

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	18OCT2008 06:03:23
Data source version	SCIA-OL/3.01-R
Processing scope for products	30SEP2008 00:00:00 to 01OCT2008 00:00:00
Start time of first product within scope	29SEP2008 22:59:31
Stop time of last product within scope	01OCT2008 01:04:59
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__2PRDPA20080929_225931_000033252072_00302_34424_1689.N1	29SEP2008 22:59:31	29SEP2008 23:54:57	0	GOOD
1	SCI_OL__2PRDPA20080930_004007_000033812072_00303_34425_1691.N1	30SEP2008 00:40:07	30SEP2008 01:36:29	0	GOOD
2	SCI_OL__2PRDPA20080930_022044_000033252072_00304_34426_1694.N1	30SEP2008 02:20:44	30SEP2008 03:16:09	0	GOOD
3	SCI_OL__2PRDPA20080930_040120_000033812072_00305_34427_1695.N1	30SEP2008 04:01:20	30SEP2008 04:57:42	0	GOOD
4	SCI_OL__2PRDPA20080930_054157_000033252072_00306_34428_1709.N1	30SEP2008 05:41:57	30SEP2008 06:37:22	0	GOOD
5	SCI_OL__2PRDPA20080930_072233_000033812072_00307_34429_1711.N1	30SEP2008 07:22:33	30SEP2008 08:18:55	0	GOOD
6	SCI_OL__2PRDPA20080930_090310_000033252072_00308_34430_1756.N1	30SEP2008 09:03:10	30SEP2008 09:58:35	0	GOOD
7	SCI_OL__2PRDPA20080930_104346_000033812072_00309_34431_1757.N1	30SEP2008 10:43:46	30SEP2008 11:40:08	0	GOOD
8	SCI_OL__2PRDPA20080930_122423_000033252072_00310_34432_1759.N1	30SEP2008 12:24:23	30SEP2008 13:19:48	0	GOOD
9	SCI_OL__2PRDPA20080930_140459_000033812072_00311_34433_1762.N1	30SEP2008 14:04:59	30SEP2008 15:01:21	0	GOOD
10	SCI_OL__2PRDPA20080930_154536_000033252072_00312_34434_1763.N1	30SEP2008 15:45:36	30SEP2008 16:41:01	0	GOOD
11	SCI_OL__2PRDPA20080930_172605_000033872072_00313_34435_1765.N1	30SEP2008 17:26:05	30SEP2008 18:22:33	0	GOOD
12	SCI_OL__2PRDPA20080930_190709_000033252072_00314_34436_1767.N1	30SEP2008 19:07:09	30SEP2008 20:02:34	0	GOOD
13	SCI_OL__2PRDPA20080930_204725_000033812072_00315_34437_1769.N1	30SEP2008 20:47:25	30SEP2008 21:43:47	0	GOOD
14	SCI_OL__2PRDPA20080930_222802_000033252072_00316_34438_1772.N1	30SEP2008 22:28:02	30SEP2008 23:23:27	0	GOOD
15	SCI_OL__2PRDPA20081001_000838_000033812072_00317_34439_1773.N1	01OCT2008 00:08:38	01OCT2008 01:04:59	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: 146380

Total number of cloud data DSRs with good quality flag (=0): 146380 (100.0 %)

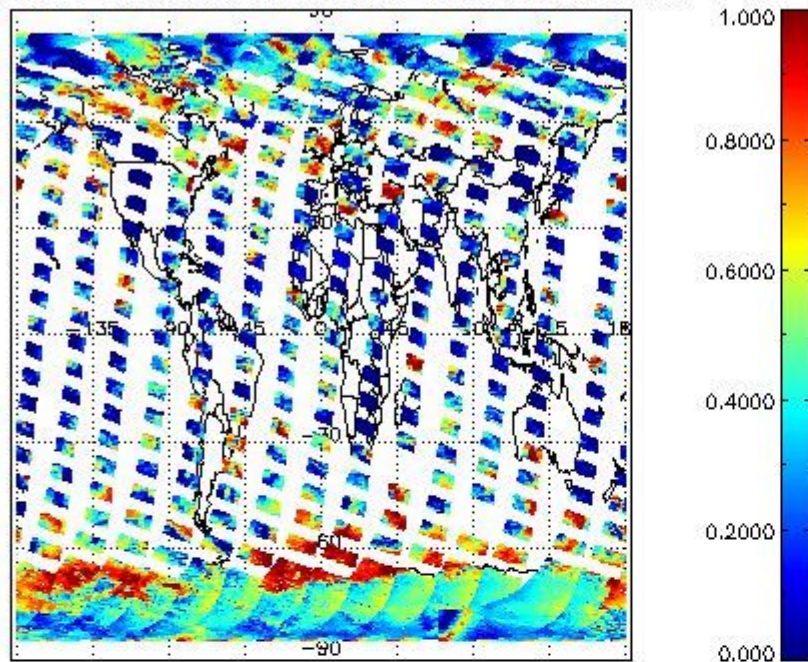
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	146380	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	146380	0.16963	0.12500	0.12500	0.25000	0.059890	s
CL_FRAC	146380	0.36805	0.33908	0.0000	1.0000	0.28776	-
CL_FRAC_ERR	146380	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	146380	5.4281	4.0000	4.0000	8.0000	1.9165	
PMD_READ_CL[0]	146380	0.18597	0.0000	0.0000	8.0000	0.96197	-
PMD_READ_CL[1]	146380	1.1856	0.0000	0.0000	8.0000	2.3839	-
CL_TOP_HEIGHT	121513	3.9489	2.3240	0.0000	17.000	4.2470	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	121513	55.435	50.046	0.0000	101.00	41.465	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	146380	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	146380	11001011	11000100	11000000	11100000	3418.5	flags
AERO_ABSO_IND	146380	3.0280	3.4681	-1.5556	13.684	2.1163	
AERO_IND_DIAG	146380	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	146380	01010110	00000000	00000000	11000000	24461.	flags

Time and geolocation plots:

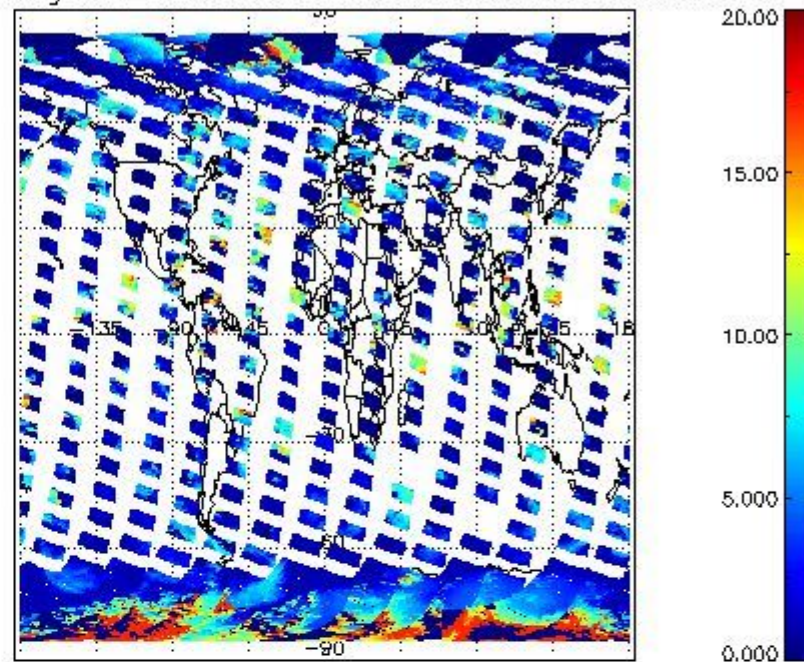
Plots are available for the following parameters:

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

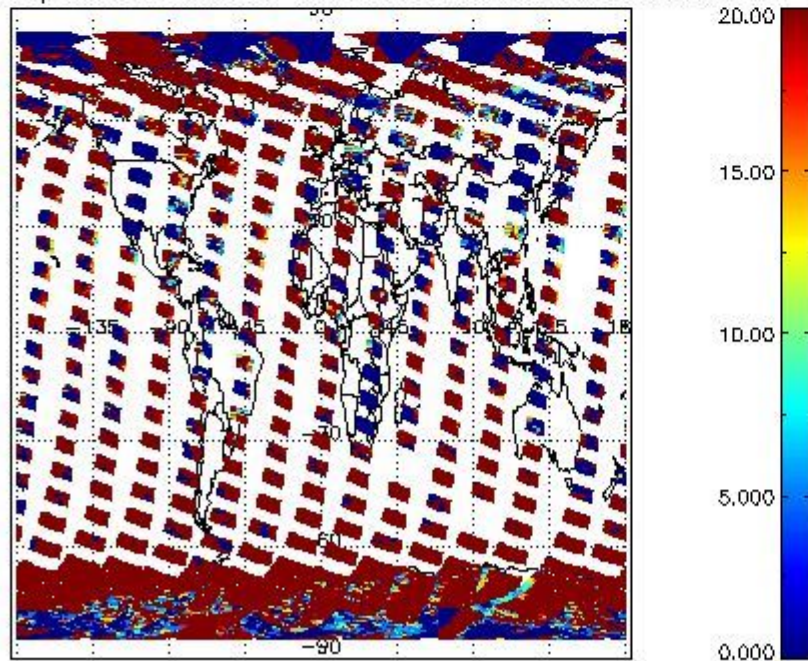
cLfrac for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



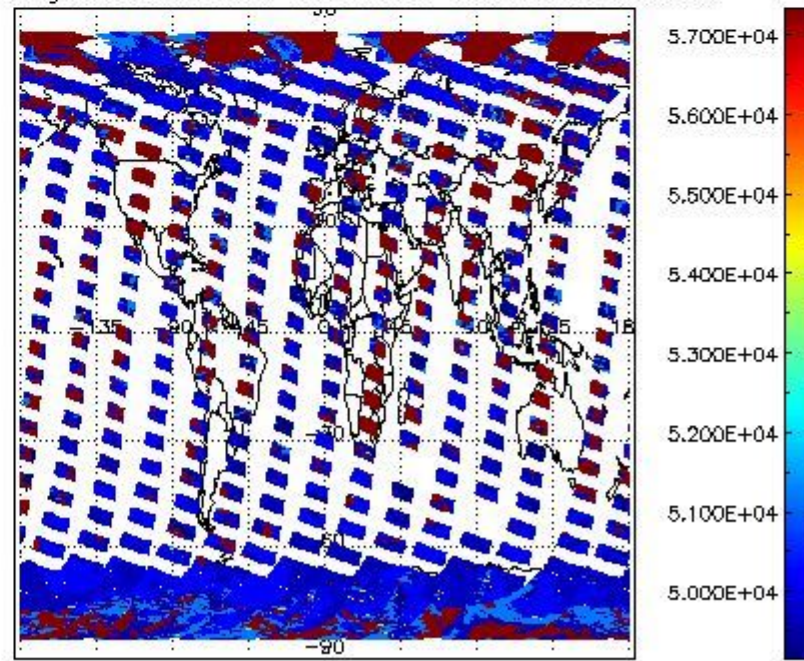
cL_top_height for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



cLopt_depth for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



cloud_flags for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



2.2.2 Nadir

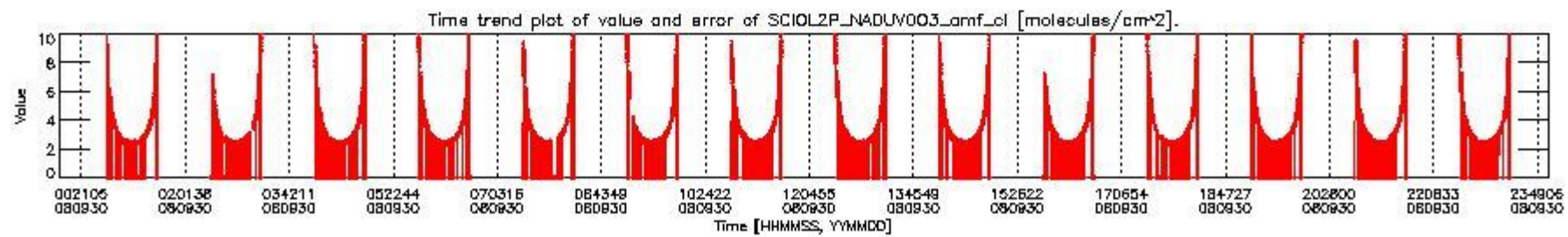
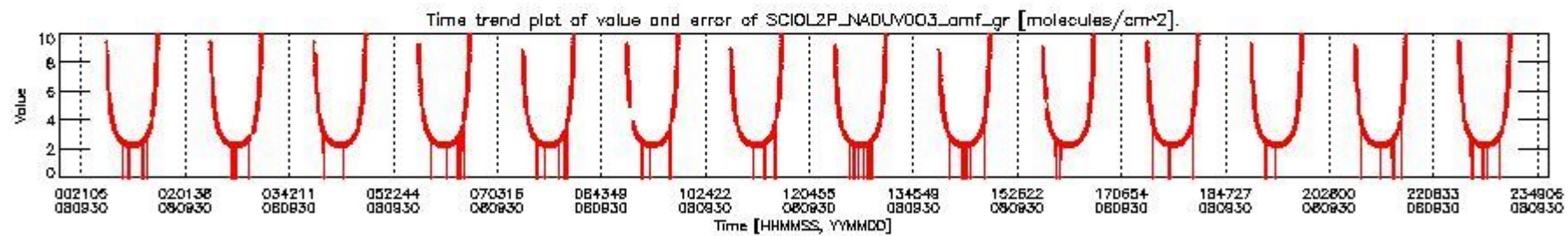
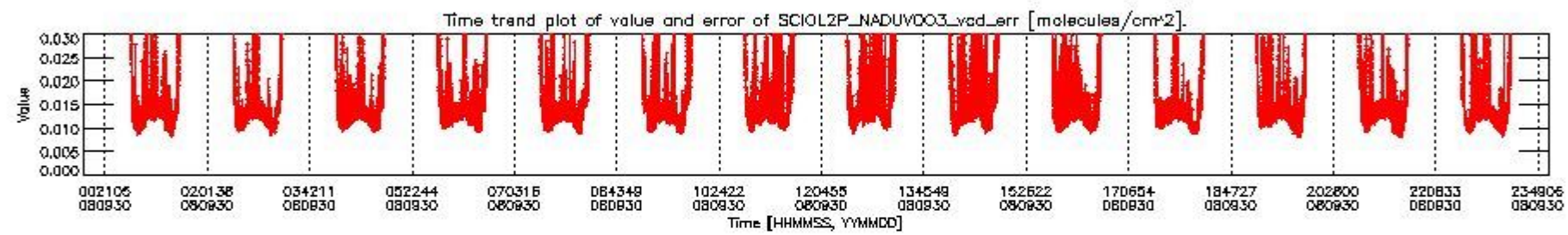
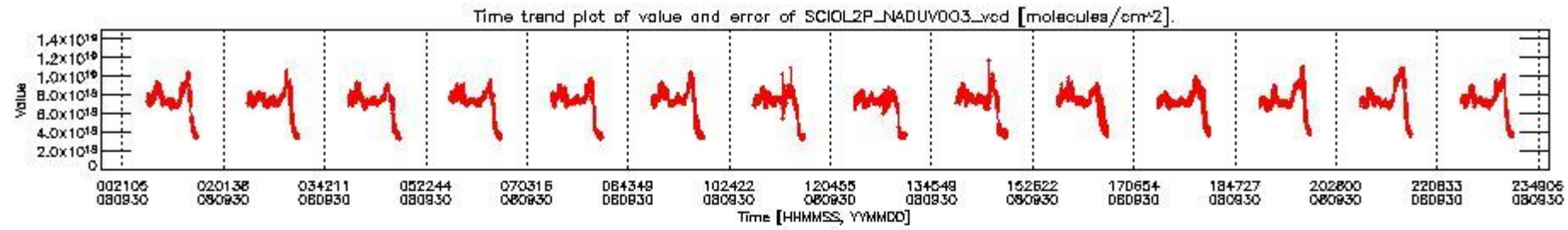
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

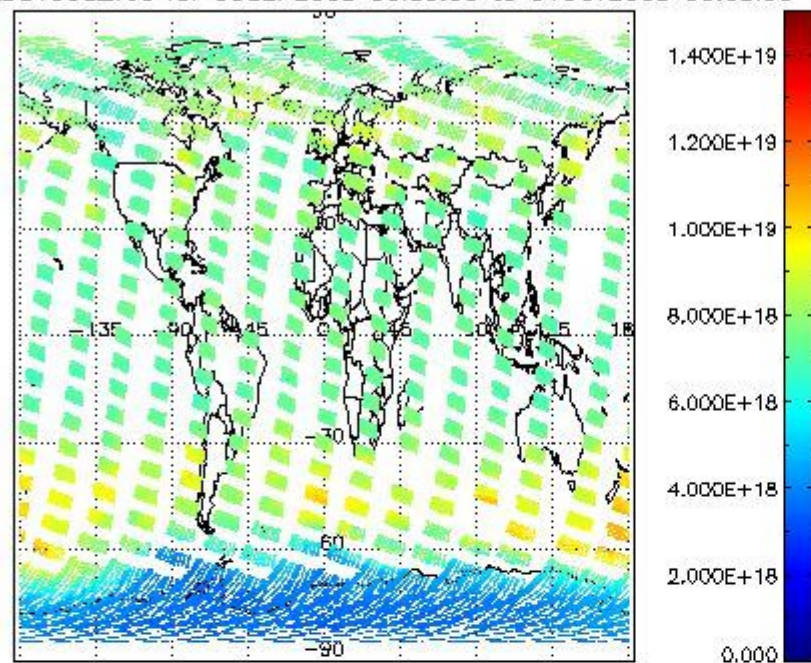
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

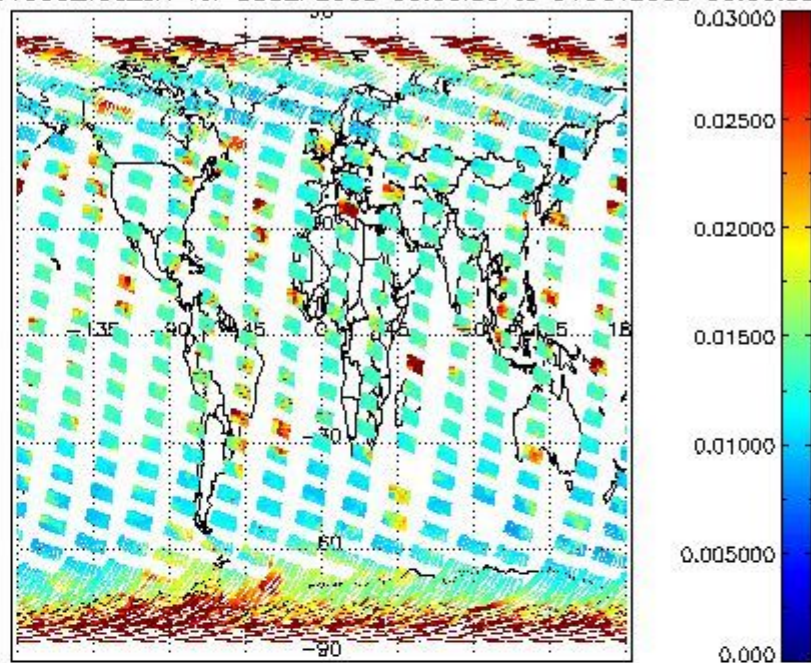
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



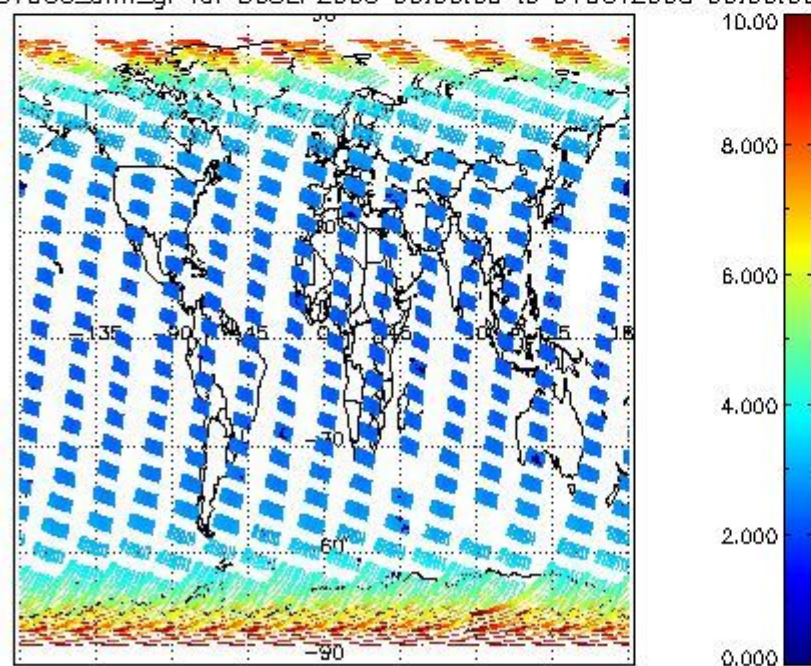
SCIOL2P_NADUV003_vcd for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



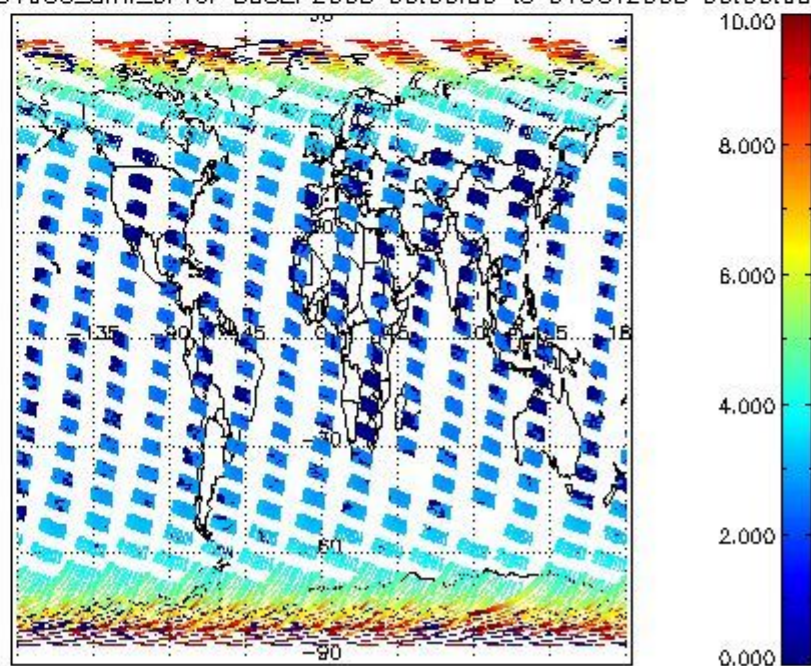
SCIOL2P_NADUV003_vcd_err for 30SEP2008 00:00:00 to 01OCT2008 00:00:00

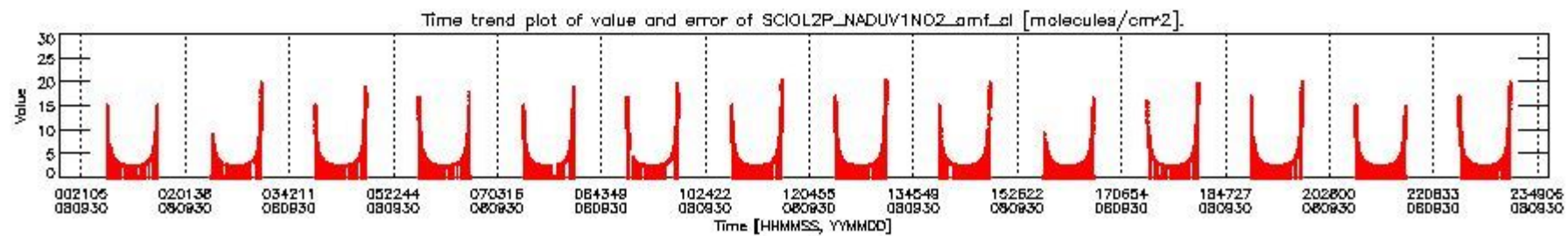
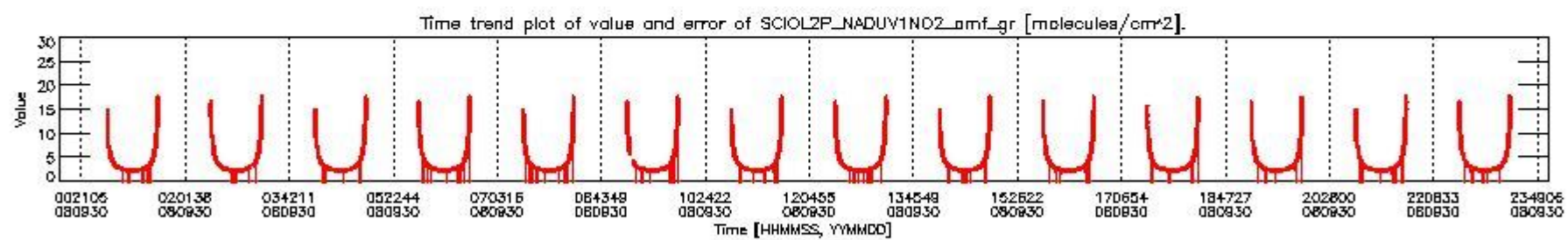
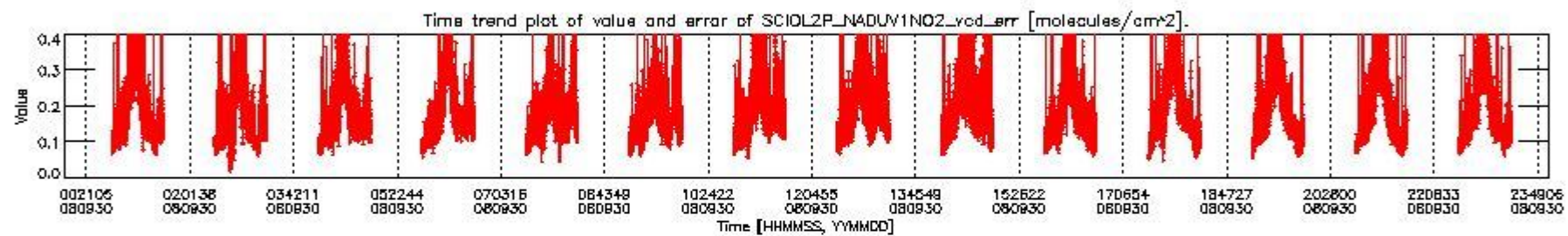
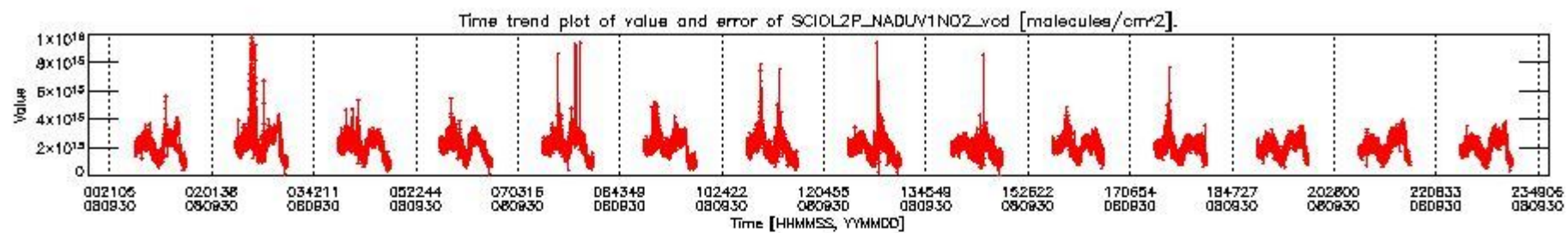


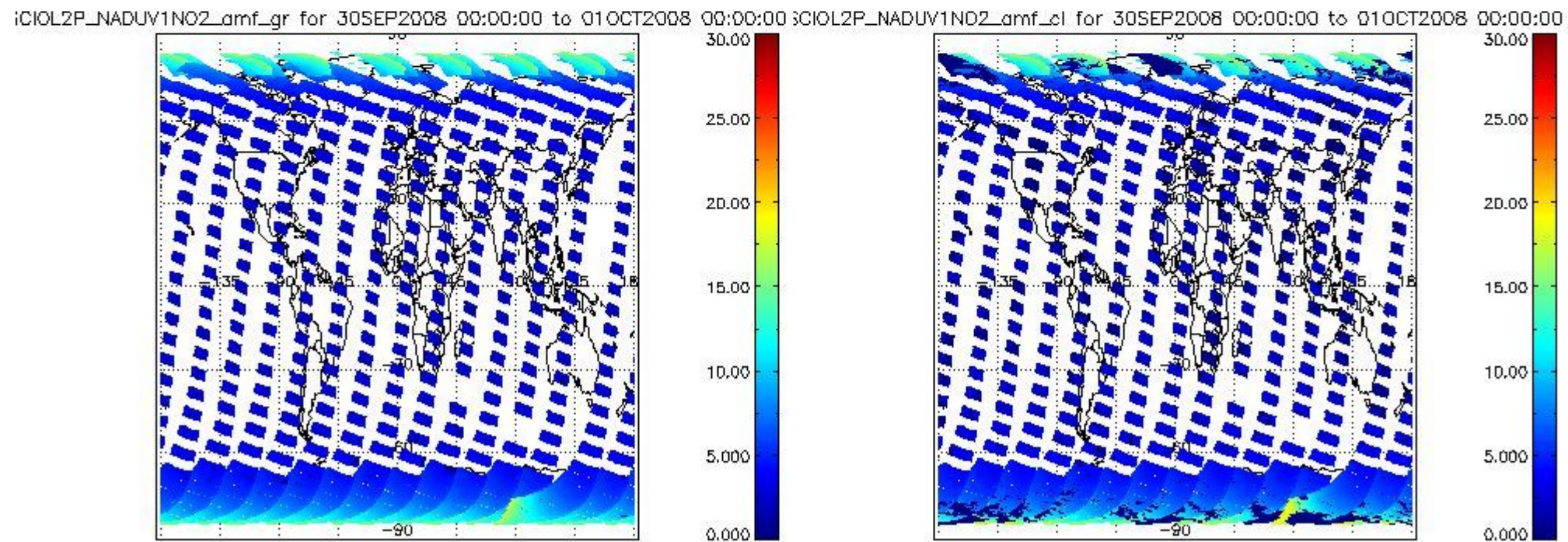
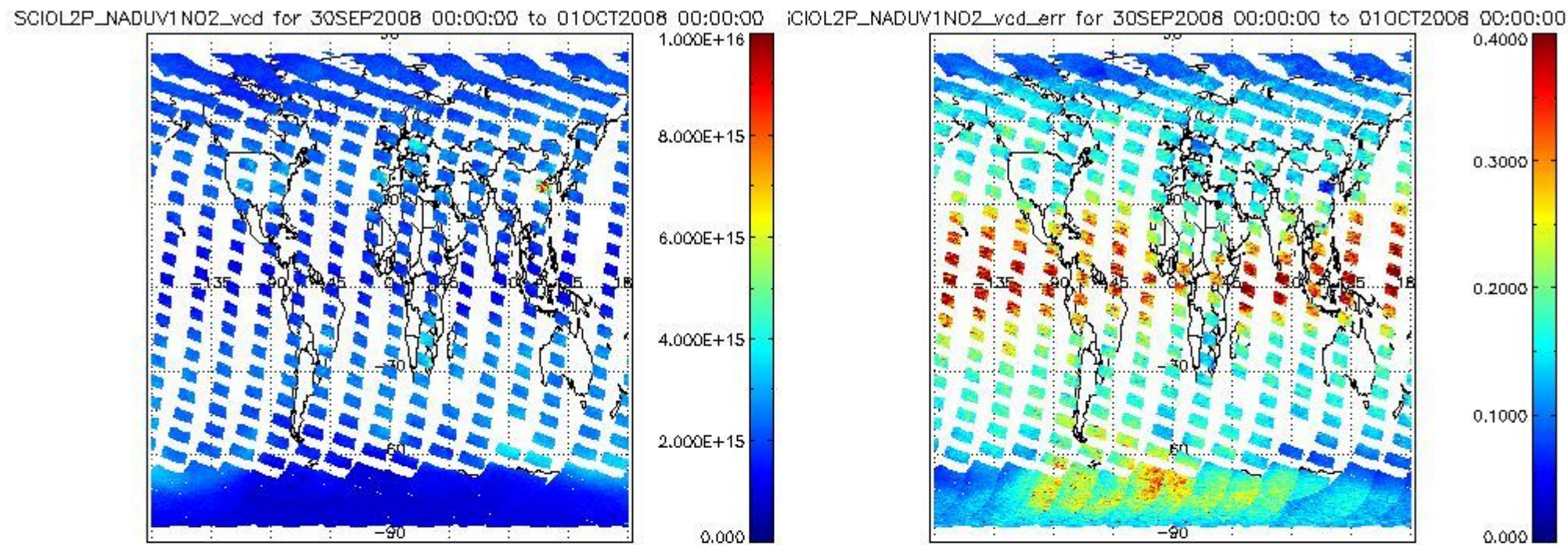
SCIOL2P_NADUV003_amf_gr for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



SCIOL2P_NADUV003_amf_sl for 30SEP2008 00:00:00 to 01OCT2008 00:00:00







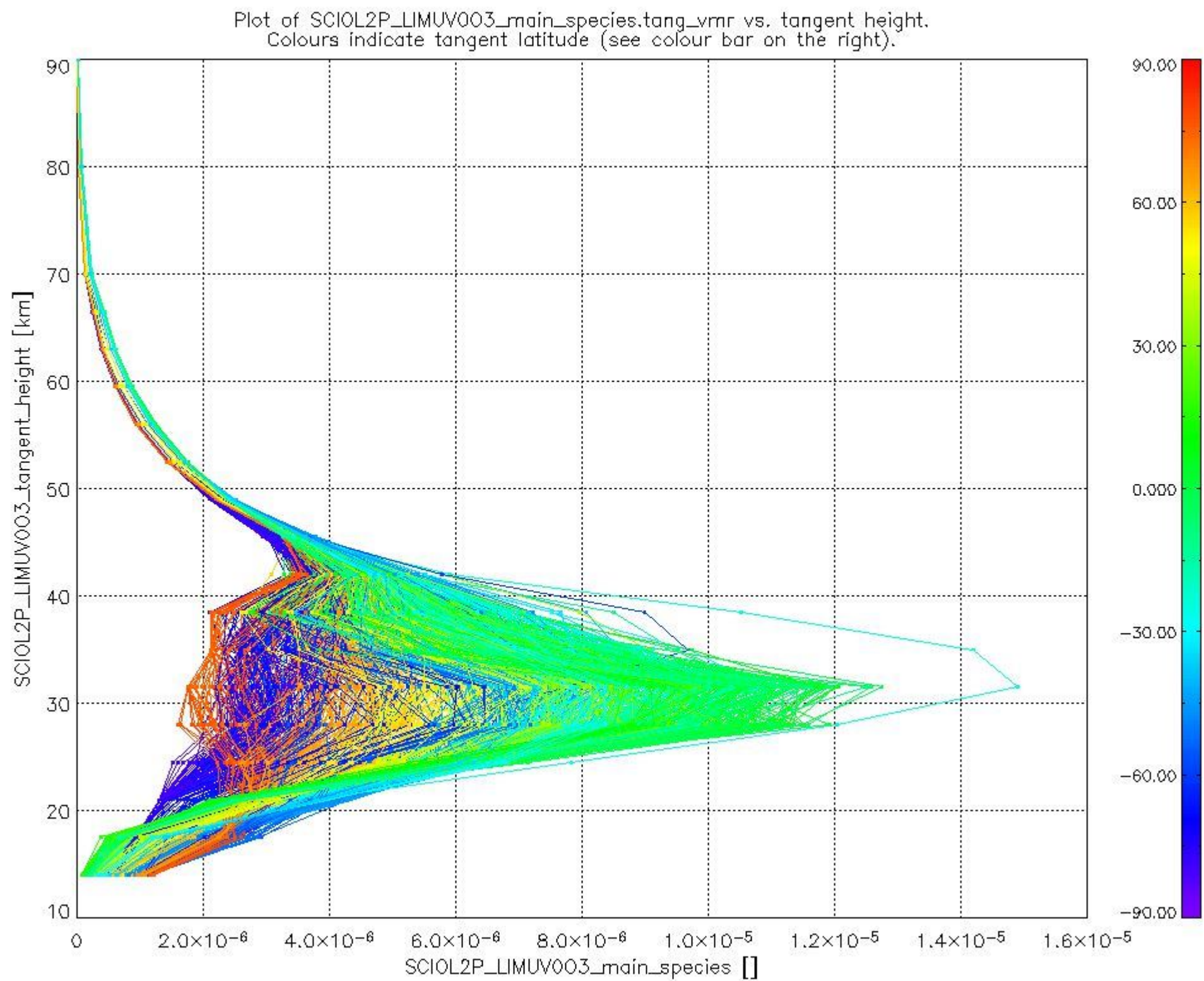
2.2.3 Limb

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

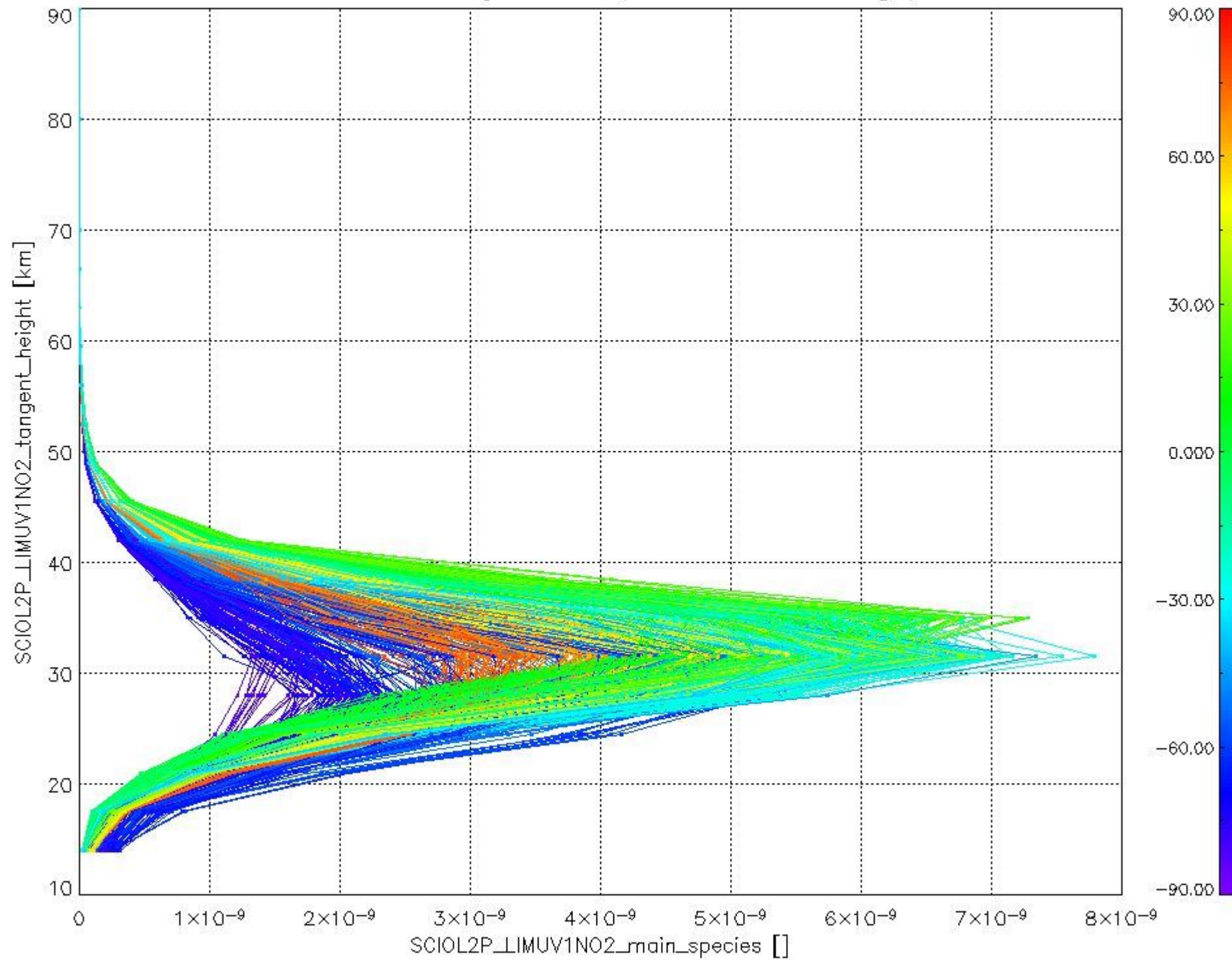
The following data items are currently included into this section:

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.



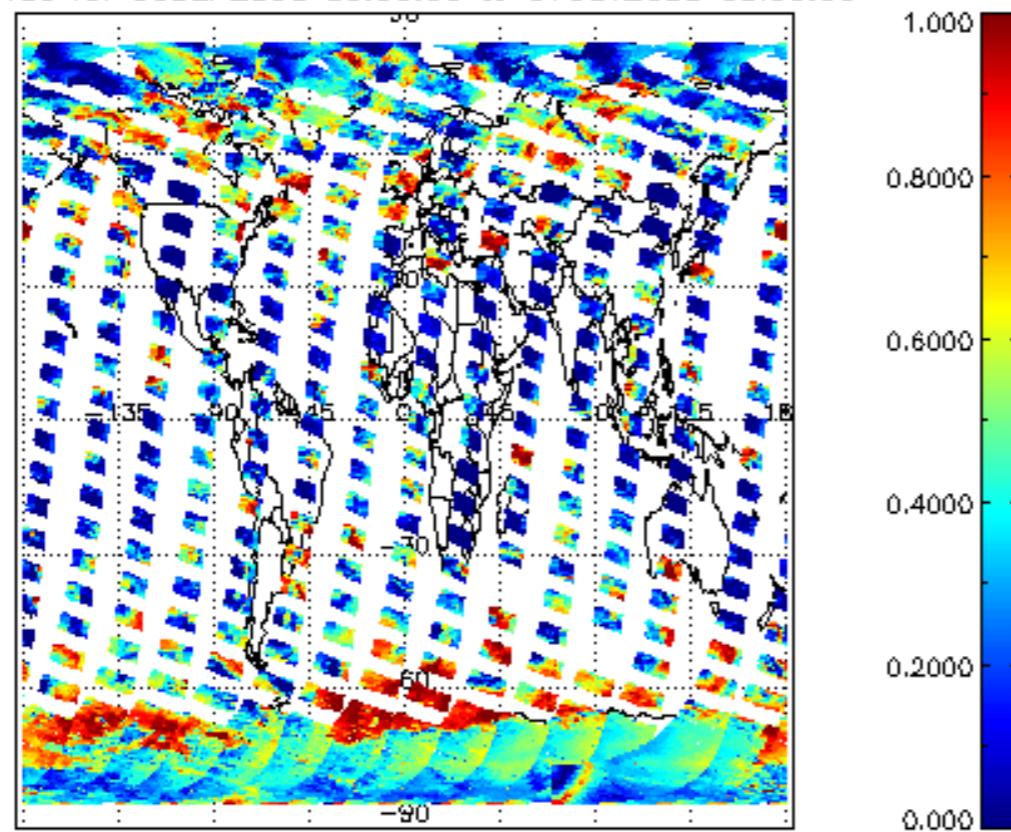
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



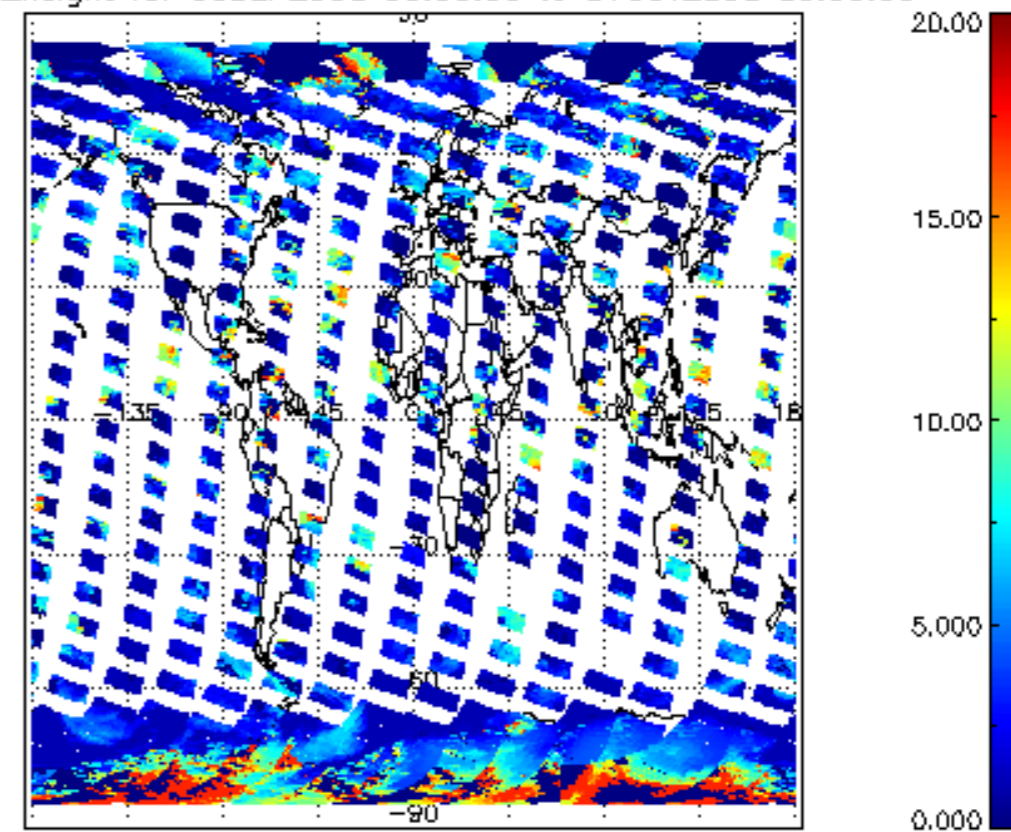
2.3 ADF monitoring

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

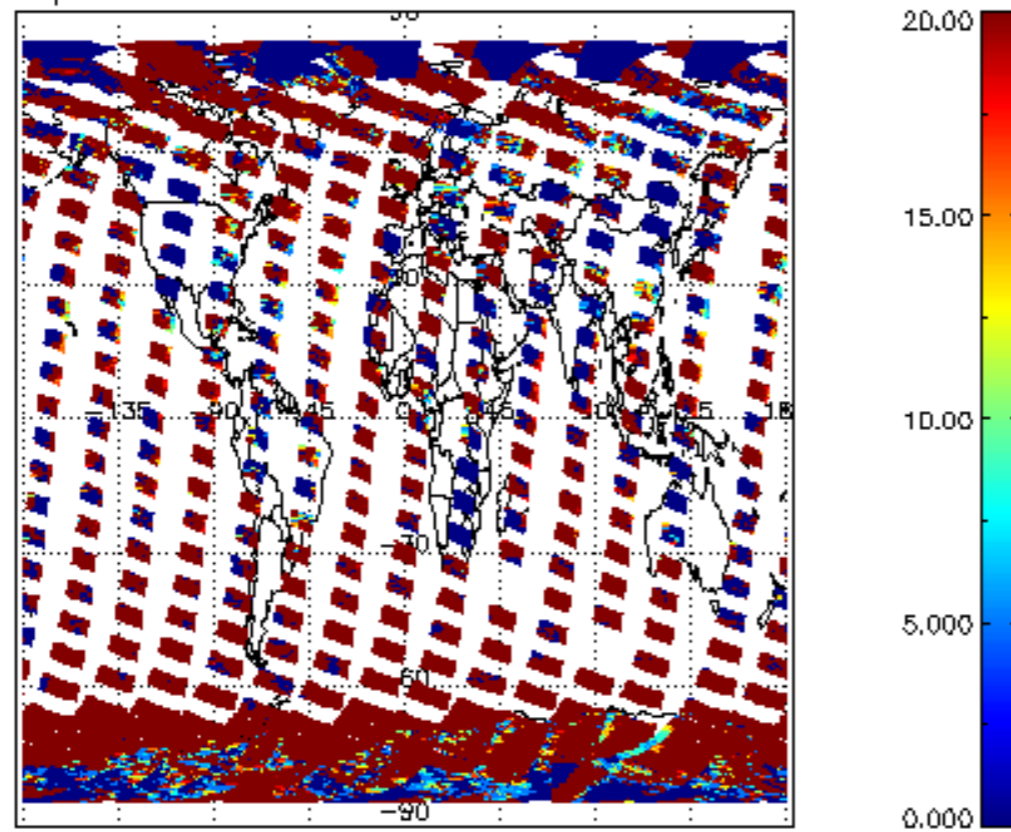
cLfrac for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



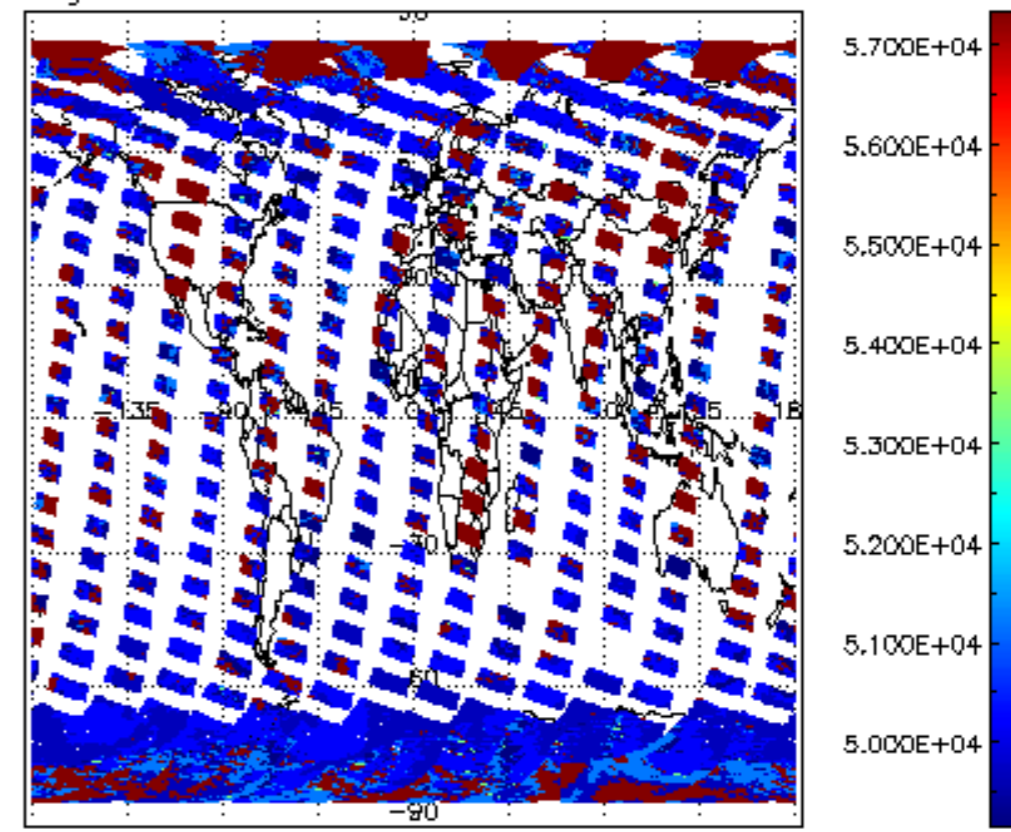
cl_top_height for 30SEP2008 00:00:00 to 01OCT2008 00:00:00

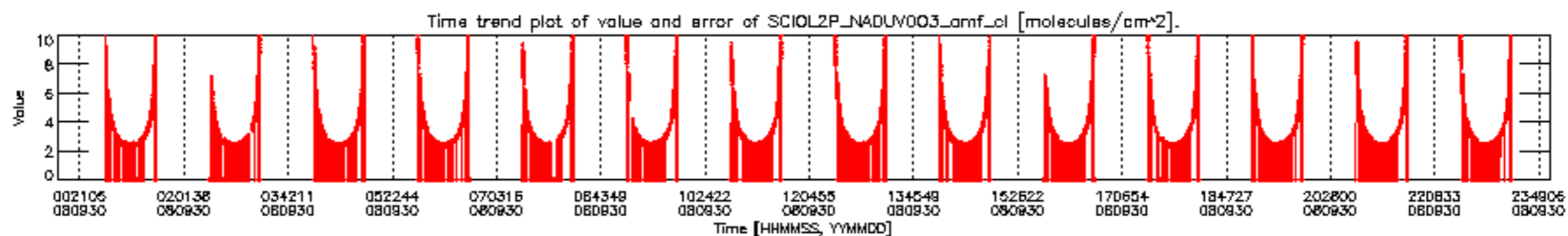
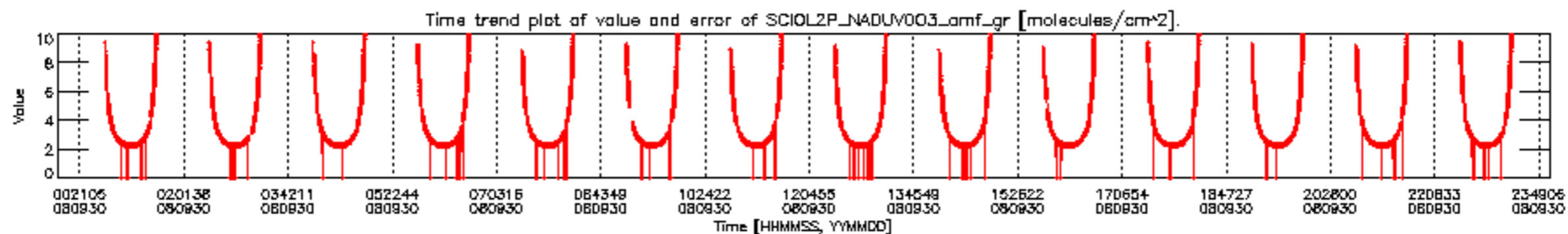
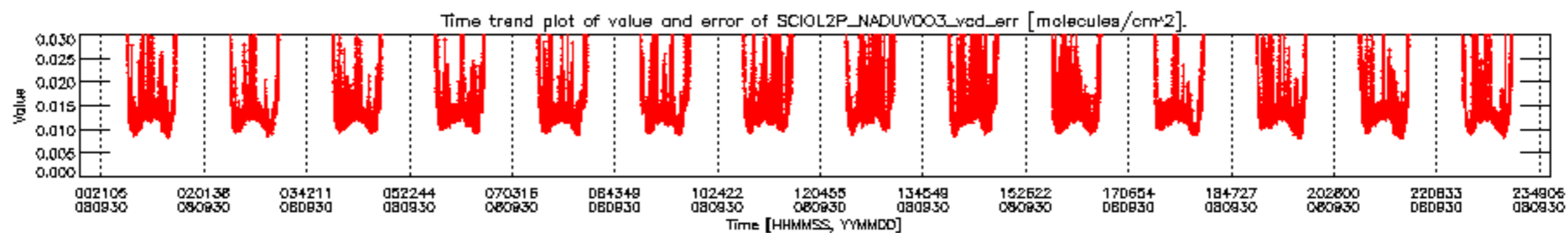
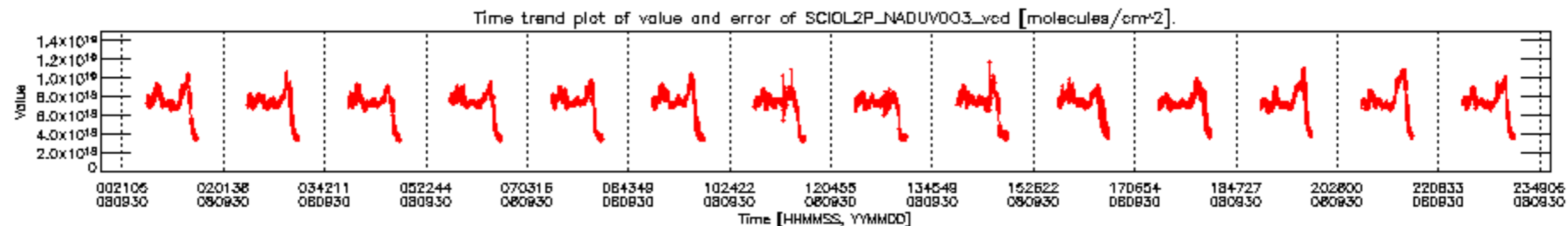


cl_opt_depth for 30SEP2008 00:00:00 to 01OCT2008 00:00:00

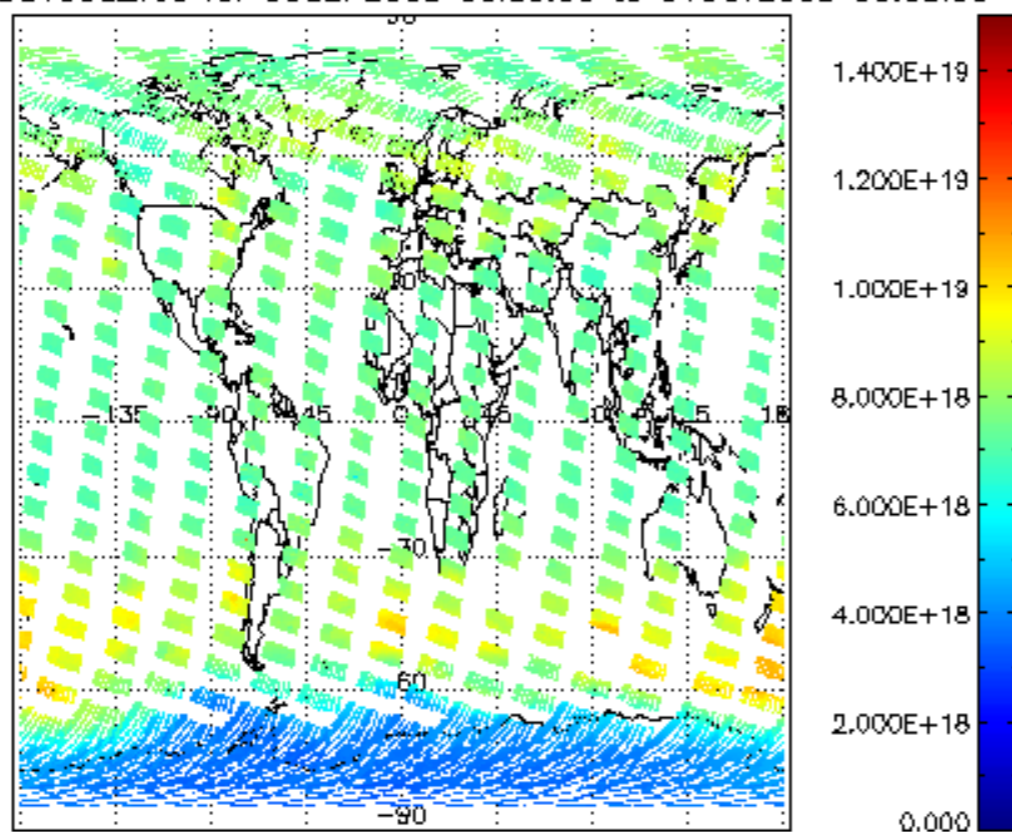


cloud_flags for 30SEP2008 00:00:00 to 01OCT2008 00:00:00

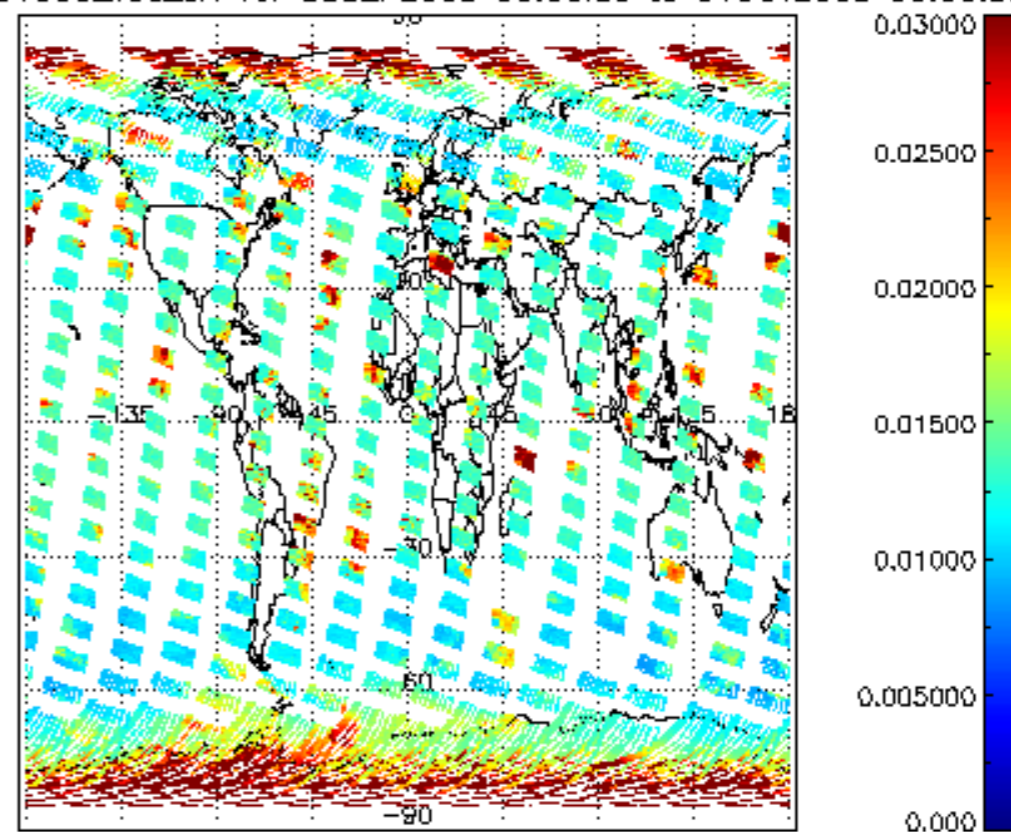




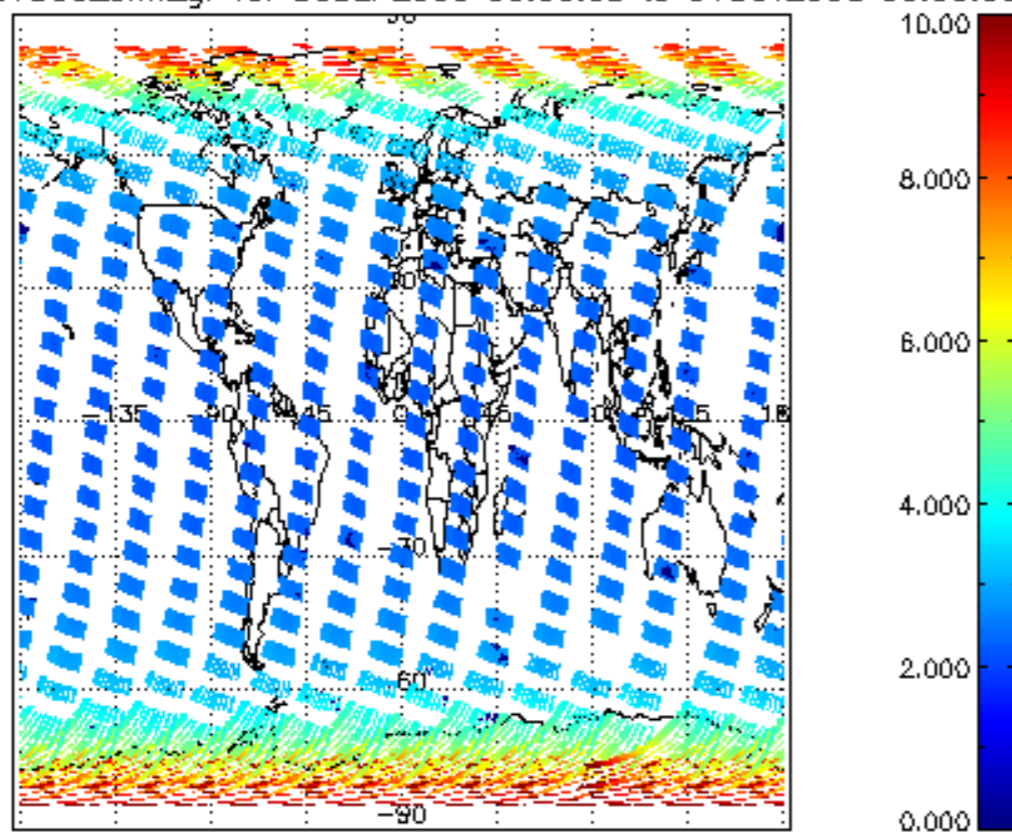
SCIOL2P_NADUV003_vcd for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



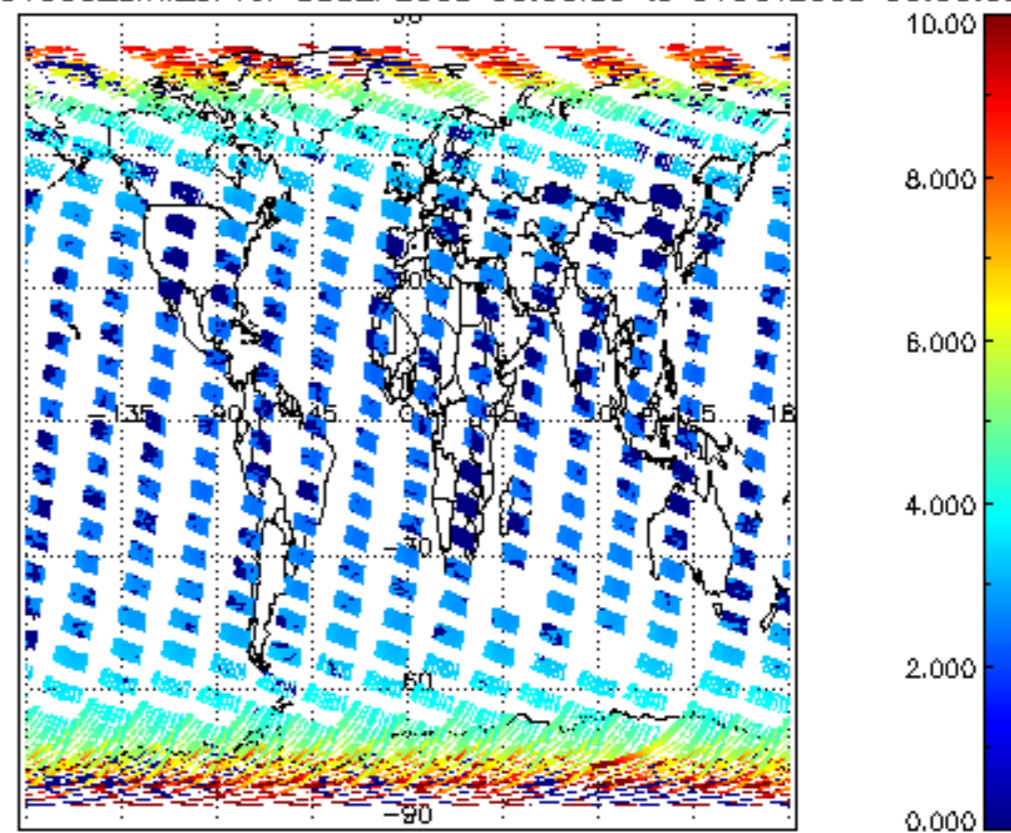
SCIOL2P_NADUV003_vcd_err for 30SEP2008 00:00:00 to 01OCT2008 00:00:00

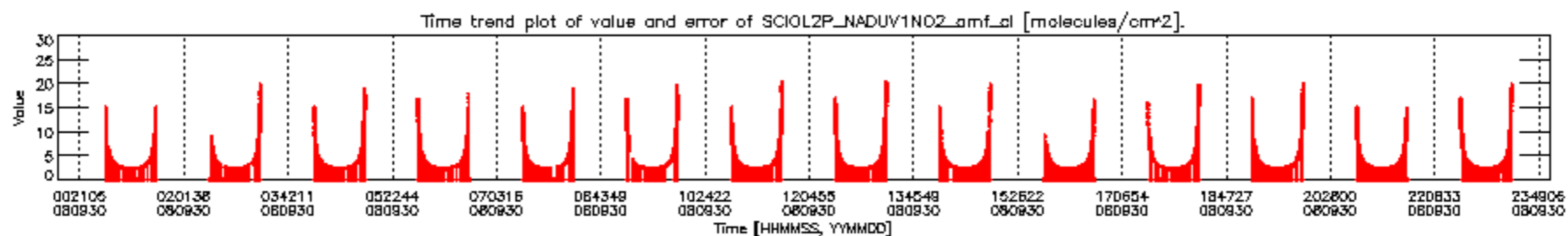
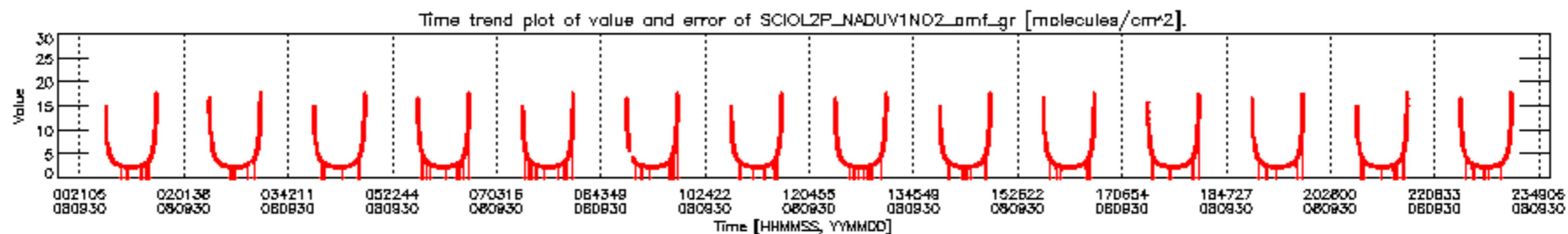
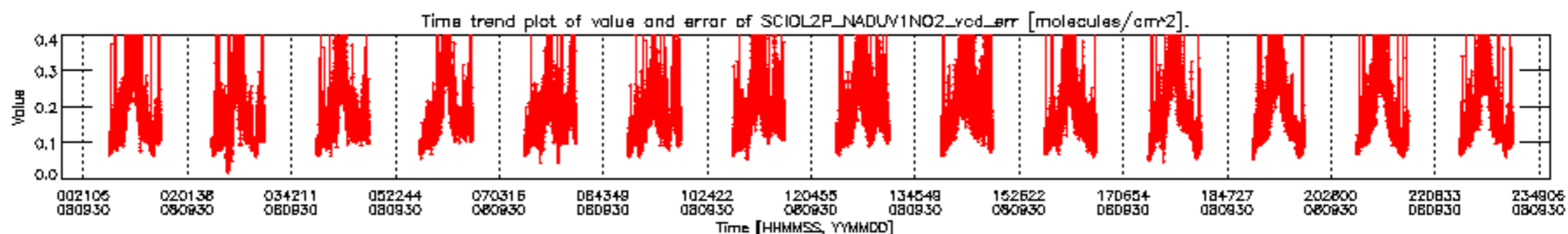
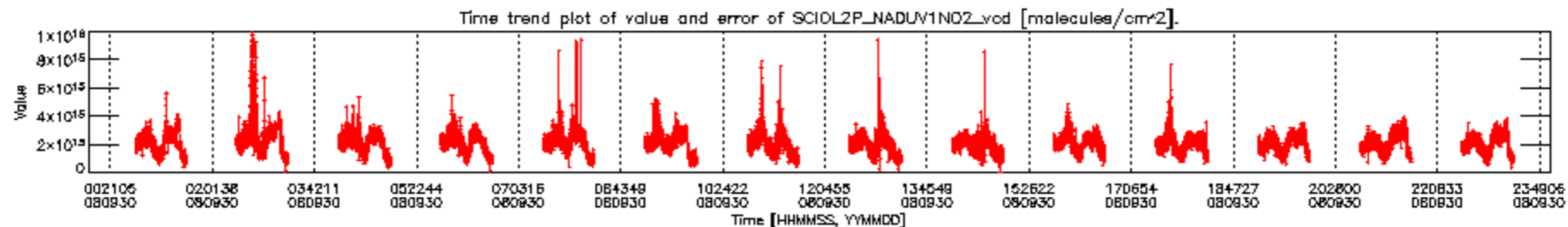


SCIOL2P_NADUV003_amf_gr for 30SEP2008 00:00:00 to 01OCT2008 00:00:00

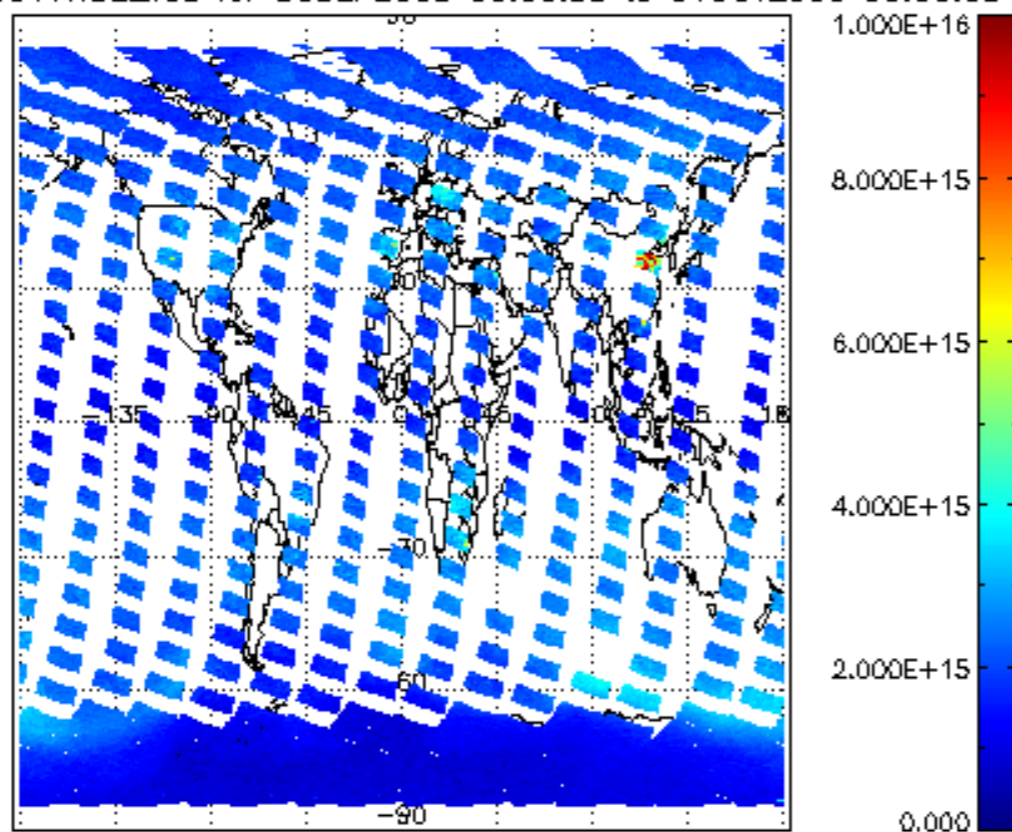


SCIOL2P_NADUV003_amf_el for 30SEP2008 00:00:00 to 01OCT2008 00:00:00

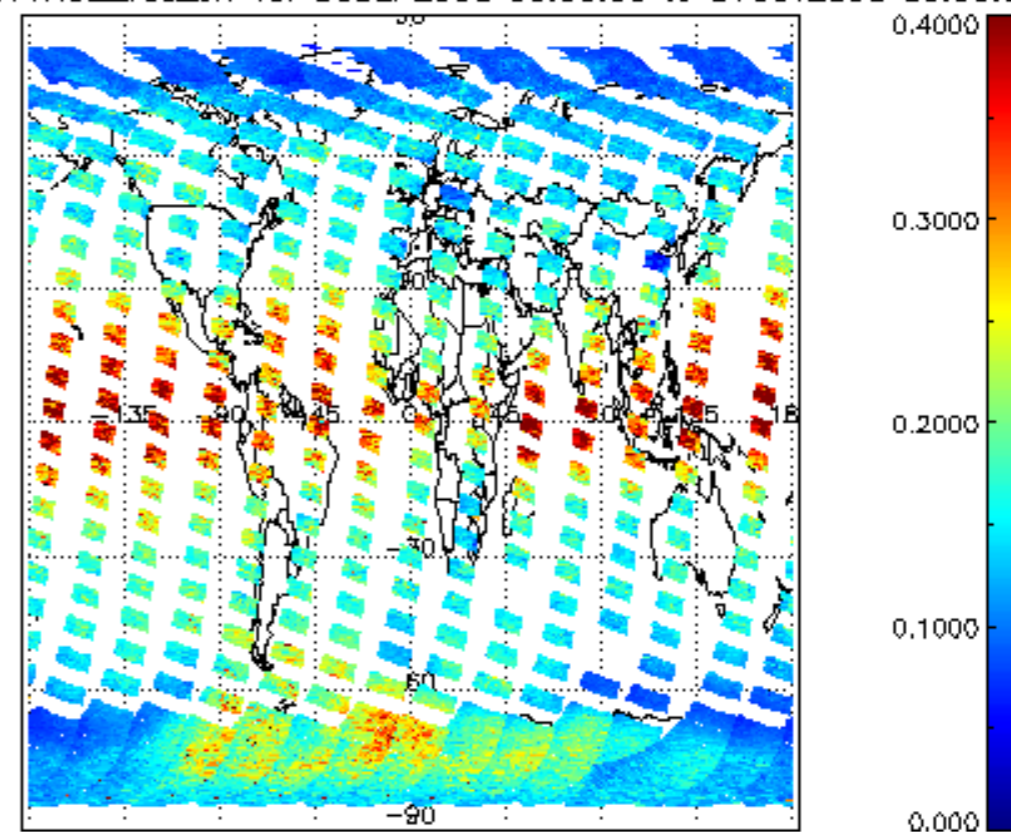




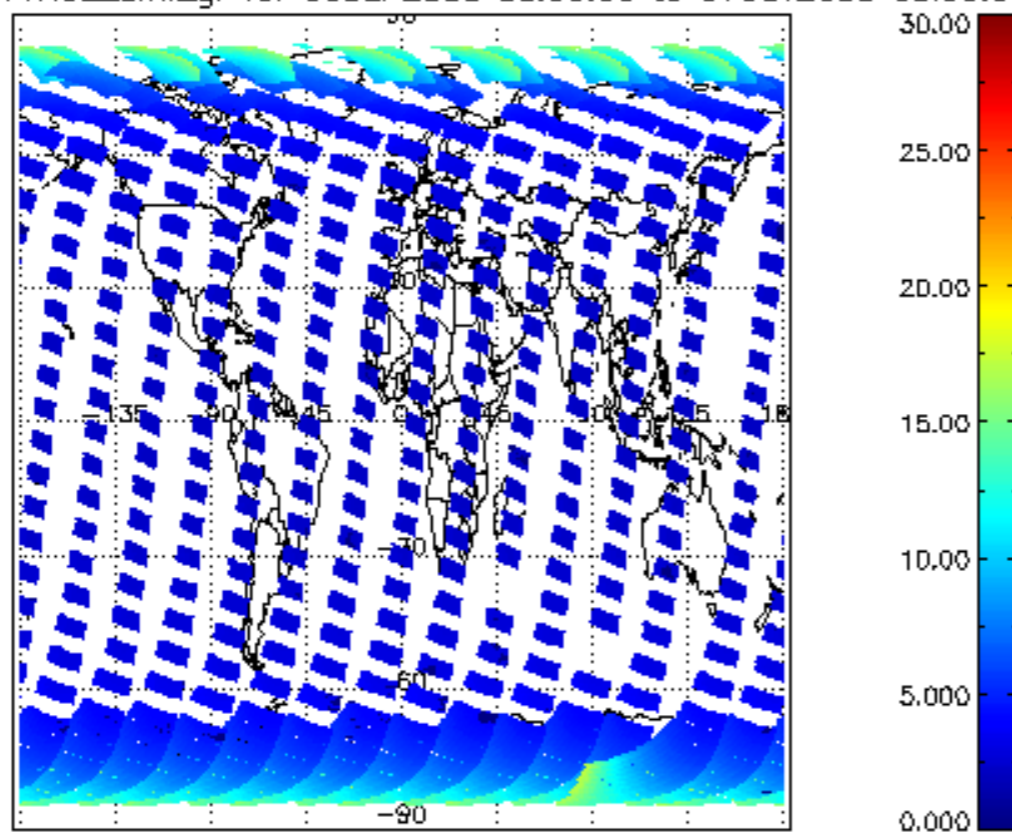
SCIOL2P_NADUV1NO2_vcd for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



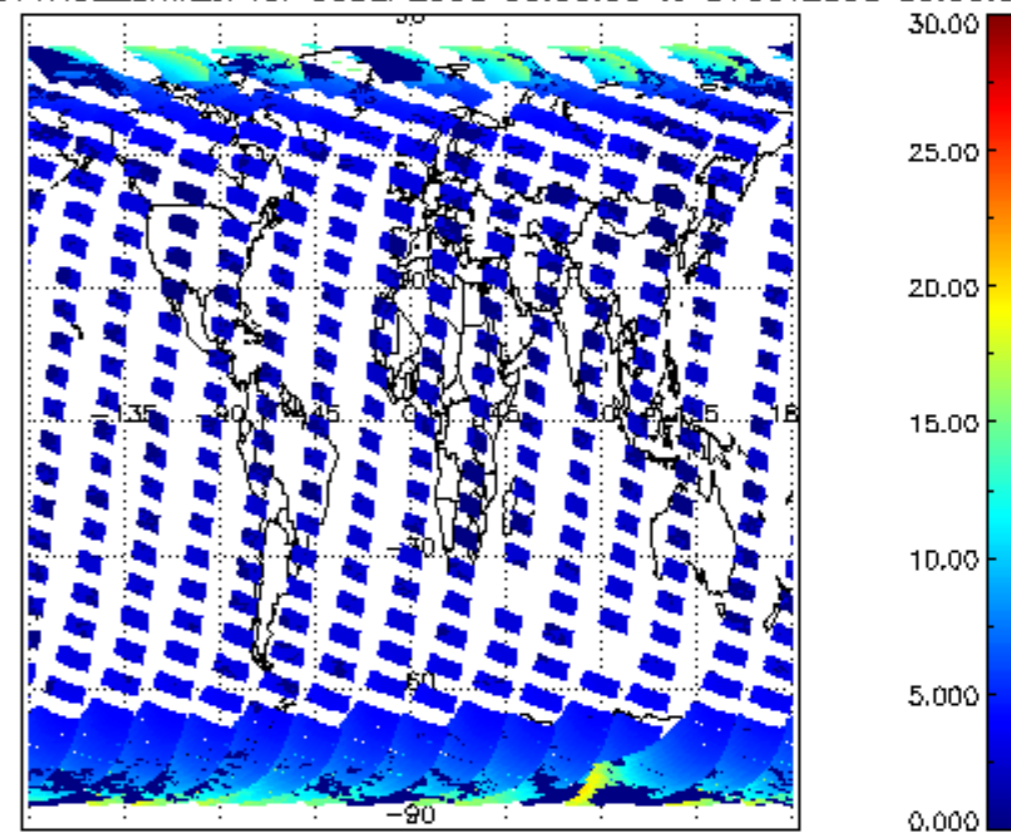
ICIOL2P_NADUV1NO2_vcd_err for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



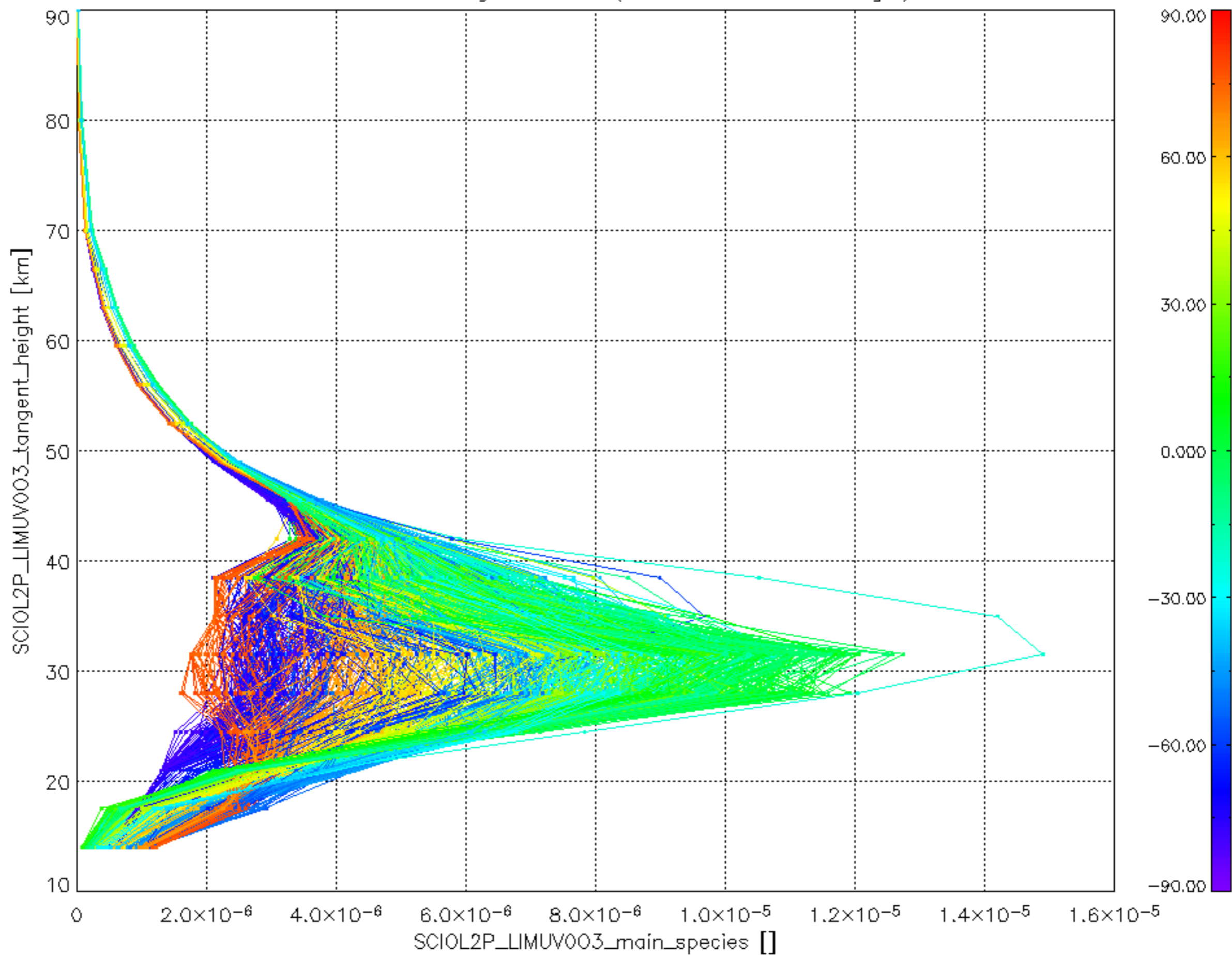
ICIOL2P_NADUV1NO2_amf_gr for 30SEP2008 00:00:00 to 01OCT2008 00:00:00



ICIOL2P_NADUV1NO2_amf_sl for 30SEP2008 00:00:00 to 01OCT2008 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).

