

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	10OCT2008 06:02:55
Data source version	SCIA-OL/3.01-R
Processing scope for products	22SEP2008 00:00:00 to 23SEP2008 00:00:00
Start time of first product within scope	21SEP2008 23:50:14
Stop time of last product within scope	23SEP2008 00:14:10
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	SCI_OL__2PRDPA20080921_235014_000033252072_00188_34310_1126.N1	21SEP2008 23:50:14	22SEP2008 00:45:39	0	GOOD
1	SCI_OL__2PRDPA20080922_013050_000033812072_00189_34311_1129.N1	22SEP2008 01:30:50	22SEP2008 02:27:12	0	GOOD
2	SCI_OL__2PRDPA20080922_031127_000033252072_00190_34312_1131.N1	22SEP2008 03:11:27	22SEP2008 04:06:52	0	GOOD
3	SCI_OL__2PRDPA20080922_045203_000033812072_00191_34313_1132.N1	22SEP2008 04:52:03	22SEP2008 05:48:25	0	GOOD
4	SCI_OL__2PRDPA20080922_063240_000033252072_00192_34314_1141.N1	22SEP2008 06:32:40	22SEP2008 07:28:05	0	GOOD
5	SCI_OL__2PRDPA20080922_081316_000033812072_00193_34315_1143.N1	22SEP2008 08:13:16	22SEP2008 09:09:38	0	GOOD
6	SCI_OL__2PRDPA20080922_095353_000033252072_00194_34316_1145.N1	22SEP2008 09:53:53	22SEP2008 10:49:18	0	GOOD
7	SCI_OL__2PRDPA20080922_113429_000033812072_00195_34317_1152.N1	22SEP2008 11:34:29	22SEP2008 12:30:50	0	GOOD
8	SCI_OL__2PRDPA20080922_131505_000033252072_00196_34318_1155.N1	22SEP2008 13:15:05	22SEP2008 14:10:31	0	GOOD
9	SCI_OL__2PRDPA20080922_145542_000033812072_00197_34319_1165.N1	22SEP2008 14:55:42	22SEP2008 15:52:03	0	GOOD
10	SCI_OL__2PRDPA20080922_163618_000033252072_00198_34320_1174.N1	22SEP2008 16:36:18	22SEP2008 17:31:44	0	GOOD
11	SCI_OL__2PRDPA20080922_181649_000033872072_00199_34321_1177.N1	22SEP2008 18:16:49	22SEP2008 19:13:16	0	GOOD
12	SCI_OL__2PRDPA20080922_195751_000033252072_00200_34322_1178.N1	22SEP2008 19:57:51	22SEP2008 20:53:17	0	GOOD
13	SCI_OL__2PRDPA20080922_213808_000033812072_00201_34323_1180.N1	22SEP2008 21:38:08	22SEP2008 22:34:29	0	GOOD
14	SCI_OL__2PRDPA20080922_231844_000033252072_00202_34324_1182.N1	22SEP2008 23:18:44	23SEP2008 00:14:10	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: 151285

Total number of cloud data DSRs with good quality flag (=0): 151285 (100.0 %)

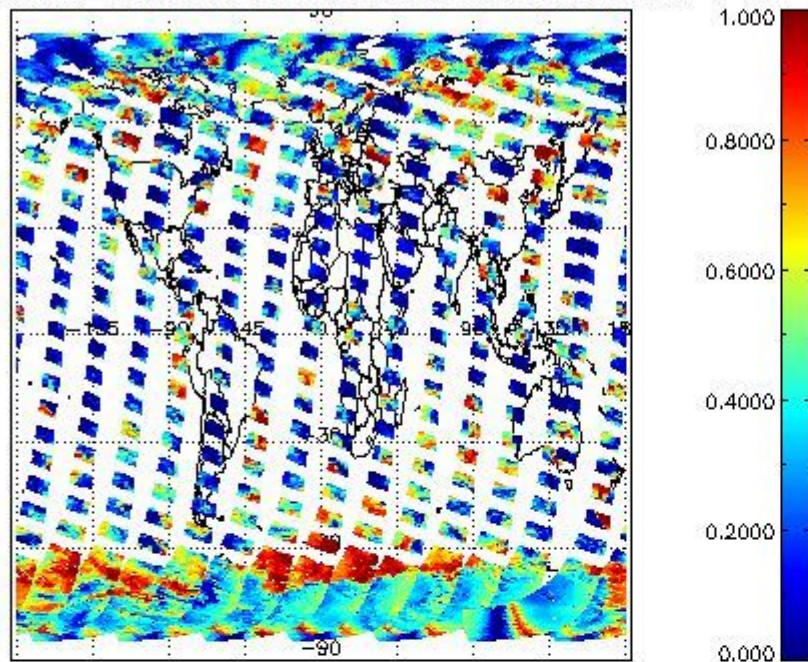
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	151285	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	151285	0.17116	0.12500	0.12500	0.25000	0.060325	s
CL_FRAC	151285	0.36311	0.32538	0.0000	1.0000	0.29286	-
CL_FRAC_ERR	151285	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	151285	5.4770	4.0000	4.0000	8.0000	1.9304	
PMD_READ_CL[0]	151285	0.20627	0.0000	0.0000	8.0000	1.0130	-
PMD_READ_CL[1]	151285	1.1901	0.0000	0.0000	8.0000	2.3251	-
CL_TOP_HEIGHT	126936	3.9756	2.1591	0.0000	17.000	4.3005	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	126936	56.203	51.782	0.0000	101.00	42.094	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	151285	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	151285	11001011	11000100	11000000	11100000	3400.8	flags
AERO_ABSO_IND	151285	3.0936	3.5807	-0.90644	14.607	2.0905	
AERO_IND_DIAG	151285	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	151285	01011000	00000000	00000000	11000000	24509.	flags

Time and geolocation plots:

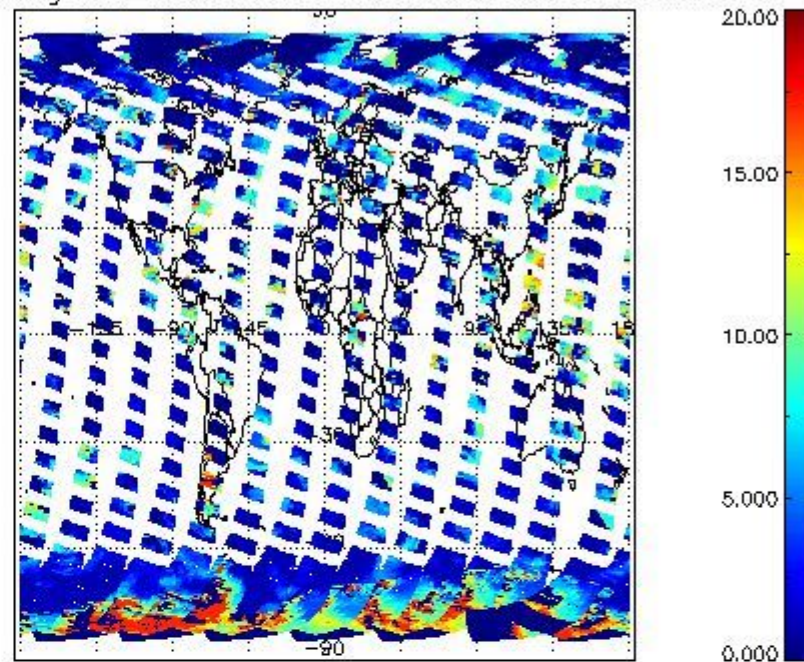
Plots are available for the following parameters:

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

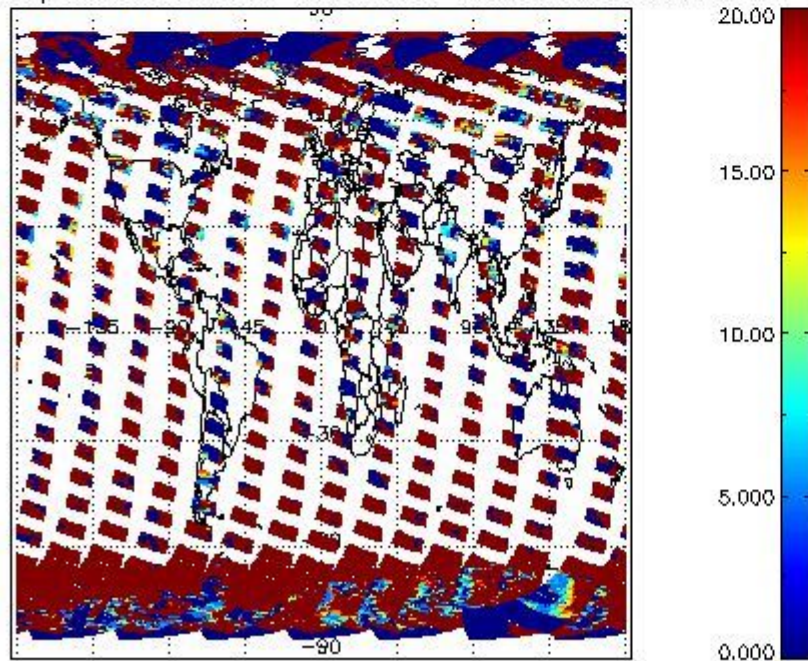
cL_frac for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



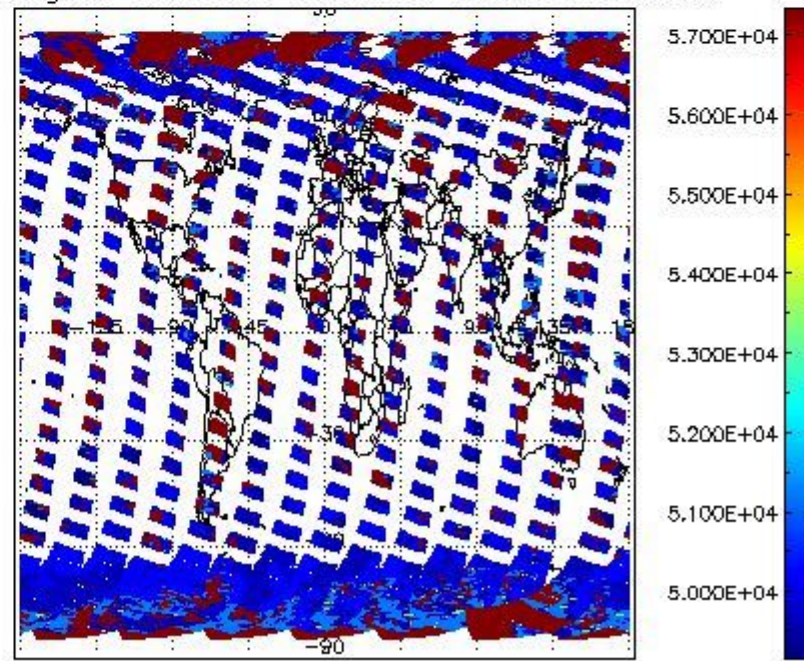
cL_top_height for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



cL_opt_depth for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



cloud_flags for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



2.2.2 Nadir

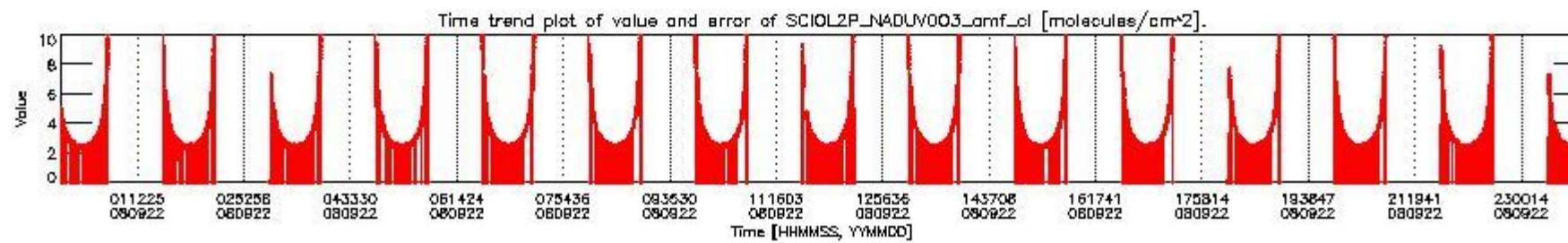
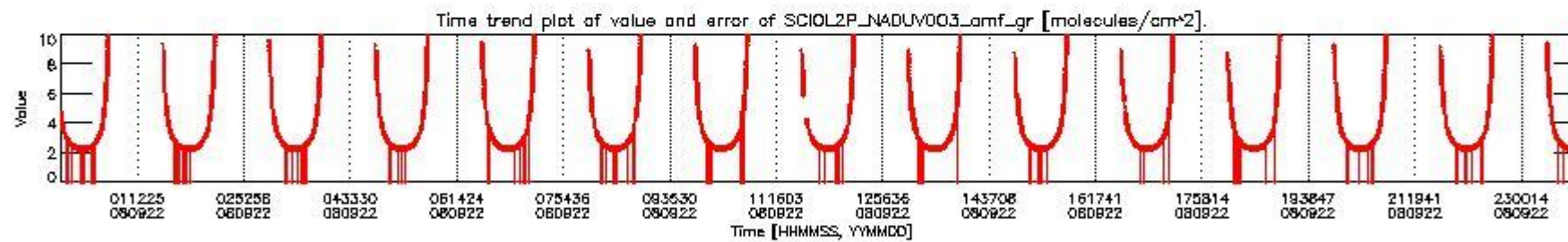
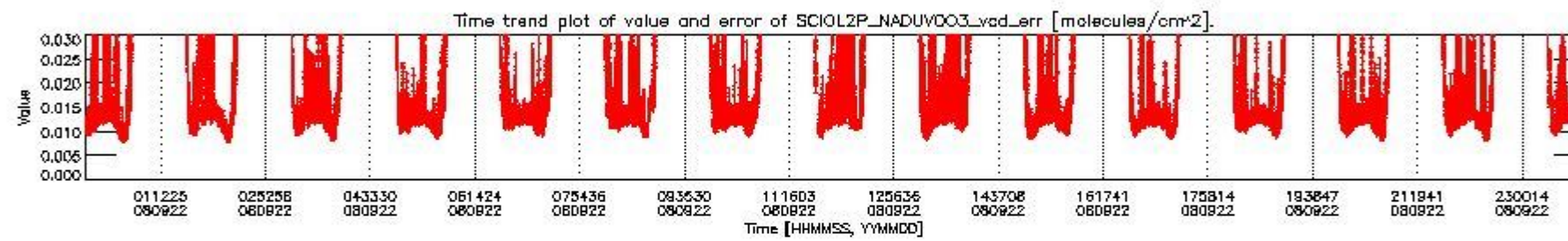
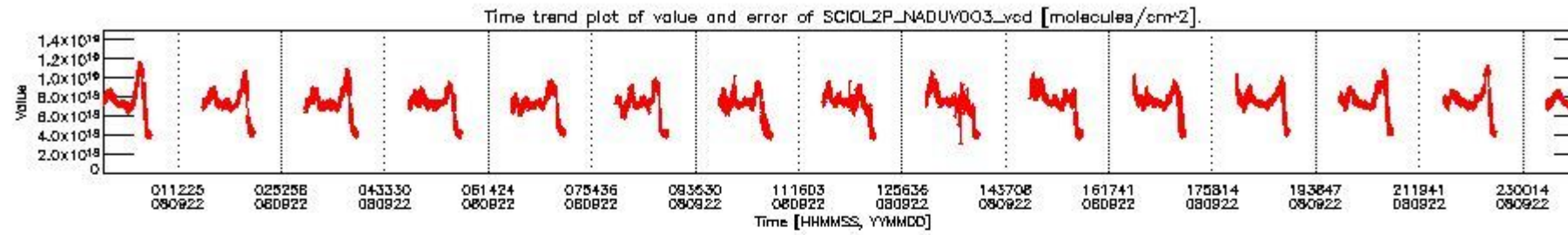
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

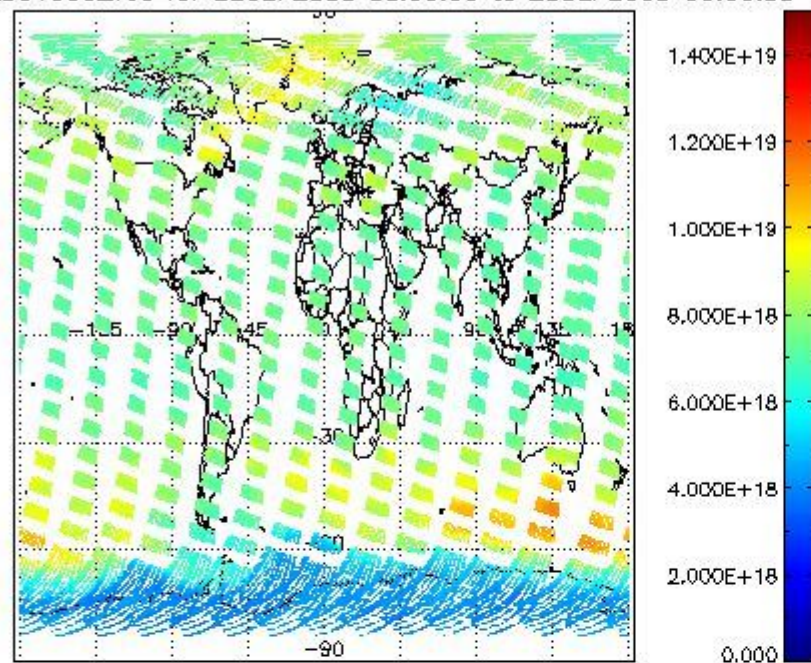
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

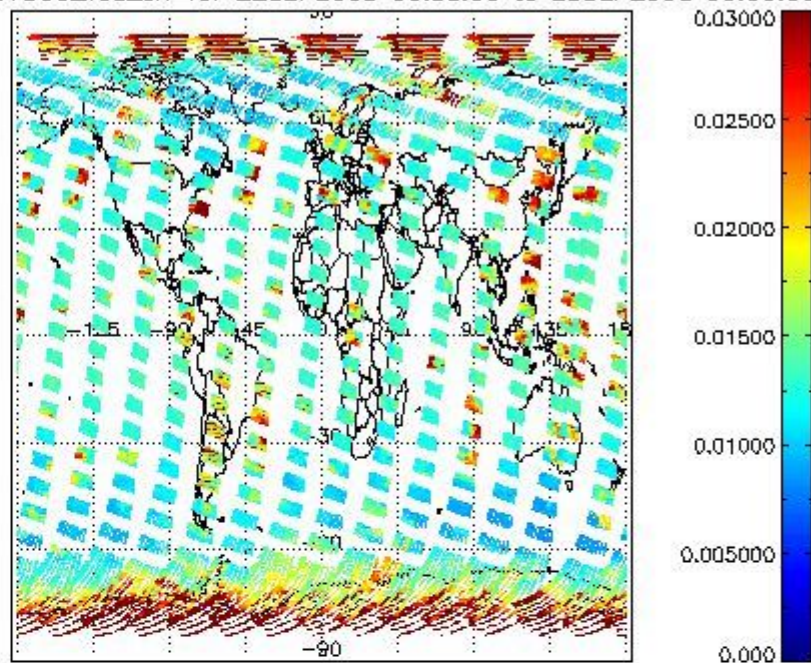
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



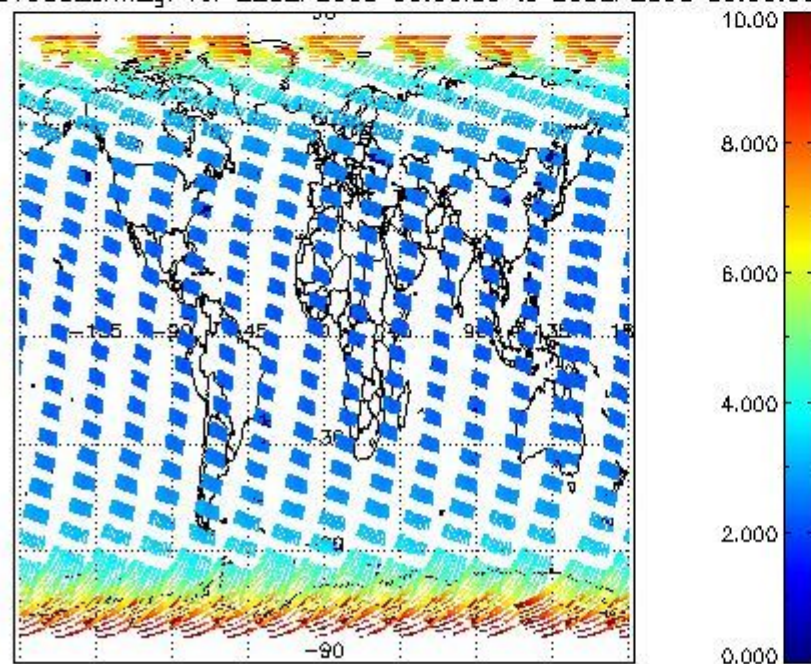
SCIOL2P_NADUV003_vcd for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



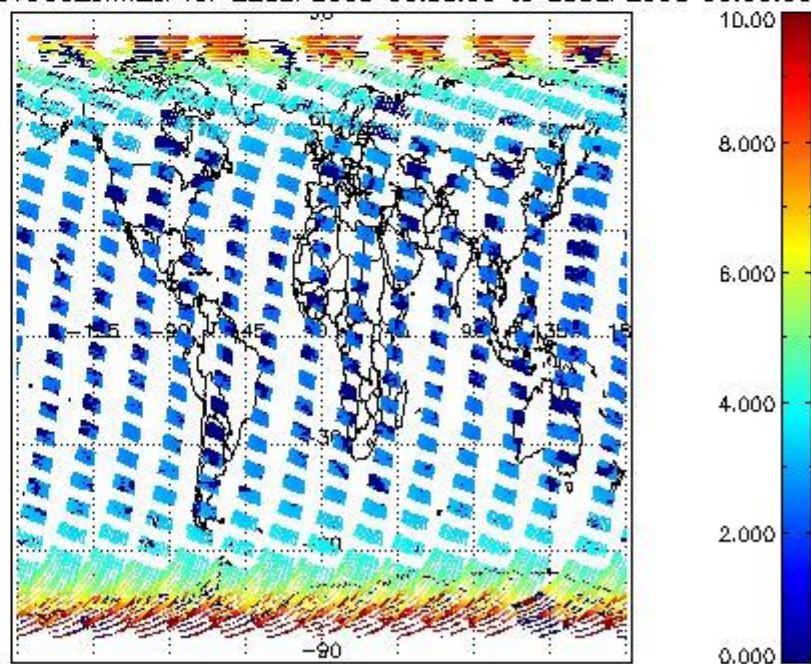
SCIOL2P_NADUV003_vcd_err for 22SEP2008 00:00:00 to 23SEP2008 00:00:00

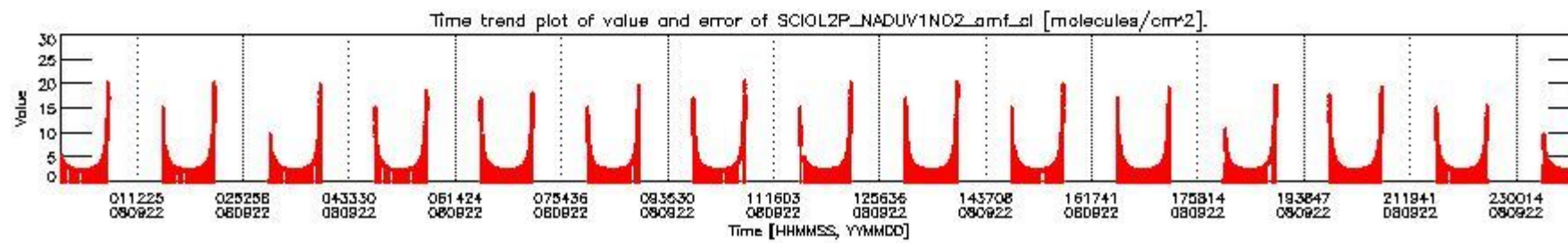
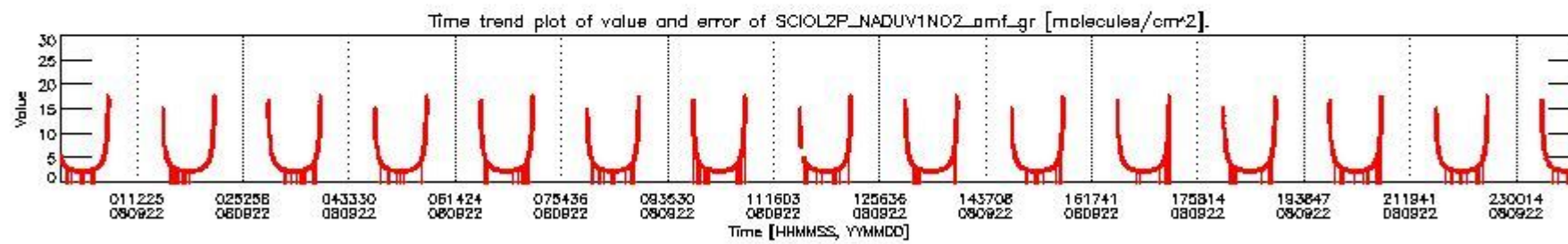
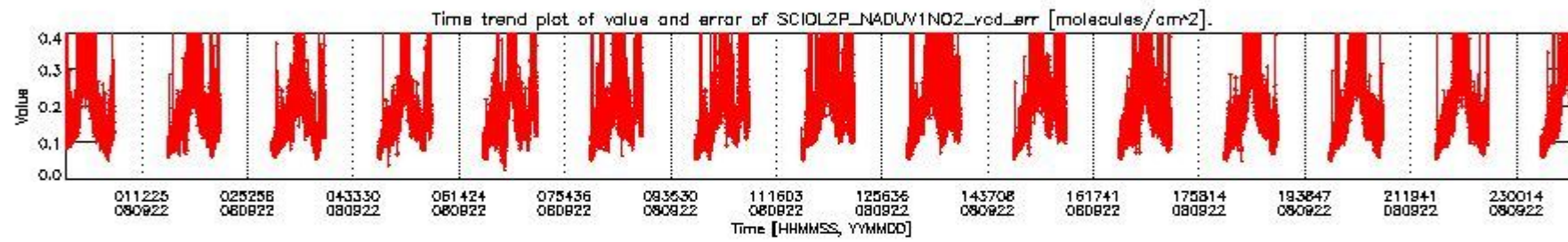
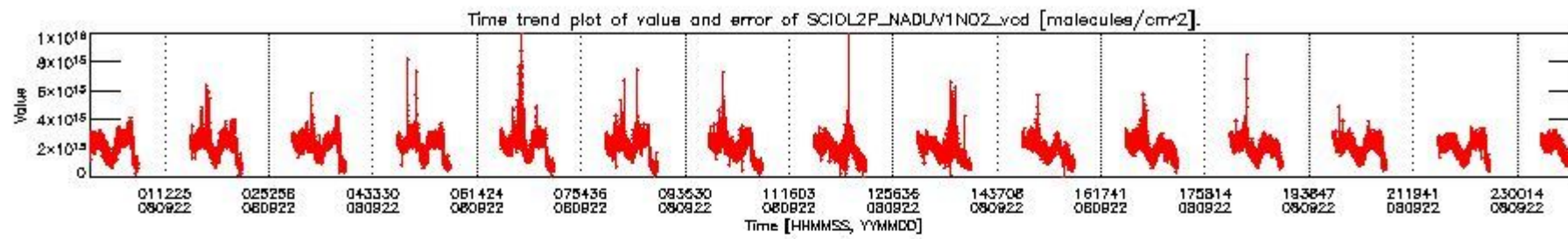


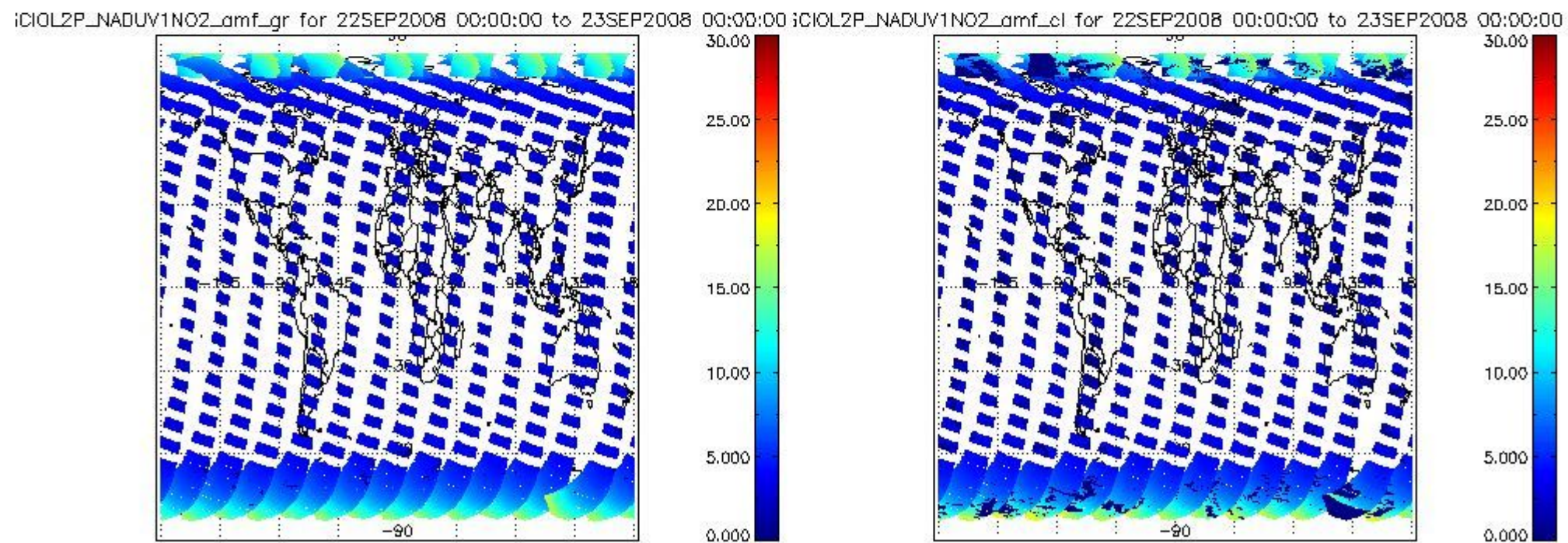
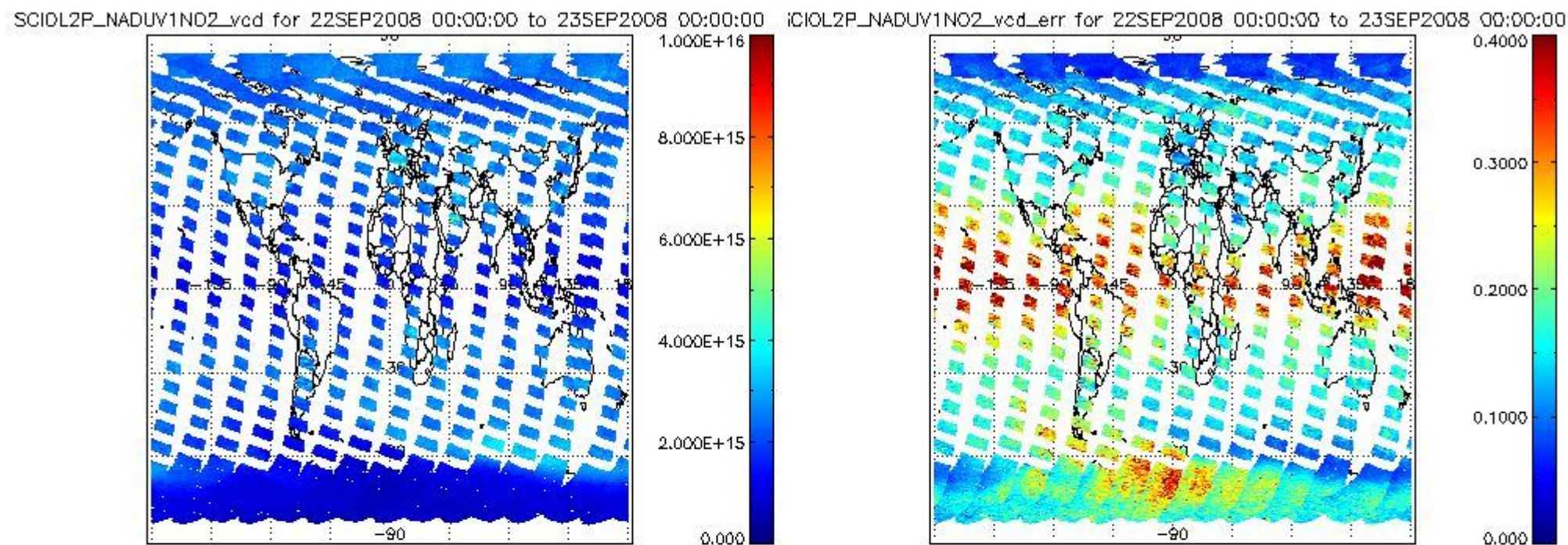
SCIOL2P_NADUV003_amf_gr for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



SCIOL2P_NADUV003_amf_cl for 22SEP2008 00:00:00 to 23SEP2008 00:00:00







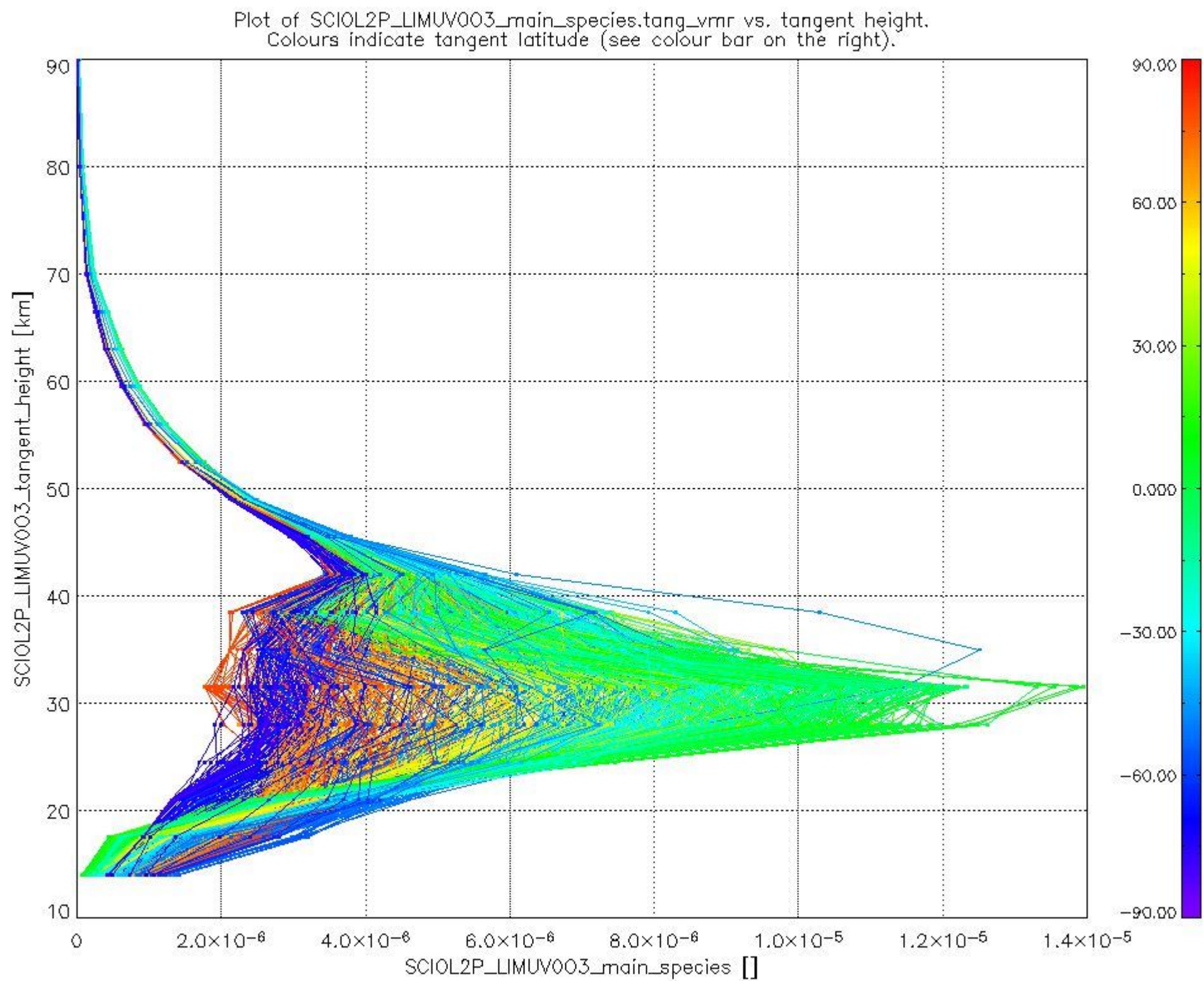
2.2.3 Limb

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

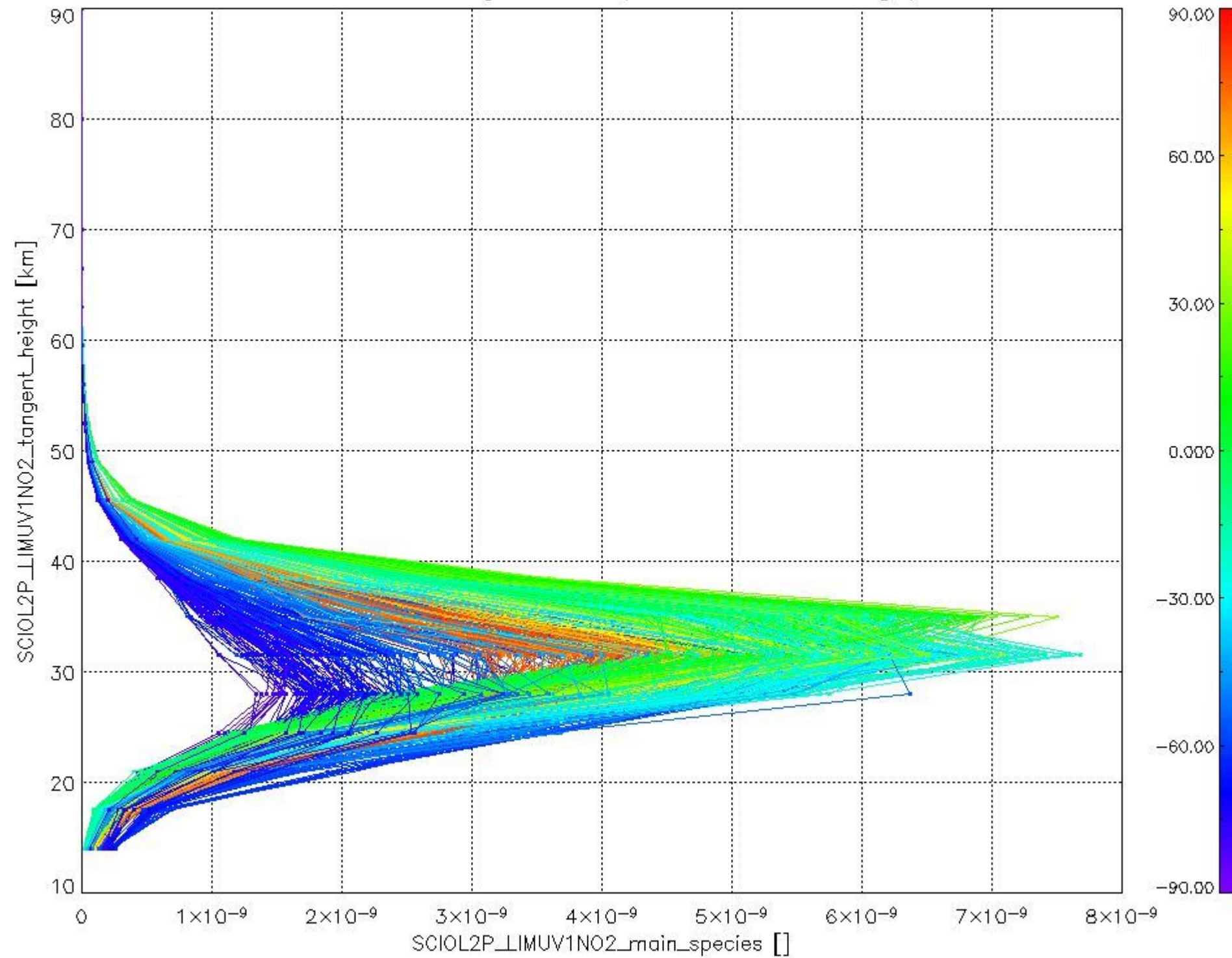
The following data items are currently included into this section:

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.



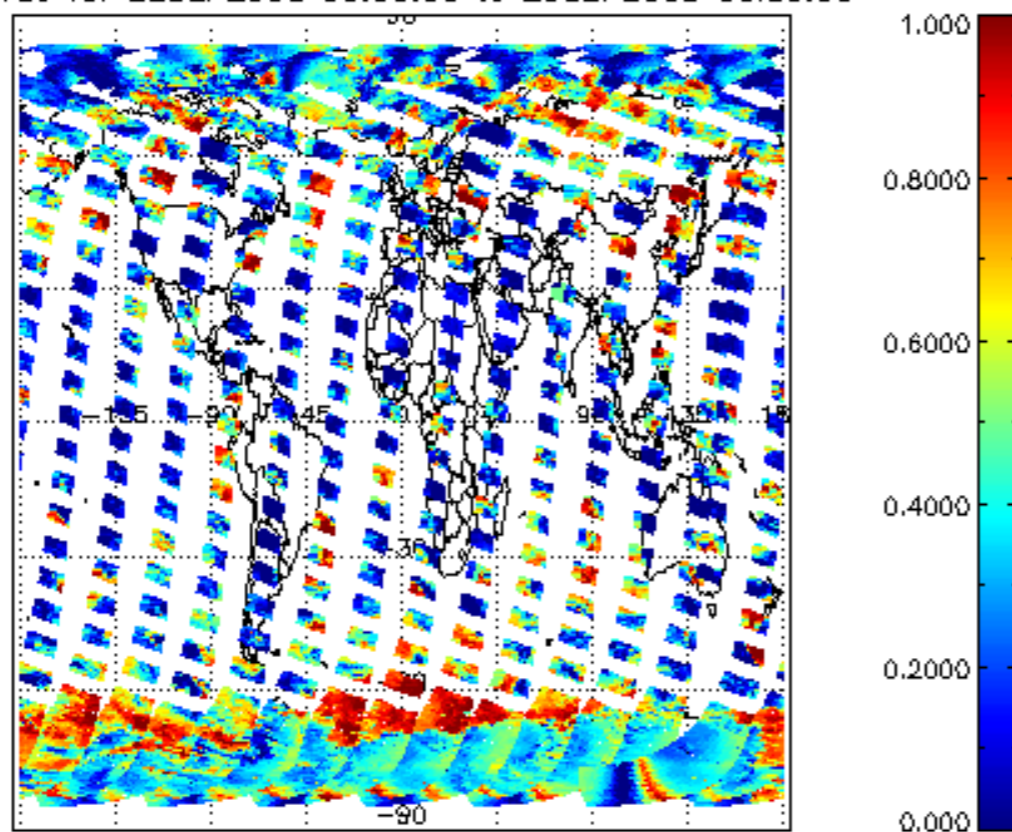
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



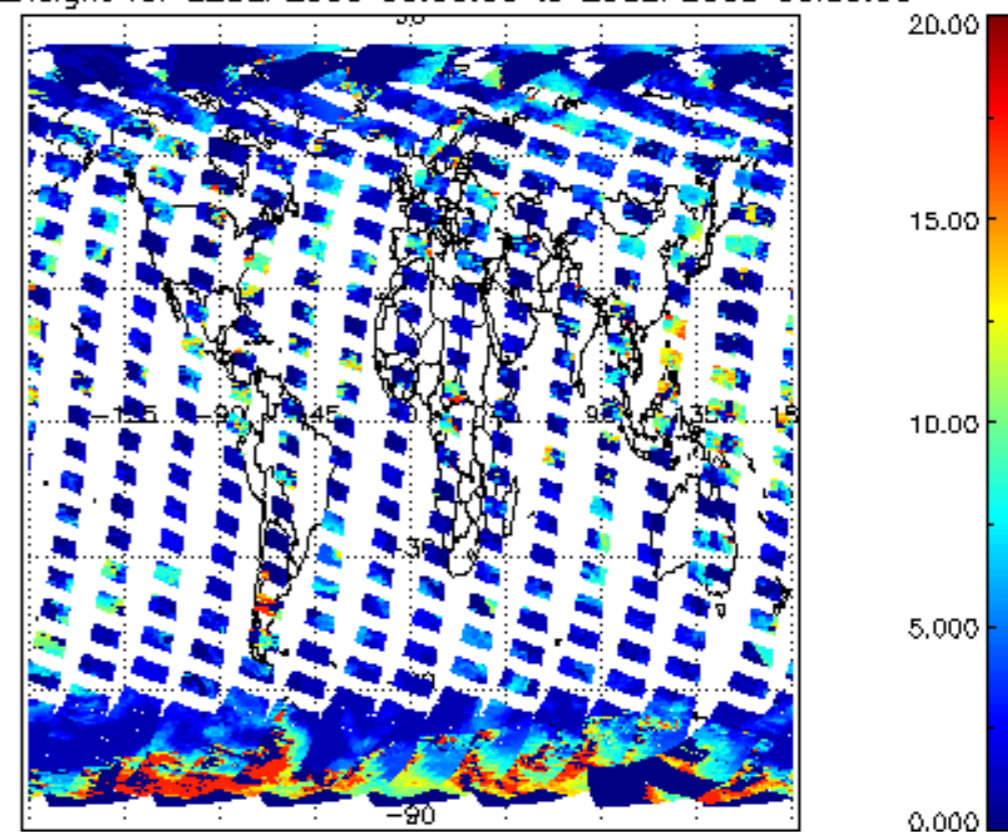
2.3 ADF monitoring

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

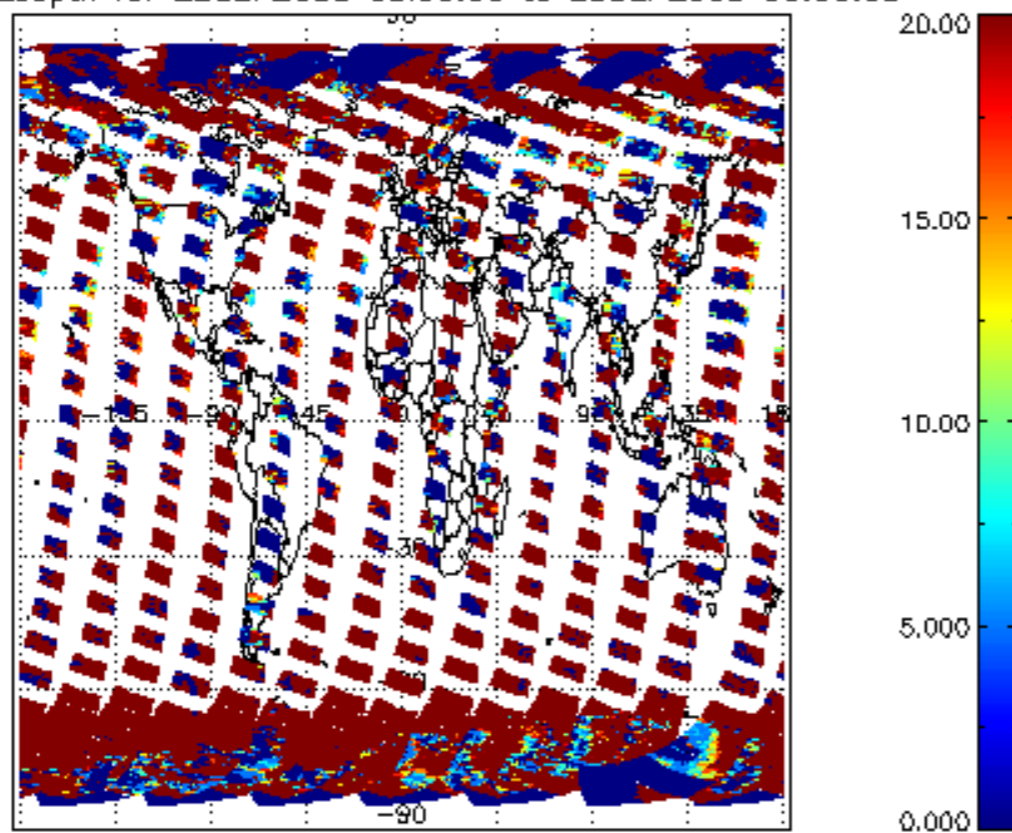
cl_frac for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



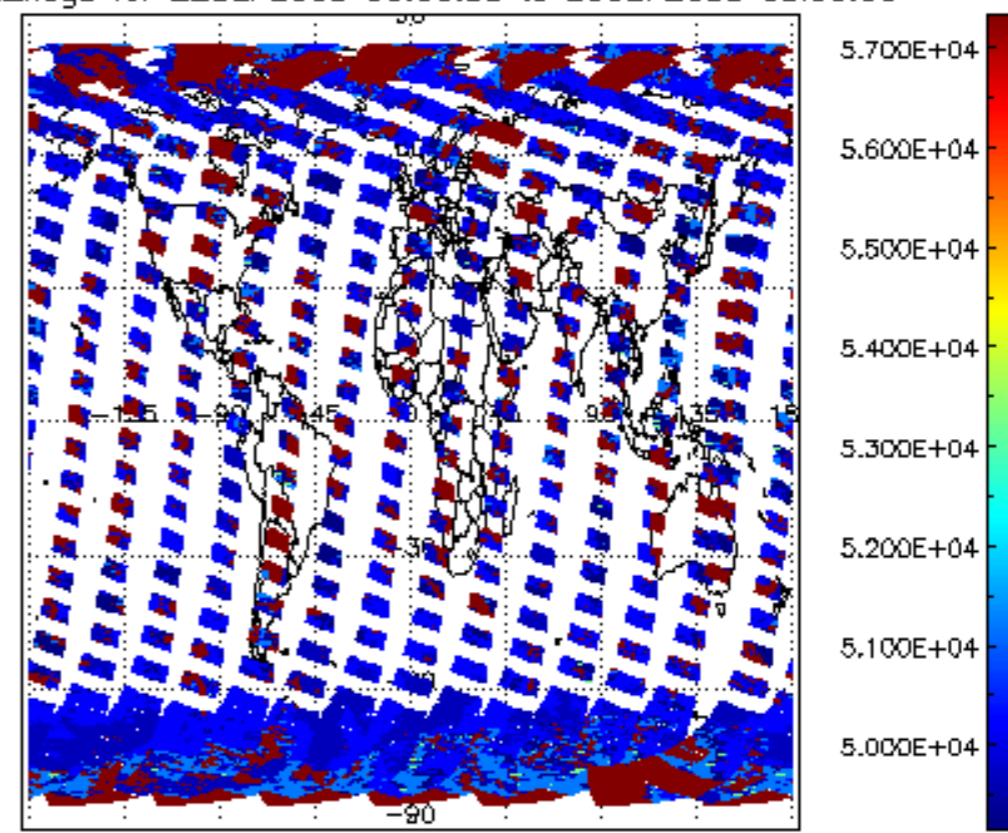
cl_top_height for 22SEP2008 00:00:00 to 23SEP2008 00:00:00

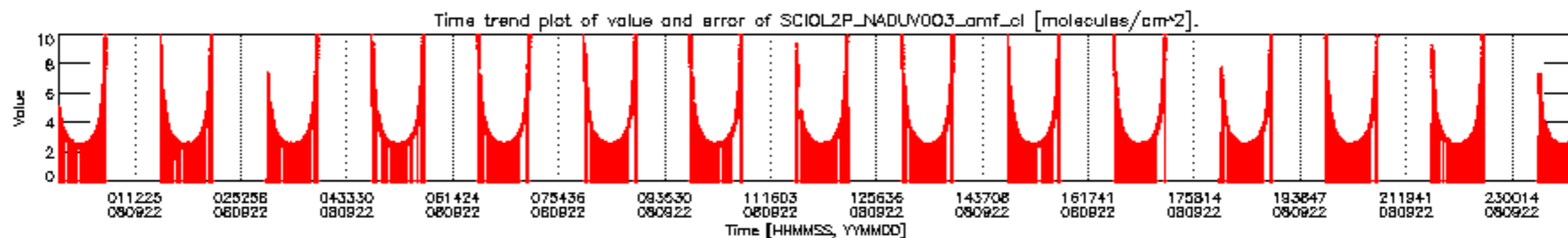
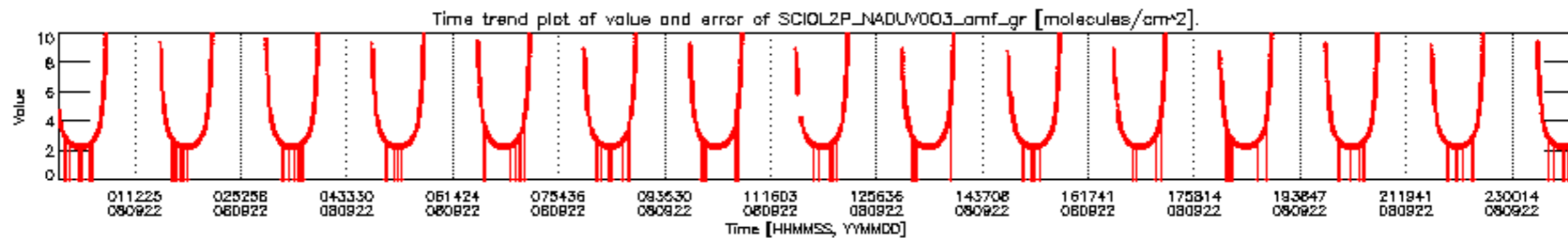
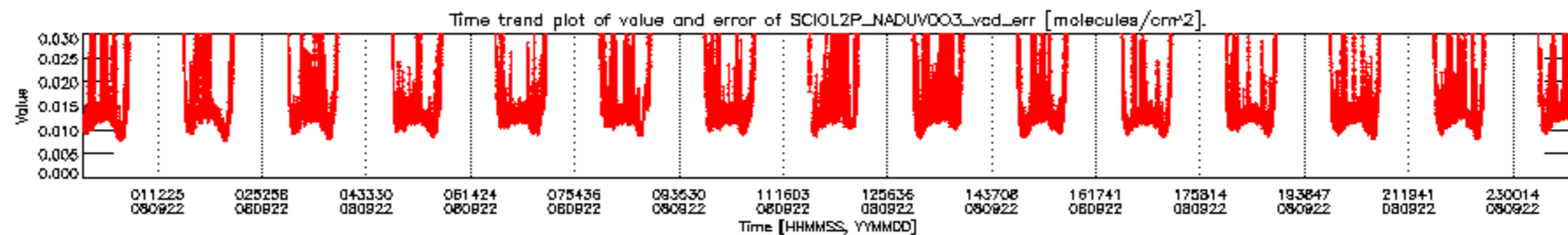
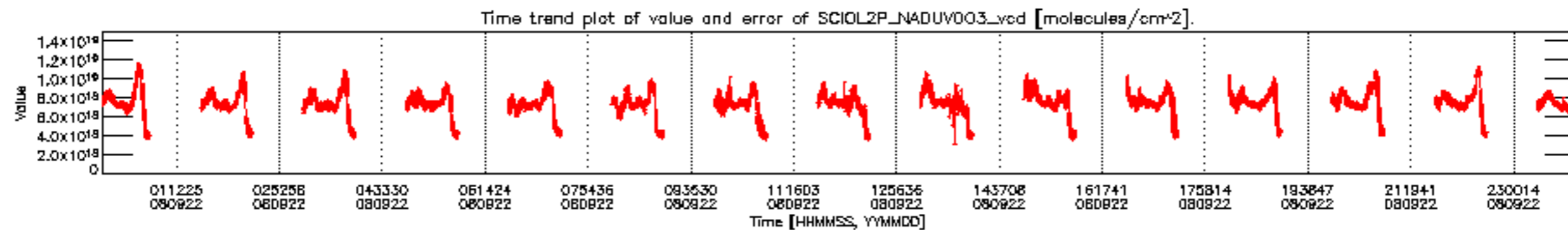


cl_opt_depth for 22SEP2008 00:00:00 to 23SEP2008 00:00:00

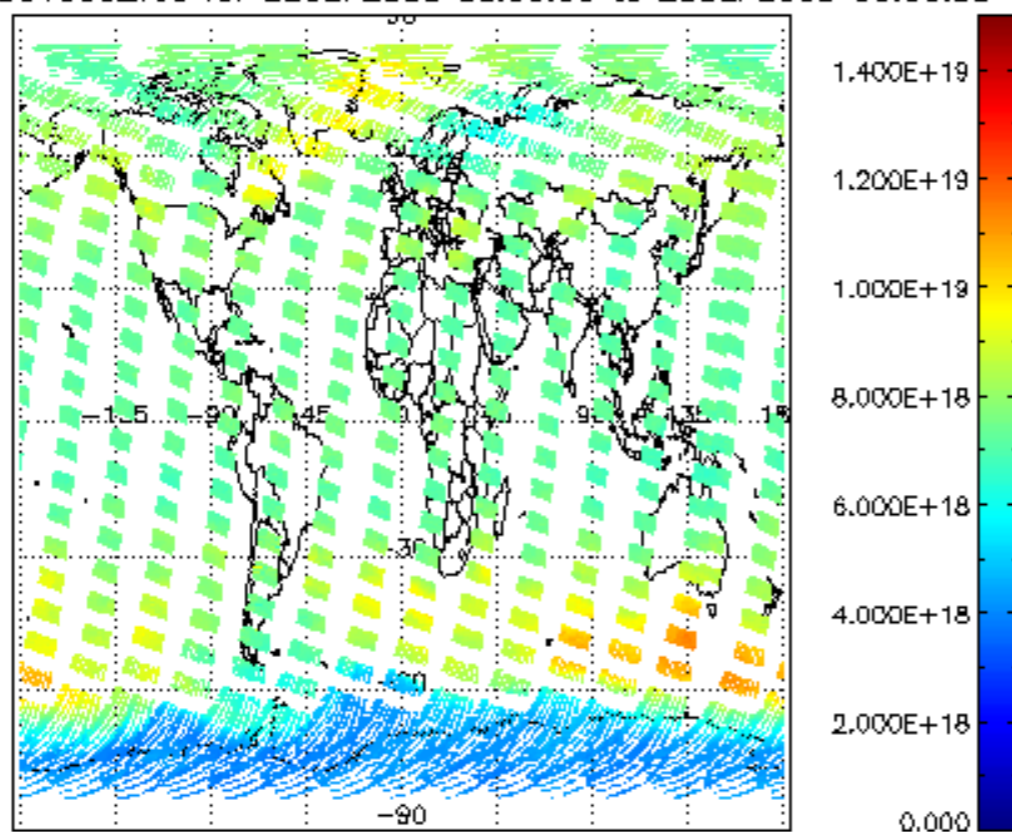


cloud_flags for 22SEP2008 00:00:00 to 23SEP2008 00:00:00

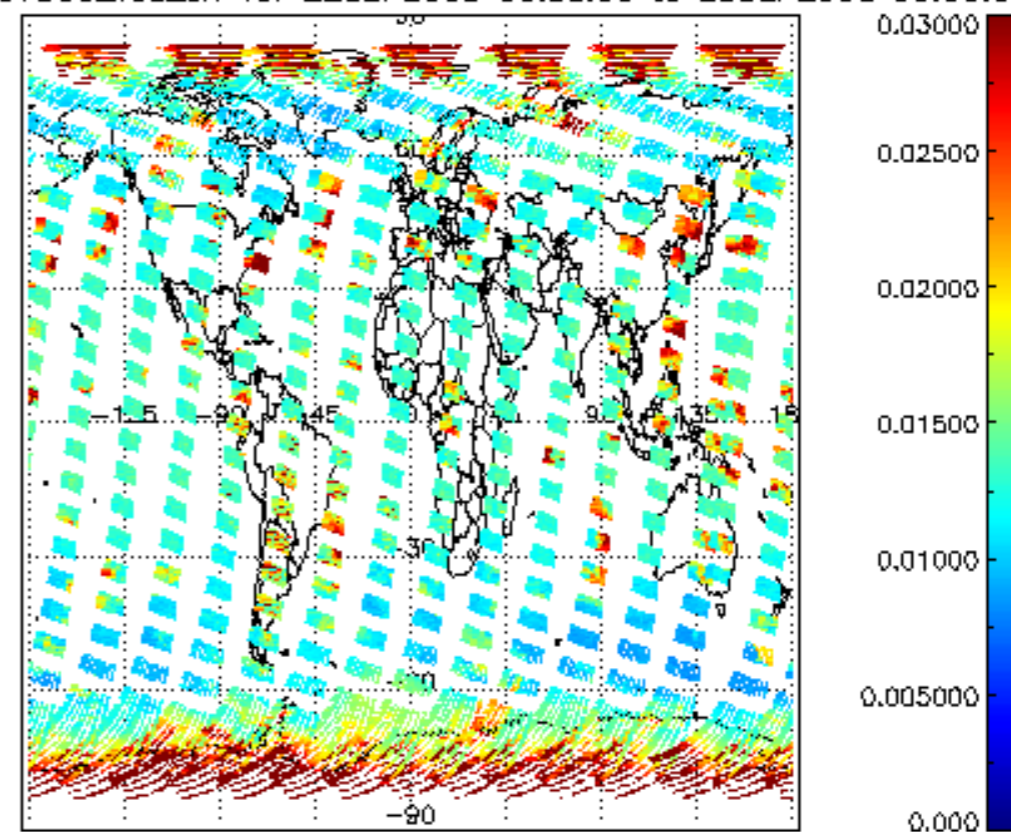




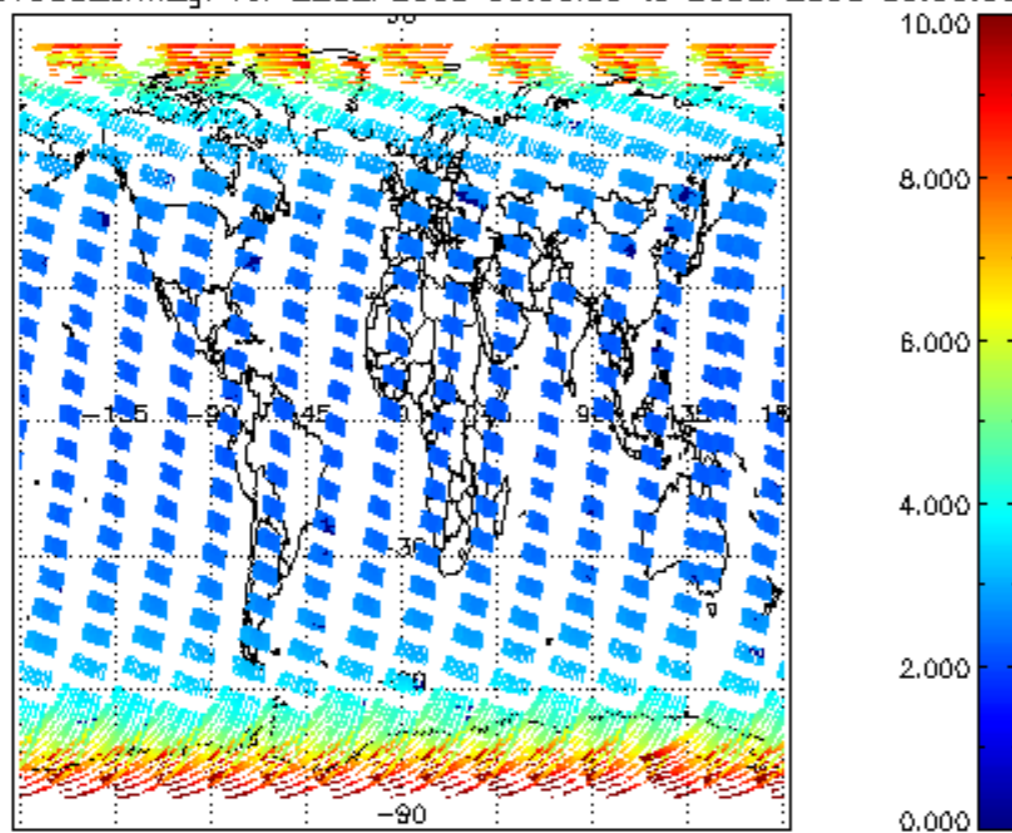
SCIOL2P_NADUV003_vcd for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



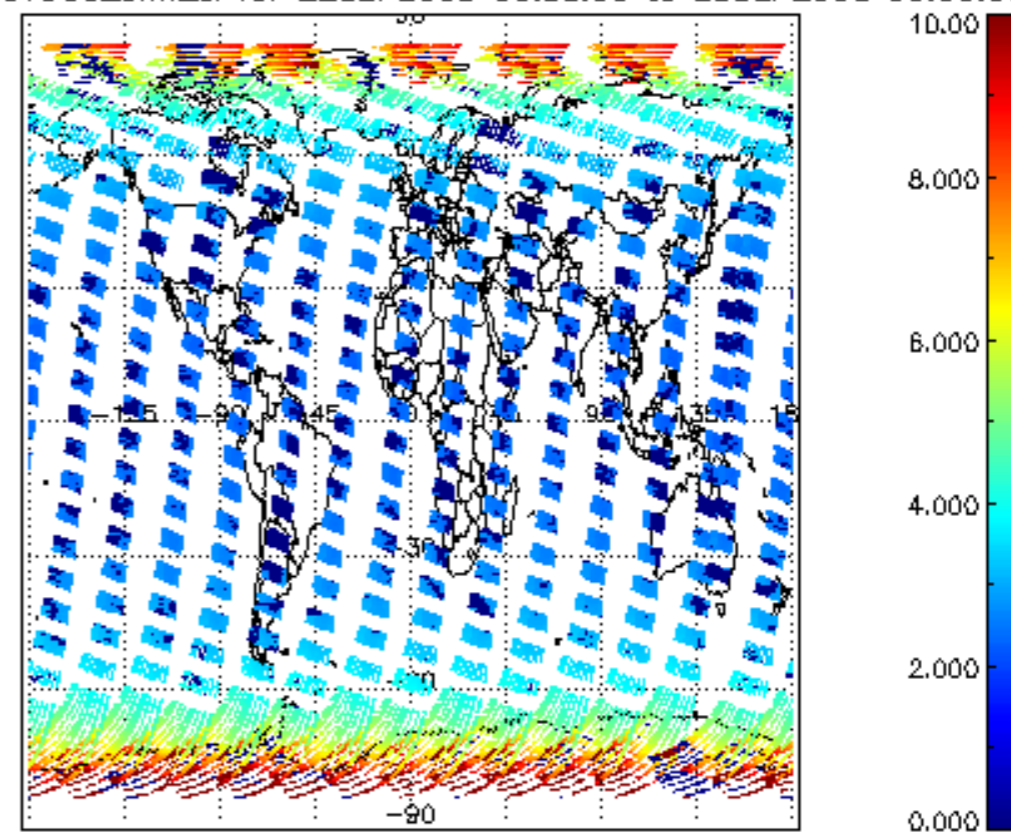
SCIOL2P_NADUV003_vcd_err for 22SEP2008 00:00:00 to 23SEP2008 00:00:00

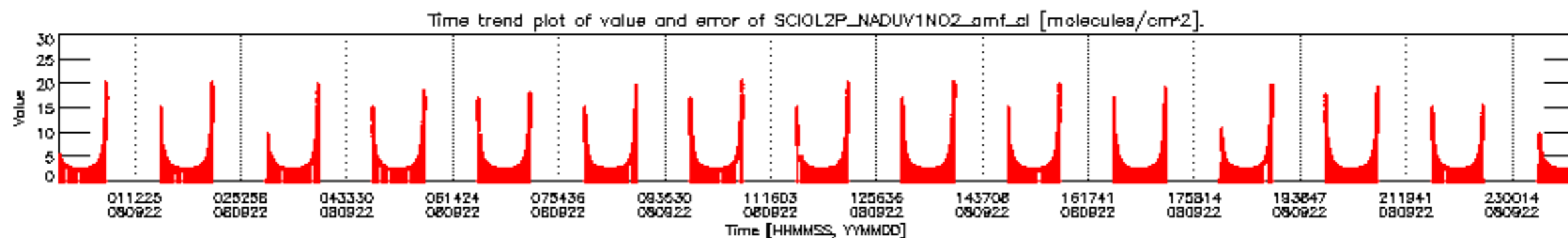
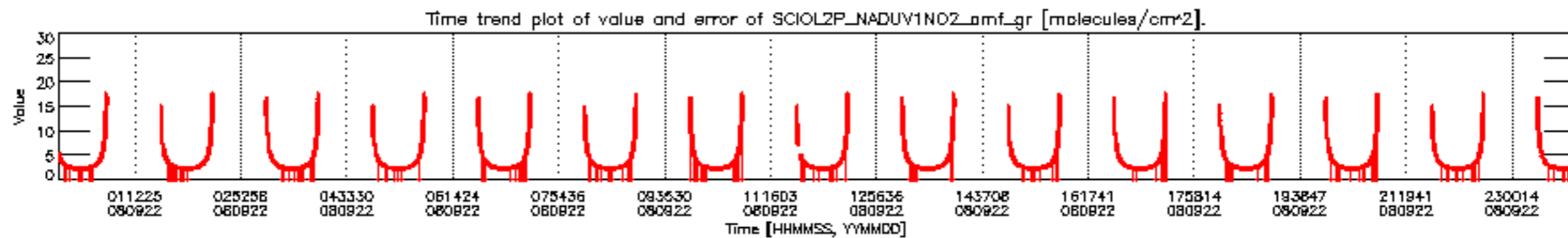
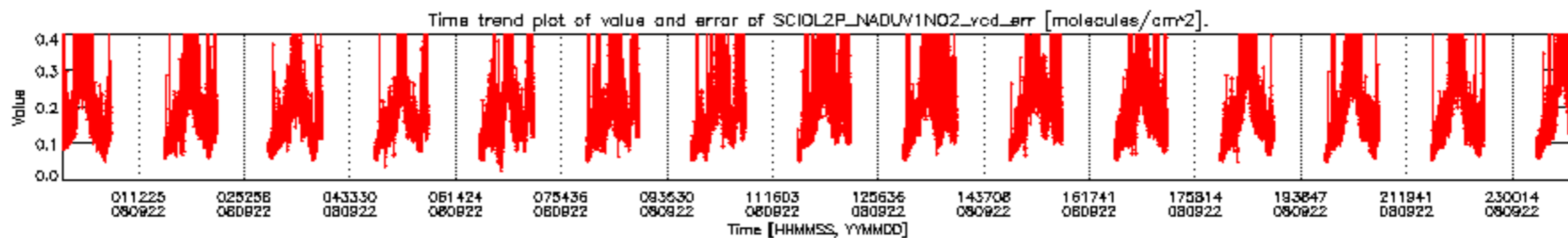
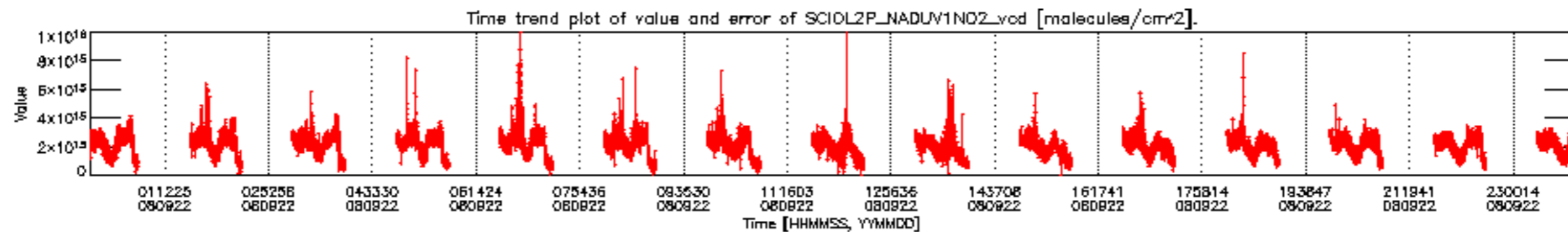


SCIOL2P_NADUV003_amf_gr for 22SEP2008 00:00:00 to 23SEP2008 00:00:00

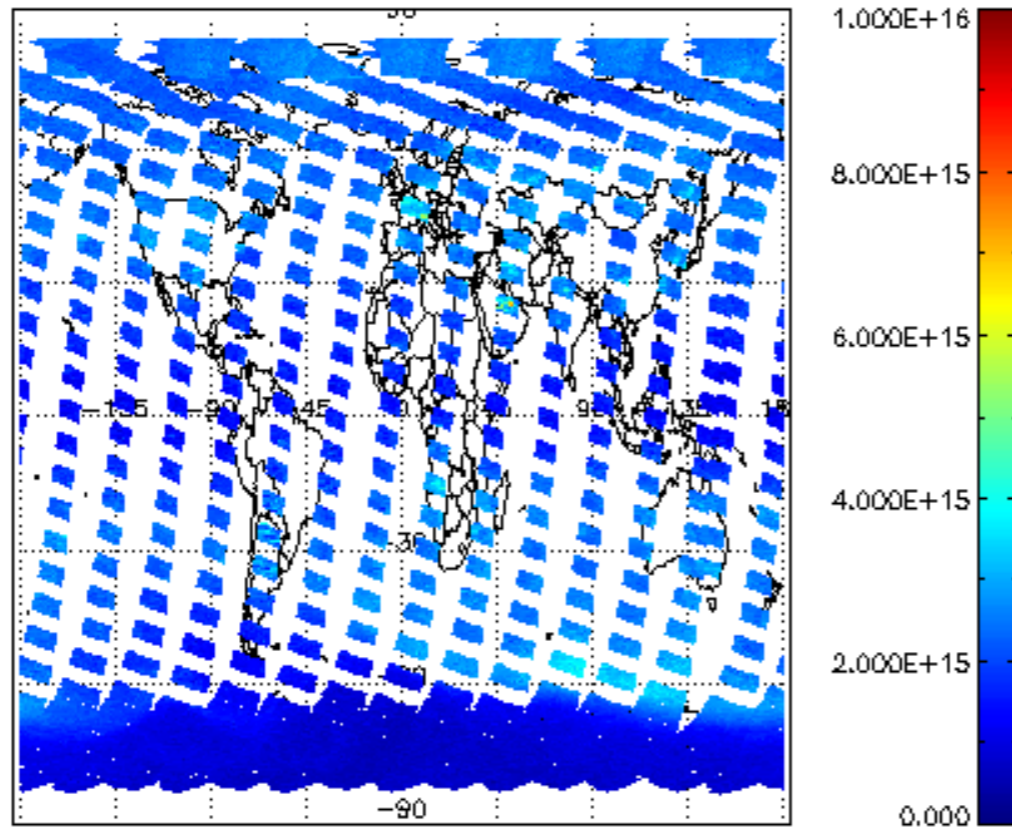


SCIOL2P_NADUV003_amf_cl for 22SEP2008 00:00:00 to 23SEP2008 00:00:00

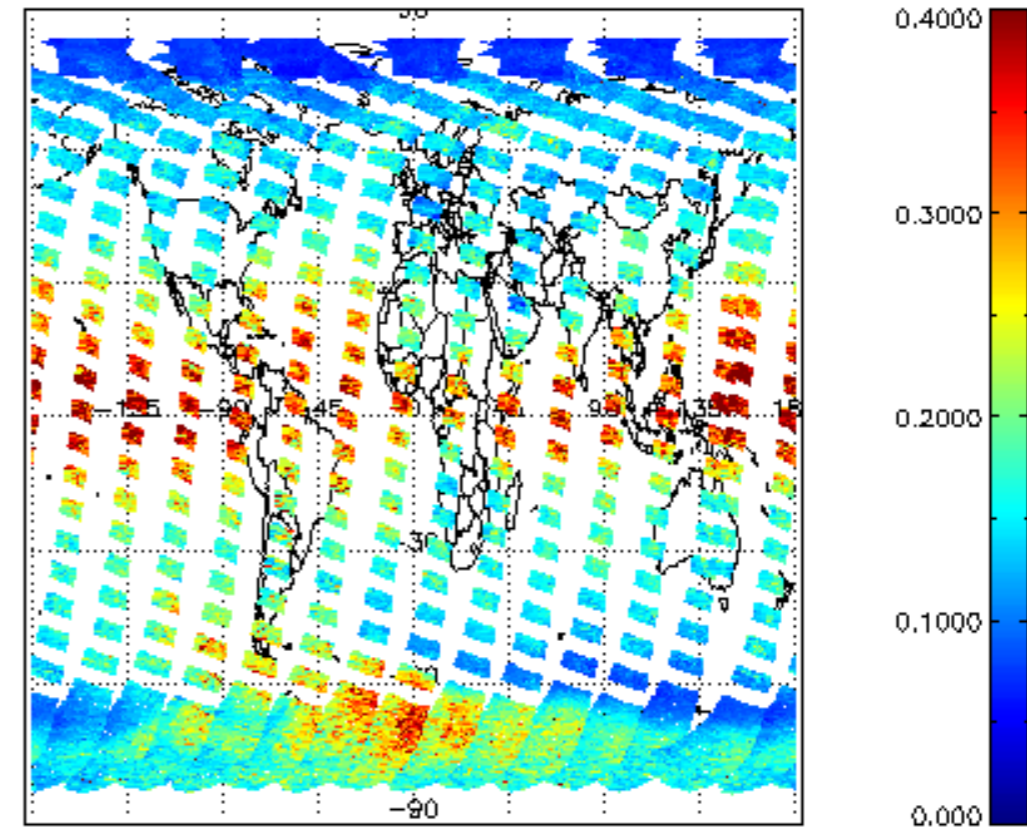




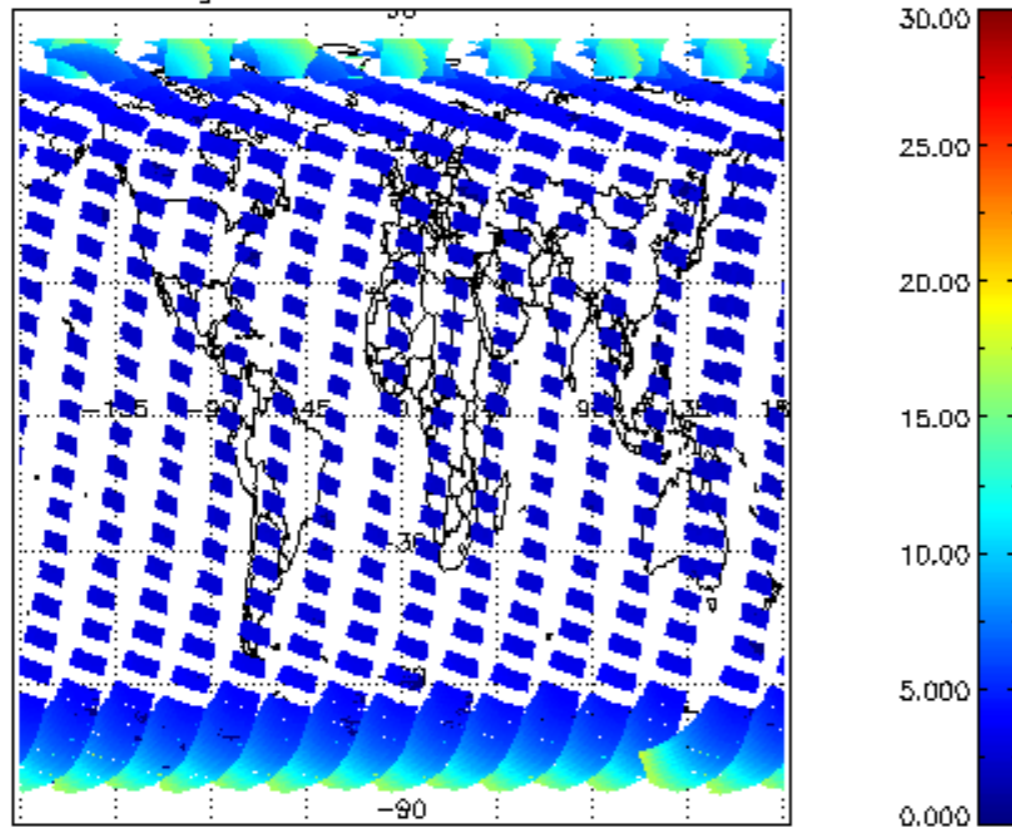
SCIOL2P_NADUV1NO2_vcd for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



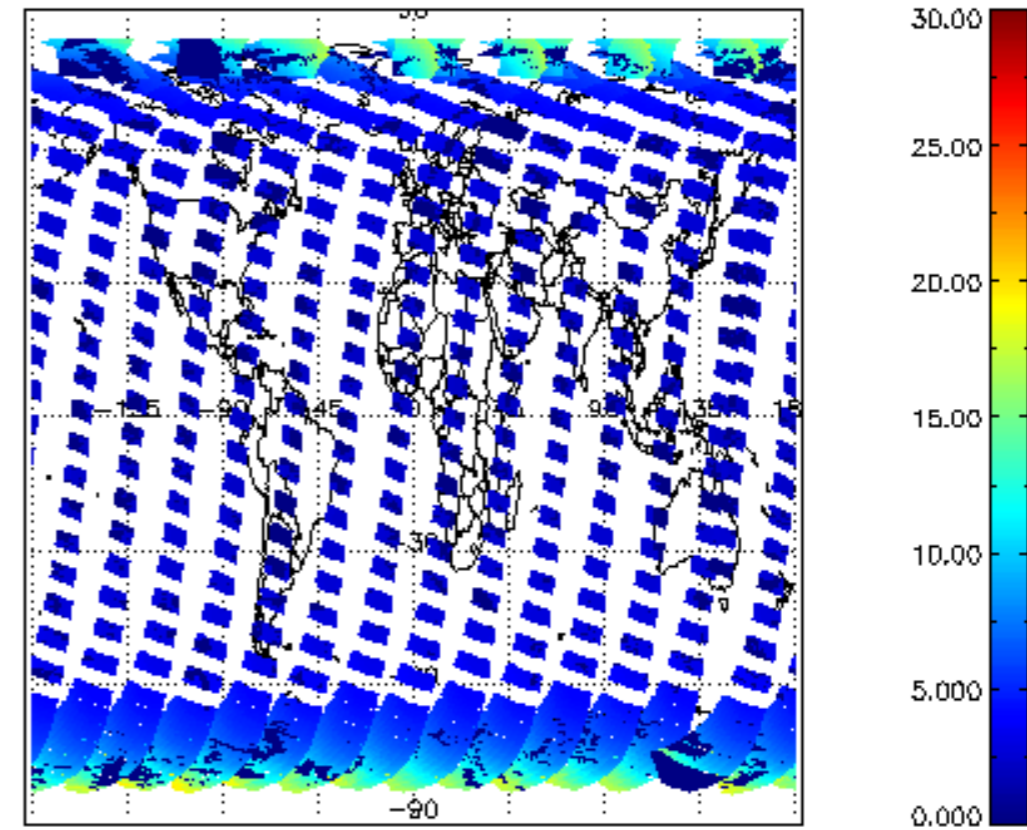
iCIOL2P_NADUV1NO2_vcd_err for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



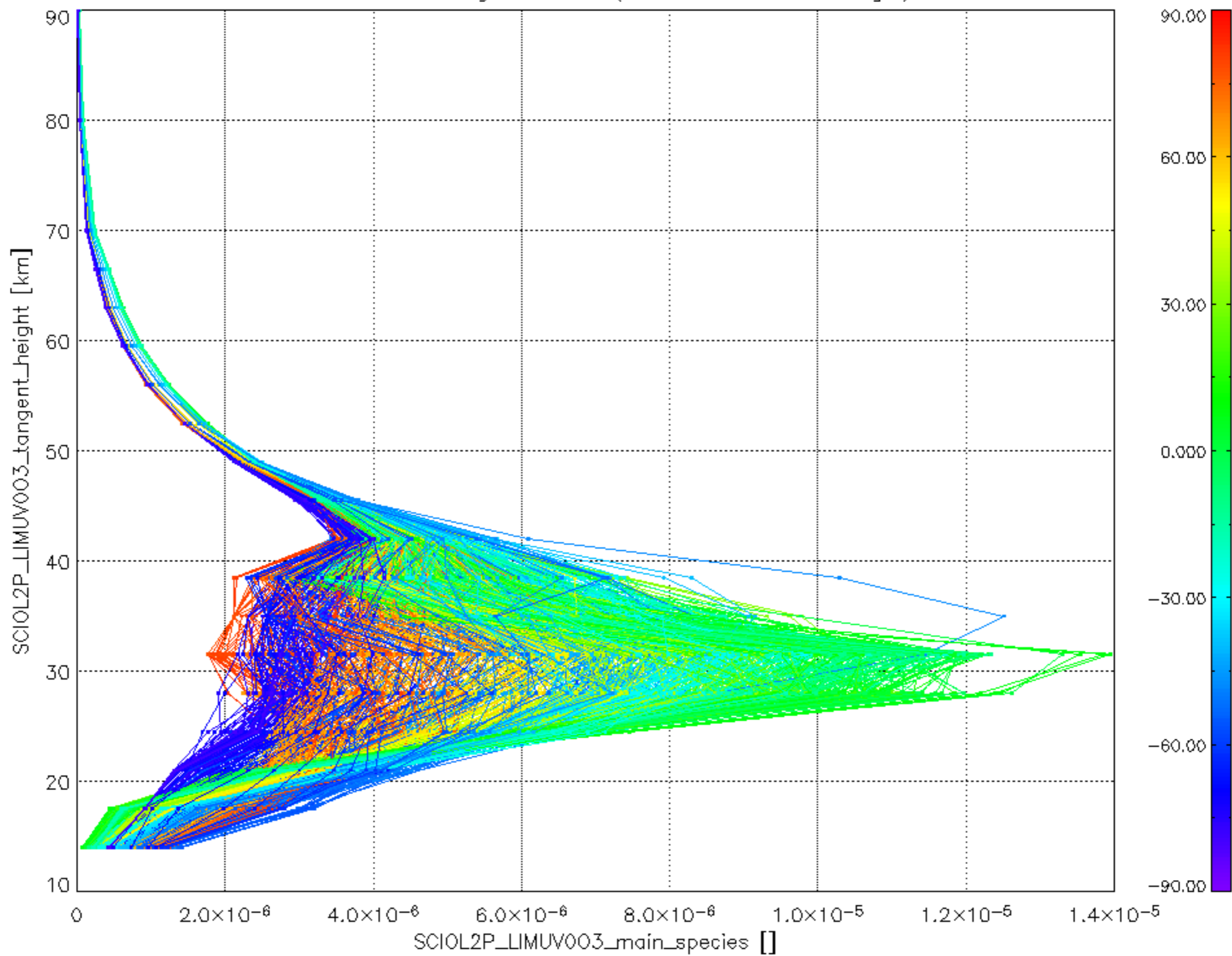
iCIOL2P_NADUV1NO2_amf_gr for 22SEP2008 00:00:00 to 23SEP2008 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 22SEP2008 00:00:00 to 23SEP2008 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).

