

## 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	02OCT2008 06:02:32
Data source version	SCIA-OL/3.01-R
Processing scope for products	14SEP2008 00:00:00 to 15SEP2008 00:00:00
Start time of first product within scope	13SEP2008 23:00:20
Stop time of last product within scope	15SEP2008 01:04:45
Total number of level 2 products	13
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__2PRDPA20080913_230020_000033702072_00073_34195_0756.N1</a>	13SEP2008 23:00:20	13SEP2008 23:56:31	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20080914_004057_000033732072_00074_34196_0758.N1</a>	14SEP2008 00:40:57	14SEP2008 01:37:10	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20080914_022133_000033252072_00074_34196_0757.N1</a>	14SEP2008 02:21:33	14SEP2008 03:16:58	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20080914_040209_000033812072_00075_34197_0759.N1</a>	14SEP2008 04:02:09	14SEP2008 04:58:31	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20080914_054246_000033252072_00077_34199_0760.N1</a>	14SEP2008 05:42:46	14SEP2008 06:38:12	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20080914_072323_000033812072_00078_34200_0761.N1</a>	14SEP2008 07:23:23	14SEP2008 08:19:44	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20080914_090359_000033252072_00079_34201_0762.N1</a>	14SEP2008 09:03:59	14SEP2008 09:59:24	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20080914_104435_000033812072_00080_34202_0763.N1</a>	14SEP2008 10:44:35	14SEP2008 11:40:57	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20080914_122512_000033252072_00081_34203_0764.N1</a>	14SEP2008 12:25:12	14SEP2008 13:20:37	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20080914_140548_000033812072_00082_34204_0765.N1</a>	14SEP2008 14:05:48	14SEP2008 15:02:10	0	GOOD
10	<a href="#">SCI_OL__2PRDPA20080914_172721_000033522072_00084_34206_0767.N1</a>	14SEP2008 17:27:21	14SEP2008 18:23:13	0	GOOD
11	<a href="#">SCI_OL__2PRDPA20080914_223311_000030812072_00087_34209_0789.N1</a>	14SEP2008 22:33:11	14SEP2008 23:24:33	0	GOOD
12	<a href="#">SCI_OL__2PRDPA20080915_001432_000030132072_00088_34210_0791.N1</a>	15SEP2008 00:14:32	15SEP2008 01:04:45	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: 113100

Total number of cloud data DSRs with good quality flag (=0): 113100 (100.0 %)

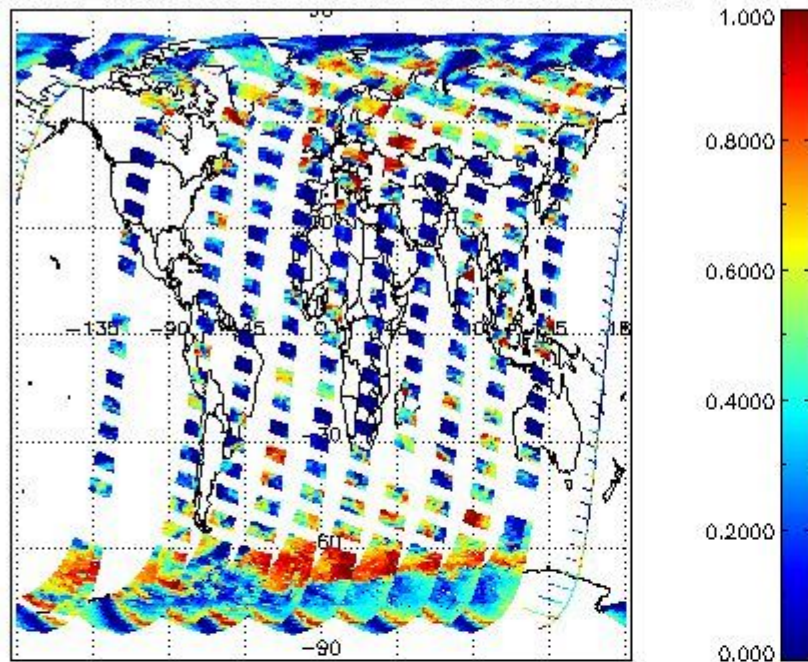
Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	113100	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	113100	0.18046	0.12500	0.12500	0.25000	0.062102	s
CL_FRAC	113100	0.36685	0.33104	0.0000	1.0000	0.29496	-
CL_FRAC_ERR	113100	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	113100	5.7747	4.0000	4.0000	8.0000	1.9873	
PMD_READ_CL[0]	113100	0.15929	0.0000	0.0000	8.0000	0.90303	-
PMD_READ_CL[1]	113100	1.2801	0.0000	0.0000	8.0000	2.4921	-
CL_TOP_HEIGHT	97719	3.7965	2.1171	0.0000	17.000	4.0241	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	97719	56.635	55.991	0.0000	101.00	42.811	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	113100	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	113100	11001011	11000100	11000000	11100000	3338.8	flags
AERO_ABSO_IND	113100	2.7723	3.3978	-1.4538	15.118	2.2220	
AERO_IND_DIAG	113100	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	113100	01010000	00000000	00000000	11000000	24273.	flags

### Time and geolocation plots:

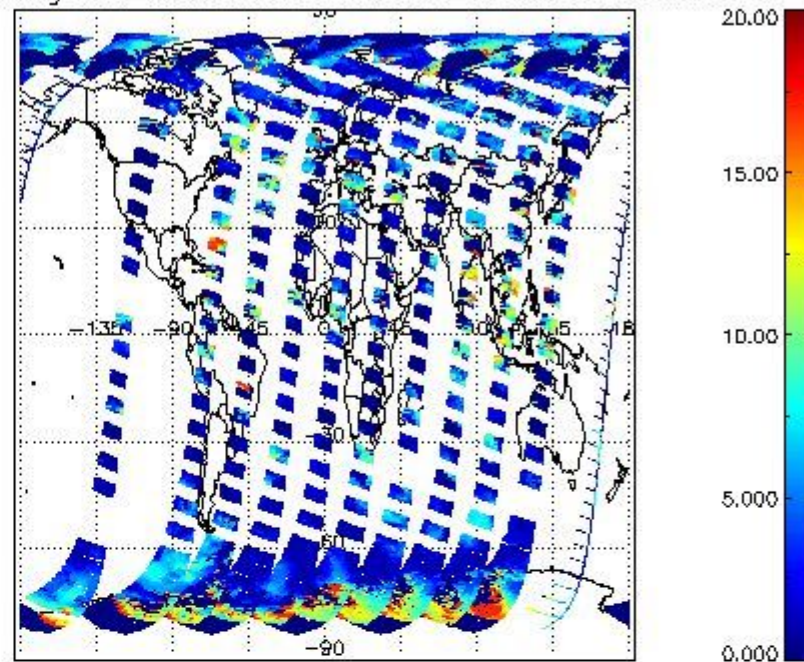
Plots are available for the following parameters:

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

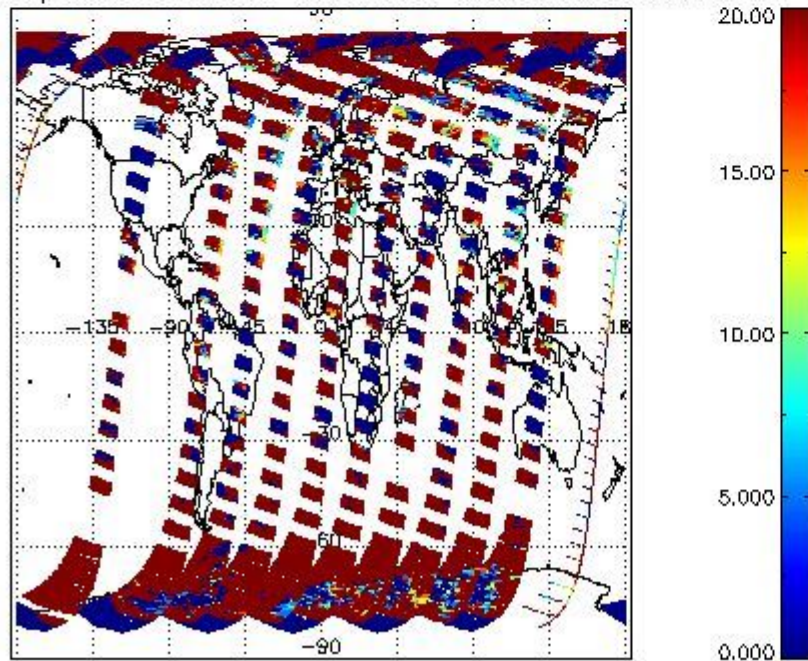
cL\_frac for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



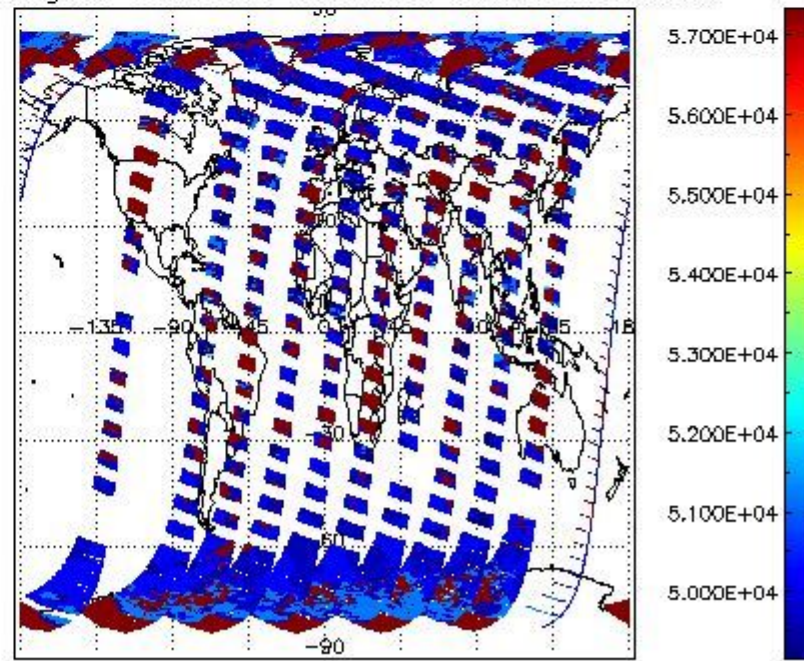
cL\_top\_height for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



cL\_opt\_depth for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



cloud\_flags for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



## 2.2.2 Nadir

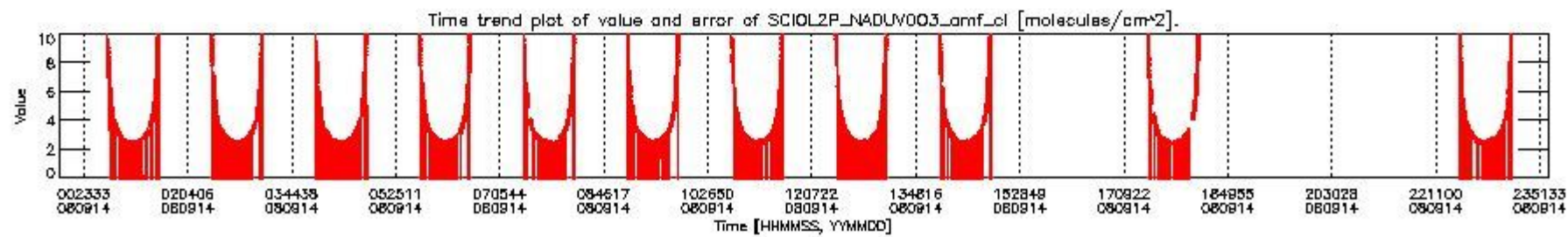
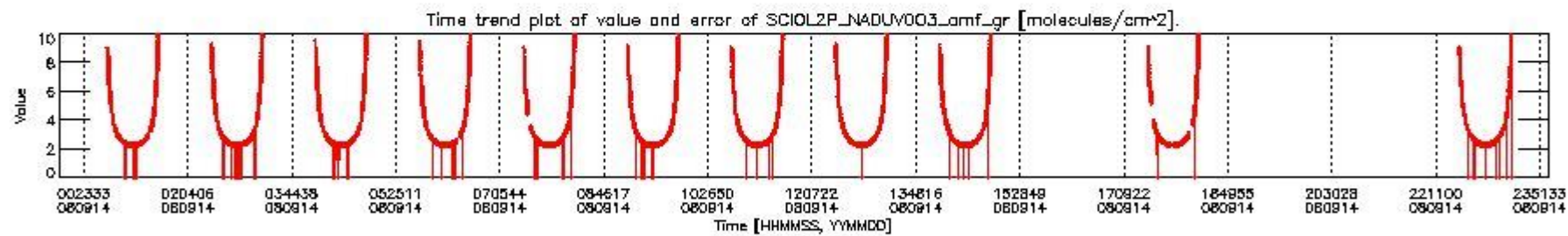
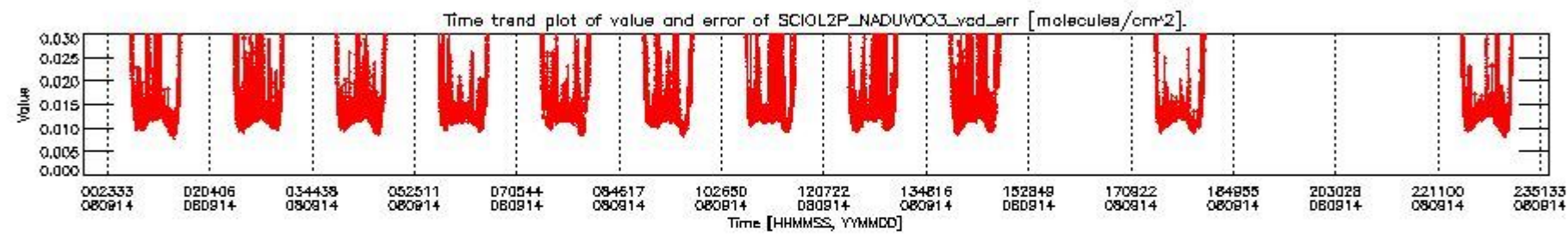
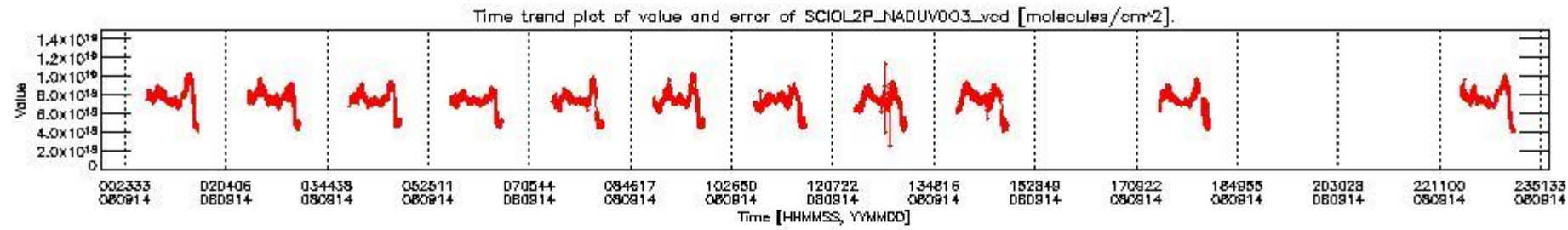
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

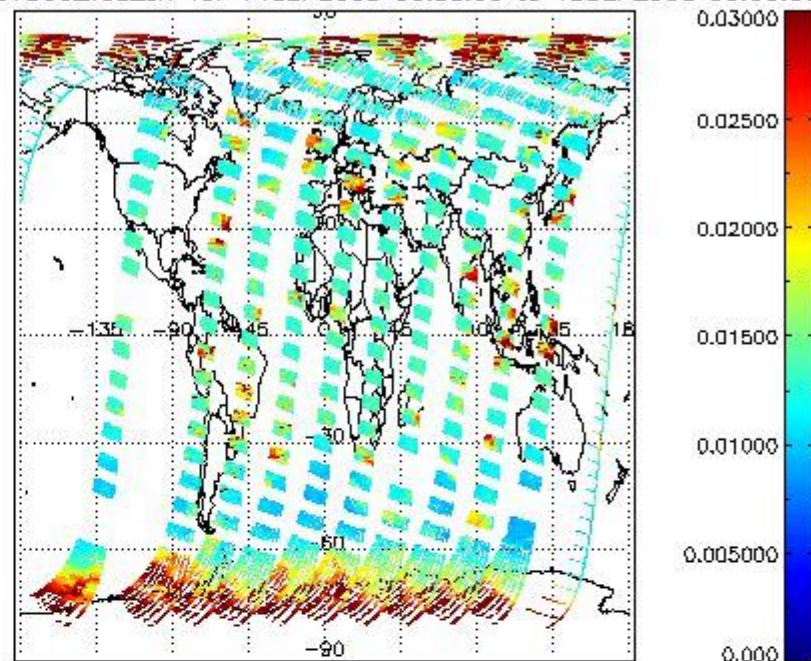
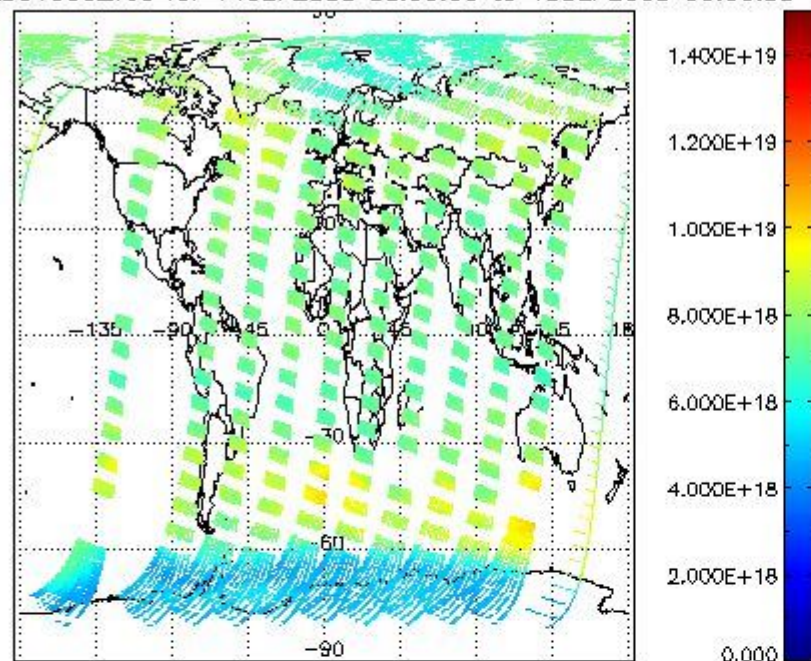
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr

3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

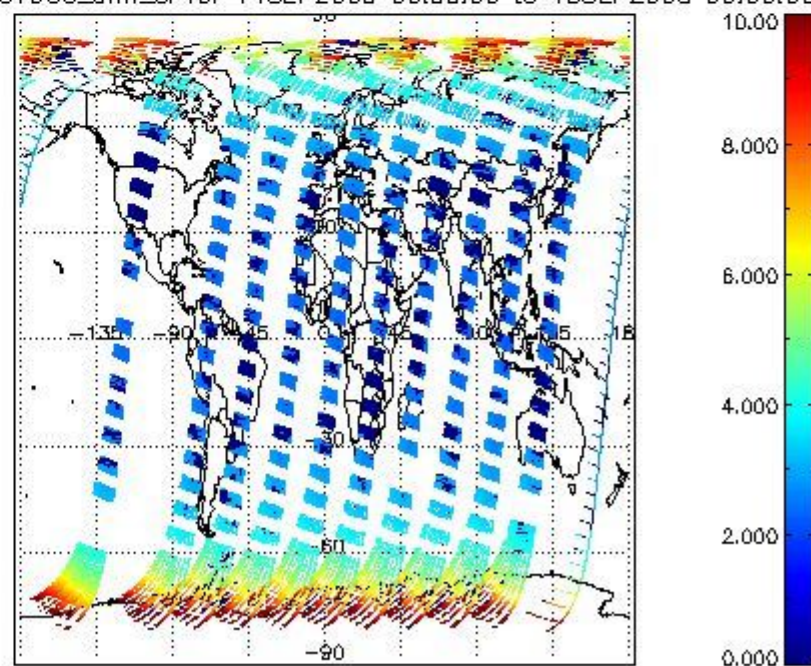
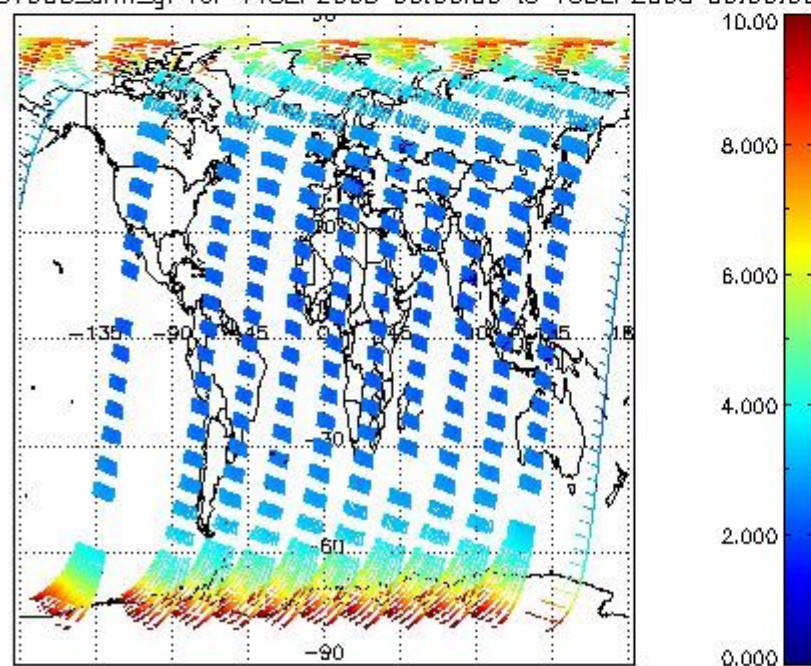
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing\_start time as suggested by the product sensing\_start time in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

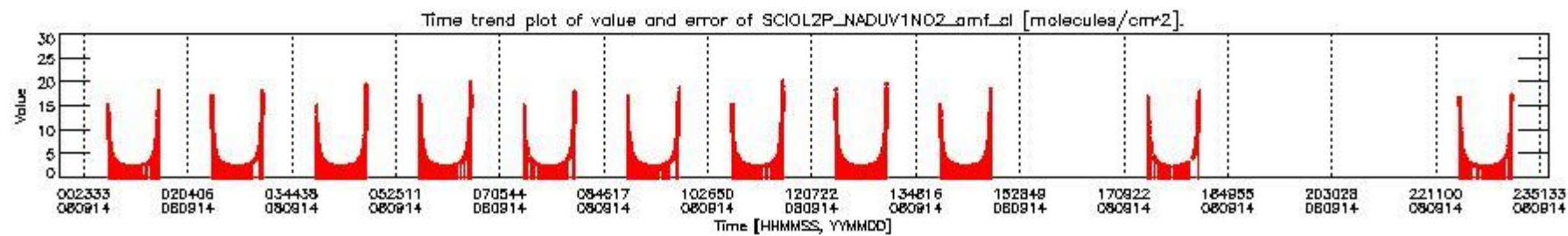
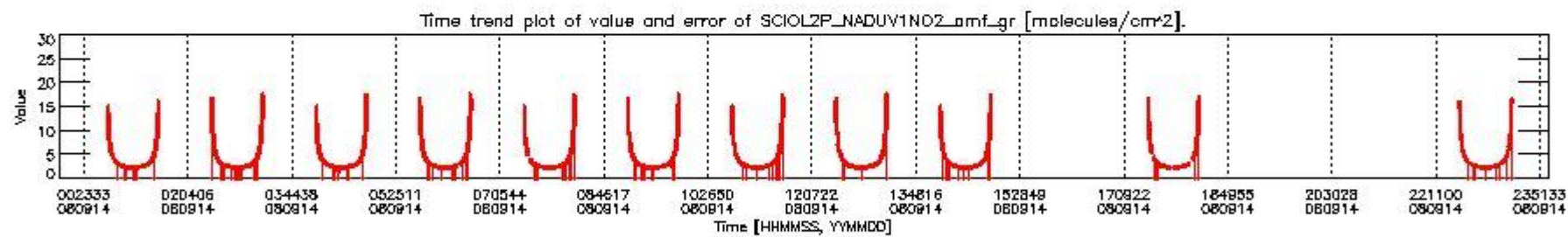
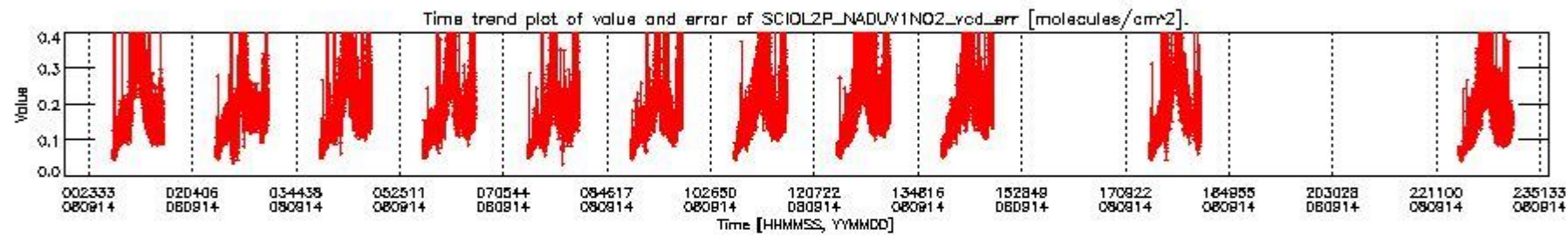
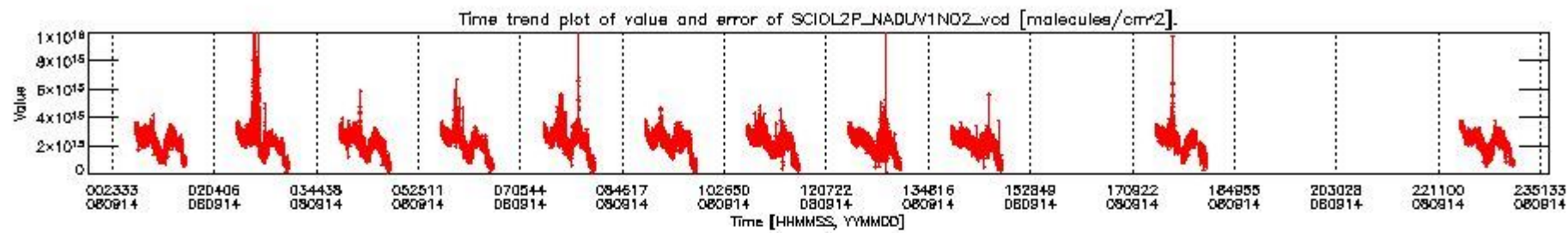


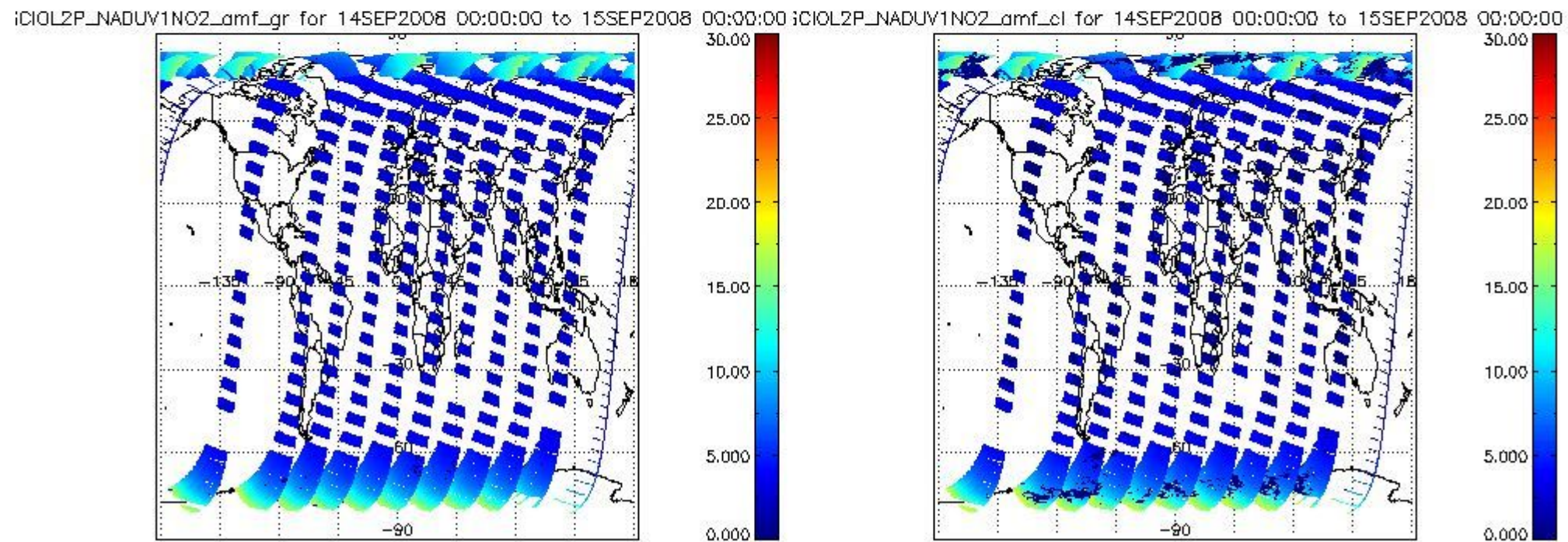
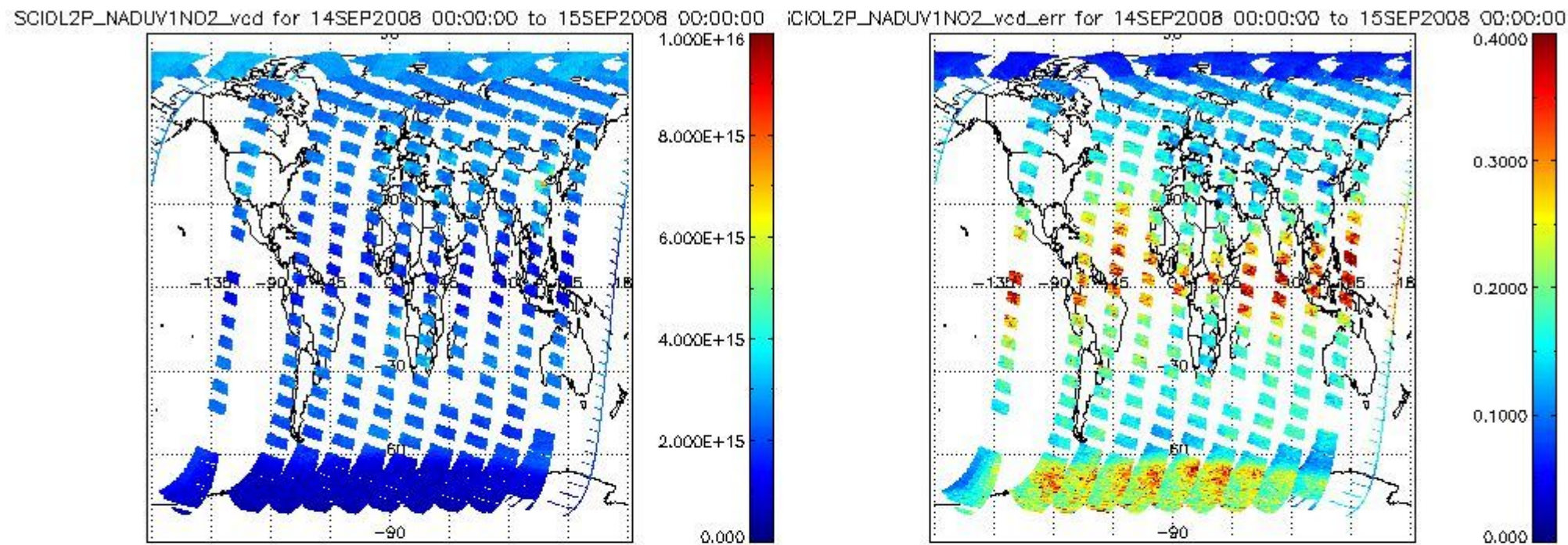
SCIOL2P\_NADUV003\_vcd for 14SEP2008 00:00:00 to 15SEP2008 00:00:00    SCIOL2P\_NADUV003\_vcd\_err for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



SCIOL2P\_NADUV003\_amf\_gr for 14SEP2008 00:00:00 to 15SEP2008 00:00:00    SCIOL2P\_NADUV003\_amf\_cl for 14SEP2008 00:00:00 to 15SEP2008 00:00:00







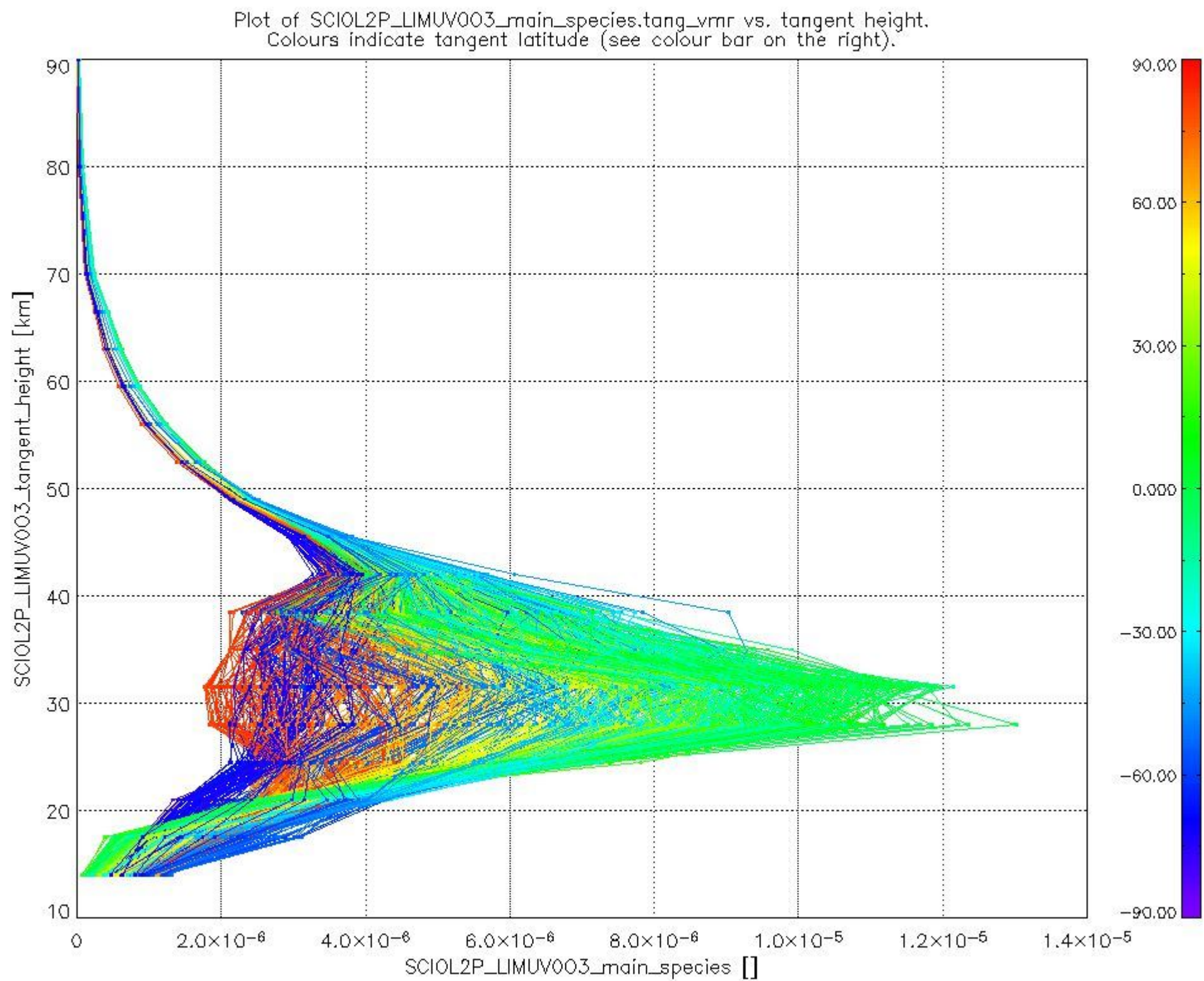
### 2.2.3 Limb

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:

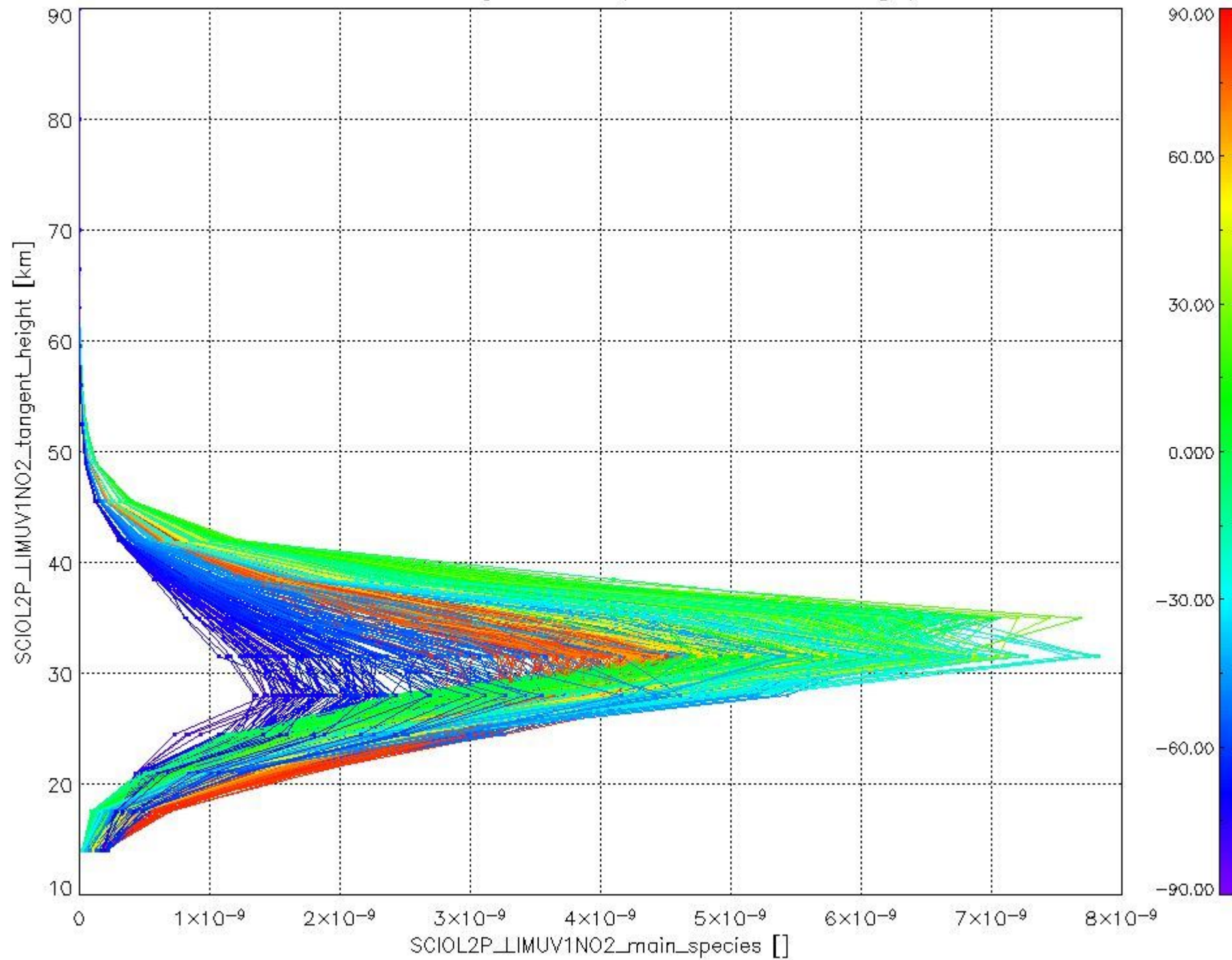
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

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





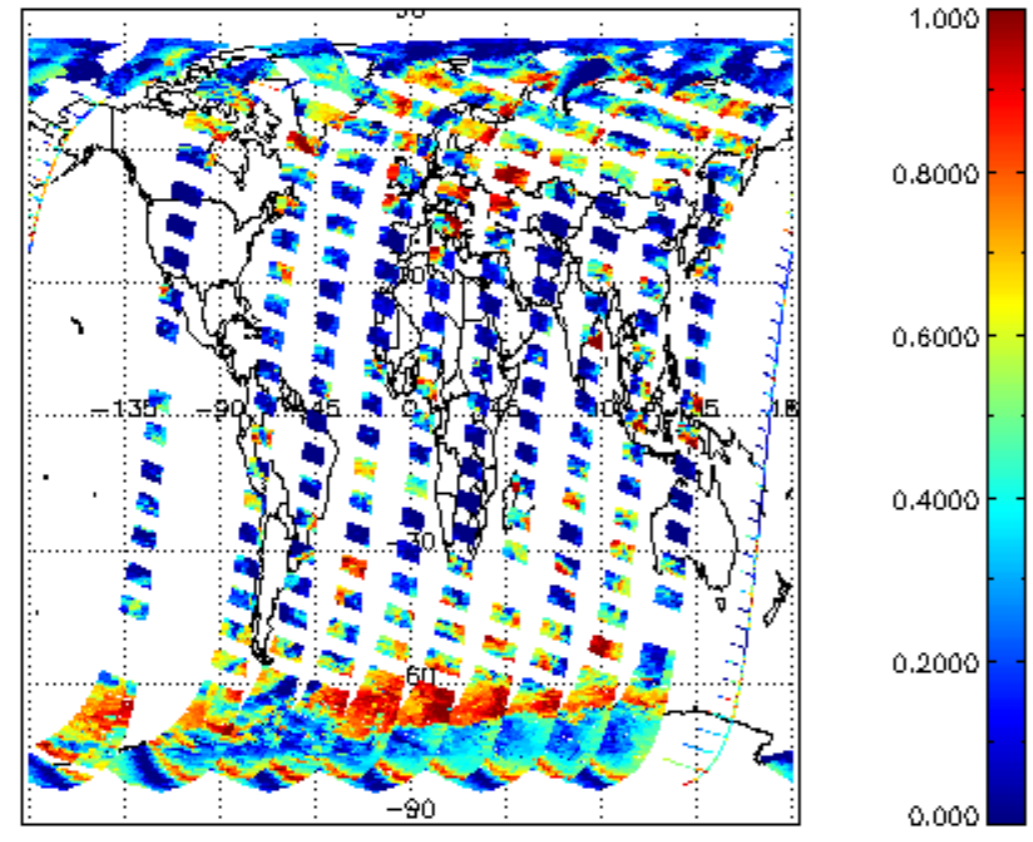
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



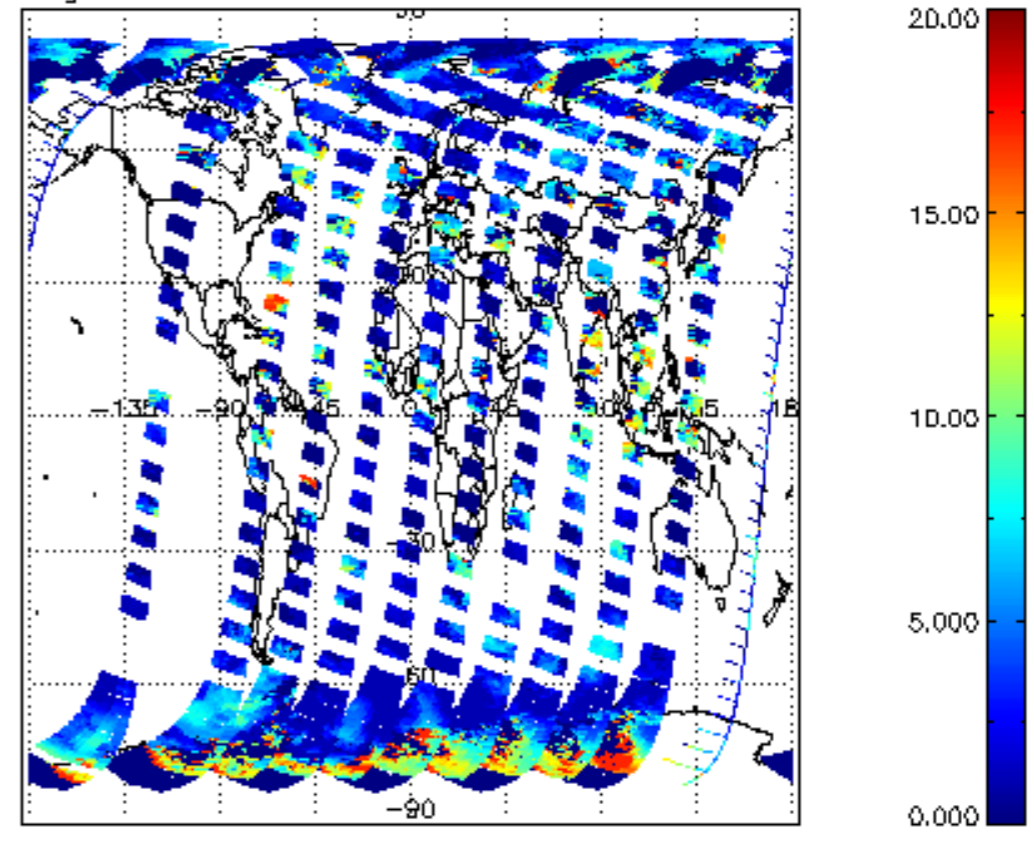
### 2.3 ADF monitoring

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

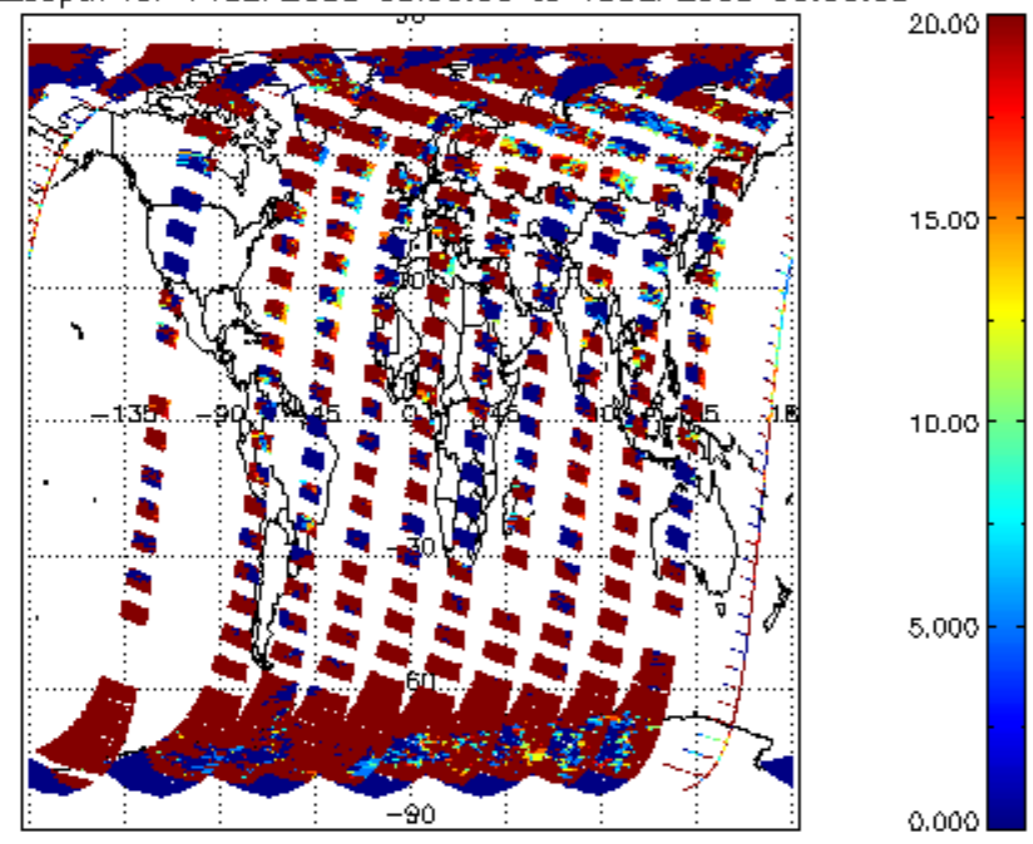
cL\_frac for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



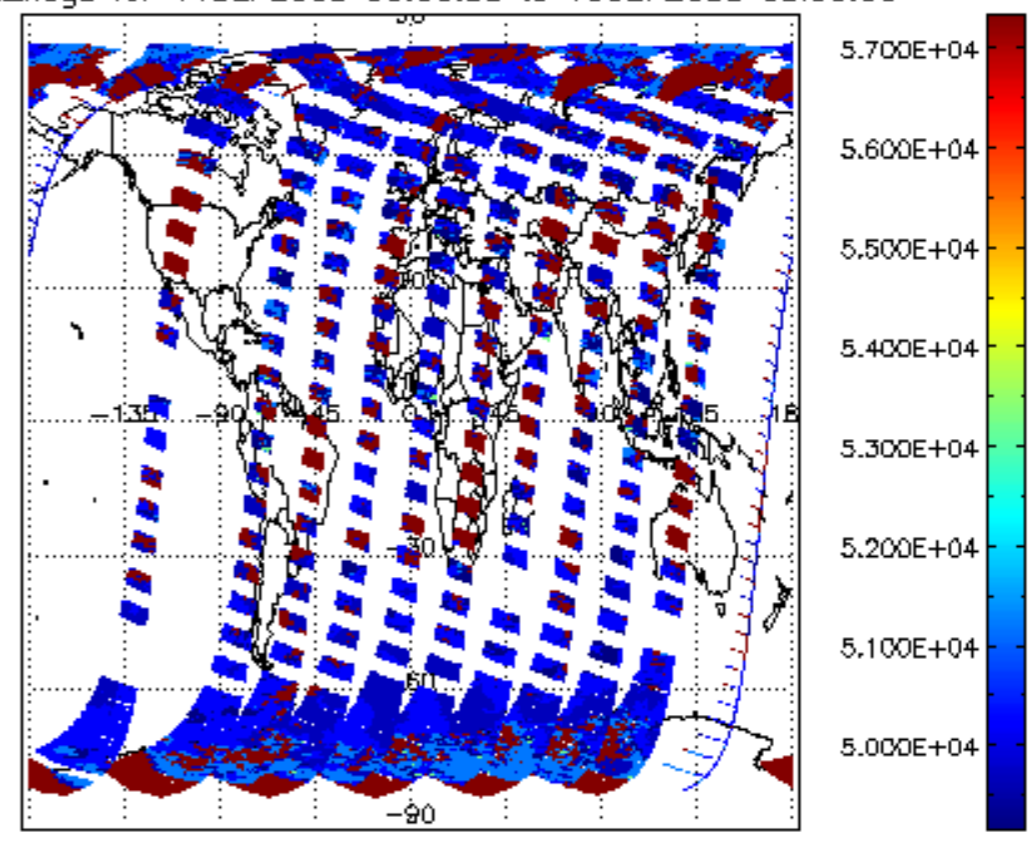
cL\_top\_height for 14SEP2008 00:00:00 to 15SEP2008 00:00:00

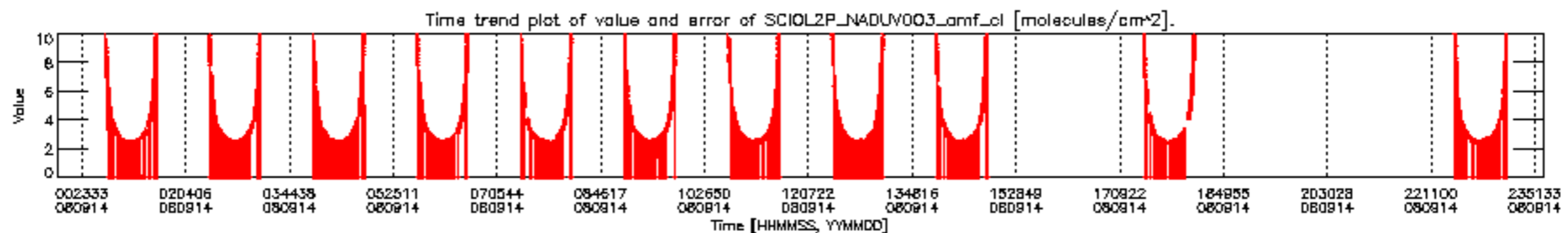
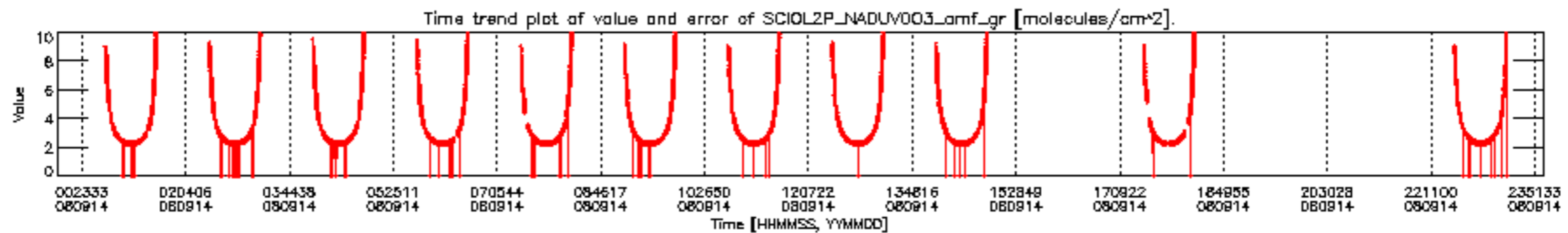
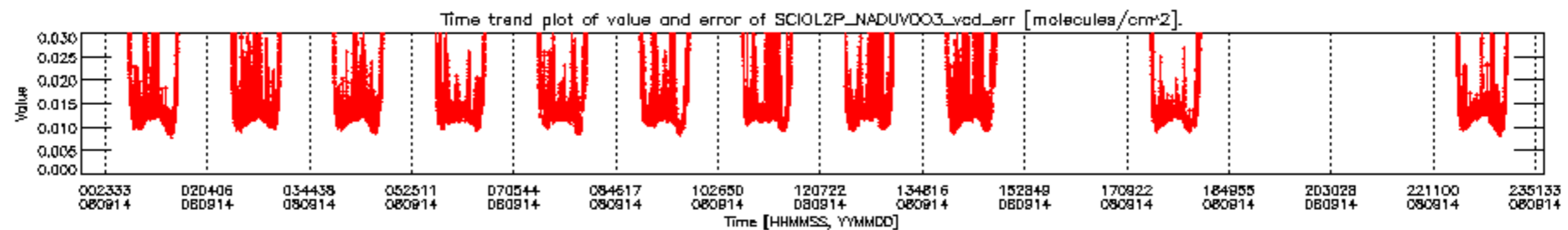
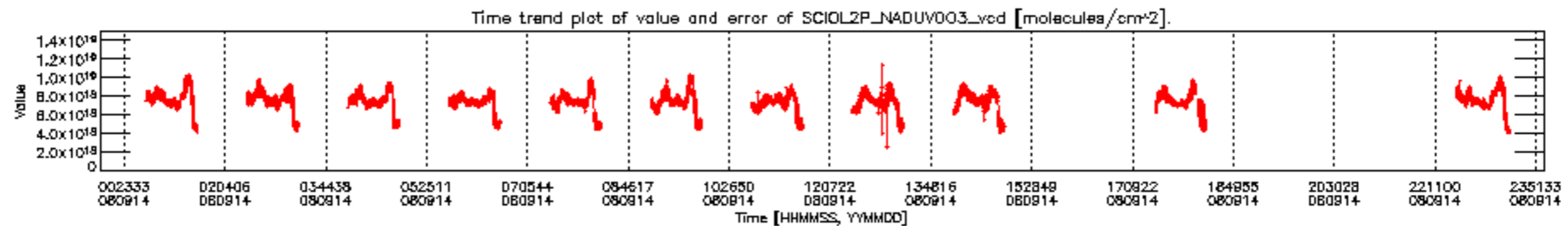


cL\_opt\_depth for 14SEP2008 00:00:00 to 15SEP2008 00:00:00

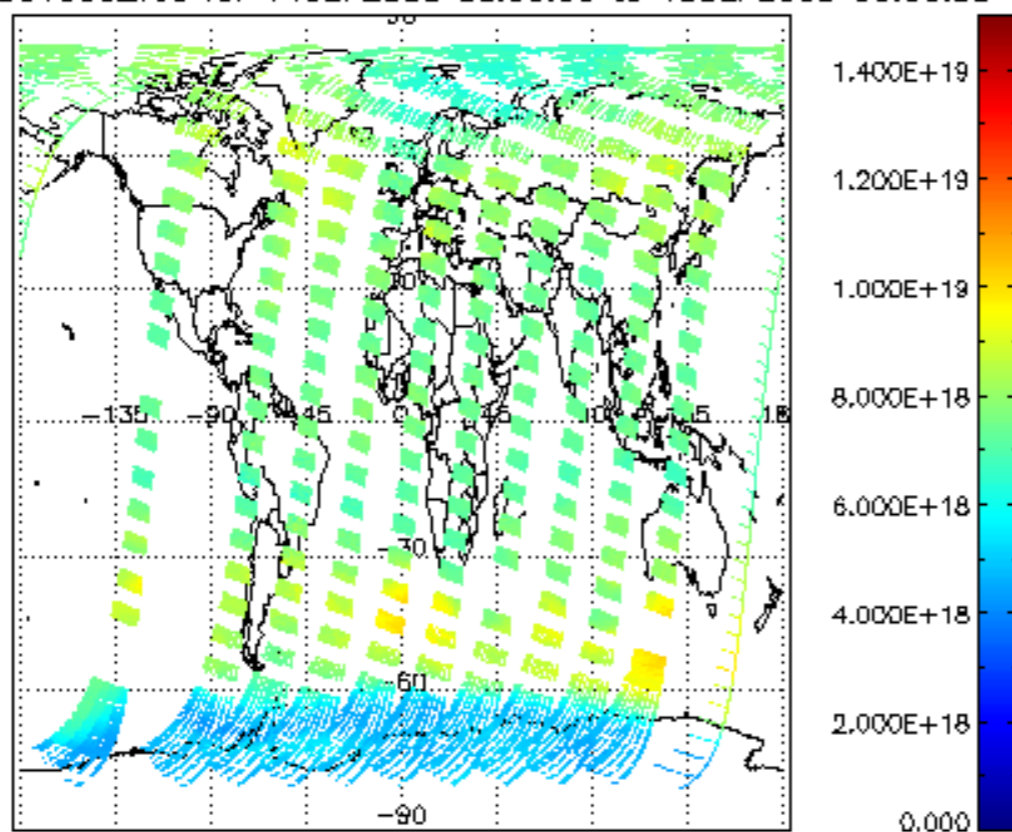


cloud\_flags for 14SEP2008 00:00:00 to 15SEP2008 00:00:00

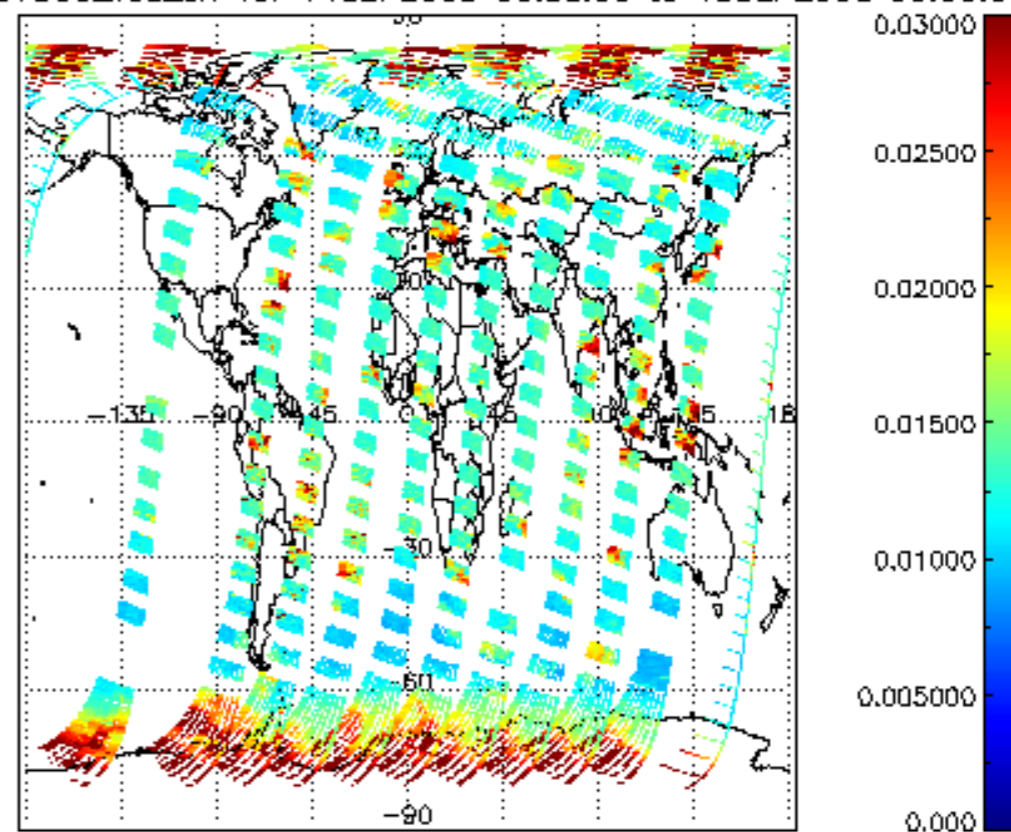




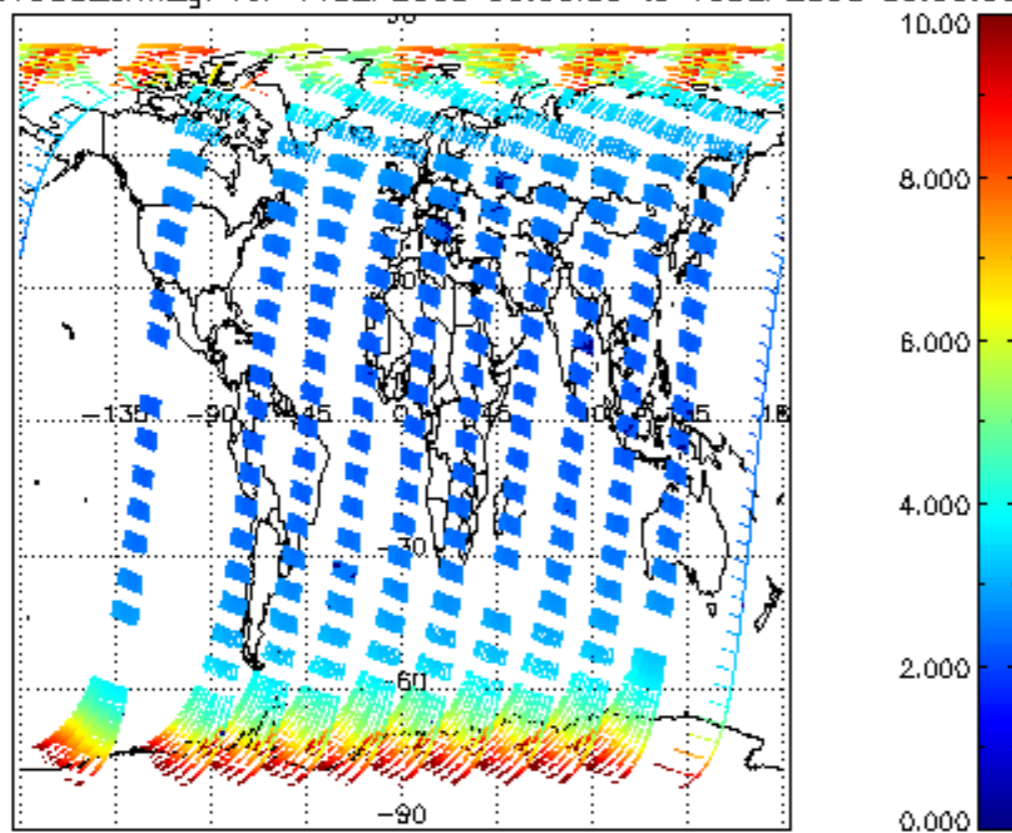
SCIOL2P\_NADUV003\_vcd for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



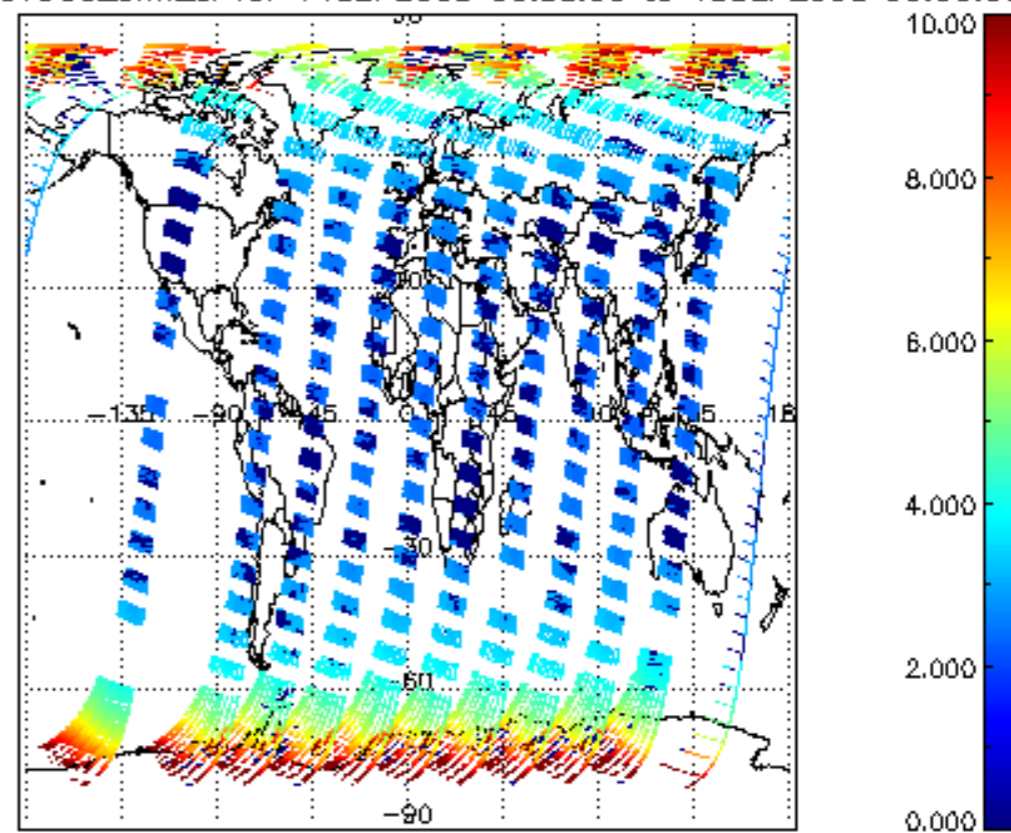
SCIOL2P\_NADUV003\_vcd\_err for 14SEP2008 00:00:00 to 15SEP2008 00:00:00

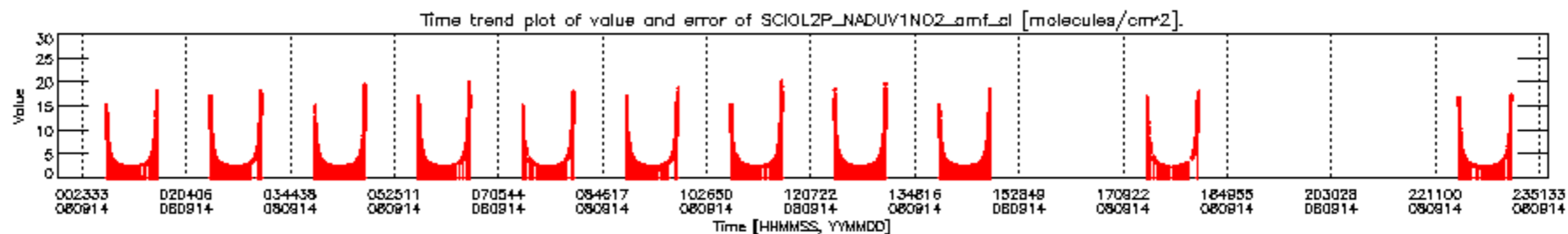
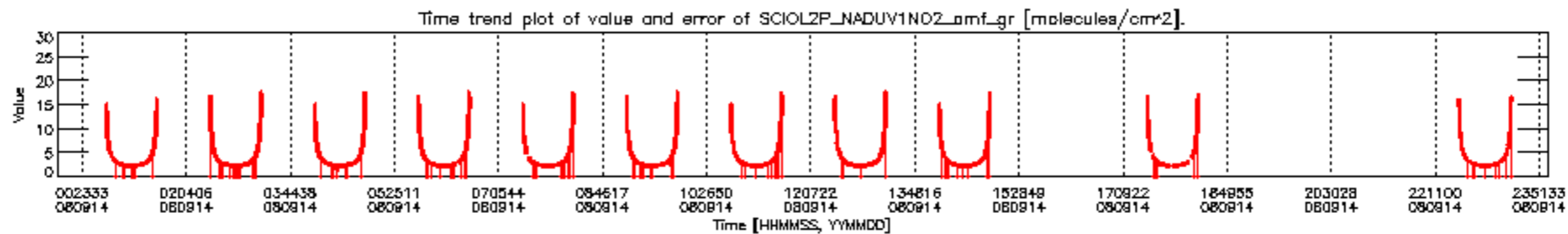
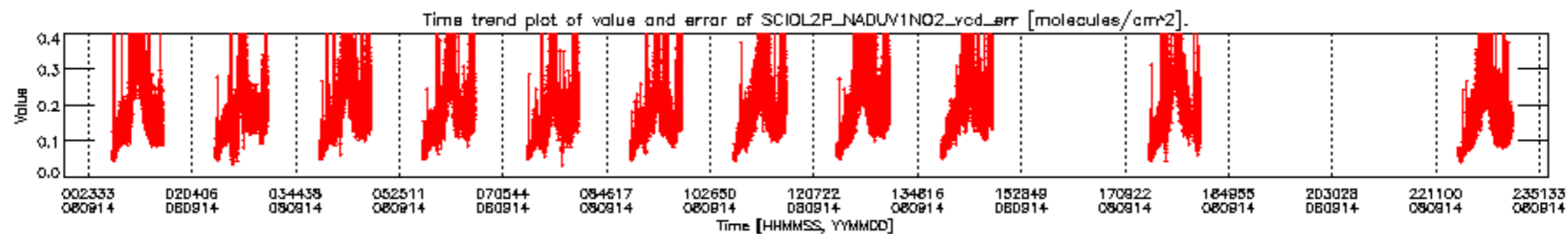
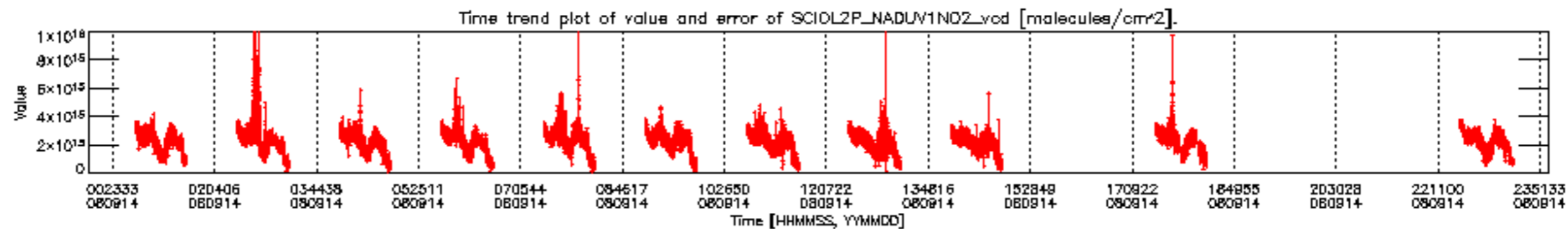


SCIOL2P\_NADUV003\_amf\_gr for 14SEP2008 00:00:00 to 15SEP2008 00:00:00

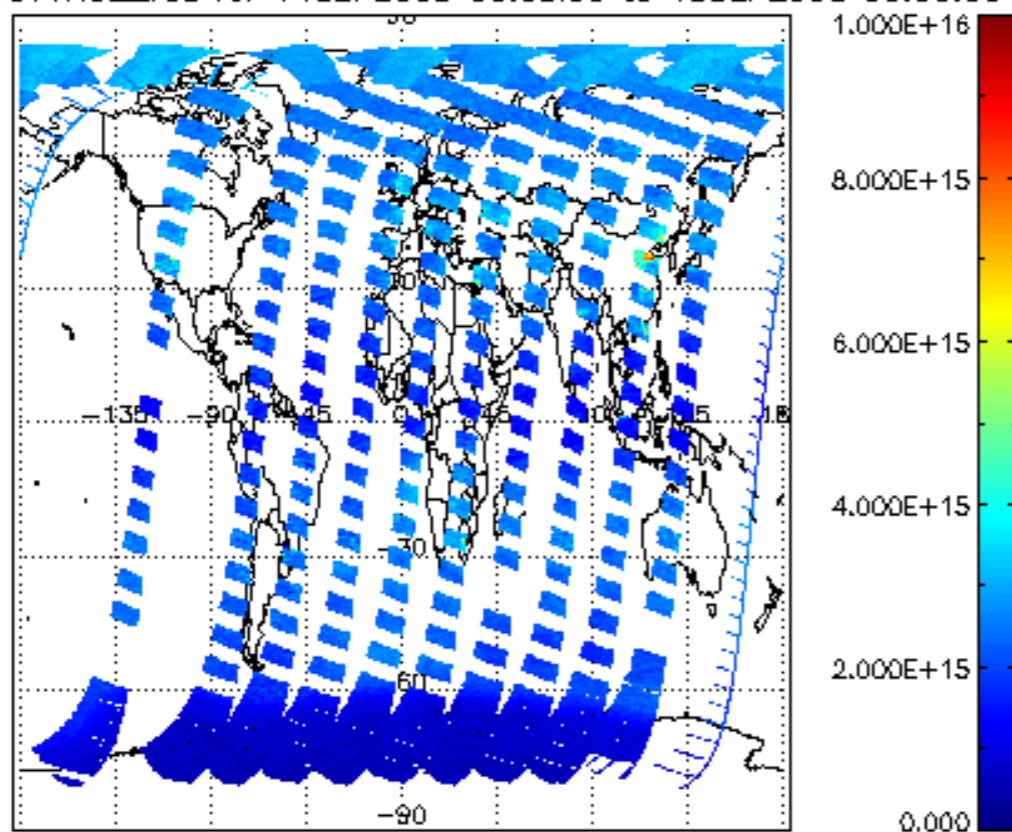


SCIOL2P\_NADUV003\_amf\_cl for 14SEP2008 00:00:00 to 15SEP2008 00:00:00

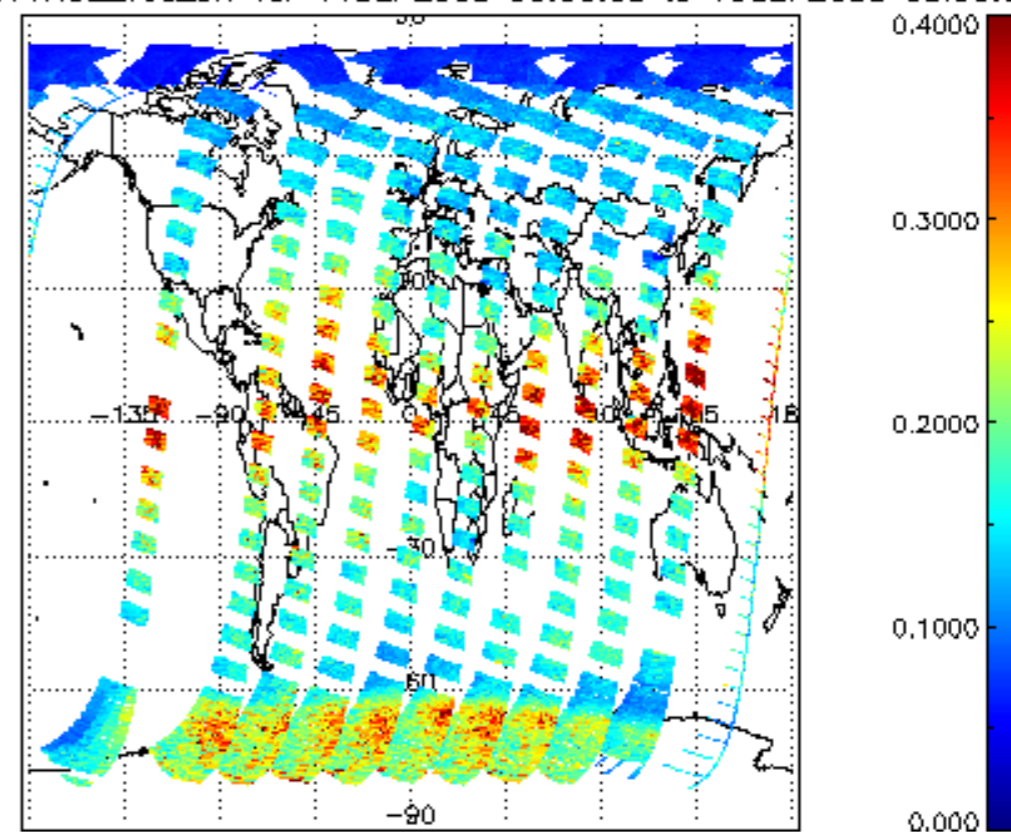




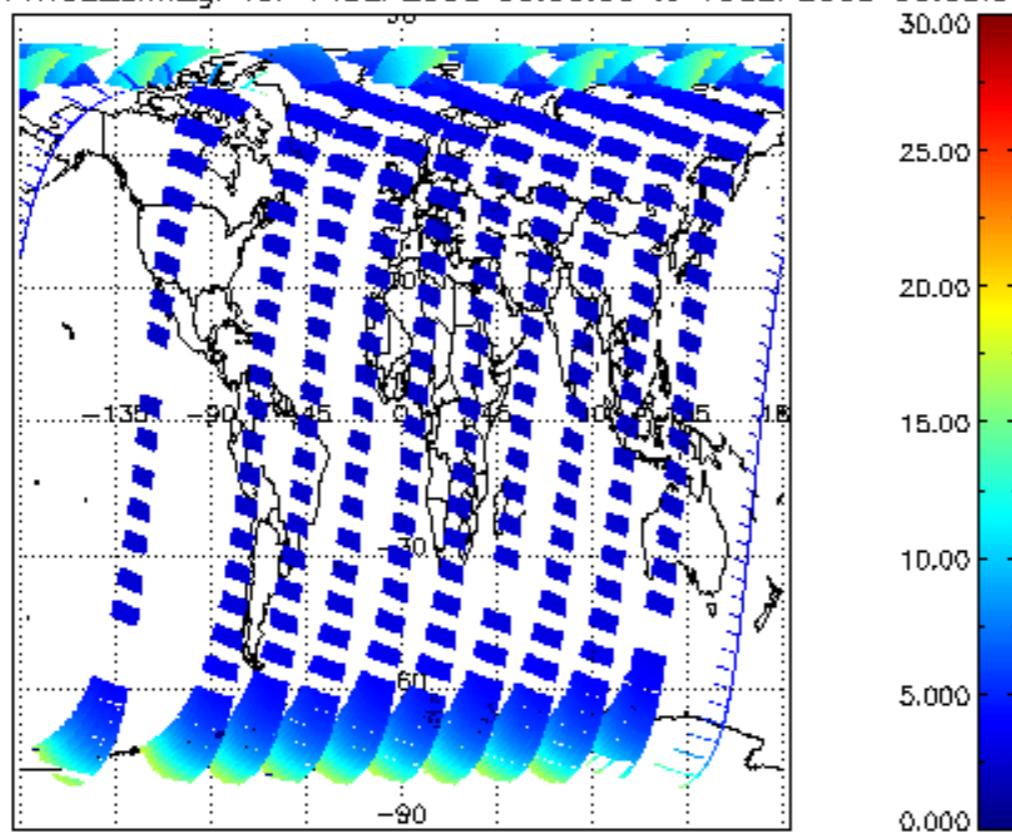
SCIOL2P\_NADUV1NO2\_vcd for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



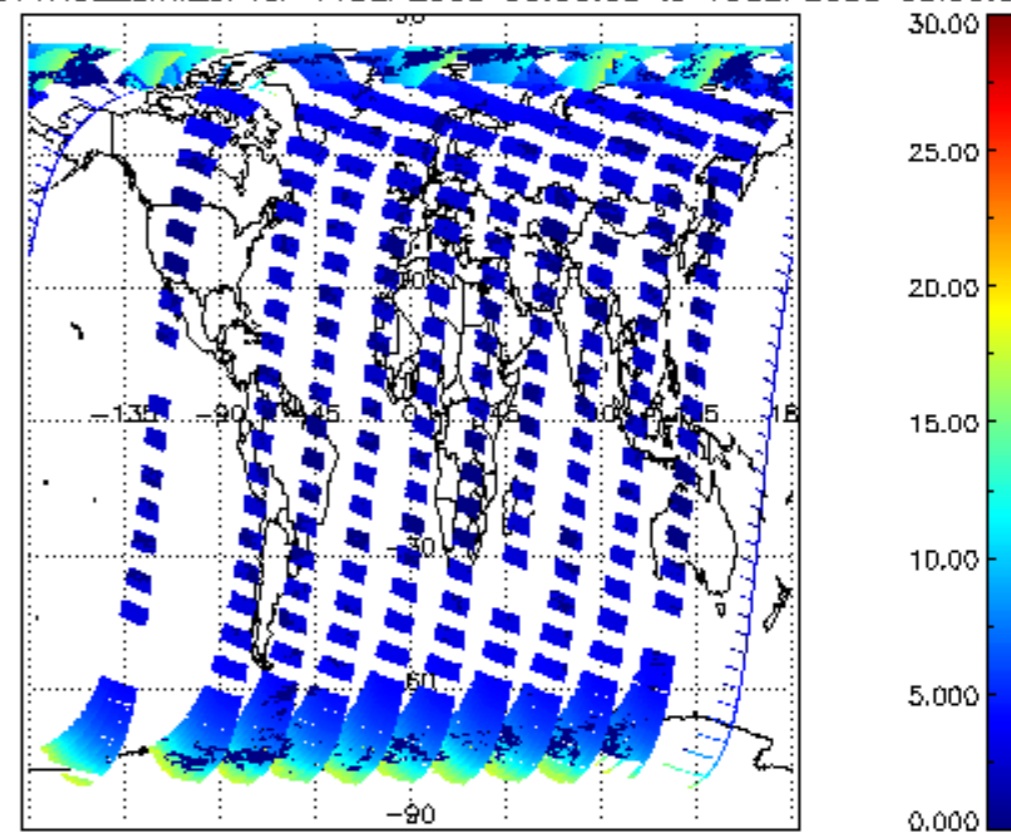
iCIOL2P\_NADUV1NO2\_vcd\_err for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



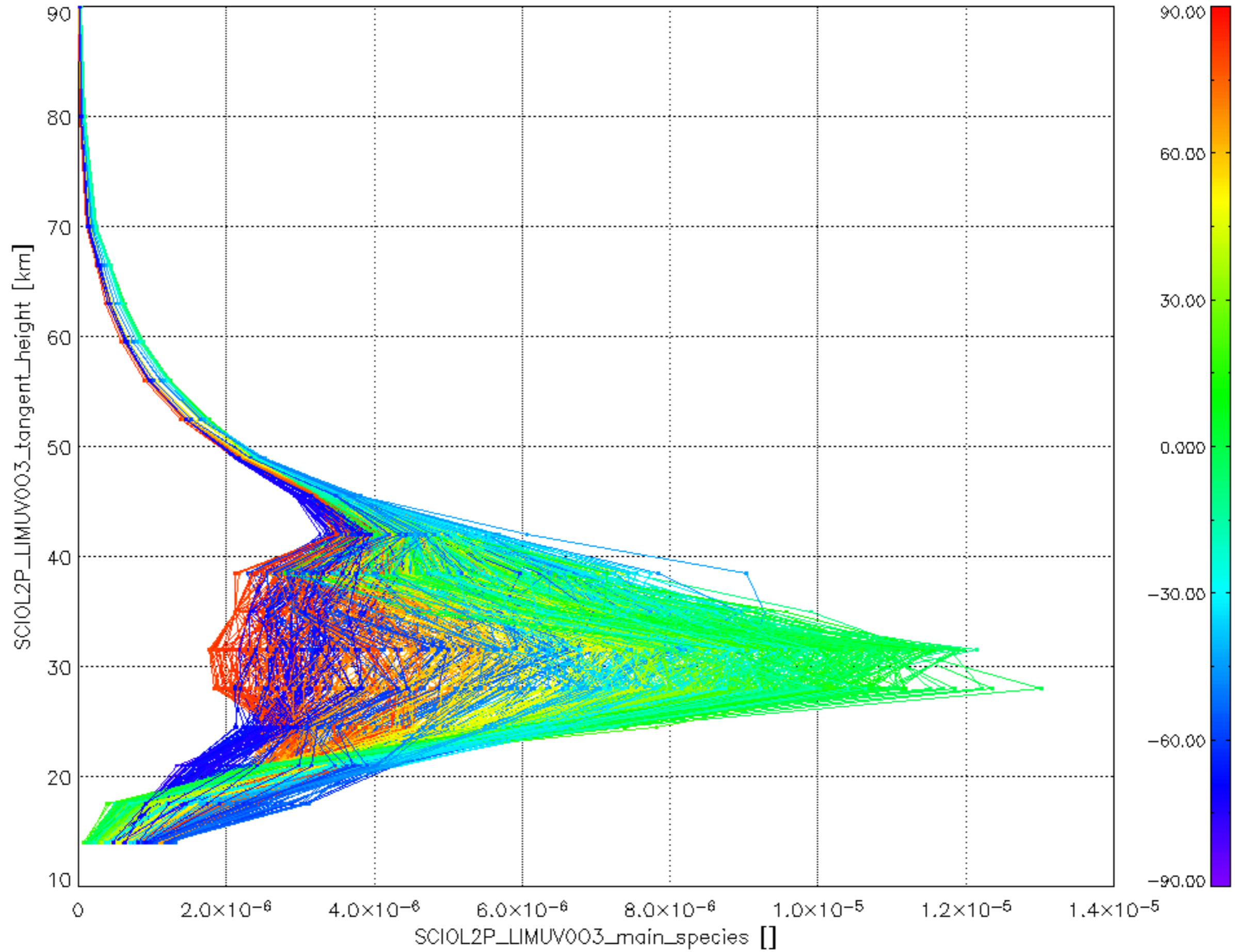
iCIOL2P\_NADUV1NO2\_amf\_gr for 14SEP2008 00:00:00 to 15SEP2008 00:00:00



iCIOL2P\_NADUV1NO2\_amf\_cl for 14SEP2008 00:00:00 to 15SEP2008 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).

