

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	1.4 (06-11-2007)
Time of report generation	14JUN2008 10:48:49
Data source version	SCIA-OL/3.01-R
Processing scope for products	29OCT2002 00:00:00 to 30OCT2002 00:00:00
Start time of first product within scope	28OCT2002 22:43:06
Stop time of last product within scope	30OCT2002 00:47:36
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.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PRDPA20021028_224306_000033242010_00402_03462_1258.N1	28OCT2002 22:43:06	28OCT2002 23:38:31	0	GOOD
1	SCI_OL__2PRDPA20021029_002343_000033242010_00403_03463_1109.N1	29OCT2002 00:23:43	29OCT2002 01:19:07	0	GOOD
2	SCI_OL__2PRDPA20021029_020419_000033242010_00404_03464_1150.N1	29OCT2002 02:04:19	29OCT2002 02:59:43	0	GOOD
3	SCI_OL__2PRDPA20021029_034455_000033242010_00405_03465_1305.N1	29OCT2002 03:44:55	29OCT2002 04:40:20	0	GOOD
4	SCI_OL__2PRDPA20021029_052532_000033242010_00406_03466_1075.N1	29OCT2002 05:25:32	29OCT2002 06:20:56	0	GOOD
5	SCI_OL__2PRDPA20021029_070608_000033242010_00407_03467_1173.N1	29OCT2002 07:06:08	29OCT2002 08:01:33	0	GOOD
6	SCI_OL__2PRDPA20021029_084645_000033242010_00408_03468_1330.N1	29OCT2002 08:46:45	29OCT2002 09:42:09	0	GOOD
7	SCI_OL__2PRDPA20021029_102721_000033242010_00409_03469_1427.N1	29OCT2002 10:27:21	29OCT2002 11:22:45	0	GOOD
8	SCI_OL__2PRDPA20021029_120757_000033242010_00410_03470_1086.N1	29OCT2002 12:07:57	29OCT2002 13:03:21	0	GOOD
9	SCI_OL__2PRDPA20021029_134834_000033242010_00411_03471_1248.N1	29OCT2002 13:48:34	29OCT2002 14:43:58	0	GOOD
10	SCI_OL__2PRDPA20021029_152910_000033242010_00412_03472_1095.N1	29OCT2002 15:29:10	29OCT2002 16:24:34	0	GOOD
11	SCI_OL__2PRDPA20021029_170946_000033242010_00413_03473_1057.N1	29OCT2002 17:09:46	29OCT2002 18:05:11	0	GOOD
12	SCI_OL__2PRDPA20021029_184951_000033662010_00414_03474_1348.N1	29OCT2002 18:49:51	29OCT2002 19:45:58	0	GOOD
13	SCI_OL__2PRDPA20021029_203017_000033862010_00415_03475_1245.N1	29OCT2002 20:30:17	29OCT2002 21:26:44	0	GOOD
14	SCI_OL__2PRDPA20021029_221136_000033242010_00416_03476_1256.N1	29OCT2002 22:11:36	29OCT2002 23:07:00	0	GOOD
15	SCI_OL__2PRDPA20021029_235212_000033242010_00417_03477_1177.N1	29OCT2002 23:52:12	30OCT2002 00:47:36	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: 109081

Total number of cloud data DSRs with good quality flag (=0): 109081 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	109081	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	109081	0.21631	0.25000	0.12500	1.0000	0.081135	s
SURFACE_PRES	109081	0.0000	0.0000	0.0000	0.0000	0.0000	hPa

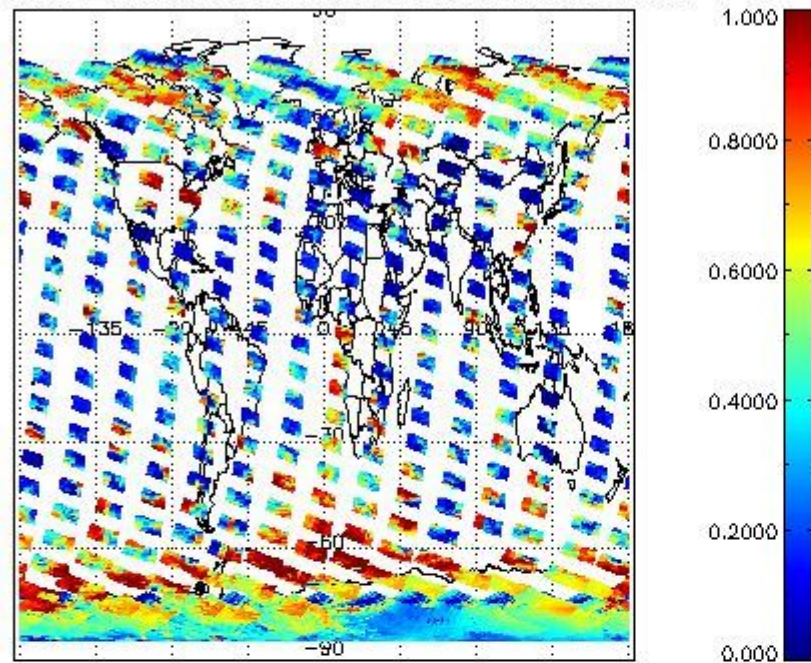
CL_FRAC	109081	0.43325	0.40412	0.0000	1.0000	0.28875	-
CL_FRAC_ERR	109081	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	109081	6.9219	8.0000	4.0000	32.000	2.5963	
PMD_READ_CL[0]	109081	0.38424	0.0000	0.0000	32.000	1.4077	-
PMD_READ_CL[1]	109081	0.43991	0.0000	0.0000	31.000	1.5500	-
CL_TOP_HEIGHT	97868	4.3403	2.8916	0.0000	17.000	4.0354	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	97868	46.196	31.086	0.0000	101.00	37.706	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	109081	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	109081	11000111	11000100	11000000	11100000	2629.5	flags
AERO_ABSO_IND	109081	0.45228	0.29421	-4.9126	10.397	1.0457	
AERO_IND_DIAG	109081	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	109081	01101000	11000000	00000000	11000000	24474.	flags

Time and geolocation plots:

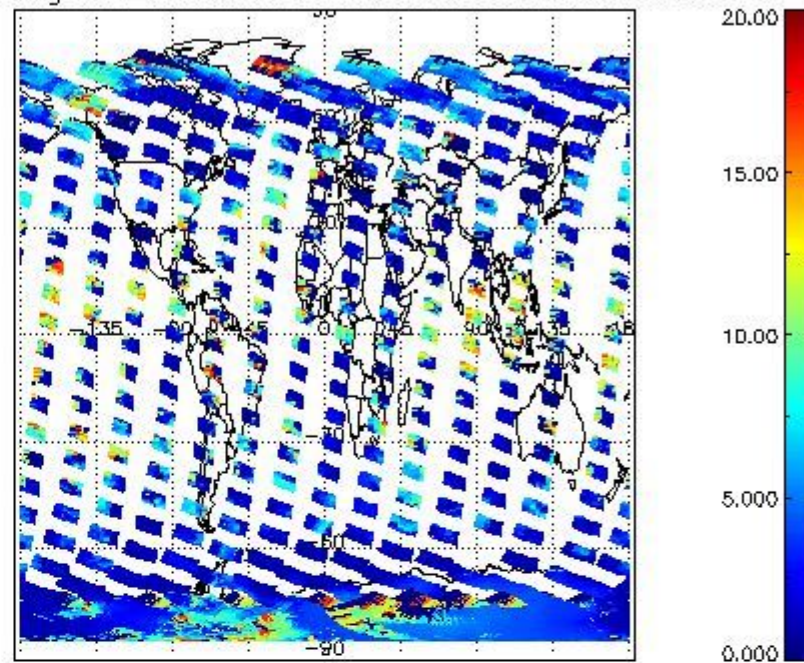
Plots are available for the following parameters:

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

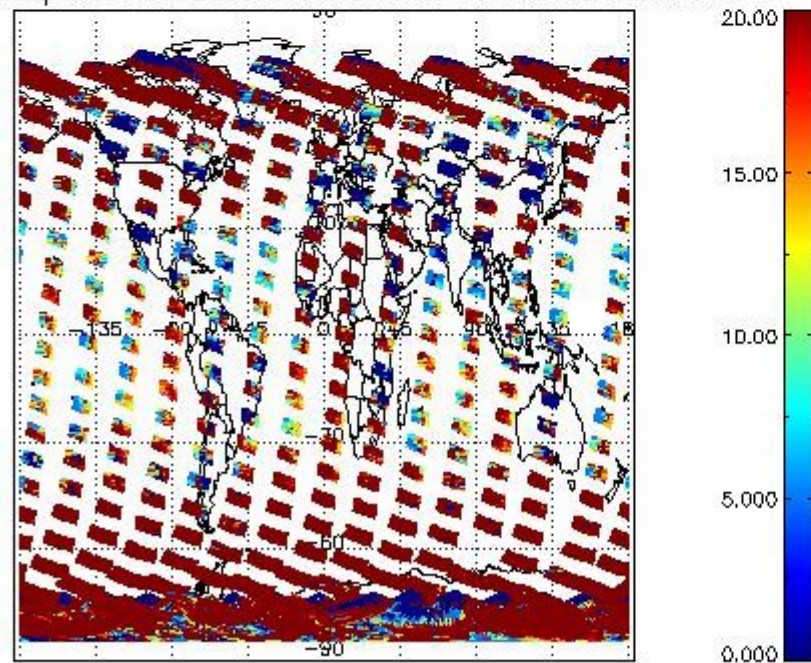
cLfrac for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



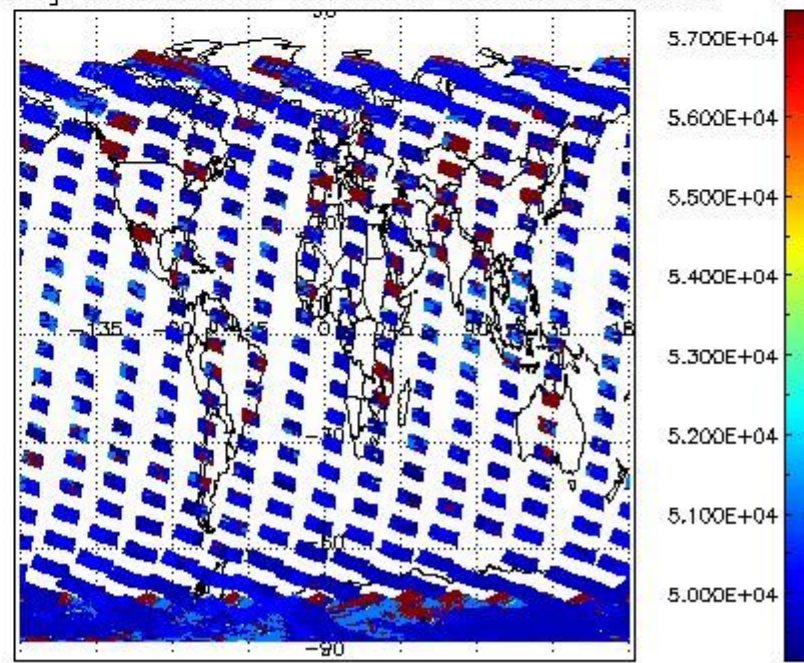
cL_top_height for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



cLopt_depth for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



cloud_flags for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



2.2.2 Nadir

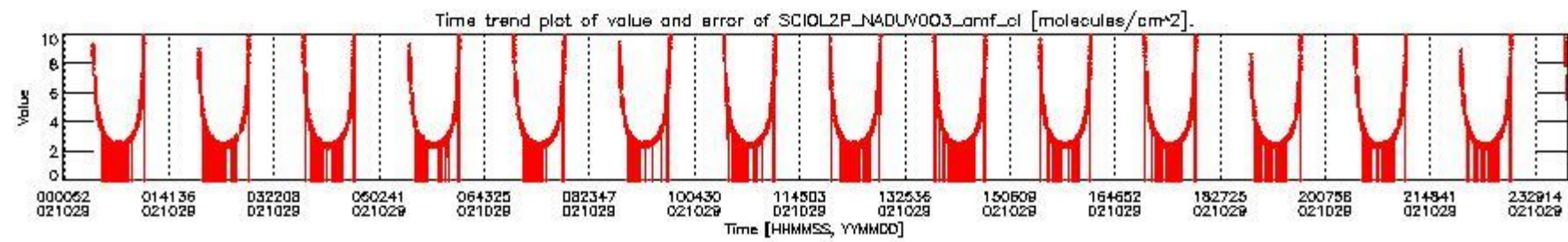
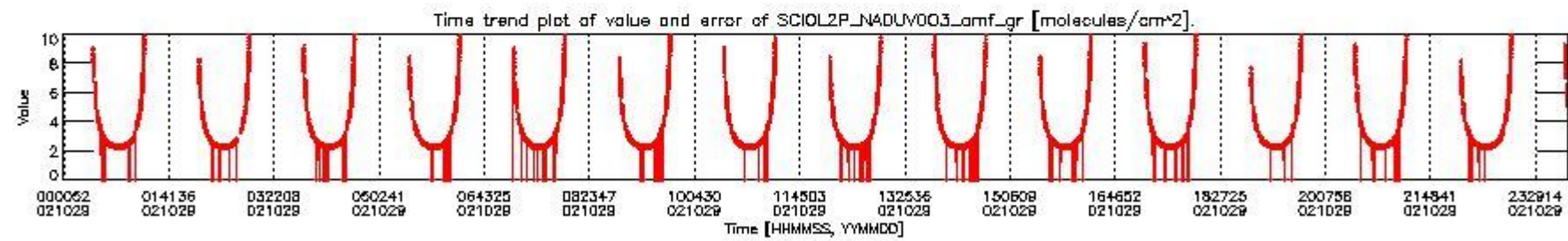
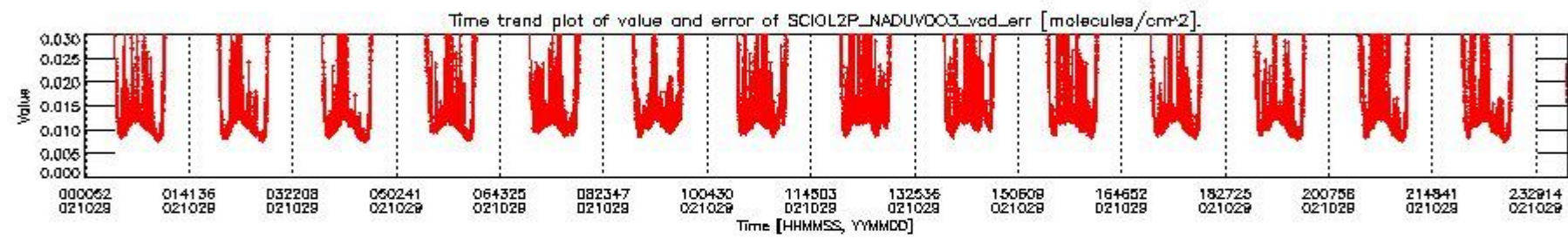
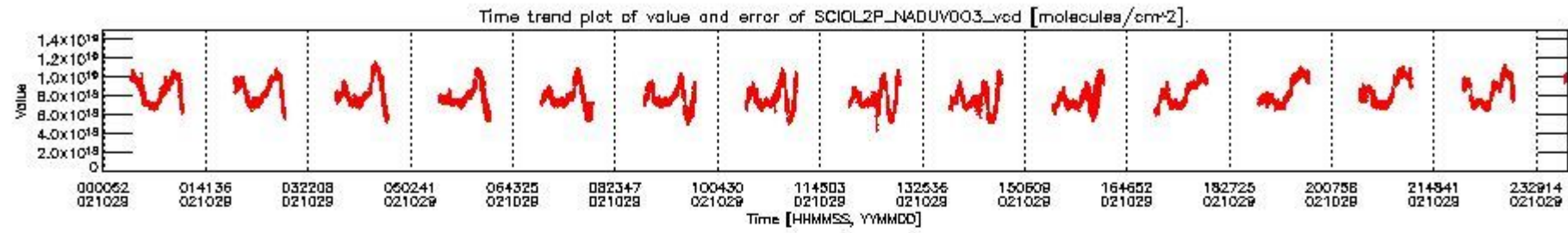
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

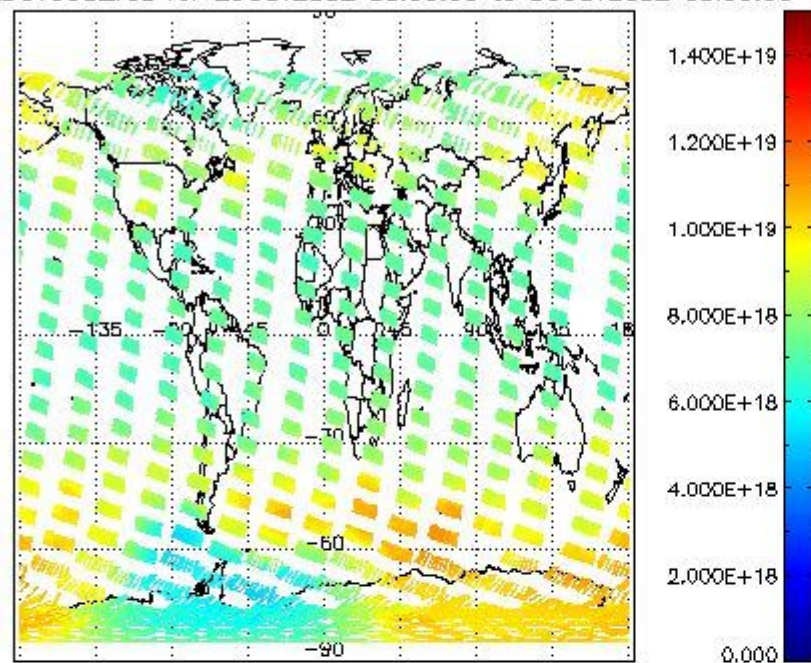
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

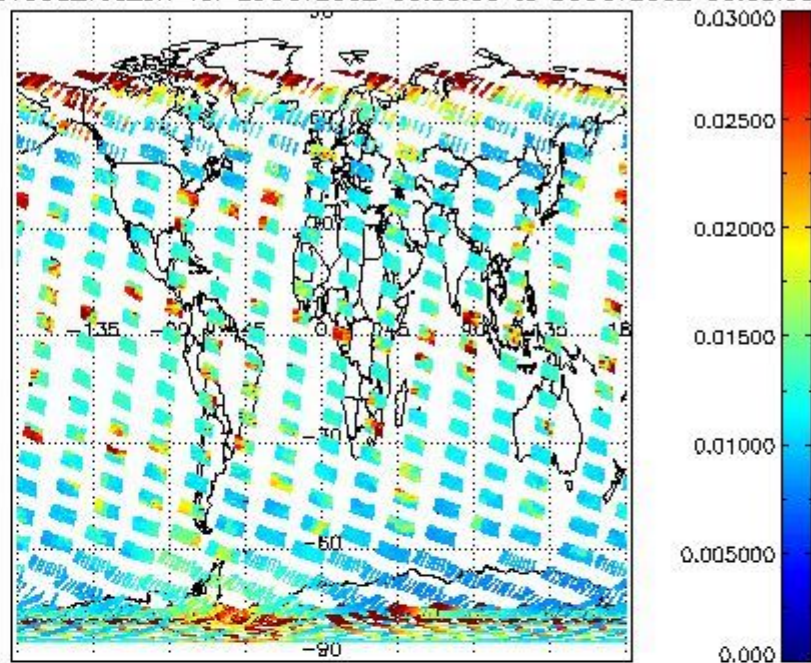
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the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



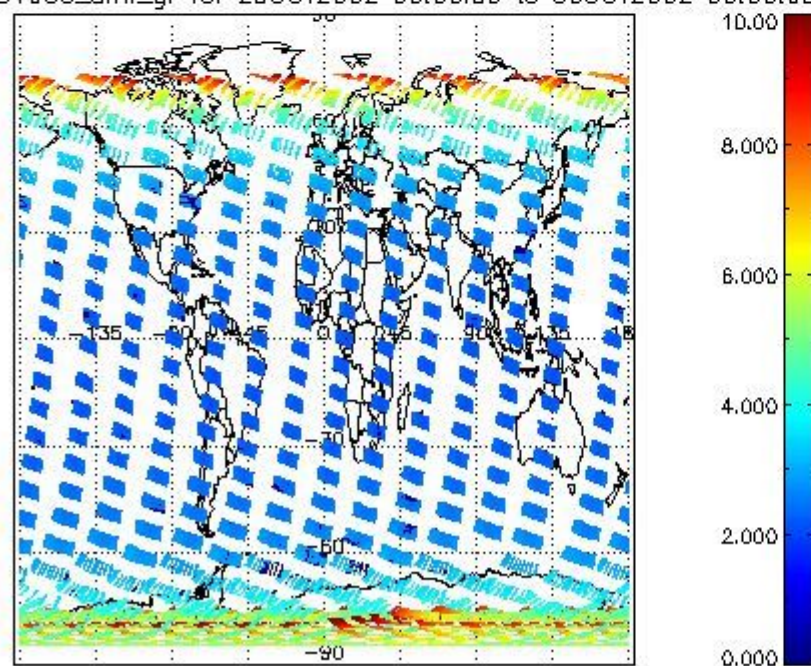
SCIOL2P_NADUV003_vcd for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



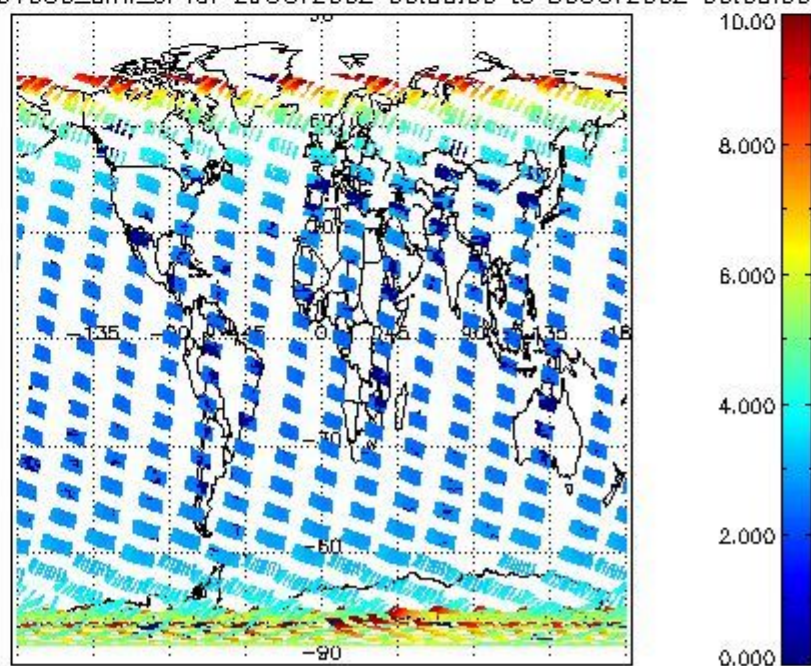
SCIOL2P_NADUV003_vcd_err for 29OCT2002 00:00:00 to 30OCT2002 00:00:00

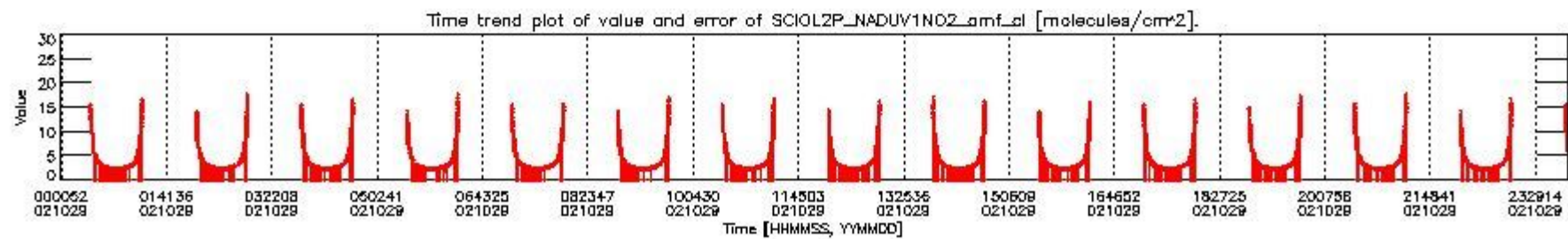
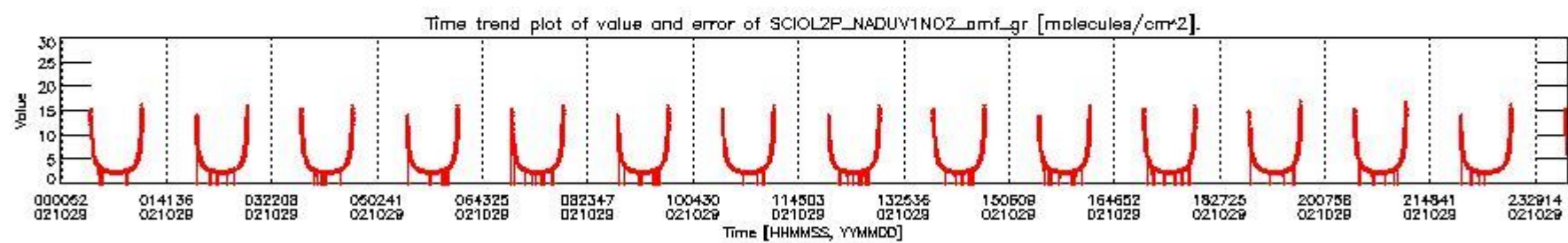
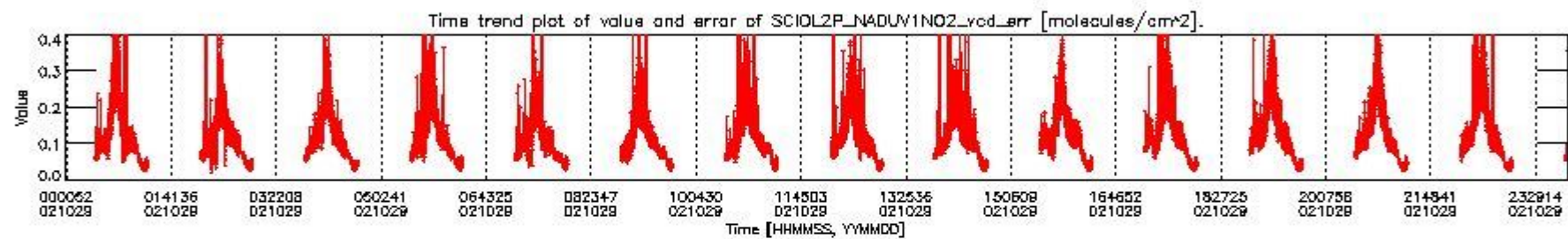
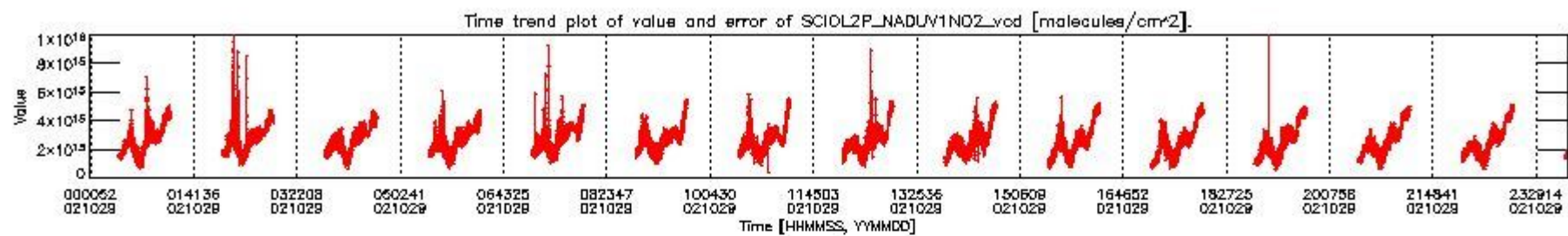


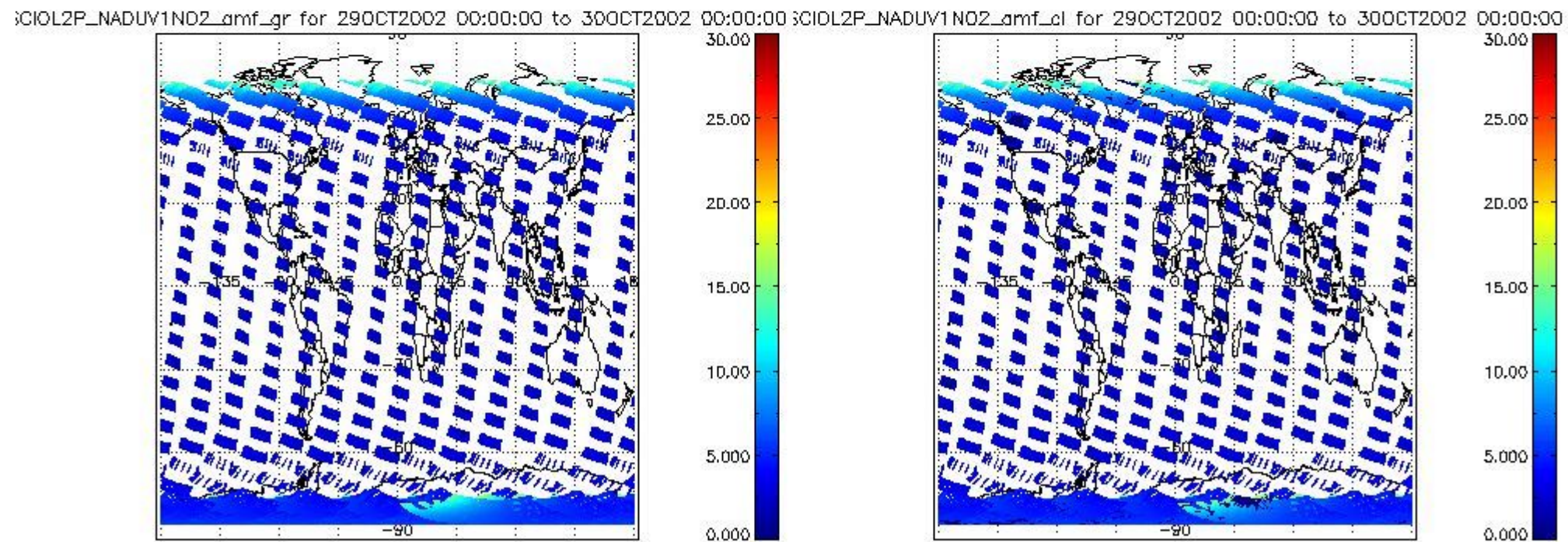
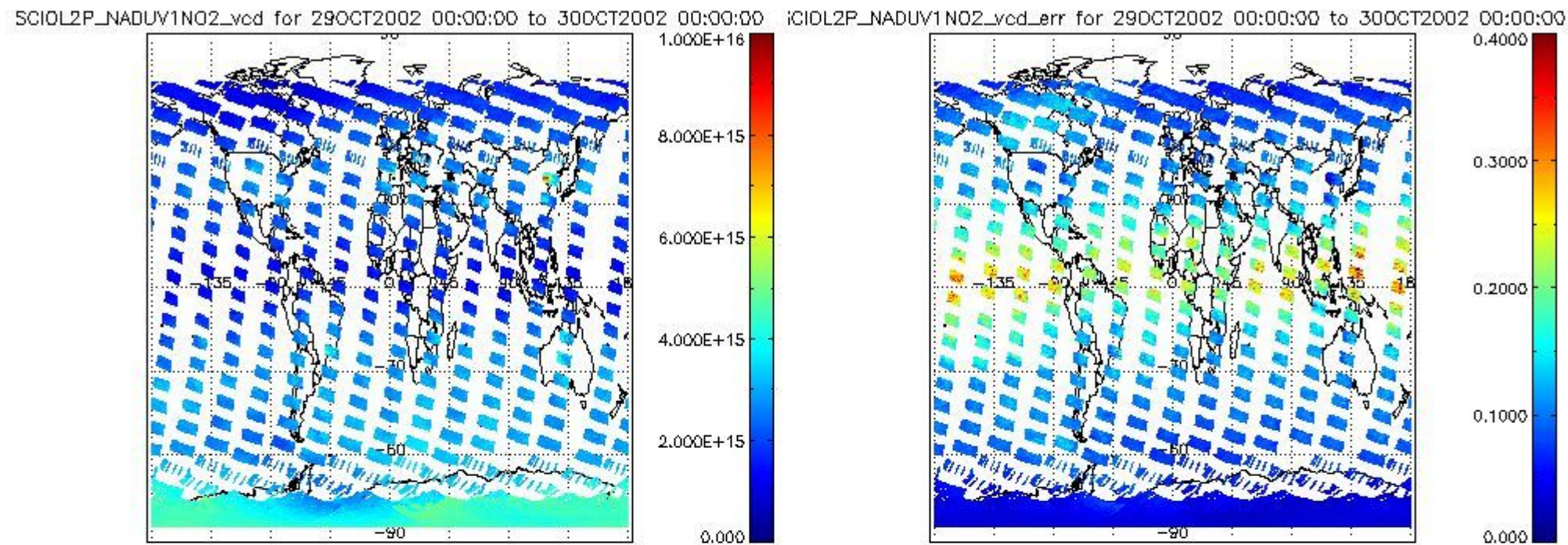
SCIOL2P_NADUV003_amf_gr for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



SCIOL2P_NADUV003_amf_sl for 29OCT2002 00:00:00 to 30OCT2002 00:00:00







2.2.3 Limb

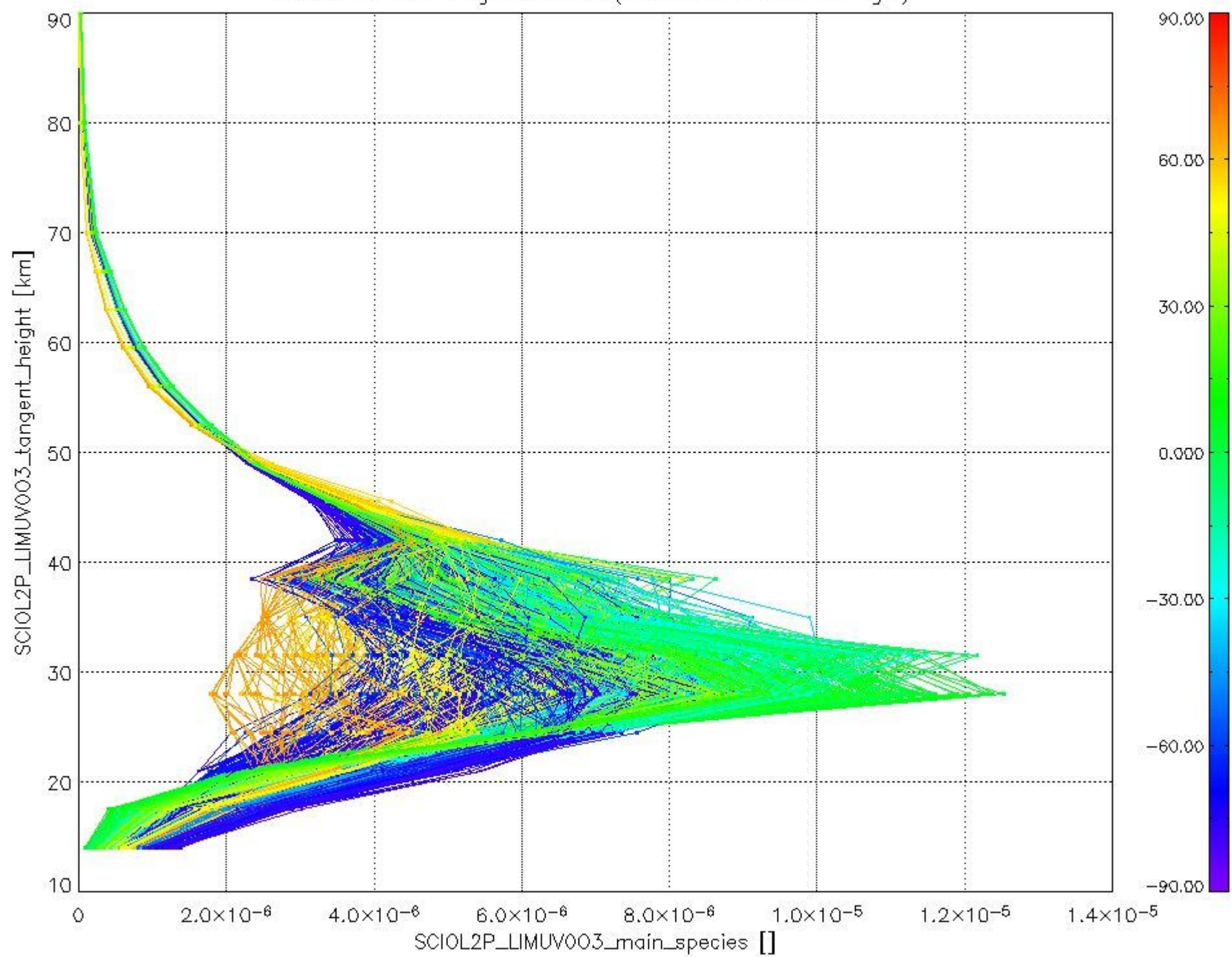
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

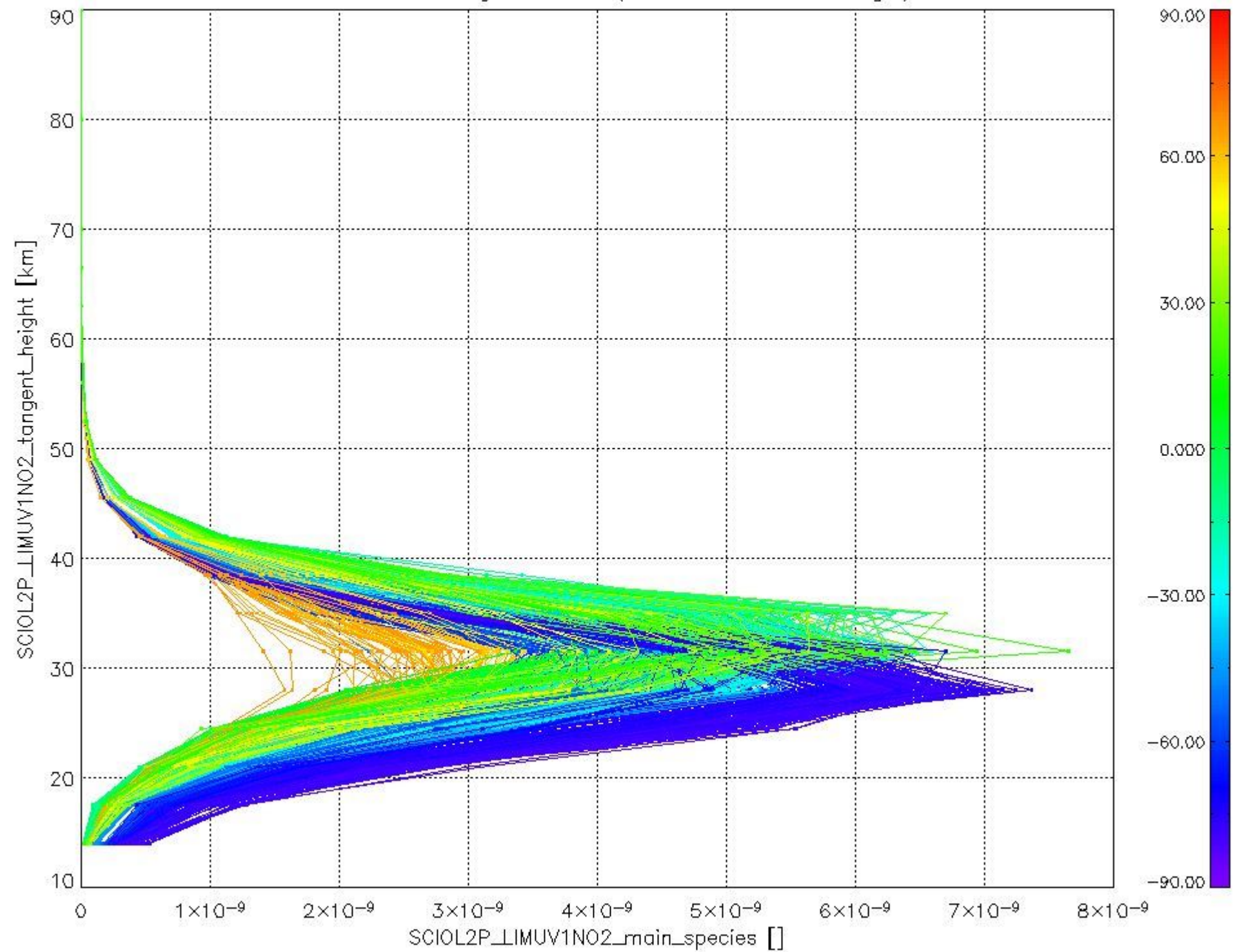
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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).



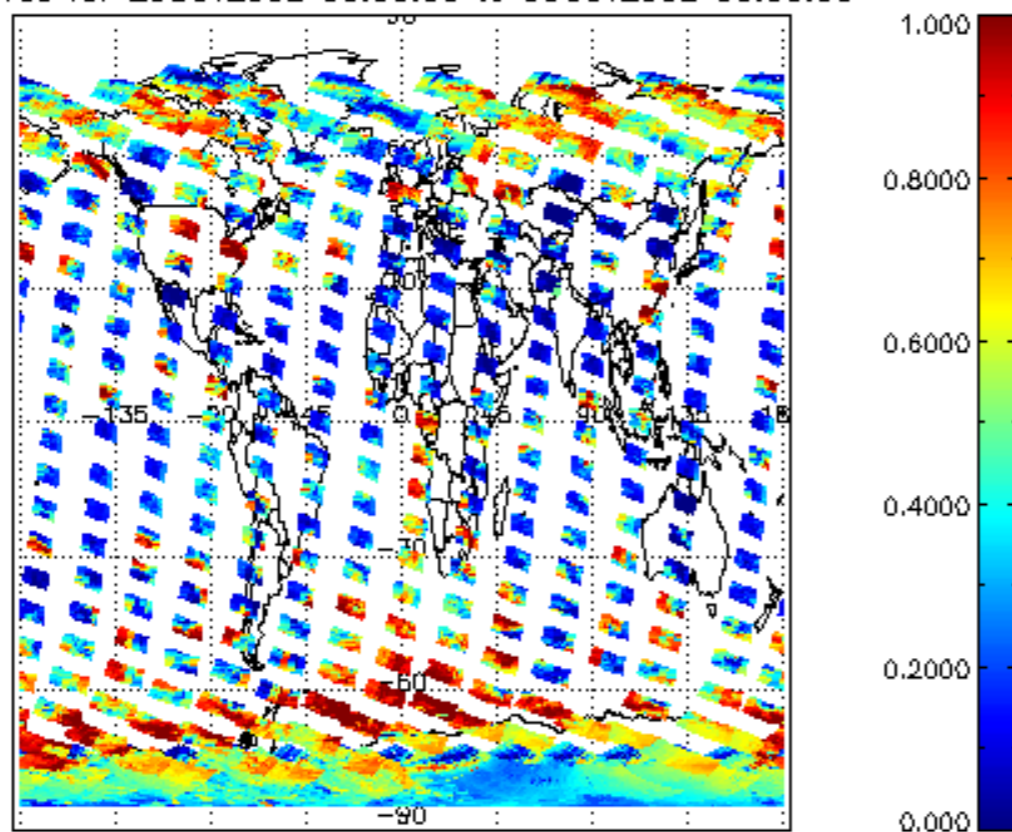
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



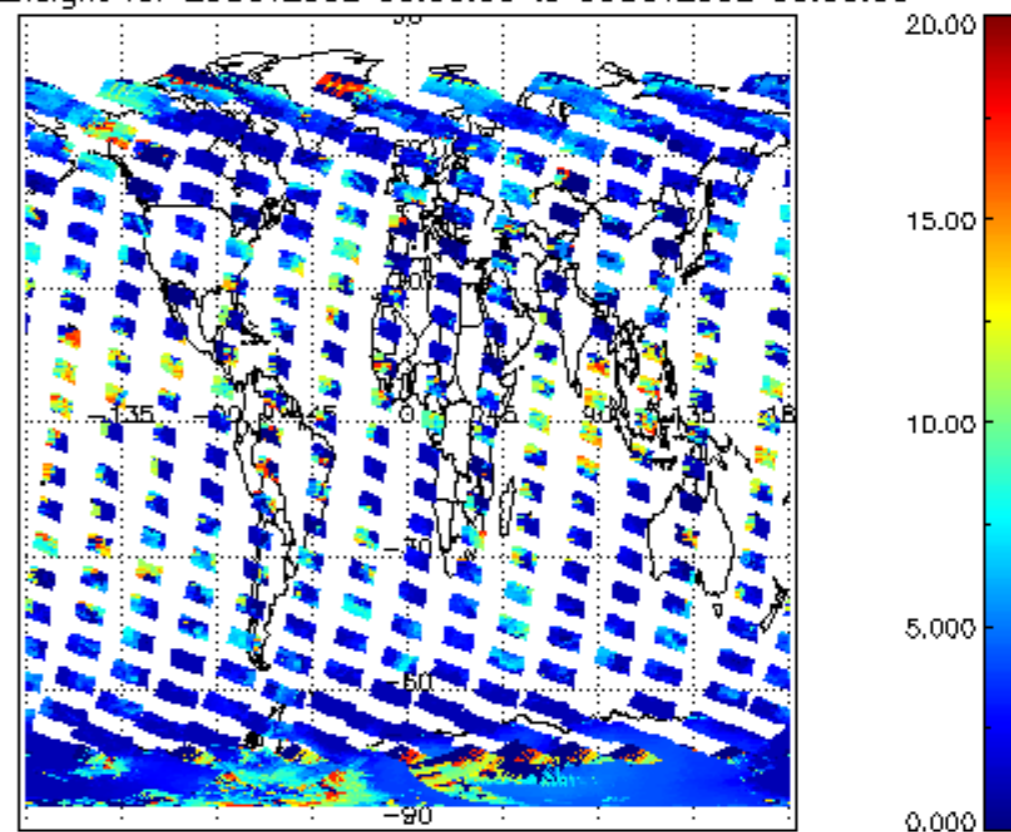
2.3 ADF monitoring

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

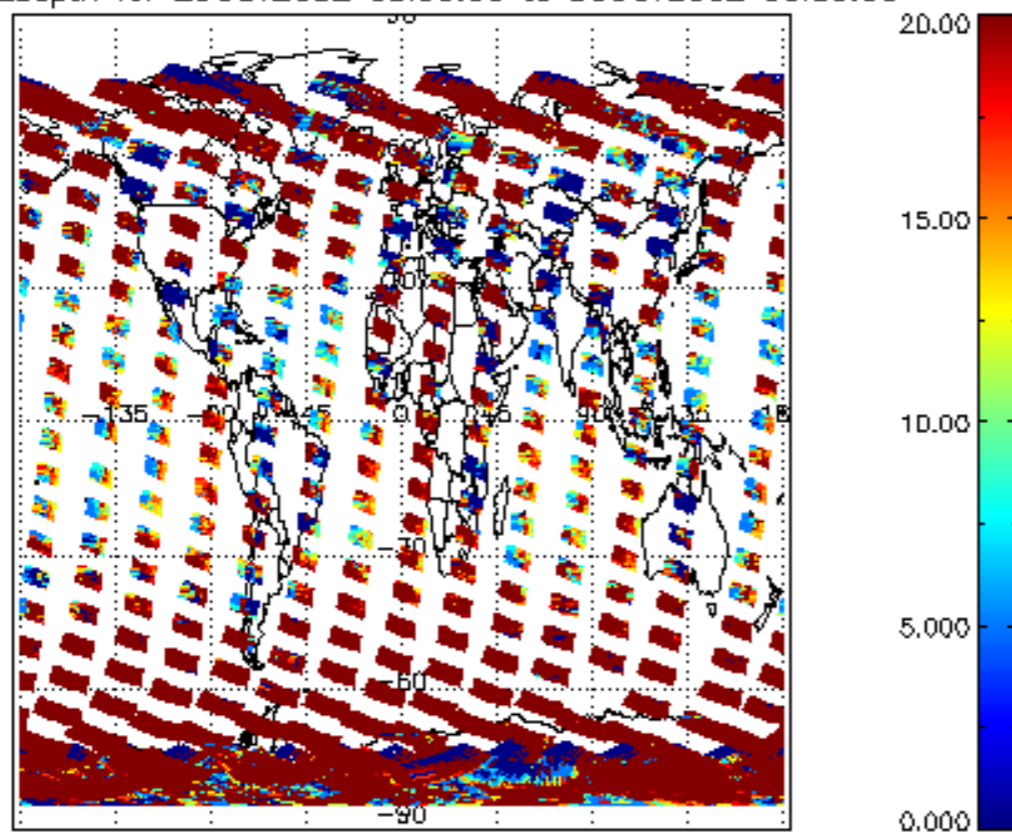
cl_frac for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



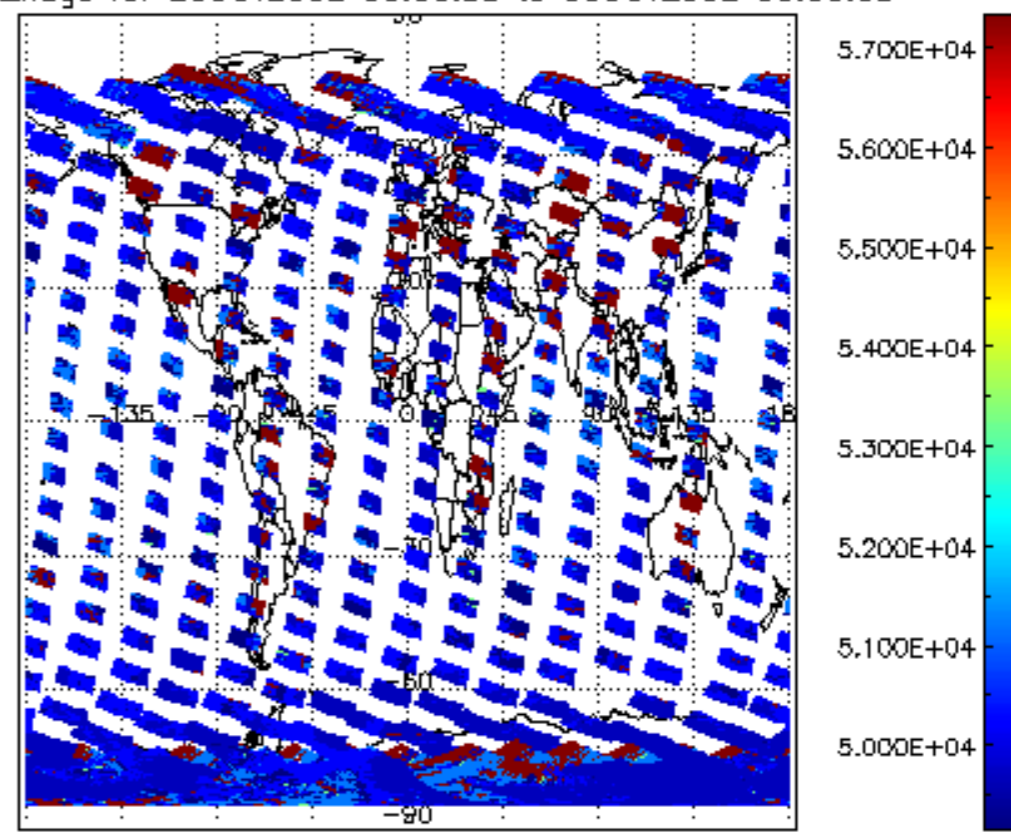
cl_top_height for 29OCT2002 00:00:00 to 30OCT2002 00:00:00

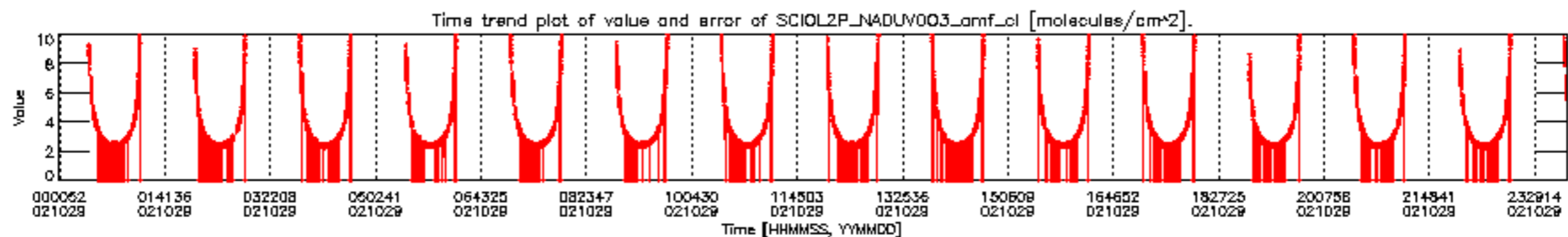
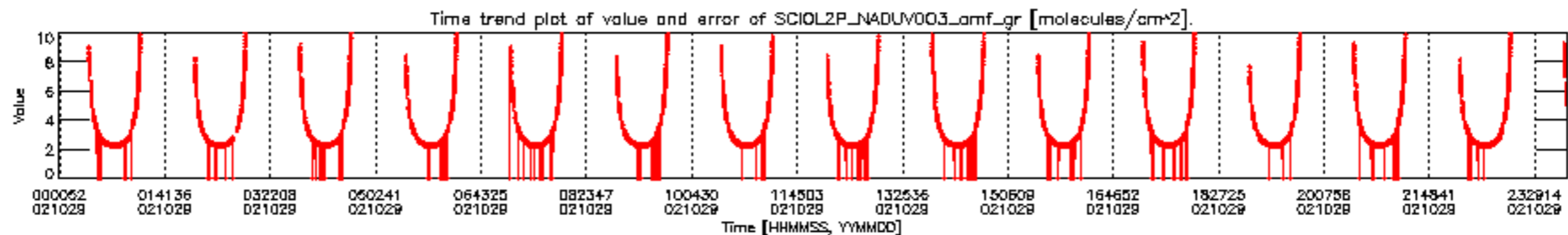
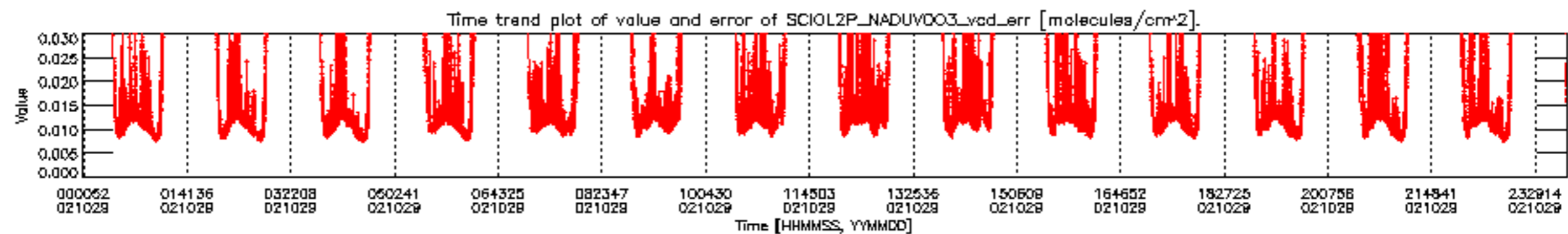
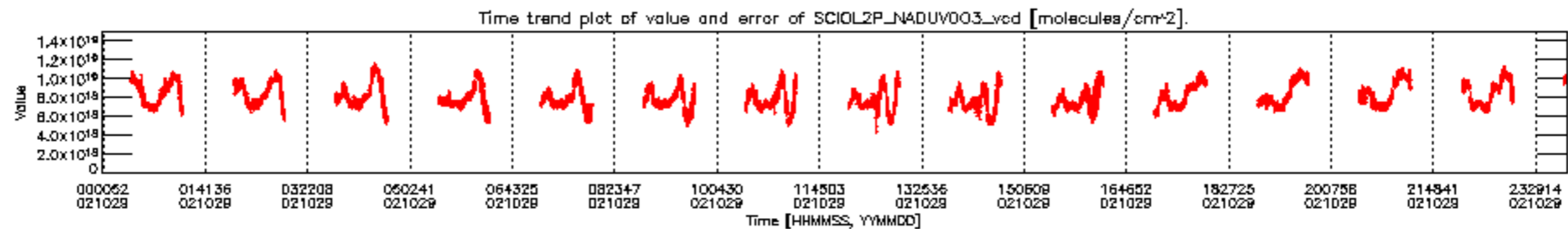


cl_opt_depth for 29OCT2002 00:00:00 to 30OCT2002 00:00:00

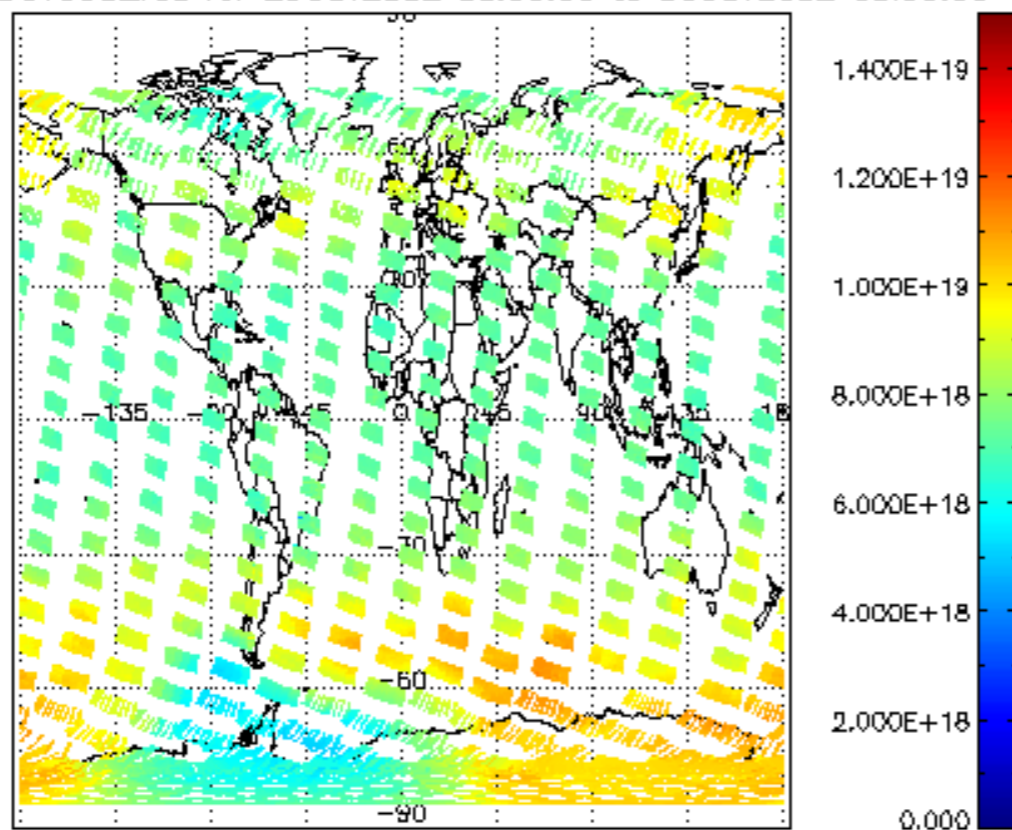


cloud_flags for 29OCT2002 00:00:00 to 30OCT2002 00:00:00

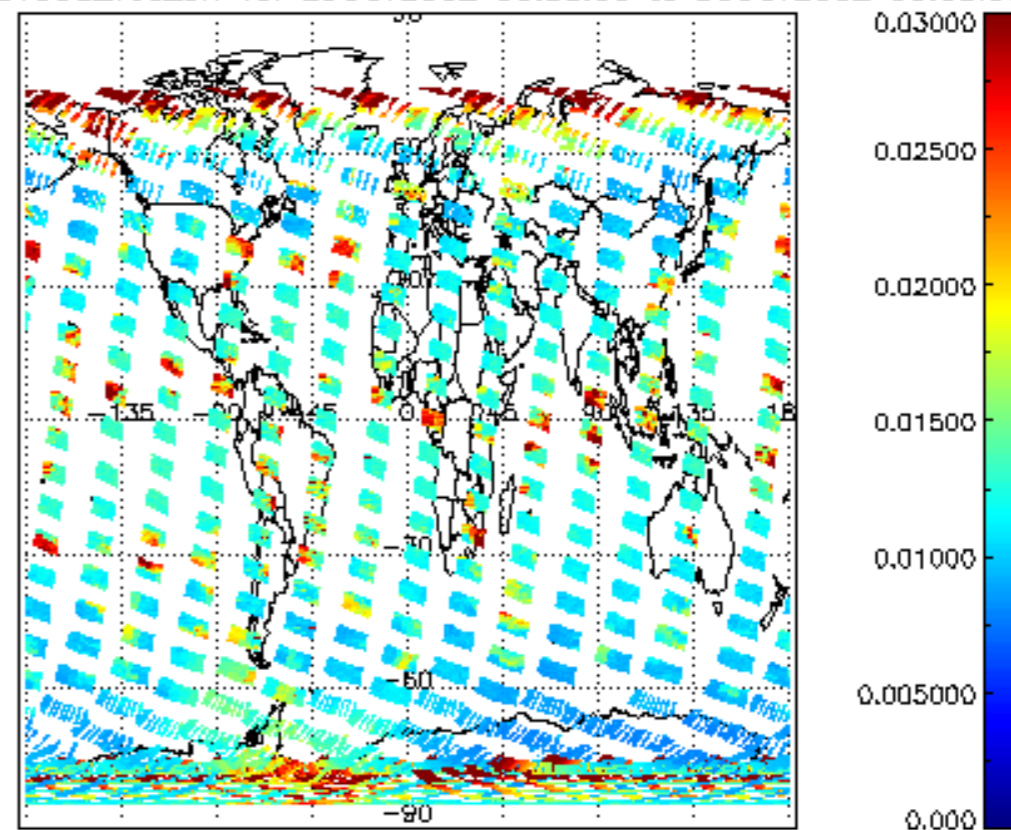




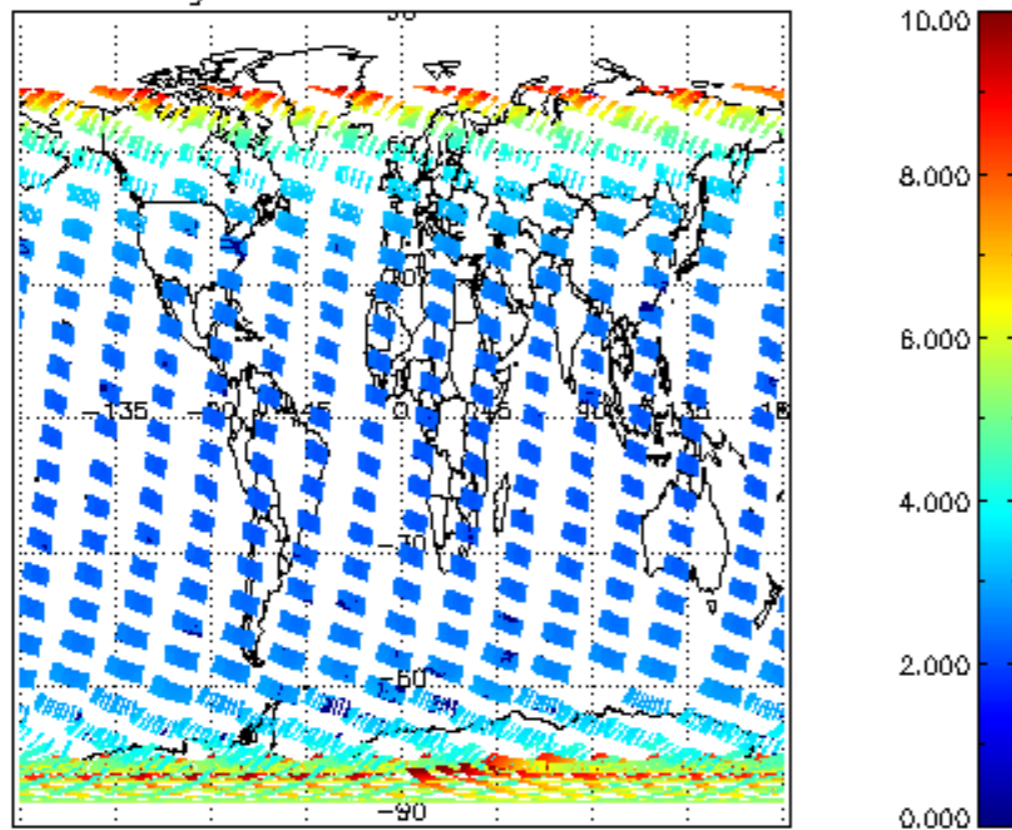
SCIOL2P_NADUV003_vcd for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



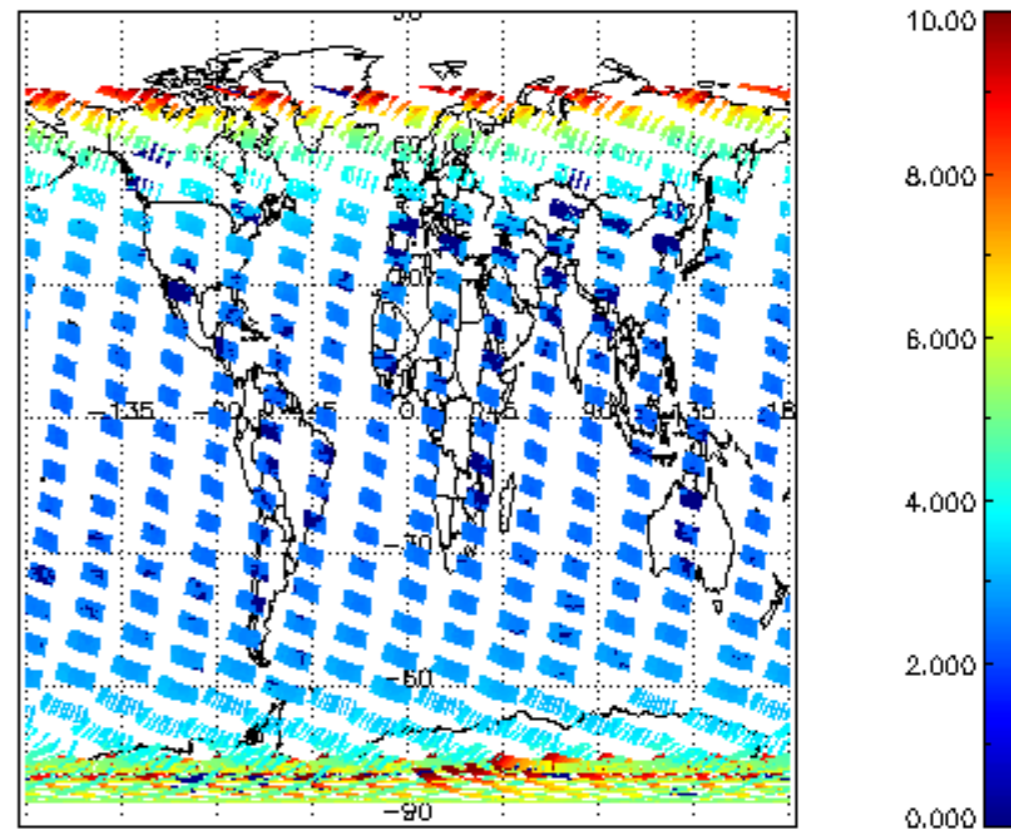
SCIOL2P_NADUV003_vcd_err for 29OCT2002 00:00:00 to 30OCT2002 00:00:00

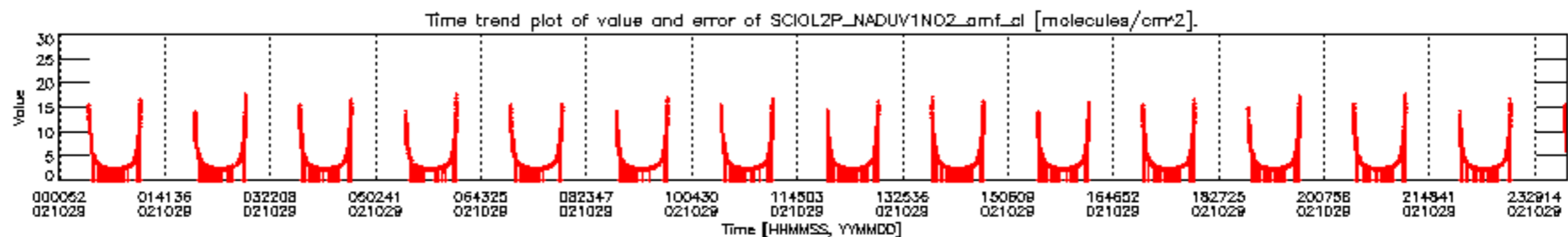
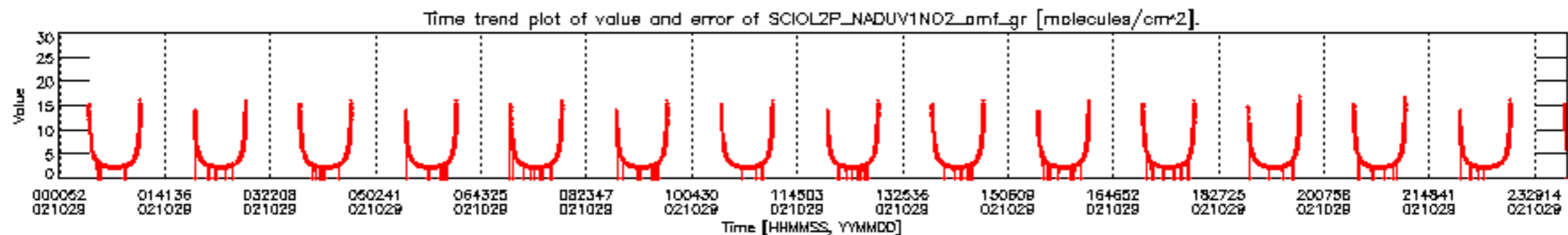
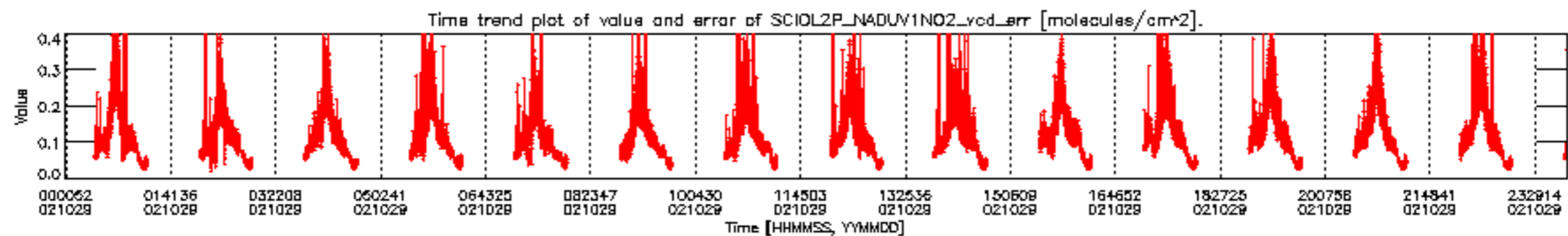
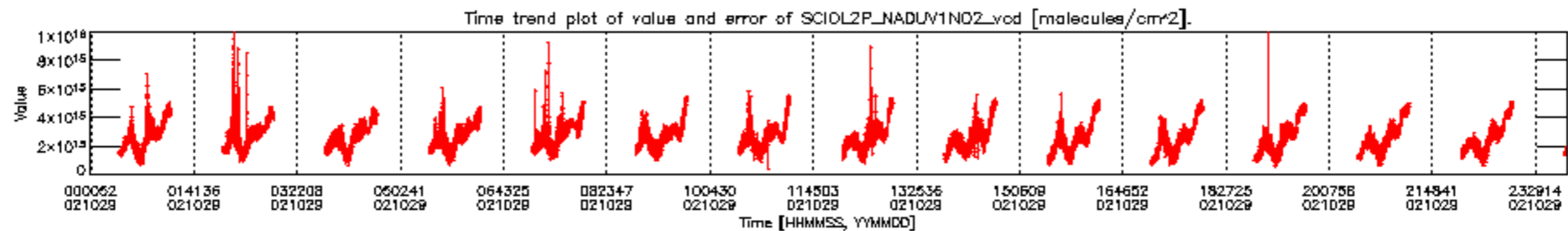


SCIOL2P_NADUV003_amf_gr for 29OCT2002 00:00:00 to 30OCT2002 00:00:00

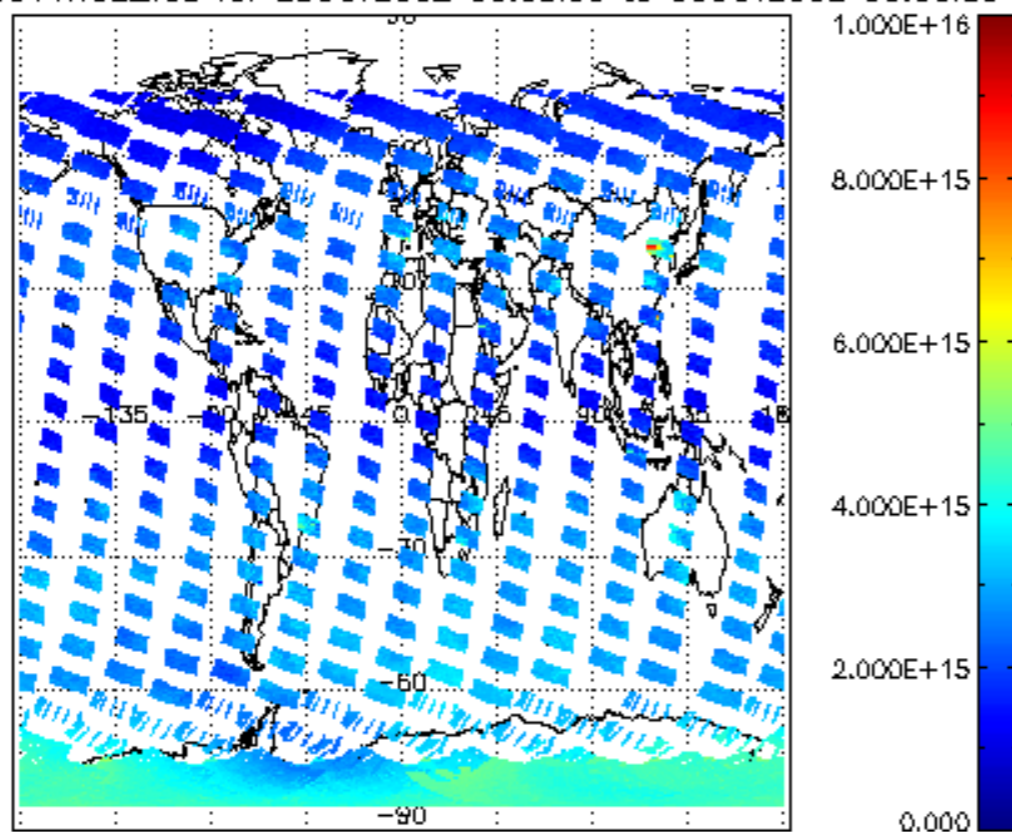


SCIOL2P_NADUV003_amf_el for 29OCT2002 00:00:00 to 30OCT2002 00:00:00

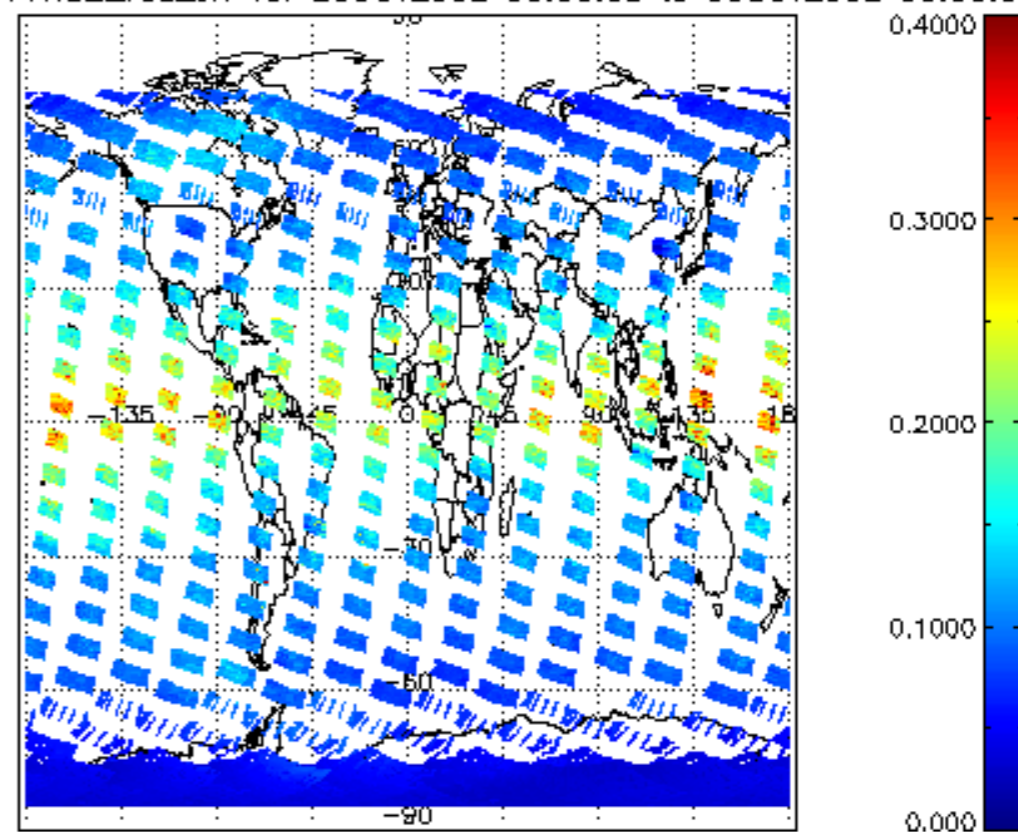




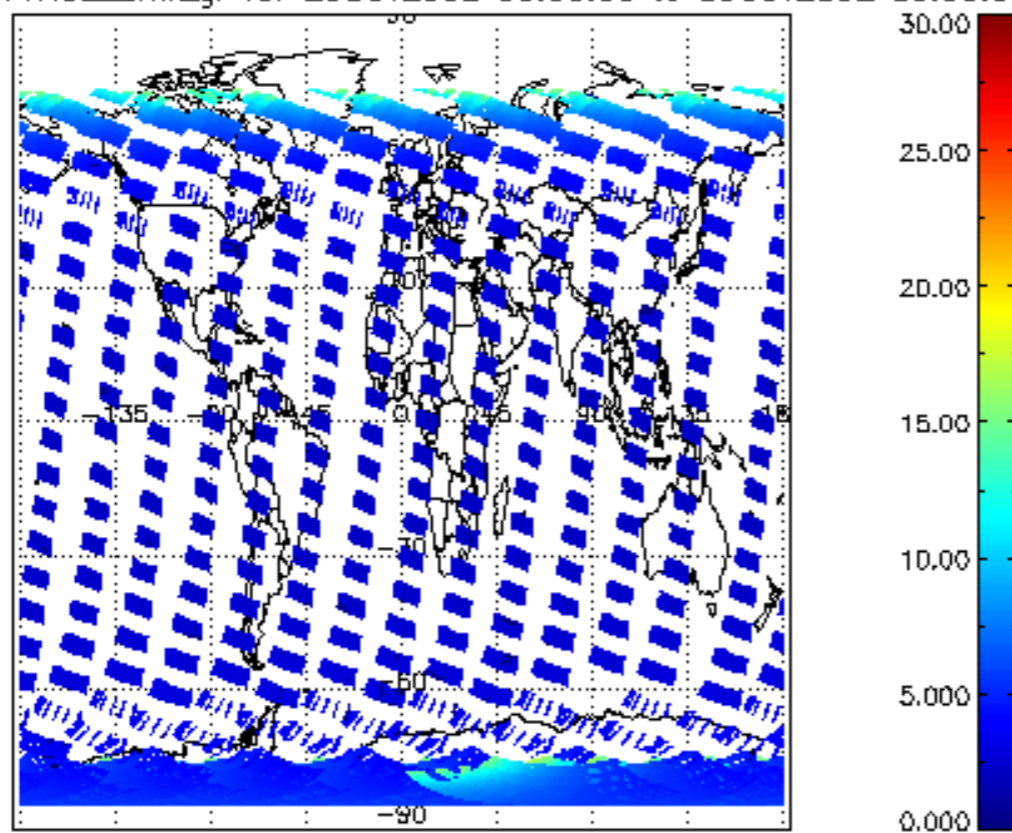
SCIOL2P_NADUV1NO2_vcd for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



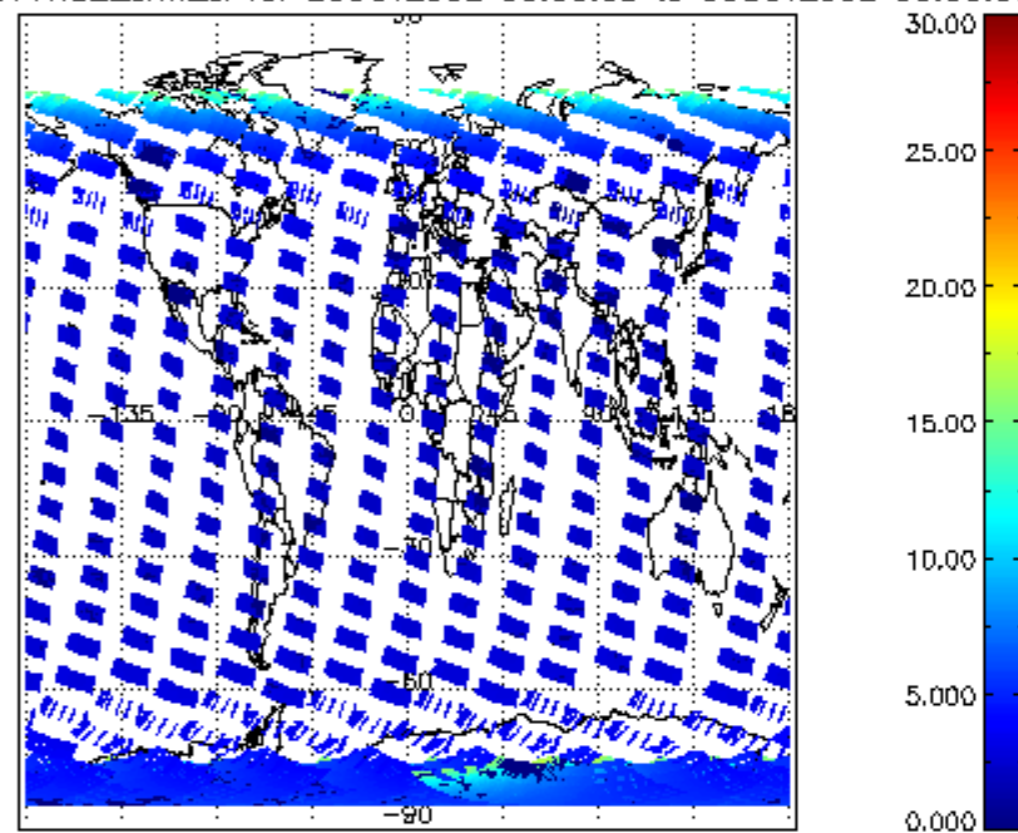
iCIOL2P_NADUV1NO2_vcd_err for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



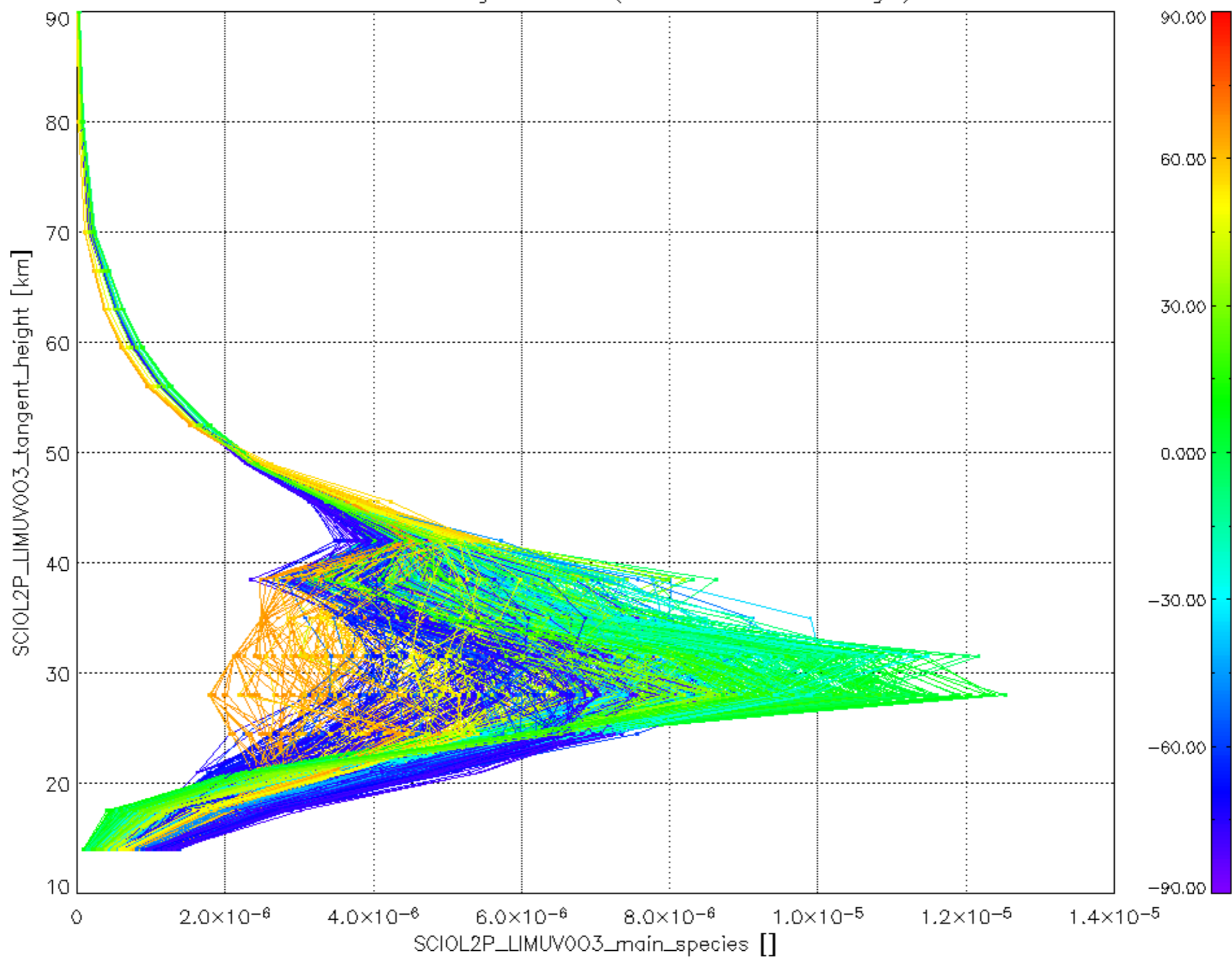
iCIOL2P_NADUV1NO2_amf_gr for 29OCT2002 00:00:00 to 30OCT2002 00:00:00



iCIOL2P_NADUV1NO2_amf_cl for 29OCT2002 00:00:00 to 30OCT2002 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).

