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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	23APR2013 03:29:11
Data source version	GOMOS/6.01
Start time of products	04-09-2007 (04SEP2007 00:00:00)
Stop time of products	05-09-2007 (05SEP2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	107
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

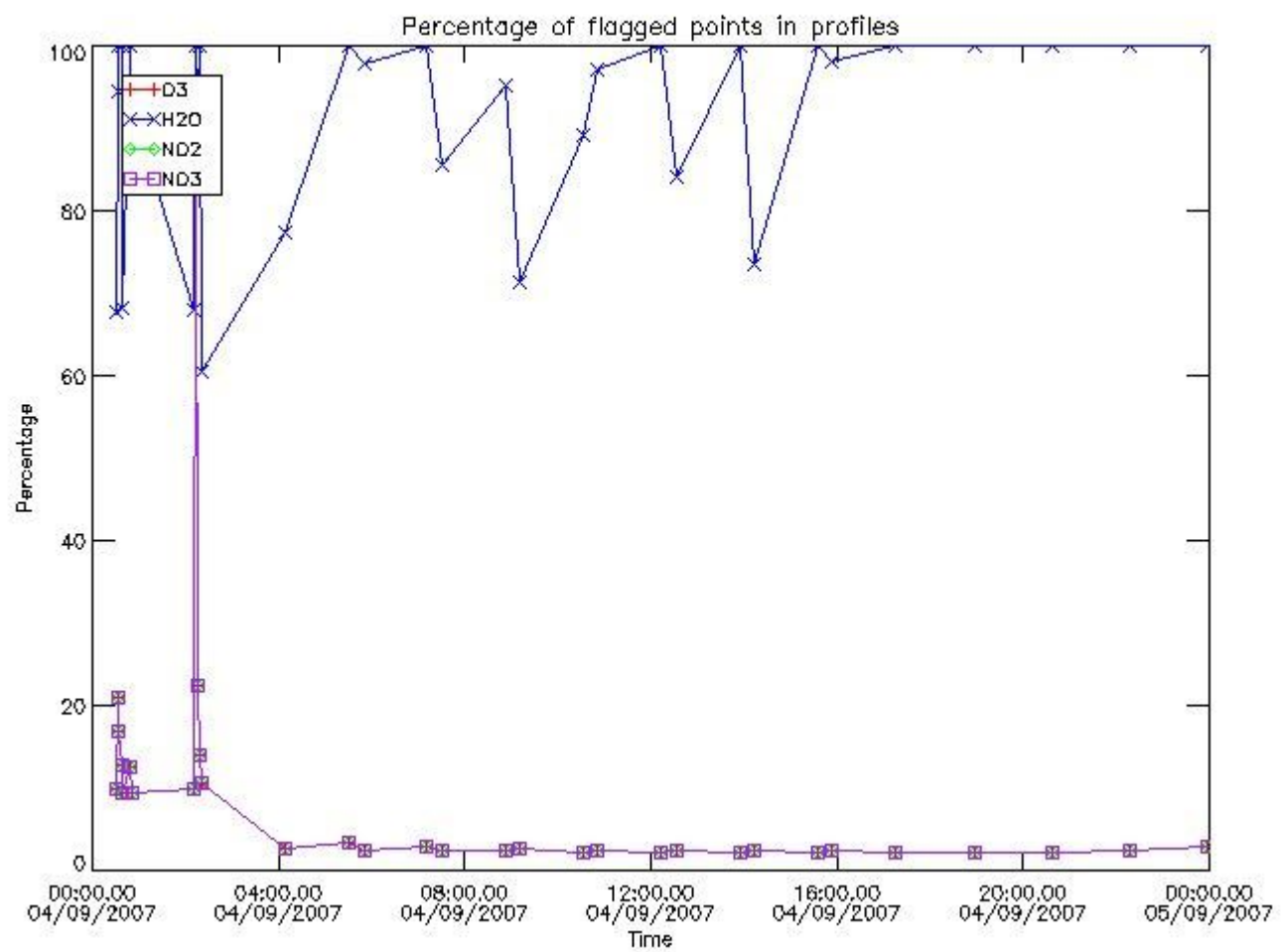
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070904_001414_000000422061_00202_28813_2988.N1	04-SEP-2007 00:14:14	Bright	41.500	24	66Alp Gem	1.5800	10200.	83	28813	No
2	GOM_NL__2PRFIN20070904_002203_000000422061_00202_28813_2989.N1	04-SEP-2007 00:22:03	Twilight	42.000	8	10Alp CMi	0.40000	6500.0	84	28813	No
3	GOM_NL__2PRFIN20070904_002954_000000522061_00202_28813_2990.N1	04-SEP-2007 00:29:54	Dark	51.500	1	9Alp CMa	-1.4400	11000.	103	28813	No
4	GOM_NL__2PRFIN20070904_003236_000000462061_00202_28813_2991.N1	04-SEP-2007 00:32:36	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	28813	No
5	GOM_NL__2PRFIN20070904_003406_000000432061_00202_28813_2992.N1	04-SEP-2007 00:34:06	Dark	42.500	117	Pi Pup	2.7060	3800.0	85	28813	No
6	GOM_NL__2PRFIN20070904_003723_000000482061_00202_28813_2993.N1	04-SEP-2007 00:37:23	Dark	47.500	108	Alp Col	2.6520	15200.	95	28813	No
7	GOM_NL__2PRFIN20070904_003918_000000542061_00202_28813_2994.N1	04-SEP-2007 00:39:18	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	28813	No
8	GOM_NL__2PRFIN20070904_004940_000000412061_00203_28814_2992.N1	04-SEP-2007 00:49:40	Dark	41.000	143	Alp Hyi	2.8570	7200.0	82	28814	No
9	GOM_NL__2PRFIN20070904_005059_000000542061_00203_28814_2993.N1	04-SEP-2007 00:50:59	Dark	54.000	9	Alp Eri	0.45300	24000.	108	28814	No
10	GOM_NL__2PRFIN20070904_005815_000000502061_00203_28814_2994.N1	04-SEP-2007 00:58:15	Straylight	49.500	63	Bet Gru	2.1500	2800.0	99	28814	No
11	GOM_NL__2PRFIN20070904_010252_000000452061_00203_28814_2995.N1	04-SEP-2007 01:02:52	Straylight	44.500	18	24Alp PsA	1.1660	9700.0	89	28814	No
12	GOM_NL__2PRFIN20070904_010737_000000462061_00203_28814_2996.N1	04-SEP-2007 01:07:37	Bright	45.500	142	49Del Cap	2.8500	8900.0	91	28814	No
13	GOM_NL__2PRFIN20070904_011044_000000382061_00203_28814_2997.N1	04-SEP-2007 01:10:44	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	28814	No
14	GOM_NL__2PRFIN20070904_011208_000000402061_00203_28814_2998.N1	04-SEP-2007 01:12:08	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	28814	No
15	GOM_NL__2PRFIN20070904_011507_000000382061_00203_28814_2999.N1	04-SEP-2007 01:15:07	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	28814	No
16	GOM_NL__2PRFIN20070904_013006_000000382061_00203_28814_3000.N1	04-SEP-2007 01:30:06	Bright	37.500	89	5Alp Cep	2.4510	8000.0	75	28814	No
17	GOM_NL__2PRFIN20070904_013747_000000342061_00203_28814_3001.N1	04-SEP-2007 01:37:47	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	28814	No
18	GOM_NL__2PRFIN20070904_015450_000000382061_00203_28814_3002.N1	04-SEP-2007 01:54:50	Bright	38.000	24	66Alp Gem	1.5800	10200.	76	28814	No
19	GOM_NL__2PRFIN20070904_020240_000000412061_00203_28814_3003.N1	04-SEP-2007 02:02:40	Twilight	41.000	8	10Alp CMi	0.40000	6500.0	82	28814	No
20	GOM_NL__2PRFIN20070904_021031_000000522061_00203_28814_3004.N1	04-SEP-2007 02:10:31	Dark	52.000	1	9Alp CMa	-1.4400	11000.	104	28814	No
21	GOM_NL__2PRFIN20070904_021312_000000442061_00203_28814_3005.N1	04-SEP-2007 02:13:12	Dark	44.000	23	21Eps CMa	1.5020	26000.	88	28814	No
22	GOM_NL__2PRFIN20070904_021442_000000432061_00203_28814_3006.N1	04-SEP-2007 02:14:42	Dark	43.000	117	Pi Pup	2.7060	3800.0	86	28814	No
23	GOM_NL__2PRFIN20070904_021800_000000442061_00203_28814_3007.N1	04-SEP-2007 02:18:00	Dark	44.000	108	Alp Col	2.6520	15200.	88	28814	No
24	GOM_NL__2PRFIN20070904_021954_000000492061_00203_28814_3008.N1	04-SEP-2007 02:19:54	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	28814	No
25	GOM_NL__2PRFIN20070904_040919_000002252061_00205_28816_3021.N1	04-SEP-2007 04:09:19	Dark	225.00	165	34Gam Eri	2.9500	3200.0	450	28816	No
26	GOM_NL__2PRFIN20070904_045429_000000892061_00205_28816_3022.N1	04-SEP-2007 04:54:29	Bright	88.500	53	43Bet And	2.0480	3300.0	177	28816	No
27	GOM_NL__2PRFIN20070904_050040_000000862061_00205_28816_3023.N1	04-SEP-2007 05:00:40	Bright	85.500	73	57Gam1And	2.2600	13100.	171	28816	No
28	GOM_NL__2PRFIN20070904_050427_000001732061_00205_28816_3024.N1	04-SEP-2007 05:04:27	Bright	172.50	173	4Bet Tri	3.0040	8900.0	345	28816	No
29	GOM_NL__2PRFIN20070904_051139_000000832061_00205_28816_3025.N1	04-SEP-2007 05:11:39	Bright	83.000	149	45Eps Per	2.8880	30000.	166	28816	No
30	GOM_NL__2PRFIN20070904_051856_000002552061_00205_28816_3026.N1	04-SEP-2007 05:18:56	Straylight	254.50	150	44Zet Per	2.8900	28000.	509	28816	No
31	GOM_NL__2PRFIN20070904_053101_000001492061_00205_28816_3027.N1	04-SEP-2007 05:31:01	Dark	148.50	13	87Alp Tau	0.86700	3800.0	297	28816	No
32	GOM_NL__2PRFIN20070904_055000_000002252061_00206_28817_3033.N1	04-SEP-2007 05:50:00	Dark	225.00	165	34Gam Eri	2.9500	3200.0	450	28817	No
33	GOM_NL__2PRFIN20070904_063503_000000762061_00206_28817_3034.N1	04-SEP-2007 06:35:03	Bright	76.000	53	43Bet And	2.0480	3300.0	152	28817	No
34	GOM_NL__2PRFIN20070904_064114_000000882061_00206_28817_3035.N1	04-SEP-2007 06:41:14	Bright	88.000	73	57Gam1And	2.2600	13100.	176	28817	No
35	GOM_NL__2PRFIN20070904_064459_000001712061_00206_28817_3036.N1	04-SEP-2007 06:44:59	Bright	171.00	173	4Bet Tri	3.0040	8900.0	342	28817	No
36	GOM_NL__2PRFIN20070904_065215_000000852061_00206_28817_3037.N1	04-SEP-2007 06:52:15	Bright	84.500	149	45Eps Per	2.8880	30000.	169	28817	No
37	GOM_NL__2PRFIN20070904_065933_000002552061_00206_28817_3038.N1	04-SEP-2007 06:59:33	Straylight	255.00	150	44Zet Per	2.8900	28000.	510	28817	No
38	GOM_NL__2PRFIN20070904_071142_000001792061_00206_28817_3039.N1	04-SEP-2007 07:11:42	Dark	178.50	13	87Alp Tau	0.86700	3800.0	357	28817	No
39	GOM_NL__2PRFIN20070904_073041_000002252061_00207_28818_3046.N1	04-SEP-2007 07:30:41	Dark	225.00	165	34Gam Eri	2.9500	3200.0	450	28818	No
40	GOM_NL__2PRFIN20070904_081537_000000892061_00207_28818_3047.N1	04-SEP-2007 08:15:37	Bright	88.500	53	43Bet And	2.0480	3300.0	177	28818	No
41	GOM_NL__2PRFIN20070904_082148_000000872061_00207_28818_3048.N1	04-SEP-2007 08:21:48	Bright	87.000	73	57Gam1And	2.2600	13100.	174	28818	No
42	GOM_NL__2PRFIN20070904_082532_000001692061_00207_28818_3049.N1	04-SEP-2007 08:25:32	Bright	169.00	173	4Bet Tri	3.0040	8900.0	338	28818	No

102	GOM_NL__2PRFIN20070904_232042_000000862061_00216_28827_3231.N1	04-SEP-2007 23:20:42	Bright	85.500	53	43Bet And	2.0480	3300.0	171	28827	No
103	GOM_NL__2PRFIN20070904_232655_000000842061_00216_28827_3232.N1	04-SEP-2007 23:26:55	Bright	84.000	73	57Gam1And	2.2600	13100.	168	28827	No
104	GOM_NL__2PRFIN20070904_233419_000001012061_00216_28827_3233.N1	04-SEP-2007 23:34:19	Bright	101.00	79	26Bet Per	2.3100	13100.	202	28827	No
105	GOM_NL__2PRFIN20070904_233807_000000862061_00216_28827_3234.N1	04-SEP-2007 23:38:07	Bright	86.000	149	45Eps Per	2.8880	30000.	172	28827	No
106	GOM_NL__2PRFIN20070904_234540_000002552061_00216_28827_3235.N1	04-SEP-2007 23:45:40	Straylight	254.50	150	44Zet Per	2.8900	28000.	509	28827	No
107	GOM_NL__2PRFIN20070904_235839_000001802061_00216_28827_3236.N1	04-SEP-2007 23:58:39	Dark	179.50	13	87Alp Tau	0.86700	3800.0	359	28827	No

3. Quality information per product

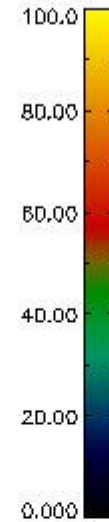
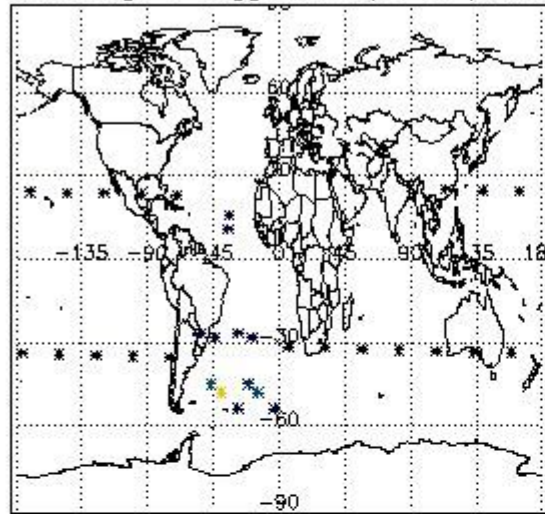
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

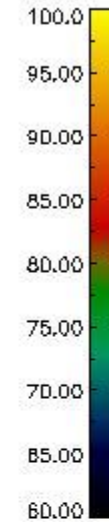
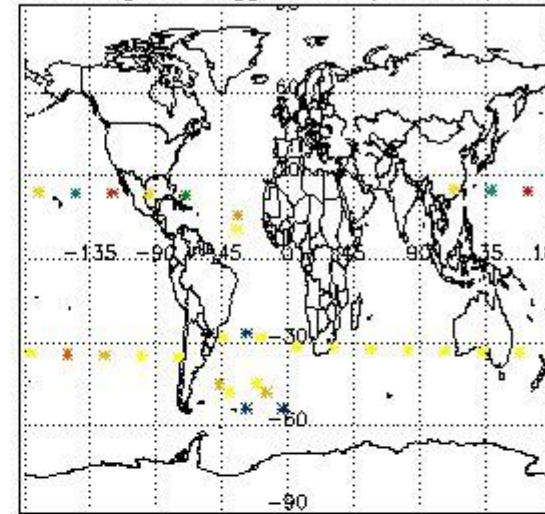


3.2 Plot quality information per product (world map)

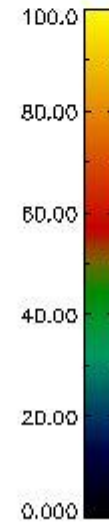
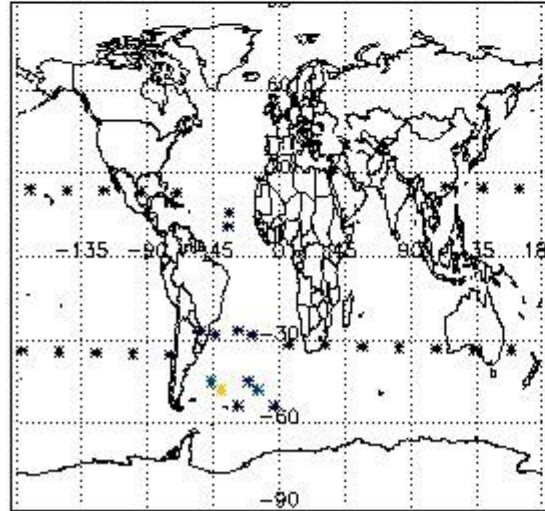
Percentage of flagged data per O3 profile



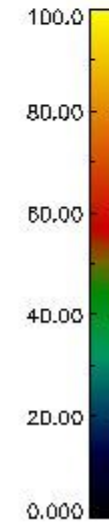
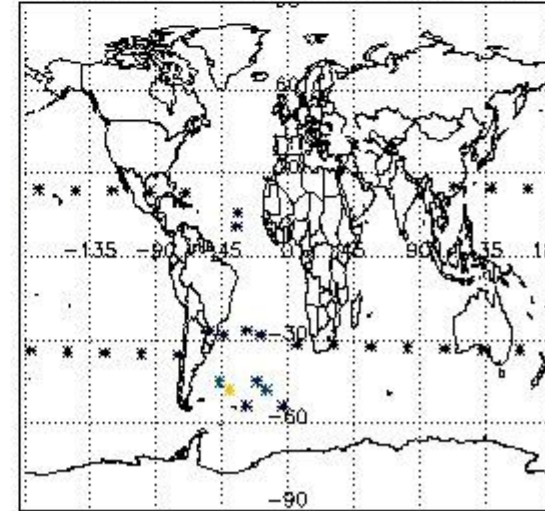
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

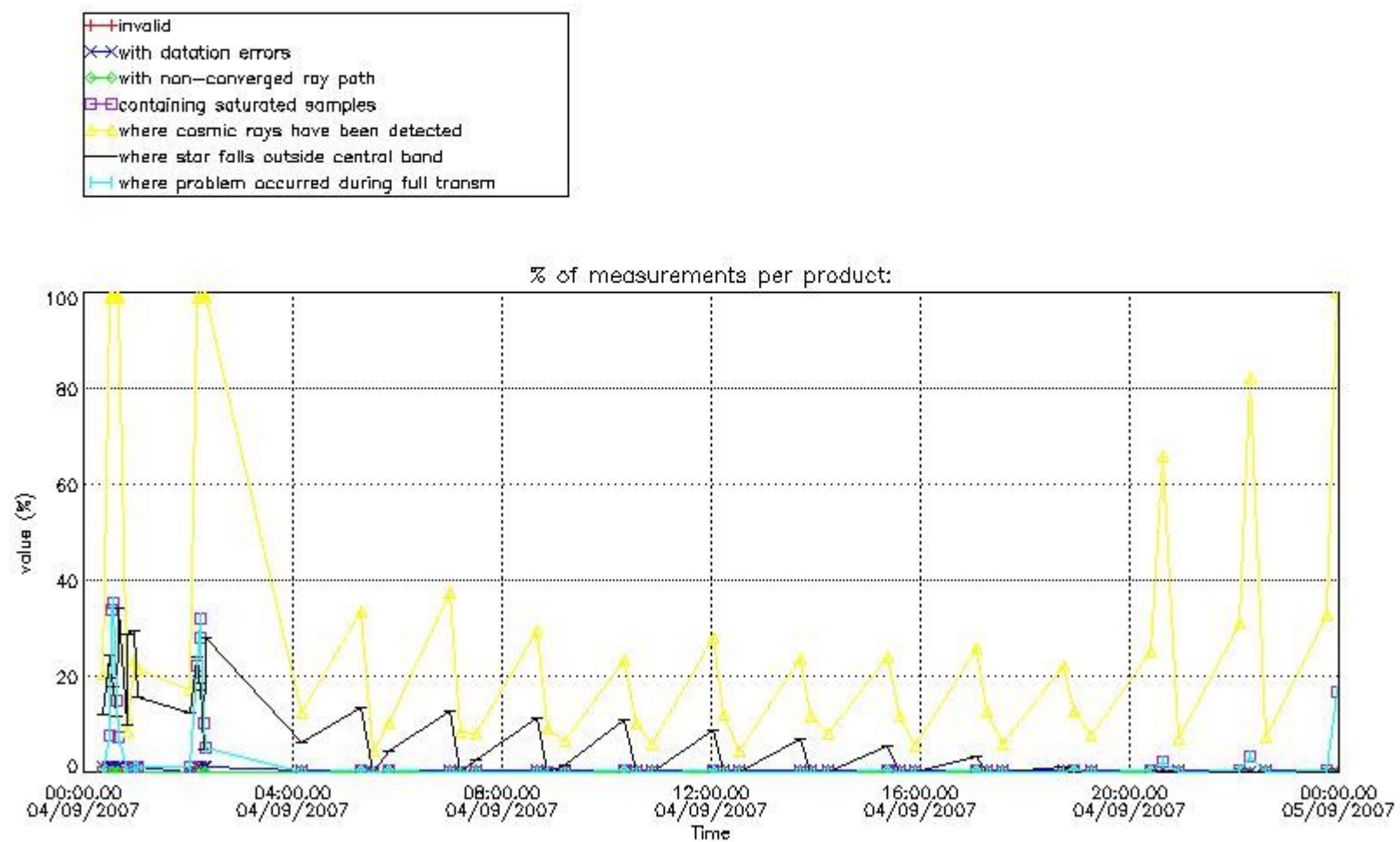


4. Level 1 quality information per product

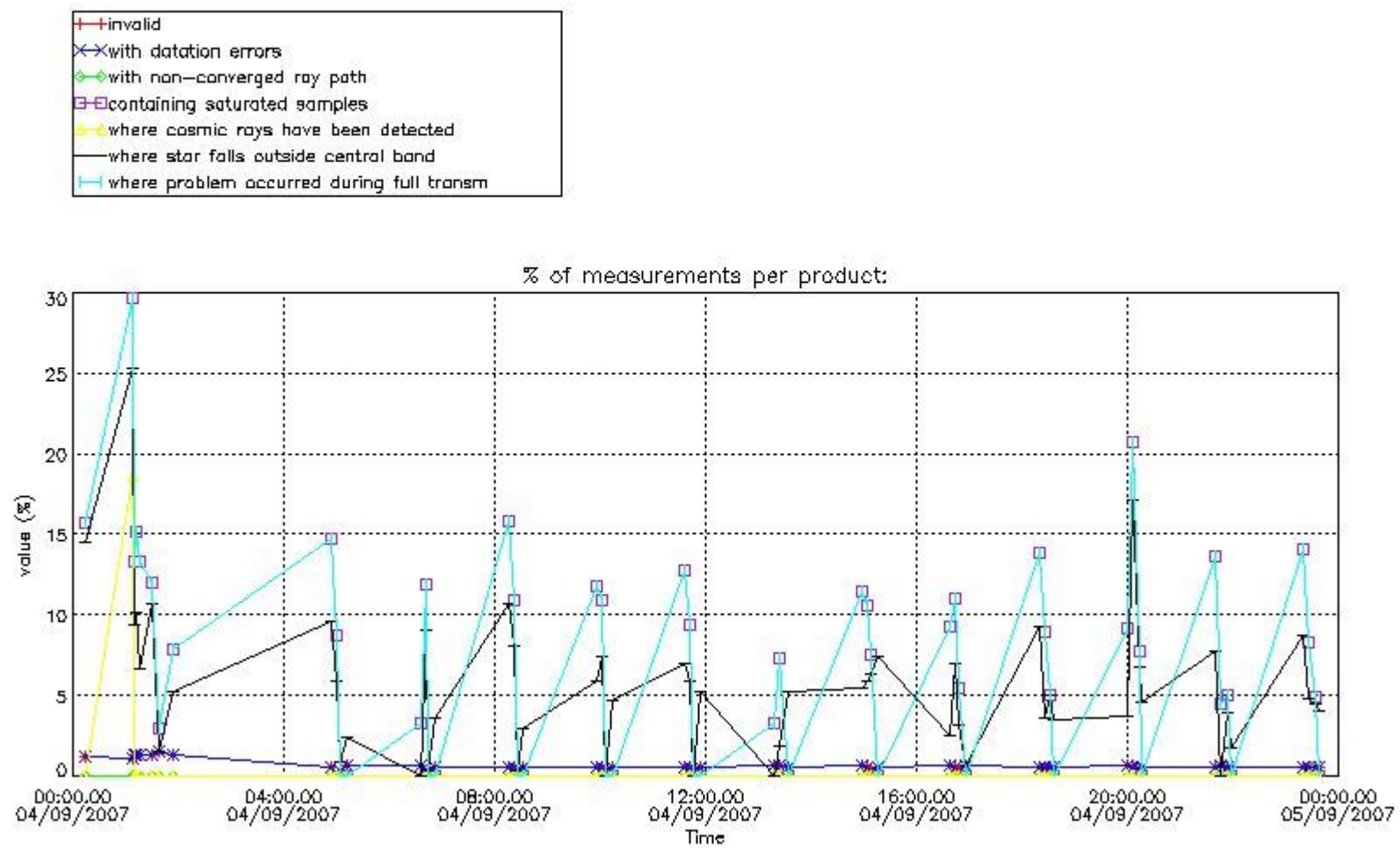
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



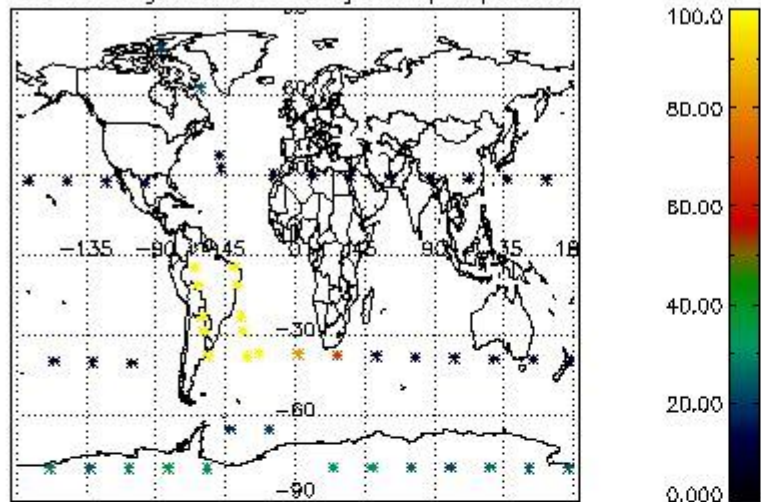
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



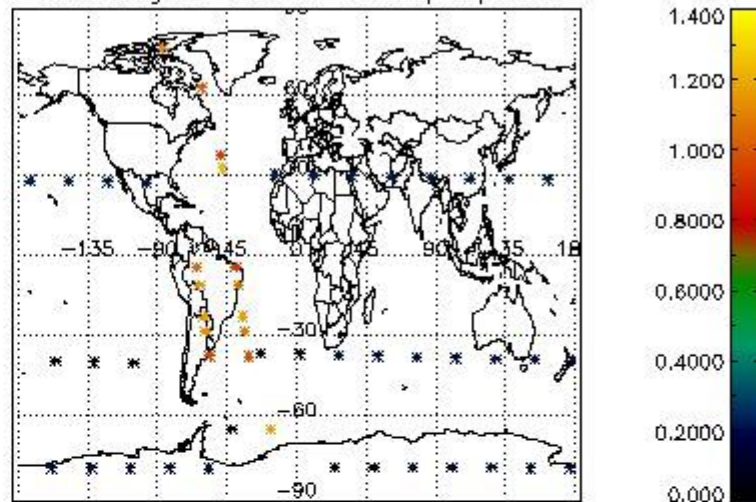
4.2 Plot quality information per product coming from level 1b processing (world map)

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

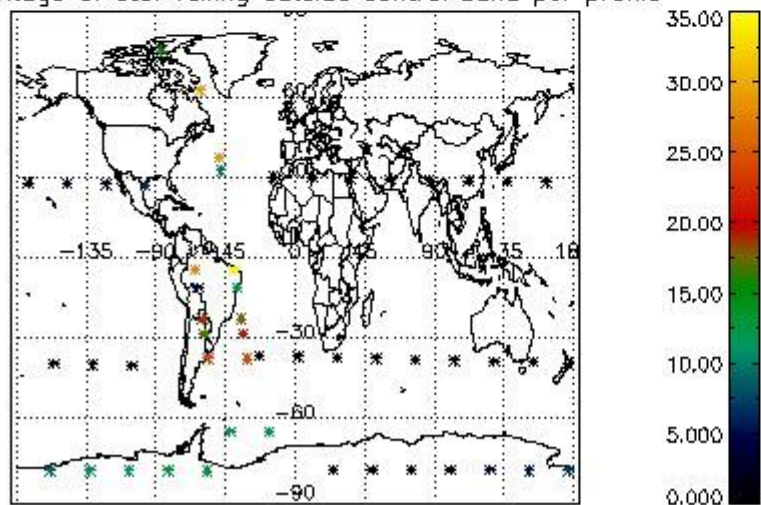
Percentage of cosmic ray hits per profile



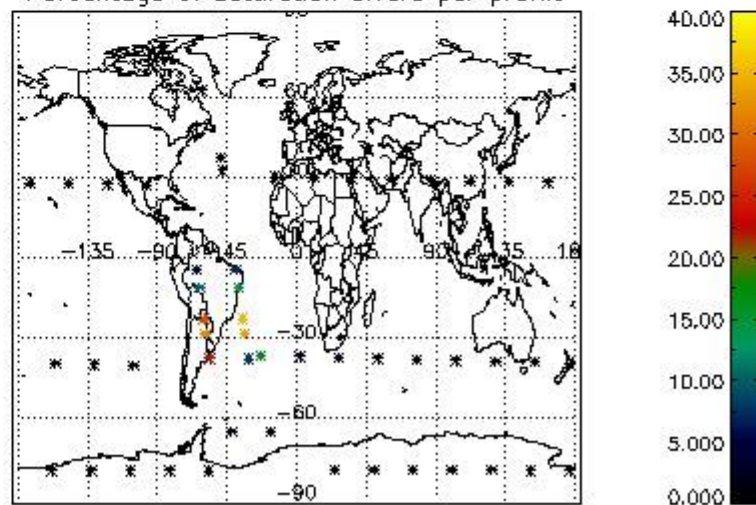
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

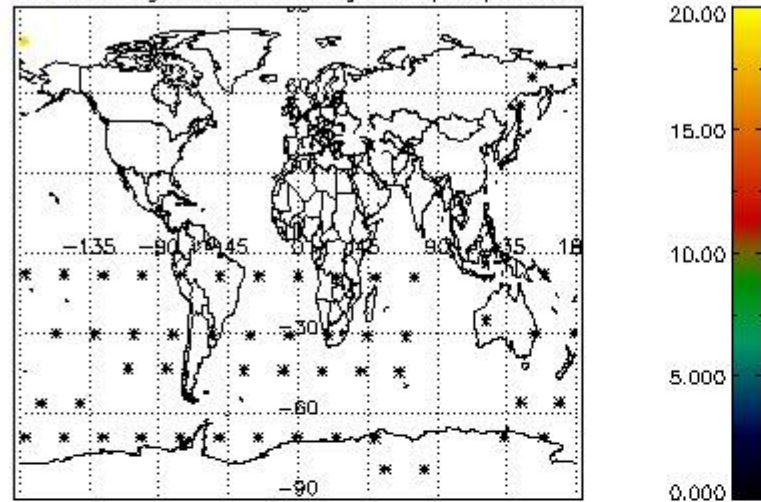


Percentage of saturation errors per profile

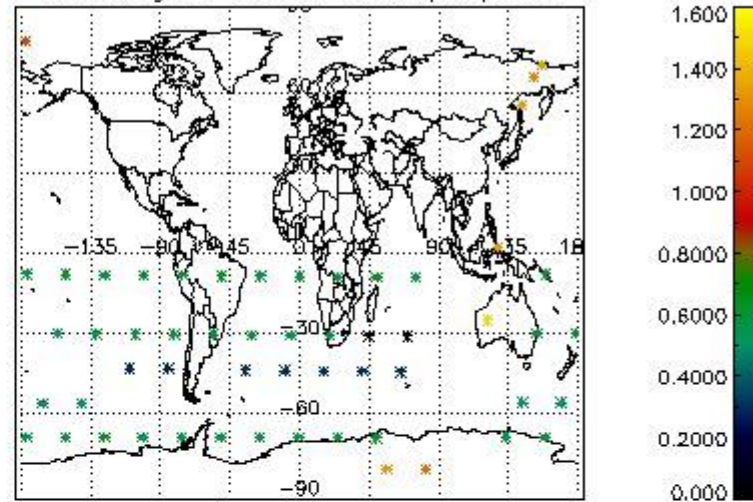


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

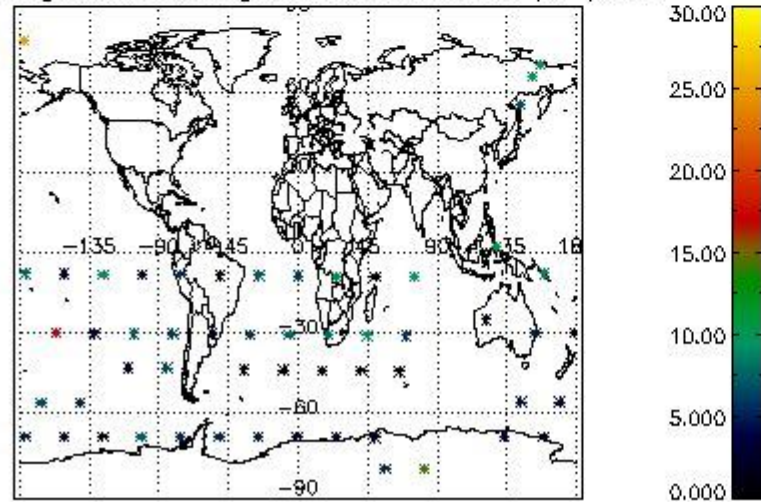
Percentage of cosmic ray hits per profile



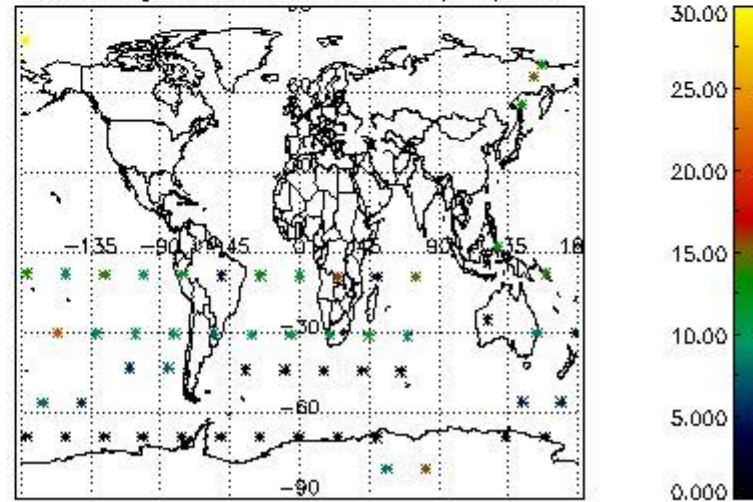
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

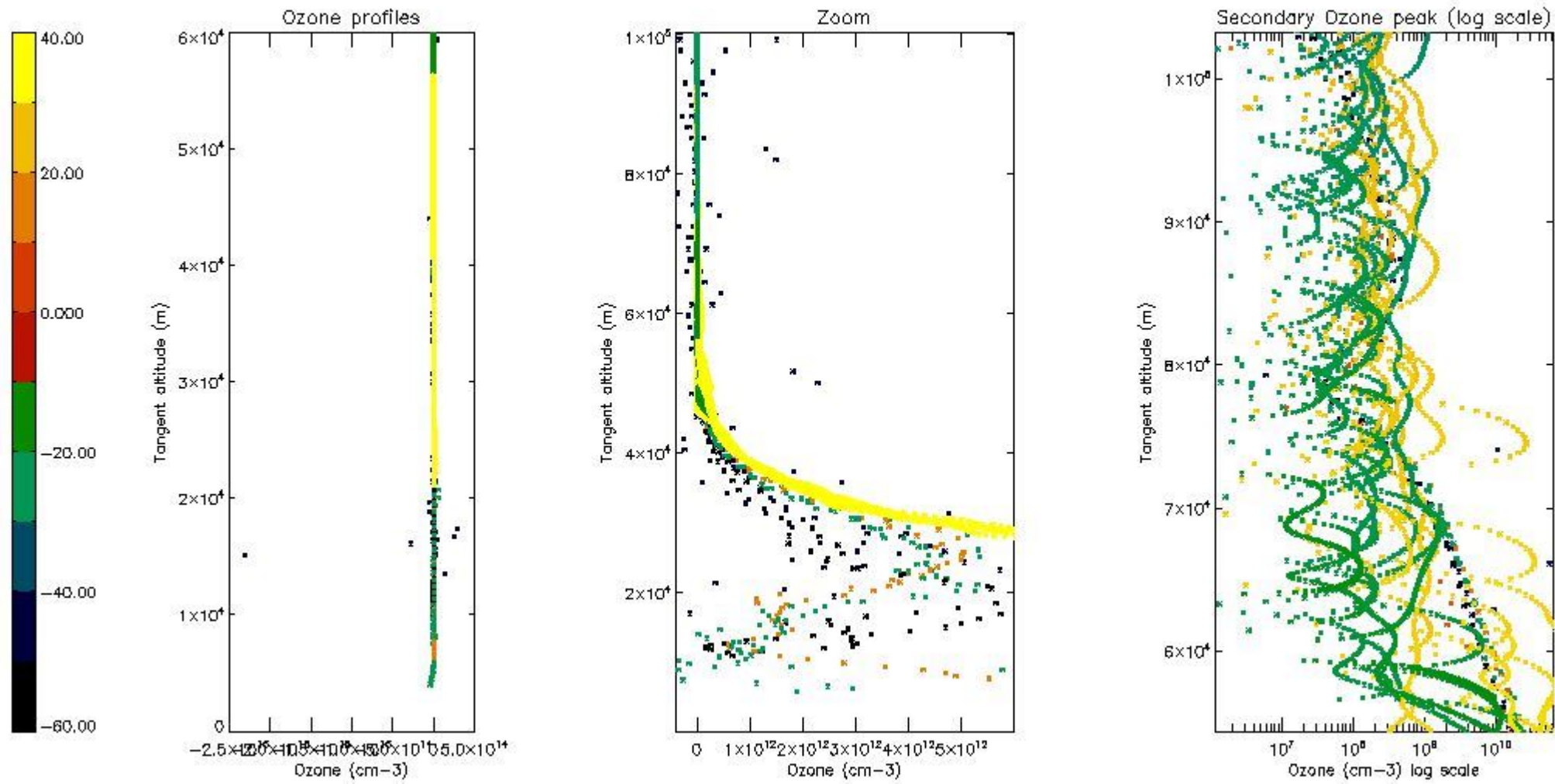
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	8

STD < 10	6
STD < 5	4

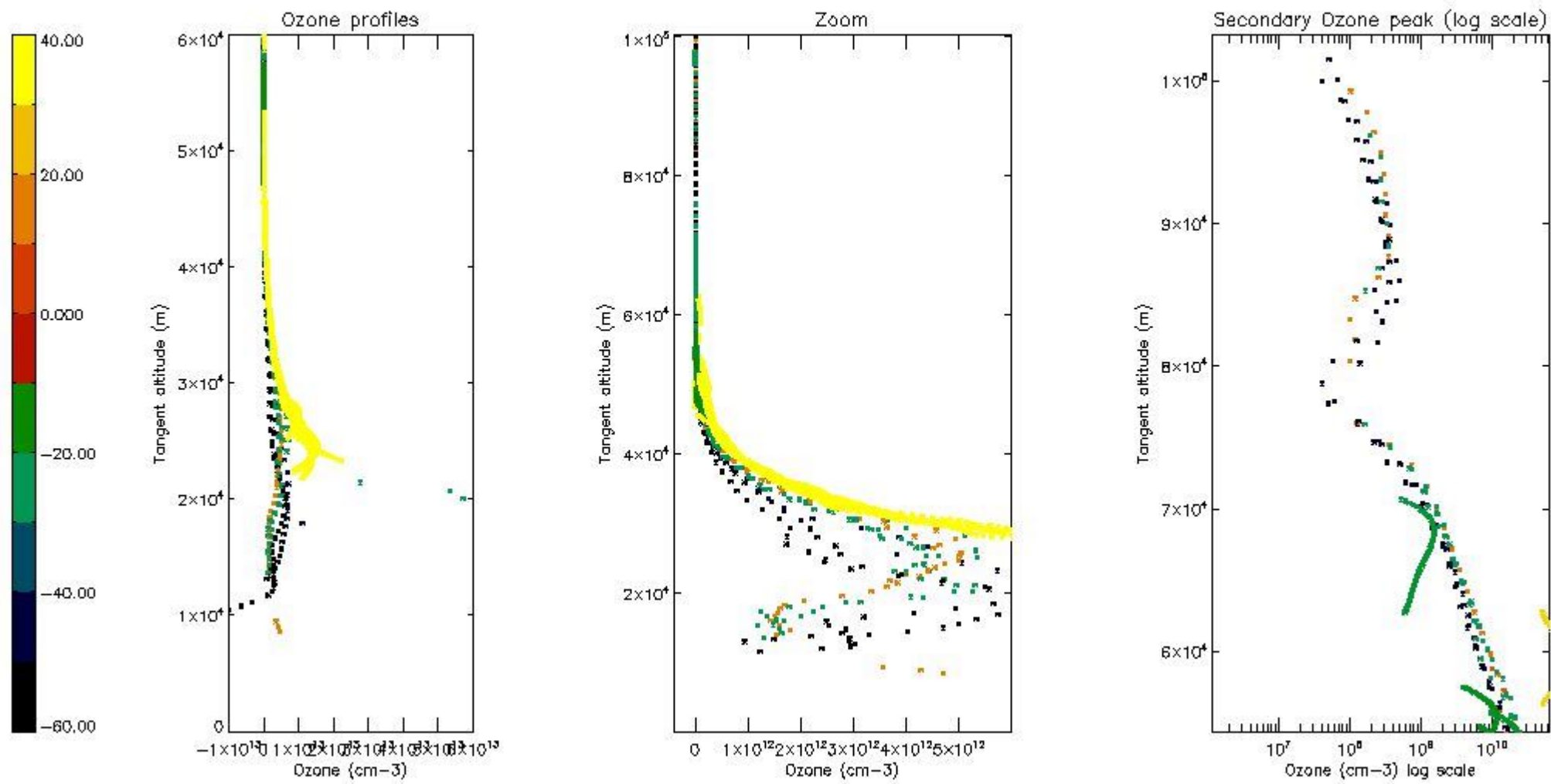
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



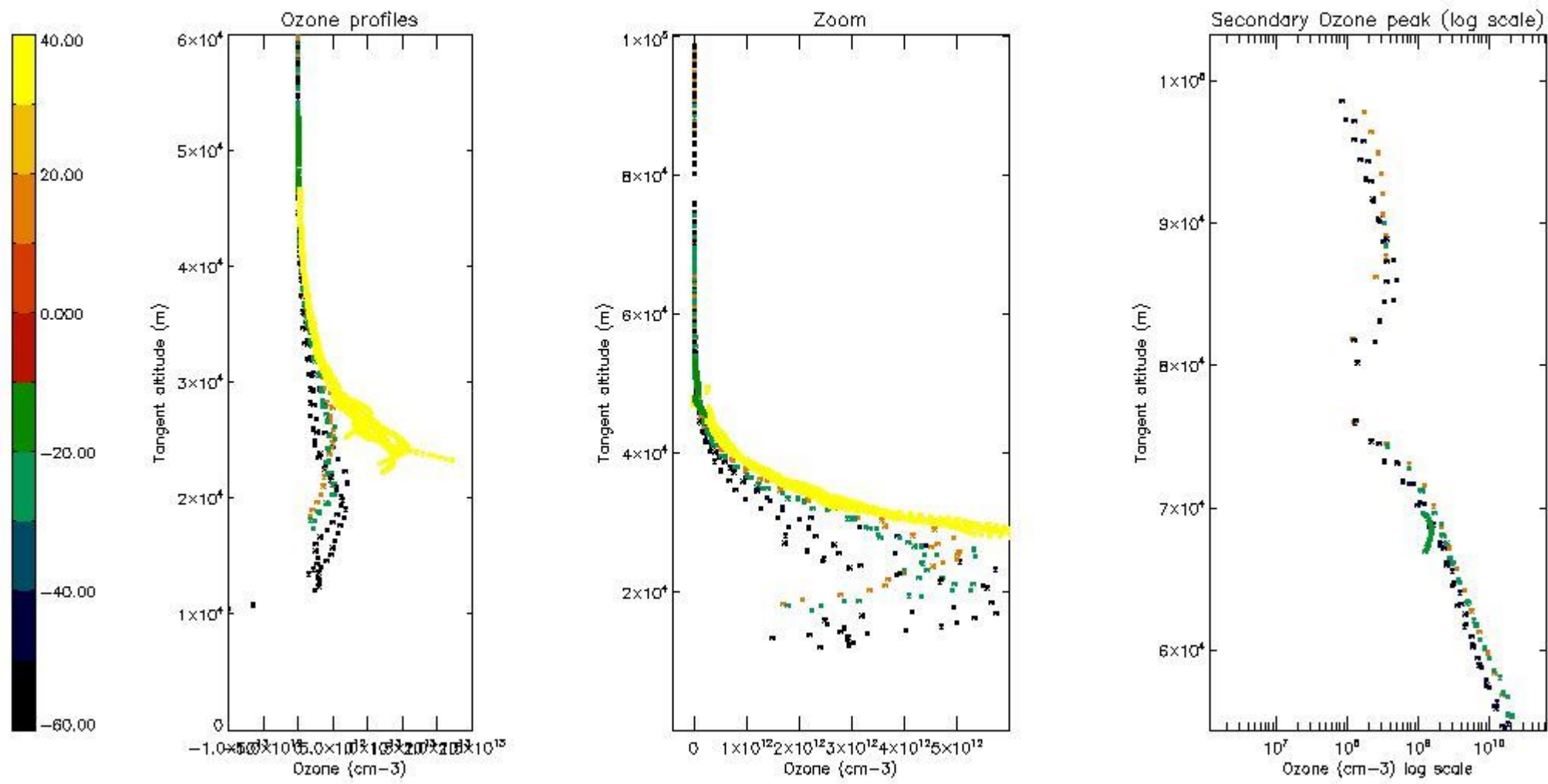
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



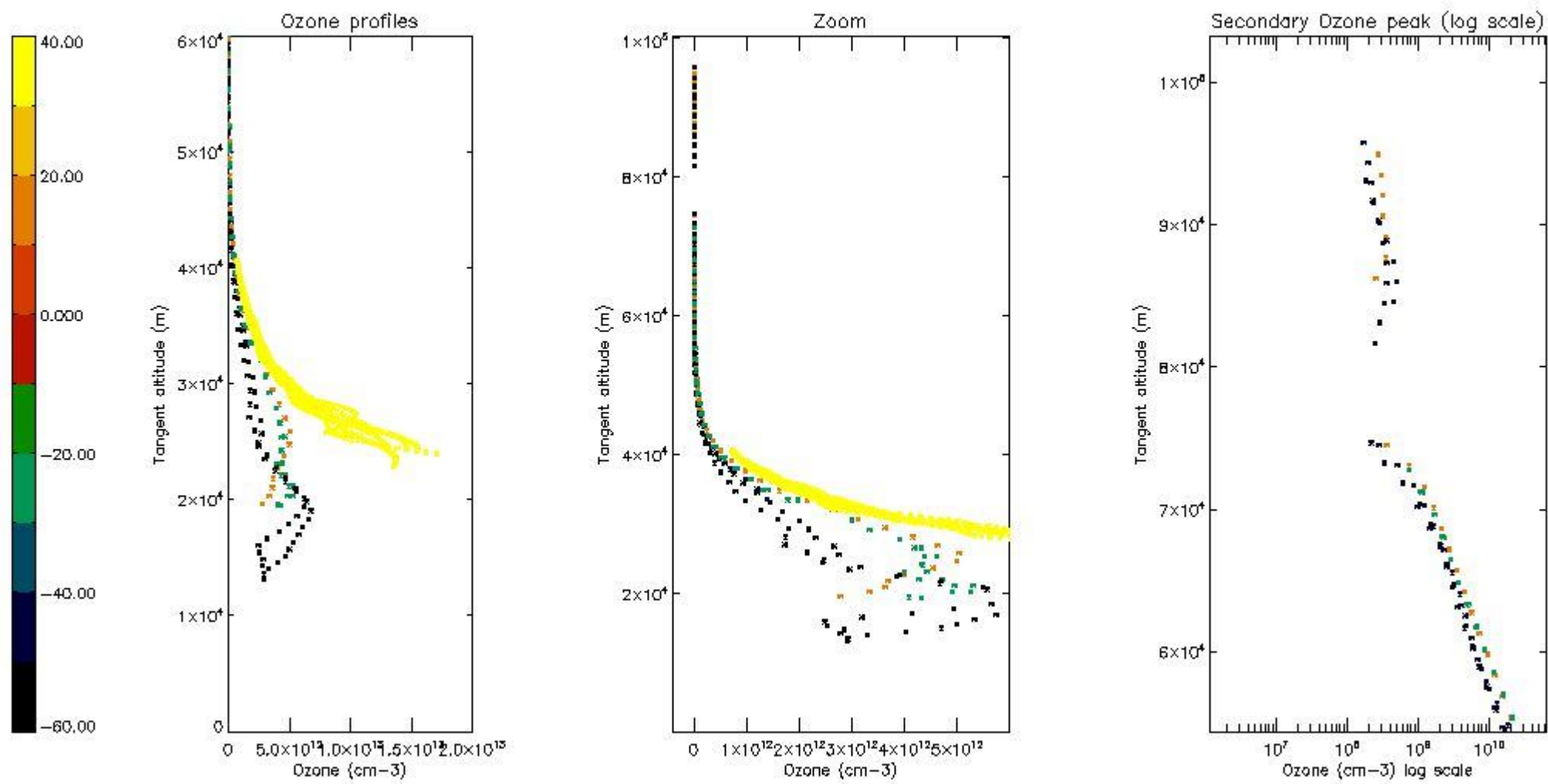
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



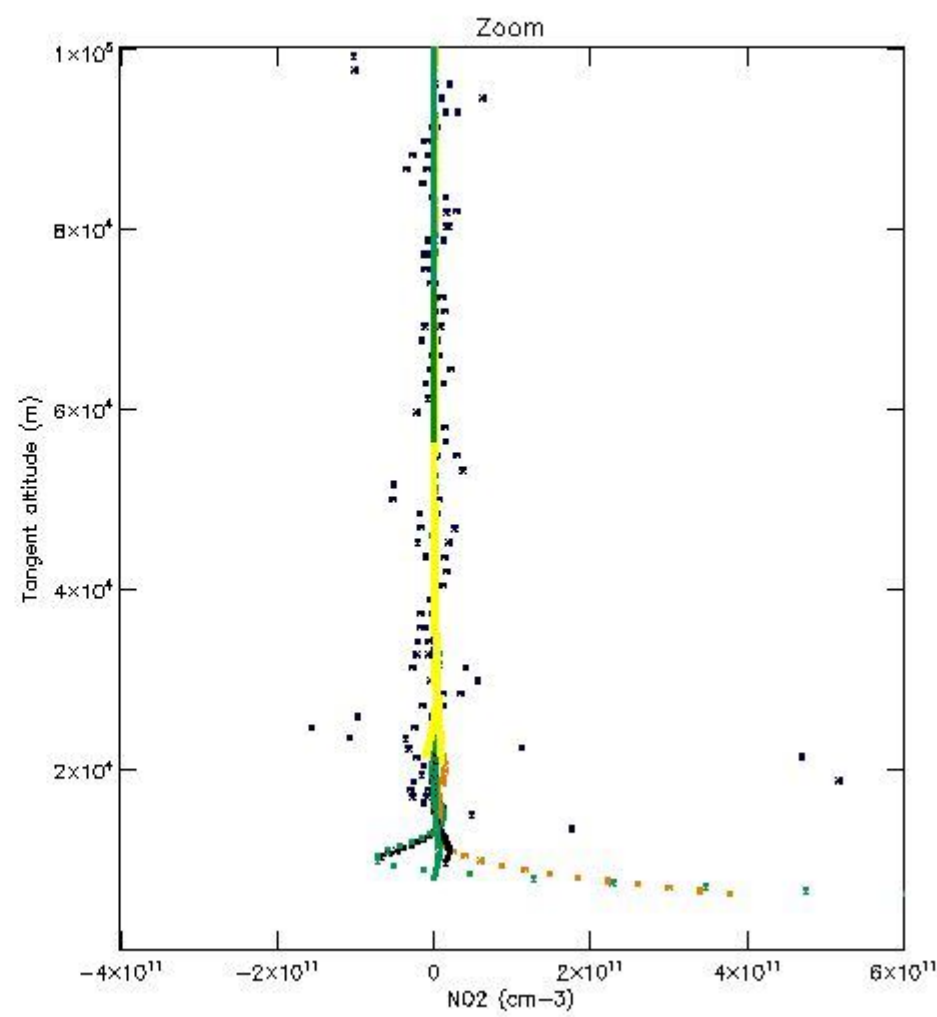
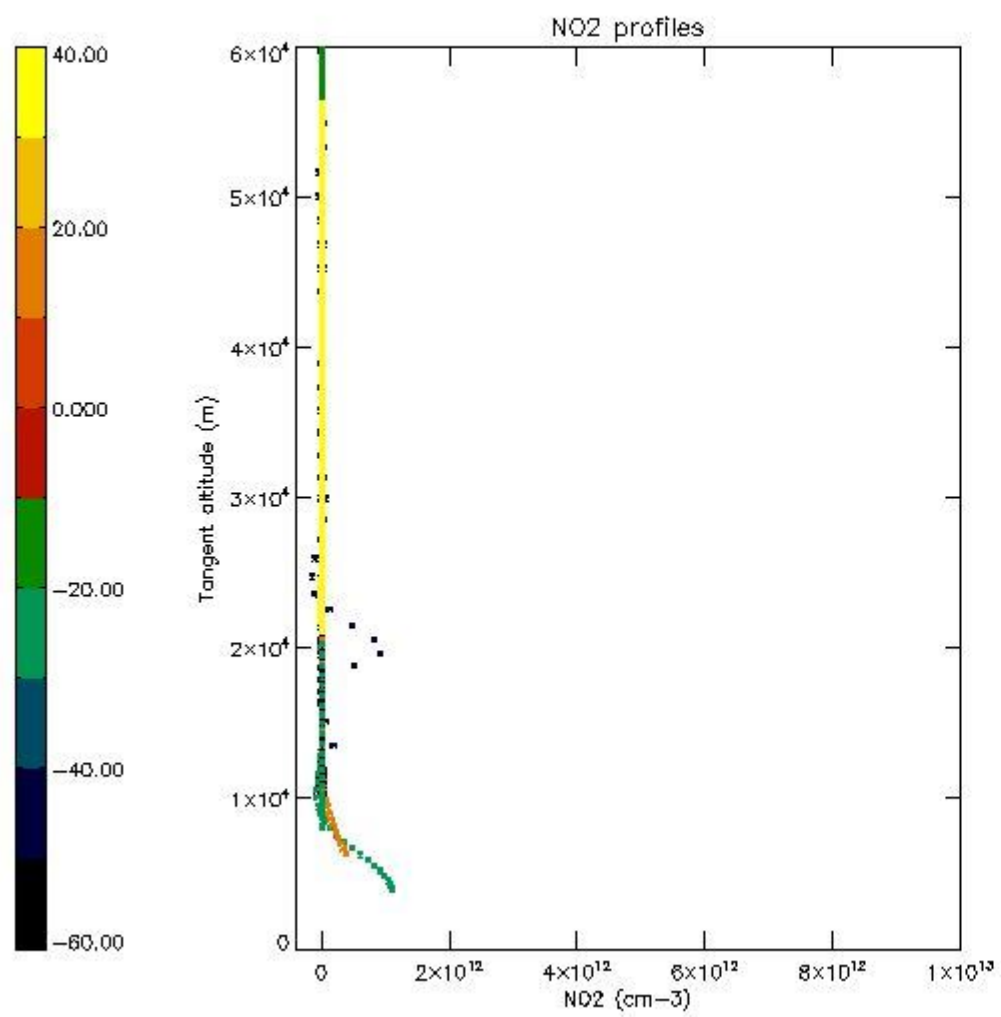
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



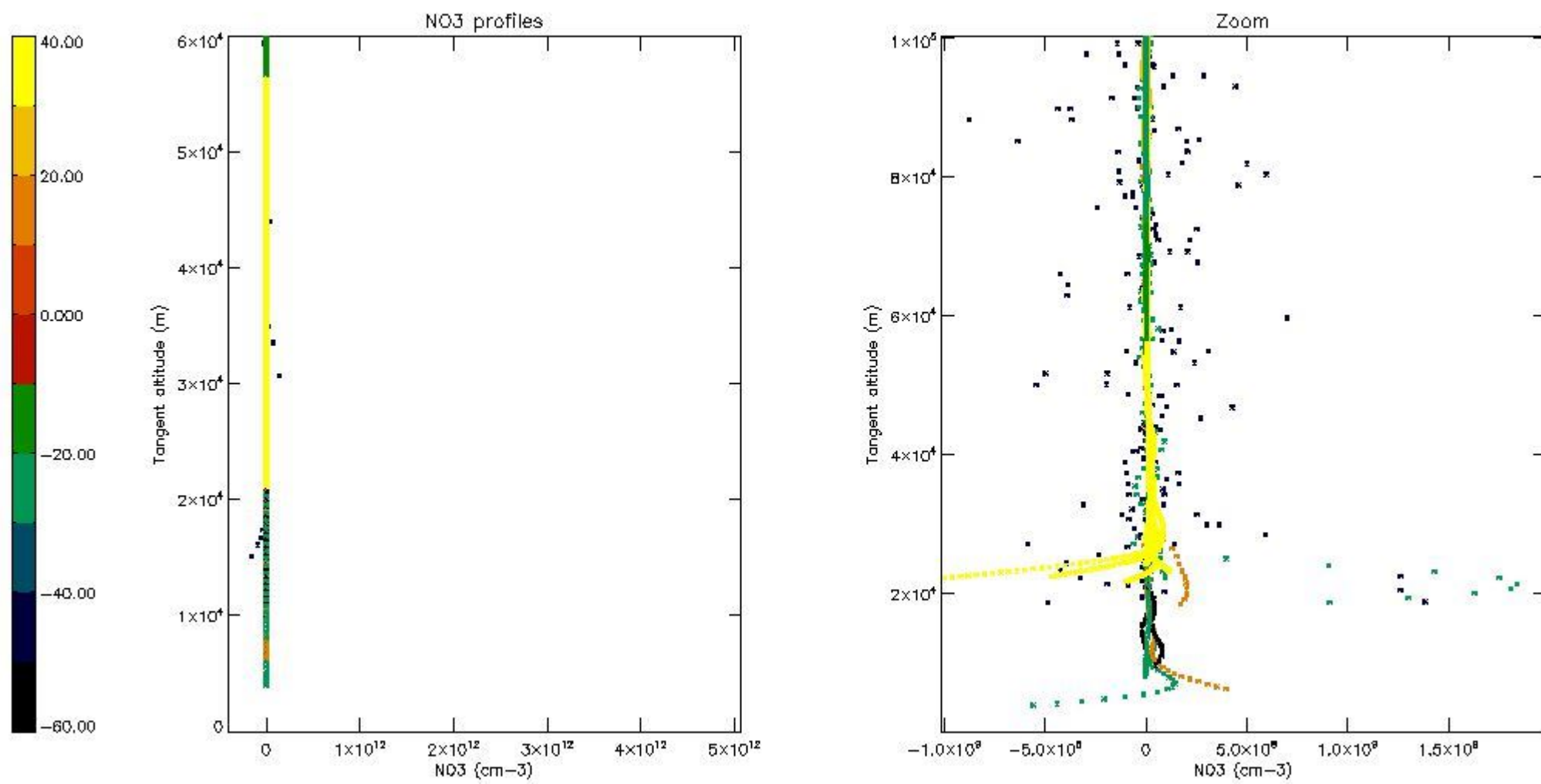
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



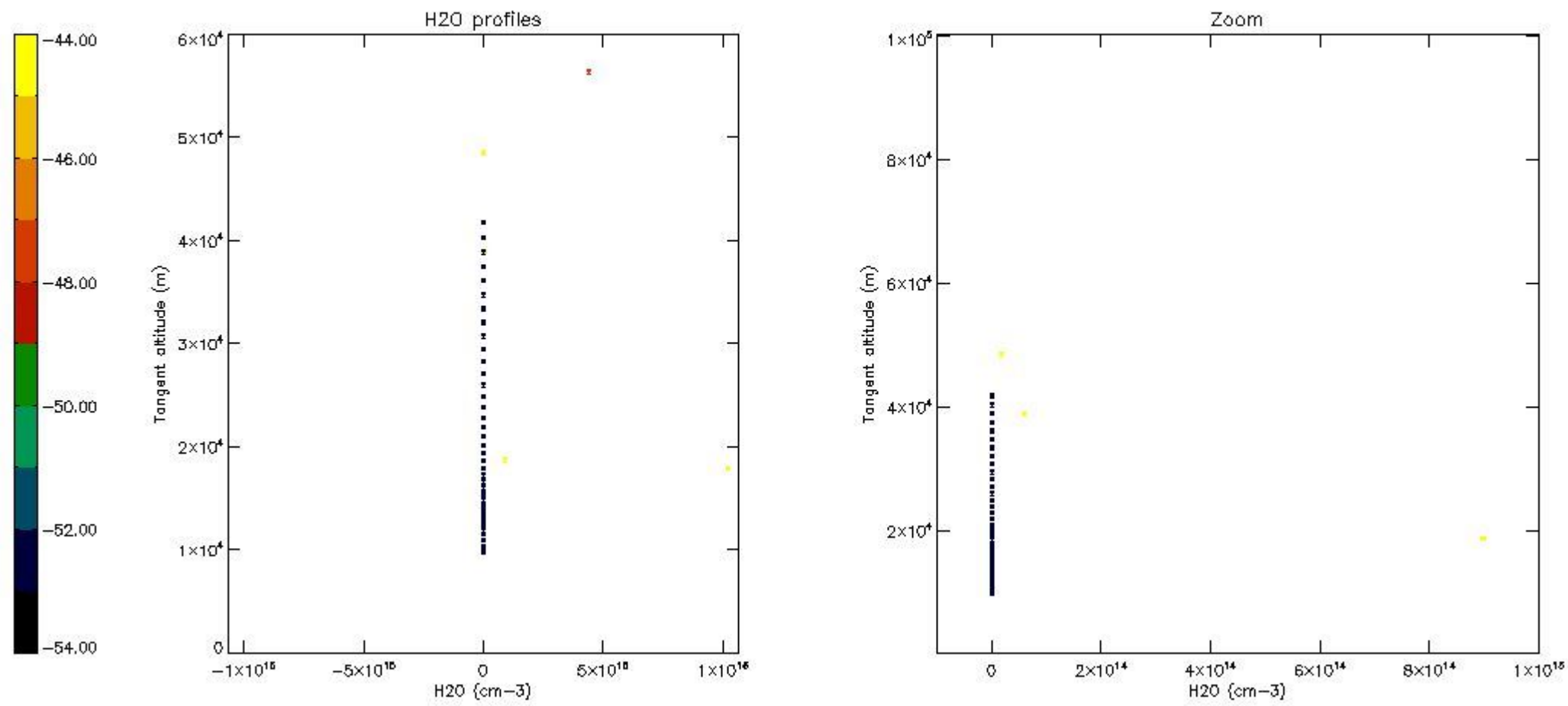
5.7 Plot NO3 profiles for all STD (dark without errors)

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	04-SEP-2007 00:14:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-SEP-2007 00:14:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-SEP-2007 00:14:14

GOMOS Level 2 Daily Report

SUMMARY

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[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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

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

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	23APR2013 03:29:11
Data source version	GOMOS/6.01
Start time of products	04-09-2007 (04SEP2007 00:00:00)
Stop time of products	05-09-2007 (05SEP2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	107
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

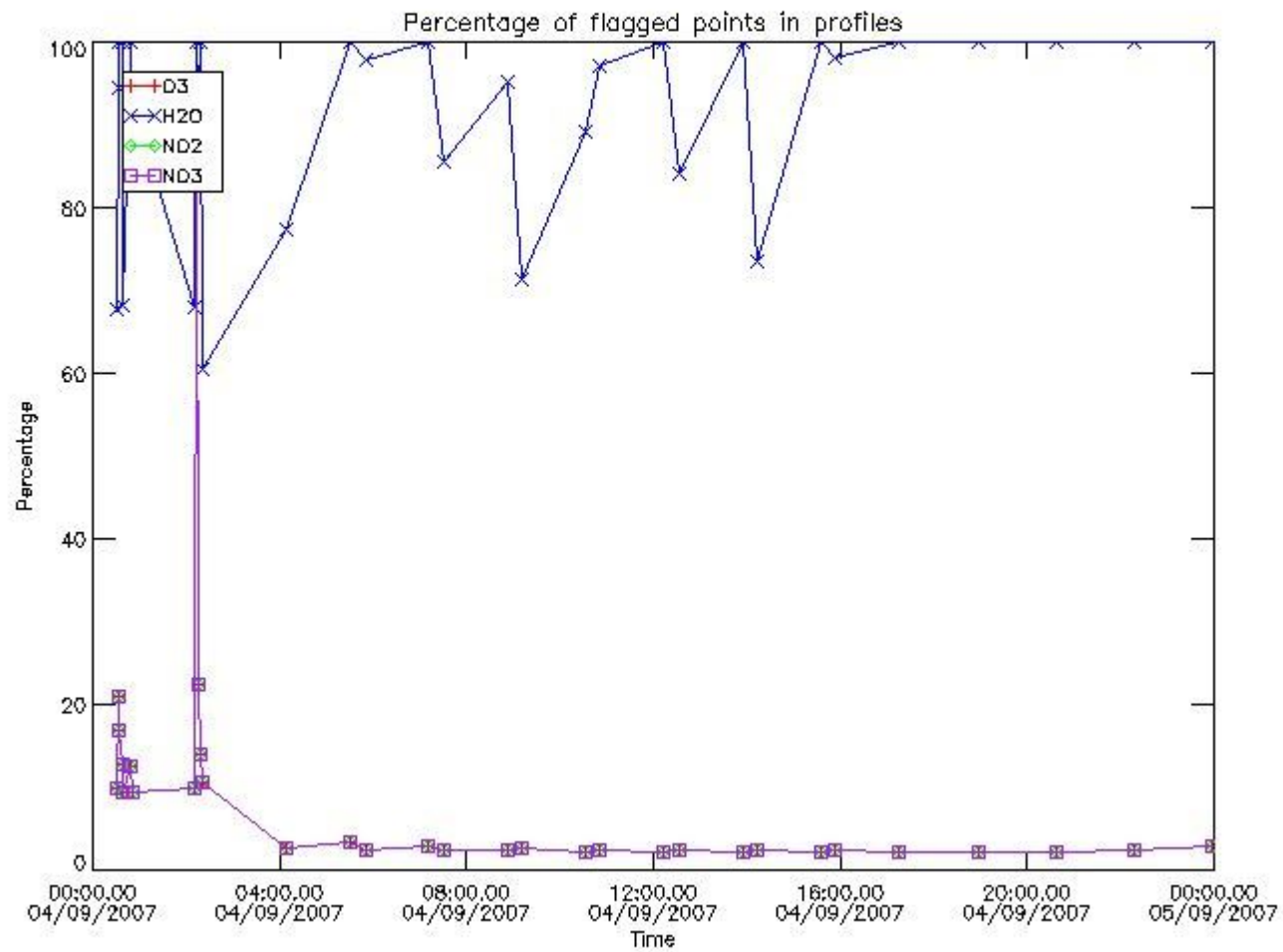
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070904_001414_000000422061_00202_28813_2988.N1	04-SEP-2007 00:14:14	Bright	41.500	24	66Alp Gem	1.5800	10200.	83	28813	No
2	GOM_NL__2PRFIN20070904_002203_000000422061_00202_28813_2989.N1	04-SEP-2007 00:22:03	Twilight	42.000	8	10Alp CMi	0.40000	6500.0	84	28813	No
3	GOM_NL__2PRFIN20070904_002954_000000522061_00202_28813_2990.N1	04-SEP-2007 00:29:54	Dark	51.500	1	9Alp CMa	-1.4400	11000.	103	28813	No
4	GOM_NL__2PRFIN20070904_003236_000000462061_00202_28813_2991.N1	04-SEP-2007 00:32:36	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	28813	No
5	GOM_NL__2PRFIN20070904_003406_000000432061_00202_28813_2992.N1	04-SEP-2007 00:34:06	Dark	42.500	117	Pi Pup	2.7060	3800.0	85	28813	No
6	GOM_NL__2PRFIN20070904_003723_000000482061_00202_28813_2993.N1	04-SEP-2007 00:37:23	Dark	47.500	108	Alp Col	2.6520	15200.	95	28813	No
7	GOM_NL__2PRFIN20070904_003918_000000542061_00202_28813_2994.N1	04-SEP-2007 00:39:18	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	28813	No
8	GOM_NL__2PRFIN20070904_004940_000000412061_00203_28814_2992.N1	04-SEP-2007 00:49:40	Dark	41.000	143	Alp Hyi	2.8570	7200.0	82	28814	No
9	GOM_NL__2PRFIN20070904_005059_000000542061_00203_28814_2993.N1	04-SEP-2007 00:50:59	Dark	54.000	9	Alp Eri	0.45300	24000.	108	28814	No
10	GOM_NL__2PRFIN20070904_005815_000000502061_00203_28814_2994.N1	04-SEP-2007 00:58:15	Straylight	49.500	63	Bet Gru	2.1500	2800.0	99	28814	No
11	GOM_NL__2PRFIN20070904_010252_000000452061_00203_28814_2995.N1	04-SEP-2007 01:02:52	Straylight	44.500	18	24Alp PsA	1.1660	9700.0	89	28814	No
12	GOM_NL__2PRFIN20070904_010737_000000462061_00203_28814_2996.N1	04-SEP-2007 01:07:37	Bright	45.500	142	49Del Cap	2.8500	8900.0	91	28814	No
13	GOM_NL__2PRFIN20070904_011044_000000382061_00203_28814_2997.N1	04-SEP-2007 01:10:44	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	28814	No
14	GOM_NL__2PRFIN20070904_011208_000000402061_00203_28814_2998.N1	04-SEP-2007 01:12:08	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	28814	No
15	GOM_NL__2PRFIN20070904_011507_000000382061_00203_28814_2999.N1	04-SEP-2007 01:15:07	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	28814	No
16	GOM_NL__2PRFIN20070904_013006_000000382061_00203_28814_3000.N1	04-SEP-2007 01:30:06	Bright	37.500	89	5Alp Cep	2.4510	8000.0	75	28814	No
17	GOM_NL__2PRFIN20070904_013747_000000342061_00203_28814_3001.N1	04-SEP-2007 01:37:47	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	28814	No
18	GOM_NL__2PRFIN20070904_015450_000000382061_00203_28814_3002.N1	04-SEP-2007 01:54:50	Bright	38.000	24	66Alp Gem	1.5800	10200.	76	28814	No
19	GOM_NL__2PRFIN20070904_020240_000000412061_00203_28814_3003.N1	04-SEP-2007 02:02:40	Twilight	41.000	8	10Alp CMi	0.40000	6500.0	82	28814	No
20	GOM_NL__2PRFIN20070904_021031_000000522061_00203_28814_3004.N1	04-SEP-2007 02:10:31	Dark	52.000	1	9Alp CMa	-1.4400	11000.	104	28814	No
21	GOM_NL__2PRFIN20070904_021312_000000442061_00203_28814_3005.N1	04-SEP-2007 02:13:12	Dark	44.000	23	21Eps CMa	1.5020	26000.	88	28814	No
22	GOM_NL__2PRFIN20070904_021442_000000432061_00203_28814_3006.N1	04-SEP-2007 02:14:42	Dark	43.000	117	Pi Pup	2.7060	3800.0	86	28814	No
23	GOM_NL__2PRFIN20070904_021800_000000442061_00203_28814_3007.N1	04-SEP-2007 02:18:00	Dark	44.000	108	Alp Col	2.6520	15200.	88	28814	No
24	GOM_NL__2PRFIN20070904_021954_000000492061_00203_28814_3008.N1	04-SEP-2007 02:19:54	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	28814	No
25	GOM_NL__2PRFIN20070904_040919_000002252061_00205_28816_3021.N1	04-SEP-2007 04:09:19	Dark	225.00	165	34Gam Eri	2.9500	3200.0	450	28816	No
26	GOM_NL__2PRFIN20070904_045429_000000892061_00205_28816_3022.N1	04-SEP-2007 04:54:29	Bright	88.500	53	43Bet And	2.0480	3300.0	177	28816	No
27	GOM_NL__2PRFIN20070904_050040_000000862061_00205_28816_3023.N1	04-SEP-2007 05:00:40	Bright	85.500	73	57Gam1And	2.2600	13100.	171	28816	No
28	GOM_NL__2PRFIN20070904_050427_000001732061_00205_28816_3024.N1	04-SEP-2007 05:04:27	Bright	172.50	173	4Bet Tri	3.0040	8900.0	345	28816	No
29	GOM_NL__2PRFIN20070904_051139_000000832061_00205_28816_3025.N1	04-SEP-2007 05:11:39	Bright	83.000	149	45Eps Per	2.8880	30000.	166	28816	No
30	GOM_NL__2PRFIN20070904_051856_000002552061_00205_28816_3026.N1	04-SEP-2007 05:18:56	Straylight	254.50	150	44Zet Per	2.8900	28000.	509	28816	No
31	GOM_NL__2PRFIN20070904_053101_000001492061_00205_28816_3027.N1	04-SEP-2007 05:31:01	Dark	148.50	13	87Alp Tau	0.86700	3800.0	297	28816	No
32	GOM_NL__2PRFIN20070904_055000_000002252061_00206_28817_3033.N1	04-SEP-2007 05:50:00	Dark	225.00	165	34Gam Eri	2.9500	3200.0	450	28817	No
33	GOM_NL__2PRFIN20070904_063503_000000762061_00206_28817_3034.N1	04-SEP-2007 06:35:03	Bright	76.000	53	43Bet And	2.0480	3300.0	152	28817	No
34	GOM_NL__2PRFIN20070904_064114_000000882061_00206_28817_3035.N1	04-SEP-2007 06:41:14	Bright	88.000	73	57Gam1And	2.2600	13100.	176	28817	No
35	GOM_NL__2PRFIN20070904_064459_000001712061_00206_28817_3036.N1	04-SEP-2007 06:44:59	Bright	171.00	173	4Bet Tri	3.0040	8900.0	342	28817	No
36	GOM_NL__2PRFIN20070904_065215_000000852061_00206_28817_3037.N1	04-SEP-2007 06:52:15	Bright	84.500	149	45Eps Per	2.8880	30000.	169	28817	No
37	GOM_NL__2PRFIN20070904_065933_000002552061_00206_28817_3038.N1	04-SEP-2007 06:59:33	Straylight	255.00	150	44Zet Per	2.8900	28000.	510	28817	No
38	GOM_NL__2PRFIN20070904_071142_000001792061_00206_28817_3039.N1	04-SEP-2007 07:11:42	Dark	178.50	13	87Alp Tau	0.86700	3800.0	357	28817	No
39	GOM_NL__2PRFIN20070904_073041_000002252061_00207_28818_3046.N1	04-SEP-2007 07:30:41	Dark	225.00	165	34Gam Eri	2.9500	3200.0	450	28818	No
40	GOM_NL__2PRFIN20070904_081537_000000892061_00207_28818_3047.N1	04-SEP-2007 08:15:37	Bright	88.500	53	43Bet And	2.0480	3300.0	177	28818	No
41	GOM_NL__2PRFIN20070904_082148_000000872061_00207_28818_3048.N1	04-SEP-2007 08:21:48	Bright	87.000	73	57Gam1And	2.2600	13100.	174	28818	No
42	GOM_NL__2PRFIN20070904_082532_000001692061_00207_28818_3049.N1	04-SEP-2007 08:25:32	Bright	169.00	173	4Bet Tri	3.0040	8900.0	338	28818	No

102	GOM_NL__2PRFIN20070904_232042_000000862061_00216_28827_3231.N1	04-SEP-2007 23:20:42	Bright	85.500	53	43Bet And	2.0480	3300.0	171	28827	No
103	GOM_NL__2PRFIN20070904_232655_000000842061_00216_28827_3232.N1	04-SEP-2007 23:26:55	Bright	84.000	73	57Gam1And	2.2600	13100.	168	28827	No
104	GOM_NL__2PRFIN20070904_233419_000001012061_00216_28827_3233.N1	04-SEP-2007 23:34:19	Bright	101.00	79	26Bet Per	2.3100	13100.	202	28827	No
105	GOM_NL__2PRFIN20070904_233807_000000862061_00216_28827_3234.N1	04-SEP-2007 23:38:07	Bright	86.000	149	45Eps Per	2.8880	30000.	172	28827	No
106	GOM_NL__2PRFIN20070904_234540_000002552061_00216_28827_3235.N1	04-SEP-2007 23:45:40	Straylight	254.50	150	44Zet Per	2.8900	28000.	509	28827	No
107	GOM_NL__2PRFIN20070904_235839_000001802061_00216_28827_3236.N1	04-SEP-2007 23:58:39	Dark	179.50	13	87Alp Tau	0.86700	3800.0	359	28827	No

3. Quality information per product

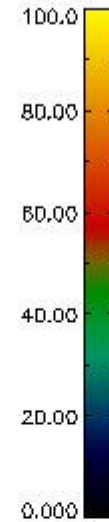
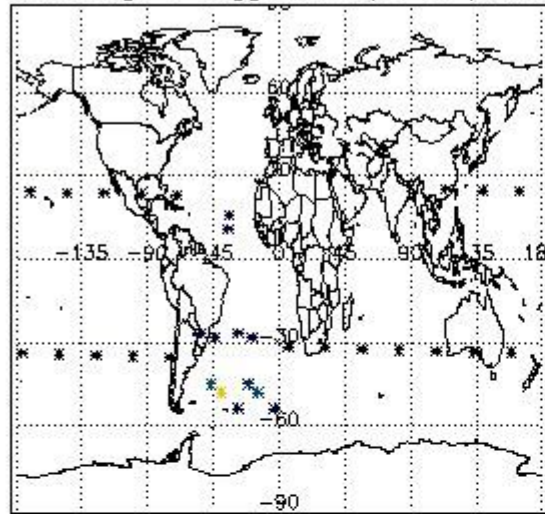
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

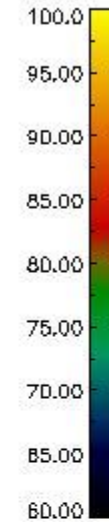
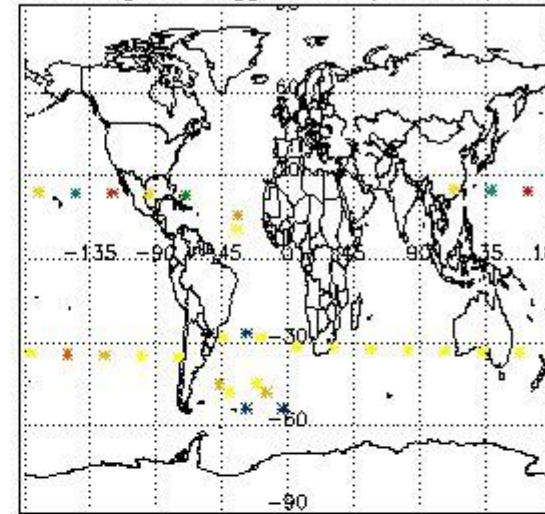


3.2 Plot quality information per product (world map)

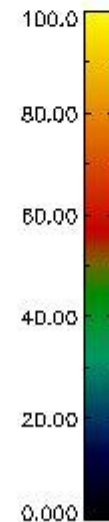
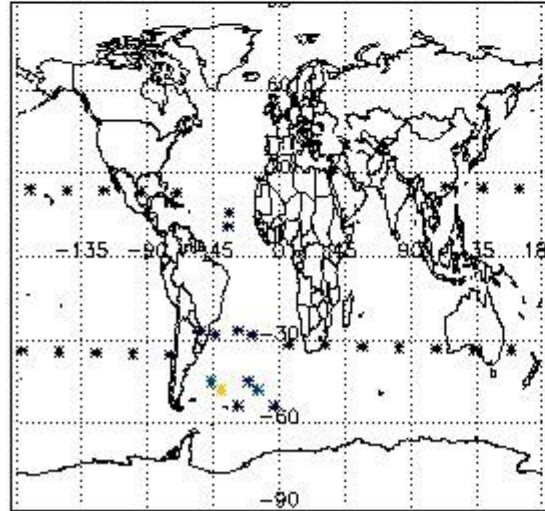
Percentage of flagged data per O3 profile



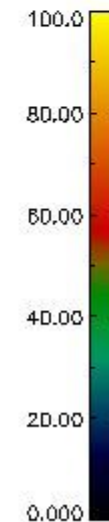
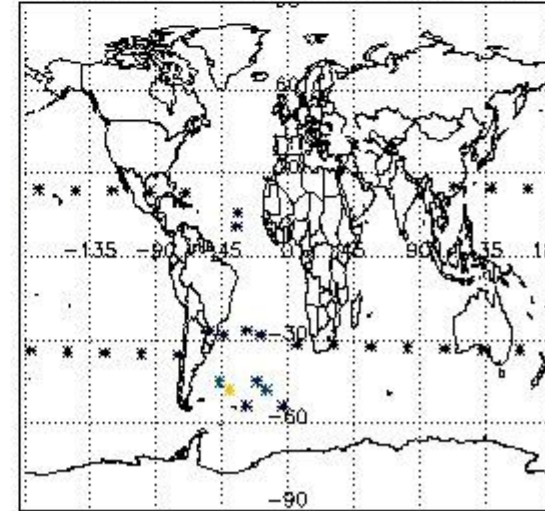
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

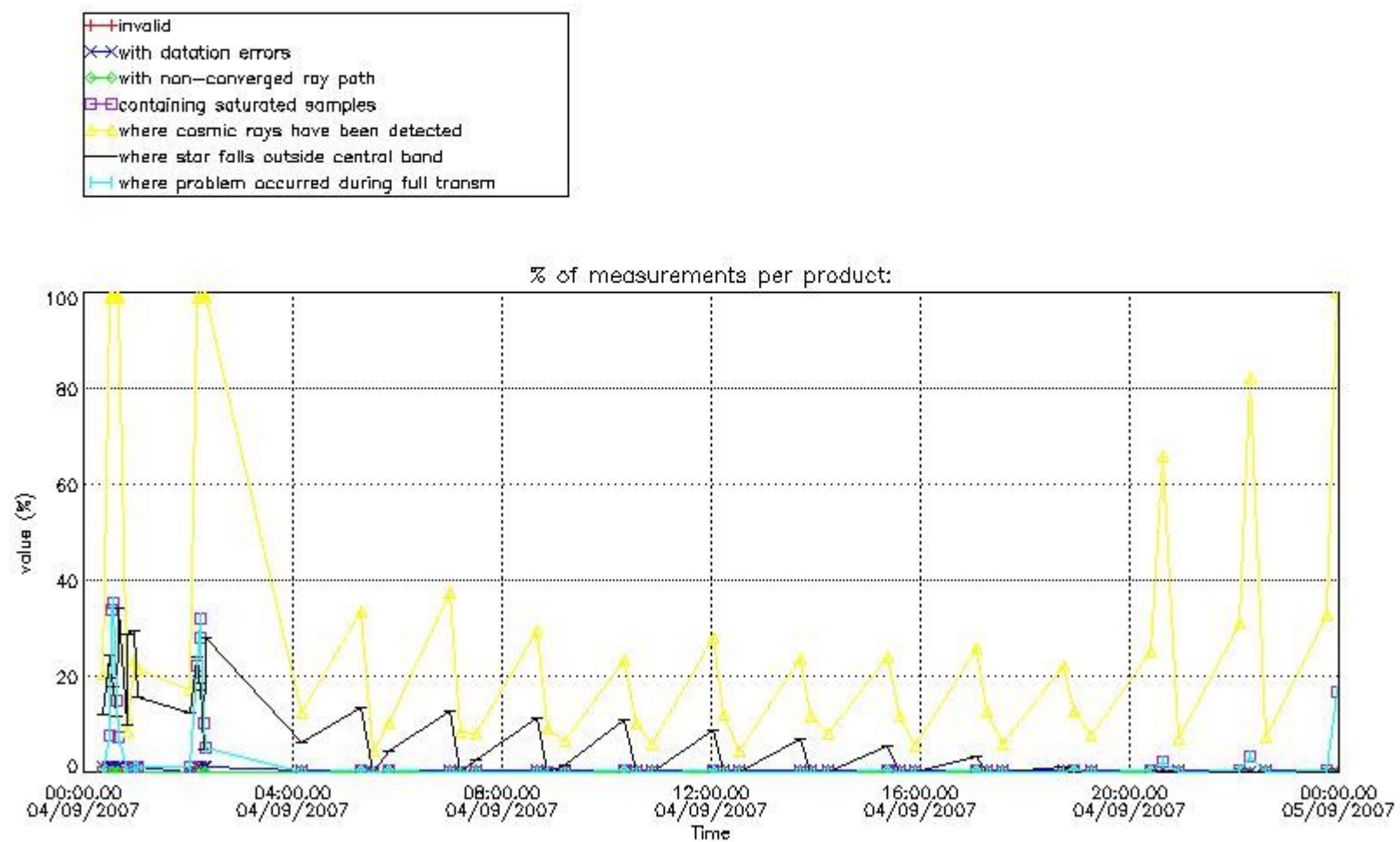


4. Level 1 quality information per product

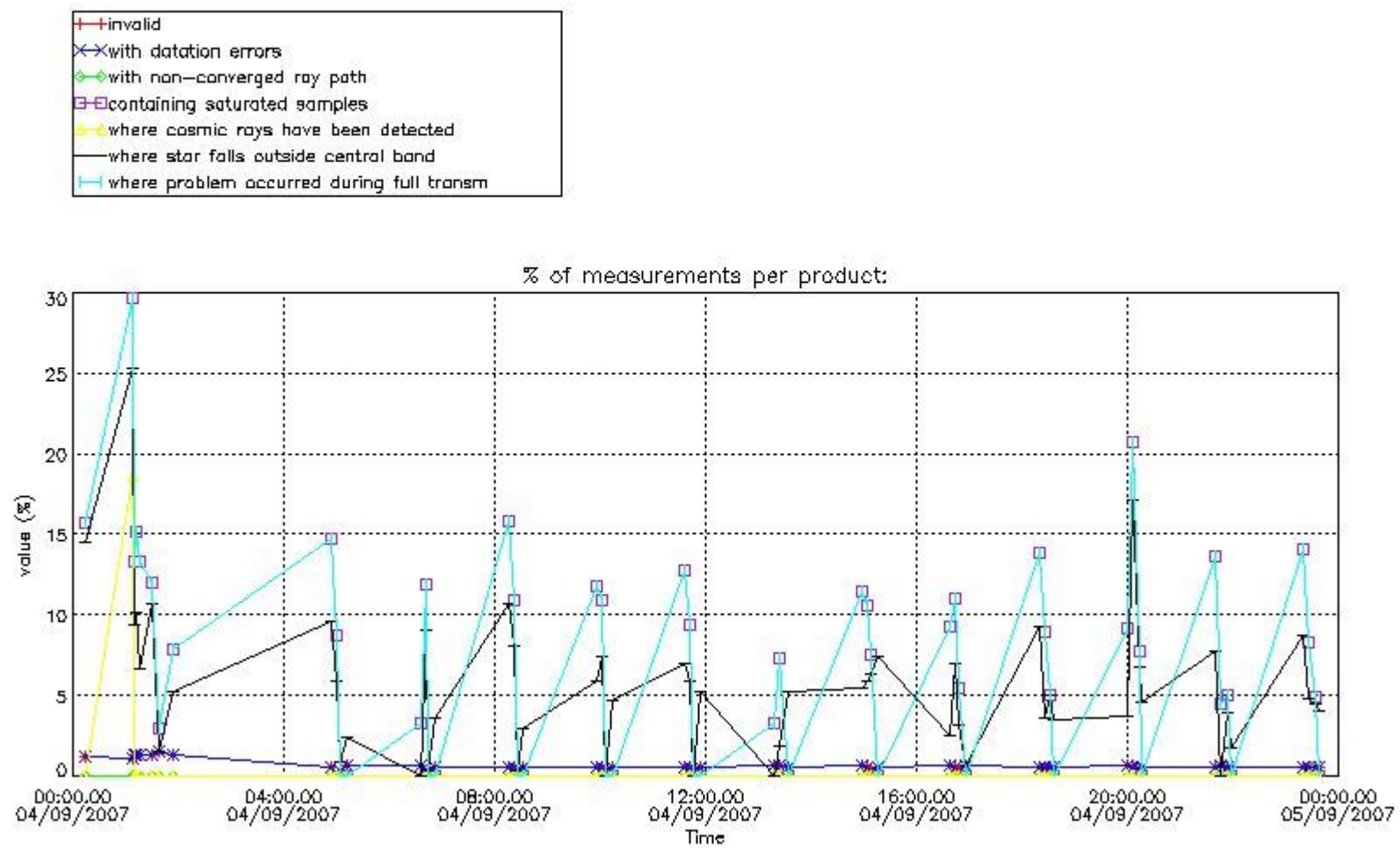
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



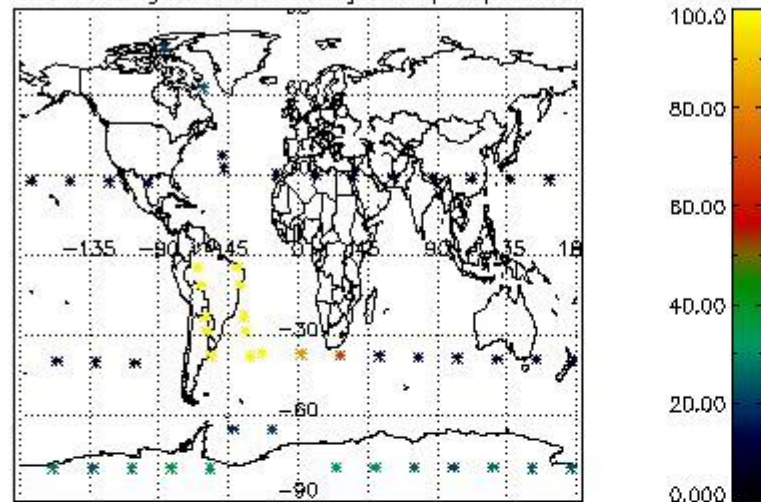
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



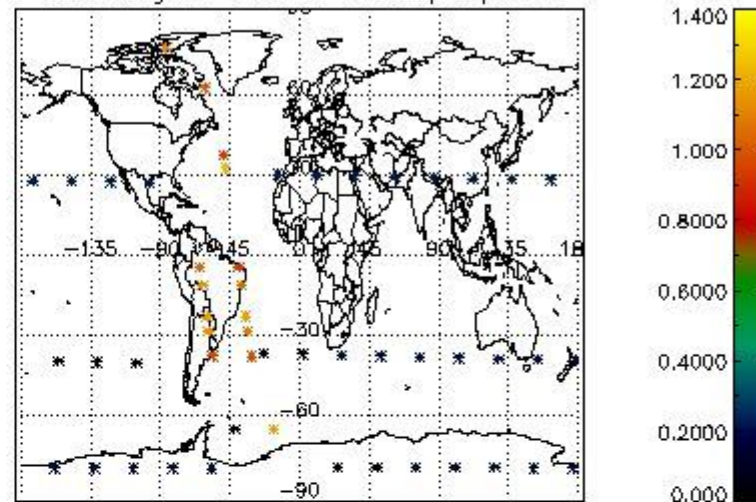
4.2 Plot quality information per product coming from level 1b processing (world map)

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

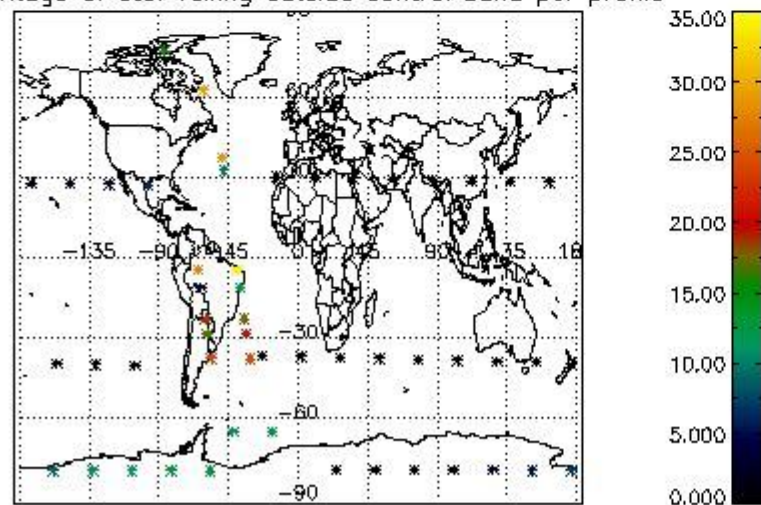
Percentage of cosmic ray hits per profile



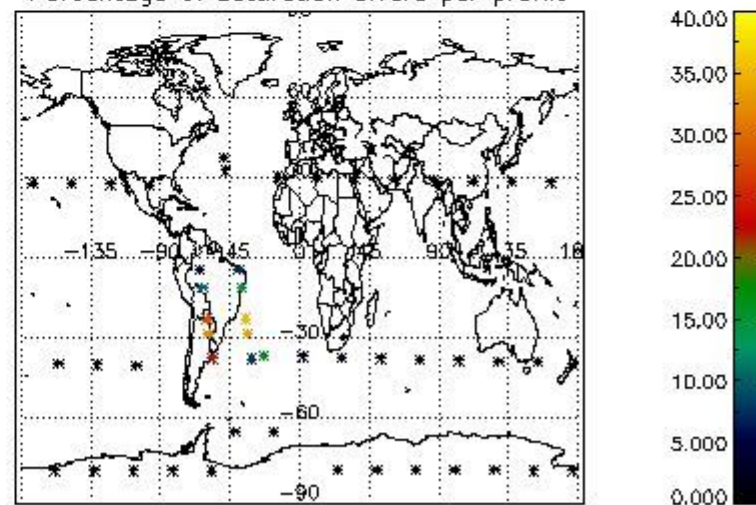
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

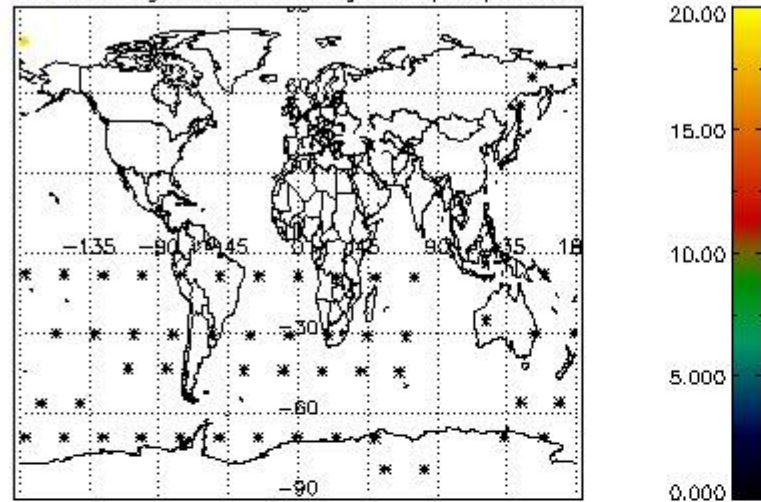


Percentage of saturation errors per profile

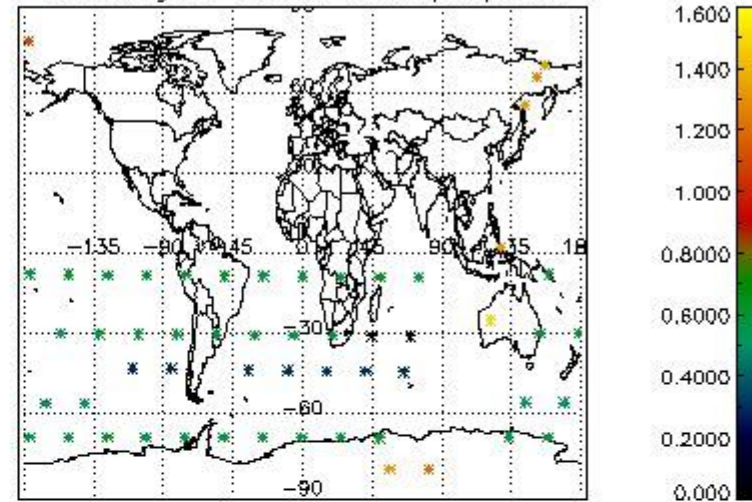


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

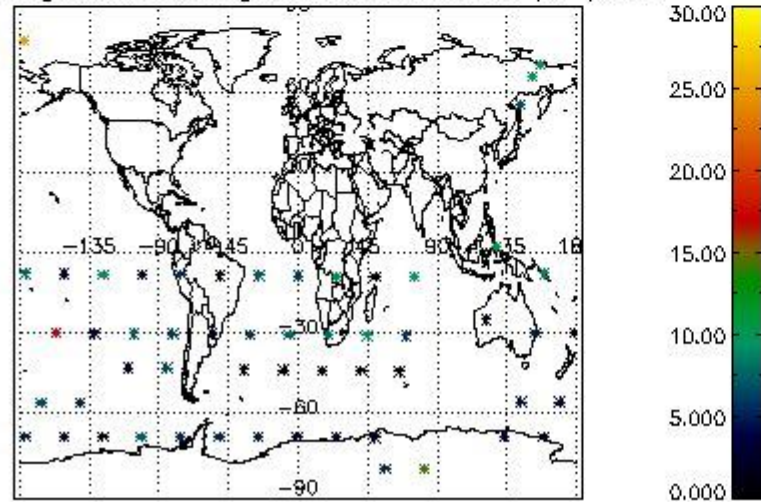
Percentage of cosmic ray hits per profile



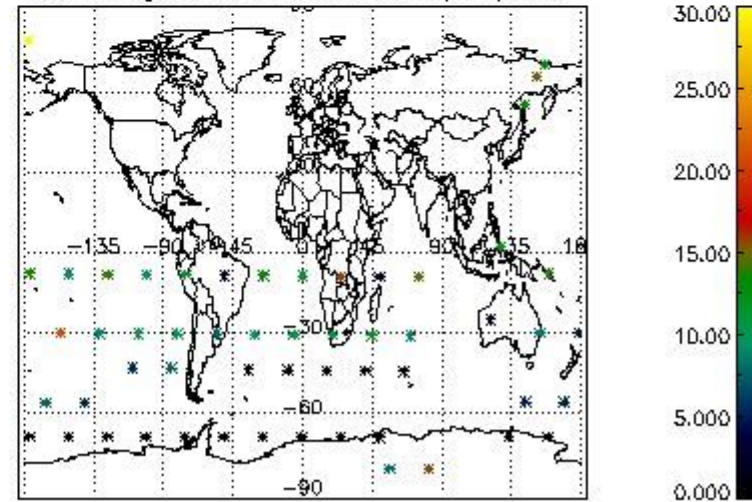
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

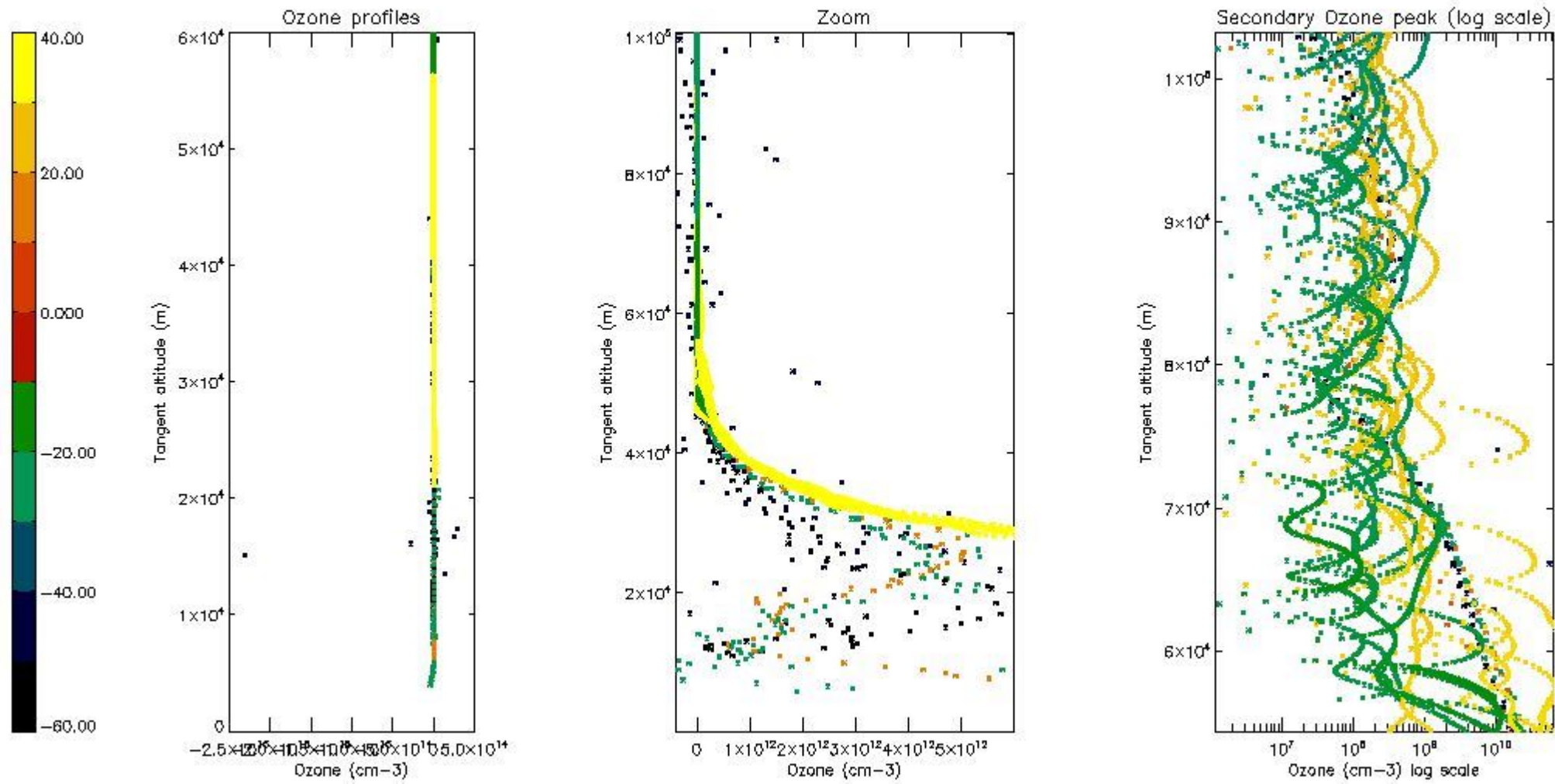
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	8

STD < 10	6
STD < 5	4

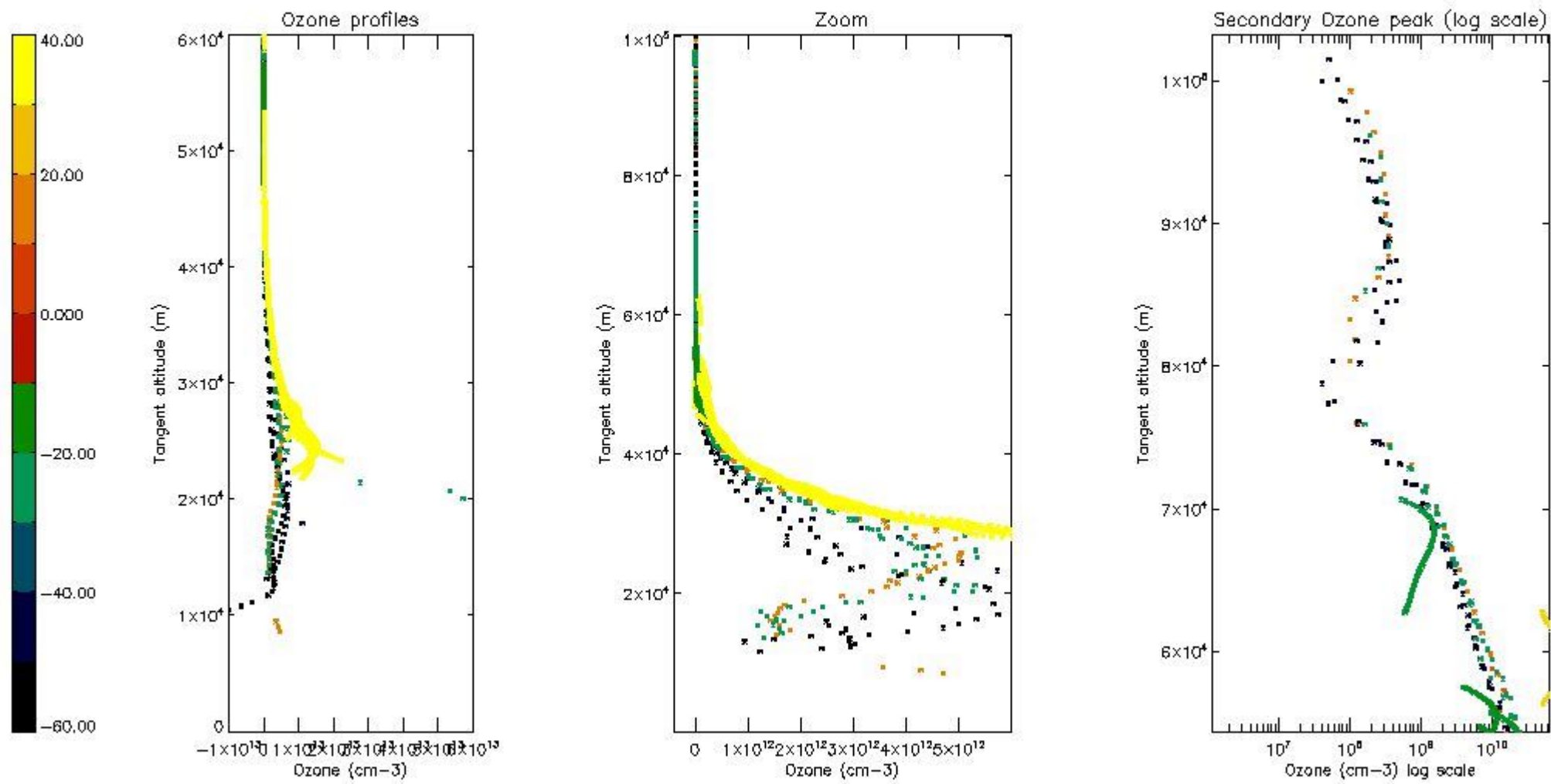
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



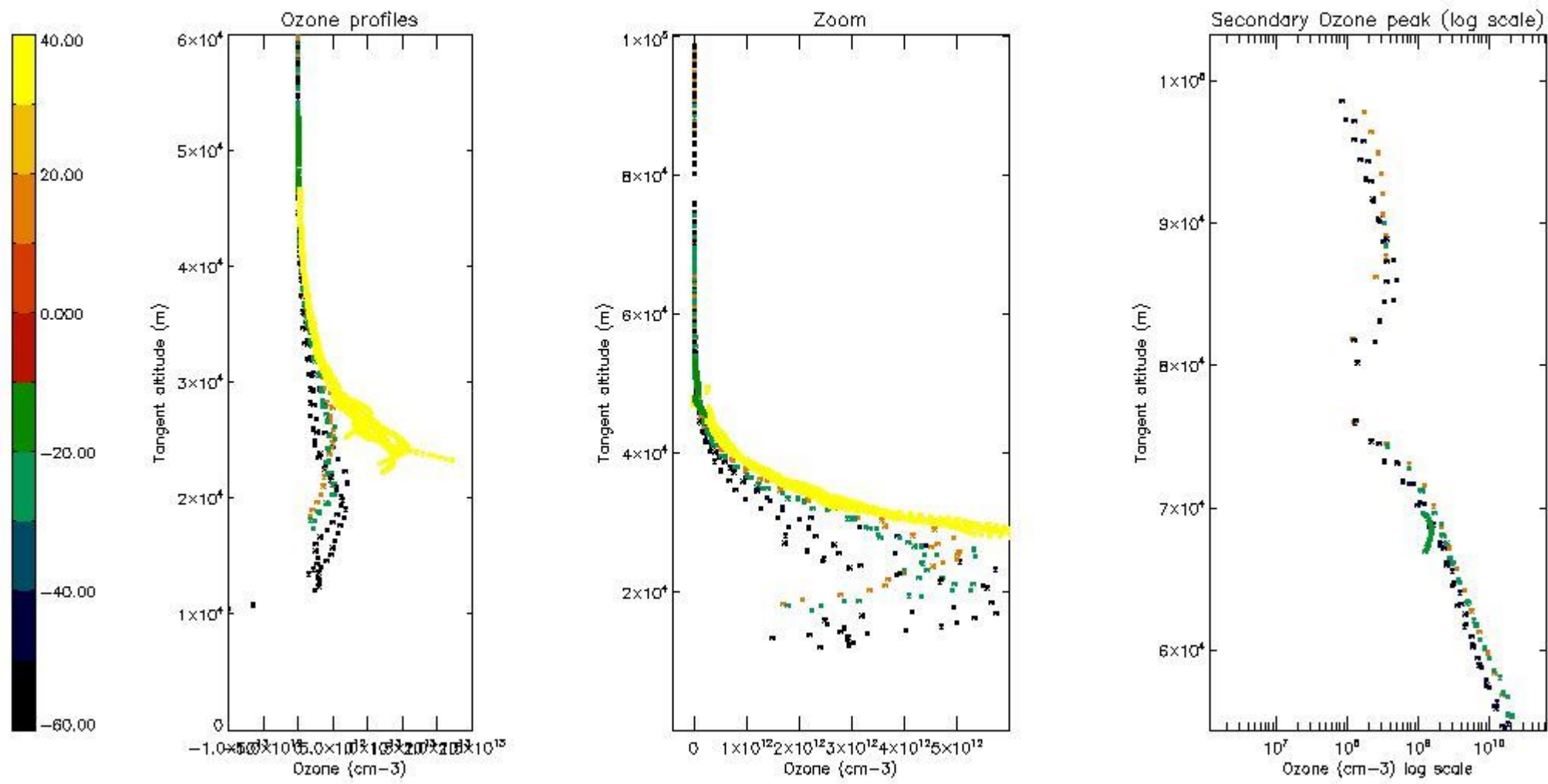
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



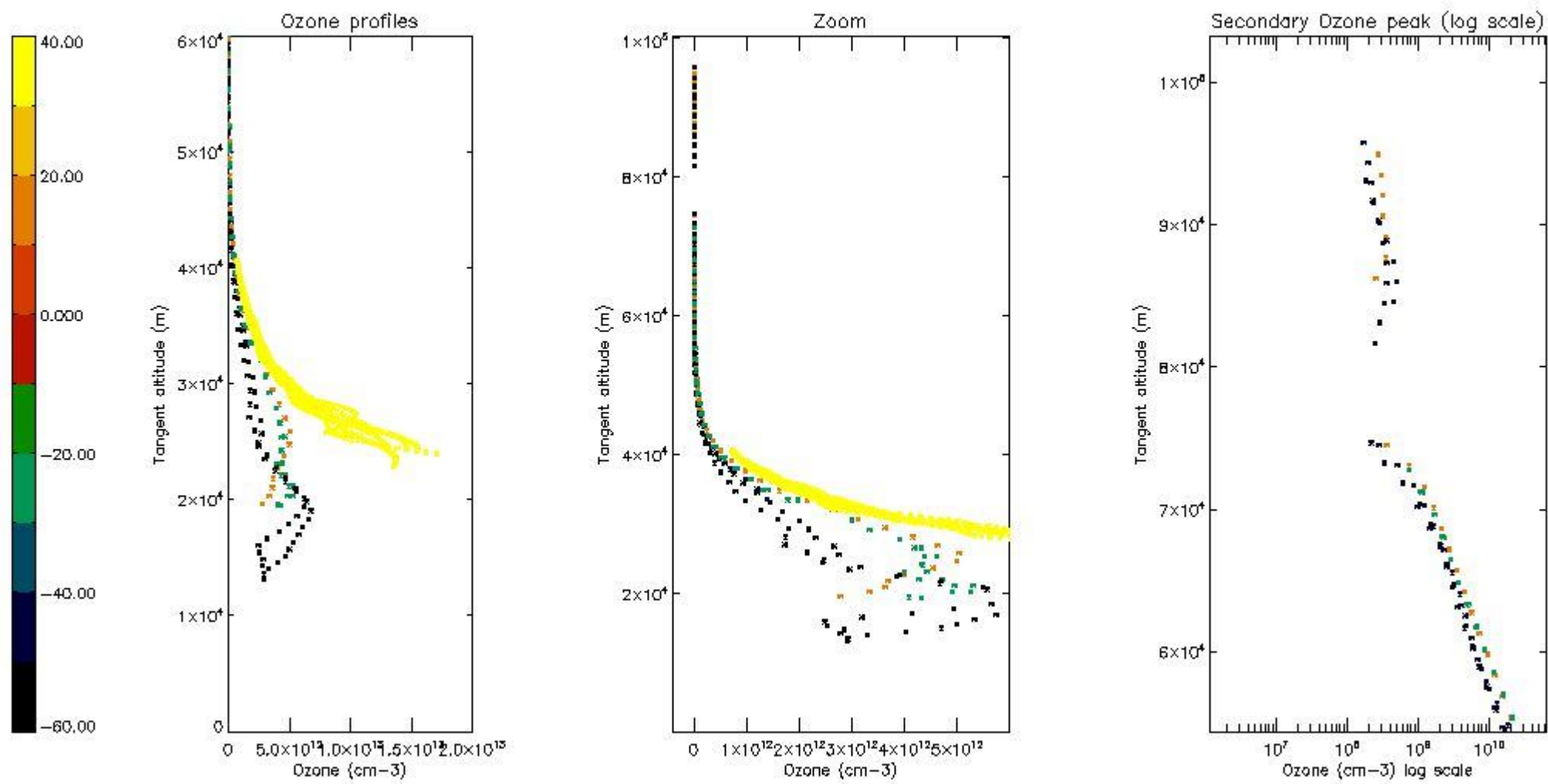
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



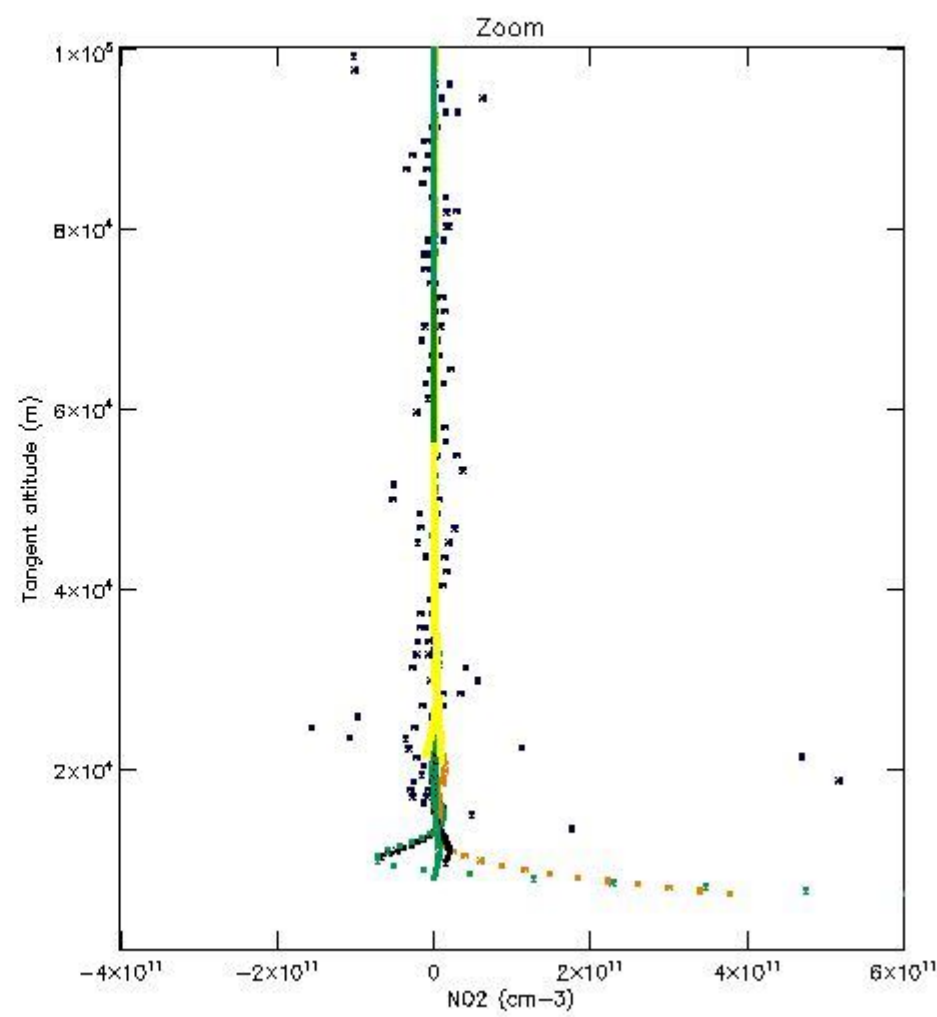
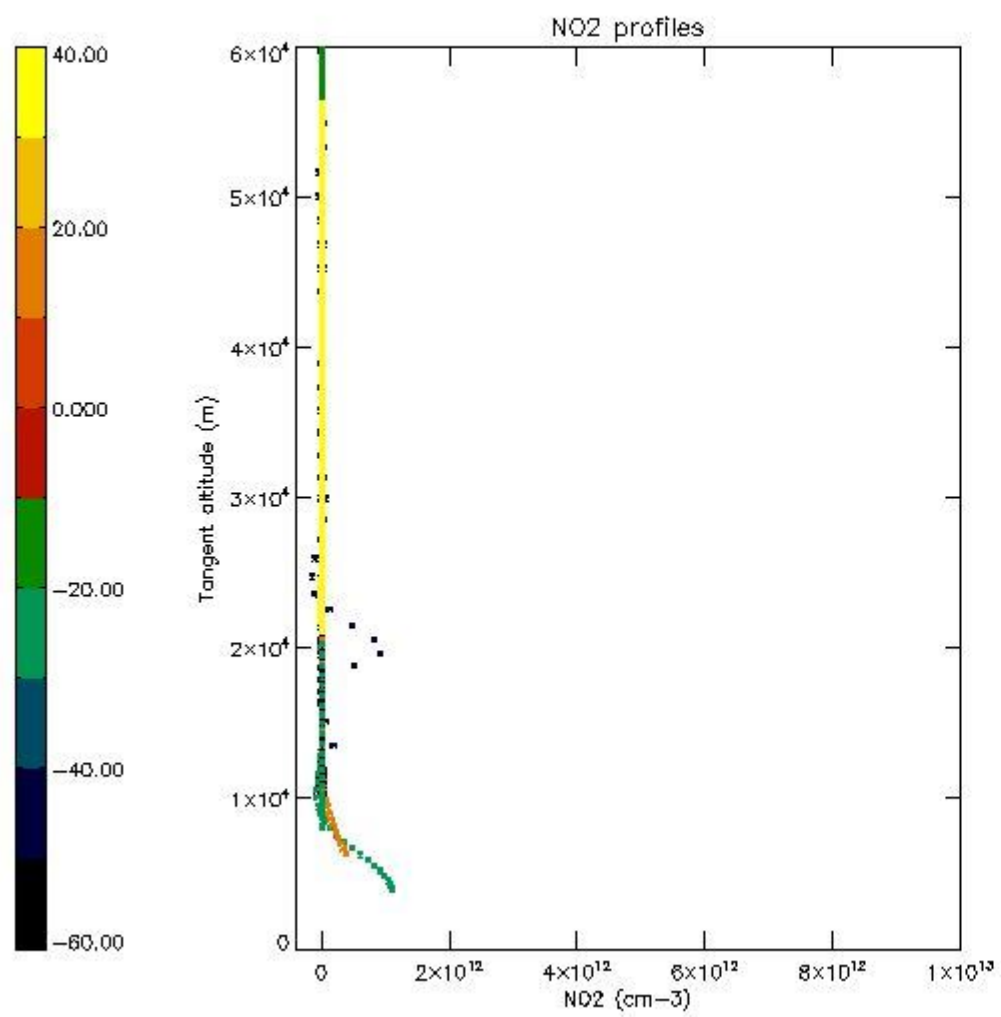
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



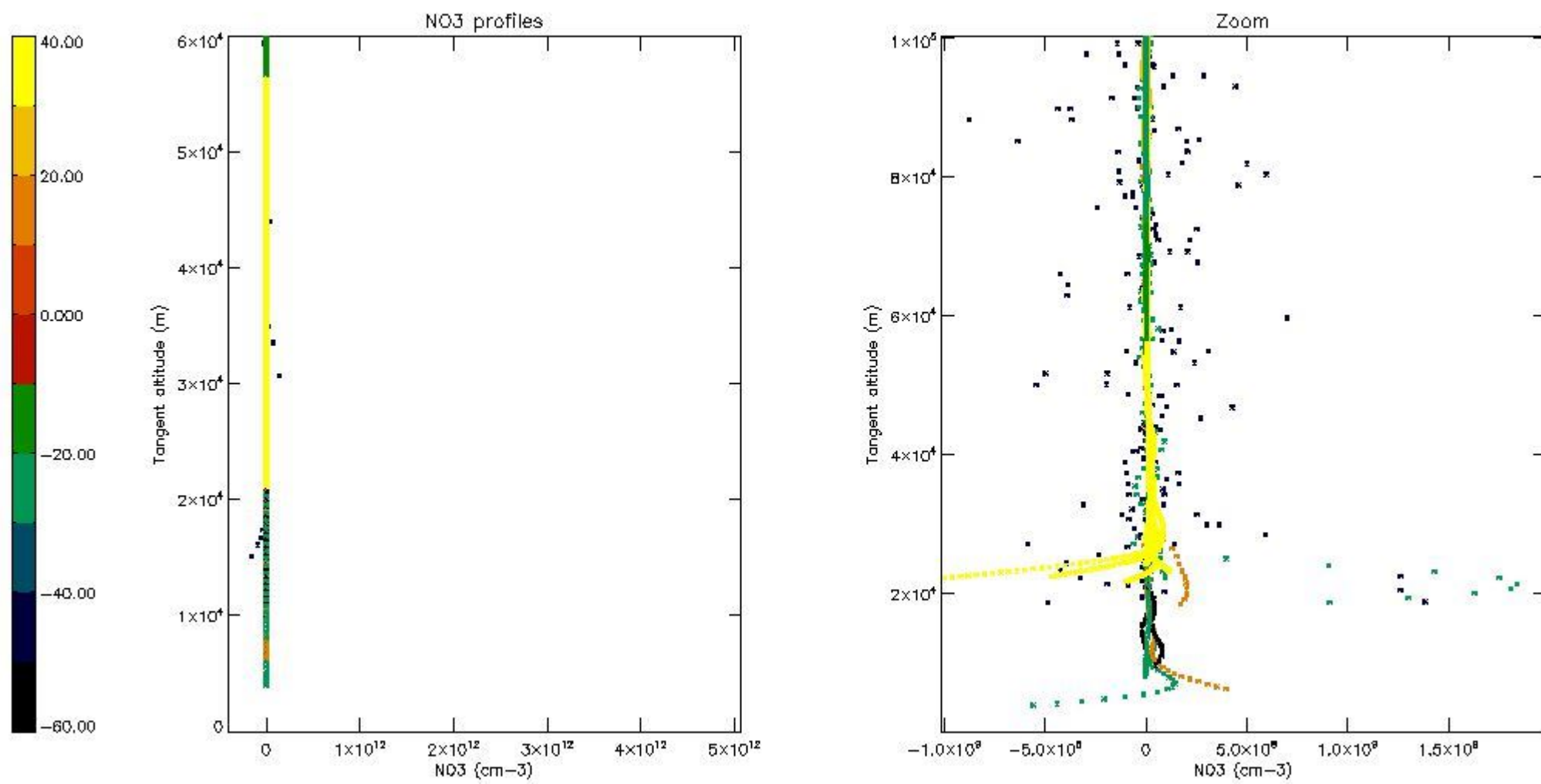
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



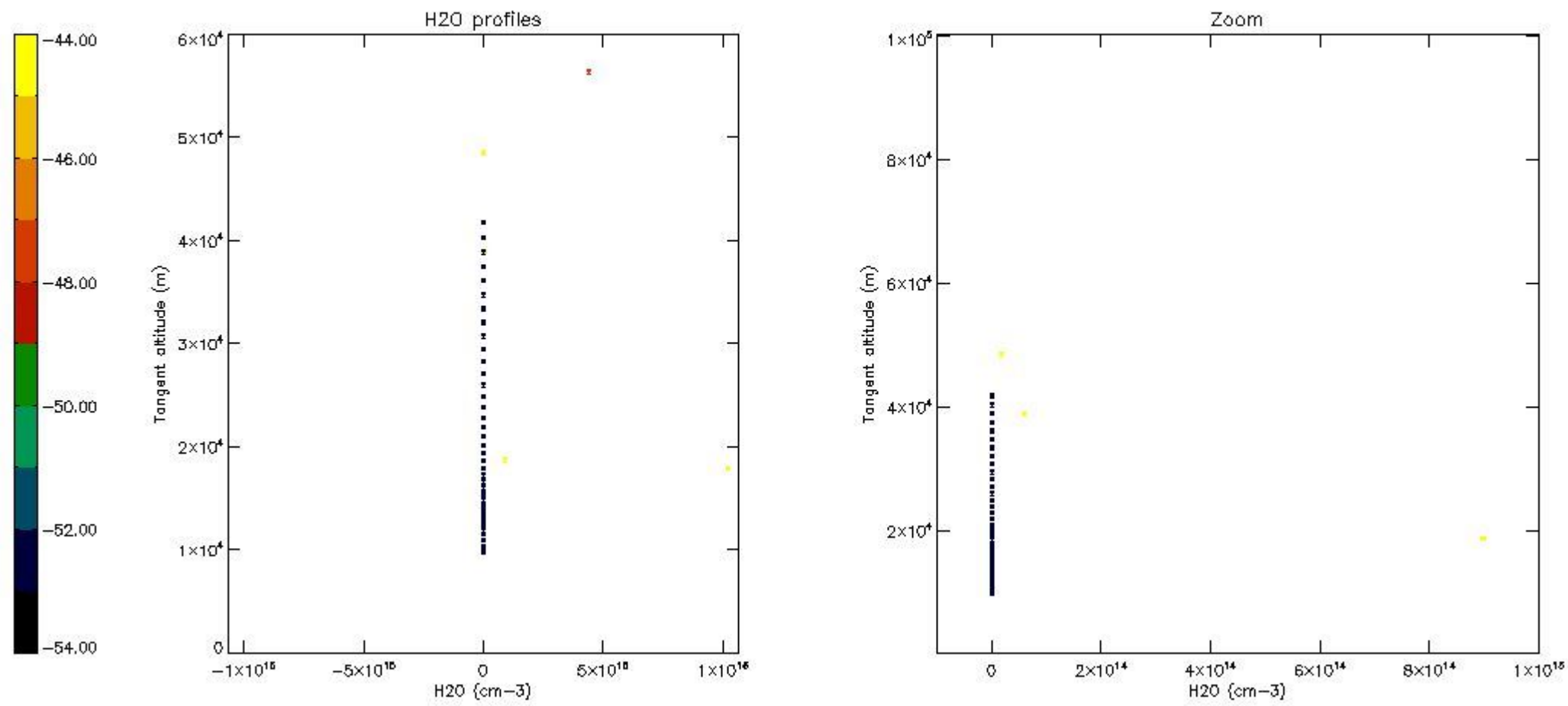
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

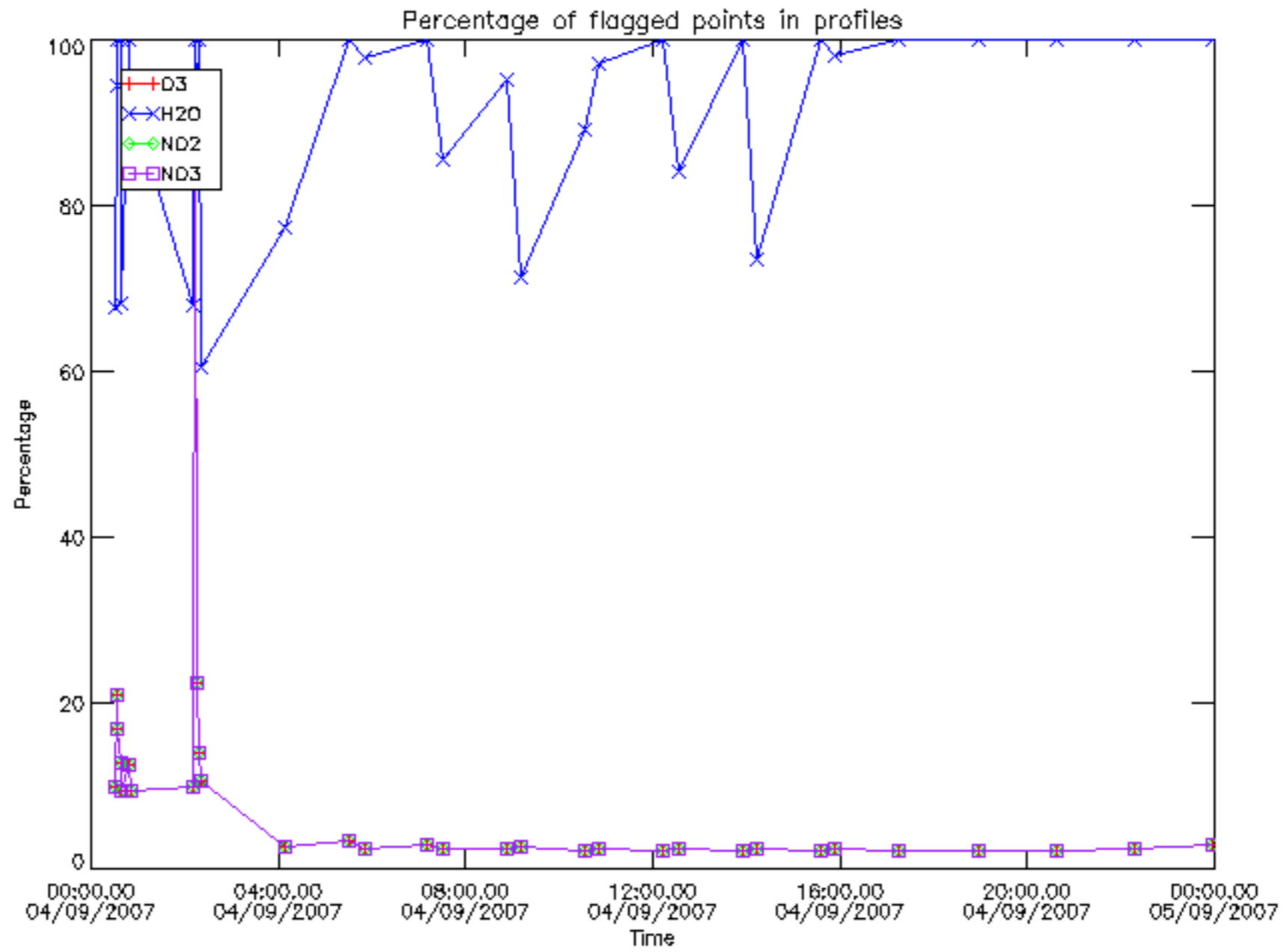
The colorbar represents the latitude.



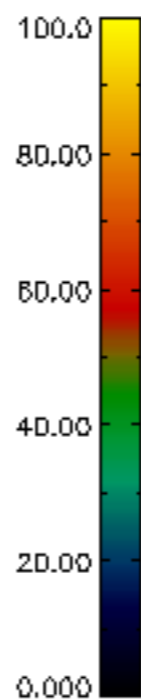
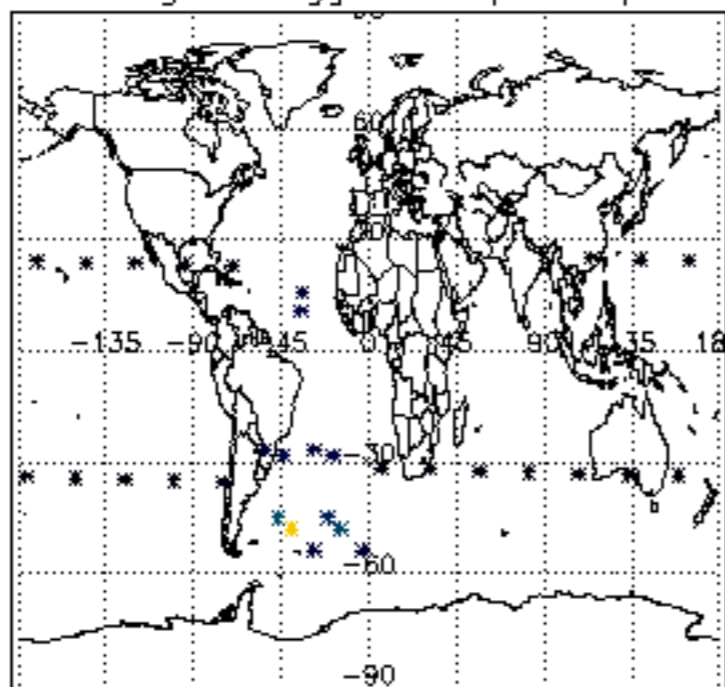
6. Auxiliary Data Files used for the production reported in section 2

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.

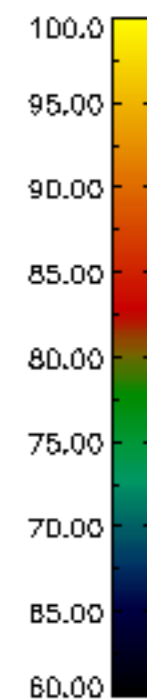
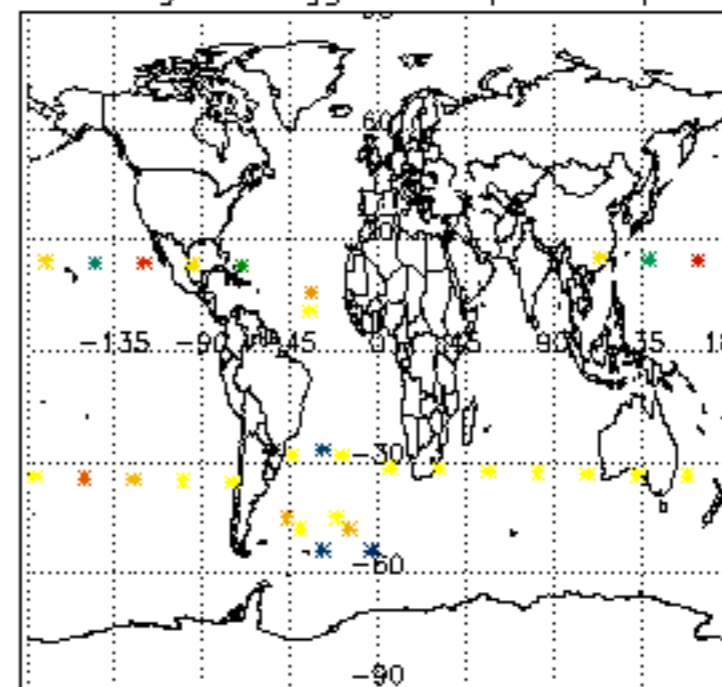
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	04-SEP-2007 00:14:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-SEP-2007 00:14:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-SEP-2007 00:14:14



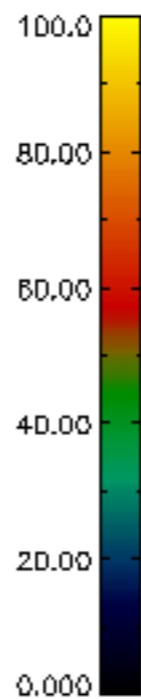
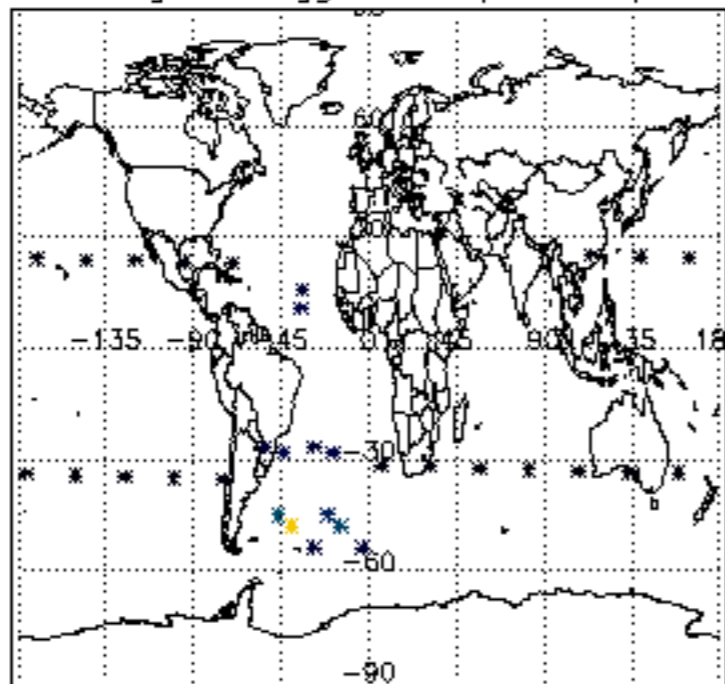
Percentage of flagged data per D3 profile



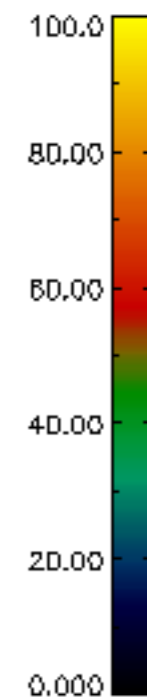
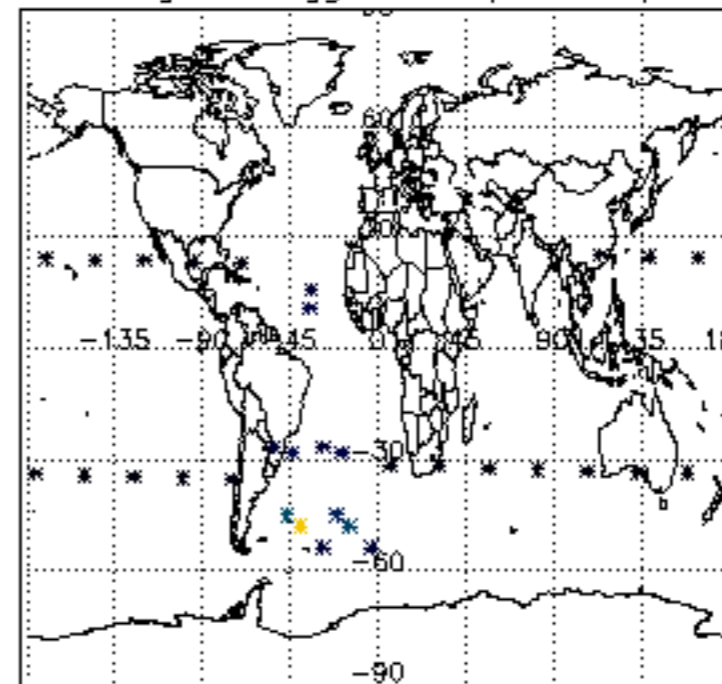
Percentage of flagged data per H2O profile

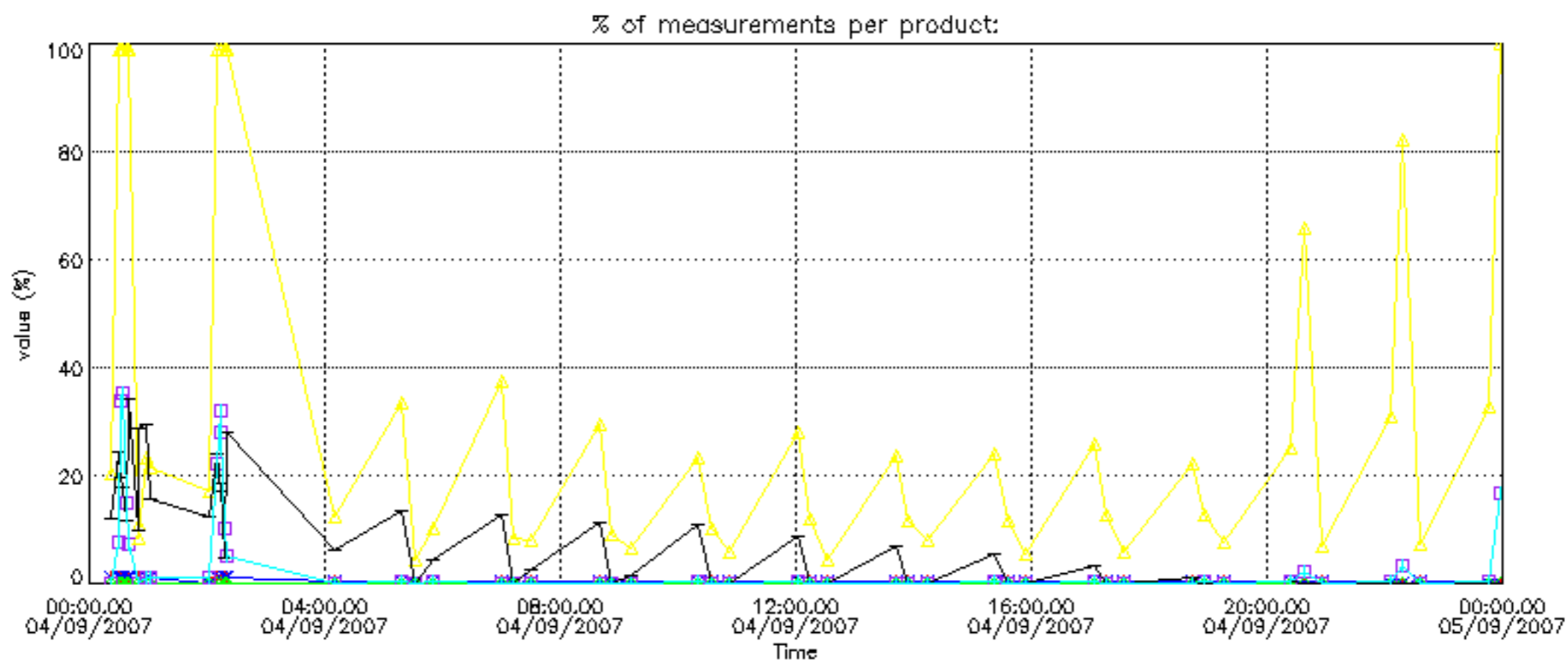


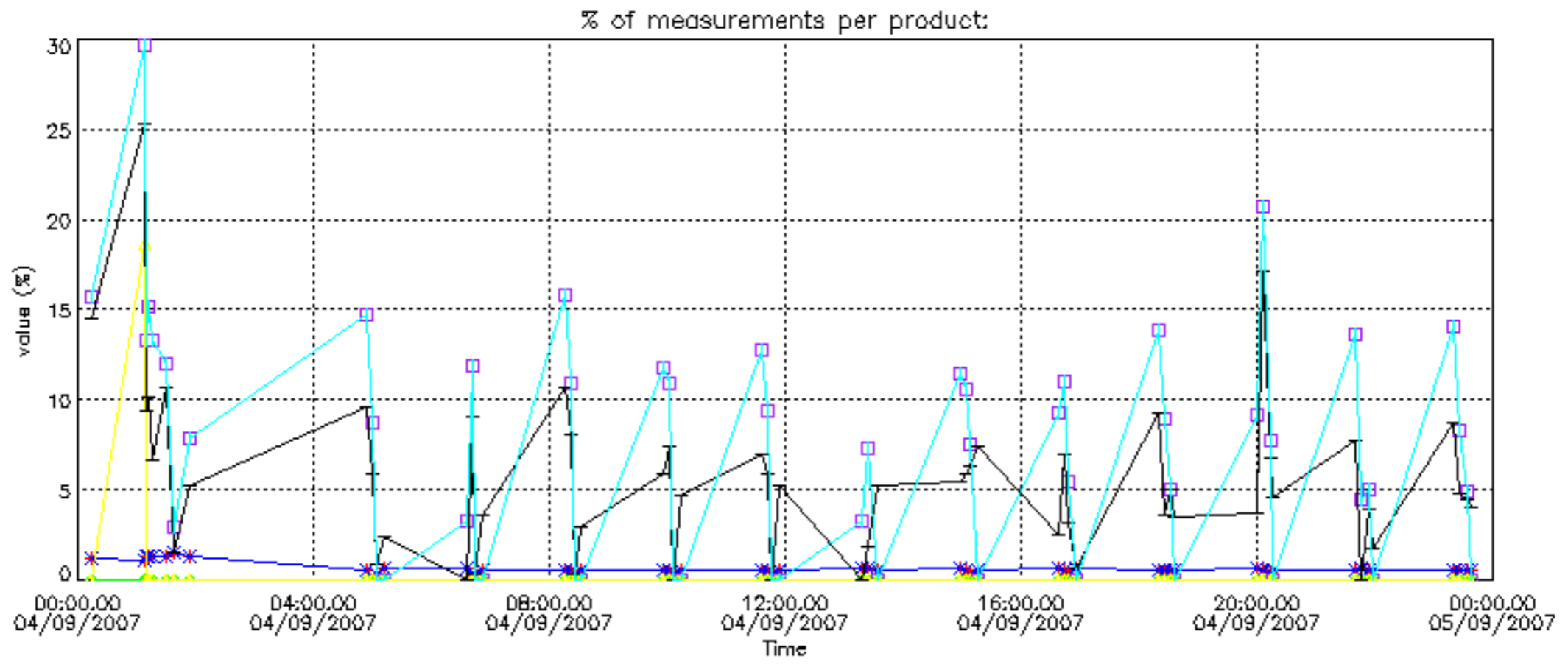
Percentage of flagged data per NO2 profile



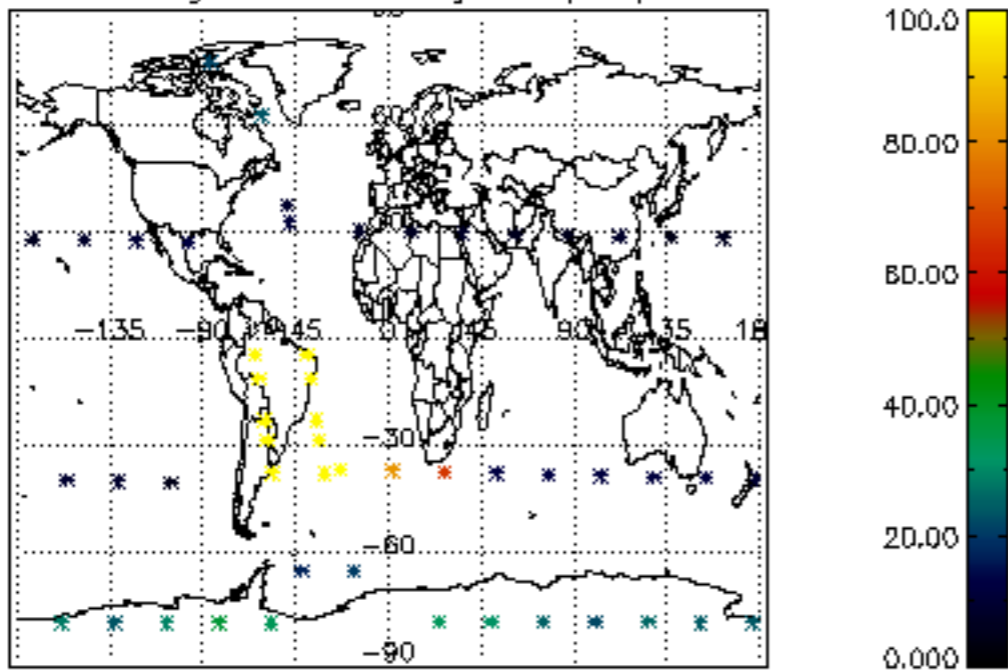
Percentage of flagged data per NO3 profile



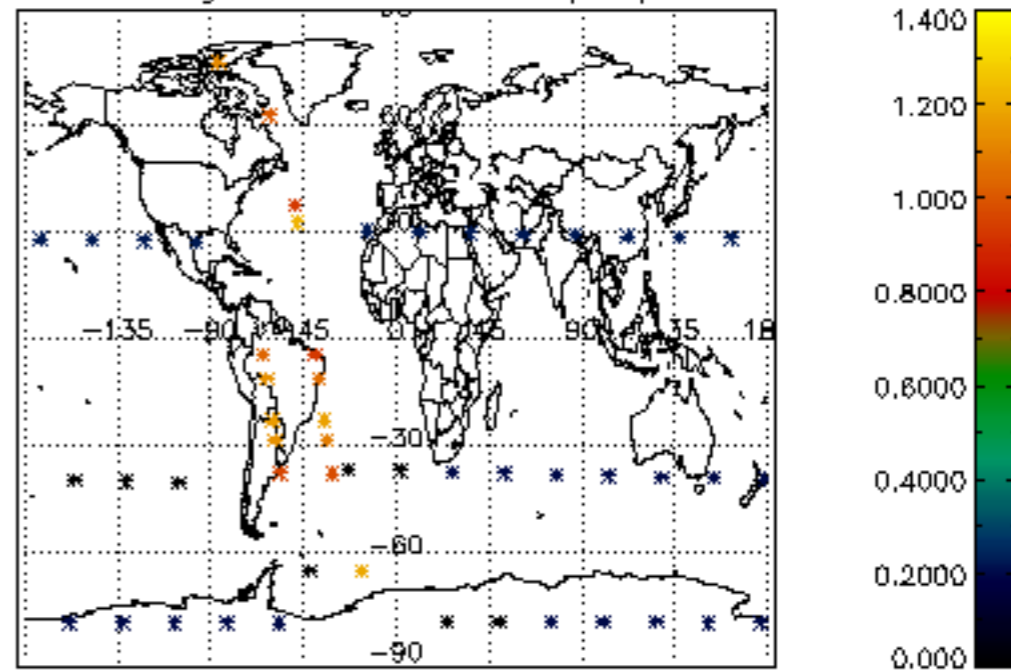




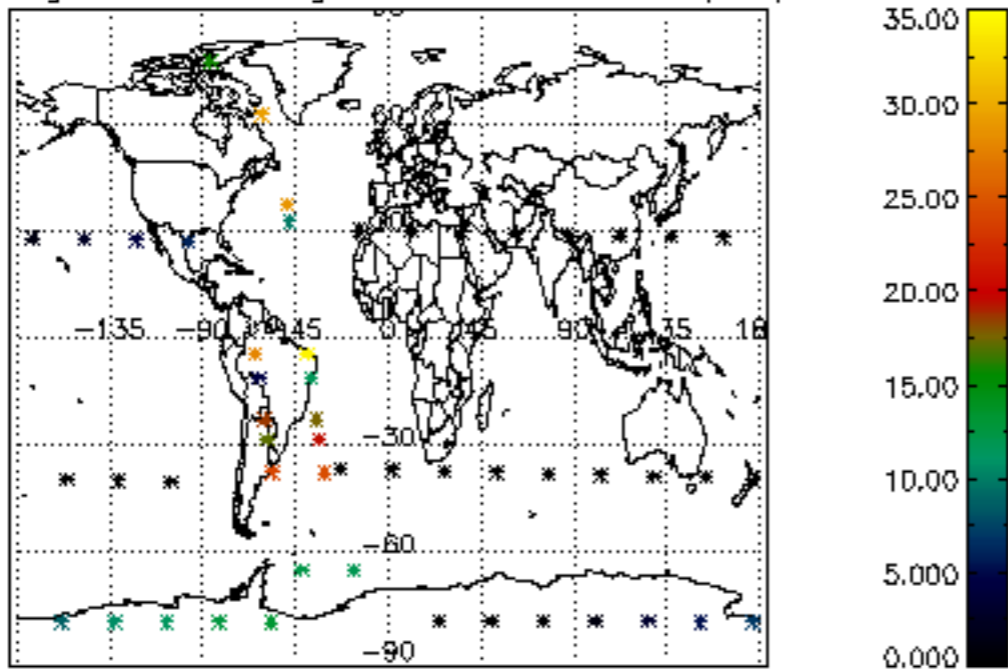
Percentage of cosmic ray hits per profile



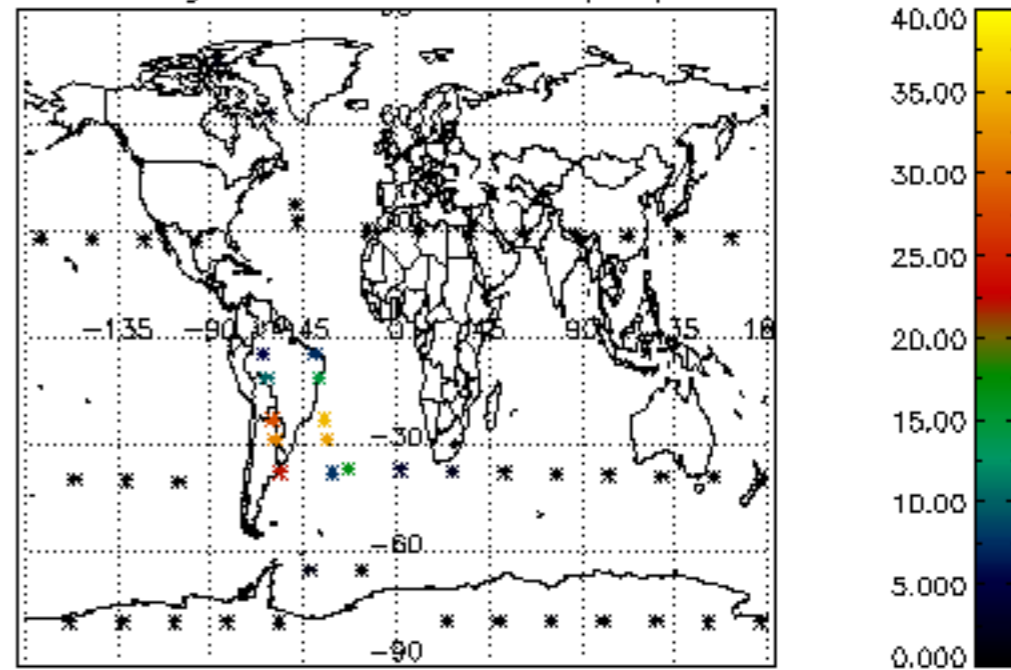
Percentage of datation errors per profile



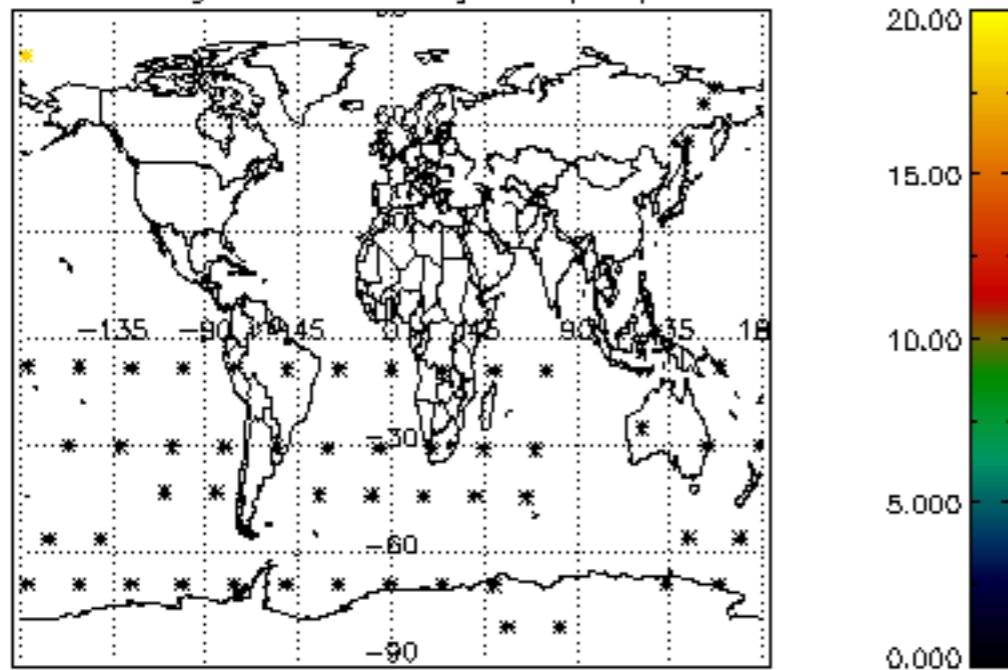
Percentage of star falling outside central band per profile



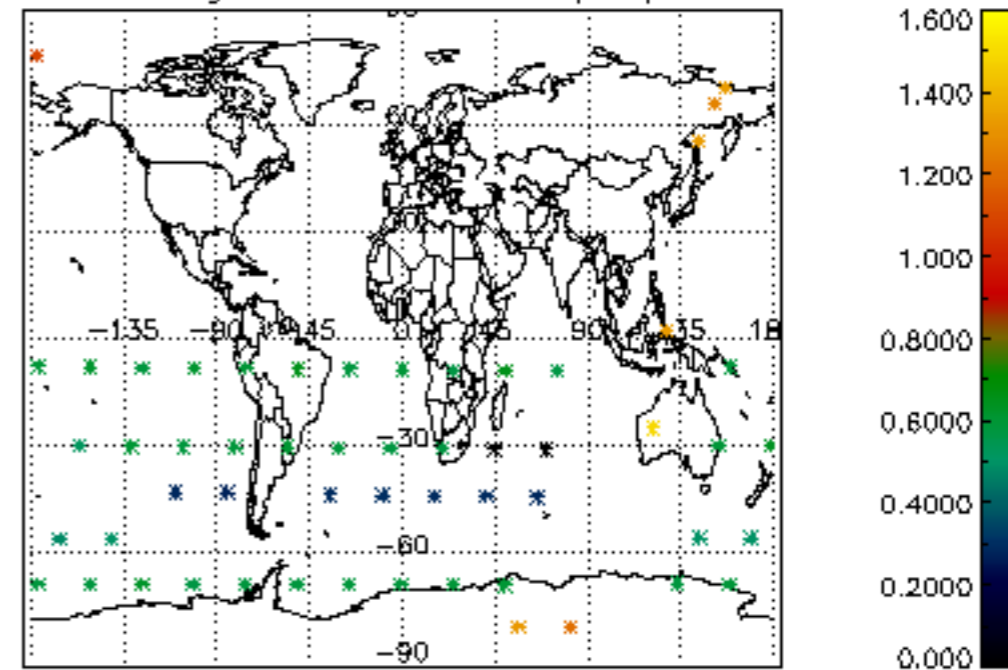
Percentage of saturation errors per profile



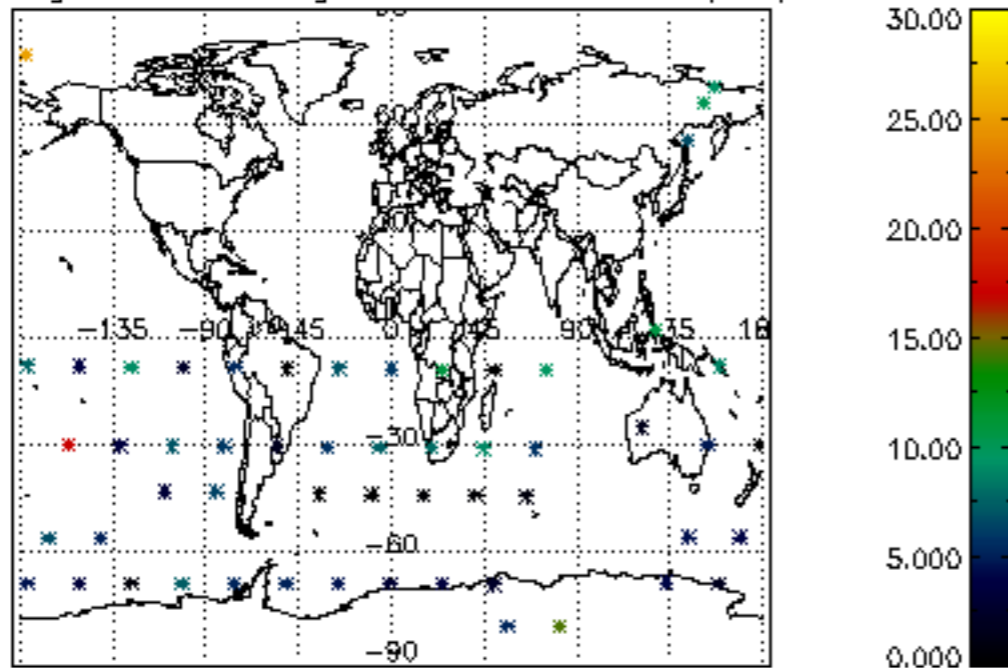
Percentage of cosmic ray hits per profile



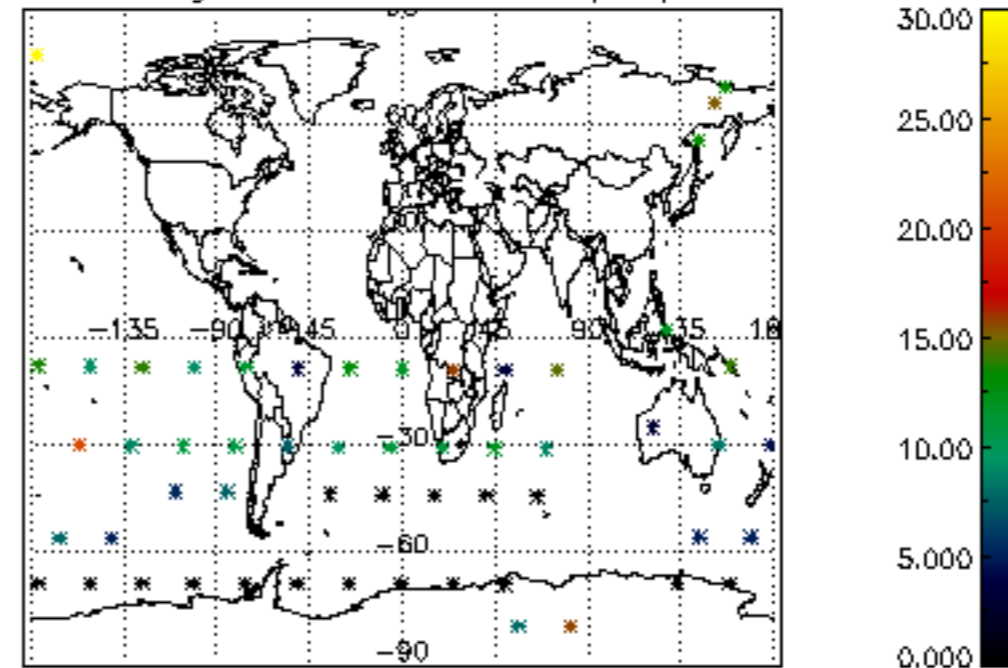
Percentage of datation errors per profile

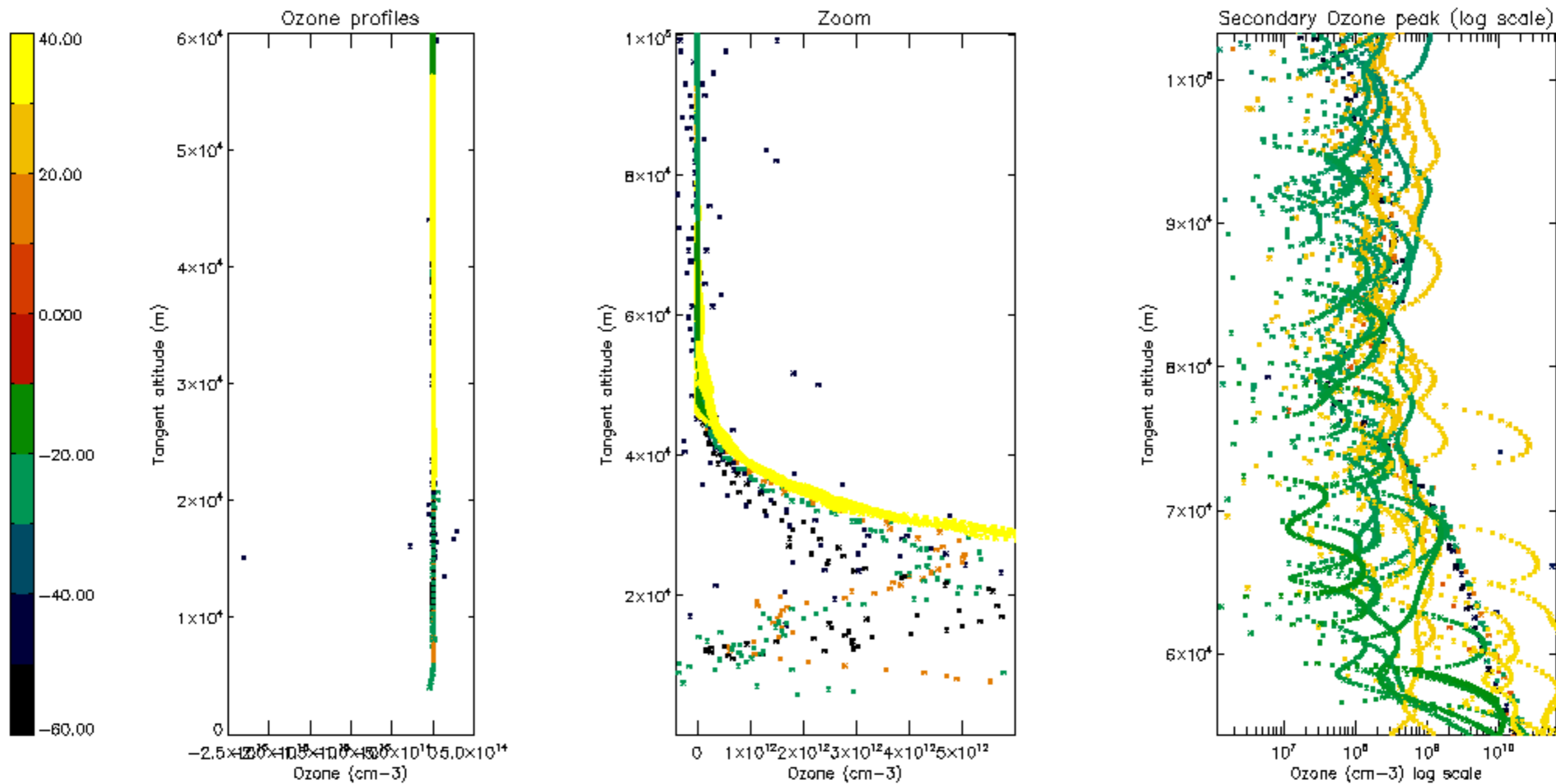


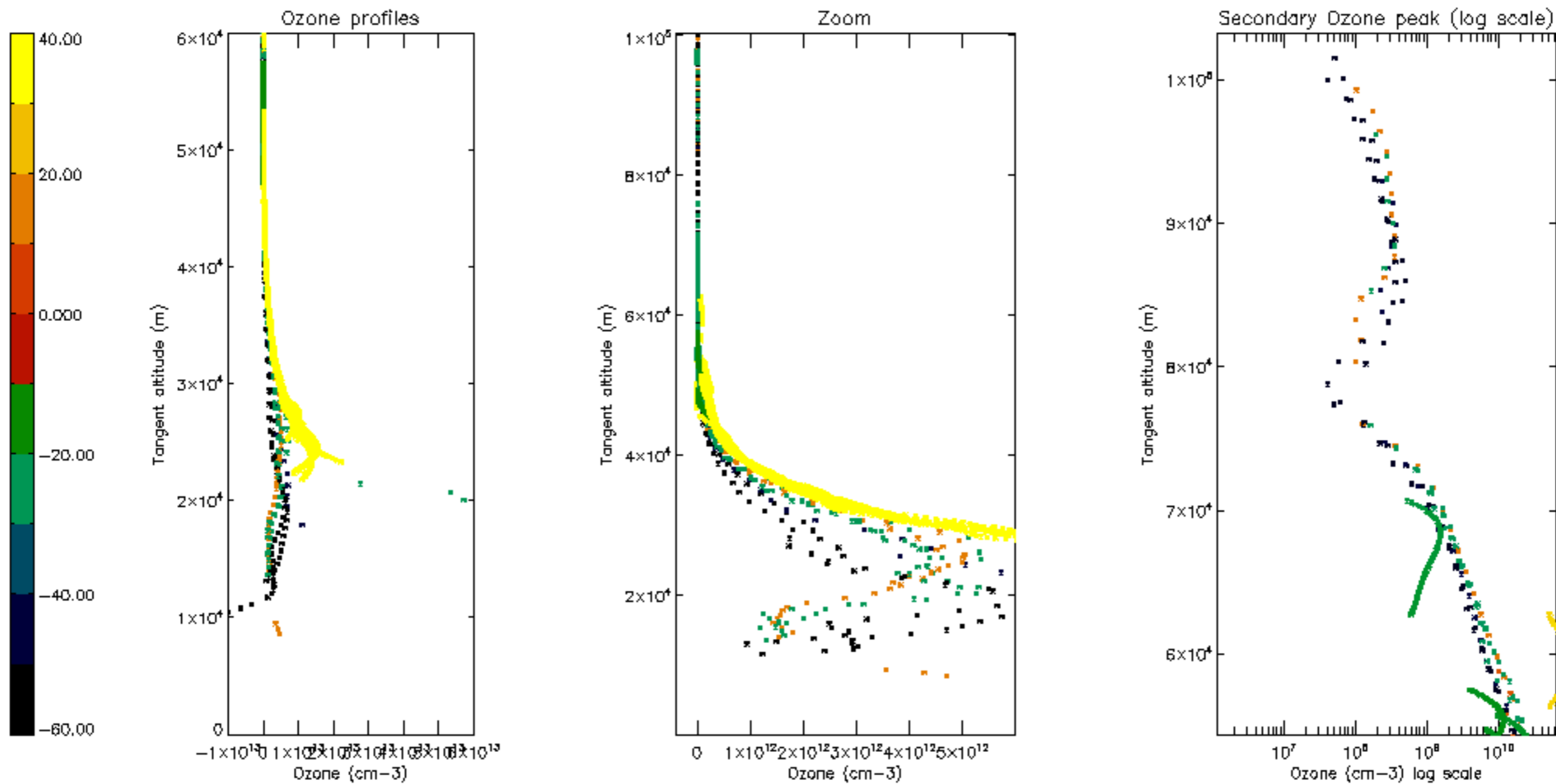
Percentage of star falling outside central band per profile

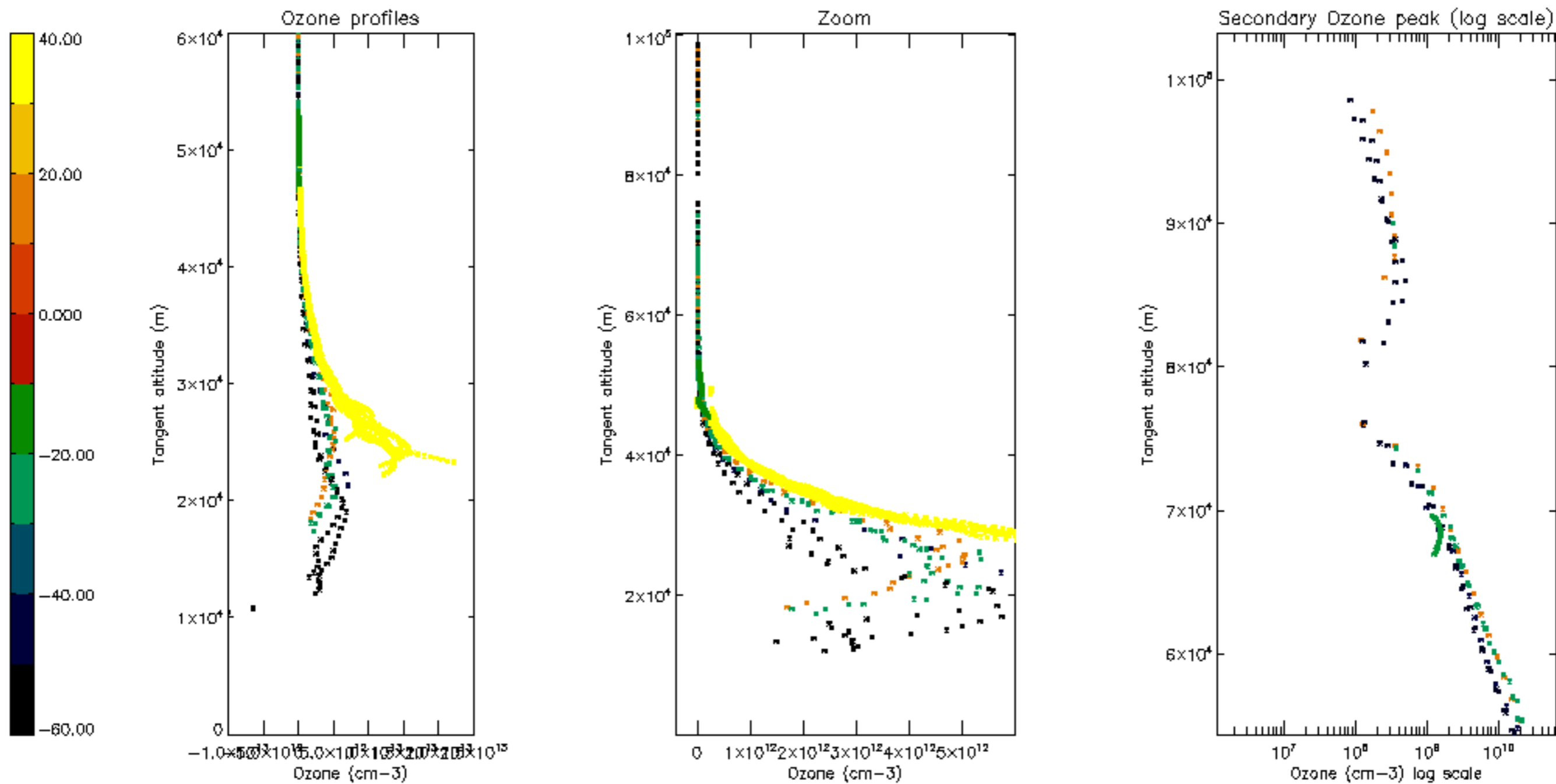


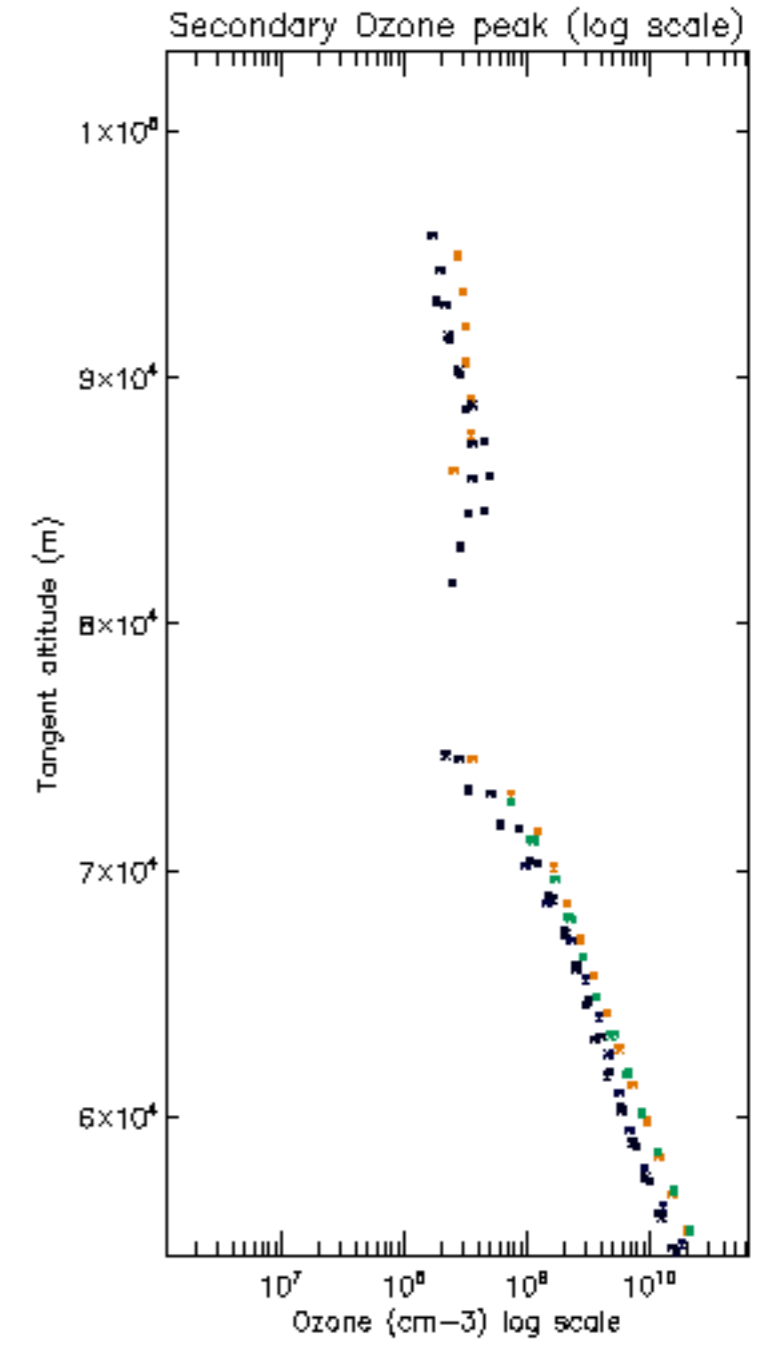
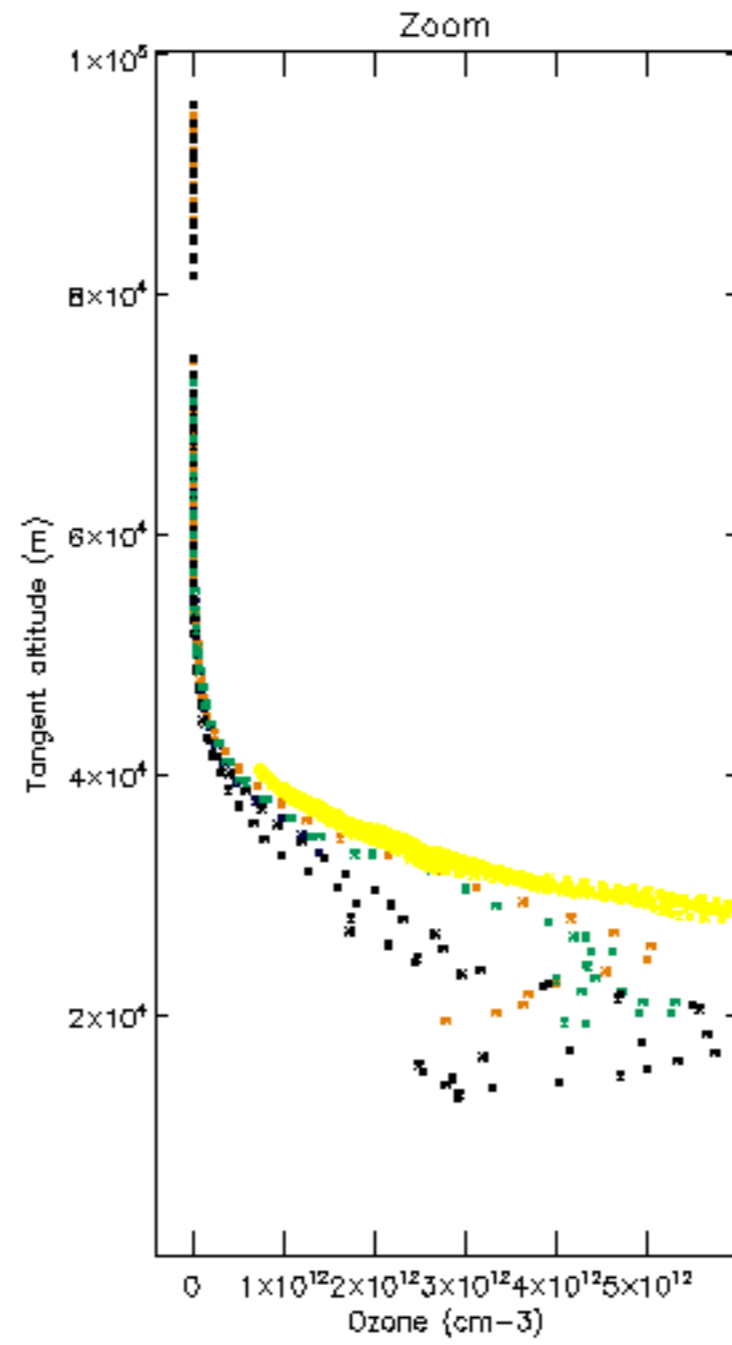
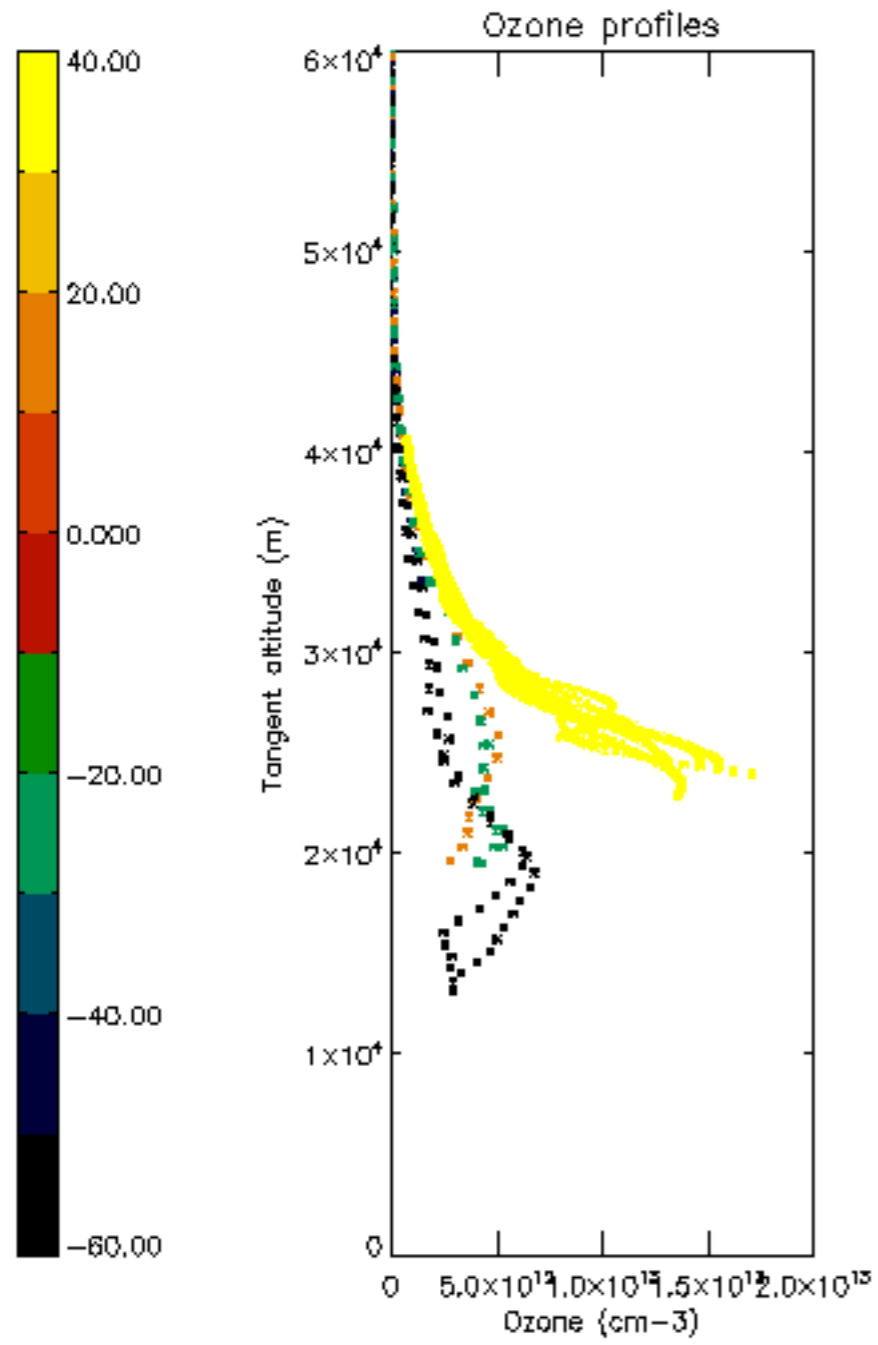
Percentage of saturation errors per profile

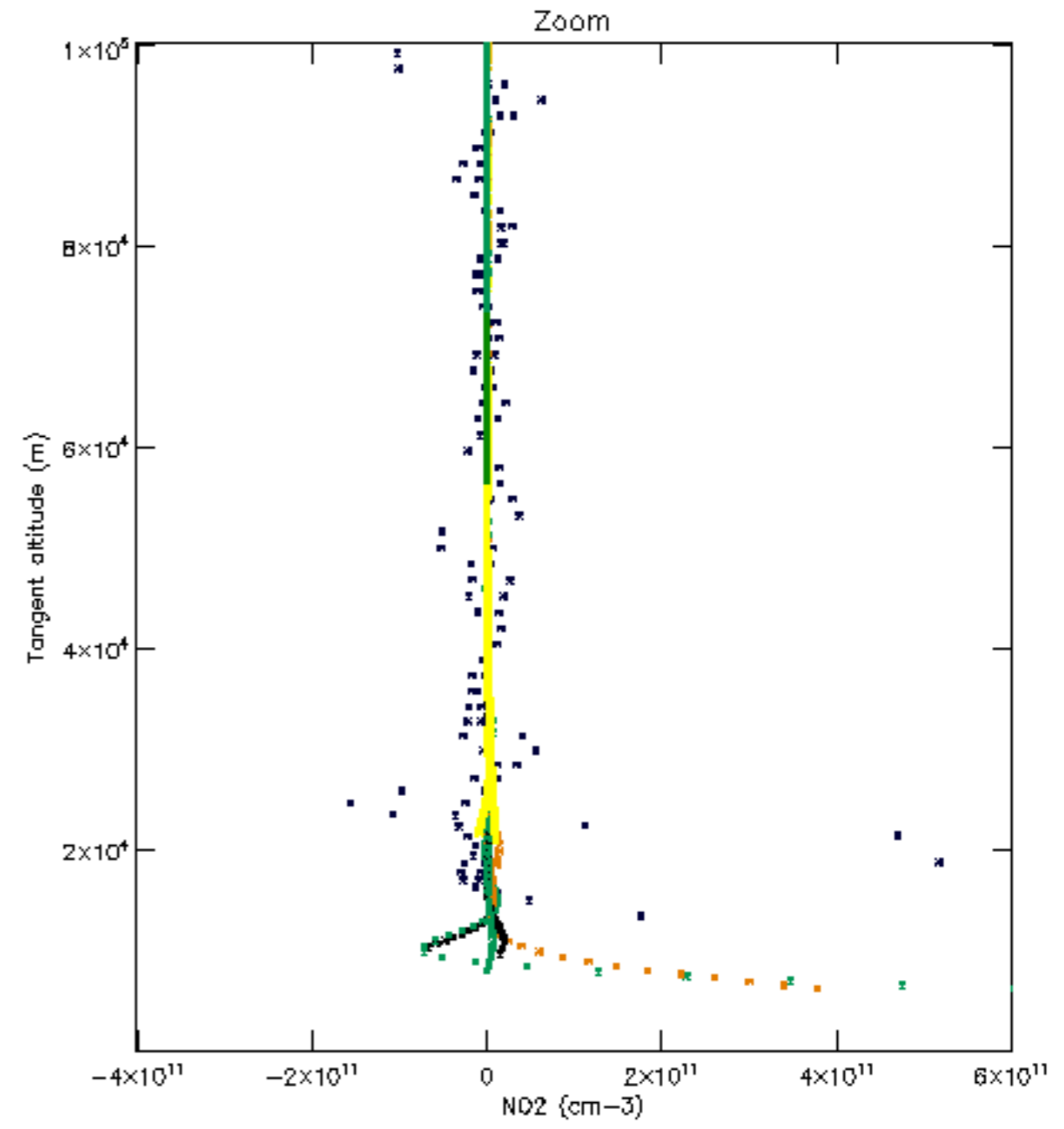
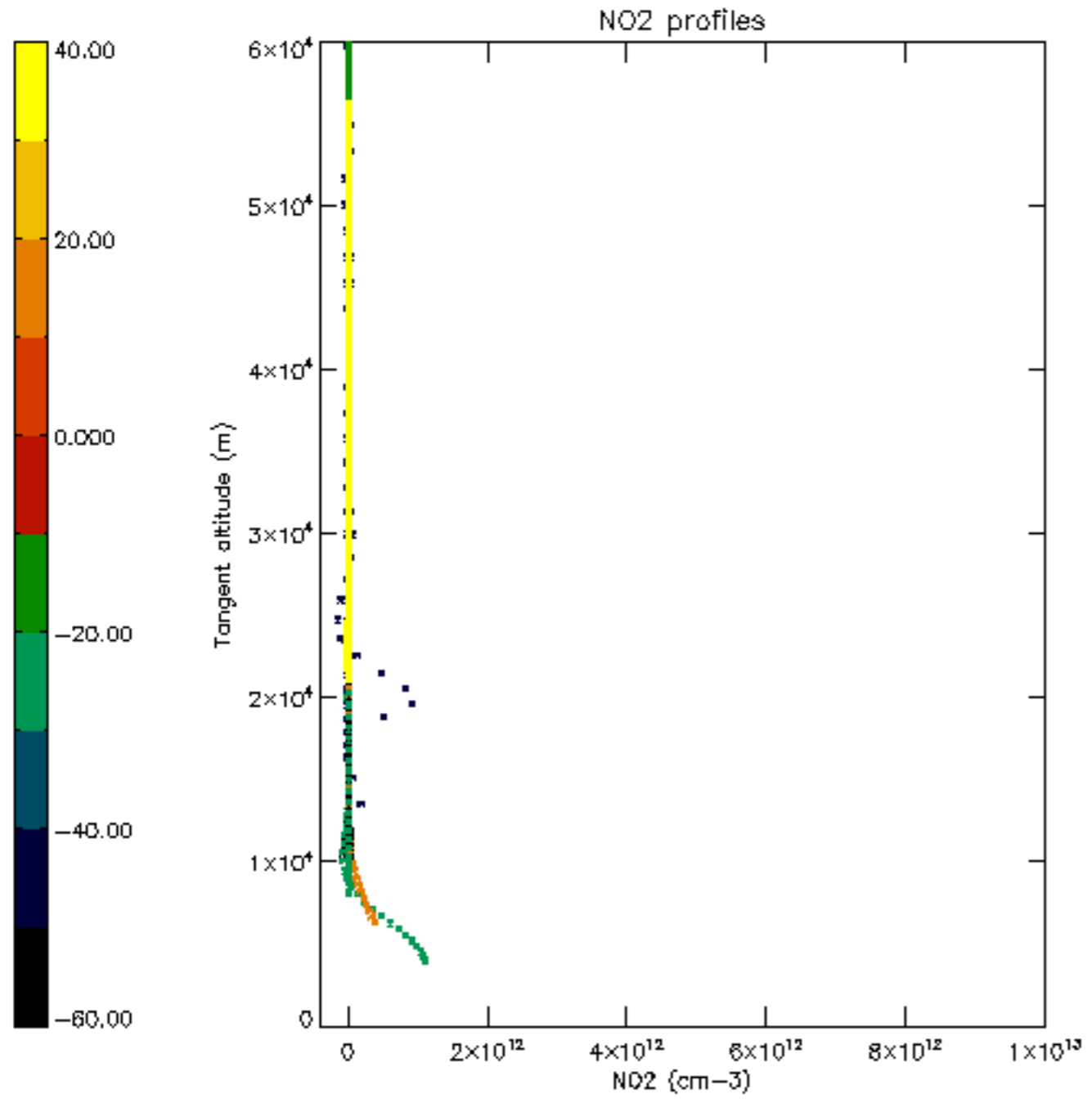


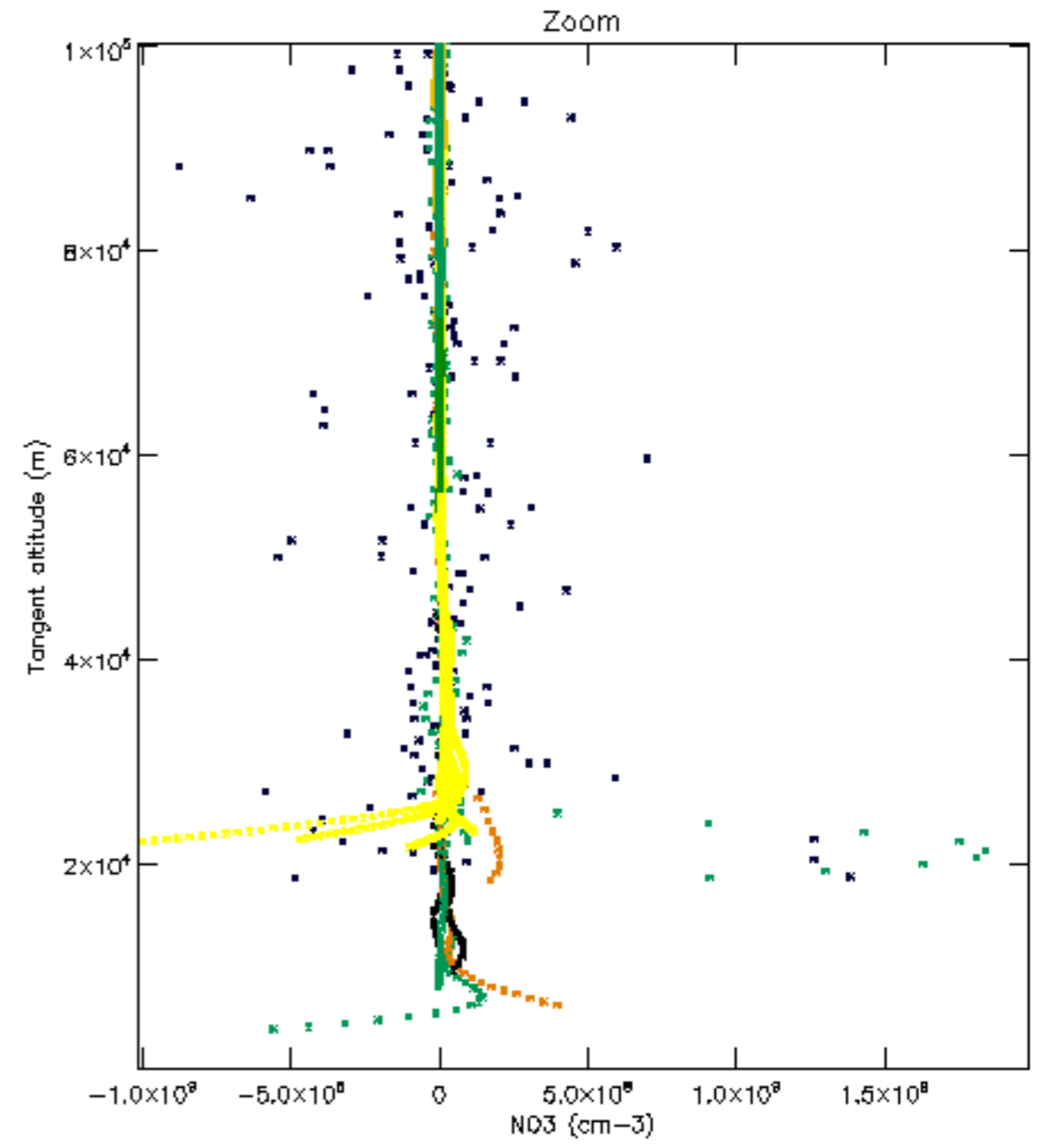
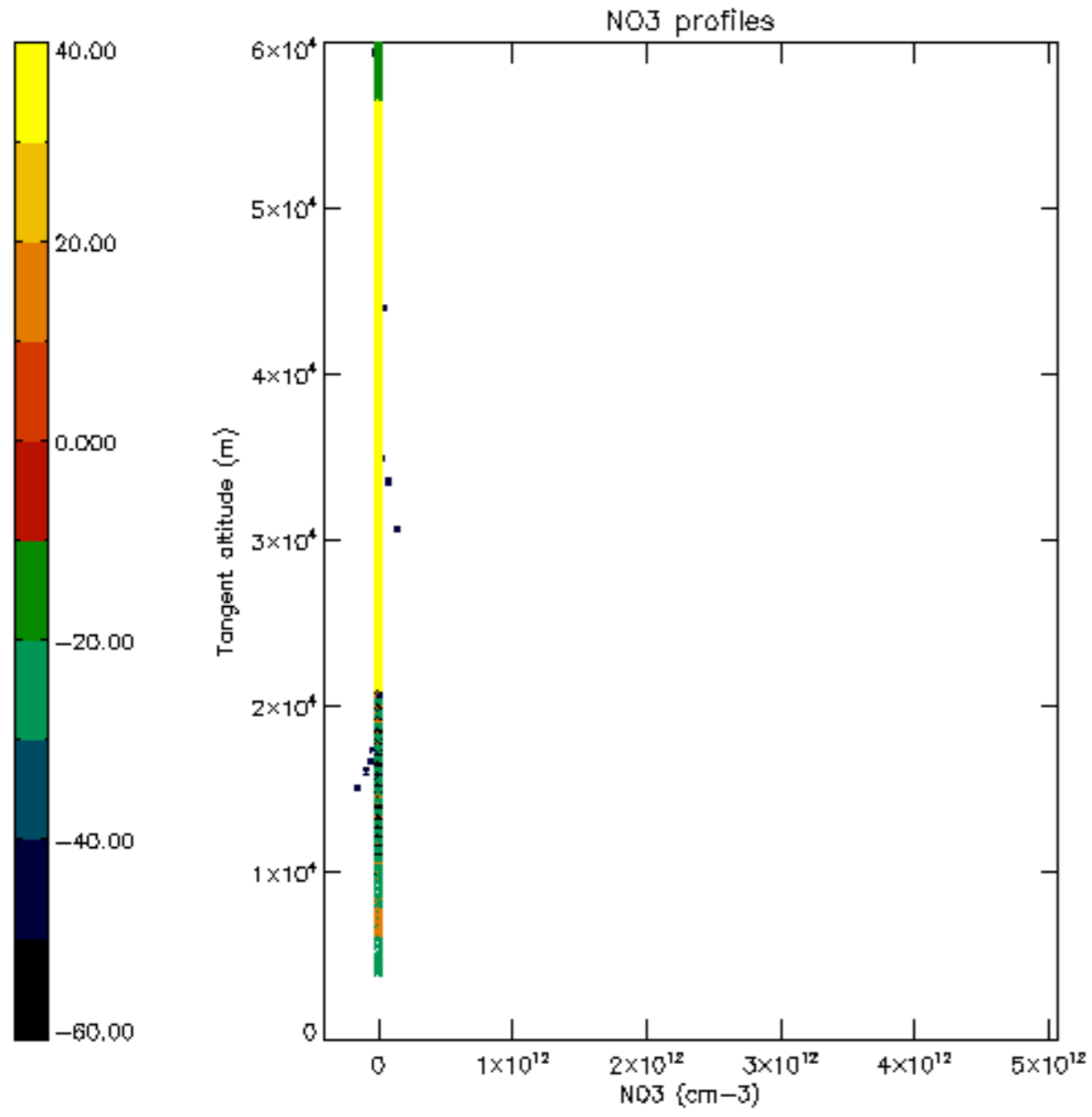


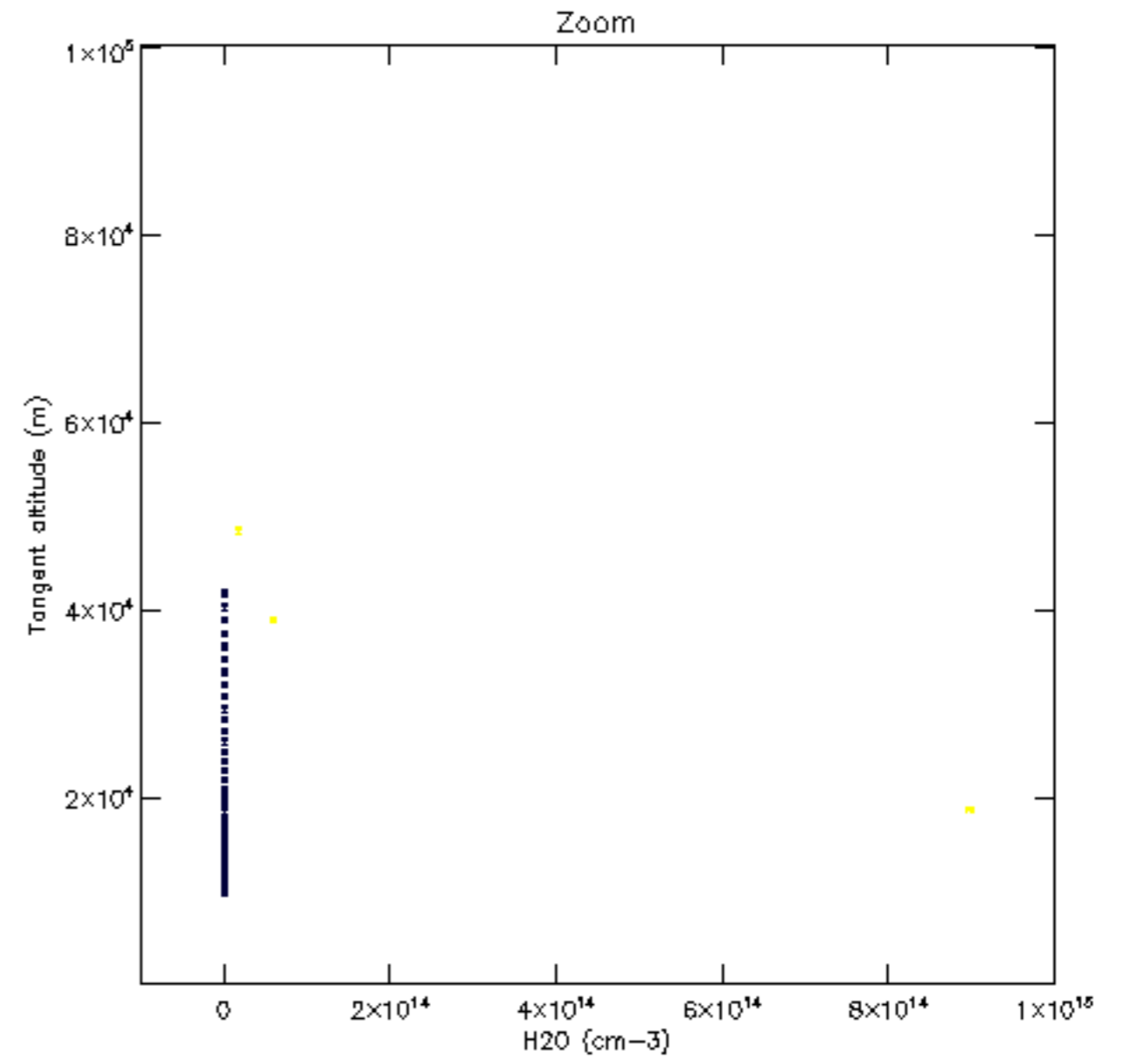
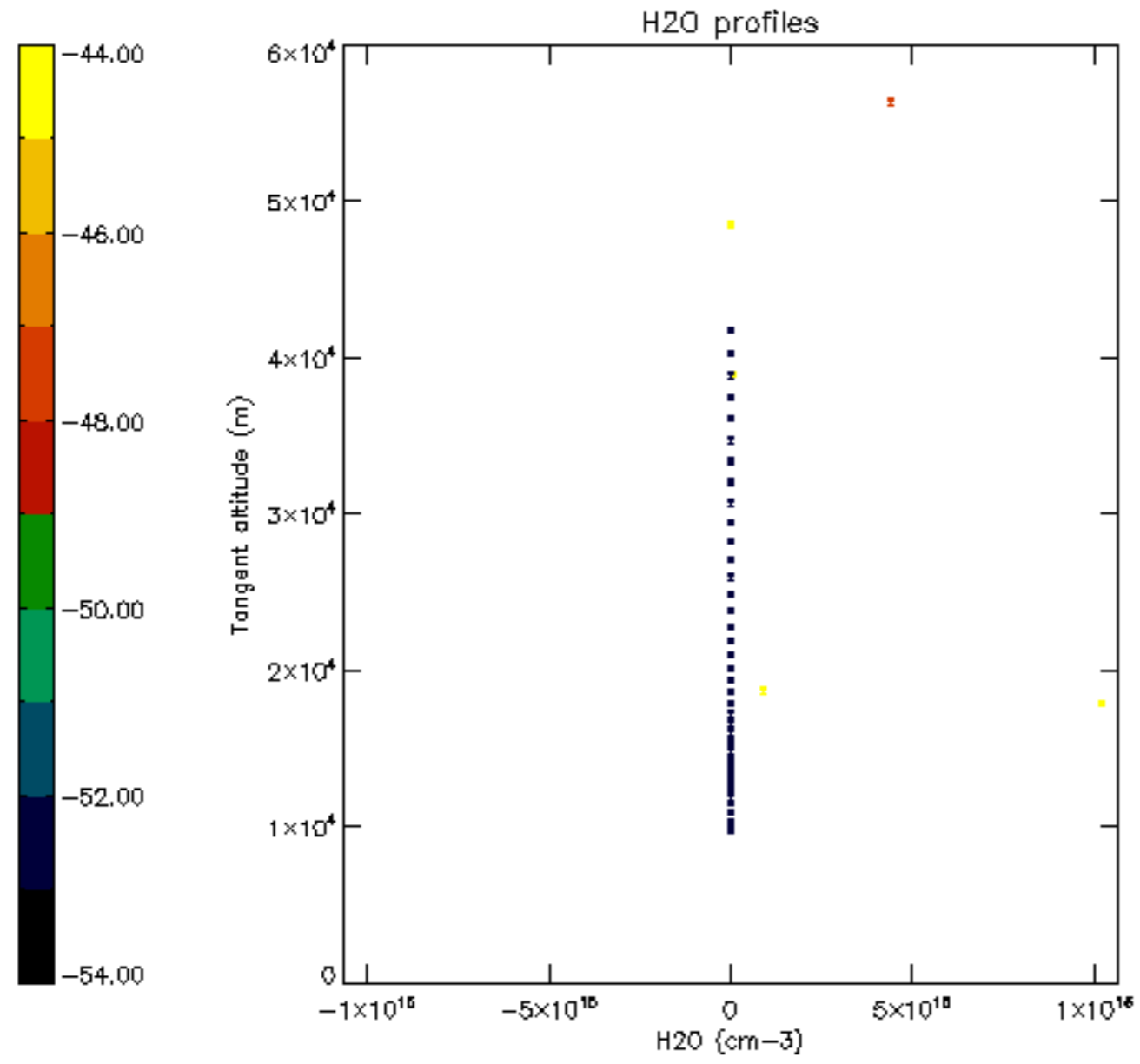


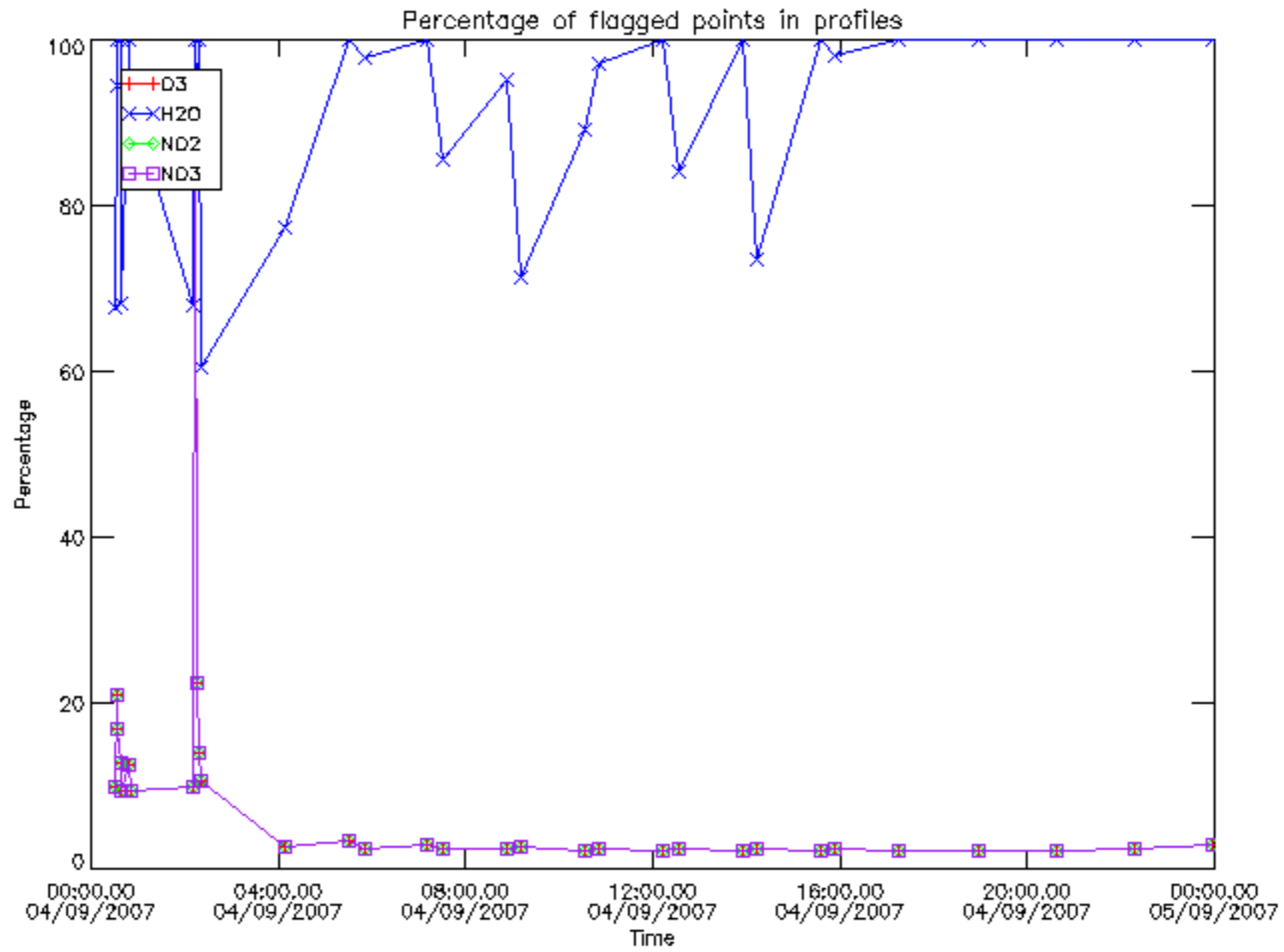




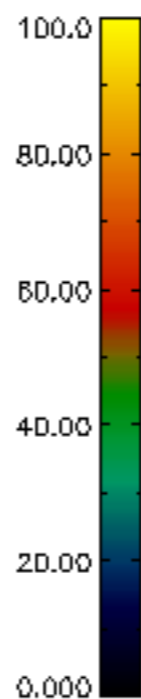
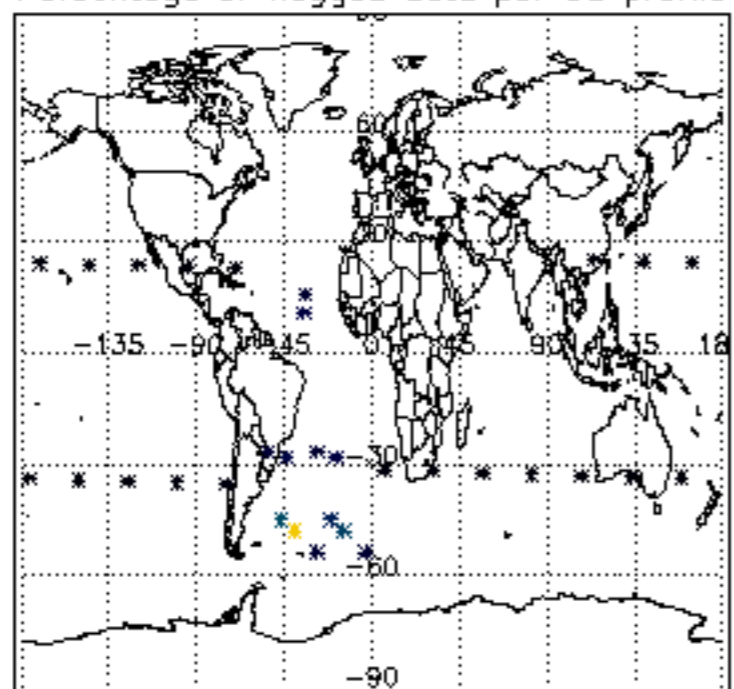




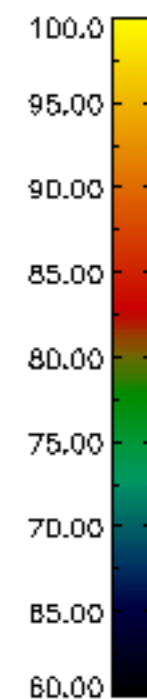
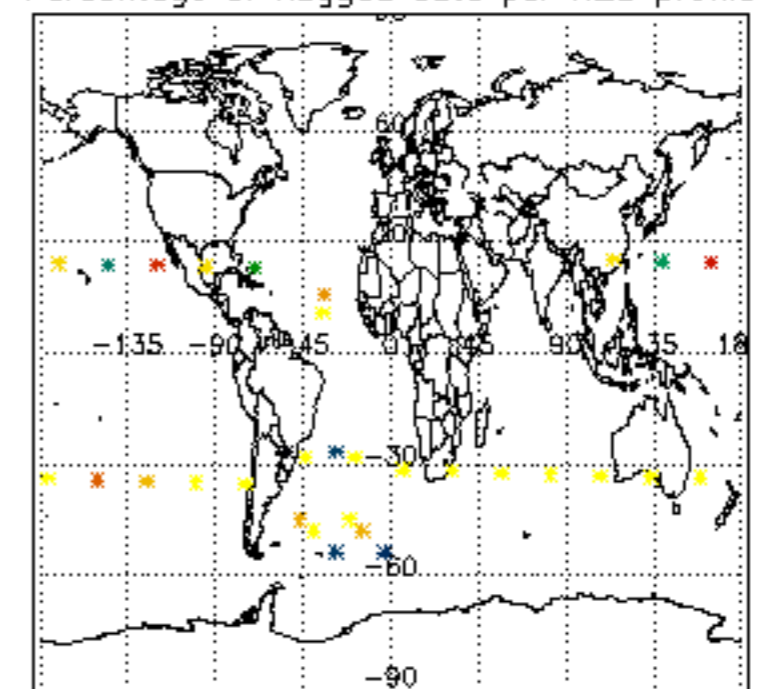




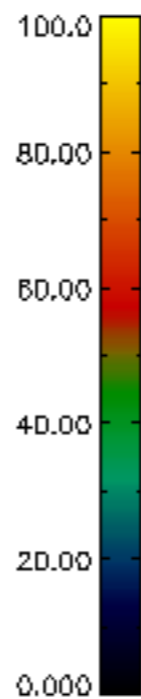
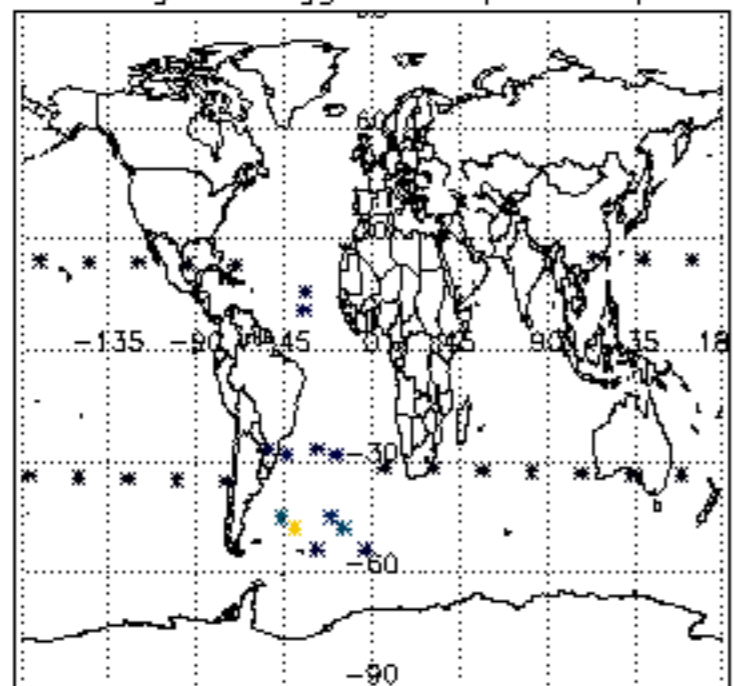
Percentage of flagged data per D3 profile



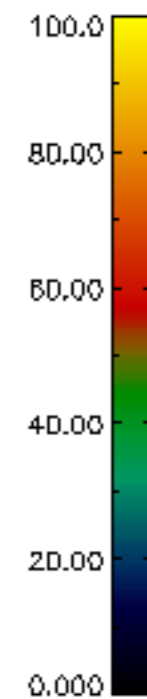
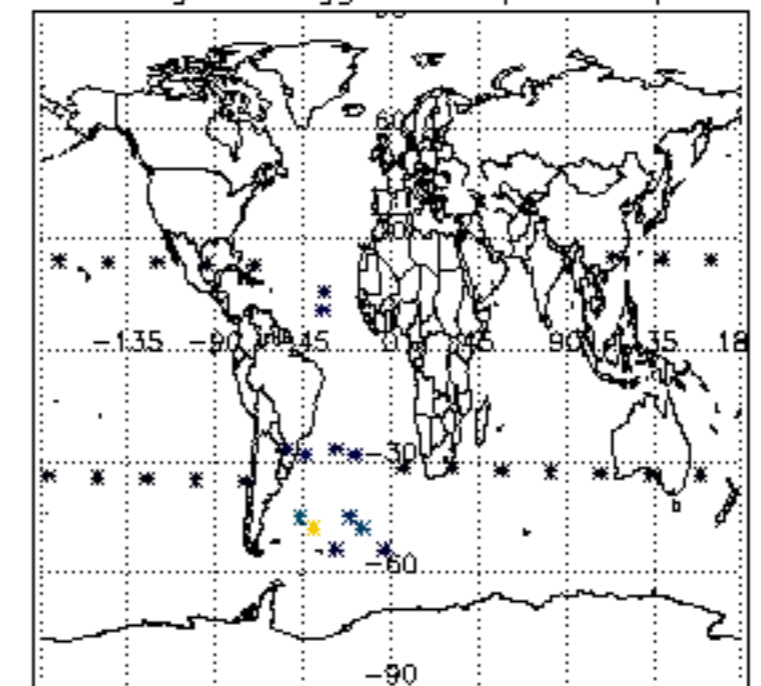
Percentage of flagged data per H2O profile

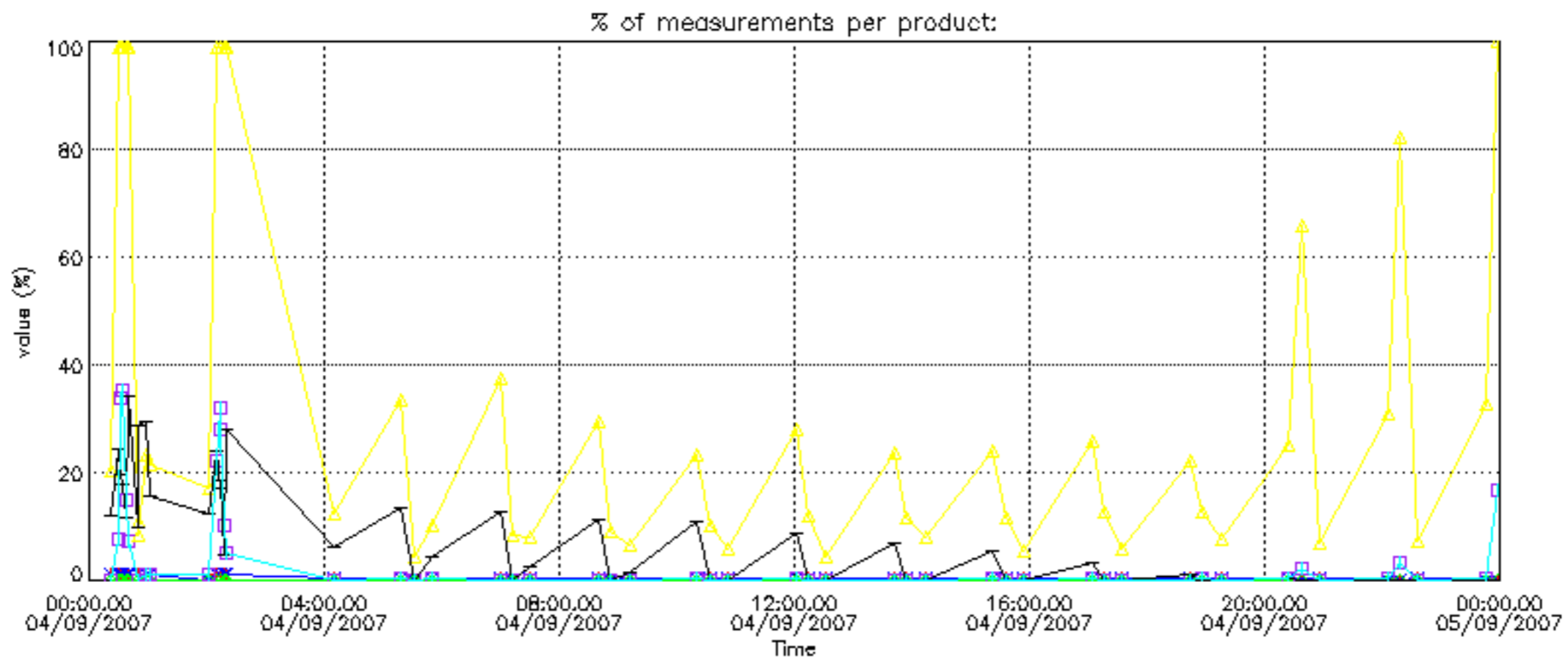


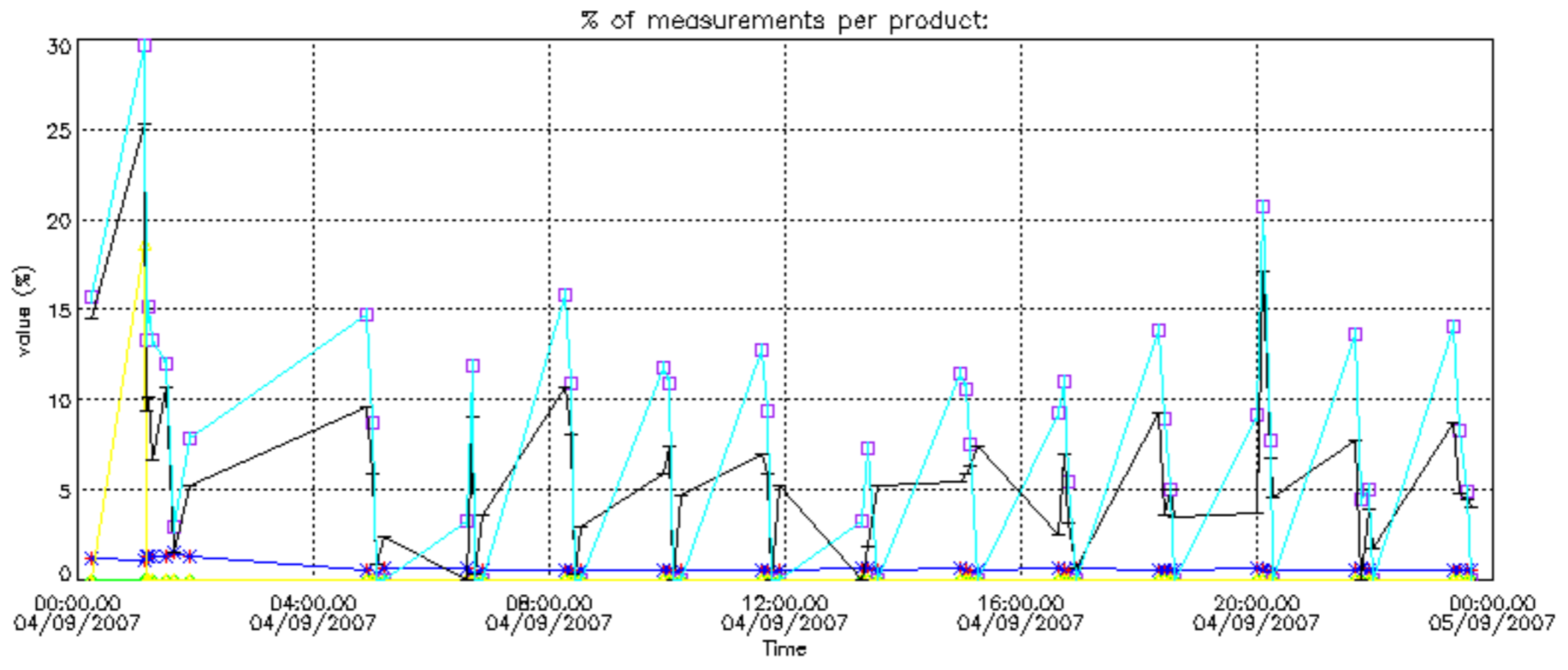
Percentage of flagged data per NO2 profile



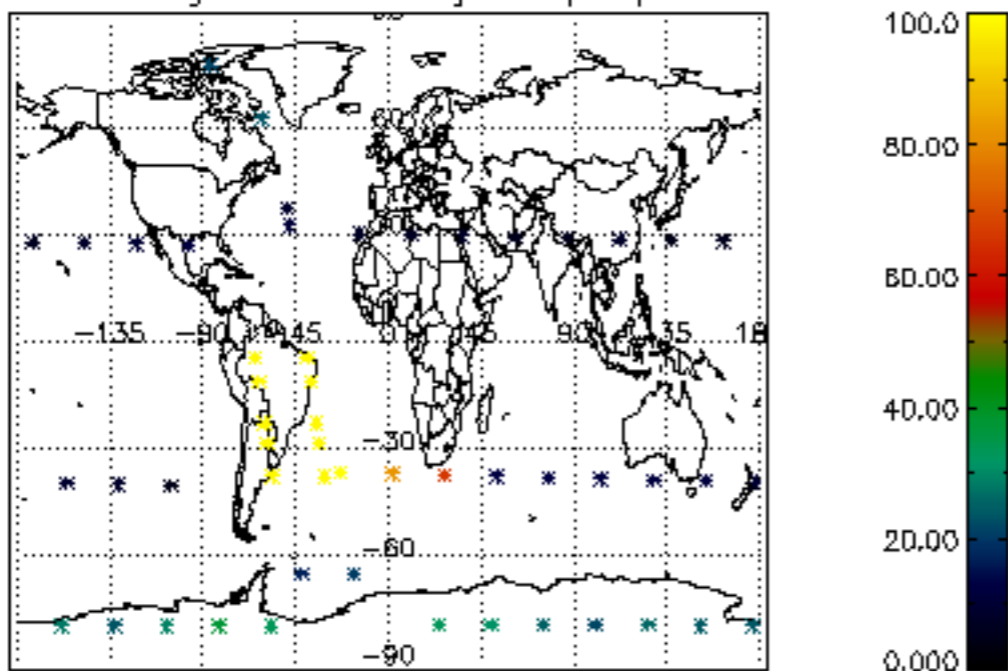
Percentage of flagged data per NO3 profile



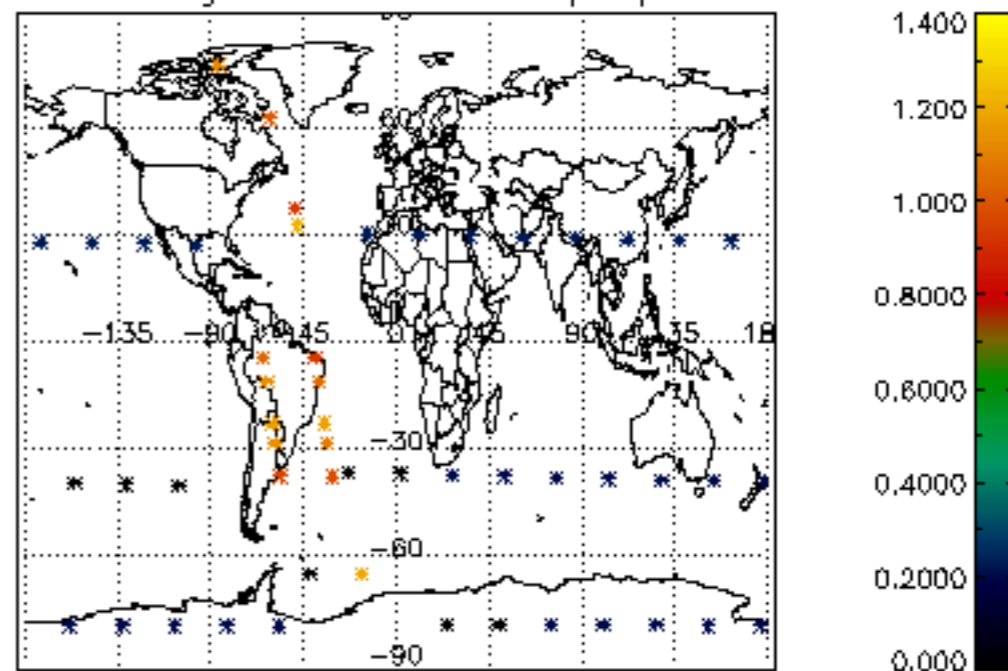




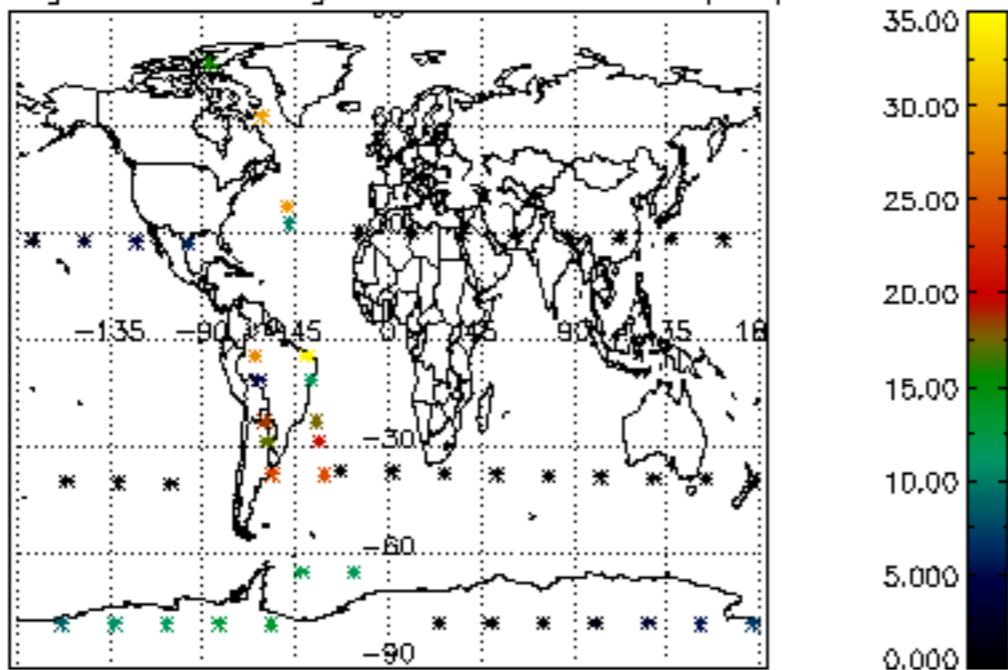
Percentage of cosmic ray hits per profile



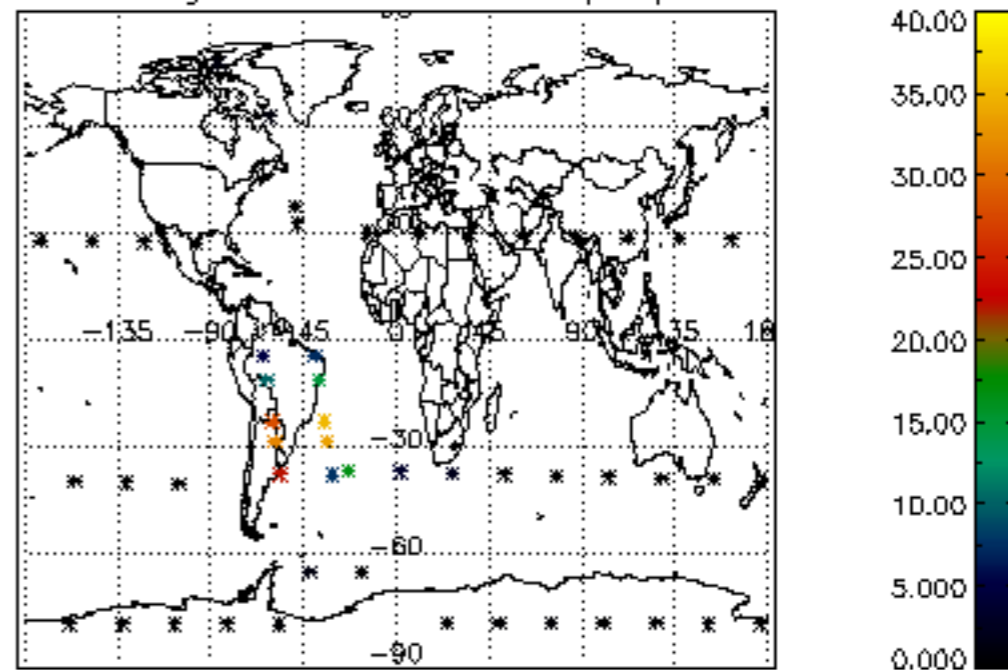
Percentage of datation errors per profile



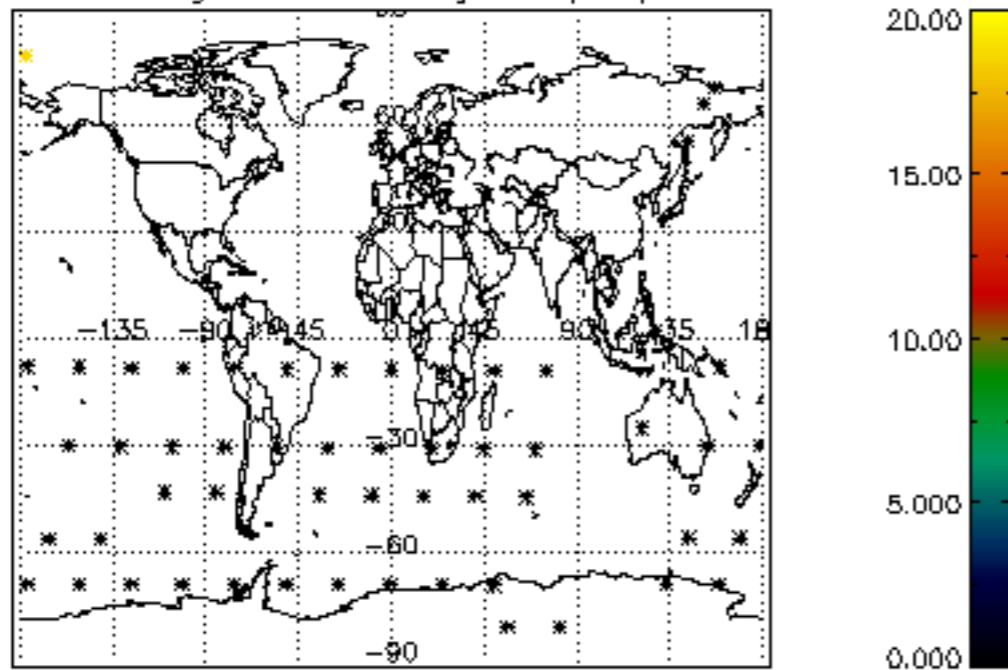
Percentage of star falling outside central band per profile



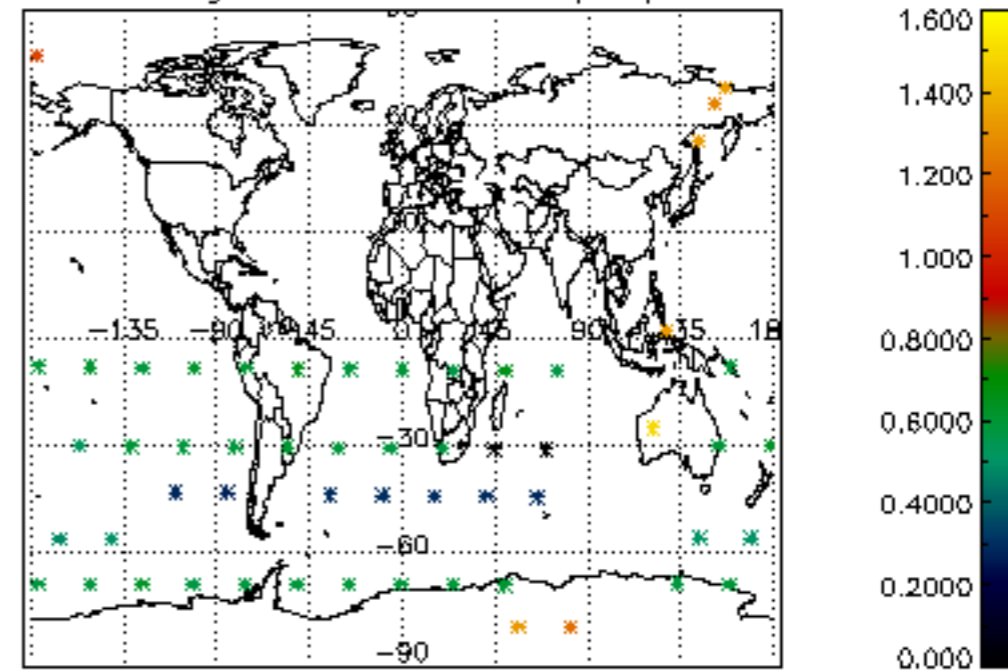
Percentage of saturation errors per profile



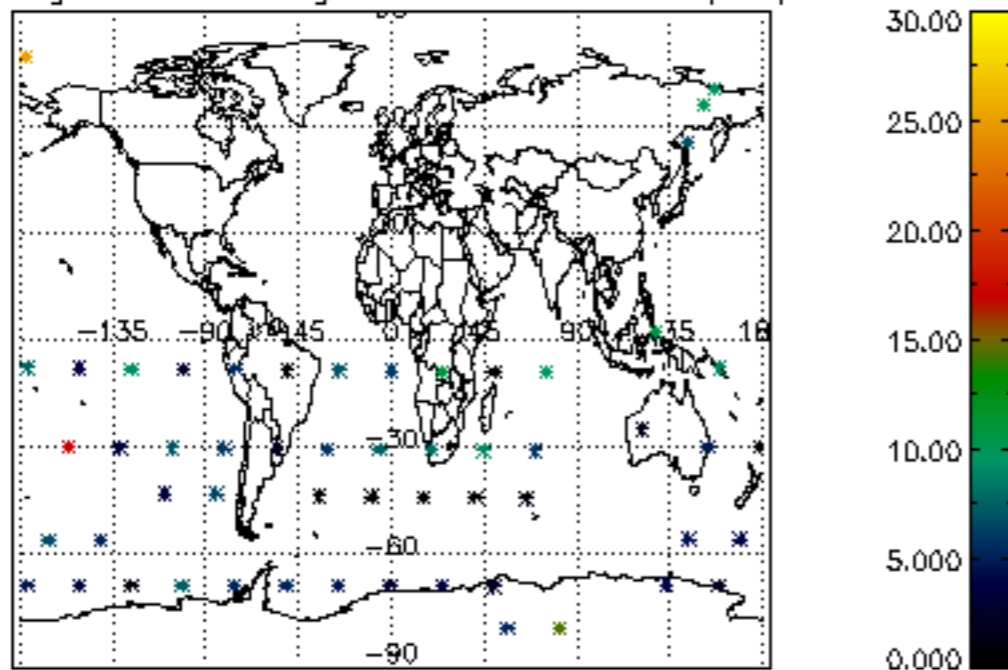
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

