

GOMOS Level 2 Daily Report

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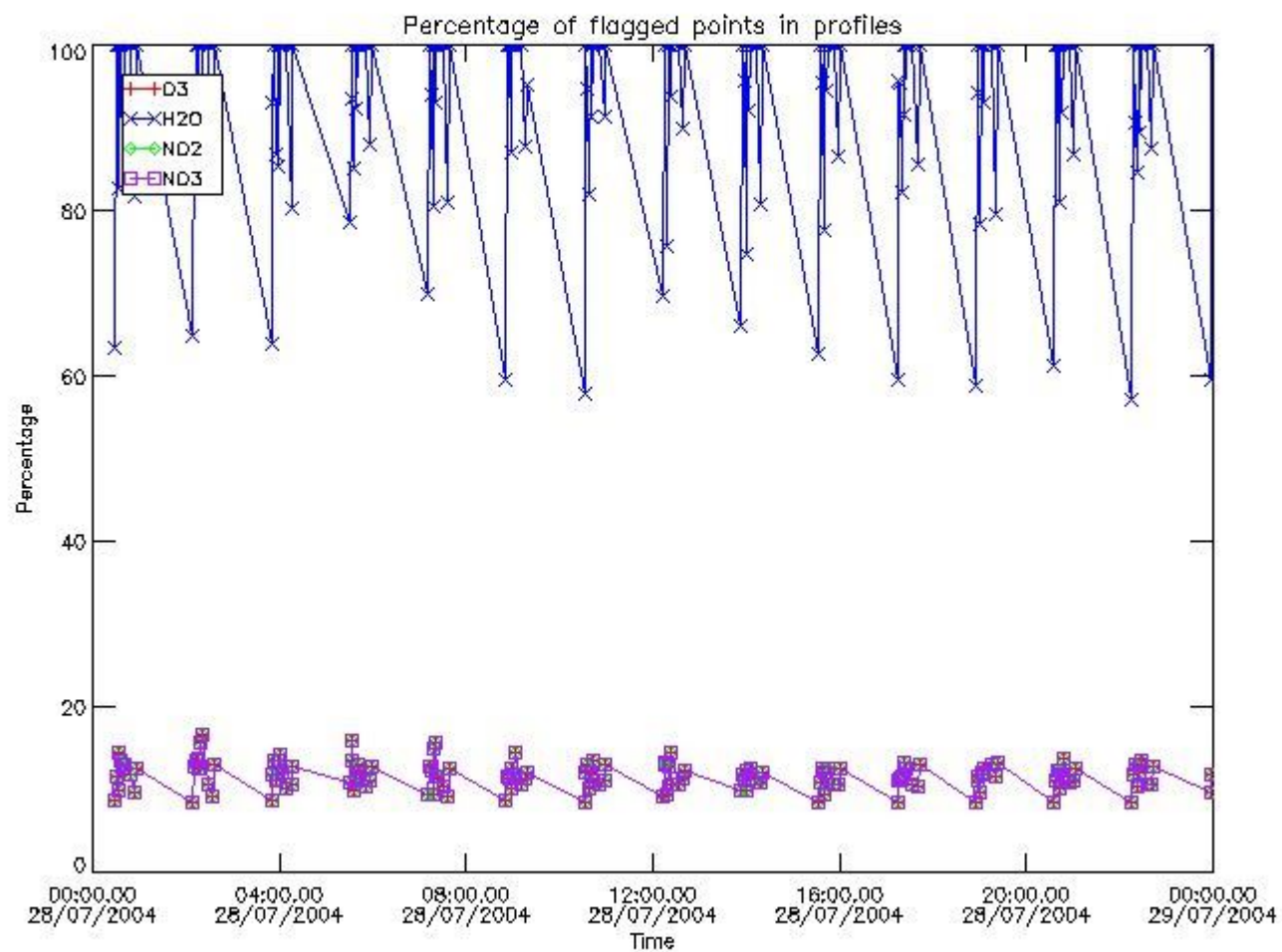
[6. Auxiliary Data Files used for the production reported in section 2](#)

456	GOM_NL__2PRFIN20040728_231321_000000382029_00030_12609_3503.N1	28-JUL-2004 23:13:21	Bright	37.500	59	55Alp Oph	2.0800	8900.0	75	12609	No
457	GOM_NL__2PRFIN20040728_231951_000000362029_00030_12609_3504.N1	28-JUL-2004 23:19:51	Bright	35.500	5	3Alp Lyr	0.033000	11000.	71	12609	No
458	GOM_NL__2PRFIN20040728_232131_000000442029_00030_12609_3505.N1	28-JUL-2004 23:21:31	Bright	44.000	66	37Gam Cyg	2.2080	5900.0	88	12609	No
459	GOM_NL__2PRFIN20040728_232334_000000412029_00030_12609_3506.N1	28-JUL-2004 23:23:34	Bright	41.000	69	33Gam Dra	2.2310	3800.0	82	12609	No
460	GOM_NL__2PRFIN20040728_232728_000000352029_00030_12609_3507.N1	28-JUL-2004 23:27:28	Bright	35.000	119	14Eta Dra	2.7270	4700.0	70	12609	No
461	GOM_NL__2PRFIN20040728_233138_000000402029_00030_12609_3508.N1	28-JUL-2004 23:31:38	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	12609	No
462	GOM_NL__2PRFIN20040728_233426_000000352029_00030_12609_3509.N1	28-JUL-2004 23:34:26	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	12609	No
463	GOM_NL__2PRFIN20040728_233728_000000512029_00030_12609_3510.N1	28-JUL-2004 23:37:28	Bright	51.000	76	27Gam Cas	2.3000	30000.	102	12609	No
464	GOM_NL__2PRFIN20040728_234336_000000502029_00030_12609_3511.N1	28-JUL-2004 23:43:36	Bright	50.000	160	23Gam Per	2.9300	4700.0	100	12609	No
465	GOM_NL__2PRFIN20040728_234641_000000722029_00030_12609_3512.N1	28-JUL-2004 23:46:41	Bright	72.000	73	57Gam1And	2.2600	13100.	144	12609	No
466	GOM_NL__2PRFIN20040728_234901_000000452029_00030_12609_3513.N1	28-JUL-2004 23:49:01	Bright	44.500	149	45Eps Per	2.8880	30000.	89	12609	No
467	GOM_NL__2PRFIN20040728_235200_000000552029_00030_12609_3514.N1	28-JUL-2004 23:52:00	Twilight_stray	54.500	150	44Zet Per	2.8900	28000.	109	12609	No
468	GOM_NL__2PRFIN20040728_235414_000000442029_00030_12609_3515.N1	28-JUL-2004 23:54:14	Twilight_stray	43.500	176	23Zet Tau	3.0200	22000.	87	12609	No
469	GOM_NL__2PRFIN20040728_235639_000000592029_00030_12609_3516.N1	28-JUL-2004 23:56:39	Dark	58.500	13	87Alp Tau	0.86700	3800.0	117	12609	No
470	GOM_NL__2PRFIN20040728_235841_000000442029_00030_12609_3517.N1	28-JUL-2004 23:58:41	Dark	43.500	27	24Gam Ori	1.6360	26000.	87	12609	No

3. Quality information per product

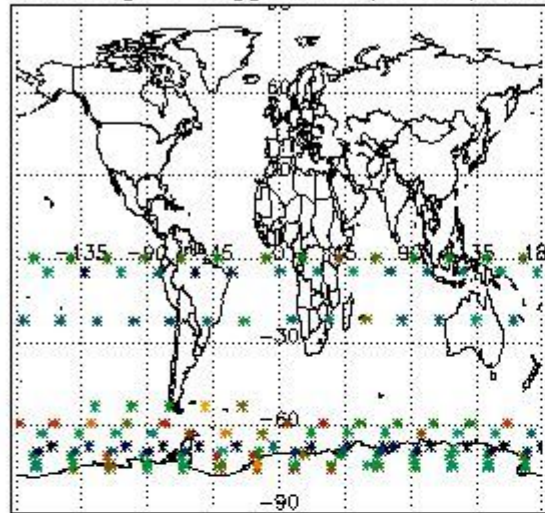
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

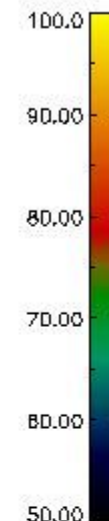
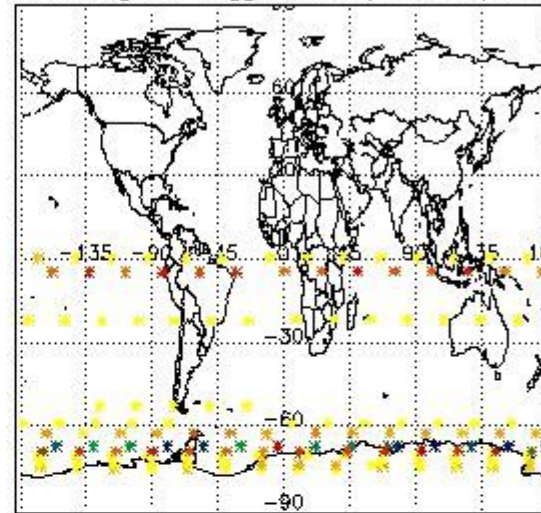


3.2 Plot quality information per product (world map)

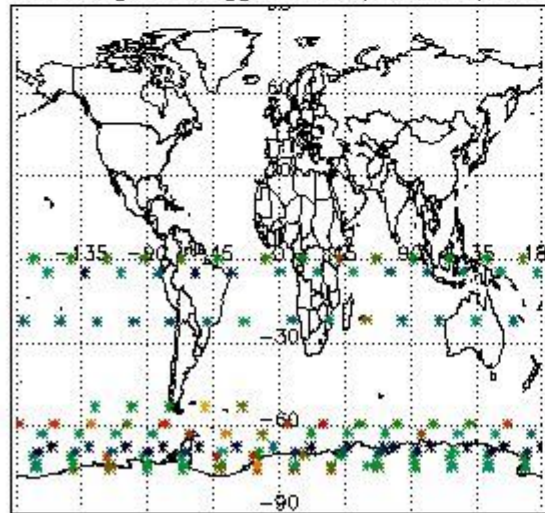
Percentage of flagged data per O3 profile



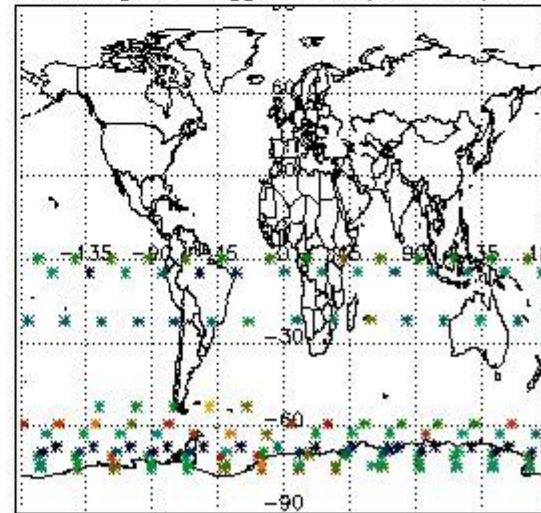
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

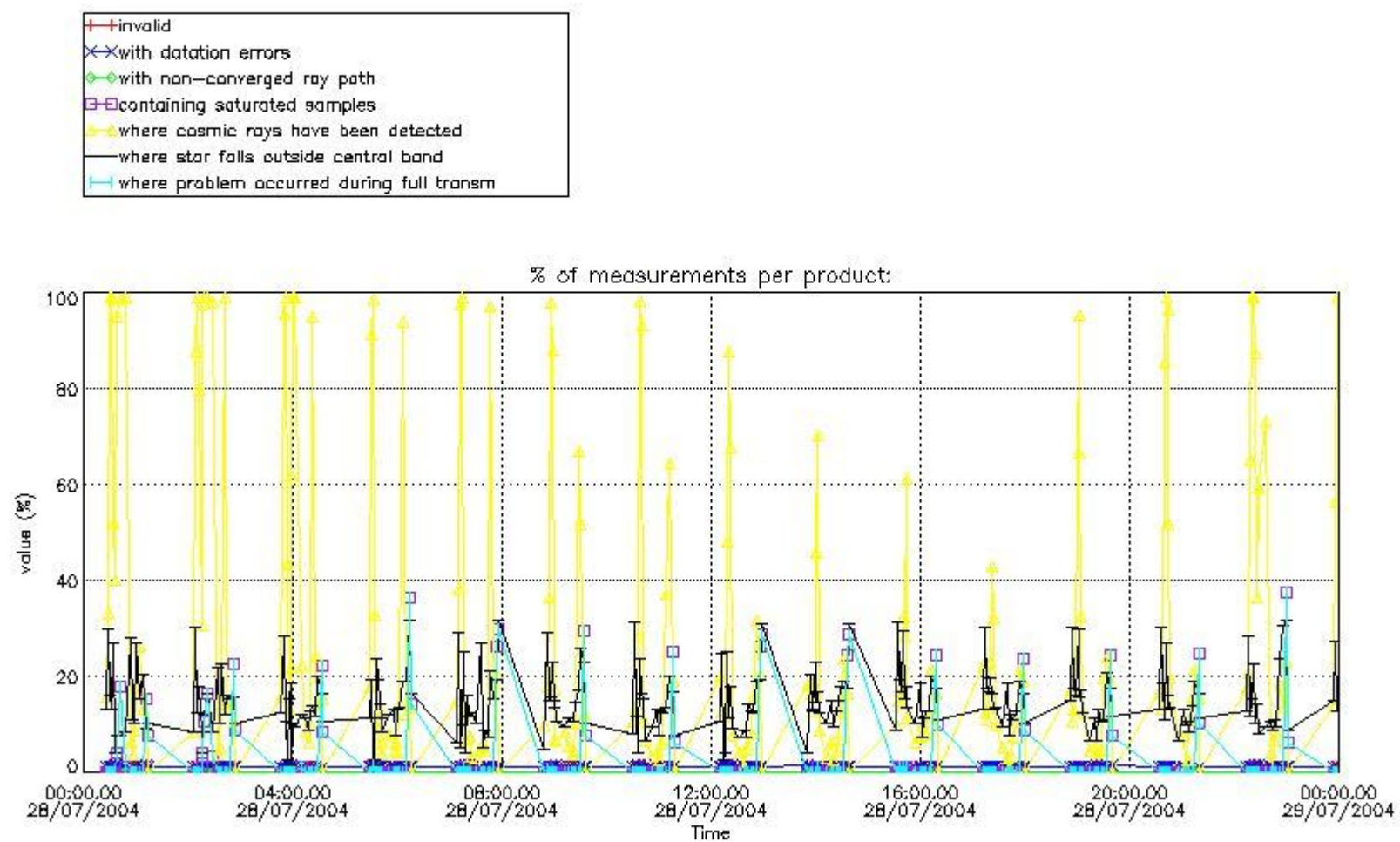


4. Level 1 quality information per product

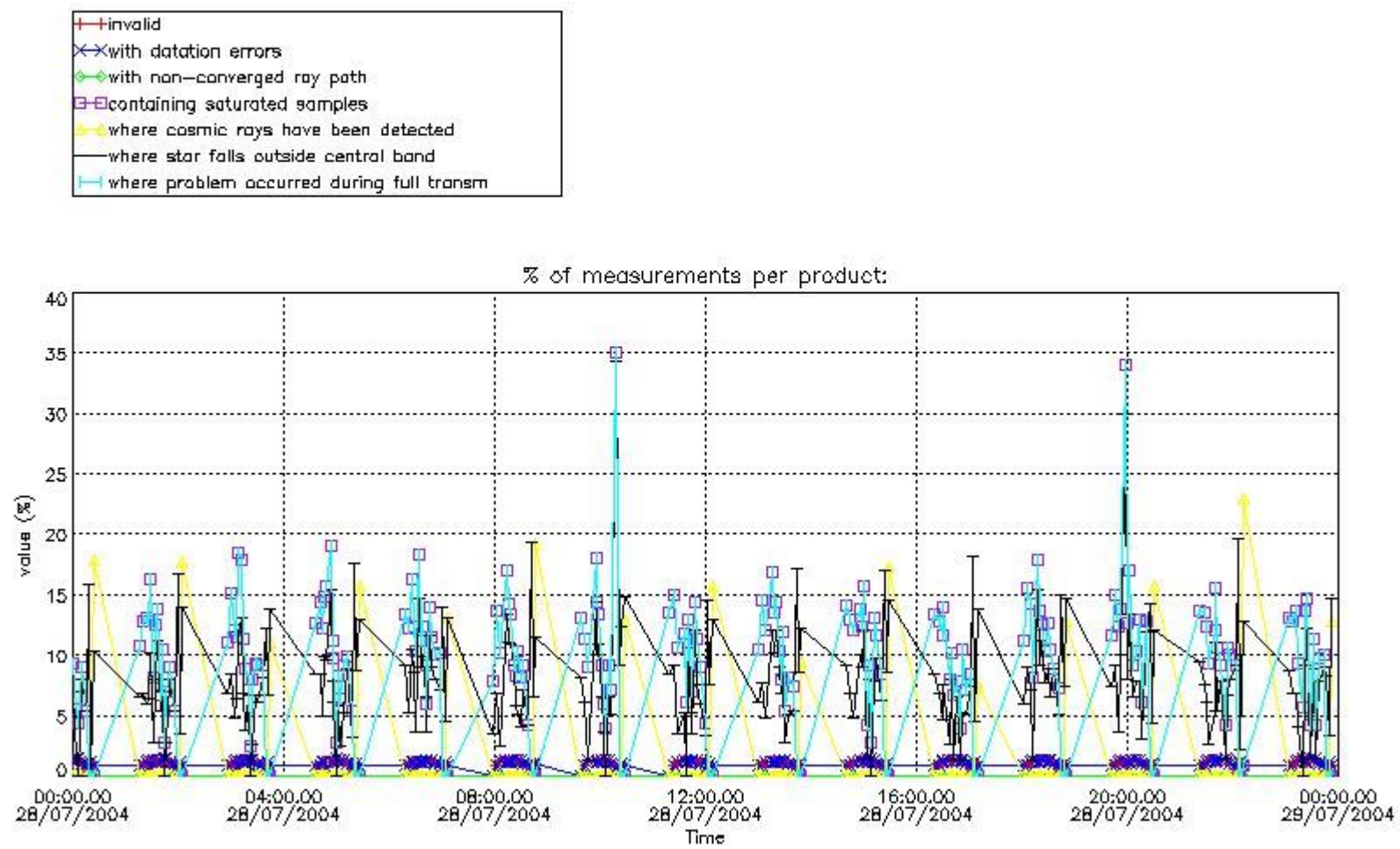
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

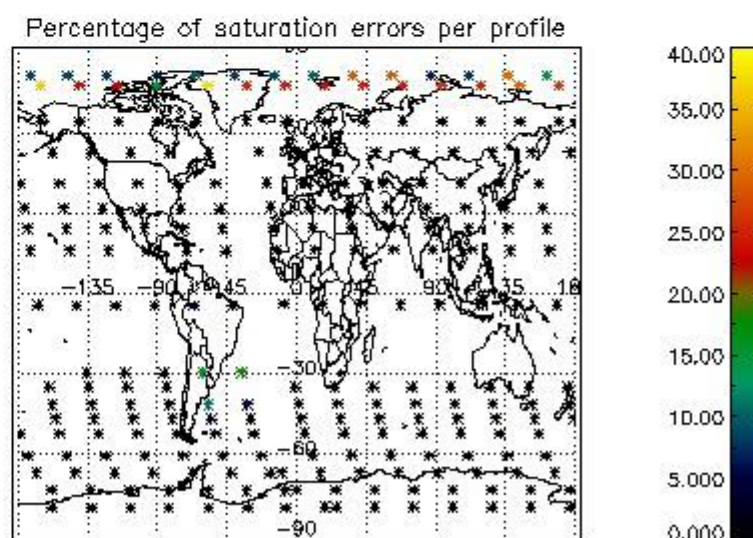
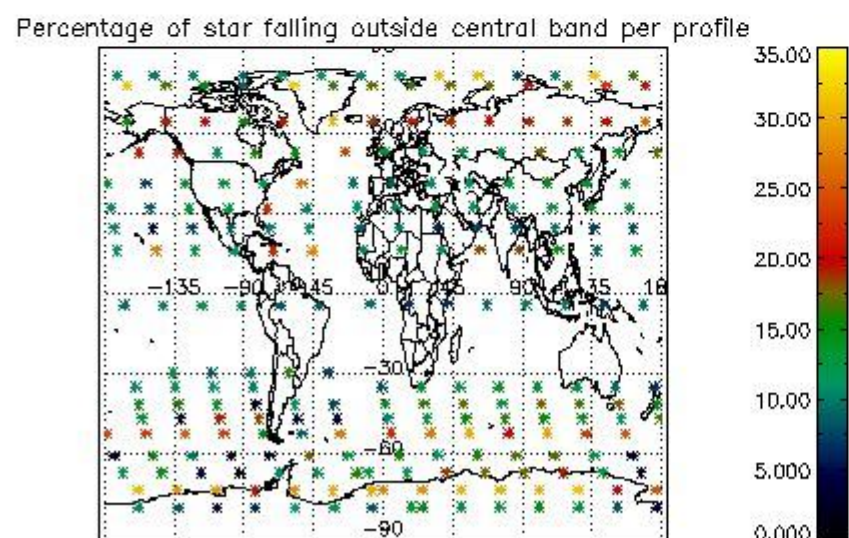
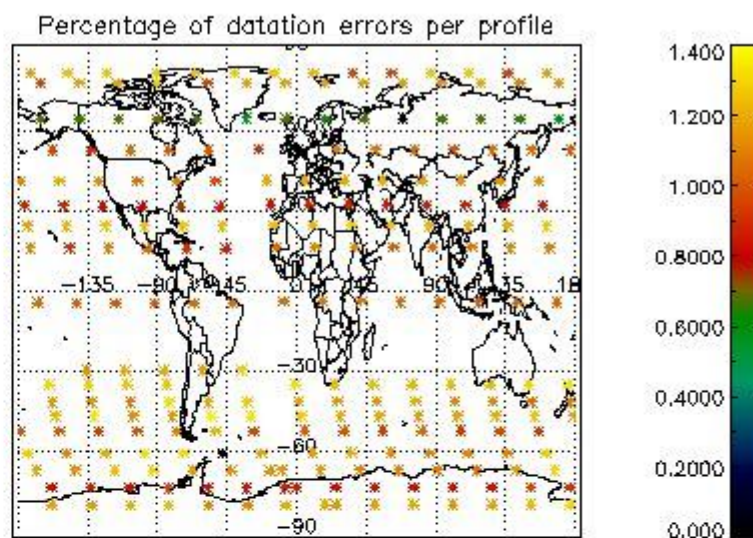
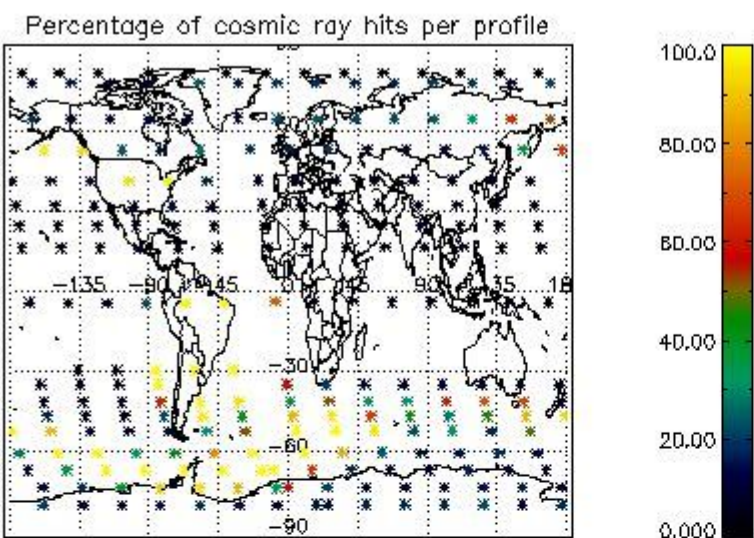


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

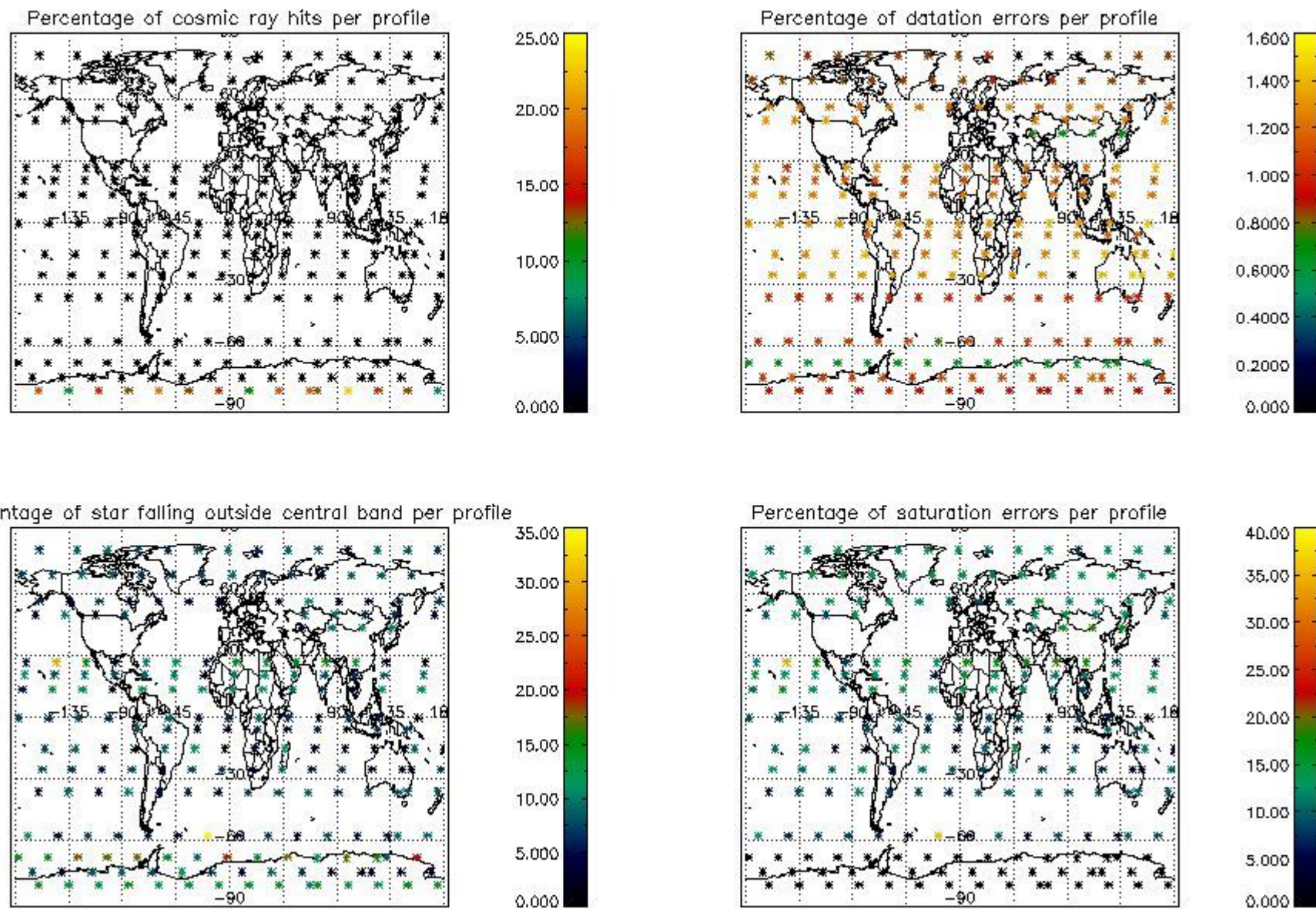


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

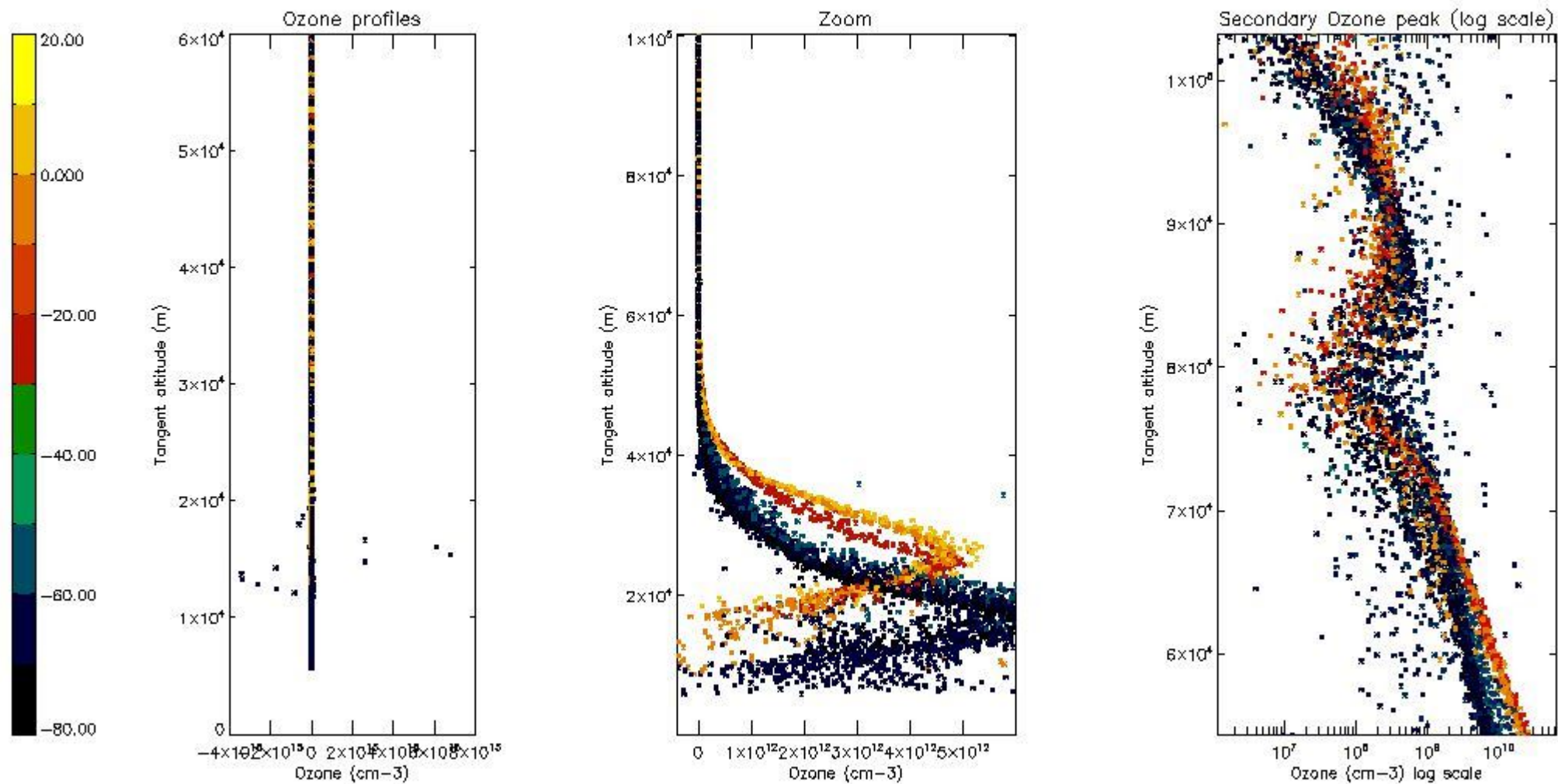
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	17

STD < 10	14
STD < 5	10

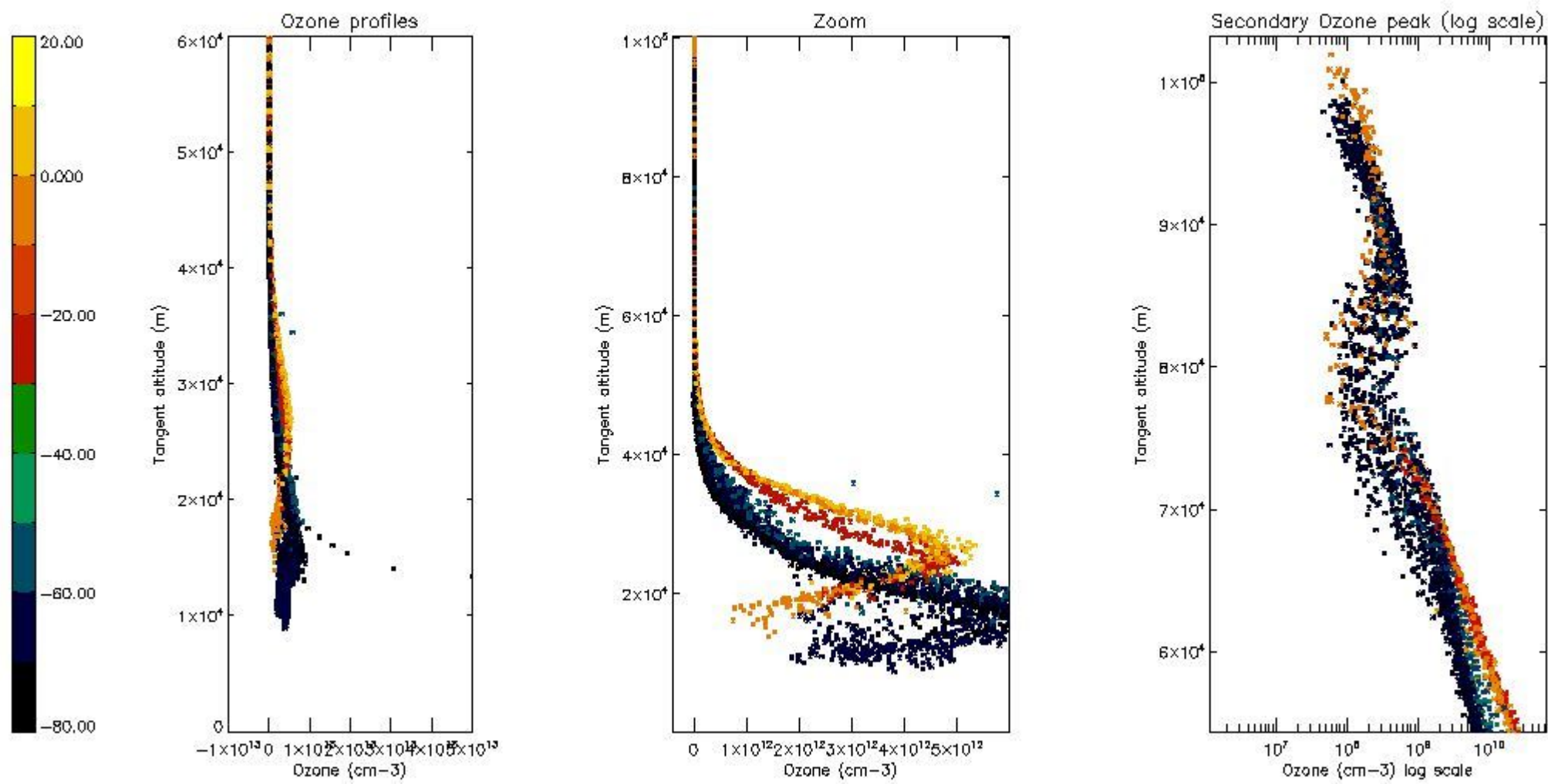
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



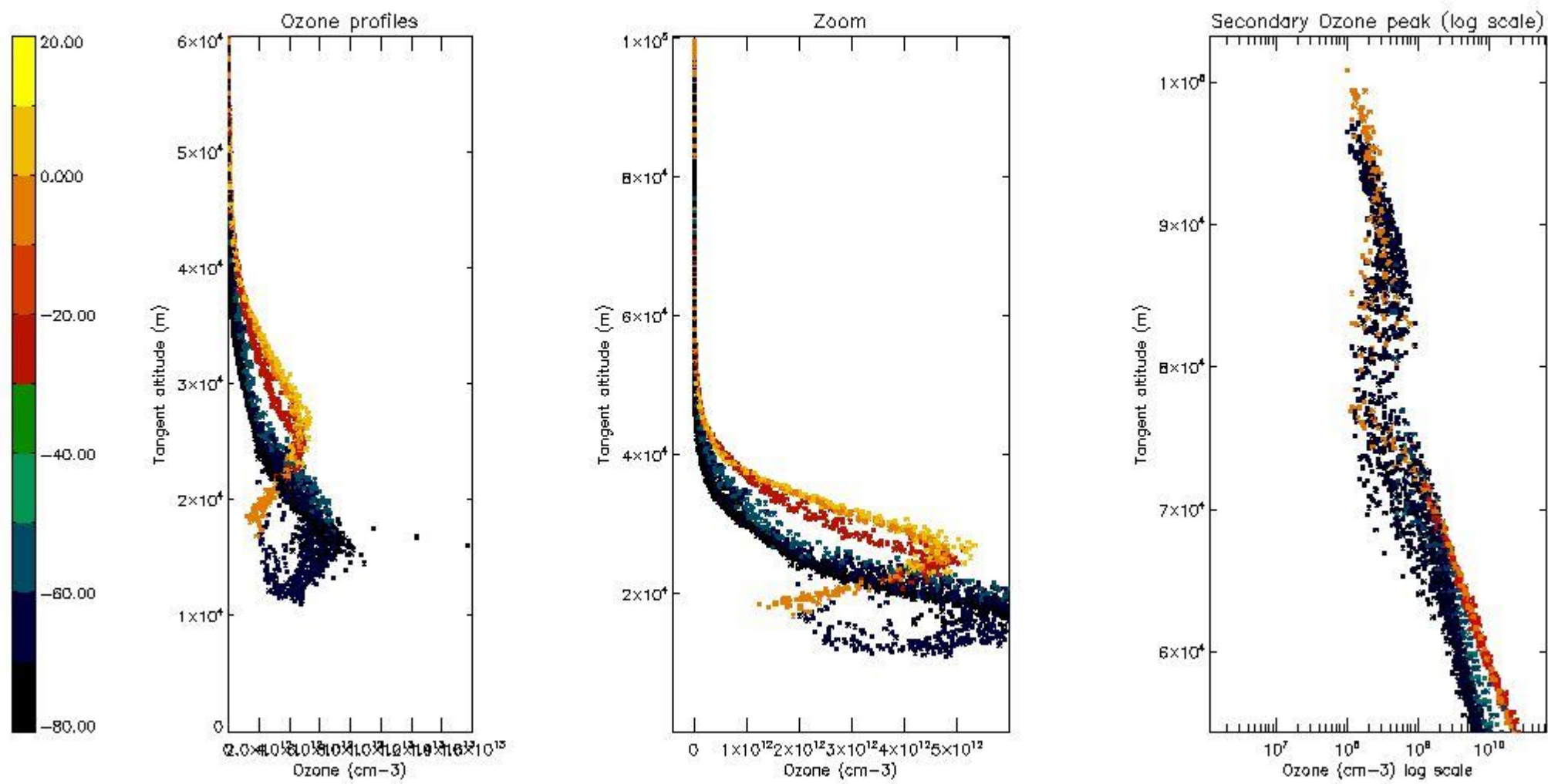
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



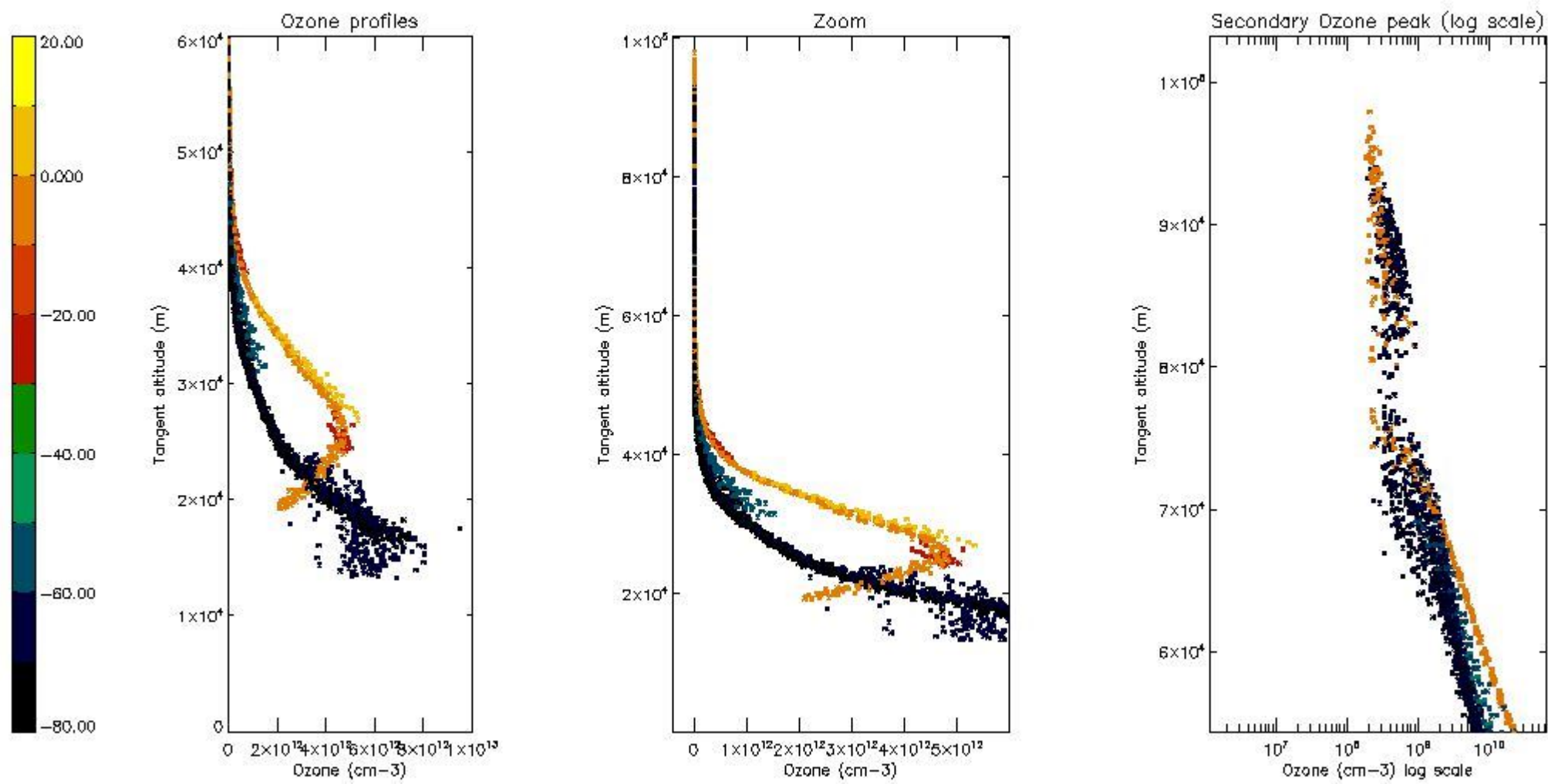
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



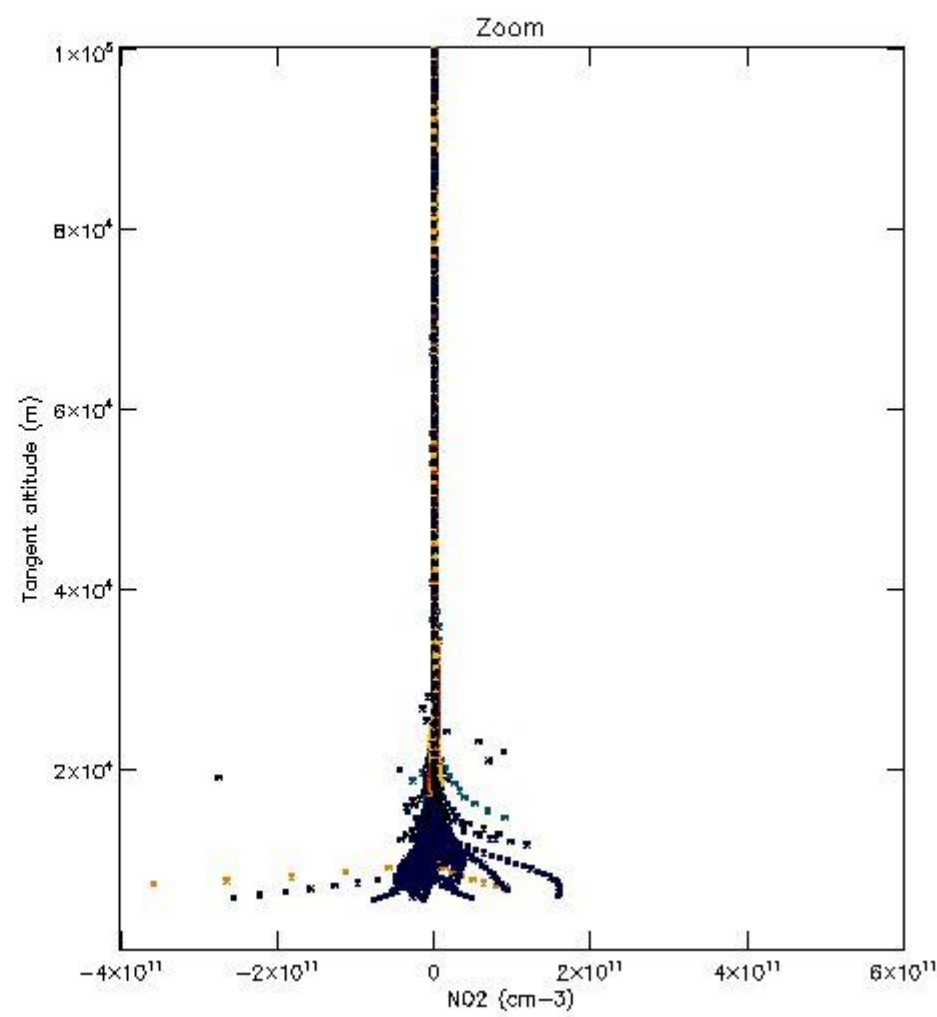
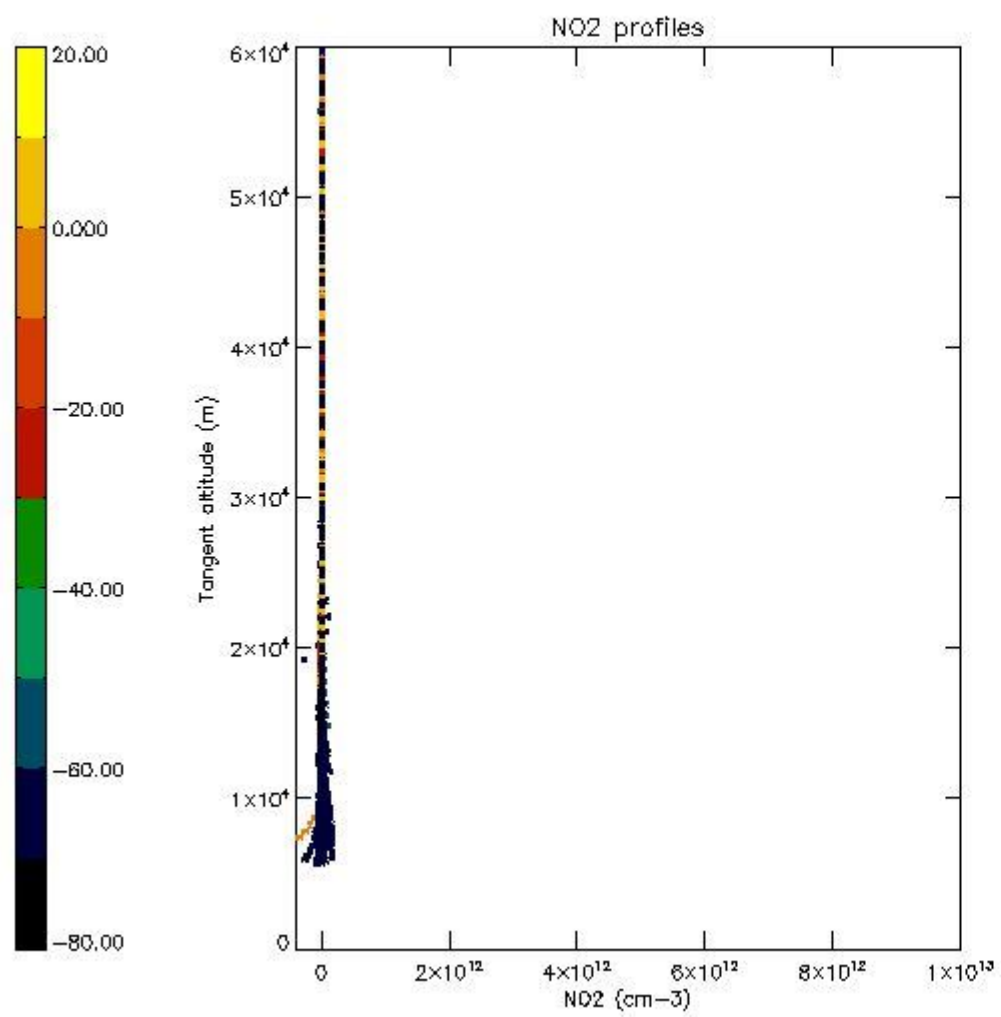
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



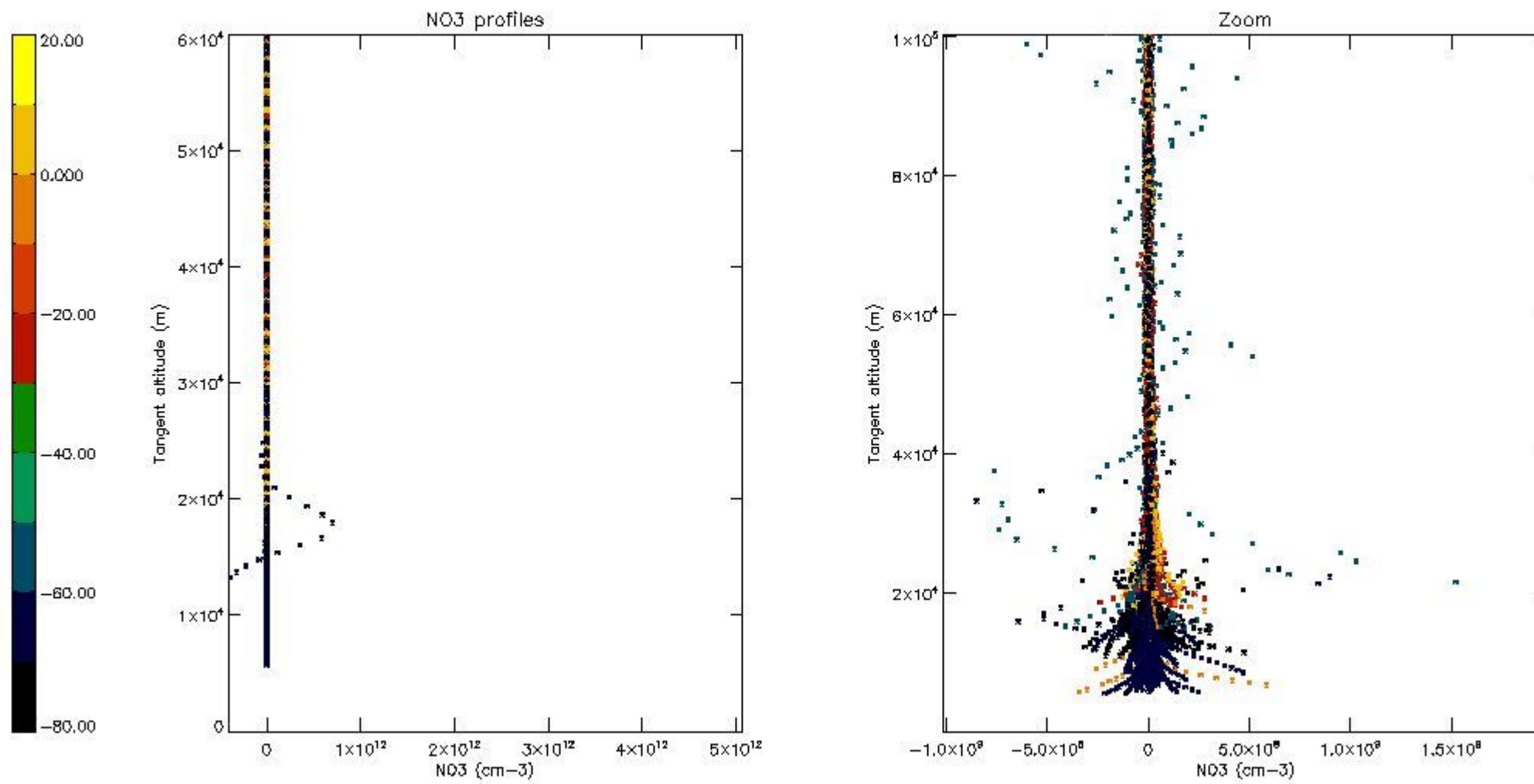
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	28-JUL-2004 00:00:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-JUL-2004 00:00:36
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-JUL-2004 00:00:36

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](#)

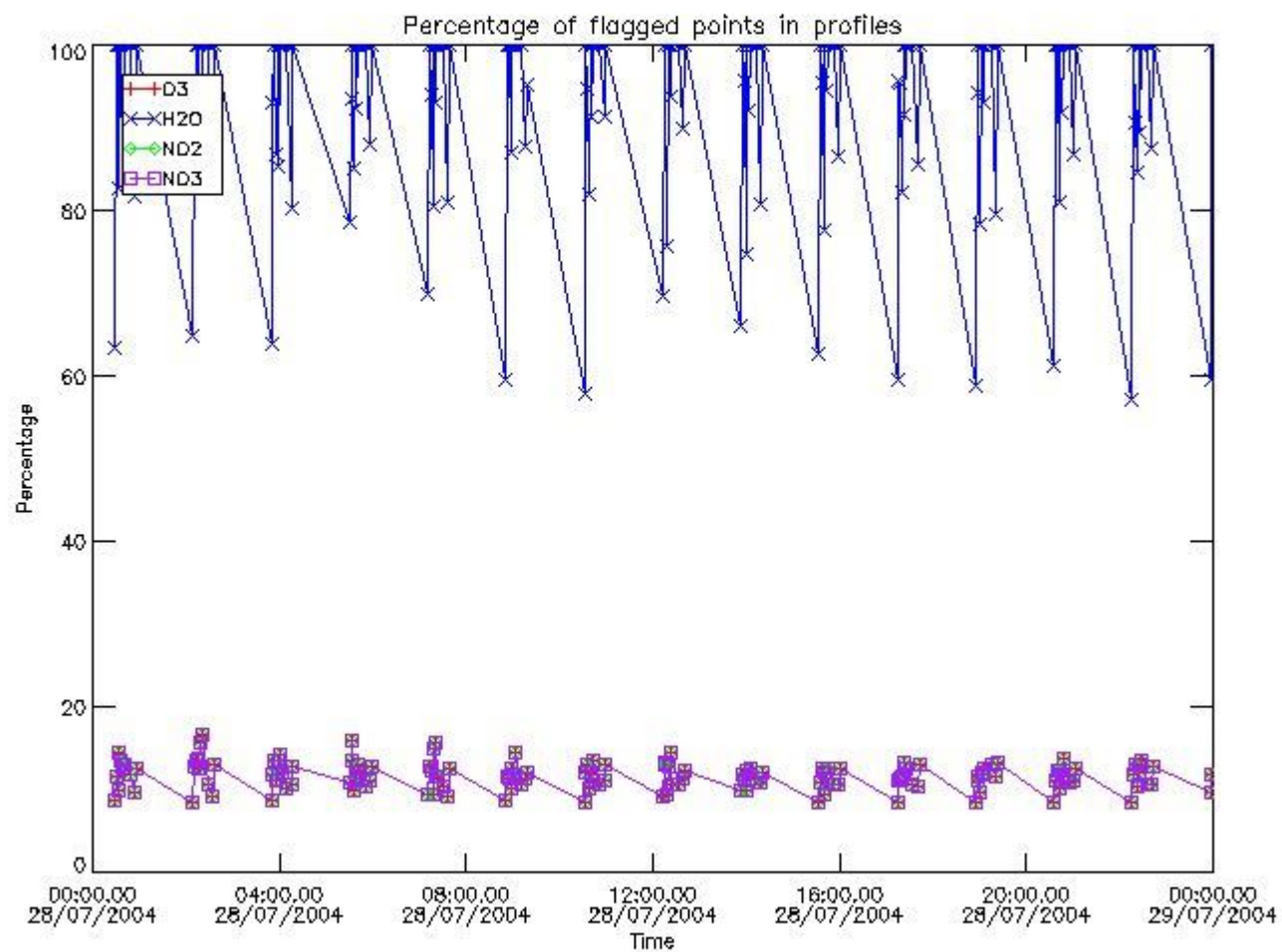
[6. Auxiliary Data Files used for the production reported in section 2](#)

456	GOM_NL__2PRFIN20040728_231321_000000382029_00030_12609_3503.N1	28-JUL-2004 23:13:21	Bright	37.500	59	55Alp Oph	2.0800	8900.0	75	12609	No
457	GOM_NL__2PRFIN20040728_231951_000000362029_00030_12609_3504.N1	28-JUL-2004 23:19:51	Bright	35.500	5	3Alp Lyr	0.033000	11000.	71	12609	No
458	GOM_NL__2PRFIN20040728_232131_000000442029_00030_12609_3505.N1	28-JUL-2004 23:21:31	Bright	44.000	66	37Gam Cyg	2.2080	5900.0	88	12609	No
459	GOM_NL__2PRFIN20040728_232334_000000412029_00030_12609_3506.N1	28-JUL-2004 23:23:34	Bright	41.000	69	33Gam Dra	2.2310	3800.0	82	12609	No
460	GOM_NL__2PRFIN20040728_232728_000000352029_00030_12609_3507.N1	28-JUL-2004 23:27:28	Bright	35.000	119	14Eta Dra	2.7270	4700.0	70	12609	No
461	GOM_NL__2PRFIN20040728_233138_000000402029_00030_12609_3508.N1	28-JUL-2004 23:31:38	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	12609	No
462	GOM_NL__2PRFIN20040728_233426_000000352029_00030_12609_3509.N1	28-JUL-2004 23:34:26	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	12609	No
463	GOM_NL__2PRFIN20040728_233728_000000512029_00030_12609_3510.N1	28-JUL-2004 23:37:28	Bright	51.000	76	27Gam Cas	2.3000	30000.	102	12609	No
464	GOM_NL__2PRFIN20040728_234336_000000502029_00030_12609_3511.N1	28-JUL-2004 23:43:36	Bright	50.000	160	23Gam Per	2.9300	4700.0	100	12609	No
465	GOM_NL__2PRFIN20040728_234641_000000722029_00030_12609_3512.N1	28-JUL-2004 23:46:41	Bright	72.000	73	57Gam1And	2.2600	13100.	144	12609	No
466	GOM_NL__2PRFIN20040728_234901_000000452029_00030_12609_3513.N1	28-JUL-2004 23:49:01	Bright	44.500	149	45Eps Per	2.8880	30000.	89	12609	No
467	GOM_NL__2PRFIN20040728_235200_000000552029_00030_12609_3514.N1	28-JUL-2004 23:52:00	Twilight_stray	54.500	150	44Zet Per	2.8900	28000.	109	12609	No
468	GOM_NL__2PRFIN20040728_235414_000000442029_00030_12609_3515.N1	28-JUL-2004 23:54:14	Twilight_stray	43.500	176	23Zet Tau	3.0200	22000.	87	12609	No
469	GOM_NL__2PRFIN20040728_235639_000000592029_00030_12609_3516.N1	28-JUL-2004 23:56:39	Dark	58.500	13	87Alp Tau	0.86700	3800.0	117	12609	No
470	GOM_NL__2PRFIN20040728_235841_000000442029_00030_12609_3517.N1	28-JUL-2004 23:58:41	Dark	43.500	27	24Gam Ori	1.6360	26000.	87	12609	No

3. Quality information per product

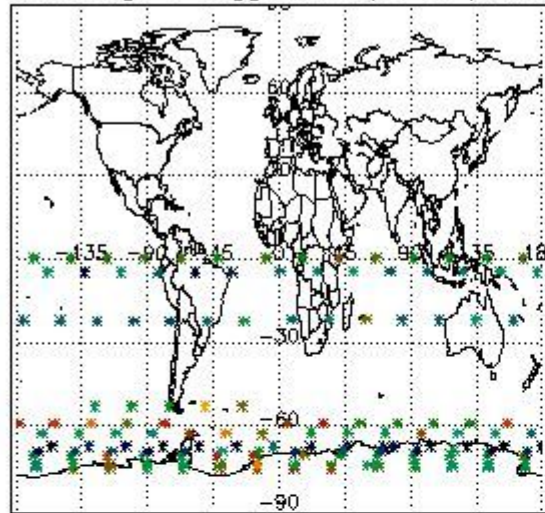
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

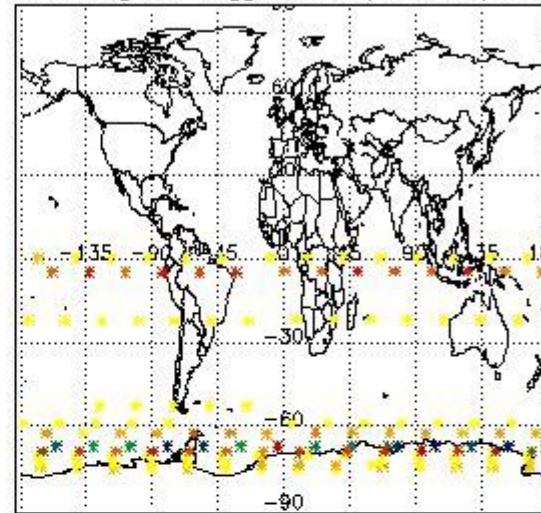


3.2 Plot quality information per product (world map)

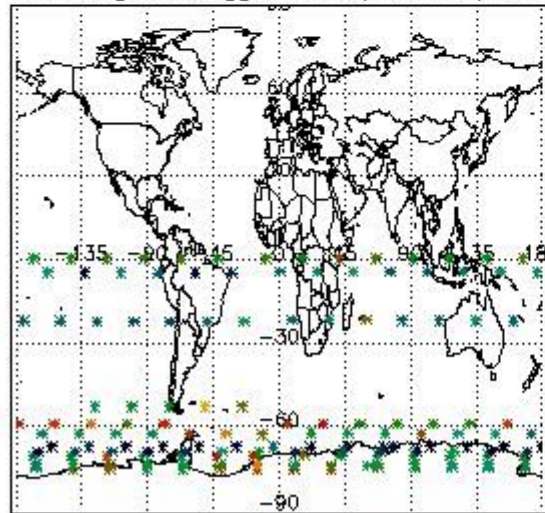
Percentage of flagged data per O3 profile



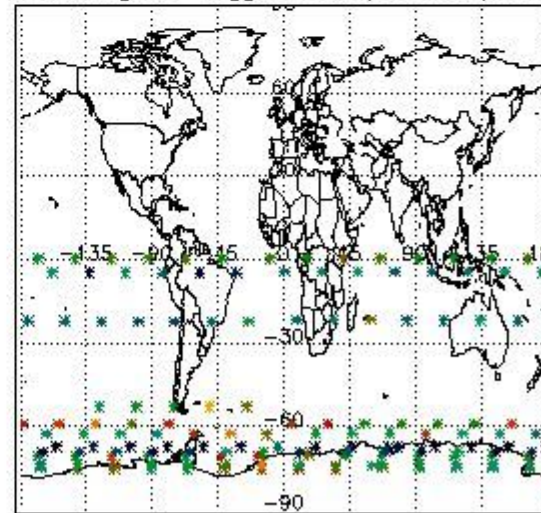
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

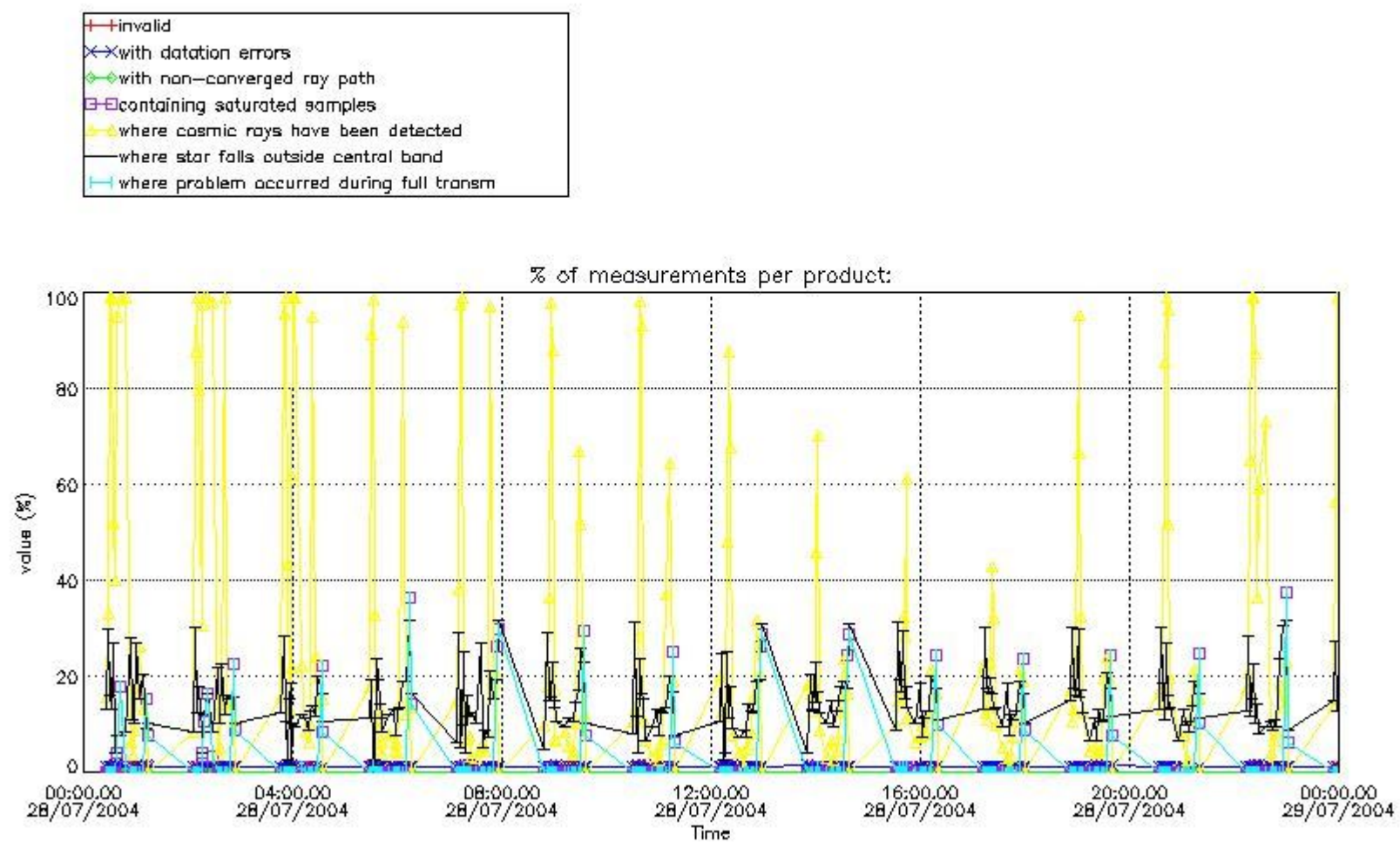


4. Level 1 quality information per product

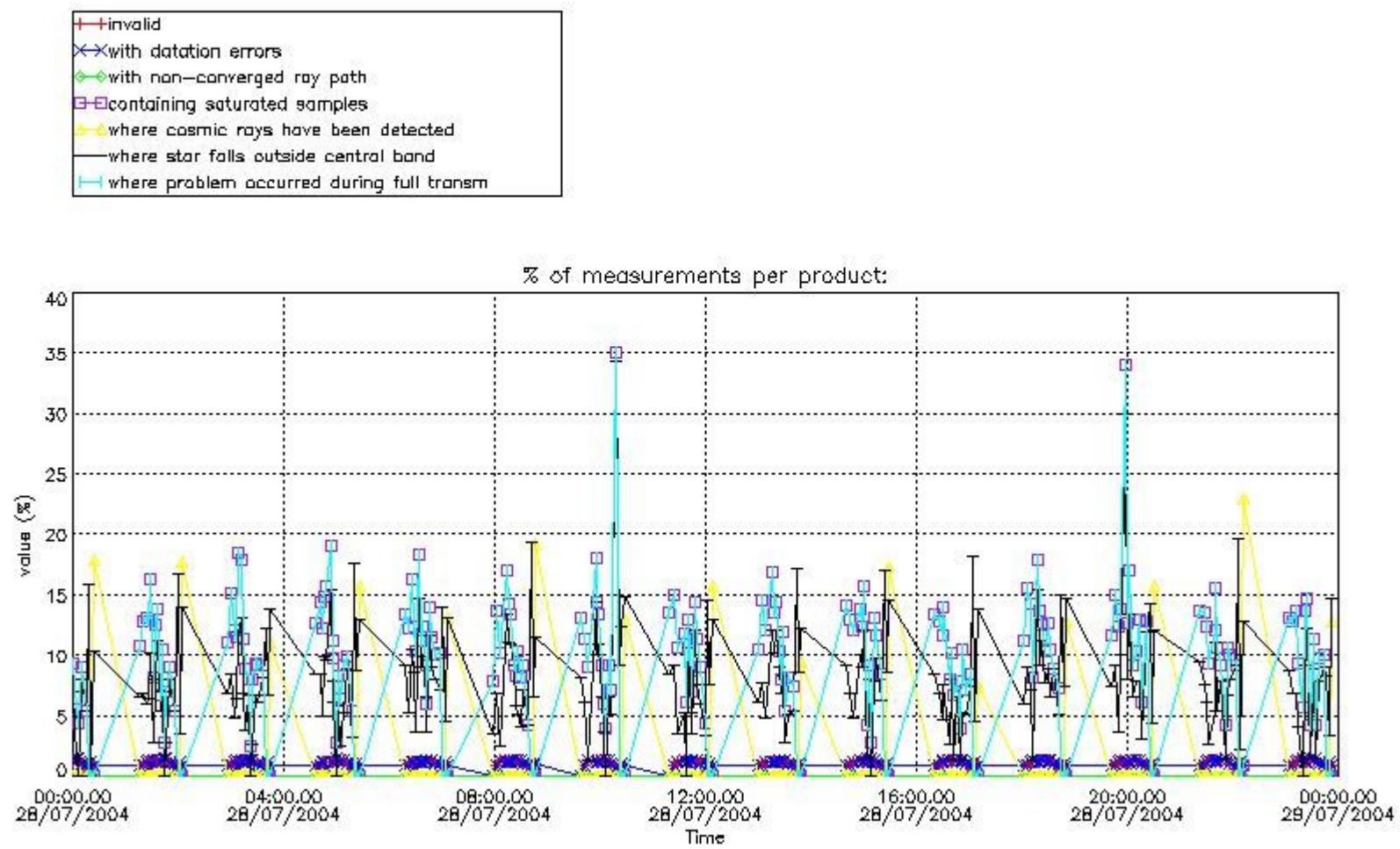
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

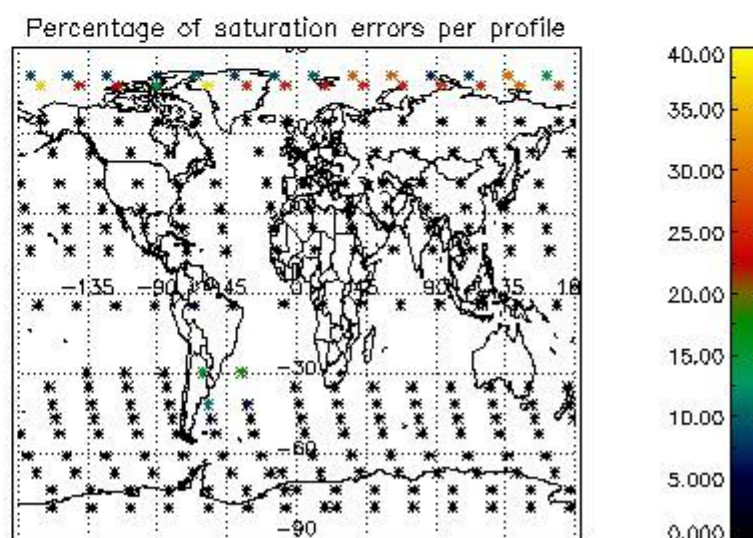
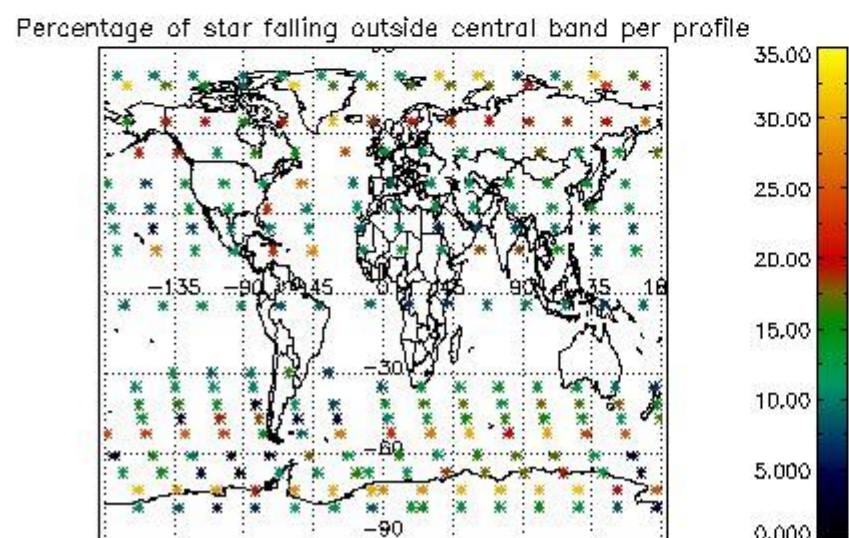
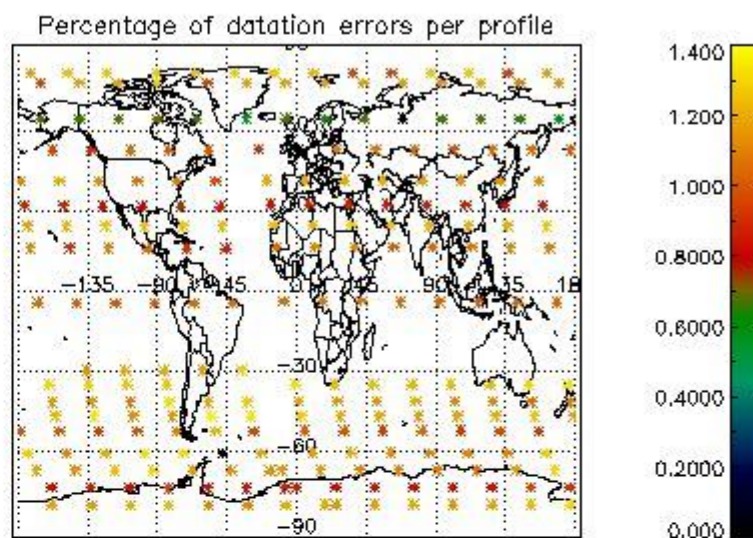
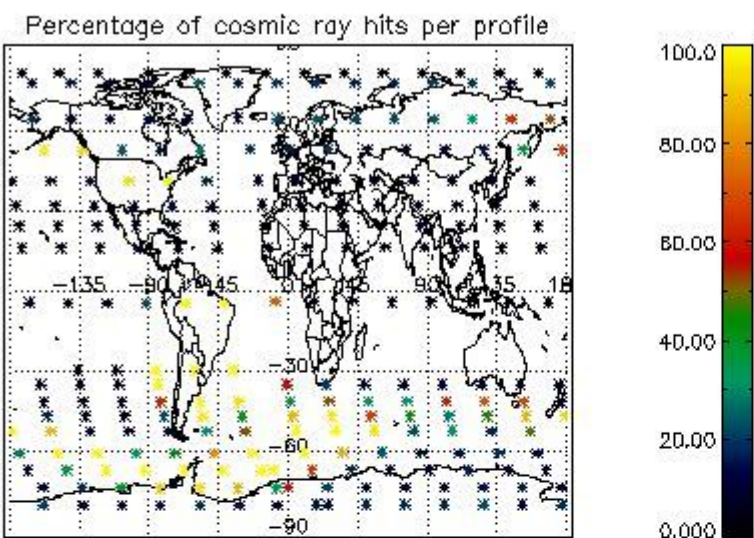


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

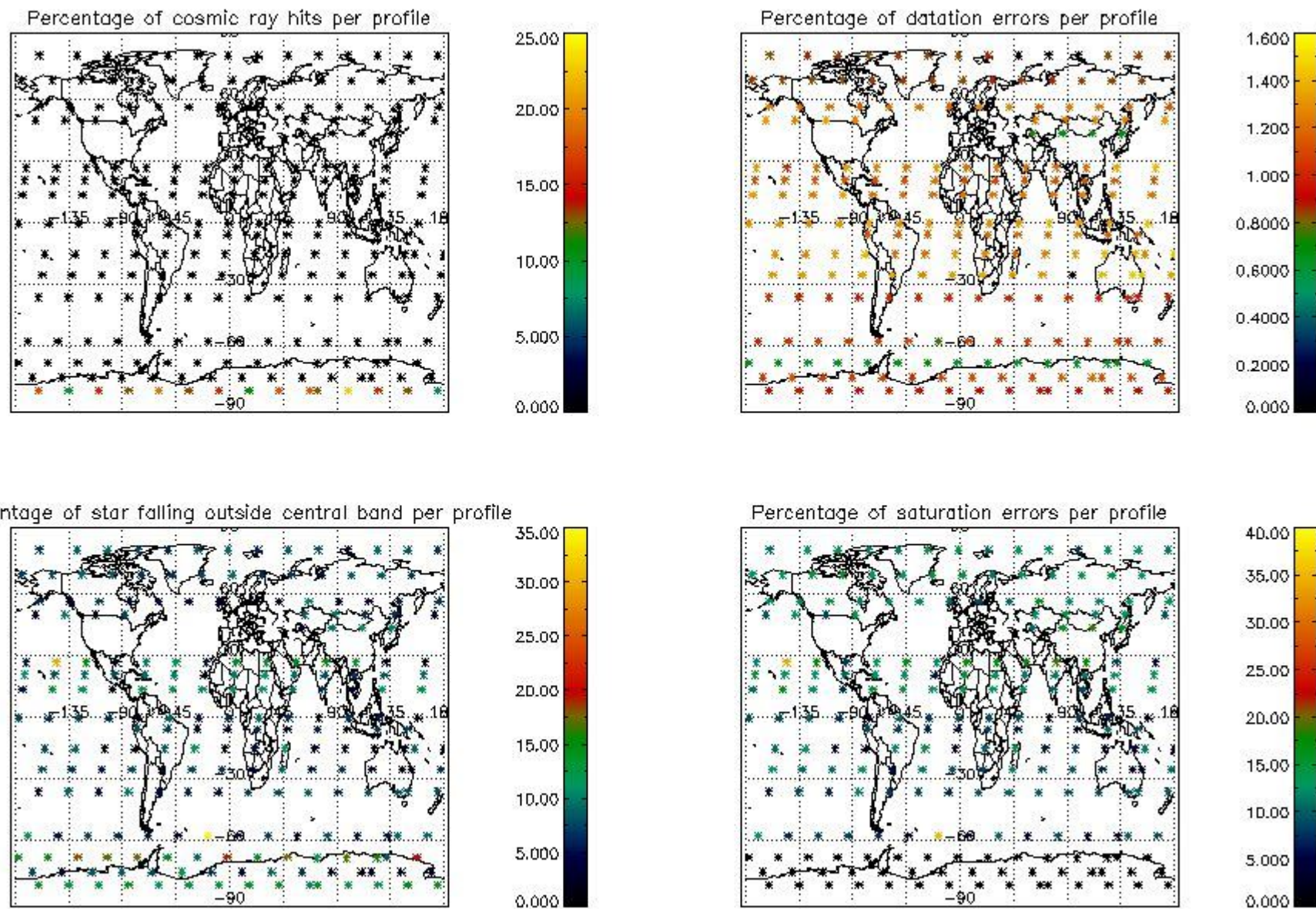


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

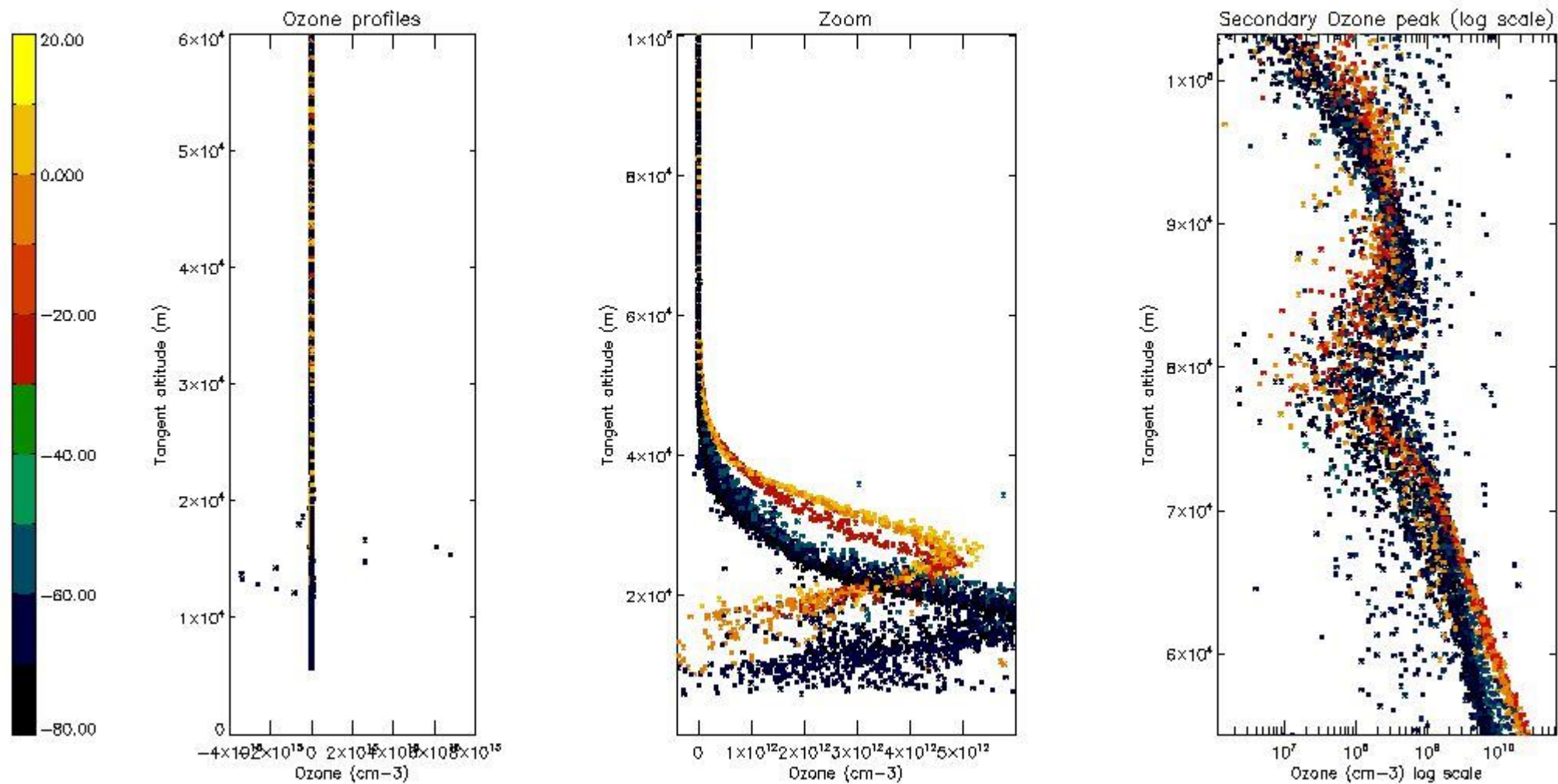
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	17

STD < 10	14
STD < 5	10

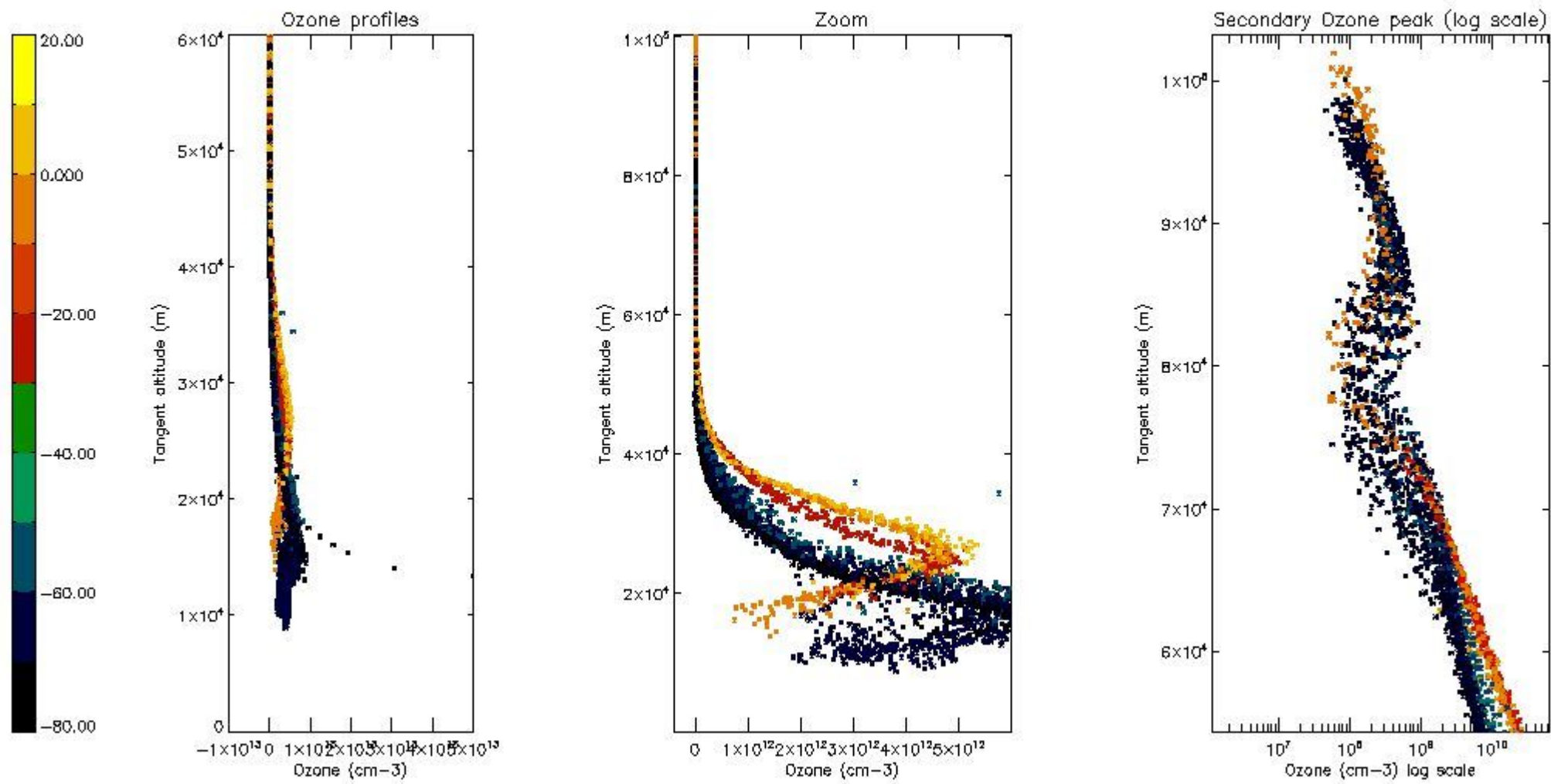
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



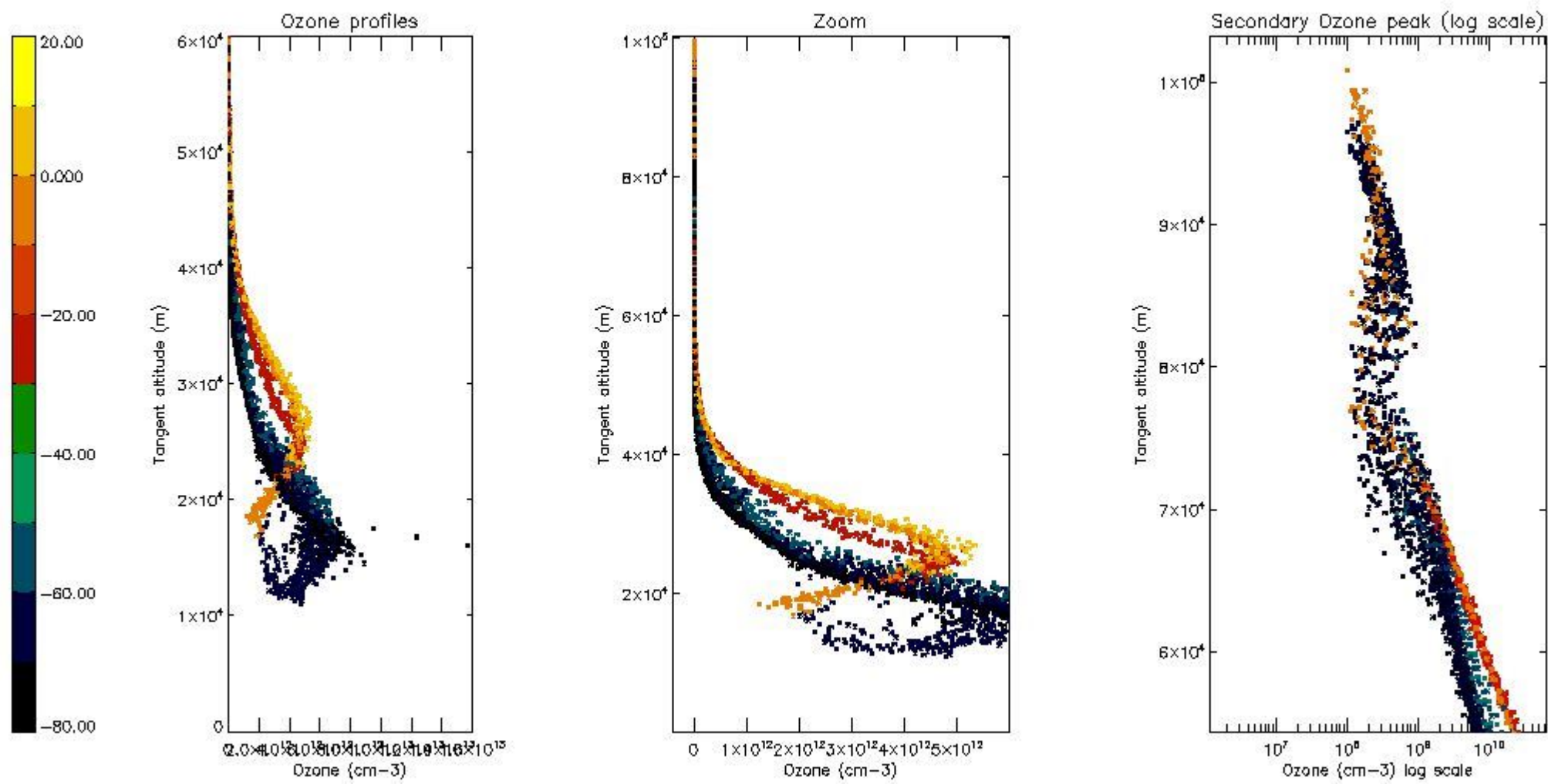
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



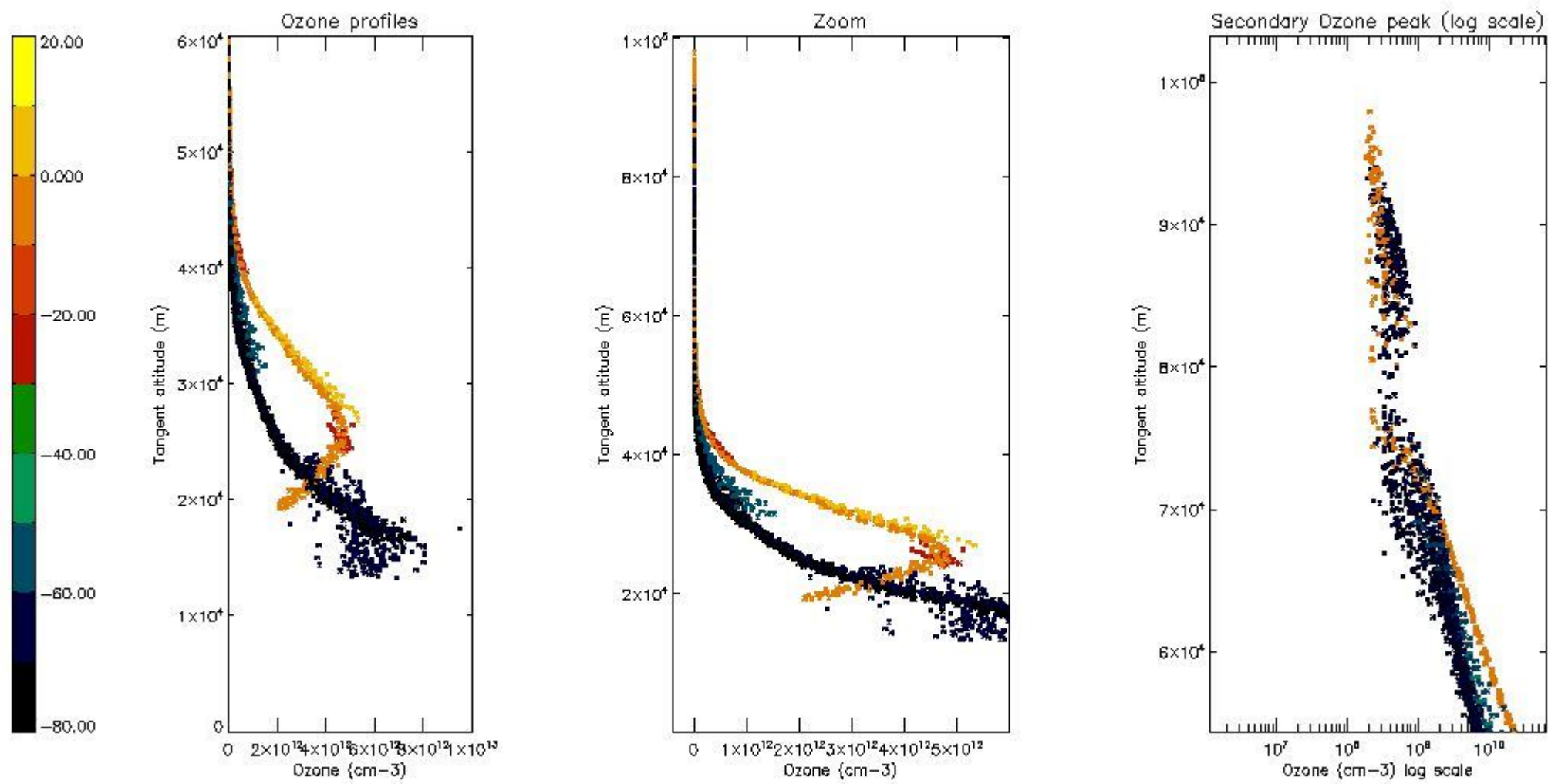
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



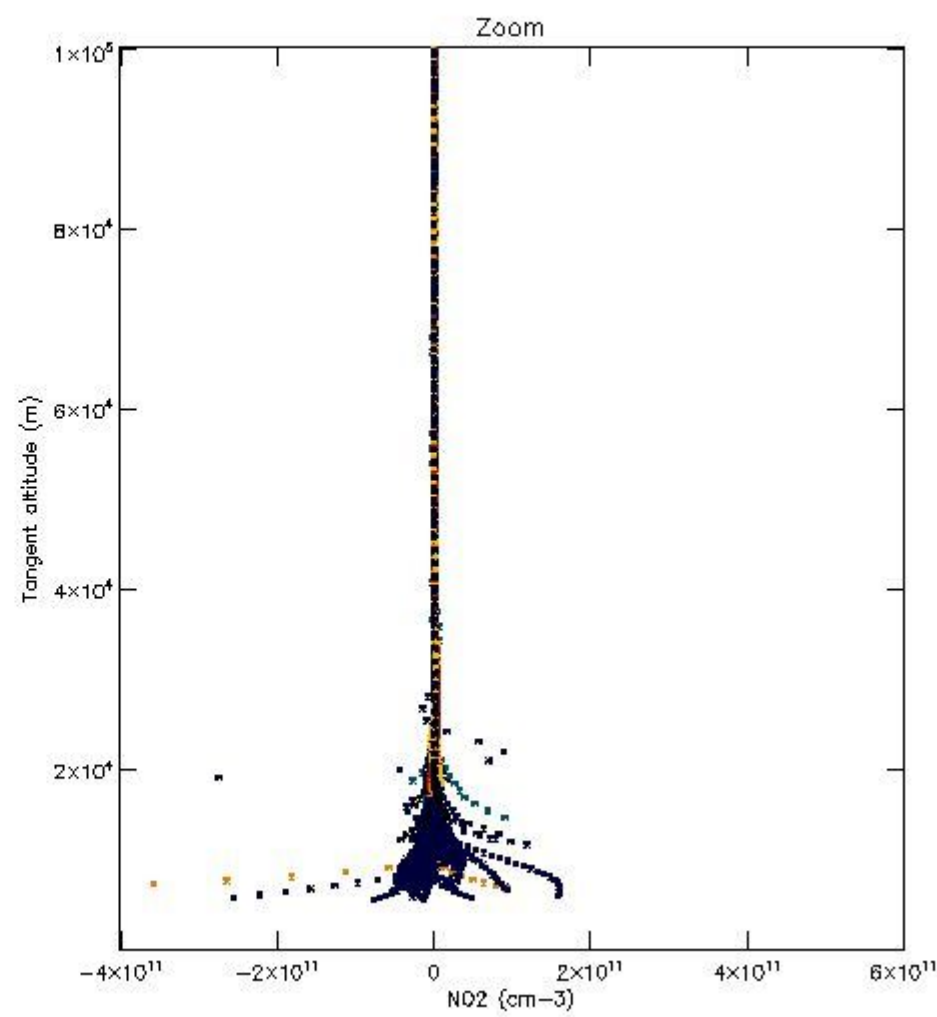
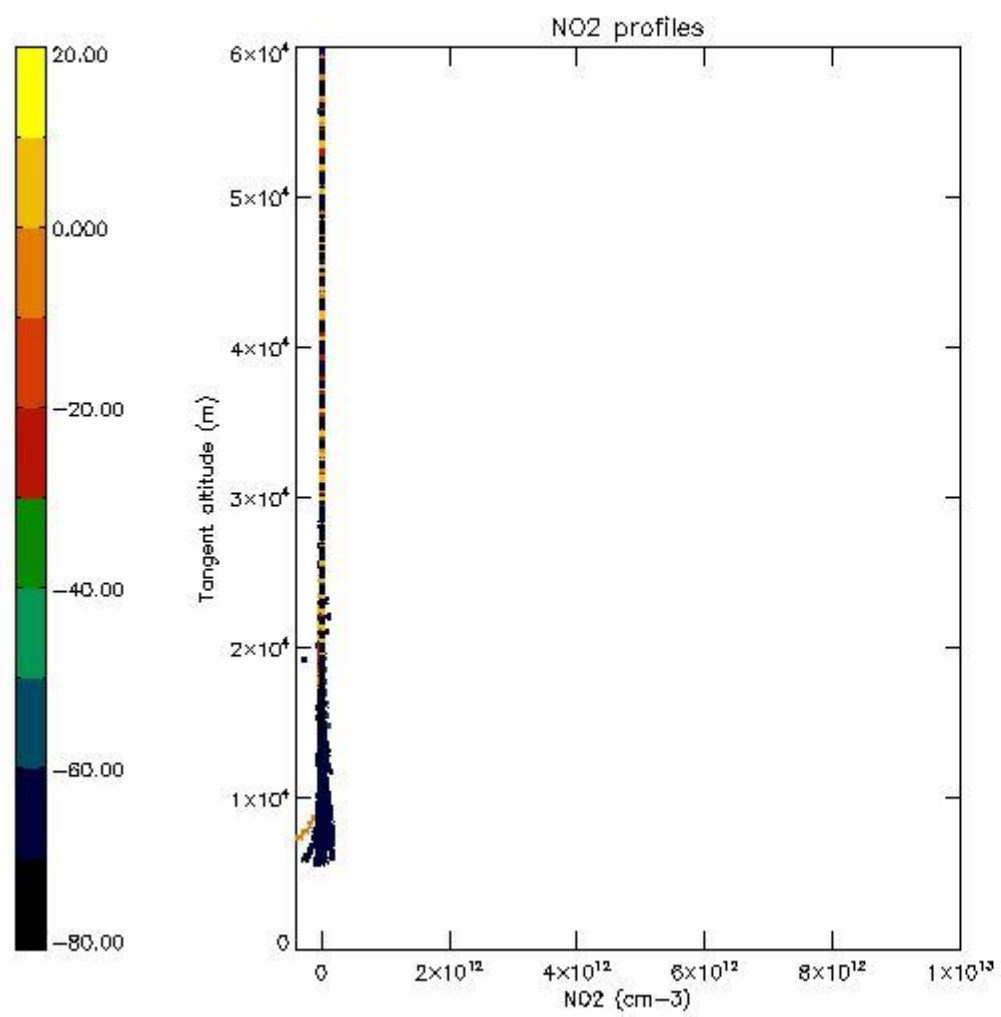
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



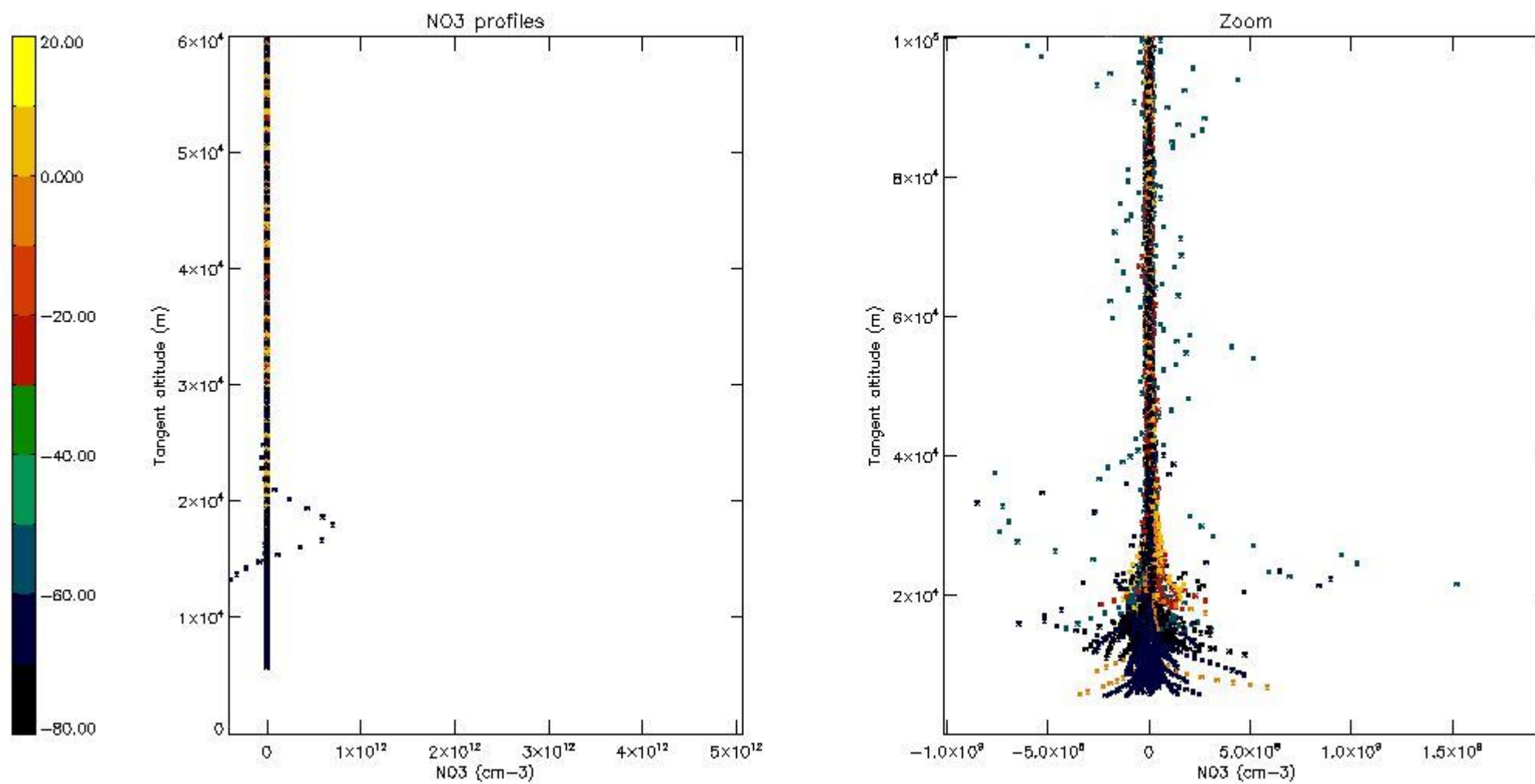
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

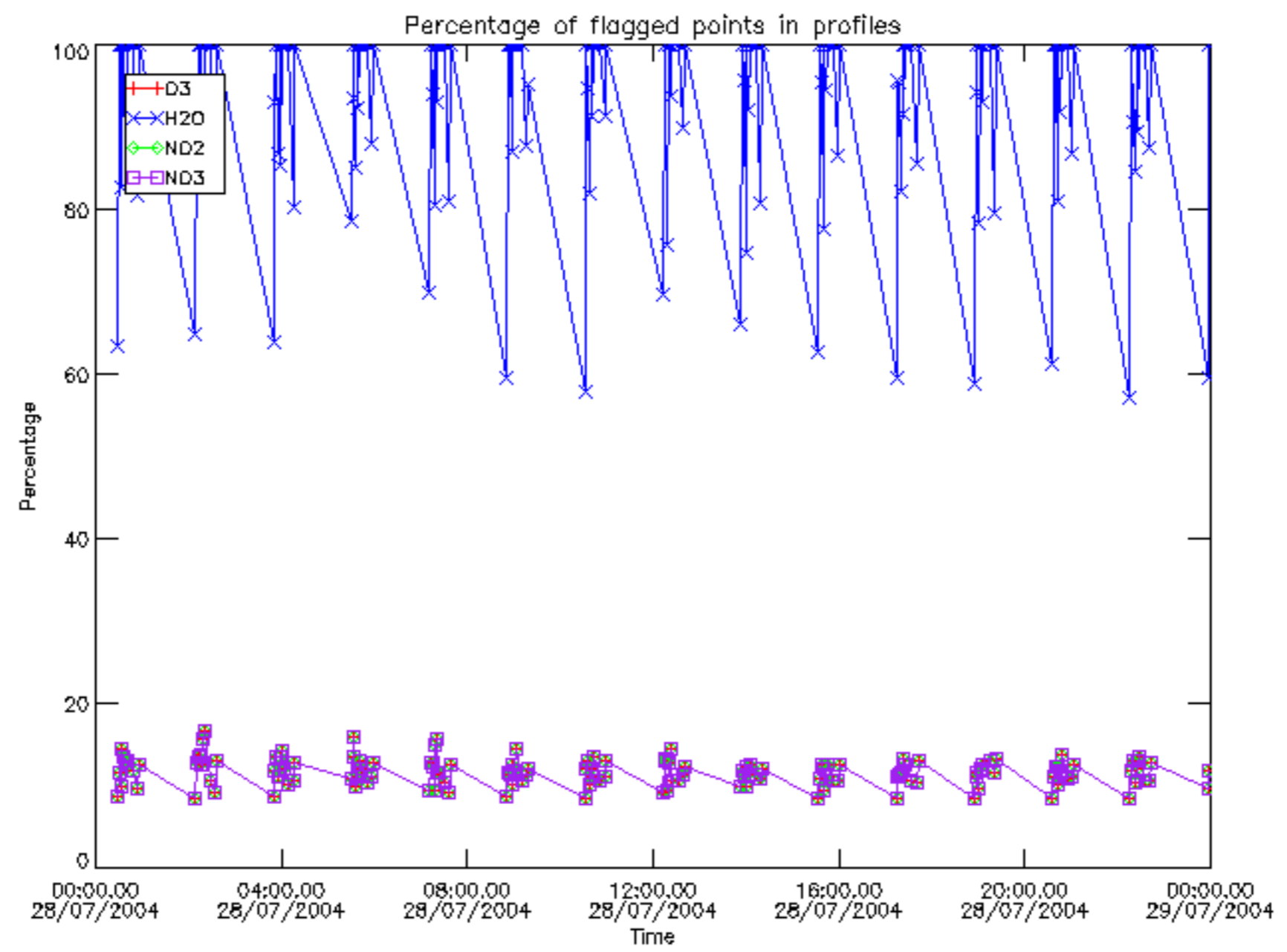
The colorbar represents the latitude.



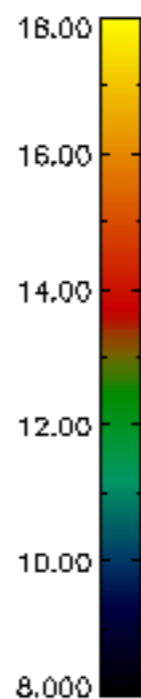
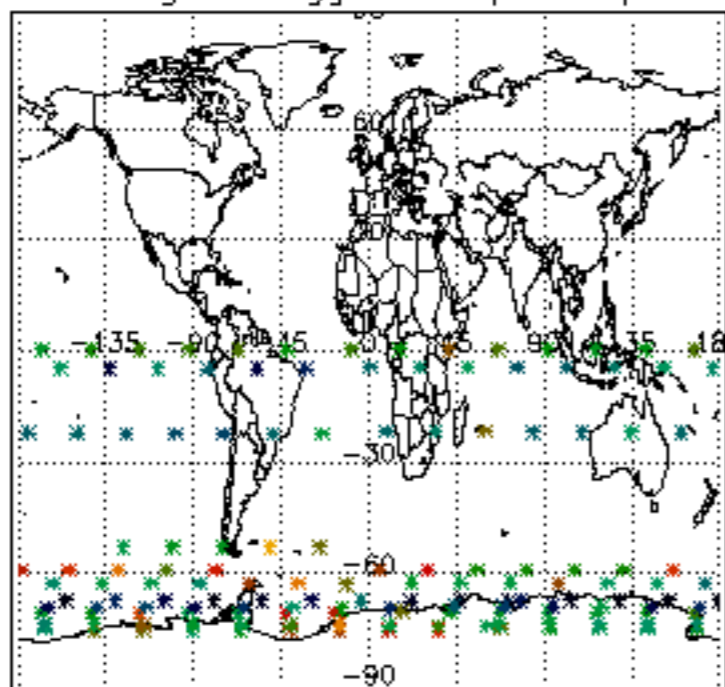
6. Auxiliary Data Files used for the production reported in section 2

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.

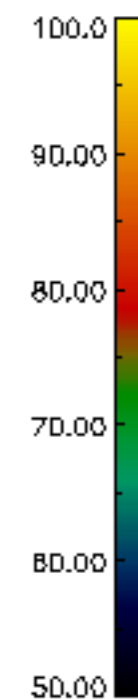
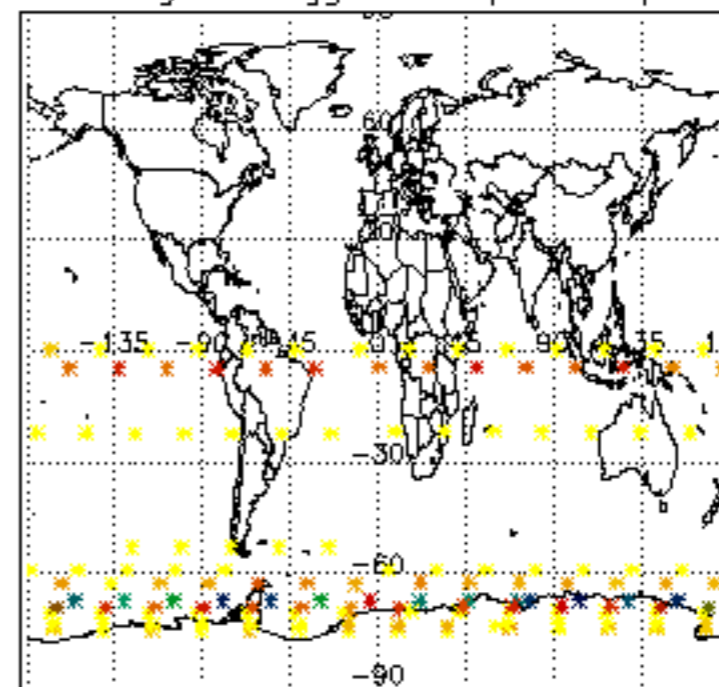
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	28-JUL-2004 00:00:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-JUL-2004 00:00:36
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-JUL-2004 00:00:36



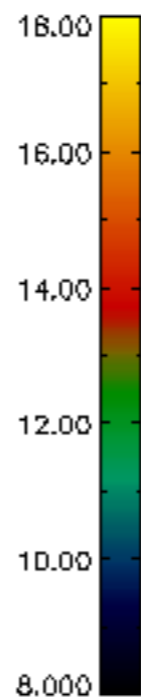
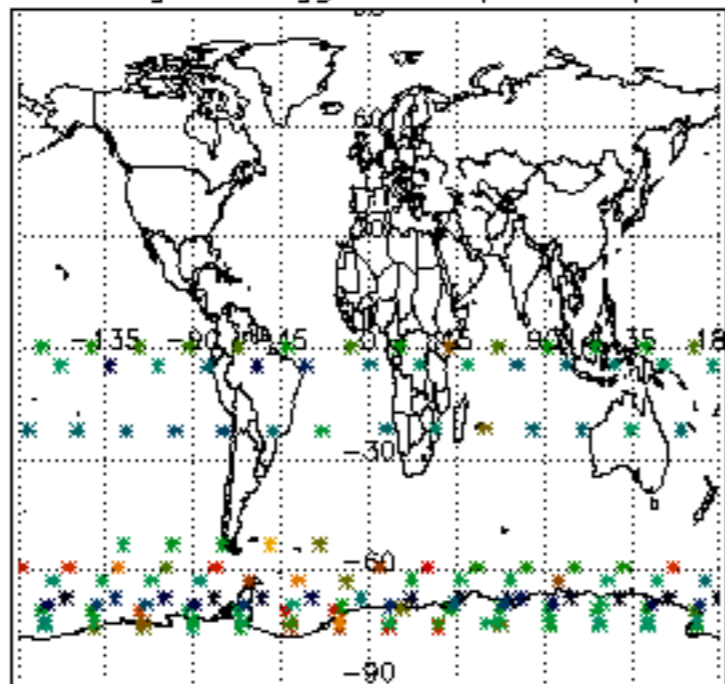
Percentage of flagged data per D3 profile



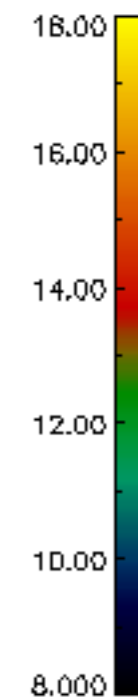
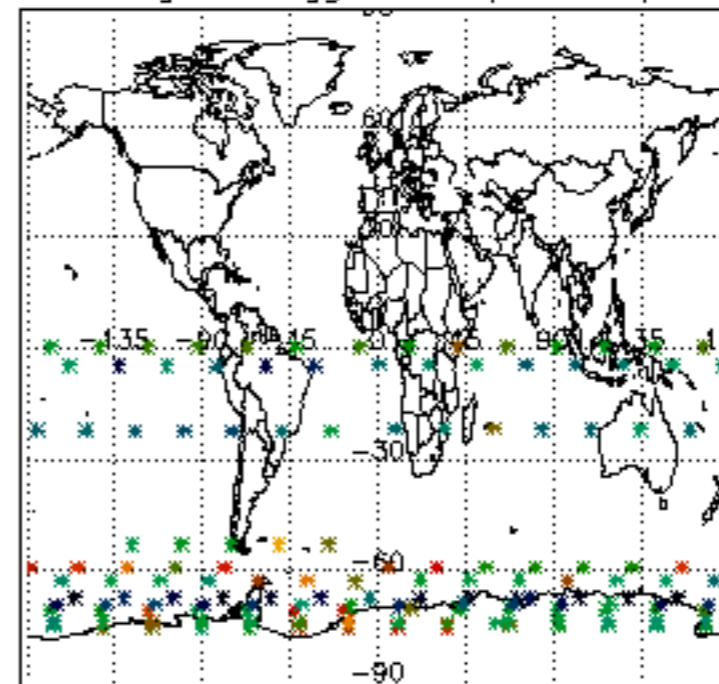
Percentage of flagged data per H2O profile

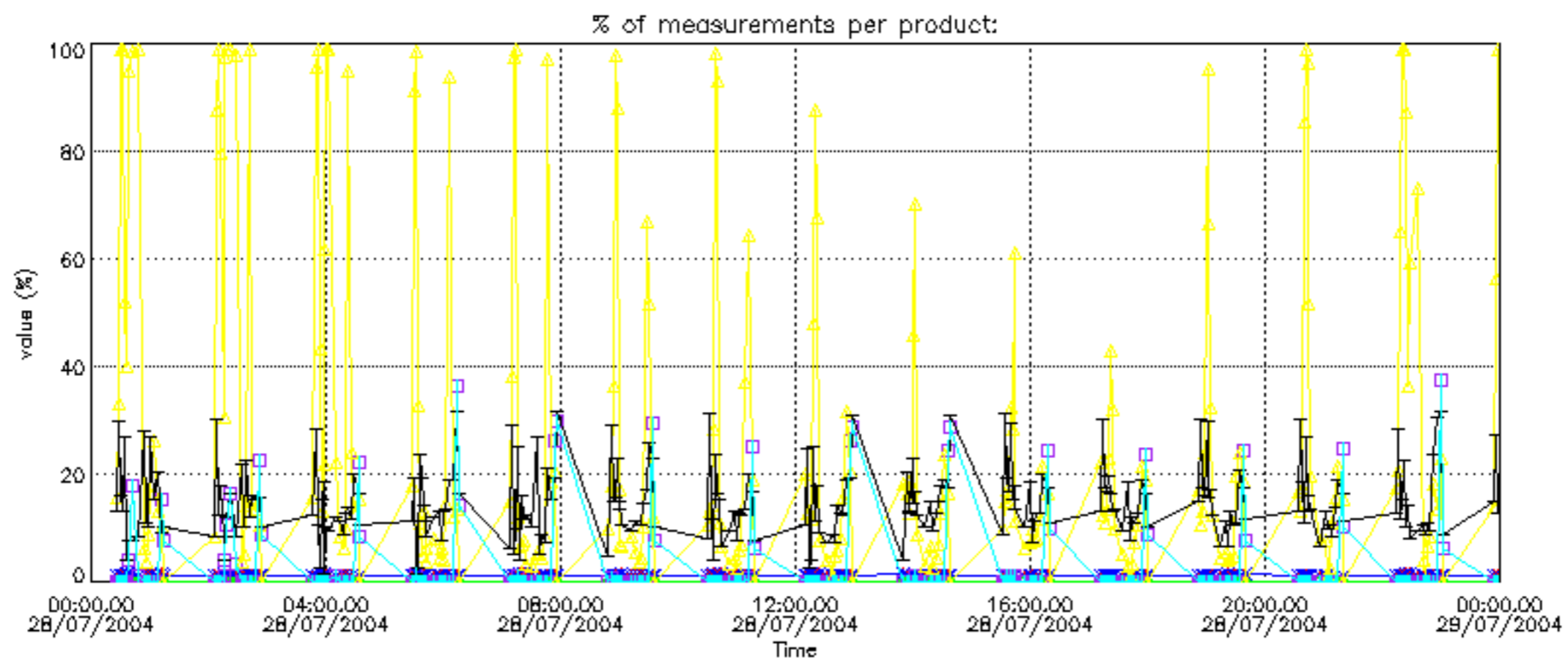
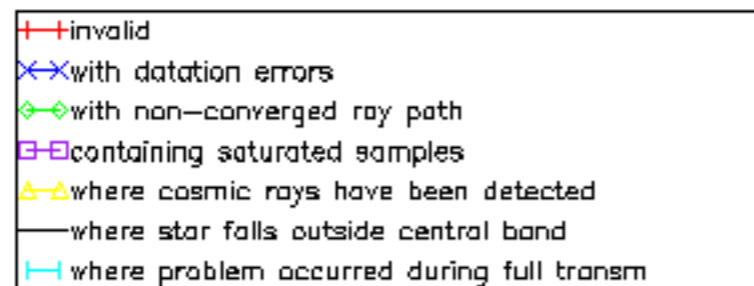


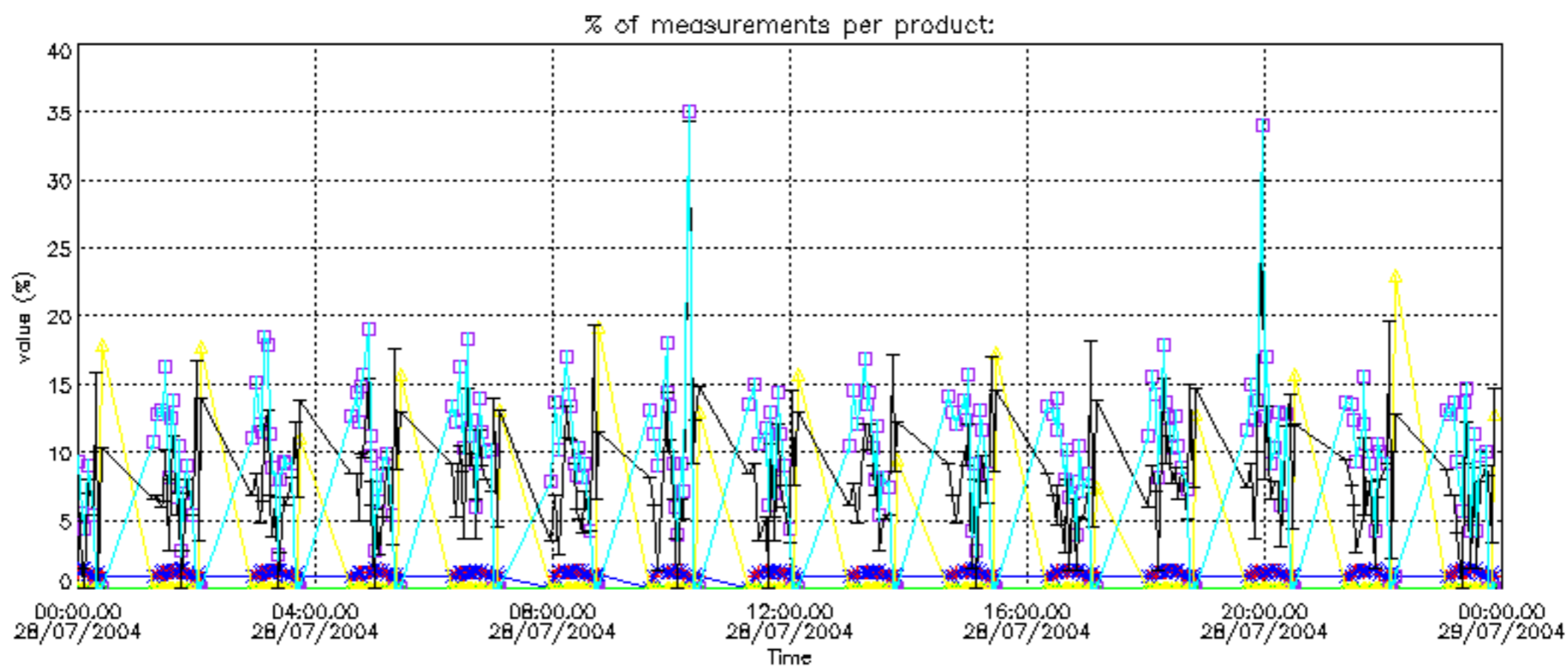
Percentage of flagged data per NO2 profile



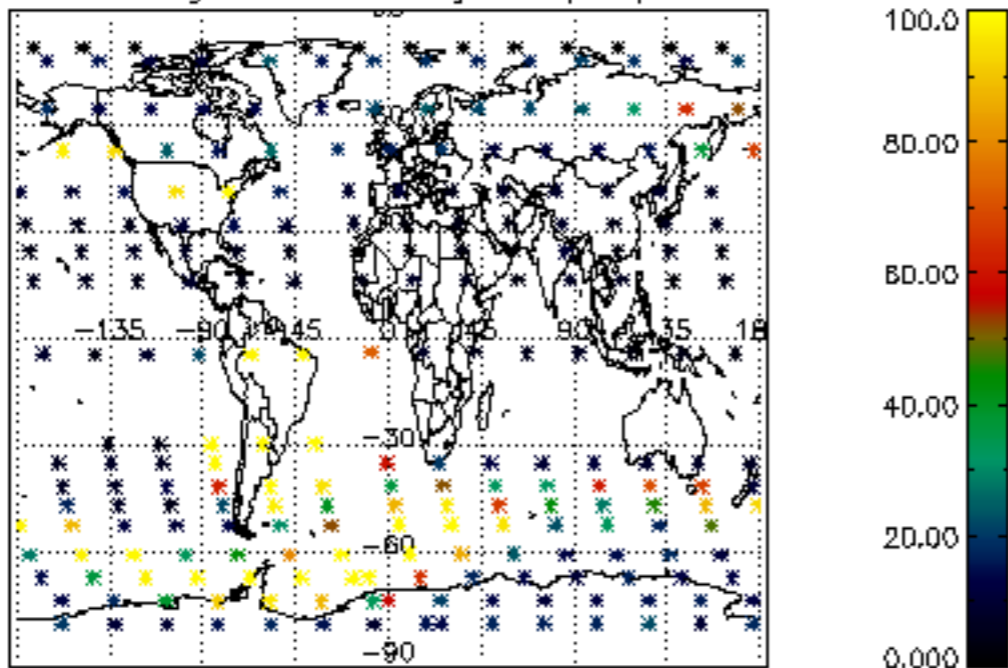
Percentage of flagged data per NO3 profile



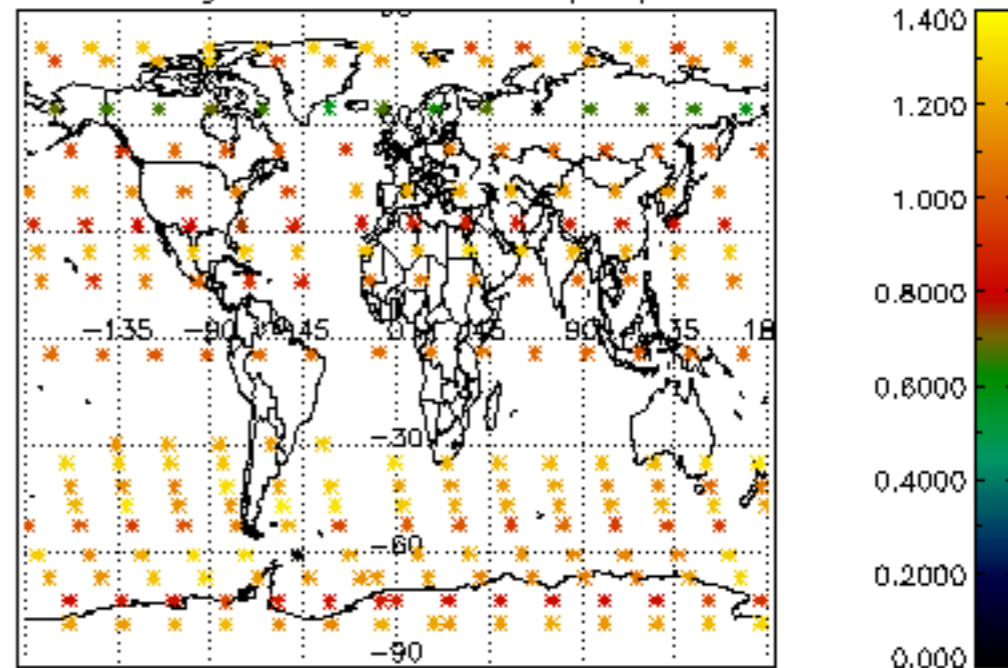




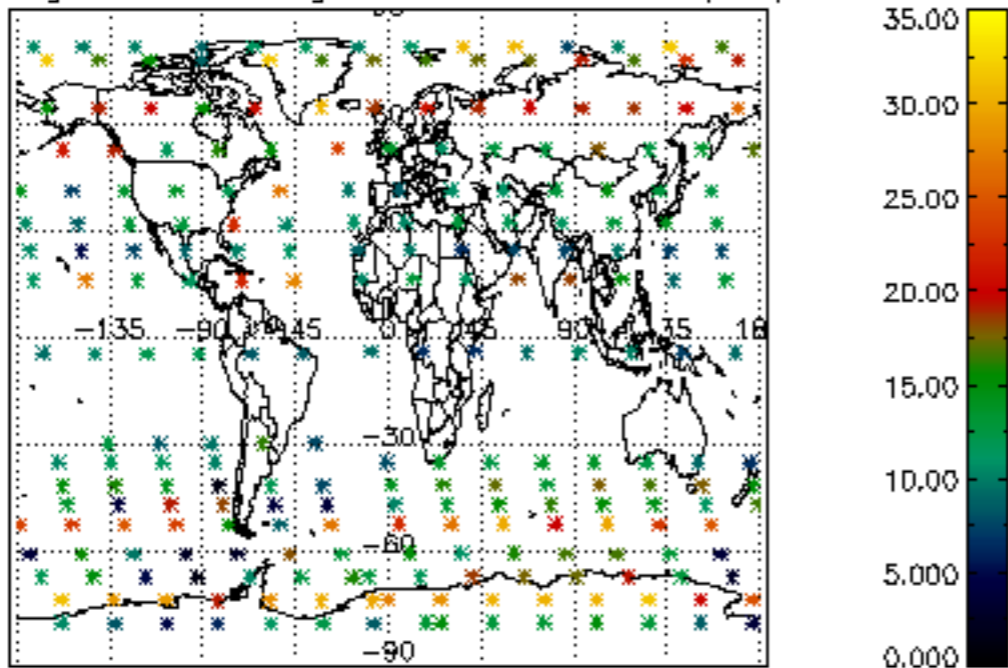
Percentage of cosmic ray hits per profile



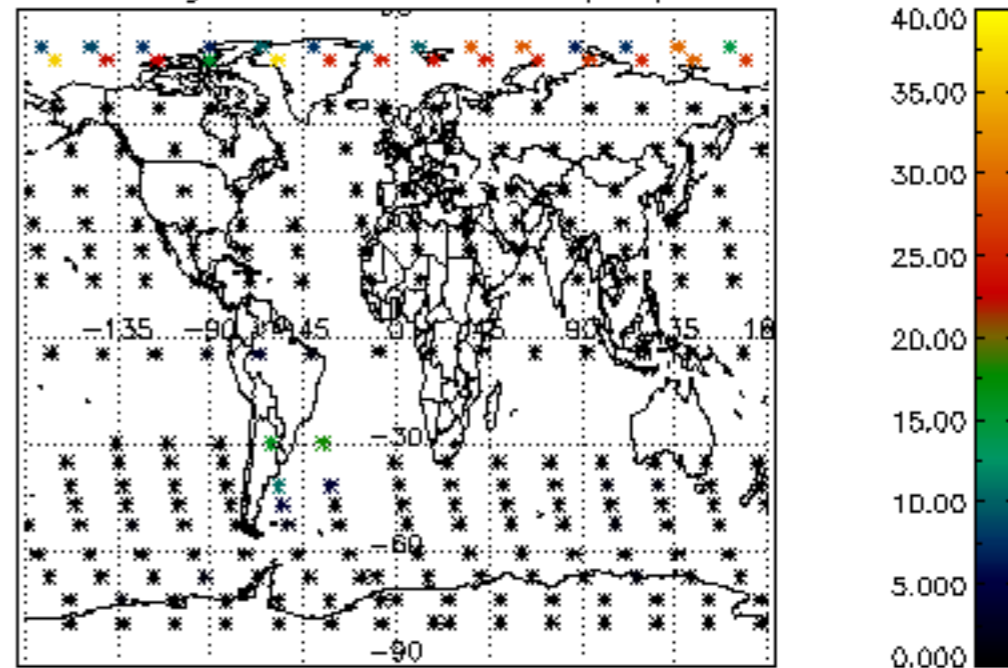
Percentage of datation errors per profile



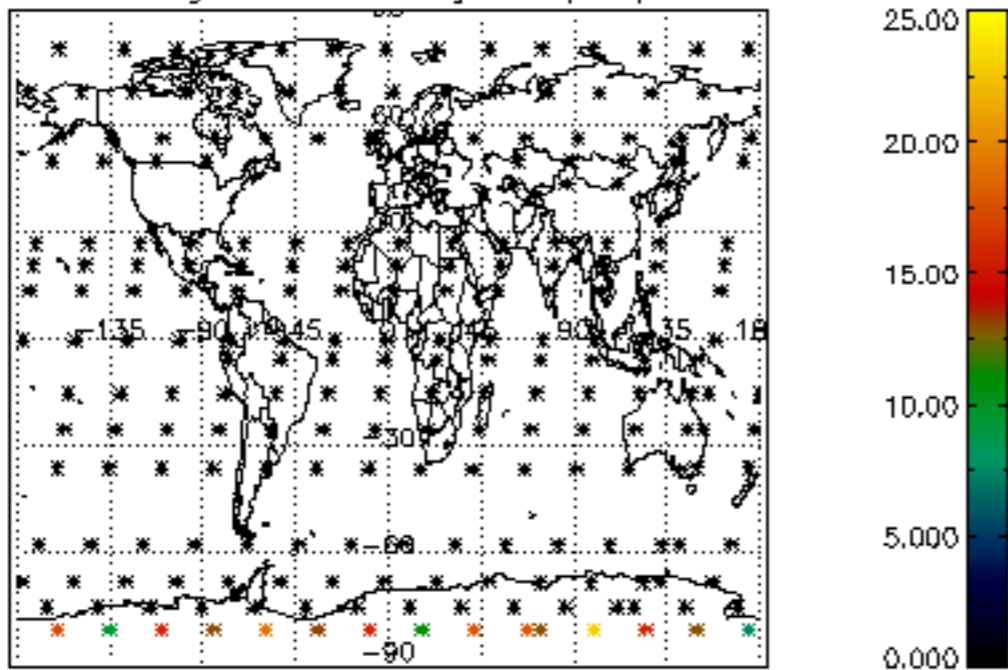
Percentage of star falling outside central band per profile



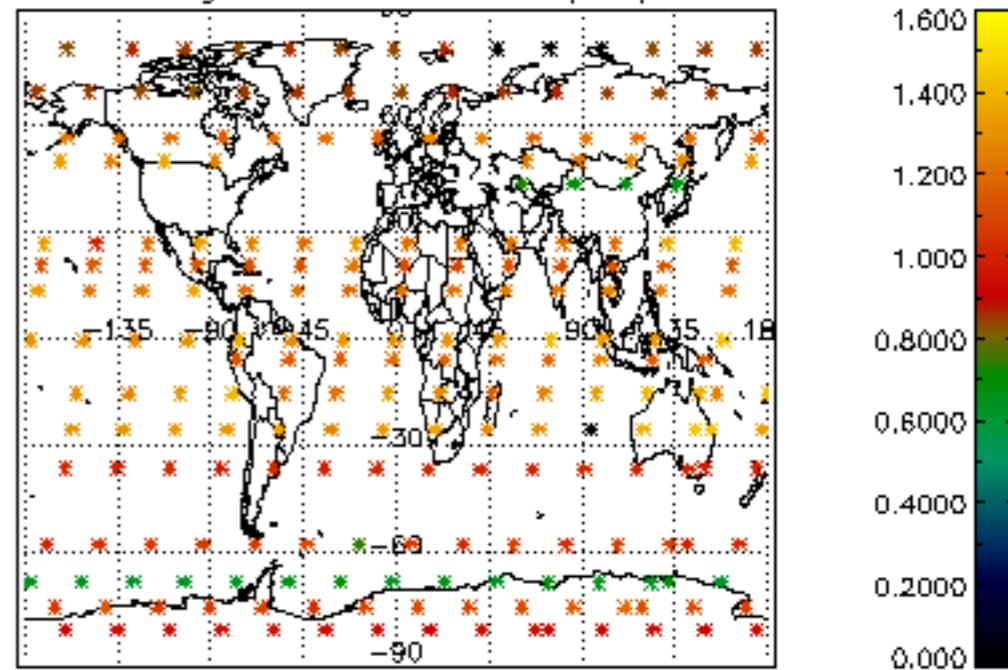
Percentage of saturation errors per profile



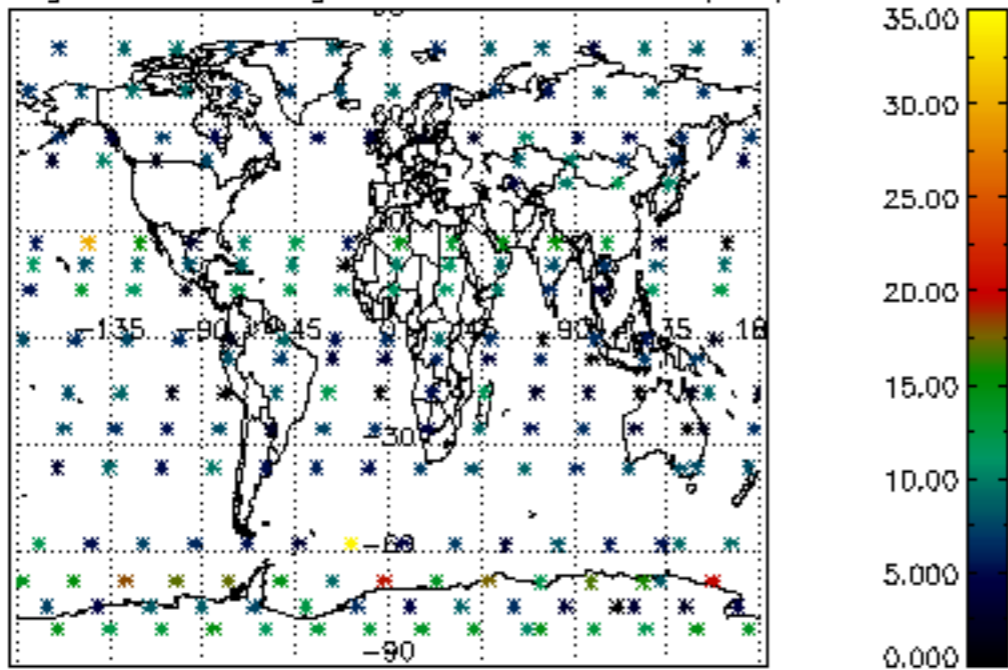
Percentage of cosmic ray hits per profile



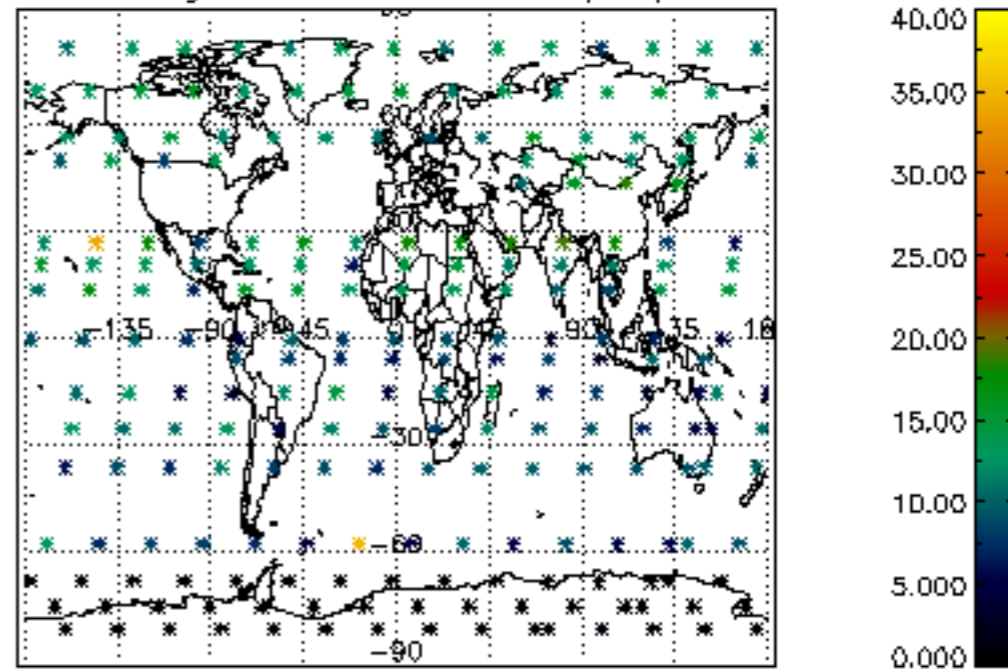
Percentage of datation errors per profile

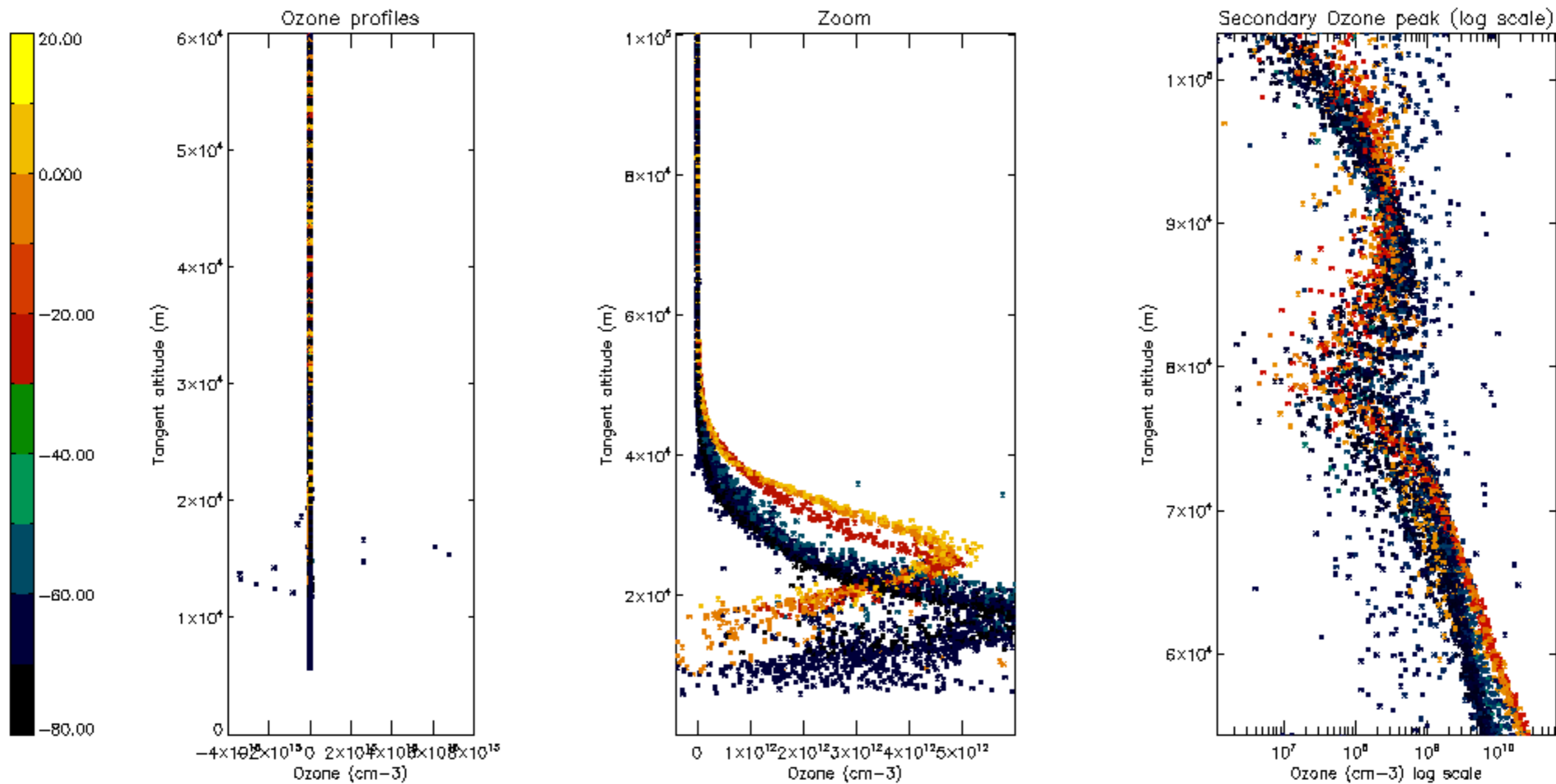


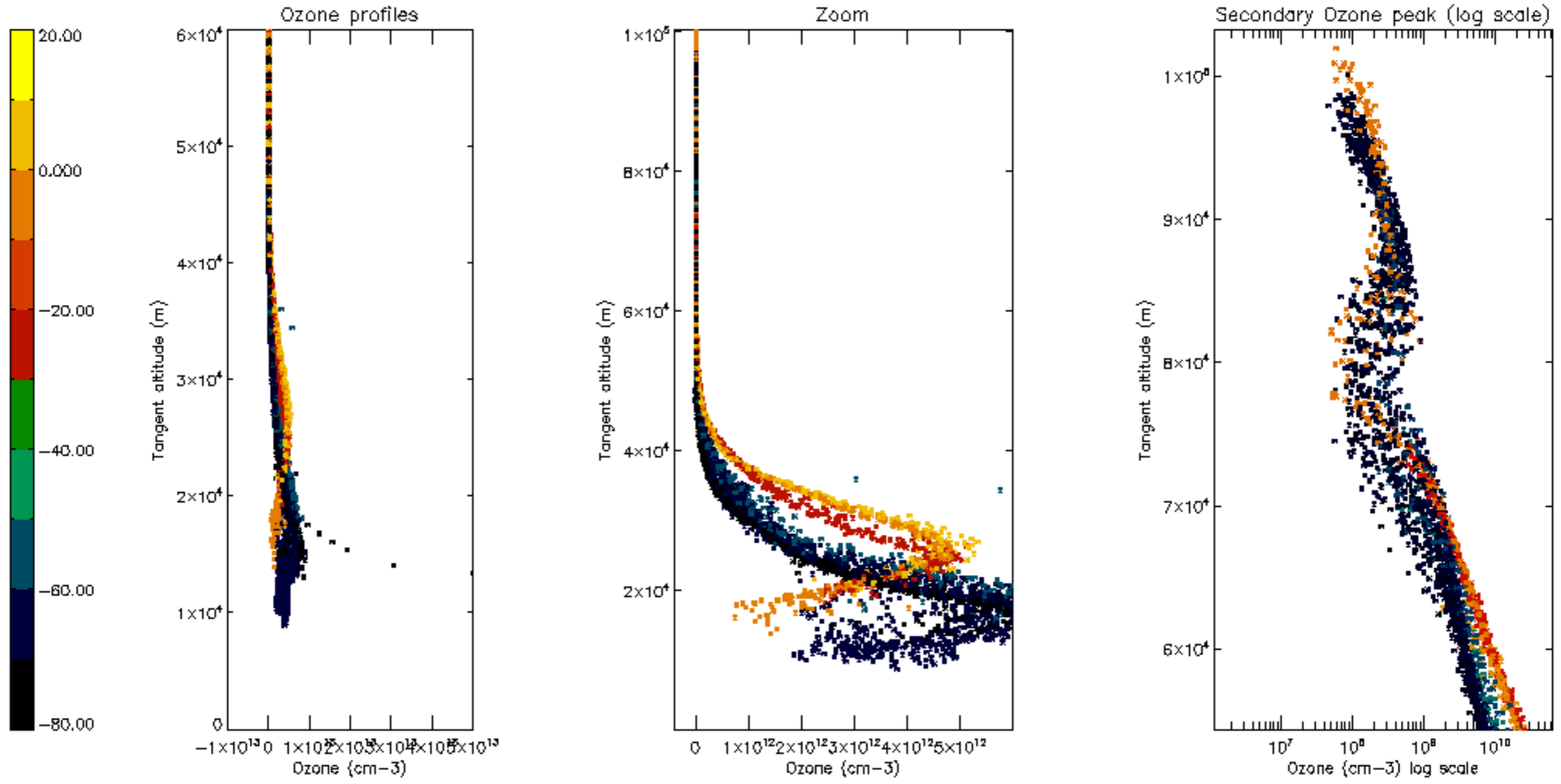
Percentage of star falling outside central band per profile

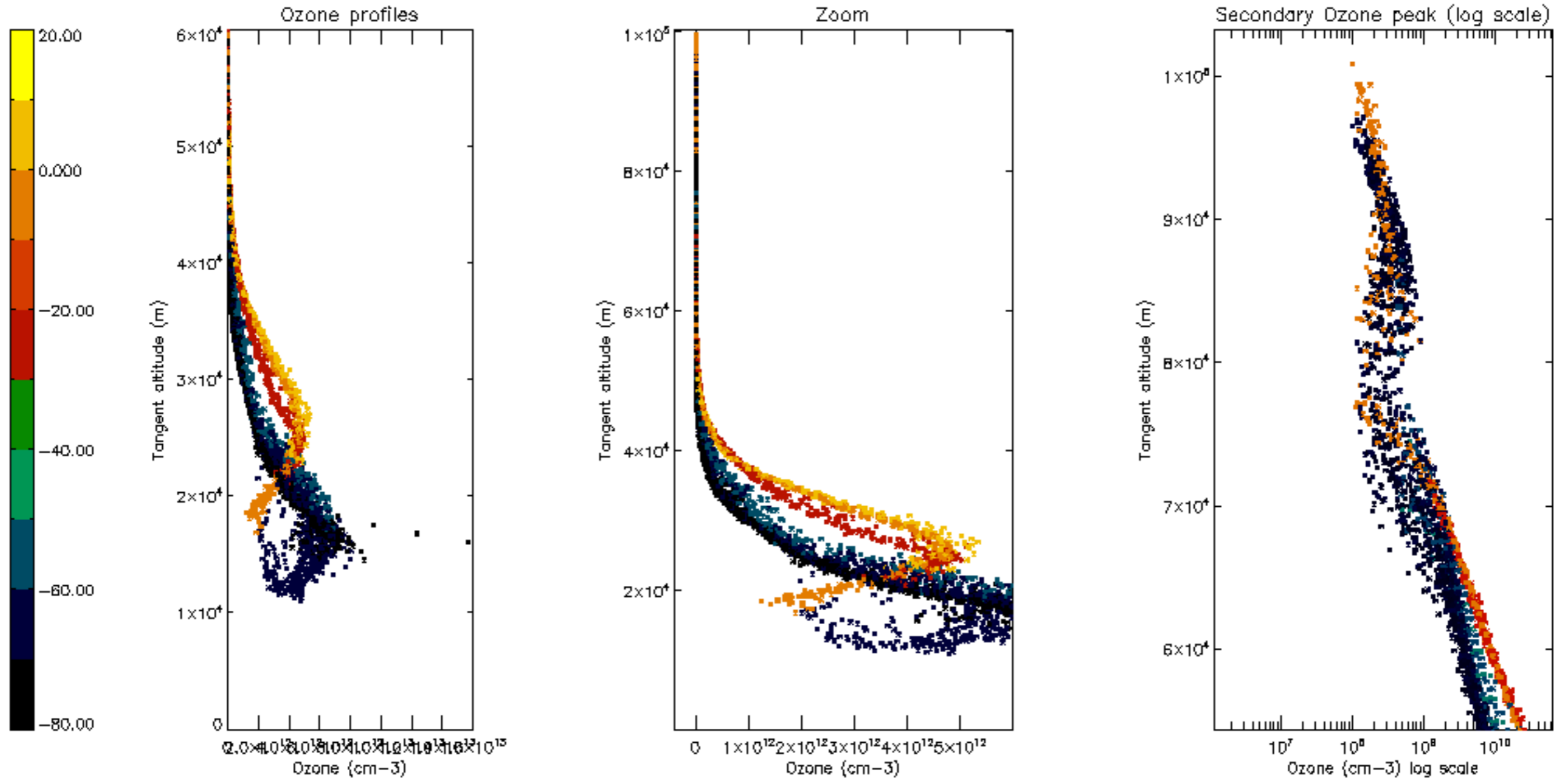


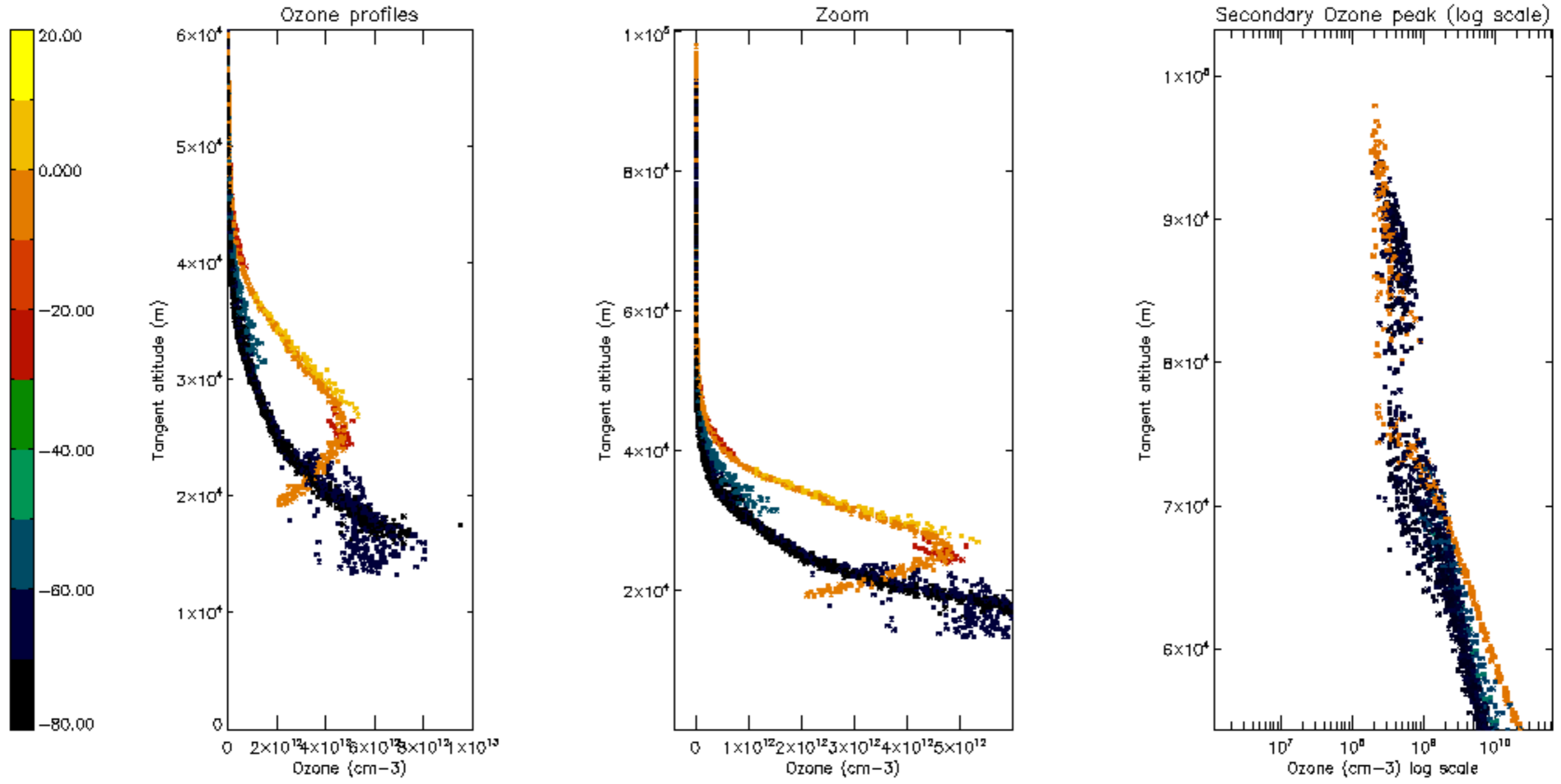
Percentage of saturation errors per profile

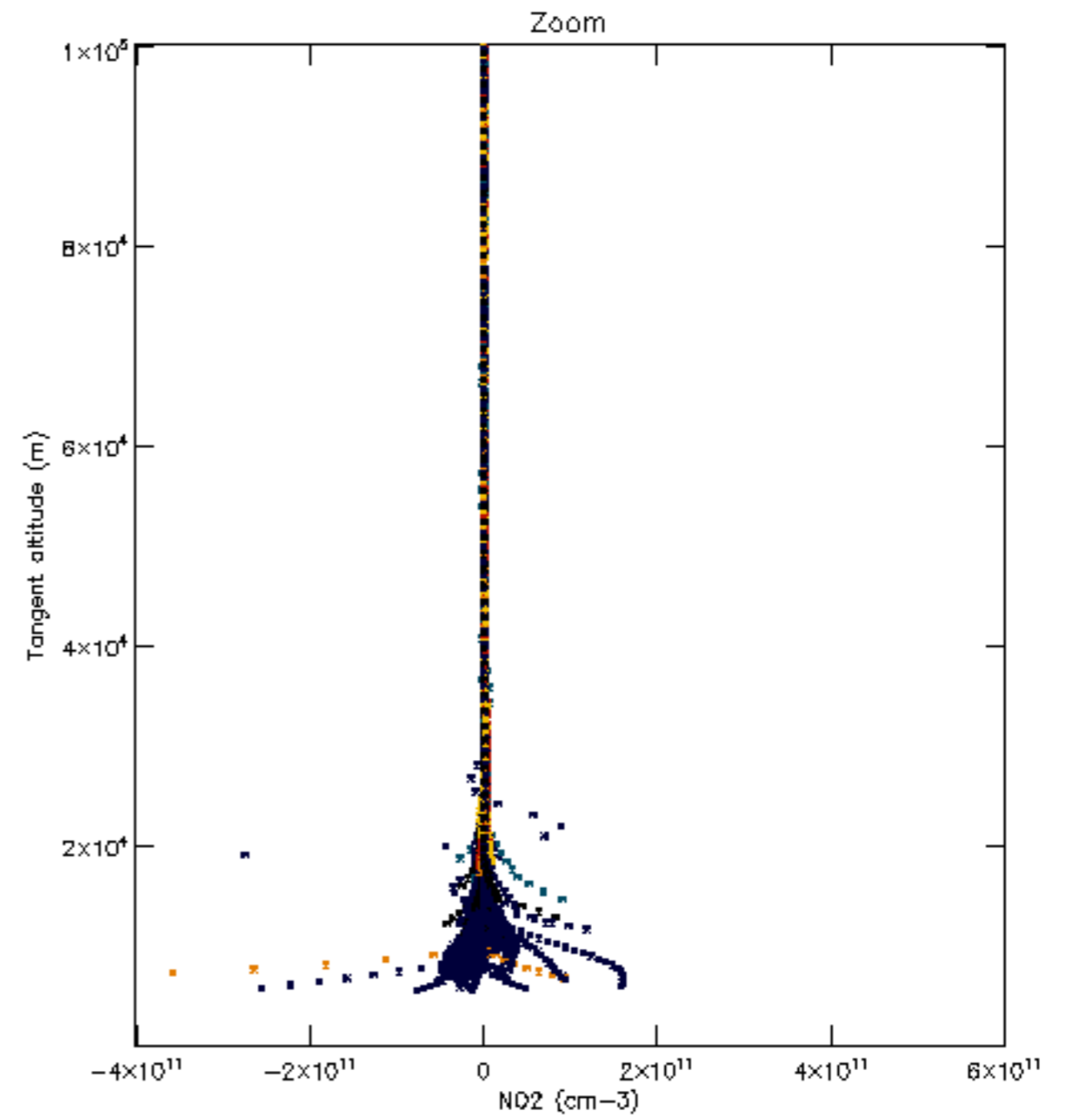
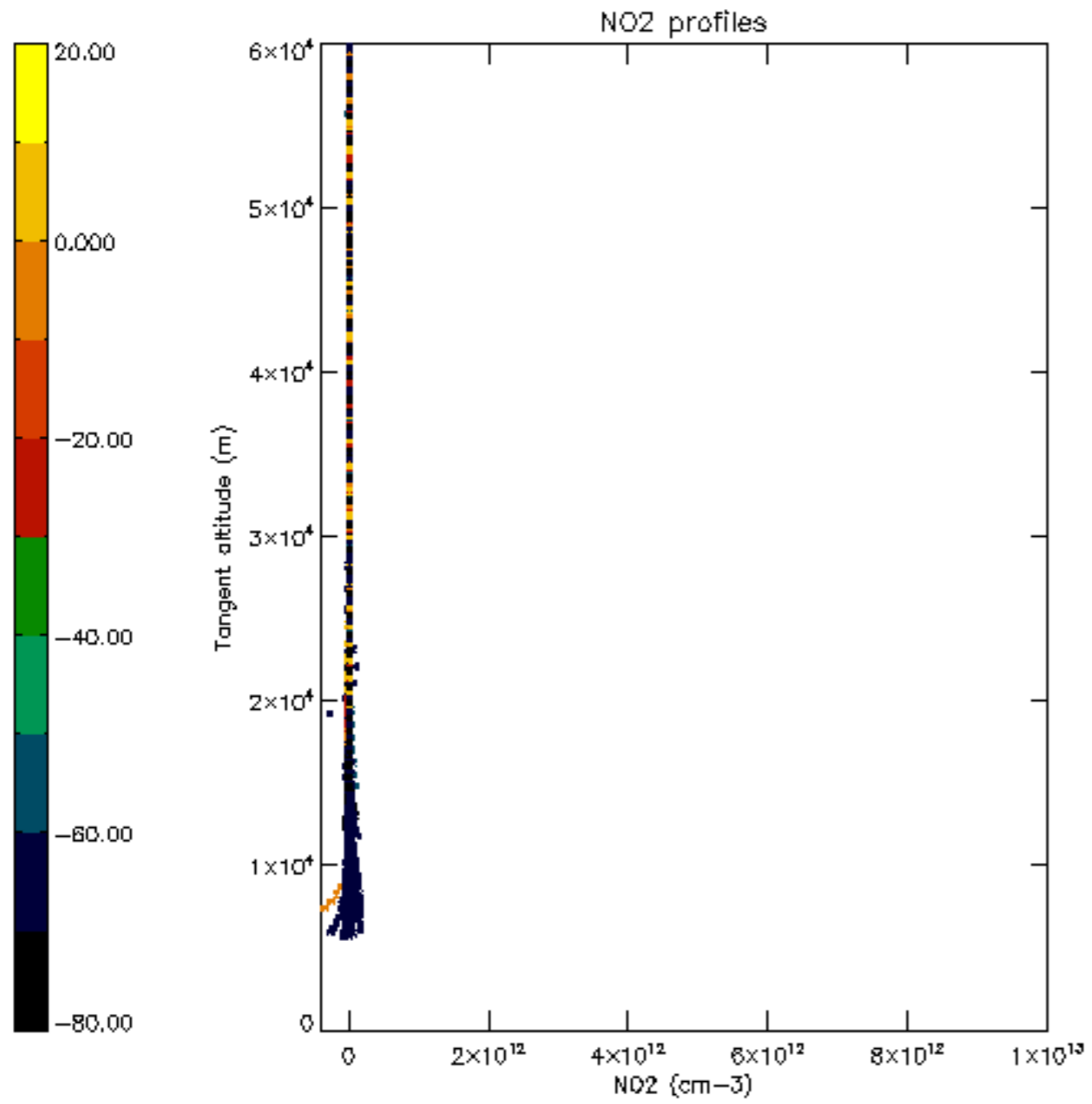


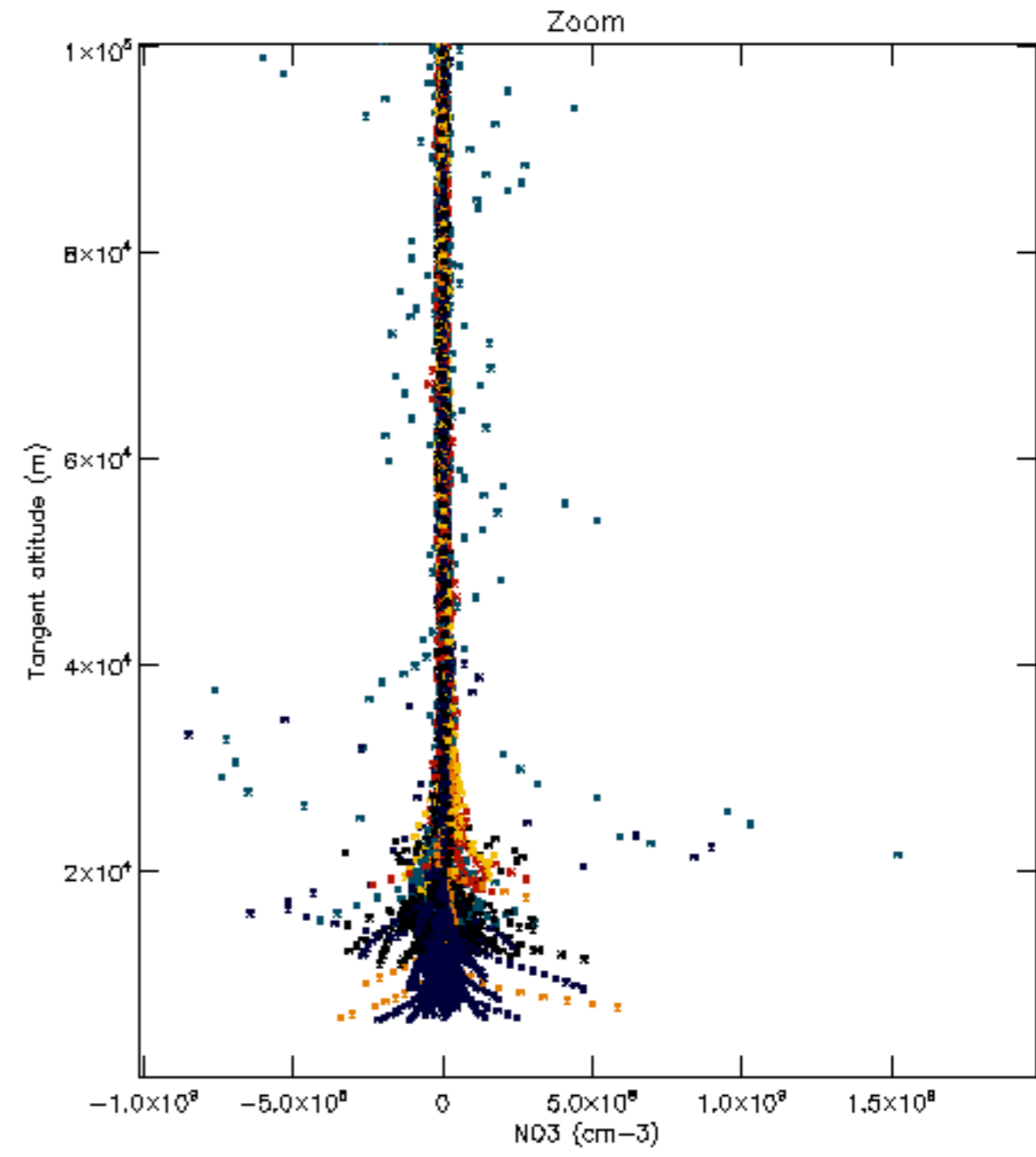
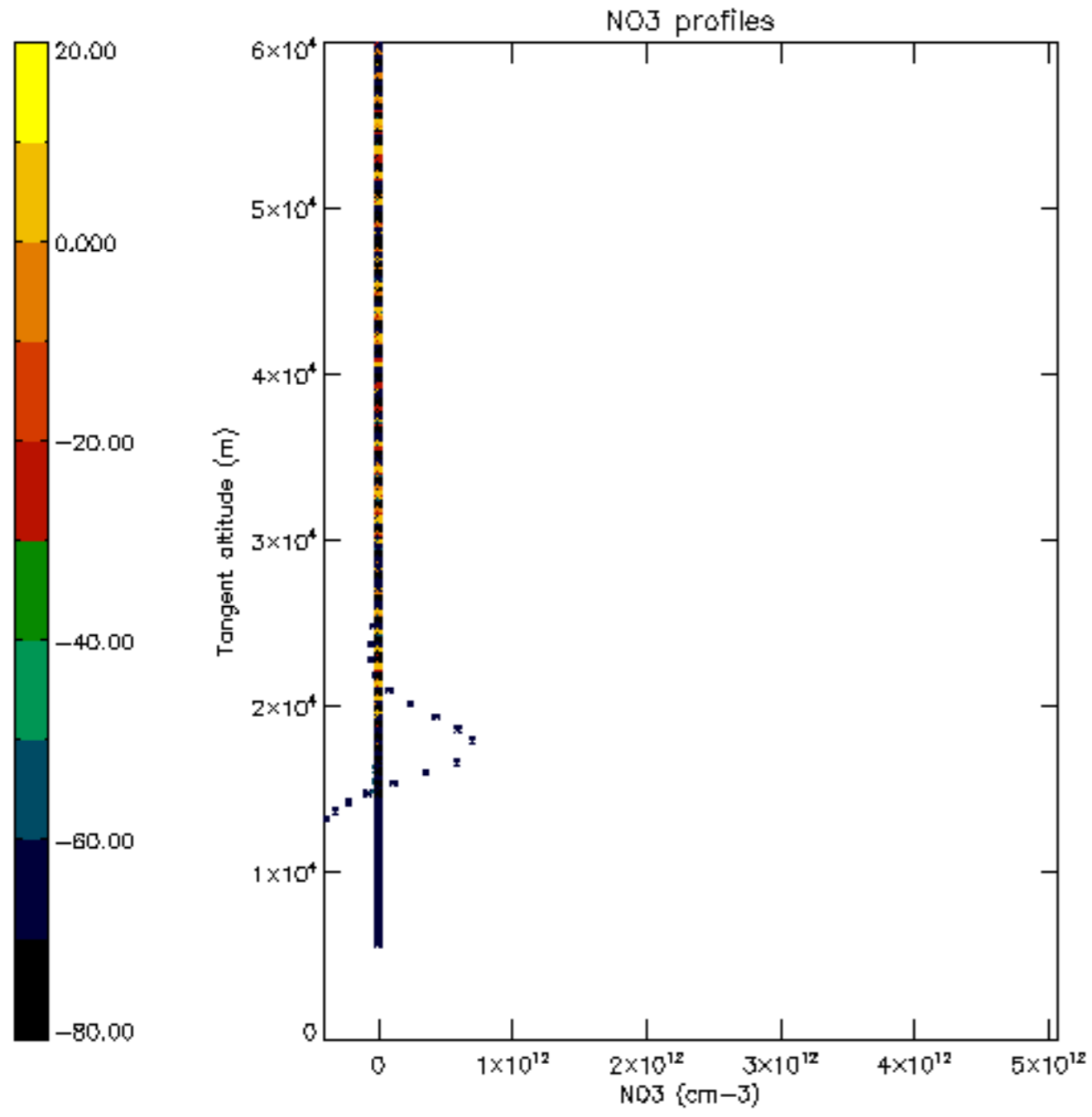


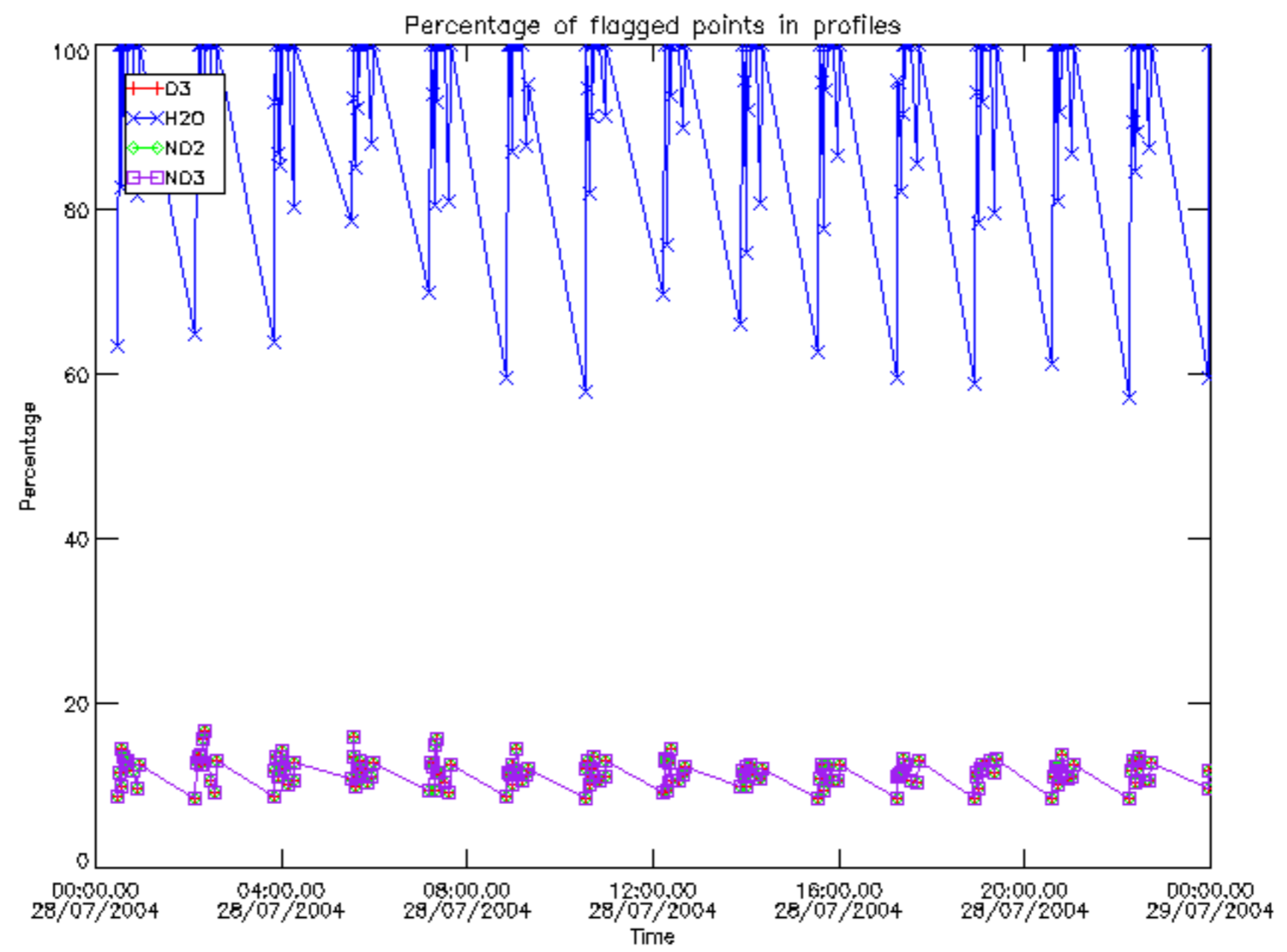




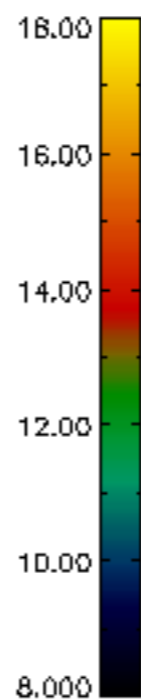
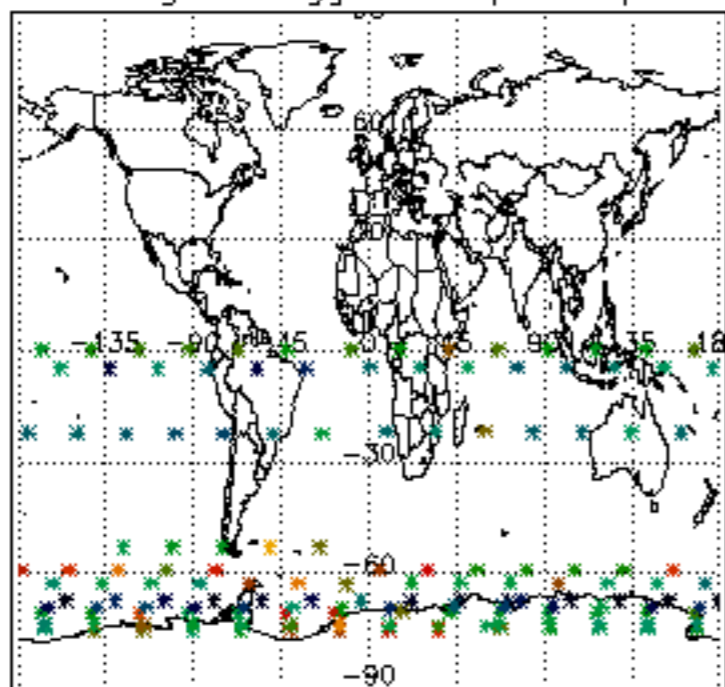




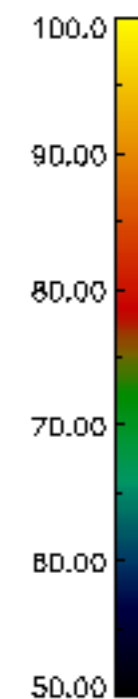
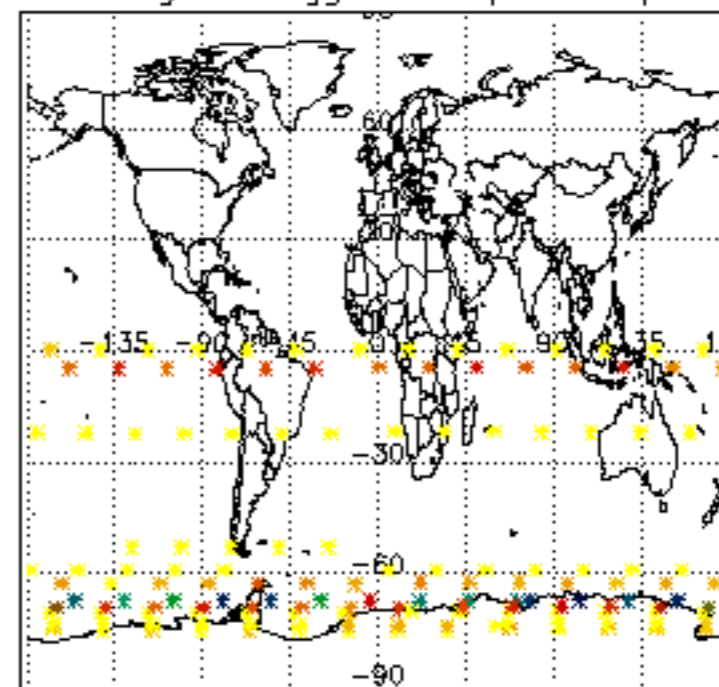




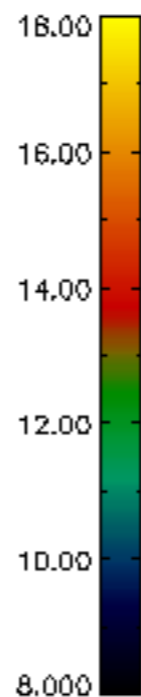
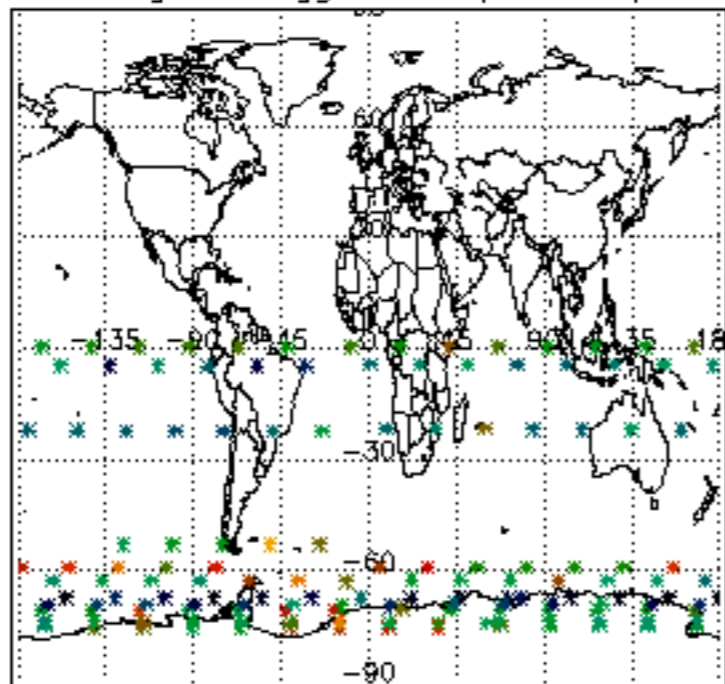
Percentage of flagged data per D3 profile



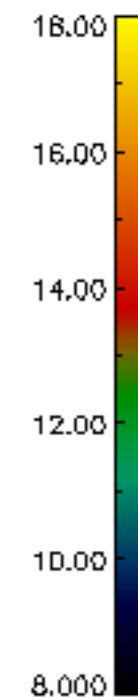
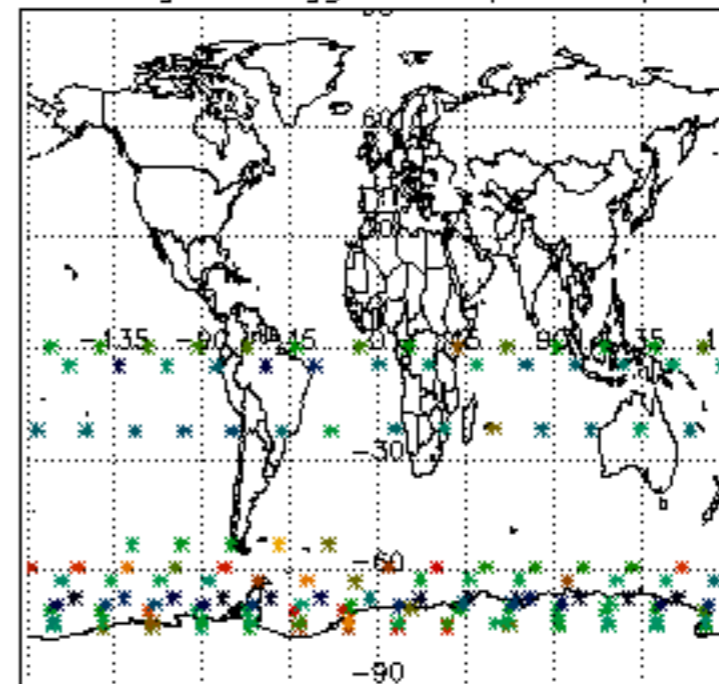
Percentage of flagged data per H2O profile

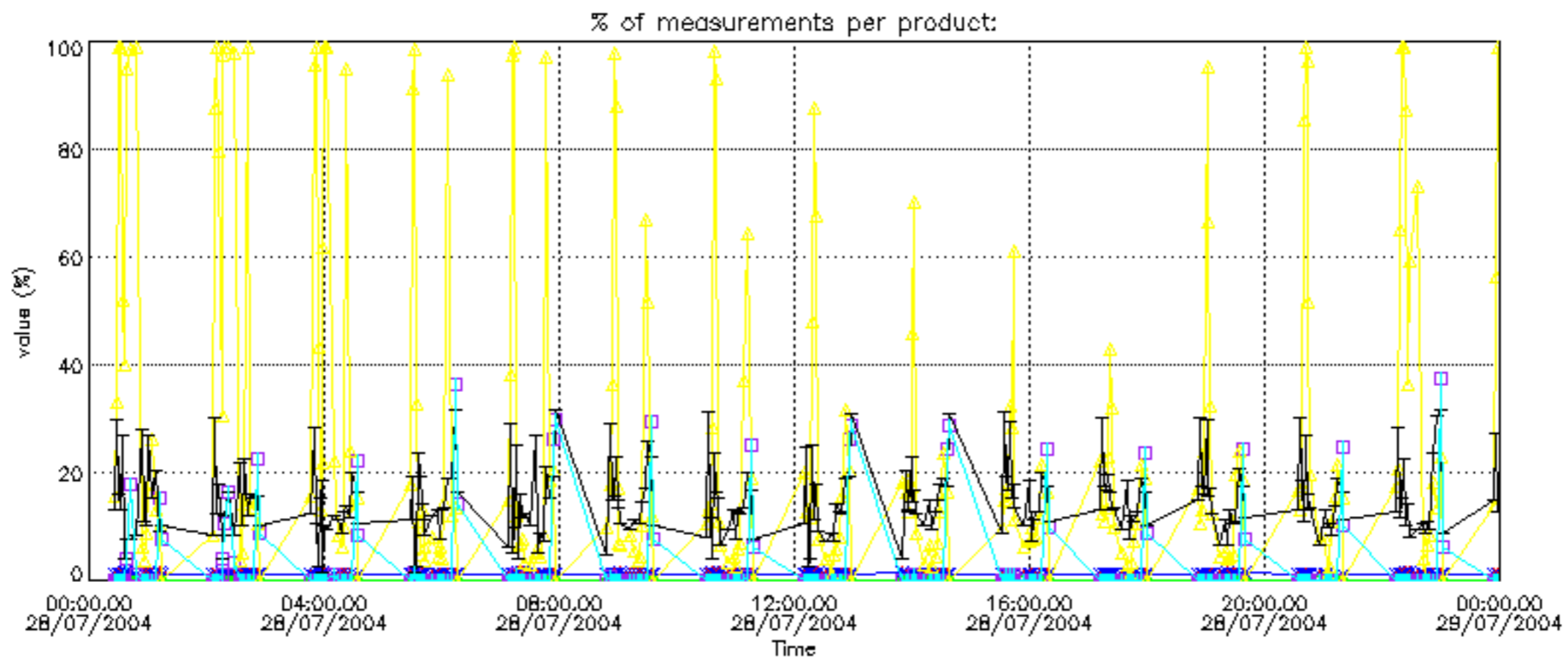


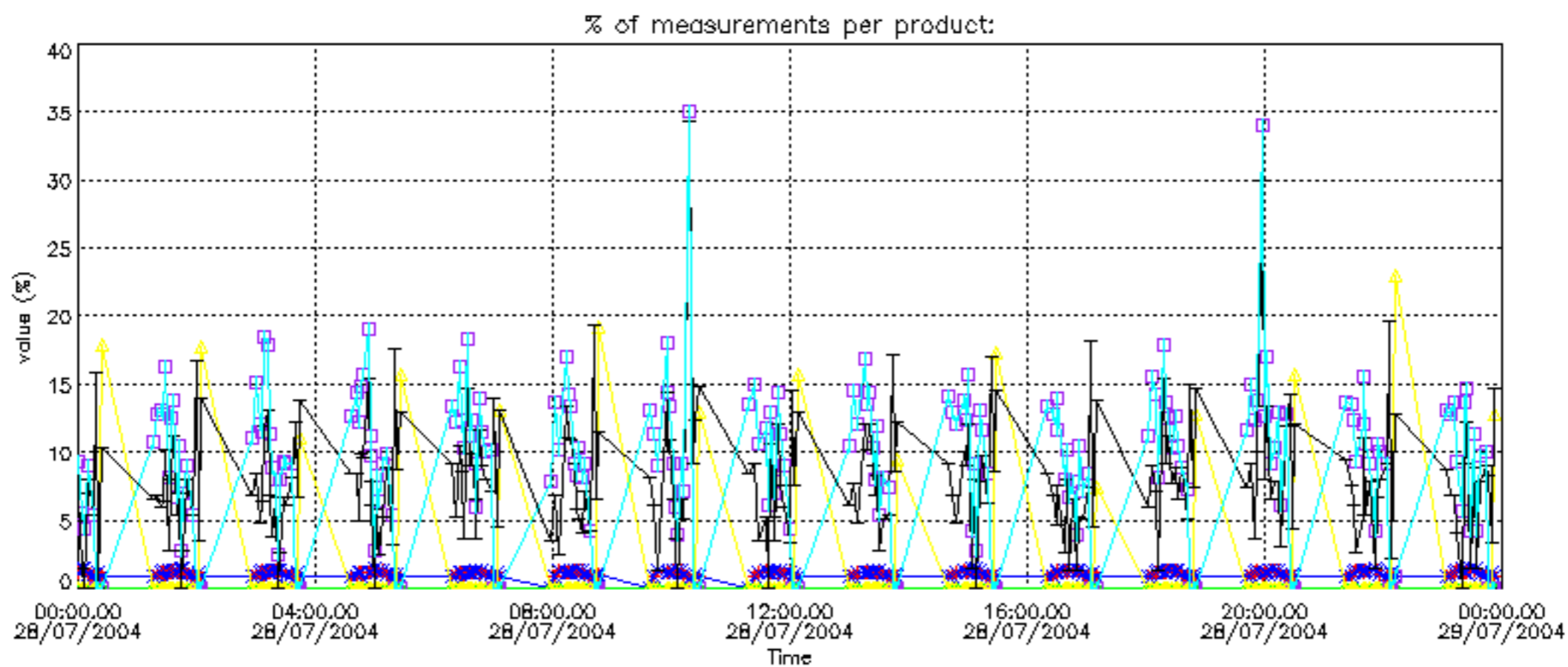
Percentage of flagged data per NO2 profile



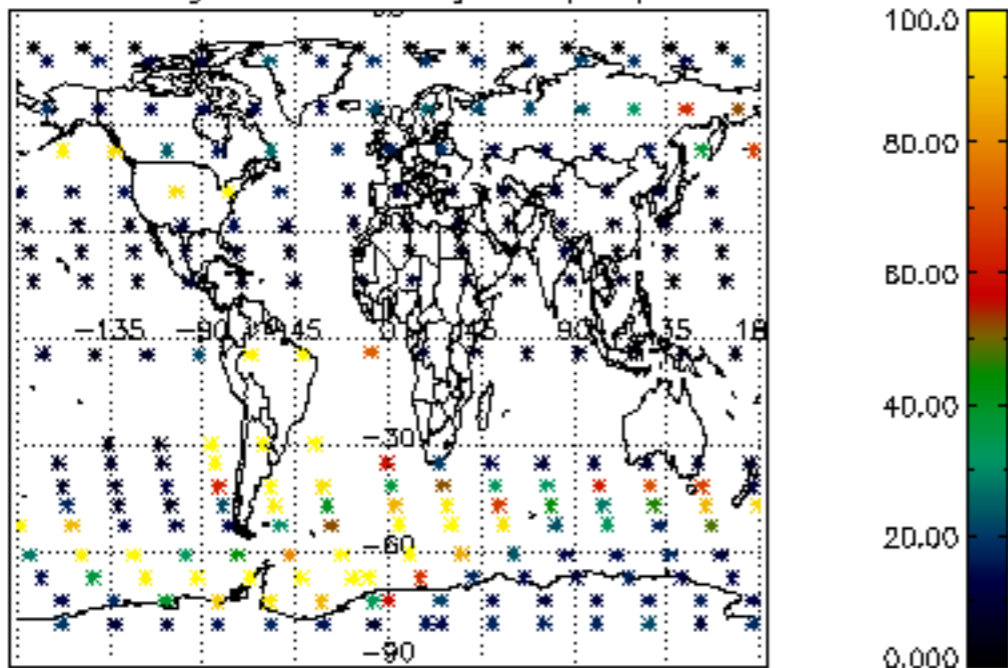
Percentage of flagged data per NO3 profile



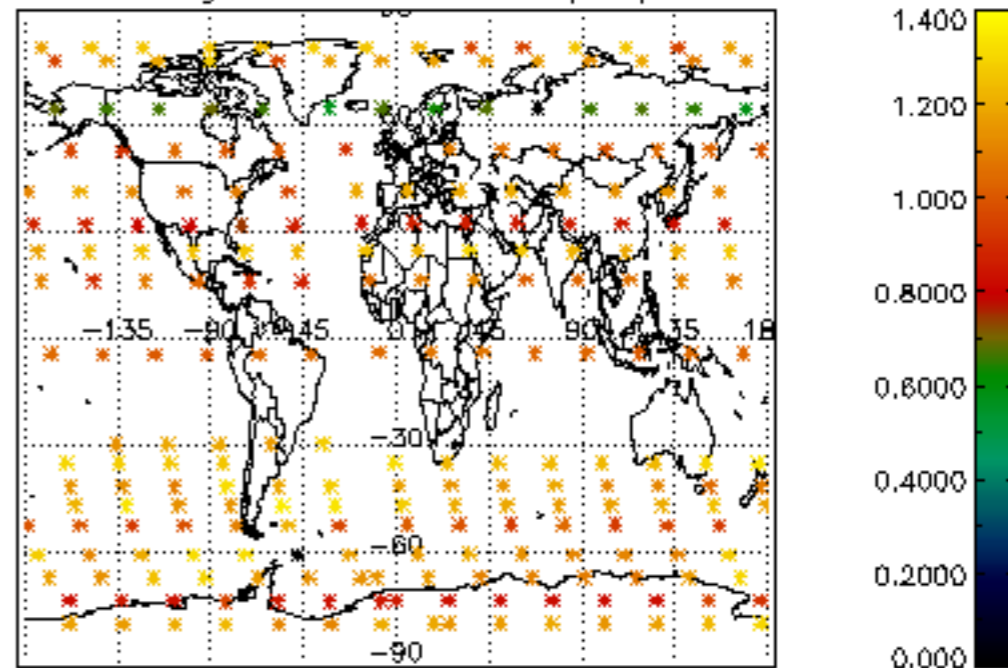




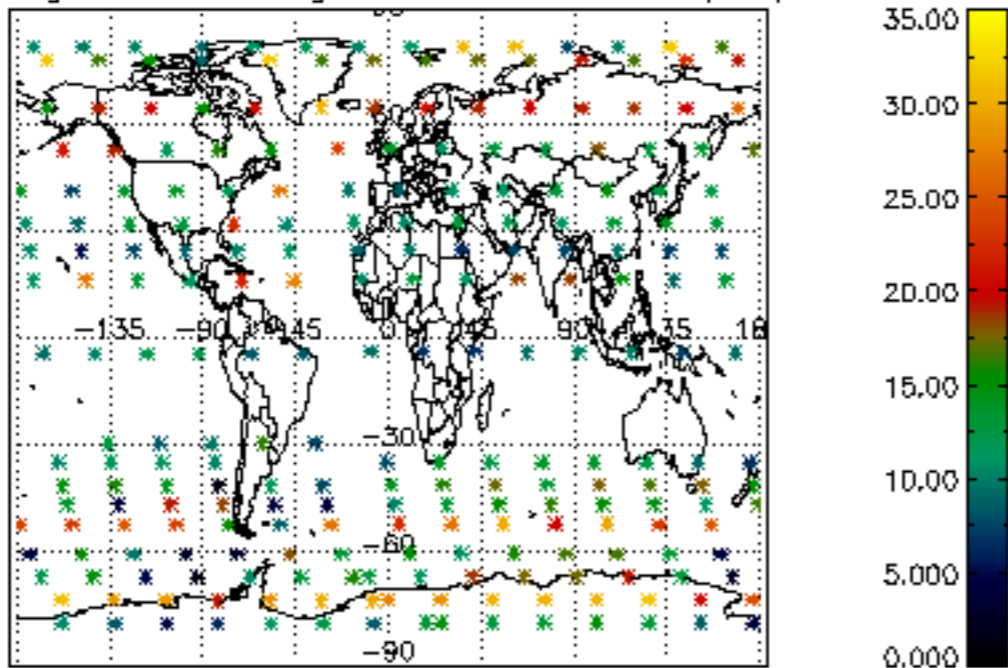
Percentage of cosmic ray hits per profile



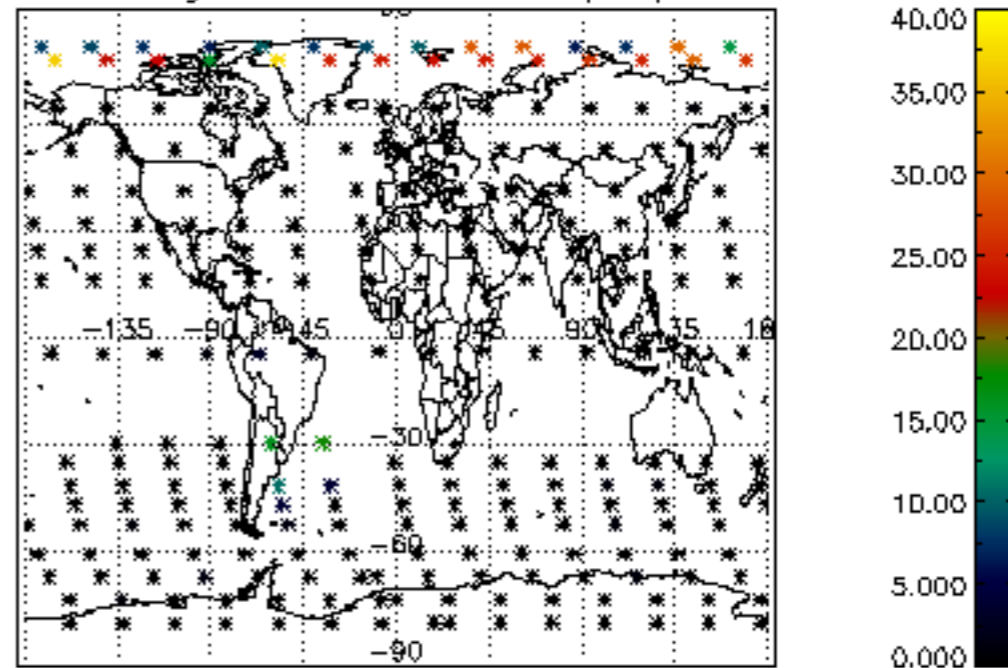
Percentage of datation errors per profile



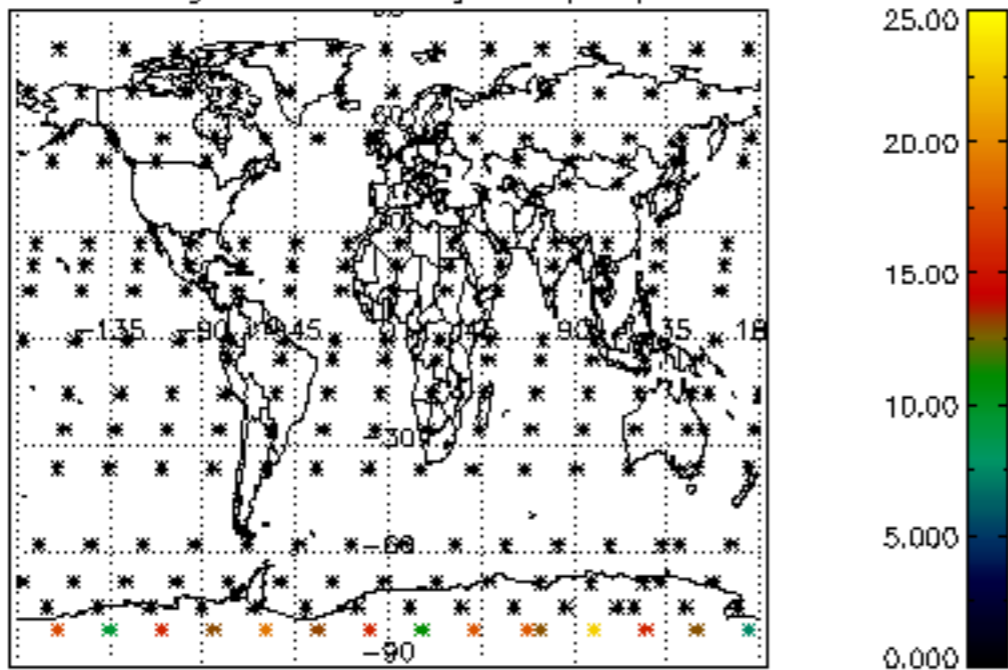
Percentage of star falling outside central band per profile



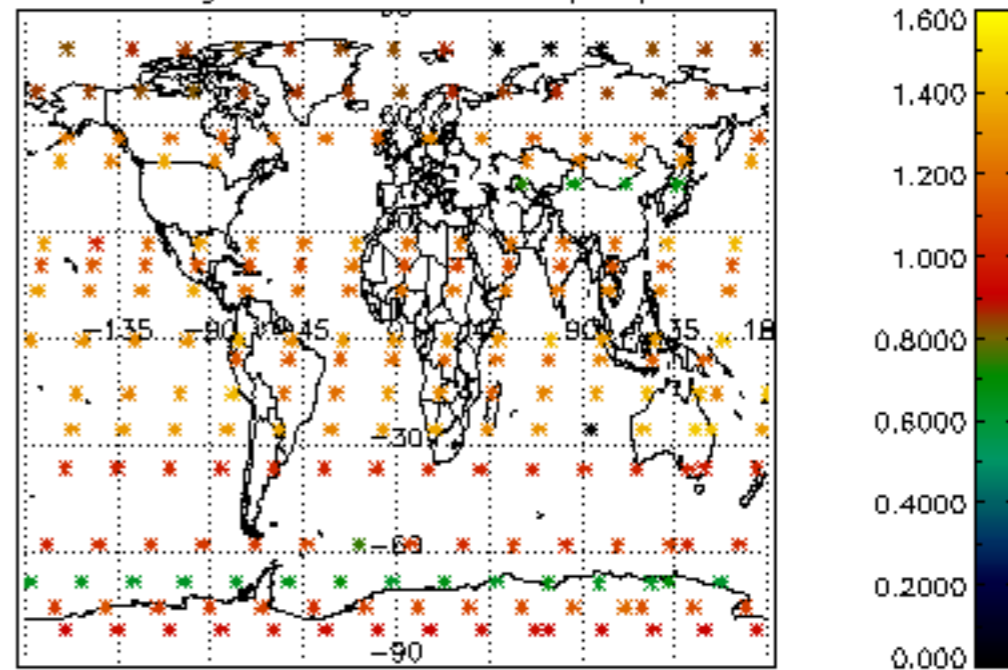
Percentage of saturation errors per profile



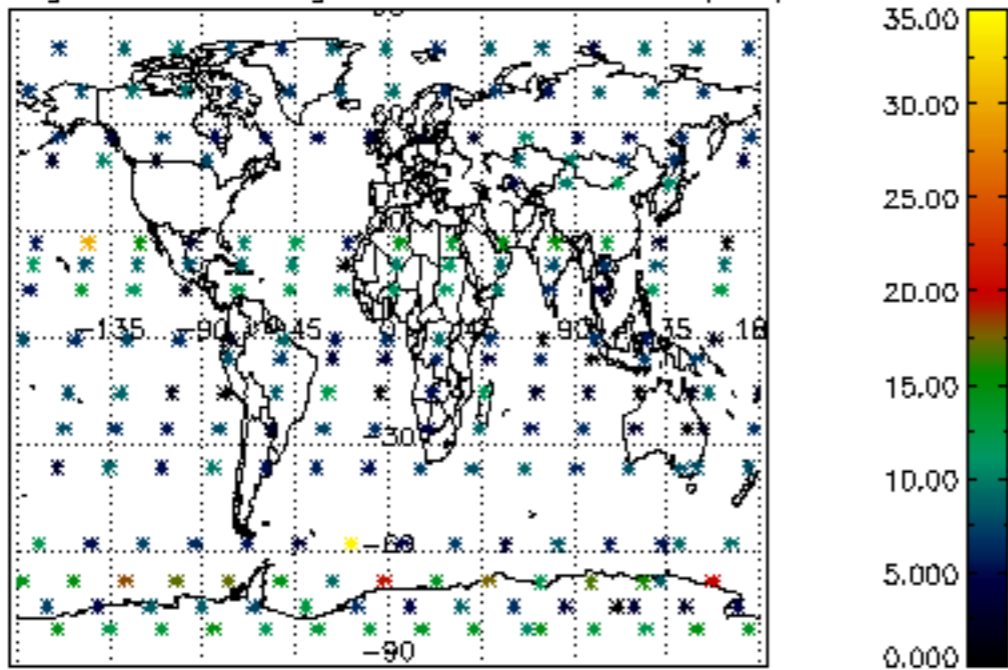
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

