

2. SCIAMACHY Daily Report for level 2 products

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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	05JUN2009 14:10:56
Data source version	SCIA-OL/3.01-R
Processing scope for products	03APR2009 00:00:00 to 04APR2009 00:00:00
Start time of first product within scope	02APR2009 22:47:18
Stop time of last product within scope	04APR2009 00:47:27
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	SCI_OL__2PRDPA20090402_224718_000030892077_00445_37072_1874.N1	02APR2009 22:47:18	02APR2009 23:38:47	0	GOOD
1	SCI_OL__2PRDPA20090403_002849_000030202077_00446_37073_1876.N1	03APR2009 00:28:49	03APR2009 01:19:10	0	GOOD
2	SCI_OL__2PRDPA20090403_020829_000030892077_00447_37074_1875.N1	03APR2009 02:08:29	03APR2009 02:59:58	0	GOOD
3	SCI_OL__2PRDPA20090403_035000_000030202077_00448_37075_1877.N1	03APR2009 03:50:00	03APR2009 04:40:21	0	GOOD
4	SCI_OL__2PRDPA20090403_052435_000033812077_00449_37076_1878.N1	03APR2009 05:24:35	03APR2009 06:20:56	0	GOOD
5	SCI_OL__2PRDPA20090403_070510_000033812077_00450_37077_1879.N1	03APR2009 07:05:10	03APR2009 08:01:32	0	GOOD
6	SCI_OL__2PRDPA20090403_084546_000033812077_00451_37078_1880.N1	03APR2009 08:45:46	03APR2009 09:42:07	0	GOOD
7	SCI_OL__2PRDPA20090403_102621_000033812077_00452_37079_1881.N1	03APR2009 10:26:21	03APR2009 11:22:43	0	GOOD
8	SCI_OL__2PRDPA20090403_120657_000033812077_00453_37080_1882.N1	03APR2009 12:06:57	03APR2009 13:03:18	0	GOOD
9	SCI_OL__2PRDPA20090403_134732_000033812077_00454_37081_1883.N1	03APR2009 13:47:32	03APR2009 14:43:54	0	GOOD
10	SCI_OL__2PRDPA20090403_152808_000033812077_00455_37082_1884.N1	03APR2009 15:28:08	03APR2009 16:24:29	0	GOOD
11	SCI_OL__2PRDPA20090403_170905_000033122077_00456_37083_1885.N1	03APR2009 17:09:05	03APR2009 18:04:17	0	GOOD
12	SCI_OL__2PRDPA20090403_184940_000033122077_00457_37084_1886.N1	03APR2009 18:49:40	03APR2009 19:44:53	0	GOOD
13	SCI_OL__2PRDPA20090403_202954_000033812077_00458_37085_1888.N1	03APR2009 20:29:54	03APR2009 21:26:16	0	GOOD
14	SCI_OL__2PRDPA20090403_221030_000033812077_00458_37085_1887.N1	03APR2009 22:10:30	03APR2009 23:06:51	0	GOOD
15	SCI_OL__2PRDPA20090403_235105_000033812077_00460_37087_1889.N1	03APR2009 23:51:05	04APR2009 00:47:27	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: 146773

Total number of cloud data DSRs with good quality flag (=0): 146773 (100.0 %)

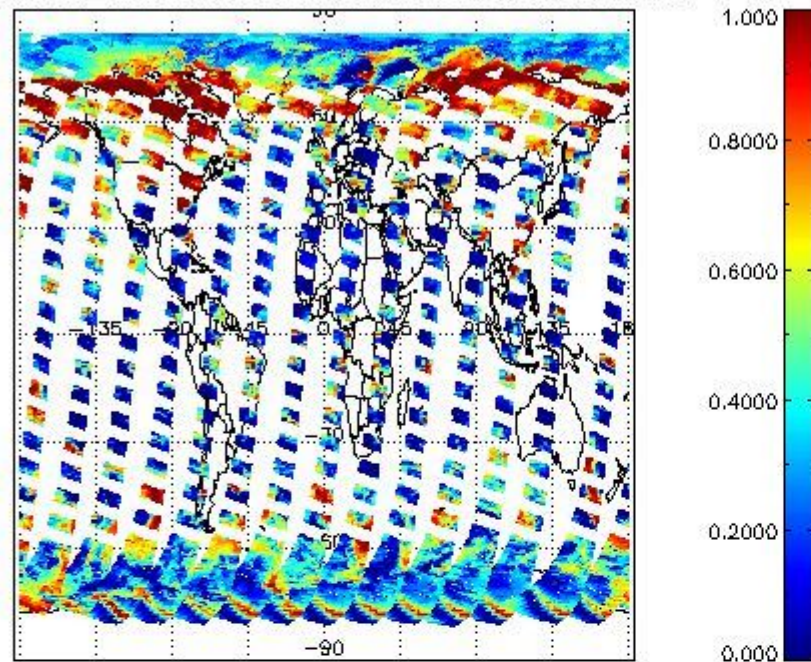
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	146773	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	146773	0.16862	0.12500	0.12500	0.25000	0.059581	s
CL_FRAC	146773	0.39915	0.36790	0.0000	1.0000	0.30534	-
CL_FRAC_ERR	146773	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	146773	5.3959	4.0000	4.0000	8.0000	1.9066	
PMD_READ_CL[0]	146773	0.32397	0.0000	0.0000	8.0000	1.2033	-
PMD_READ_CL[1]	146773	1.1520	0.0000	0.0000	8.0000	2.3602	-
CL_TOP_HEIGHT	128551	3.0348	1.3730	0.0000	17.000	3.5393	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	128551	65.228	100.00	0.0000	101.00	41.101	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	146773	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	146773	11001010	11000100	11000000	11100000	3245.0	flags
AERO_ABSO_IND	146773	3.6058	4.3462	-1.0200	15.764	2.3514	
AERO_IND_DIAG	146773	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	146773	01010110	00000000	00000000	11000000	24444.	flags

Time and geolocation plots:

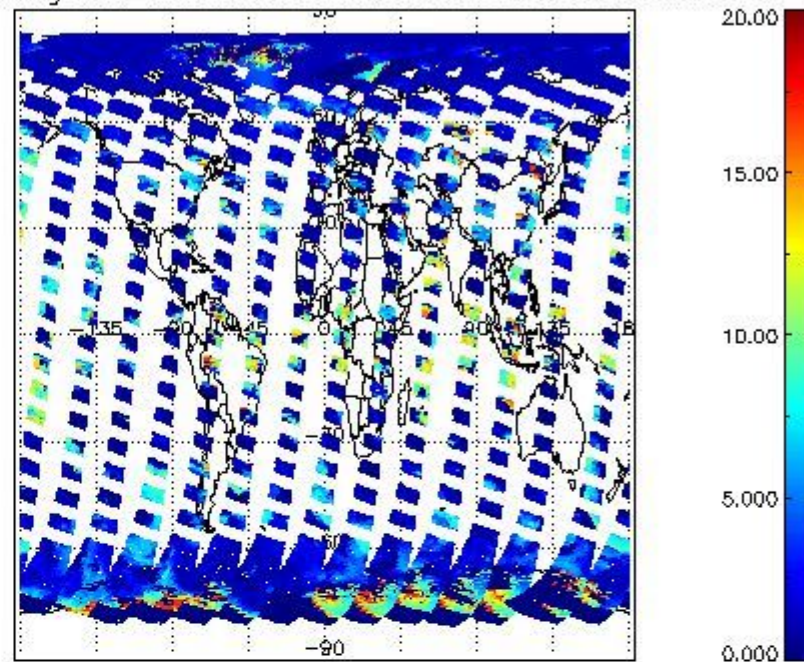
Plots are available for the following parameters:

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

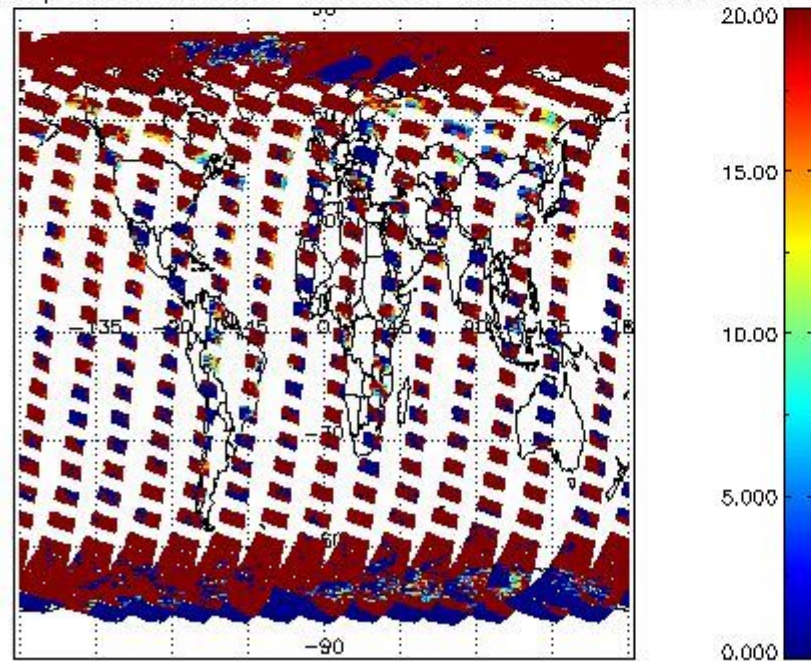
cLfrac for 03APR2009 00:00:00 to 04APR2009 00:00:00



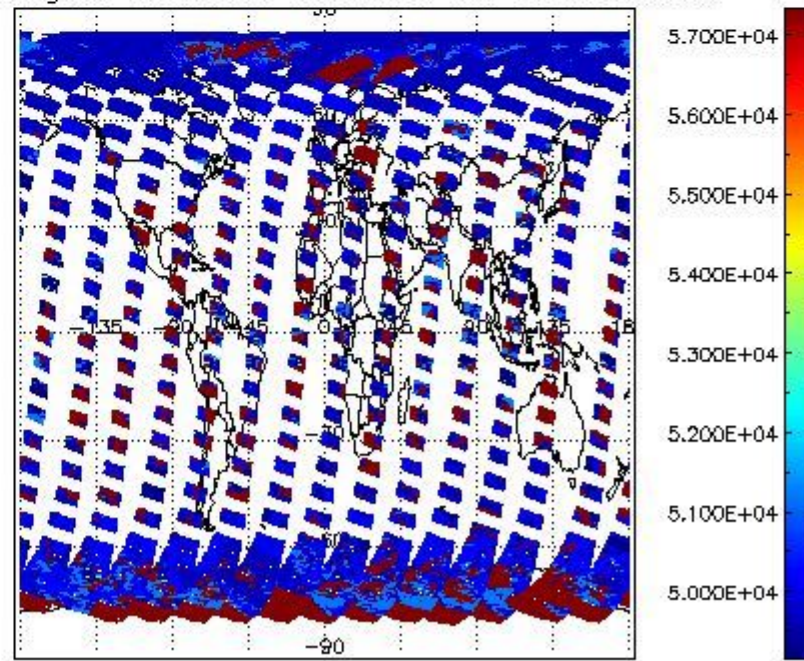
cL_top_height for 03APR2009 00:00:00 to 04APR2009 00:00:00



cLopt_depth for 03APR2009 00:00:00 to 04APR2009 00:00:00



cloud_flags for 03APR2009 00:00:00 to 04APR2009 00:00:00



2.2.2 Nadir

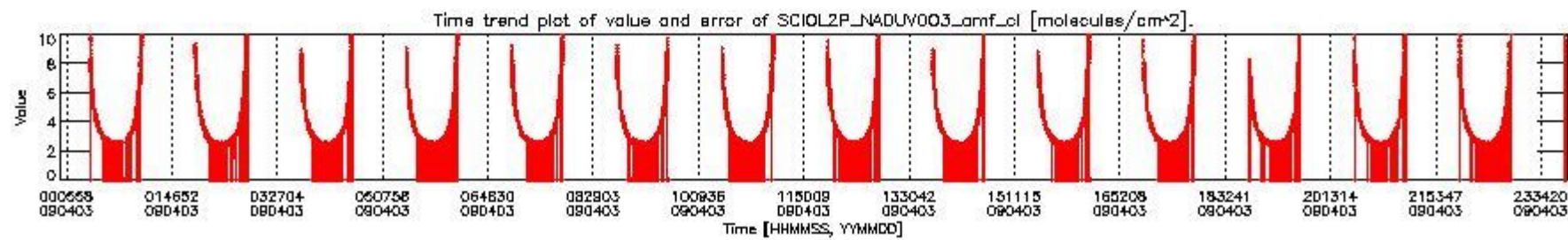
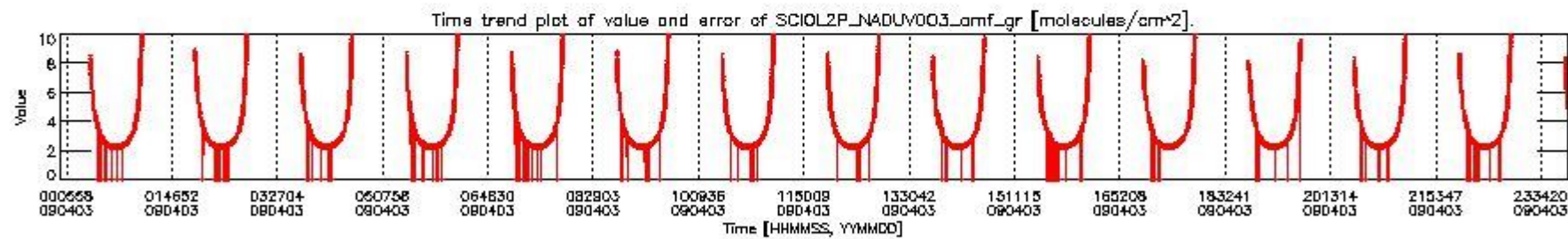
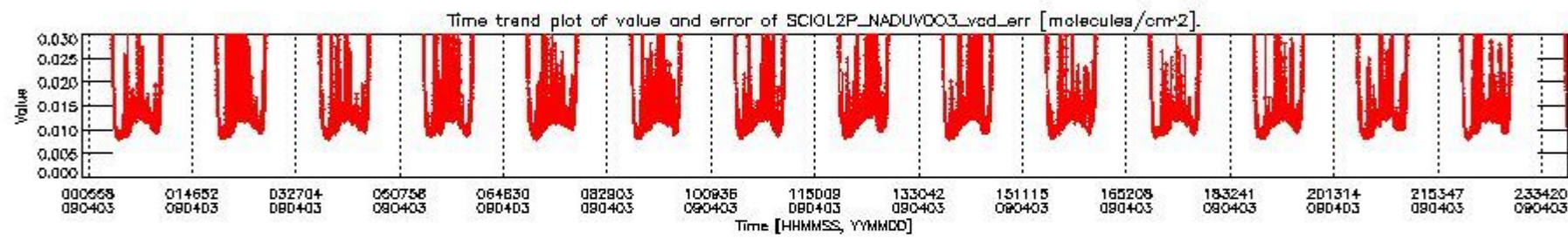
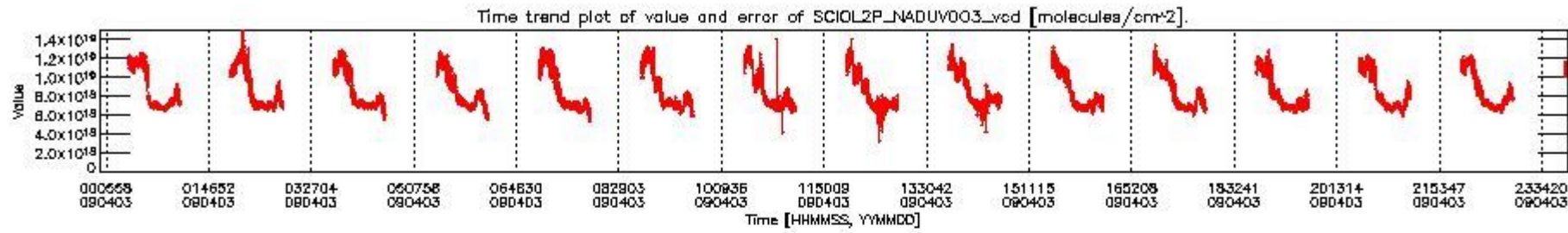
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

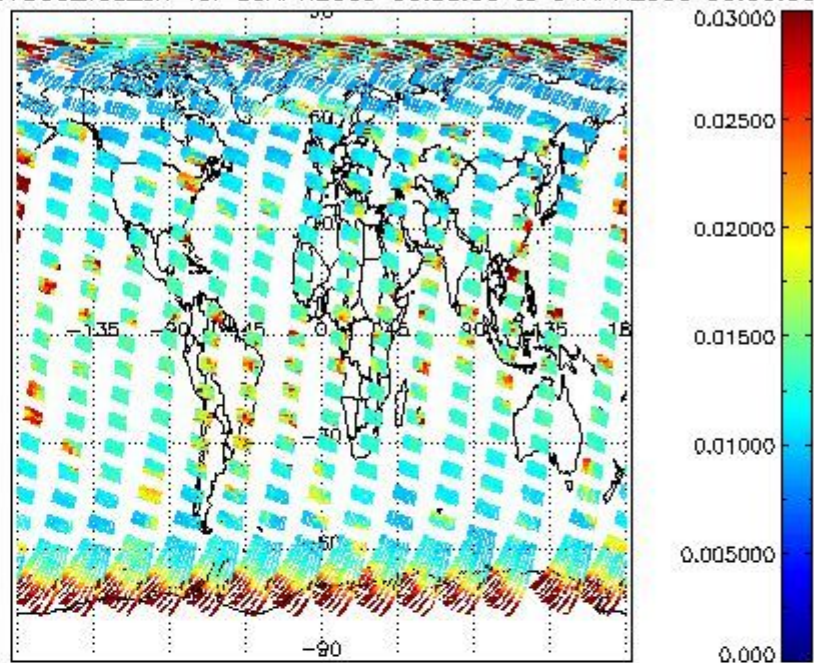
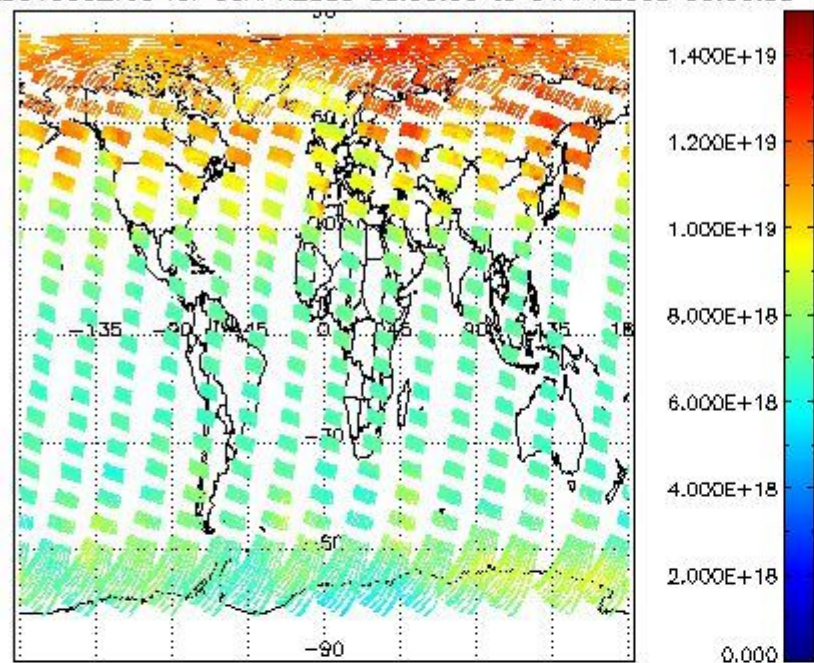
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

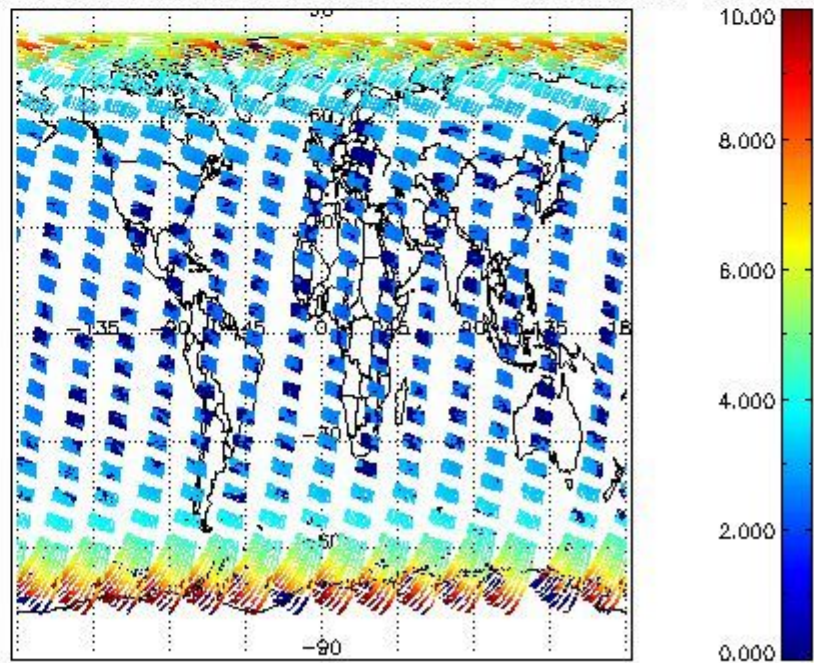
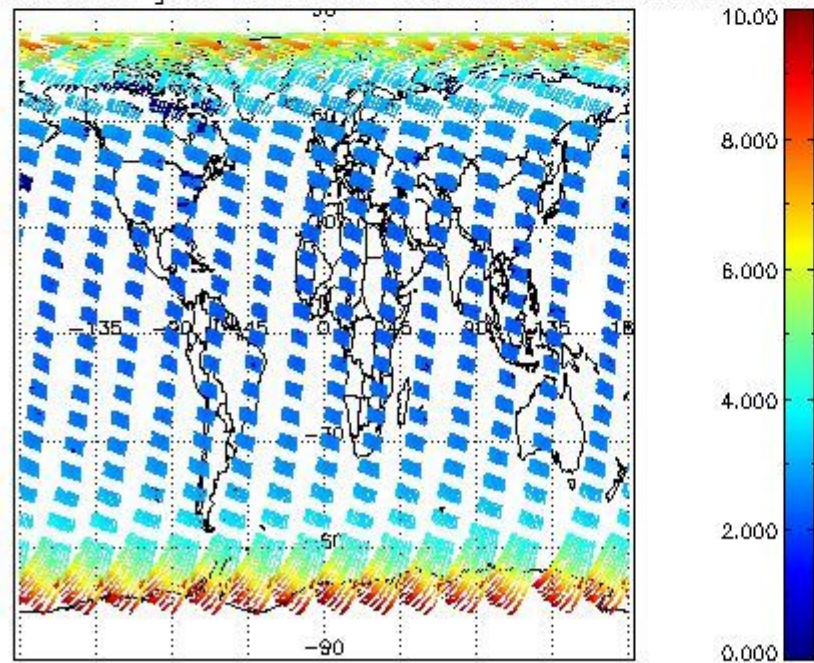
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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

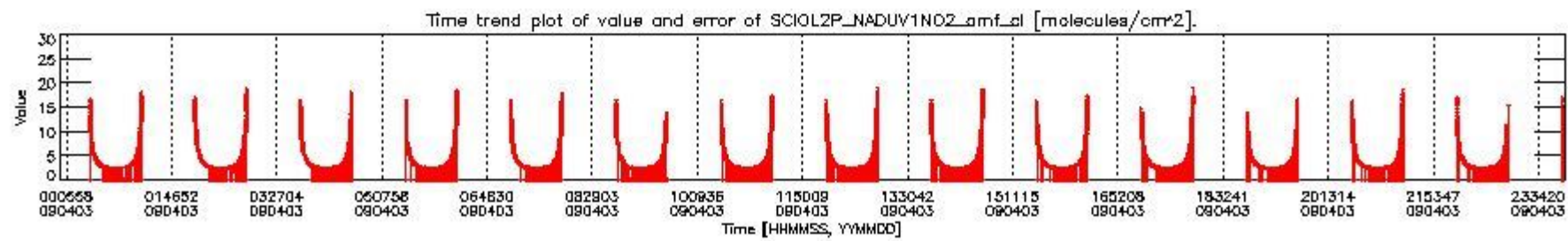
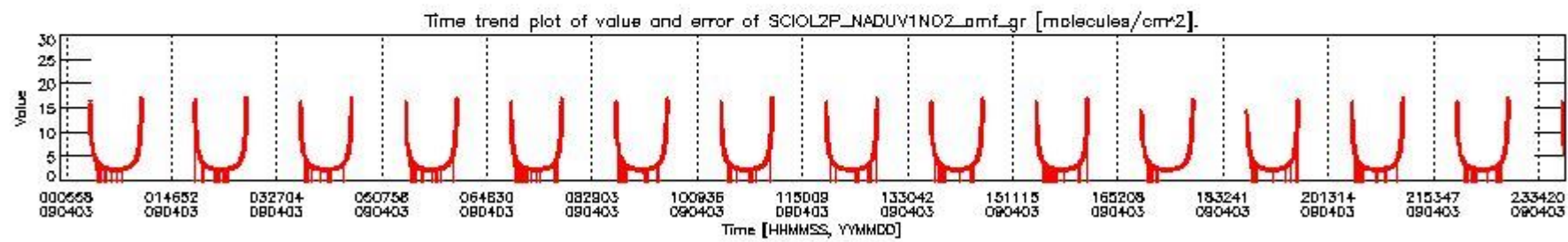
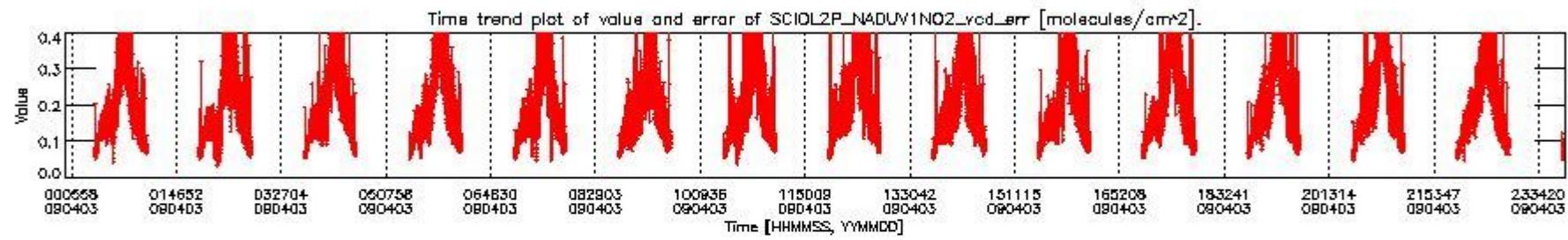
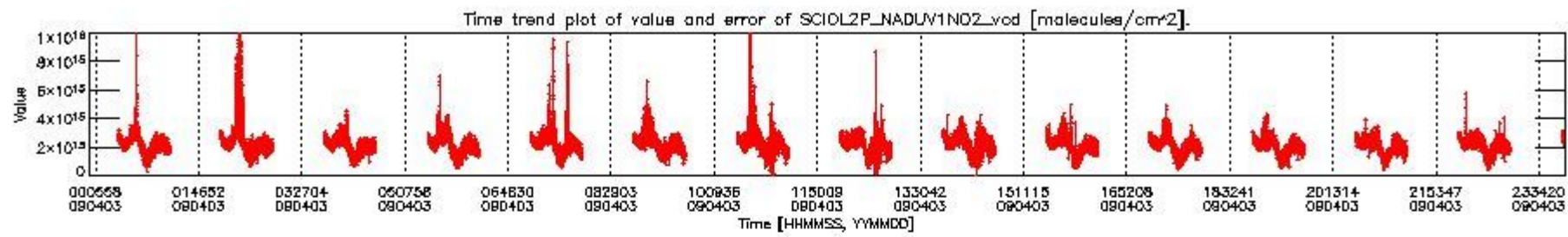


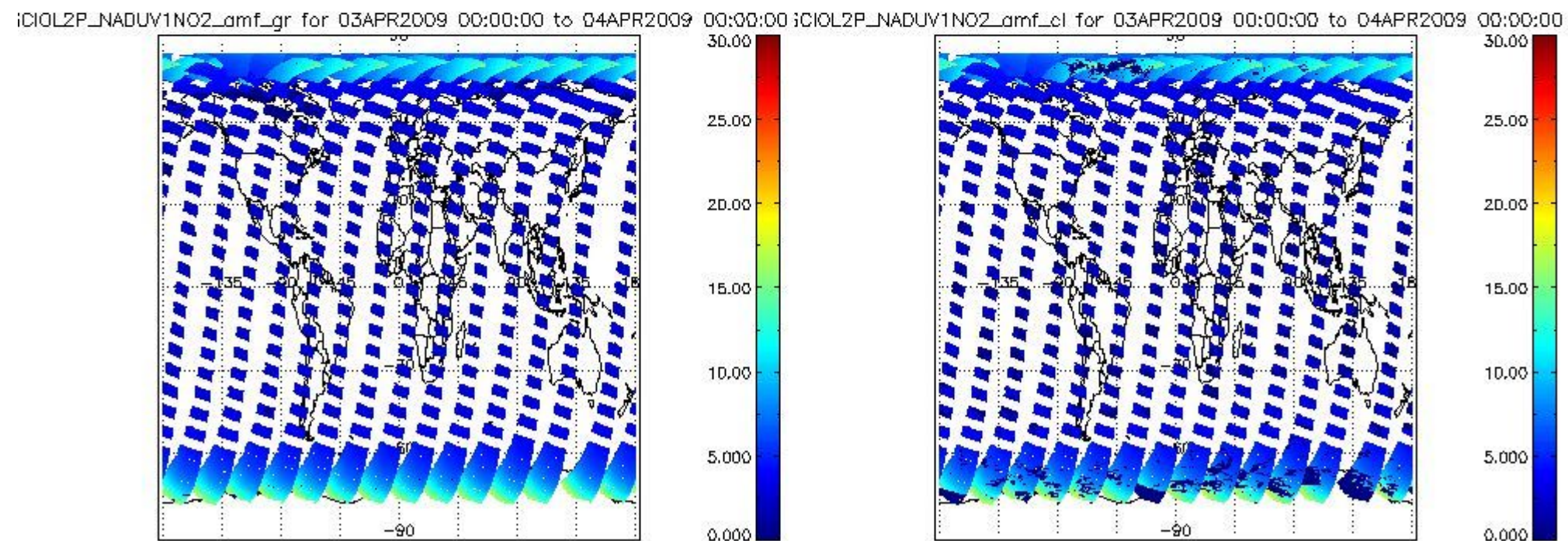
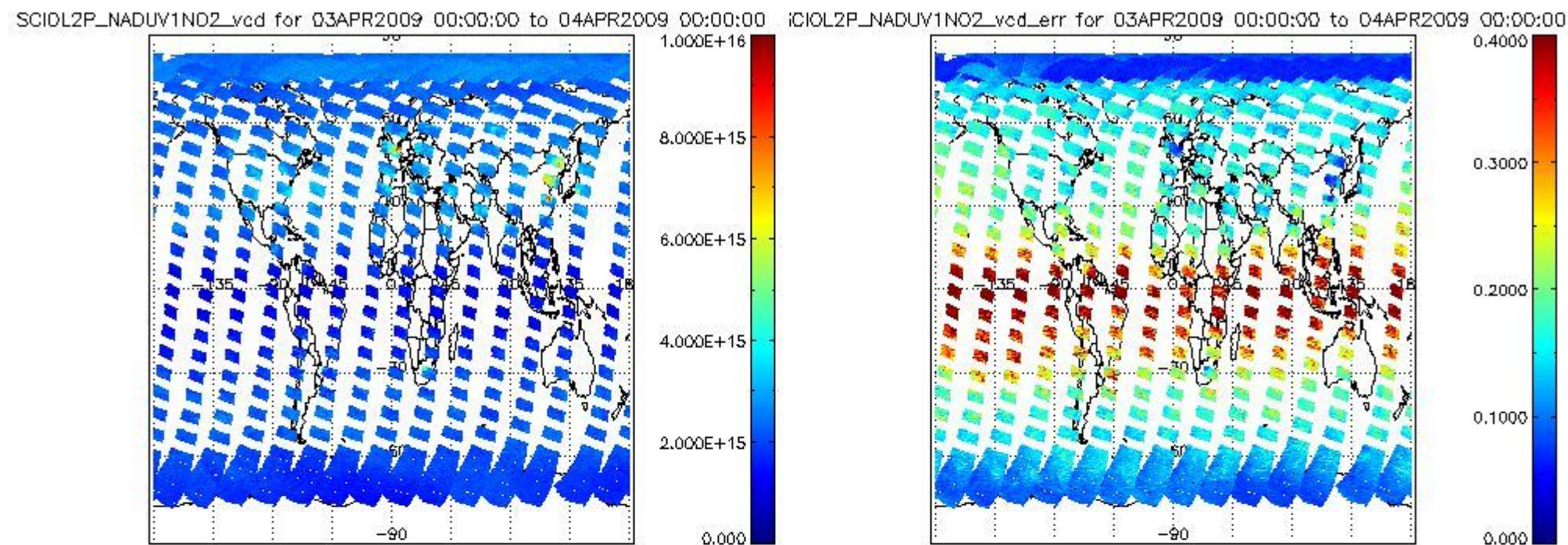
SCIOL2P_NADUV003_vcd for 03APR2009 00:00:00 to 04APR2009 00:00:00 SCIOL2P_NADUV003_vcd_err for 03APR2009 00:00:00 to 04APR2009 00:00:00



SCIOL2P_NADUV003_amf_gr for 03APR2009 00:00:00 to 04APR2009 00:00:00 SCIOL2P_NADUV003_amf_cl for 03APR2009 00:00:00 to 04APR2009 00:00:00







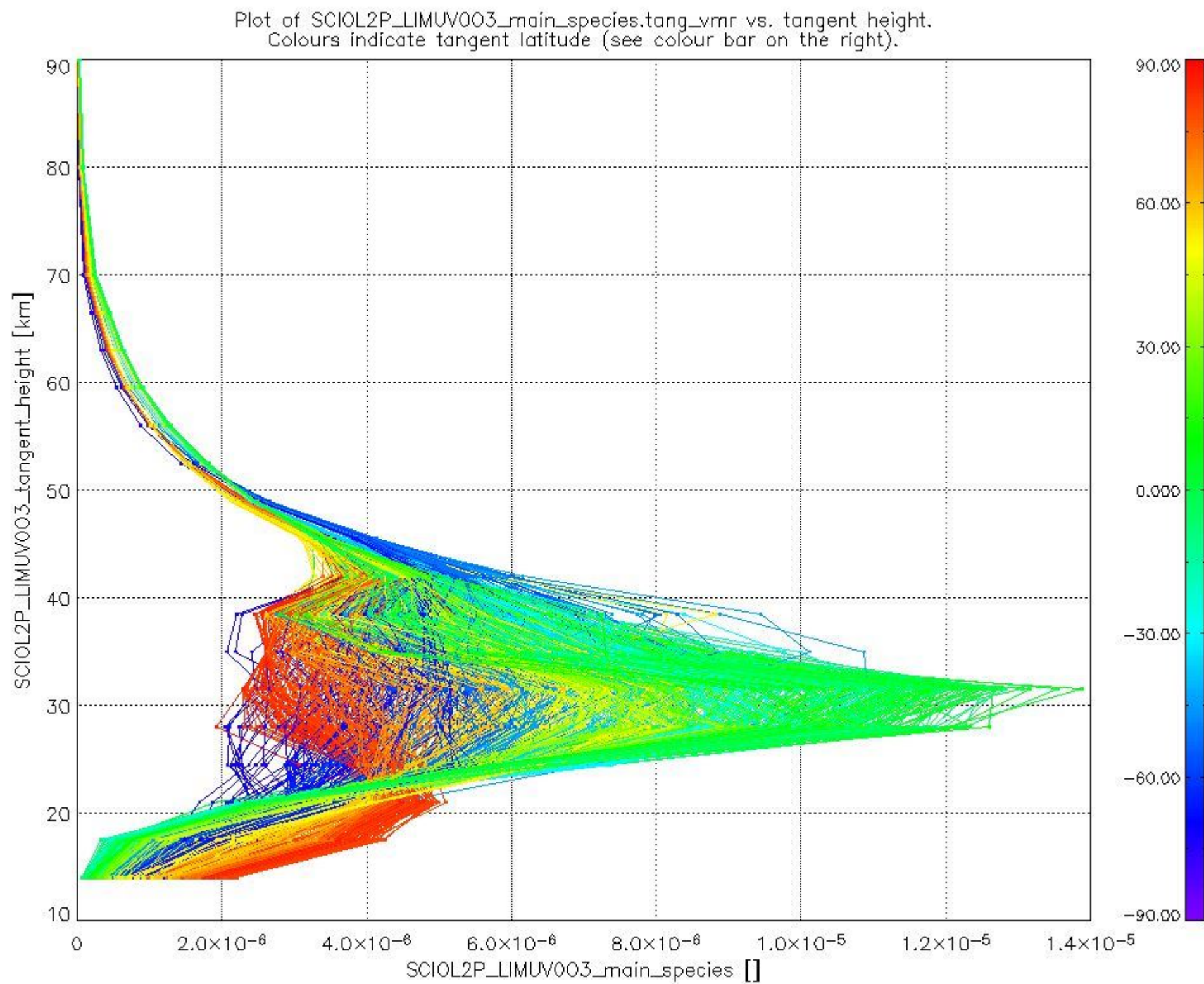
2.2.3 Limb

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

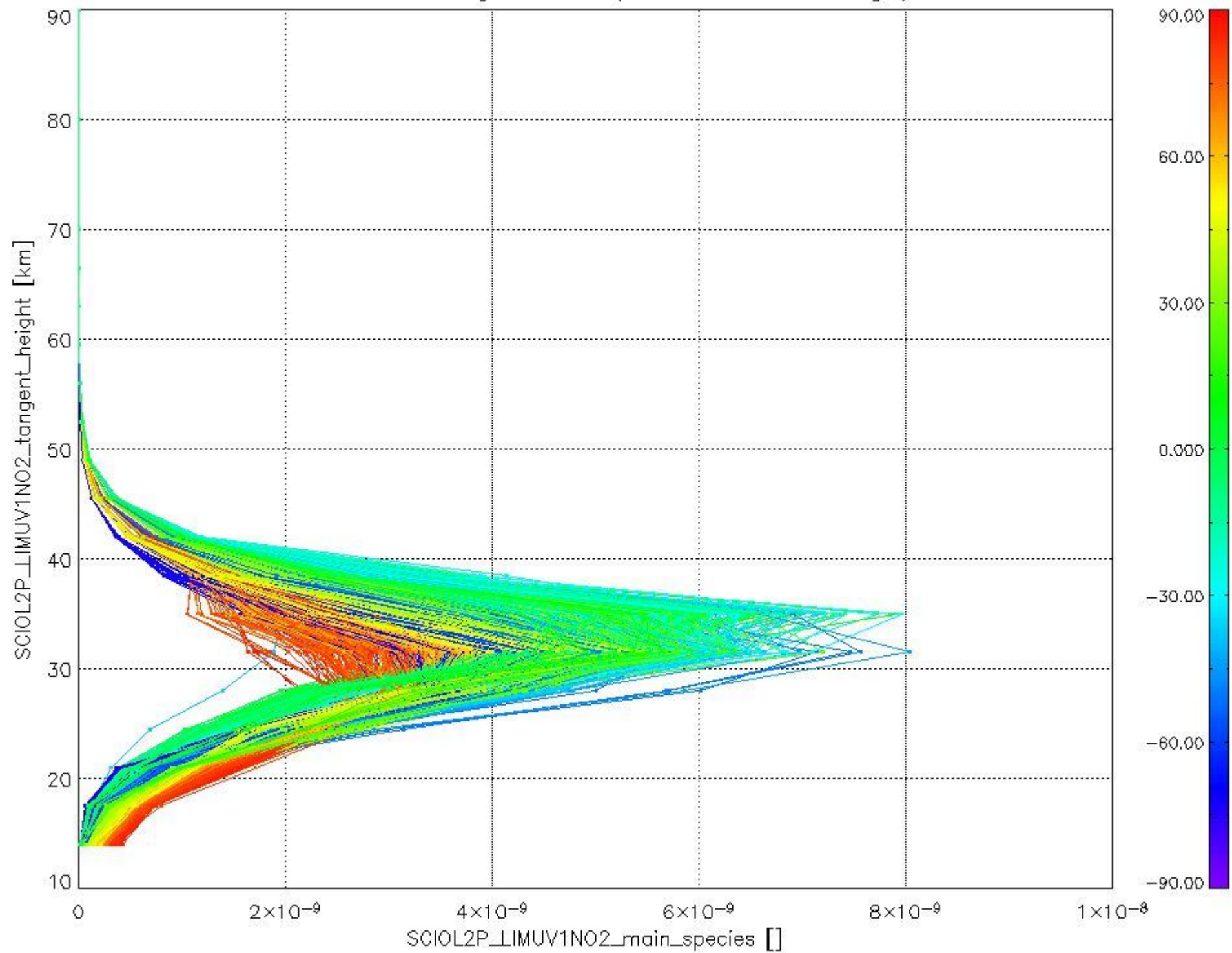
The following data items are currently included into this section:

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.



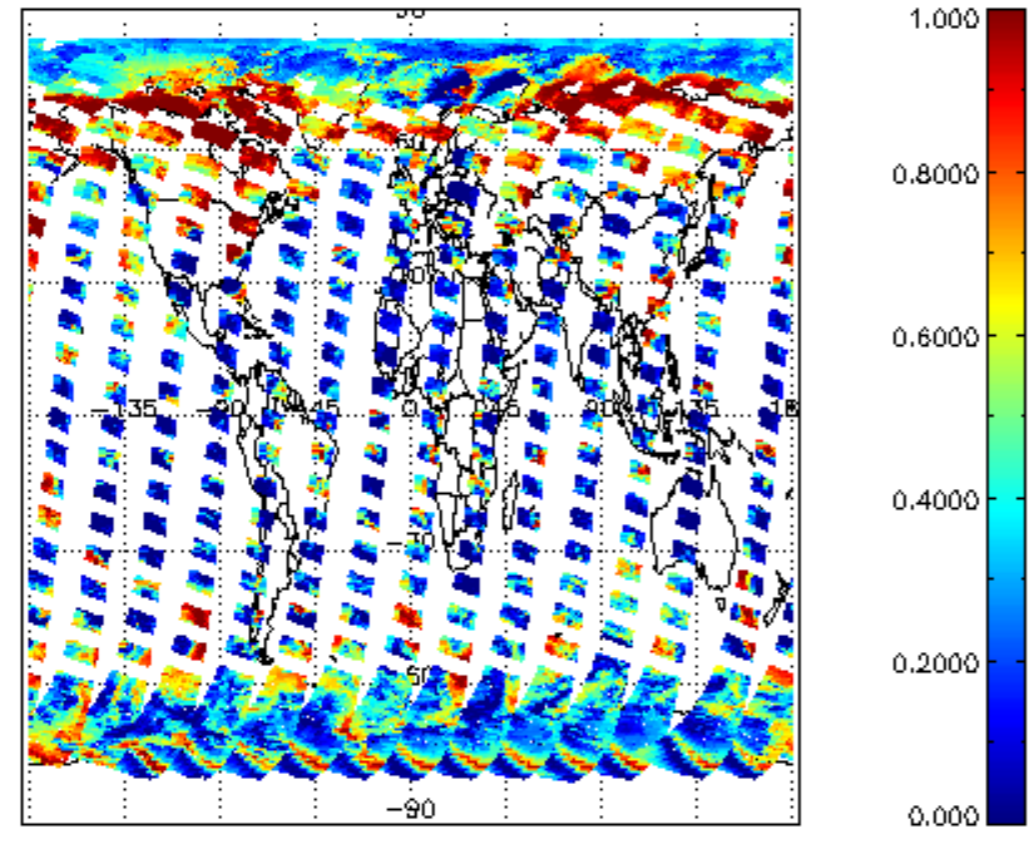
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



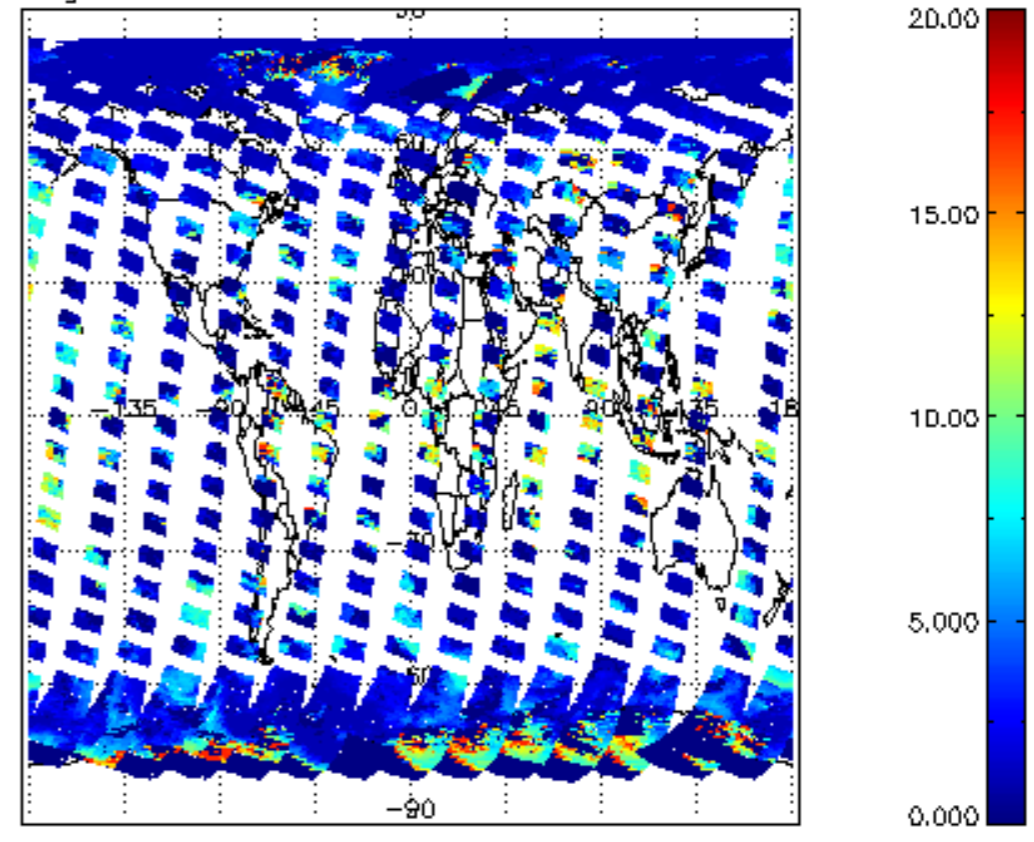
2.3 ADF monitoring

Number	ADF
	IN_ (INITIALISATION_FILE)
0	SCI_IN__AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

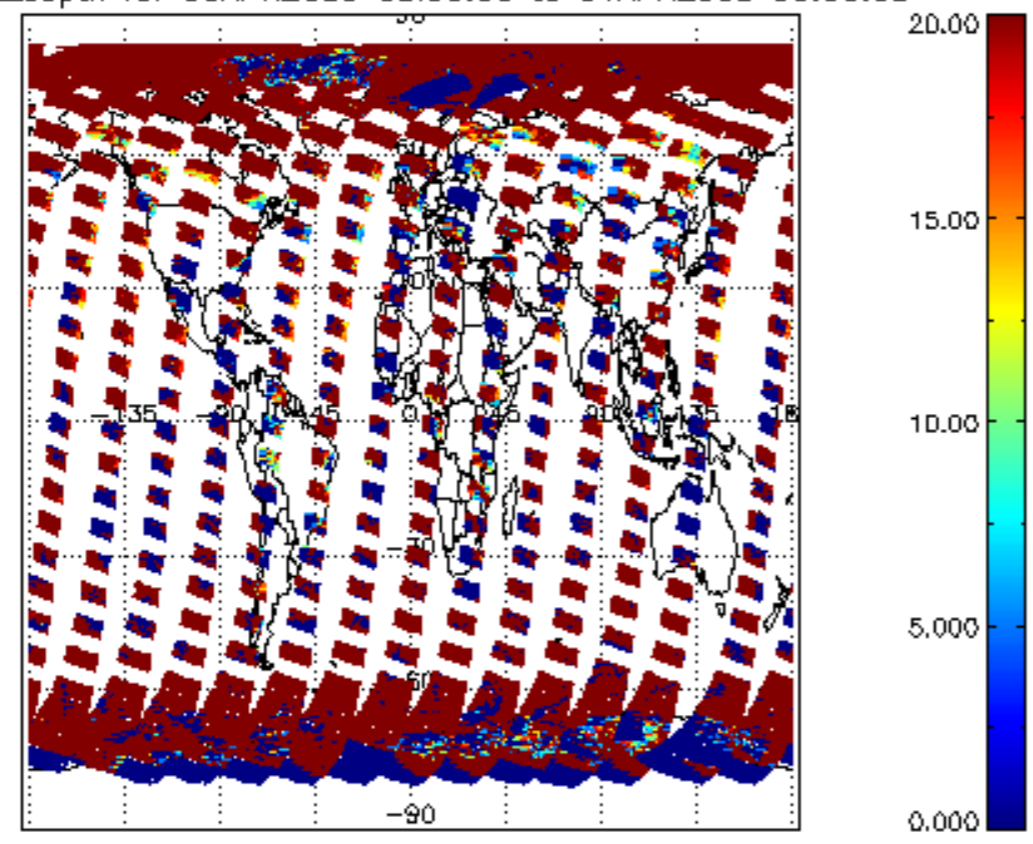
cl_frac for 03APR2009 00:00:00 to 04APR2009 00:00:00



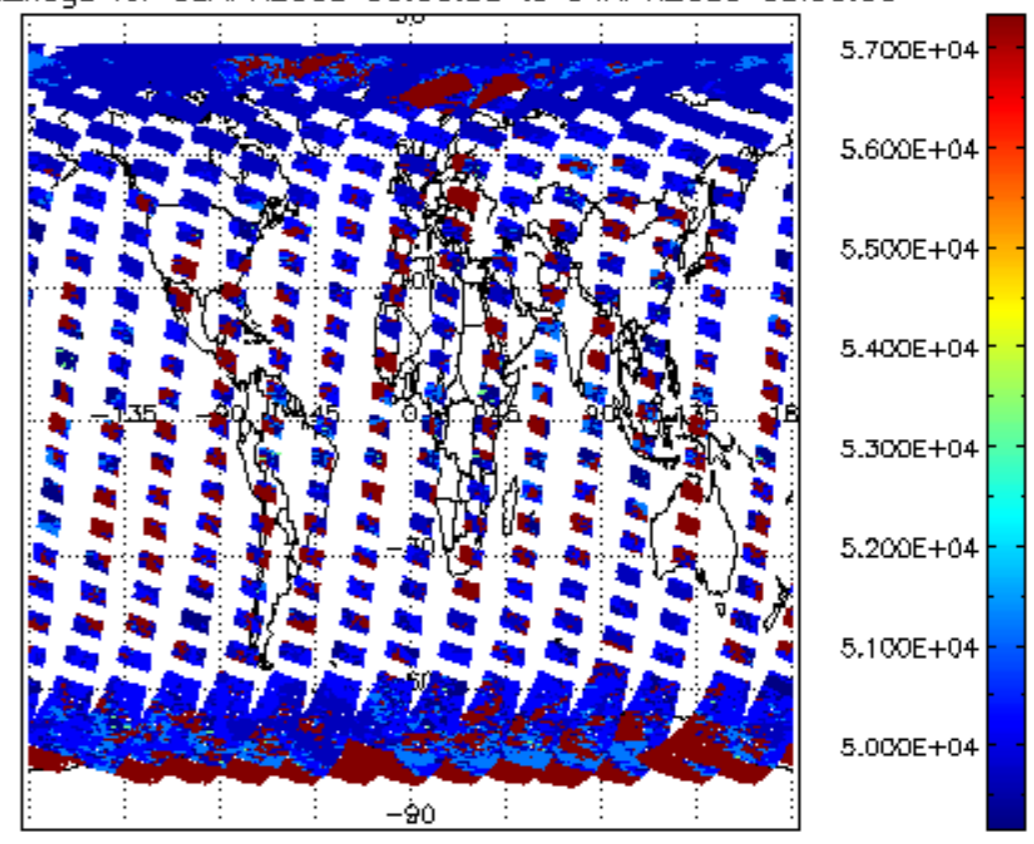
cl_top_height for 03APR2009 00:00:00 to 04APR2009 00:00:00

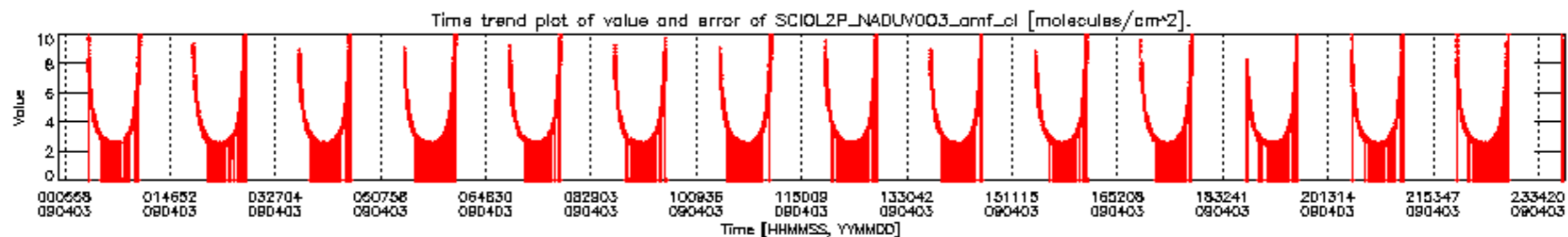
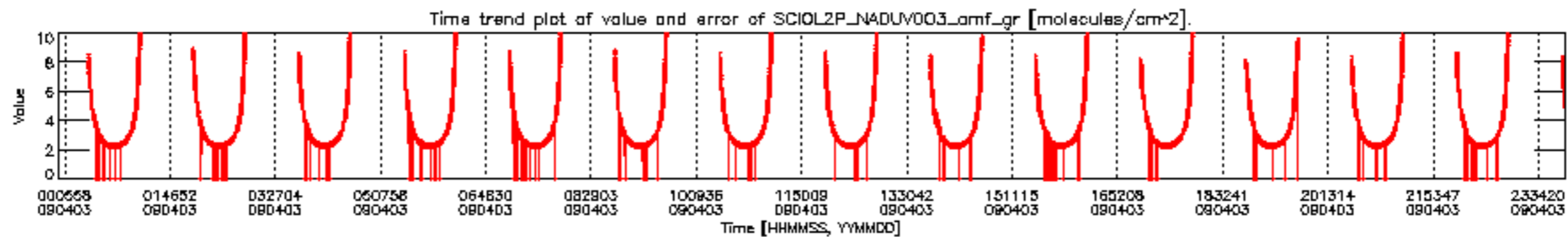
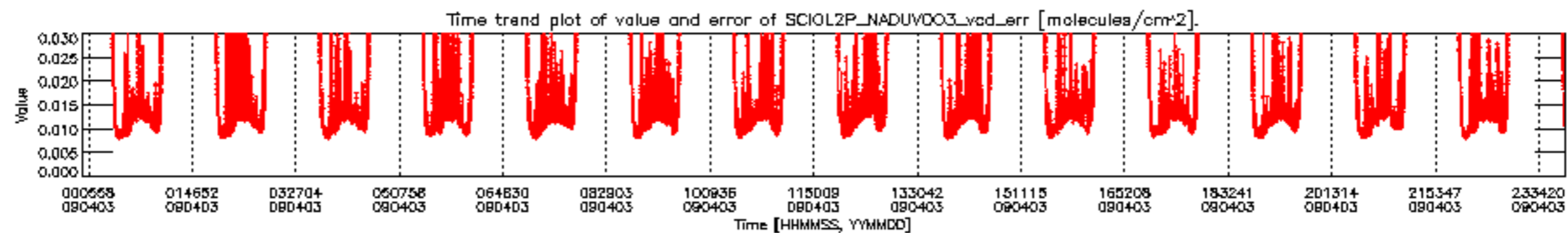
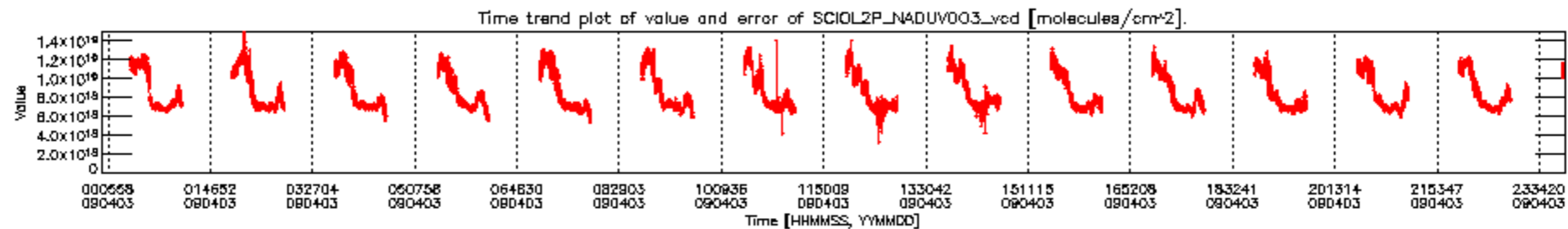


cl_opt_depth for 03APR2009 00:00:00 to 04APR2009 00:00:00

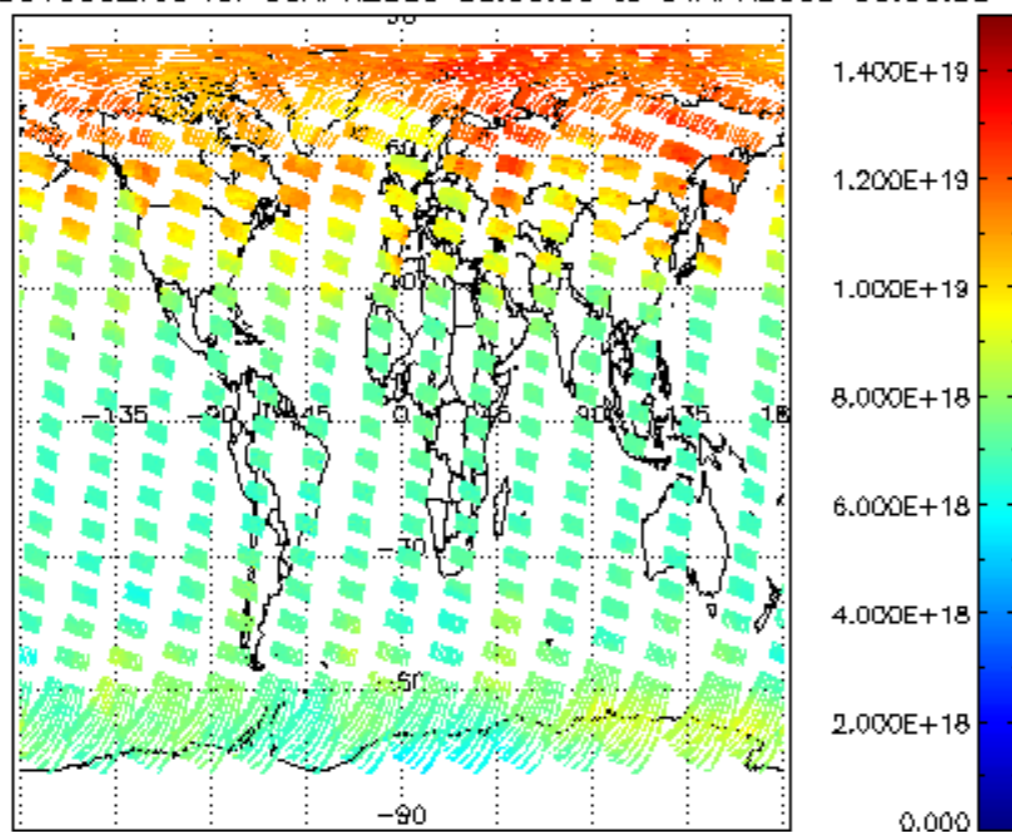


cloud_flags for 03APR2009 00:00:00 to 04APR2009 00:00:00

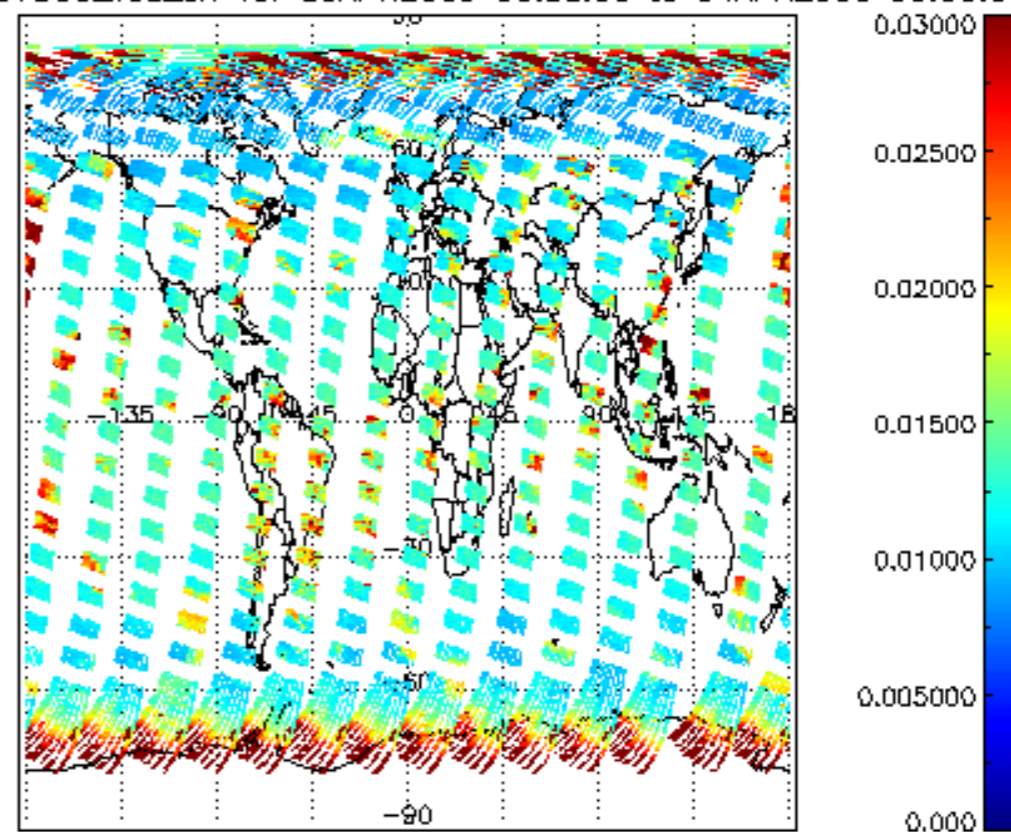




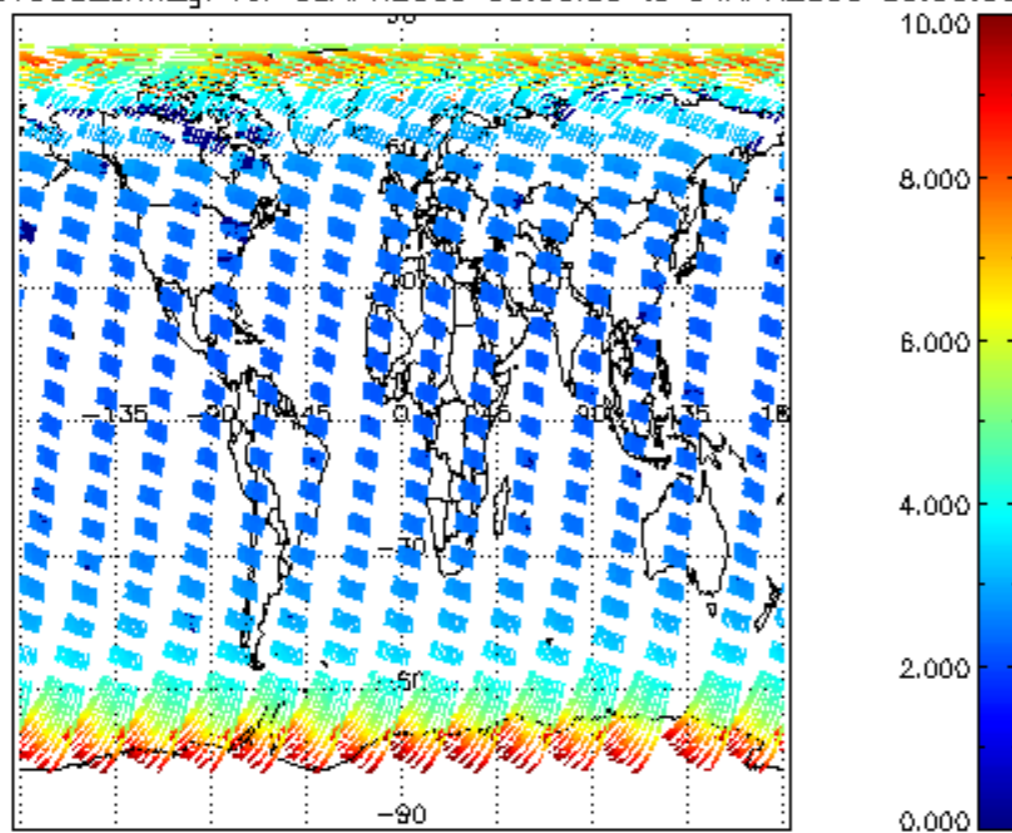
SCIOL2P_NADUV003_vcd for 03APR2009 00:00:00 to 04APR2009 00:00:00



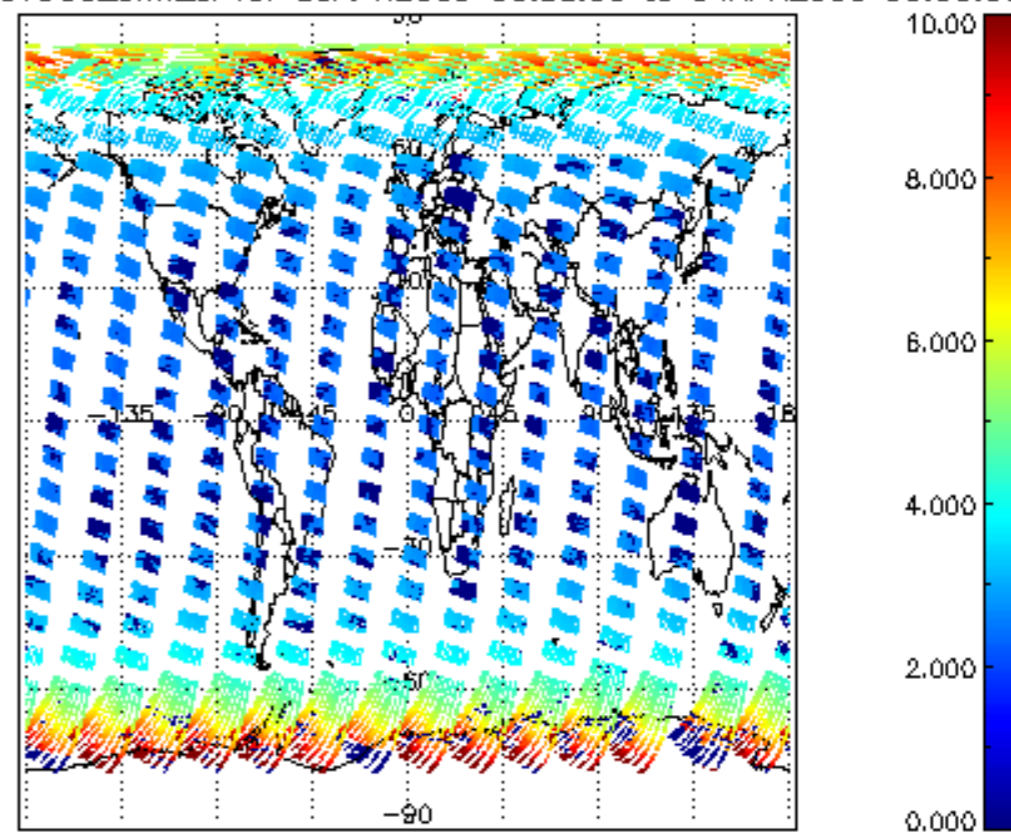
SCIOL2P_NADUV003_vcd_err for 03APR2009 00:00:00 to 04APR2009 00:00:00



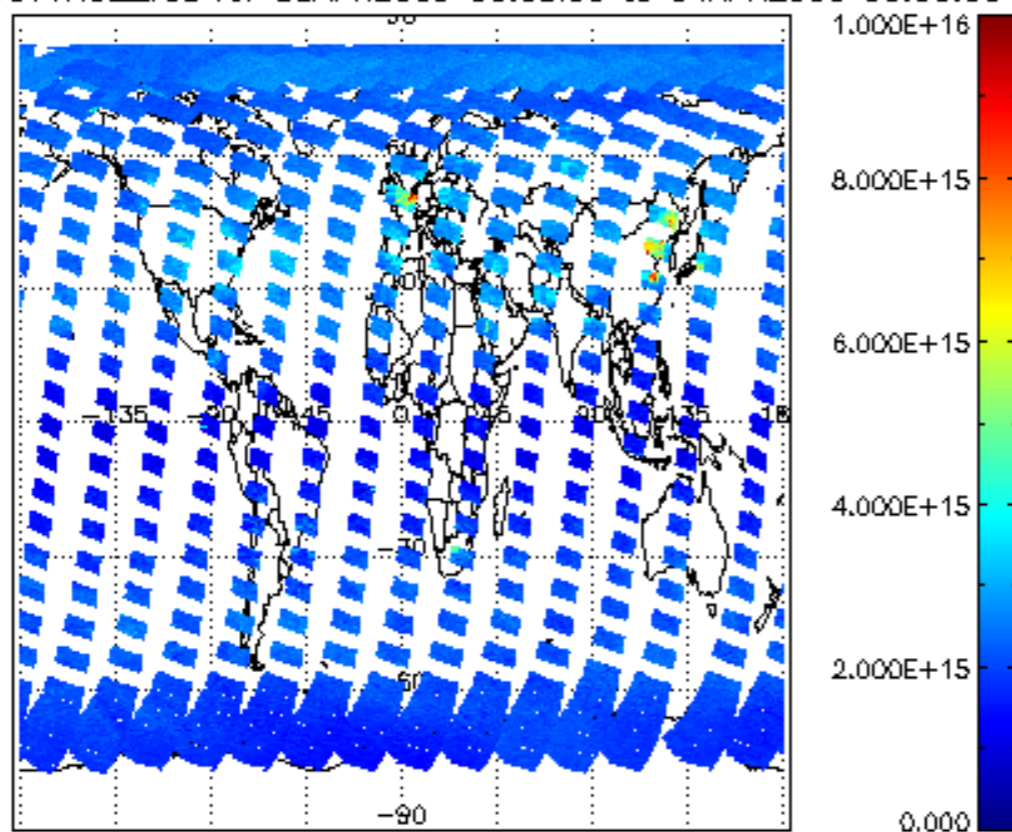
SCIOL2P_NADUV003_amf_gr for 03APR2009 00:00:00 to 04APR2009 00:00:00



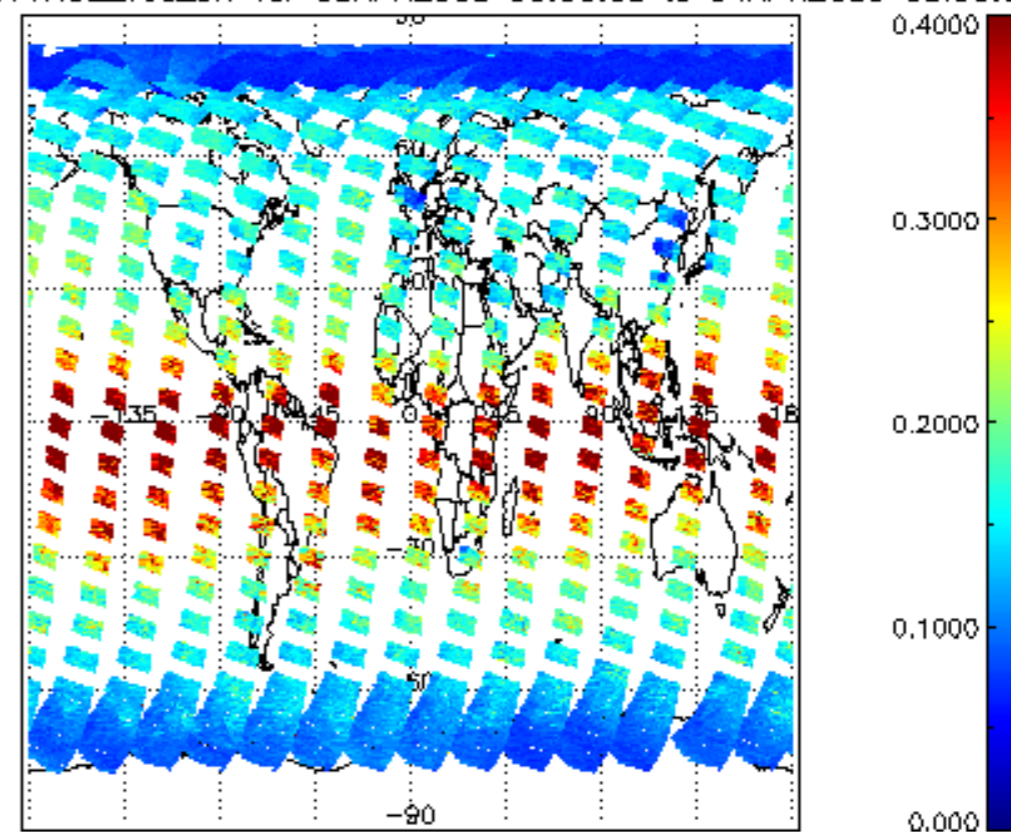
SCIOL2P_NADUV003_amf_cl for 03APR2009 00:00:00 to 04APR2009 00:00:00



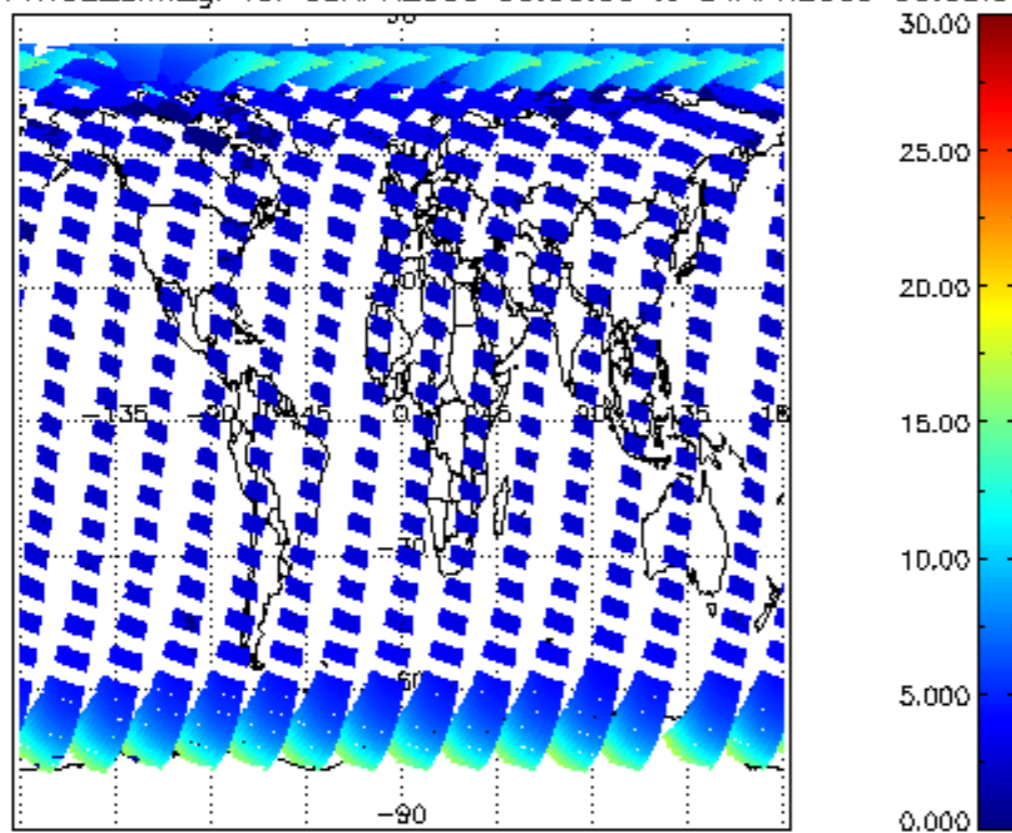
SCIOL2P_NADUV1NO2_vcd for 03APR2009 00:00:00 to 04APR2009 00:00:00



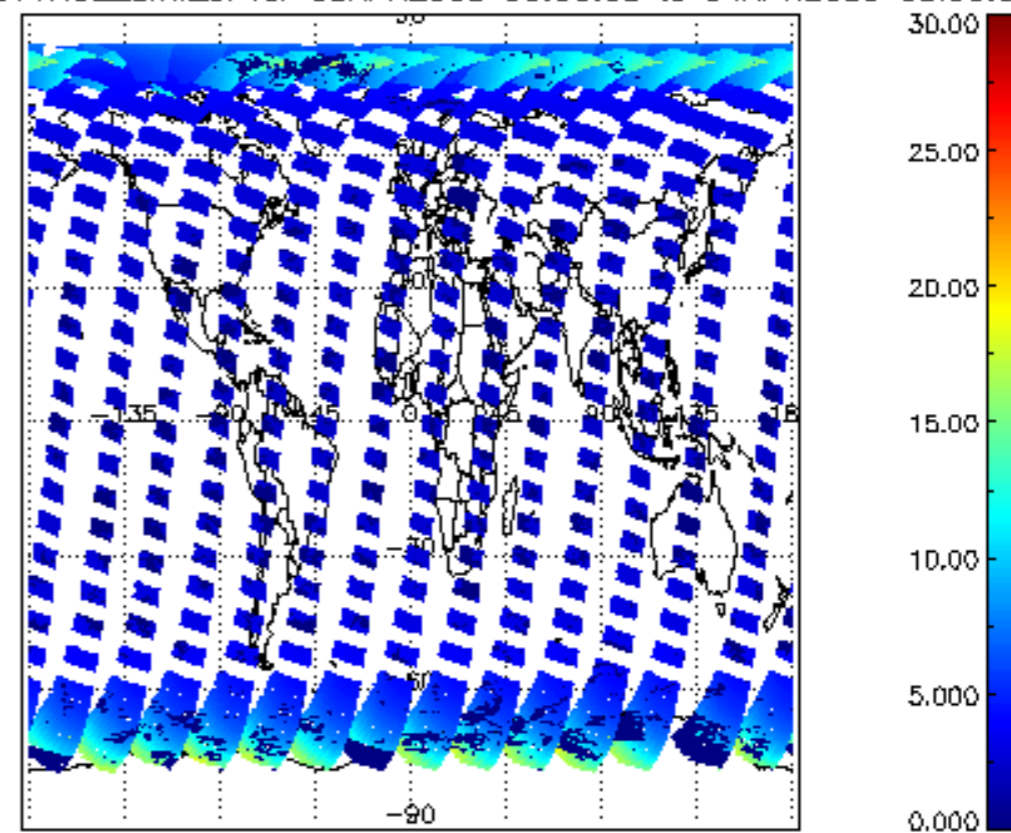
iCIOL2P_NADUV1NO2_vcd_err for 03APR2009 00:00:00 to 04APR2009 00:00:00



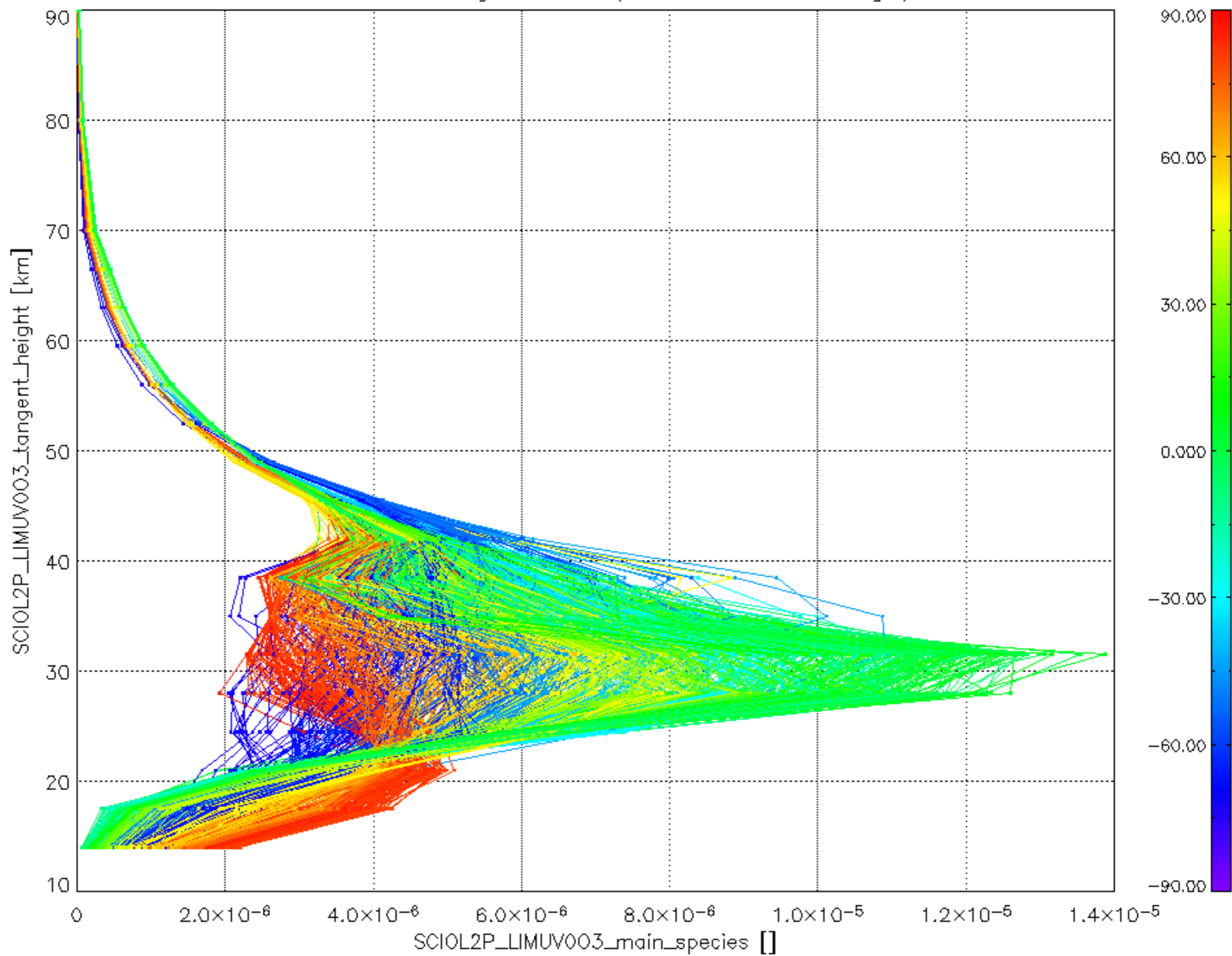
iCIOL2P_NADUV1NO2_amf_gr for 03APR2009 00:00:00 to 04APR2009 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 03APR2009 00:00:00 to 04APR2009 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).

