

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](#)

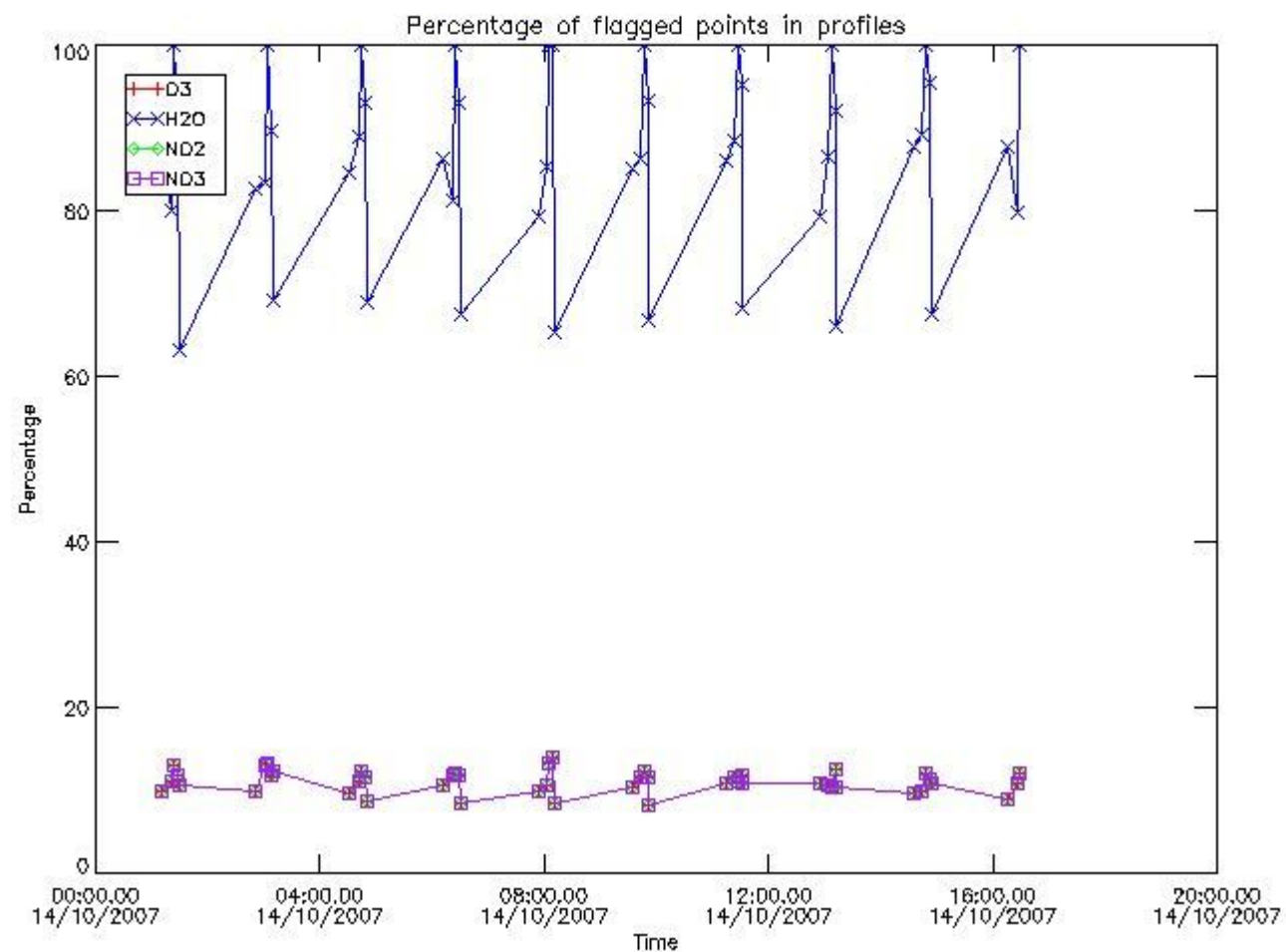
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20071014_145221_000000452062_00283_29395_3667.N1	14-OCT-2007 14:52:21	Dark	45.000	161	Tau Pup	2.9310	4500.0	90	29395	No
162	GOM_NL__2PRFIN20071014_145343_000000472062_00283_29395_3668.N1	14-OCT-2007 14:53:43	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	29395	No
163	GOM_NL__2PRFIN20071014_150537_000000442062_00283_29395_3669.N1	14-OCT-2007 15:05:37	Straylight	44.000	157	The1Eri	2.9060	9300.0	88	29395	No
164	GOM_NL__2PRFIN20071014_151448_000000432062_00283_29395_3670.N1	14-OCT-2007 15:14:48	Straylight	42.500	52	16Bet Cet	2.0370	4500.0	85	29395	No
165	GOM_NL__2PRFIN20071014_152430_000000362062_00283_29395_3671.N1	14-OCT-2007 15:24:30	Bright	35.500	140	88Gam Peg	2.8340	26000.	71	29395	No
166	GOM_NL__2PRFIN20071014_152829_000000382062_00283_29395_3672.N1	14-OCT-2007 15:28:29	Bright	37.500	58	21Alp And	2.0730	11000.	75	29395	No
167	GOM_NL__2PRFIN20071014_153107_000000422062_00283_29395_3673.N1	14-OCT-2007 15:31:07	Bright	42.000	53	43Bet And	2.0480	3300.0	84	29395	No
168	GOM_NL__2PRFIN20071014_153635_000000392062_00283_29395_3674.N1	14-OCT-2007 15:36:35	Bright	38.500	68	18Alp Cas	2.2250	4500.0	77	29395	No
169	GOM_NL__2PRFIN20071014_153757_000000382062_00283_29395_3675.N1	14-OCT-2007 15:37:57	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	29395	No
170	GOM_NL__2PRFIN20071014_154531_000000372062_00283_29395_3676.N1	14-OCT-2007 15:45:31	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	29395	No
171	GOM_NL__2PRFIN20071014_155343_000000522062_00283_29395_3677.N1	14-OCT-2007 15:53:43	Bright	52.000	36	50Alp UMa	1.8000	6300.0	104	29395	No
172	GOM_NL__2PRFIN20071014_155516_000000352062_00283_29395_3678.N1	14-OCT-2007 15:55:16	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	29395	No
173	GOM_NL__2PRFIN20071014_155839_000000402062_00283_29395_3679.N1	14-OCT-2007 15:58:39	Bright	39.500	174	52Psi UMa	3.0040	4400.0	79	29395	No
174	GOM_NL__2PRFIN20071014_160533_000000602062_00283_29395_3680.N1	14-OCT-2007 16:05:33	Bright	60.000	166	17Eps Leo	2.9800	6000.0	120	29395	No
175	GOM_NL__2PRFIN20071014_160847_000000572062_00283_29395_3681.N1	14-OCT-2007 16:08:47	Bright	57.000	22	32Alp Leo	1.3600	15200.	114	29395	No
176	GOM_NL__2PRFIN20071014_161603_000000572062_00283_29395_3682.N1	14-OCT-2007 16:16:03	Dark	57.000	48	30Alp Hya	1.9770	4100.0	114	29395	No
177	GOM_NL__2PRFIN20071014_162537_000000482062_00283_29395_3683.N1	14-OCT-2007 16:25:37	Dark	47.500	65	Lam Vel	2.2040	4400.0	95	29395	No
178	GOM_NL__2PRFIN20071014_162844_000000422062_00283_29395_3684.N1	14-OCT-2007 16:28:44	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	29395	No

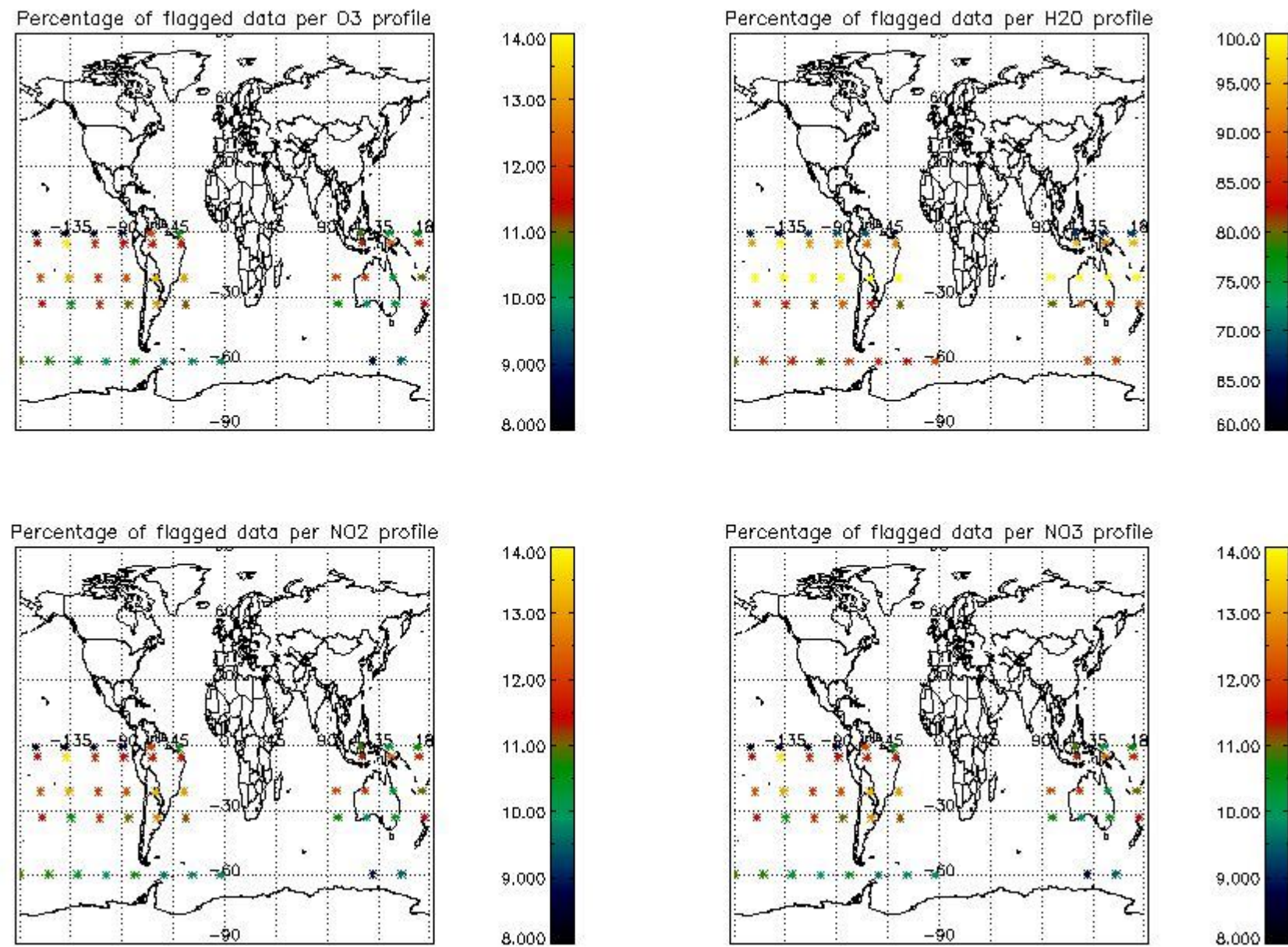
3. Quality information per product

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)

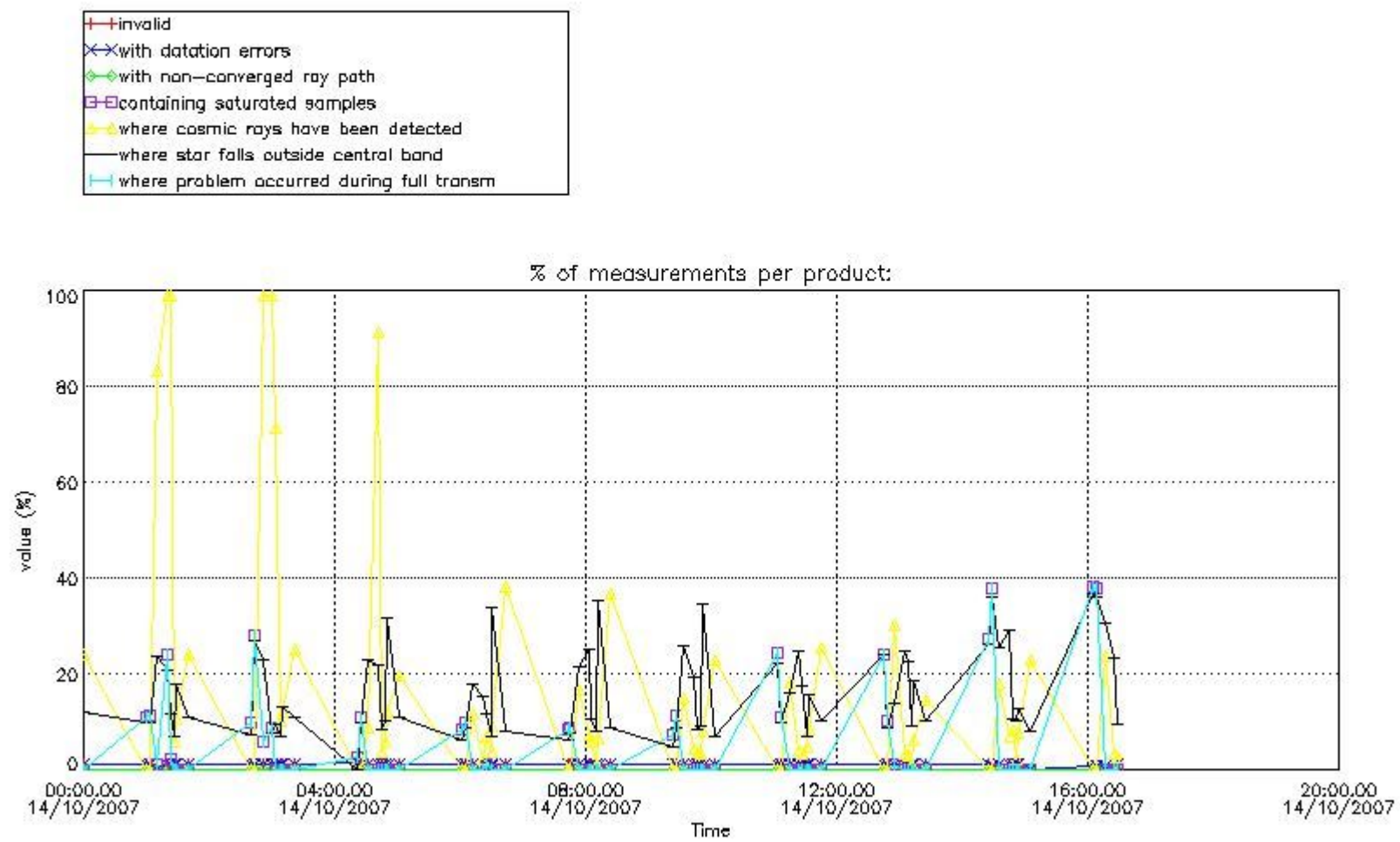


4. Level 1 quality information per product

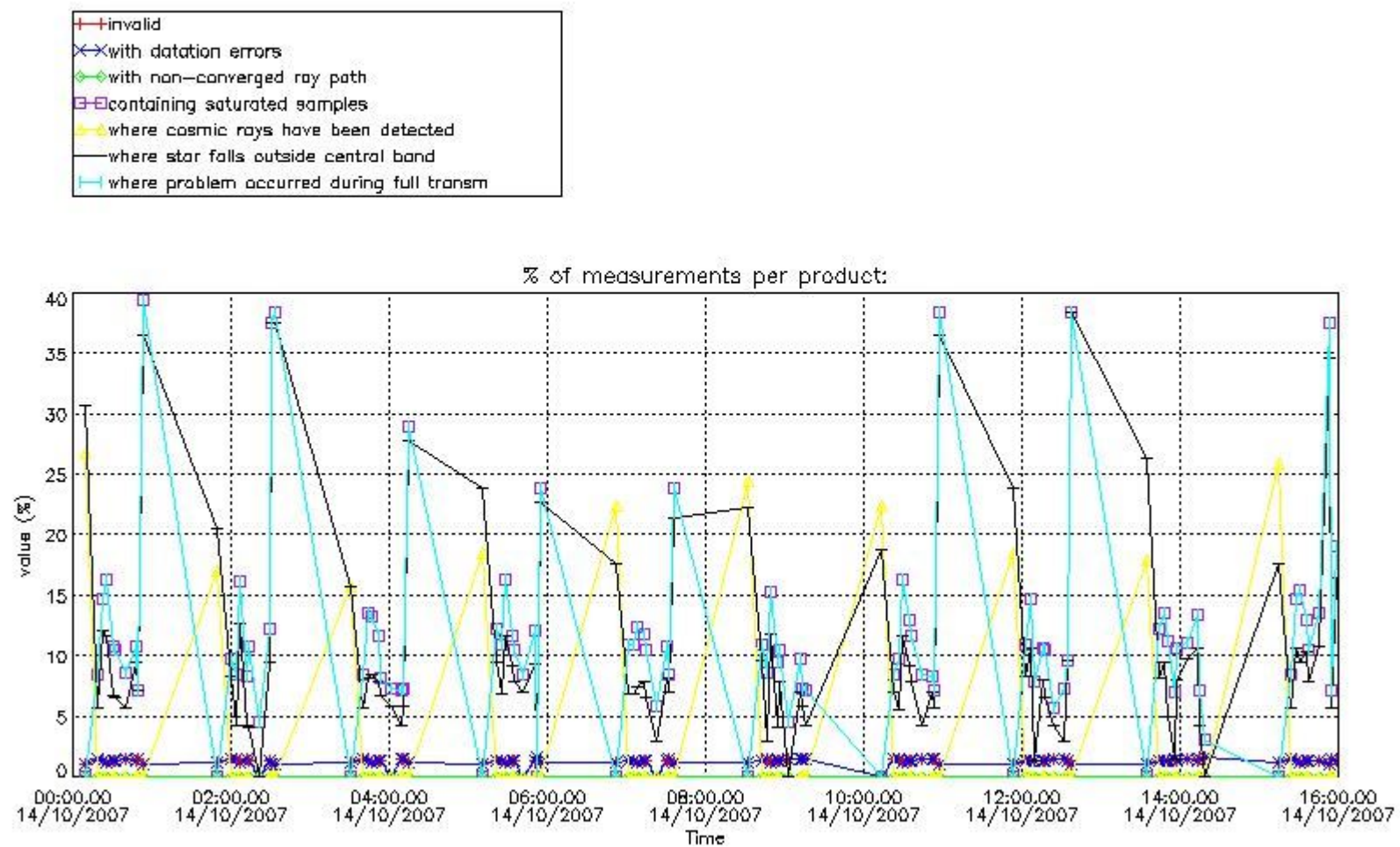
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



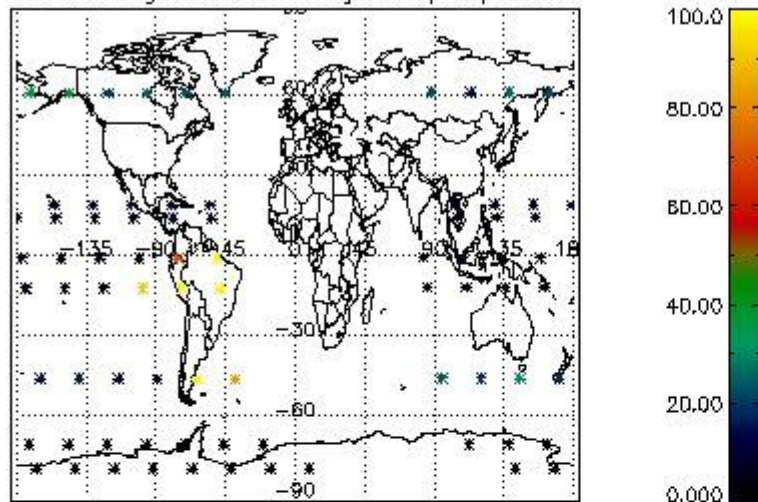
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



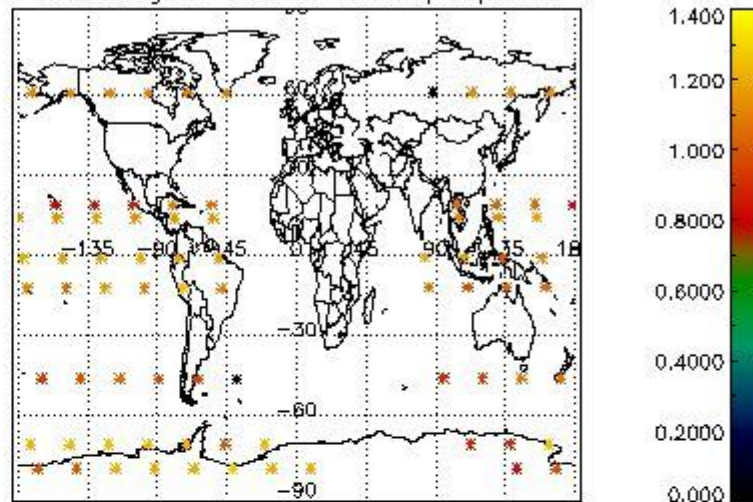
4.2 Plot quality information per product coming from level 1b processing (world map)

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

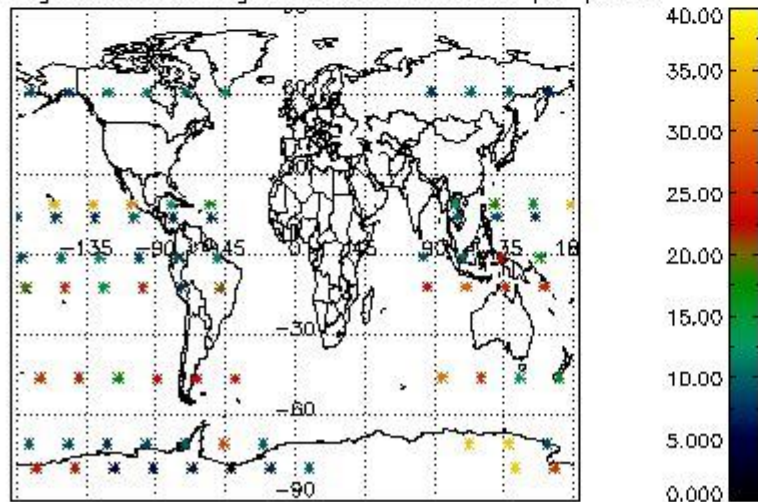
Percentage of cosmic ray hits per profile



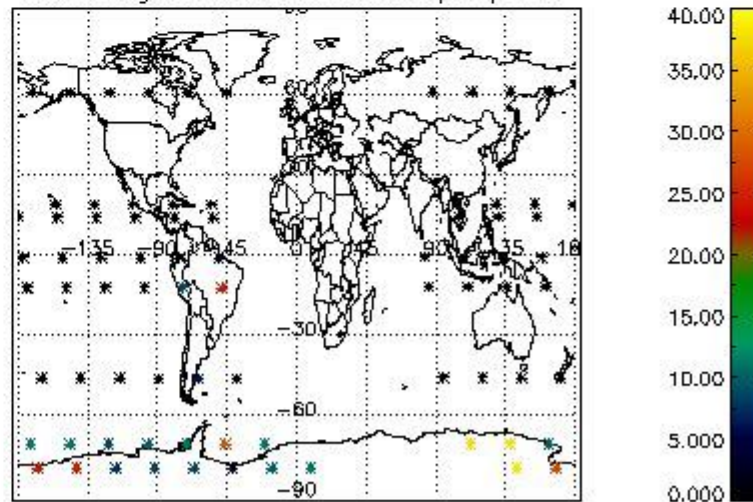
Percentage of datation errors per profile



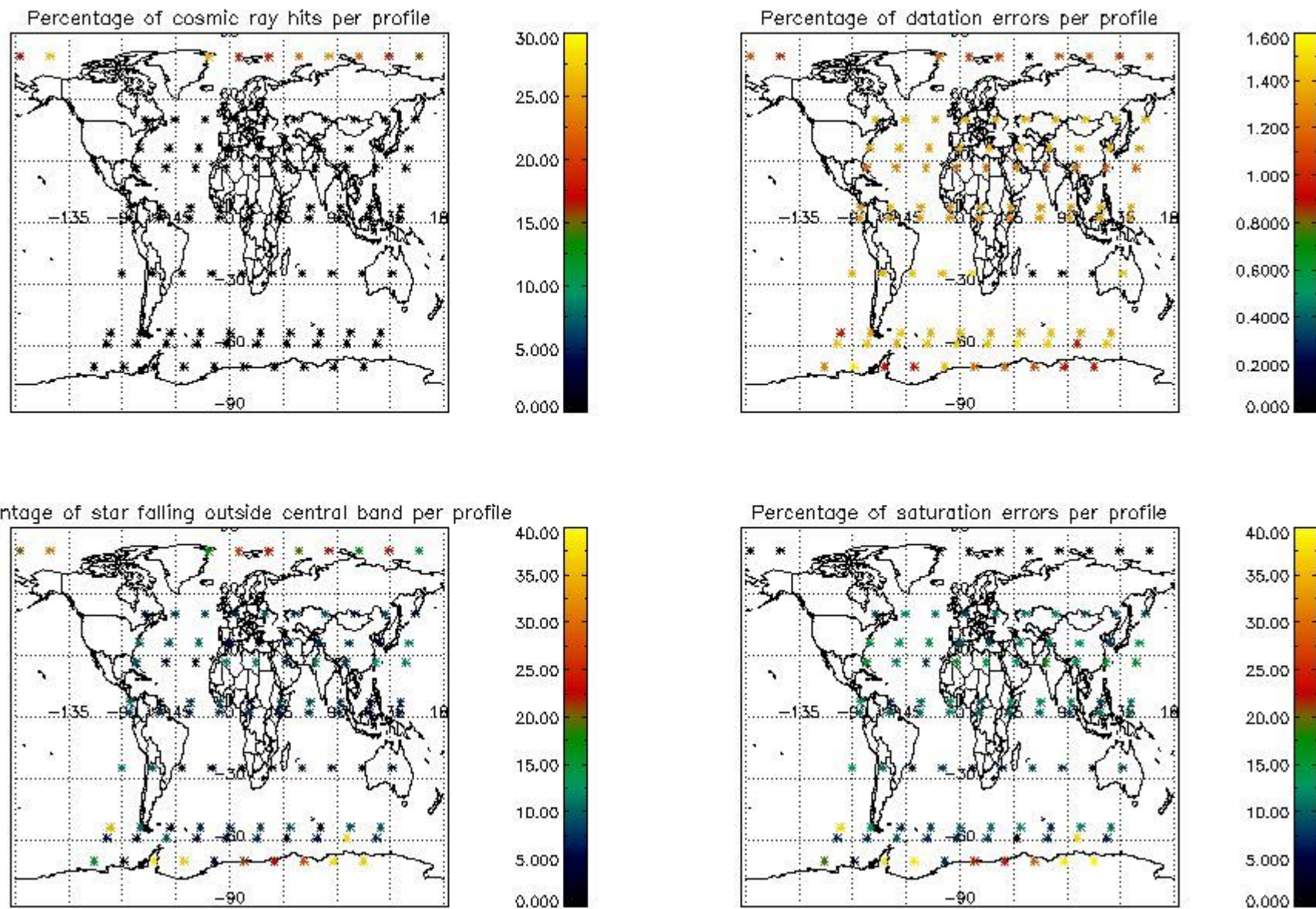
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



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

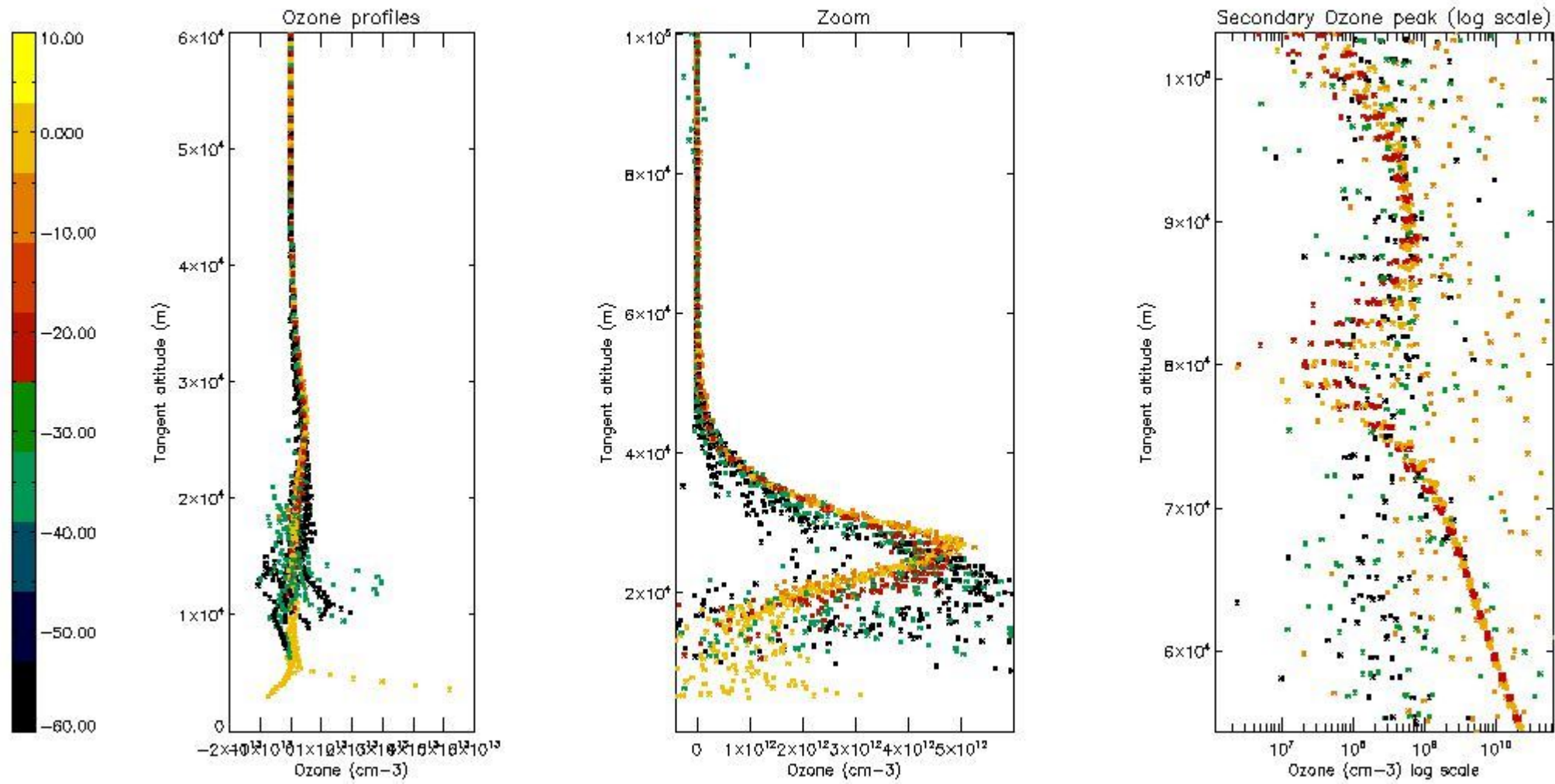
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	14

STD < 10	10
STD < 5	7

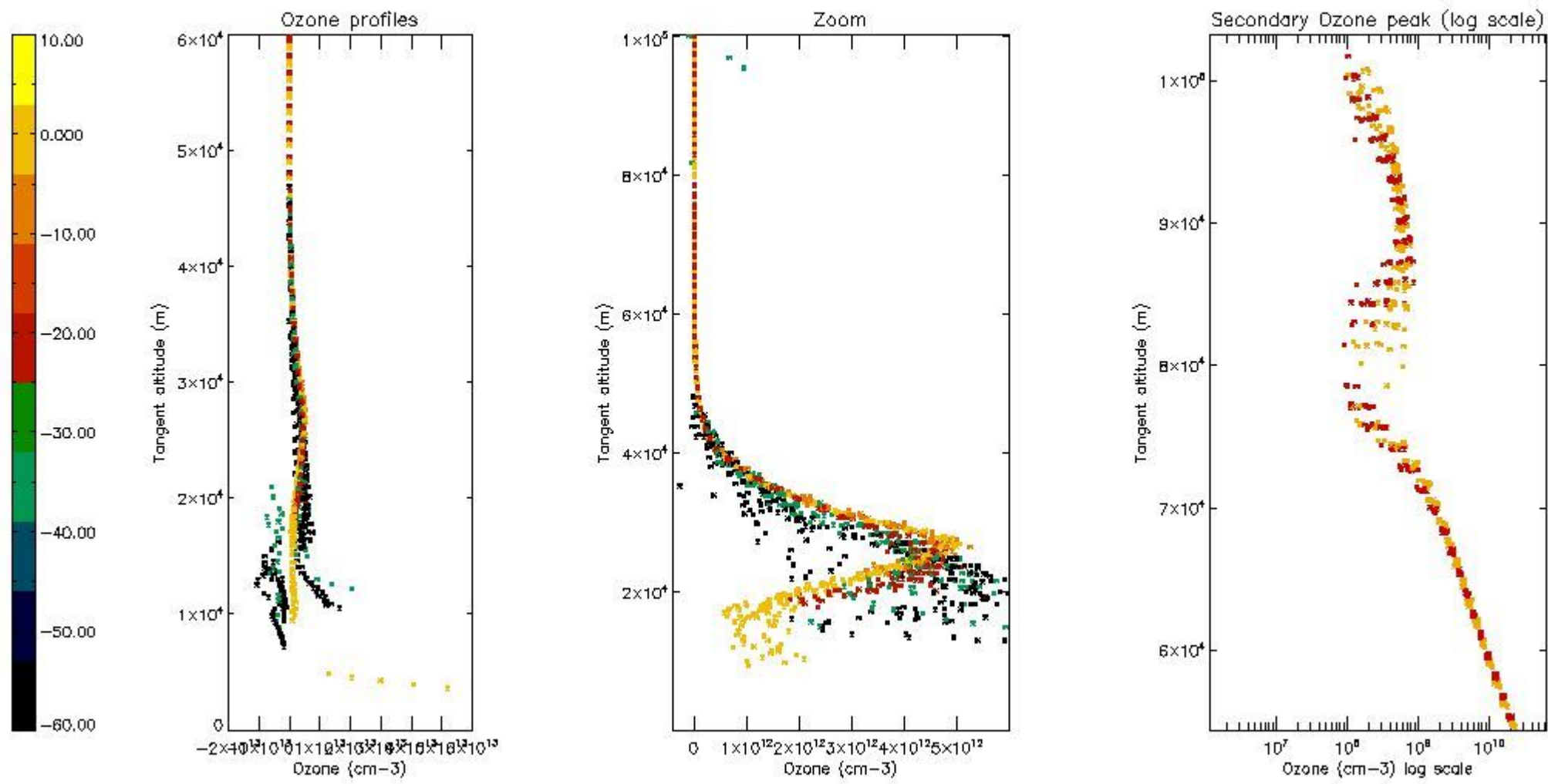
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



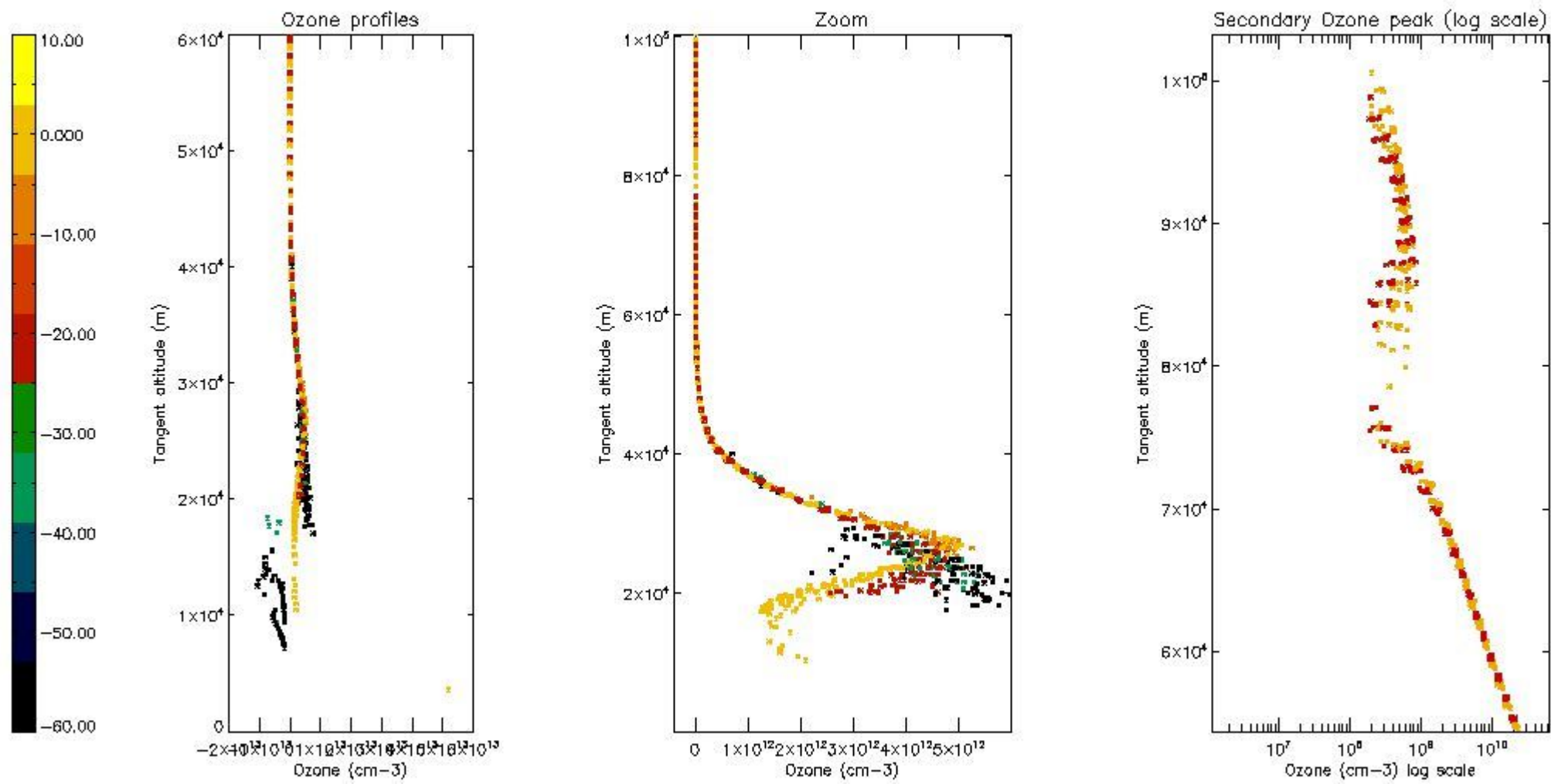
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



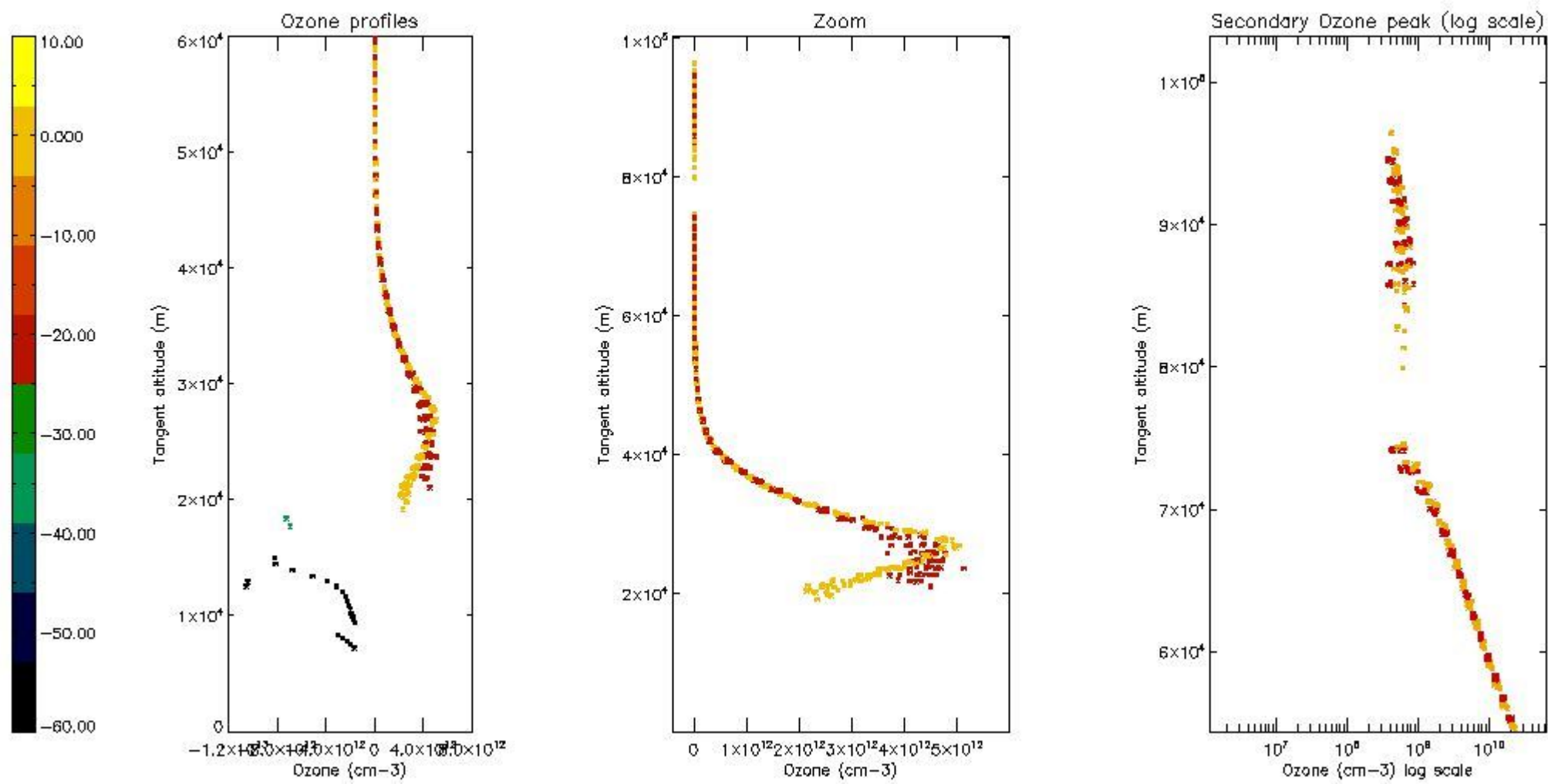
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



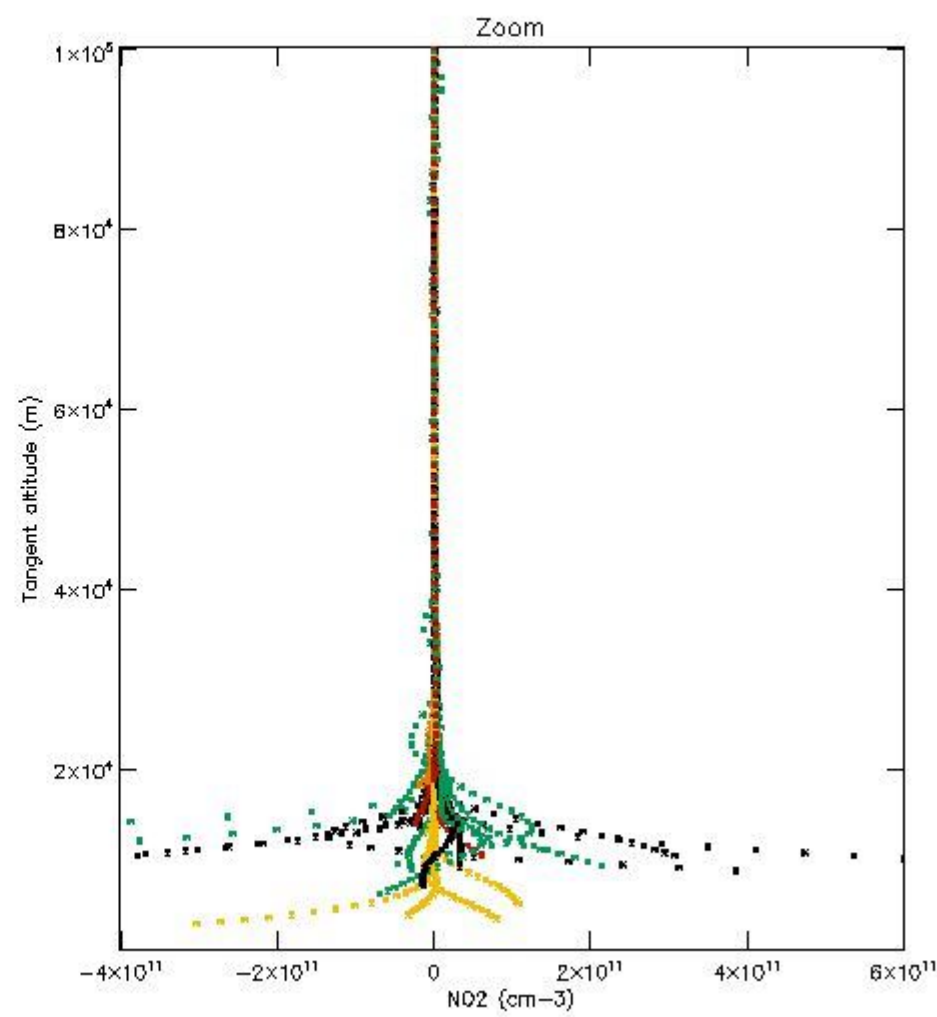
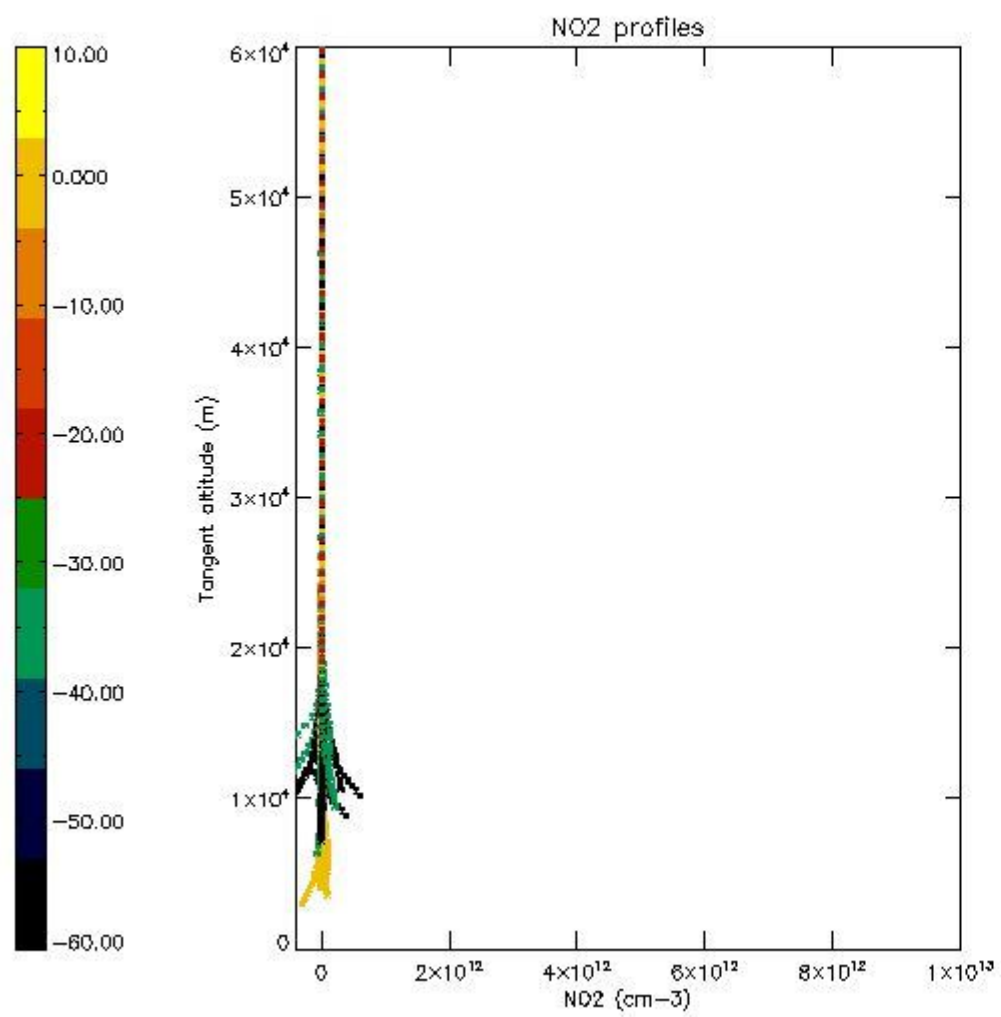
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



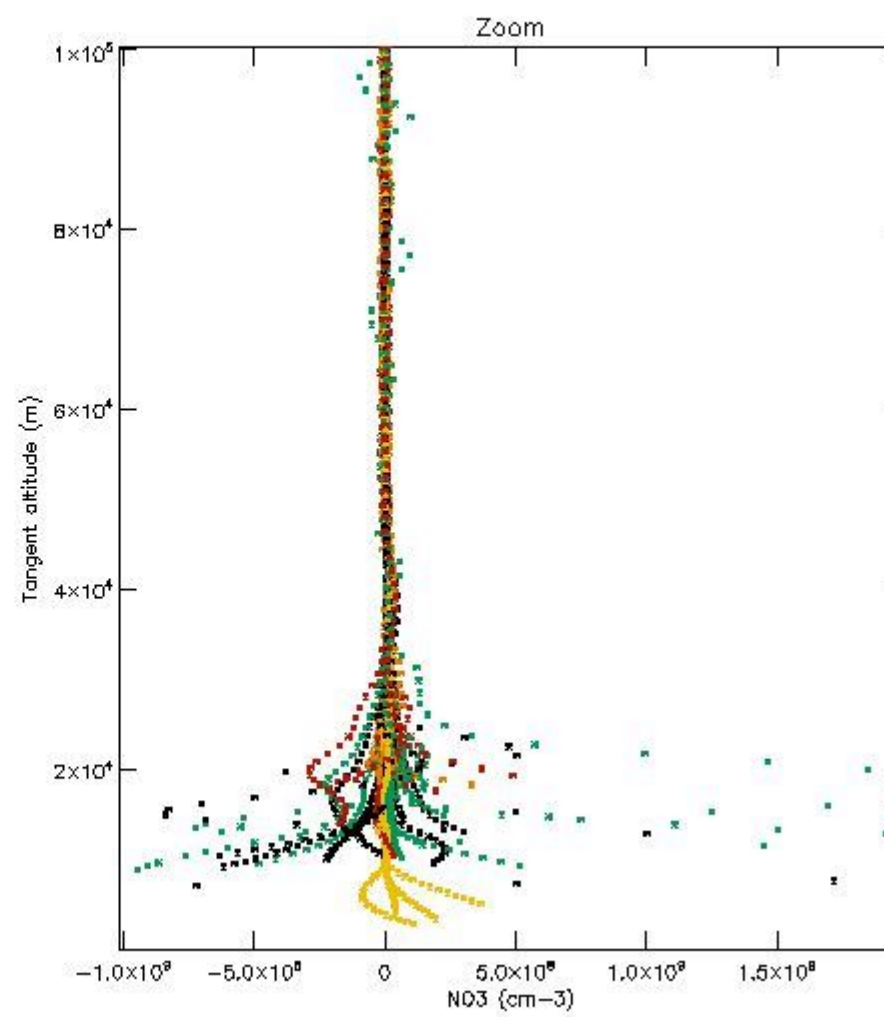
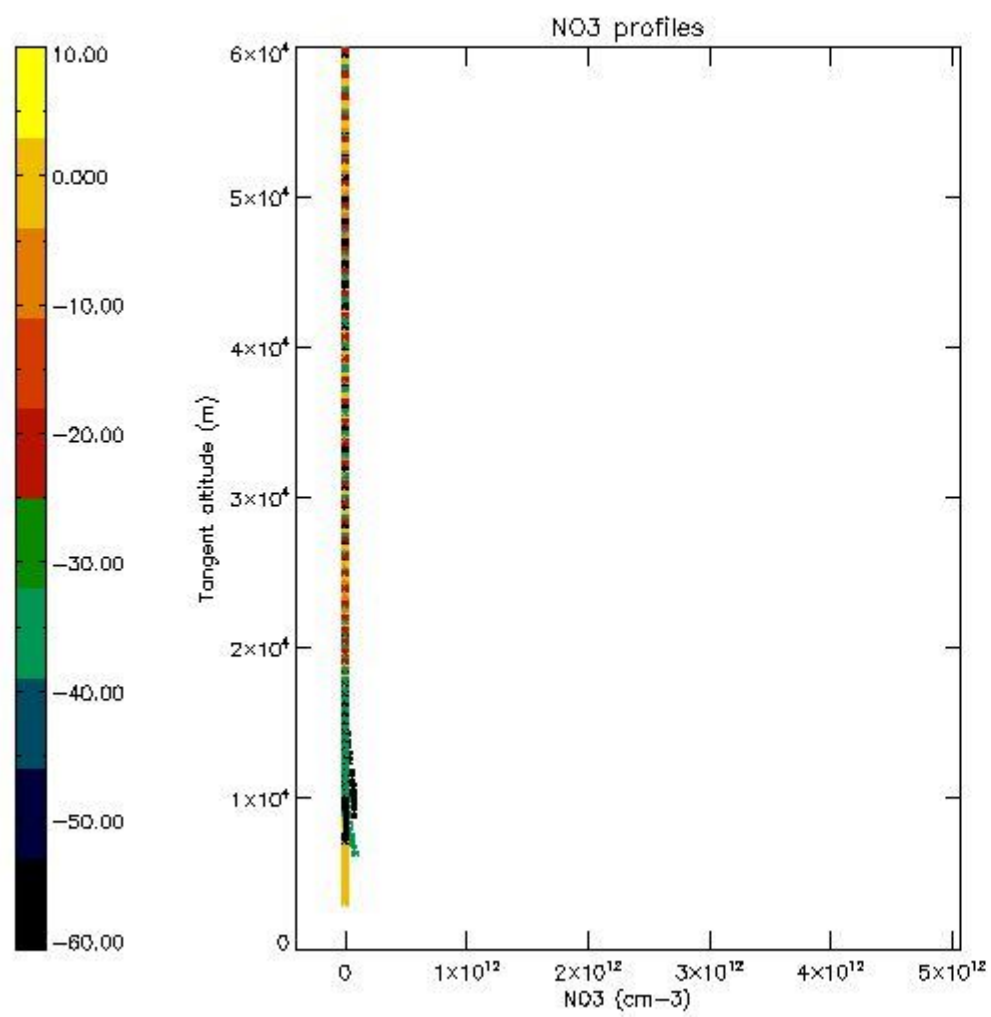
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



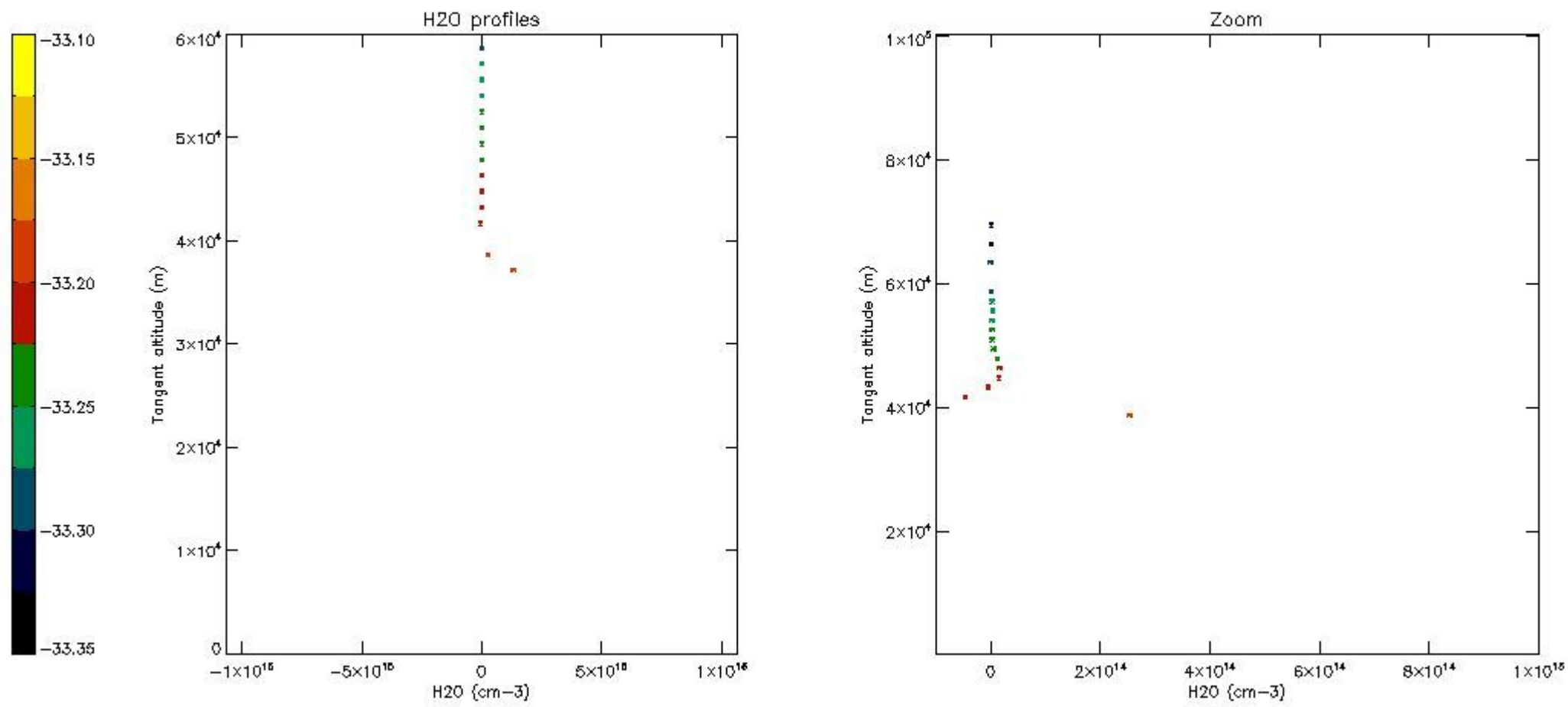
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	14-OCT-2007 00:00:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	14-OCT-2007 00:00:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	14-OCT-2007 00:00:09

GOMOS Level 2 Daily Report

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[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](#)

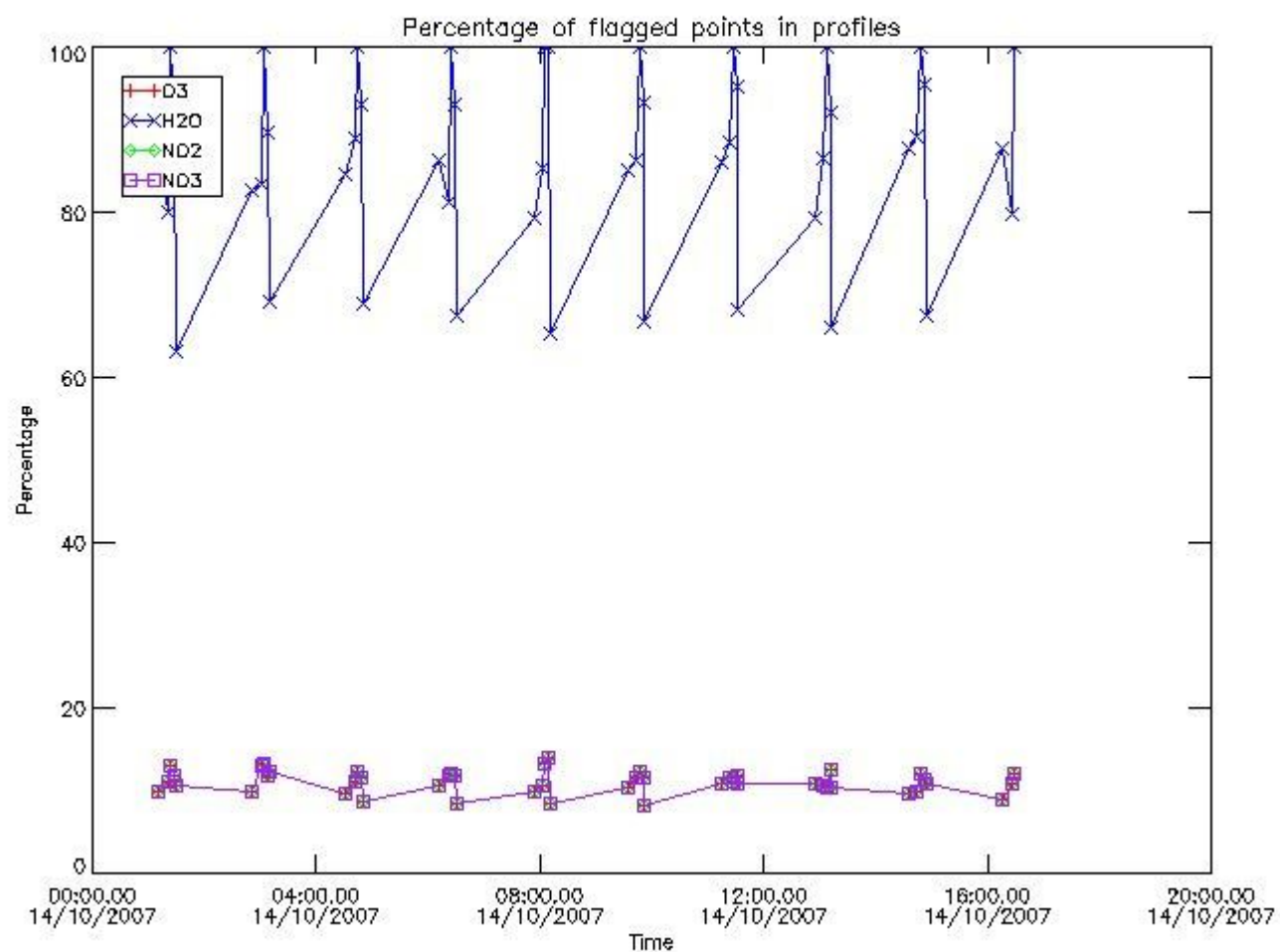
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20071014_145221_000000452062_00283_29395_3667.N1	14-OCT-2007 14:52:21	Dark	45.000	161	Tau Pup	2.9310	4500.0	90	29395	No
162	GOM_NL__2PRFIN20071014_145343_000000472062_00283_29395_3668.N1	14-OCT-2007 14:53:43	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	29395	No
163	GOM_NL__2PRFIN20071014_150537_000000442062_00283_29395_3669.N1	14-OCT-2007 15:05:37	Straylight	44.000	157	The1Eri	2.9060	9300.0	88	29395	No
164	GOM_NL__2PRFIN20071014_151448_000000432062_00283_29395_3670.N1	14-OCT-2007 15:14:48	Straylight	42.500	52	16Bet Cet	2.0370	4500.0	85	29395	No
165	GOM_NL__2PRFIN20071014_152430_000000362062_00283_29395_3671.N1	14-OCT-2007 15:24:30	Bright	35.500	140	88Gam Peg	2.8340	26000.	71	29395	No
166	GOM_NL__2PRFIN20071014_152829_000000382062_00283_29395_3672.N1	14-OCT-2007 15:28:29	Bright	37.500	58	21Alp And	2.0730	11000.	75	29395	No
167	GOM_NL__2PRFIN20071014_153107_000000422062_00283_29395_3673.N1	14-OCT-2007 15:31:07	Bright	42.000	53	43Bet And	2.0480	3300.0	84	29395	No
168	GOM_NL__2PRFIN20071014_153635_000000392062_00283_29395_3674.N1	14-OCT-2007 15:36:35	Bright	38.500	68	18Alp Cas	2.2250	4500.0	77	29395	No
169	GOM_NL__2PRFIN20071014_153757_000000382062_00283_29395_3675.N1	14-OCT-2007 15:37:57	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	29395	No
170	GOM_NL__2PRFIN20071014_154531_000000372062_00283_29395_3676.N1	14-OCT-2007 15:45:31	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	29395	No
171	GOM_NL__2PRFIN20071014_155343_000000522062_00283_29395_3677.N1	14-OCT-2007 15:53:43	Bright	52.000	36	50Alp UMa	1.8000	6300.0	104	29395	No
172	GOM_NL__2PRFIN20071014_155516_000000352062_00283_29395_3678.N1	14-OCT-2007 15:55:16	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	29395	No
173	GOM_NL__2PRFIN20071014_155839_000000402062_00283_29395_3679.N1	14-OCT-2007 15:58:39	Bright	39.500	174	52Psi UMa	3.0040	4400.0	79	29395	No
174	GOM_NL__2PRFIN20071014_160533_000000602062_00283_29395_3680.N1	14-OCT-2007 16:05:33	Bright	60.000	166	17Eps Leo	2.9800	6000.0	120	29395	No
175	GOM_NL__2PRFIN20071014_160847_000000572062_00283_29395_3681.N1	14-OCT-2007 16:08:47	Bright	57.000	22	32Alp Leo	1.3600	15200.	114	29395	No
176	GOM_NL__2PRFIN20071014_161603_000000572062_00283_29395_3682.N1	14-OCT-2007 16:16:03	Dark	57.000	48	30Alp Hya	1.9770	4100.0	114	29395	No
177	GOM_NL__2PRFIN20071014_162537_000000482062_00283_29395_3683.N1	14-OCT-2007 16:25:37	Dark	47.500	65	Lam Vel	2.2040	4400.0	95	29395	No
178	GOM_NL__2PRFIN20071014_162844_000000422062_00283_29395_3684.N1	14-OCT-2007 16:28:44	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	29395	No

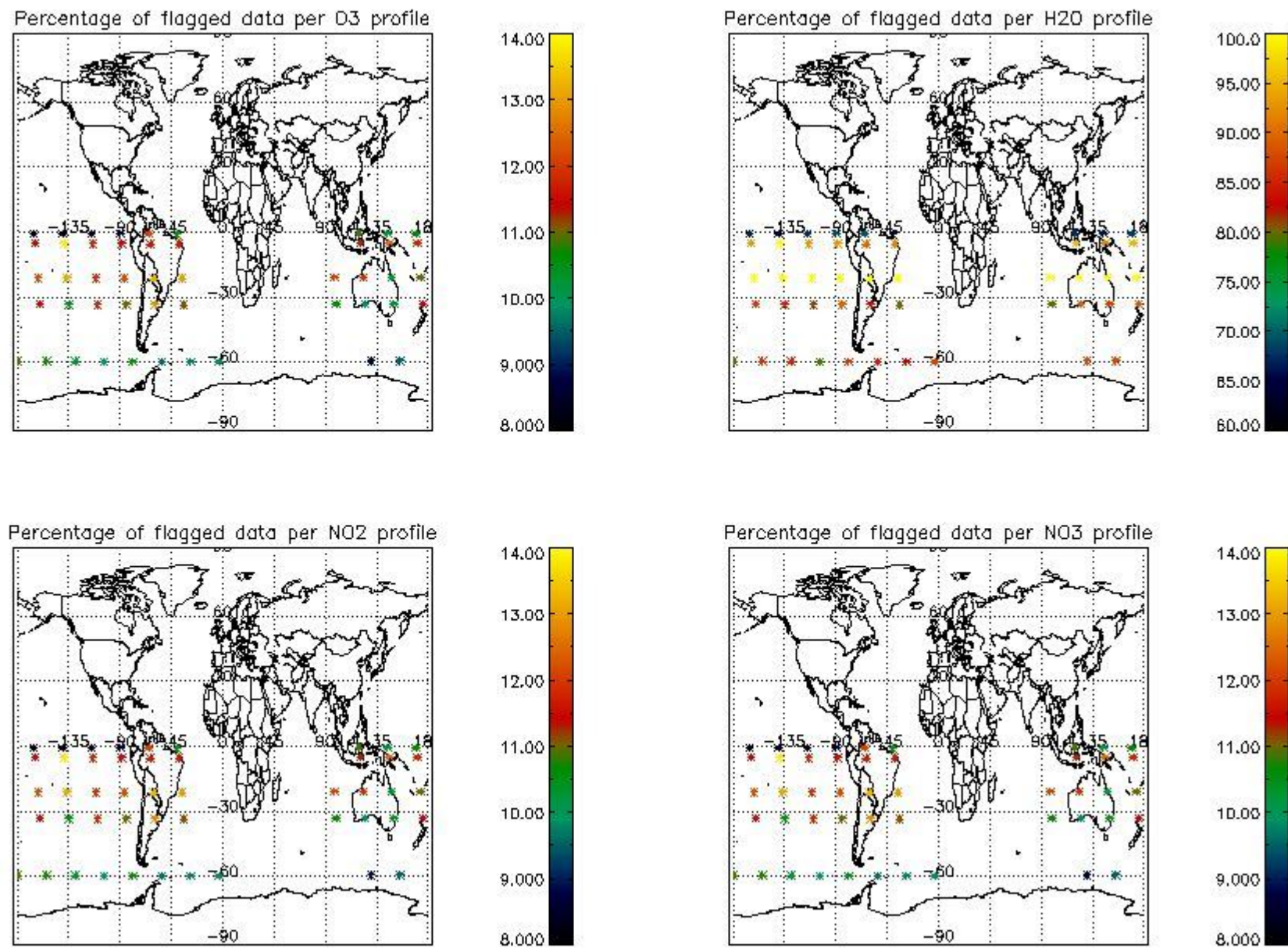
3. Quality information per product

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)

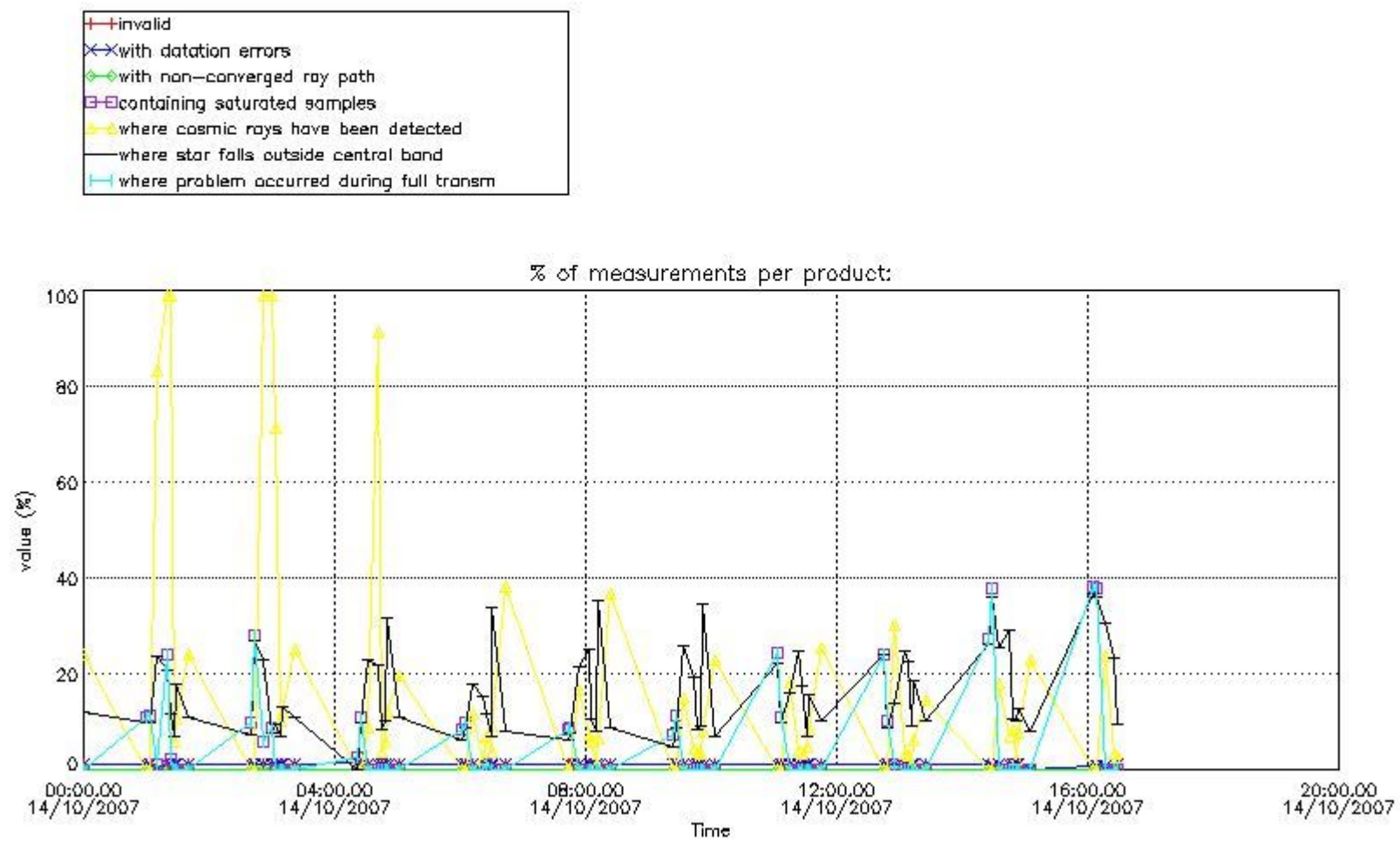


4. Level 1 quality information per product

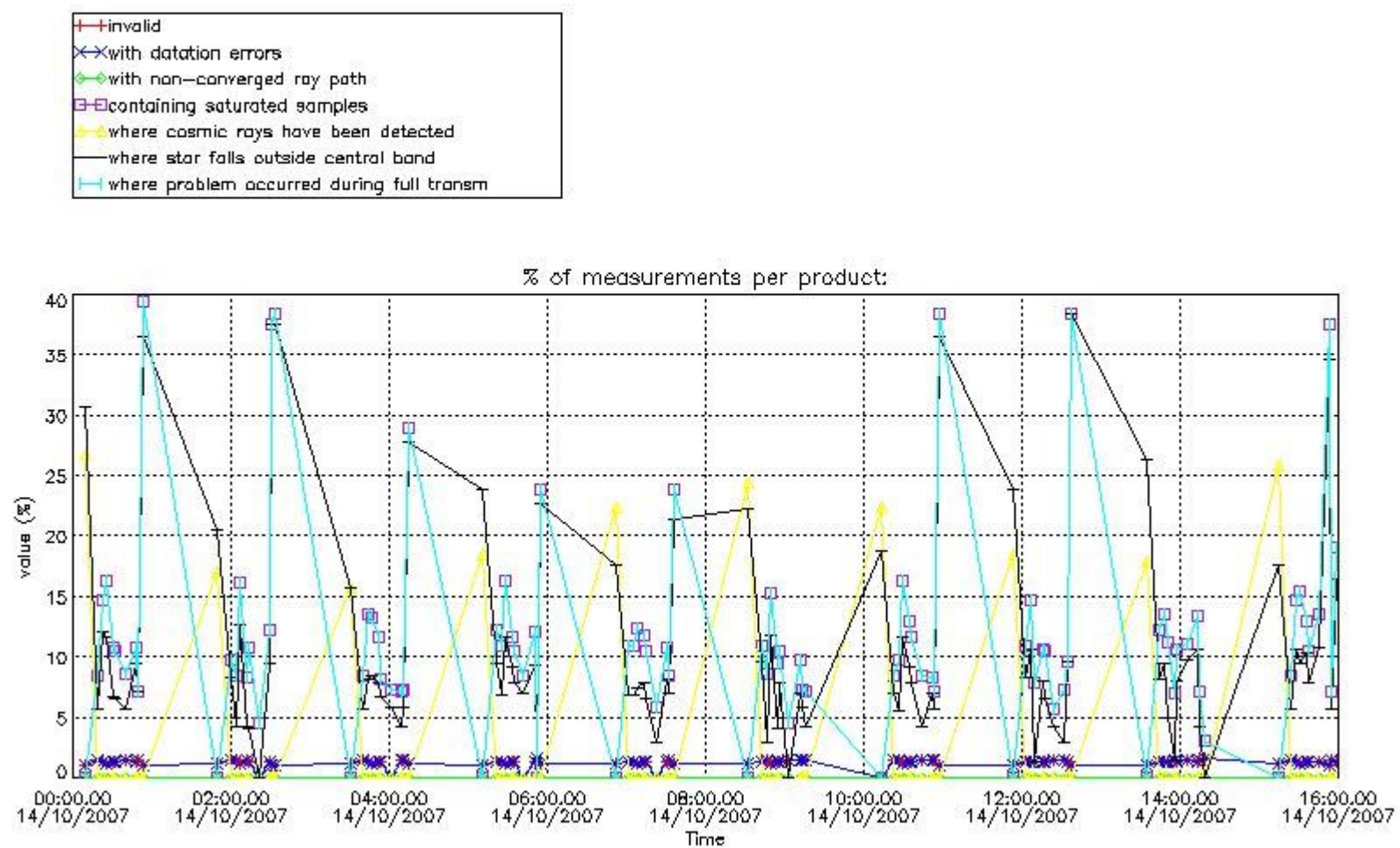
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

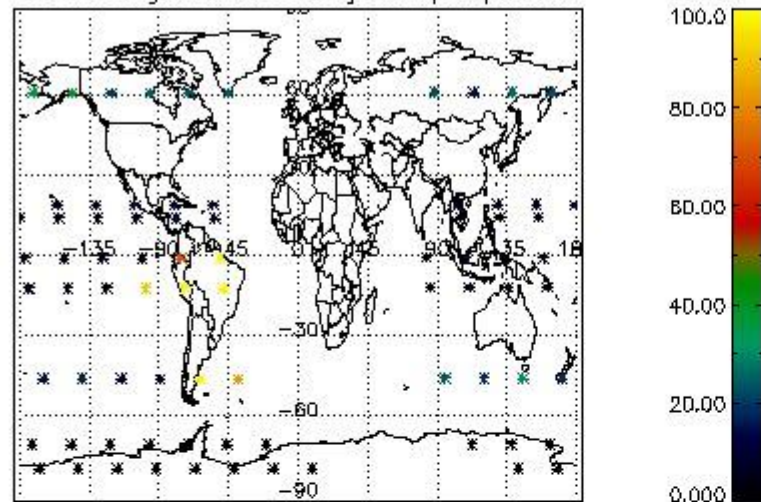


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

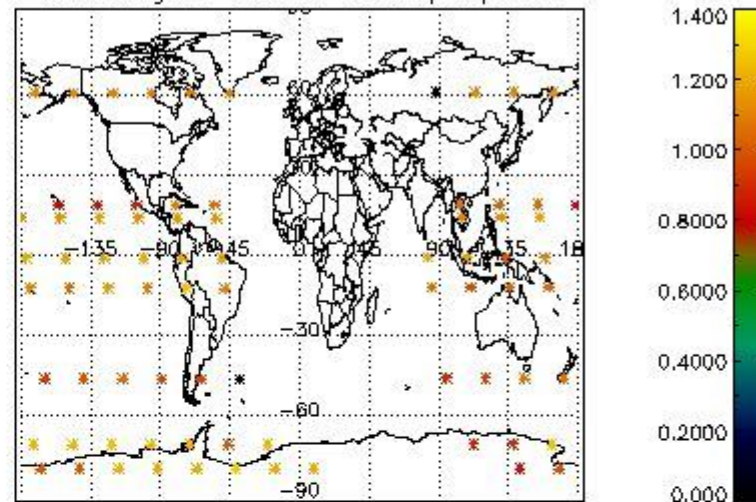


4.2 Plot quality information per product coming from level 1b processing (world map)
 4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

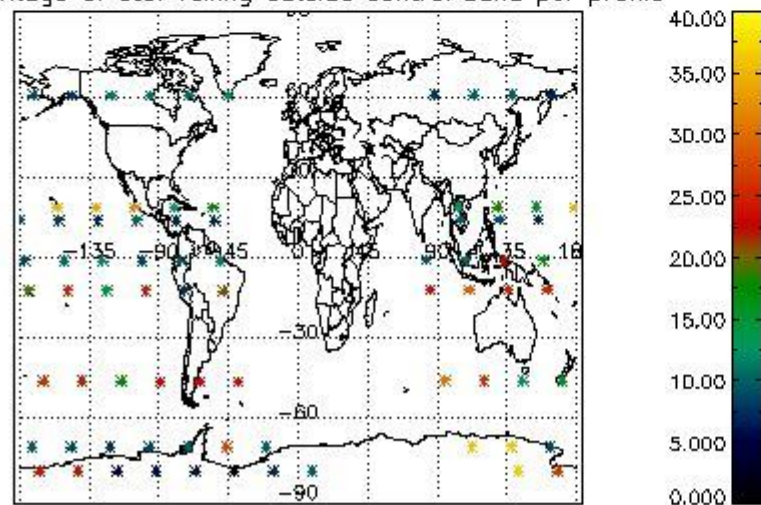
Percentage of cosmic ray hits per profile



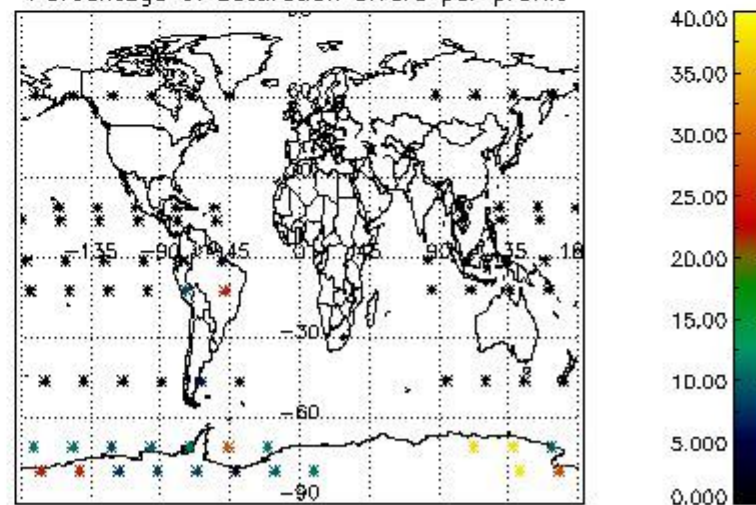
Percentage of datation errors per profile



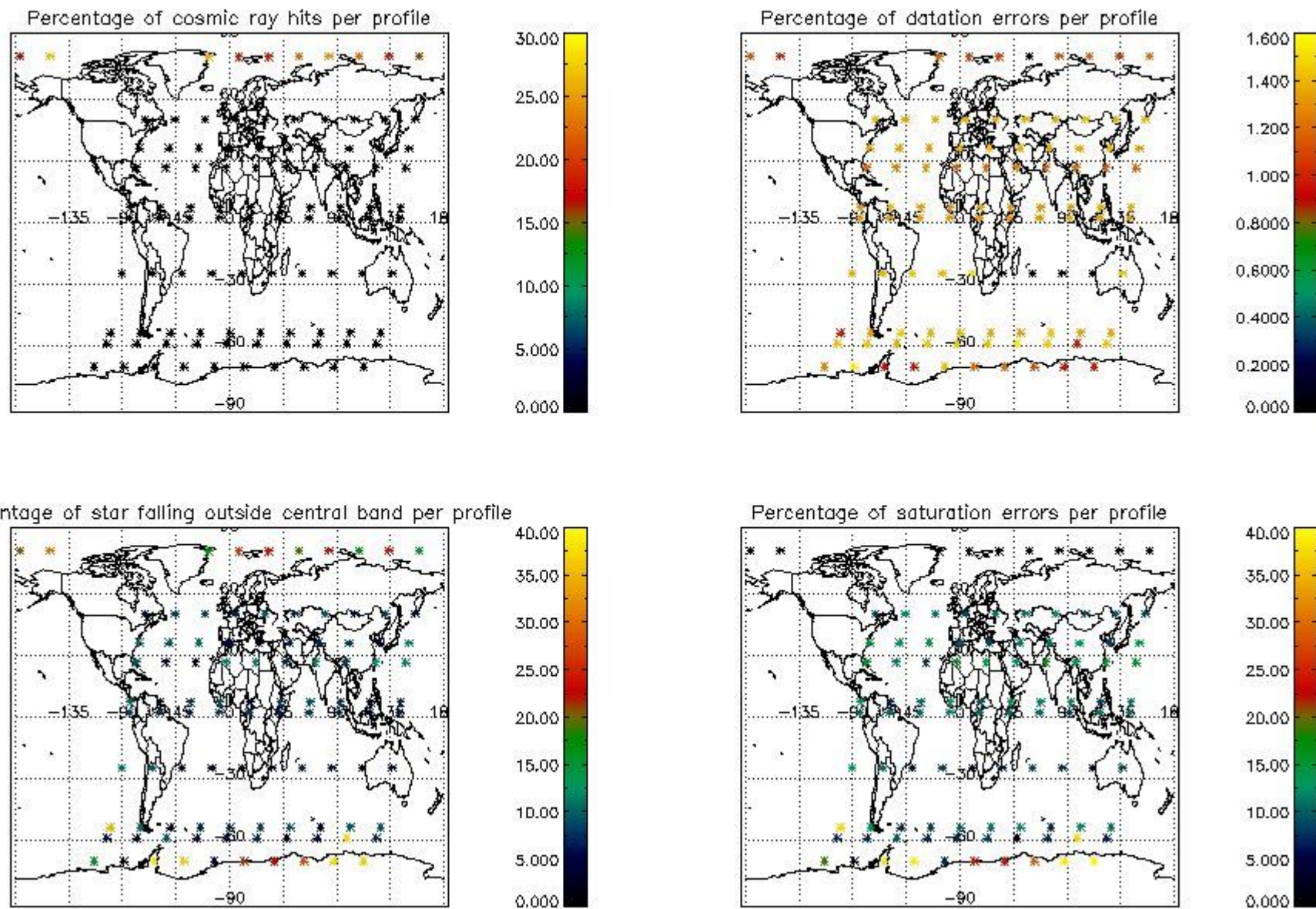
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



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

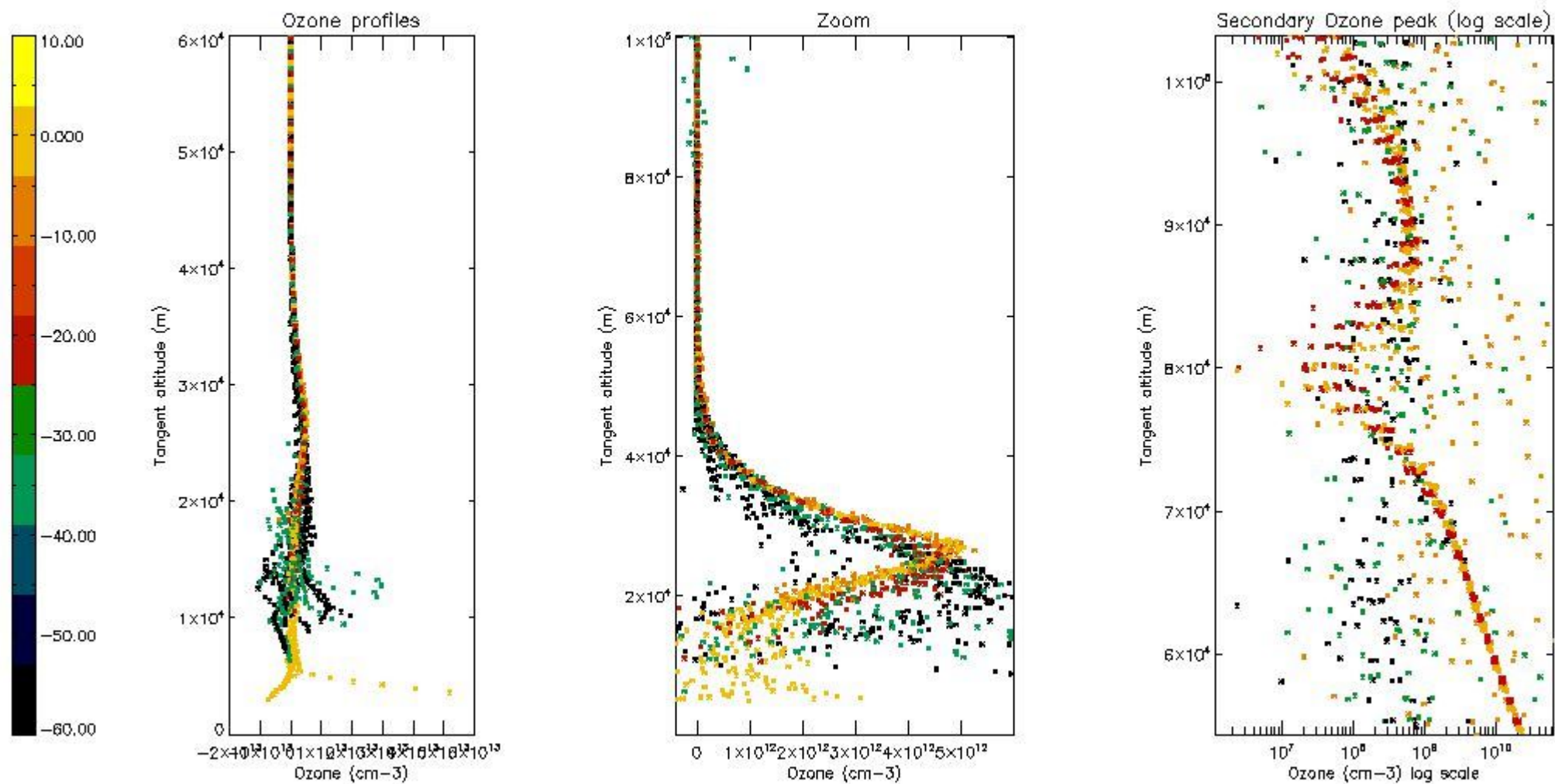
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	14

STD < 10	10
STD < 5	7

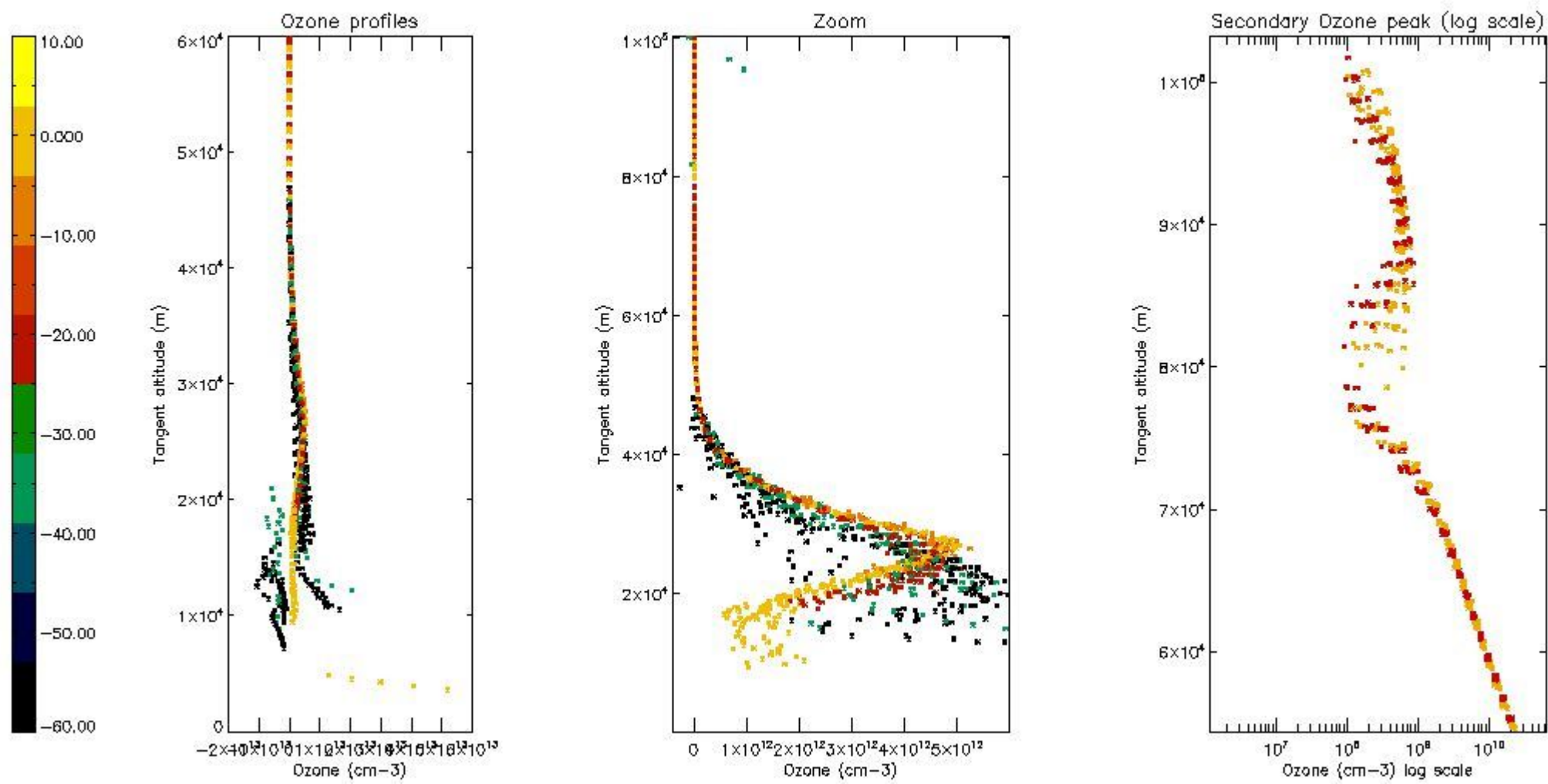
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



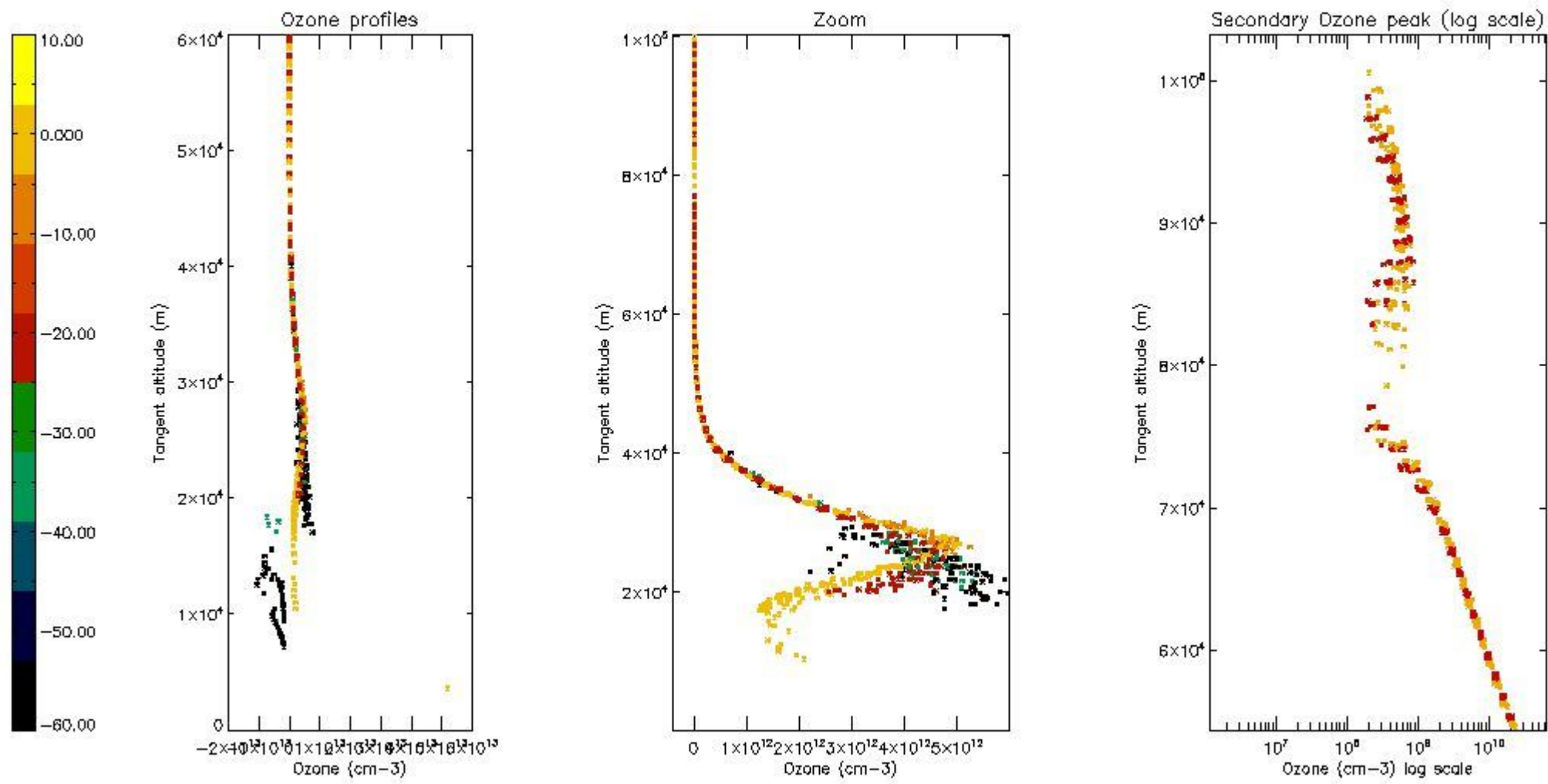
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



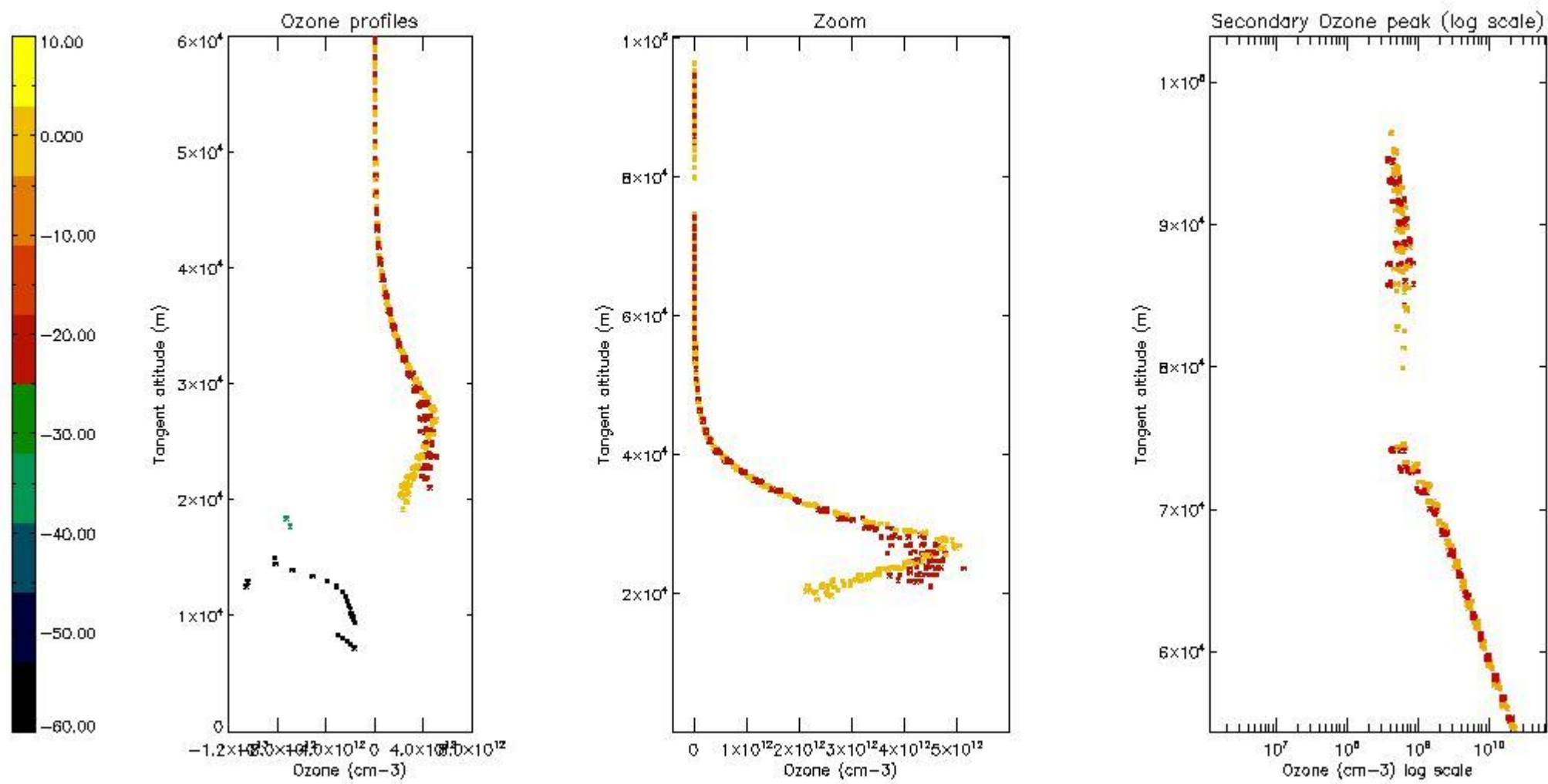
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



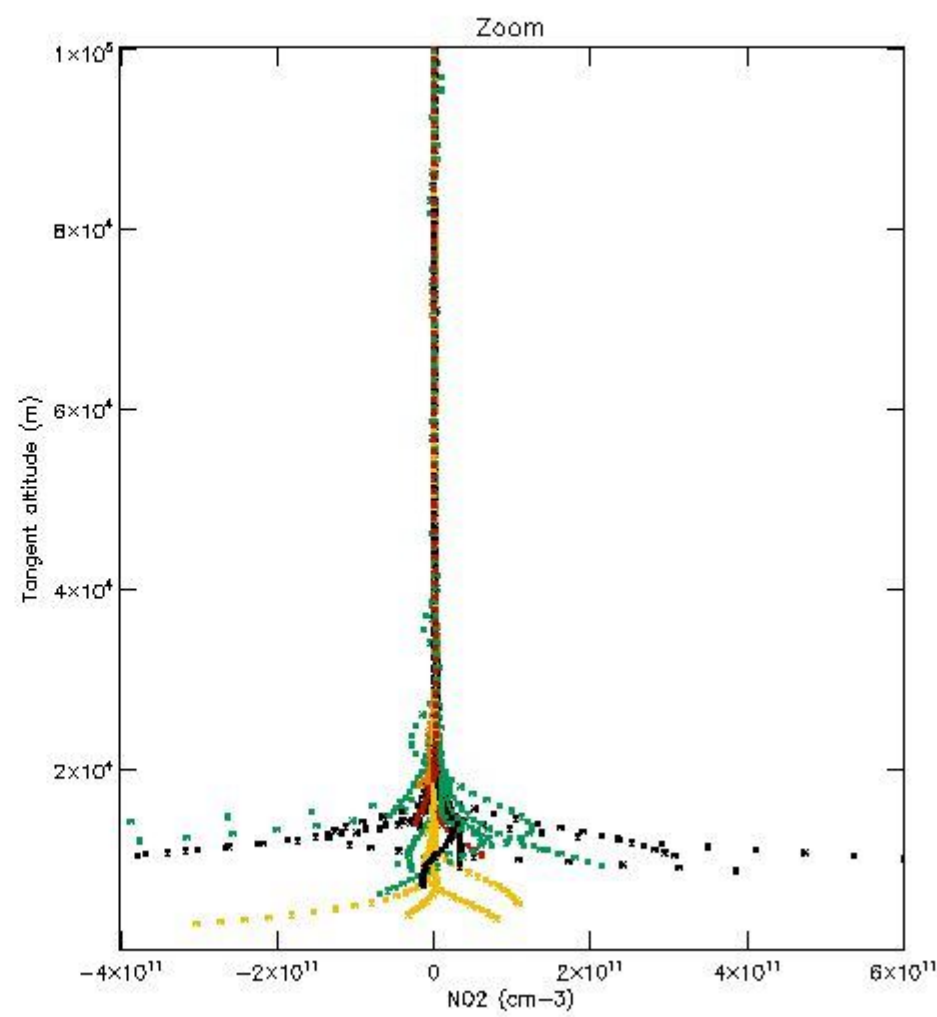
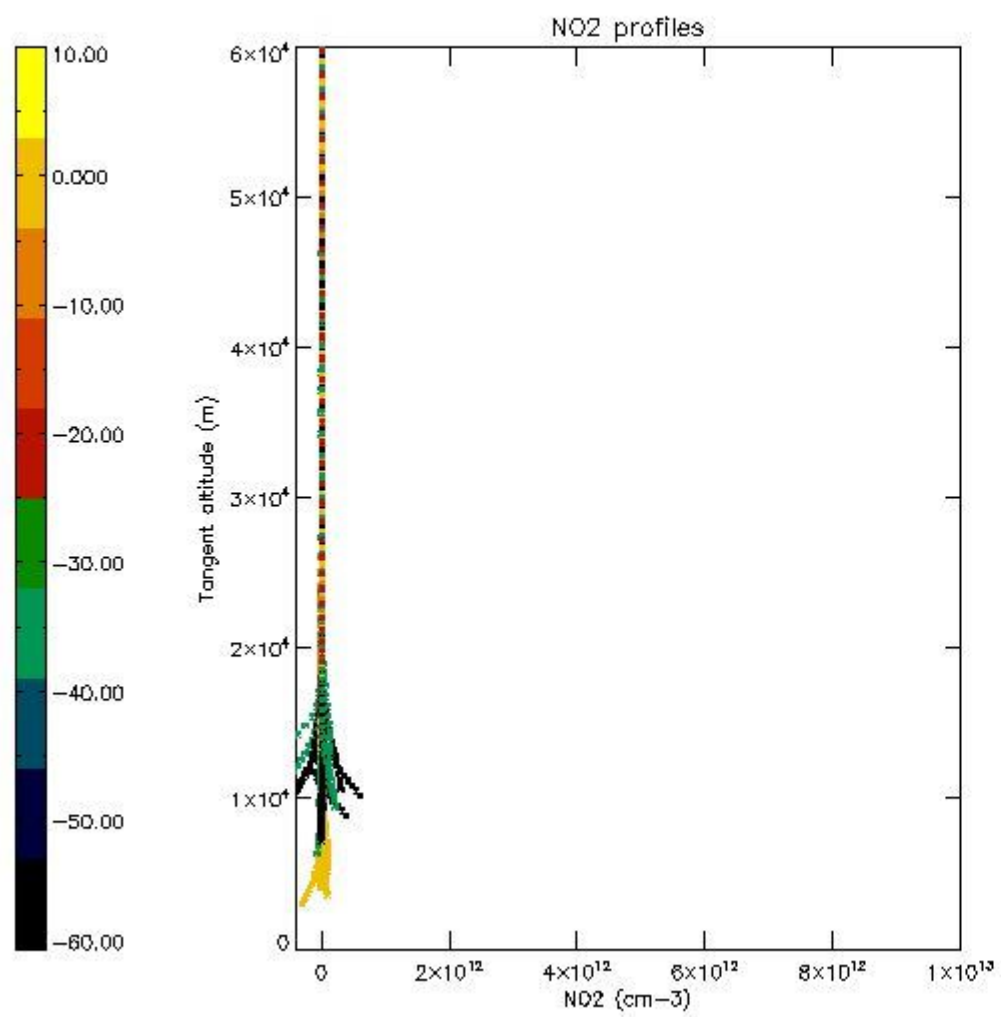
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



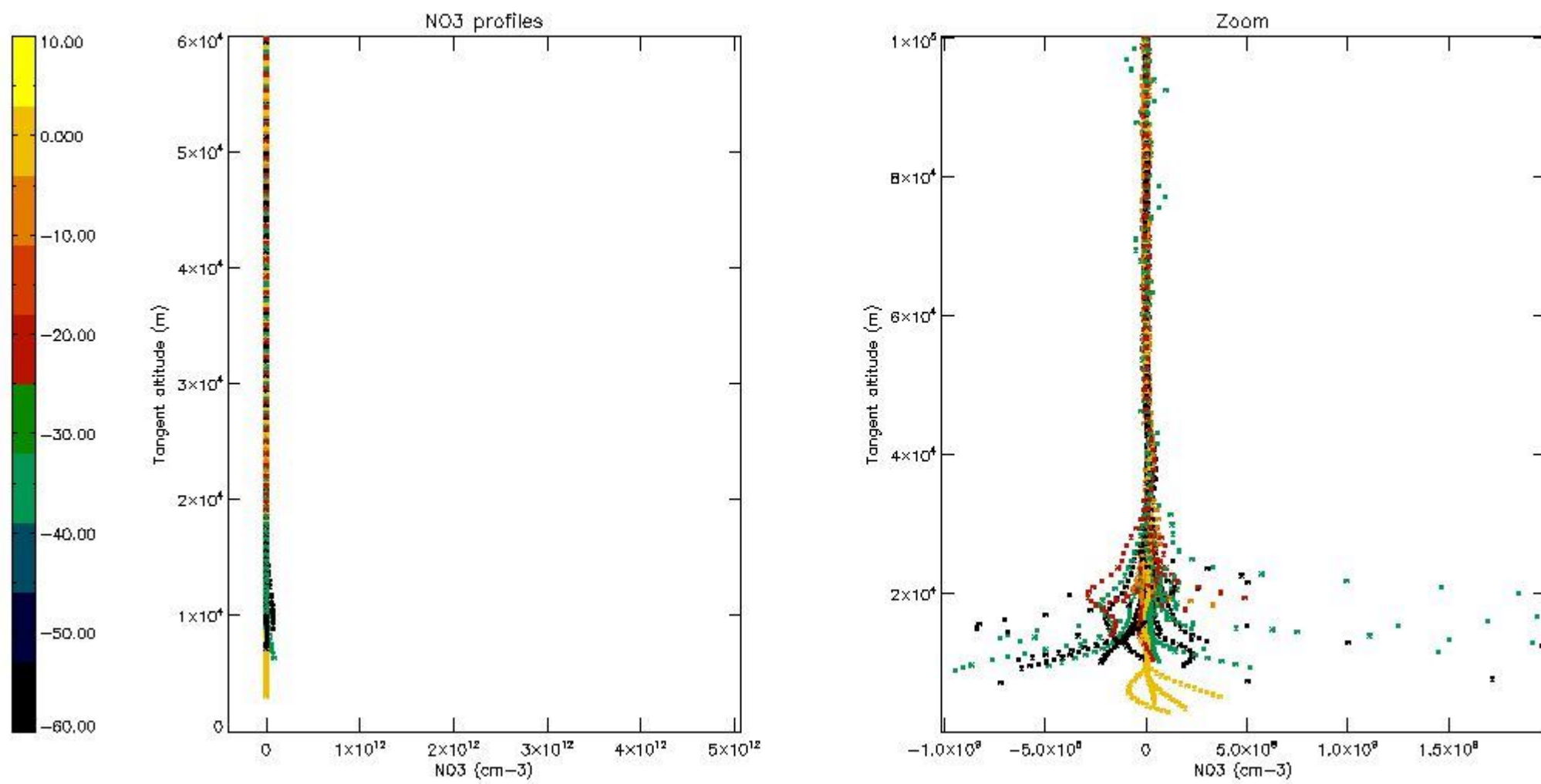
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



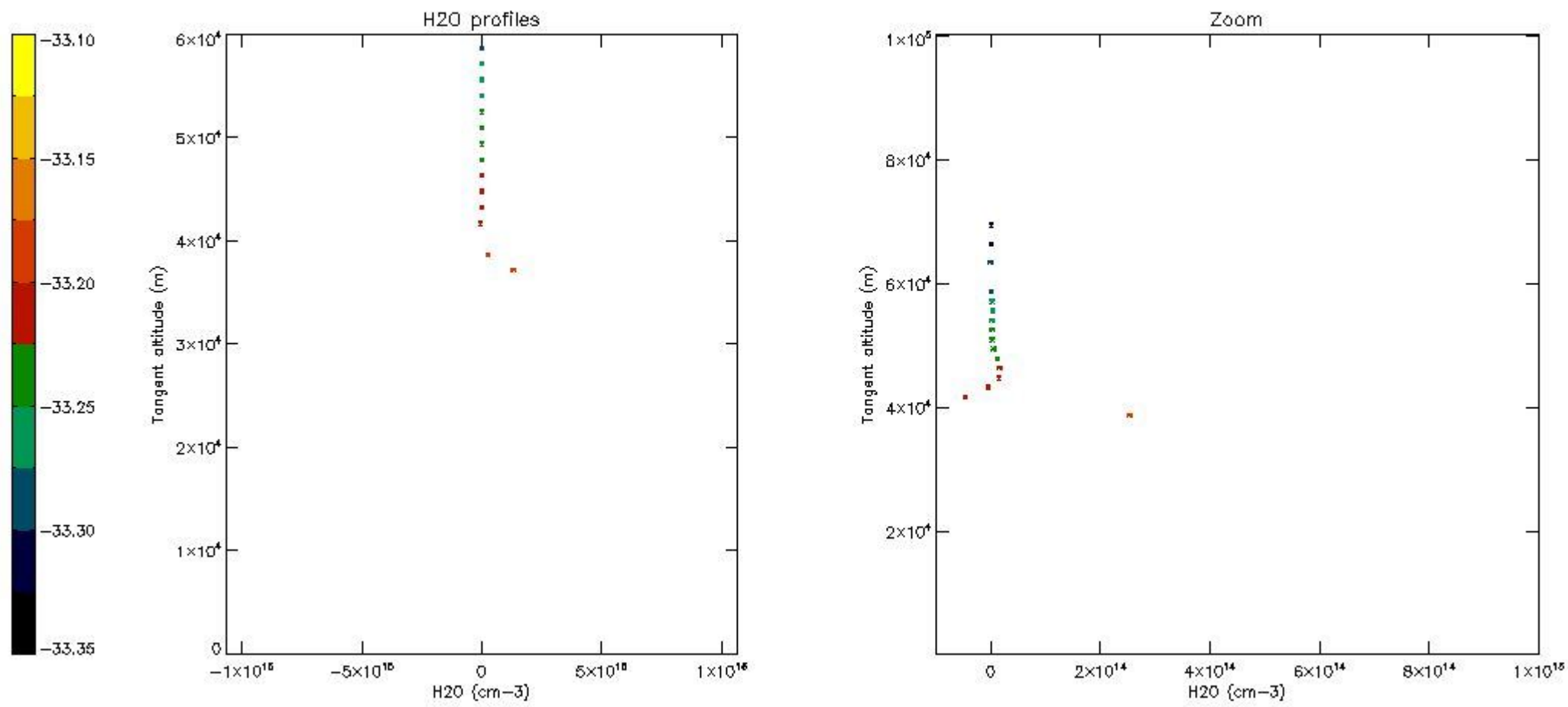
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

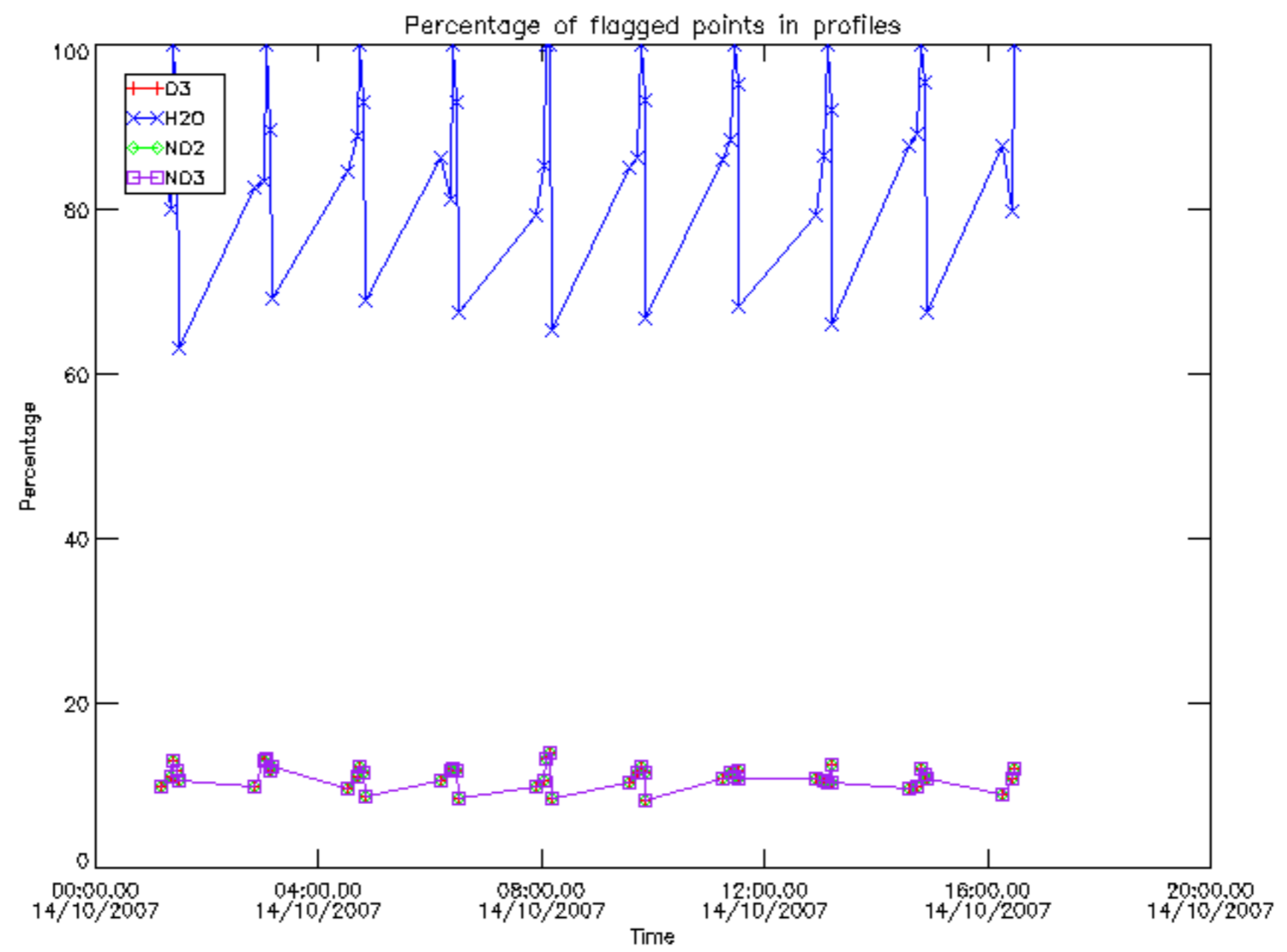
The colorbar represents the latitude.



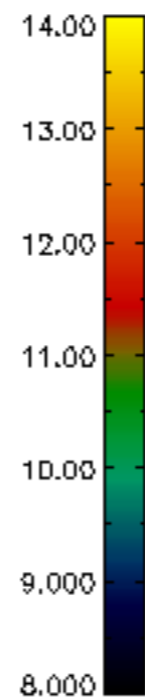
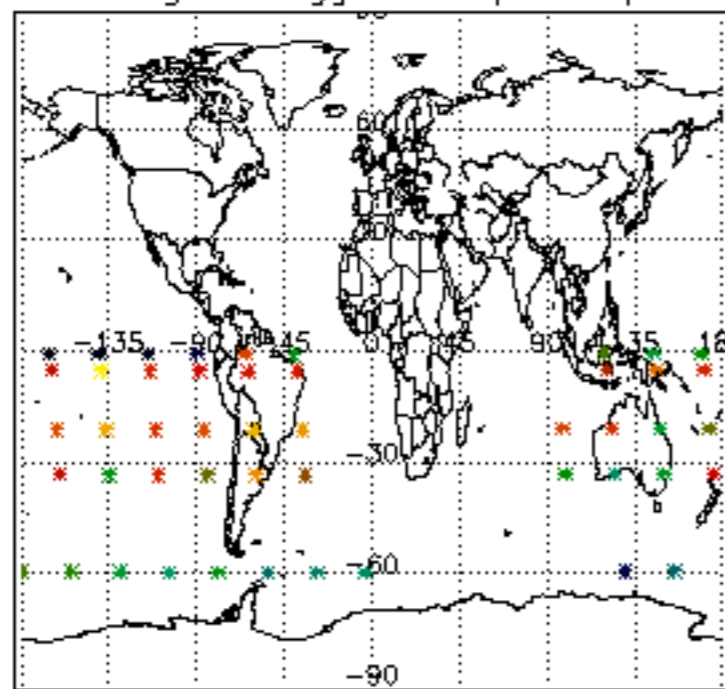
6. Auxiliary Data Files used for the production reported in section 2

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.

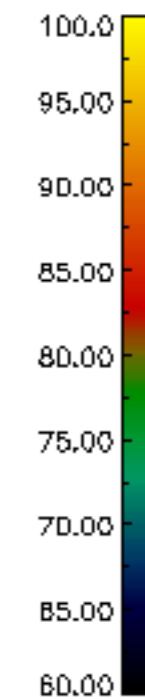
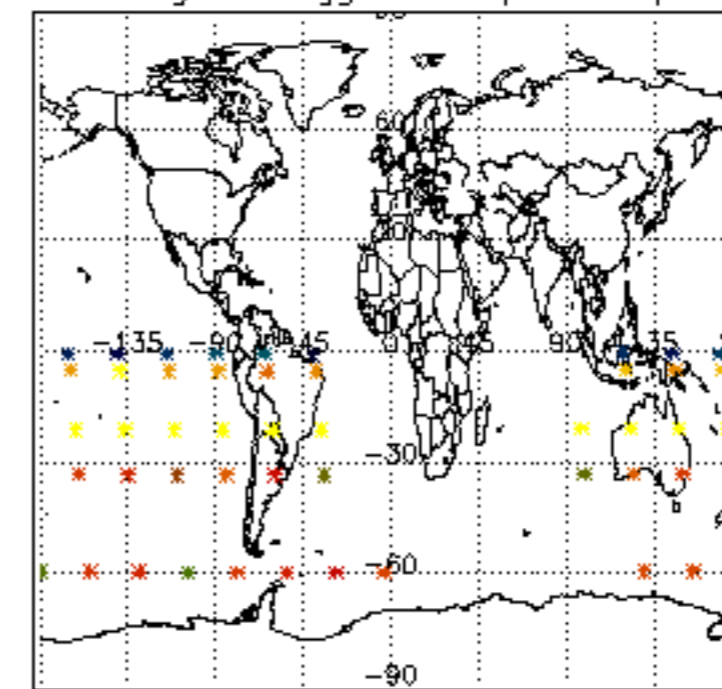
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	14-OCT-2007 00:00:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	14-OCT-2007 00:00:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	14-OCT-2007 00:00:09



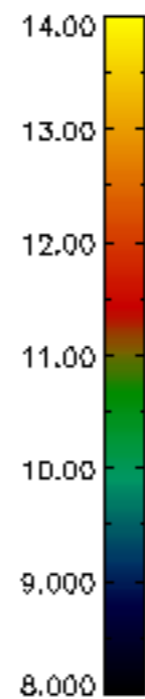
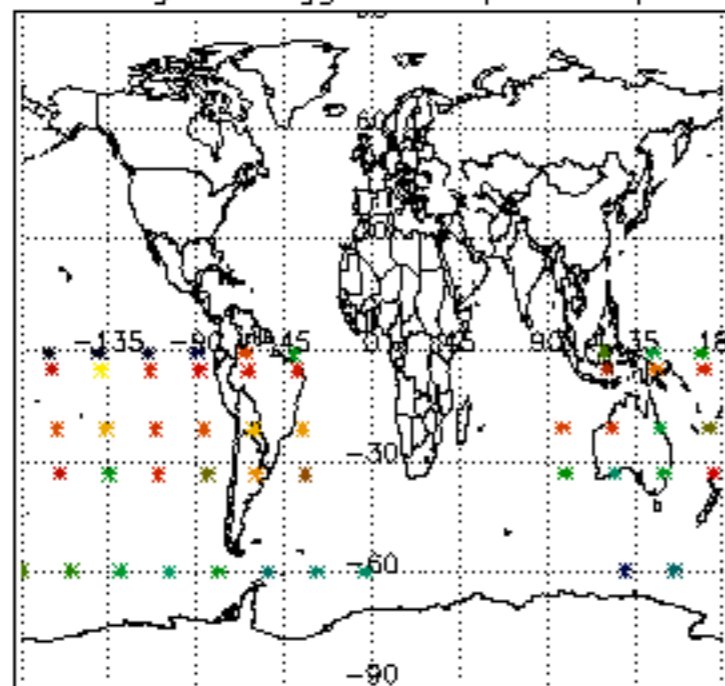
Percentage of flagged data per D3 profile



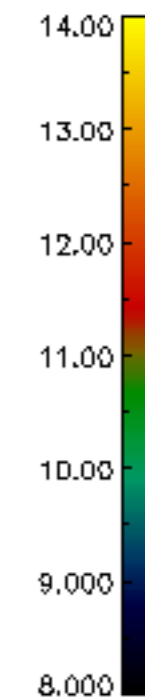
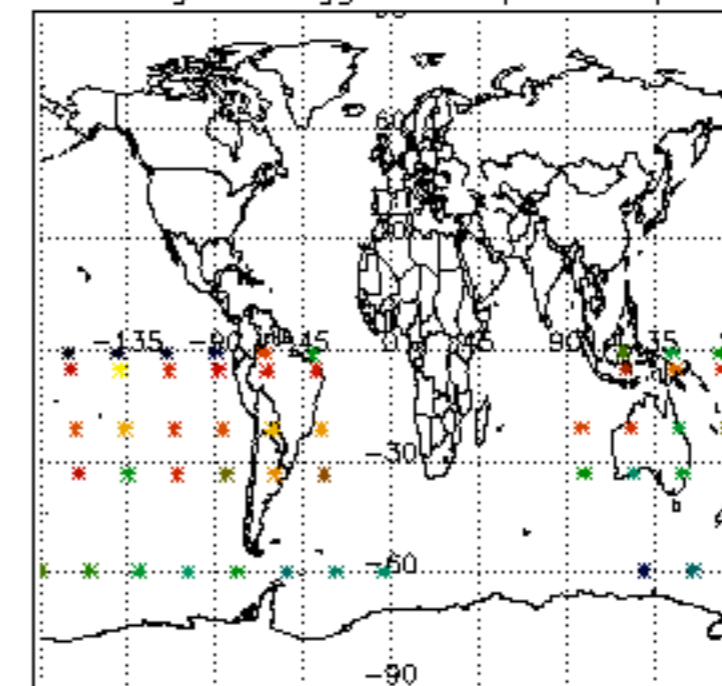
Percentage of flagged data per H2O profile

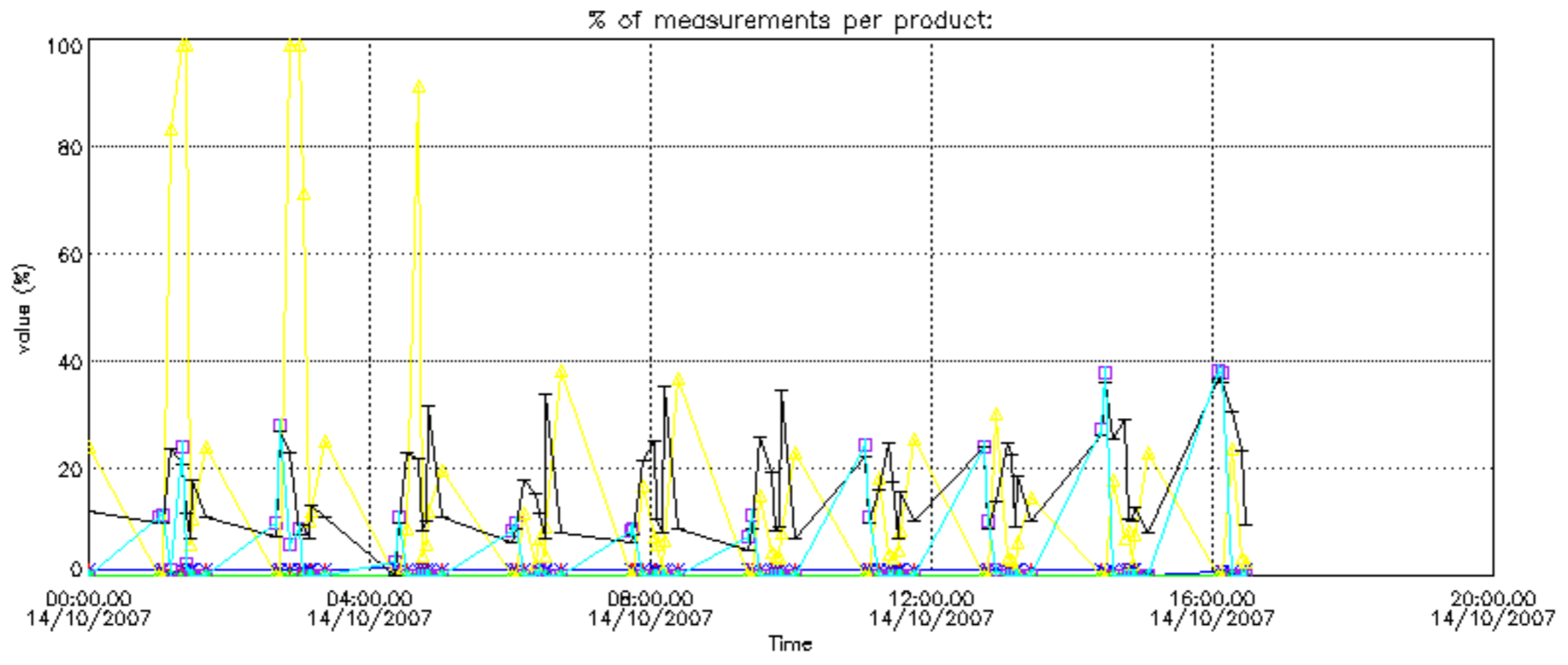


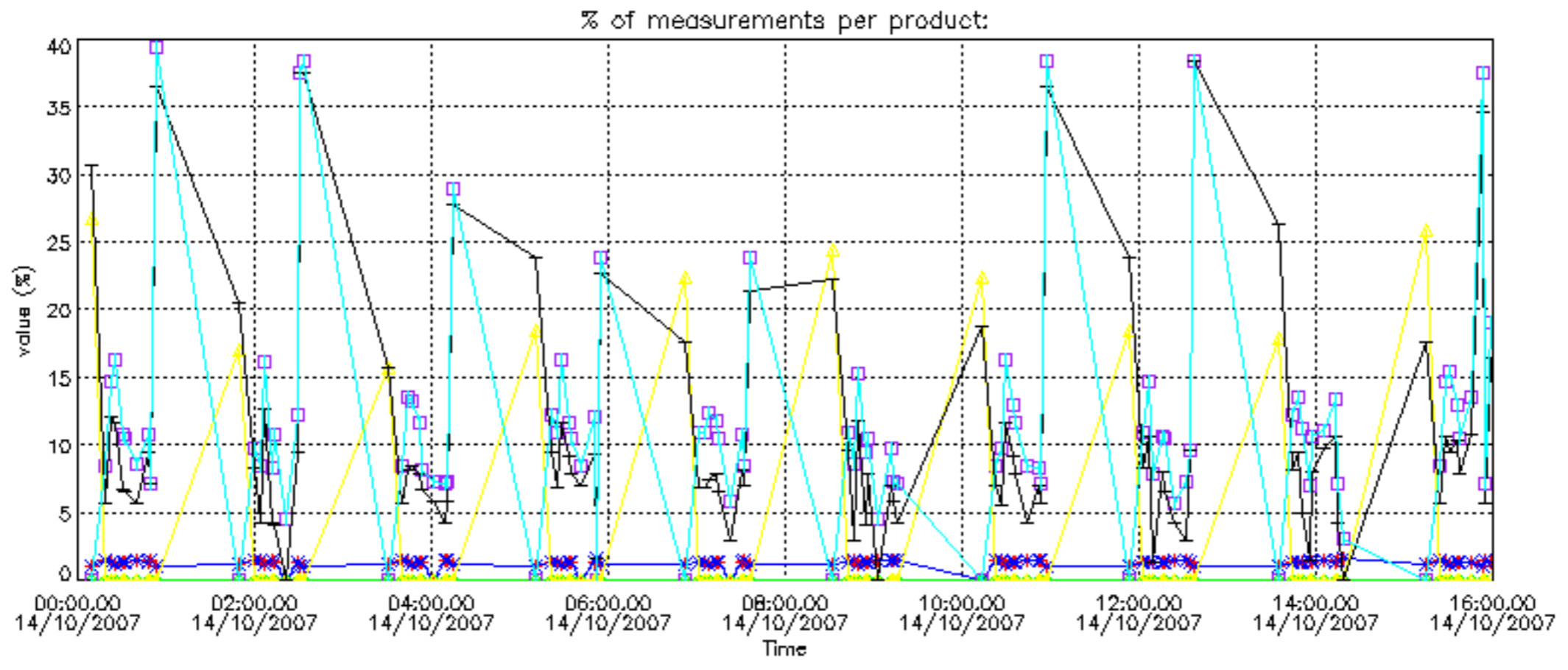
Percentage of flagged data per NO2 profile



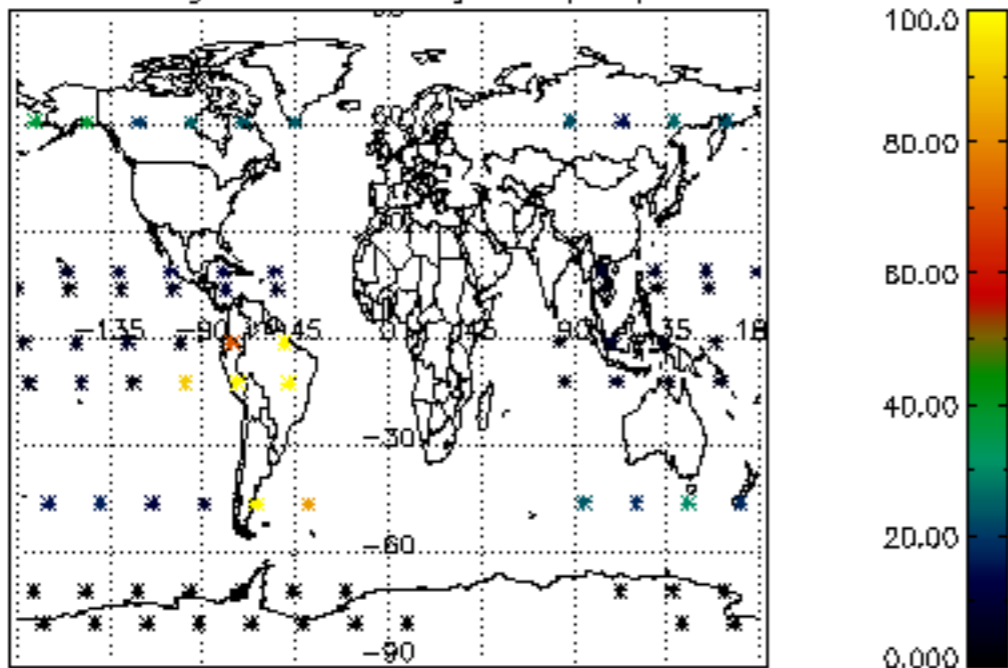
Percentage of flagged data per NO3 profile



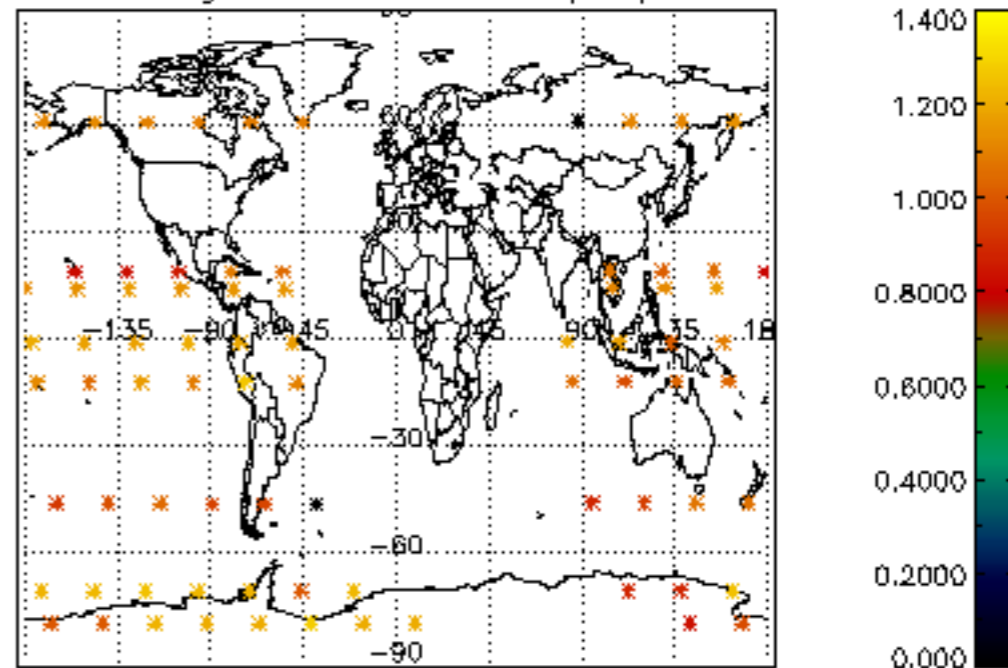




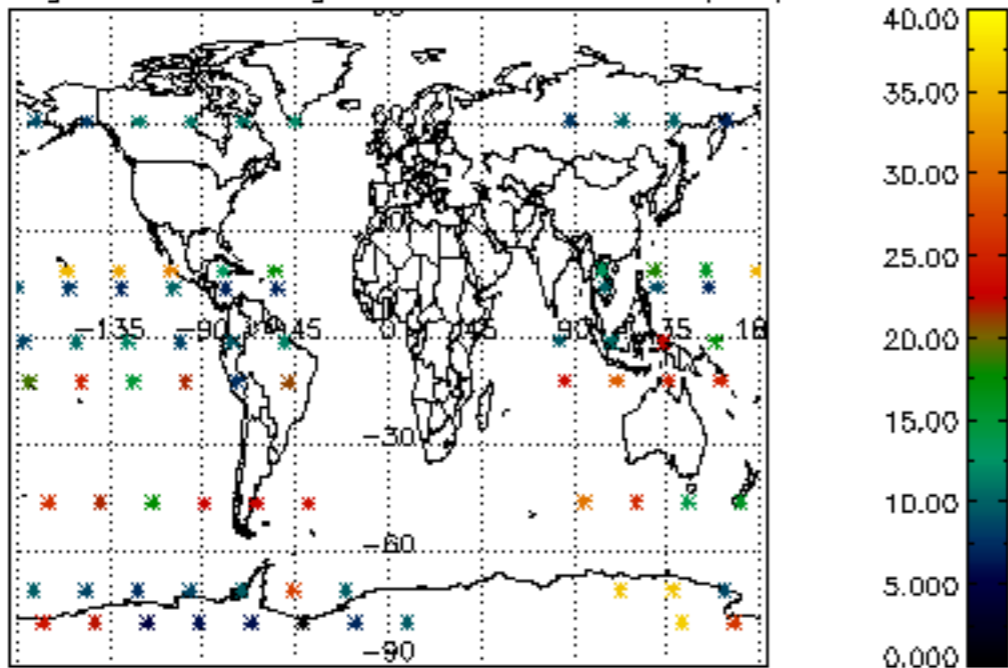
Percentage of cosmic ray hits per profile



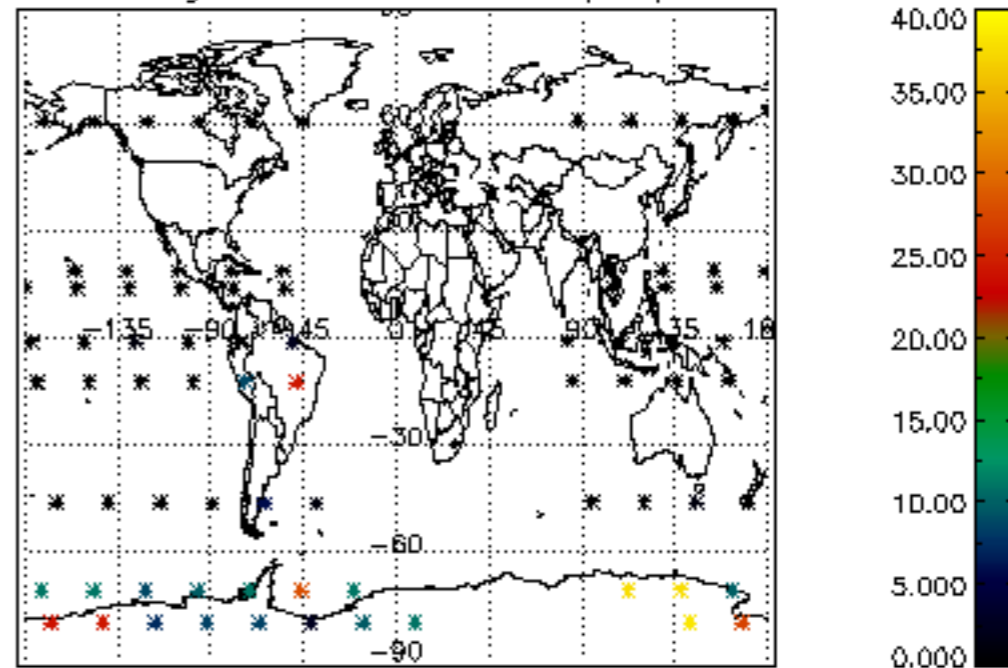
Percentage of datation errors per profile



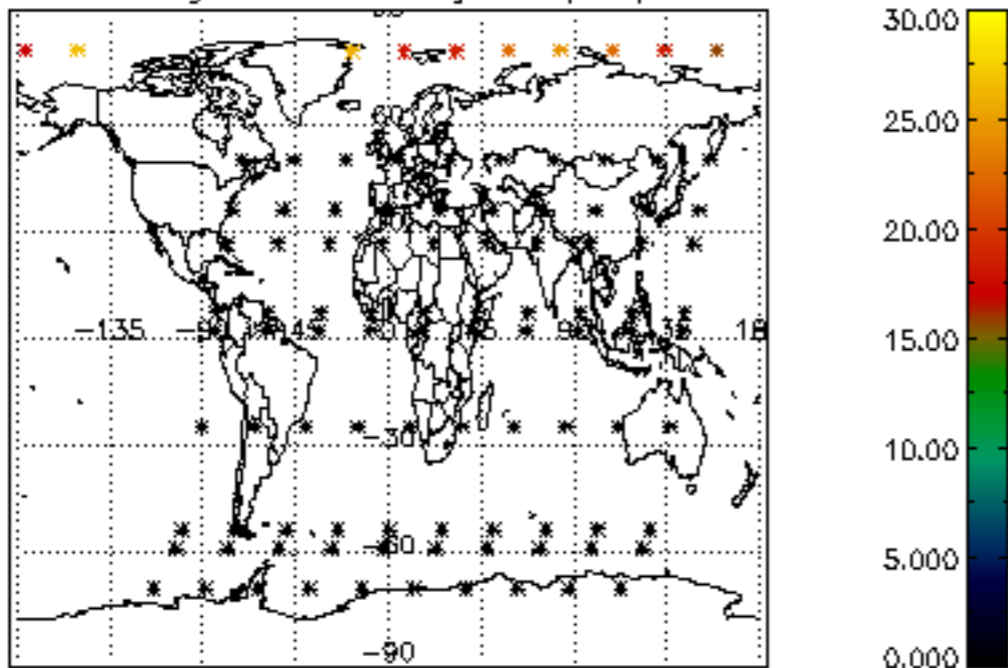
Percentage of star falling outside central band per profile



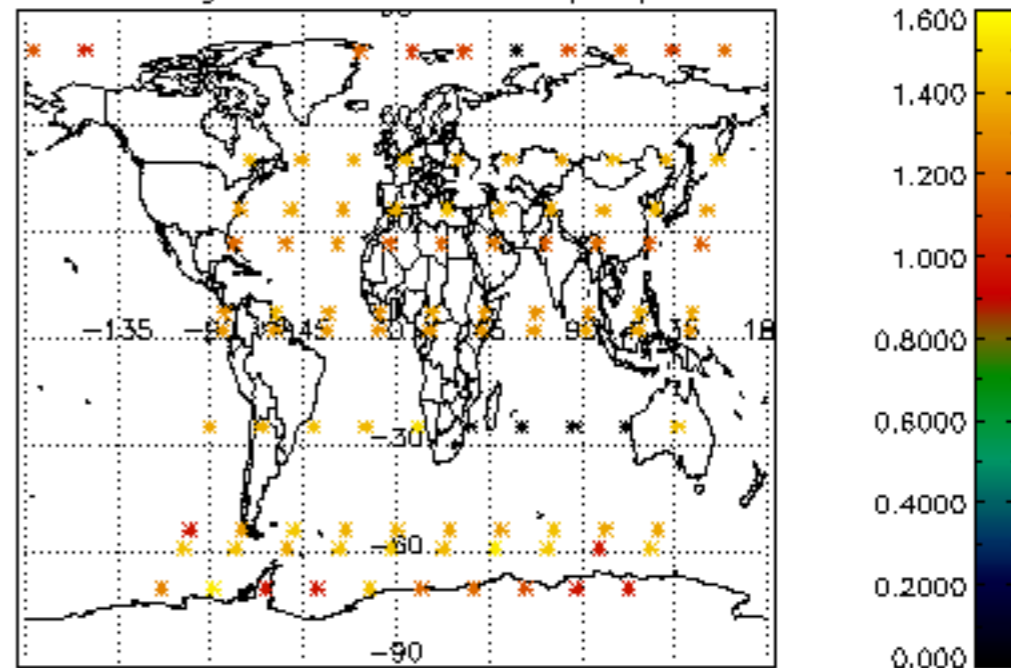
Percentage of saturation errors per profile



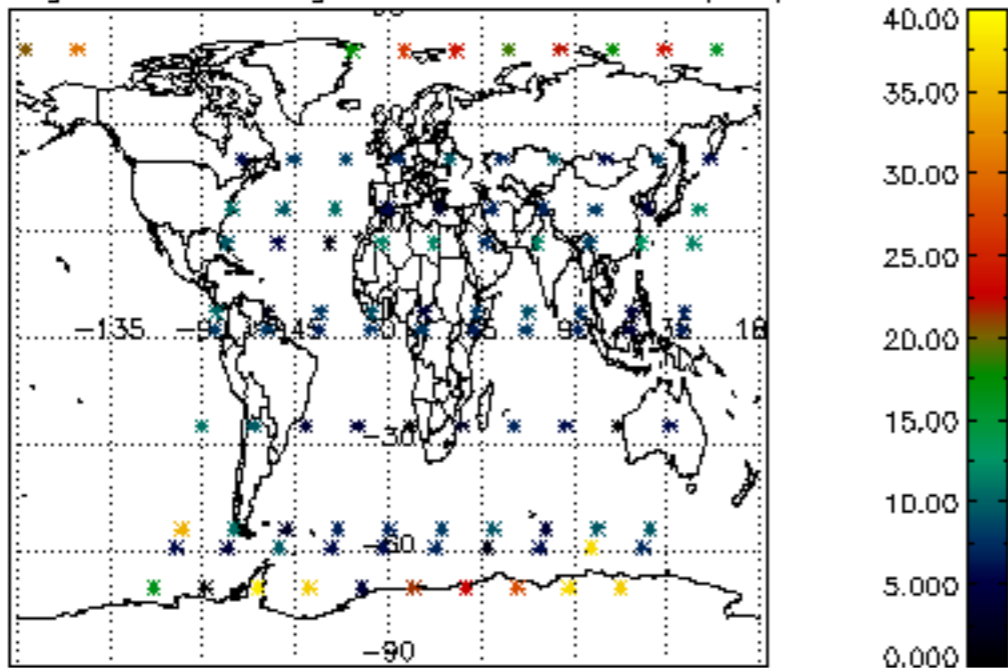
Percentage of cosmic ray hits per profile



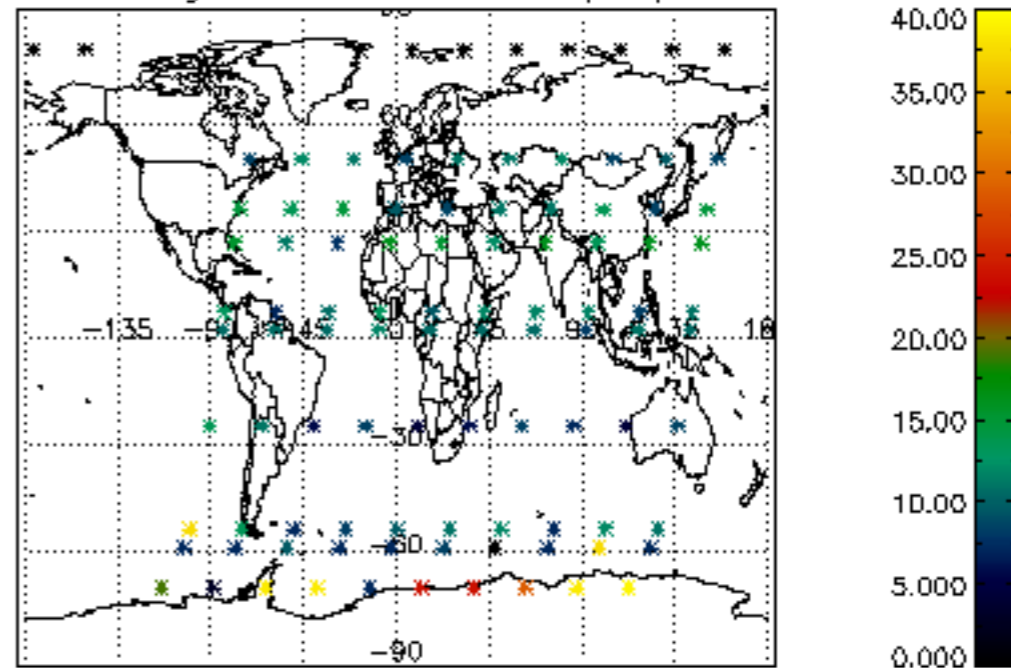
Percentage of datation errors per profile

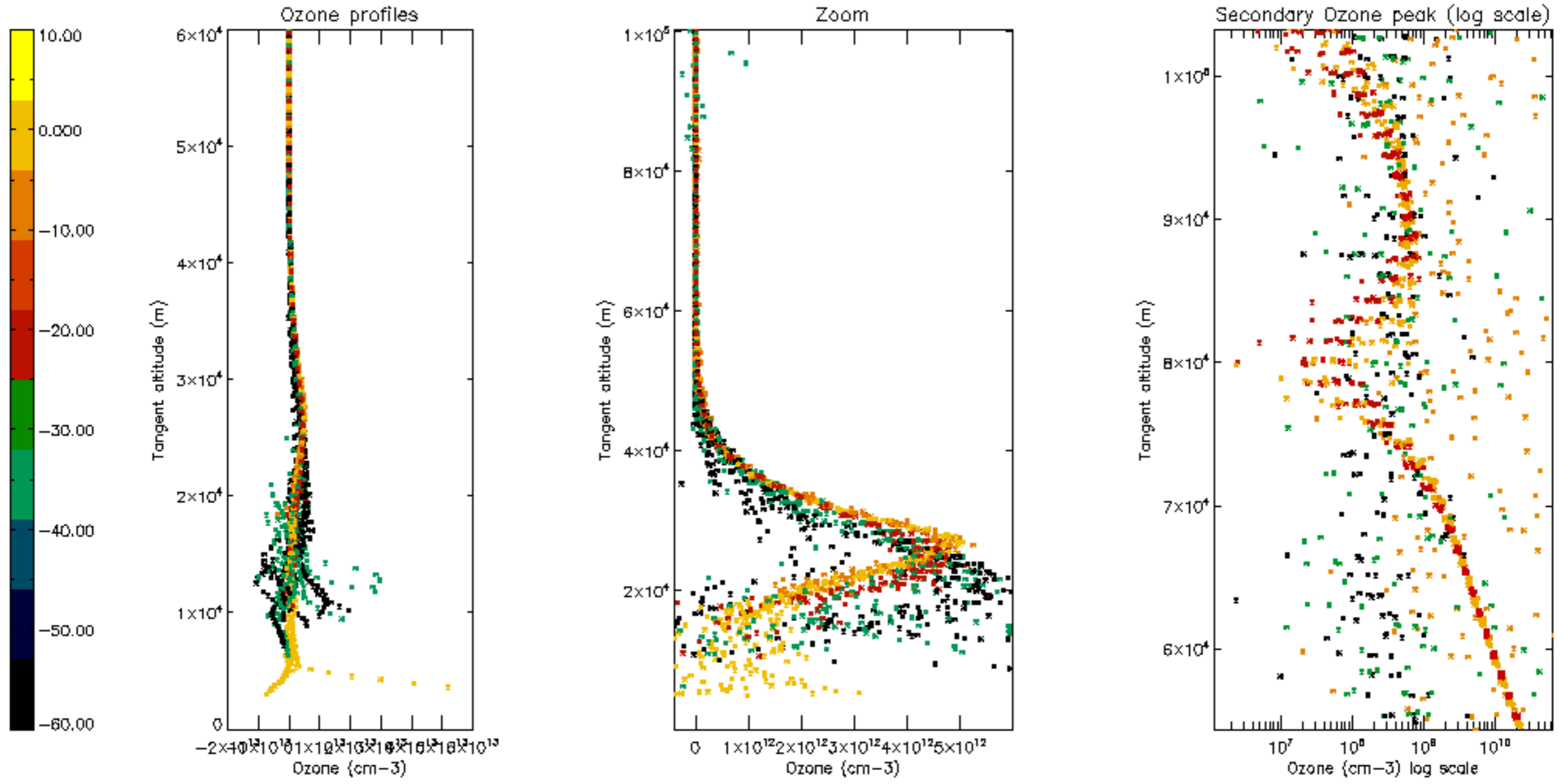


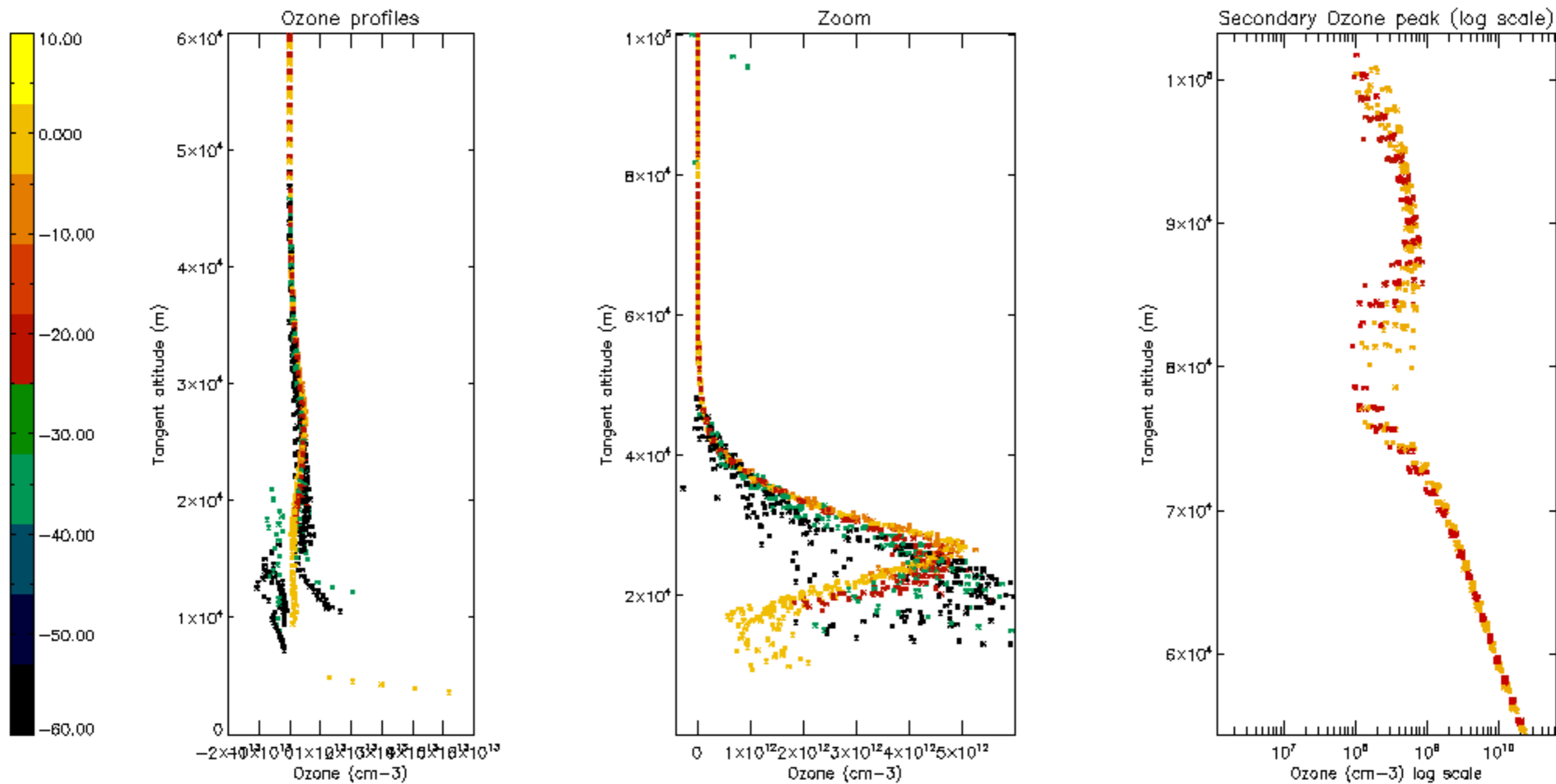
Percentage of star falling outside central band per profile

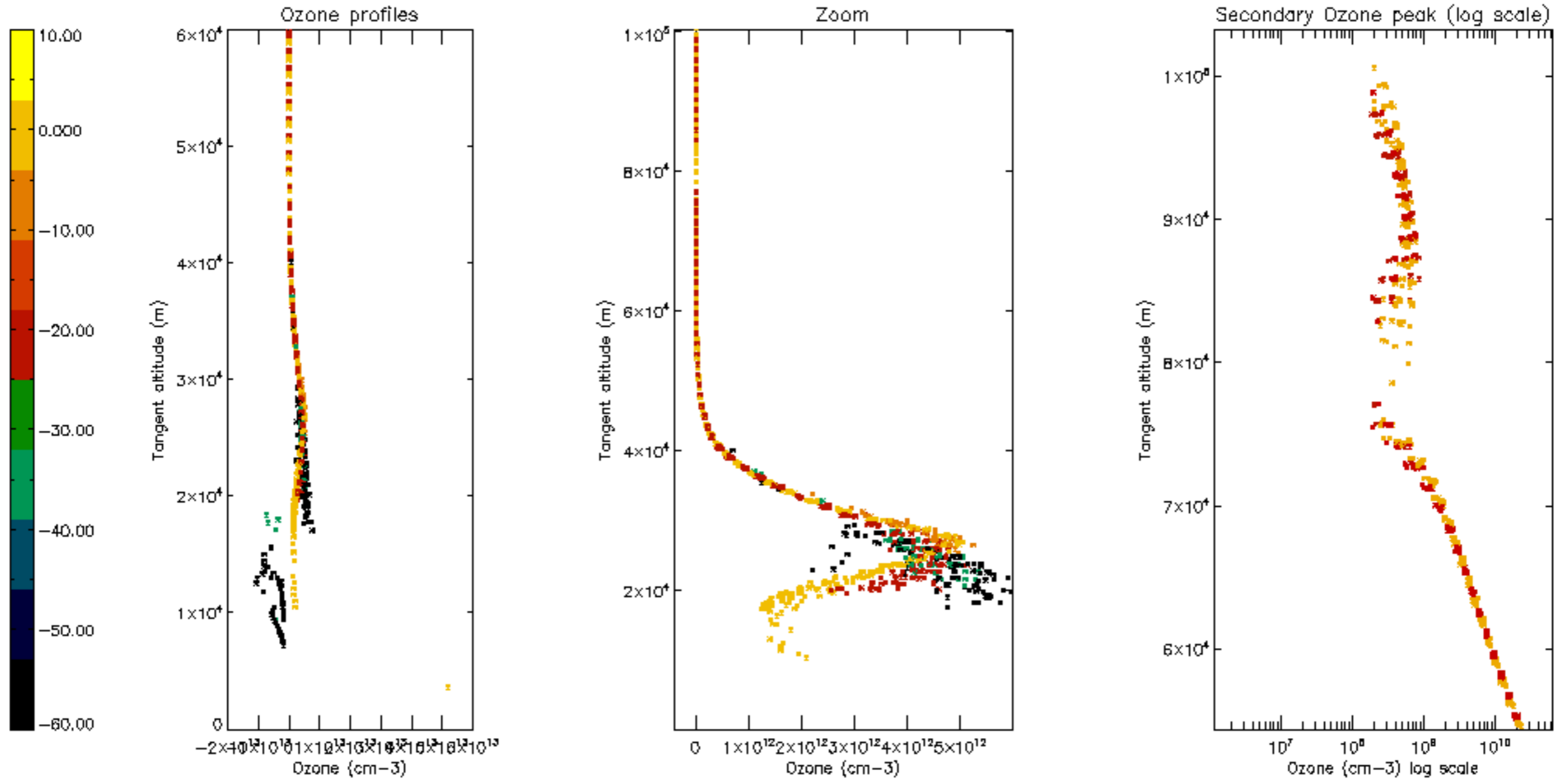


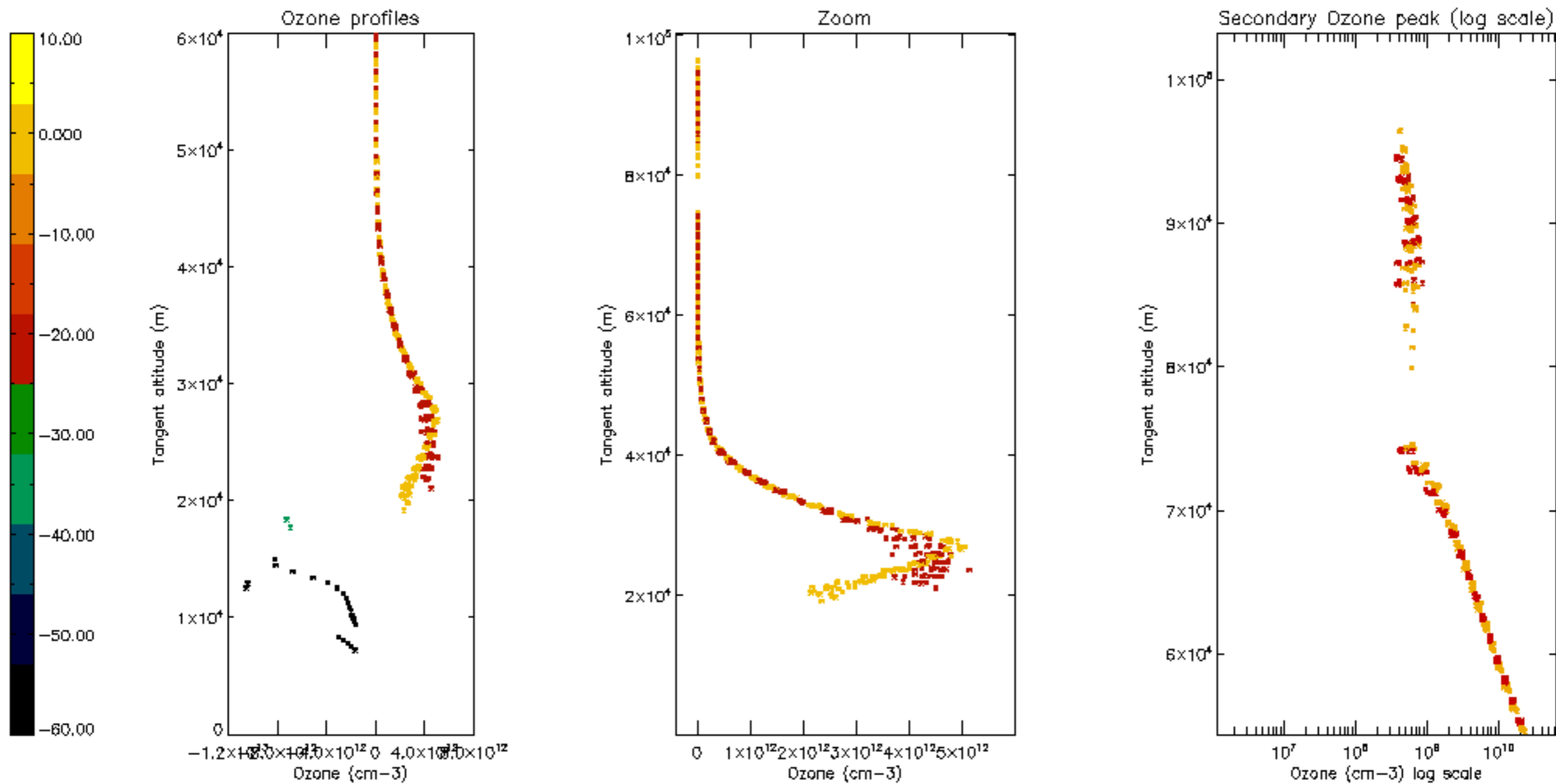
Percentage of saturation errors per profile

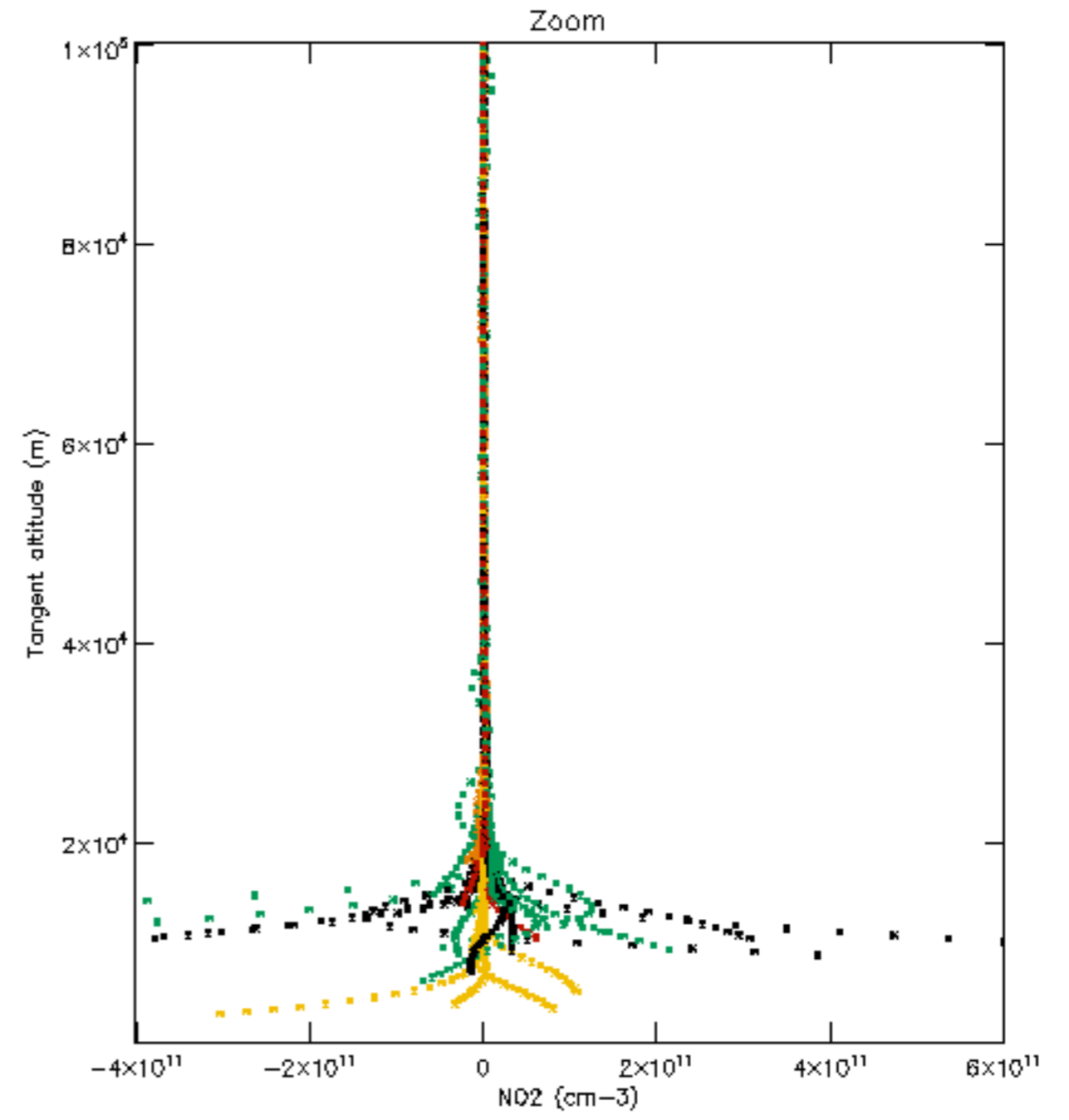
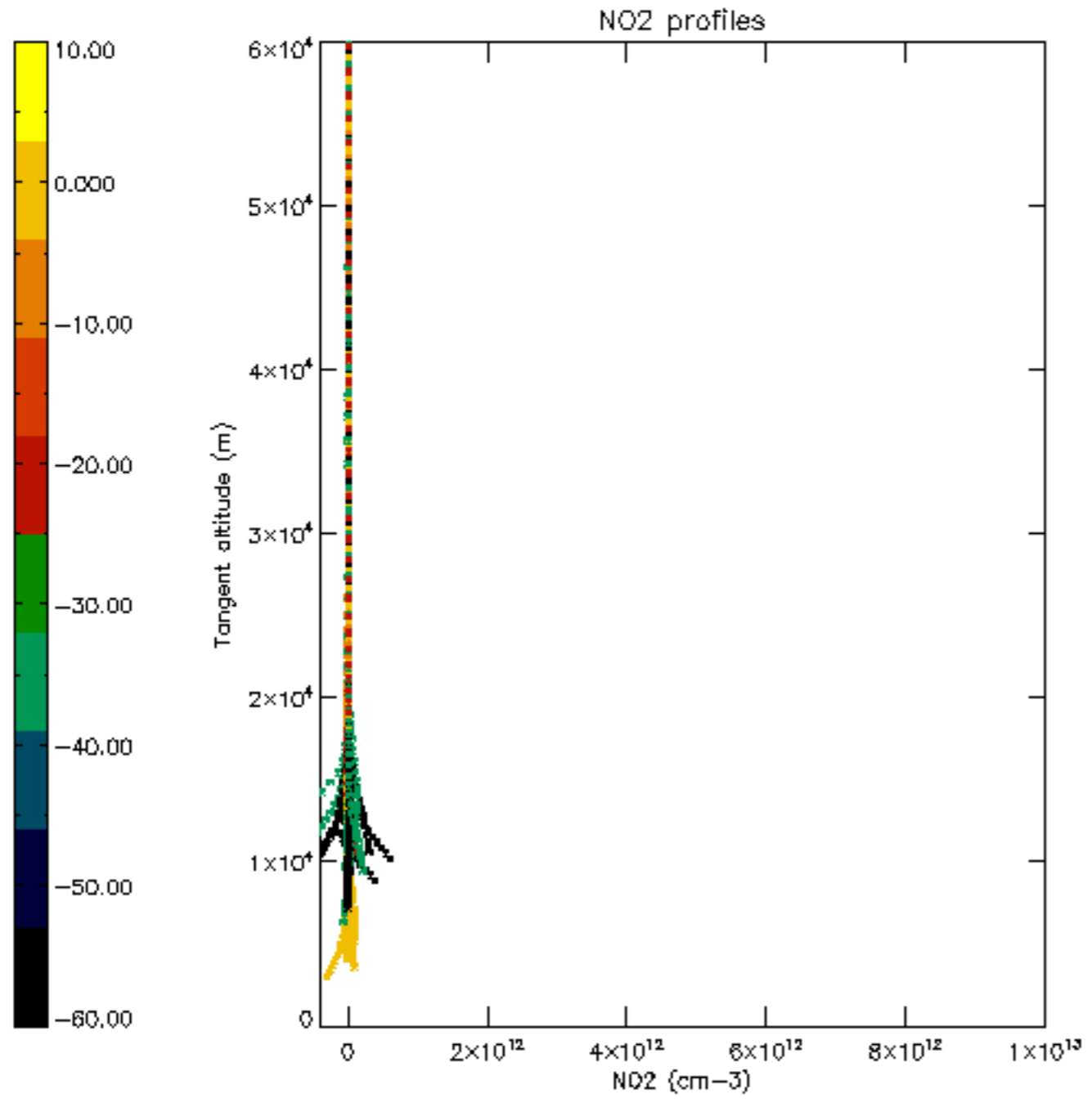


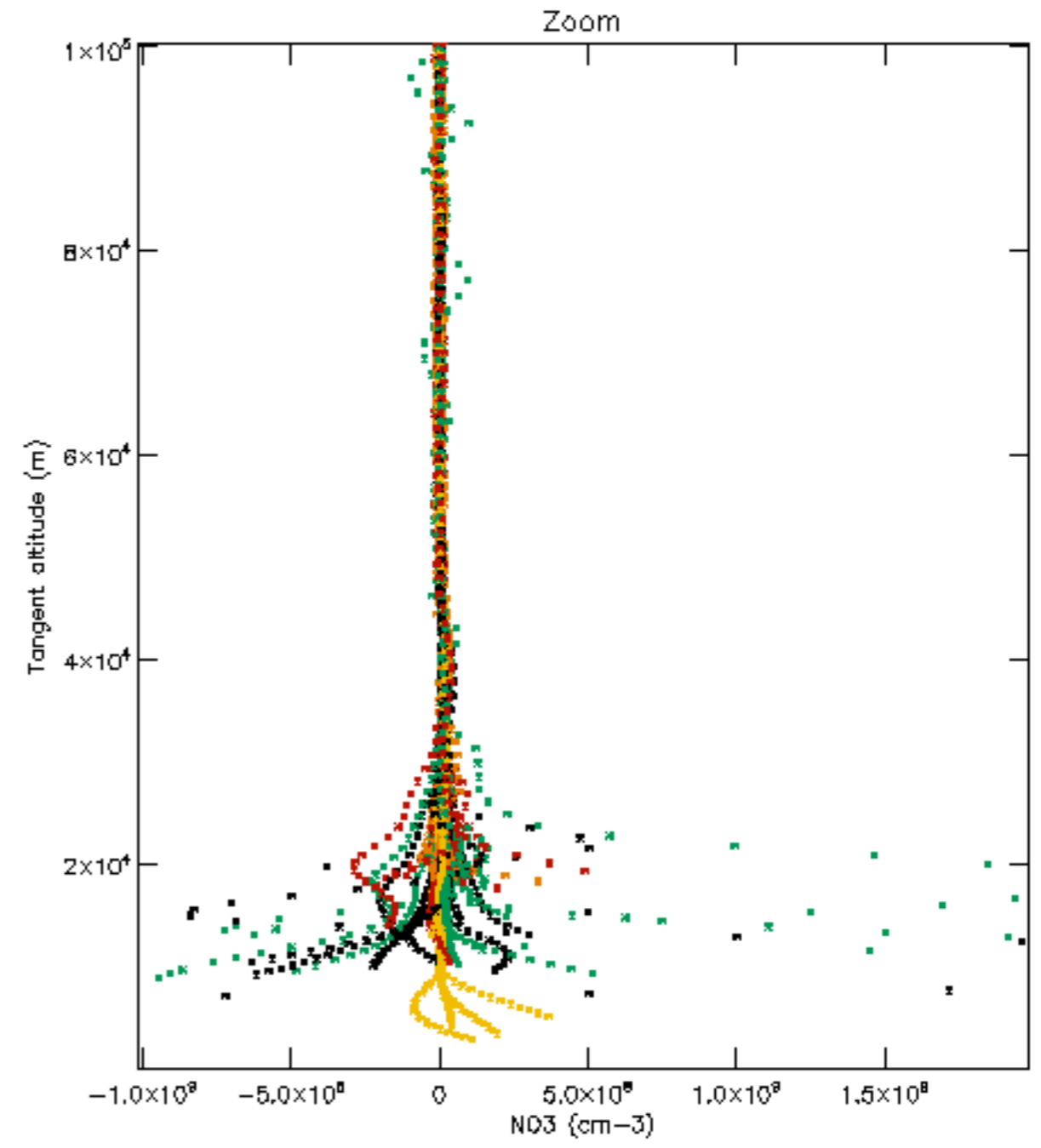
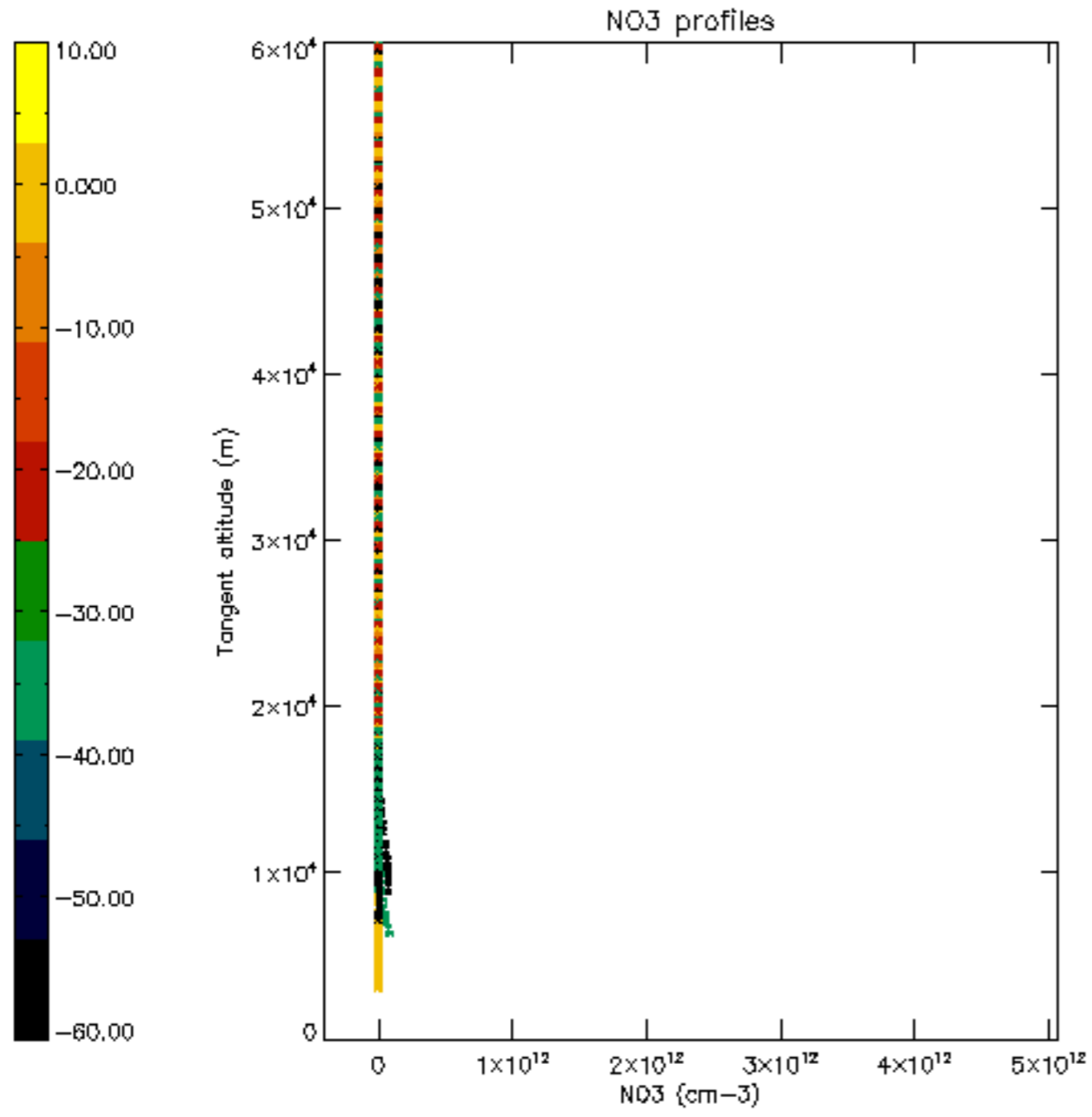


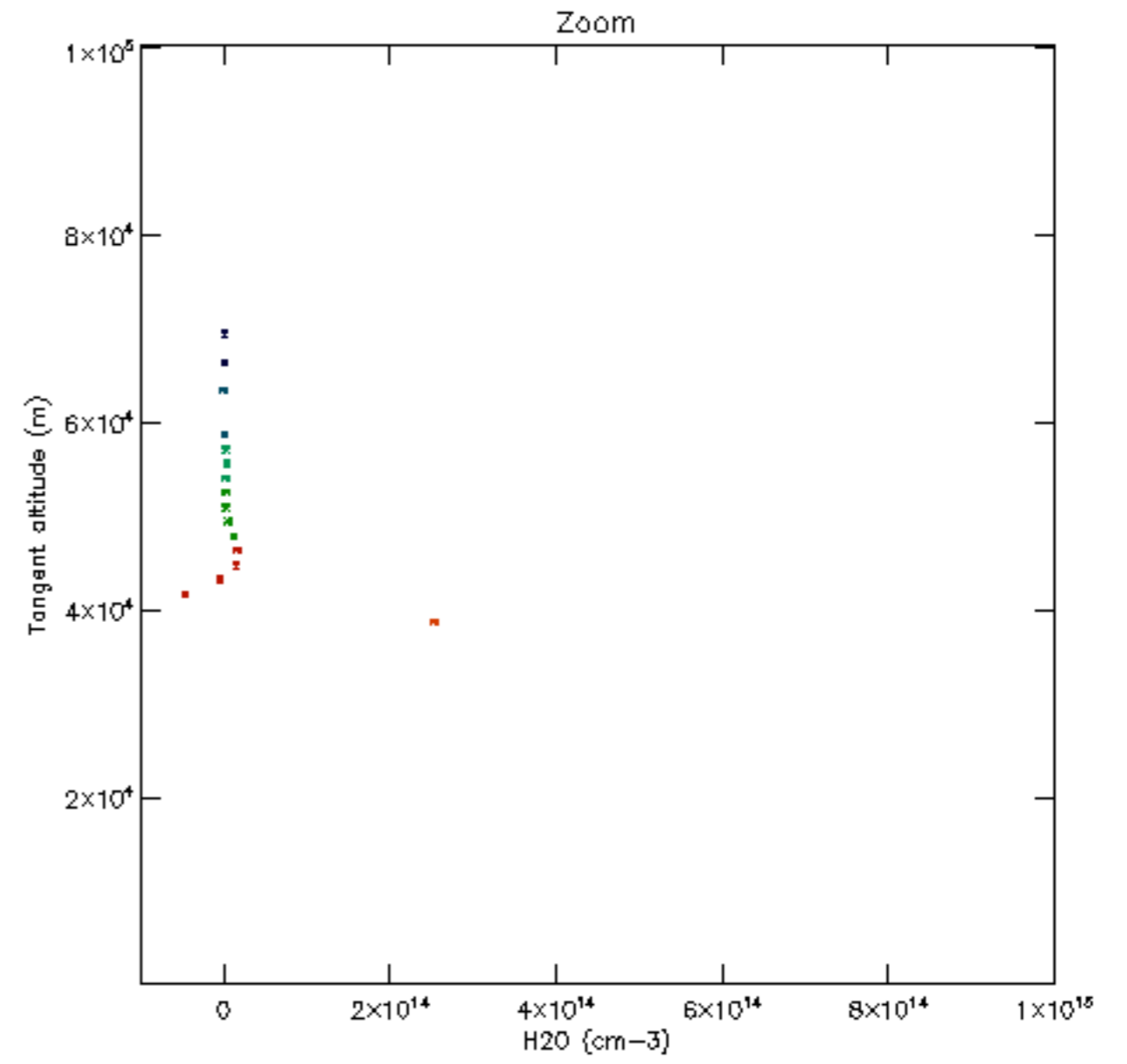
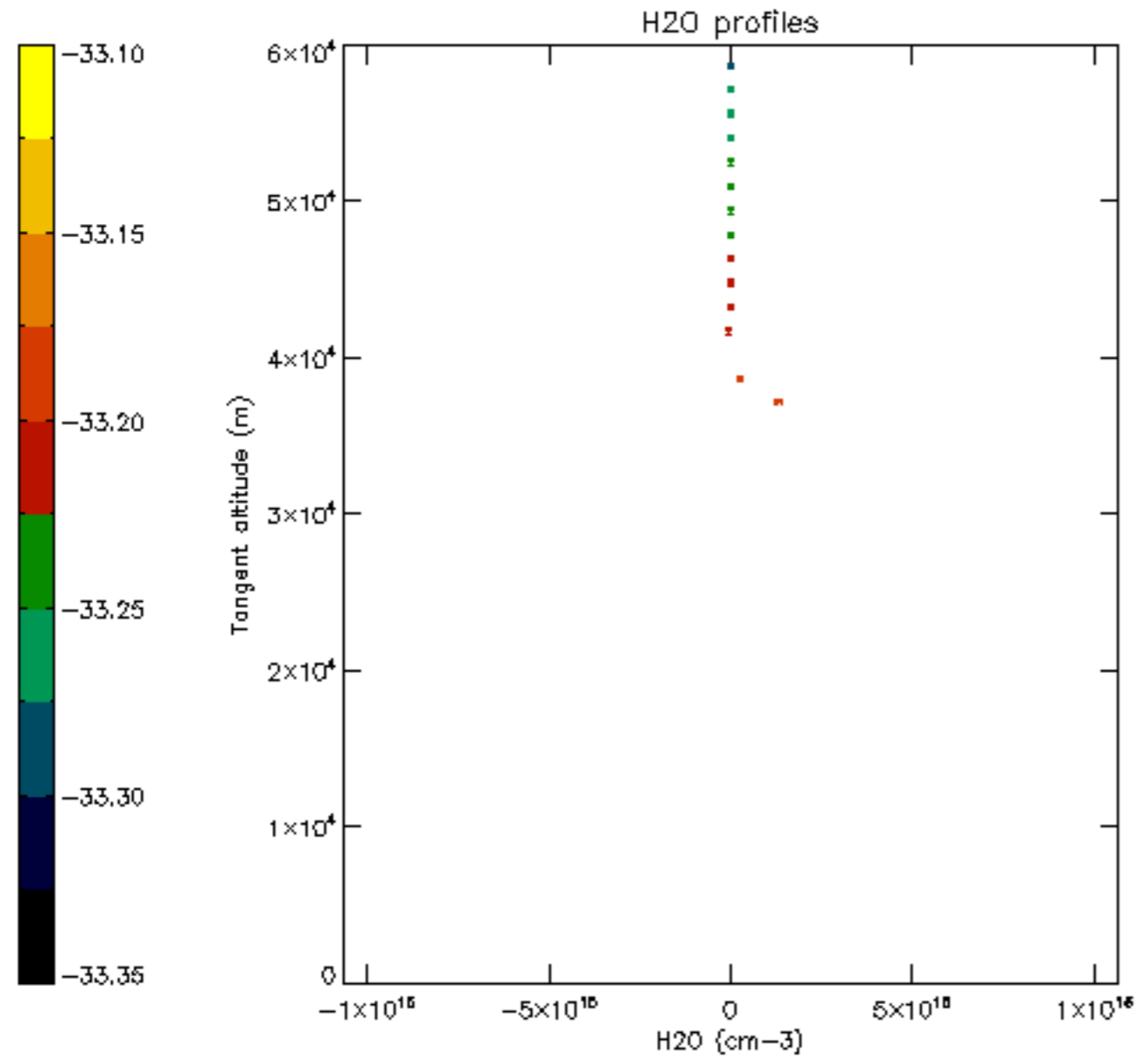


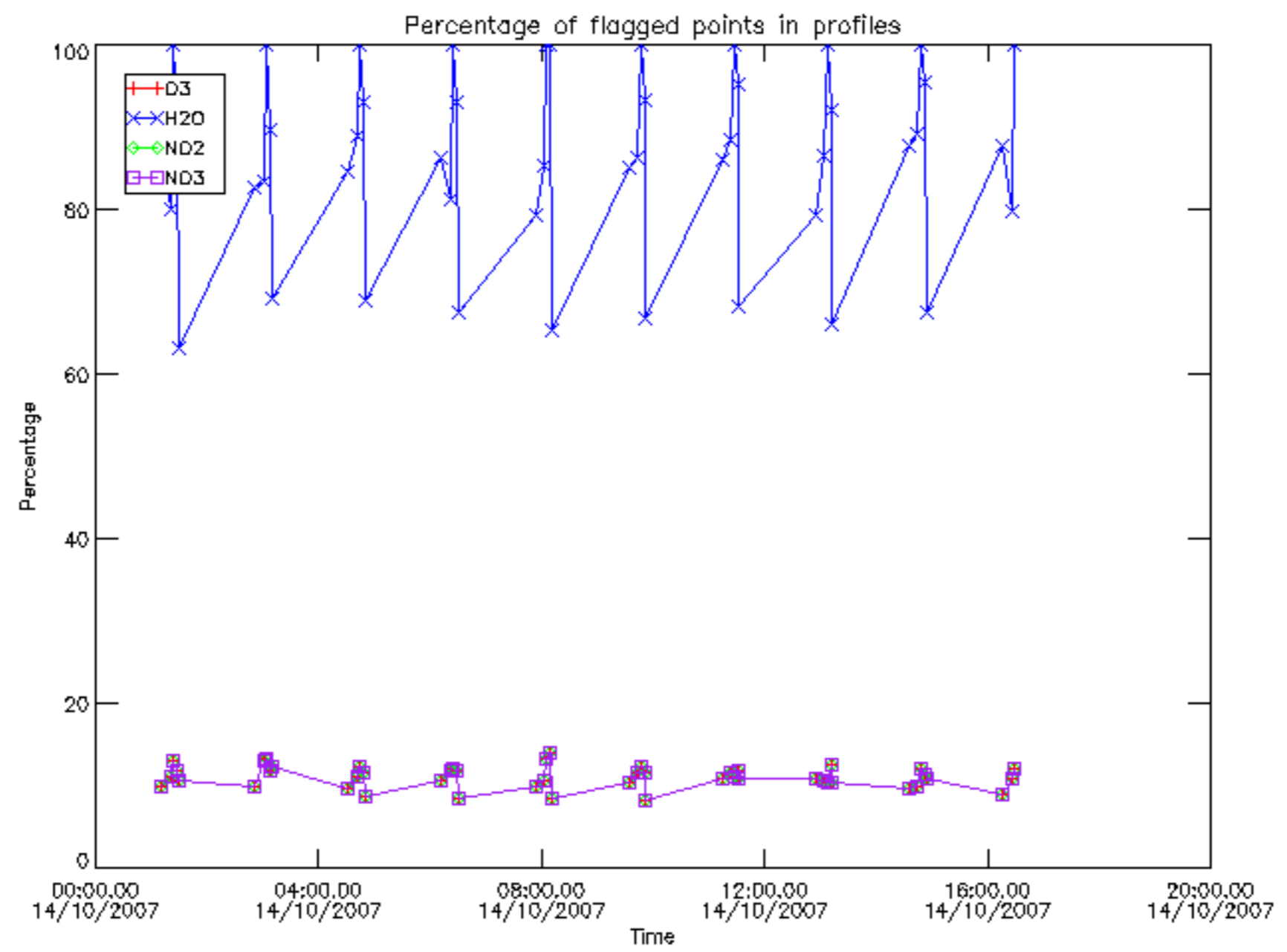




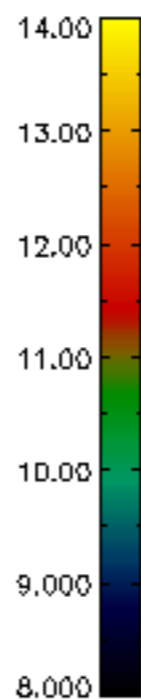
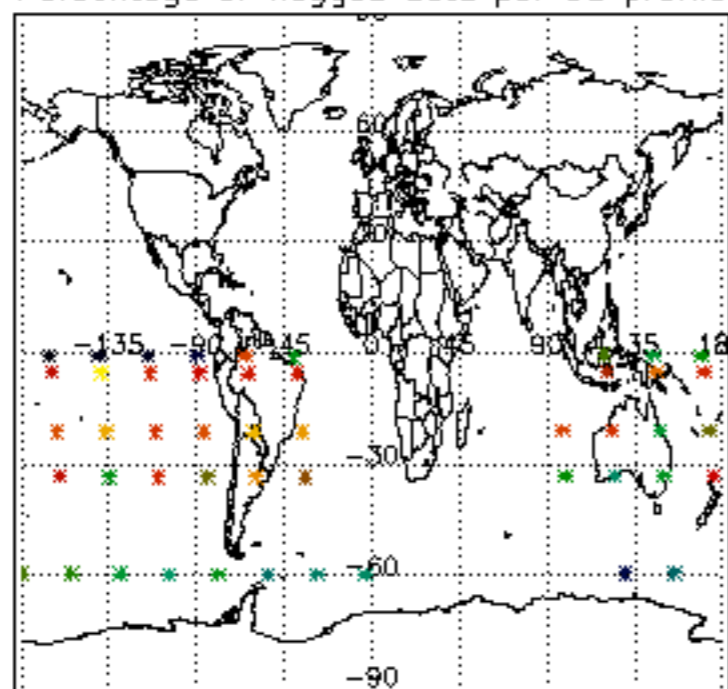




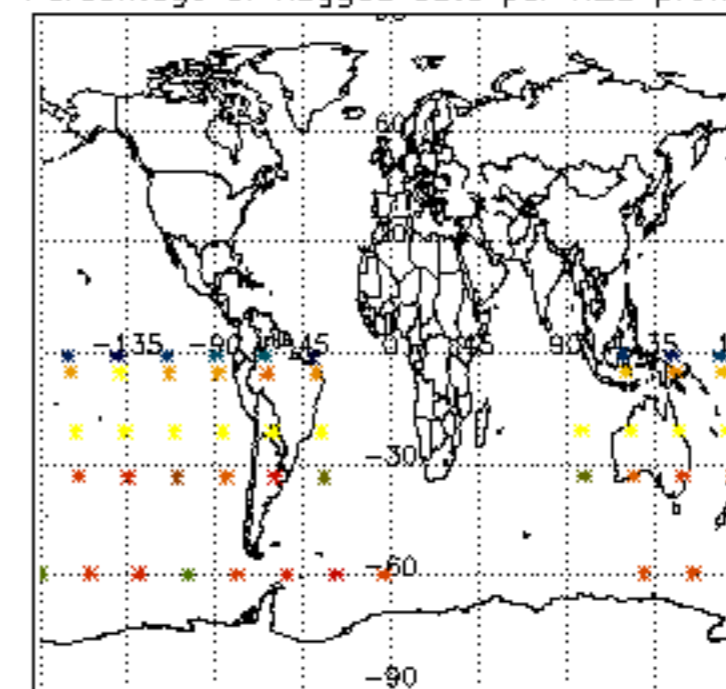




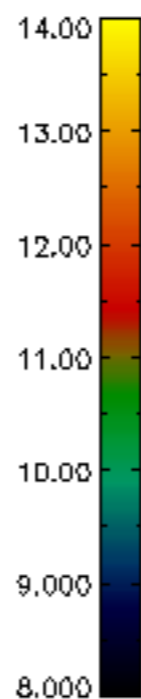
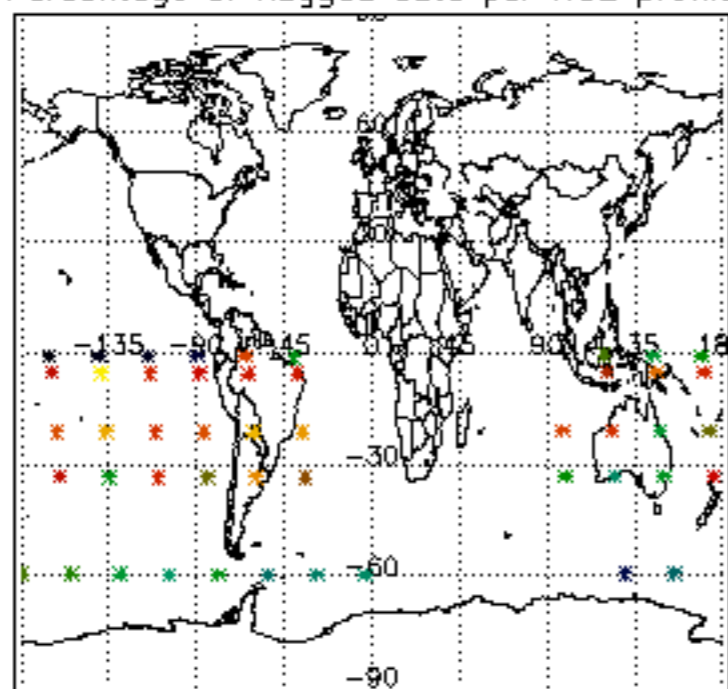
Percentage of flagged data per D3 profile



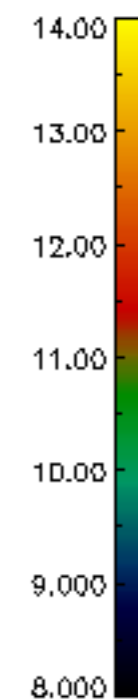
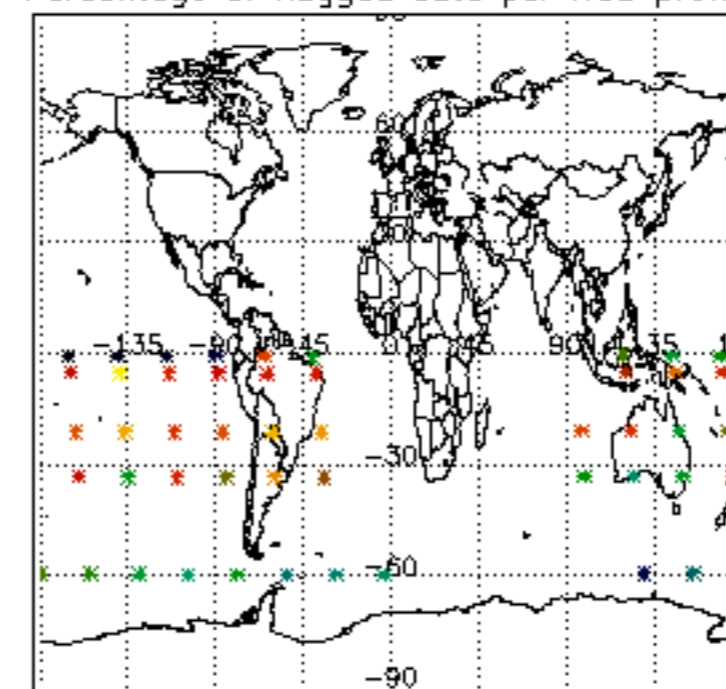
Percentage of flagged data per H2O profile

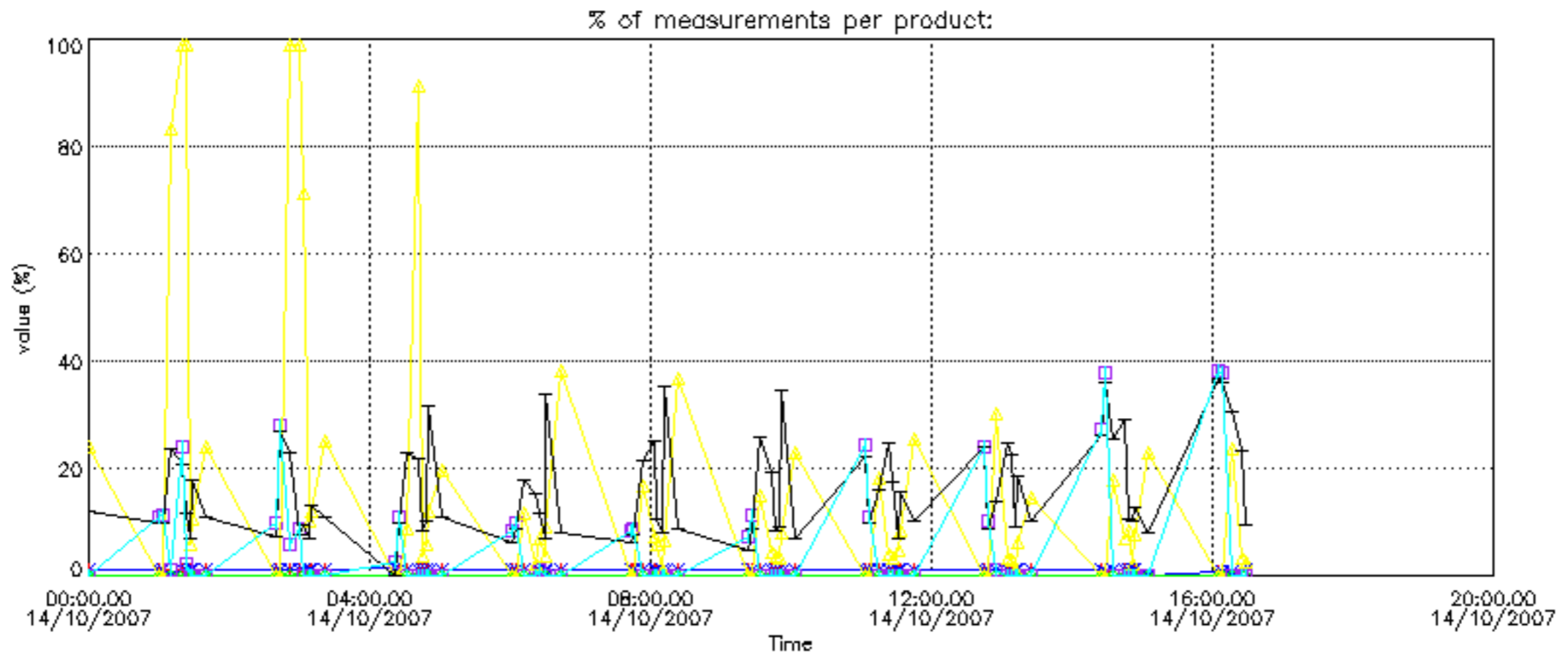


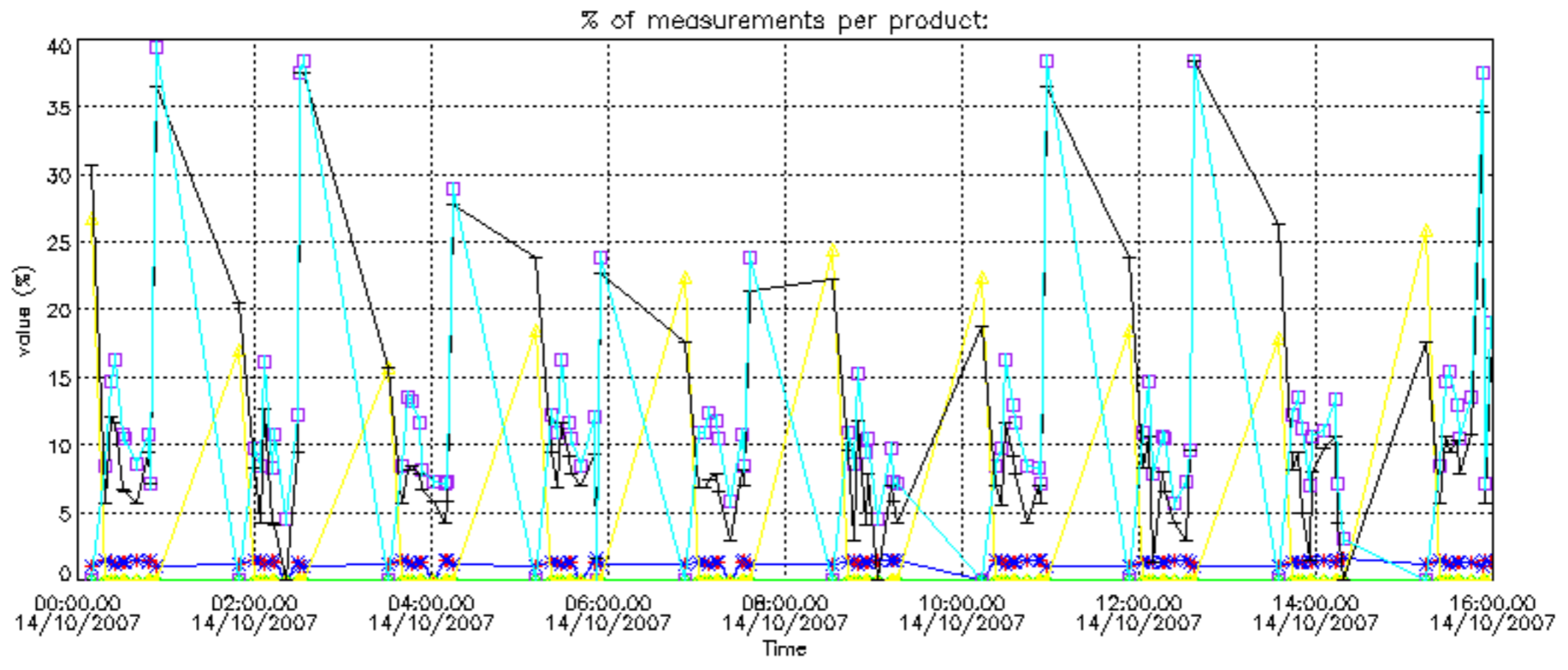
Percentage of flagged data per NO2 profile



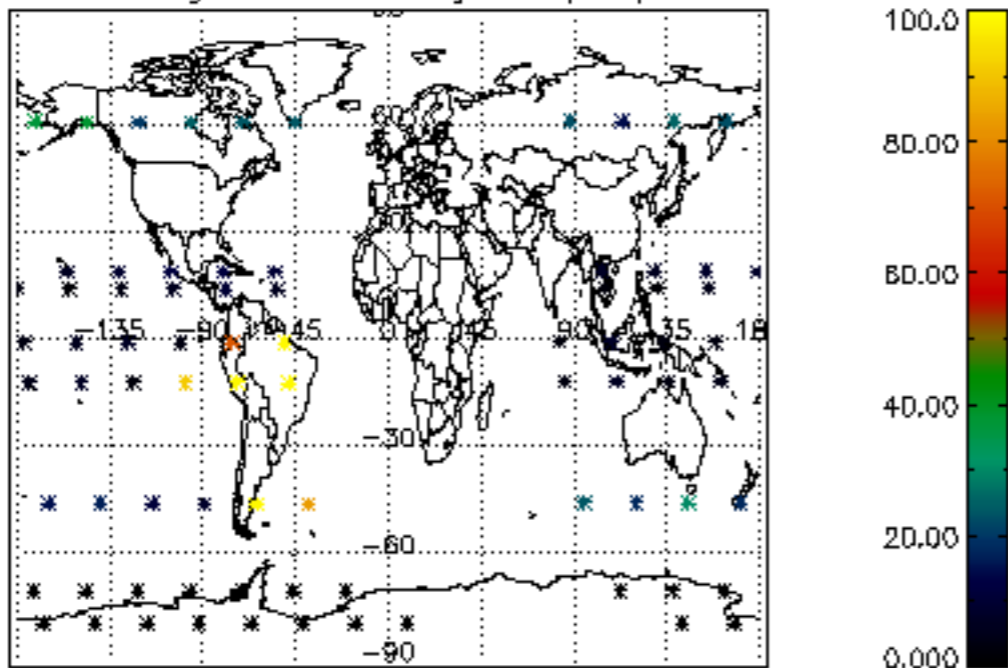
Percentage of flagged data per NO3 profile



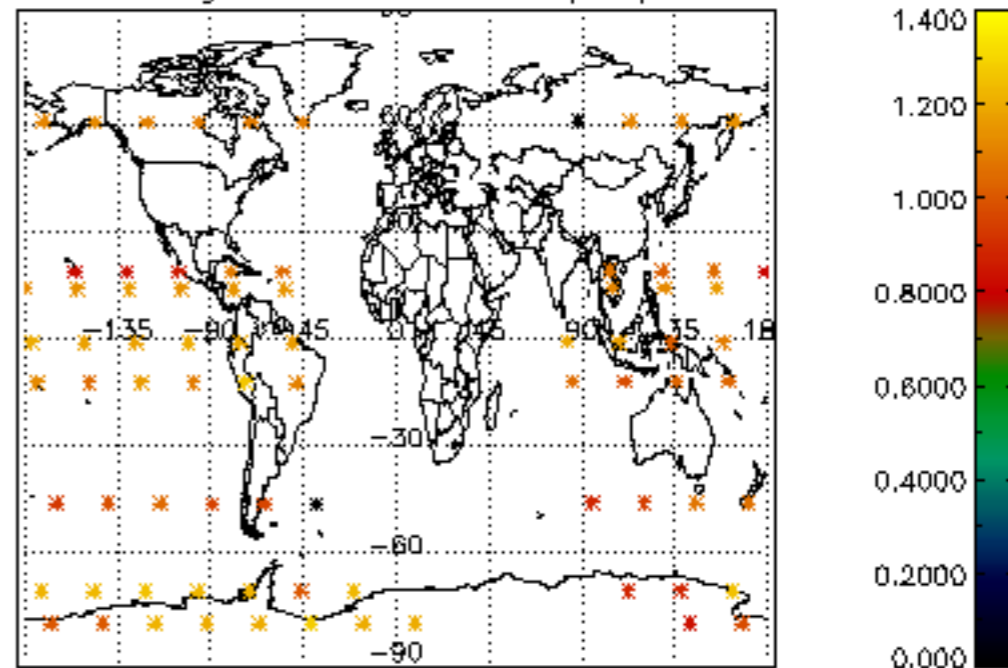




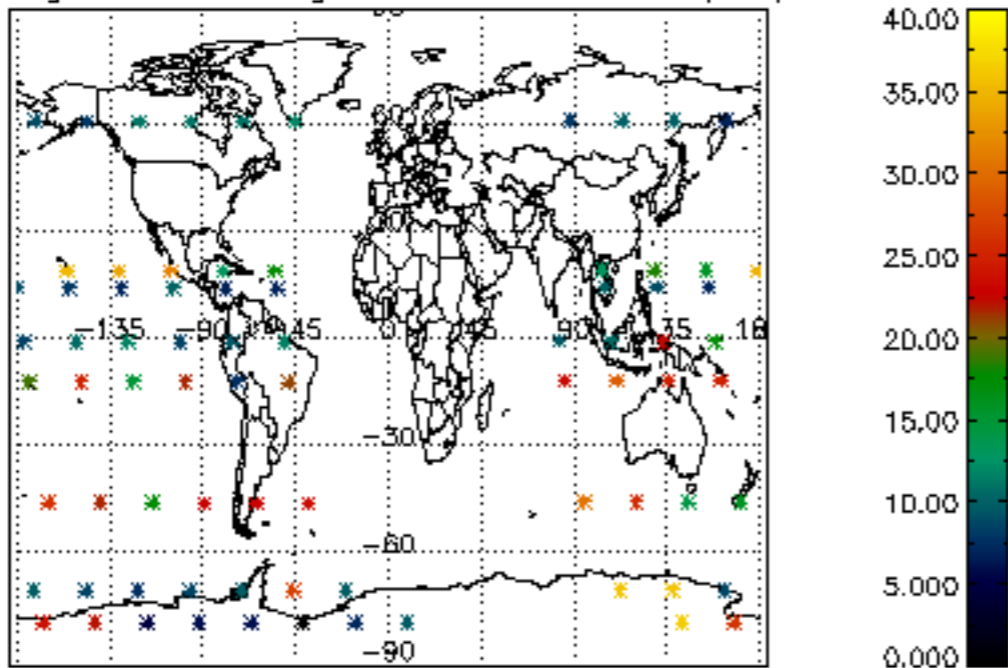
Percentage of cosmic ray hits per profile



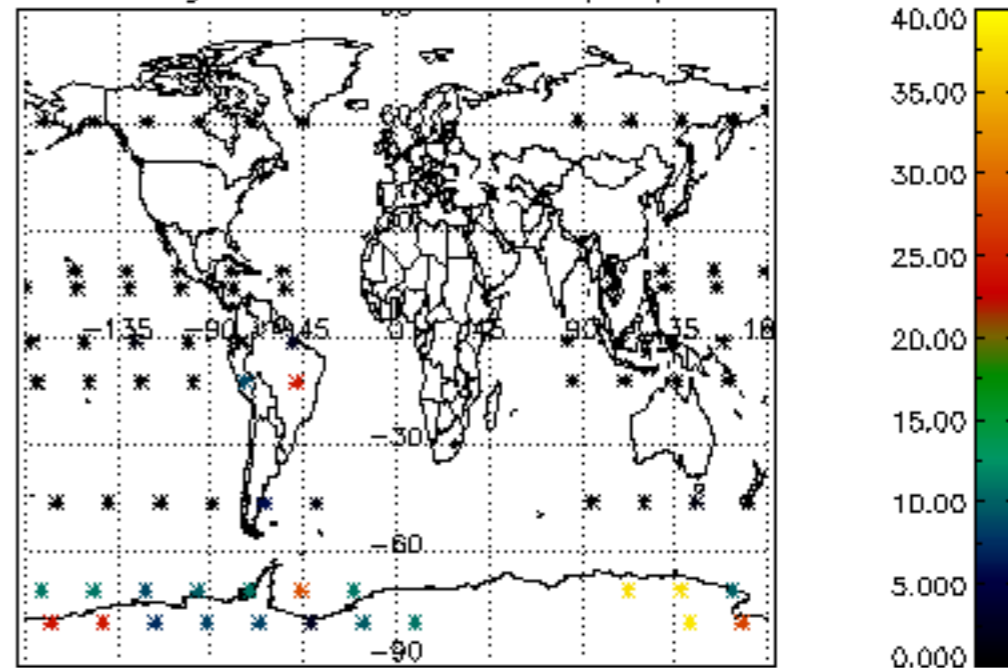
Percentage of datation errors per profile



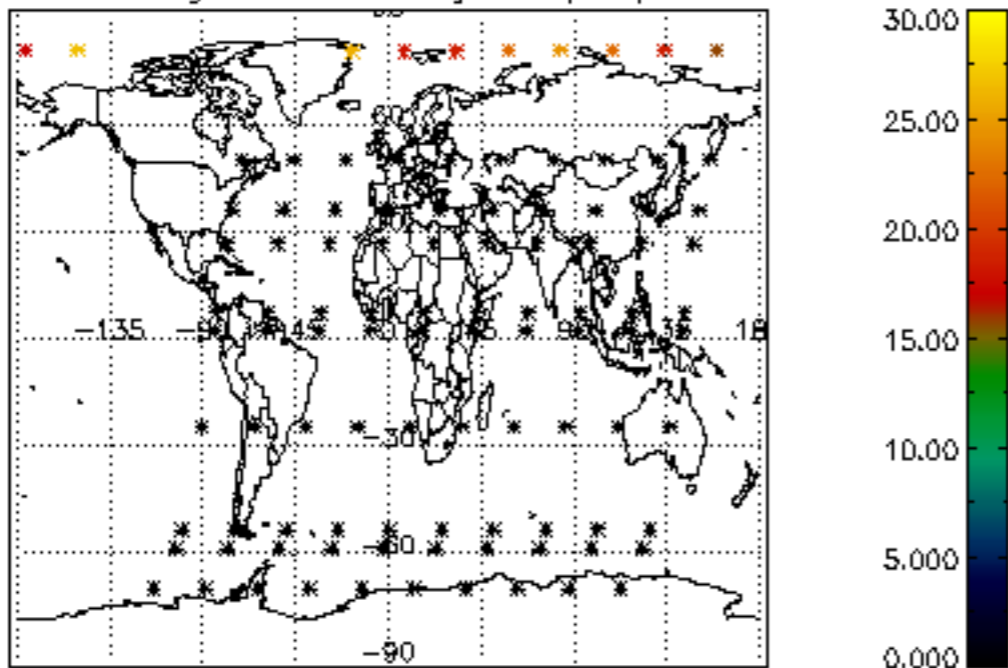
Percentage of star falling outside central band per profile



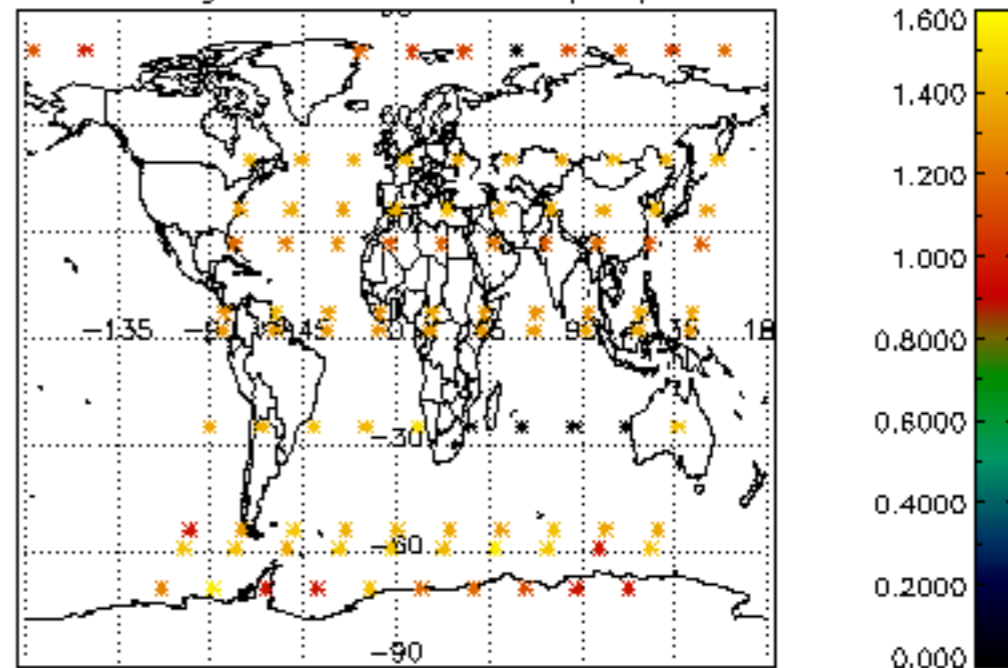
Percentage of saturation errors per profile



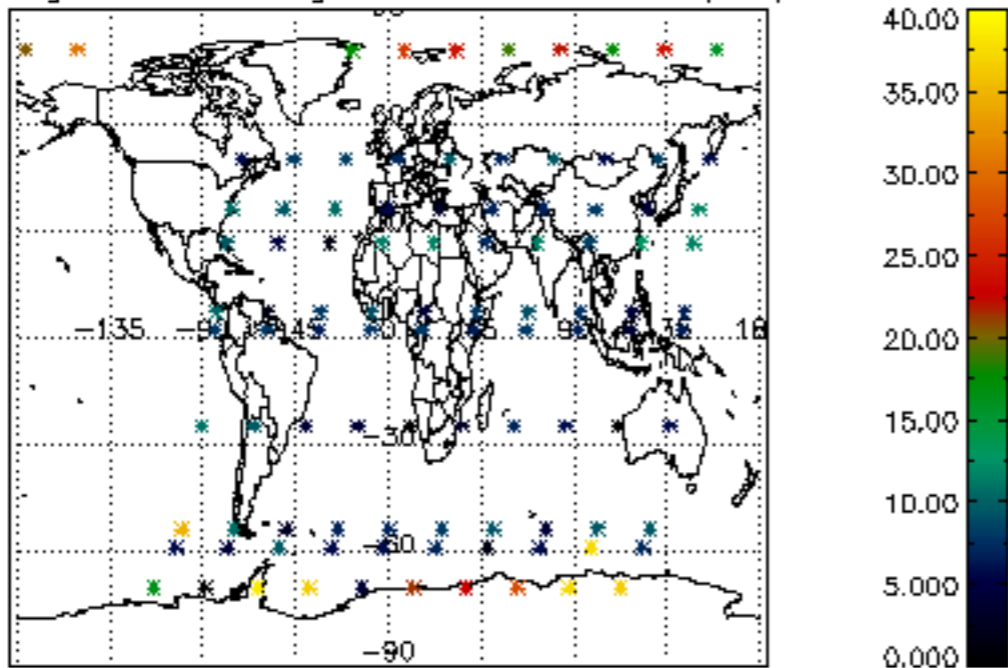
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

