

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](#)

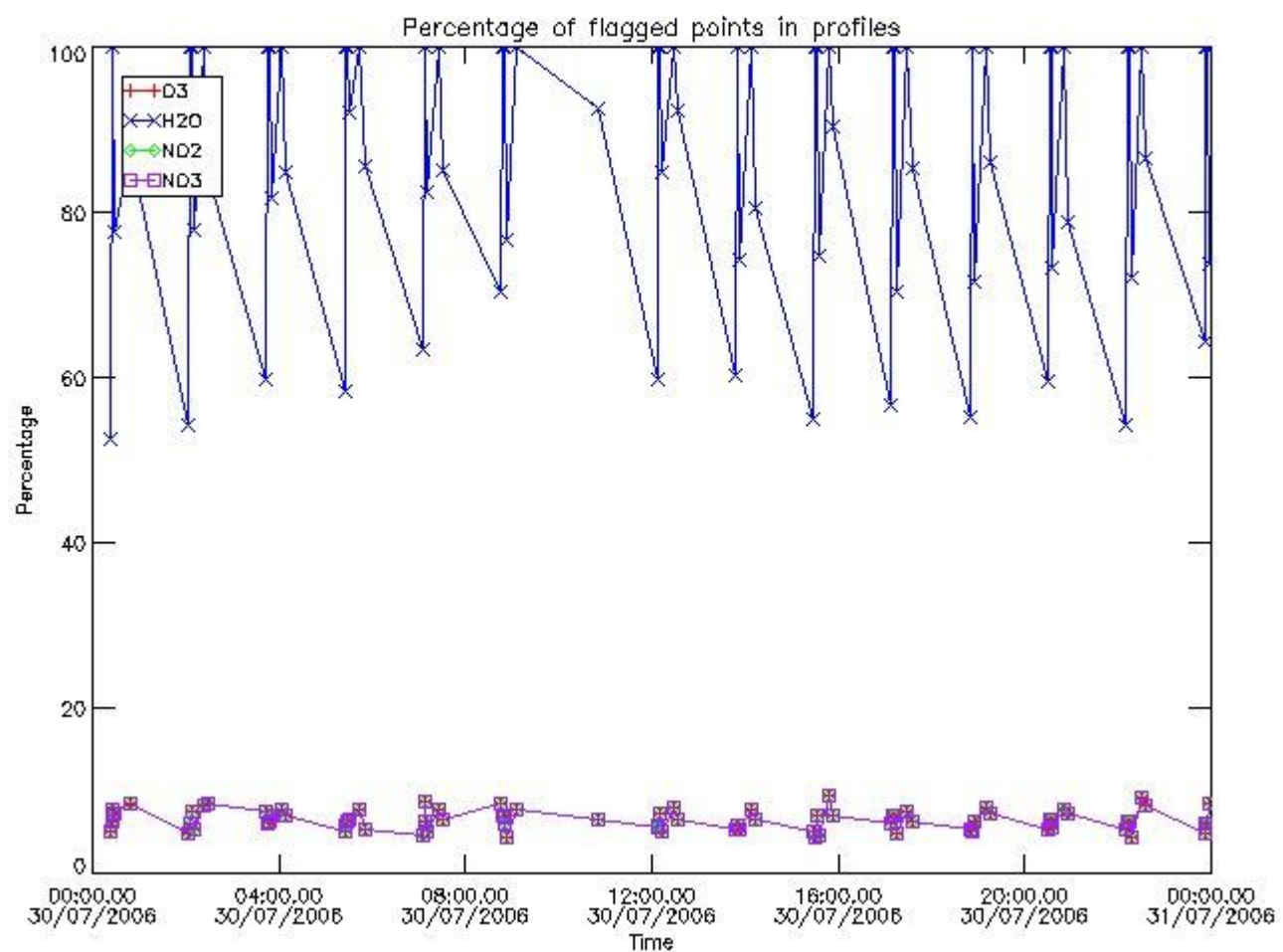
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20060730_221653_000000472049_00487_23086_0799.N1	30-JUL-2006 22:16:53	Dark	46.500	7	19Bet Ori	0.10000	14000.	93	23086	No
221	GOM_NL__2PRFIN20060730_223043_000000402049_00487_23086_0800.N1	30-JUL-2006 22:30:43	Dark	39.500	157	The1Eri	2.9060	9300.0	79	23086	No
222	GOM_NL__2PRFIN20060730_223619_000000382049_00488_23087_0784.N1	30-JUL-2006 22:36:19	Dark	37.500	9	Alp Eri	0.45300	24000.	75	23087	No
223	GOM_NL__2PRFIN20060730_224314_000000352049_00488_23087_0785.N1	30-JUL-2006 22:43:14	Straylight	34.500	148	Alp Tuc	2.8780	4100.0	69	23087	No
224	GOM_NL__2PRFIN20060730_224634_000000382049_00488_23087_0786.N1	30-JUL-2006 22:46:34	Straylight	37.500	31	Alp Gru	1.7340	15200.	75	23087	No
225	GOM_NL__2PRFIN20060730_224944_000000382049_00488_23087_0787.N1	30-JUL-2006 22:49:44	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	23087	No
226	GOM_NL__2PRFIN20060730_230545_000000322049_00488_23087_0788.N1	30-JUL-2006 23:05:45	Bright	32.000	11	53Alp Aql	0.76500	8000.0	64	23087	No
227	GOM_NL__2PRFIN20060730_230708_000000302049_00488_23087_0789.N1	30-JUL-2006 23:07:08	Bright	29.500	168	17Zet Aql	2.9860	11000.	59	23087	No
228	GOM_NL__2PRFIN20060730_231542_000000322049_00488_23087_0790.N1	30-JUL-2006 23:15:42	Bright	32.000	66	37Gam Cyg	2.2080	5900.0	64	23087	No
229	GOM_NL__2PRFIN20060730_232304_000000332049_00488_23087_0791.N1	30-JUL-2006 23:23:04	Bright	33.000	89	5Alp Cep	2.4510	8000.0	66	23087	No
230	GOM_NL__2PRFIN20060730_232845_000000292049_00488_23087_0792.N1	30-JUL-2006 23:28:45	Bright	28.500	49	1Alp UMi	1.9900	6300.0	57	23087	No
231	GOM_NL__2PRFIN20060730_234125_000000492049_00488_23087_0793.N1	30-JUL-2006 23:41:25	Bright	49.000	6	13Alp Aur	0.080000	3400.0	98	23087	No
232	GOM_NL__2PRFIN20060730_234636_000000372049_00488_23087_0794.N1	30-JUL-2006 23:46:36	Bright	36.500	28	12Bet Tau	1.6500	15200.	73	23087	No
233	GOM_NL__2PRFIN20060730_234840_000000352049_00488_23087_0795.N1	30-JUL-2006 23:48:40	Twilight_stray	34.500	176	23Zet Tau	3.0200	22000.	69	23087	No
234	GOM_NL__2PRFIN20060730_235108_000000532049_00488_23087_0796.N1	30-JUL-2006 23:51:08	Dark	52.500	13	87Alp Tau	0.86700	3800.0	105	23087	No
235	GOM_NL__2PRFIN20060730_235308_000000342049_00488_23087_0797.N1	30-JUL-2006 23:53:08	Dark	34.000	27	24Gam Ori	1.6360	26000.	68	23087	No
236	GOM_NL__2PRFIN20060730_235503_000000352049_00488_23087_0798.N1	30-JUL-2006 23:55:03	Dark	34.500	30	46Eps Ori	1.6940	30000.	69	23087	No
237	GOM_NL__2PRFIN20060730_235729_000000362049_00488_23087_0799.N1	30-JUL-2006 23:57:29	Dark	36.000	7	19Bet Ori	0.10000	14000.	72	23087	No

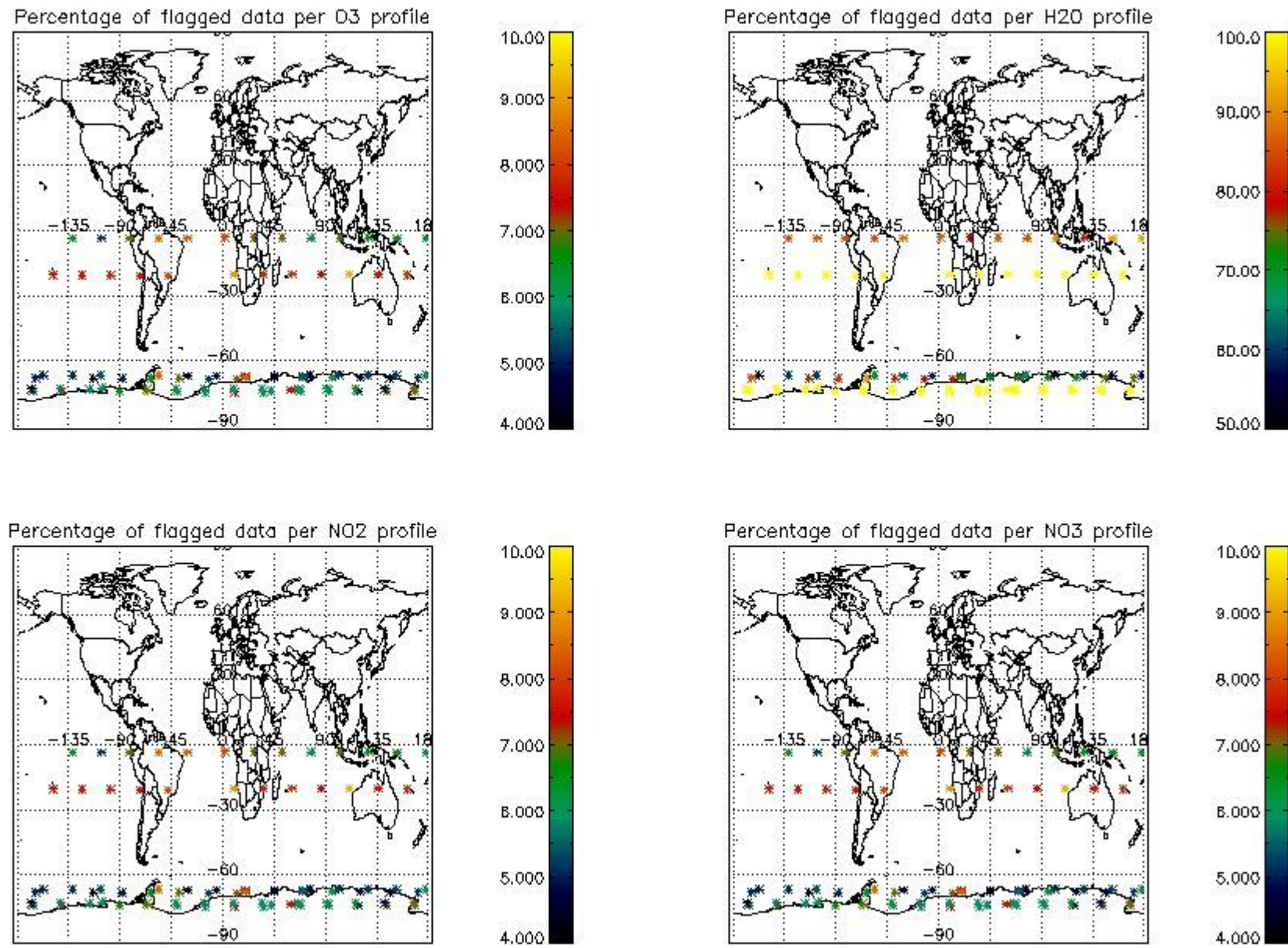
3. Quality information per product

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)

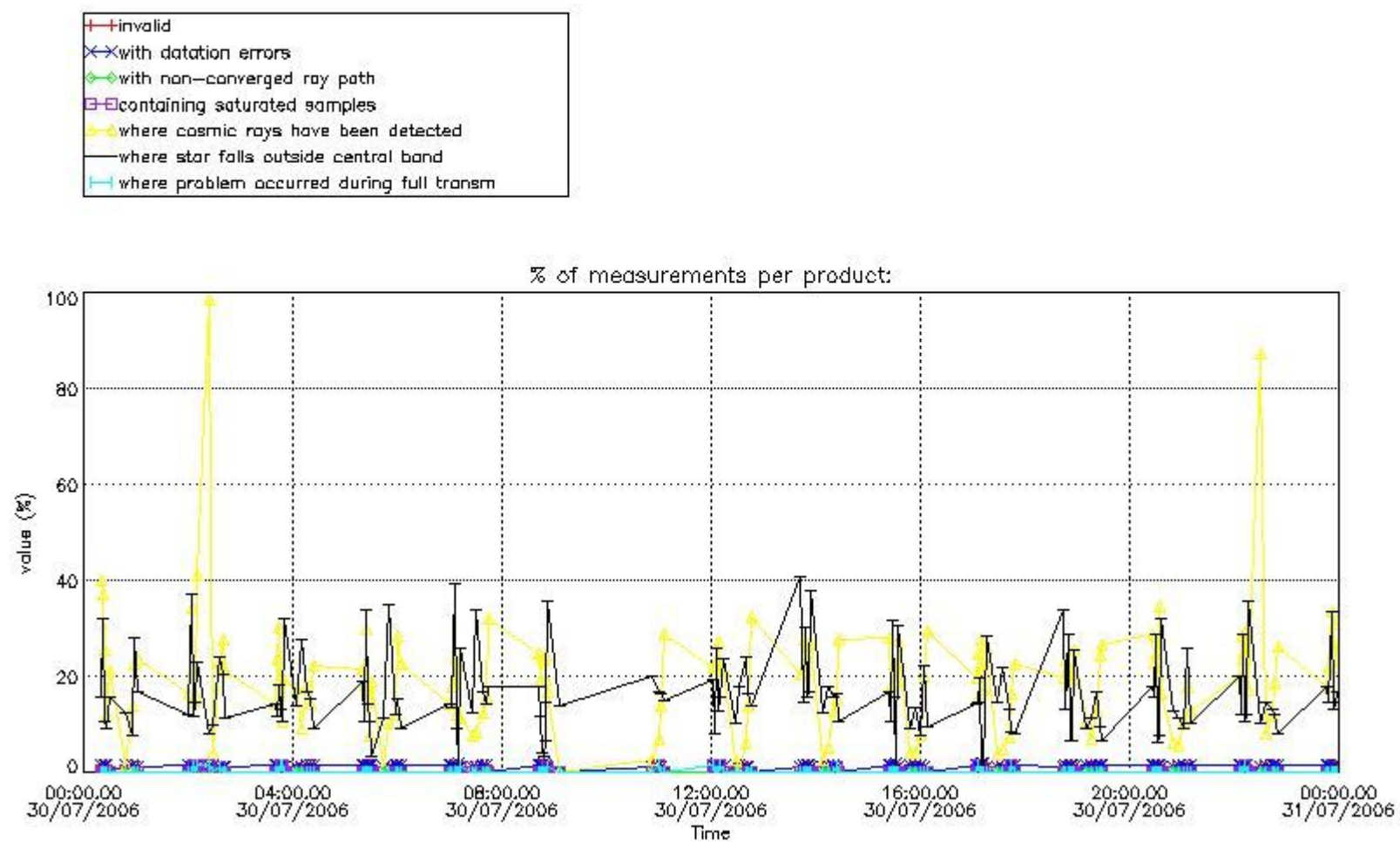


4. Level 1 quality information per product

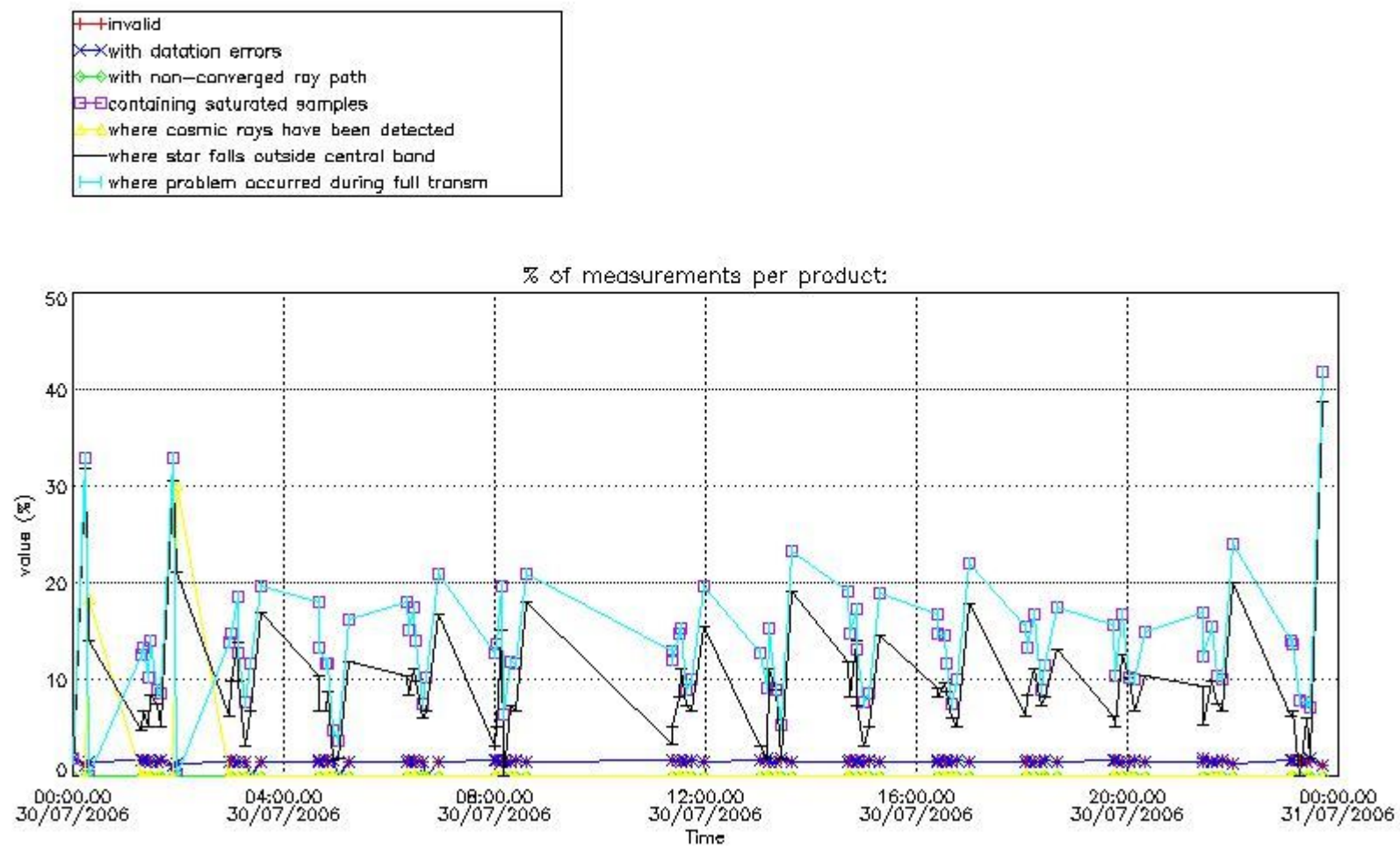
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



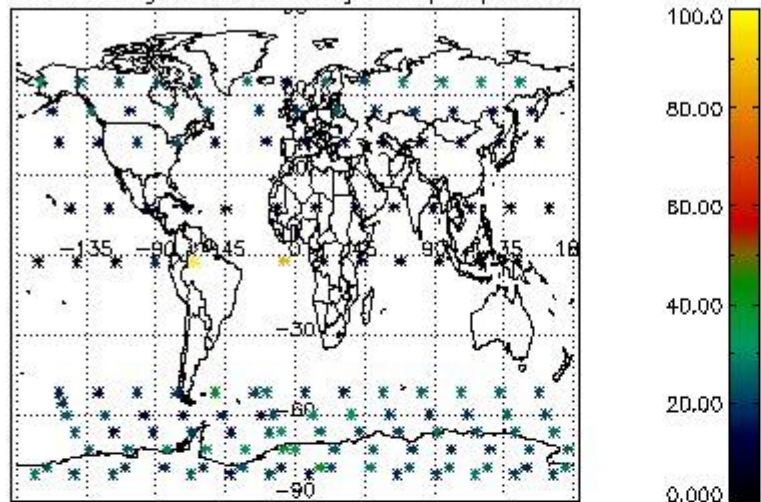
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



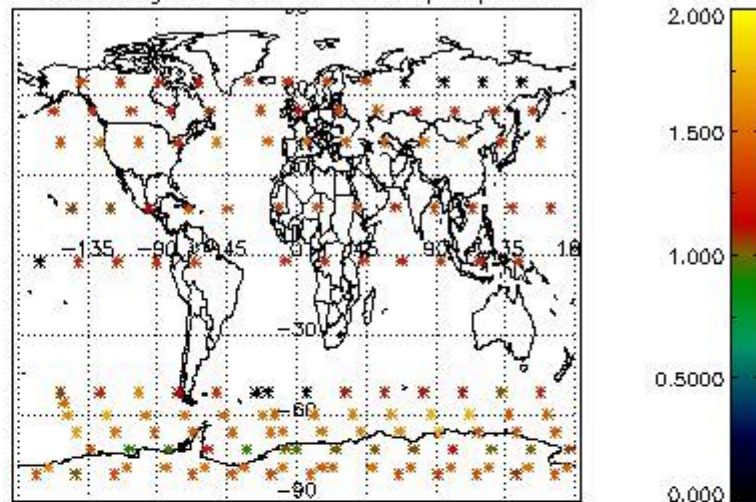
4.2 Plot quality information per product coming from level 1b processing (world map)

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

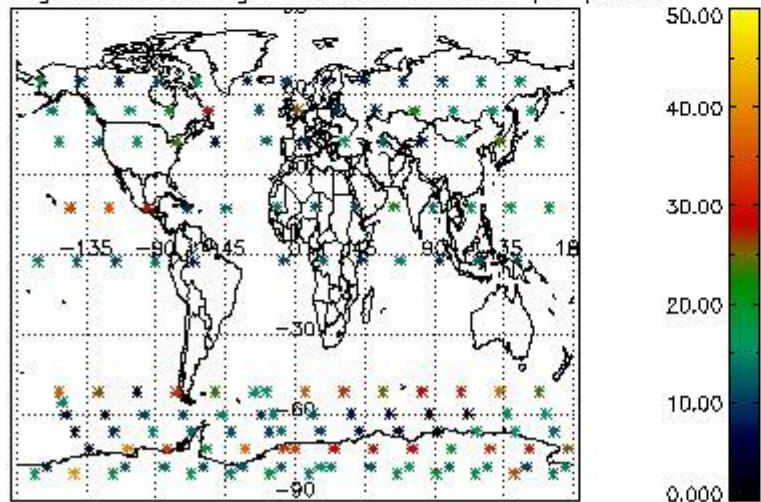
Percentage of cosmic ray hits per profile



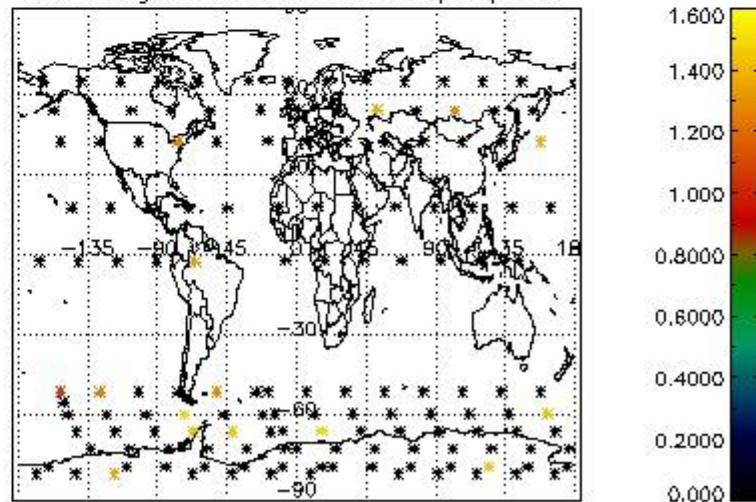
Percentage of datation errors per profile



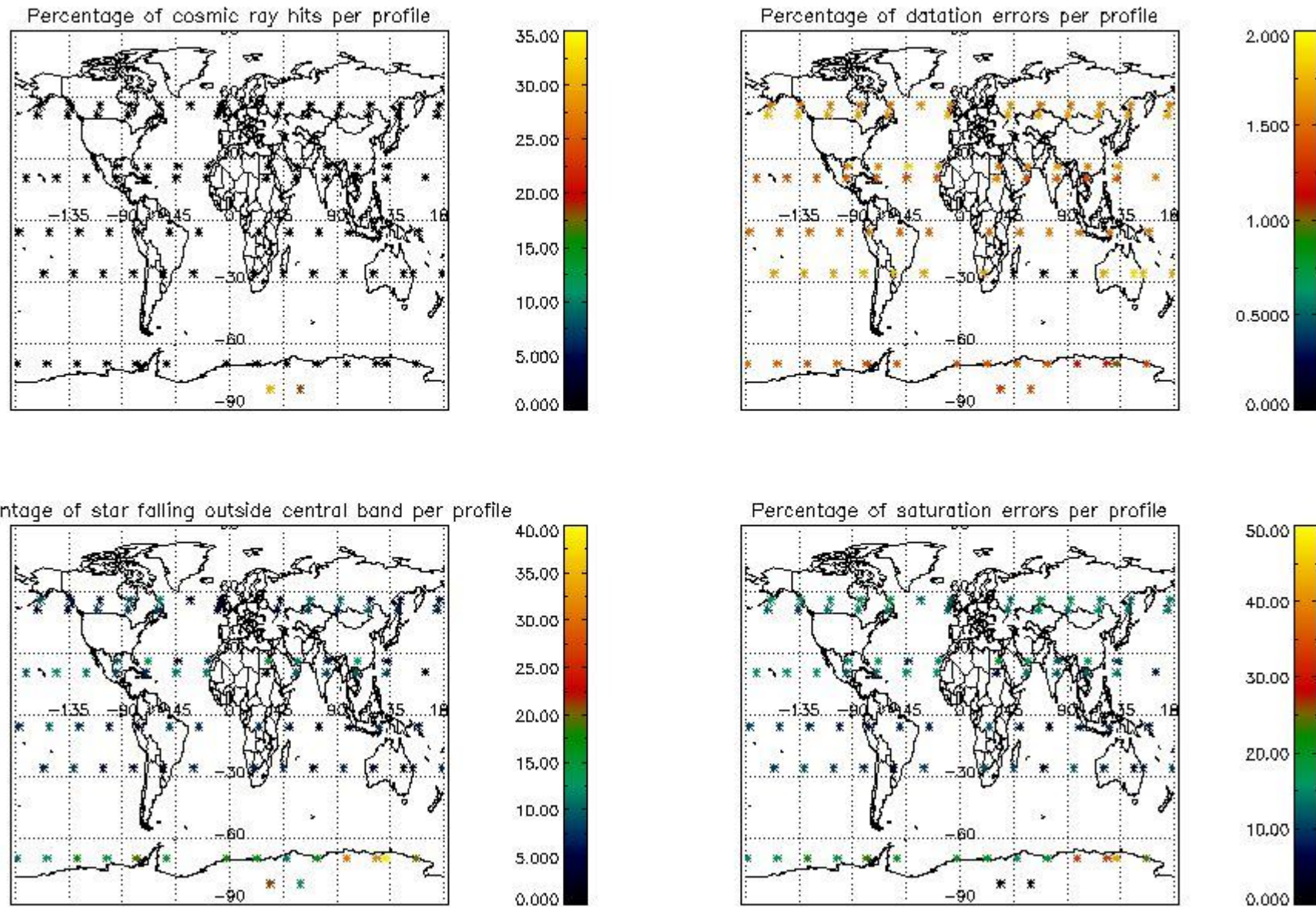
Percentage of star falling outside central band per profile



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

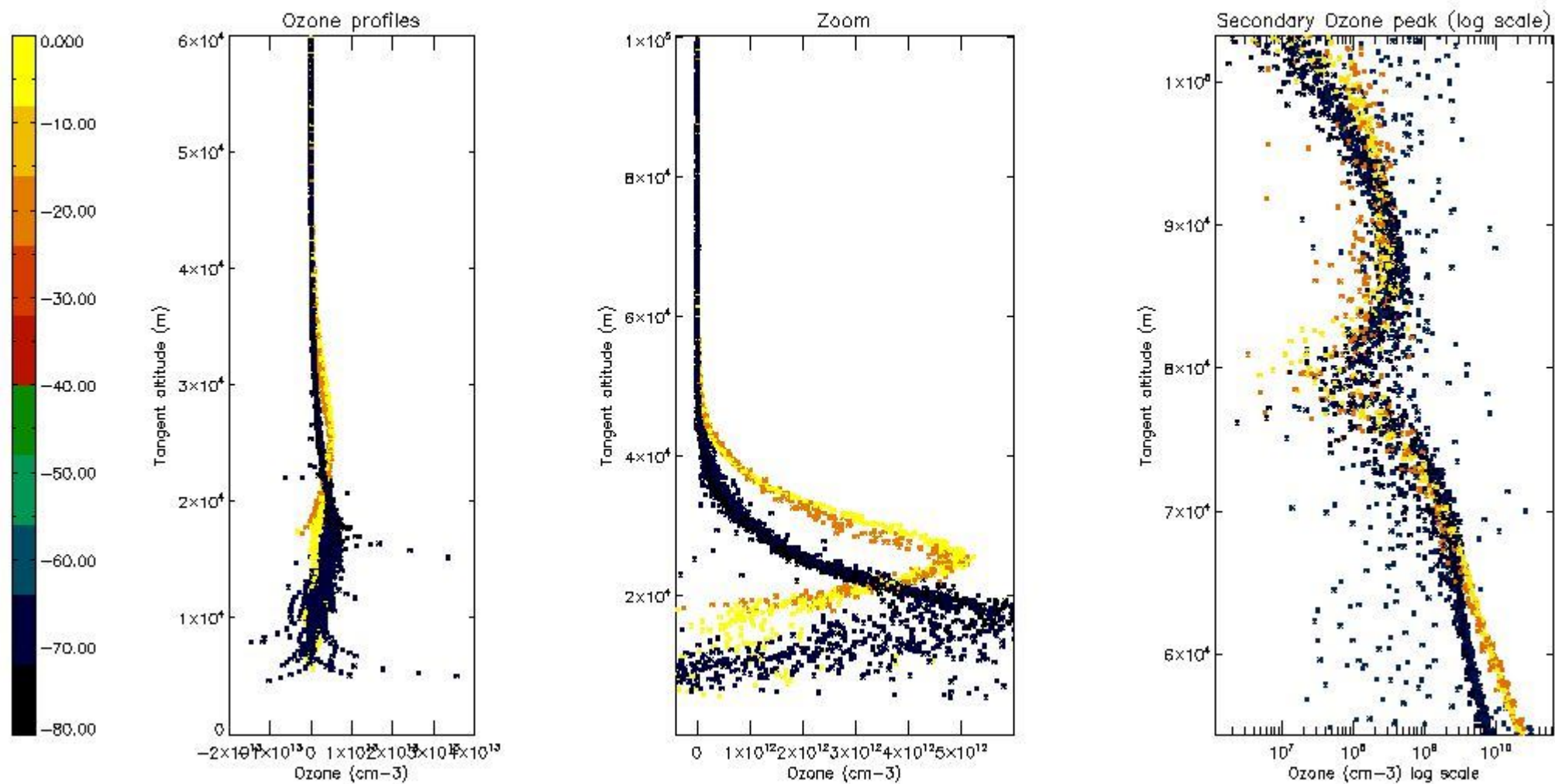
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	26

STD < 10	22
STD < 5	16

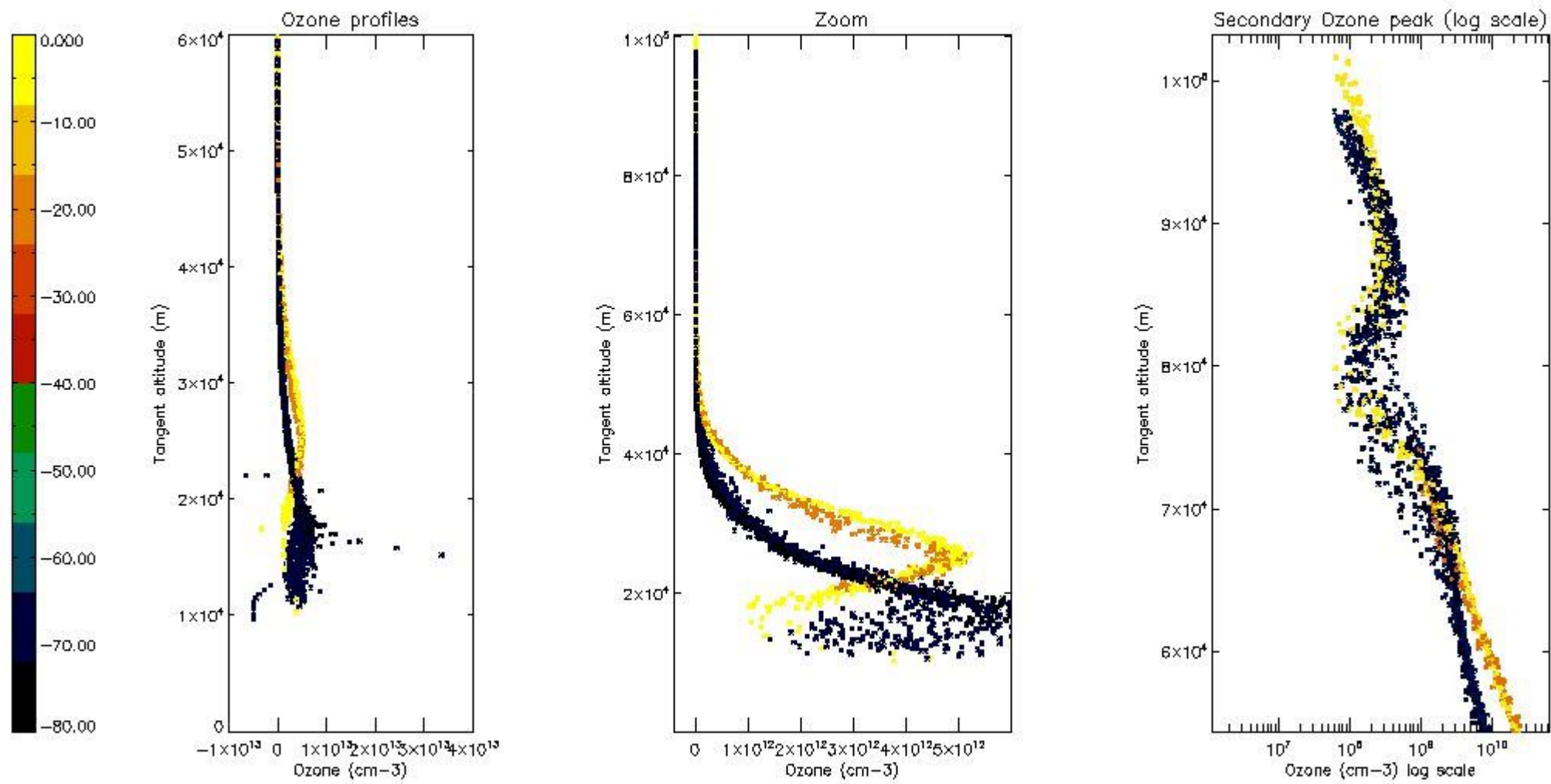
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



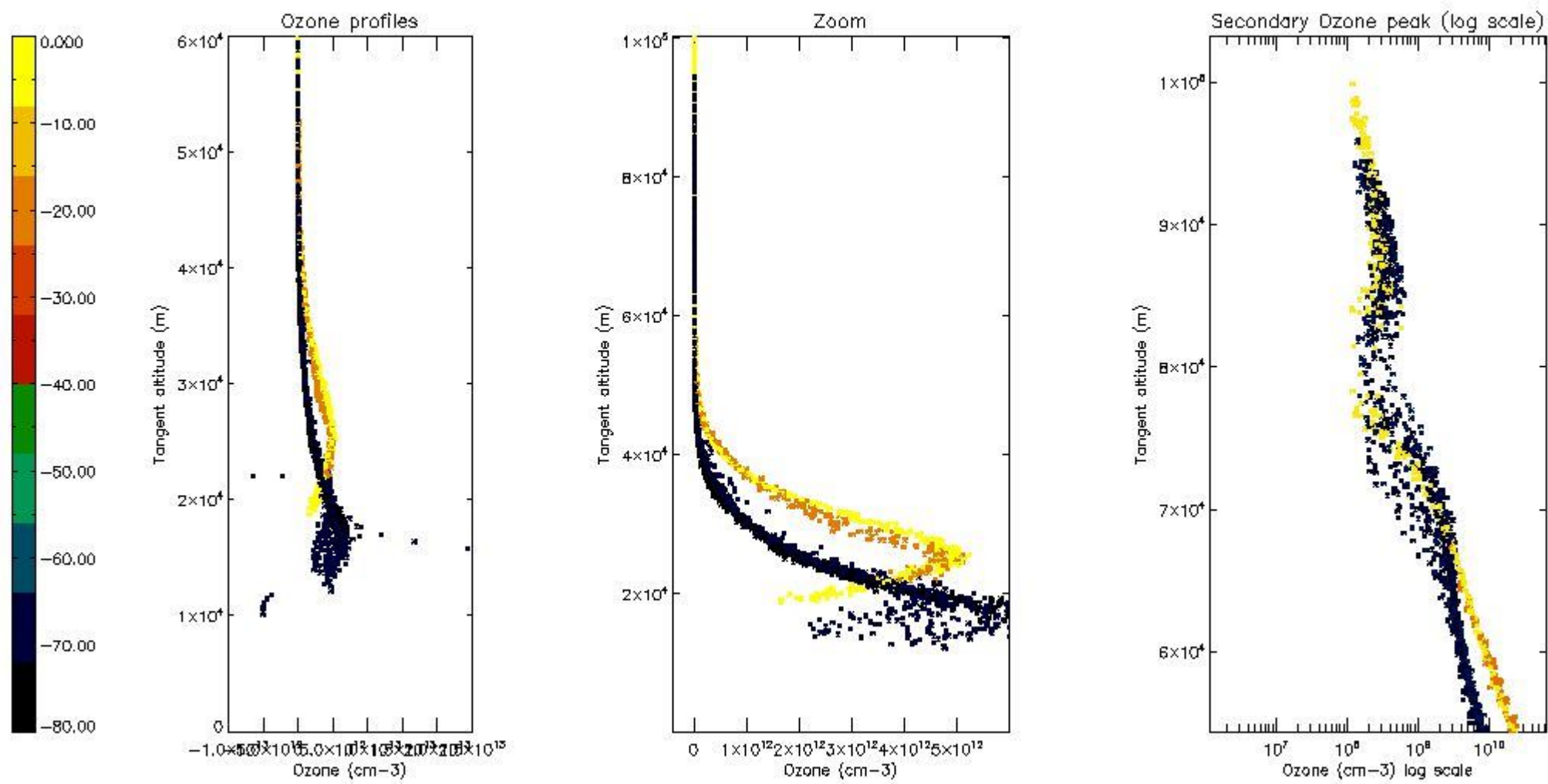
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



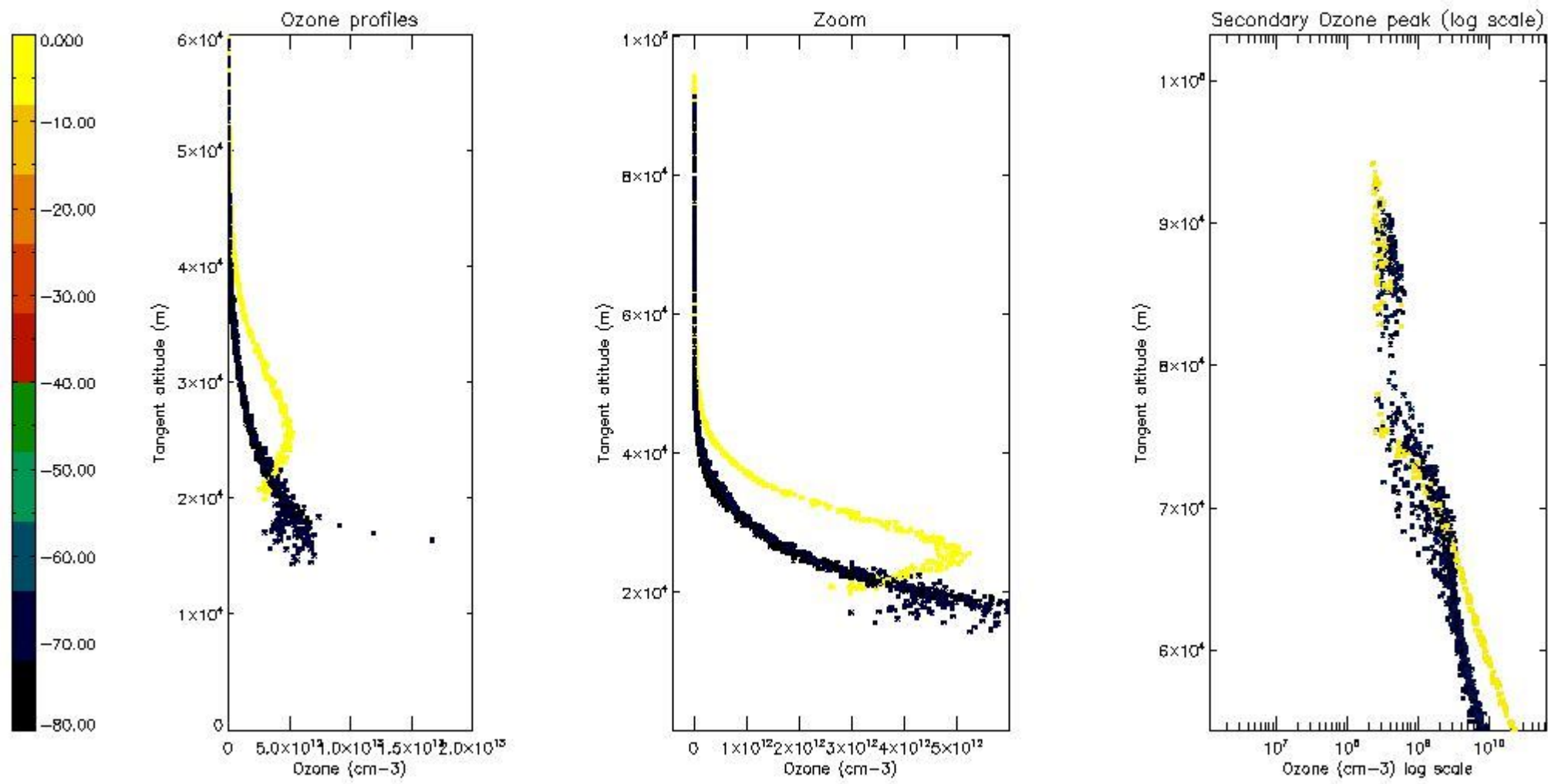
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



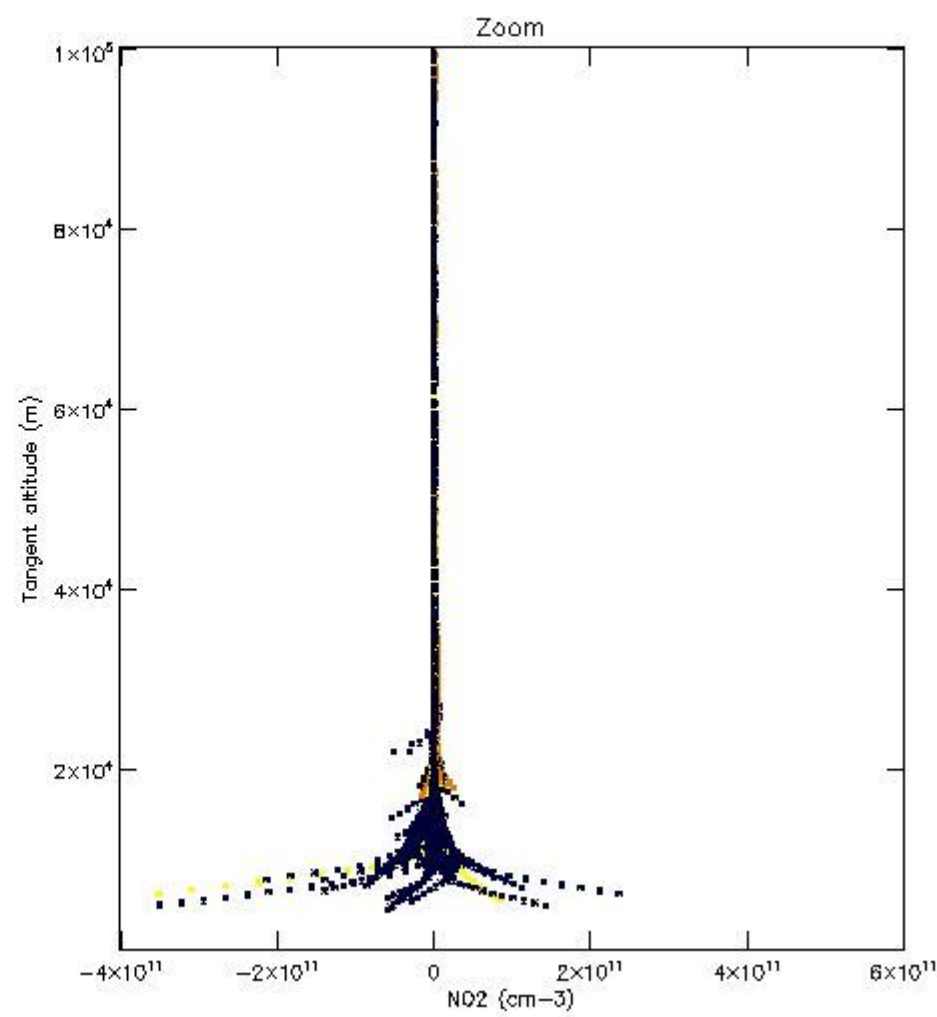
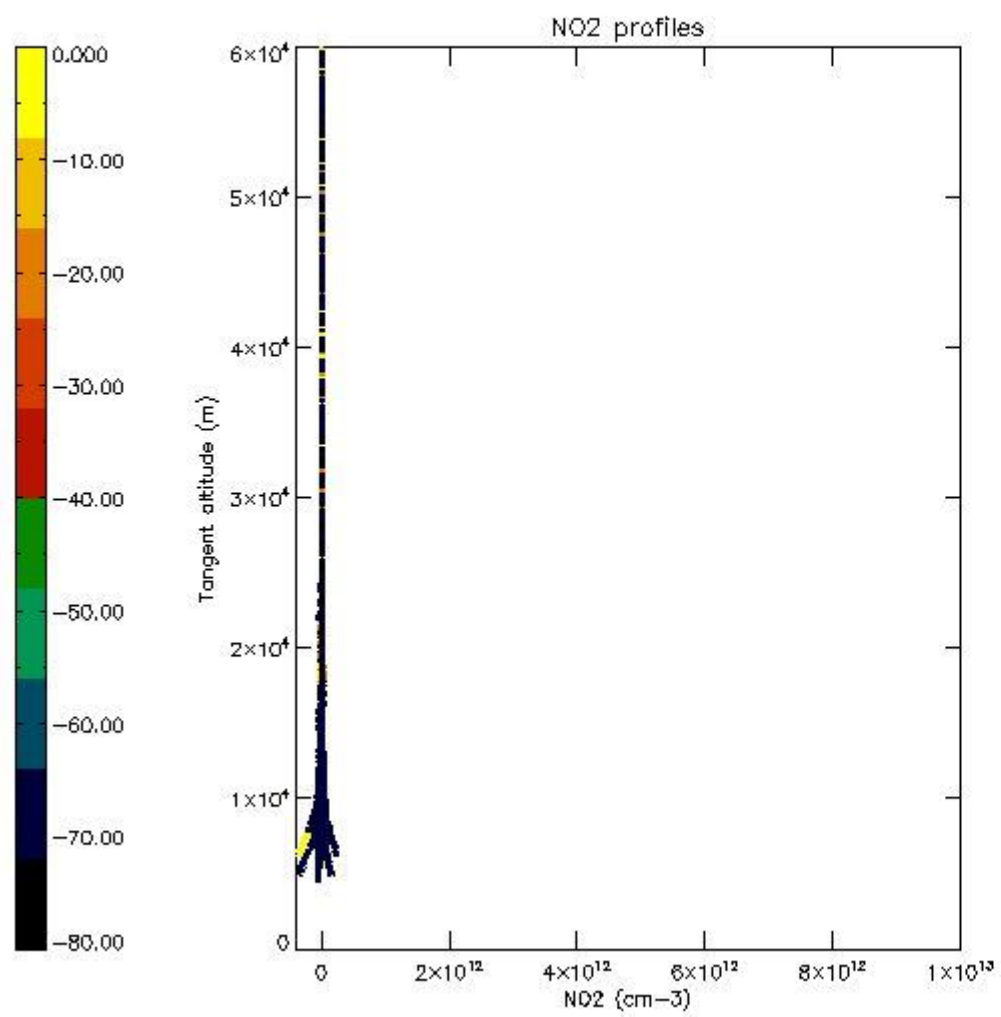
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



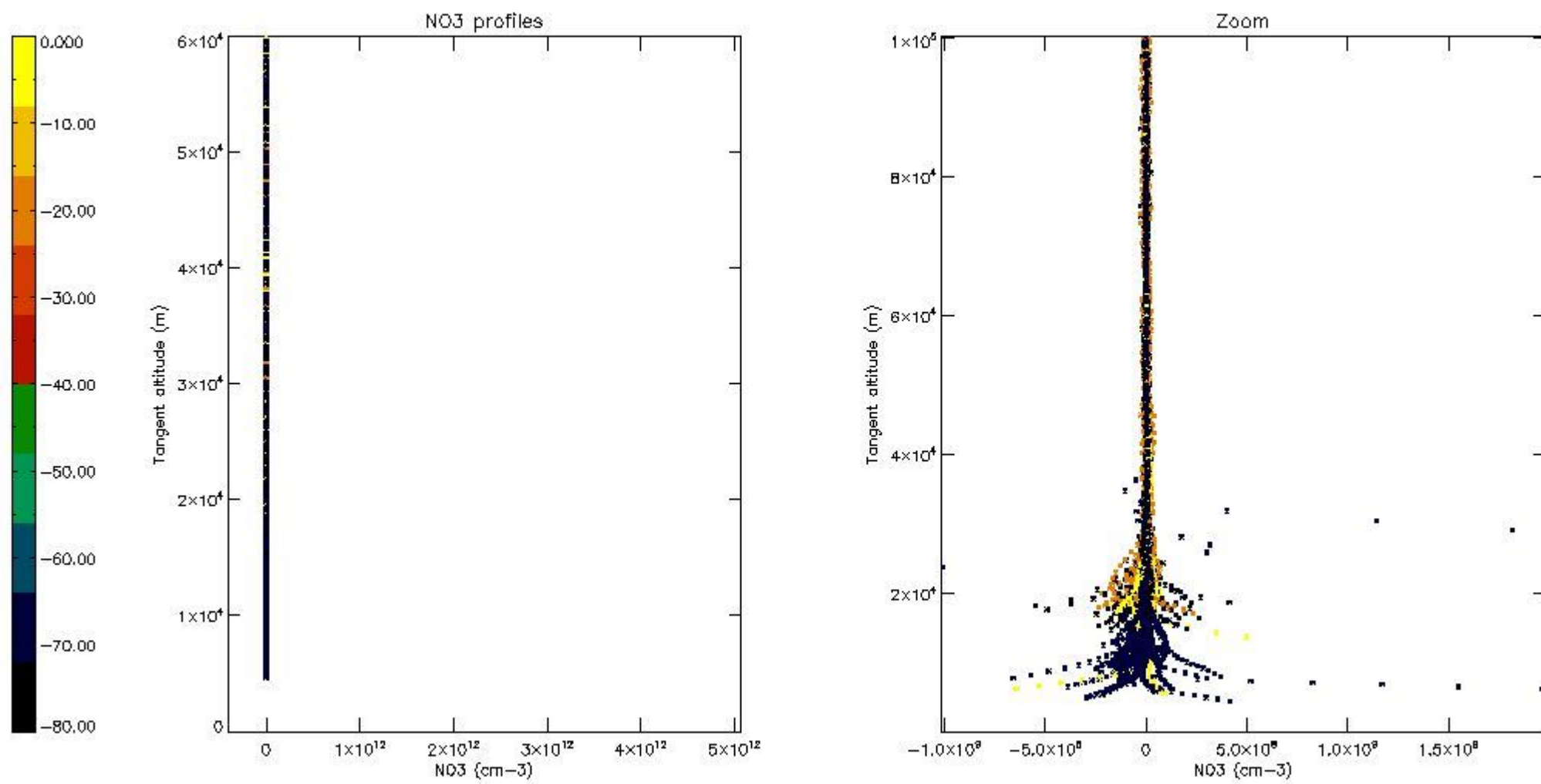
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



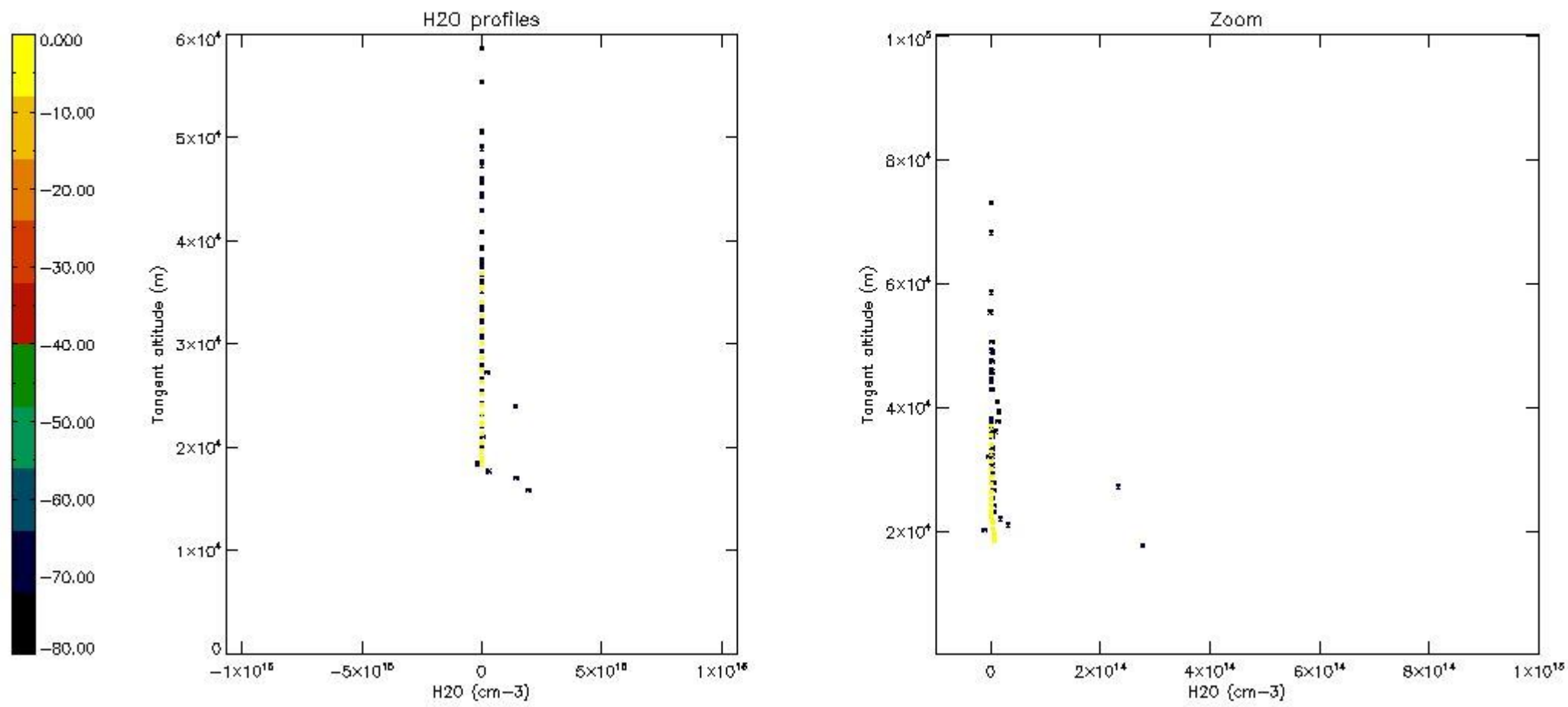
5.7 Plot NO3 profiles for all STD (dark without errors)

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	30-JUL-2006 00:00:22
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JUL-2006 00:00:22
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JUL-2006 00:00:22

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](#)

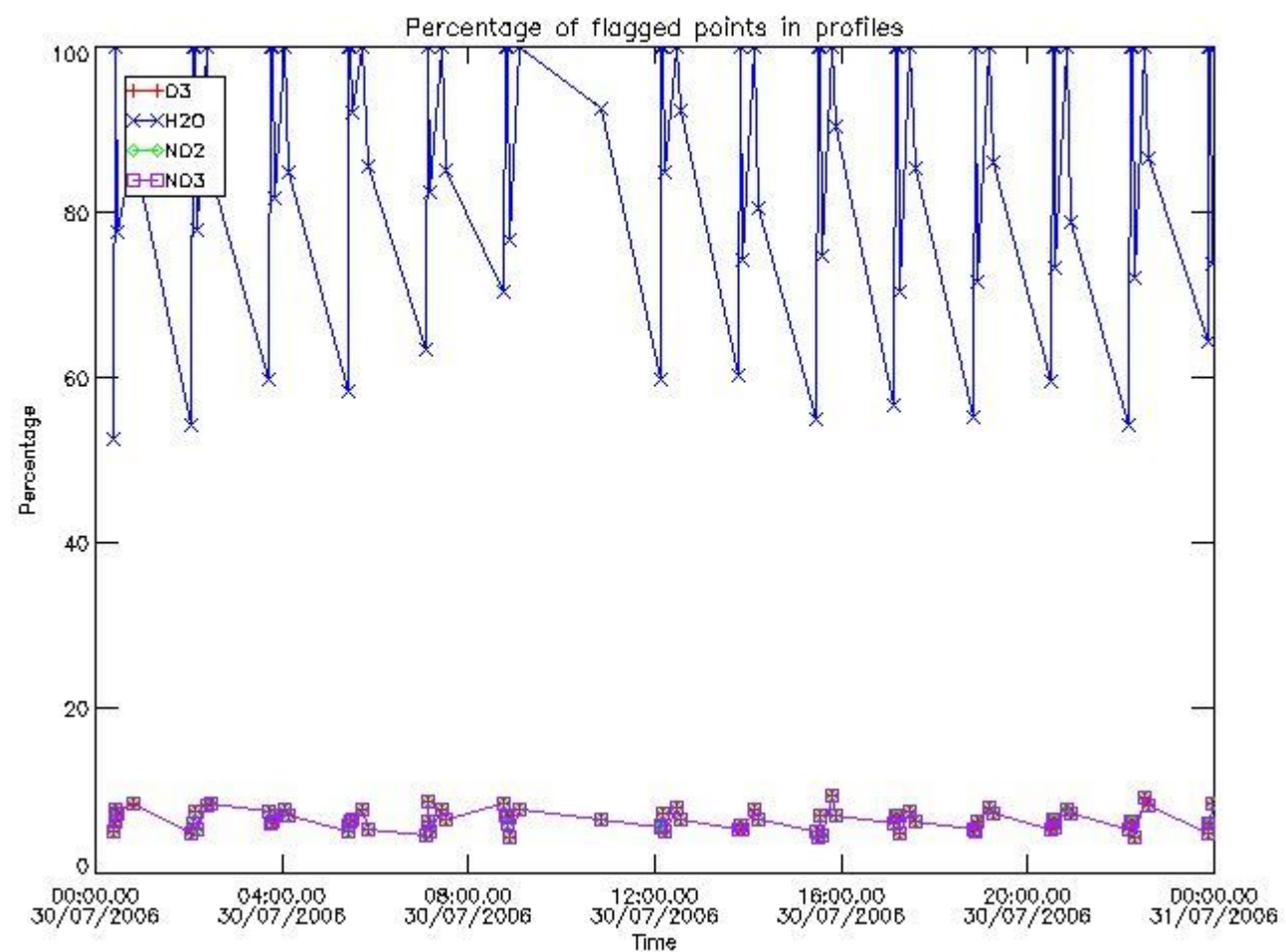
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20060730_221653_000000472049_00487_23086_0799.N1	30-JUL-2006 22:16:53	Dark	46.500	7	19Bet Ori	0.10000	14000.	93	23086	No
221	GOM_NL__2PRFIN20060730_223043_000000402049_00487_23086_0800.N1	30-JUL-2006 22:30:43	Dark	39.500	157	The1Eri	2.9060	9300.0	79	23086	No
222	GOM_NL__2PRFIN20060730_223619_000000382049_00488_23087_0784.N1	30-JUL-2006 22:36:19	Dark	37.500	9	Alp Eri	0.45300	24000.	75	23087	No
223	GOM_NL__2PRFIN20060730_224314_000000352049_00488_23087_0785.N1	30-JUL-2006 22:43:14	Straylight	34.500	148	Alp Tuc	2.8780	4100.0	69	23087	No
224	GOM_NL__2PRFIN20060730_224634_000000382049_00488_23087_0786.N1	30-JUL-2006 22:46:34	Straylight	37.500	31	Alp Gru	1.7340	15200.	75	23087	No
225	GOM_NL__2PRFIN20060730_224944_000000382049_00488_23087_0787.N1	30-JUL-2006 22:49:44	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	23087	No
226	GOM_NL__2PRFIN20060730_230545_000000322049_00488_23087_0788.N1	30-JUL-2006 23:05:45	Bright	32.000	11	53Alp Aql	0.76500	8000.0	64	23087	No
227	GOM_NL__2PRFIN20060730_230708_000000302049_00488_23087_0789.N1	30-JUL-2006 23:07:08	Bright	29.500	168	17Zet Aql	2.9860	11000.	59	23087	No
228	GOM_NL__2PRFIN20060730_231542_000000322049_00488_23087_0790.N1	30-JUL-2006 23:15:42	Bright	32.000	66	37Gam Cyg	2.2080	5900.0	64	23087	No
229	GOM_NL__2PRFIN20060730_232304_000000332049_00488_23087_0791.N1	30-JUL-2006 23:23:04	Bright	33.000	89	5Alp Cep	2.4510	8000.0	66	23087	No
230	GOM_NL__2PRFIN20060730_232845_000000292049_00488_23087_0792.N1	30-JUL-2006 23:28:45	Bright	28.500	49	1Alp UMi	1.9900	6300.0	57	23087	No
231	GOM_NL__2PRFIN20060730_234125_000000492049_00488_23087_0793.N1	30-JUL-2006 23:41:25	Bright	49.000	6	13Alp Aur	0.080000	3400.0	98	23087	No
232	GOM_NL__2PRFIN20060730_234636_000000372049_00488_23087_0794.N1	30-JUL-2006 23:46:36	Bright	36.500	28	12Bet Tau	1.6500	15200.	73	23087	No
233	GOM_NL__2PRFIN20060730_234840_000000352049_00488_23087_0795.N1	30-JUL-2006 23:48:40	Twilight_stray	34.500	176	23Zet Tau	3.0200	22000.	69	23087	No
234	GOM_NL__2PRFIN20060730_235108_000000532049_00488_23087_0796.N1	30-JUL-2006 23:51:08	Dark	52.500	13	87Alp Tau	0.86700	3800.0	105	23087	No
235	GOM_NL__2PRFIN20060730_235308_000000342049_00488_23087_0797.N1	30-JUL-2006 23:53:08	Dark	34.000	27	24Gam Ori	1.6360	26000.	68	23087	No
236	GOM_NL__2PRFIN20060730_235503_000000352049_00488_23087_0798.N1	30-JUL-2006 23:55:03	Dark	34.500	30	46Eps Ori	1.6940	30000.	69	23087	No
237	GOM_NL__2PRFIN20060730_235729_000000362049_00488_23087_0799.N1	30-JUL-2006 23:57:29	Dark	36.000	7	19Bet Ori	0.10000	14000.	72	23087	No

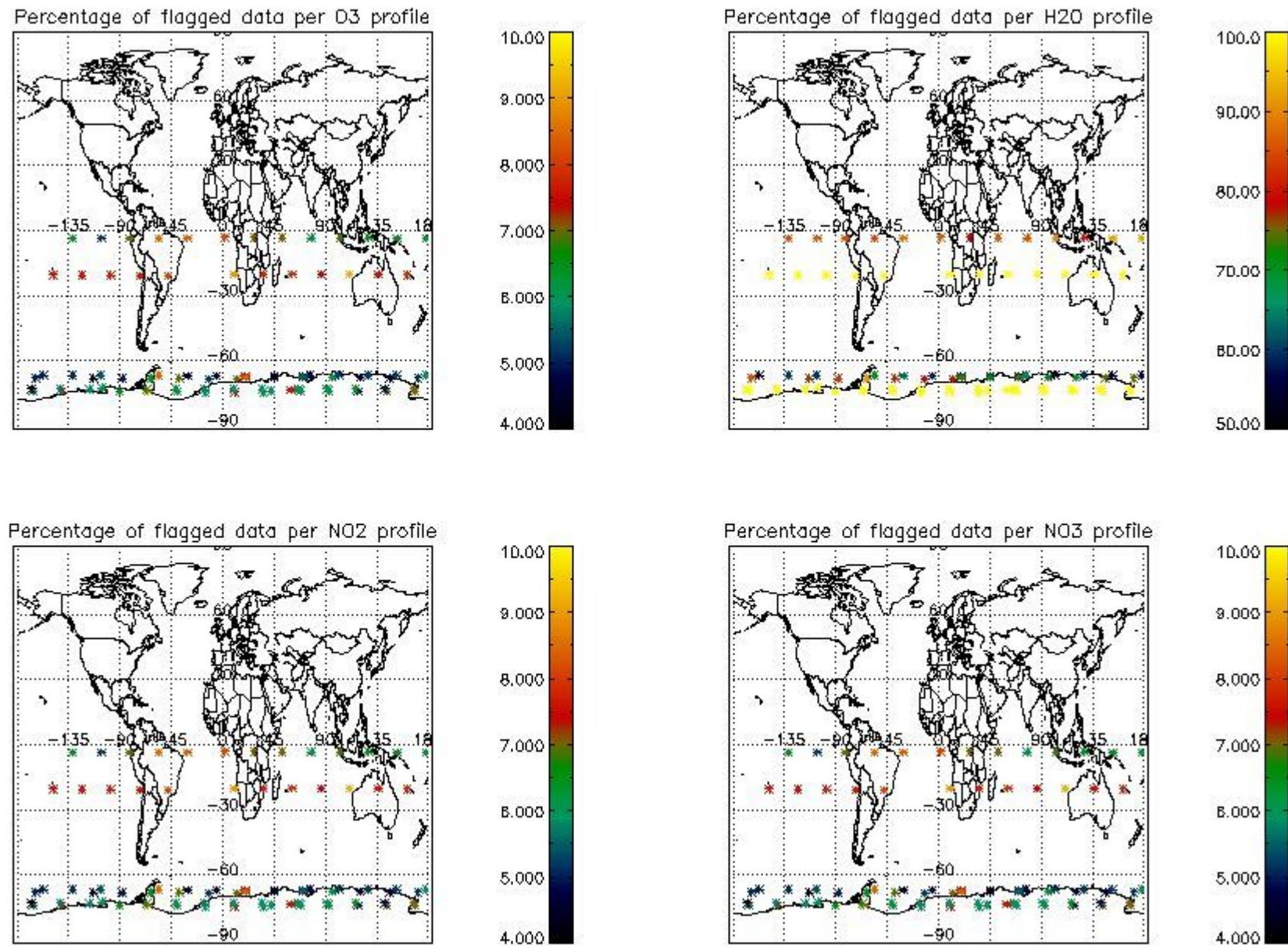
3. Quality information per product

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)

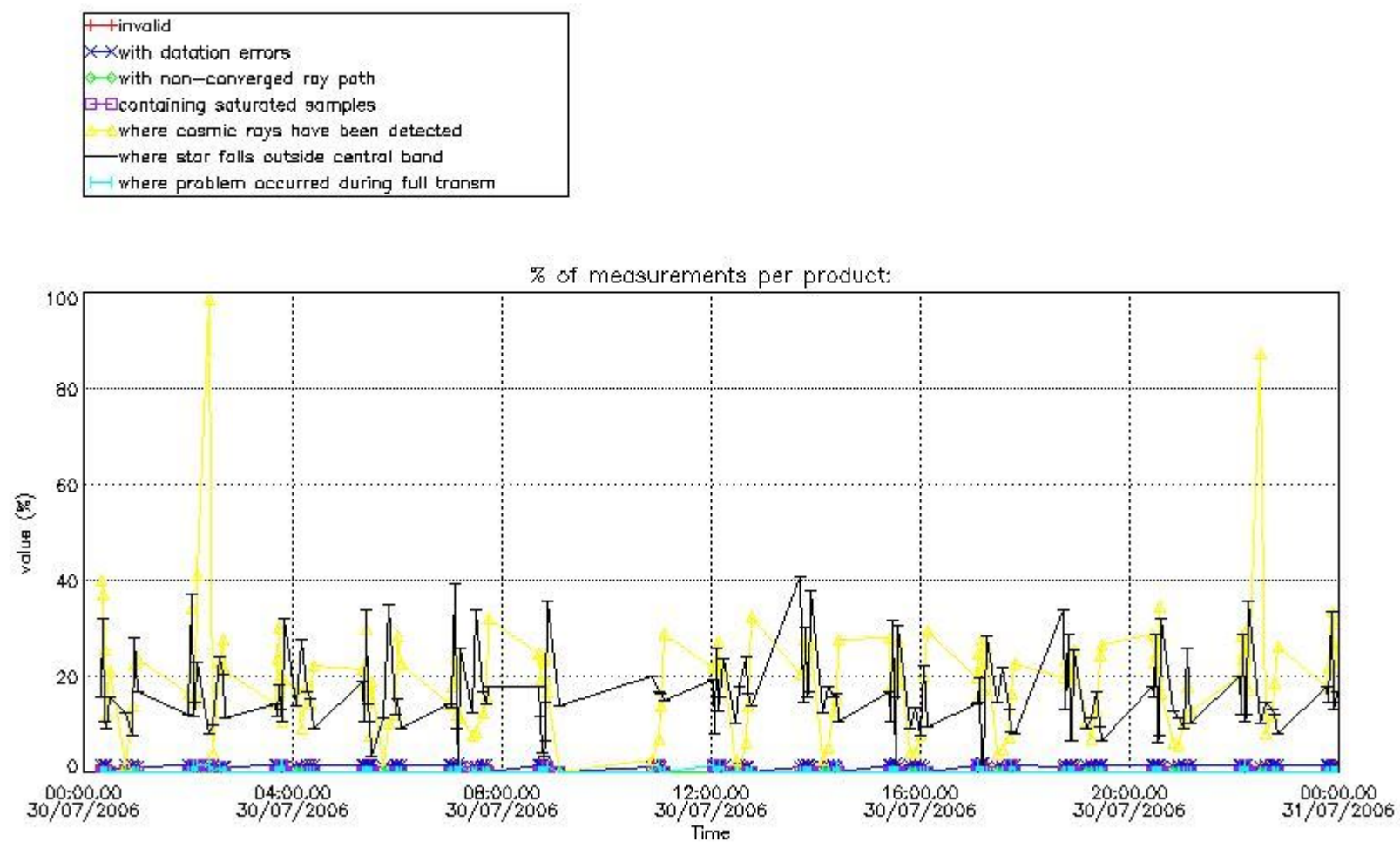


4. Level 1 quality information per product

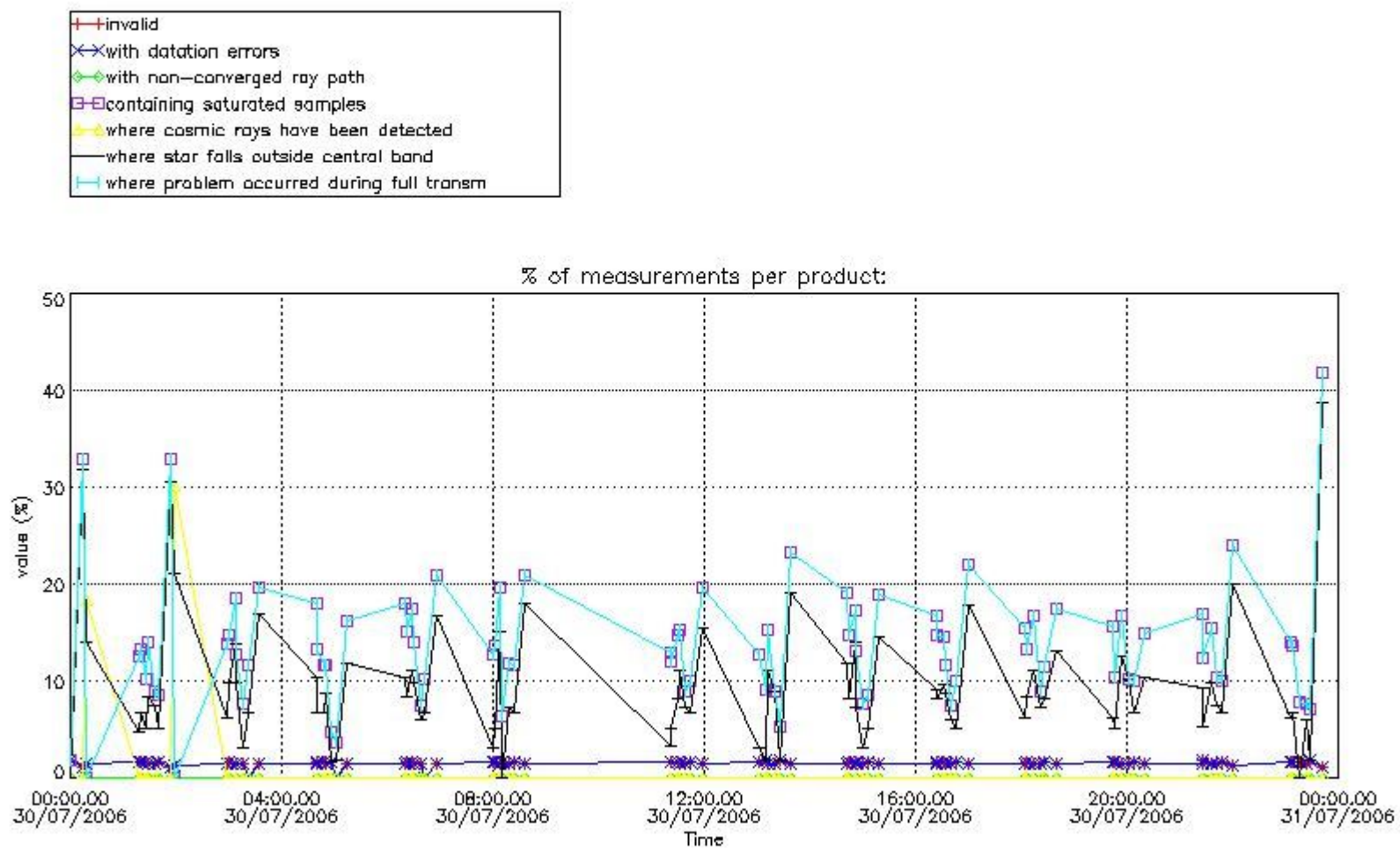
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

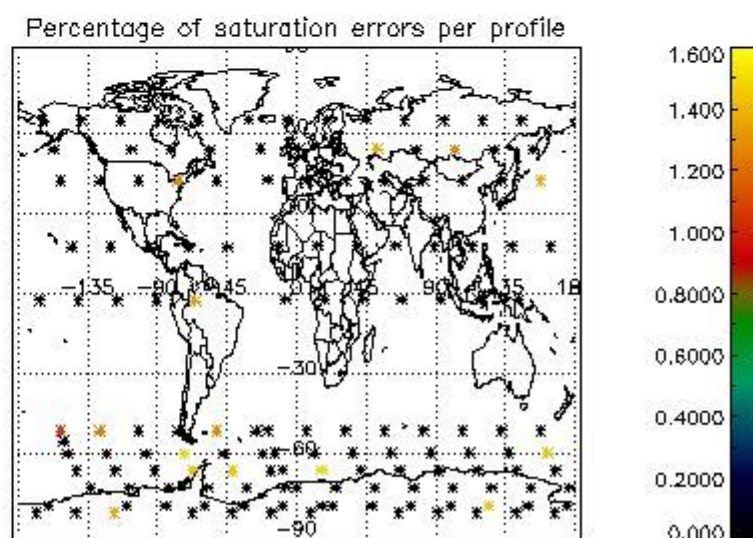
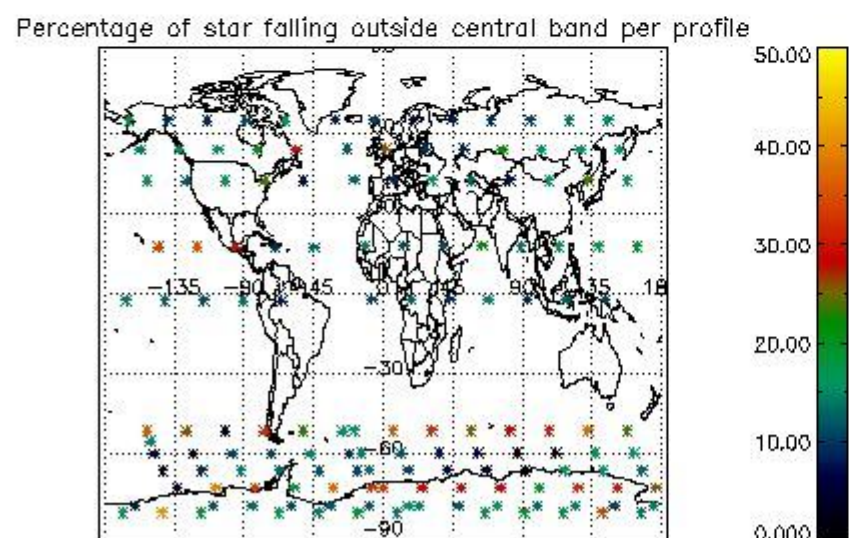
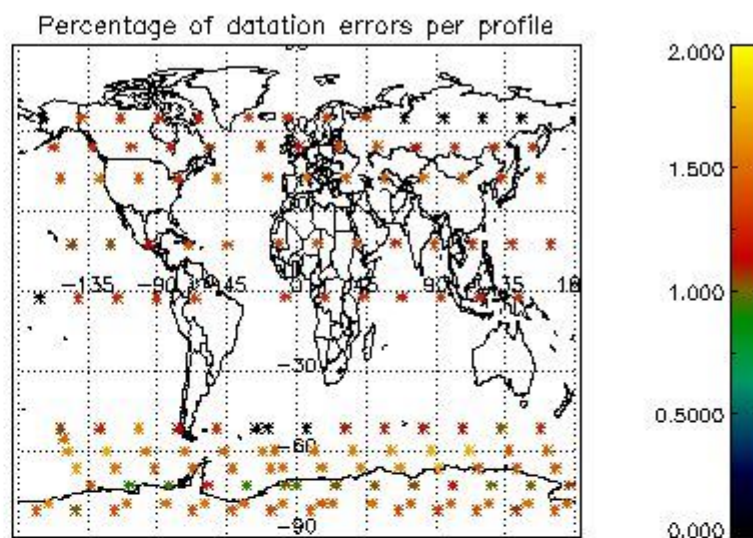
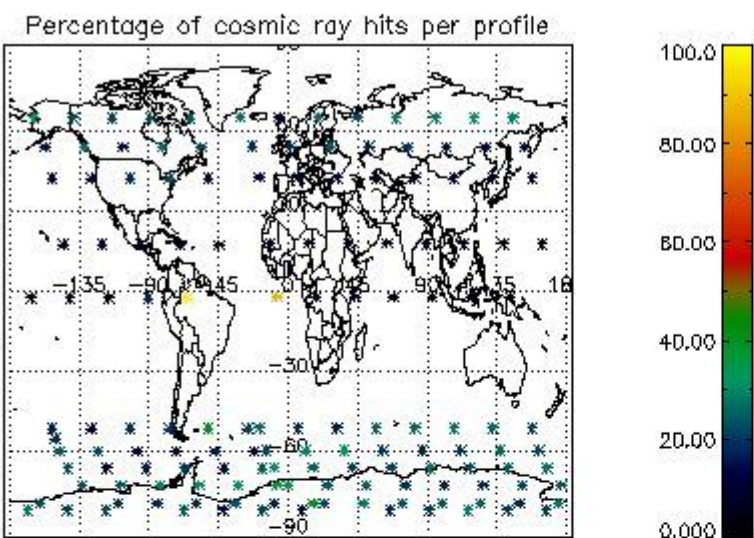


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

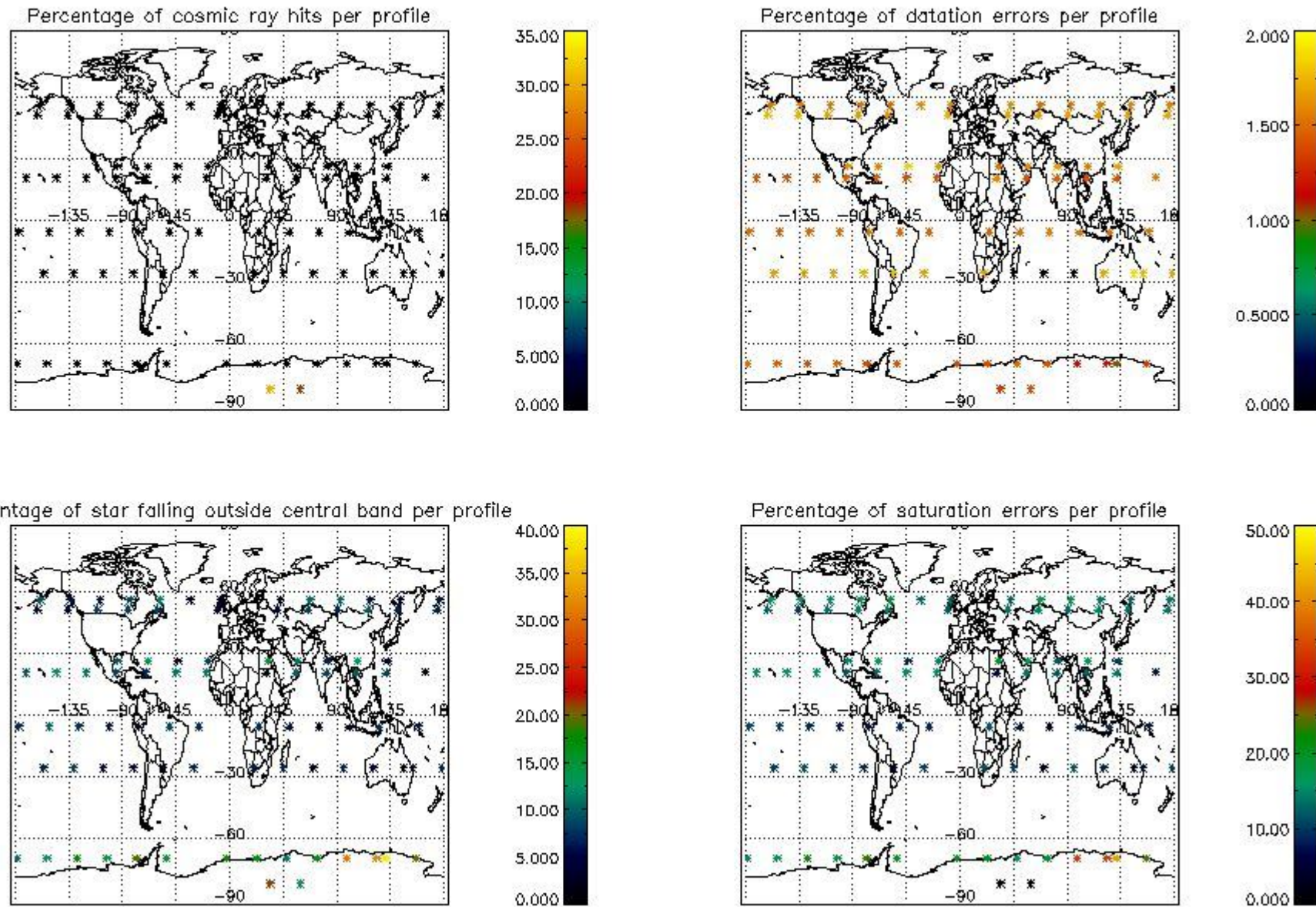


4.2 Plot quality information per product coming from level 1b processing (world map)

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

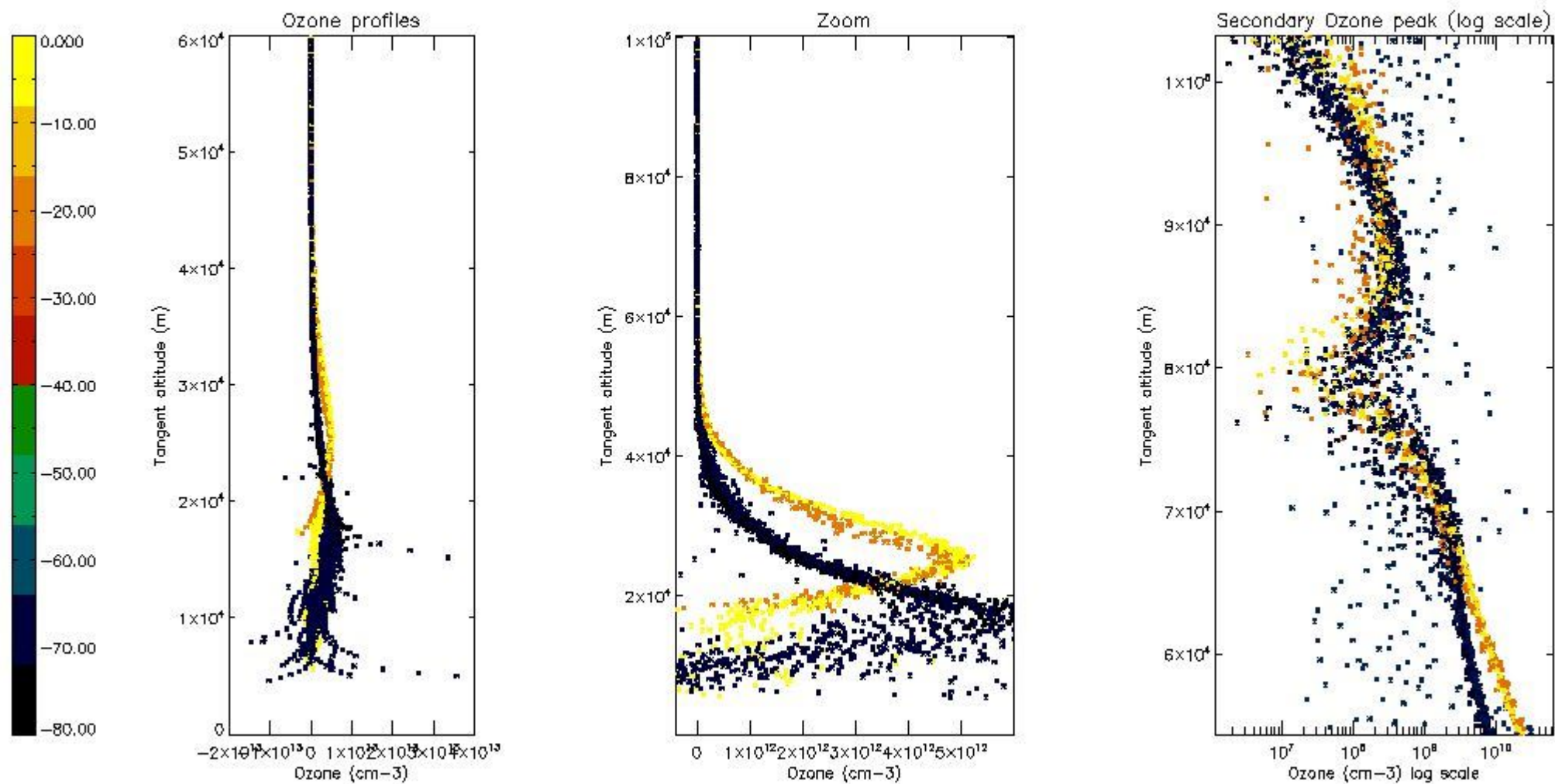
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	26

STD < 10	22
STD < 5	16

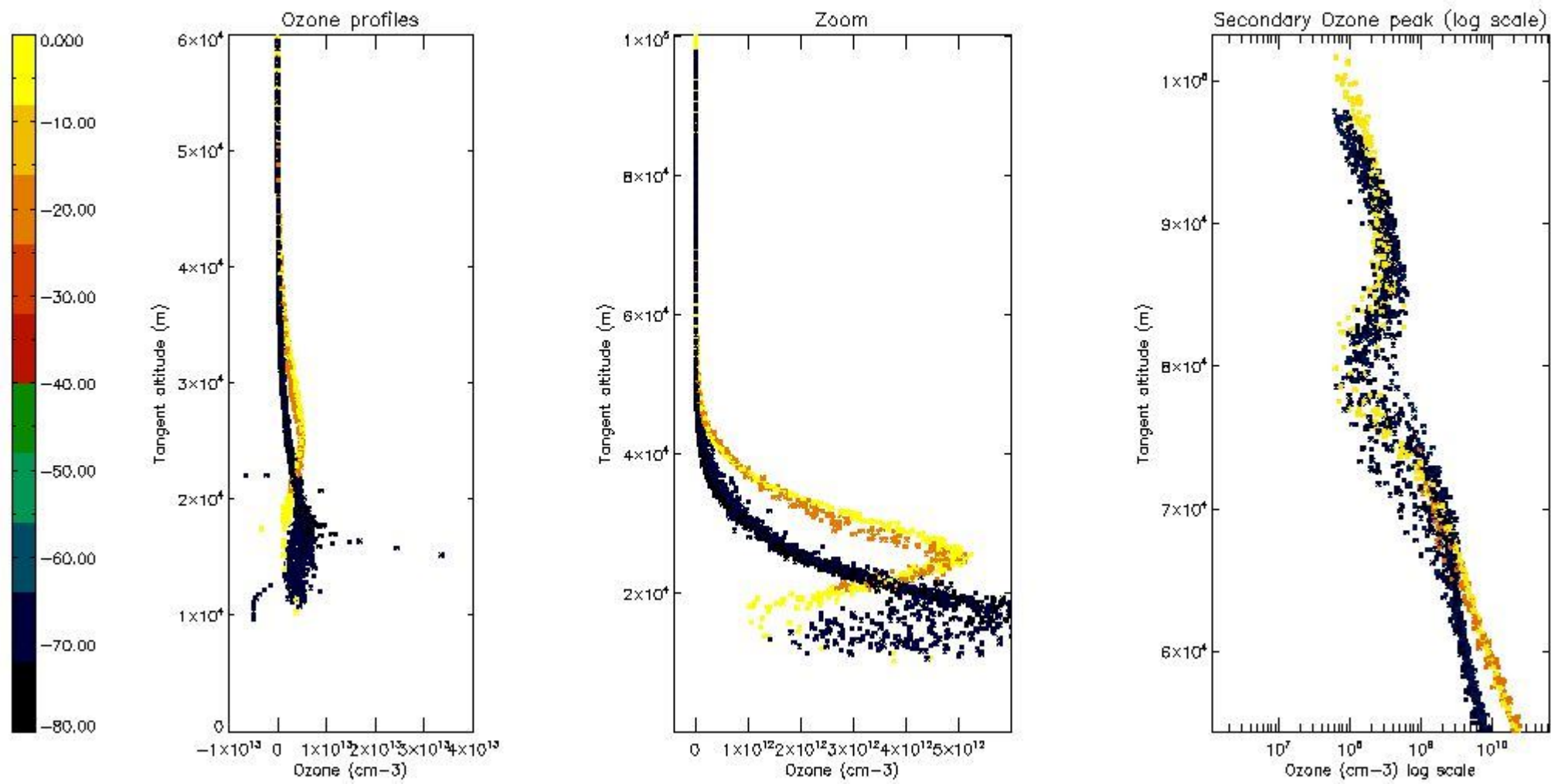
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



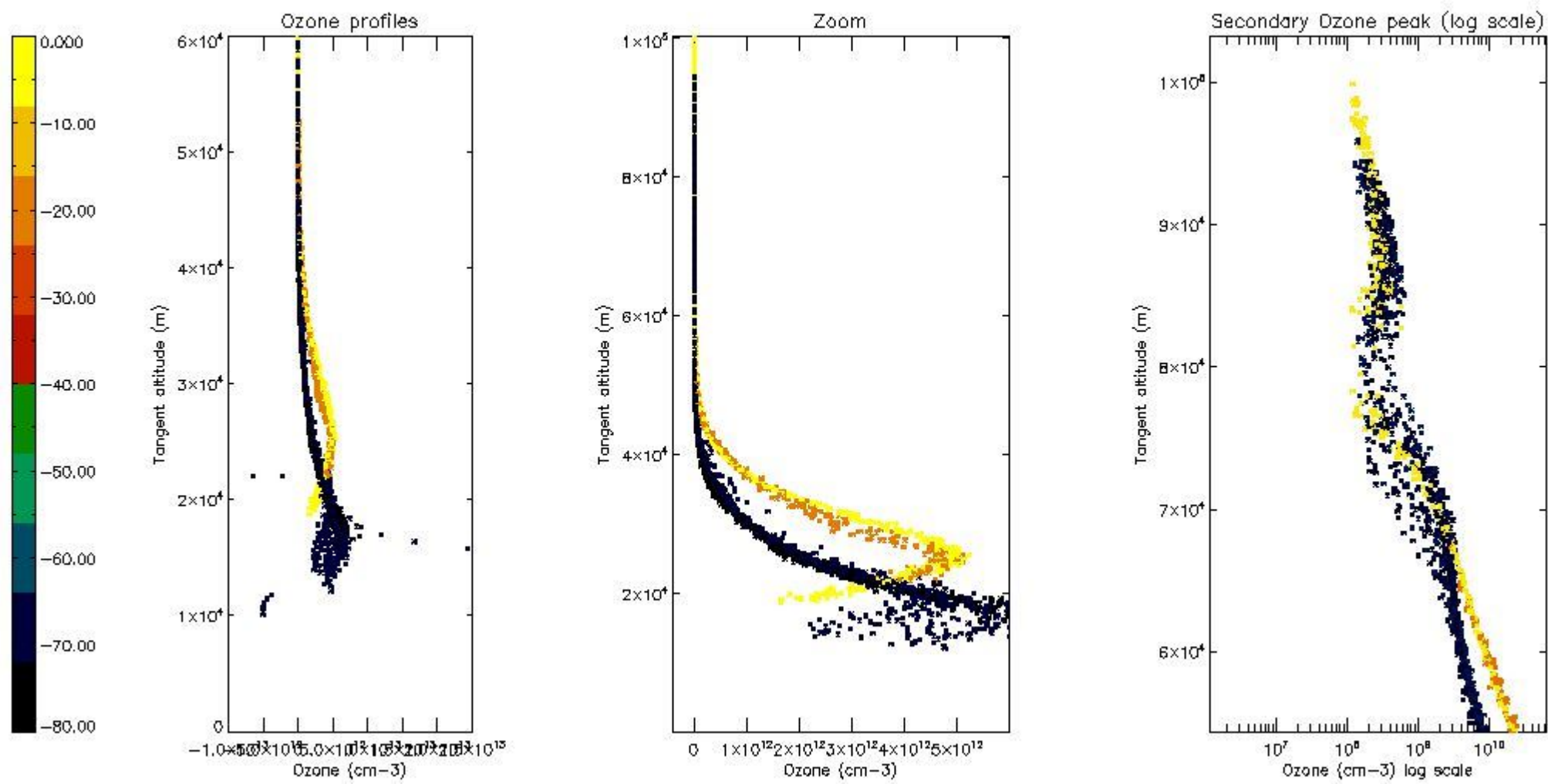
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



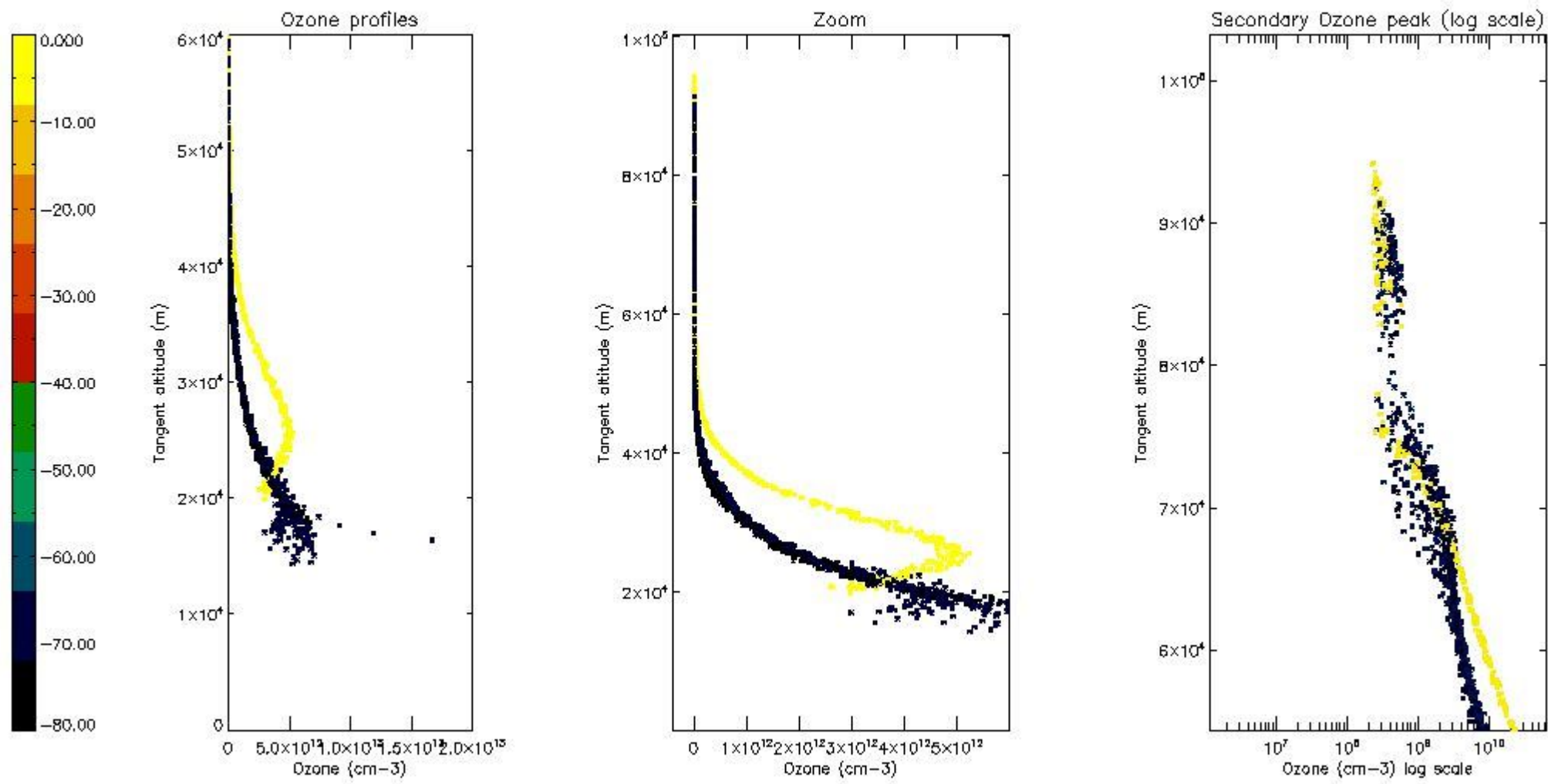
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



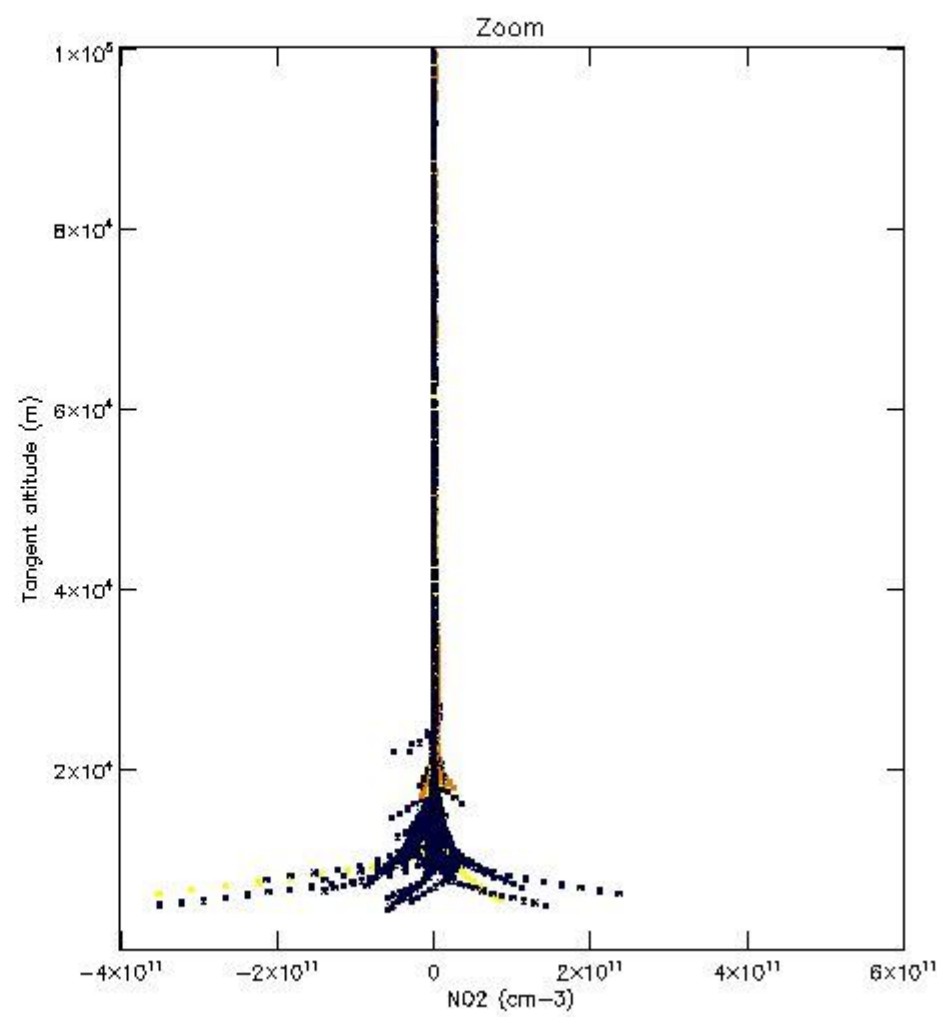
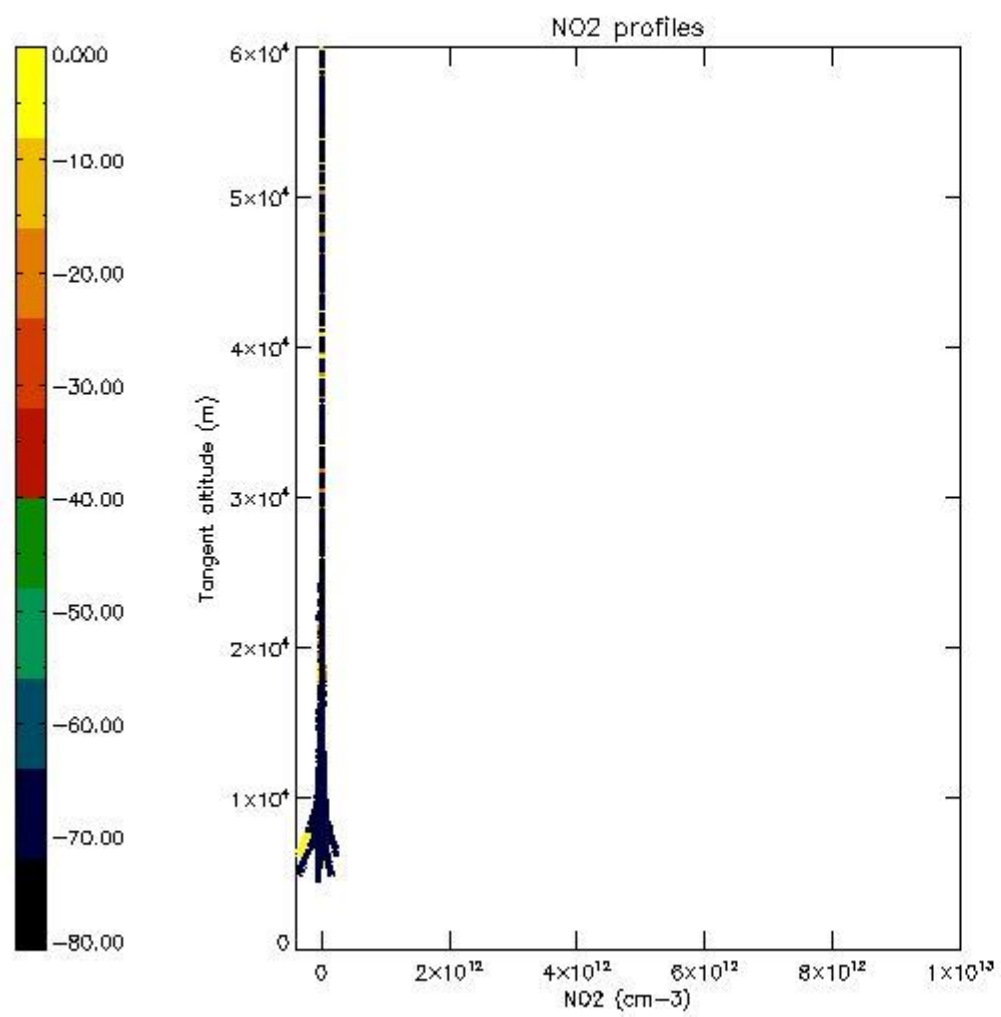
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



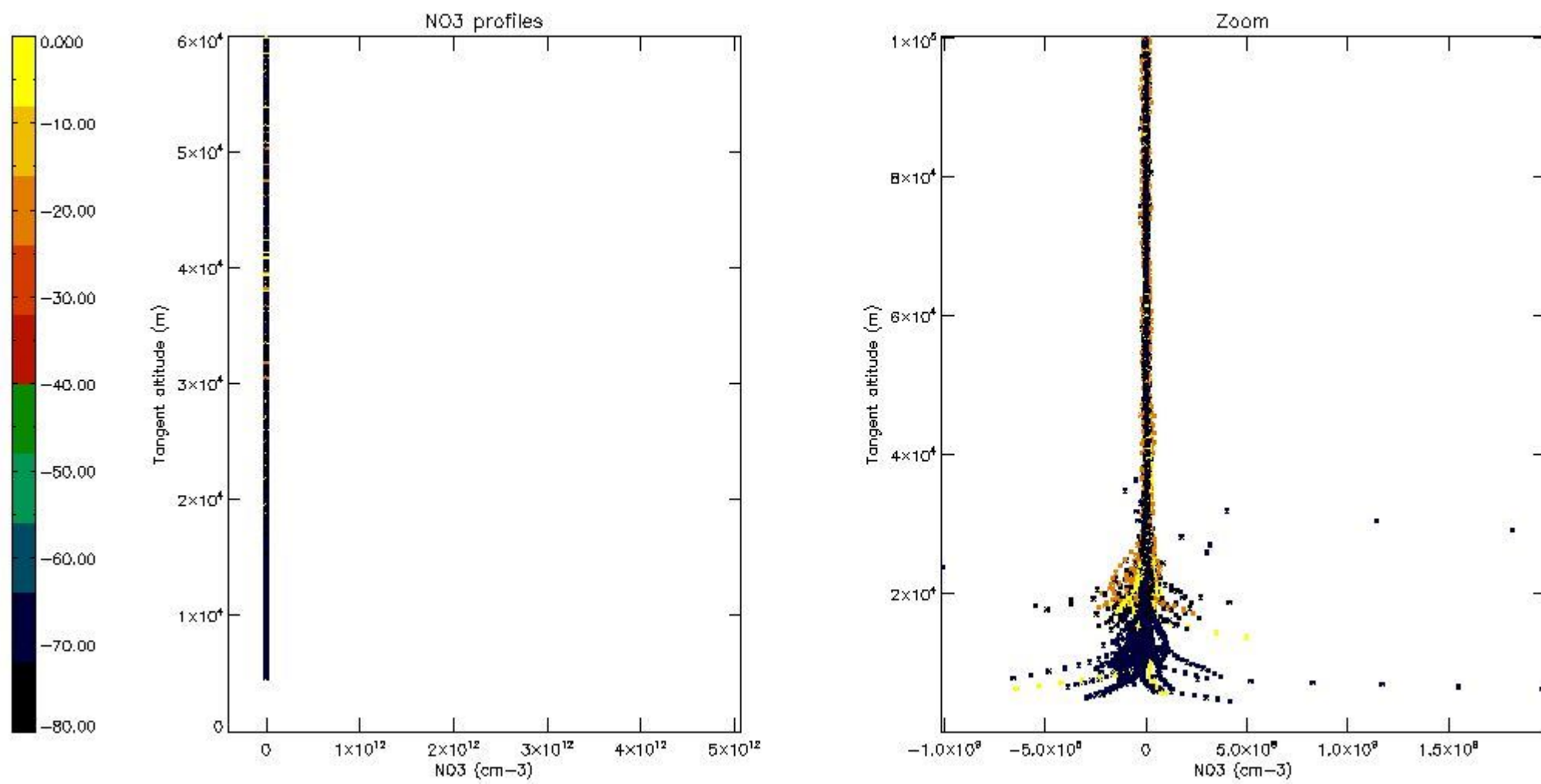
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



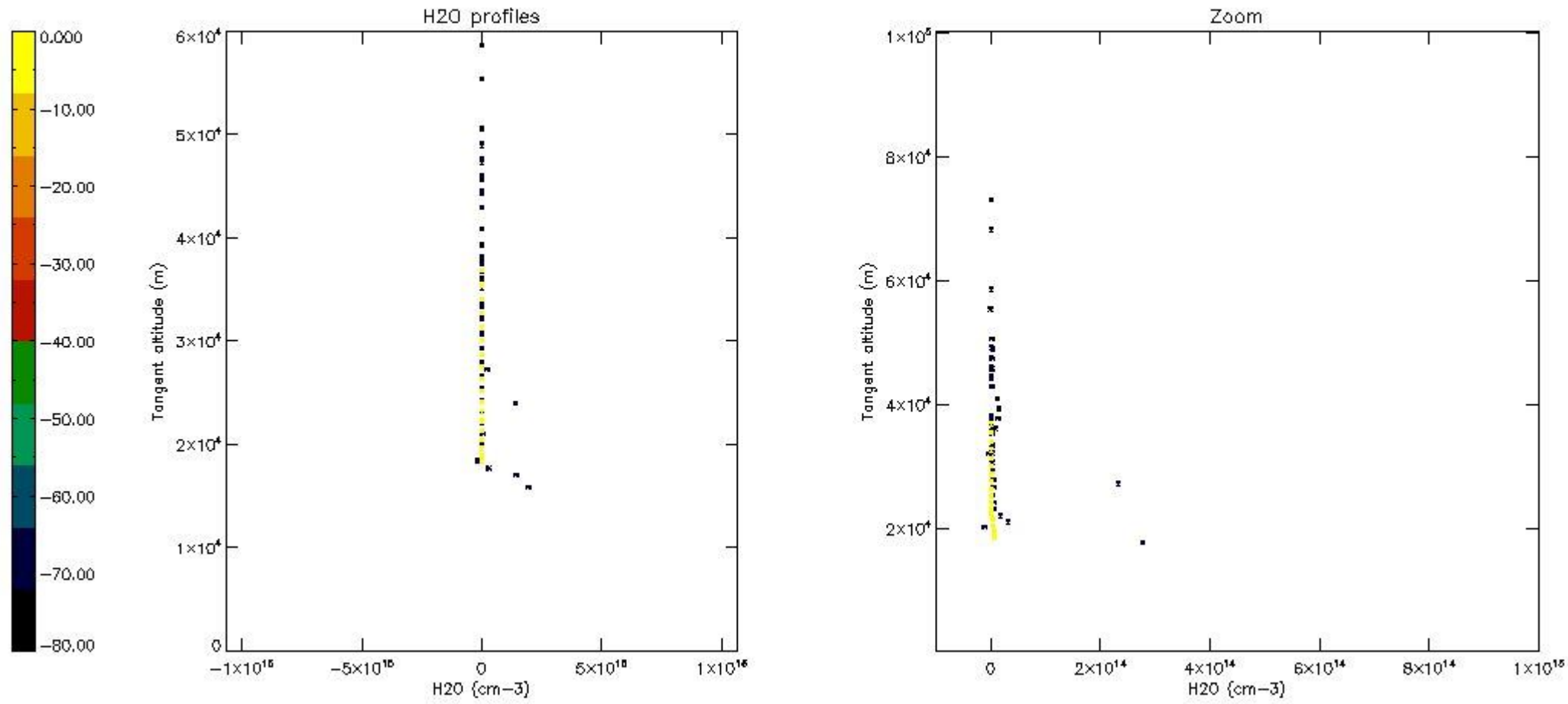
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

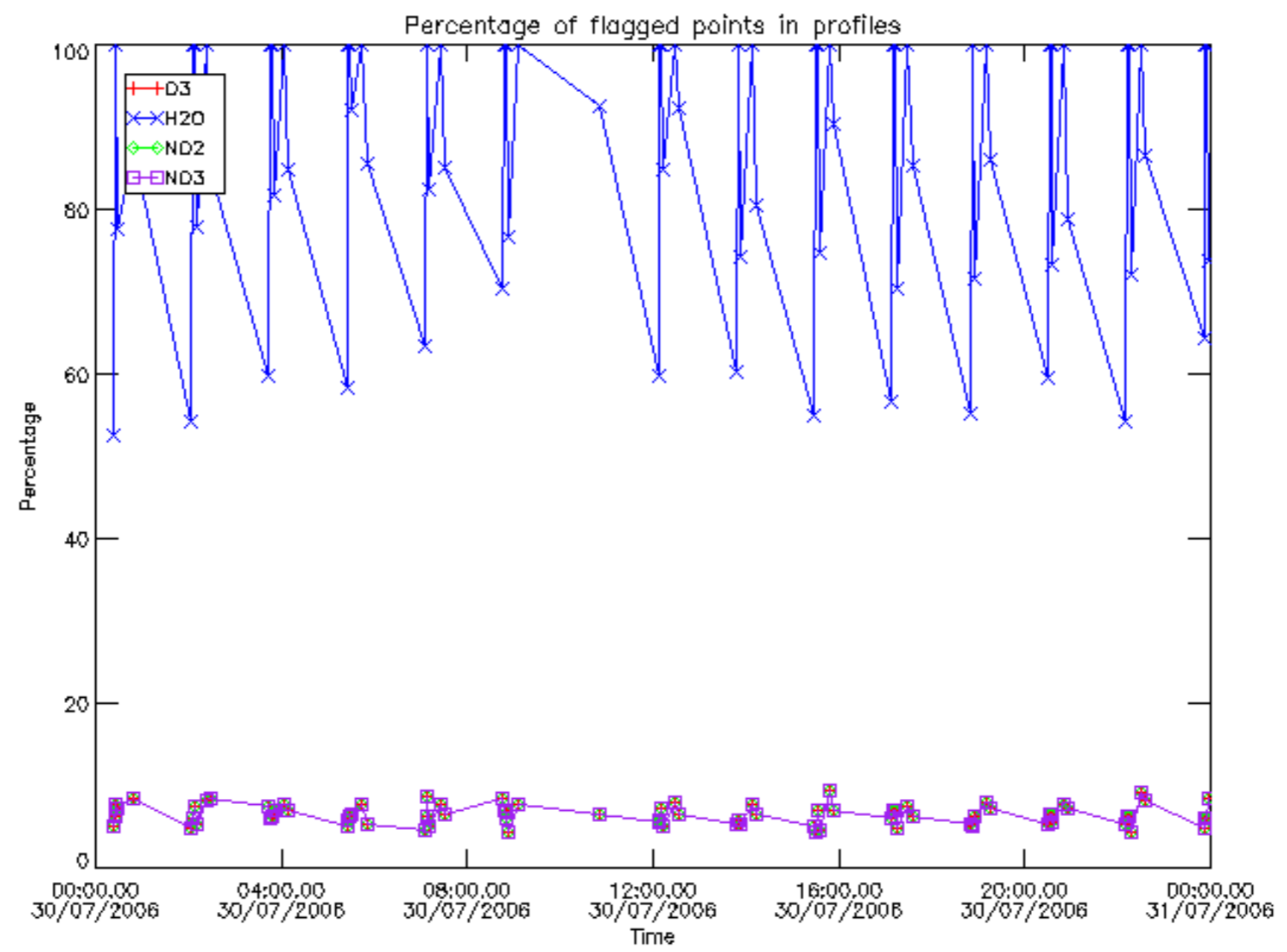
The colorbar represents the latitude.



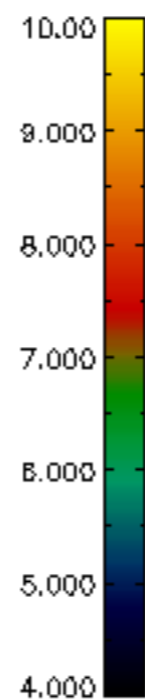
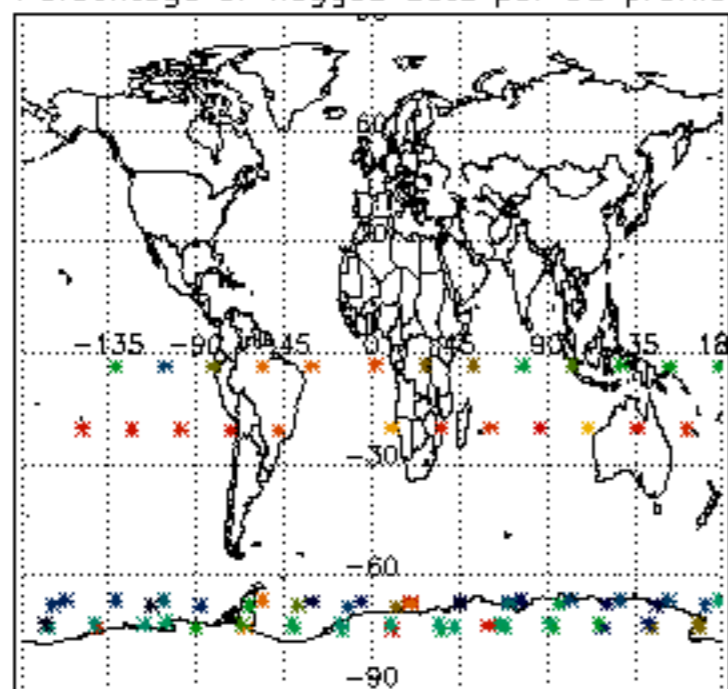
6. Auxiliary Data Files used for the production reported in section 2

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.

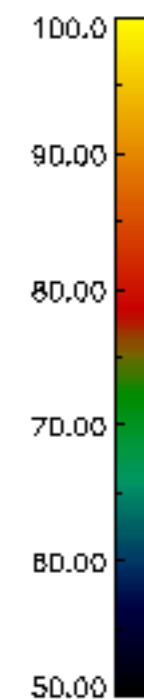
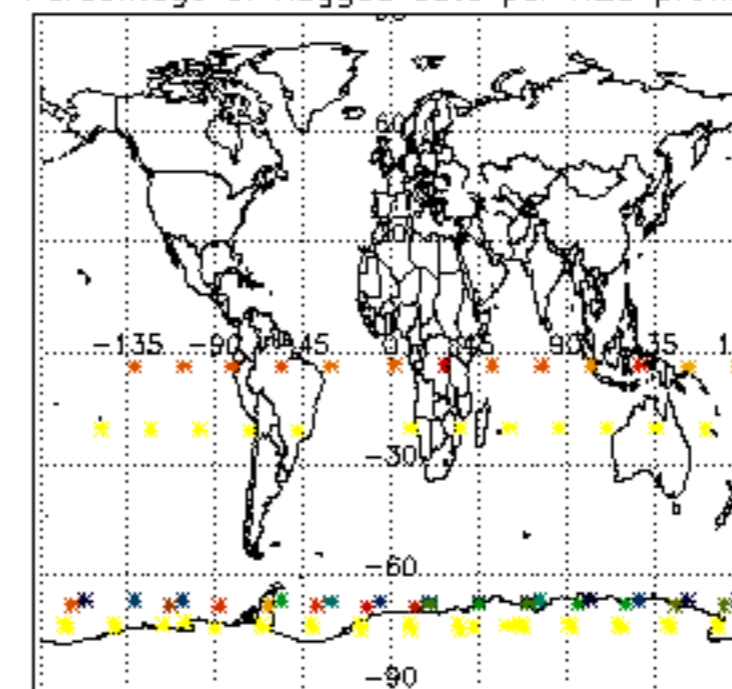
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-JUL-2006 00:00:22
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JUL-2006 00:00:22
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JUL-2006 00:00:22



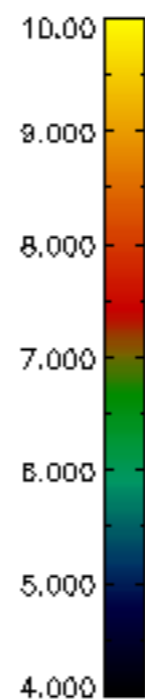
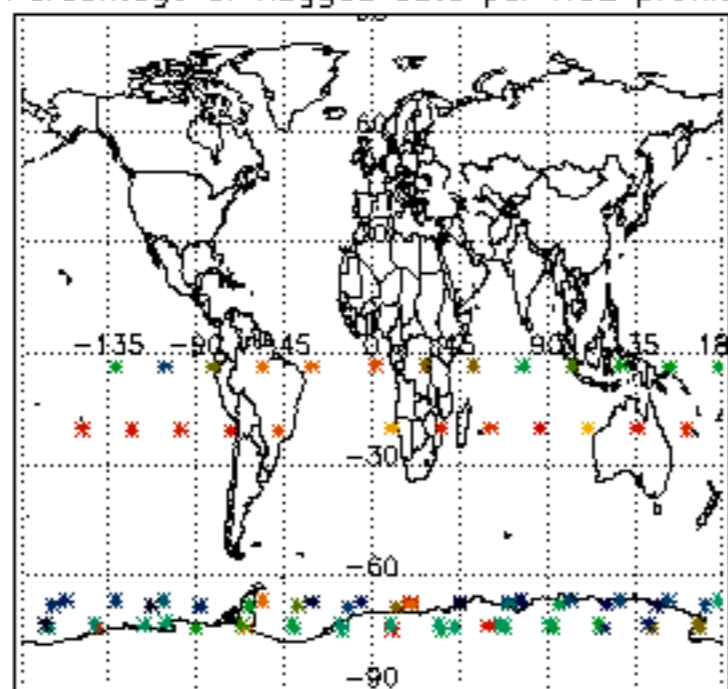
Percentage of flagged data per D3 profile



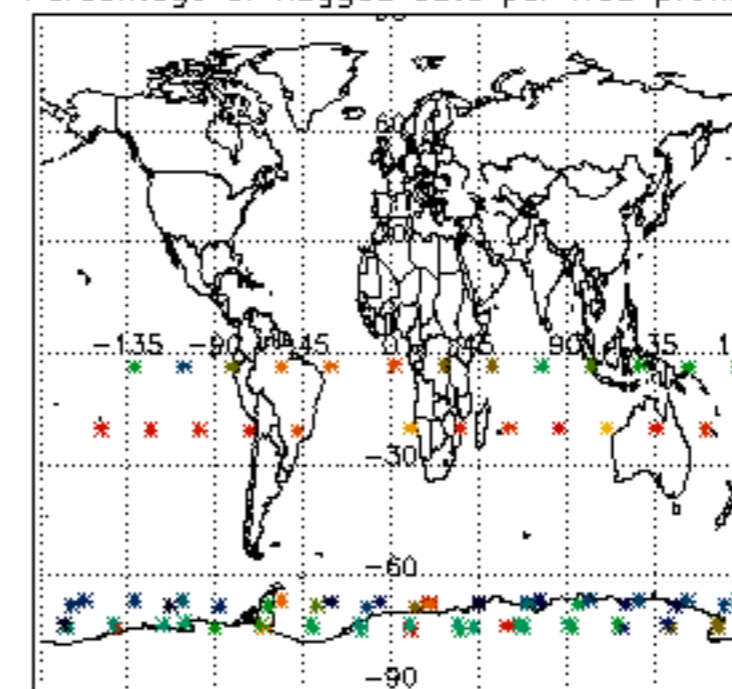
Percentage of flagged data per H2O profile

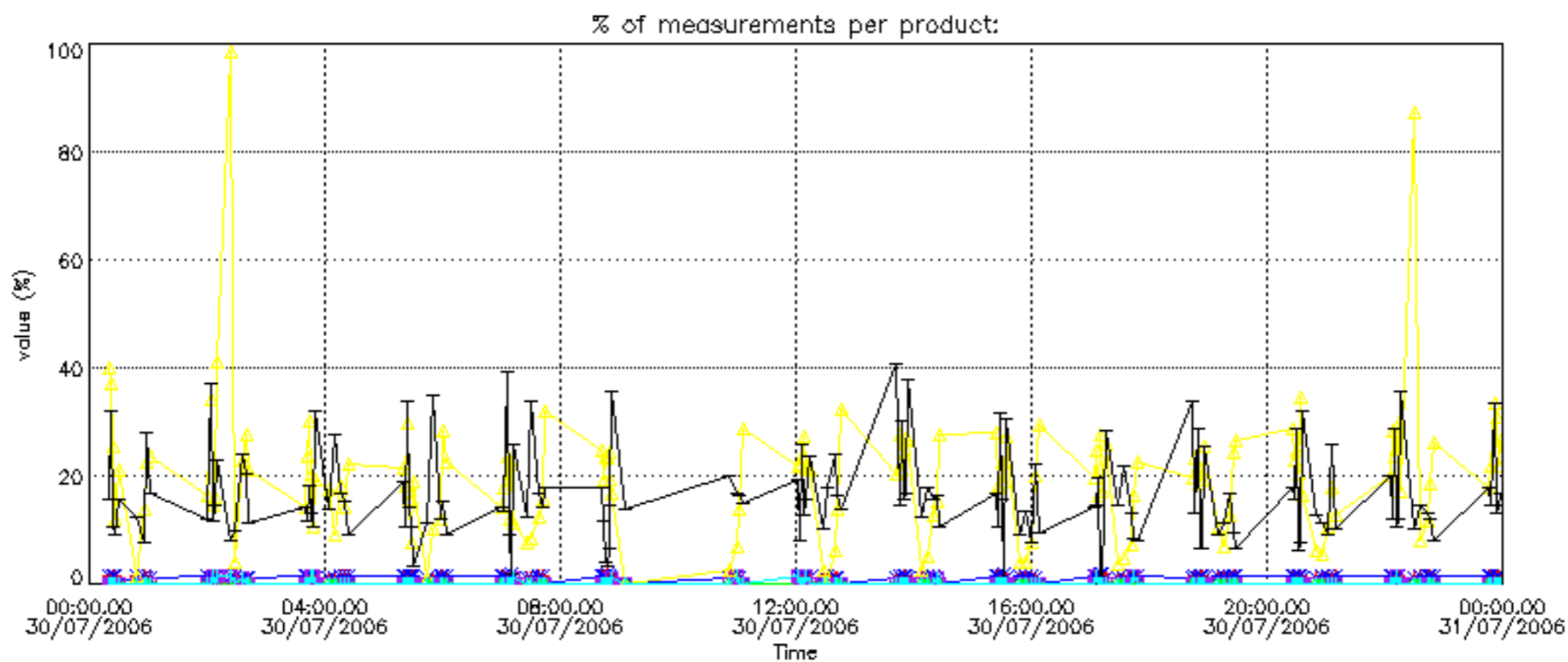


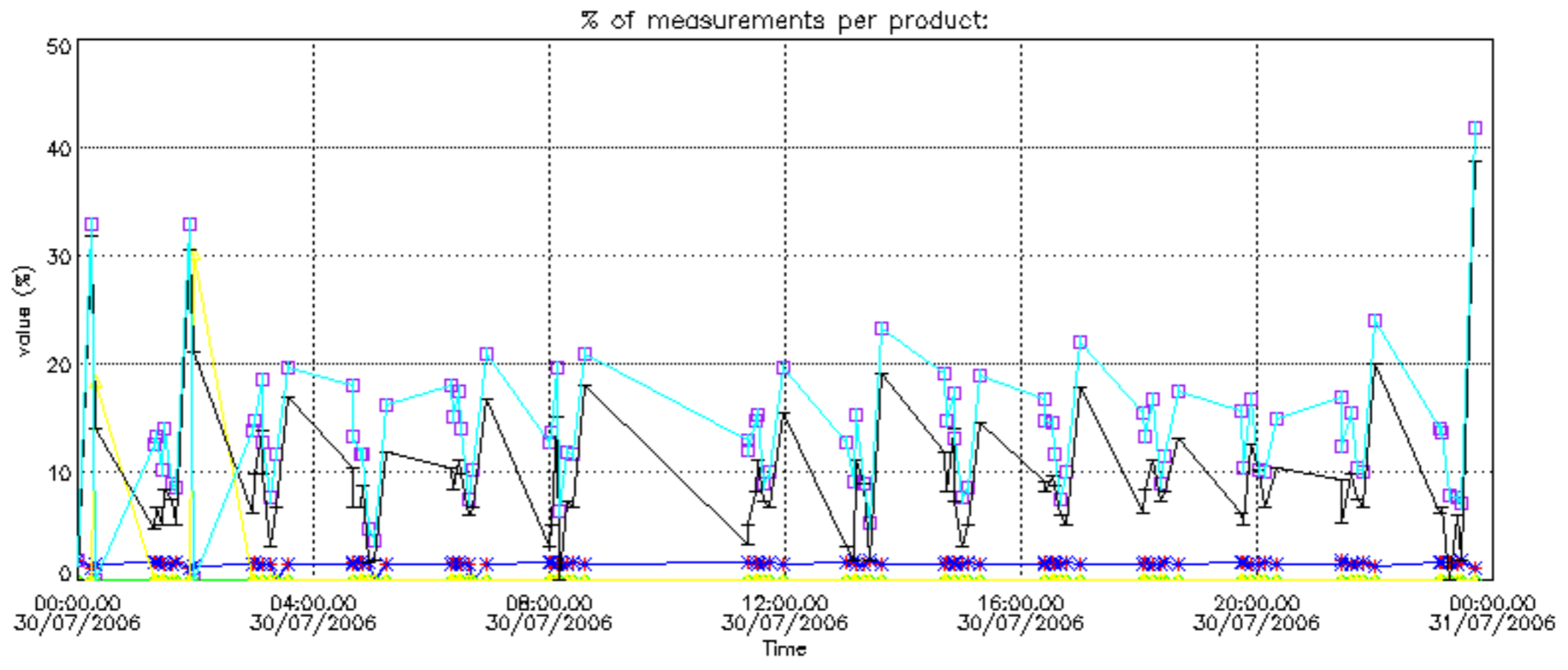
Percentage of flagged data per NO2 profile



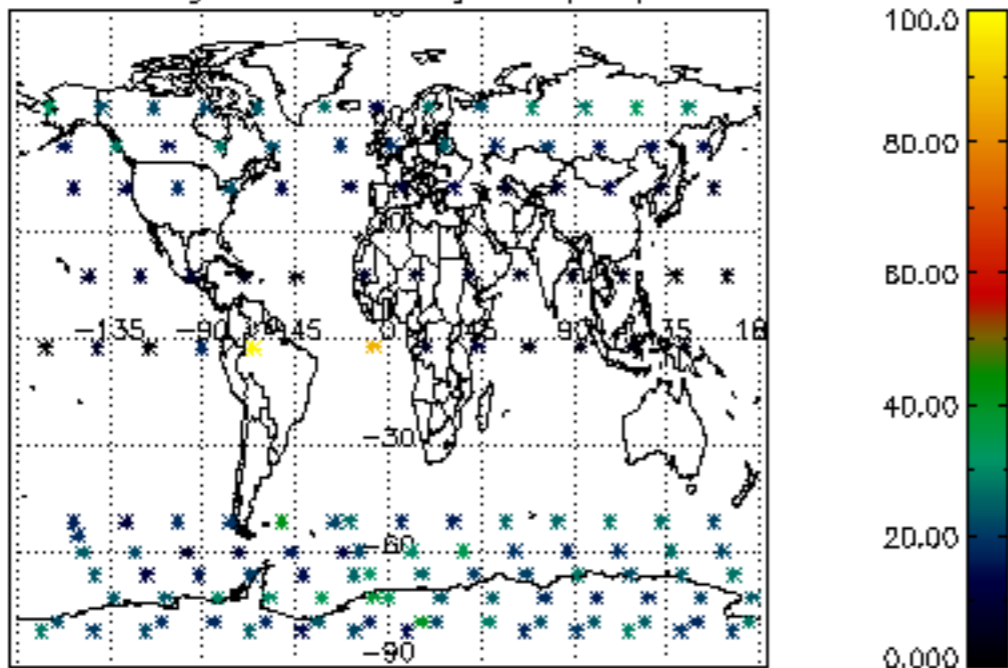
Percentage of flagged data per NO3 profile



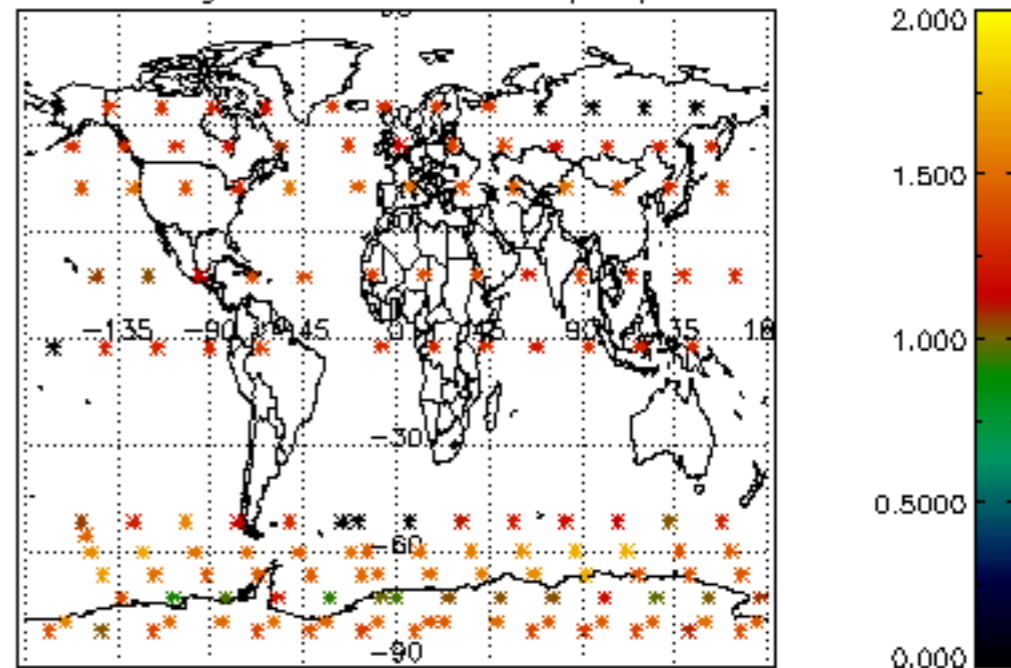




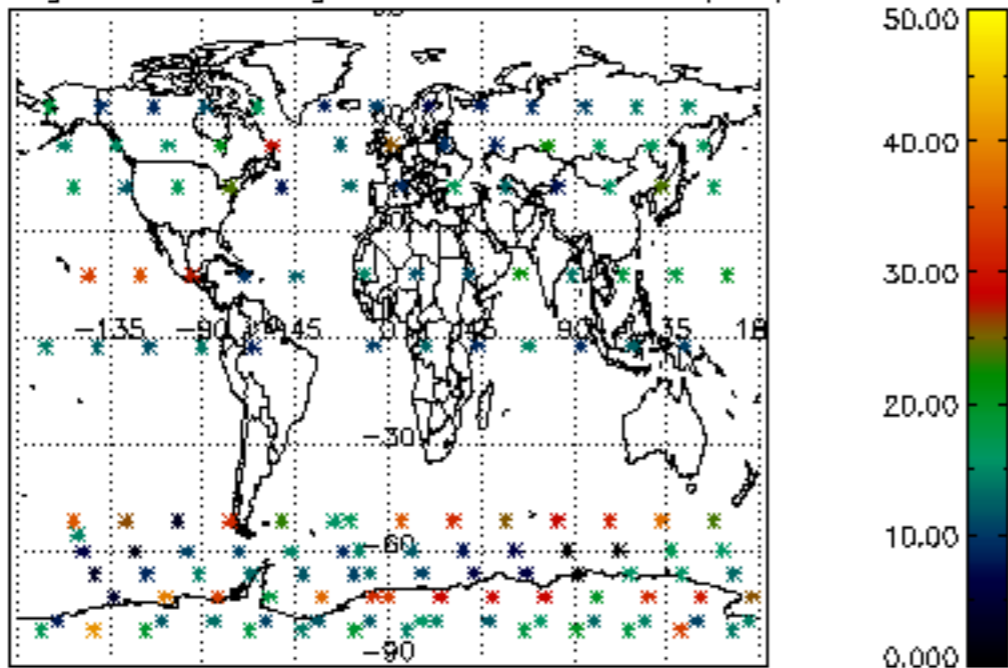
Percentage of cosmic ray hits per profile



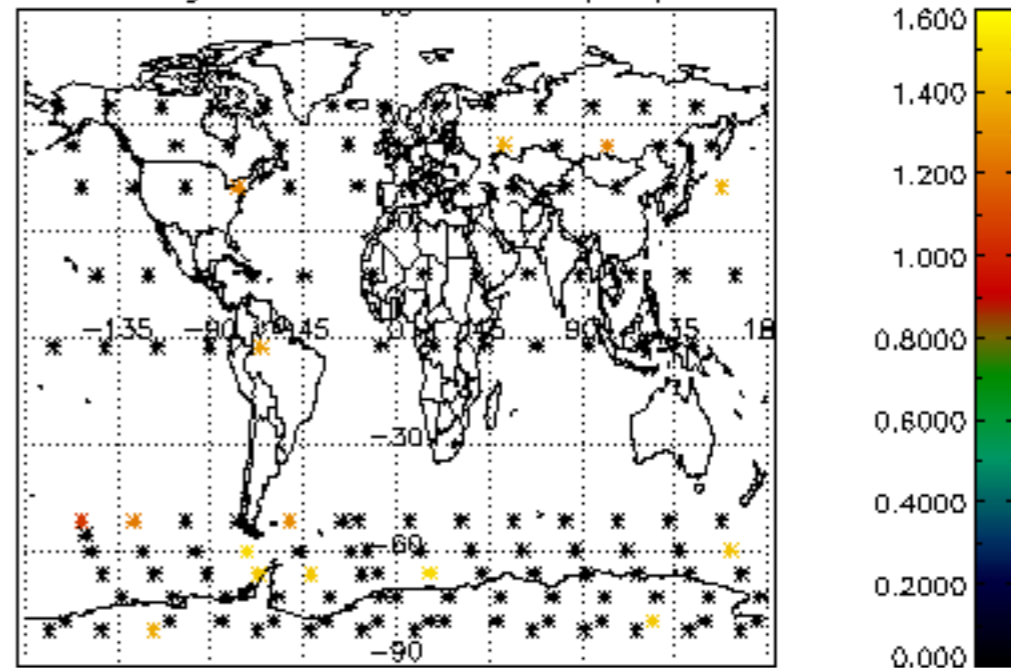
Percentage of datation errors per profile



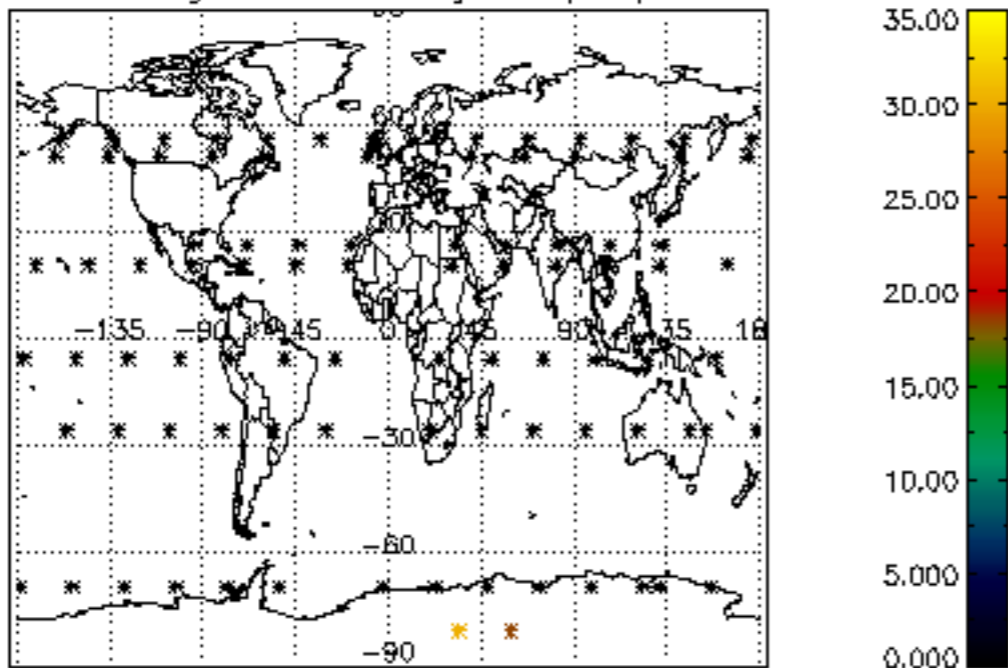
Percentage of star falling outside central band per profile



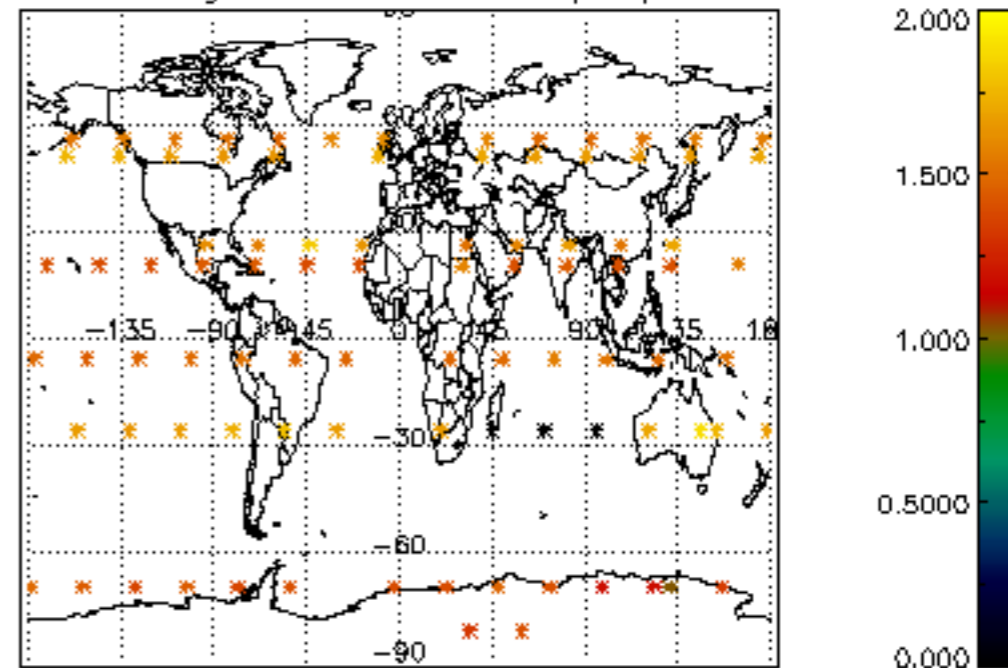
Percentage of saturation errors per profile



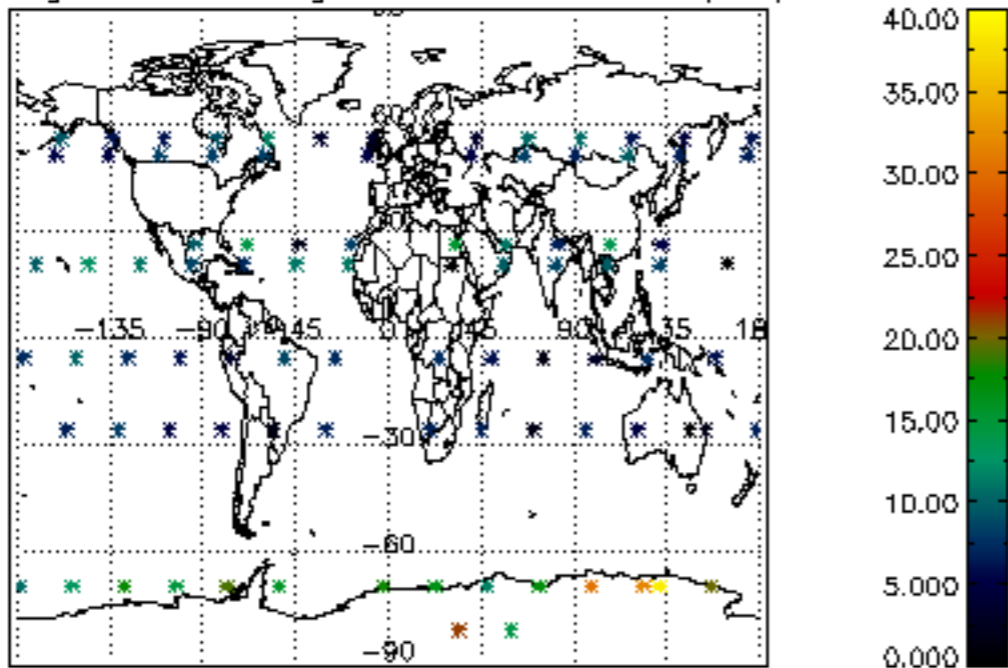
Percentage of cosmic ray hits per profile



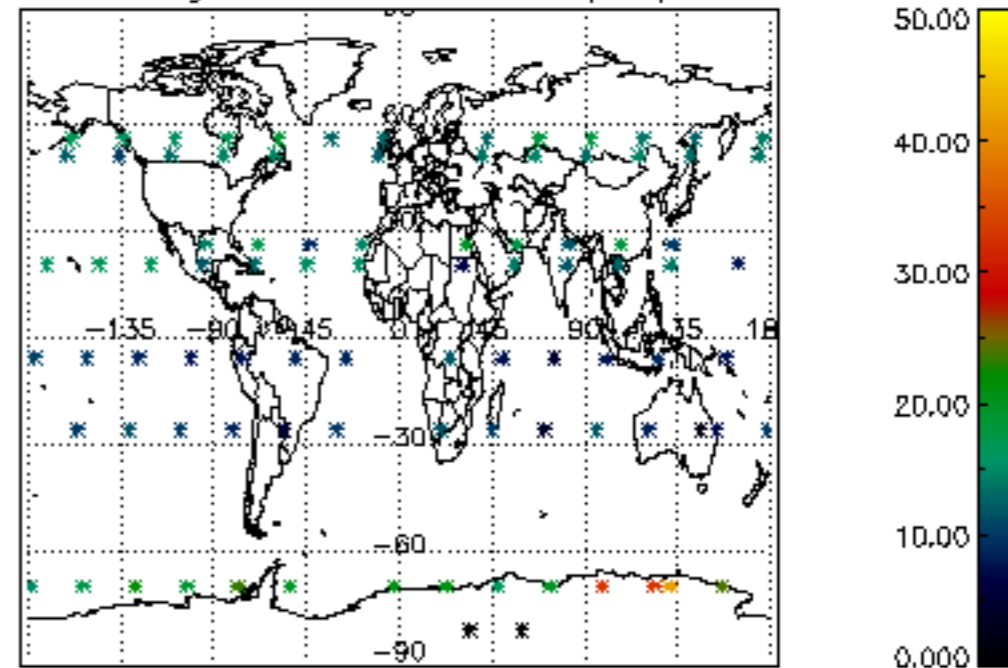
Percentage of datation errors per profile

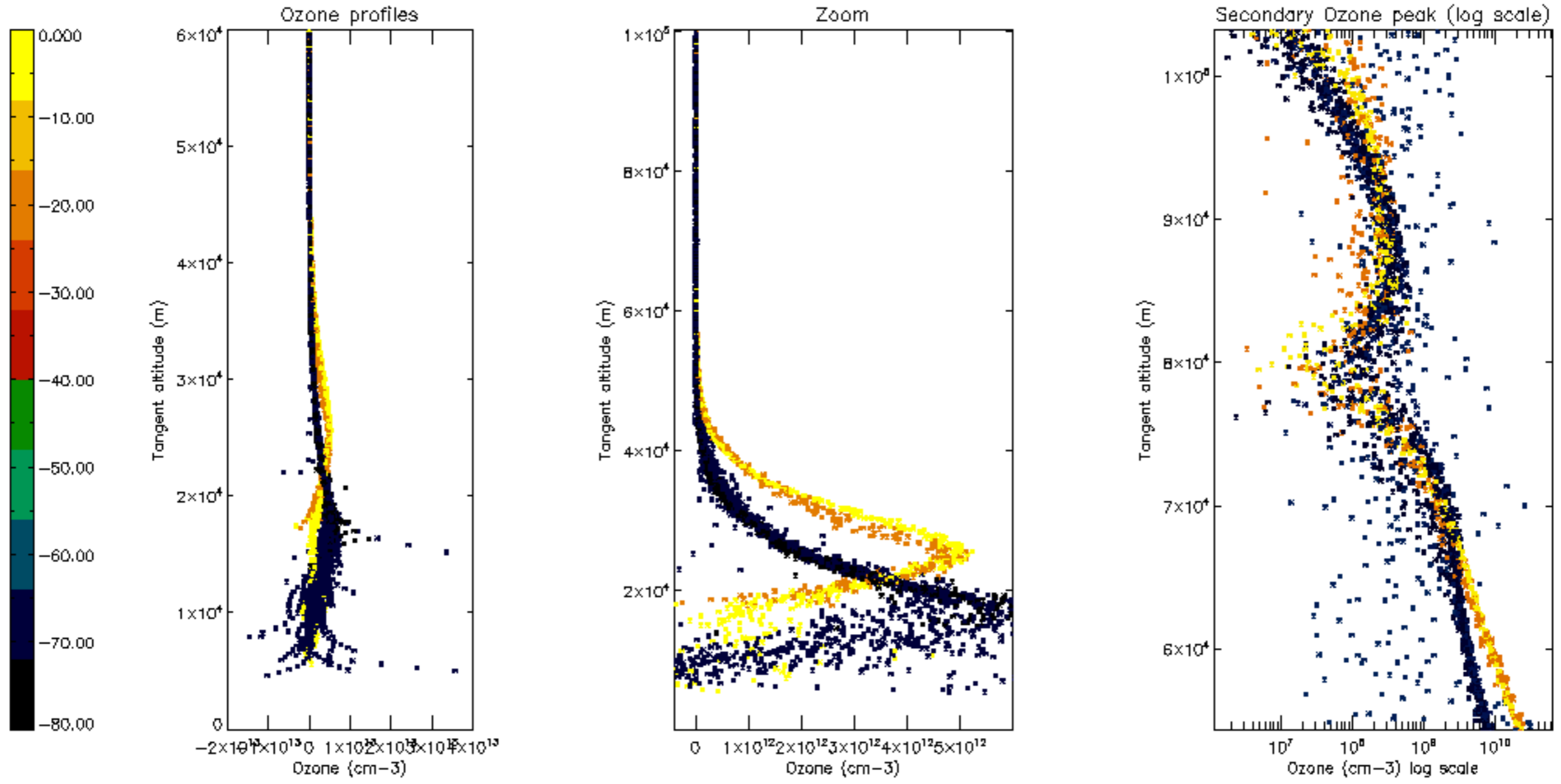


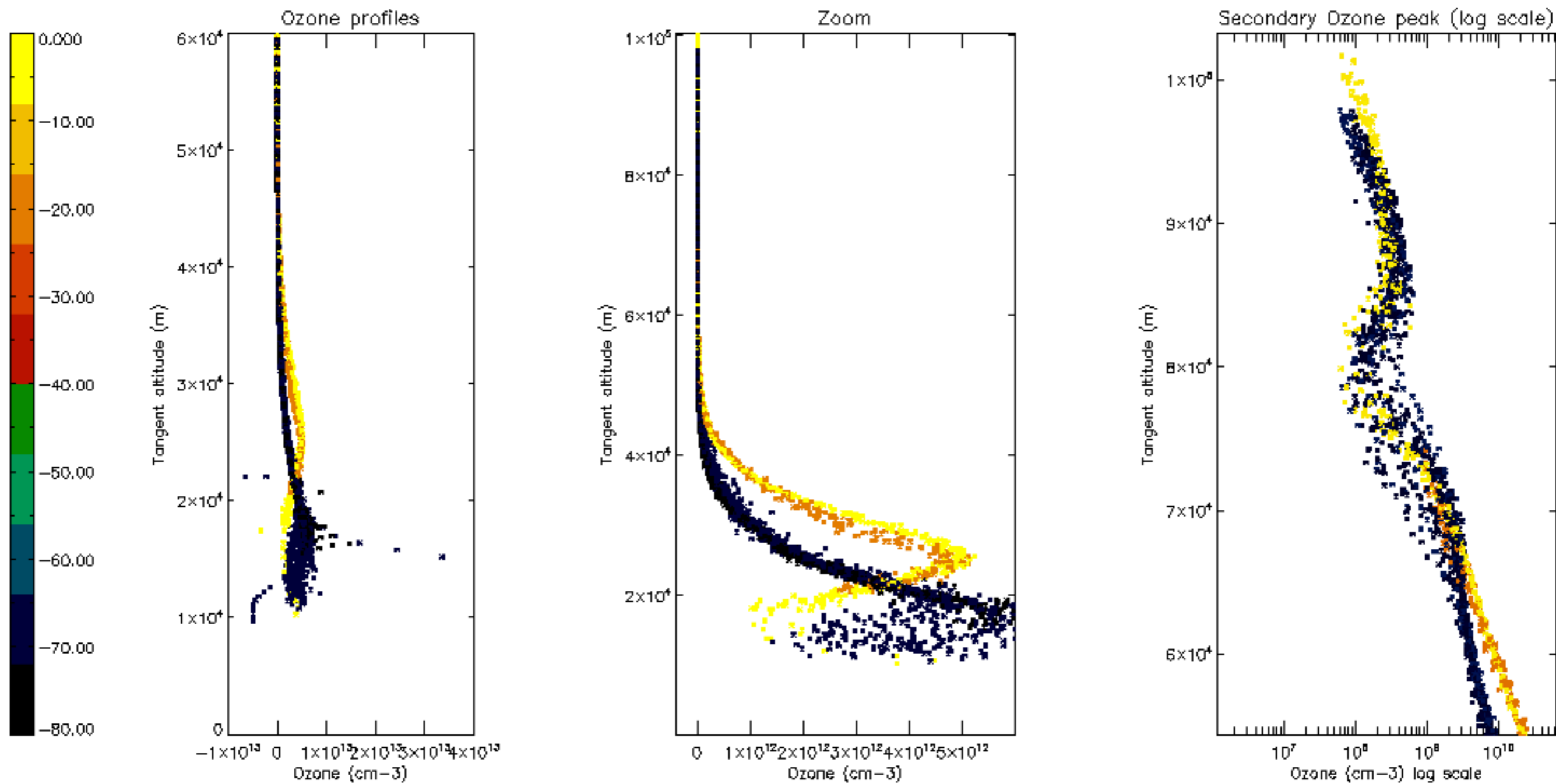
Percentage of star falling outside central band per profile

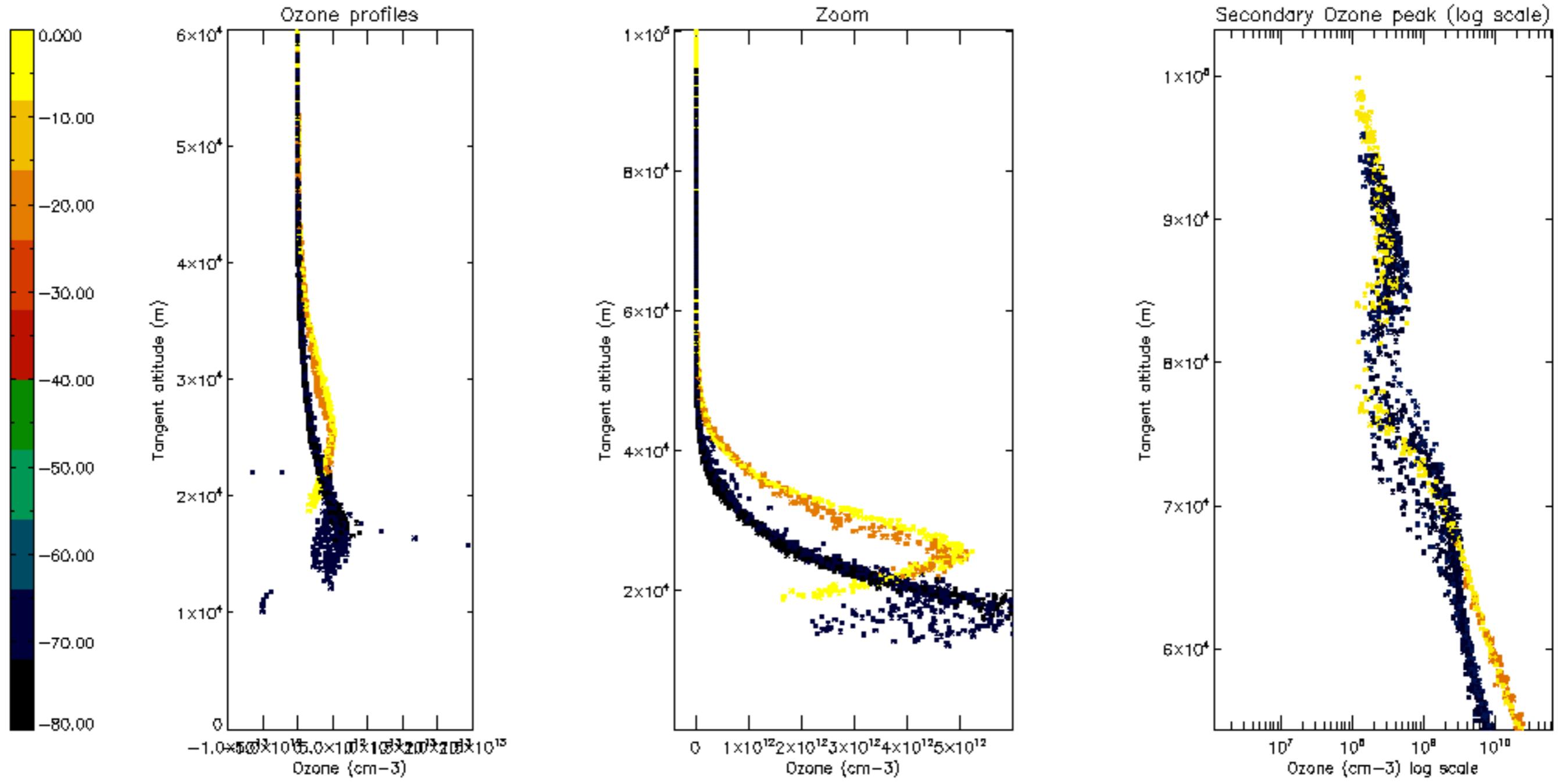


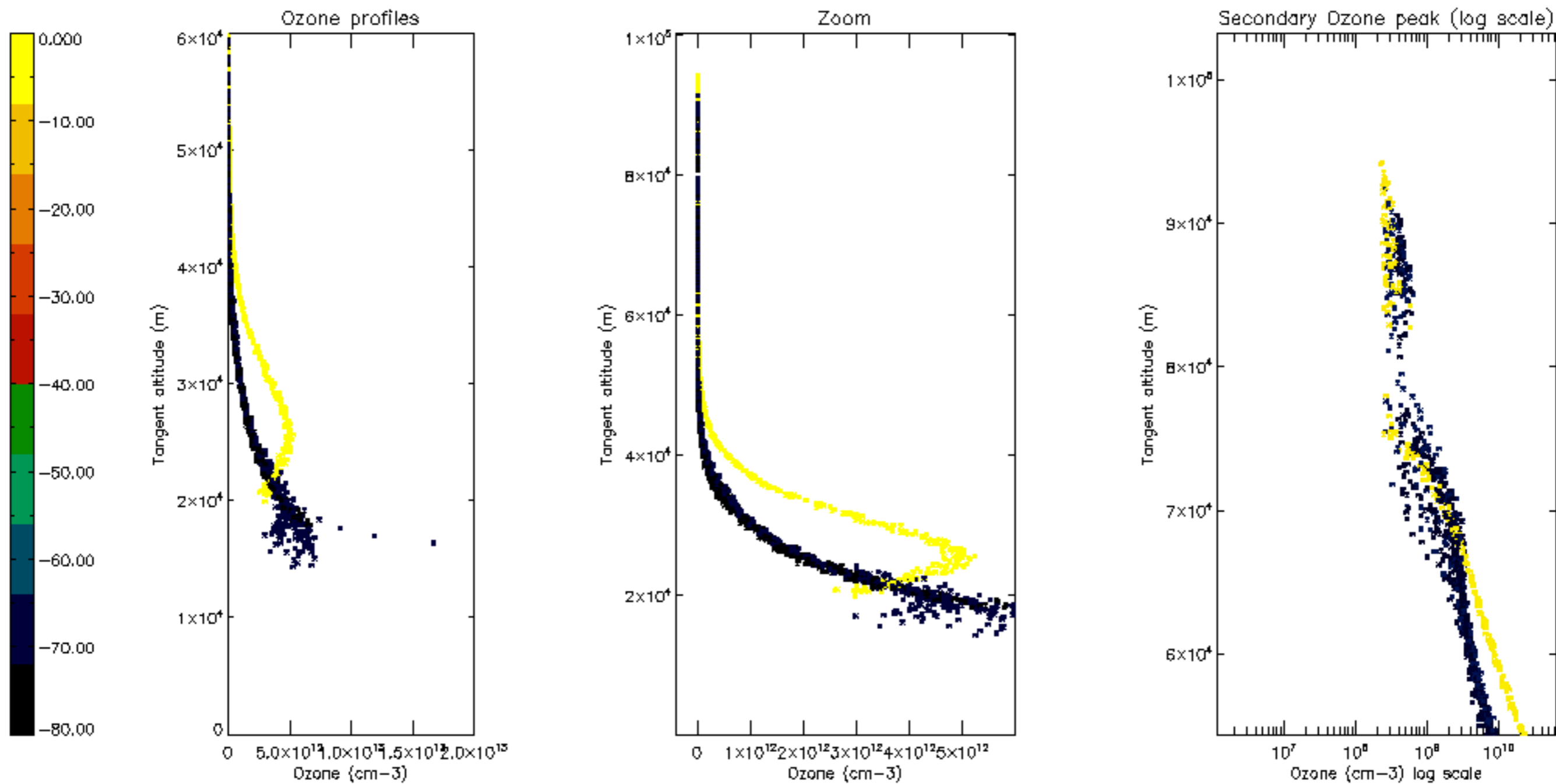
Percentage of saturation errors per profile

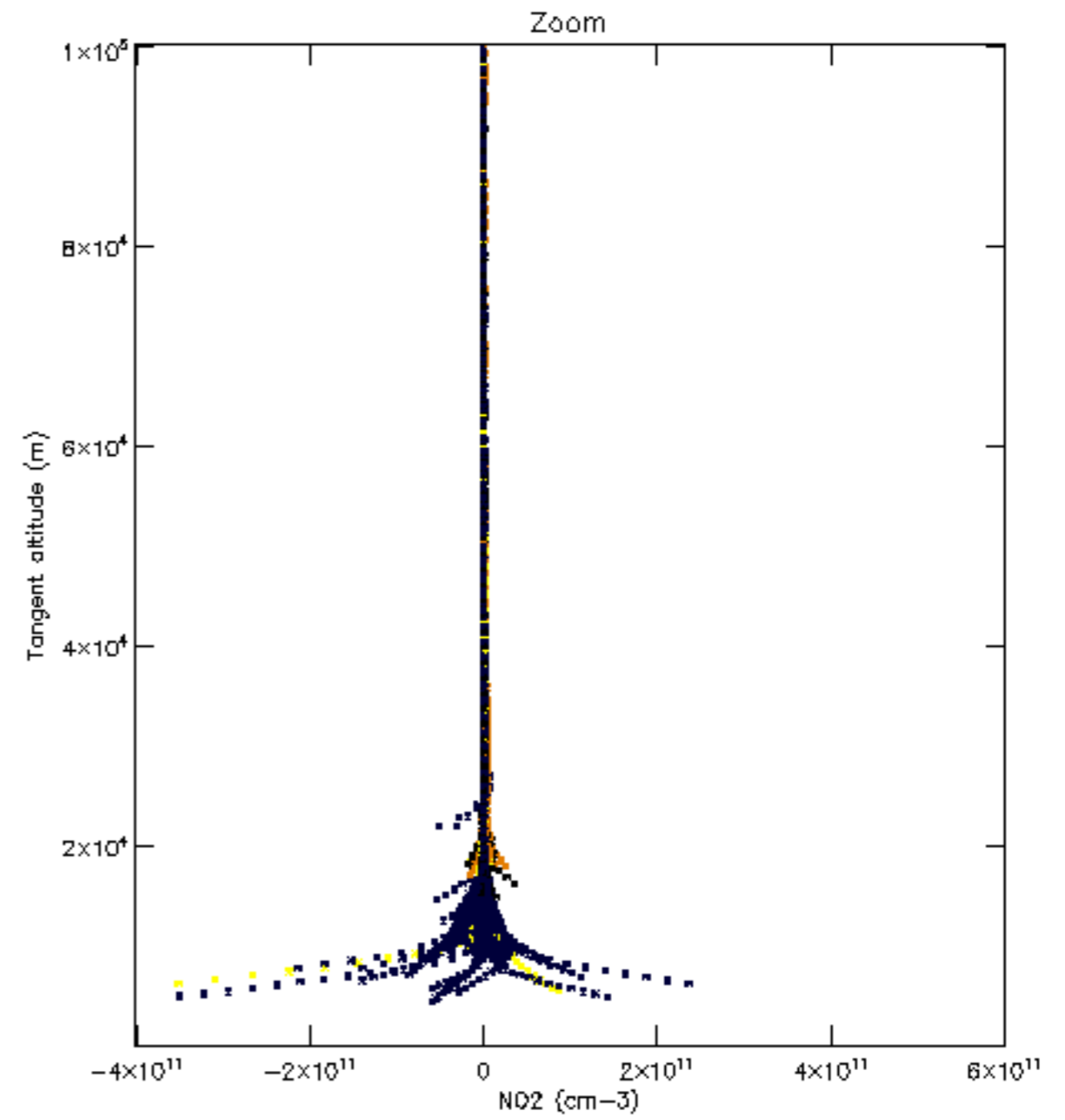
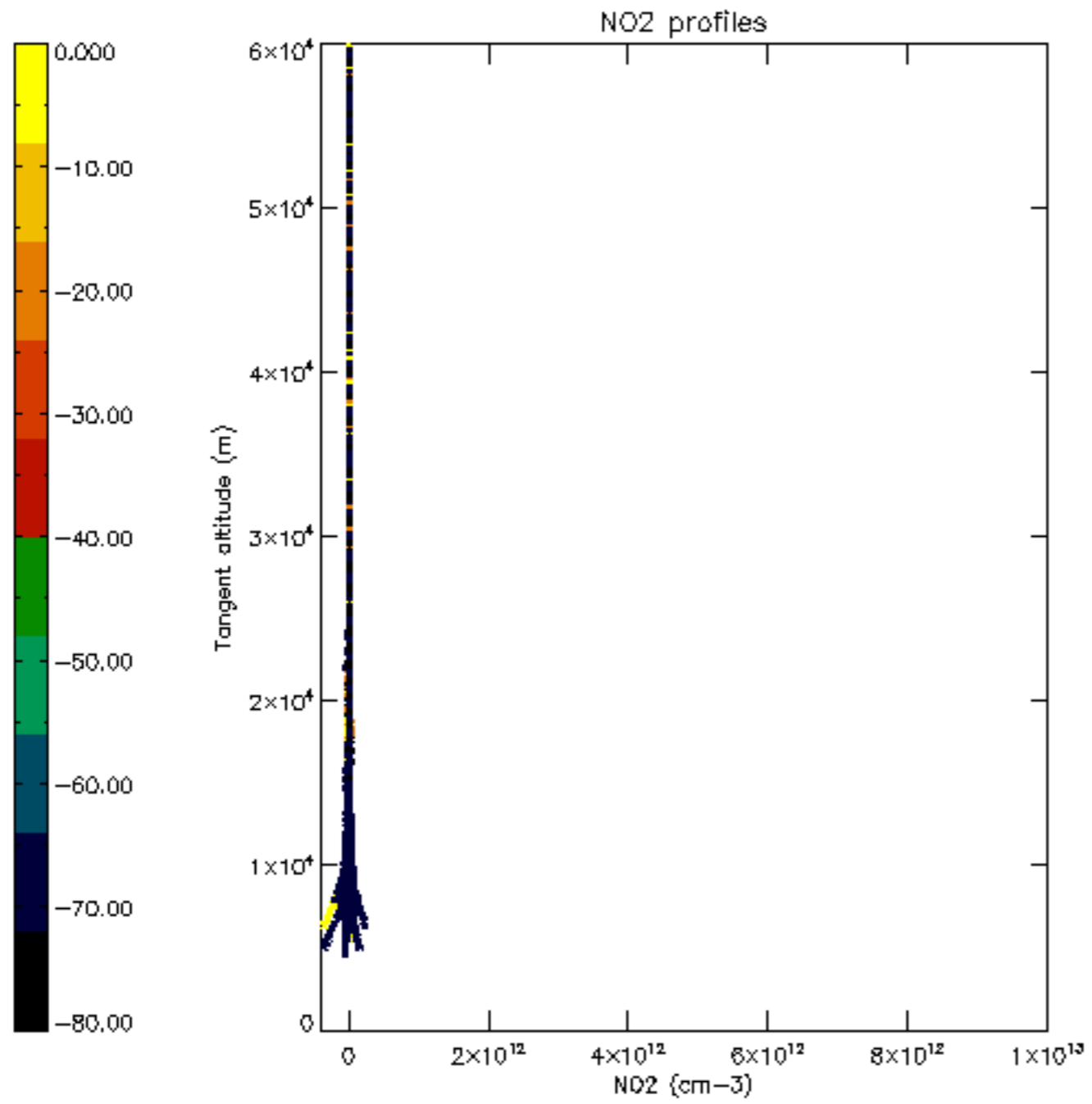


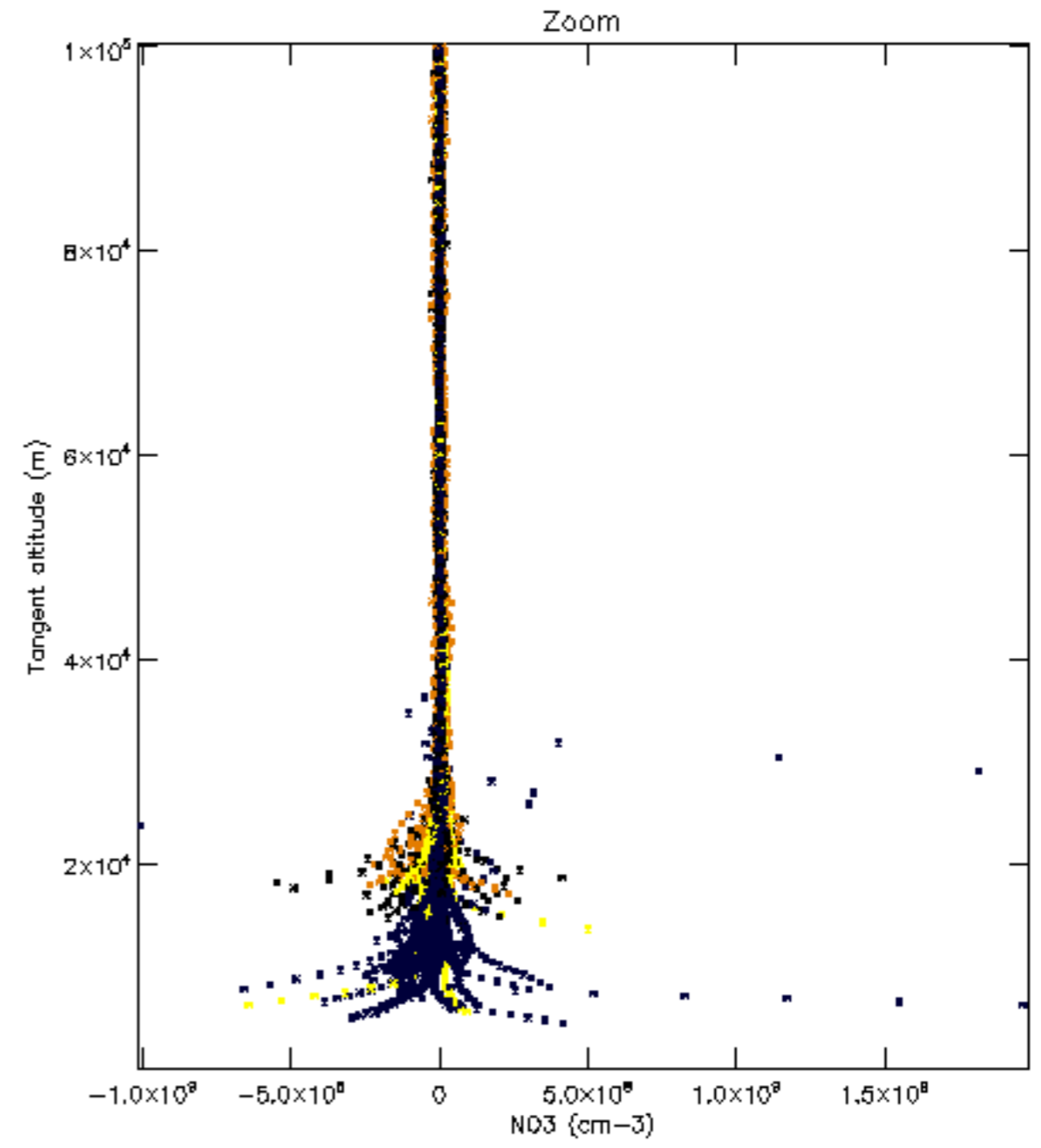
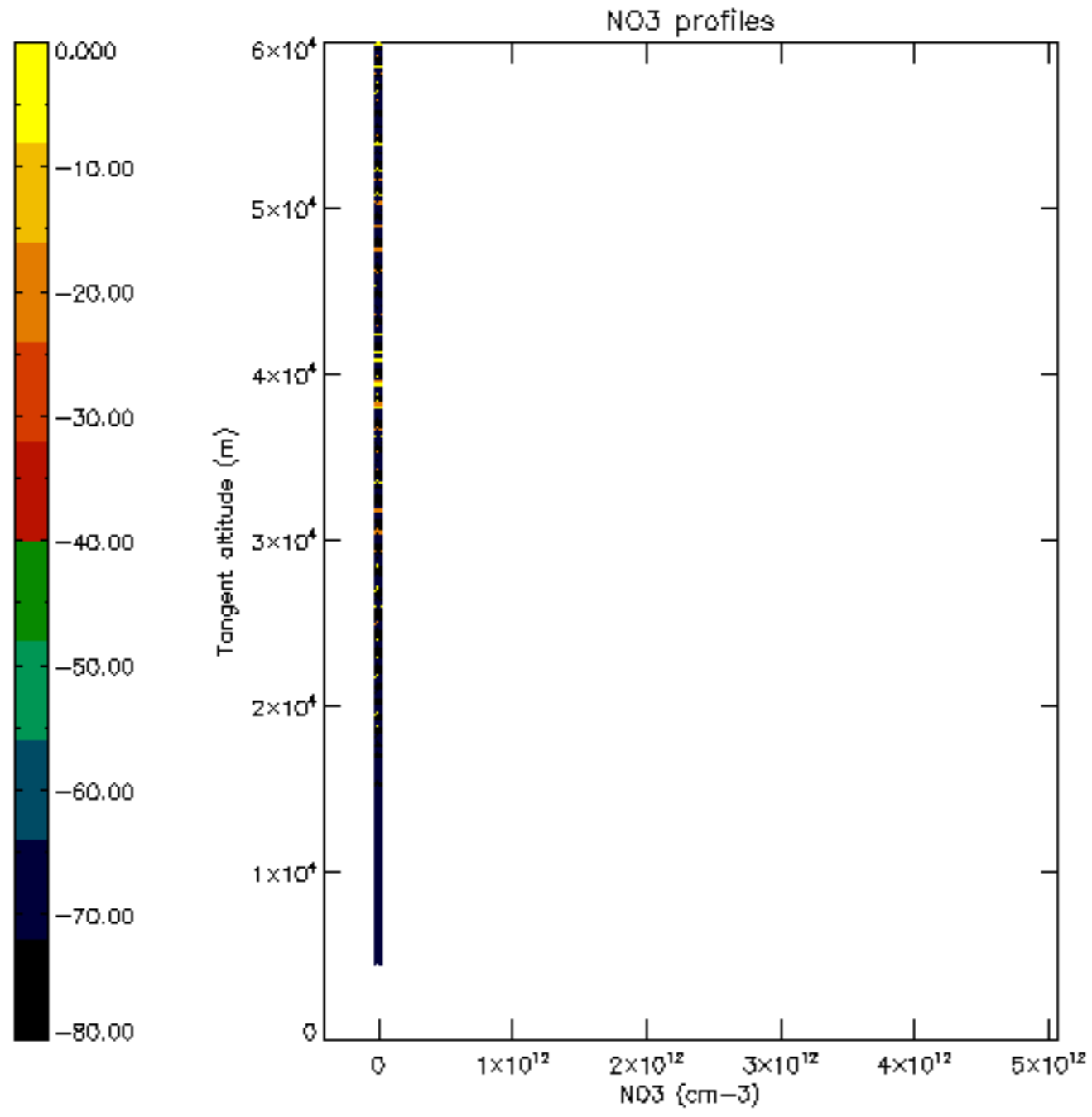


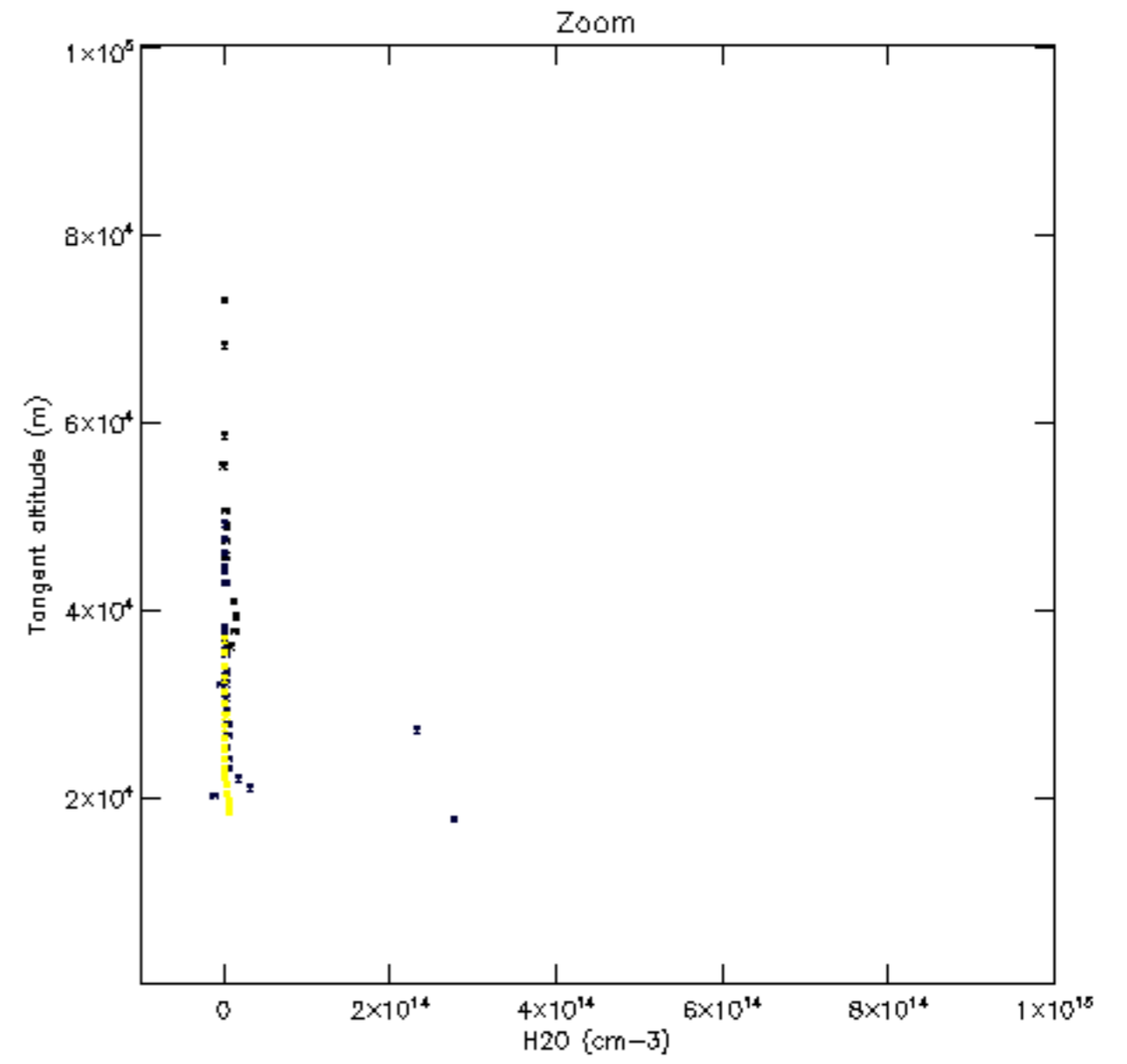
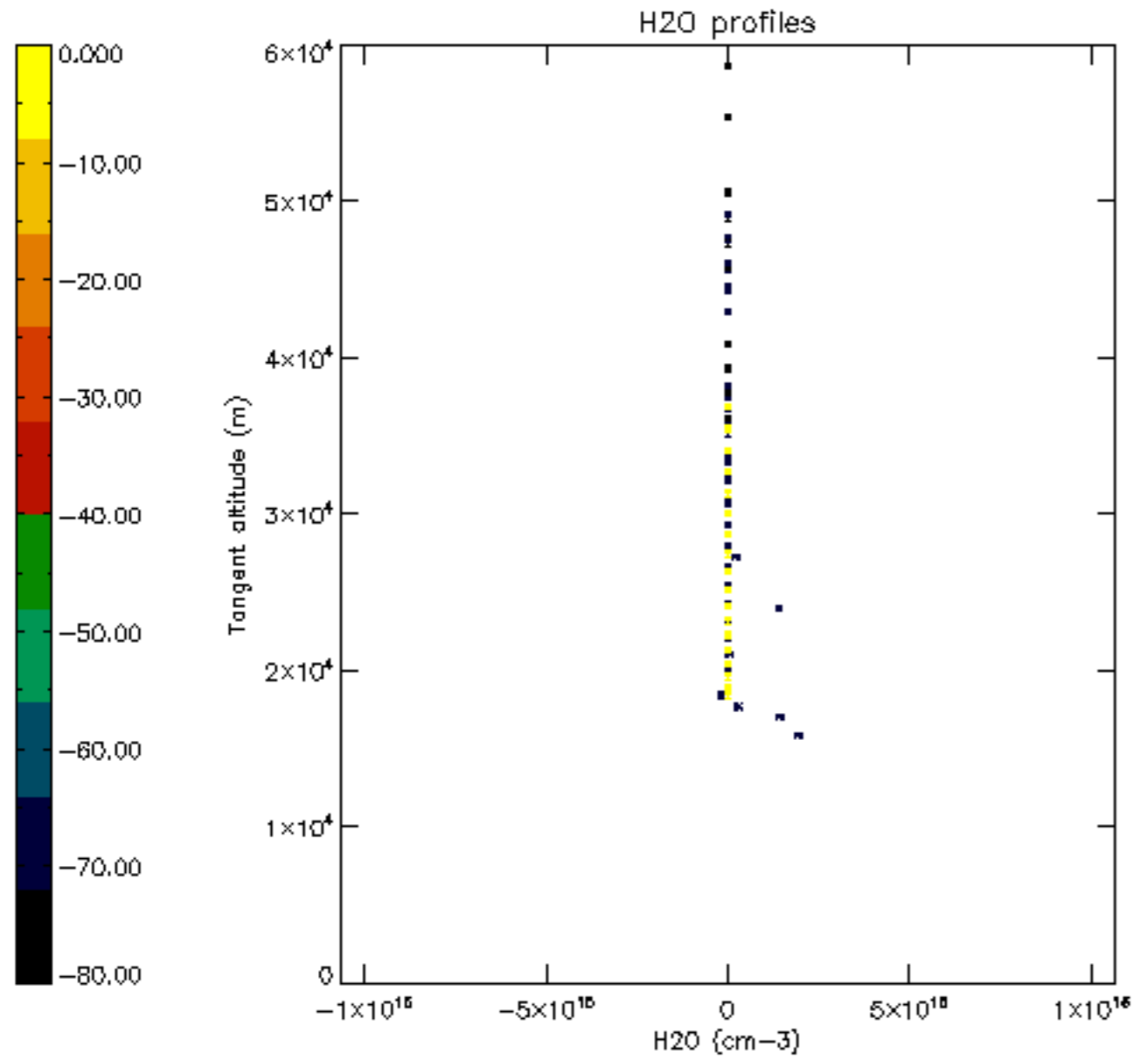


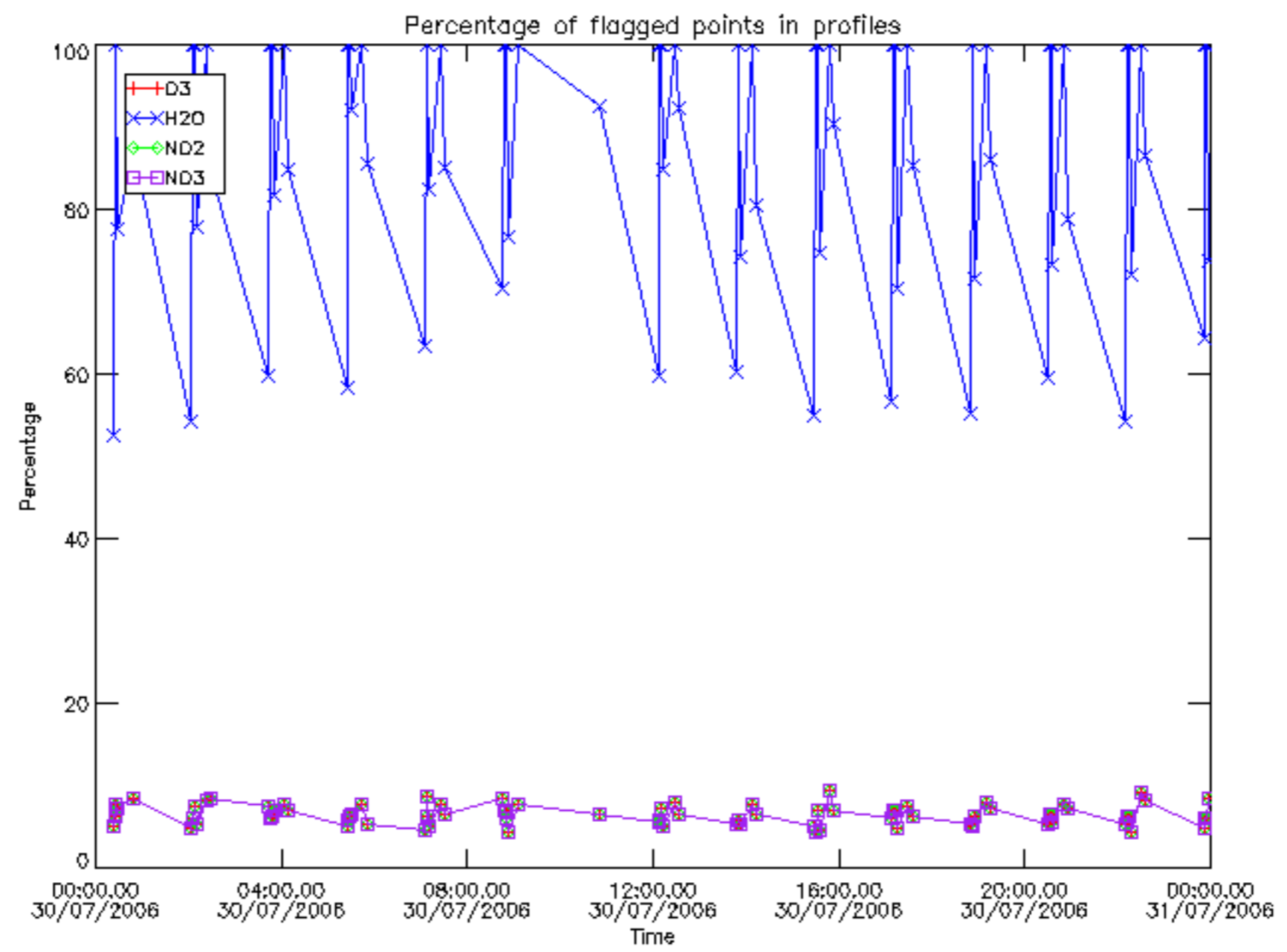




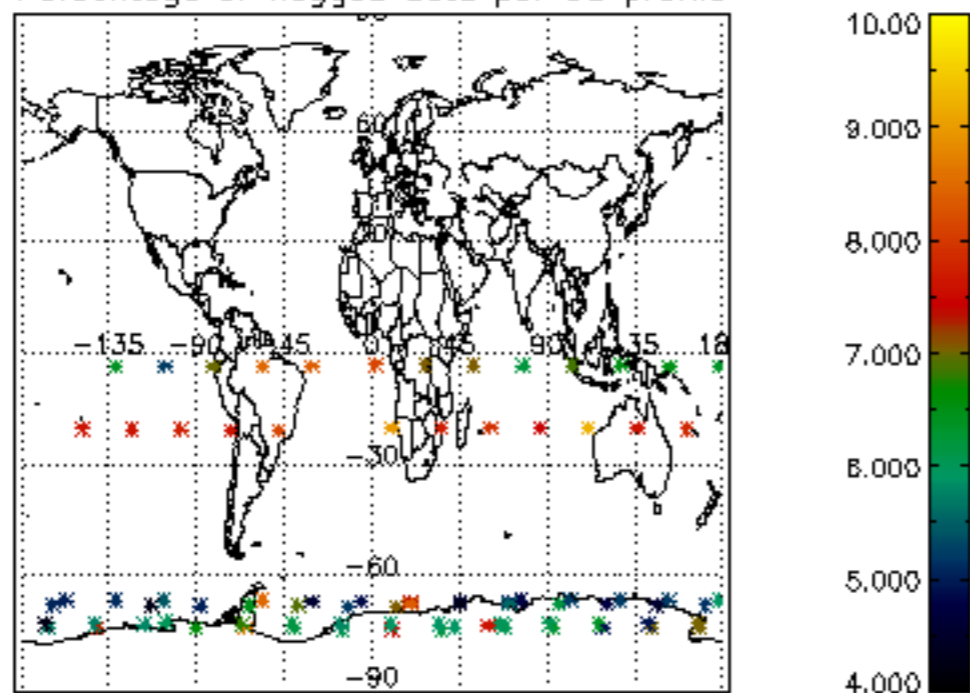




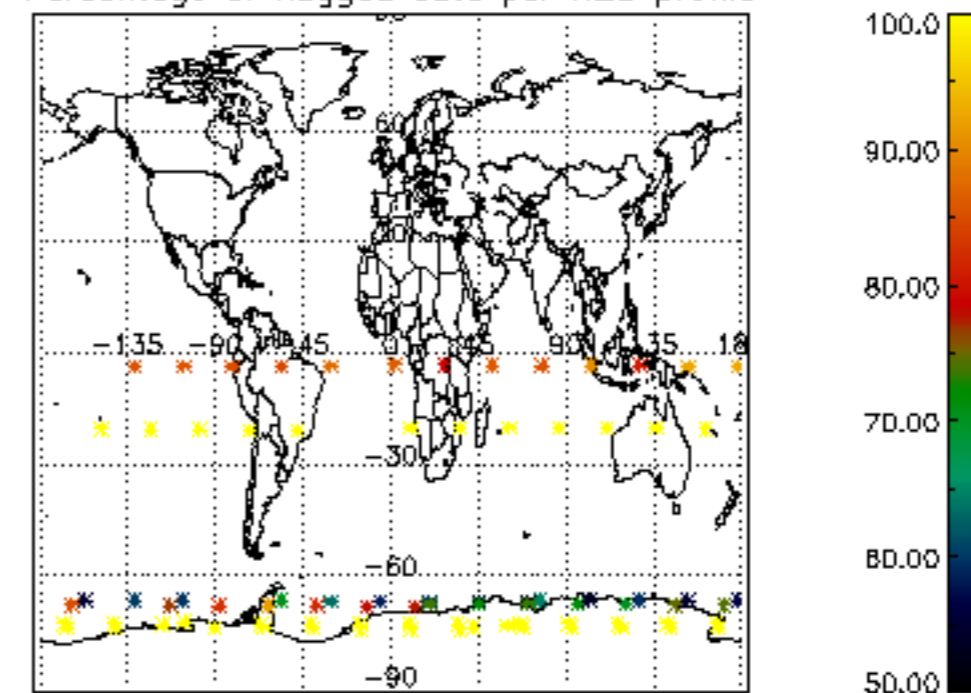




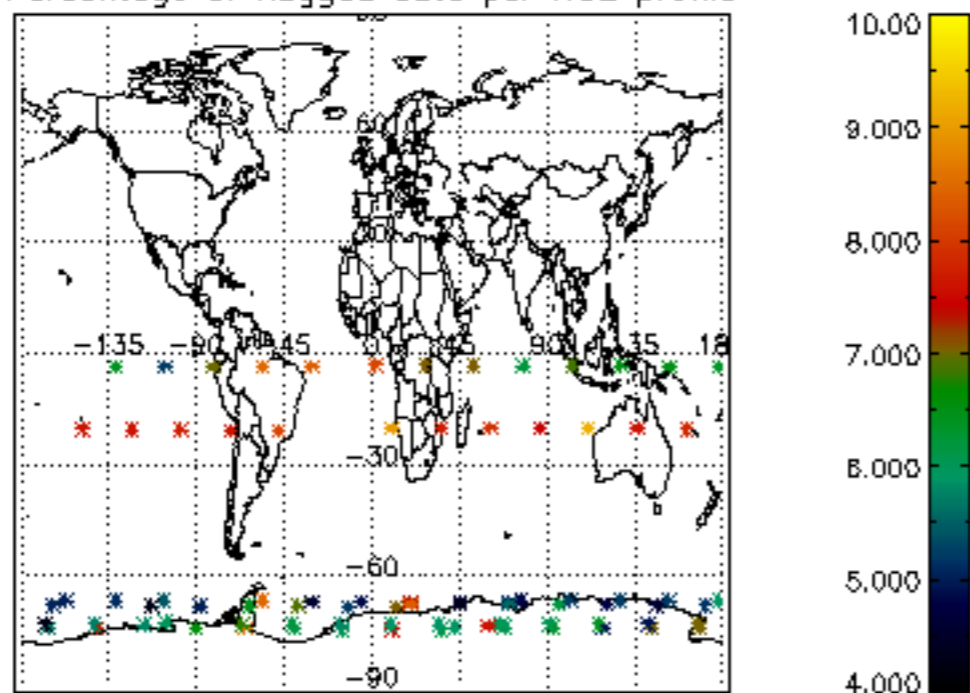
Percentage of flagged data per D3 profile



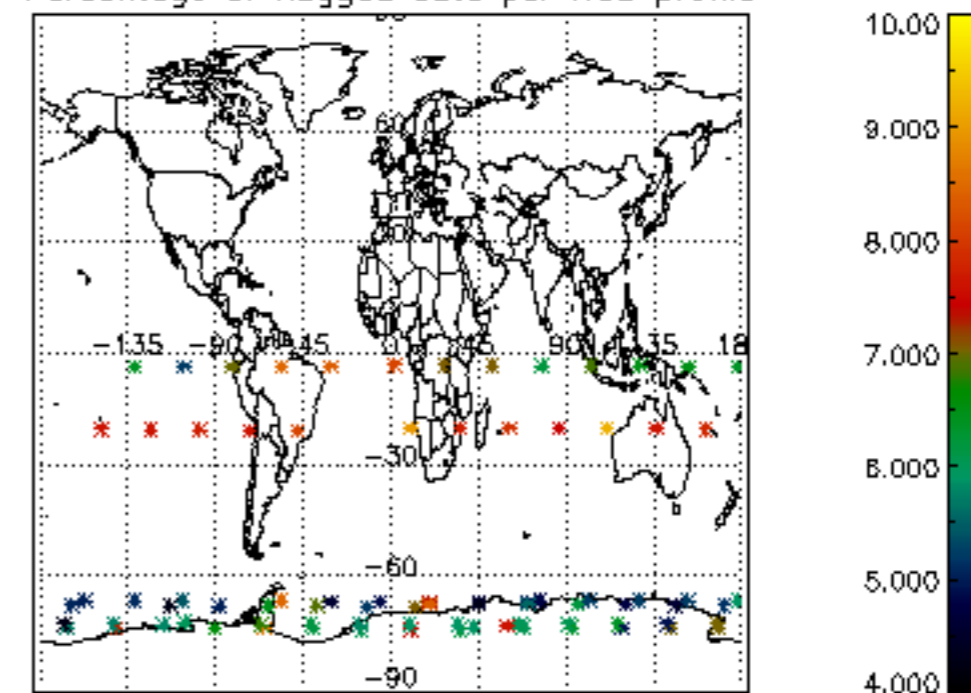
Percentage of flagged data per H2O profile

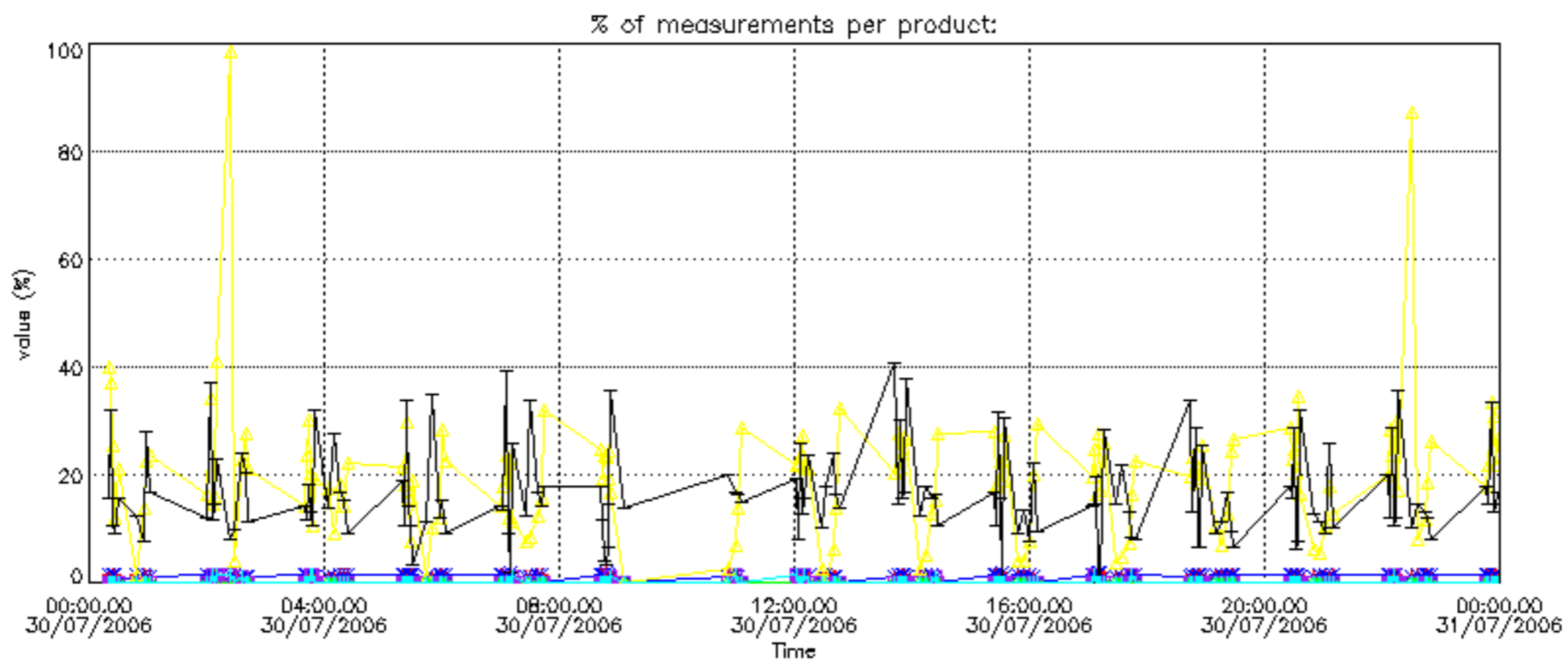


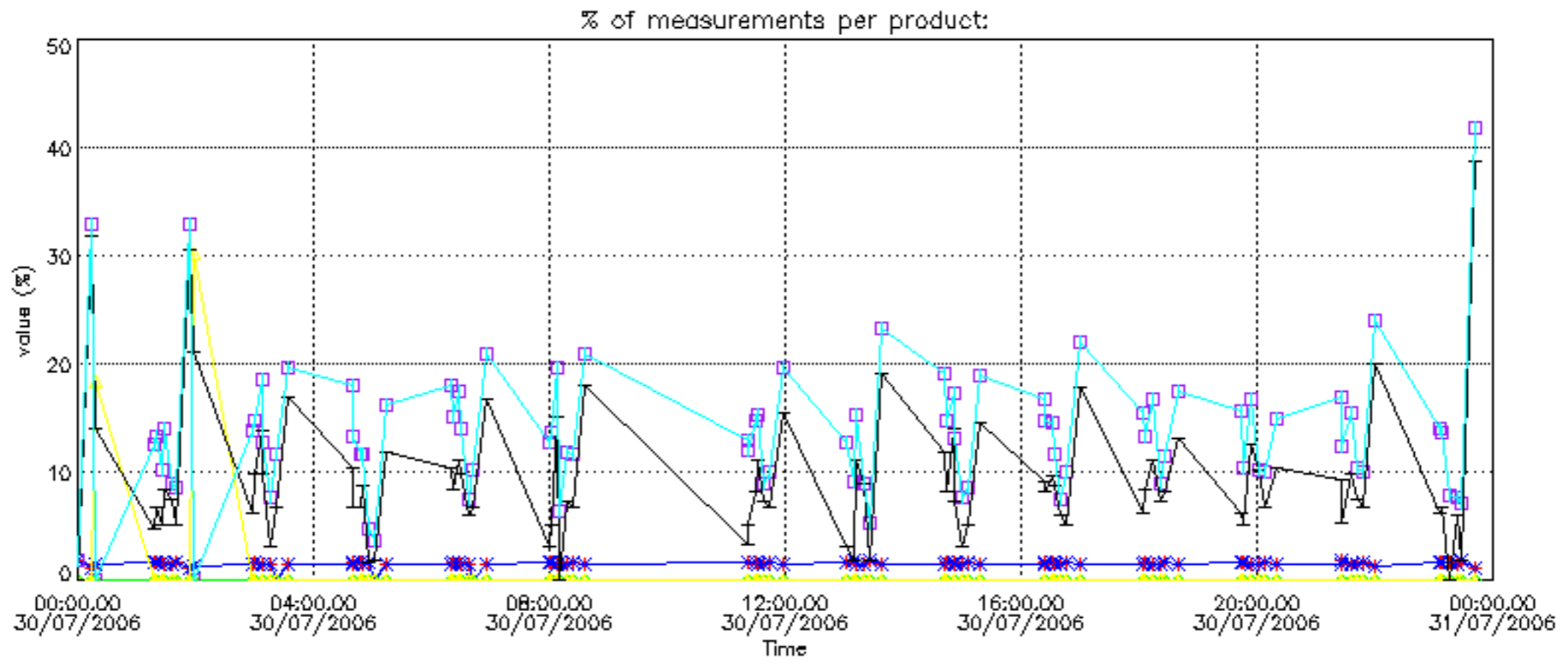
Percentage of flagged data per NO2 profile



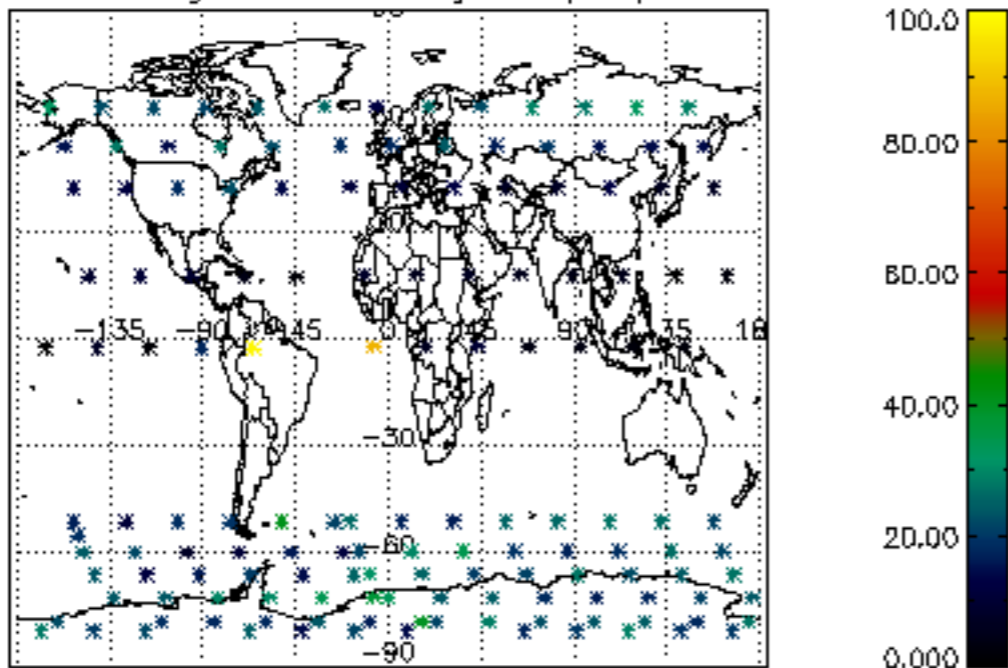
Percentage of flagged data per NO3 profile



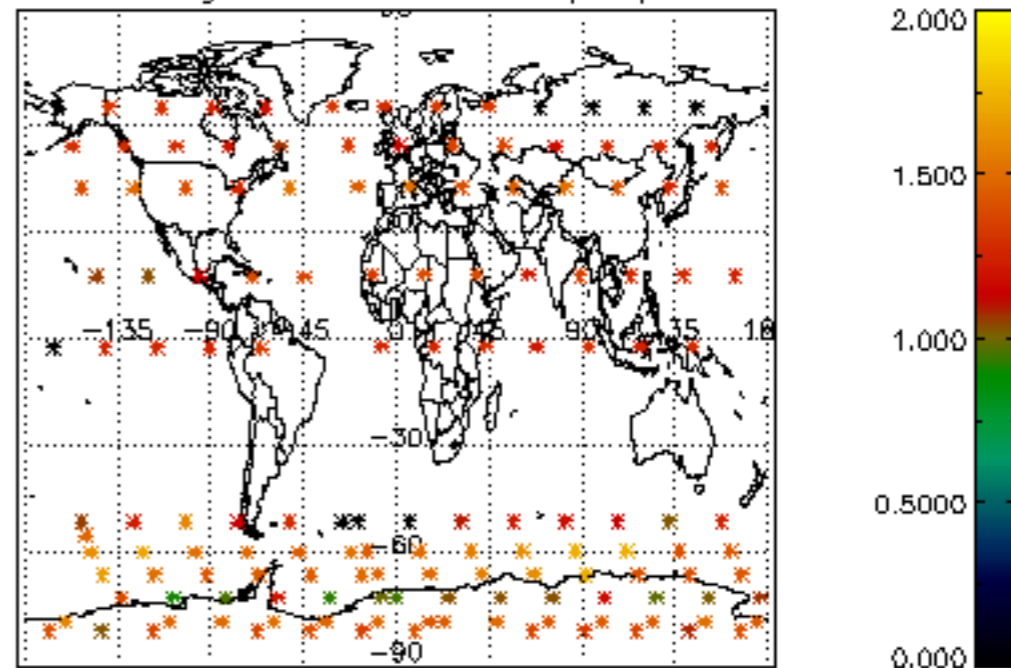




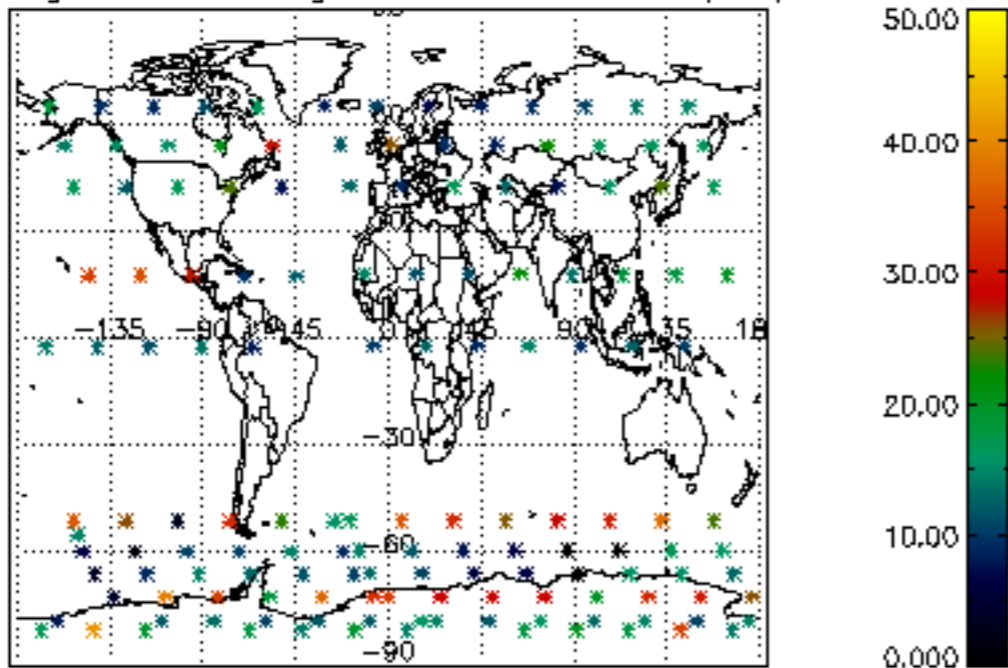
Percentage of cosmic ray hits per profile



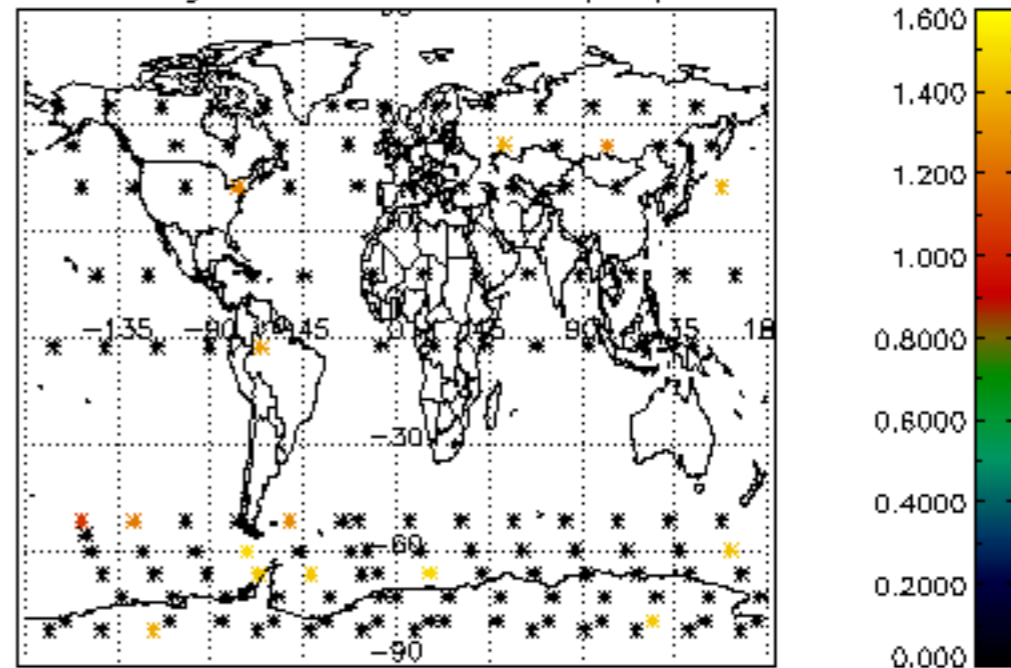
Percentage of datation errors per profile



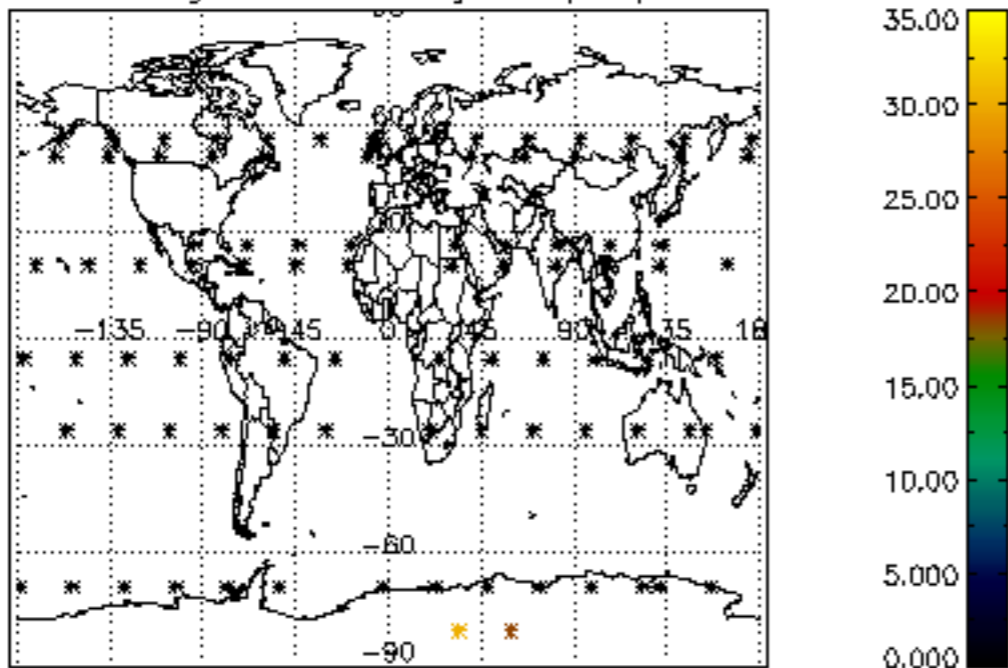
Percentage of star falling outside central band per profile



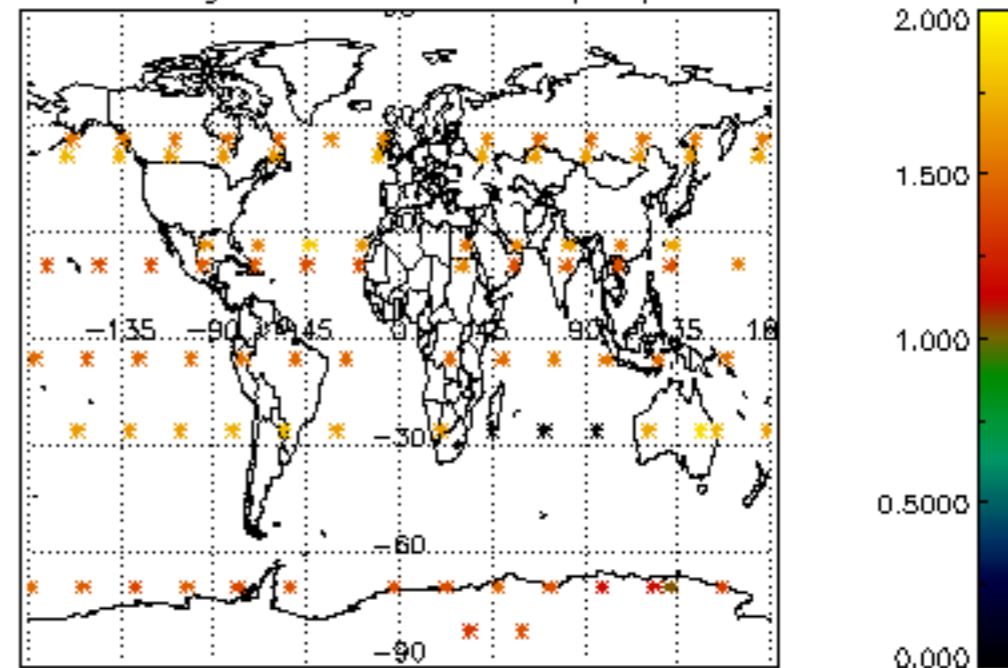
Percentage of saturation errors per profile



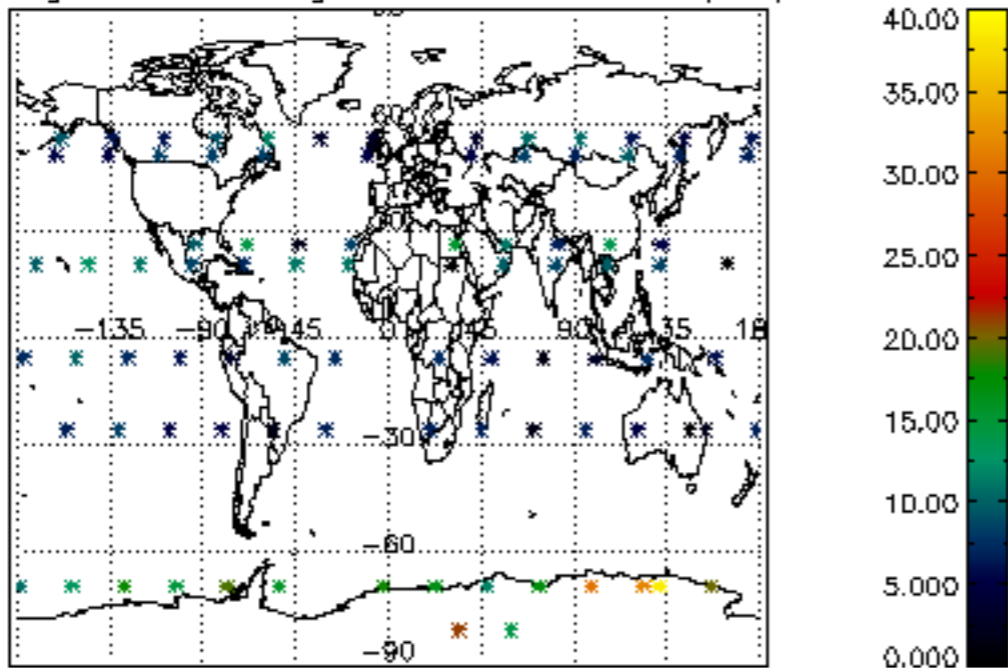
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

