

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	17APR2013 19:52:52
Data source version	GOMOS/6.01
Start time of products	01-11-2002 (01NOV2002 00:00:00)
Stop time of products	02-11-2002 (02NOV2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	260
Nb of prods with errors	1

2. Summary of processed GOM_NL__2P products.

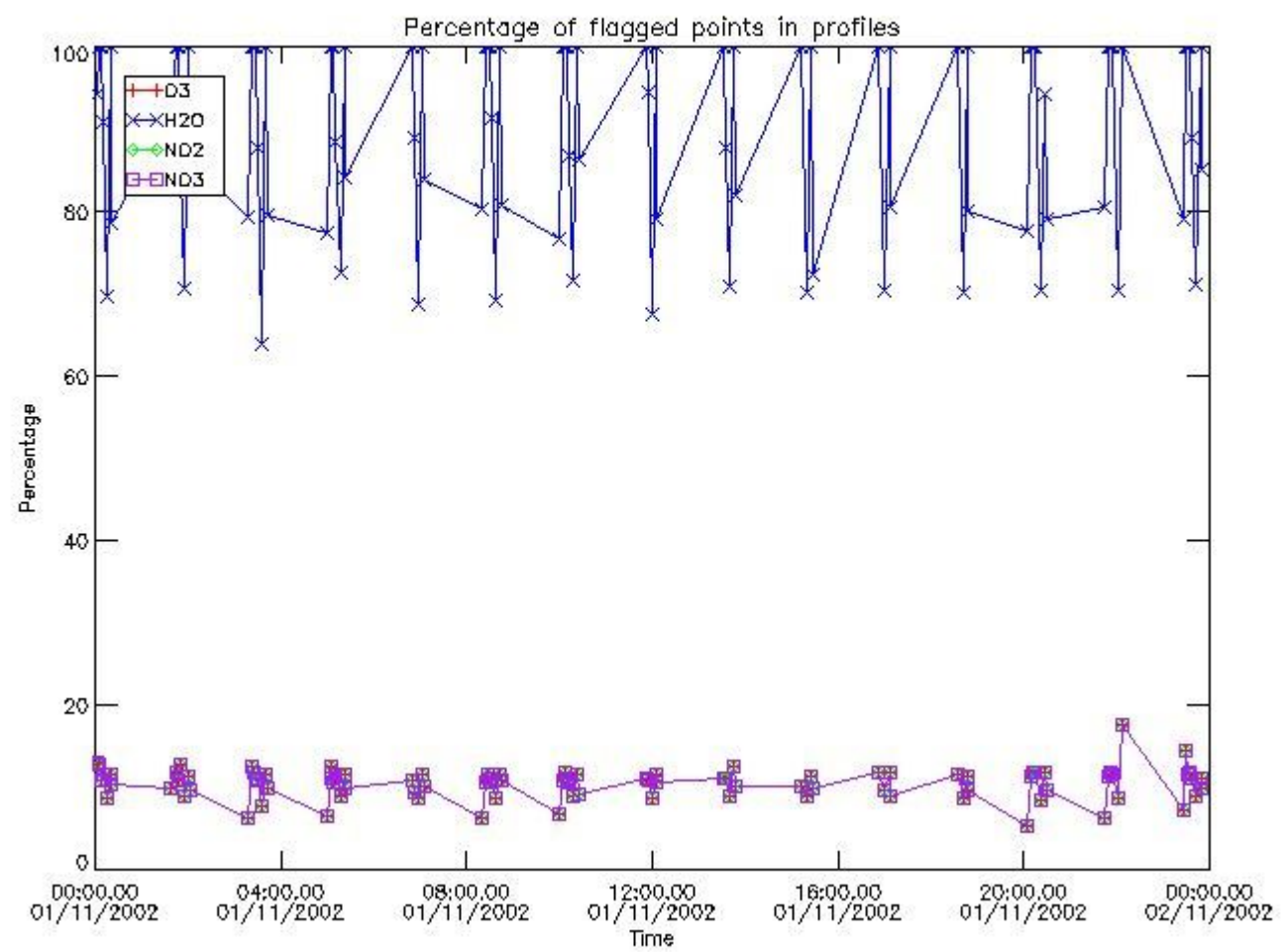
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021101_000203_000000432010_00445_03505_2828.N1	01-NOV-2002 00:02:03	Dark	43.000	99	Del Cen	2.5750	26000.	86	3505	No
2	GOM_NL__2PRFIN20021101_000412_000000442010_00445_03505_2829.N1	01-NOV-2002 00:04:12	Dark	44.000	129	Del Cru	2.7930	26000.	88	3505	No
3	GOM_NL__2PRFIN20021101_000647_000000482010_00446_03506_2820.N1	01-NOV-2002 00:06:47	Dark	47.500	91	Kap Vel	2.4900	26000.	95	3506	No
4	GOM_NL__2PRFIN20021101_000924_000000442010_00446_03506_2821.N1	01-NOV-2002 00:09:24	Dark	44.000	29	Bet Car	1.6720	10200.	88	3506	No
5	GOM_NL__2PRFIN20021101_001437_000000582010_00446_03506_2822.N1	01-NOV-2002 00:14:37	Dark	58.000	2	Alp Car	-0.73600	7000.0	116	3506	No
6	GOM_NL__2PRFIN20021101_002016_000000452010_00446_03506_2823.N1	01-NOV-2002 00:20:16	Dark	44.500	143	Alp Hyi	2.8570	7200.0	89	3506	No
7	GOM_NL__2PRFIN20021101_002139_000000502010_00446_03506_2824.N1	01-NOV-2002 00:21:39	Dark	49.500	9	Alp Eri	0.45300	24000.	99	3506	No
8	GOM_NL__2PRFIN20021101_002456_000000492010_00446_03506_2825.N1	01-NOV-2002 00:24:56	Straylight	49.000	157	The1Eri	2.9060	9300.0	98	3506	No
9	GOM_NL__2PRFIN20021101_002712_000002172010_00446_03506_2826.N1	01-NOV-2002 00:27:12	Straylight	217.00	47	2Bet CMa	1.9760	28000.	434	3506	No
10	GOM_NL__2PRFIN20021101_003300_000000512010_00446_03506_2827.N1	01-NOV-2002 00:33:00	Straylight	50.500	52	16Bet Cet	2.0370	4500.0	101	3506	No
11	GOM_NL__2PRFIN20021101_003925_000000662010_00446_03506_2828.N1	01-NOV-2002 00:39:25	Twilight_and_stray	66.000	94	92Alp Cet	2.5260	3100.0	132	3506	No
12	GOM_NL__2PRFIN20021101_004230_000000432010_00446_03506_2829.N1	01-NOV-2002 00:42:30	Bright	42.500	140	88Gam Peg	2.8340	26000.	85	3506	No
13	GOM_NL__2PRFIN20021101_004446_000000522010_00446_03506_2830.N1	01-NOV-2002 00:44:46	Bright	51.500	50	13Alp Ari	2.0070	4250.0	103	3506	No
14	GOM_NL__2PRFIN20021101_004750_000000462010_00446_03506_2831.N1	01-NOV-2002 00:47:50	Bright	45.500	53	43Bet And	2.0480	3300.0	91	3506	No
15	GOM_NL__2PRFIN20021101_005017_000000482010_00446_03506_2832.N1	01-NOV-2002 00:50:17	Bright	48.000	73	57Gam1And	2.2600	13100.	96	3506	No
16	GOM_NL__2PRFIN20021101_005343_000000422010_00446_03506_2833.N1	01-NOV-2002 00:53:43	Bright	41.500	68	18Alp Cas	2.2250	4500.0	83	3506	No
17	GOM_NL__2PRFIN20021101_005805_000001072010_00446_03506_2834.N1	01-NOV-2002 00:58:05	Bright	107.00	114	3Iot Aur	2.6930	4600.0	214	3506	No
18	GOM_NL__2PRFIN20021101_010259_000000452010_00446_03506_2835.N1	01-NOV-2002 01:02:59	Bright	44.500	49	1Alp UMi	1.9900	6300.0	89	3506	No
19	GOM_NL__2PRFIN20021101_010648_000000452010_00446_03506_2836.N1	01-NOV-2002 01:06:48	Bright	44.500	60	7Bet UMi	2.0810	3950.0	89	3506	No
20	GOM_NL__2PRFIN20021101_011107_000000472010_00446_03506_2837.N1	01-NOV-2002 01:11:07	Bright	47.000	36	50Alp UMa	1.8000	6300.0	94	3506	No
21	GOM_NL__2PRFIN20021101_011244_000000472010_00446_03506_2838.N1	01-NOV-2002 01:12:44	Bright	46.500	82	48Bet UMa	2.3650	10600.	93	3506	No
22	GOM_NL__2PRFIN20021101_011624_000000462010_00446_03506_2839.N1	01-NOV-2002 01:16:24	Bright	45.500	174	52Psi UMa	3.0040	4400.0	91	3506	No
23	GOM_NL__2PRFIN20021101_012309_000002552010_00446_03506_2840.N1	01-NOV-2002 01:23:09	Twilight_and_stray	255.00	24	66Alp Gem	1.5800	10200.	510	3506	No
24	GOM_NL__2PRFIN20021101_012810_000000652010_00446_03506_2841.N1	01-NOV-2002 01:28:10	Bright	65.000	22	32Alp Leo	1.3600	15200.	130	3506	No
25	GOM_NL__2PRFIN20021101_013731_000000822010_00446_03506_2842.N1	01-NOV-2002 01:37:31	Dark	81.500	48	30Alp Hya	1.9770	4100.0	163	3506	No
26	GOM_NL__2PRFIN20021101_014448_000000432010_00446_03506_2843.N1	01-NOV-2002 01:44:48	Dark	43.000	129	Del Cru	2.7930	26000.	86	3506	No
27	GOM_NL__2PRFIN20021101_014724_000000482010_00447_03507_9355.N1	01-NOV-2002 01:47:24	Dark	47.500	91	Kap Vel	2.4900	26000.	95	3507	No
28	GOM_NL__2PRFIN20021101_015001_000000442010_00447_03507_9356.N1	01-NOV-2002 01:50:01	Dark	44.000	29	Bet Car	1.6720	10200.	88	3507	No
29	GOM_NL__2PRFIN20021101_015514_000000572010_00447_03507_9357.N1	01-NOV-2002 01:55:14	Dark	56.500	2	Alp Car	-0.73600	7000.0	113	3507	No
30	GOM_NL__2PRFIN20021101_020052_000000452010_00447_03507_9358.N1	01-NOV-2002 02:00:52	Dark	45.000	143	Alp Hyi	2.8570	7200.0	90	3507	No
31	GOM_NL__2PRFIN20021101_020215_000000532010_00447_03507_9359.N1	01-NOV-2002 02:02:15	Dark	52.500	9	Alp Eri	0.45300	24000.	105	3507	No
32	GOM_NL__2PRFIN20021101_020532_000000512010_00447_03507_9360.N1	01-NOV-2002 02:05:32	Straylight	50.500	157	The1Eri	2.9060	9300.0	101	3507	No
33	GOM_NL__2PRFIN20021101_020750_000002172010_00447_03507_9361.N1	01-NOV-2002 02:07:50	Straylight	217.00	47	2Bet CMa	1.9760	28000.	434	3507	No
34	GOM_NL__2PRFIN20021101_021336_000000502010_00447_03507_9362.N1	01-NOV-2002 02:13:36	Straylight	50.000	52	16Bet Cet	2.0370	4500.0	100	3507	No
35	GOM_NL__2PRFIN20021101_022001_000000662010_00447_03507_9363.N1	01-NOV-2002 02:20:01	Twilight_and_stray	66.000	94	92Alp Cet	2.5260	3100.0	132	3507	No
36	GOM_NL__2PRFIN20021101_022307_000000422010_00447_03507_9364.N1	01-NOV-2002 02:23:07	Bright	41.500	140	88Gam Peg	2.8340	26000.	83	3507	No
37	GOM_NL__2PRFIN20021101_022522_000000502010_00447_03507_9365.N1	01-NOV-2002 02:25:22	Bright	50.000	50	13Alp Ari	2.0070	4250.0	100	3507	No
38	GOM_NL__2PRFIN20021101_022826_000000472010_00447_03507_9366.N1	01-NOV-2002 02:28:26	Bright	46.500	53	43Bet And	2.0480	3300.0	93	3507	No
39	GOM_NL__2PRFIN20021101_023053_000000492010_00447_03507_9367.N1	01-NOV-2002 02:30:53	Bright	49.000	73	57Gam1And	2.2600	13100.	98	3507	No
40	GOM_NL__2PRFIN20021101_023419_000000442010_00447_03507_9368.N1	01-NOV-2002 02:34:19	Bright	44.000	68	18Alp Cas	2.2250	4500.0	88	3507	No
41	GOM_NL__2PRFIN20021101_023839_000001082010_00447_03507_9369.N1	01-NOV-2002 02:38:39	Bright	107.50	114	3Iot Aur	2.6930	4600.0	215	3507	No
42	GOM_NL__2PRFIN20021101_024335_000000412010_00447_03507_9370.N1	01-NOV-2002 02:43:35	Bright	41.000	49	1Alp UMi	1.9900	6300.0	82	3507	No

220	GOM_NL__2PRFIN20021101_211009_000000472010_00458_03518_2333.N1	01-NOV-2002 21:10:09	Bright	46.500	49	1Alp UMi	1.9900	6300.0	93	3518	No
221	GOM_NL__2PRFIN20021101_211402_000000442010_00458_03518_2334.N1	01-NOV-2002 21:14:02	Bright	44.000	60	7Bet UMi	2.0810	3950.0	88	3518	No
222	GOM_NL__2PRFIN20021101_211816_000000502010_00458_03518_2335.N1	01-NOV-2002 21:18:16	Bright	49.500	36	50Alp UMa	1.8000	6300.0	99	3518	No
223	GOM_NL__2PRFIN20021101_211952_000000492010_00458_03518_2336.N1	01-NOV-2002 21:19:52	Bright	48.500	82	48Bet UMa	2.3650	10600.	97	3518	No
224	GOM_NL__2PRFIN20021101_212334_000000502010_00458_03518_2337.N1	01-NOV-2002 21:23:34	Bright	49.500	174	52Psi UMa	3.0040	4400.0	99	3518	No
225	GOM_NL__2PRFIN20021101_213031_000002552010_00458_03518_2338.N1	01-NOV-2002 21:30:31	Twilight_stray	255.00	24	66Alp Gem	1.5800	10200.	510	3518	No
226	GOM_NL__2PRFIN20021101_213527_000000692010_00458_03518_2339.N1	01-NOV-2002 21:35:27	Bright	68.500	22	32Alp Leo	1.3600	15200.	137	3518	No
227	GOM_NL__2PRFIN20021101_214458_000000832010_00458_03518_2340.N1	01-NOV-2002 21:44:58	Dark	82.500	48	30Alp Hya	1.9770	4100.0	165	3518	No
228	GOM_NL__2PRFIN20021101_214951_000000452010_00458_03518_2341.N1	01-NOV-2002 21:49:51	Dark	45.000	99	Del Cen	2.5750	26000.	90	3518	No
229	GOM_NL__2PRFIN20021101_215200_000000442010_00458_03518_2342.N1	01-NOV-2002 21:52:00	Dark	43.500	129	Del Cru	2.7930	26000.	87	3518	No
230	GOM_NL__2PRFIN20021101_215431_000000442010_00459_03519_9373.N1	01-NOV-2002 21:54:31	Dark	44.000	124	The Car	2.7640	30000.	88	3519	No
231	GOM_NL__2PRFIN20021101_220233_000000582010_00459_03519_9374.N1	01-NOV-2002 22:02:33	Dark	58.000	2	Alp Car	-0.73600	7000.0	116	3519	No
232	GOM_NL__2PRFIN20021101_220805_000000292010_00459_03519_9375.N1	01-NOV-2002 22:08:05	Dark	28.500	143	Alp Hyi	2.8570	7200.0	57	3519	No
233	GOM_NL__2PRFIN20021101_221246_000000492010_00459_03519_2320.N1	01-NOV-2002 22:12:46	Straylight	49.000	157	The1Eri	2.9060	9300.0	98	3519	No
234	GOM_NL__2PRFIN20021101_221453_000002202010_00459_03519_2321.N1	01-NOV-2002 22:14:53	Straylight	220.00	1	9Alp CMa	-1.4400	11000.	440	3519	No
235	GOM_NL__2PRFIN20021101_222049_000000512010_00459_03519_2322.N1	01-NOV-2002 22:20:49	Straylight	50.500	52	16Bet Cet	2.0370	4500.0	101	3519	No
236	GOM_NL__2PRFIN20021101_222708_000000662010_00459_03519_2323.N1	01-NOV-2002 22:27:08	Twilight_stray	65.500	94	92Alp Cet	2.5260	3100.0	131	3519	No
237	GOM_NL__2PRFIN20021101_223020_000000432010_00459_03519_2324.N1	01-NOV-2002 22:30:20	Bright	42.500	140	88Gam Peg	2.8340	26000.	85	3519	No
238	GOM_NL__2PRFIN20021101_223229_000000512010_00459_03519_2325.N1	01-NOV-2002 22:32:29	Bright	50.500	50	13Alp Ari	2.0070	4250.0	101	3519	No
239	GOM_NL__2PRFIN20021101_223412_000000442010_00459_03519_2326.N1	01-NOV-2002 22:34:12	Bright	43.500	58	21Alp And	2.0730	11000.	87	3519	No
240	GOM_NL__2PRFIN20021101_223536_000000462010_00459_03519_2327.N1	01-NOV-2002 22:35:36	Bright	45.500	53	43Bet And	2.0480	3300.0	91	3519	No
241	GOM_NL__2PRFIN20021101_223800_000000462010_00459_03519_2328.N1	01-NOV-2002 22:38:00	Bright	45.500	73	57Gam1And	2.2600	13100.	91	3519	No
242	GOM_NL__2PRFIN20021101_224130_000000442010_00459_03519_2329.N1	01-NOV-2002 22:41:30	Bright	44.000	68	18Alp Cas	2.2250	4500.0	88	3519	No
243	GOM_NL__2PRFIN20021101_224523_000001032010_00459_03519_2330.N1	01-NOV-2002 22:45:23	Bright	102.50	114	3Iot Aur	2.6930	4600.0	205	3519	No
244	GOM_NL__2PRFIN20021101_225045_000000462010_00459_03519_2331.N1	01-NOV-2002 22:50:45	Bright	46.000	49	1Alp UMi	1.9900	6300.0	92	3519	No
245	GOM_NL__2PRFIN20021101_225438_000000412010_00459_03519_2332.N1	01-NOV-2002 22:54:38	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	3519	No
246	GOM_NL__2PRFIN20021101_225852_000000502010_00459_03519_2333.N1	01-NOV-2002 22:58:52	Bright	49.500	36	50Alp UMa	1.8000	6300.0	99	3519	No
247	GOM_NL__2PRFIN20021101_230029_000000462010_00459_03519_2334.N1	01-NOV-2002 23:00:29	Bright	46.000	82	48Bet UMa	2.3650	10600.	92	3519	No
248	GOM_NL__2PRFIN20021101_230408_000000492010_00459_03519_2335.N1	01-NOV-2002 23:04:08	Bright	49.000	174	52Psi UMa	3.0040	4400.0	98	3519	No
249	GOM_NL__2PRFIN20021101_231108_000002552010_00459_03519_2336.N1	01-NOV-2002 23:11:08	Twilight_stray	255.00	24	66Alp Gem	1.5800	10200.	510	3519	No
250	GOM_NL__2PRFIN20021101_231605_000000662010_00459_03519_2337.N1	01-NOV-2002 23:16:05	Bright	65.500	22	32Alp Leo	1.3600	15200.	131	3519	No
251	GOM_NL__2PRFIN20021101_232535_000000772010_00459_03519_2338.N1	01-NOV-2002 23:25:35	Dark	76.500	48	30Alp Hya	1.9770	4100.0	153	3519	No
252	GOM_NL__2PRFIN20021101_233027_000000462010_00459_03519_2339.N1	01-NOV-2002 23:30:27	Dark	45.500	99	Del Cen	2.5750	26000.	91	3519	No
253	GOM_NL__2PRFIN20021101_233236_000000442010_00459_03519_2340.N1	01-NOV-2002 23:32:36	Dark	44.000	129	Del Cru	2.7930	26000.	88	3519	No
254	GOM_NL__2PRFIN20021101_233507_000000432010_00460_03520_2323.N1	01-NOV-2002 23:35:07	Dark	43.000	124	The Car	2.7640	30000.	86	3520	No
255	GOM_NL__2PRFIN20021101_233751_000000462010_00460_03520_2324.N1	01-NOV-2002 23:37:51	Dark	45.500	29	Bet Car	1.6720	10200.	91	3520	No
256	GOM_NL__2PRFIN20021101_234310_000000582010_00460_03520_2325.N1	01-NOV-2002 23:43:10	Dark	57.500	2	Alp Car	-0.73600	7000.0	115	3520	No
257	GOM_NL__2PRFIN20021101_234841_000000462010_00460_03520_2326.N1	01-NOV-2002 23:48:41	Dark	45.500	143	Alp Hyi	2.8570	7200.0	91	3520	No
258	GOM_NL__2PRFIN20021101_235004_000000512010_00460_03520_2327.N1	01-NOV-2002 23:50:04	Dark	50.500	9	Alp Eri	0.45300	24000.	101	3520	No
259	GOM_NL__2PRFIN20021101_235323_000000492010_00460_03520_2328.N1	01-NOV-2002 23:53:23	Dark	49.000	157	The1Eri	2.9060	9300.0	98	3520	Yes
260	GOM_NL__2PRFIN20021101_235556_000002162010_00460_03520_2329.N1	01-NOV-2002 23:55:56	Straylight	216.00	47	2Bet CMa	1.9760	28000.	432	3520	No

3. Quality information per product

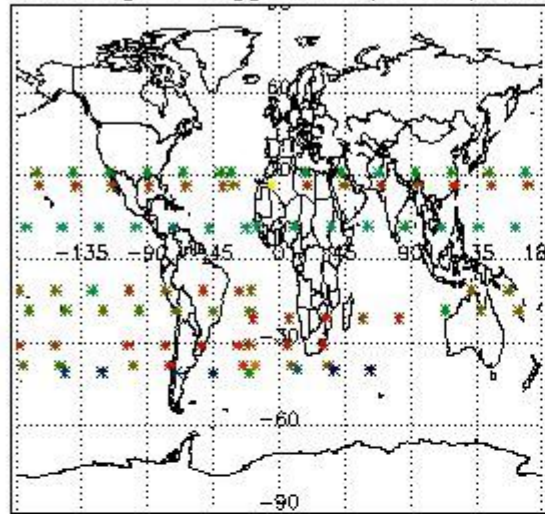
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

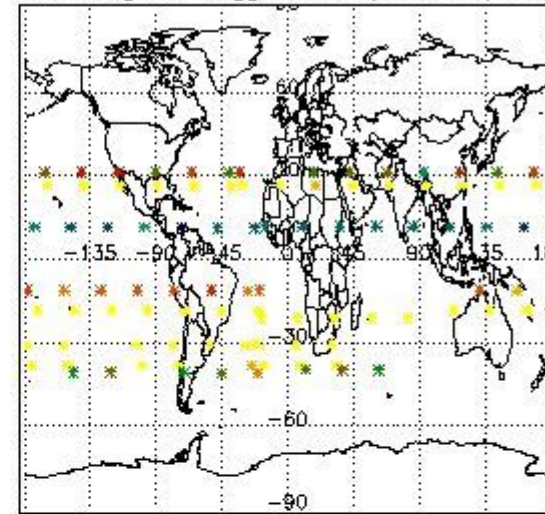


3.2 Plot quality information per product (world map)

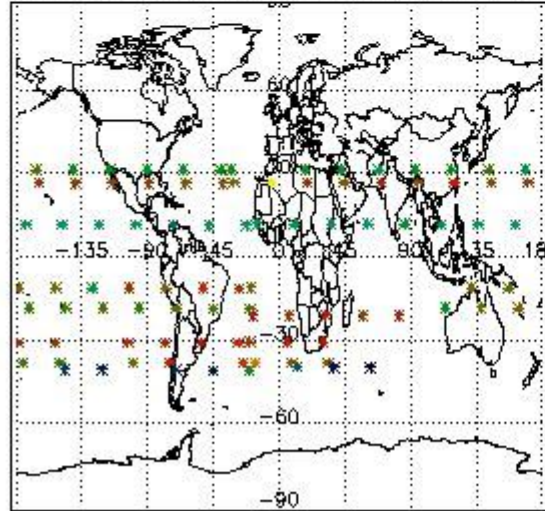
Percentage of flagged data per O3 profile



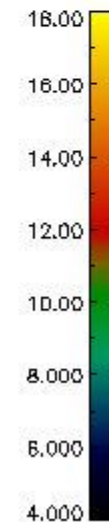
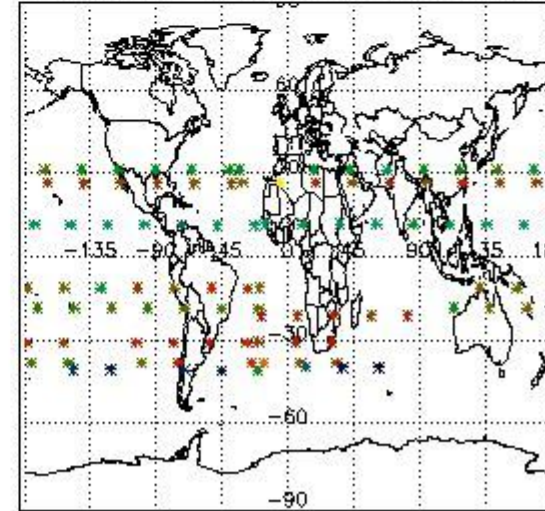
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

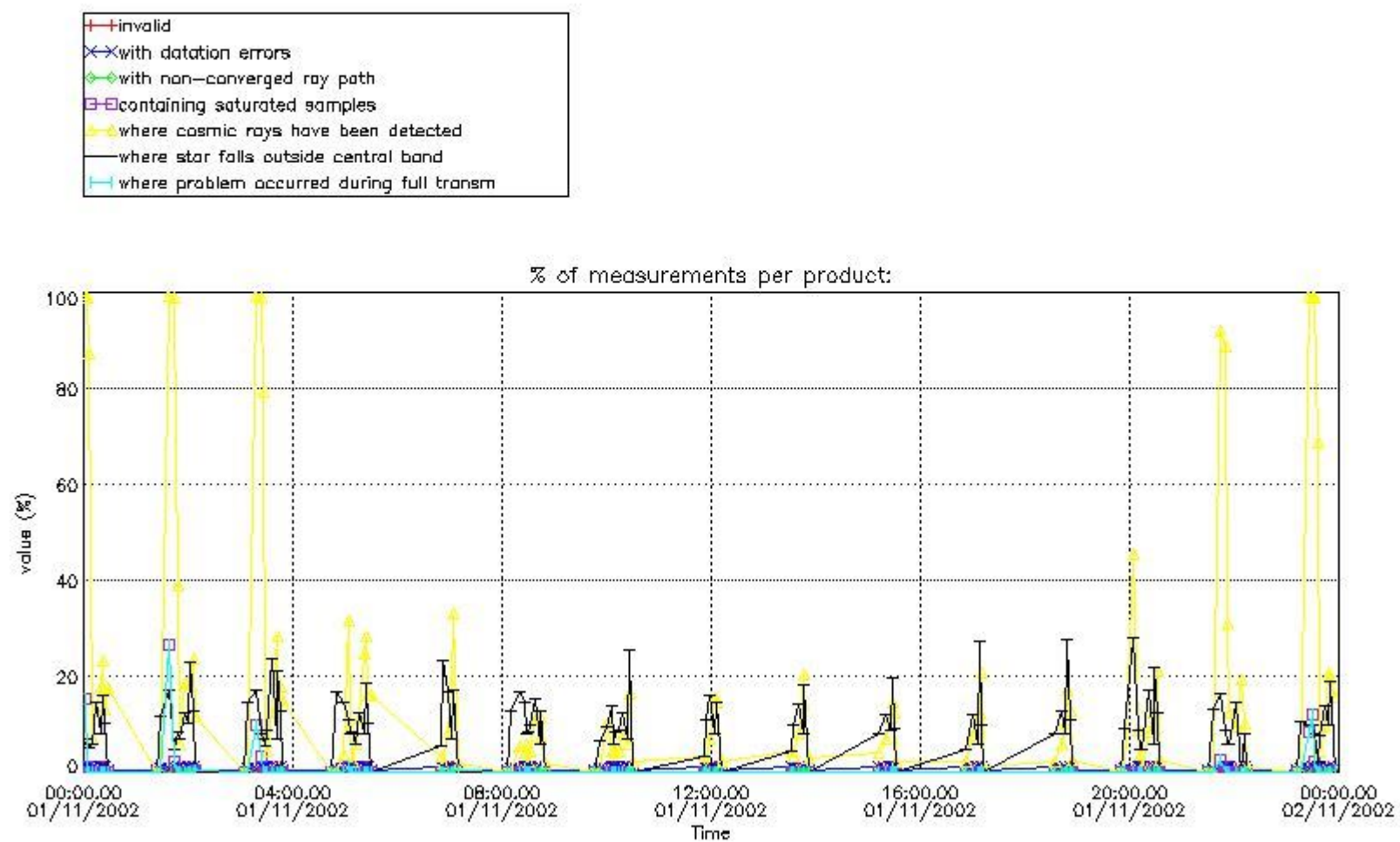


4. Level 1 quality information per product

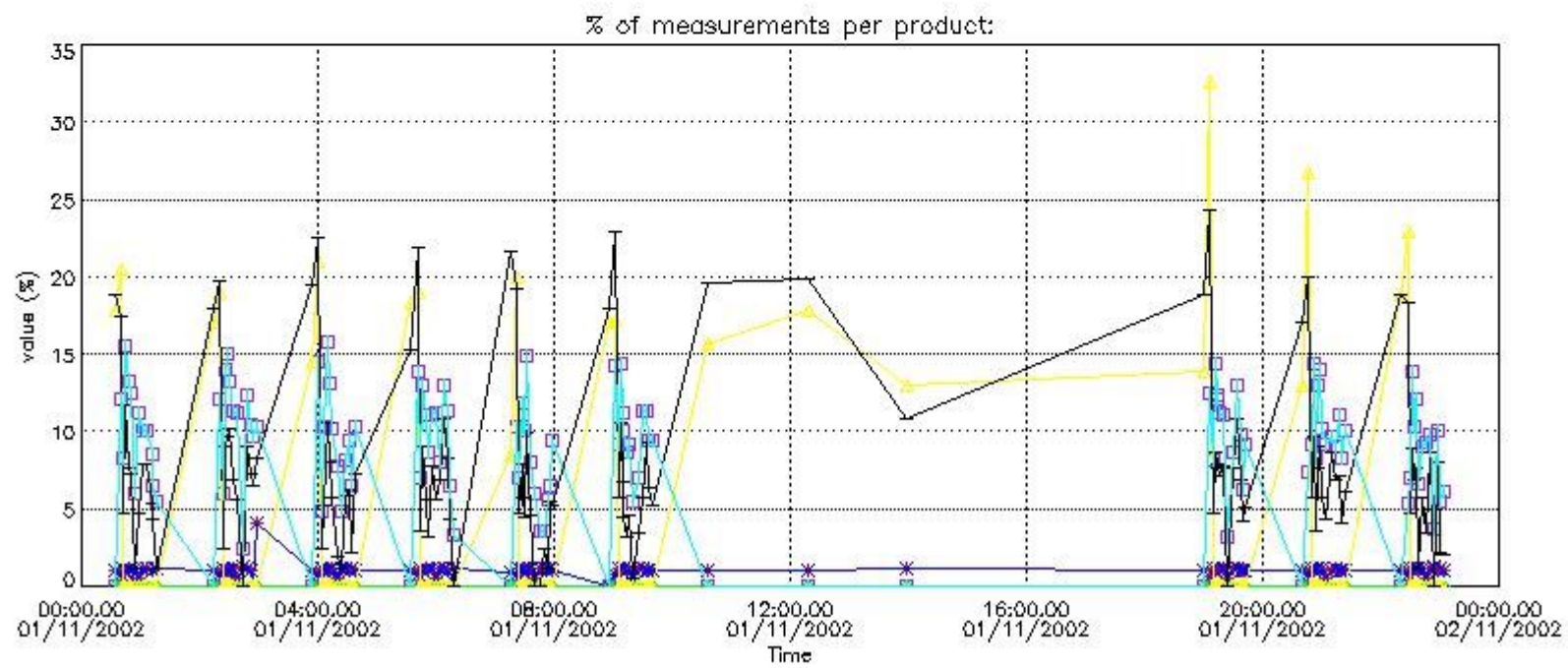
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



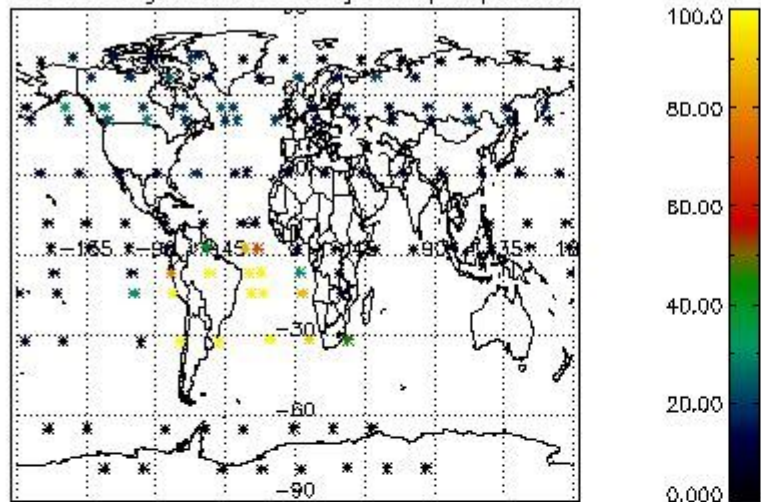
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



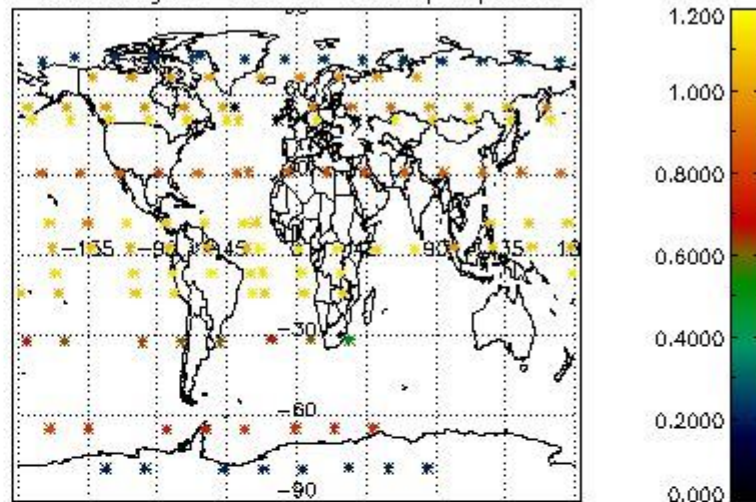
4.2 Plot quality information per product coming from level 1b processing (world map)

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

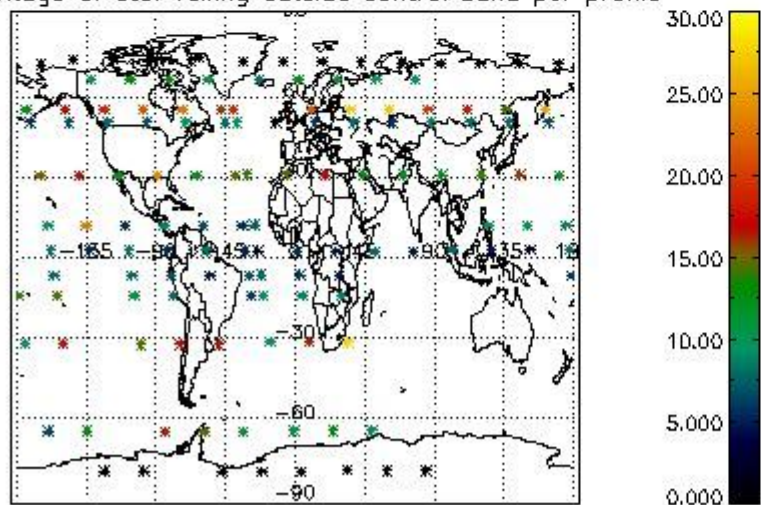
Percentage of cosmic ray hits per profile



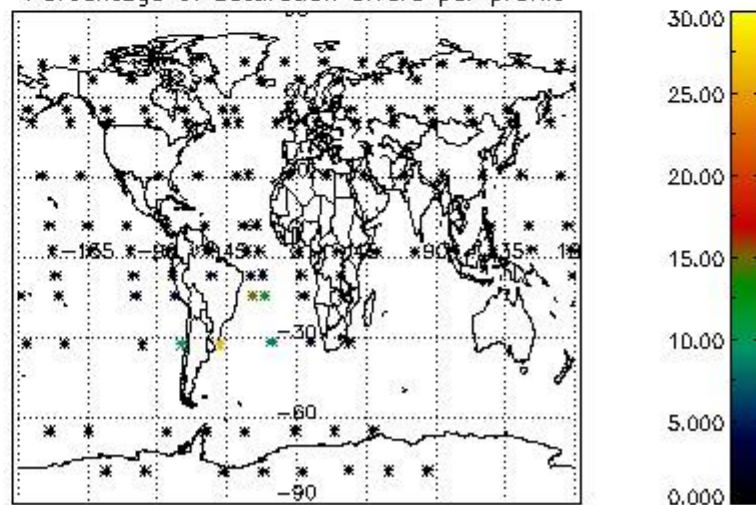
Percentage of datation errors per profile



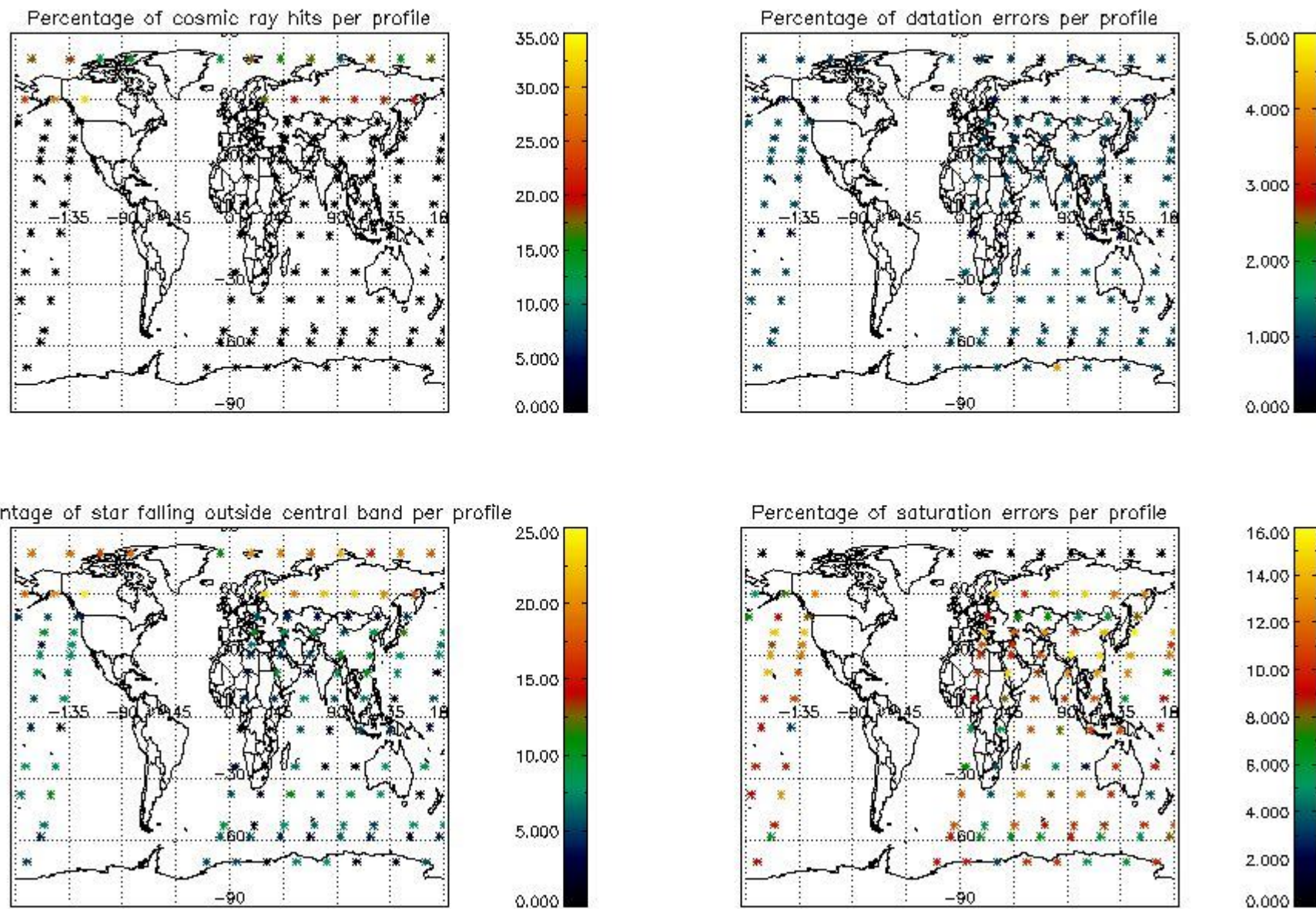
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

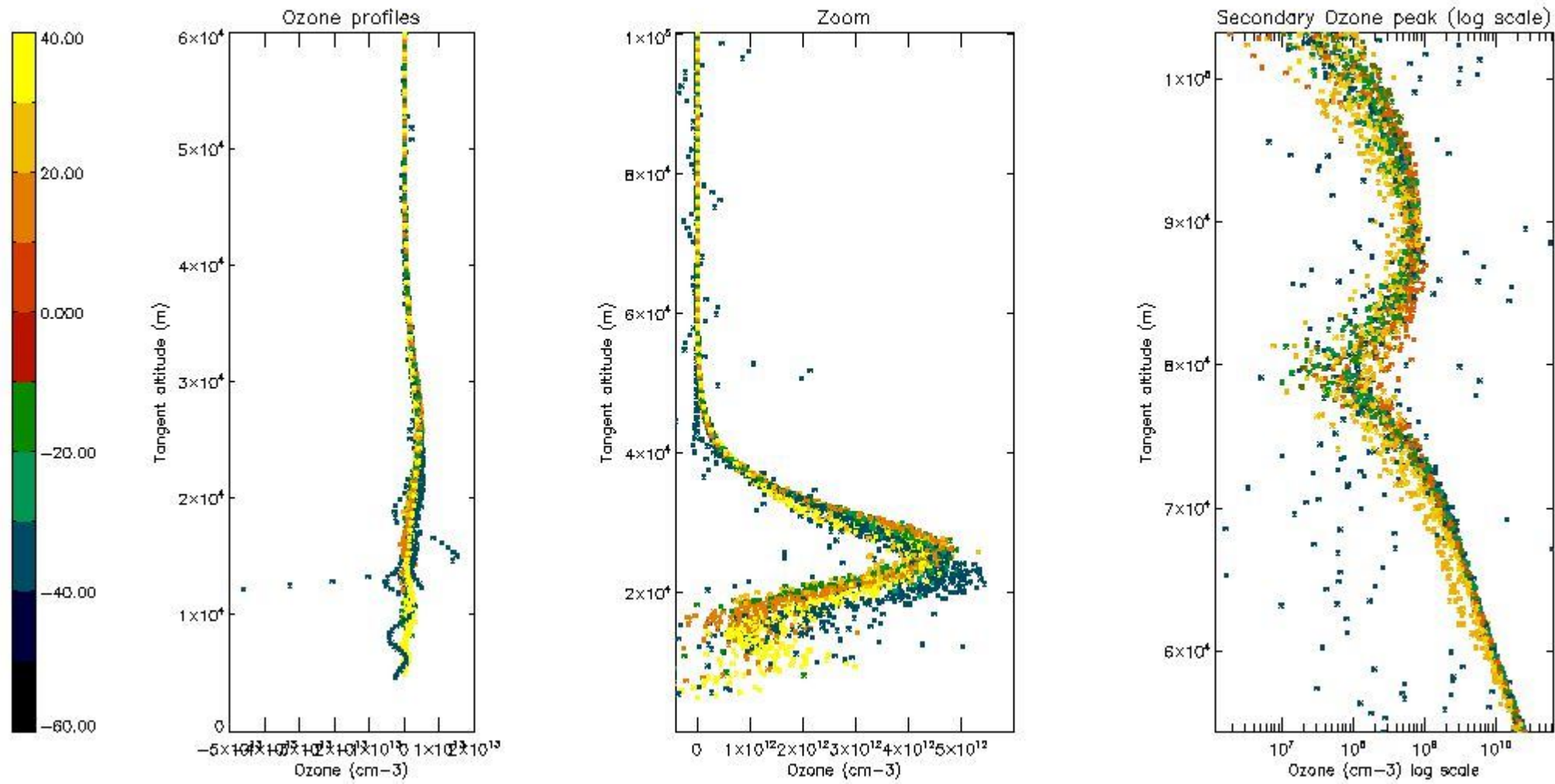
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	15

STD < 10	13
STD < 5	10

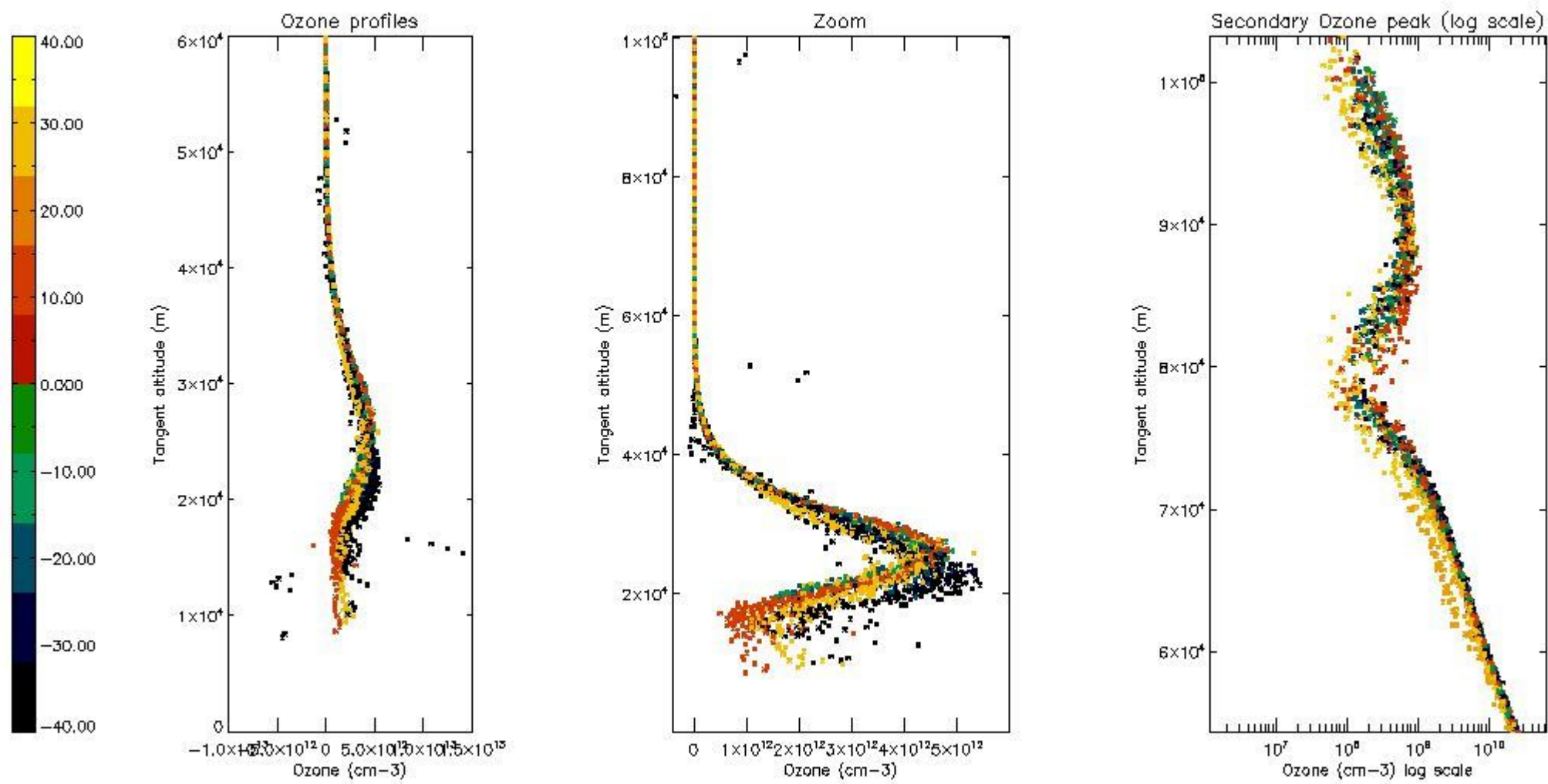
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



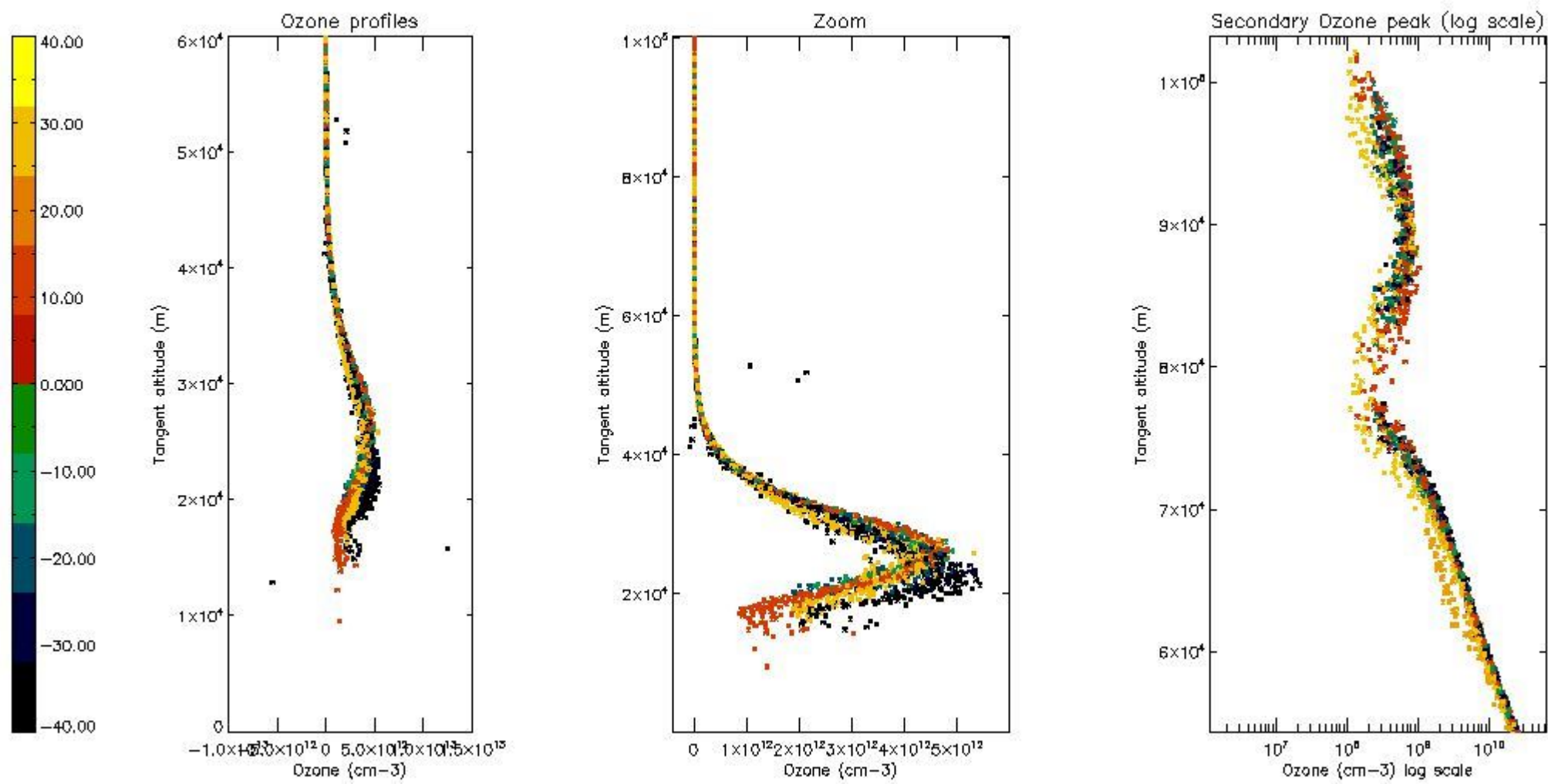
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



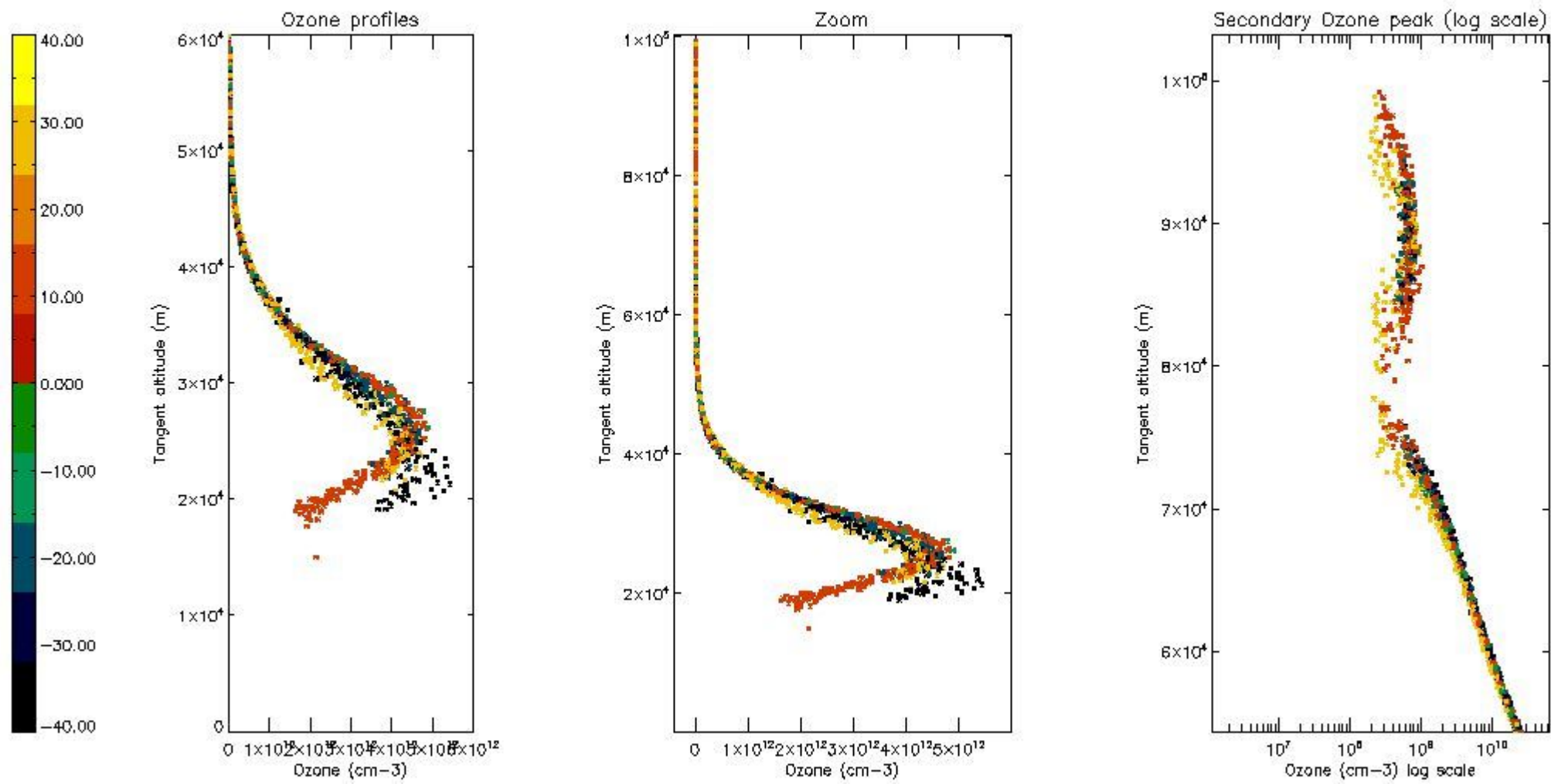
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



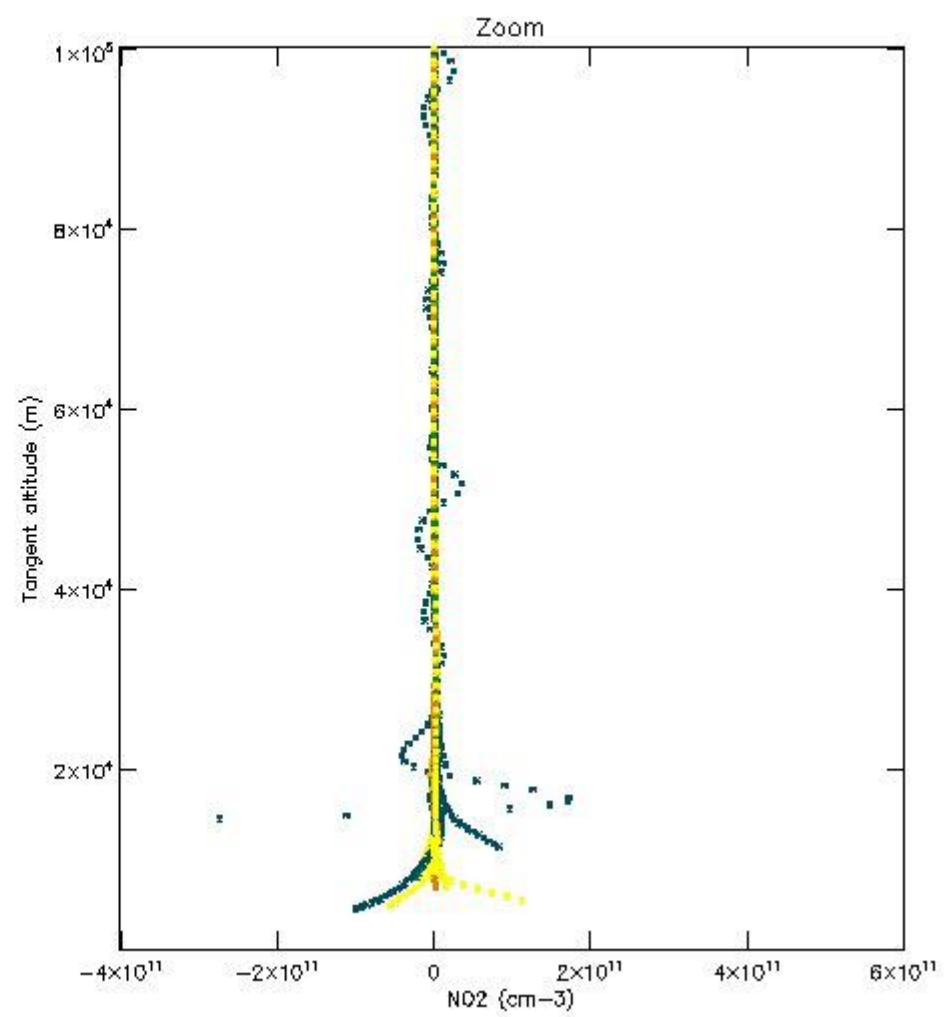
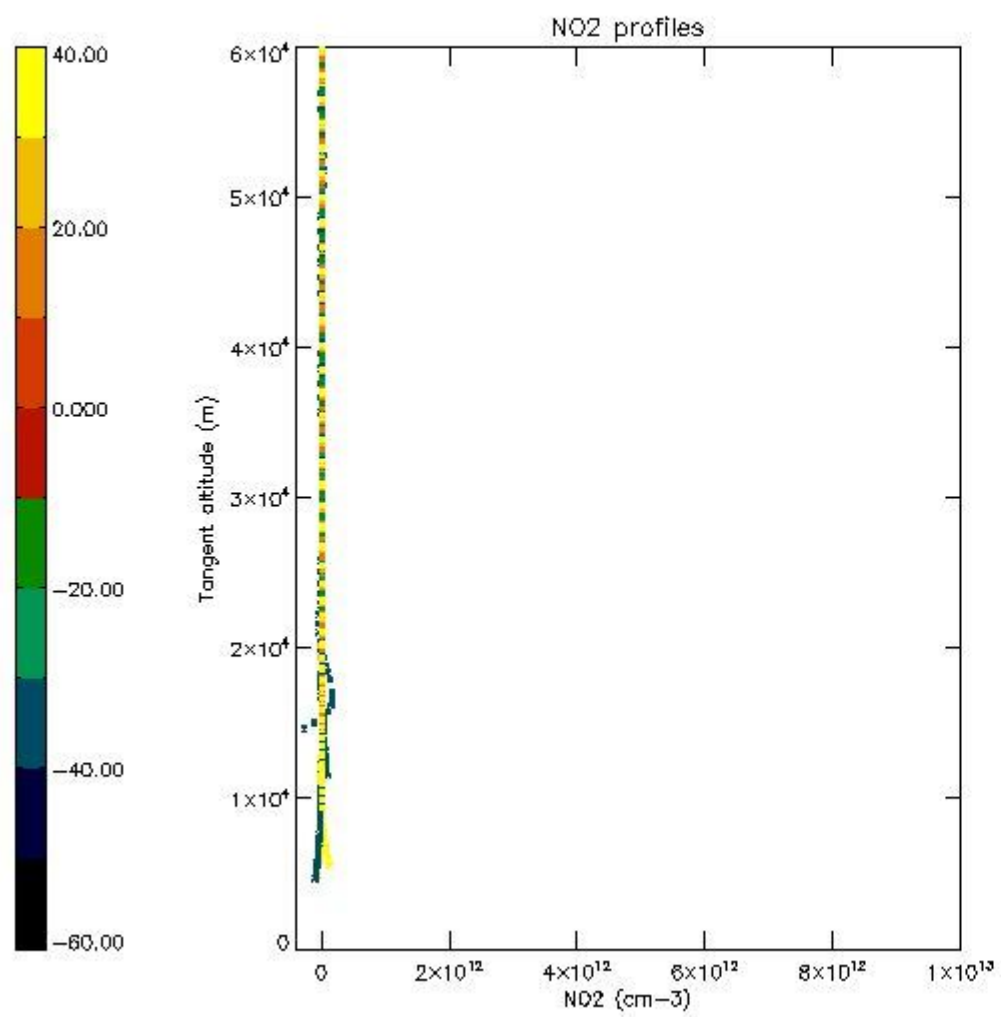
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



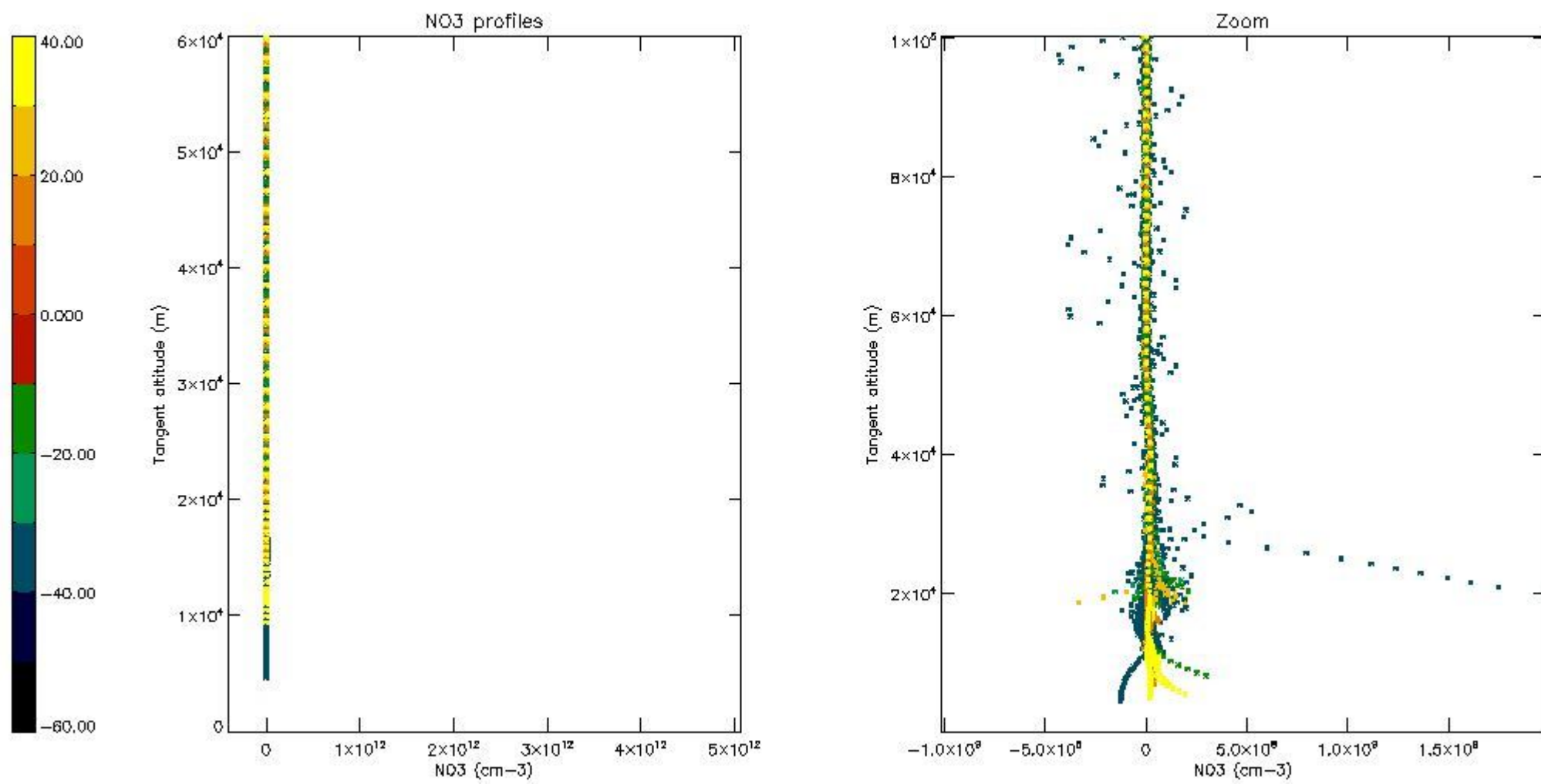
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



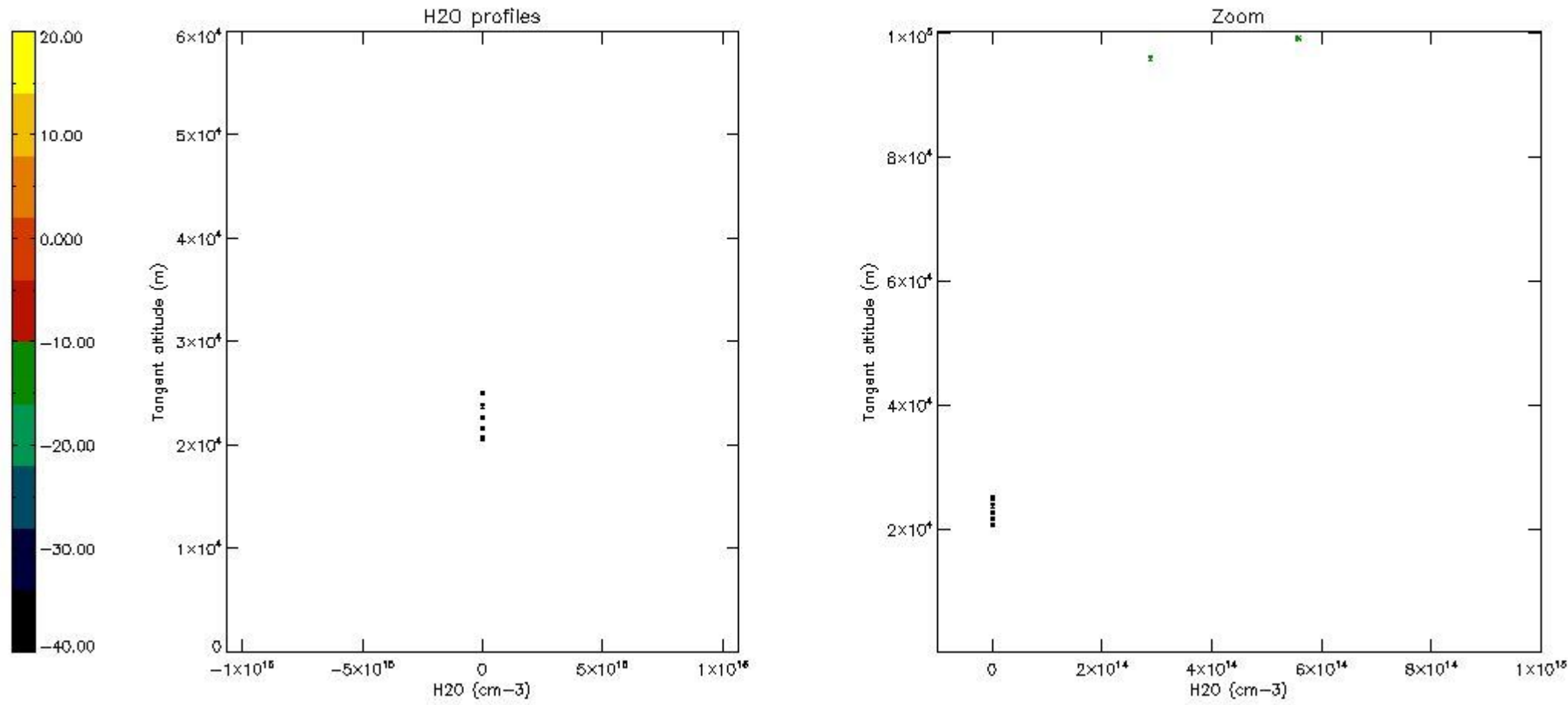
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	01-NOV-2002 00:02:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-NOV-2002 00:02:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-NOV-2002 00:02:03

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% \(dark without errors\)](#)

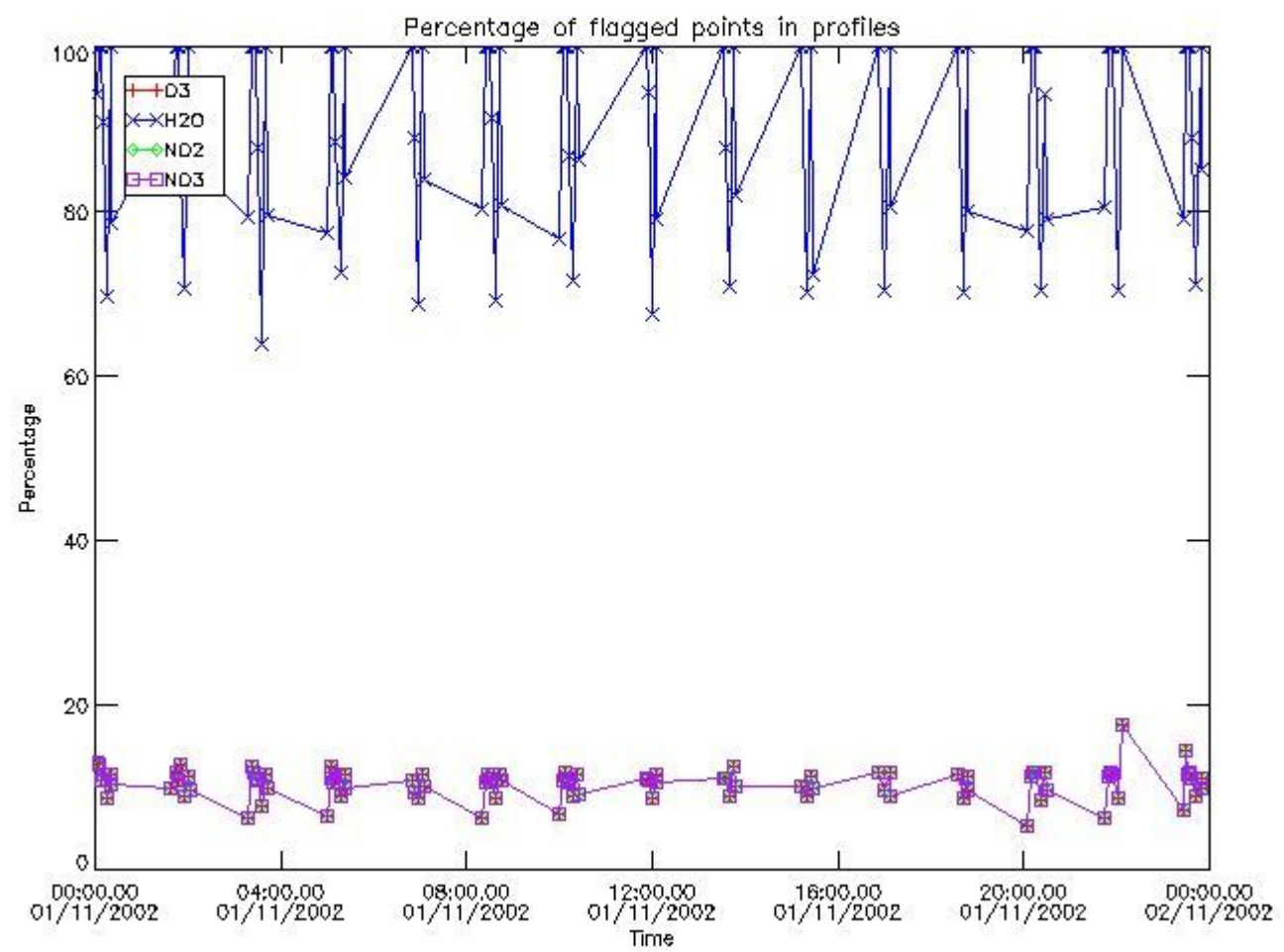
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

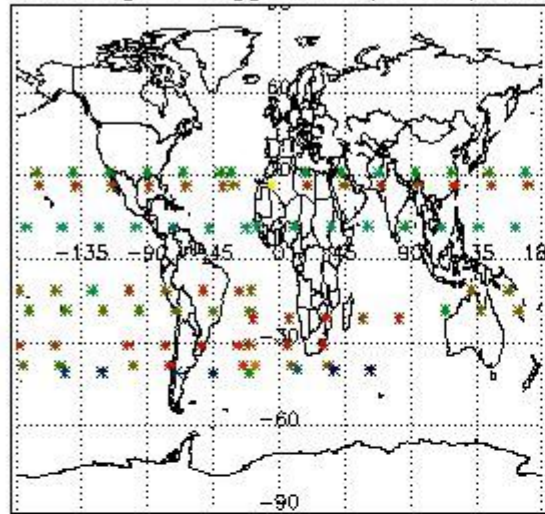
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

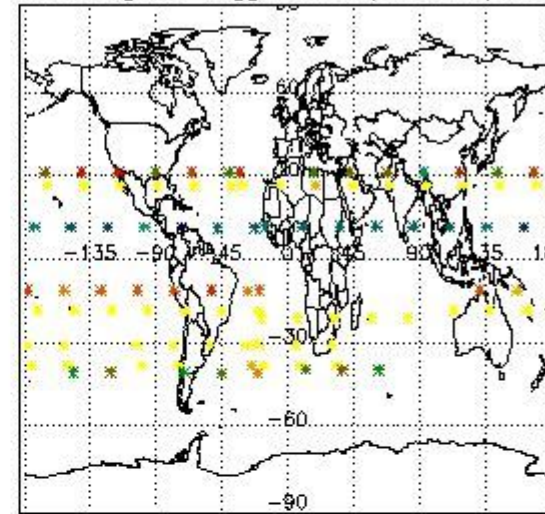


3.2 Plot quality information per product (world map)

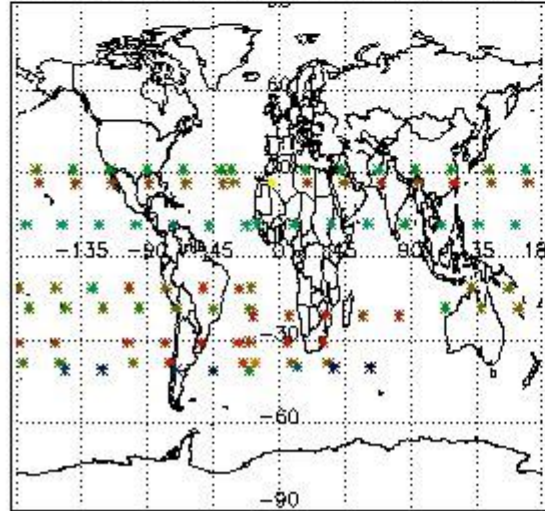
Percentage of flagged data per O3 profile



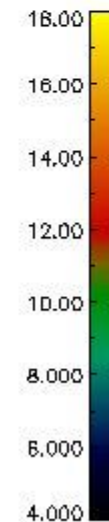
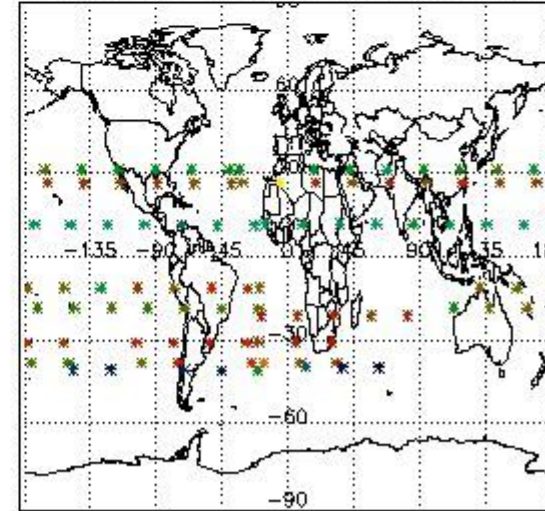
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

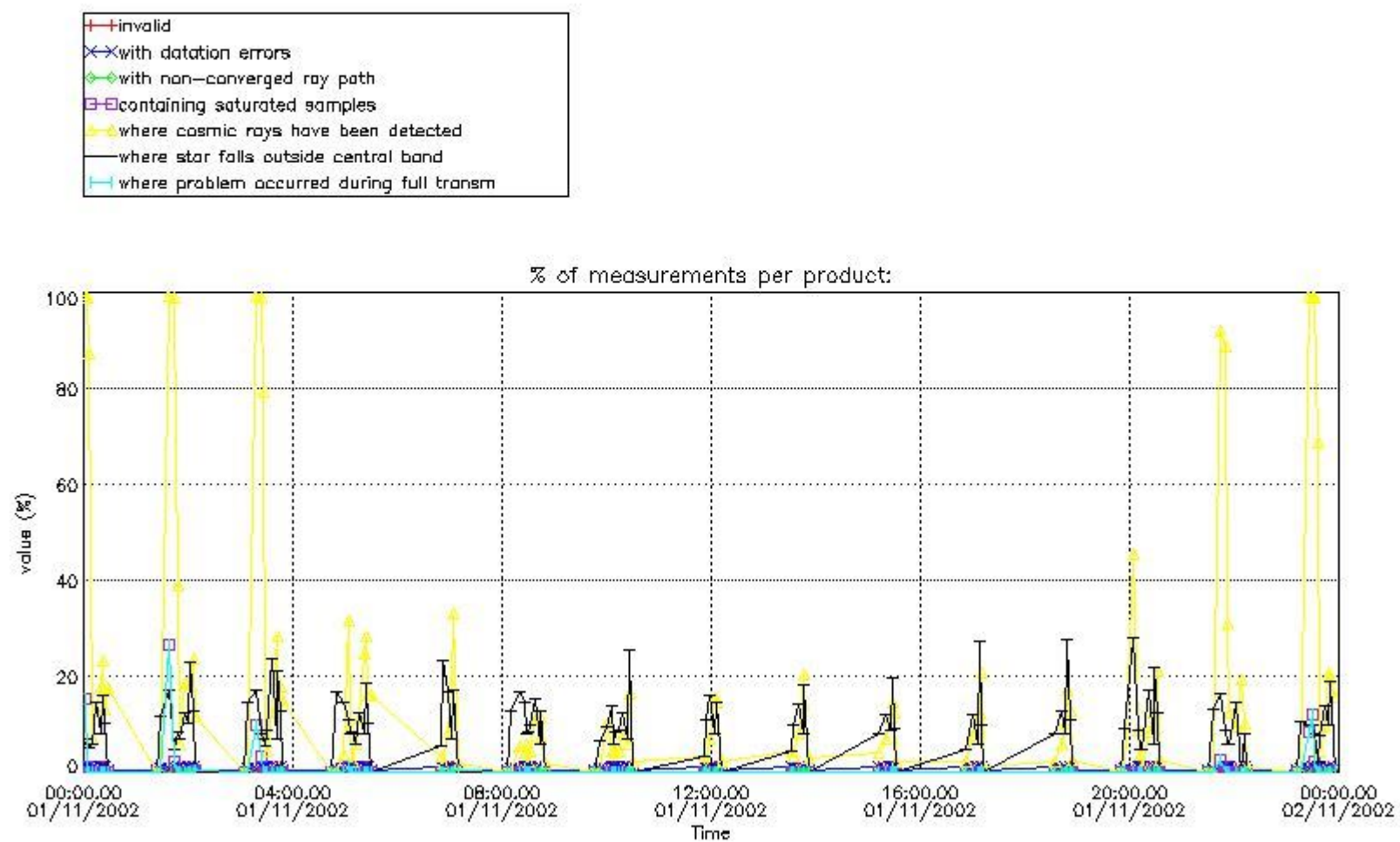


4. Level 1 quality information per product

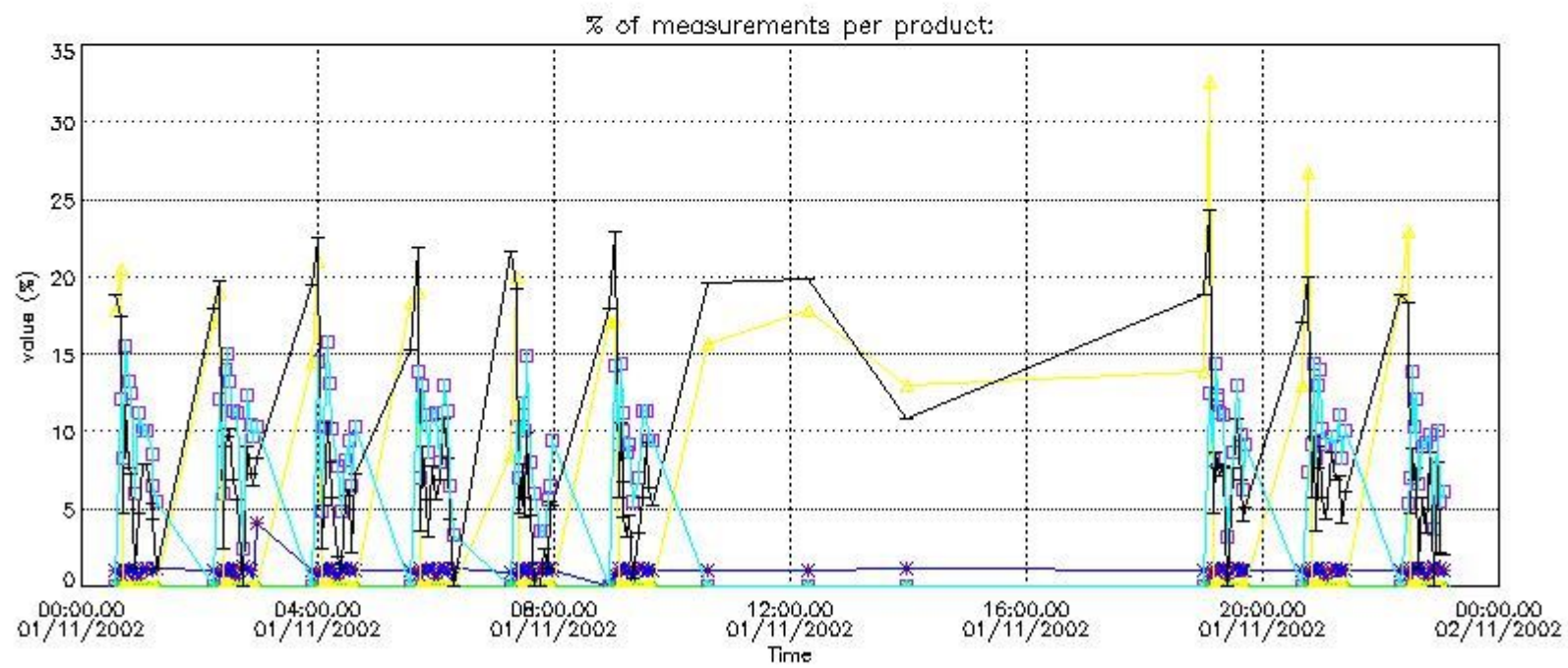
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



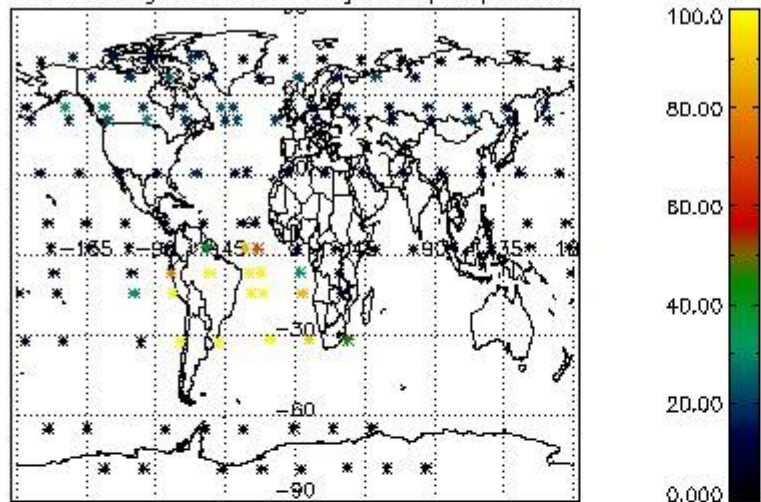
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



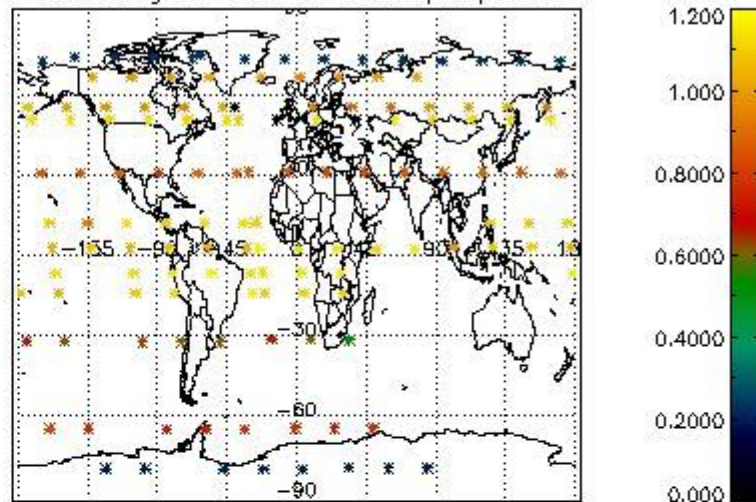
4.2 Plot quality information per product coming from level 1b processing (world map)

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

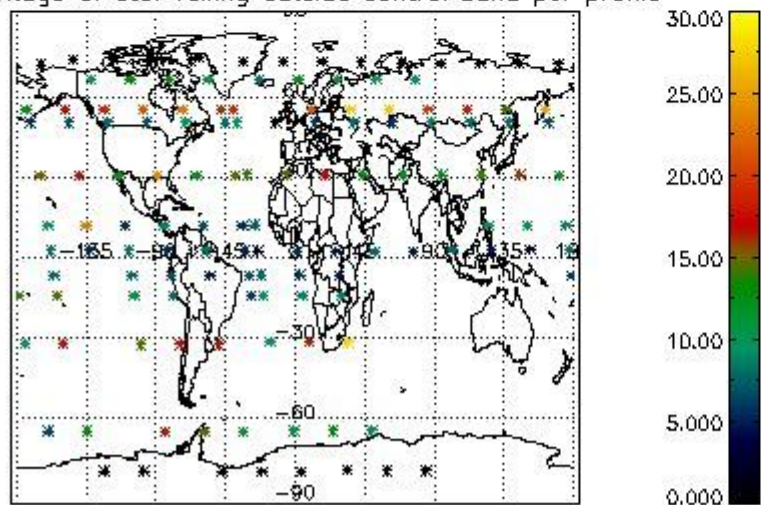
Percentage of cosmic ray hits per profile



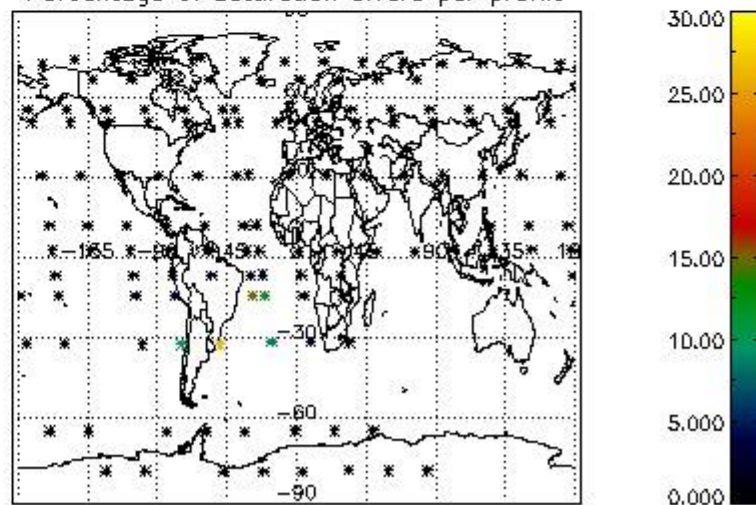
Percentage of datation errors per profile



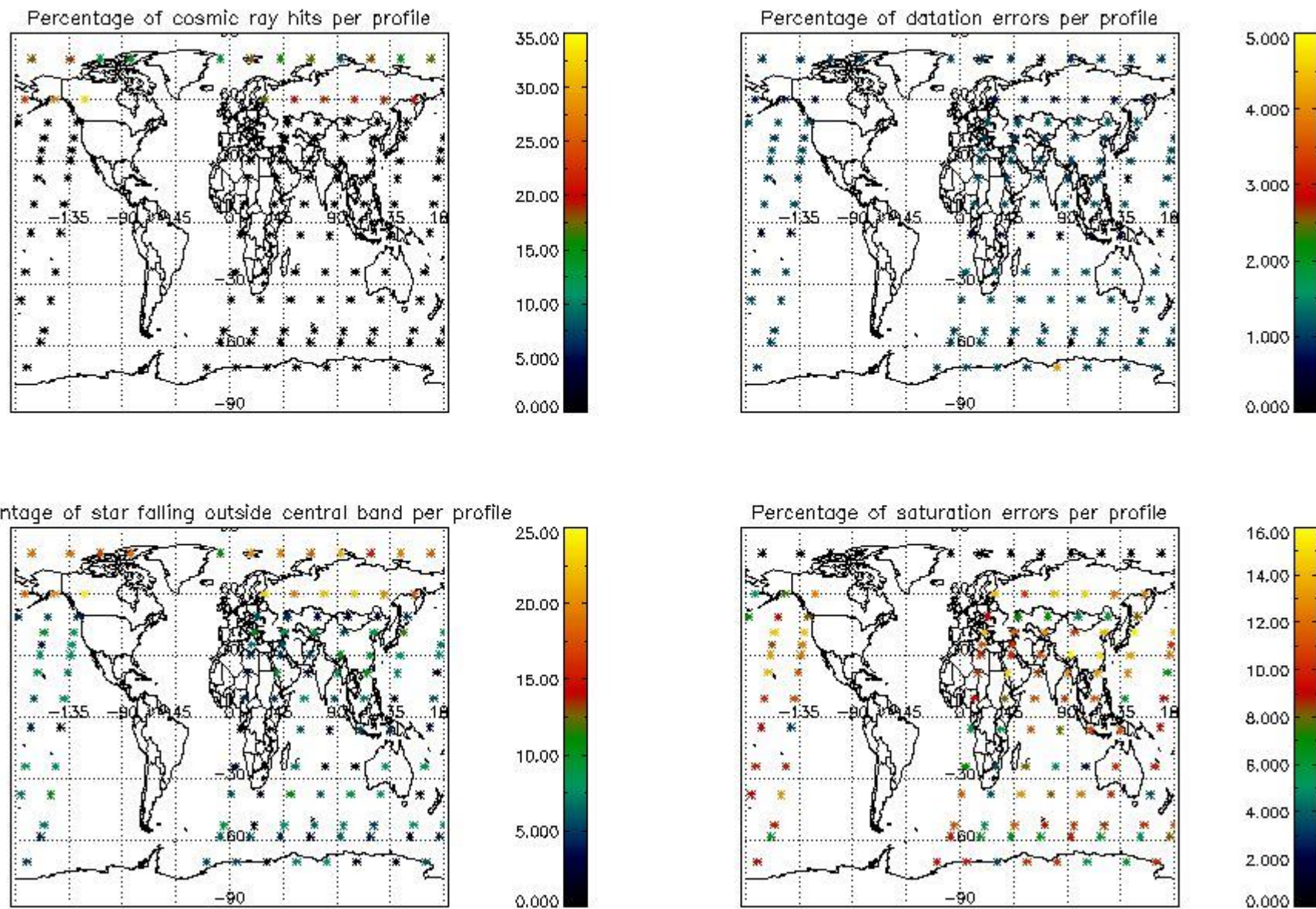
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

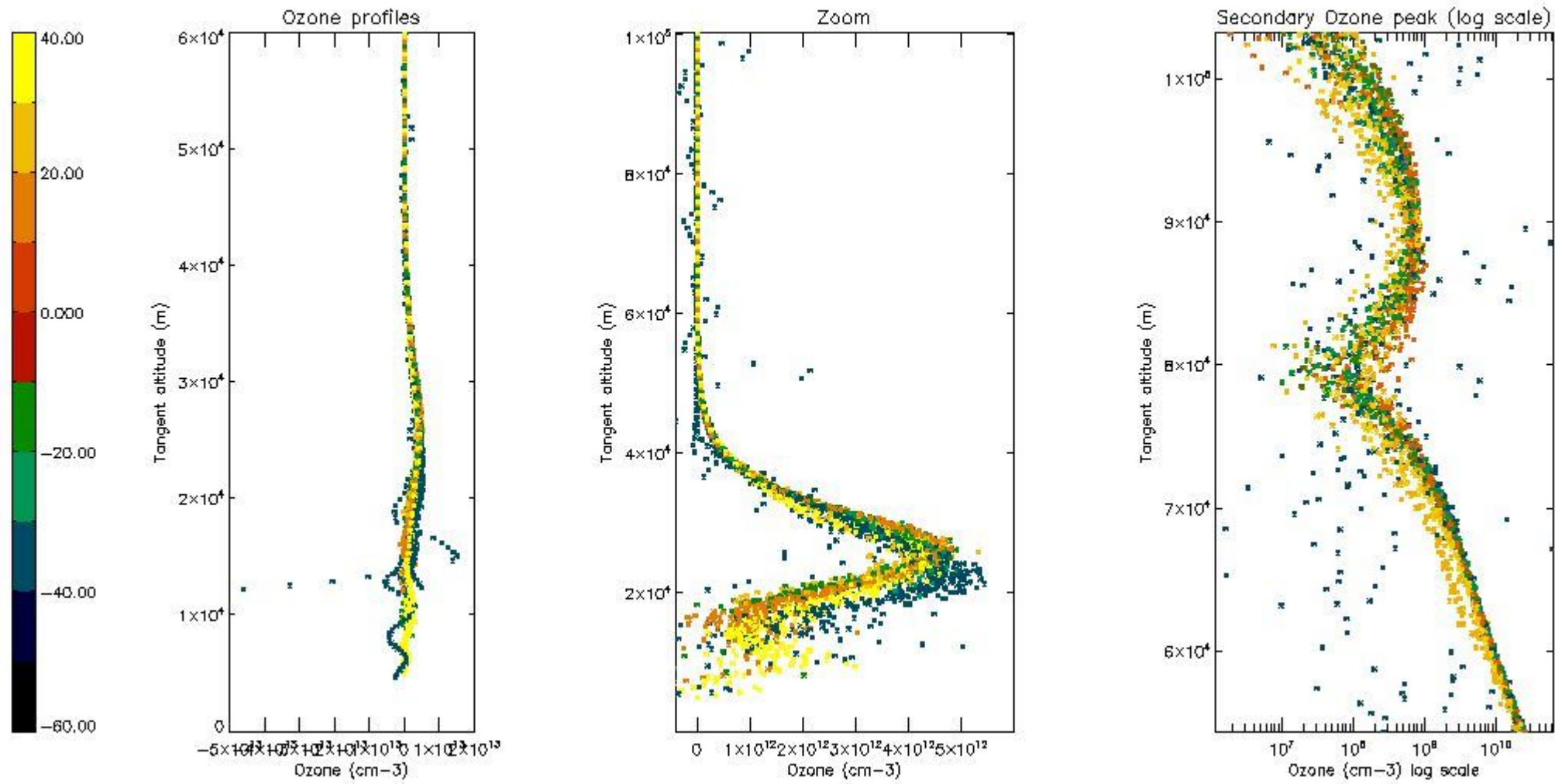
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	15

STD < 10	13
STD < 5	10

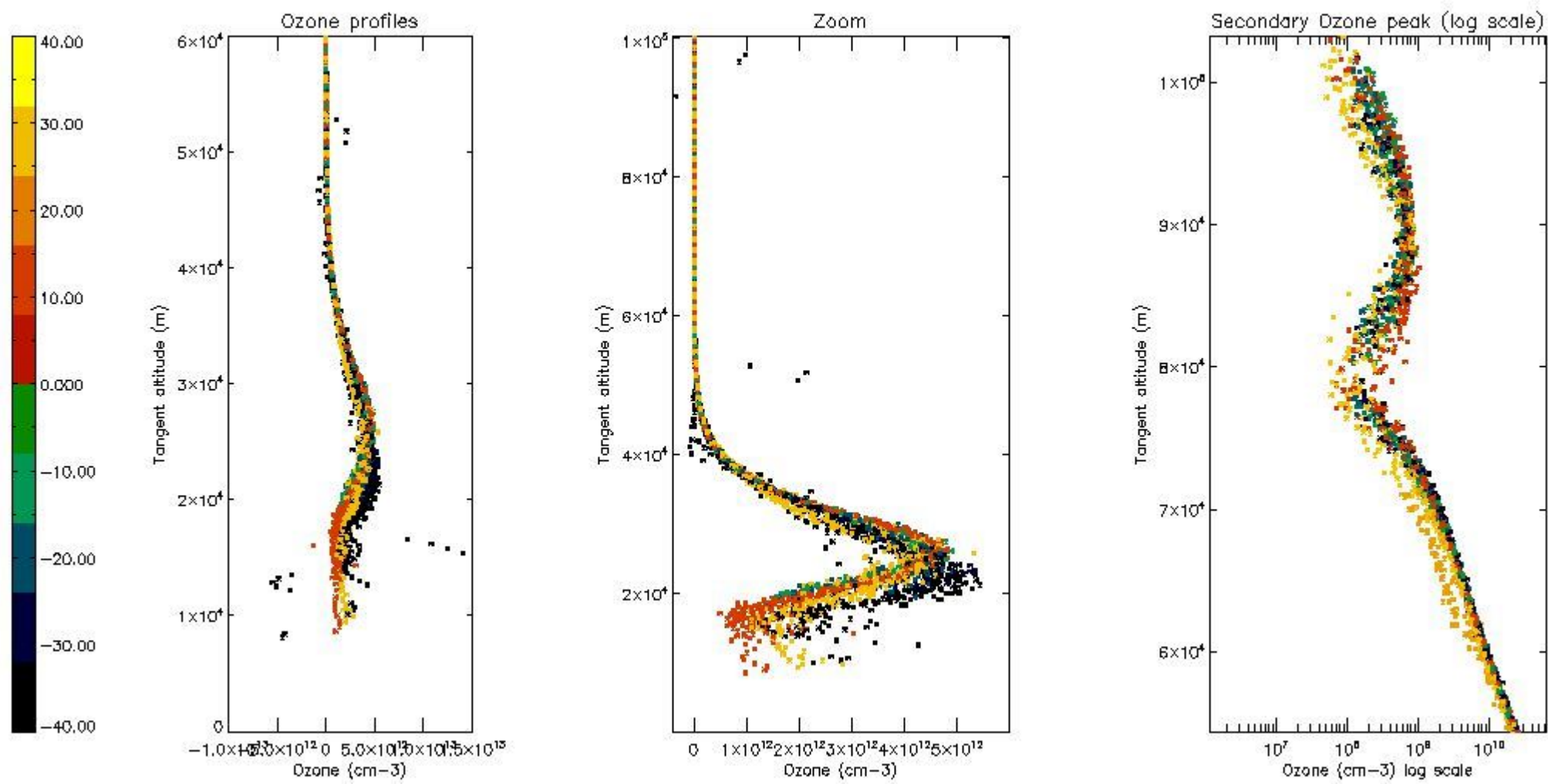
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



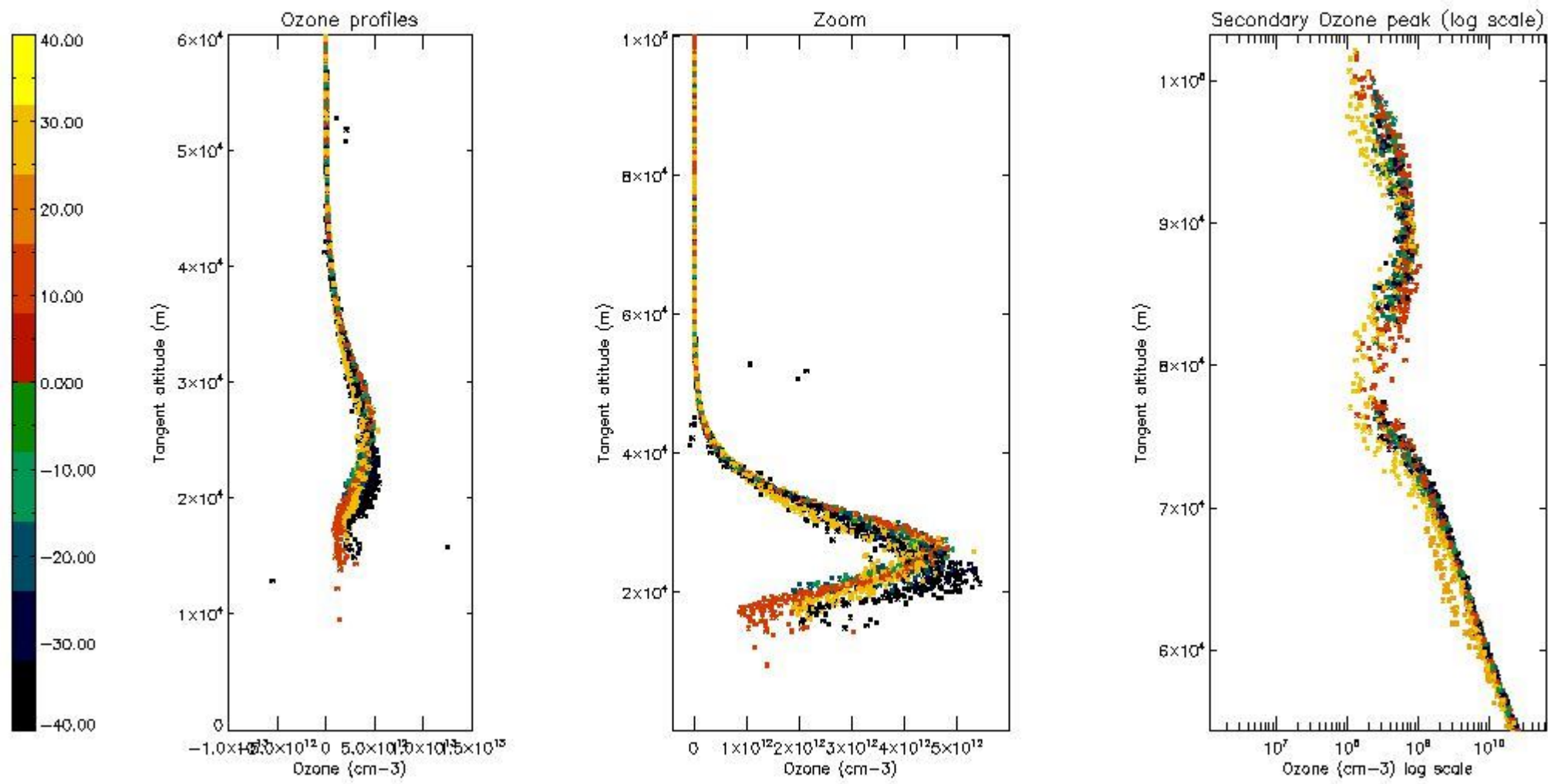
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



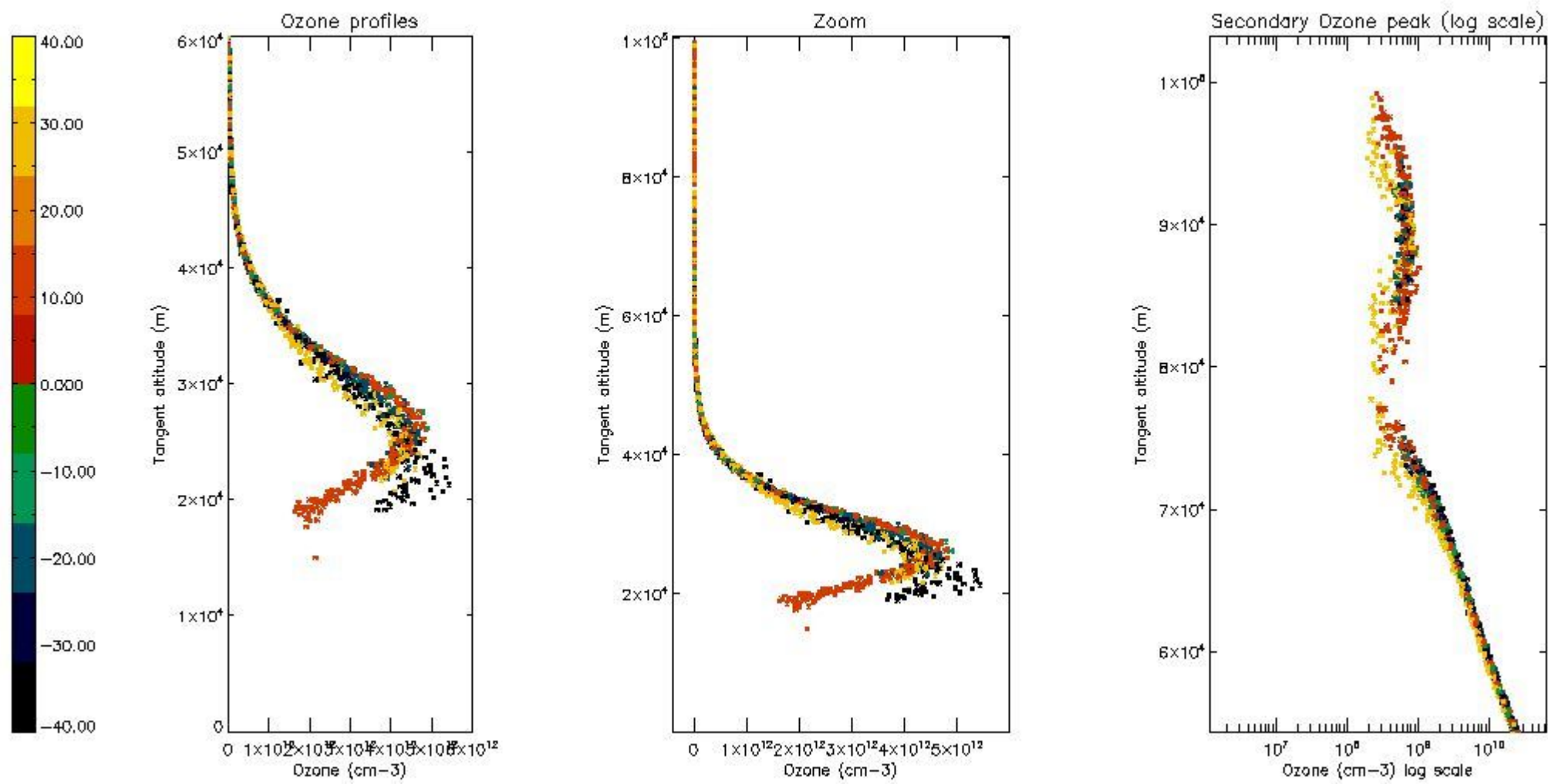
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



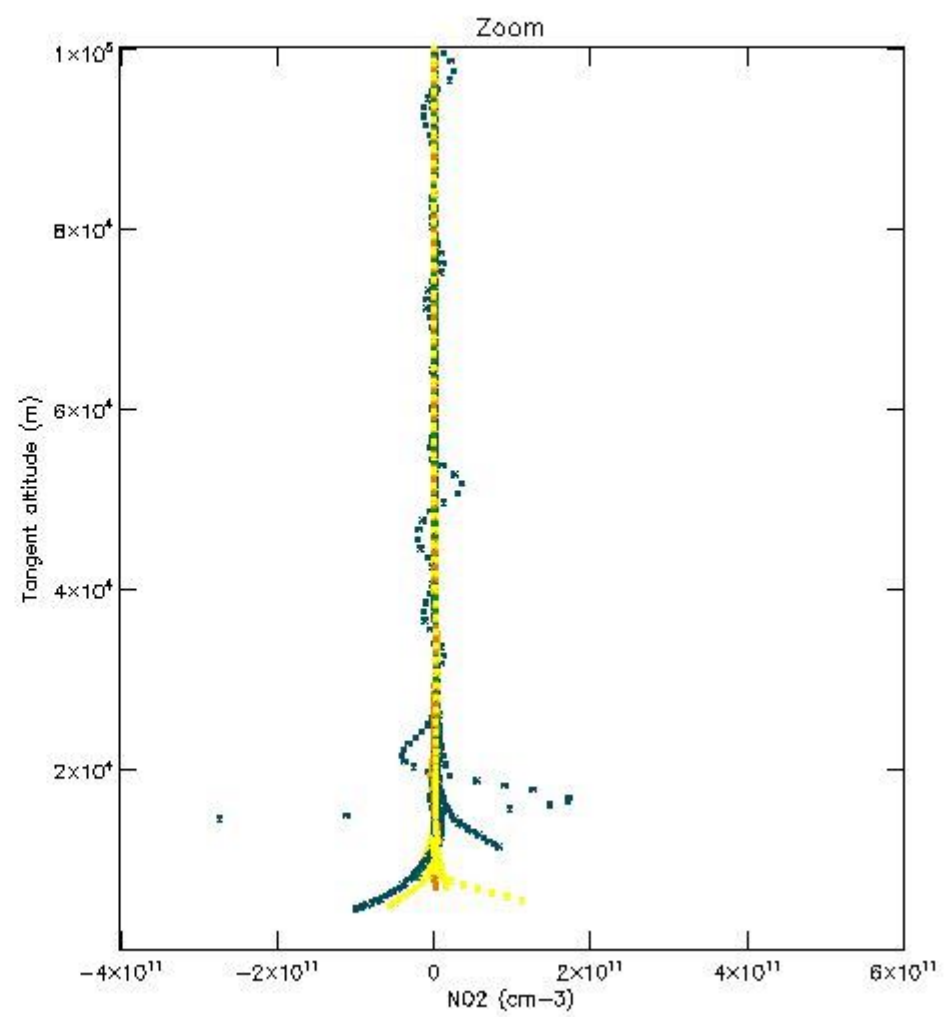
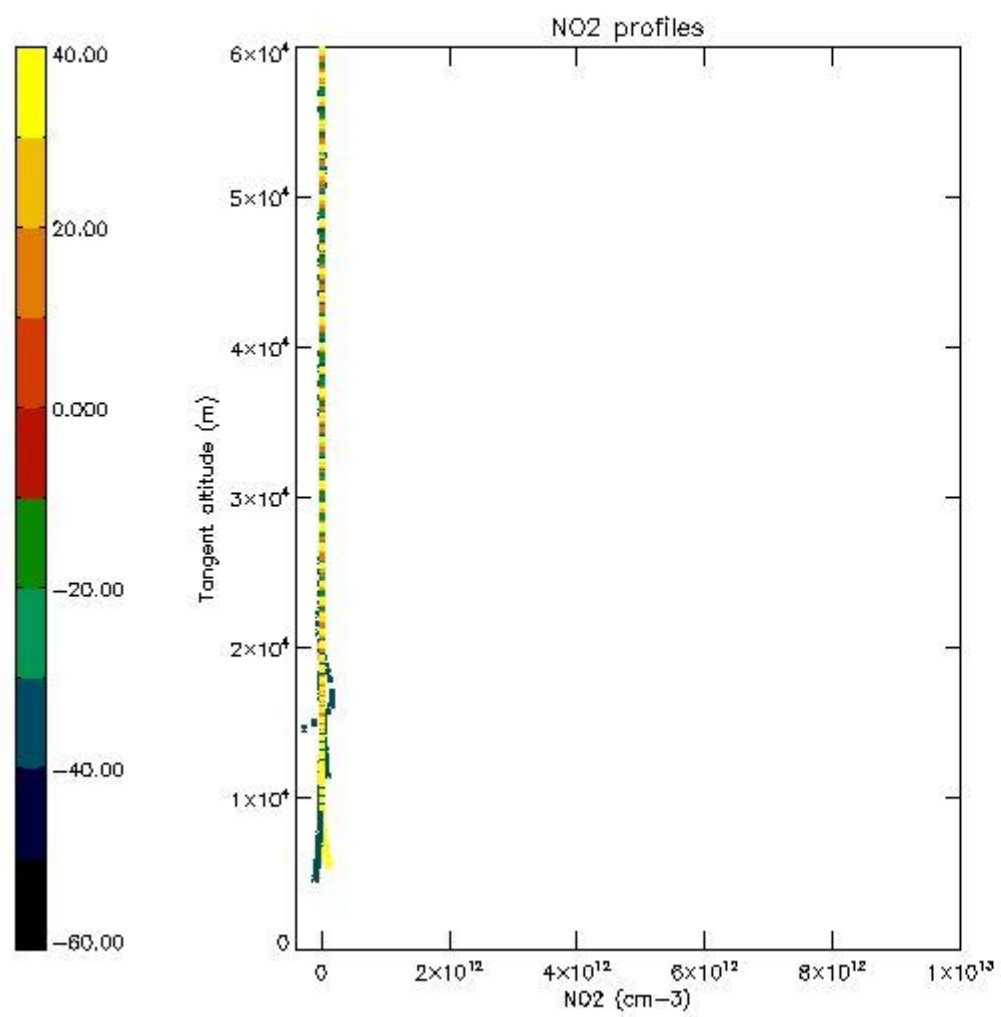
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



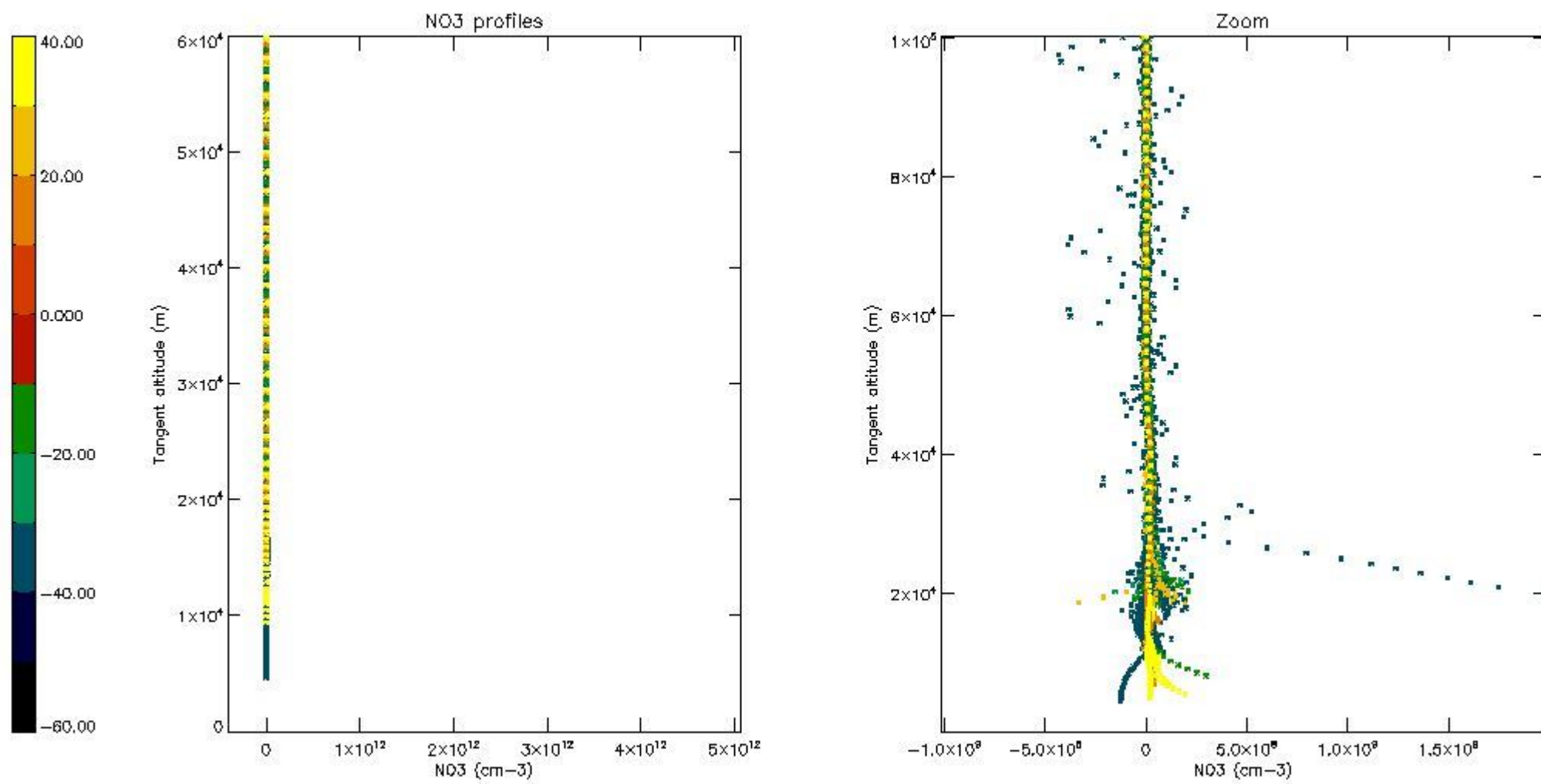
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



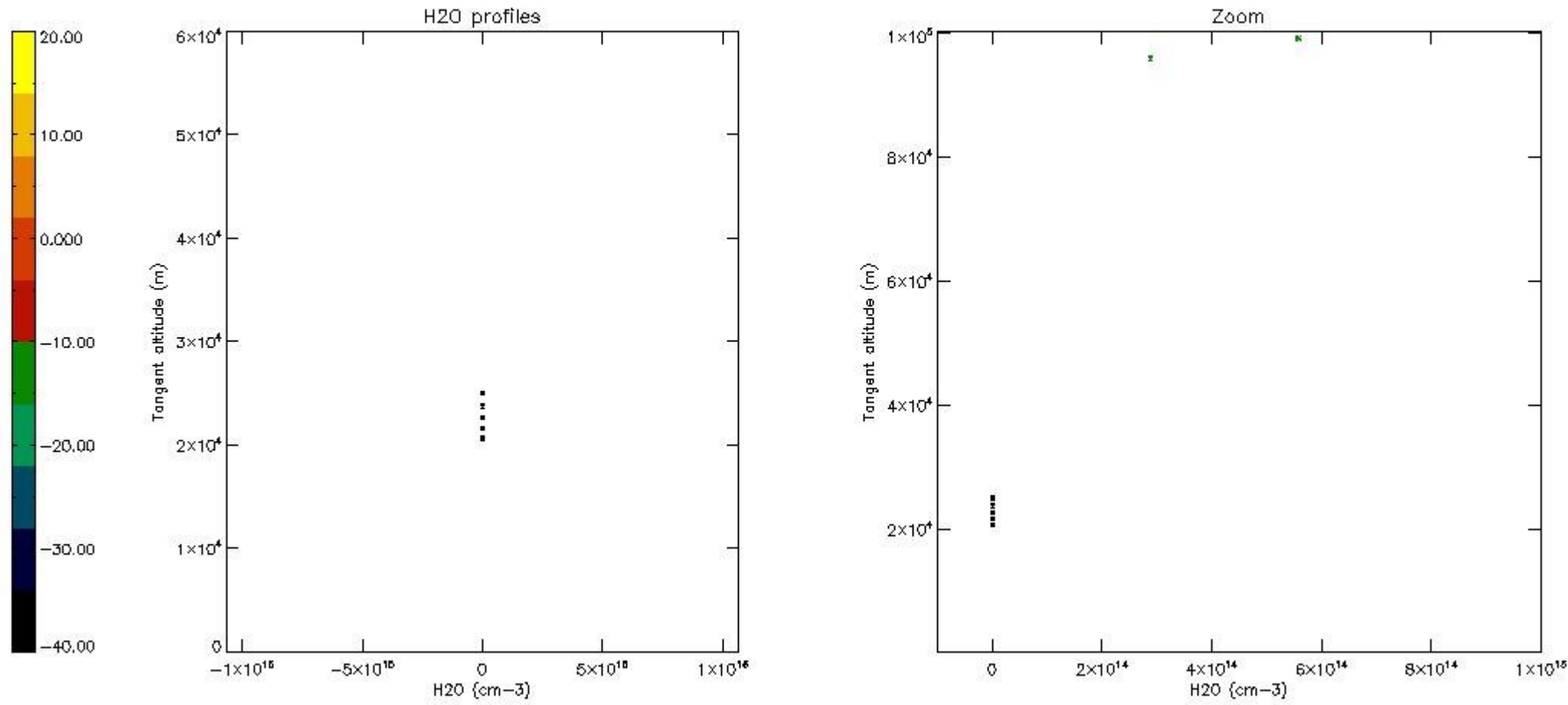
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

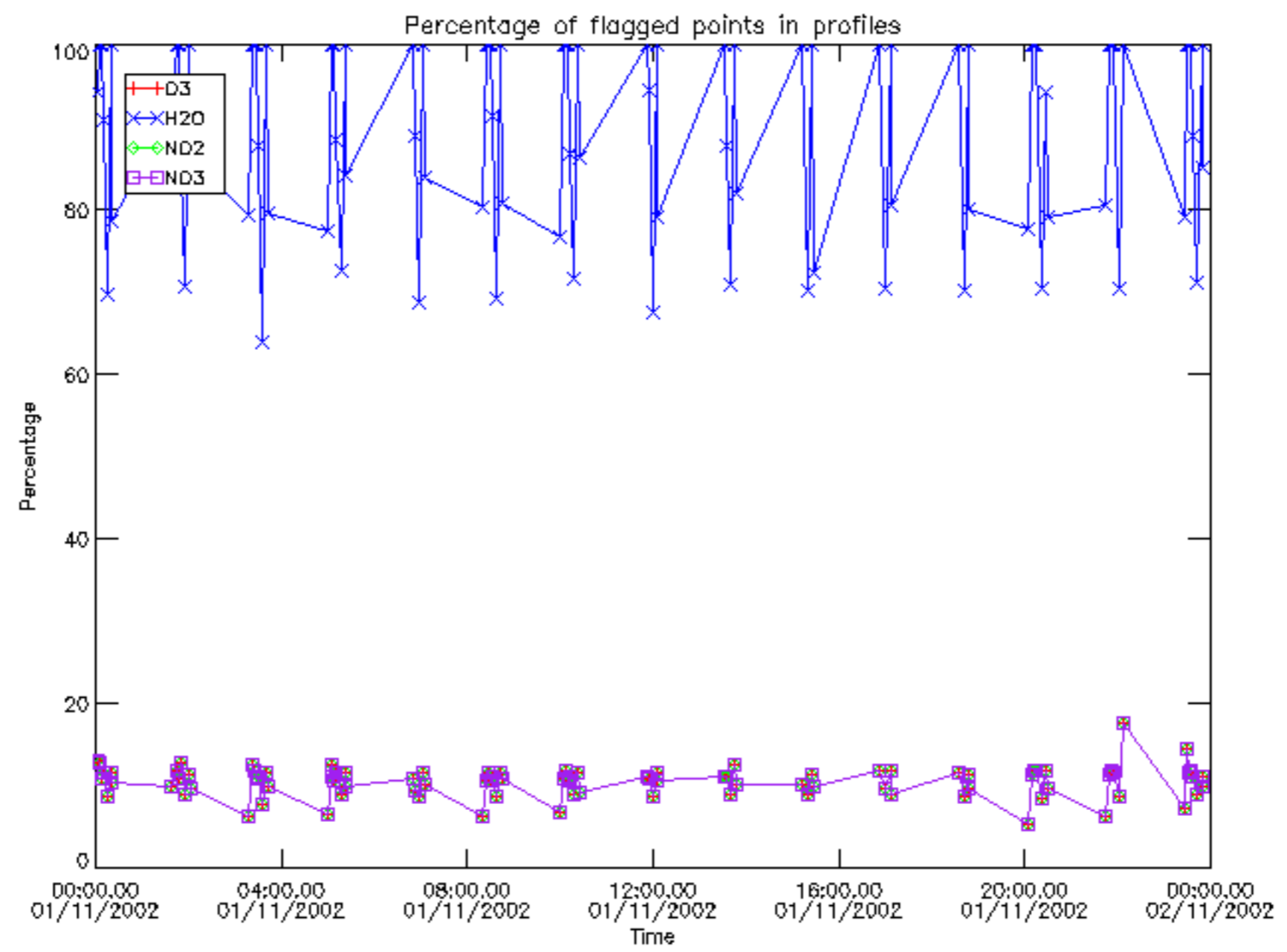
The colorbar represents the latitude.



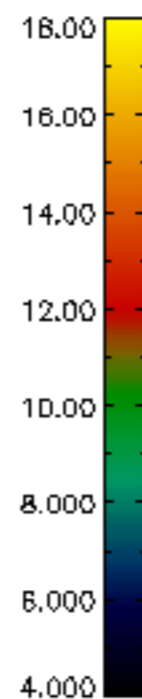
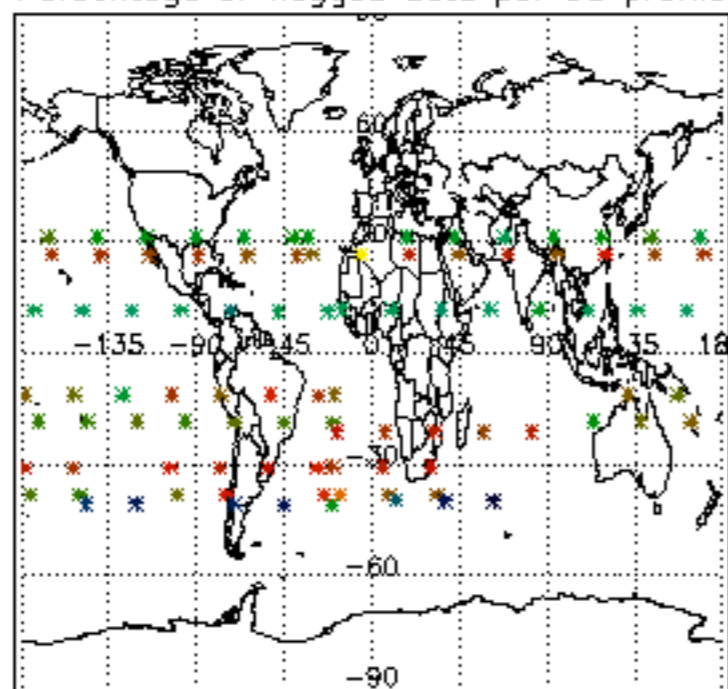
6. Auxiliary Data Files used for the production reported in section 2

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.

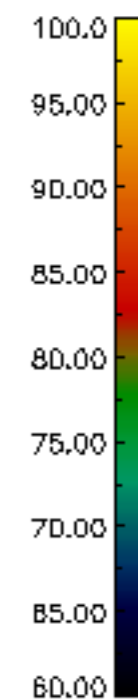
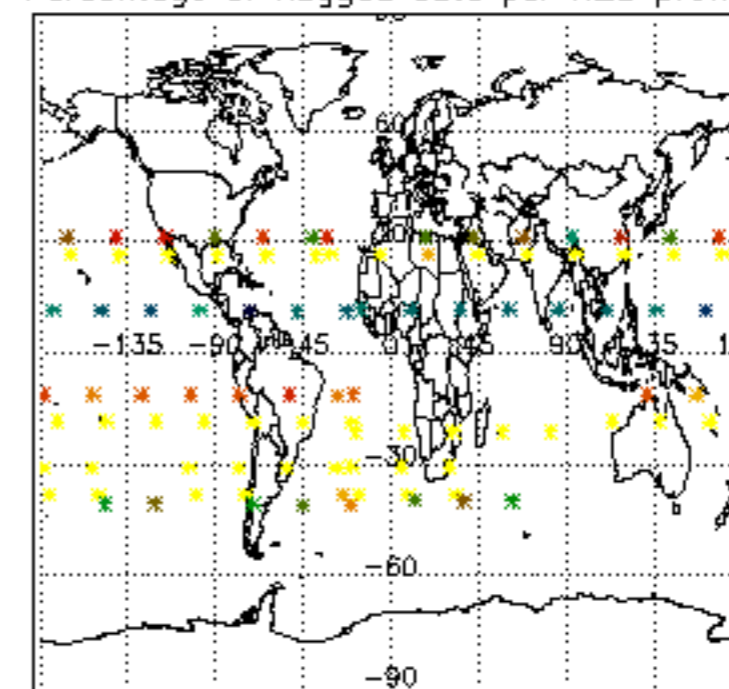
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	01-NOV-2002 00:02:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-NOV-2002 00:02:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-NOV-2002 00:02:03



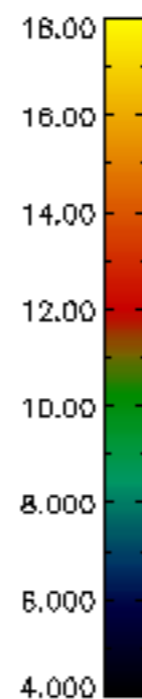
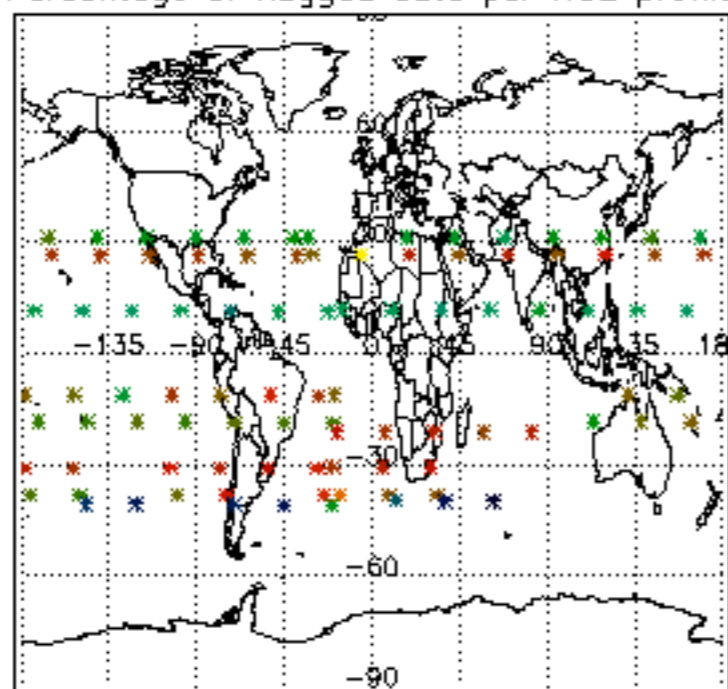
Percentage of flagged data per D3 profile



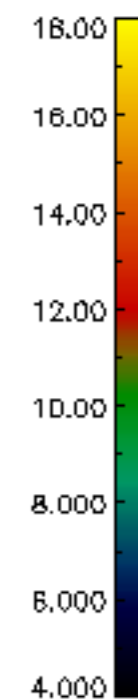
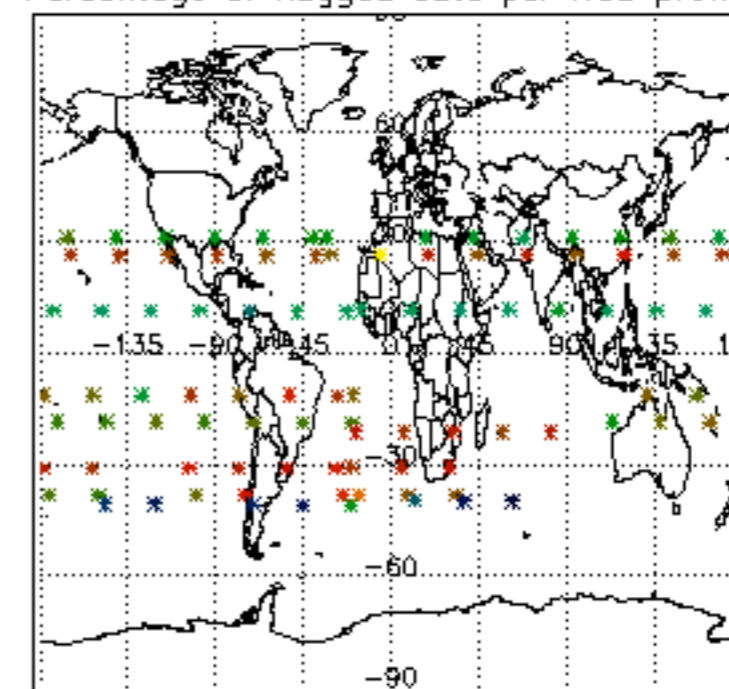
Percentage of flagged data per H2O profile

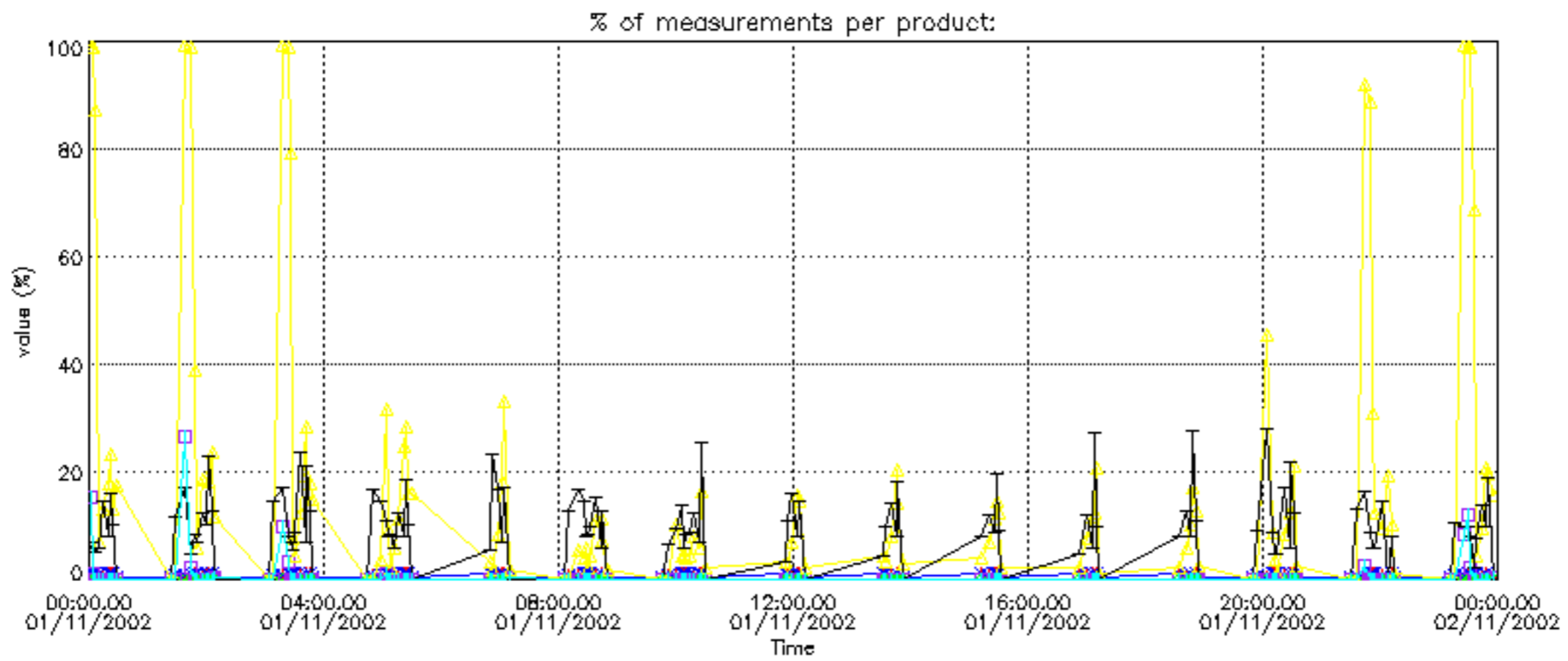


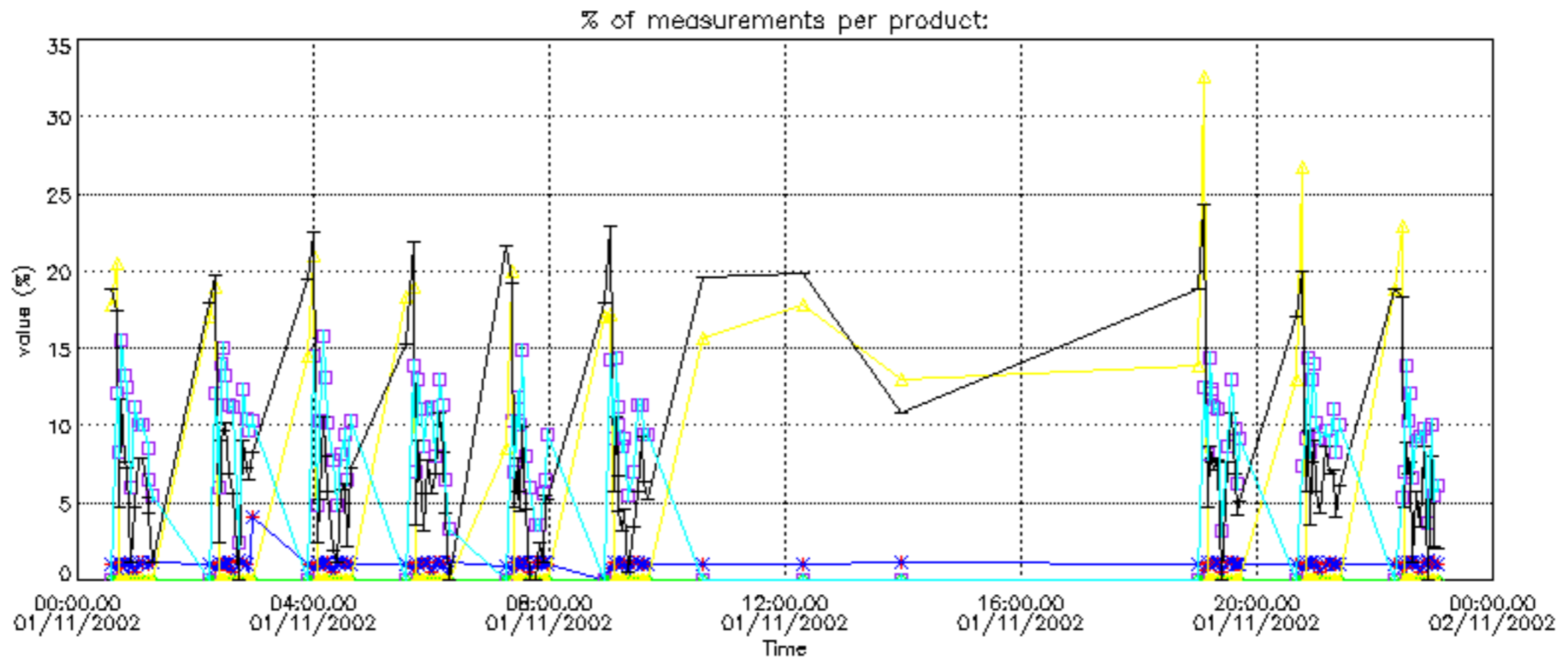
Percentage of flagged data per NO2 profile



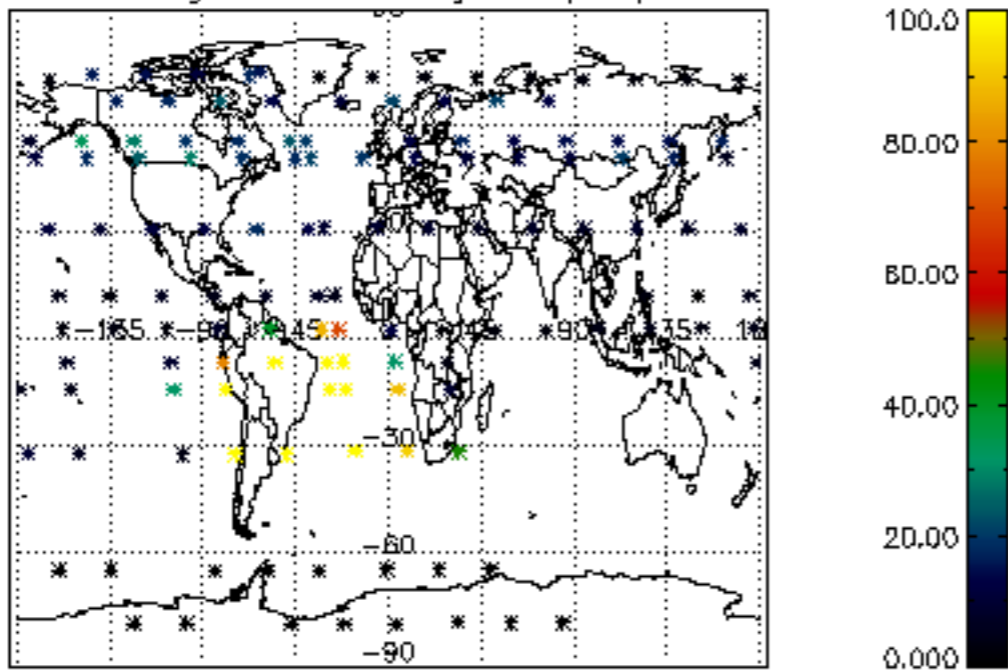
Percentage of flagged data per NO3 profile



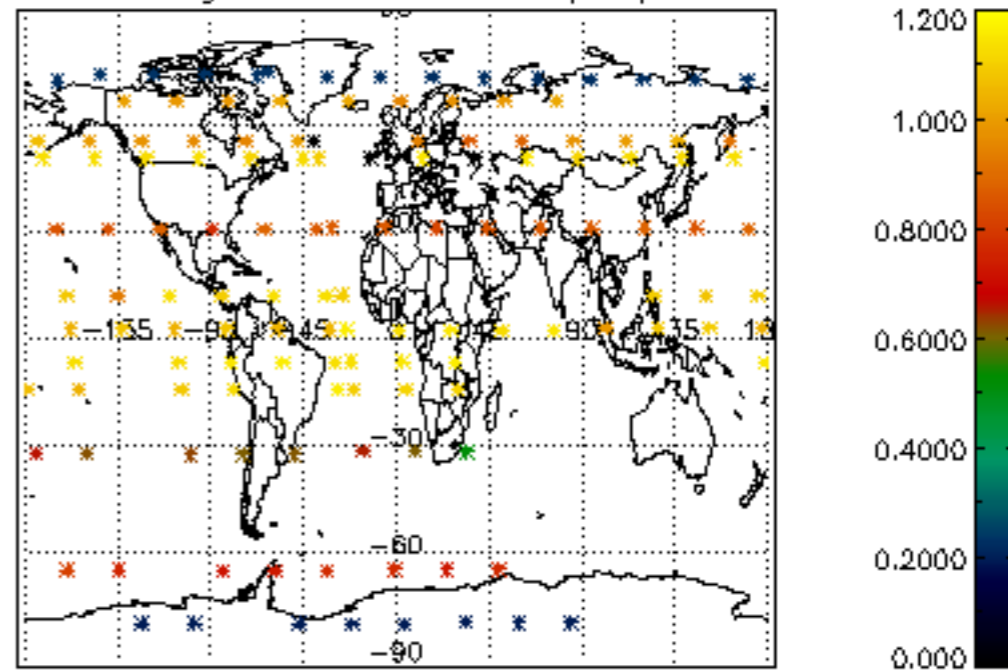




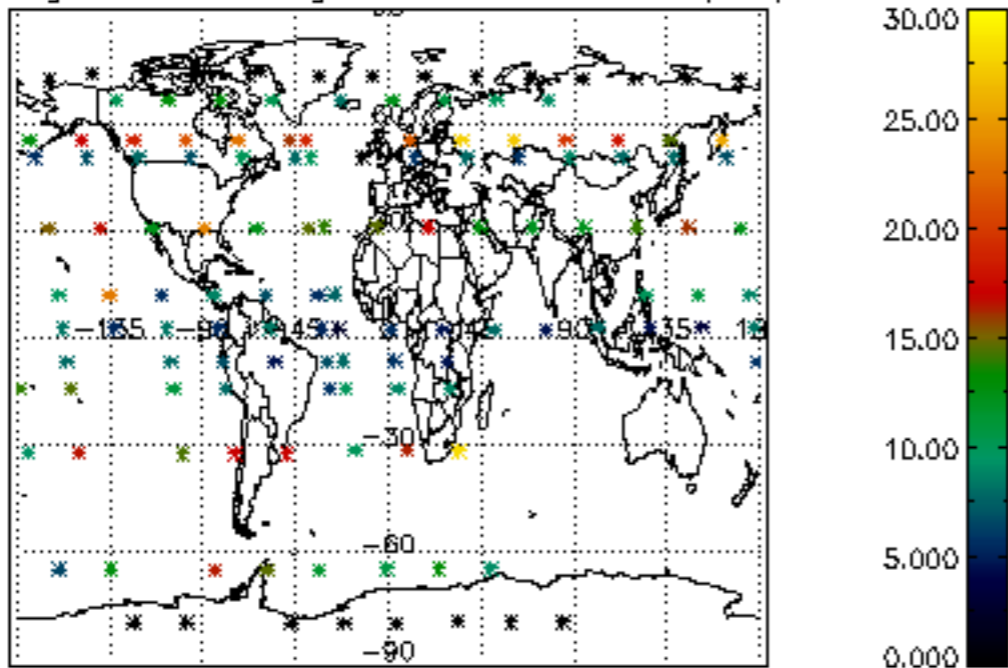
Percentage of cosmic ray hits per profile



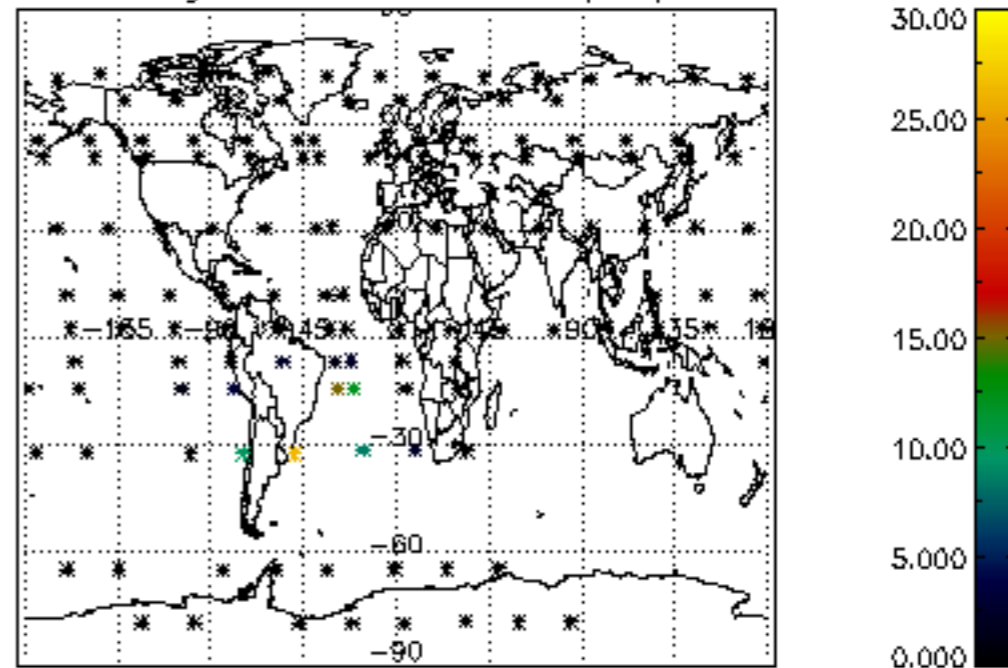
Percentage of datation errors per profile



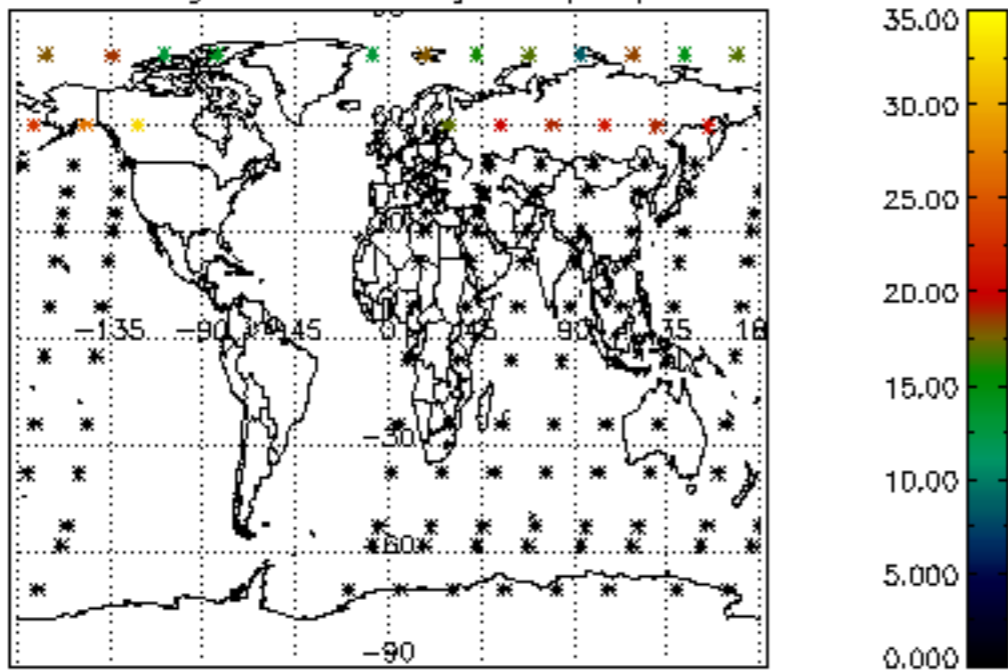
Percentage of star falling outside central band per profile



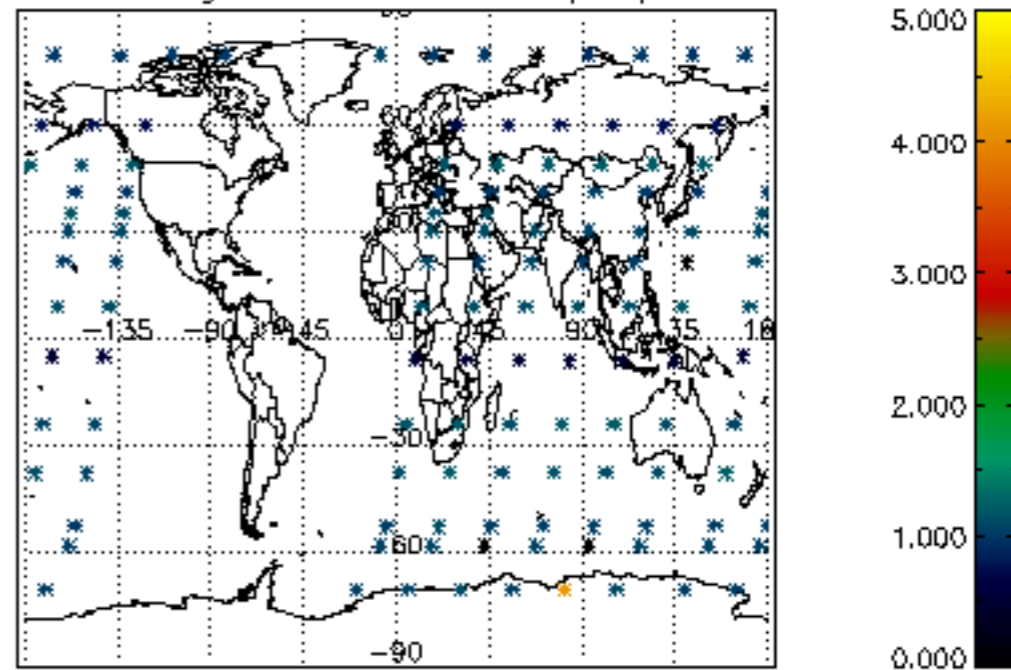
Percentage of saturation errors per profile



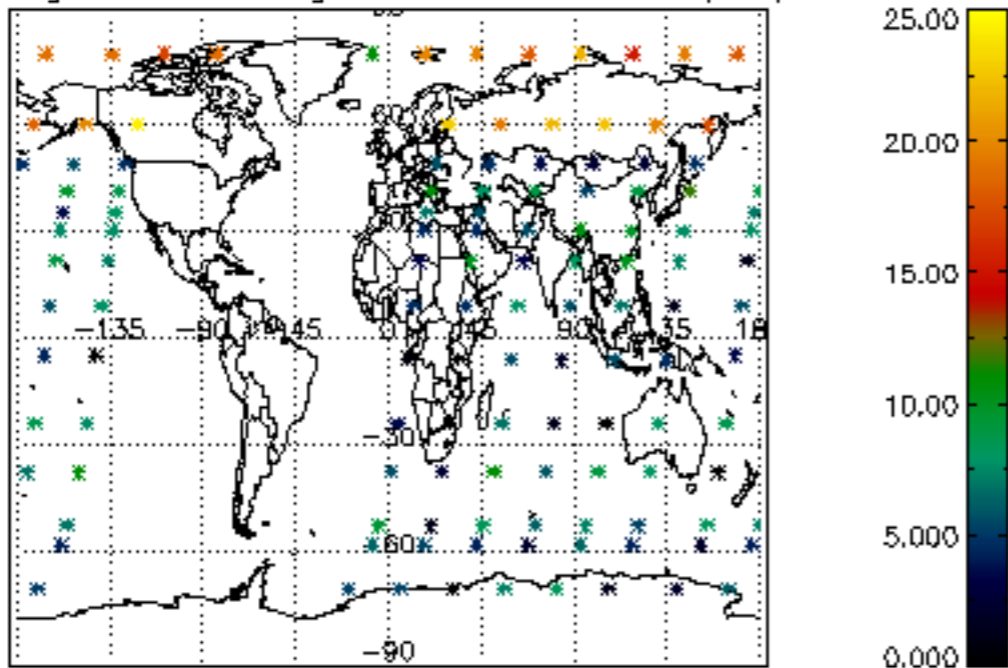
Percentage of cosmic ray hits per profile



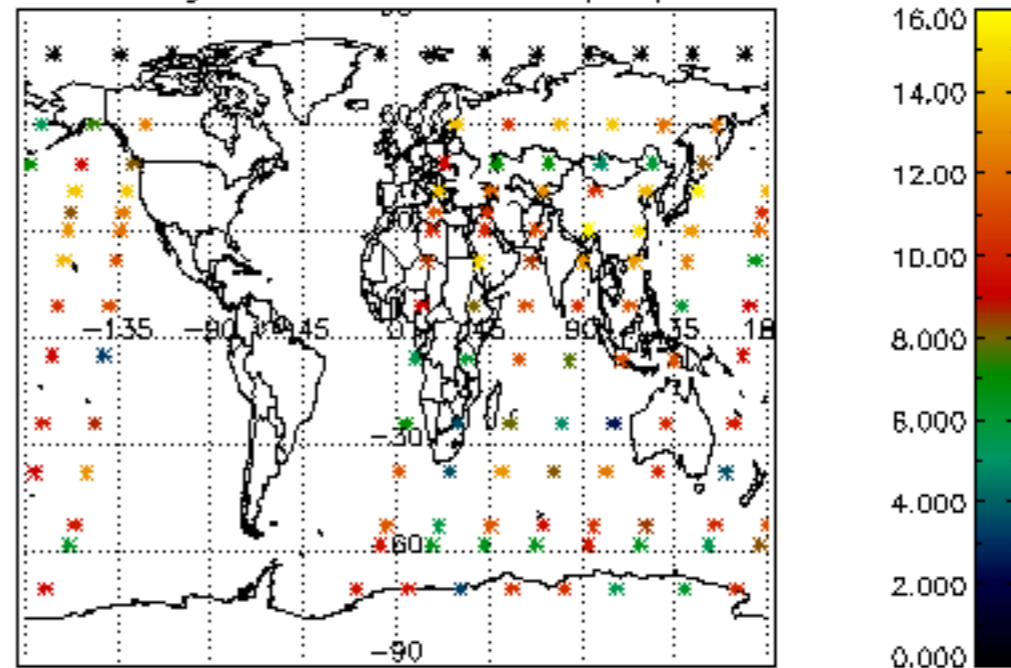
Percentage of datation errors per profile

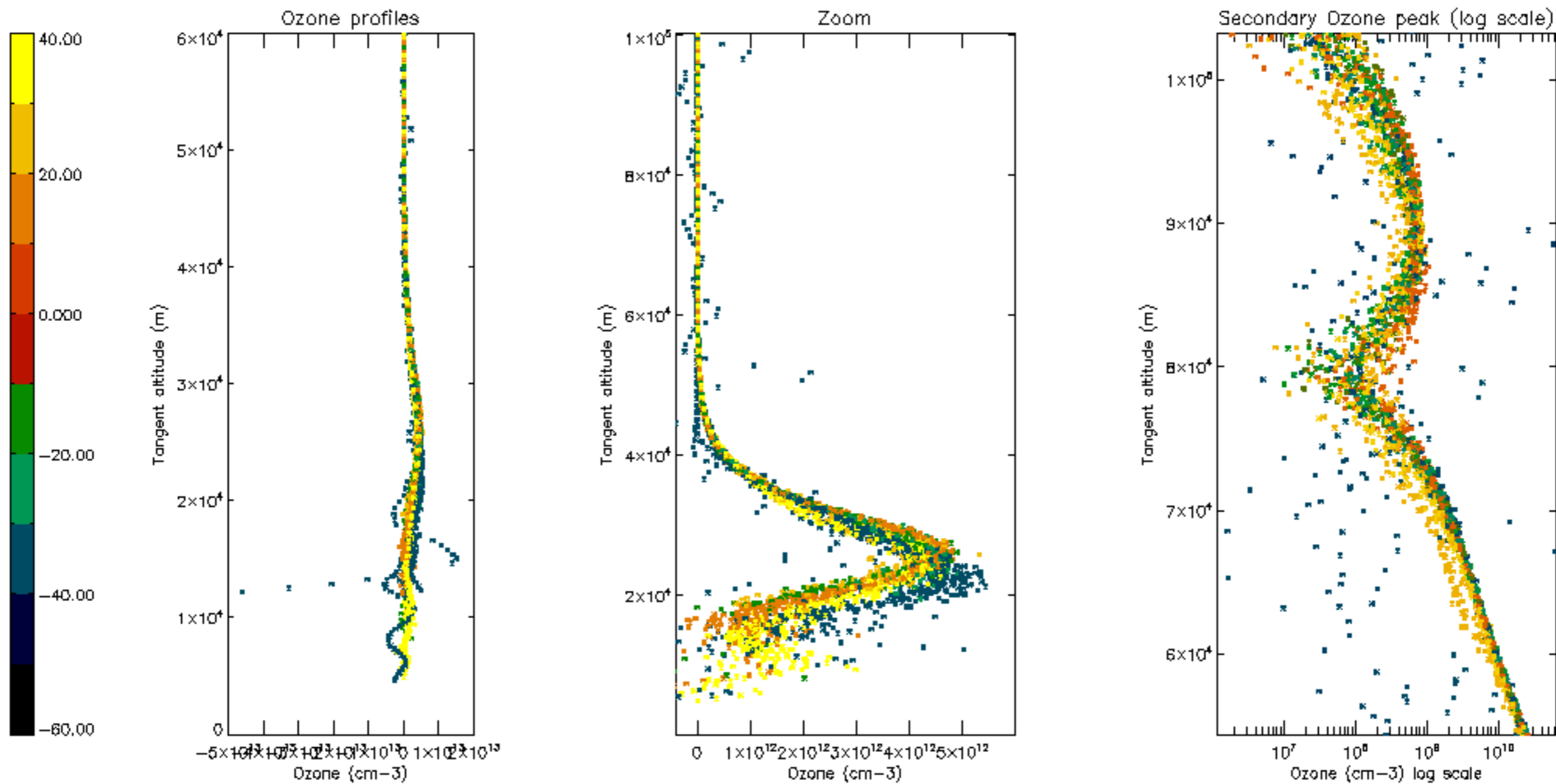


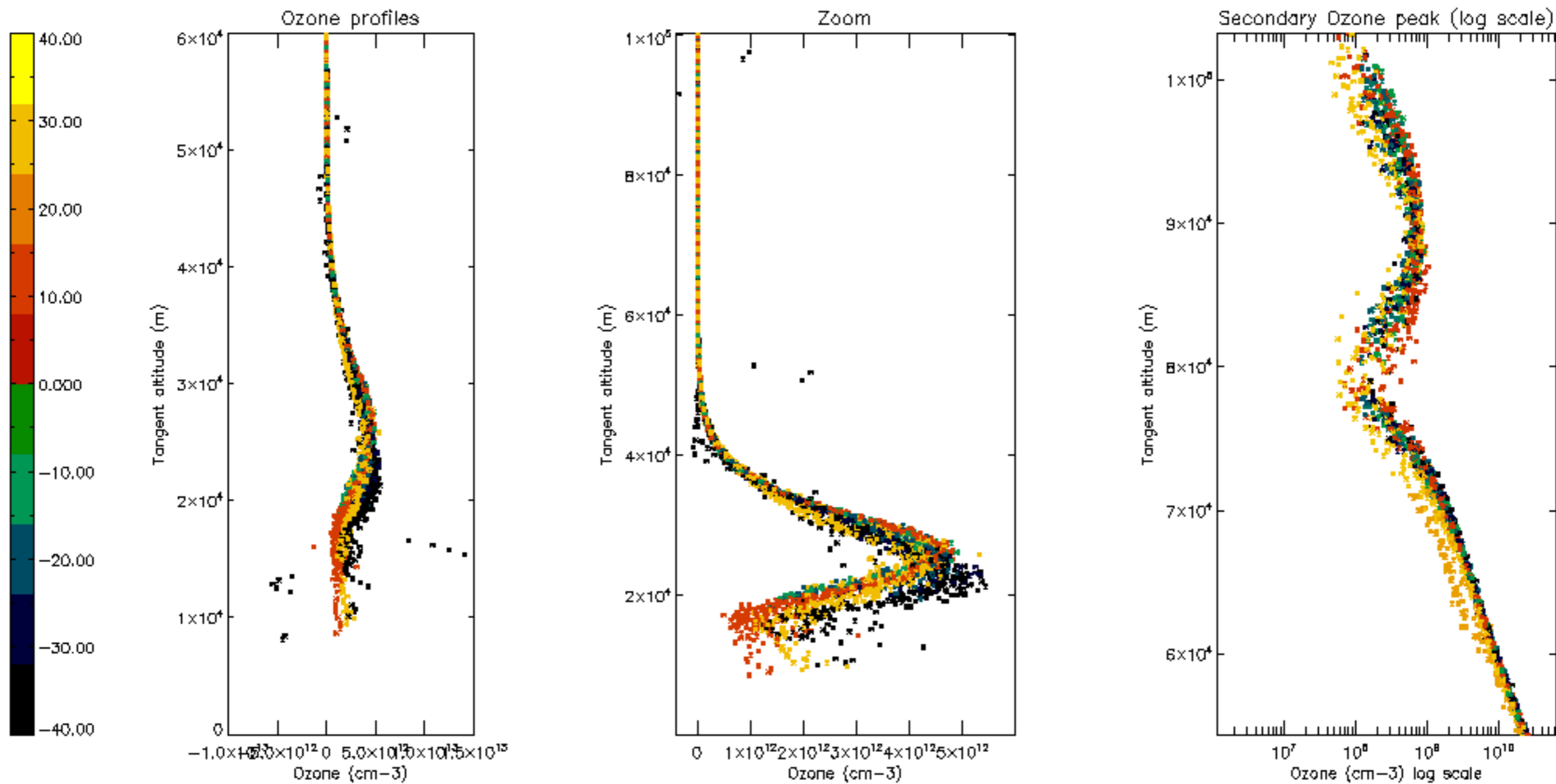
Percentage of star falling outside central band per profile

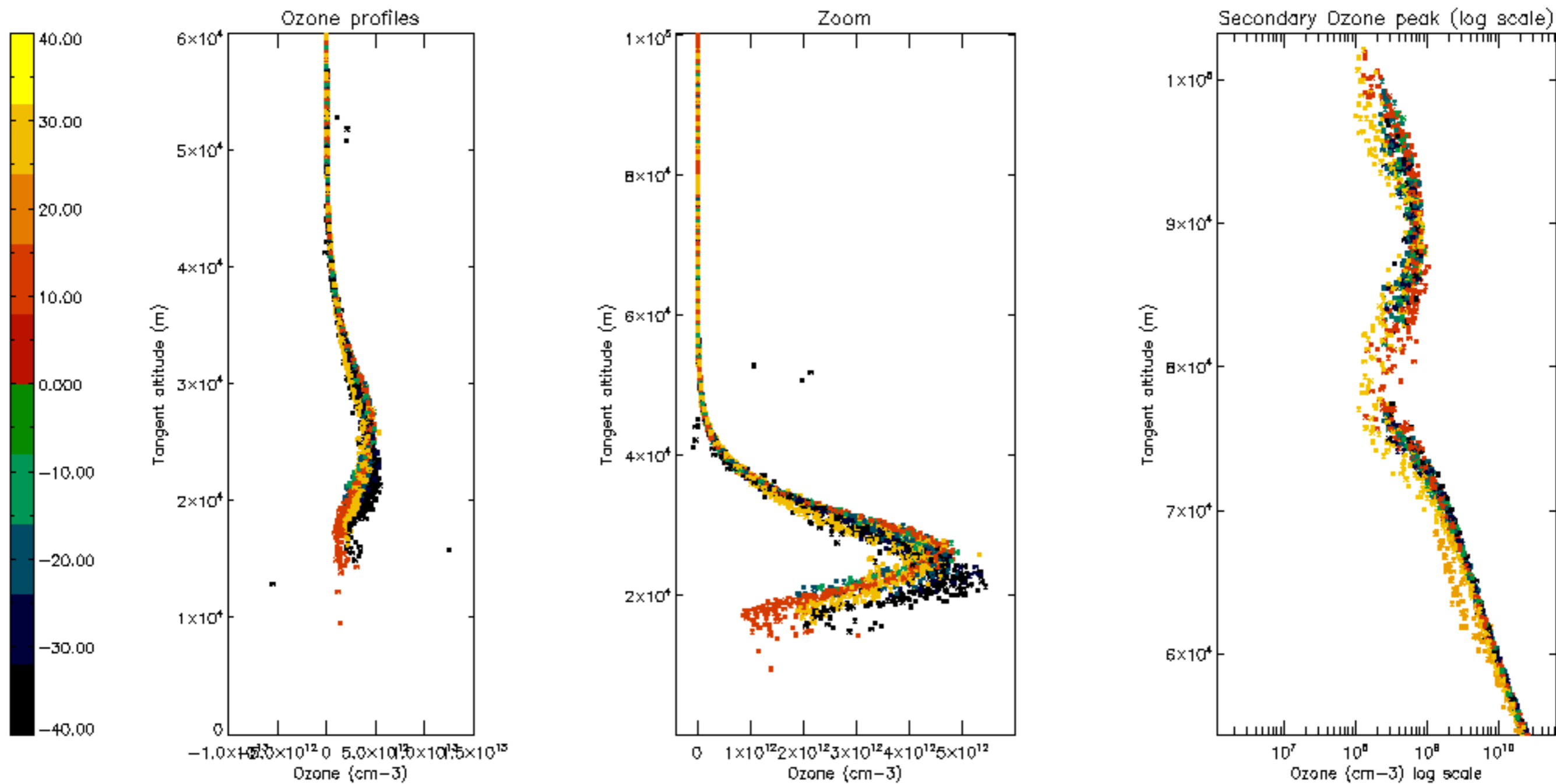


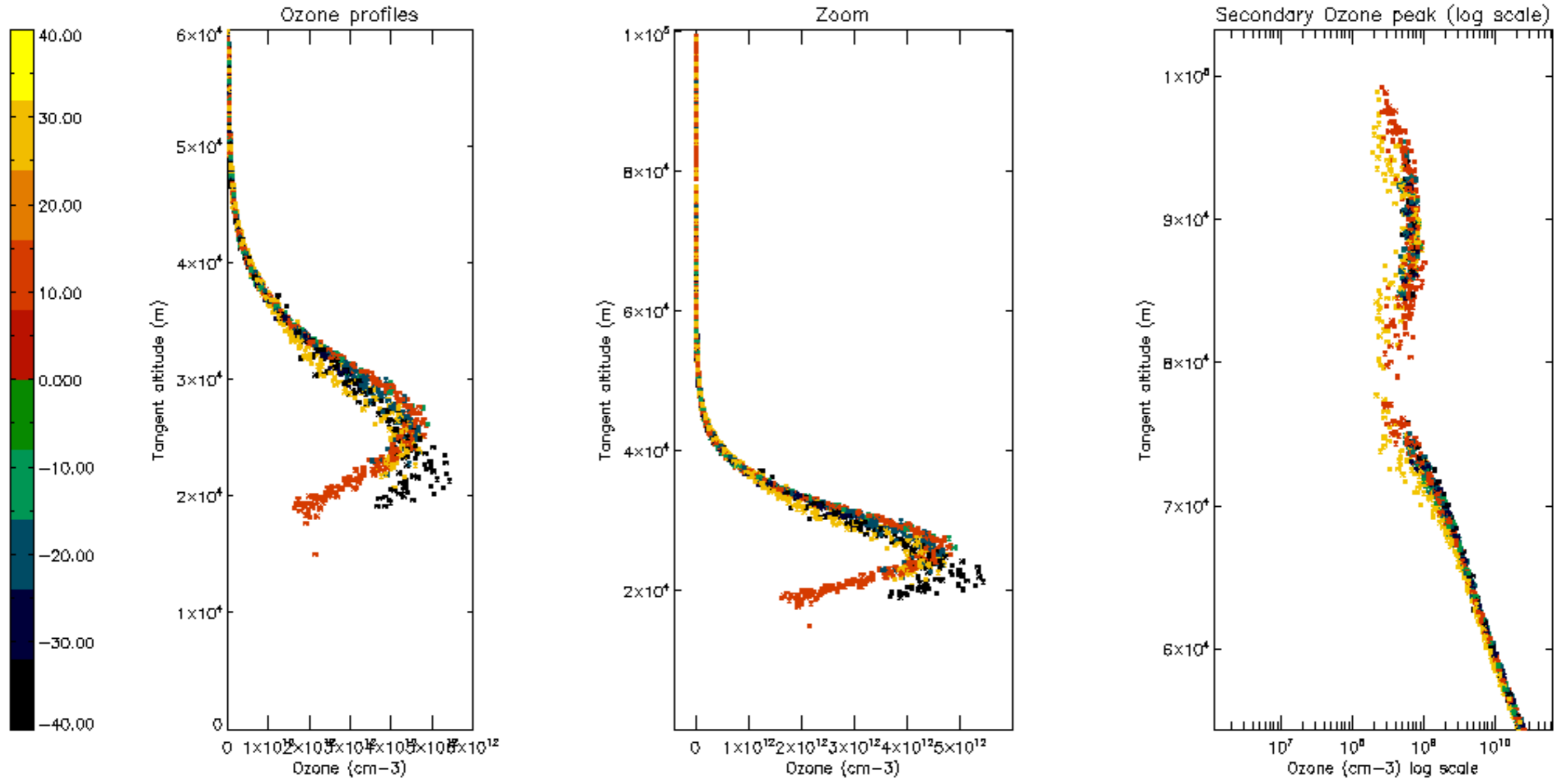
Percentage of saturation errors per profile

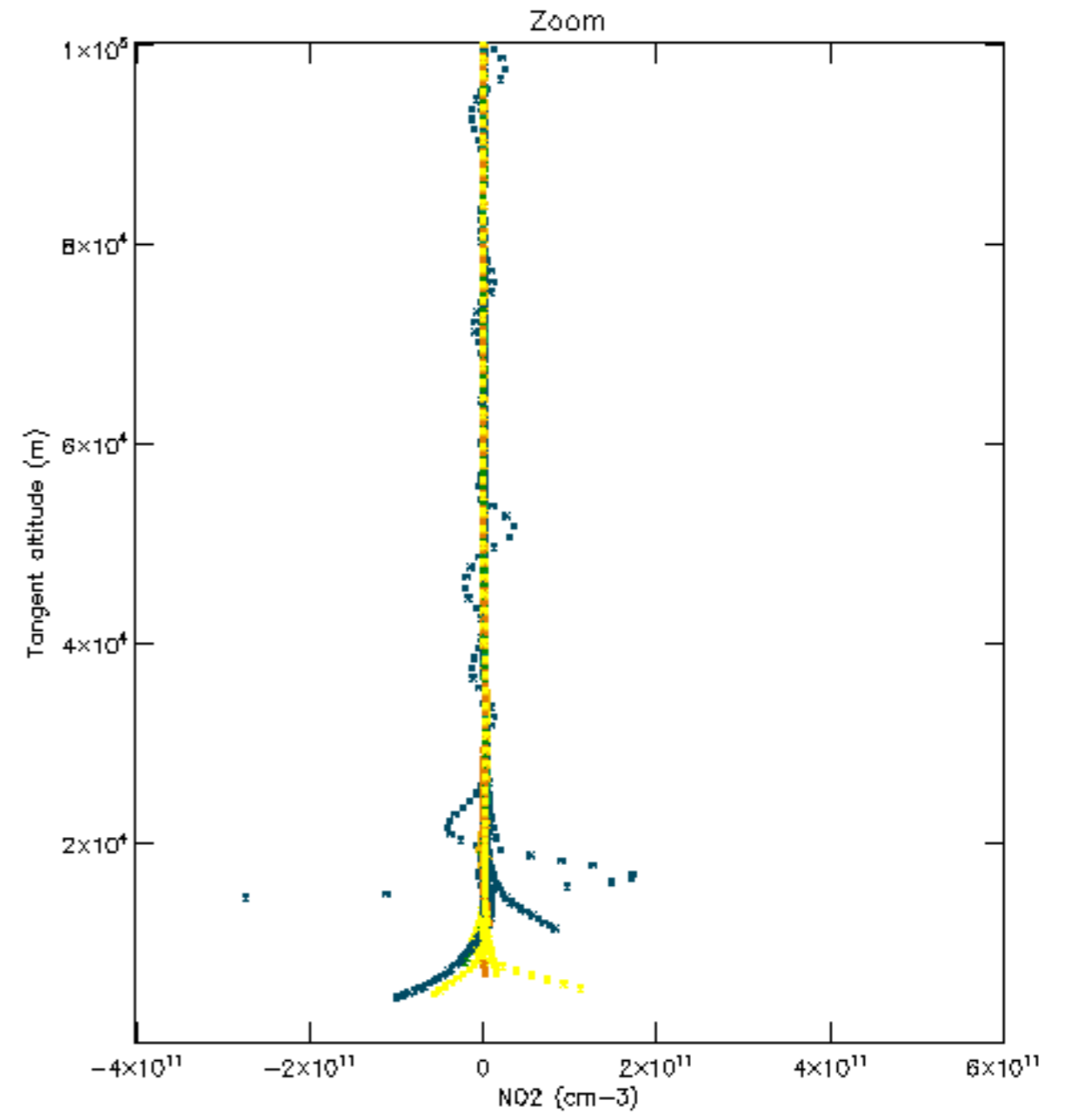
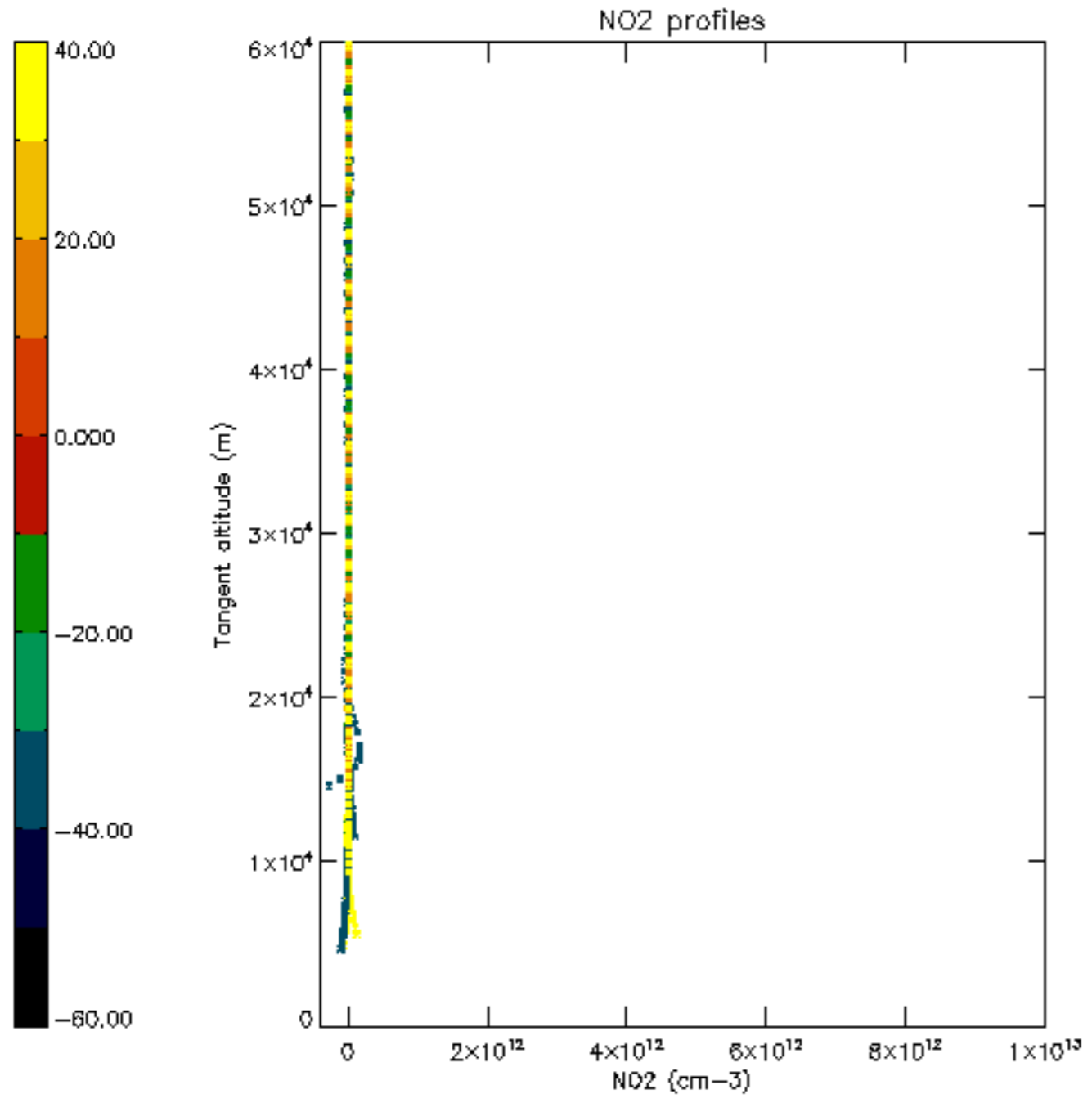


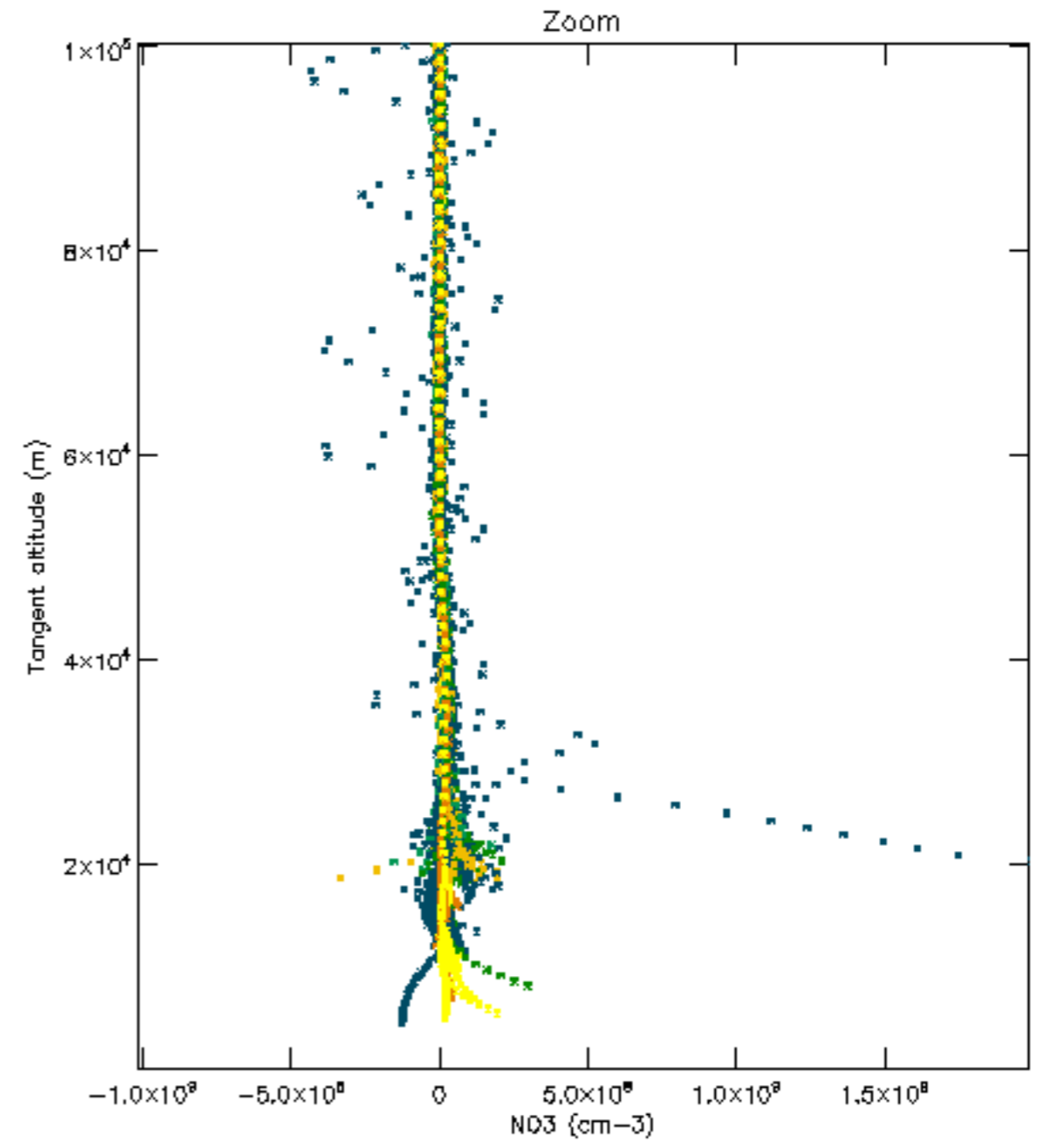
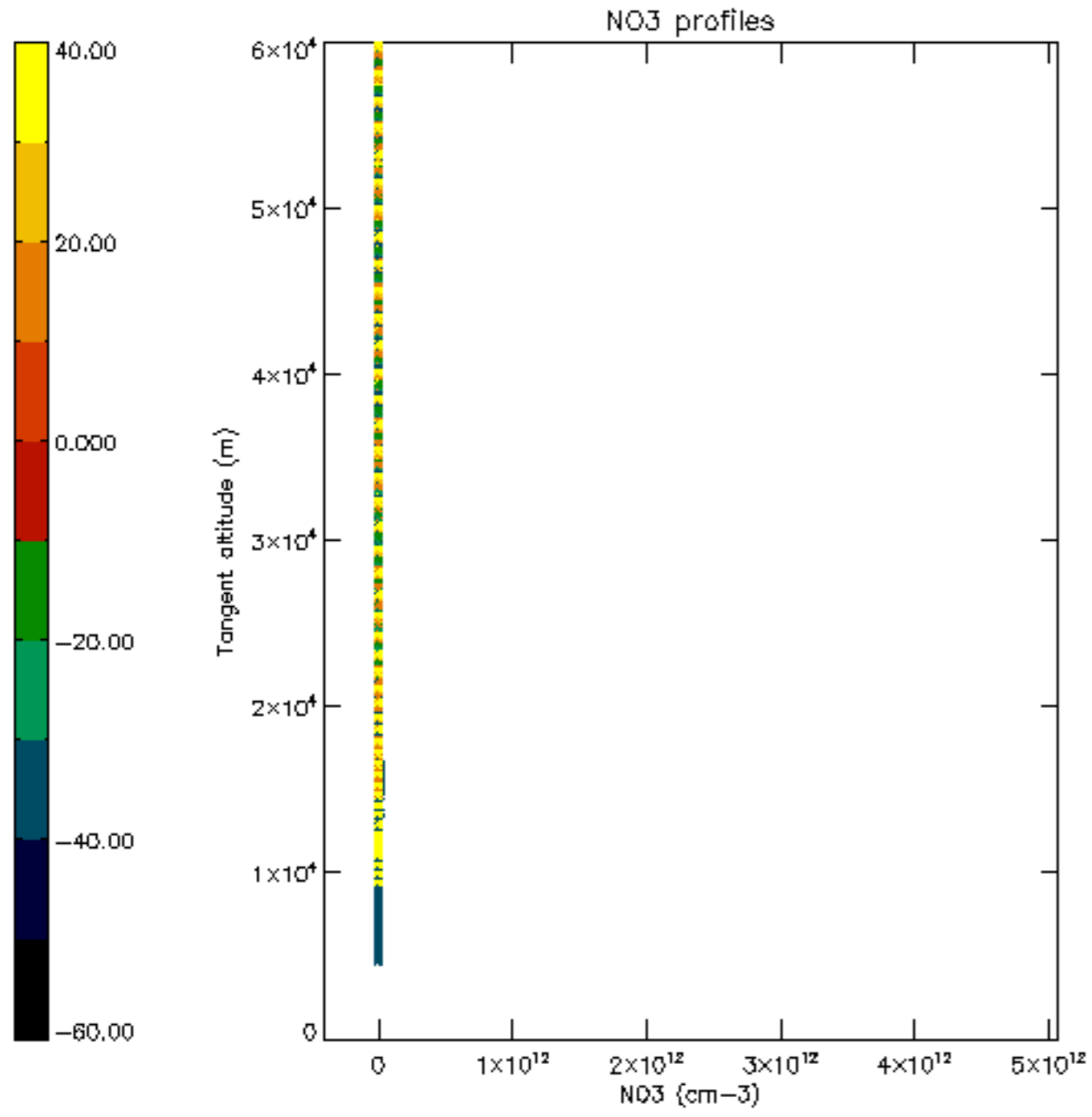


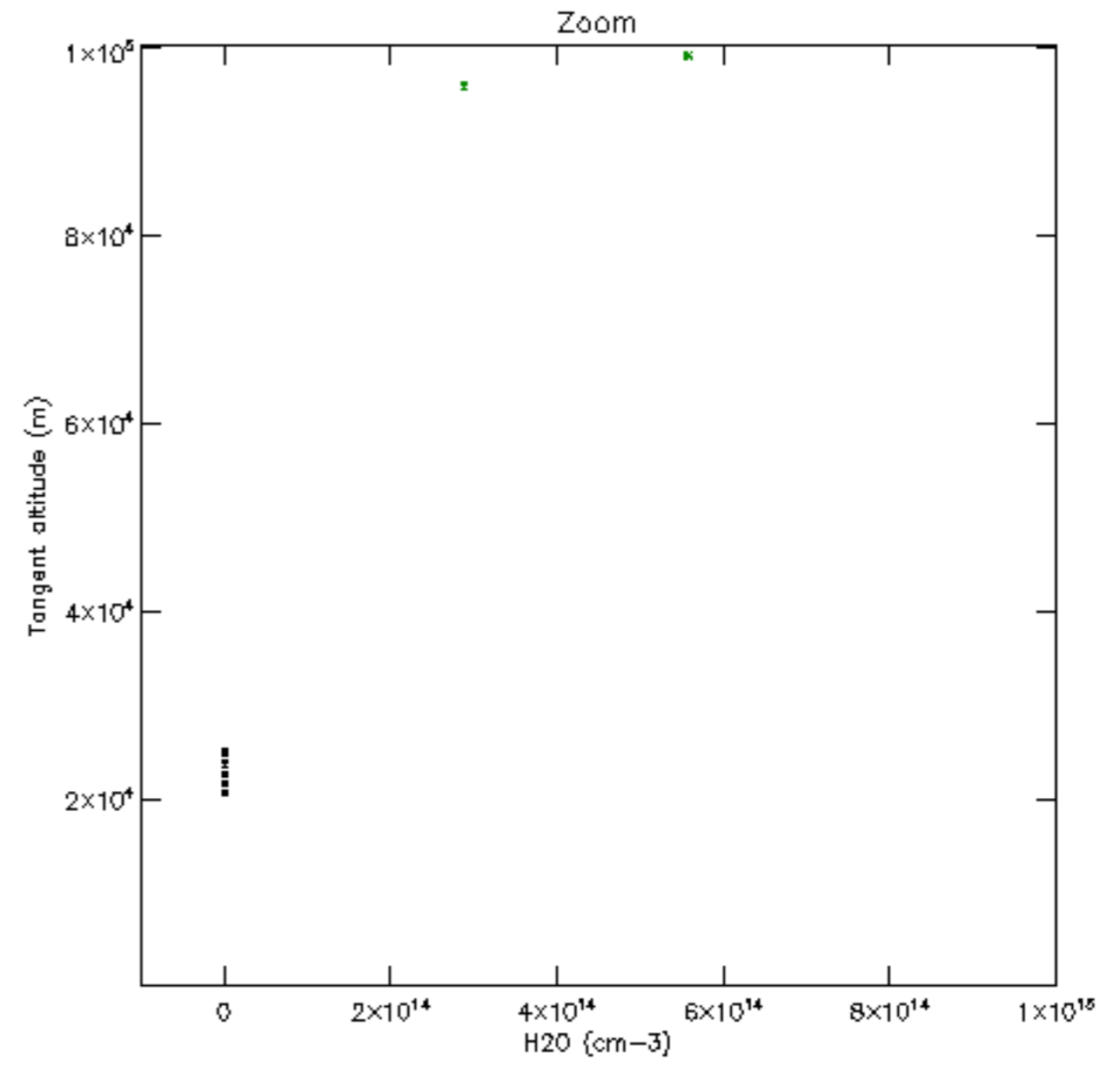
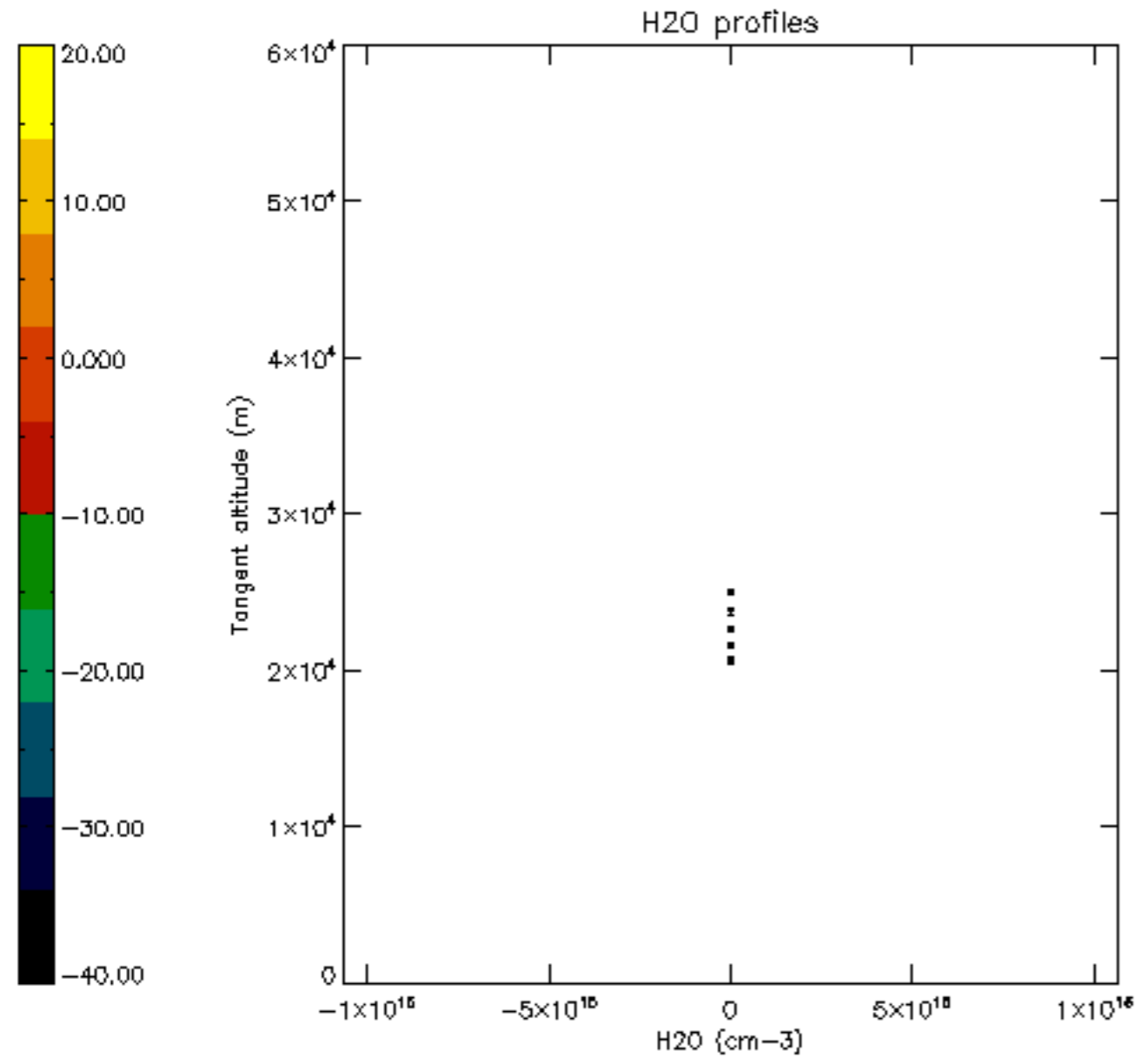


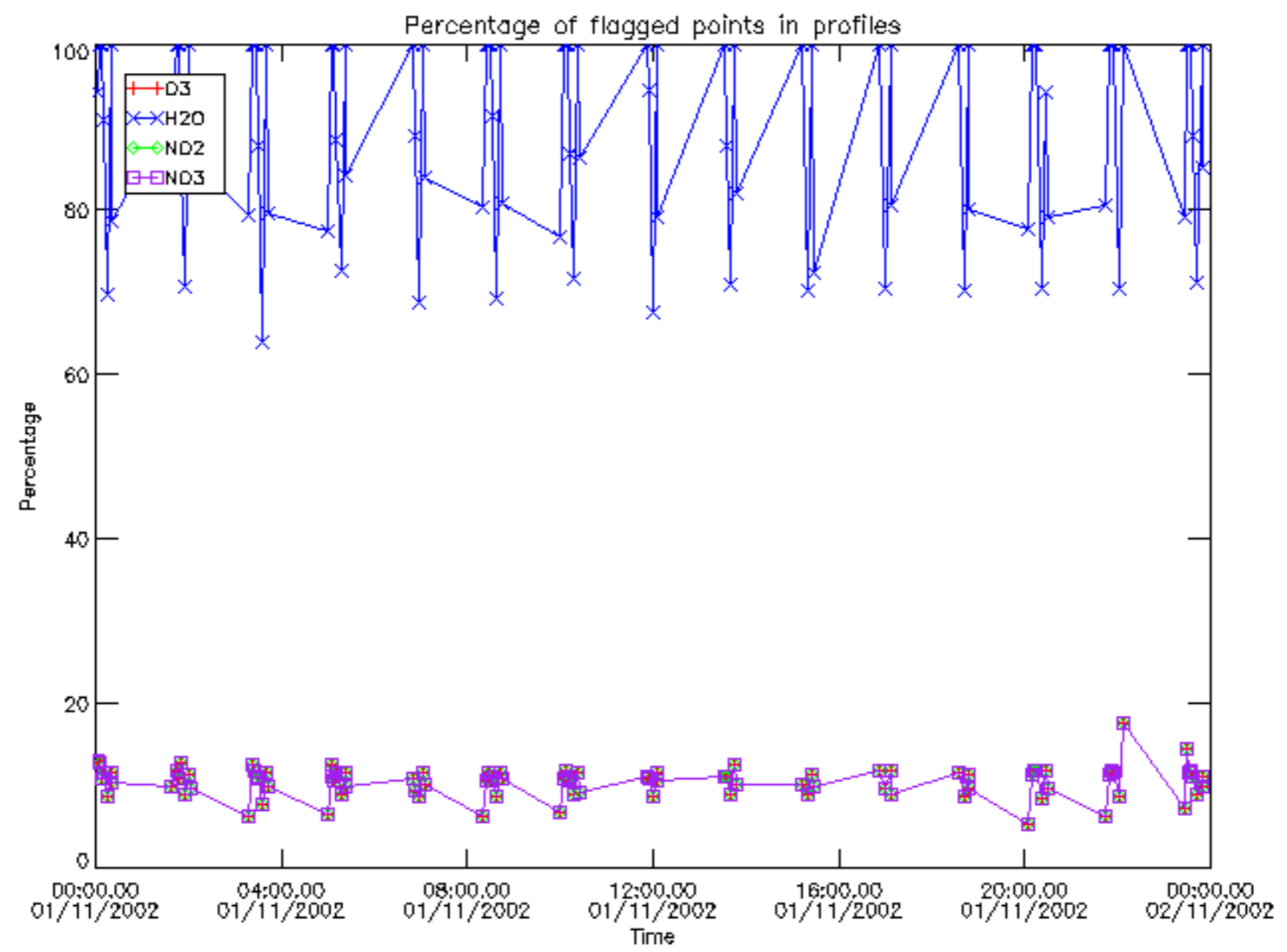




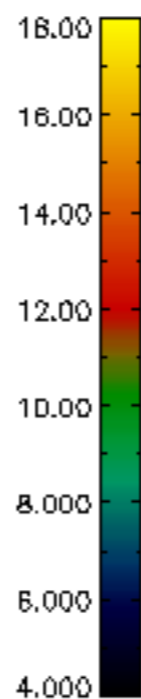
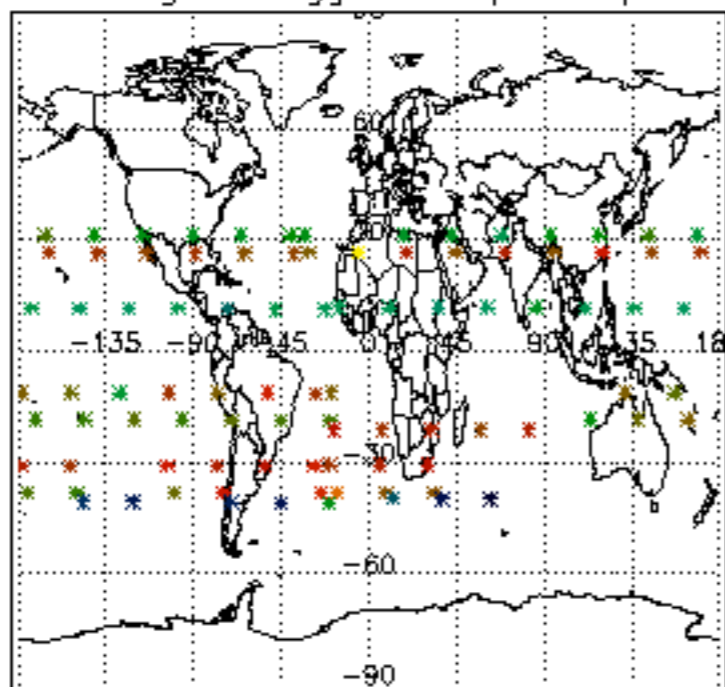




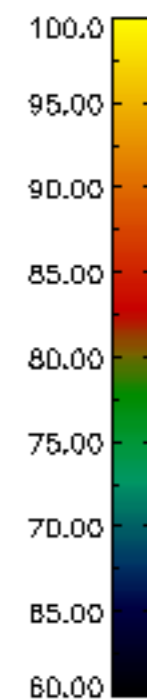
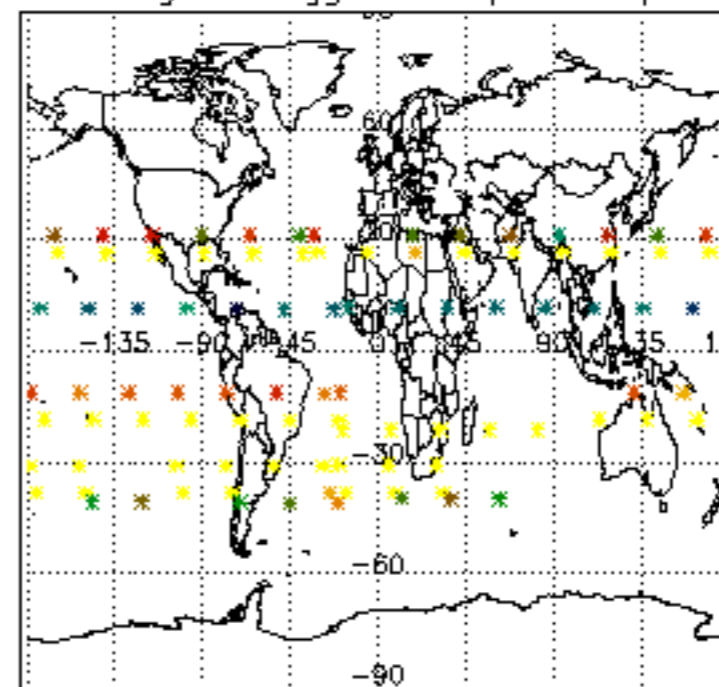




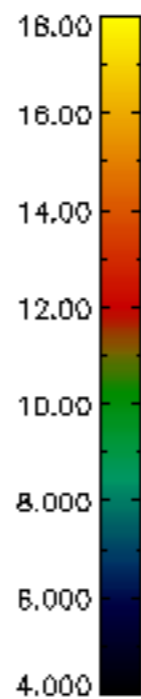
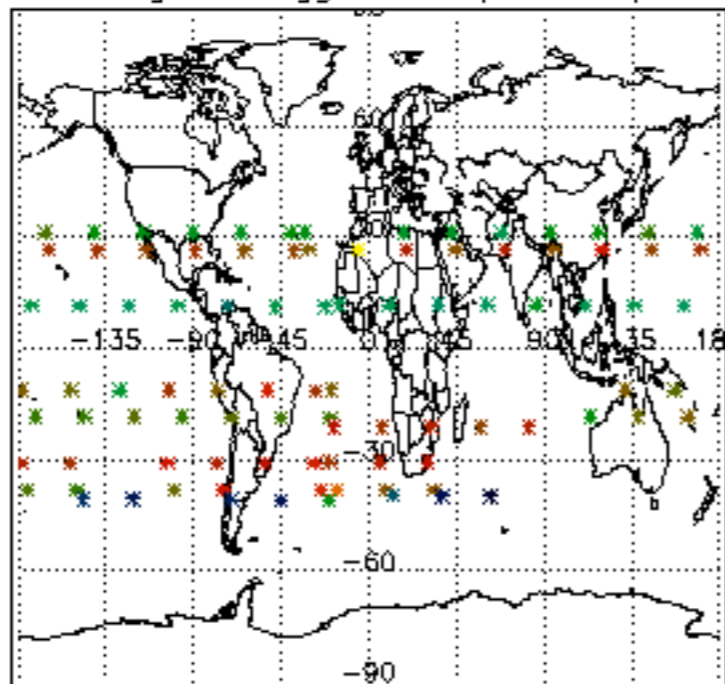
Percentage of flagged data per D3 profile



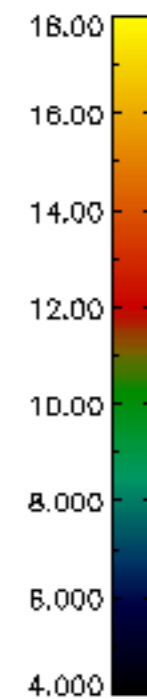
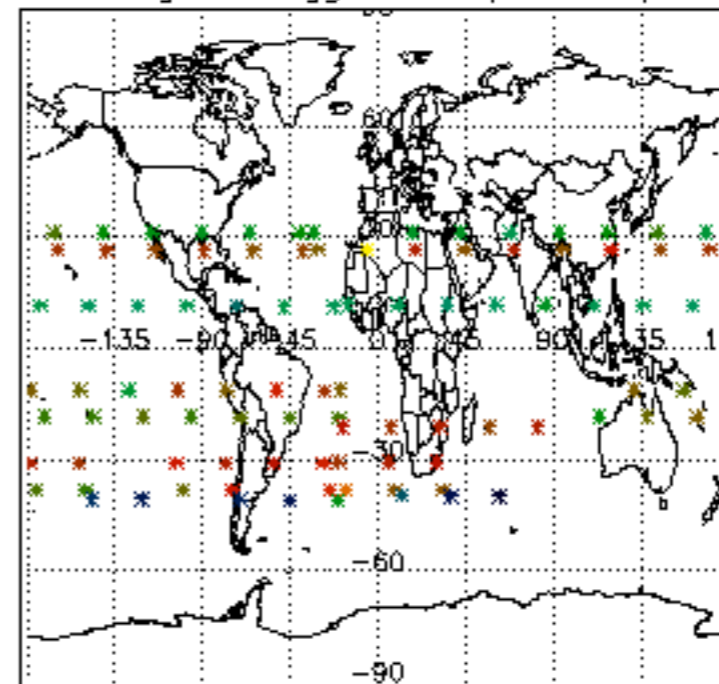
Percentage of flagged data per H2O profile

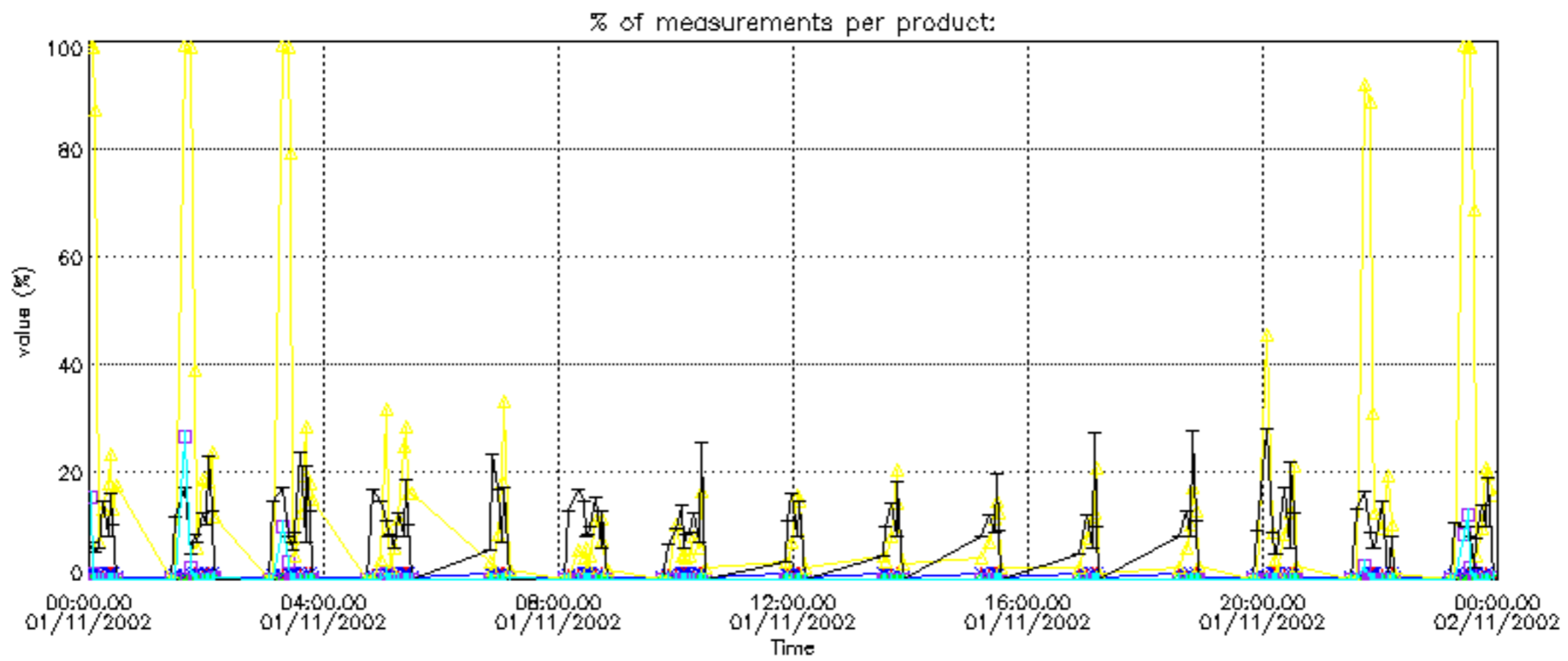


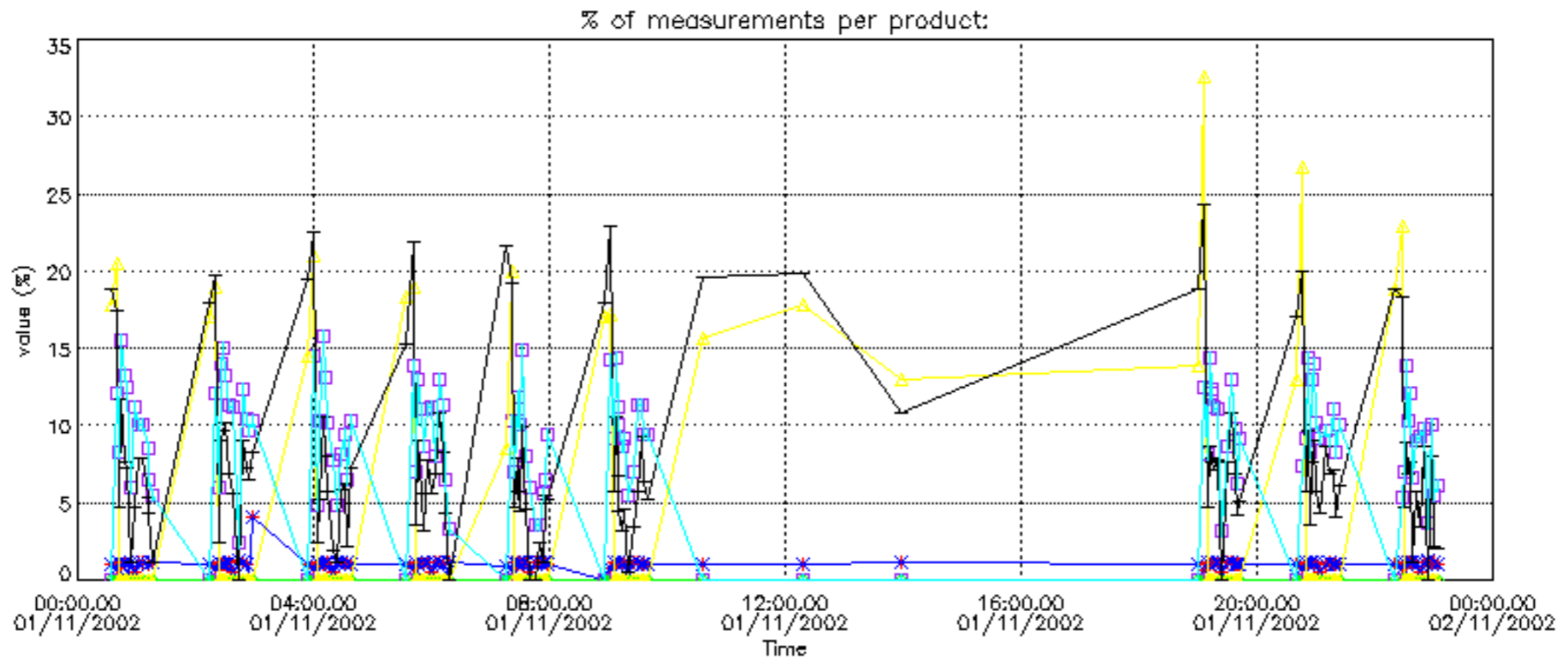
Percentage of flagged data per NO2 profile



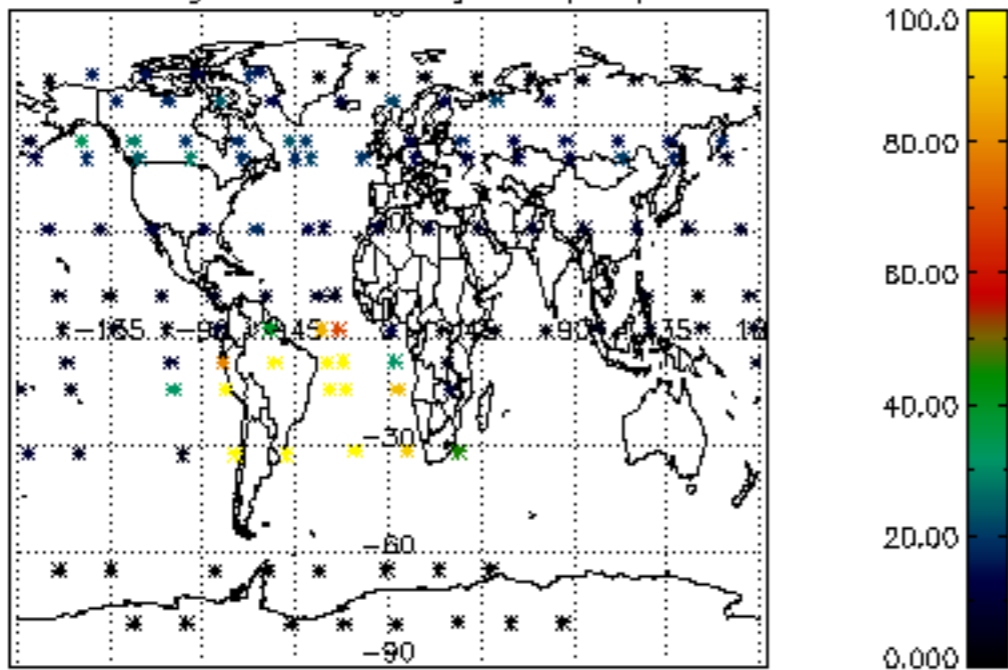
Percentage of flagged data per NO3 profile



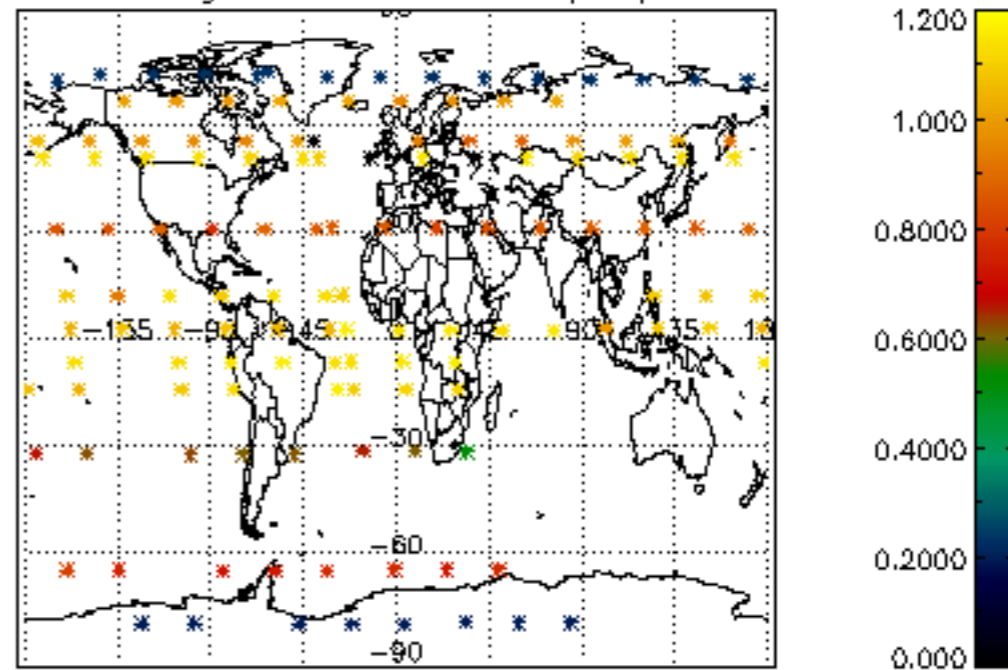




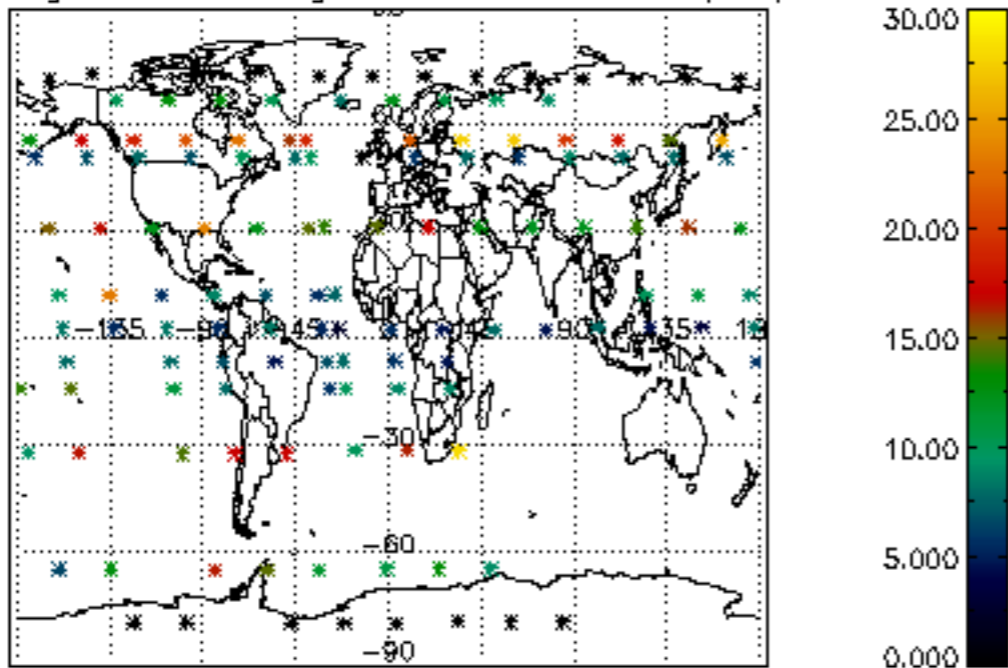
Percentage of cosmic ray hits per profile



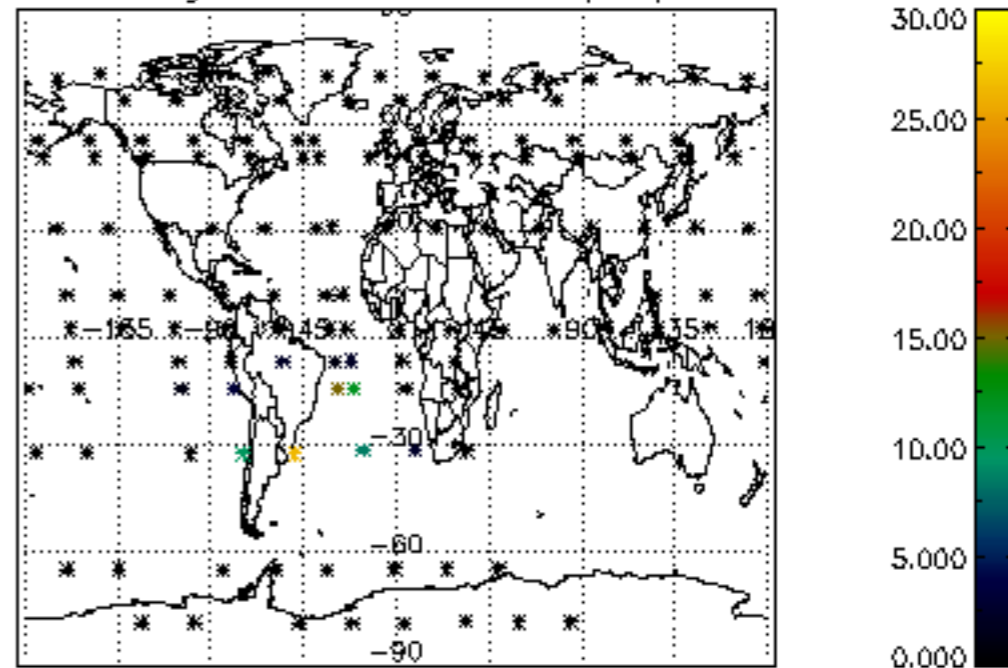
Percentage of datation errors per profile



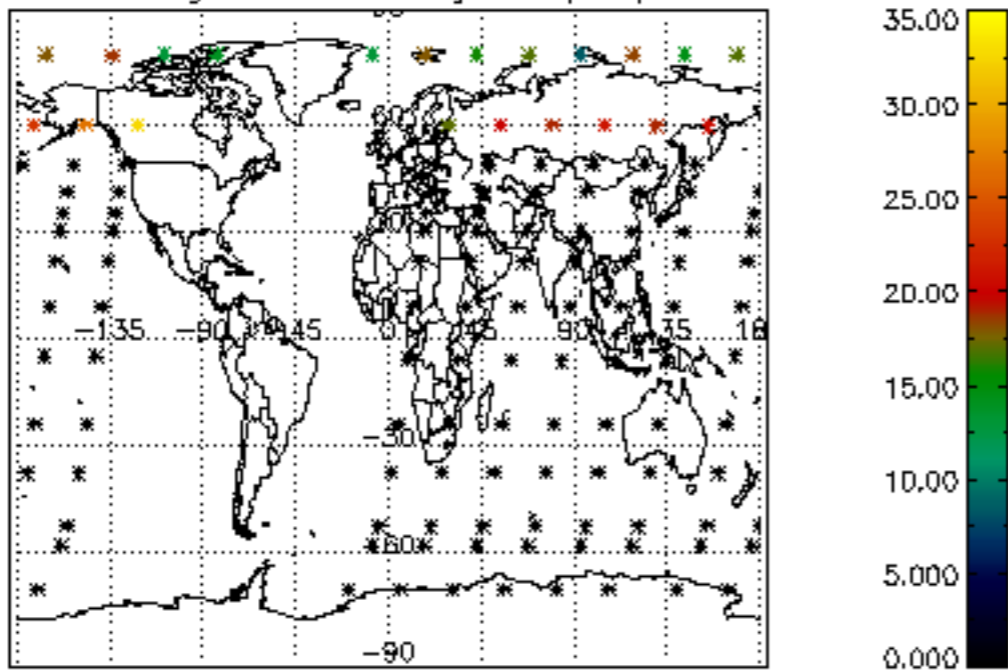
Percentage of star falling outside central band per profile



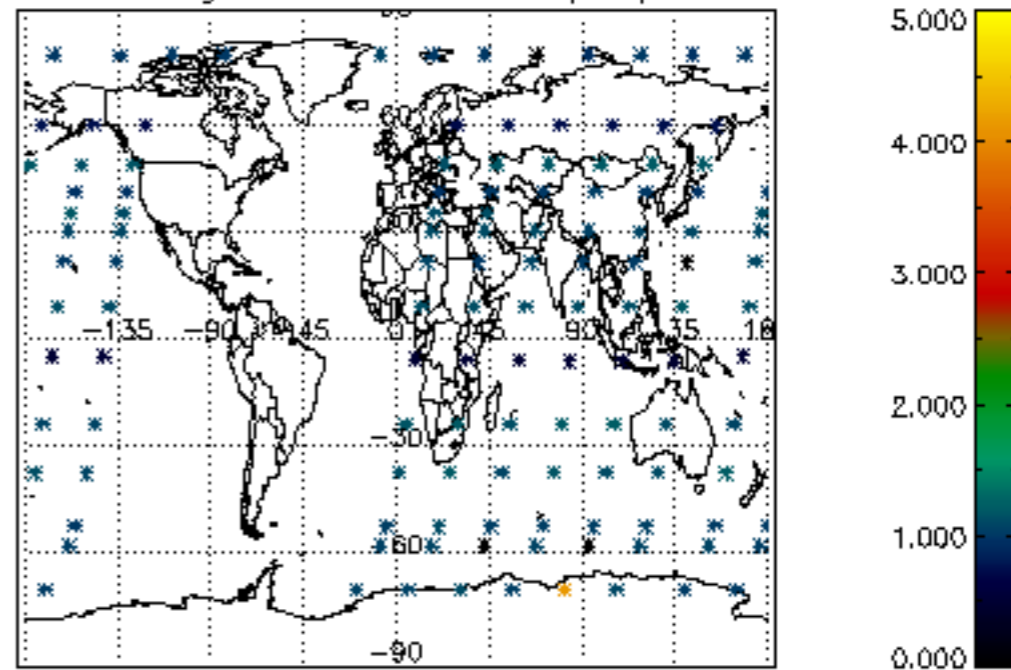
Percentage of saturation errors per profile



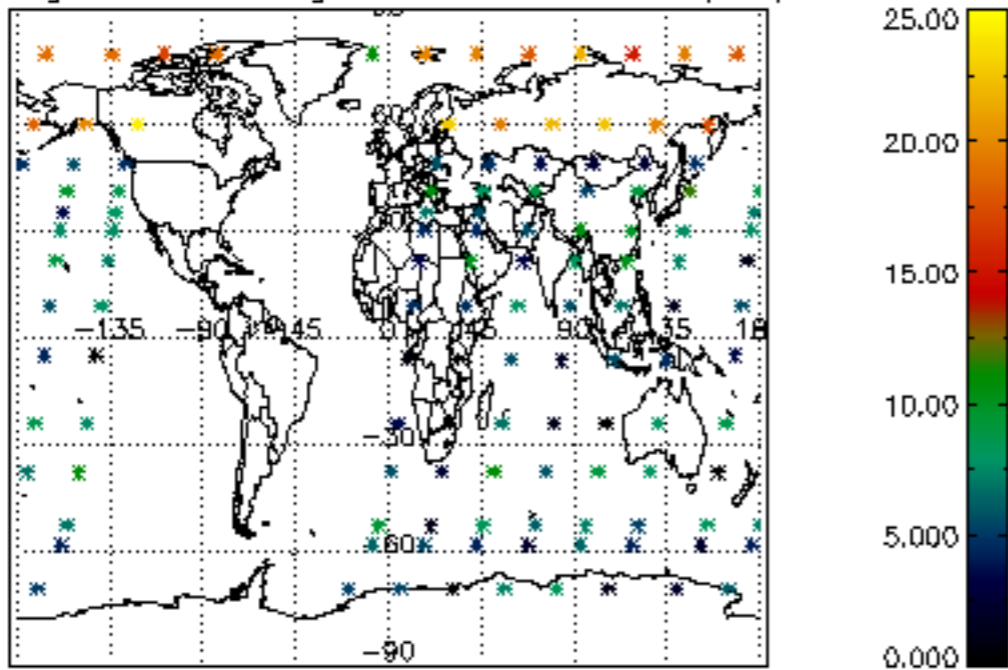
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

