

## 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	1.6 (28-07-2008)
Time of report generation	01OCT2008 06:02:54
Data source version	SCIA-OL/3.01-R
Processing scope for products	13SEP2008 00:00:00 to 14SEP2008 00:00:00
Start time of first product within scope	12SEP2008 23:31:50
Stop time of last product within scope	13SEP2008 23:56:31
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	<a href="#">SCI_OL__2PRDPA20080912_233150_000033252072_00059_34181_0733.N1</a>	12SEP2008 23:31:50	13SEP2008 00:27:16	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20080913_011226_000033292072_00060_34182_0735.N1</a>	13SEP2008 01:12:26	13SEP2008 02:07:56	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20080913_025302_000033332072_00061_34183_0736.N1</a>	13SEP2008 02:53:02	13SEP2008 03:48:36	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20080913_043339_000033362072_00062_34184_0738.N1</a>	13SEP2008 04:33:39	13SEP2008 05:29:16	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20080913_061416_000033402072_00063_34185_0741.N1</a>	13SEP2008 06:14:16	13SEP2008 07:09:56	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20080913_075452_000033432072_00064_34186_0742.N1</a>	13SEP2008 07:54:52	13SEP2008 08:50:36	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20080913_093528_000033462072_00065_34187_0744.N1</a>	13SEP2008 09:35:28	13SEP2008 10:31:15	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20080913_111605_000033502072_00066_34188_0746.N1</a>	13SEP2008 11:16:05	13SEP2008 12:11:55	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20080913_125641_000033532072_00067_34189_0748.N1</a>	13SEP2008 12:56:41	13SEP2008 13:52:35	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20080913_143718_000033562072_00068_34190_0751.N1</a>	13SEP2008 14:37:18	13SEP2008 15:33:14	0	GOOD
10	<a href="#">SCI_OL__2PRDPA20080913_161754_000033592072_00069_34191_0752.N1</a>	13SEP2008 16:17:54	13SEP2008 17:13:54	0	GOOD
11	<a href="#">SCI_OL__2PRDPA20080913_175851_000033612072_00070_34192_0753.N1</a>	13SEP2008 17:58:51	13SEP2008 18:54:52	0	GOOD
12	<a href="#">SCI_OL__2PRDPA20080913_193927_000033452072_00071_34193_0754.N1</a>	13SEP2008 19:39:27	13SEP2008 20:35:13	0	GOOD
13	<a href="#">SCI_OL__2PRDPA20080913_211944_000033682072_00072_34194_0755.N1</a>	13SEP2008 21:19:44	13SEP2008 22:15:52	0	GOOD
14	<a href="#">SCI_OL__2PRDPA20080913_230020_000033702072_00073_34195_0756.N1</a>	13SEP2008 23:00:20	13SEP2008 23:56:31	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: 149500

Total number of cloud data DSRs with good quality flag (=0): 149500 (100.0 %)

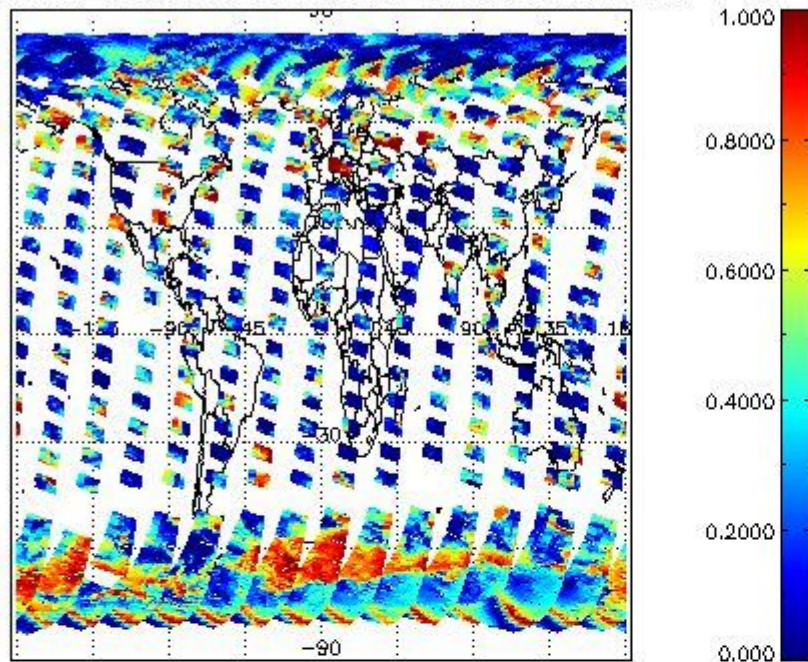
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	149500	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	149500	0.17522	0.12500	0.12500	0.25000	0.061281	s
CL_FRAC	149500	0.33588	0.28317	0.0000	1.0000	0.28648	-
CL_FRAC_ERR	149500	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	149500	5.6070	4.0000	4.0000	8.0000	1.9610	-
PMD_READ_CL[0]	149500	0.15177	0.0000	0.0000	8.0000	0.88034	-
PMD_READ_CL[1]	149500	1.3803	0.0000	0.0000	8.0000	2.4528	-
CL_TOP_HEIGHT	124550	3.5106	1.5912	0.0000	17.000	4.0375	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	124550	57.532	58.948	0.0000	101.00	43.139	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	149500	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	149500	11001100	11000100	11000000	11100000	3473.6	flags
AERO_ABSO_IND	149500	3.1136	3.6813	-0.65740	14.478	2.1747	-
AERO_IND_DIAG	149500	0.0000	0.0000	0.0000	0.0000	0.0000	-
AERO_FLAGS	149500	01011100	00000000	00000000	11000000	24561.	flags

### Time and geolocation plots:

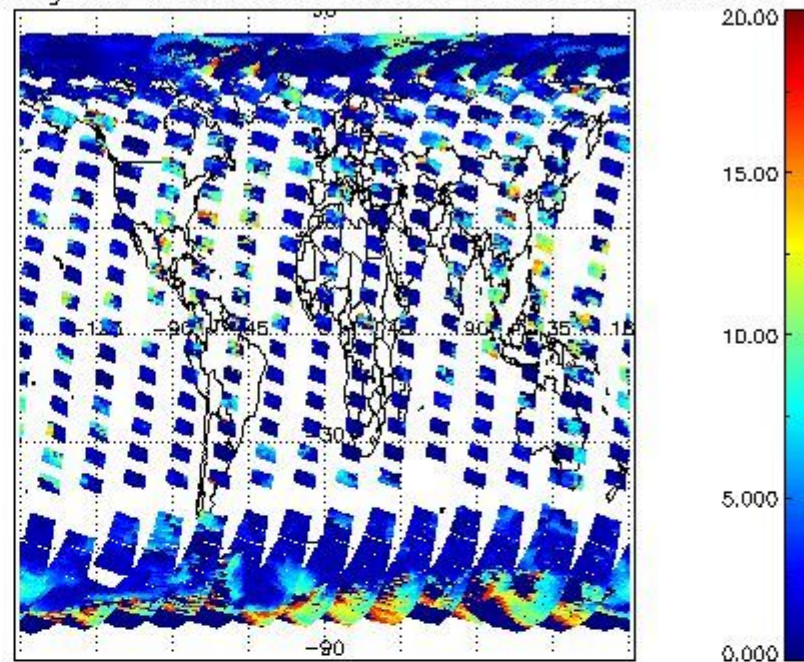
Plots are available for the following parameters:

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

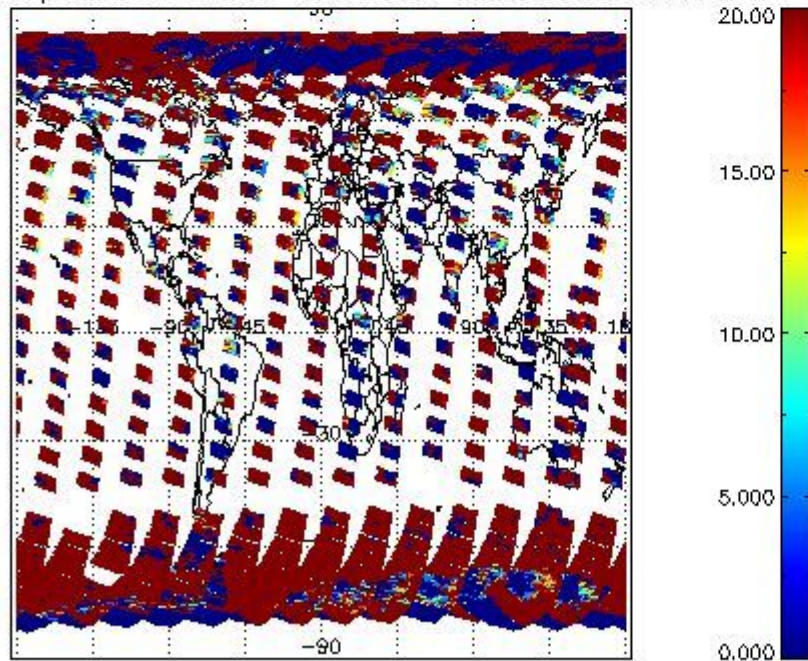
cL\_frac for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



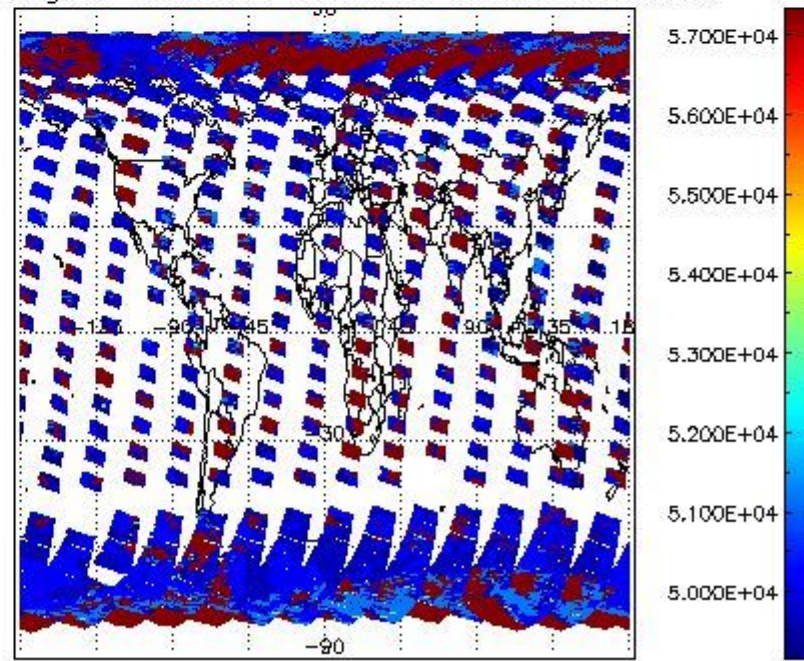
cL\_top\_height for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



cL\_opt\_depth for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



cloud\_flags for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



## 2.2.2 Nadir

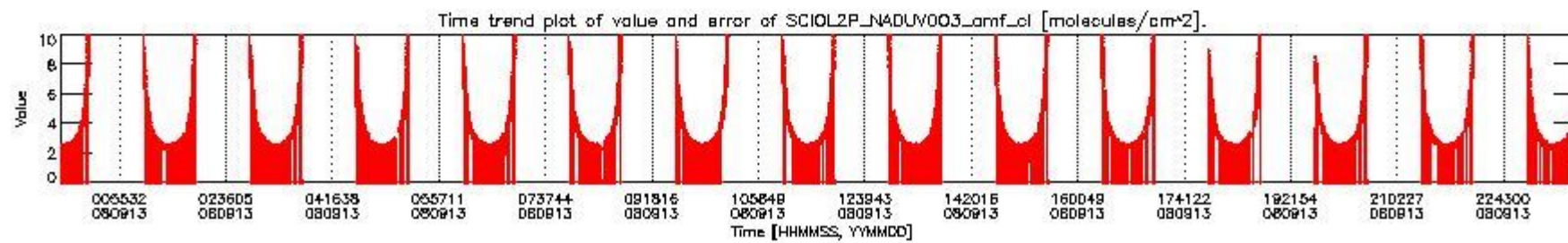
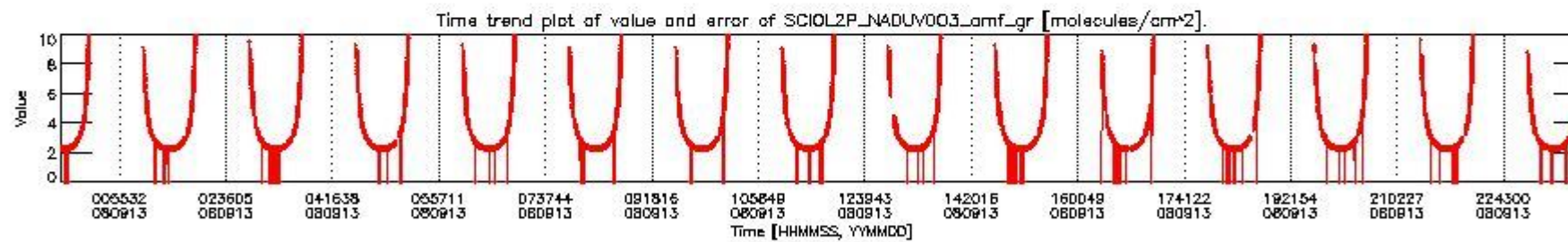
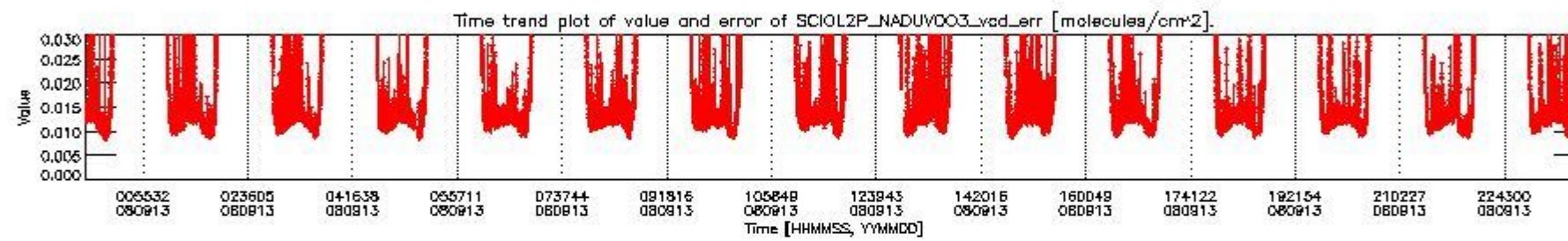
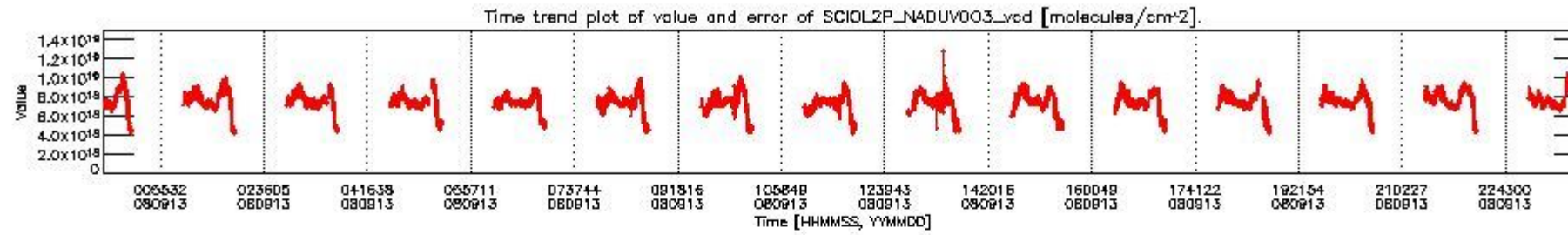
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

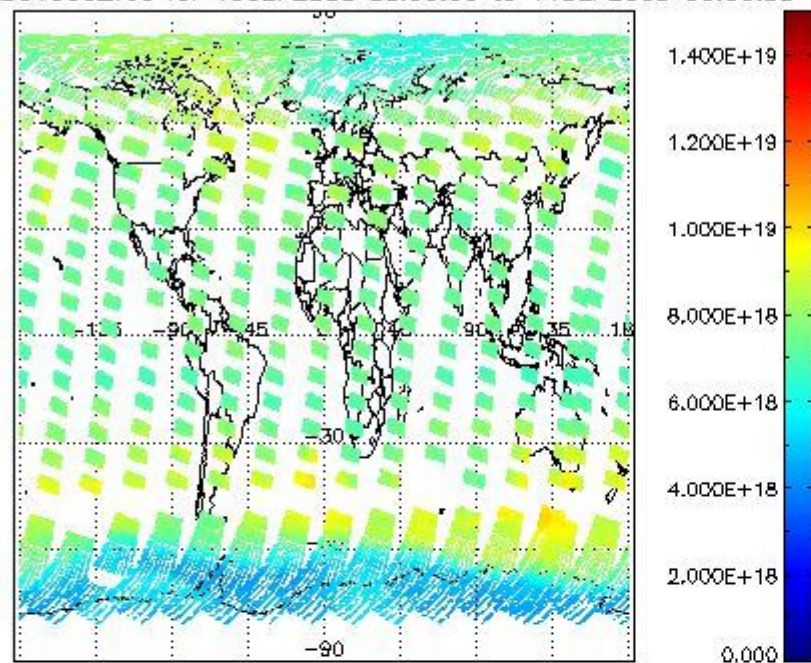
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

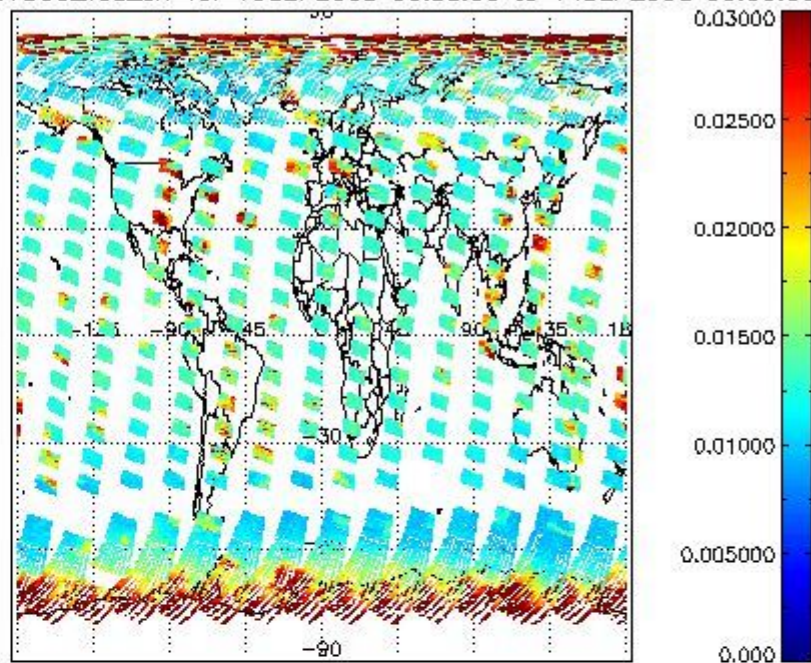
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing\_start time as suggested by the product sensing\_start time in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



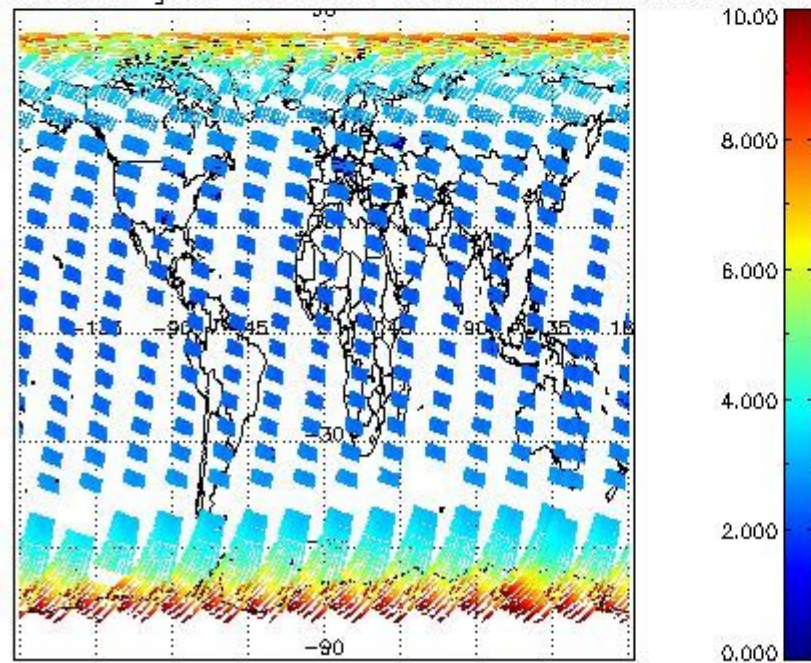
SCIOL2P\_NADUV003\_vcd for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



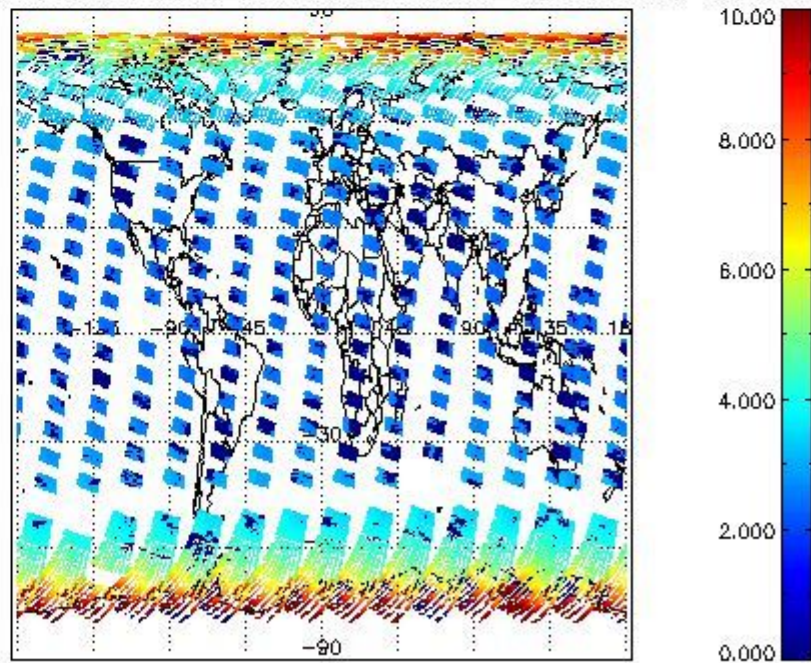
SCIOL2P\_NADUV003\_vcd\_err for 13SEP2008 00:00:00 to 14SEP2008 00:00:00

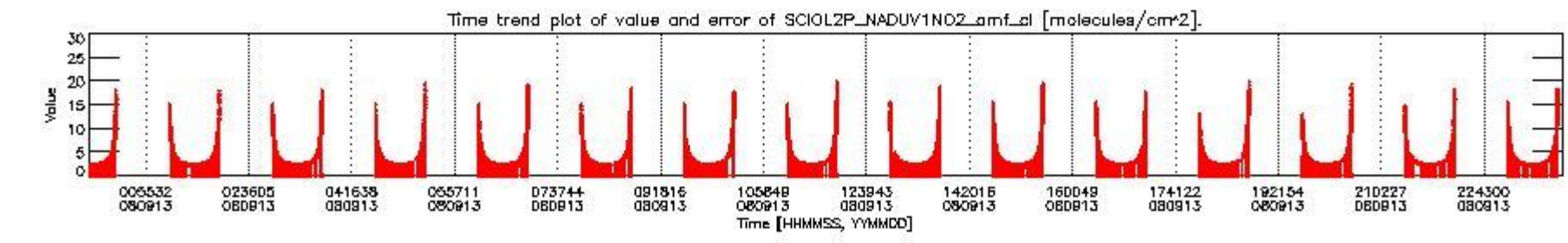
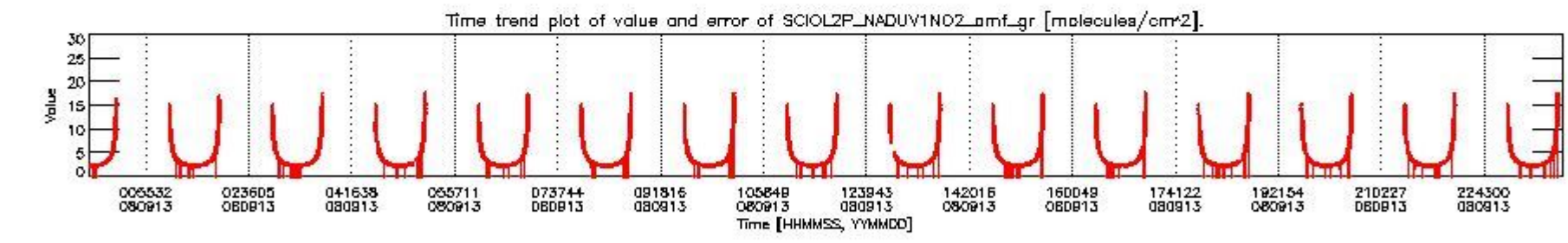
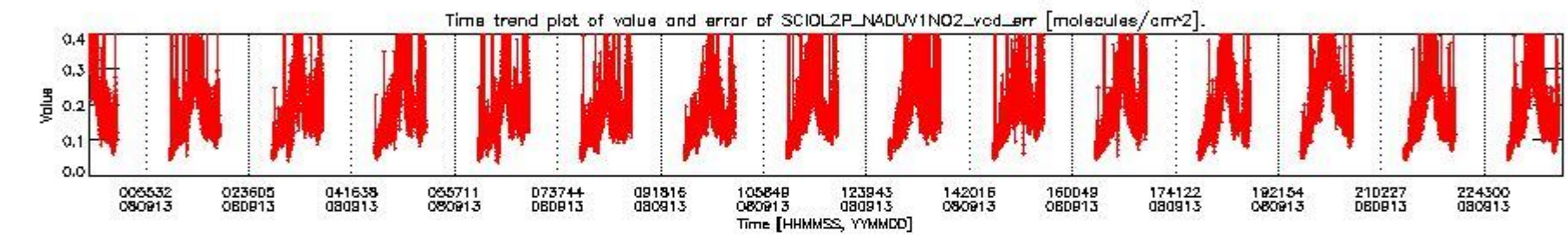
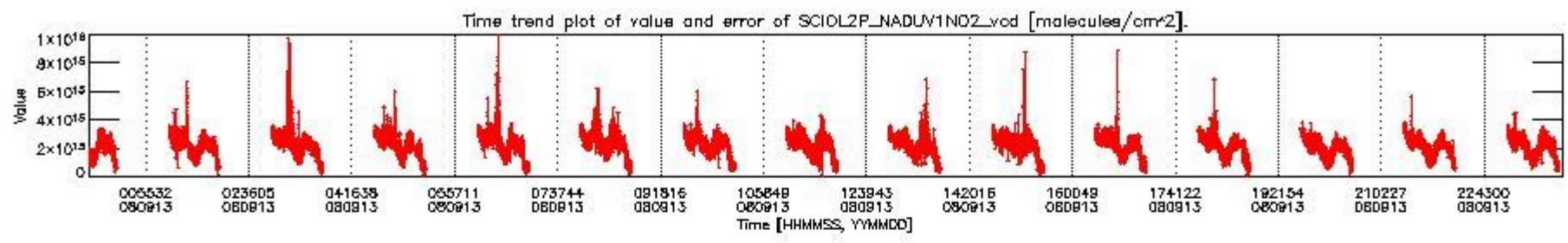


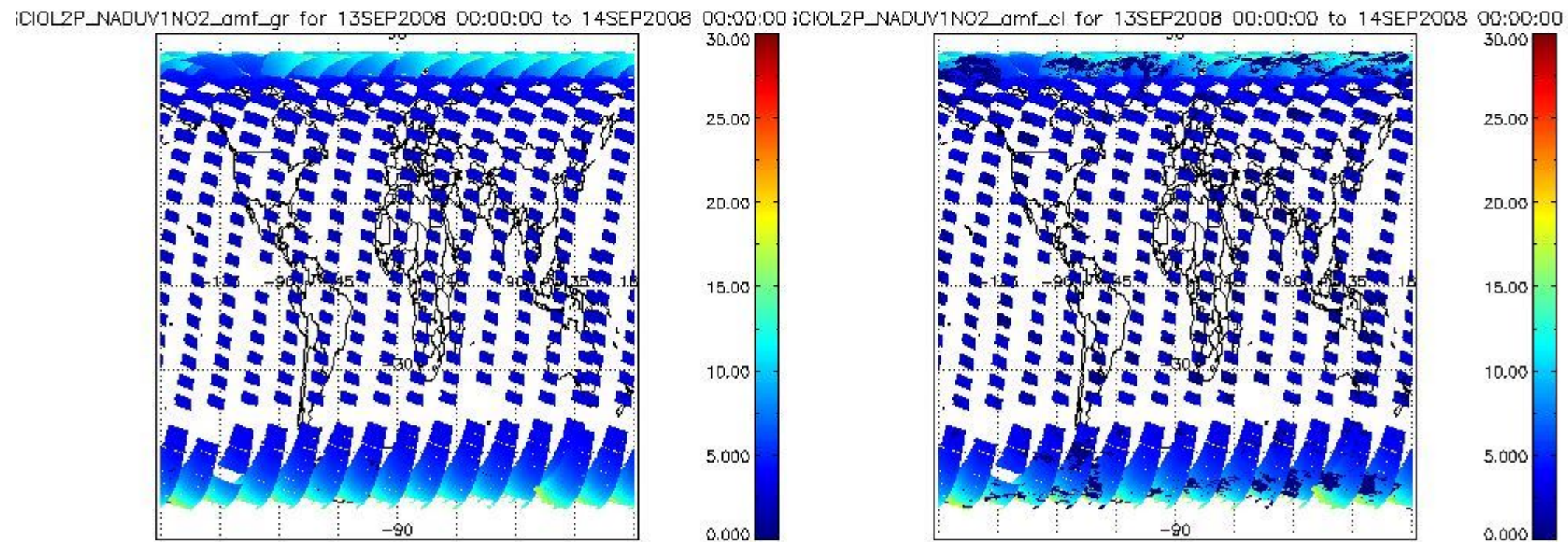
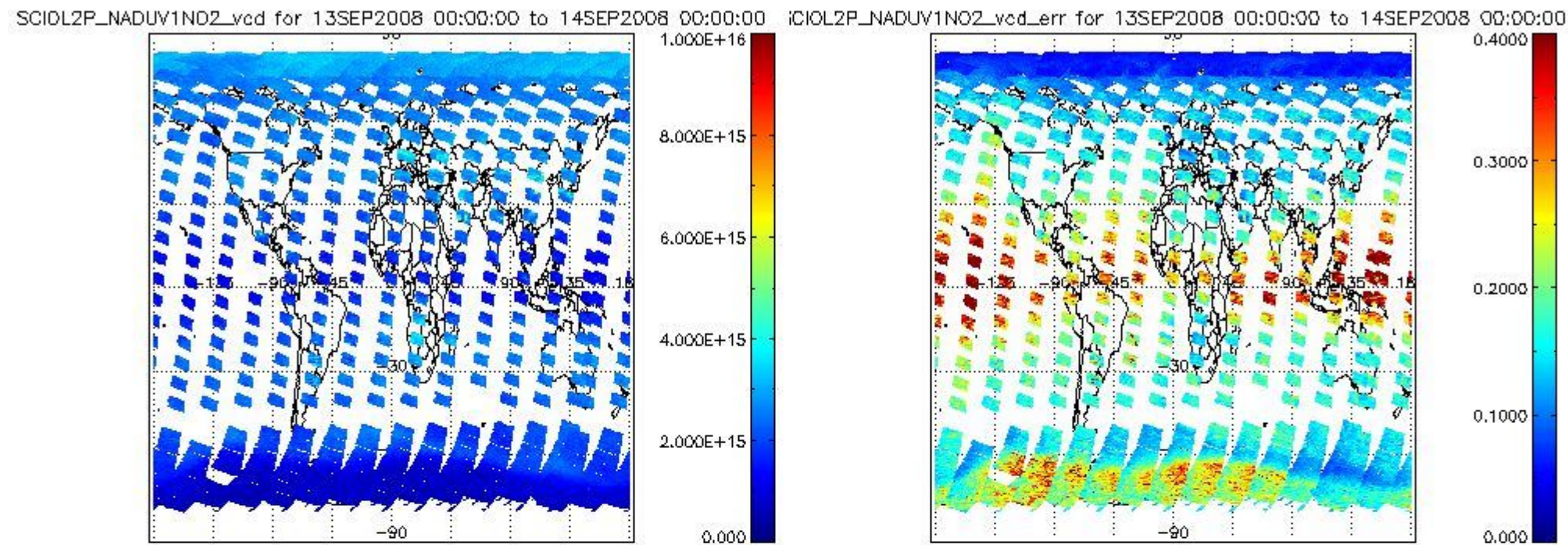
SCIOL2P\_NADUV003\_amf\_gr for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



SCIOL2P\_NADUV003\_amf\_cl for 13SEP2008 00:00:00 to 14SEP2008 00:00:00







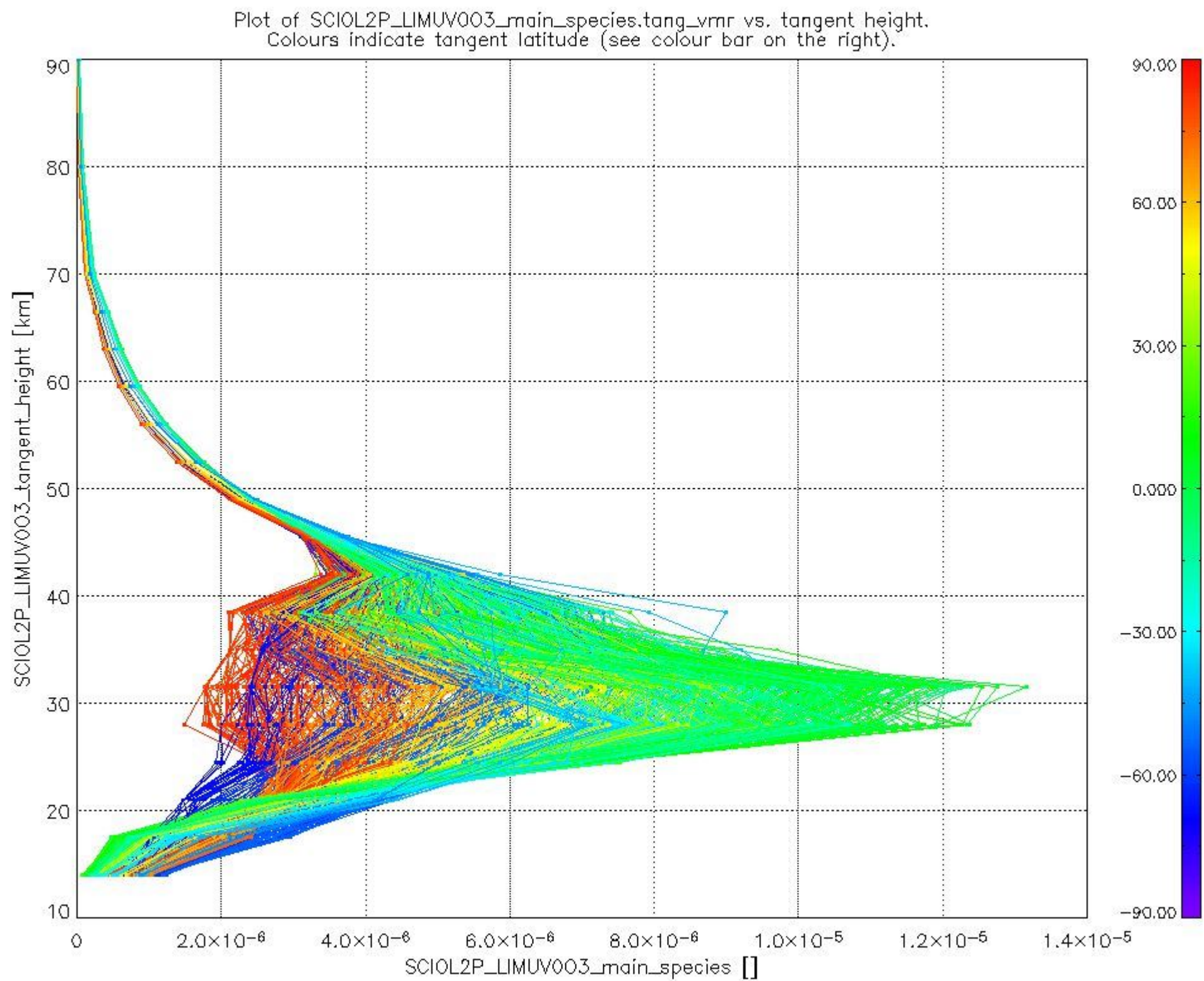
### 2.2.3 Limb

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:

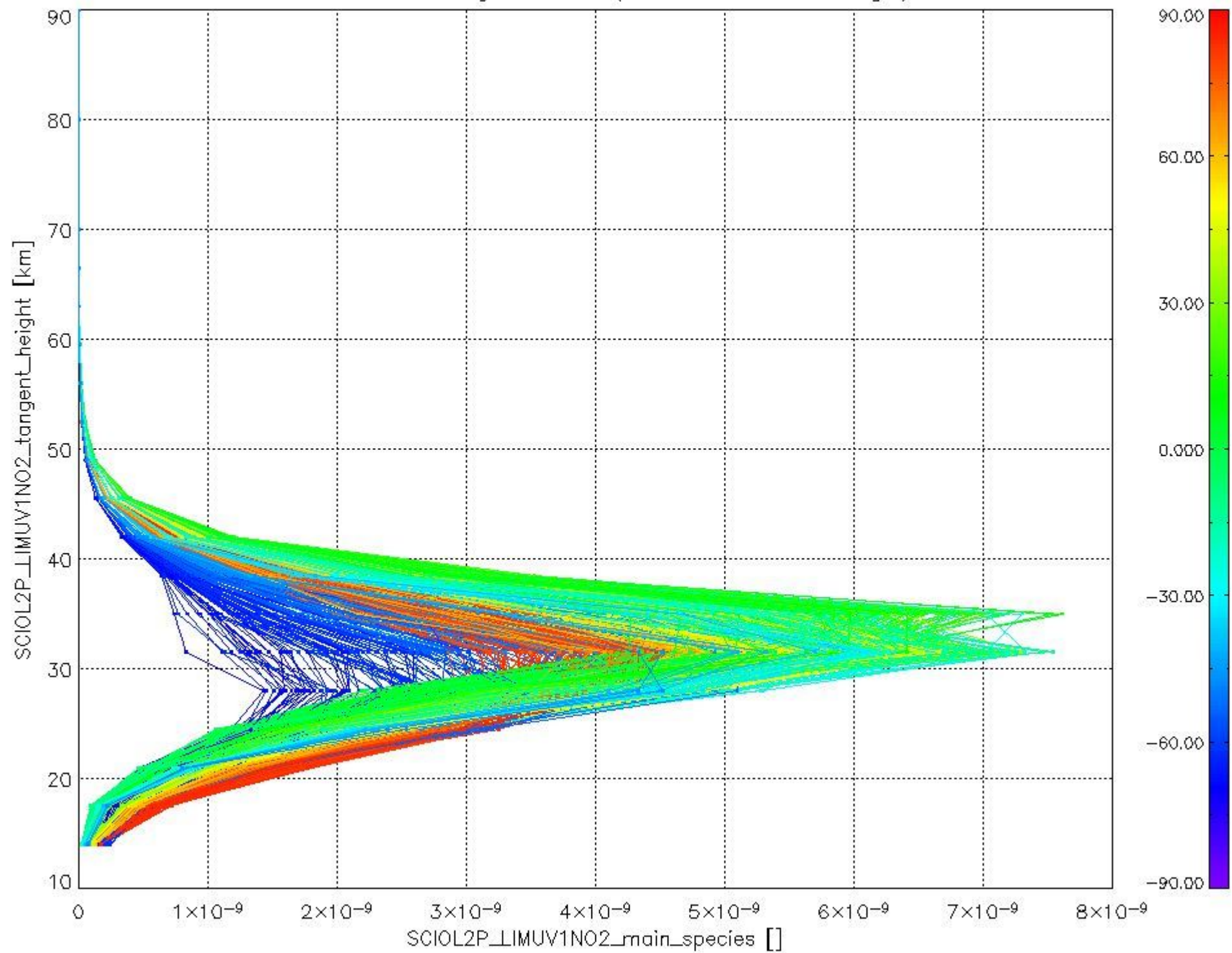
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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





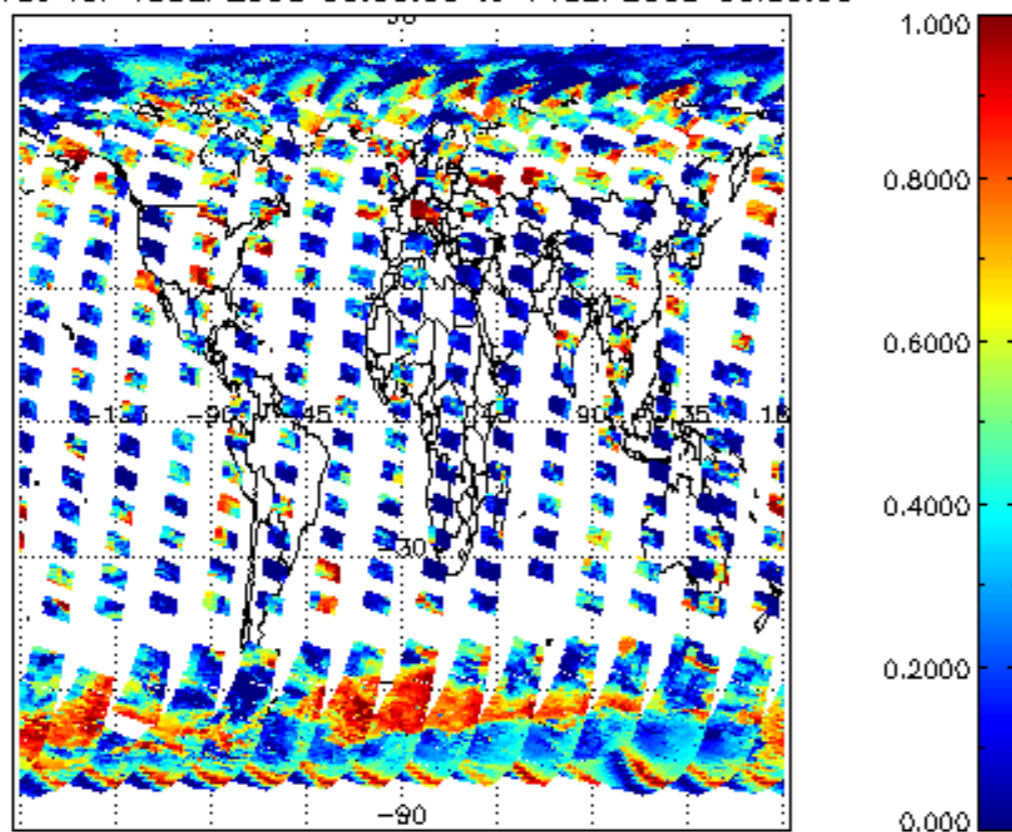
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



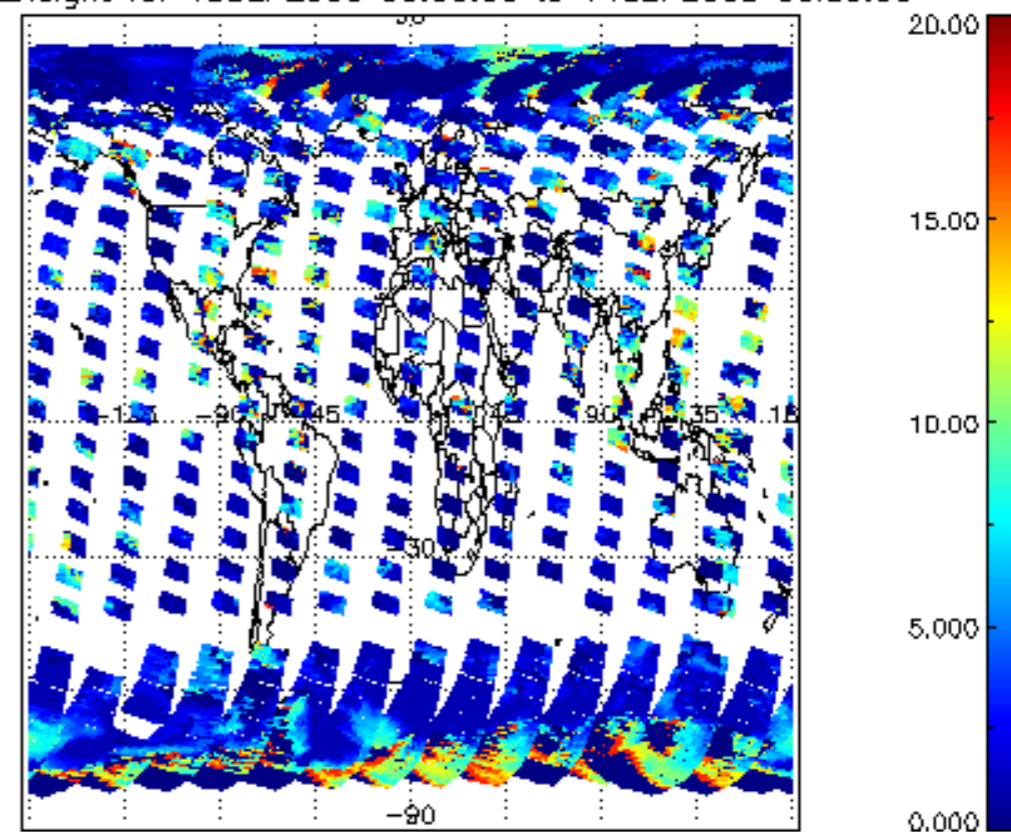
### 2.3 ADF monitoring

Number	ADF
	<b>IN_ (INITIALISATION_FILE)</b>
0	SCI_IN__AXNPDE20070629_092400_20070720_000000_20991231_235959
	<b>ECF (ECMWF_FILE)</b>
1	NOT USED

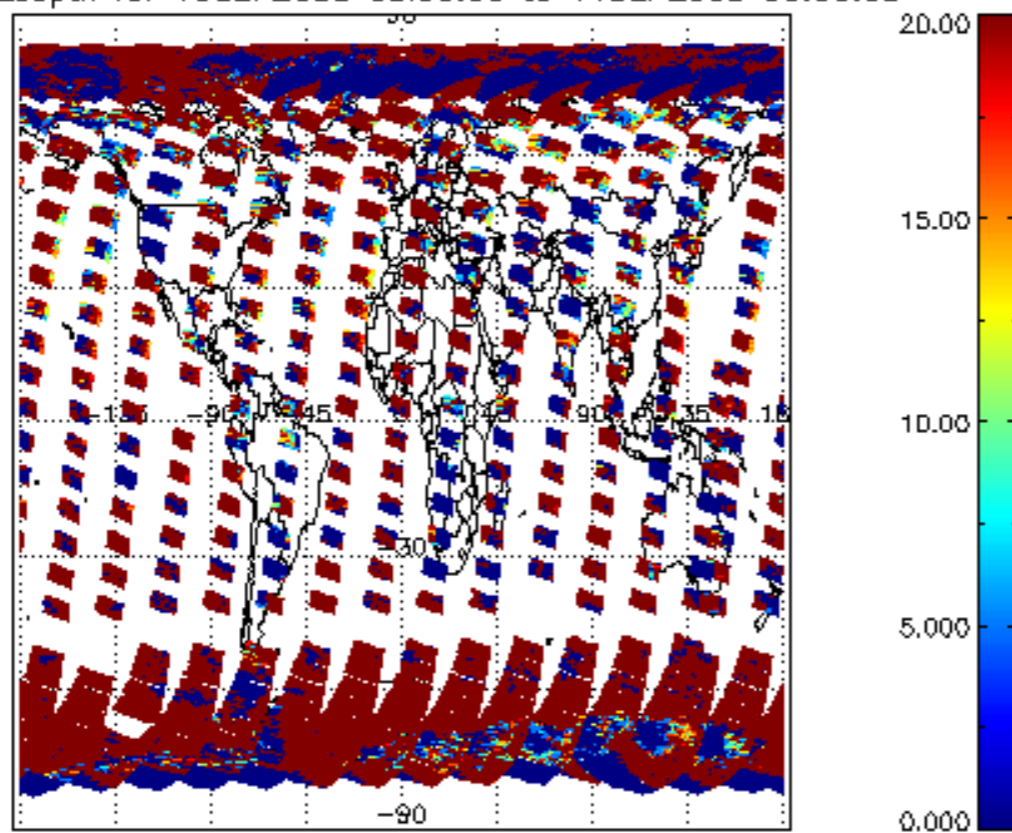
cl\_frac for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



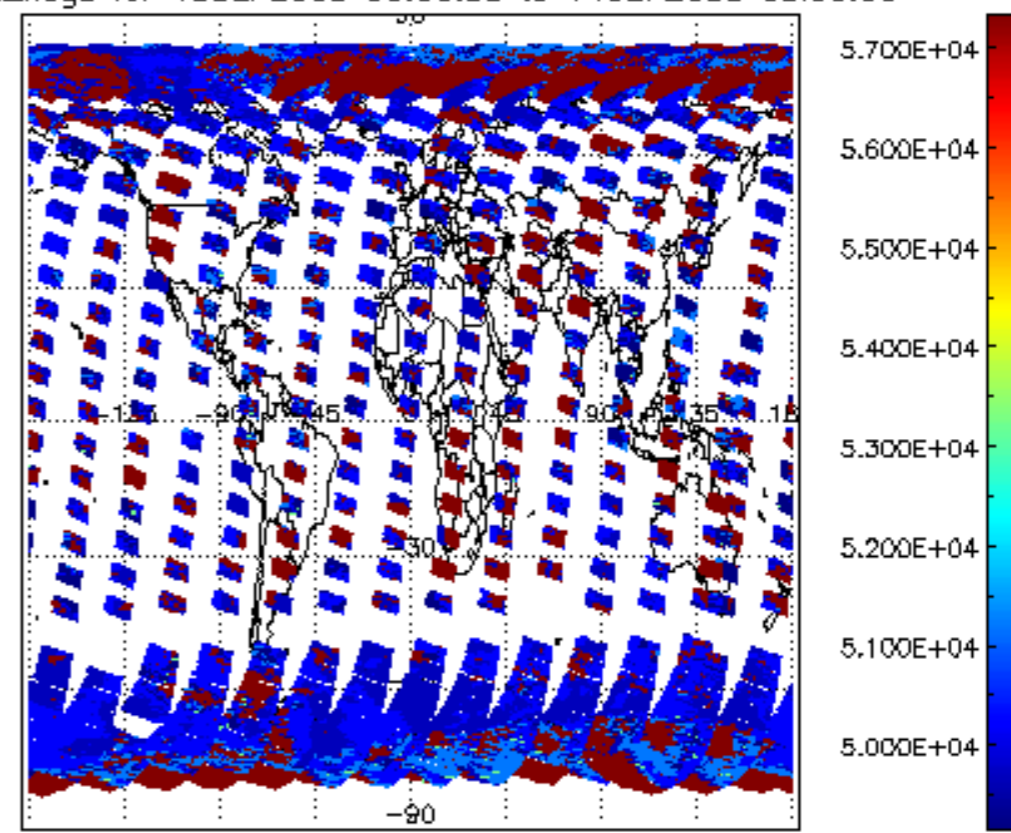
cl\_top\_height for 13SEP2008 00:00:00 to 14SEP2008 00:00:00

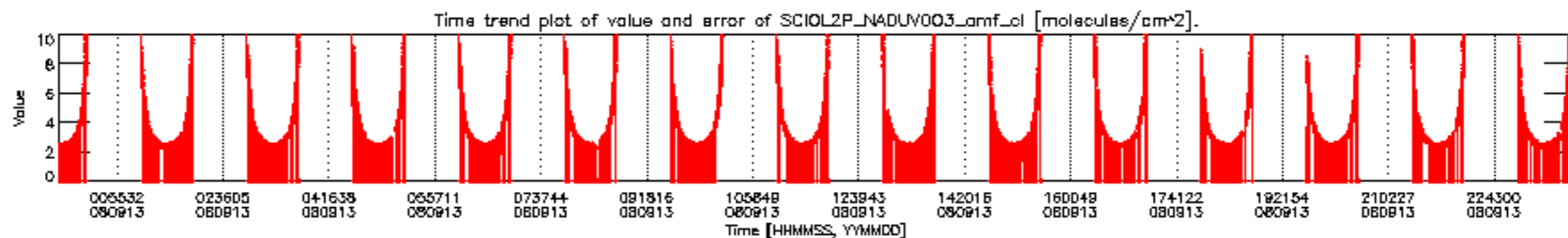
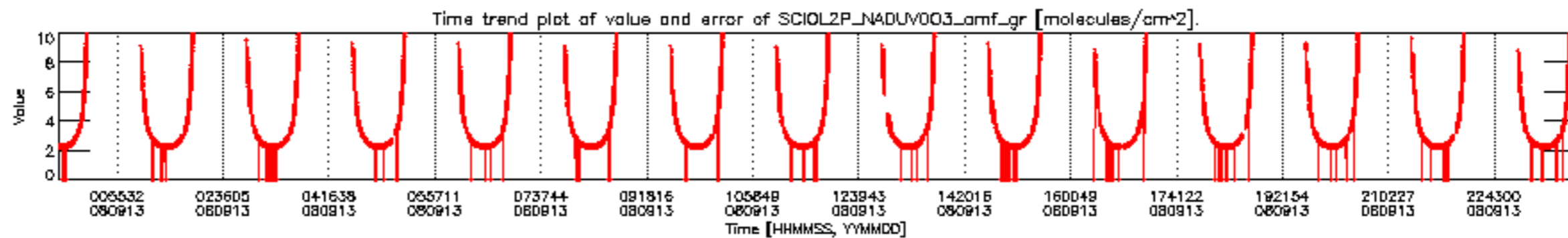
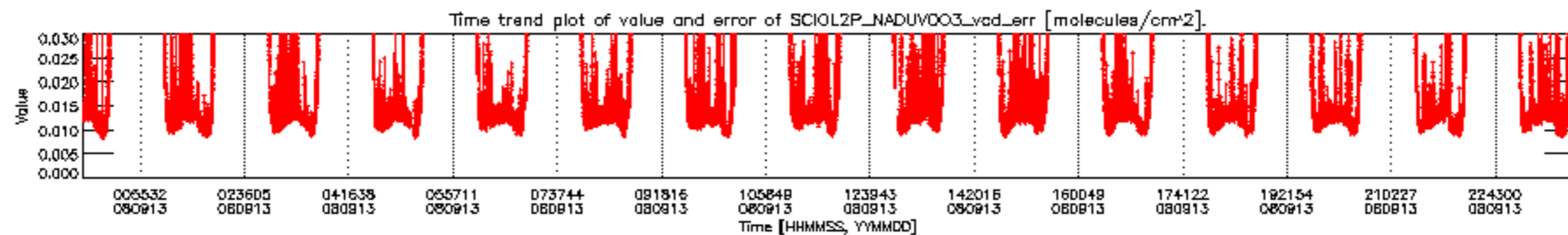
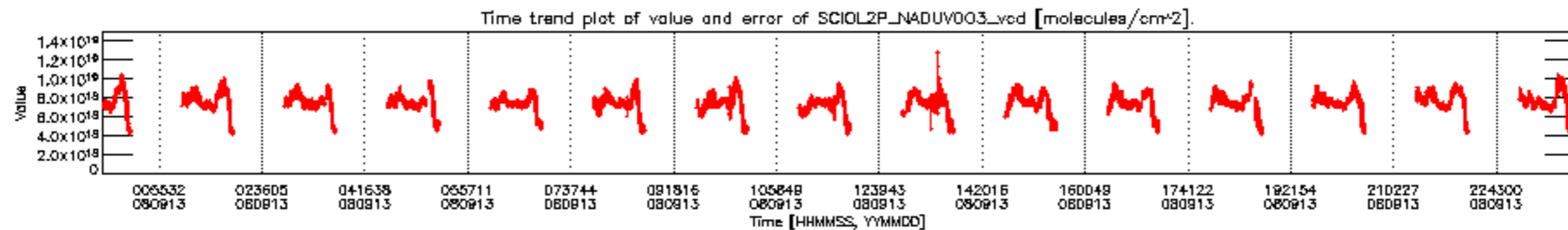


cl\_opt\_depth for 13SEP2008 00:00:00 to 14SEP2008 00:00:00

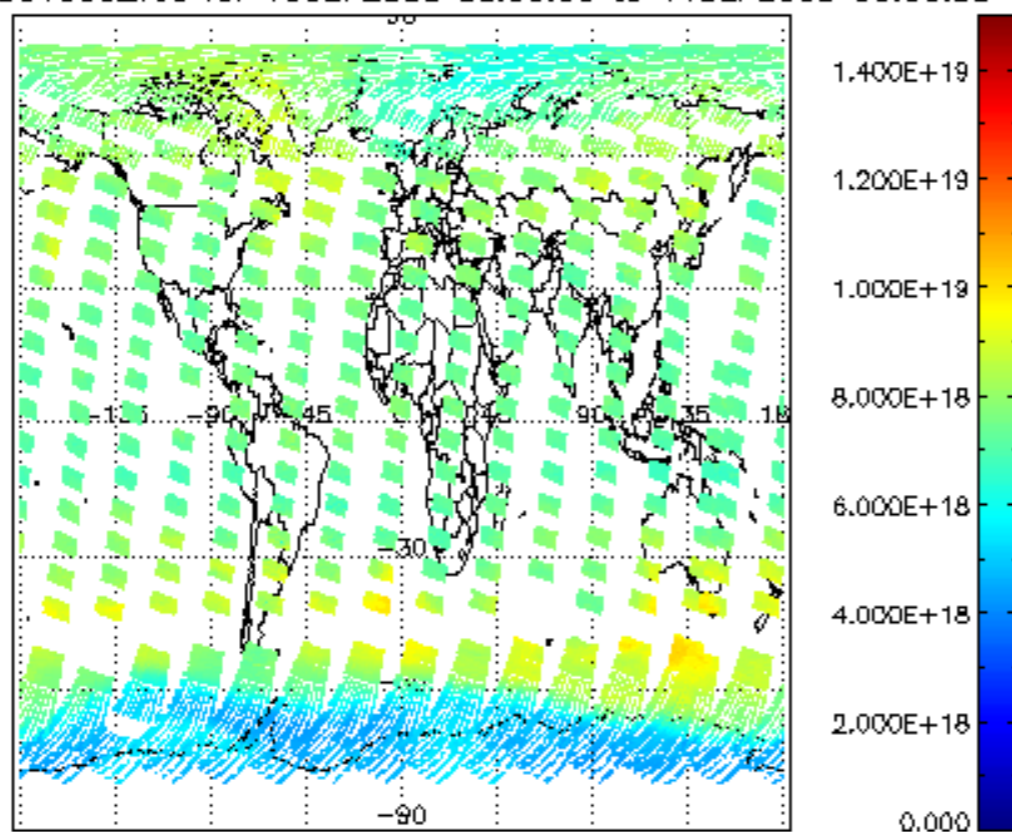


cloud\_flags for 13SEP2008 00:00:00 to 14SEP2008 00:00:00

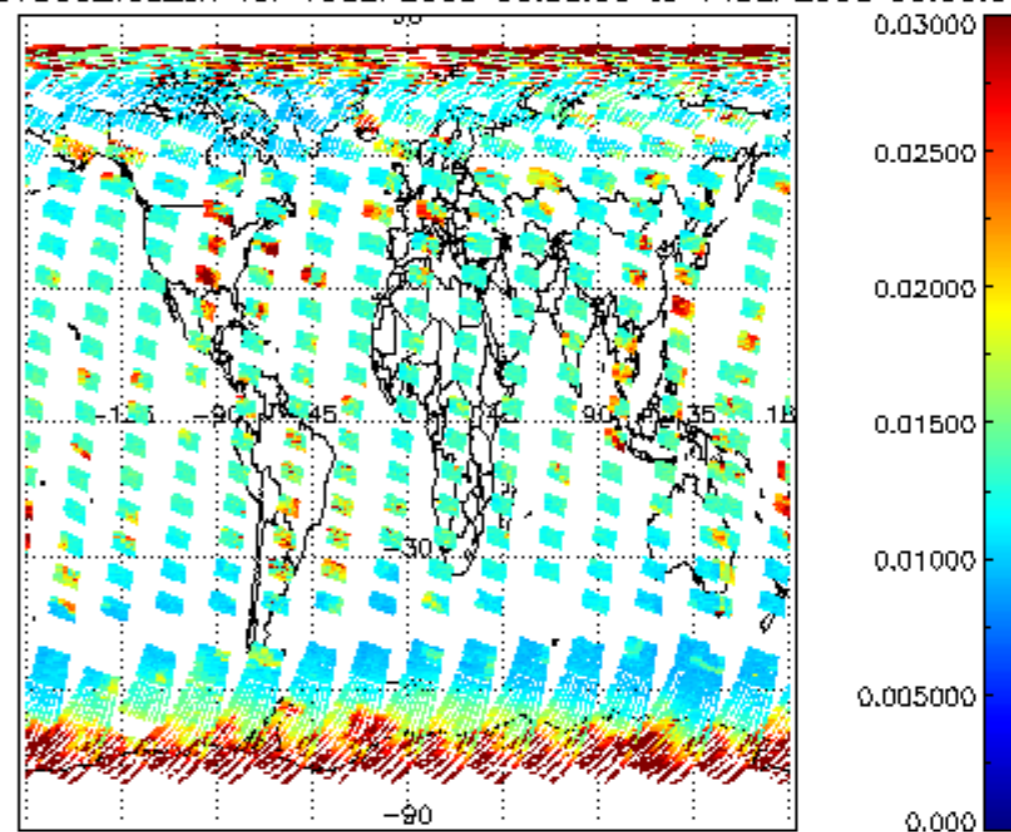




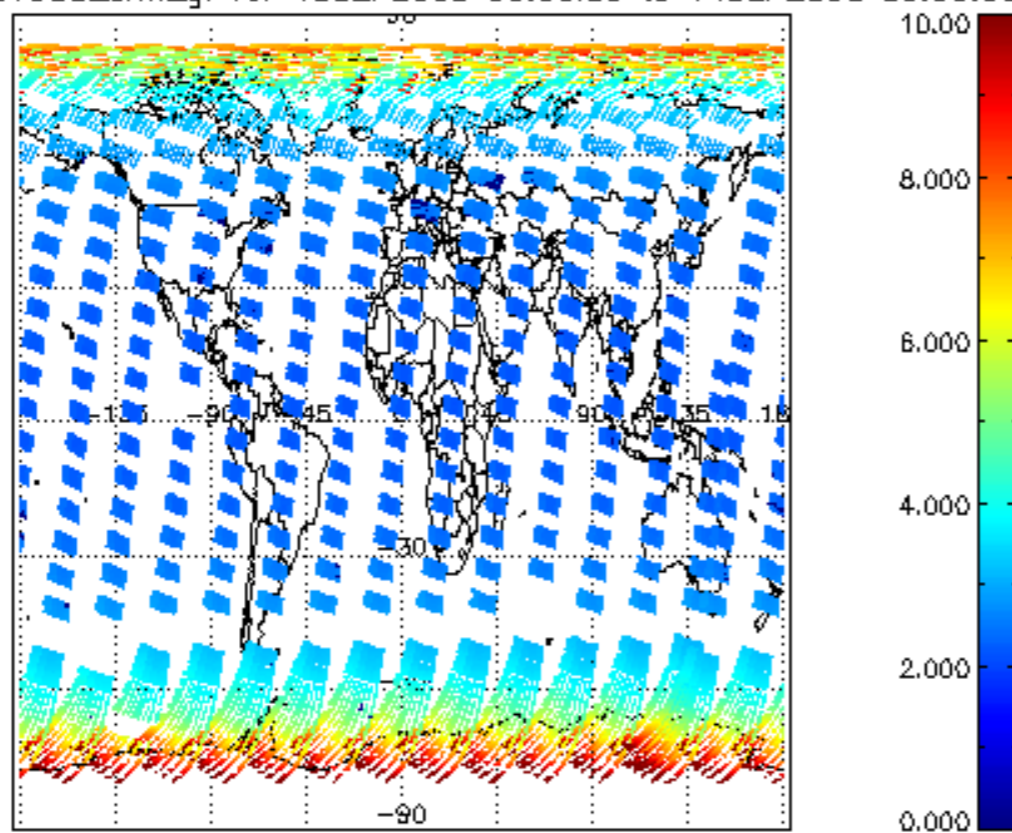
SCIOL2P\_NADUV003\_vcd for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



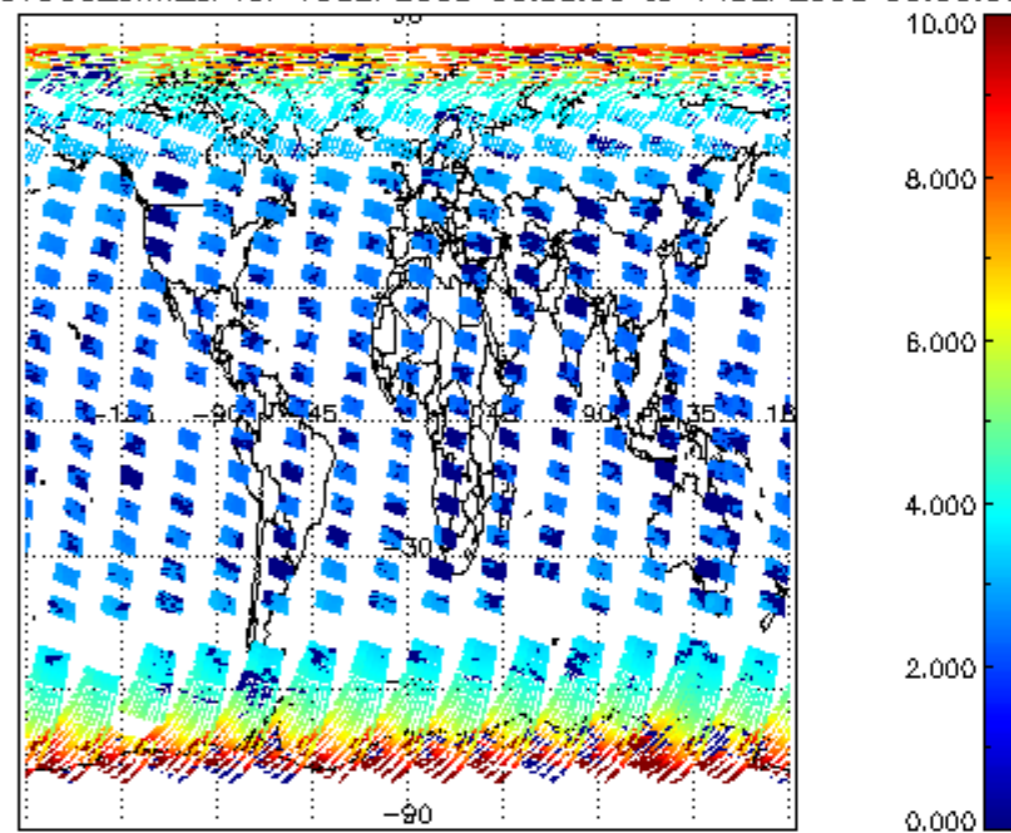
SCIOL2P\_NADUV003\_vcd\_err for 13SEP2008 00:00:00 to 14SEP2008 00:00:00

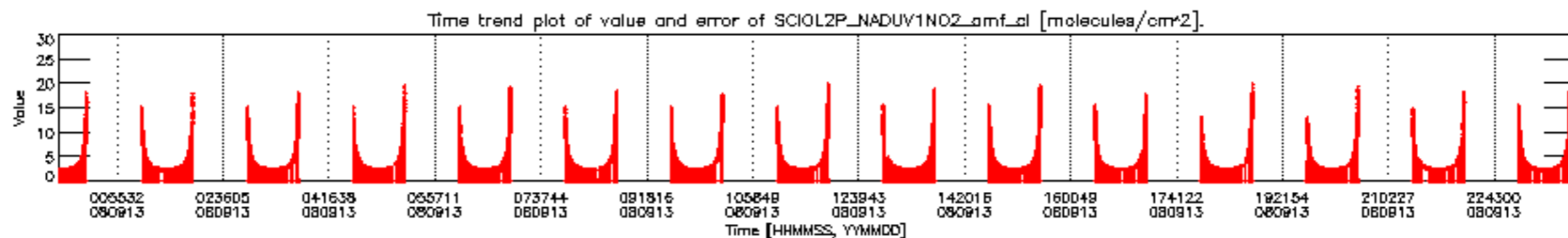
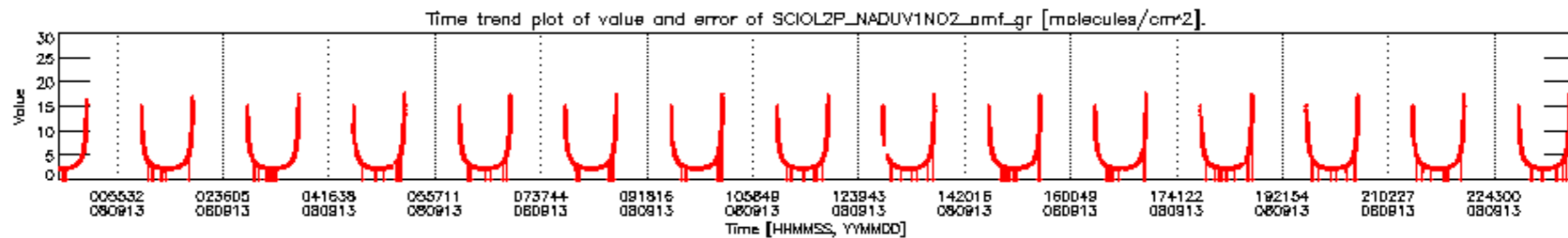
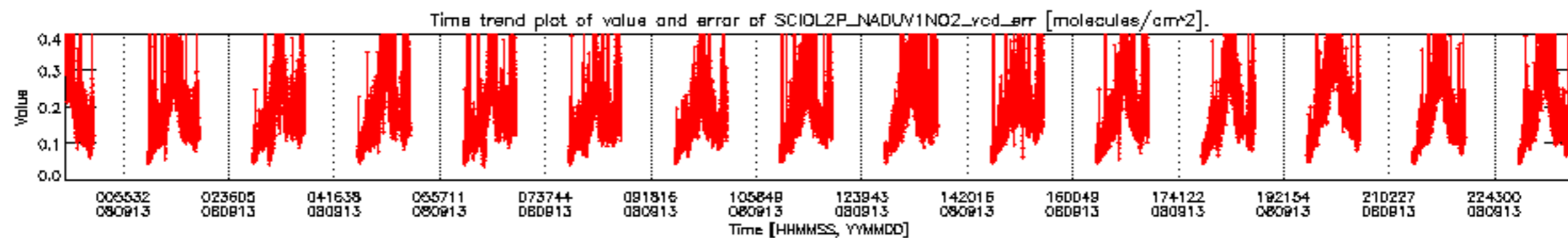
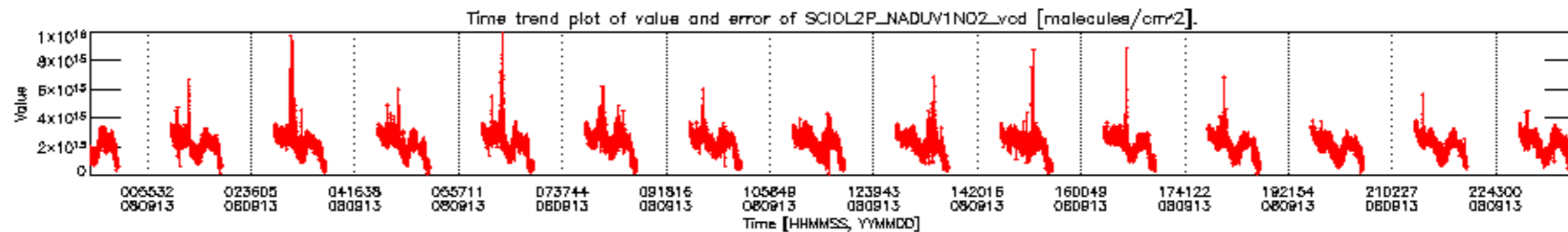


SCIOL2P\_NADUV003\_amf\_gr for 13SEP2008 00:00:00 to 14SEP2008 00:00:00

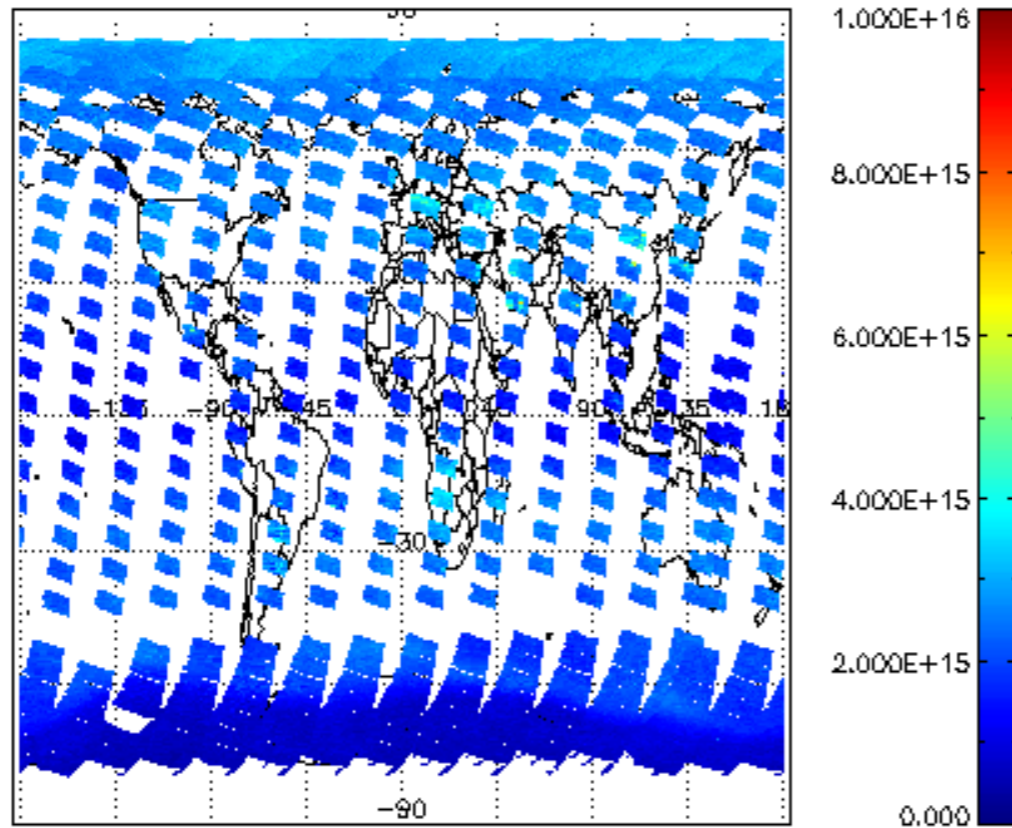


SCIOL2P\_NADUV003\_amf\_cl for 13SEP2008 00:00:00 to 14SEP2008 00:00:00

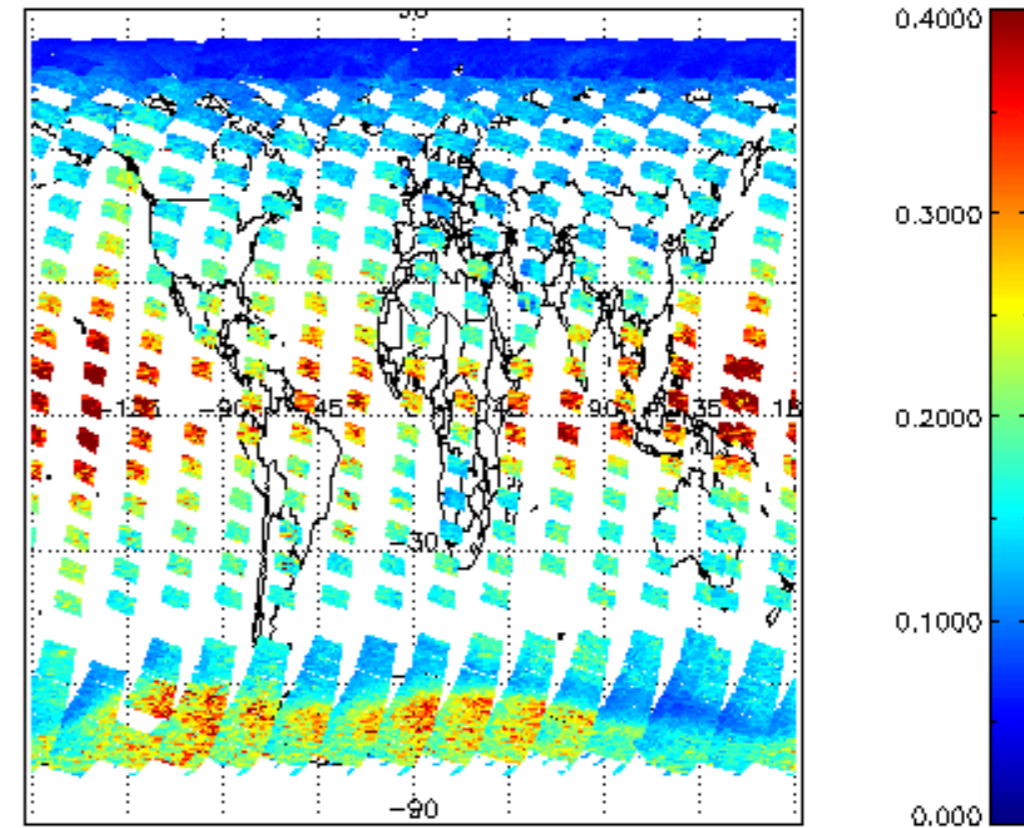




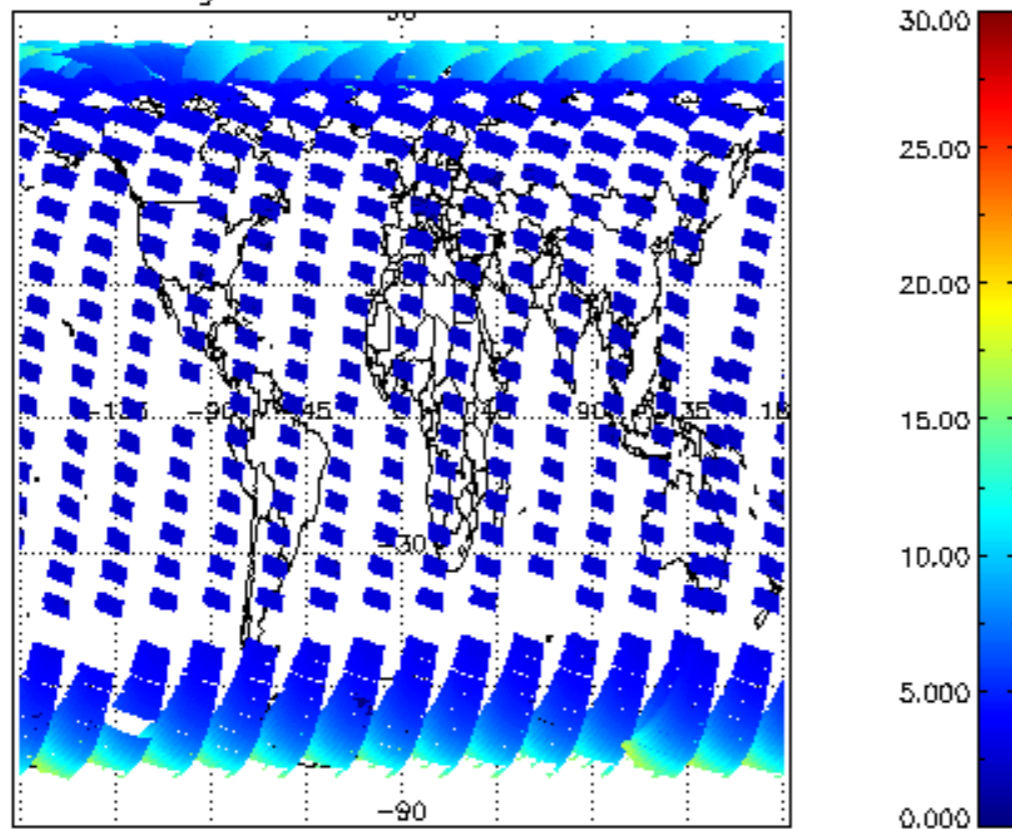
SCIOL2P\_NADUV1NO2\_vcd for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



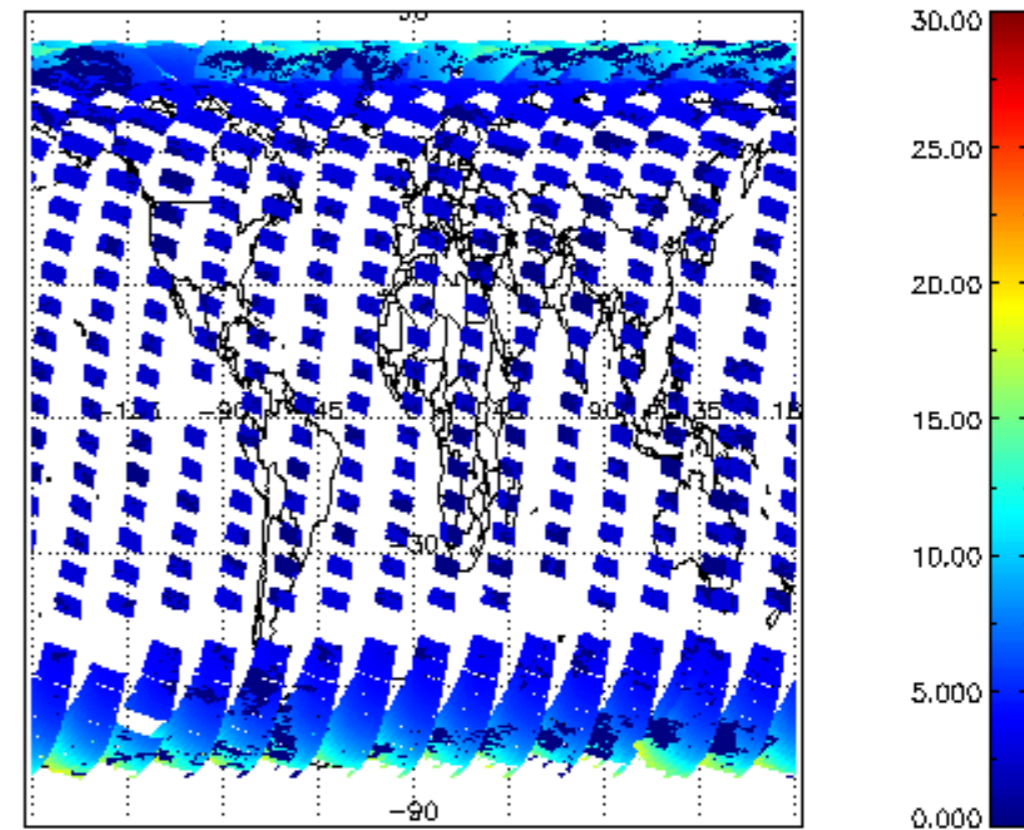
iCIOL2P\_NADUV1NO2\_vcd\_err for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



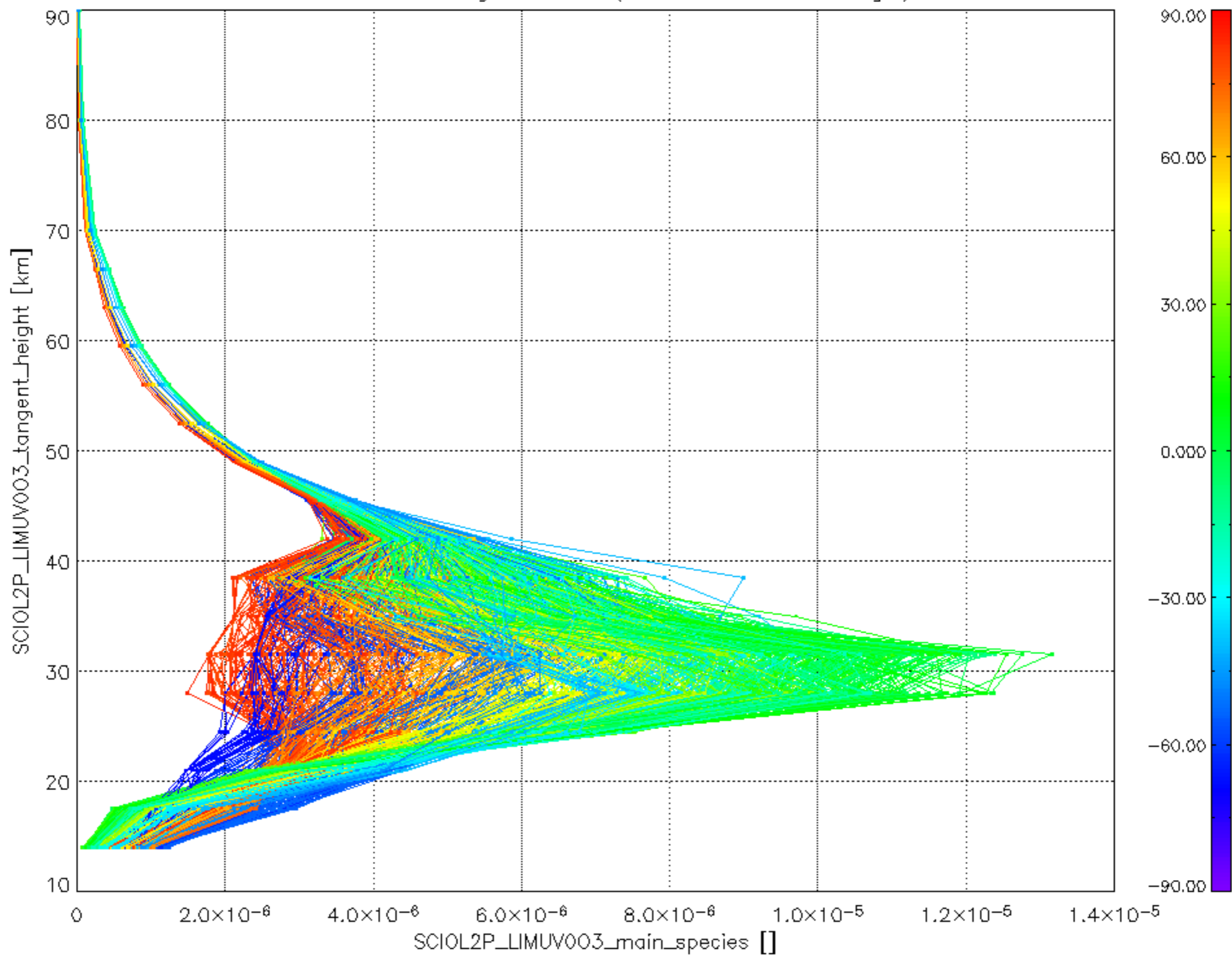
iCIOL2P\_NADUV1NO2\_amf\_gr for 13SEP2008 00:00:00 to 14SEP2008 00:00:00



iCIOL2P\_NADUV1NO2\_amf\_cl for 13SEP2008 00:00:00 to 14SEP2008 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).

