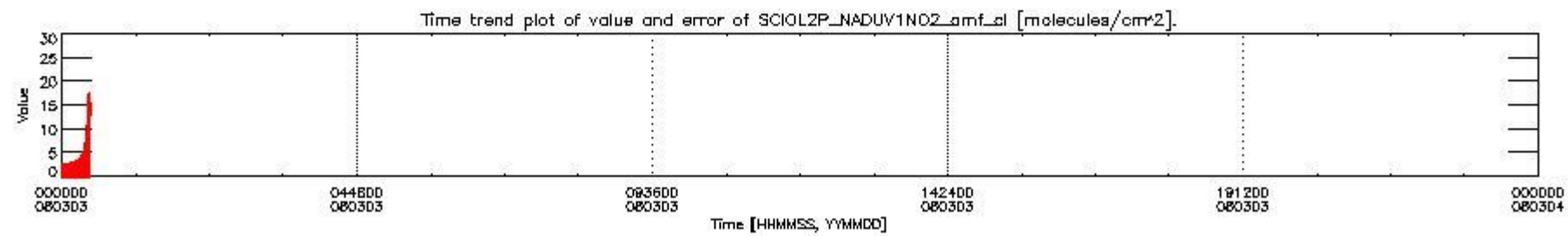
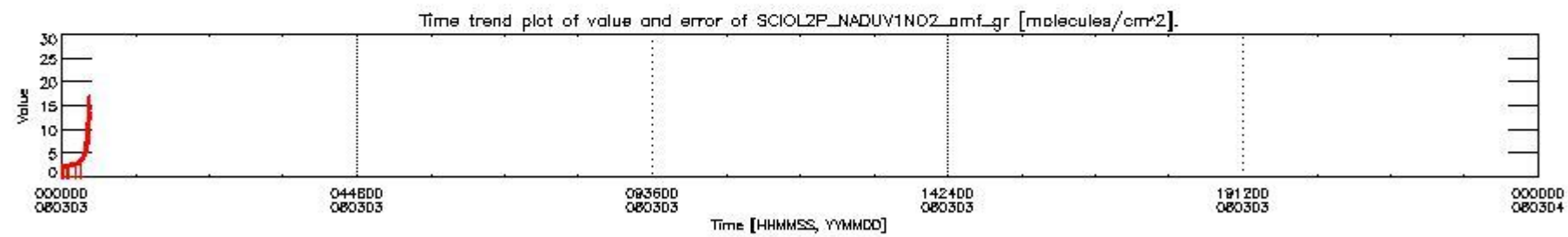
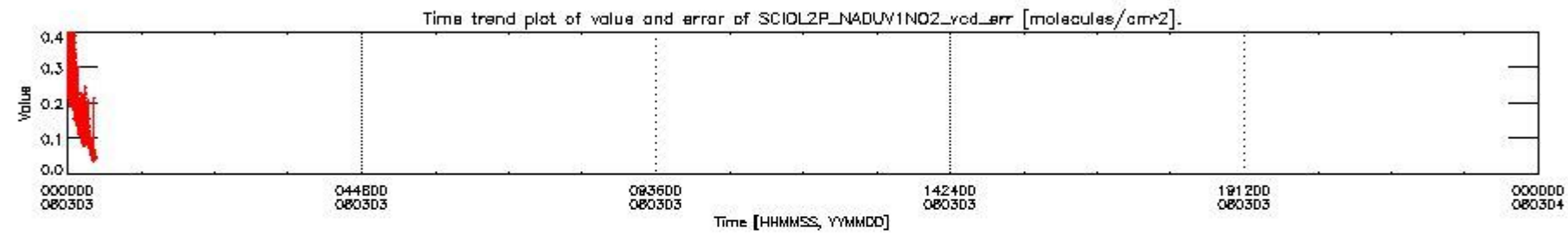
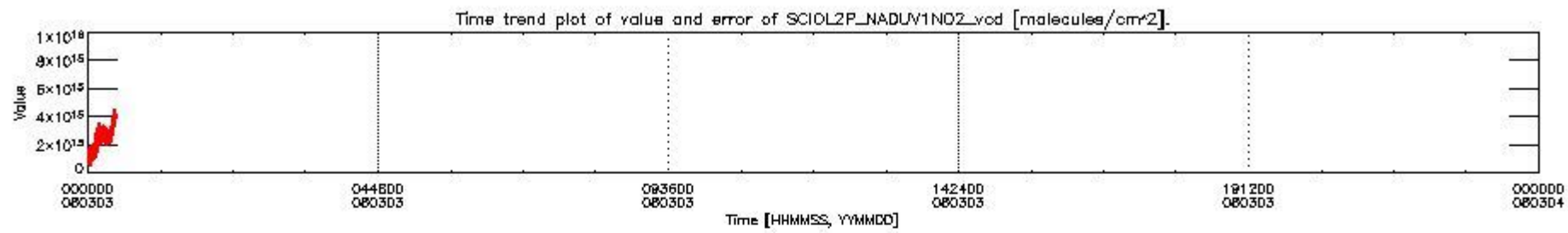


SCIOL2P_NADUV003_vcd for 03MAR2008 00:00:00 to 04MAR2008 00:00:00 SCIOL2P_NADUV003_vcd_err for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

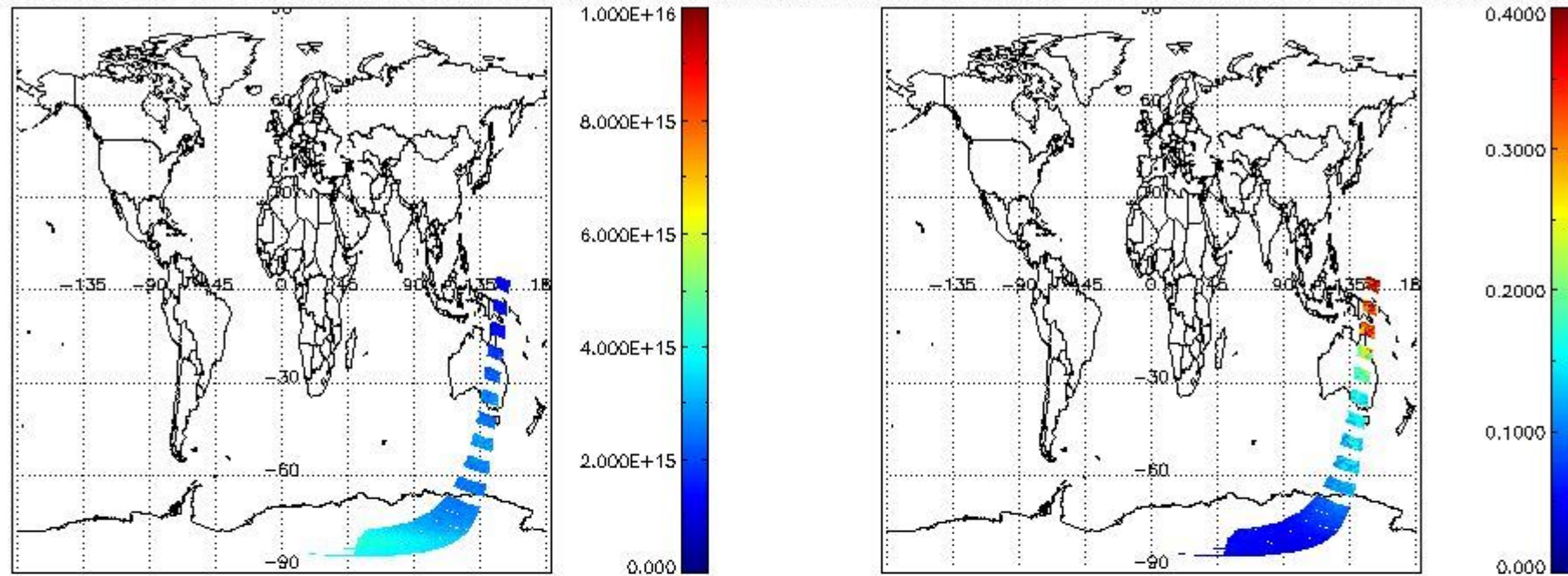


SCIOL2P_NADUV003_amf_gr for 03MAR2008 00:00:00 to 04MAR2008 00:00:00 SCIOL2P_NADUV003_amf_cl for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

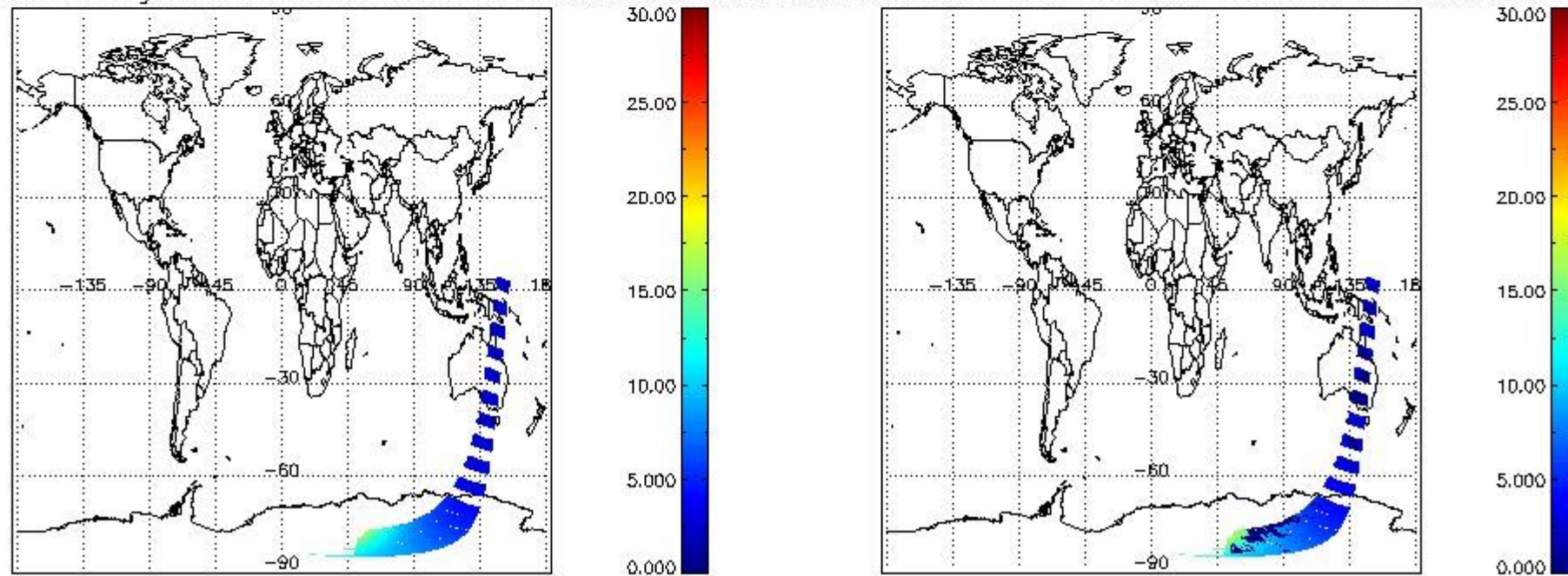




SCIOL2P_NADUV1NO2_vcd for 03MAR2008 00:00:00 to 04MAR2008 00:00:00 CIOL2P_NADUV1NO2_vcd_err for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



CIOL2P_NADUV1NO2_amf_gr for 03MAR2008 00:00:00 to 04MAR2008 00:00:00; CIOL2P_NADUV1NO2_amf_cl for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



2.2.3 Limb

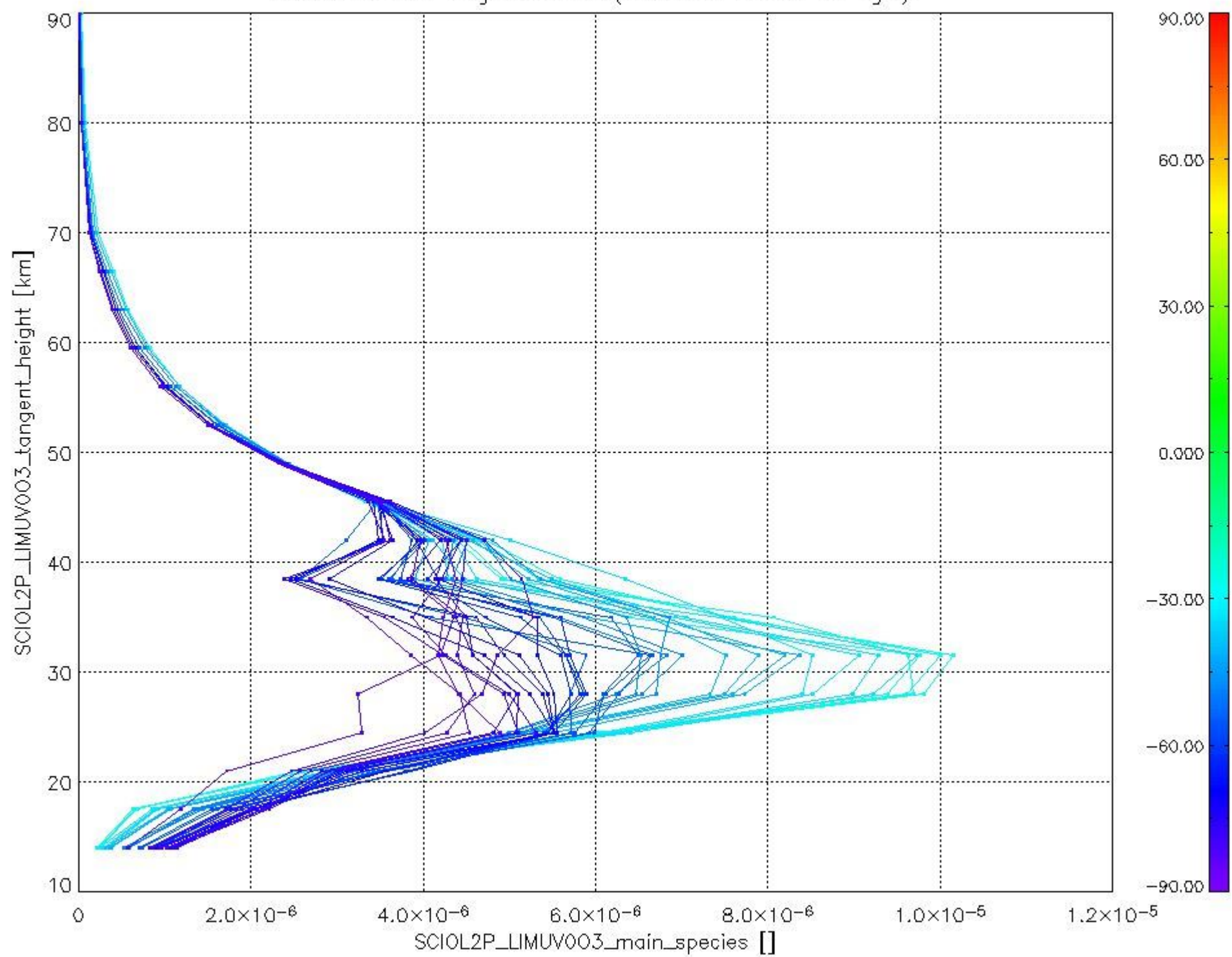
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

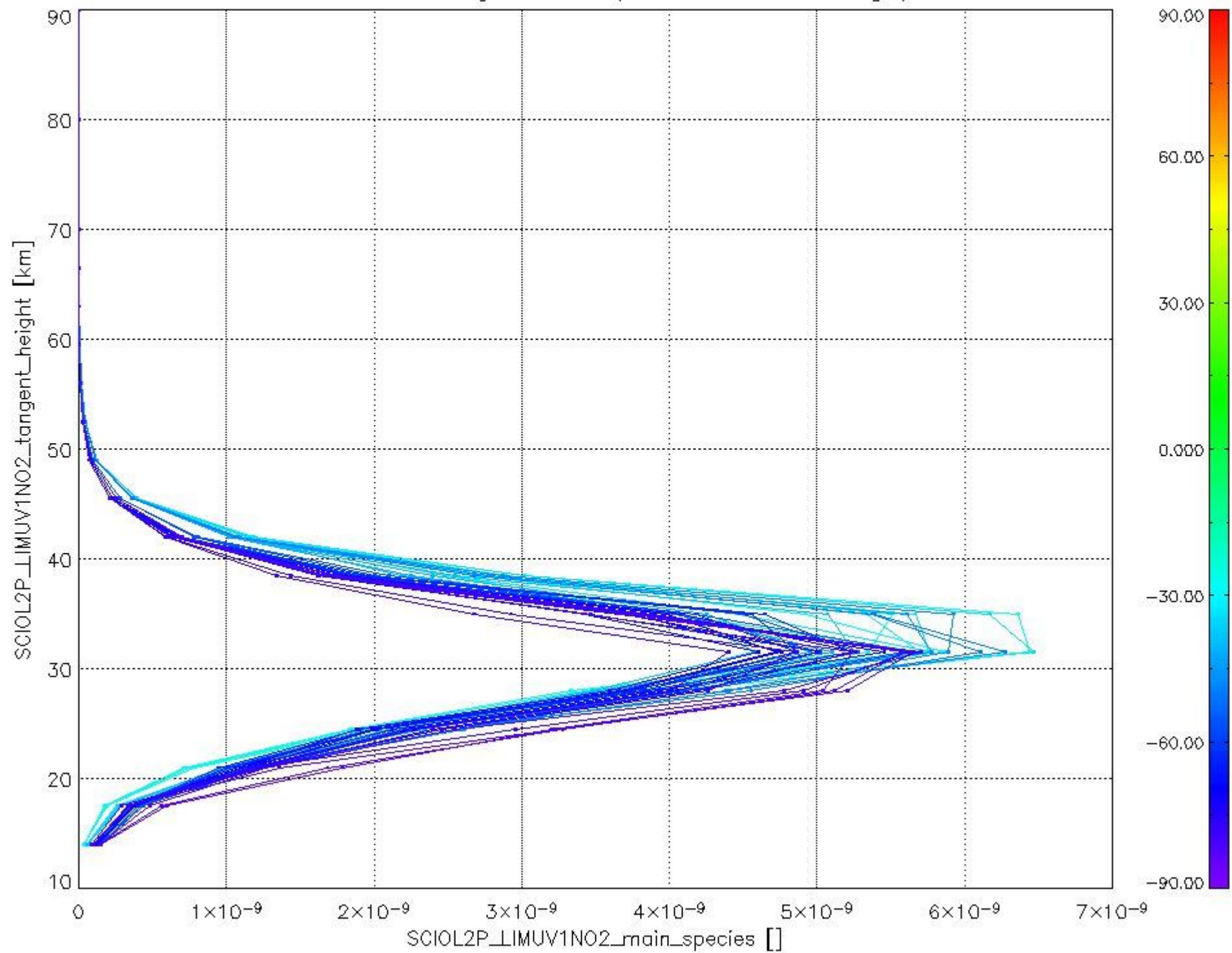
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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

Plot of SCIOL2P_LIMUV003_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



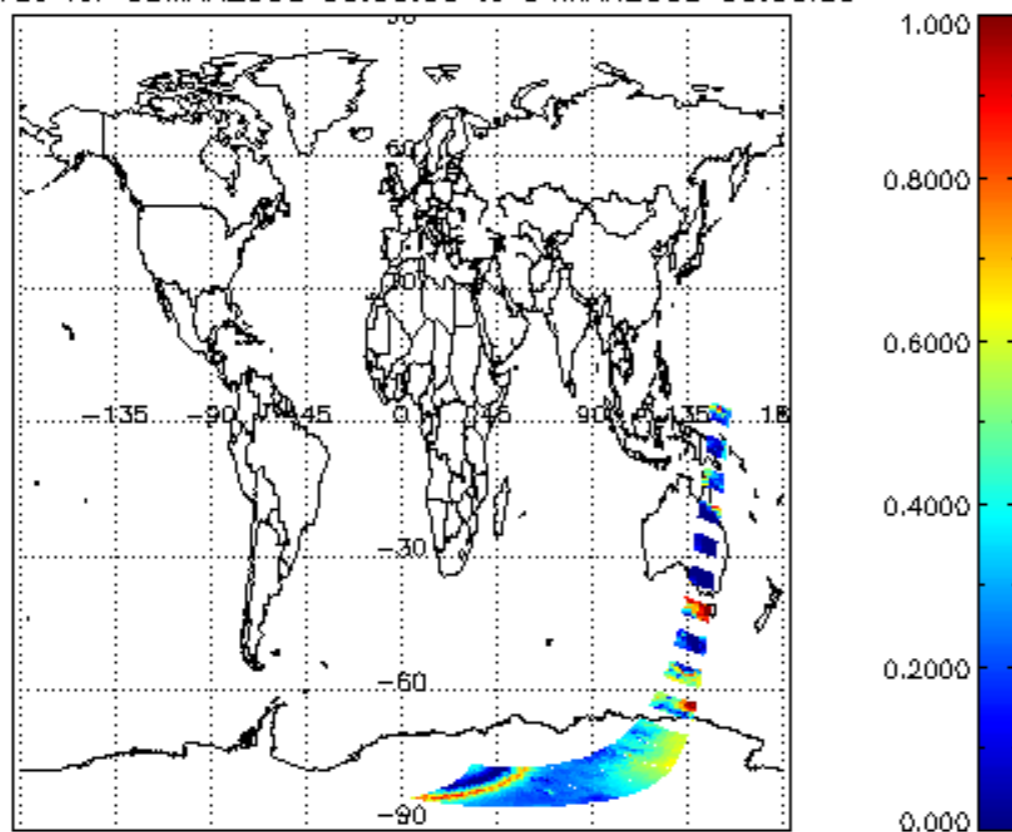
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



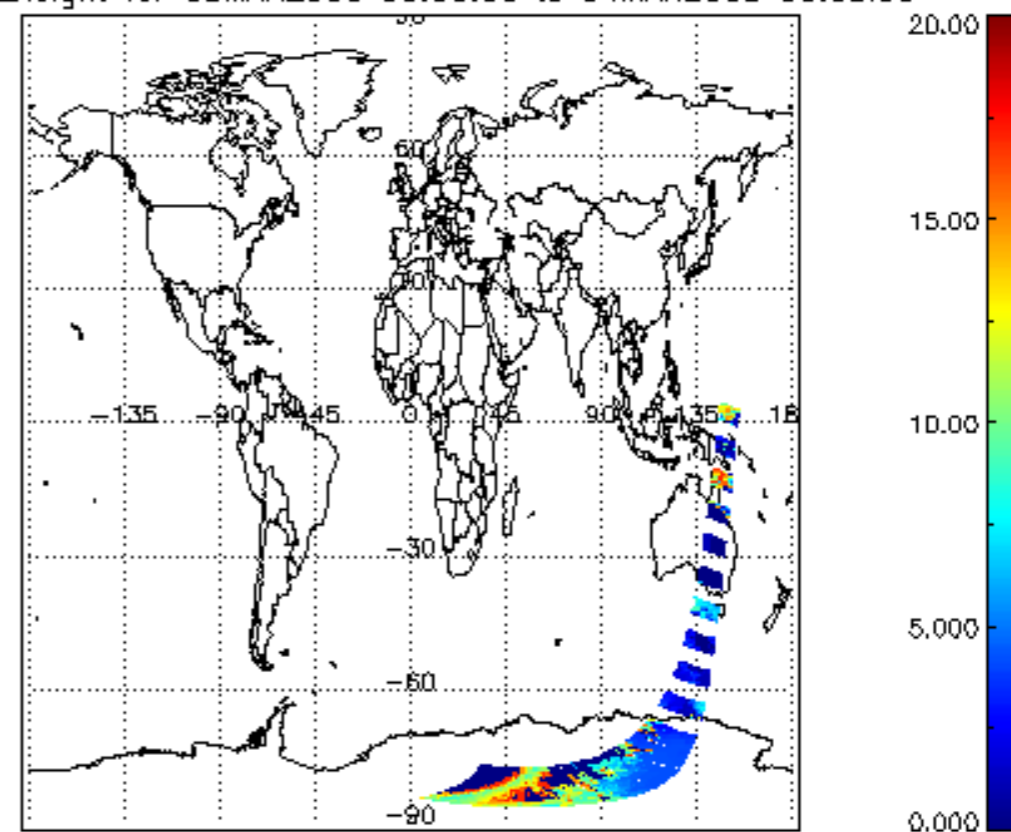
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

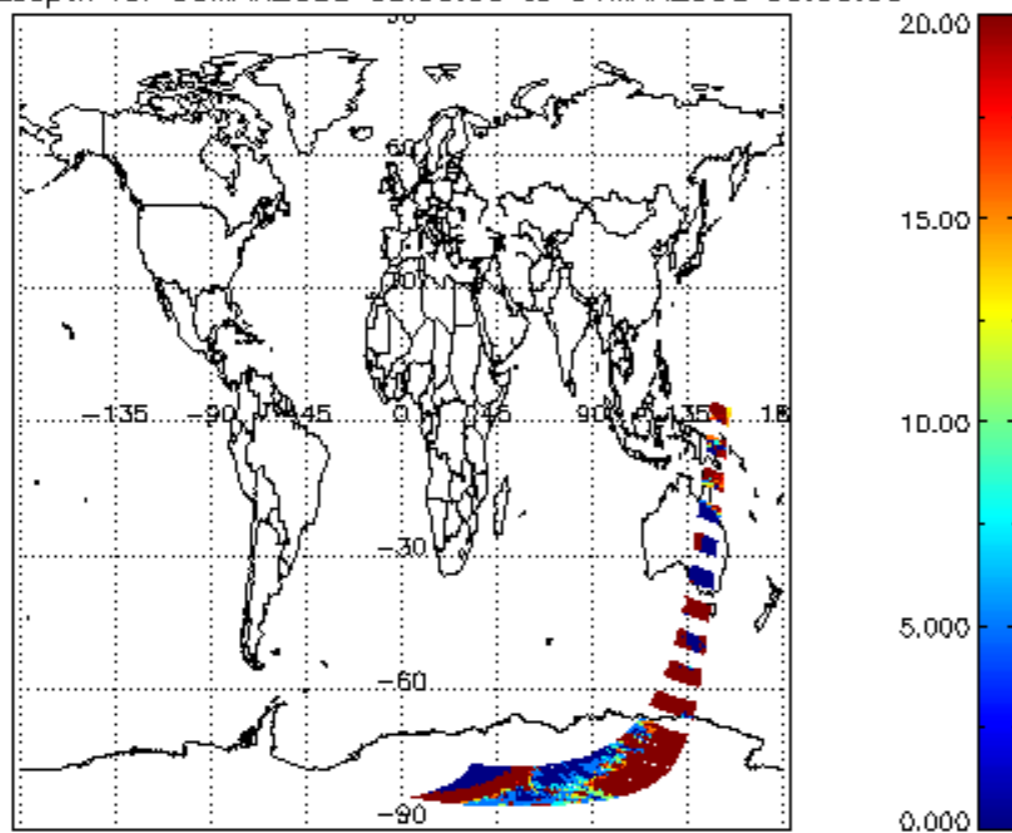
cL_frac for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



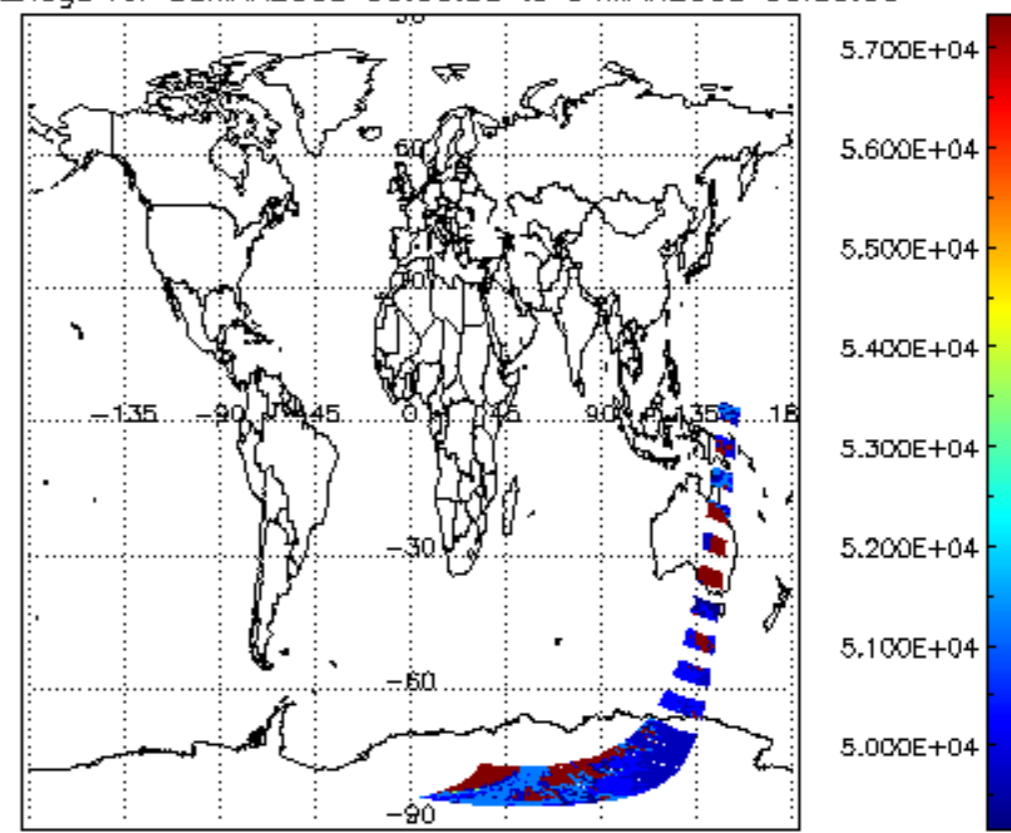
cL_top_height for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

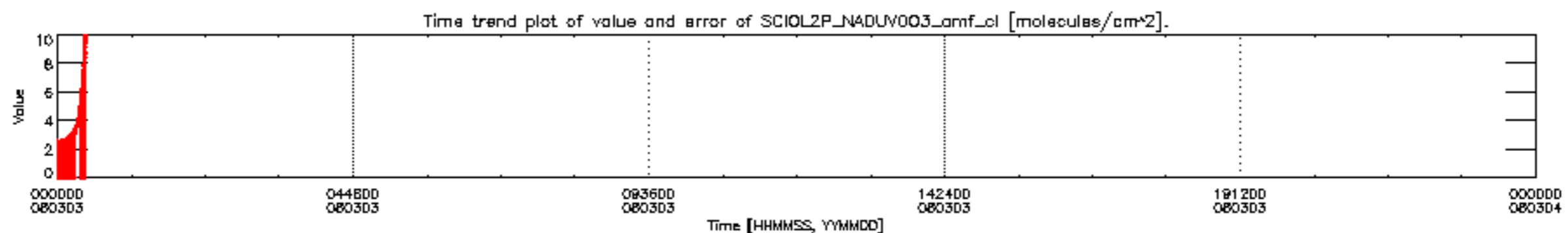
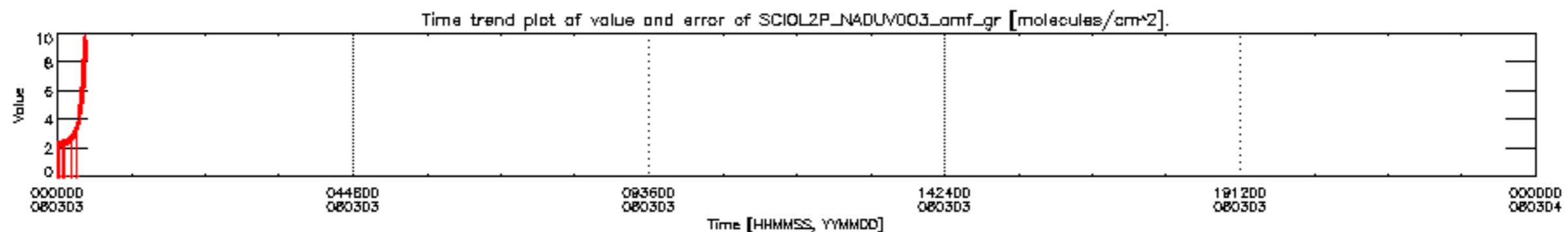
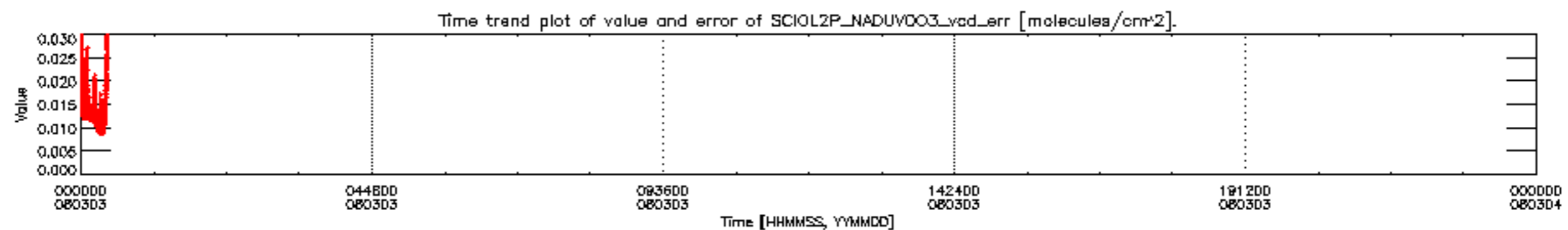
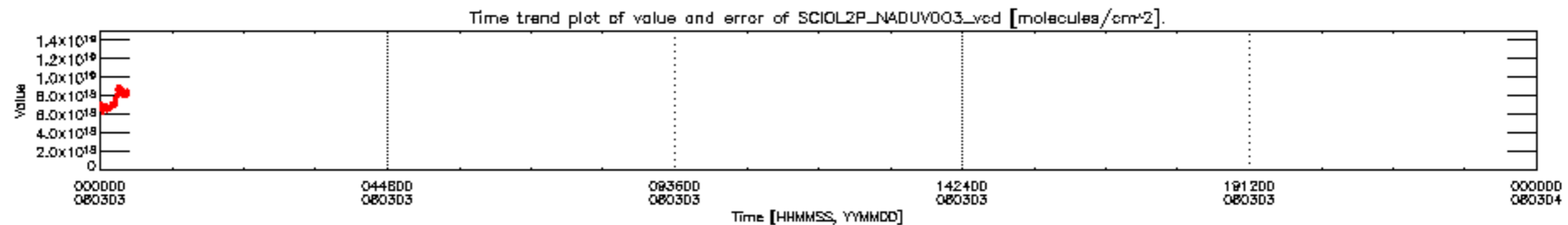


cL_opt_depth for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

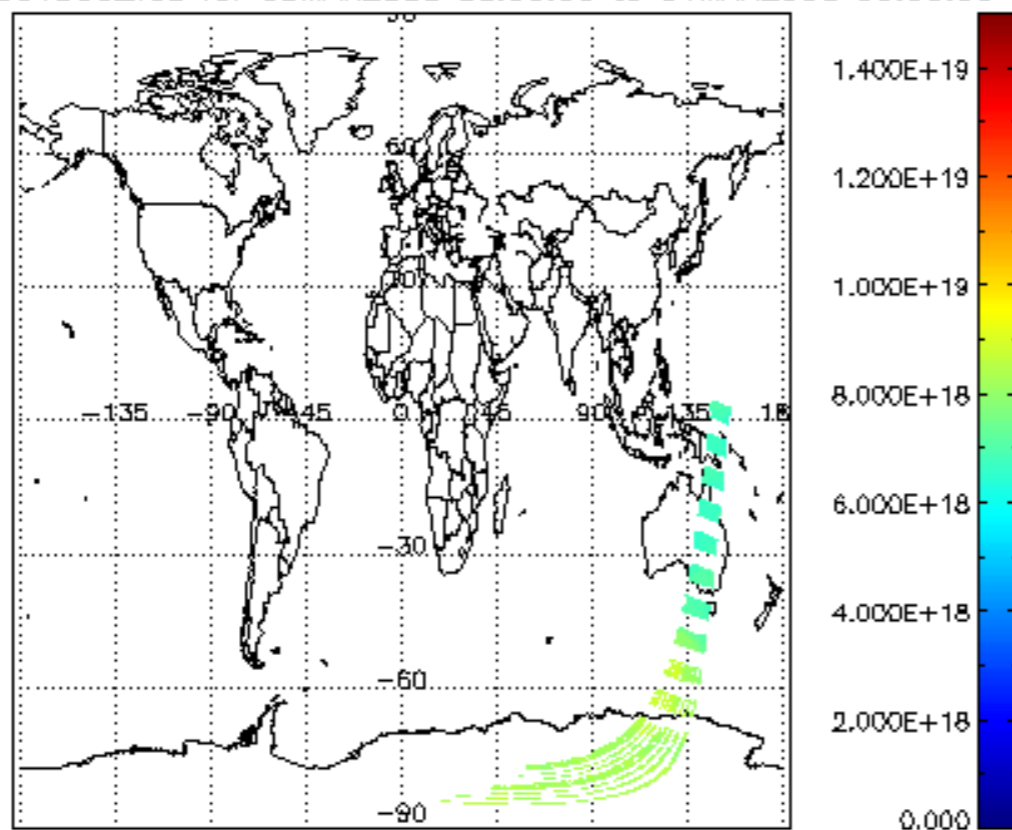


cloud_flags for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

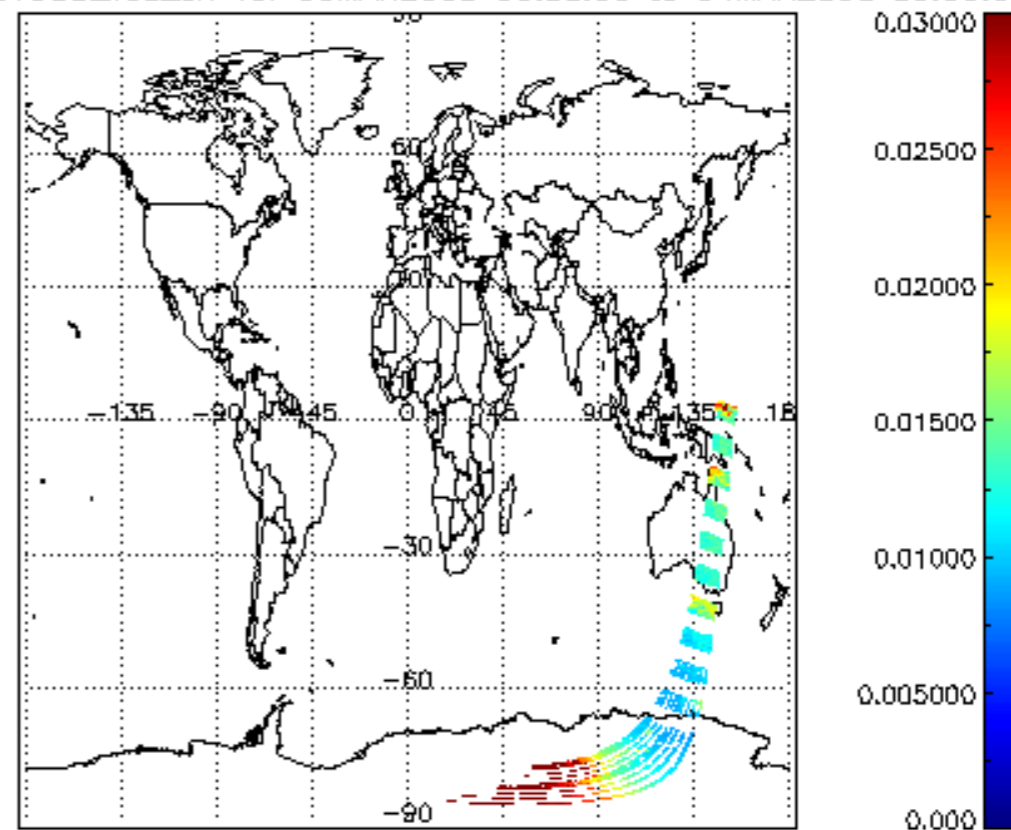




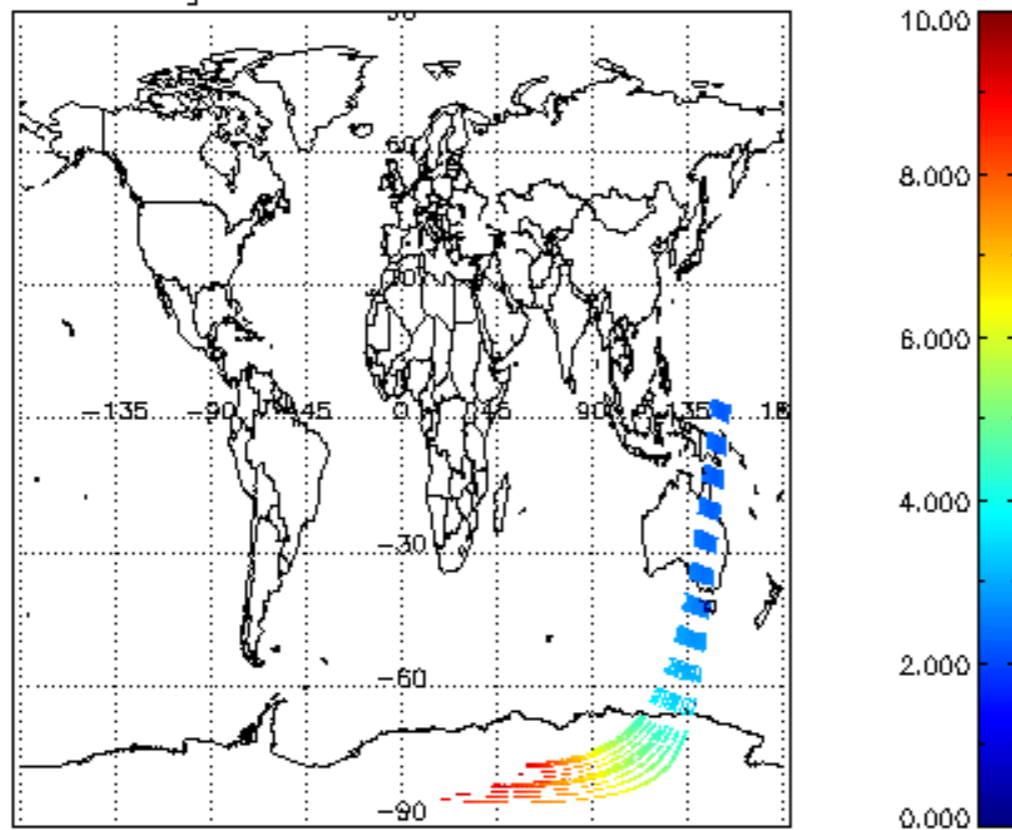
SCIOL2P_NADUV003_vcd for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



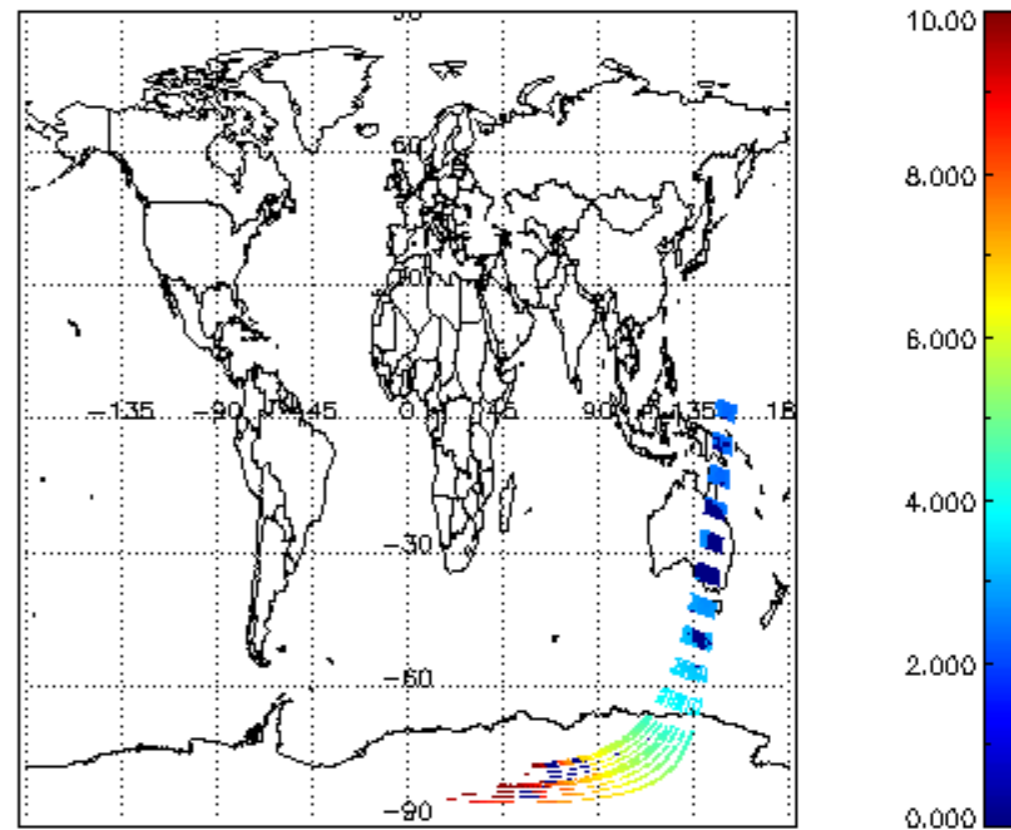
SCIOL2P_NADUV003_vcd_err for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

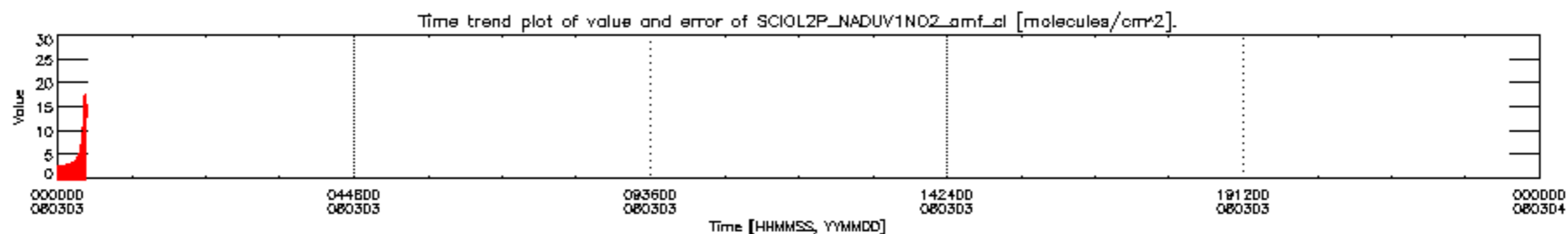
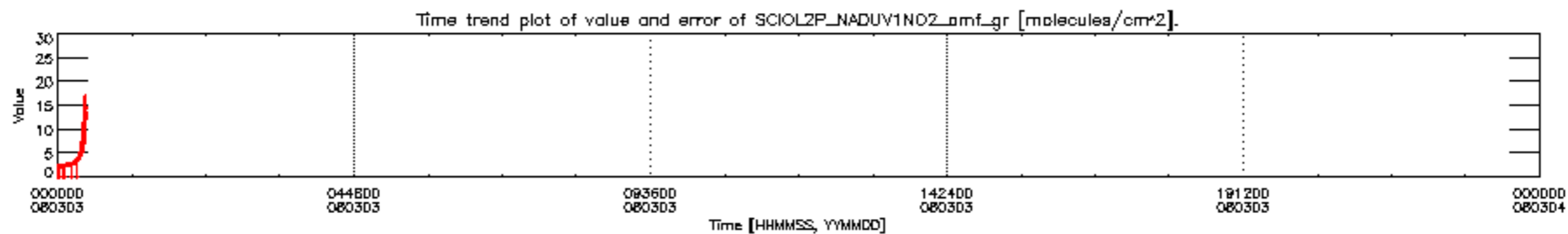
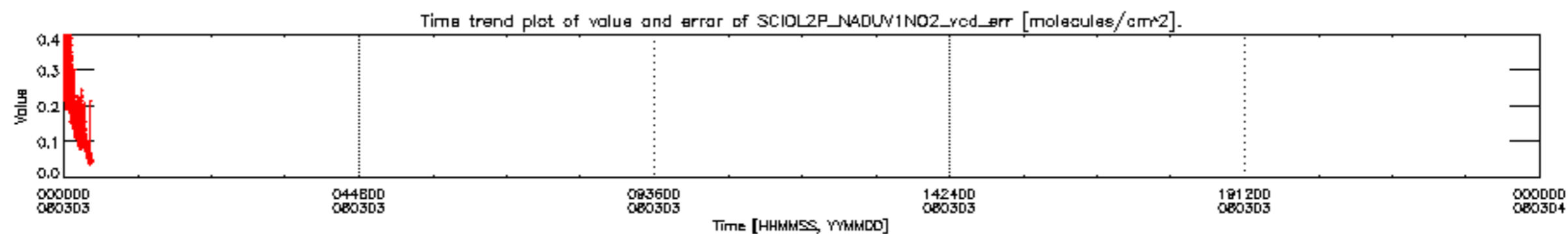
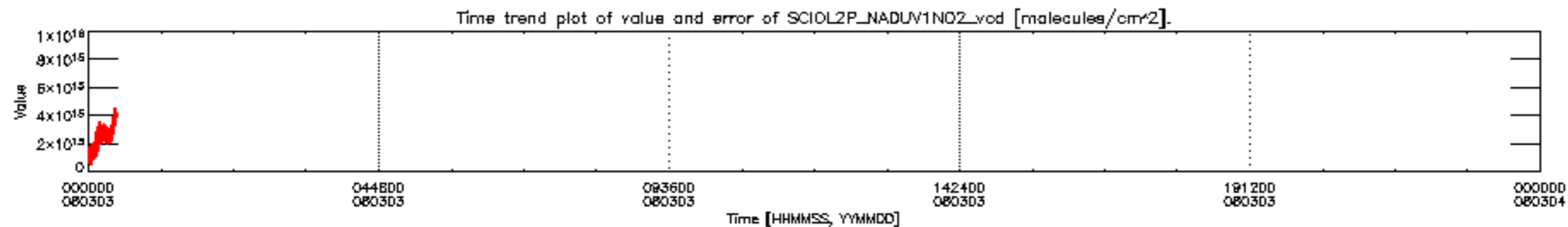


SCIOL2P_NADUV003_amf_gr for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

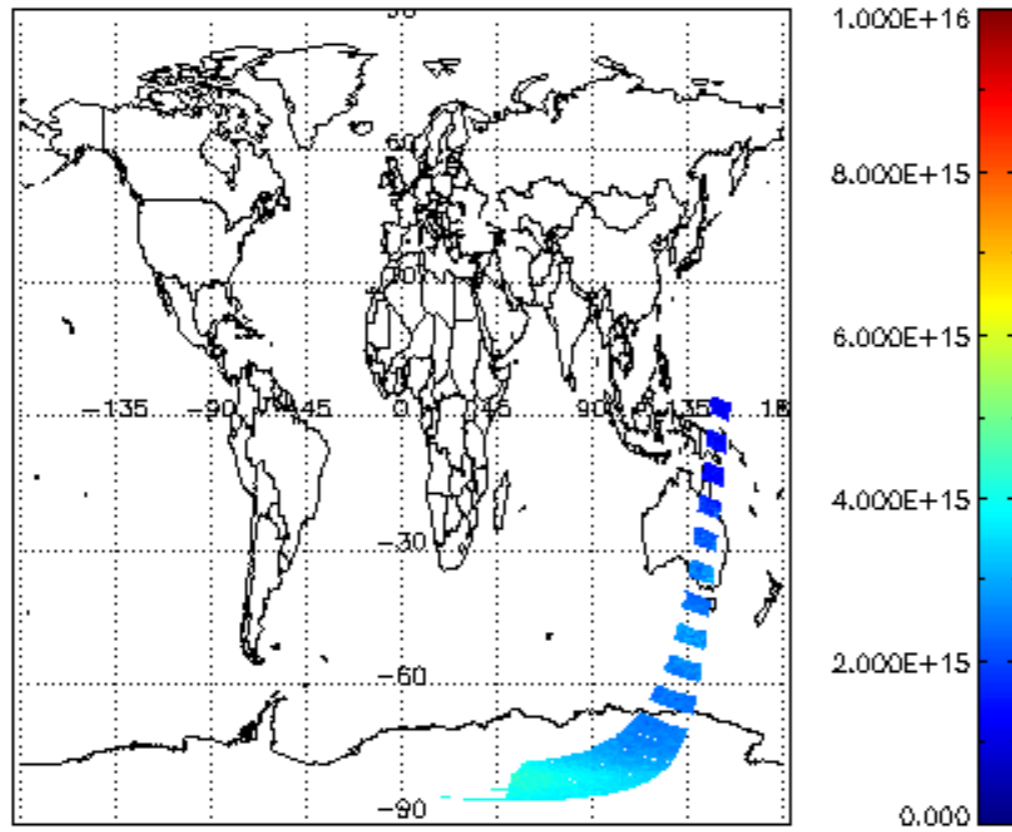


SCIOL2P_NADUV003_amf_cl for 03MAR2008 00:00:00 to 04MAR2008 00:00:00

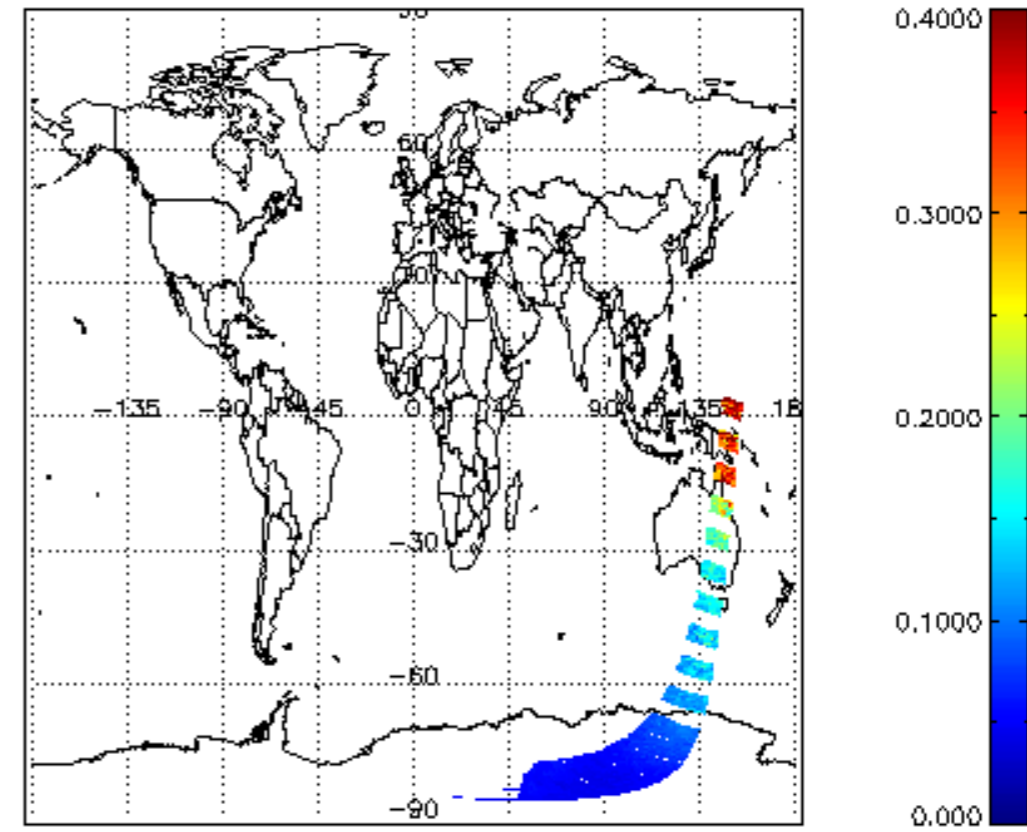




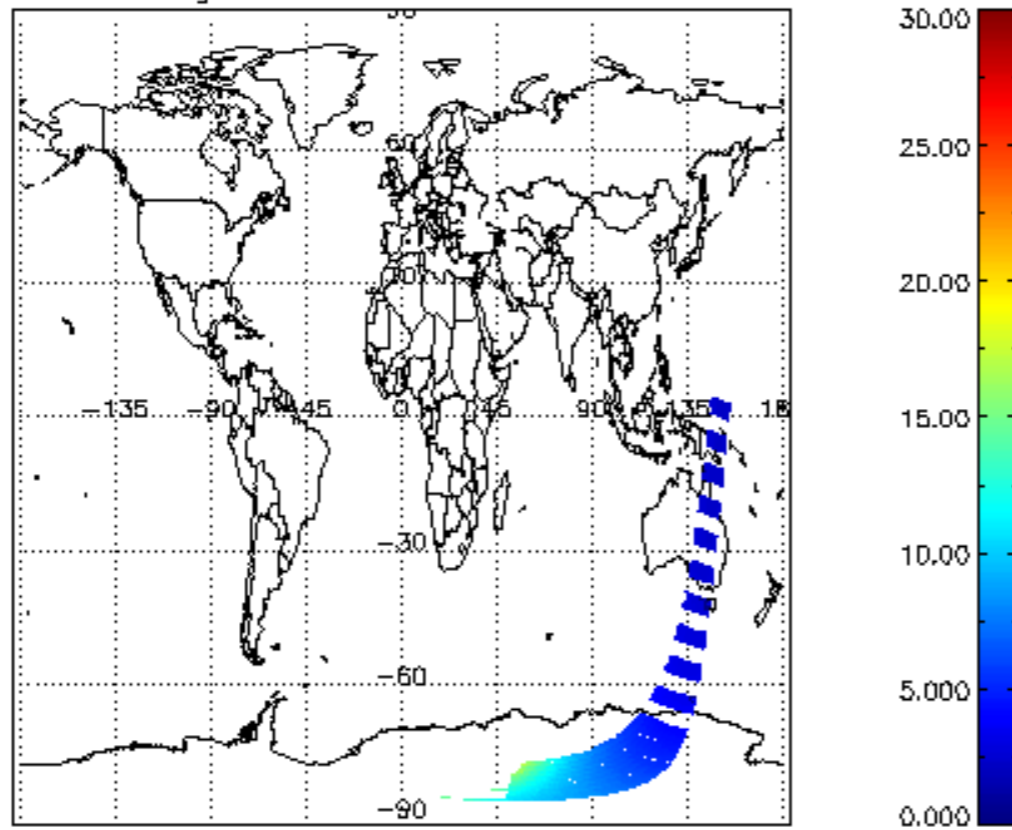
SCIOL2P_NADUV1NO2_vcd for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



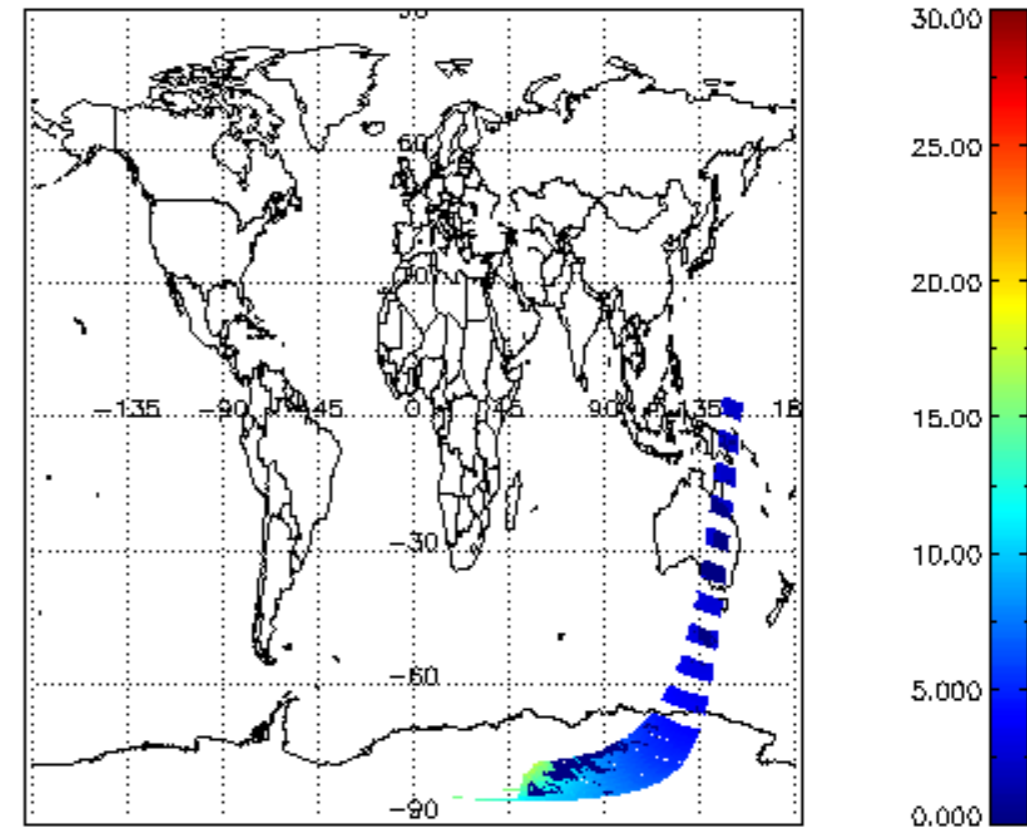
SCIOL2P_NADUV1NO2_vcd_err for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



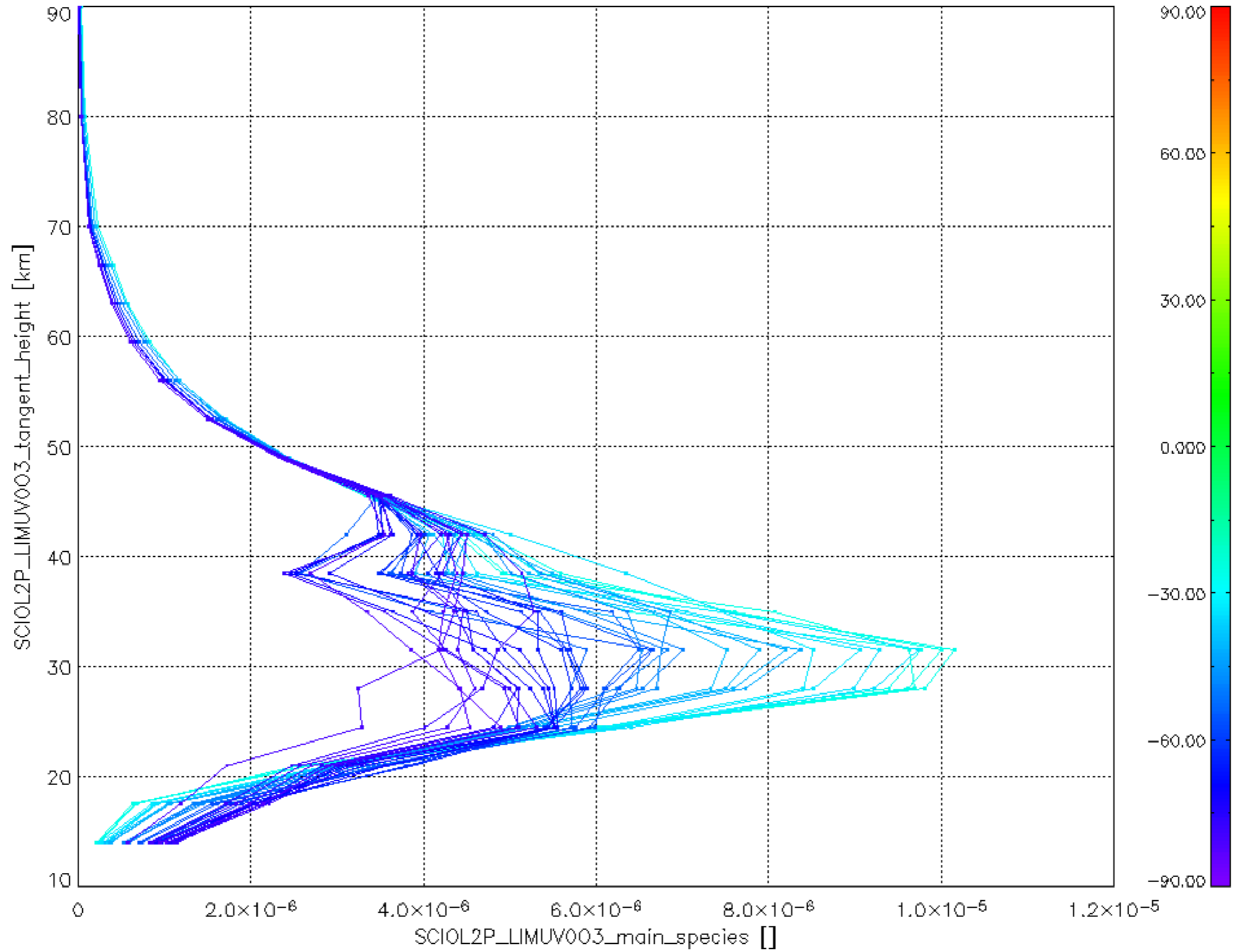
SCIOL2P_NADUV1NO2_amf_gr for 03MAR2008 00:00:00 to 04MAR2008 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 03MAR2008 00:00:00 to 04MAR2008 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_LIMUV1N02_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

