

## 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	22SEP2008 06:02:42
Data source version	SCIA-OL/3.01-R
Processing scope for products	04SEP2008 00:00:00 to 05SEP2008 00:00:00
Start time of first product within scope	03SEP2008 23:13:30
Stop time of last product within scope	04SEP2008 23:38:21
Total number of level 2 products	14
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__2PRDPA20080903_231330_000033812071_00431_34052_6511.N1</a>	03SEP2008 23:13:30	04SEP2008 00:09:51	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20080904_005406_000033252071_00432_34053_6512.N1</a>	04SEP2008 00:54:06	04SEP2008 01:49:32	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20080904_023442_000033812071_00433_34054_6520.N1</a>	04SEP2008 02:34:42	04SEP2008 03:31:04	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20080904_041519_000033252071_00434_34055_6516.N1</a>	04SEP2008 04:15:19	04SEP2008 05:10:44	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20080904_055555_000033812071_00435_34056_6517.N1</a>	04SEP2008 05:55:55	04SEP2008 06:52:17	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20080904_073632_000033252071_00436_34057_6521.N1</a>	04SEP2008 07:36:32	04SEP2008 08:31:57	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20080904_091708_000033812071_00437_34058_6522.N1</a>	04SEP2008 09:17:08	04SEP2008 10:13:30	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20080904_105744_000033252071_00438_34059_6526.N1</a>	04SEP2008 10:57:44	04SEP2008 11:53:10	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20080904_123821_000033812071_00439_34060_6527.N1</a>	04SEP2008 12:38:21	04SEP2008 13:34:42	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20080904_142102_000032012071_00440_34061_6528.N1</a>	04SEP2008 14:21:02	04SEP2008 15:14:23	0	GOOD
10	<a href="#">SCI_OL__2PRDPA20080904_174005_000033762071_00442_34063_6532.N1</a>	04SEP2008 17:40:05	04SEP2008 18:36:21	0	GOOD
11	<a href="#">SCI_OL__2PRDPA20080904_192106_000033122071_00443_34064_6534.N1</a>	04SEP2008 19:21:06	04SEP2008 20:16:19	0	GOOD
12	<a href="#">SCI_OL__2PRDPA20080904_210123_000033252071_00444_34065_6538.N1</a>	04SEP2008 21:01:23	04SEP2008 21:56:49	0	GOOD
13	<a href="#">SCI_OL__2PRDPA20080904_224159_000033812071_00445_34066_6539.N1</a>	04SEP2008 22:41:59	04SEP2008 23:38:21	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: 136761

Total number of cloud data DSRs with good quality flag (=0): 136761 (100.0 %)

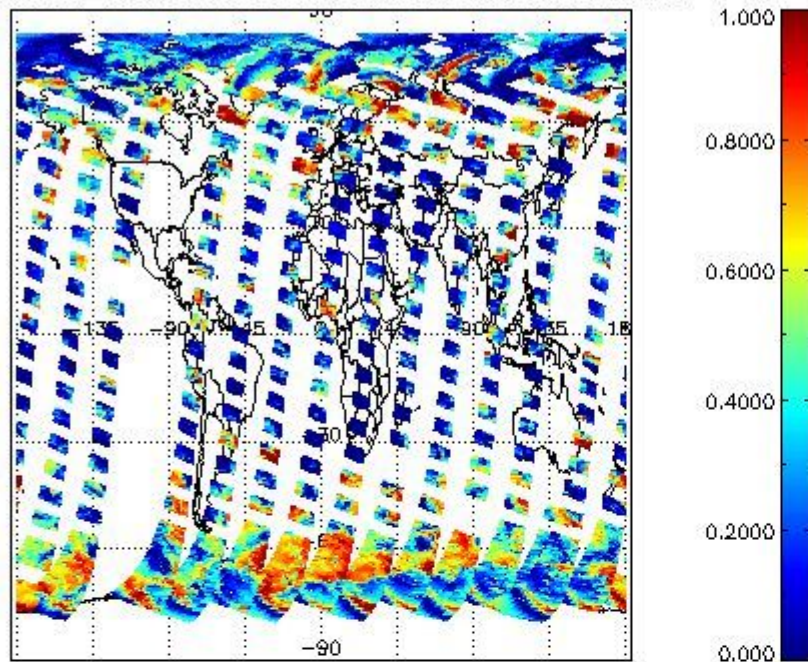
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	136761	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	136761	0.16920	0.12500	0.12500	0.25000	0.059761	s
CL_FRAC	136761	0.33873	0.29018	0.0000	1.0000	0.28766	-
CL_FRAC_ERR	136761	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	136761	5.4144	4.0000	4.0000	8.0000	1.9124	
PMD_READ_CL[0]	136761	0.15336	0.0000	0.0000	8.0000	0.88525	-
PMD_READ_CL[1]	136761	1.3673	0.0000	0.0000	8.0000	2.4251	-
CL_TOP_HEIGHT	115269	3.6490	1.9240	0.0000	17.000	4.0556	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	115269	60.841	90.825	0.0000	101.00	43.102	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	136761	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	136761	11001100	11000100	11000000	11100000	3460.2	flags
AERO_ABSO_IND	136761	3.1793	3.7914	-1.7360	12.922	2.1746	
AERO_IND_DIAG	136761	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	136761	01010101	00000000	00000000	11000000	24442.	flags

### Time and geolocation plots:

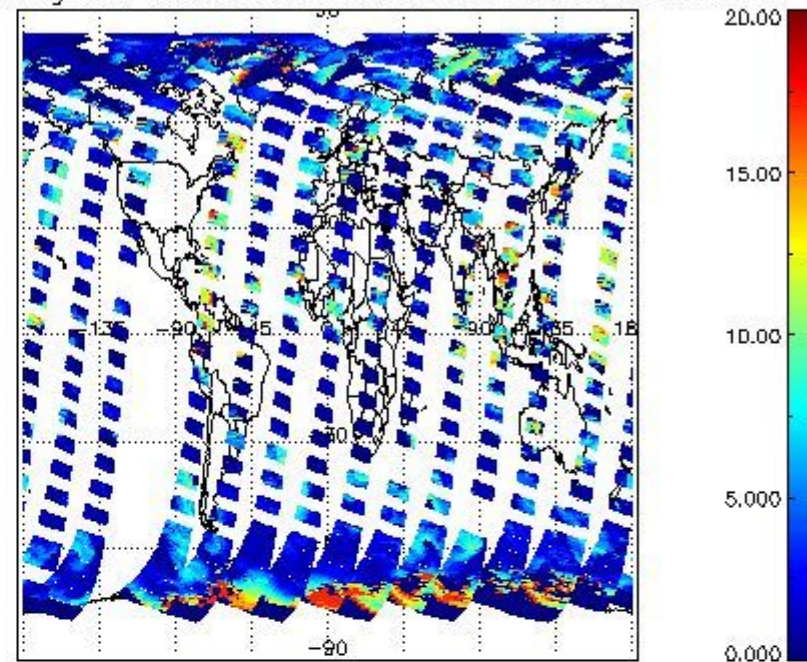
Plots are available for the following parameters:

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

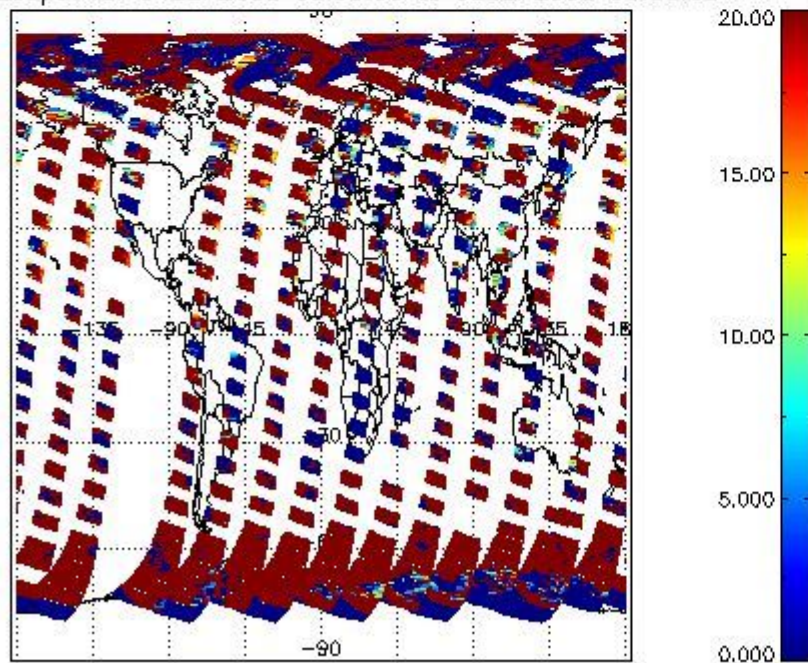
cLfrac for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



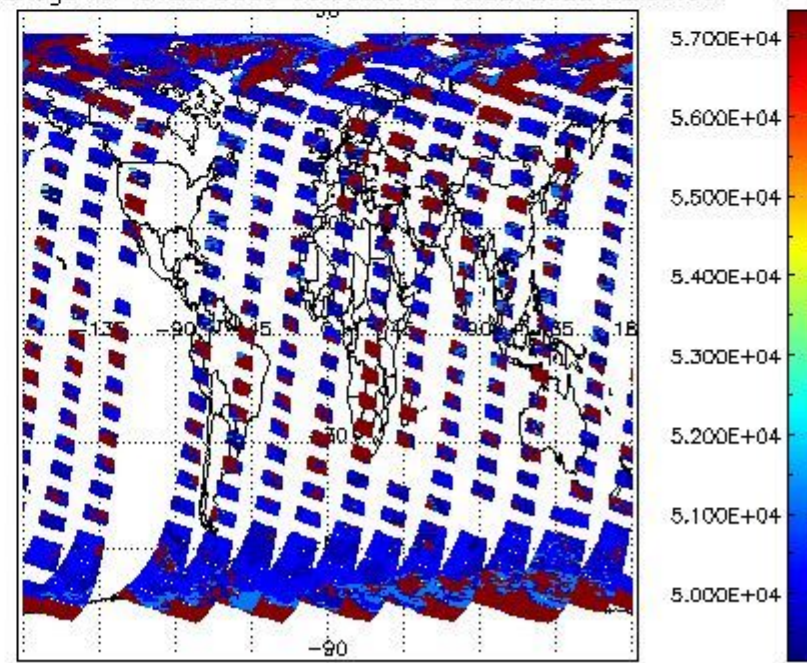
cL\_top\_height for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



cLopt\_depth for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



cloud\_flags for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



## 2.2.2 Nadir

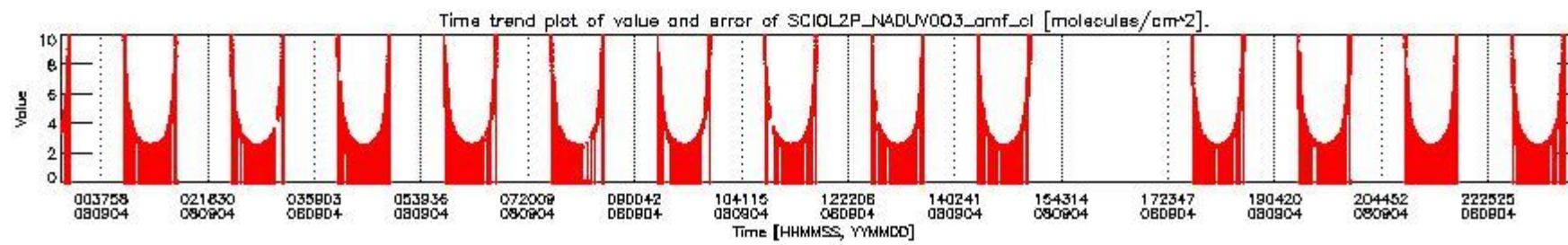
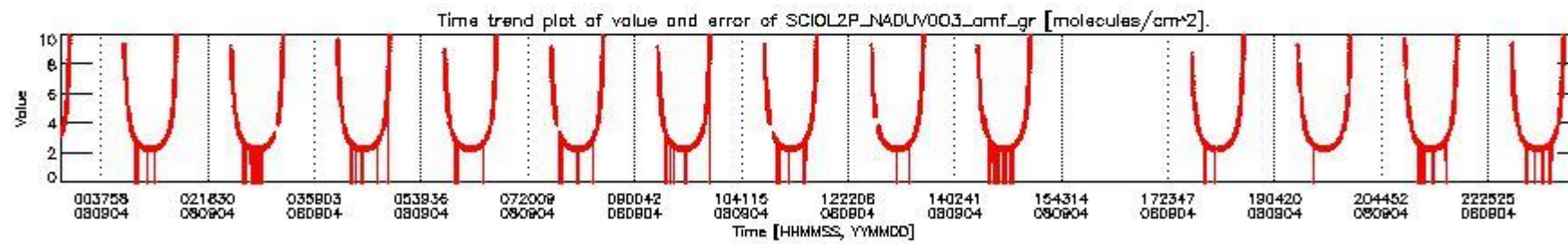
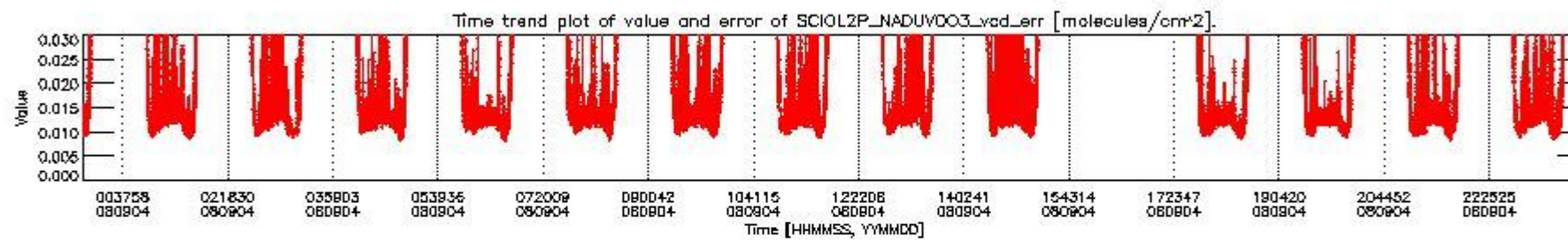
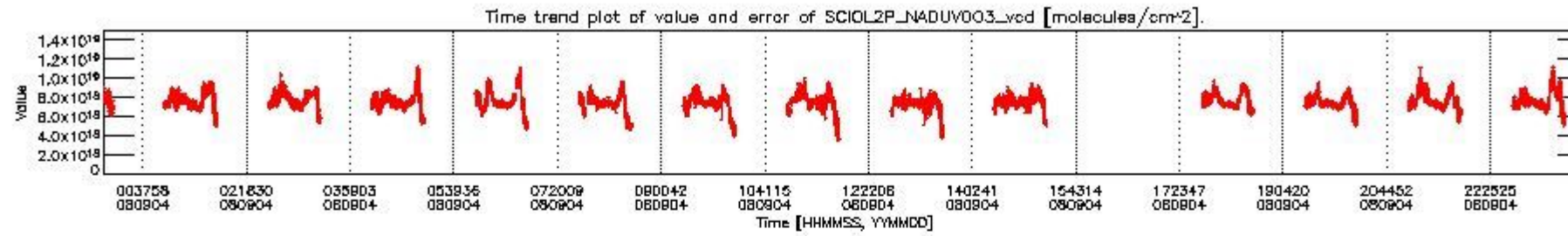
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

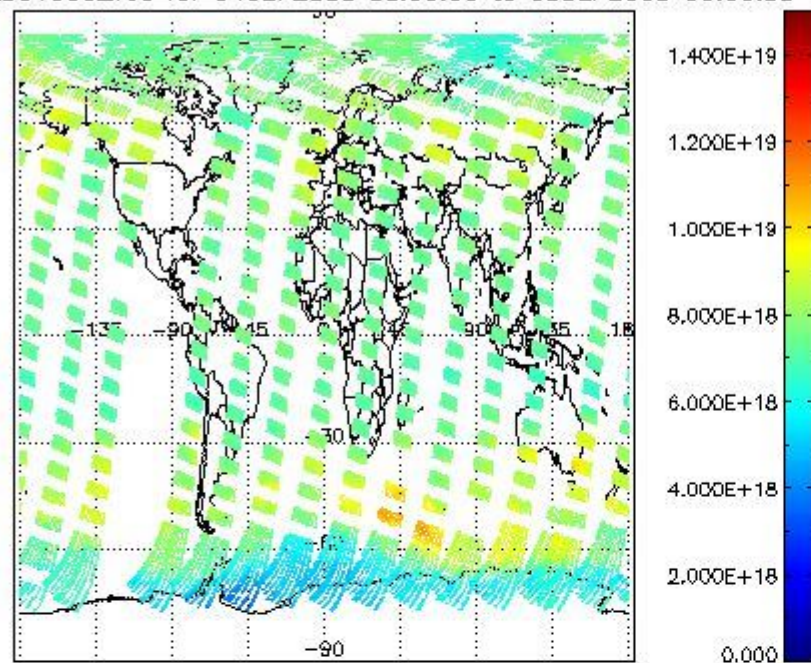
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

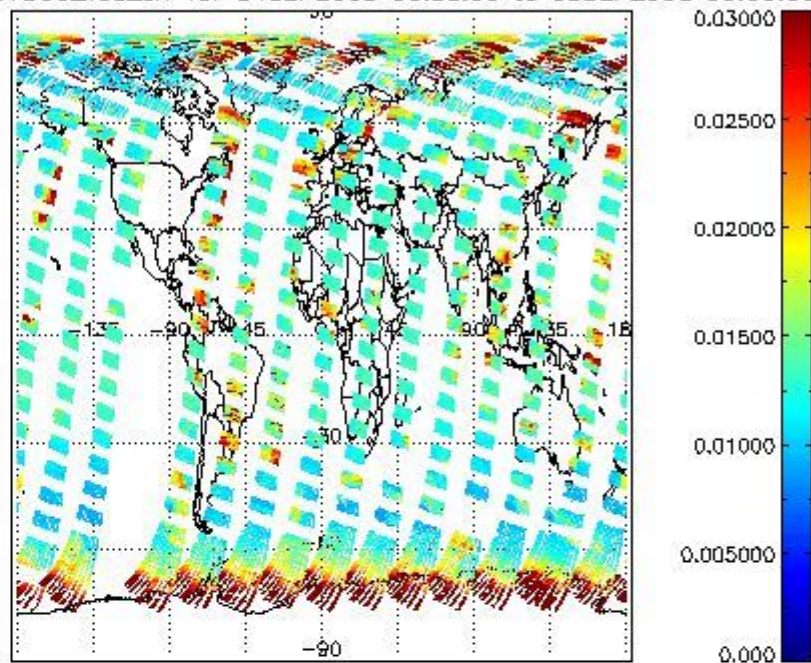
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing\_start time as suggested by the product sensing\_start time in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



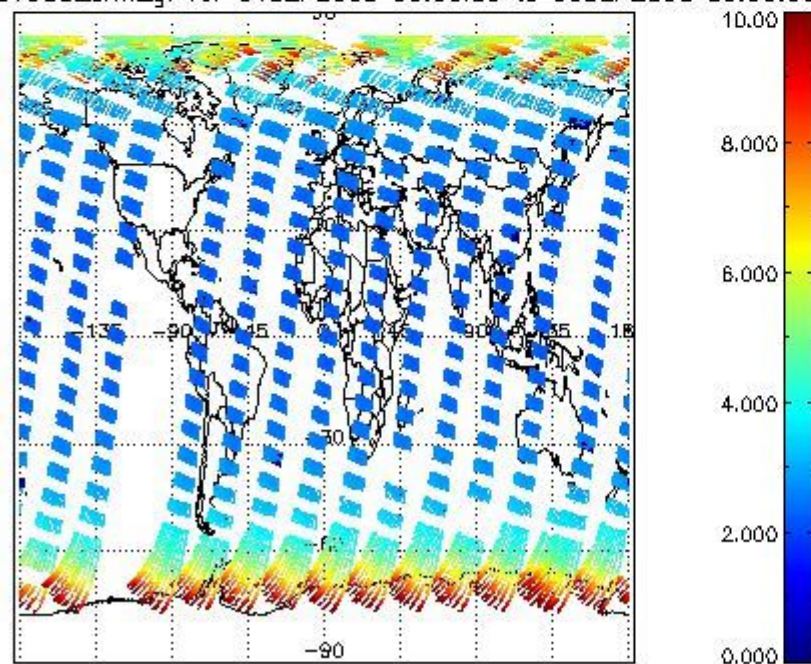
SCIOL2P\_NADUV003\_vcd for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



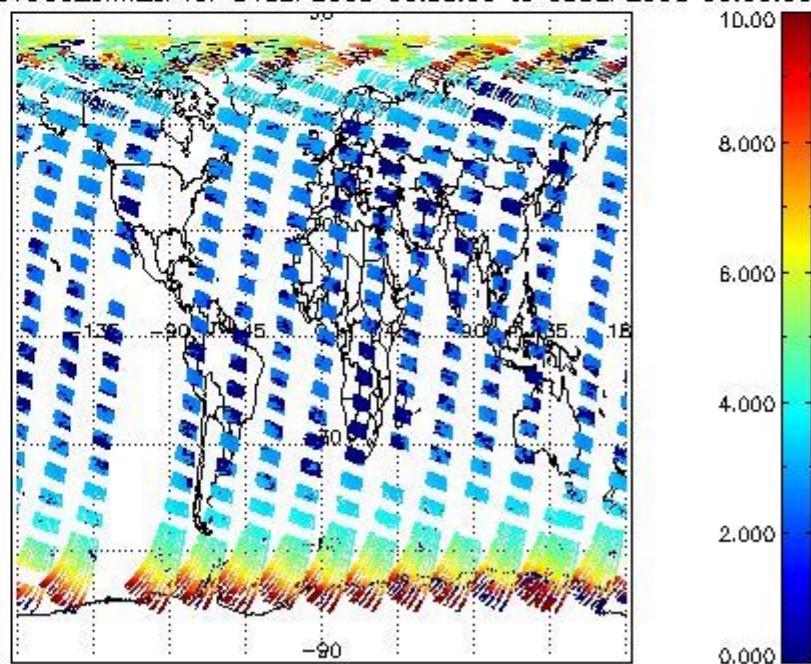
SCIOL2P\_NADUV003\_vcd\_err for 04SEP2008 00:00:00 to 05SEP2008 00:00:00

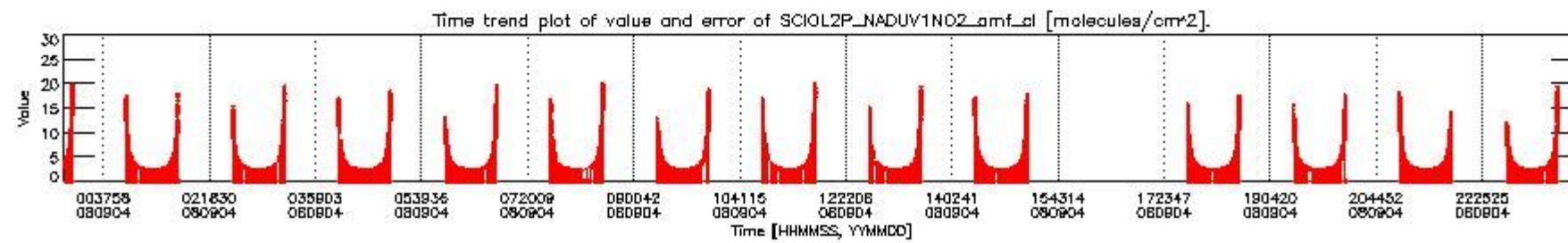
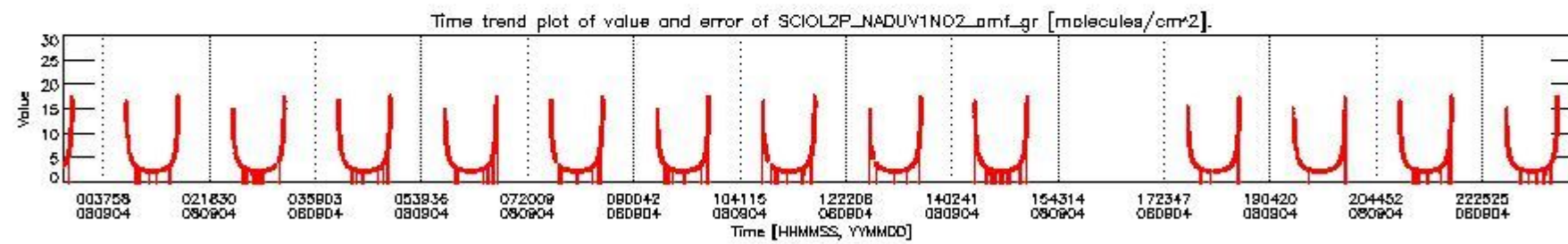
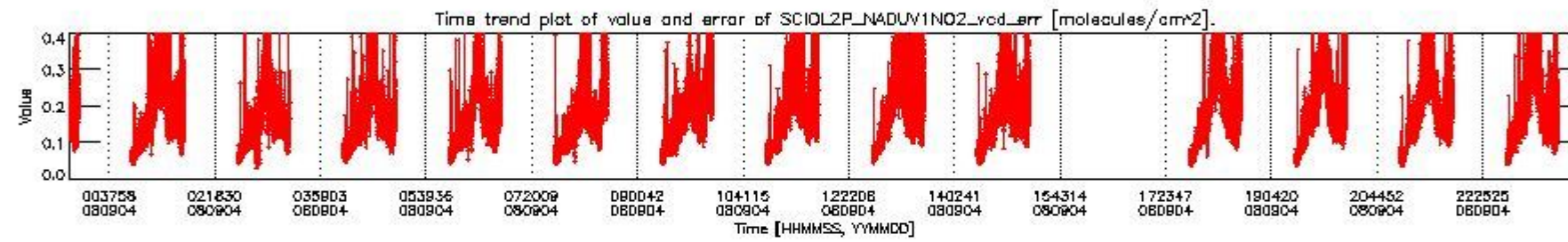
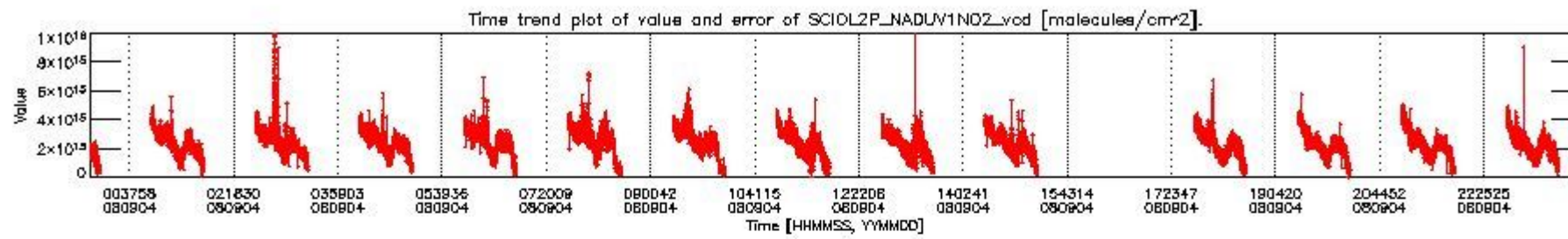


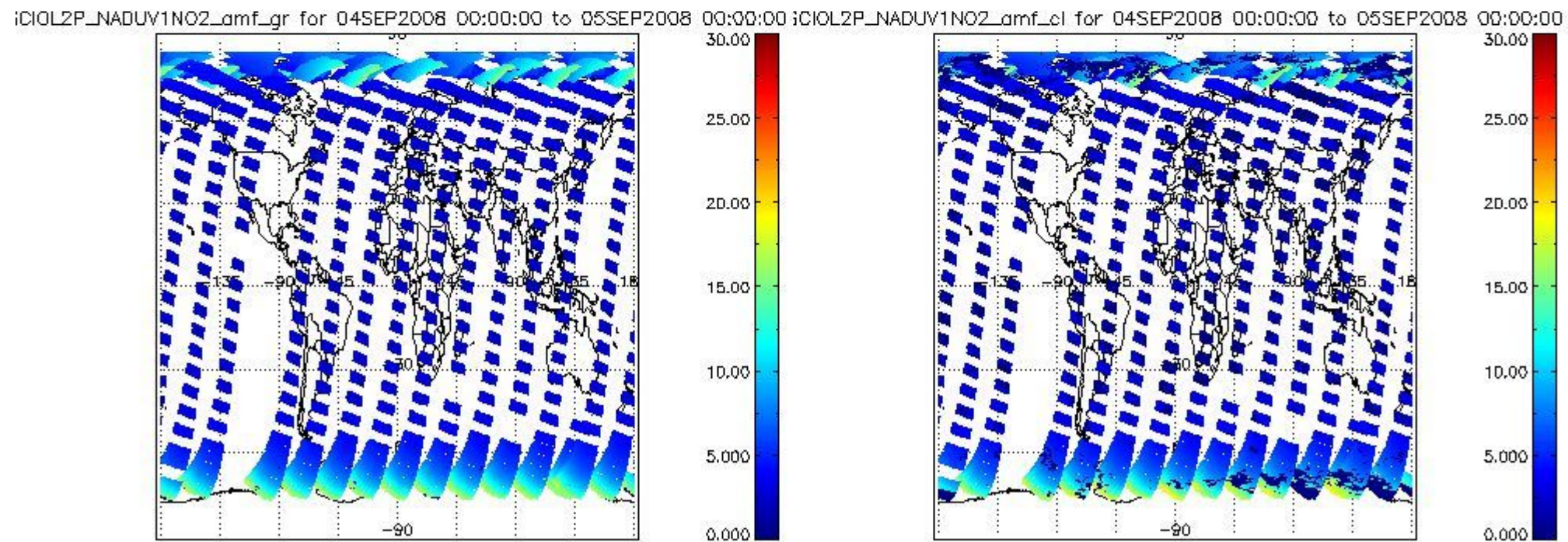
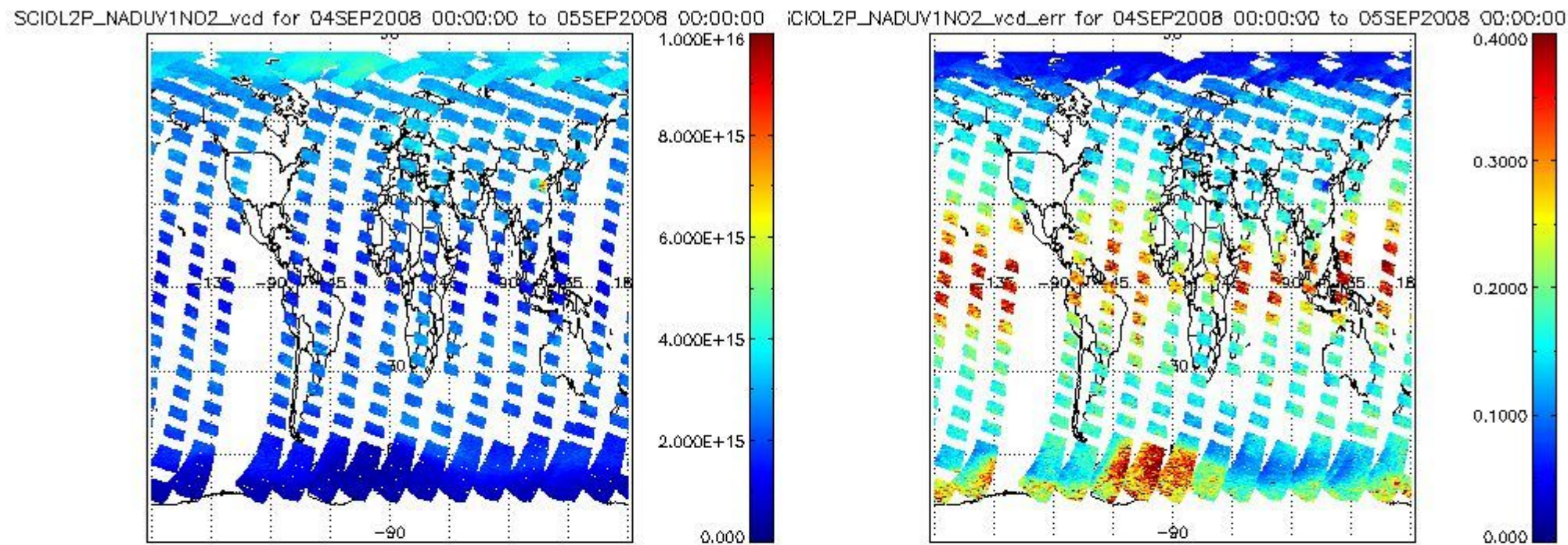
SCIOL2P\_NADUV003\_amf\_gr for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



SCIOL2P\_NADUV003\_amf\_cl for 04SEP2008 00:00:00 to 05SEP2008 00:00:00







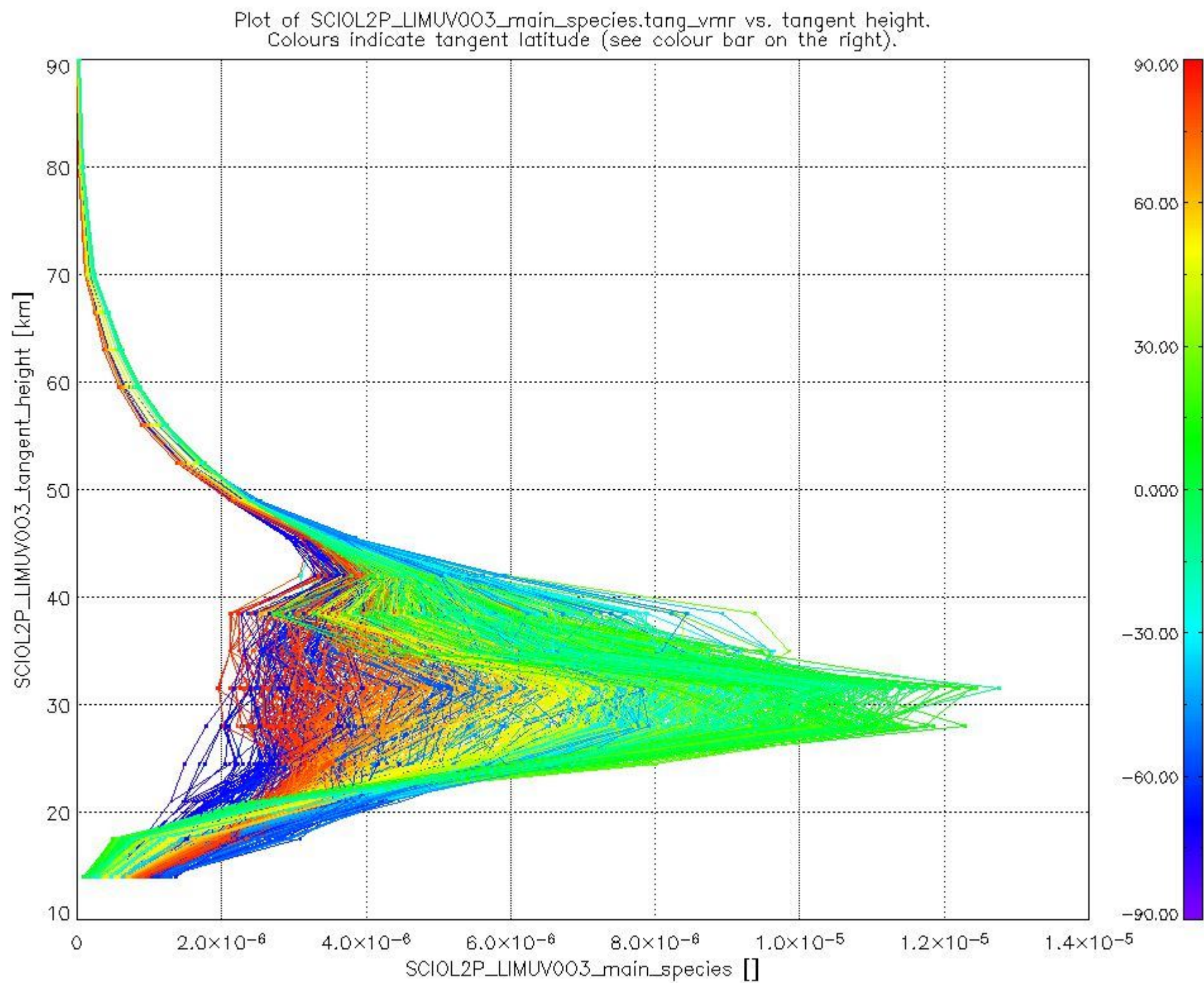
### 2.2.3 Limb

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:

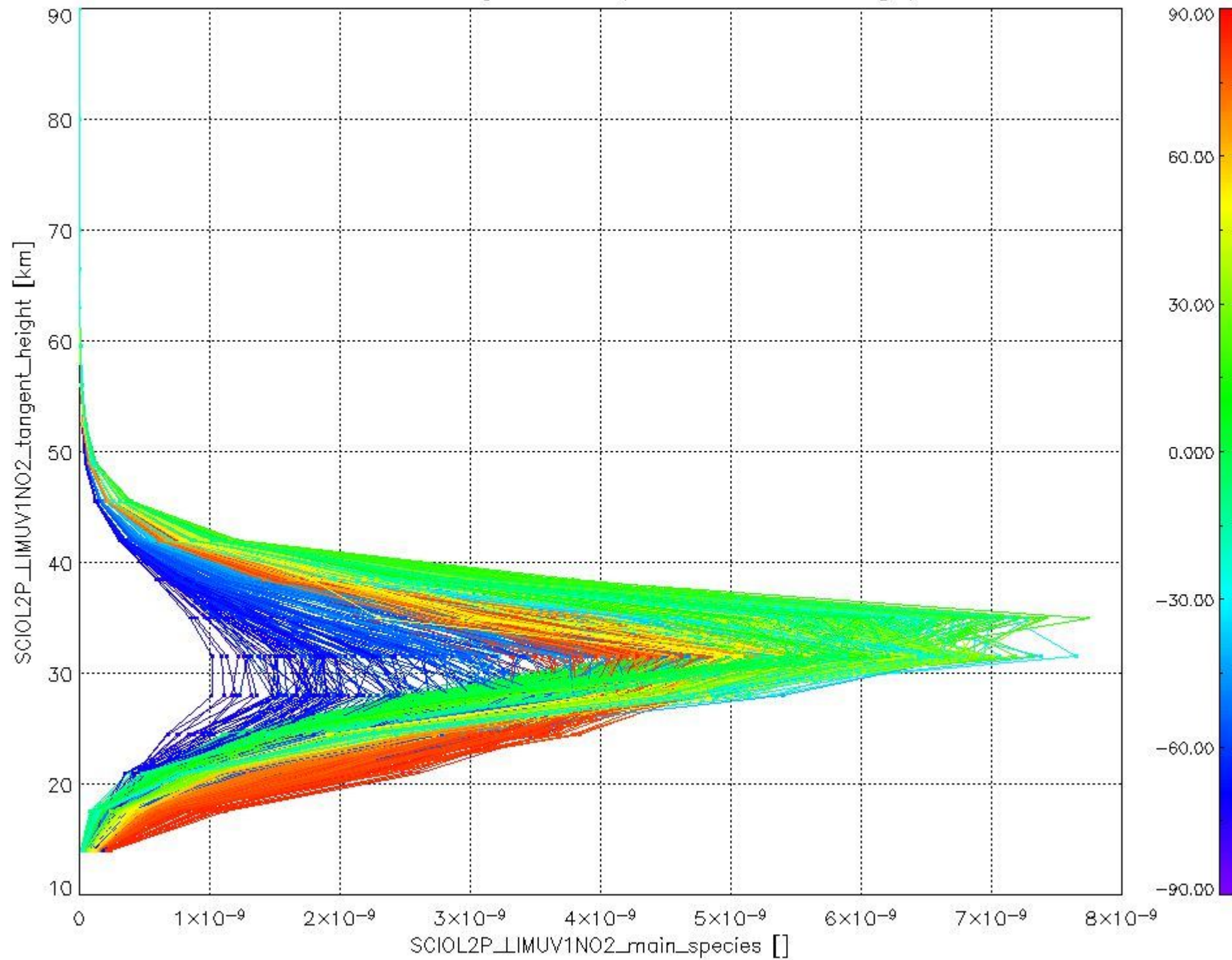
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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





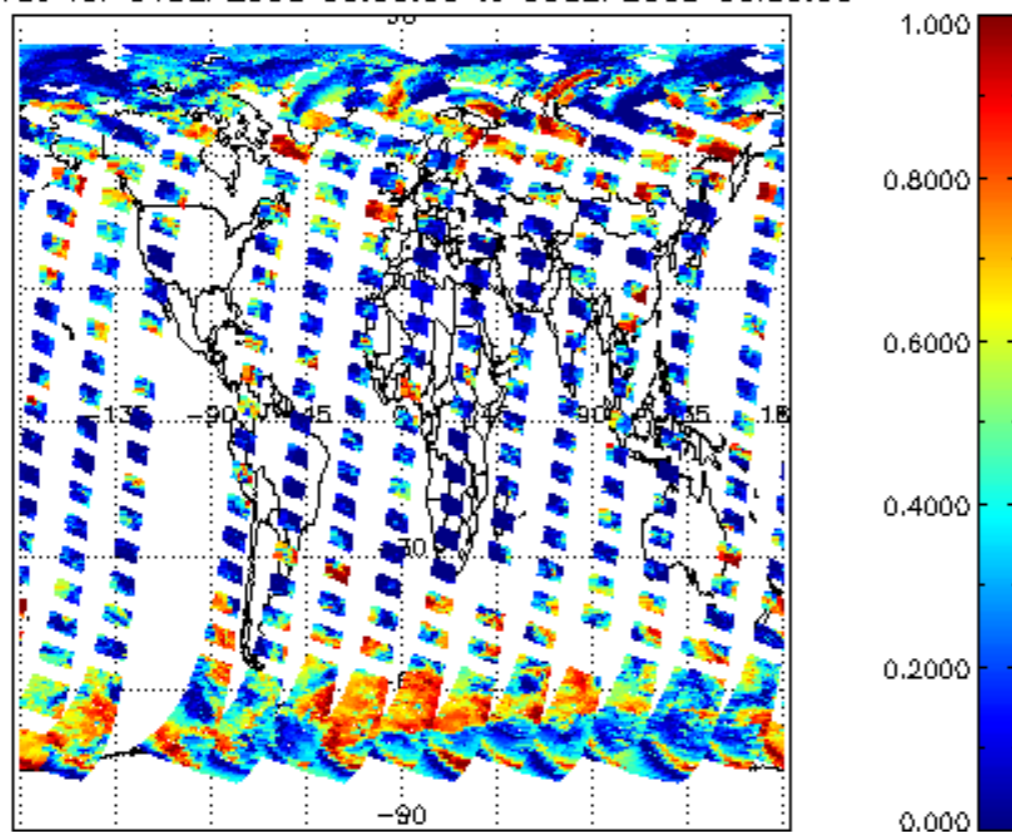
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



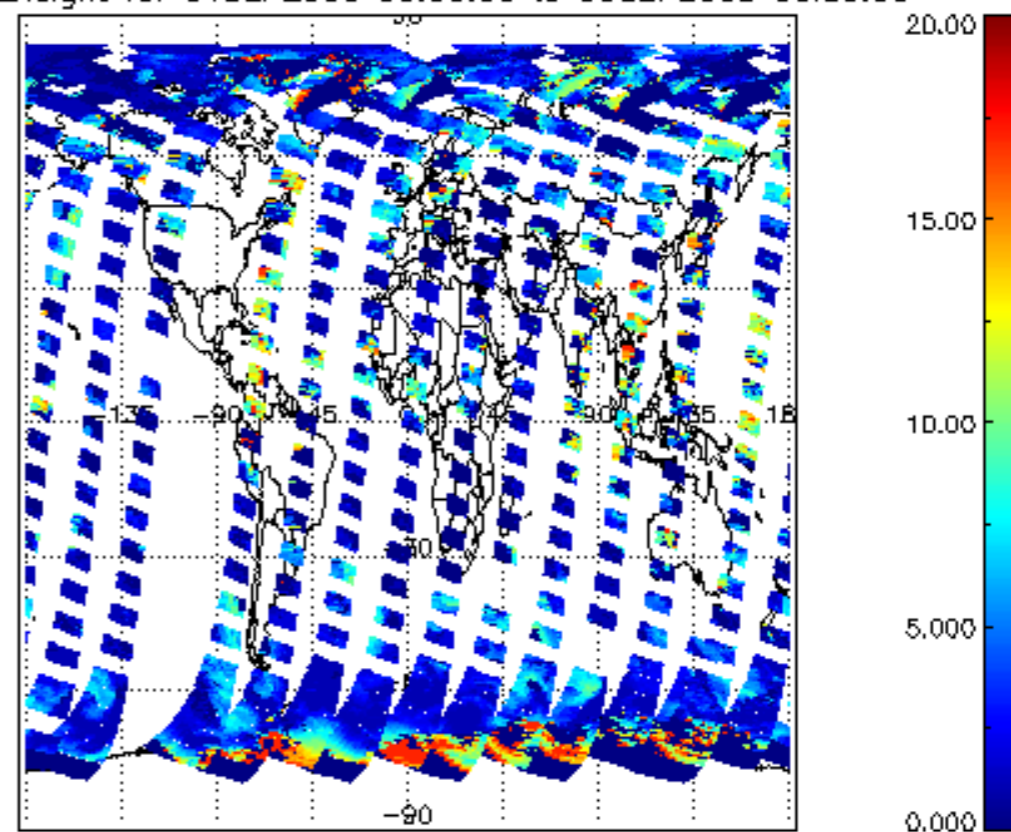
### 2.3 ADF monitoring

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

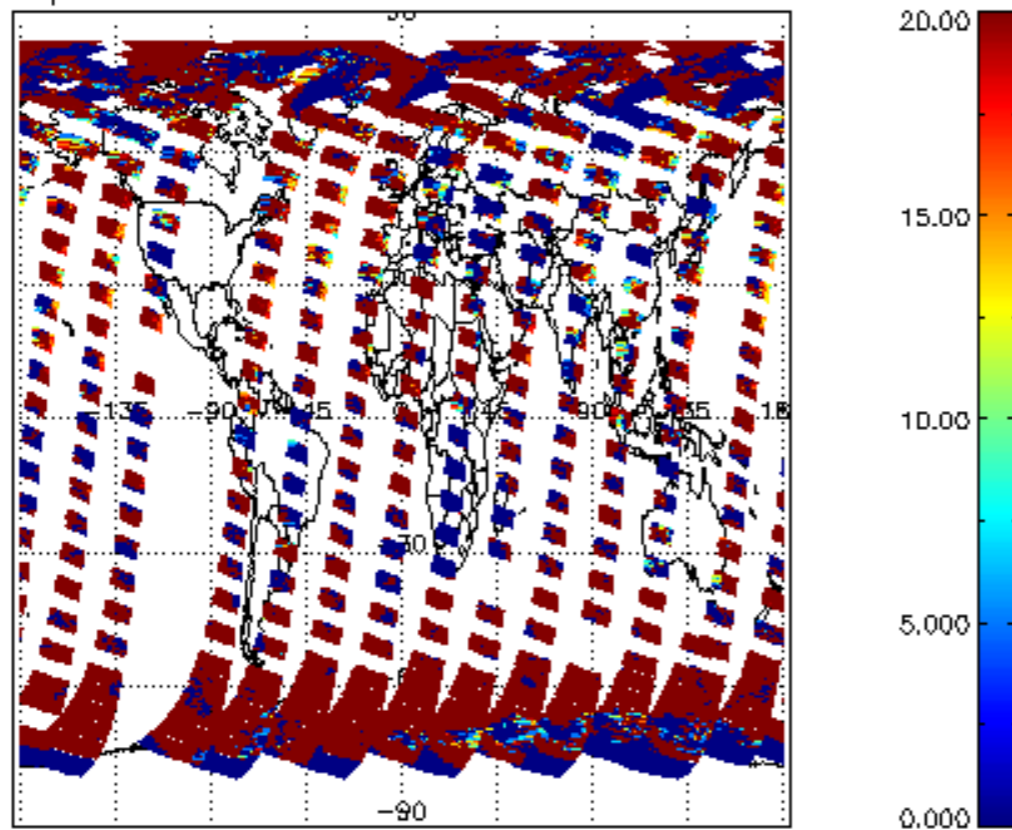
cL\_frac for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



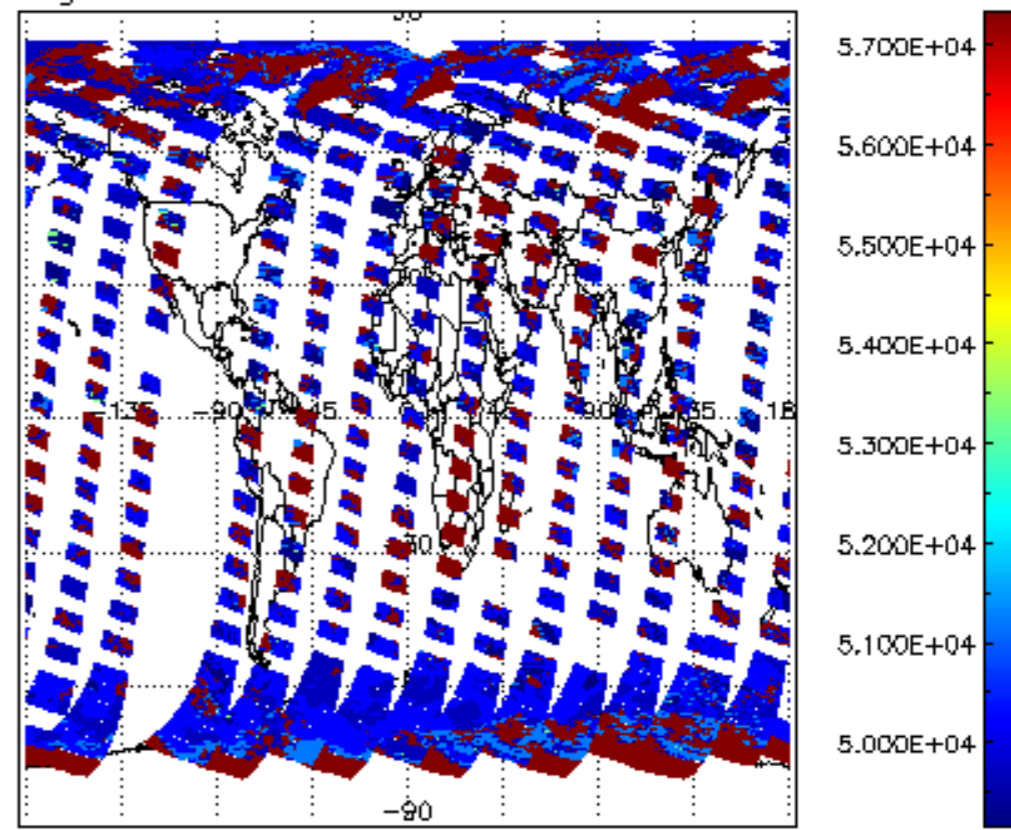
cL\_top\_height for 04SEP2008 00:00:00 to 05SEP2008 00:00:00

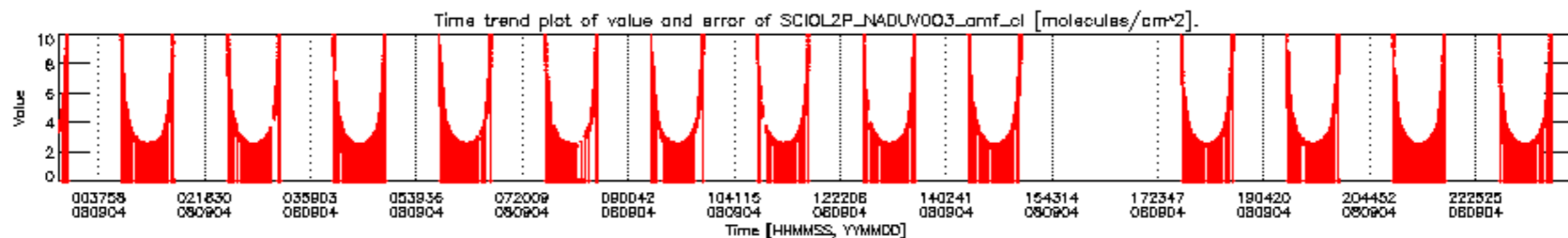
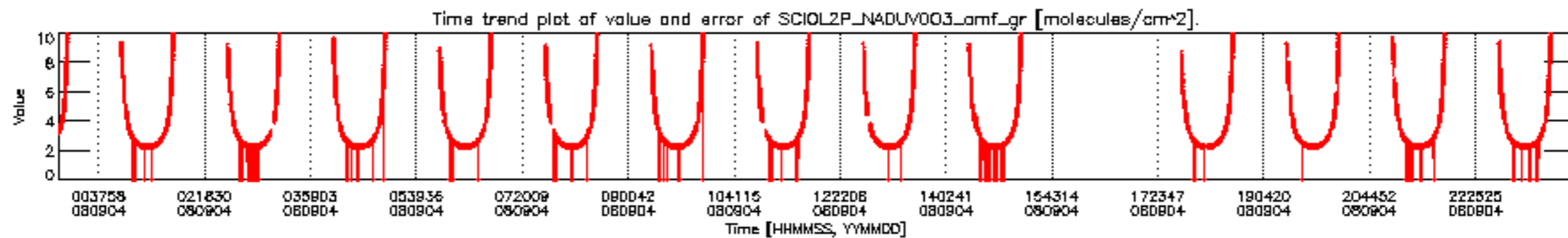
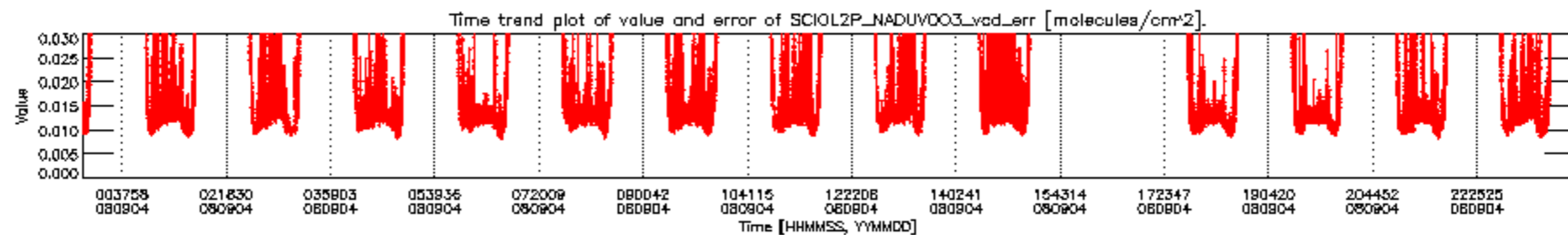
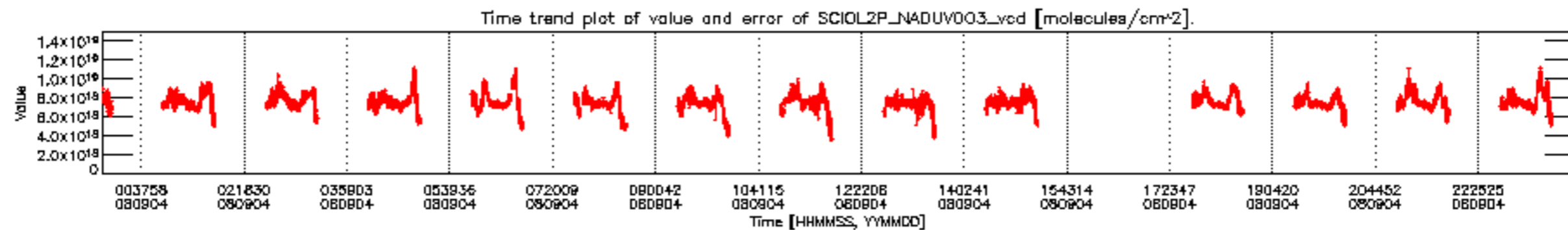


cL\_opt\_depth for 04SEP2008 00:00:00 to 05SEP2008 00:00:00

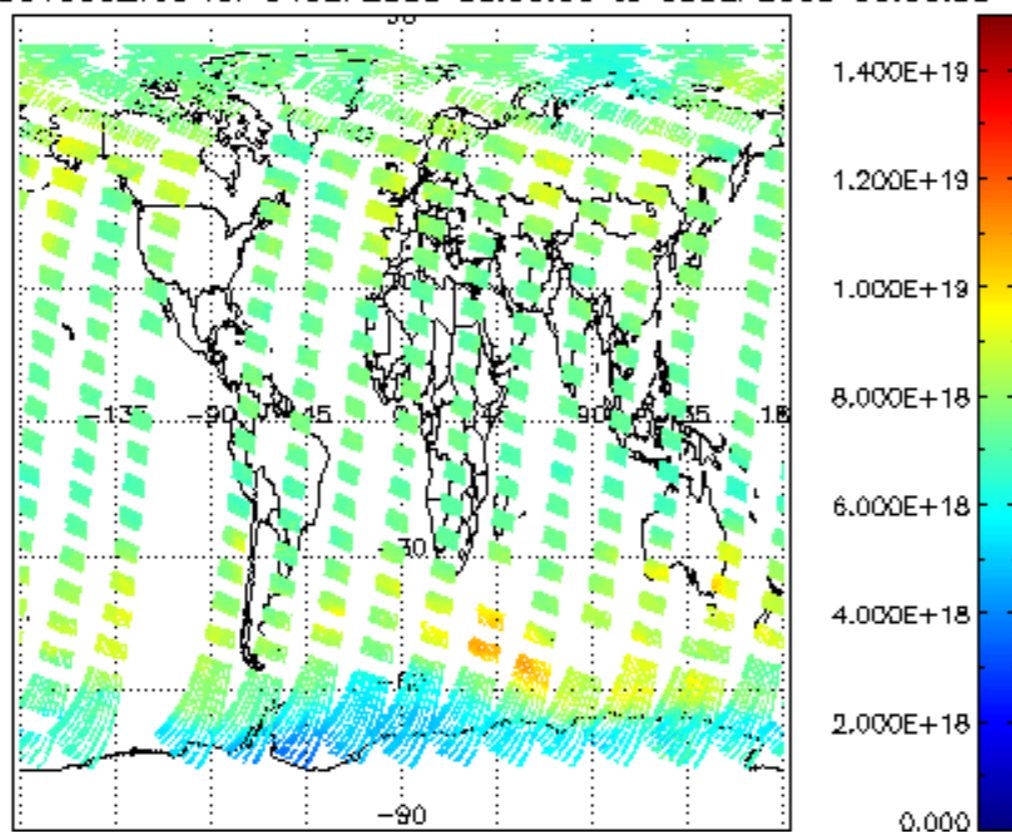


cloud\_flags for 04SEP2008 00:00:00 to 05SEP2008 00:00:00

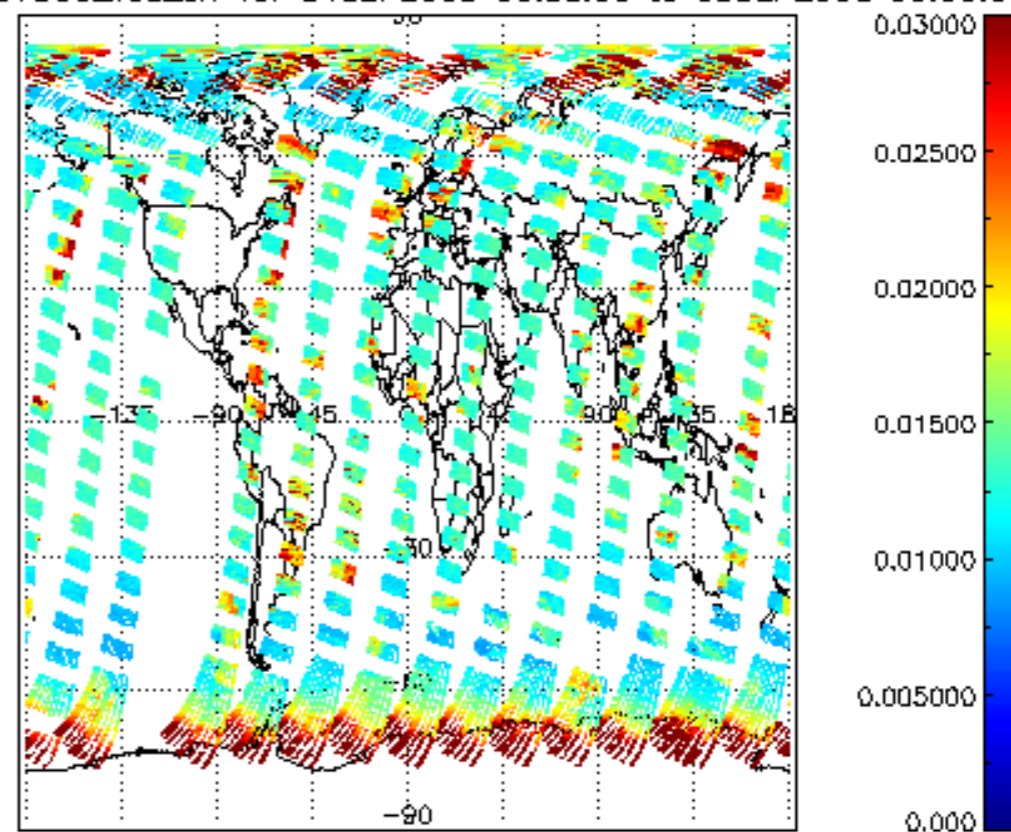




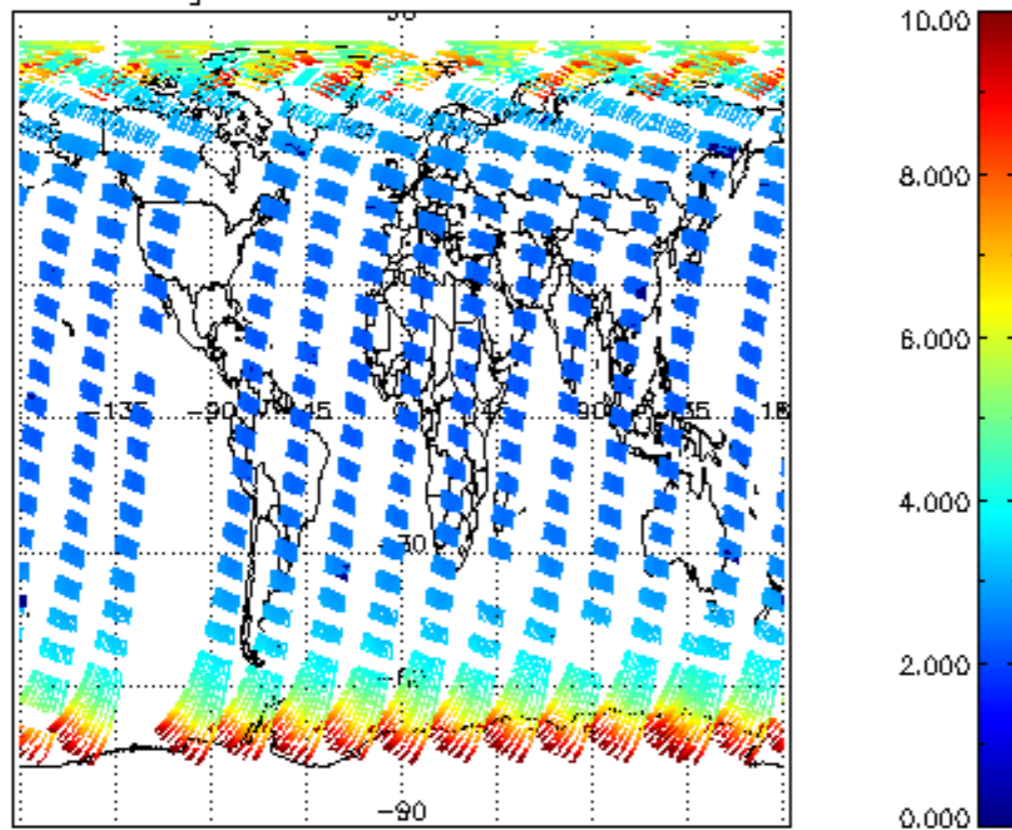
SCIOL2P\_NADUV003\_vcd for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



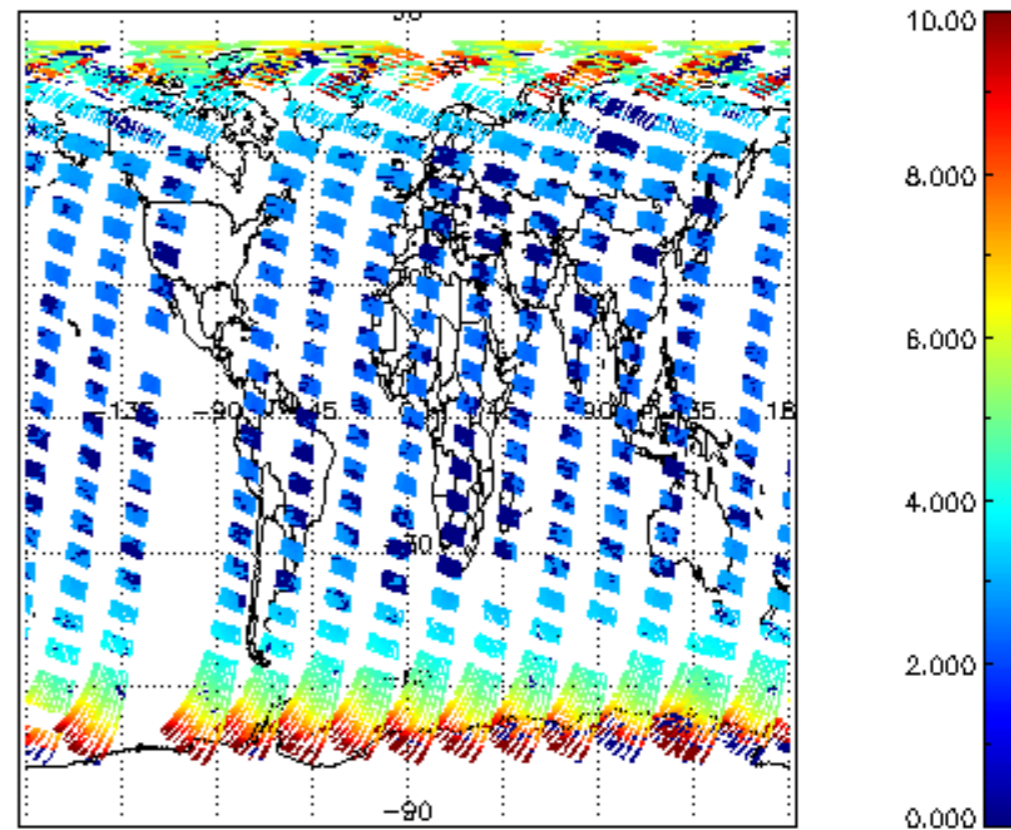
SCIOL2P\_NADUV003\_vcd\_err for 04SEP2008 00:00:00 to 05SEP2008 00:00:00

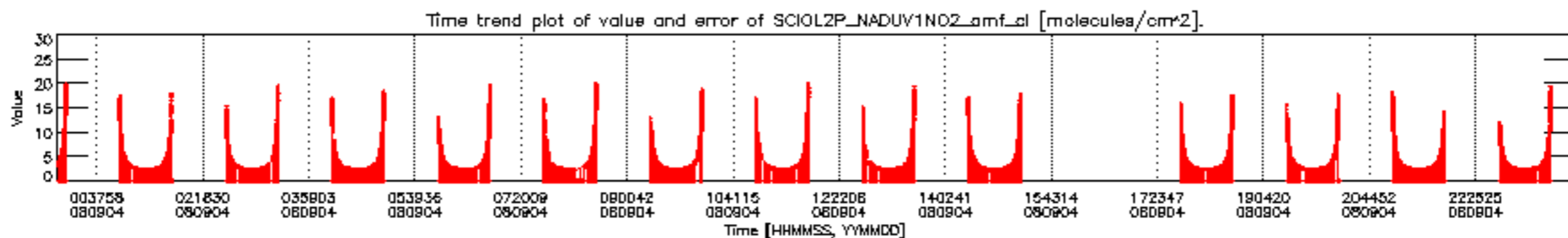
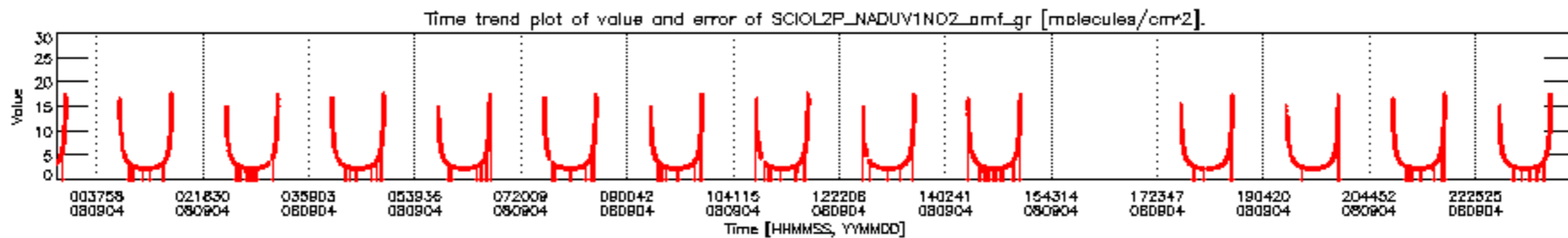
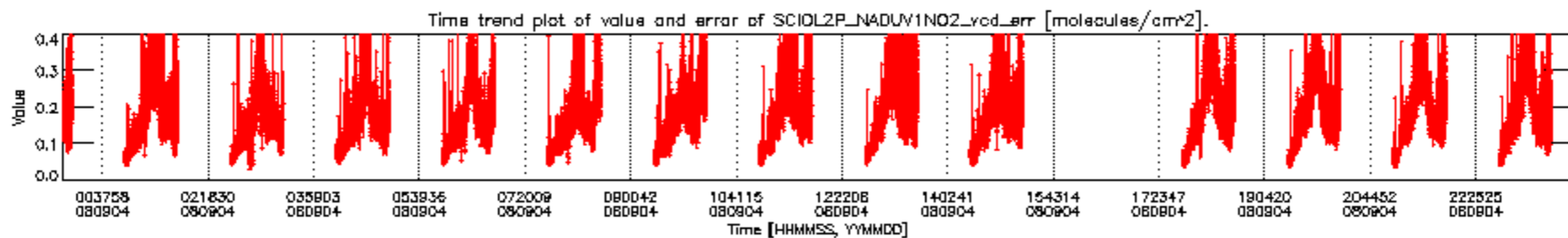
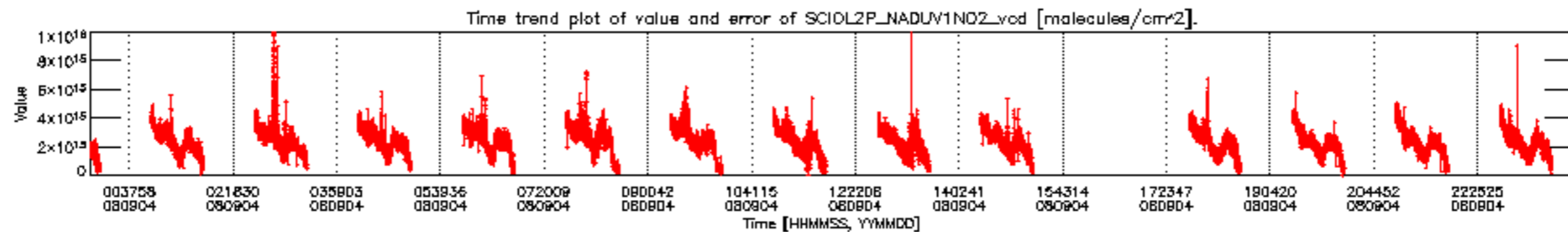


SCIOL2P\_NADUV003\_amf\_gr for 04SEP2008 00:00:00 to 05SEP2008 00:00:00

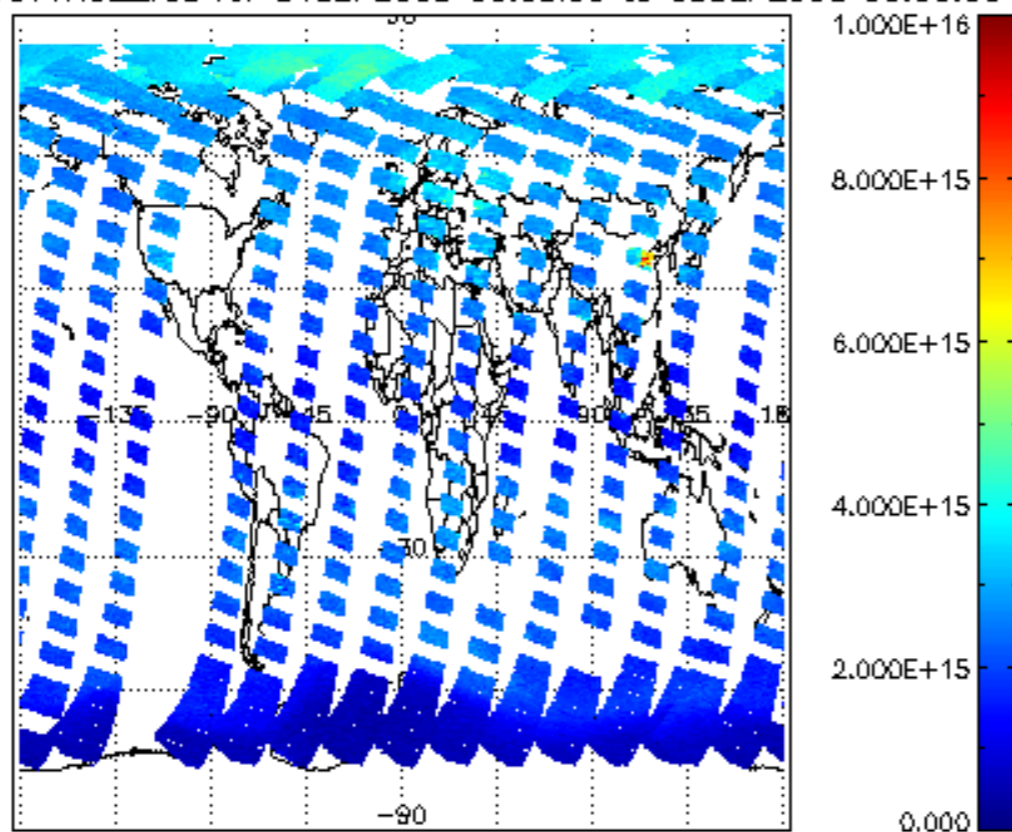


SCIOL2P\_NADUV003\_amf\_cl for 04SEP2008 00:00:00 to 05SEP2008 00:00:00

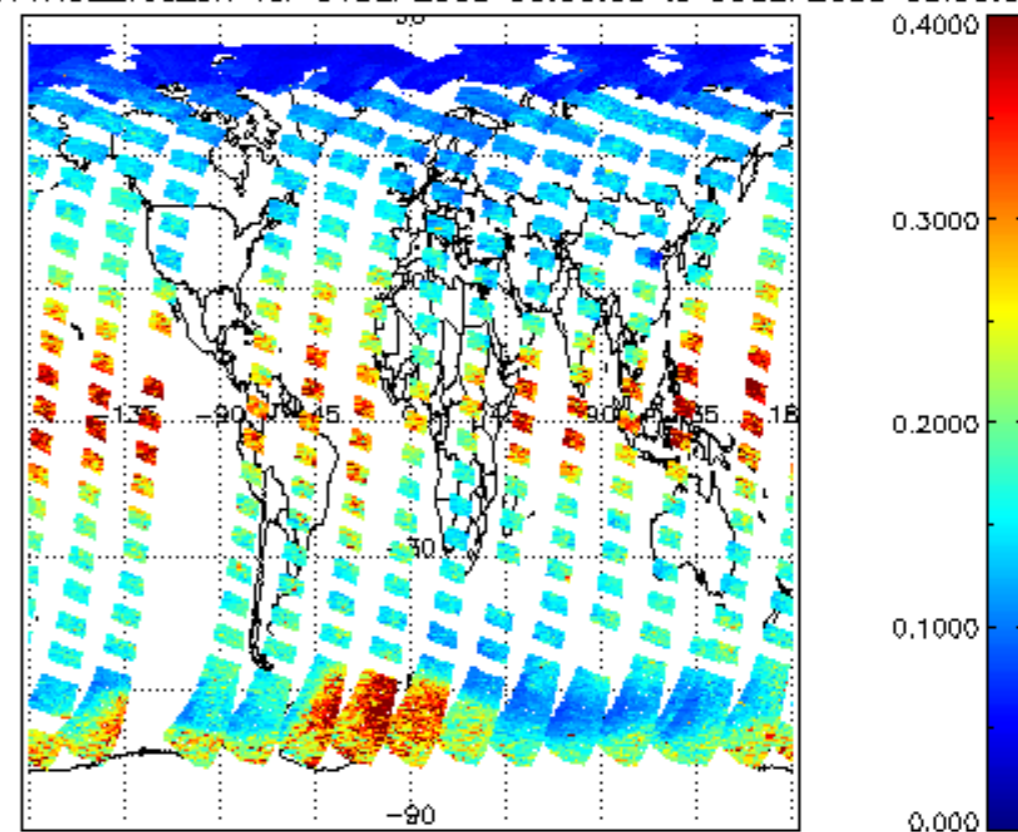




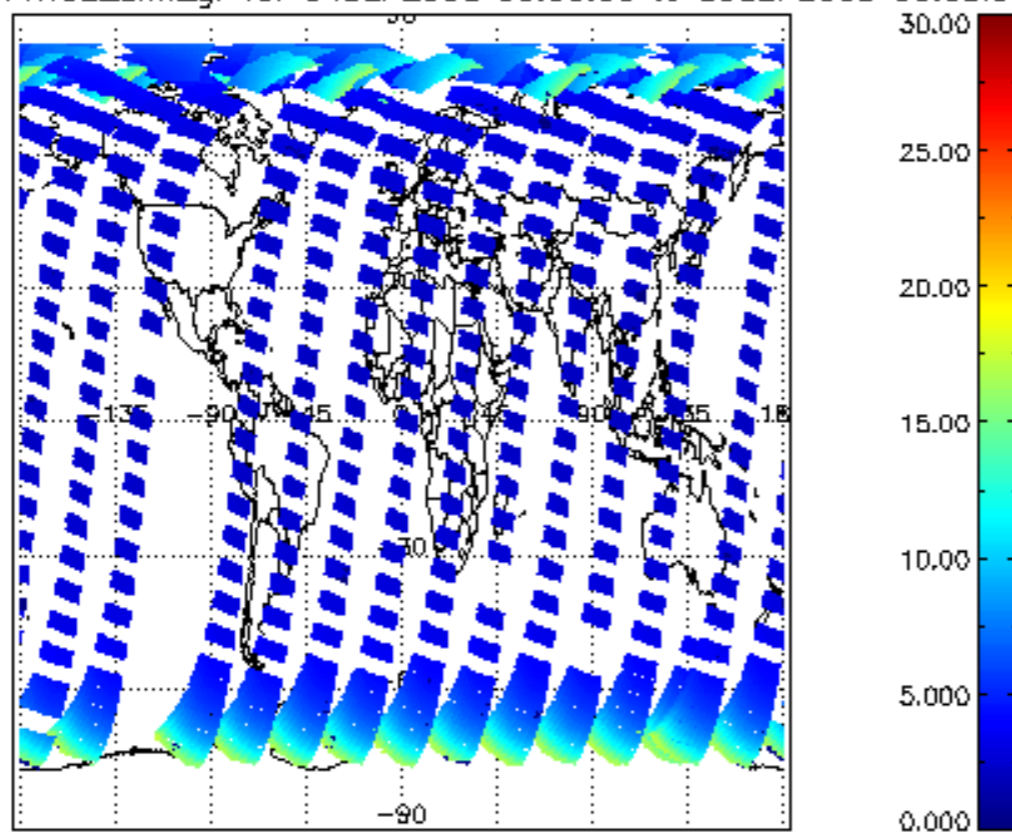
SCIOL2P\_NADUV1NO2\_vcd for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



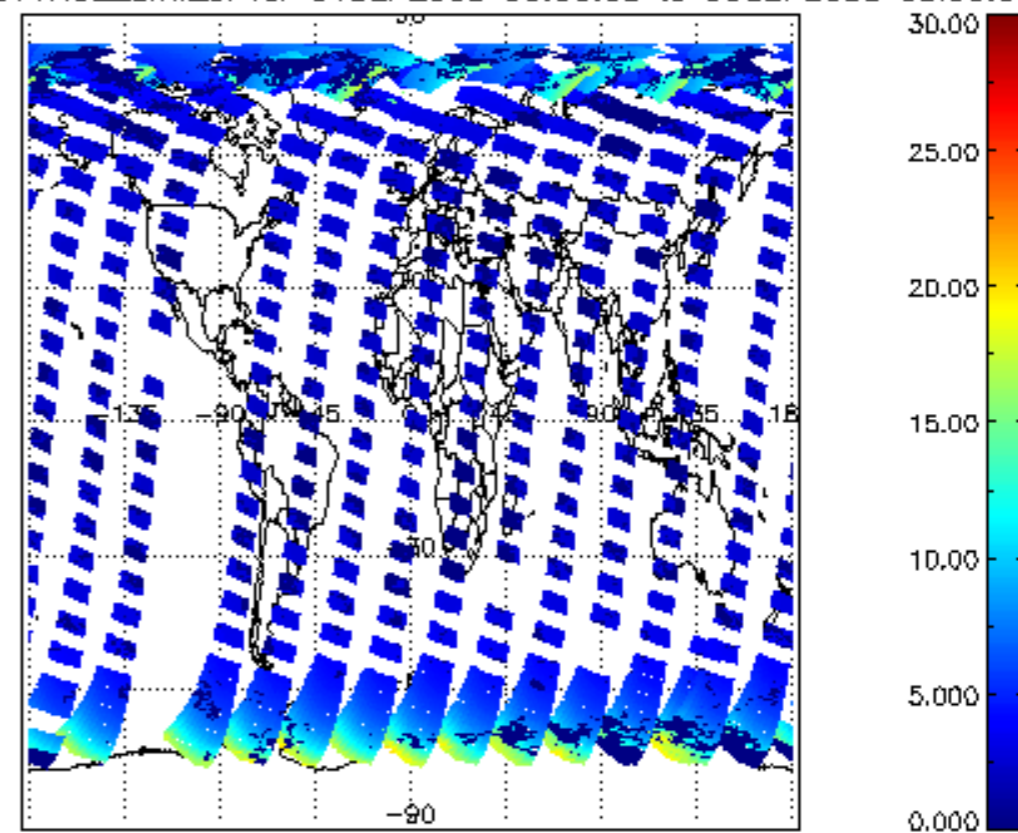
iCIOL2P\_NADUV1NO2\_vcd\_err for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



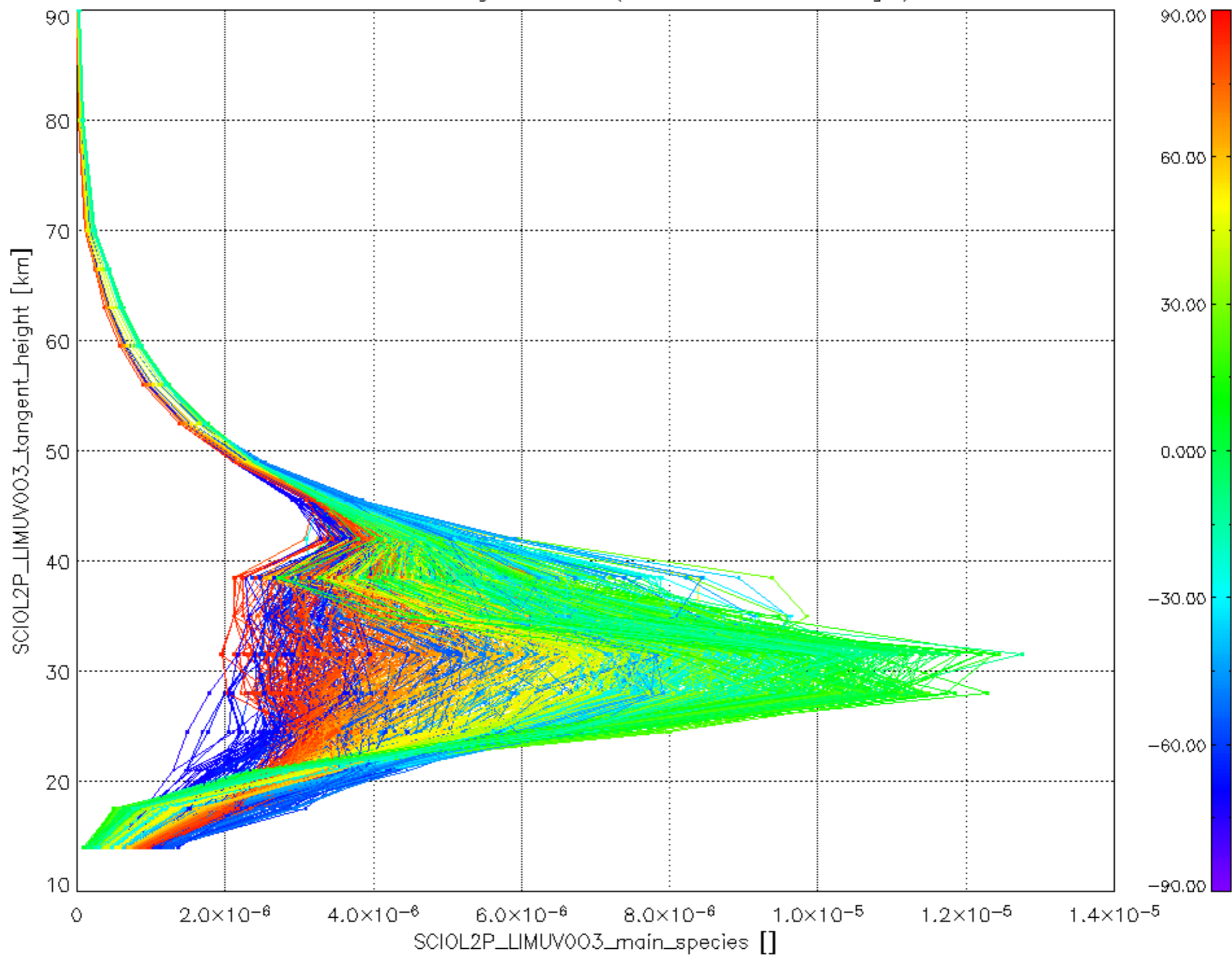
iCIOL2P\_NADUV1NO2\_amf\_gr for 04SEP2008 00:00:00 to 05SEP2008 00:00:00



iCIOL2P\_NADUV1NO2\_amf\_cl for 04SEP2008 00:00:00 to 05SEP2008 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).

