

GOMOS Level 2 Daily Report

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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	17APR2013 20:20:20
Data source version	GOMOS/6.01
Start time of products	20-11-2002 (20NOV2002 00:00:00)
Stop time of products	21-11-2002 (21NOV2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	12
Nb of prods with errors	1

2. Summary of processed GOM_NL__2P products.

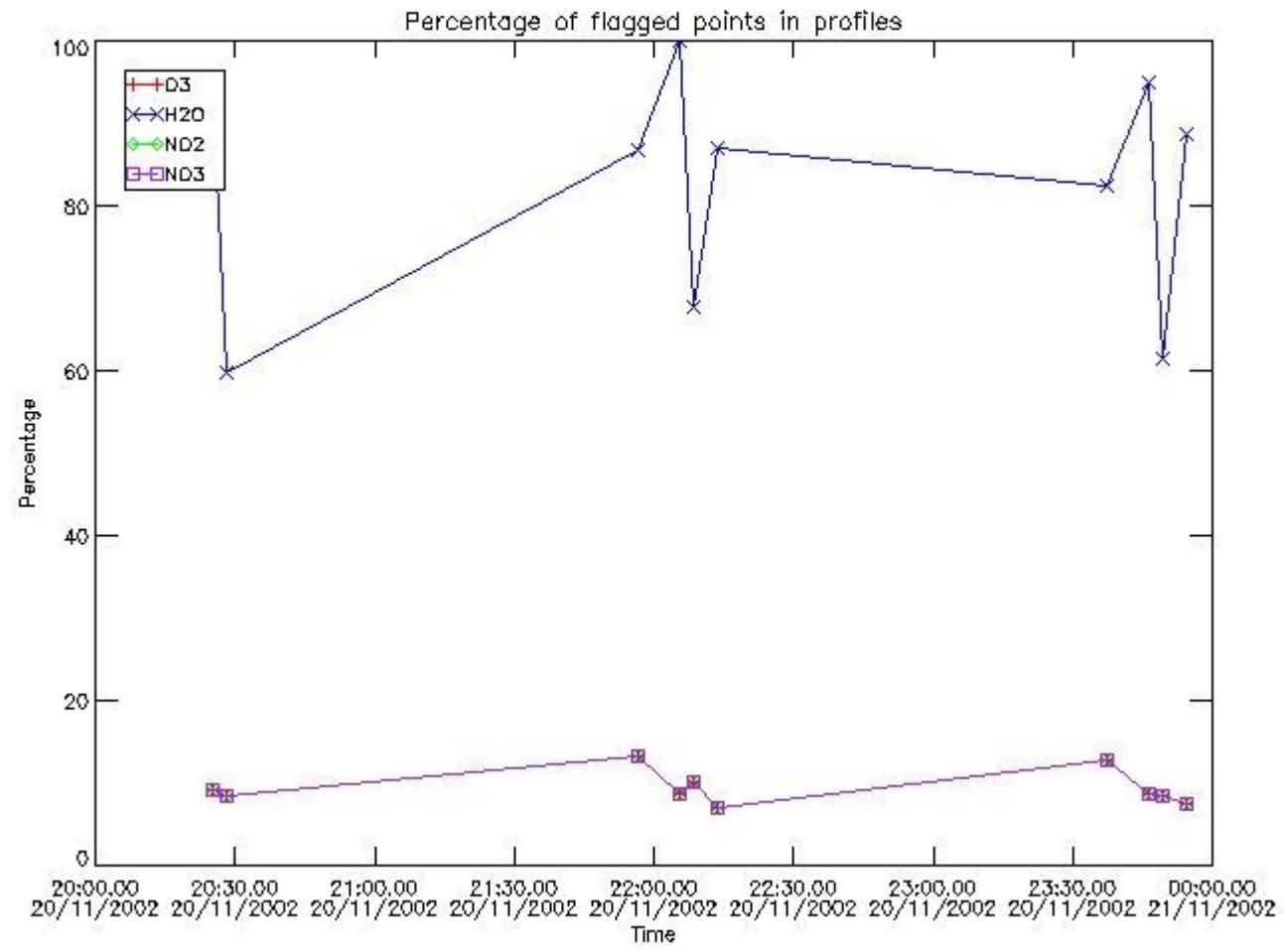
!Warning: No products without errors in BRIGHT limb conditions found

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021120_202506_000000612011_00229_03790_9752.N1	20-NOV-2002 20:25:06	Dark	61.000	70	Zet Pup	2.2460	39000.	122	3790	No
2	GOM_NL__2PRFIN20021120_202806_000000602011_00229_03790_9753.N1	20-NOV-2002 20:28:06	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	3790	No
3	GOM_NL__2PRFIN20021120_215645_000000392011_00230_03791_9752.N1	20-NOV-2002 21:56:45	Dark	38.500	12	Alp1Cru	0.77500	30000.	77	3791	No
4	GOM_NL__2PRFIN20021120_220543_000000592011_00230_03791_9753.N1	20-NOV-2002 22:05:43	Dark	59.000	70	Zet Pup	2.2460	39000.	118	3791	No
5	GOM_NL__2PRFIN20021120_220843_000000502011_00230_03791_9754.N1	20-NOV-2002 22:08:43	Dark	50.000	2	Alp Car	-0.73600	7000.0	100	3791	No
6	GOM_NL__2PRFIN20021120_221342_000000732011_00230_03791_9755.N1	20-NOV-2002 22:13:42	Dark	73.000	23	21Eps CMa	1.5020	26000.	146	3791	No
7	GOM_NL__2PRFIN20021120_221658_000000422011_00230_03791_9756.N1	20-NOV-2002 22:16:58	Dark	42.000	157	The1Eri	2.9060	9300.0	84	3791	Yes
8	GOM_NL__2PRFIN20021120_233721_000000402011_00231_03792_9752.N1	20-NOV-2002 23:37:21	Dark	40.000	12	Alp1Cru	0.77500	30000.	80	3792	No
9	GOM_NL__2PRFIN20021120_234622_000000602011_00231_03792_9753.N1	20-NOV-2002 23:46:22	Dark	59.500	70	Zet Pup	2.2460	39000.	119	3792	No
10	GOM_NL__2PRFIN20021120_234920_000000602011_00231_03792_9754.N1	20-NOV-2002 23:49:20	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	3792	No
11	GOM_NL__2PRFIN20021120_235419_000000762011_00231_03792_9755.N1	20-NOV-2002 23:54:19	Dark	75.500	23	21Eps CMa	1.5020	26000.	151	3792	No
12	GOM_NL__2PRFIN20021120_235734_000000382011_00231_03792_9756.N1	20-NOV-2002 23:57:34	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	3792	No

3. Quality information per product

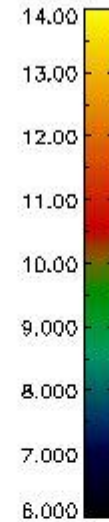
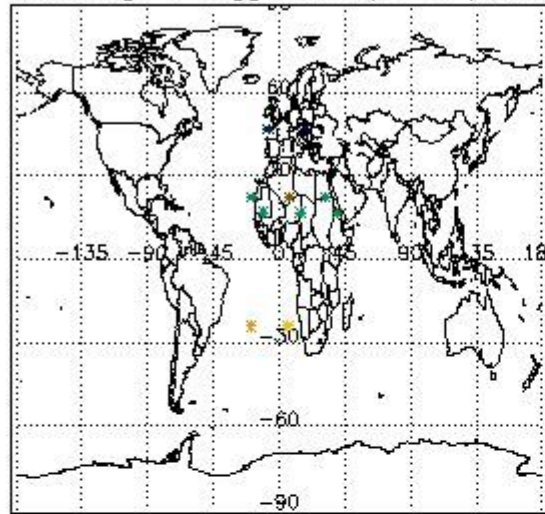
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

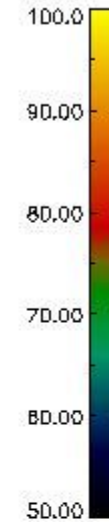
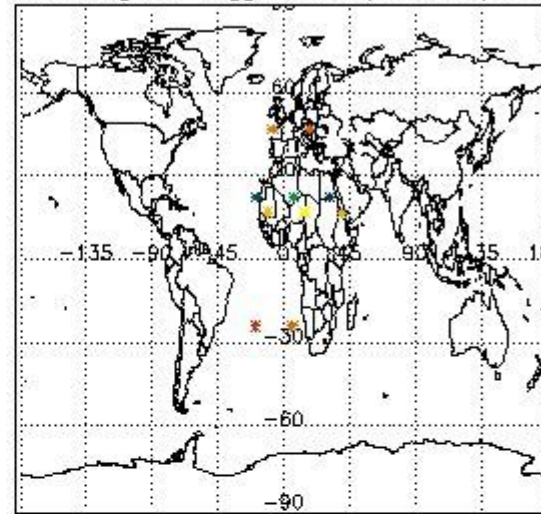


3.2 Plot quality information per product (world map)

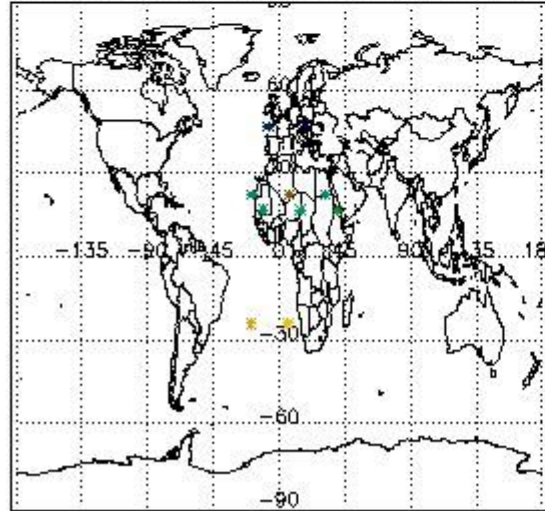
Percentage of flagged data per O3 profile



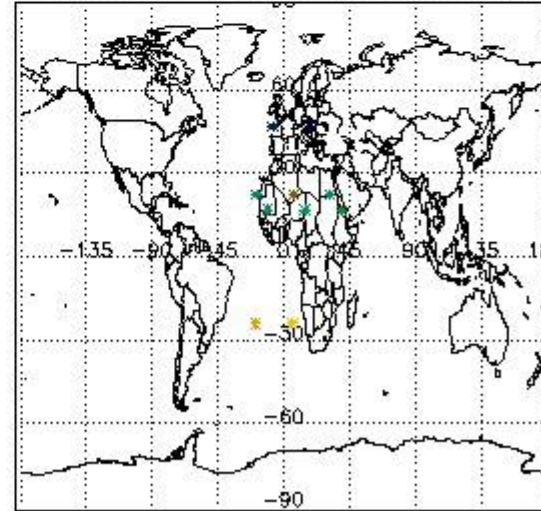
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

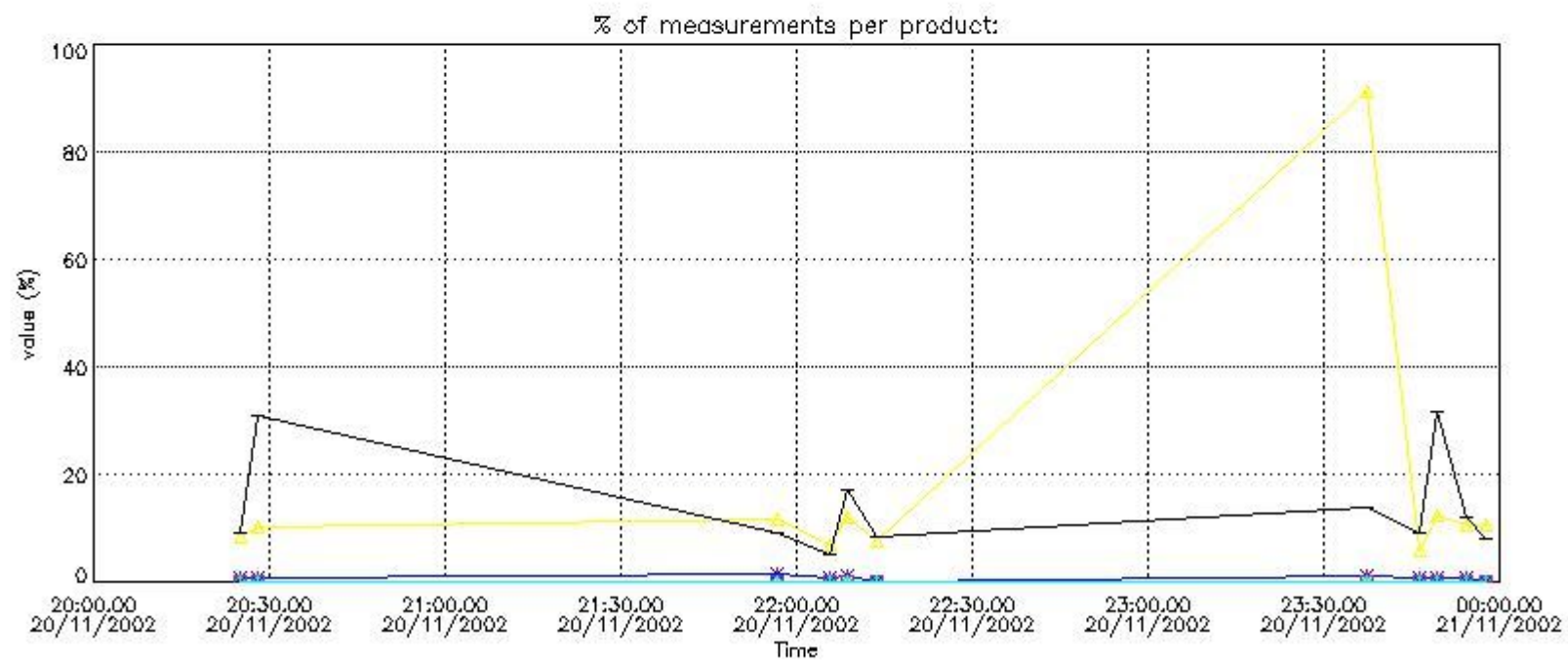


4. Level 1 quality information per product

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

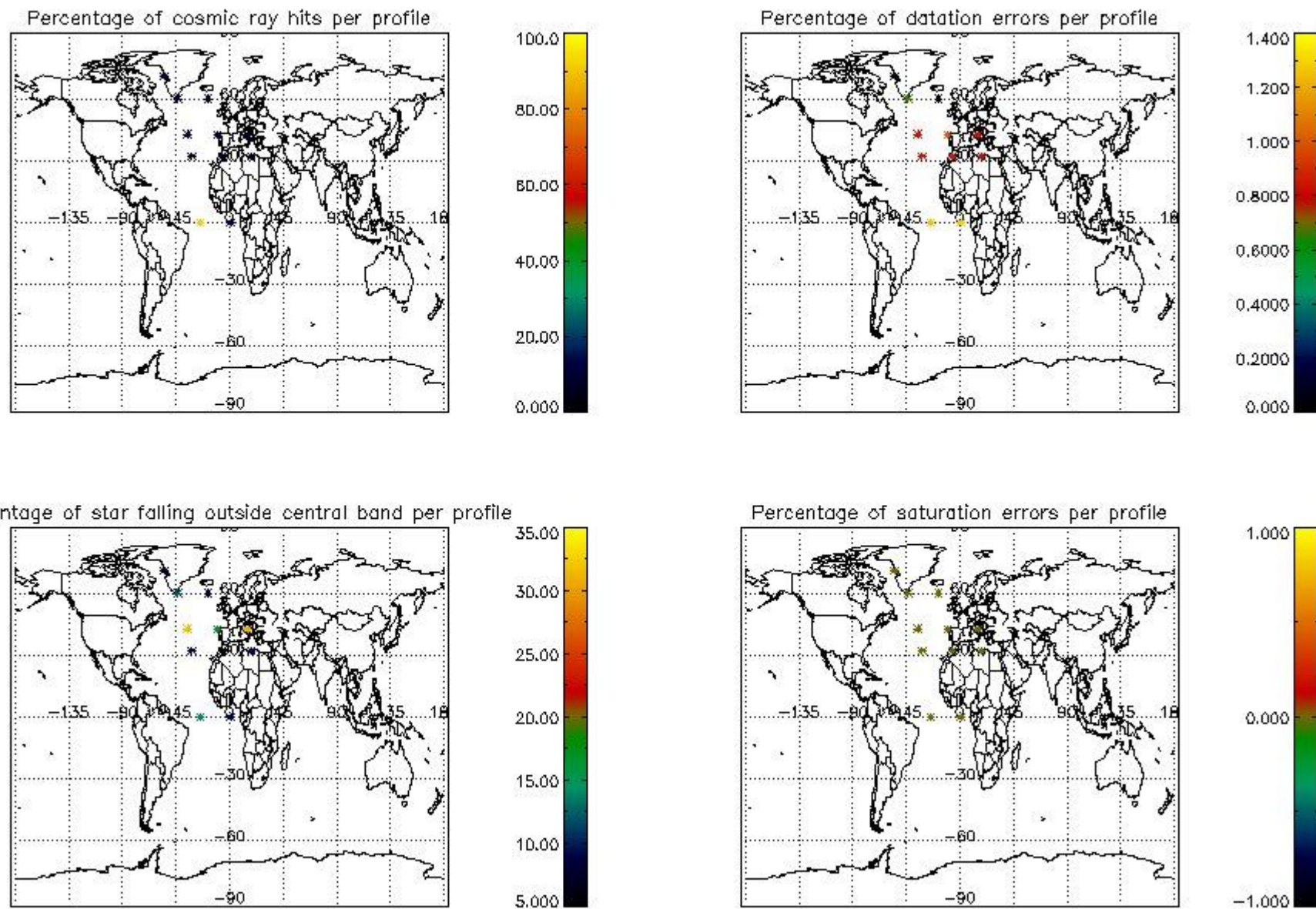


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

!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:

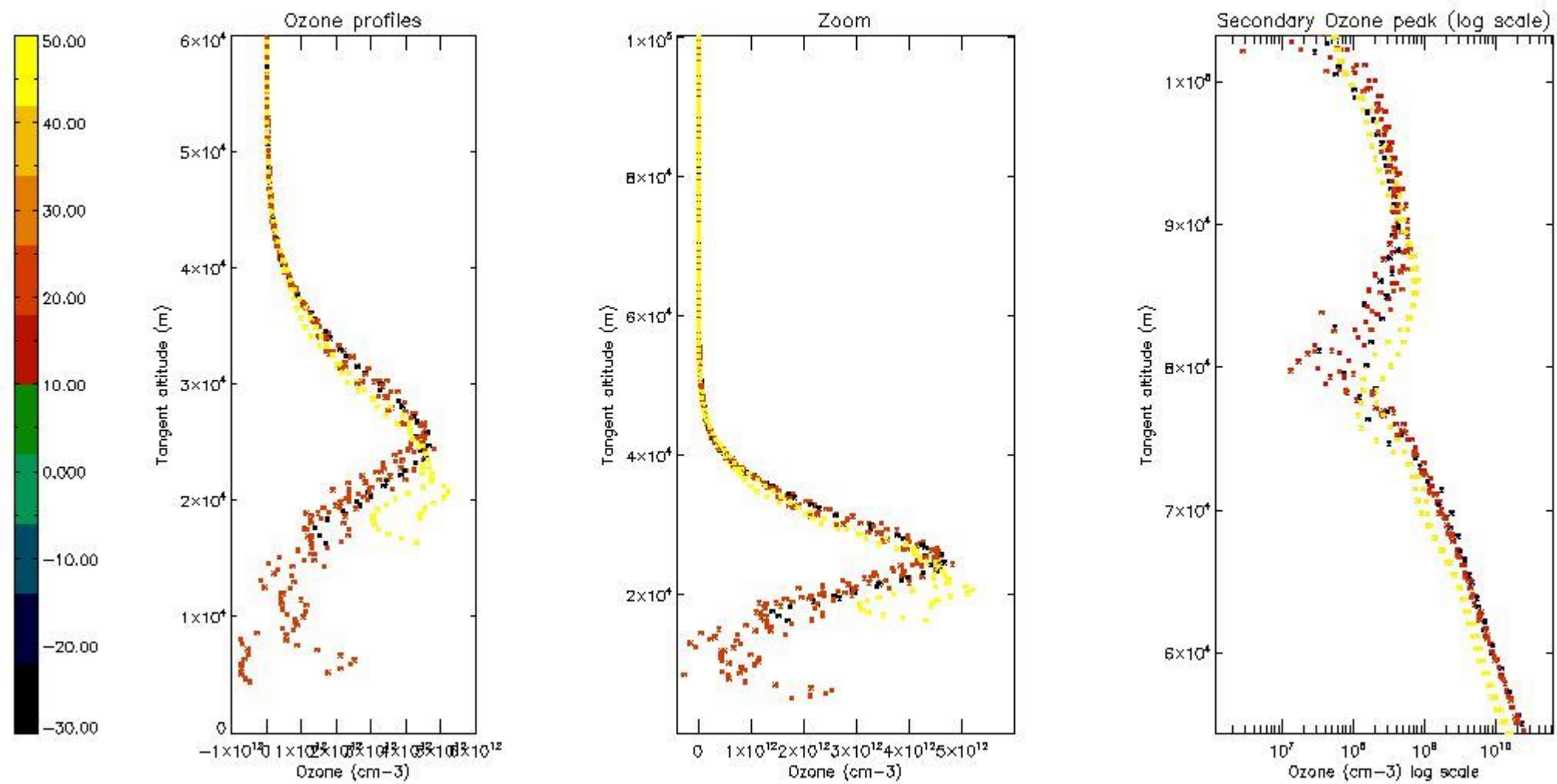
- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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	94
STD < 20	71
STD < 10	66
STD < 5	59

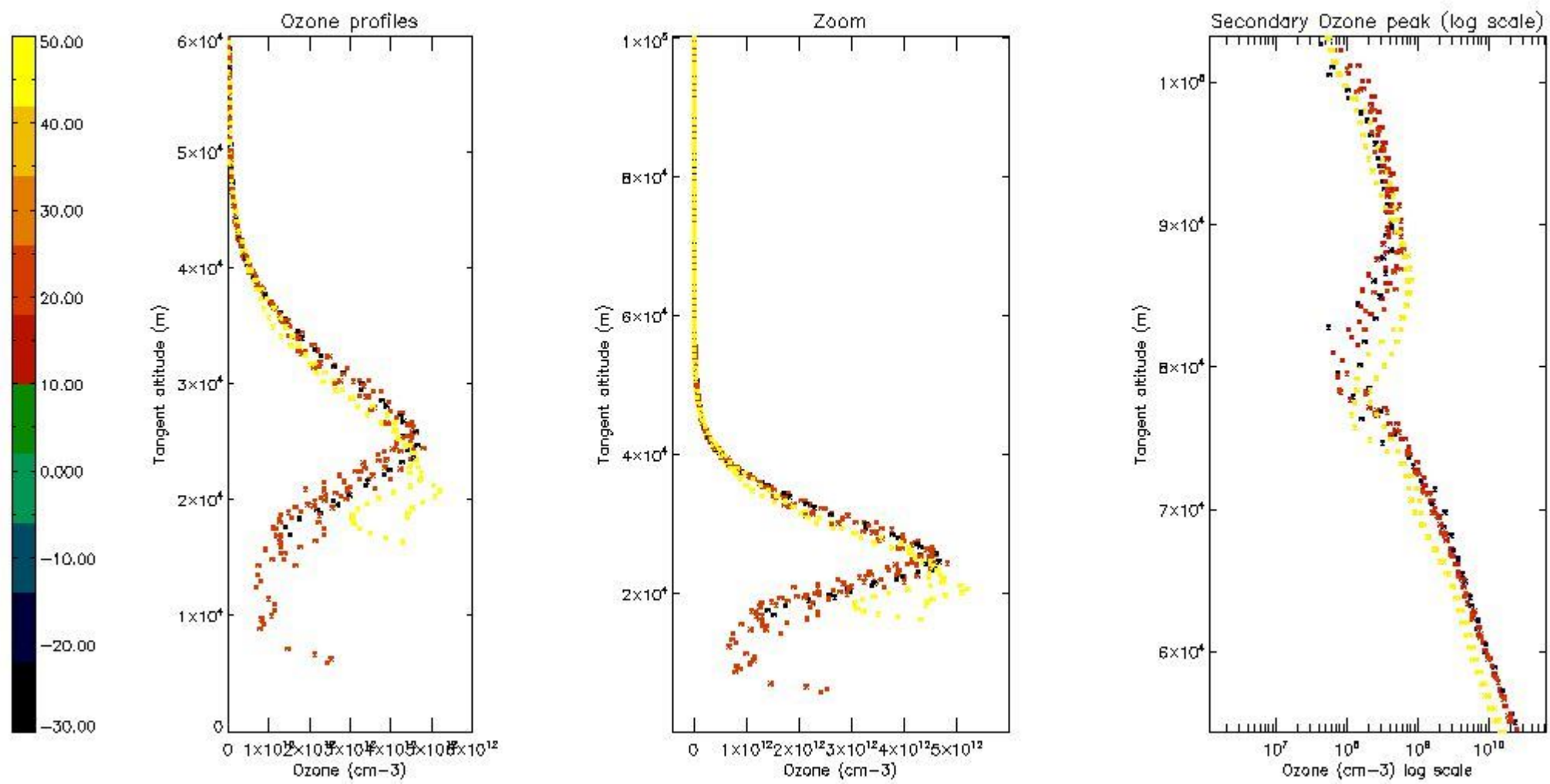
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



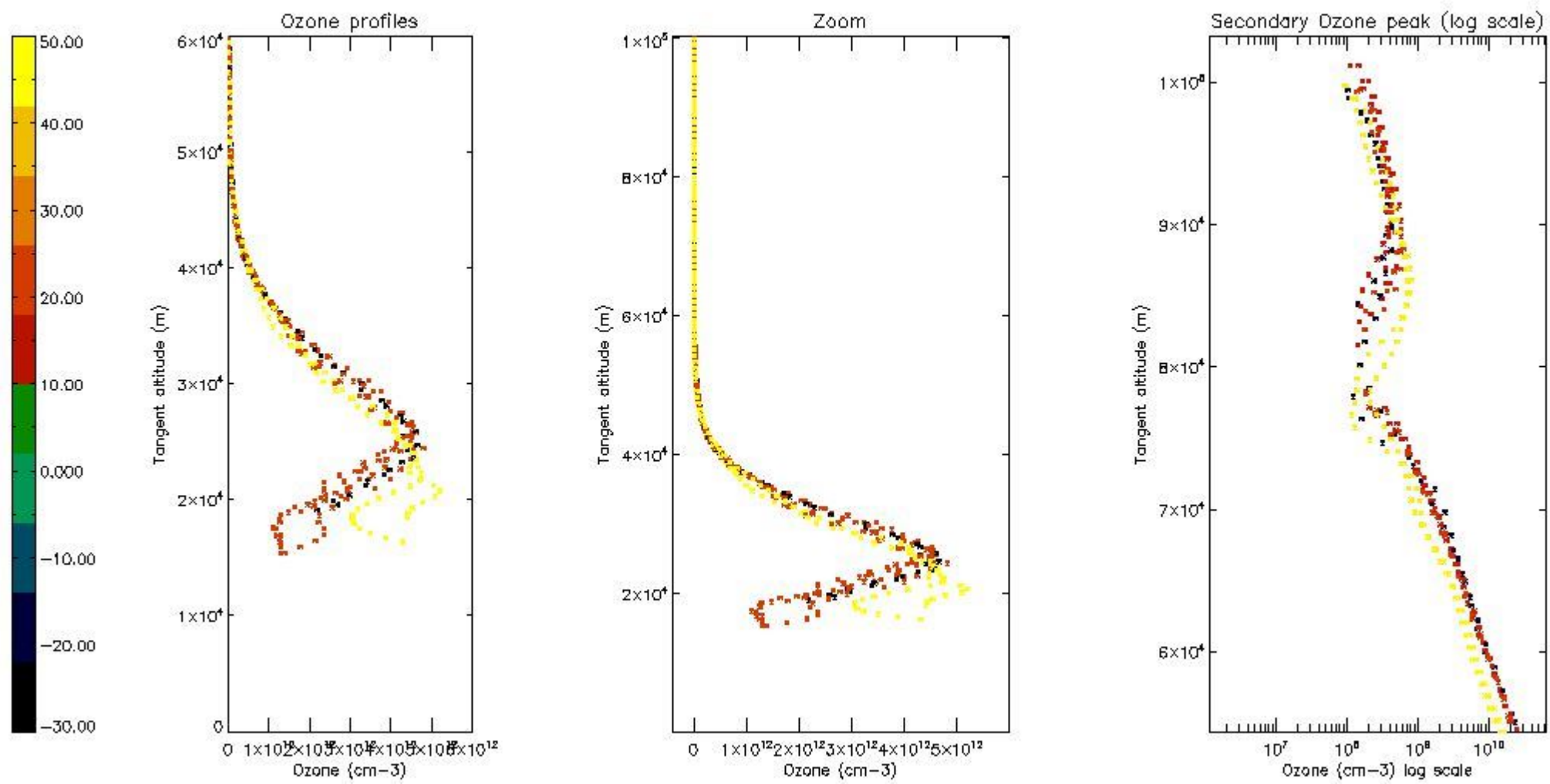
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



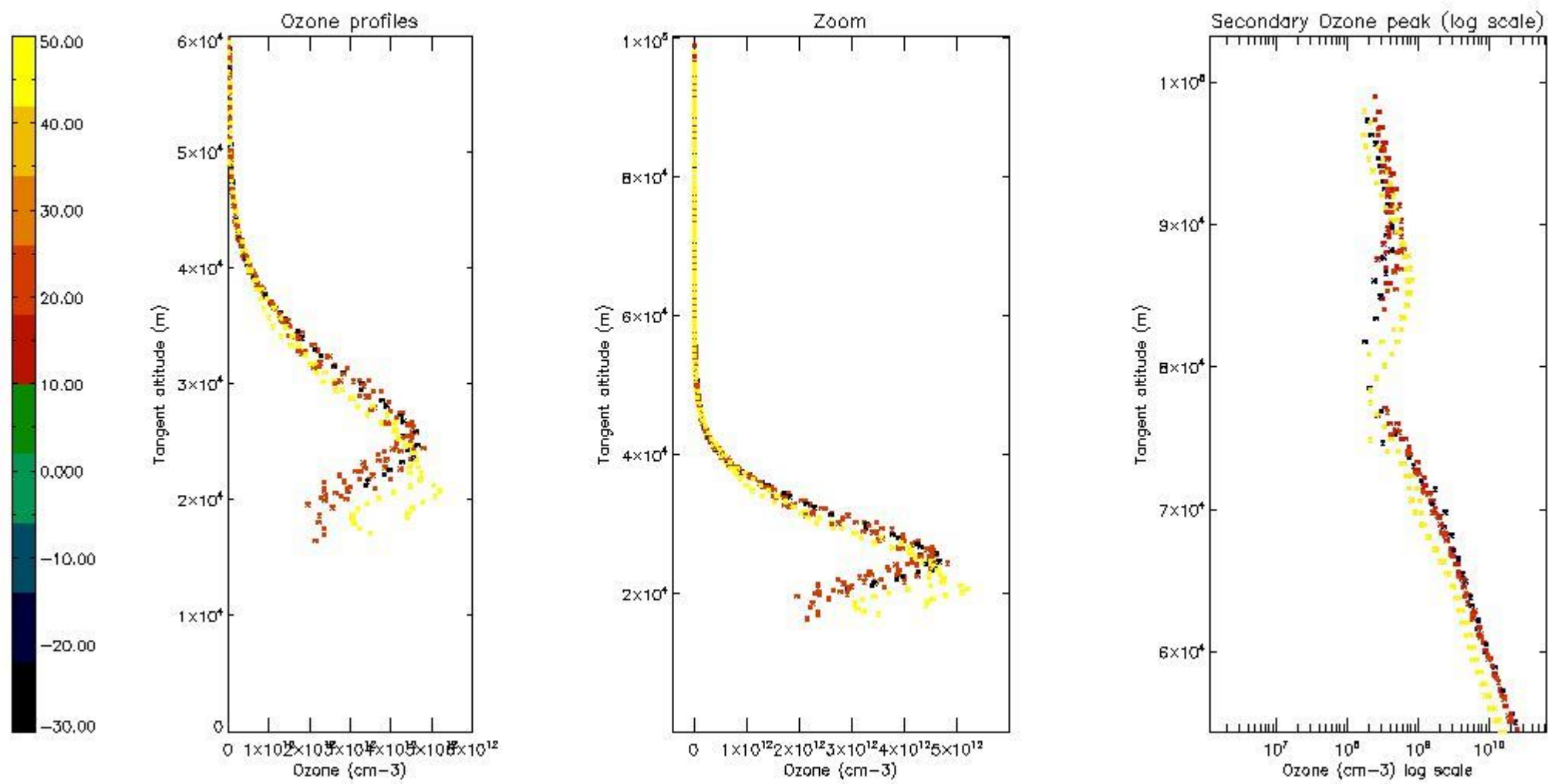
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



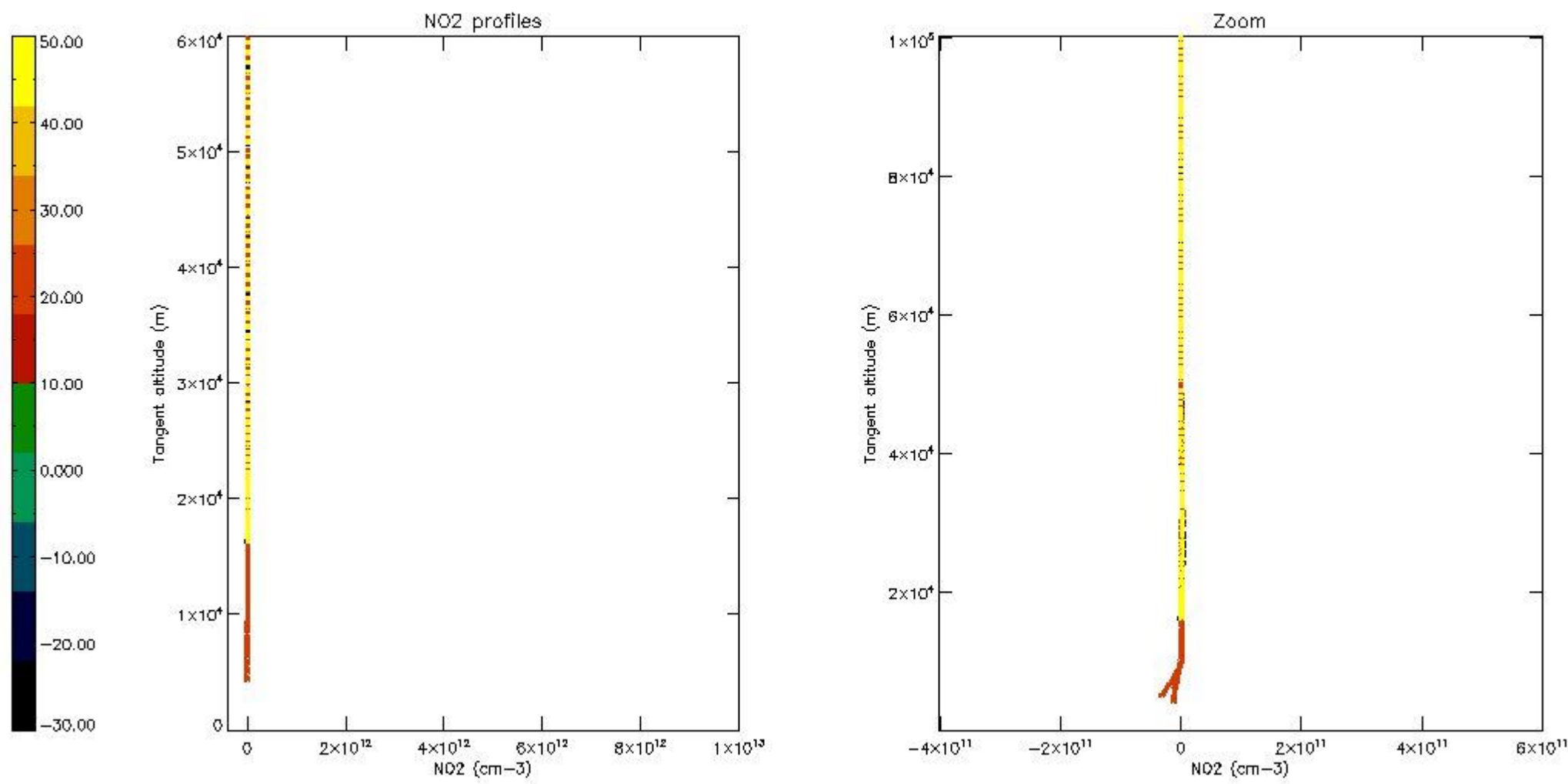
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



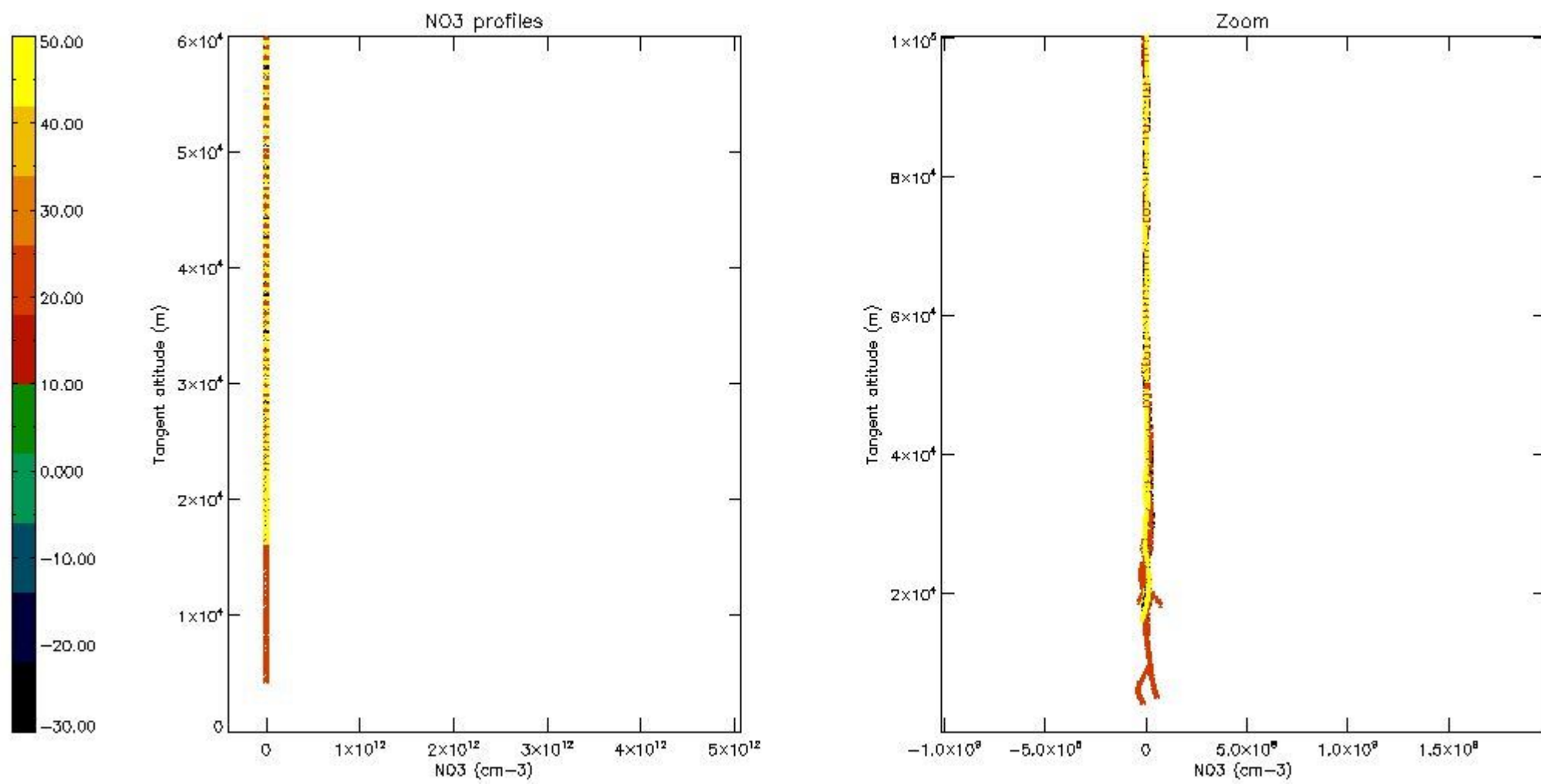
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



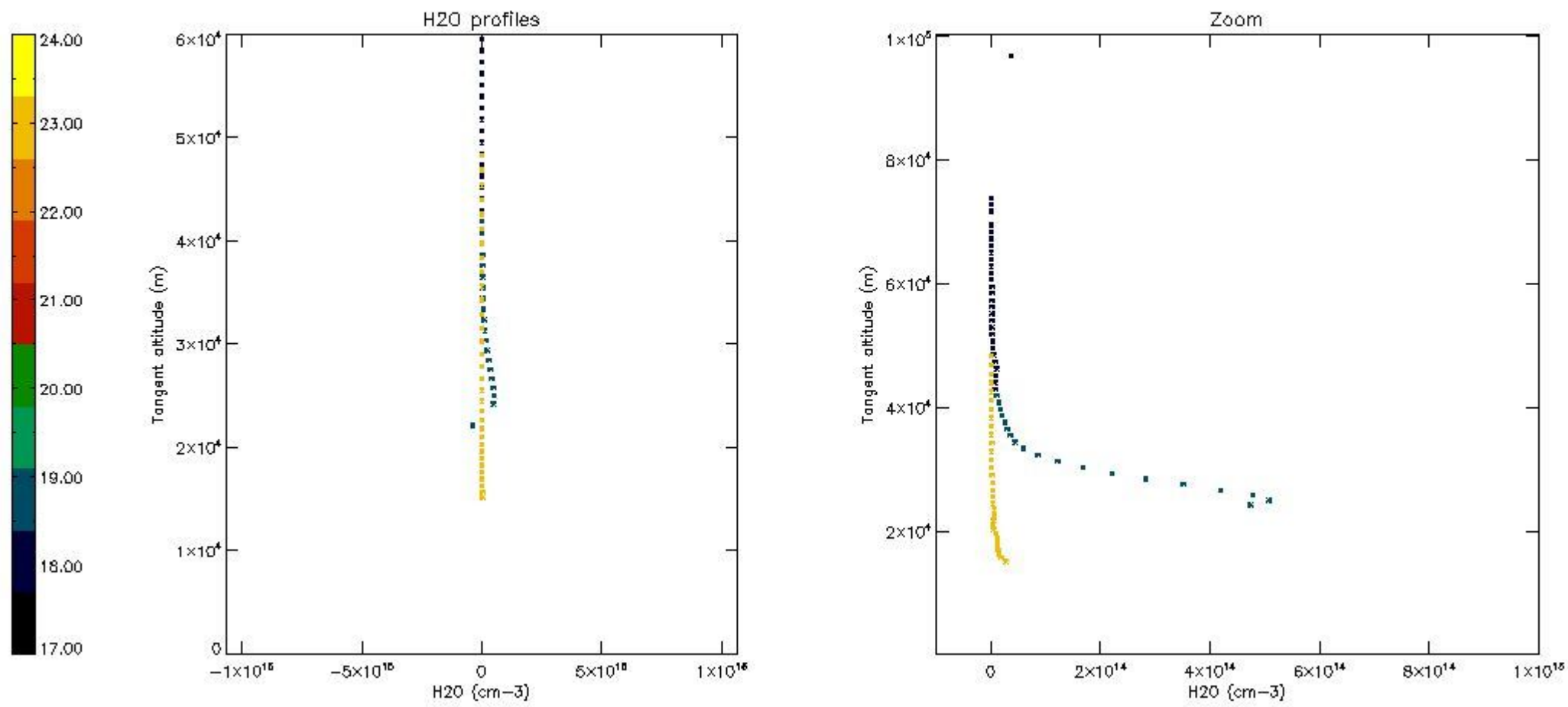
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	20-NOV-2002 20:25:06
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-NOV-2002 20:25:06
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-NOV-2002 20:25:06

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[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](#)

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[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.

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Stop time of products	21-11-2002 (21NOV2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	12
Nb of prods with errors	1

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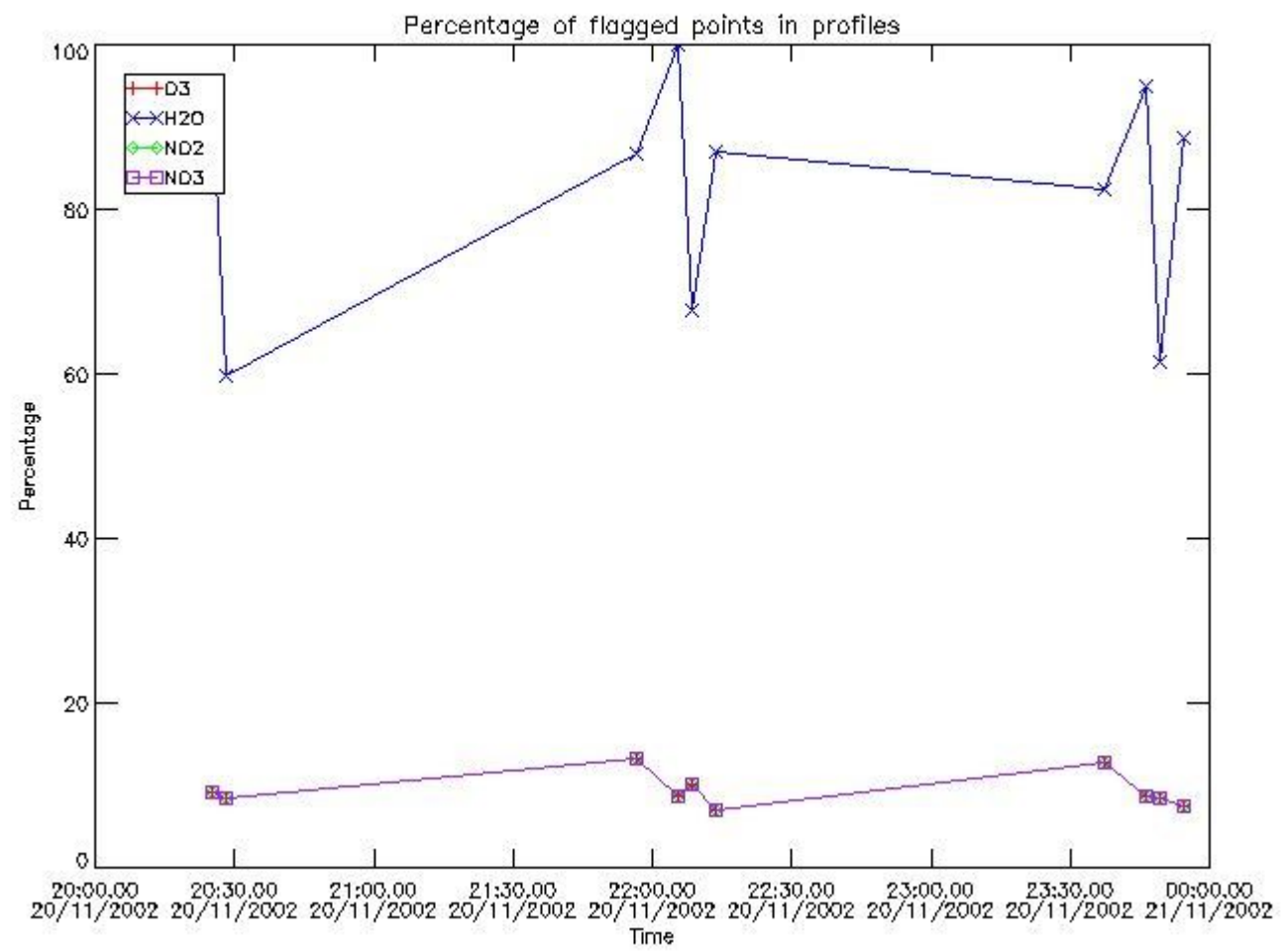
!Warning: No products without errors in BRIGHT limb conditions found

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021120_202506_000000612011_00229_03790_9752.N1	20-NOV-2002 20:25:06	Dark	61.000	70	Zet Pup	2.2460	39000.	122	3790	No
2	GOM_NL__2PRFIN20021120_202806_000000602011_00229_03790_9753.N1	20-NOV-2002 20:28:06	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	3790	No
3	GOM_NL__2PRFIN20021120_215645_000000392011_00230_03791_9752.N1	20-NOV-2002 21:56:45	Dark	38.500	12	Alp1Cru	0.77500	30000.	77	3791	No
4	GOM_NL__2PRFIN20021120_220543_000000592011_00230_03791_9753.N1	20-NOV-2002 22:05:43	Dark	59.000	70	Zet Pup	2.2460	39000.	118	3791	No
5	GOM_NL__2PRFIN20021120_220843_000000502011_00230_03791_9754.N1	20-NOV-2002 22:08:43	Dark	50.000	2	Alp Car	-0.73600	7000.0	100	3791	No
6	GOM_NL__2PRFIN20021120_221342_000000732011_00230_03791_9755.N1	20-NOV-2002 22:13:42	Dark	73.000	23	21Eps CMa	1.5020	26000.	146	3791	No
7	GOM_NL__2PRFIN20021120_221658_000000422011_00230_03791_9756.N1	20-NOV-2002 22:16:58	Dark	42.000	157	The1Eri	2.9060	9300.0	84	3791	Yes
8	GOM_NL__2PRFIN20021120_233721_000000402011_00231_03792_9752.N1	20-NOV-2002 23:37:21	Dark	40.000	12	Alp1Cru	0.77500	30000.	80	3792	No
9	GOM_NL__2PRFIN20021120_234622_000000602011_00231_03792_9753.N1	20-NOV-2002 23:46:22	Dark	59.500	70	Zet Pup	2.2460	39000.	119	3792	No
10	GOM_NL__2PRFIN20021120_234920_000000602011_00231_03792_9754.N1	20-NOV-2002 23:49:20	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	3792	No
11	GOM_NL__2PRFIN20021120_235419_000000762011_00231_03792_9755.N1	20-NOV-2002 23:54:19	Dark	75.500	23	21Eps CMa	1.5020	26000.	151	3792	No
12	GOM_NL__2PRFIN20021120_235734_000000382011_00231_03792_9756.N1	20-NOV-2002 23:57:34	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	3792	No

3. Quality information per product

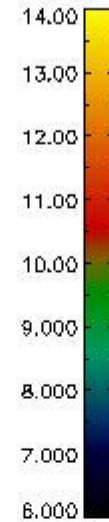
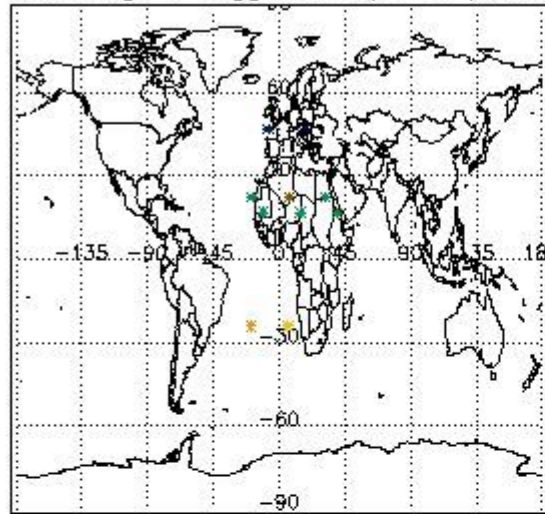
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

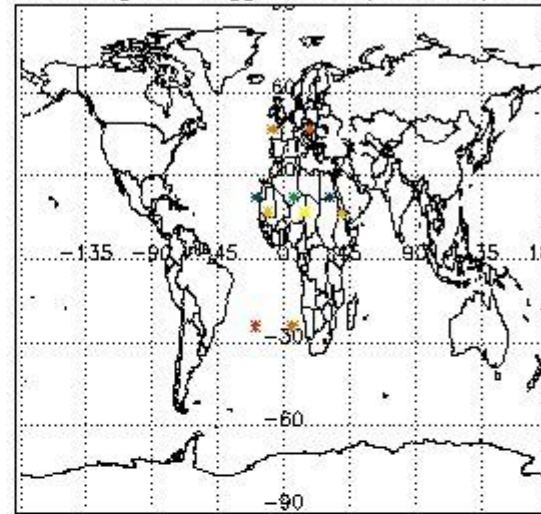


3.2 Plot quality information per product (world map)

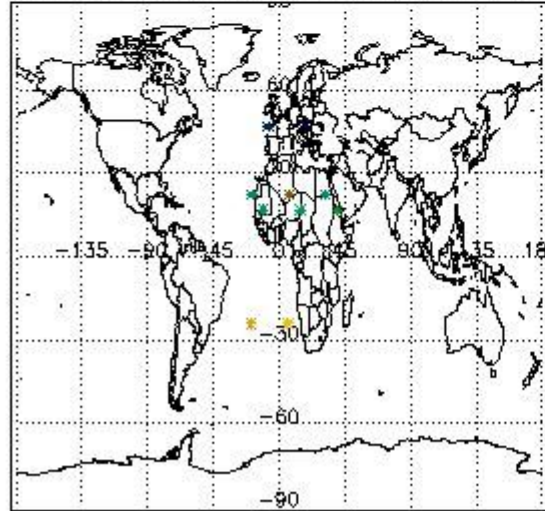
Percentage of flagged data per O3 profile



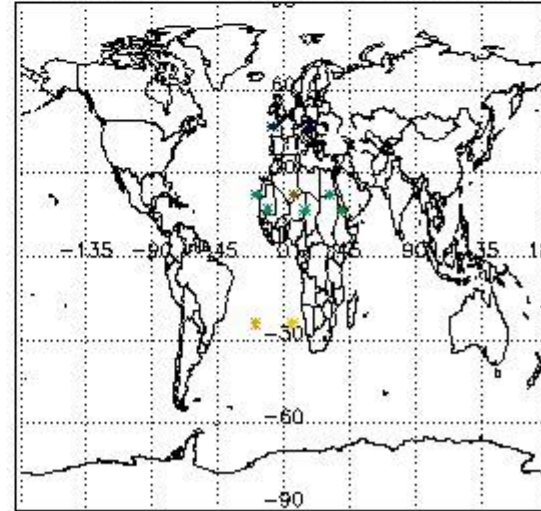
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

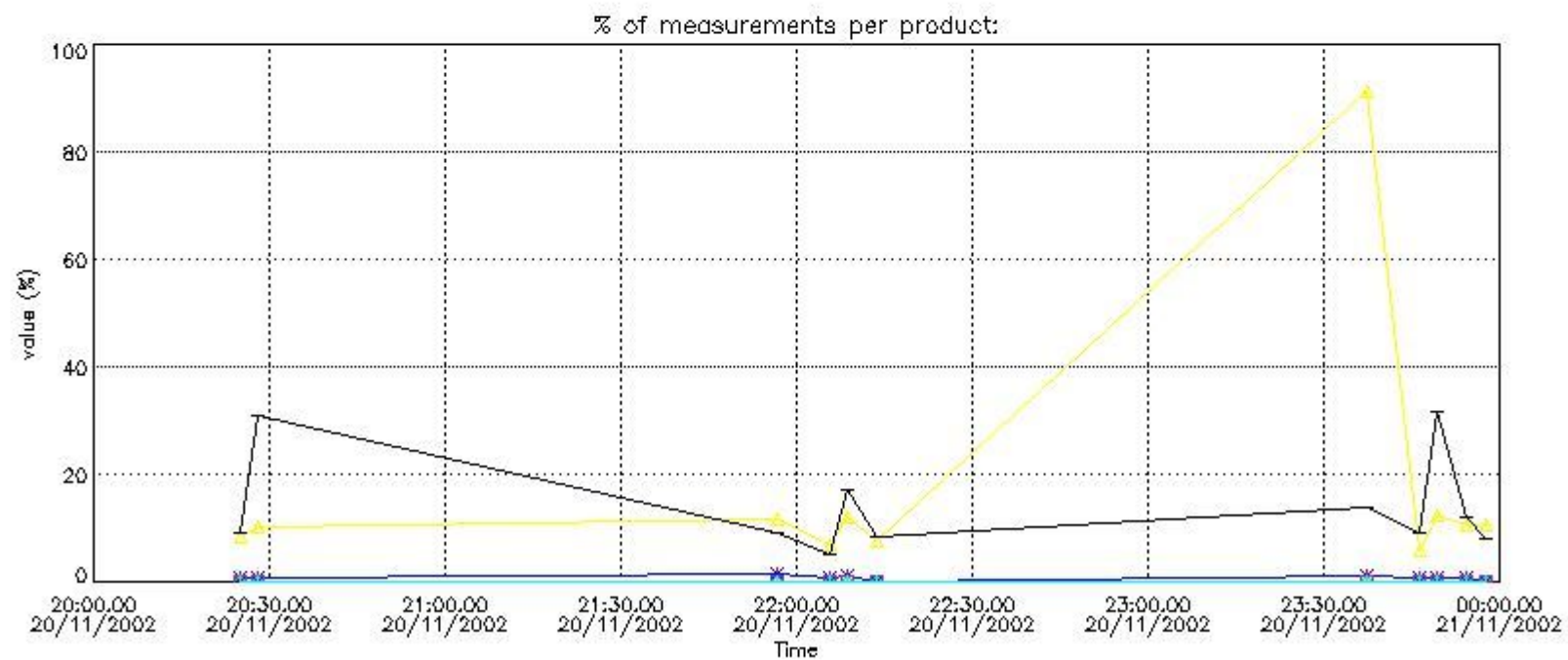


4. Level 1 quality information per product

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

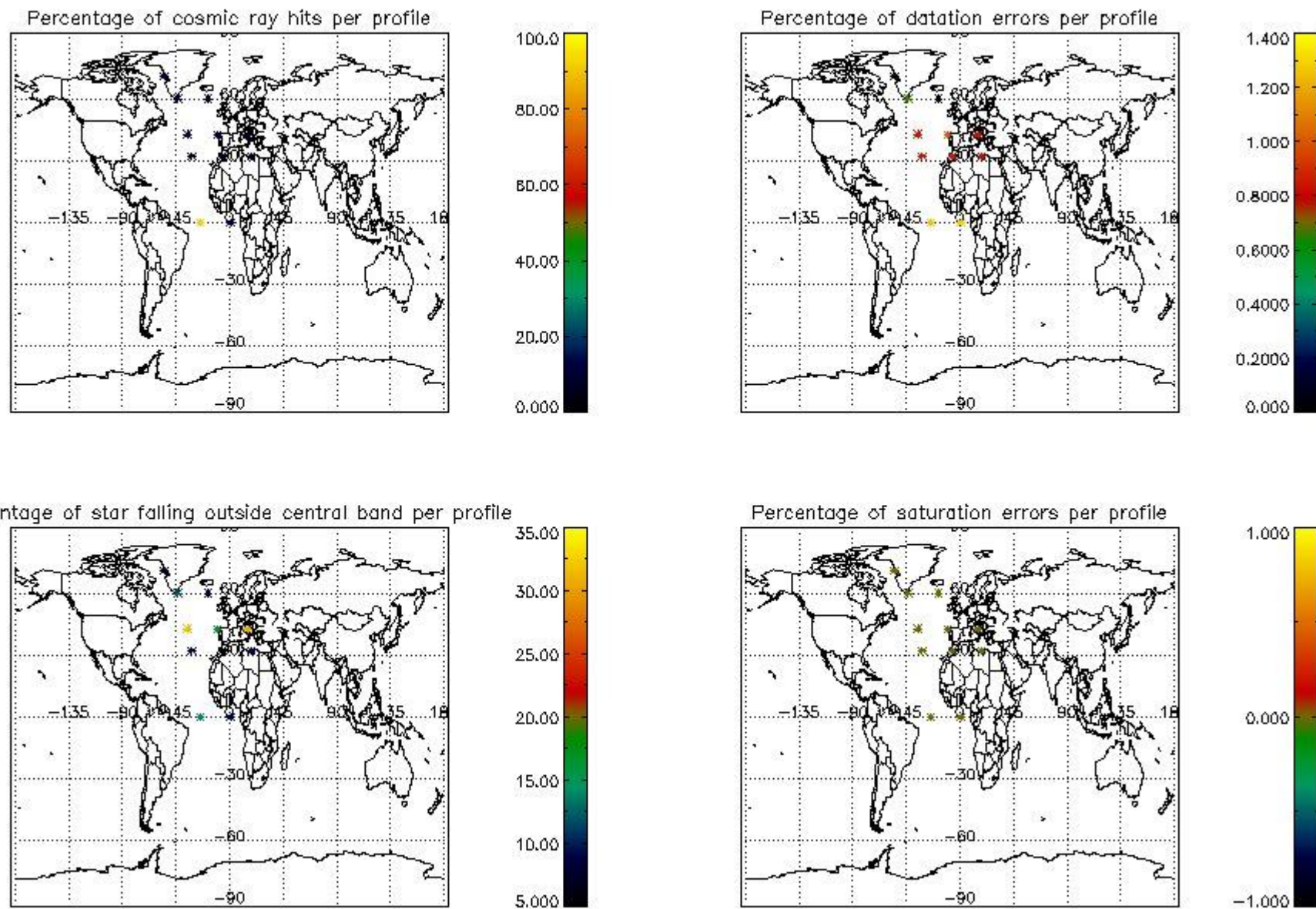


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

!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:

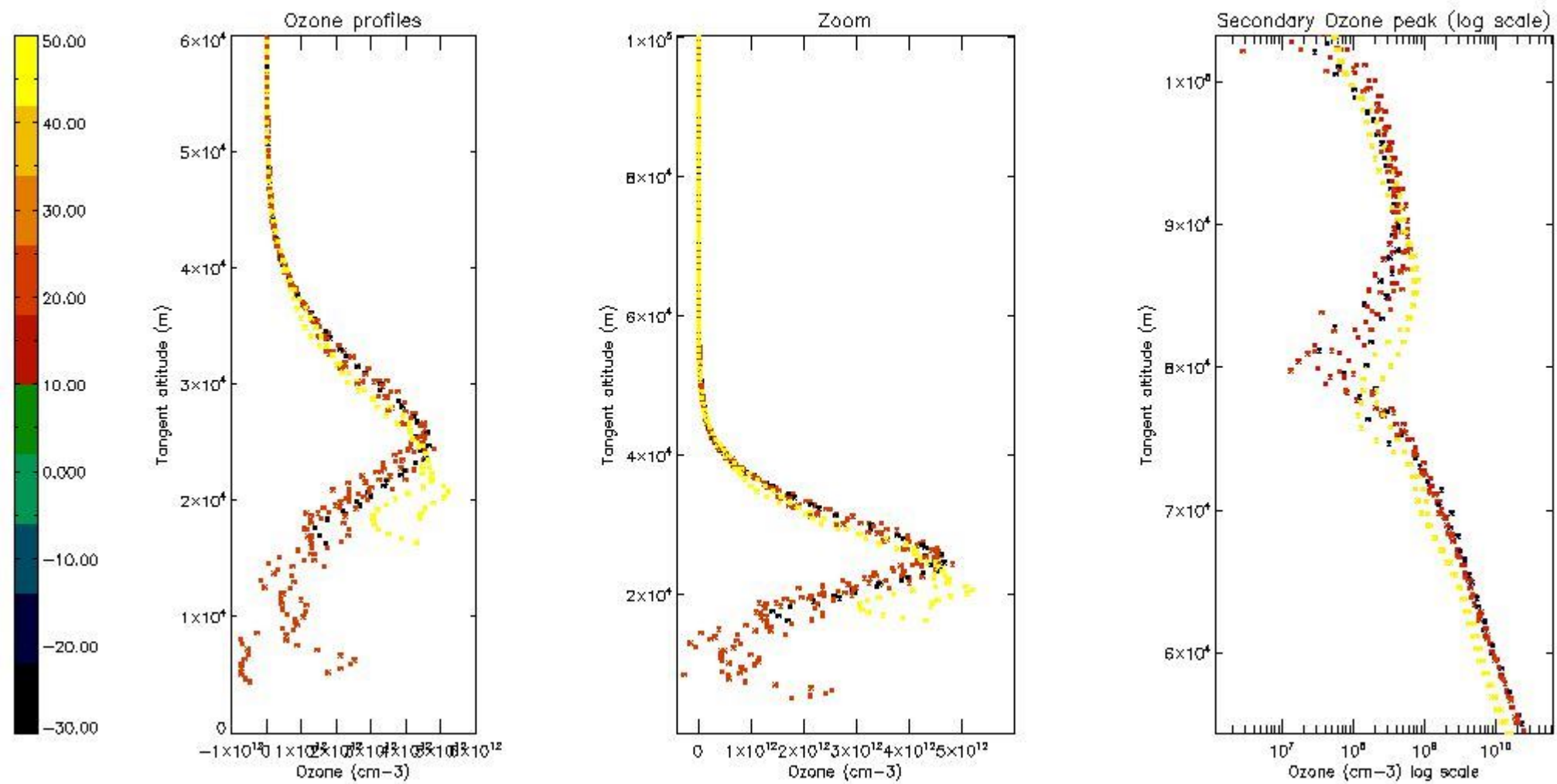
- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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	94
STD < 20	71
STD < 10	66
STD < 5	59

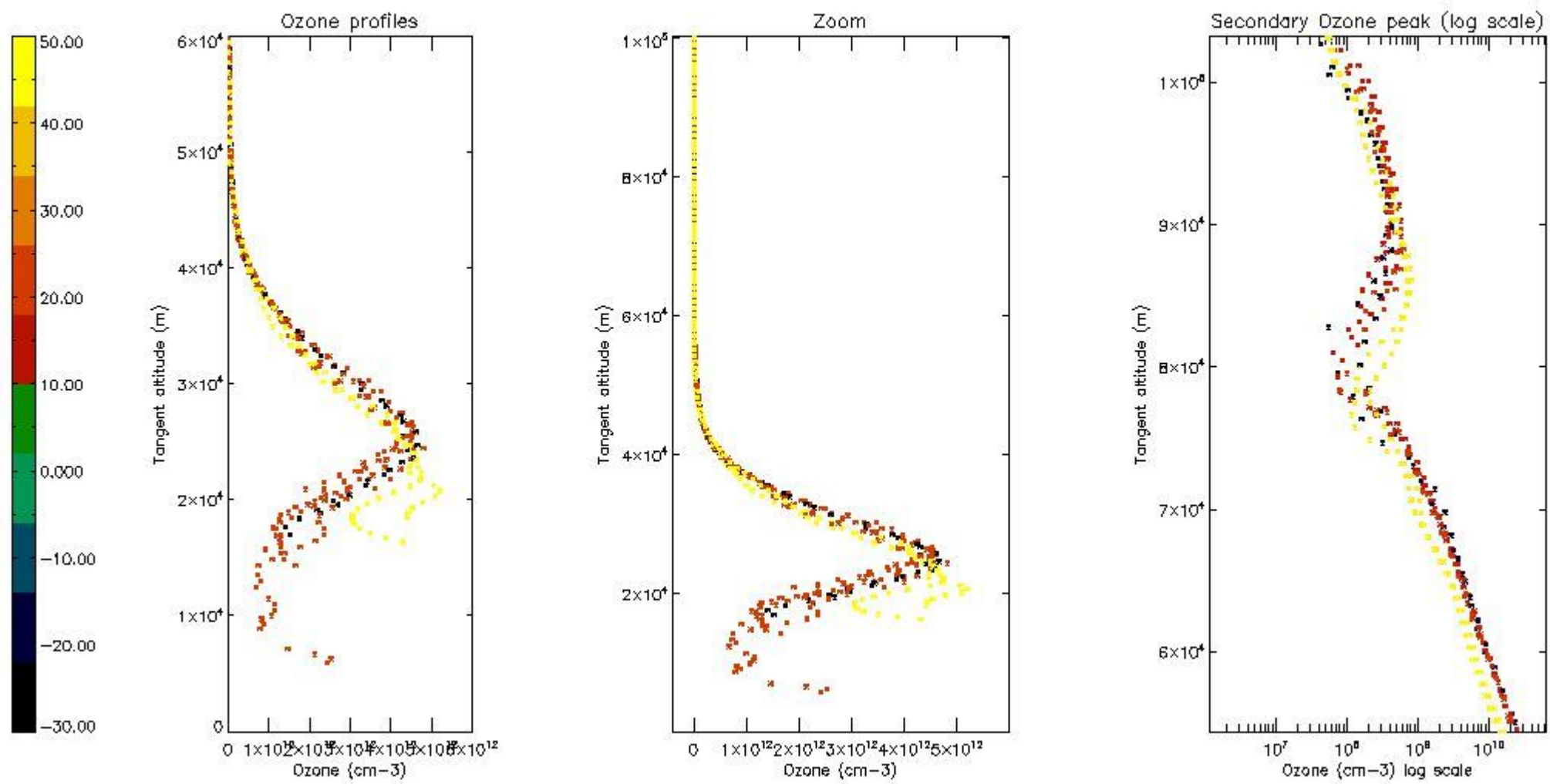
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



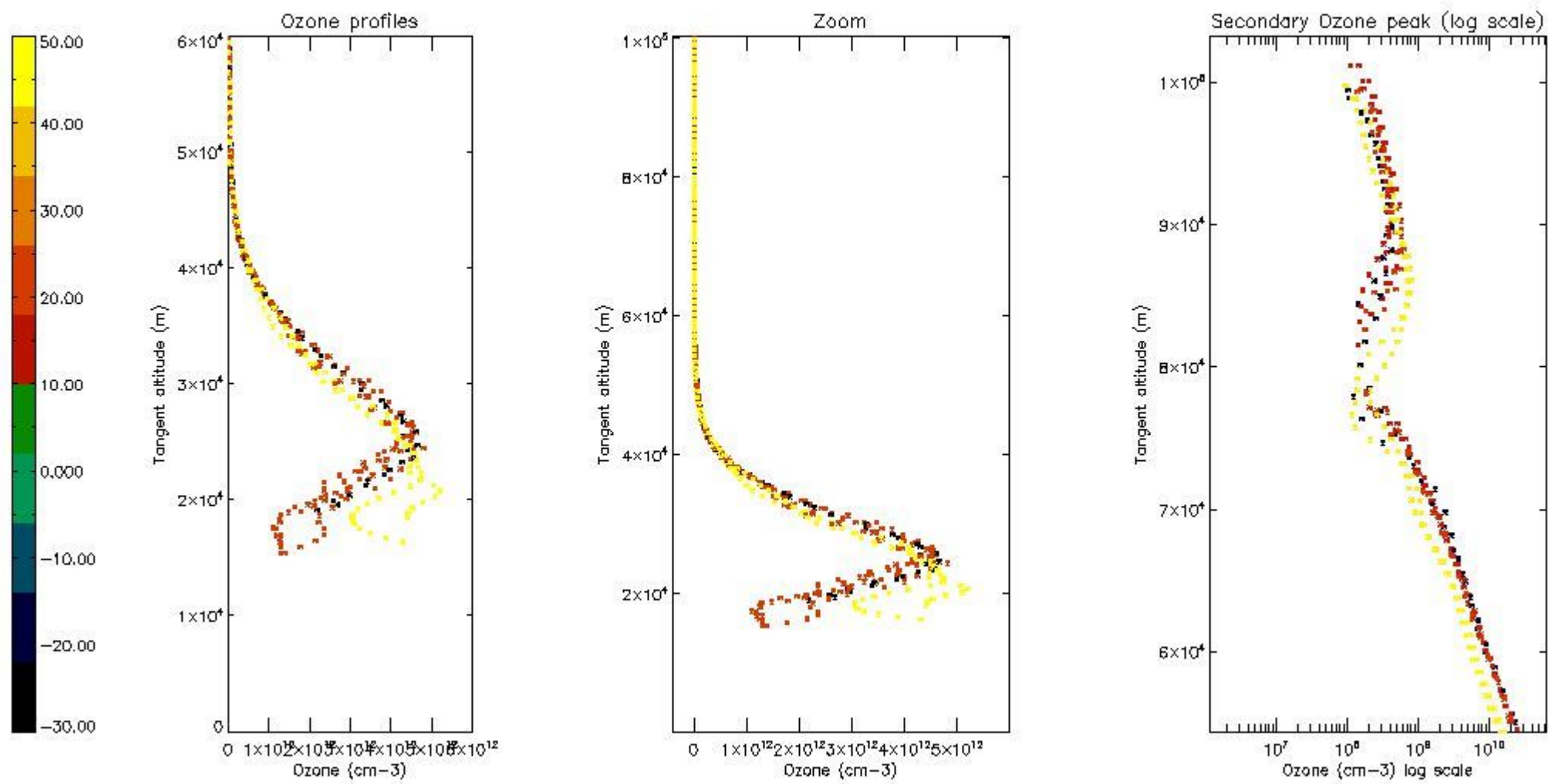
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



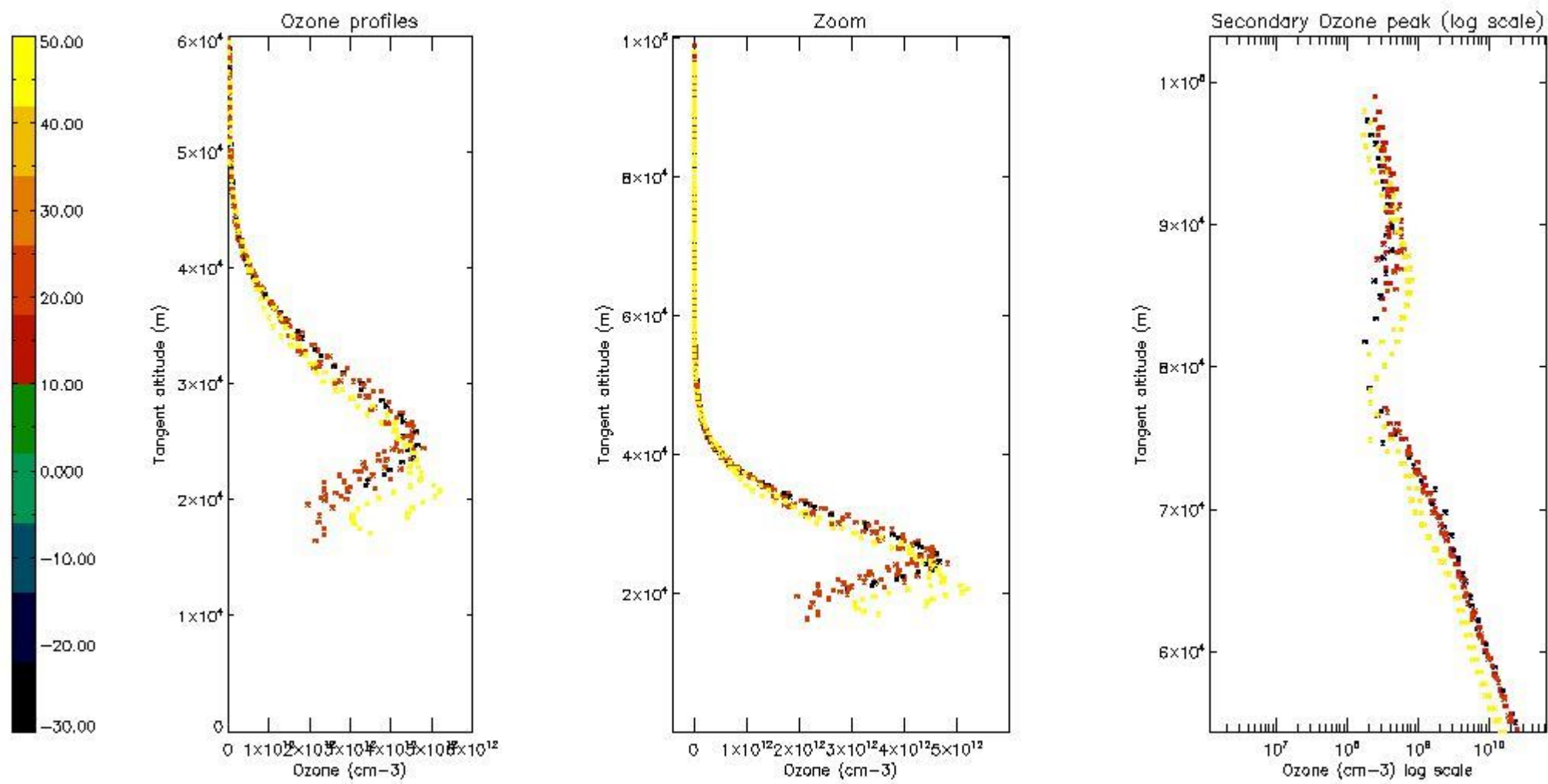
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



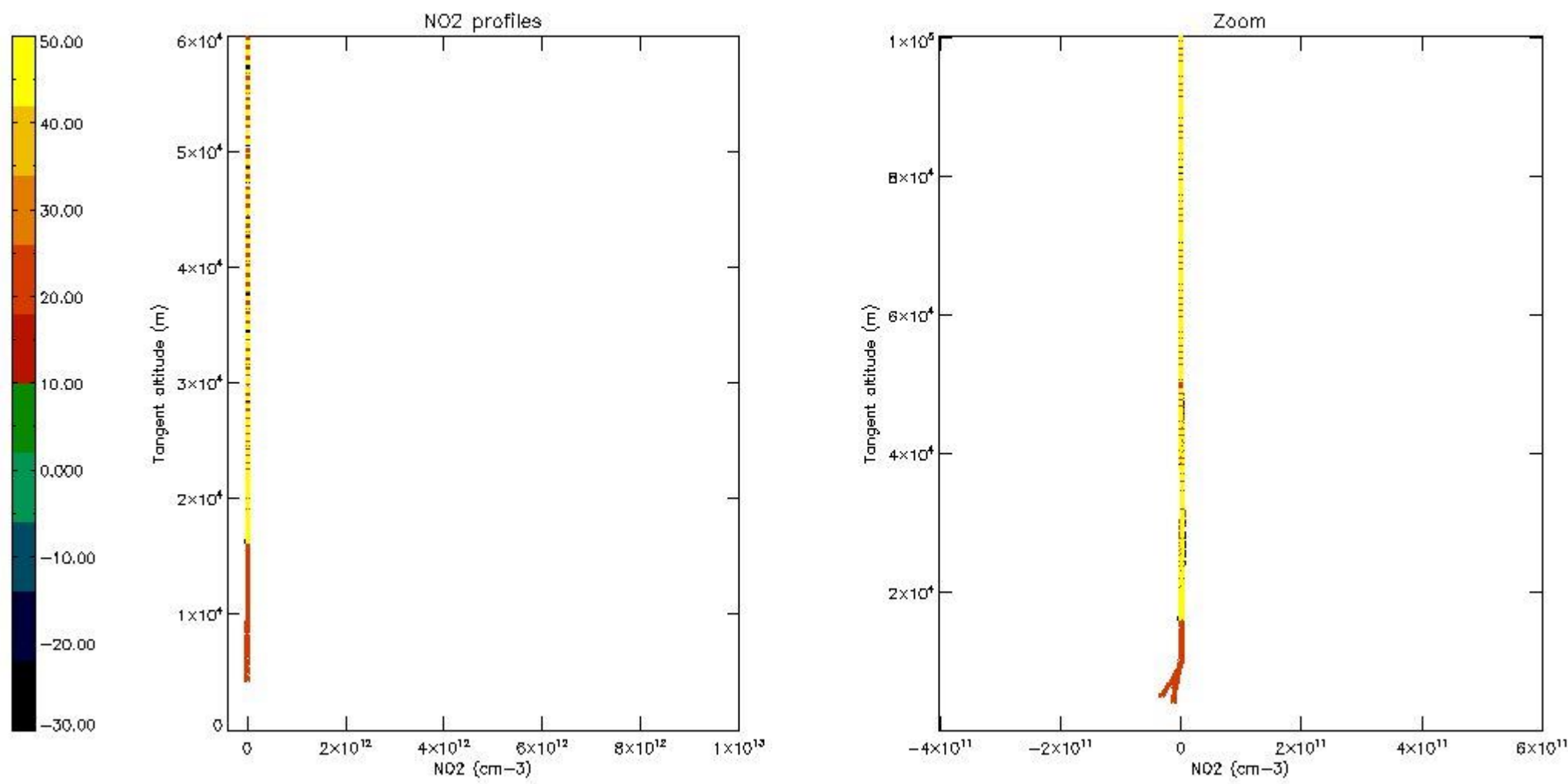
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



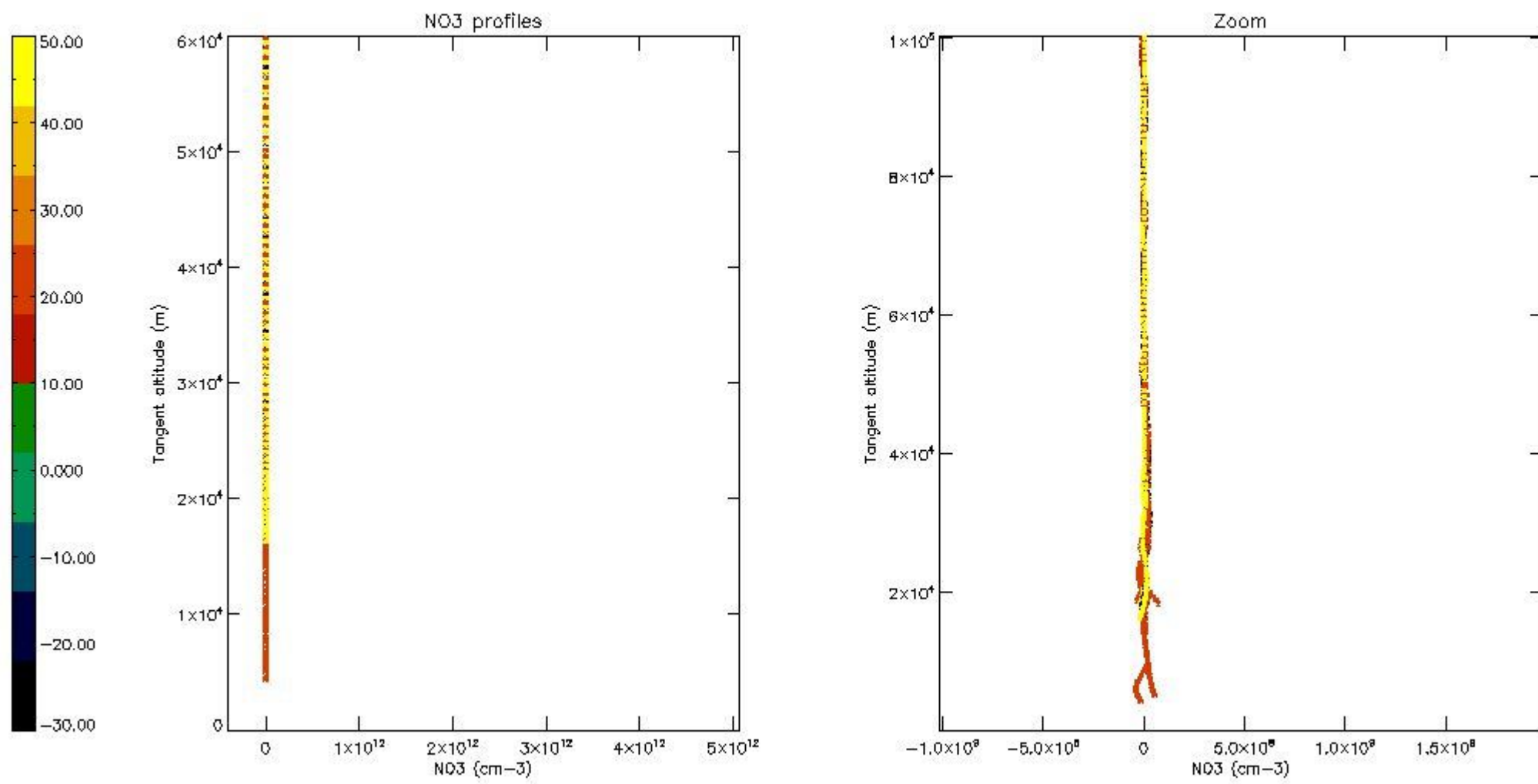
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



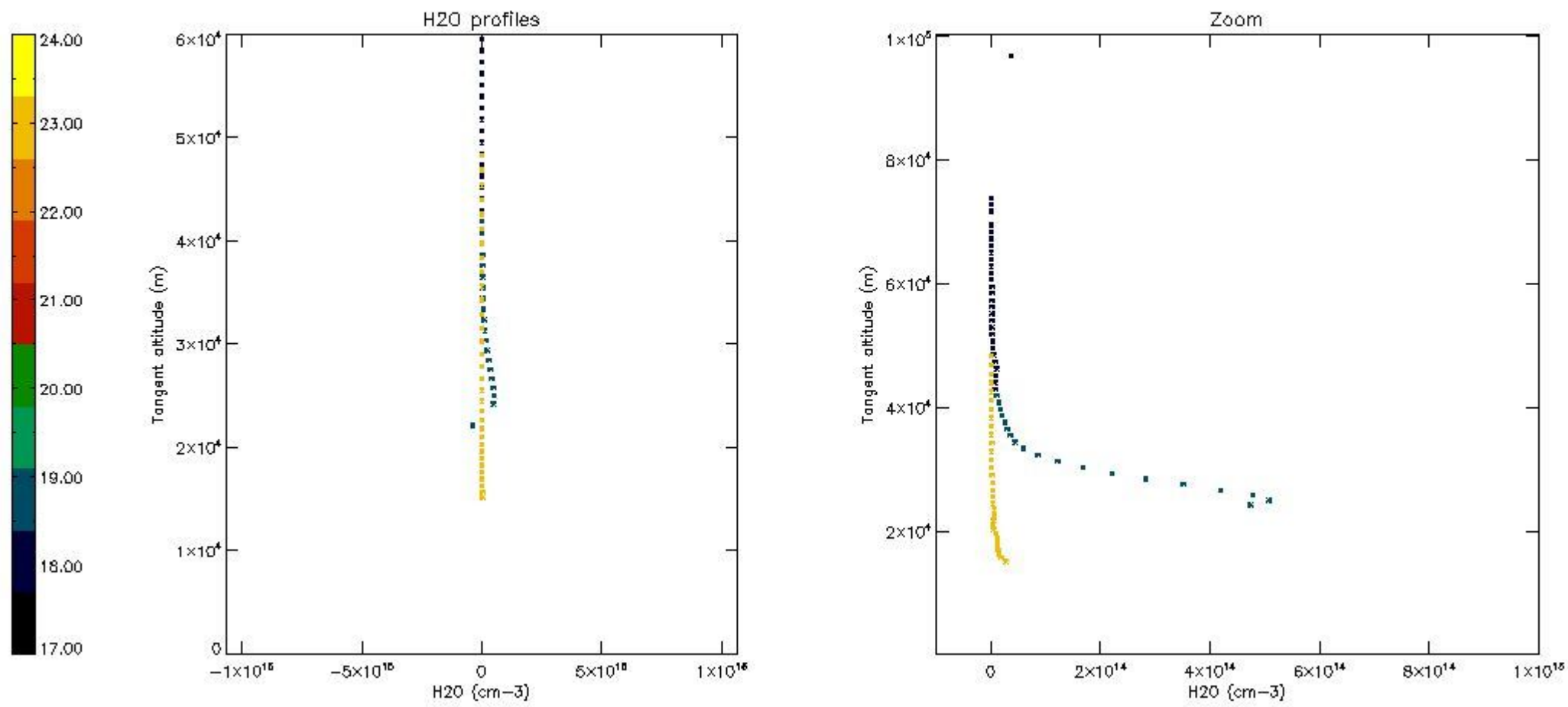
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

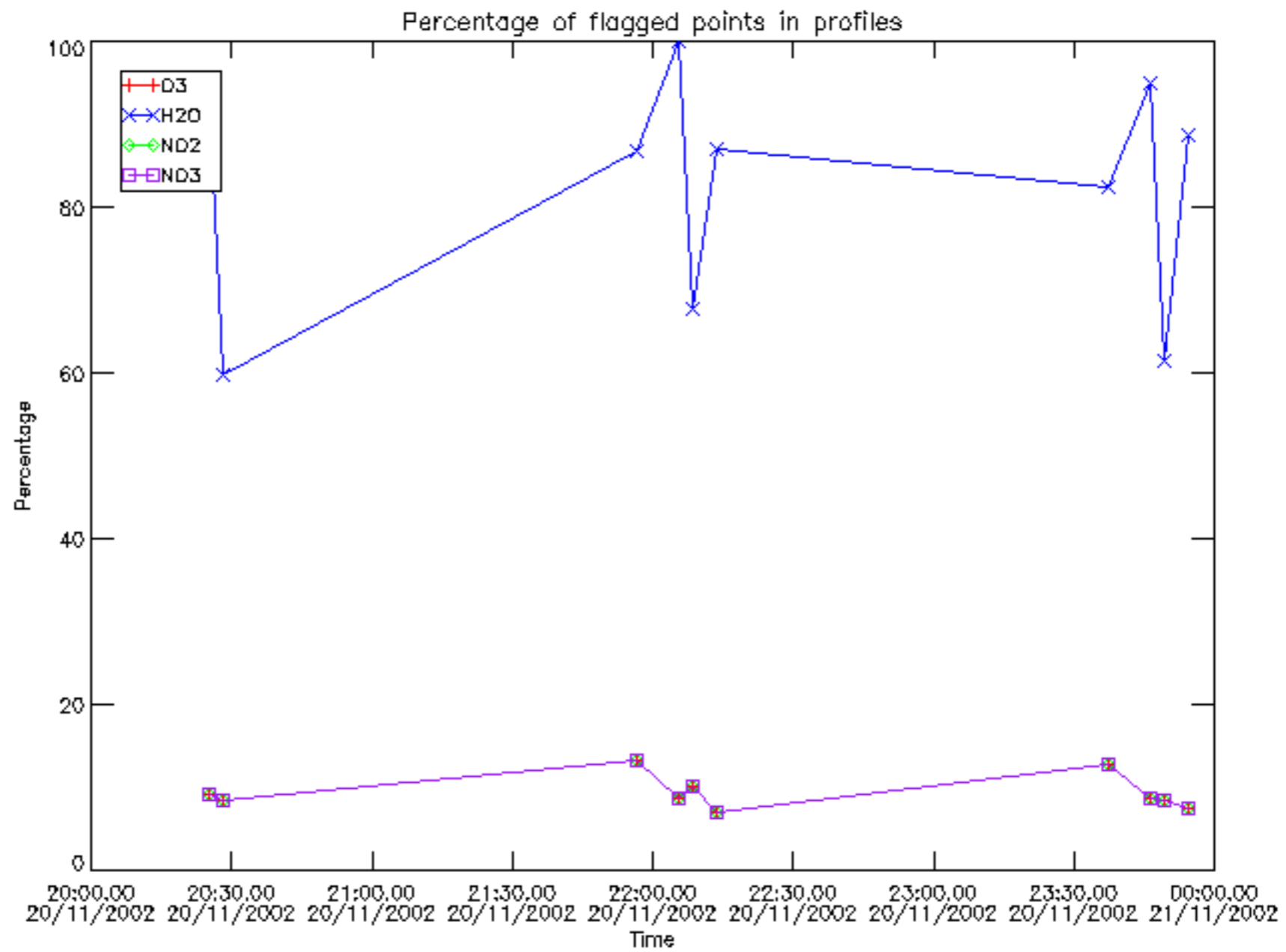
The colorbar represents the latitude.



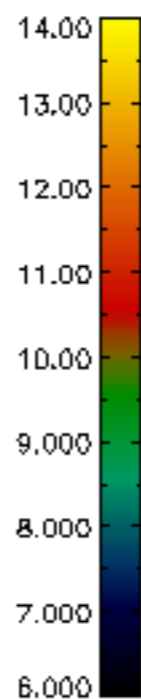
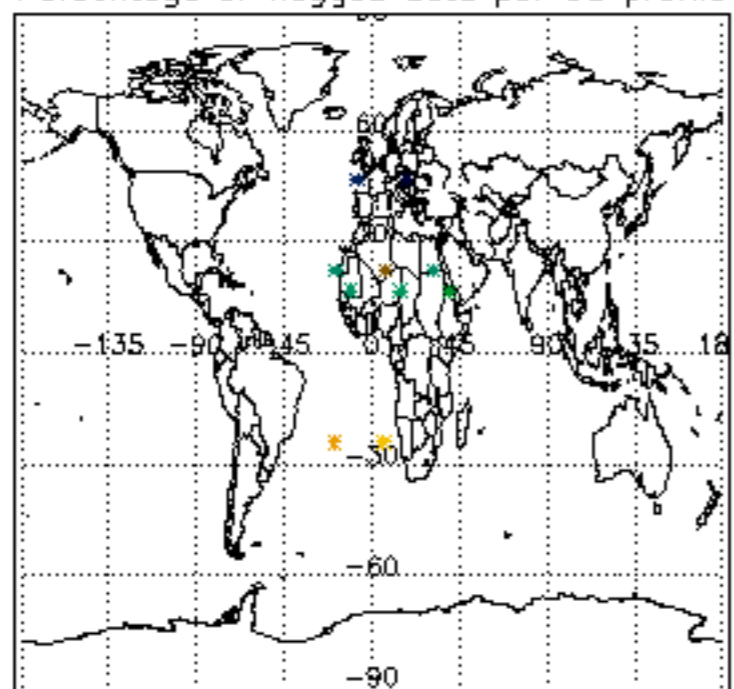
6. Auxiliary Data Files used for the production reported in section 2

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.

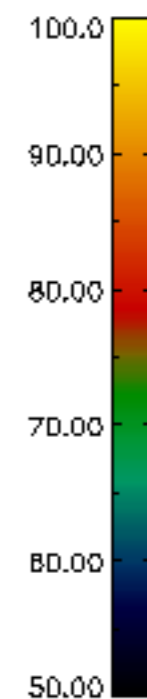
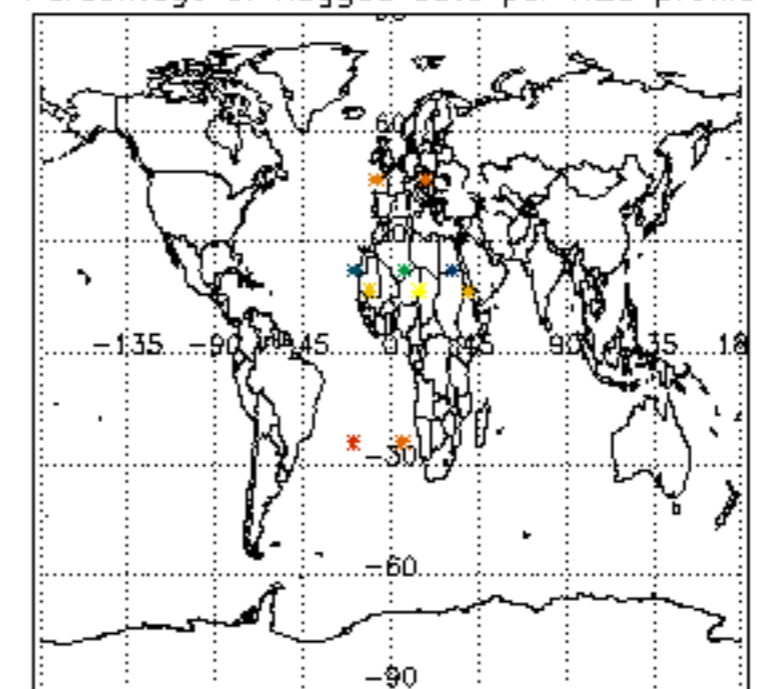
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	20-NOV-2002 20:25:06
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-NOV-2002 20:25:06
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-NOV-2002 20:25:06



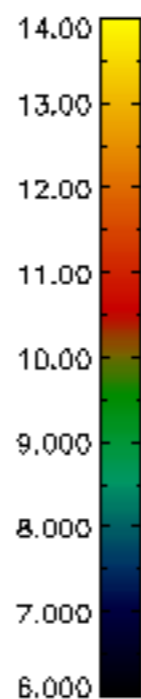
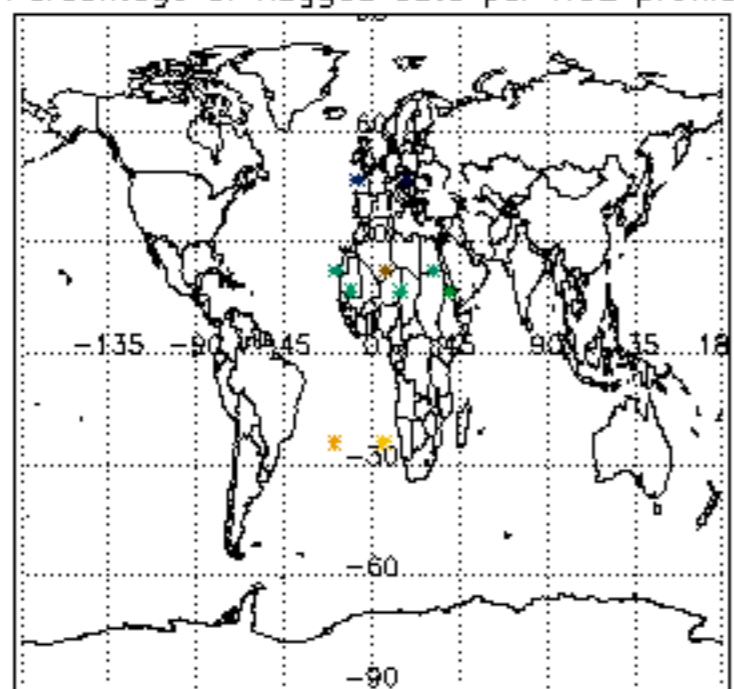
Percentage of flagged data per D3 profile



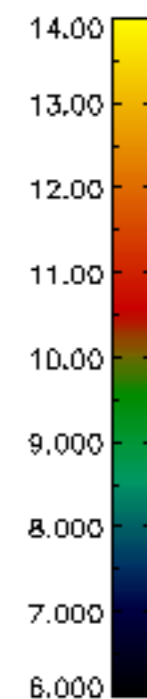
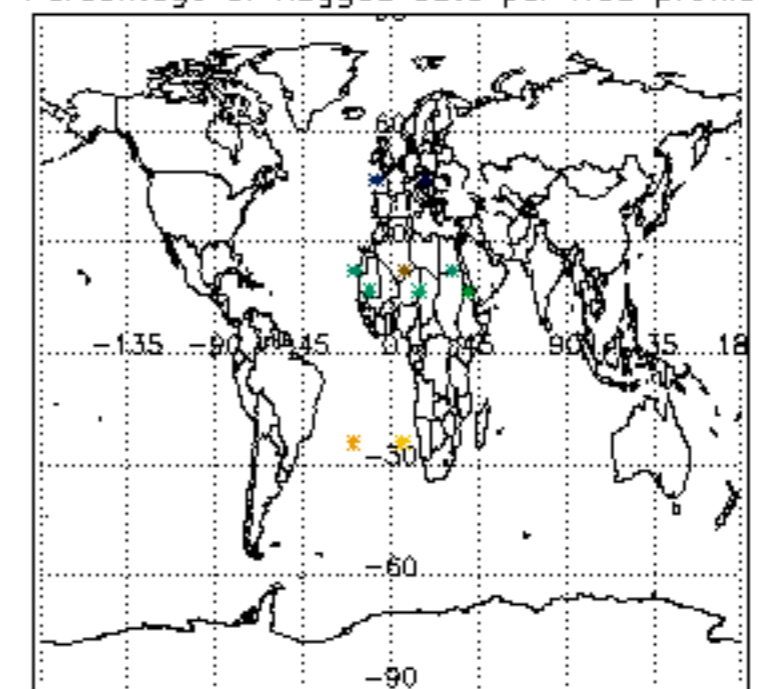
Percentage of flagged data per H2O profile

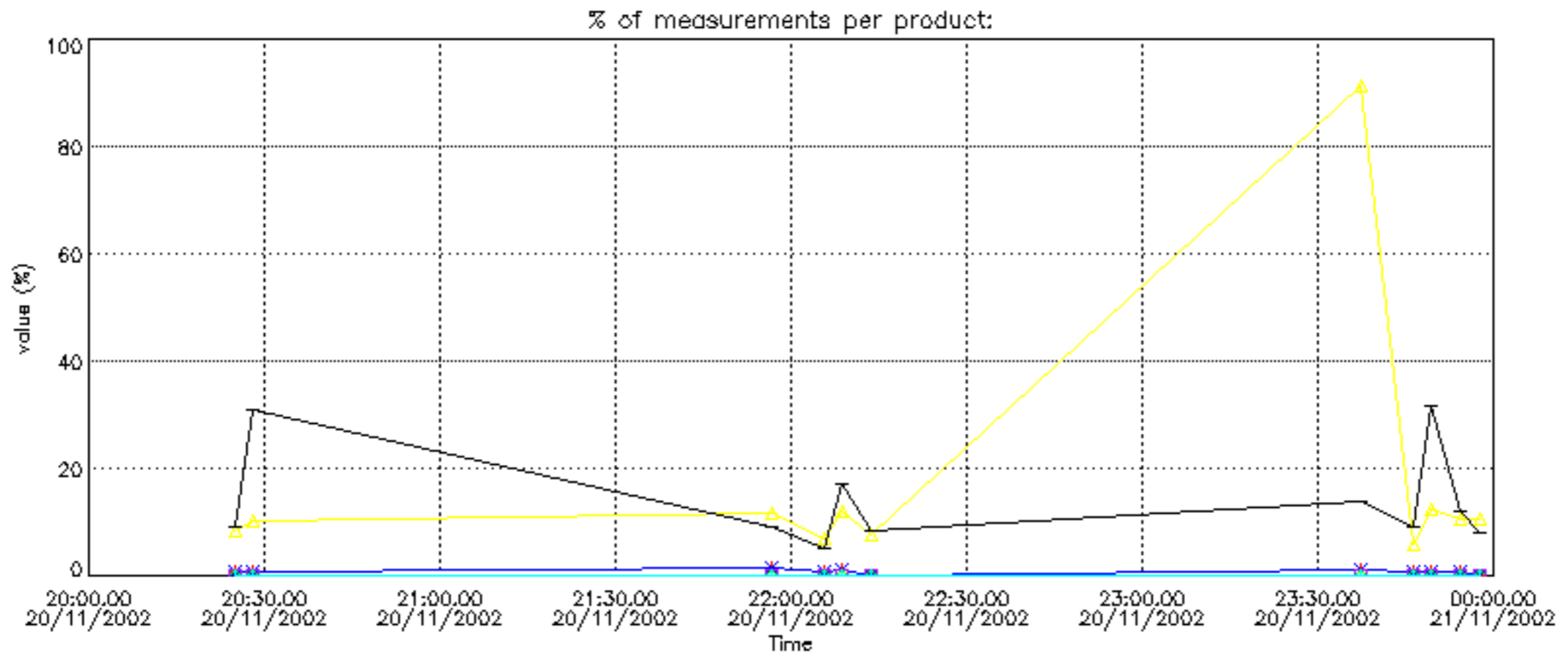


Percentage of flagged data per NO2 profile

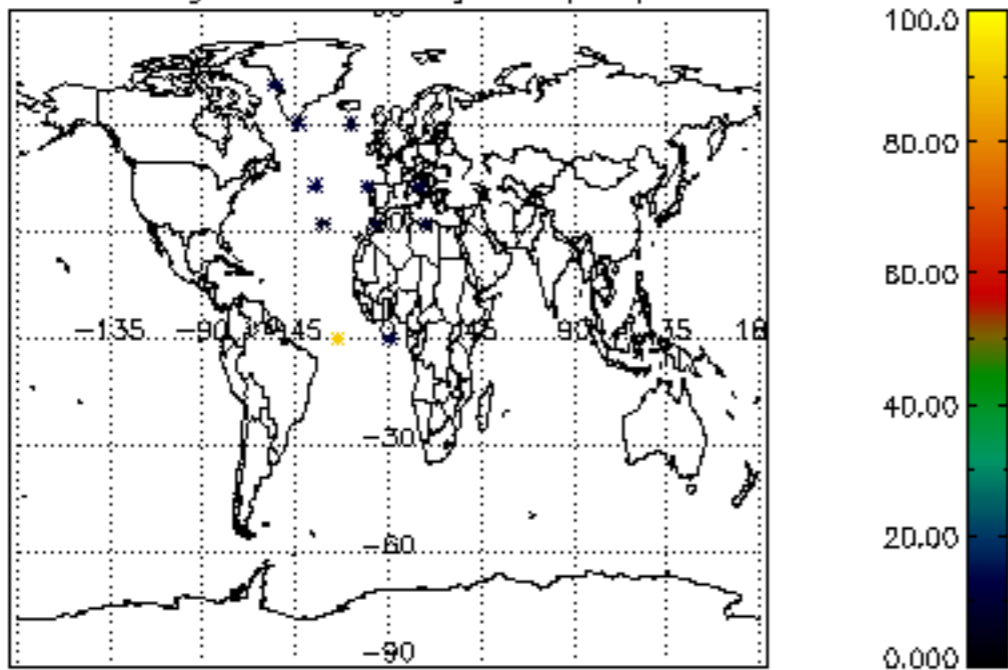


Percentage of flagged data per NO3 profile

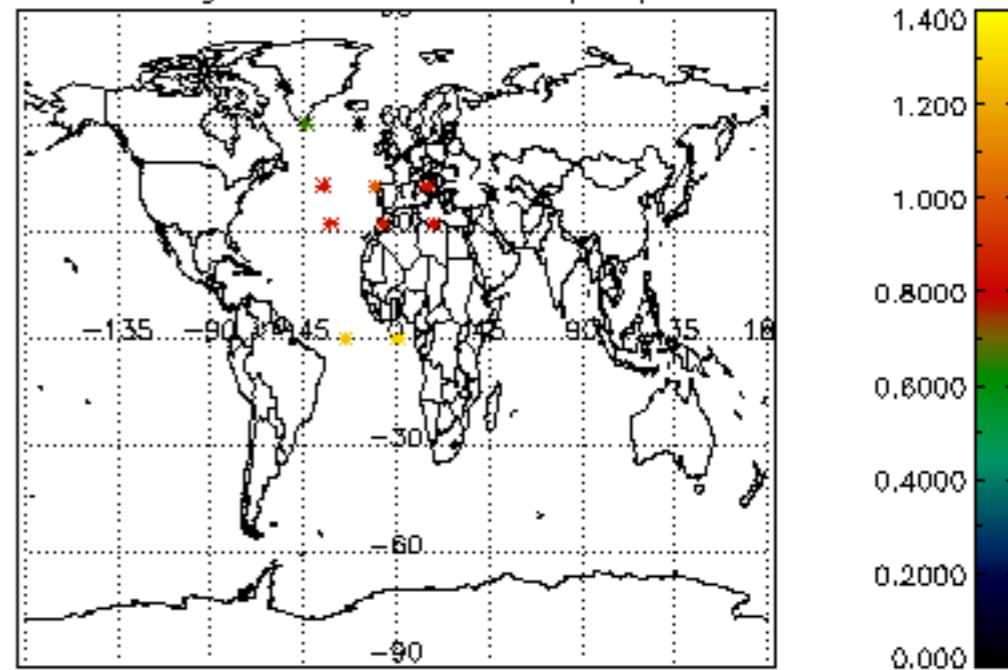




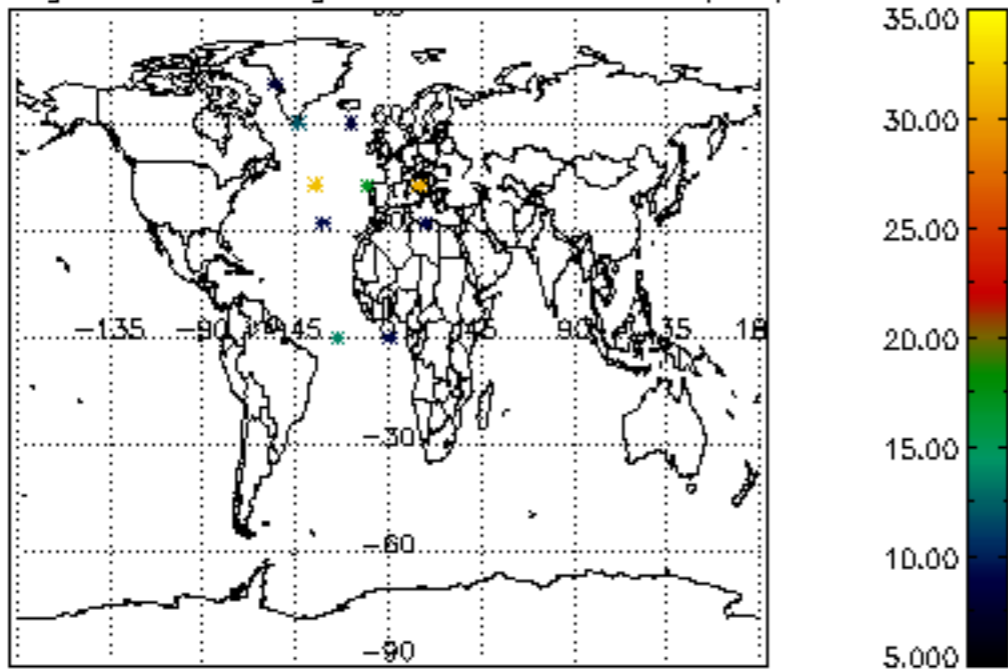
Percentage of cosmic ray hits per profile



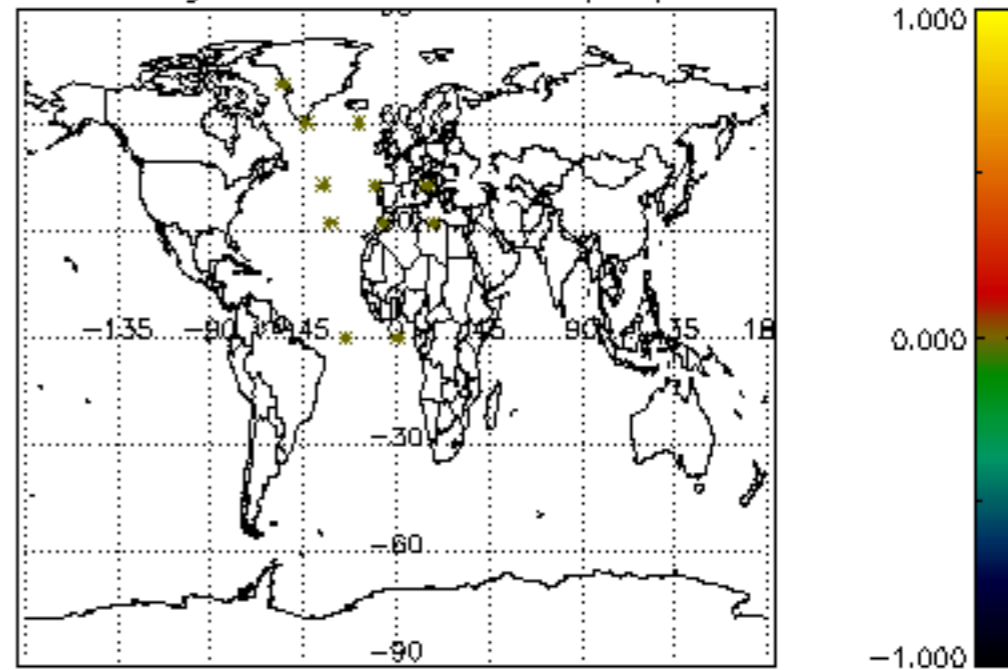
Percentage of datation errors per profile

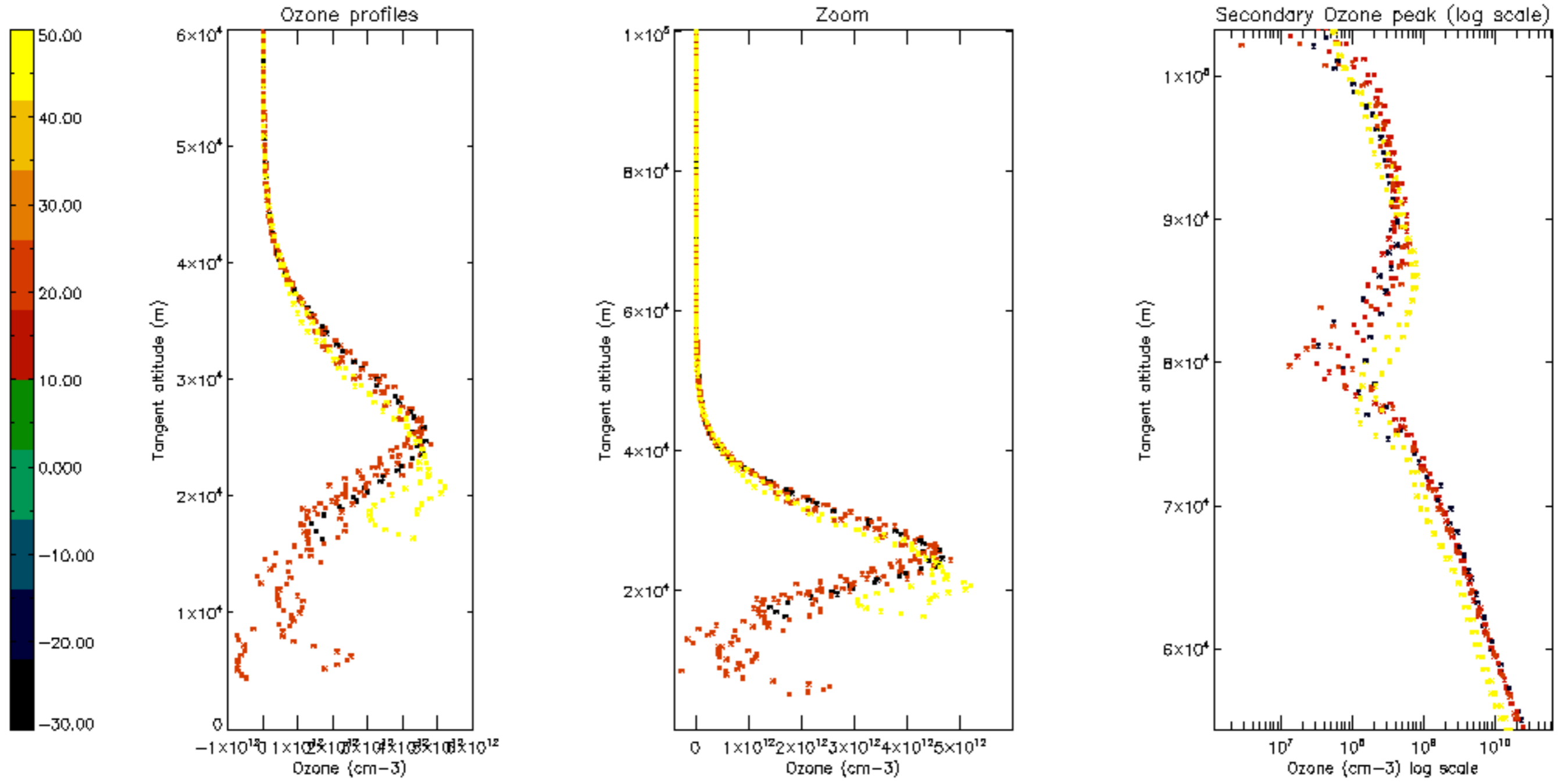


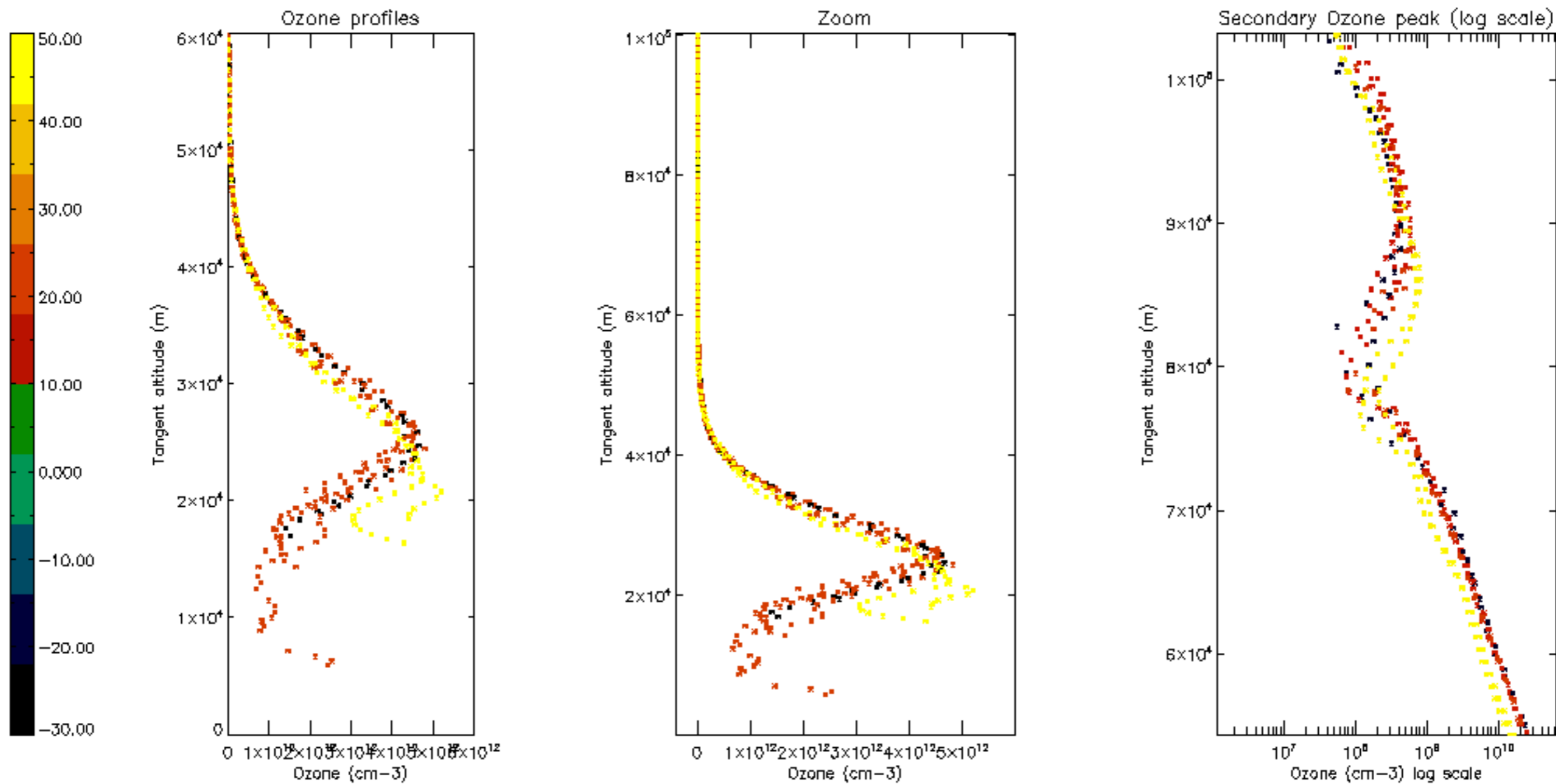
Percentage of star falling outside central band per profile

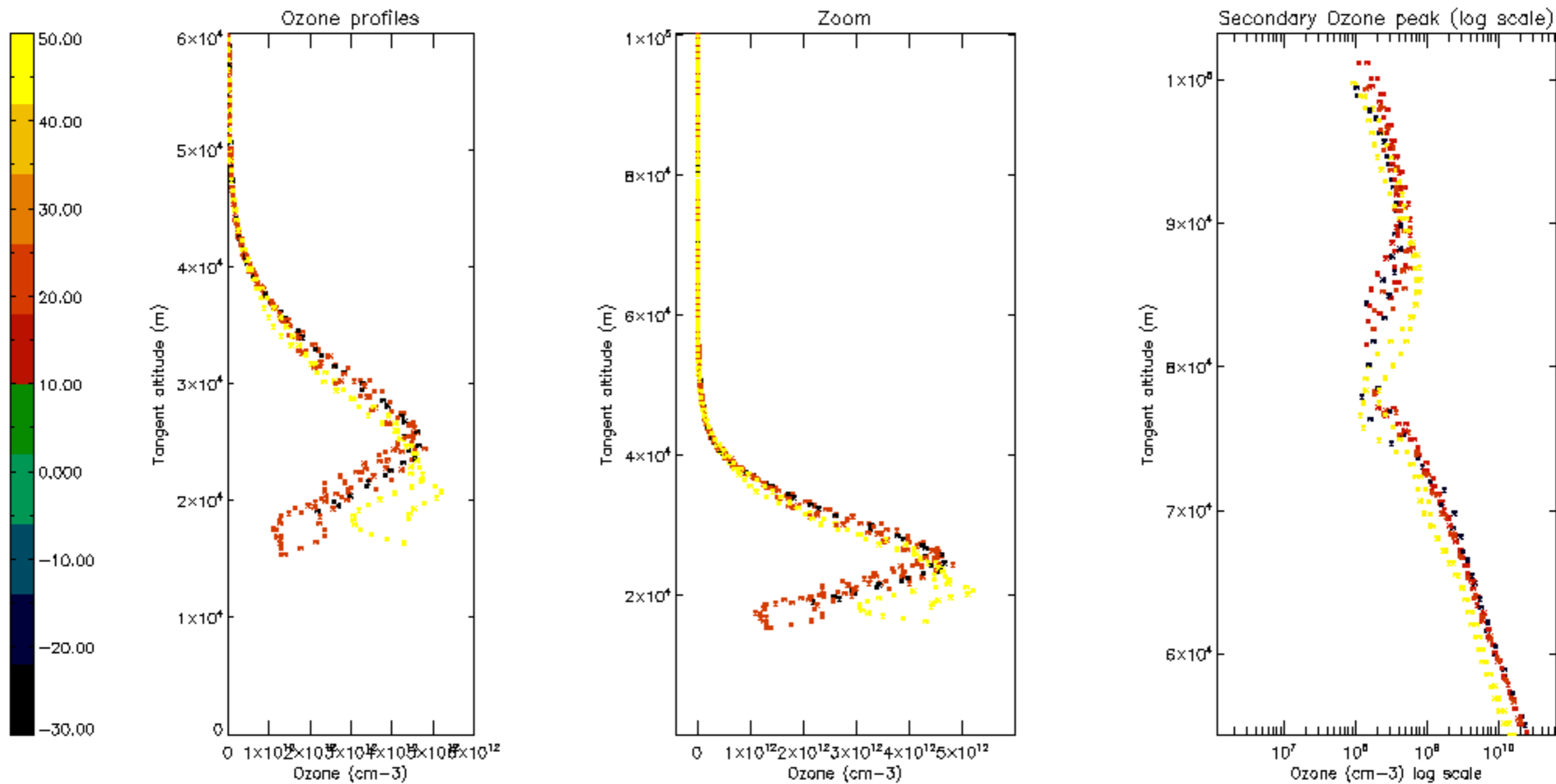


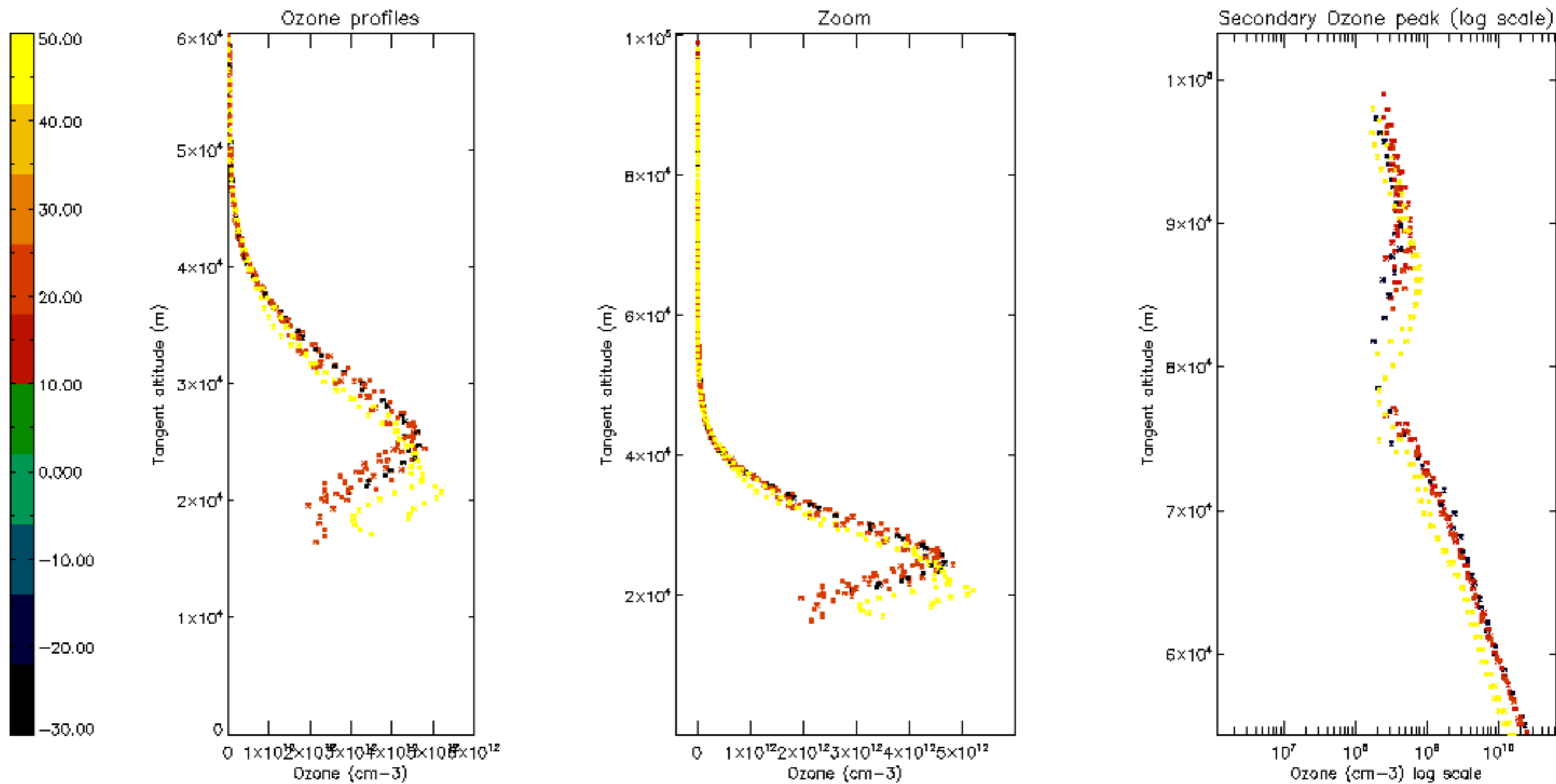
Percentage of saturation errors per profile

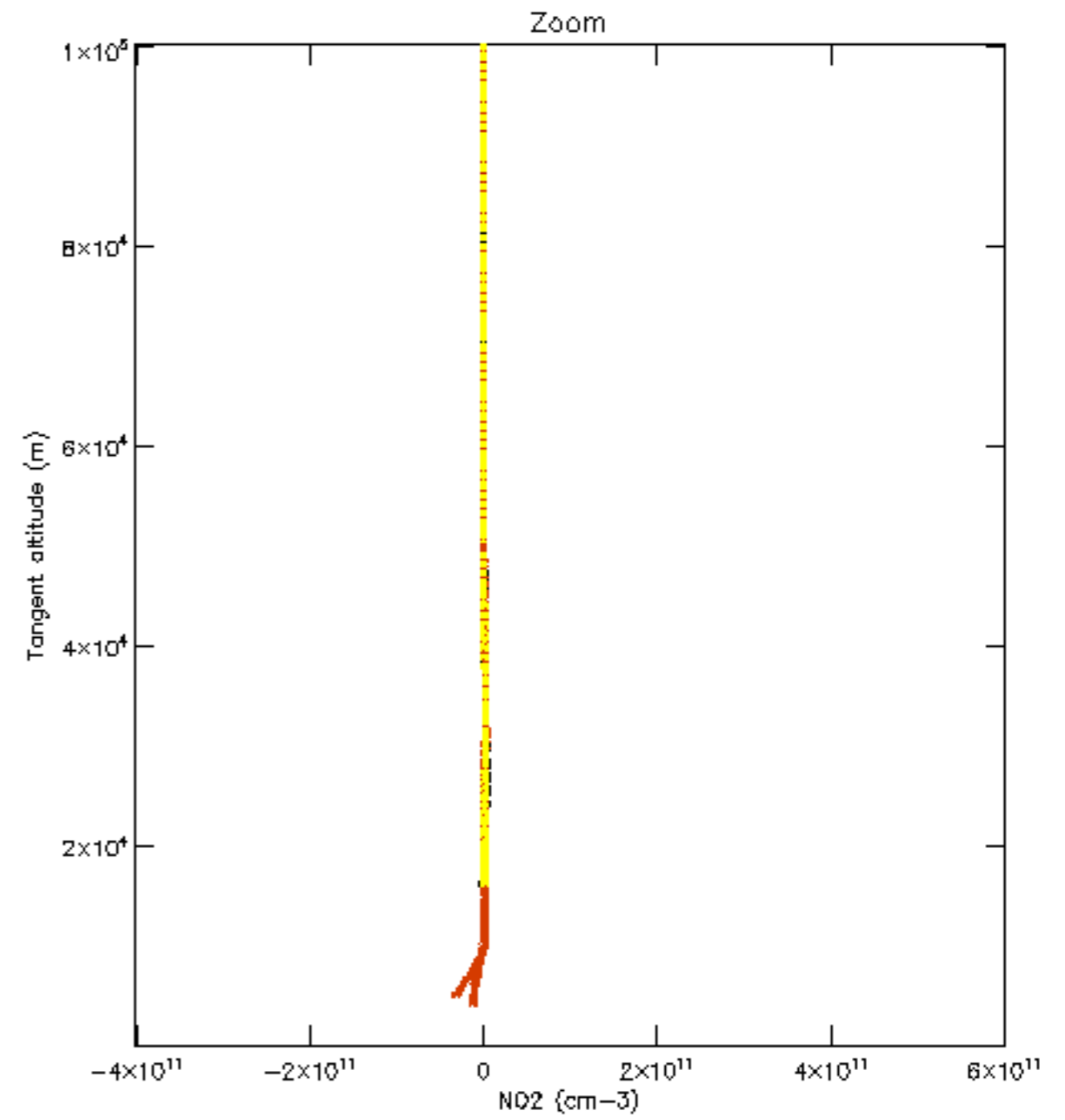
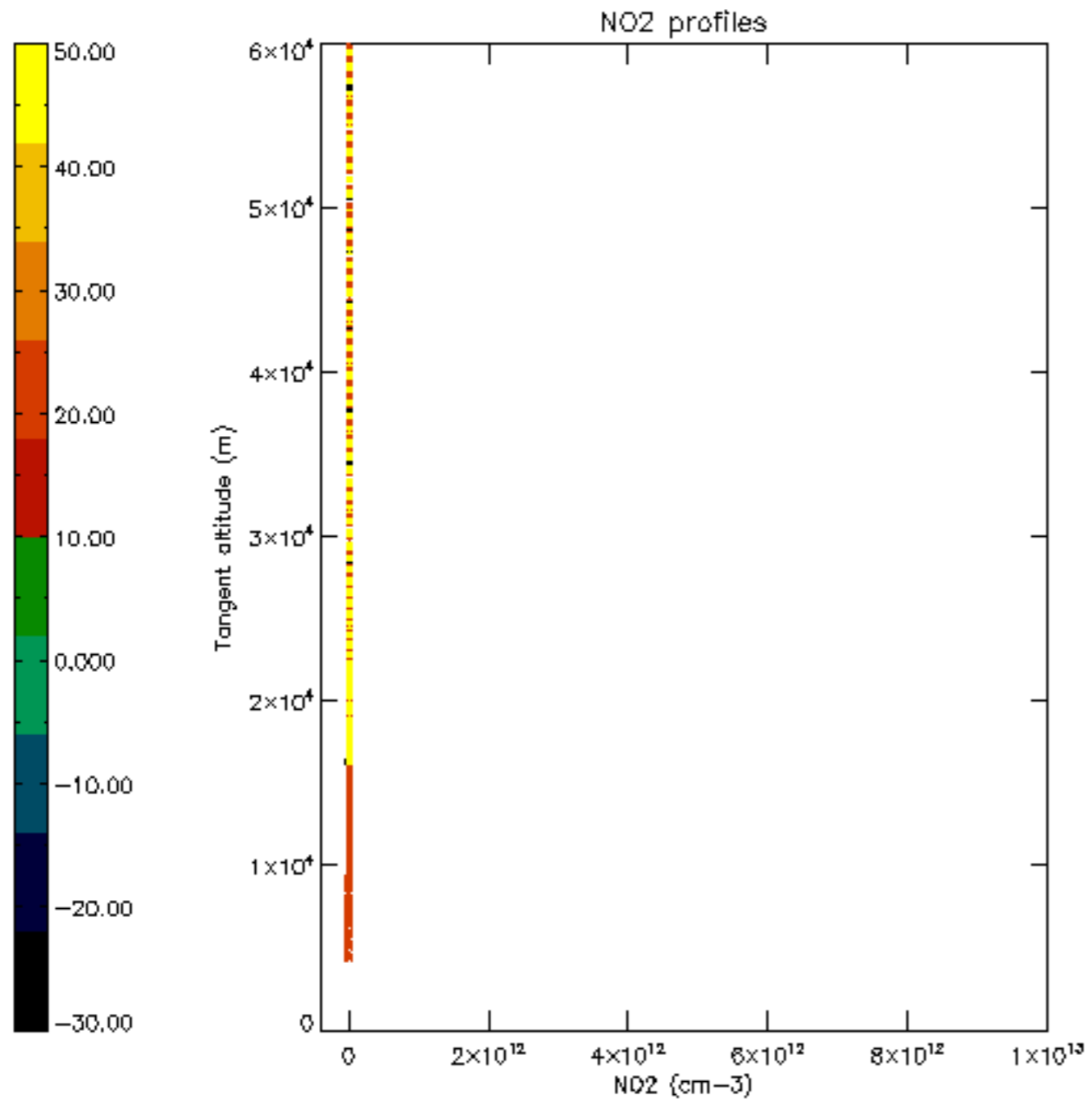


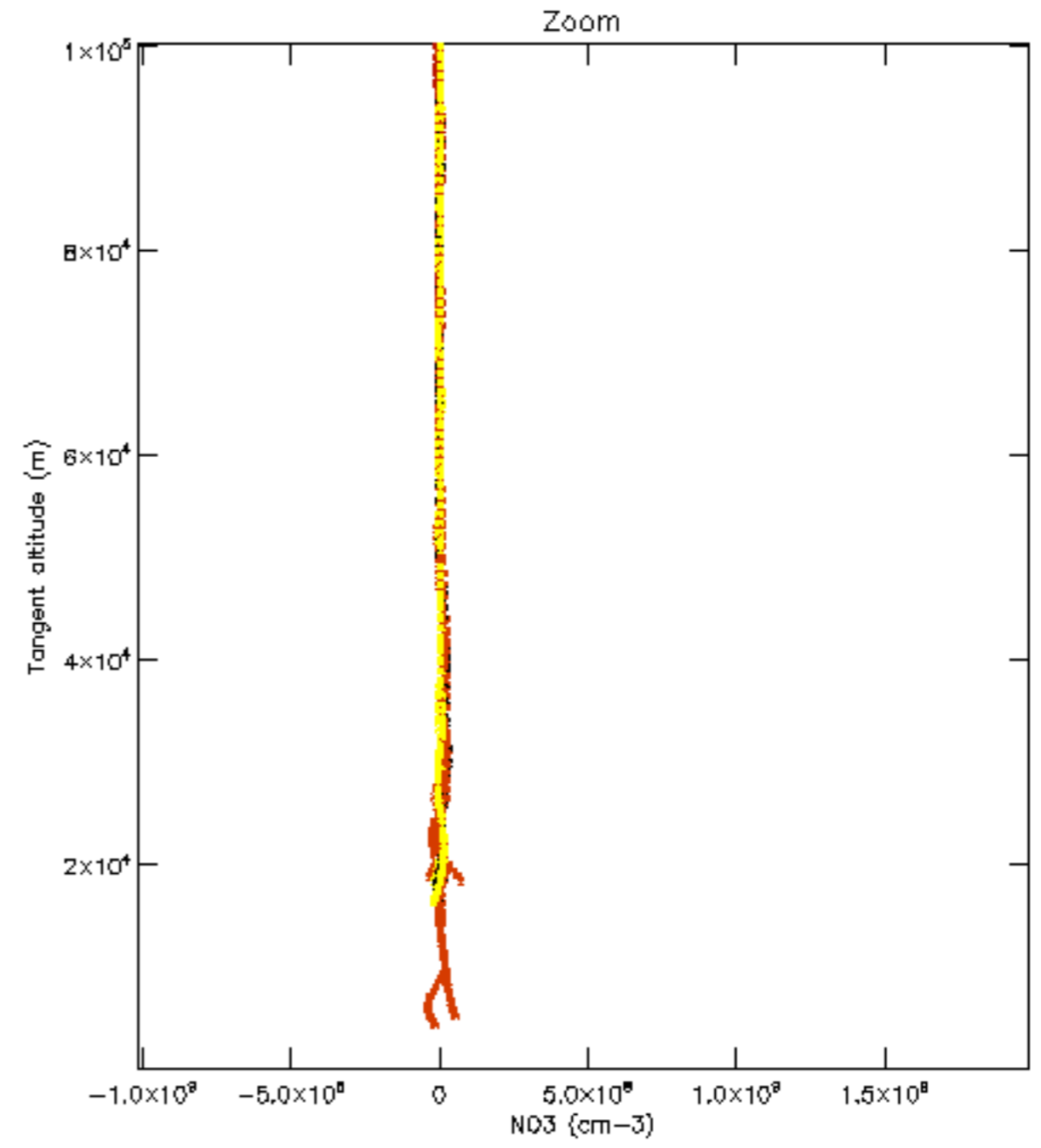
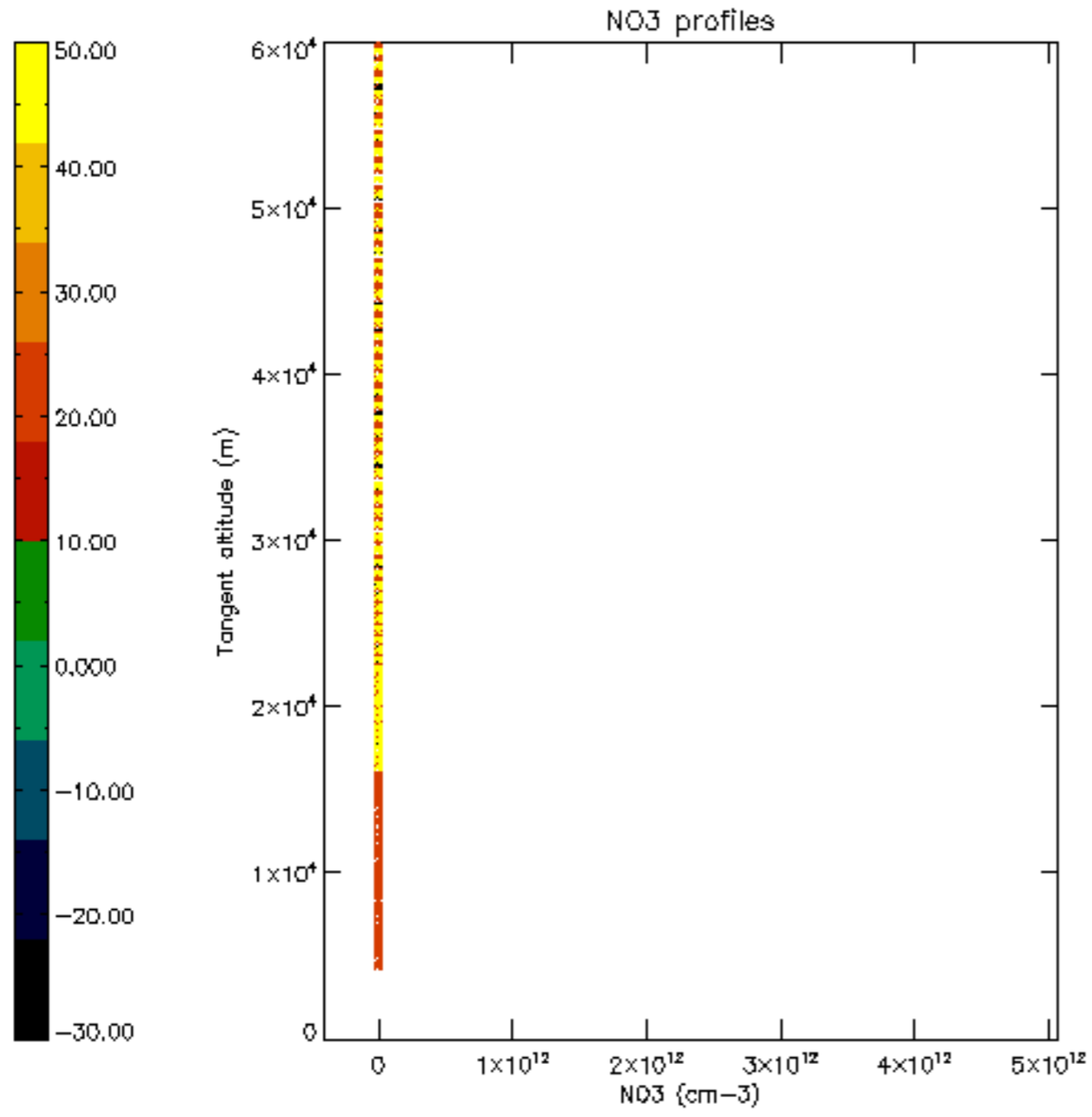


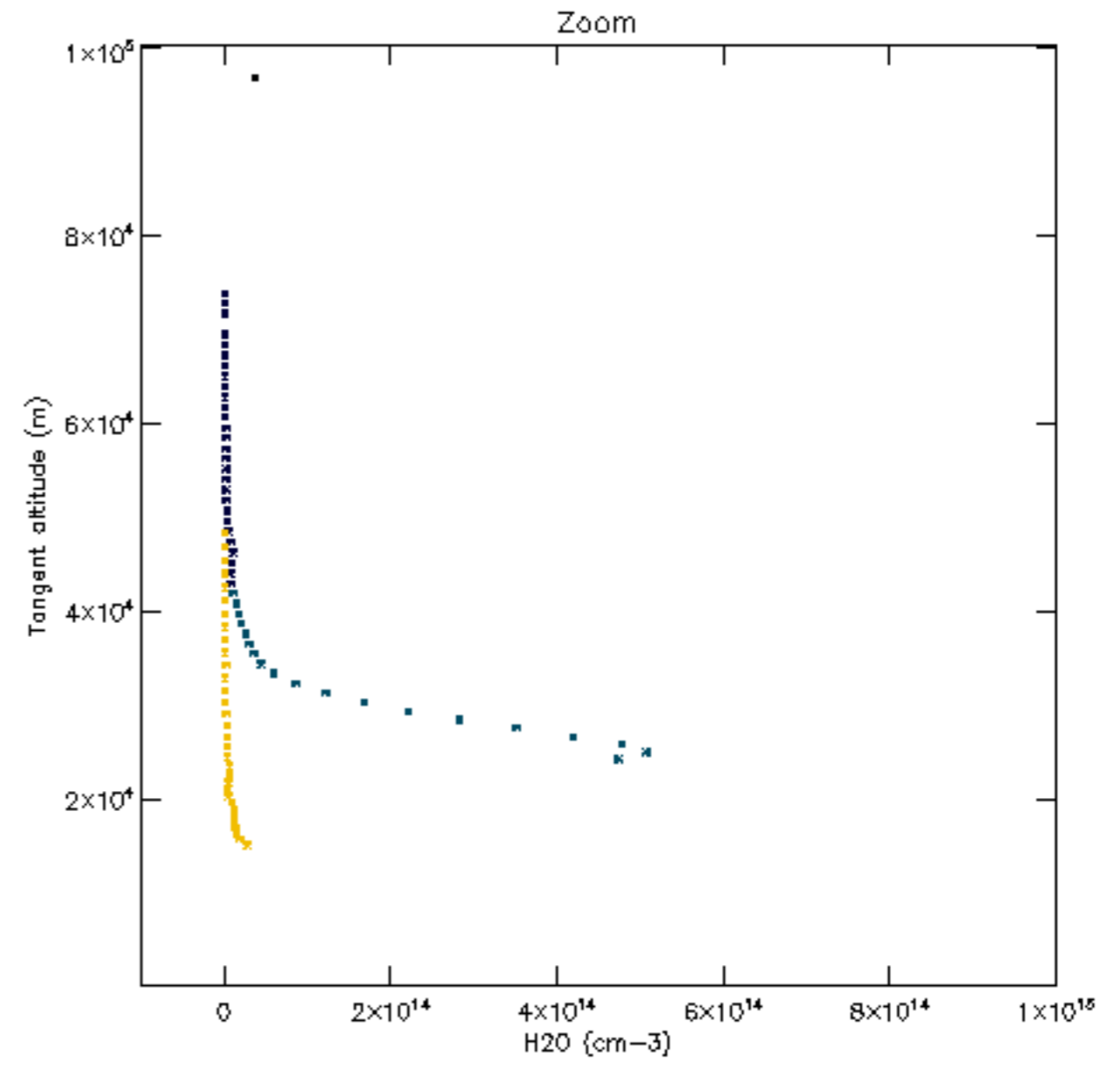
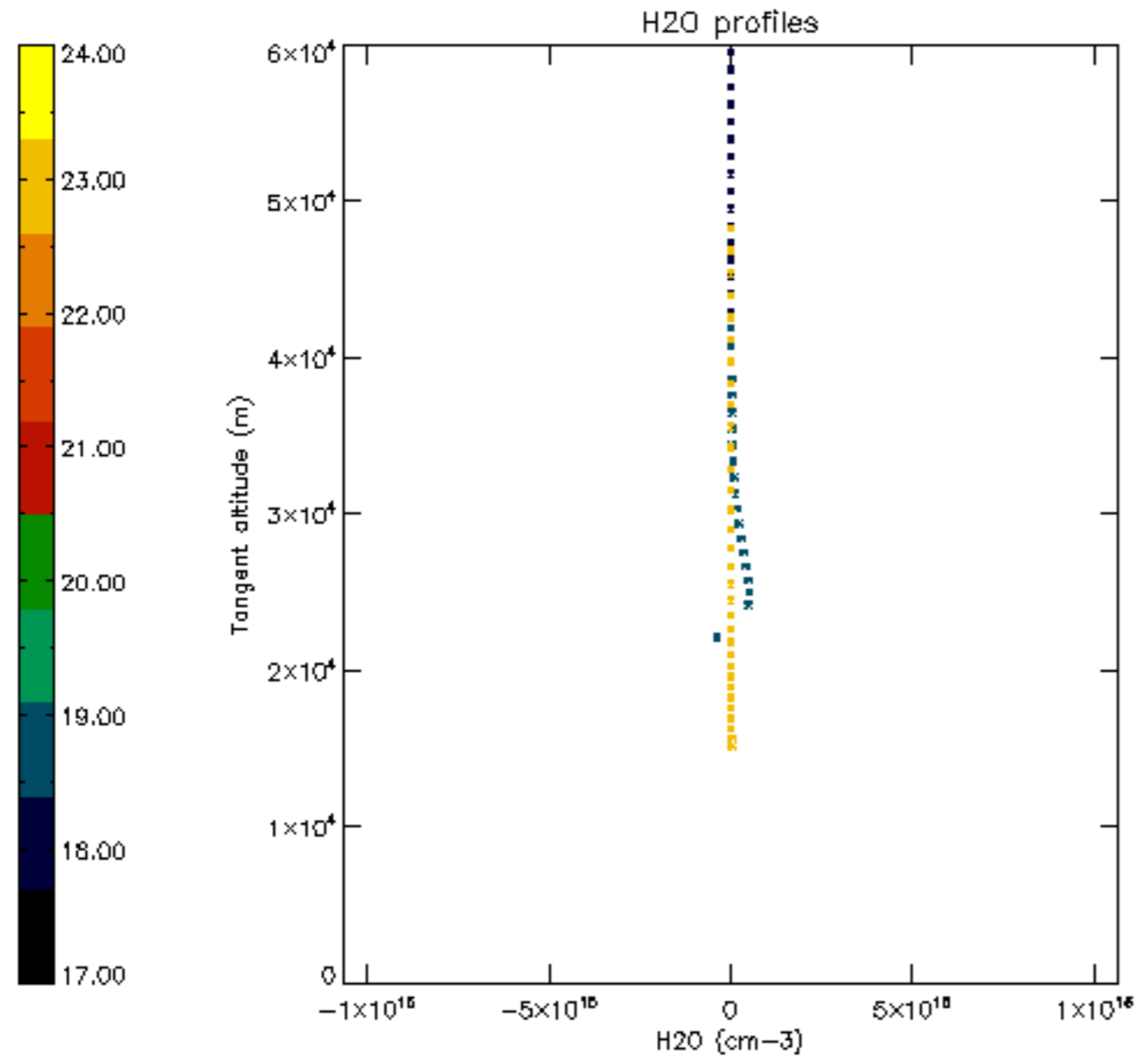


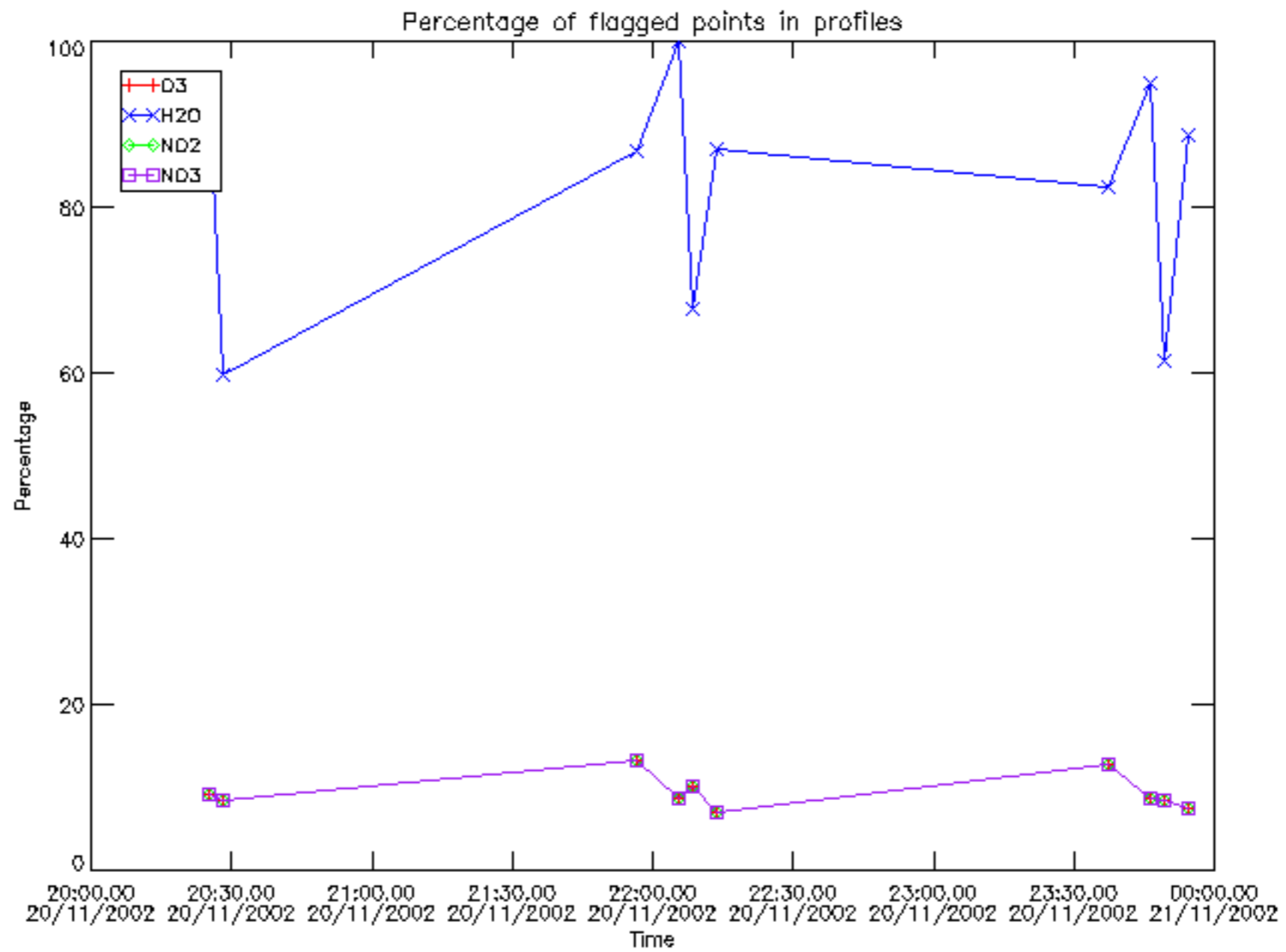




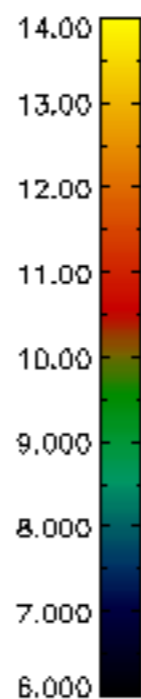
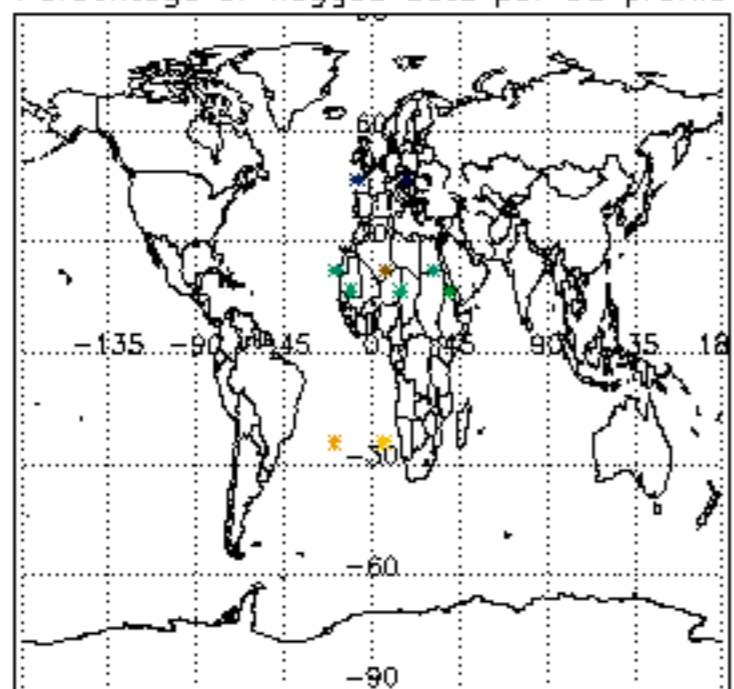




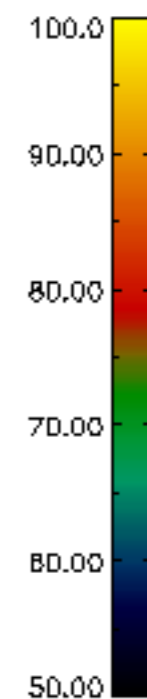
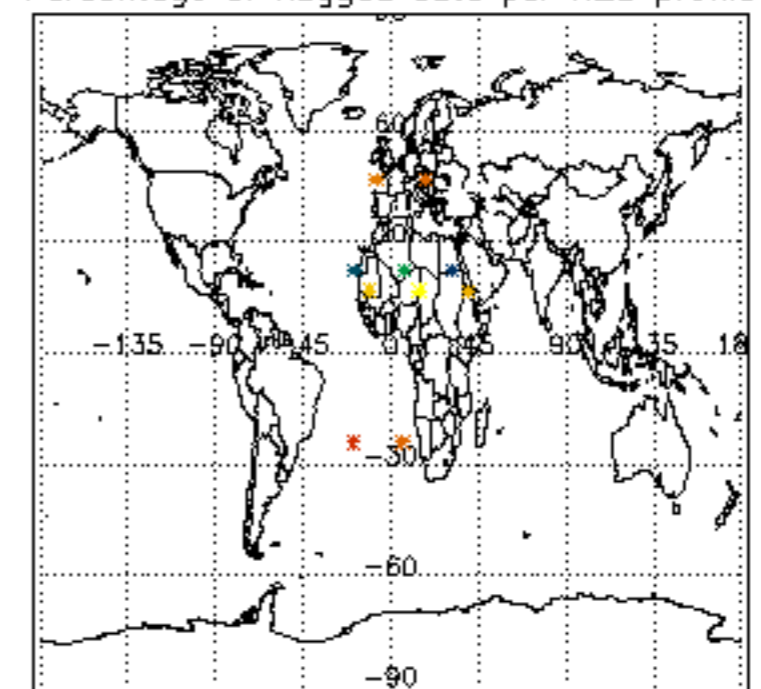




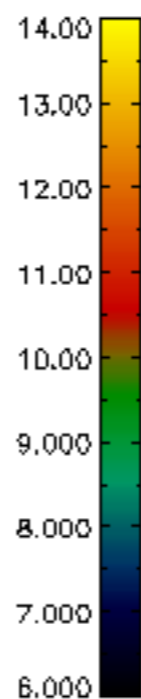
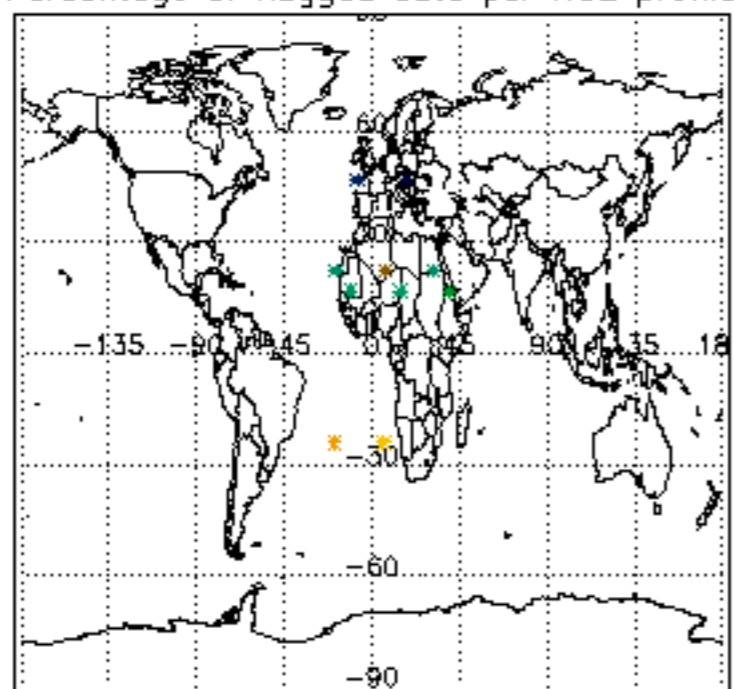
Percentage of flagged data per D3 profile



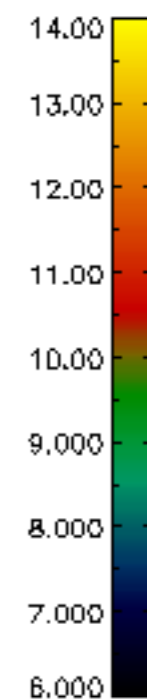
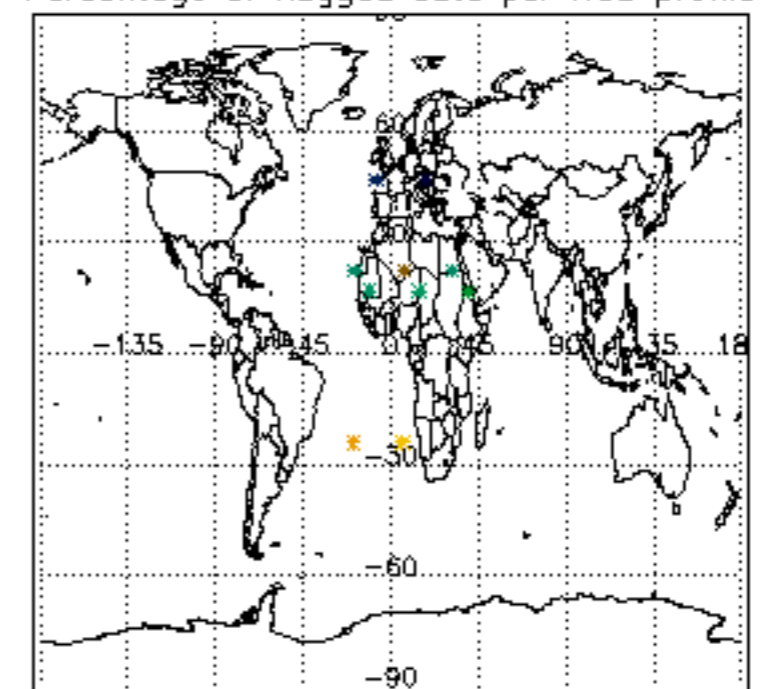
Percentage of flagged data per H2O profile

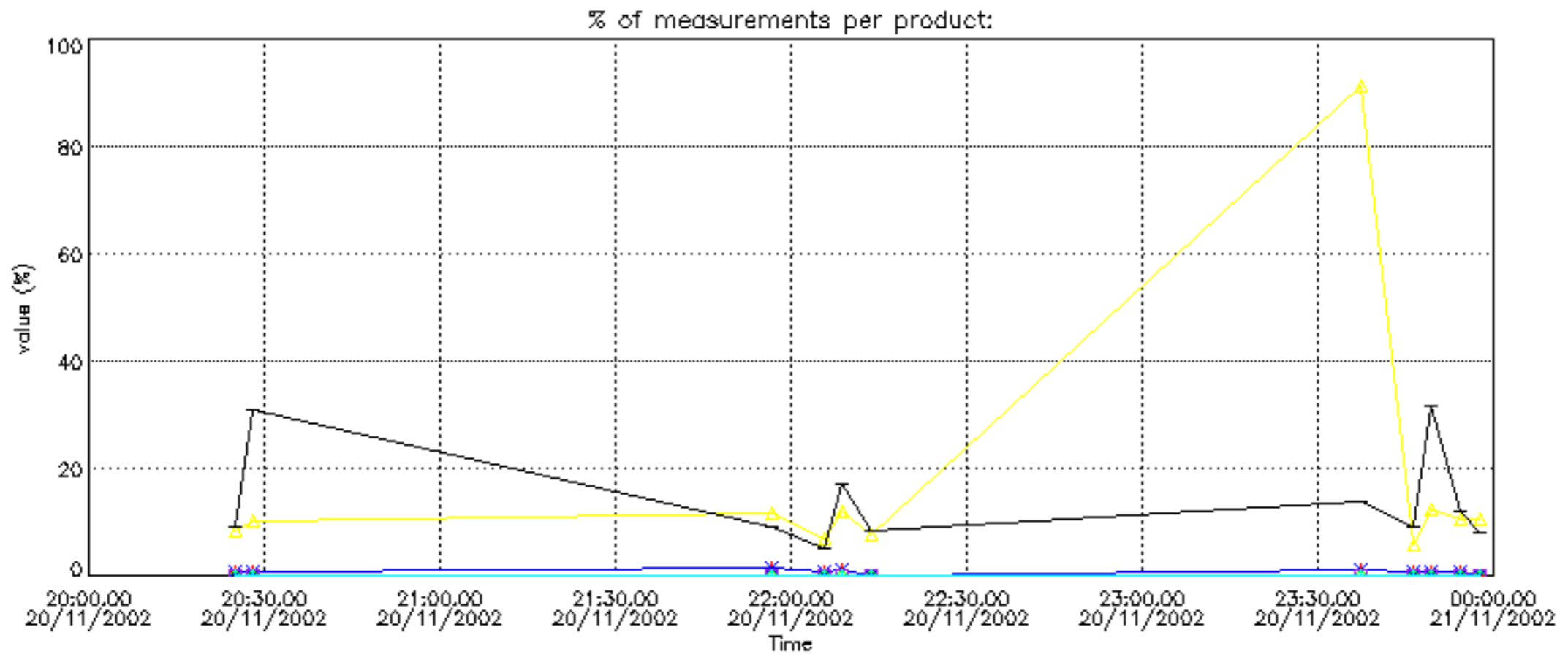


Percentage of flagged data per NO2 profile

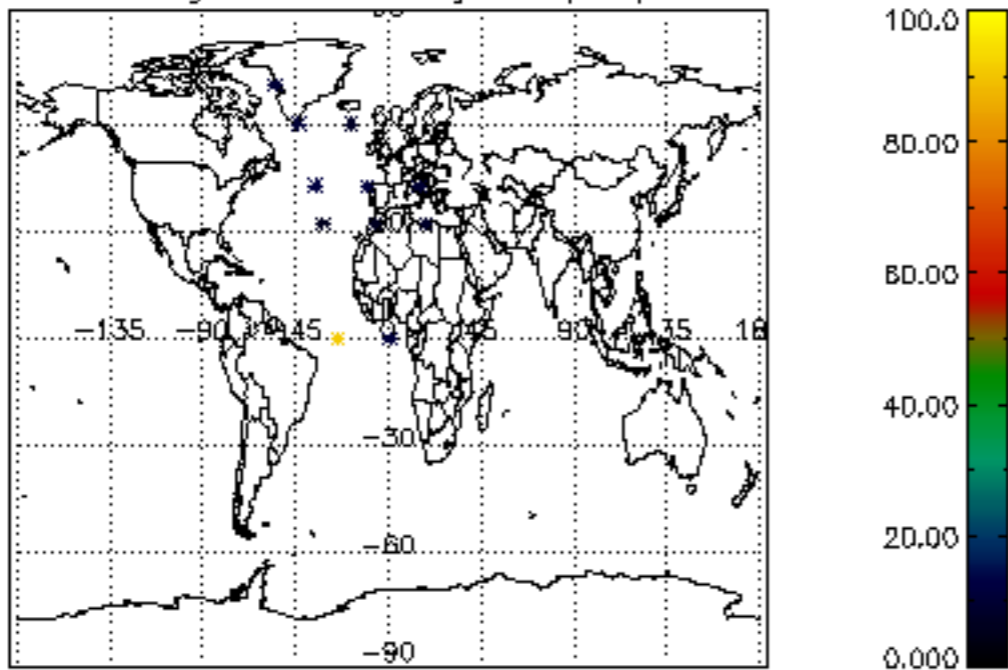


Percentage of flagged data per NO3 profile

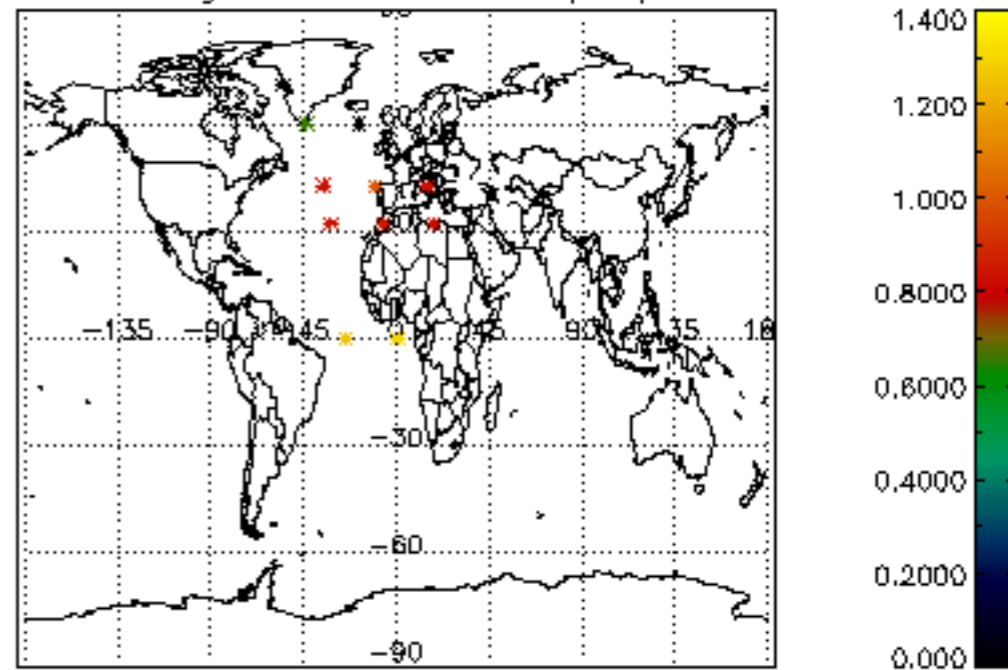




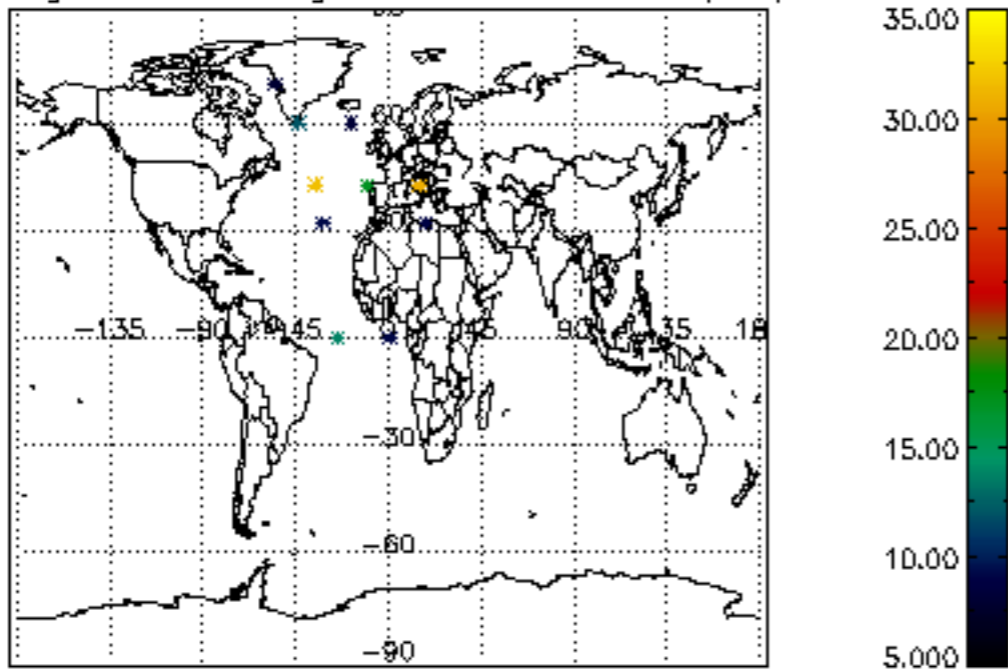
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

