

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 14:06:27
Data source version	GOMOS/6.01
Start time of products	16-02-2012 (16FEB2012 00:00:00)
Stop time of products	17-02-2012 (17FEB2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	39
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

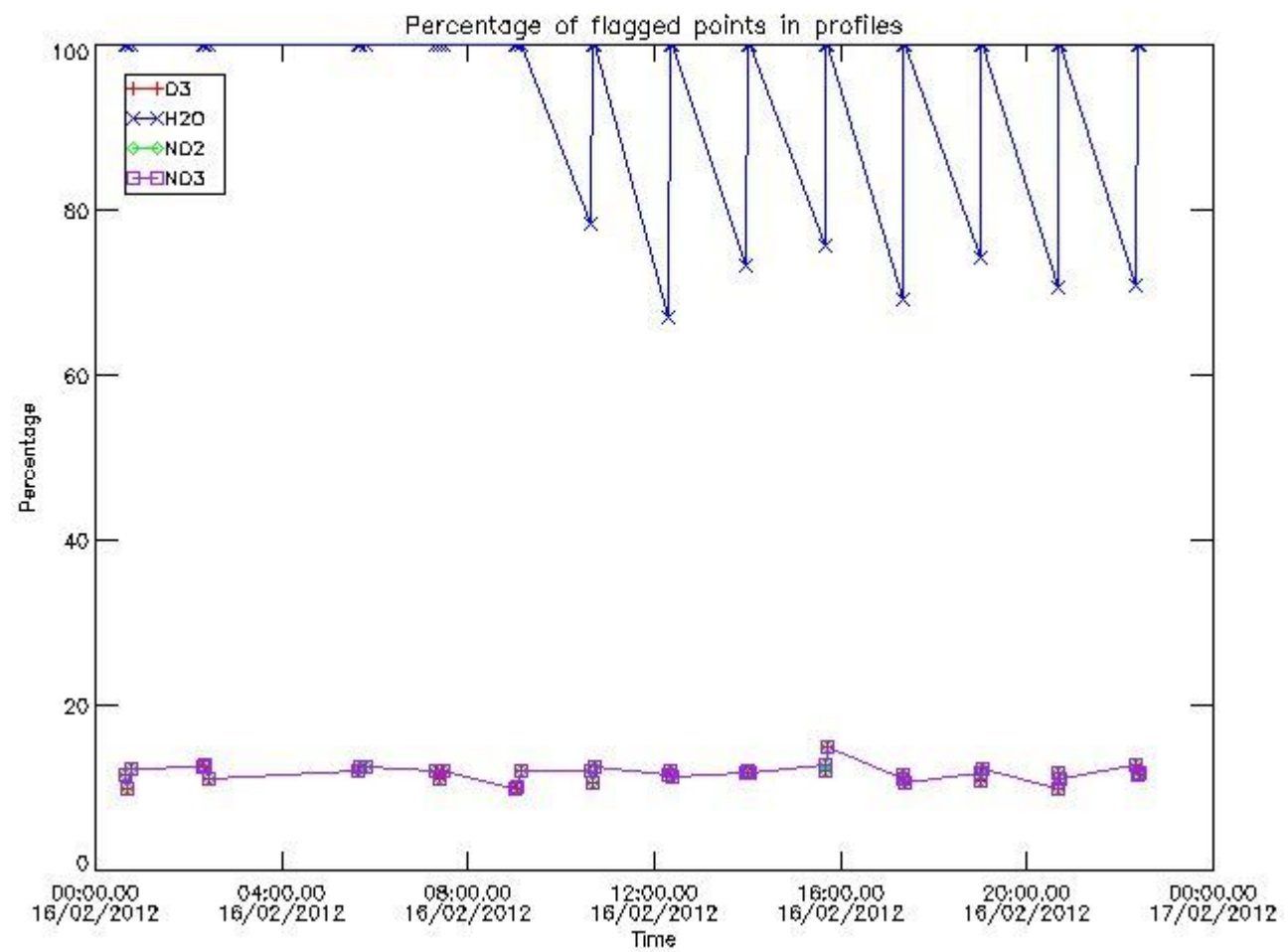
!Warning: No products without errors in BRIGHT limb contitions found

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120216_003814_000000453111_00376_52114_2745.N1	16-FEB-2012 00:38:14	Dark	44.500	10	Bet Cen	0.61000	28000.	89	52114	No
2	GOM_NL__2PRFIN20120216_004102_000000513111_00376_52114_2746.N1	16-FEB-2012 00:41:02	Dark	51.000	20	Bet Cru	1.2530	30000.	102	52114	No
3	GOM_NL__2PRFIN20120216_004657_000000413111_00376_52114_2747.N1	16-FEB-2012 00:46:57	Dark	41.000	113	Mu Vel	2.6920	5000.0	82	52114	No
4	GOM_NL__2PRFIN20120216_021828_000000413111_00377_52115_2861.N1	16-FEB-2012 02:18:28	Dark	41.000	10	Bet Cen	0.61000	28000.	82	52115	No
5	GOM_NL__2PRFIN20120216_022117_000000403111_00377_52115_2862.N1	16-FEB-2012 02:21:17	Dark	40.000	20	Bet Cru	1.2530	30000.	80	52115	No
6	GOM_NL__2PRFIN20120216_022711_000000453111_00377_52115_2863.N1	16-FEB-2012 02:27:11	Dark	45.000	113	Mu Vel	2.6920	5000.0	90	52115	No
7	GOM_NL__2PRFIN20120216_053858_000000433111_00379_52117_2875.N1	16-FEB-2012 05:38:58	Dark	42.500	10	Bet Cen	0.61000	28000.	85	52117	No
8	GOM_NL__2PRFIN20120216_054146_000000413111_00379_52117_2876.N1	16-FEB-2012 05:41:46	Dark	40.500	20	Bet Cru	1.2530	30000.	81	52117	No
9	GOM_NL__2PRFIN20120216_054740_000000413111_00379_52117_2877.N1	16-FEB-2012 05:47:40	Dark	40.500	113	Mu Vel	2.6920	5000.0	81	52117	No
10	GOM_NL__2PRFIN20120216_071912_000000433111_00380_52118_2892.N1	16-FEB-2012 07:19:12	Dark	42.500	10	Bet Cen	0.61000	28000.	85	52118	No
11	GOM_NL__2PRFIN20120216_072200_000000463111_00380_52118_2893.N1	16-FEB-2012 07:22:00	Dark	45.500	20	Bet Cru	1.2530	30000.	91	52118	No
12	GOM_NL__2PRFIN20120216_072755_000000423111_00380_52118_2894.N1	16-FEB-2012 07:27:55	Dark	42.000	113	Mu Vel	2.6920	5000.0	84	52118	No
13	GOM_NL__2PRFIN20120216_085927_000000513111_00381_52119_2914.N1	16-FEB-2012 08:59:27	Dark	51.000	10	Bet Cen	0.61000	28000.	102	52119	No
14	GOM_NL__2PRFIN20120216_090215_000000513111_00381_52119_2915.N1	16-FEB-2012 09:02:15	Dark	50.500	20	Bet Cru	1.2530	30000.	101	52119	No
15	GOM_NL__2PRFIN20120216_090809_000000423111_00381_52119_2916.N1	16-FEB-2012 09:08:09	Dark	42.000	113	Mu Vel	2.6920	5000.0	84	52119	No
16	GOM_NL__2PRFIN20120216_103822_000000423111_00382_52120_2959.N1	16-FEB-2012 10:38:22	Dark	42.000	4	Alp1Cen	-0.010000	5800.0	84	52120	No
17	GOM_NL__2PRFIN20120216_103941_000000483111_00382_52120_2960.N1	16-FEB-2012 10:39:41	Dark	48.000	10	Bet Cen	0.61000	28000.	96	52120	No
18	GOM_NL__2PRFIN20120216_104229_000000413111_00382_52120_2961.N1	16-FEB-2012 10:42:29	Dark	40.500	20	Bet Cru	1.2530	30000.	81	52120	No
19	GOM_NL__2PRFIN20120216_121837_000000453111_00383_52121_2993.N1	16-FEB-2012 12:18:37	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	52121	No
20	GOM_NL__2PRFIN20120216_121956_000000423111_00383_52121_2994.N1	16-FEB-2012 12:19:56	Dark	42.000	10	Bet Cen	0.61000	28000.	84	52121	No
21	GOM_NL__2PRFIN20120216_122244_000000493111_00383_52121_2995.N1	16-FEB-2012 12:22:44	Dark	49.000	20	Bet Cru	1.2530	30000.	98	52121	No
22	GOM_NL__2PRFIN20120216_135851_000000443111_00384_52122_3030.N1	16-FEB-2012 13:58:51	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	52122	No
23	GOM_NL__2PRFIN20120216_140010_000000423111_00384_52122_3031.N1	16-FEB-2012 14:00:10	Dark	42.000	10	Bet Cen	0.61000	28000.	84	52122	No
24	GOM_NL__2PRFIN20120216_140258_000000433111_00384_52122_3032.N1	16-FEB-2012 14:02:58	Dark	43.000	20	Bet Cru	1.2530	30000.	86	52122	No
25	GOM_NL__2PRFIN20120216_153906_000000443111_00385_52123_3064.N1	16-FEB-2012 15:39:06	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	52123	No
26	GOM_NL__2PRFIN20120216_154024_000000423111_00385_52123_3065.N1	16-FEB-2012 15:40:24	Dark	42.000	10	Bet Cen	0.61000	28000.	84	52123	No
27	GOM_NL__2PRFIN20120216_154313_000000443111_00385_52123_3066.N1	16-FEB-2012 15:43:13	Dark	43.500	20	Bet Cru	1.2530	30000.	87	52123	No
28	GOM_NL__2PRFIN20120216_171920_000000463111_00386_52124_3111.N1	16-FEB-2012 17:19:20	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	52124	No
29	GOM_NL__2PRFIN20120216_172039_000000443111_00386_52124_3112.N1	16-FEB-2012 17:20:39	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52124	No
30	GOM_NL__2PRFIN20120216_172327_000000533111_00386_52124_3113.N1	16-FEB-2012 17:23:27	Dark	52.500	20	Bet Cru	1.2530	30000.	105	52124	No
31	GOM_NL__2PRFIN20120216_185935_000000433111_00387_52125_3161.N1	16-FEB-2012 18:59:35	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	52125	No
32	GOM_NL__2PRFIN20120216_190054_000000483111_00387_52125_3162.N1	16-FEB-2012 19:00:54	Dark	47.500	10	Bet Cen	0.61000	28000.	95	52125	No
33	GOM_NL__2PRFIN20120216_190342_000000413111_00387_52125_3163.N1	16-FEB-2012 19:03:42	Dark	41.000	20	Bet Cru	1.2530	30000.	82	52125	No
34	GOM_NL__2PRFIN20120216_203949_000000523111_00388_52126_3171.N1	16-FEB-2012 20:39:49	Dark	51.500	4	Alp1Cen	-0.010000	5800.0	103	52126	No
35	GOM_NL__2PRFIN20120216_204108_000000443111_00388_52126_3172.N1	16-FEB-2012 20:41:08	Dark	43.500	10	Bet Cen	0.61000	28000.	87	52126	No
36	GOM_NL__2PRFIN20120216_204356_000000463111_00388_52126_3173.N1	16-FEB-2012 20:43:56	Dark	45.500	20	Bet Cru	1.2530	30000.	91	52126	No
37	GOM_NL__2PRFIN20120216_222004_000000443111_00389_52127_3181.N1	16-FEB-2012 22:20:04	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	52127	No
38	GOM_NL__2PRFIN20120216_222123_000000443111_00389_52127_3182.N1	16-FEB-2012 22:21:23	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52127	No
39	GOM_NL__2PRFIN20120216_222410_000000433111_00389_52127_3183.N1	16-FEB-2012 22:24:10	Dark	43.000	20	Bet Cru	1.2530	30000.	86	52127	No

3. Quality information per product

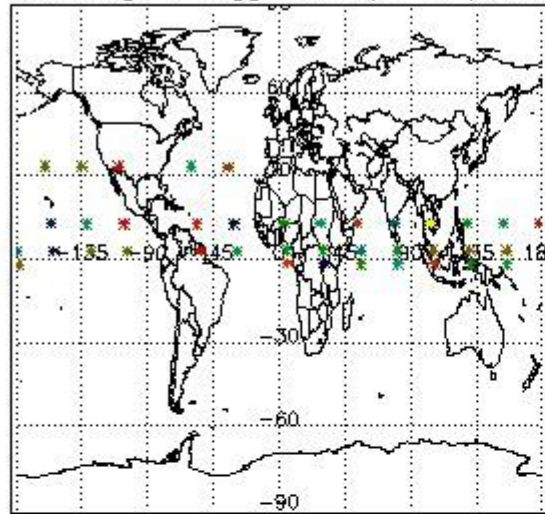
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

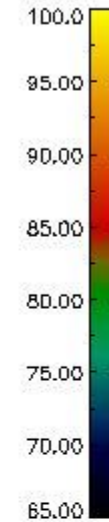
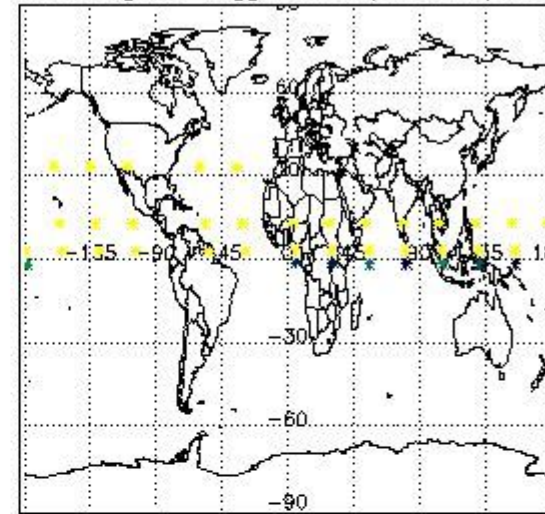


3.2 Plot quality information per product (world map)

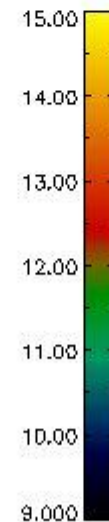
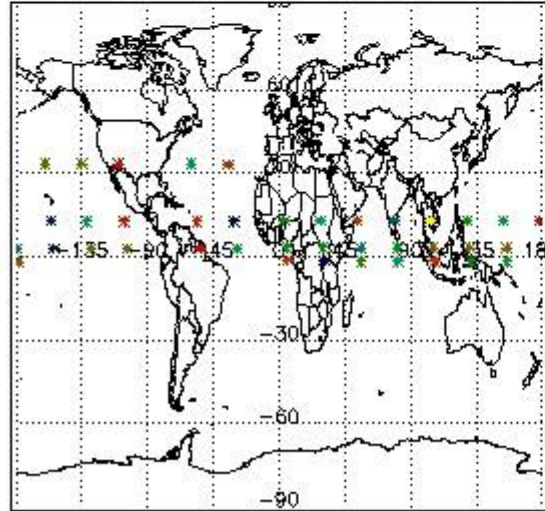
Percentage of flagged data per O3 profile



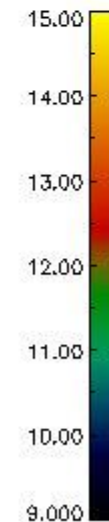
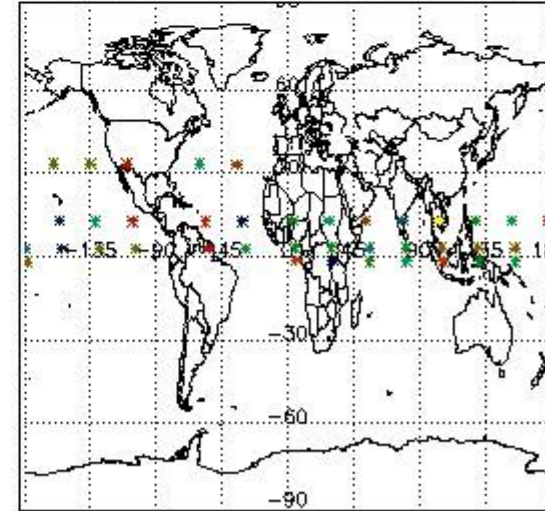
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

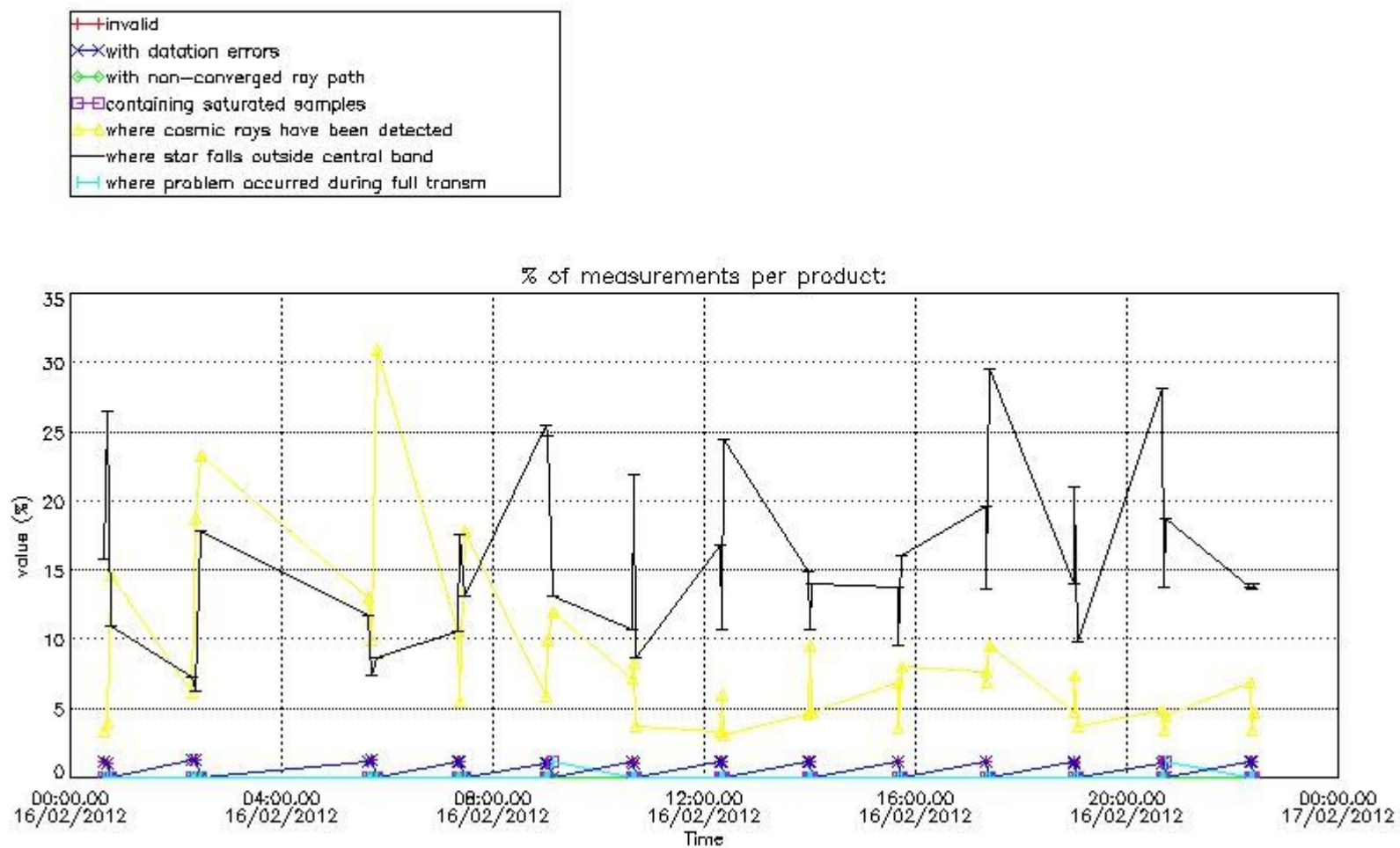


4. Level 1 quality information per product

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

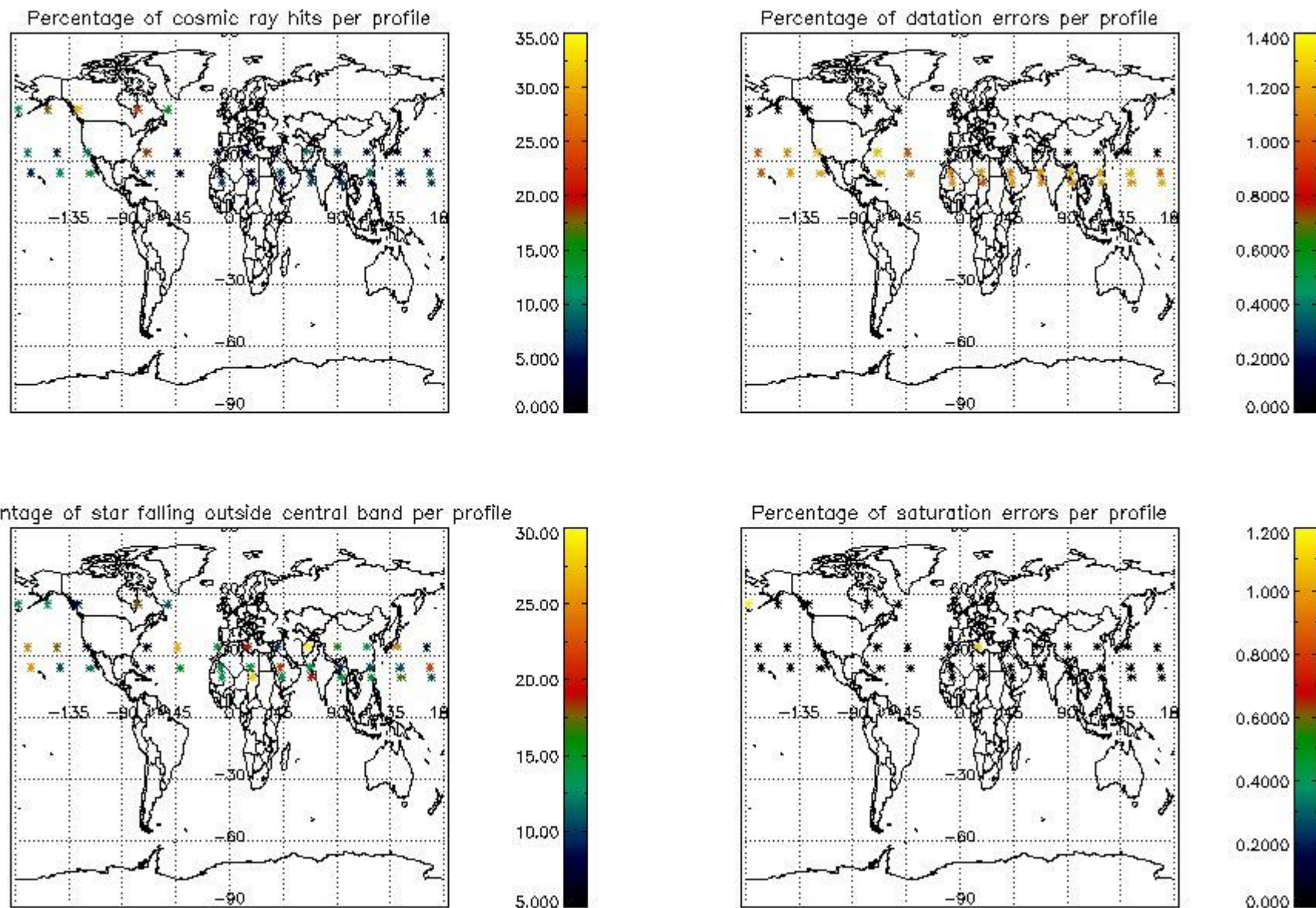


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

!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:

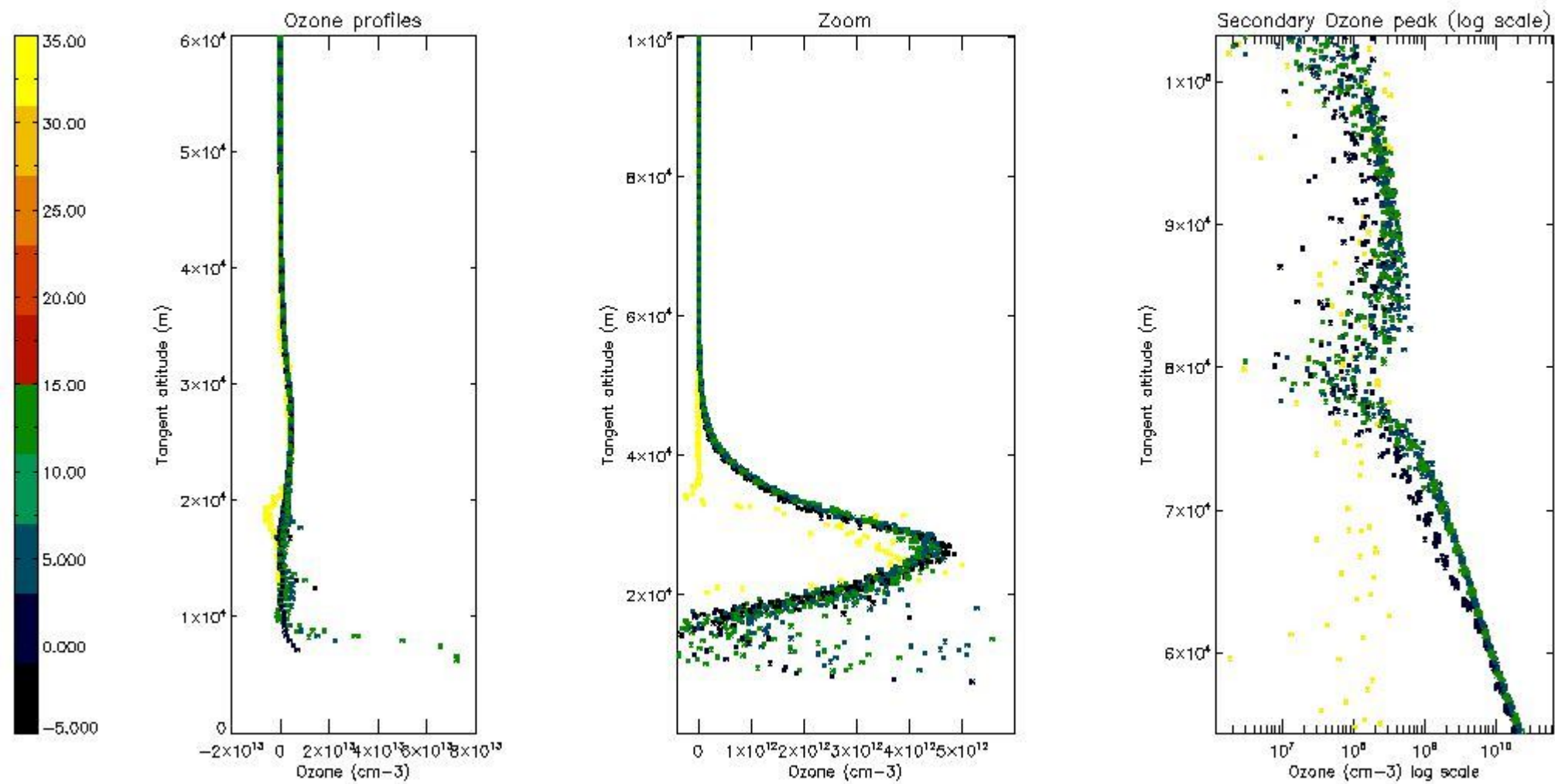
- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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	64
STD < 10	57
STD < 5	47

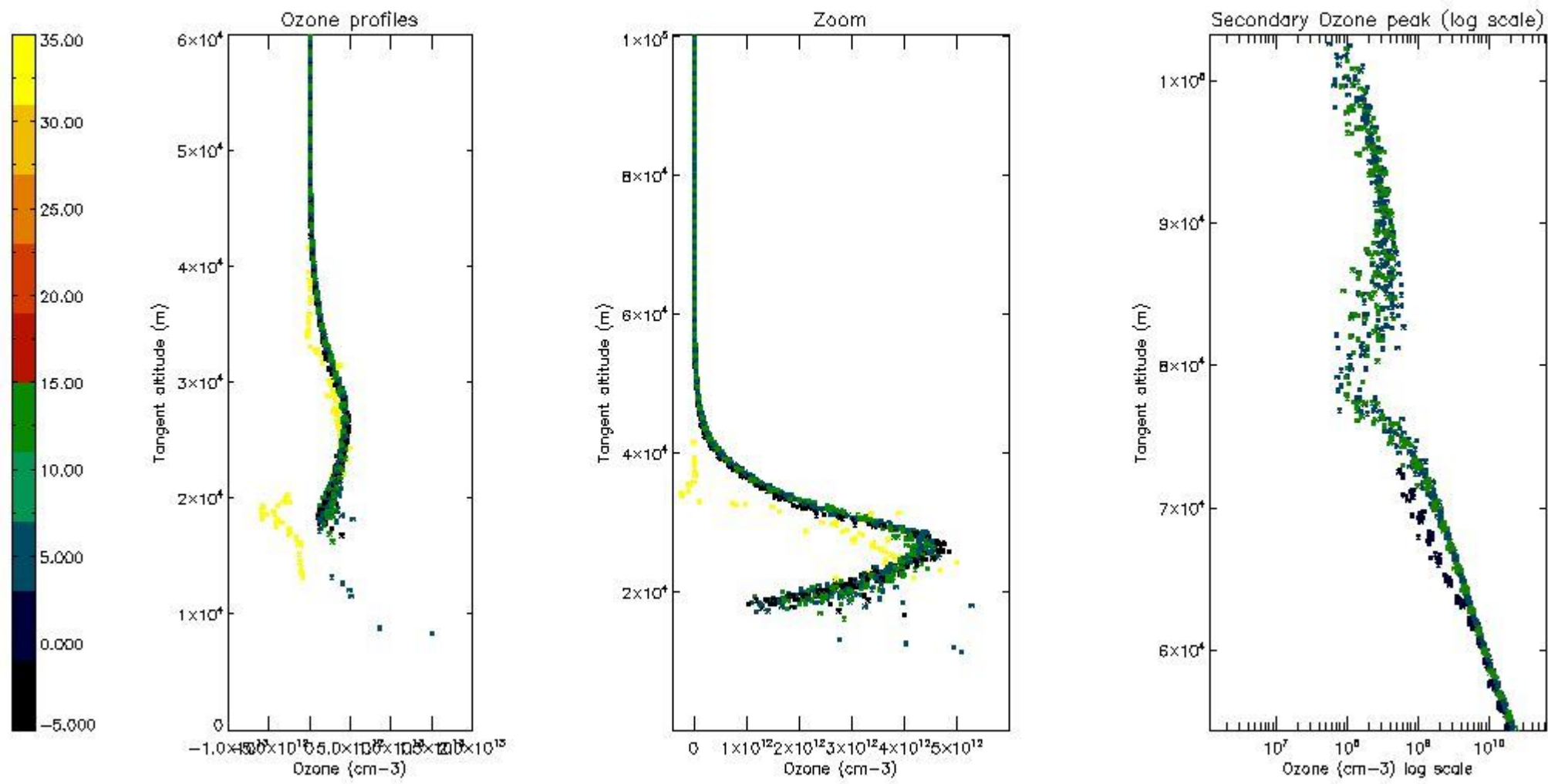
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



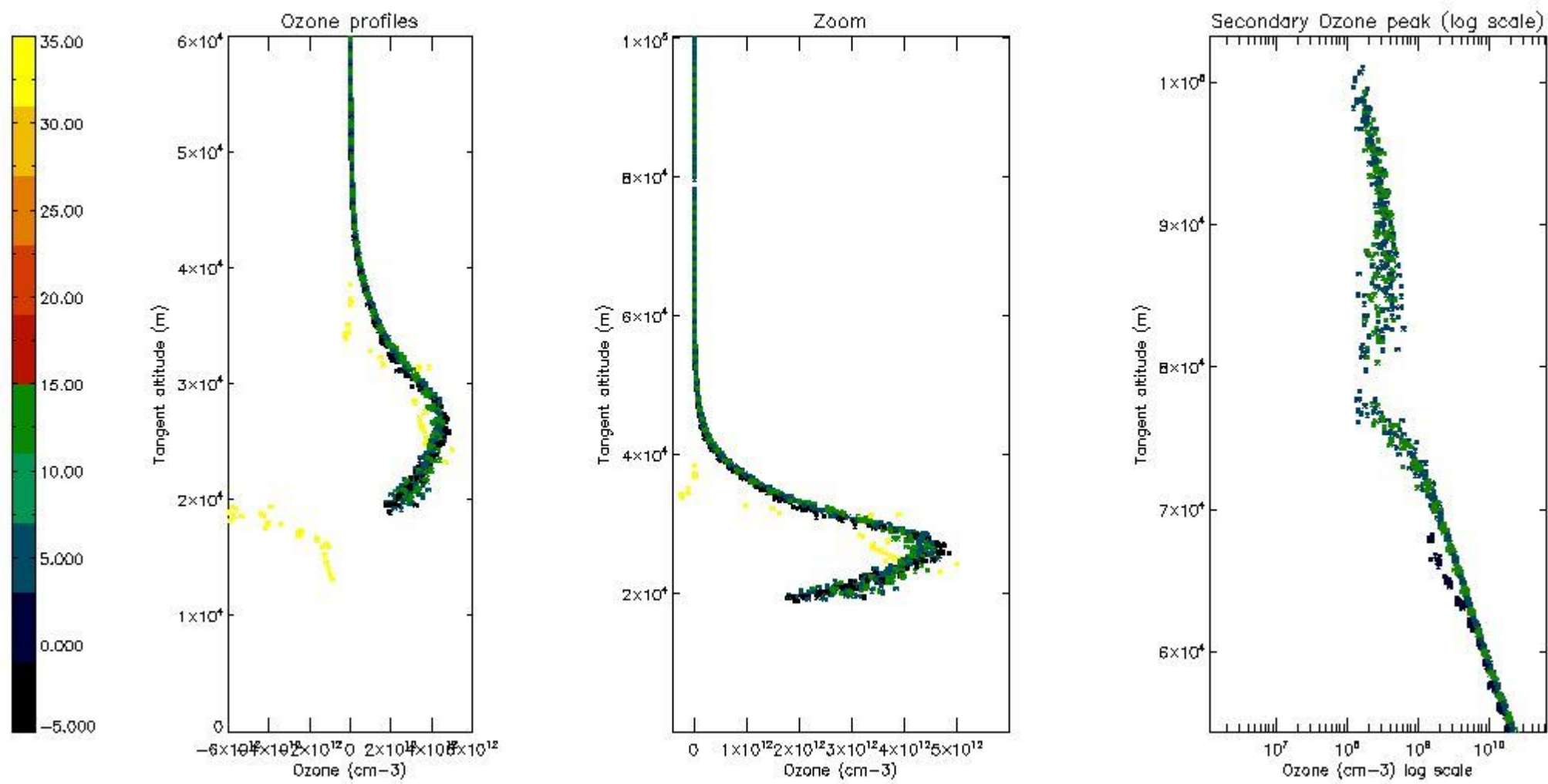
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



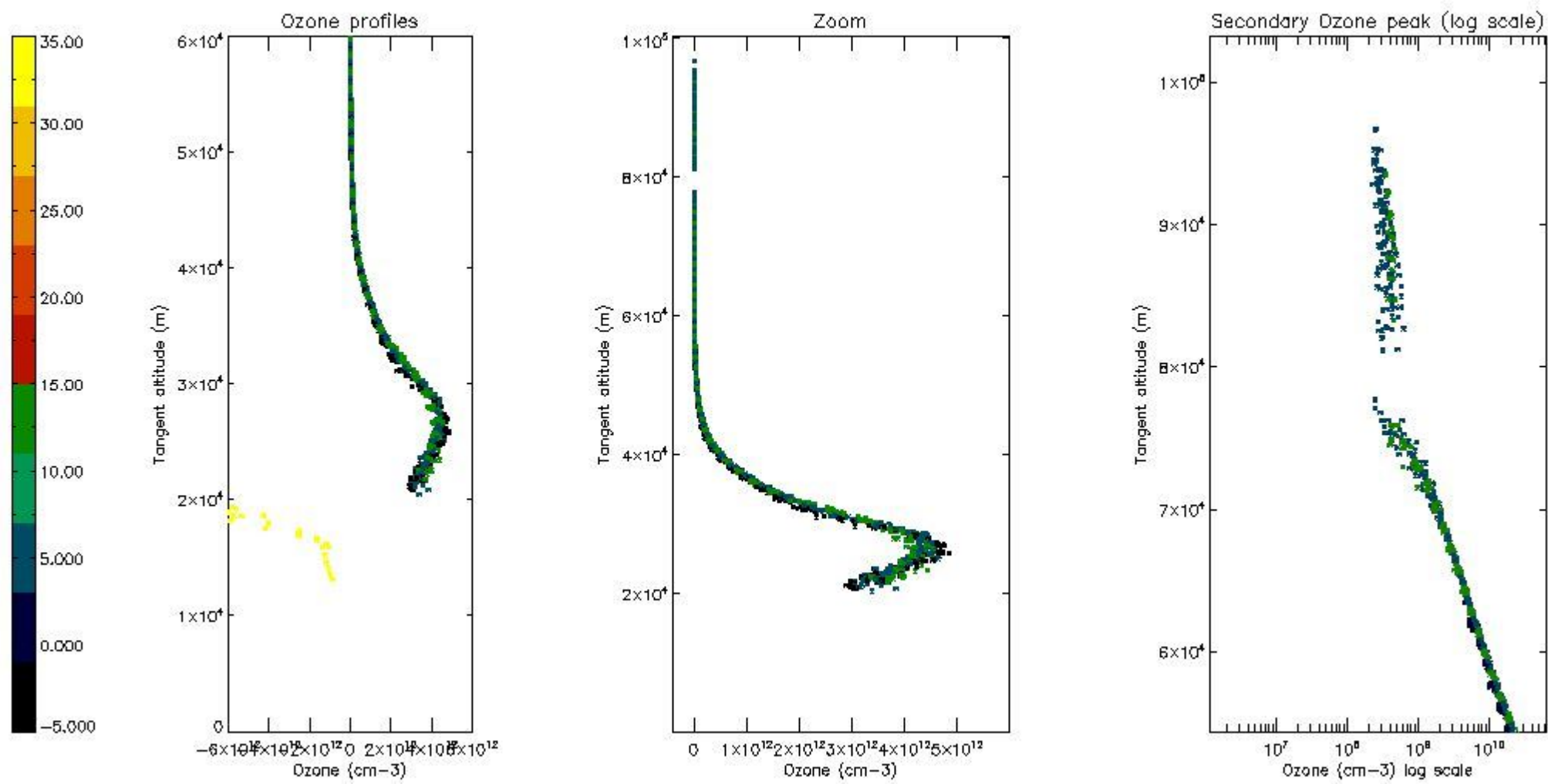
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



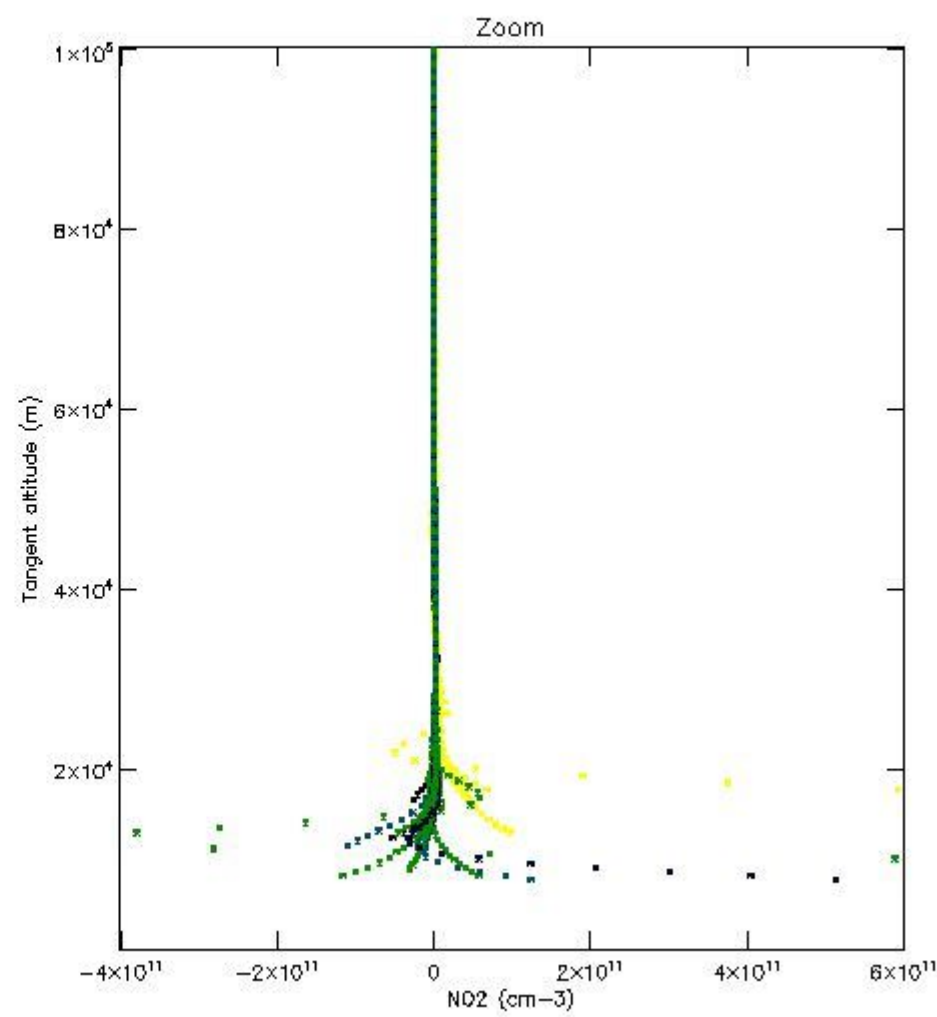
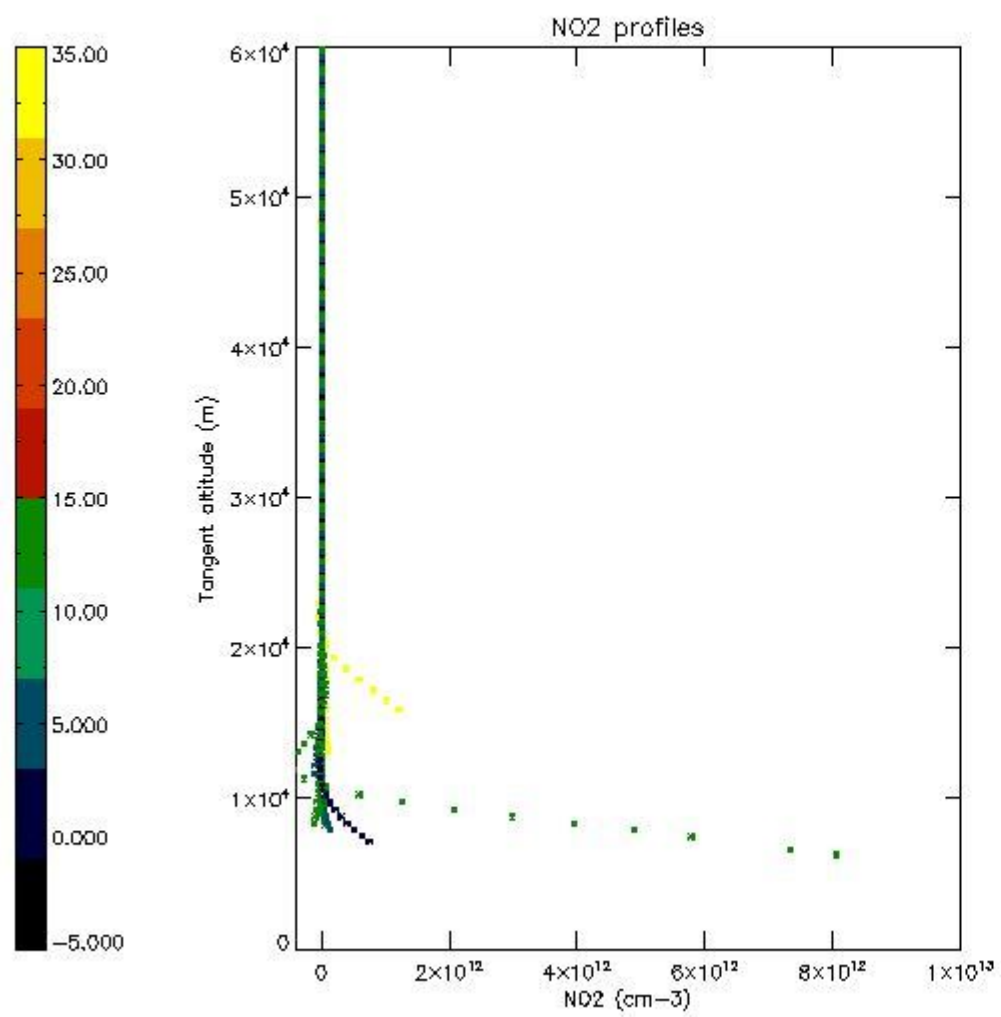
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



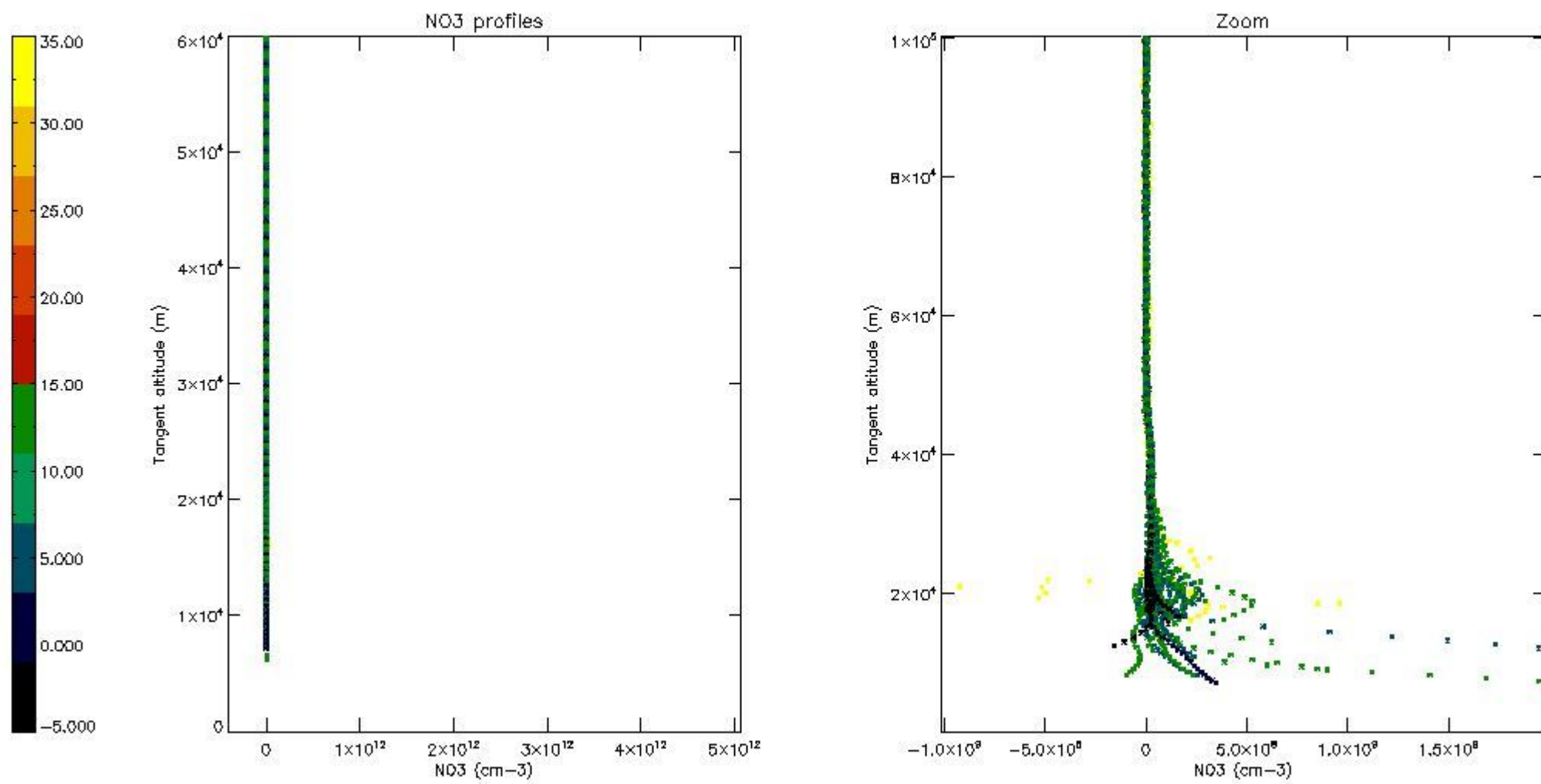
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



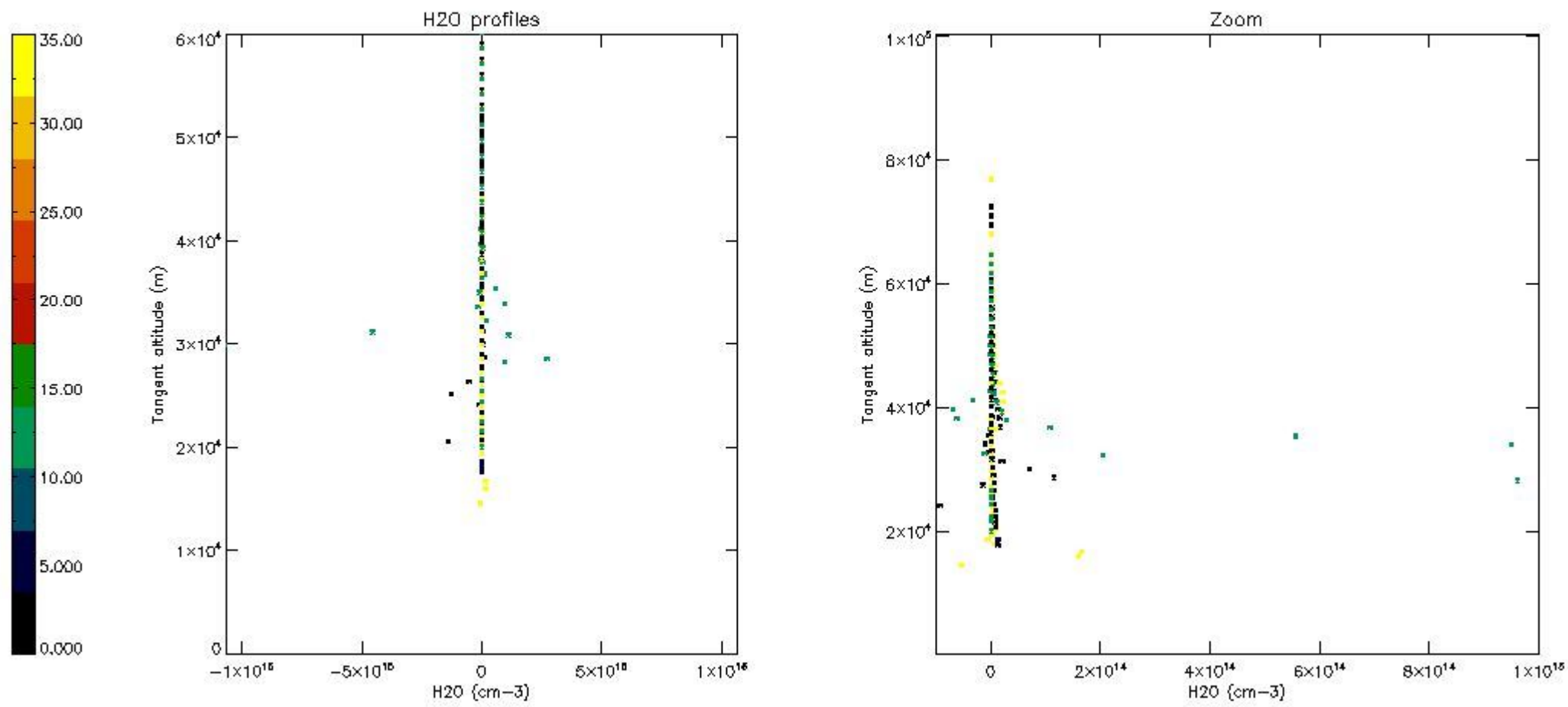
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.8 Plot H₂O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 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	16-FEB-2012 00:38:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	16-FEB-2012 00:38:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	16-FEB-2012 00:38:14

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 \(dark without errors\)](#)

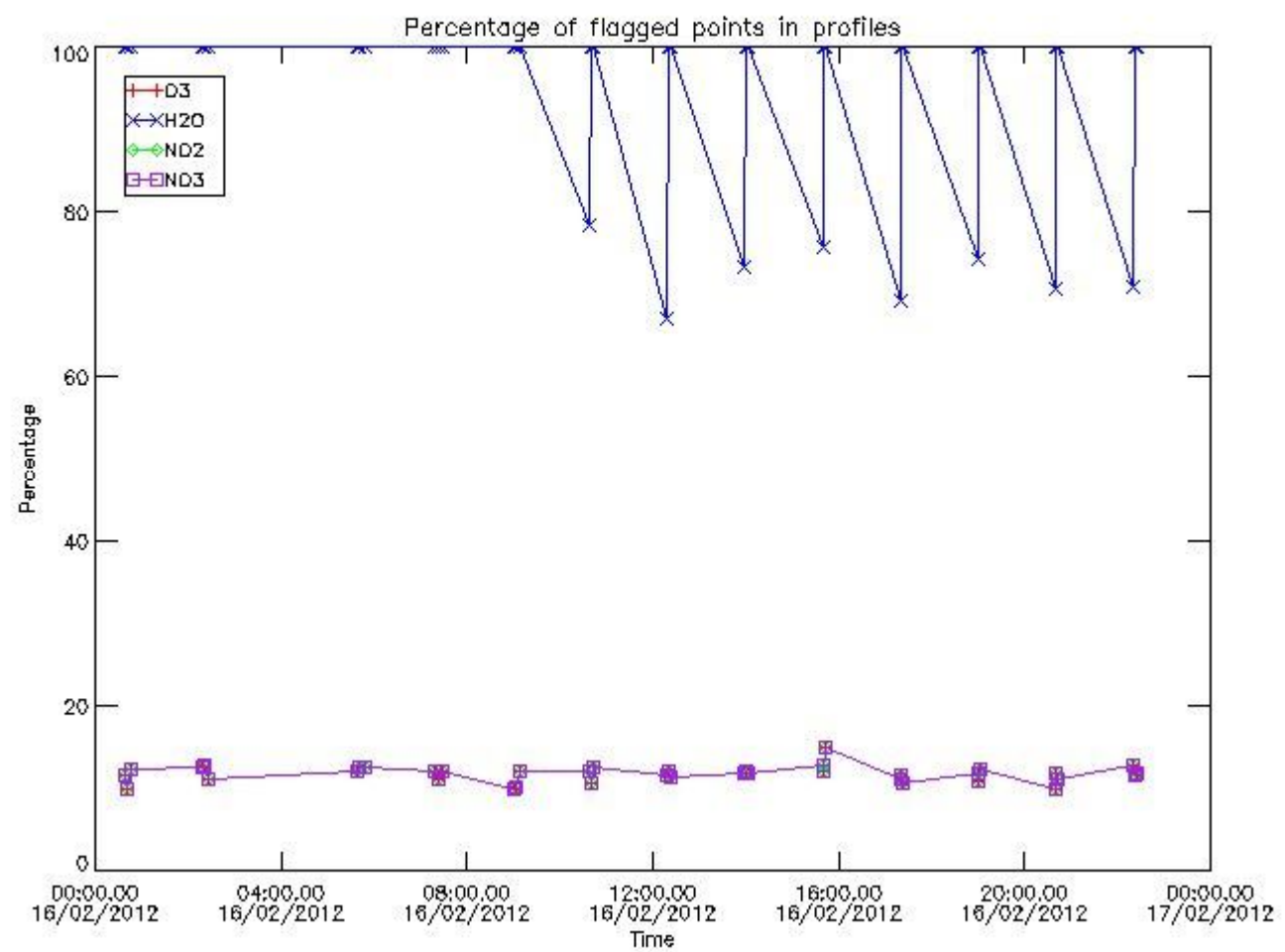
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

3. Quality information per product

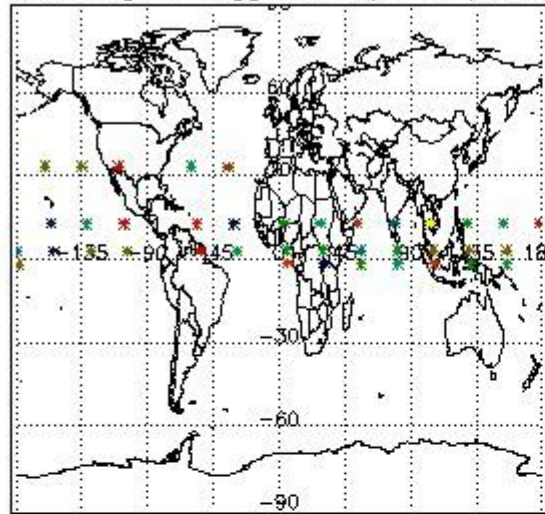
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

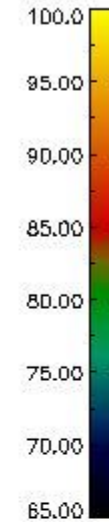
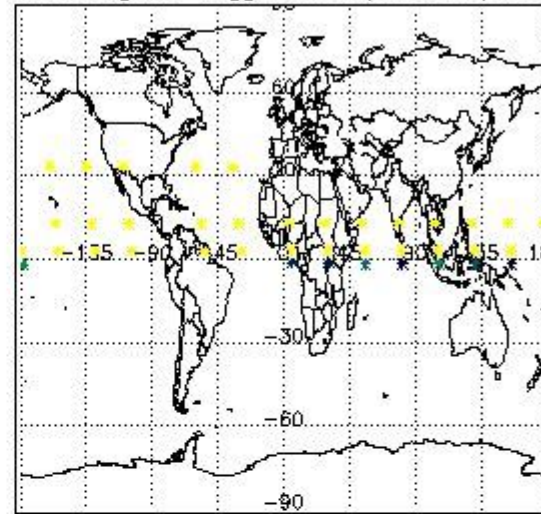


3.2 Plot quality information per product (world map)

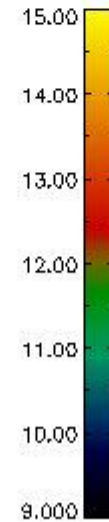
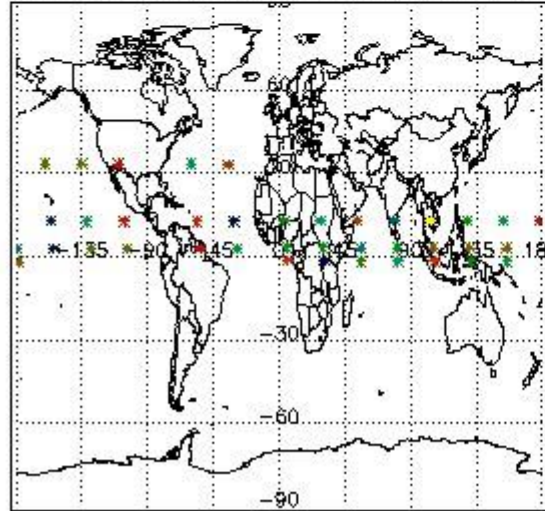
Percentage of flagged data per O3 profile



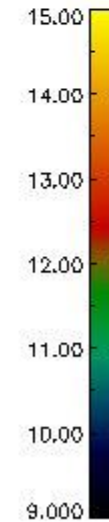
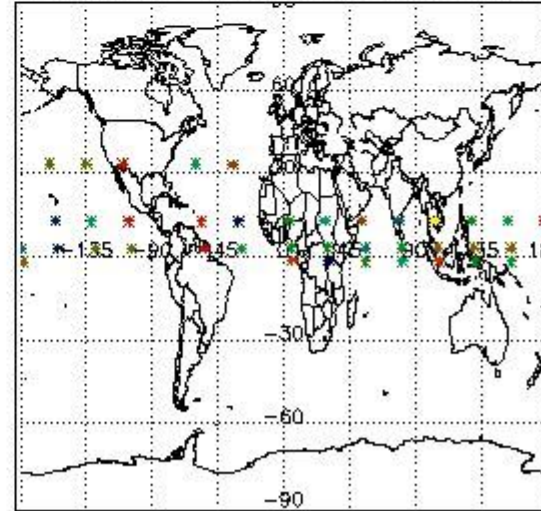
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

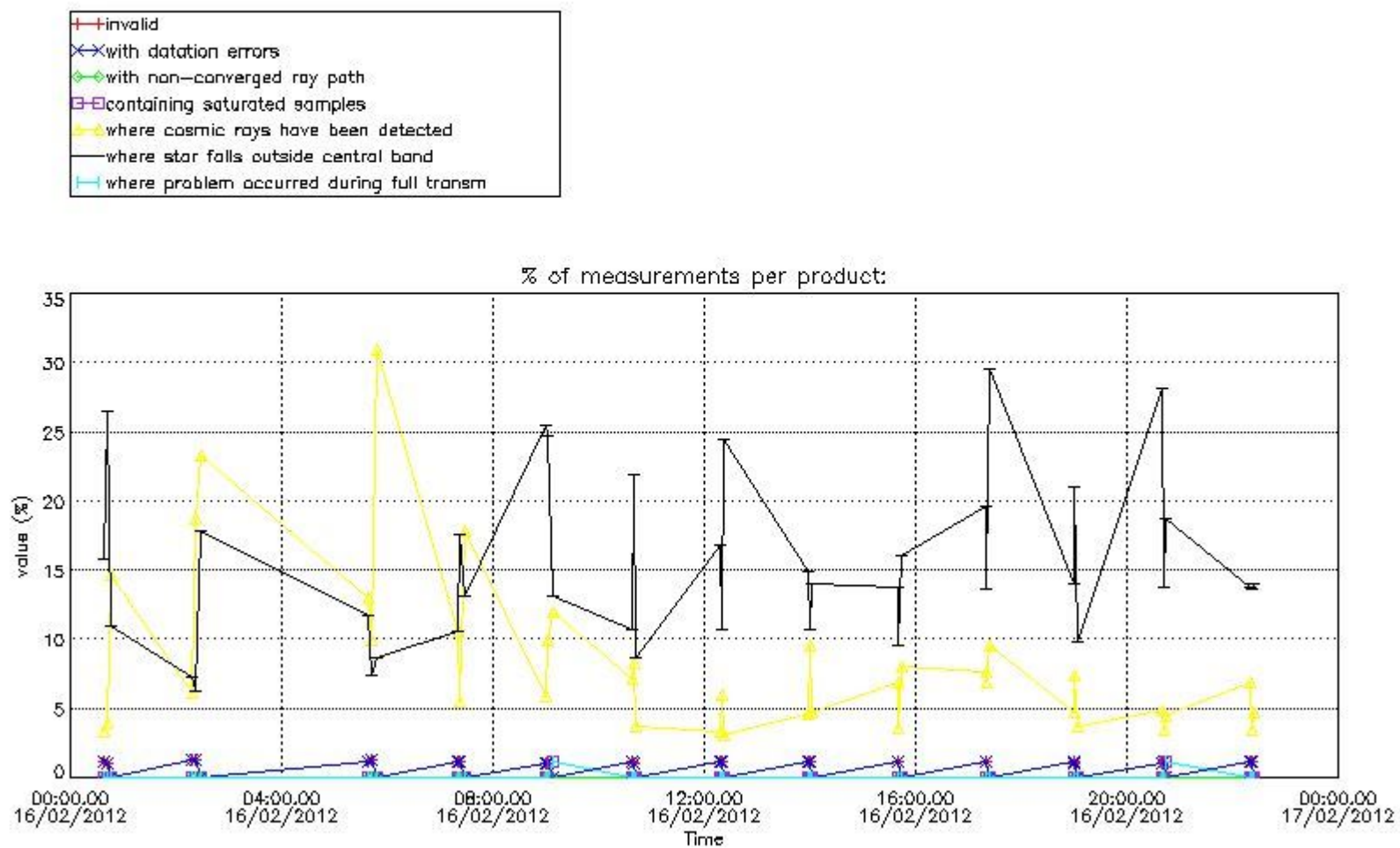


4. Level 1 quality information per product

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

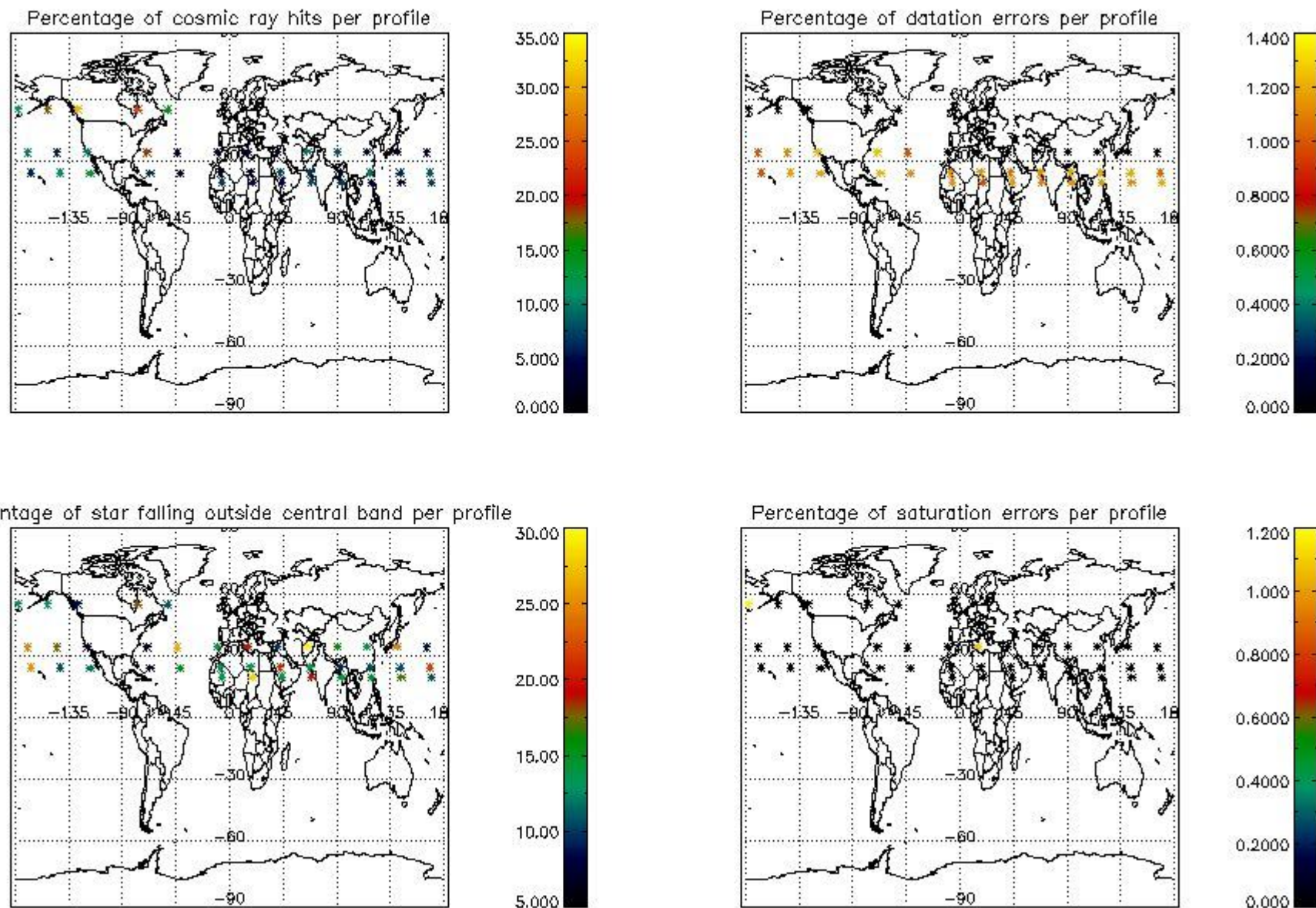


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

!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:

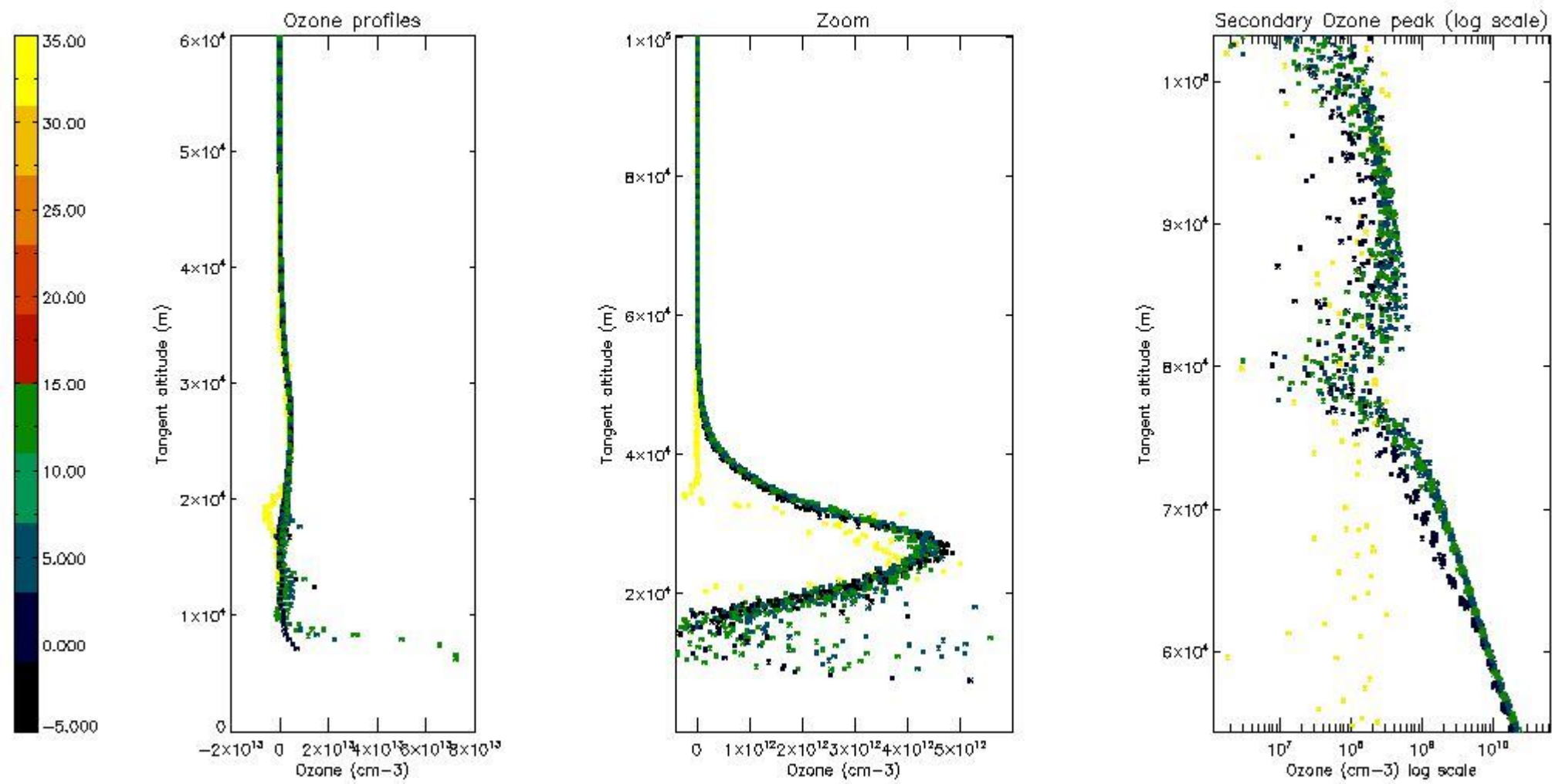
- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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	64
STD < 10	57
STD < 5	47

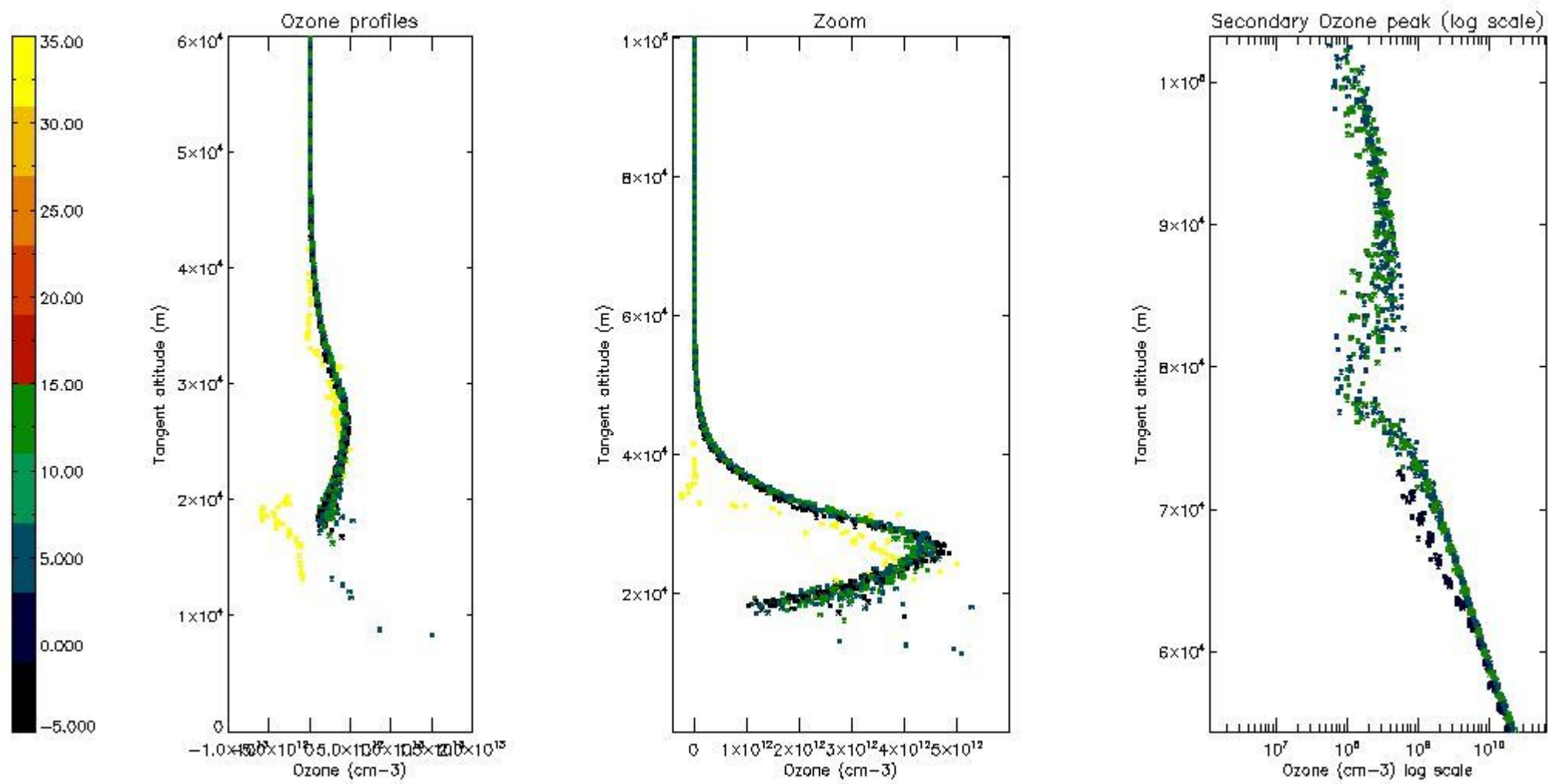
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



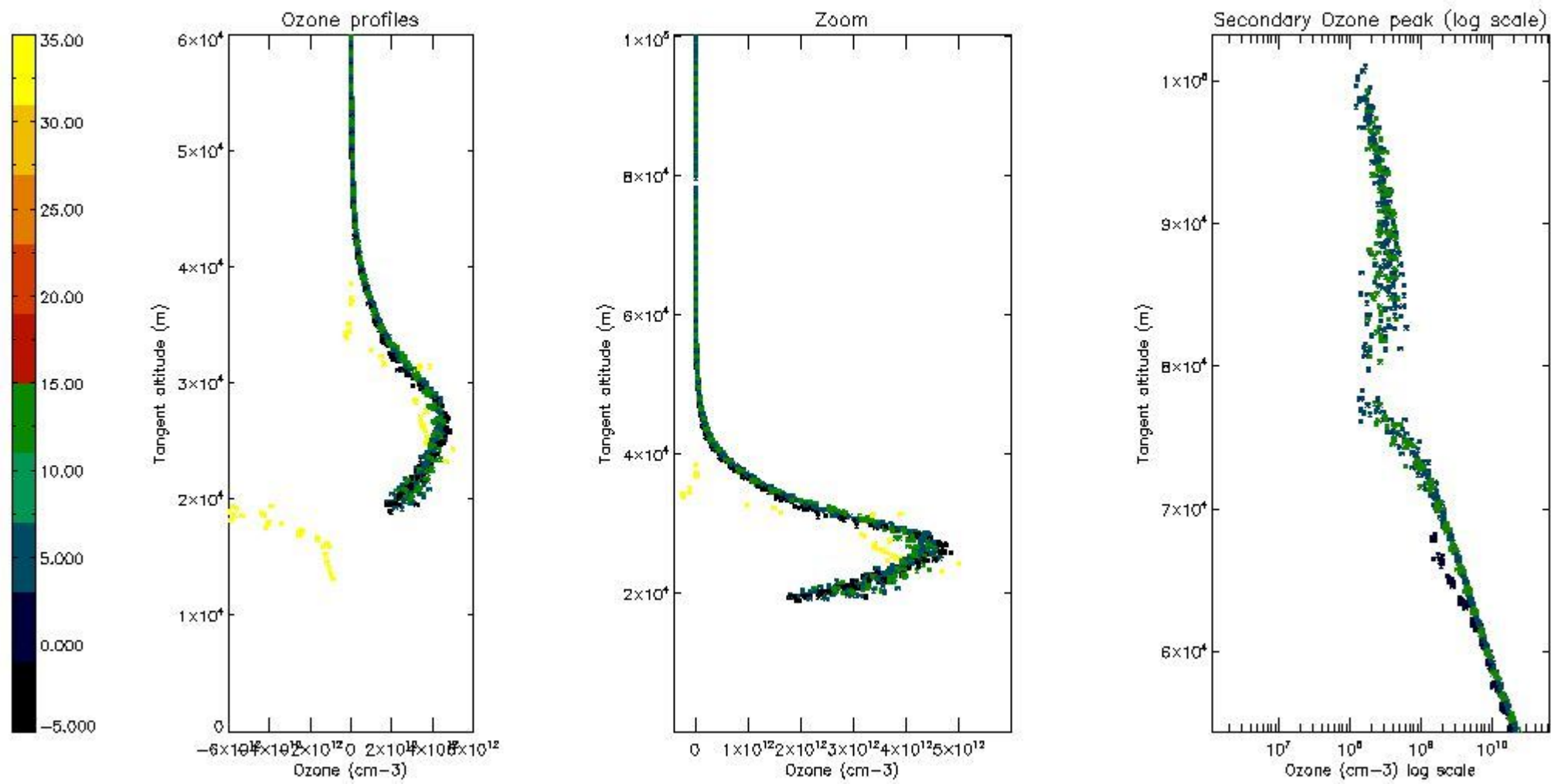
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



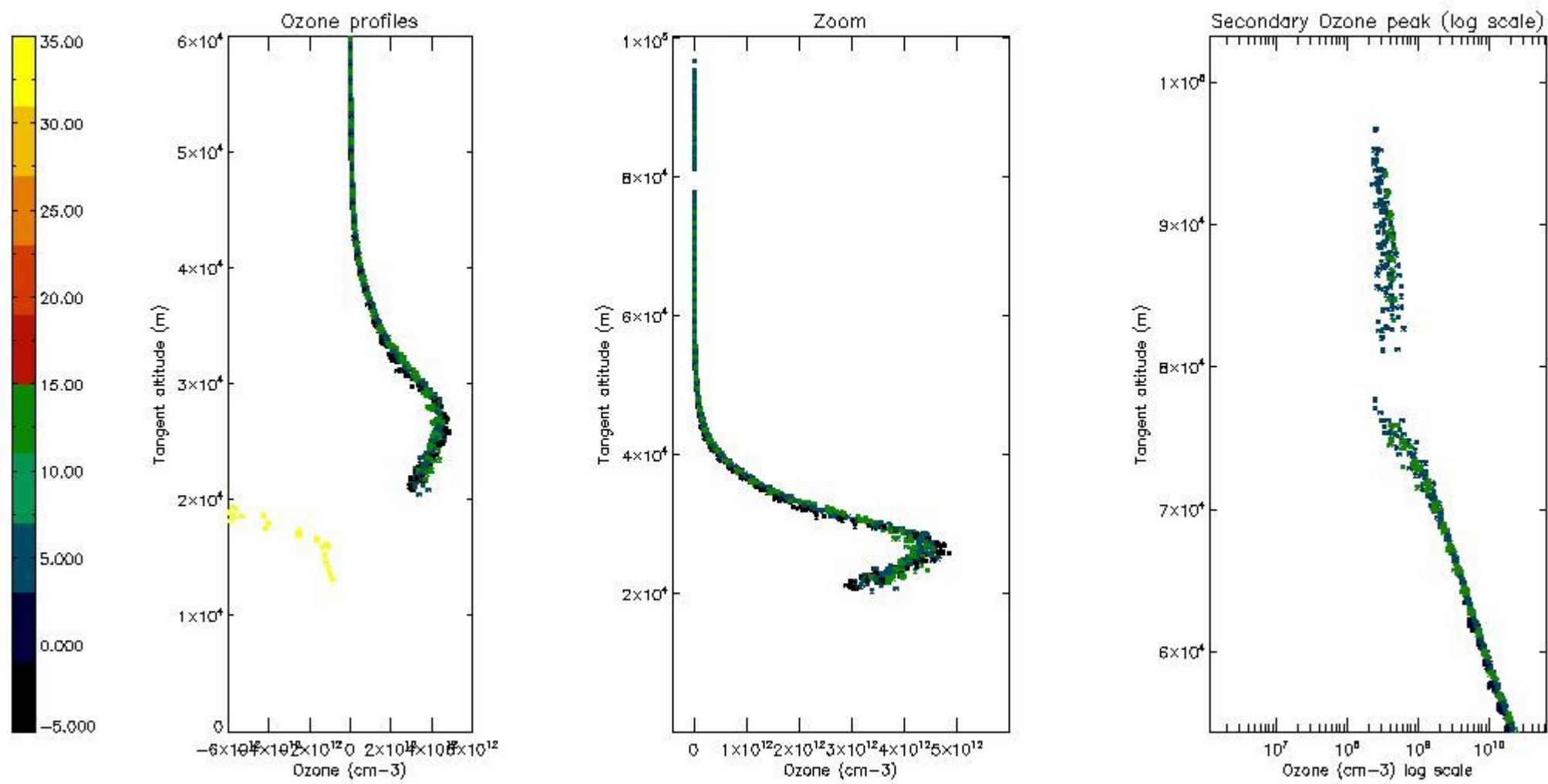
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



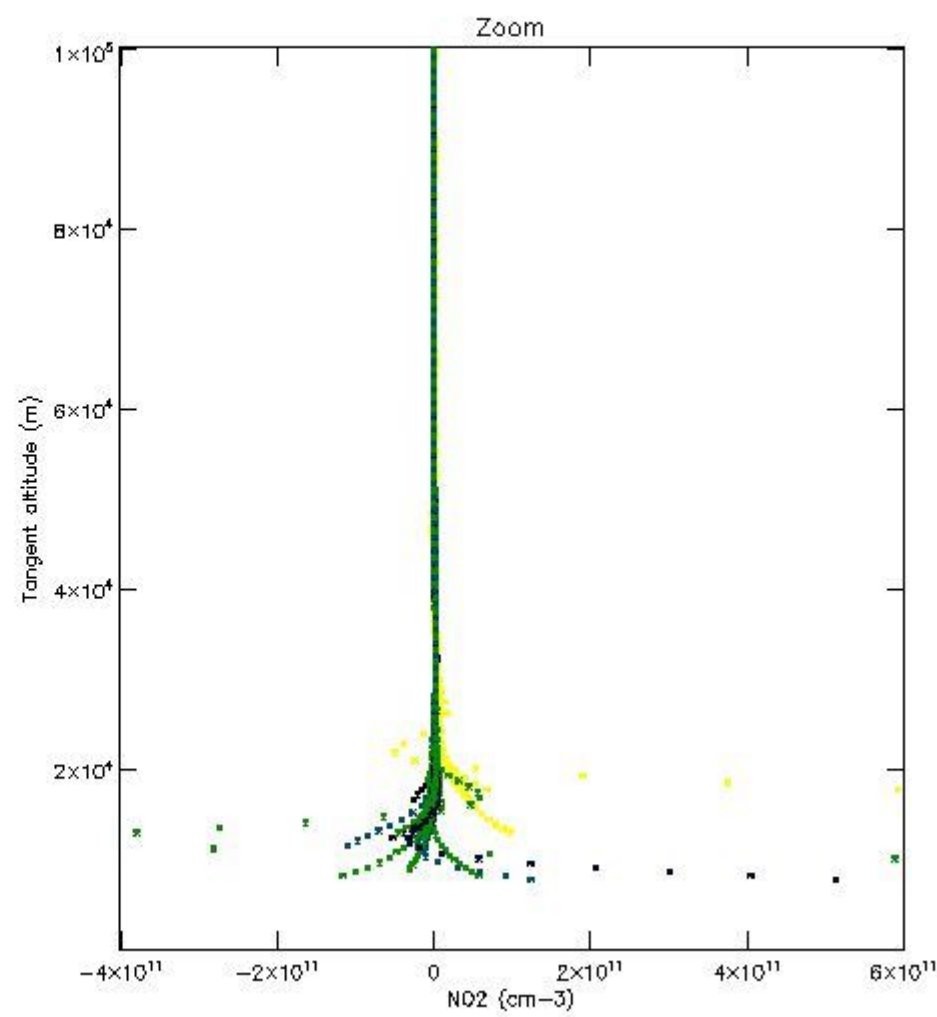
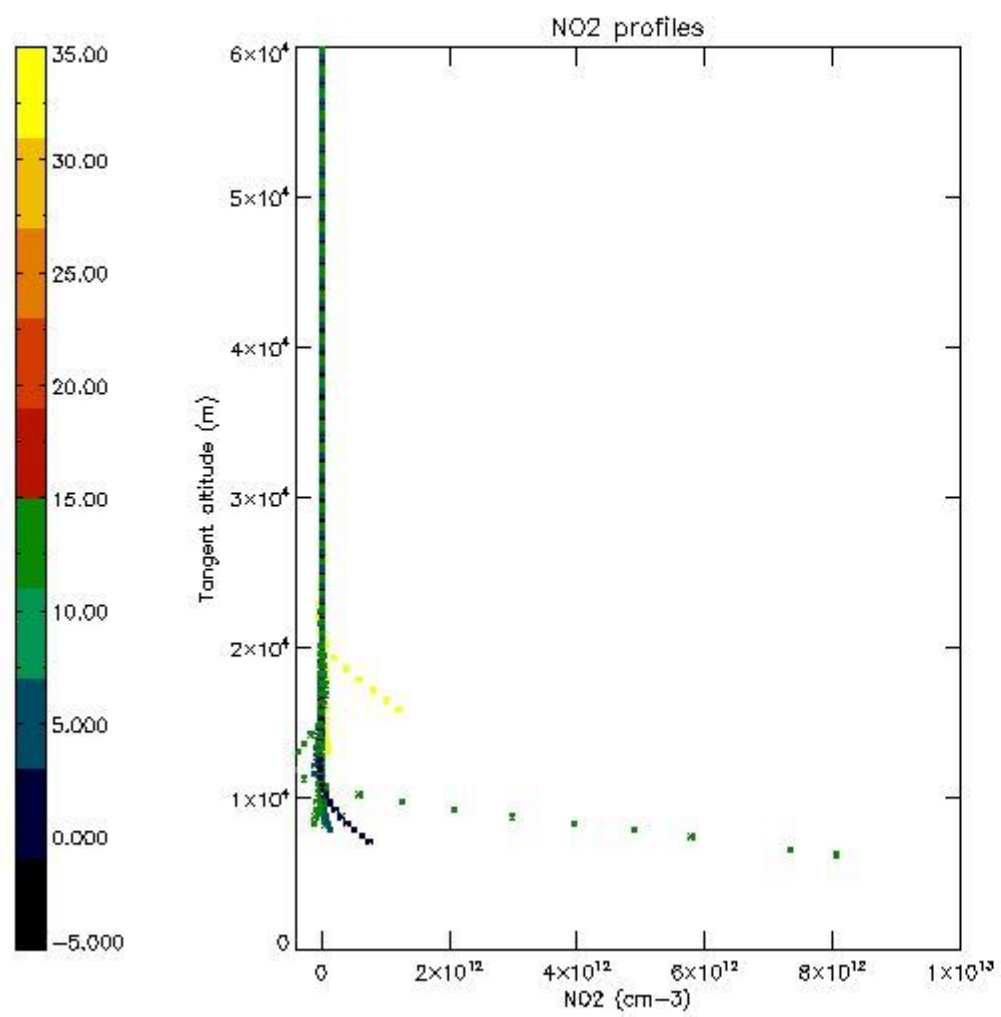
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



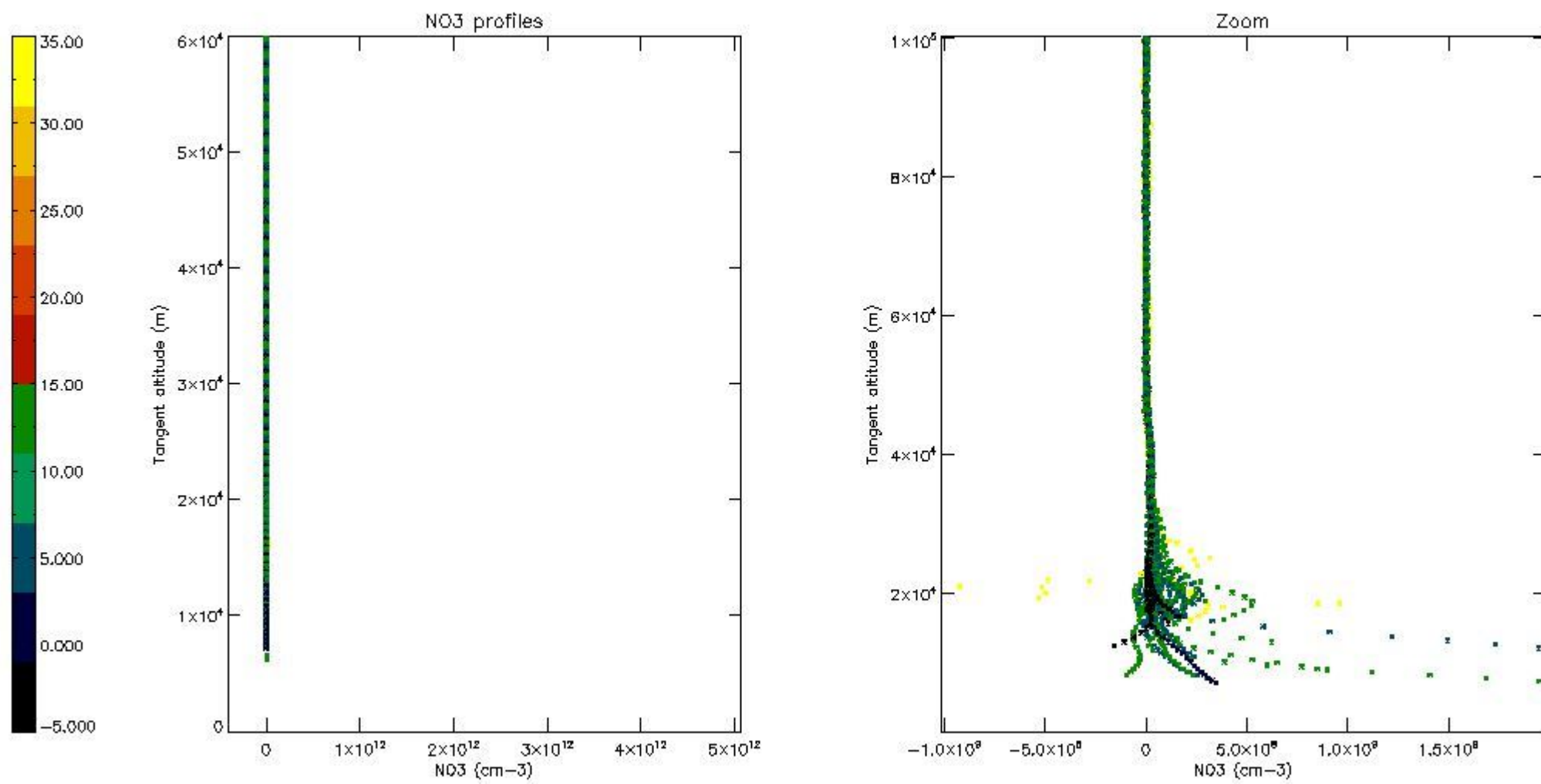
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



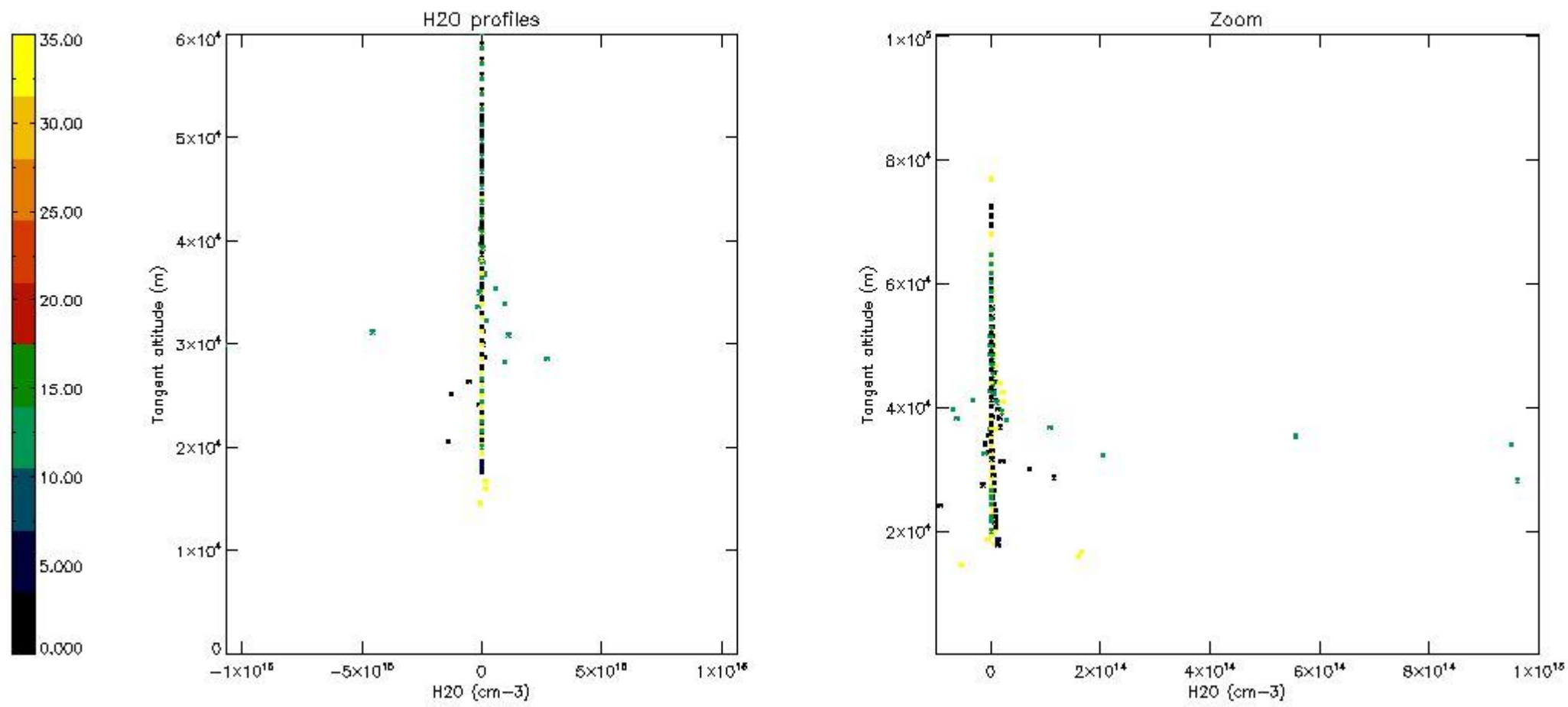
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

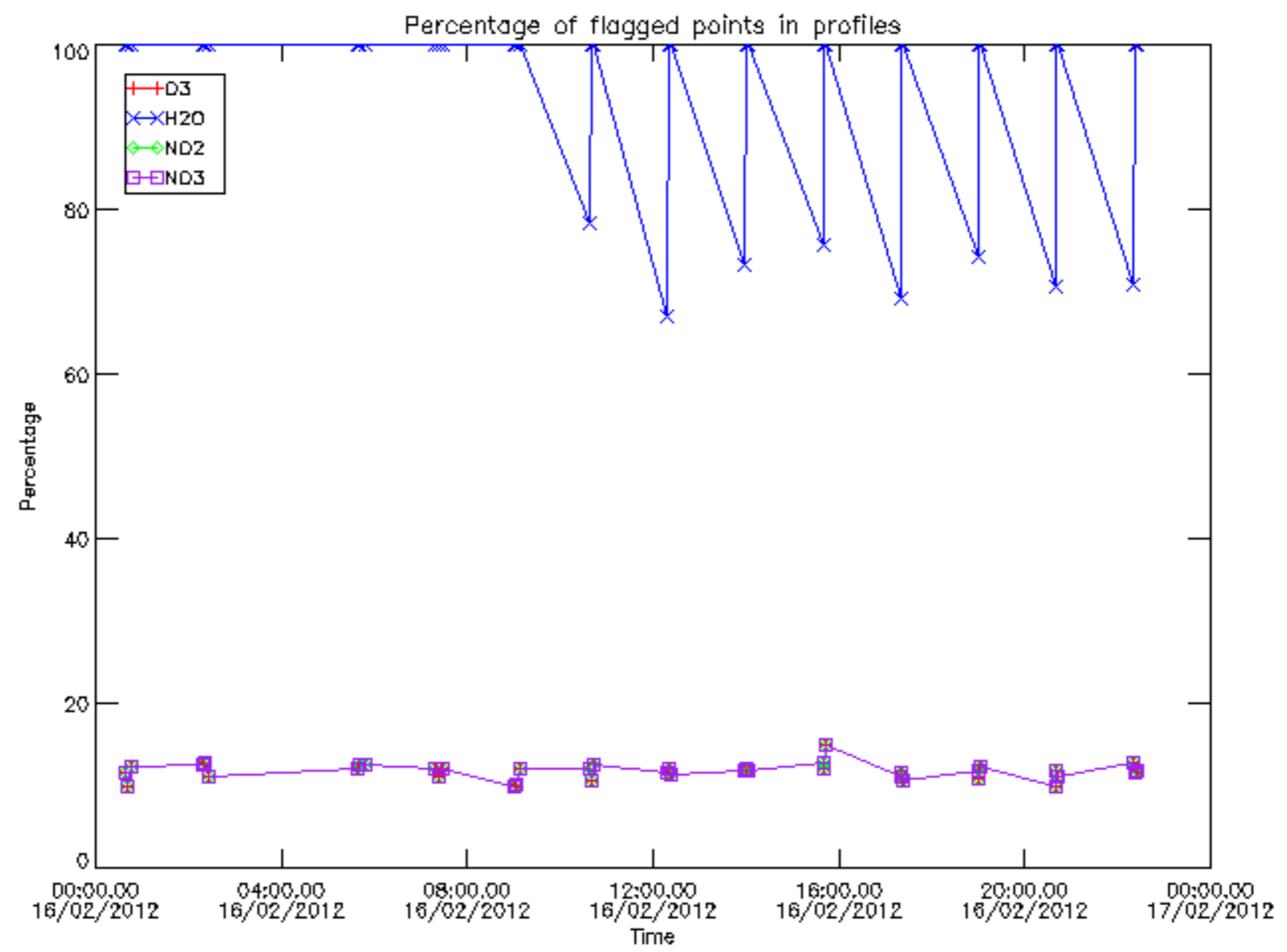
The colorbar represents the latitude.



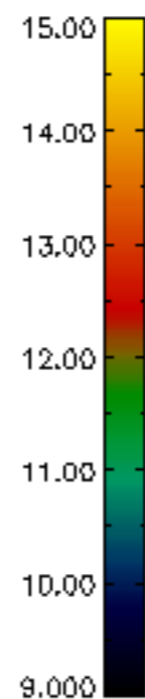
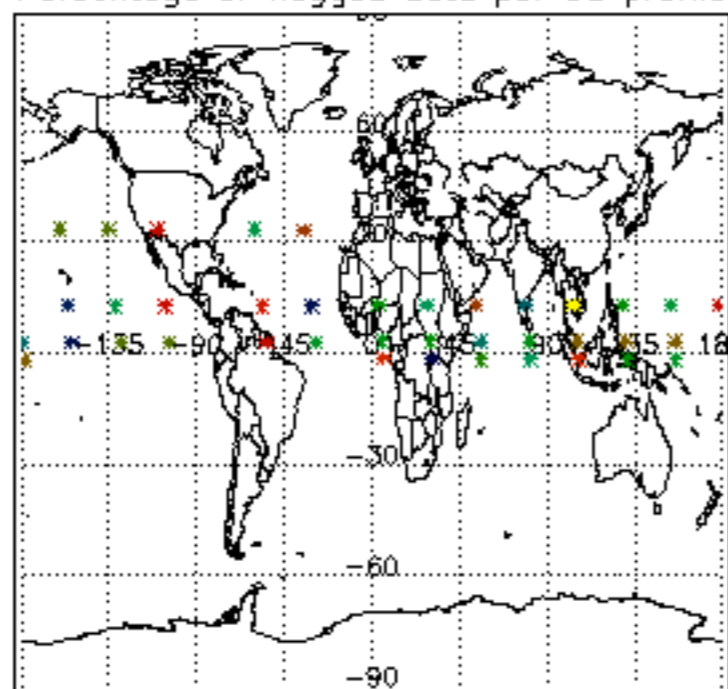
6. Auxiliary Data Files used for the production reported in section 2

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.

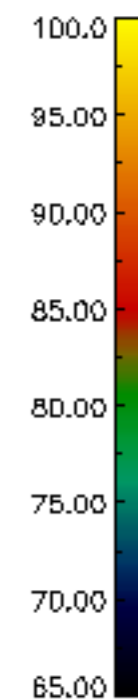
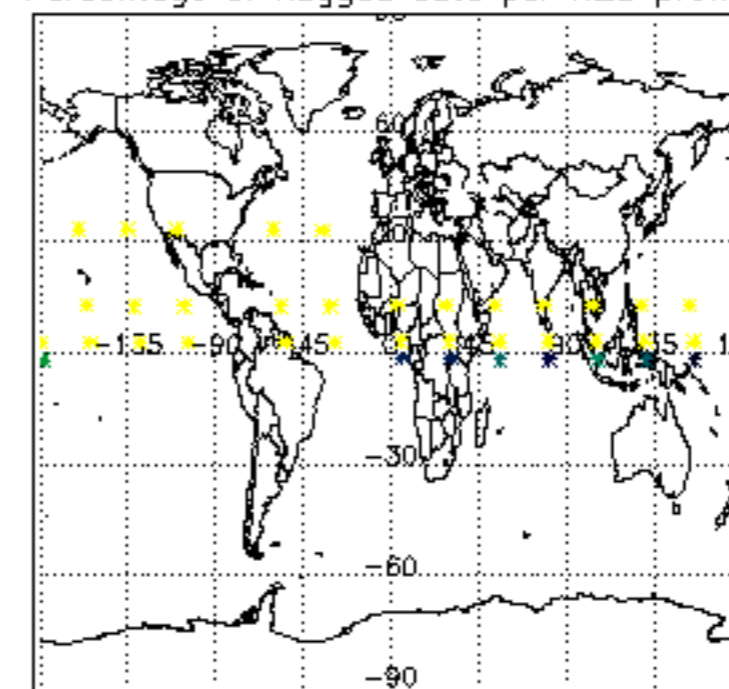
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	16-FEB-2012 00:38:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	16-FEB-2012 00:38:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	16-FEB-2012 00:38:14



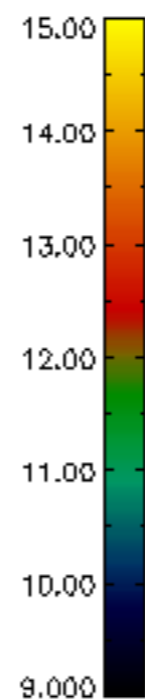
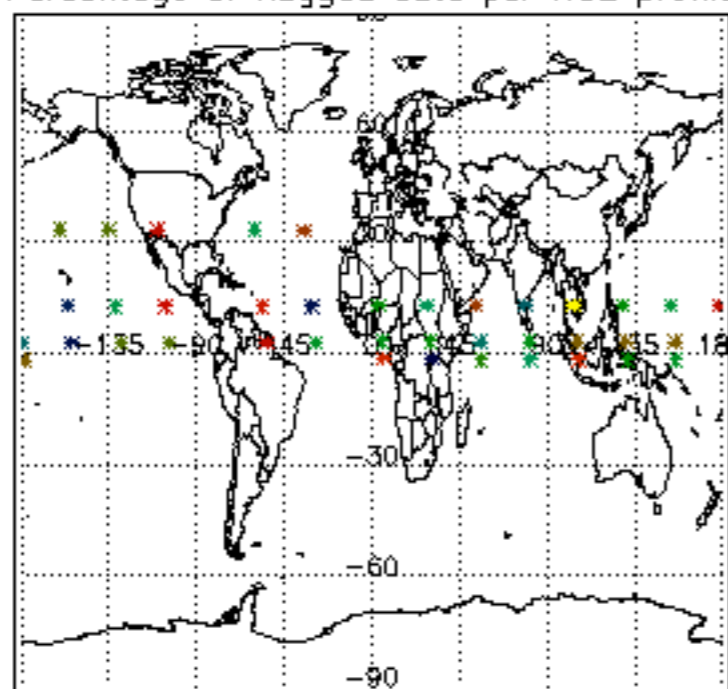
Percentage of flagged data per D3 profile



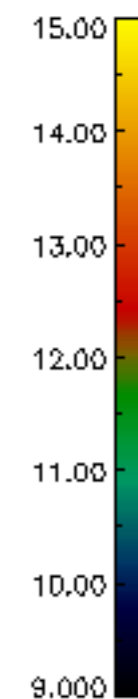
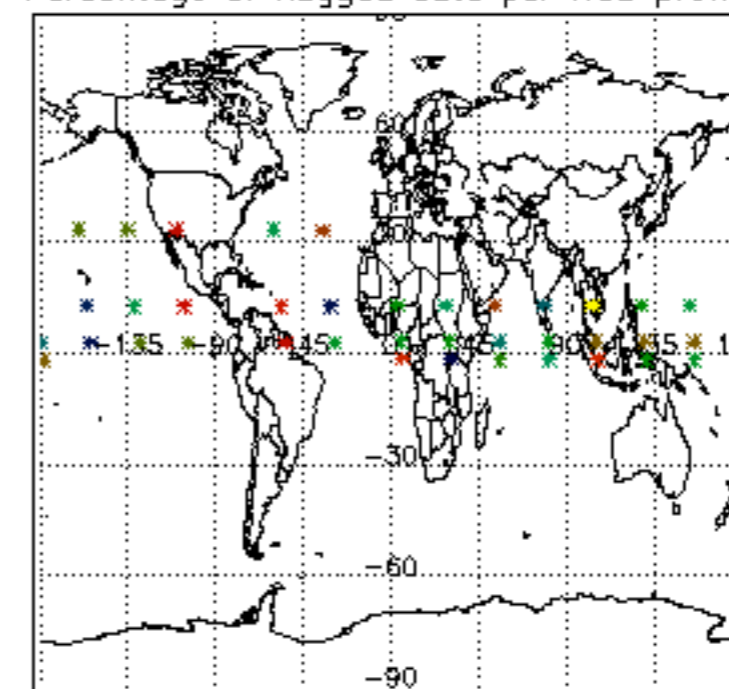
Percentage of flagged data per H2O profile

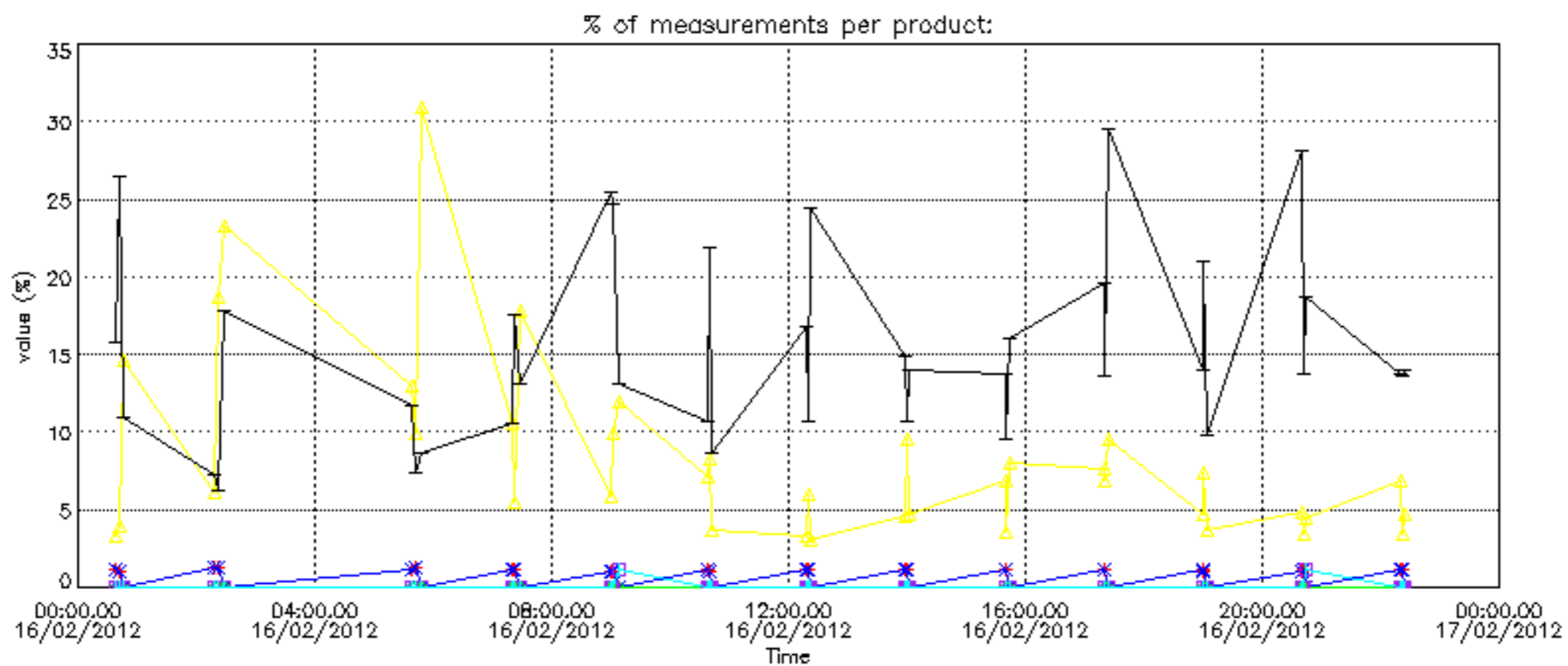


Percentage of flagged data per NO2 profile

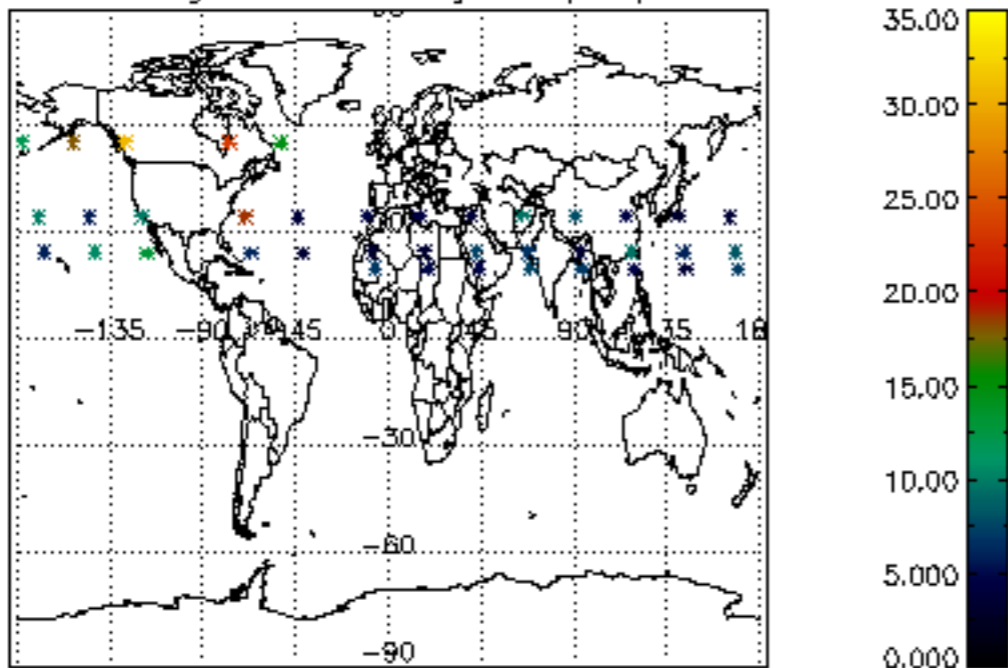


Percentage of flagged data per NO3 profile

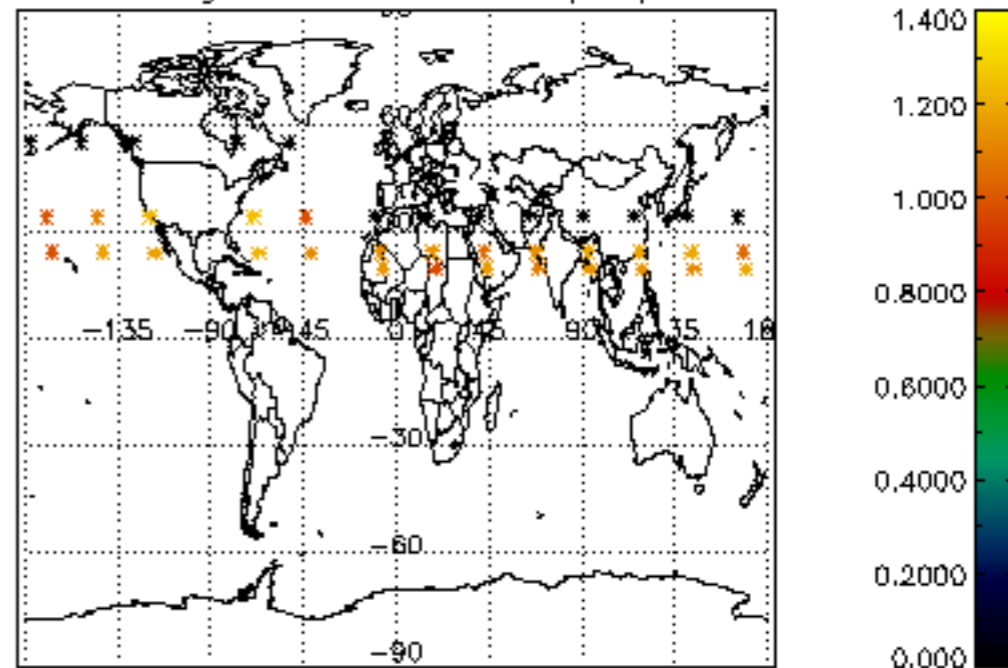




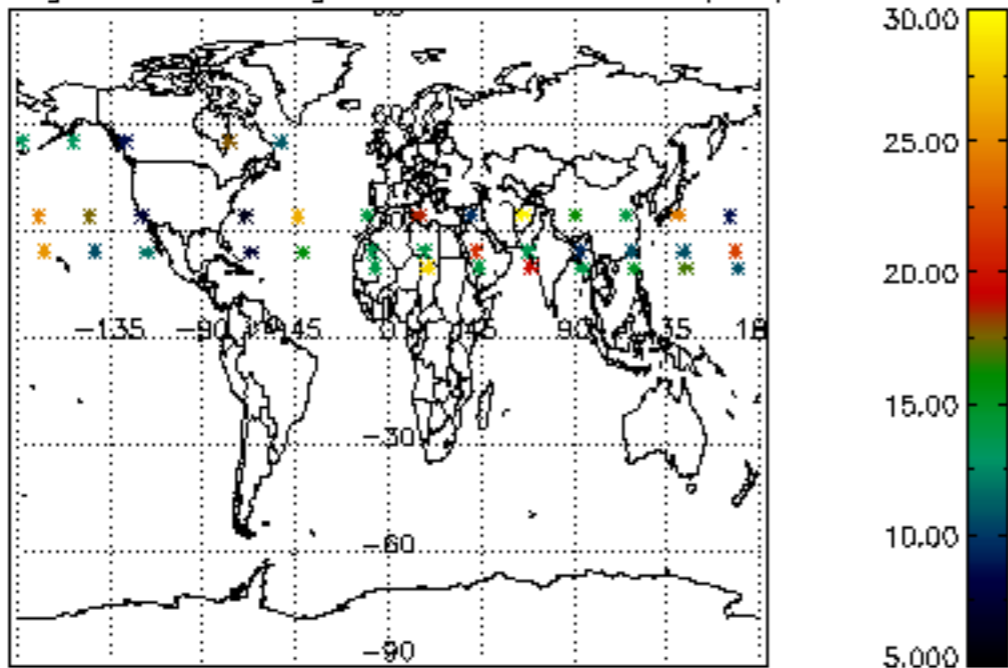
Percentage of cosmic ray hits per profile



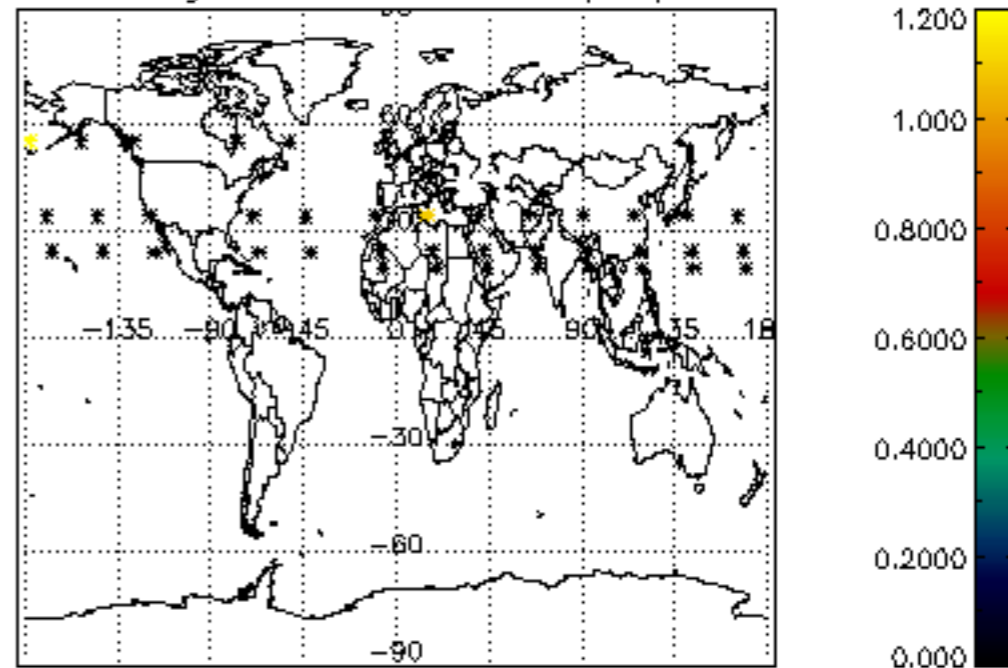
Percentage of datation errors per profile

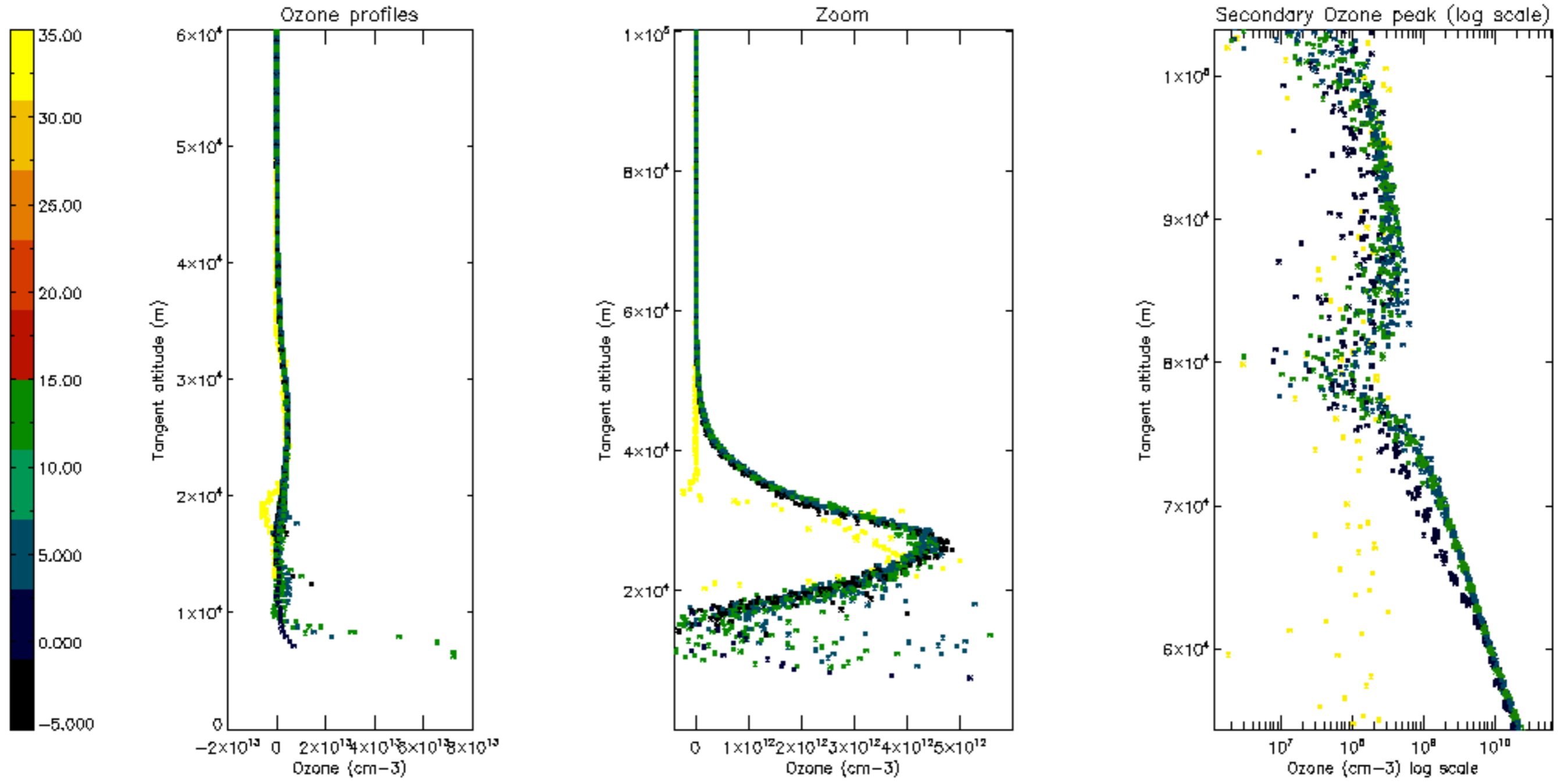


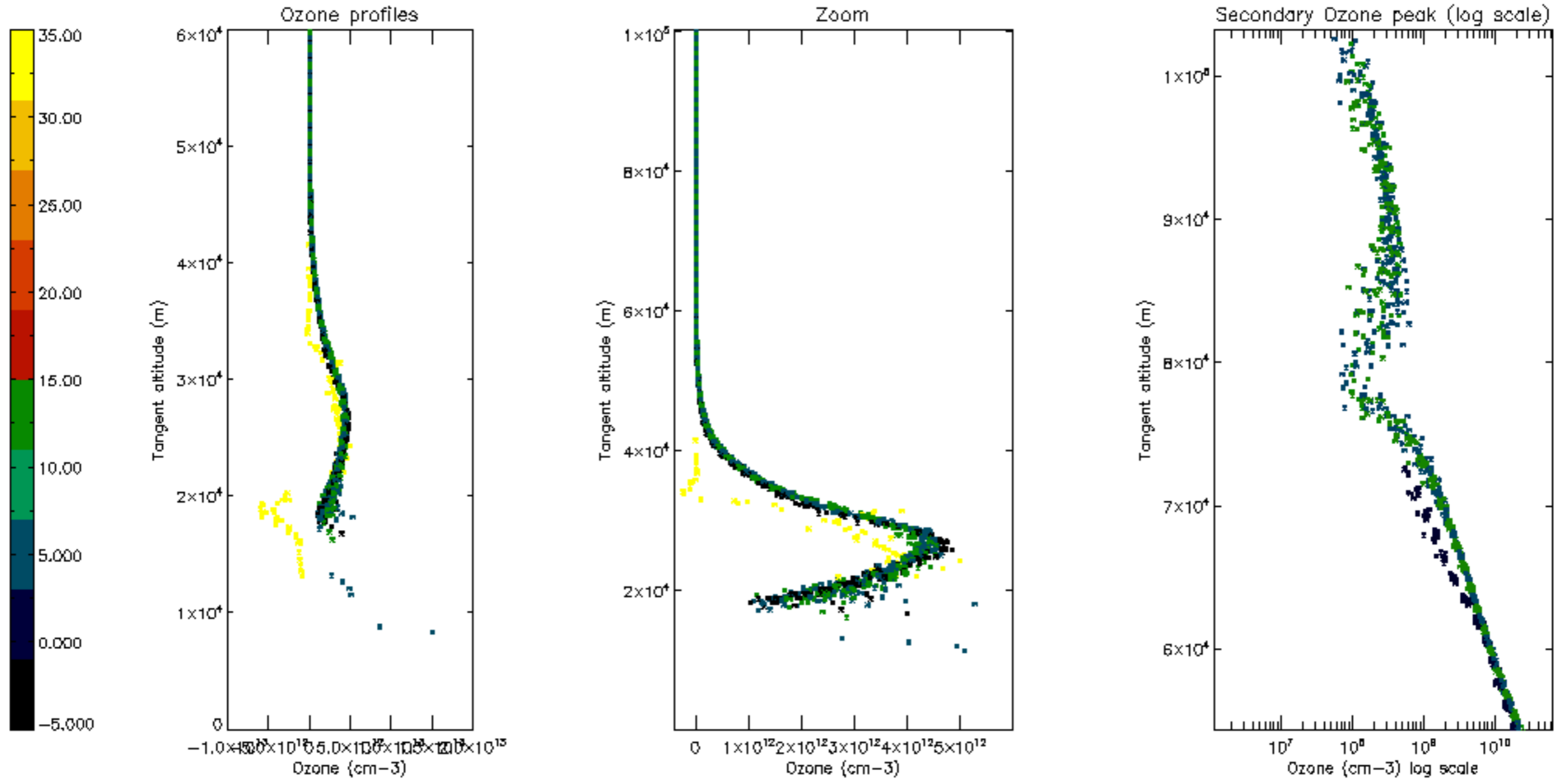
Percentage of star falling outside central band per profile

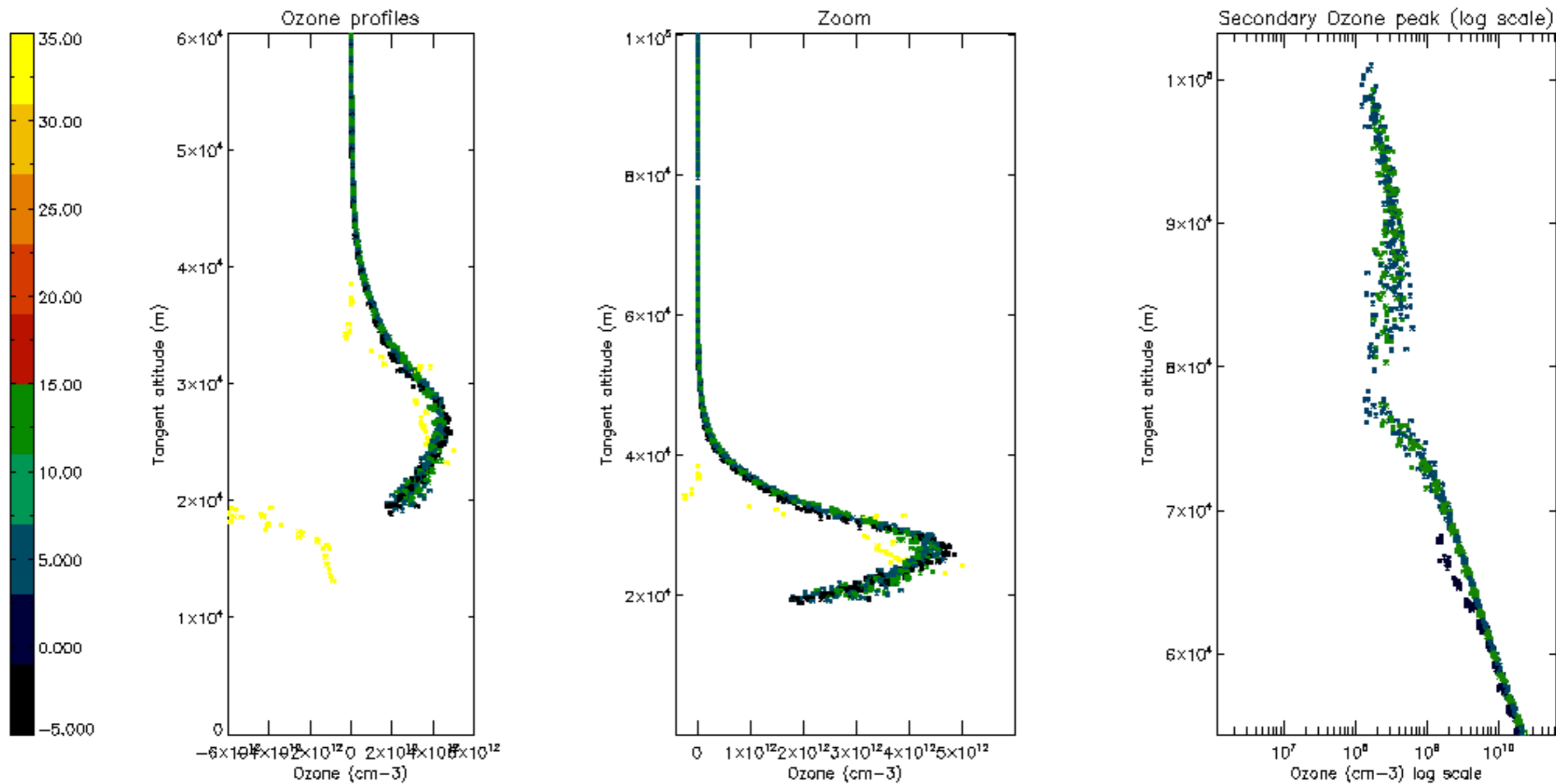


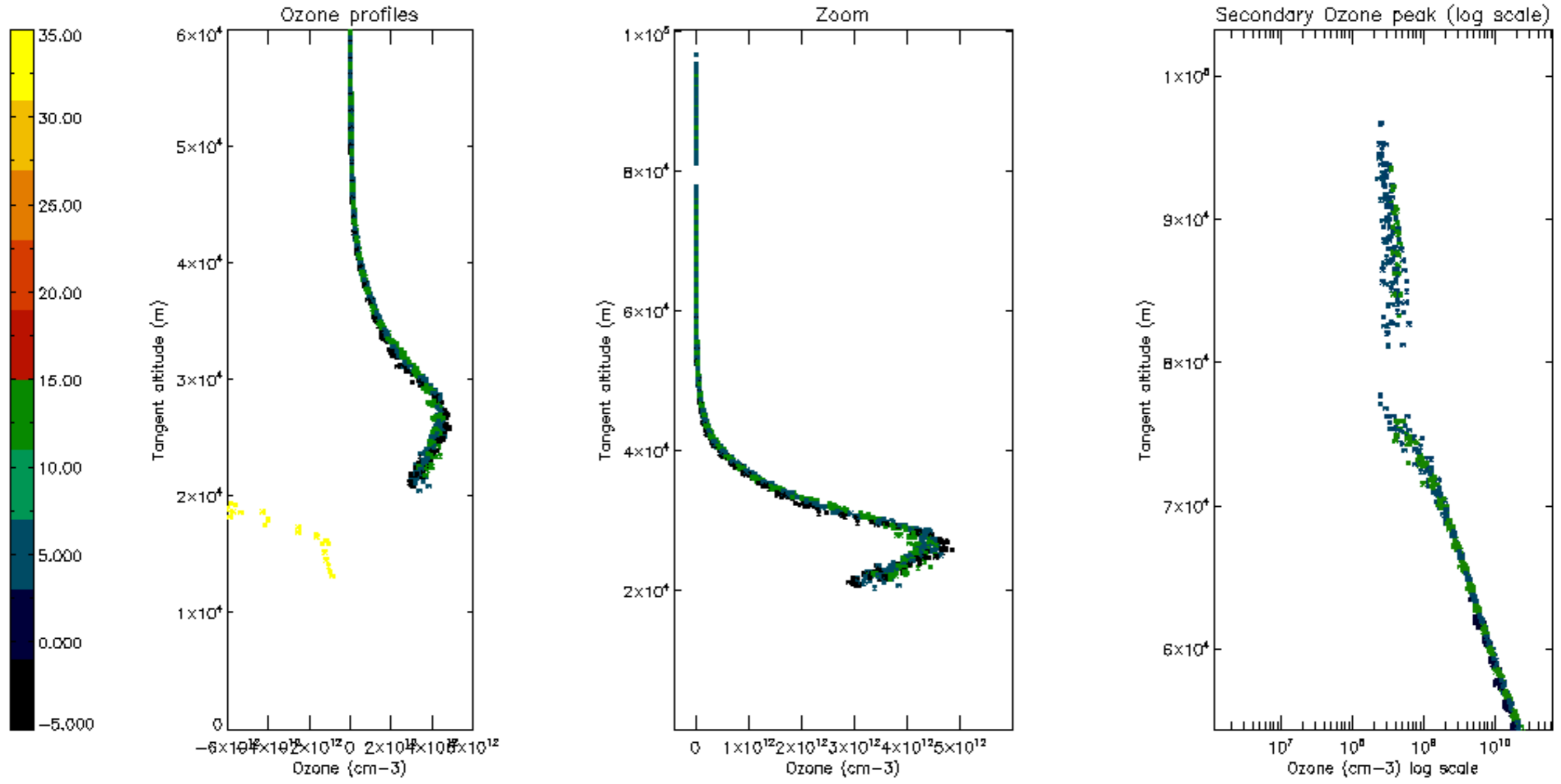
Percentage of saturation errors per profile

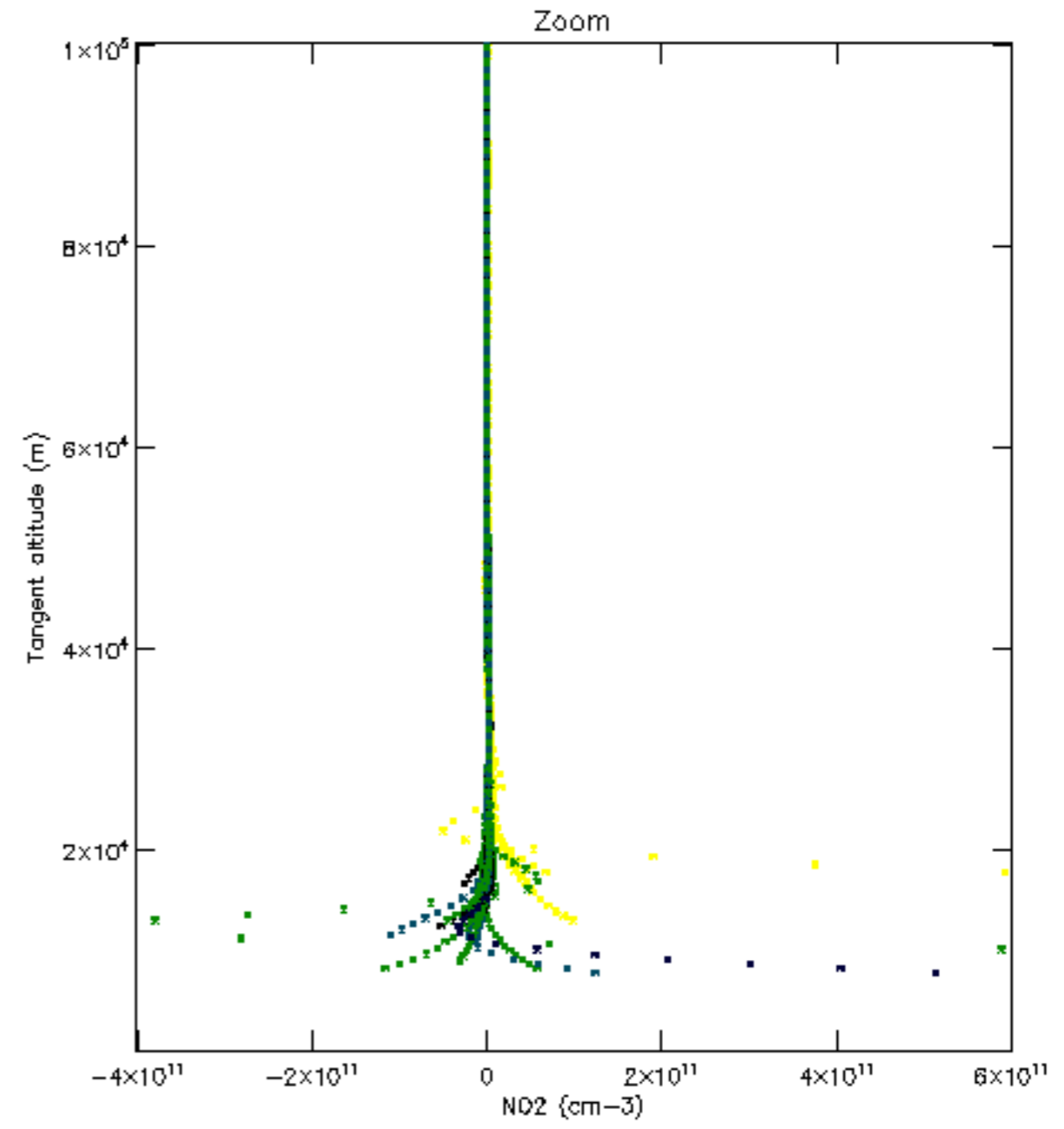
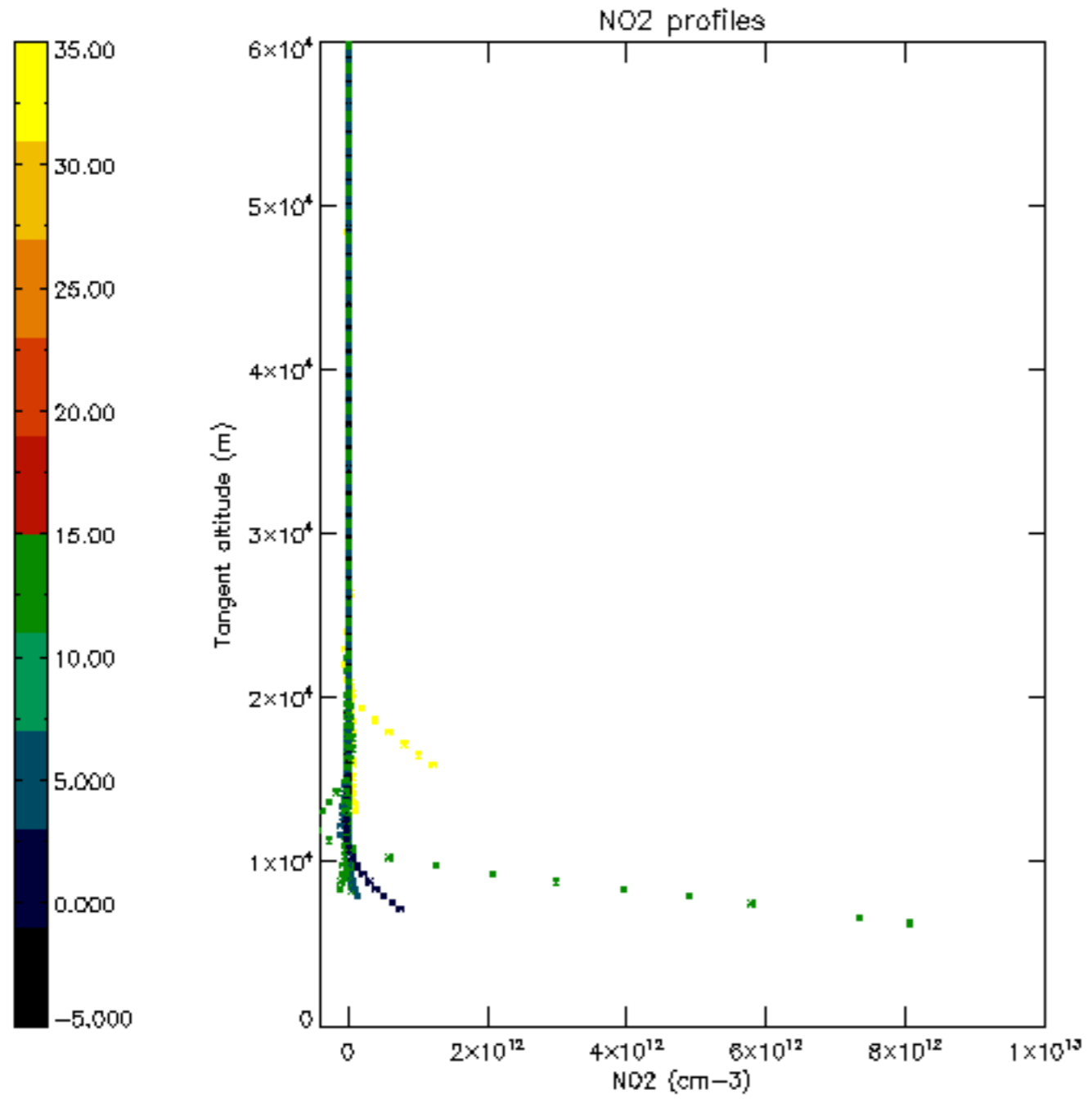


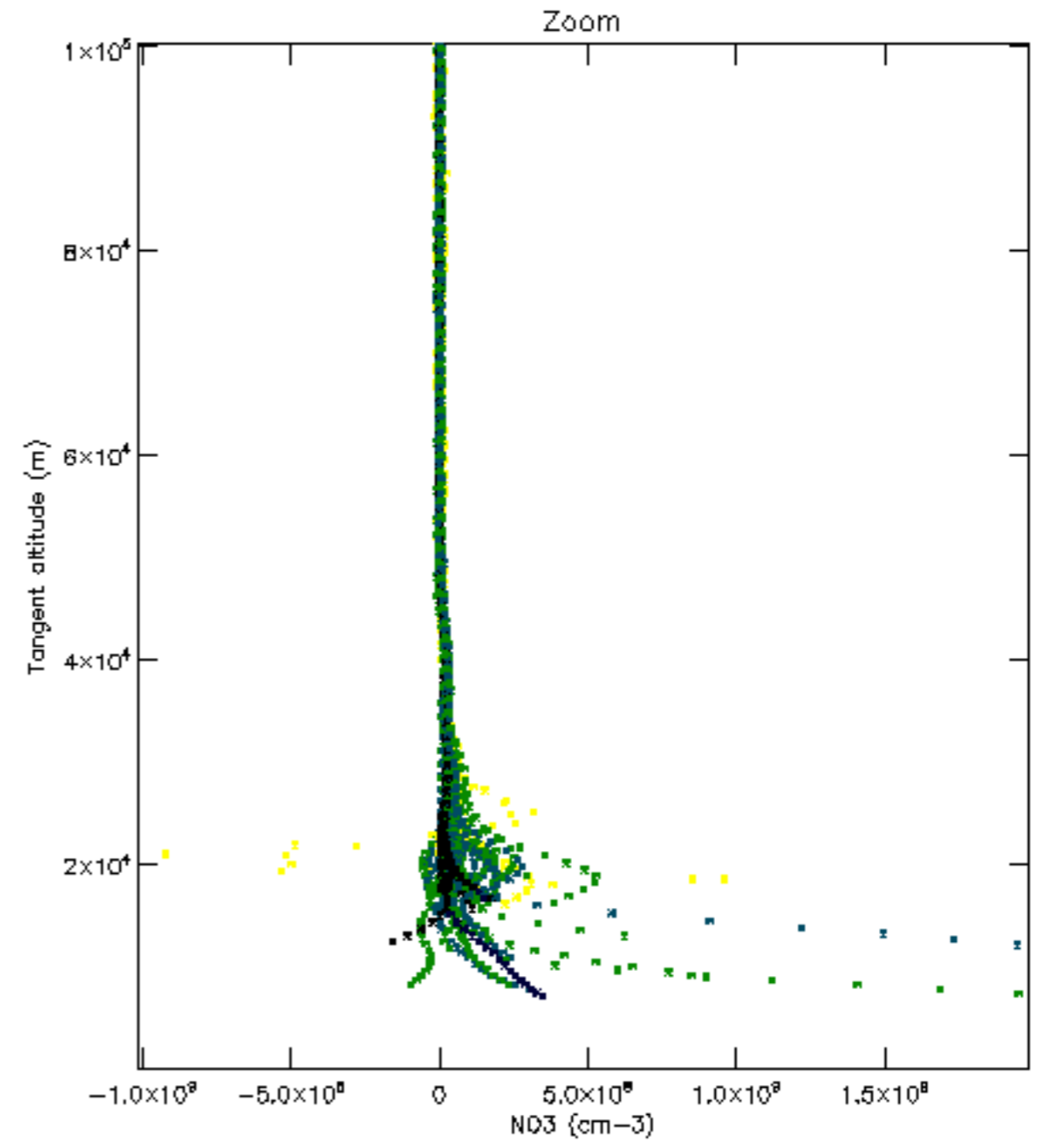
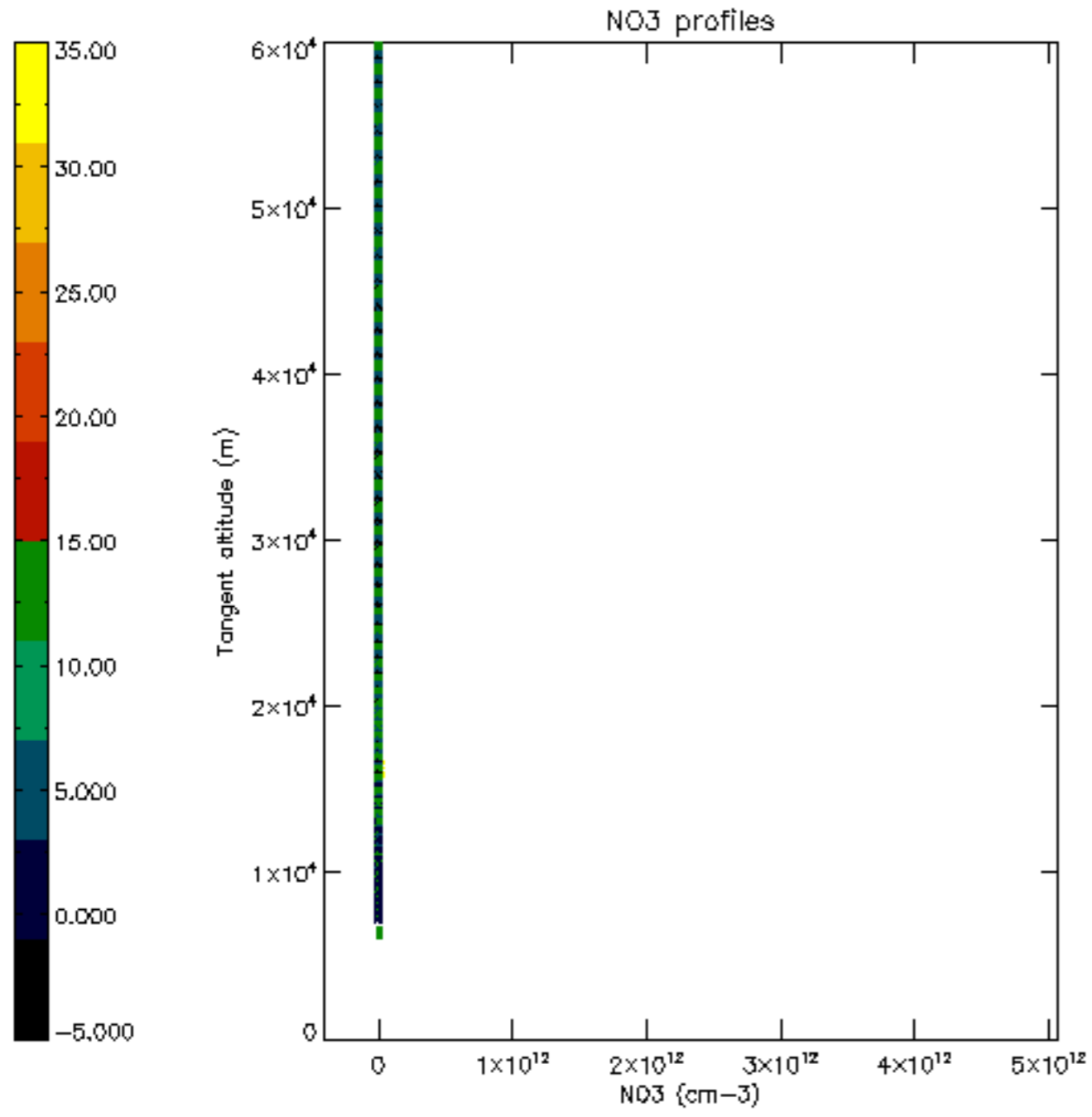


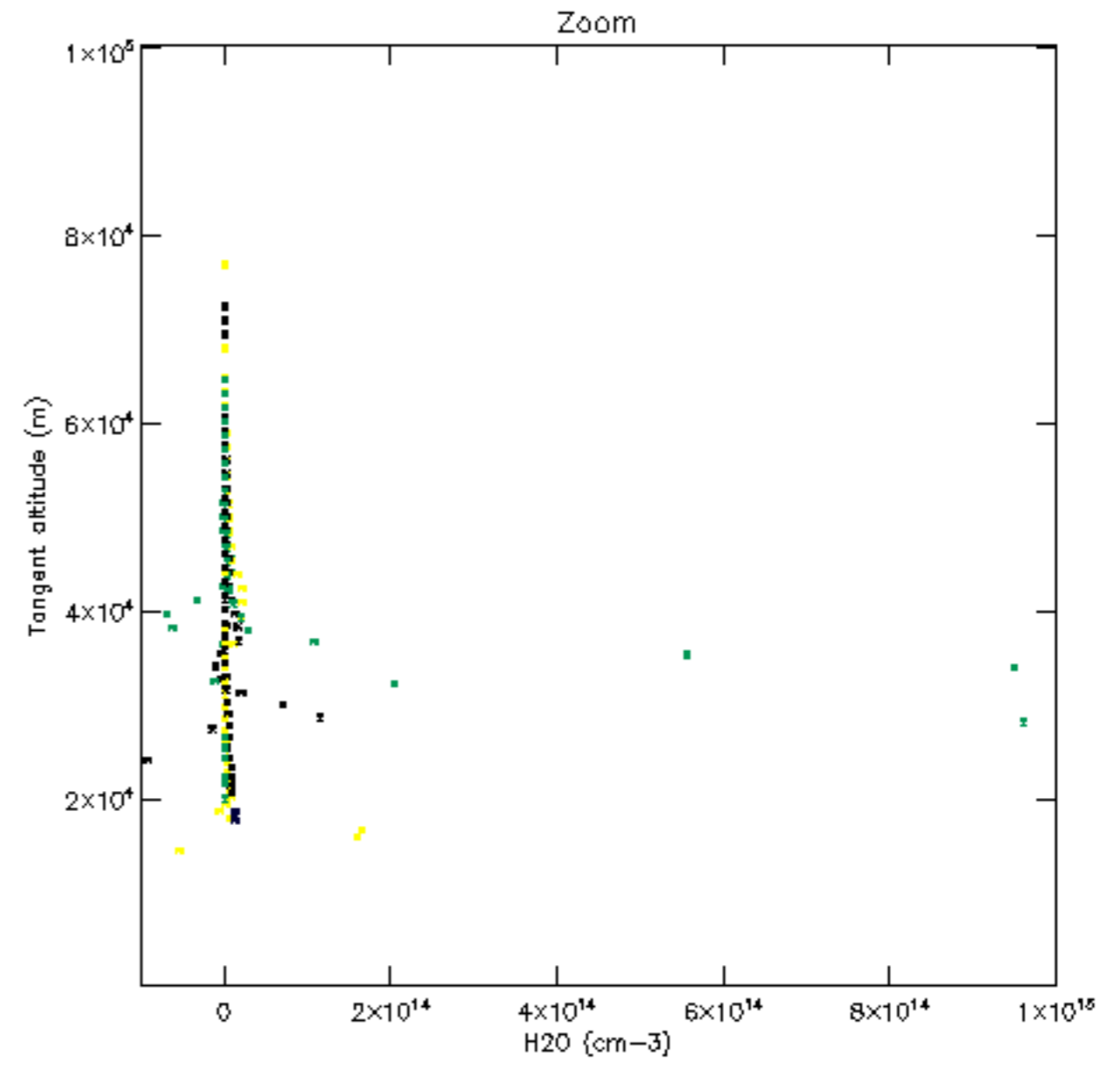
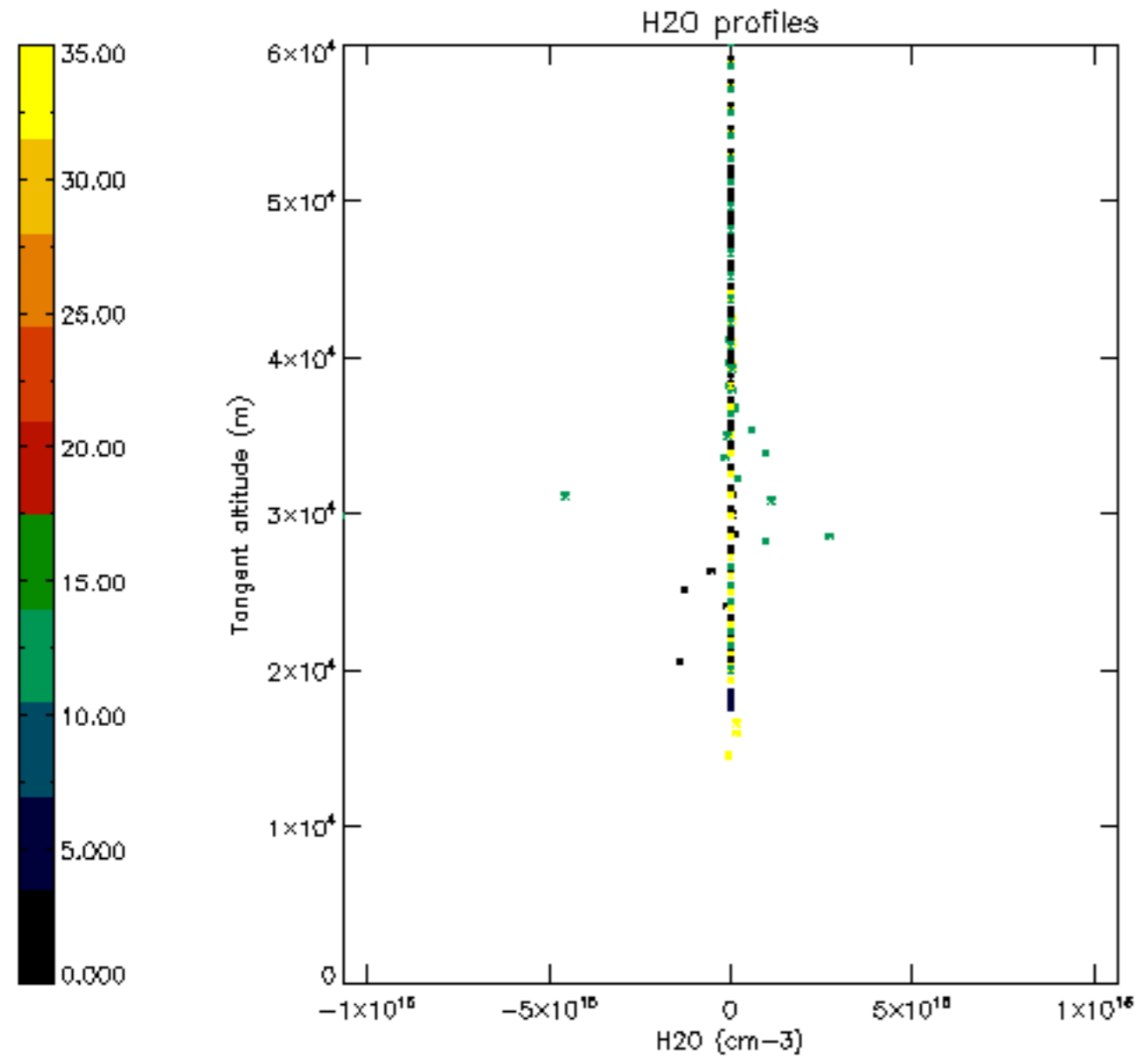


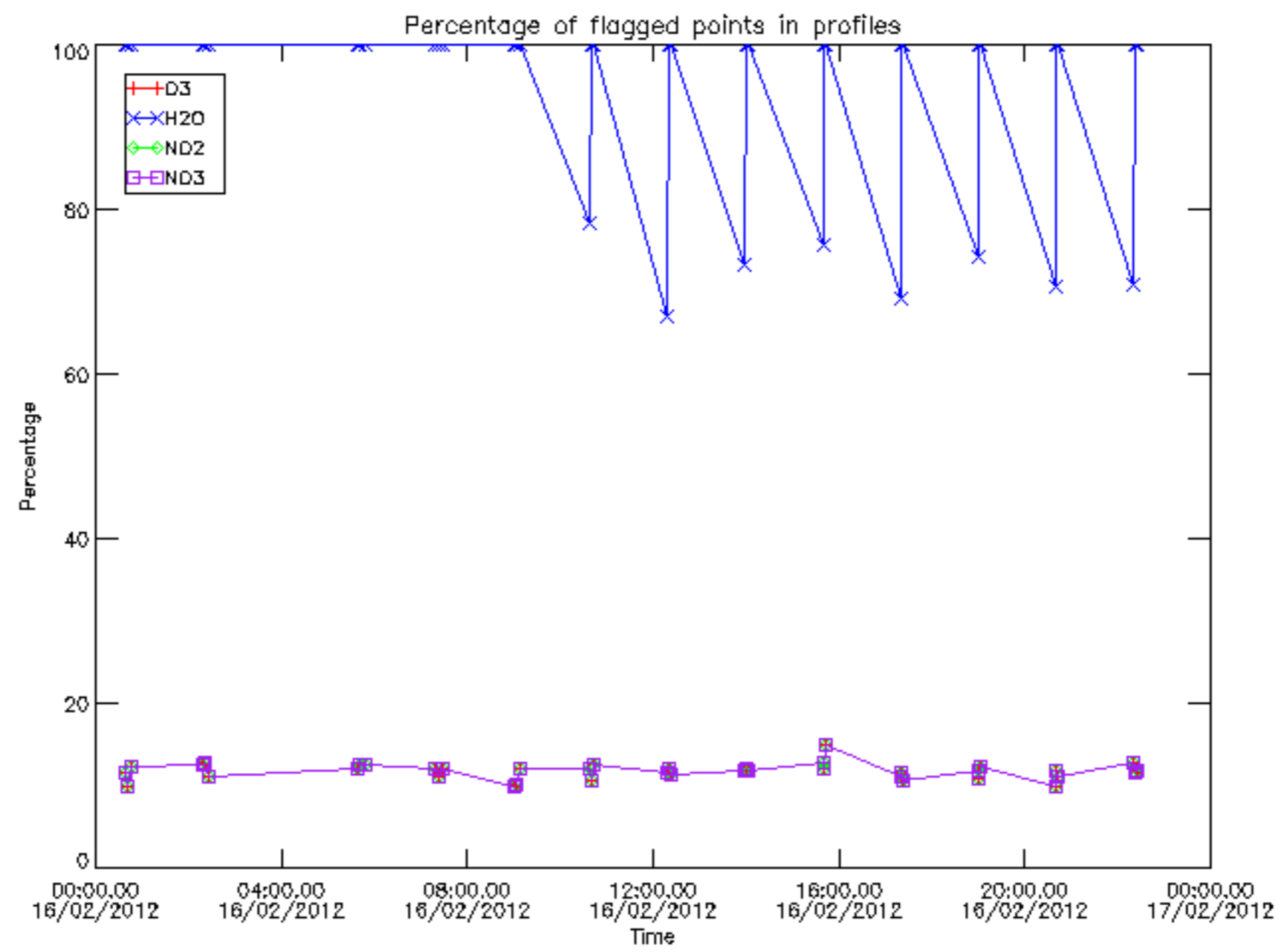




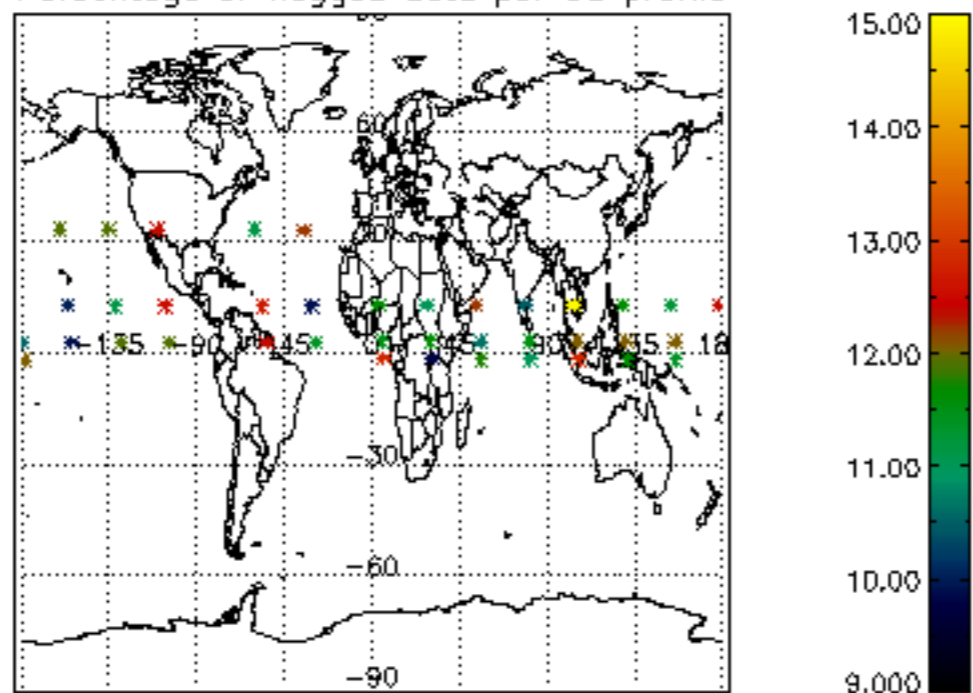




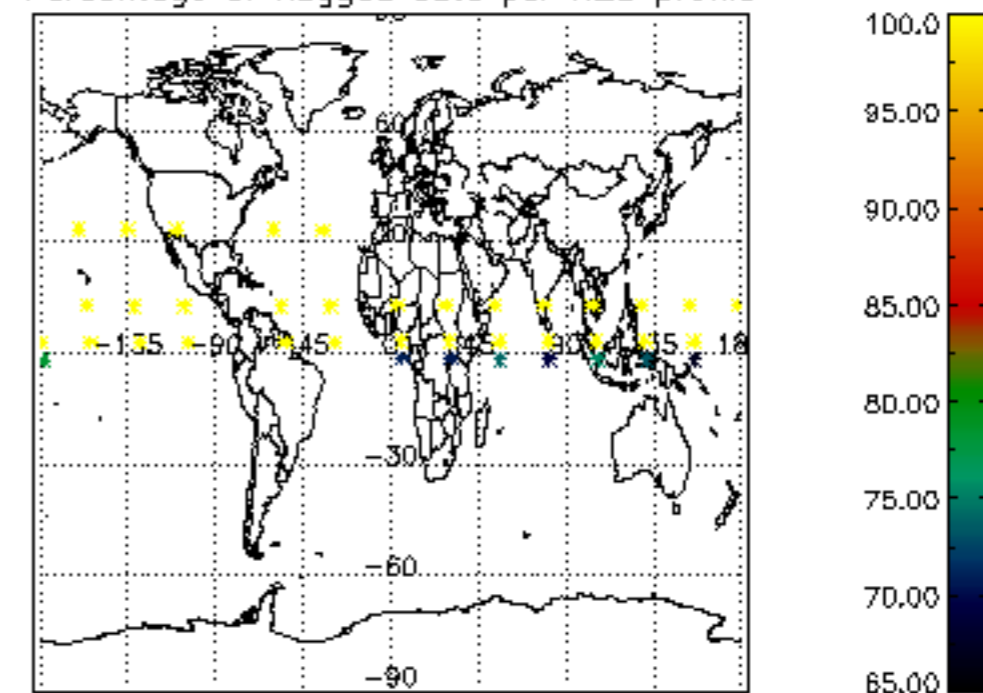




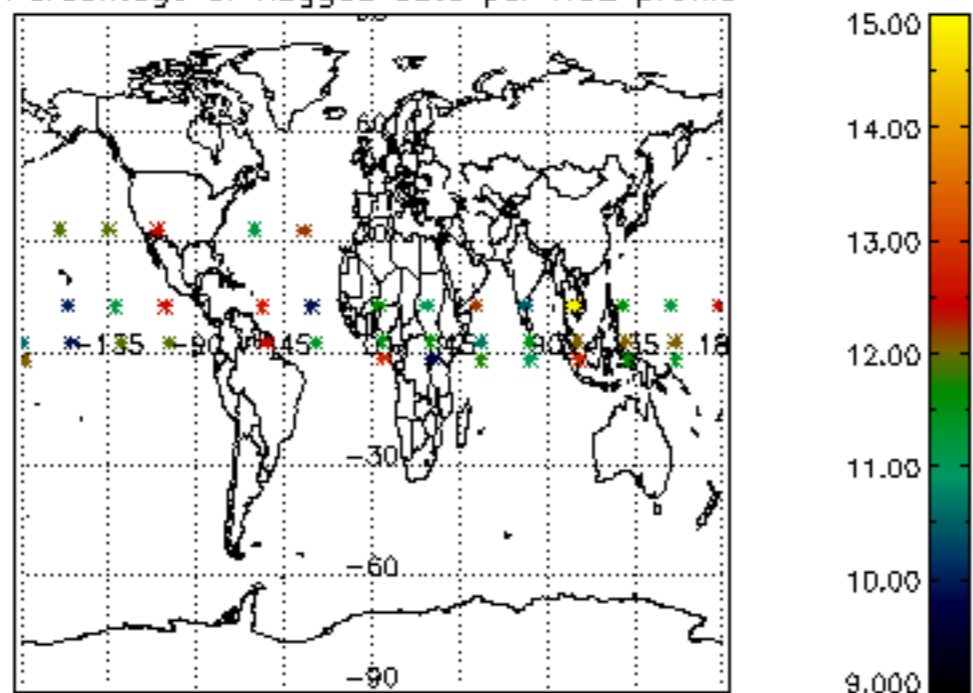
Percentage of flagged data per D3 profile



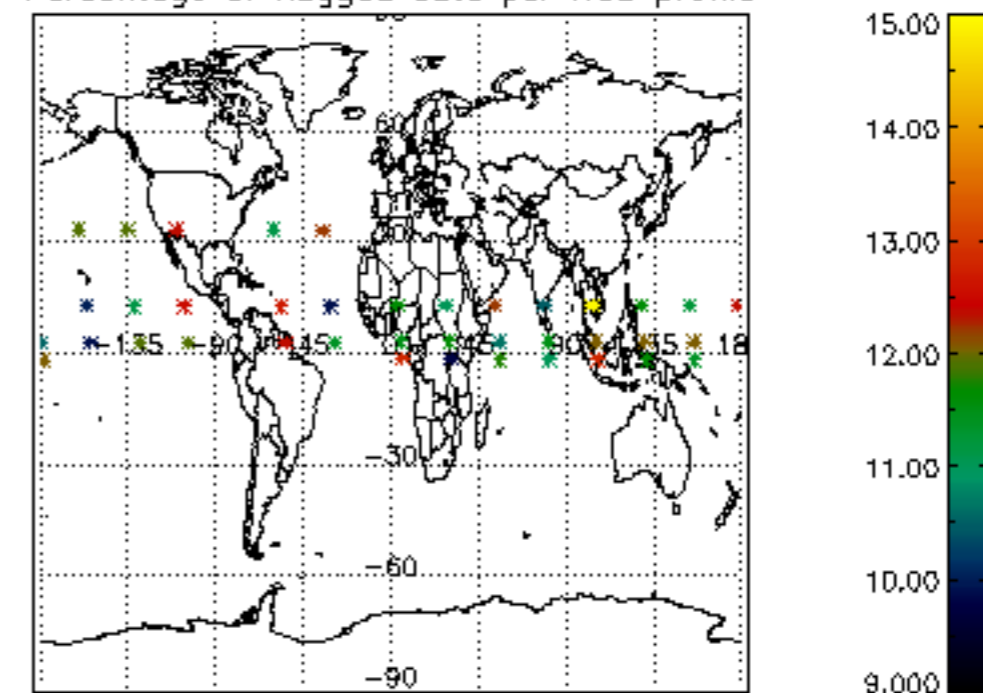
Percentage of flagged data per H2O profile

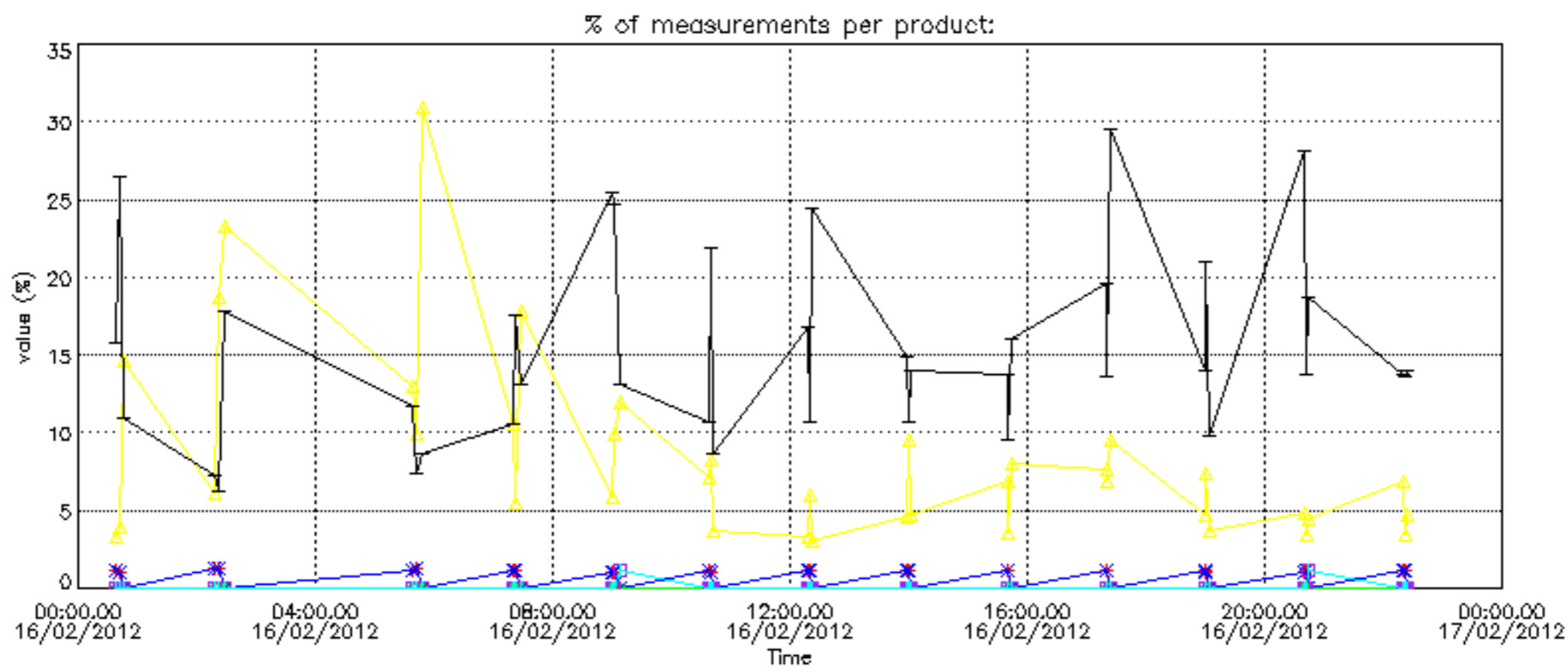


Percentage of flagged data per NO2 profile

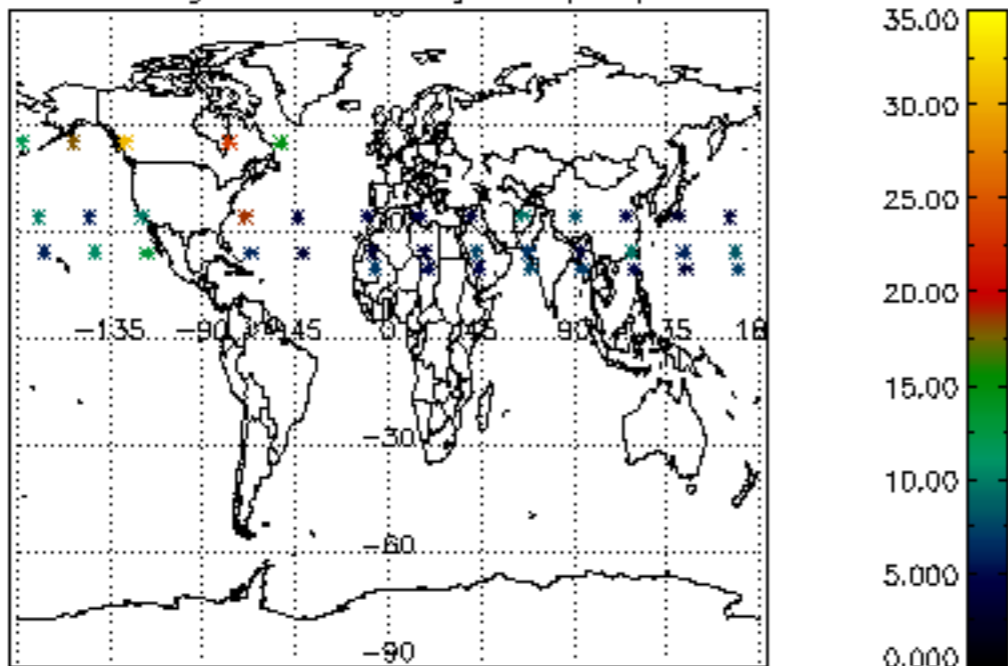


Percentage of flagged data per NO3 profile

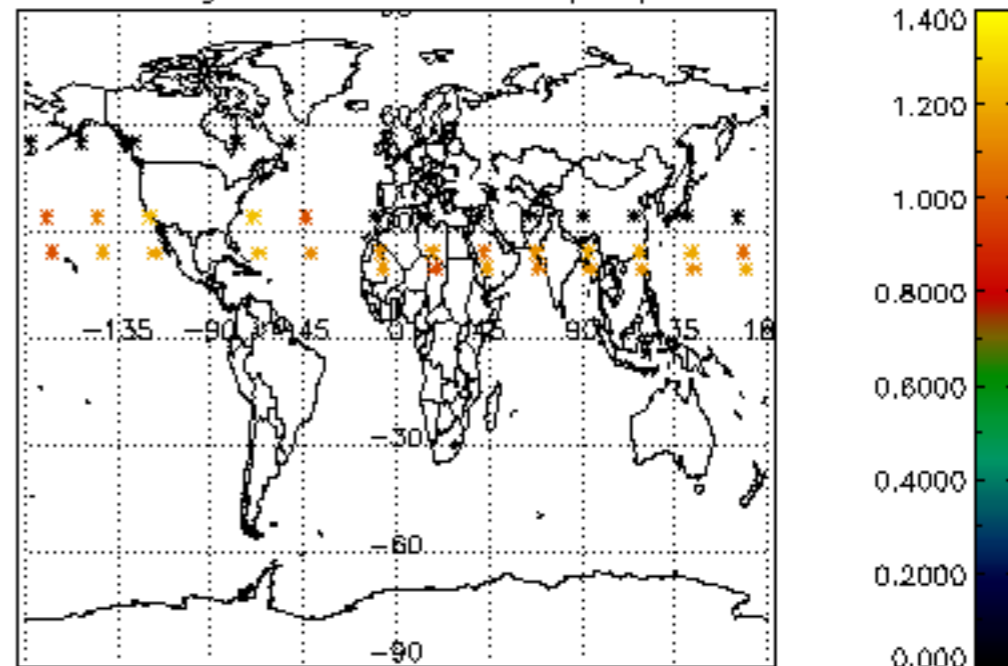




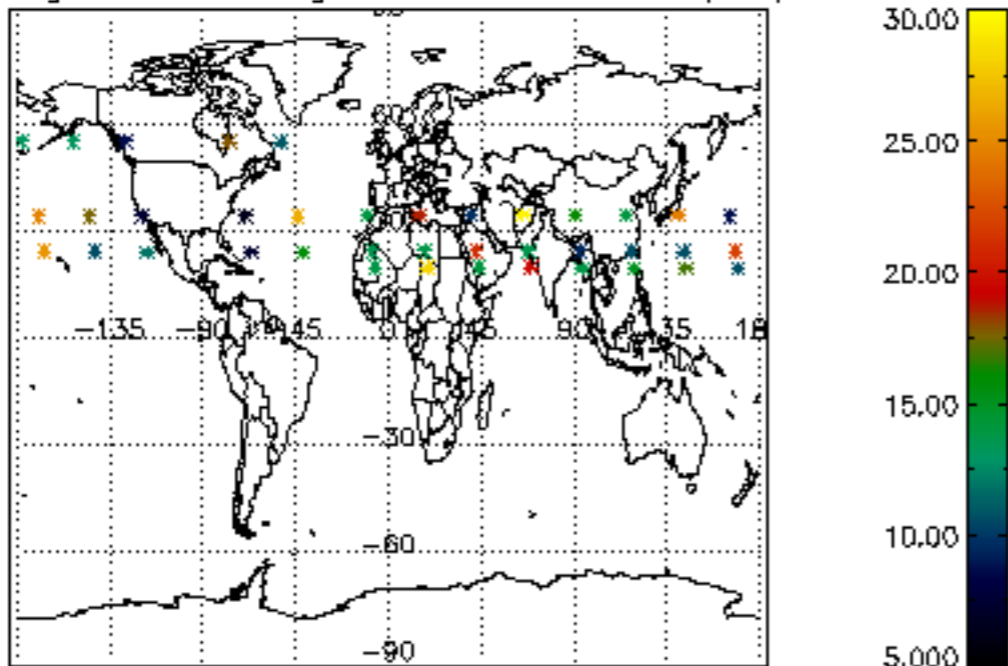
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

