

# GOMOS Level 2 Daily Report

## SUMMARY

### [1. General Info](#)

### [2. Summary of processed GOM\\_NL\\_2P products](#)

### [3. Level 2 Quality information per product](#)

#### [3.1 Plot of level 2 quality information per product \(time dependant\)](#)

#### [3.2 Plot of level 2 quality information per product \(world map\)](#)

### [4. Level 1 Quality information per product \(stored on level 2 products\)](#)

#### [4.1 Plot of level 1 quality information per product \(time dependant\)](#)

##### [4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

##### [4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

#### [4.2 Plot of level 1 quality information per product \(world map\)](#)

##### [4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

##### [4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

### [5. Ozone profiles based on quality statistics and other trace gas profiles](#)

#### [5.1 Ozone statistics based on quality of products](#)

#### [5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

#### [5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

#### [5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

#### [5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

#### [5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

#### [5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

#### [5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

### [6. Auxiliary Data Files used for the production reported in section 2](#)

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM\_NL\_\_2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	18APR2013 14:06:10
Data source version	GOMOS/6.01
Start time of products	15-02-2012 (15FEB2012 00:00:00)
Stop time of products	16-02-2012 (16FEB2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	33
Nb of prods with errors	0

## 2. Summary of processed GOM\_NL\_\_2P products.

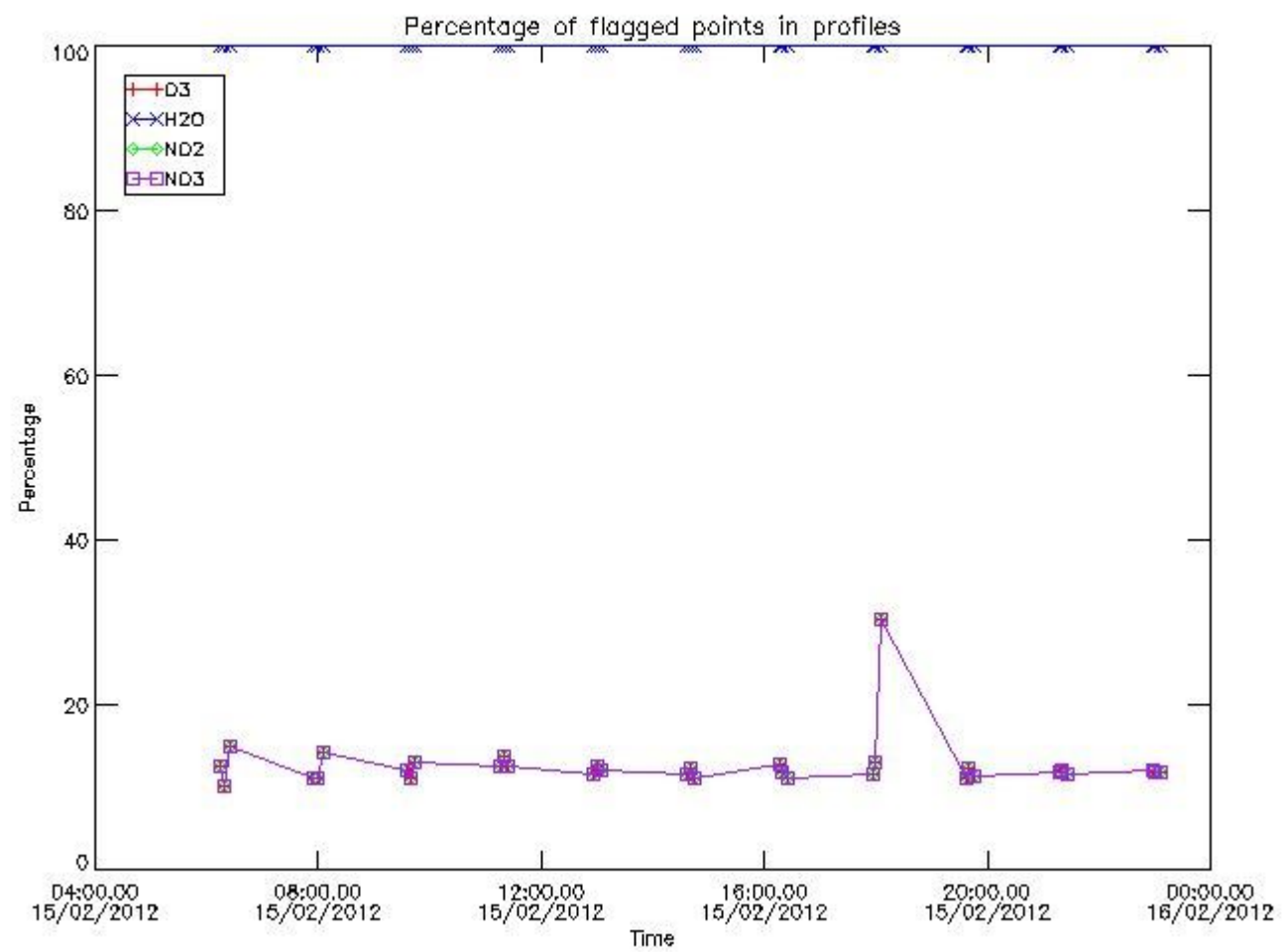
**!Warning: No products without errors in BRIGHT limb conditions found**

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120215_061534_000000413111_00365_52103_2442.N1	15-FEB-2012 06:15:34	Dark	41.000	10	Bet Cen	0.61000	28000.	82	52103	No
2	GOM_NL__2PRFIN20120215_061823_000000513111_00365_52103_2443.N1	15-FEB-2012 06:18:23	Dark	50.500	20	Bet Cru	1.2530	30000.	101	52103	No
3	GOM_NL__2PRFIN20120215_062420_000000343111_00365_52103_2444.N1	15-FEB-2012 06:24:20	Dark	33.500	113	Mu Vel	2.6920	5000.0	67	52103	No
4	GOM_NL__2PRFIN20120215_075549_000000503111_00366_52104_2464.N1	15-FEB-2012 07:55:49	Dark	50.000	10	Bet Cen	0.61000	28000.	100	52104	No
5	GOM_NL__2PRFIN20120215_075837_000000463111_00366_52104_2465.N1	15-FEB-2012 07:58:37	Dark	45.500	20	Bet Cru	1.2530	30000.	91	52104	No
6	GOM_NL__2PRFIN20120215_080434_000000363111_00366_52104_2466.N1	15-FEB-2012 08:04:34	Dark	35.500	113	Mu Vel	2.6920	5000.0	71	52104	No
7	GOM_NL__2PRFIN20120215_093603_000000433111_00367_52105_2513.N1	15-FEB-2012 09:36:03	Dark	42.500	10	Bet Cen	0.61000	28000.	85	52105	No
8	GOM_NL__2PRFIN20120215_093852_000000463111_00367_52105_2514.N1	15-FEB-2012 09:38:52	Dark	45.500	20	Bet Cru	1.2530	30000.	91	52105	No
9	GOM_NL__2PRFIN20120215_094448_000000393111_00367_52105_2515.N1	15-FEB-2012 09:44:48	Dark	38.500	113	Mu Vel	2.6920	5000.0	77	52105	No
10	GOM_NL__2PRFIN20120215_111618_000000413111_00368_52106_2543.N1	15-FEB-2012 11:16:18	Dark	41.000	10	Bet Cen	0.61000	28000.	82	52106	No
11	GOM_NL__2PRFIN20120215_111906_000000413111_00368_52106_2544.N1	15-FEB-2012 11:19:06	Dark	40.500	20	Bet Cru	1.2530	30000.	81	52106	No
12	GOM_NL__2PRFIN20120215_112503_000000413111_00368_52106_2545.N1	15-FEB-2012 11:25:03	Dark	40.500	113	Mu Vel	2.6920	5000.0	81	52106	No
13	GOM_NL__2PRFIN20120215_125632_000000443111_00369_52107_2566.N1	15-FEB-2012 12:56:32	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52107	No
14	GOM_NL__2PRFIN20120215_125921_000000413111_00369_52107_2567.N1	15-FEB-2012 12:59:21	Dark	40.500	20	Bet Cru	1.2530	30000.	81	52107	No
15	GOM_NL__2PRFIN20120215_130517_000000423111_00369_52107_2568.N1	15-FEB-2012 13:05:17	Dark	41.500	113	Mu Vel	2.6920	5000.0	83	52107	No
16	GOM_NL__2PRFIN20120215_143647_000000443111_00370_52108_2594.N1	15-FEB-2012 14:36:47	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52108	No
17	GOM_NL__2PRFIN20120215_143935_000000423111_00370_52108_2595.N1	15-FEB-2012 14:39:35	Dark	41.500	20	Bet Cru	1.2530	30000.	83	52108	No
18	GOM_NL__2PRFIN20120215_144531_000000463111_00370_52108_2596.N1	15-FEB-2012 14:45:31	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	52108	No
19	GOM_NL__2PRFIN20120215_161701_000000443111_00371_52109_2628.N1	15-FEB-2012 16:17:01	Dark	43.500	10	Bet Cen	0.61000	28000.	87	52109	No
20	GOM_NL__2PRFIN20120215_161950_000000443111_00371_52109_2629.N1	15-FEB-2012 16:19:50	Dark	43.500	20	Bet Cru	1.2530	30000.	87	52109	No
21	GOM_NL__2PRFIN20120215_162546_000000463111_00371_52109_2630.N1	15-FEB-2012 16:25:46	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	52109	No
22	GOM_NL__2PRFIN20120215_175716_000000483111_00372_52110_2675.N1	15-FEB-2012 17:57:16	Dark	48.000	10	Bet Cen	0.61000	28000.	96	52110	No
23	GOM_NL__2PRFIN20120215_180004_000000433111_00372_52110_2676.N1	15-FEB-2012 18:00:04	Dark	43.000	20	Bet Cru	1.2530	30000.	86	52110	No
24	GOM_NL__2PRFIN20120215_180600_000000173111_00372_52110_2677.N1	15-FEB-2012 18:06:00	Dark	16.500	113	Mu Vel	2.6920	5000.0	33	52110	No
25	GOM_NL__2PRFIN20120215_193730_000000463111_00373_52111_2679.N1	15-FEB-2012 19:37:30	Dark	46.000	10	Bet Cen	0.61000	28000.	92	52111	No
26	GOM_NL__2PRFIN20120215_194019_000000423111_00373_52111_2680.N1	15-FEB-2012 19:40:19	Dark	41.500	20	Bet Cru	1.2530	30000.	83	52111	No
27	GOM_NL__2PRFIN20120215_194614_000000453111_00373_52111_2681.N1	15-FEB-2012 19:46:14	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	52111	No
28	GOM_NL__2PRFIN20120215_211745_000000443111_00374_52112_2705.N1	15-FEB-2012 21:17:45	Dark	43.500	10	Bet Cen	0.61000	28000.	87	52112	No
29	GOM_NL__2PRFIN20120215_212033_000000423111_00374_52112_2706.N1	15-FEB-2012 21:20:33	Dark	42.000	20	Bet Cru	1.2530	30000.	84	52112	No
30	GOM_NL__2PRFIN20120215_212629_000000443111_00374_52112_2707.N1	15-FEB-2012 21:26:29	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	52112	No
31	GOM_NL__2PRFIN20120215_225759_000000423111_00375_52113_2734.N1	15-FEB-2012 22:57:59	Dark	42.000	10	Bet Cen	0.61000	28000.	84	52113	No
32	GOM_NL__2PRFIN20120215_230048_000000443111_00375_52113_2735.N1	15-FEB-2012 23:00:48	Dark	43.500	20	Bet Cru	1.2530	30000.	87	52113	No
33	GOM_NL__2PRFIN20120215_230643_000000433111_00375_52113_2736.N1	15-FEB-2012 23:06:43	Dark	43.000	113	Mu Vel	2.6920	5000.0	86	52113	No

## 3. Quality information per product

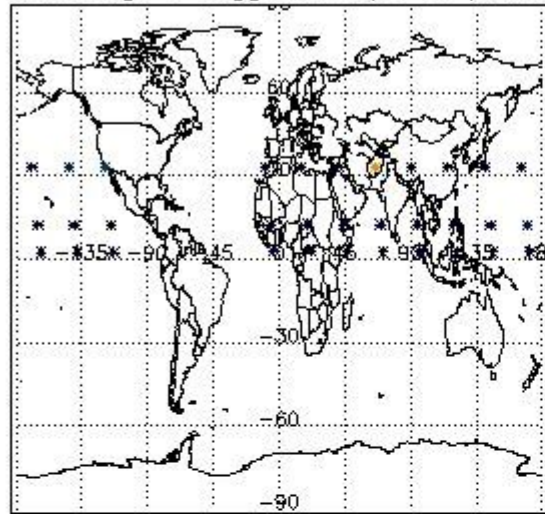
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

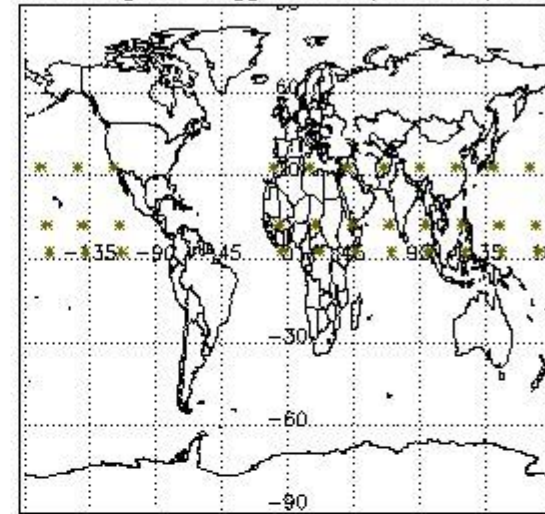


3.2 Plot quality information per product (world map)

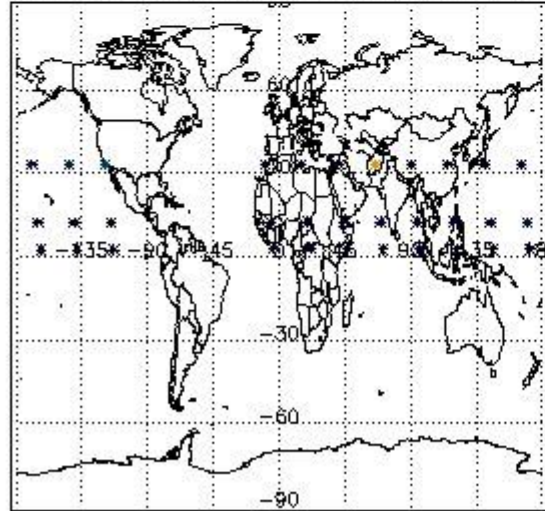
Percentage of flagged data per O3 profile



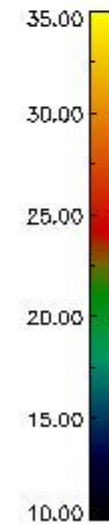
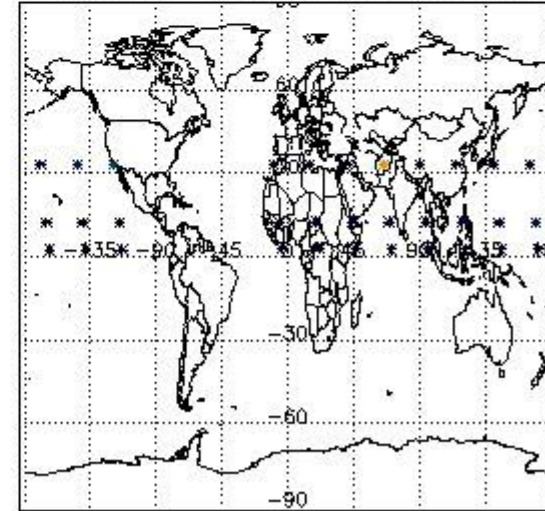
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

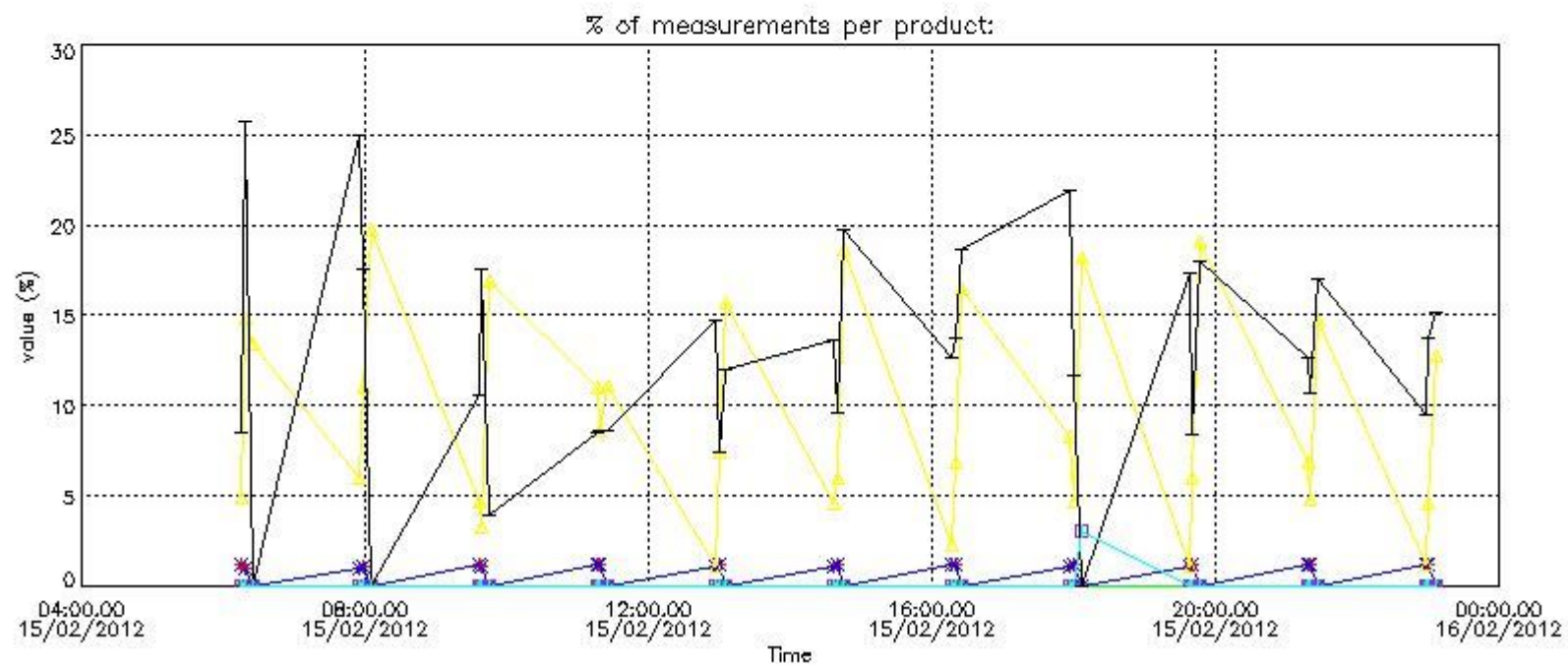


#### 4. Level 1 quality information per product

In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

###### 4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

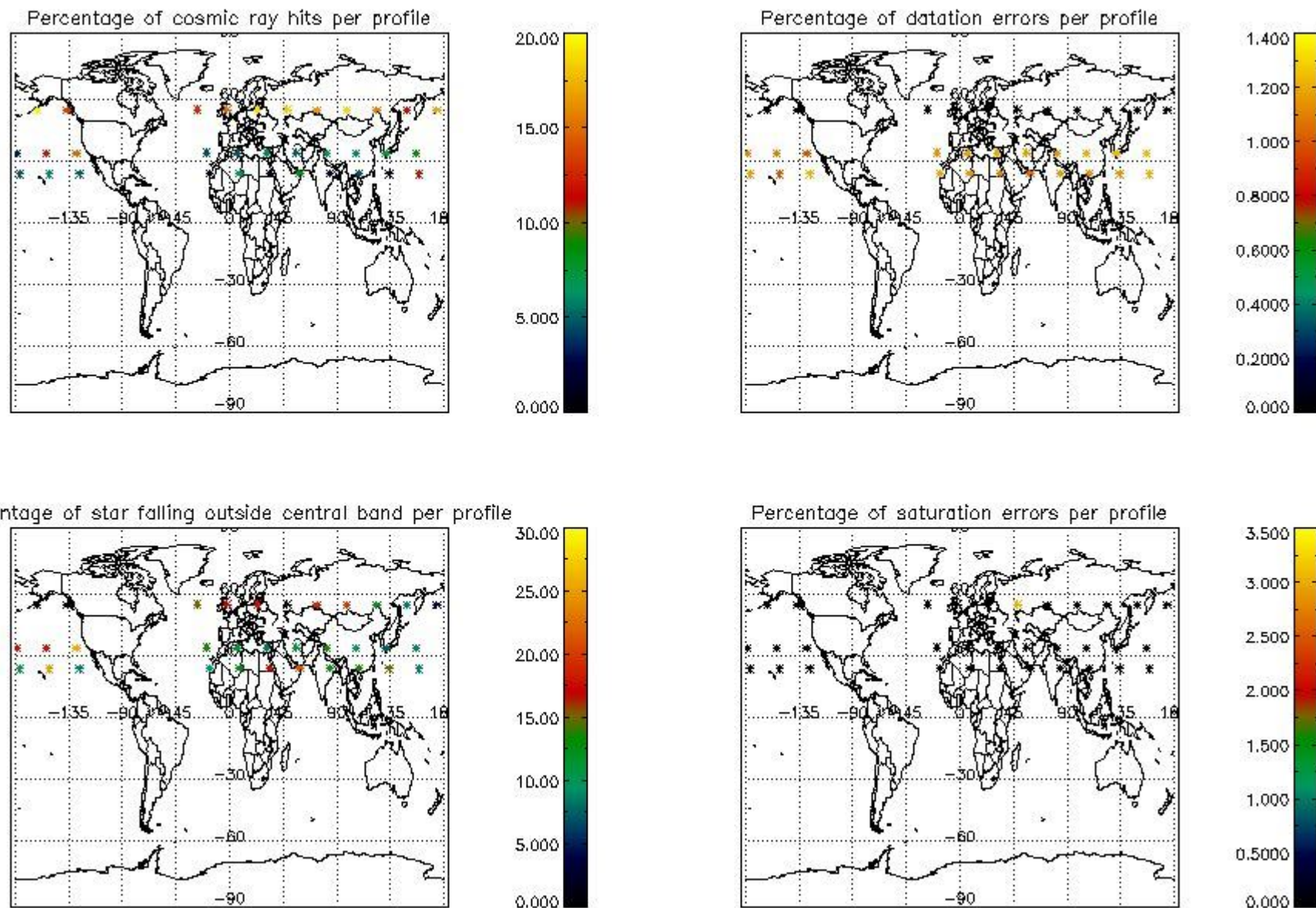


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

!Warning: No products without errors in descending found

4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes



#### 4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

**!Warning: No products without errors in descending found**

### 5. Trace gas profiles

#### 5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/o3\_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

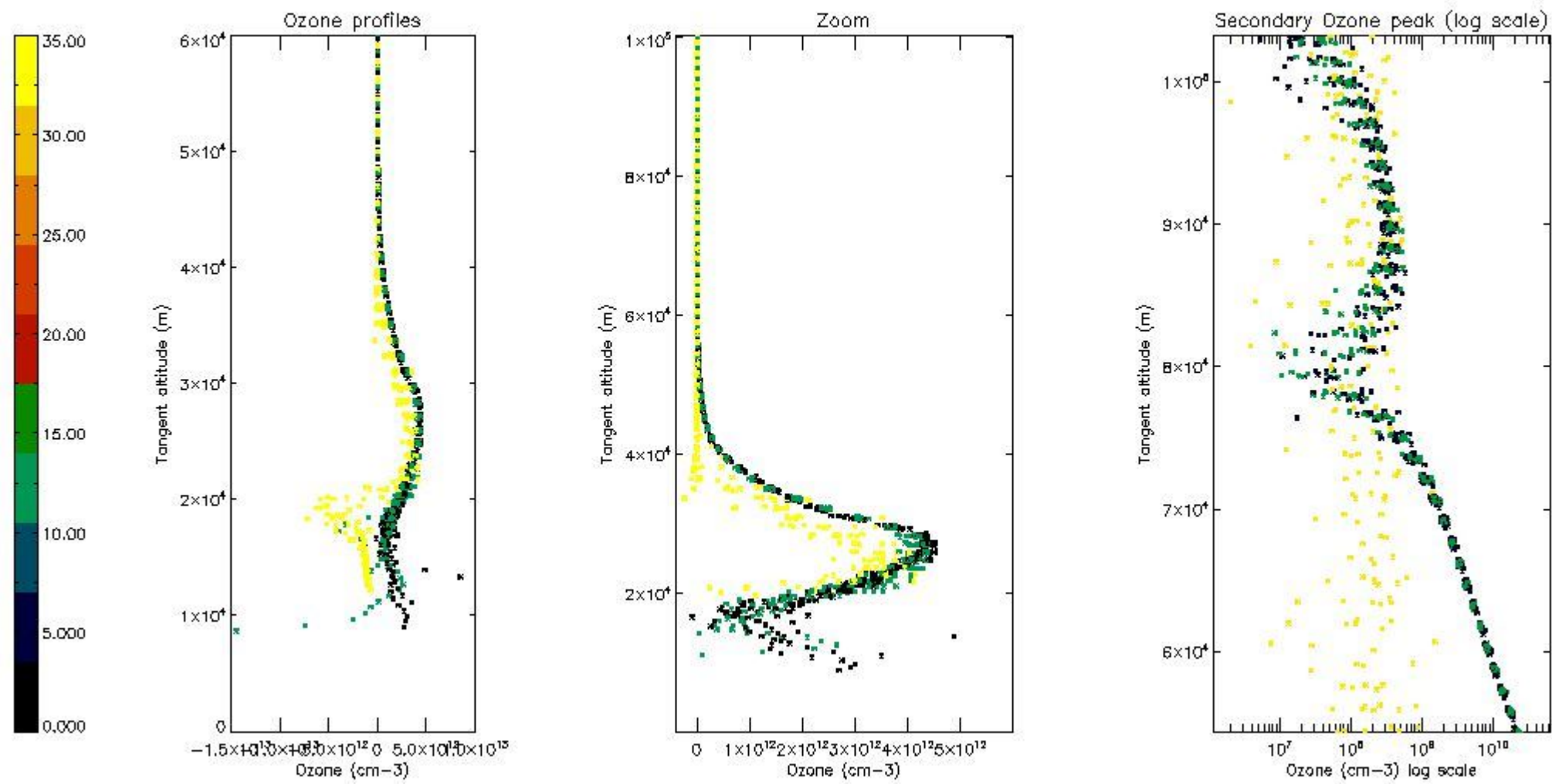
- Products in dark limb illumination condition: GOM\_NL\_\_2P/NL\_SUMMARY\_QUALITY/obs\_ill\_cond=0
- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	100
STD < 20	60
STD < 10	51
STD < 5	42

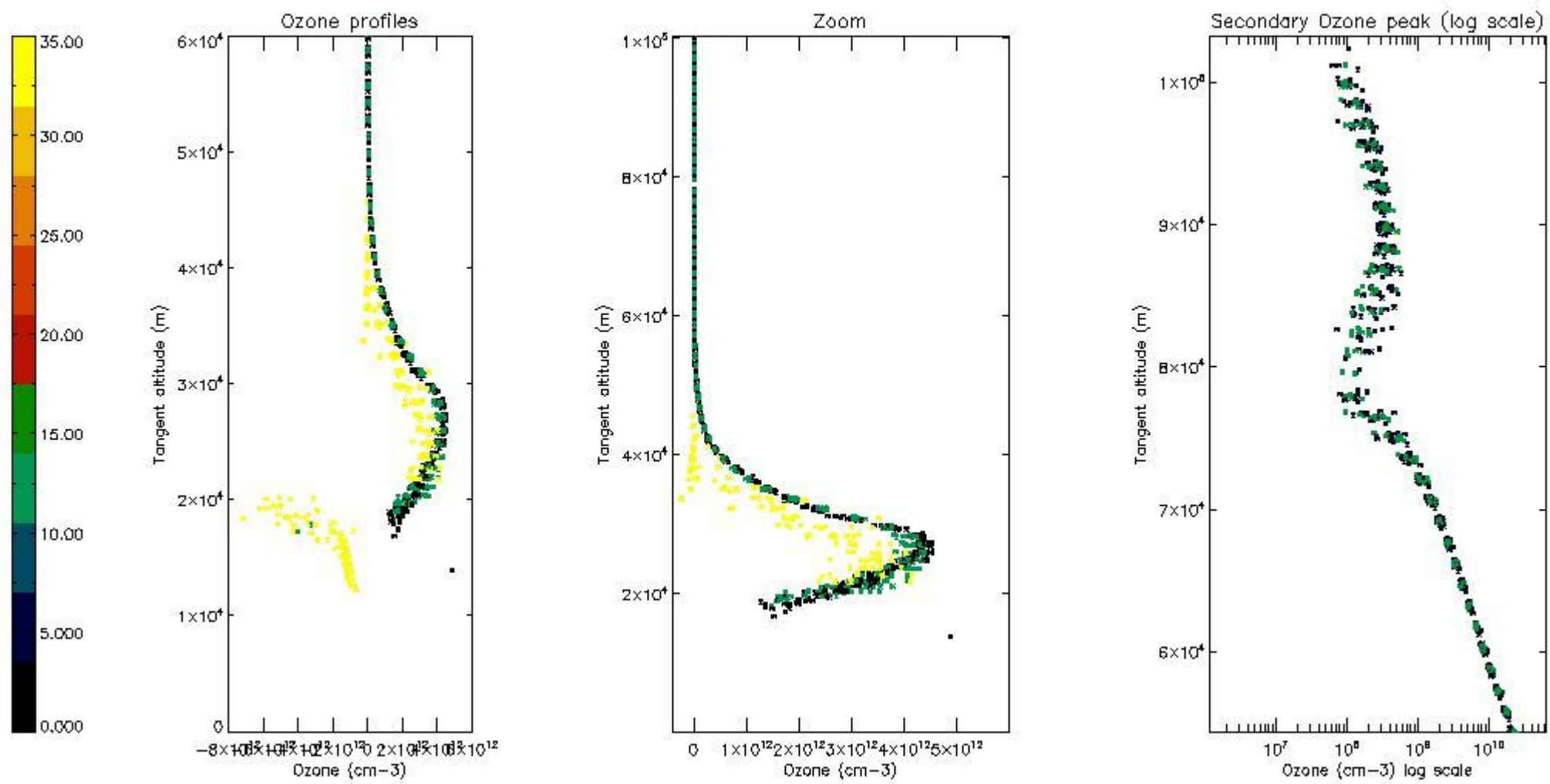
### 5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



### 5.3 Plot ozone profiles where STD < 20% (dark without errors)

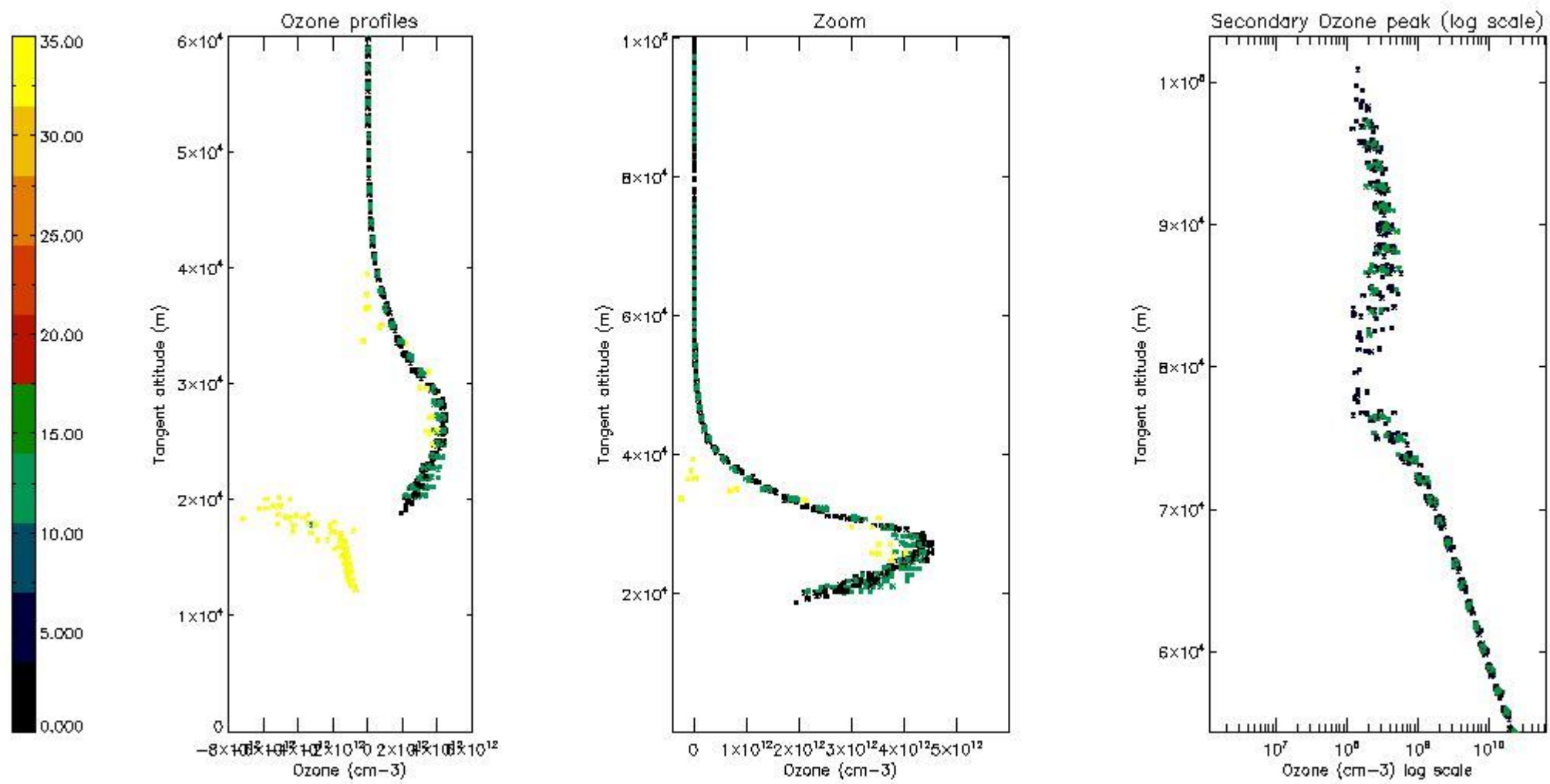
The colorbar represents the latitude.



*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

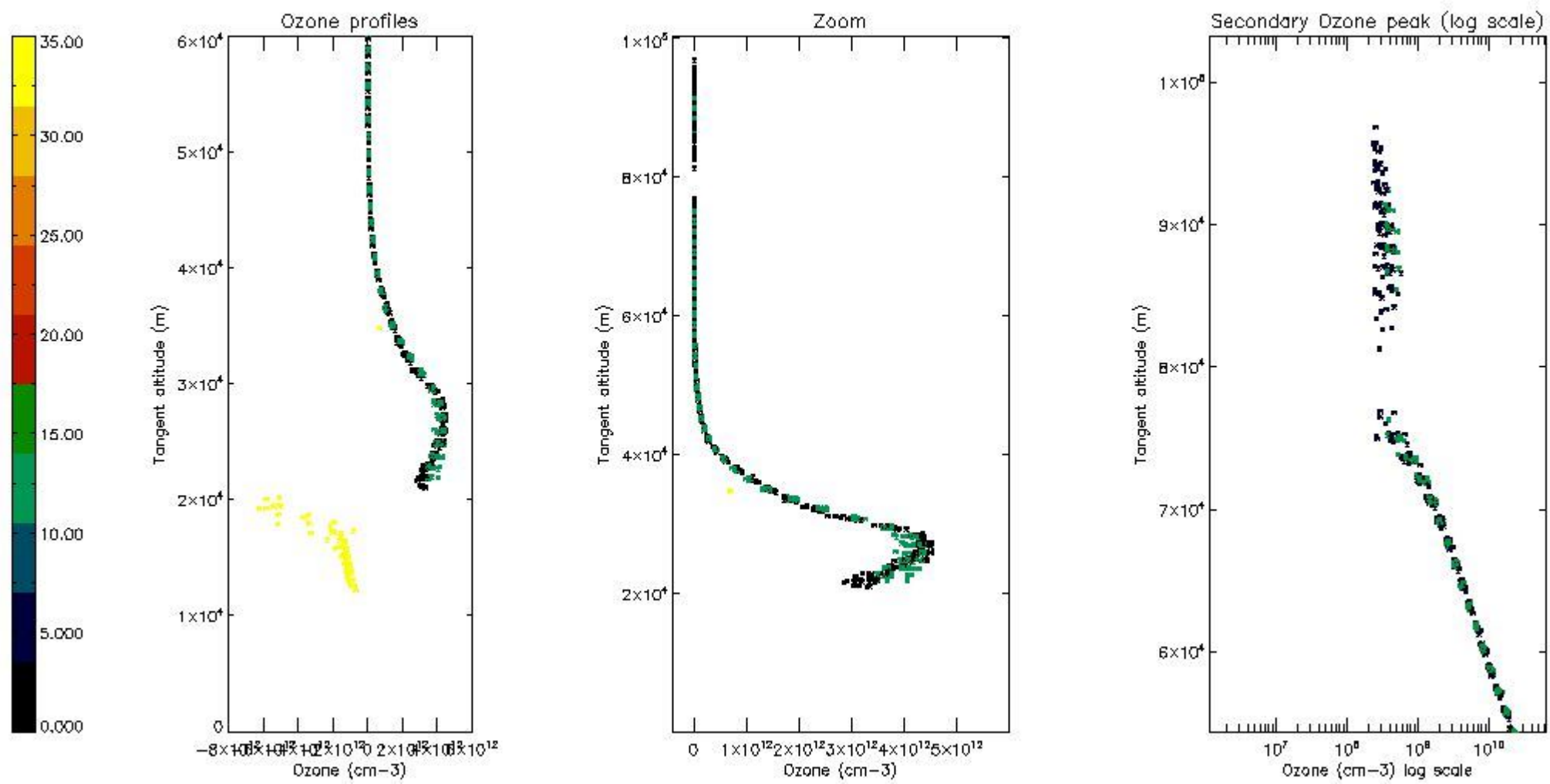
The colorbar represents the latitude.





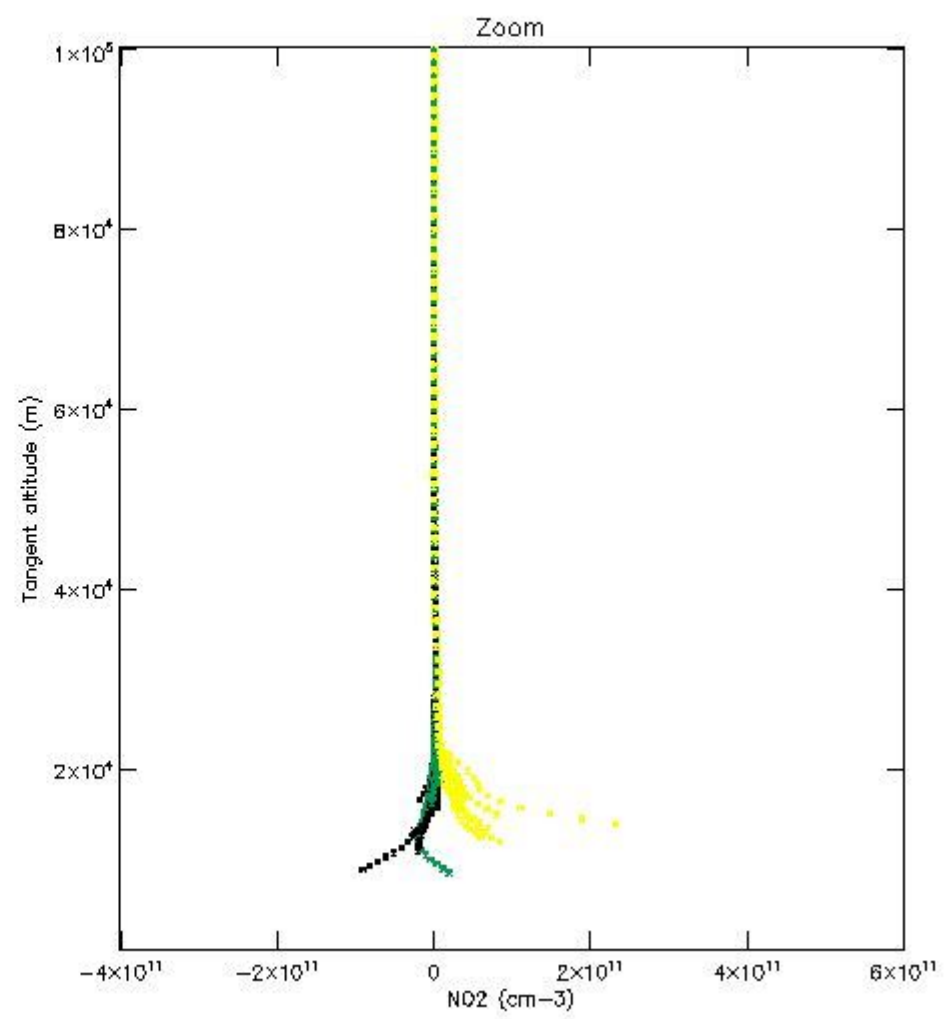
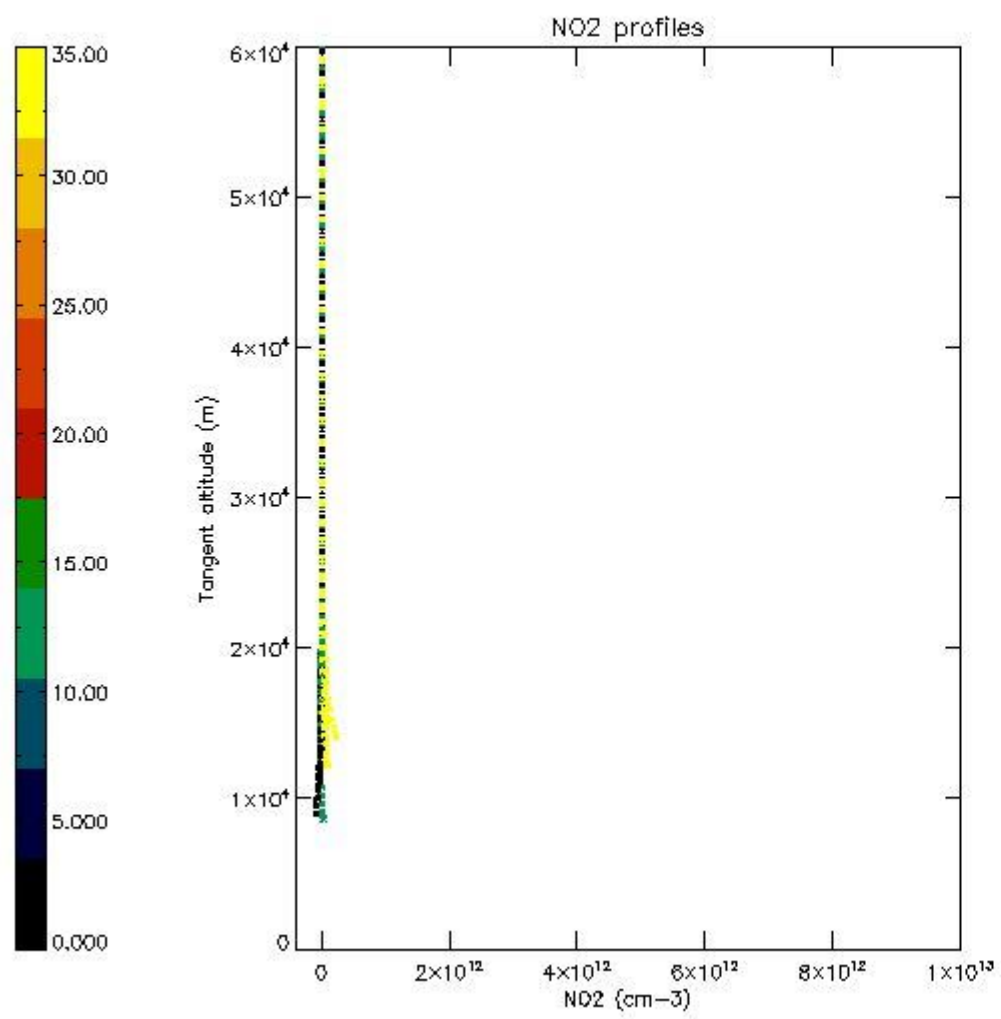
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



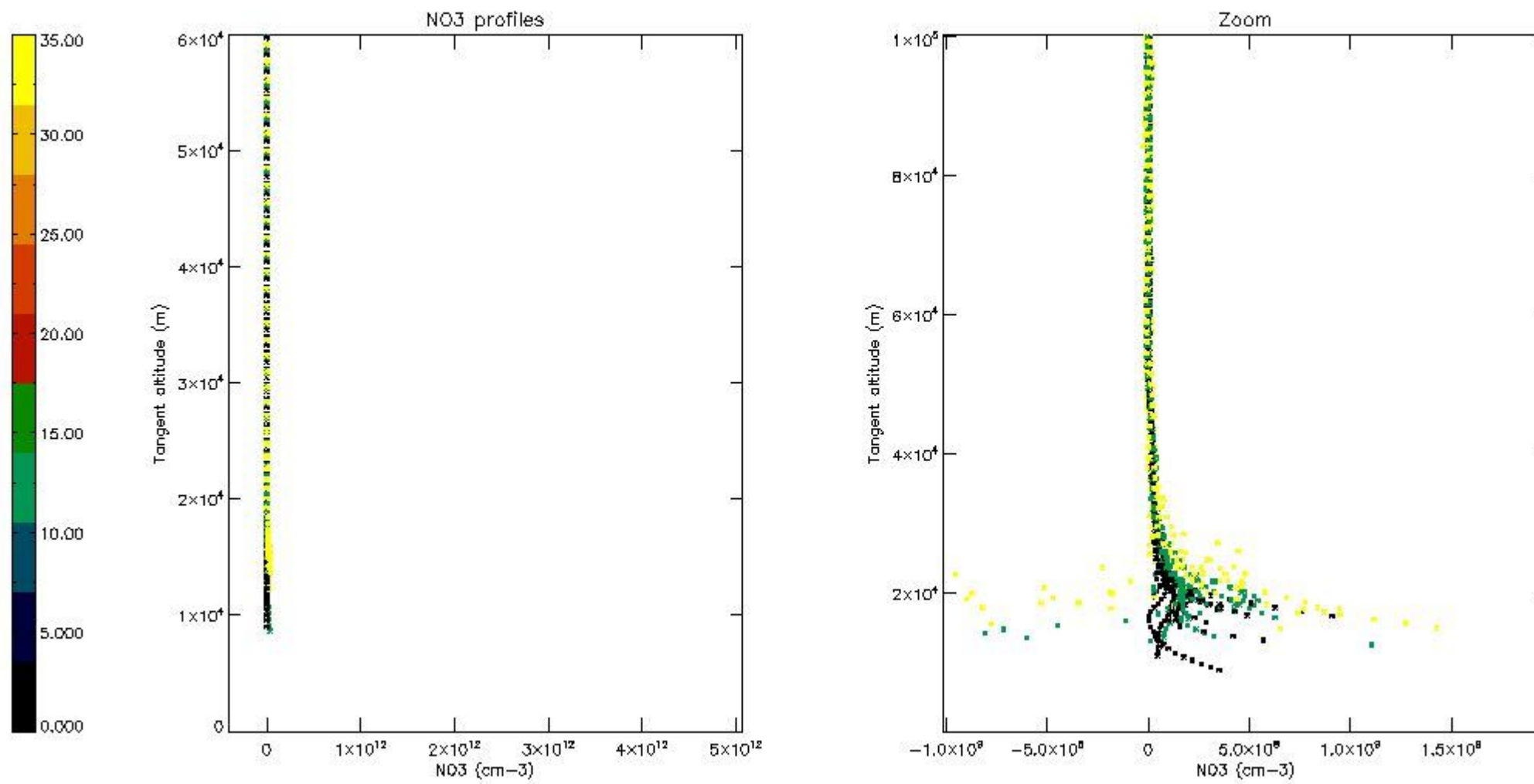
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



*5.7 Plot NO3 profiles for all STD (dark without errors)*

The colorbar represents the latitude.



## 6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	15-FEB-2012 06:15:34
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-FEB-2012 06:15:34
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-FEB-2012 06:15:34

# GOMOS Level 2 Daily Report

## SUMMARY

### [1. General Info](#)

### [2. Summary of processed GOM\\_NL\\_2P products](#)

### [3. Level 2 Quality information per product](#)

#### [3.1 Plot of level 2 quality information per product \(time dependant\)](#)

#### [3.2 Plot of level 2 quality information per product \(world map\)](#)

### [4. Level 1 Quality information per product \(stored on level 2 products\)](#)

#### [4.1 Plot of level 1 quality information per product \(time dependant\)](#)

##### [4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

##### [4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

#### [4.2 Plot of level 1 quality information per product \(world map\)](#)

##### [4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

##### [4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

### [5. Ozone profiles based on quality statistics and other trace gas profiles](#)

#### [5.1 Ozone statistics based on quality of products](#)

#### [5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

#### [5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

#### [5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

#### [5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

#### [5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

#### [5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

#### [5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

### [6. Auxiliary Data Files used for the production reported in section 2](#)

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM\_NL\_\_2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	18APR2013 14:06:10
Data source version	GOMOS/6.01
Start time of products	15-02-2012 (15FEB2012 00:00:00)
Stop time of products	16-02-2012 (16FEB2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	33
Nb of prods with errors	0

## 2. Summary of processed GOM\_NL\_\_2P products.

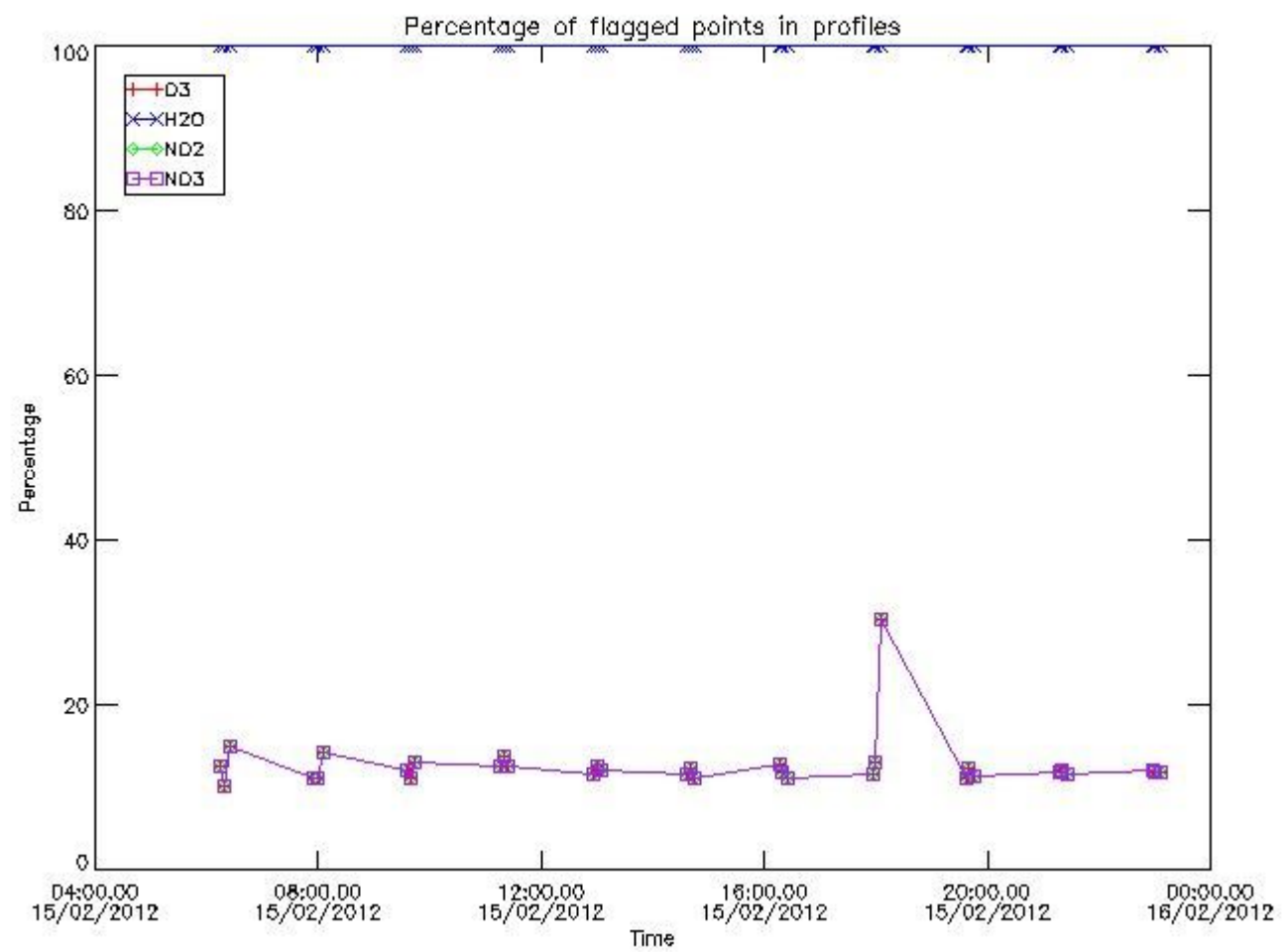
**!Warning: No products without errors in BRIGHT limb conditions found**

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120215_061534_000000413111_00365_52103_2442.N1	15-FEB-2012 06:15:34	Dark	41.000	10	Bet Cen	0.61000	28000.	82	52103	No
2	GOM_NL__2PRFIN20120215_061823_000000513111_00365_52103_2443.N1	15-FEB-2012 06:18:23	Dark	50.500	20	Bet Cru	1.2530	30000.	101	52103	No
3	GOM_NL__2PRFIN20120215_062420_000000343111_00365_52103_2444.N1	15-FEB-2012 06:24:20	Dark	33.500	113	Mu Vel	2.6920	5000.0	67	52103	No
4	GOM_NL__2PRFIN20120215_075549_000000503111_00366_52104_2464.N1	15-FEB-2012 07:55:49	Dark	50.000	10	Bet Cen	0.61000	28000.	100	52104	No
5	GOM_NL__2PRFIN20120215_075837_000000463111_00366_52104_2465.N1	15-FEB-2012 07:58:37	Dark	45.500	20	Bet Cru	1.2530	30000.	91	52104	No
6	GOM_NL__2PRFIN20120215_080434_000000363111_00366_52104_2466.N1	15-FEB-2012 08:04:34	Dark	35.500	113	Mu Vel	2.6920	5000.0	71	52104	No
7	GOM_NL__2PRFIN20120215_093603_000000433111_00367_52105_2513.N1	15-FEB-2012 09:36:03	Dark	42.500	10	Bet Cen	0.61000	28000.	85	52105	No
8	GOM_NL__2PRFIN20120215_093852_000000463111_00367_52105_2514.N1	15-FEB-2012 09:38:52	Dark	45.500	20	Bet Cru	1.2530	30000.	91	52105	No
9	GOM_NL__2PRFIN20120215_094448_000000393111_00367_52105_2515.N1	15-FEB-2012 09:44:48	Dark	38.500	113	Mu Vel	2.6920	5000.0	77	52105	No
10	GOM_NL__2PRFIN20120215_111618_000000413111_00368_52106_2543.N1	15-FEB-2012 11:16:18	Dark	41.000	10	Bet Cen	0.61000	28000.	82	52106	No
11	GOM_NL__2PRFIN20120215_111906_000000413111_00368_52106_2544.N1	15-FEB-2012 11:19:06	Dark	40.500	20	Bet Cru	1.2530	30000.	81	52106	No
12	GOM_NL__2PRFIN20120215_112503_000000413111_00368_52106_2545.N1	15-FEB-2012 11:25:03	Dark	40.500	113	Mu Vel	2.6920	5000.0	81	52106	No
13	GOM_NL__2PRFIN20120215_125632_000000443111_00369_52107_2566.N1	15-FEB-2012 12:56:32	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52107	No
14	GOM_NL__2PRFIN20120215_125921_000000413111_00369_52107_2567.N1	15-FEB-2012 12:59:21	Dark	40.500	20	Bet Cru	1.2530	30000.	81	52107	No
15	GOM_NL__2PRFIN20120215_130517_000000423111_00369_52107_2568.N1	15-FEB-2012 13:05:17	Dark	41.500	113	Mu Vel	2.6920	5000.0	83	52107	No
16	GOM_NL__2PRFIN20120215_143647_000000443111_00370_52108_2594.N1	15-FEB-2012 14:36:47	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52108	No
17	GOM_NL__2PRFIN20120215_143935_000000423111_00370_52108_2595.N1	15-FEB-2012 14:39:35	Dark	41.500	20	Bet Cru	1.2530	30000.	83	52108	No
18	GOM_NL__2PRFIN20120215_144531_000000463111_00370_52108_2596.N1	15-FEB-2012 14:45:31	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	52108	No
19	GOM_NL__2PRFIN20120215_161701_000000443111_00371_52109_2628.N1	15-FEB-2012 16:17:01	Dark	43.500	10	Bet Cen	0.61000	28000.	87	52109	No
20	GOM_NL__2PRFIN20120215_161950_000000443111_00371_52109_2629.N1	15-FEB-2012 16:19:50	Dark	43.500	20	Bet Cru	1.2530	30000.	87	52109	No
21	GOM_NL__2PRFIN20120215_162546_000000463111_00371_52109_2630.N1	15-FEB-2012 16:25:46	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	52109	No
22	GOM_NL__2PRFIN20120215_175716_000000483111_00372_52110_2675.N1	15-FEB-2012 17:57:16	Dark	48.000	10	Bet Cen	0.61000	28000.	96	52110	No
23	GOM_NL__2PRFIN20120215_180004_000000433111_00372_52110_2676.N1	15-FEB-2012 18:00:04	Dark	43.000	20	Bet Cru	1.2530	30000.	86	52110	No
24	GOM_NL__2PRFIN20120215_180600_000000173111_00372_52110_2677.N1	15-FEB-2012 18:06:00	Dark	16.500	113	Mu Vel	2.6920	5000.0	33	52110	No
25	GOM_NL__2PRFIN20120215_193730_000000463111_00373_52111_2679.N1	15-FEB-2012 19:37:30	Dark	46.000	10	Bet Cen	0.61000	28000.	92	52111	No
26	GOM_NL__2PRFIN20120215_194019_000000423111_00373_52111_2680.N1	15-FEB-2012 19:40:19	Dark	41.500	20	Bet Cru	1.2530	30000.	83	52111	No
27	GOM_NL__2PRFIN20120215_194614_000000453111_00373_52111_2681.N1	15-FEB-2012 19:46:14	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	52111	No
28	GOM_NL__2PRFIN20120215_211745_000000443111_00374_52112_2705.N1	15-FEB-2012 21:17:45	Dark	43.500	10	Bet Cen	0.61000	28000.	87	52112	No
29	GOM_NL__2PRFIN20120215_212033_000000423111_00374_52112_2706.N1	15-FEB-2012 21:20:33	Dark	42.000	20	Bet Cru	1.2530	30000.	84	52112	No
30	GOM_NL__2PRFIN20120215_212629_000000443111_00374_52112_2707.N1	15-FEB-2012 21:26:29	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	52112	No
31	GOM_NL__2PRFIN20120215_225759_000000423111_00375_52113_2734.N1	15-FEB-2012 22:57:59	Dark	42.000	10	Bet Cen	0.61000	28000.	84	52113	No
32	GOM_NL__2PRFIN20120215_230048_000000443111_00375_52113_2735.N1	15-FEB-2012 23:00:48	Dark	43.500	20	Bet Cru	1.2530	30000.	87	52113	No
33	GOM_NL__2PRFIN20120215_230643_000000433111_00375_52113_2736.N1	15-FEB-2012 23:06:43	Dark	43.000	113	Mu Vel	2.6920	5000.0	86	52113	No

## 3. Quality information per product

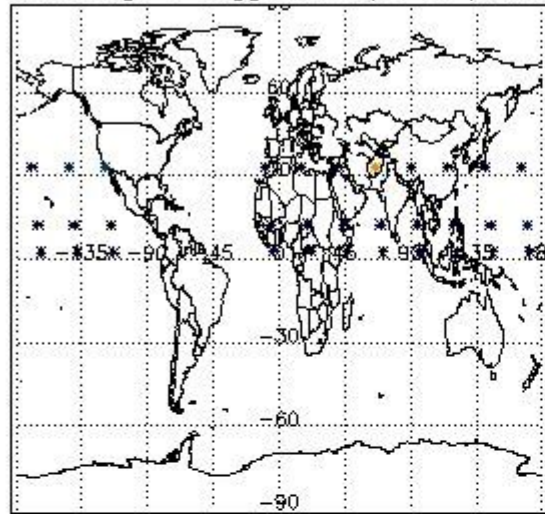
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

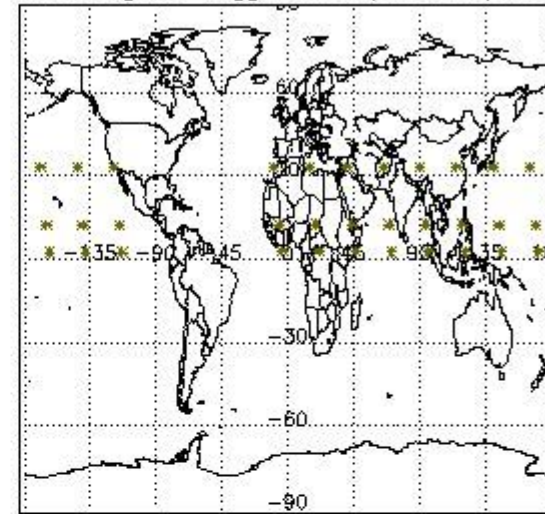


3.2 Plot quality information per product (world map)

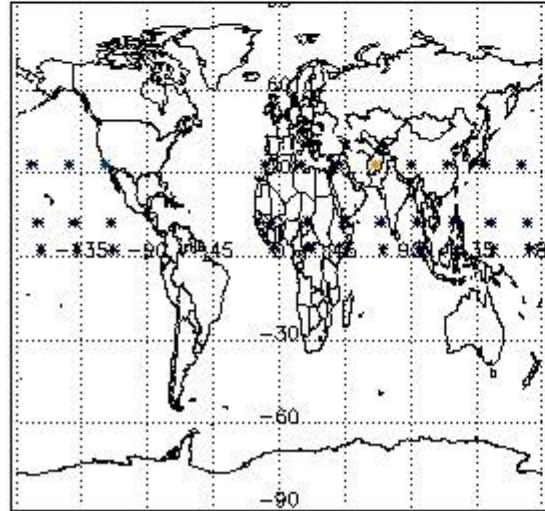
Percentage of flagged data per O3 profile



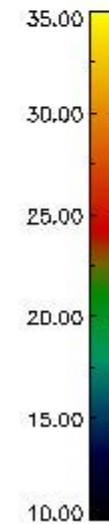
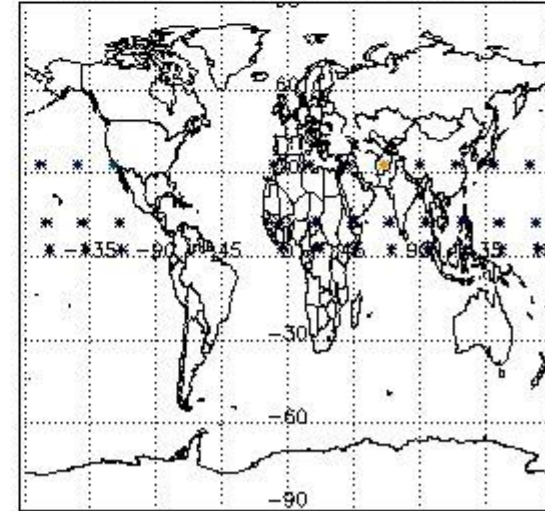
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile



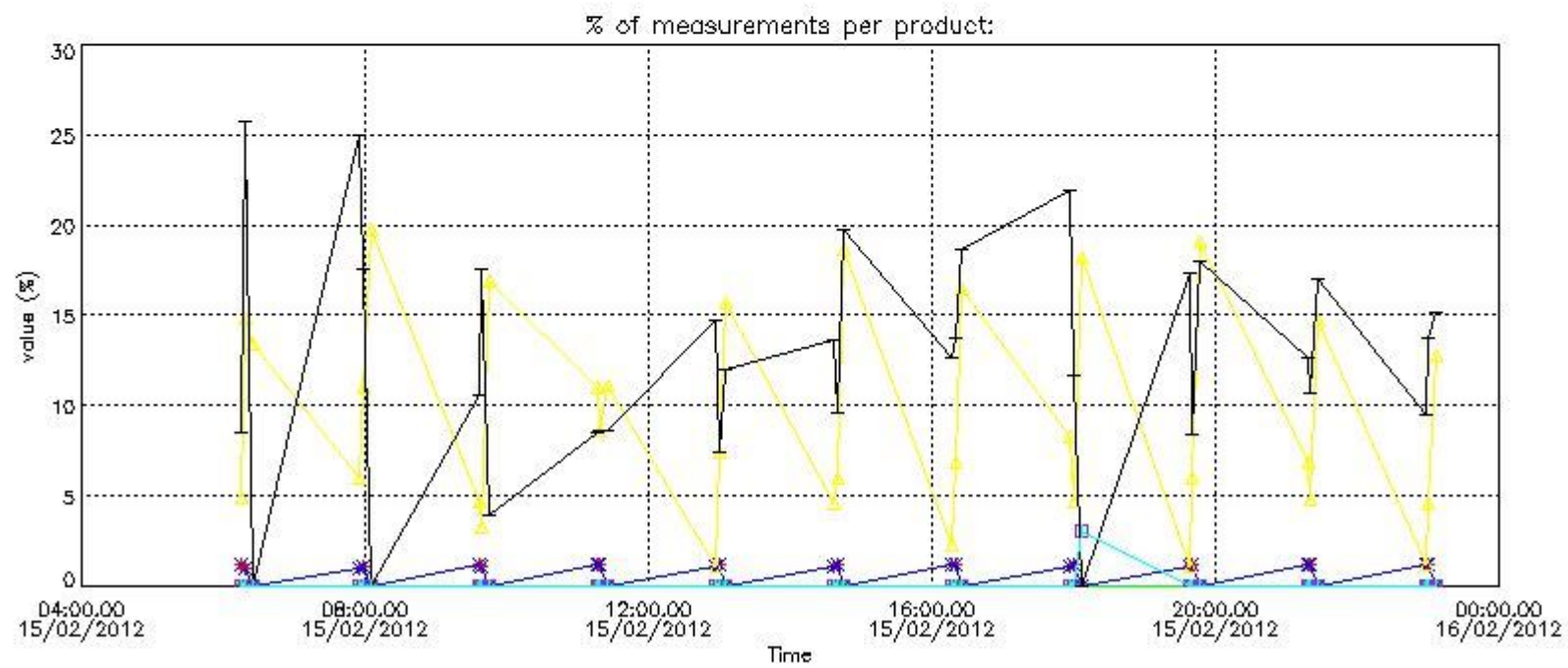
#### 4. Level 1 quality information per product

In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

###### 4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



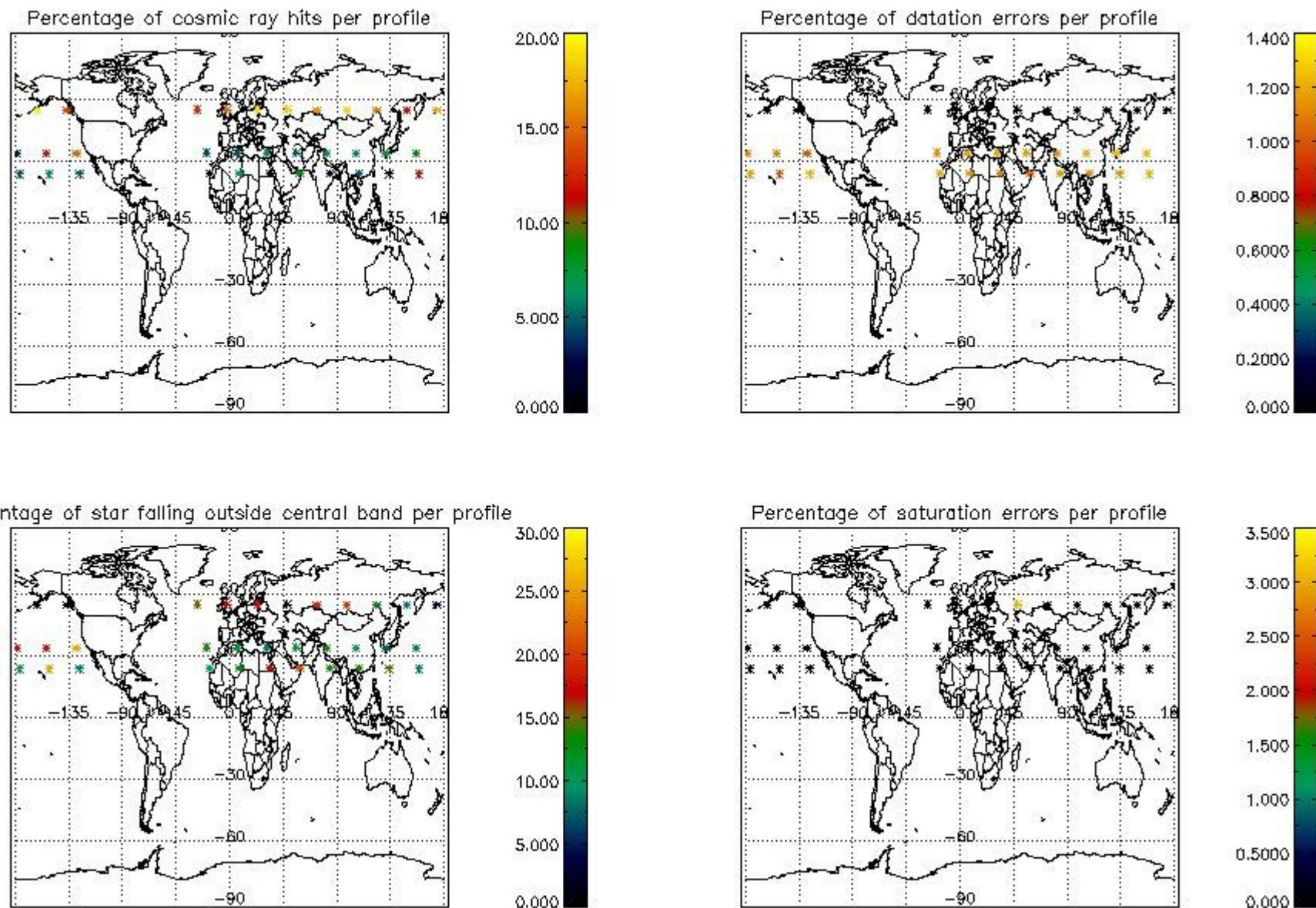


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

!Warning: No products without errors in descending found

4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes



#### 4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

**!Warning: No products without errors in descending found**

### 5. Trace gas profiles

#### 5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/o3\_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

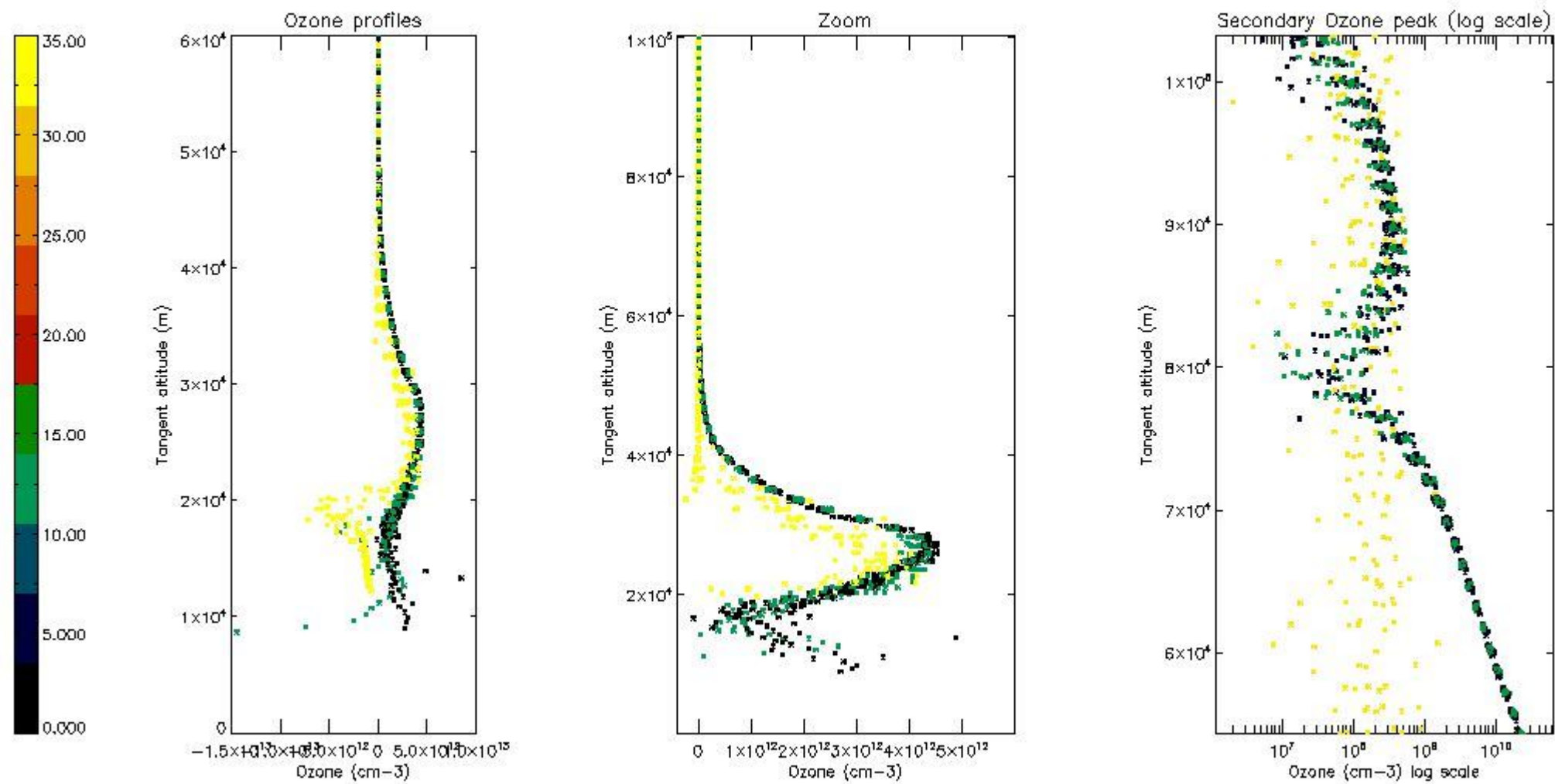
- Products in dark limb illumination condition: GOM\_NL\_\_2P/NL\_SUMMARY\_QUALITY/obs\_ill\_cond=0
- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	100
STD < 20	60
STD < 10	51
STD < 5	42

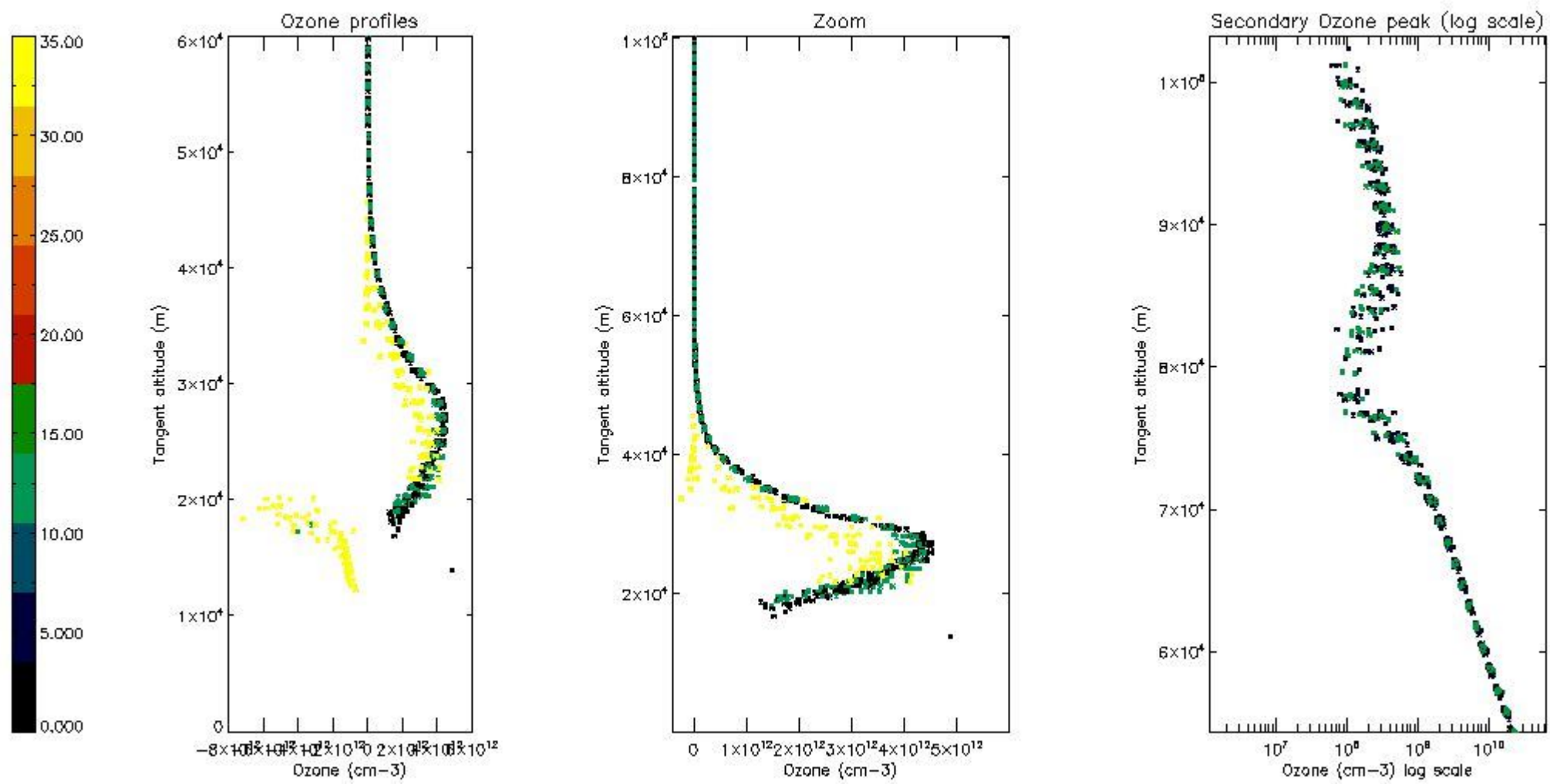
### 5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



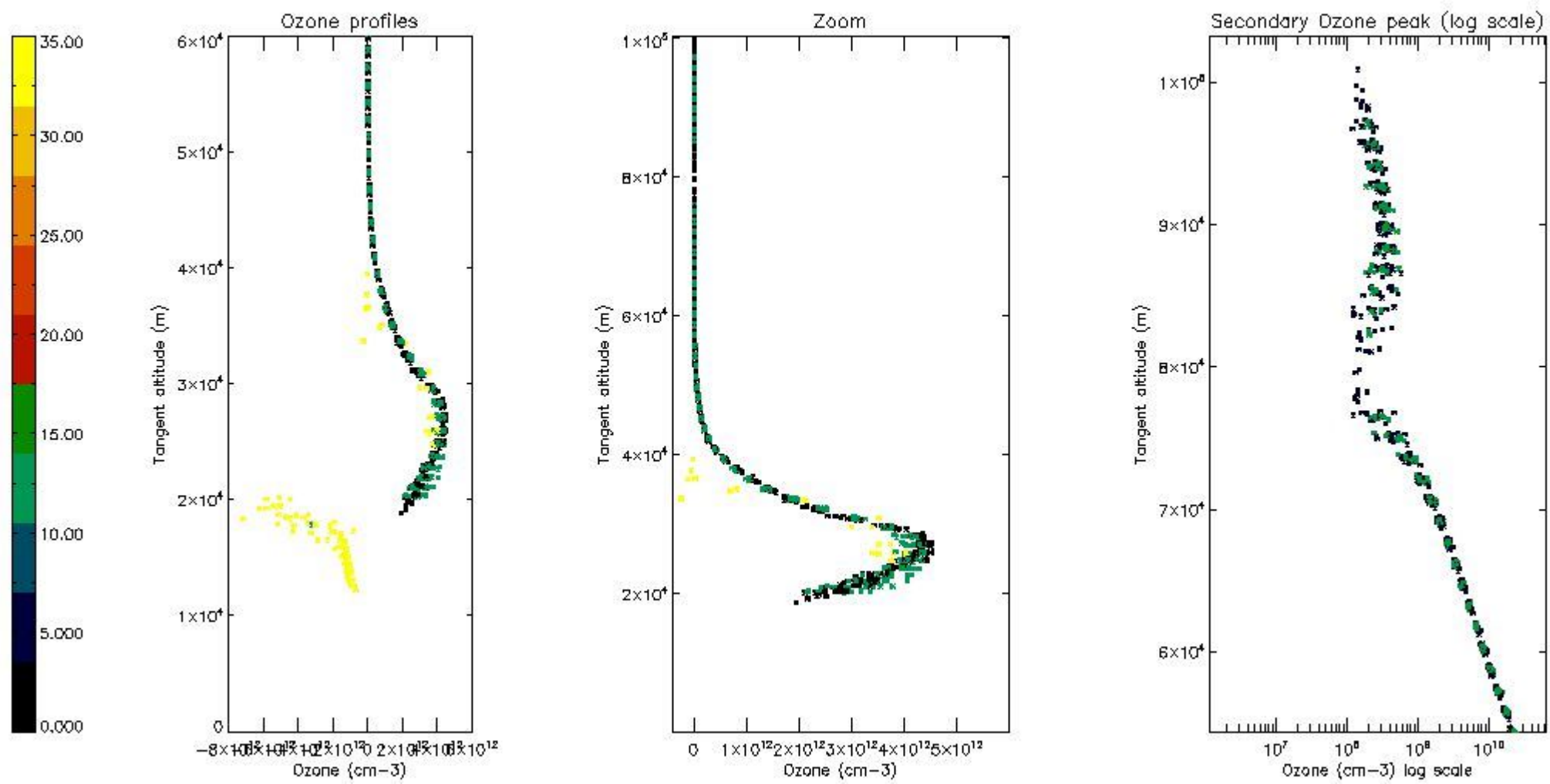
### 5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



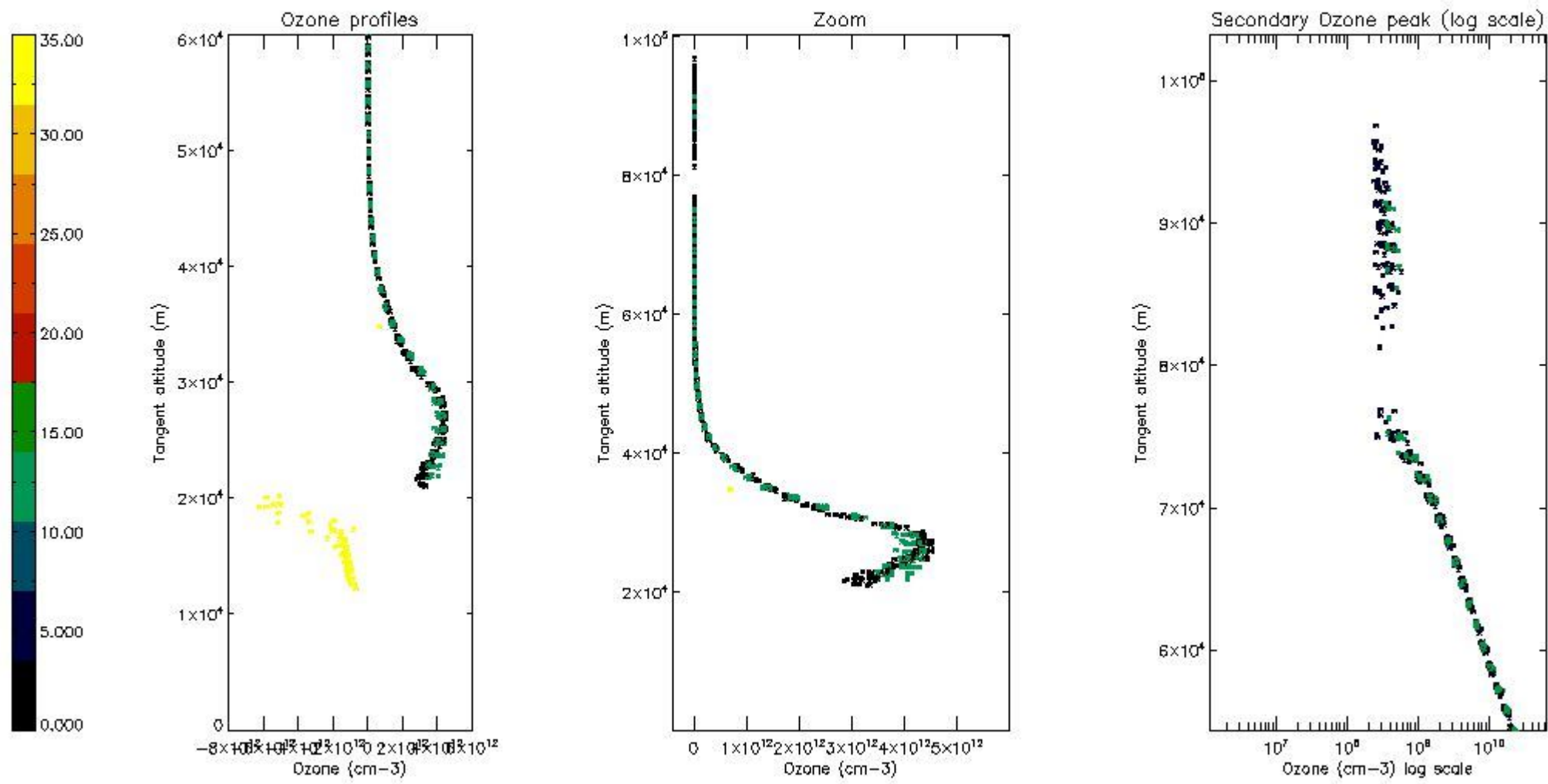
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



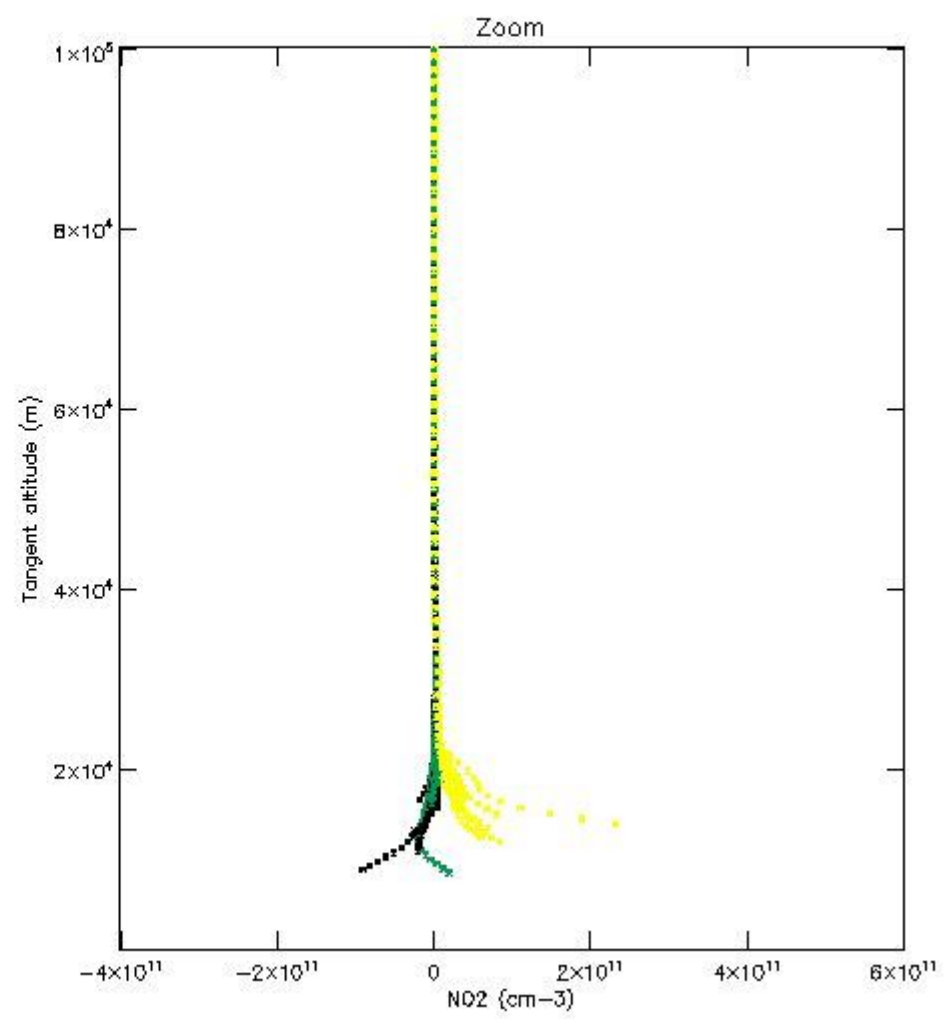
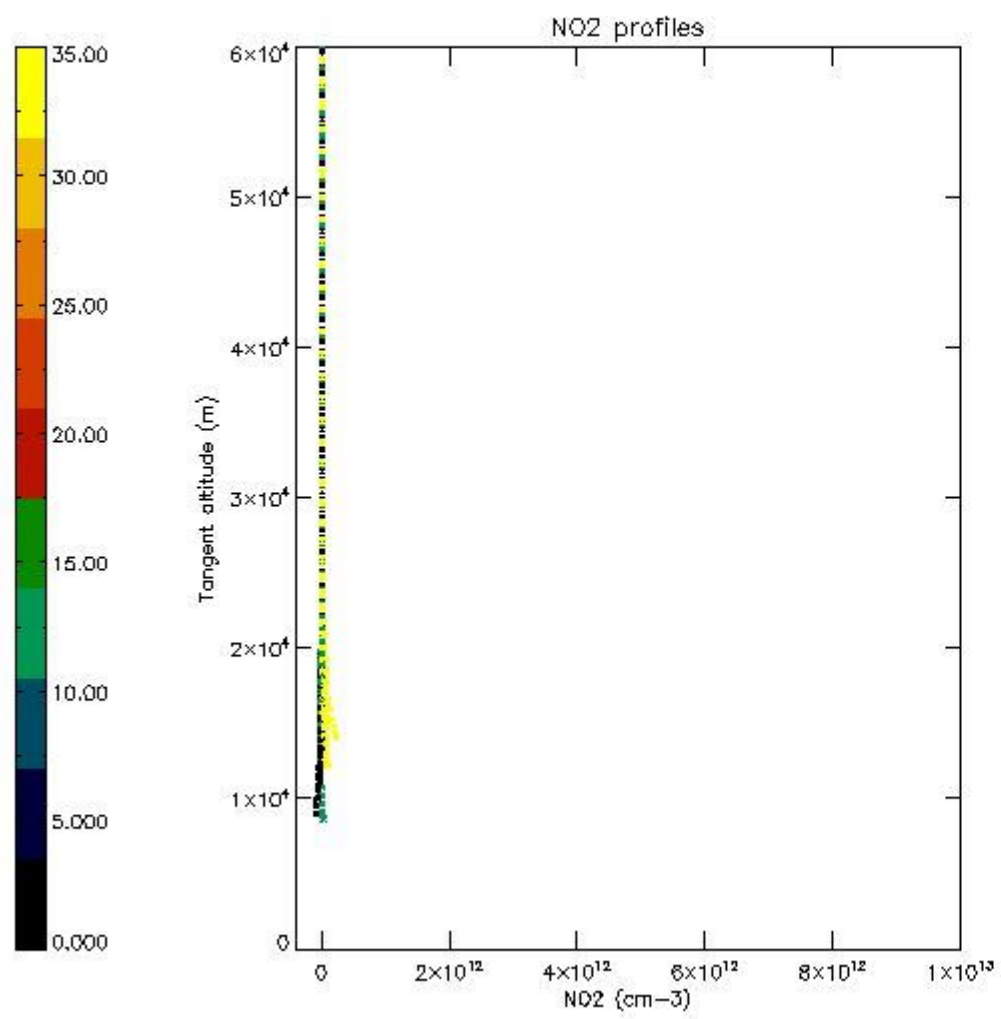
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



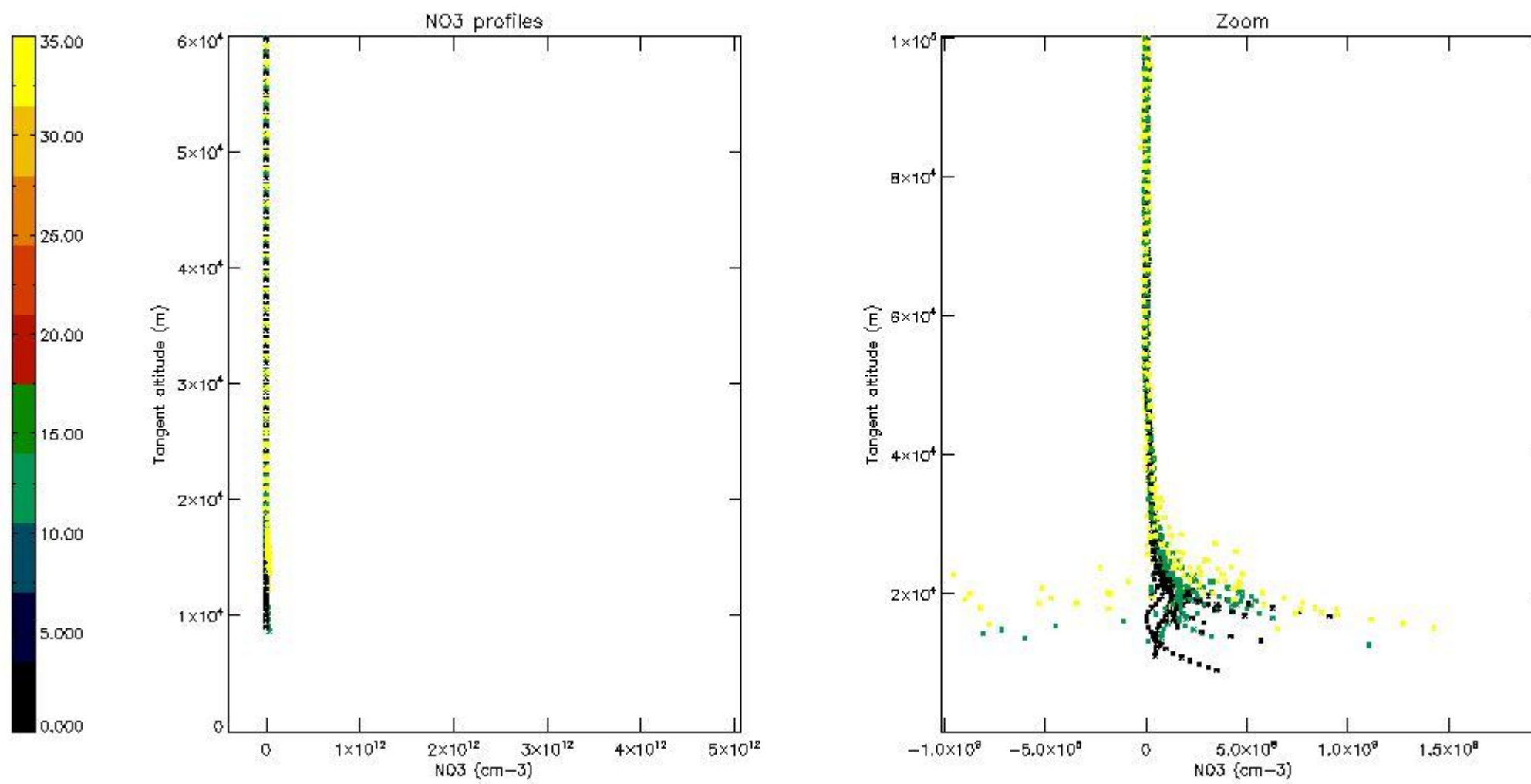
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



*5.7 Plot NO3 profiles for all STD (dark without errors)*

The colorbar represents the latitude.

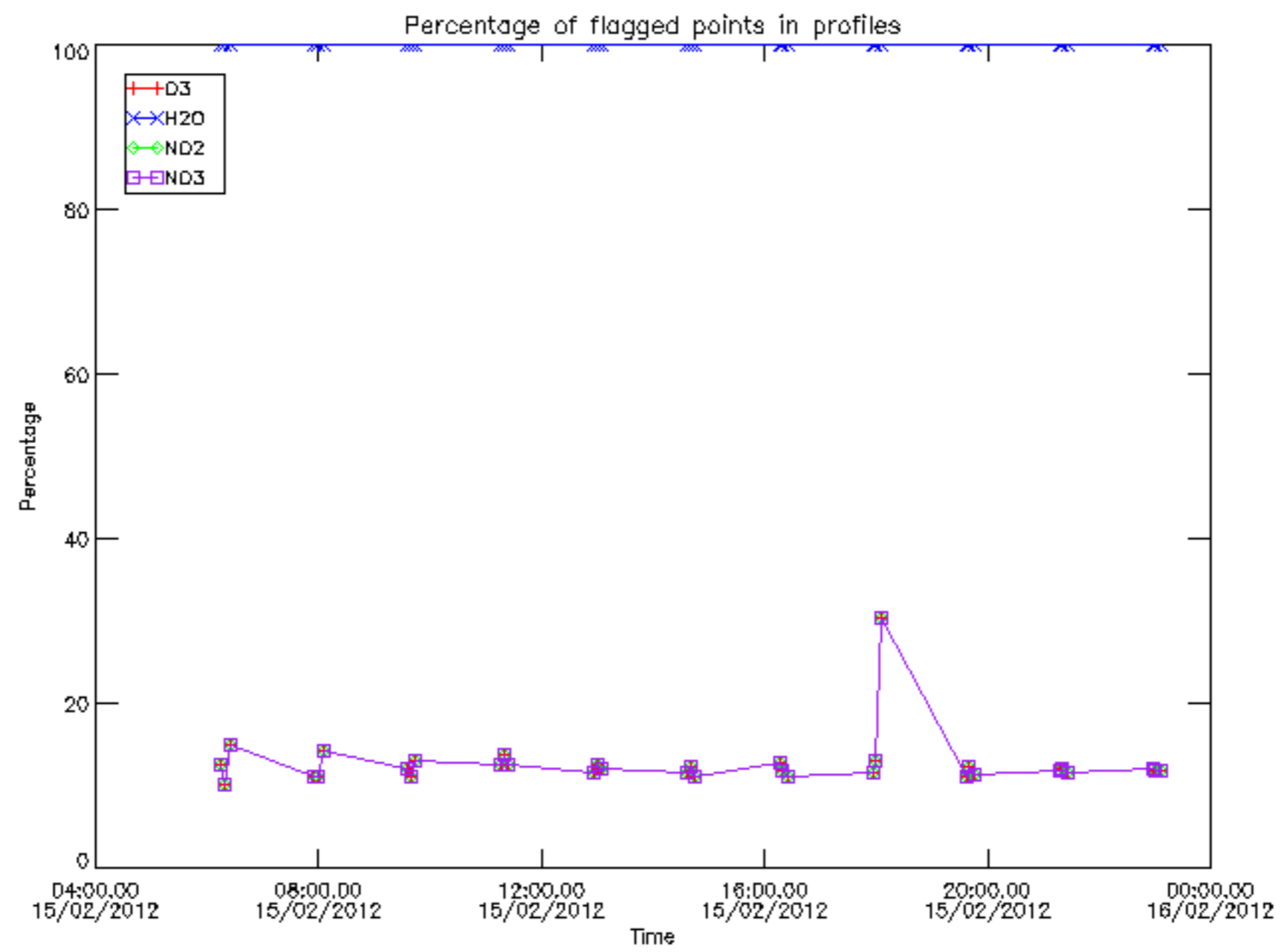


## 6. Auxiliary Data Files used for the production reported in section 2

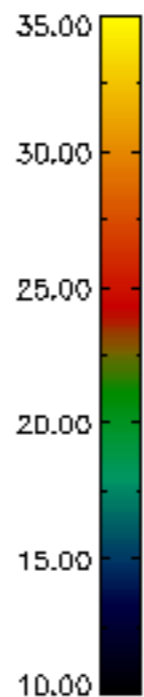
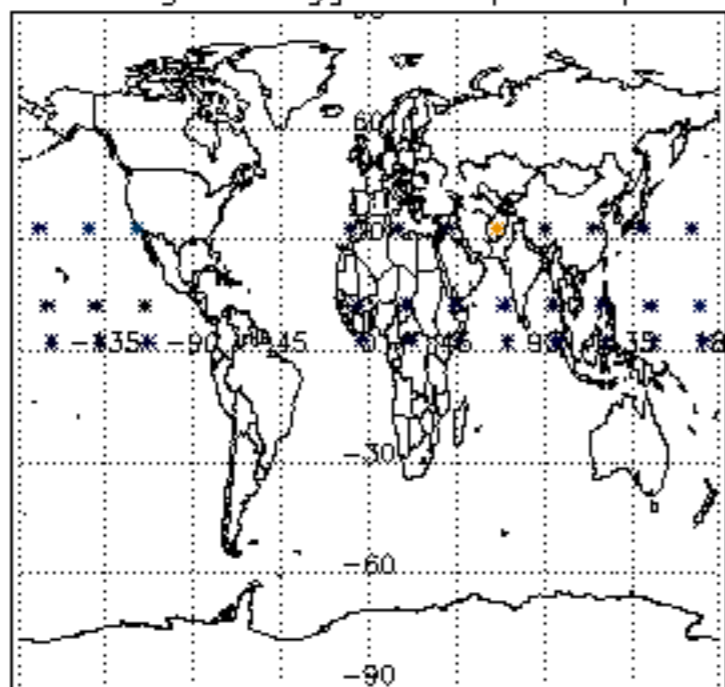
The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	15-FEB-2012 06:15:34
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-FEB-2012 06:15:34
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-FEB-2012 06:15:34

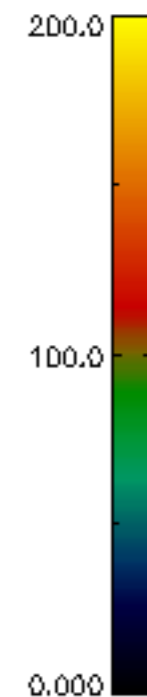
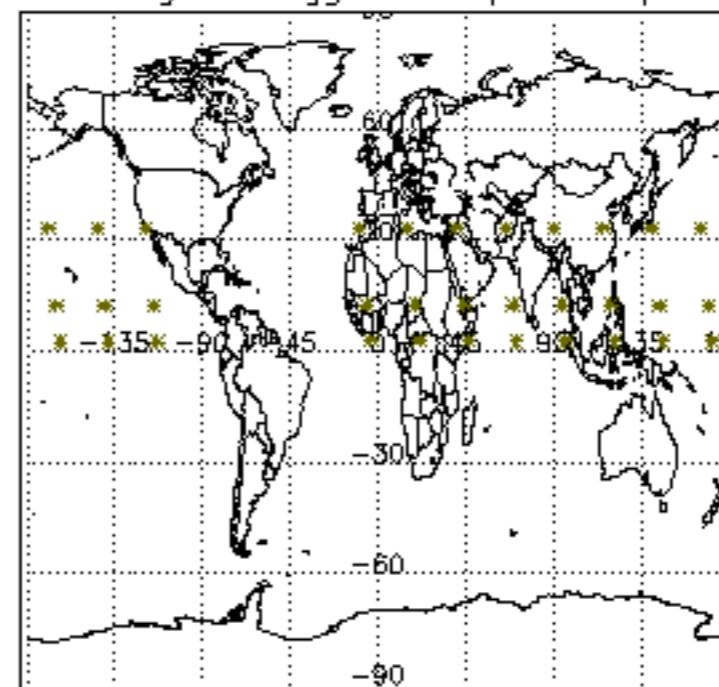




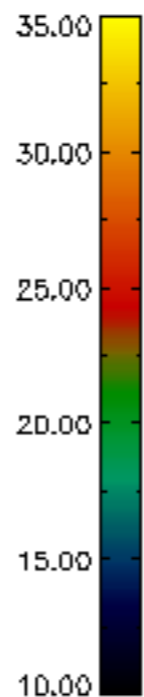
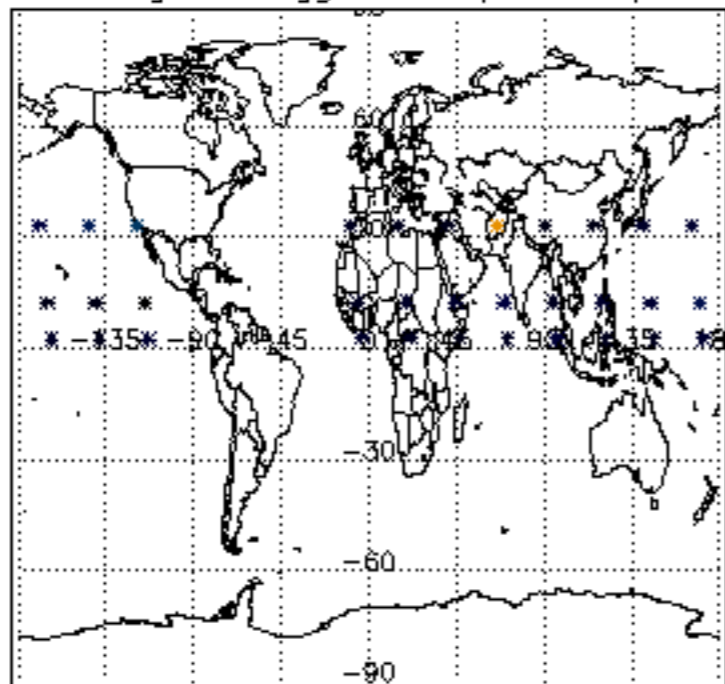
Percentage of flagged data per D3 profile



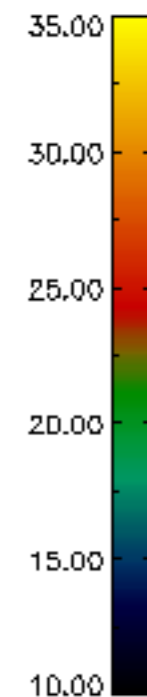
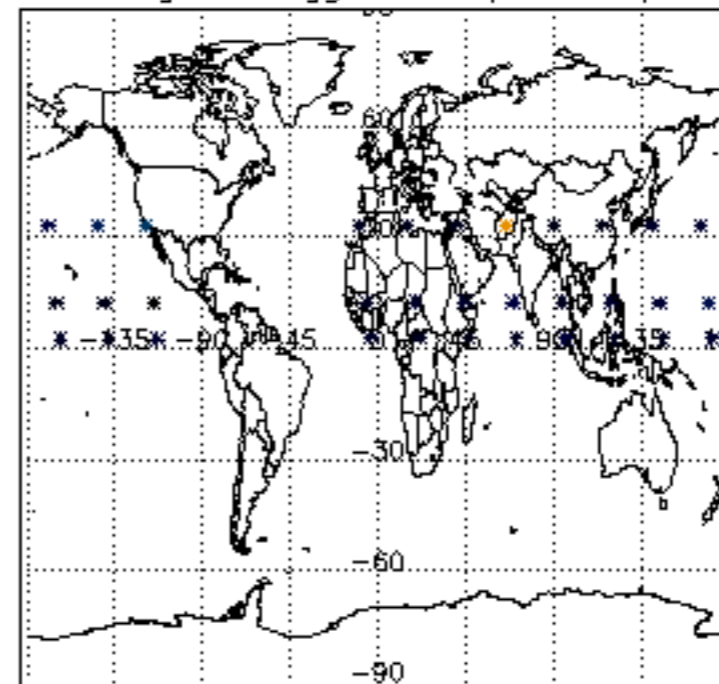
Percentage of flagged data per H2O profile

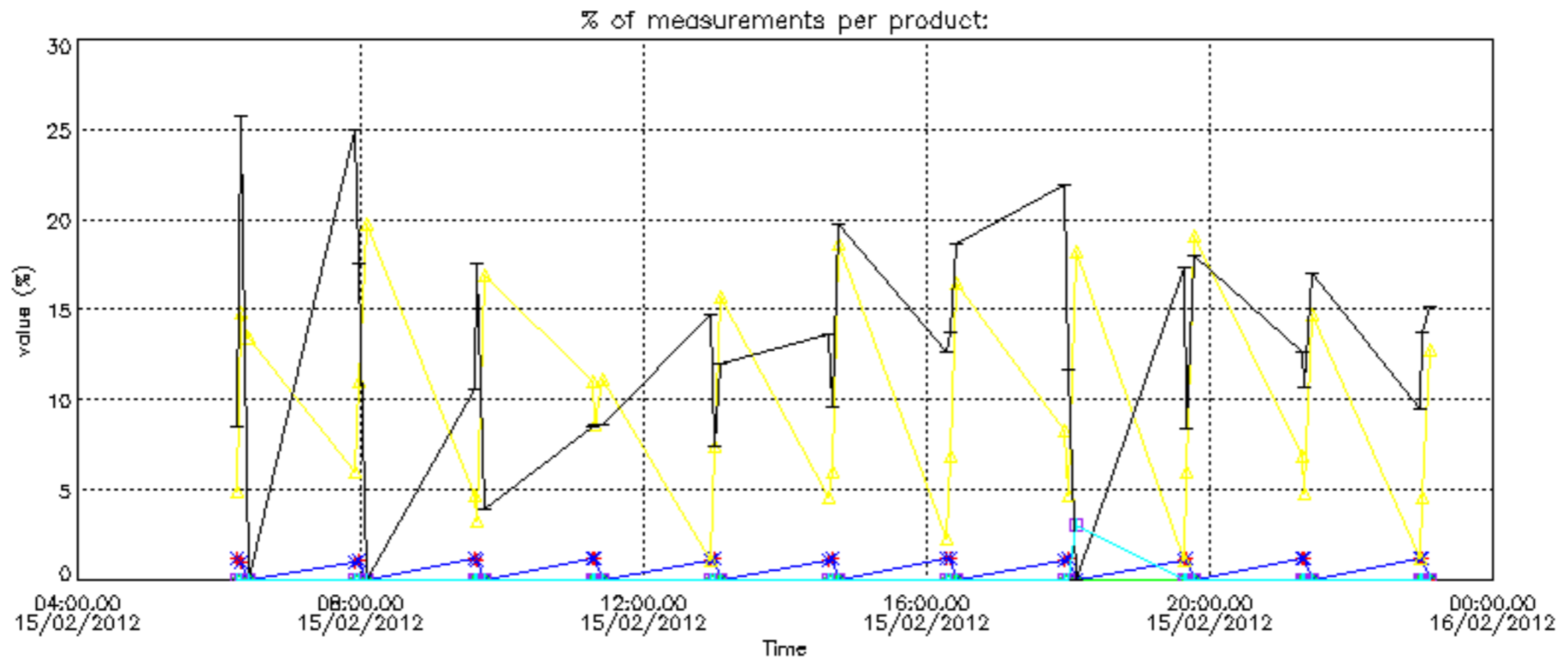


Percentage of flagged data per NO2 profile

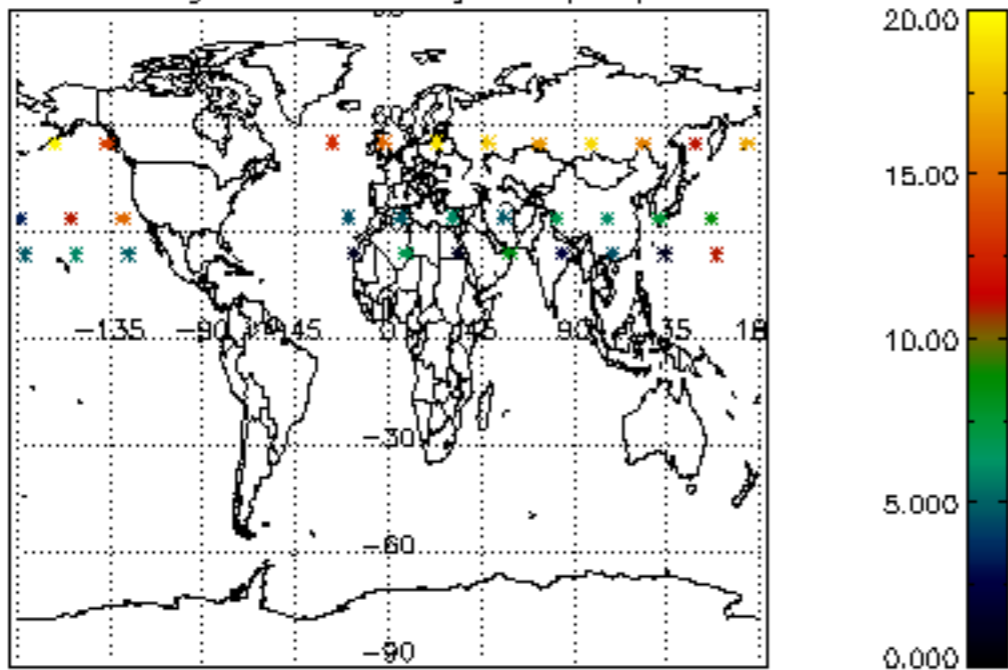


Percentage of flagged data per NO3 profile

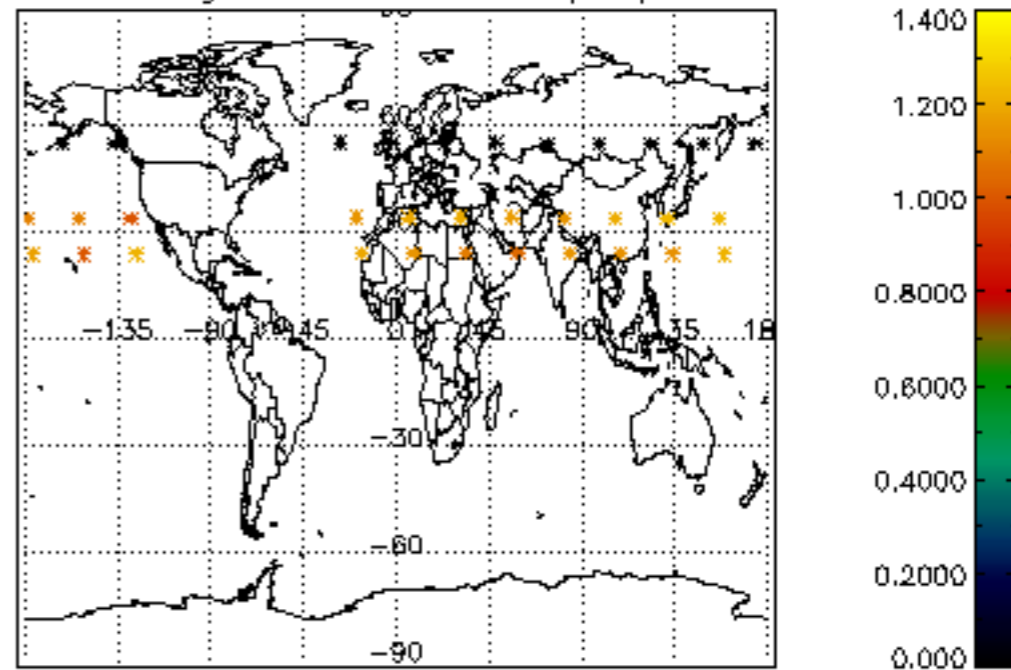




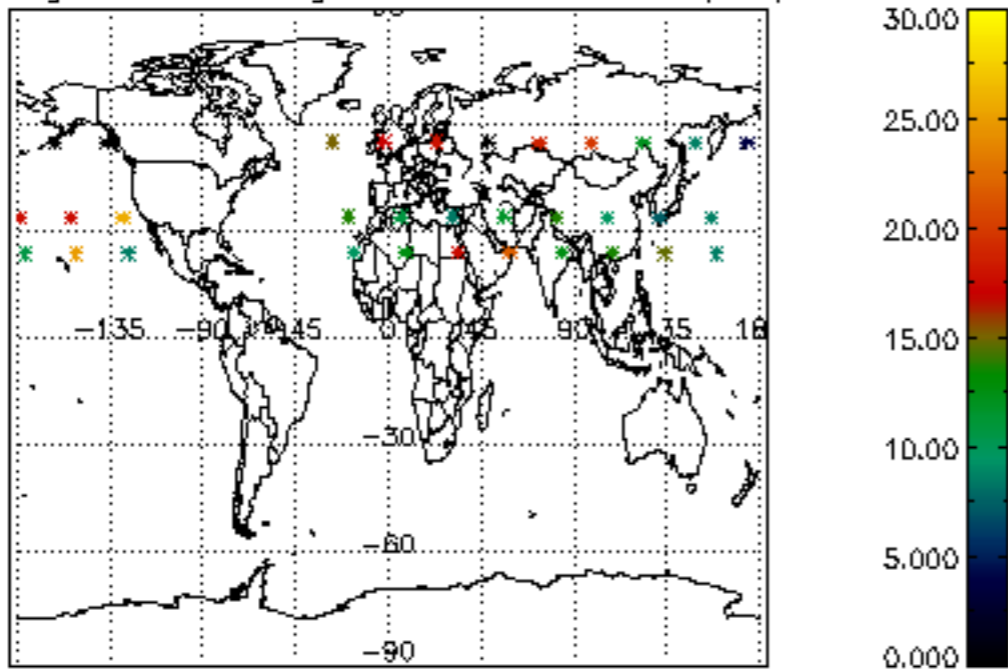
Percentage of cosmic ray hits per profile



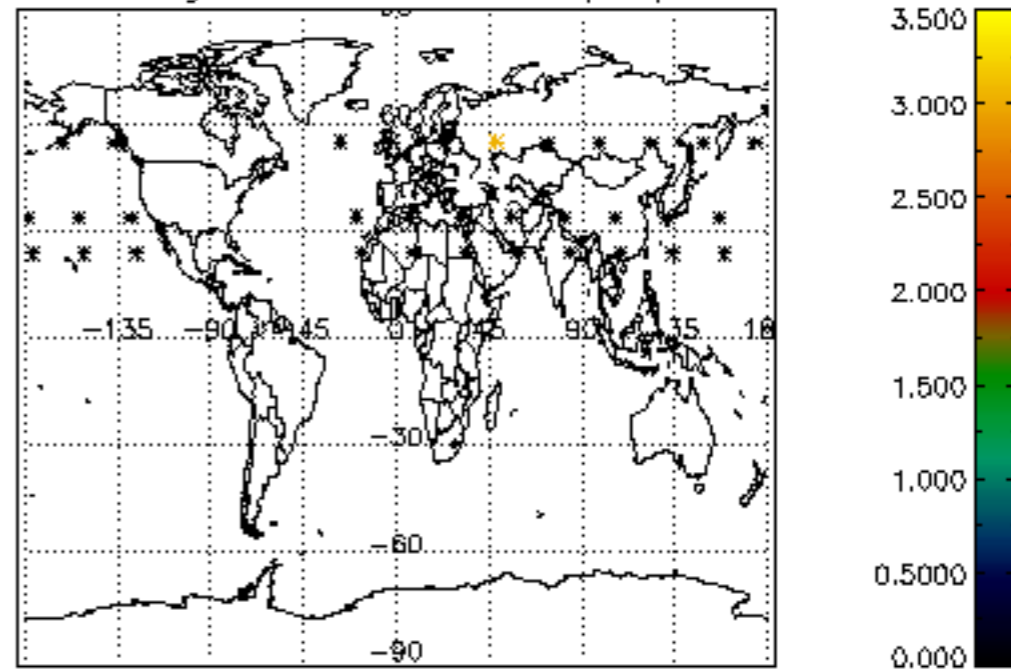
Percentage of datation errors per profile

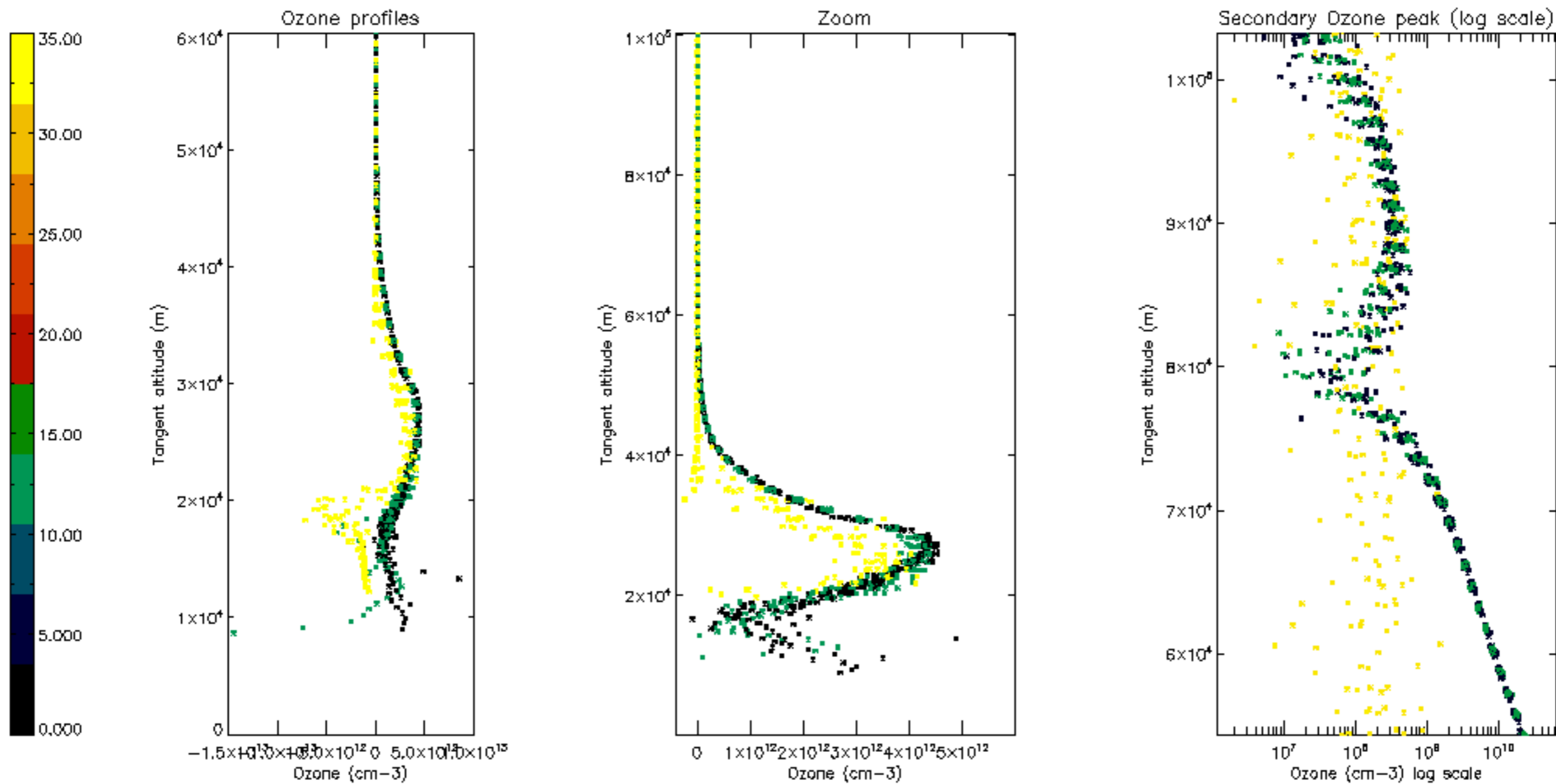


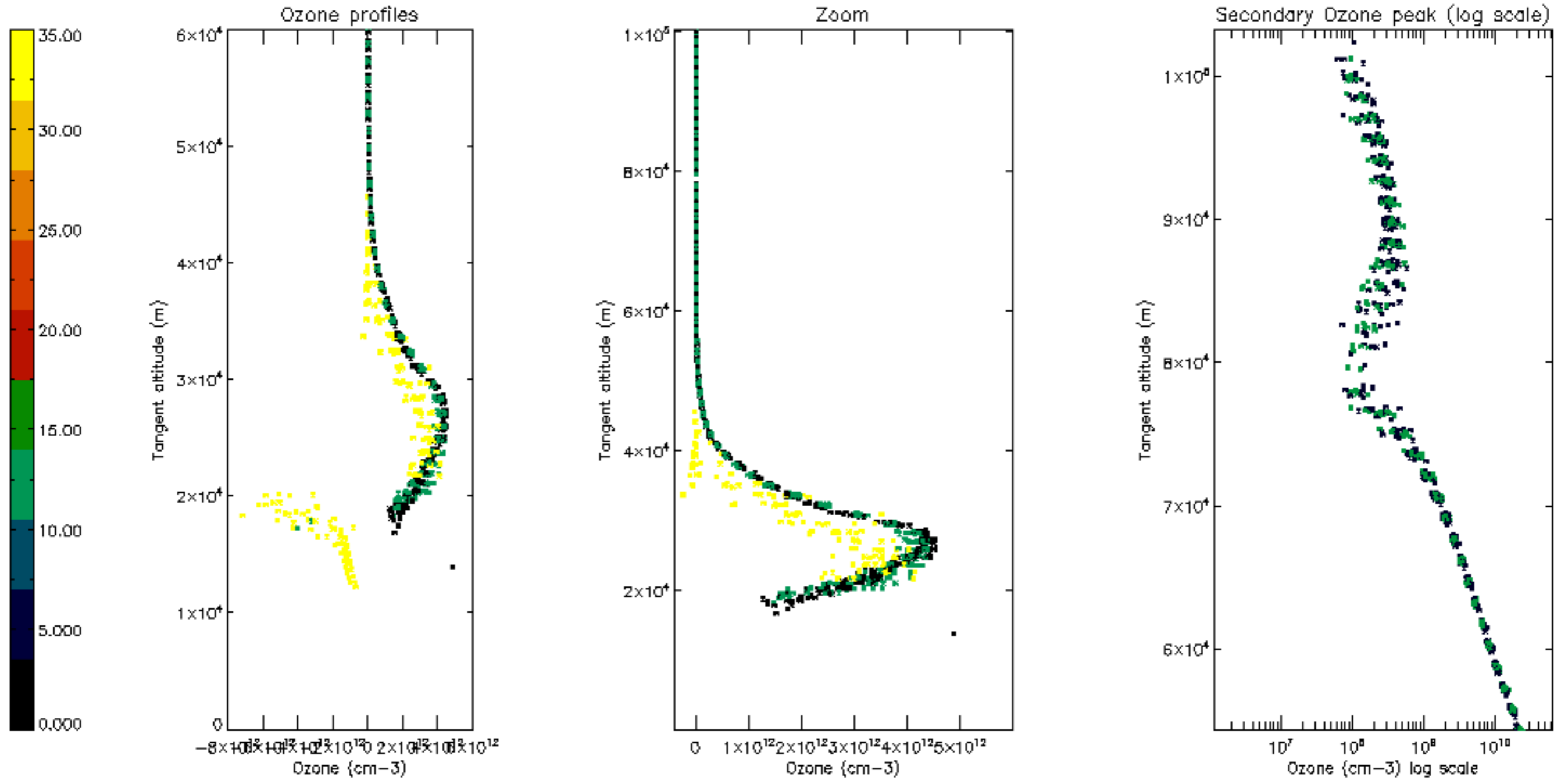
Percentage of star falling outside central band per profile

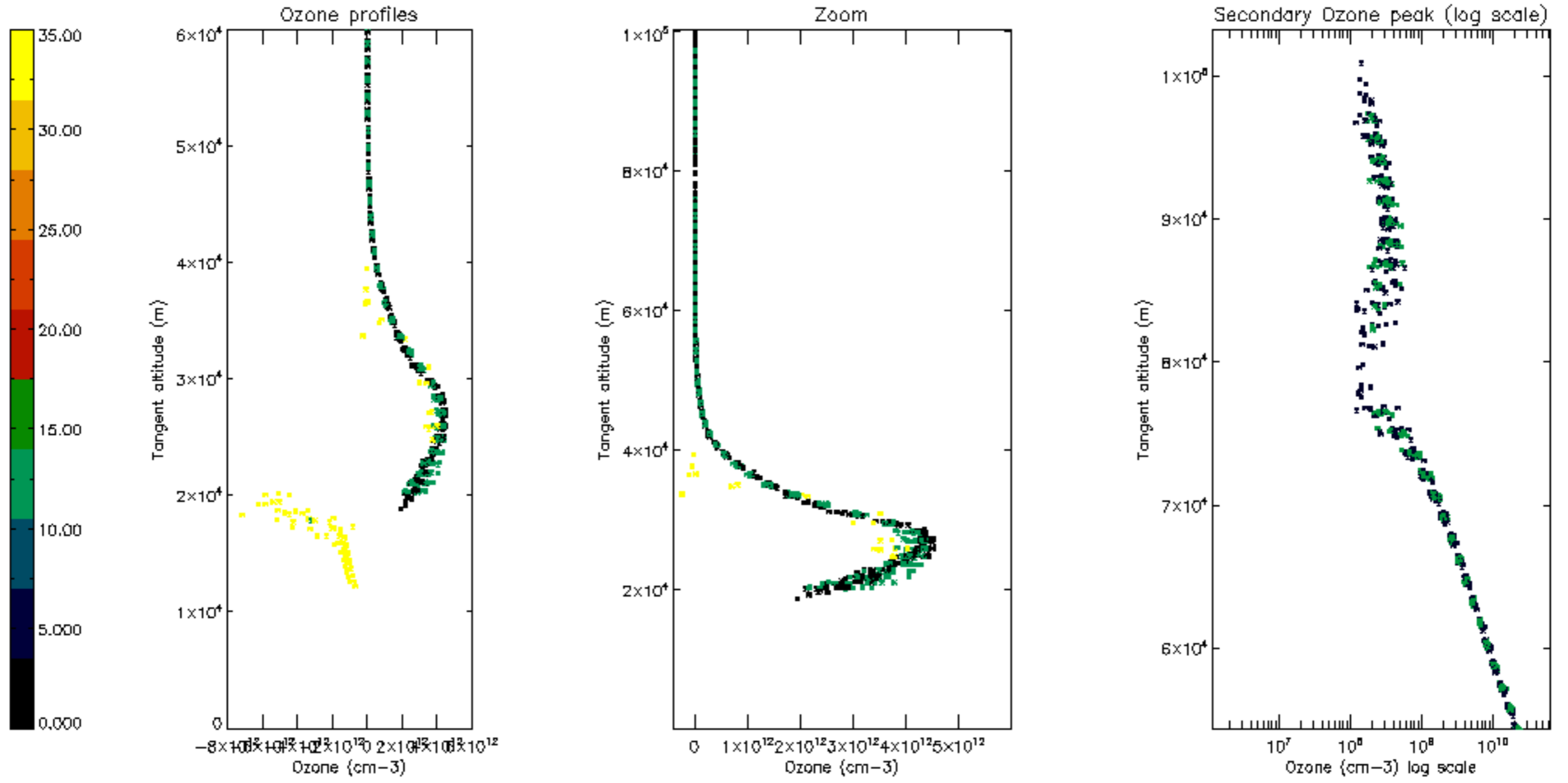


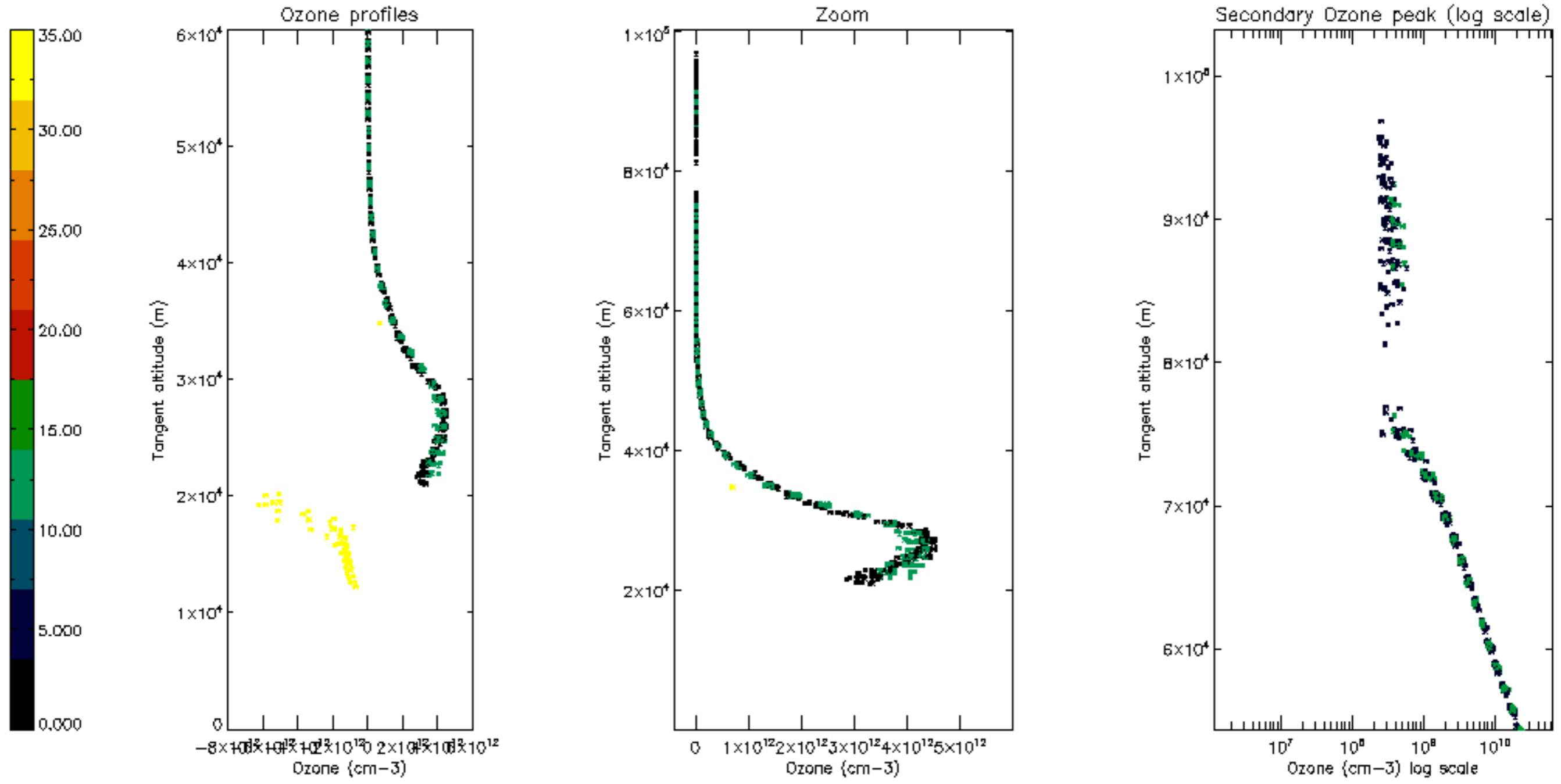
Percentage of saturation errors per profile



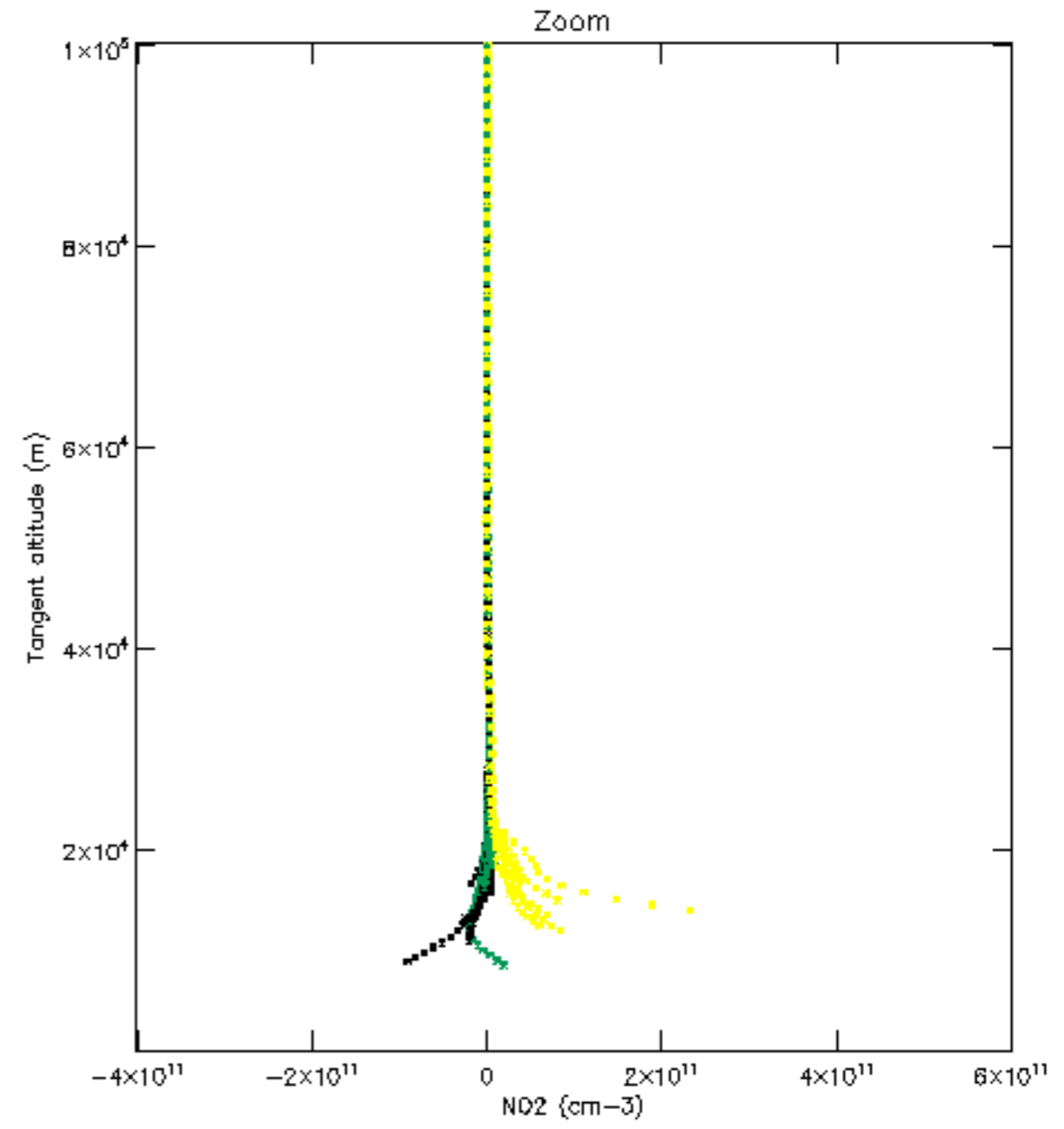
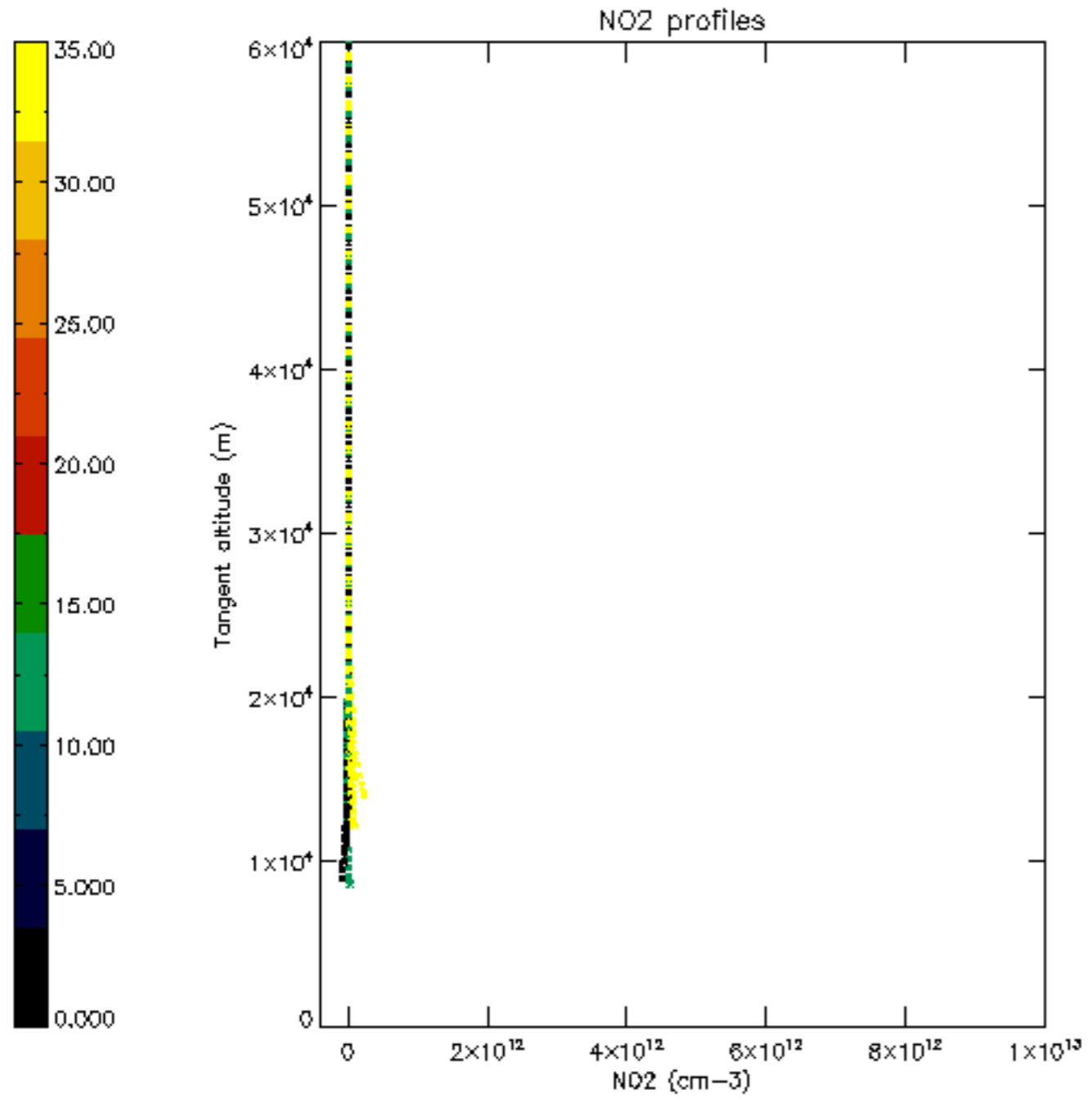


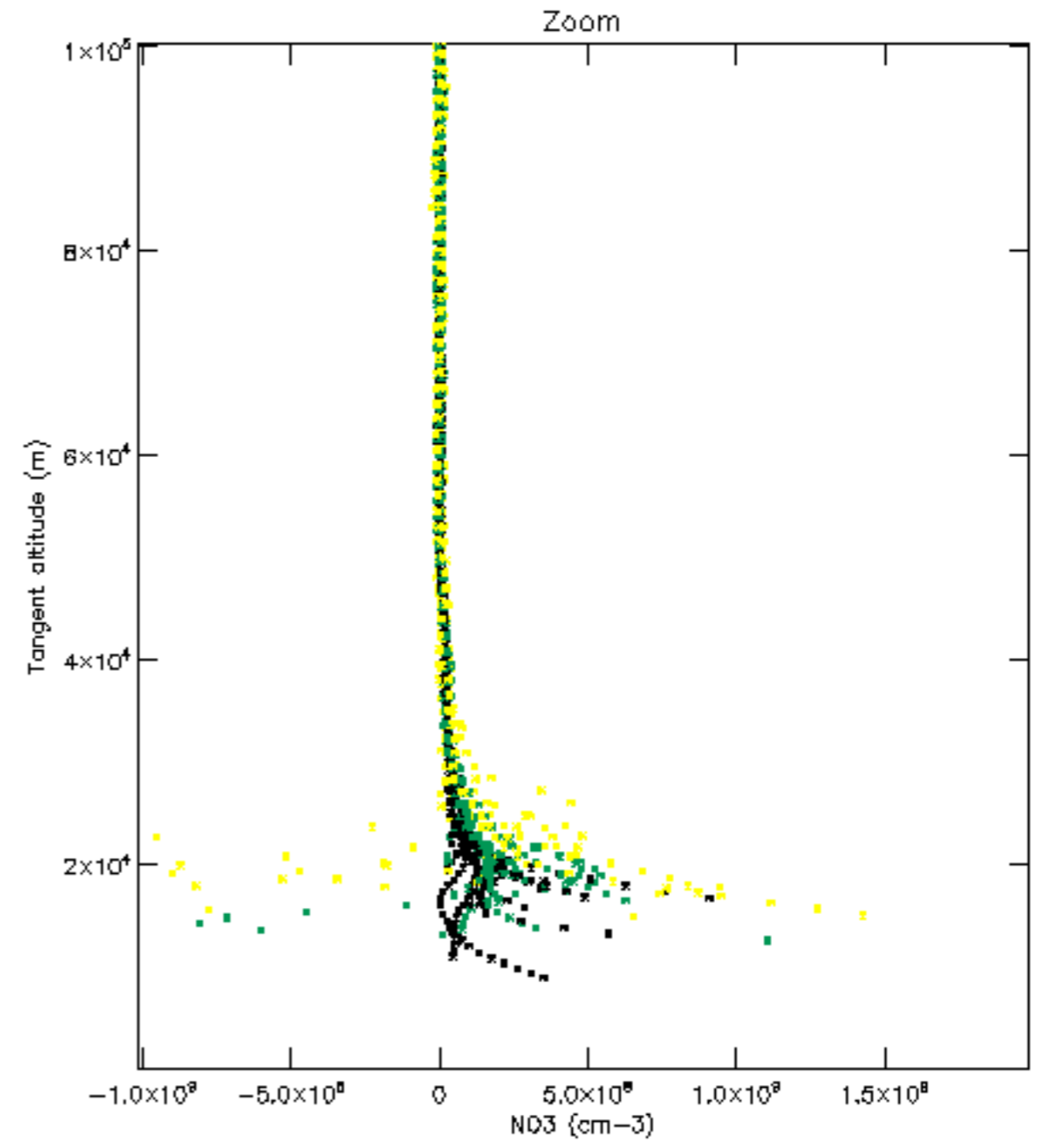
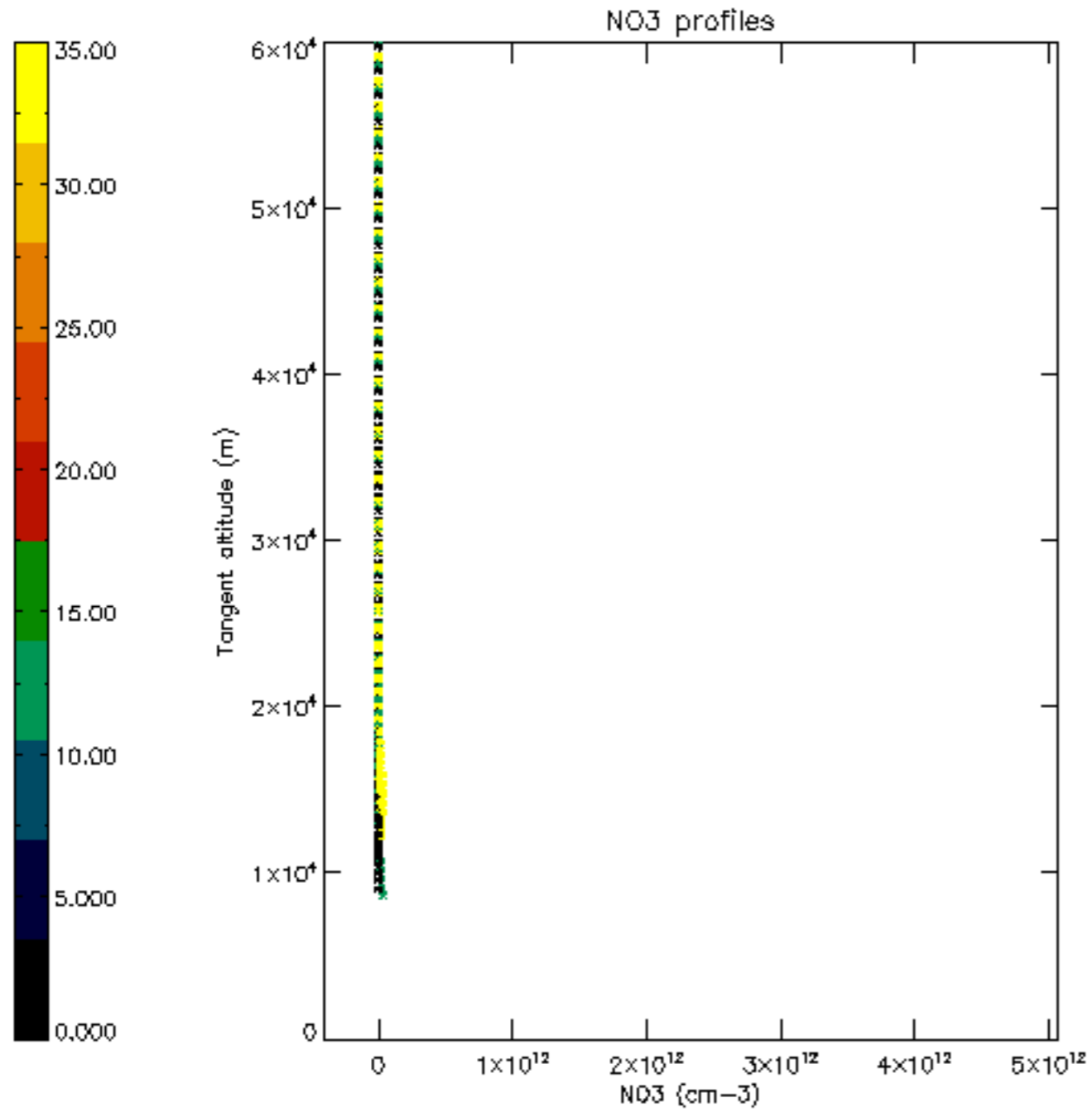


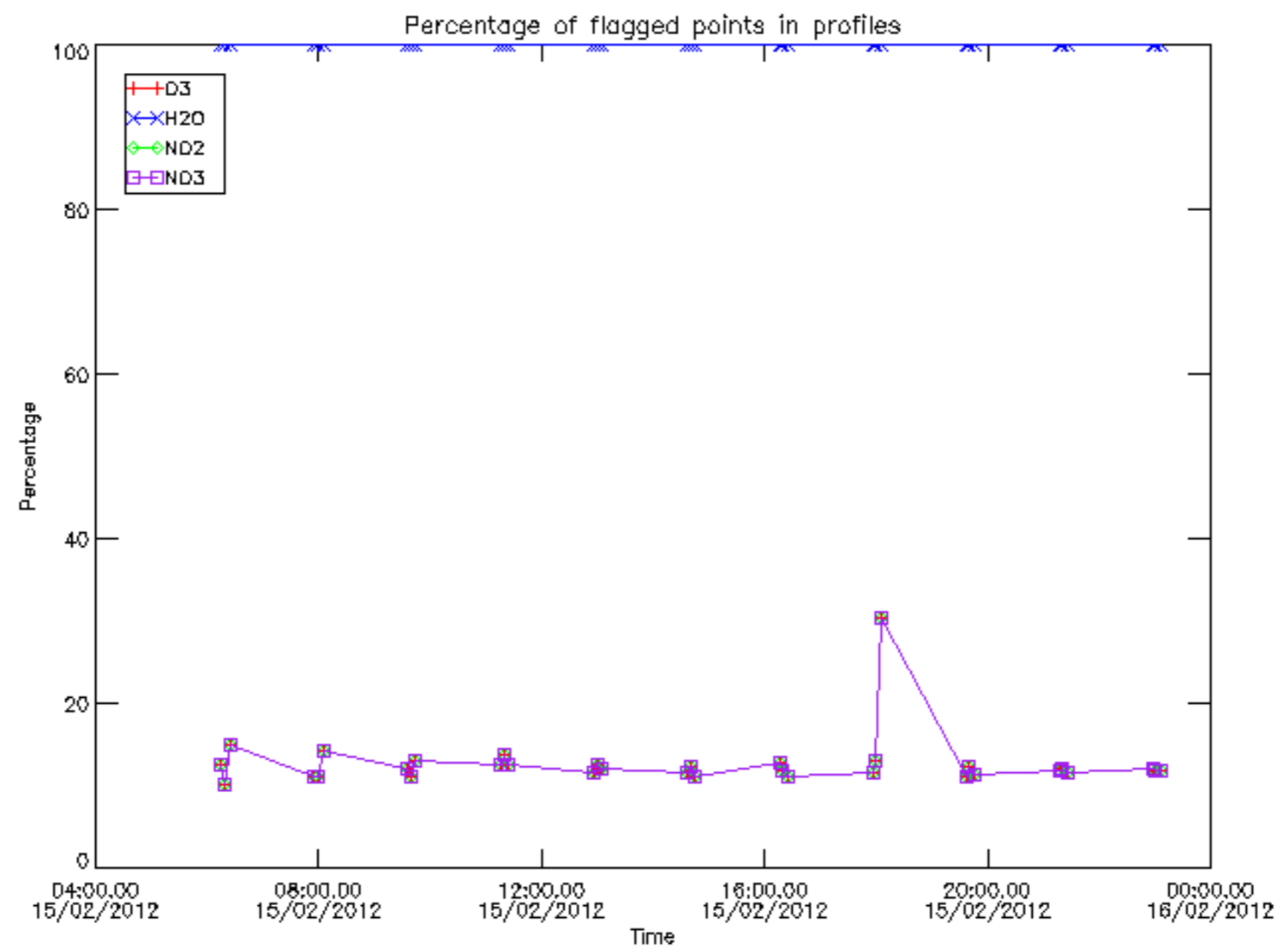




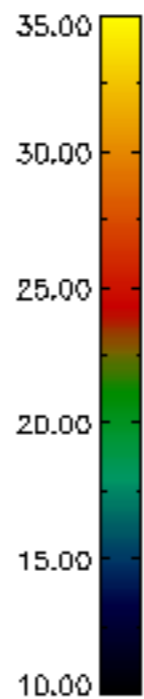
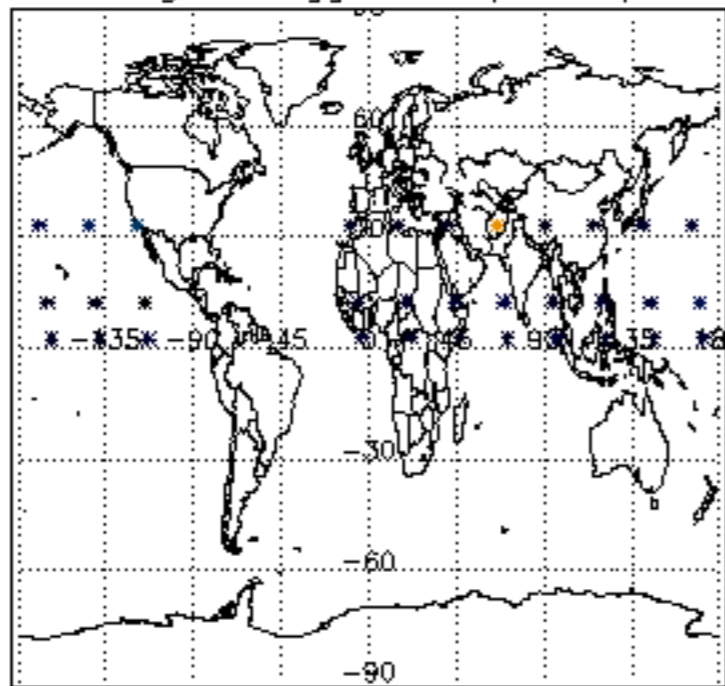




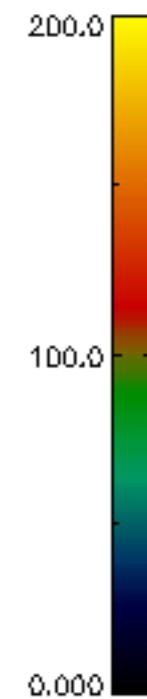
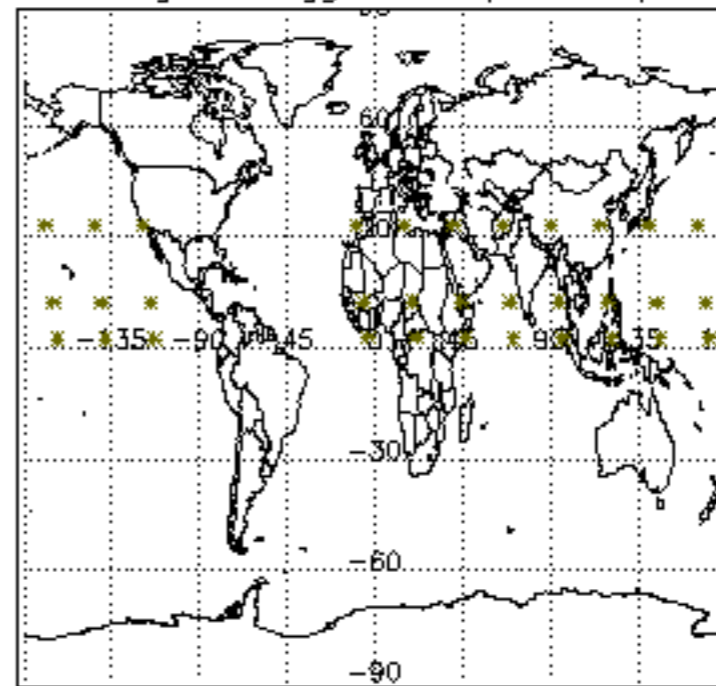




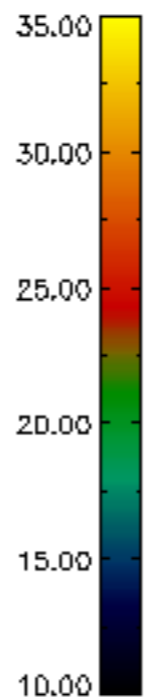
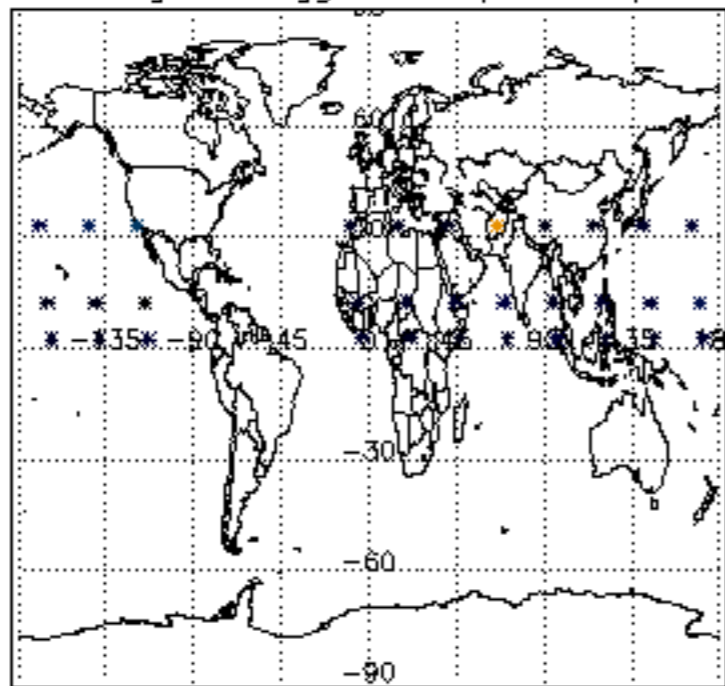
Percentage of flagged data per D3 profile



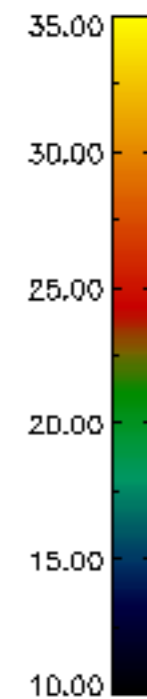
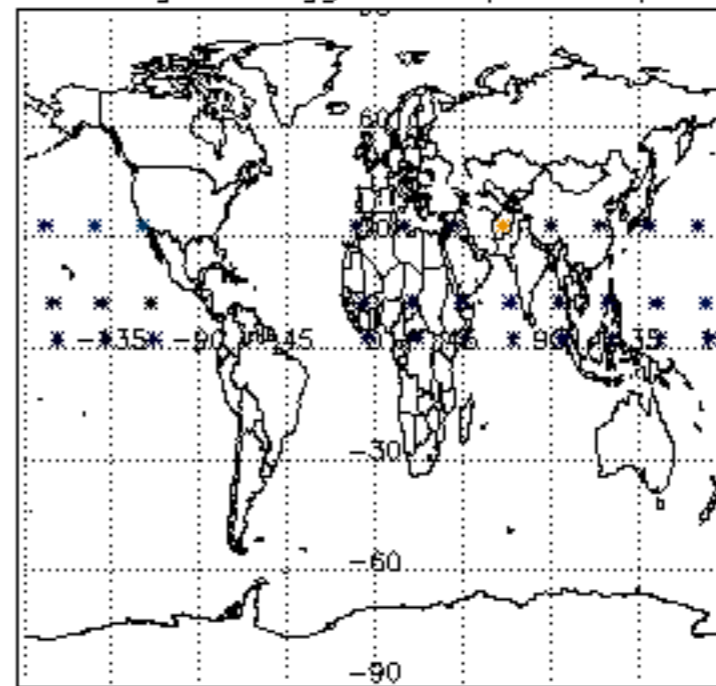
Percentage of flagged data per H2O profile

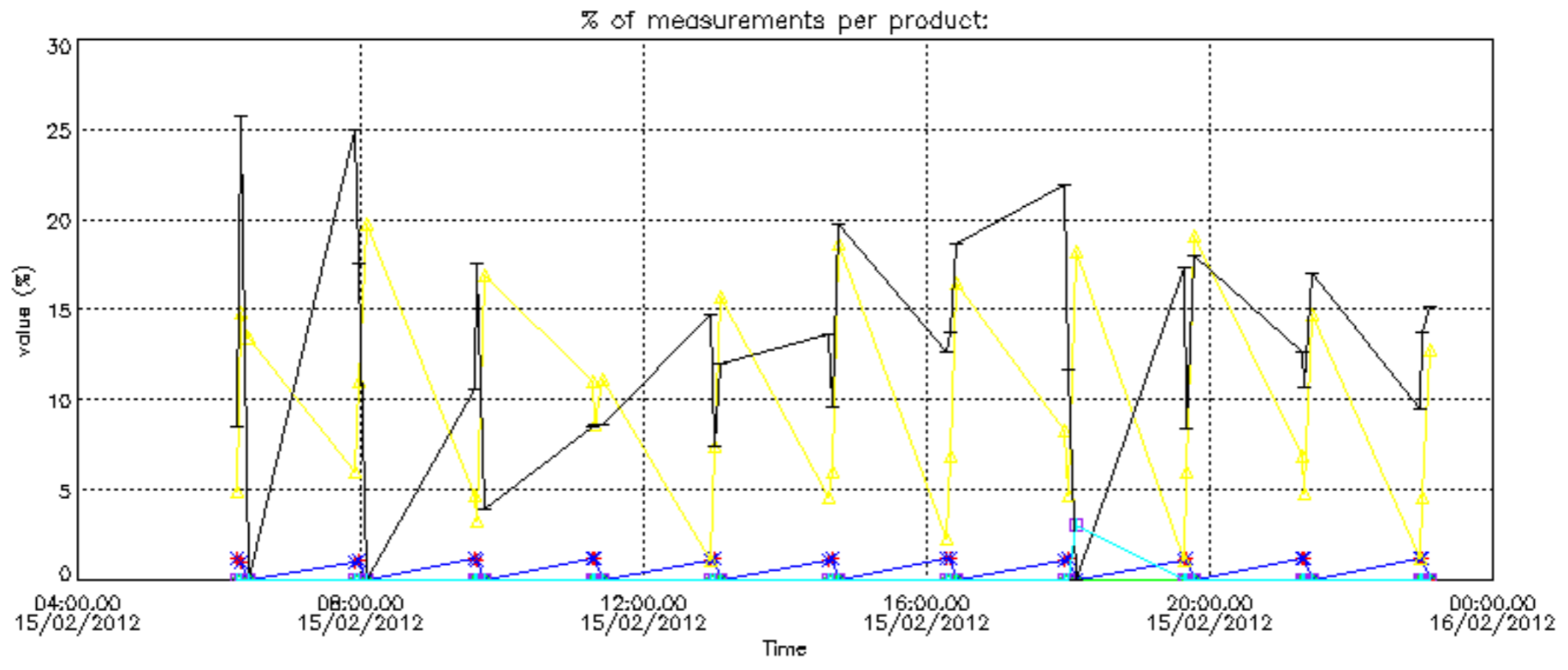


Percentage of flagged data per NO2 profile

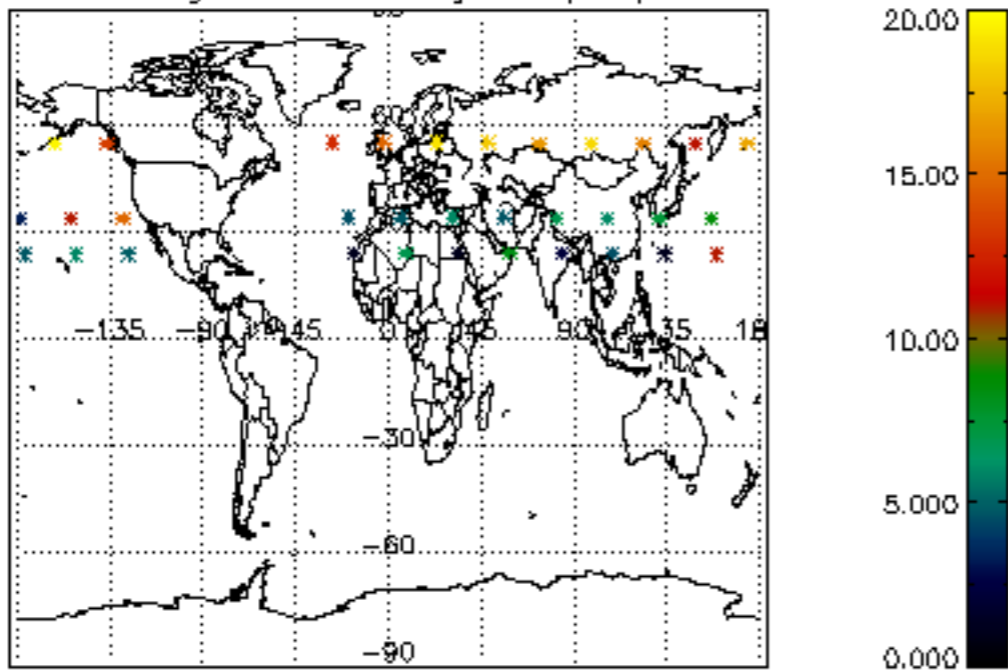


Percentage of flagged data per NO3 profile

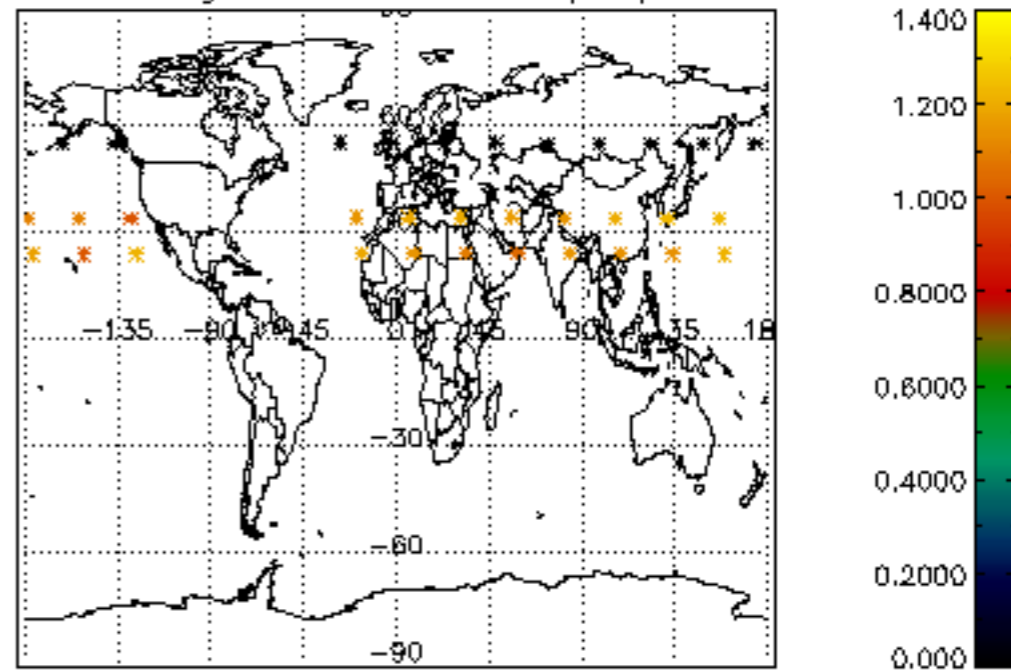




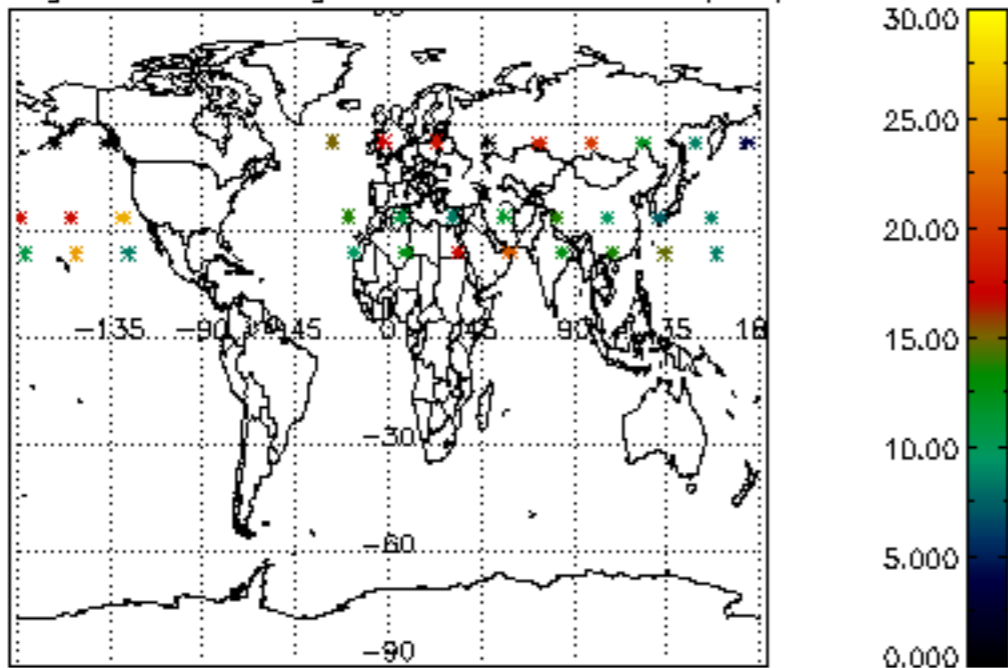
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

