

GOMOS Level 2 Daily Report

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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	25APR2013 21:54:28
Data source version	GOMOS/6.01
Start time of products	10-11-2008 (10NOV2008 00:00:00)
Stop time of products	11-11-2008 (11NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	251
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

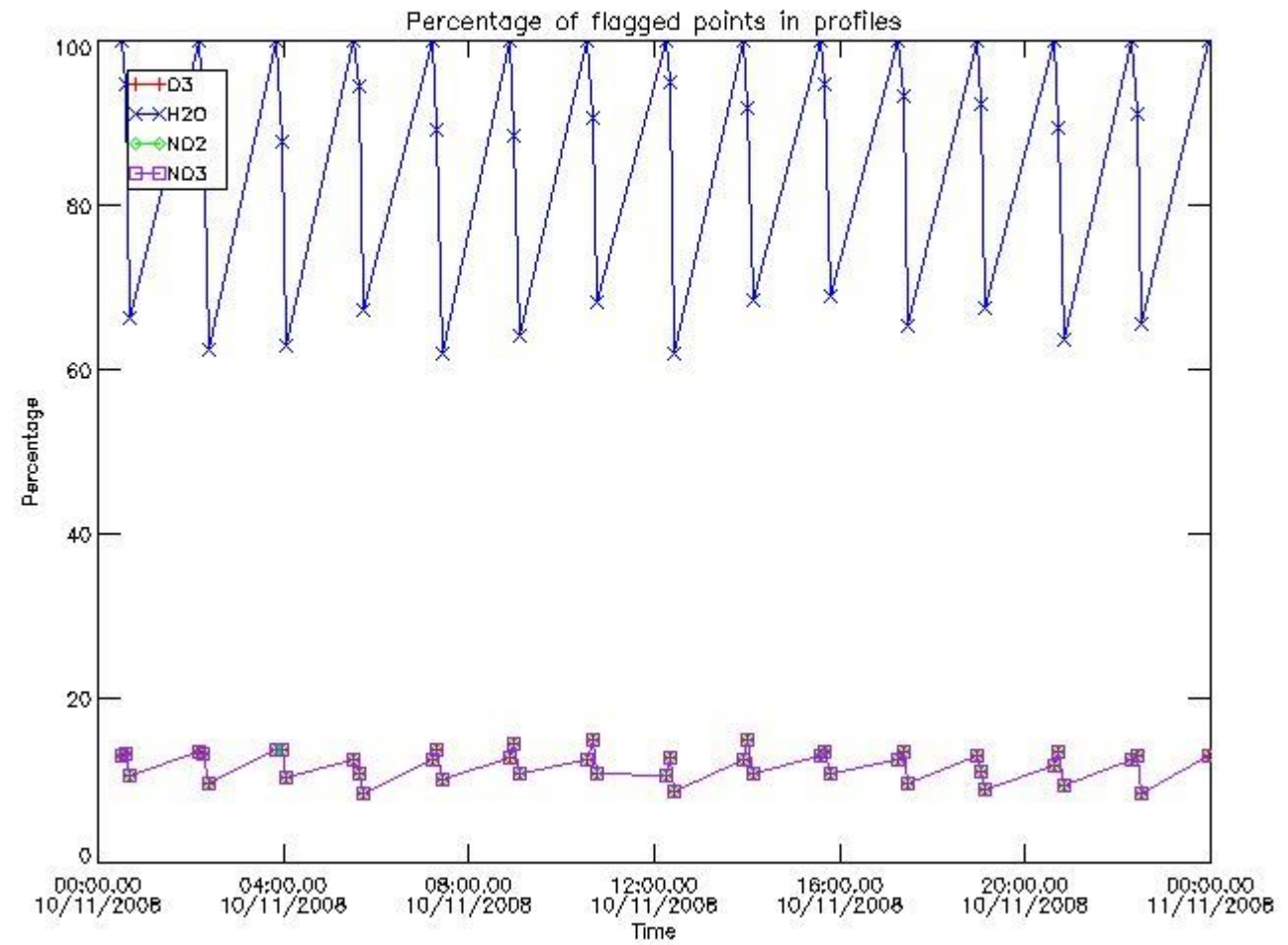
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081110_000139_000000422073_00388_35011_0564.N1	10-NOV-2008 00:01:39	Bright	42.000	174	52Psi UMa	3.0040	4400.0	84	35011	No
2	GOM_NL__2PRFIN20081110_000311_000000352073_00388_35011_0565.N1	10-NOV-2008 00:03:11	Bright	34.500	152	12Alp2CVn	2.8900	11000.	69	35011	No
3	GOM_NL__2PRFIN20081110_001055_000000382073_00388_35011_0566.N1	10-NOV-2008 00:10:55	Bright	38.000	62	94Bet Leo	2.1360	9700.0	76	35011	No
4	GOM_NL__2PRFIN20081110_002055_000000402073_00388_35011_0567.N1	10-NOV-2008 00:20:55	Twilight	40.000	171	2Eps Crv	3.0010	4250.0	80	35011	No
5	GOM_NL__2PRFIN20081110_002959_000000402073_00388_35011_0568.N1	10-NOV-2008 00:29:59	Dark	39.500	113	Mu Vel	2.6920	5000.0	79	35011	No
6	GOM_NL__2PRFIN20081110_003603_000000392073_00389_35012_0565.N1	10-NOV-2008 00:36:03	Dark	38.500	29	Bet Car	1.6720	10200.	77	35012	No
7	GOM_NL__2PRFIN20081110_004211_000000482073_00389_35012_0566.N1	10-NOV-2008 00:42:11	Dark	48.000	2	Alp Car	-0.73600	7000.0	96	35012	No
8	GOM_NL__2PRFIN20081110_005129_000000392073_00389_35012_0567.N1	10-NOV-2008 00:51:29	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	35012	No
9	GOM_NL__2PRFIN20081110_010450_000000492073_00389_35012_0568.N1	10-NOV-2008 01:04:50	Twilight	48.500	94	92Alp Cet	2.5260	3100.0	97	35012	No
10	GOM_NL__2PRFIN20081110_010930_000000372073_00389_35012_0569.N1	10-NOV-2008 01:09:30	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	35012	No
11	GOM_NL__2PRFIN20081110_011338_000000362073_00389_35012_0570.N1	10-NOV-2008 01:13:38	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	35012	No
12	GOM_NL__2PRFIN20081110_011542_000000392073_00389_35012_0571.N1	10-NOV-2008 01:15:42	Bright	39.000	73	57Gam1And	2.2600	13100.	78	35012	No
13	GOM_NL__2PRFIN20081110_011945_000000332073_00389_35012_0572.N1	10-NOV-2008 01:19:45	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	35012	No
14	GOM_NL__2PRFIN20081110_012850_000000332073_00389_35012_0573.N1	10-NOV-2008 01:28:50	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	35012	No
15	GOM_NL__2PRFIN20081110_013302_000000352073_00389_35012_0574.N1	10-NOV-2008 01:33:02	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	35012	No
16	GOM_NL__2PRFIN20081110_013643_000000402073_00389_35012_0575.N1	10-NOV-2008 01:36:43	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	35012	No
17	GOM_NL__2PRFIN20081110_013821_000000392073_00389_35012_0576.N1	10-NOV-2008 01:38:21	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	35012	No
18	GOM_NL__2PRFIN20081110_014215_000000432073_00389_35012_0577.N1	10-NOV-2008 01:42:15	Bright	42.500	174	52Psi UMa	3.0040	4400.0	85	35012	No
19	GOM_NL__2PRFIN20081110_014347_000000392073_00389_35012_0578.N1	10-NOV-2008 01:43:47	Bright	38.500	152	12Alp2CVn	2.8900	11000.	77	35012	No
20	GOM_NL__2PRFIN20081110_015131_000000392073_00389_35012_0579.N1	10-NOV-2008 01:51:31	Bright	39.000	62	94Bet Leo	2.1360	9700.0	78	35012	No
21	GOM_NL__2PRFIN20081110_020132_000000432073_00389_35012_0580.N1	10-NOV-2008 02:01:32	Twilight	43.000	171	2Eps Crv	3.0010	4250.0	86	35012	No
22	GOM_NL__2PRFIN20081110_021035_000000382073_00389_35012_0581.N1	10-NOV-2008 02:10:35	Dark	38.000	113	Mu Vel	2.6920	5000.0	76	35012	No
23	GOM_NL__2PRFIN20081110_021639_000000392073_00390_35013_0585.N1	10-NOV-2008 02:16:39	Dark	38.500	29	Bet Car	1.6720	10200.	77	35013	No
24	GOM_NL__2PRFIN20081110_022247_000000582073_00390_35013_0586.N1	10-NOV-2008 02:22:47	Dark	57.500	2	Alp Car	-0.73600	7000.0	115	35013	No
25	GOM_NL__2PRFIN20081110_023205_000000402073_00390_35013_0587.N1	10-NOV-2008 02:32:05	Straylight	40.000	157	The1Eri	2.9060	9300.0	80	35013	No
26	GOM_NL__2PRFIN20081110_024526_000000502073_00390_35013_0588.N1	10-NOV-2008 02:45:26	Twilight	49.500	94	92Alp Cet	2.5260	3100.0	99	35013	No
27	GOM_NL__2PRFIN20081110_025005_000000382073_00390_35013_0589.N1	10-NOV-2008 02:50:05	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	35013	No
28	GOM_NL__2PRFIN20081110_025414_000000372073_00390_35013_0590.N1	10-NOV-2008 02:54:14	Bright	37.000	173	4Bet Tri	3.0040	8900.0	74	35013	No
29	GOM_NL__2PRFIN20081110_025617_000000372073_00390_35013_0591.N1	10-NOV-2008 02:56:17	Bright	37.000	73	57Gam1And	2.2600	13100.	74	35013	No
30	GOM_NL__2PRFIN20081110_030021_000000522073_00390_35013_0592.N1	10-NOV-2008 03:00:21	Bright	52.000	68	18Alp Cas	2.2250	4500.0	104	35013	No
31	GOM_NL__2PRFIN20081110_030926_000000332073_00390_35013_0593.N1	10-NOV-2008 03:09:26	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	35013	No
32	GOM_NL__2PRFIN20081110_031338_000000352073_00390_35013_0594.N1	10-NOV-2008 03:13:38	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	35013	No
33	GOM_NL__2PRFIN20081110_031719_000000402073_00390_35013_0595.N1	10-NOV-2008 03:17:19	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	35013	No
34	GOM_NL__2PRFIN20081110_031857_000000402073_00390_35013_0596.N1	10-NOV-2008 03:18:57	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	35013	No
35	GOM_NL__2PRFIN20081110_032251_000000602073_00390_35013_0597.N1	10-NOV-2008 03:22:51	Bright	60.000	174	52Psi UMa	3.0040	4400.0	120	35013	No
36	GOM_NL__2PRFIN20081110_032423_000000342073_00390_35013_0598.N1	10-NOV-2008 03:24:23	Bright	34.000	152	12Alp2CVn	2.8900	11000.	68	35013	No
37	GOM_NL__2PRFIN20081110_033207_000000392073_00390_35013_0599.N1	10-NOV-2008 03:32:07	Bright	38.500	62	94Bet Leo	2.1360	9700.0	77	35013	No
38	GOM_NL__2PRFIN20081110_034208_000000432073_00390_35013_0600.N1	10-NOV-2008 03:42:08	Twilight	43.000	171	2Eps Crv	3.0010	4250.0	86	35013	No
39	GOM_NL__2PRFIN20081110_035112_000000372073_00390_35013_0601.N1	10-NOV-2008 03:51:12	Dark	37.000	113	Mu Vel	2.6920	5000.0	74	35013	No
40	GOM_NL__2PRFIN20081110_035716_000000372073_00391_35014_0598.N1	10-NOV-2008 03:57:16	Dark	37.000	29	Bet Car	1.6720	10200.	74	35014	No
41	GOM_NL__2PRFIN20081110_040324_000000492073_00391_35014_0599.N1	10-NOV-2008 04:03:24	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	35014	No
42	GOM_NL__2PRFIN20081110_041241_000000402073_00391_35014_0600.N1	10-NOV-2008 04:12:41	Straylight	40.000	157	The1Eri	2.9060	9300.0	80	35014	No

220	GOM_NL__2PRFIN20081110_212252_000000372073_00401_35024_0753.N1	10-NOV-2008 21:22:52	Bright	37.000	73	57Gam1And	2.2600	13100.	74	35024	No
221	GOM_NL__2PRFIN20081110_212621_000000392073_00401_35024_0754.N1	10-NOV-2008 21:26:21	Bright	39.000	35	33Alp Per	1.7950	6250.0	78	35024	No
222	GOM_NL__2PRFIN20081110_212800_000000342073_00401_35024_0755.N1	10-NOV-2008 21:28:00	Bright	34.000	76	27Gam Cas	2.3000	30000.	68	35024	No
223	GOM_NL__2PRFIN20081110_213601_000000372073_00401_35024_0756.N1	10-NOV-2008 21:36:01	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	35024	No
224	GOM_NL__2PRFIN20081110_214015_000000322073_00401_35024_0757.N1	10-NOV-2008 21:40:15	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	35024	No
225	GOM_NL__2PRFIN20081110_214352_000000372073_00401_35024_0758.N1	10-NOV-2008 21:43:52	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	35024	No
226	GOM_NL__2PRFIN20081110_214530_000000402073_00401_35024_0759.N1	10-NOV-2008 21:45:30	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	35024	No
227	GOM_NL__2PRFIN20081110_214926_000000432073_00401_35024_0760.N1	10-NOV-2008 21:49:26	Bright	43.000	174	52Psi UMa	3.0040	4400.0	86	35024	No
228	GOM_NL__2PRFIN20081110_215100_000000352073_00401_35024_0761.N1	10-NOV-2008 21:51:00	Bright	34.500	152	12Alp2CVn	2.8900	11000.	69	35024	No
229	GOM_NL__2PRFIN20081110_215846_000000382073_00401_35024_0762.N1	10-NOV-2008 21:58:46	Bright	38.000	62	94Bet Leo	2.1360	9700.0	76	35024	No
230	GOM_NL__2PRFIN20081110_220718_000000412073_00401_35024_0763.N1	10-NOV-2008 22:07:18	Twilight	40.500	100	4Gam Crv	2.5800	13100.	81	35024	No
231	GOM_NL__2PRFIN20081110_220847_000000442073_00401_35024_0764.N1	10-NOV-2008 22:08:47	Twilight	44.000	171	2Eps Crv	3.0010	4250.0	88	35024	No
232	GOM_NL__2PRFIN20081110_221753_000000412073_00401_35024_0765.N1	10-NOV-2008 22:17:53	Dark	41.000	113	Mu Vel	2.6920	5000.0	82	35024	No
233	GOM_NL__2PRFIN20081110_222355_000000402073_00402_35025_0761.N1	10-NOV-2008 22:23:55	Dark	39.500	29	Bet Car	1.6720	10200.	79	35025	No
234	GOM_NL__2PRFIN20081110_223007_000000602073_00402_35025_0762.N1	10-NOV-2008 22:30:07	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	35025	No
235	GOM_NL__2PRFIN20081110_223919_000000402073_00402_35025_0763.N1	10-NOV-2008 22:39:19	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	35025	No
236	GOM_NL__2PRFIN20081110_225235_000000512073_00402_35025_0764.N1	10-NOV-2008 22:52:35	Twilight	50.500	94	92Alp Cet	2.5260	3100.0	101	35025	No
237	GOM_NL__2PRFIN20081110_225717_000000382073_00402_35025_0765.N1	10-NOV-2008 22:57:17	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	35025	No
238	GOM_NL__2PRFIN20081110_230124_000000362073_00402_35025_0766.N1	10-NOV-2008 23:01:24	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	35025	No
239	GOM_NL__2PRFIN20081110_230327_000000382073_00402_35025_0767.N1	10-NOV-2008 23:03:27	Bright	38.000	73	57Gam1And	2.2600	13100.	76	35025	No
240	GOM_NL__2PRFIN20081110_230656_000000392073_00402_35025_0768.N1	10-NOV-2008 23:06:56	Bright	38.500	35	33Alp Per	1.7950	6250.0	77	35025	No
241	GOM_NL__2PRFIN20081110_230836_000000422073_00402_35025_0769.N1	10-NOV-2008 23:08:36	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	35025	No
242	GOM_NL__2PRFIN20081110_231637_000000372073_00402_35025_0770.N1	10-NOV-2008 23:16:37	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	35025	No
243	GOM_NL__2PRFIN20081110_232051_000000352073_00402_35025_0771.N1	10-NOV-2008 23:20:51	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	35025	No
244	GOM_NL__2PRFIN20081110_232428_000000392073_00402_35025_0772.N1	10-NOV-2008 23:24:28	Bright	38.500	36	50Alp UMa	1.8000	6300.0	77	35025	No
245	GOM_NL__2PRFIN20081110_232606_000000412073_00402_35025_0773.N1	10-NOV-2008 23:26:06	Bright	40.500	82	48Bet UMa	2.3650	10600.	81	35025	No
246	GOM_NL__2PRFIN20081110_233002_000000432073_00402_35025_0774.N1	10-NOV-2008 23:30:02	Bright	42.500	174	52Psi UMa	3.0040	4400.0	85	35025	No
247	GOM_NL__2PRFIN20081110_233136_000000342073_00402_35025_0775.N1	10-NOV-2008 23:31:36	Bright	33.500	152	12Alp2CVn	2.8900	11000.	67	35025	No
248	GOM_NL__2PRFIN20081110_233922_000000582073_00402_35025_0776.N1	10-NOV-2008 23:39:22	Bright	58.000	62	94Bet Leo	2.1360	9700.0	116	35025	No
249	GOM_NL__2PRFIN20081110_234754_000000402073_00402_35025_0777.N1	10-NOV-2008 23:47:54	Twilight	40.000	100	4Gam Crv	2.5800	13100.	80	35025	No
250	GOM_NL__2PRFIN20081110_234924_000000422073_00402_35025_0778.N1	10-NOV-2008 23:49:24	Twilight	42.000	171	2Eps Crv	3.0010	4250.0	84	35025	No
251	GOM_NL__2PRFIN20081110_235829_000000402073_00402_35025_0779.N1	10-NOV-2008 23:58:29	Dark	39.500	113	Mu Vel	2.6920	5000.0	79	35025	No

3. Quality information per product

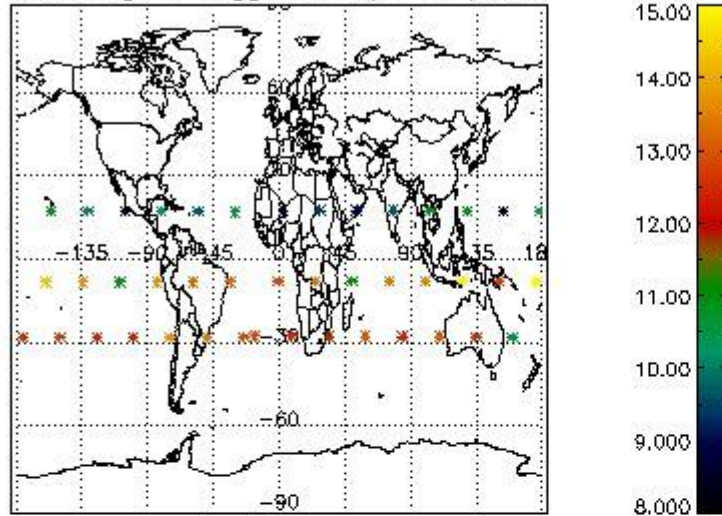
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

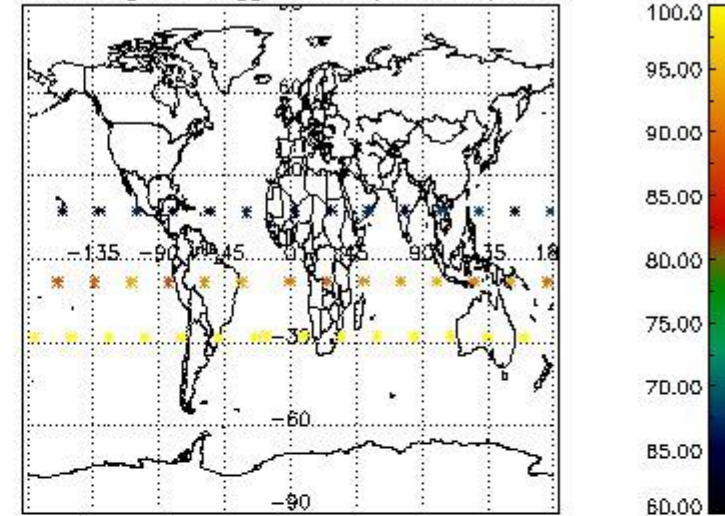


3.2 Plot quality information per product (world map)

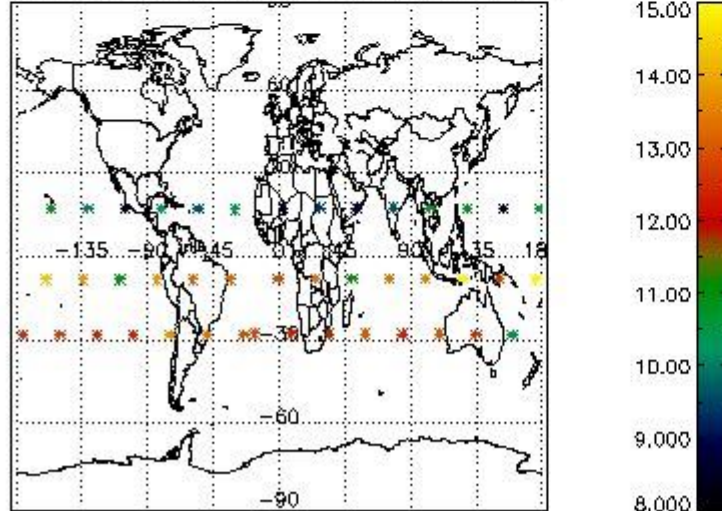
Percentage of flagged data per O3 profile



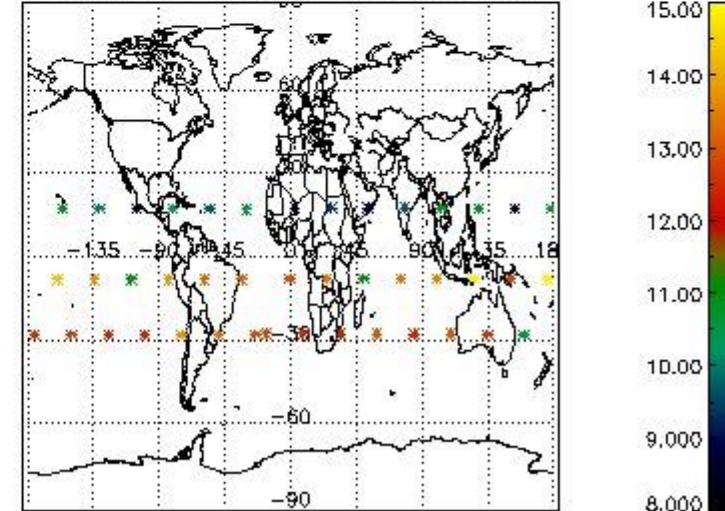
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

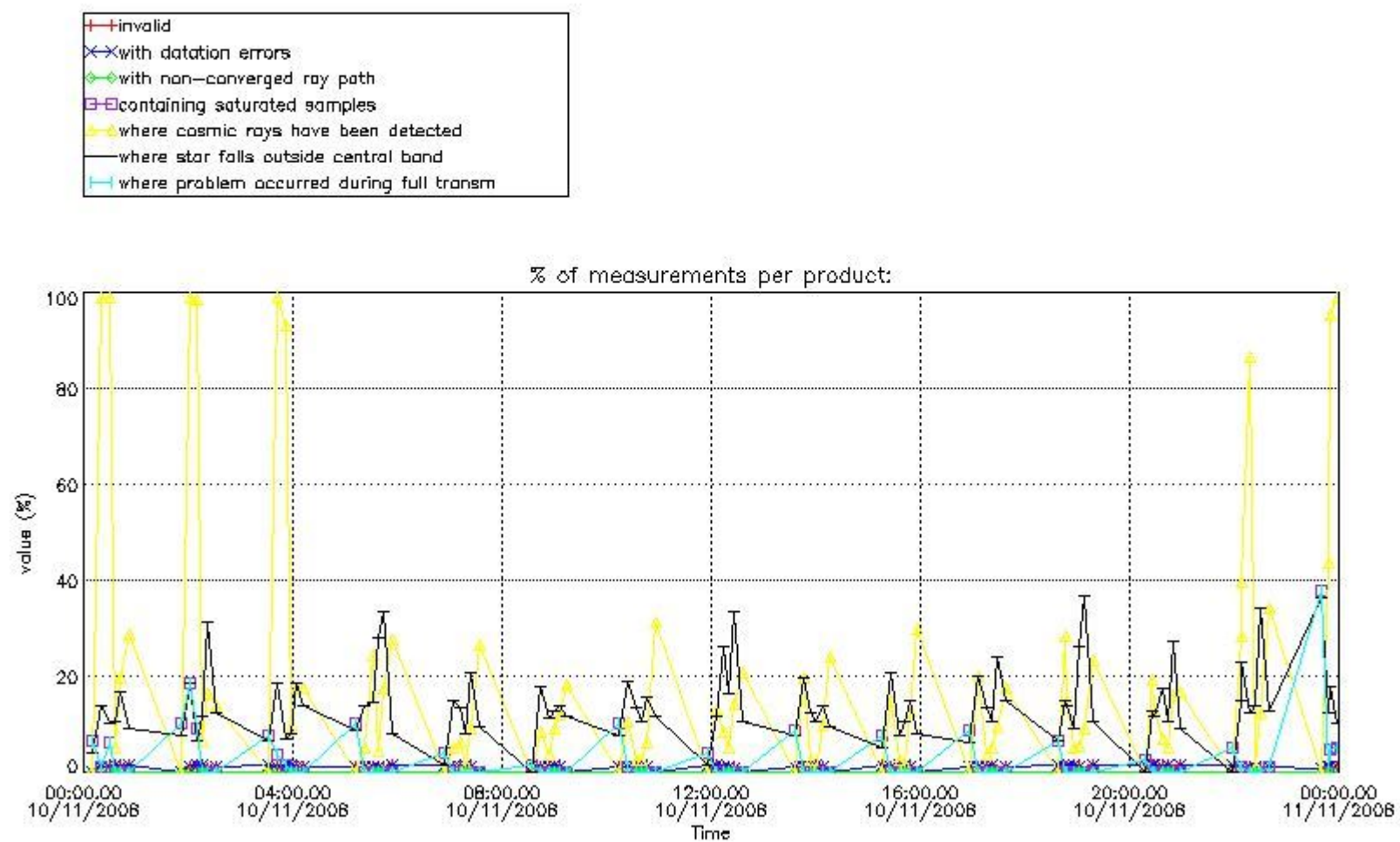


4. Level 1 quality information per product

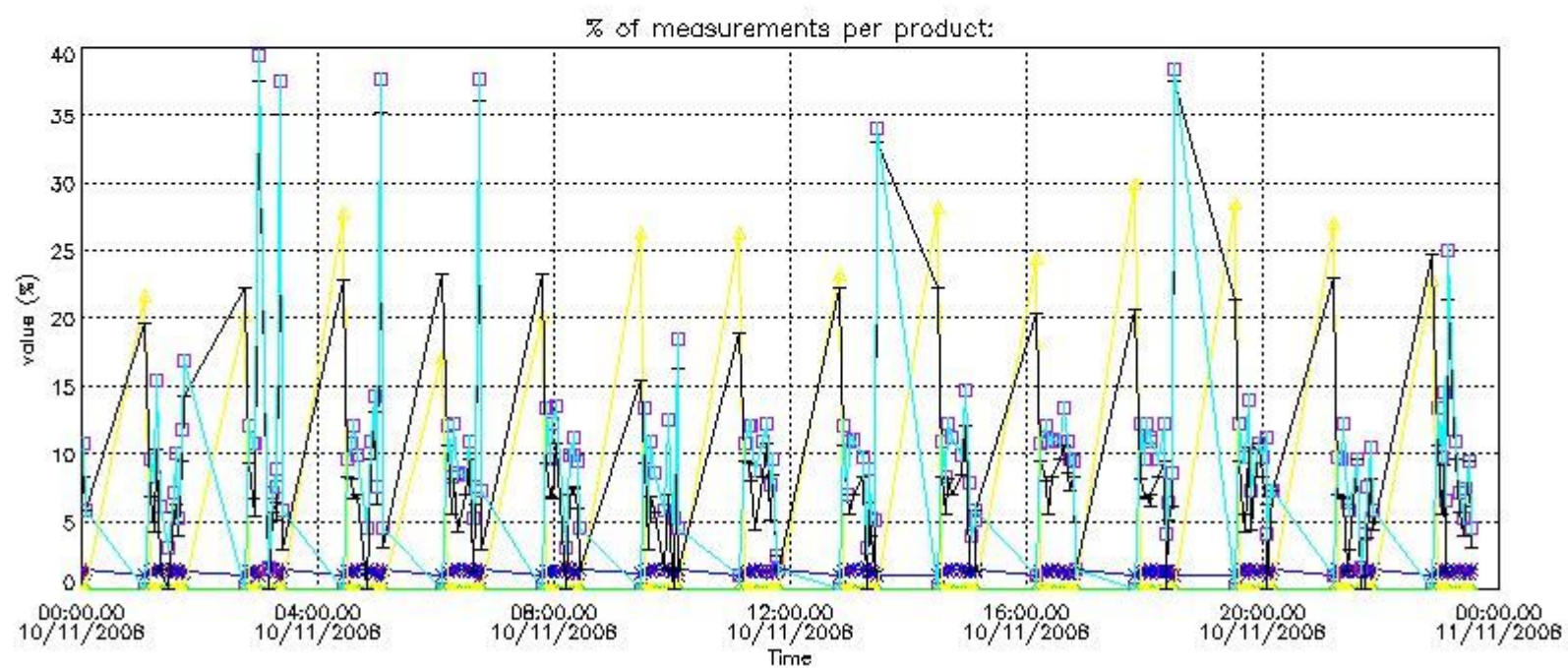
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

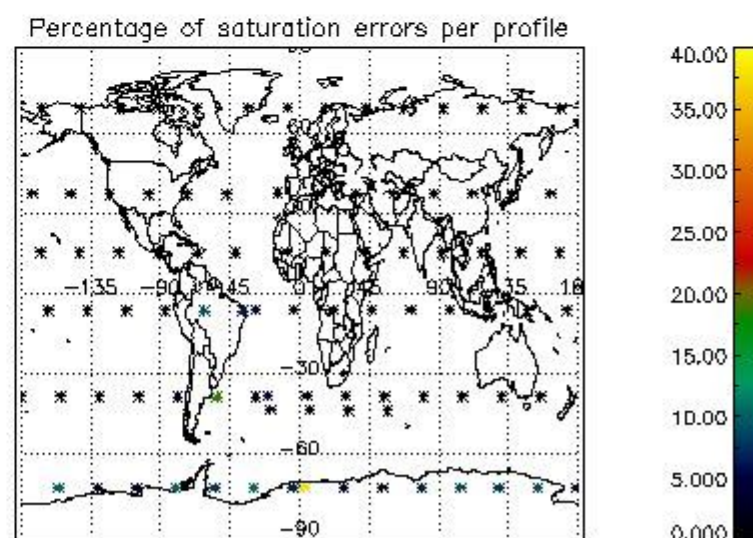
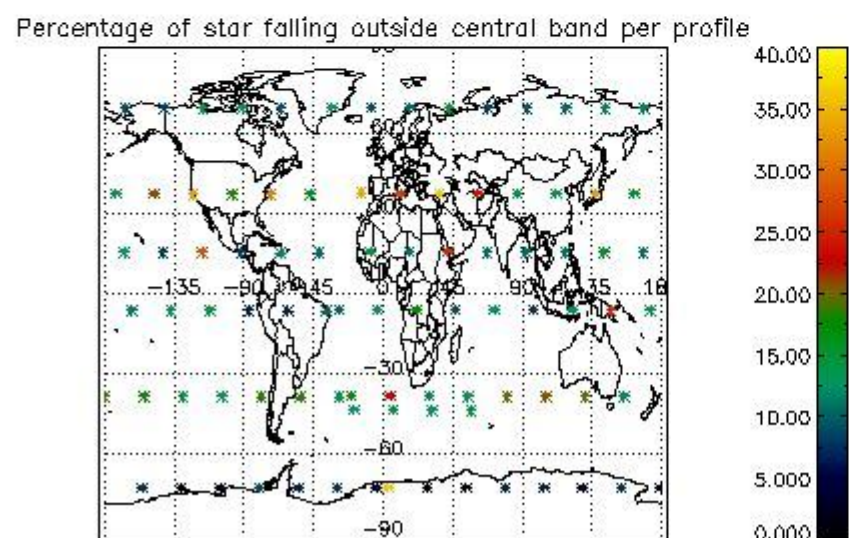
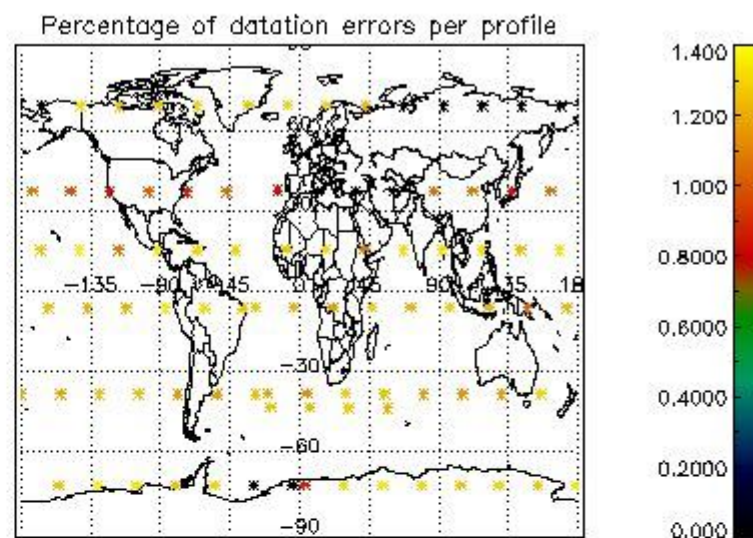
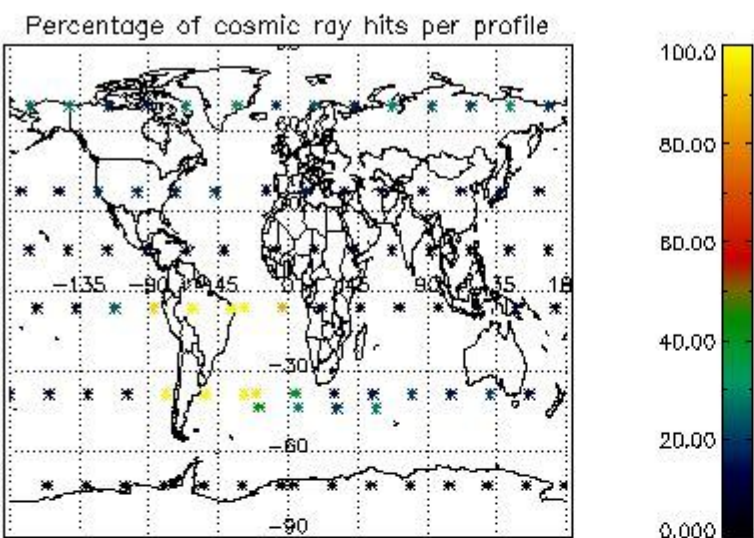


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



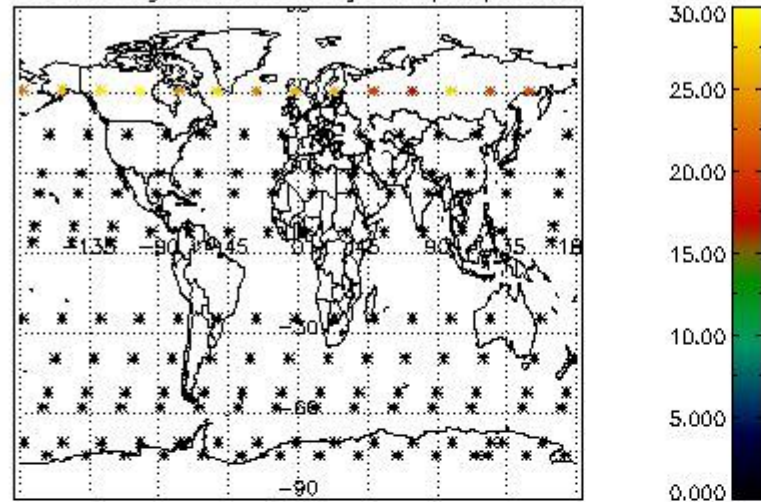
4.2 Plot quality information per product coming from level 1b processing (world map)

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

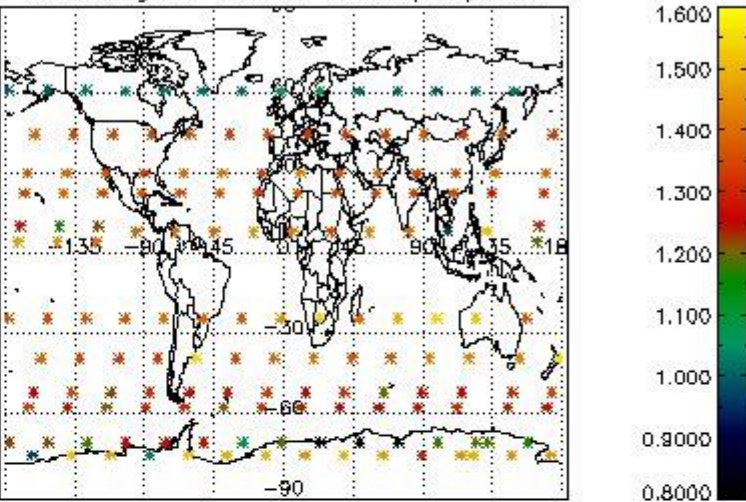


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

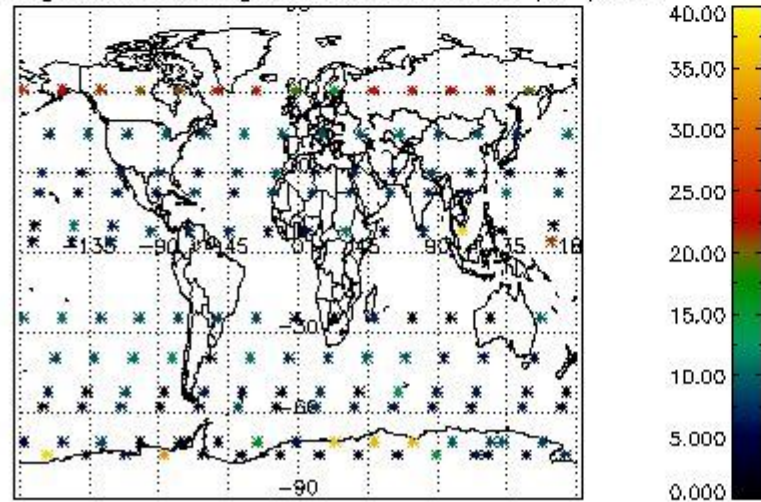
Percentage of cosmic ray hits per profile



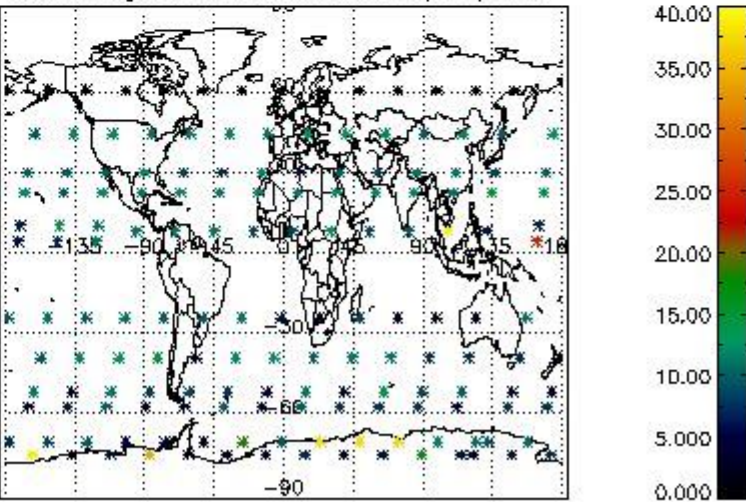
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

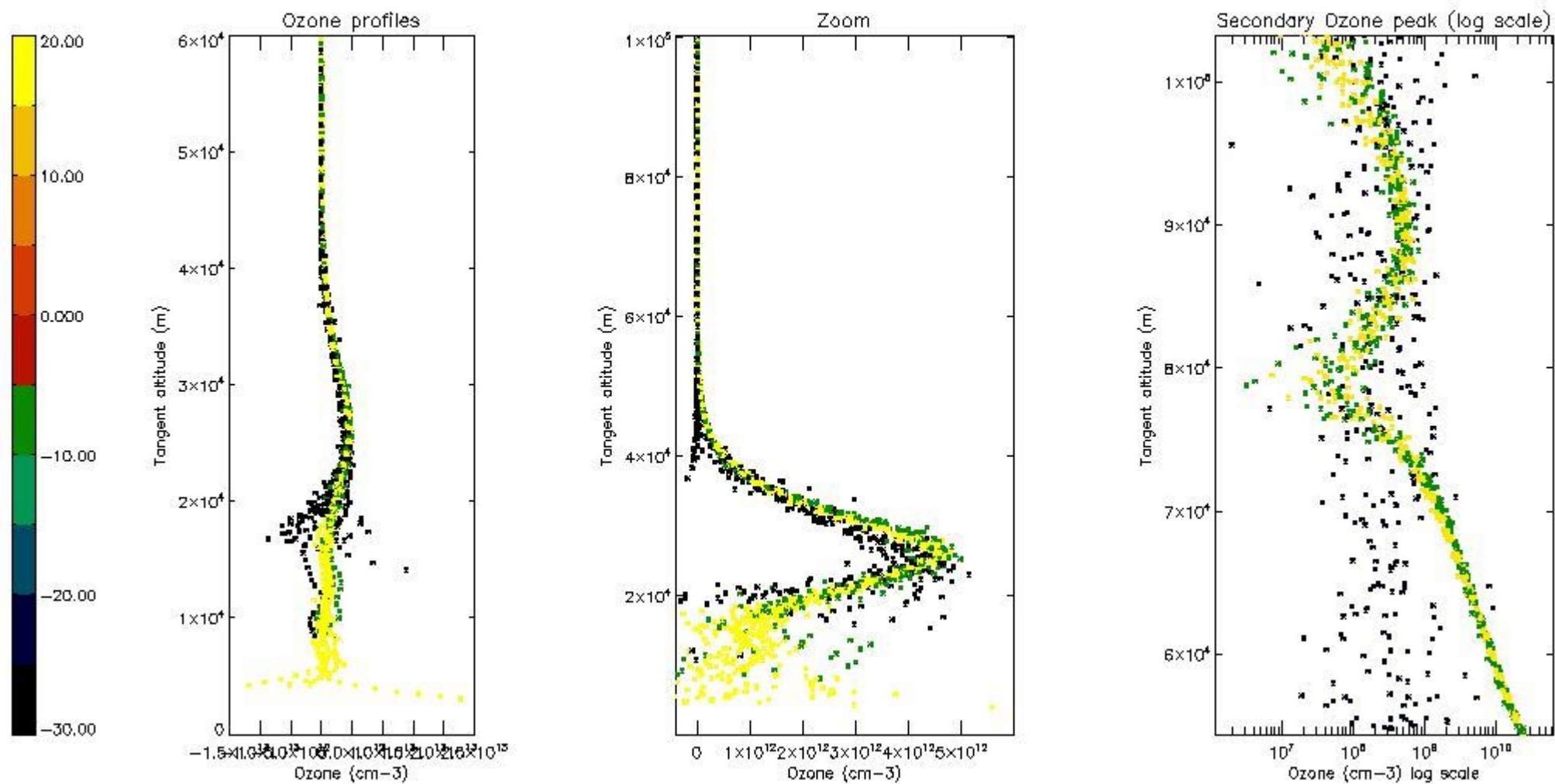
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	11

STD < 10	8
STD < 5	6

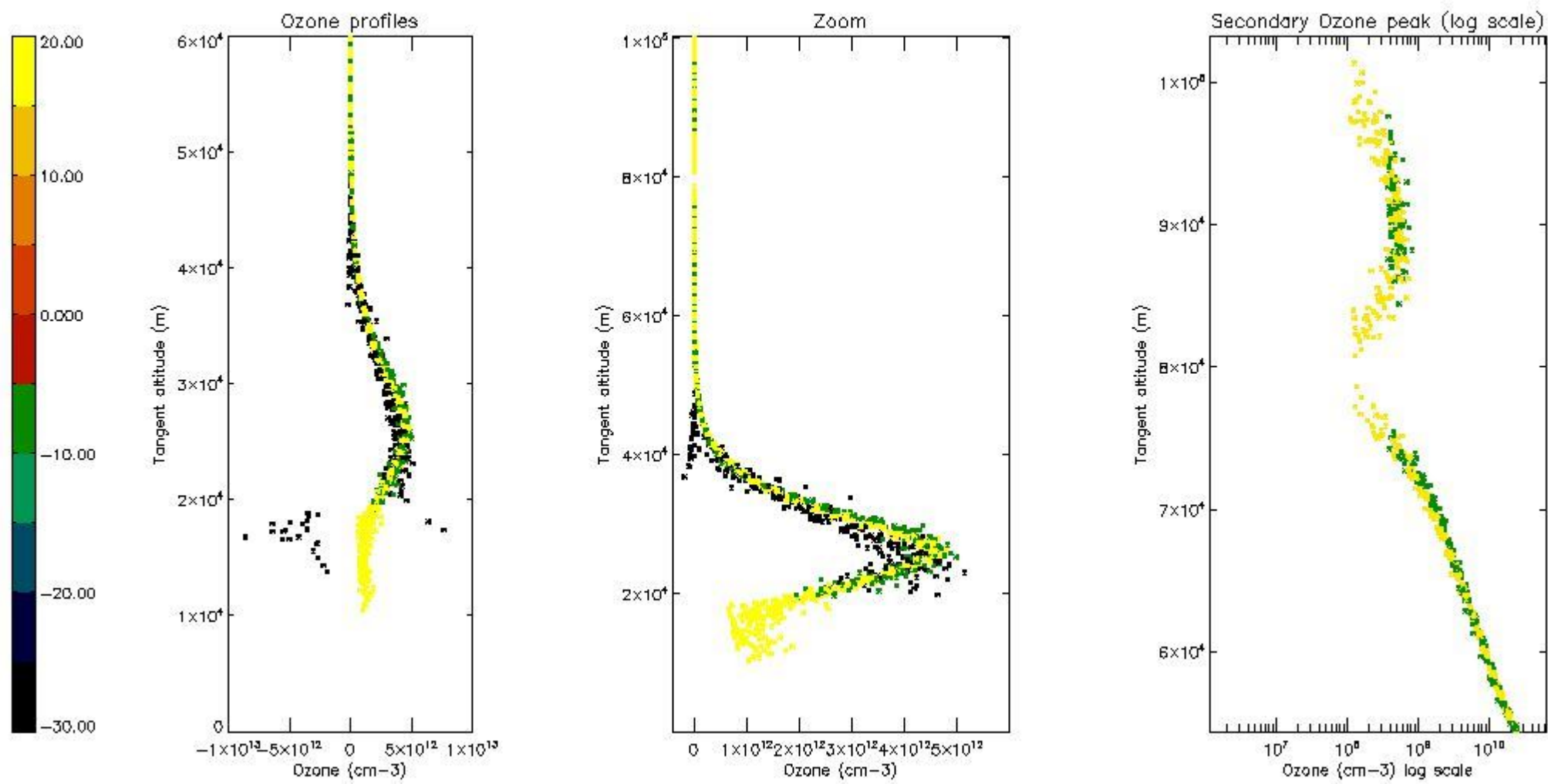
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



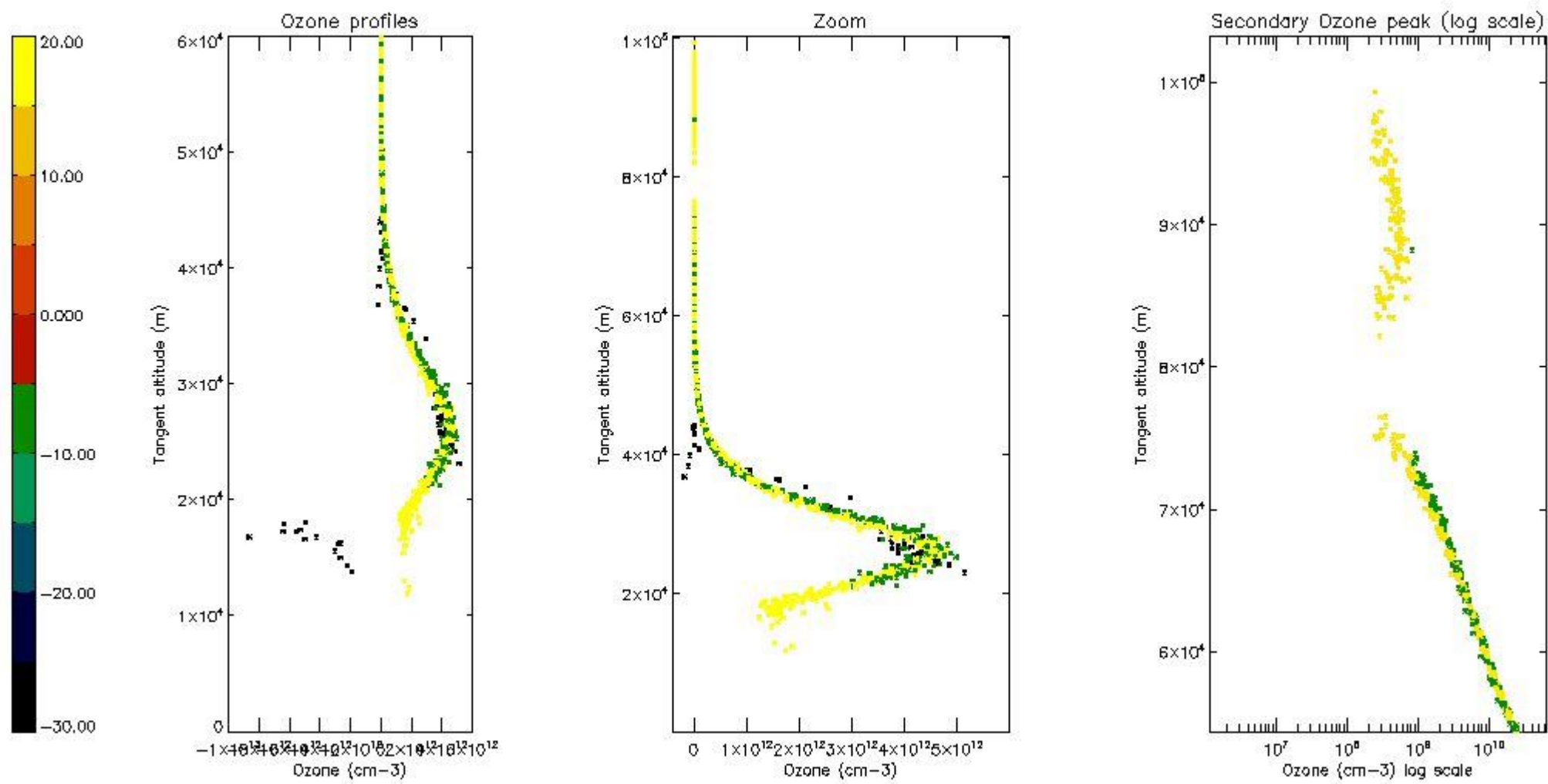
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



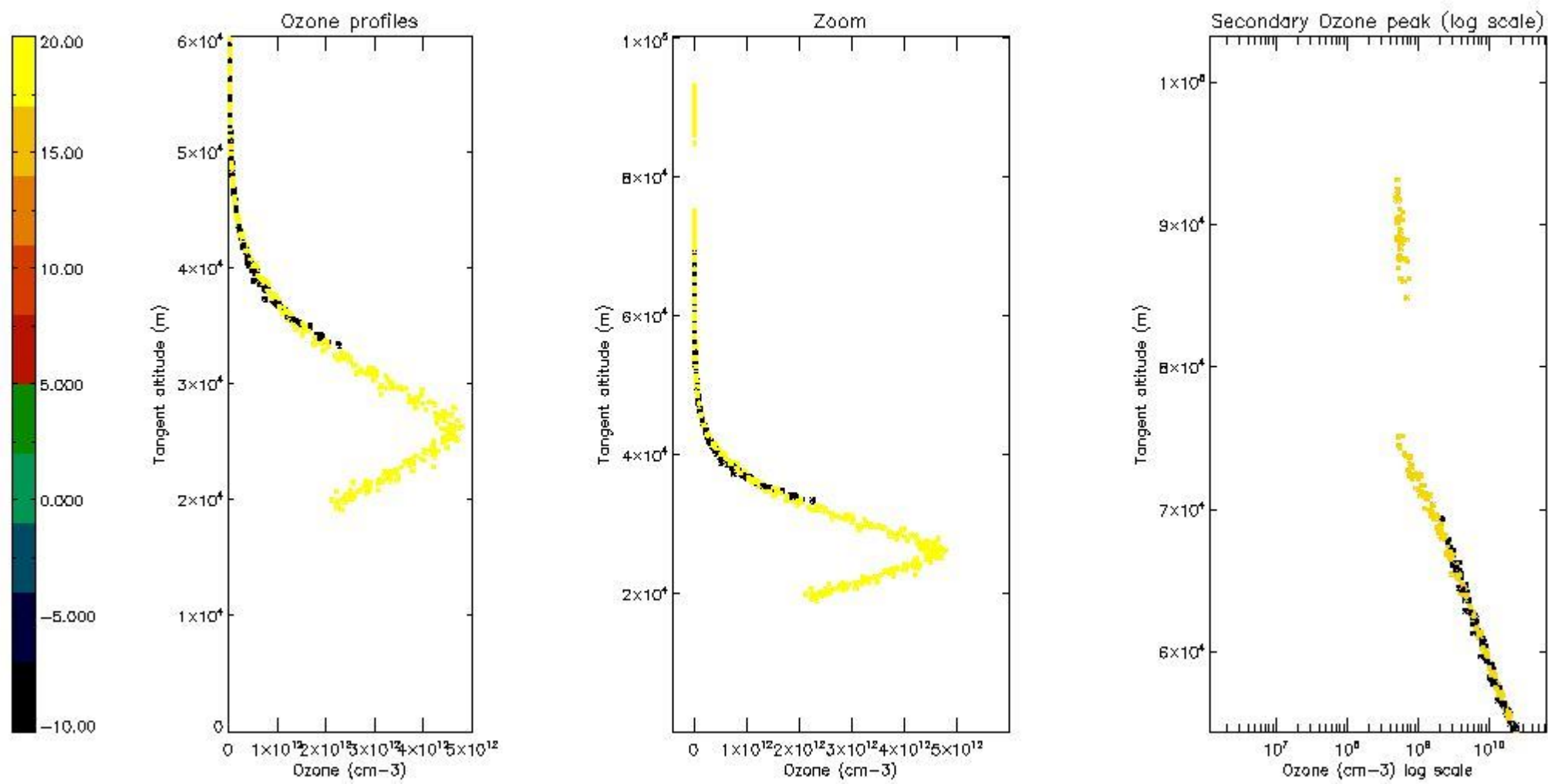
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



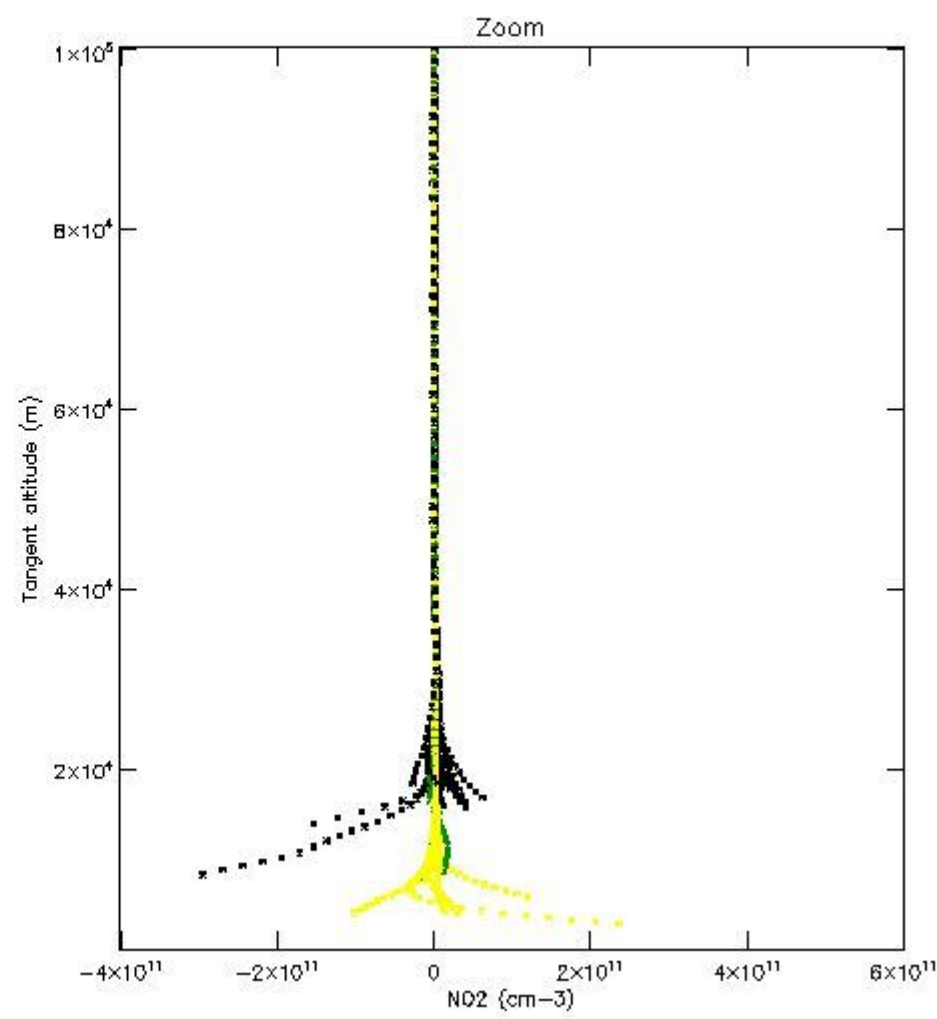
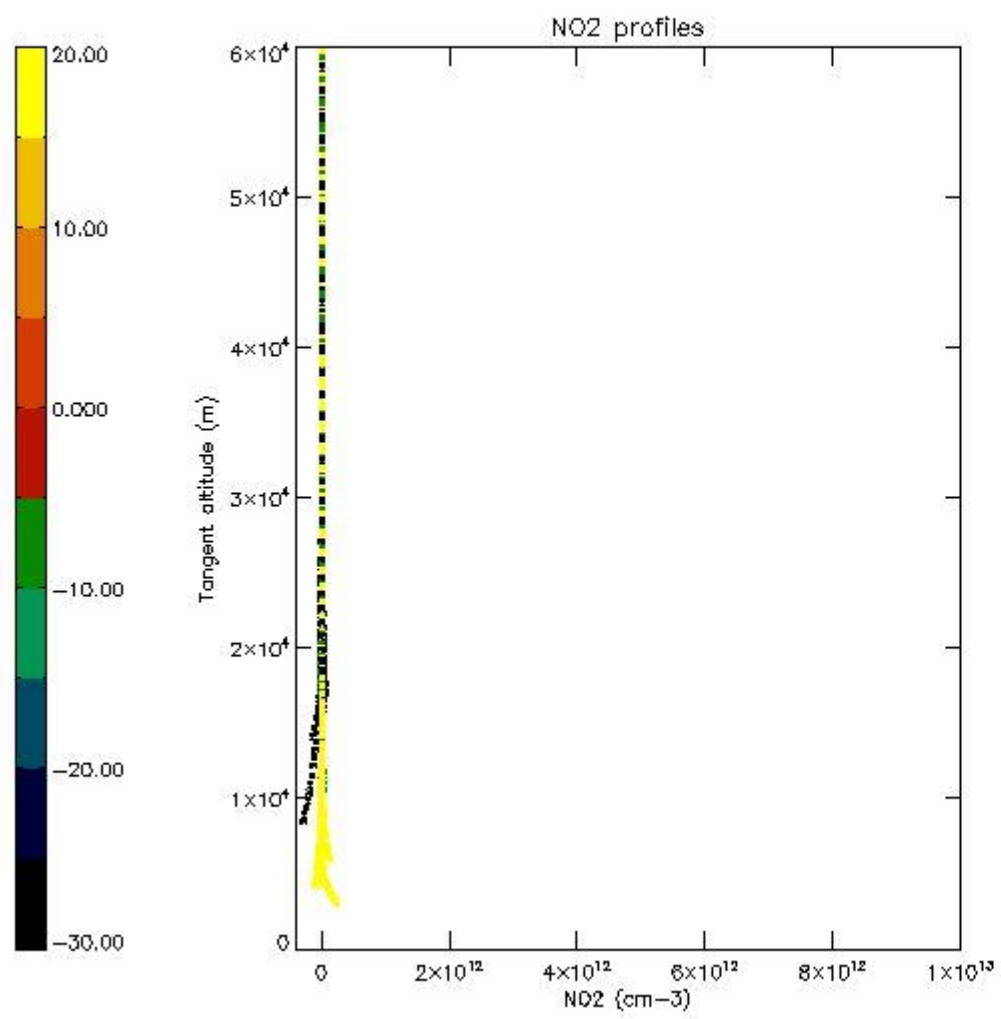
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



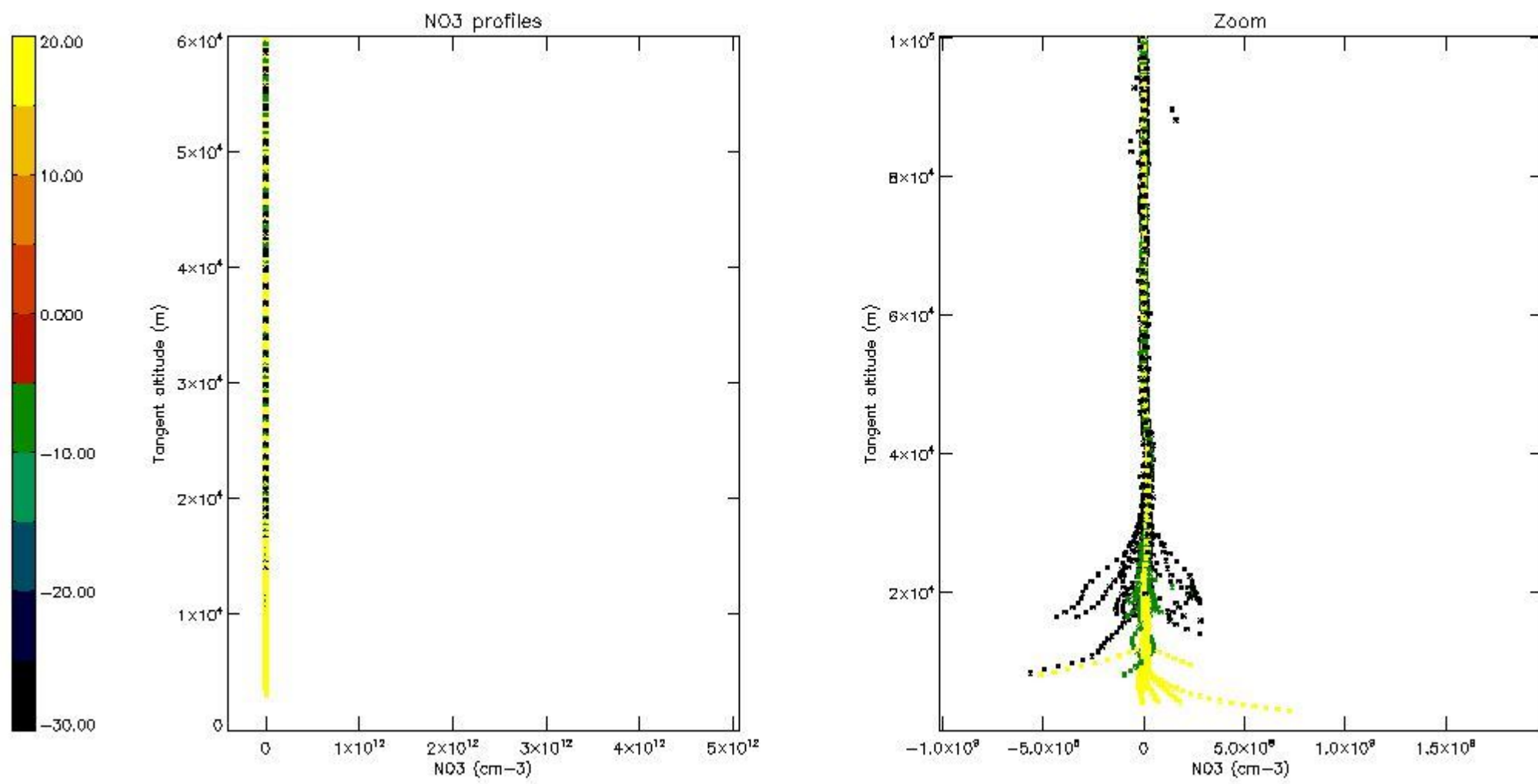
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



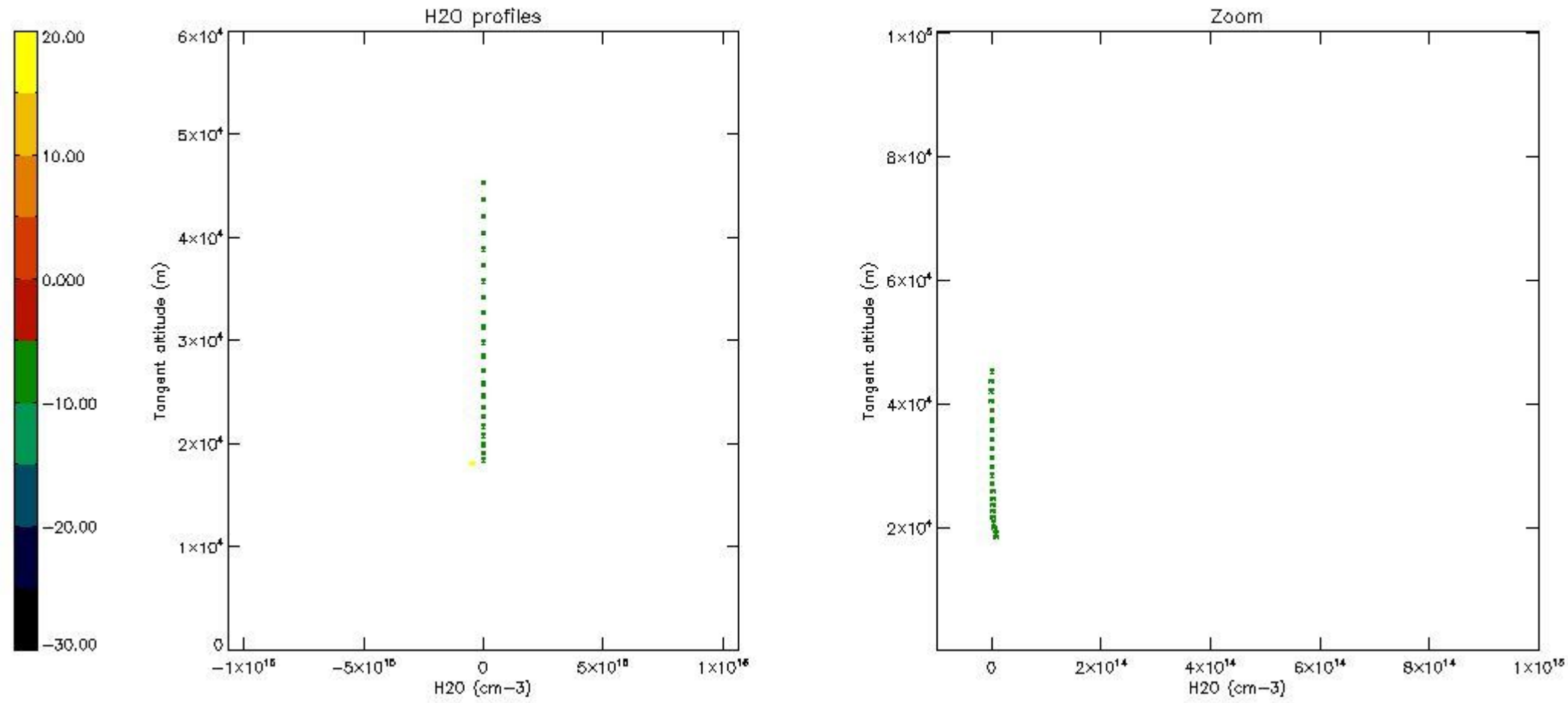
5.7 Plot NO3 profiles for all STD (dark without errors)

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	10-NOV-2008 00:01:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-NOV-2008 00:01:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-NOV-2008 00:01:39

GOMOS Level 2 Daily Report

SUMMARY

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[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 \(world map\)](#)

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[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](#)

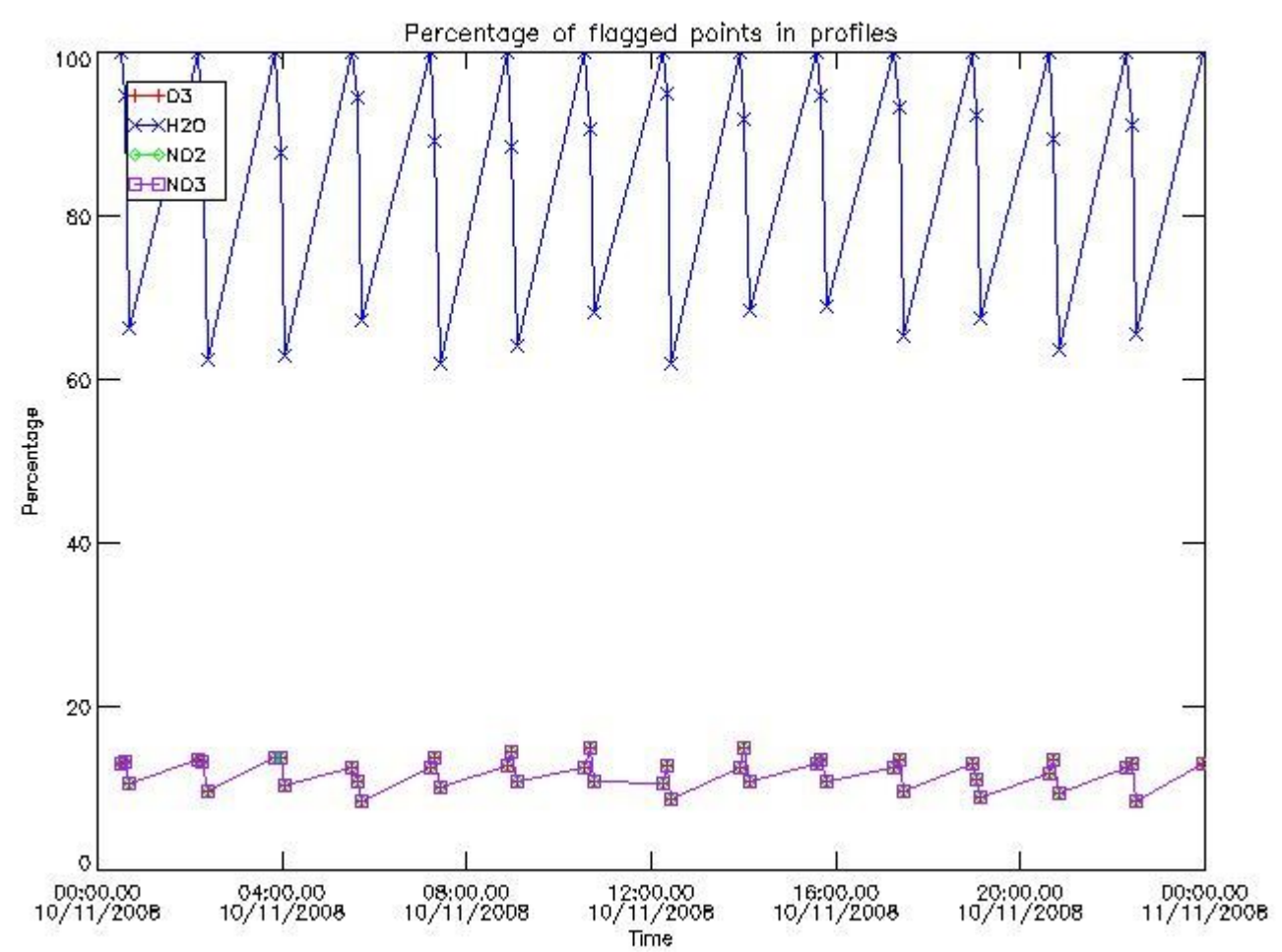
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20081110_212252_000000372073_00401_35024_0753.N1	10-NOV-2008 21:22:52	Bright	37.000	73	57Gam1And	2.2600	13100.	74	35024	No
221	GOM_NL__2PRFIN20081110_212621_000000392073_00401_35024_0754.N1	10-NOV-2008 21:26:21	Bright	39.000	35	33Alp Per	1.7950	6250.0	78	35024	No
222	GOM_NL__2PRFIN20081110_212800_000000342073_00401_35024_0755.N1	10-NOV-2008 21:28:00	Bright	34.000	76	27Gam Cas	2.3000	30000.	68	35024	No
223	GOM_NL__2PRFIN20081110_213601_000000372073_00401_35024_0756.N1	10-NOV-2008 21:36:01	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	35024	No
224	GOM_NL__2PRFIN20081110_214015_000000322073_00401_35024_0757.N1	10-NOV-2008 21:40:15	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	35024	No
225	GOM_NL__2PRFIN20081110_214352_000000372073_00401_35024_0758.N1	10-NOV-2008 21:43:52	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	35024	No
226	GOM_NL__2PRFIN20081110_214530_000000402073_00401_35024_0759.N1	10-NOV-2008 21:45:30	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	35024	No
227	GOM_NL__2PRFIN20081110_214926_000000432073_00401_35024_0760.N1	10-NOV-2008 21:49:26	Bright	43.000	174	52Psi UMa	3.0040	4400.0	86	35024	No
228	GOM_NL__2PRFIN20081110_215100_000000352073_00401_35024_0761.N1	10-NOV-2008 21:51:00	Bright	34.500	152	12Alp2CVn	2.8900	11000.	69	35024	No
229	GOM_NL__2PRFIN20081110_215846_000000382073_00401_35024_0762.N1	10-NOV-2008 21:58:46	Bright	38.000	62	94Bet Leo	2.1360	9700.0	76	35024	No
230	GOM_NL__2PRFIN20081110_220718_000000412073_00401_35024_0763.N1	10-NOV-2008 22:07:18	Twilight	40.500	100	4Gam Crv	2.5800	13100.	81	35024	No
231	GOM_NL__2PRFIN20081110_220847_000000442073_00401_35024_0764.N1	10-NOV-2008 22:08:47	Twilight	44.000	171	2Eps Crv	3.0010	4250.0	88	35024	No
232	GOM_NL__2PRFIN20081110_221753_000000412073_00401_35024_0765.N1	10-NOV-2008 22:17:53	Dark	41.000	113	Mu Vel	2.6920	5000.0	82	35024	No
233	GOM_NL__2PRFIN20081110_222355_000000402073_00402_35025_0761.N1	10-NOV-2008 22:23:55	Dark	39.500	29	Bet Car	1.6720	10200.	79	35025	No
234	GOM_NL__2PRFIN20081110_223007_000000602073_00402_35025_0762.N1	10-NOV-2008 22:30:07	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	35025	No
235	GOM_NL__2PRFIN20081110_223919_000000402073_00402_35025_0763.N1	10-NOV-2008 22:39:19	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	35025	No
236	GOM_NL__2PRFIN20081110_225235_000000512073_00402_35025_0764.N1	10-NOV-2008 22:52:35	Twilight	50.500	94	92Alp Cet	2.5260	3100.0	101	35025	No
237	GOM_NL__2PRFIN20081110_225717_000000382073_00402_35025_0765.N1	10-NOV-2008 22:57:17	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	35025	No
238	GOM_NL__2PRFIN20081110_230124_000000362073_00402_35025_0766.N1	10-NOV-2008 23:01:24	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	35025	No
239	GOM_NL__2PRFIN20081110_230327_000000382073_00402_35025_0767.N1	10-NOV-2008 23:03:27	Bright	38.000	73	57Gam1And	2.2600	13100.	76	35025	No
240	GOM_NL__2PRFIN20081110_230656_000000392073_00402_35025_0768.N1	10-NOV-2008 23:06:56	Bright	38.500	35	33Alp Per	1.7950	6250.0	77	35025	No
241	GOM_NL__2PRFIN20081110_230836_000000422073_00402_35025_0769.N1	10-NOV-2008 23:08:36	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	35025	No
242	GOM_NL__2PRFIN20081110_231637_000000372073_00402_35025_0770.N1	10-NOV-2008 23:16:37	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	35025	No
243	GOM_NL__2PRFIN20081110_232051_000000352073_00402_35025_0771.N1	10-NOV-2008 23:20:51	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	35025	No
244	GOM_NL__2PRFIN20081110_232428_000000392073_00402_35025_0772.N1	10-NOV-2008 23:24:28	Bright	38.500	36	50Alp UMa	1.8000	6300.0	77	35025	No
245	GOM_NL__2PRFIN20081110_232606_000000412073_00402_35025_0773.N1	10-NOV-2008 23:26:06	Bright	40.500	82	48Bet UMa	2.3650	10600.	81	35025	No
246	GOM_NL__2PRFIN20081110_233002_000000432073_00402_35025_0774.N1	10-NOV-2008 23:30:02	Bright	42.500	174	52Psi UMa	3.0040	4400.0	85	35025	No
247	GOM_NL__2PRFIN20081110_233136_000000342073_00402_35025_0775.N1	10-NOV-2008 23:31:36	Bright	33.500	152	12Alp2CVn	2.8900	11000.	67	35025	No
248	GOM_NL__2PRFIN20081110_233922_000000582073_00402_35025_0776.N1	10-NOV-2008 23:39:22	Bright	58.000	62	94Bet Leo	2.1360	9700.0	116	35025	No
249	GOM_NL__2PRFIN20081110_234754_000000402073_00402_35025_0777.N1	10-NOV-2008 23:47:54	Twilight	40.000	100	4Gam Crv	2.5800	13100.	80	35025	No
250	GOM_NL__2PRFIN20081110_234924_000000422073_00402_35025_0778.N1	10-NOV-2008 23:49:24	Twilight	42.000	171	2Eps Crv	3.0010	4250.0	84	35025	No
251	GOM_NL__2PRFIN20081110_235829_000000402073_00402_35025_0779.N1	10-NOV-2008 23:58:29	Dark	39.500	113	Mu Vel	2.6920	5000.0	79	35025	No

3. Quality information per product

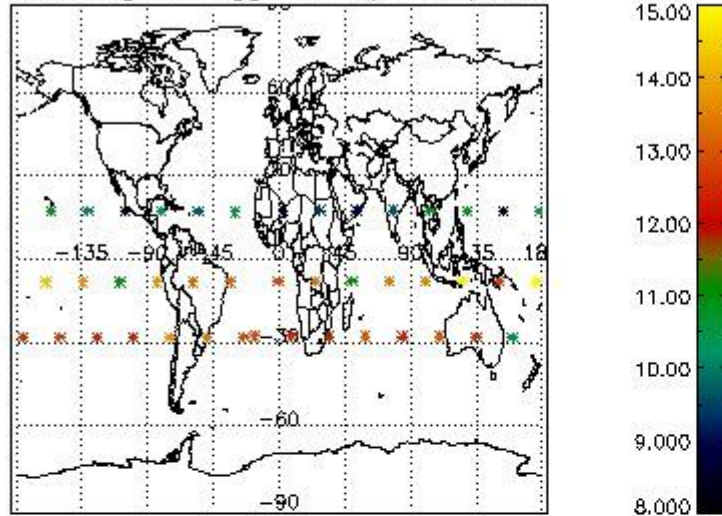
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

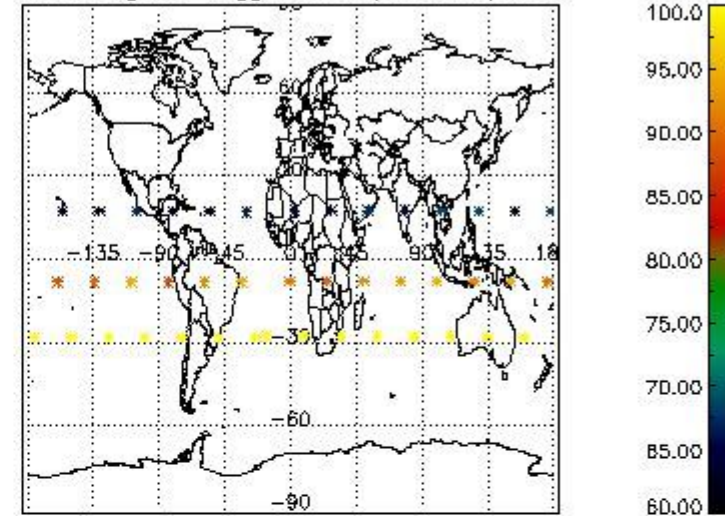


3.2 Plot quality information per product (world map)

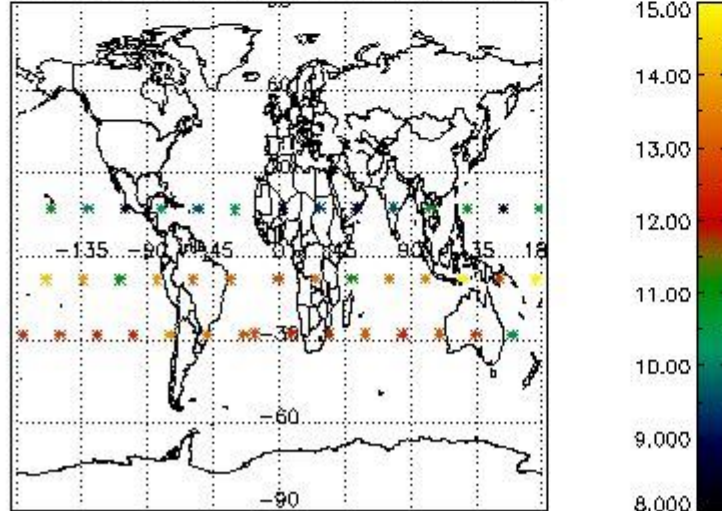
Percentage of flagged data per O3 profile



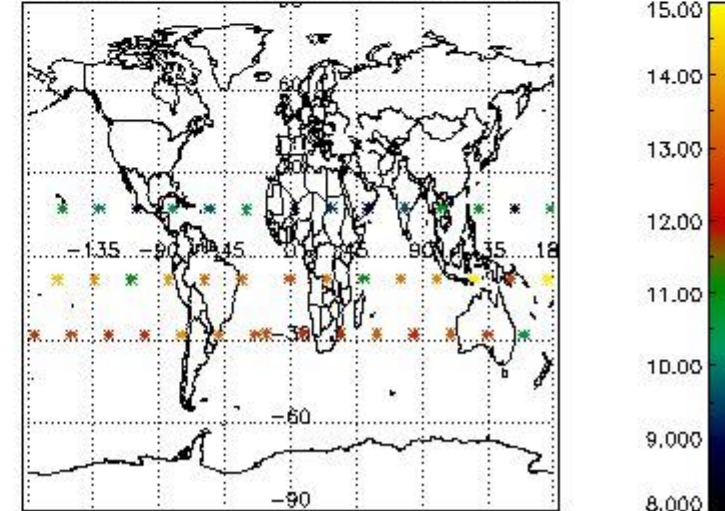
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

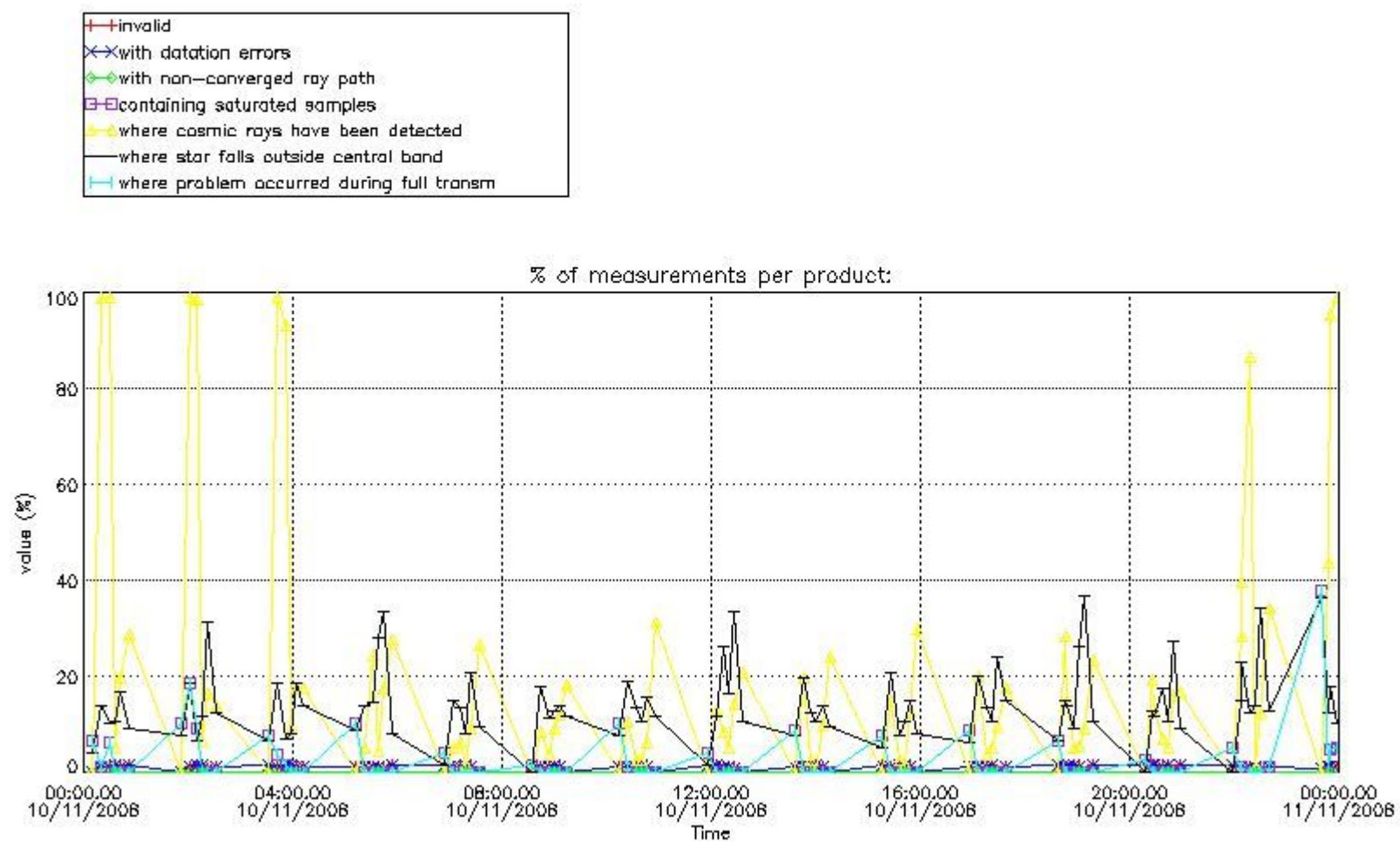


4. Level 1 quality information per product

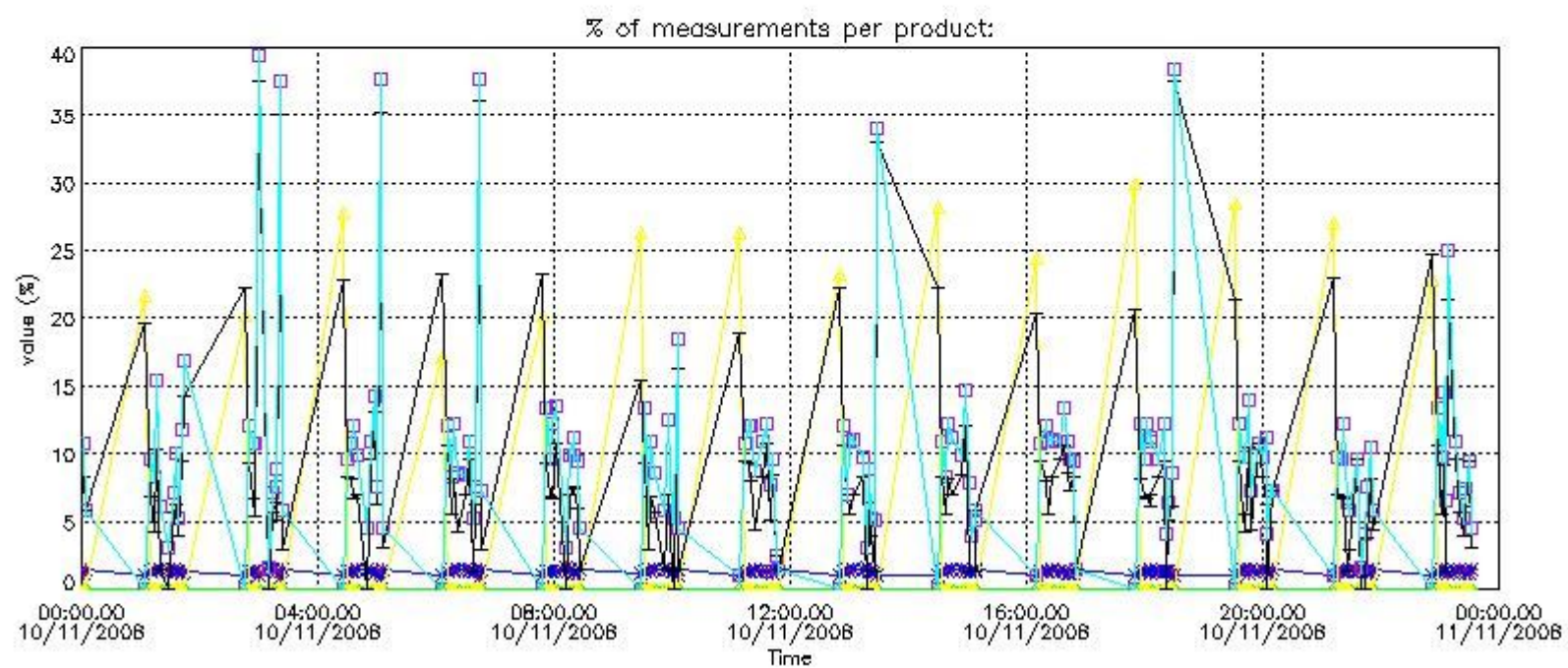
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

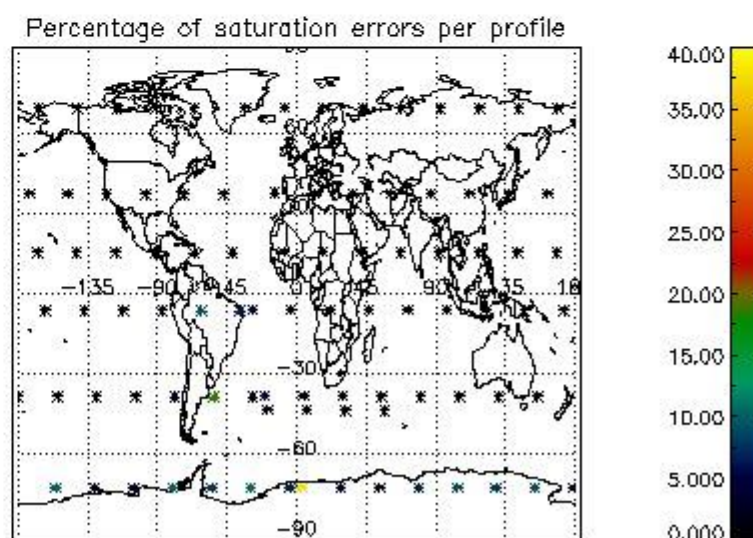
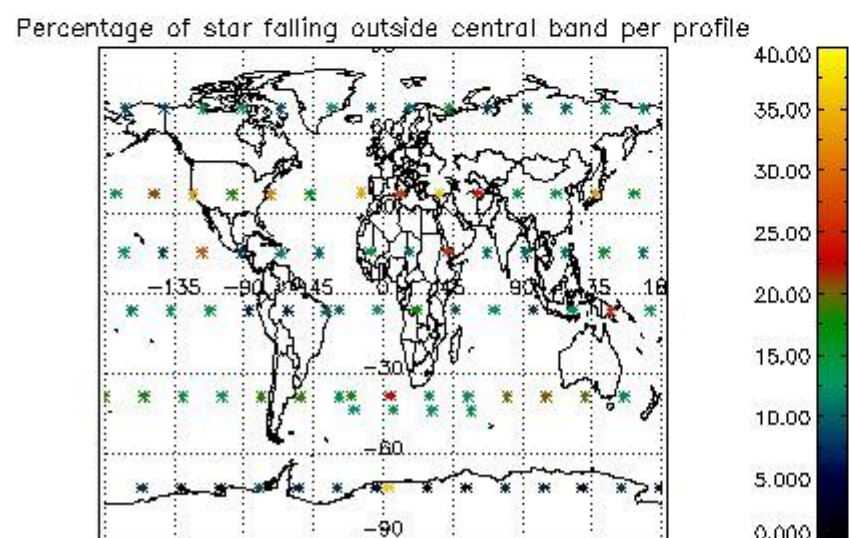
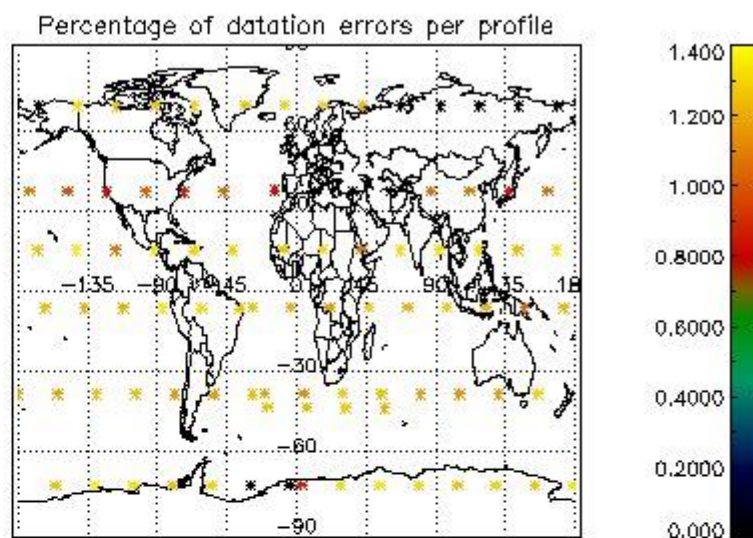
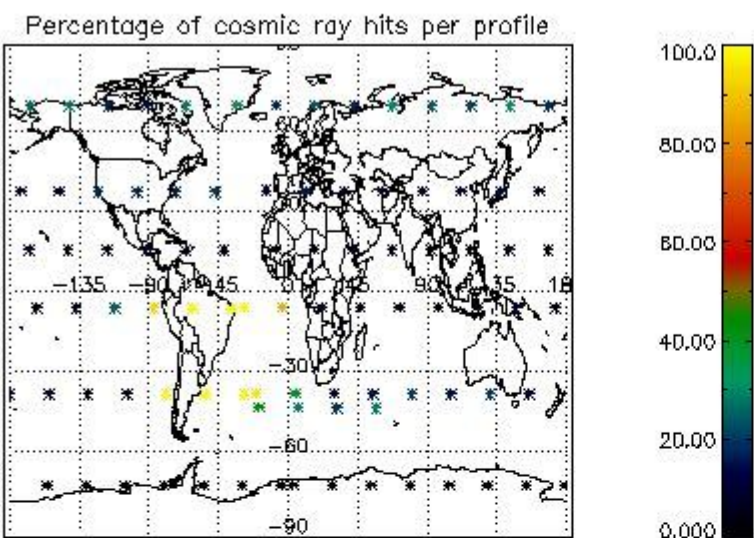


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



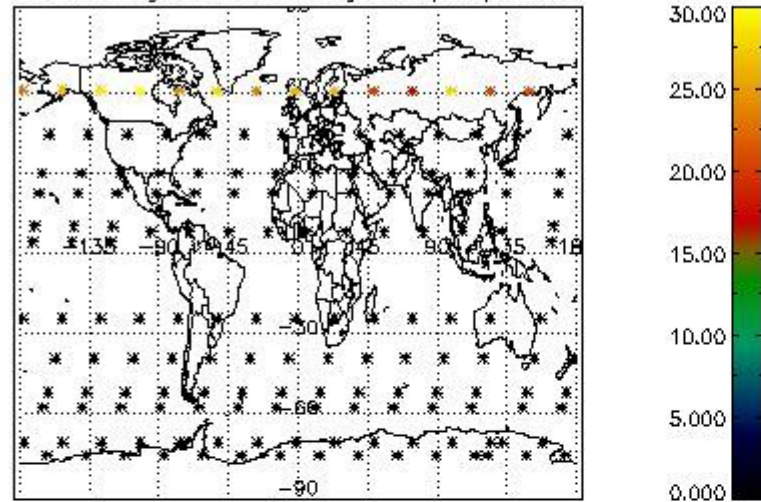
4.2 Plot quality information per product coming from level 1b processing (world map)

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

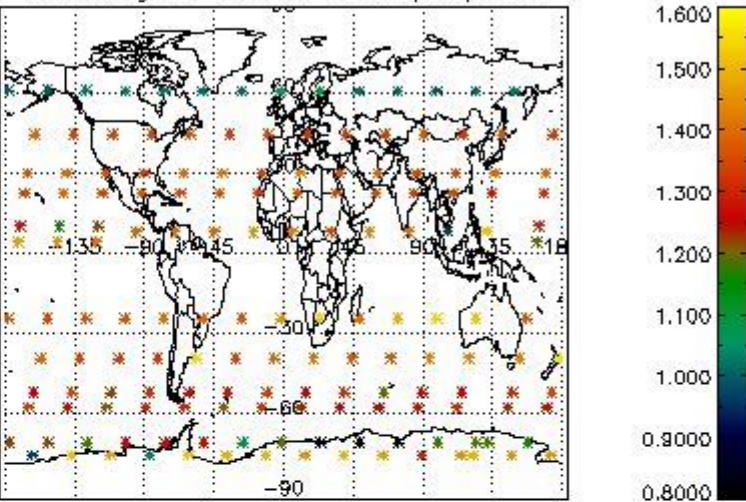


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

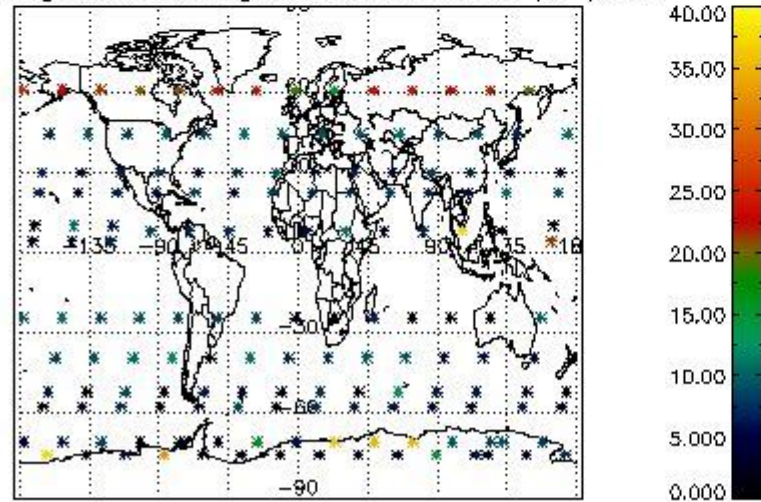
Percentage of cosmic ray hits per profile



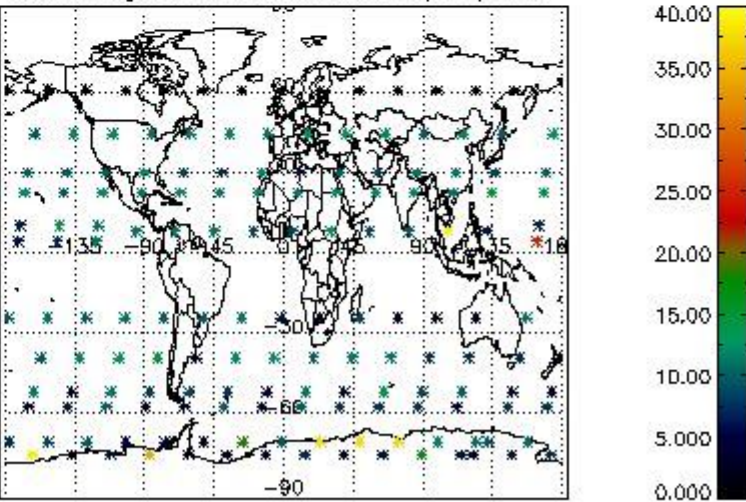
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

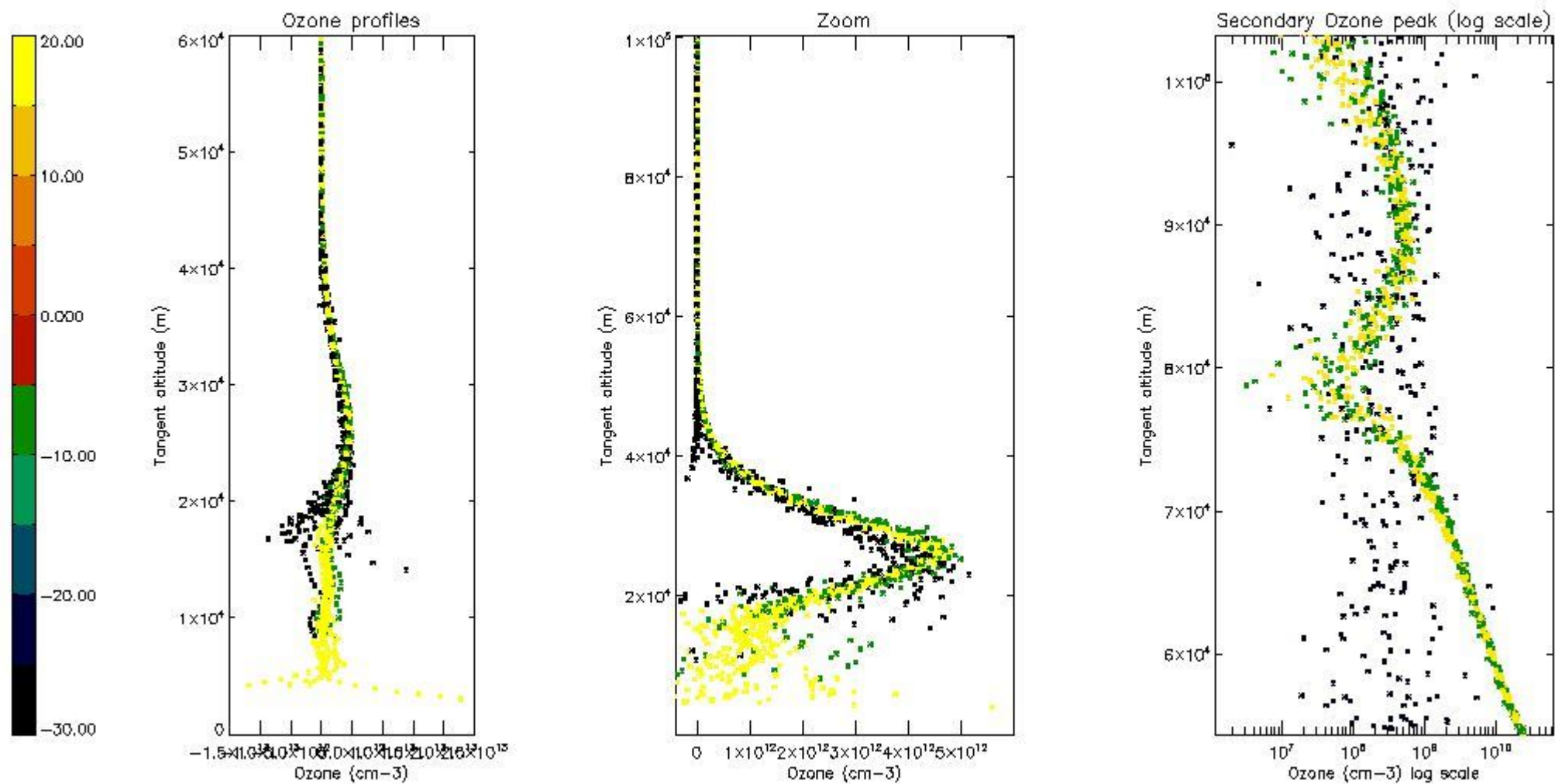
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	11

STD < 10	8
STD < 5	6

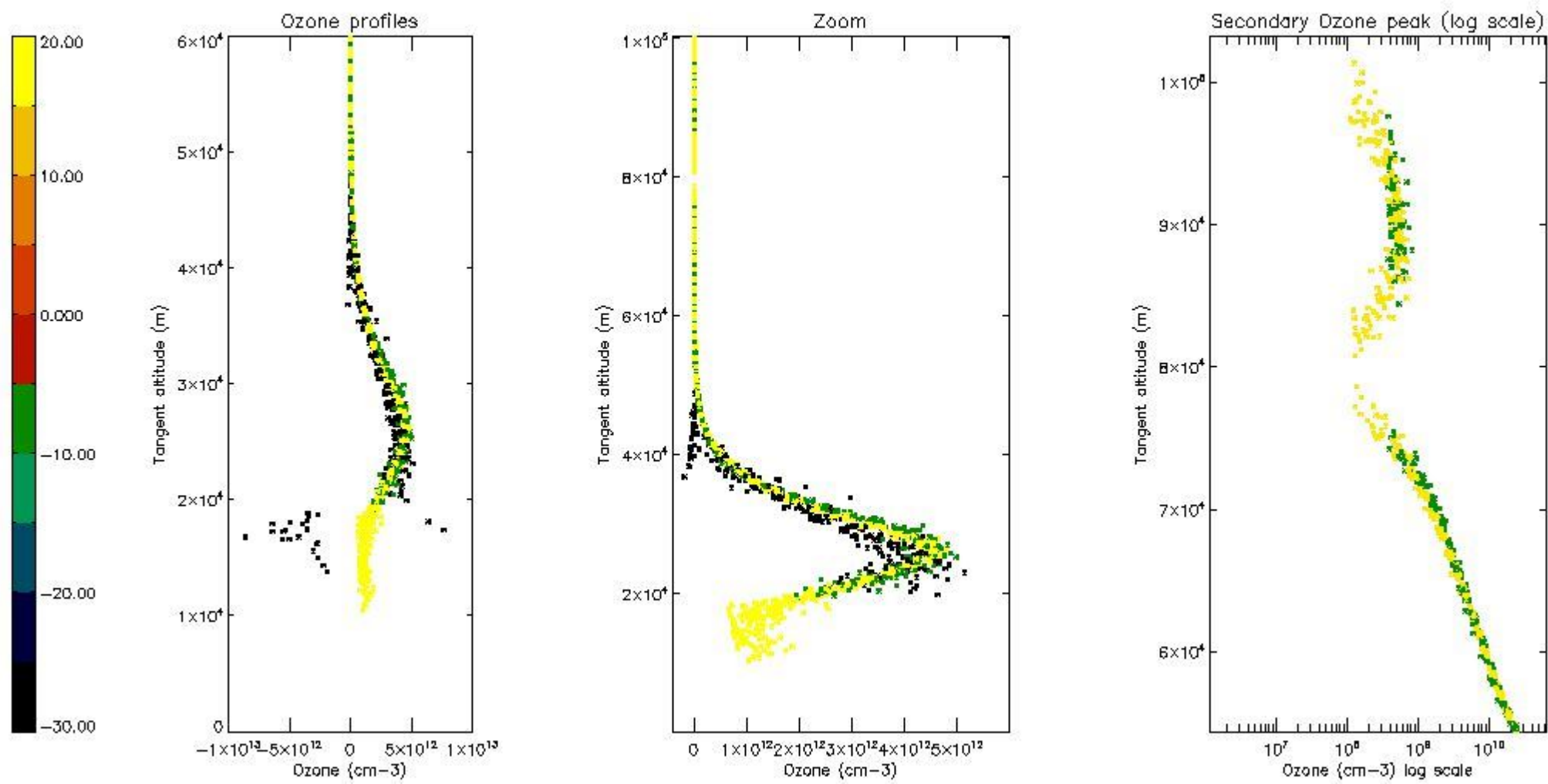
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



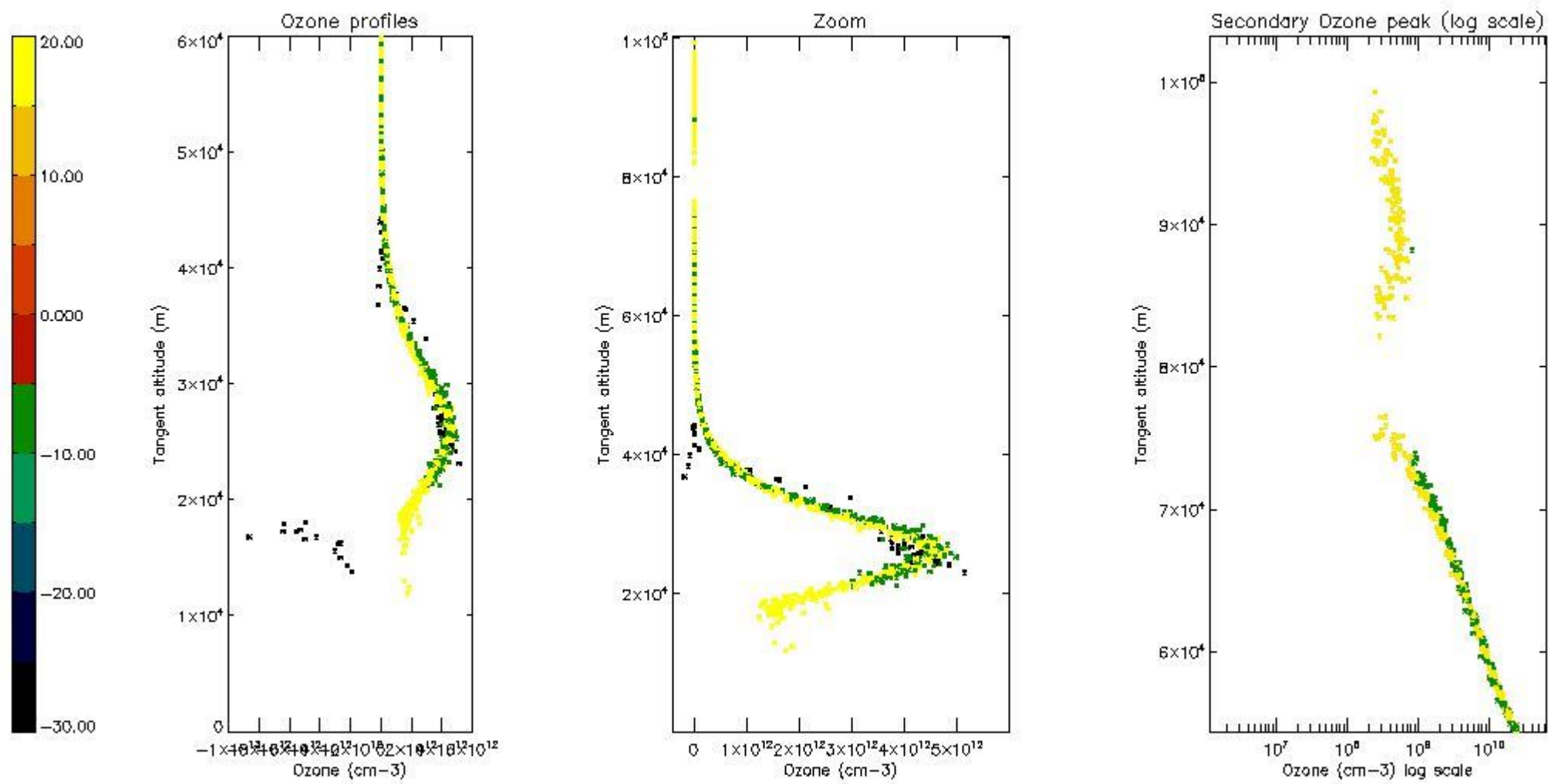
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



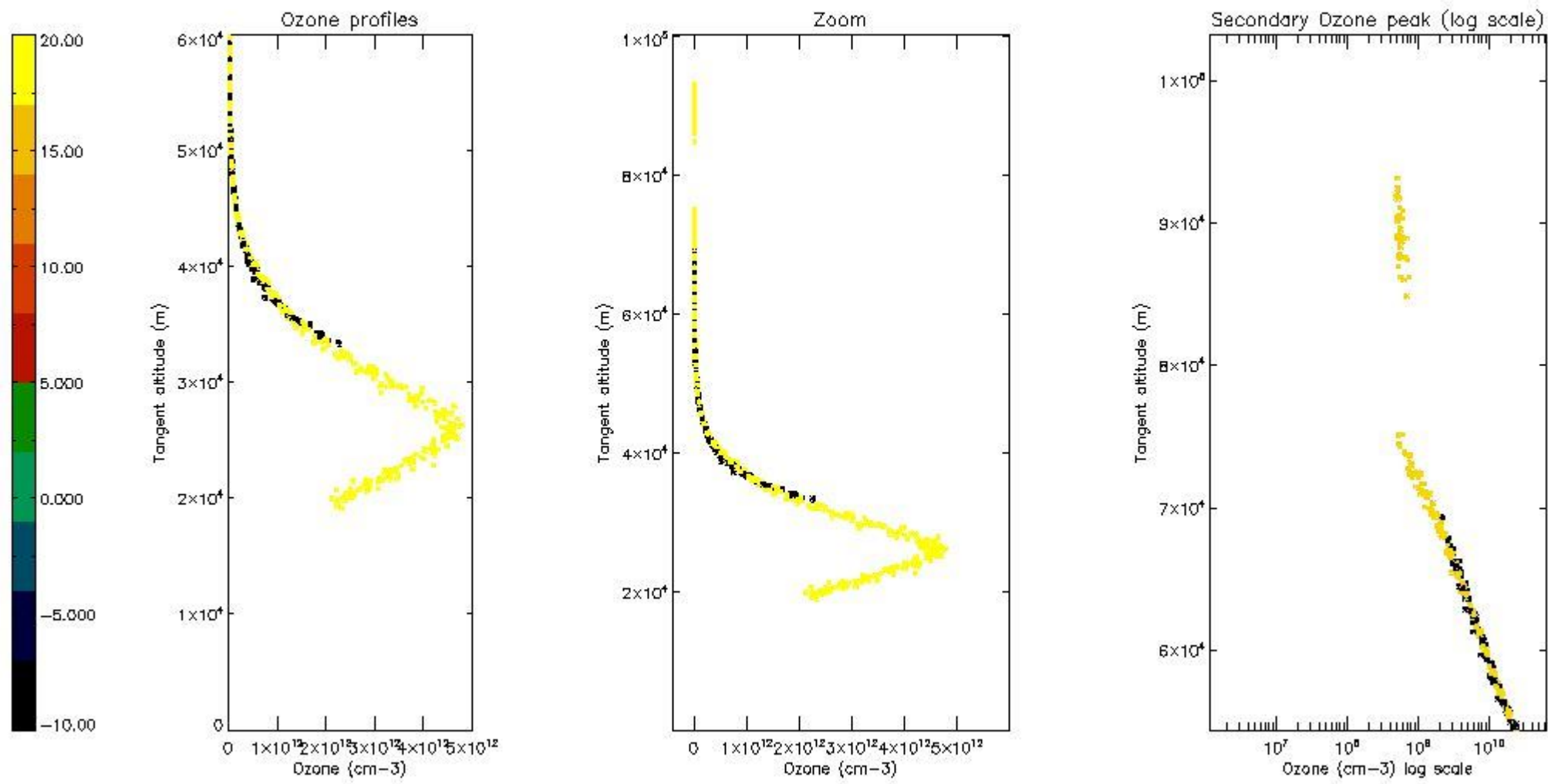
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



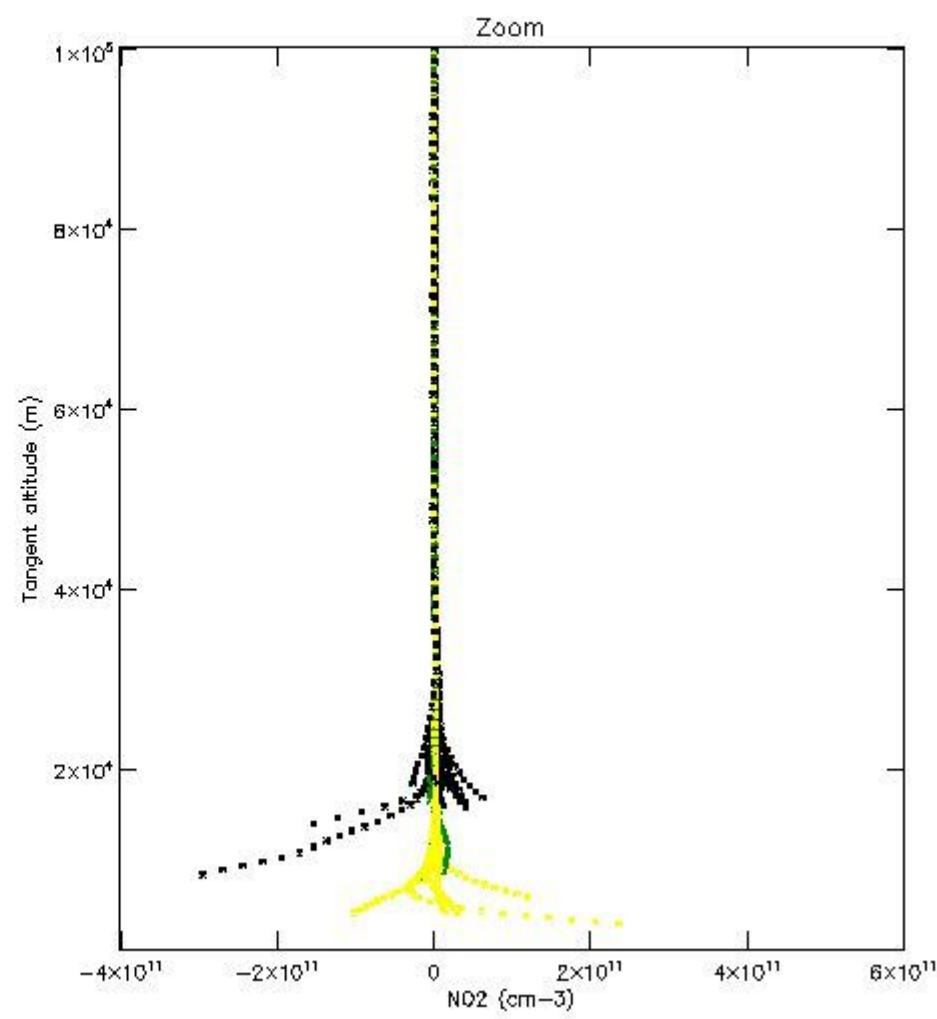
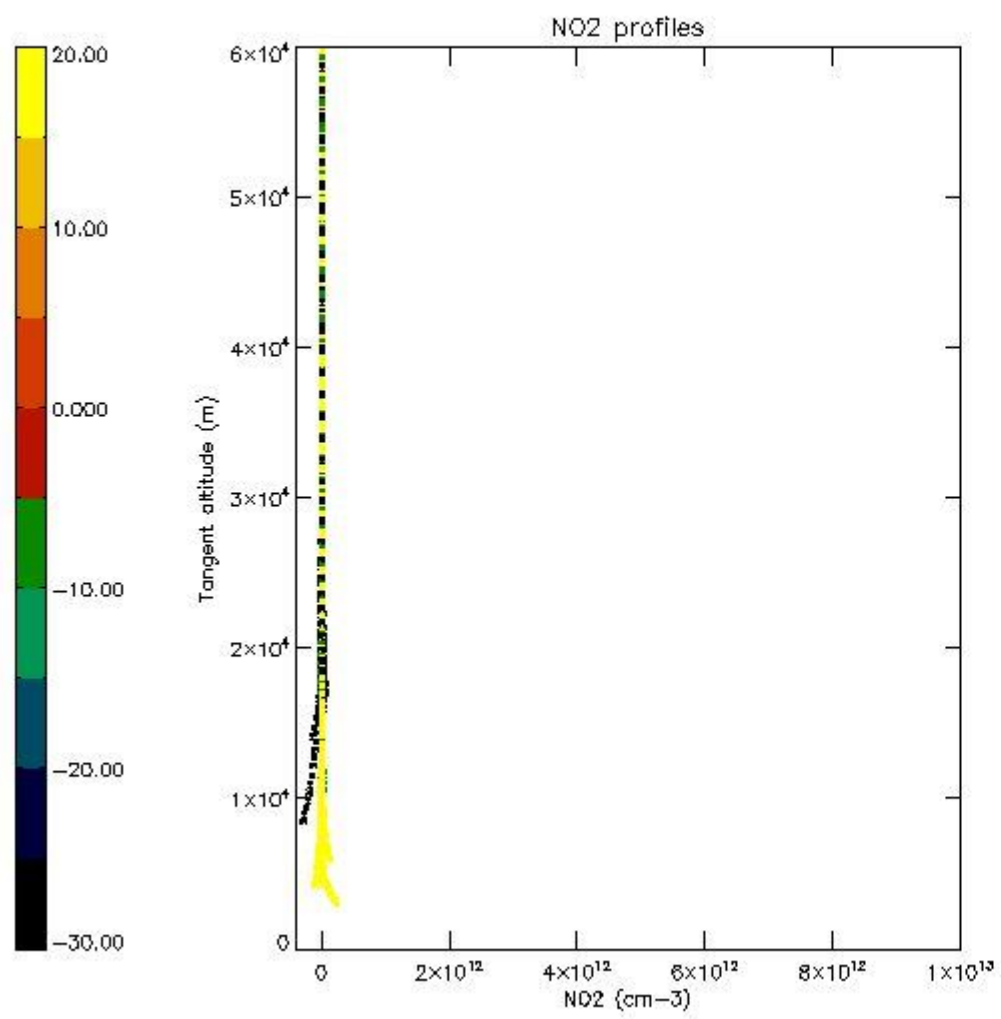
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



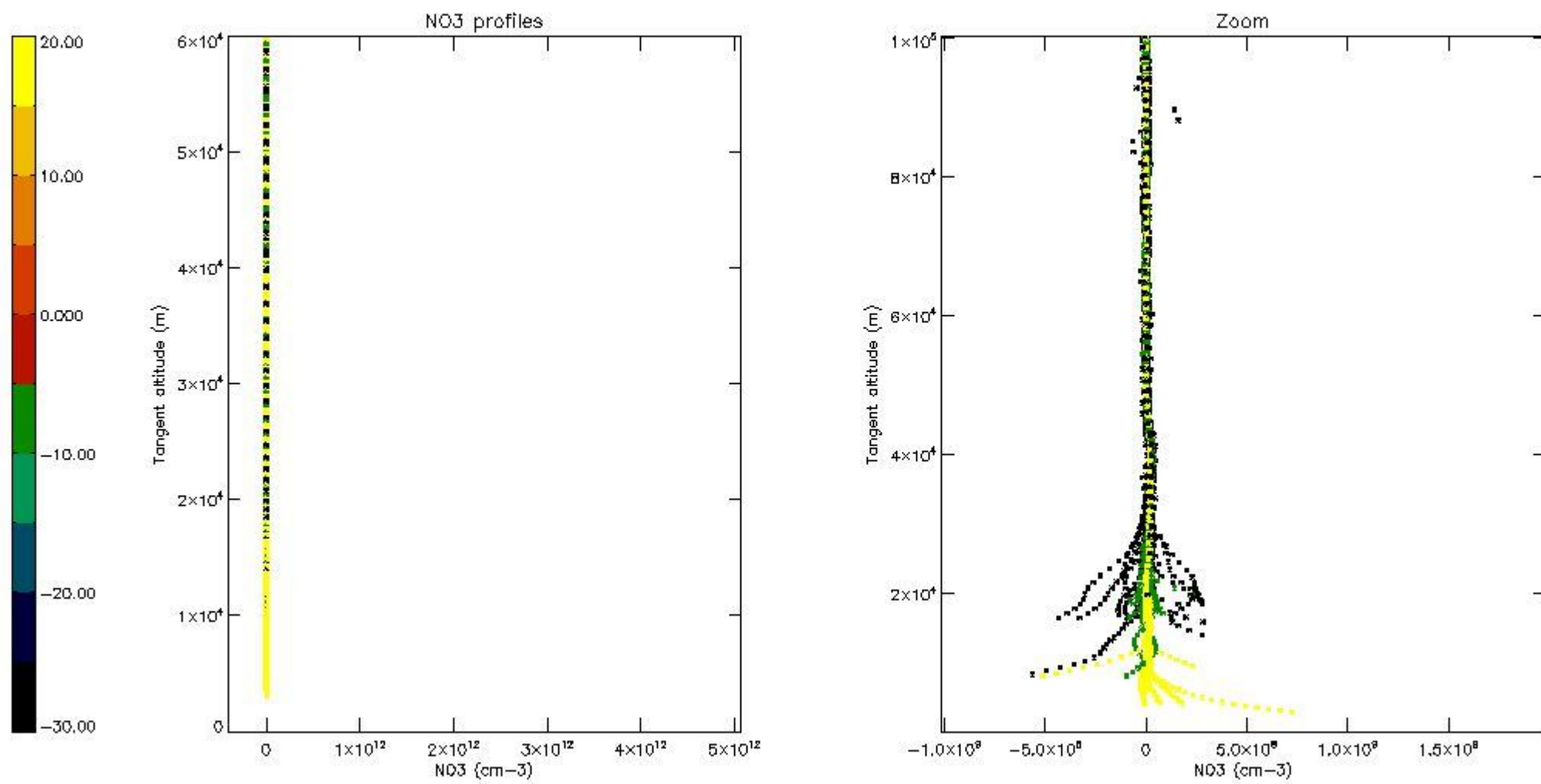
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



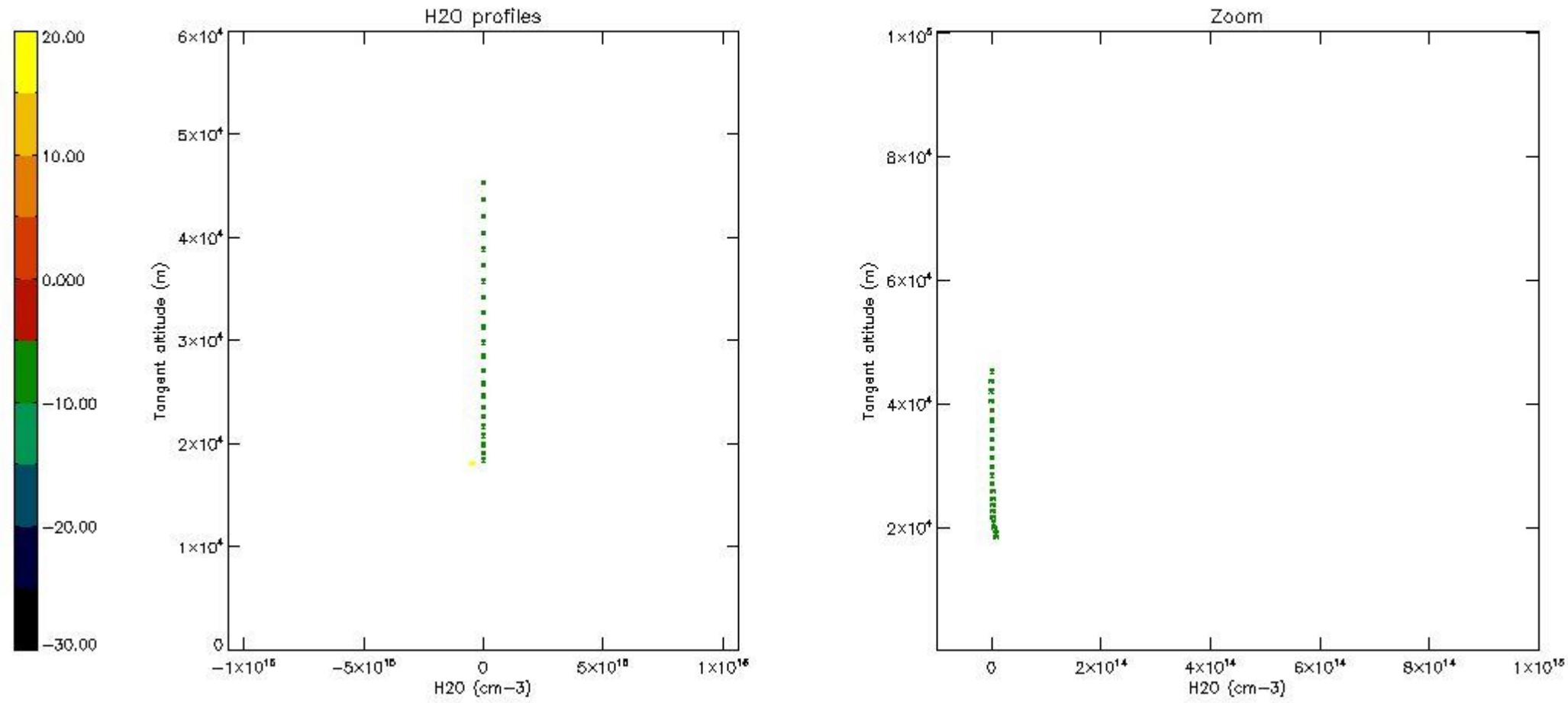
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

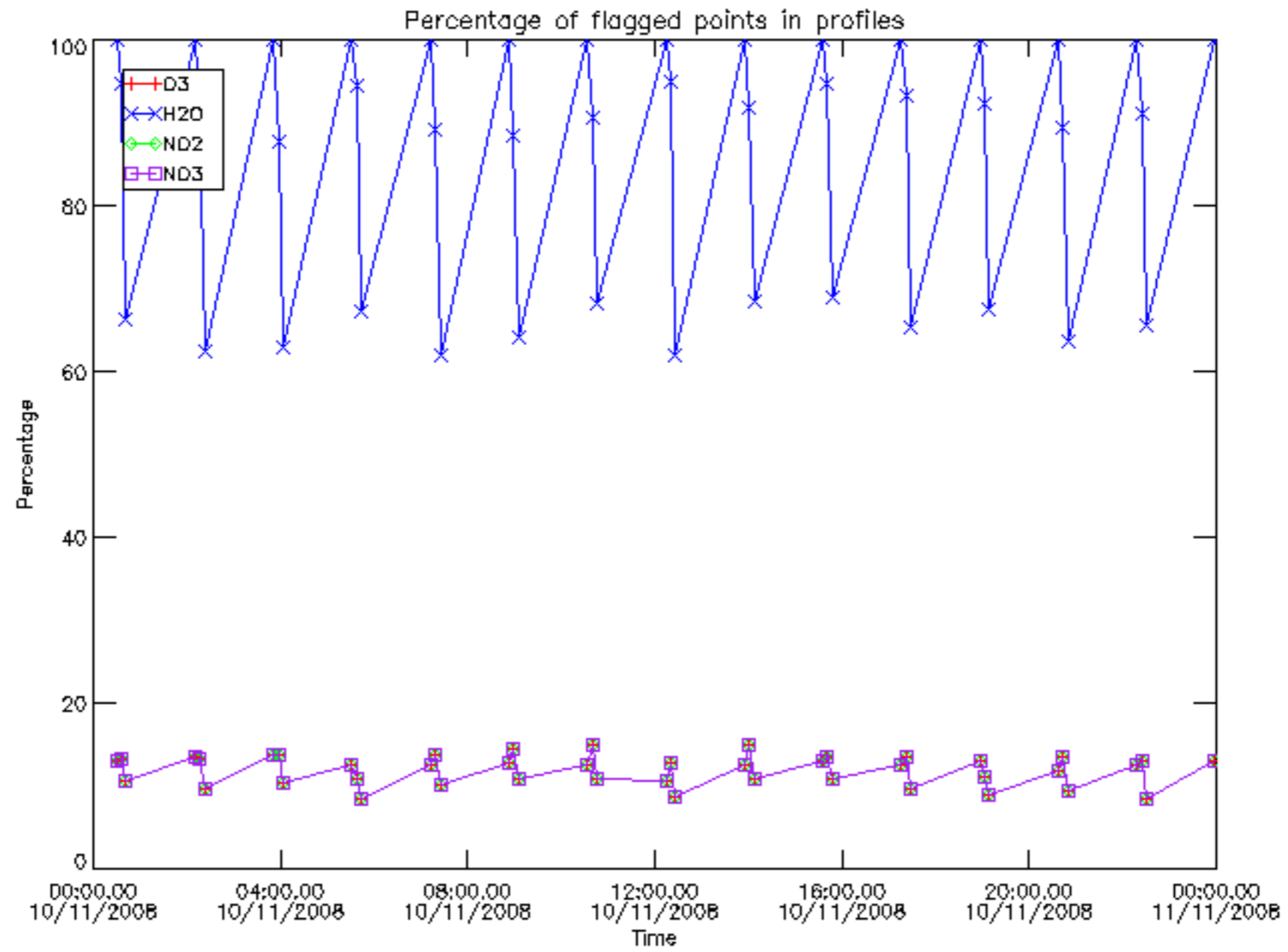
The colorbar represents the latitude.



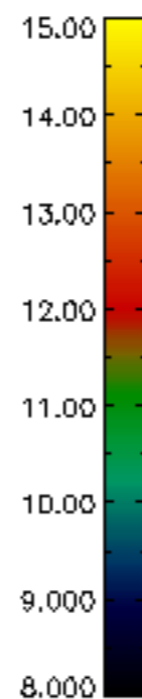
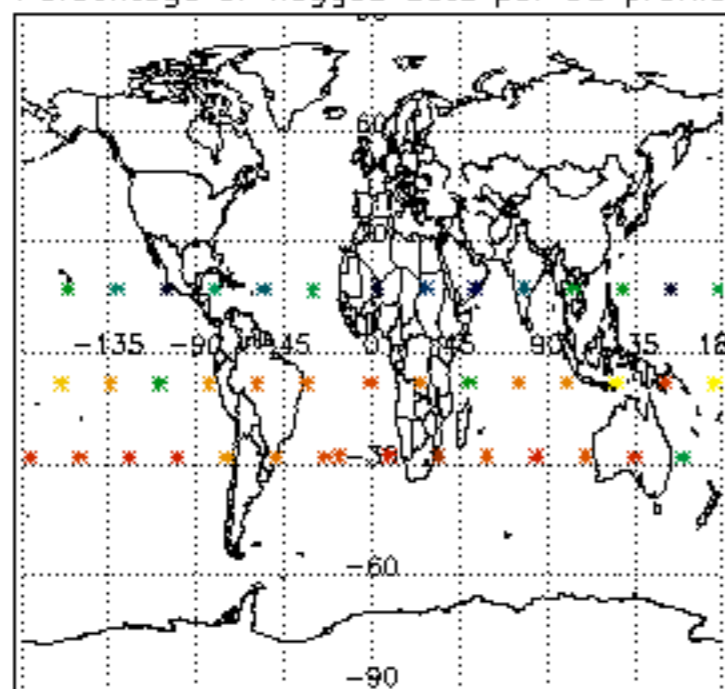
6. Auxiliary Data Files used for the production reported in section 2

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.

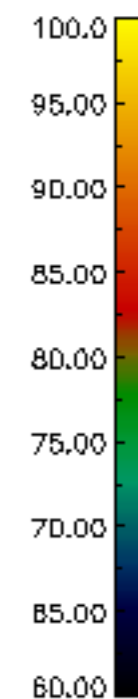
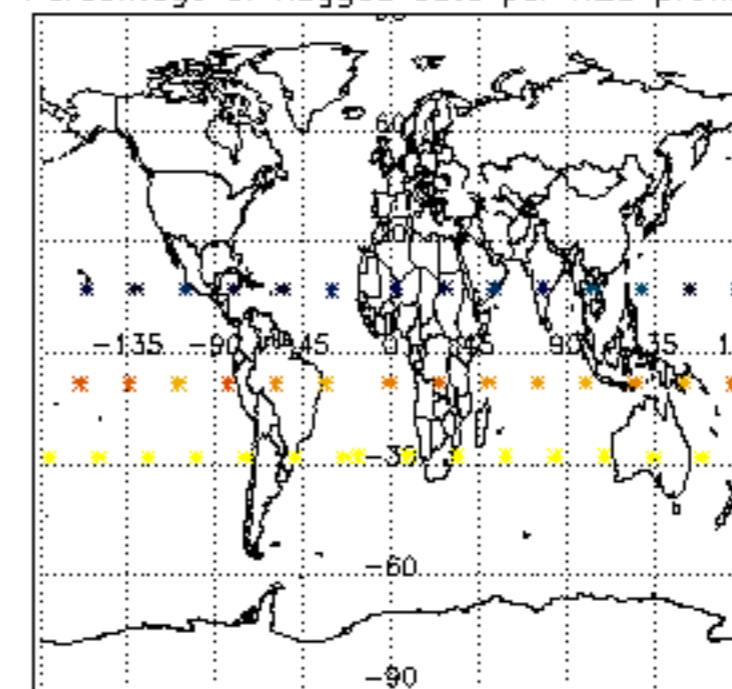
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-NOV-2008 00:01:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-NOV-2008 00:01:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-NOV-2008 00:01:39



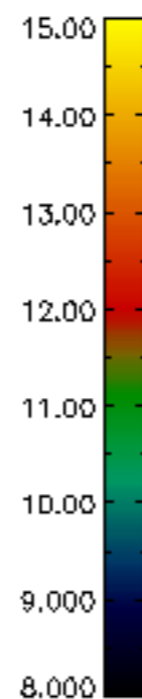
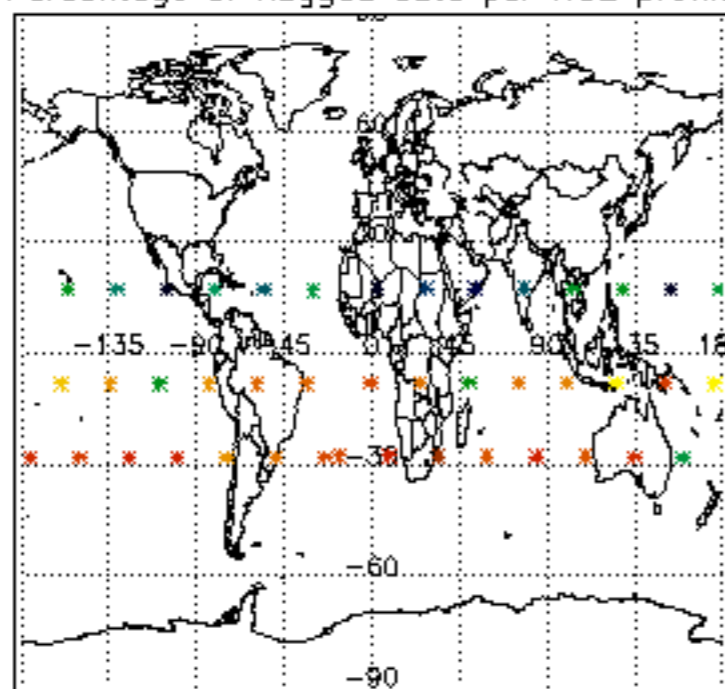
Percentage of flagged data per D3 profile



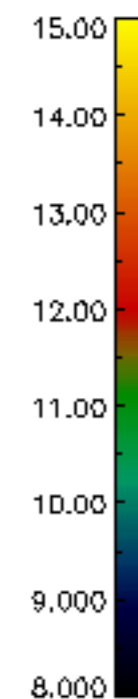
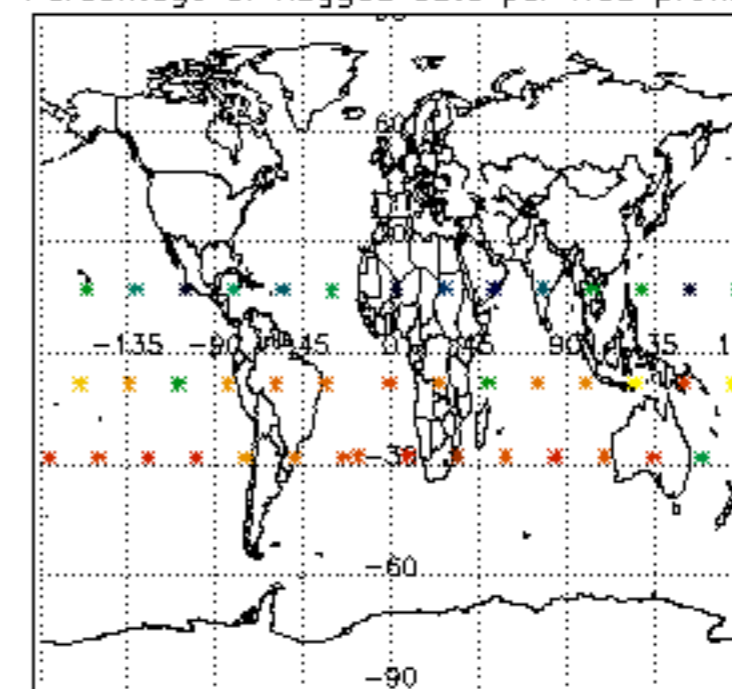
Percentage of flagged data per H2O profile

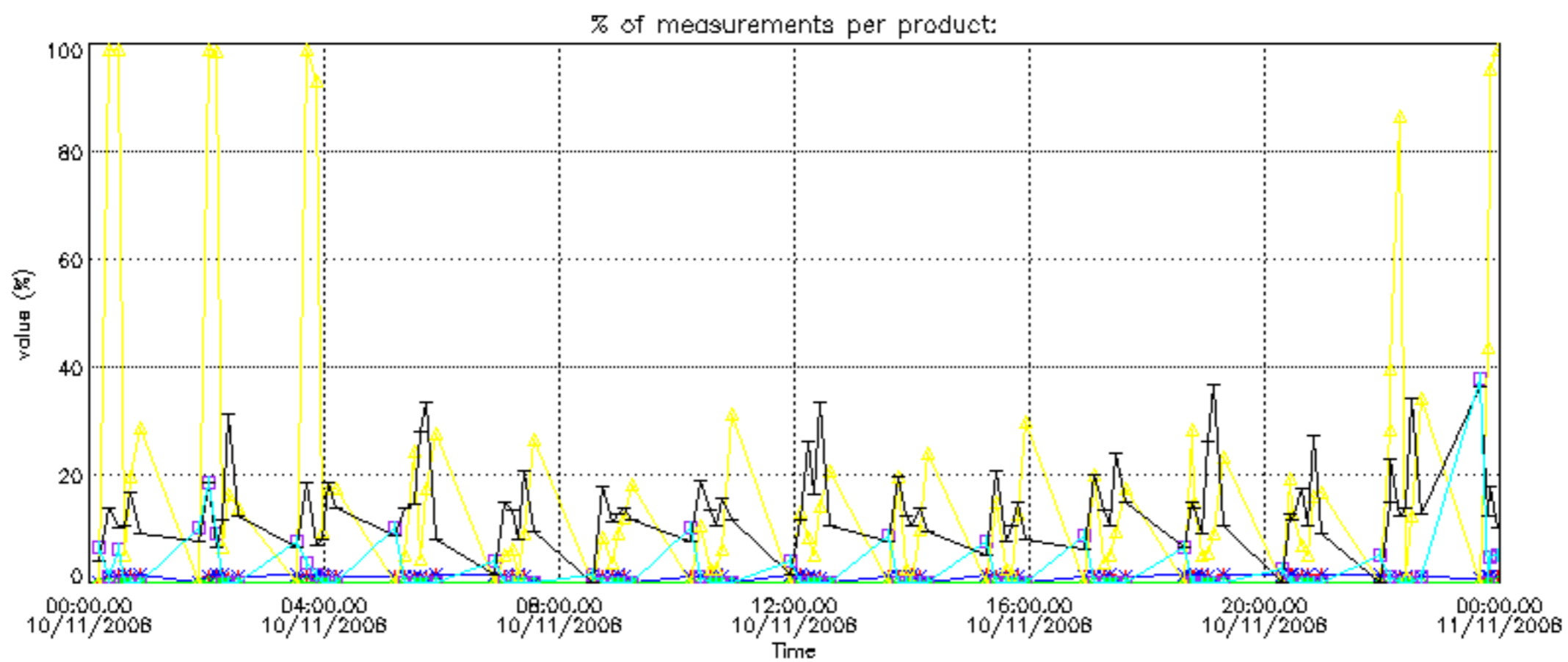


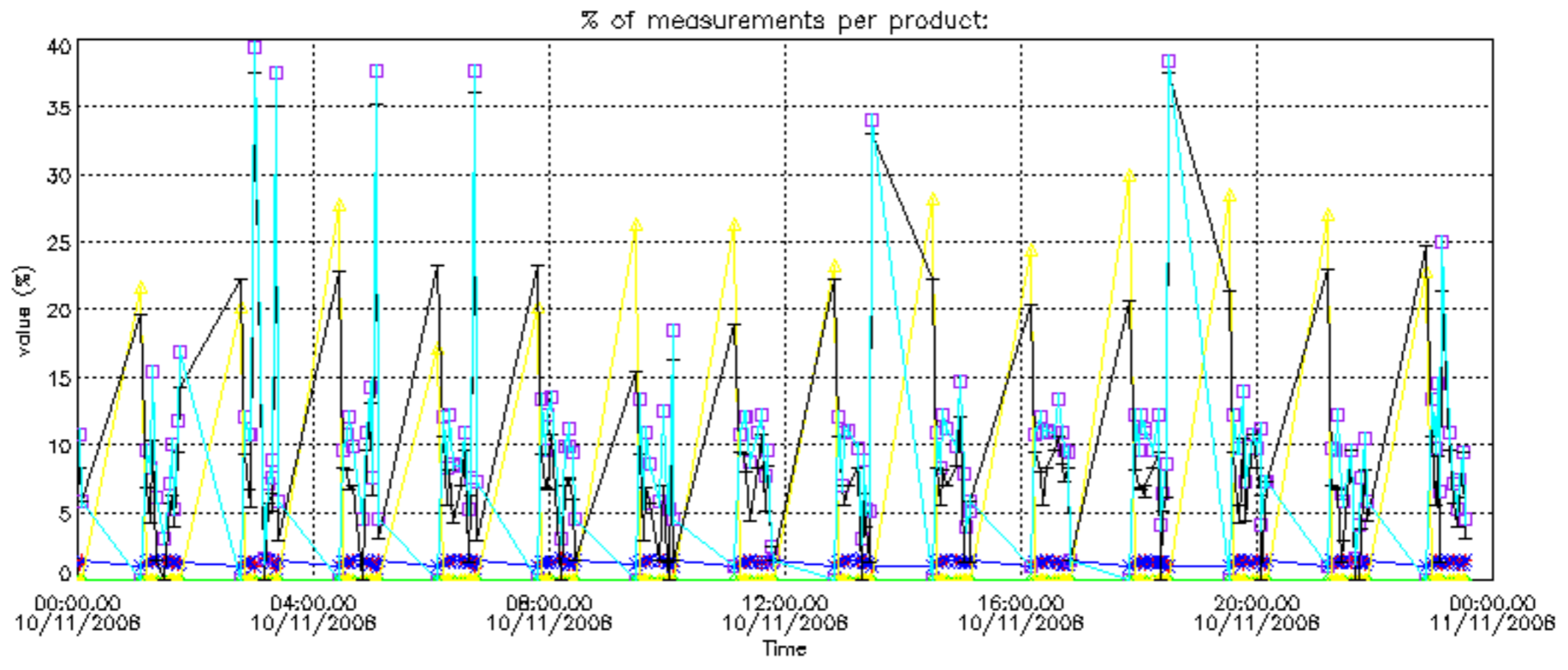
Percentage of flagged data per NO2 profile



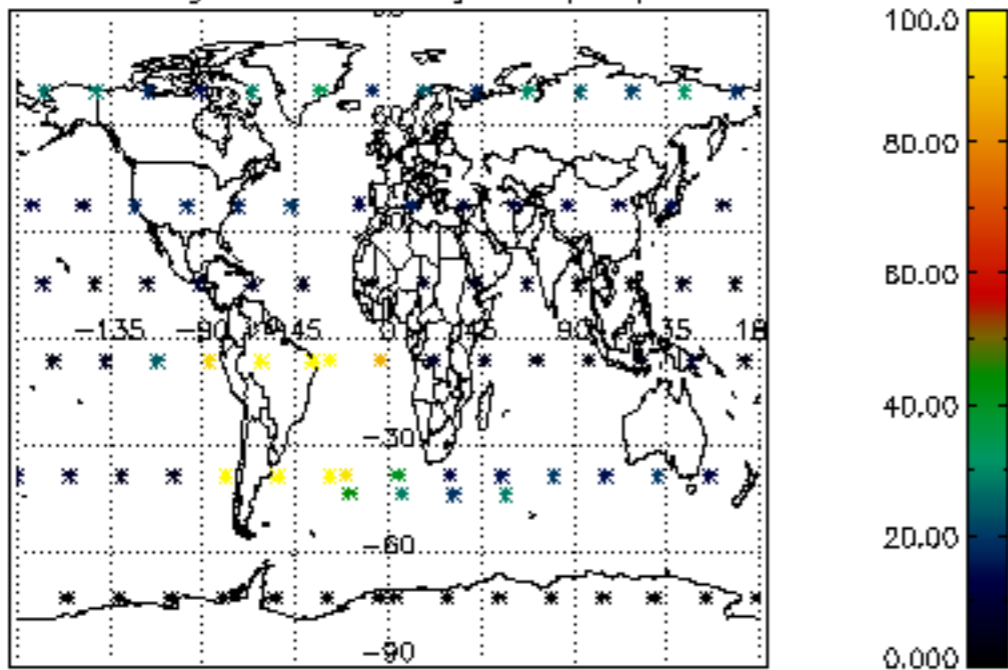
Percentage of flagged data per NO3 profile



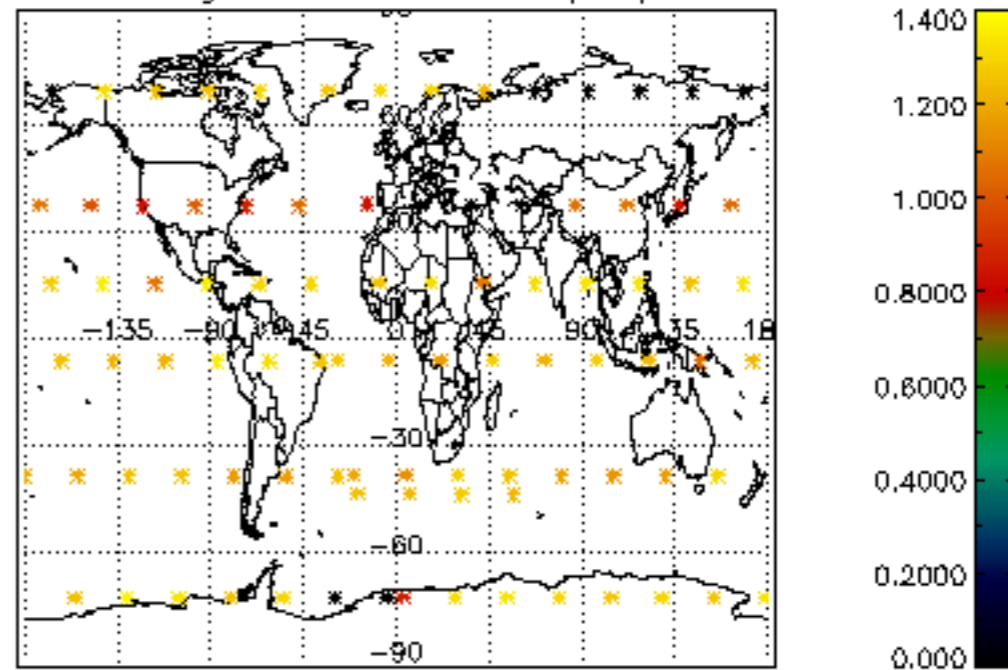




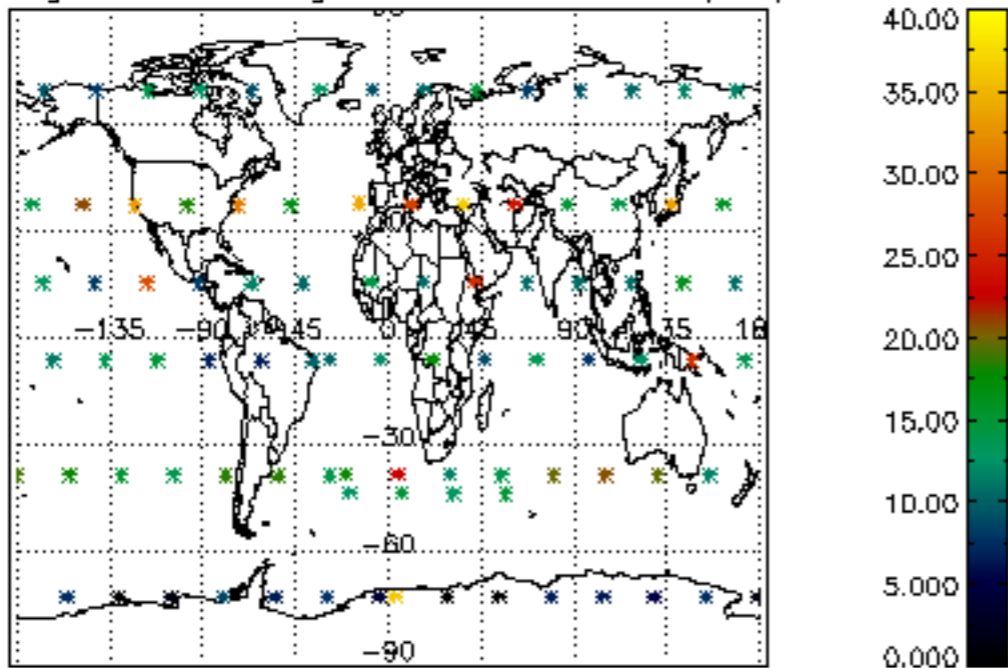
Percentage of cosmic ray hits per profile



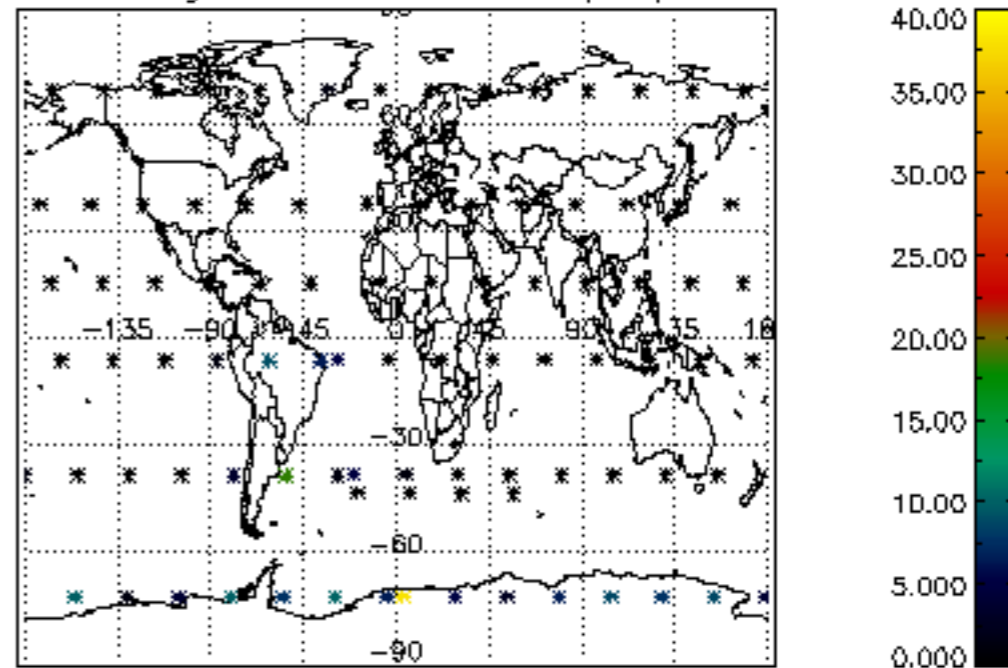
Percentage of datation errors per profile



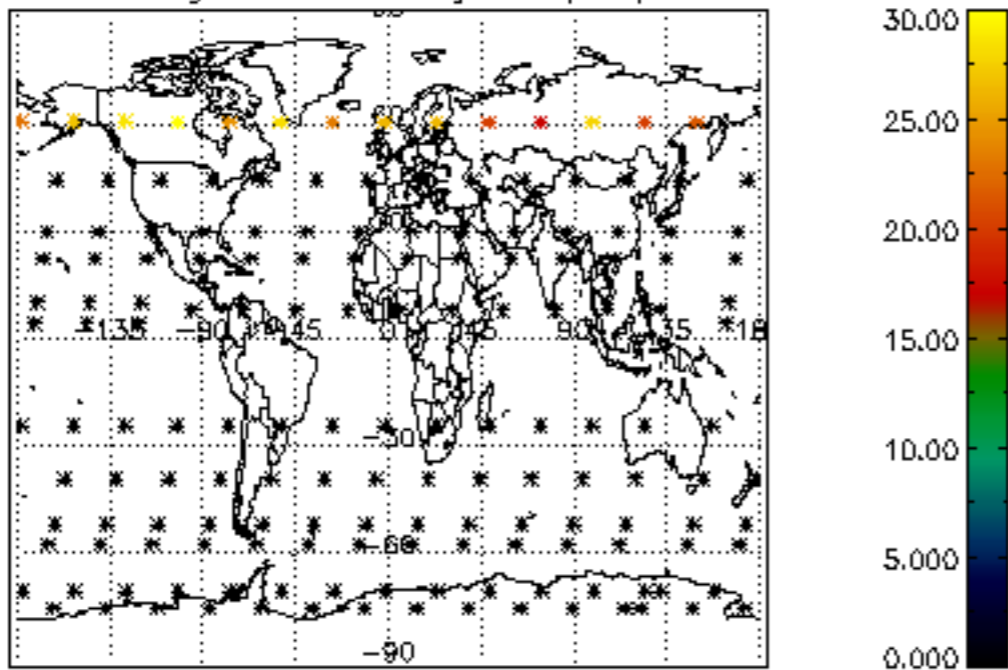
Percentage of star falling outside central band per profile



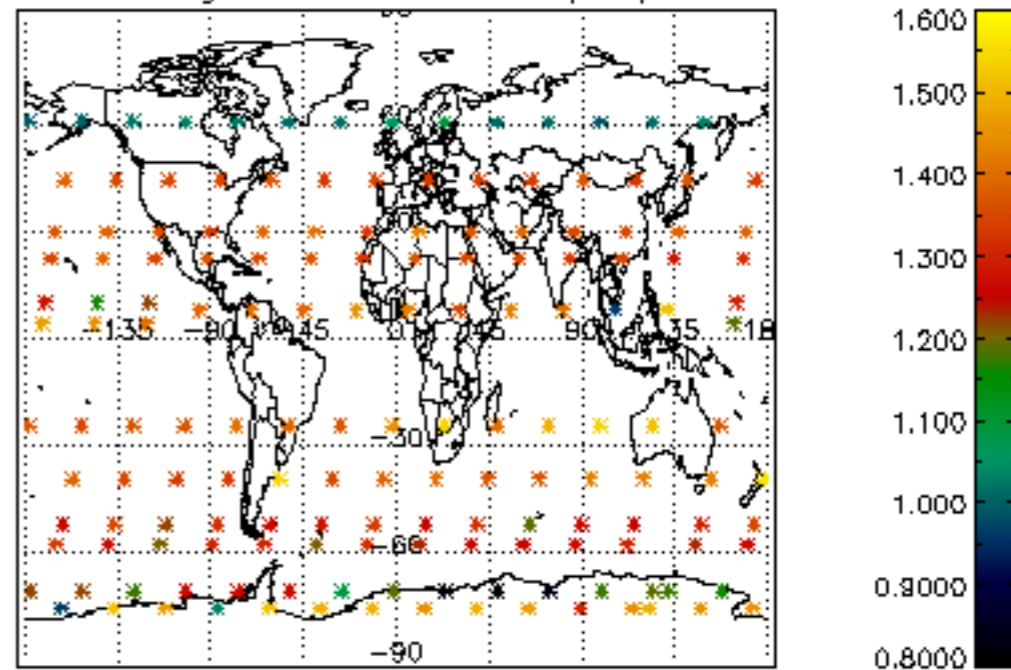
Percentage of saturation errors per profile



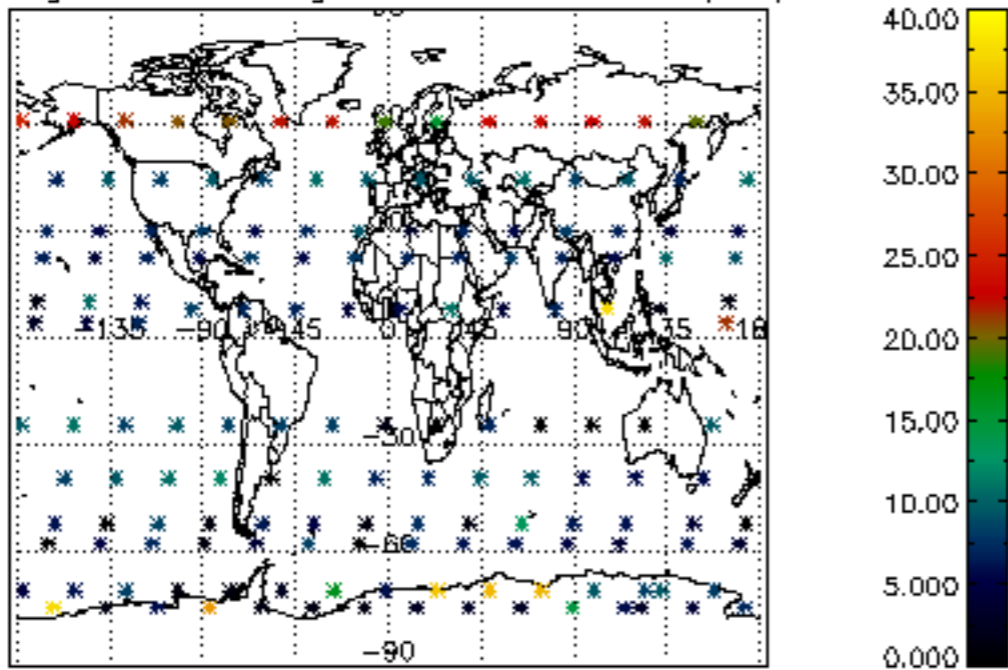
Percentage of cosmic ray hits per profile



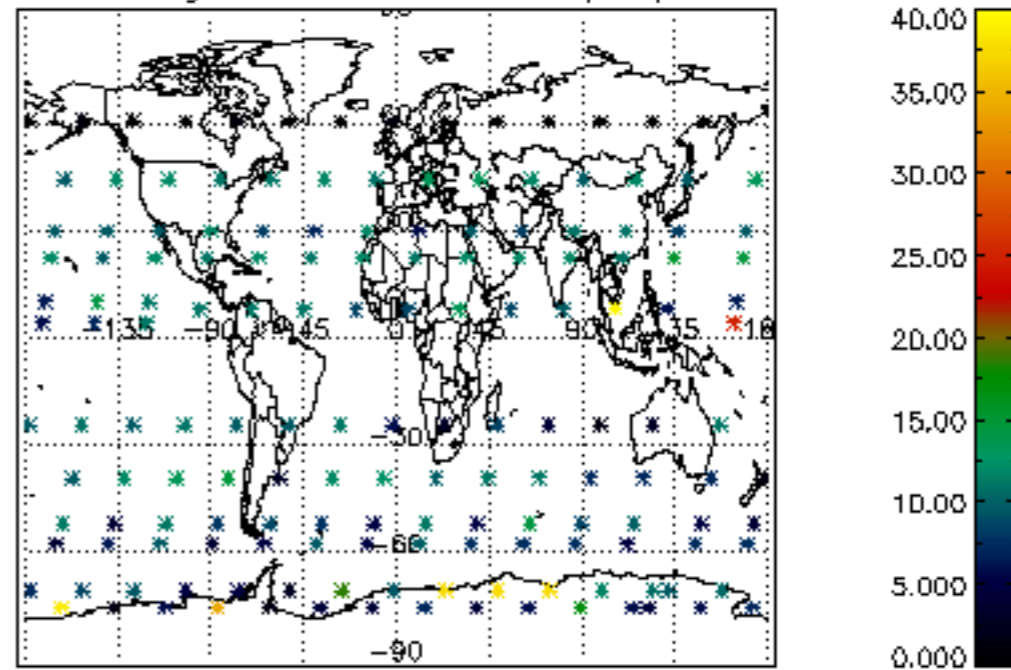
Percentage of datation errors per profile

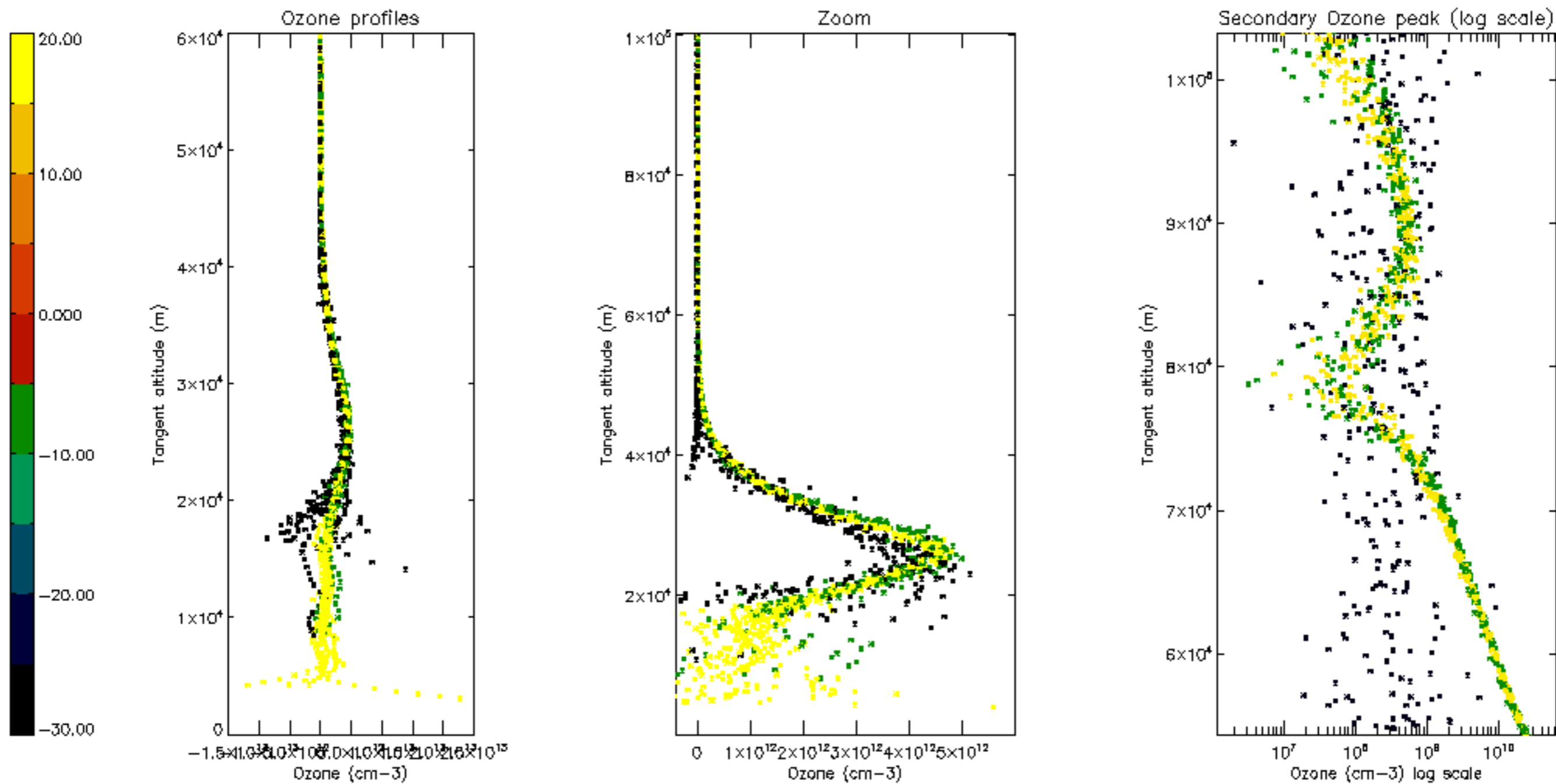


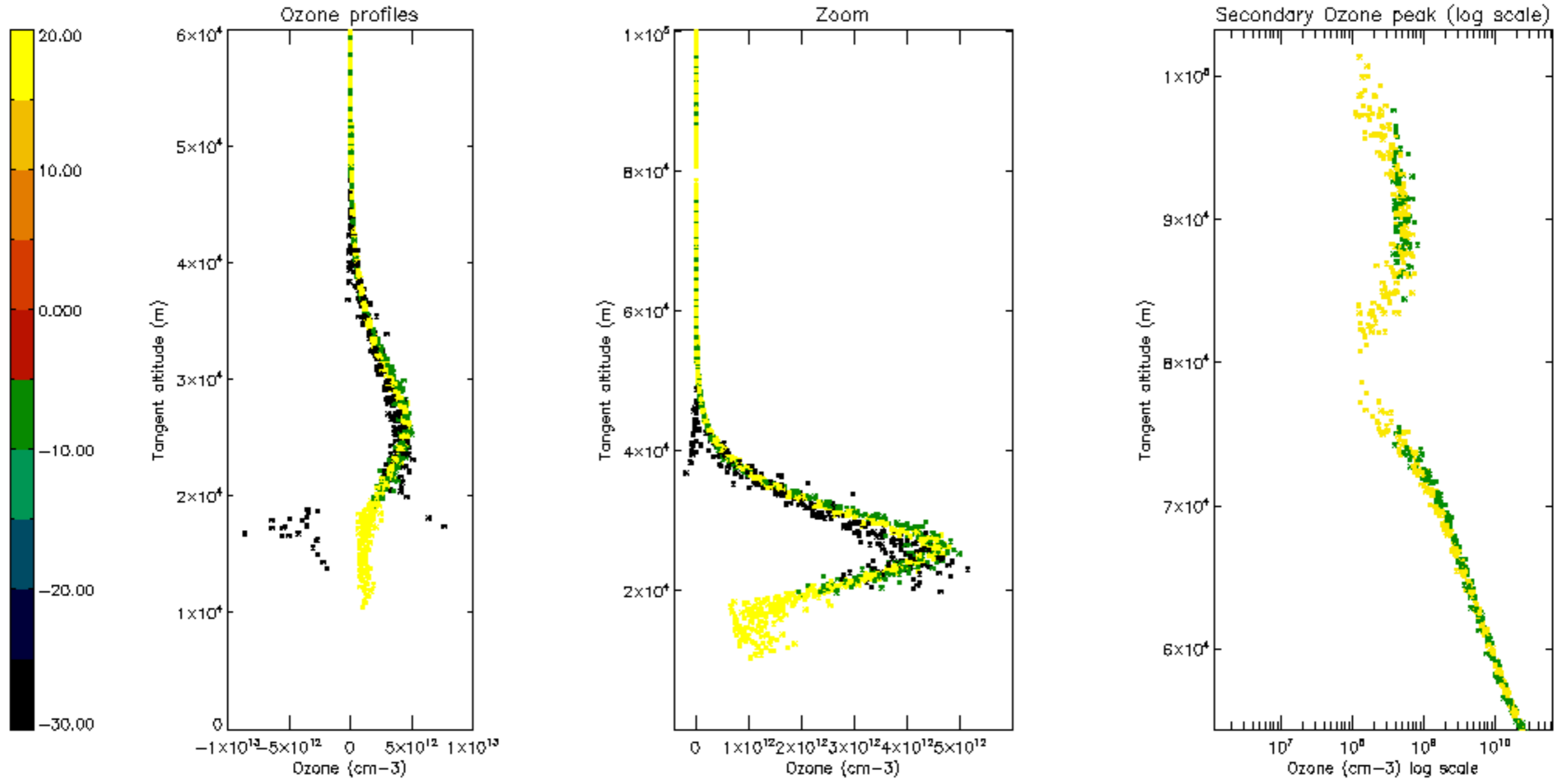
Percentage of star falling outside central band per profile

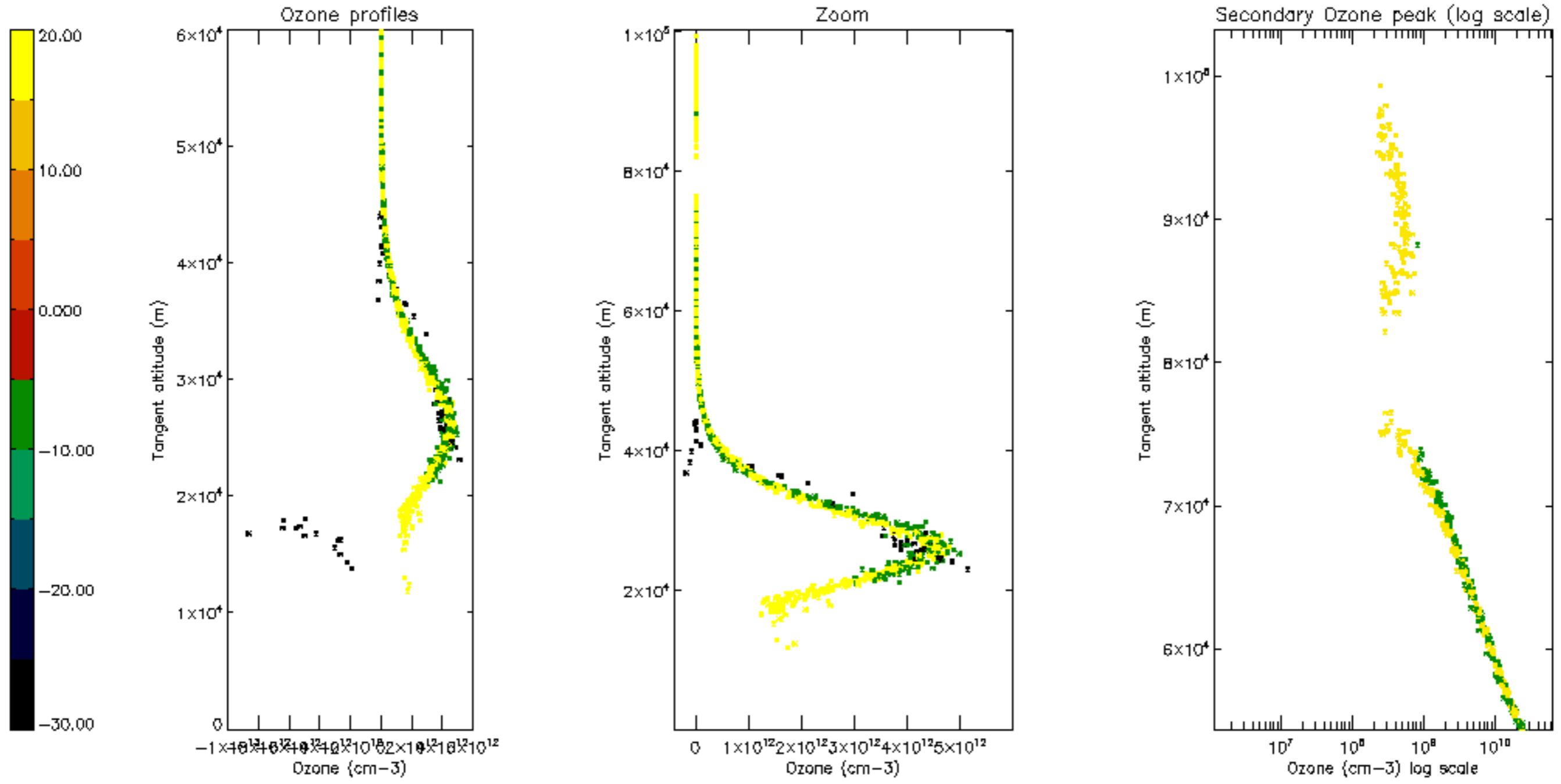


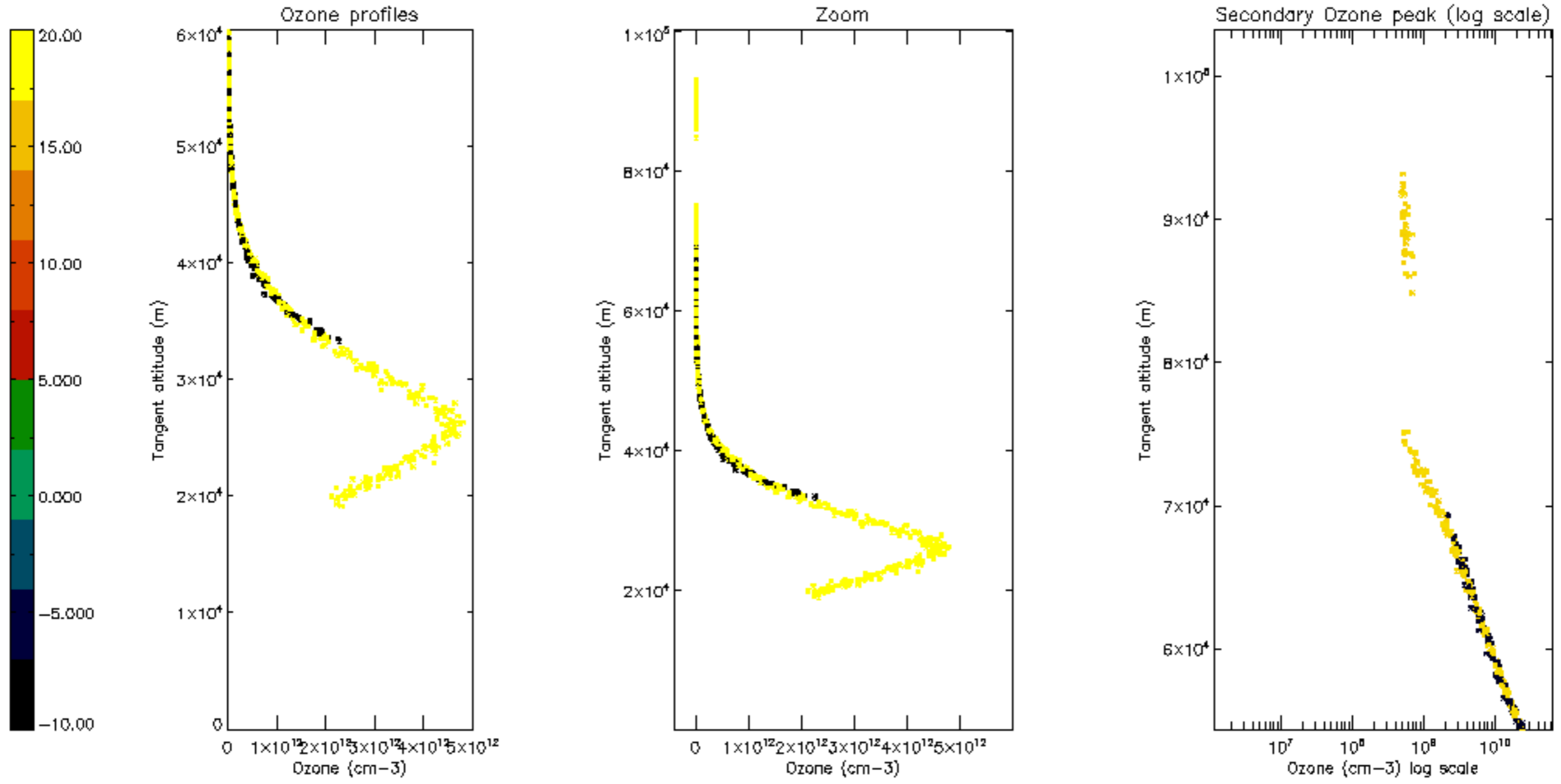
Percentage of saturation errors per profile

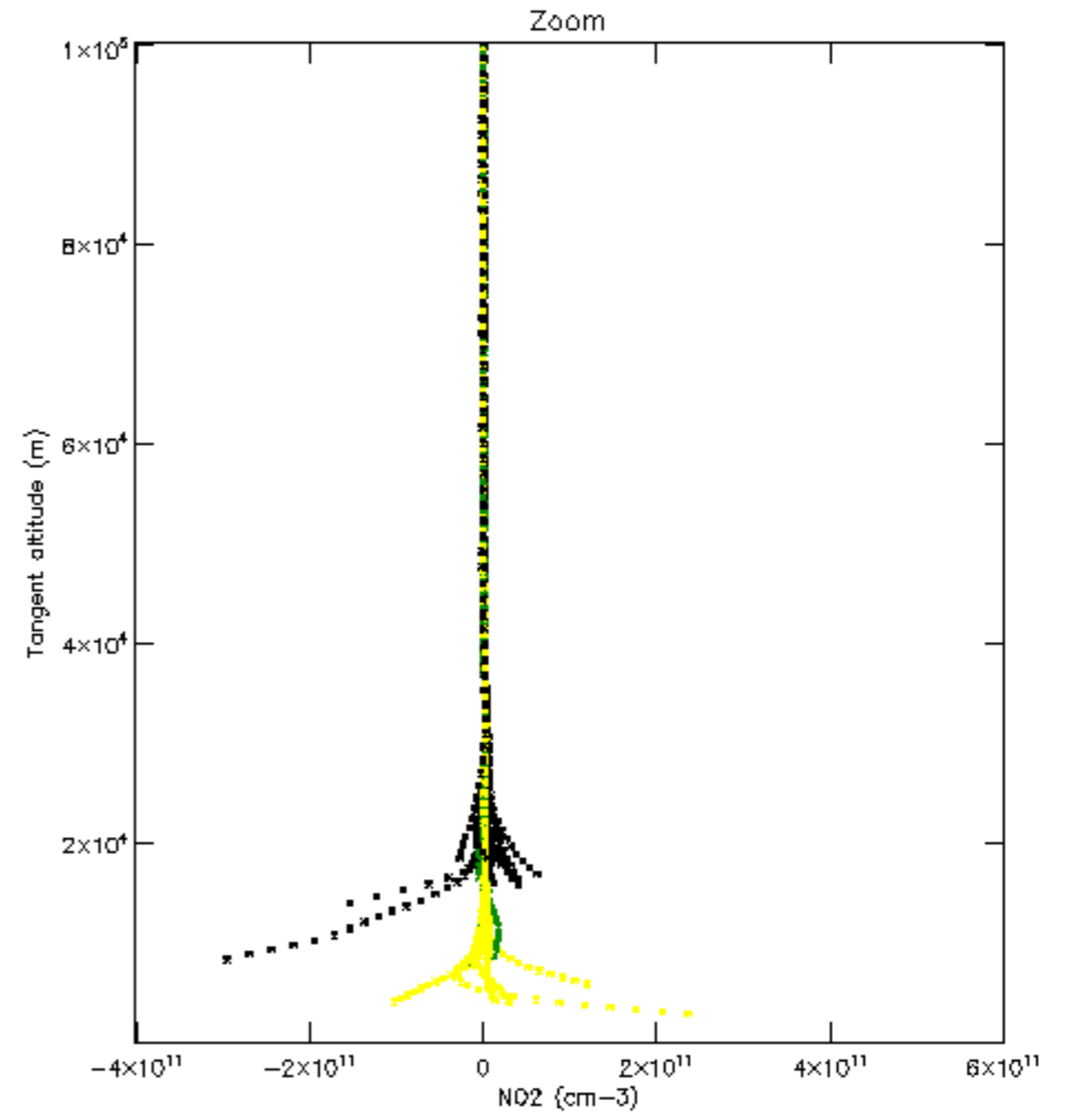
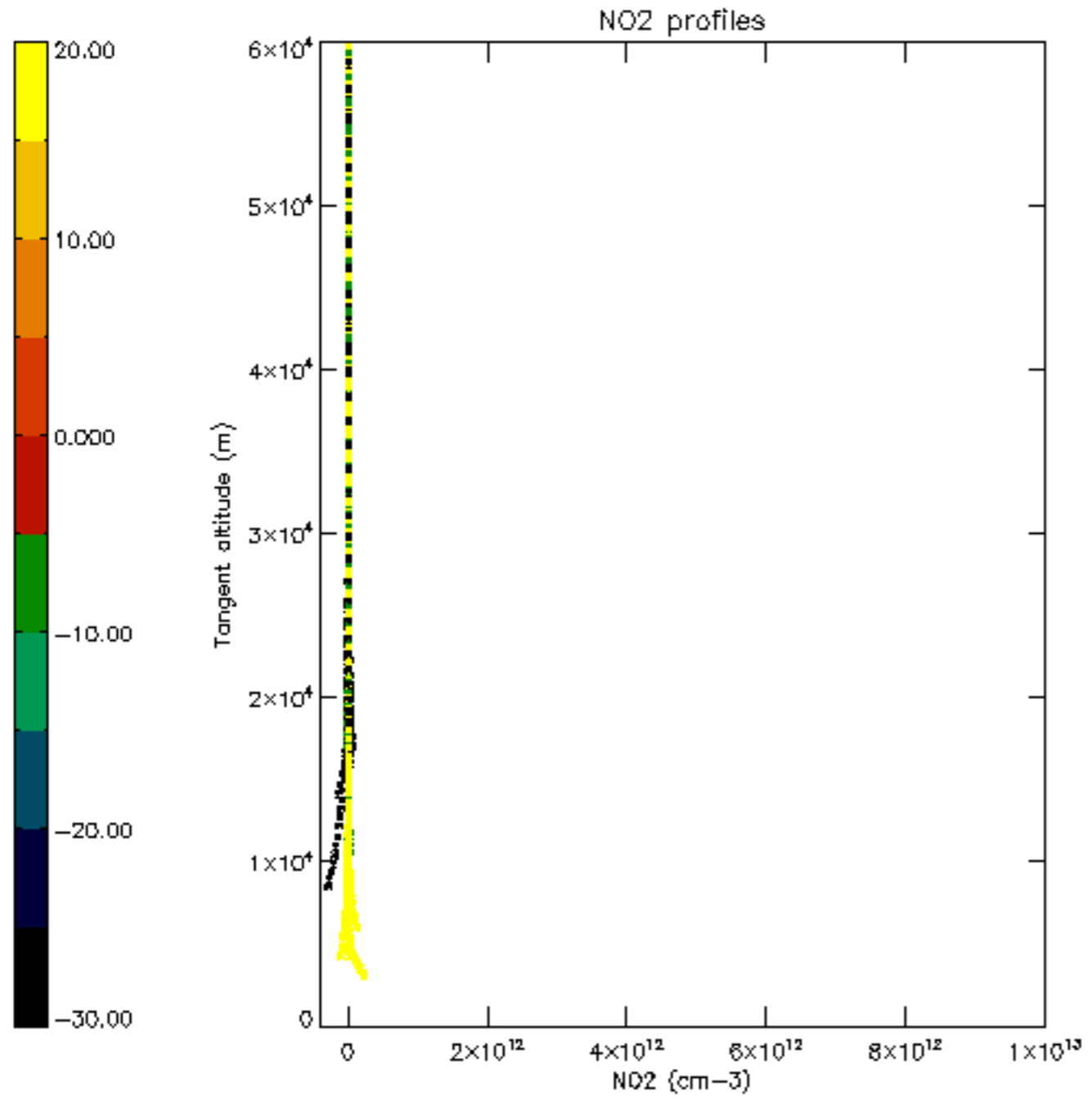


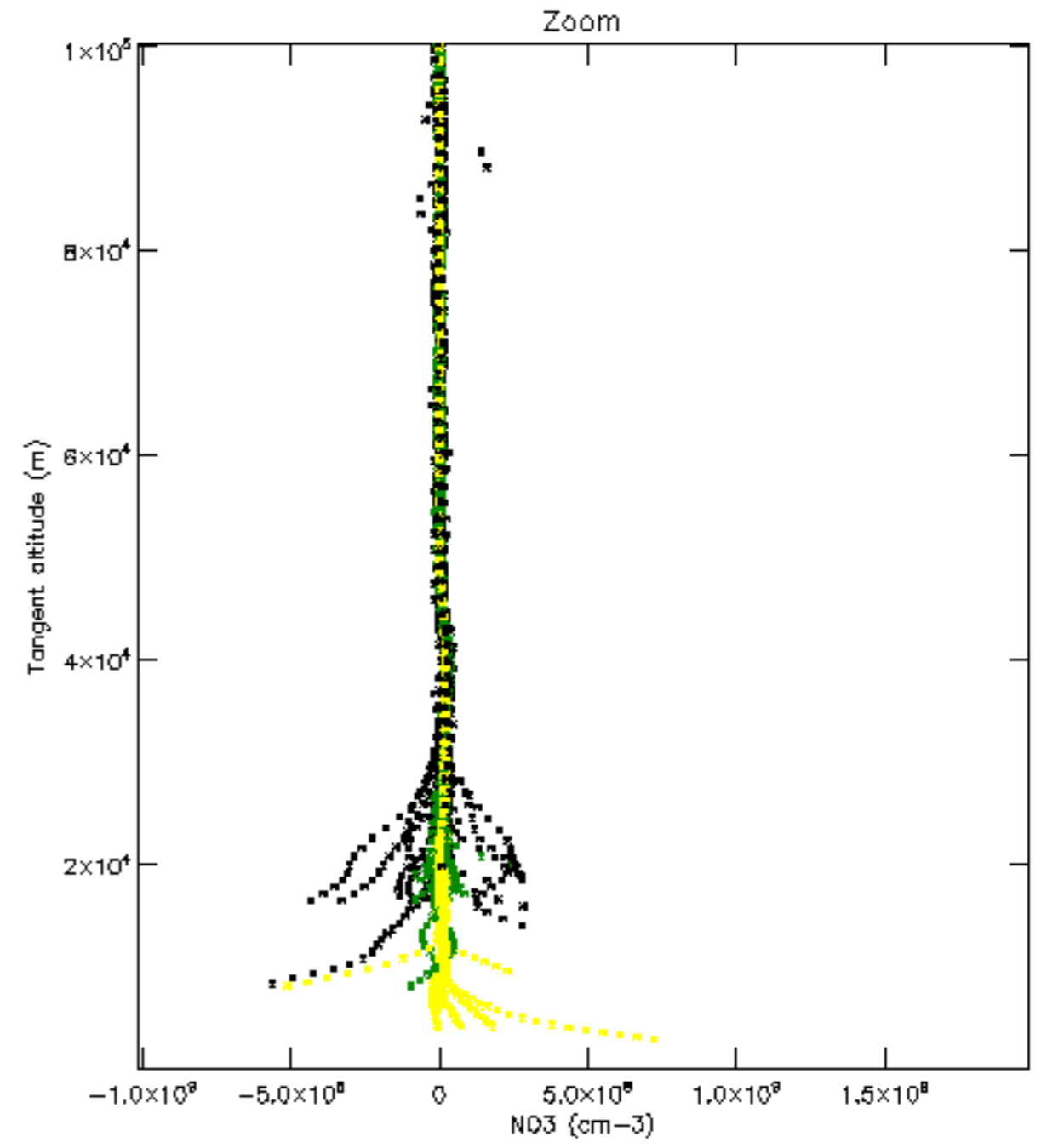
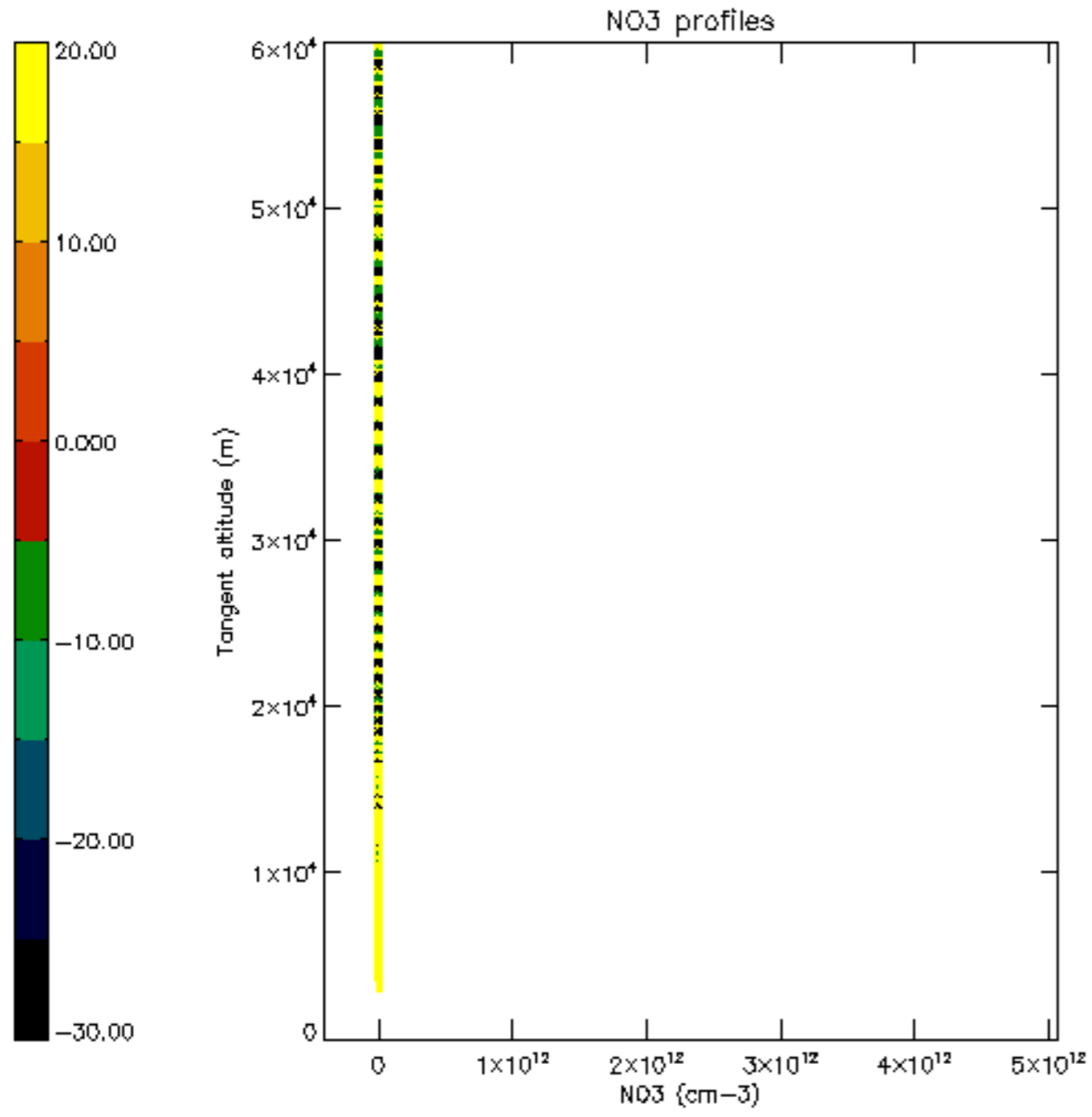


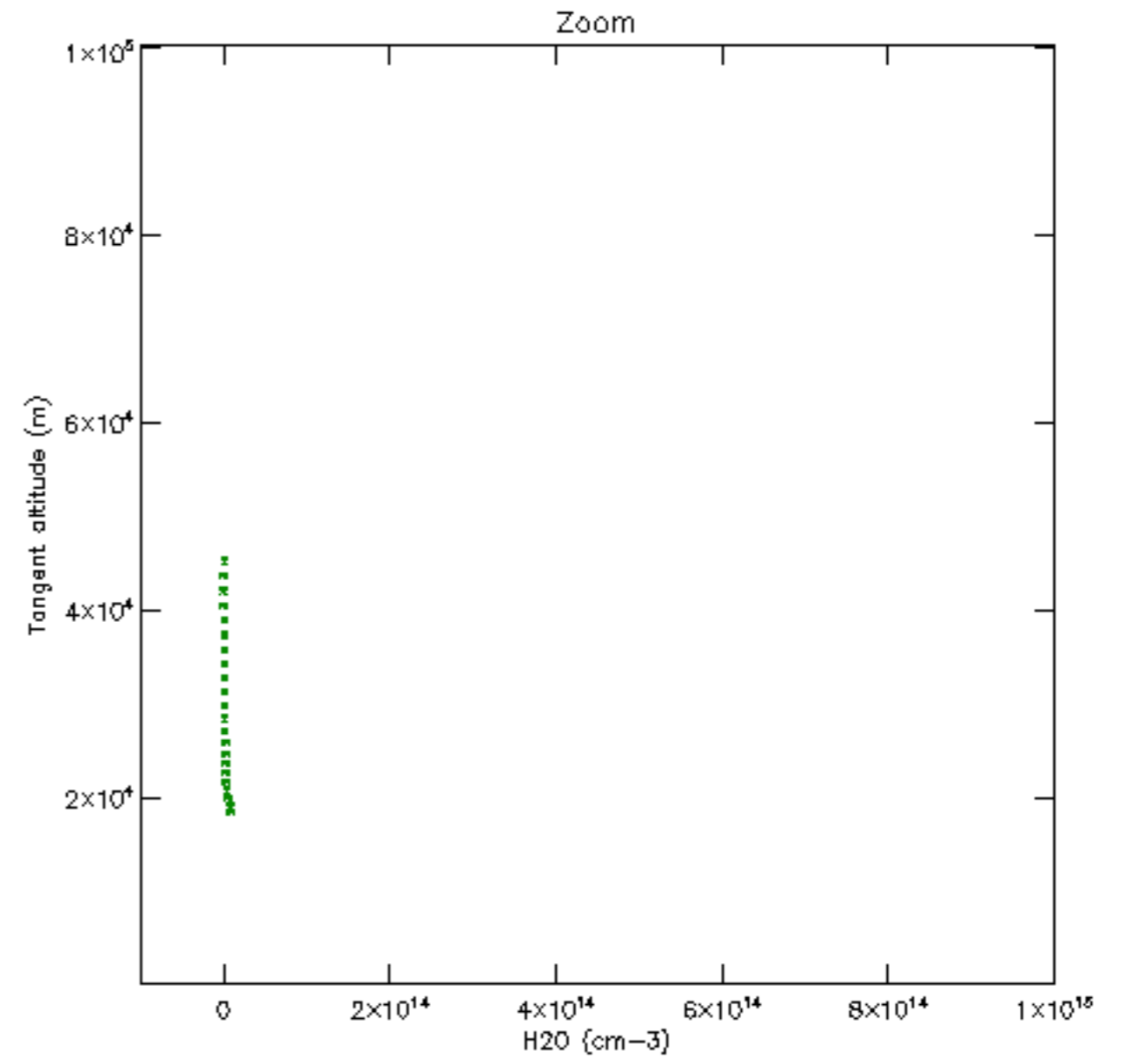
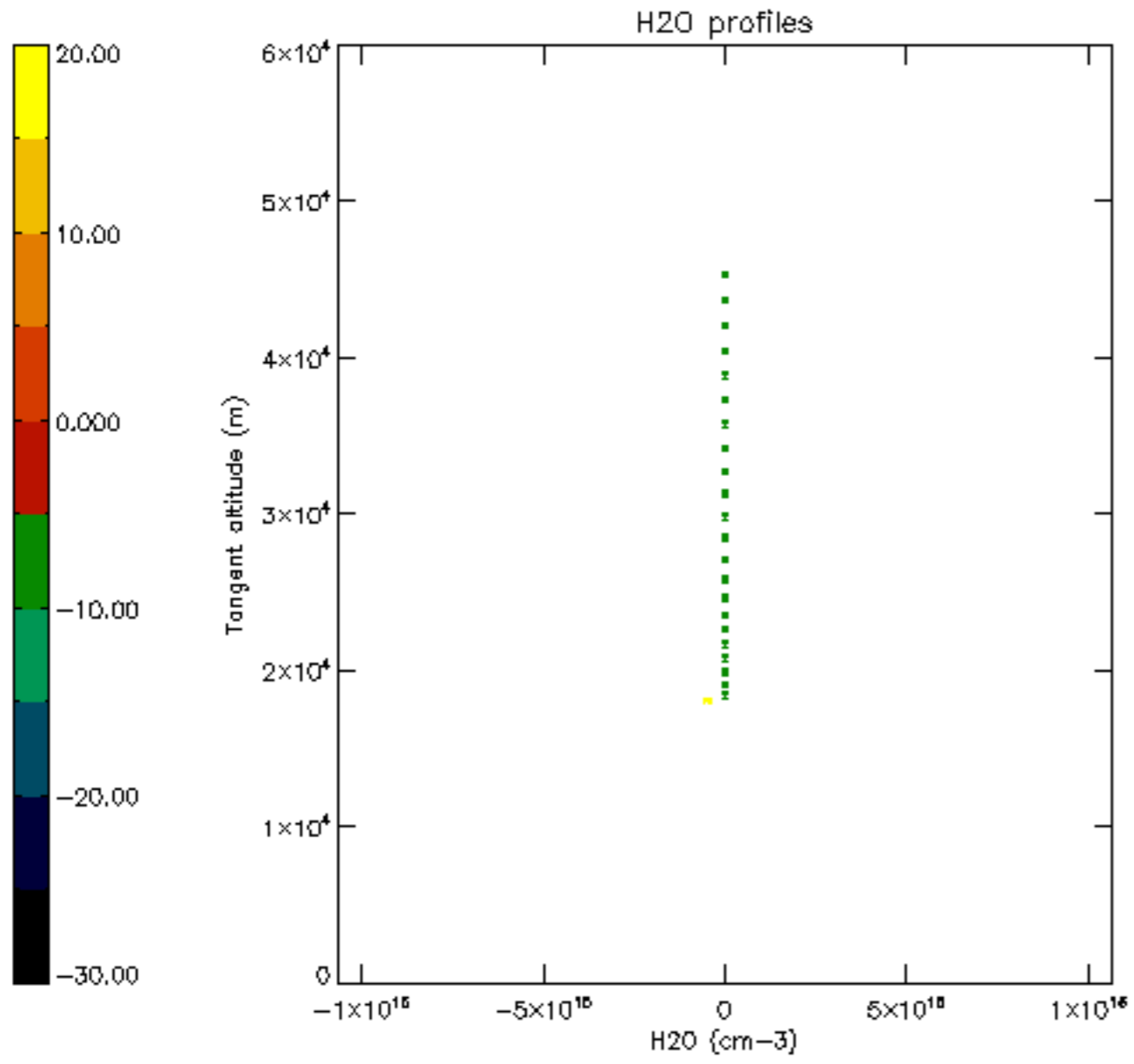


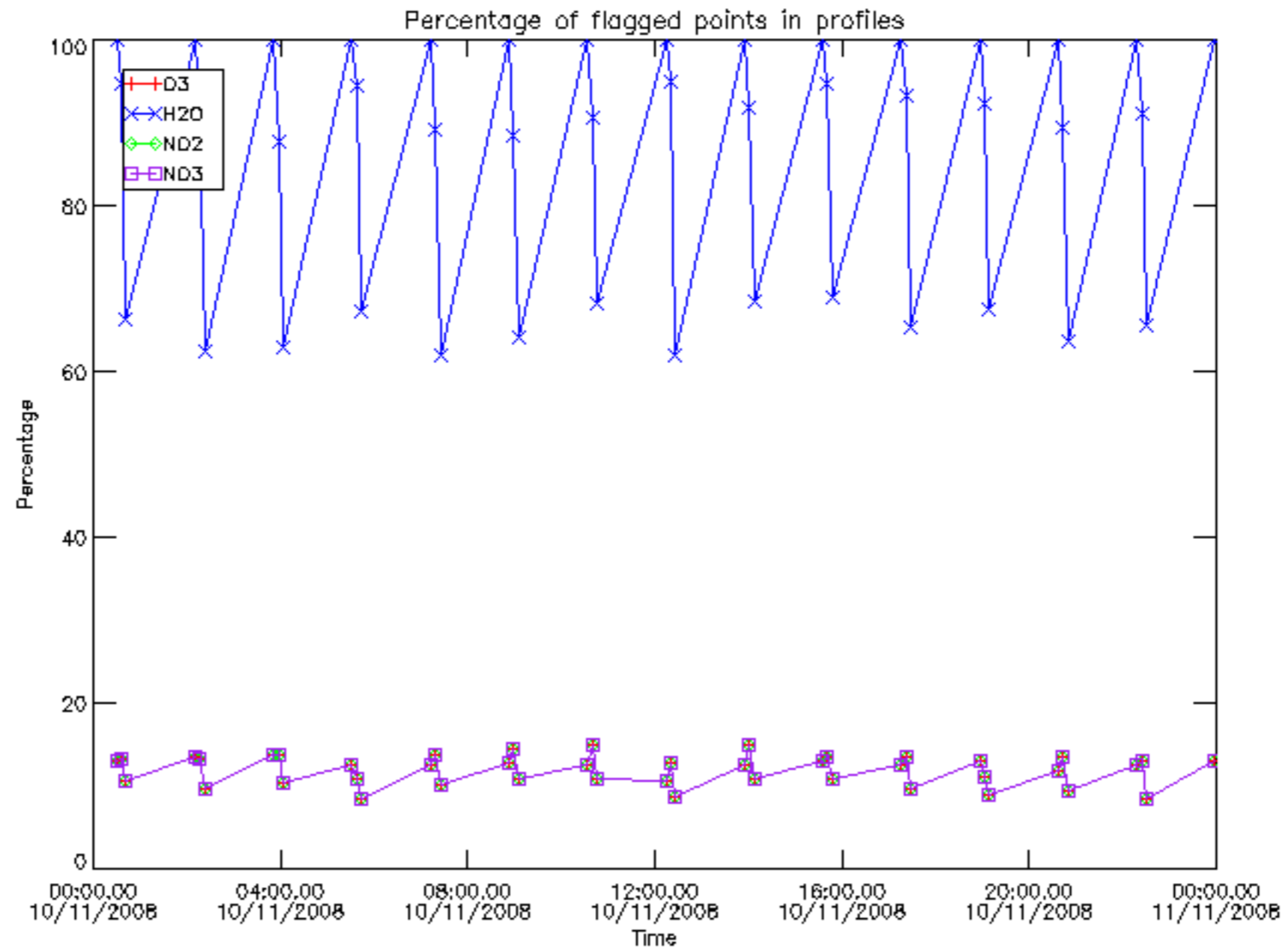




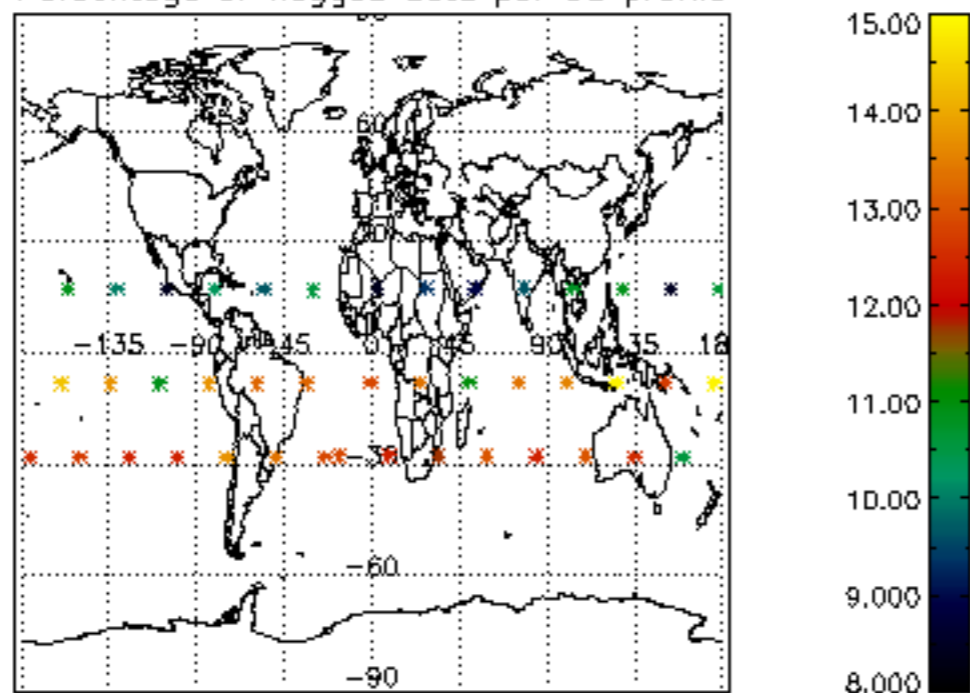




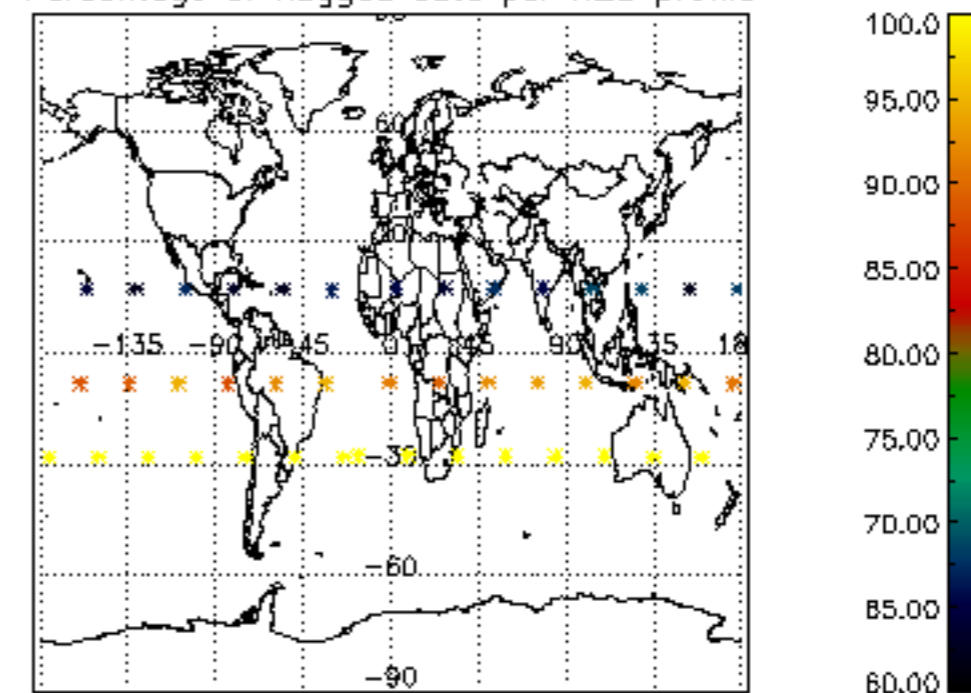




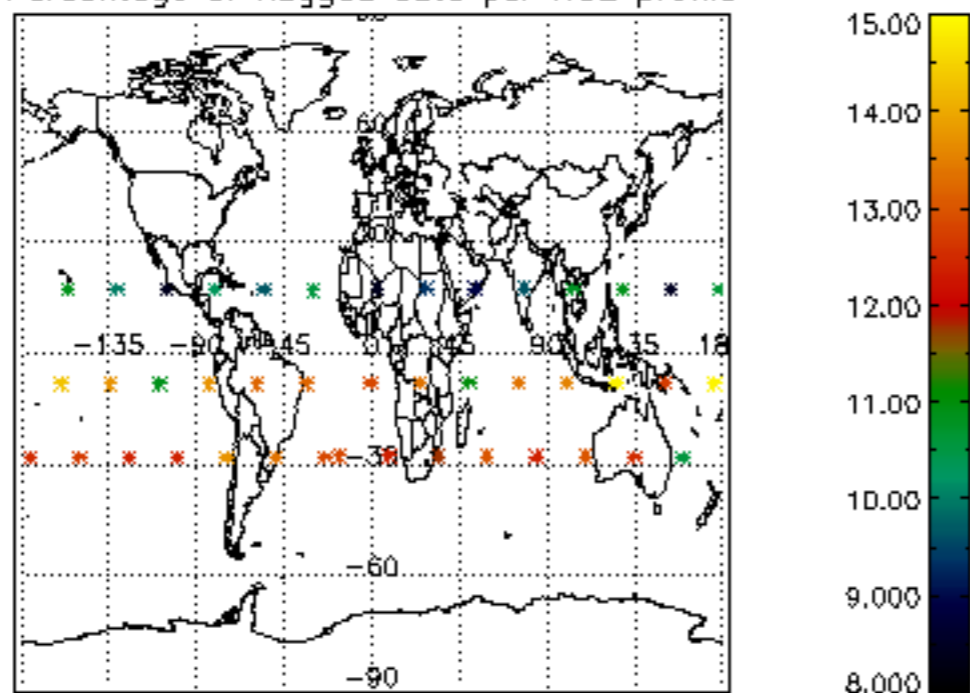
Percentage of flagged data per D3 profile



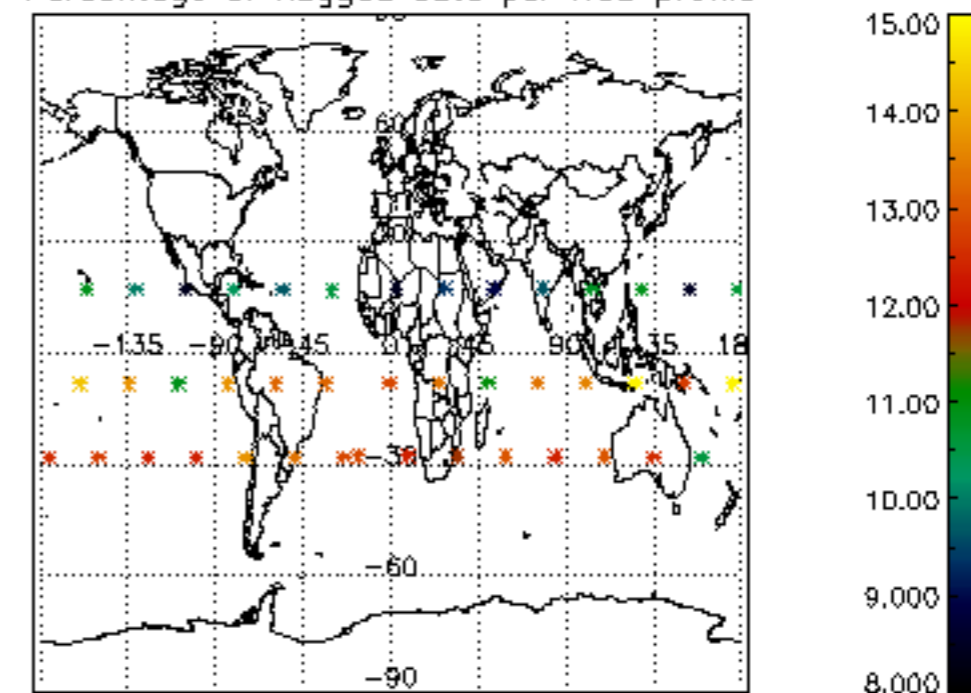
Percentage of flagged data per H2O profile

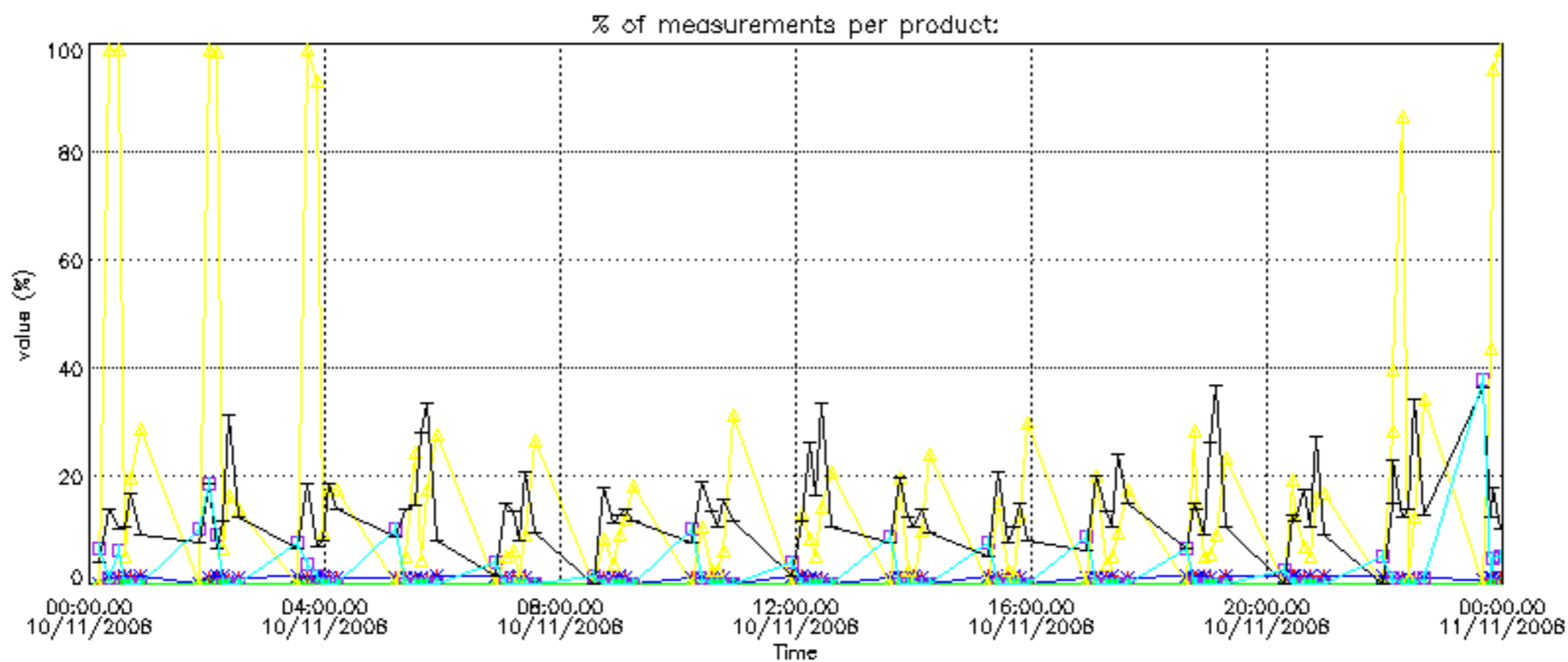


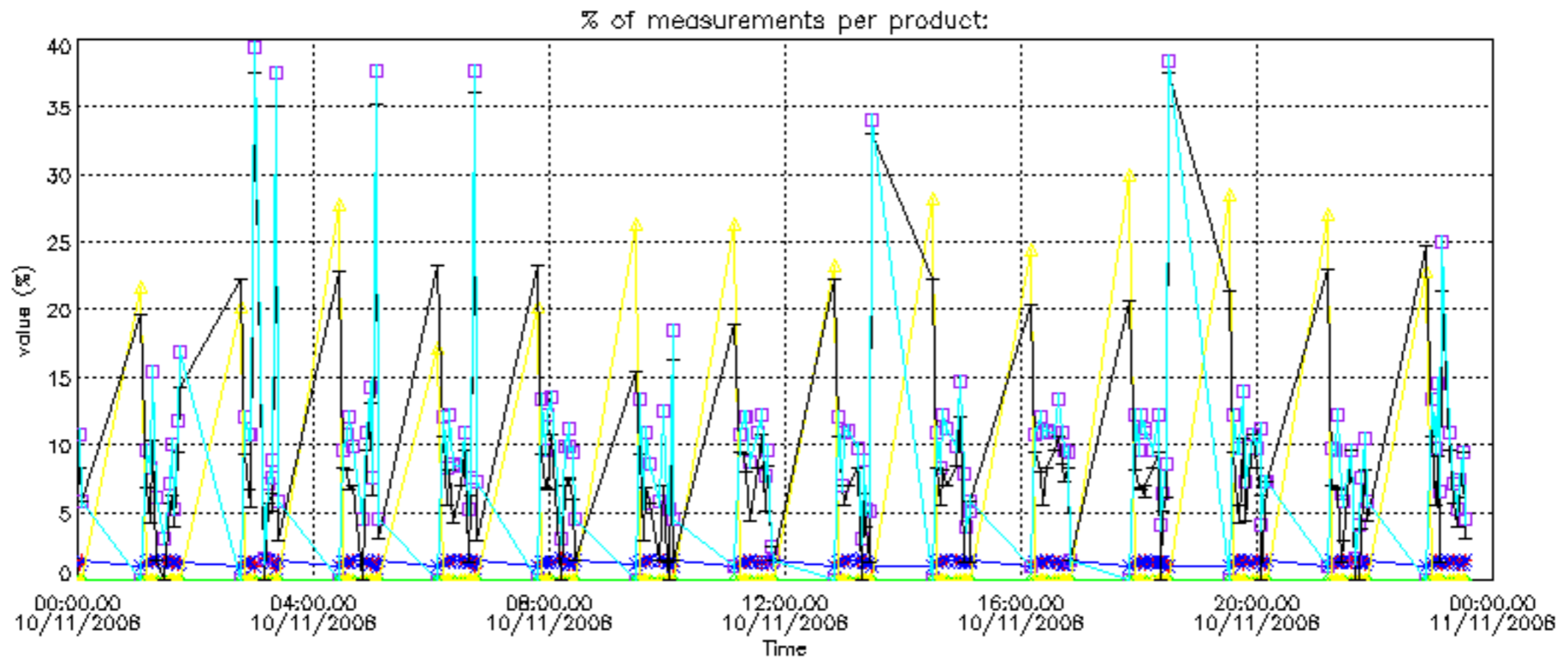
Percentage of flagged data per NO2 profile



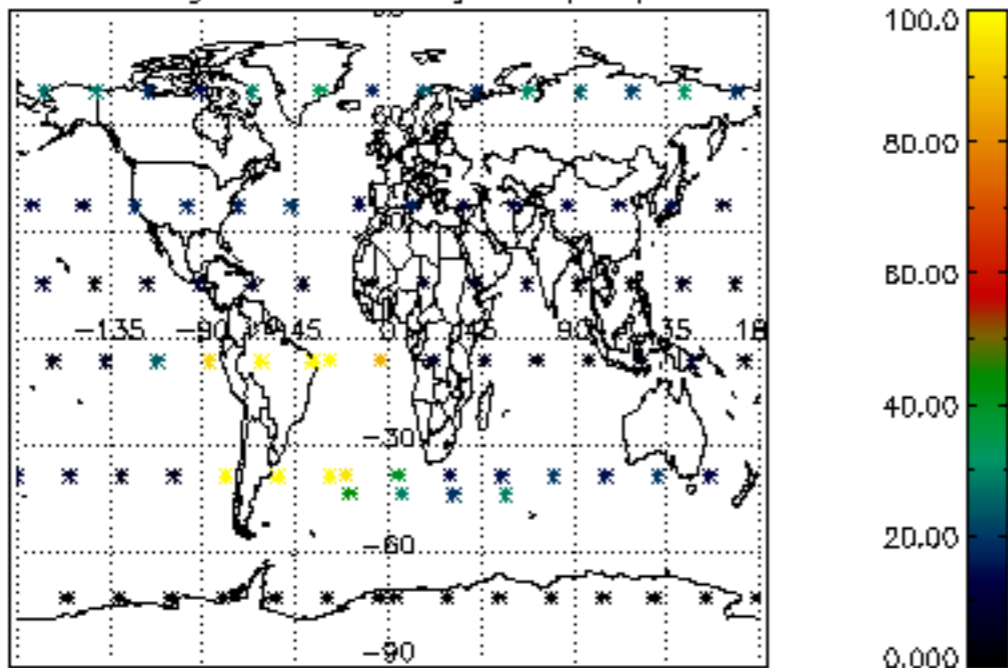
Percentage of flagged data per NO3 profile



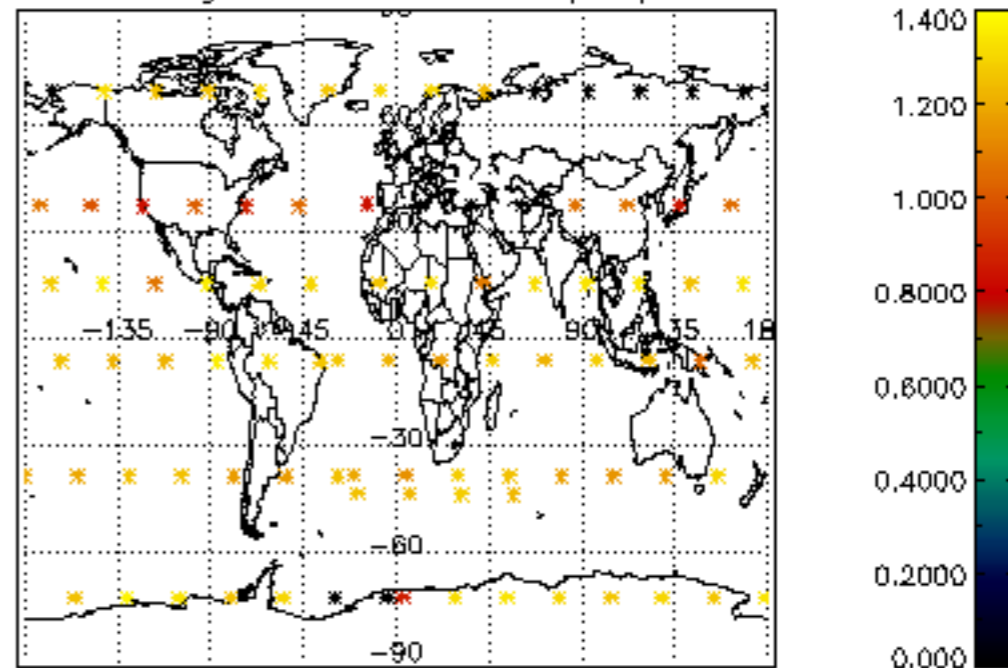




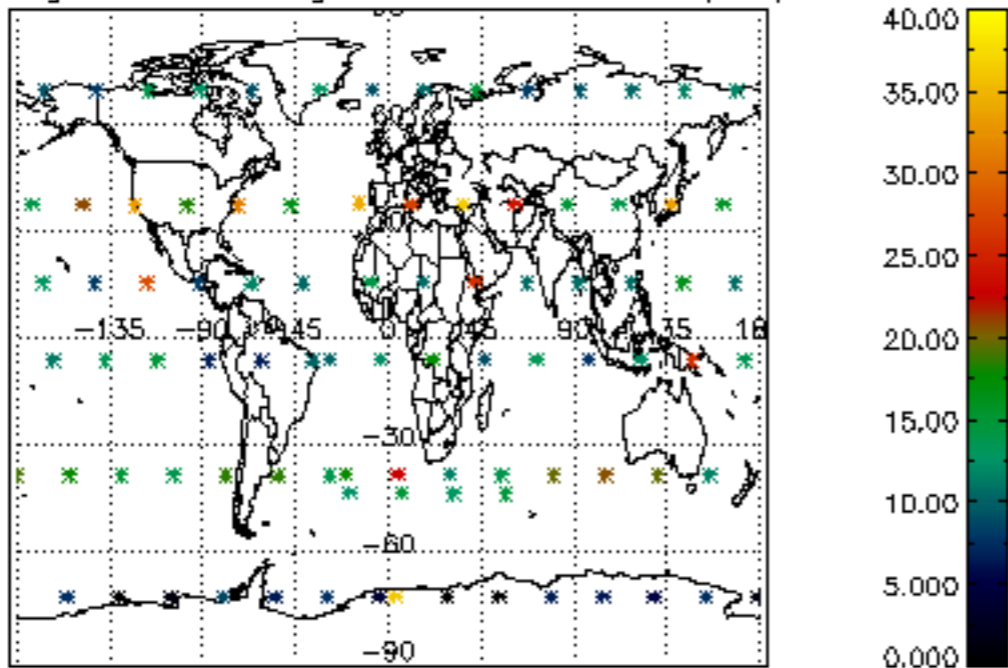
Percentage of cosmic ray hits per profile



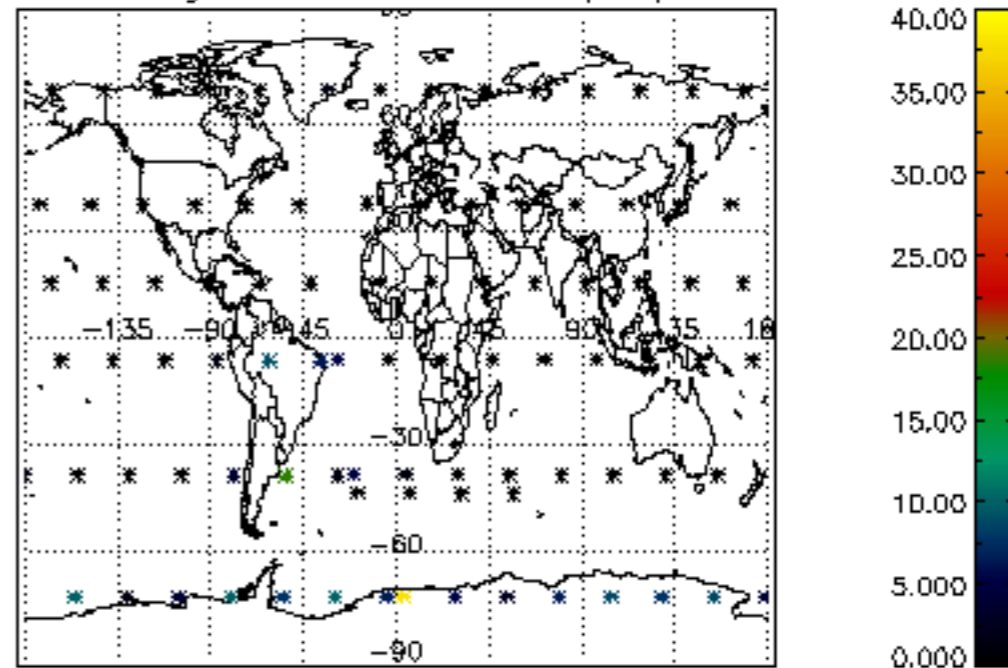
Percentage of datation errors per profile



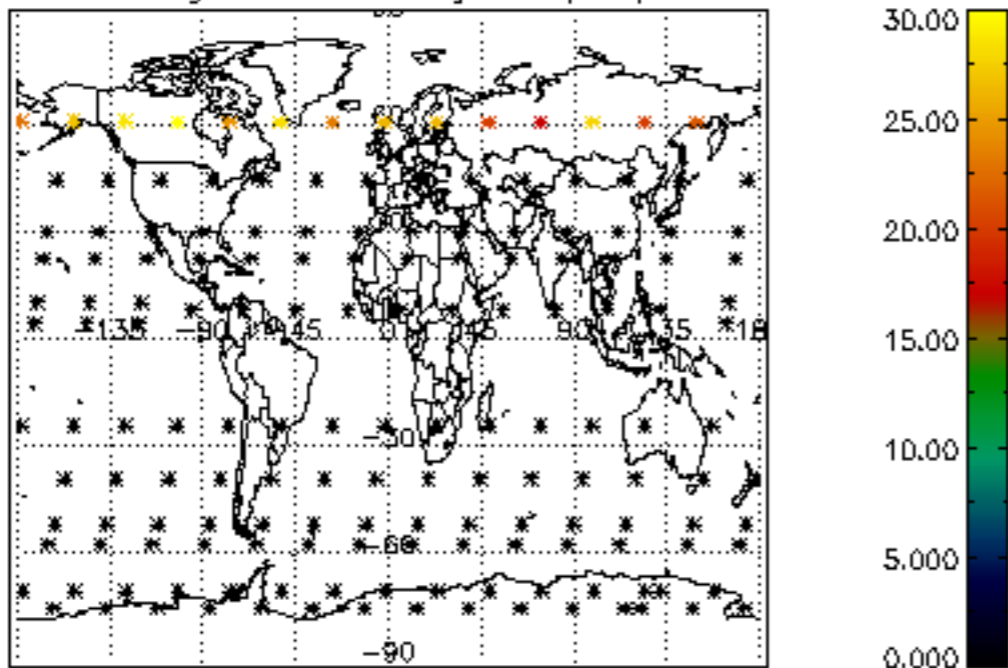
Percentage of star falling outside central band per profile



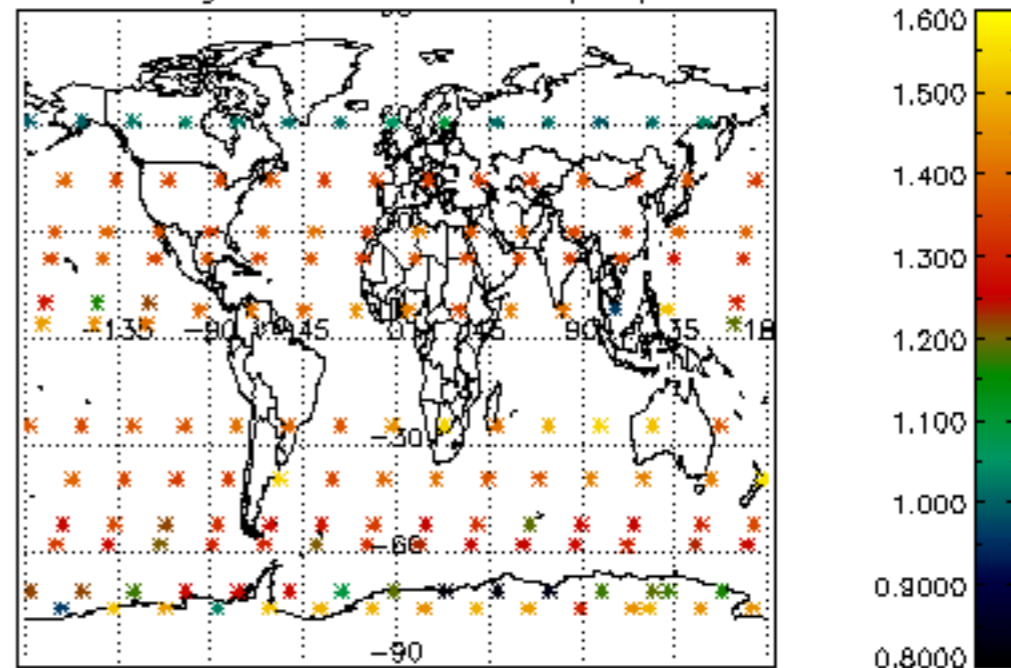
Percentage of saturation errors per profile



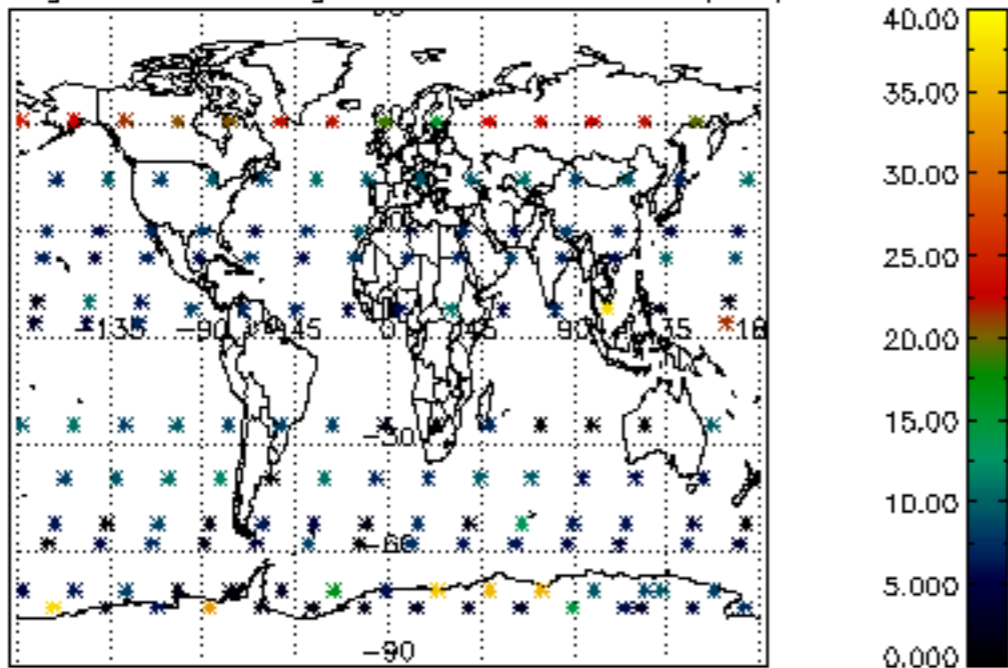
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

