

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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	22APR2013 12:43:52
Data source version	GOMOS/6.01
Start time of products	18-01-2007 (18JAN2007 00:00:00)
Stop time of products	19-01-2007 (19JAN2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	377
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

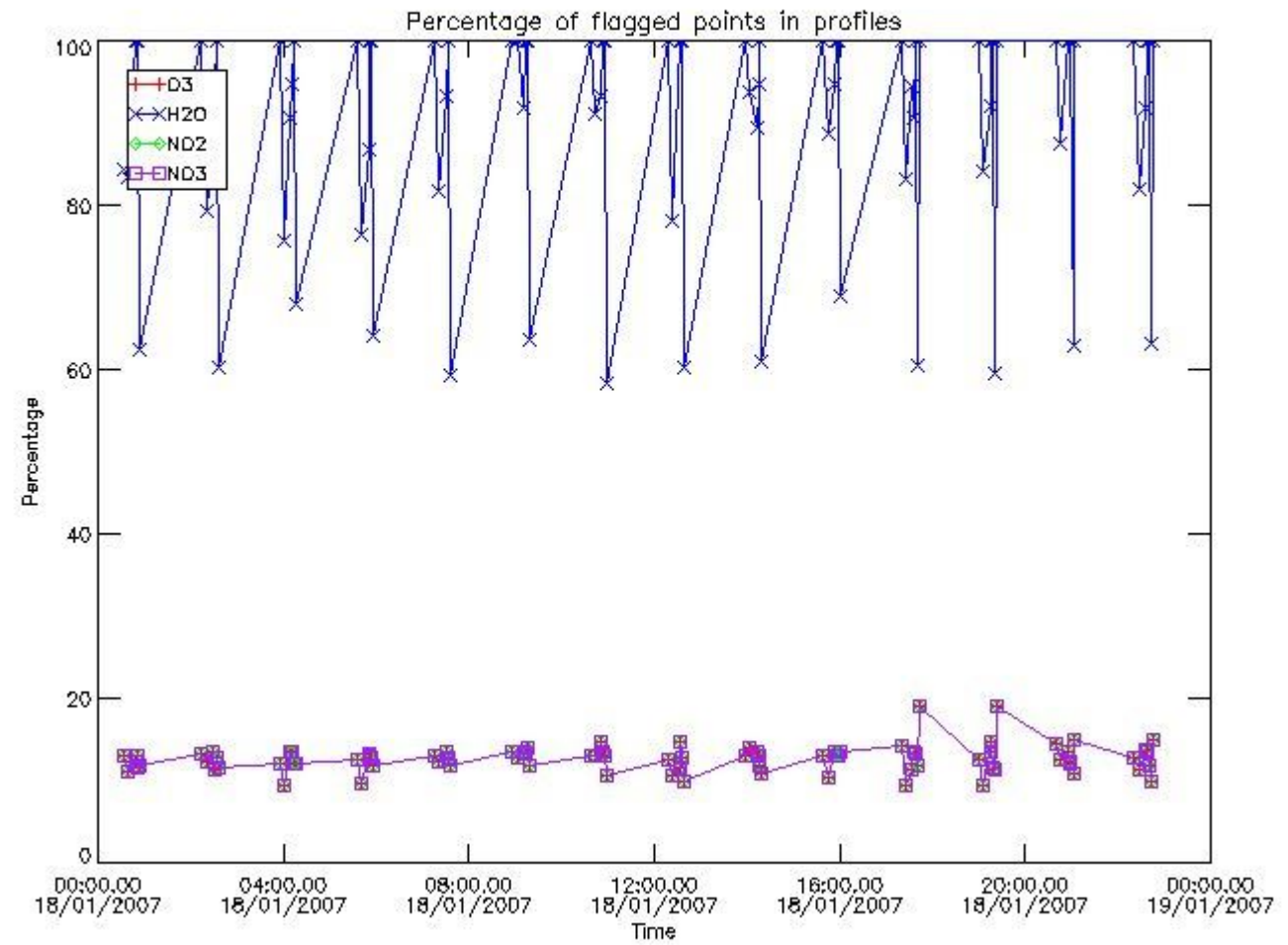
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070118_000501_000000362054_00431_25535_2102.N1	18-JAN-2007 00:05:01	Bright	36.000	130	23Bet Dra	2.7990	5800.0	72	25535	No
2	GOM_NL__2PRFIN20070118_000812_000000352054_00431_25535_2103.N1	18-JAN-2007 00:08:12	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	25535	No
3	GOM_NL__2PRFIN20070118_001610_000000332054_00431_25535_2104.N1	18-JAN-2007 00:16:10	Bright	33.000	59	55Alp Oph	2.0800	8900.0	66	25535	No
4	GOM_NL__2PRFIN20070118_001816_000000332054_00431_25535_2105.N1	18-JAN-2007 00:18:16	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25535	No
5	GOM_NL__2PRFIN20070118_002333_000000382054_00431_25535_2106.N1	18-JAN-2007 00:23:33	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	25535	No
6	GOM_NL__2PRFIN20070118_002801_000000472054_00431_25535_2107.N1	18-JAN-2007 00:28:01	Twilight	47.000	16	21Alp Sco	1.0200	3000.0	94	25535	No
7	GOM_NL__2PRFIN20070118_002939_000000402054_00431_25535_2108.N1	18-JAN-2007 00:29:39	Twilight	40.000	75	26Eps Sco	2.2910	4250.0	80	25535	No
8	GOM_NL__2PRFIN20070118_003322_000000392054_00431_25535_2109.N1	18-JAN-2007 00:33:22	Dark	39.000	131	Gam Lup	2.8000	26000.	78	25535	No
9	GOM_NL__2PRFIN20070118_003909_000000462054_00432_25536_2164.N1	18-JAN-2007 00:39:09	Dark	45.500	4	Alp1Cen	-0.010000	5800.0	91	25536	No
10	GOM_NL__2PRFIN20070118_004805_000000422054_00432_25536_2165.N1	18-JAN-2007 00:48:05	Dark	41.500	29	Bet Car	1.6720	10200.	83	25536	No
11	GOM_NL__2PRFIN20070118_005004_000000452054_00432_25536_2166.N1	18-JAN-2007 00:50:04	Dark	44.500	71	lot Car	2.2460	7700.0	89	25536	No
12	GOM_NL__2PRFIN20070118_005155_000000392054_00432_25536_2167.N1	18-JAN-2007 00:51:55	Dark	39.000	46	Del Vel	1.9540	10600.	78	25536	No
13	GOM_NL__2PRFIN20070118_005447_000000432054_00432_25536_2168.N1	18-JAN-2007 00:54:47	Dark	43.000	2	Alp Car	-0.73600	7000.0	86	25536	No
14	GOM_NL__2PRFIN20070118_005822_000000442054_00432_25536_2169.N1	18-JAN-2007 00:58:22	Straylight	43.500	117	Pi Pup	2.7060	3800.0	87	25536	No
15	GOM_NL__2PRFIN20070118_010054_000000452054_00432_25536_2170.N1	18-JAN-2007 01:00:54	Straylight	44.500	23	21Eps CMa	1.5020	26000.	89	25536	No
16	GOM_NL__2PRFIN20070118_010218_000000402054_00432_25536_2171.N1	18-JAN-2007 01:02:18	Straylight	39.500	179	24Omi2CMa	3.0320	24000.	79	25536	No
17	GOM_NL__2PRFIN20070118_010431_000000442054_00432_25536_2172.N1	18-JAN-2007 01:04:31	Straylight	43.500	1	9Alp CMa	-1.4400	11000.	87	25536	No
18	GOM_NL__2PRFIN20070118_010701_000000402054_00432_25536_2173.N1	18-JAN-2007 01:07:01	Straylight	39.500	56	53Kap Ori	2.0650	30000.	79	25536	No
19	GOM_NL__2PRFIN20070118_010812_000000392054_00432_25536_2174.N1	18-JAN-2007 01:08:12	Twilight	38.500	125	44lot Ori	2.7700	30000.	77	25536	No
20	GOM_NL__2PRFIN20070118_010929_000000442054_00432_25536_2175.N1	18-JAN-2007 01:09:29	Twilight	44.000	30	46Eps Ori	1.6940	30000.	88	25536	No
21	GOM_NL__2PRFIN20070118_011140_000000492054_00432_25536_2176.N1	18-JAN-2007 01:11:40	Twilight	49.000	14	58Alp Ori	0.87000	3000.0	98	25536	No
22	GOM_NL__2PRFIN20070118_011404_000000462054_00432_25536_2177.N1	18-JAN-2007 01:14:04	Bright	45.500	44	24Gam Gem	1.9280	11000.	91	25536	No
23	GOM_NL__2PRFIN20070118_011926_000000372054_00432_25536_2178.N1	18-JAN-2007 01:19:26	Bright	36.500	114	3lot Aur	2.6930	4600.0	73	25536	No
24	GOM_NL__2PRFIN20070118_012209_000000372054_00432_25536_2179.N1	18-JAN-2007 01:22:09	Bright	36.500	42	34Bet Aur	1.9000	10200.	73	25536	No
25	GOM_NL__2PRFIN20070118_013442_000000352054_00432_25536_2180.N1	18-JAN-2007 01:34:42	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	25536	No
26	GOM_NL__2PRFIN20070118_014537_000000352054_00432_25536_2181.N1	18-JAN-2007 01:45:37	Bright	34.500	130	23Bet Dra	2.7990	5800.0	69	25536	No
27	GOM_NL__2PRFIN20070118_014848_000000342054_00432_25536_2182.N1	18-JAN-2007 01:48:48	Bright	34.000	5	3Alp Lyr	0.033000	11000.	68	25536	No
28	GOM_NL__2PRFIN20070118_015646_000000332054_00432_25536_2183.N1	18-JAN-2007 01:56:46	Bright	33.000	59	55Alp Oph	2.0800	8900.0	66	25536	No
29	GOM_NL__2PRFIN20070118_015853_000000332054_00432_25536_2184.N1	18-JAN-2007 01:58:53	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25536	No
30	GOM_NL__2PRFIN20070118_020410_000000372054_00432_25536_2185.N1	18-JAN-2007 02:04:10	Bright	36.500	98	13Zet Oph	2.5710	30000.	73	25536	No
31	GOM_NL__2PRFIN20070118_020838_000000502054_00432_25536_2186.N1	18-JAN-2007 02:08:38	Twilight	50.000	16	21Alp Sco	1.0200	3000.0	100	25536	No
32	GOM_NL__2PRFIN20070118_021015_000000452054_00432_25536_2187.N1	18-JAN-2007 02:10:15	Twilight	45.000	75	26Eps Sco	2.2910	4250.0	90	25536	No
33	GOM_NL__2PRFIN20070118_021358_000000392054_00432_25536_2188.N1	18-JAN-2007 02:13:58	Dark	38.500	131	Gam Lup	2.8000	26000.	77	25536	No
34	GOM_NL__2PRFIN20070118_021946_000000422054_00433_25537_2180.N1	18-JAN-2007 02:19:46	Dark	41.500	4	Alp1Cen	-0.010000	5800.0	83	25537	No
35	GOM_NL__2PRFIN20070118_022841_000000382054_00433_25537_2181.N1	18-JAN-2007 02:28:41	Dark	38.000	29	Bet Car	1.6720	10200.	76	25537	No
36	GOM_NL__2PRFIN20070118_023041_000000452054_00433_25537_2182.N1	18-JAN-2007 02:30:41	Dark	45.000	71	lot Car	2.2460	7700.0	90	25537	No
37	GOM_NL__2PRFIN20070118_023232_000000442054_00433_25537_2183.N1	18-JAN-2007 02:32:32	Dark	44.000	46	Del Vel	1.9540	10600.	88	25537	No
38	GOM_NL__2PRFIN20070118_023523_000000452054_00433_25537_2184.N1	18-JAN-2007 02:35:23	Dark	44.500	2	Alp Car	-0.73600	7000.0	89	25537	No
39	GOM_NL__2PRFIN20070118_023858_000000452054_00433_25537_2185.N1	18-JAN-2007 02:38:58	Straylight	45.000	117	Pi Pup	2.7060	3800.0	90	25537	No
40	GOM_NL__2PRFIN20070118_024130_000000442054_00433_25537_2186.N1	18-JAN-2007 02:41:30	Straylight	43.500	23	21Eps CMa	1.5020	26000.	87	25537	No
41	GOM_NL__2PRFIN20070118_024255_000000412054_00433_25537_2187.N1	18-JAN-2007 02:42:55	Straylight	40.500	179	24Omi2CMa	3.0320	24000.	81	25537	No
42	GOM_NL__2PRFIN20070118_024507_000000432054_00433_25537_2188.N1	18-JAN-2007 02:45:07	Straylight	43.000	1	9Alp CMa	-1.4400	11000.	86	25537	No

338	GOM_NL__2PRFIN20070118_212259_000000412054_00444_25548_2385.N1	18-JAN-2007 21:22:59	Bright	40.500	151	13Mu Gem	2.8900	3000.0	81	25548	No
339	GOM_NL__2PRFIN20070118_212501_000000352054_00444_25548_2386.N1	18-JAN-2007 21:25:01	Bright	35.000	28	12Bet Tau	1.6500	15200.	70	25548	No
340	GOM_NL__2PRFIN20070118_212640_000000372054_00444_25548_2387.N1	18-JAN-2007 21:26:40	Bright	36.500	114	3Iot Aur	2.6930	4600.0	73	25548	No
341	GOM_NL__2PRFIN20070118_212920_000000362054_00444_25548_2388.N1	18-JAN-2007 21:29:20	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	25548	No
342	GOM_NL__2PRFIN20070118_214154_000000332054_00444_25548_2389.N1	18-JAN-2007 21:41:54	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	25548	No
343	GOM_NL__2PRFIN20070118_215249_000000362054_00444_25548_2390.N1	18-JAN-2007 21:52:49	Bright	35.500	130	23Bet Dra	2.7990	5800.0	71	25548	No
344	GOM_NL__2PRFIN20070118_215601_000000372054_00444_25548_2391.N1	18-JAN-2007 21:56:01	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	25548	No
345	GOM_NL__2PRFIN20070118_220359_000000332054_00444_25548_2392.N1	18-JAN-2007 22:03:59	Bright	33.000	59	55Alp Oph	2.0800	8900.0	66	25548	No
346	GOM_NL__2PRFIN20070118_220606_000000332054_00444_25548_2393.N1	18-JAN-2007 22:06:06	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25548	No
347	GOM_NL__2PRFIN20070118_221125_000000362054_00444_25548_2394.N1	18-JAN-2007 22:11:25	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	25548	No
348	GOM_NL__2PRFIN20070118_221554_000000482054_00444_25548_2395.N1	18-JAN-2007 22:15:54	Twilight	47.500	16	21Alp Sco	1.0200	3000.0	95	25548	No
349	GOM_NL__2PRFIN20070118_221730_000000432054_00444_25548_2396.N1	18-JAN-2007 22:17:30	Twilight	43.000	75	26Eps Sco	2.2910	4250.0	86	25548	No
350	GOM_NL__2PRFIN20070118_222116_000000402054_00444_25548_2397.N1	18-JAN-2007 22:21:16	Dark	40.000	131	Gam Lup	2.8000	26000.	80	25548	No
351	GOM_NL__2PRFIN20070118_222702_000000452054_00445_25549_2381.N1	18-JAN-2007 22:27:02	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	25549	No
352	GOM_NL__2PRFIN20070118_223555_000000372054_00445_25549_2382.N1	18-JAN-2007 22:35:55	Dark	37.000	29	Bet Car	1.6720	10200.	74	25549	No
353	GOM_NL__2PRFIN20070118_223757_000000382054_00445_25549_2383.N1	18-JAN-2007 22:37:57	Dark	37.500	71	Iot Car	2.2460	7700.0	75	25549	No
354	GOM_NL__2PRFIN20070118_223947_000000432054_00445_25549_2384.N1	18-JAN-2007 22:39:47	Dark	43.000	46	Del Vel	1.9540	10600.	86	25549	No
355	GOM_NL__2PRFIN20070118_224236_000000522054_00445_25549_2385.N1	18-JAN-2007 22:42:36	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	25549	No
356	GOM_NL__2PRFIN20070118_224436_000000342054_00445_25549_2386.N1	18-JAN-2007 22:44:36	Dark	34.000	70	Zet Pup	2.2460	39000.	68	25549	No
357	GOM_NL__2PRFIN20070118_224612_000000422054_00445_25549_2387.N1	18-JAN-2007 22:46:12	Straylight	42.000	117	Pi Pup	2.7060	3800.0	84	25549	No
358	GOM_NL__2PRFIN20070118_224843_000000432054_00445_25549_2388.N1	18-JAN-2007 22:48:43	Straylight	43.000	23	21Eps CMa	1.5020	26000.	86	25549	No
359	GOM_NL__2PRFIN20070118_225008_000000392054_00445_25549_2389.N1	18-JAN-2007 22:50:08	Straylight	39.000	179	24Omi2CMa	3.0320	24000.	78	25549	No
360	GOM_NL__2PRFIN20070118_225219_000000422054_00445_25549_2390.N1	18-JAN-2007 22:52:19	Straylight	42.000	1	9Alp CMa	-1.4400	11000.	84	25549	No
361	GOM_NL__2PRFIN20070118_225450_000000402054_00445_25549_2391.N1	18-JAN-2007 22:54:50	Straylight	39.500	56	53Kap Ori	2.0650	30000.	79	25549	No
362	GOM_NL__2PRFIN20070118_225601_000000392054_00445_25549_2392.N1	18-JAN-2007 22:56:01	Tw_i_and_stray	39.000	125	44Iot Ori	2.7700	30000.	78	25549	No
363	GOM_NL__2PRFIN20070118_225719_000000422054_00445_25549_2393.N1	18-JAN-2007 22:57:19	Tw_i_and_stray	42.000	30	46Eps Ori	1.6940	30000.	84	25549	No
364	GOM_NL__2PRFIN20070118_225929_000000492054_00445_25549_2394.N1	18-JAN-2007 22:59:29	Tw_i_and_stray	49.000	14	58Alp Ori	0.87000	3000.0	98	25549	No
365	GOM_NL__2PRFIN20070118_230151_000000442054_00445_25549_2395.N1	18-JAN-2007 23:01:51	Bright	44.000	44	24Gam Gem	1.9280	11000.	88	25549	No
366	GOM_NL__2PRFIN20070118_230335_000000412054_00445_25549_2396.N1	18-JAN-2007 23:03:35	Bright	41.000	151	13Mu Gem	2.8900	3000.0	82	25549	No
367	GOM_NL__2PRFIN20070118_230537_000000352054_00445_25549_2397.N1	18-JAN-2007 23:05:37	Bright	35.000	28	12Bet Tau	1.6500	15200.	70	25549	No
368	GOM_NL__2PRFIN20070118_230717_000000372054_00445_25549_2398.N1	18-JAN-2007 23:07:17	Bright	36.500	114	3Iot Aur	2.6930	4600.0	73	25549	No
369	GOM_NL__2PRFIN20070118_230956_000000362054_00445_25549_2399.N1	18-JAN-2007 23:09:56	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	25549	No
370	GOM_NL__2PRFIN20070118_232229_000000362054_00445_25549_2400.N1	18-JAN-2007 23:22:29	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	25549	No
371	GOM_NL__2PRFIN20070118_233325_000000342054_00445_25549_2401.N1	18-JAN-2007 23:33:25	Bright	33.500	130	23Bet Dra	2.7990	5800.0	67	25549	No
372	GOM_NL__2PRFIN20070118_233637_000000332054_00445_25549_2402.N1	18-JAN-2007 23:36:37	Bright	33.000	5	3Alp Lyr	0.033000	11000.	66	25549	No
373	GOM_NL__2PRFIN20070118_234435_000000332054_00445_25549_2403.N1	18-JAN-2007 23:44:35	Bright	33.000	59	55Alp Oph	2.0800	8900.0	66	25549	No
374	GOM_NL__2PRFIN20070118_234642_000000332054_00445_25549_2404.N1	18-JAN-2007 23:46:42	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25549	No
375	GOM_NL__2PRFIN20070118_235202_000000362054_00445_25549_2405.N1	18-JAN-2007 23:52:02	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	25549	No
376	GOM_NL__2PRFIN20070118_235630_000000462054_00445_25549_2406.N1	18-JAN-2007 23:56:30	Twilight	46.000	16	21Alp Sco	1.0200	3000.0	92	25549	No
377	GOM_NL__2PRFIN20070118_235806_000000432054_00445_25549_2407.N1	18-JAN-2007 23:58:06	Twilight	43.000	75	26Eps Sco	2.2910	4250.0	86	25549	No

3. Quality information per product

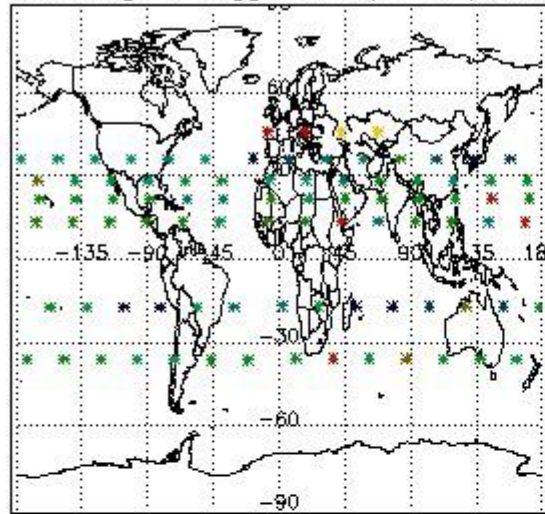
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

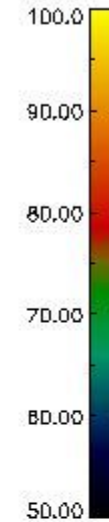
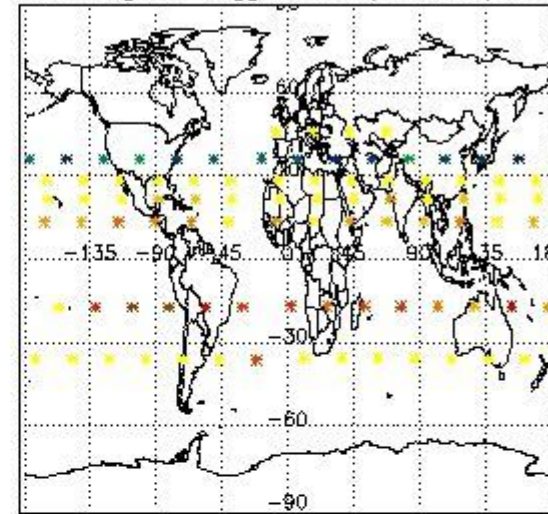


3.2 Plot quality information per product (world map)

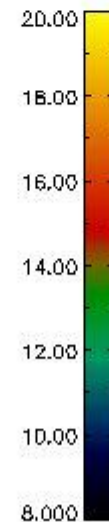
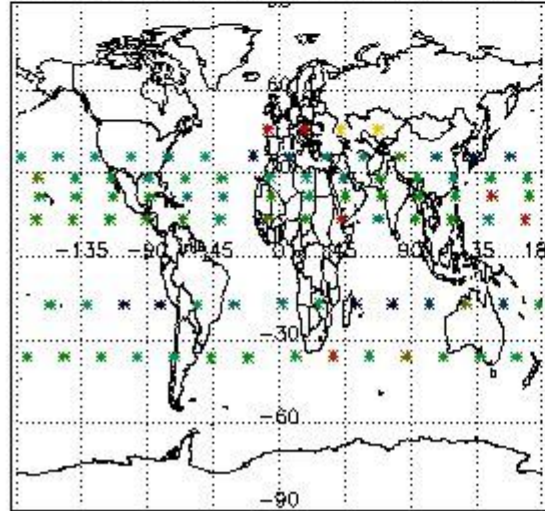
Percentage of flagged data per O3 profile



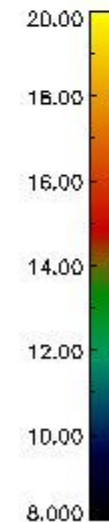
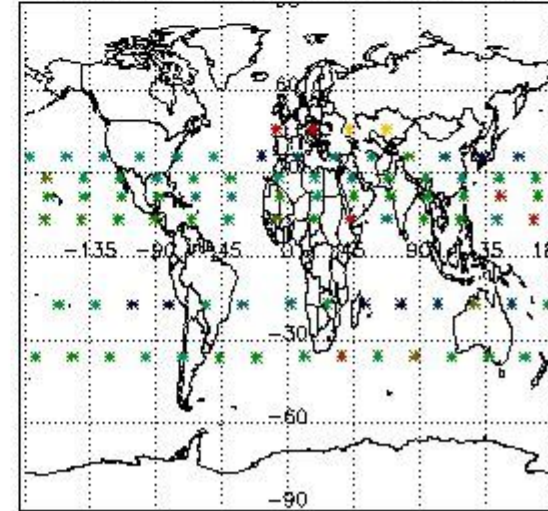
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

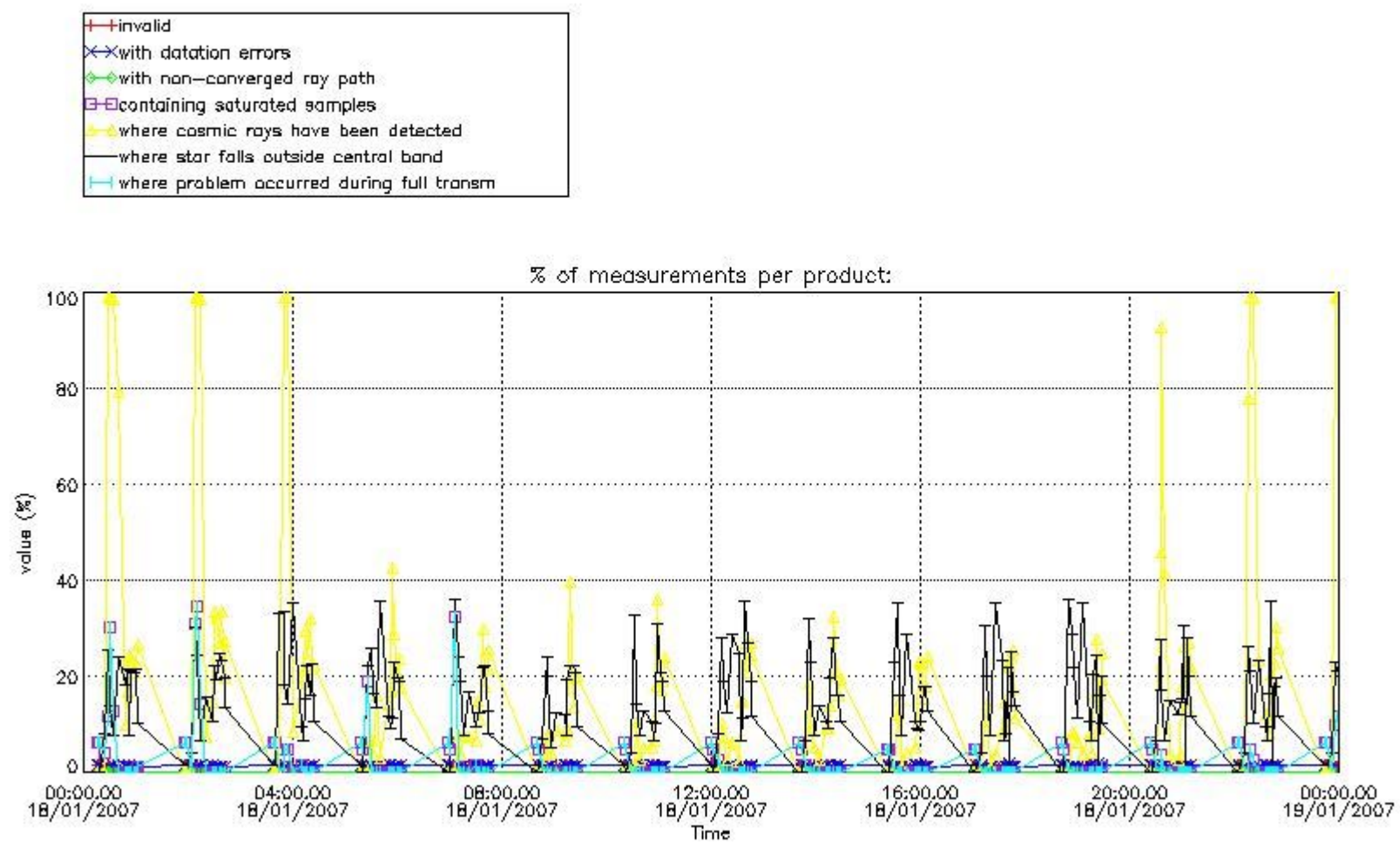


4. Level 1 quality information per product

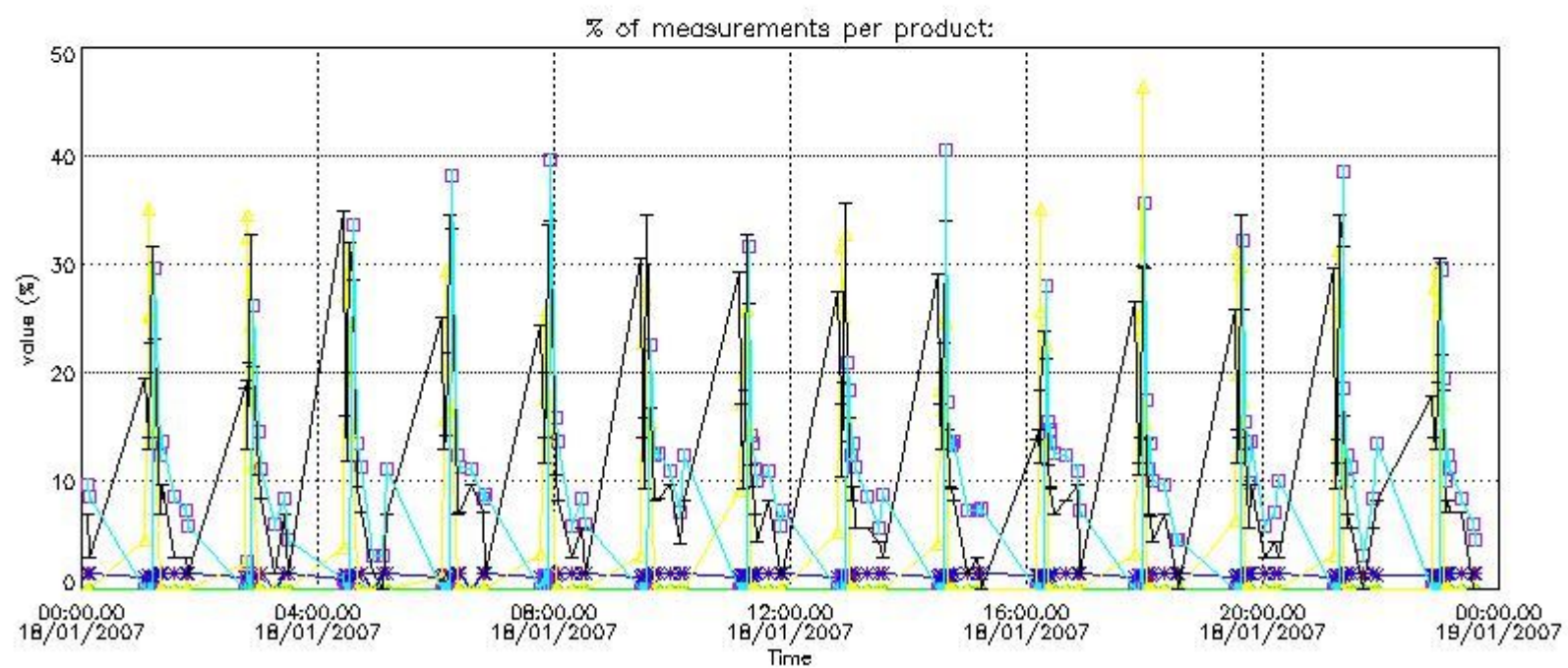
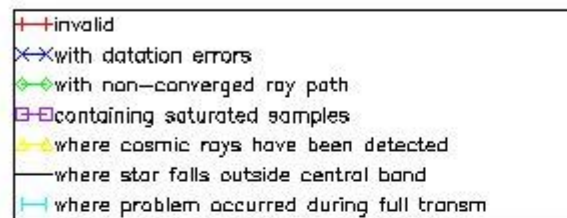
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

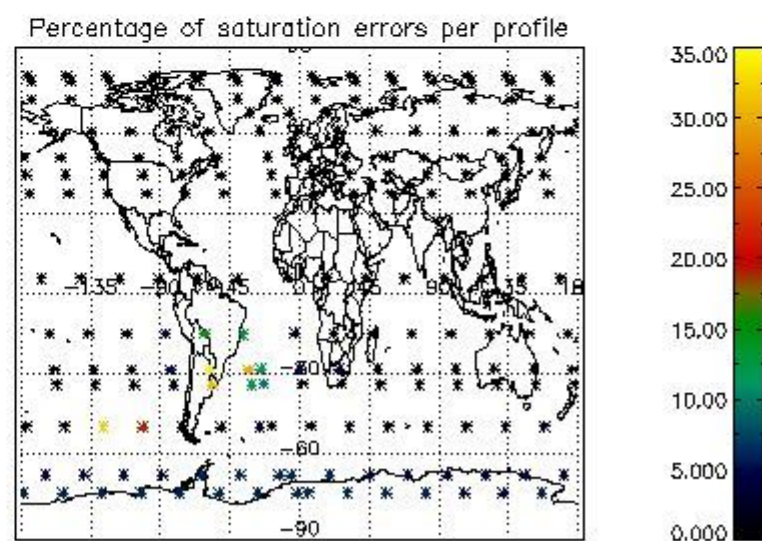
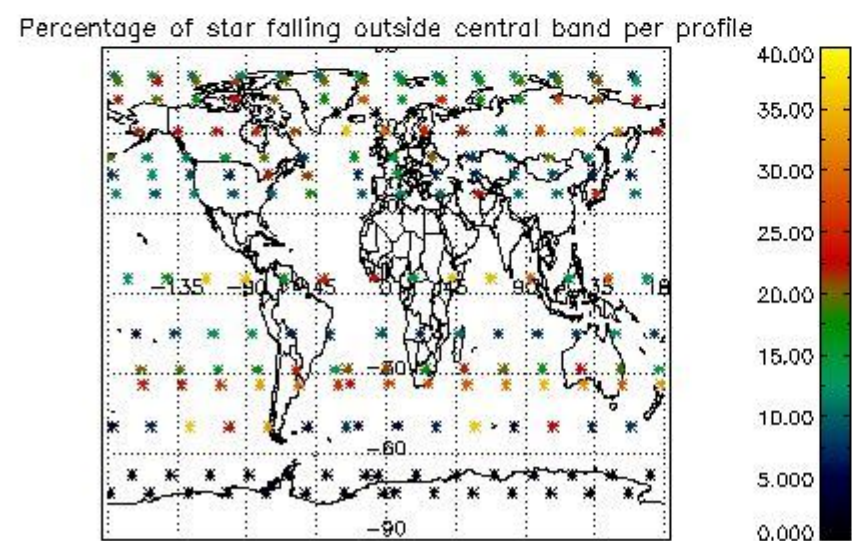
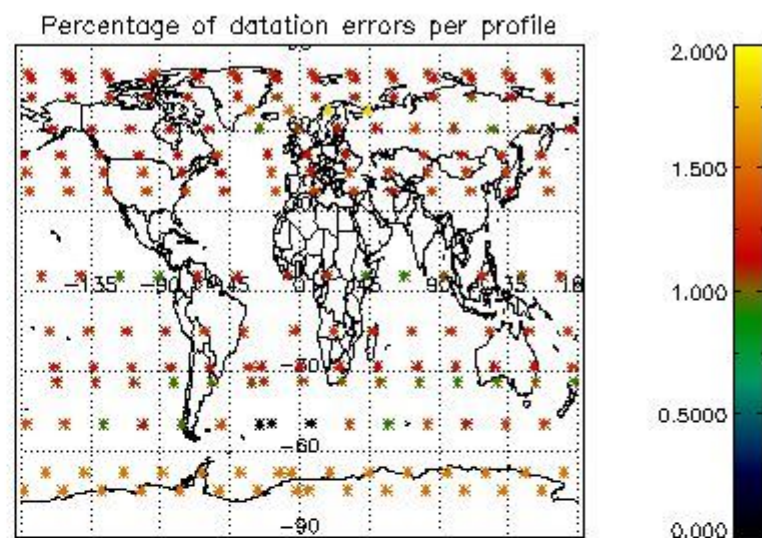
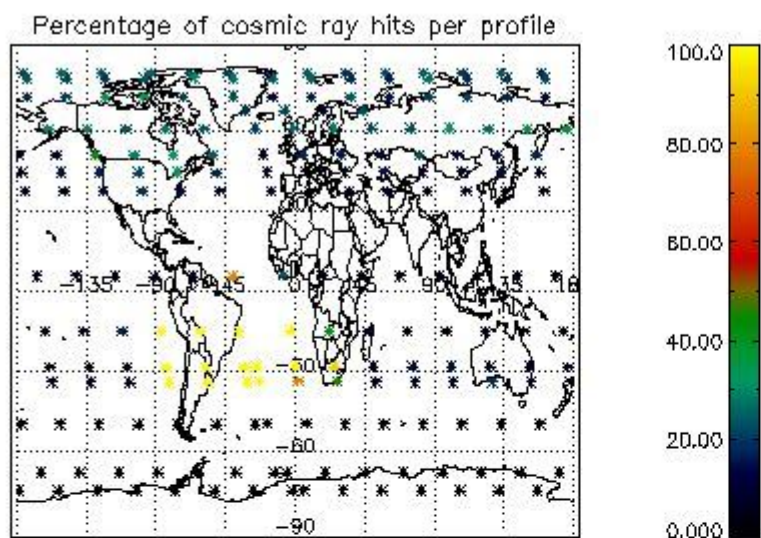


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



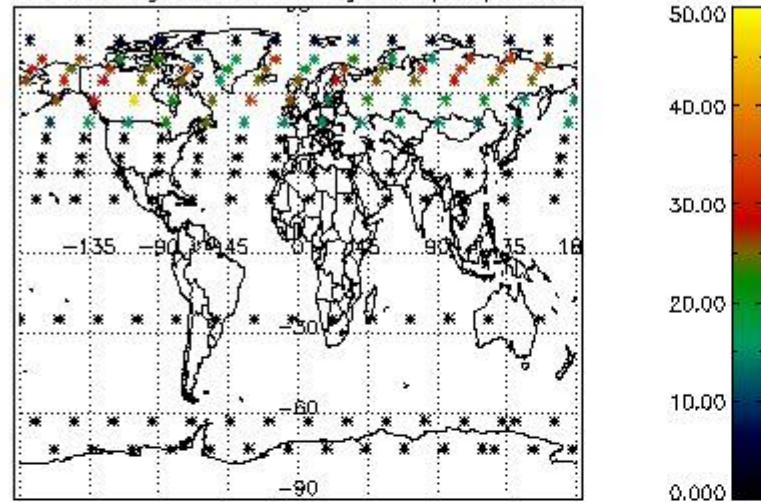
4.2 Plot quality information per product coming from level 1b processing (world map)

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

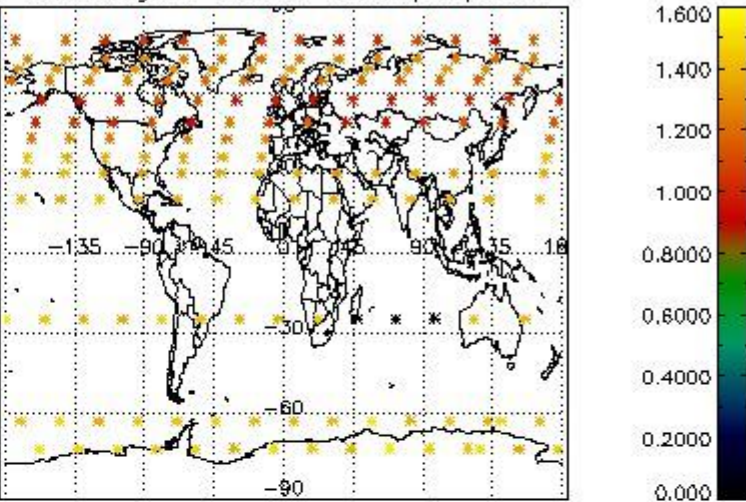


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

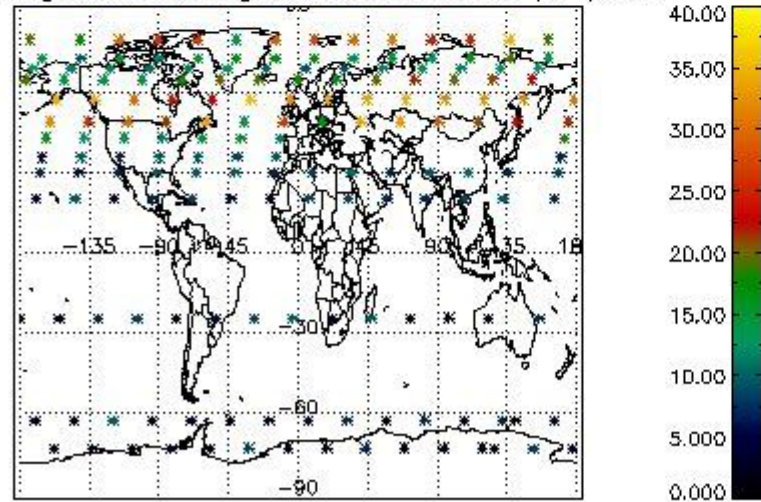
Percentage of cosmic ray hits per profile



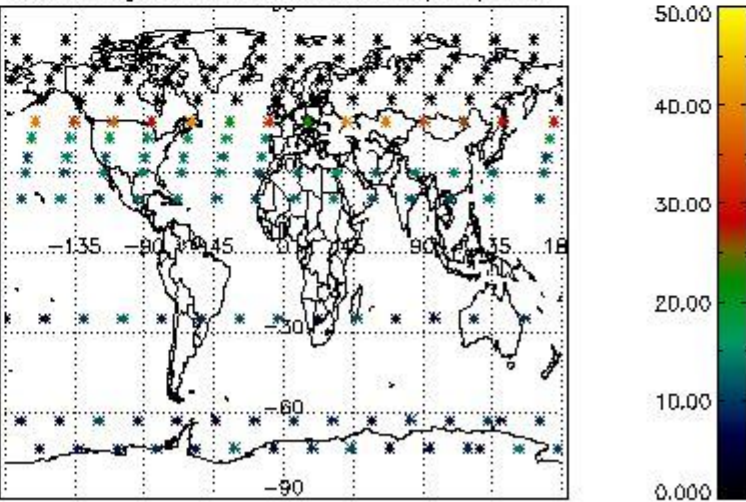
Percentage of datation errors per profile



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

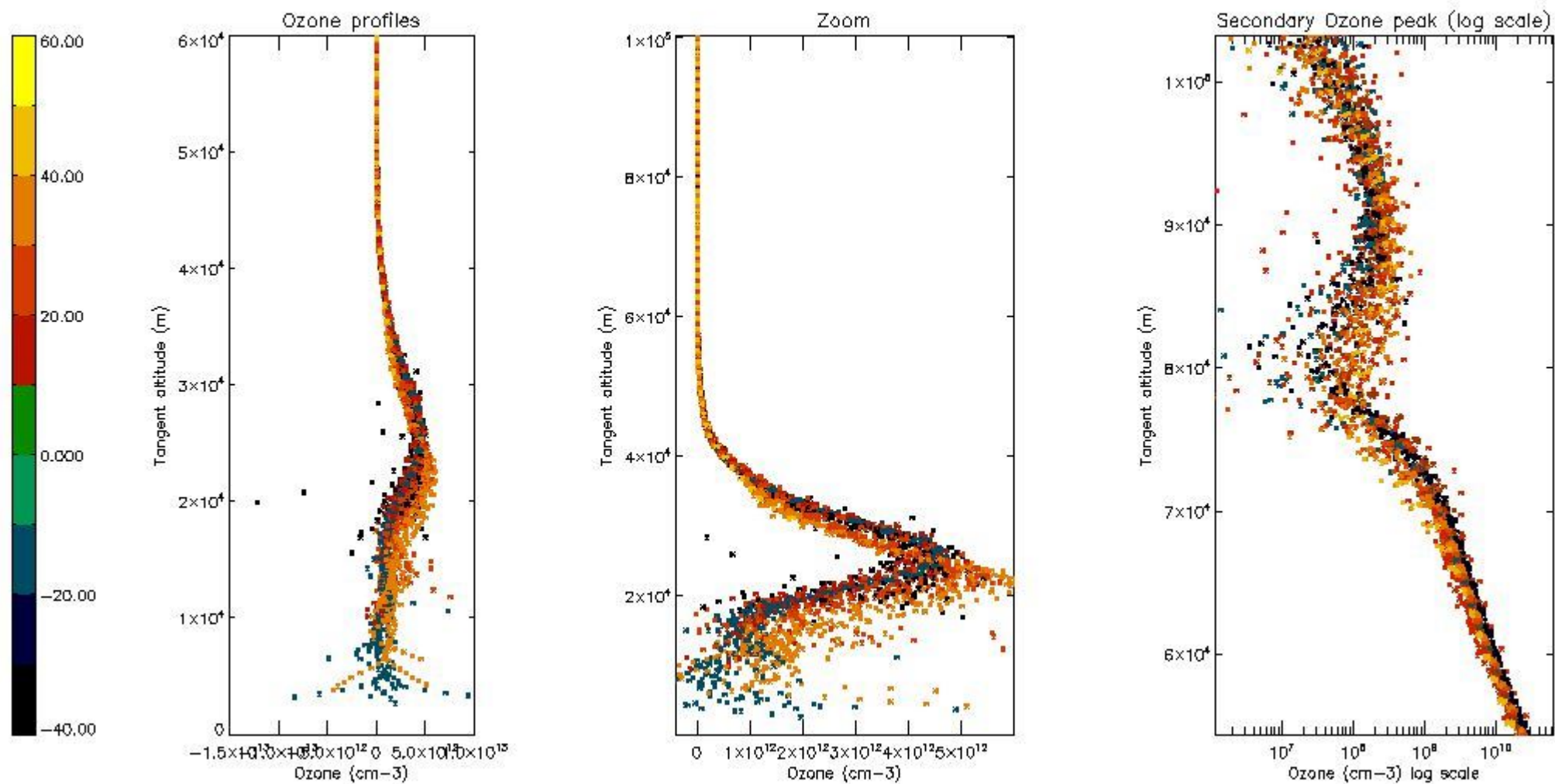
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	14

STD < 10	12
STD < 5	8

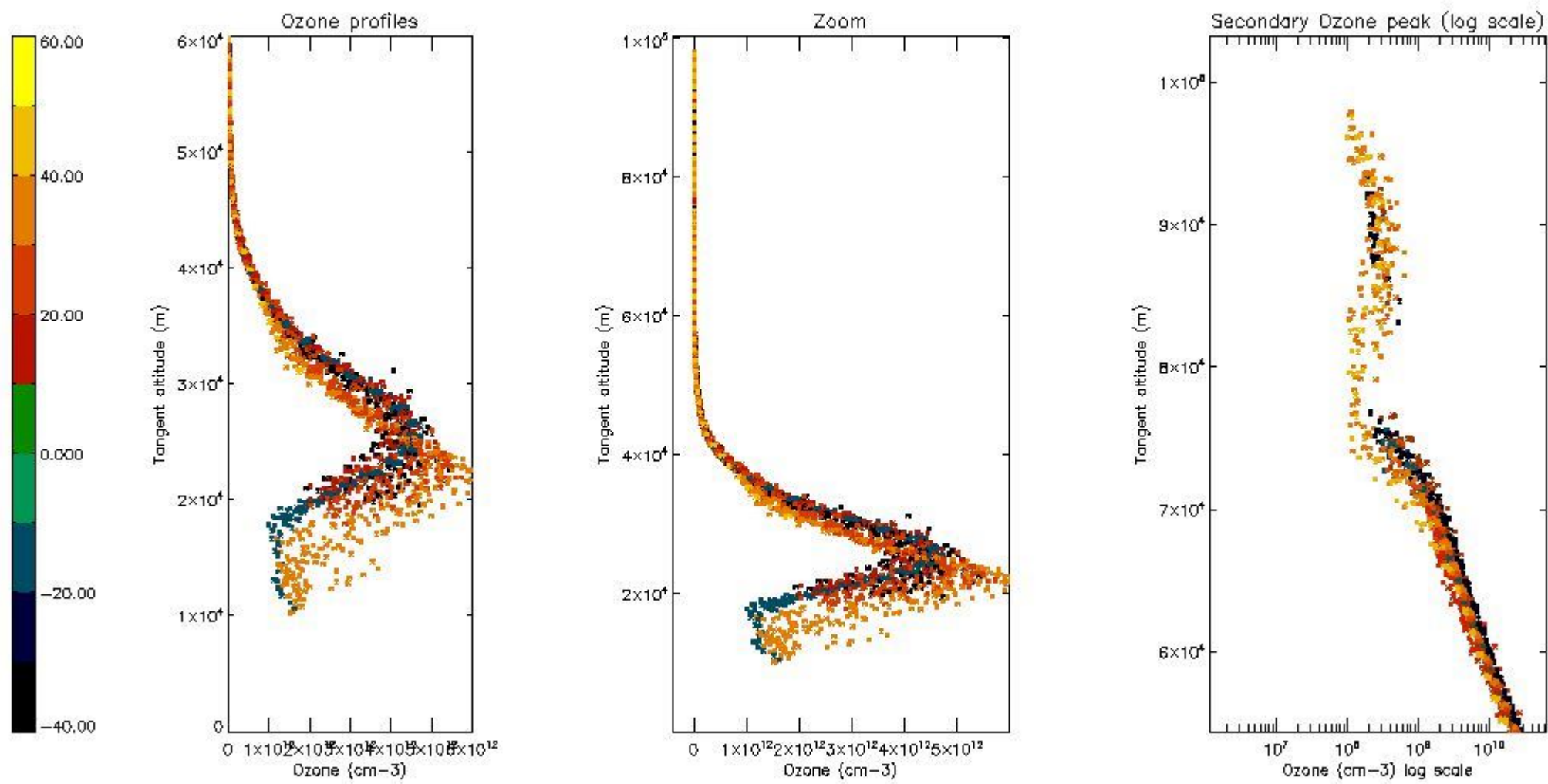
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



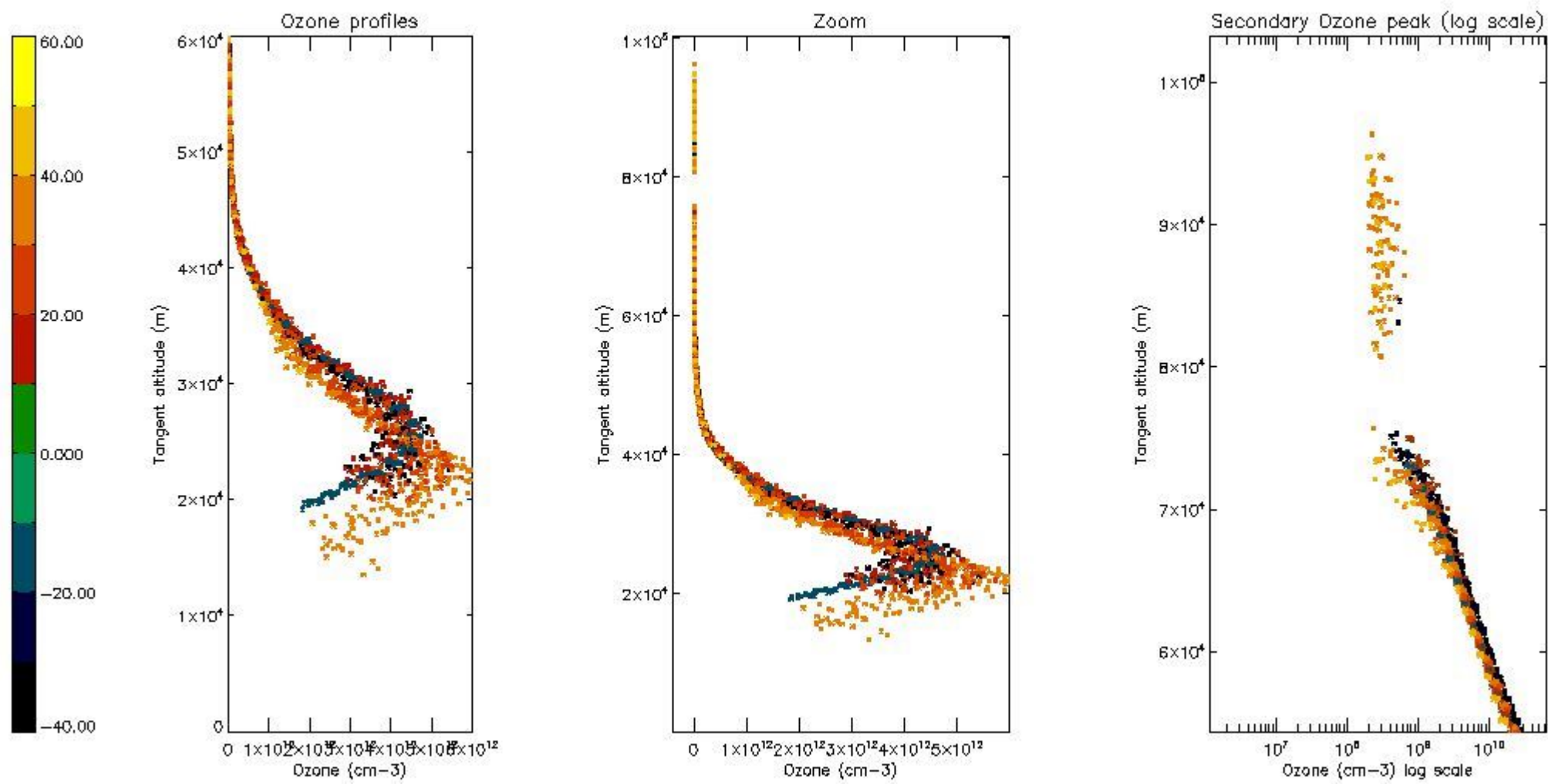
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



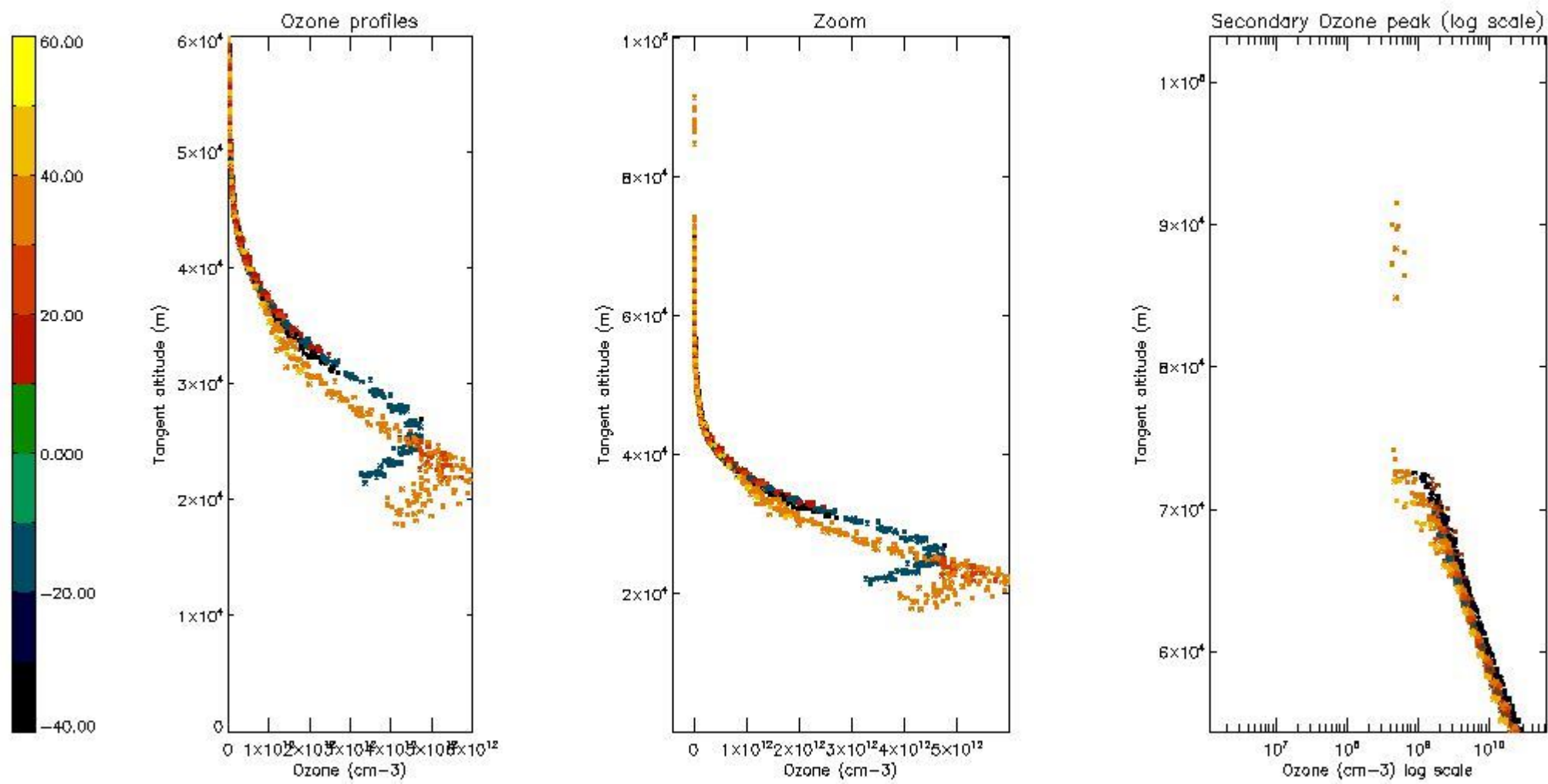
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



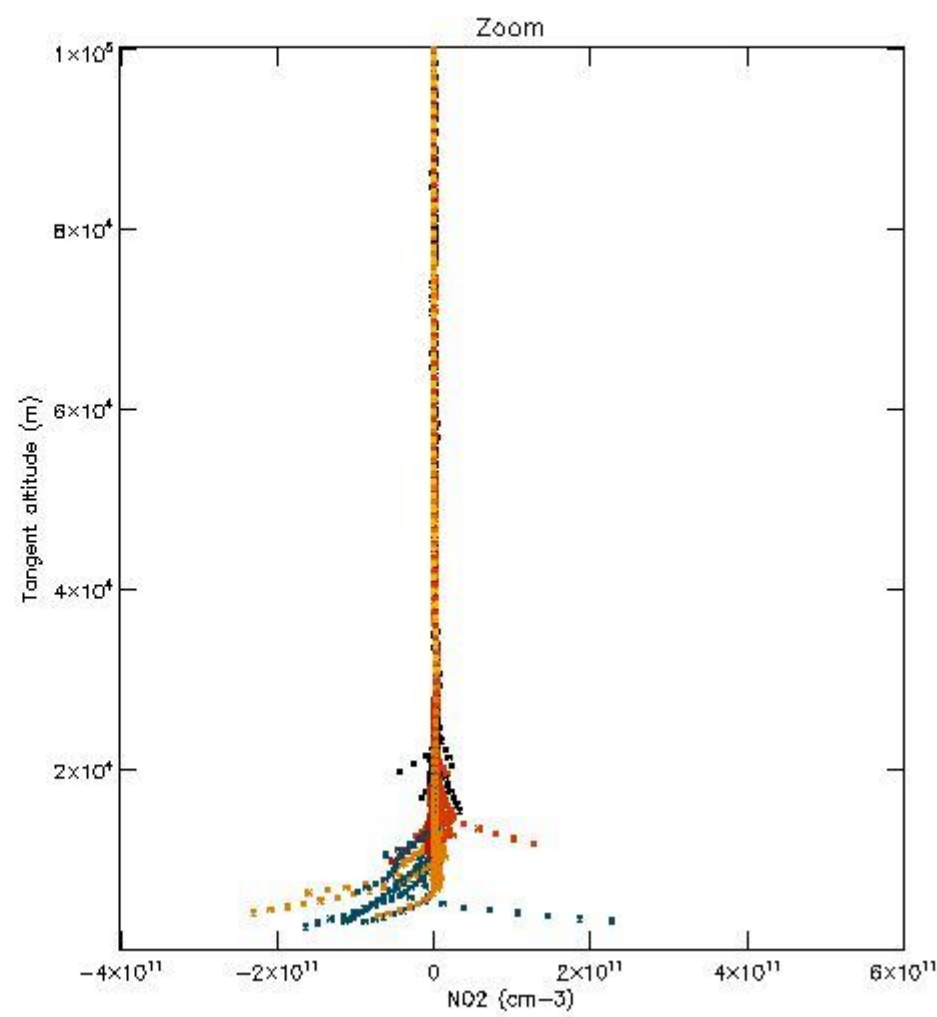
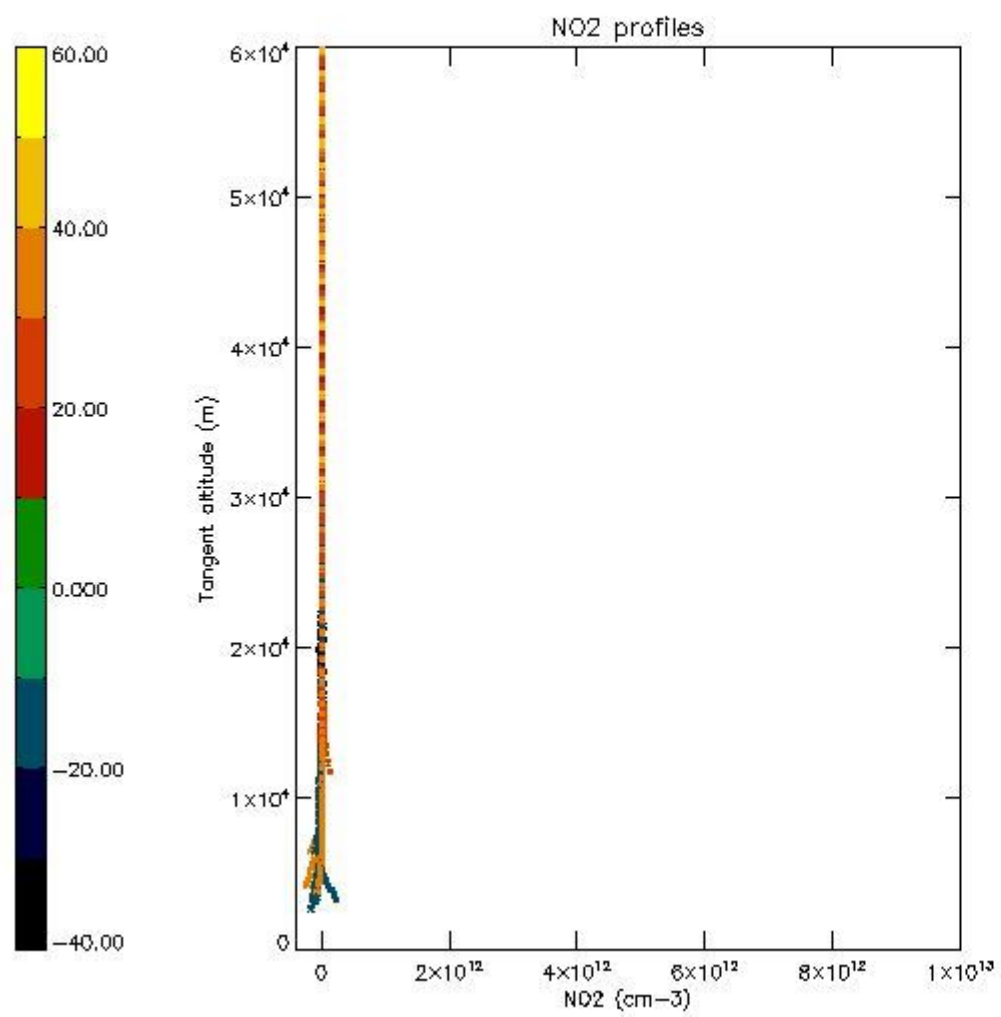
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



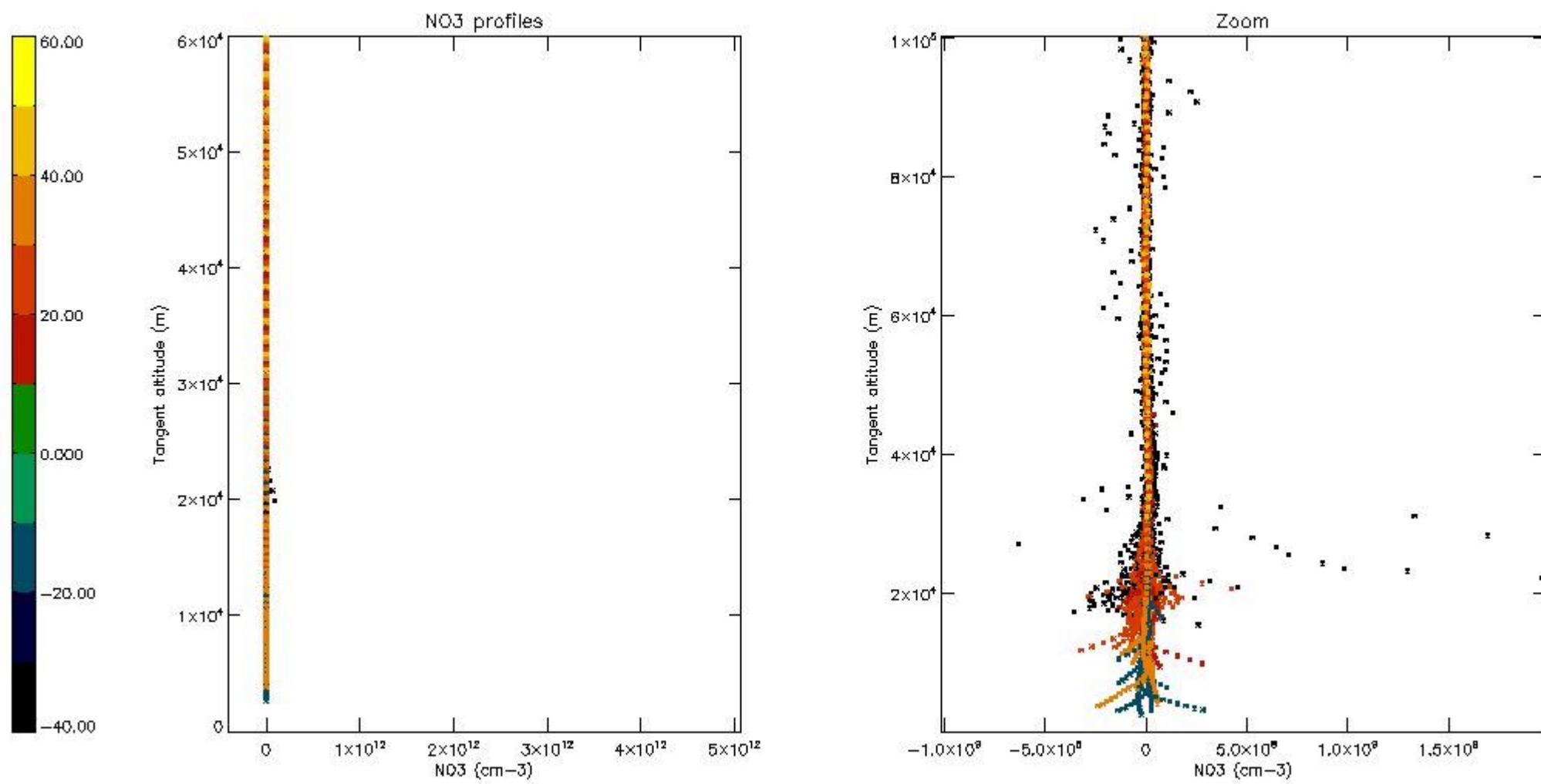
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



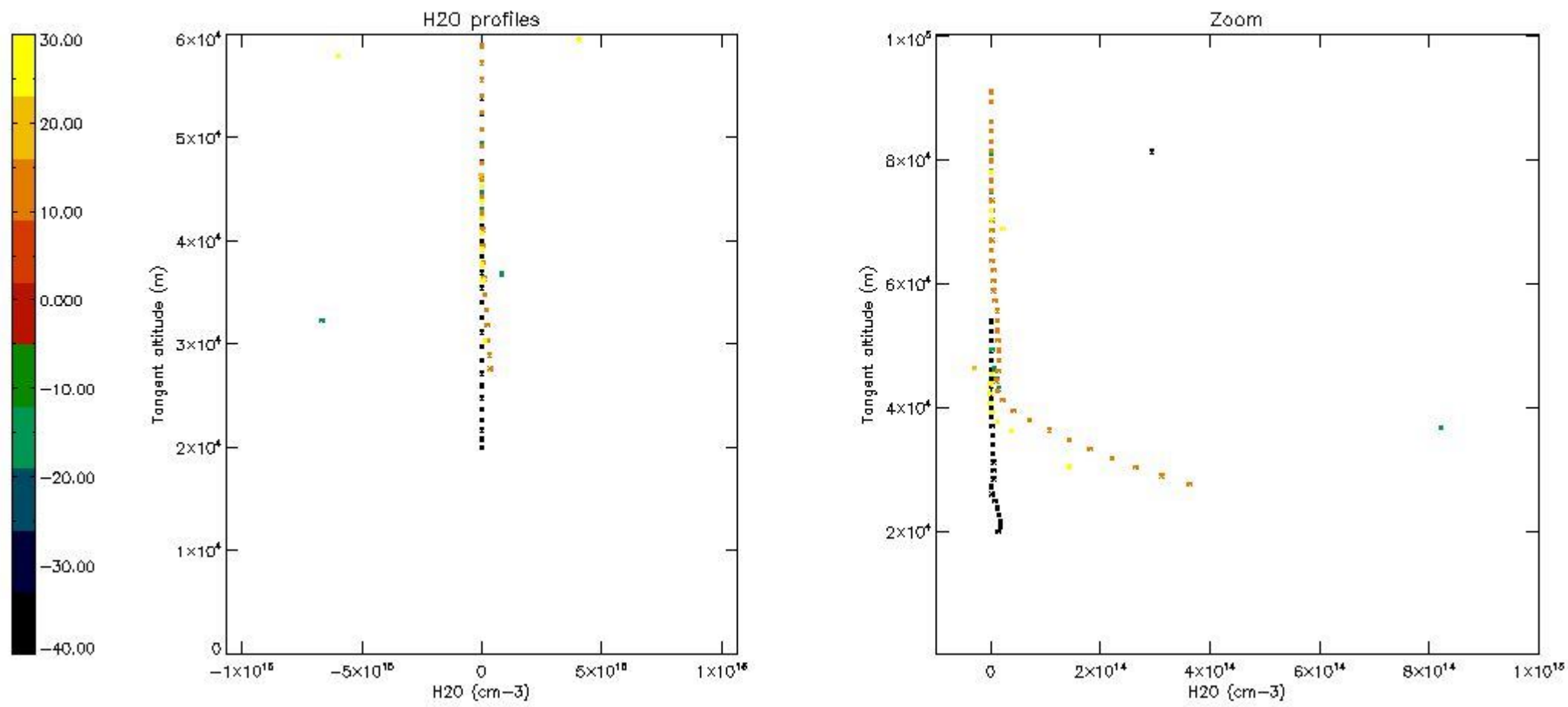
5.7 Plot NO3 profiles for all STD (dark without errors)

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	18-JAN-2007 00:05:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-JAN-2007 00:05:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-JAN-2007 00:05:01

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

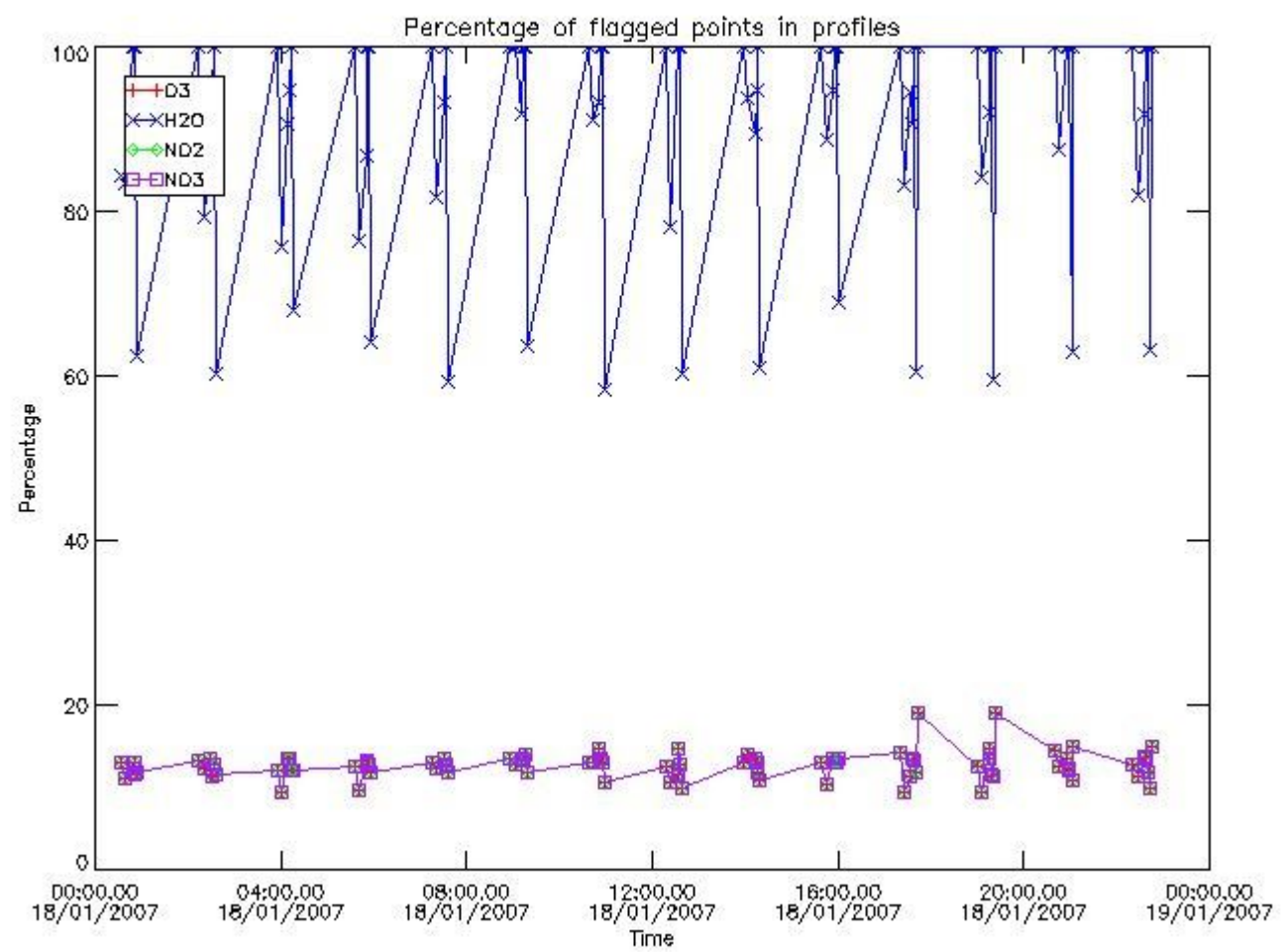
[6. Auxiliary Data Files used for the production reported in section 2](#)

338	GOM_NL__2PRFIN20070118_212259_000000412054_00444_25548_2385.N1	18-JAN-2007 21:22:59	Bright	40.500	151	13Mu Gem	2.8900	3000.0	81	25548	No
339	GOM_NL__2PRFIN20070118_212501_000000352054_00444_25548_2386.N1	18-JAN-2007 21:25:01	Bright	35.000	28	12Bet Tau	1.6500	15200.	70	25548	No
340	GOM_NL__2PRFIN20070118_212640_000000372054_00444_25548_2387.N1	18-JAN-2007 21:26:40	Bright	36.500	114	3lot Aur	2.6930	4600.0	73	25548	No
341	GOM_NL__2PRFIN20070118_212920_000000362054_00444_25548_2388.N1	18-JAN-2007 21:29:20	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	25548	No
342	GOM_NL__2PRFIN20070118_214154_000000332054_00444_25548_2389.N1	18-JAN-2007 21:41:54	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	25548	No
343	GOM_NL__2PRFIN20070118_215249_000000362054_00444_25548_2390.N1	18-JAN-2007 21:52:49	Bright	35.500	130	23Bet Dra	2.7990	5800.0	71	25548	No
344	GOM_NL__2PRFIN20070118_215601_000000372054_00444_25548_2391.N1	18-JAN-2007 21:56:01	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	25548	No
345	GOM_NL__2PRFIN20070118_220359_000000332054_00444_25548_2392.N1	18-JAN-2007 22:03:59	Bright	33.000	59	55Alp Oph	2.0800	8900.0	66	25548	No
346	GOM_NL__2PRFIN20070118_220606_000000332054_00444_25548_2393.N1	18-JAN-2007 22:06:06	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25548	No
347	GOM_NL__2PRFIN20070118_221125_000000362054_00444_25548_2394.N1	18-JAN-2007 22:11:25	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	25548	No
348	GOM_NL__2PRFIN20070118_221554_000000482054_00444_25548_2395.N1	18-JAN-2007 22:15:54	Twilight	47.500	16	21Alp Sco	1.0200	3000.0	95	25548	No
349	GOM_NL__2PRFIN20070118_221730_000000432054_00444_25548_2396.N1	18-JAN-2007 22:17:30	Twilight	43.000	75	26Eps Sco	2.2910	4250.0	86	25548	No
350	GOM_NL__2PRFIN20070118_222116_000000402054_00444_25548_2397.N1	18-JAN-2007 22:21:16	Dark	40.000	131	Gam Lup	2.8000	26000.	80	25548	No
351	GOM_NL__2PRFIN20070118_222702_000000452054_00445_25549_2381.N1	18-JAN-2007 22:27:02	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	25549	No
352	GOM_NL__2PRFIN20070118_223555_000000372054_00445_25549_2382.N1	18-JAN-2007 22:35:55	Dark	37.000	29	Bet Car	1.6720	10200.	74	25549	No
353	GOM_NL__2PRFIN20070118_223757_000000382054_00445_25549_2383.N1	18-JAN-2007 22:37:57	Dark	37.500	71	lot Car	2.2460	7700.0	75	25549	No
354	GOM_NL__2PRFIN20070118_223947_000000432054_00445_25549_2384.N1	18-JAN-2007 22:39:47	Dark	43.000	46	Del Vel	1.9540	10600.	86	25549	No
355	GOM_NL__2PRFIN20070118_224236_000000522054_00445_25549_2385.N1	18-JAN-2007 22:42:36	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	25549	No
356	GOM_NL__2PRFIN20070118_224436_000000342054_00445_25549_2386.N1	18-JAN-2007 22:44:36	Dark	34.000	70	Zet Pup	2.2460	39000.	68	25549	No
357	GOM_NL__2PRFIN20070118_224612_000000422054_00445_25549_2387.N1	18-JAN-2007 22:46:12	Straylight	42.000	117	Pi Pup	2.7060	3800.0	84	25549	No
358	GOM_NL__2PRFIN20070118_224843_000000432054_00445_25549_2388.N1	18-JAN-2007 22:48:43	Straylight	43.000	23	21Eps CMa	1.5020	26000.	86	25549	No
359	GOM_NL__2PRFIN20070118_225008_000000392054_00445_25549_2389.N1	18-JAN-2007 22:50:08	Straylight	39.000	179	24Omi2CMa	3.0320	24000.	78	25549	No
360	GOM_NL__2PRFIN20070118_225219_000000422054_00445_25549_2390.N1	18-JAN-2007 22:52:19	Straylight	42.000	1	9Alp CMa	-1.4400	11000.	84	25549	No
361	GOM_NL__2PRFIN20070118_225450_000000402054_00445_25549_2391.N1	18-JAN-2007 22:54:50	Straylight	39.500	56	53Kap Ori	2.0650	30000.	79	25549	No
362	GOM_NL__2PRFIN20070118_225601_000000392054_00445_25549_2392.N1	18-JAN-2007 22:56:01	Tw_i_and_stray	39.000	125	44lot Ori	2.7700	30000.	78	25549	No
363	GOM_NL__2PRFIN20070118_225719_000000422054_00445_25549_2393.N1	18-JAN-2007 22:57:19	Tw_i_and_stray	42.000	30	46Eps Ori	1.6940	30000.	84	25549	No
364	GOM_NL__2PRFIN20070118_225929_000000492054_00445_25549_2394.N1	18-JAN-2007 22:59:29	Tw_i_and_stray	49.000	14	58Alp Ori	0.87000	3000.0	98	25549	No
365	GOM_NL__2PRFIN20070118_230151_000000442054_00445_25549_2395.N1	18-JAN-2007 23:01:51	Bright	44.000	44	24Gam Gem	1.9280	11000.	88	25549	No
366	GOM_NL__2PRFIN20070118_230335_000000412054_00445_25549_2396.N1	18-JAN-2007 23:03:35	Bright	41.000	151	13Mu Gem	2.8900	3000.0	82	25549	No
367	GOM_NL__2PRFIN20070118_230537_000000352054_00445_25549_2397.N1	18-JAN-2007 23:05:37	Bright	35.000	28	12Bet Tau	1.6500	15200.	70	25549	No
368	GOM_NL__2PRFIN20070118_230717_000000372054_00445_25549_2398.N1	18-JAN-2007 23:07:17	Bright	36.500	114	3lot Aur	2.6930	4600.0	73	25549	No
369	GOM_NL__2PRFIN20070118_230956_000000362054_00445_25549_2399.N1	18-JAN-2007 23:09:56	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	25549	No
370	GOM_NL__2PRFIN20070118_232229_000000362054_00445_25549_2400.N1	18-JAN-2007 23:22:29	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	25549	No
371	GOM_NL__2PRFIN20070118_233325_000000342054_00445_25549_2401.N1	18-JAN-2007 23:33:25	Bright	33.500	130	23Bet Dra	2.7990	5800.0	67	25549	No
372	GOM_NL__2PRFIN20070118_233637_000000332054_00445_25549_2402.N1	18-JAN-2007 23:36:37	Bright	33.000	5	3Alp Lyr	0.033000	11000.	66	25549	No
373	GOM_NL__2PRFIN20070118_234435_000000332054_00445_25549_2403.N1	18-JAN-2007 23:44:35	Bright	33.000	59	55Alp Oph	2.0800	8900.0	66	25549	No
374	GOM_NL__2PRFIN20070118_234642_000000332054_00445_25549_2404.N1	18-JAN-2007 23:46:42	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25549	No
375	GOM_NL__2PRFIN20070118_235202_000000362054_00445_25549_2405.N1	18-JAN-2007 23:52:02	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	25549	No
376	GOM_NL__2PRFIN20070118_235630_000000462054_00445_25549_2406.N1	18-JAN-2007 23:56:30	Twilight	46.000	16	21Alp Sco	1.0200	3000.0	92	25549	No
377	GOM_NL__2PRFIN20070118_235806_000000432054_00445_25549_2407.N1	18-JAN-2007 23:58:06	Twilight	43.000	75	26Eps Sco	2.2910	4250.0	86	25549	No

3. Quality information per product

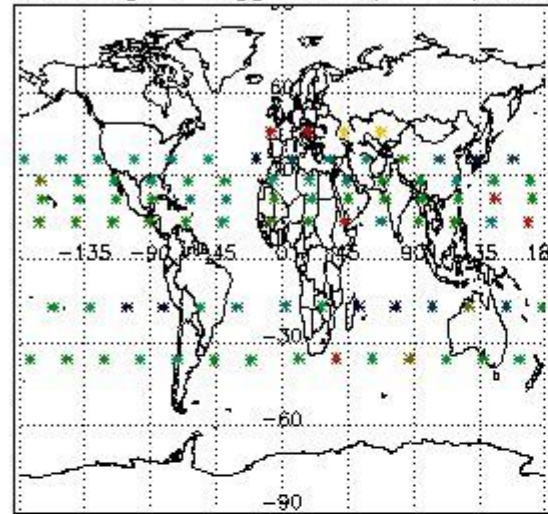
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

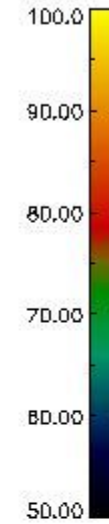
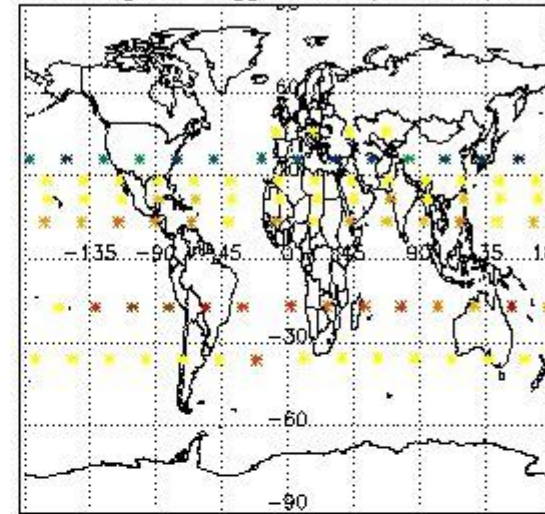


3.2 Plot quality information per product (world map)

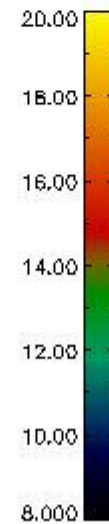
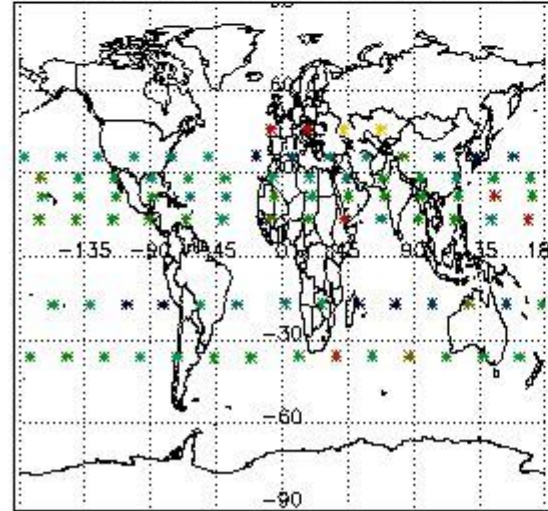
Percentage of flagged data per O3 profile



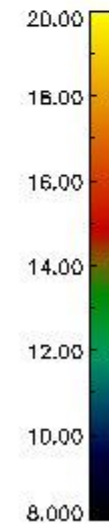
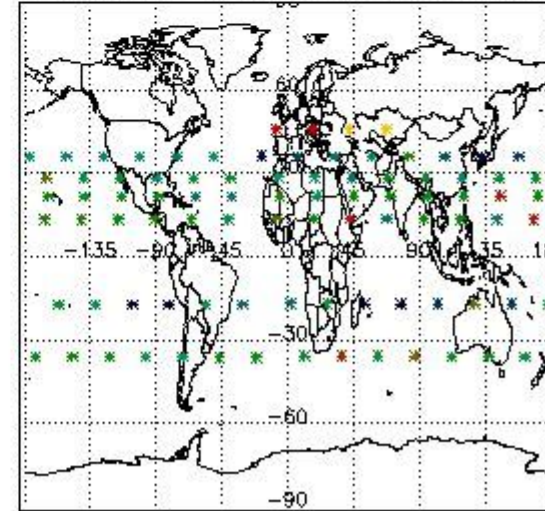
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

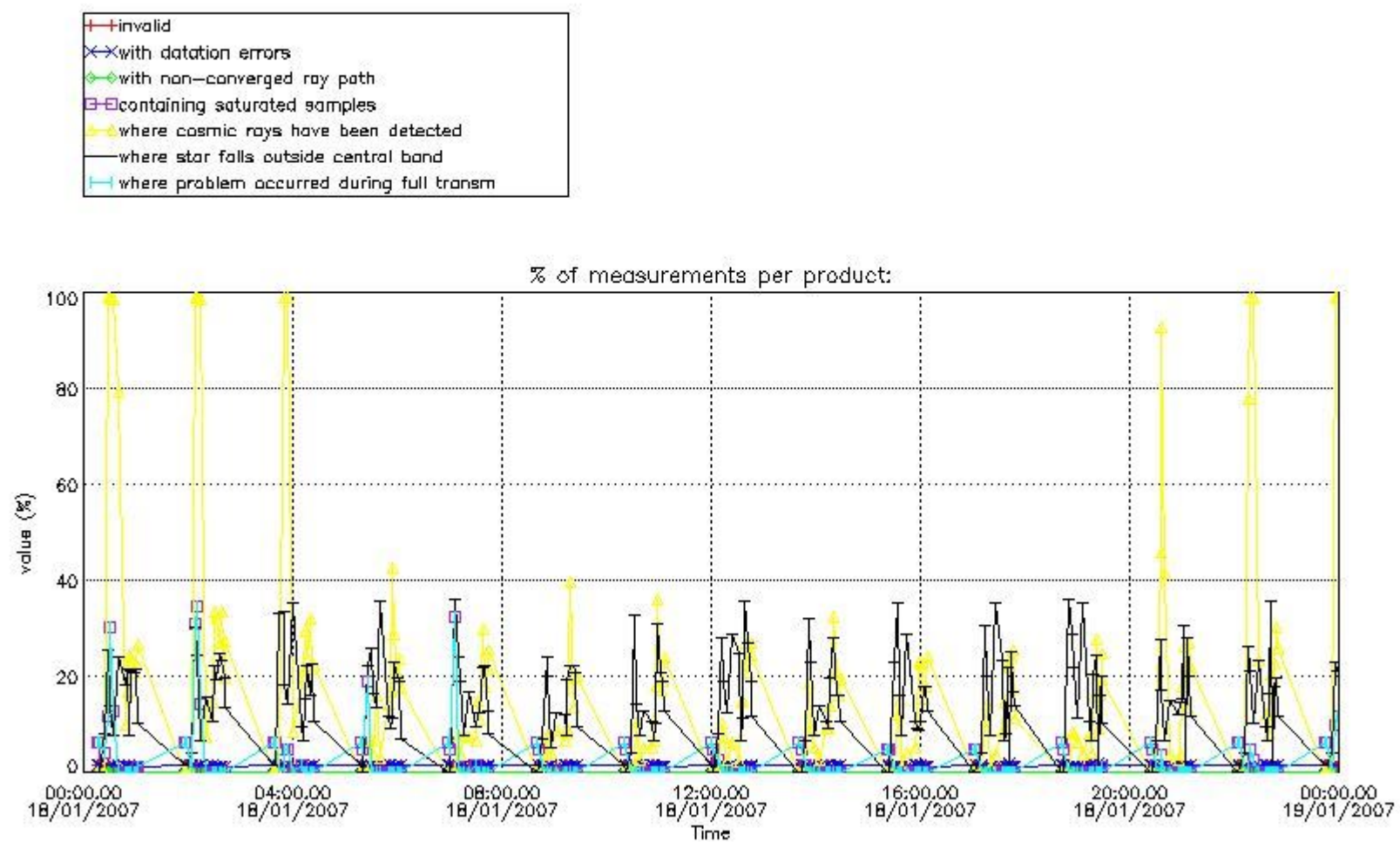


4. Level 1 quality information per product

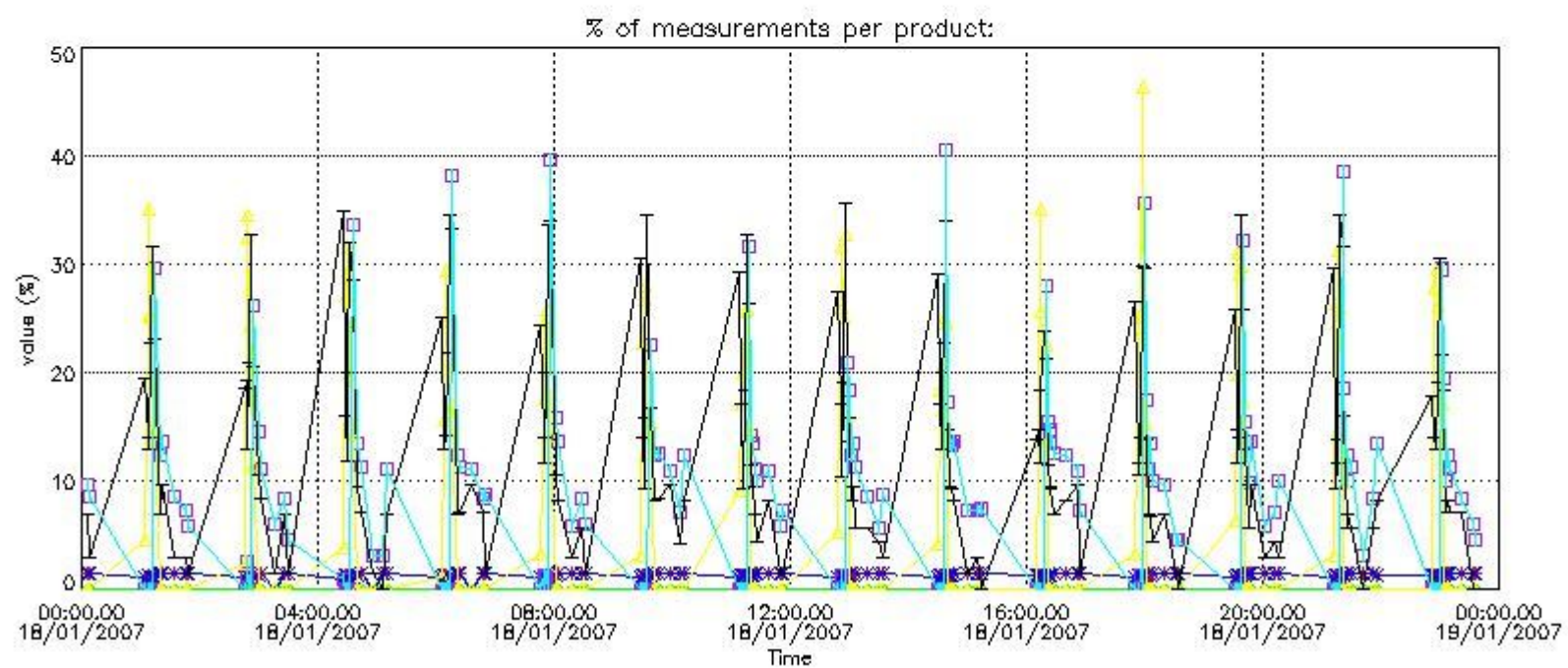
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

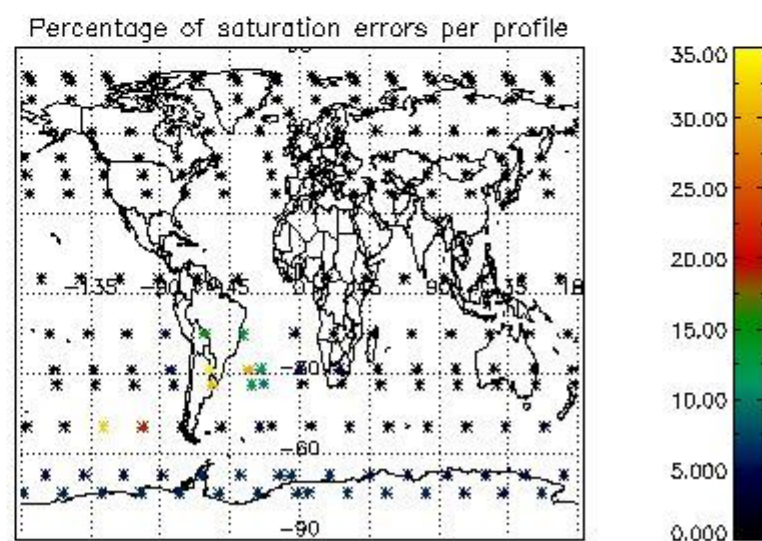
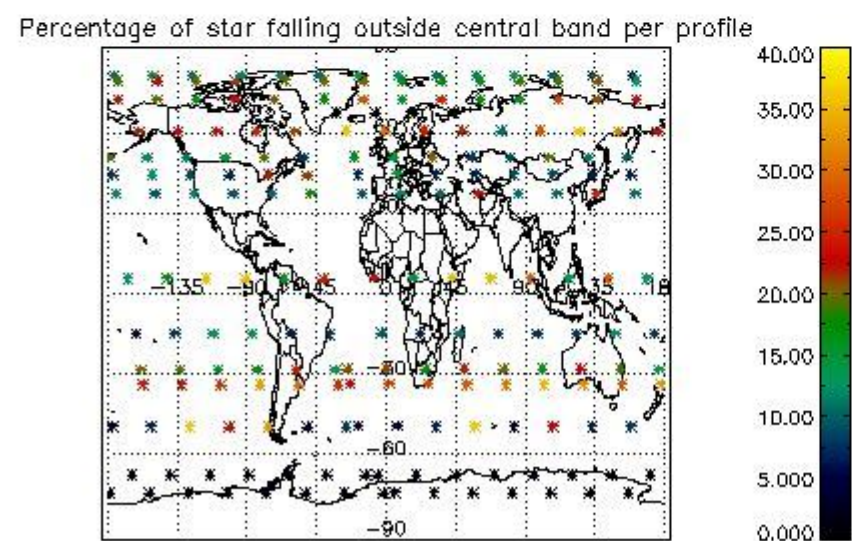
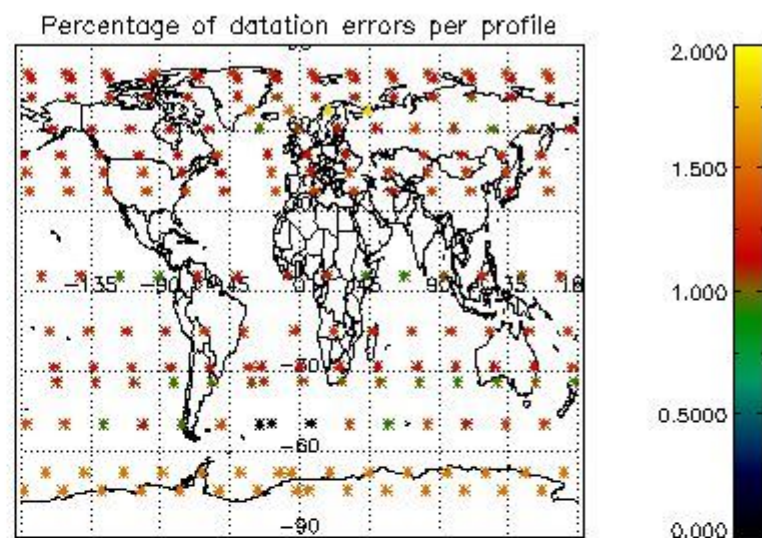
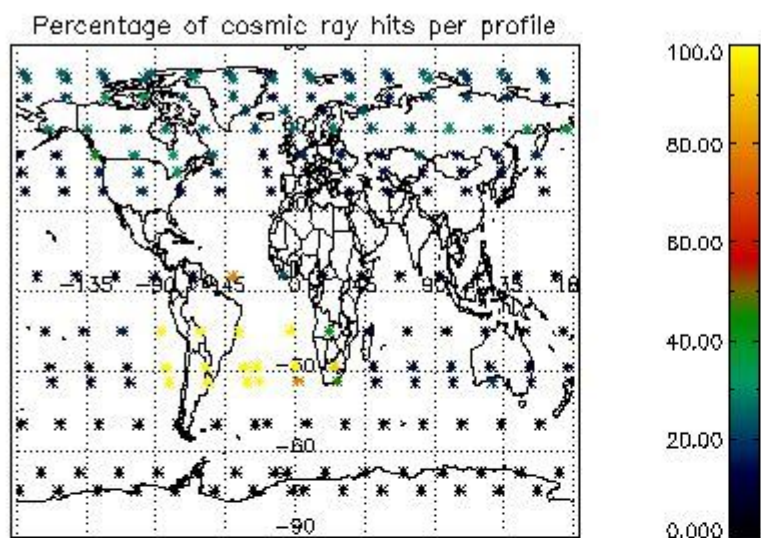


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



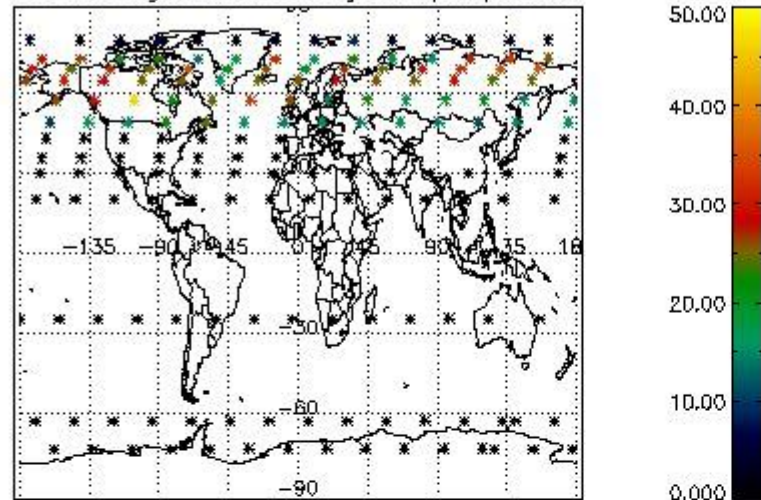
4.2 Plot quality information per product coming from level 1b processing (world map)

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

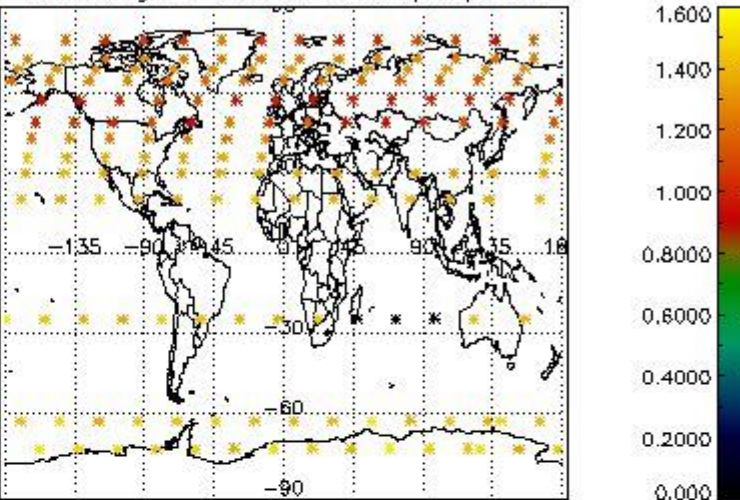


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

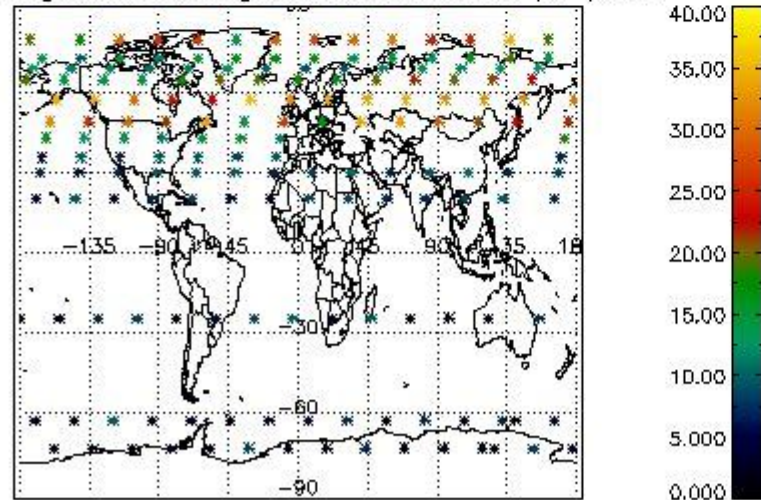
Percentage of cosmic ray hits per profile



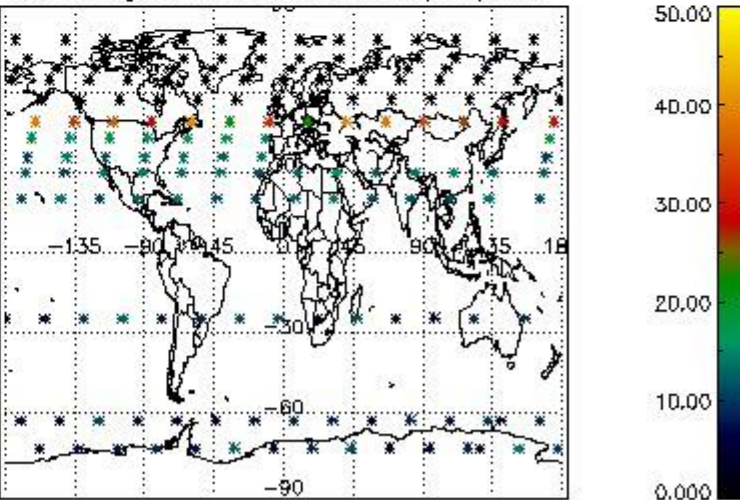
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

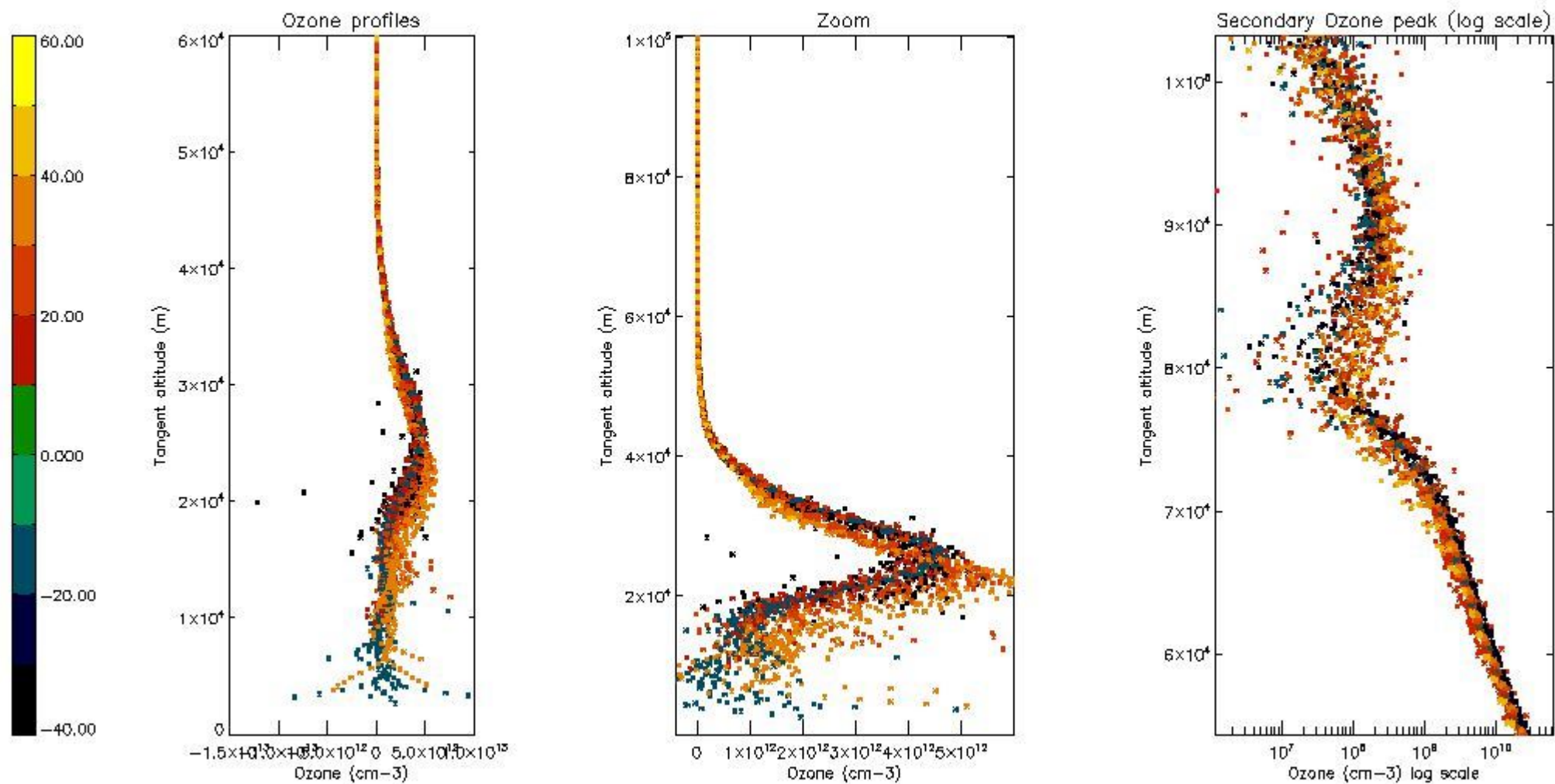
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	14

STD < 10	12
STD < 5	8

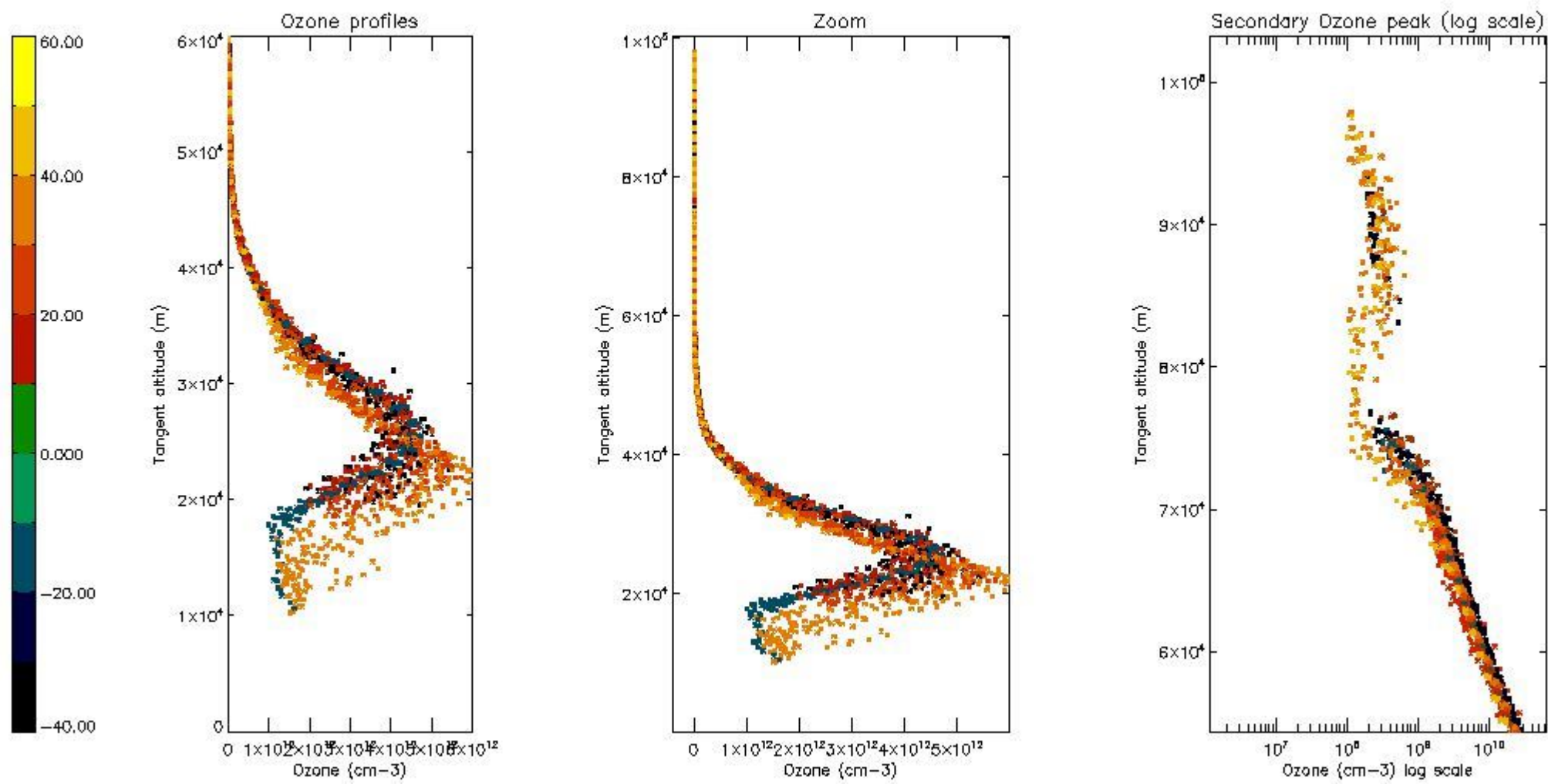
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



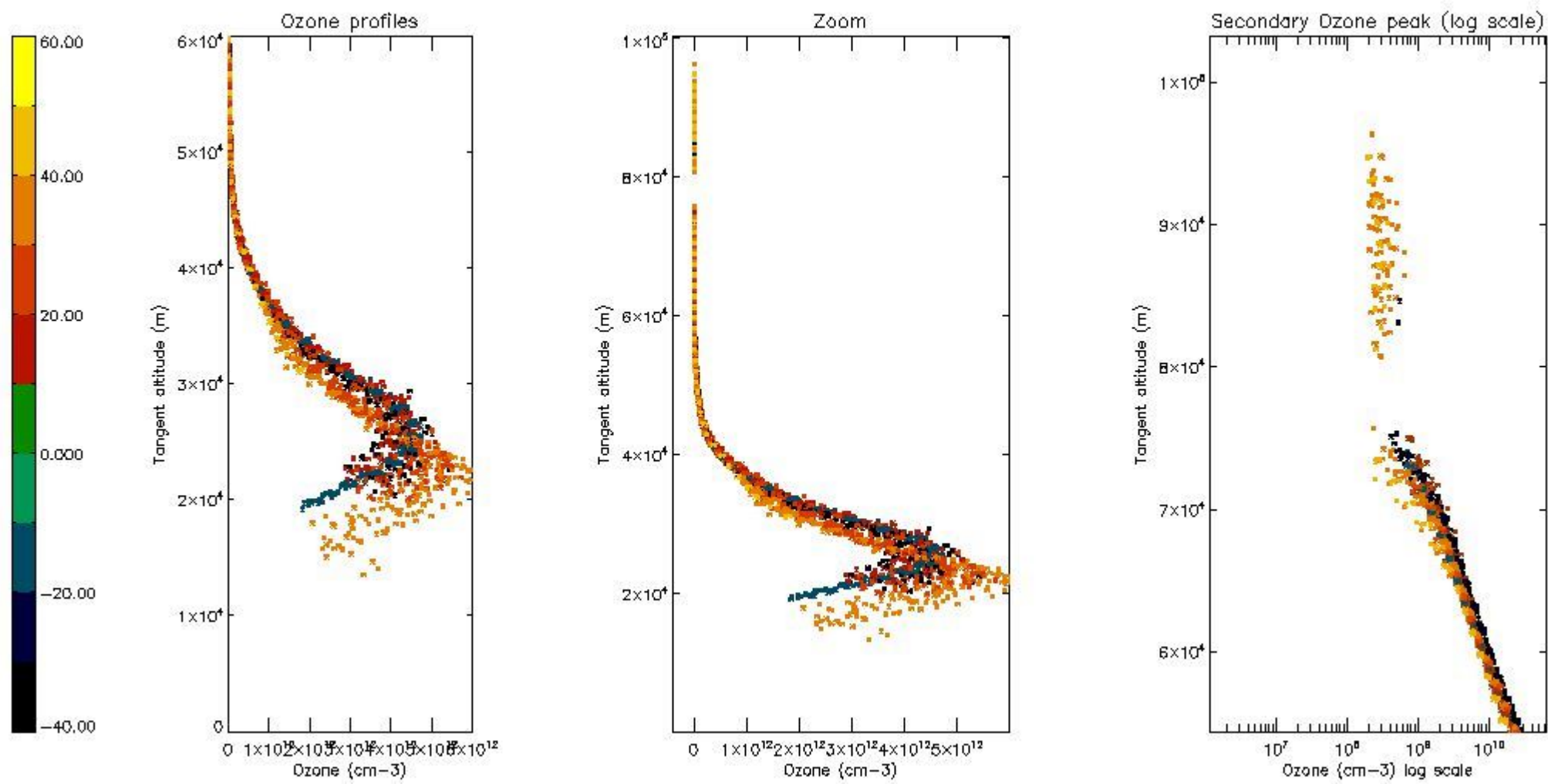
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



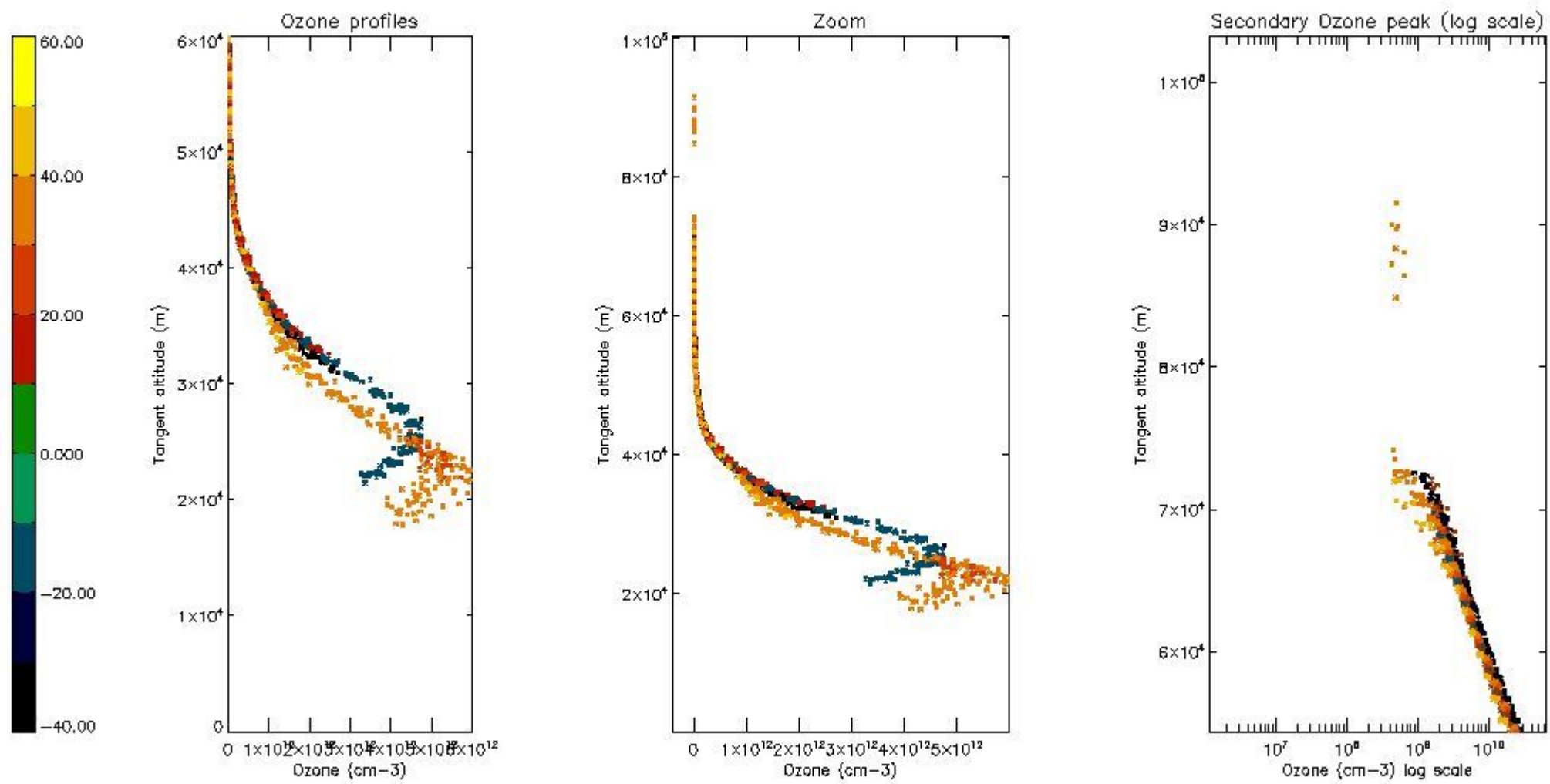
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



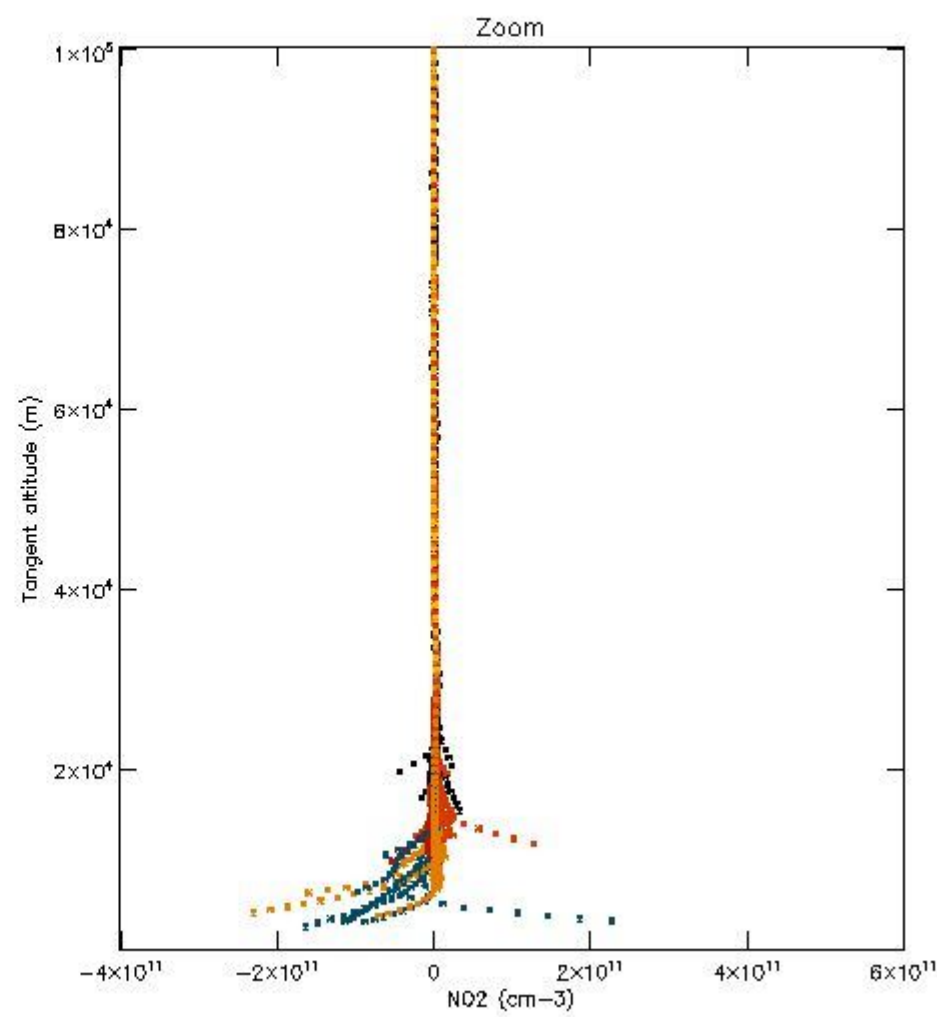
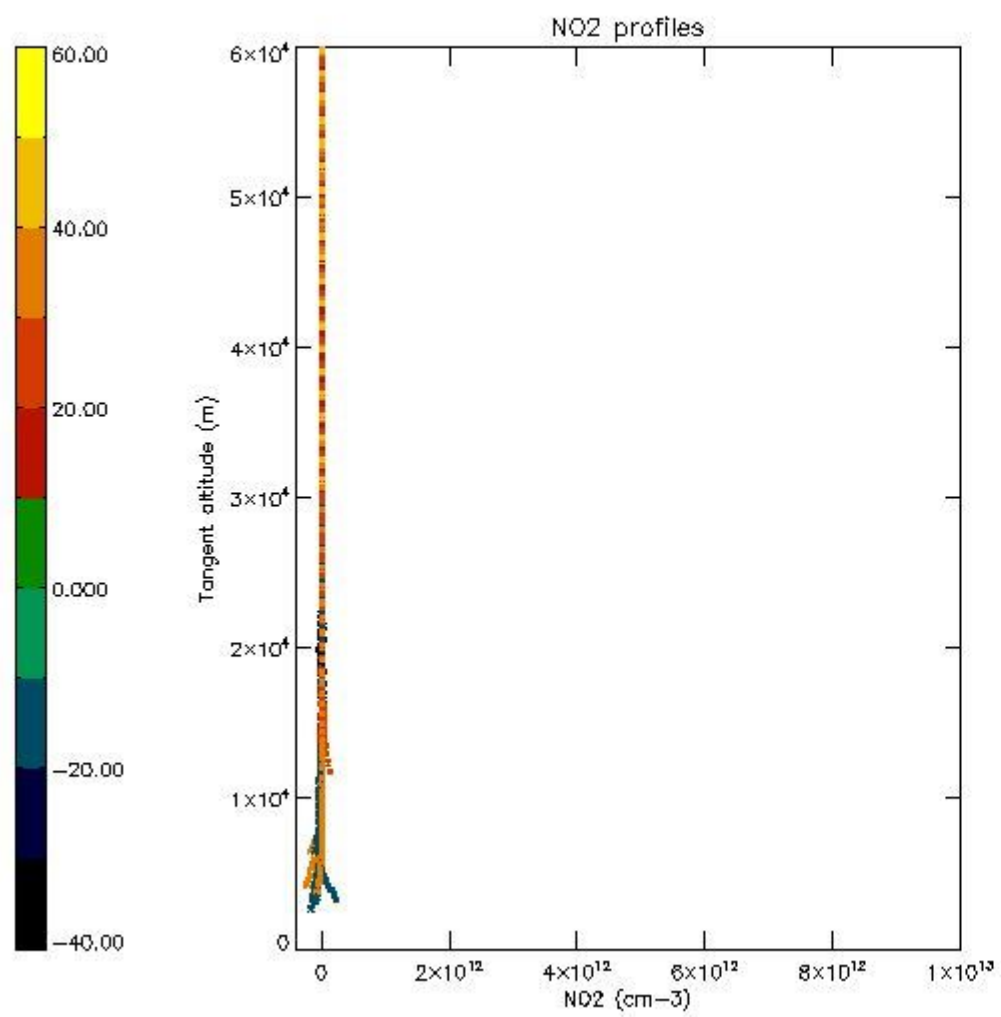
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



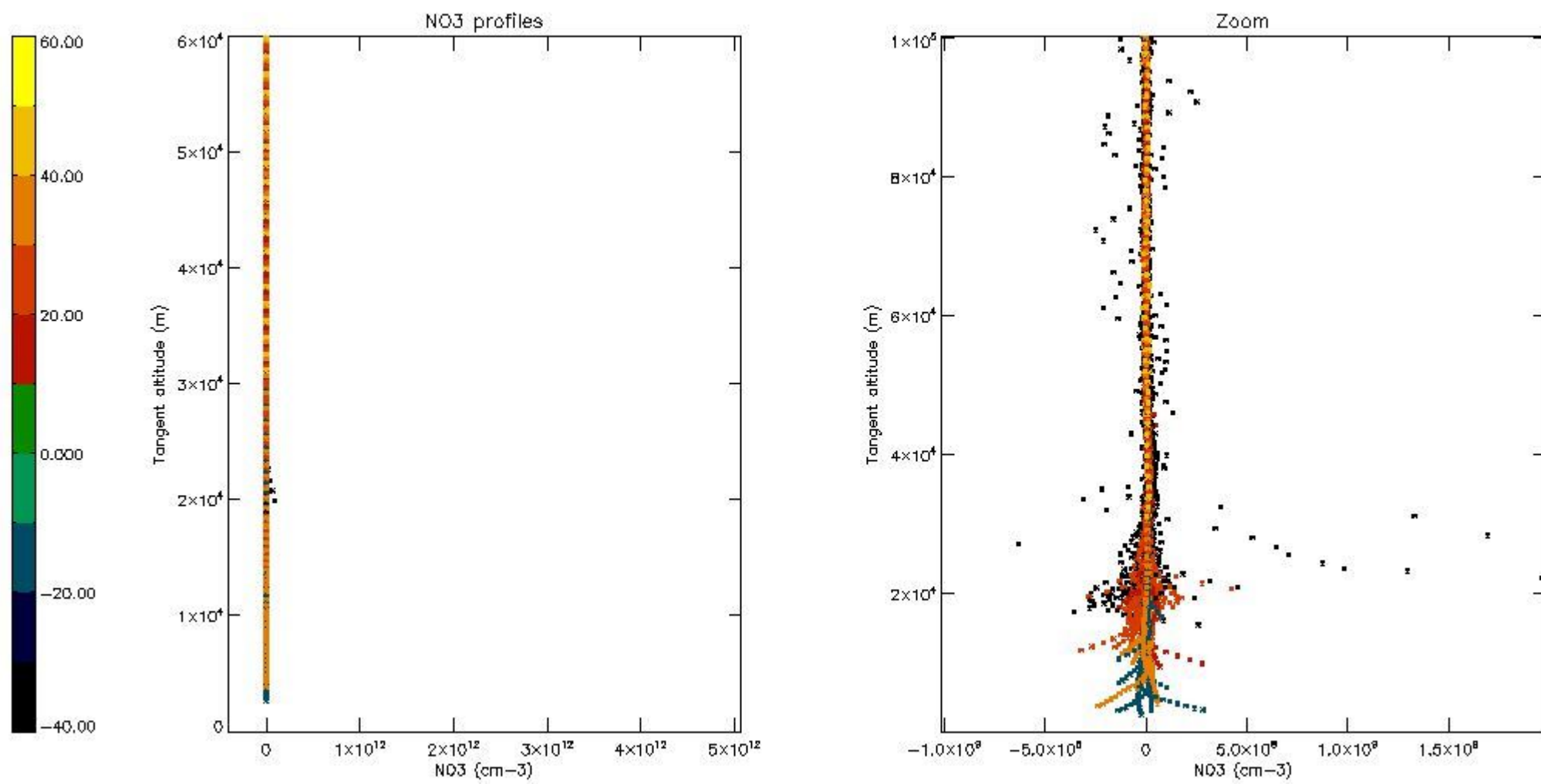
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



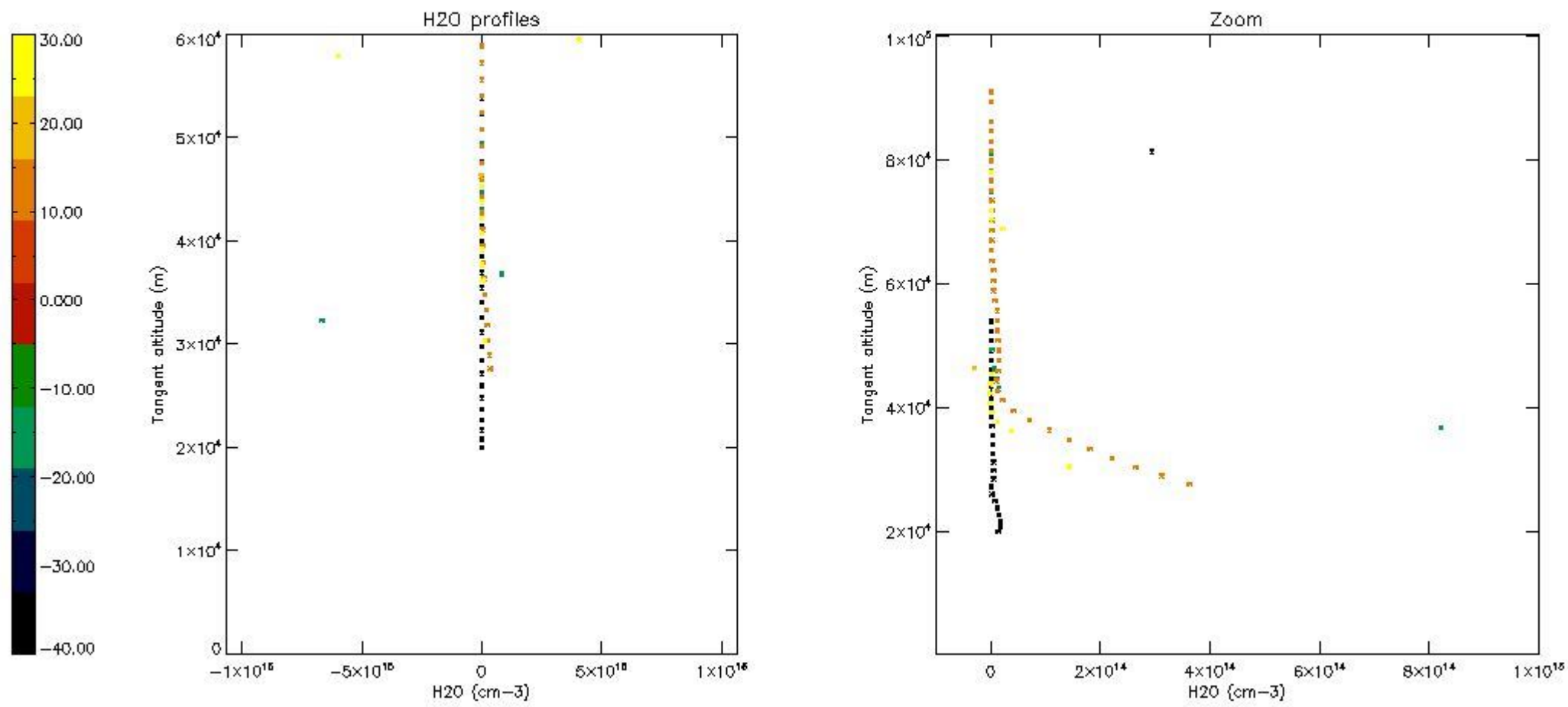
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

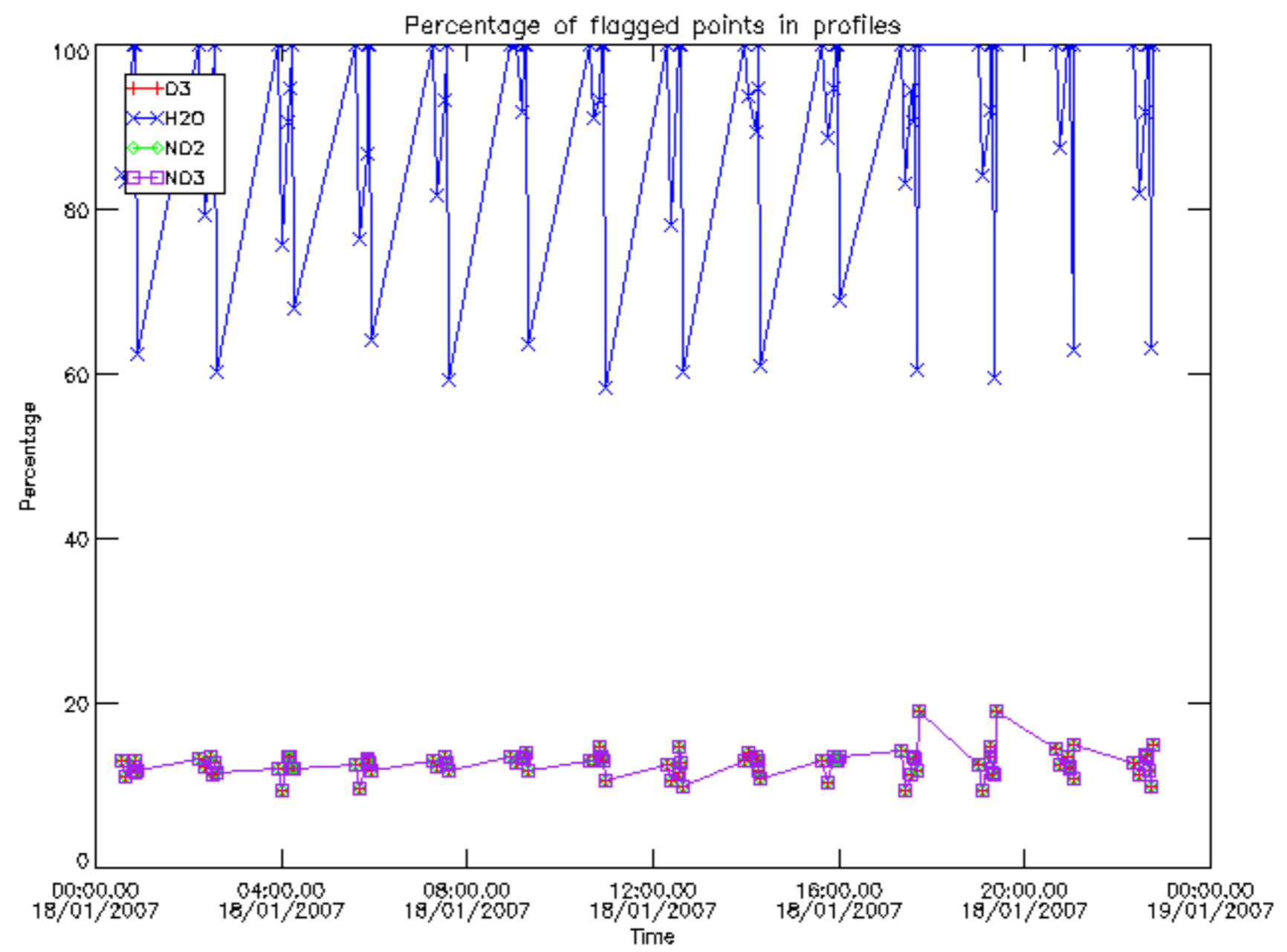
The colorbar represents the latitude.



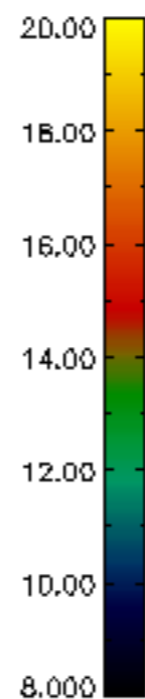
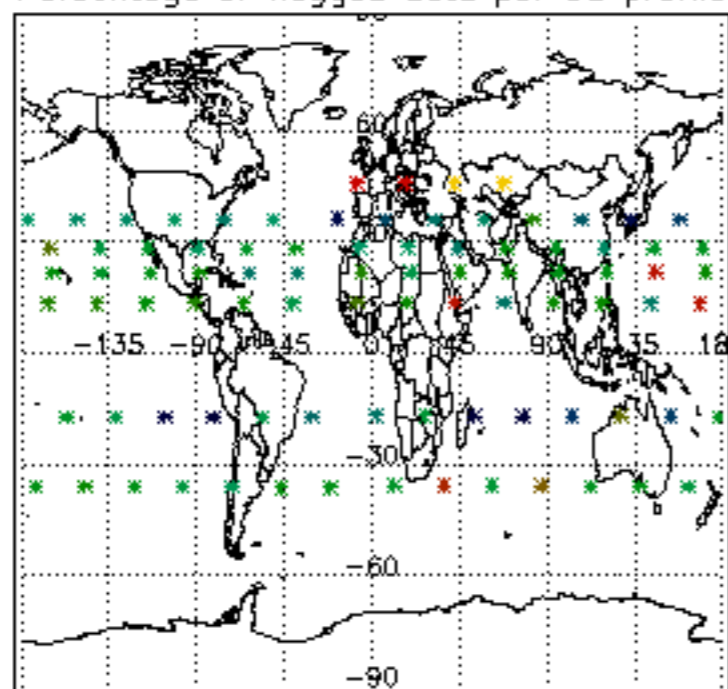
6. Auxiliary Data Files used for the production reported in section 2

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.

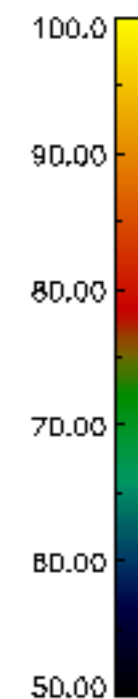
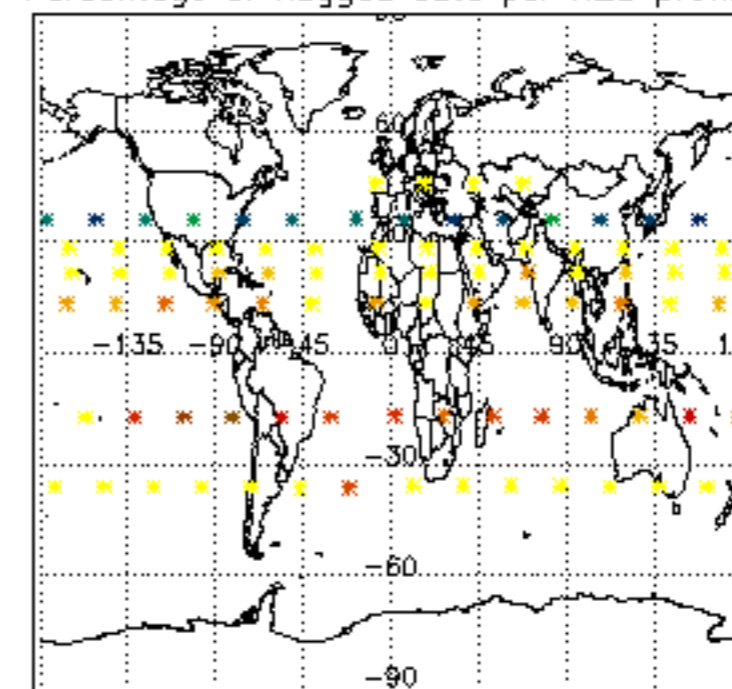
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	18-JAN-2007 00:05:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-JAN-2007 00:05:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-JAN-2007 00:05:01



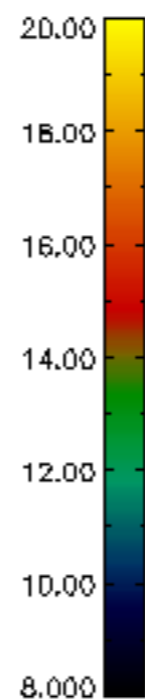
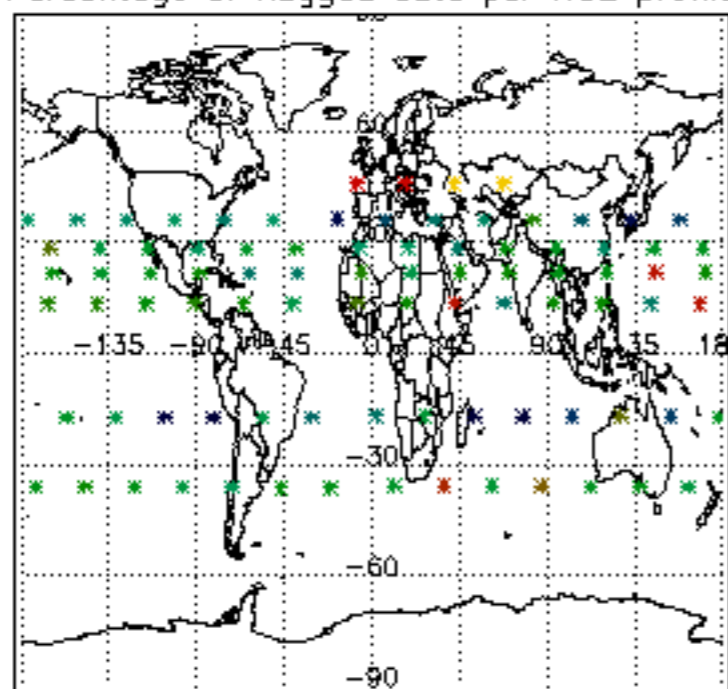
Percentage of flagged data per D3 profile



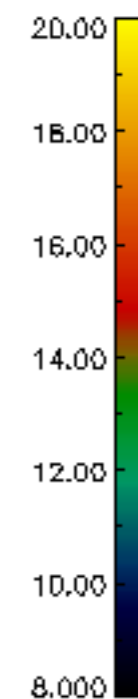
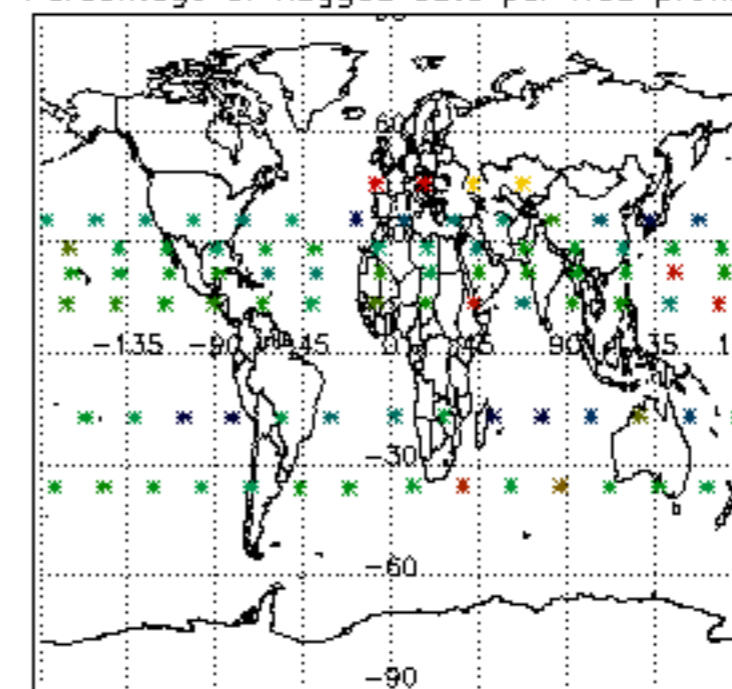
Percentage of flagged data per H2O profile

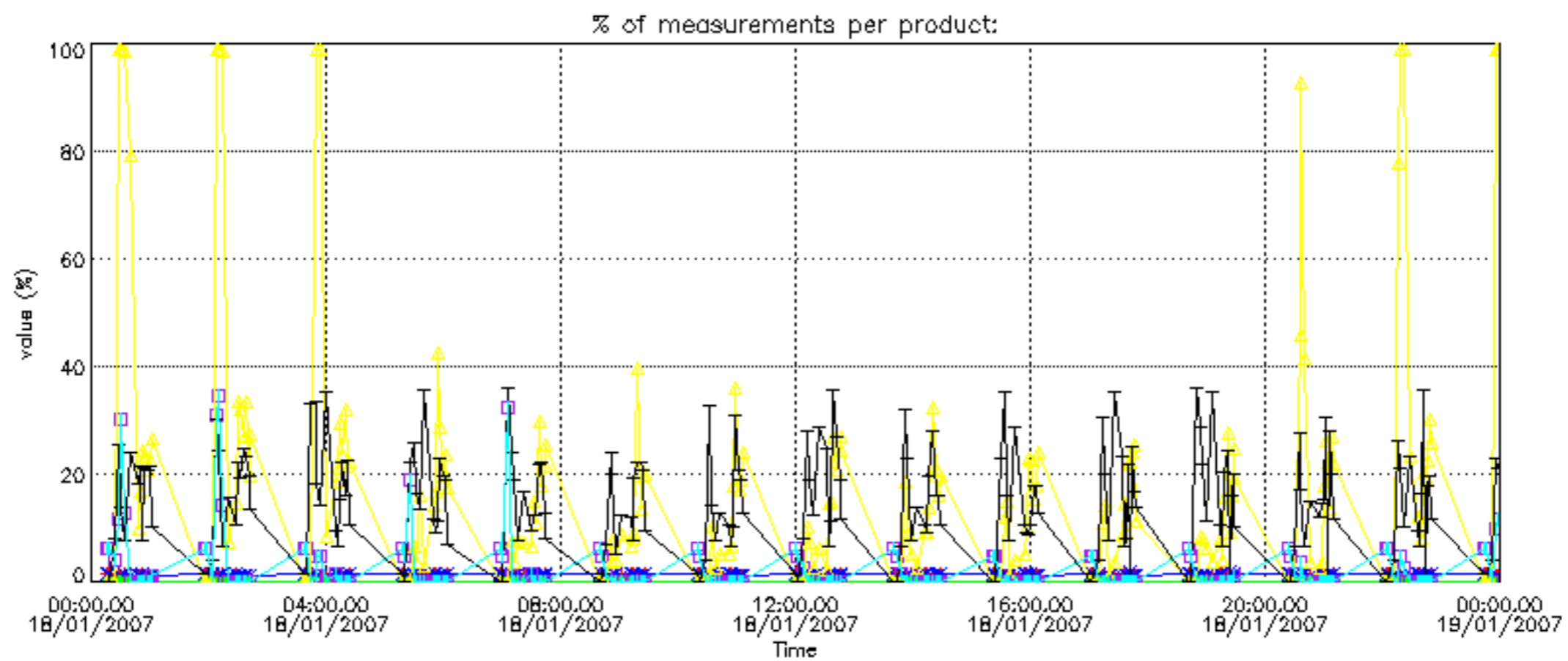
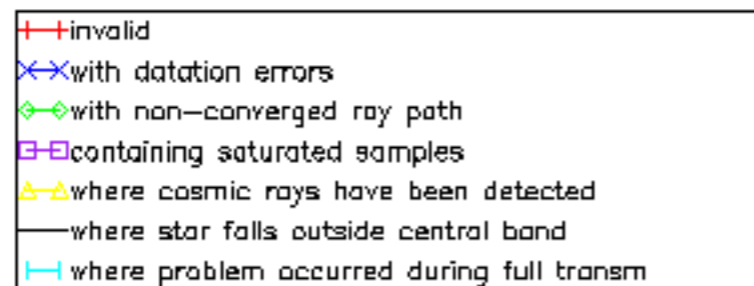


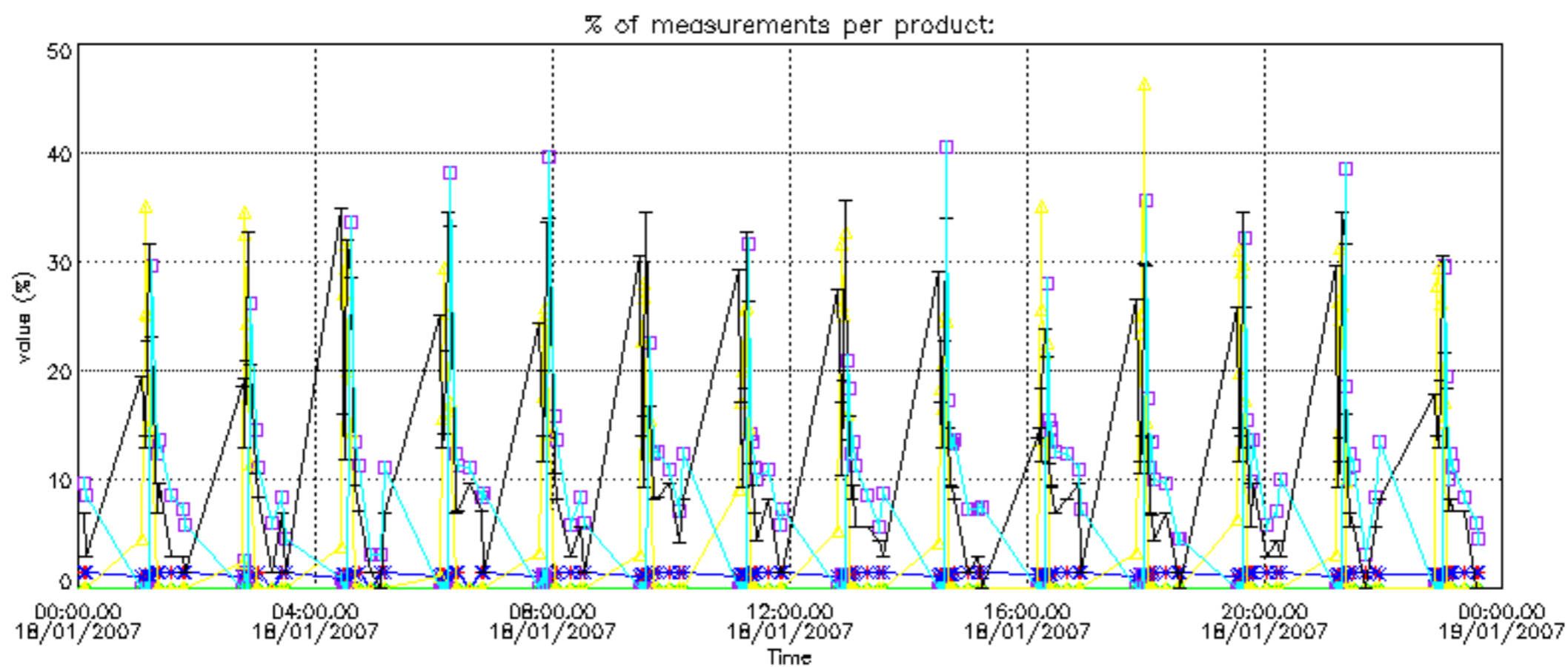
Percentage of flagged data per NO2 profile



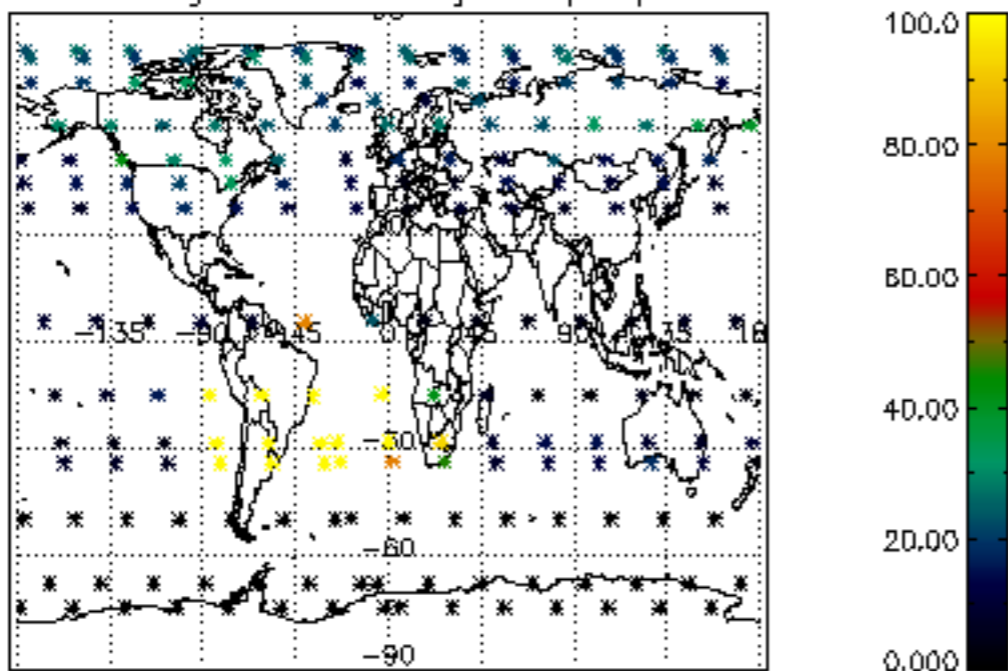
Percentage of flagged data per NO3 profile



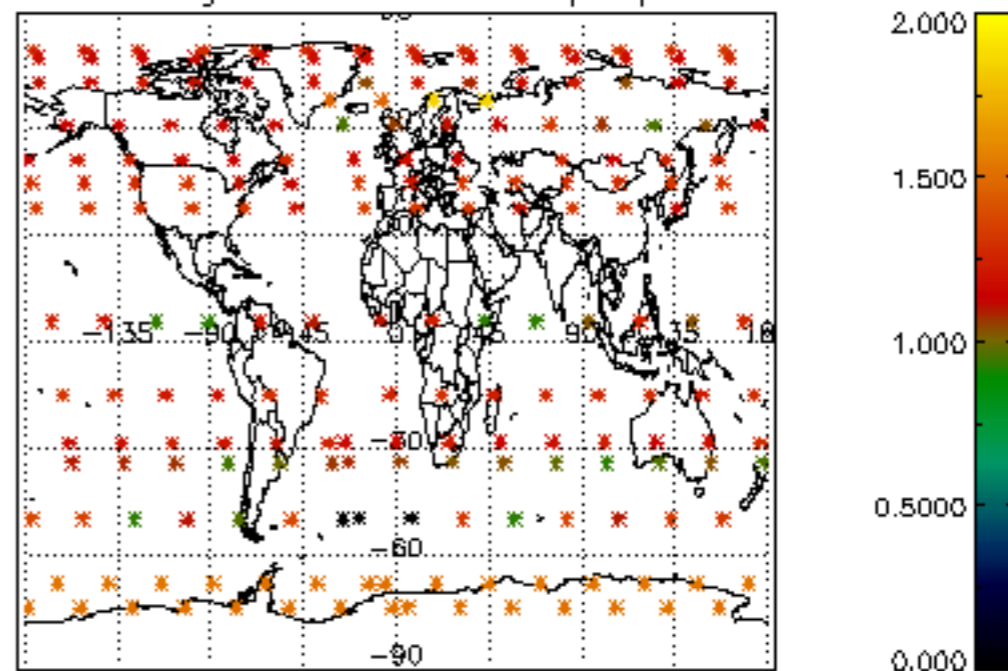




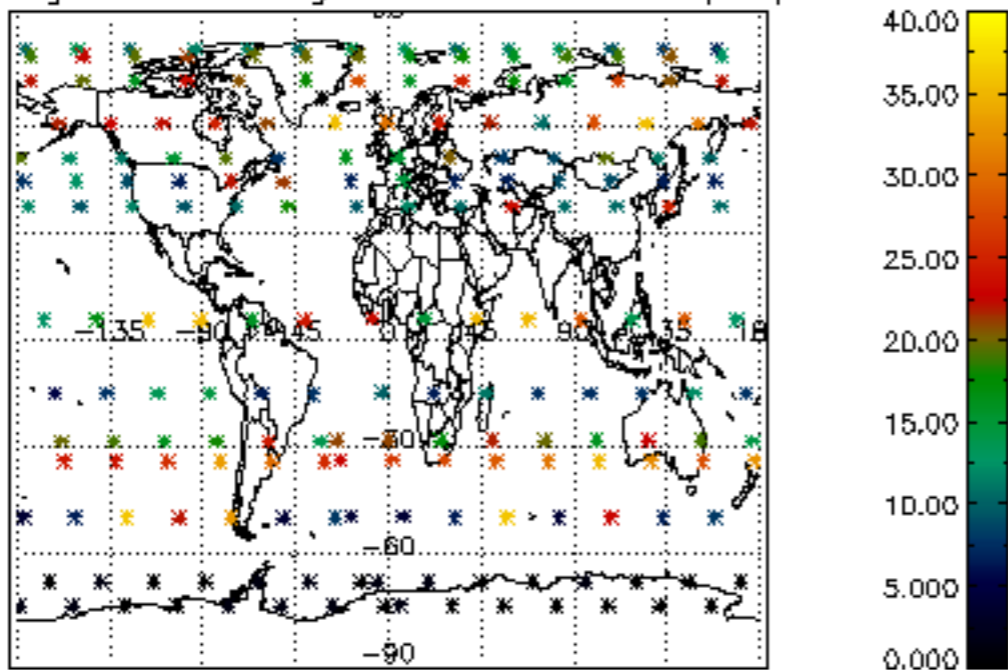
Percentage of cosmic ray hits per profile



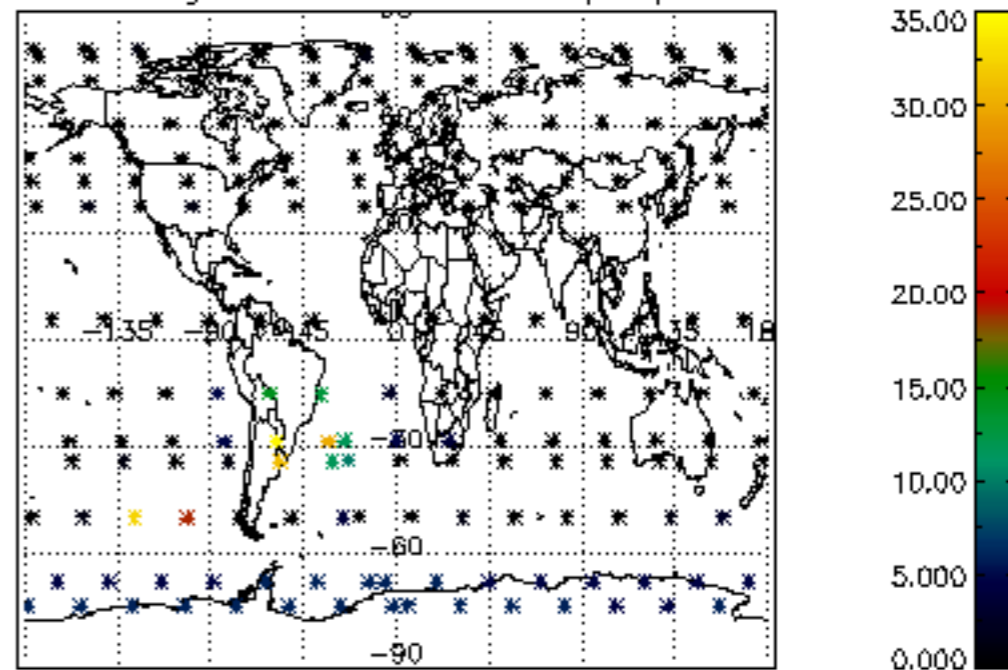
Percentage of datation errors per profile



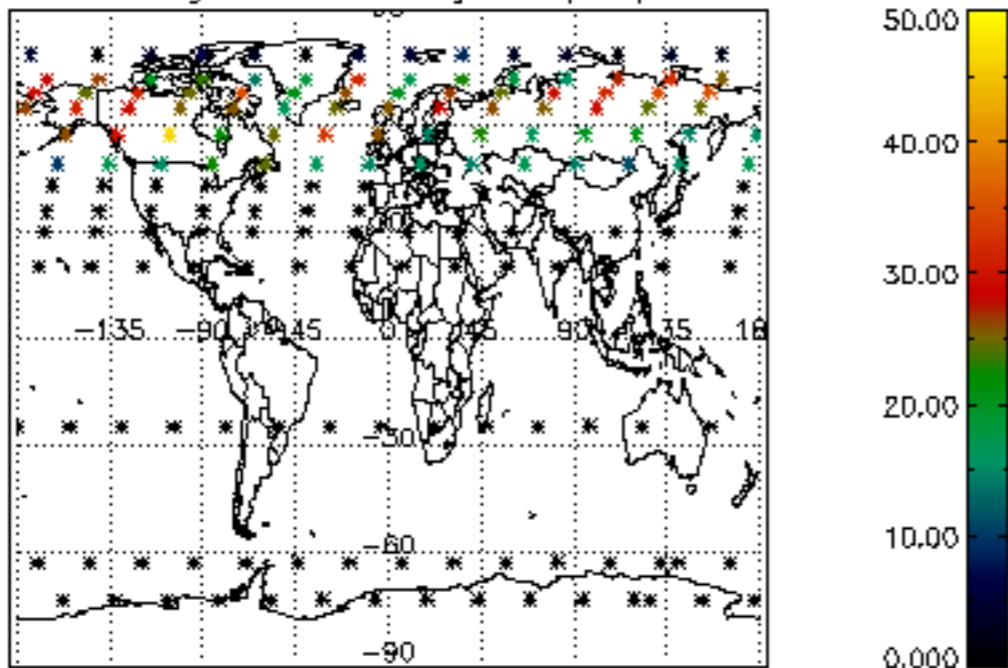
Percentage of star falling outside central band per profile



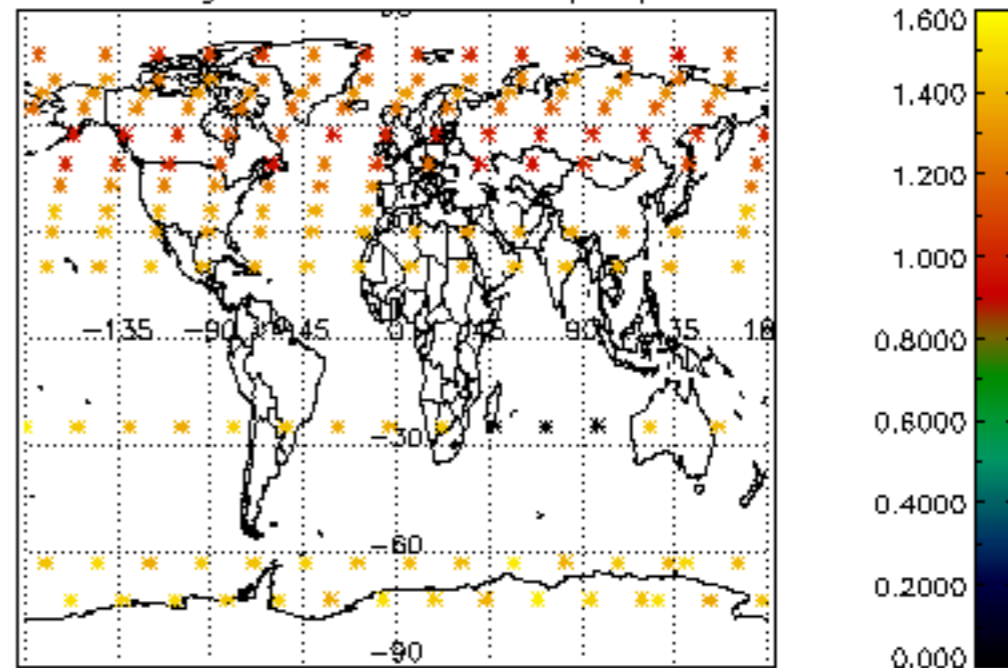
Percentage of saturation errors per profile



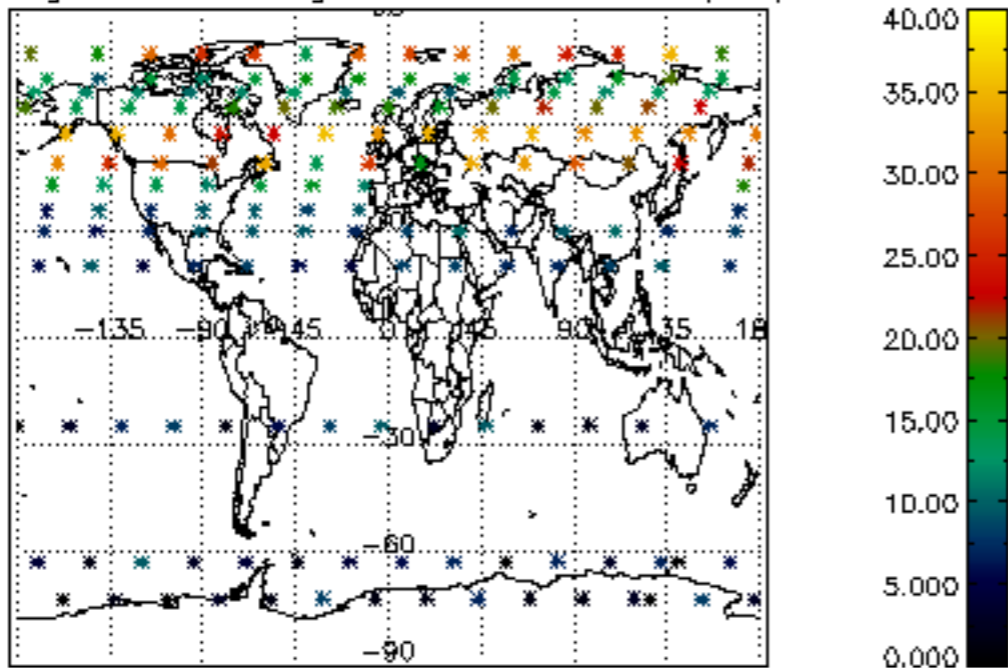
Percentage of cosmic ray hits per profile



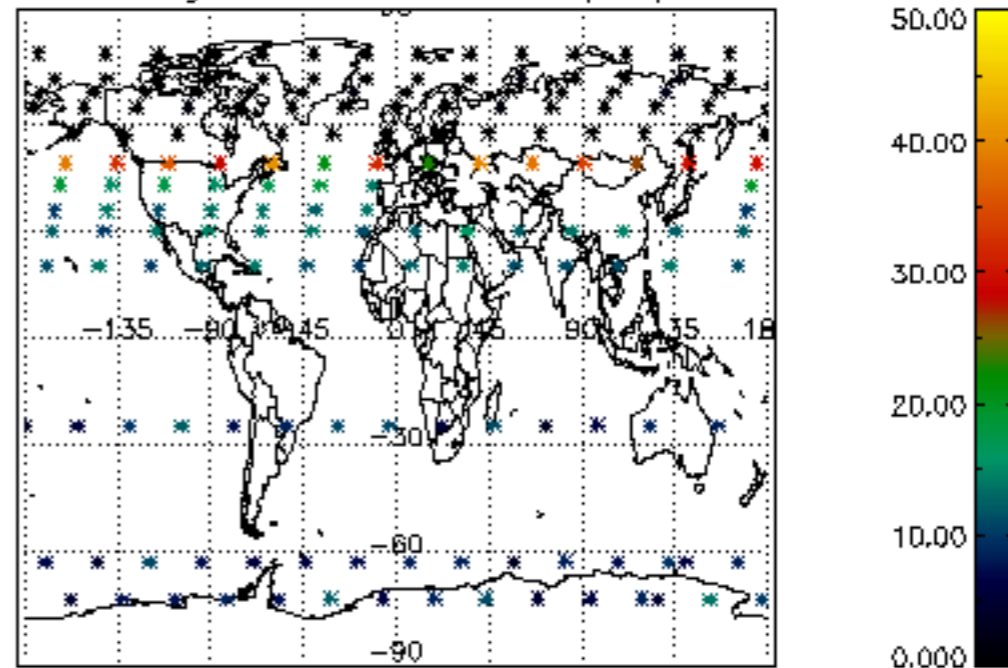
Percentage of datation errors per profile

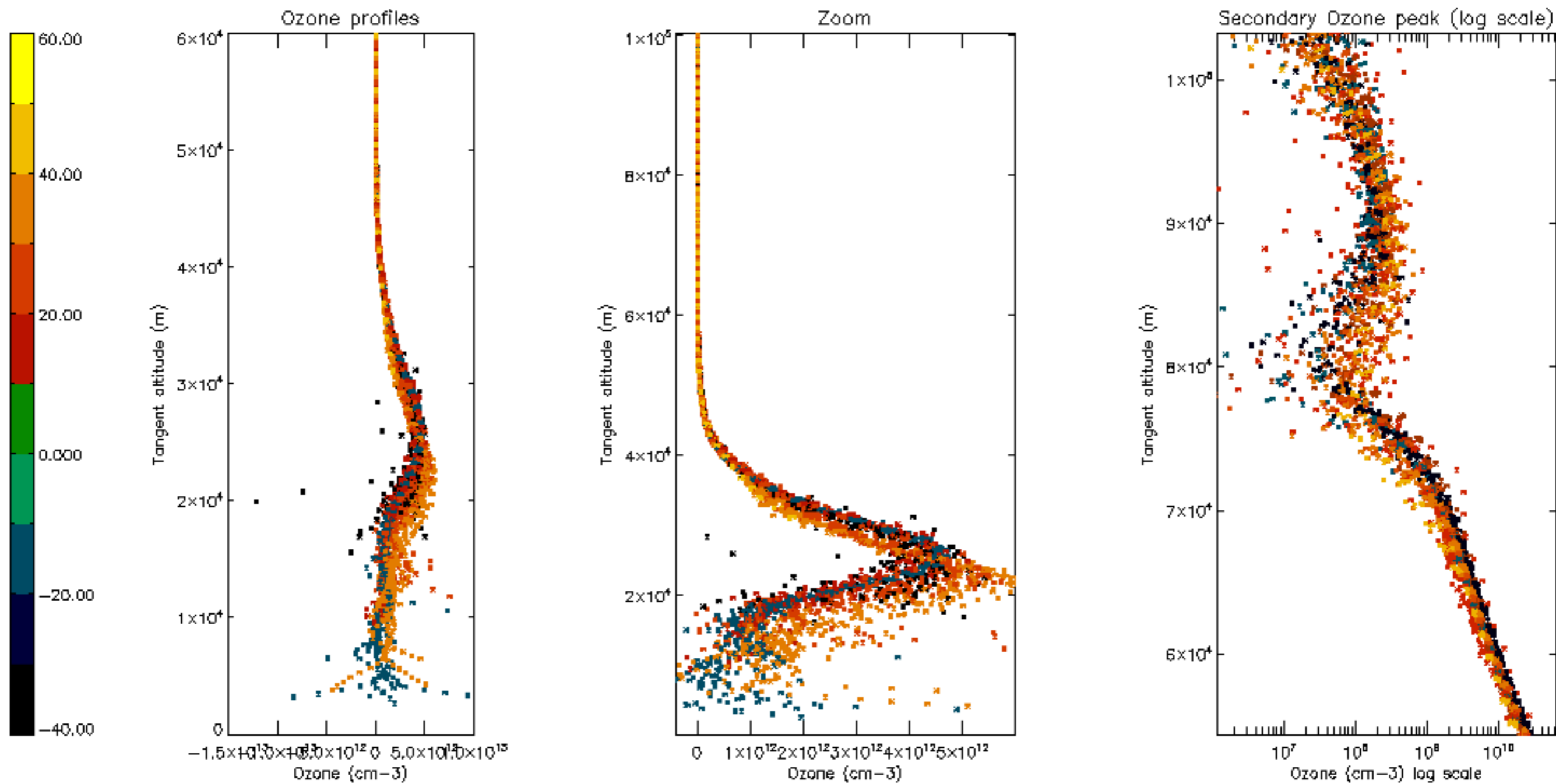


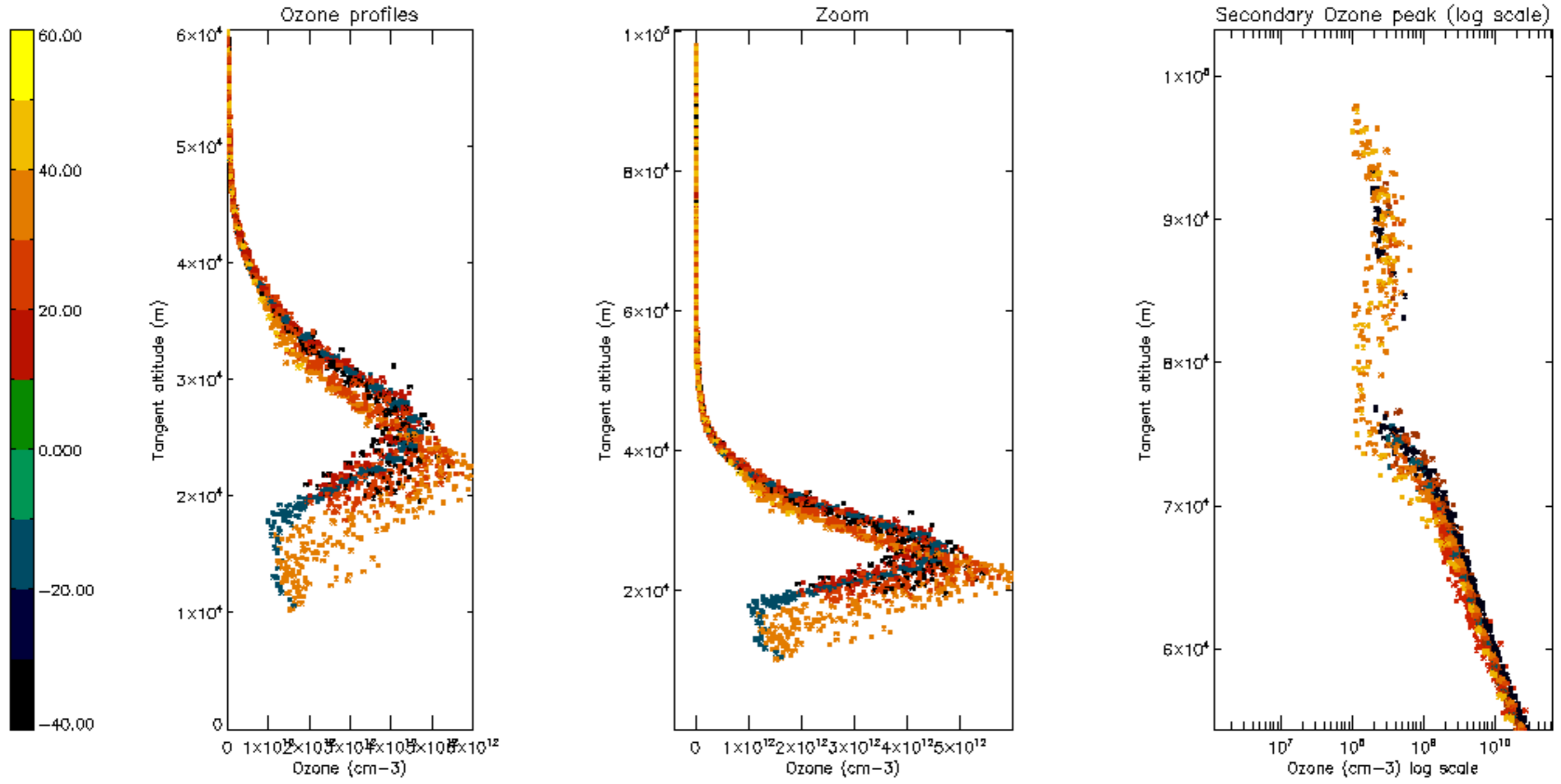
Percentage of star falling outside central band per profile

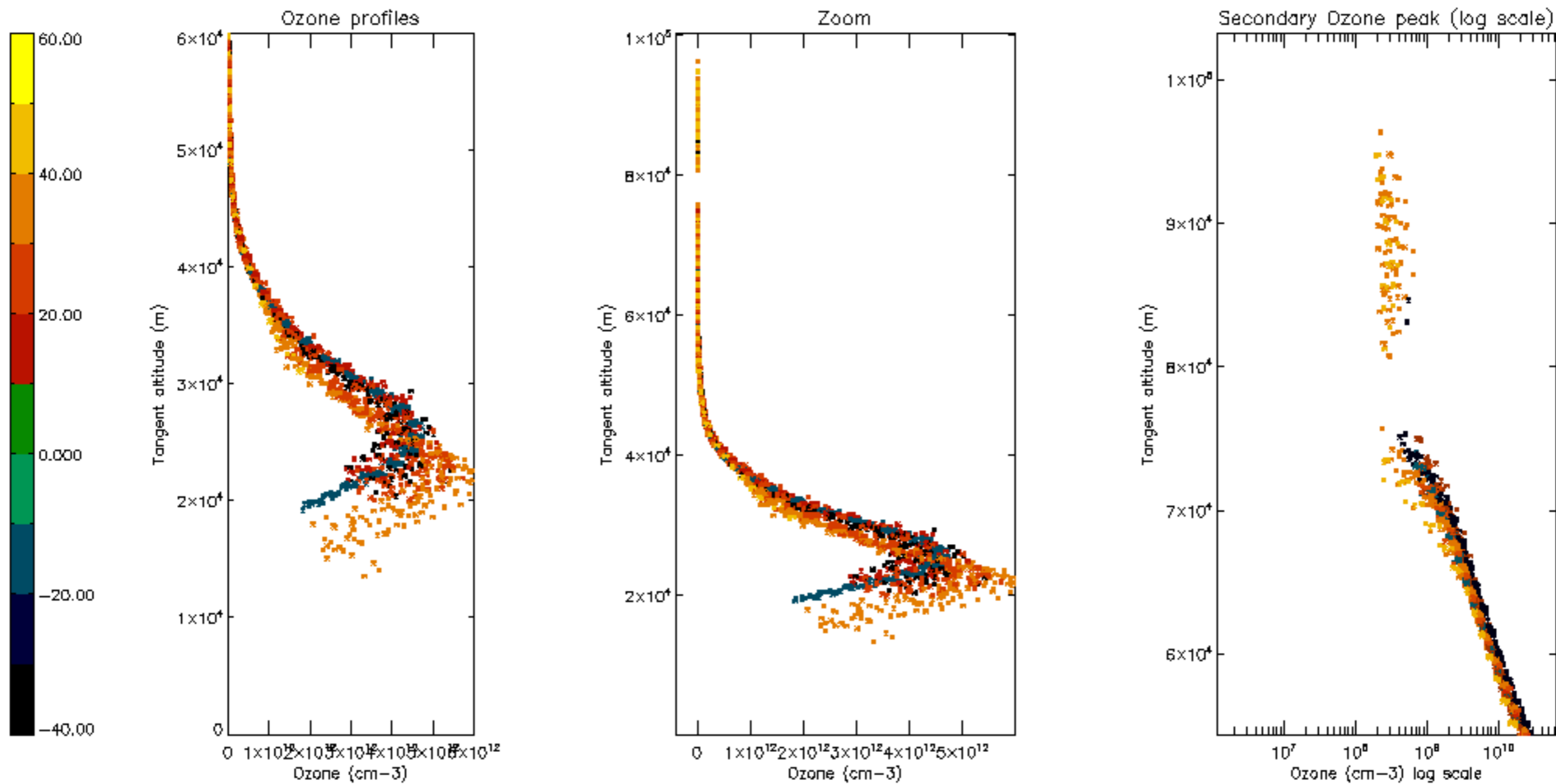


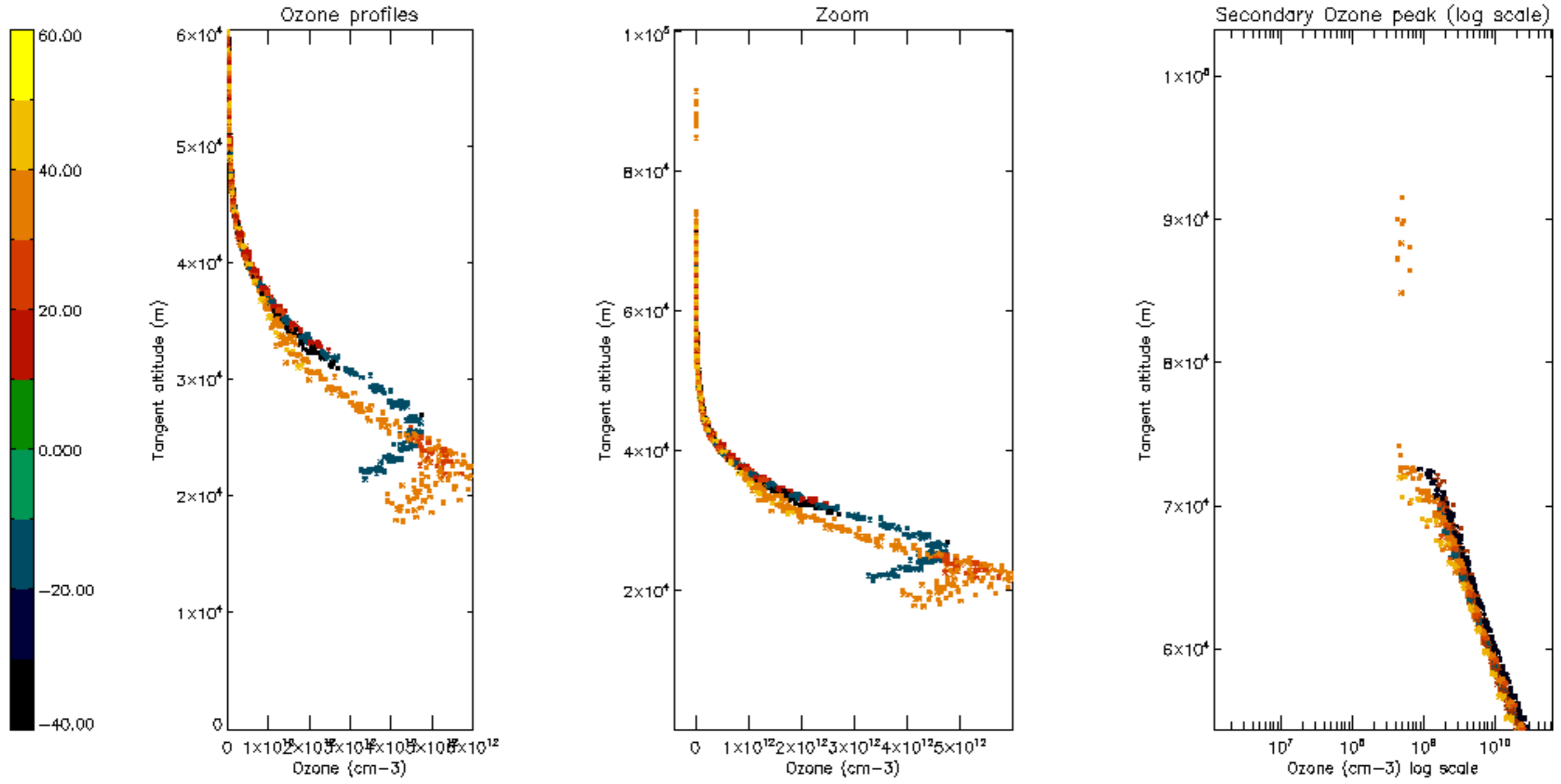
Percentage of saturation errors per profile

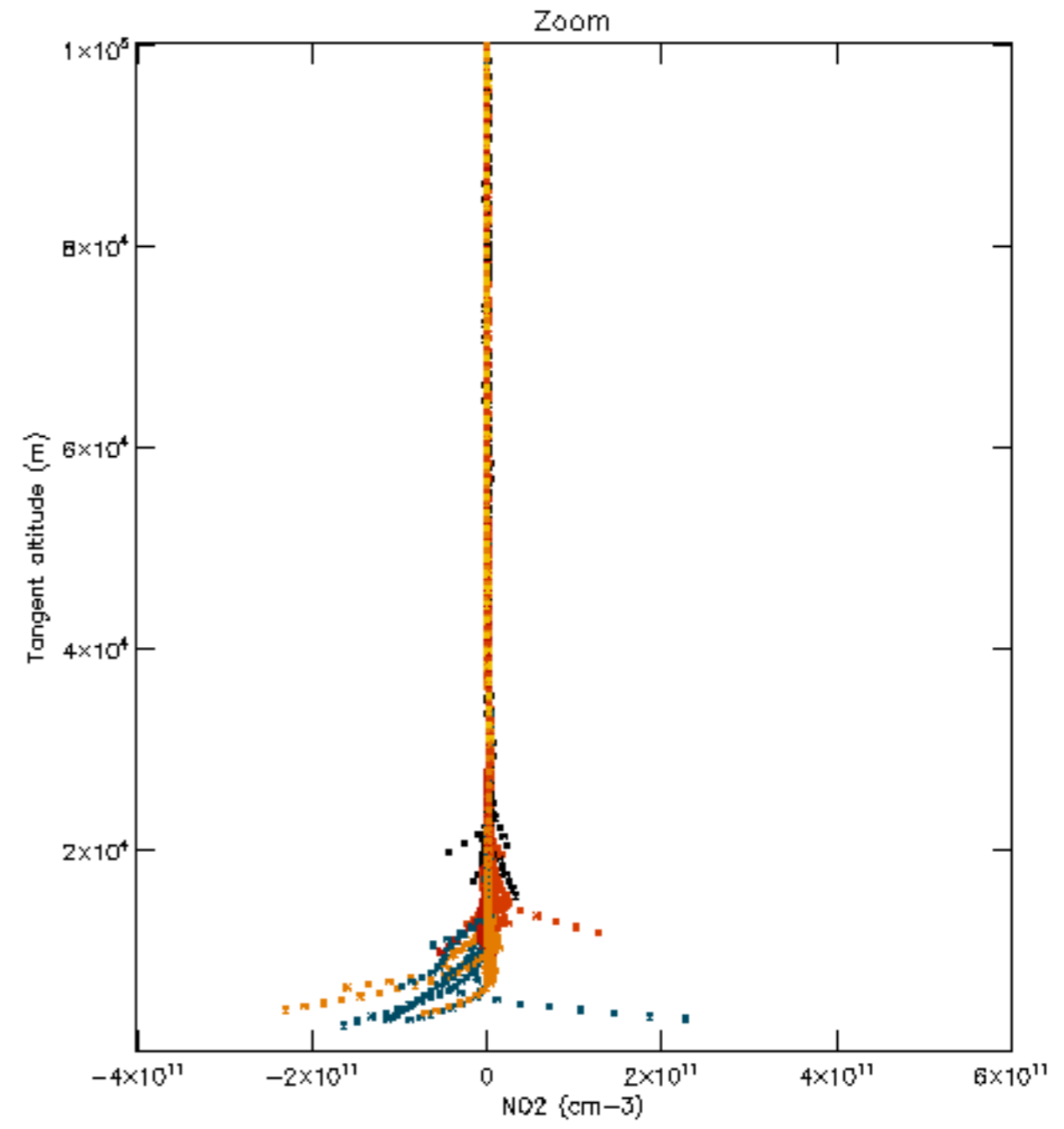
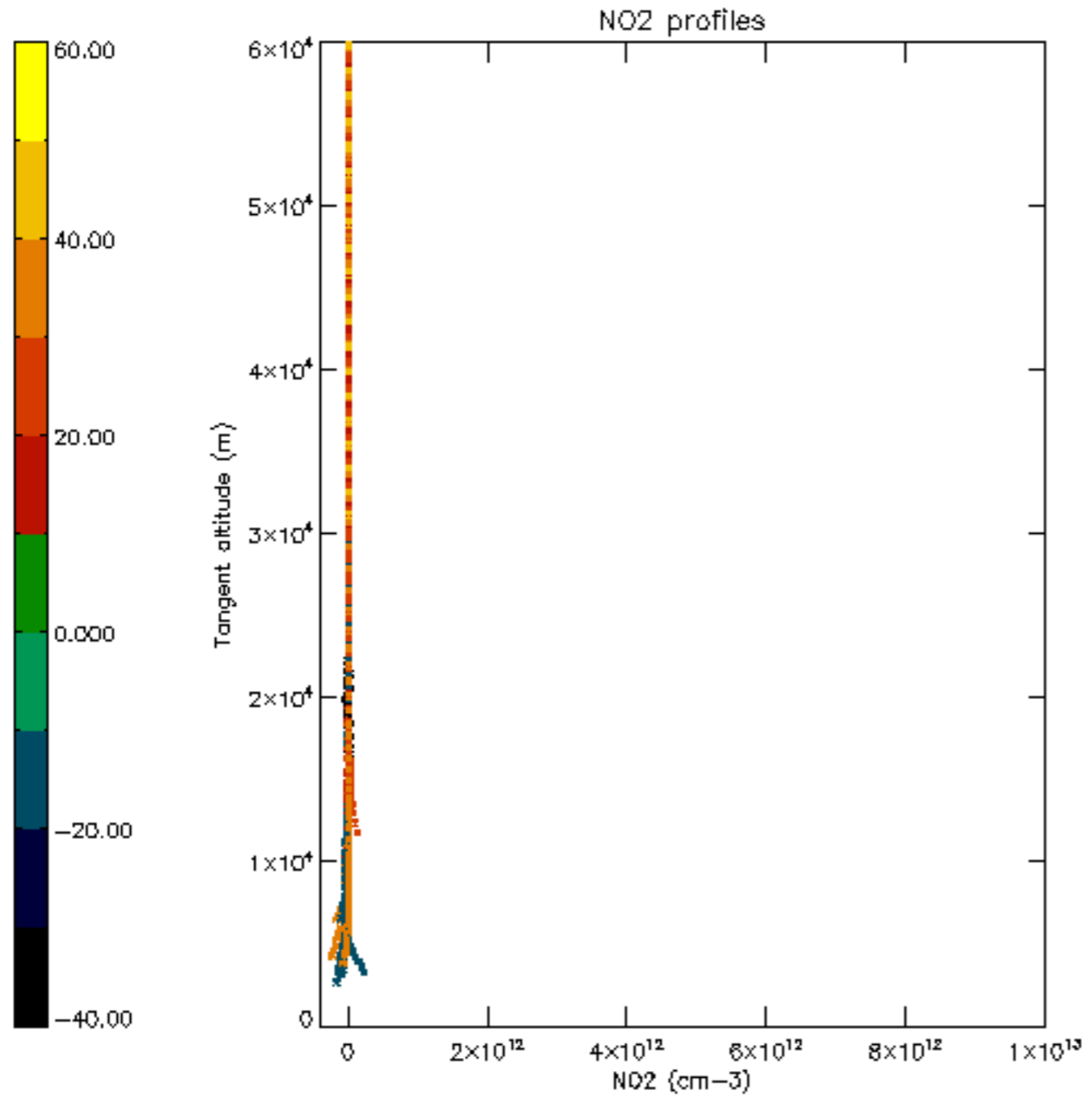


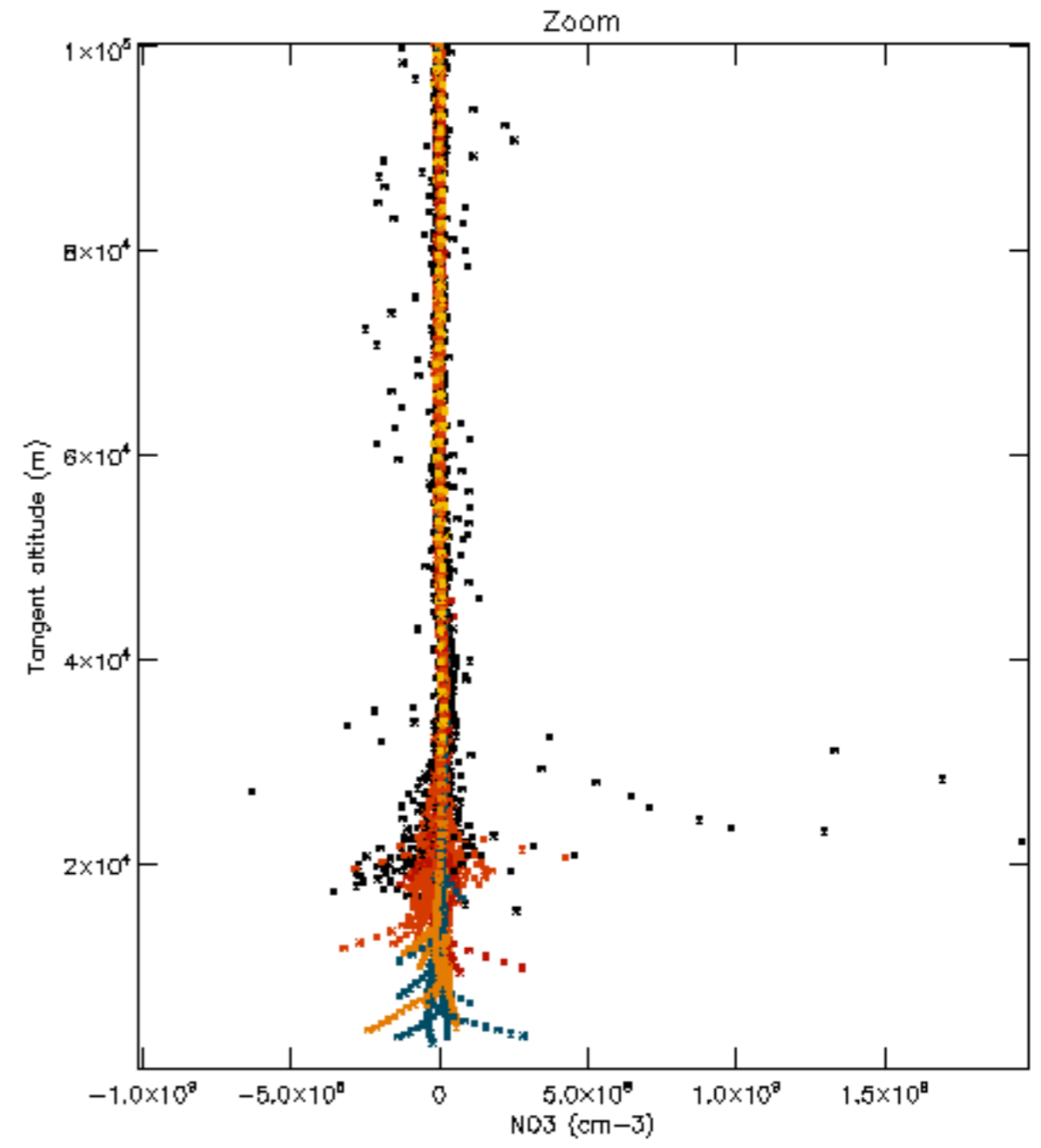
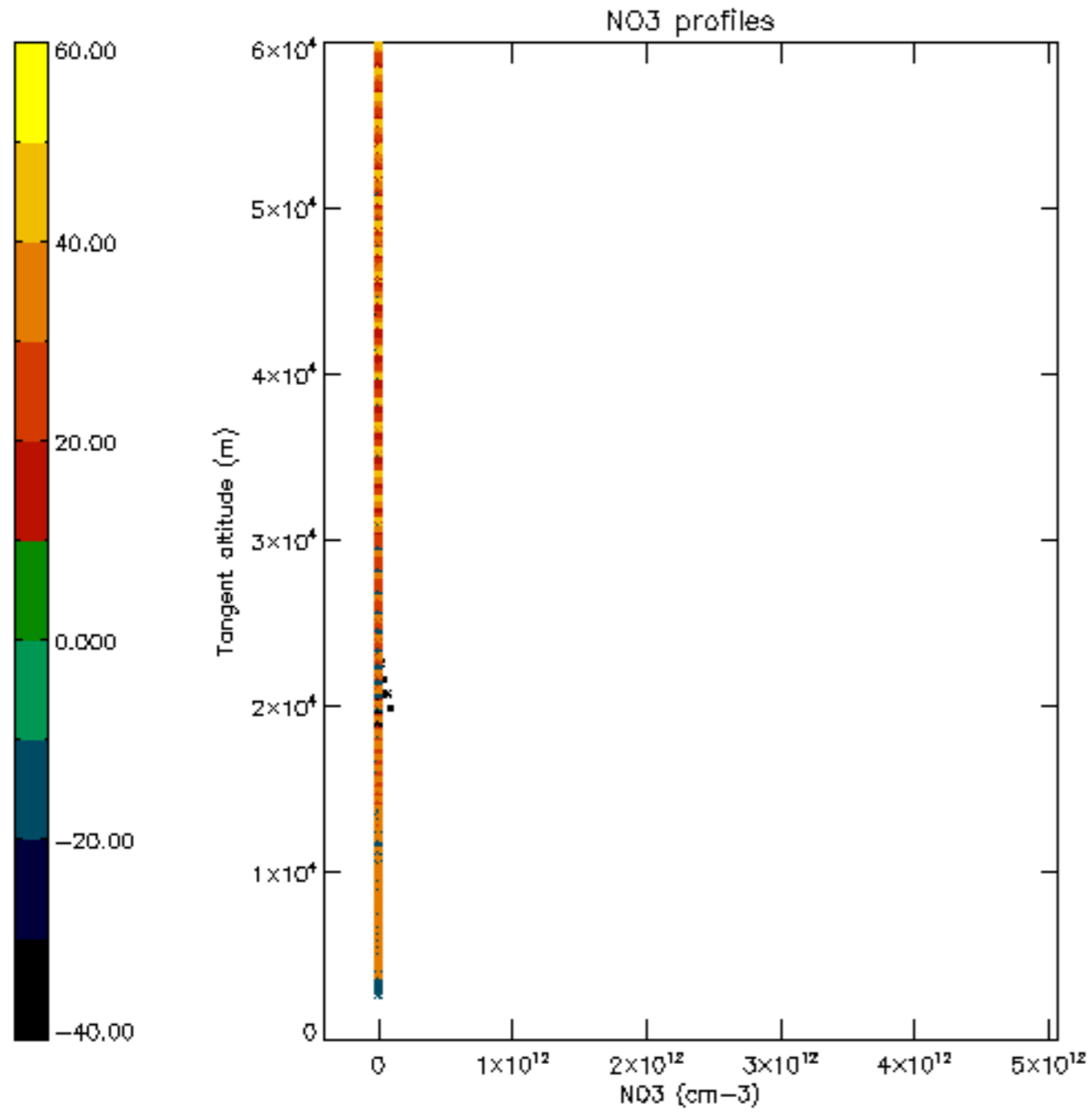


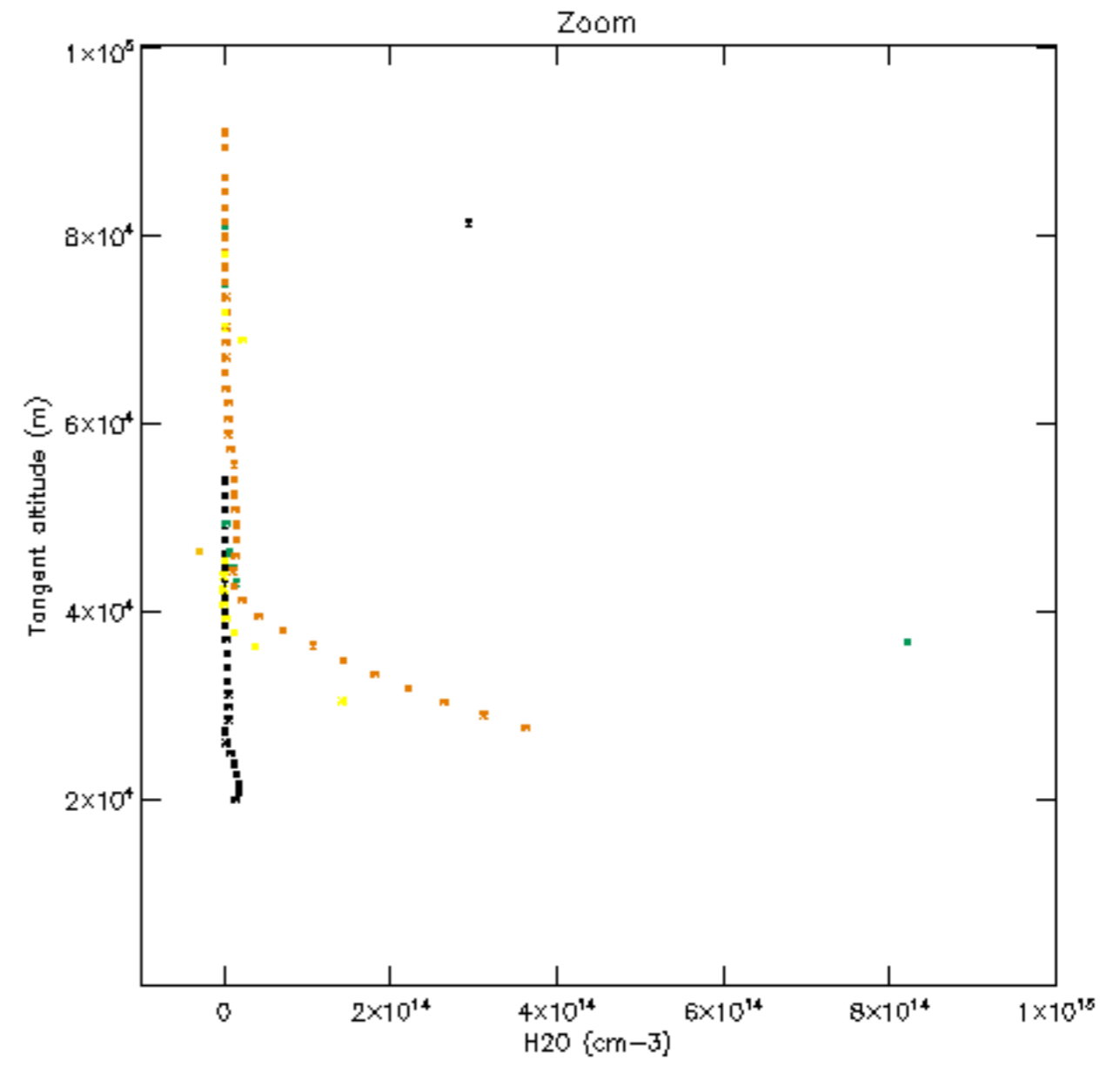
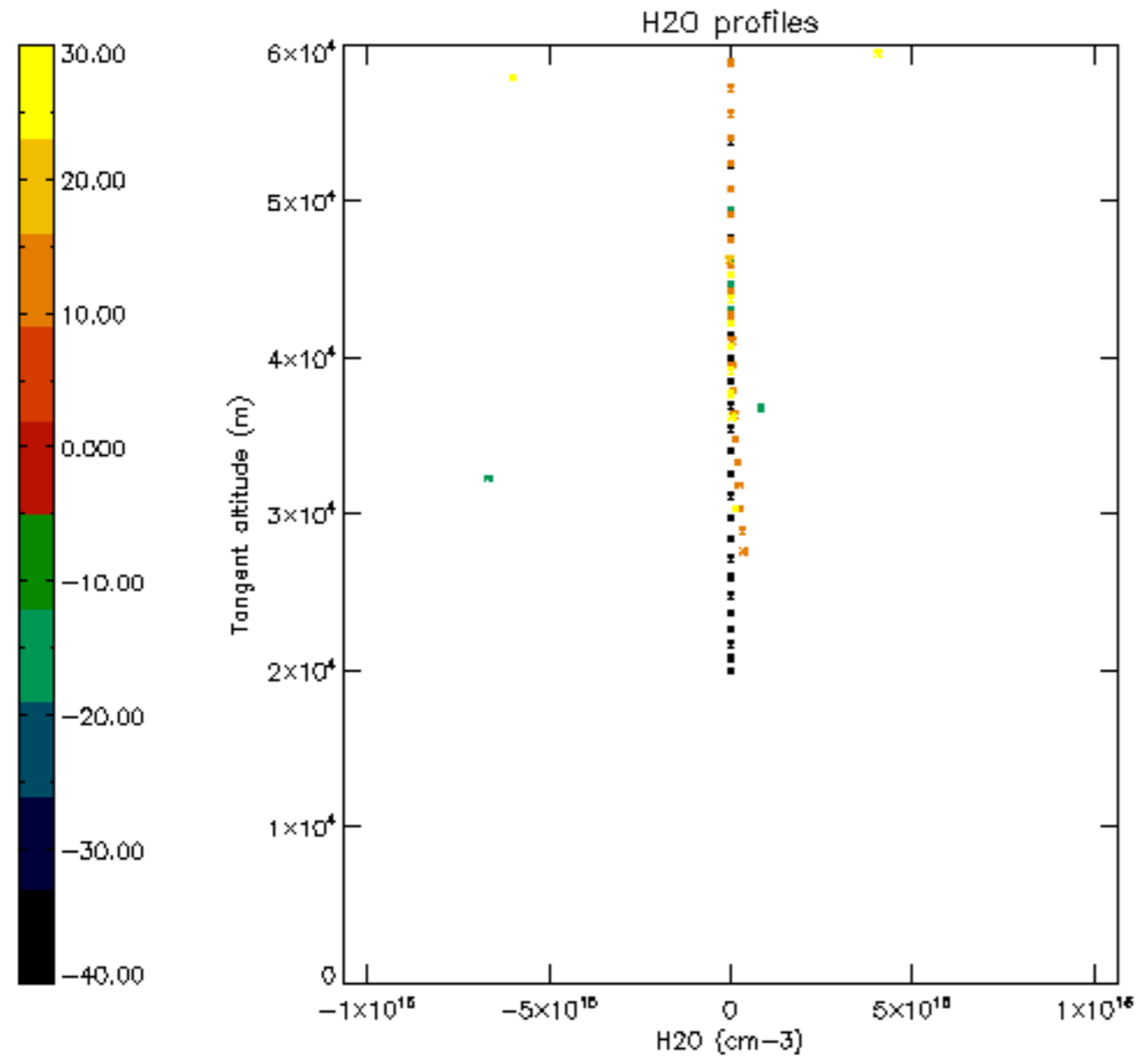


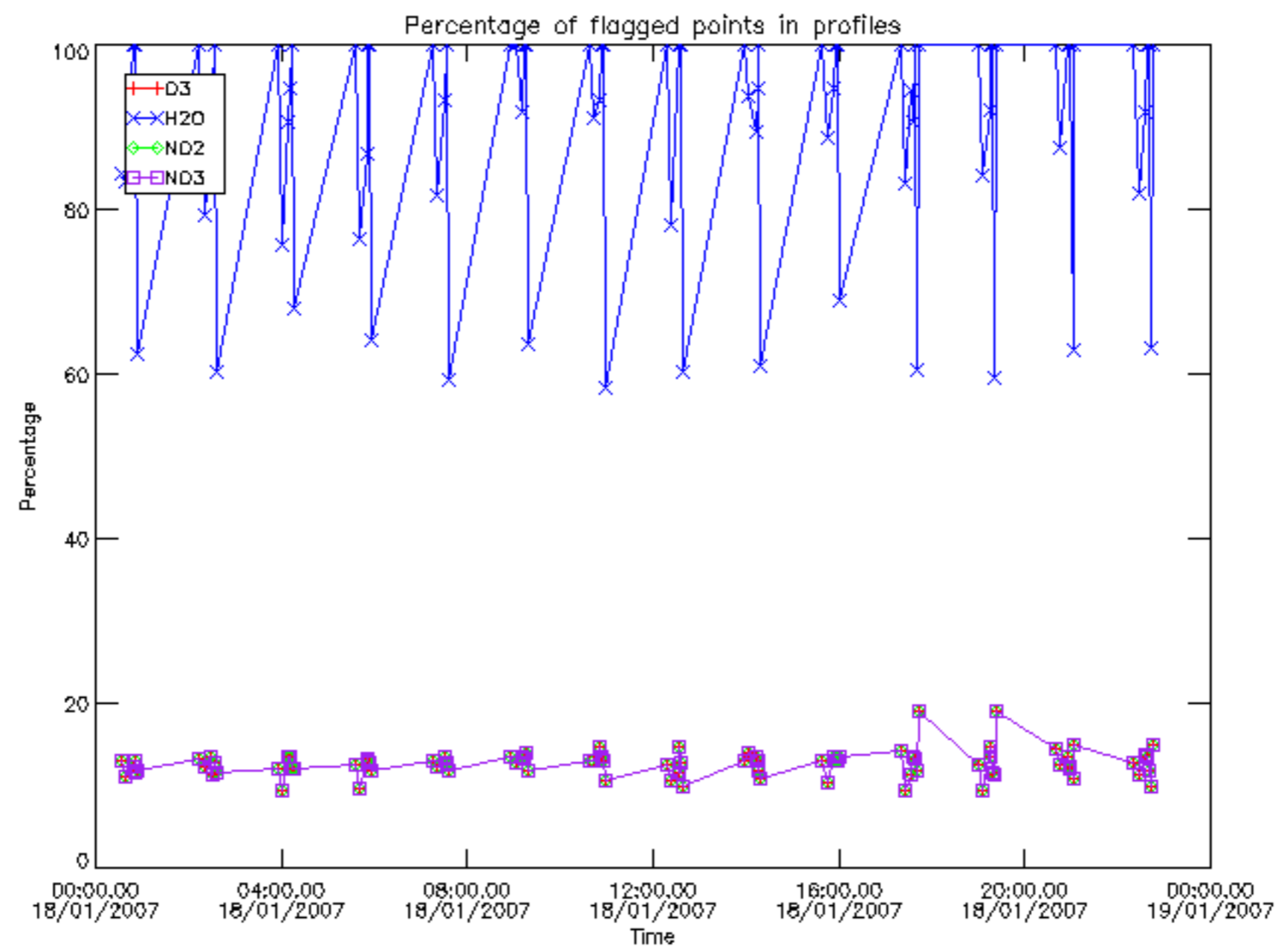




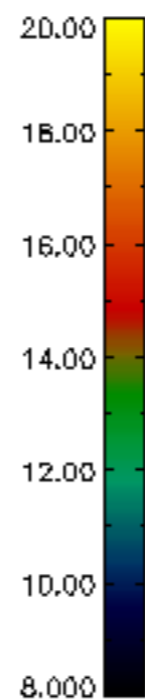
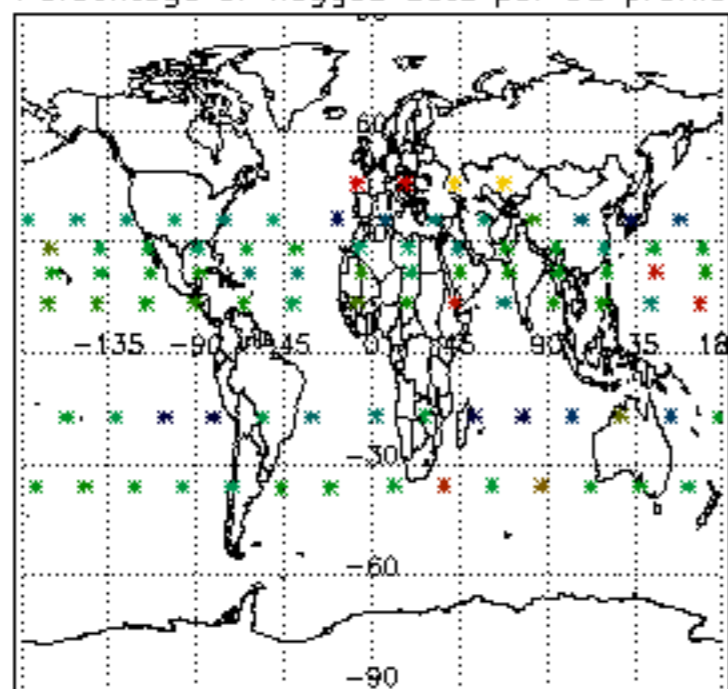




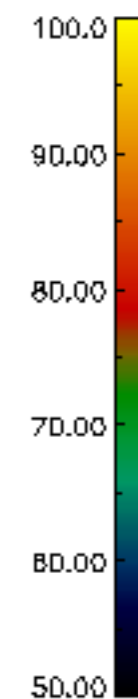
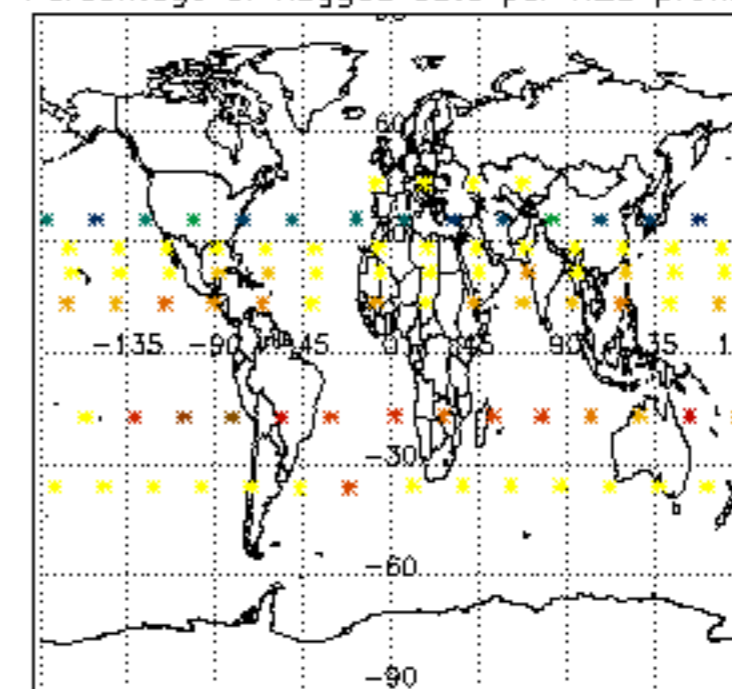




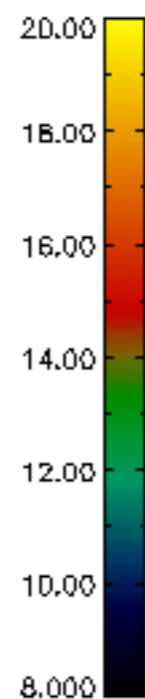
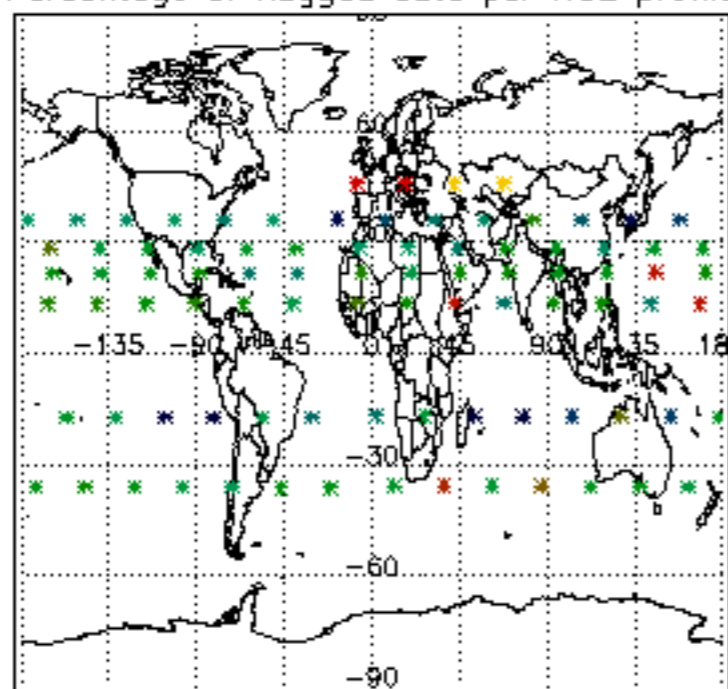
Percentage of flagged data per D3 profile



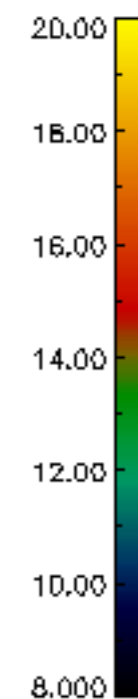
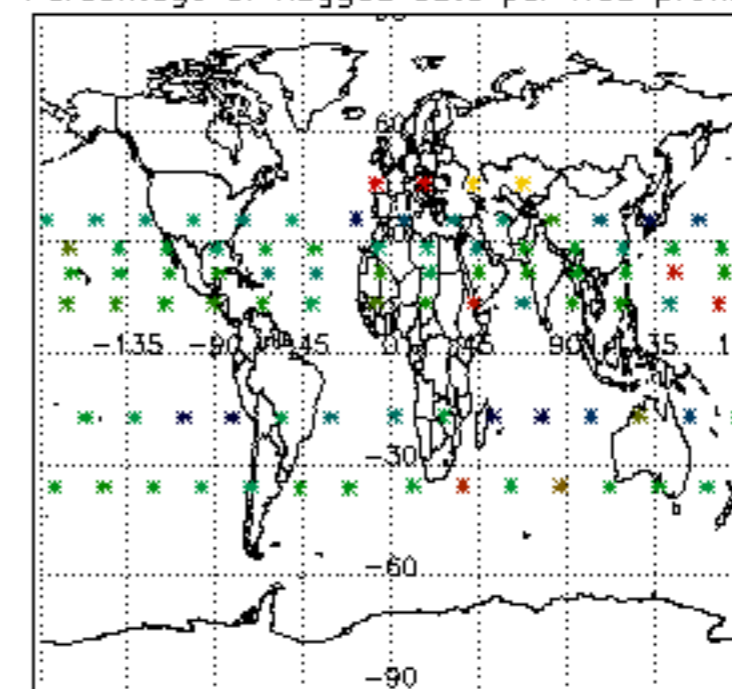
Percentage of flagged data per H2O profile

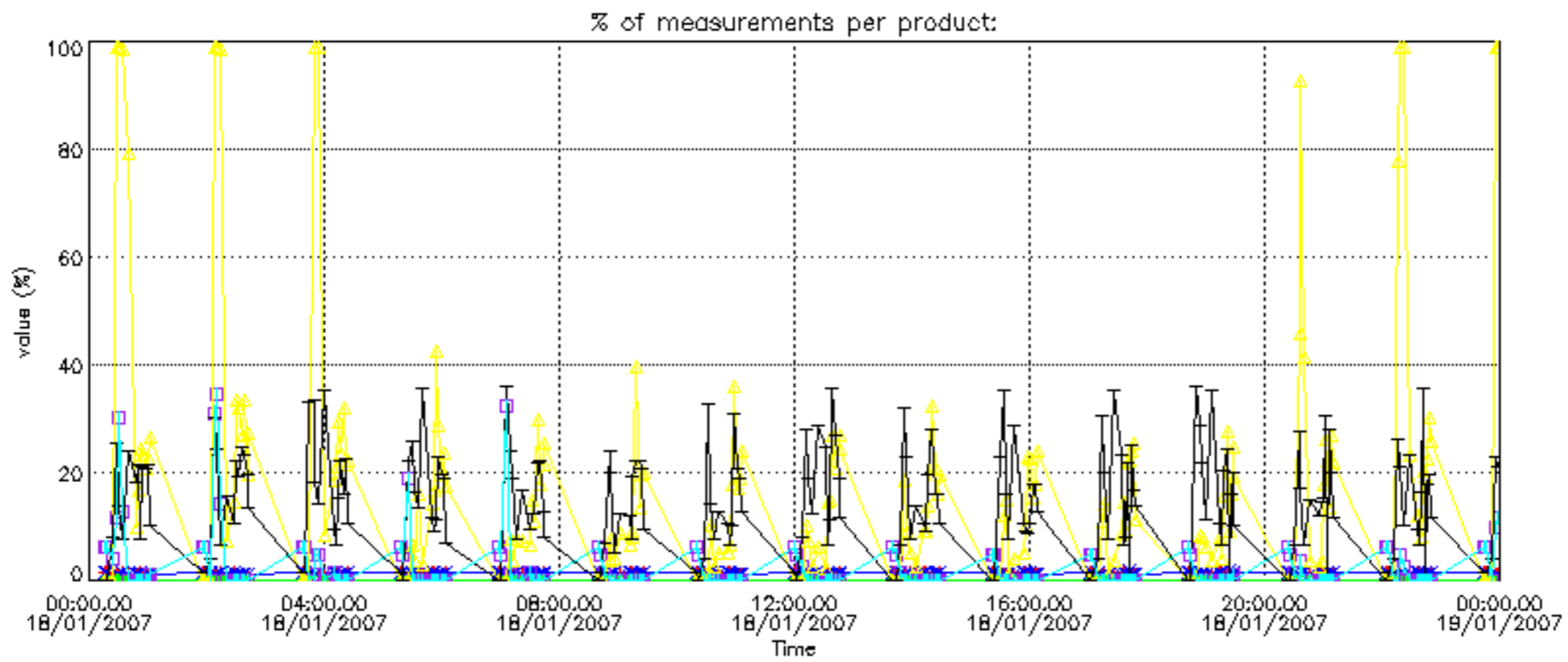


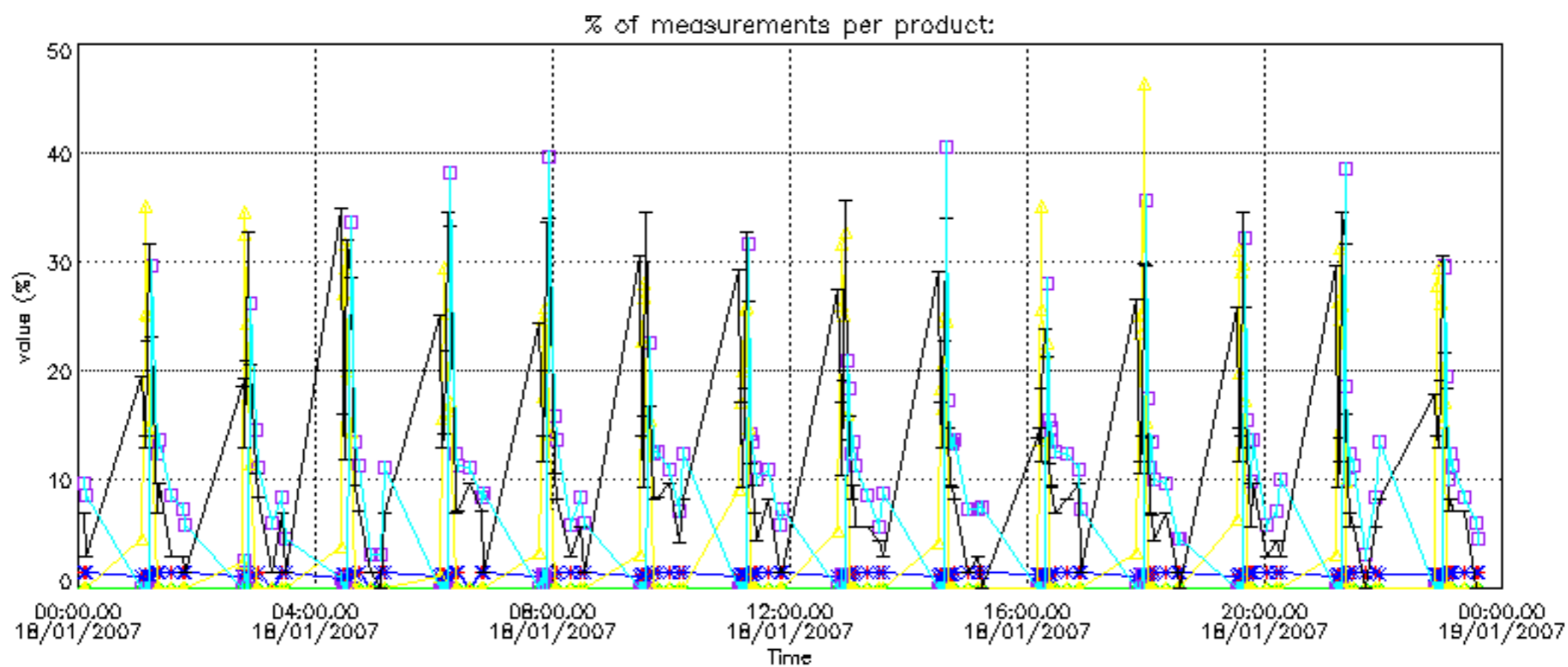
Percentage of flagged data per NO2 profile



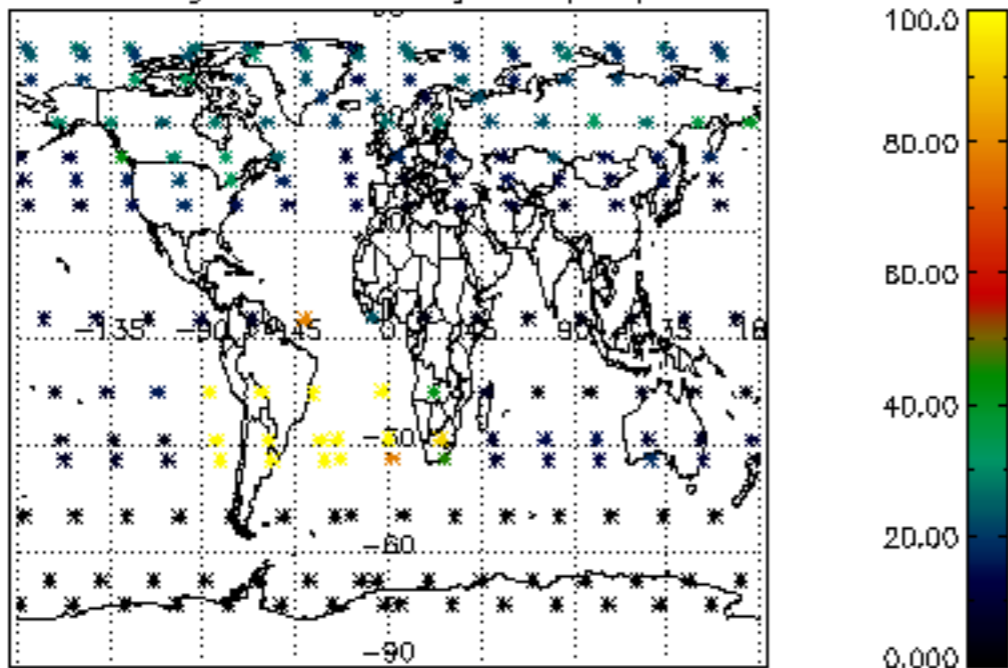
Percentage of flagged data per NO3 profile



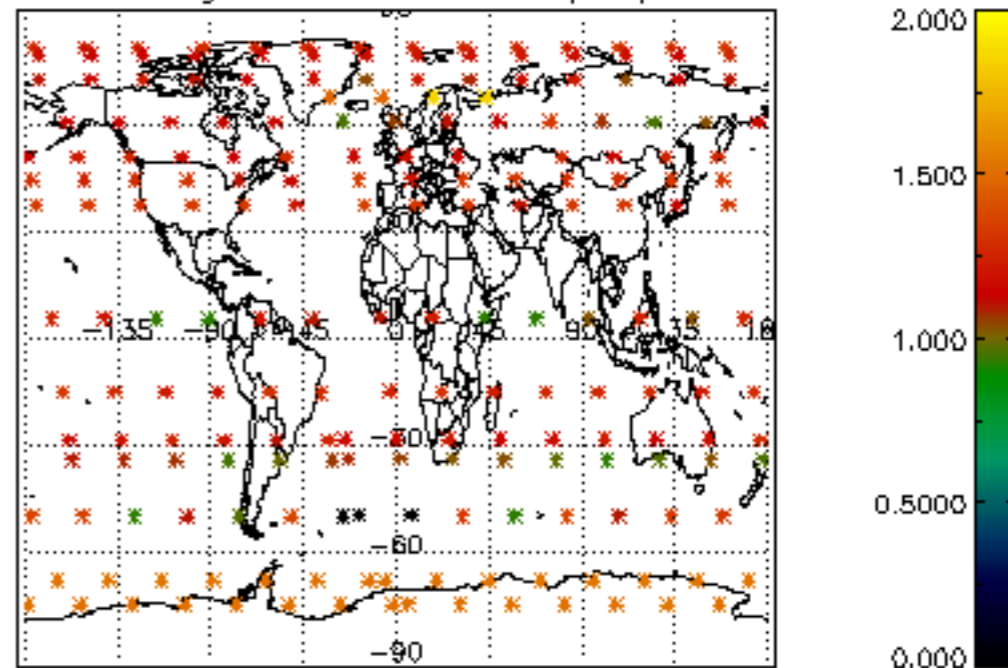




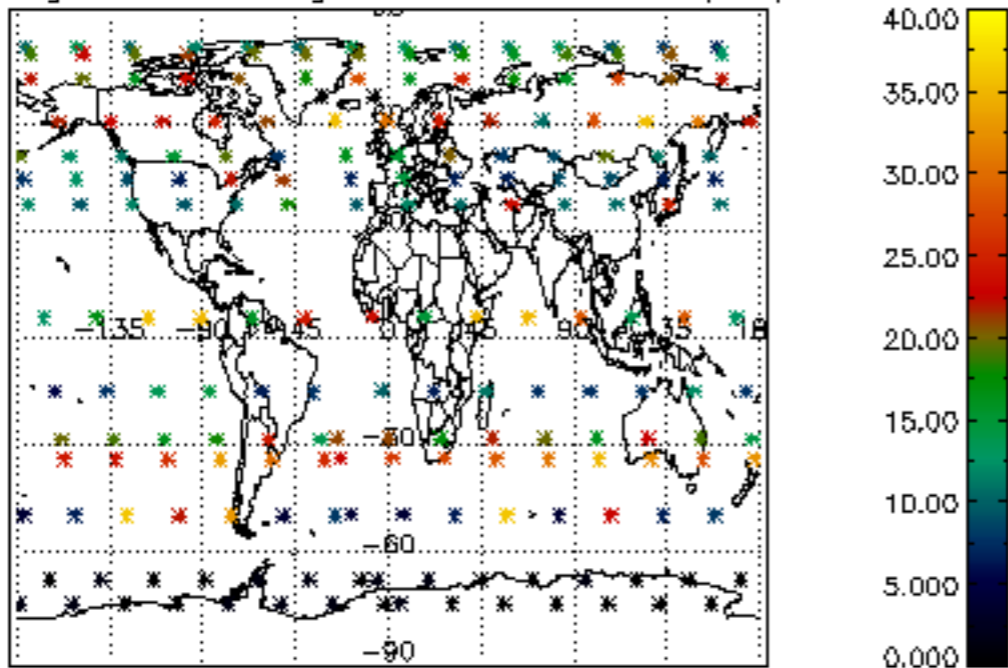
Percentage of cosmic ray hits per profile



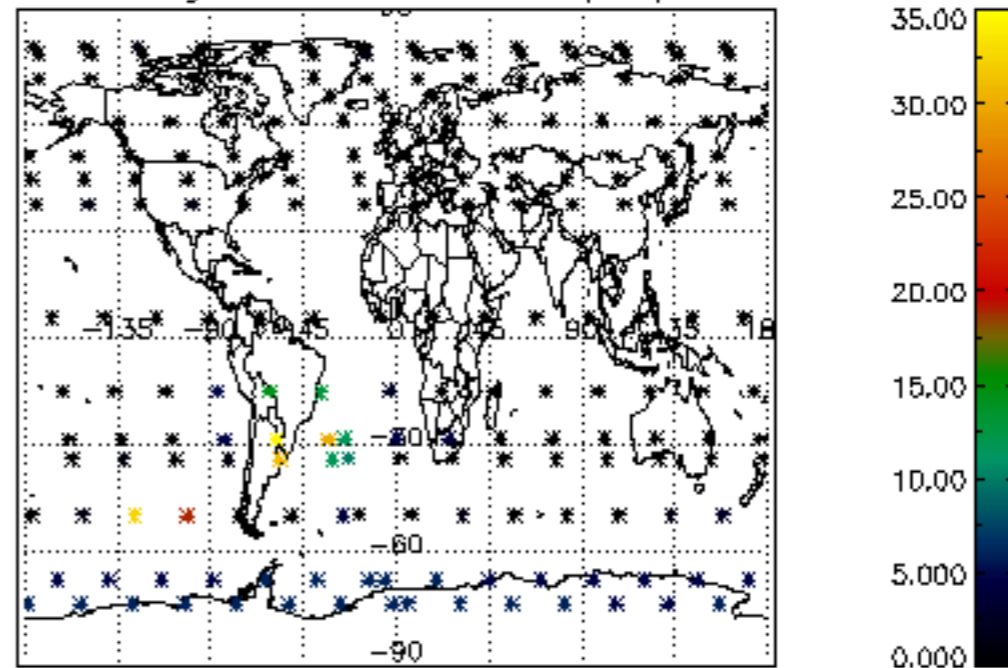
Percentage of datation errors per profile



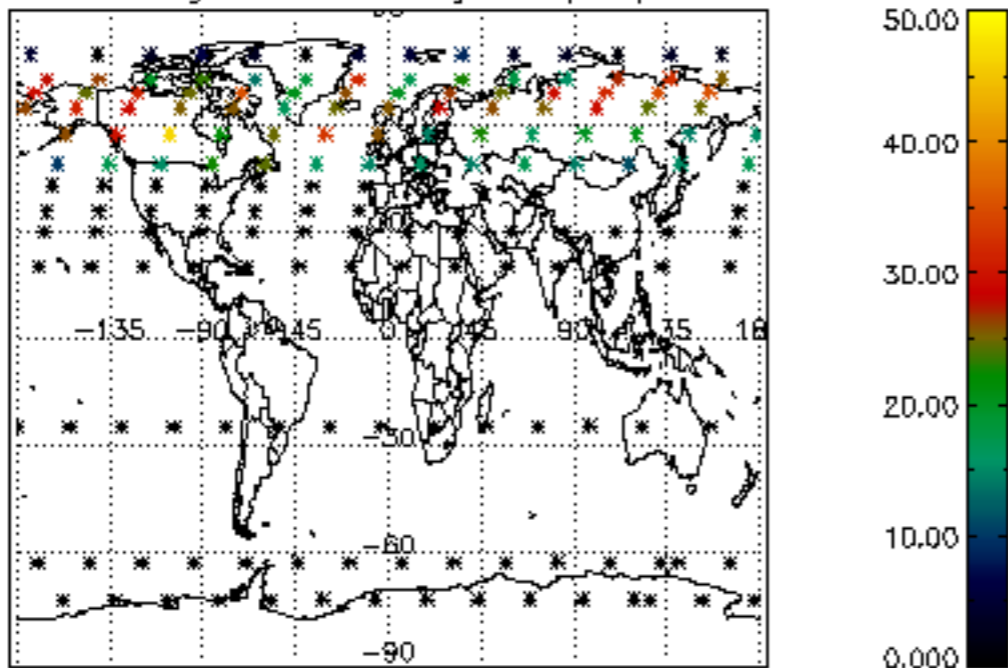
Percentage of star falling outside central band per profile



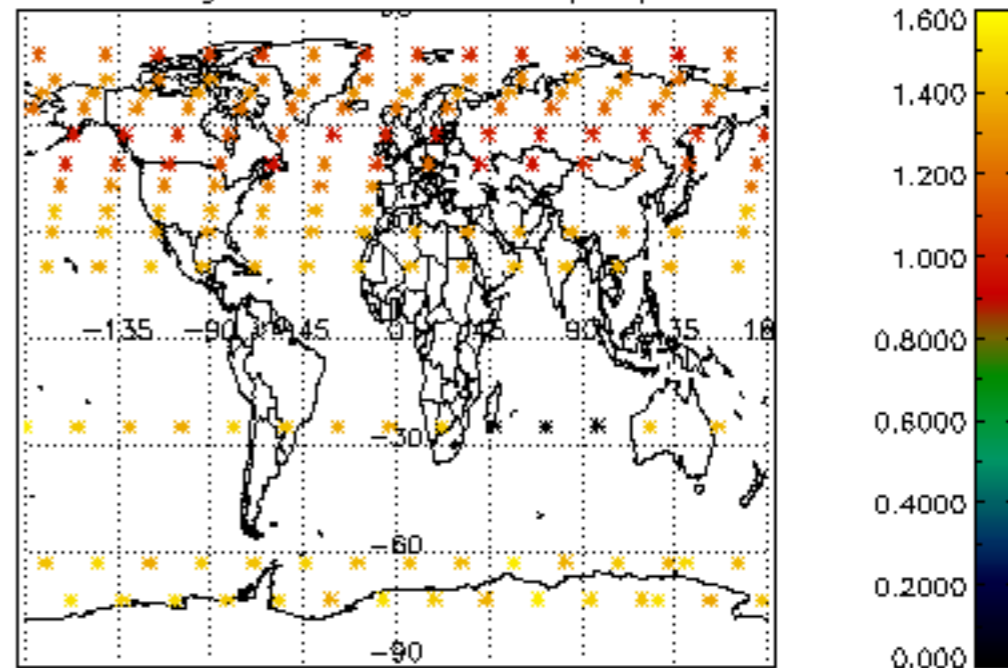
Percentage of saturation errors per profile



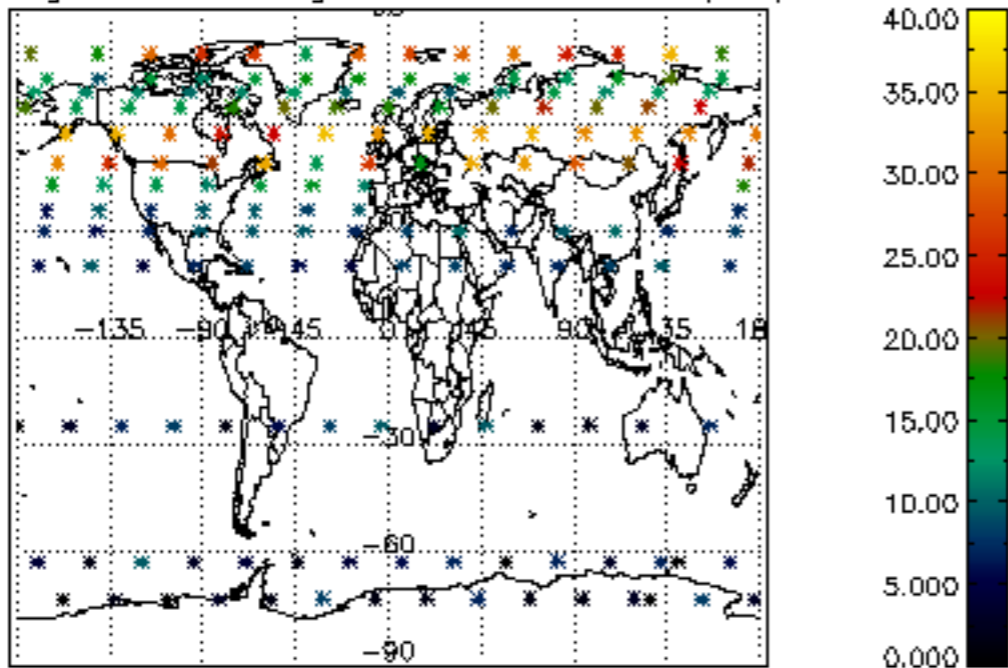
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

