

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	29APR2013 15:36:48
Data source version	GOMOS/6.01
Start time of products	01-10-2010 (01OCT2010 00:00:00)
Stop time of products	02-10-2010 (02OCT2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	182
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

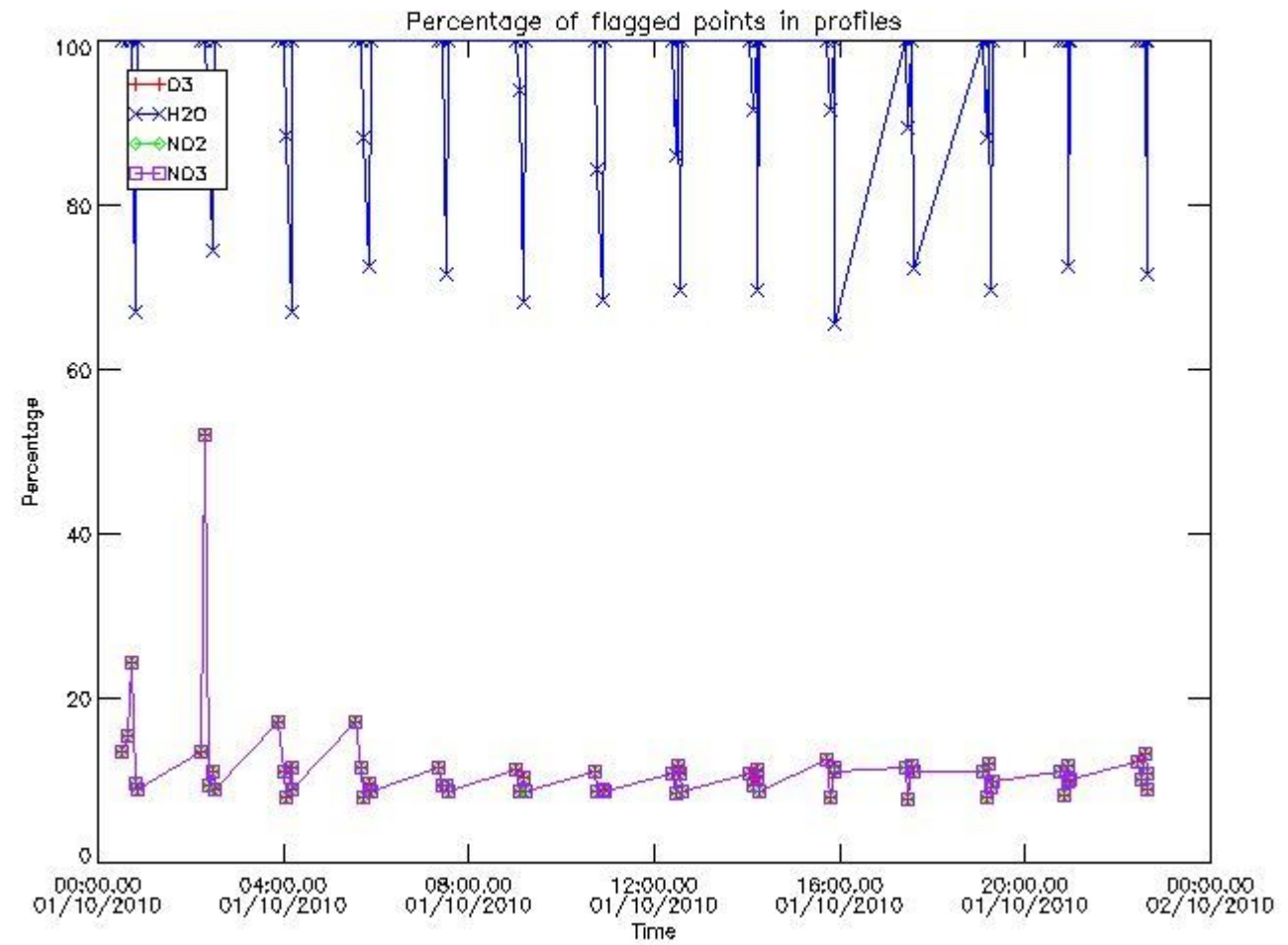
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20101001_002037_000000392093_00245_44888_3386.N1	01-OCT-2010 00:20:37	Bright	39.000	24	66Alp Gem	1.5800	10200.	78	44888	No
2	GOM_NL__2PRFIN20101001_002205_000000772093_00245_44888_3387.N1	01-OCT-2010 00:22:05	Bright	77.000	17	78Bet Gem	1.1610	4500.0	154	44888	No
3	GOM_NL__2PRFIN20101001_003125_000000382093_00245_44888_3388.N1	01-OCT-2010 00:31:25	Dark	37.500	8	10Alp CMi	0.40000	6500.0	75	44888	No
4	GOM_NL__2PRFIN20101001_003829_000000462093_00245_44888_3389.N1	01-OCT-2010 00:38:29	Dark	46.000	132	15Rho Pup	2.8030	6900.0	92	44888	No
5	GOM_NL__2PRFIN20101001_004236_000000542093_00245_44888_3390.N1	01-OCT-2010 00:42:36	Dark	54.000	37	25Del CMa	1.8300	5900.0	108	44888	No
6	GOM_NL__2PRFIN20101001_004849_000000542093_00246_44889_3183.N1	01-OCT-2010 00:48:49	Dark	53.500	2	Alp Car	-0.73600	7000.0	107	44889	No
7	GOM_NL__2PRFIN20101001_005101_000000572093_00246_44889_3184.N1	01-OCT-2010 00:51:01	Dark	57.000	108	Alp Col	2.6520	15200.	114	44889	No
8	GOM_NL__2PRFIN20101001_010114_000000512093_00246_44889_3185.N1	01-OCT-2010 01:01:14	Straylight	50.500	157	The1Eri	2.9060	9300.0	101	44889	No
9	GOM_NL__2PRFIN20101001_011157_000000492093_00246_44889_3186.N1	01-OCT-2010 01:11:57	Straylight	49.000	52	16Bet Cet	2.0370	4500.0	98	44889	No
10	GOM_NL__2PRFIN20101001_012227_000000412093_00246_44889_3187.N1	01-OCT-2010 01:22:27	Bright	41.000	140	88Gam Peg	2.8340	26000.	82	44889	No
11	GOM_NL__2PRFIN20101001_012637_000000402093_00246_44889_3188.N1	01-OCT-2010 01:26:37	Bright	40.000	58	21Alp And	2.0730	11000.	80	44889	No
12	GOM_NL__2PRFIN20101001_013023_000000462093_00246_44889_3189.N1	01-OCT-2010 01:30:23	Bright	46.000	53	43Bet And	2.0480	3300.0	92	44889	No
13	GOM_NL__2PRFIN20101001_013512_000000392093_00246_44889_3190.N1	01-OCT-2010 01:35:12	Bright	38.500	74	11Bet Cas	2.2680	6600.0	77	44889	No
14	GOM_NL__2PRFIN20101001_013634_000000392093_00246_44889_3191.N1	01-OCT-2010 01:36:34	Bright	39.000	76	27Gam Cas	2.3000	30000.	78	44889	No
15	GOM_NL__2PRFIN20101001_020113_000000392093_00246_44889_3192.N1	01-OCT-2010 02:01:13	Bright	39.000	24	66Alp Gem	1.5800	10200.	78	44889	No
16	GOM_NL__2PRFIN20101001_020241_000000772093_00246_44889_3193.N1	01-OCT-2010 02:02:41	Bright	76.500	17	78Bet Gem	1.1610	4500.0	153	44889	No
17	GOM_NL__2PRFIN20101001_021202_000000382093_00246_44889_3194.N1	01-OCT-2010 02:12:02	Dark	38.000	8	10Alp CMi	0.40000	6500.0	76	44889	No
18	GOM_NL__2PRFIN20101001_021905_000000492093_00246_44889_3195.N1	01-OCT-2010 02:19:05	Dark	48.500	132	15Rho Pup	2.8030	6900.0	97	44889	No
19	GOM_NL__2PRFIN20101001_022313_000000542093_00246_44889_3196.N1	01-OCT-2010 02:23:13	Dark	54.000	37	25Del CMa	1.8300	5900.0	108	44889	No
20	GOM_NL__2PRFIN20101001_022926_000000462093_00247_44890_3193.N1	01-OCT-2010 02:29:26	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	44890	No
21	GOM_NL__2PRFIN20101001_023139_000000582093_00247_44890_3194.N1	01-OCT-2010 02:31:39	Dark	57.500	108	Alp Col	2.6520	15200.	115	44890	No
22	GOM_NL__2PRFIN20101001_024150_000000512093_00247_44890_3195.N1	01-OCT-2010 02:41:50	Straylight	51.000	157	The1Eri	2.9060	9300.0	102	44890	No
23	GOM_NL__2PRFIN20101001_025234_000000512093_00247_44890_3196.N1	01-OCT-2010 02:52:34	Straylight	51.000	52	16Bet Cet	2.0370	4500.0	102	44890	No
24	GOM_NL__2PRFIN20101001_030302_000000412093_00247_44890_3197.N1	01-OCT-2010 03:03:02	Bright	40.500	140	88Gam Peg	2.8340	26000.	81	44890	No
25	GOM_NL__2PRFIN20101001_030712_000000402093_00247_44890_3198.N1	01-OCT-2010 03:07:12	Bright	39.500	58	21Alp And	2.0730	11000.	79	44890	No
26	GOM_NL__2PRFIN20101001_031058_000000492093_00247_44890_3199.N1	01-OCT-2010 03:10:58	Bright	48.500	53	43Bet And	2.0480	3300.0	97	44890	No
27	GOM_NL__2PRFIN20101001_031548_000000372093_00247_44890_3200.N1	01-OCT-2010 03:15:48	Bright	36.500	74	11Bet Cas	2.2680	6600.0	73	44890	No
28	GOM_NL__2PRFIN20101001_031709_000000402093_00247_44890_3201.N1	01-OCT-2010 03:17:09	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	44890	No
29	GOM_NL__2PRFIN20101001_034149_000000312093_00247_44890_3202.N1	01-OCT-2010 03:41:49	Twilight_stray	31.000	24	66Alp Gem	1.5800	10200.	62	44890	No
30	GOM_NL__2PRFIN20101001_034318_000000732093_00247_44890_3203.N1	01-OCT-2010 03:43:18	Bright	73.000	17	78Bet Gem	1.1610	4500.0	146	44890	No
31	GOM_NL__2PRFIN20101001_035239_000000302093_00247_44890_3204.N1	01-OCT-2010 03:52:39	Dark	30.000	8	10Alp CMi	0.40000	6500.0	60	44890	No
32	GOM_NL__2PRFIN20101001_035942_000000462093_00247_44890_3205.N1	01-OCT-2010 03:59:42	Dark	45.500	132	15Rho Pup	2.8030	6900.0	91	44890	No
33	GOM_NL__2PRFIN20101001_040351_000000652093_00247_44890_3206.N1	01-OCT-2010 04:03:51	Dark	65.000	37	25Del CMa	1.8300	5900.0	130	44890	No
34	GOM_NL__2PRFIN20101001_041003_000000452093_00248_44891_3204.N1	01-OCT-2010 04:10:03	Dark	44.500	2	Alp Car	-0.73600	7000.0	89	44891	No
35	GOM_NL__2PRFIN20101001_041216_000000582093_00248_44891_3205.N1	01-OCT-2010 04:12:16	Dark	57.500	108	Alp Col	2.6520	15200.	115	44891	No
36	GOM_NL__2PRFIN20101001_042227_000000492093_00248_44891_3206.N1	01-OCT-2010 04:22:27	Straylight	49.000	157	The1Eri	2.9060	9300.0	98	44891	No
37	GOM_NL__2PRFIN20101001_043310_000000512093_00248_44891_3207.N1	01-OCT-2010 04:33:10	Straylight	51.000	52	16Bet Cet	2.0370	4500.0	102	44891	No
38	GOM_NL__2PRFIN20101001_044338_000000412093_00248_44891_3208.N1	01-OCT-2010 04:43:38	Bright	41.000	140	88Gam Peg	2.8340	26000.	82	44891	No
39	GOM_NL__2PRFIN20101001_044748_000000392093_00248_44891_3209.N1	01-OCT-2010 04:47:48	Bright	39.000	58	21Alp And	2.0730	11000.	78	44891	No
40	GOM_NL__2PRFIN20101001_045134_000000502093_00248_44891_3210.N1	01-OCT-2010 04:51:34	Bright	49.500	53	43Bet And	2.0480	3300.0	99	44891	No
41	GOM_NL__2PRFIN20101001_045624_000000392093_00248_44891_3211.N1	01-OCT-2010 04:56:24	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	44891	No
42	GOM_NL__2PRFIN20101001_045745_000000412093_00248_44891_3212.N1	01-OCT-2010 04:57:45	Bright	41.000	76	27Gam Cas	2.3000	30000.	82	44891	No

161	GOM_NL__2PRFIN20101001_205831_000000562093_00258_44901_3628.N1	01-OCT-2010 20:58:31	Dark	55.500	108	Alp Col	2.6520	15200.	111	44901	No
162	GOM_NL__2PRFIN20101001_210833_000000492093_00258_44901_3629.N1	01-OCT-2010 21:08:33	Straylight	48.500	157	The1Eri	2.9060	9300.0	97	44901	No
163	GOM_NL__2PRFIN20101001_211911_000000482093_00258_44901_3630.N1	01-OCT-2010 21:19:11	Straylight	48.000	52	16Bet Cet	2.0370	4500.0	96	44901	No
164	GOM_NL__2PRFIN20101001_212935_000000402093_00258_44901_3631.N1	01-OCT-2010 21:29:35	Bright	40.000	140	88Gam Peg	2.8340	26000.	80	44901	No
165	GOM_NL__2PRFIN20101001_213344_000000412093_00258_44901_3632.N1	01-OCT-2010 21:33:44	Bright	40.500	58	21Alp And	2.0730	11000.	81	44901	No
166	GOM_NL__2PRFIN20101001_213726_000000452093_00258_44901_3633.N1	01-OCT-2010 21:37:26	Bright	45.000	53	43Bet And	2.0480	3300.0	90	44901	No
167	GOM_NL__2PRFIN20101001_214221_000000372093_00258_44901_3634.N1	01-OCT-2010 21:42:21	Bright	36.500	74	11Bet Cas	2.2680	6600.0	73	44901	No
168	GOM_NL__2PRFIN20101001_214340_000000382093_00258_44901_3635.N1	01-OCT-2010 21:43:40	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	44901	No
169	GOM_NL__2PRFIN20101001_220956_000000672093_00258_44901_3636.N1	01-OCT-2010 22:09:56	Bright	67.000	17	78Bet Gem	1.1610	4500.0	134	44901	No
170	GOM_NL__2PRFIN20101001_222626_000000462093_00258_44901_3637.N1	01-OCT-2010 22:26:26	Dark	45.500	132	15Rho Pup	2.8030	6900.0	91	44901	No
171	GOM_NL__2PRFIN20101001_223040_000000662093_00258_44901_3638.N1	01-OCT-2010 22:30:40	Dark	65.500	37	25Del CMa	1.8300	5900.0	131	44901	No
172	GOM_NL__2PRFIN20101001_223522_000000432093_00259_44902_3645.N1	01-OCT-2010 22:35:22	Dark	42.500	161	Tau Pup	2.9310	4500.0	85	44902	No
173	GOM_NL__2PRFIN20101001_223646_000000572093_00259_44902_3646.N1	01-OCT-2010 22:36:46	Dark	56.500	2	Alp Car	-0.73600	7000.0	113	44902	No
174	GOM_NL__2PRFIN20101001_223908_000000582093_00259_44902_3647.N1	01-OCT-2010 22:39:08	Dark	57.500	108	Alp Col	2.6520	15200.	115	44902	No
175	GOM_NL__2PRFIN20101001_224910_000000522093_00259_44902_3648.N1	01-OCT-2010 22:49:10	Straylight	52.000	157	The1Eri	2.9060	9300.0	104	44902	No
176	GOM_NL__2PRFIN20101001_225947_000000492093_00259_44902_3649.N1	01-OCT-2010 22:59:47	Straylight	48.500	52	16Bet Cet	2.0370	4500.0	97	44902	No
177	GOM_NL__2PRFIN20101001_231011_000000402093_00259_44902_3650.N1	01-OCT-2010 23:10:11	Bright	40.000	140	88Gam Peg	2.8340	26000.	80	44902	No
178	GOM_NL__2PRFIN20101001_231420_000000412093_00259_44902_3651.N1	01-OCT-2010 23:14:20	Bright	41.000	58	21Alp And	2.0730	11000.	82	44902	No
179	GOM_NL__2PRFIN20101001_231801_000000502093_00259_44902_3652.N1	01-OCT-2010 23:18:01	Bright	49.500	53	43Bet And	2.0480	3300.0	99	44902	No
180	GOM_NL__2PRFIN20101001_232256_000000392093_00259_44902_3653.N1	01-OCT-2010 23:22:56	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	44902	No
181	GOM_NL__2PRFIN20101001_232416_000000402093_00259_44902_3654.N1	01-OCT-2010 23:24:16	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	44902	No
182	GOM_NL__2PRFIN20101001_235032_000000622093_00259_44902_3655.N1	01-OCT-2010 23:50:32	Bright	62.000	17	78Bet Gem	1.1610	4500.0	124	44902	No

3. Quality information per product

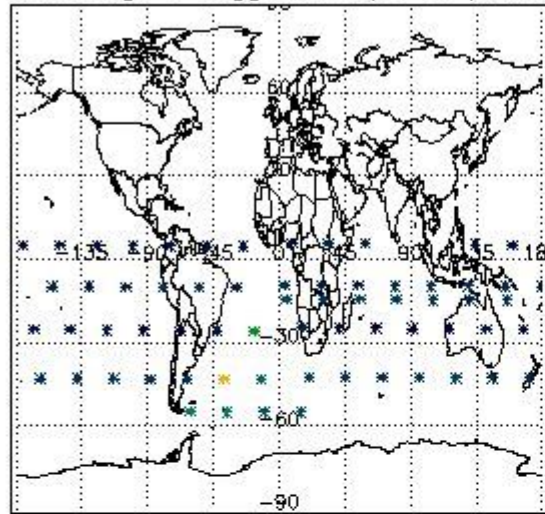
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

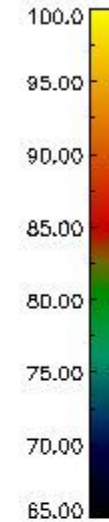
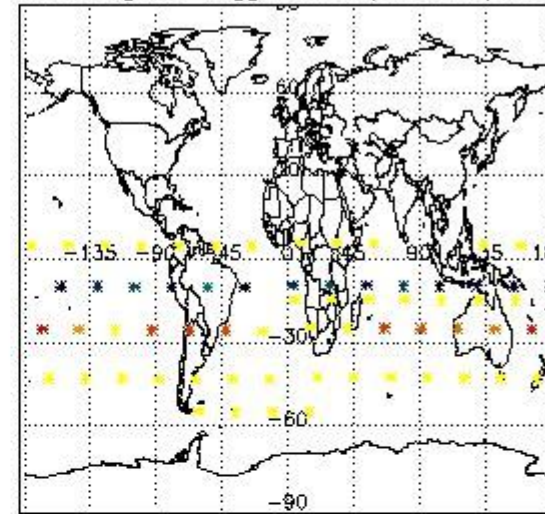


3.2 Plot quality information per product (world map)

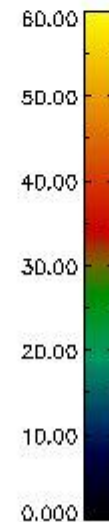
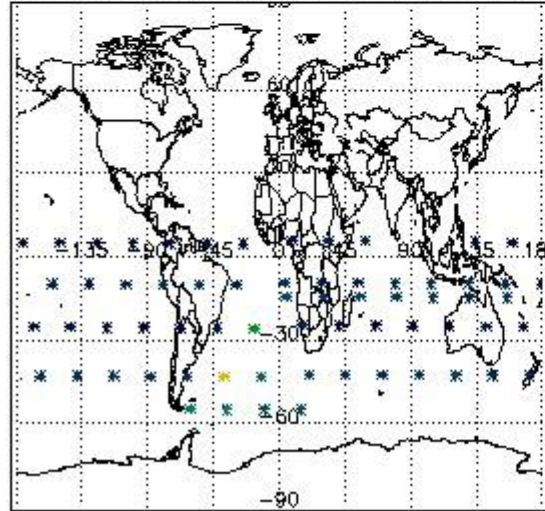
Percentage of flagged data per O3 profile



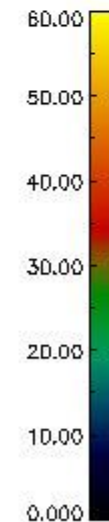
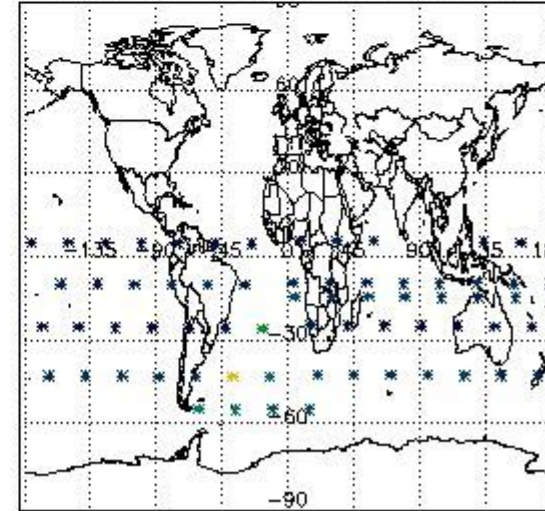
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

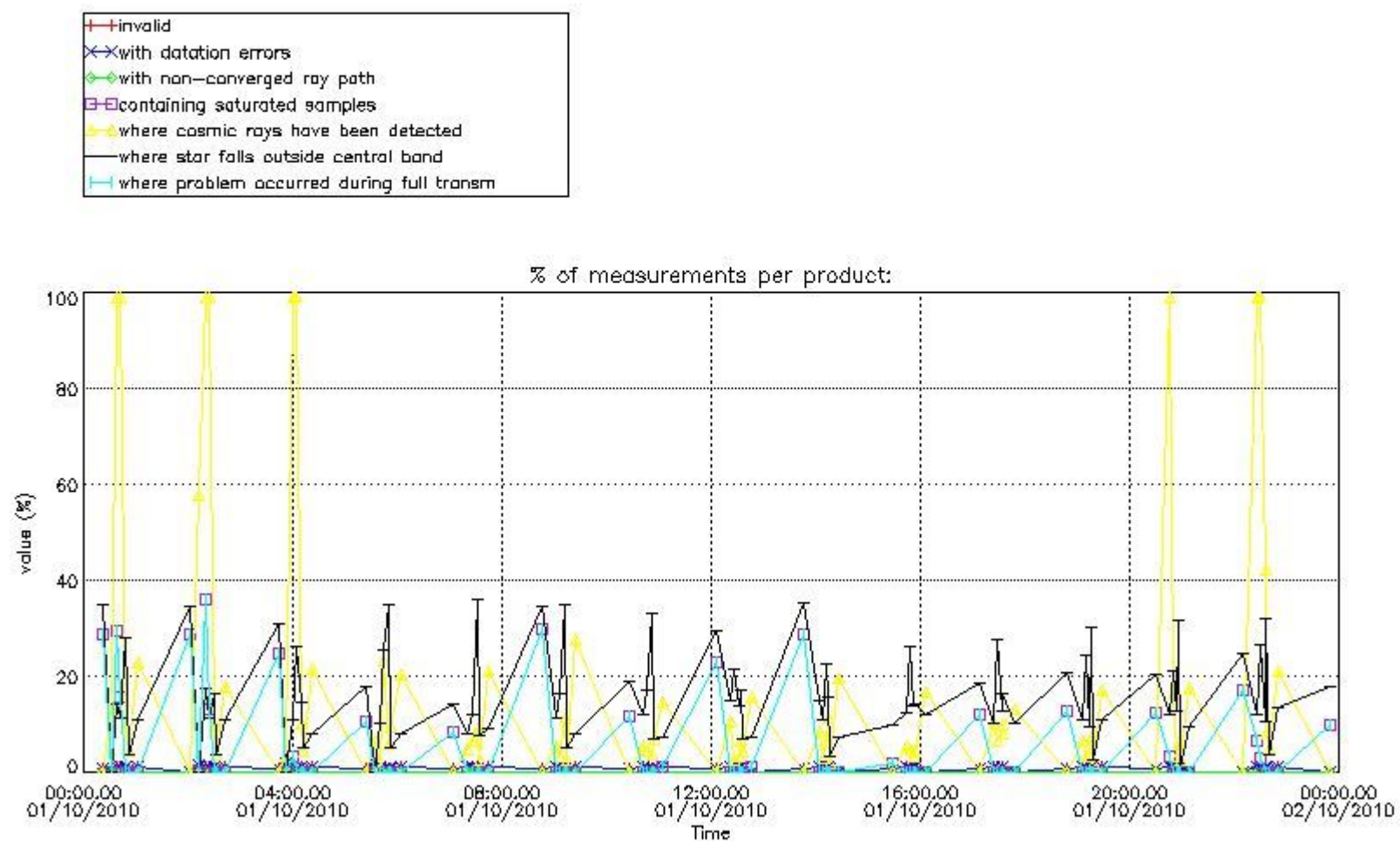


4. Level 1 quality information per product

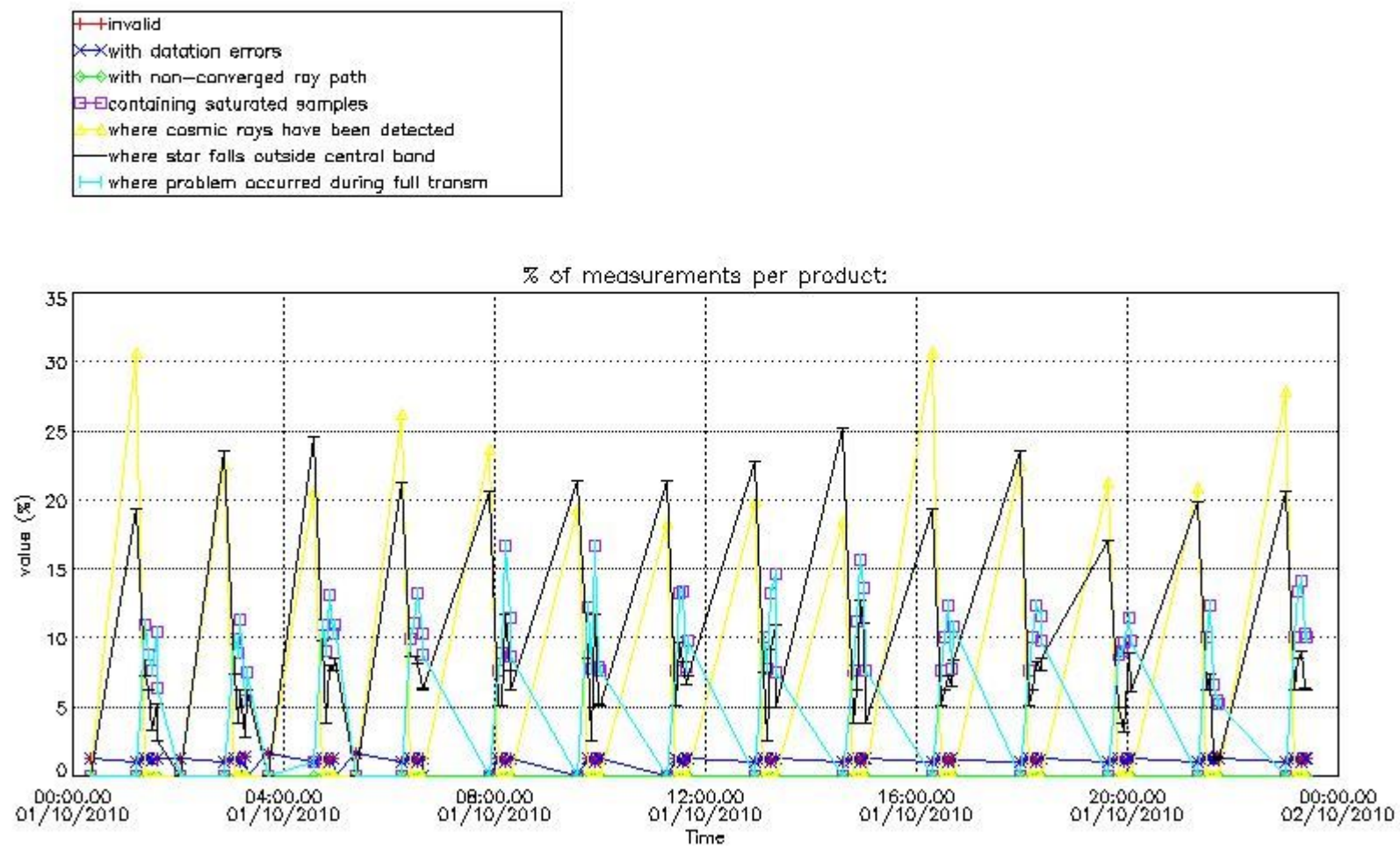
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



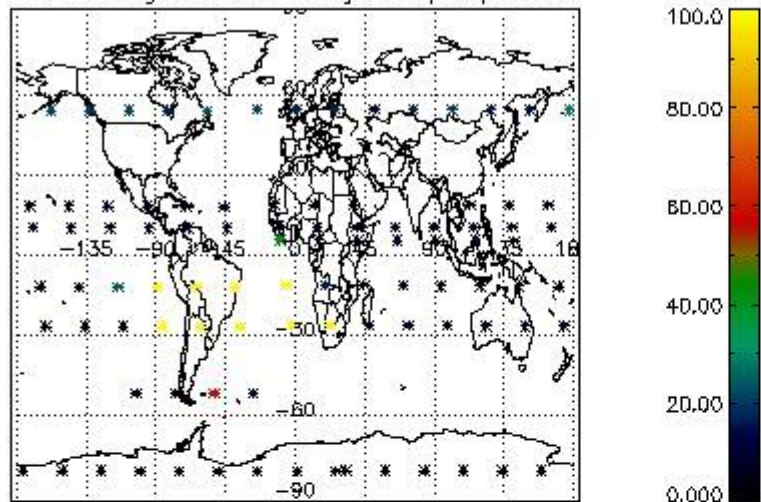
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



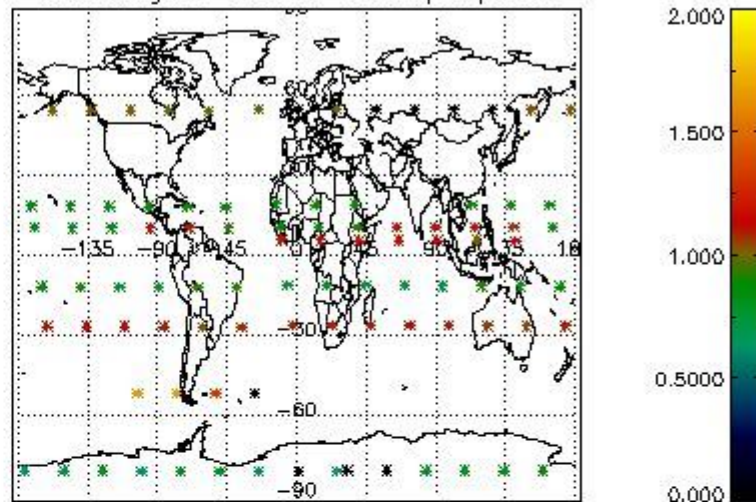
4.2 Plot quality information per product coming from level 1b processing (world map)

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

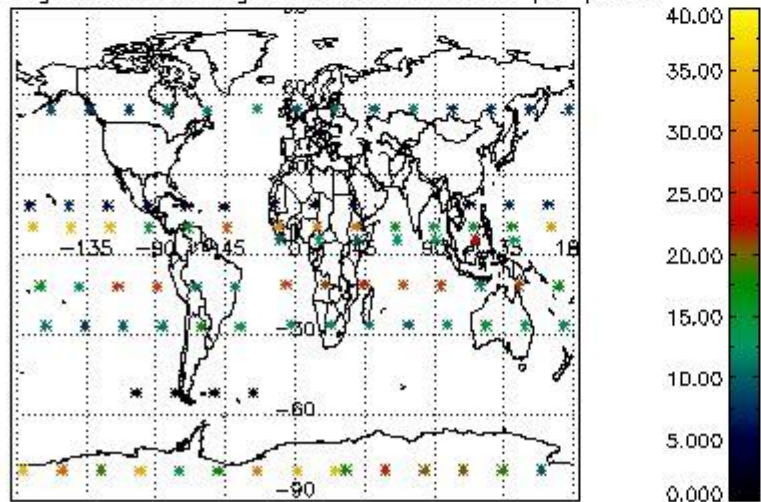
Percentage of cosmic ray hits per profile



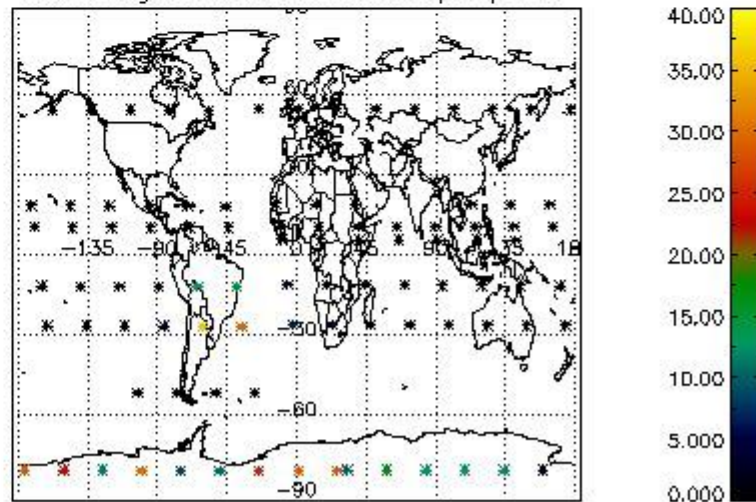
Percentage of datation errors per profile



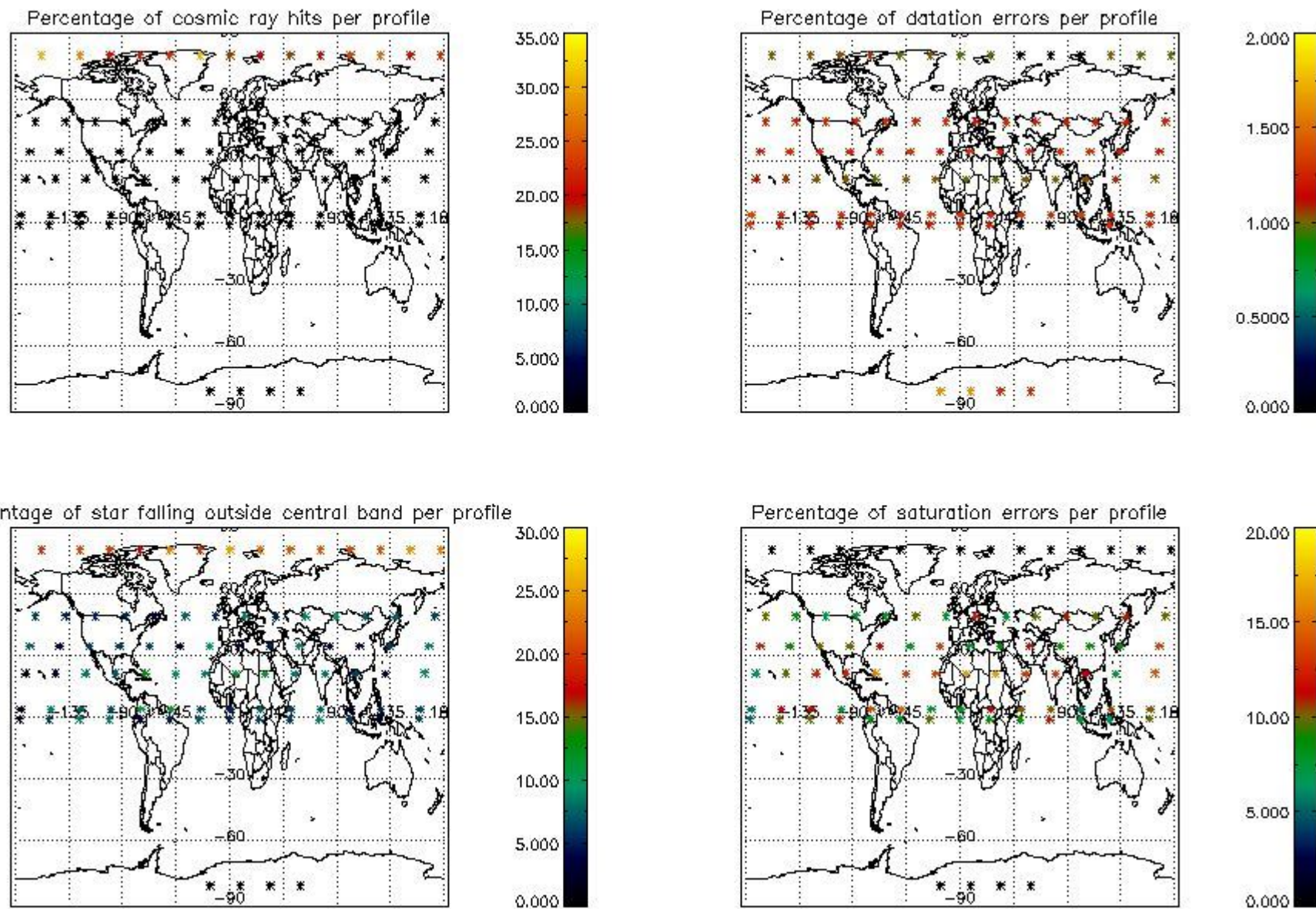
Percentage of star falling outside central band per profile



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

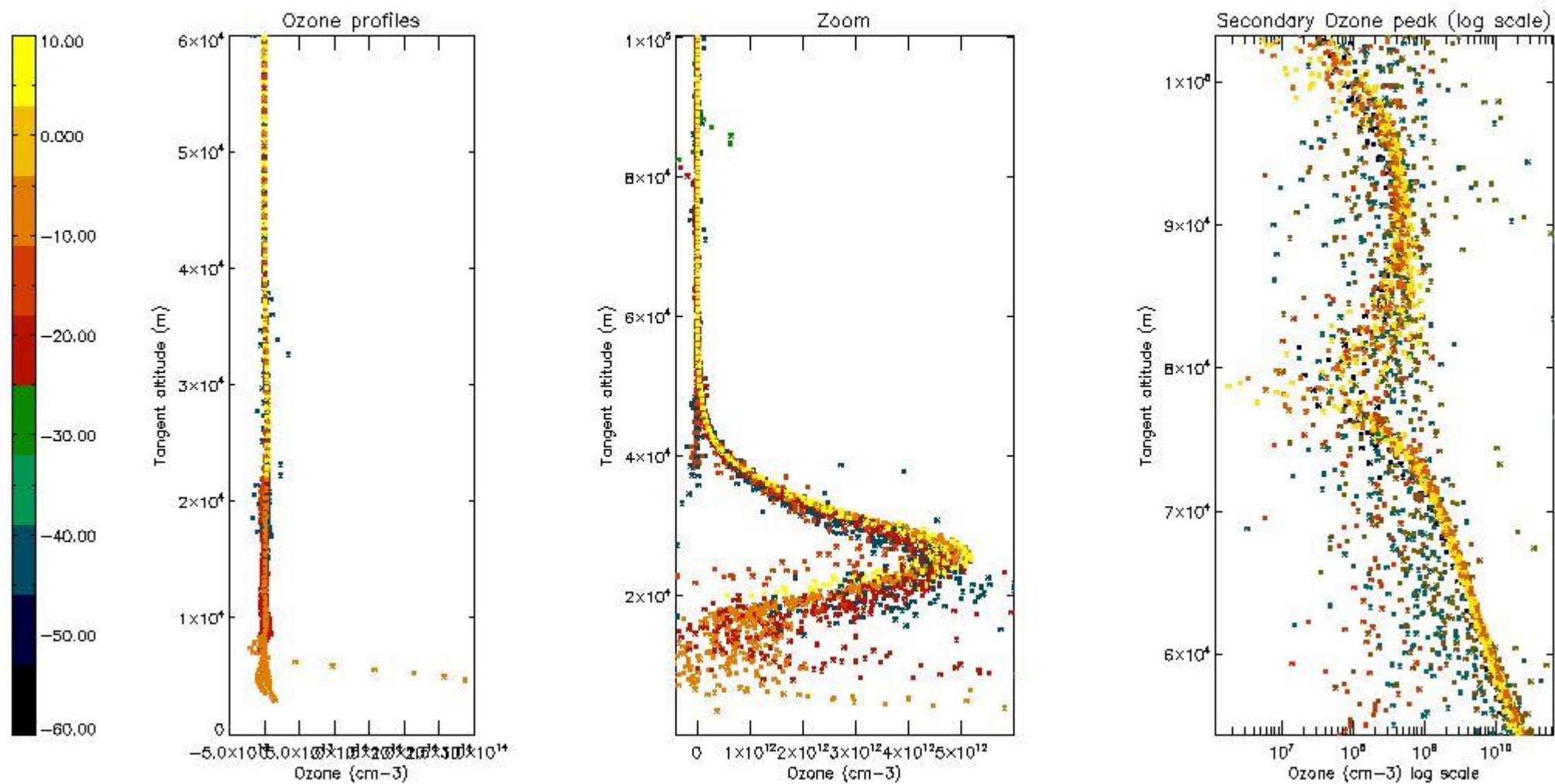
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	39
STD < 20	17

STD < 10	12
STD < 5	8

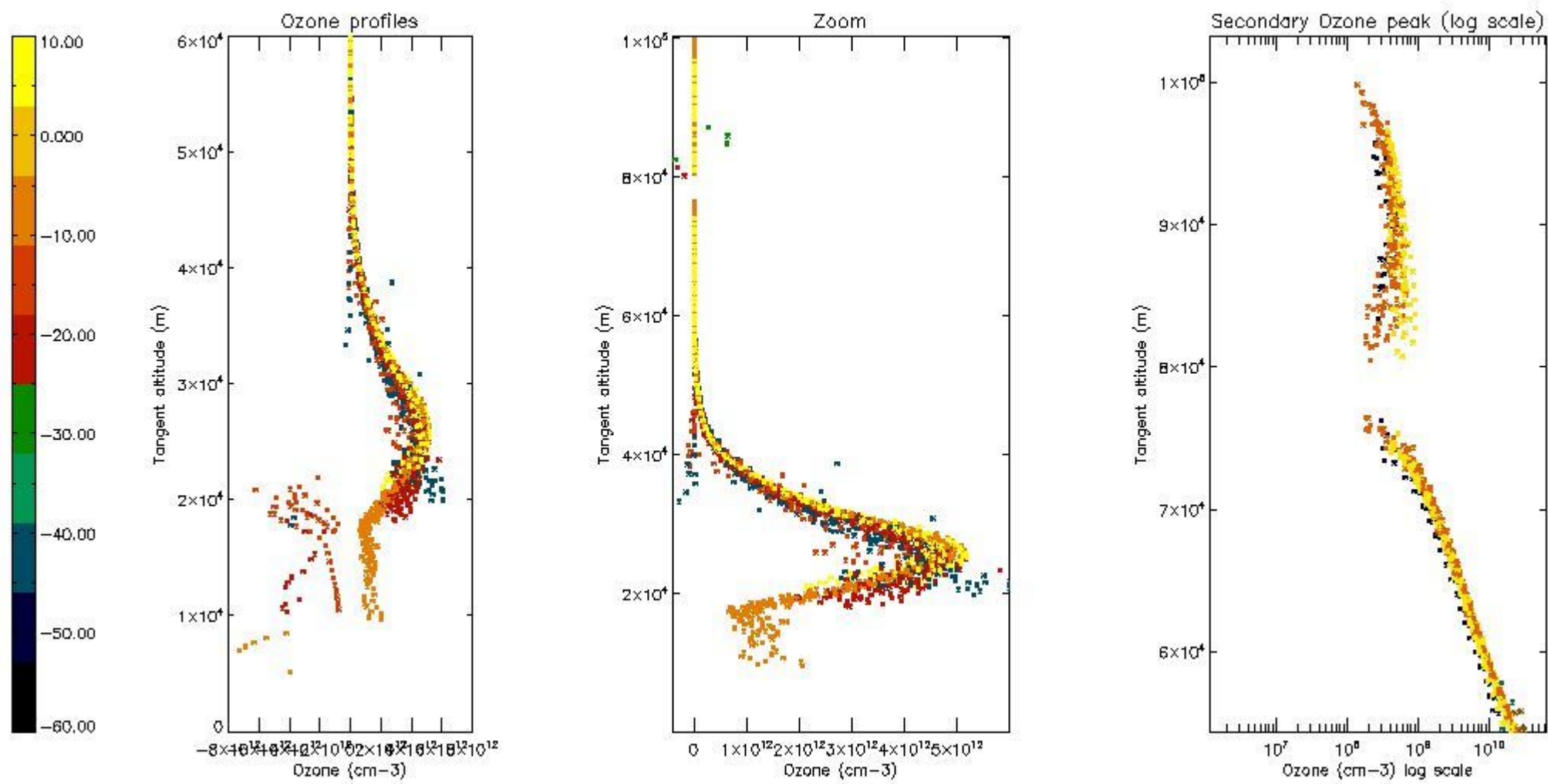
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



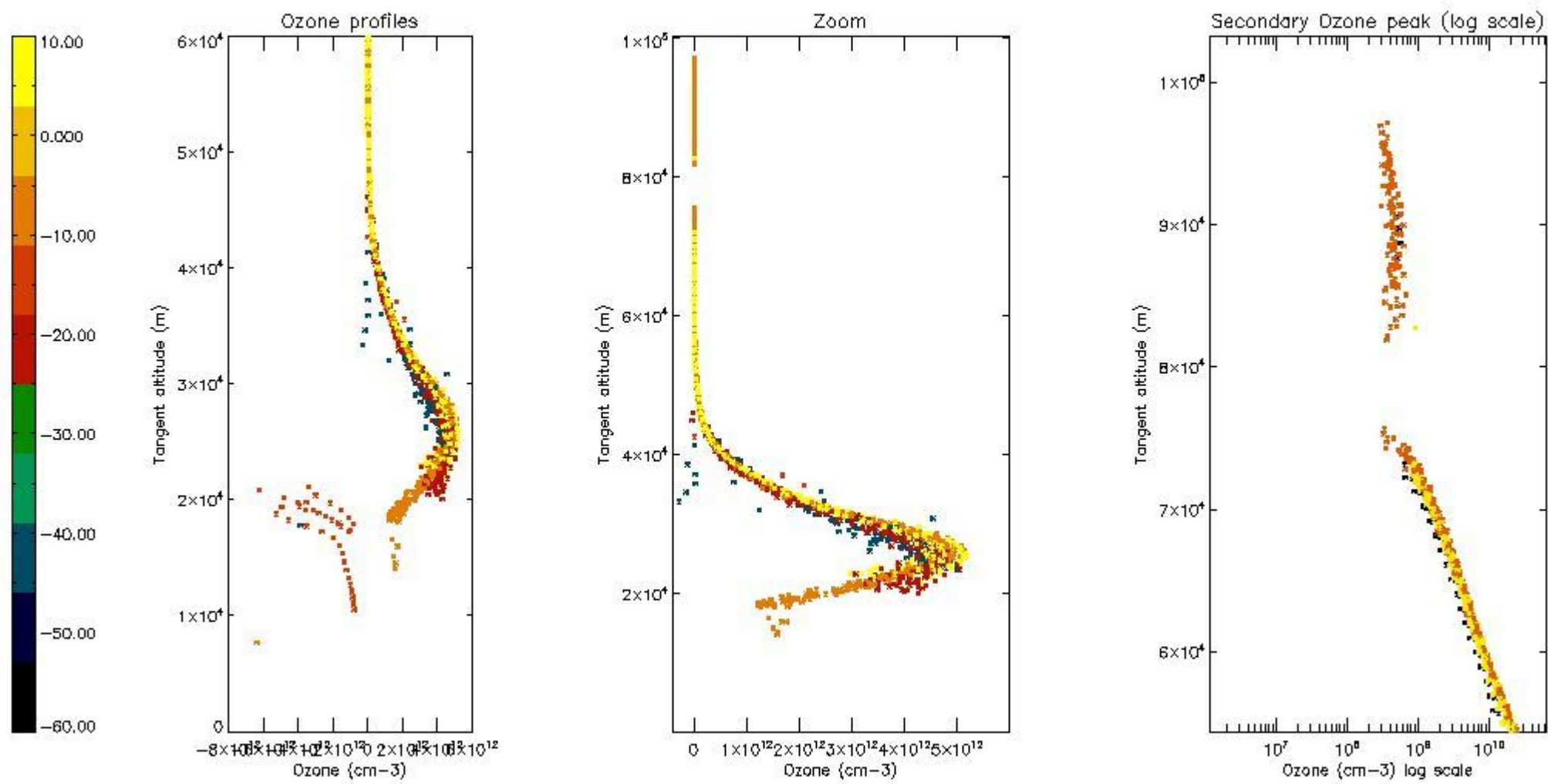
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



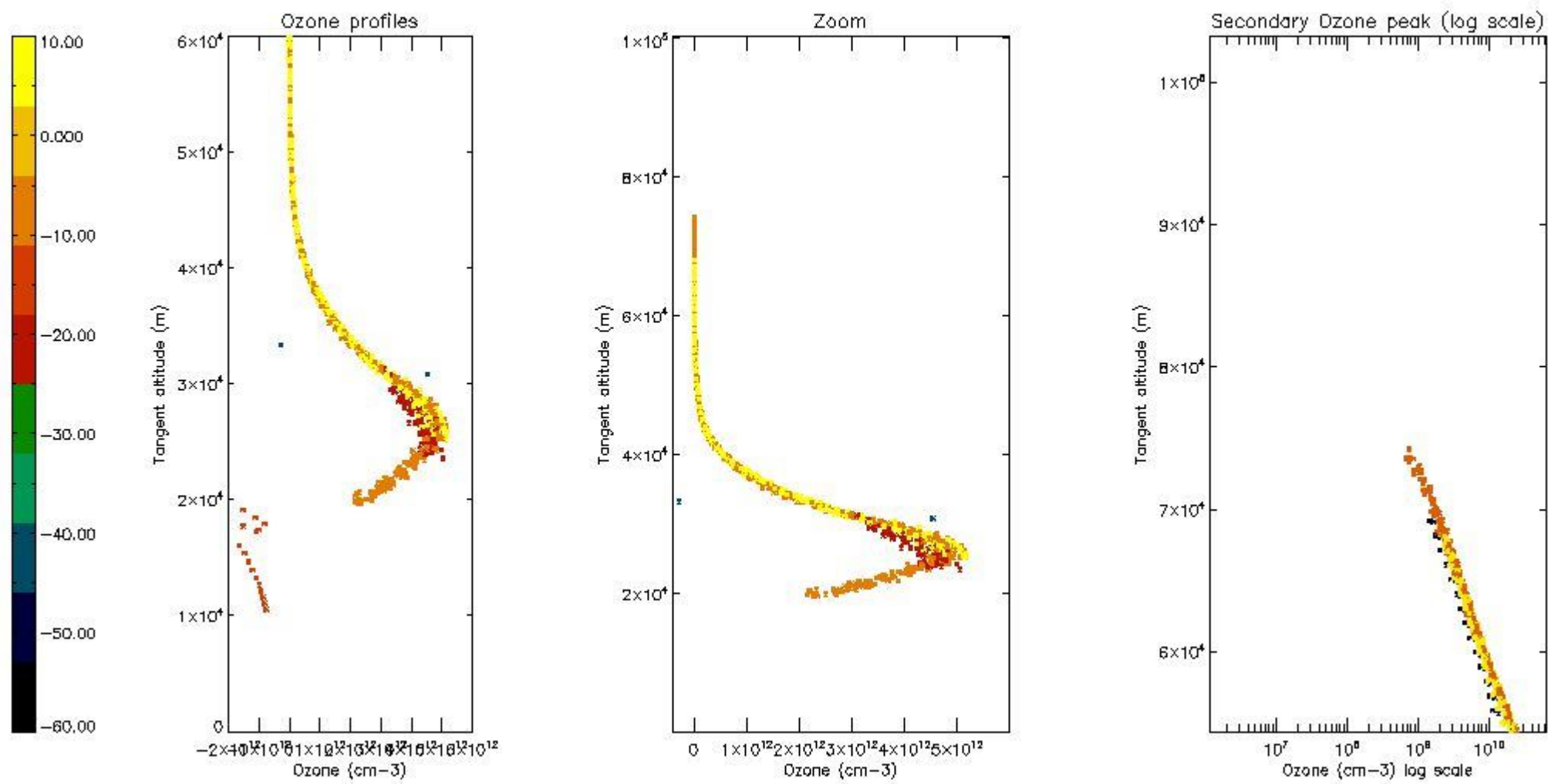
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



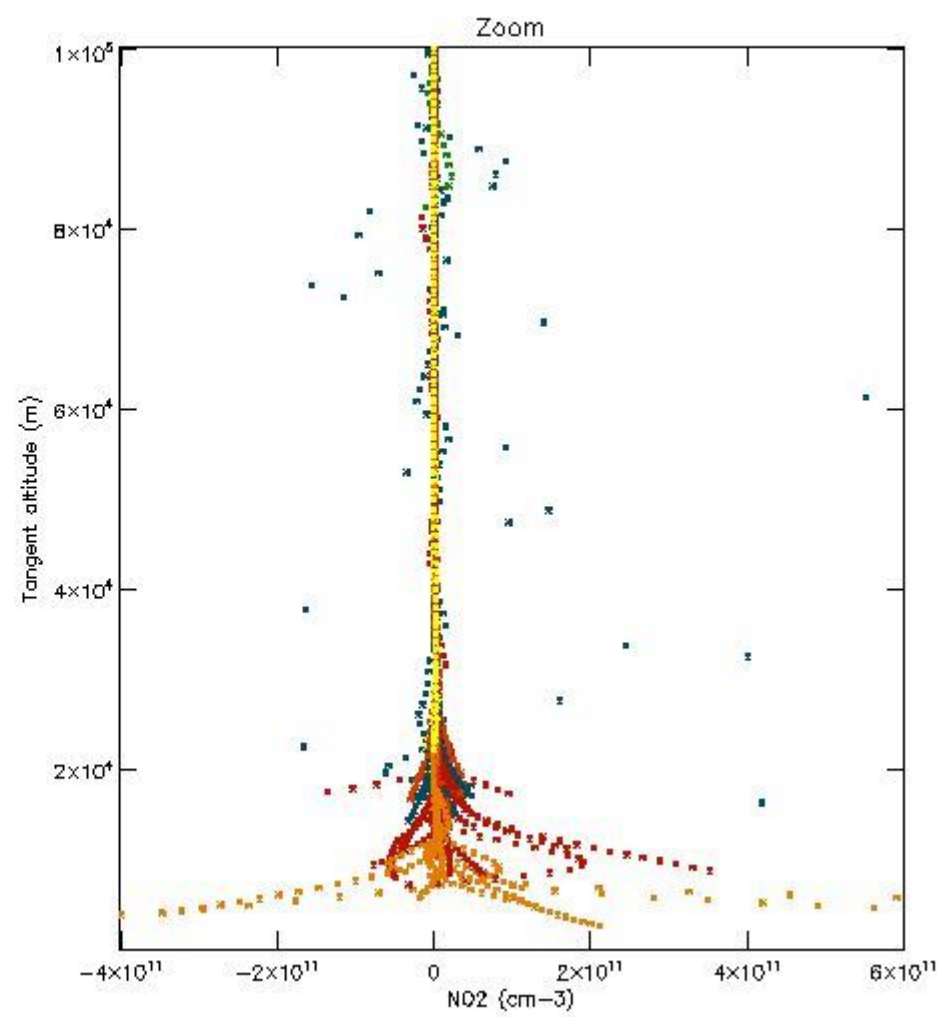
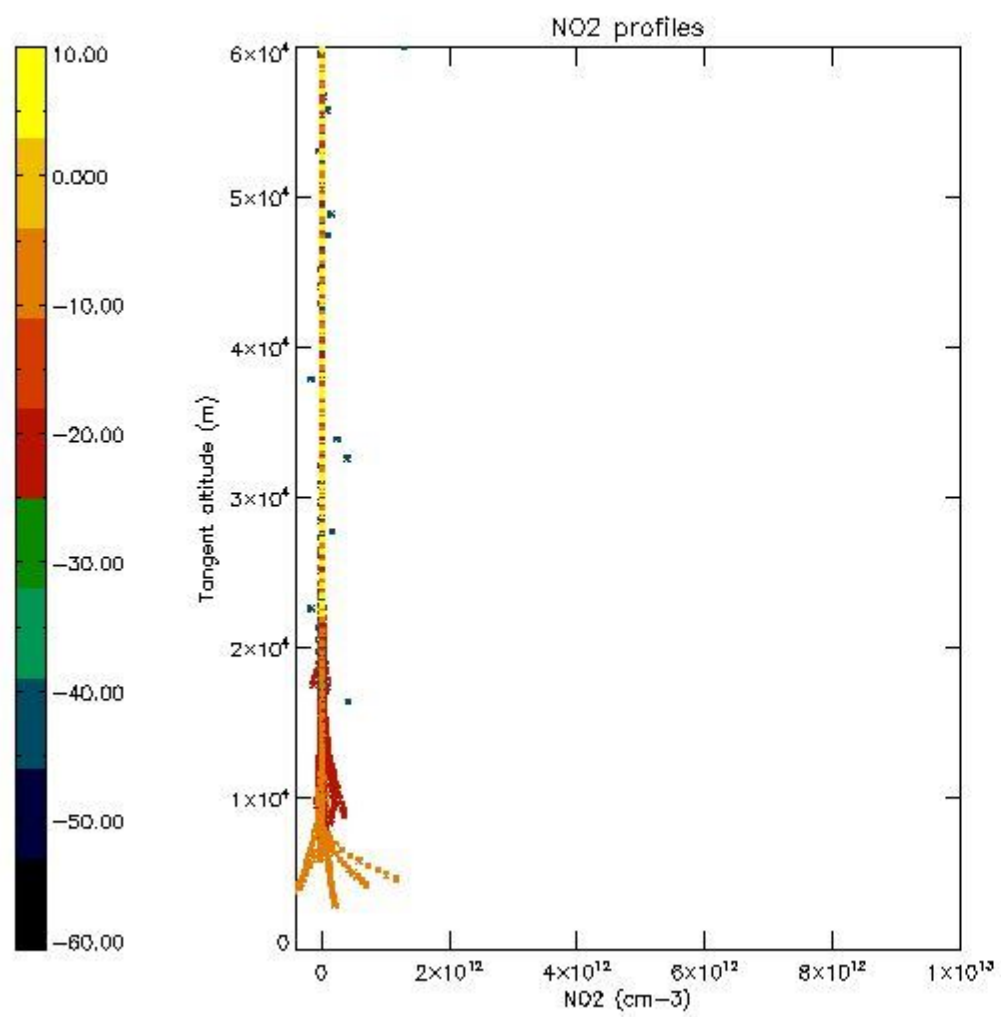
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



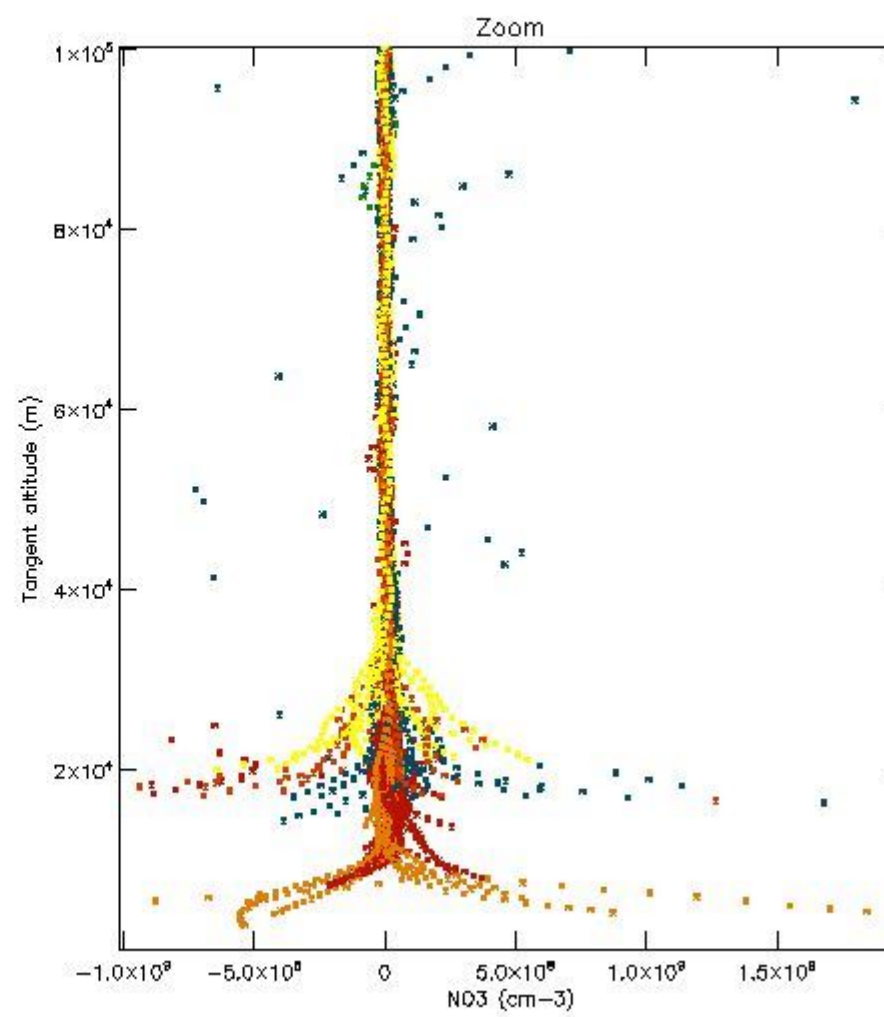
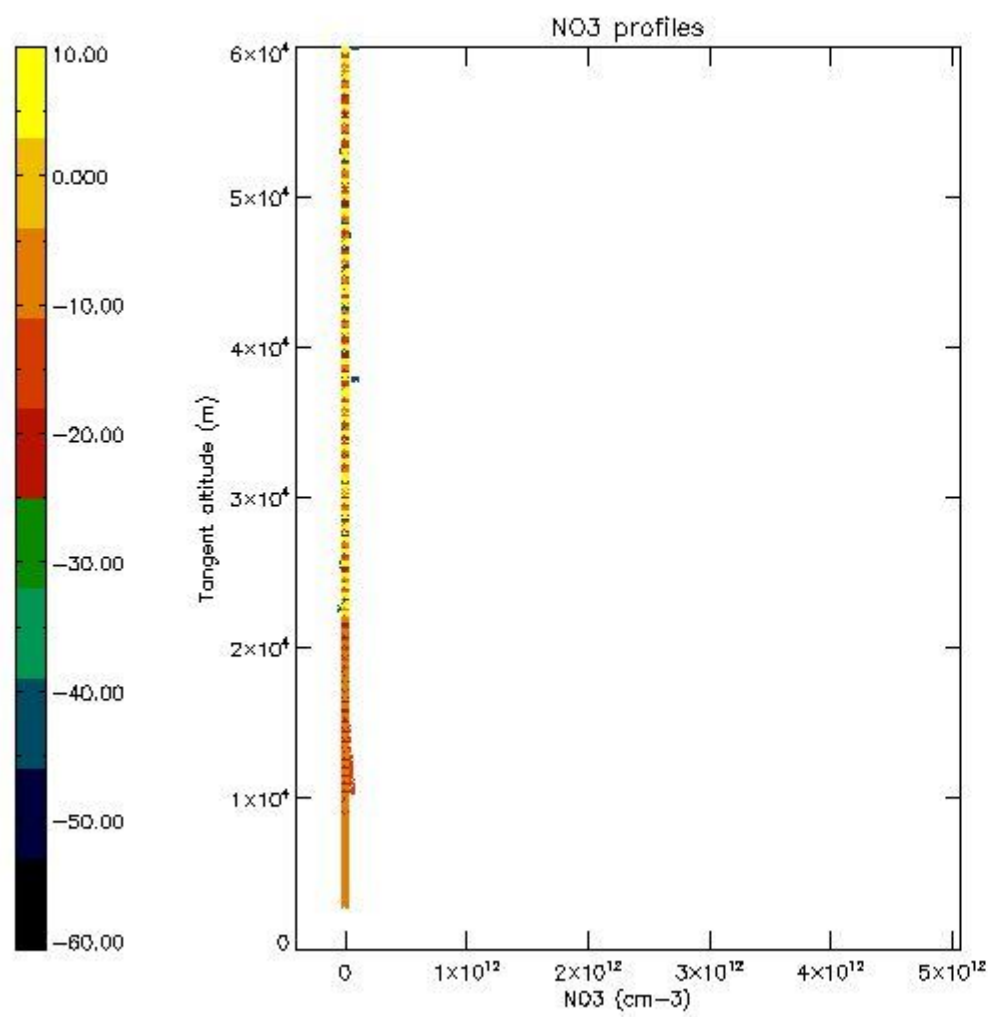
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



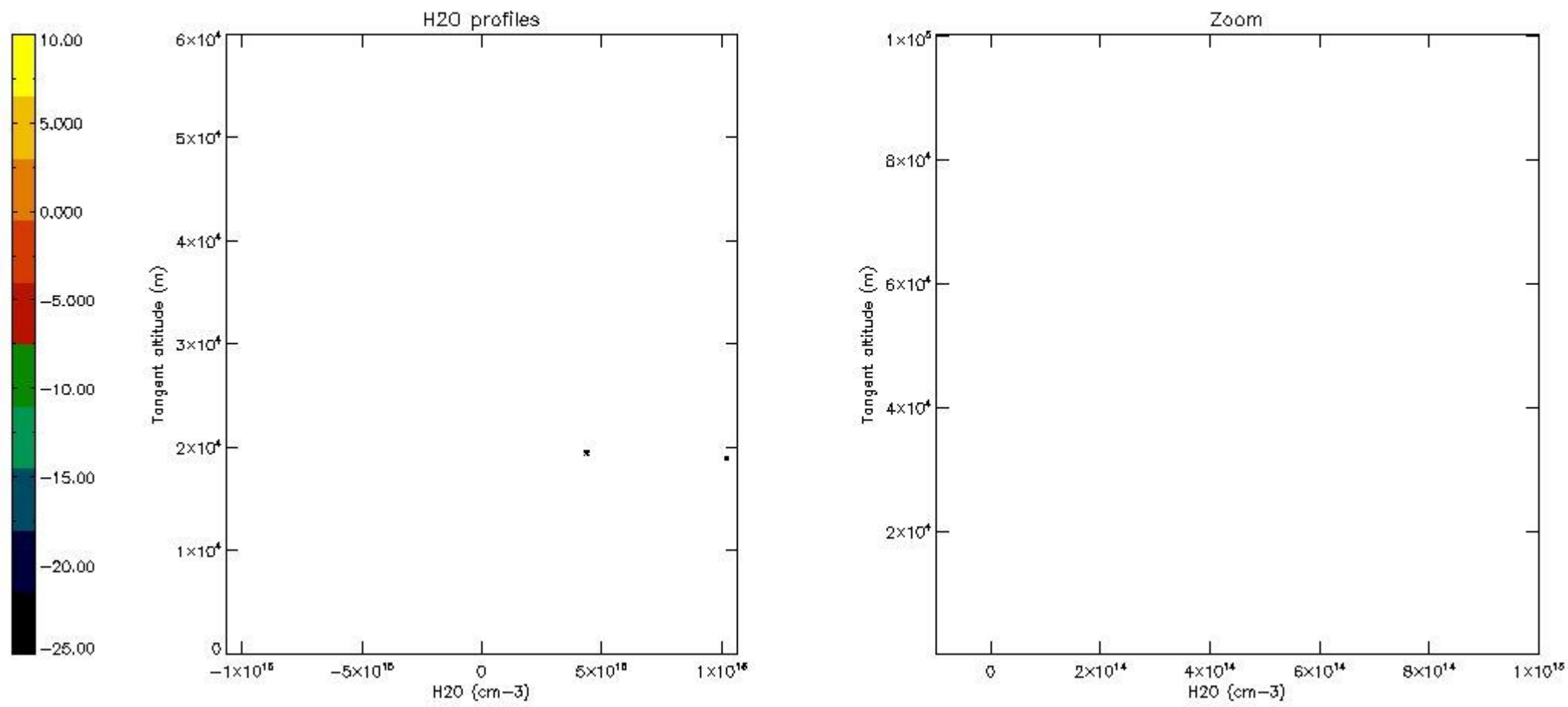
5.7 Plot NO3 profiles for all STD (dark without errors)

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	01-OCT-2010 00:20:37
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-OCT-2010 00:20:37
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-OCT-2010 00:20:37

GOMOS Level 2 Daily Report

SUMMARY

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

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

Item	Value
Time of report generation	29APR2013 15:36:48
Data source version	GOMOS/6.01
Start time of products	01-10-2010 (01OCT2010 00:00:00)
Stop time of products	02-10-2010 (02OCT2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	182
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

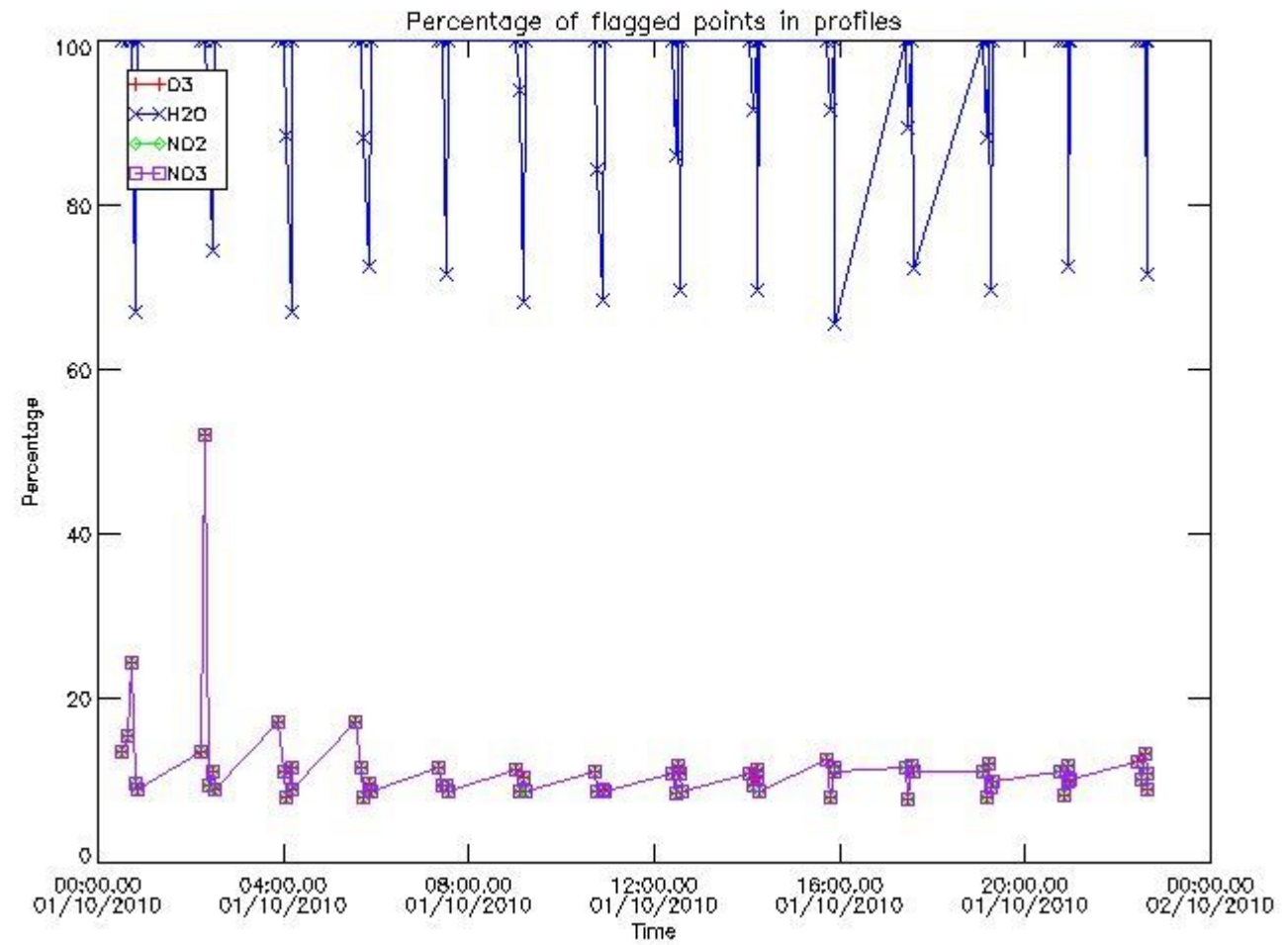
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20101001_002037_000000392093_00245_44888_3386.N1	01-OCT-2010 00:20:37	Bright	39.000	24	66Alp Gem	1.5800	10200.	78	44888	No
2	GOM_NL__2PRFIN20101001_002205_000000772093_00245_44888_3387.N1	01-OCT-2010 00:22:05	Bright	77.000	17	78Bet Gem	1.1610	4500.0	154	44888	No
3	GOM_NL__2PRFIN20101001_003125_000000382093_00245_44888_3388.N1	01-OCT-2010 00:31:25	Dark	37.500	8	10Alp CMi	0.40000	6500.0	75	44888	No
4	GOM_NL__2PRFIN20101001_003829_000000462093_00245_44888_3389.N1	01-OCT-2010 00:38:29	Dark	46.000	132	15Rho Pup	2.8030	6900.0	92	44888	No
5	GOM_NL__2PRFIN20101001_004236_000000542093_00245_44888_3390.N1	01-OCT-2010 00:42:36	Dark	54.000	37	25Del CMa	1.8300	5900.0	108	44888	No
6	GOM_NL__2PRFIN20101001_004849_000000542093_00246_44889_3183.N1	01-OCT-2010 00:48:49	Dark	53.500	2	Alp Car	-0.73600	7000.0	107	44889	No
7	GOM_NL__2PRFIN20101001_005101_000000572093_00246_44889_3184.N1	01-OCT-2010 00:51:01	Dark	57.000	108	Alp Col	2.6520	15200.	114	44889	No
8	GOM_NL__2PRFIN20101001_010114_000000512093_00246_44889_3185.N1	01-OCT-2010 01:01:14	Straylight	50.500	157	The1Eri	2.9060	9300.0	101	44889	No
9	GOM_NL__2PRFIN20101001_011157_000000492093_00246_44889_3186.N1	01-OCT-2010 01:11:57	Straylight	49.000	52	16Bet Cet	2.0370	4500.0	98	44889	No
10	GOM_NL__2PRFIN20101001_012227_000000412093_00246_44889_3187.N1	01-OCT-2010 01:22:27	Bright	41.000	140	88Gam Peg	2.8340	26000.	82	44889	No
11	GOM_NL__2PRFIN20101001_012637_000000402093_00246_44889_3188.N1	01-OCT-2010 01:26:37	Bright	40.000	58	21Alp And	2.0730	11000.	80	44889	No
12	GOM_NL__2PRFIN20101001_013023_000000462093_00246_44889_3189.N1	01-OCT-2010 01:30:23	Bright	46.000	53	43Bet And	2.0480	3300.0	92	44889	No
13	GOM_NL__2PRFIN20101001_013512_000000392093_00246_44889_3190.N1	01-OCT-2010 01:35:12	Bright	38.500	74	11Bet Cas	2.2680	6600.0	77	44889	No
14	GOM_NL__2PRFIN20101001_013634_000000392093_00246_44889_3191.N1	01-OCT-2010 01:36:34	Bright	39.000	76	27Gam Cas	2.3000	30000.	78	44889	No
15	GOM_NL__2PRFIN20101001_020113_000000392093_00246_44889_3192.N1	01-OCT-2010 02:01:13	Bright	39.000	24	66Alp Gem	1.5800	10200.	78	44889	No
16	GOM_NL__2PRFIN20101001_020241_000000772093_00246_44889_3193.N1	01-OCT-2010 02:02:41	Bright	76.500	17	78Bet Gem	1.1610	4500.0	153	44889	No
17	GOM_NL__2PRFIN20101001_021202_000000382093_00246_44889_3194.N1	01-OCT-2010 02:12:02	Dark	38.000	8	10Alp CMi	0.40000	6500.0	76	44889	No
18	GOM_NL__2PRFIN20101001_021905_000000492093_00246_44889_3195.N1	01-OCT-2010 02:19:05	Dark	48.500	132	15Rho Pup	2.8030	6900.0	97	44889	No
19	GOM_NL__2PRFIN20101001_022313_000000542093_00246_44889_3196.N1	01-OCT-2010 02:23:13	Dark	54.000	37	25Del CMa	1.8300	5900.0	108	44889	No
20	GOM_NL__2PRFIN20101001_022926_000000462093_00247_44890_3193.N1	01-OCT-2010 02:29:26	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	44890	No
21	GOM_NL__2PRFIN20101001_023139_000000582093_00247_44890_3194.N1	01-OCT-2010 02:31:39	Dark	57.500	108	Alp Col	2.6520	15200.	115	44890	No
22	GOM_NL__2PRFIN20101001_024150_000000512093_00247_44890_3195.N1	01-OCT-2010 02:41:50	Straylight	51.000	157	The1Eri	2.9060	9300.0	102	44890	No
23	GOM_NL__2PRFIN20101001_025234_000000512093_00247_44890_3196.N1	01-OCT-2010 02:52:34	Straylight	51.000	52	16Bet Cet	2.0370	4500.0	102	44890	No
24	GOM_NL__2PRFIN20101001_030302_000000412093_00247_44890_3197.N1	01-OCT-2010 03:03:02	Bright	40.500	140	88Gam Peg	2.8340	26000.	81	44890	No
25	GOM_NL__2PRFIN20101001_030712_000000402093_00247_44890_3198.N1	01-OCT-2010 03:07:12	Bright	39.500	58	21Alp And	2.0730	11000.	79	44890	No
26	GOM_NL__2PRFIN20101001_031058_000000492093_00247_44890_3199.N1	01-OCT-2010 03:10:58	Bright	48.500	53	43Bet And	2.0480	3300.0	97	44890	No
27	GOM_NL__2PRFIN20101001_031548_000000372093_00247_44890_3200.N1	01-OCT-2010 03:15:48	Bright	36.500	74	11Bet Cas	2.2680	6600.0	73	44890	No
28	GOM_NL__2PRFIN20101001_031709_000000402093_00247_44890_3201.N1	01-OCT-2010 03:17:09	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	44890	No
29	GOM_NL__2PRFIN20101001_034149_000000312093_00247_44890_3202.N1	01-OCT-2010 03:41:49	Twilight	31.000	24	66Alp Gem	1.5800	10200.	62	44890	No
30	GOM_NL__2PRFIN20101001_034318_000000732093_00247_44890_3203.N1	01-OCT-2010 03:43:18	Bright	73.000	17	78Bet Gem	1.1610	4500.0	146	44890	No
31	GOM_NL__2PRFIN20101001_035239_000000302093_00247_44890_3204.N1	01-OCT-2010 03:52:39	Dark	30.000	8	10Alp CMi	0.40000	6500.0	60	44890	No
32	GOM_NL__2PRFIN20101001_035942_000000462093_00247_44890_3205.N1	01-OCT-2010 03:59:42	Dark	45.500	132	15Rho Pup	2.8030	6900.0	91	44890	No
33	GOM_NL__2PRFIN20101001_040351_000000652093_00247_44890_3206.N1	01-OCT-2010 04:03:51	Dark	65.000	37	25Del CMa	1.8300	5900.0	130	44890	No
34	GOM_NL__2PRFIN20101001_041003_000000452093_00248_44891_3204.N1	01-OCT-2010 04:10:03	Dark	44.500	2	Alp Car	-0.73600	7000.0	89	44891	No
35	GOM_NL__2PRFIN20101001_041216_000000582093_00248_44891_3205.N1	01-OCT-2010 04:12:16	Dark	57.500	108	Alp Col	2.6520	15200.	115	44891	No
36	GOM_NL__2PRFIN20101001_042227_000000492093_00248_44891_3206.N1	01-OCT-2010 04:22:27	Straylight	49.000	157	The1Eri	2.9060	9300.0	98	44891	No
37	GOM_NL__2PRFIN20101001_043310_000000512093_00248_44891_3207.N1	01-OCT-2010 04:33:10	Straylight	51.000	52	16Bet Cet	2.0370	4500.0	102	44891	No
38	GOM_NL__2PRFIN20101001_044338_000000412093_00248_44891_3208.N1	01-OCT-2010 04:43:38	Bright	41.000	140	88Gam Peg	2.8340	26000.	82	44891	No
39	GOM_NL__2PRFIN20101001_044748_000000392093_00248_44891_3209.N1	01-OCT-2010 04:47:48	Bright	39.000	58	21Alp And	2.0730	11000.	78	44891	No
40	GOM_NL__2PRFIN20101001_045134_000000502093_00248_44891_3210.N1	01-OCT-2010 04:51:34	Bright	49.500	53	43Bet And	2.0480	3300.0	99	44891	No
41	GOM_NL__2PRFIN20101001_045624_000000392093_00248_44891_3211.N1	01-OCT-2010 04:56:24	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	44891	No
42	GOM_NL__2PRFIN20101001_045745_000000412093_00248_44891_3212.N1	01-OCT-2010 04:57:45	Bright	41.000	76	27Gam Cas	2.3000	30000.	82	44891	No

161	GOM_NL__2PRFIN20101001_205831_000000562093_00258_44901_3628.N1	01-OCT-2010 20:58:31	Dark	55.500	108	Alp Col	2.6520	15200.	111	44901	No
162	GOM_NL__2PRFIN20101001_210833_000000492093_00258_44901_3629.N1	01-OCT-2010 21:08:33	Straylight	48.500	157	The1Eri	2.9060	9300.0	97	44901	No
163	GOM_NL__2PRFIN20101001_211911_000000482093_00258_44901_3630.N1	01-OCT-2010 21:19:11	Straylight	48.000	52	16Bet Cet	2.0370	4500.0	96	44901	No
164	GOM_NL__2PRFIN20101001_212935_000000402093_00258_44901_3631.N1	01-OCT-2010 21:29:35	Bright	40.000	140	88Gam Peg	2.8340	26000.	80	44901	No
165	GOM_NL__2PRFIN20101001_213344_000000412093_00258_44901_3632.N1	01-OCT-2010 21:33:44	Bright	40.500	58	21Alp And	2.0730	11000.	81	44901	No
166	GOM_NL__2PRFIN20101001_213726_000000452093_00258_44901_3633.N1	01-OCT-2010 21:37:26	Bright	45.000	53	43Bet And	2.0480	3300.0	90	44901	No
167	GOM_NL__2PRFIN20101001_214221_000000372093_00258_44901_3634.N1	01-OCT-2010 21:42:21	Bright	36.500	74	11Bet Cas	2.2680	6600.0	73	44901	No
168	GOM_NL__2PRFIN20101001_214340_000000382093_00258_44901_3635.N1	01-OCT-2010 21:43:40	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	44901	No
169	GOM_NL__2PRFIN20101001_220956_000000672093_00258_44901_3636.N1	01-OCT-2010 22:09:56	Bright	67.000	17	78Bet Gem	1.1610	4500.0	134	44901	No
170	GOM_NL__2PRFIN20101001_222626_000000462093_00258_44901_3637.N1	01-OCT-2010 22:26:26	Dark	45.500	132	15Rho Pup	2.8030	6900.0	91	44901	No
171	GOM_NL__2PRFIN20101001_223040_000000662093_00258_44901_3638.N1	01-OCT-2010 22:30:40	Dark	65.500	37	25Del CMa	1.8300	5900.0	131	44901	No
172	GOM_NL__2PRFIN20101001_223522_000000432093_00259_44902_3645.N1	01-OCT-2010 22:35:22	Dark	42.500	161	Tau Pup	2.9310	4500.0	85	44902	No
173	GOM_NL__2PRFIN20101001_223646_000000572093_00259_44902_3646.N1	01-OCT-2010 22:36:46	Dark	56.500	2	Alp Car	-0.73600	7000.0	113	44902	No
174	GOM_NL__2PRFIN20101001_223908_000000582093_00259_44902_3647.N1	01-OCT-2010 22:39:08	Dark	57.500	108	Alp Col	2.6520	15200.	115	44902	No
175	GOM_NL__2PRFIN20101001_224910_000000522093_00259_44902_3648.N1	01-OCT-2010 22:49:10	Straylight	52.000	157	The1Eri	2.9060	9300.0	104	44902	No
176	GOM_NL__2PRFIN20101001_225947_000000492093_00259_44902_3649.N1	01-OCT-2010 22:59:47	Straylight	48.500	52	16Bet Cet	2.0370	4500.0	97	44902	No
177	GOM_NL__2PRFIN20101001_231011_000000402093_00259_44902_3650.N1	01-OCT-2010 23:10:11	Bright	40.000	140	88Gam Peg	2.8340	26000.	80	44902	No
178	GOM_NL__2PRFIN20101001_231420_000000412093_00259_44902_3651.N1	01-OCT-2010 23:14:20	Bright	41.000	58	21Alp And	2.0730	11000.	82	44902	No
179	GOM_NL__2PRFIN20101001_231801_000000502093_00259_44902_3652.N1	01-OCT-2010 23:18:01	Bright	49.500	53	43Bet And	2.0480	3300.0	99	44902	No
180	GOM_NL__2PRFIN20101001_232256_000000392093_00259_44902_3653.N1	01-OCT-2010 23:22:56	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	44902	No
181	GOM_NL__2PRFIN20101001_232416_000000402093_00259_44902_3654.N1	01-OCT-2010 23:24:16	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	44902	No
182	GOM_NL__2PRFIN20101001_235032_000000622093_00259_44902_3655.N1	01-OCT-2010 23:50:32	Bright	62.000	17	78Bet Gem	1.1610	4500.0	124	44902	No

3. Quality information per product

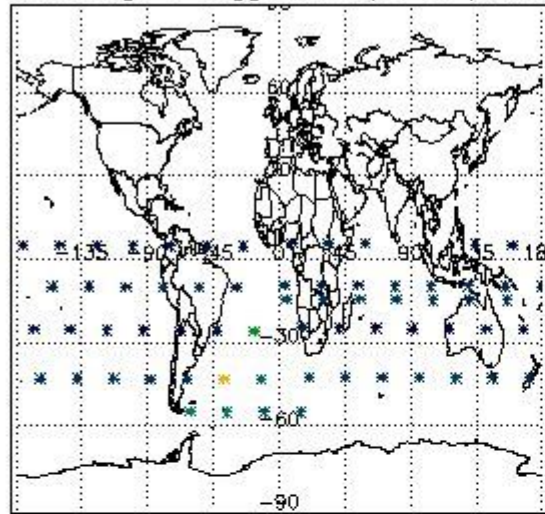
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

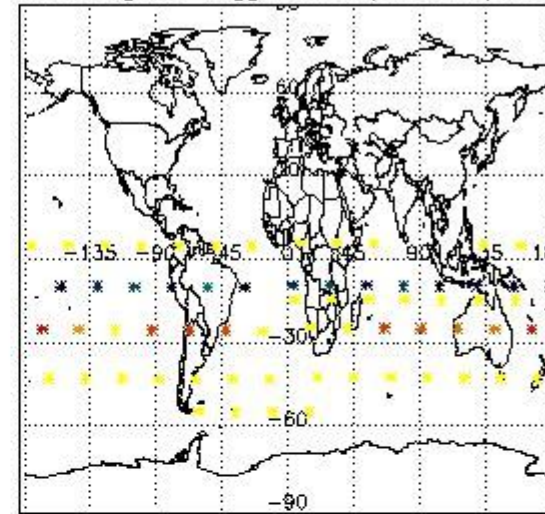


3.2 Plot quality information per product (world map)

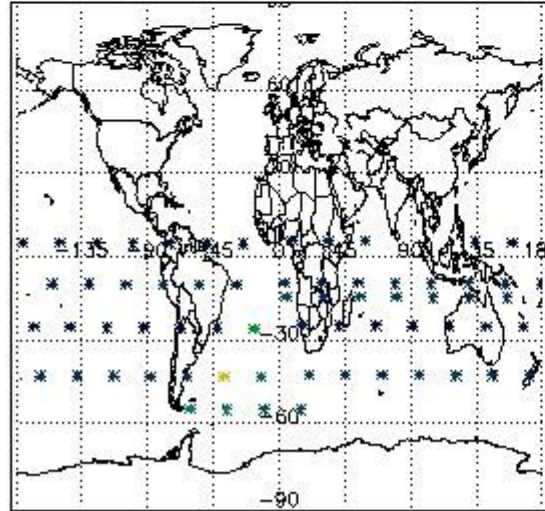
Percentage of flagged data per O3 profile



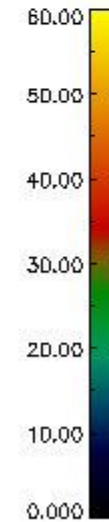
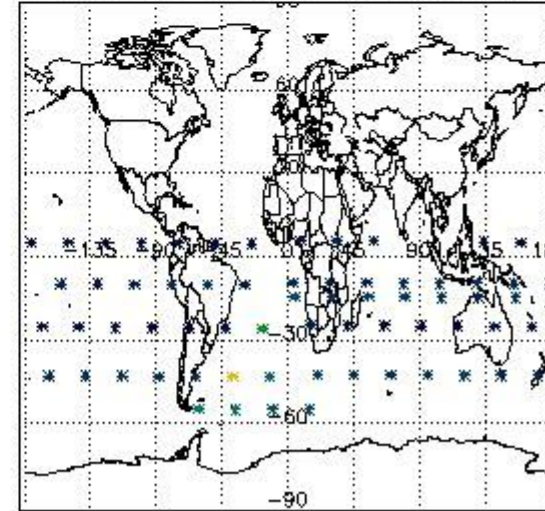
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

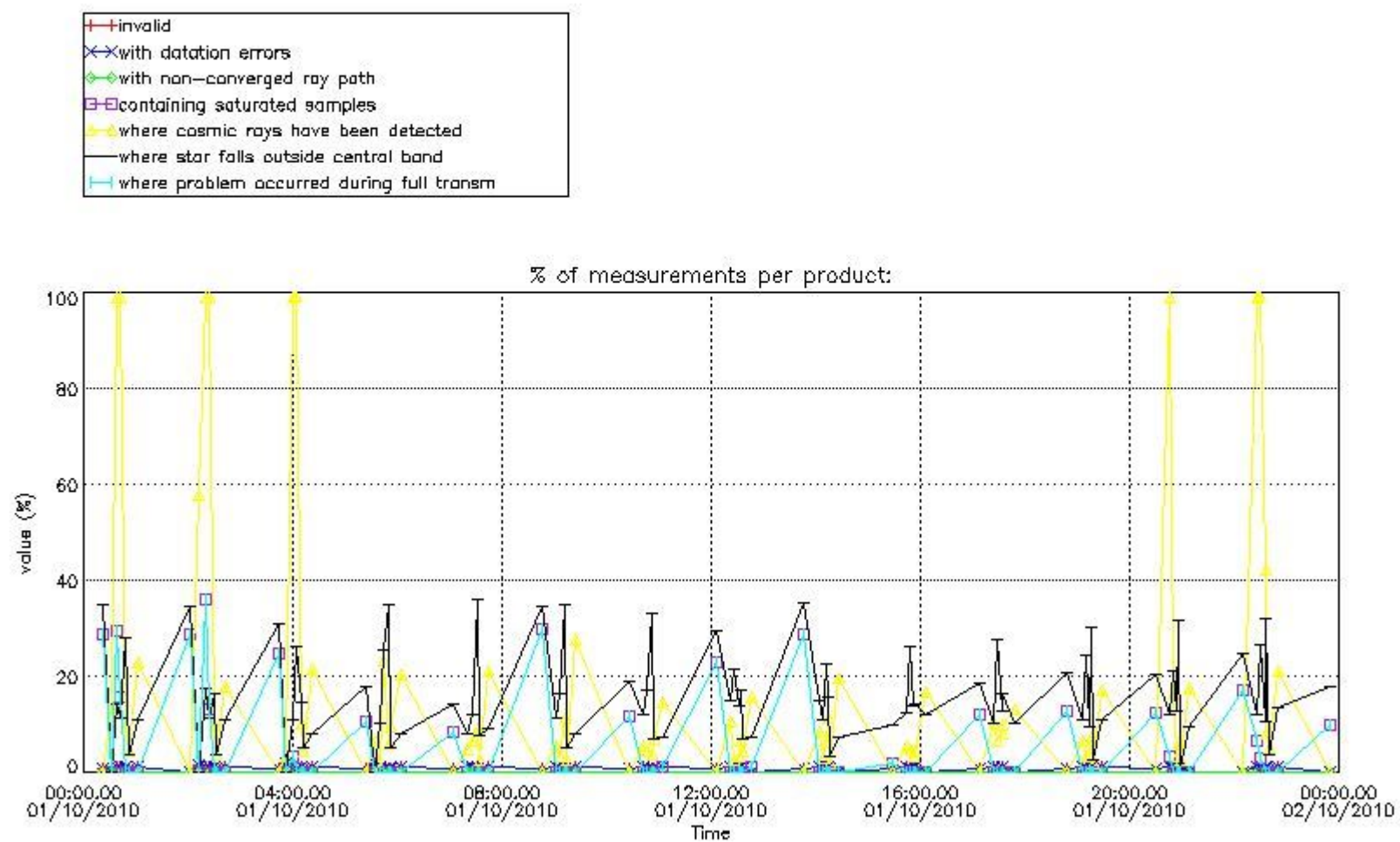


4. Level 1 quality information per product

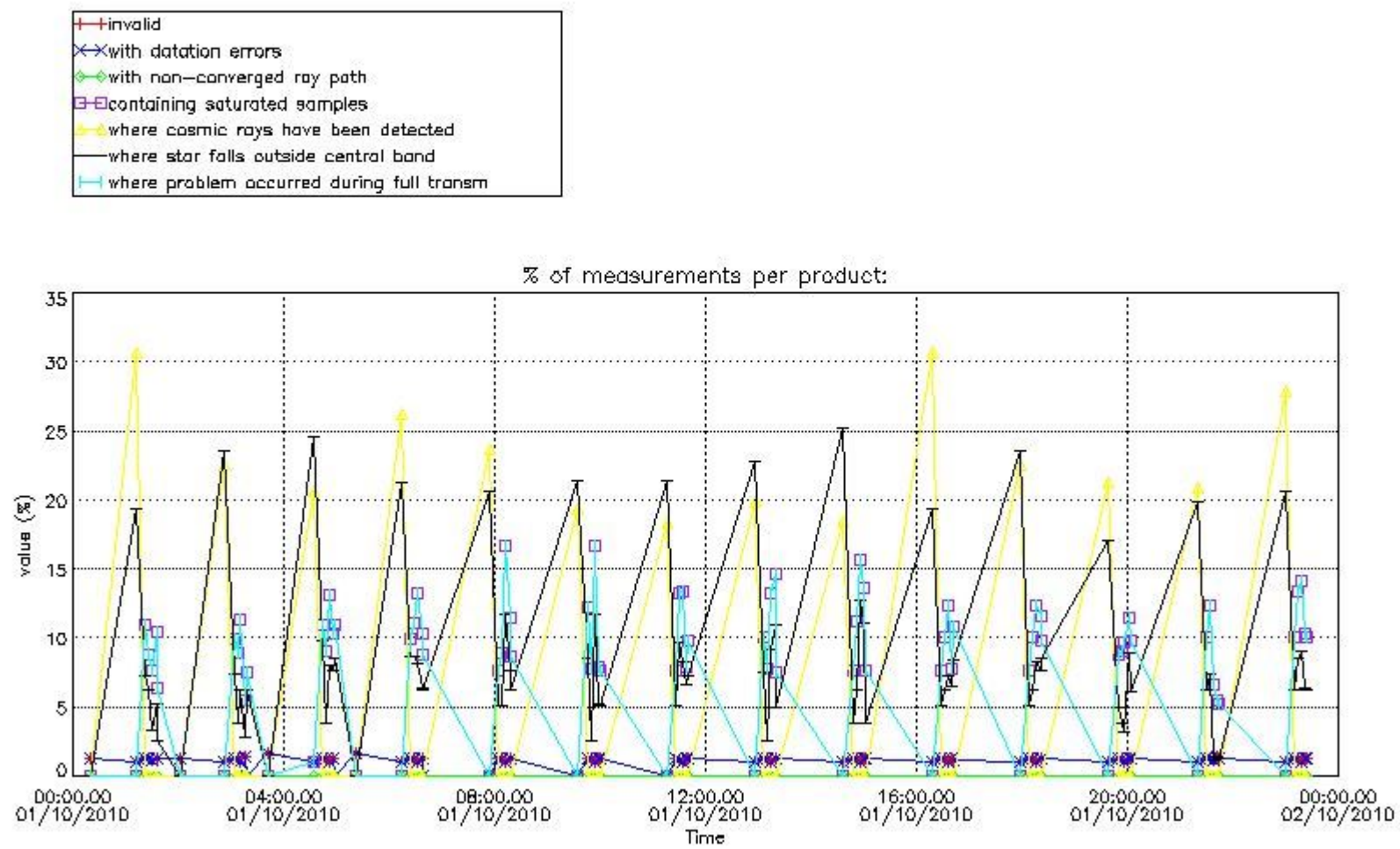
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



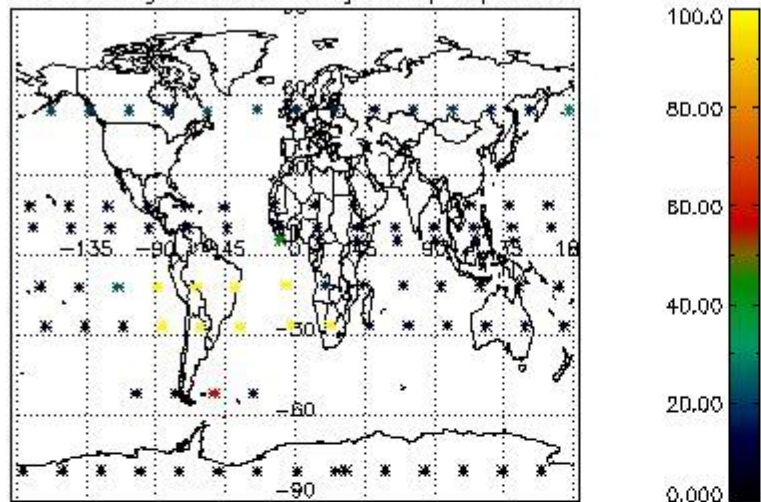
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



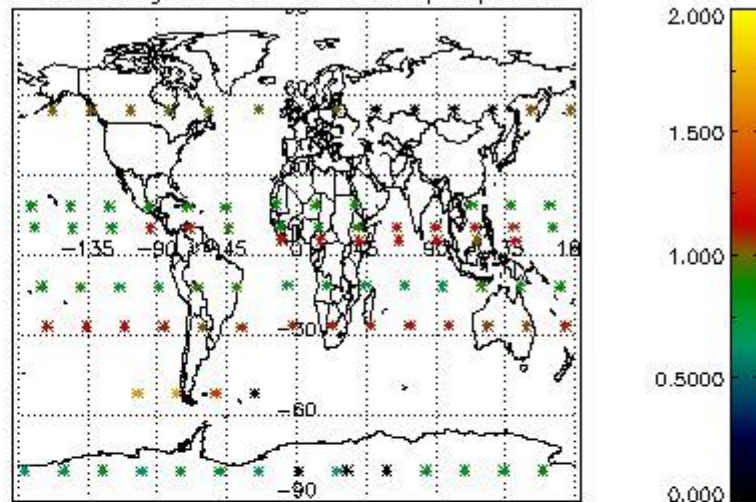
4.2 Plot quality information per product coming from level 1b processing (world map)

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

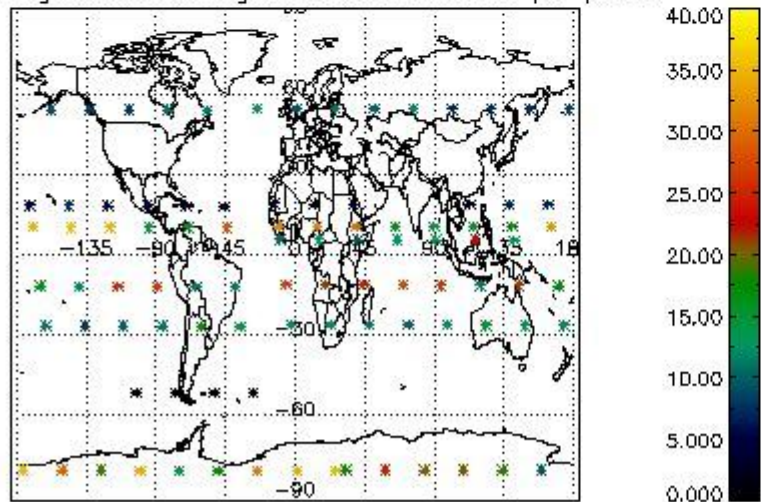
Percentage of cosmic ray hits per profile



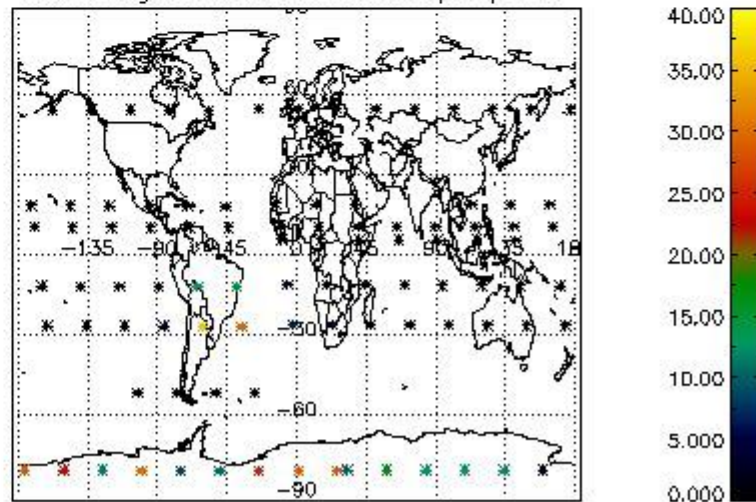
Percentage of datation errors per profile



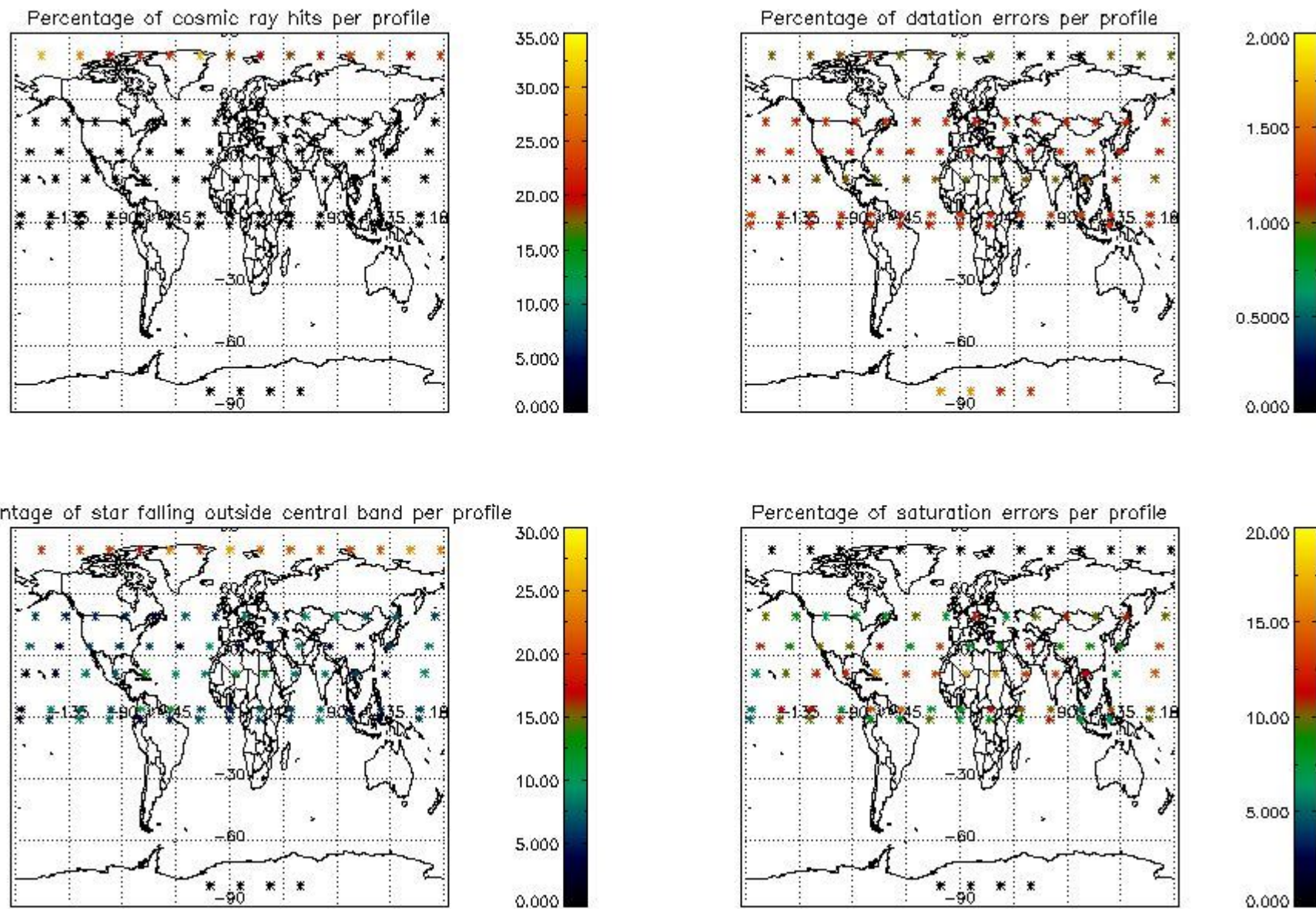
Percentage of star falling outside central band per profile



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

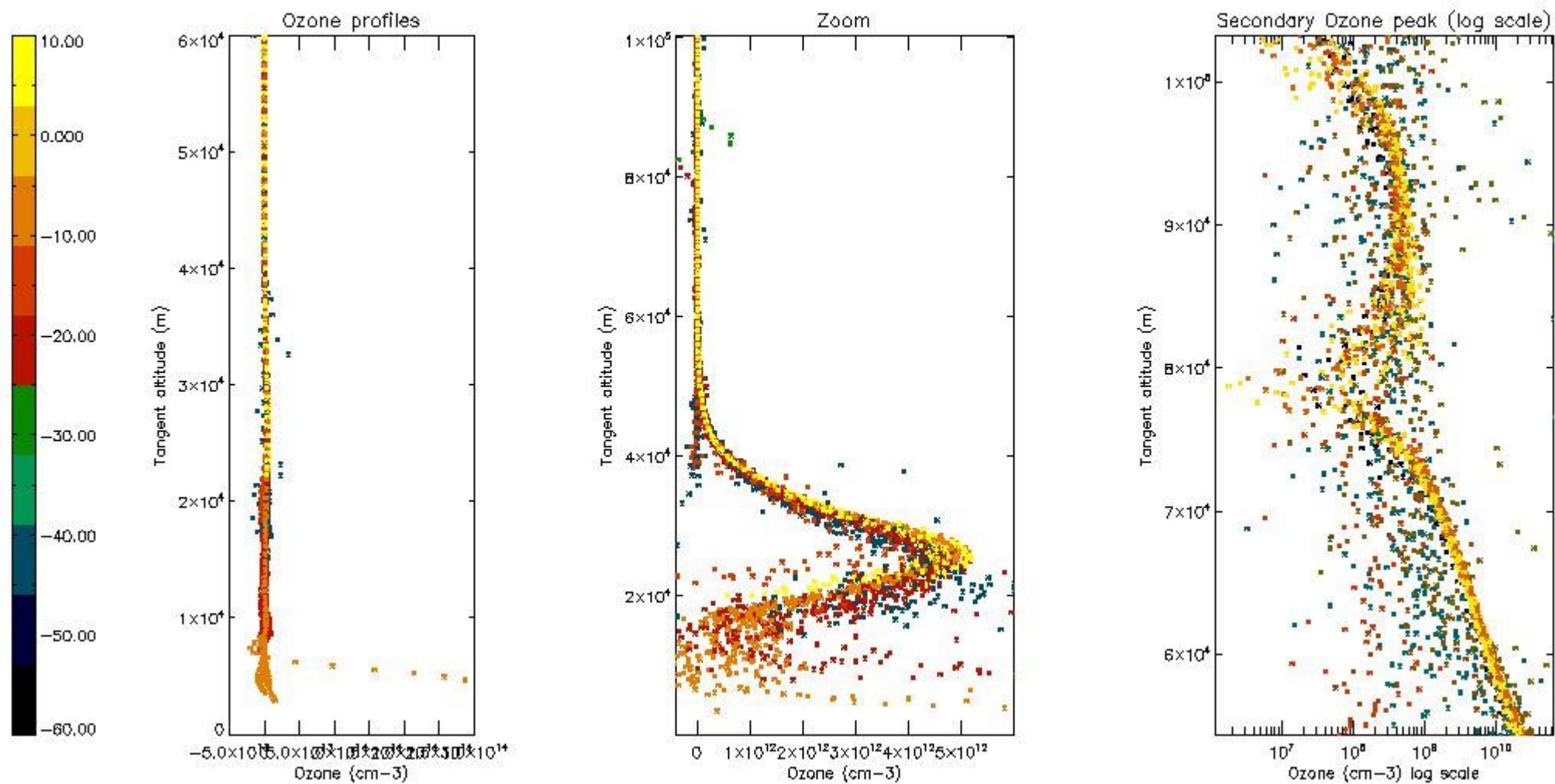
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	39
STD < 20	17

STD < 10	12
STD < 5	8

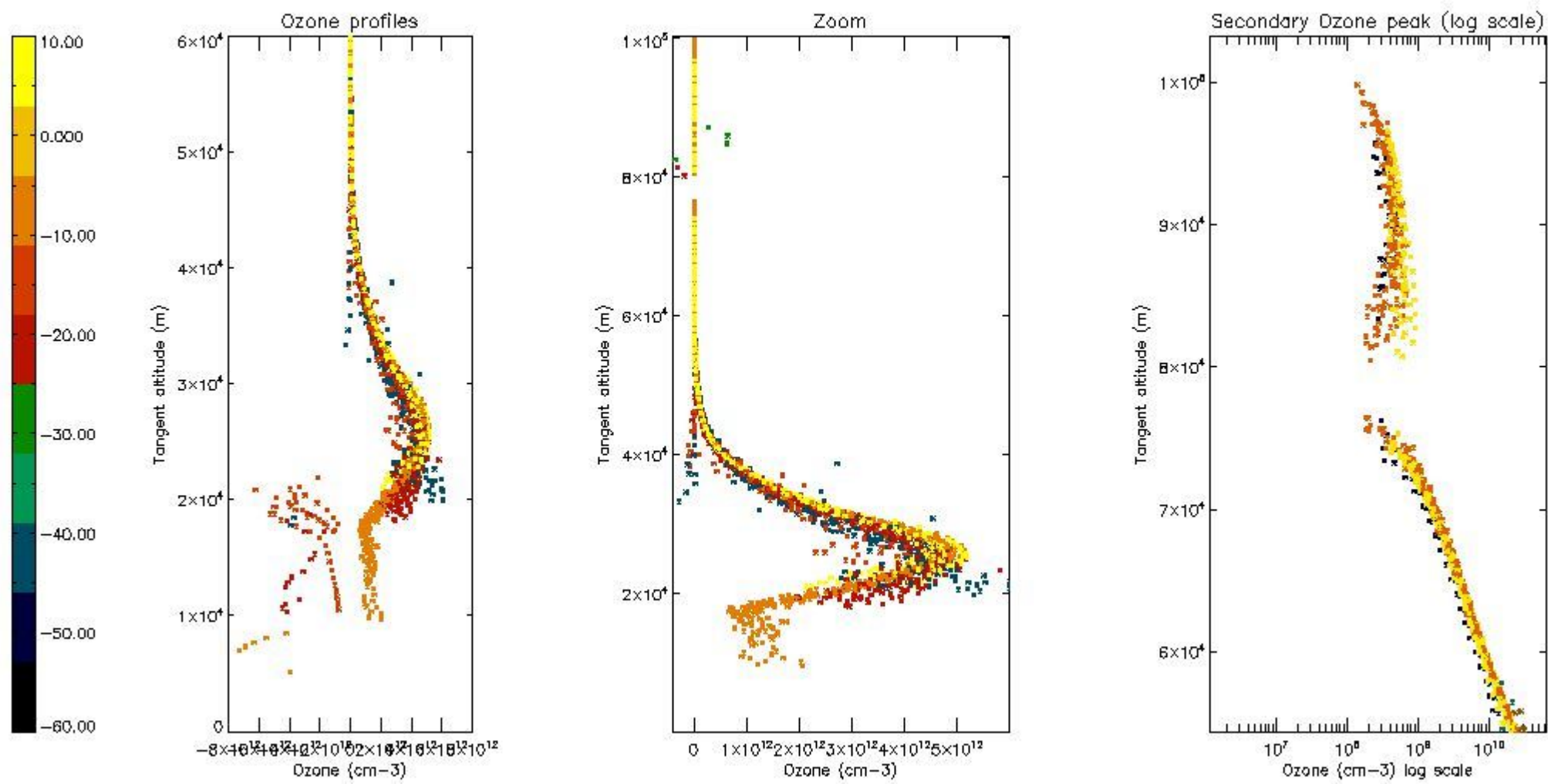
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



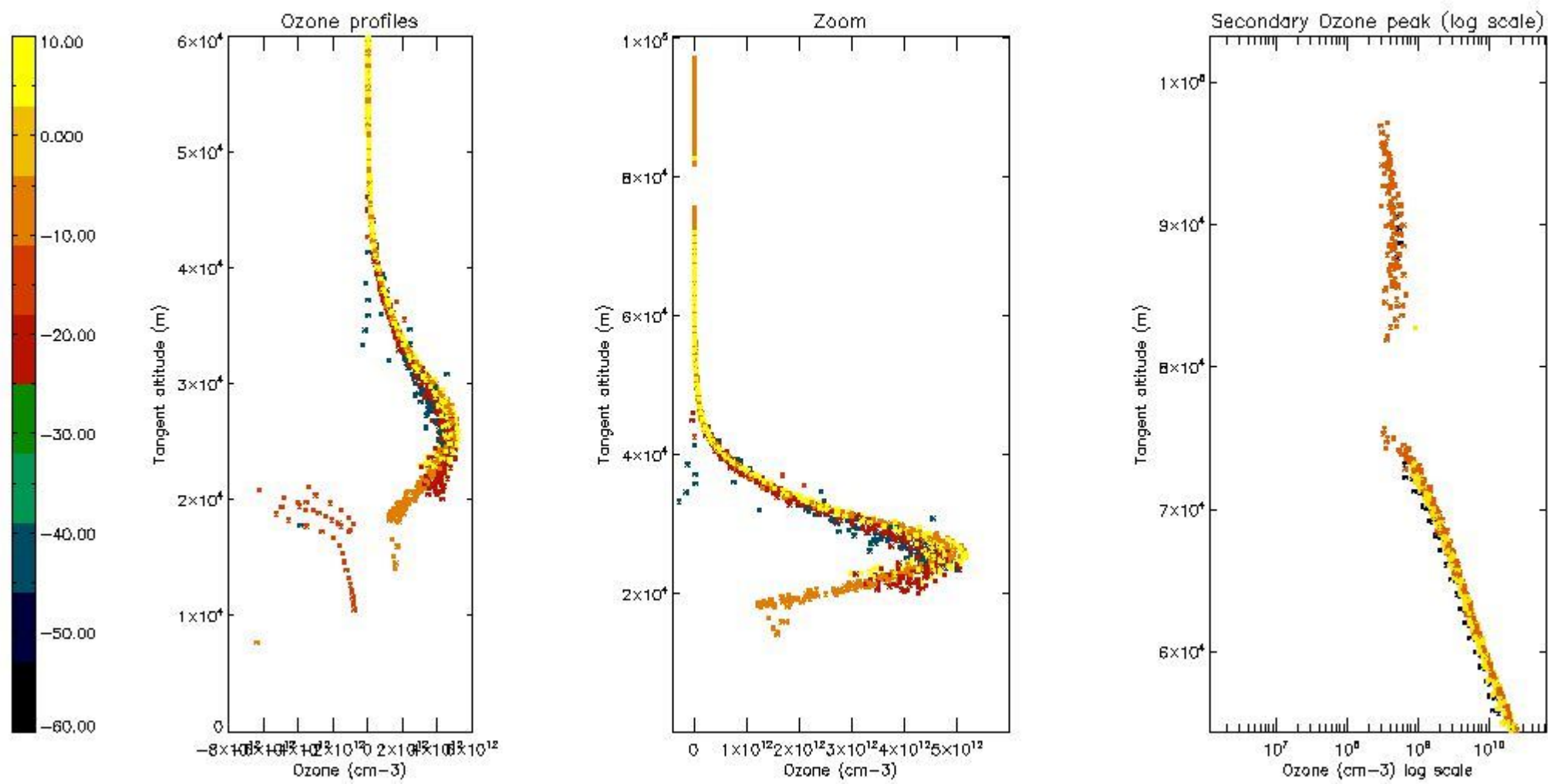
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



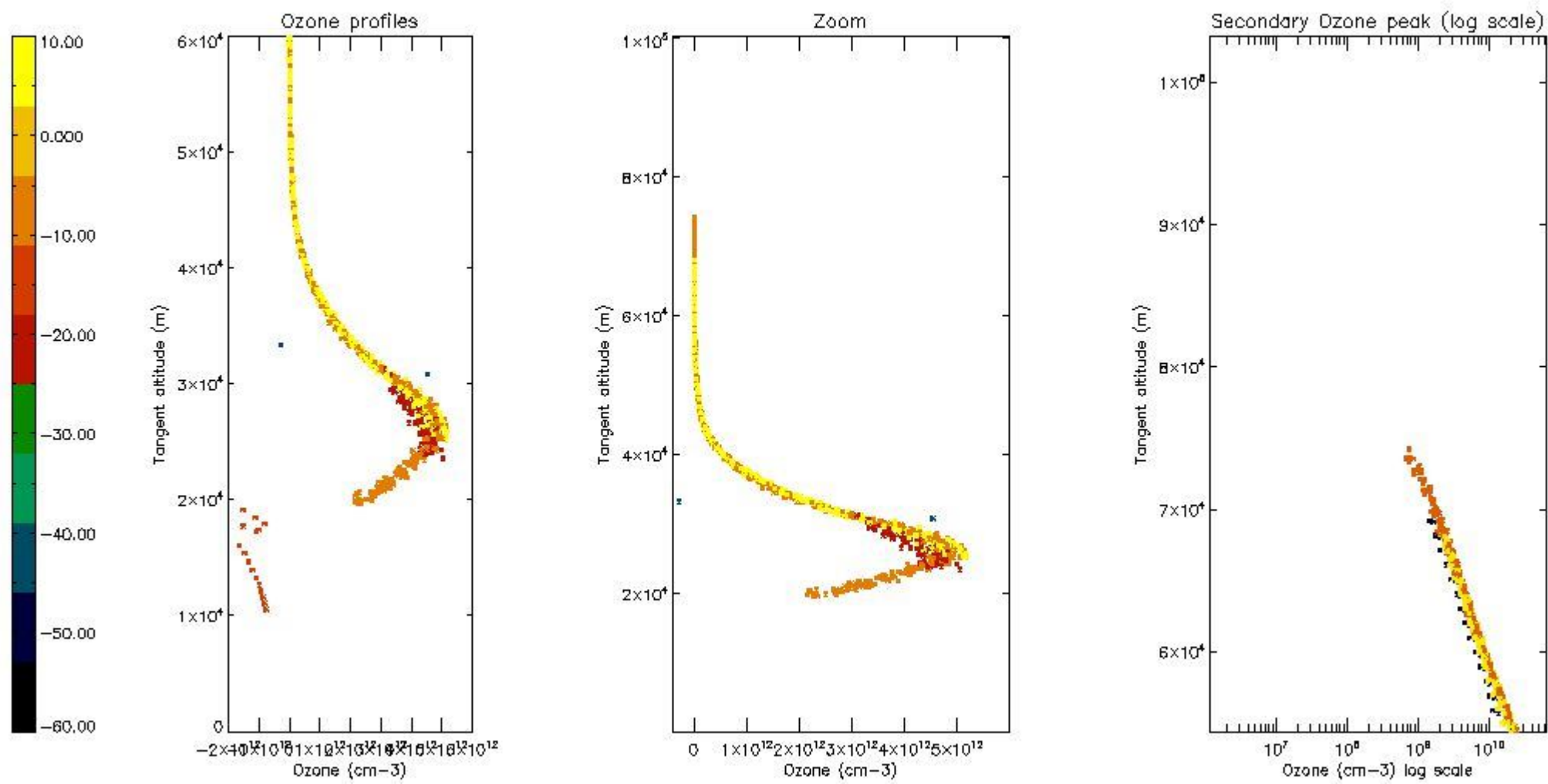
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



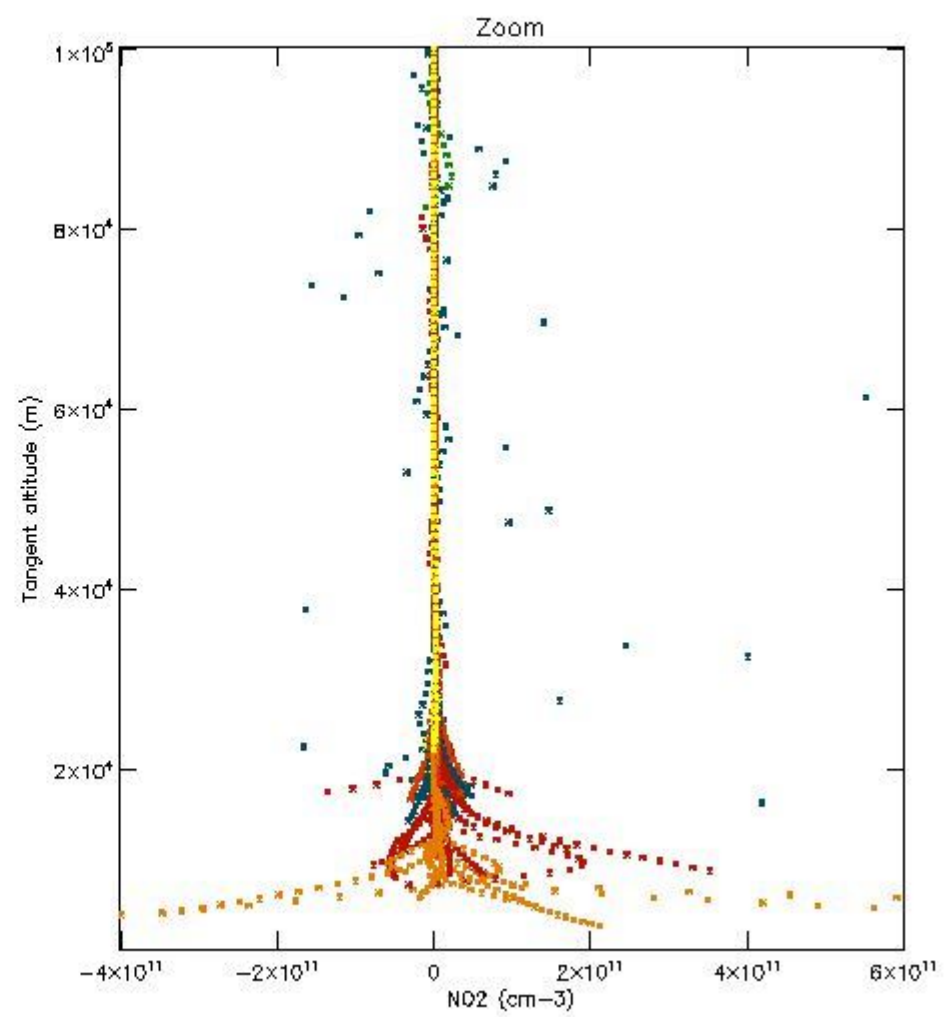
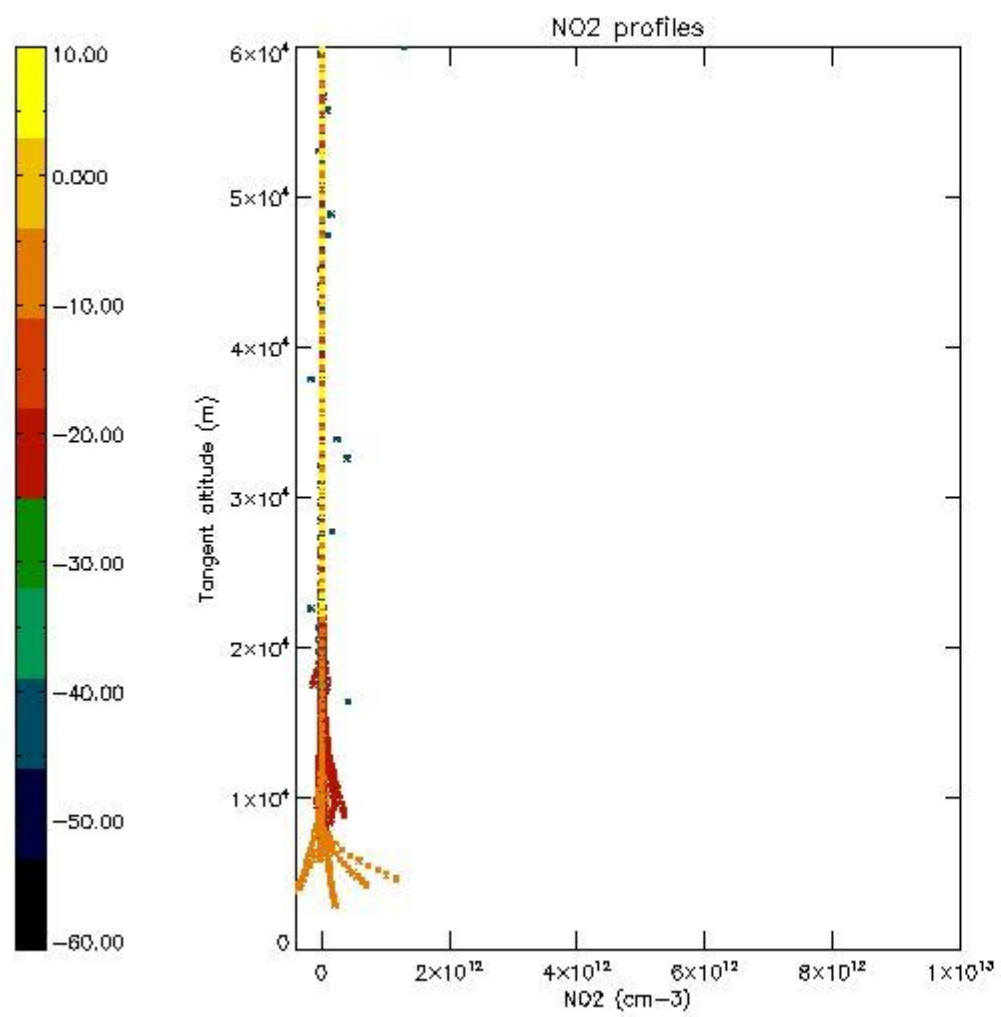
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



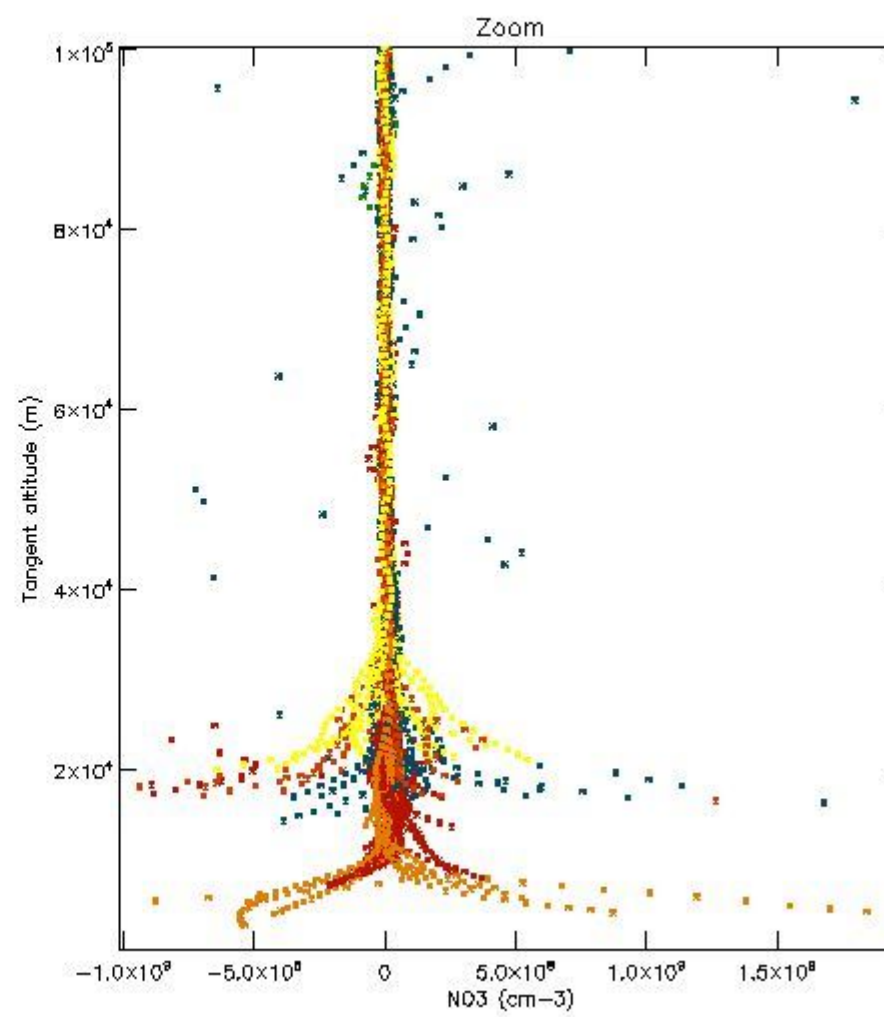
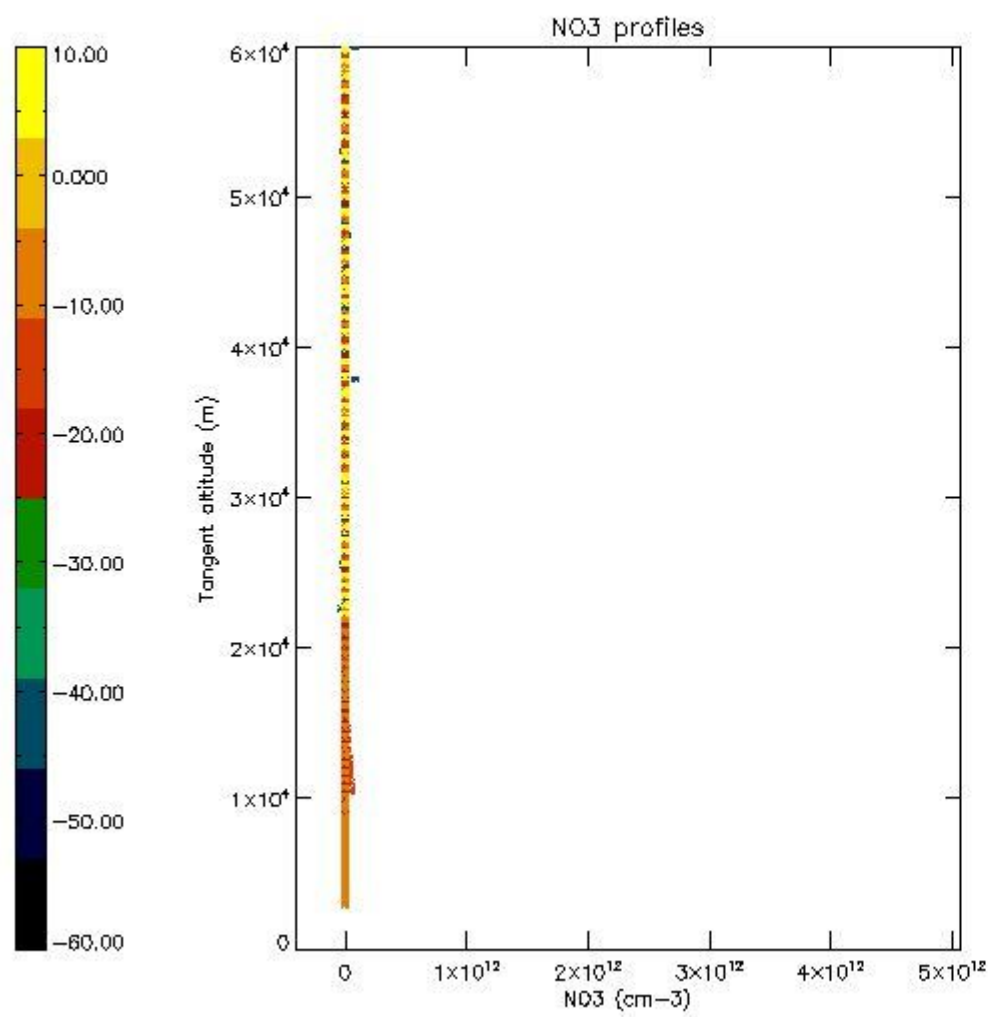
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



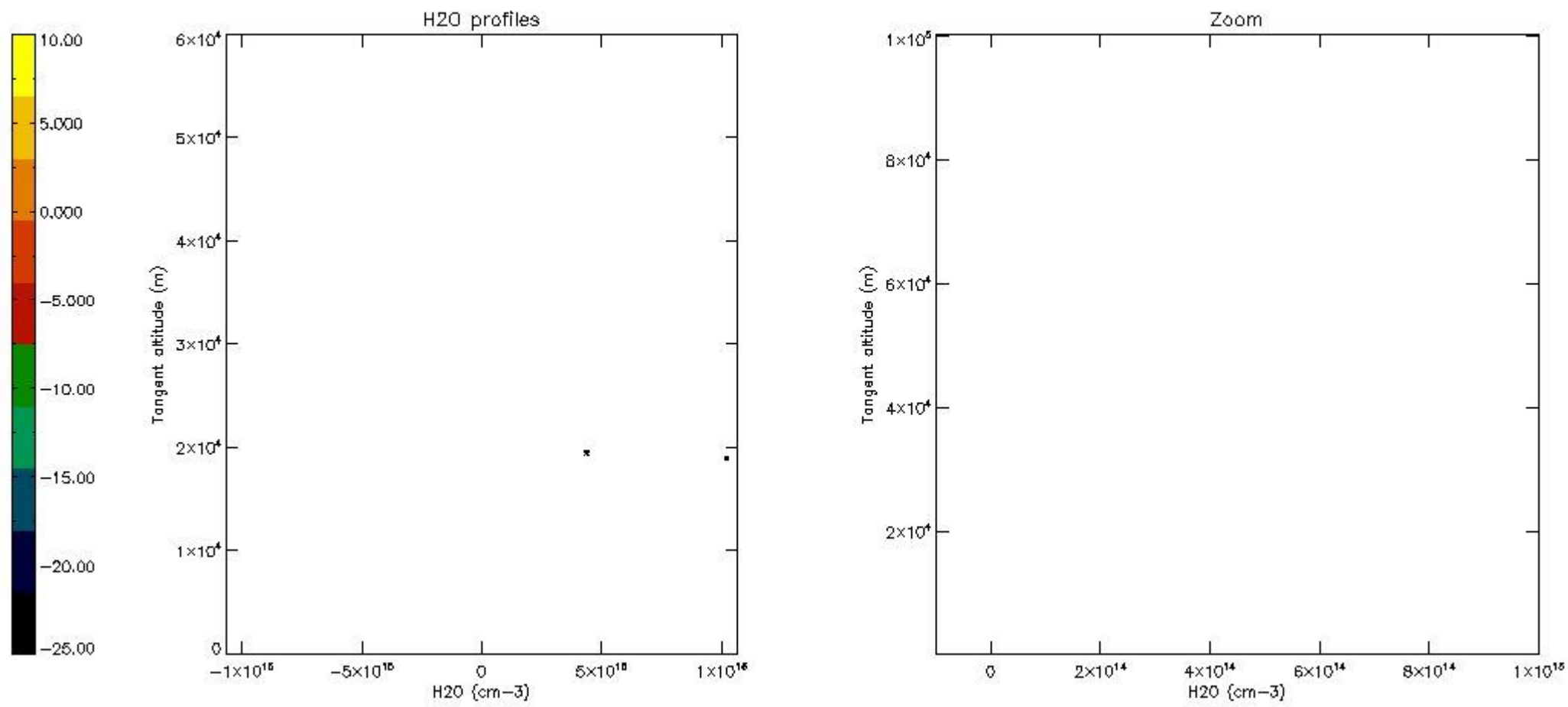
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

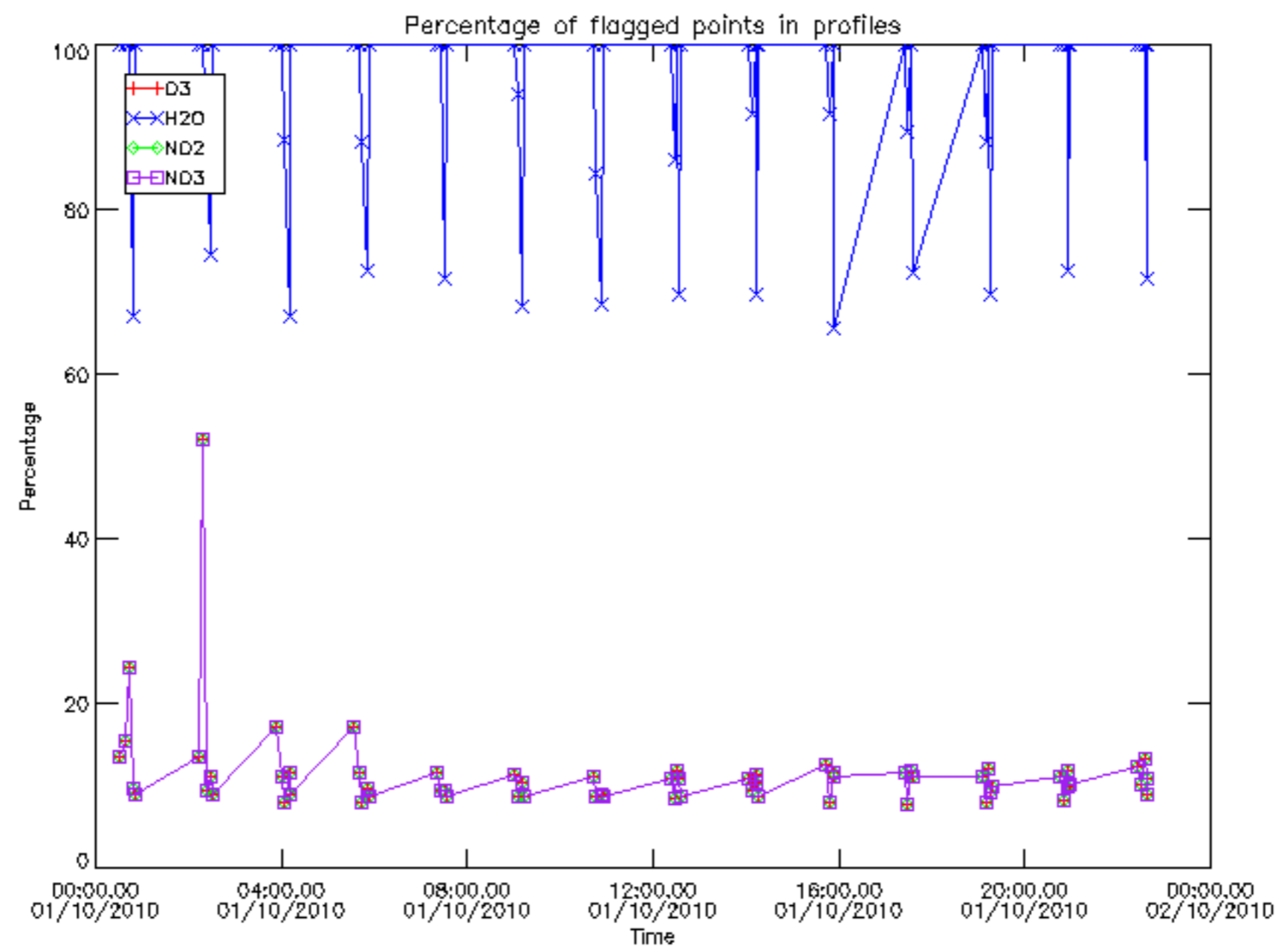
The colorbar represents the latitude.



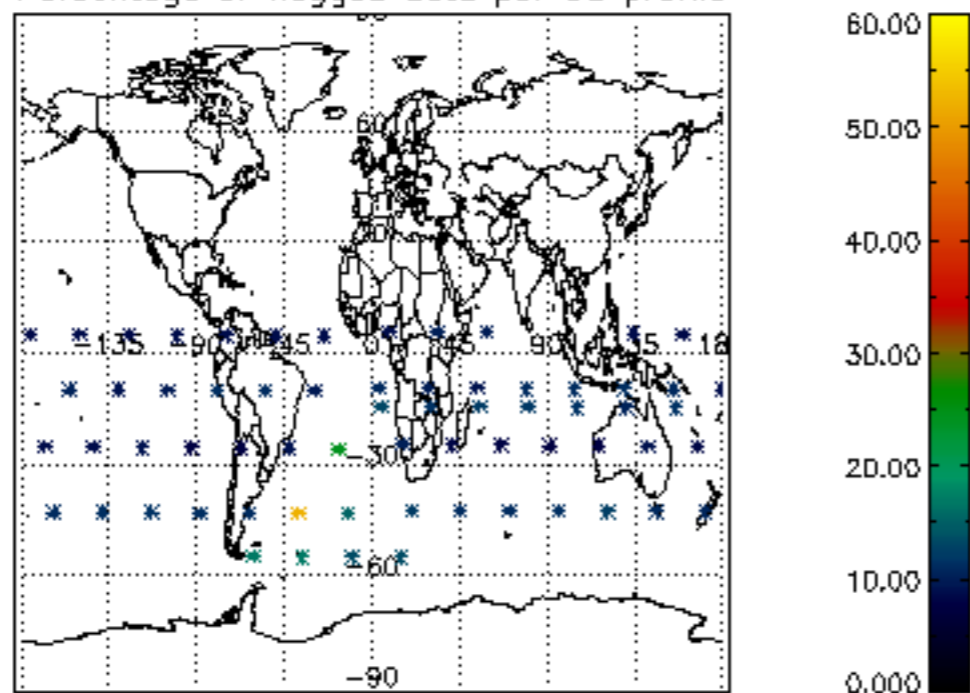
6. Auxiliary Data Files used for the production reported in section 2

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.

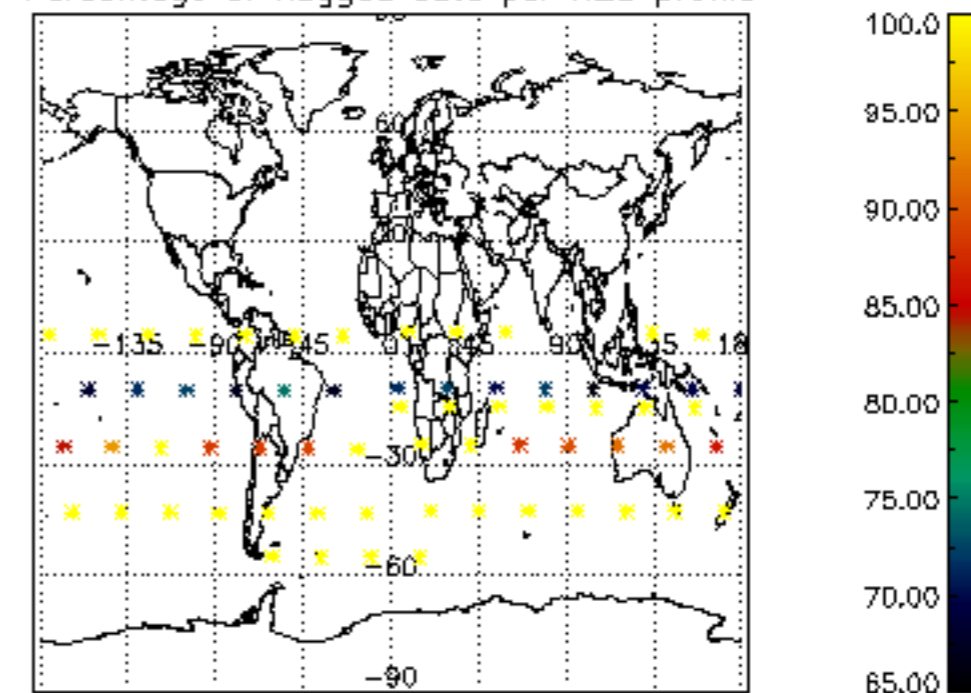
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-OCT-2010 00:20:37
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-OCT-2010 00:20:37
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-OCT-2010 00:20:37



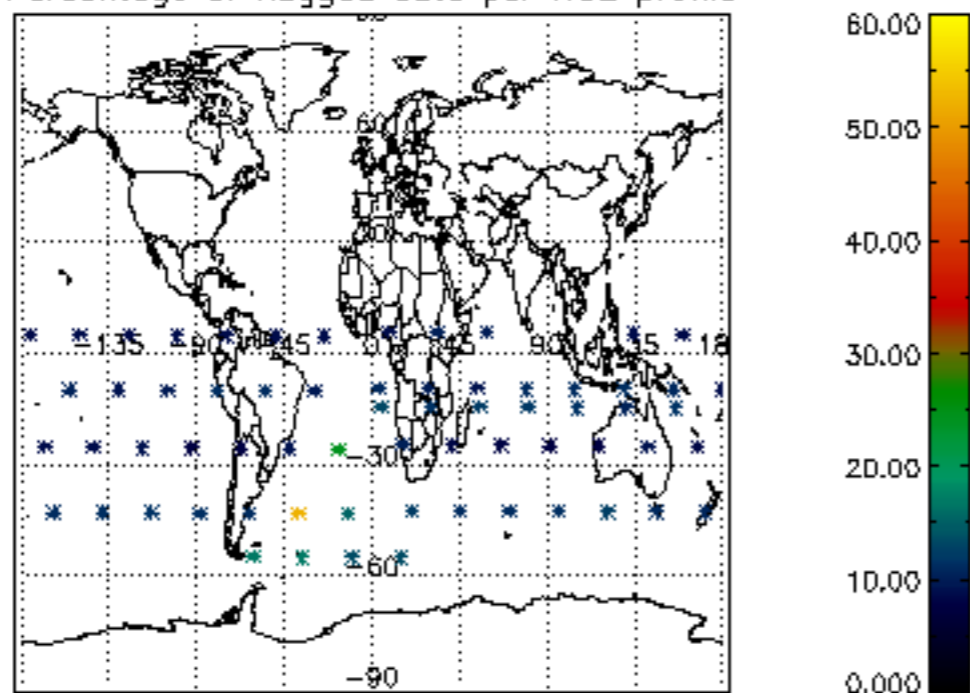
Percentage of flagged data per D3 profile



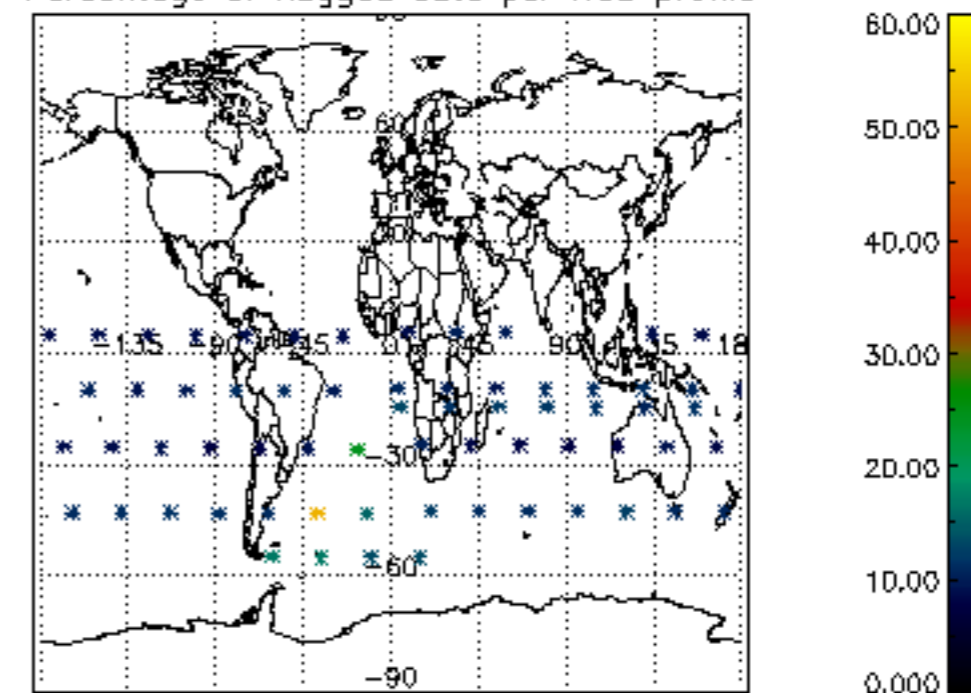
Percentage of flagged data per H2O profile

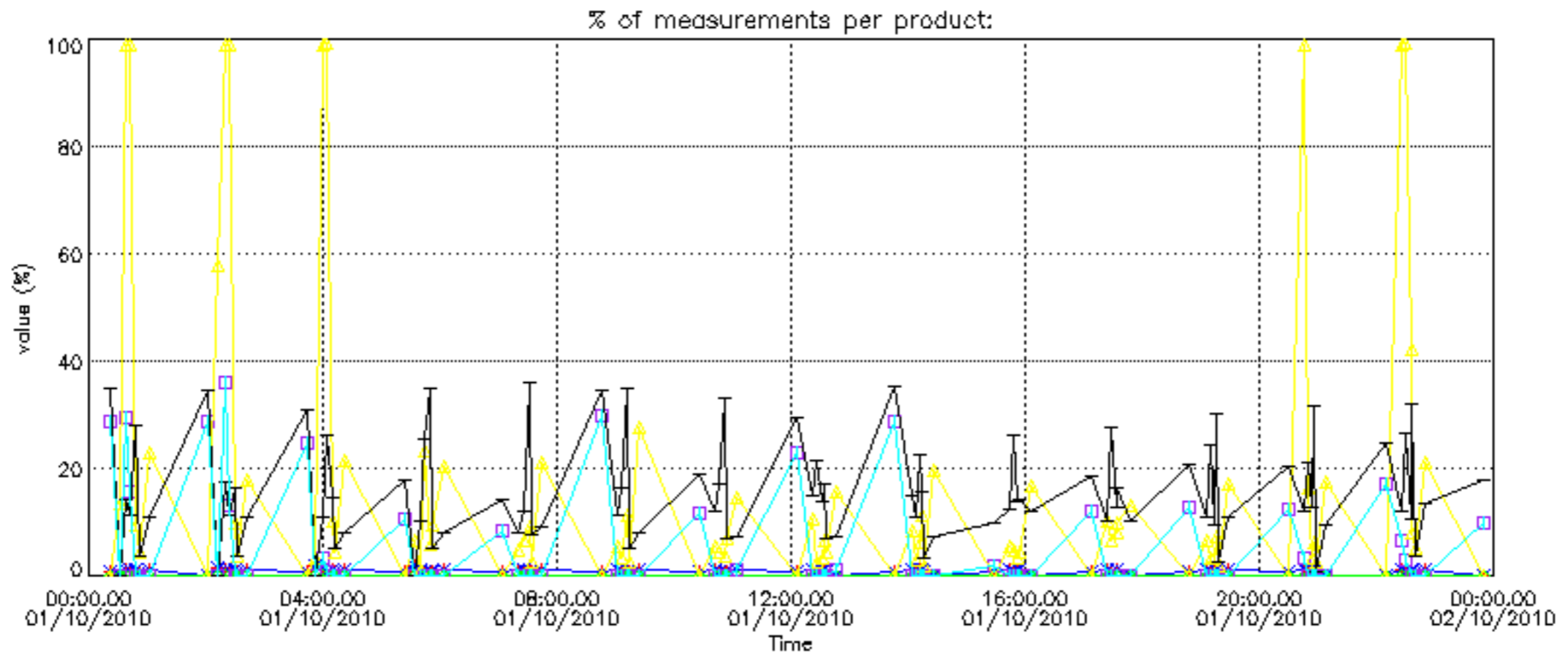


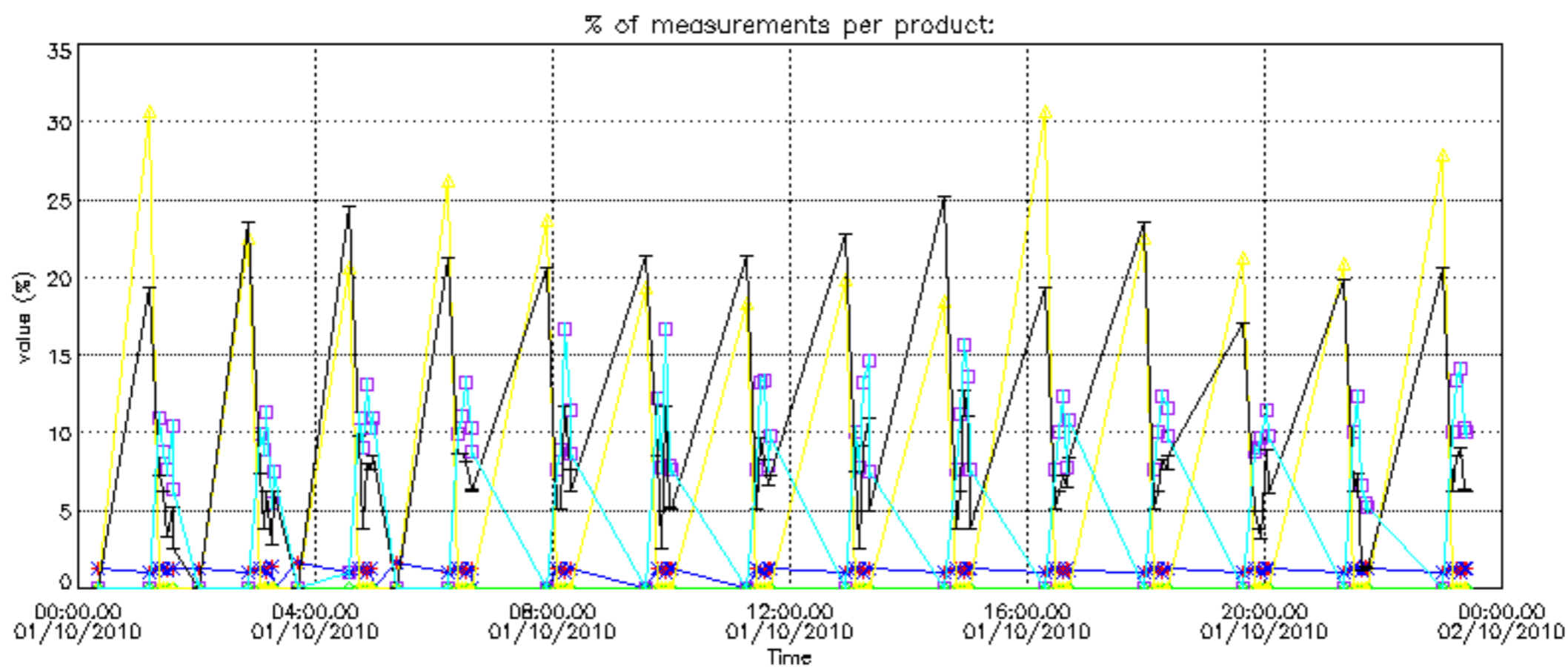
Percentage of flagged data per NO2 profile



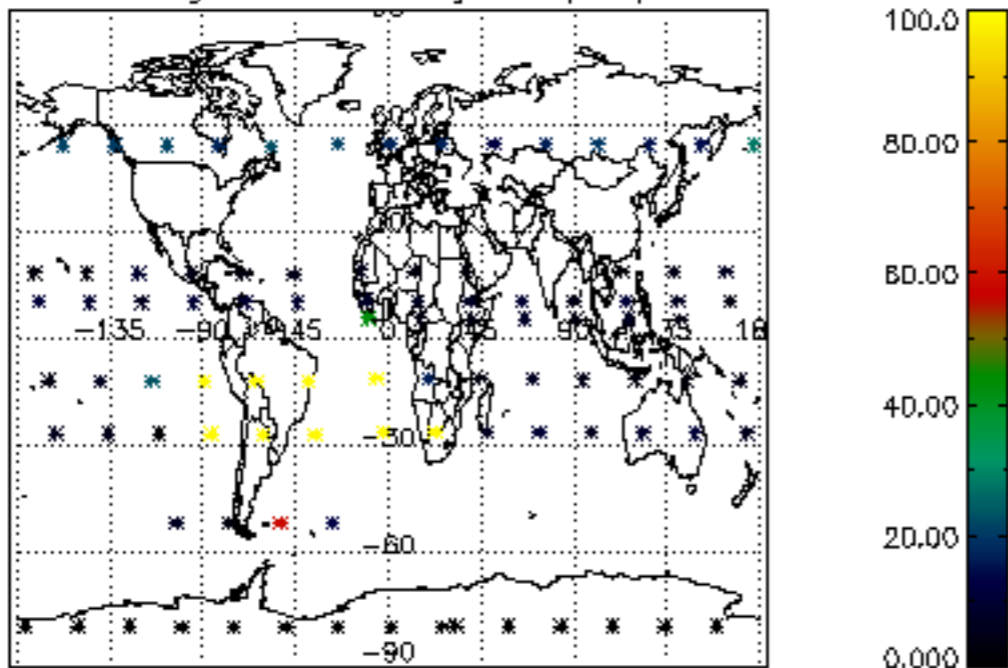
Percentage of flagged data per NO3 profile



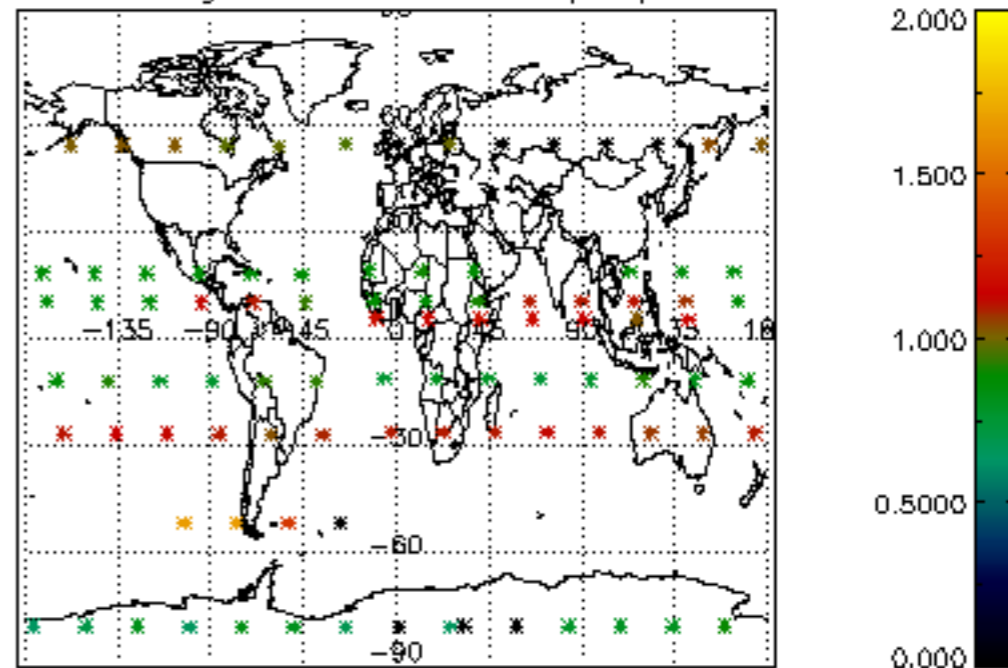




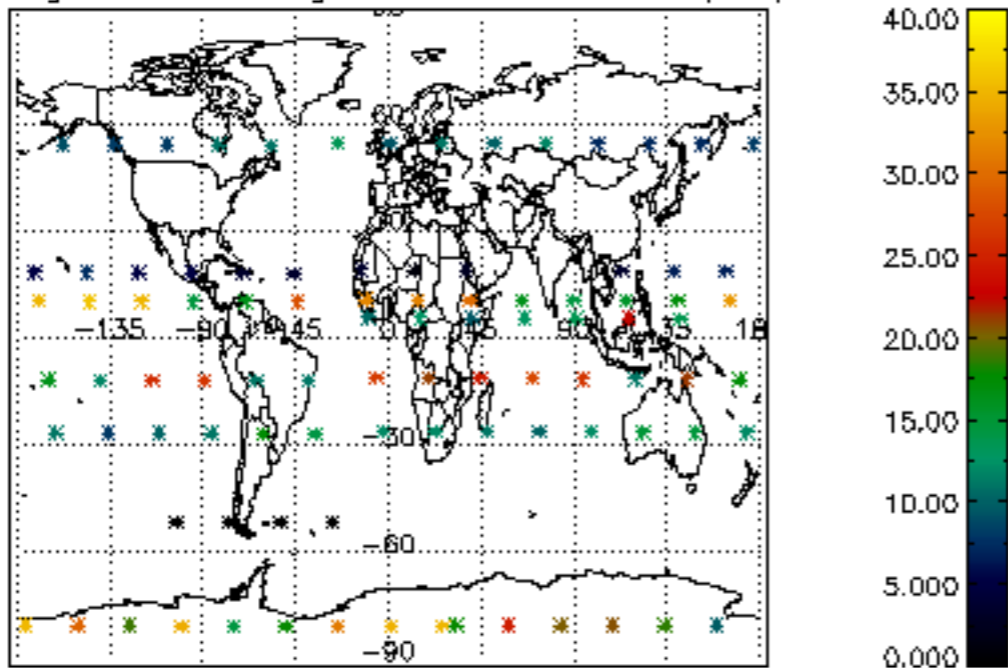
Percentage of cosmic ray hits per profile



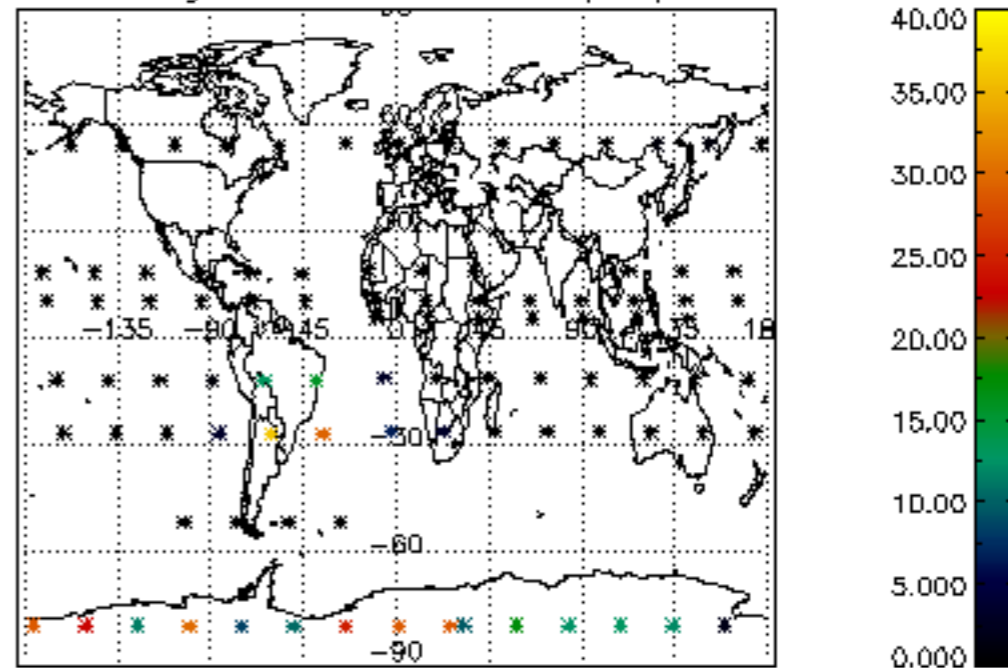
Percentage of datation errors per profile



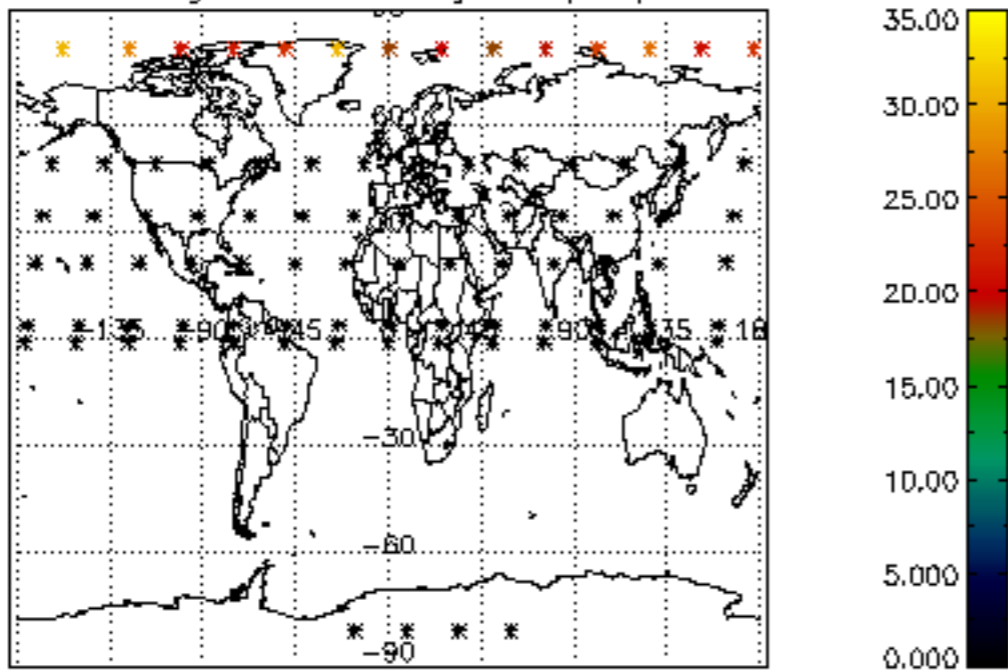
Percentage of star falling outside central band per profile



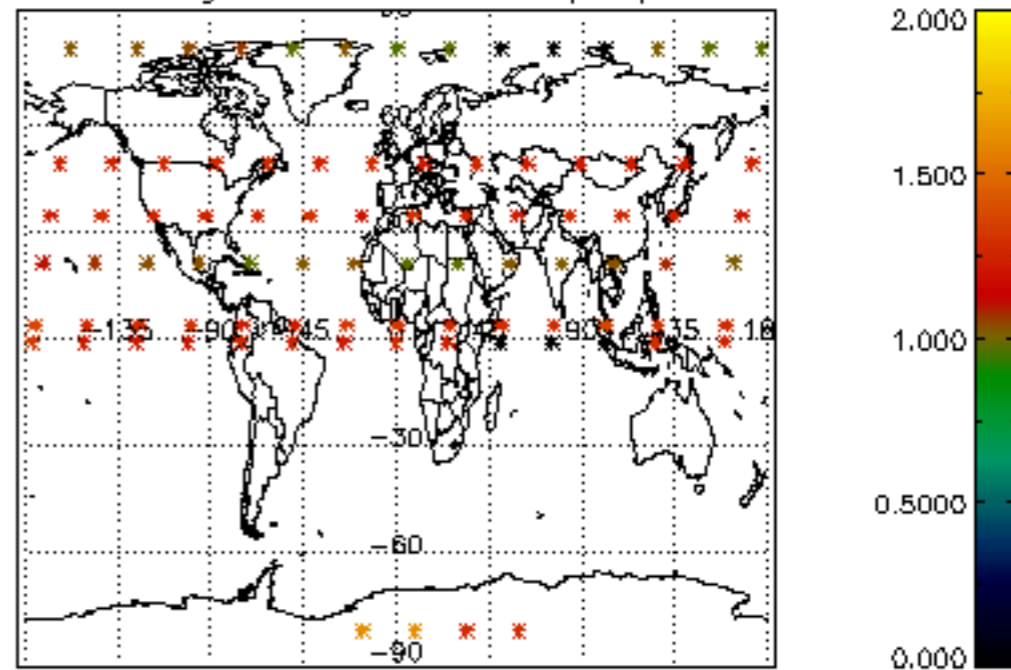
Percentage of saturation errors per profile



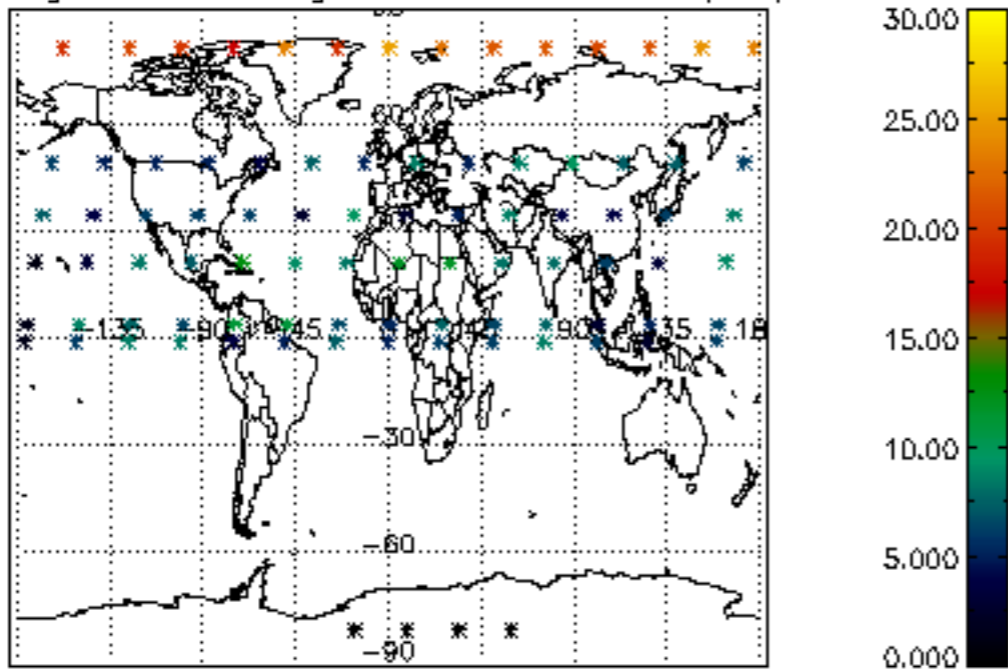
Percentage of cosmic ray hits per profile



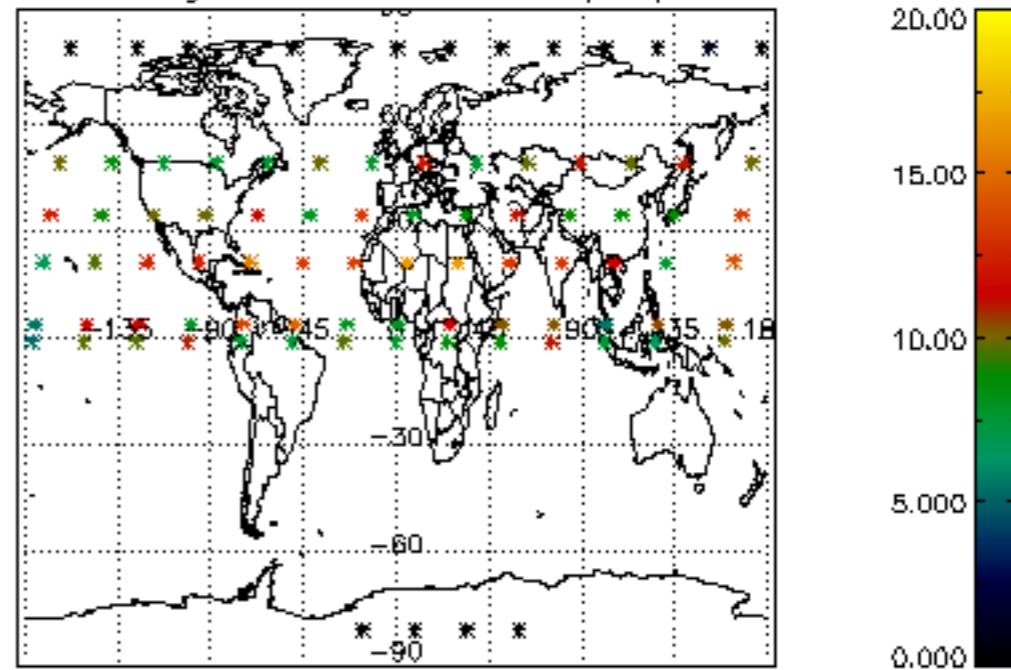
Percentage of datation errors per profile

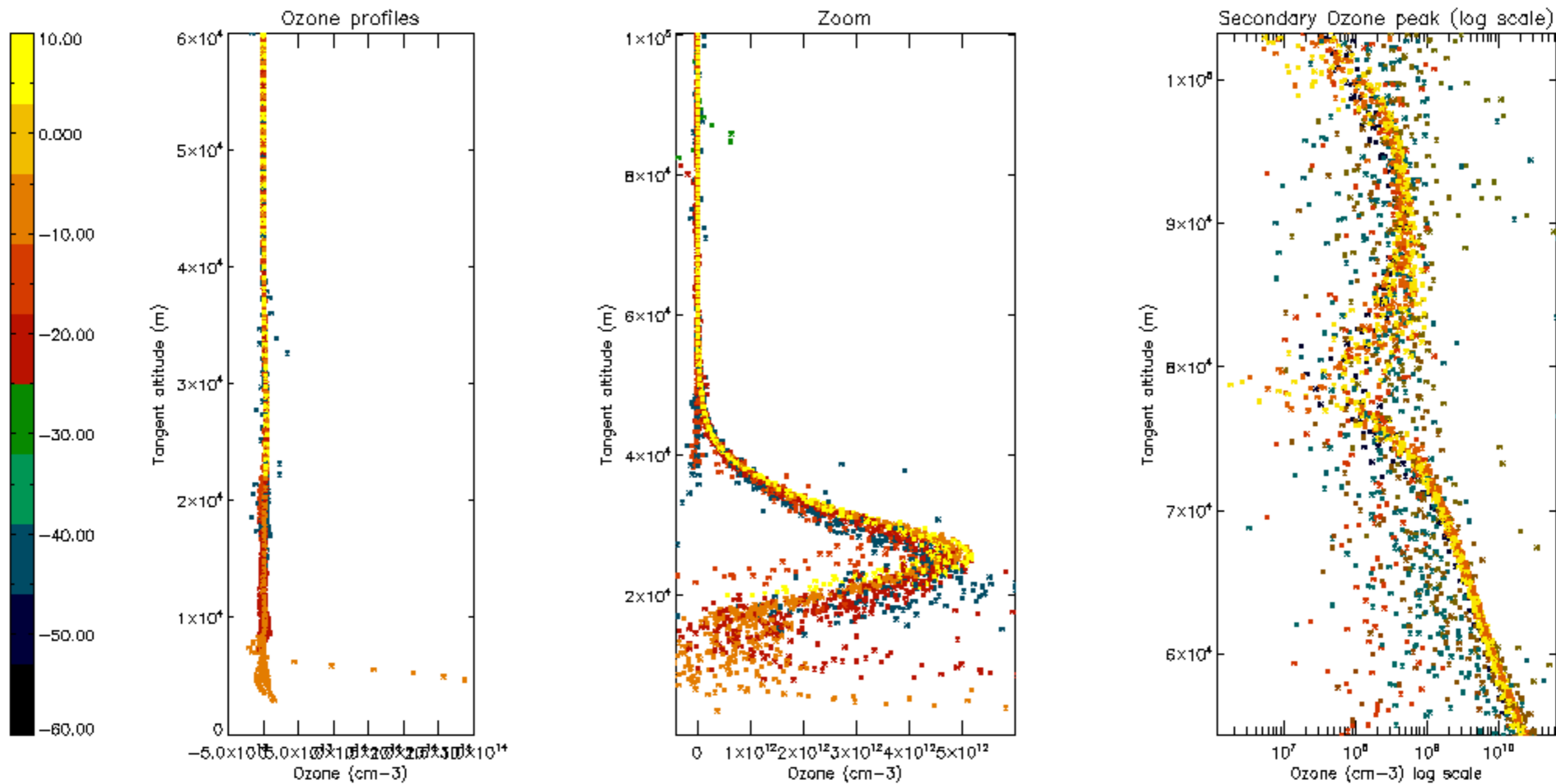


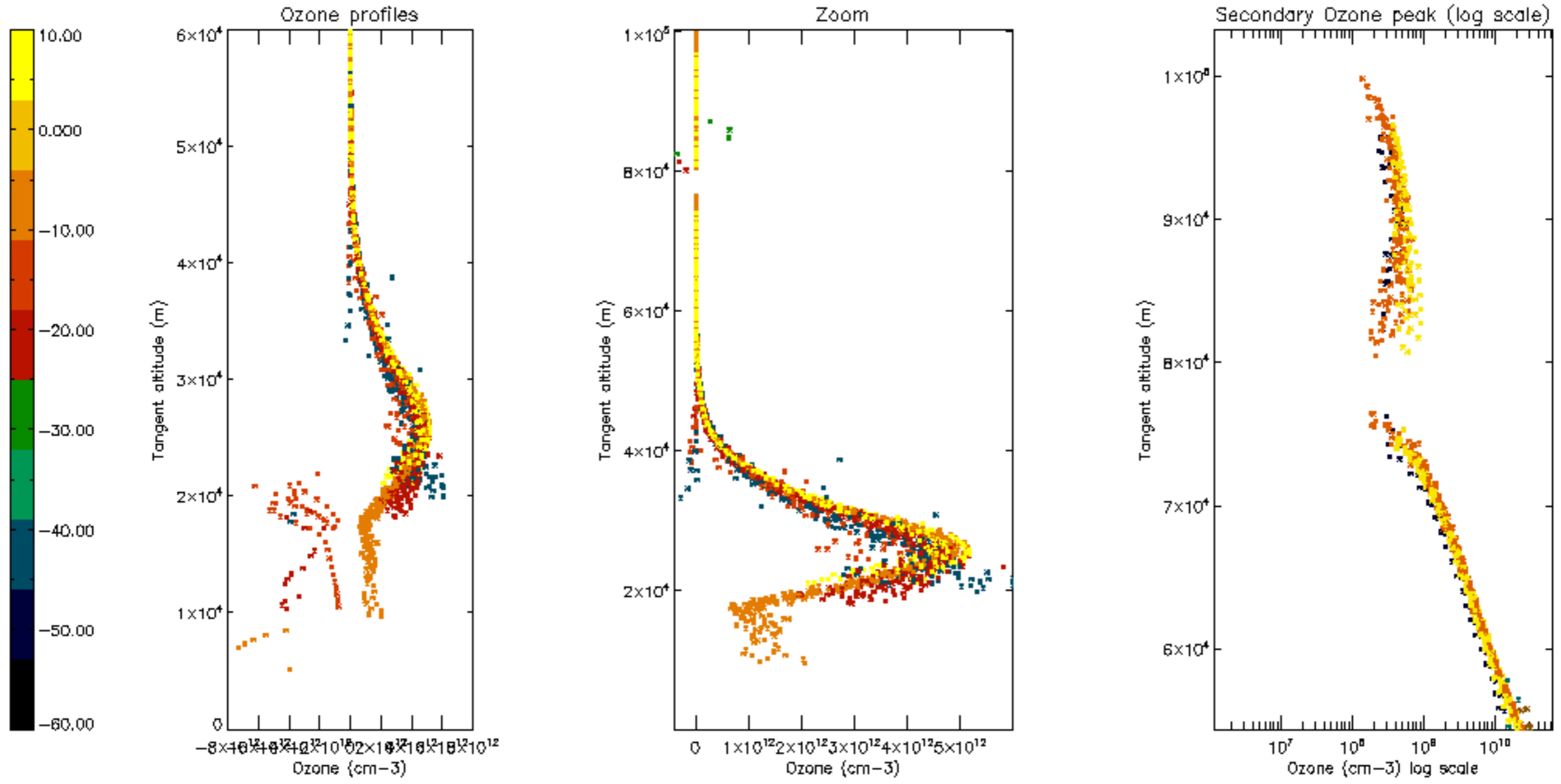
Percentage of star falling outside central band per profile

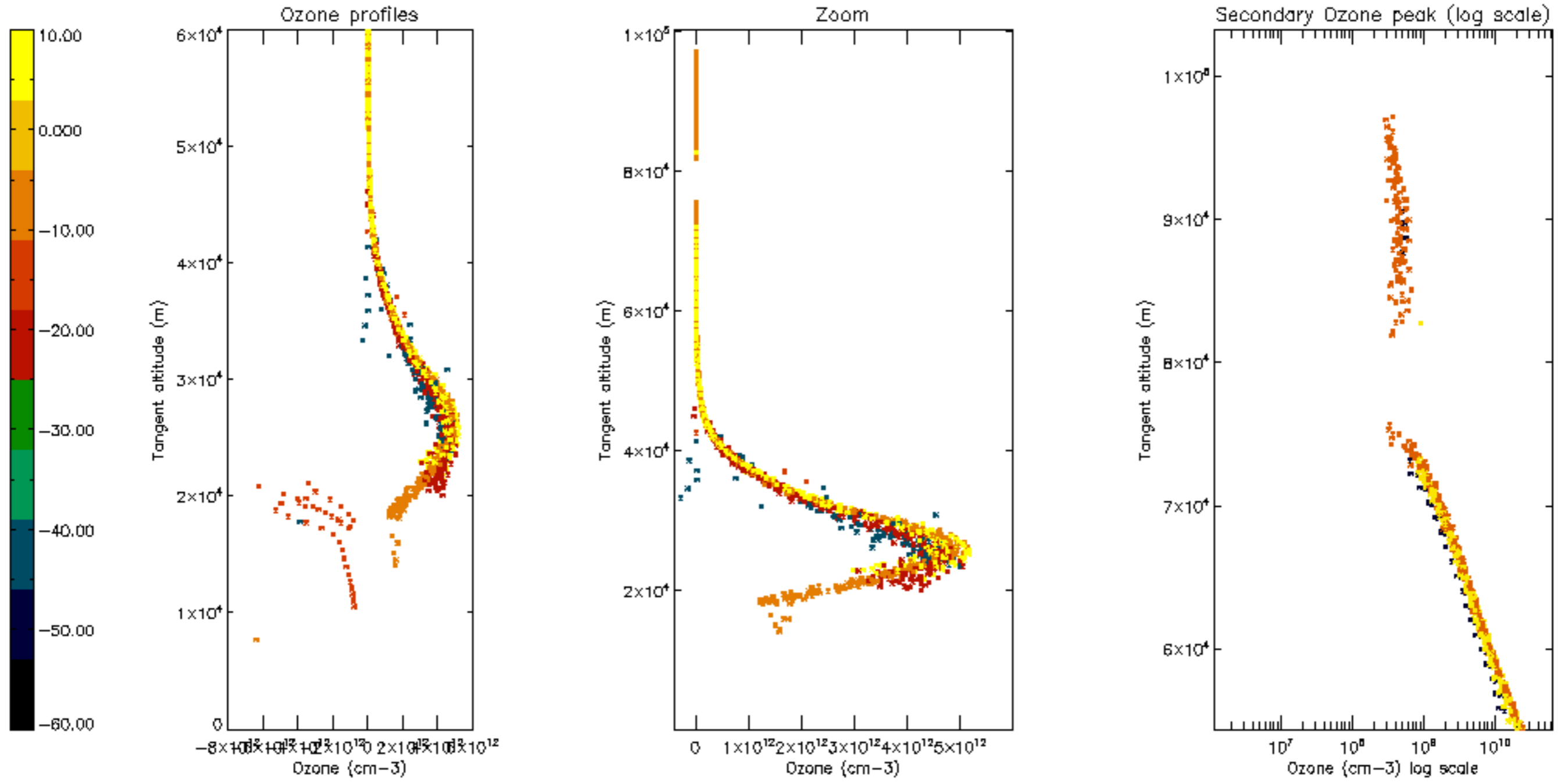


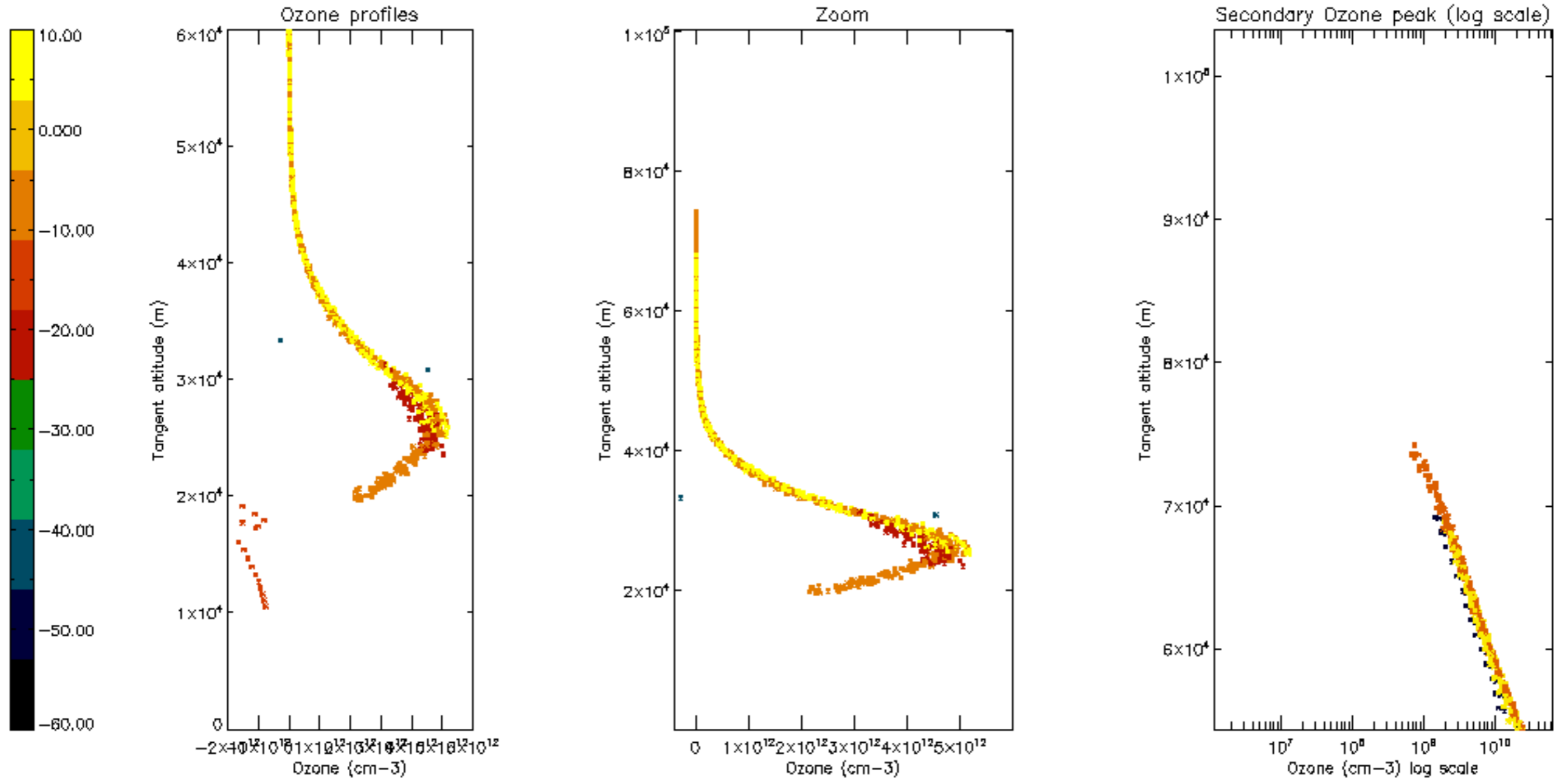
Percentage of saturation errors per profile

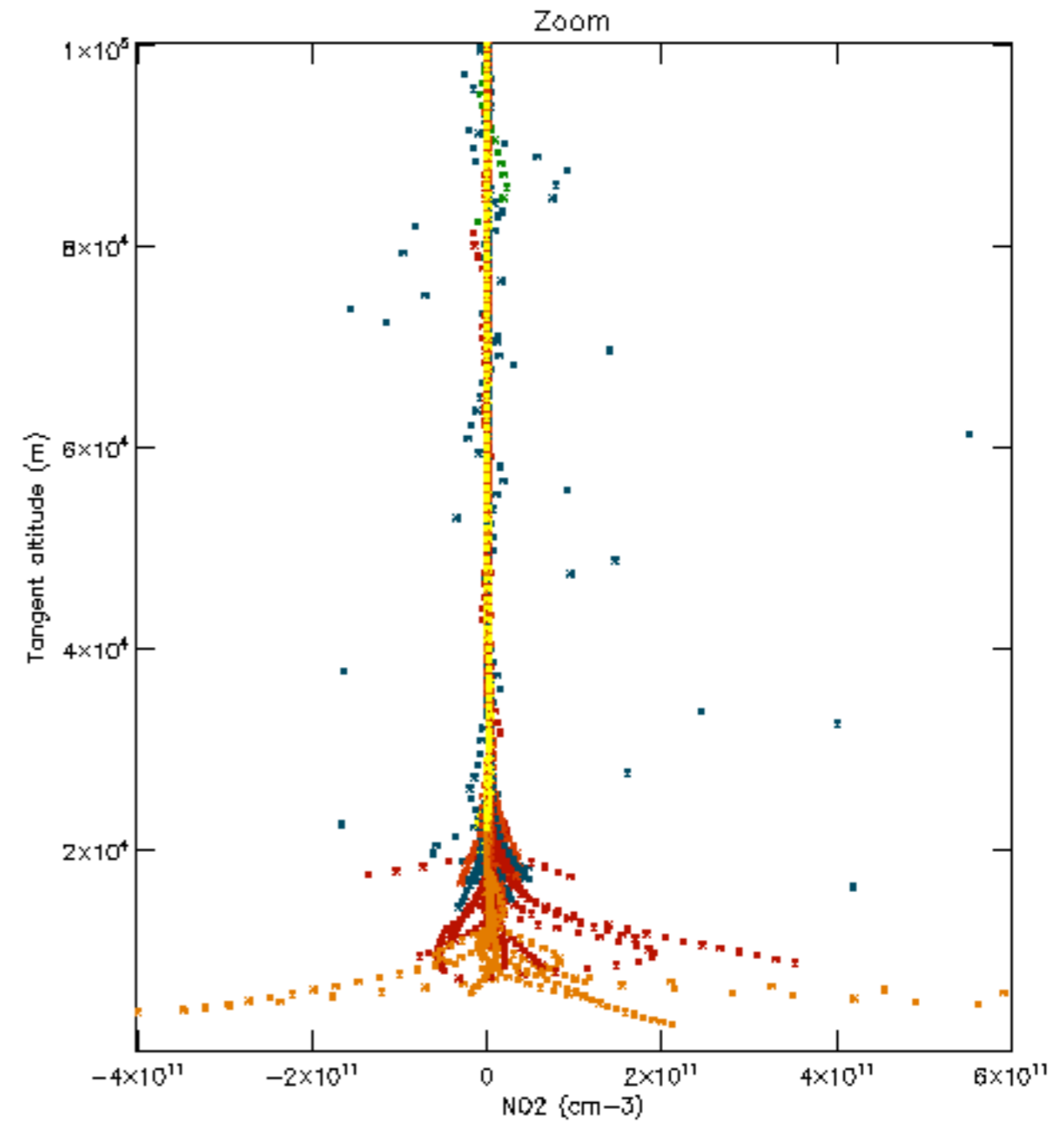
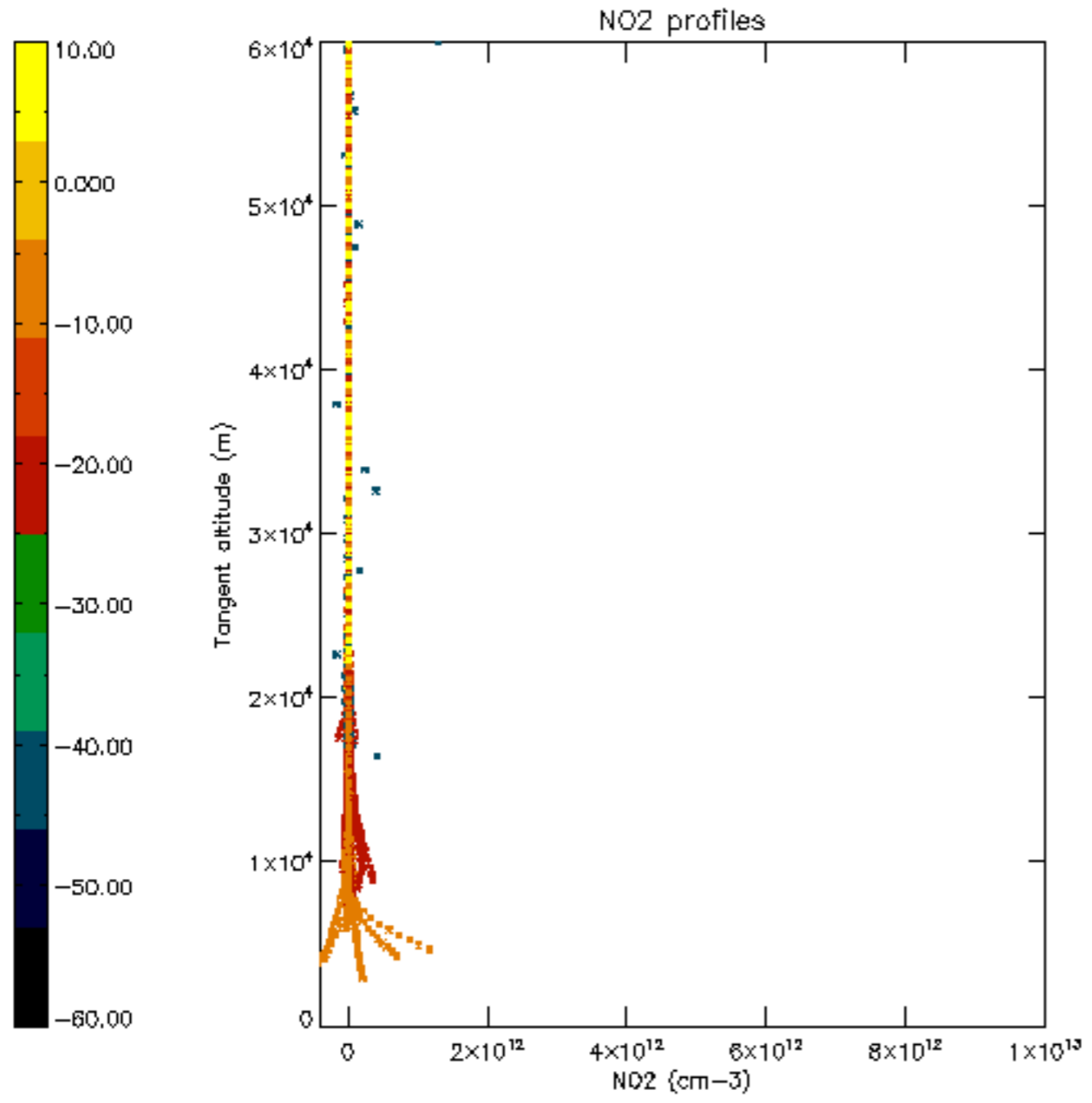


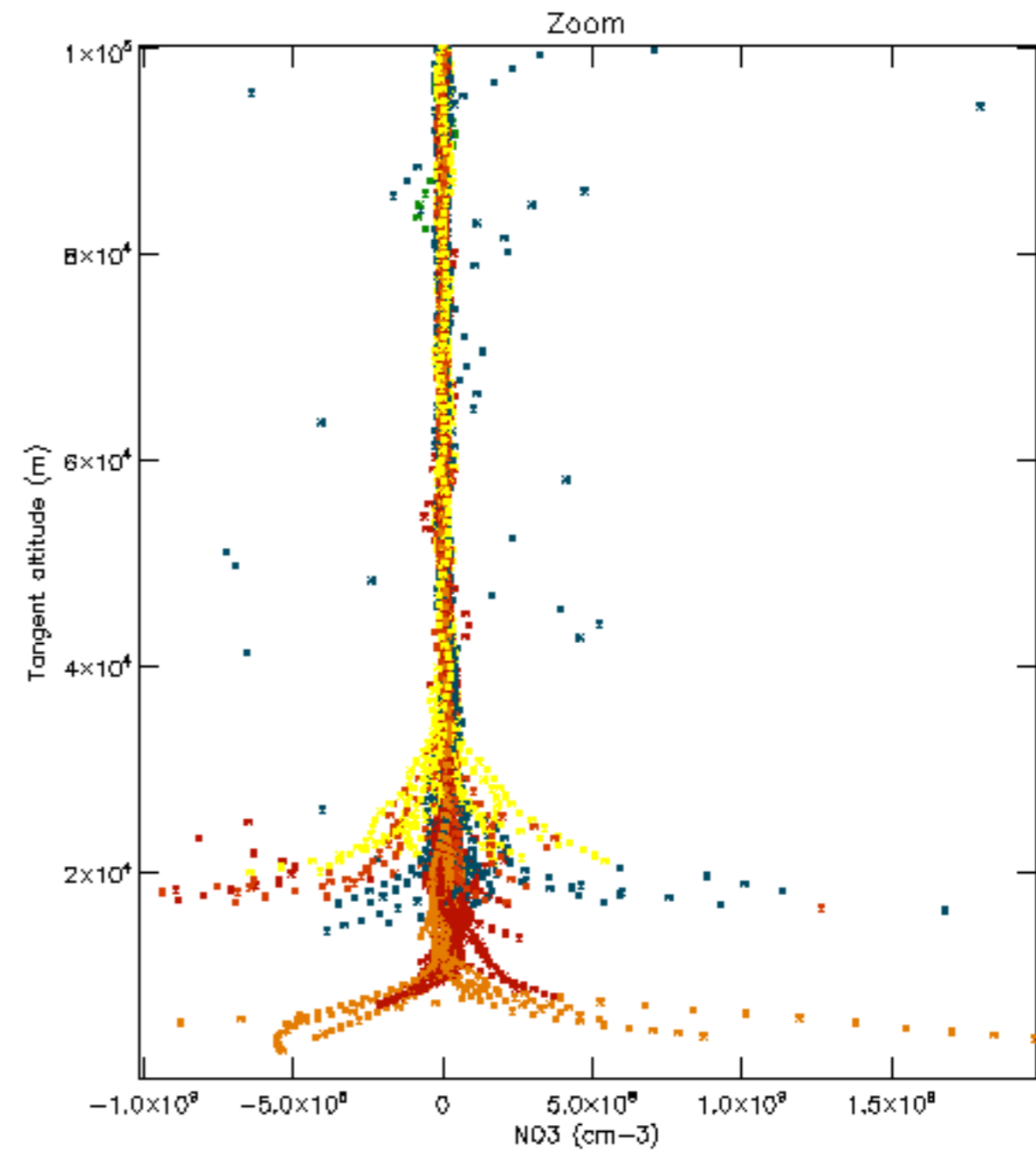
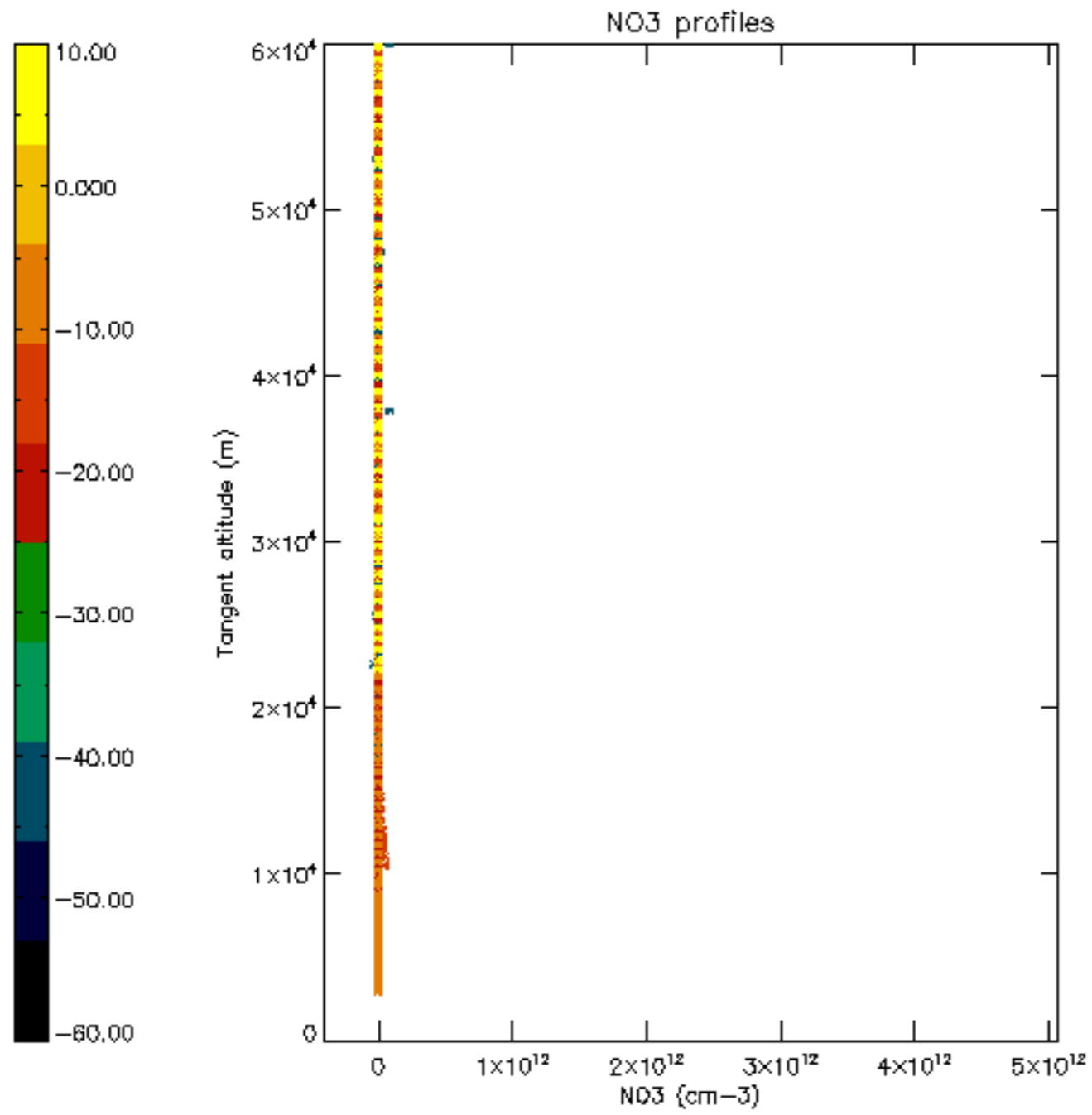


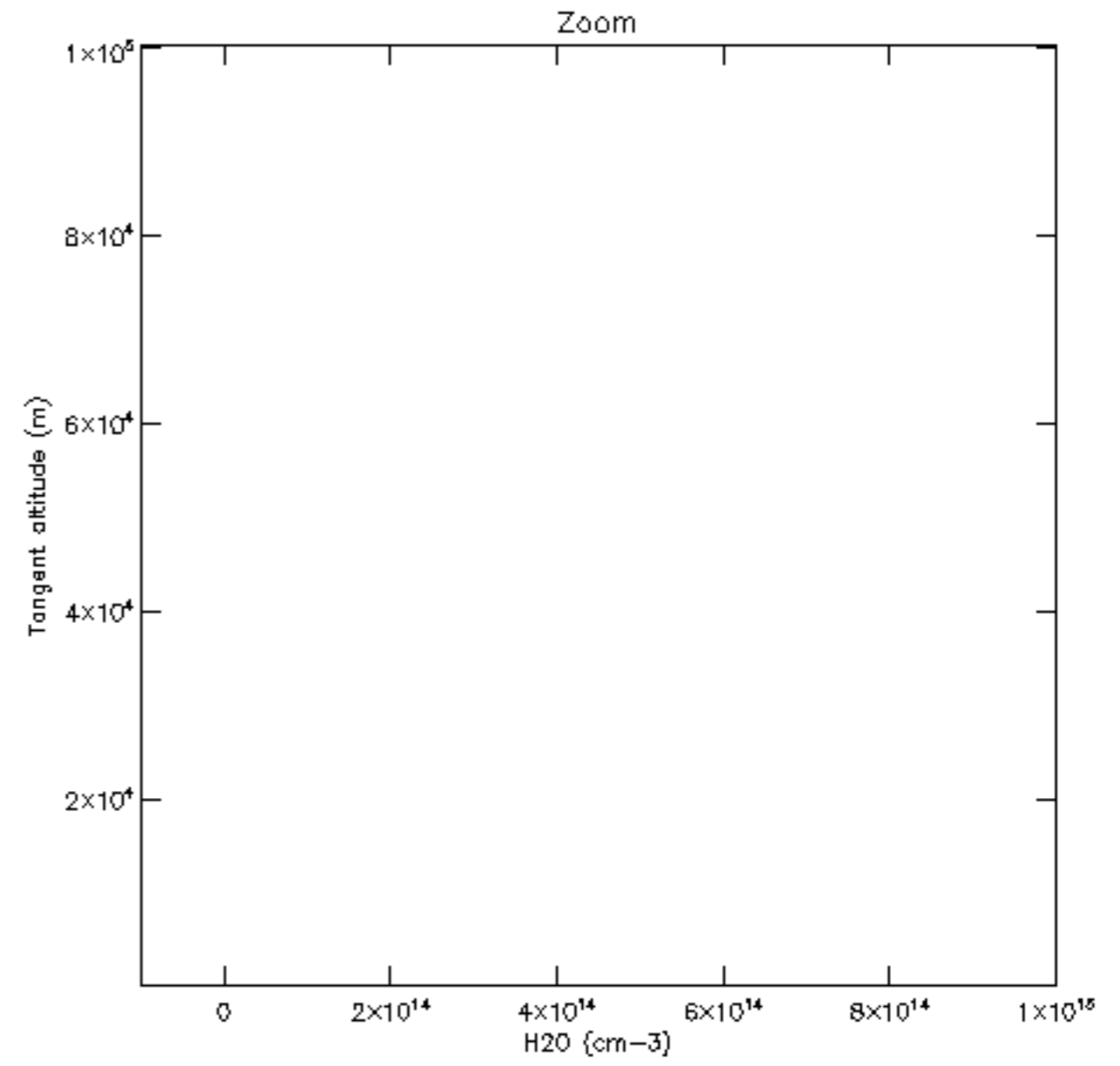
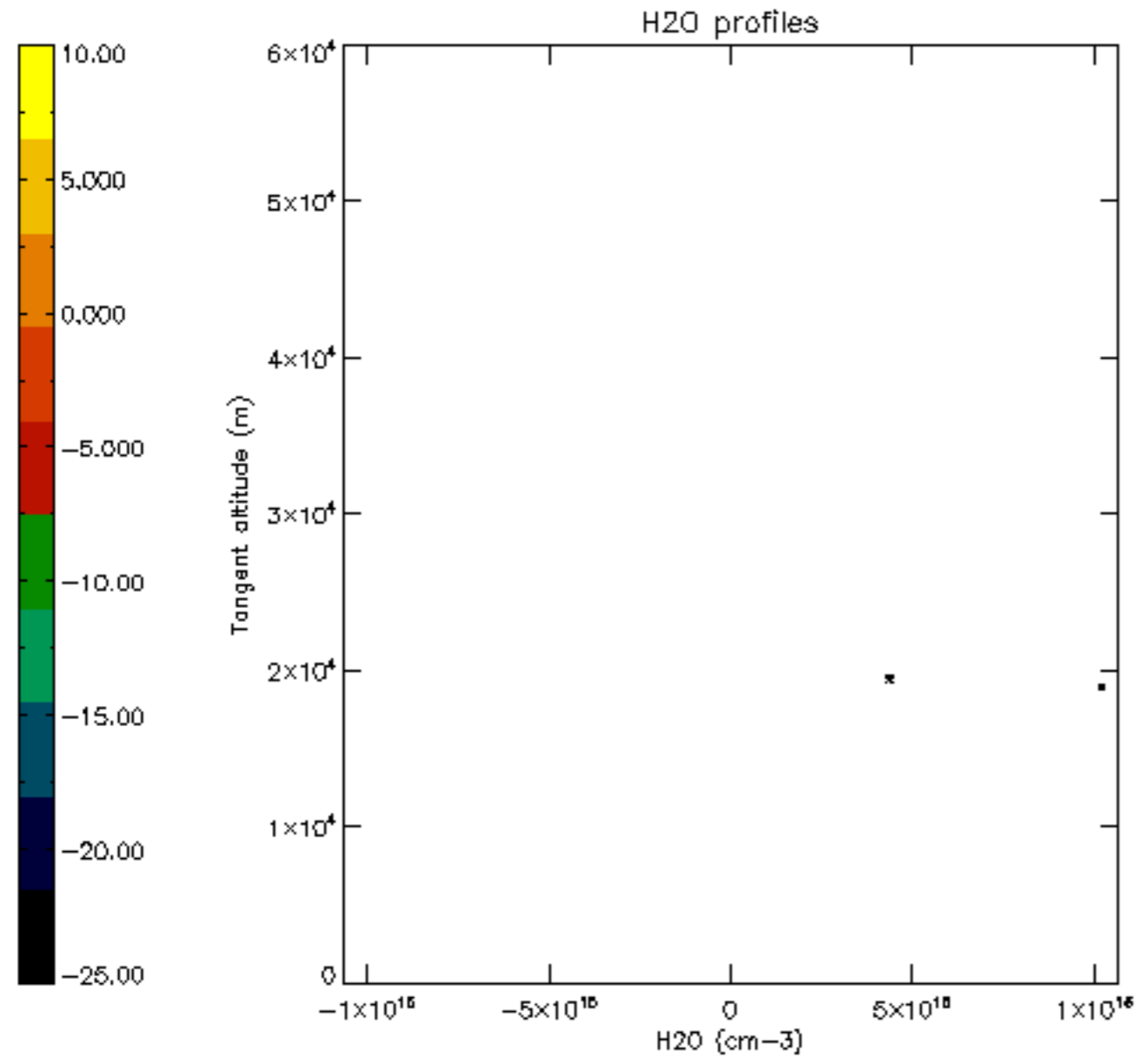


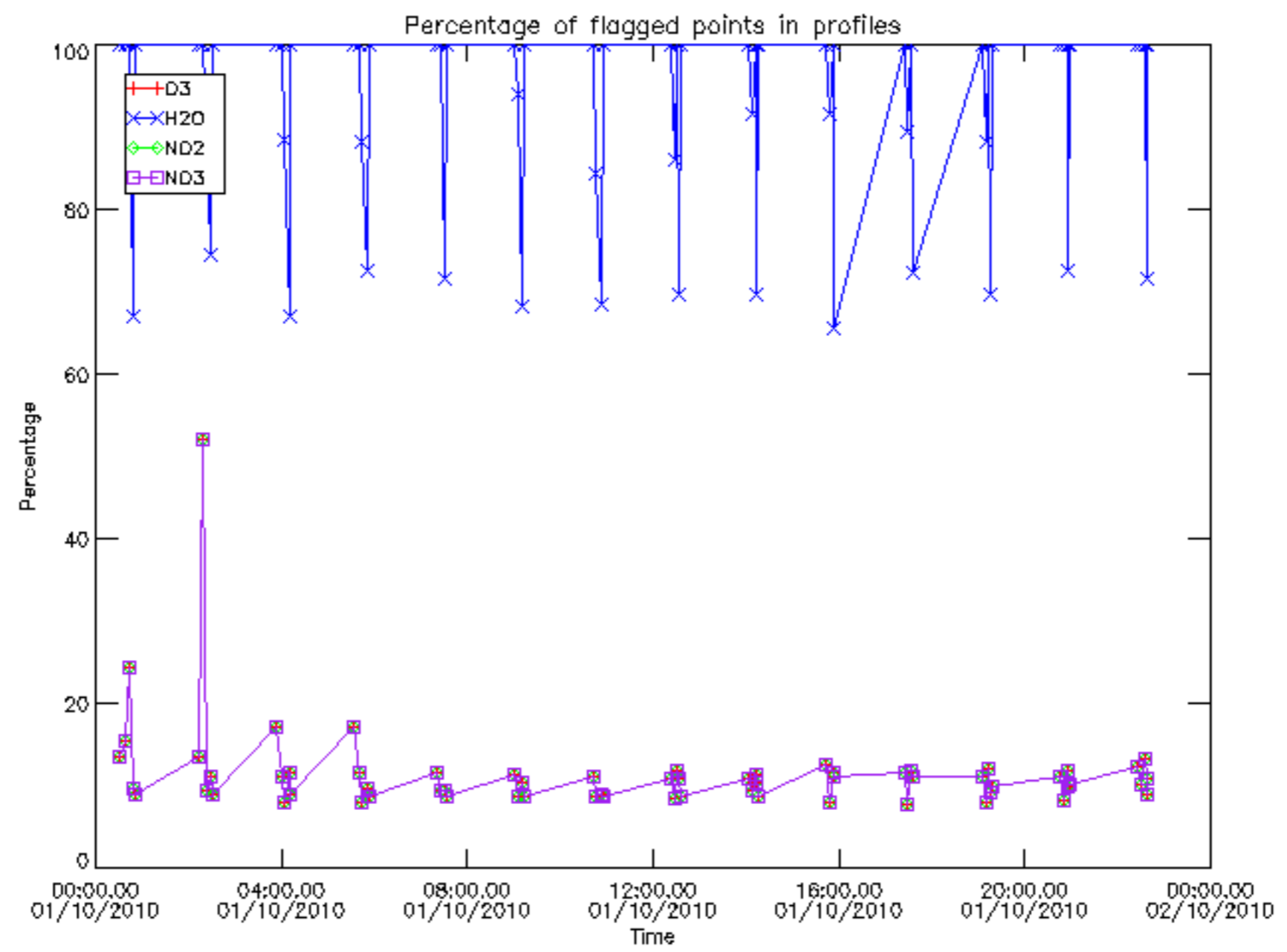




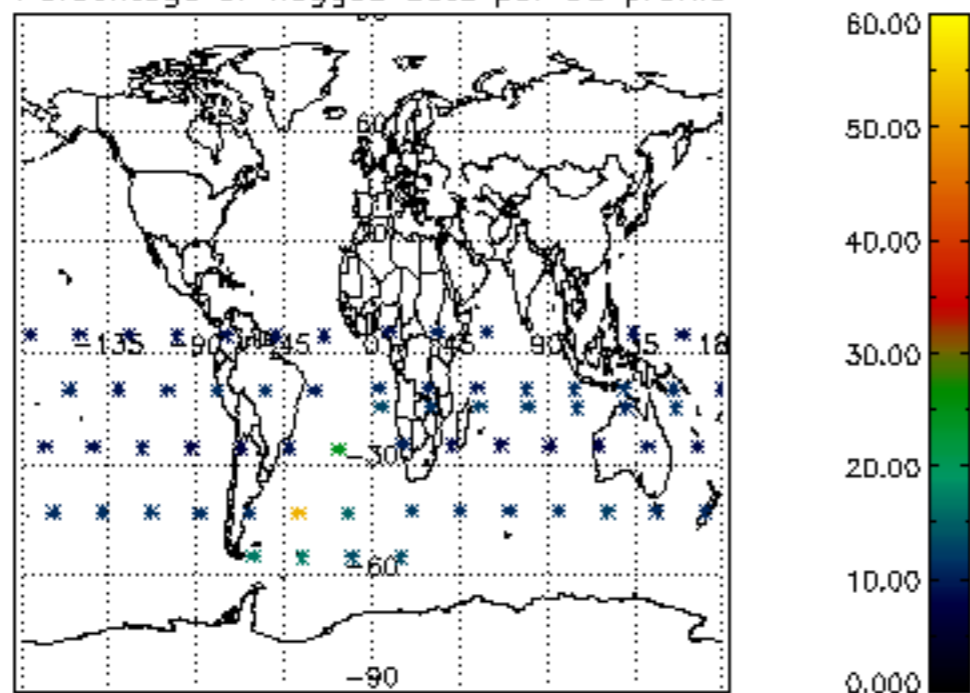




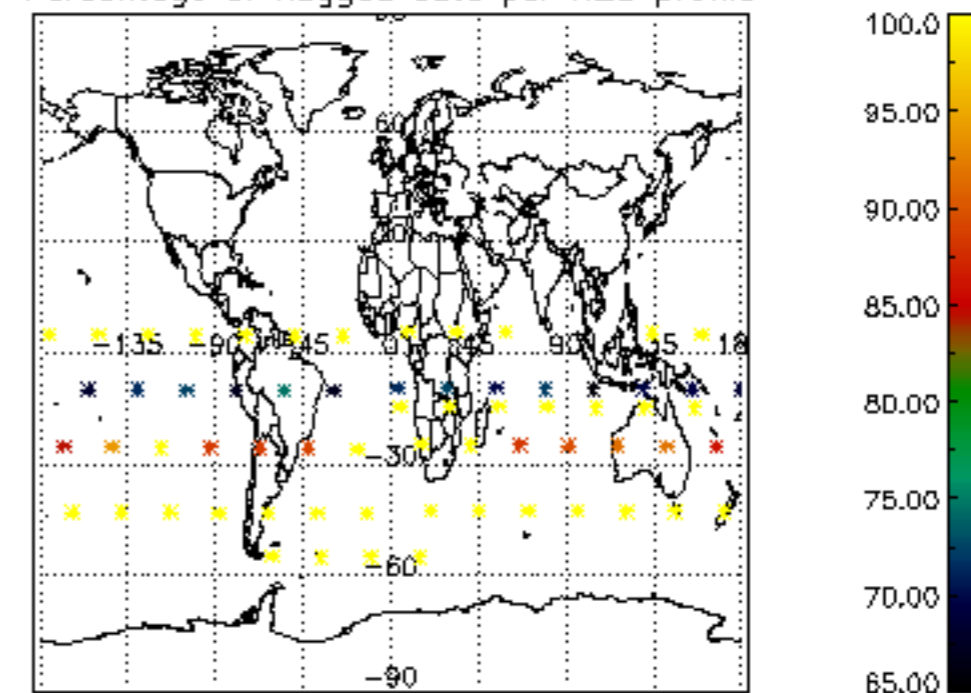




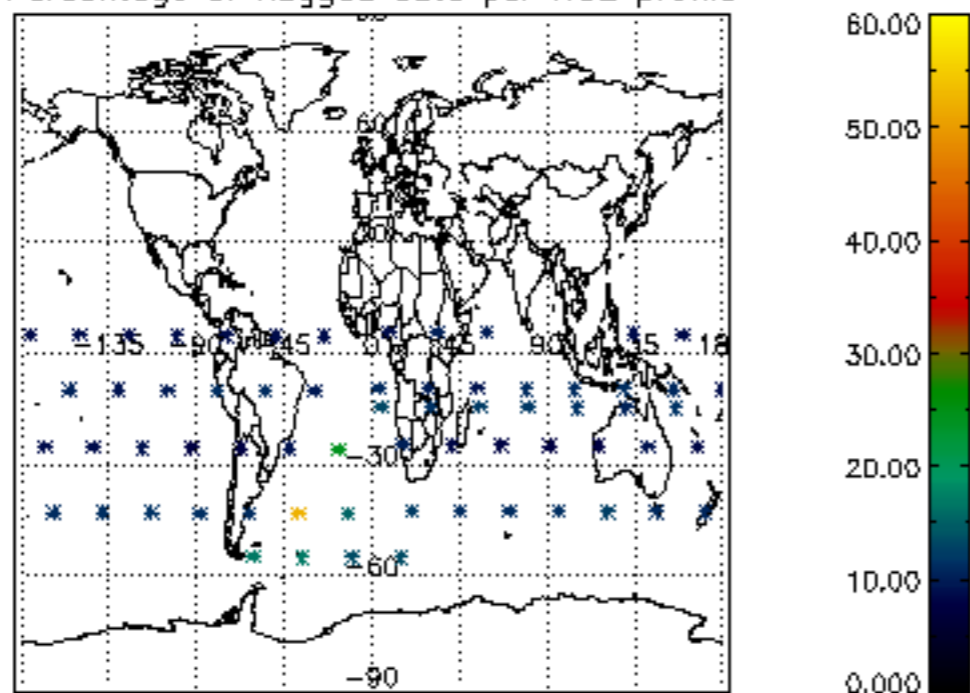
Percentage of flagged data per D3 profile



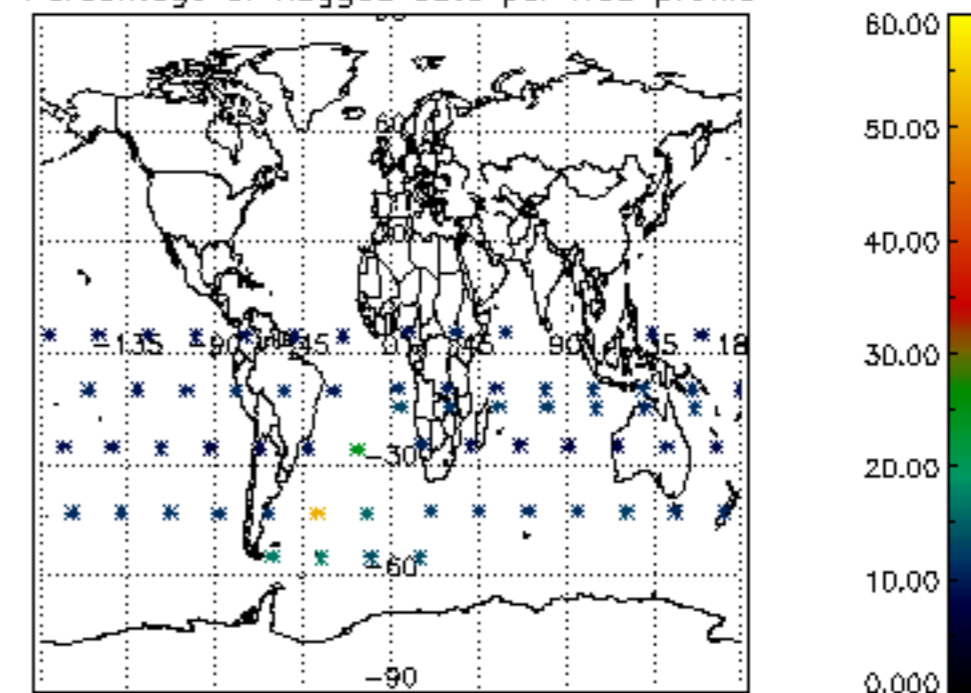
Percentage of flagged data per H2O profile

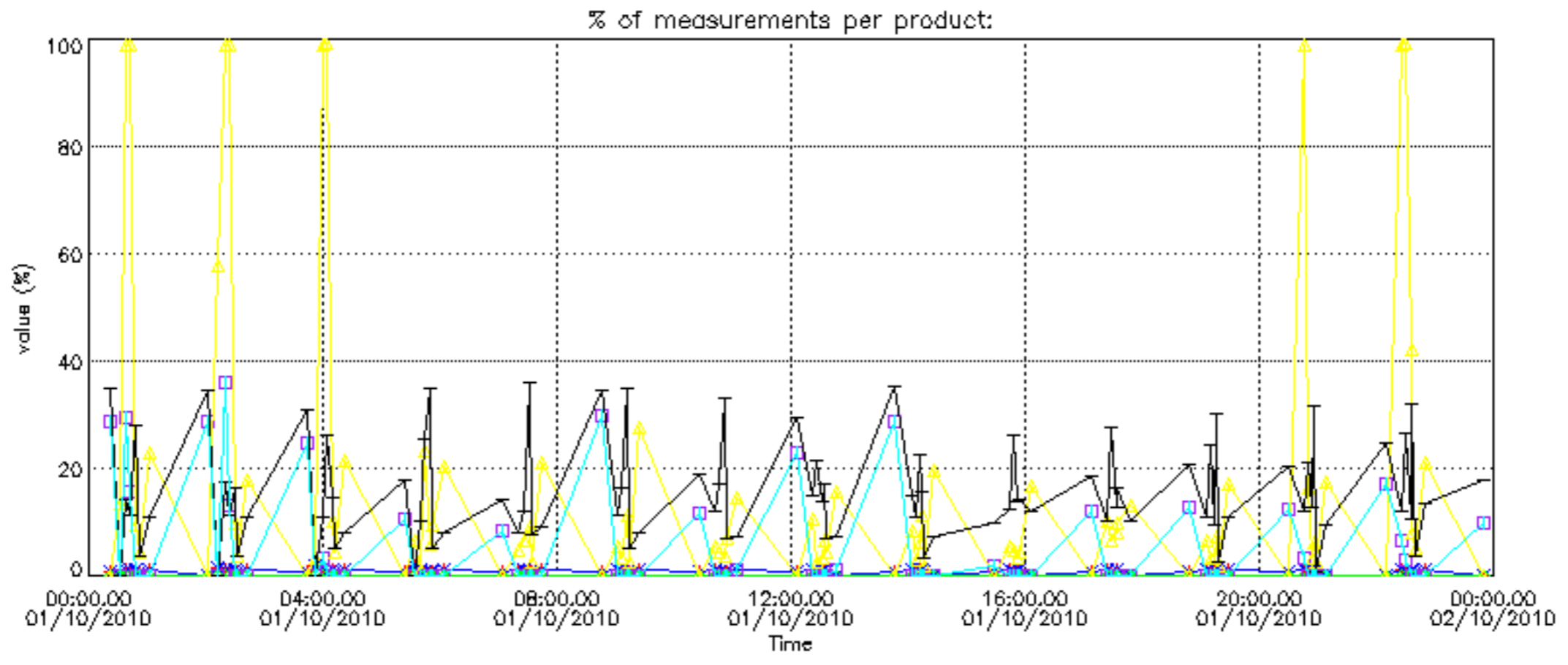


Percentage of flagged data per NO2 profile

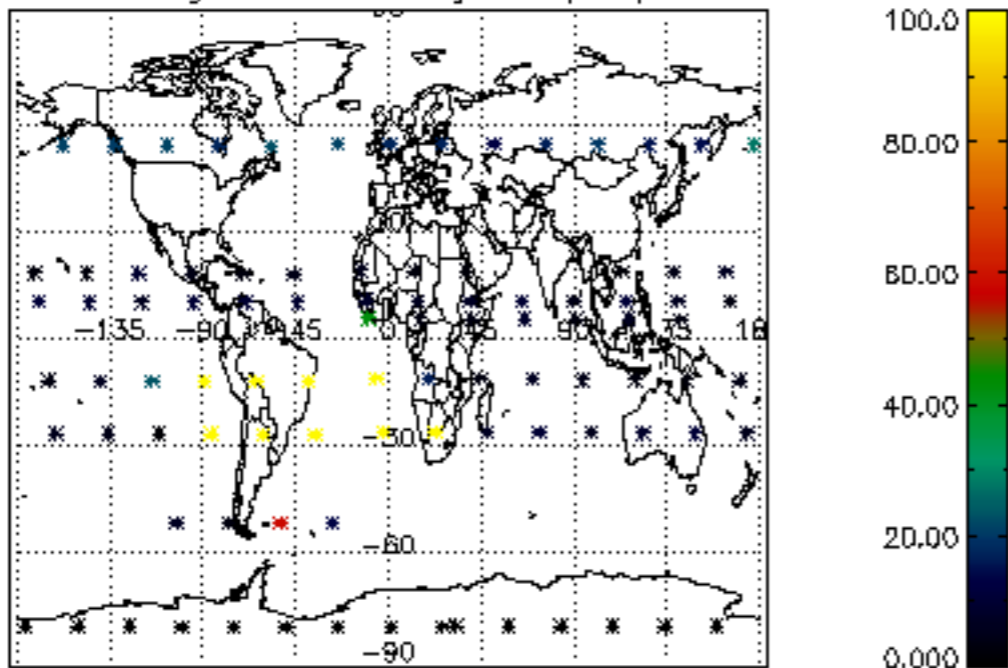


Percentage of flagged data per NO3 profile

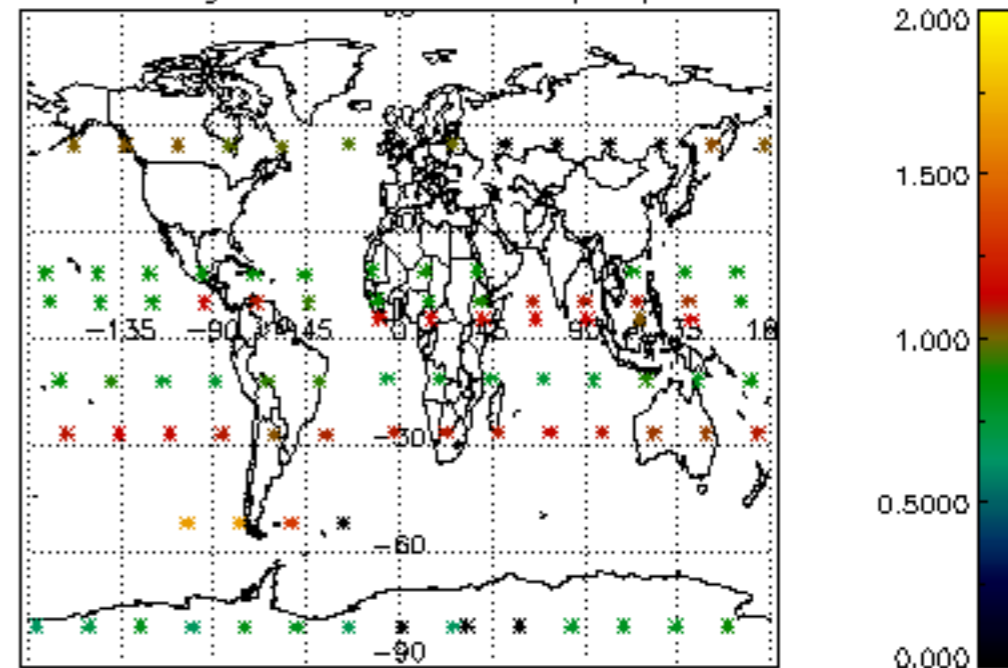




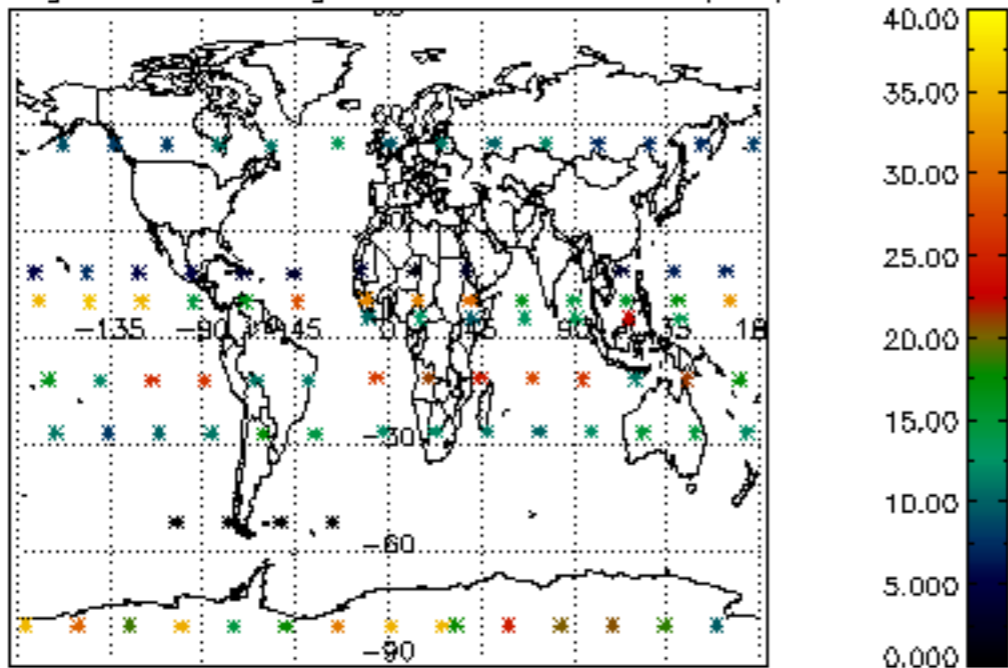
Percentage of cosmic ray hits per profile



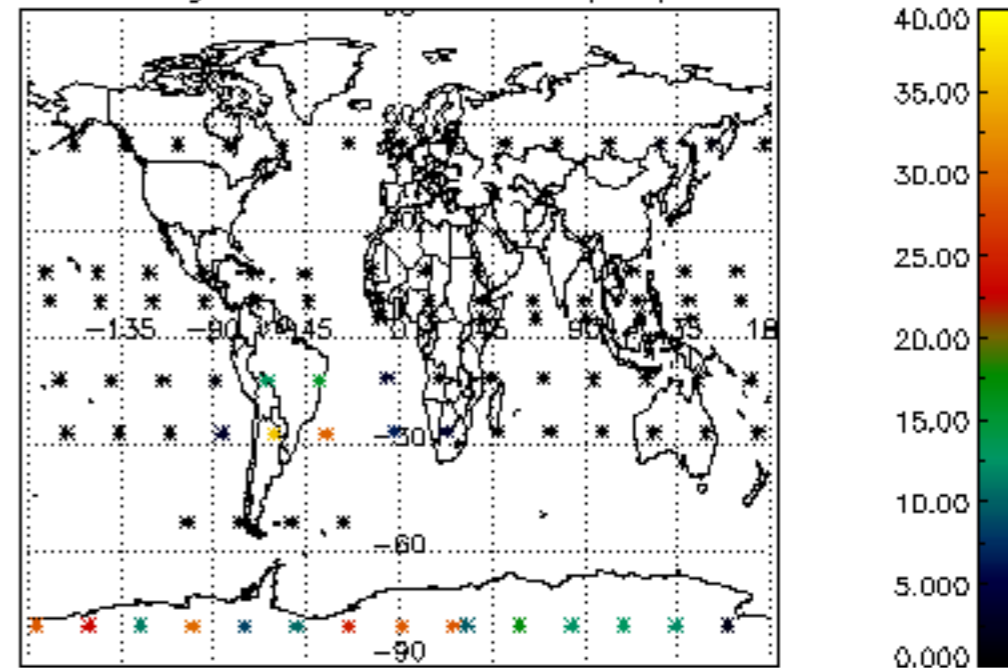
Percentage of datation errors per profile



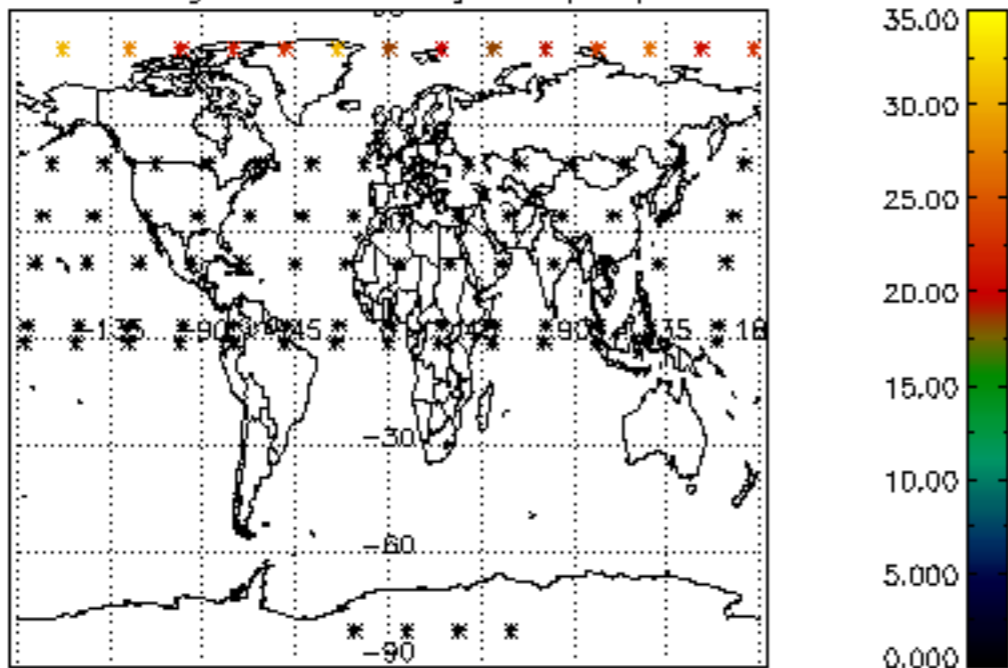
Percentage of star falling outside central band per profile



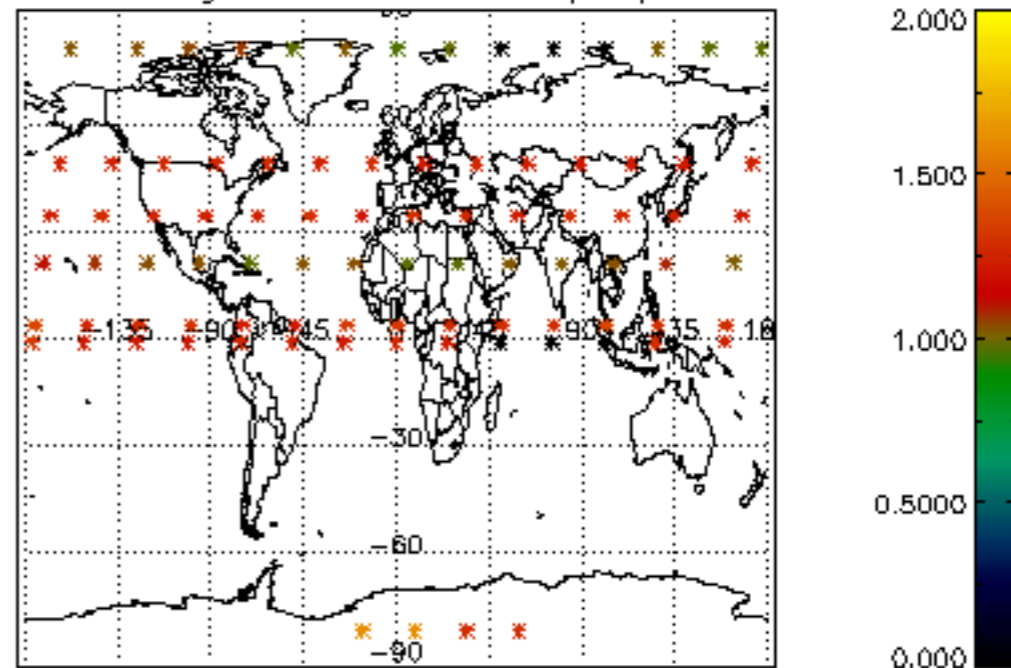
Percentage of saturation errors per profile



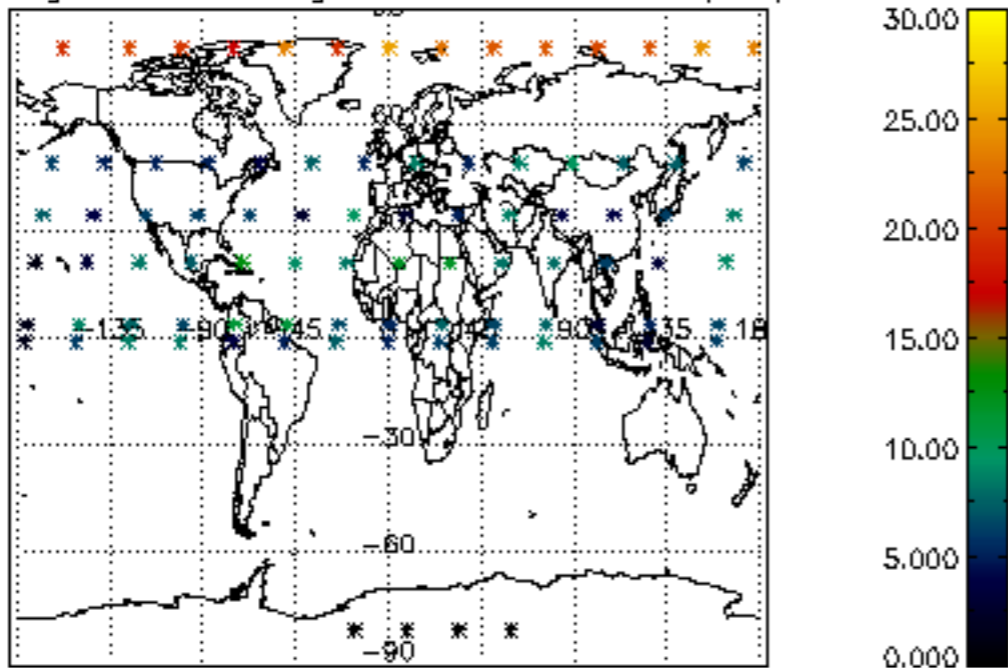
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

