

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 15:58:22
Data source version	GOMOS/6.01
Start time of products	15-10-2010 (15OCT2010 00:00:00)
Stop time of products	16-10-2010 (16OCT2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	200
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

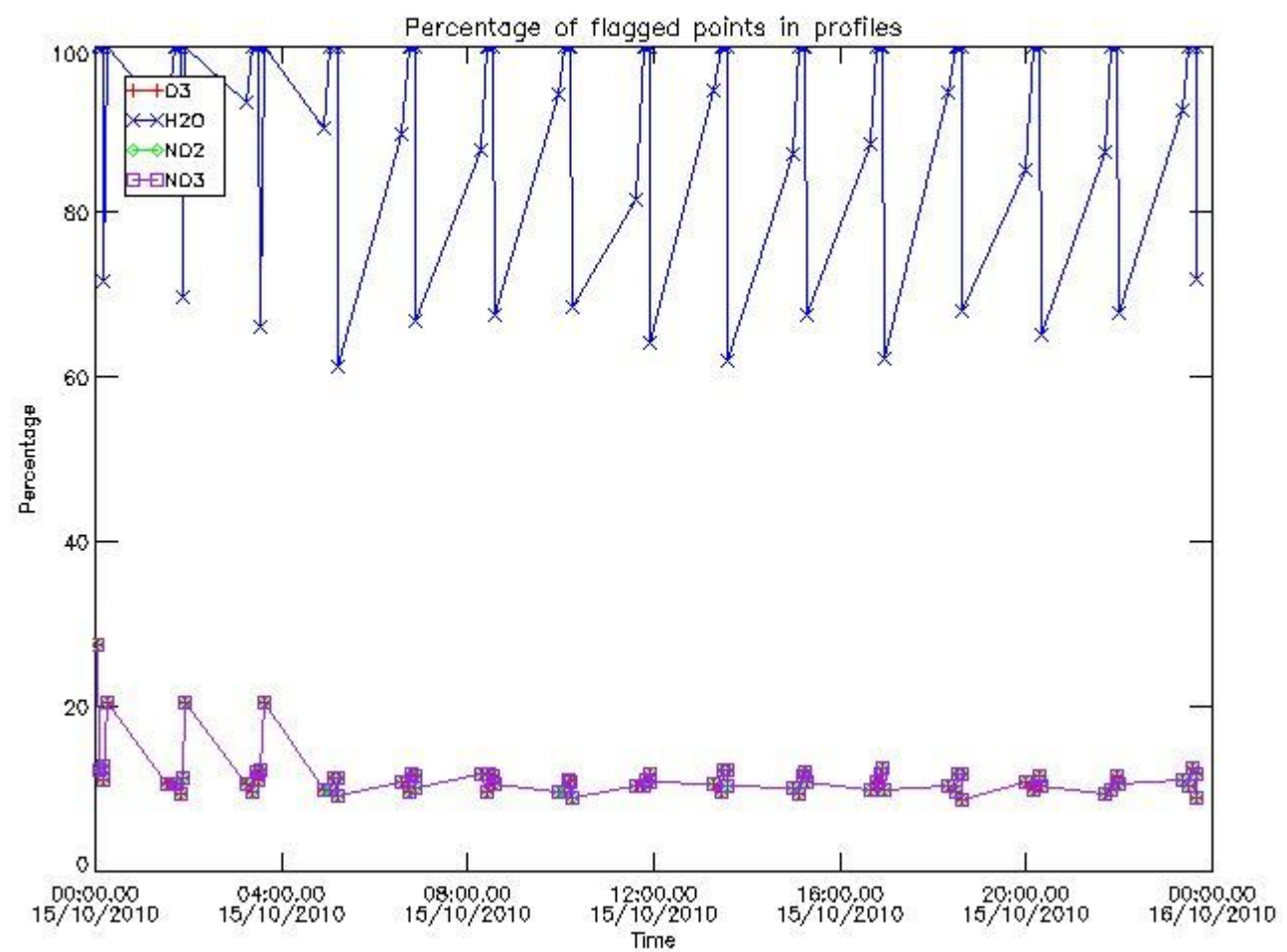
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20101015_000136_000000542093_00445_45088_9395.N1	15-OCT-2010 00:01:36	Dark	53.500	132	15Rho Pup	2.8030	6900.0	107	45088	No
2	GOM_NL__2PRFIN20101015_000532_000000462093_00445_45088_9396.N1	15-OCT-2010 00:05:32	Dark	45.500	34	Gam2Vel	1.7930	23000.	91	45088	No
3	GOM_NL__2PRFIN20101015_000948_000000442093_00446_45089_9393.N1	15-OCT-2010 00:09:48	Dark	44.000	161	Tau Pup	2.9310	4500.0	88	45089	No
4	GOM_NL__2PRFIN20101015_001109_000000462093_00446_45089_9394.N1	15-OCT-2010 00:11:09	Dark	46.000	2	Alp Car	-0.73600	7000.0	92	45089	No
5	GOM_NL__2PRFIN20101015_001546_000000252093_00446_45089_9395.N1	15-OCT-2010 00:15:46	Dark	25.000	108	Alp Col	2.6520	15200.	50	45089	No
6	GOM_NL__2PRFIN20101015_002301_000000462093_00446_45089_9396.N1	15-OCT-2010 00:23:01	Straylight	45.500	157	The1Eri	2.9060	9300.0	91	45089	No
7	GOM_NL__2PRFIN20101015_004502_000000472093_00446_45089_9397.N1	15-OCT-2010 00:45:02	Bright	46.500	105	6Bet Ari	2.6450	8900.0	93	45089	No
8	GOM_NL__2PRFIN20101015_004823_000000412093_00446_45089_9398.N1	15-OCT-2010 00:48:23	Bright	40.500	53	43Bet And	2.0480	3300.0	81	45089	No
9	GOM_NL__2PRFIN20101015_005007_000000472093_00446_45089_9399.N1	15-OCT-2010 00:50:07	Bright	46.500	173	4Bet Tri	3.0040	8900.0	93	45089	No
10	GOM_NL__2PRFIN20101015_005157_000000472093_00446_45089_9400.N1	15-OCT-2010 00:51:57	Bright	46.500	73	57Gam1And	2.2600	13100.	93	45089	No
11	GOM_NL__2PRFIN20101015_005514_000000392093_00446_45089_9401.N1	15-OCT-2010 00:55:14	Bright	39.000	76	27Gam Cas	2.3000	30000.	78	45089	No
12	GOM_NL__2PRFIN20101015_005717_000000482093_00446_45089_9402.N1	15-OCT-2010 00:57:17	Bright	47.500	160	23Gam Per	2.9300	4700.0	95	45089	No
13	GOM_NL__2PRFIN20101015_012254_000000562093_00446_45089_9403.N1	15-OCT-2010 01:22:54	Bright	55.500	166	17Eps Leo	2.9800	6000.0	111	45089	No
14	GOM_NL__2PRFIN20101015_012609_000000572093_00446_45089_9404.N1	15-OCT-2010 01:26:09	Bright	56.500	22	32Alp Leo	1.3600	15200.	113	45089	No
15	GOM_NL__2PRFIN20101015_013327_000000532093_00446_45089_9405.N1	15-OCT-2010 01:33:27	Dark	53.000	48	30Alp Hya	1.9770	4100.0	106	45089	No
16	GOM_NL__2PRFIN20101015_014213_000000532093_00446_45089_9406.N1	15-OCT-2010 01:42:13	Dark	53.000	132	15Rho Pup	2.8030	6900.0	106	45089	No
17	GOM_NL__2PRFIN20101015_014609_000000492093_00446_45089_9407.N1	15-OCT-2010 01:46:09	Dark	48.500	34	Gam2Vel	1.7930	23000.	97	45089	No
18	GOM_NL__2PRFIN20101015_015025_000000542093_00447_45090_9404.N1	15-OCT-2010 01:50:25	Dark	54.000	161	Tau Pup	2.9310	4500.0	108	45090	No
19	GOM_NL__2PRFIN20101015_015146_000000452093_00447_45090_9405.N1	15-OCT-2010 01:51:46	Dark	45.000	2	Alp Car	-0.73600	7000.0	90	45090	No
20	GOM_NL__2PRFIN20101015_015623_000000252093_00447_45090_9406.N1	15-OCT-2010 01:56:23	Dark	25.000	108	Alp Col	2.6520	15200.	50	45090	No
21	GOM_NL__2PRFIN20101015_020337_000000452093_00447_45090_9407.N1	15-OCT-2010 02:03:37	Straylight	45.000	157	The1Eri	2.9060	9300.0	90	45090	No
22	GOM_NL__2PRFIN20101015_022537_000000492093_00447_45090_9408.N1	15-OCT-2010 02:25:37	Bright	48.500	105	6Bet Ari	2.6450	8900.0	97	45090	No
23	GOM_NL__2PRFIN20101015_022858_000000442093_00447_45090_9409.N1	15-OCT-2010 02:28:58	Bright	43.500	53	43Bet And	2.0480	3300.0	87	45090	No
24	GOM_NL__2PRFIN20101015_023042_000000482093_00447_45090_9410.N1	15-OCT-2010 02:30:42	Bright	48.000	173	4Bet Tri	3.0040	8900.0	96	45090	No
25	GOM_NL__2PRFIN20101015_023232_000000462093_00447_45090_9411.N1	15-OCT-2010 02:32:32	Bright	46.000	73	57Gam1And	2.2600	13100.	92	45090	No
26	GOM_NL__2PRFIN20101015_023550_000000372093_00447_45090_9412.N1	15-OCT-2010 02:35:50	Bright	36.500	76	27Gam Cas	2.3000	30000.	73	45090	No
27	GOM_NL__2PRFIN20101015_023753_000000462093_00447_45090_9413.N1	15-OCT-2010 02:37:53	Bright	45.500	160	23Gam Per	2.9300	4700.0	91	45090	No
28	GOM_NL__2PRFIN20101015_030330_000000422093_00447_45090_9414.N1	15-OCT-2010 03:03:30	Bright	41.500	166	17Eps Leo	2.9800	6000.0	83	45090	No
29	GOM_NL__2PRFIN20101015_030645_000000402093_00447_45090_9415.N1	15-OCT-2010 03:06:45	Bright	40.000	22	32Alp Leo	1.3600	15200.	80	45090	No
30	GOM_NL__2PRFIN20101015_031404_000000532093_00447_45090_9416.N1	15-OCT-2010 03:14:04	Dark	52.500	48	30Alp Hya	1.9770	4100.0	105	45090	No
31	GOM_NL__2PRFIN20101015_032250_000000532093_00447_45090_9417.N1	15-OCT-2010 03:22:50	Dark	52.500	132	15Rho Pup	2.8030	6900.0	105	45090	No
32	GOM_NL__2PRFIN20101015_032646_000000422093_00447_45090_9418.N1	15-OCT-2010 03:26:46	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	45090	No
33	GOM_NL__2PRFIN20101015_033101_000000462093_00448_45091_9415.N1	15-OCT-2010 03:31:01	Dark	46.000	161	Tau Pup	2.9310	4500.0	92	45091	No
34	GOM_NL__2PRFIN20101015_033222_000000462093_00448_45091_9416.N1	15-OCT-2010 03:32:22	Dark	46.000	2	Alp Car	-0.73600	7000.0	92	45091	No
35	GOM_NL__2PRFIN20101015_033701_000000252093_00448_45091_9417.N1	15-OCT-2010 03:37:01	Dark	25.000	108	Alp Col	2.6520	15200.	50	45091	No
36	GOM_NL__2PRFIN20101015_034413_000000472093_00448_45091_9418.N1	15-OCT-2010 03:44:13	Straylight	46.500	157	The1Eri	2.9060	9300.0	93	45091	No
37	GOM_NL__2PRFIN20101015_040613_000000472093_00448_45091_9419.N1	15-OCT-2010 04:06:13	Bright	46.500	105	6Bet Ari	2.6450	8900.0	93	45091	No
38	GOM_NL__2PRFIN20101015_040934_000000422093_00448_45091_9420.N1	15-OCT-2010 04:09:34	Bright	42.000	53	43Bet And	2.0480	3300.0	84	45091	No
39	GOM_NL__2PRFIN20101015_041117_000000462093_00448_45091_9421.N1	15-OCT-2010 04:11:17	Bright	46.000	173	4Bet Tri	3.0040	8900.0	92	45091	No
40	GOM_NL__2PRFIN20101015_041308_000000482093_00448_45091_9422.N1	15-OCT-2010 04:13:08	Bright	47.500	73	57Gam1And	2.2600	13100.	95	45091	No
41	GOM_NL__2PRFIN20101015_041625_000000382093_00448_45091_9423.N1	15-OCT-2010 04:16:25	Bright	37.500	76	27Gam Cas	2.3000	30000.	75	45091	No
42	GOM_NL__2PRFIN20101015_041828_000000482093_00448_45091_9424.N1	15-OCT-2010 04:18:28	Bright	48.000	160	23Gam Per	2.9300	4700.0	96	45091	No

161	GOM_NL__2PRFIN20101015_191131_000000472093_00457_45100_9564.N1	15-OCT-2010 19:11:31	Bright	46.500	105	6Bet Ari	2.6450	8900.0	93	45100	No
162	GOM_NL__2PRFIN20101015_191454_000000432093_00457_45100_9565.N1	15-OCT-2010 19:14:54	Bright	42.500	53	43Bet And	2.0480	3300.0	85	45100	No
163	GOM_NL__2PRFIN20101015_191634_000000472093_00457_45100_9566.N1	15-OCT-2010 19:16:34	Bright	47.000	173	4Bet Tri	3.0040	8900.0	94	45100	No
164	GOM_NL__2PRFIN20101015_191826_000000482093_00457_45100_9567.N1	15-OCT-2010 19:18:26	Bright	47.500	73	57Gam1And	2.2600	13100.	95	45100	No
165	GOM_NL__2PRFIN20101015_192147_000000382093_00457_45100_9568.N1	15-OCT-2010 19:21:47	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	45100	No
166	GOM_NL__2PRFIN20101015_192344_000000492093_00457_45100_9569.N1	15-OCT-2010 19:23:44	Bright	49.000	160	23Gam Per	2.9300	4700.0	98	45100	No
167	GOM_NL__2PRFIN20101015_194932_000000422093_00457_45100_9570.N1	15-OCT-2010 19:49:32	Bright	41.500	166	17Eps Leo	2.9800	6000.0	83	45100	No
168	GOM_NL__2PRFIN20101015_195248_000000402093_00457_45100_9571.N1	15-OCT-2010 19:52:48	Bright	39.500	22	32Alp Leo	1.3600	15200.	79	45100	No
169	GOM_NL__2PRFIN20101015_200010_000000482093_00457_45100_9572.N1	15-OCT-2010 20:00:10	Dark	47.500	48	30Alp Hya	1.9770	4100.0	95	45100	No
170	GOM_NL__2PRFIN20101015_200902_000000522093_00457_45100_9573.N1	15-OCT-2010 20:09:02	Dark	52.000	132	15Rho Pup	2.8030	6900.0	104	45100	No
171	GOM_NL__2PRFIN20101015_201709_000000452093_00458_45101_9574.N1	15-OCT-2010 20:17:09	Dark	44.500	161	Tau Pup	2.9310	4500.0	89	45101	No
172	GOM_NL__2PRFIN20101015_201830_000000492093_00458_45101_9575.N1	15-OCT-2010 20:18:30	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	45101	No
173	GOM_NL__2PRFIN20101015_203018_000000482093_00458_45101_9576.N1	15-OCT-2010 20:30:18	Straylight	47.500	157	The1Eri	2.9060	9300.0	95	45101	No
174	GOM_NL__2PRFIN20101015_205206_000000482093_00458_45101_9577.N1	15-OCT-2010 20:52:06	Bright	48.000	105	6Bet Ari	2.6450	8900.0	96	45101	No
175	GOM_NL__2PRFIN20101015_205530_000000412093_00458_45101_9578.N1	15-OCT-2010 20:55:30	Bright	40.500	53	43Bet And	2.0480	3300.0	81	45101	No
176	GOM_NL__2PRFIN20101015_205709_000000462093_00458_45101_9579.N1	15-OCT-2010 20:57:09	Bright	46.000	173	4Bet Tri	3.0040	8900.0	92	45101	No
177	GOM_NL__2PRFIN20101015_205901_000000482093_00458_45101_9580.N1	15-OCT-2010 20:59:01	Bright	48.000	73	57Gam1And	2.2600	13100.	96	45101	No
178	GOM_NL__2PRFIN20101015_210223_000000392093_00458_45101_9581.N1	15-OCT-2010 21:02:23	Bright	38.500	76	27Gam Cas	2.3000	30000.	77	45101	No
179	GOM_NL__2PRFIN20101015_210419_000000492093_00458_45101_9582.N1	15-OCT-2010 21:04:19	Bright	49.000	160	23Gam Per	2.9300	4700.0	98	45101	No
180	GOM_NL__2PRFIN20101015_213008_000000432093_00458_45101_9583.N1	15-OCT-2010 21:30:08	Bright	42.500	166	17Eps Leo	2.9800	6000.0	85	45101	No
181	GOM_NL__2PRFIN20101015_213324_000000532093_00458_45101_9584.N1	15-OCT-2010 21:33:24	Bright	53.000	22	32Alp Leo	1.3600	15200.	106	45101	No
182	GOM_NL__2PRFIN20101015_214046_000000592093_00458_45101_9585.N1	15-OCT-2010 21:40:46	Dark	59.000	48	30Alp Hya	1.9770	4100.0	118	45101	No
183	GOM_NL__2PRFIN20101015_214939_000000522093_00458_45101_9586.N1	15-OCT-2010 21:49:39	Dark	51.500	132	15Rho Pup	2.8030	6900.0	103	45101	No
184	GOM_NL__2PRFIN20101015_215746_000000442093_00459_45102_9587.N1	15-OCT-2010 21:57:46	Dark	44.000	161	Tau Pup	2.9310	4500.0	88	45102	No
185	GOM_NL__2PRFIN20101015_215906_000000492093_00459_45102_9588.N1	15-OCT-2010 21:59:06	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	45102	No
186	GOM_NL__2PRFIN20101015_221054_000000442093_00459_45102_9589.N1	15-OCT-2010 22:10:54	Straylight	44.000	157	The1Eri	2.9060	9300.0	88	45102	No
187	GOM_NL__2PRFIN20101015_223242_000000462093_00459_45102_9590.N1	15-OCT-2010 22:32:42	Bright	45.500	105	6Bet Ari	2.6450	8900.0	91	45102	No
188	GOM_NL__2PRFIN20101015_223605_000000422093_00459_45102_9591.N1	15-OCT-2010 22:36:05	Bright	41.500	53	43Bet And	2.0480	3300.0	83	45102	No
189	GOM_NL__2PRFIN20101015_223745_000000472093_00459_45102_9592.N1	15-OCT-2010 22:37:45	Bright	46.500	173	4Bet Tri	3.0040	8900.0	93	45102	No
190	GOM_NL__2PRFIN20101015_223936_000000492093_00459_45102_9593.N1	15-OCT-2010 22:39:36	Bright	48.500	73	57Gam1And	2.2600	13100.	97	45102	No
191	GOM_NL__2PRFIN20101015_224258_000000382093_00459_45102_9594.N1	15-OCT-2010 22:42:58	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	45102	No
192	GOM_NL__2PRFIN20101015_224454_000000482093_00459_45102_9595.N1	15-OCT-2010 22:44:54	Bright	47.500	160	23Gam Per	2.9300	4700.0	95	45102	No
193	GOM_NL__2PRFIN20101015_231044_000000412093_00459_45102_9596.N1	15-OCT-2010 23:10:44	Bright	41.000	166	17Eps Leo	2.9800	6000.0	82	45102	No
194	GOM_NL__2PRFIN20101015_231400_000000402093_00459_45102_9597.N1	15-OCT-2010 23:14:00	Bright	40.000	22	32Alp Leo	1.3600	15200.	80	45102	No
195	GOM_NL__2PRFIN20101015_232123_000000462093_00459_45102_9598.N1	15-OCT-2010 23:21:23	Dark	45.500	48	30Alp Hya	1.9770	4100.0	91	45102	No
196	GOM_NL__2PRFIN20101015_233016_000000552093_00459_45102_9599.N1	15-OCT-2010 23:30:16	Dark	54.500	132	15Rho Pup	2.8030	6900.0	109	45102	No
197	GOM_NL__2PRFIN20101015_233316_000000452093_00459_45102_9600.N1	15-OCT-2010 23:33:16	Dark	45.000	70	Zet Pup	2.2460	39000.	90	45102	No
198	GOM_NL__2PRFIN20101015_233822_000000442093_00460_45103_9597.N1	15-OCT-2010 23:38:22	Dark	43.500	161	Tau Pup	2.9310	4500.0	87	45103	No
199	GOM_NL__2PRFIN20101015_233943_000000572093_00460_45103_9598.N1	15-OCT-2010 23:39:43	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	45103	No
200	GOM_NL__2PRFIN20101015_235130_000000462093_00460_45103_9599.N1	15-OCT-2010 23:51:30	Straylight	45.500	157	The1Eri	2.9060	9300.0	91	45103	No

3. Quality information per product

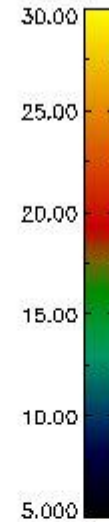
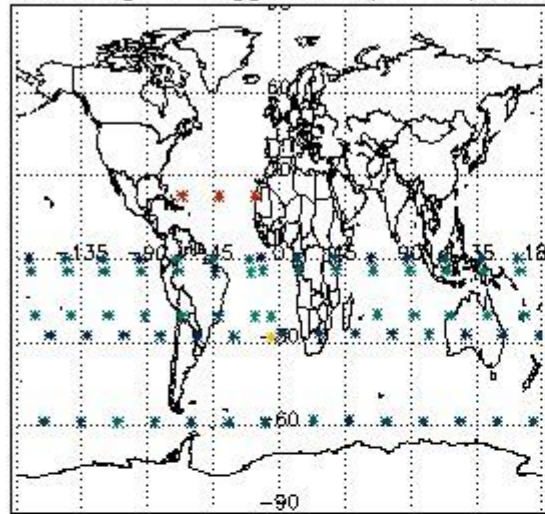
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

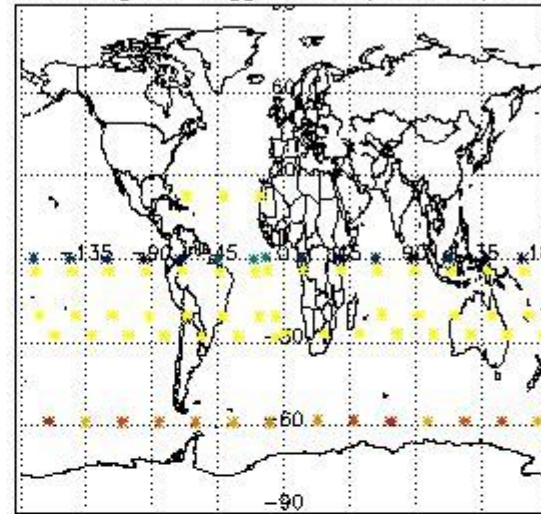


3.2 Plot quality information per product (world map)

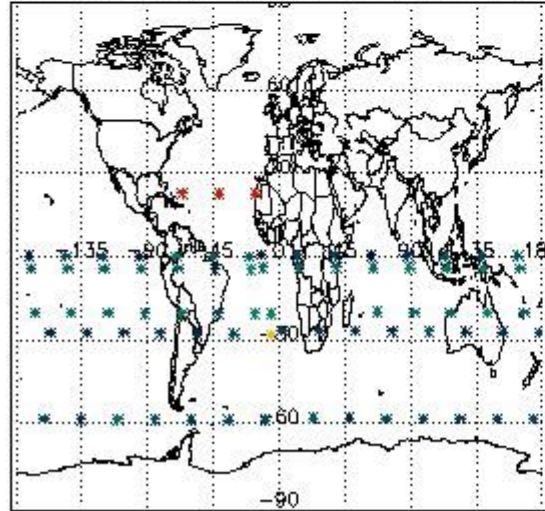
Percentage of flagged data per O3 profile



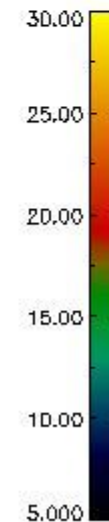
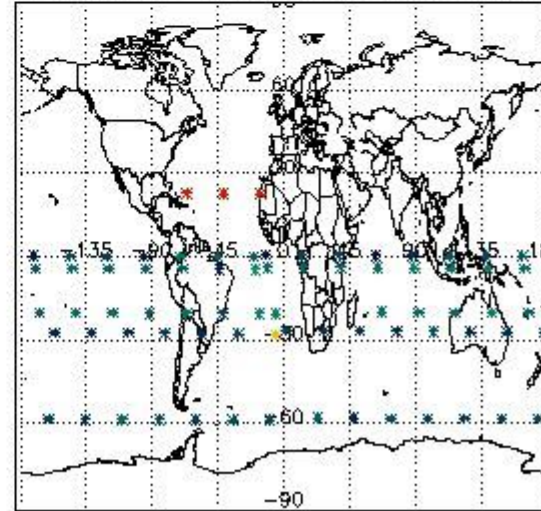
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

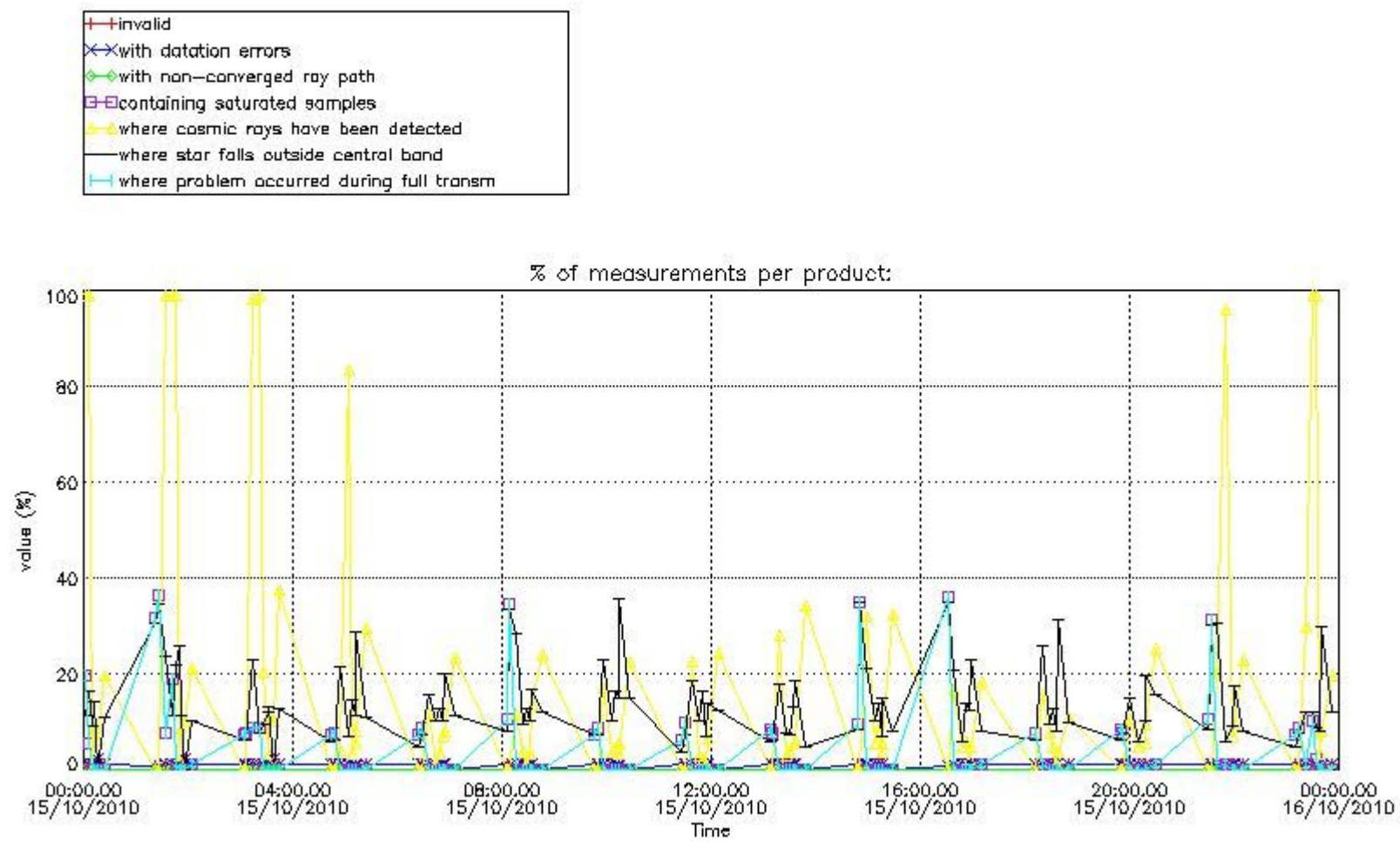


4. Level 1 quality information per product

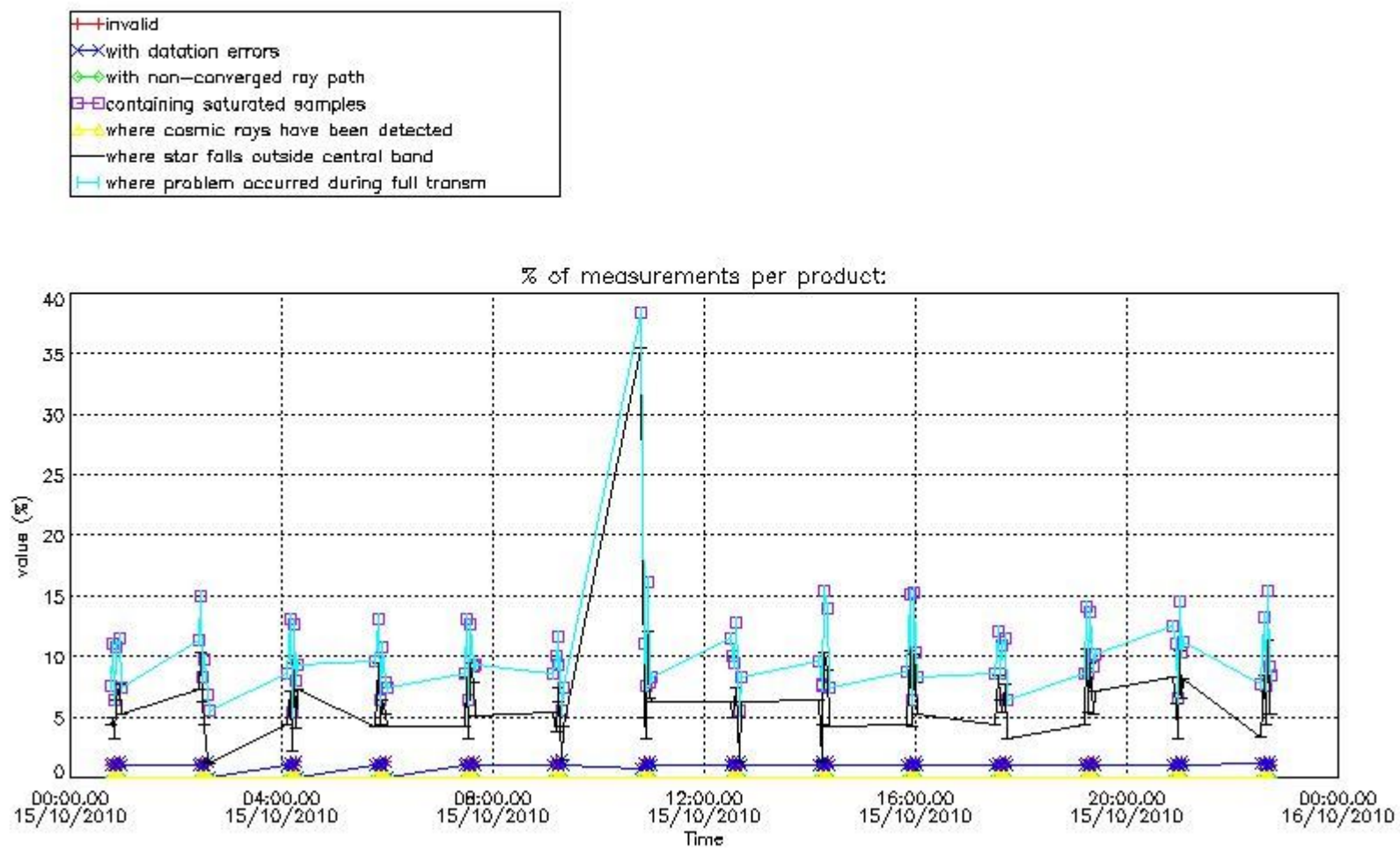
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



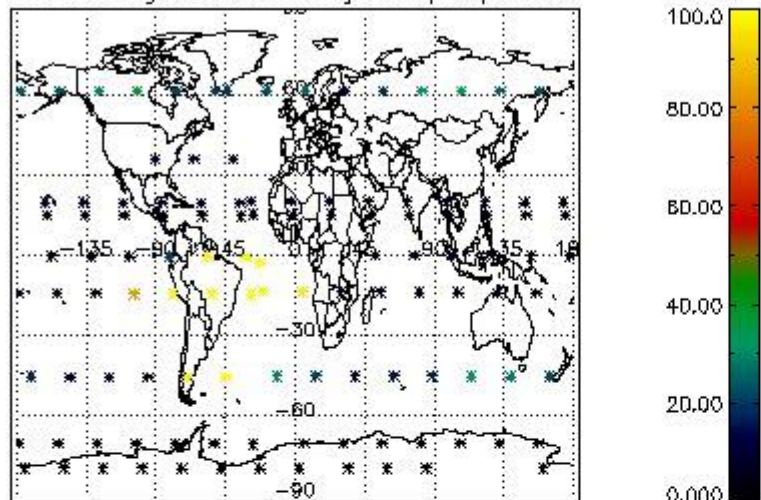
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



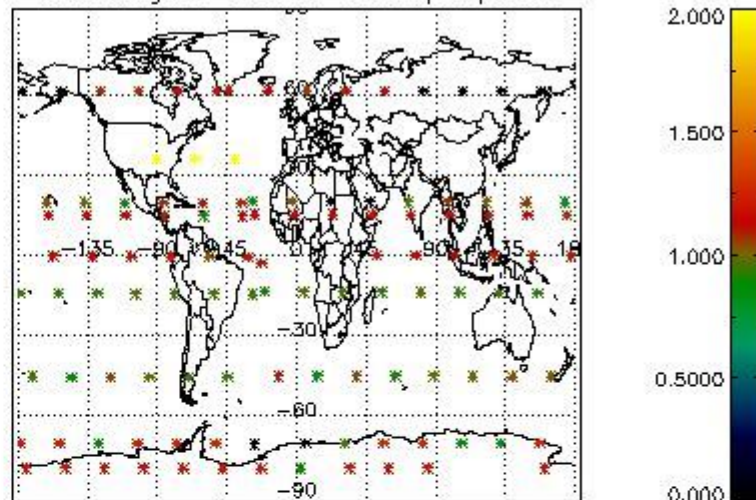
4.2 Plot quality information per product coming from level 1b processing (world map)

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

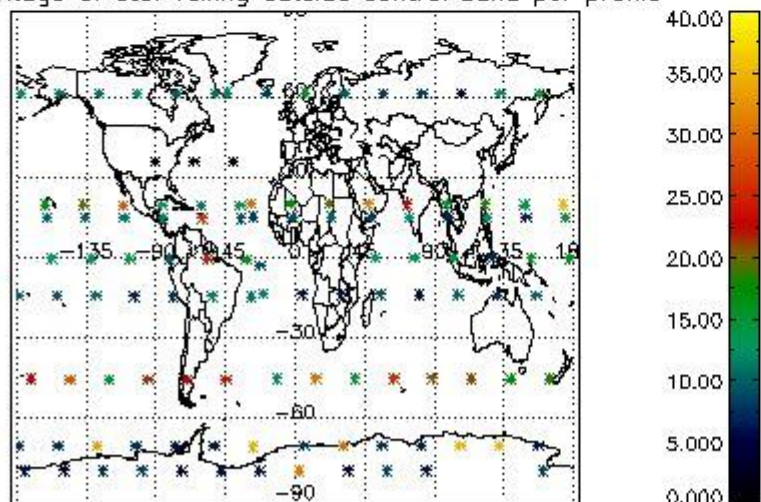
Percentage of cosmic ray hits per profile



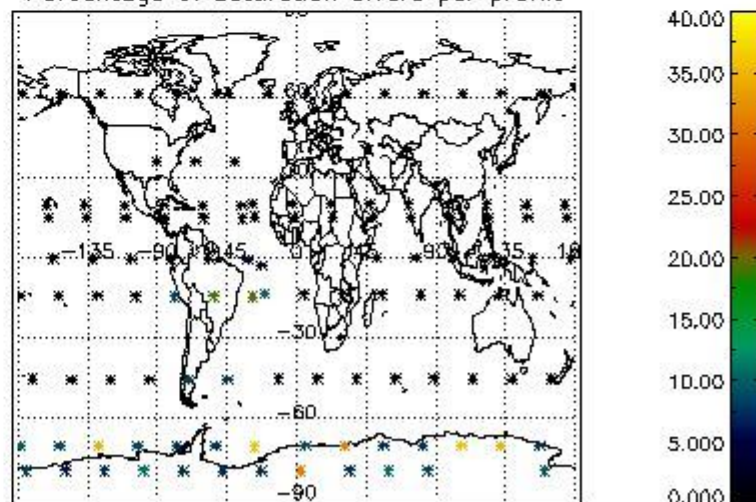
Percentage of datation errors per profile



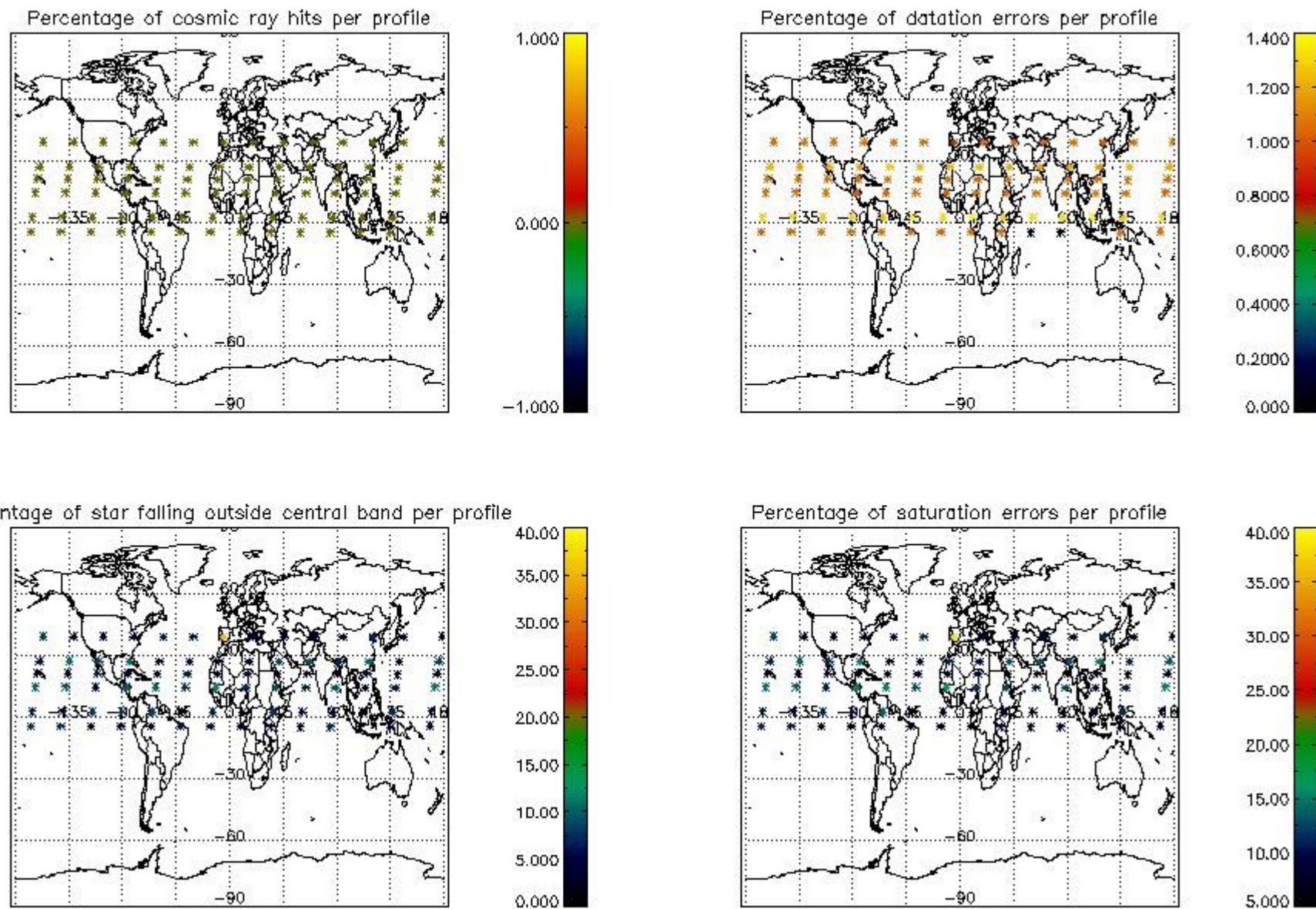
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

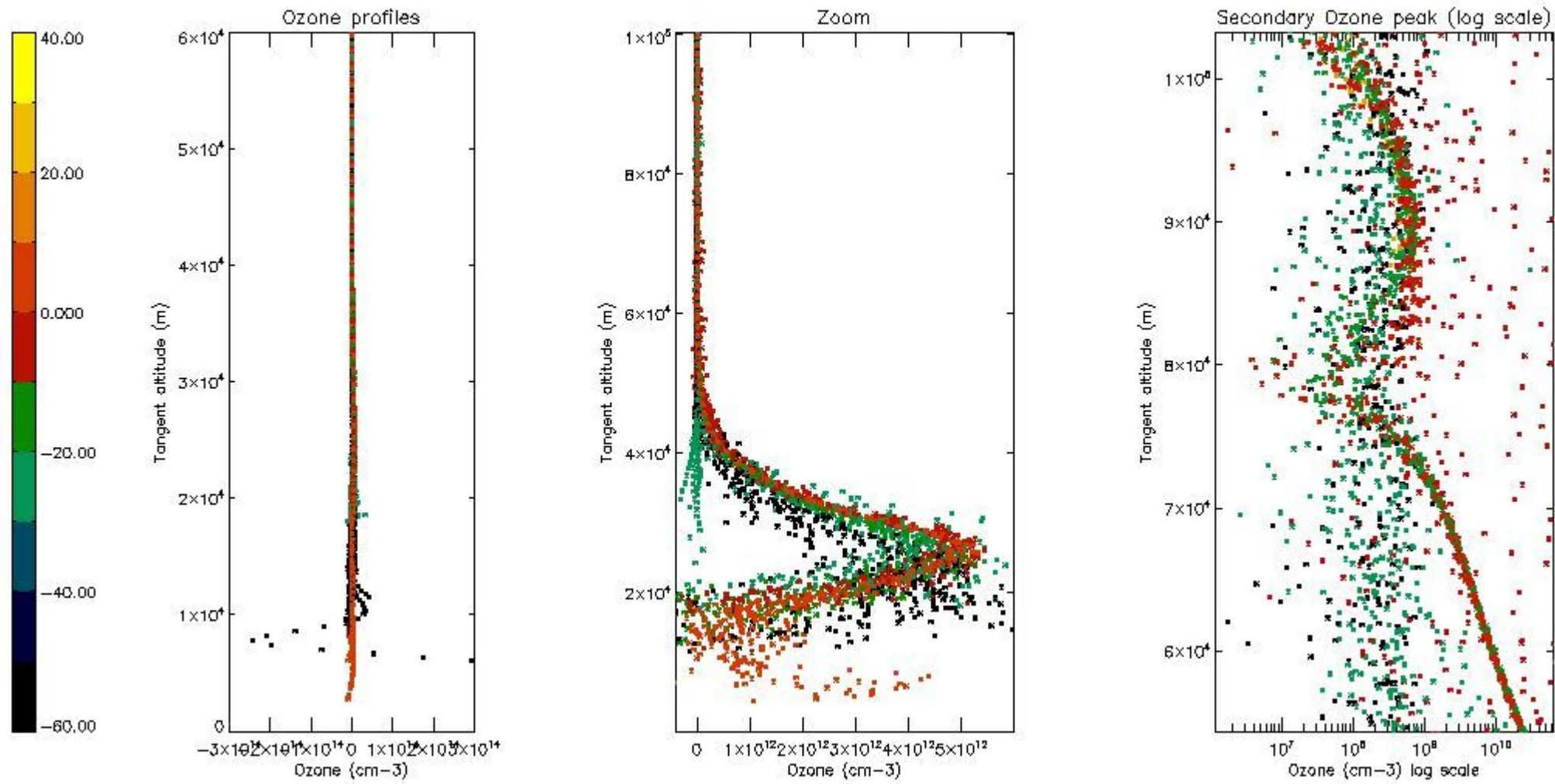
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	17

STD < 10	12
STD < 5	8

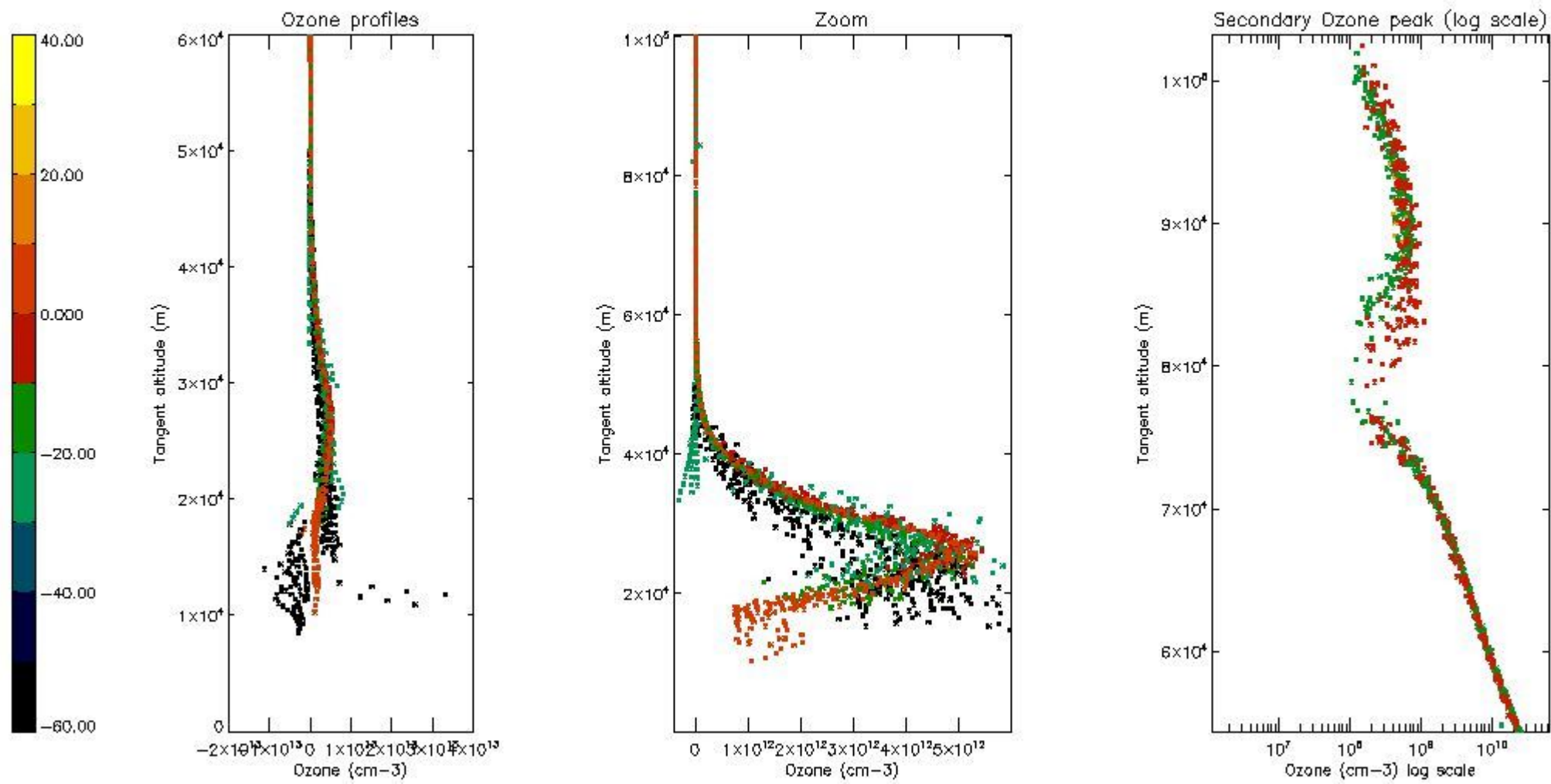
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



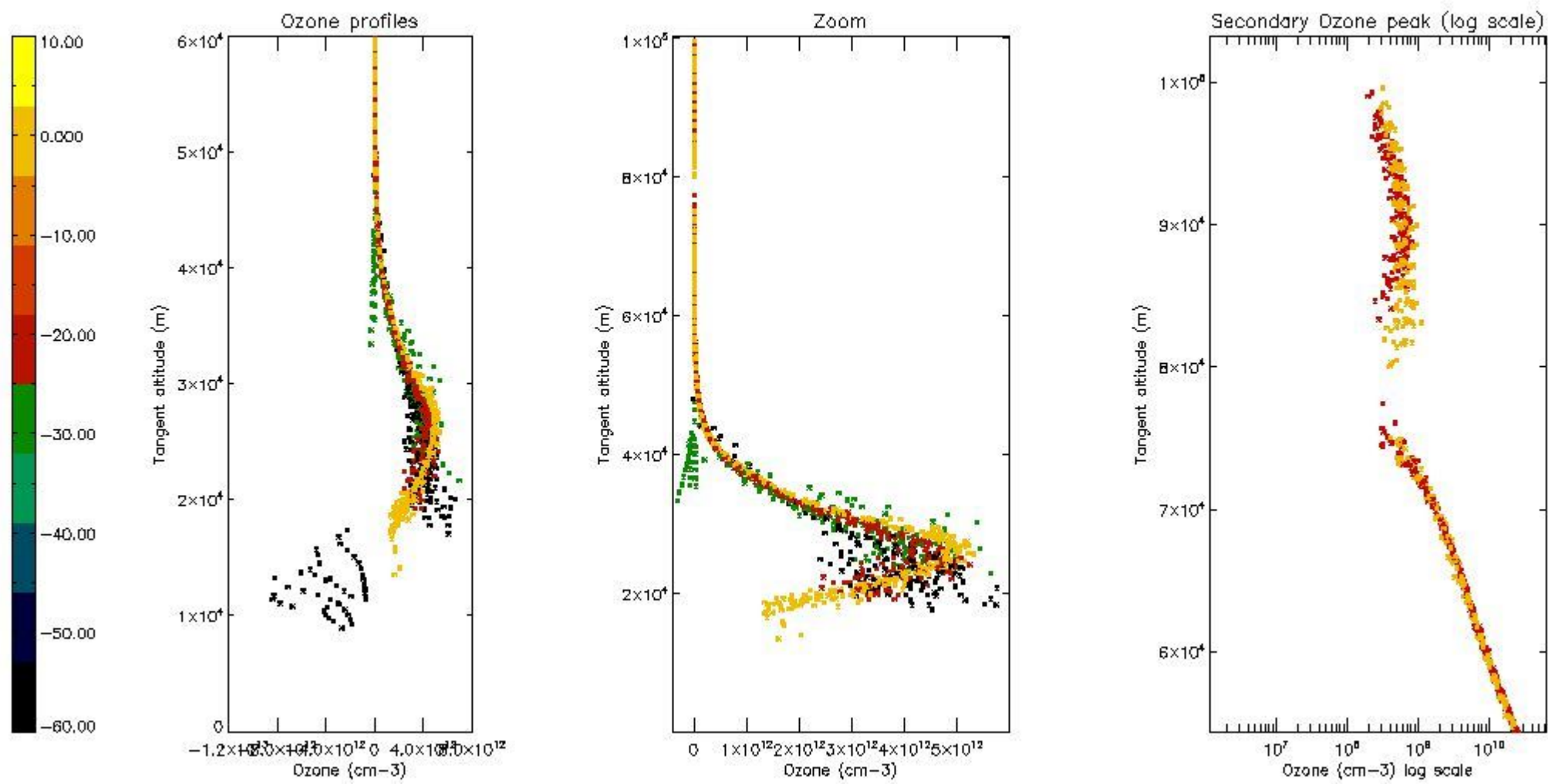
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



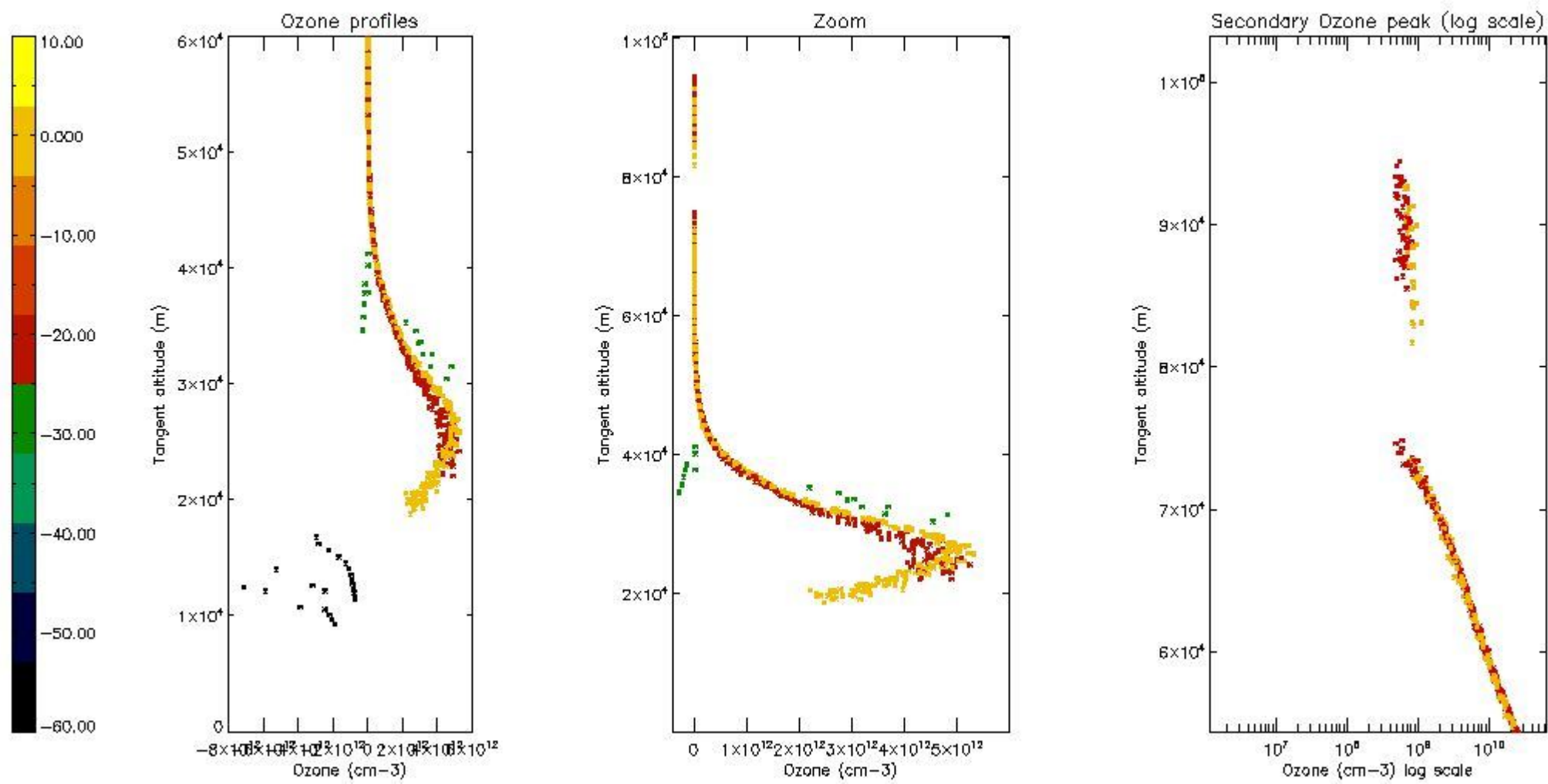
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



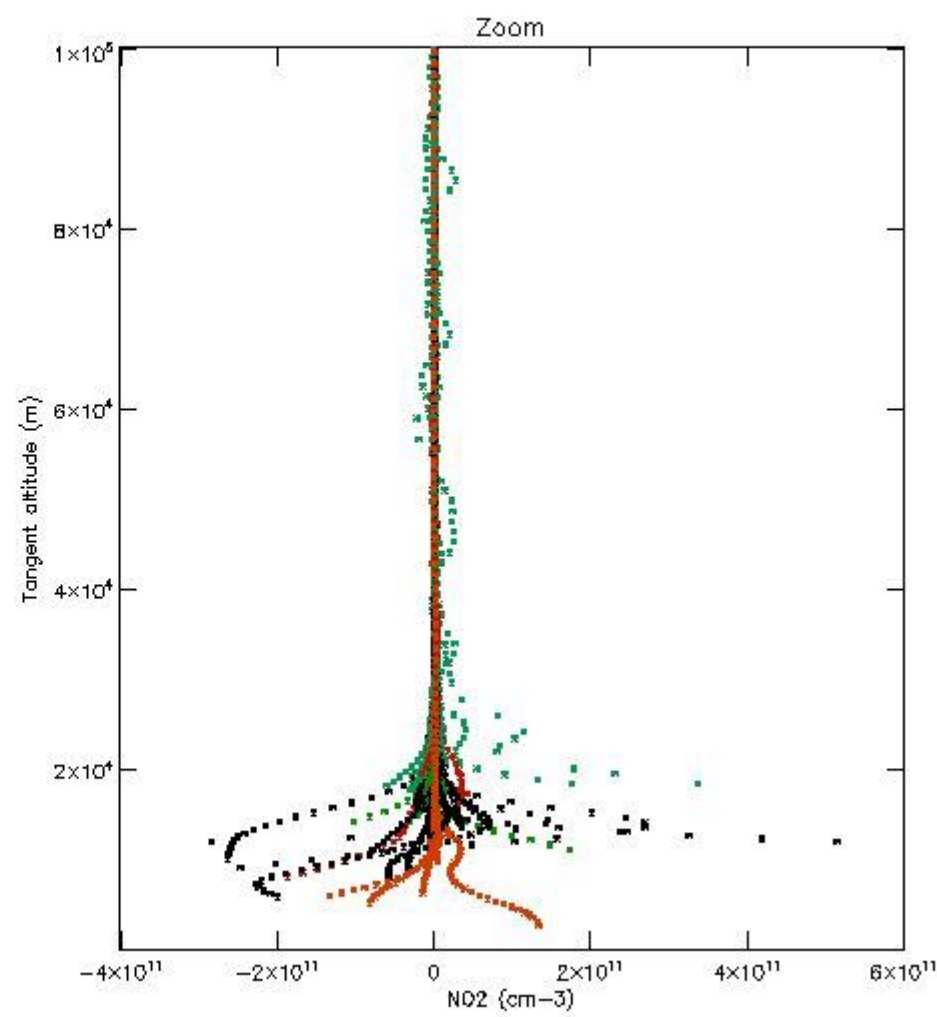
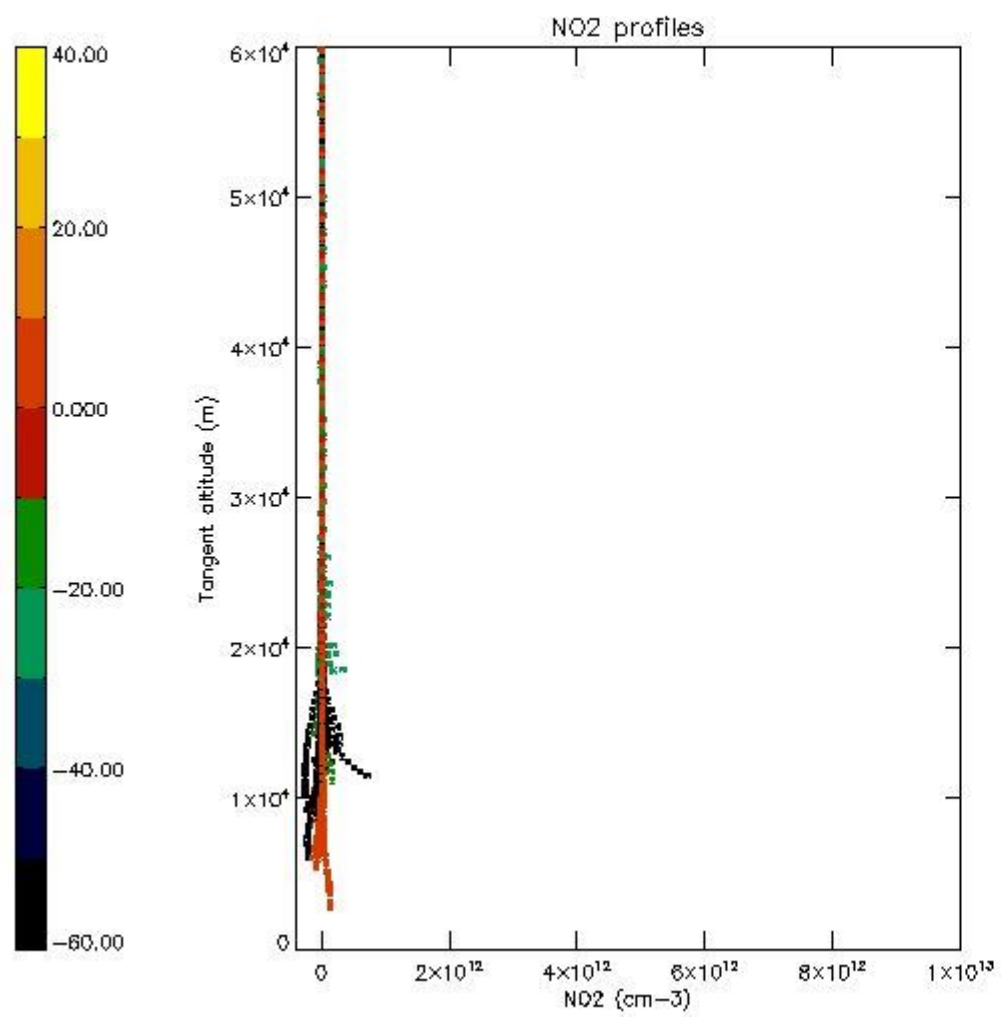
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



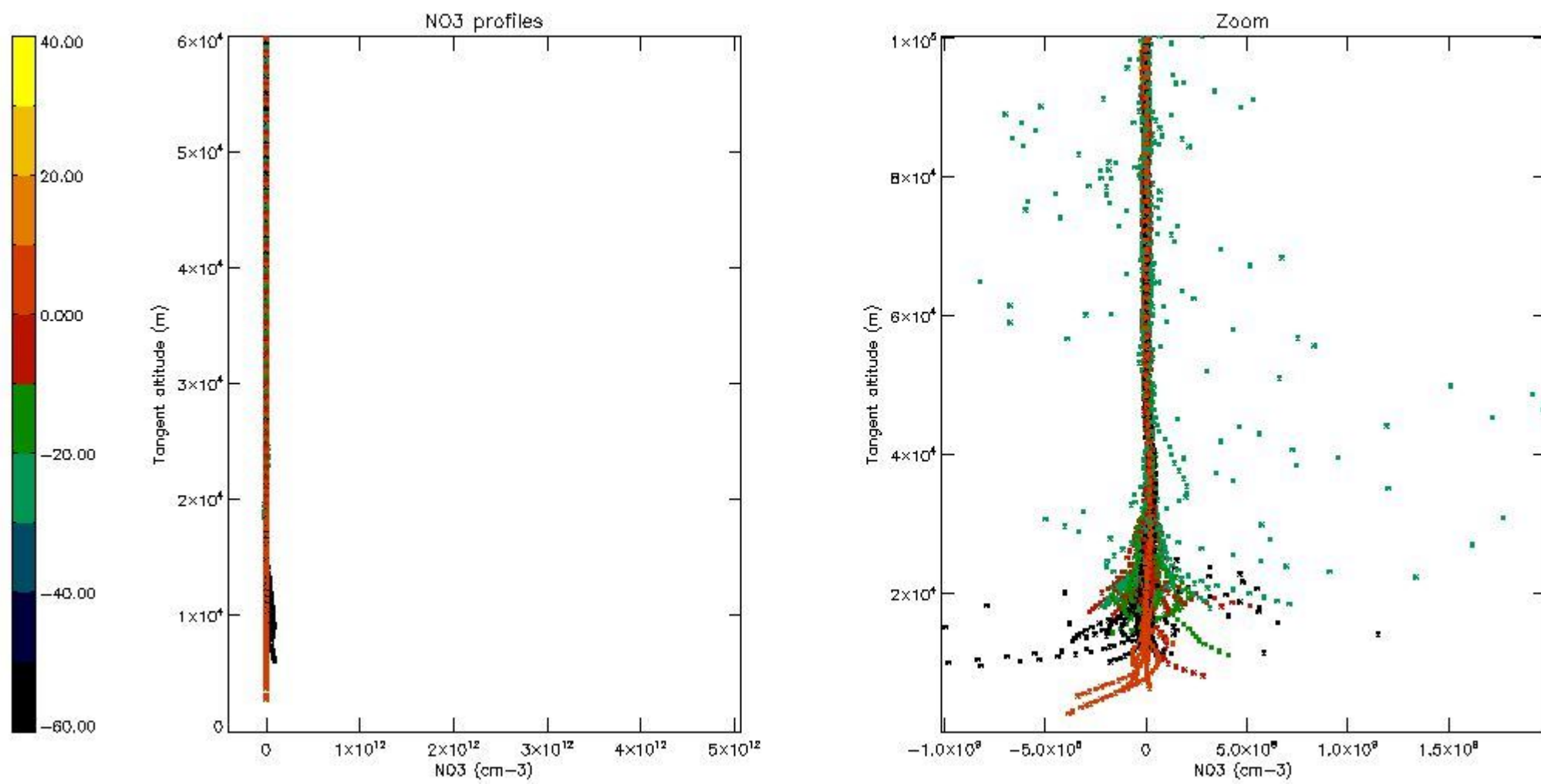
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



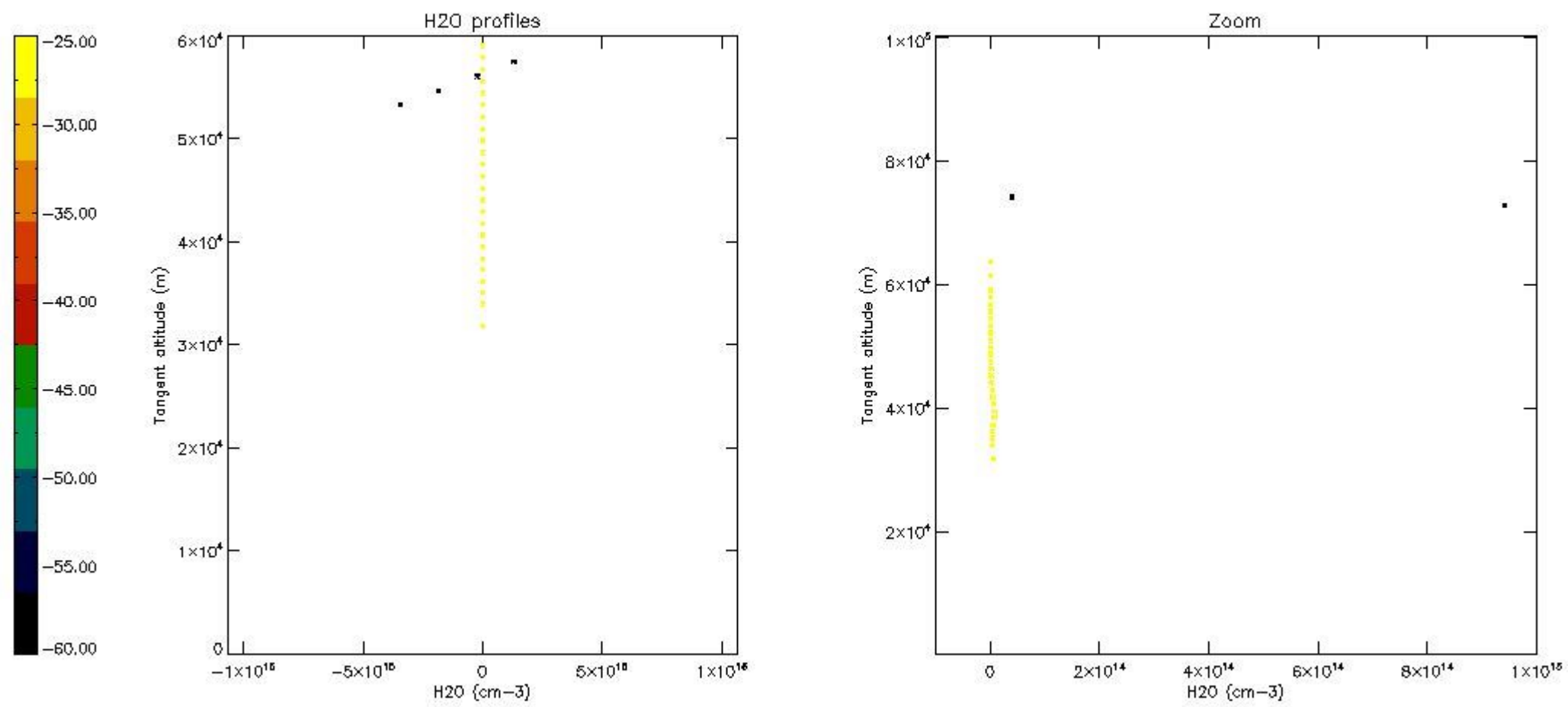
5.7 Plot NO3 profiles for all STD (dark without errors)

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	15-OCT-2010 00:01:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-OCT-2010 00:01:36
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-OCT-2010 00:01:36

GOMOS Level 2 Daily Report

SUMMARY

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[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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[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

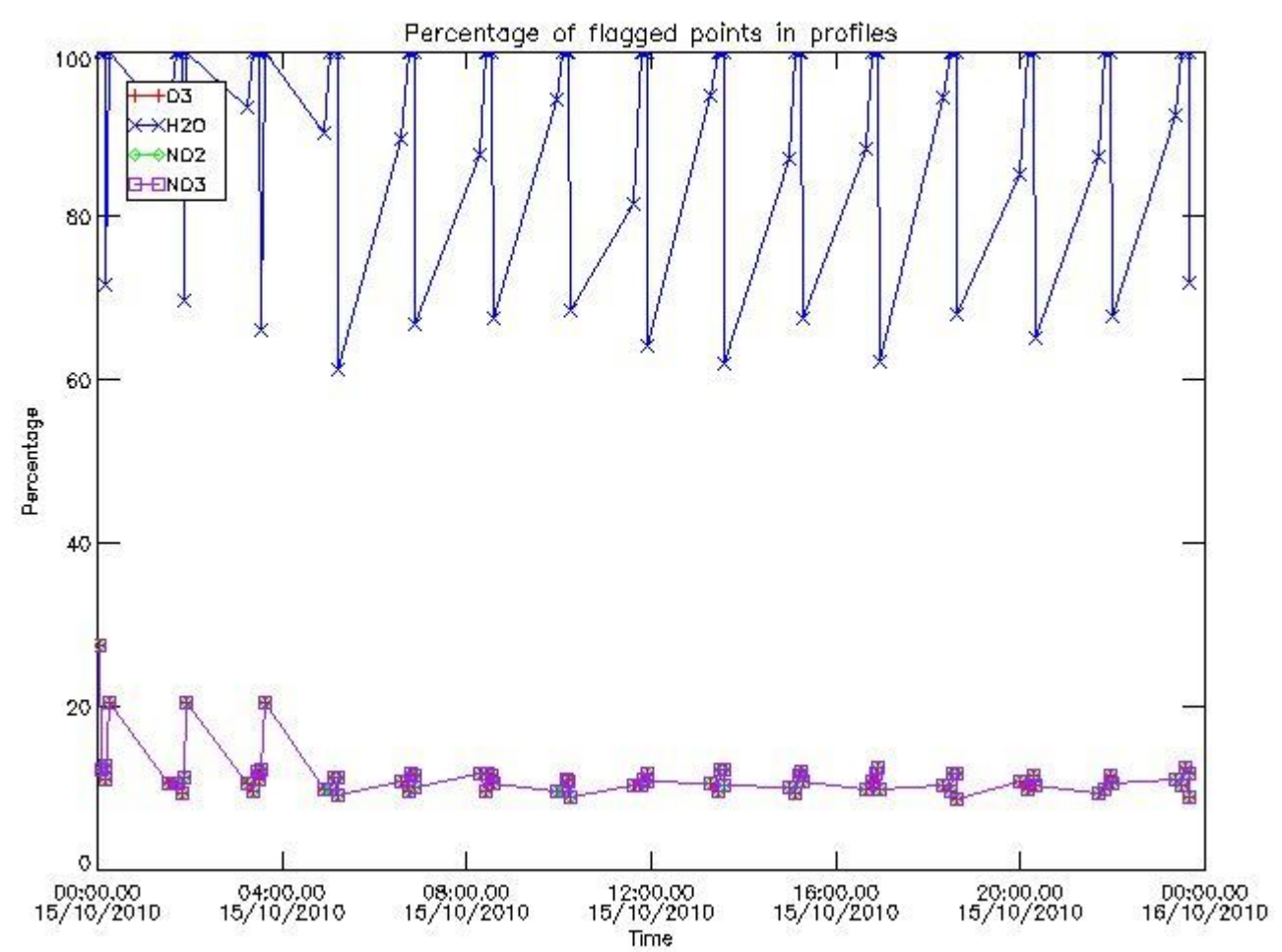
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20101015_191131_000000472093_00457_45100_9564.N1	15-OCT-2010 19:11:31	Bright	46.500	105	6Bet Ari	2.6450	8900.0	93	45100	No
162	GOM_NL__2PRFIN20101015_191454_000000432093_00457_45100_9565.N1	15-OCT-2010 19:14:54	Bright	42.500	53	43Bet And	2.0480	3300.0	85	45100	No
163	GOM_NL__2PRFIN20101015_191634_000000472093_00457_45100_9566.N1	15-OCT-2010 19:16:34	Bright	47.000	173	4Bet Tri	3.0040	8900.0	94	45100	No
164	GOM_NL__2PRFIN20101015_191826_000000482093_00457_45100_9567.N1	15-OCT-2010 19:18:26	Bright	47.500	73	57Gam1And	2.2600	13100.	95	45100	No
165	GOM_NL__2PRFIN20101015_192147_000000382093_00457_45100_9568.N1	15-OCT-2010 19:21:47	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	45100	No
166	GOM_NL__2PRFIN20101015_192344_000000492093_00457_45100_9569.N1	15-OCT-2010 19:23:44	Bright	49.000	160	23Gam Per	2.9300	4700.0	98	45100	No
167	GOM_NL__2PRFIN20101015_194932_000000422093_00457_45100_9570.N1	15-OCT-2010 19:49:32	Bright	41.500	166	17Eps Leo	2.9800	6000.0	83	45100	No
168	GOM_NL__2PRFIN20101015_195248_000000402093_00457_45100_9571.N1	15-OCT-2010 19:52:48	Bright	39.500	22	32Alp Leo	1.3600	15200.	79	45100	No
169	GOM_NL__2PRFIN20101015_200010_000000482093_00457_45100_9572.N1	15-OCT-2010 20:00:10	Dark	47.500	48	30Alp Hya	1.9770	4100.0	95	45100	No
170	GOM_NL__2PRFIN20101015_200902_000000522093_00457_45100_9573.N1	15-OCT-2010 20:09:02	Dark	52.000	132	15Rho Pup	2.8030	6900.0	104	45100	No
171	GOM_NL__2PRFIN20101015_201709_000000452093_00458_45101_9574.N1	15-OCT-2010 20:17:09	Dark	44.500	161	Tau Pup	2.9310	4500.0	89	45101	No
172	GOM_NL__2PRFIN20101015_201830_000000492093_00458_45101_9575.N1	15-OCT-2010 20:18:30	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	45101	No
173	GOM_NL__2PRFIN20101015_203018_000000482093_00458_45101_9576.N1	15-OCT-2010 20:30:18	Straylight	47.500	157	The1Eri	2.9060	9300.0	95	45101	No
174	GOM_NL__2PRFIN20101015_205206_000000482093_00458_45101_9577.N1	15-OCT-2010 20:52:06	Bright	48.000	105	6Bet Ari	2.6450	8900.0	96	45101	No
175	GOM_NL__2PRFIN20101015_205530_000000412093_00458_45101_9578.N1	15-OCT-2010 20:55:30	Bright	40.500	53	43Bet And	2.0480	3300.0	81	45101	No
176	GOM_NL__2PRFIN20101015_205709_000000462093_00458_45101_9579.N1	15-OCT-2010 20:57:09	Bright	46.000	173	4Bet Tri	3.0040	8900.0	92	45101	No
177	GOM_NL__2PRFIN20101015_205901_000000482093_00458_45101_9580.N1	15-OCT-2010 20:59:01	Bright	48.000	73	57Gam1And	2.2600	13100.	96	45101	No
178	GOM_NL__2PRFIN20101015_210223_000000392093_00458_45101_9581.N1	15-OCT-2010 21:02:23	Bright	38.500	76	27Gam Cas	2.3000	30000.	77	45101	No
179	GOM_NL__2PRFIN20101015_210419_000000492093_00458_45101_9582.N1	15-OCT-2010 21:04:19	Bright	49.000	160	23Gam Per	2.9300	4700.0	98	45101	No
180	GOM_NL__2PRFIN20101015_213008_000000432093_00458_45101_9583.N1	15-OCT-2010 21:30:08	Bright	42.500	166	17Eps Leo	2.9800	6000.0	85	45101	No
181	GOM_NL__2PRFIN20101015_213324_000000532093_00458_45101_9584.N1	15-OCT-2010 21:33:24	Bright	53.000	22	32Alp Leo	1.3600	15200.	106	45101	No
182	GOM_NL__2PRFIN20101015_214046_000000592093_00458_45101_9585.N1	15-OCT-2010 21:40:46	Dark	59.000	48	30Alp Hya	1.9770	4100.0	118	45101	No
183	GOM_NL__2PRFIN20101015_214939_000000522093_00458_45101_9586.N1	15-OCT-2010 21:49:39	Dark	51.500	132	15Rho Pup	2.8030	6900.0	103	45101	No
184	GOM_NL__2PRFIN20101015_215746_000000442093_00459_45102_9587.N1	15-OCT-2010 21:57:46	Dark	44.000	161	Tau Pup	2.9310	4500.0	88	45102	No
185	GOM_NL__2PRFIN20101015_215906_000000492093_00459_45102_9588.N1	15-OCT-2010 21:59:06	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	45102	No
186	GOM_NL__2PRFIN20101015_221054_000000442093_00459_45102_9589.N1	15-OCT-2010 22:10:54	Straylight	44.000	157	The1Eri	2.9060	9300.0	88	45102	No
187	GOM_NL__2PRFIN20101015_223242_000000462093_00459_45102_9590.N1	15-OCT-2010 22:32:42	Bright	45.500	105	6Bet Ari	2.6450	8900.0	91	45102	No
188	GOM_NL__2PRFIN20101015_223605_000000422093_00459_45102_9591.N1	15-OCT-2010 22:36:05	Bright	41.500	53	43Bet And	2.0480	3300.0	83	45102	No
189	GOM_NL__2PRFIN20101015_223745_000000472093_00459_45102_9592.N1	15-OCT-2010 22:37:45	Bright	46.500	173	4Bet Tri	3.0040	8900.0	93	45102	No
190	GOM_NL__2PRFIN20101015_223936_000000492093_00459_45102_9593.N1	15-OCT-2010 22:39:36	Bright	48.500	73	57Gam1And	2.2600	13100.	97	45102	No
191	GOM_NL__2PRFIN20101015_224258_000000382093_00459_45102_9594.N1	15-OCT-2010 22:42:58	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	45102	No
192	GOM_NL__2PRFIN20101015_224454_000000482093_00459_45102_9595.N1	15-OCT-2010 22:44:54	Bright	47.500	160	23Gam Per	2.9300	4700.0	95	45102	No
193	GOM_NL__2PRFIN20101015_231044_000000412093_00459_45102_9596.N1	15-OCT-2010 23:10:44	Bright	41.000	166	17Eps Leo	2.9800	6000.0	82	45102	No
194	GOM_NL__2PRFIN20101015_231400_000000402093_00459_45102_9597.N1	15-OCT-2010 23:14:00	Bright	40.000	22	32Alp Leo	1.3600	15200.	80	45102	No
195	GOM_NL__2PRFIN20101015_232123_000000462093_00459_45102_9598.N1	15-OCT-2010 23:21:23	Dark	45.500	48	30Alp Hya	1.9770	4100.0	91	45102	No
196	GOM_NL__2PRFIN20101015_233016_000000552093_00459_45102_9599.N1	15-OCT-2010 23:30:16	Dark	54.500	132	15Rho Pup	2.8030	6900.0	109	45102	No
197	GOM_NL__2PRFIN20101015_233316_000000452093_00459_45102_9600.N1	15-OCT-2010 23:33:16	Dark	45.000	70	Zet Pup	2.2460	39000.	90	45102	No
198	GOM_NL__2PRFIN20101015_233822_000000442093_00460_45103_9597.N1	15-OCT-2010 23:38:22	Dark	43.500	161	Tau Pup	2.9310	4500.0	87	45103	No
199	GOM_NL__2PRFIN20101015_233943_000000572093_00460_45103_9598.N1	15-OCT-2010 23:39:43	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	45103	No
200	GOM_NL__2PRFIN20101015_235130_000000462093_00460_45103_9599.N1	15-OCT-2010 23:51:30	Straylight	45.500	157	The1Eri	2.9060	9300.0	91	45103	No

3. Quality information per product

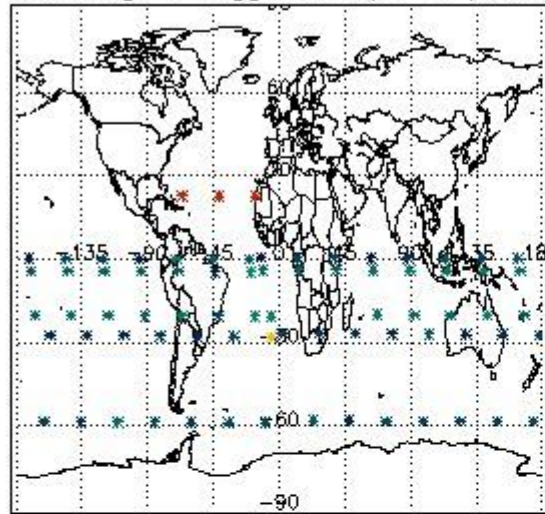
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

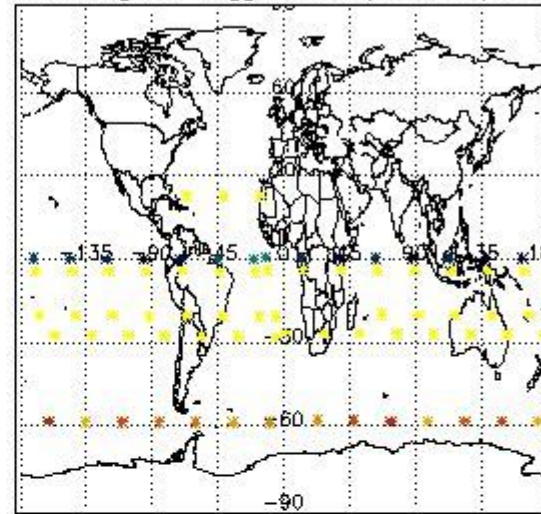


3.2 Plot quality information per product (world map)

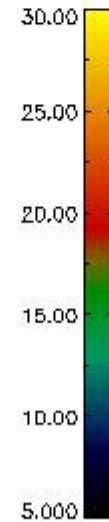
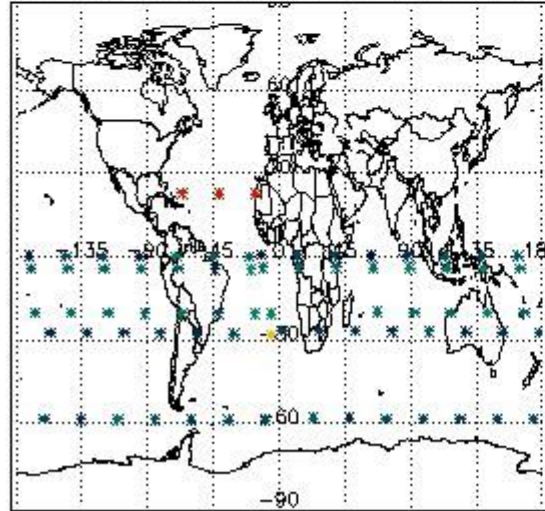
Percentage of flagged data per O3 profile



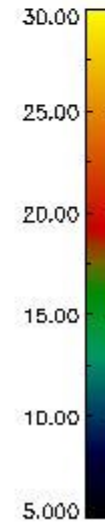
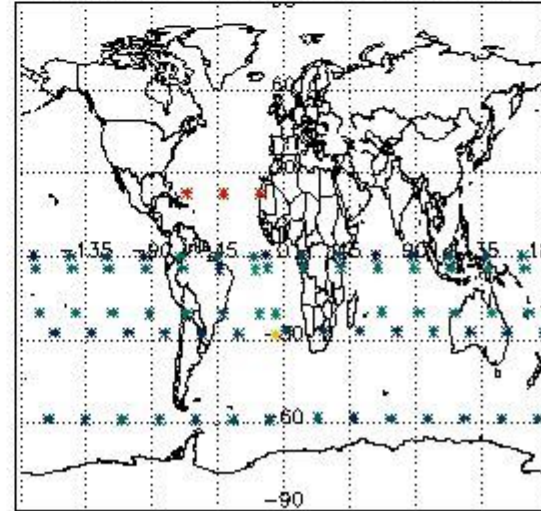
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

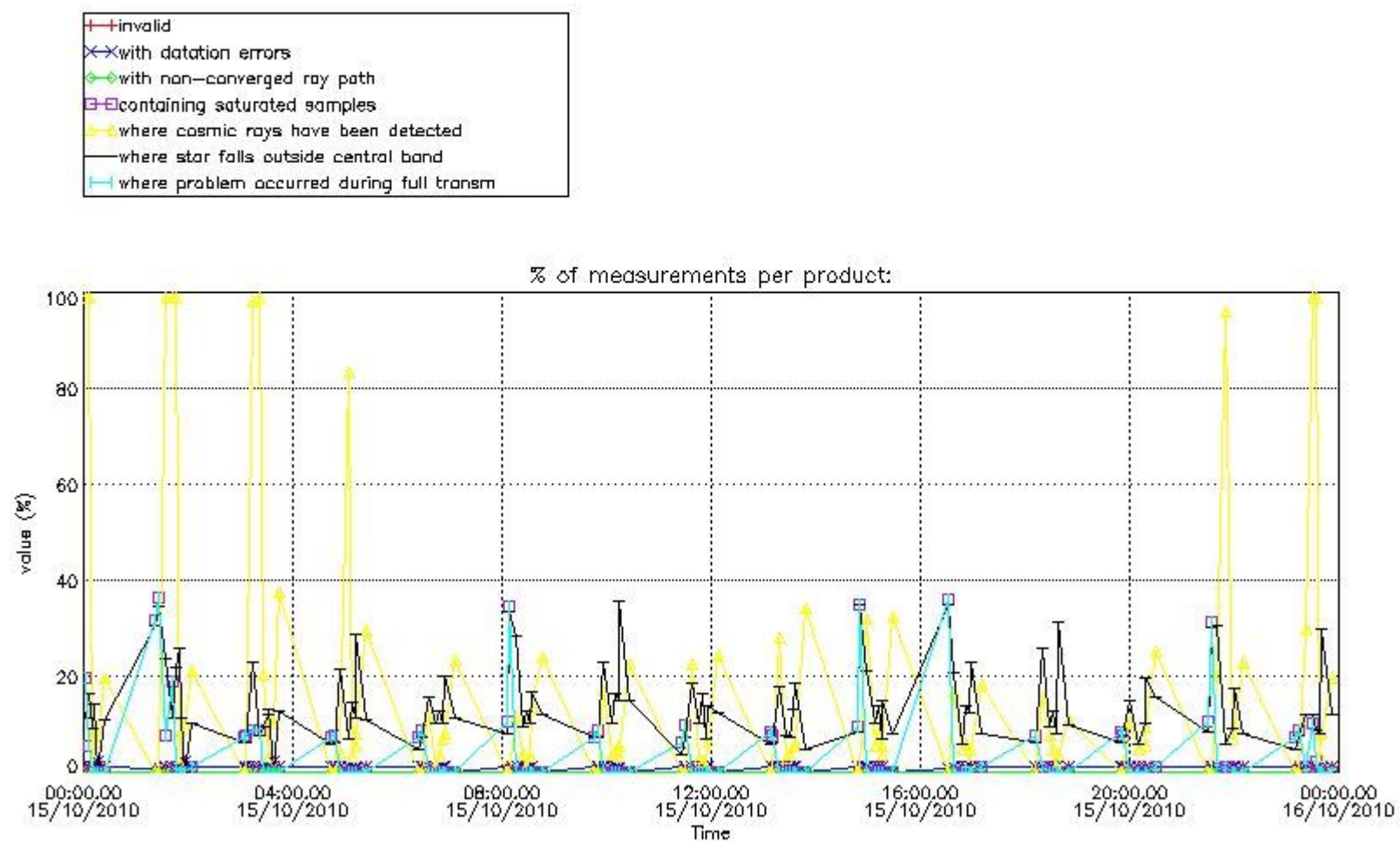


4. Level 1 quality information per product

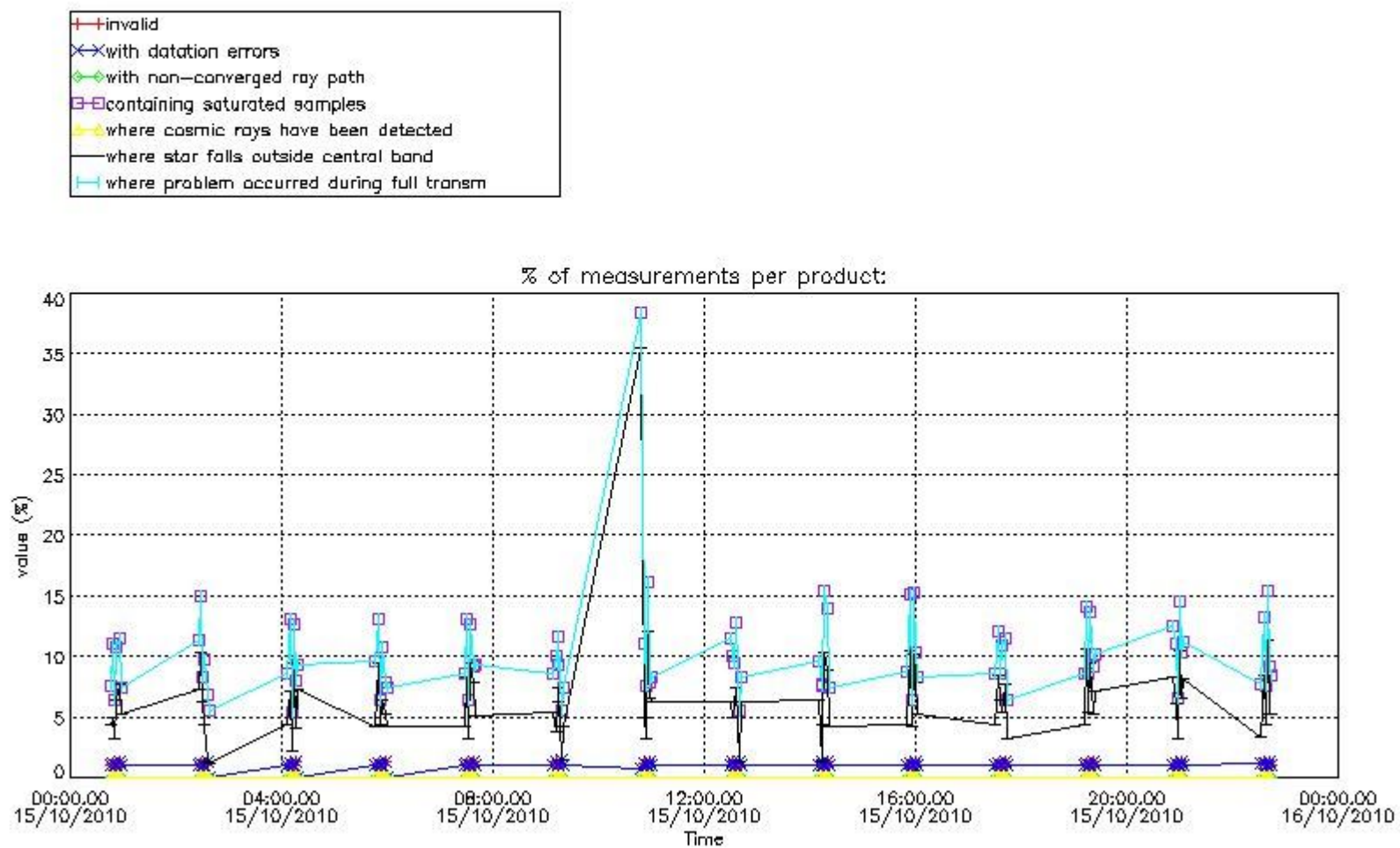
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



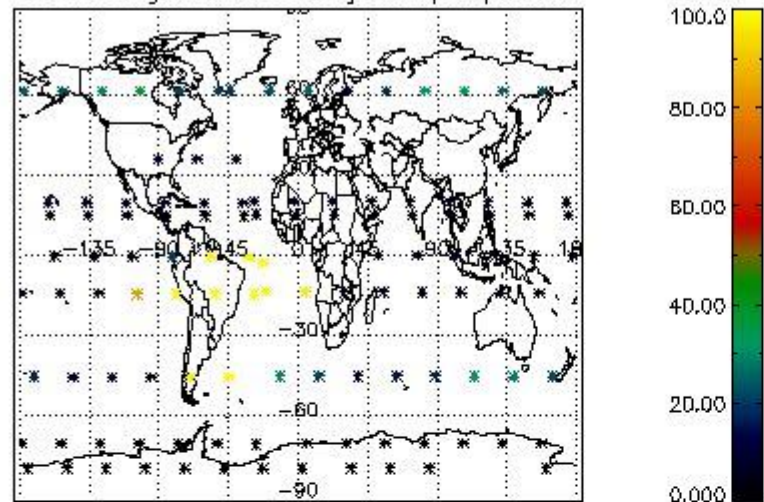
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



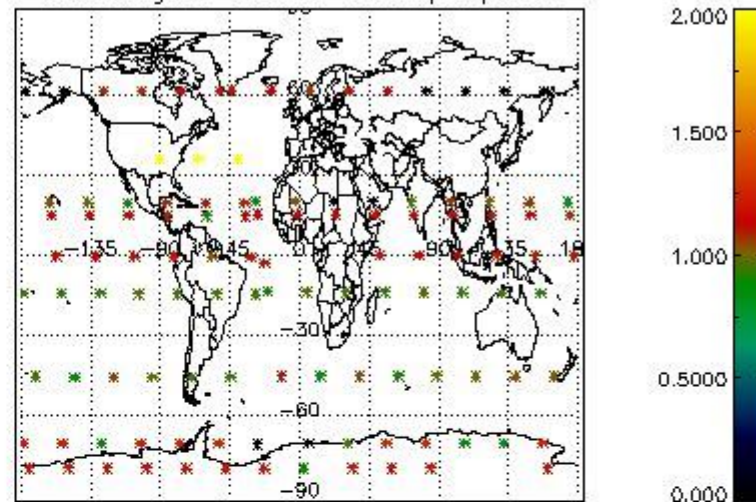
4.2 Plot quality information per product coming from level 1b processing (world map)

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

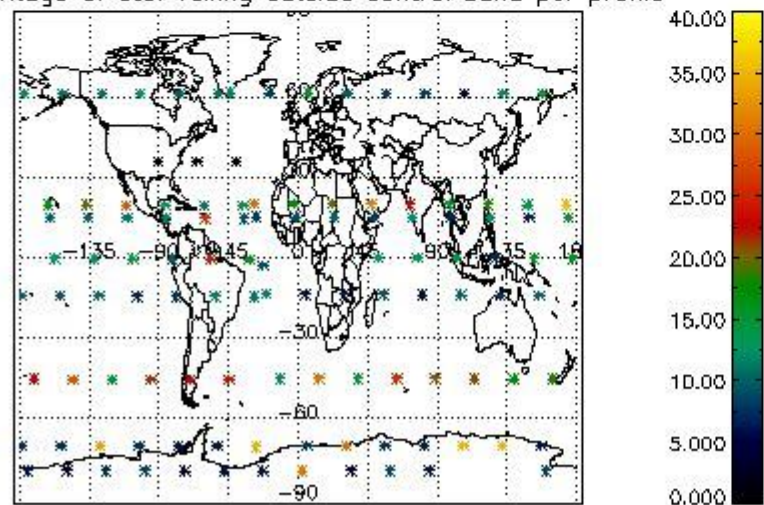
Percentage of cosmic ray hits per profile



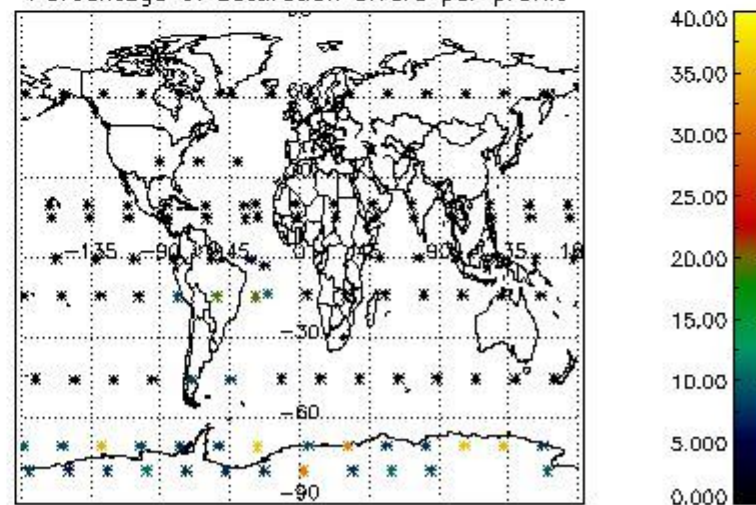
Percentage of datation errors per profile



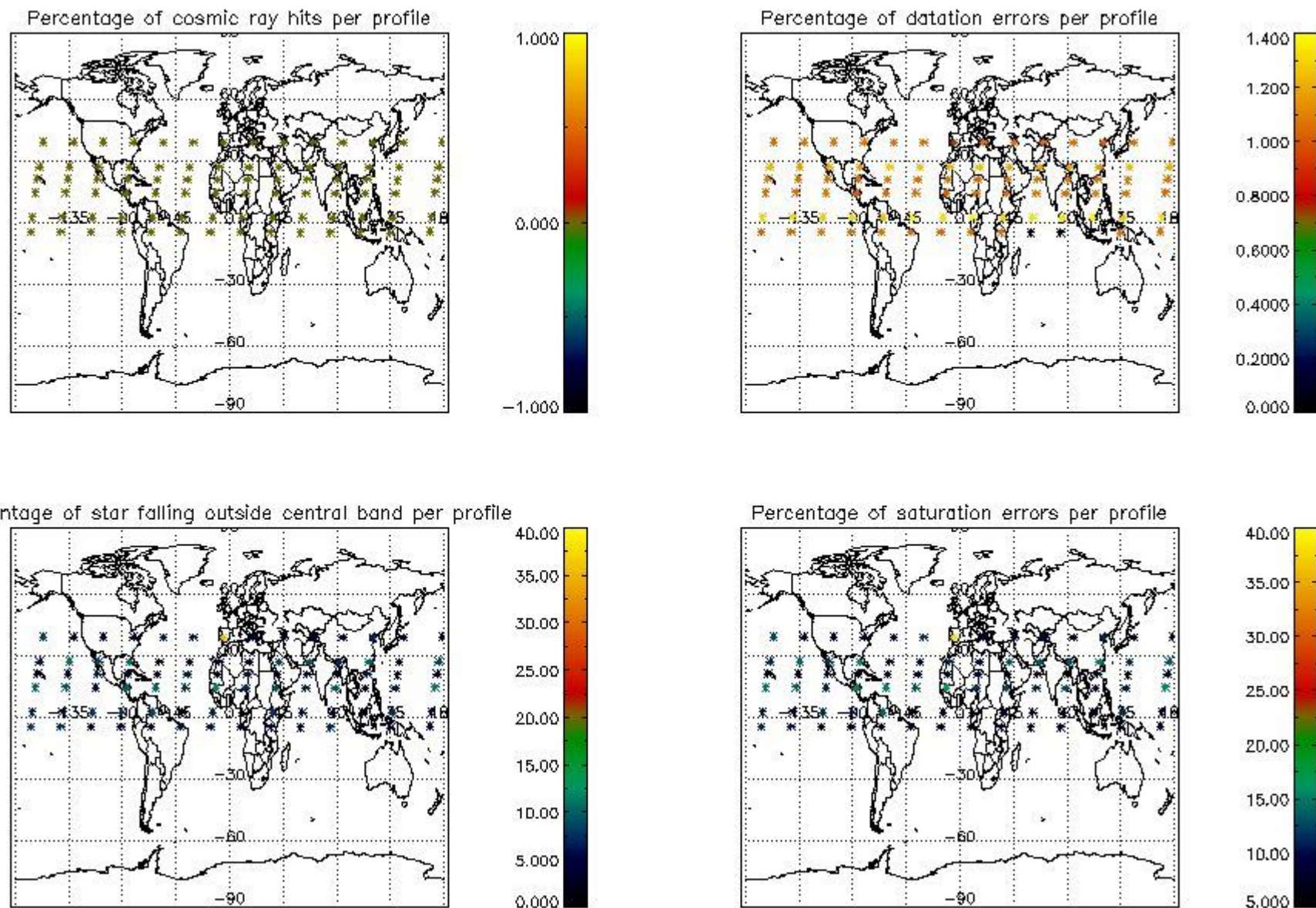
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

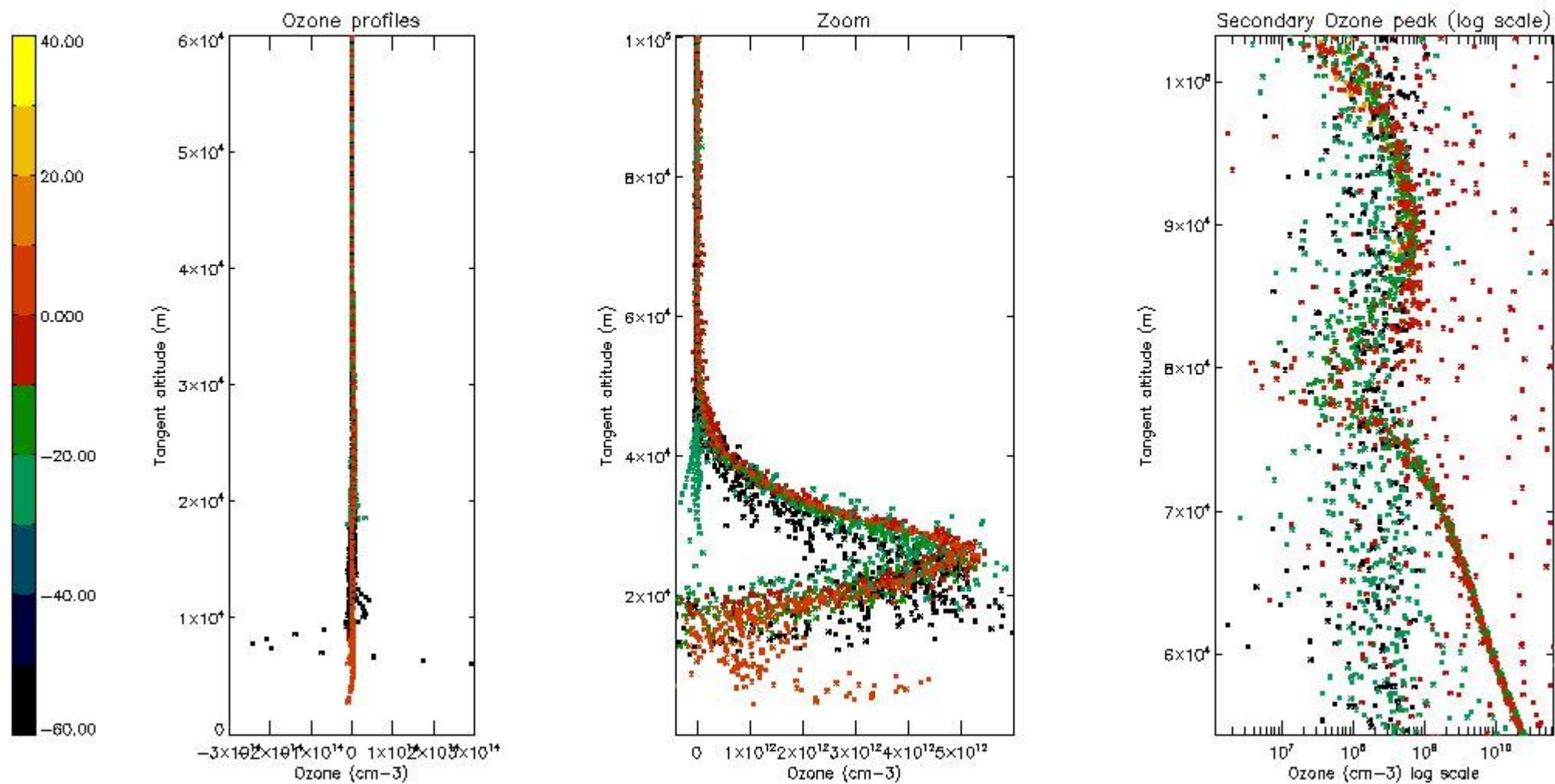
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	17

STD < 10	12
STD < 5	8

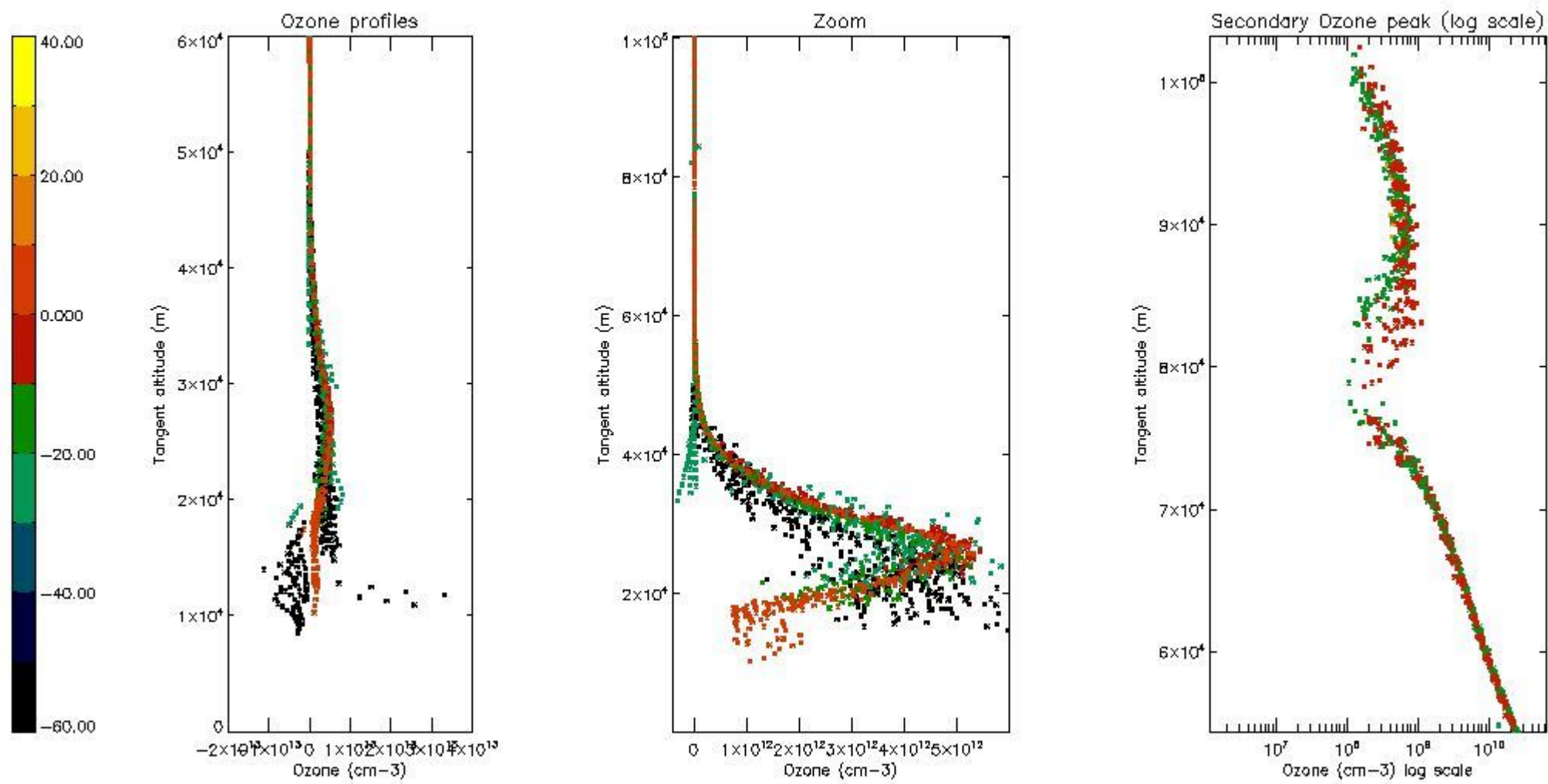
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



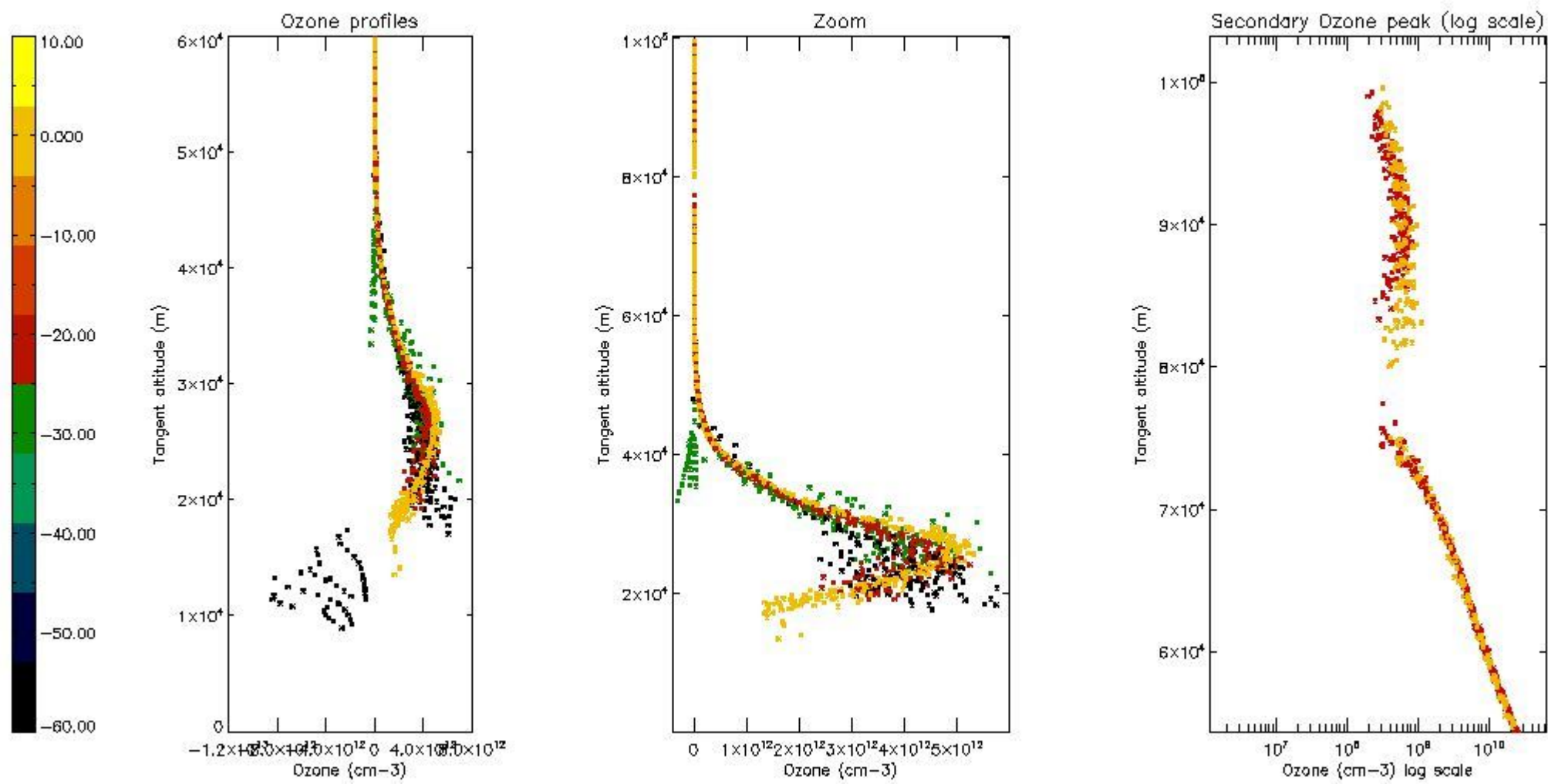
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



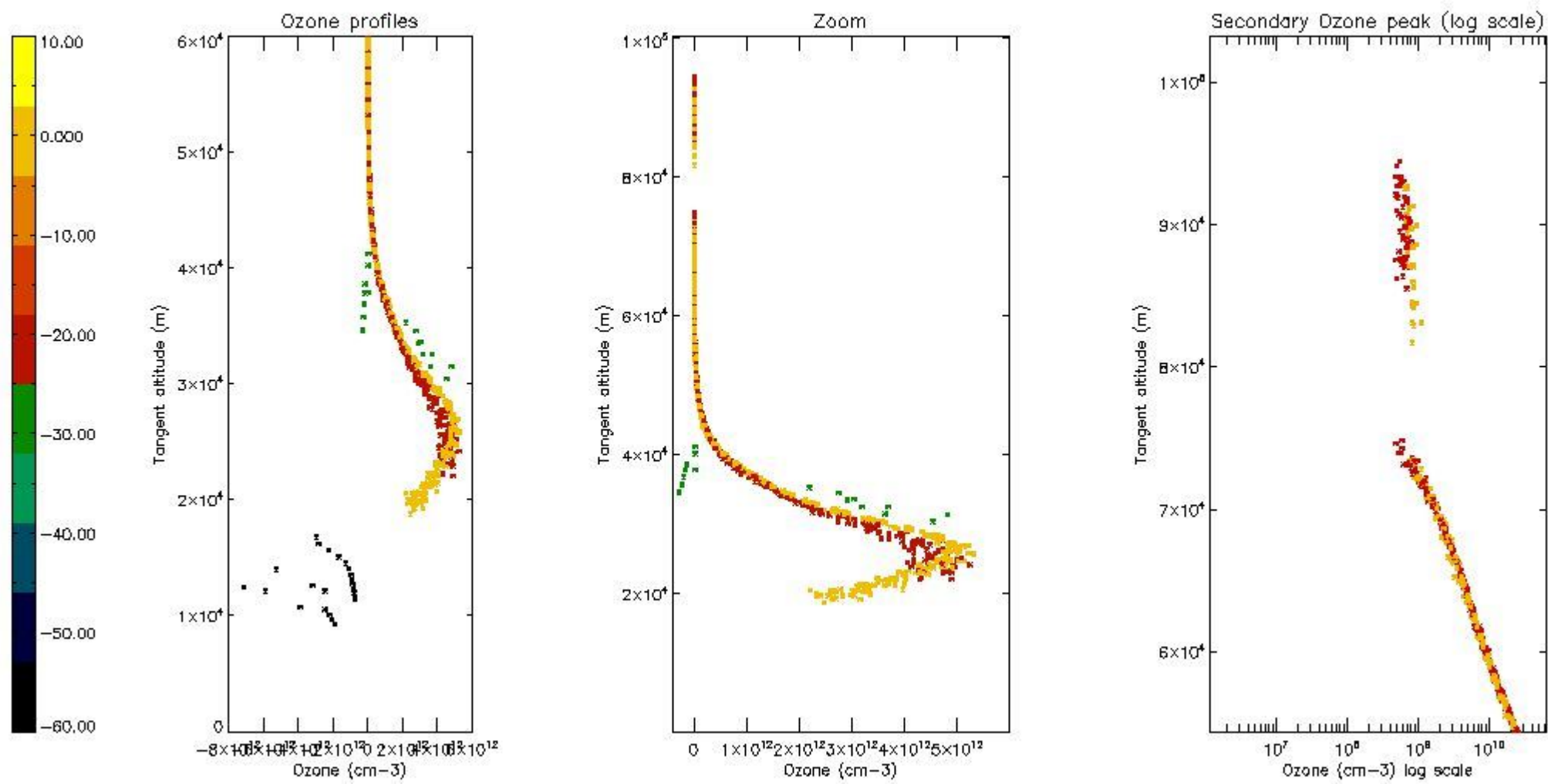
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



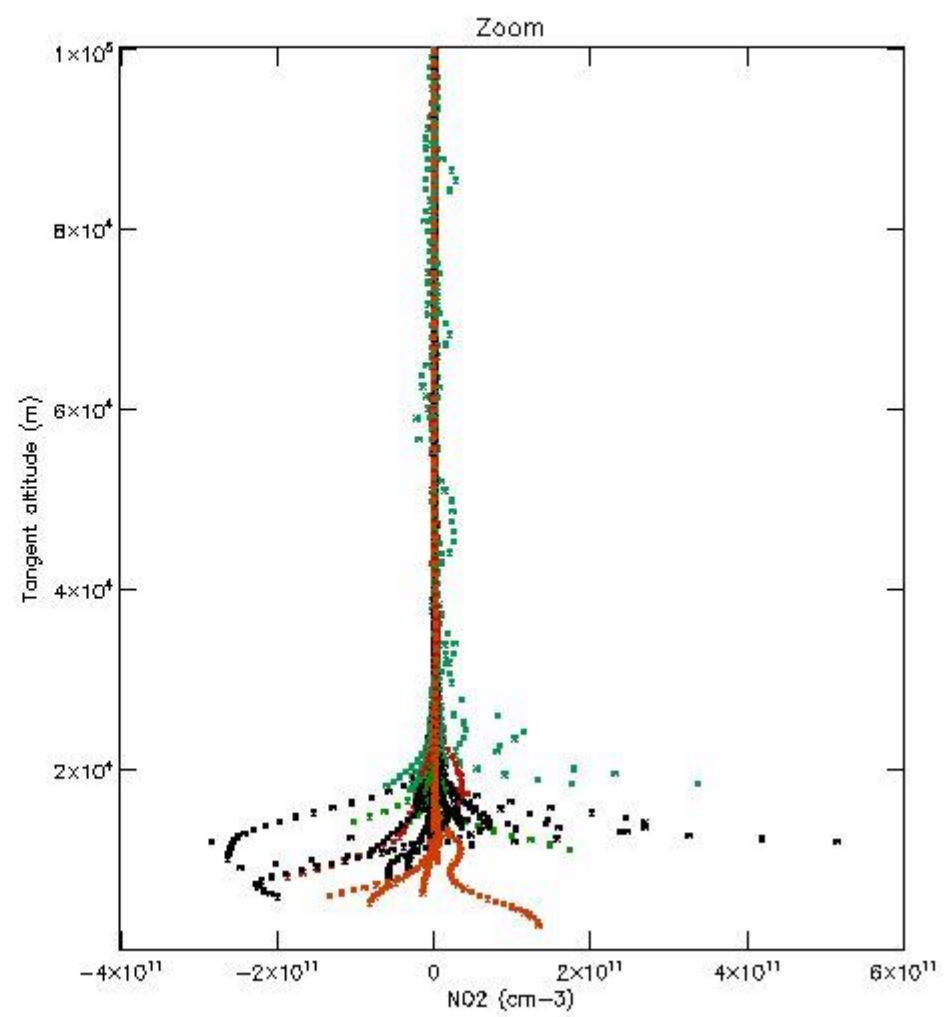
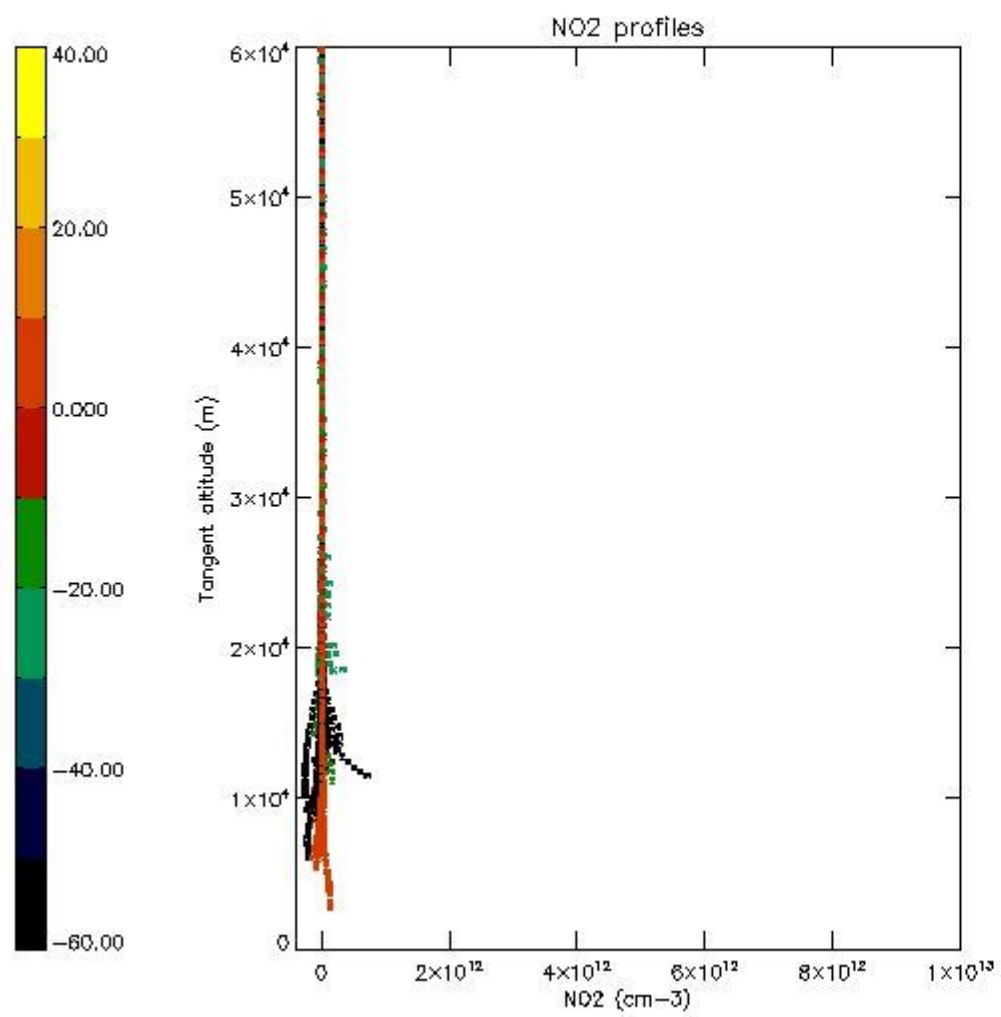
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



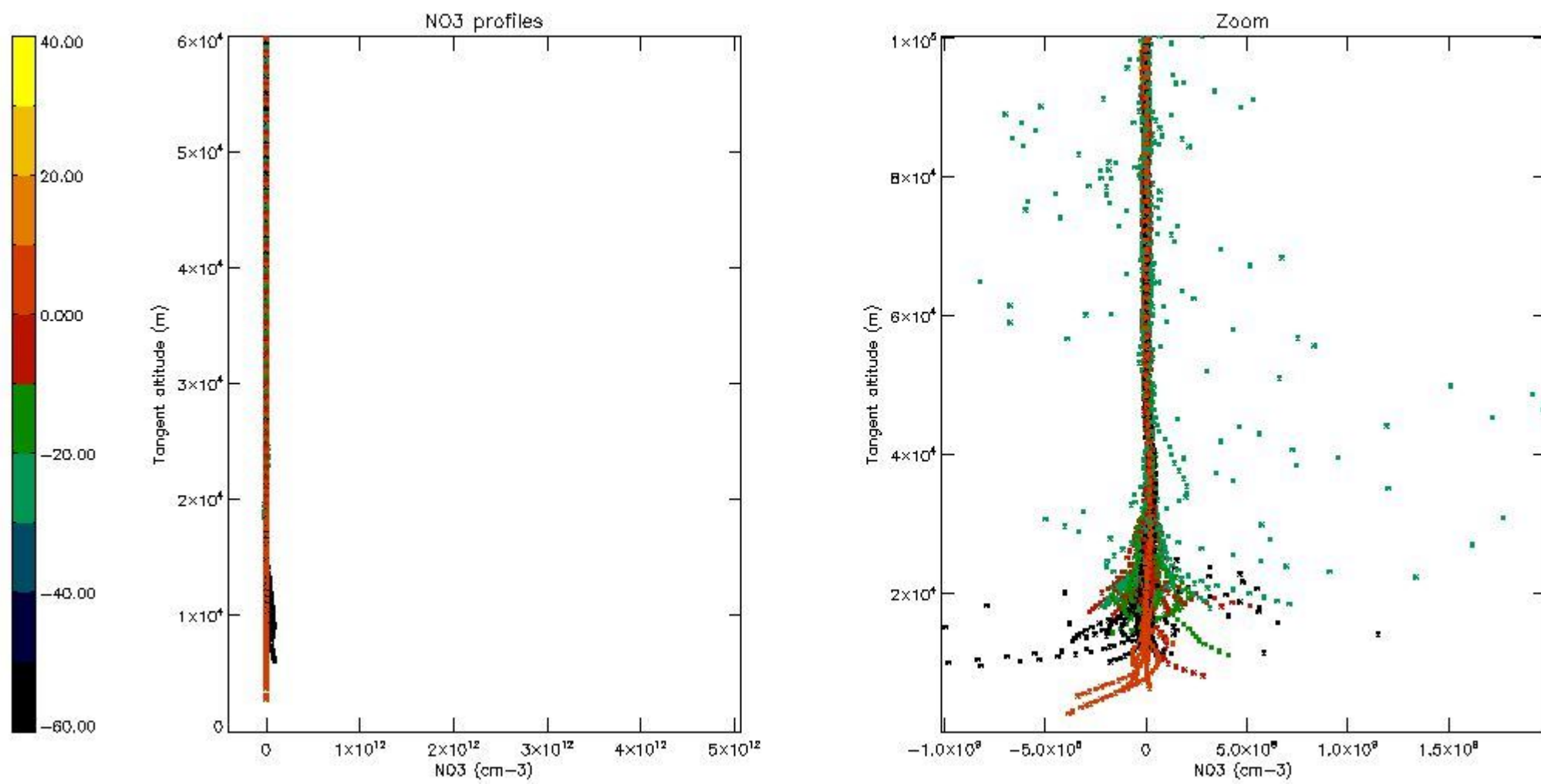
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



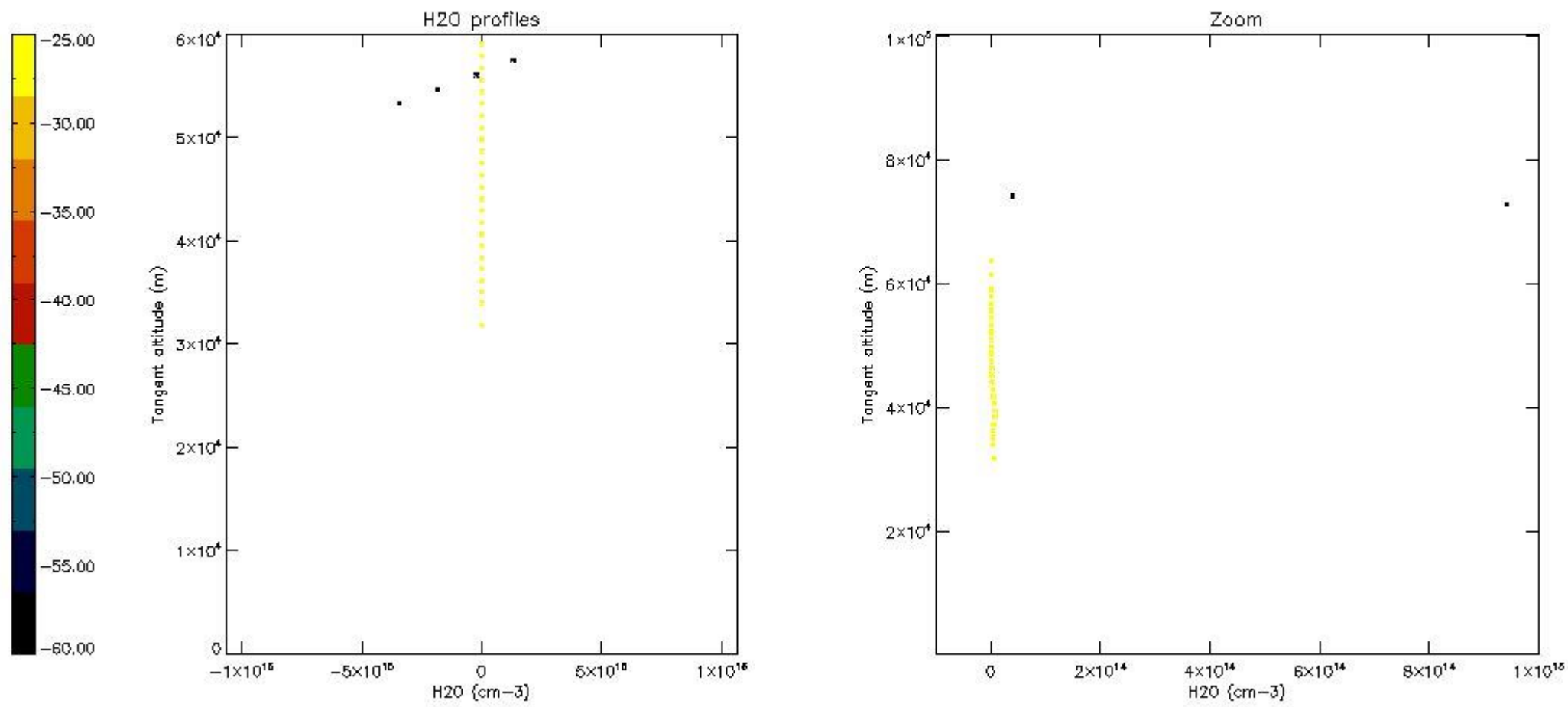
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

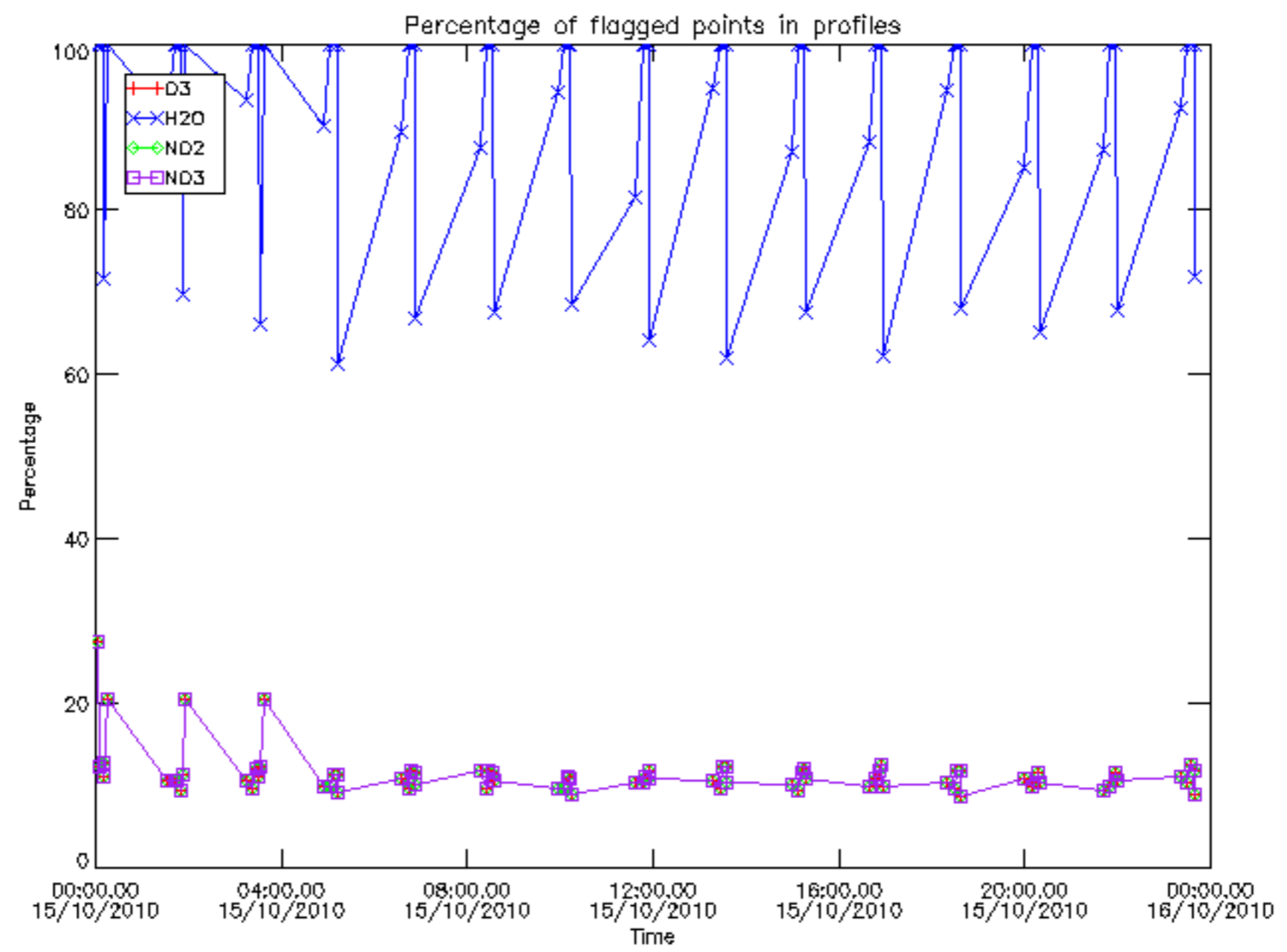
The colorbar represents the latitude.



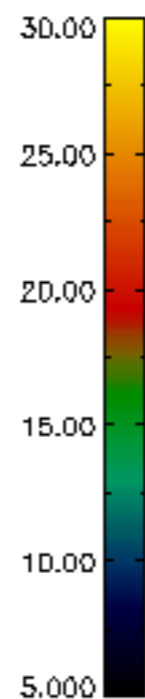
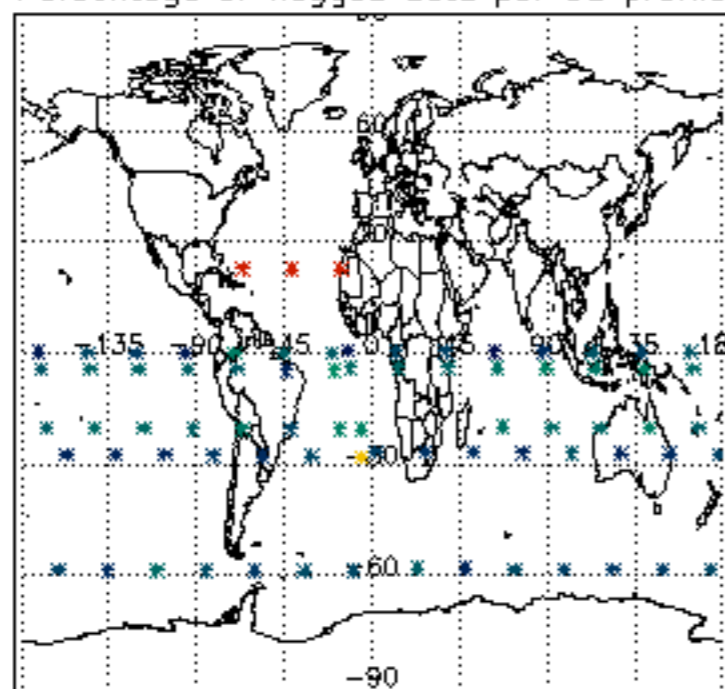
6. Auxiliary Data Files used for the production reported in section 2

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.

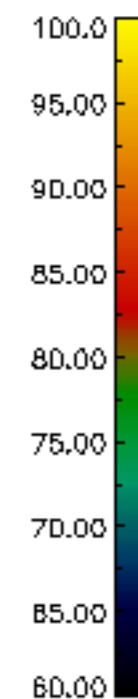
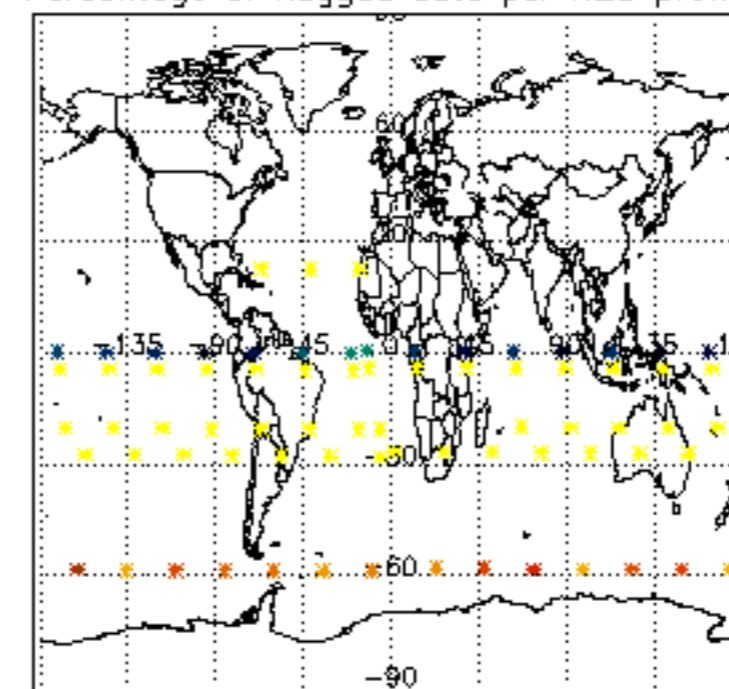
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	15-OCT-2010 00:01:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-OCT-2010 00:01:36
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-OCT-2010 00:01:36



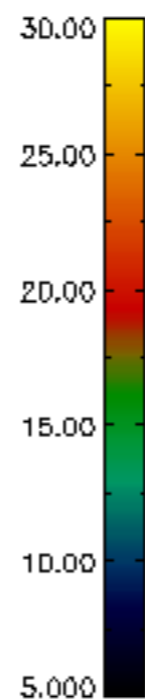
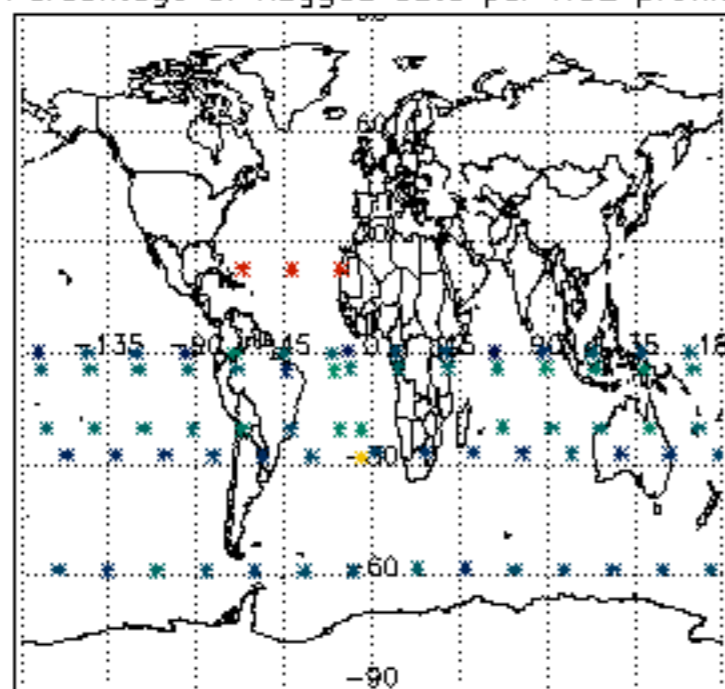
Percentage of flagged data per D3 profile



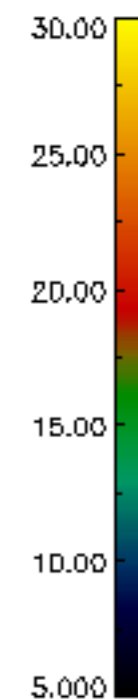
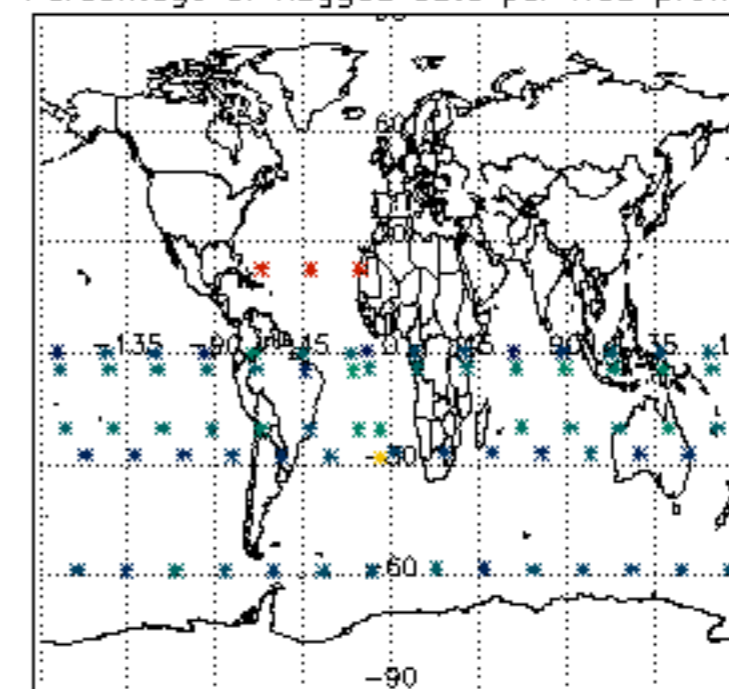
Percentage of flagged data per H2O profile

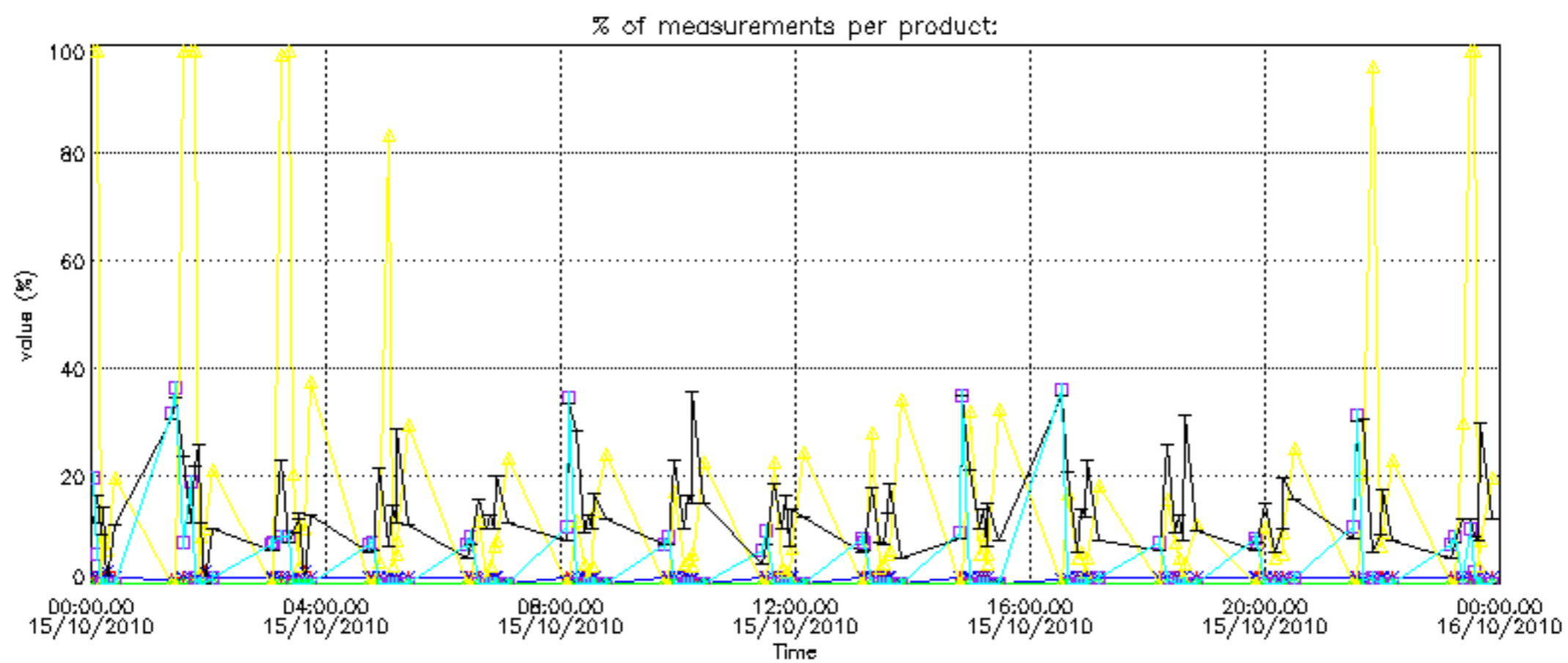
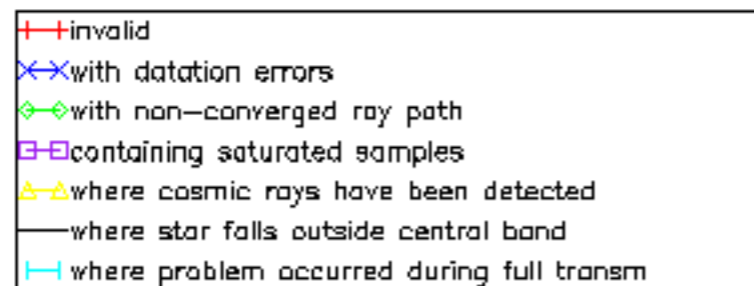


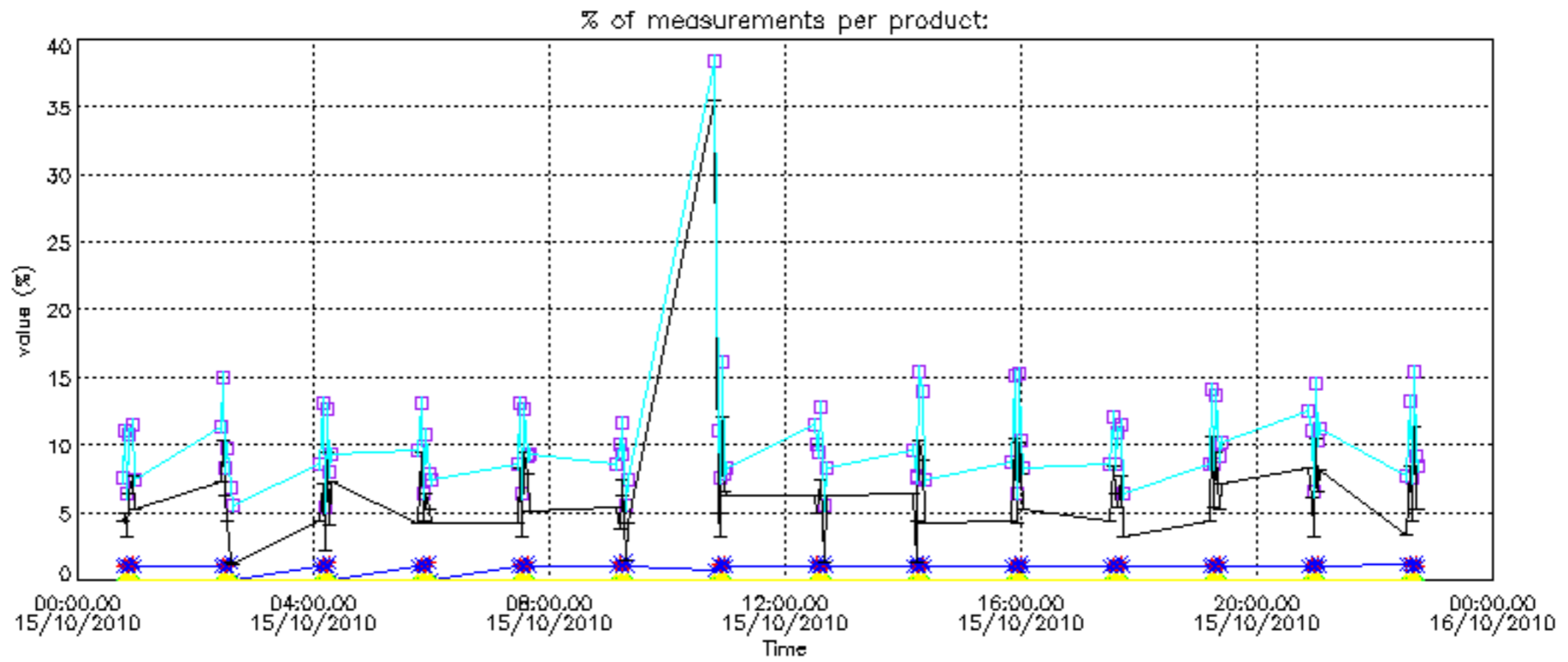
Percentage of flagged data per NO2 profile



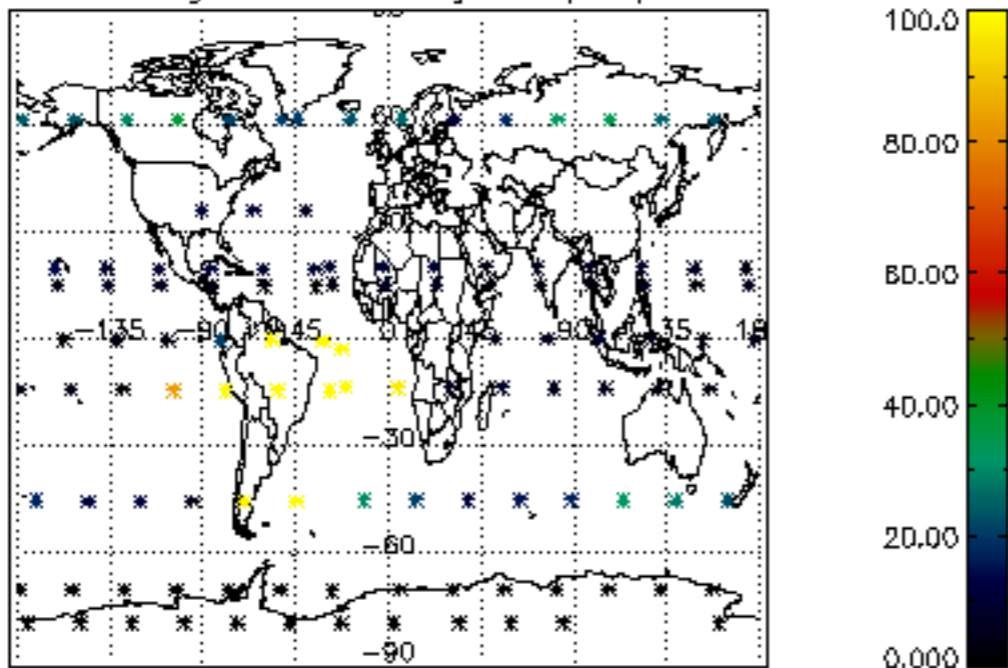
Percentage of flagged data per NO3 profile



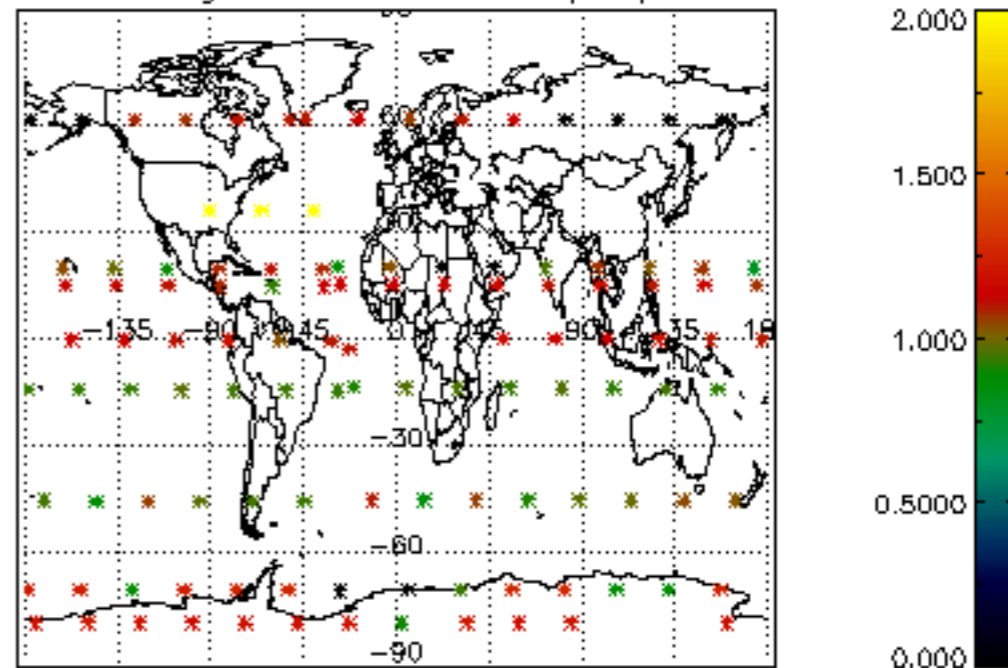




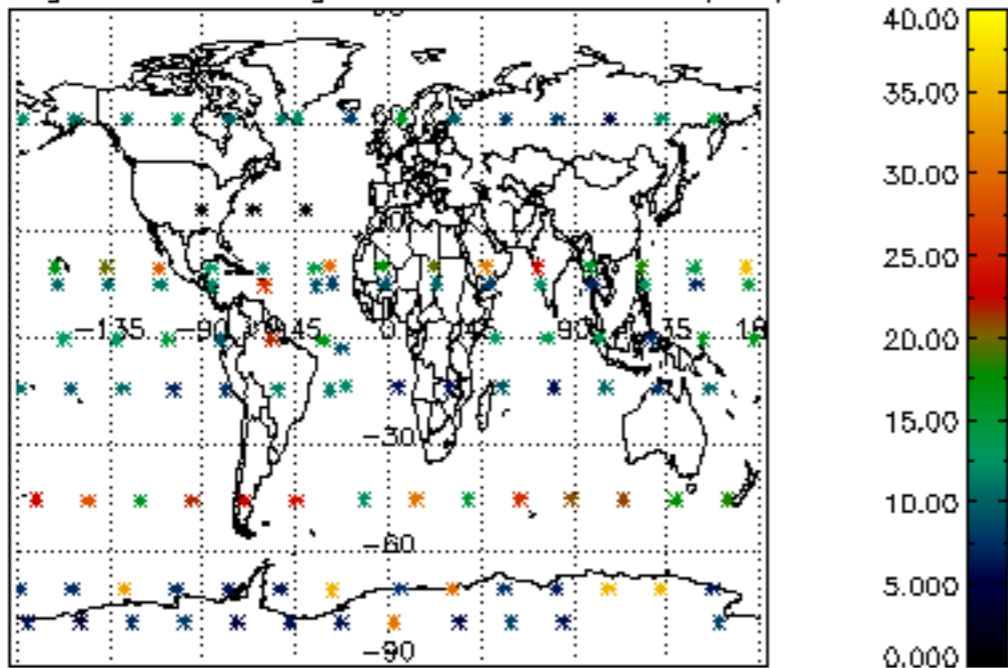
Percentage of cosmic ray hits per profile



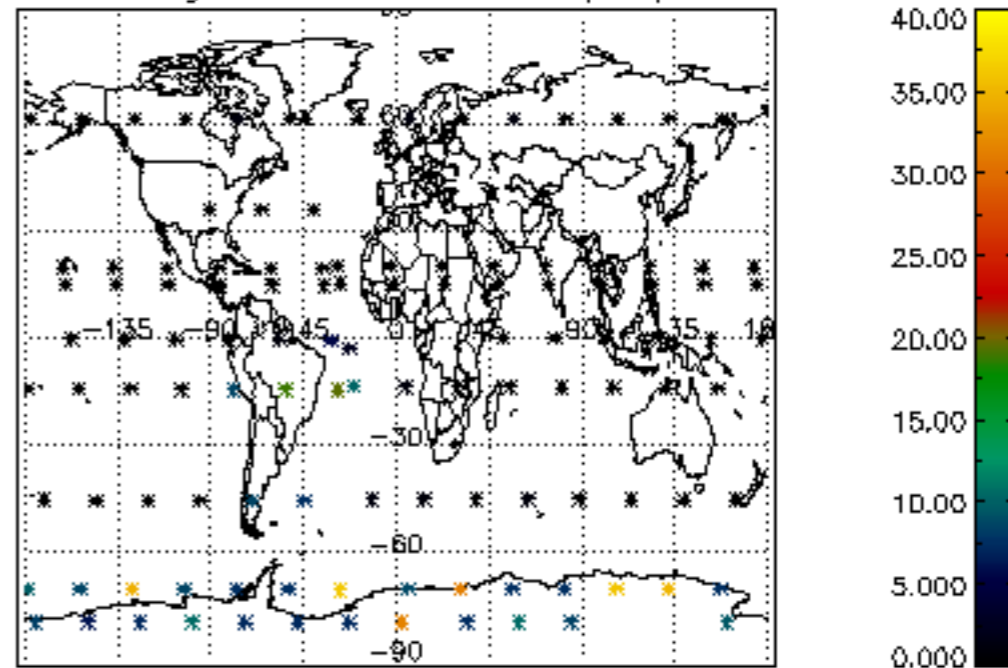
Percentage of datation errors per profile



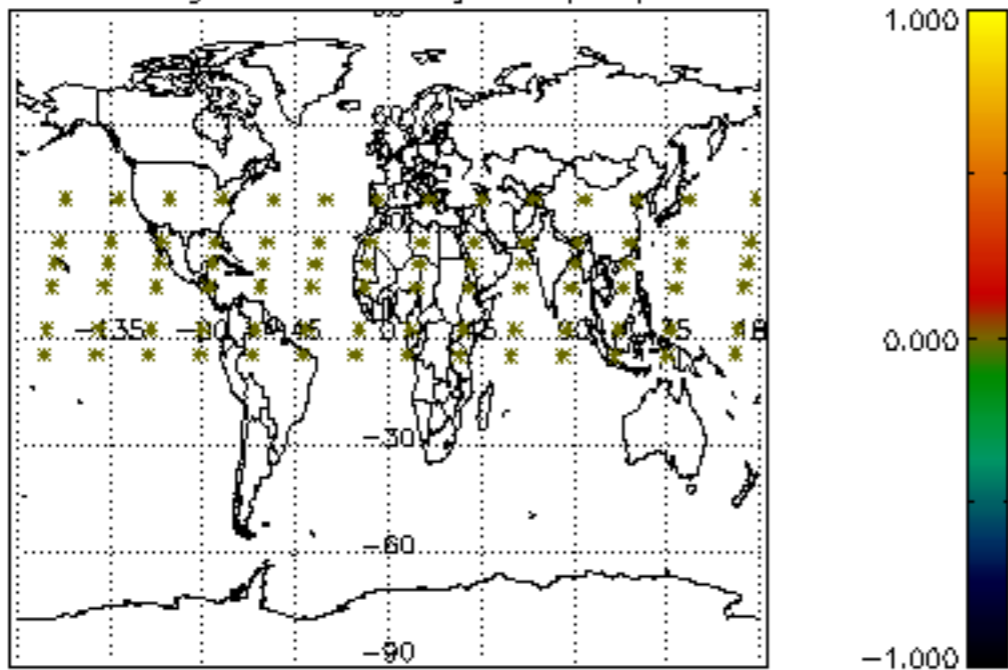
Percentage of star falling outside central band per profile



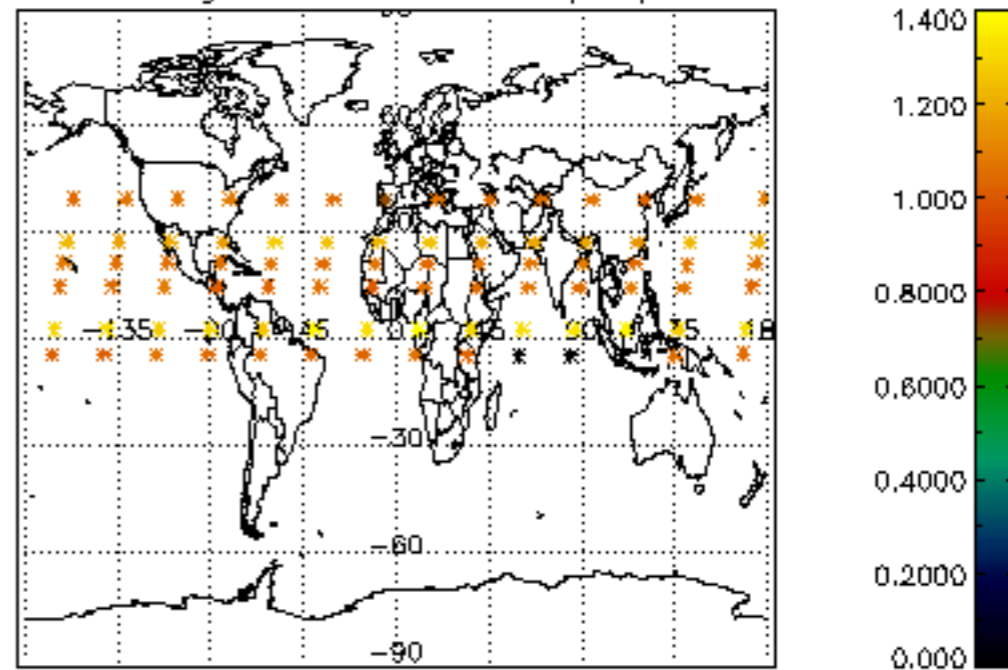
Percentage of saturation errors per profile



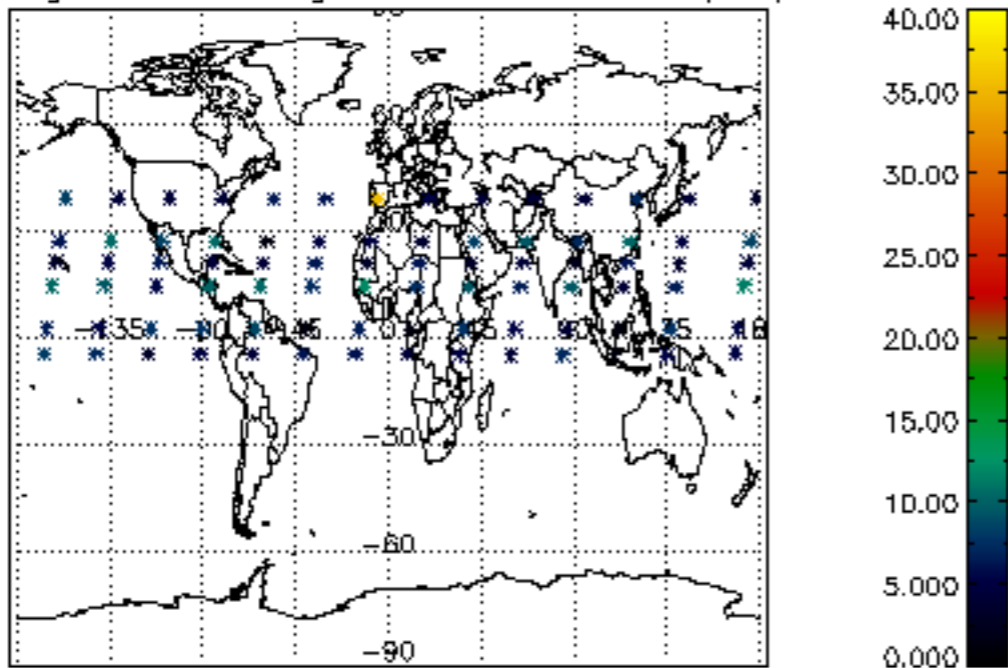
Percentage of cosmic ray hits per profile



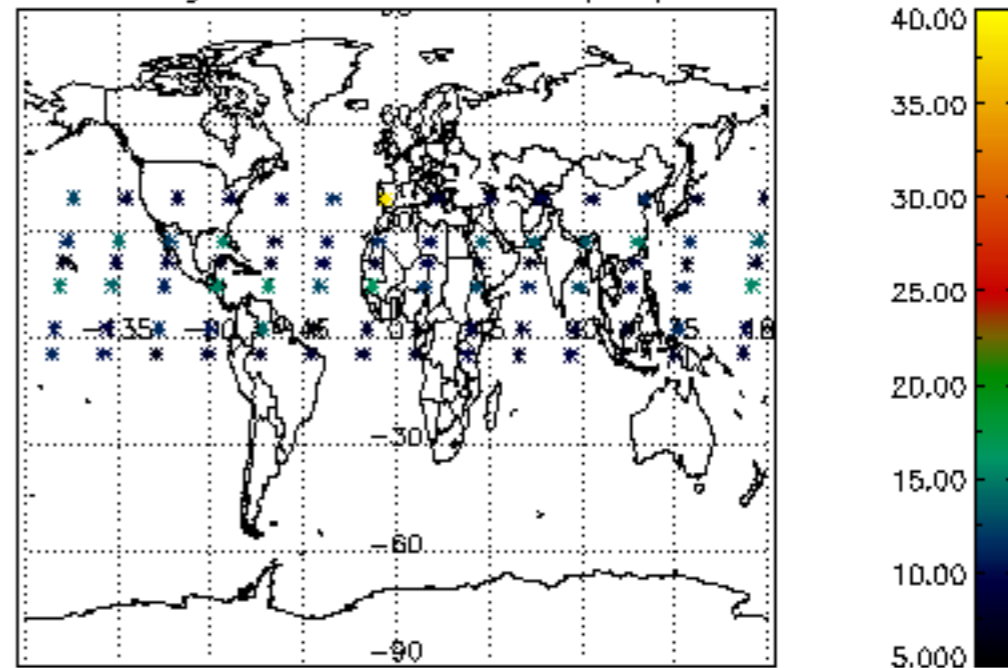
Percentage of datation errors per profile

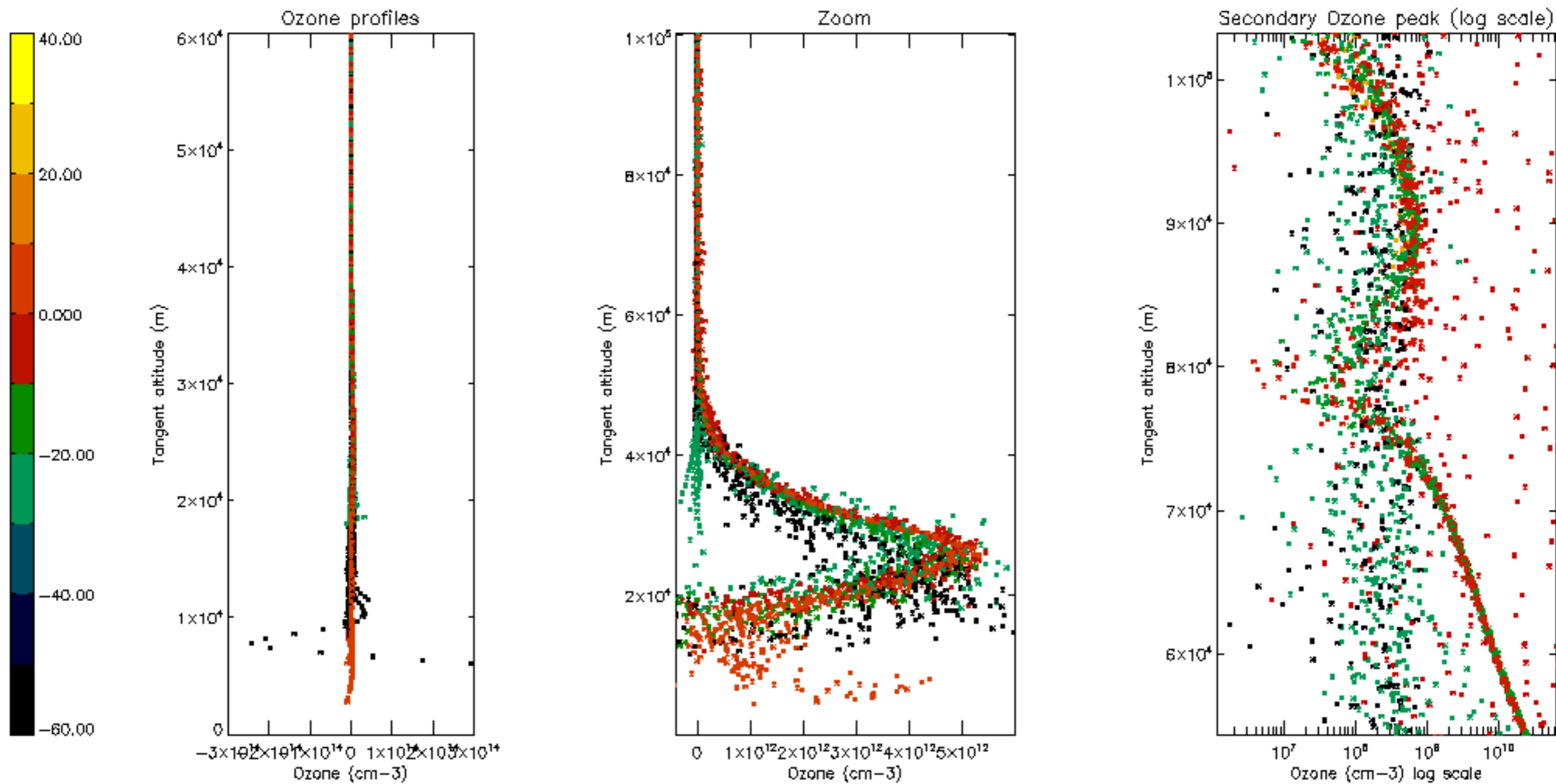


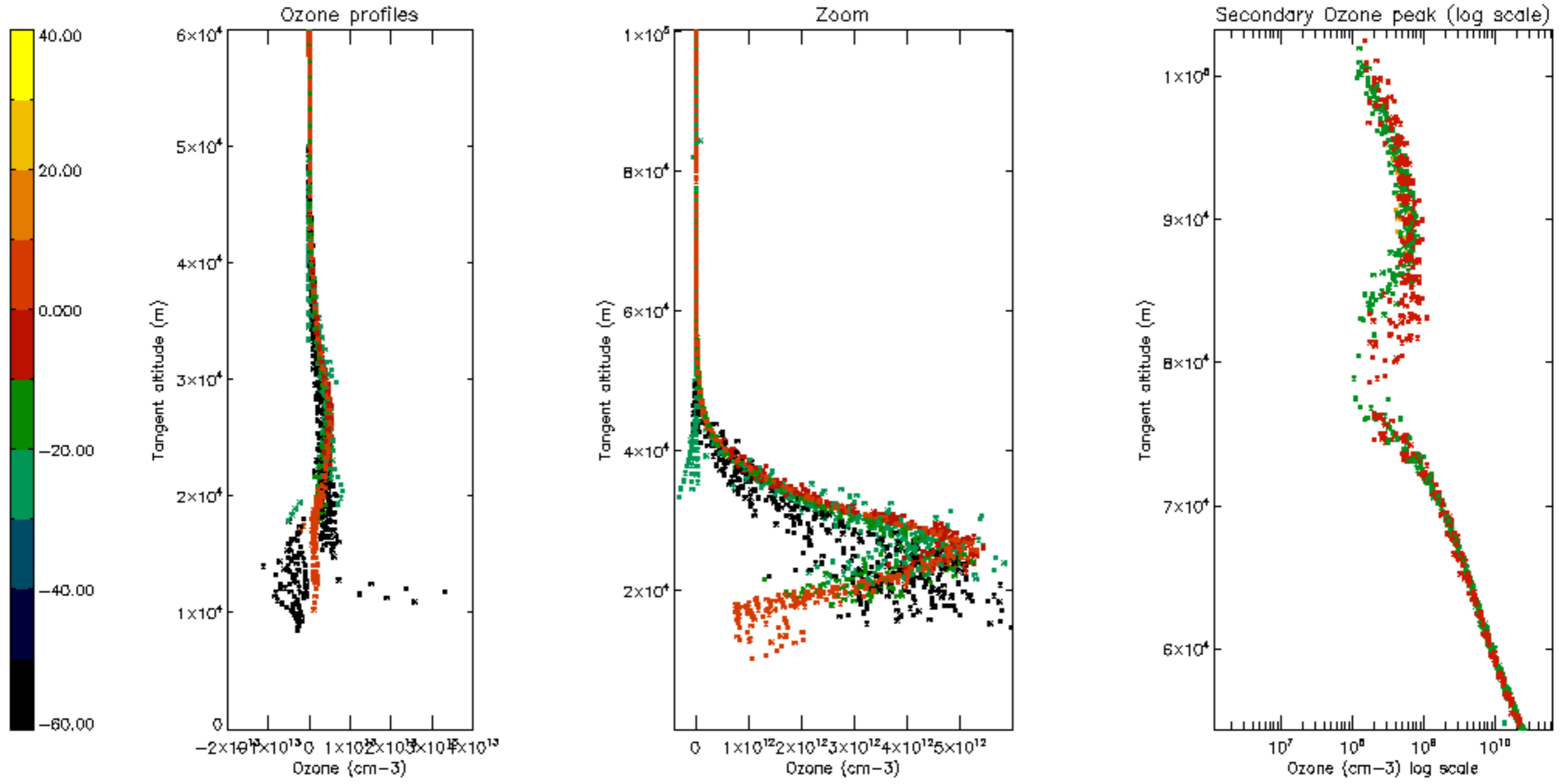
Percentage of star falling outside central band per profile

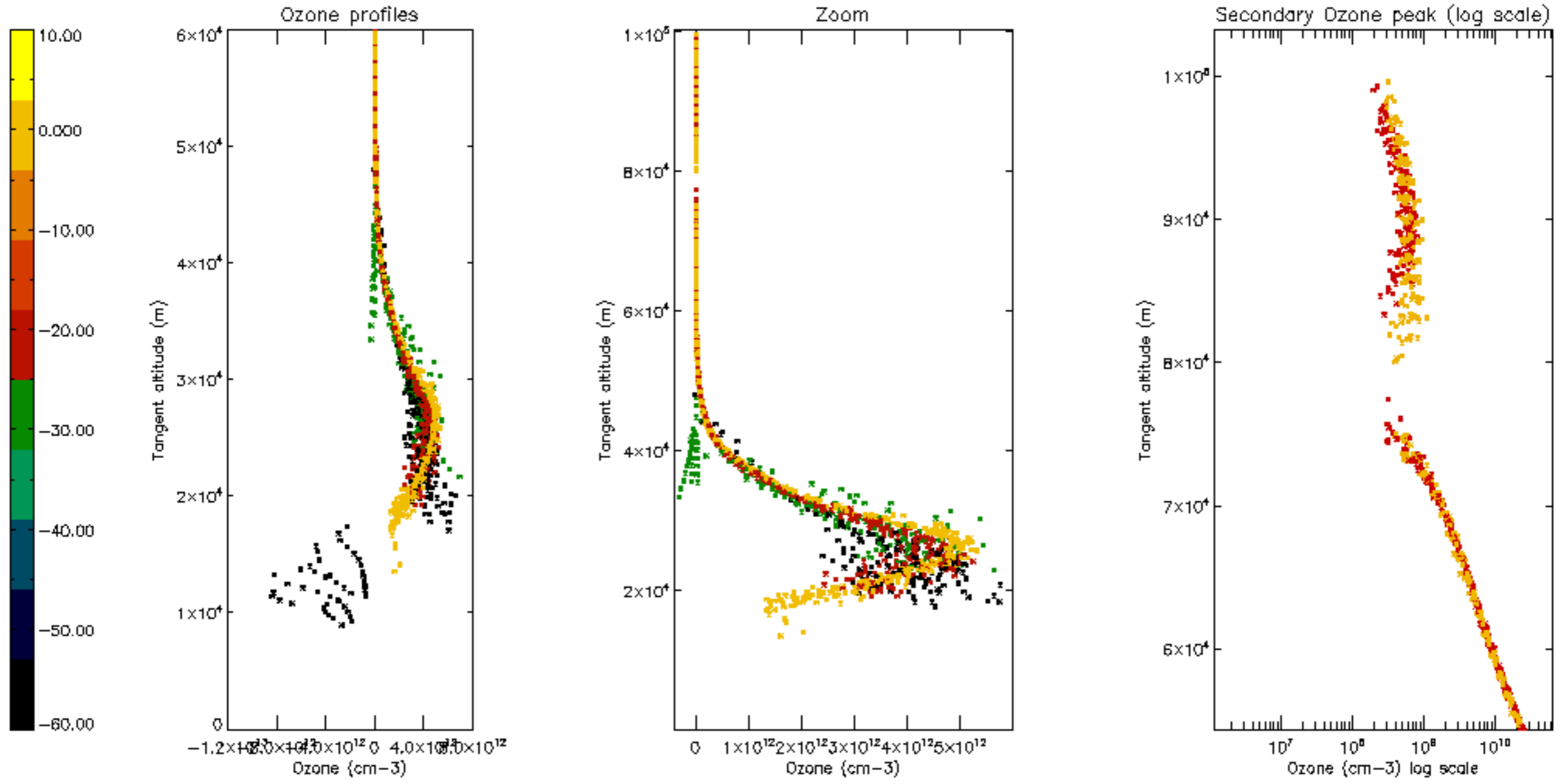


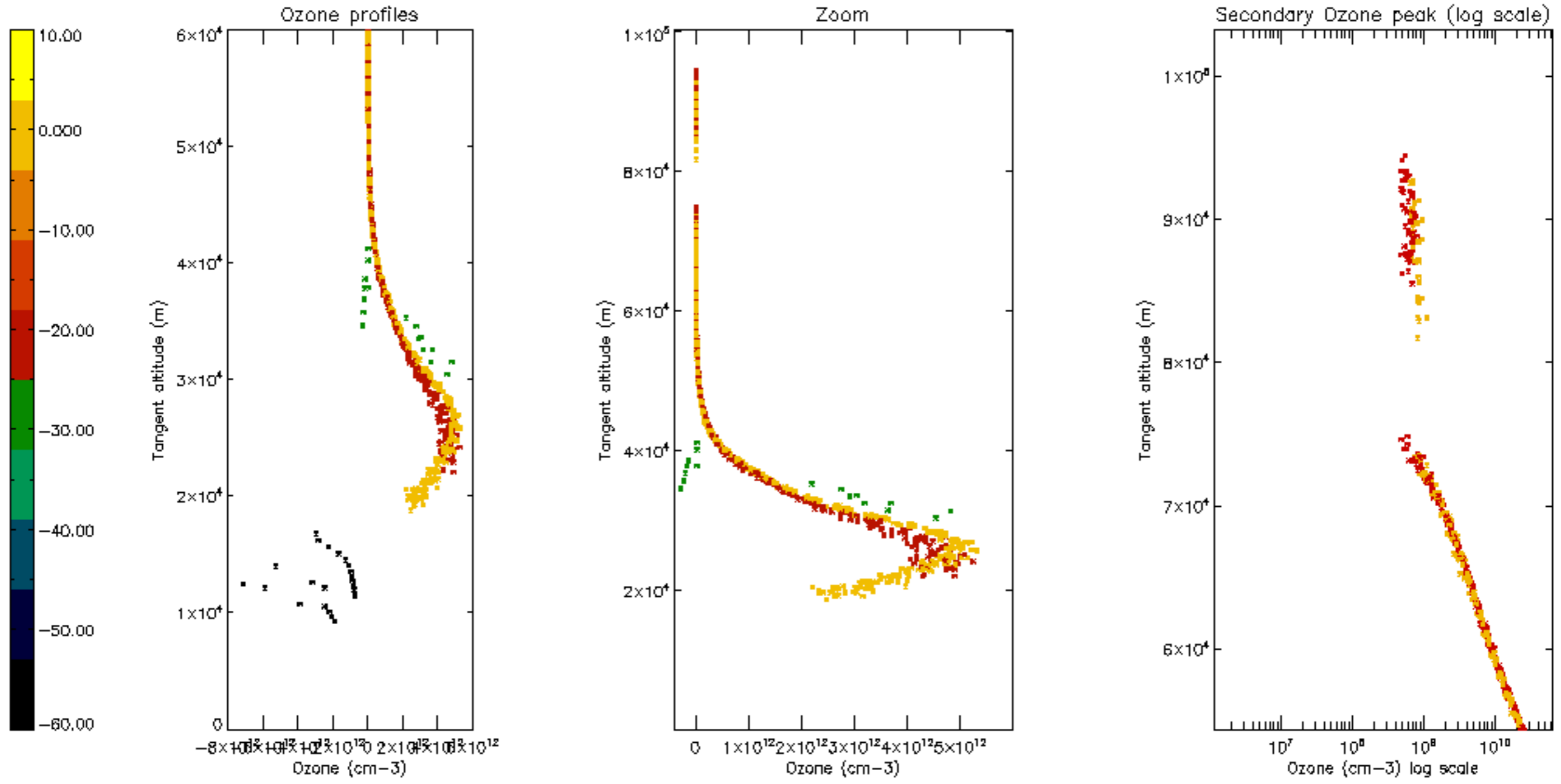
Percentage of saturation errors per profile

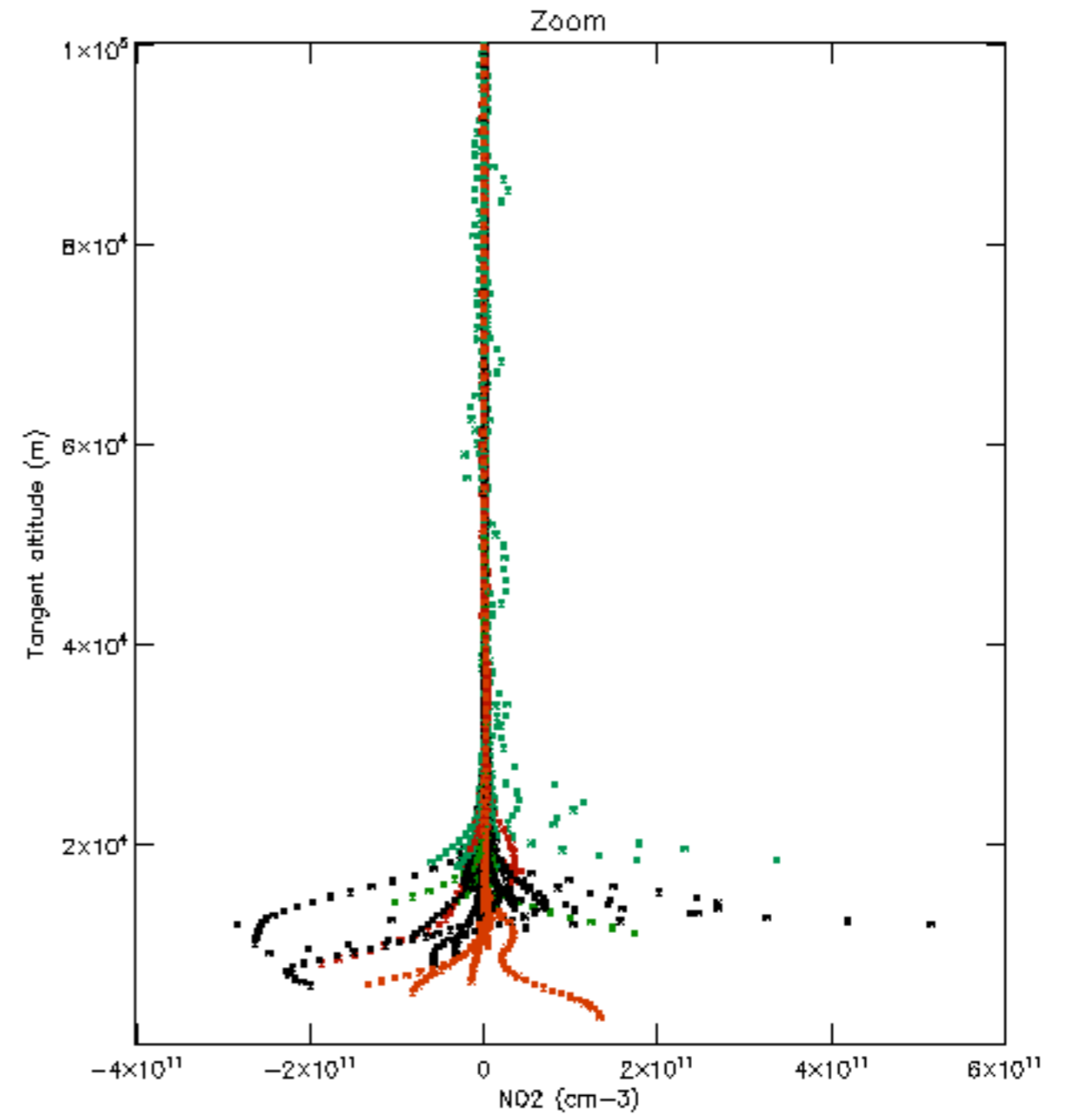
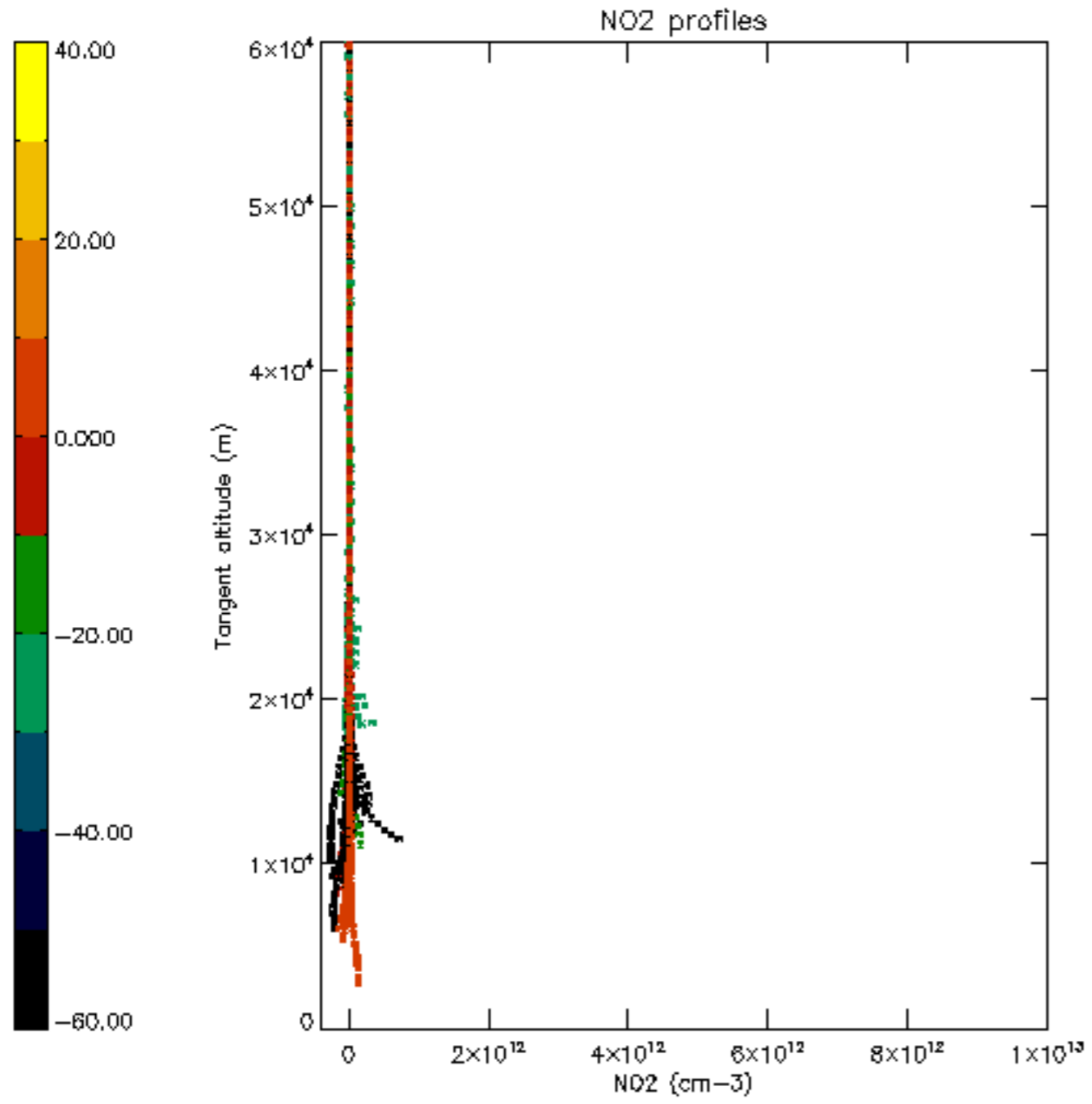


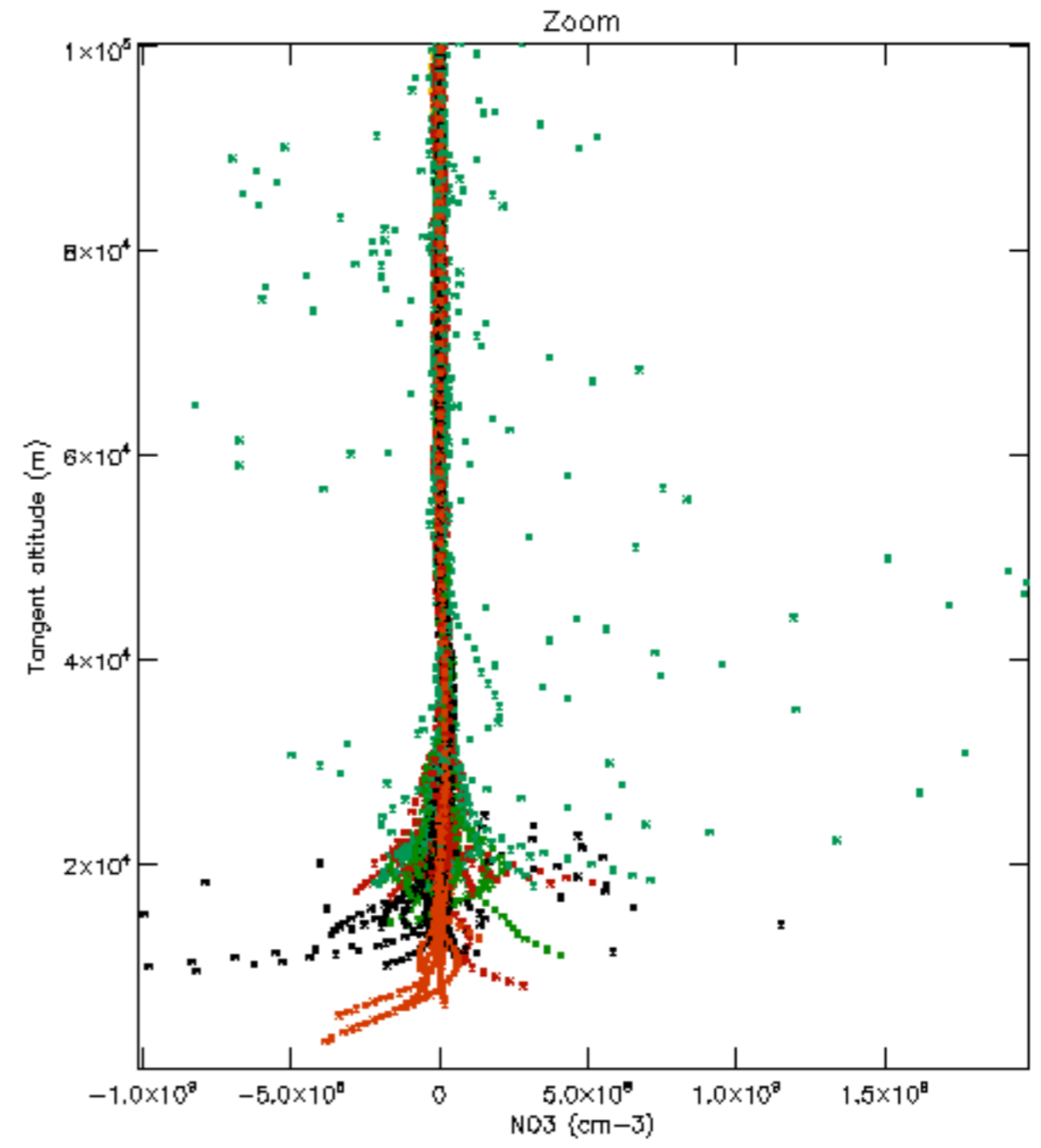
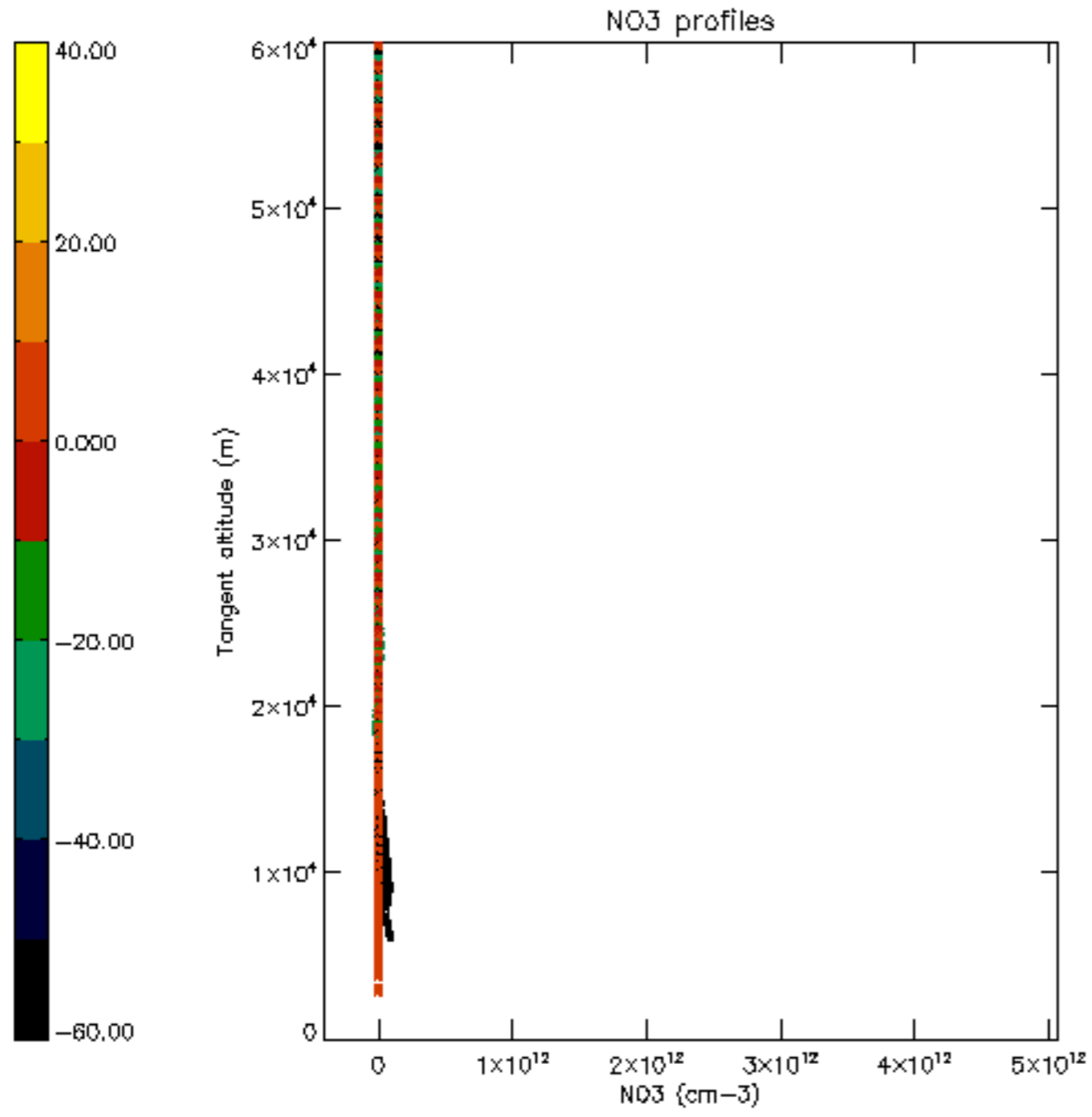


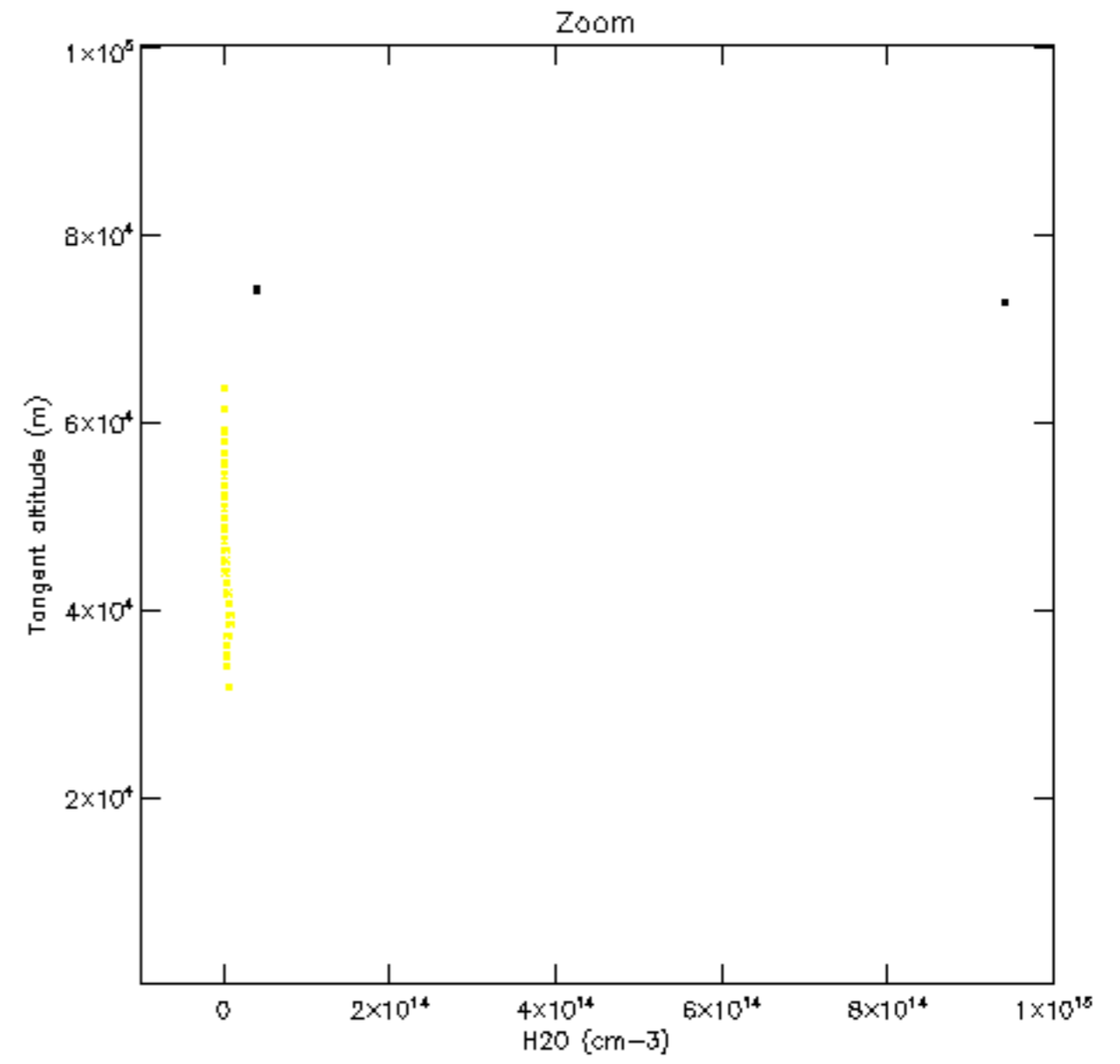
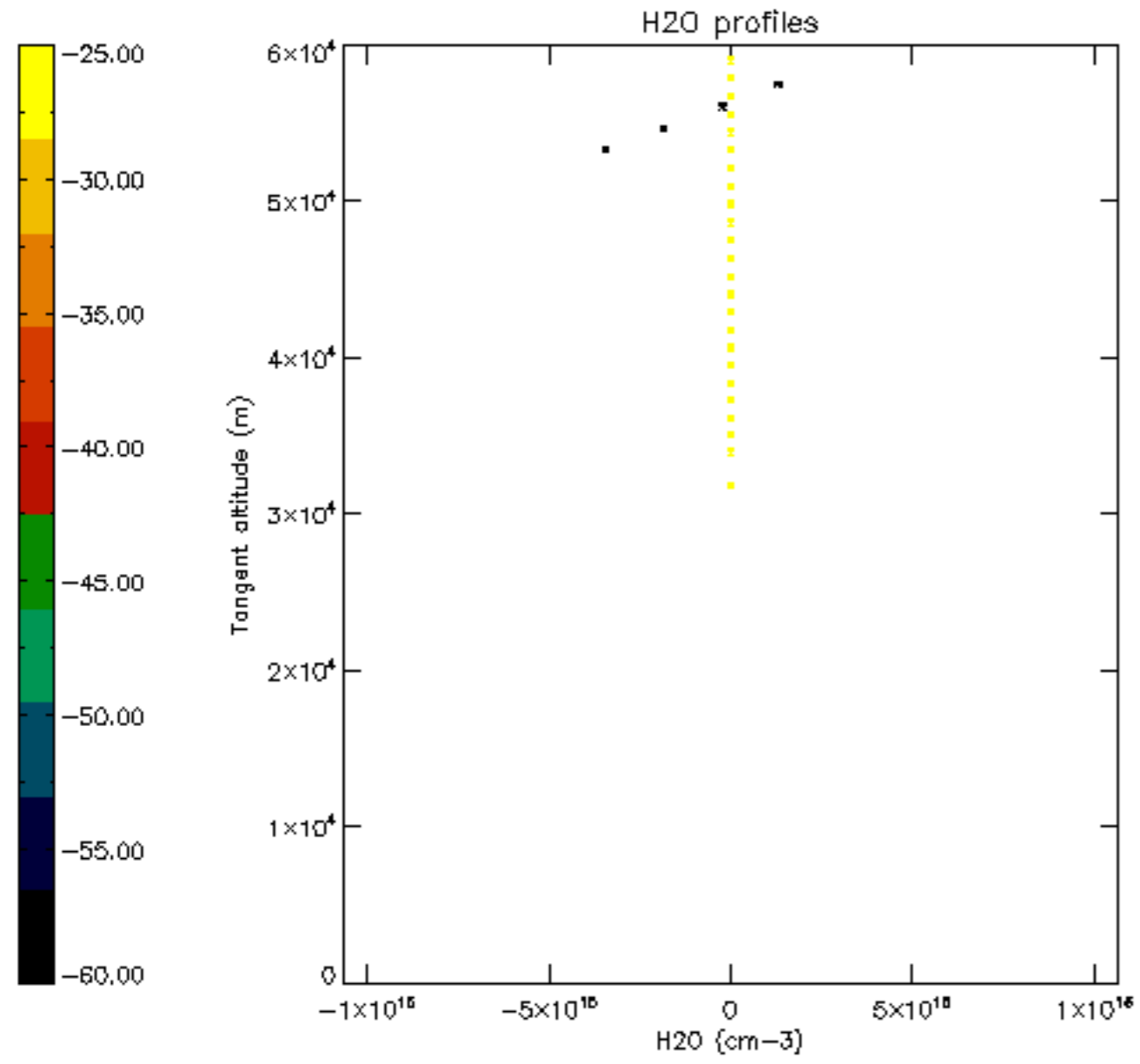


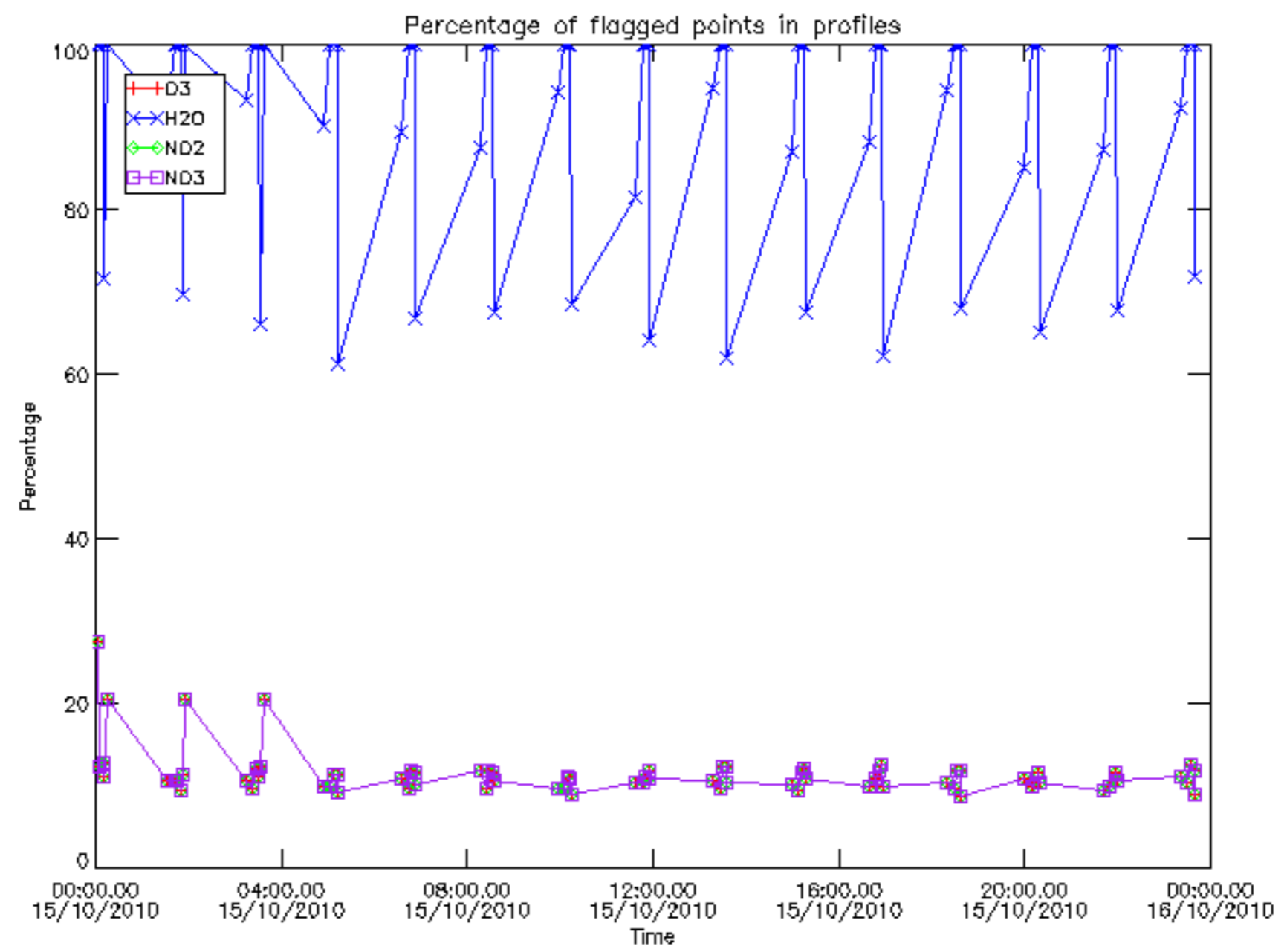




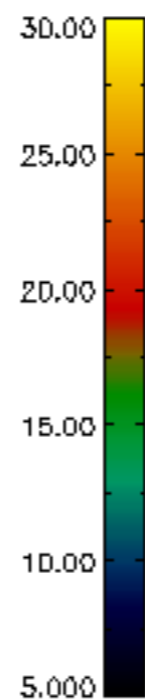
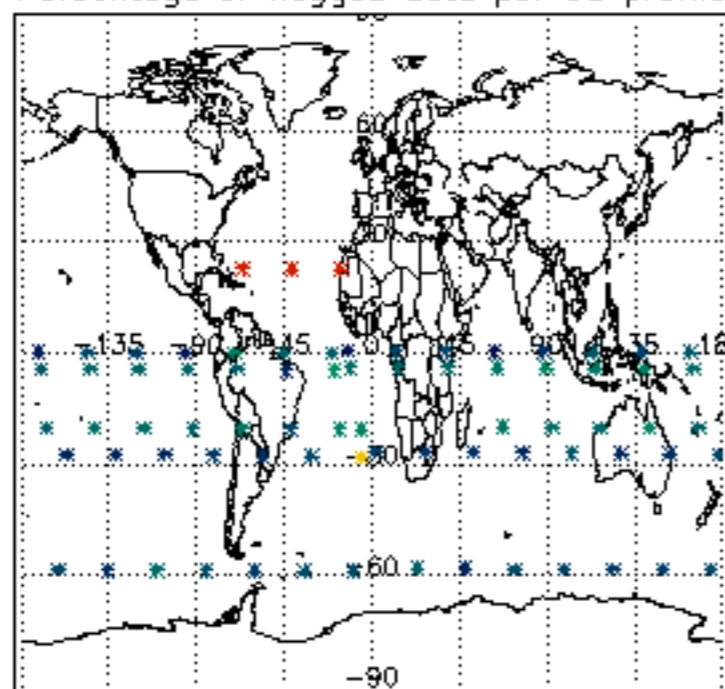




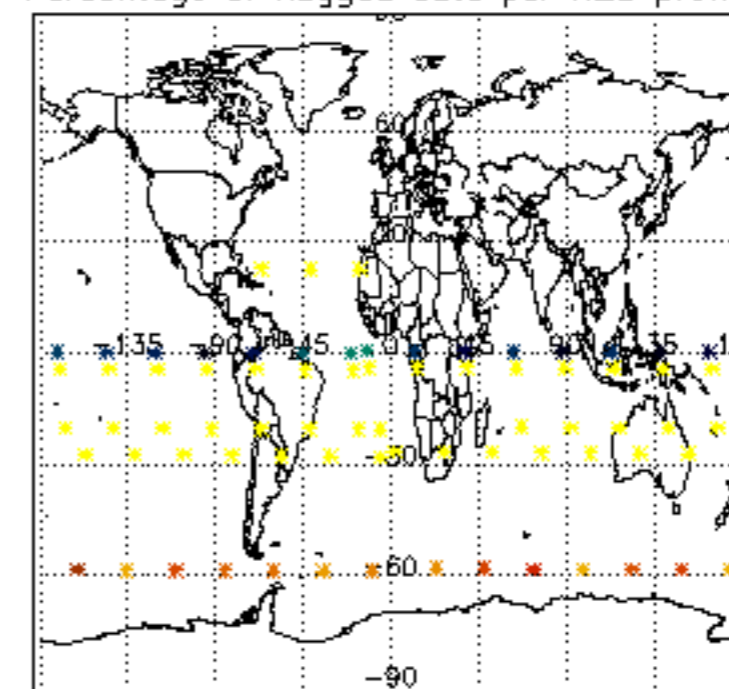




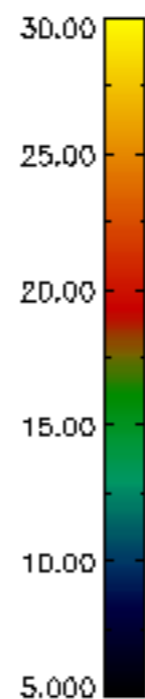
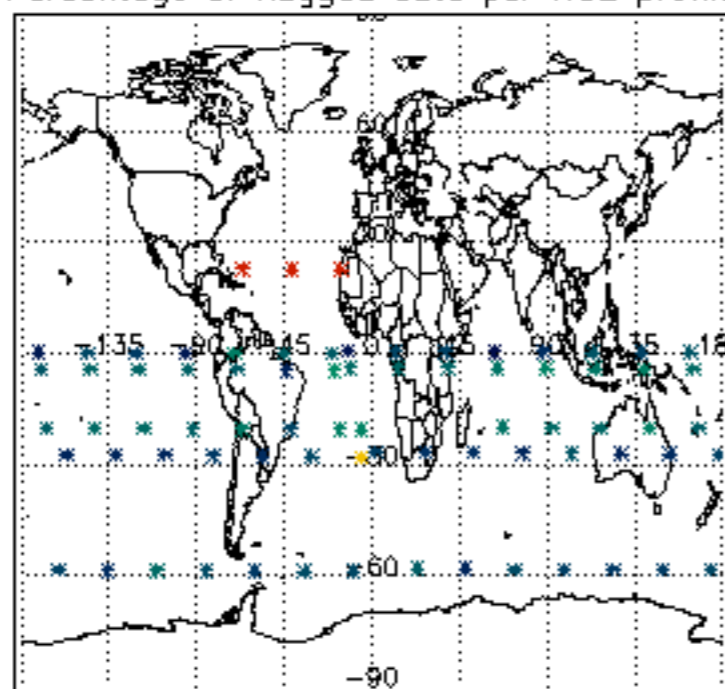
Percentage of flagged data per D3 profile



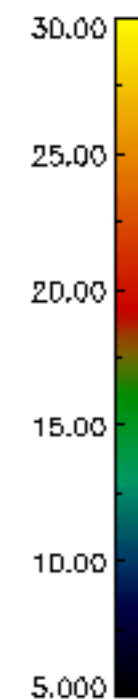
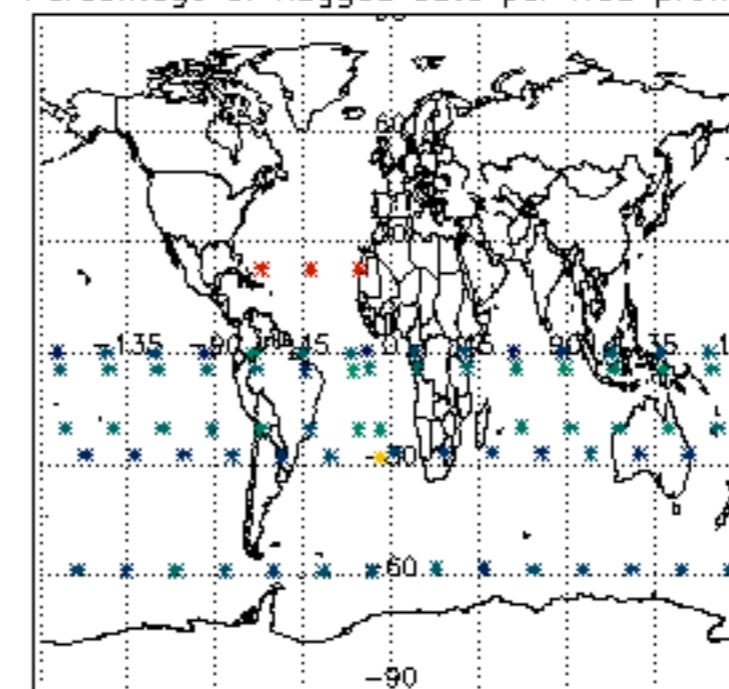
Percentage of flagged data per H2O profile

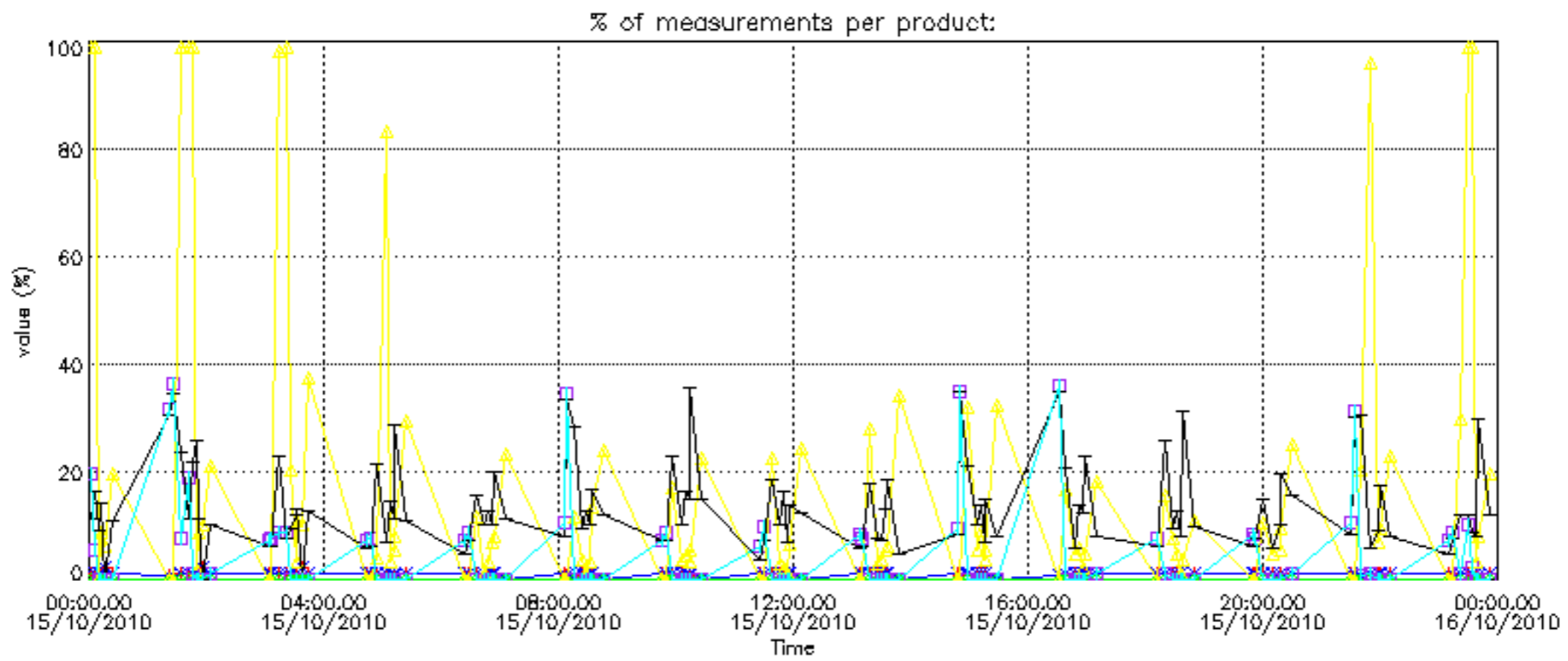


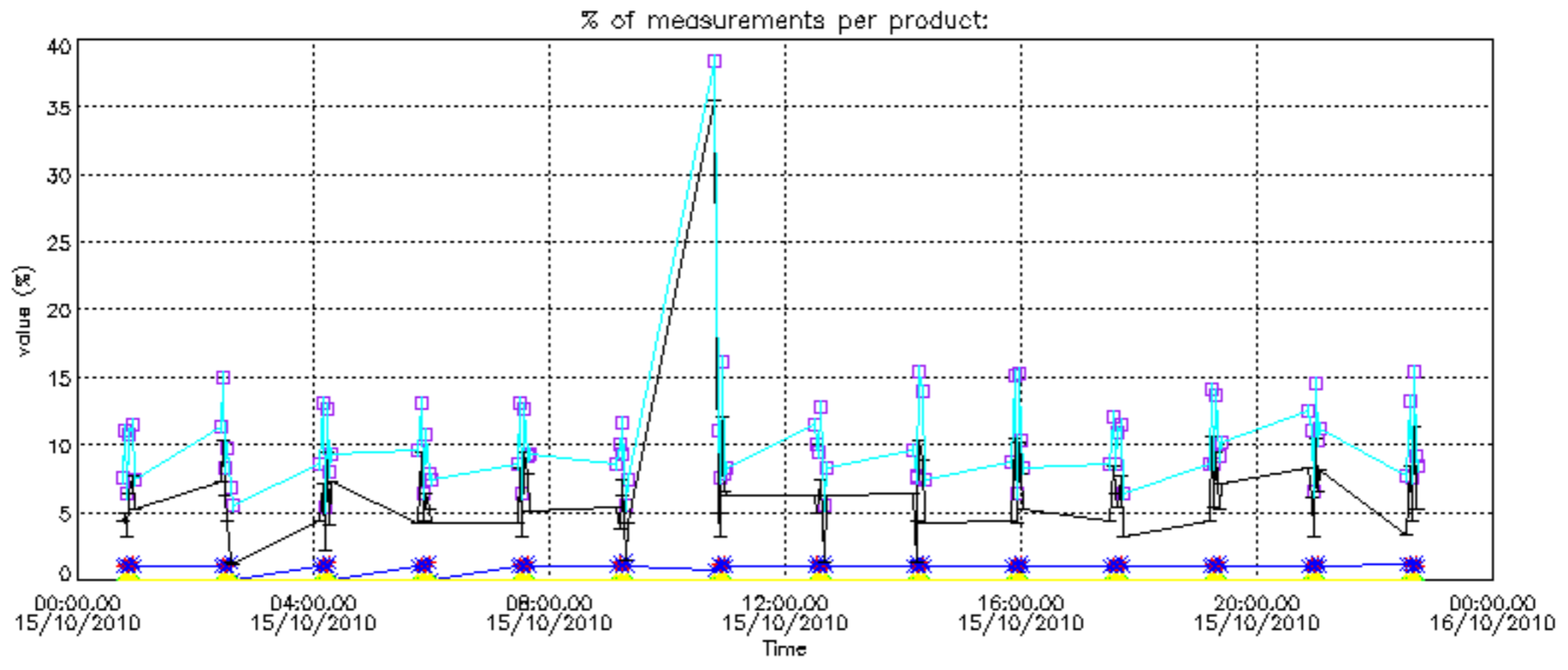
Percentage of flagged data per NO2 profile



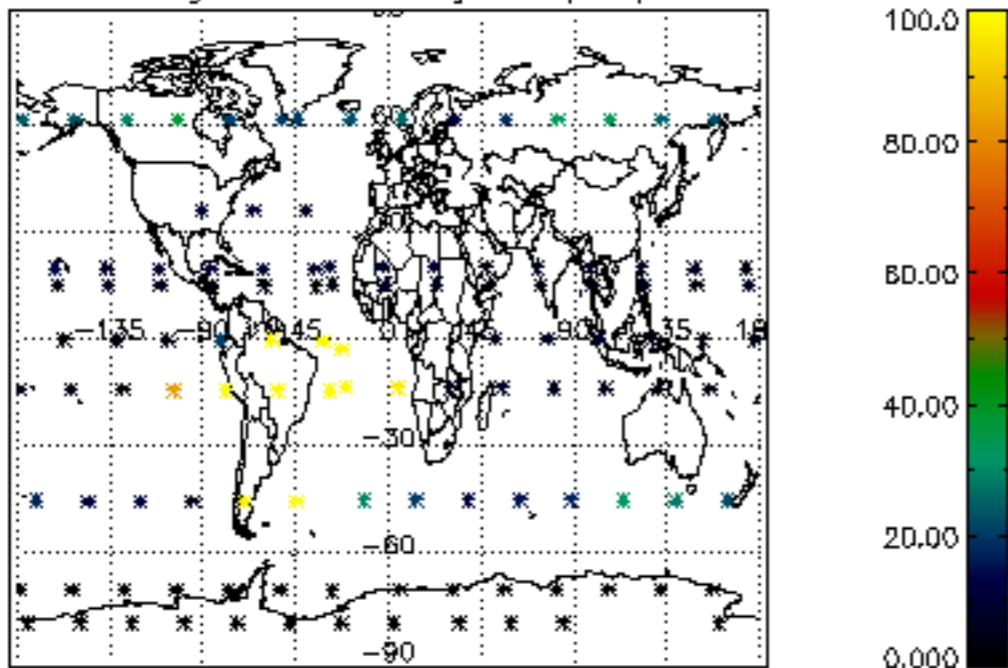
Percentage of flagged data per NO3 profile



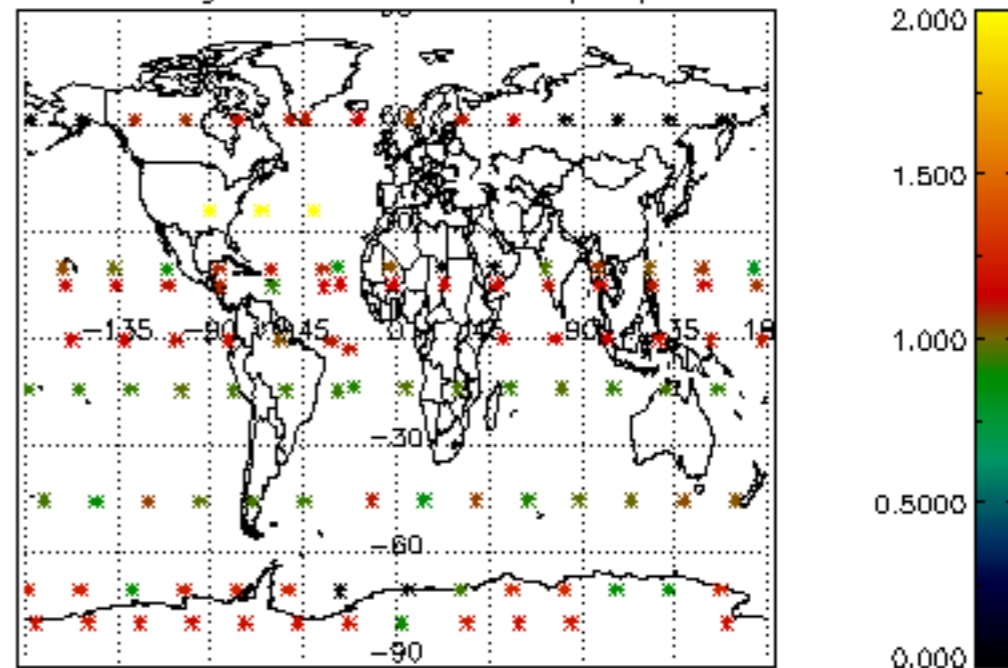




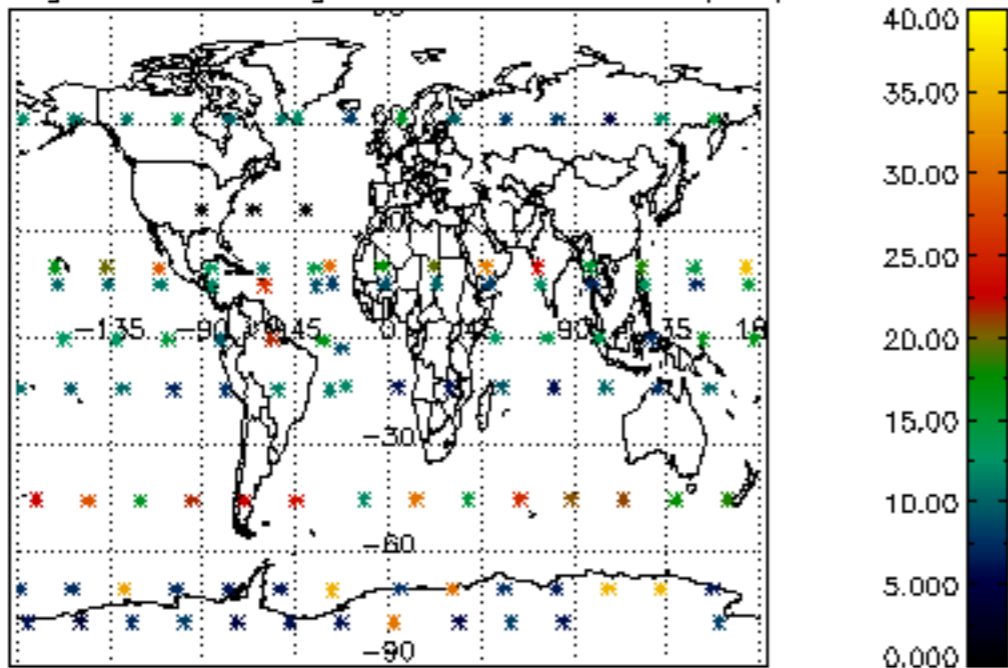
Percentage of cosmic ray hits per profile



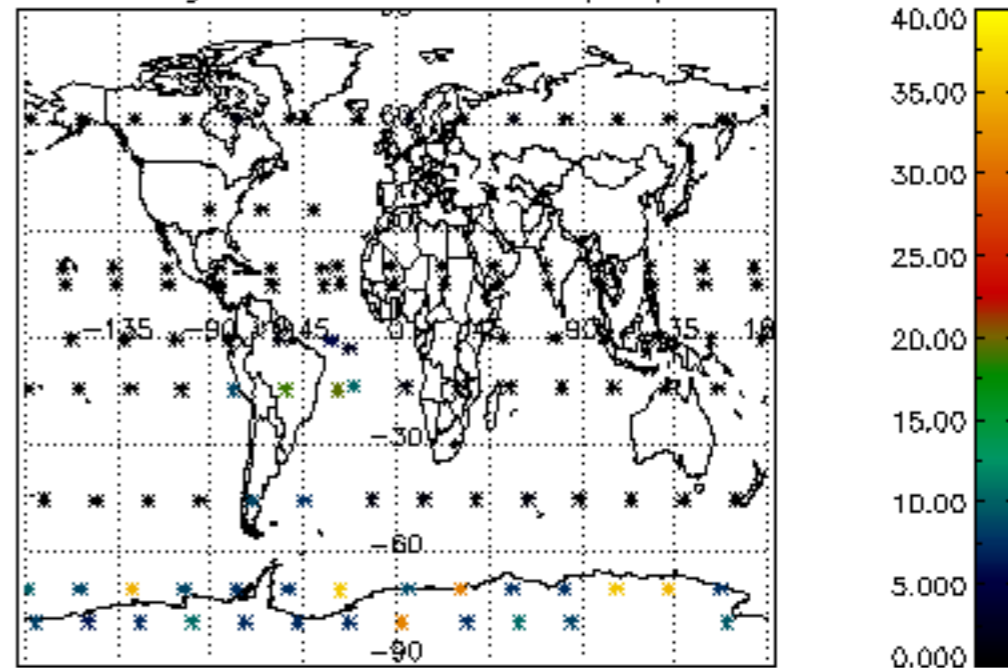
Percentage of datation errors per profile



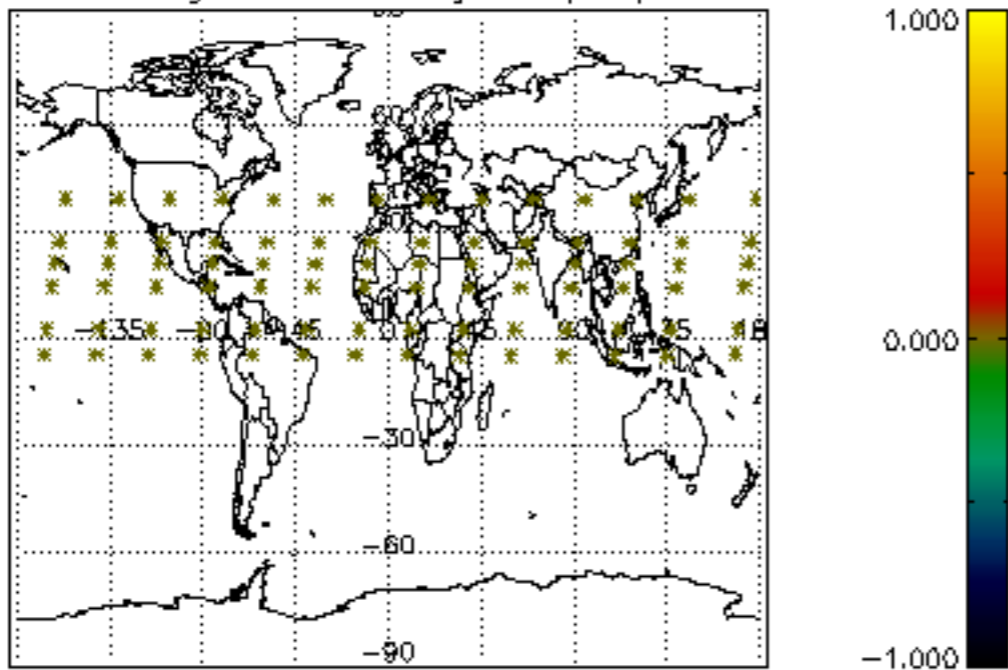
Percentage of star falling outside central band per profile



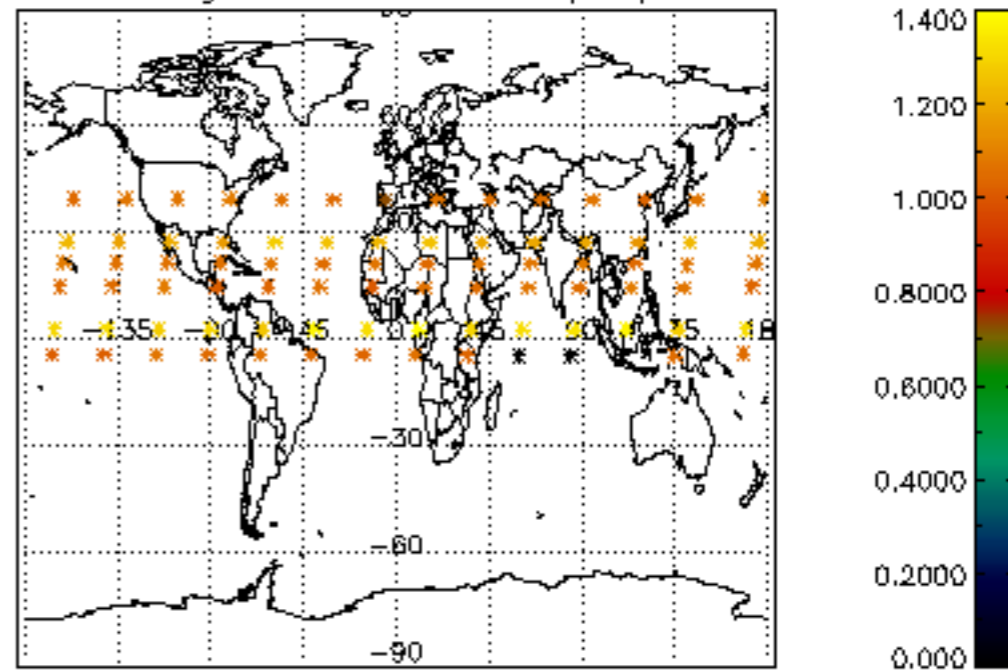
Percentage of saturation errors per profile



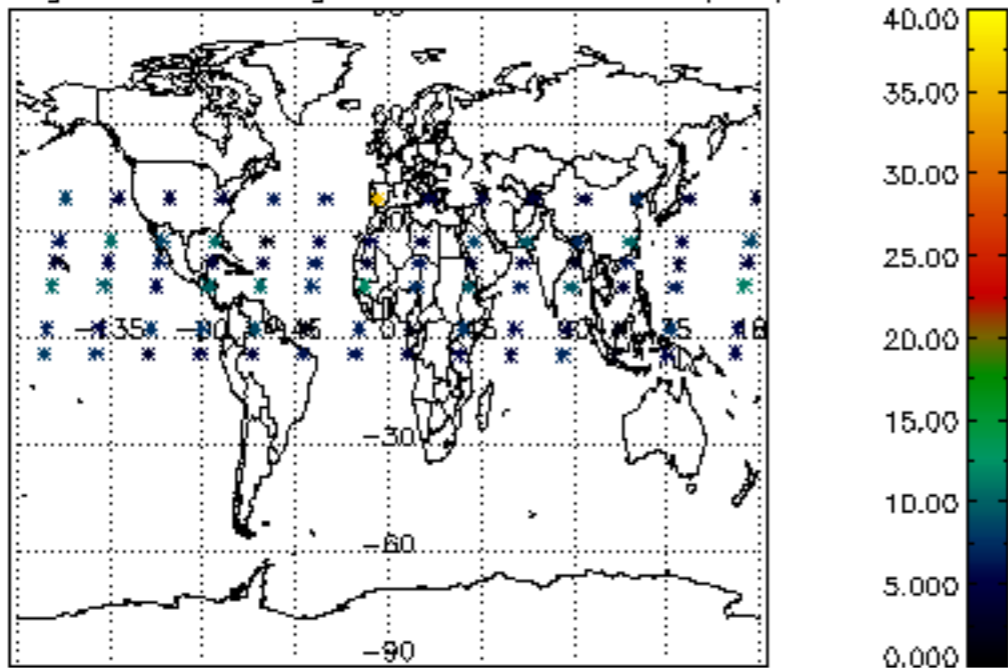
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

