

## 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	20NOV2009 03:06:42
Data source version	SCIA-OL/3.01-R
Processing scope for products	02NOV2009 00:00:00 to 03NOV2009 00:00:00
Start time of first product within scope	01NOV2009 22:58:57
Stop time of last product within scope	03NOV2009 01:00:06
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.

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__2PRDPA20091101_225857_000030812083_00488_40121_5140.N1</a>	01NOV2009 22:58:57	01NOV2009 23:50:19	0	GOOD
1	<a href="#">SCI_OL__2PRDPA20091102_004018_000030132083_00489_40122_5141.N1</a>	02NOV2009 00:40:18	02NOV2009 01:30:31	0	GOOD
2	<a href="#">SCI_OL__2PRDPA20091102_021550_000033662083_00490_40123_5142.N1</a>	02NOV2009 02:15:50	02NOV2009 03:11:56	0	GOOD
3	<a href="#">SCI_OL__2PRDPA20091102_035626_000033682083_00491_40124_5143.N1</a>	02NOV2009 03:56:26	02NOV2009 04:52:35	0	GOOD
4	<a href="#">SCI_OL__2PRDPA20091102_053703_000033702083_00492_40125_5145.N1</a>	02NOV2009 05:37:03	02NOV2009 06:33:13	0	GOOD
5	<a href="#">SCI_OL__2PRDPA20091102_071739_000033722083_00493_40126_5144.N1</a>	02NOV2009 07:17:39	02NOV2009 08:13:51	0	GOOD
6	<a href="#">SCI_OL__2PRDPA20091102_085815_000033732083_00494_40127_5146.N1</a>	02NOV2009 08:58:15	02NOV2009 09:54:29	0	GOOD
7	<a href="#">SCI_OL__2PRDPA20091102_103851_000033752083_00495_40128_5147.N1</a>	02NOV2009 10:38:51	02NOV2009 11:35:07	0	GOOD
8	<a href="#">SCI_OL__2PRDPA20091102_121928_000033762083_00496_40129_5148.N1</a>	02NOV2009 12:19:28	02NOV2009 13:15:45	0	GOOD
9	<a href="#">SCI_OL__2PRDPA20091102_140004_000033782083_00497_40130_5149.N1</a>	02NOV2009 14:00:04	02NOV2009 14:56:22	0	GOOD
10	<a href="#">SCI_OL__2PRDPA20091102_154040_000033792083_00498_40131_5150.N1</a>	02NOV2009 15:40:40	02NOV2009 16:37:00	0	GOOD
11	<a href="#">SCI_OL__2PRDPA20091102_172137_000033092083_00499_40132_5151.N1</a>	02NOV2009 17:21:37	02NOV2009 18:16:47	0	GOOD
12	<a href="#">SCI_OL__2PRDPA20091102_190214_000033612083_00500_40133_5152.N1</a>	02NOV2009 19:02:14	02NOV2009 19:58:15	0	GOOD
13	<a href="#">SCI_OL__2PRDPA20091102_204230_000033822083_00501_40134_5153.N1</a>	02NOV2009 20:42:30	02NOV2009 21:38:52	0	GOOD
14	<a href="#">SCI_OL__2PRDPA20091102_222306_000033832084_00001_40135_5154.N1</a>	02NOV2009 22:23:06	02NOV2009 23:19:29	0	GOOD
15	<a href="#">SCI_OL__2PRDPA20091103_000342_000033832084_00002_40136_5155.N1</a>	03NOV2009 00:03:42	03NOV2009 01:00:06	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: 139360

Total number of cloud data DSRs with good quality flag (=0): 139360 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	139360	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	139360	0.17724	0.12500	0.12500	0.25000	0.061652	s
CL_FRAC	139360	0.35652	0.32854	0.0000	1.0000	0.28986	-
CL_FRAC_ERR	139360	0.0000	0.0000	0.0000	0.0000	0.0000	%
PMD_READ	139360	5.6716	4.0000	4.0000	8.0000	1.9729	
PMD_READ_CL[0]	139360	0.20276	0.0000	0.0000	8.0000	0.98997	-
PMD_READ_CL[1]	139360	1.3825	0.0000	0.0000	8.0000	2.5626	-
CL_TOP_HEIGHT	113342	3.8238	2.2870	0.0000	17.000	4.0904	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	113342	49.850	39.675	0.0000	101.00	40.978	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	139360	11100000	11100000	11100000	11100000	0.0000	flags
CLOUD_FLAGS	139360	11001101	11000100	11000000	11100000	3542.0	flags
AERO_ABSO_IND	139360	4.0028	4.7573	0.0000	17.567	2.8582	
AERO_IND_DIAG	139360	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	139360	01011100	00000000	00000000	11000000	24563.	flags

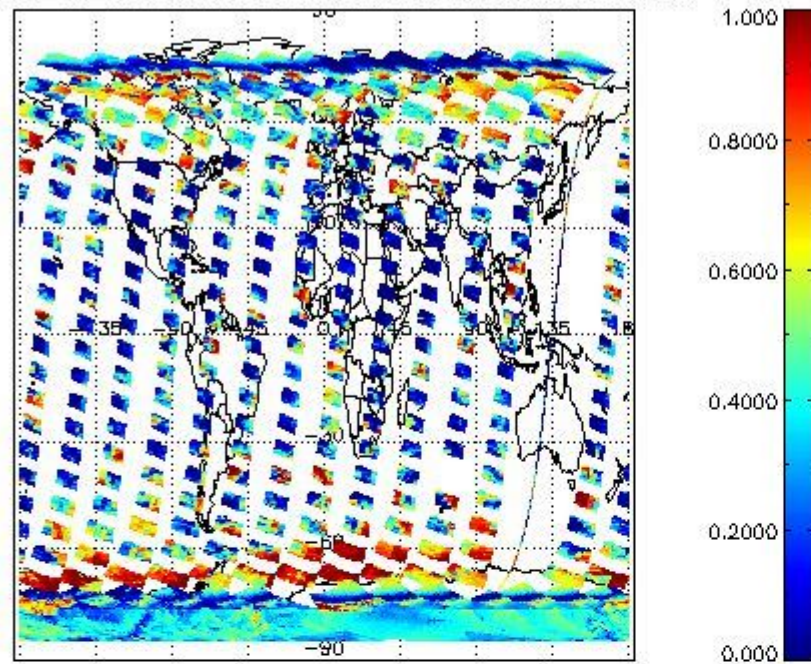
### Time and geolocation plots:

Plots are available for the following parameters:

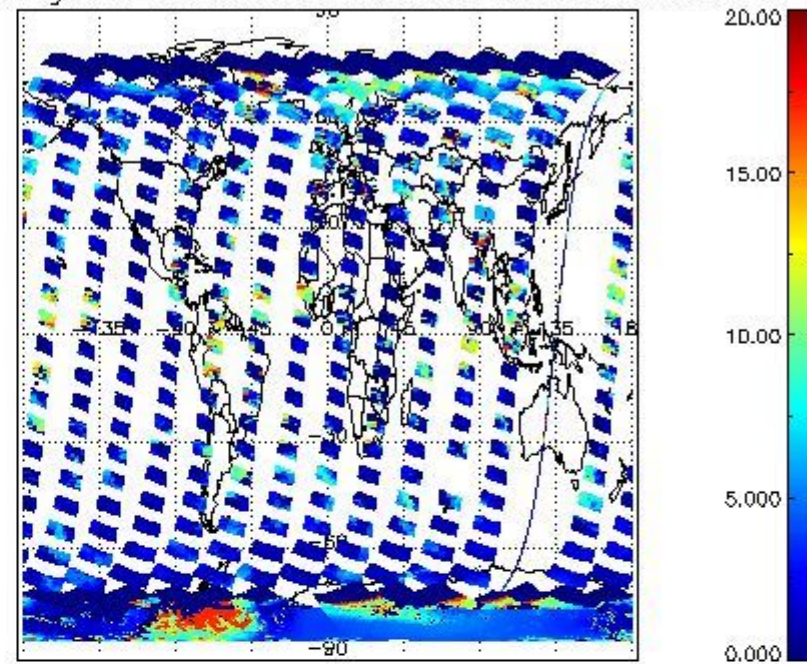
Number	Data item ID
0	cl_frac
1	cl_top_height
2	cl_opt_depth
3	cloud_flags



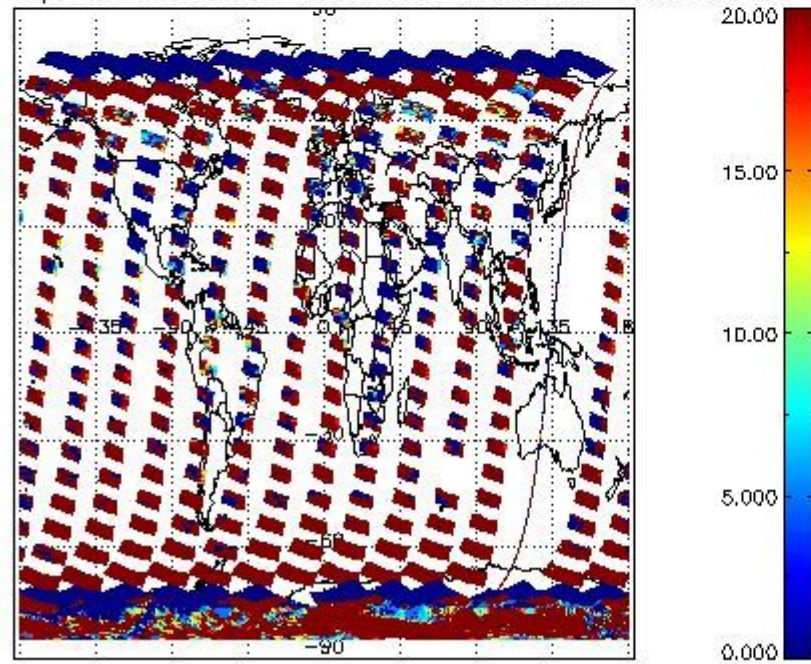
cLfrac for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



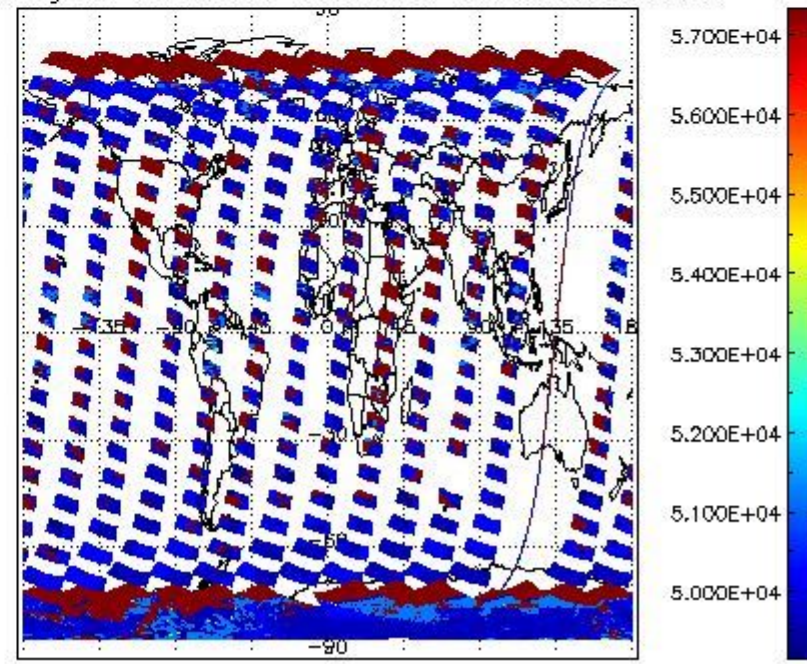
cL\_top\_height for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



cLopt\_depth for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



cloud\_flags for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



## 2.2.2 Nadir

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

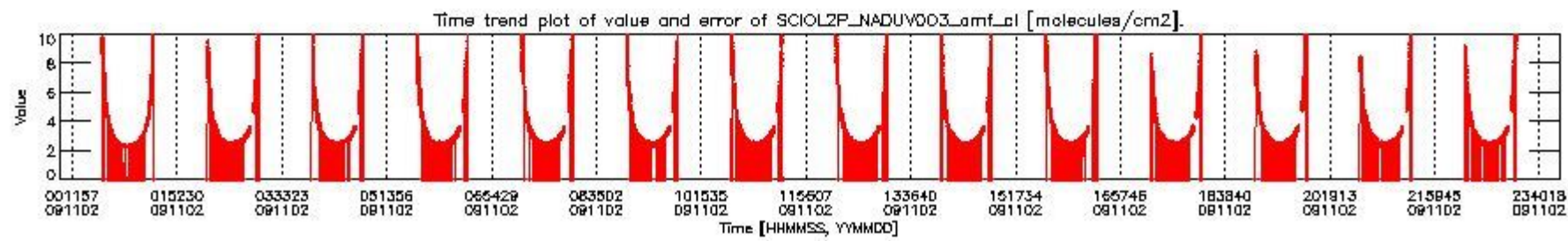
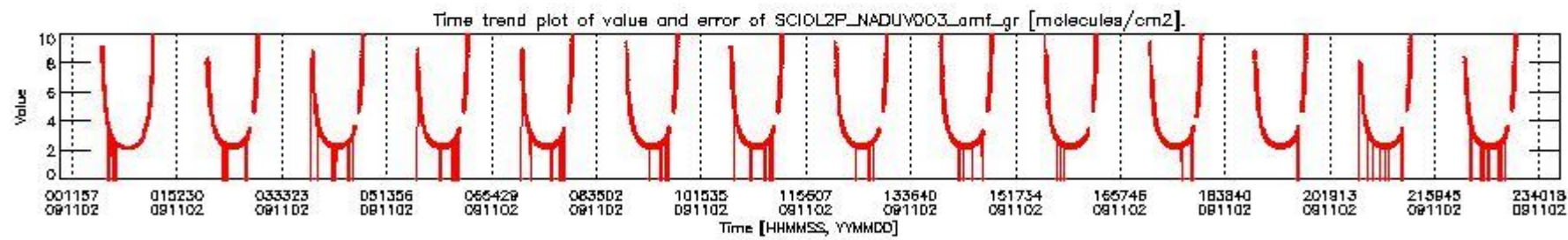
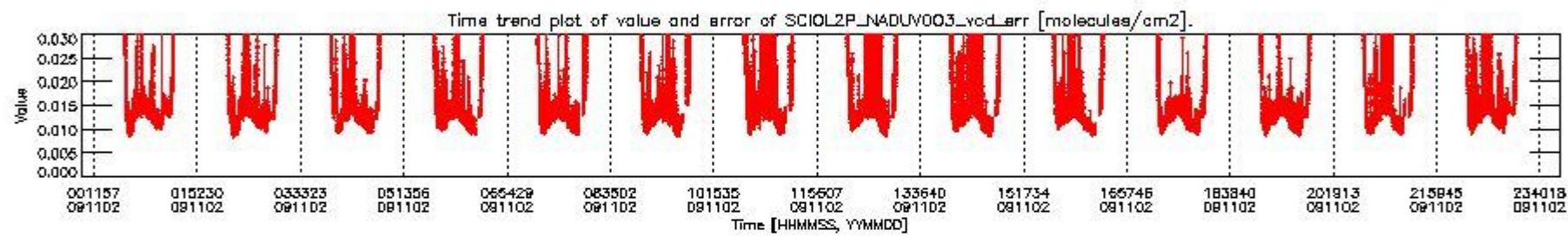
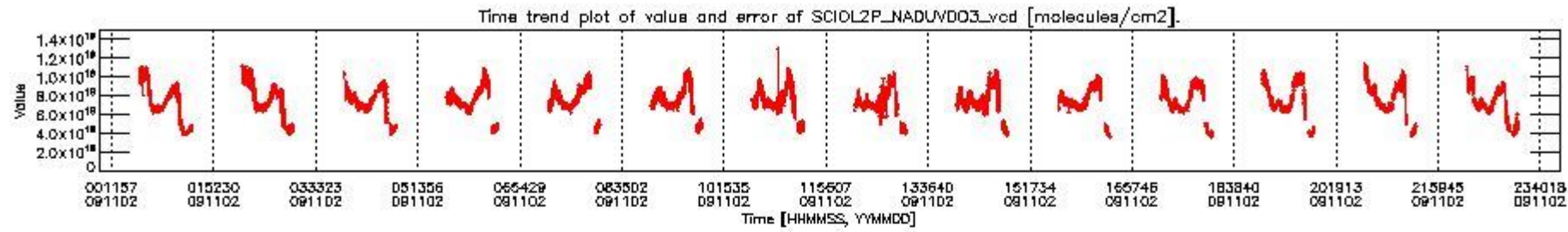
The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr



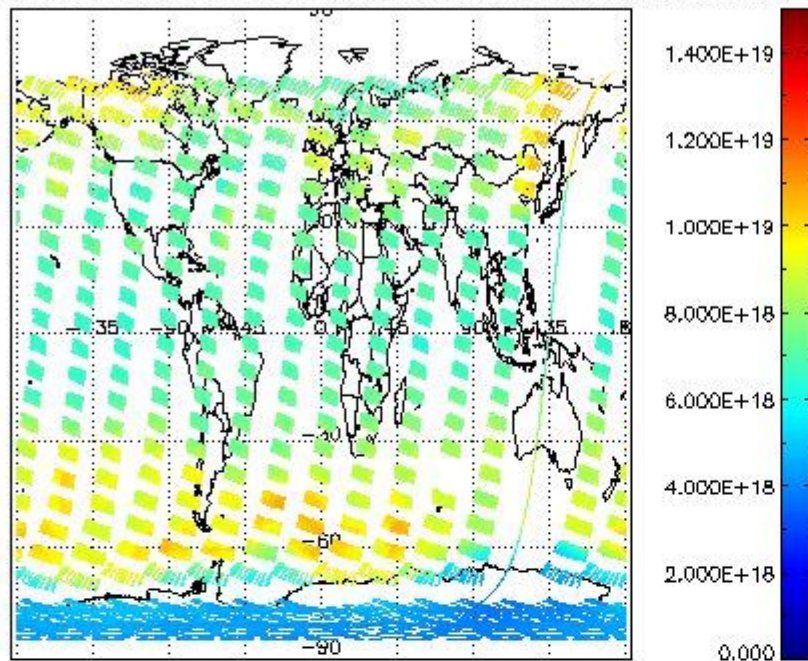
3	SCIOL2P_NADUV003_amf_cl
4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

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.

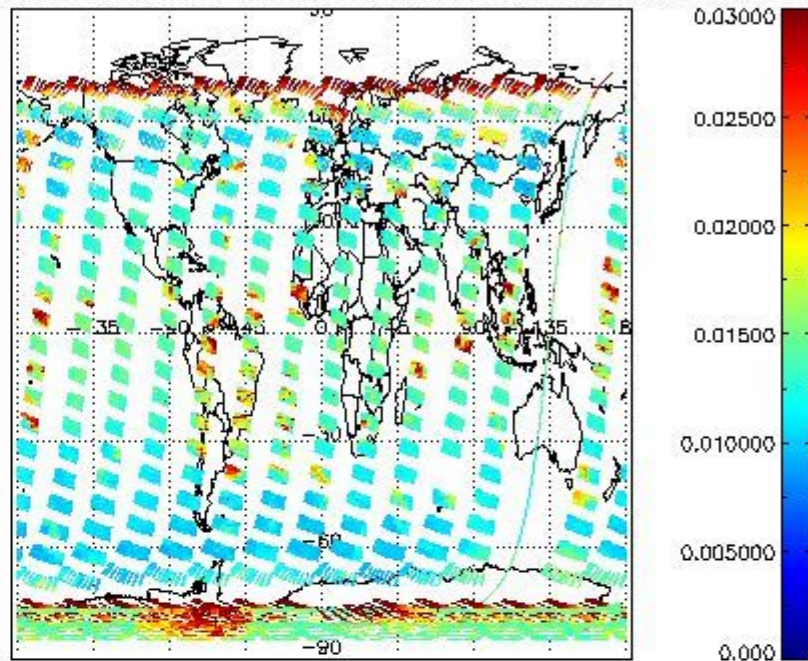




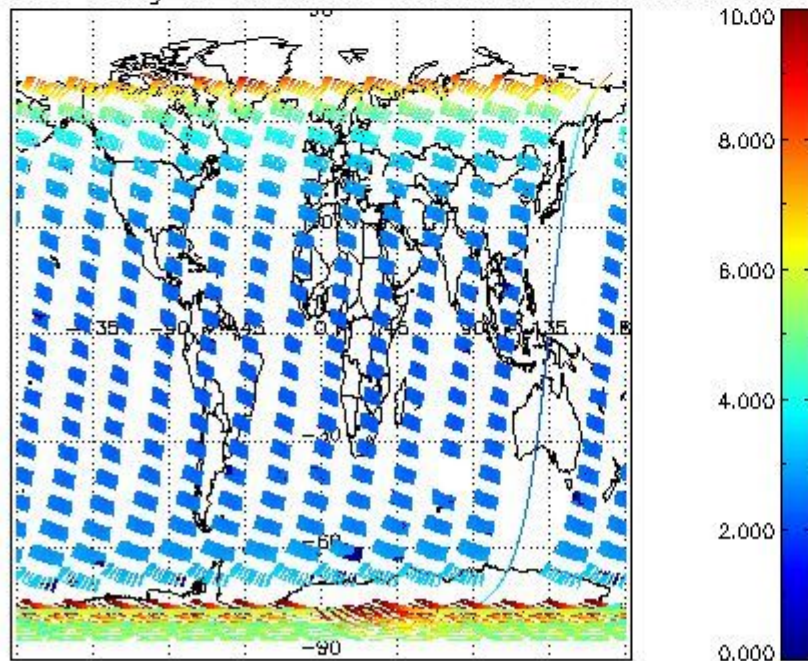
SCIOL2P\_NADUV003\_vcd for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



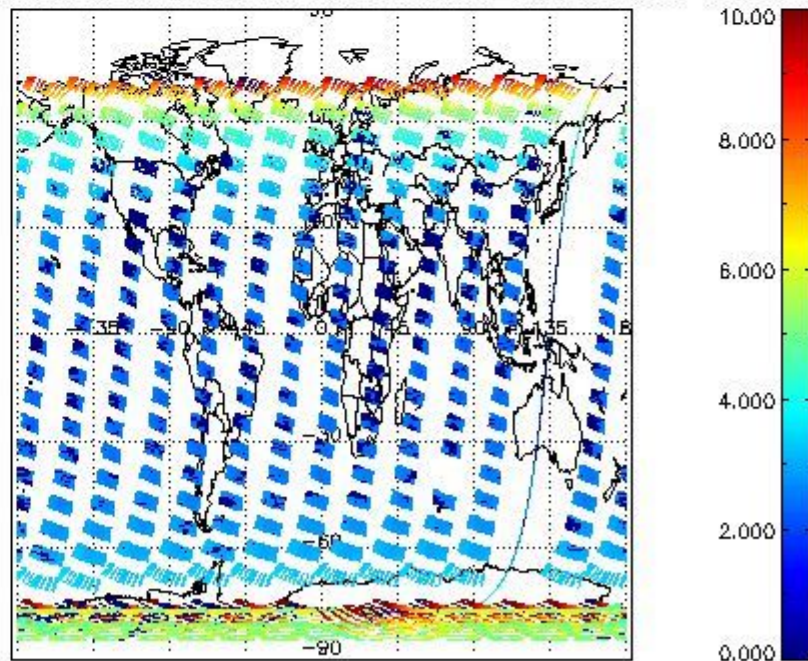
SCIOL2P\_NADUV003\_vcd\_err for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



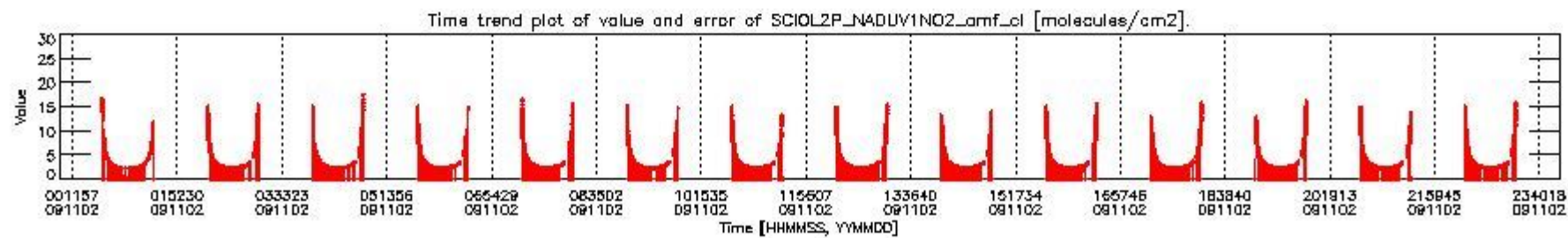
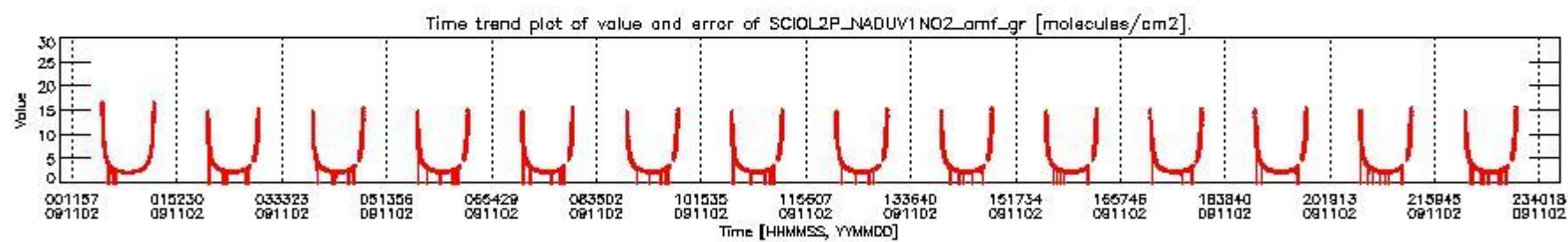
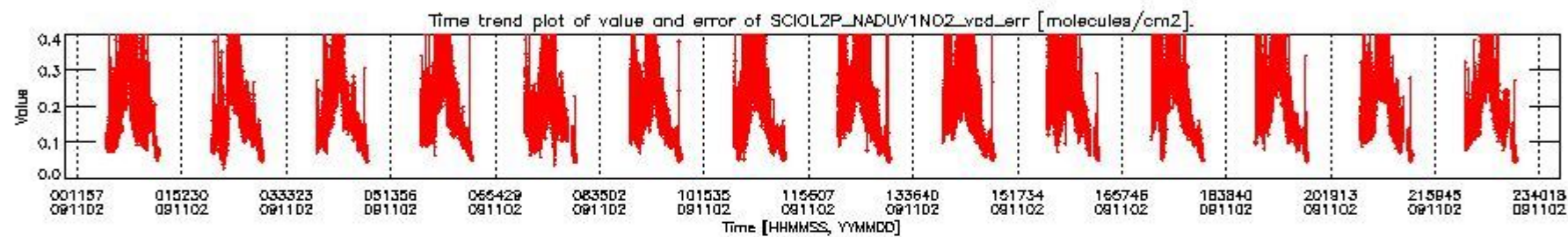
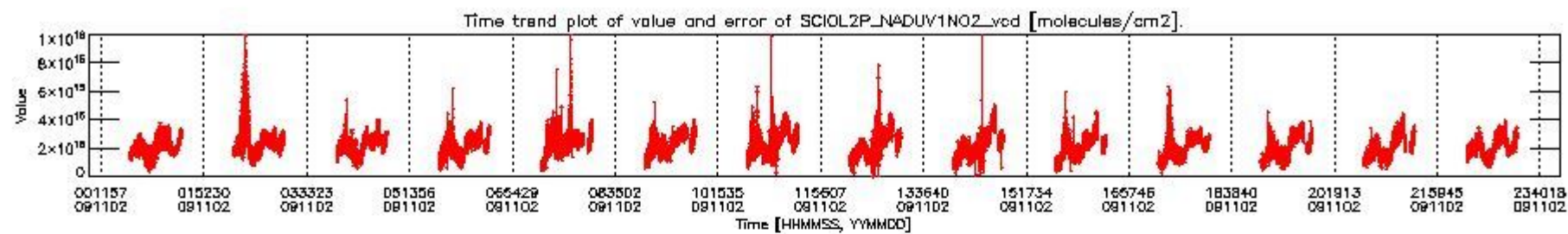
SCIOL2P\_NADUV003\_amf\_gr for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



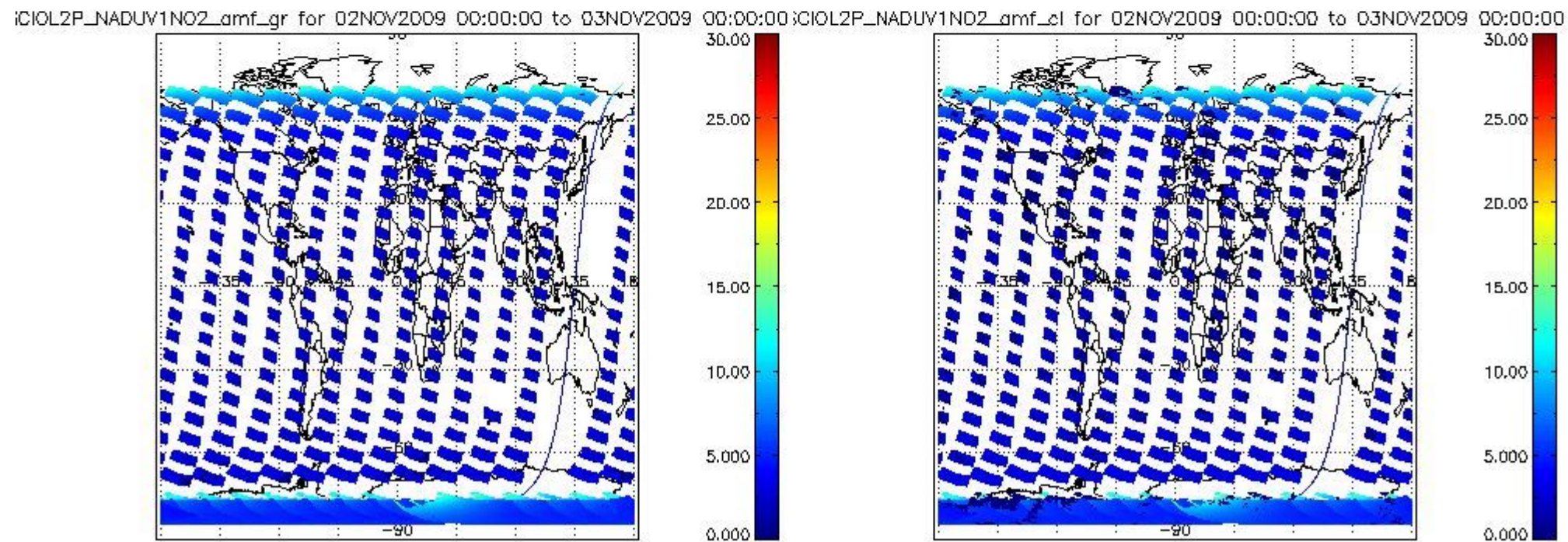
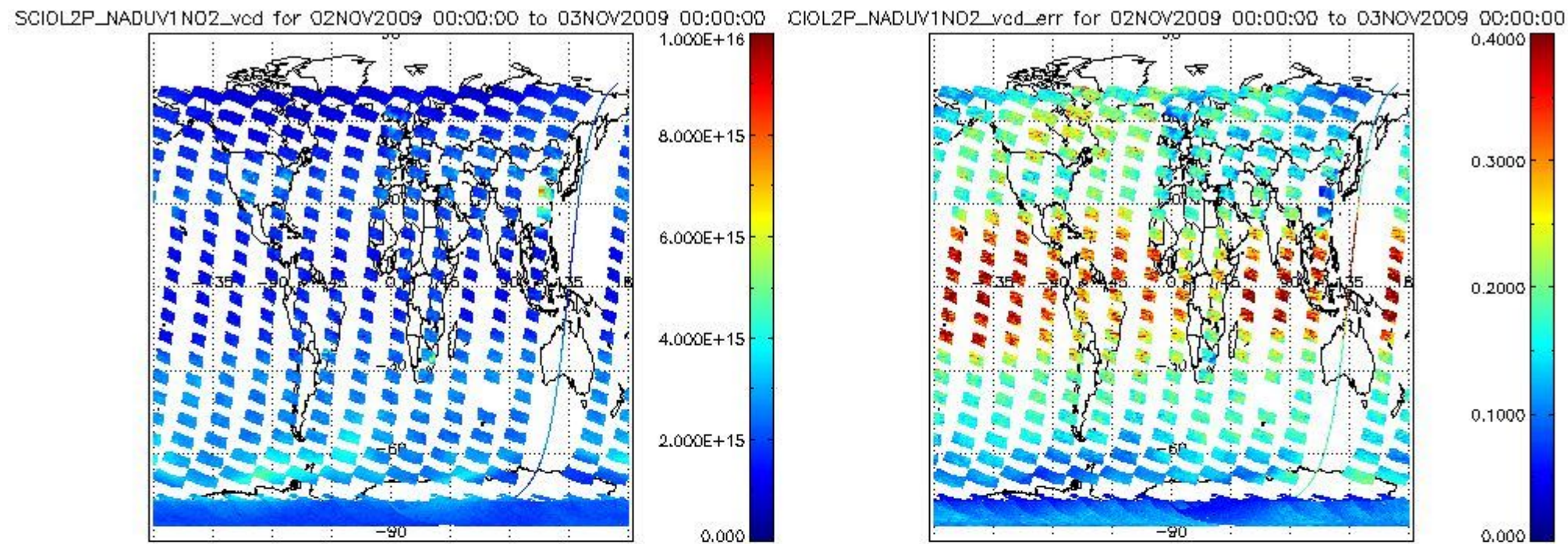
SCIOL2P\_NADUV003\_amf\_cl for 02NOV2009 00:00:00 to 03NOV2009 00:00:00











### 2.2.3 Limb

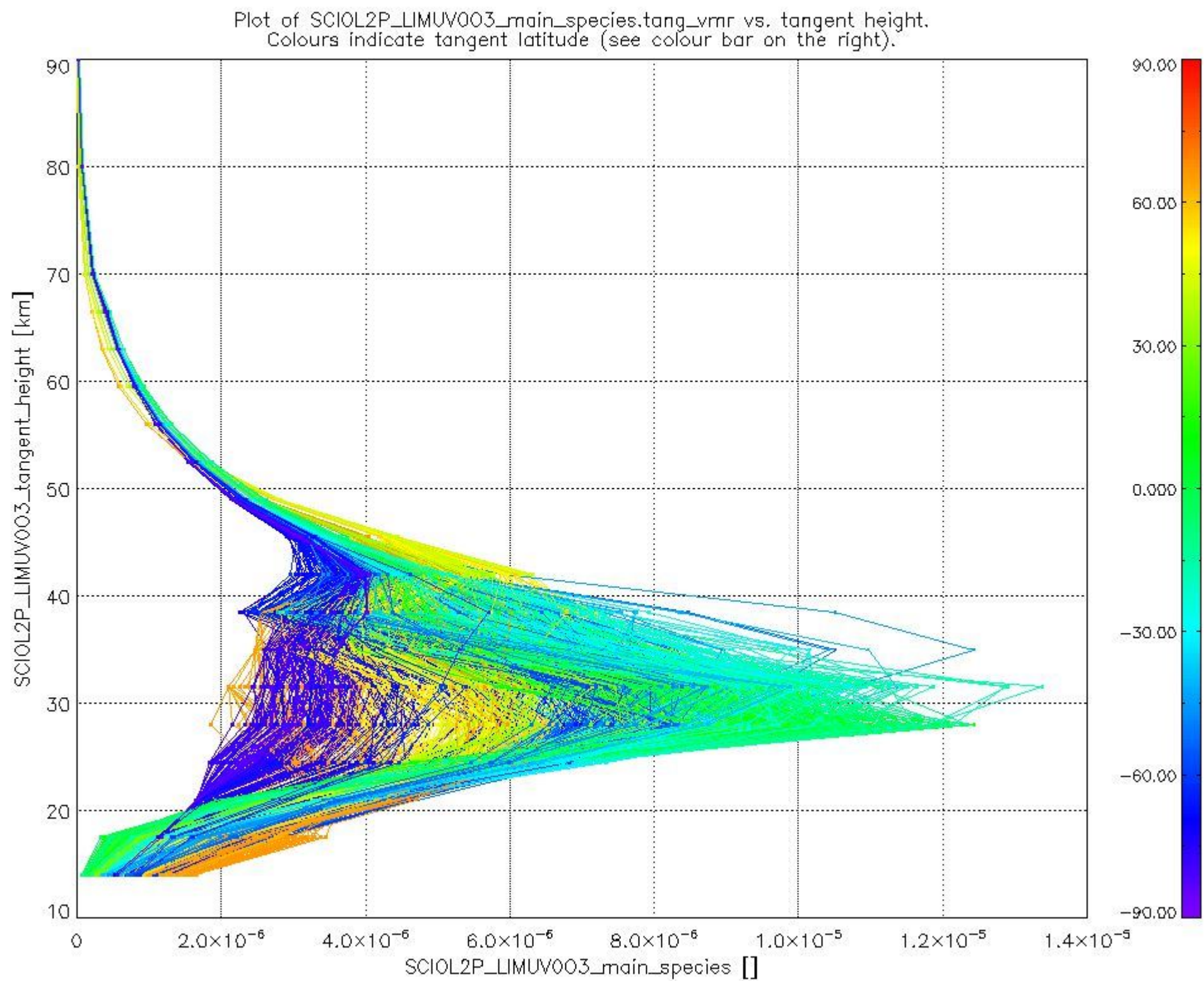
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

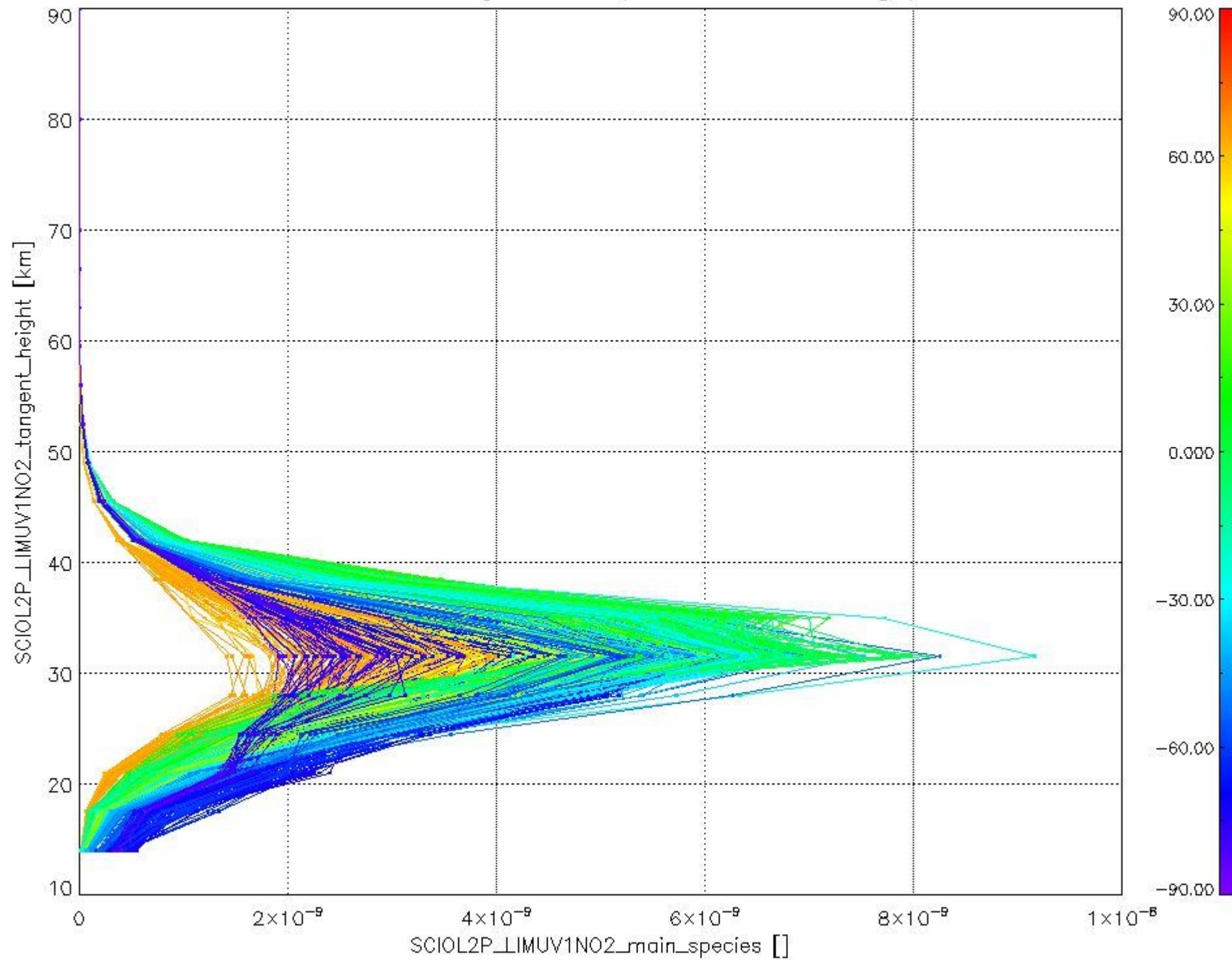


The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.





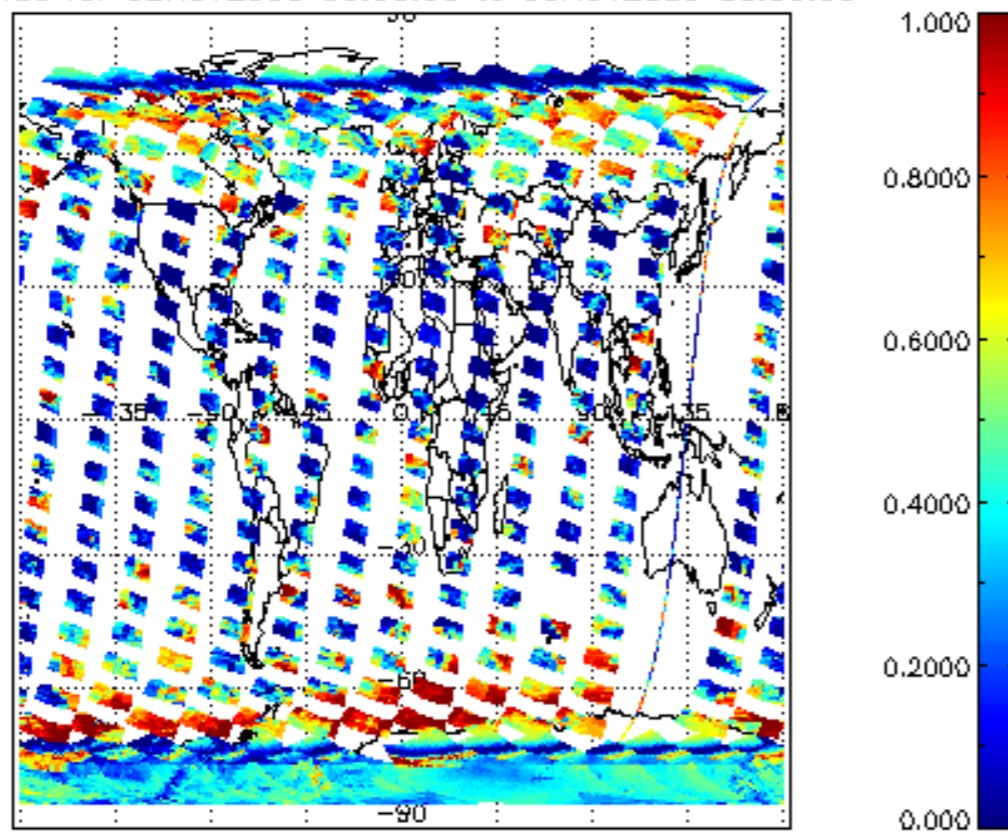
Plot of SCIOL2P\_LIMUV1NO2\_main\_species.tang\_vmr vs. tangent height.  
Colours indicate tangent latitude (see colour bar on the right).



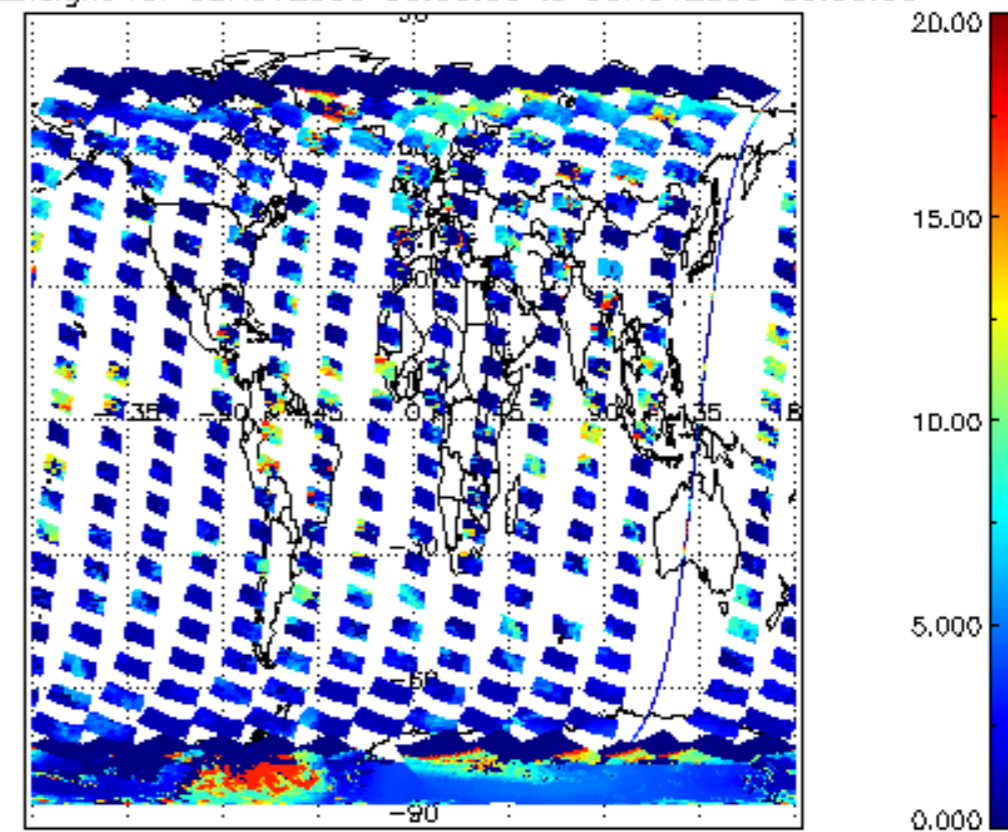
### 2.3 ADF monitoring

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

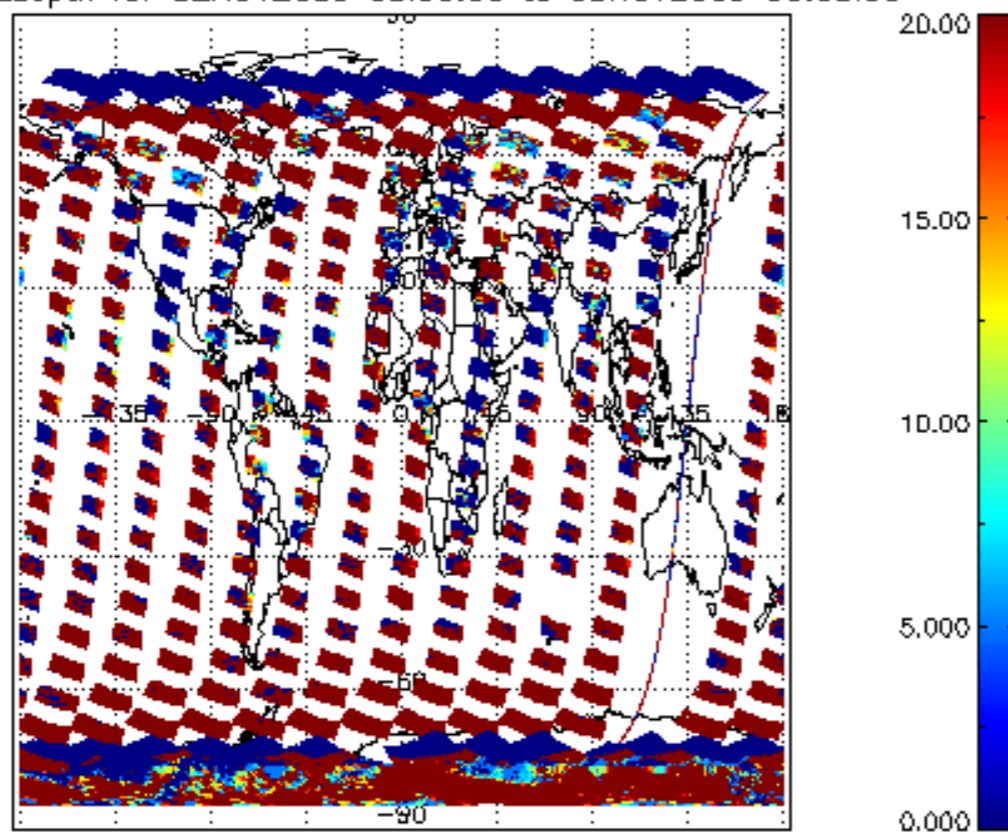
cLfrac for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



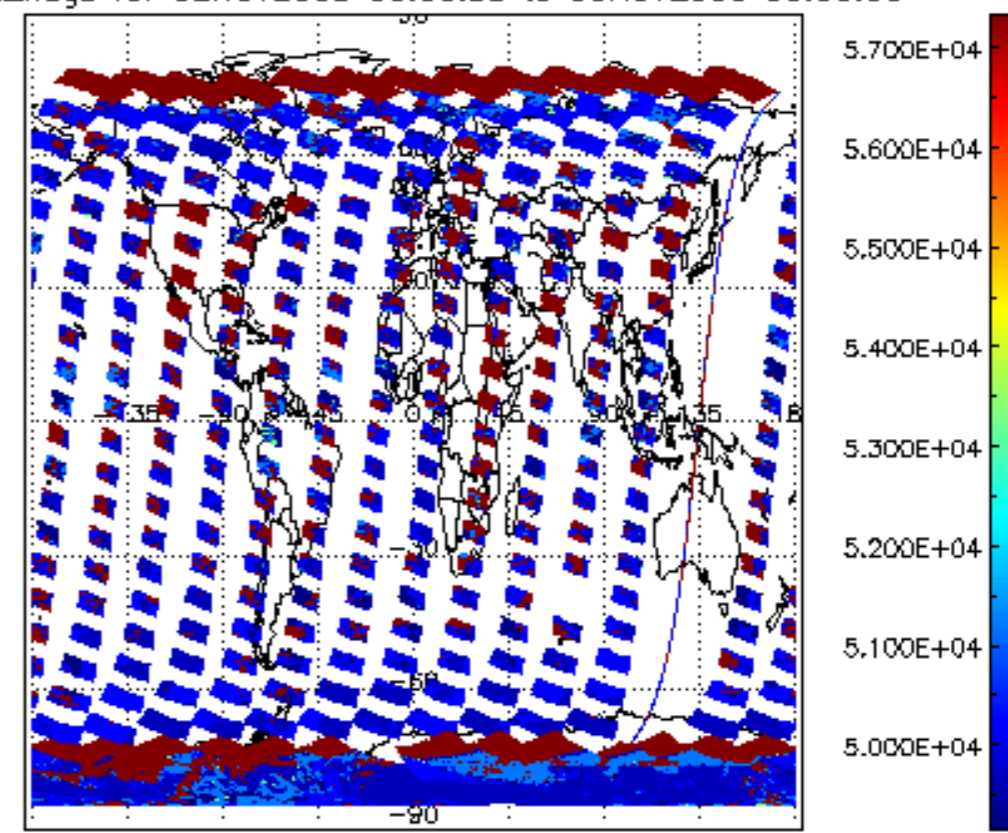
cL\_top\_height for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



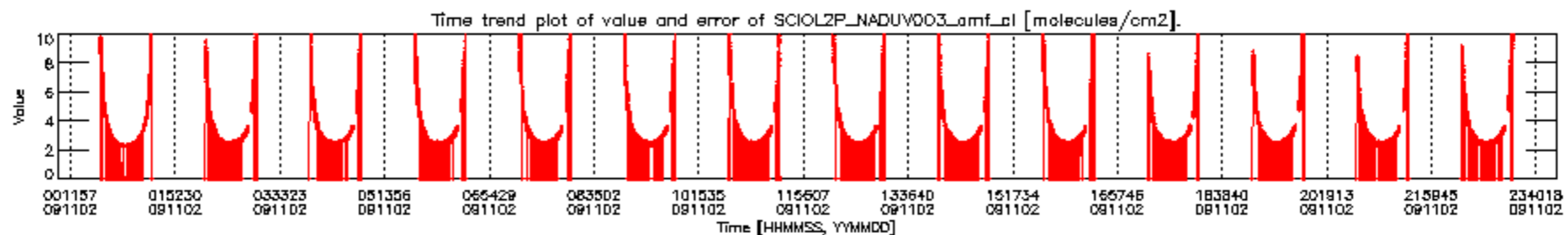
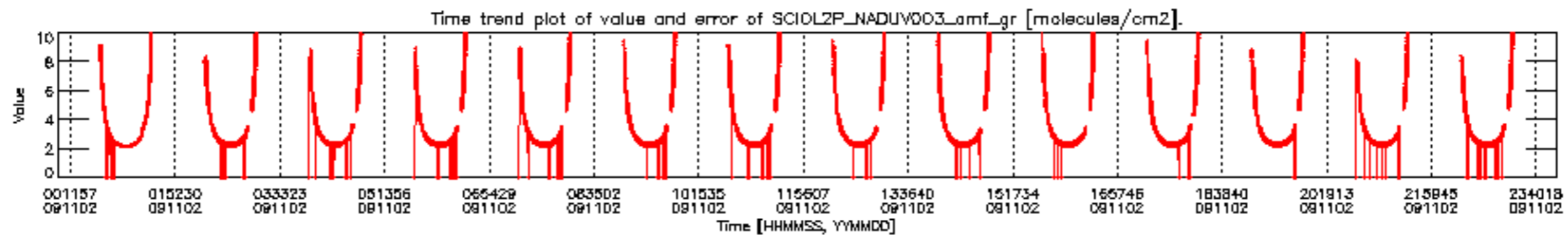
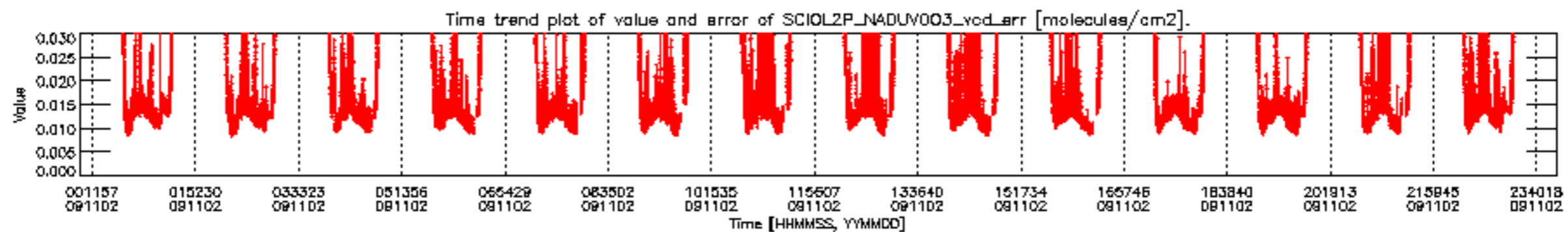
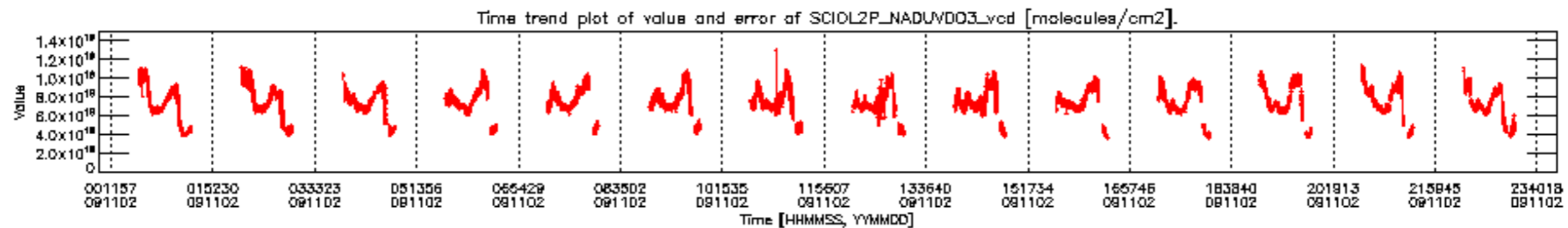
cL\_opt\_depth for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



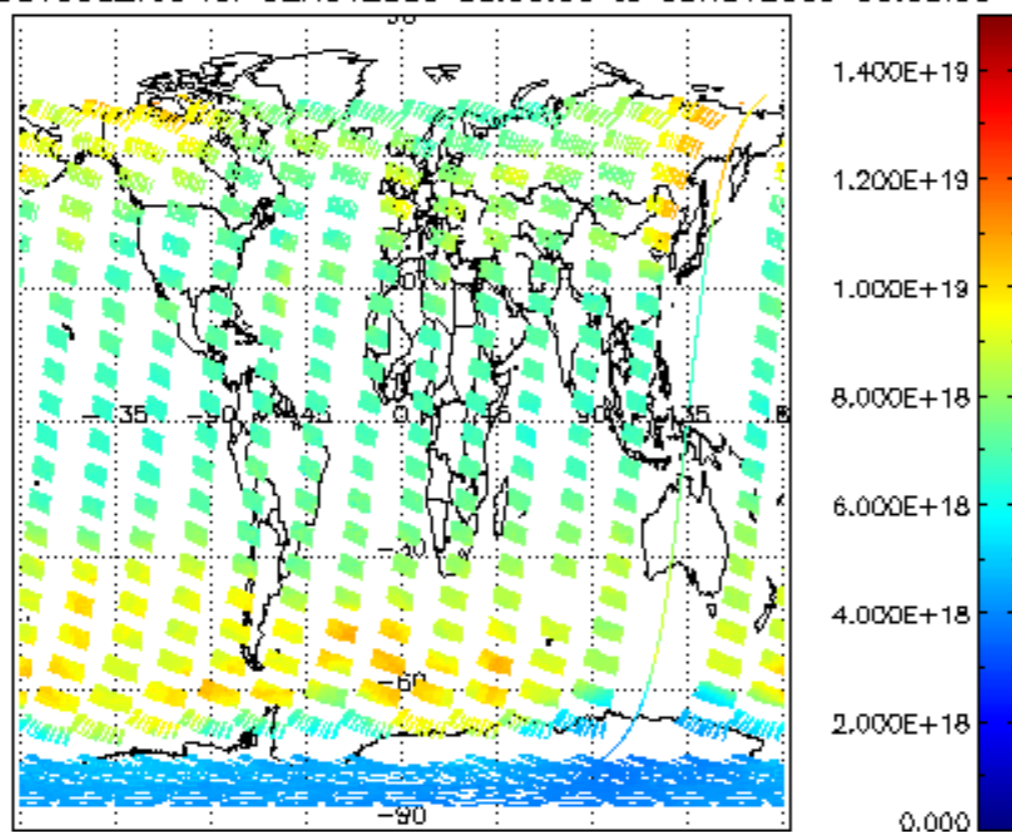
cloud\_flags for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



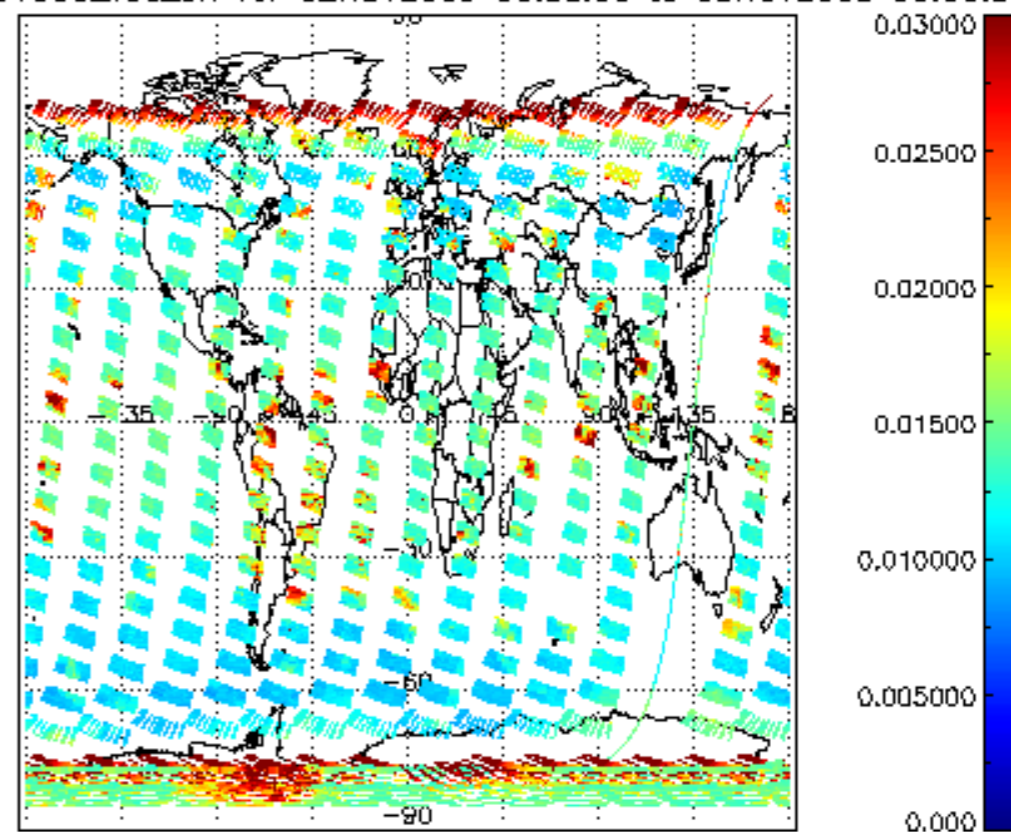




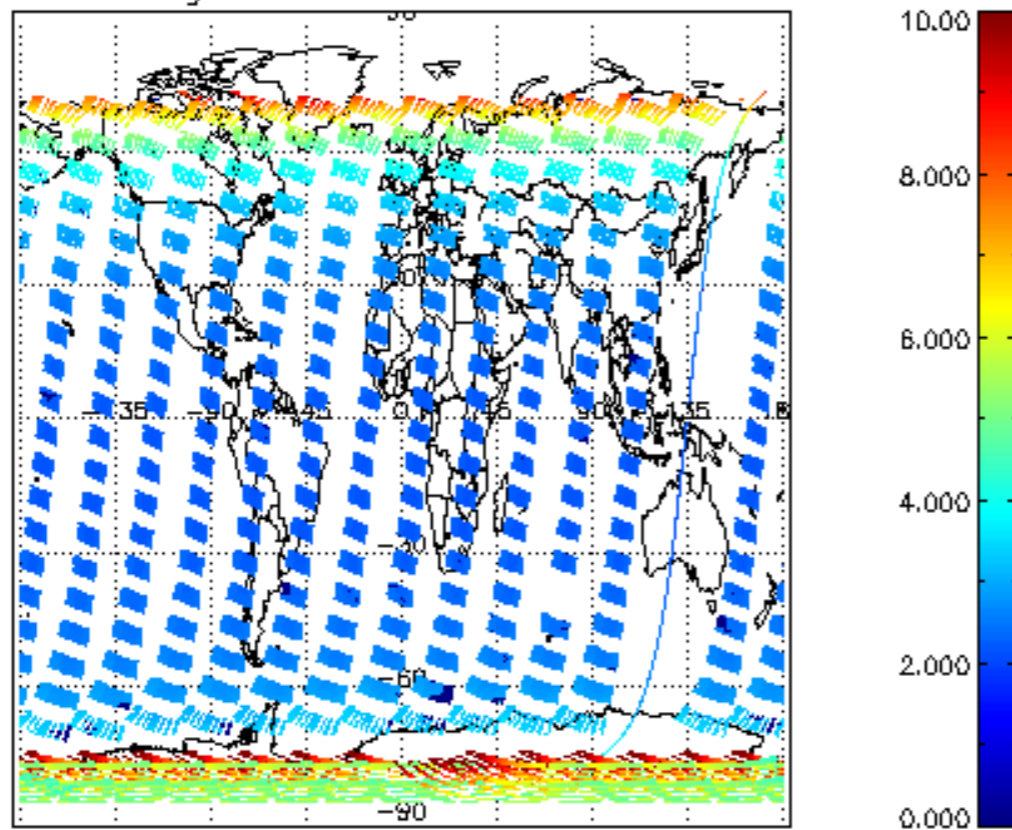
SCIOL2P\_NADUV003\_vcd for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



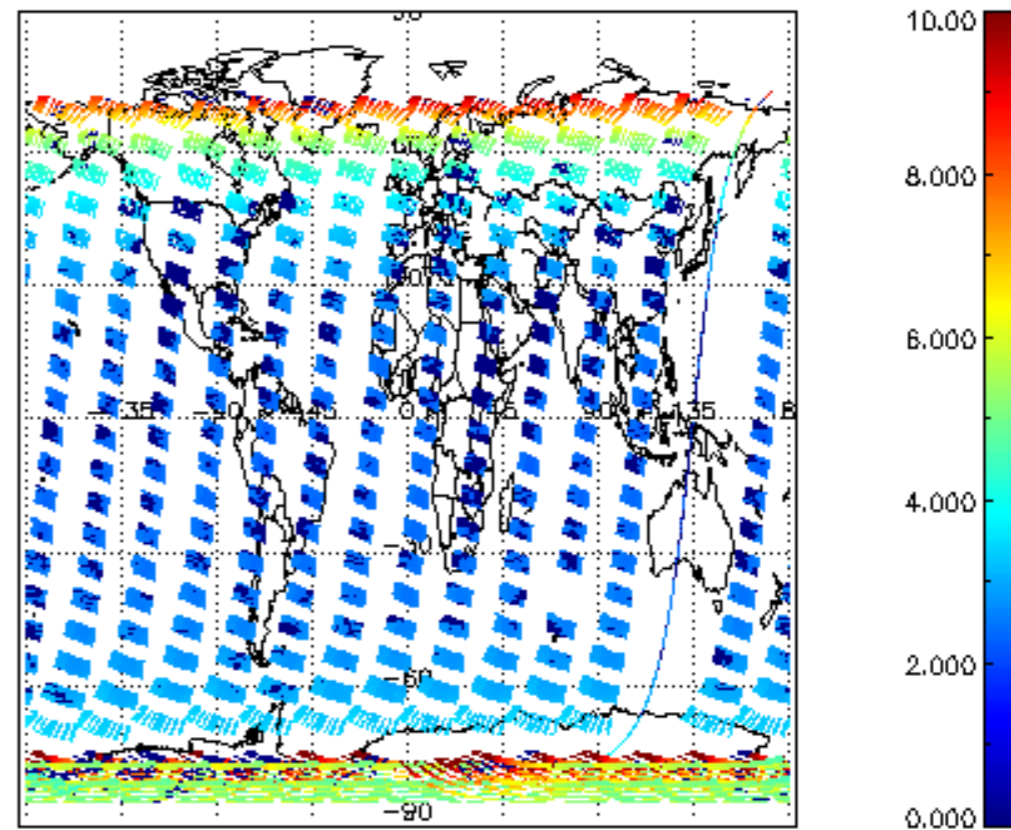
SCIOL2P\_NADUV003\_vcd\_err for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



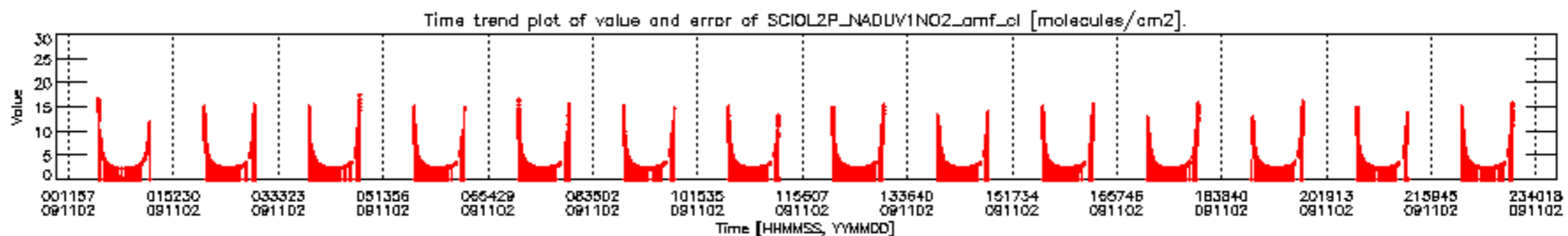
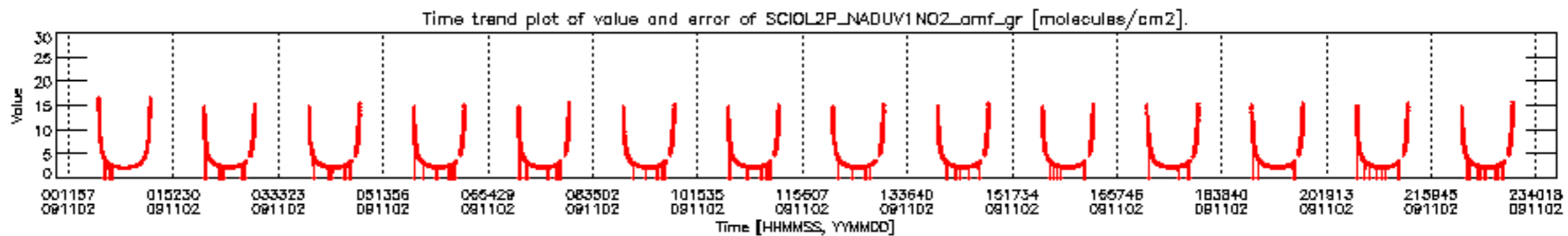
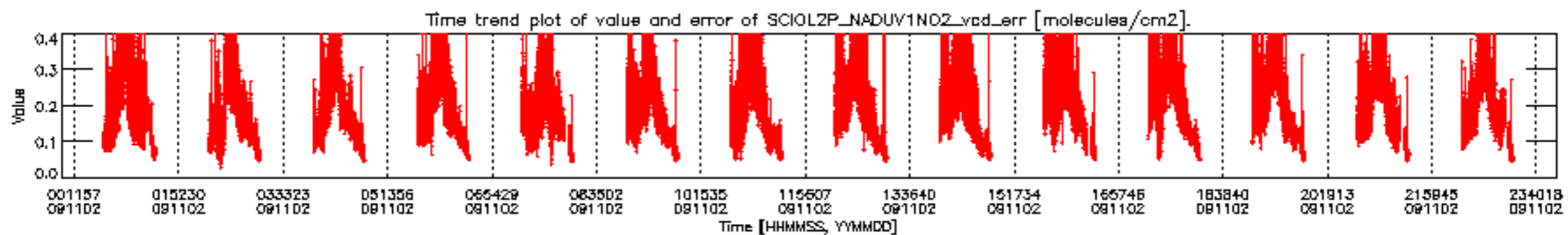
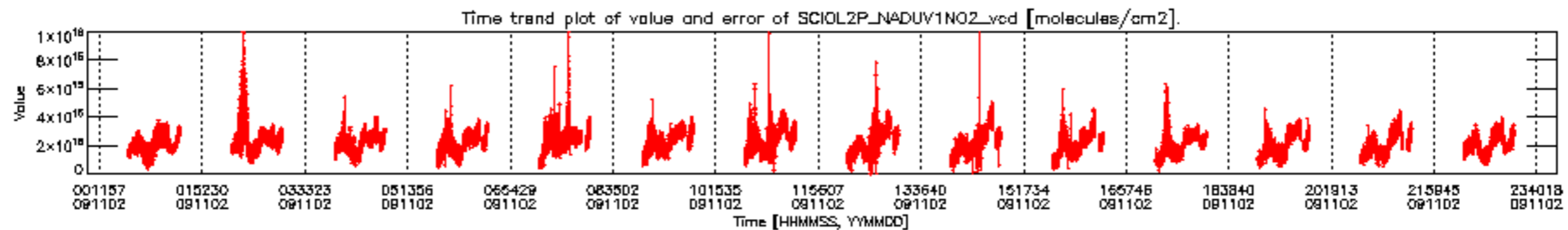
SCIOL2P\_NADUV003\_amf\_gr for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



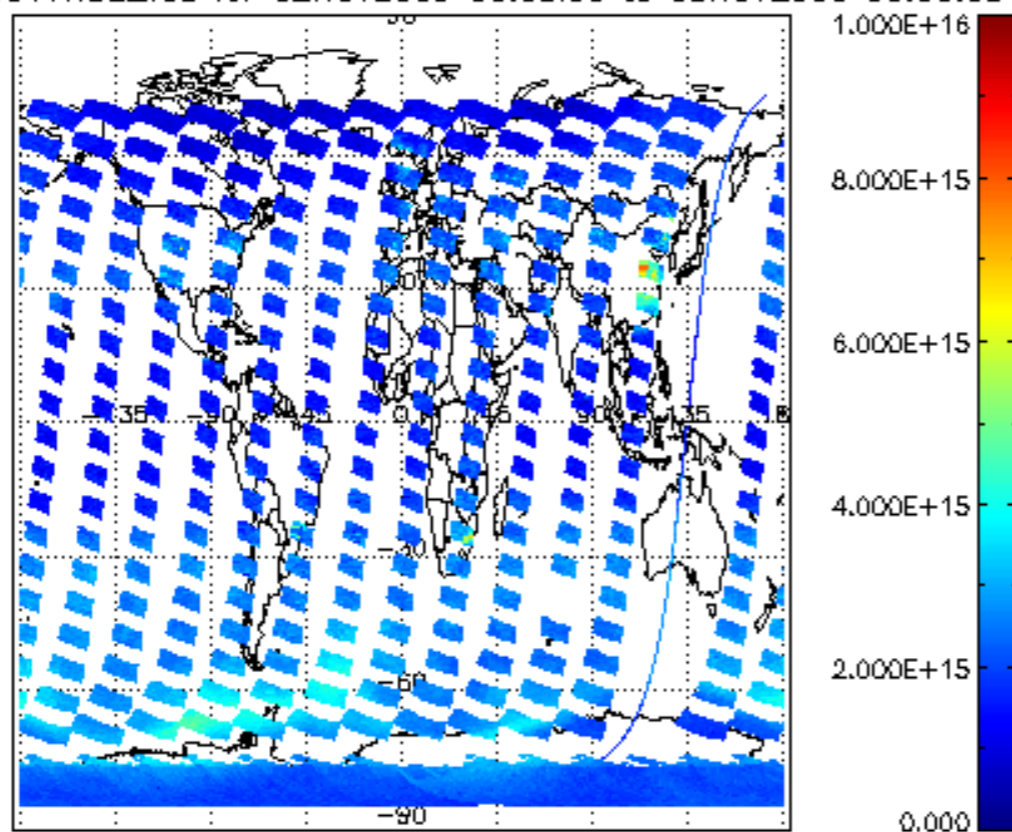
SCIOL2P\_NADUV003\_amf\_cl for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



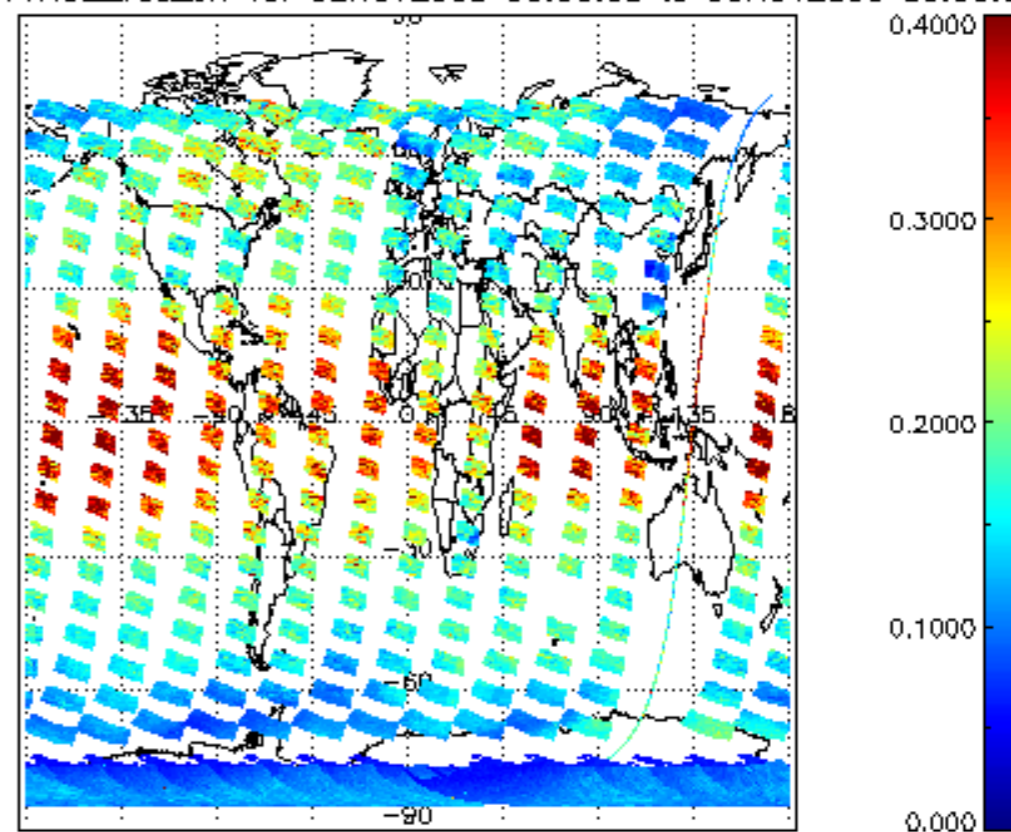




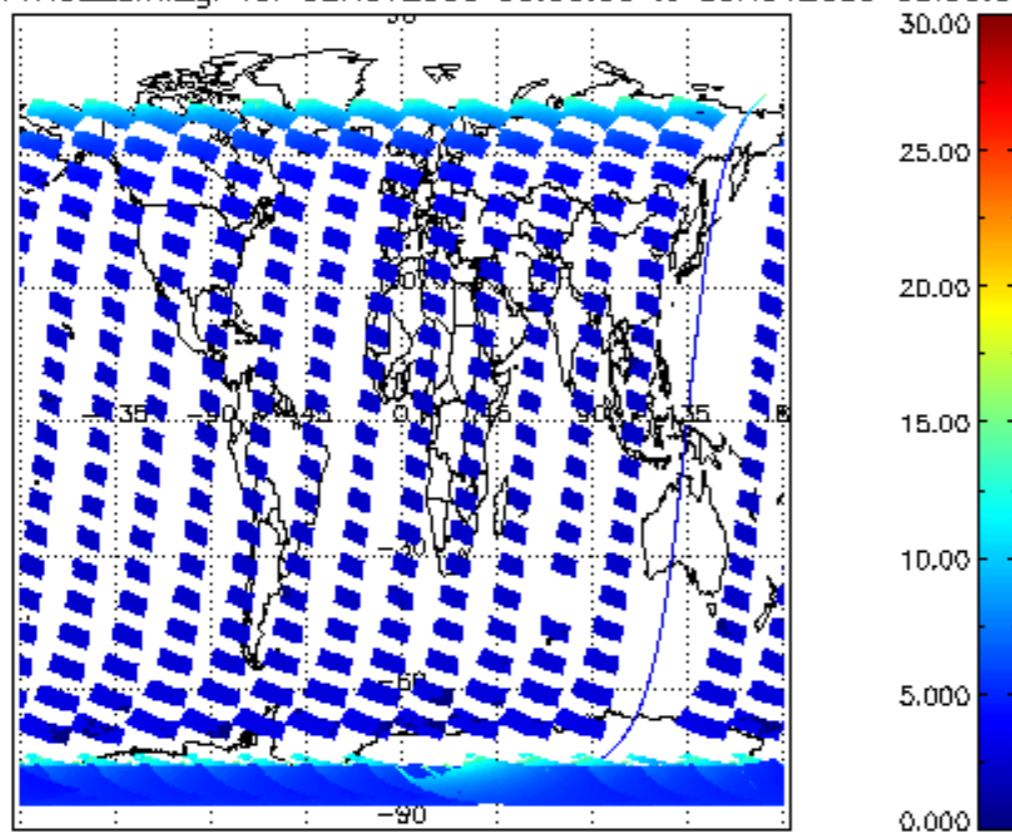
SCIOL2P\_NADUV1NO2\_vcd for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



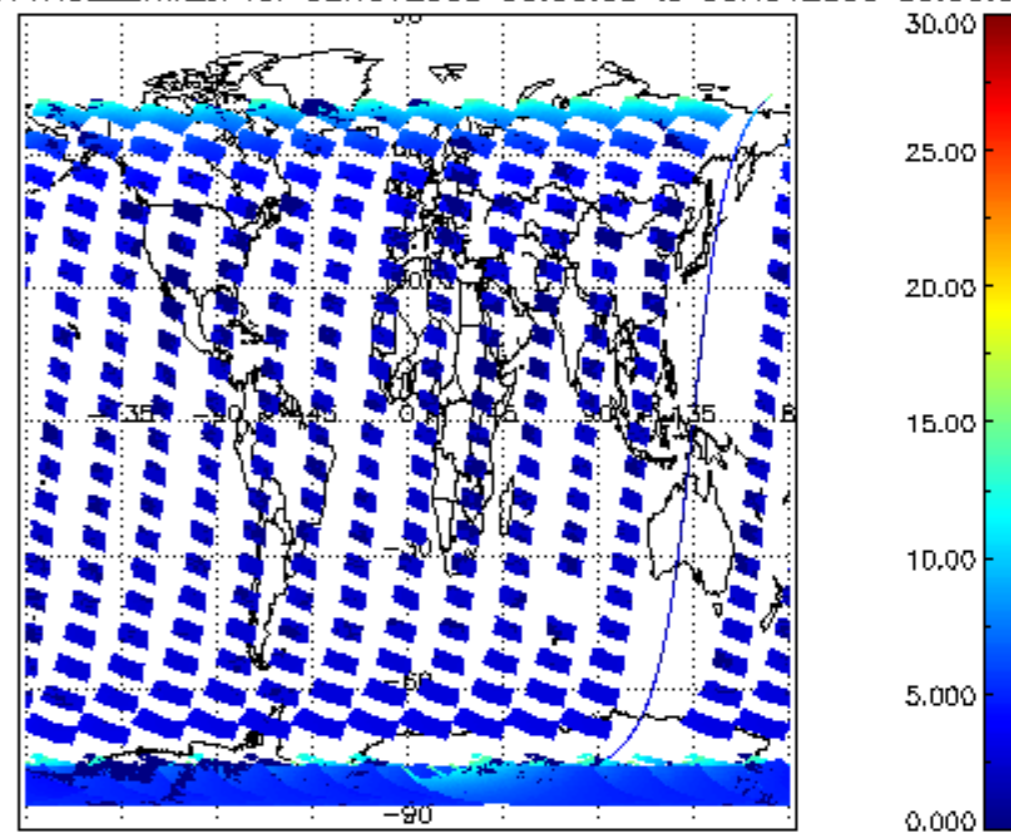
SCIOL2P\_NADUV1NO2\_vcd\_err for 02NOV2009 00:00:00 to 03NOV2009 00:00:00



SCIOL2P\_NADUV1NO2\_amf\_gr for 02NOV2009 00:00:00 to 03NOV2009 00:00:00

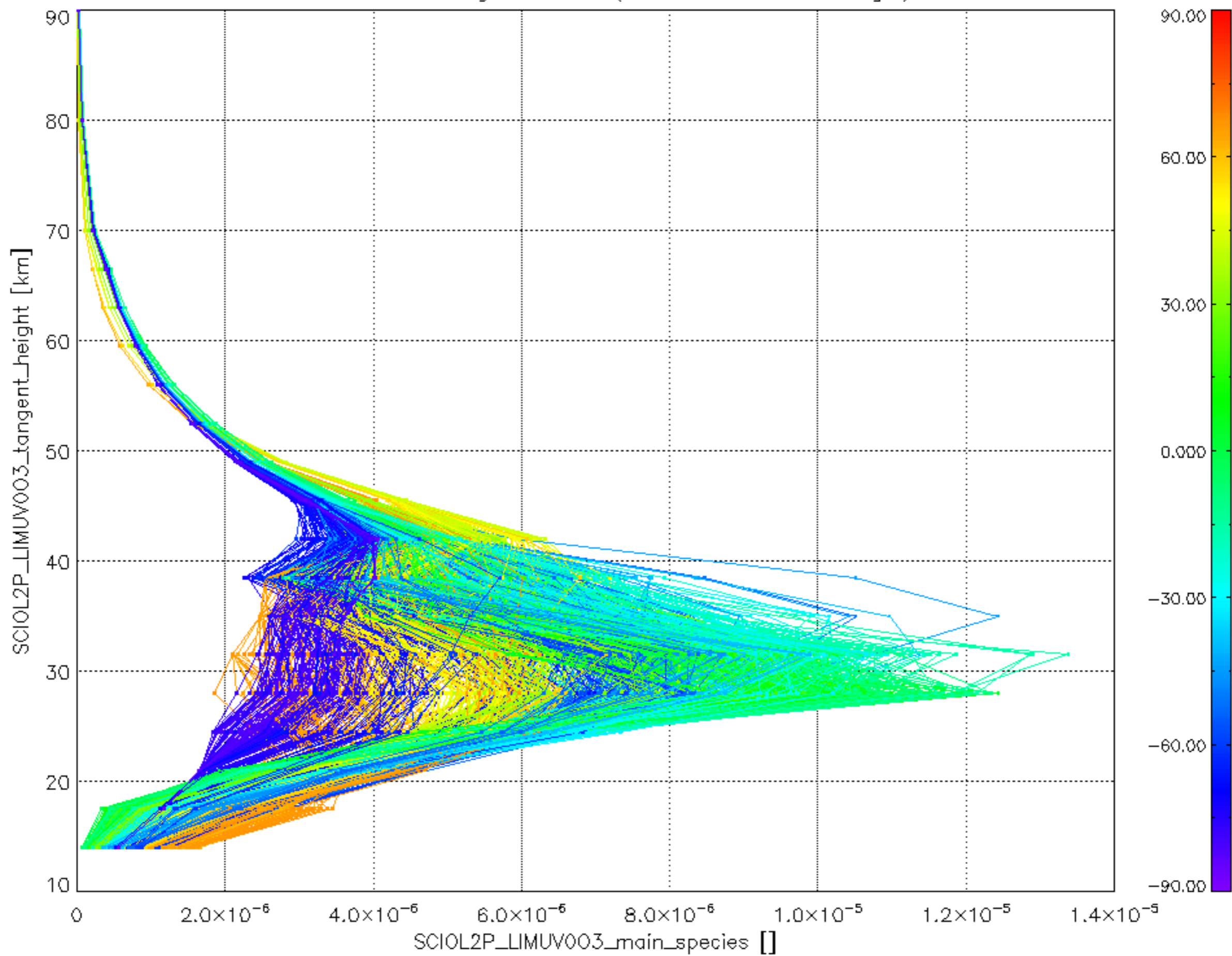


SCIOL2P\_NADUV1NO2\_amf\_cl for 02NOV2009 00:00:00 to 03NOV2009 00:00:00





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).

