

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	17APR2013 19:14:52
Data source version	GOMOS/6.01
Start time of products	07-10-2002 (07OCT2002 00:00:00)
Stop time of products	08-10-2002 (08OCT2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	247
Nb of prods with errors	1

2. Summary of processed GOM_NL__2P products.

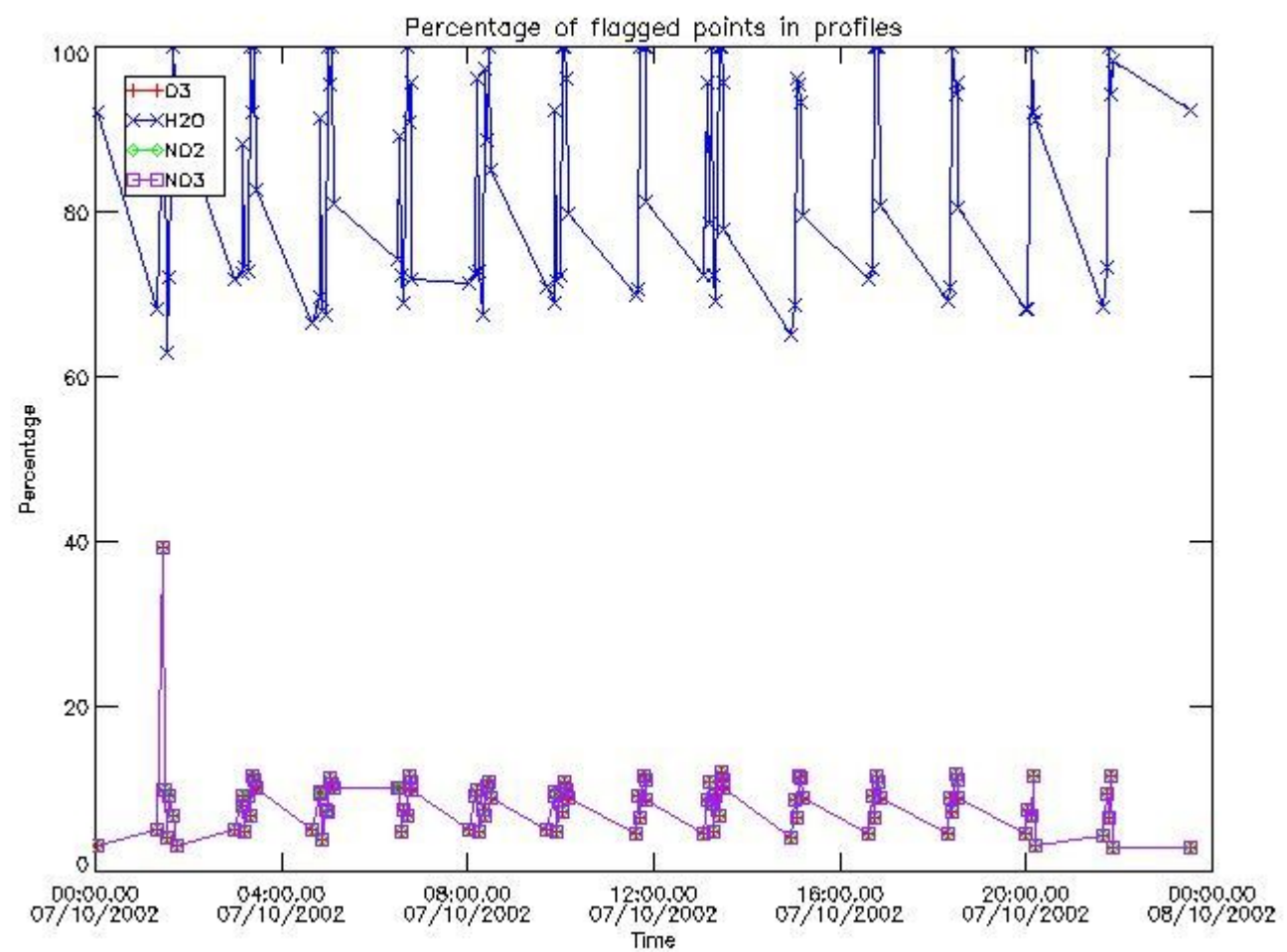
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021007_000339_000001712010_00088_03148_2306.N1	07-OCT-2002 00:03:39	Dark	171.00	139	9Bet Lep	2.8330	5600.0	342	3148	No
2	GOM_NL__2PRFIN20021007_001056_000000532010_00088_03148_2307.N1	07-OCT-2002 00:10:56	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	3148	No
3	GOM_NL__2PRFIN20021007_001529_000000522010_00088_03148_2308.N1	07-OCT-2002 00:15:29	Straylight	51.500	18	24Alp PsA	1.1660	9700.0	103	3148	No
4	GOM_NL__2PRFIN20021007_001741_000000552010_00088_03148_2309.N1	07-OCT-2002 00:17:41	Straylight	55.000	52	16Bet Cet	2.0370	4500.0	110	3148	No
5	GOM_NL__2PRFIN20021007_001956_000002172010_00088_03148_2310.N1	07-OCT-2002 00:19:56	Bright	217.00	165	34Gam Eri	2.9500	3200.0	434	3148	No
6	GOM_NL__2PRFIN20021007_002745_000000462010_00088_03148_2311.N1	07-OCT-2002 00:27:45	Bright	46.000	140	88Gam Peg	2.8340	26000.	92	3148	No
7	GOM_NL__2PRFIN20021007_003124_000000462010_00088_03148_2312.N1	07-OCT-2002 00:31:24	Bright	45.500	93	53Bet Peg	2.5200	3100.0	91	3148	No
8	GOM_NL__2PRFIN20021007_003502_000000532010_00088_03148_2313.N1	07-OCT-2002 00:35:02	Bright	52.500	53	43Bet And	2.0480	3300.0	105	3148	No
9	GOM_NL__2PRFIN20021007_003736_000000632010_00088_03148_2314.N1	07-OCT-2002 00:37:36	Bright	63.000	173	4Bet Tri	3.0040	8900.0	126	3148	No
10	GOM_NL__2PRFIN20021007_004010_000000482010_00088_03148_2315.N1	07-OCT-2002 00:40:10	Bright	47.500	68	18Alp Cas	2.2250	4500.0	95	3148	No
11	GOM_NL__2PRFIN20021007_004135_000000482010_00088_03148_2316.N1	07-OCT-2002 00:41:35	Bright	47.500	76	27Gam Cas	2.3000	30000.	95	3148	No
12	GOM_NL__2PRFIN20021007_004443_000000612010_00088_03148_2317.N1	07-OCT-2002 00:44:43	Bright	61.000	160	23Gam Per	2.9300	4700.0	122	3148	No
13	GOM_NL__2PRFIN20021007_004840_000000442010_00088_03148_2318.N1	07-OCT-2002 00:48:40	Bright	44.000	49	1Alp UMi	1.9900	6300.0	88	3148	No
14	GOM_NL__2PRFIN20021007_005108_000000452010_00088_03148_2319.N1	07-OCT-2002 00:51:08	Bright	45.000	60	7Bet UMi	2.0810	3950.0	90	3148	No
15	GOM_NL__2PRFIN20021007_005646_000000452010_00088_03148_2320.N1	07-OCT-2002 00:56:46	Bright	44.500	36	50Alp UMa	1.8000	6300.0	89	3148	No
16	GOM_NL__2PRFIN20021007_005817_000000442010_00088_03148_2321.N1	07-OCT-2002 00:58:17	Bright	44.000	82	48Bet UMa	2.3650	10600.	88	3148	No
17	GOM_NL__2PRFIN20021007_010134_000000442010_00088_03148_2322.N1	07-OCT-2002 01:01:34	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	3148	No
18	GOM_NL__2PRFIN20021007_010655_000000772010_00088_03148_2323.N1	07-OCT-2002 01:06:55	Bright	77.000	24	66Alp Gem	1.5800	10200.	154	3148	No
19	GOM_NL__2PRFIN20021007_011255_000001812010_00088_03148_2324.N1	07-OCT-2002 01:12:55	Straylight	181.00	170	27Eps Gem	3.0000	9700.0	362	3148	No
20	GOM_NL__2PRFIN20021007_011915_000001002010_00088_03148_2325.N1	07-OCT-2002 01:19:15	Dark	99.500	8	10Alp CMi	0.40000	6500.0	199	3148	No
21	GOM_NL__2PRFIN20021007_012750_000000522010_00088_03148_2326.N1	07-OCT-2002 01:27:50	Dark	51.500	65	Lam Vel	2.2040	4400.0	103	3148	No
22	GOM_NL__2PRFIN20021007_012951_000000632010_00088_03148_2327.N1	07-OCT-2002 01:29:51	Dark	62.500	88	31Eta CMa	2.4480	20000.	125	3148	No
23	GOM_NL__2PRFIN20021007_013203_000001242010_00088_03148_2328.N1	07-OCT-2002 01:32:03	Dark	124.00	1	9Alp CMa	-1.4400	11000.	248	3148	No
24	GOM_NL__2PRFIN20021007_013603_000000562010_00089_03149_2304.N1	07-OCT-2002 01:36:03	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	3149	No
25	GOM_NL__2PRFIN20021007_013918_000000762010_00089_03149_2305.N1	07-OCT-2002 01:39:18	Dark	76.000	108	Alp Col	2.6520	15200.	152	3149	No
26	GOM_NL__2PRFIN20021007_014417_000001612010_00089_03149_2306.N1	07-OCT-2002 01:44:17	Dark	160.50	139	9Bet Lep	2.8330	5600.0	321	3149	No
27	GOM_NL__2PRFIN20021007_015133_000000502010_00089_03149_2307.N1	07-OCT-2002 01:51:33	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	3149	No
28	GOM_NL__2PRFIN20021007_015605_000000512010_00089_03149_2308.N1	07-OCT-2002 01:56:05	Straylight	50.500	18	24Alp PsA	1.1660	9700.0	101	3149	No
29	GOM_NL__2PRFIN20021007_015818_000000552010_00089_03149_2309.N1	07-OCT-2002 01:58:18	Straylight	55.000	52	16Bet Cet	2.0370	4500.0	110	3149	No
30	GOM_NL__2PRFIN20021007_020031_000002172010_00089_03149_2310.N1	07-OCT-2002 02:00:31	Bright	217.00	165	34Gam Eri	2.9500	3200.0	434	3149	No
31	GOM_NL__2PRFIN20021007_020821_000000472010_00089_03149_2311.N1	07-OCT-2002 02:08:21	Bright	46.500	140	88Gam Peg	2.8340	26000.	93	3149	No
32	GOM_NL__2PRFIN20021007_021200_000000472010_00089_03149_2312.N1	07-OCT-2002 02:12:00	Bright	47.000	93	53Bet Peg	2.5200	3100.0	94	3149	No
33	GOM_NL__2PRFIN20021007_021537_000000552010_00089_03149_2313.N1	07-OCT-2002 02:15:37	Bright	54.500	53	43Bet And	2.0480	3300.0	109	3149	No
34	GOM_NL__2PRFIN20021007_021811_000000642010_00089_03149_2314.N1	07-OCT-2002 02:18:11	Bright	63.500	173	4Bet Tri	3.0040	8900.0	127	3149	No
35	GOM_NL__2PRFIN20021007_022046_000000492010_00089_03149_2315.N1	07-OCT-2002 02:20:46	Bright	49.000	68	18Alp Cas	2.2250	4500.0	98	3149	No
36	GOM_NL__2PRFIN20021007_022210_000000482010_00089_03149_2316.N1	07-OCT-2002 02:22:10	Bright	47.500	76	27Gam Cas	2.3000	30000.	95	3149	No
37	GOM_NL__2PRFIN20021007_022518_000000592010_00089_03149_2317.N1	07-OCT-2002 02:25:18	Bright	58.500	160	23Gam Per	2.9300	4700.0	117	3149	No
38	GOM_NL__2PRFIN20021007_022916_000000432010_00089_03149_2318.N1	07-OCT-2002 02:29:16	Bright	42.500	49	1Alp UMi	1.9900	6300.0	85	3149	No
39	GOM_NL__2PRFIN20021007_023143_000000452010_00089_03149_2319.N1	07-OCT-2002 02:31:43	Bright	45.000	60	7Bet UMi	2.0810	3950.0	90	3149	No
40	GOM_NL__2PRFIN20021007_023722_000000452010_00089_03149_2320.N1	07-OCT-2002 02:37:22	Bright	44.500	36	50Alp UMa	1.8000	6300.0	89	3149	No
41	GOM_NL__2PRFIN20021007_023853_000000452010_00089_03149_2321.N1	07-OCT-2002 02:38:53	Bright	44.500	82	48Bet UMa	2.3650	10600.	89	3149	No
42	GOM_NL__2PRFIN20021007_024210_000000582010_00089_03149_2322.N1	07-OCT-2002 02:42:10	Bright	58.000	174	52Psi UMa	3.0040	4400.0	116	3149	No

220	GOM_NL__2PRFIN20021007_165658_000000492010_00098_03158_8936.N1	07-OCT-2002 16:56:58	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	3158	No
221	GOM_NL__2PRFIN20021007_170130_000000512010_00098_03158_8937.N1	07-OCT-2002 17:01:30	Straylight	51.000	18	24Alp PsA	1.1660	9700.0	102	3158	No
222	GOM_NL__2PRFIN20021007_181826_000001142010_00099_03159_8929.N1	07-OCT-2002 18:18:26	Dark	114.00	1	9Alp CMa	-1.4400	11000.	228	3159	No
223	GOM_NL__2PRFIN20021007_182210_000000572010_00099_03159_8930.N1	07-OCT-2002 18:22:10	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	3159	No
224	GOM_NL__2PRFIN20021007_182533_000000782010_00099_03159_8931.N1	07-OCT-2002 18:25:33	Dark	78.000	108	Alp Col	2.6520	15200.	156	3159	No
225	GOM_NL__2PRFIN20021007_182824_000000442010_00099_03159_8932.N1	07-OCT-2002 18:28:24	Dark	43.500	135	Bet Hyi	2.8200	5800.0	87	3159	No
226	GOM_NL__2PRFIN20021007_183055_000000462010_00099_03159_8933.N1	07-OCT-2002 18:30:55	Dark	46.000	143	Alp Hyi	2.8570	7200.0	92	3159	No
227	GOM_NL__2PRFIN20021007_183223_000000572010_00099_03159_8934.N1	07-OCT-2002 18:32:23	Dark	57.000	9	Alp Eri	0.45300	24000.	114	3159	No
228	GOM_NL__2PRFIN20021007_183424_000000612010_00099_03159_8935.N1	07-OCT-2002 18:34:24	Straylight	60.500	157	The1Eri	2.9060	9300.0	121	3159	No
229	GOM_NL__2PRFIN20021007_183734_000000502010_00099_03159_8936.N1	07-OCT-2002 18:37:34	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	3159	No
230	GOM_NL__2PRFIN20021007_195905_000001152010_00100_03160_8929.N1	07-OCT-2002 19:59:05	Dark	115.00	1	9Alp CMa	-1.4400	11000.	230	3160	No
231	GOM_NL__2PRFIN20021007_200247_000000682010_00100_03160_8930.N1	07-OCT-2002 20:02:47	Dark	68.000	2	Alp Car	-0.73600	7000.0	136	3160	No
232	GOM_NL__2PRFIN20021007_200610_000000772010_00100_03160_8931.N1	07-OCT-2002 20:06:10	Dark	76.500	108	Alp Col	2.6520	15200.	153	3160	No
233	GOM_NL__2PRFIN20021007_200900_000000452010_00100_03160_8932.N1	07-OCT-2002 20:09:00	Dark	44.500	135	Bet Hyi	2.8200	5800.0	89	3160	No
234	GOM_NL__2PRFIN20021007_201123_000001642010_00100_03160_8933.N1	07-OCT-2002 20:11:23	Dark	163.50	139	9Bet Lep	2.8330	5600.0	327	3160	No
235	GOM_NL__2PRFIN20021007_201810_000000512010_00100_03160_8934.N1	07-OCT-2002 20:18:10	Straylight	50.500	84	Alp Phe	2.3970	4500.0	101	3160	No
236	GOM_NL__2PRFIN20021007_213943_000001182010_00101_03161_8929.N1	07-OCT-2002 21:39:43	Dark	117.50	1	9Alp CMa	-1.4400	11000.	235	3161	No
237	GOM_NL__2PRFIN20021007_214324_000000552010_00101_03161_8930.N1	07-OCT-2002 21:43:24	Dark	54.500	2	Alp Car	-0.73600	7000.0	109	3161	No
238	GOM_NL__2PRFIN20021007_214648_000000772010_00101_03161_8931.N1	07-OCT-2002 21:46:48	Dark	77.000	108	Alp Col	2.6520	15200.	154	3161	No
239	GOM_NL__2PRFIN20021007_214936_000000452010_00101_03161_8932.N1	07-OCT-2002 21:49:36	Dark	44.500	135	Bet Hyi	2.8200	5800.0	89	3161	No
240	GOM_NL__2PRFIN20021007_215201_000001772010_00101_03161_8933.N1	07-OCT-2002 21:52:01	Dark	176.50	139	9Bet Lep	2.8330	5600.0	353	3161	No
241	GOM_NL__2PRFIN20021007_233240_000001892010_00102_03162_2322.N1	07-OCT-2002 23:32:40	Dark	189.00	139	9Bet Lep	2.8330	5600.0	378	3162	No
242	GOM_NL__2PRFIN20021007_233923_000000492010_00102_03162_2323.N1	07-OCT-2002 23:39:23	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	3162	No
243	GOM_NL__2PRFIN20021007_234354_000000492010_00102_03162_2324.N1	07-OCT-2002 23:43:54	Straylight	49.000	18	24Alp PsA	1.1660	9700.0	98	3162	No
244	GOM_NL__2PRFIN20021007_234607_000000572010_00102_03162_2325.N1	07-OCT-2002 23:46:07	Straylight	56.500	52	16Bet Cet	2.0370	4500.0	113	3162	No
245	GOM_NL__2PRFIN20021007_234808_000002172010_00102_03162_2326.N1	07-OCT-2002 23:48:08	Bright	217.00	165	34Gam Eri	2.9500	3200.0	434	3162	No
246	GOM_NL__2PRFIN20021007_235607_000000452010_00102_03162_2327.N1	07-OCT-2002 23:56:07	Bright	45.000	140	88Gam Peg	2.8340	26000.	90	3162	No
247	GOM_NL__2PRFIN20021007_235948_000000462010_00102_03162_2328.N1	07-OCT-2002 23:59:48	Bright	46.000	93	53Bet Peg	2.5200	3100.0	92	3162	No

3. Quality information per product

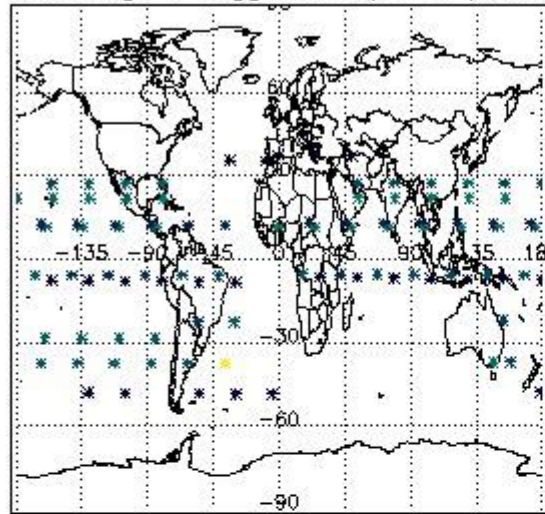
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

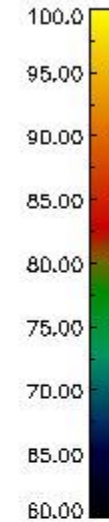
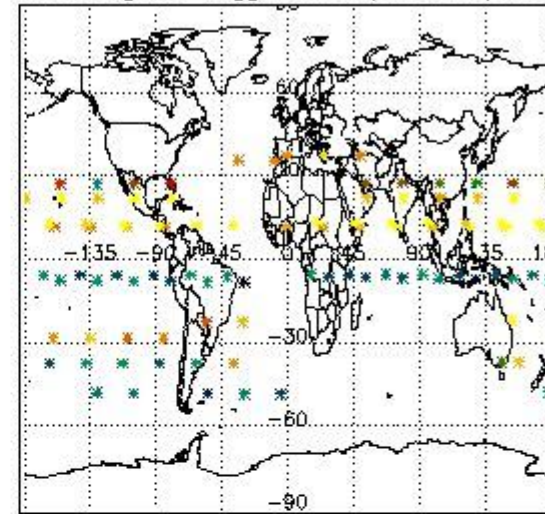


3.2 Plot quality information per product (world map)

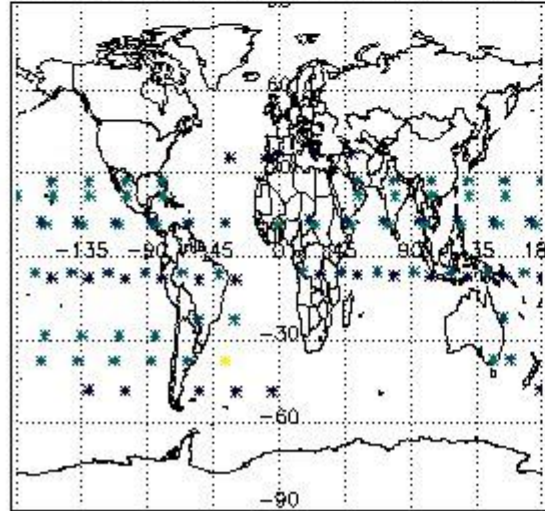
Percentage of flagged data per O3 profile



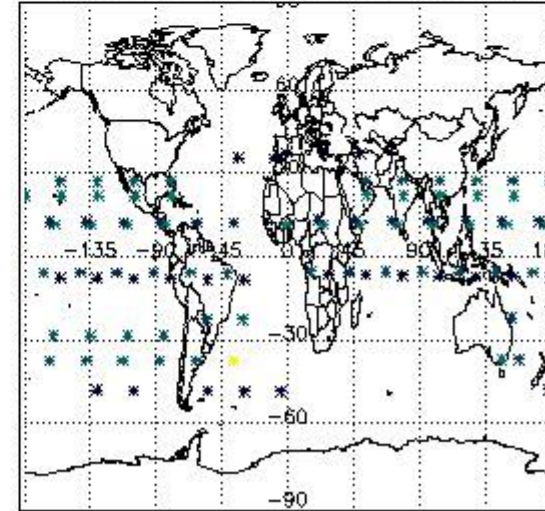
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

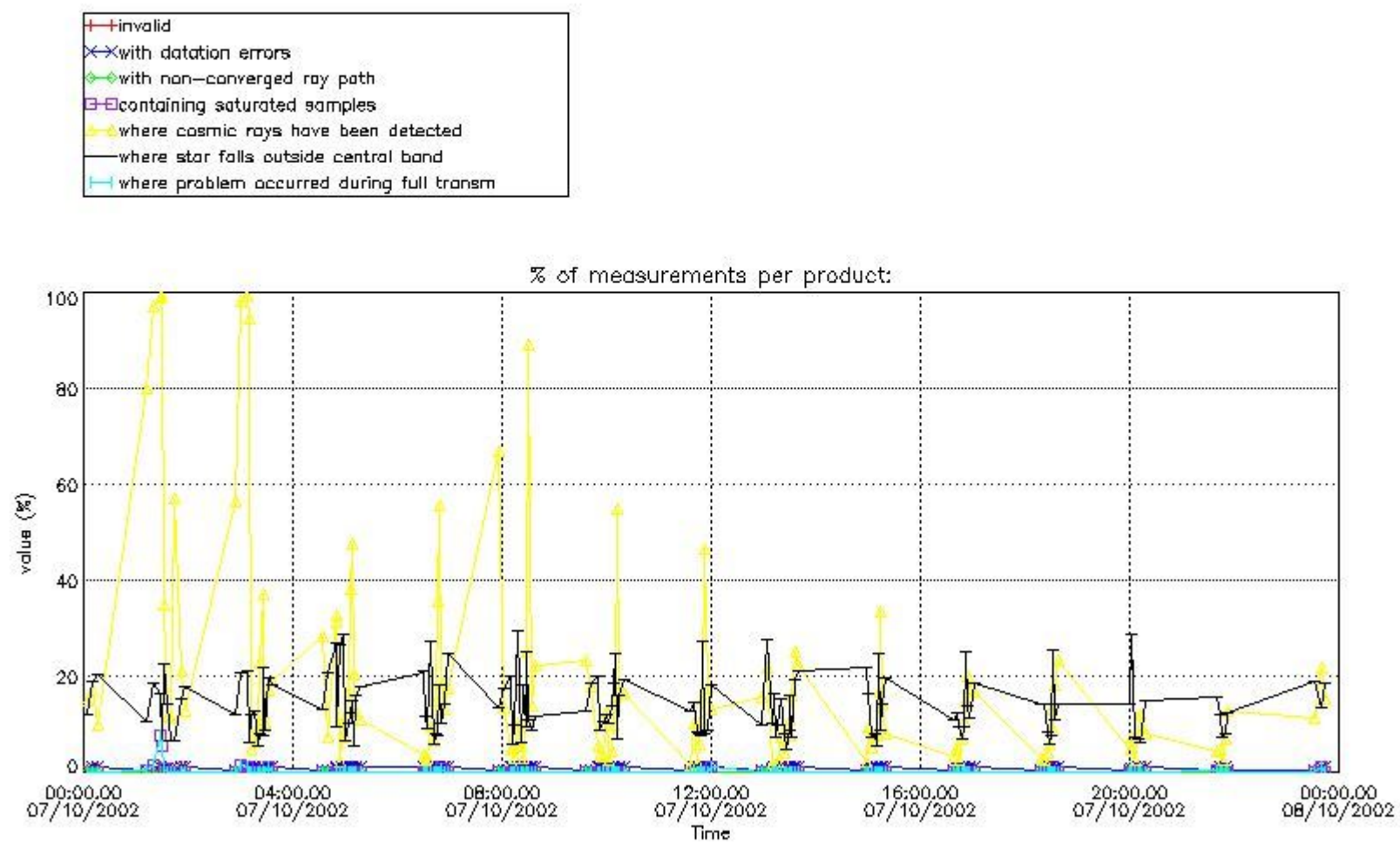


4. Level 1 quality information per product

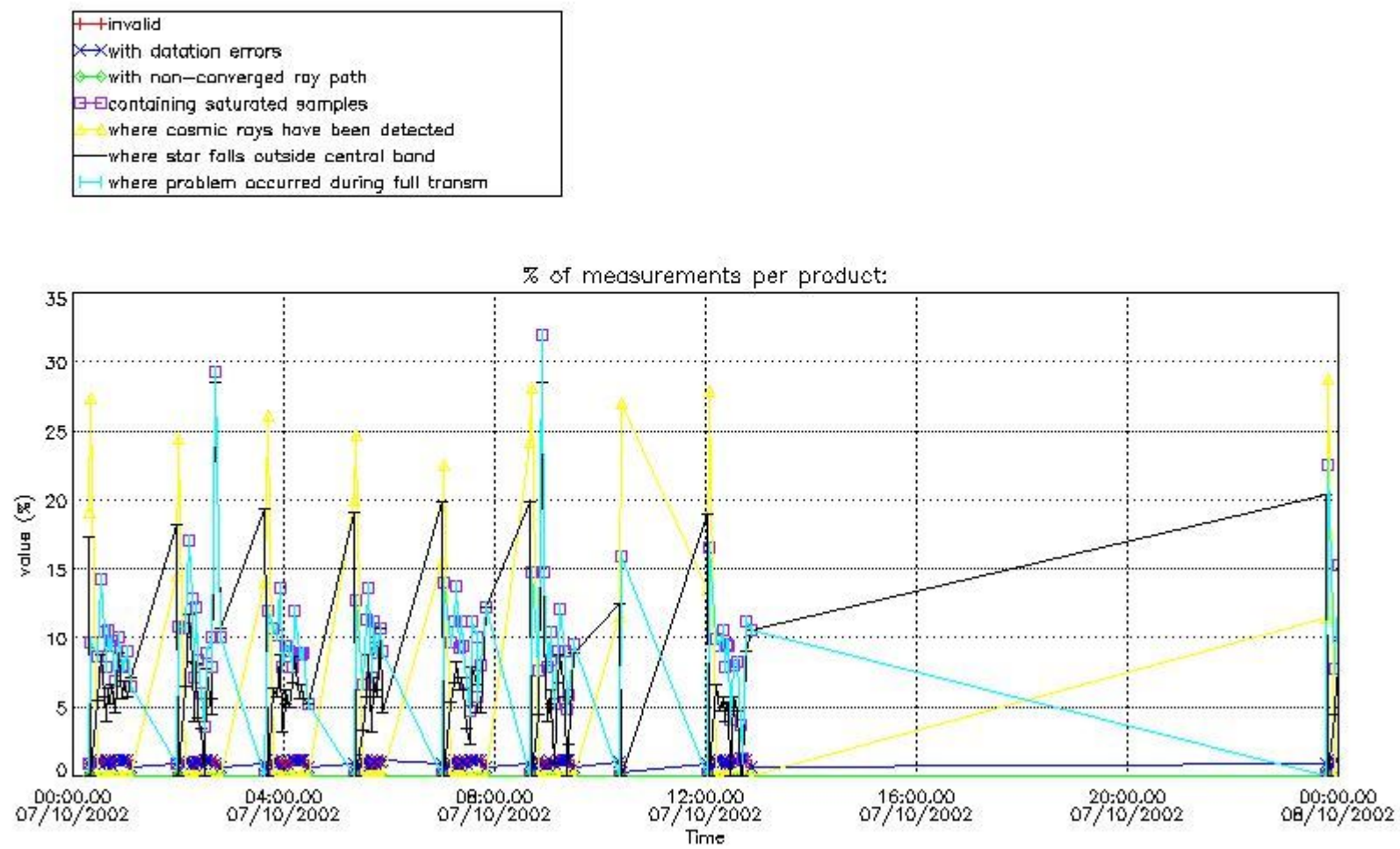
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

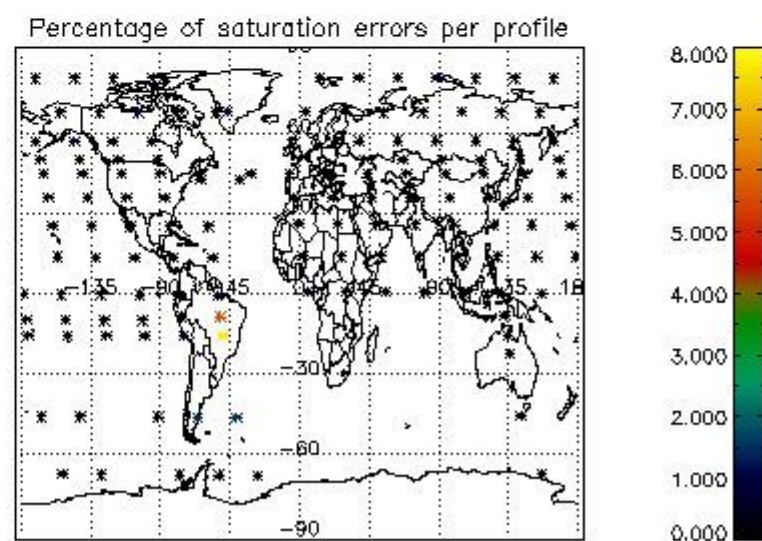
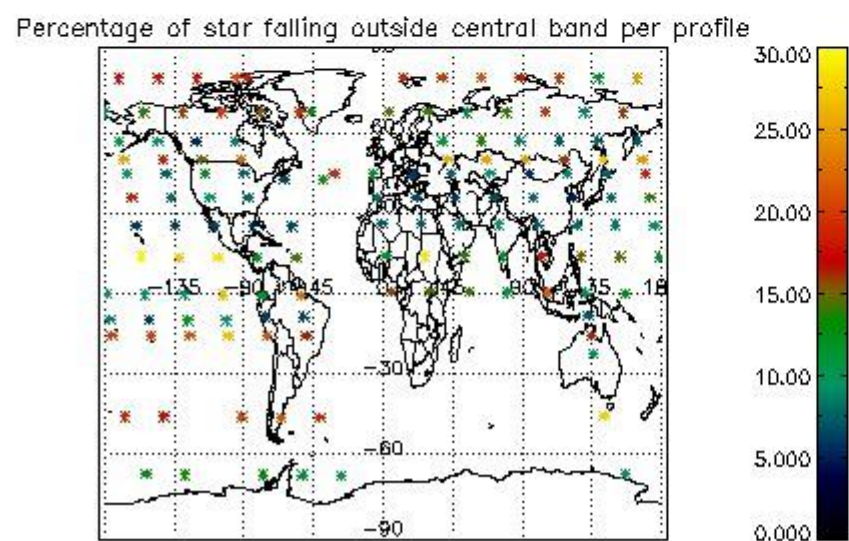
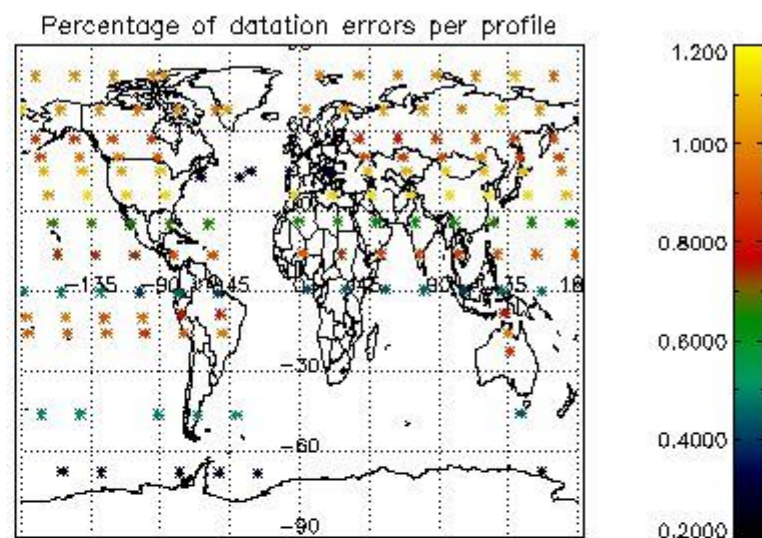
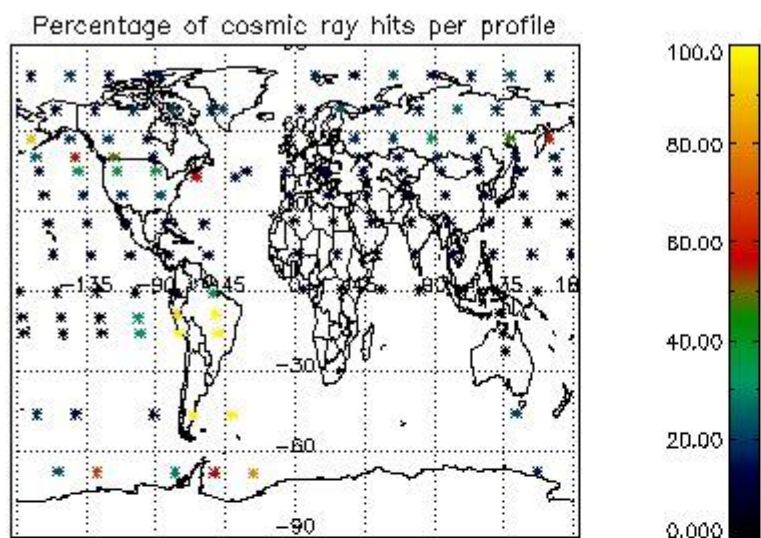


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

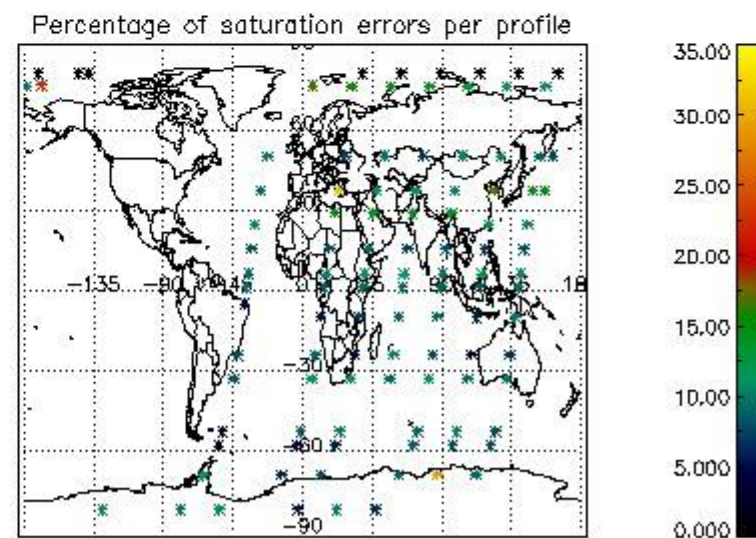
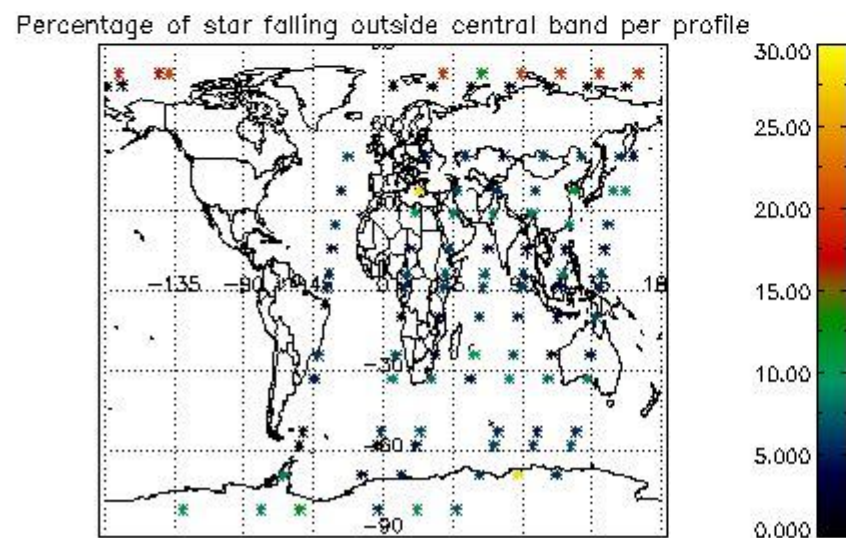
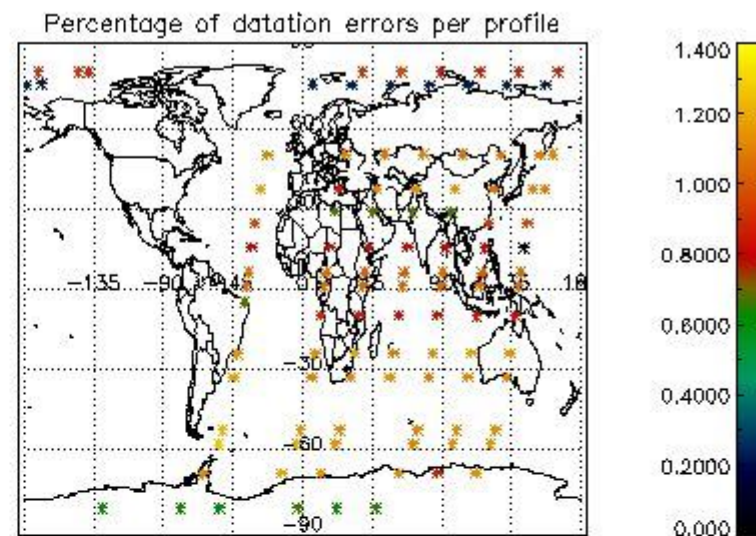
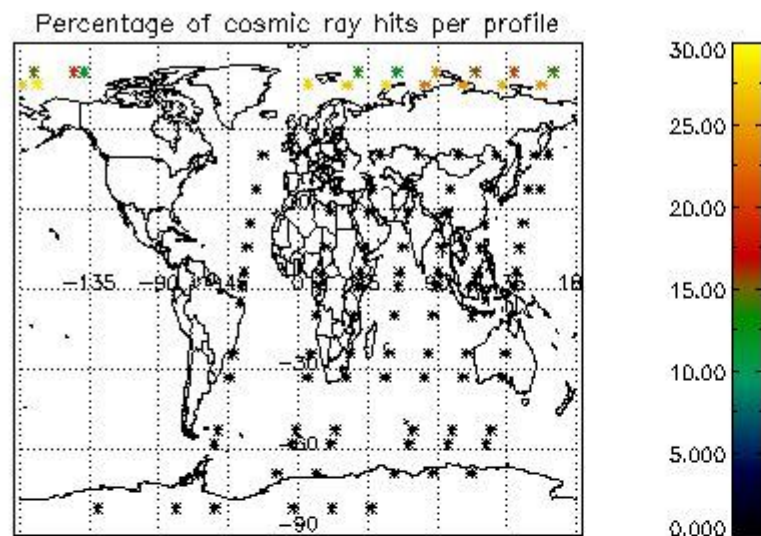


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

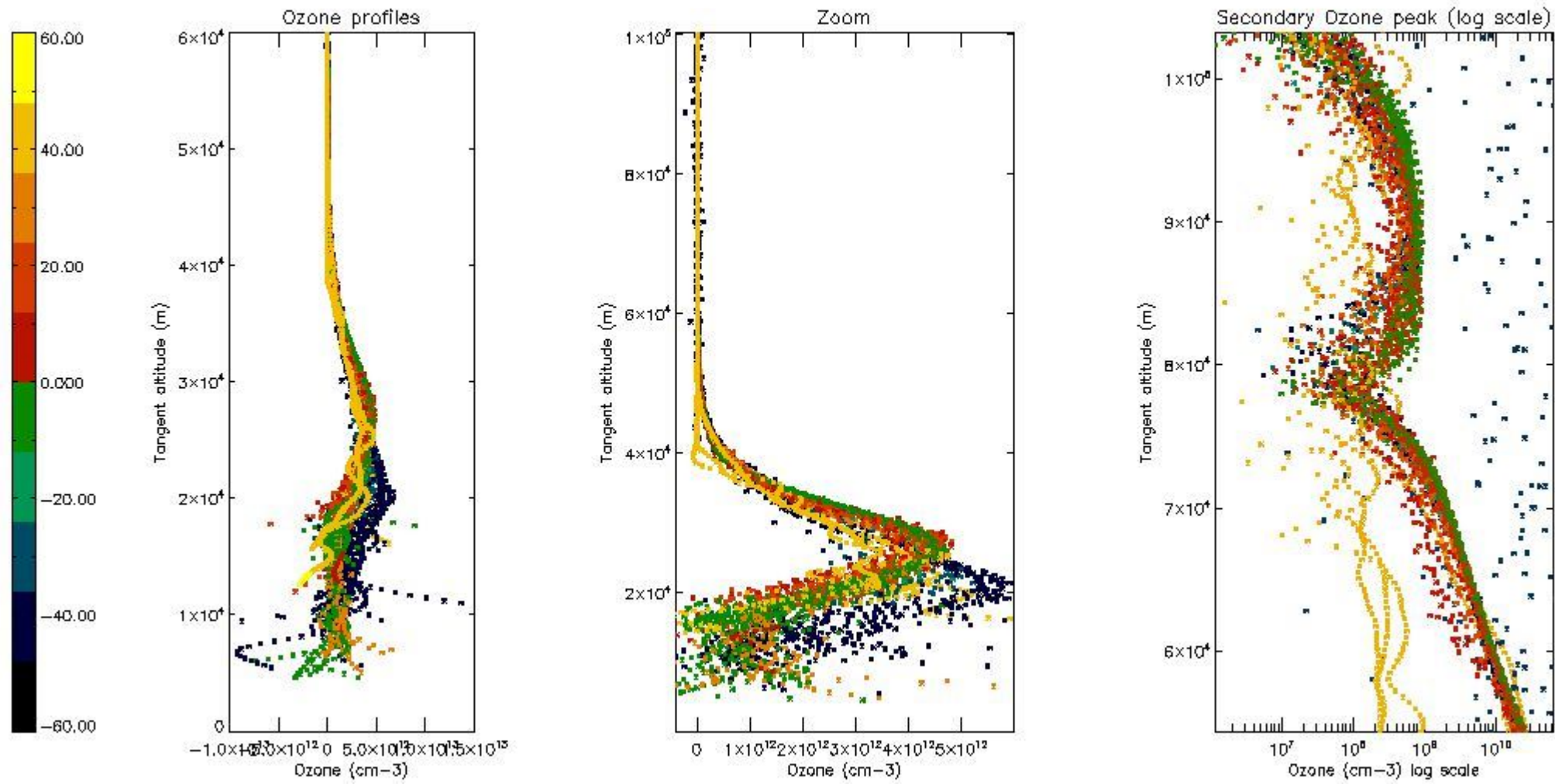
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	23

STD < 10	21
STD < 5	17

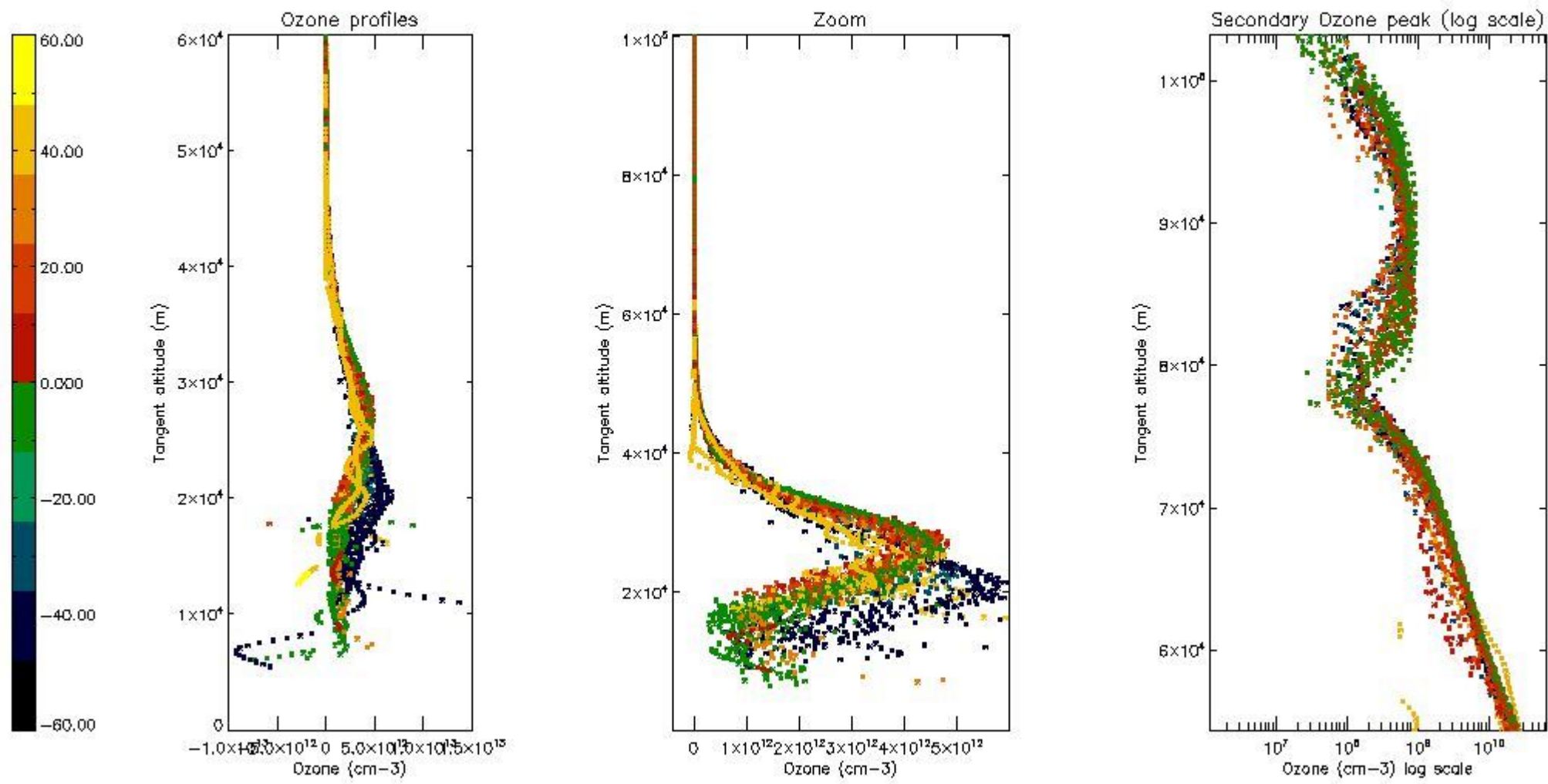
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



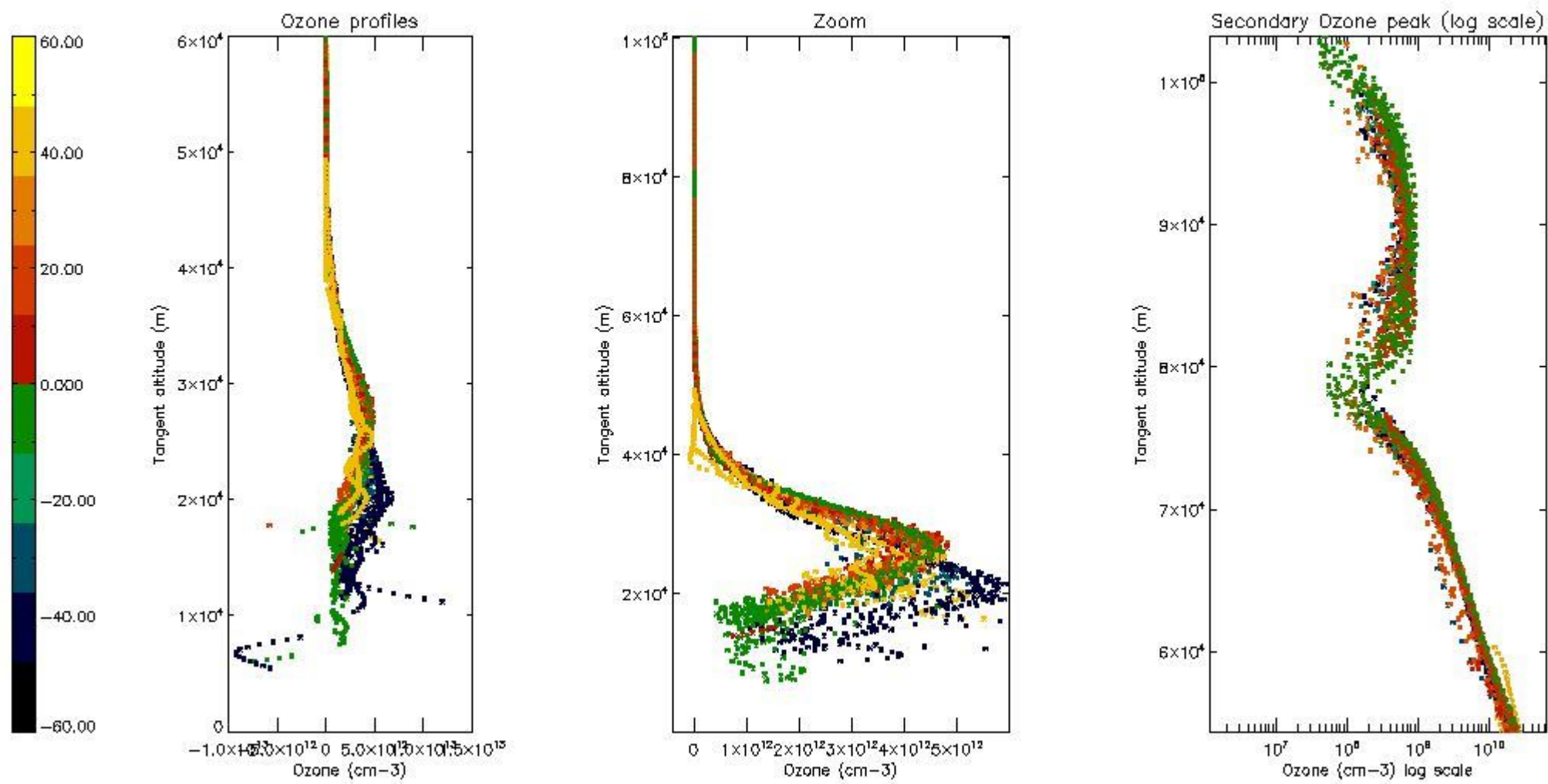
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



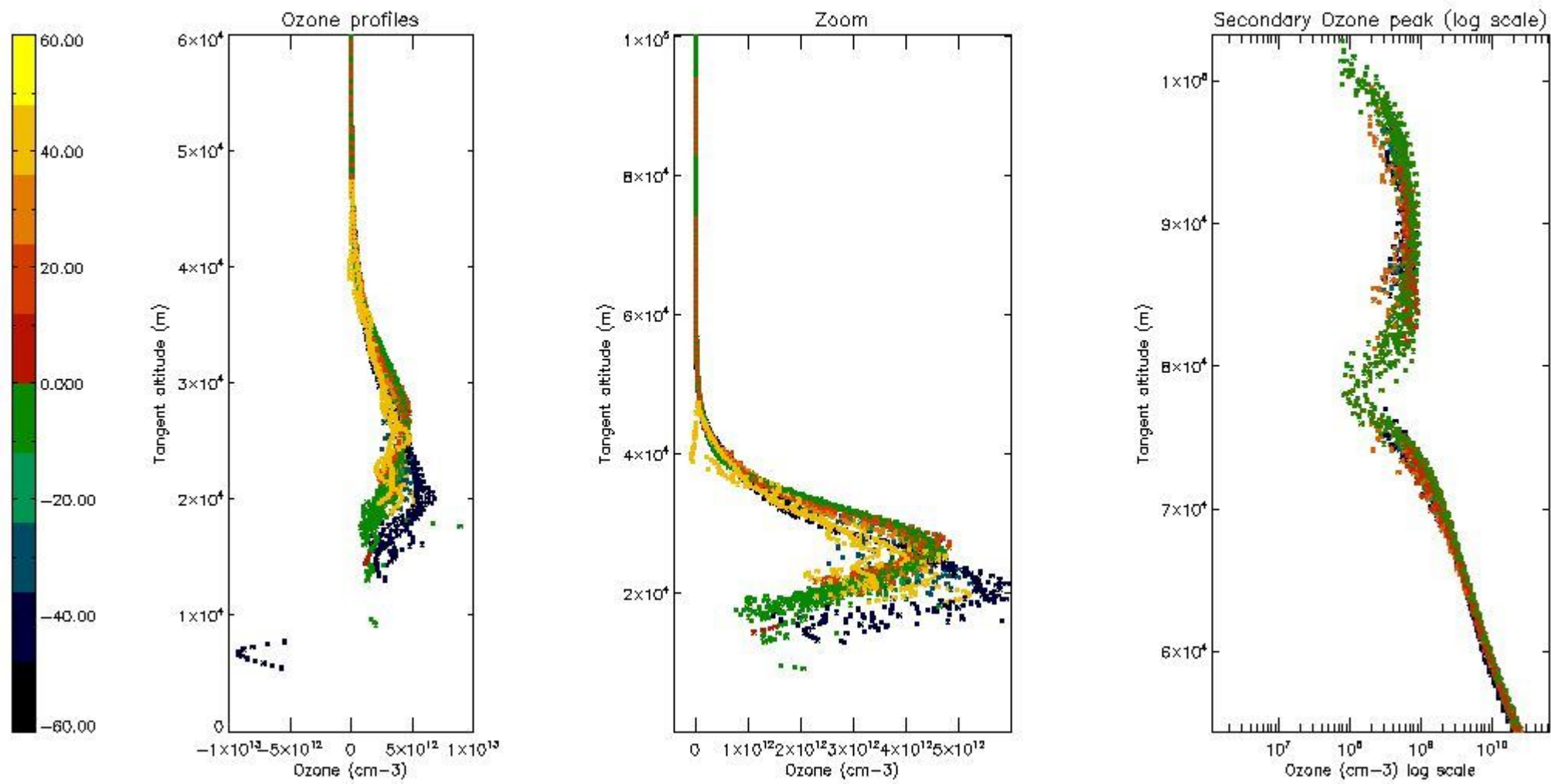
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



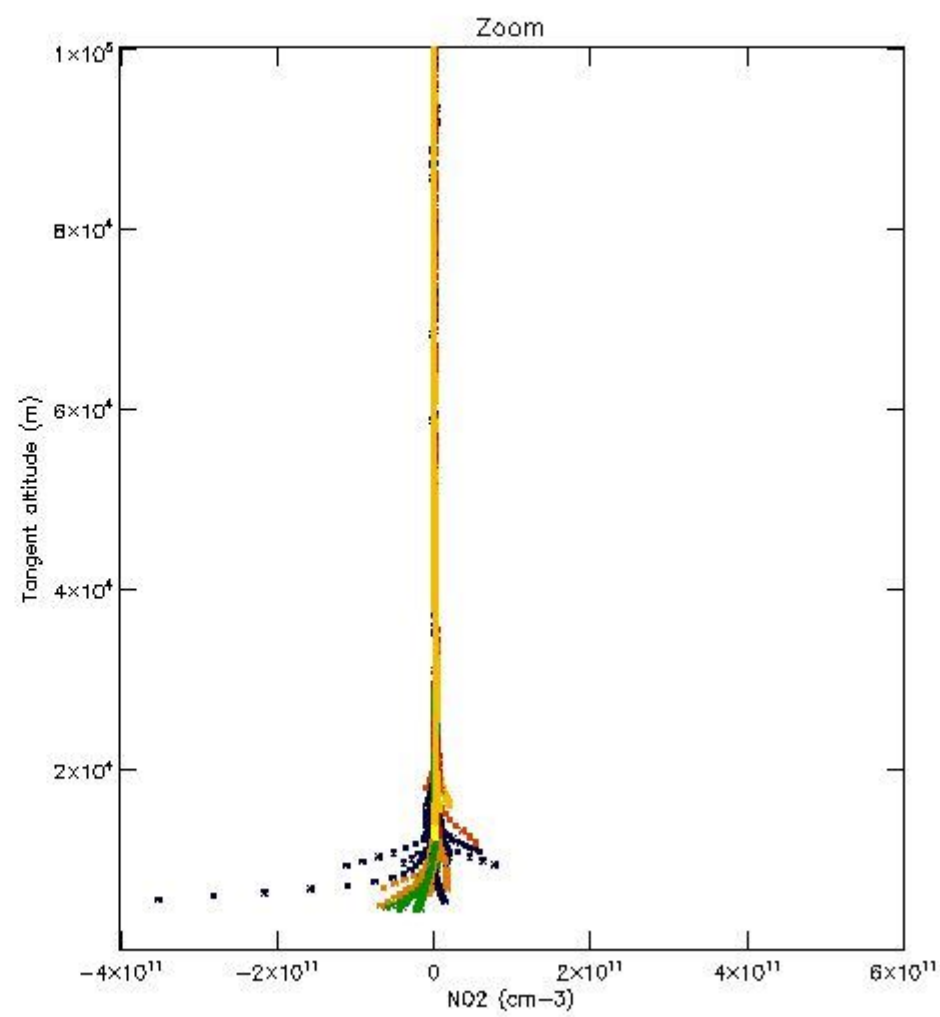
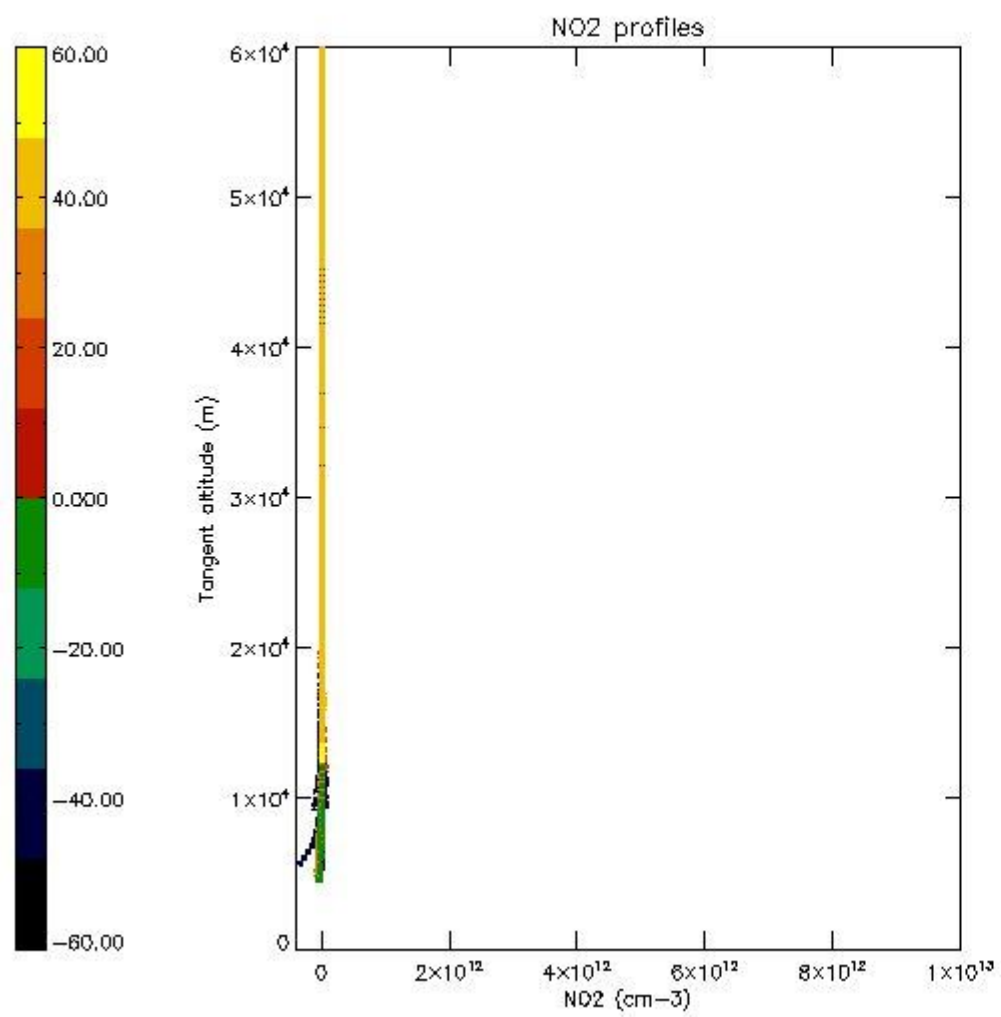
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



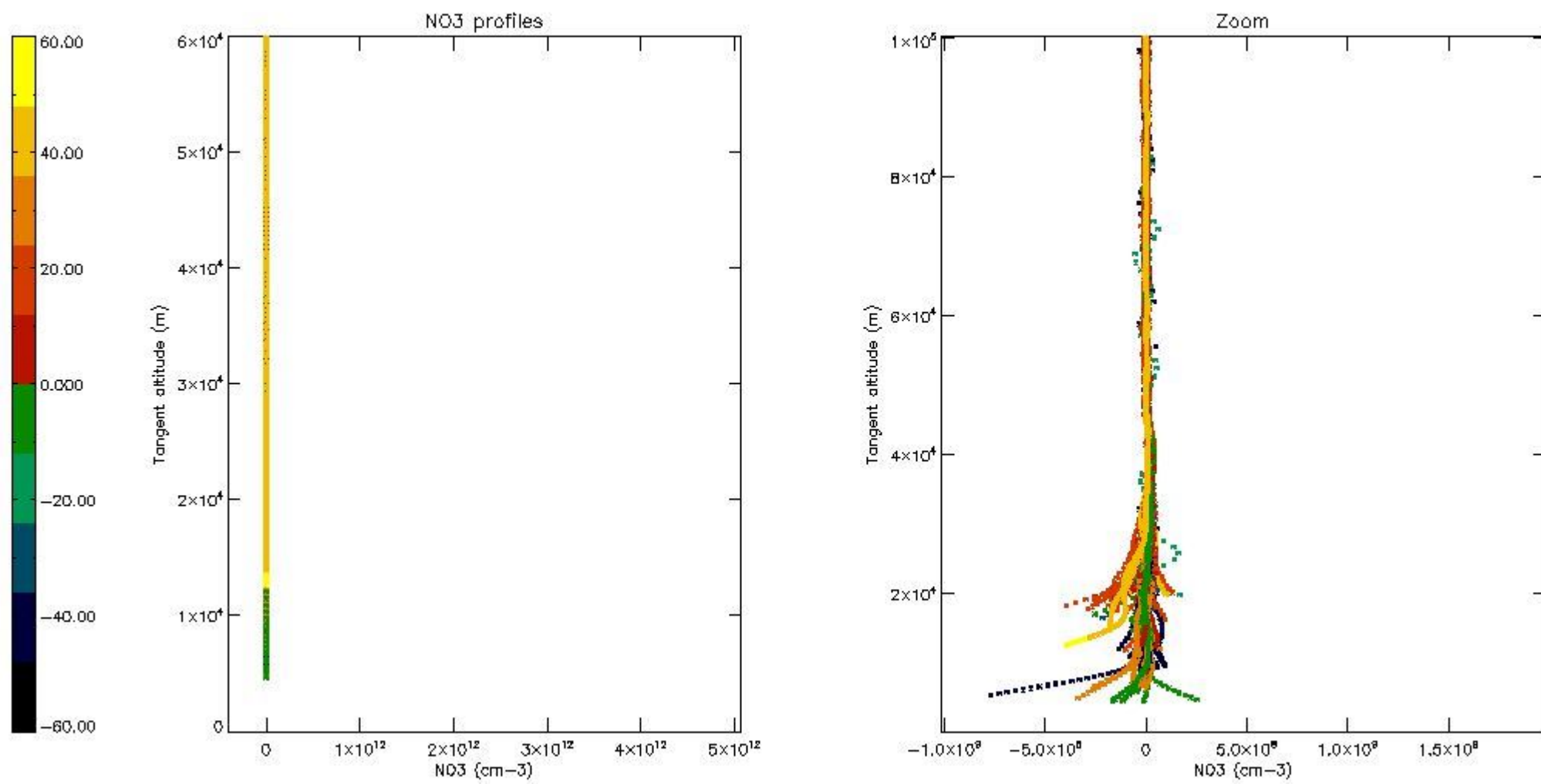
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



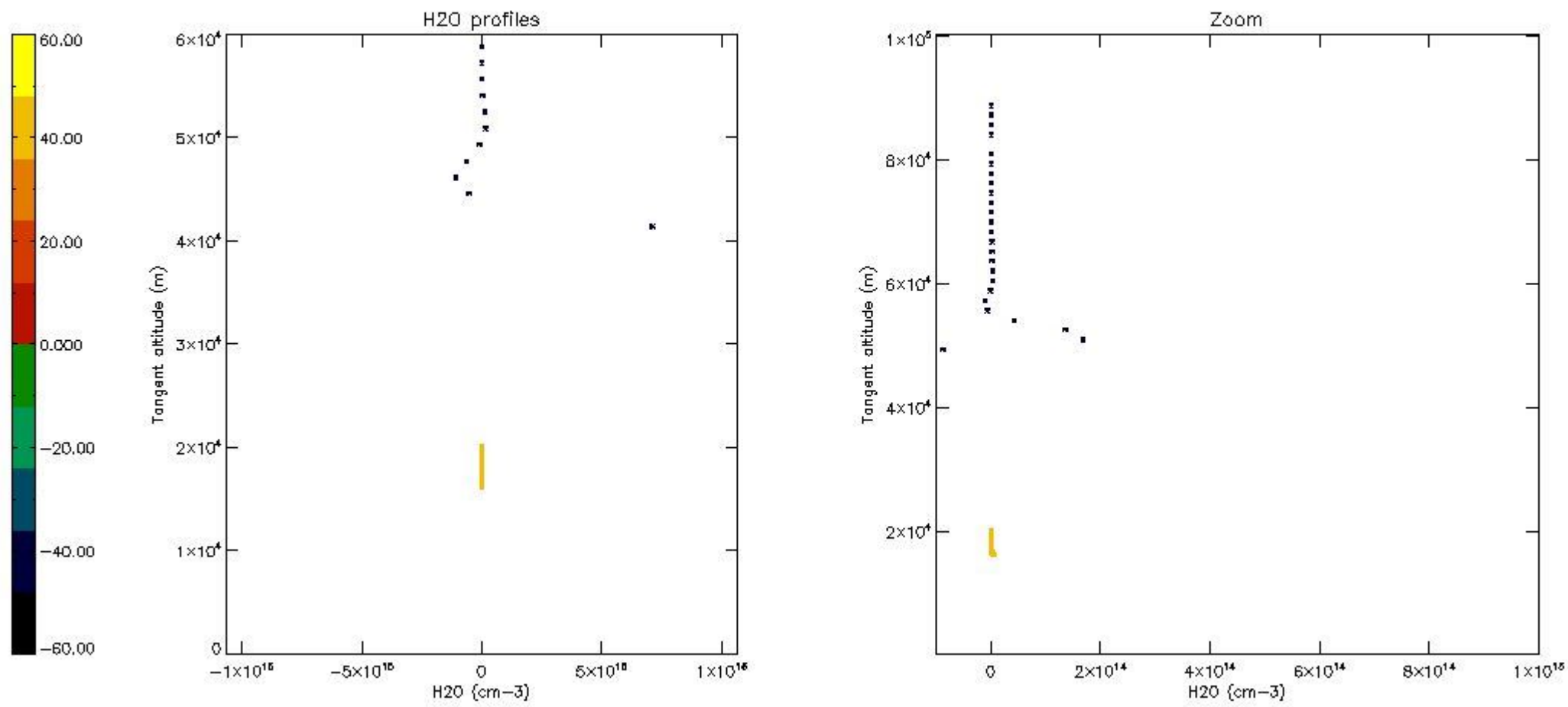
5.7 Plot NO3 profiles for all STD (dark without errors)

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	07-OCT-2002 00:03:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-OCT-2002 00:03:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-OCT-2002 00:03:39

GOMOS Level 2 Daily Report

SUMMARY

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

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

Item	Value
Time of report generation	17APR2013 19:14:52
Data source version	GOMOS/6.01
Start time of products	07-10-2002 (07OCT2002 00:00:00)
Stop time of products	08-10-2002 (08OCT2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	247
Nb of prods with errors	1

2. Summary of processed GOM_NL__2P products.

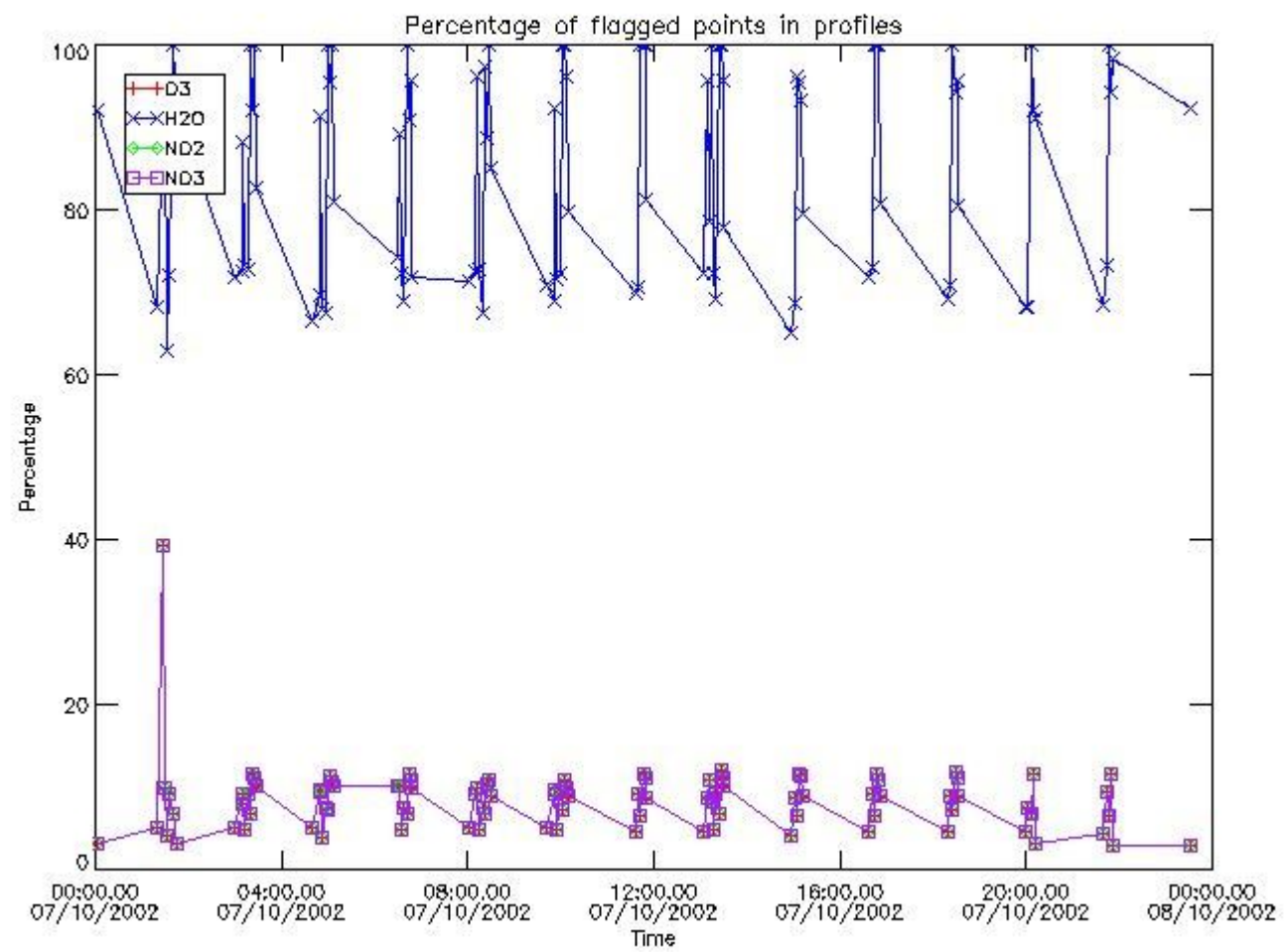
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021007_000339_000001712010_00088_03148_2306.N1	07-OCT-2002 00:03:39	Dark	171.00	139	9Bet Lep	2.8330	5600.0	342	3148	No
2	GOM_NL__2PRFIN20021007_001056_000000532010_00088_03148_2307.N1	07-OCT-2002 00:10:56	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	3148	No
3	GOM_NL__2PRFIN20021007_001529_000000522010_00088_03148_2308.N1	07-OCT-2002 00:15:29	Straylight	51.500	18	24Alp PsA	1.1660	9700.0	103	3148	No
4	GOM_NL__2PRFIN20021007_001741_000000552010_00088_03148_2309.N1	07-OCT-2002 00:17:41	Straylight	55.000	52	16Bet Cet	2.0370	4500.0	110	3148	No
5	GOM_NL__2PRFIN20021007_001956_000002172010_00088_03148_2310.N1	07-OCT-2002 00:19:56	Bright	217.00	165	34Gam Eri	2.9500	3200.0	434	3148	No
6	GOM_NL__2PRFIN20021007_002745_000000462010_00088_03148_2311.N1	07-OCT-2002 00:27:45	Bright	46.000	140	88Gam Peg	2.8340	26000.	92	3148	No
7	GOM_NL__2PRFIN20021007_003124_000000462010_00088_03148_2312.N1	07-OCT-2002 00:31:24	Bright	45.500	93	53Bet Peg	2.5200	3100.0	91	3148	No
8	GOM_NL__2PRFIN20021007_003502_000000532010_00088_03148_2313.N1	07-OCT-2002 00:35:02	Bright	52.500	53	43Bet And	2.0480	3300.0	105	3148	No
9	GOM_NL__2PRFIN20021007_003736_000000632010_00088_03148_2314.N1	07-OCT-2002 00:37:36	Bright	63.000	173	4Bet Tri	3.0040	8900.0	126	3148	No
10	GOM_NL__2PRFIN20021007_004010_000000482010_00088_03148_2315.N1	07-OCT-2002 00:40:10	Bright	47.500	68	18Alp Cas	2.2250	4500.0	95	3148	No
11	GOM_NL__2PRFIN20021007_004135_000000482010_00088_03148_2316.N1	07-OCT-2002 00:41:35	Bright	47.500	76	27Gam Cas	2.3000	30000.	95	3148	No
12	GOM_NL__2PRFIN20021007_004443_000000612010_00088_03148_2317.N1	07-OCT-2002 00:44:43	Bright	61.000	160	23Gam Per	2.9300	4700.0	122	3148	No
13	GOM_NL__2PRFIN20021007_004840_000000442010_00088_03148_2318.N1	07-OCT-2002 00:48:40	Bright	44.000	49	1Alp UMi	1.9900	6300.0	88	3148	No
14	GOM_NL__2PRFIN20021007_005108_000000452010_00088_03148_2319.N1	07-OCT-2002 00:51:08	Bright	45.000	60	7Bet UMi	2.0810	3950.0	90	3148	No
15	GOM_NL__2PRFIN20021007_005646_000000452010_00088_03148_2320.N1	07-OCT-2002 00:56:46	Bright	44.500	36	50Alp UMa	1.8000	6300.0	89	3148	No
16	GOM_NL__2PRFIN20021007_005817_000000442010_00088_03148_2321.N1	07-OCT-2002 00:58:17	Bright	44.000	82	48Bet UMa	2.3650	10600.	88	3148	No
17	GOM_NL__2PRFIN20021007_010134_000000442010_00088_03148_2322.N1	07-OCT-2002 01:01:34	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	3148	No
18	GOM_NL__2PRFIN20021007_010655_000000772010_00088_03148_2323.N1	07-OCT-2002 01:06:55	Bright	77.000	24	66Alp Gem	1.5800	10200.	154	3148	No
19	GOM_NL__2PRFIN20021007_011255_000001812010_00088_03148_2324.N1	07-OCT-2002 01:12:55	Straylight	181.00	170	27Eps Gem	3.0000	9700.0	362	3148	No
20	GOM_NL__2PRFIN20021007_011915_000001002010_00088_03148_2325.N1	07-OCT-2002 01:19:15	Dark	99.500	8	10Alp CMi	0.40000	6500.0	199	3148	No
21	GOM_NL__2PRFIN20021007_012750_000000522010_00088_03148_2326.N1	07-OCT-2002 01:27:50	Dark	51.500	65	Lam Vel	2.2040	4400.0	103	3148	No
22	GOM_NL__2PRFIN20021007_012951_000000632010_00088_03148_2327.N1	07-OCT-2002 01:29:51	Dark	62.500	88	31Eta CMa	2.4480	20000.	125	3148	No
23	GOM_NL__2PRFIN20021007_013203_000001242010_00088_03148_2328.N1	07-OCT-2002 01:32:03	Dark	124.00	1	9Alp CMa	-1.4400	11000.	248	3148	No
24	GOM_NL__2PRFIN20021007_013603_000000562010_00089_03149_2304.N1	07-OCT-2002 01:36:03	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	3149	No
25	GOM_NL__2PRFIN20021007_013918_000000762010_00089_03149_2305.N1	07-OCT-2002 01:39:18	Dark	76.000	108	Alp Col	2.6520	15200.	152	3149	No
26	GOM_NL__2PRFIN20021007_014417_000001612010_00089_03149_2306.N1	07-OCT-2002 01:44:17	Dark	160.50	139	9Bet Lep	2.8330	5600.0	321	3149	No
27	GOM_NL__2PRFIN20021007_015133_000000502010_00089_03149_2307.N1	07-OCT-2002 01:51:33	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	3149	No
28	GOM_NL__2PRFIN20021007_015605_000000512010_00089_03149_2308.N1	07-OCT-2002 01:56:05	Straylight	50.500	18	24Alp PsA	1.1660	9700.0	101	3149	No
29	GOM_NL__2PRFIN20021007_015818_000000552010_00089_03149_2309.N1	07-OCT-2002 01:58:18	Straylight	55.000	52	16Bet Cet	2.0370	4500.0	110	3149	No
30	GOM_NL__2PRFIN20021007_020031_000002172010_00089_03149_2310.N1	07-OCT-2002 02:00:31	Bright	217.00	165	34Gam Eri	2.9500	3200.0	434	3149	No
31	GOM_NL__2PRFIN20021007_020821_000000472010_00089_03149_2311.N1	07-OCT-2002 02:08:21	Bright	46.500	140	88Gam Peg	2.8340	26000.	93	3149	No
32	GOM_NL__2PRFIN20021007_021200_000000472010_00089_03149_2312.N1	07-OCT-2002 02:12:00	Bright	47.000	93	53Bet Peg	2.5200	3100.0	94	3149	No
33	GOM_NL__2PRFIN20021007_021537_000000552010_00089_03149_2313.N1	07-OCT-2002 02:15:37	Bright	54.500	53	43Bet And	2.0480	3300.0	109	3149	No
34	GOM_NL__2PRFIN20021007_021811_000000642010_00089_03149_2314.N1	07-OCT-2002 02:18:11	Bright	63.500	173	4Bet Tri	3.0040	8900.0	127	3149	No
35	GOM_NL__2PRFIN20021007_022046_000000492010_00089_03149_2315.N1	07-OCT-2002 02:20:46	Bright	49.000	68	18Alp Cas	2.2250	4500.0	98	3149	No
36	GOM_NL__2PRFIN20021007_022210_000000482010_00089_03149_2316.N1	07-OCT-2002 02:22:10	Bright	47.500	76	27Gam Cas	2.3000	30000.	95	3149	No
37	GOM_NL__2PRFIN20021007_022518_000000592010_00089_03149_2317.N1	07-OCT-2002 02:25:18	Bright	58.500	160	23Gam Per	2.9300	4700.0	117	3149	No
38	GOM_NL__2PRFIN20021007_022916_000000432010_00089_03149_2318.N1	07-OCT-2002 02:29:16	Bright	42.500	49	1Alp UMi	1.9900	6300.0	85	3149	No
39	GOM_NL__2PRFIN20021007_023143_000000452010_00089_03149_2319.N1	07-OCT-2002 02:31:43	Bright	45.000	60	7Bet UMi	2.0810	3950.0	90	3149	No
40	GOM_NL__2PRFIN20021007_023722_000000452010_00089_03149_2320.N1	07-OCT-2002 02:37:22	Bright	44.500	36	50Alp UMa	1.8000	6300.0	89	3149	No
41	GOM_NL__2PRFIN20021007_023853_000000452010_00089_03149_2321.N1	07-OCT-2002 02:38:53	Bright	44.500	82	48Bet UMa	2.3650	10600.	89	3149	No
42	GOM_NL__2PRFIN20021007_024210_000000582010_00089_03149_2322.N1	07-OCT-2002 02:42:10	Bright	58.000	174	52Psi UMa	3.0040	4400.0	116	3149	No

220	GOM_NL__2PRFIN20021007_165658_000000492010_00098_03158_8936.N1	07-OCT-2002 16:56:58	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	3158	No
221	GOM_NL__2PRFIN20021007_170130_000000512010_00098_03158_8937.N1	07-OCT-2002 17:01:30	Straylight	51.000	18	24Alp PsA	1.1660	9700.0	102	3158	No
222	GOM_NL__2PRFIN20021007_181826_000001142010_00099_03159_8929.N1	07-OCT-2002 18:18:26	Dark	114.00	1	9Alp CMa	-1.4400	11000.	228	3159	No
223	GOM_NL__2PRFIN20021007_182210_000000572010_00099_03159_8930.N1	07-OCT-2002 18:22:10	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	3159	No
224	GOM_NL__2PRFIN20021007_182533_000000782010_00099_03159_8931.N1	07-OCT-2002 18:25:33	Dark	78.000	108	Alp Col	2.6520	15200.	156	3159	No
225	GOM_NL__2PRFIN20021007_182824_000000442010_00099_03159_8932.N1	07-OCT-2002 18:28:24	Dark	43.500	135	Bet Hyi	2.8200	5800.0	87	3159	No
226	GOM_NL__2PRFIN20021007_183055_000000462010_00099_03159_8933.N1	07-OCT-2002 18:30:55	Dark	46.000	143	Alp Hyi	2.8570	7200.0	92	3159	No
227	GOM_NL__2PRFIN20021007_183223_000000572010_00099_03159_8934.N1	07-OCT-2002 18:32:23	Dark	57.000	9	Alp Eri	0.45300	24000.	114	3159	No
228	GOM_NL__2PRFIN20021007_183424_000000612010_00099_03159_8935.N1	07-OCT-2002 18:34:24	Straylight	60.500	157	The1Eri	2.9060	9300.0	121	3159	No
229	GOM_NL__2PRFIN20021007_183734_000000502010_00099_03159_8936.N1	07-OCT-2002 18:37:34	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	3159	No
230	GOM_NL__2PRFIN20021007_195905_000001152010_00100_03160_8929.N1	07-OCT-2002 19:59:05	Dark	115.00	1	9Alp CMa	-1.4400	11000.	230	3160	No
231	GOM_NL__2PRFIN20021007_200247_000000682010_00100_03160_8930.N1	07-OCT-2002 20:02:47	Dark	68.000	2	Alp Car	-0.73600	7000.0	136	3160	No
232	GOM_NL__2PRFIN20021007_200610_000000772010_00100_03160_8931.N1	07-OCT-2002 20:06:10	Dark	76.500	108	Alp Col	2.6520	15200.	153	3160	No
233	GOM_NL__2PRFIN20021007_200900_000000452010_00100_03160_8932.N1	07-OCT-2002 20:09:00	Dark	44.500	135	Bet Hyi	2.8200	5800.0	89	3160	No
234	GOM_NL__2PRFIN20021007_201123_000001642010_00100_03160_8933.N1	07-OCT-2002 20:11:23	Dark	163.50	139	9Bet Lep	2.8330	5600.0	327	3160	No
235	GOM_NL__2PRFIN20021007_201810_000000512010_00100_03160_8934.N1	07-OCT-2002 20:18:10	Straylight	50.500	84	Alp Phe	2.3970	4500.0	101	3160	No
236	GOM_NL__2PRFIN20021007_213943_000001182010_00101_03161_8929.N1	07-OCT-2002 21:39:43	Dark	117.50	1	9Alp CMa	-1.4400	11000.	235	3161	No
237	GOM_NL__2PRFIN20021007_214324_000000552010_00101_03161_8930.N1	07-OCT-2002 21:43:24	Dark	54.500	2	Alp Car	-0.73600	7000.0	109	3161	No
238	GOM_NL__2PRFIN20021007_214648_000000772010_00101_03161_8931.N1	07-OCT-2002 21:46:48	Dark	77.000	108	Alp Col	2.6520	15200.	154	3161	No
239	GOM_NL__2PRFIN20021007_214936_000000452010_00101_03161_8932.N1	07-OCT-2002 21:49:36	Dark	44.500	135	Bet Hyi	2.8200	5800.0	89	3161	No
240	GOM_NL__2PRFIN20021007_215201_000001772010_00101_03161_8933.N1	07-OCT-2002 21:52:01	Dark	176.50	139	9Bet Lep	2.8330	5600.0	353	3161	No
241	GOM_NL__2PRFIN20021007_233240_000001892010_00102_03162_2322.N1	07-OCT-2002 23:32:40	Dark	189.00	139	9Bet Lep	2.8330	5600.0	378	3162	No
242	GOM_NL__2PRFIN20021007_233923_000000492010_00102_03162_2323.N1	07-OCT-2002 23:39:23	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	3162	No
243	GOM_NL__2PRFIN20021007_234354_000000492010_00102_03162_2324.N1	07-OCT-2002 23:43:54	Straylight	49.000	18	24Alp PsA	1.1660	9700.0	98	3162	No
244	GOM_NL__2PRFIN20021007_234607_000000572010_00102_03162_2325.N1	07-OCT-2002 23:46:07	Straylight	56.500	52	16Bet Cet	2.0370	4500.0	113	3162	No
245	GOM_NL__2PRFIN20021007_234808_000002172010_00102_03162_2326.N1	07-OCT-2002 23:48:08	Bright	217.00	165	34Gam Eri	2.9500	3200.0	434	3162	No
246	GOM_NL__2PRFIN20021007_235607_000000452010_00102_03162_2327.N1	07-OCT-2002 23:56:07	Bright	45.000	140	88Gam Peg	2.8340	26000.	90	3162	No
247	GOM_NL__2PRFIN20021007_235948_000000462010_00102_03162_2328.N1	07-OCT-2002 23:59:48	Bright	46.000	93	53Bet Peg	2.5200	3100.0	92	3162	No

3. Quality information per product

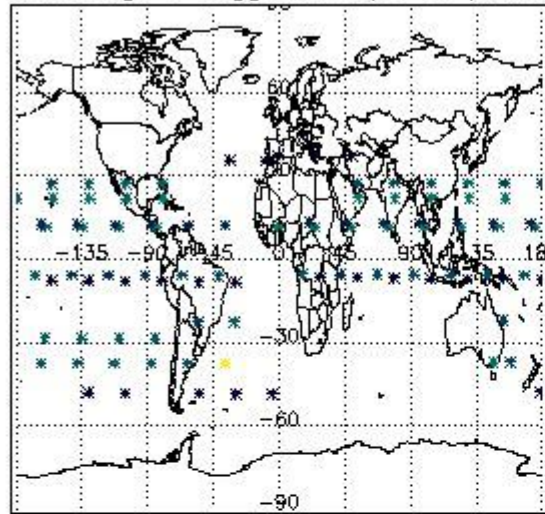
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

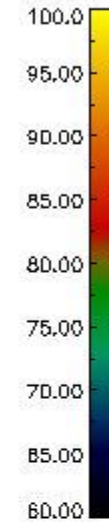
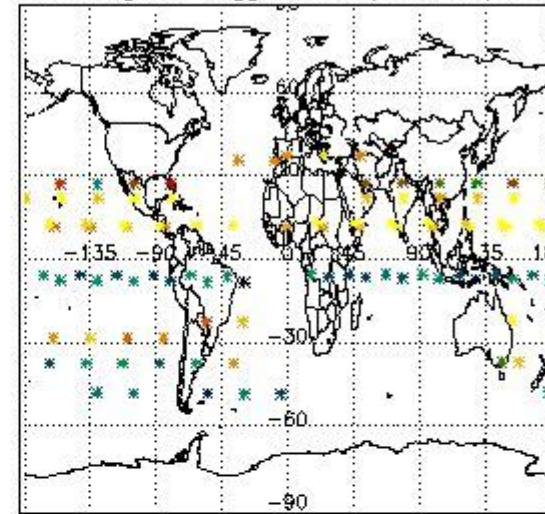


3.2 Plot quality information per product (world map)

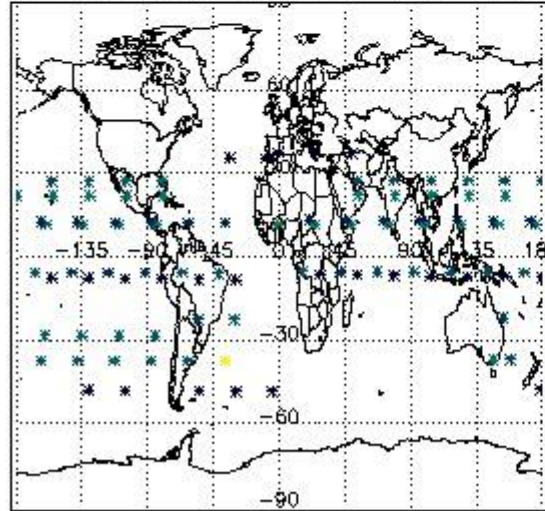
Percentage of flagged data per O3 profile



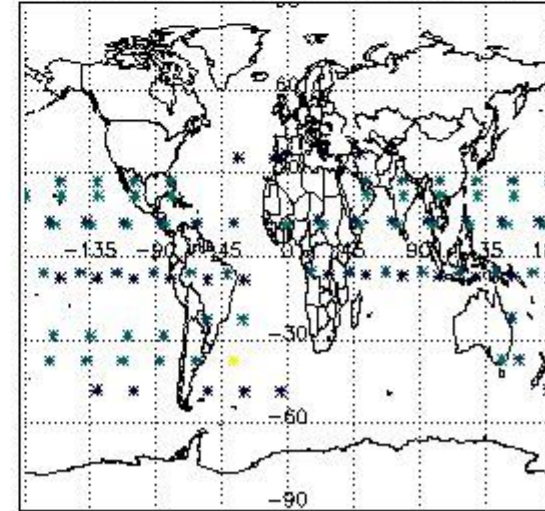
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

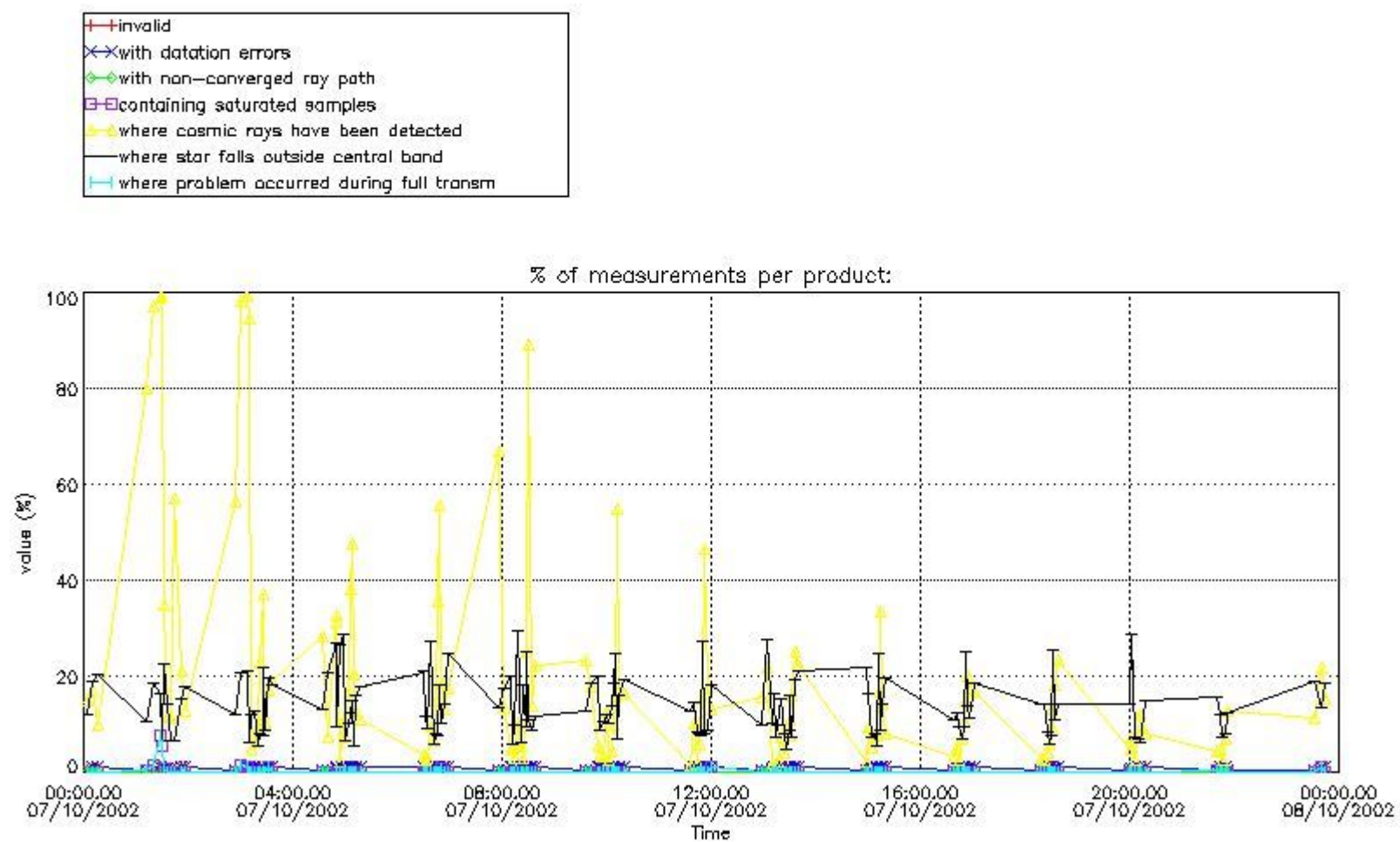


4. Level 1 quality information per product

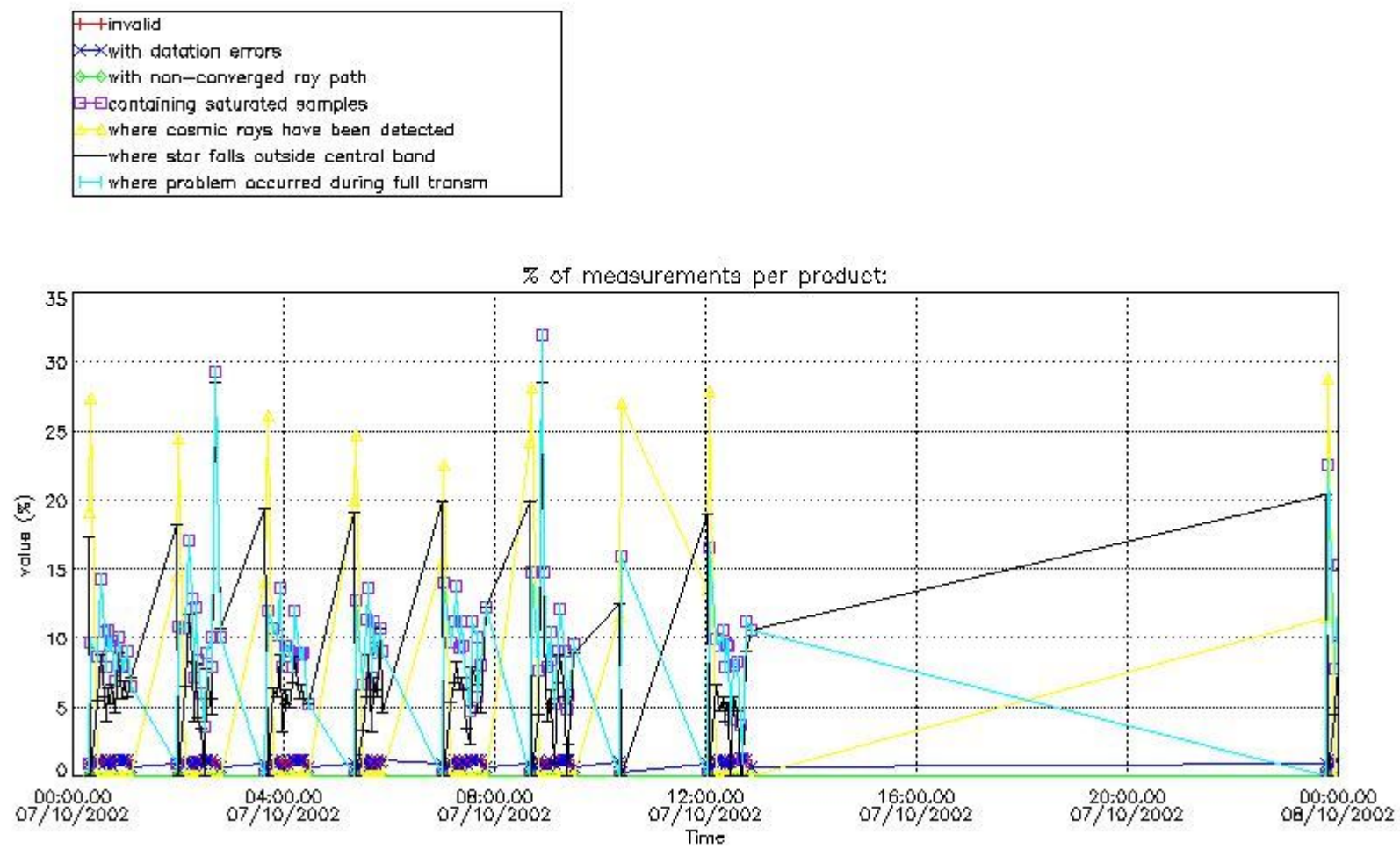
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

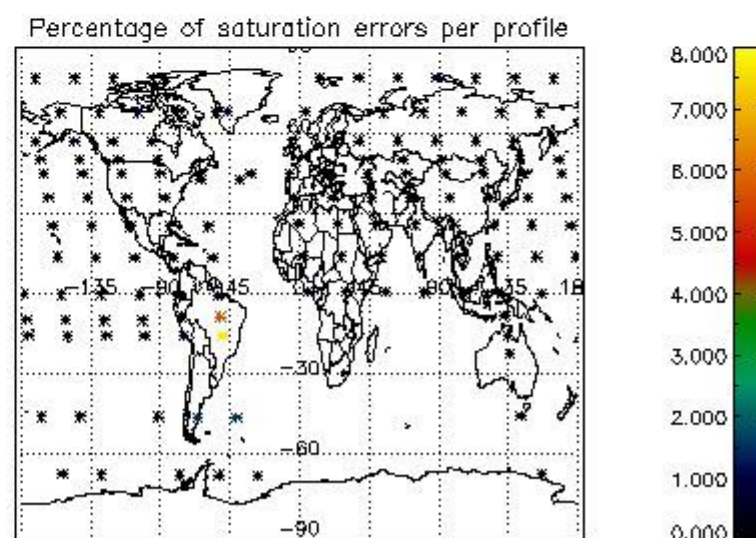
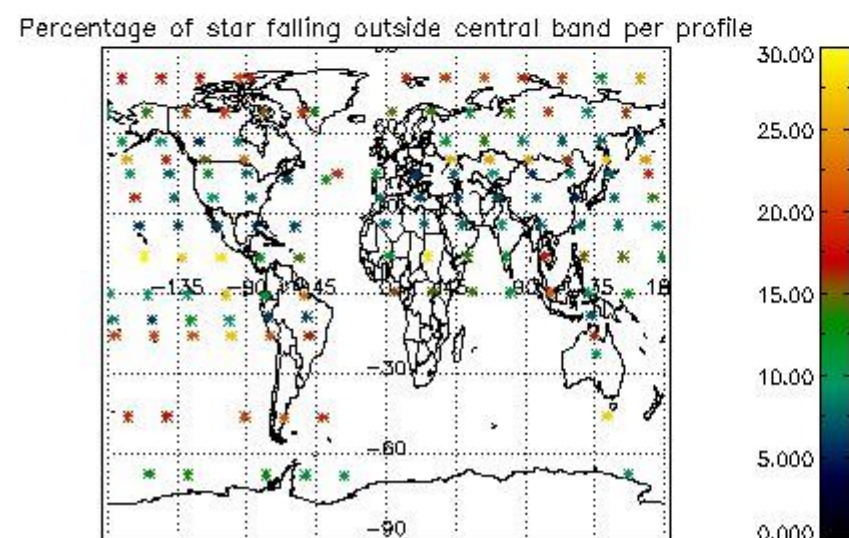
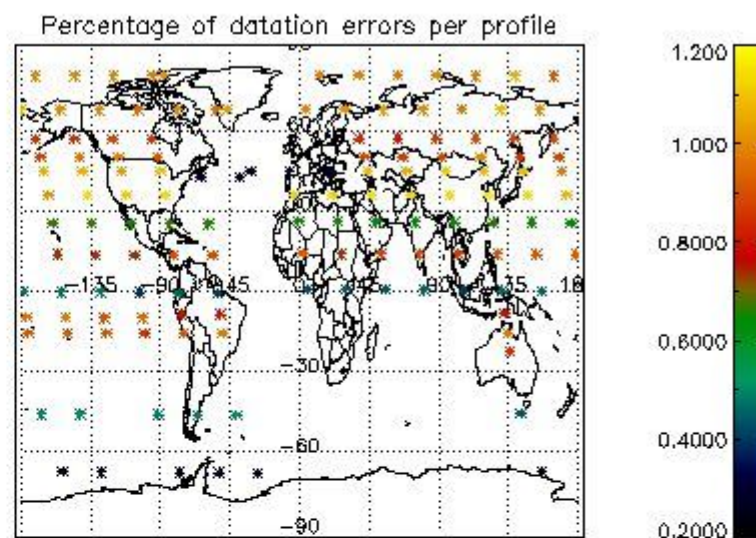
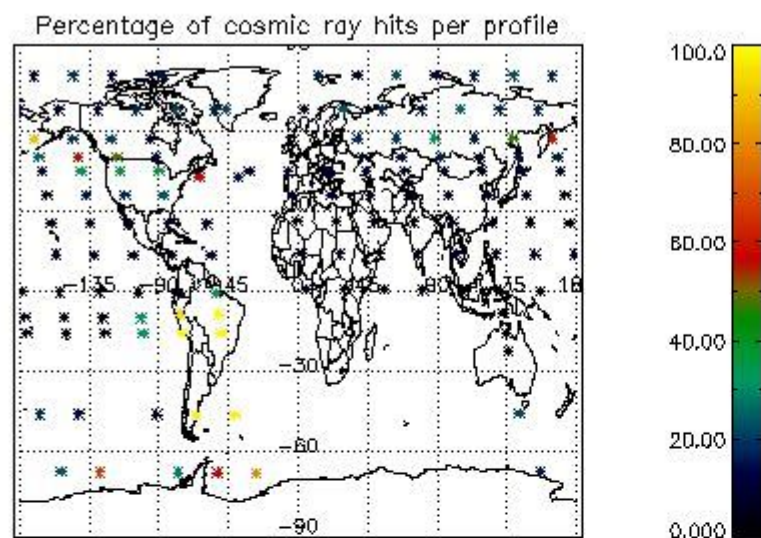


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

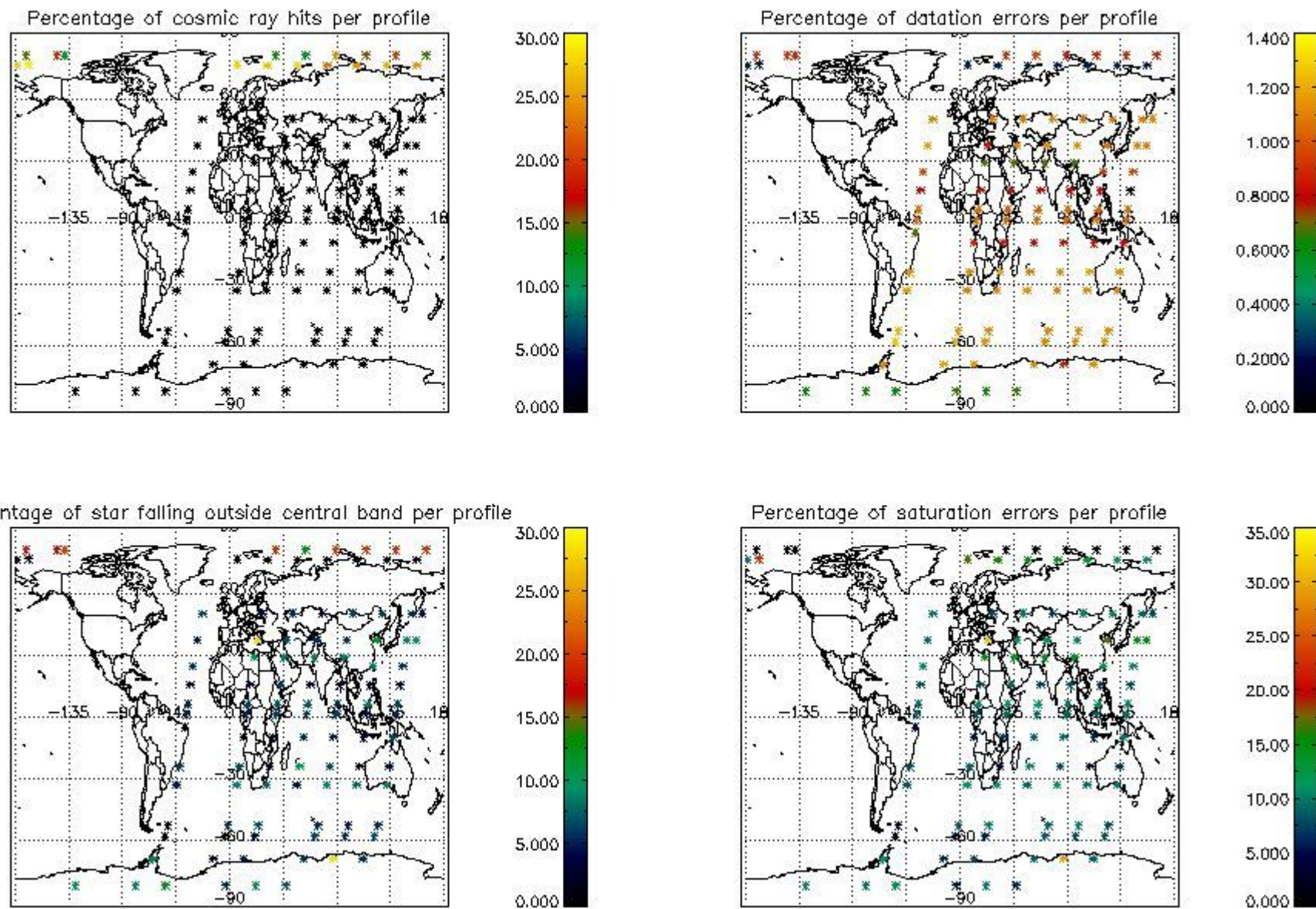


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

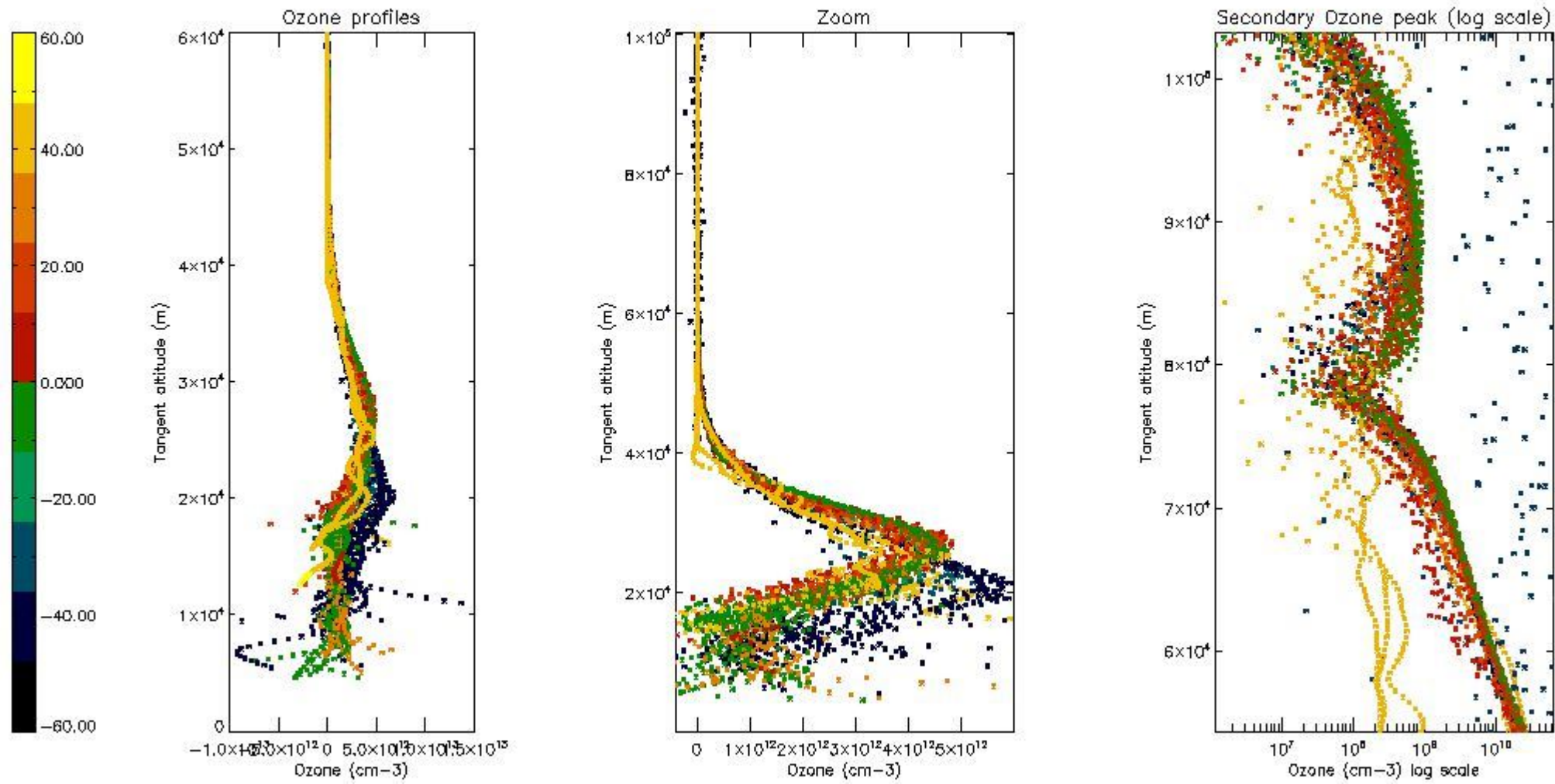
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	23

STD < 10	21
STD < 5	17

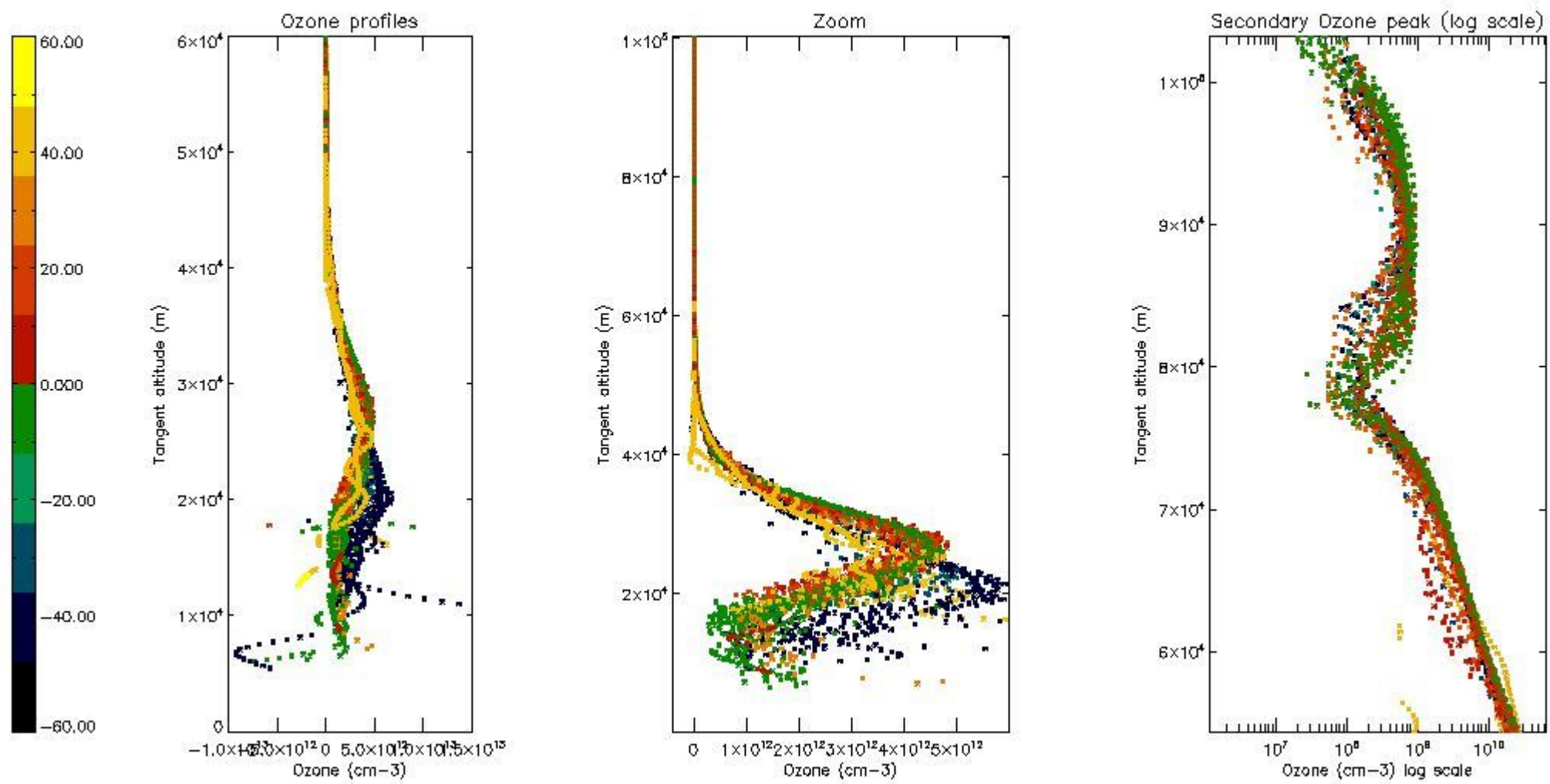
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



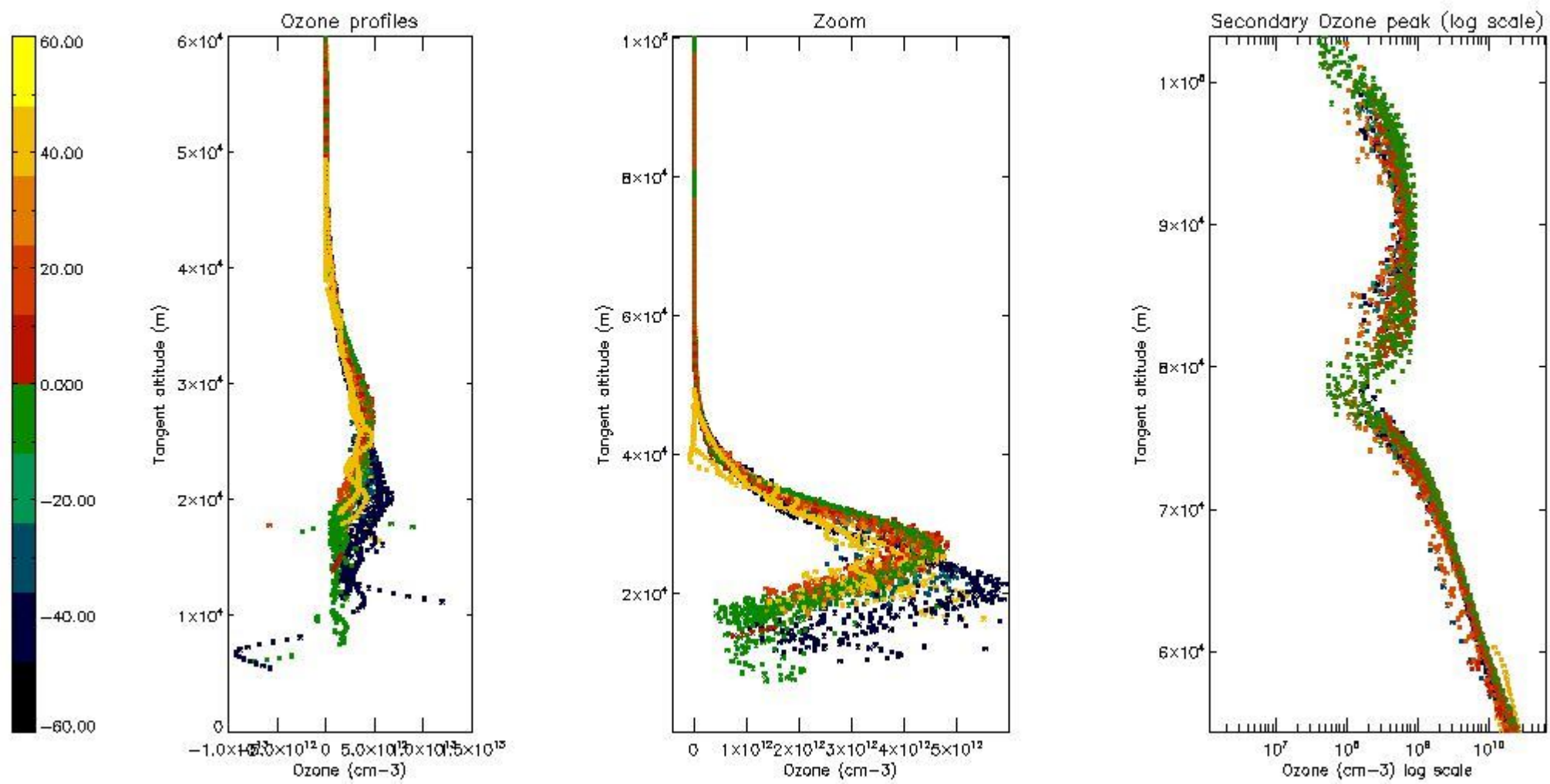
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



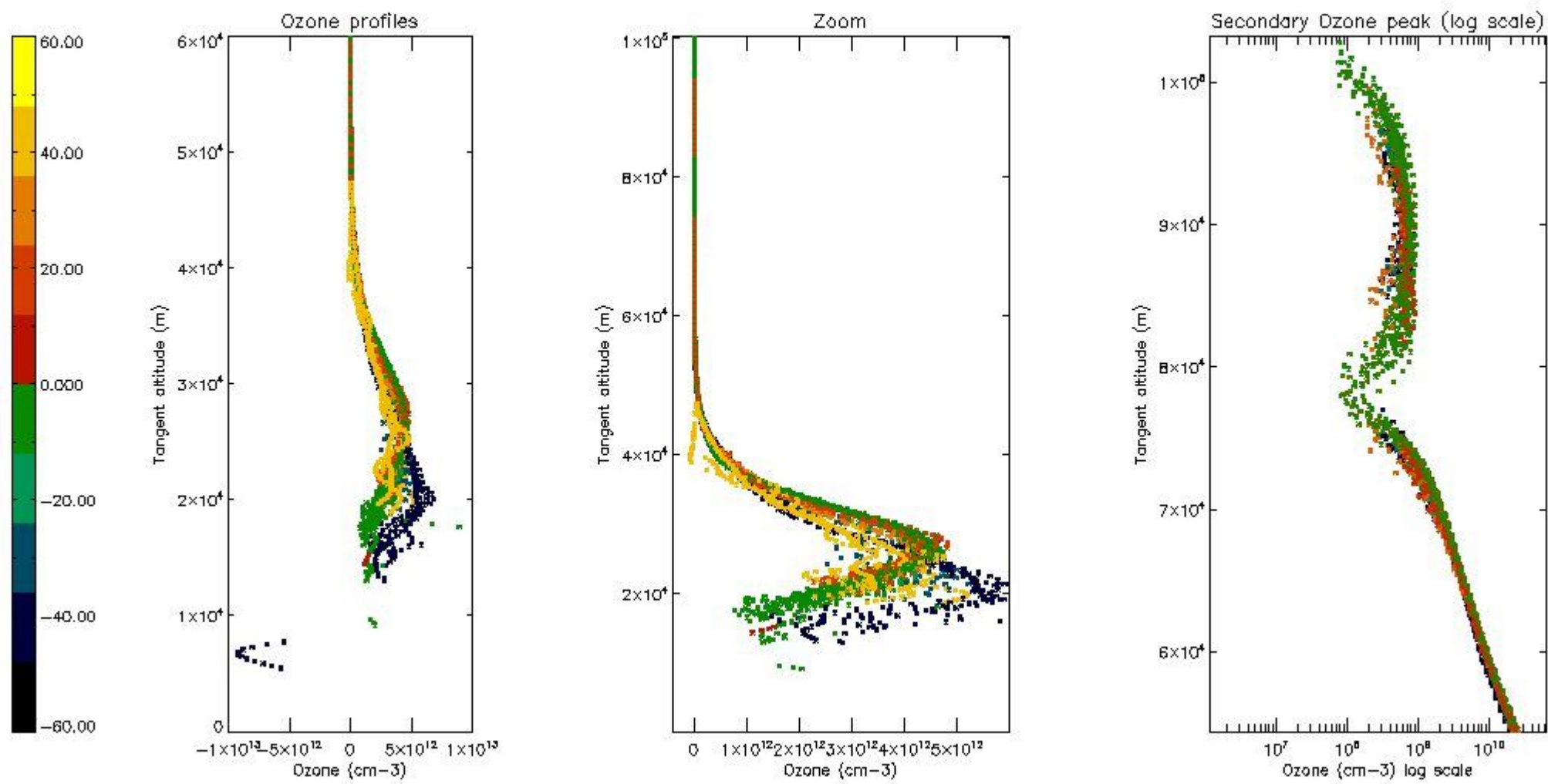
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



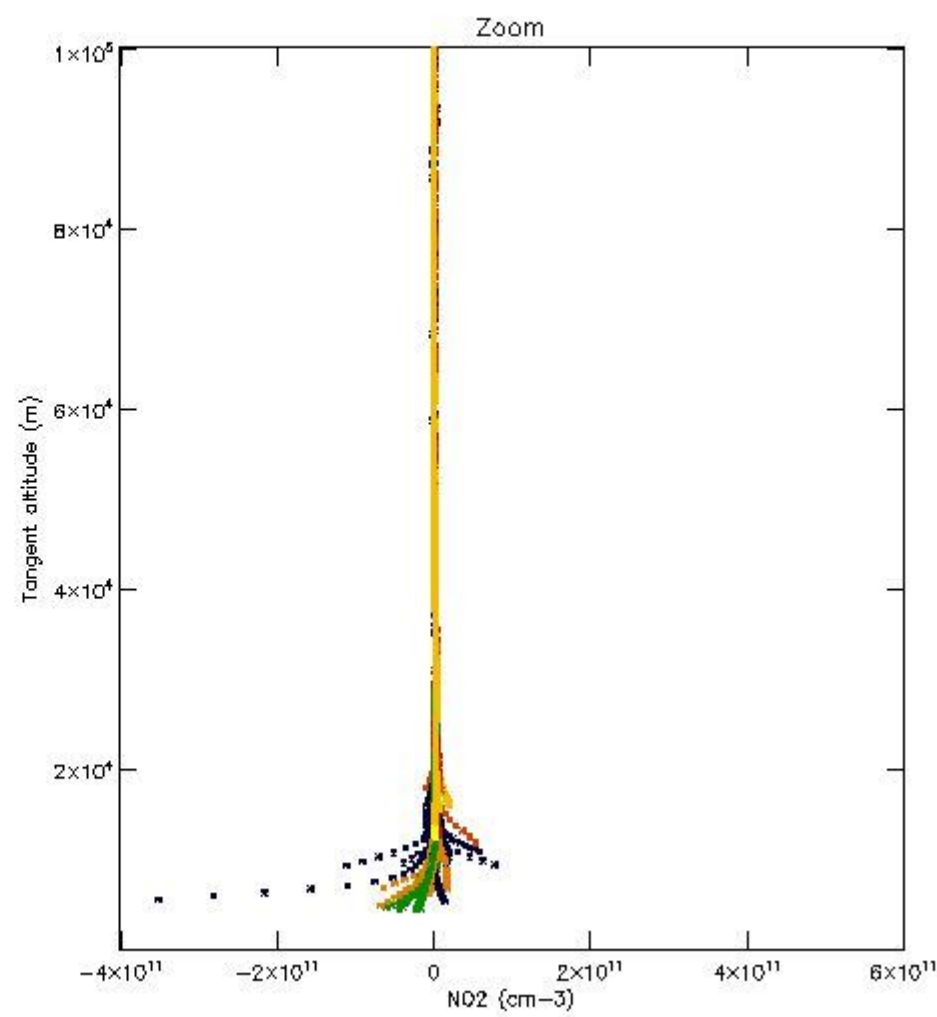
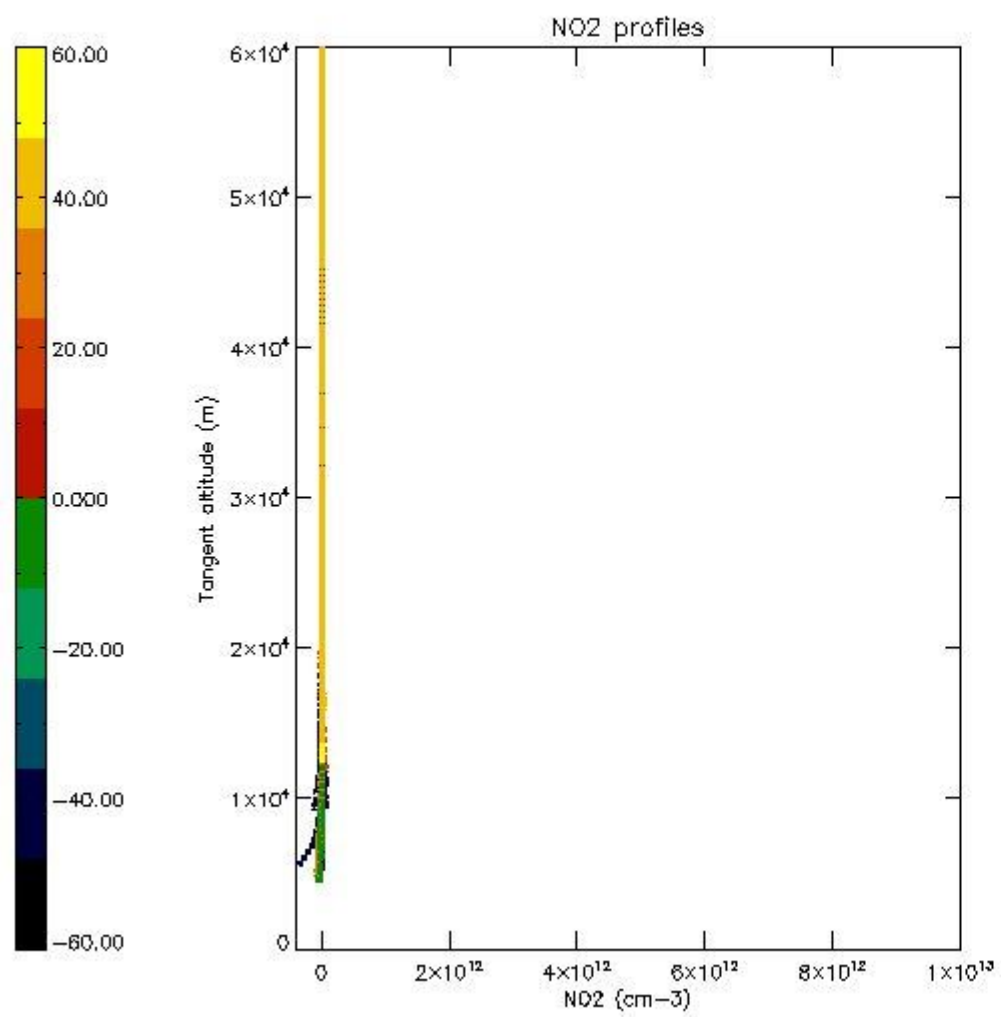
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



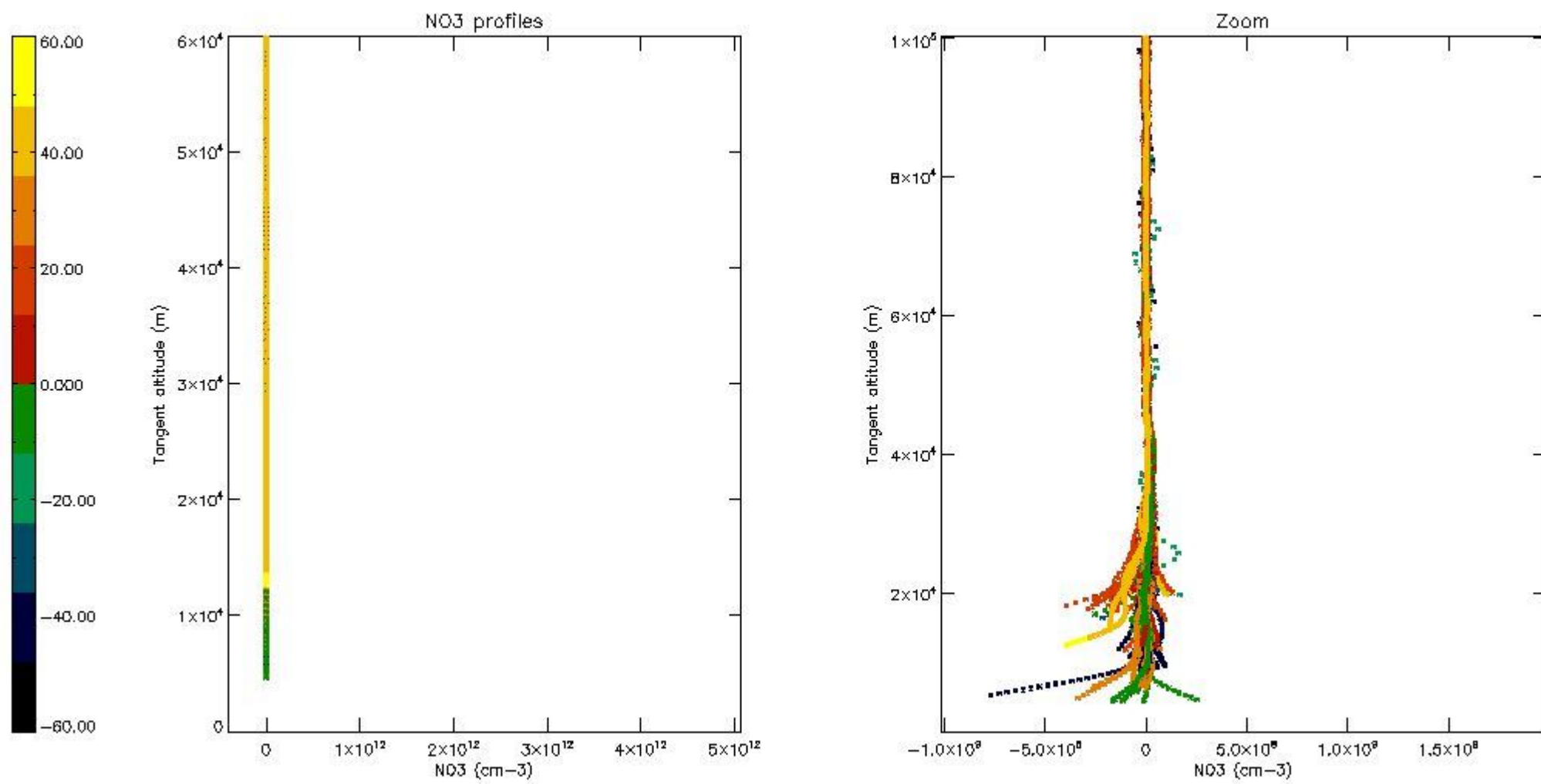
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



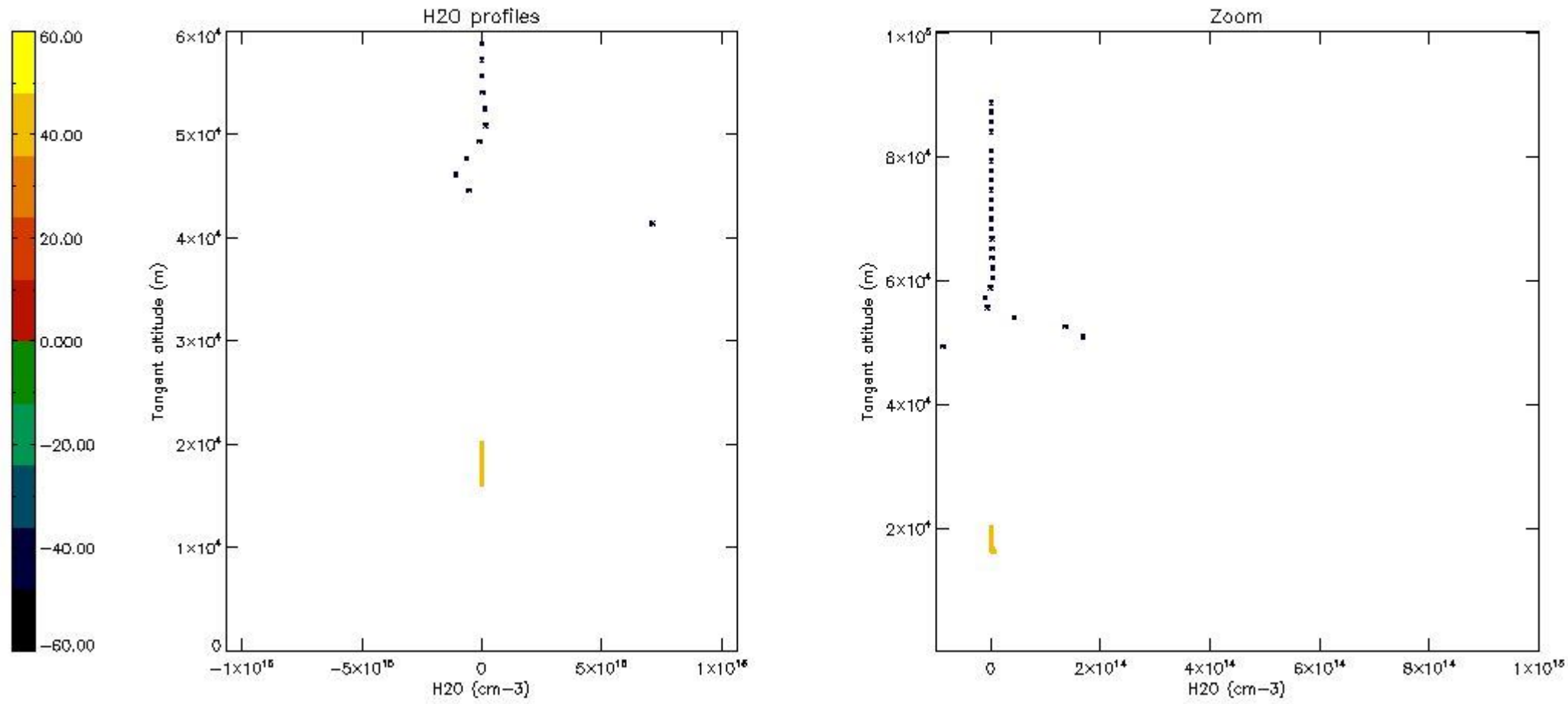
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

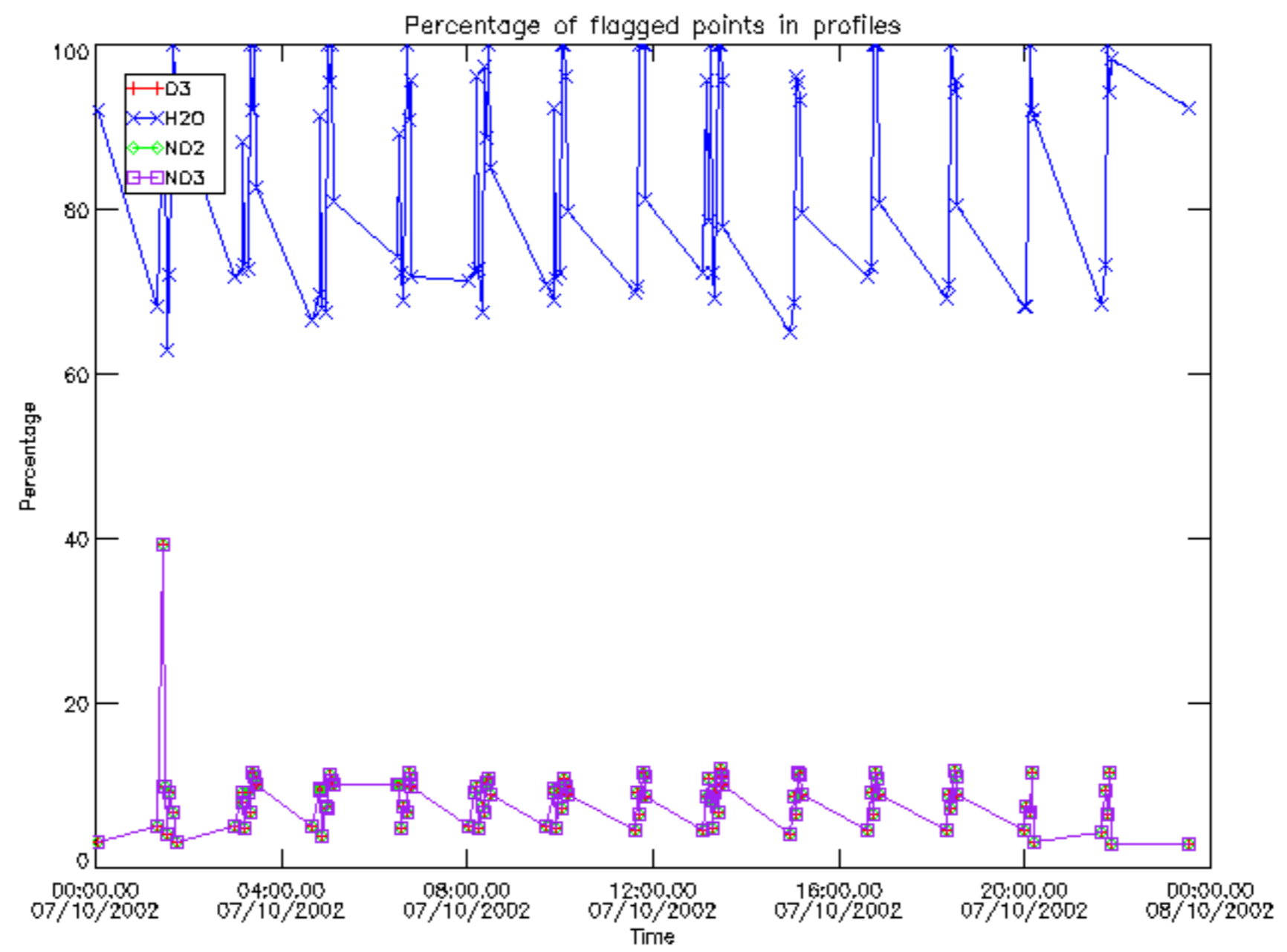
The colorbar represents the latitude.



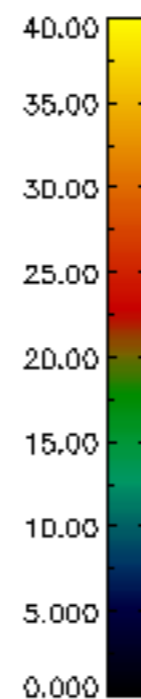
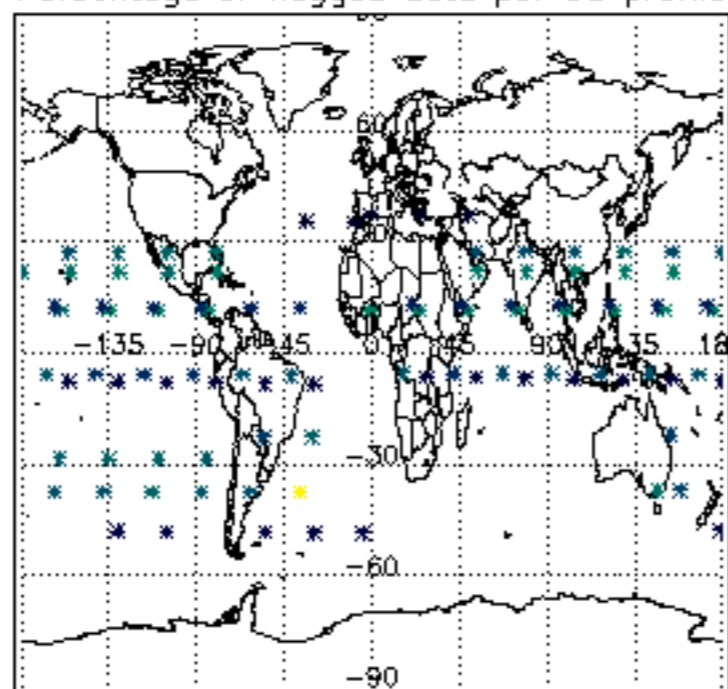
6. Auxiliary Data Files used for the production reported in section 2

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.

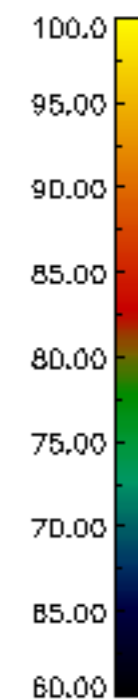
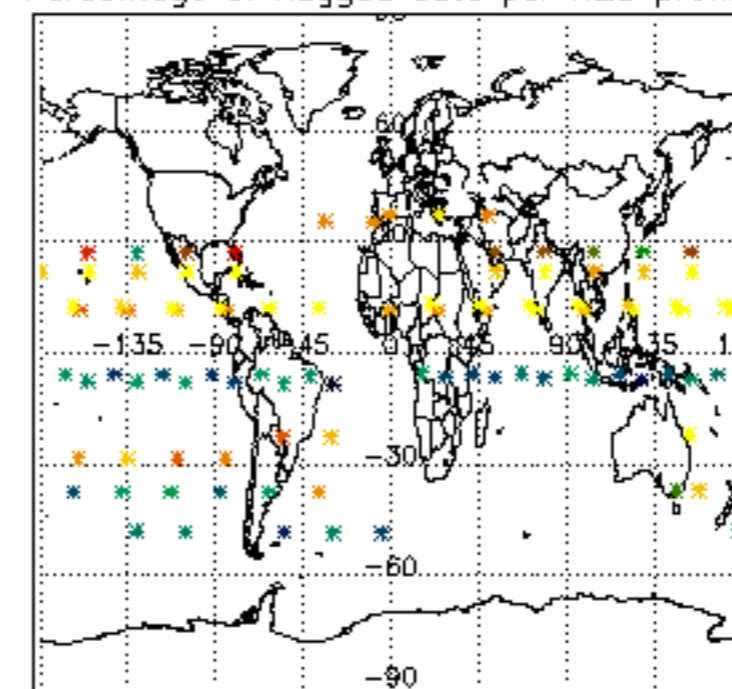
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	07-OCT-2002 00:03:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-OCT-2002 00:03:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-OCT-2002 00:03:39



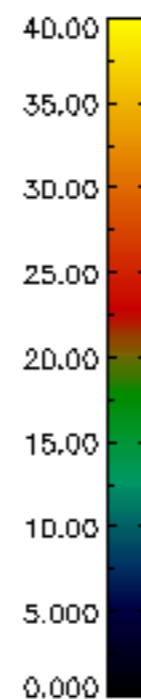
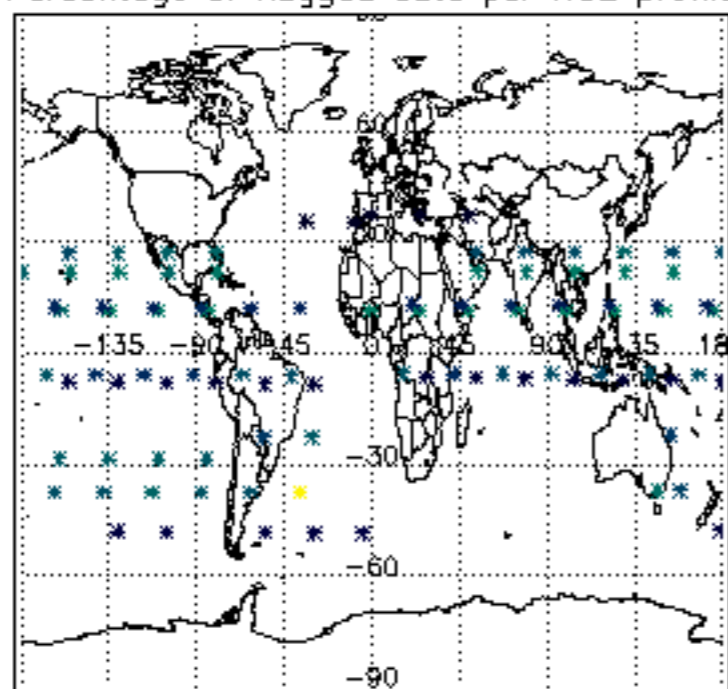
Percentage of flagged data per D3 profile



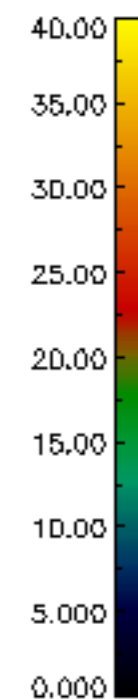
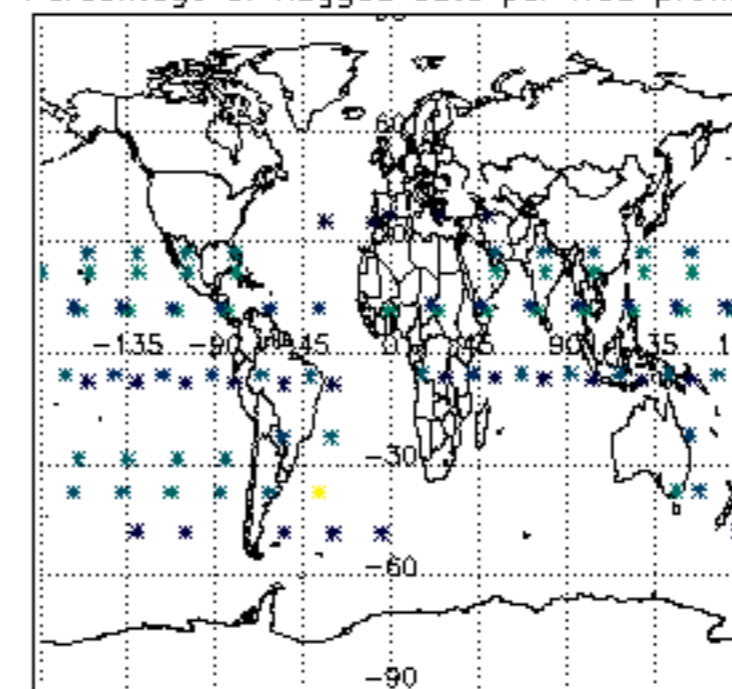
Percentage of flagged data per H2O profile

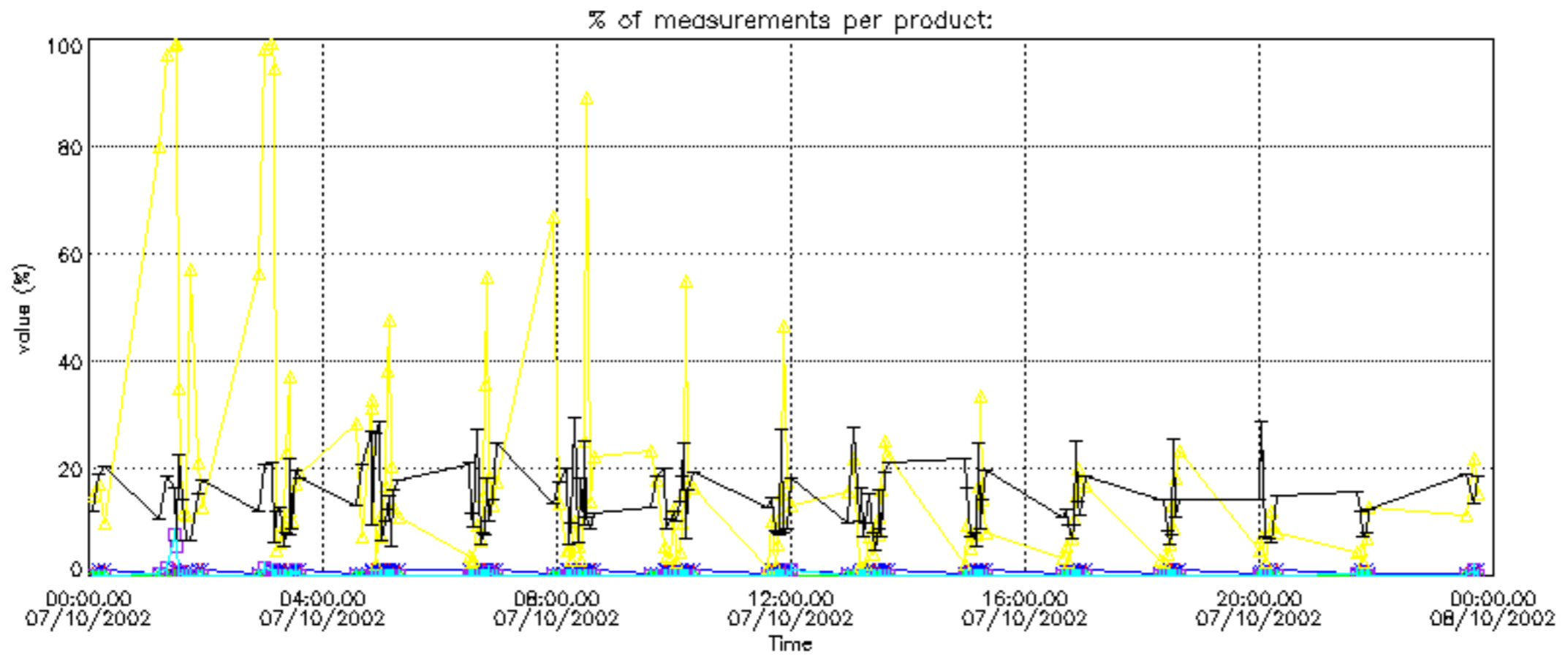


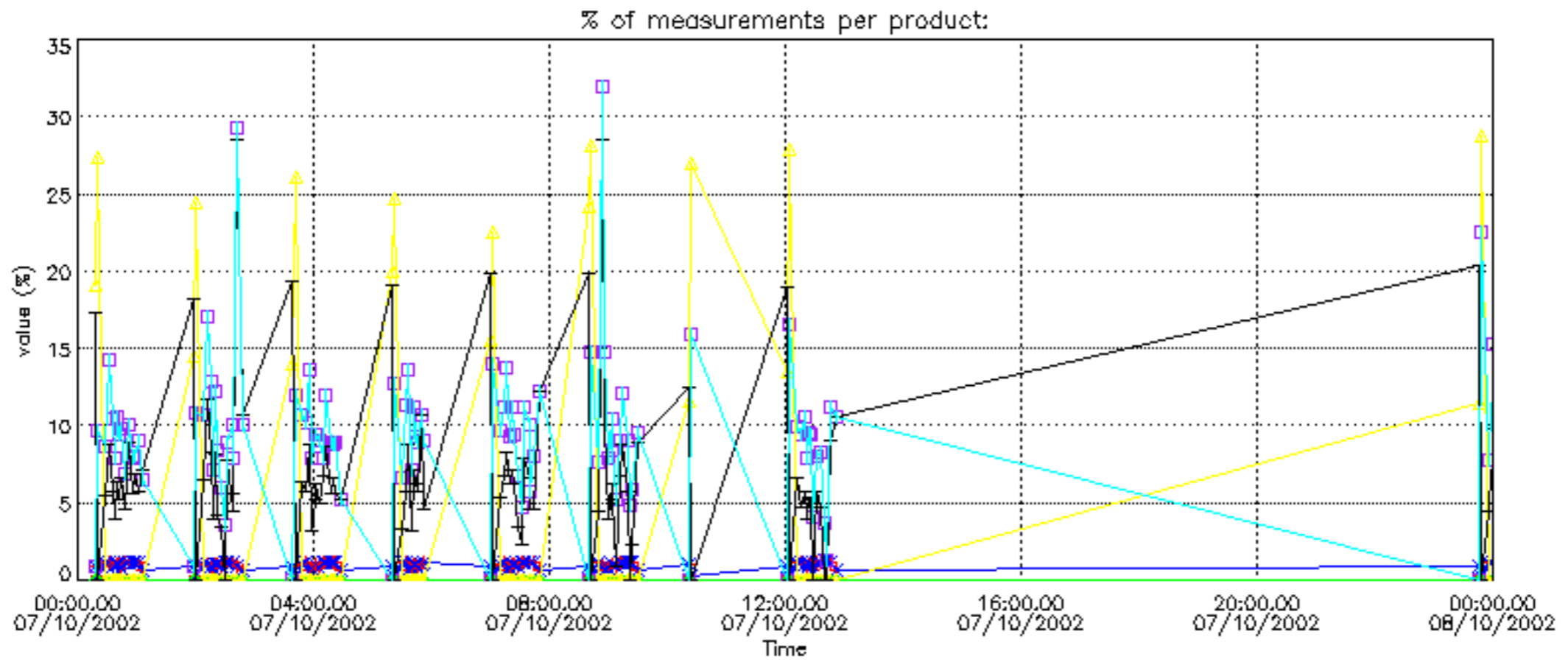
Percentage of flagged data per NO2 profile



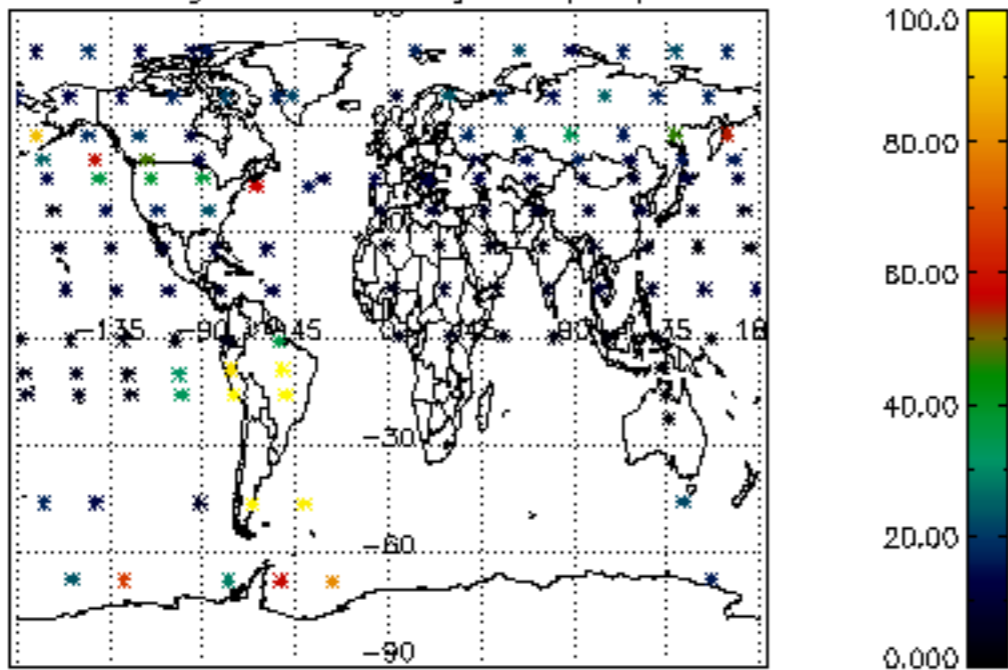
Percentage of flagged data per NO3 profile



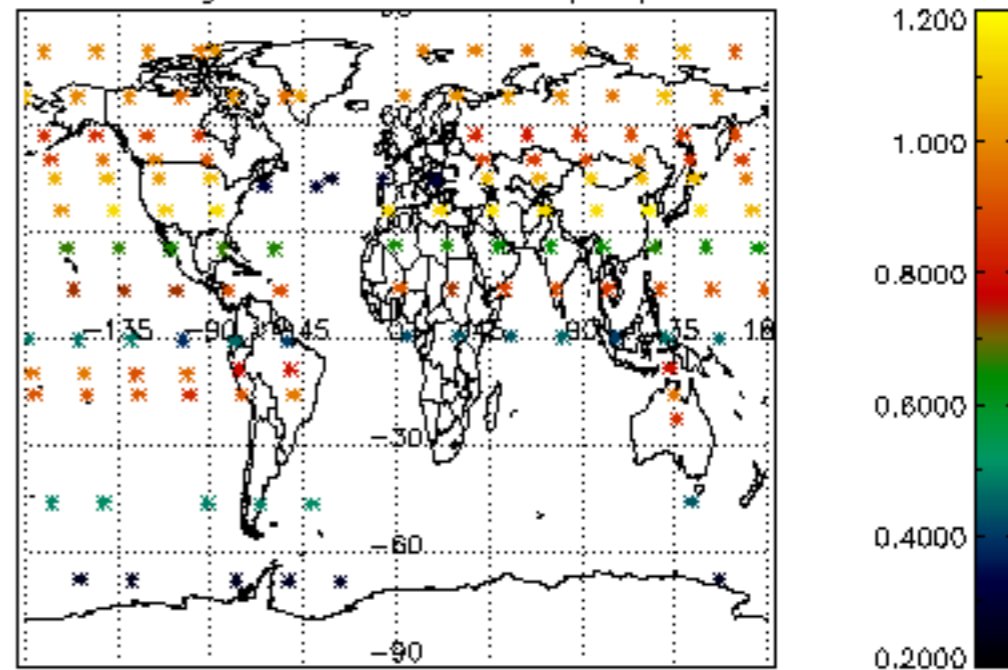




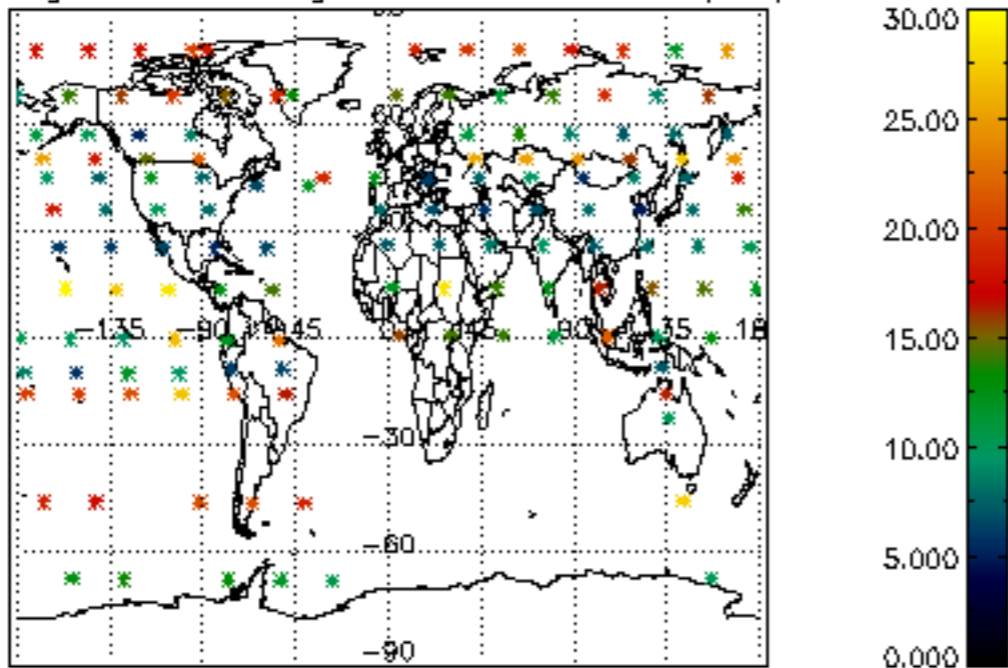
Percentage of cosmic ray hits per profile



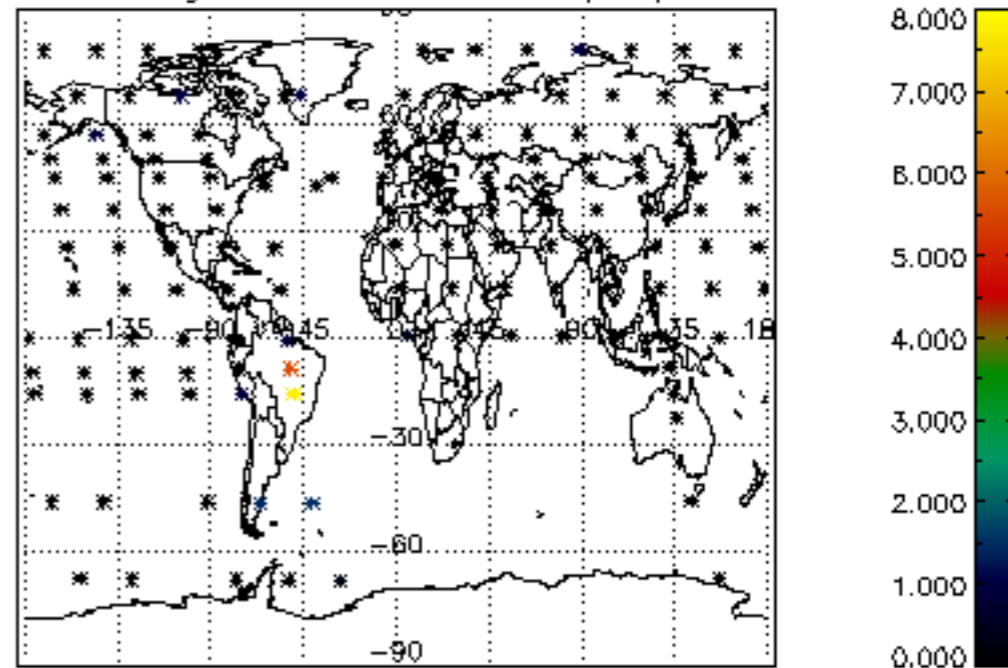
Percentage of datation errors per profile



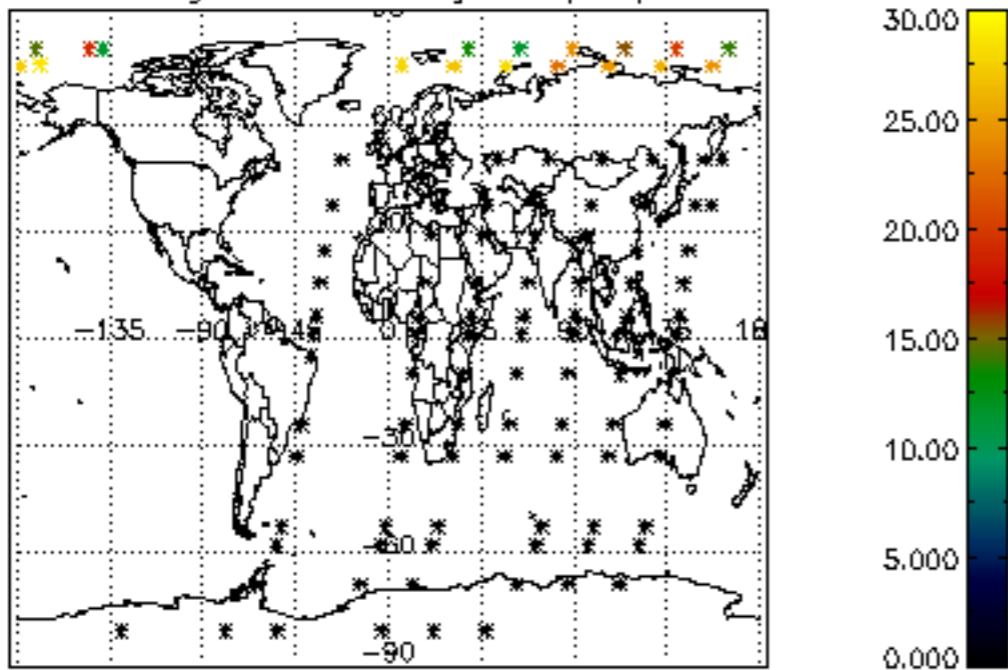
Percentage of star falling outside central band per profile



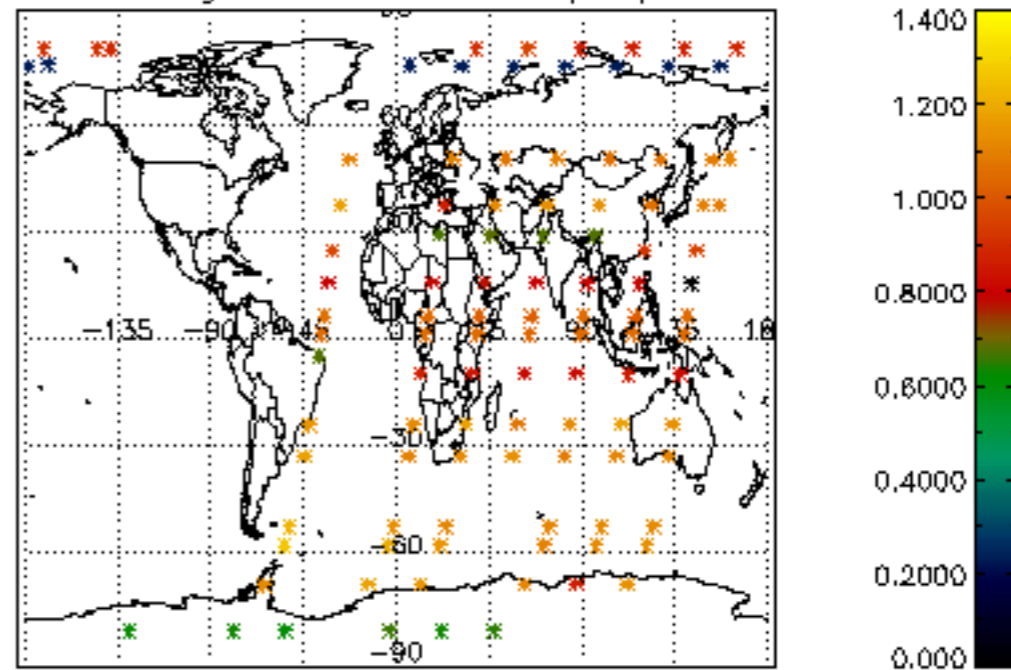
Percentage of saturation errors per profile



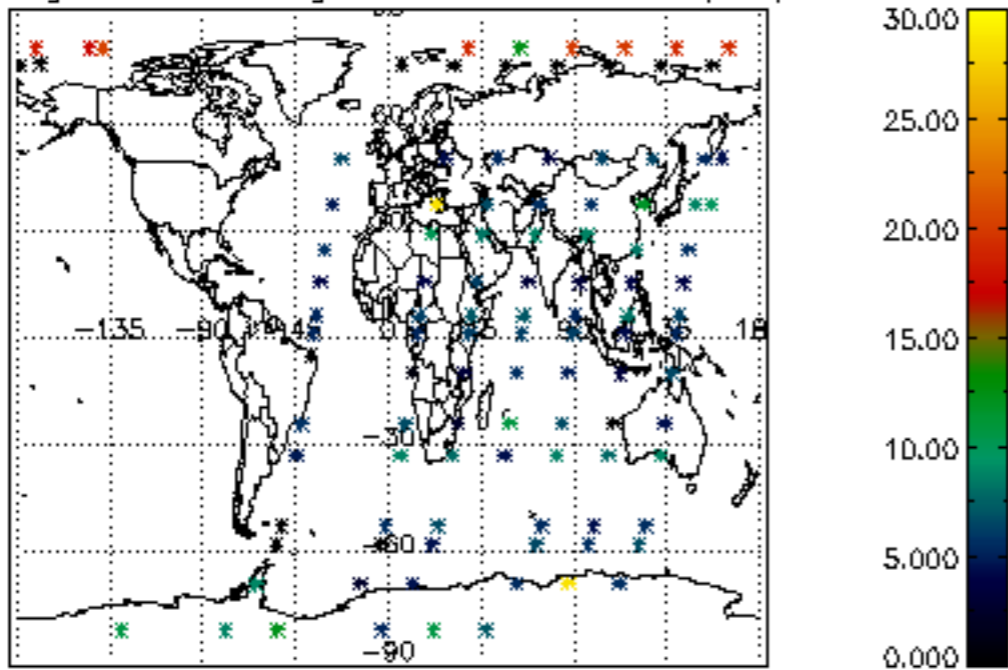
Percentage of cosmic ray hits per profile



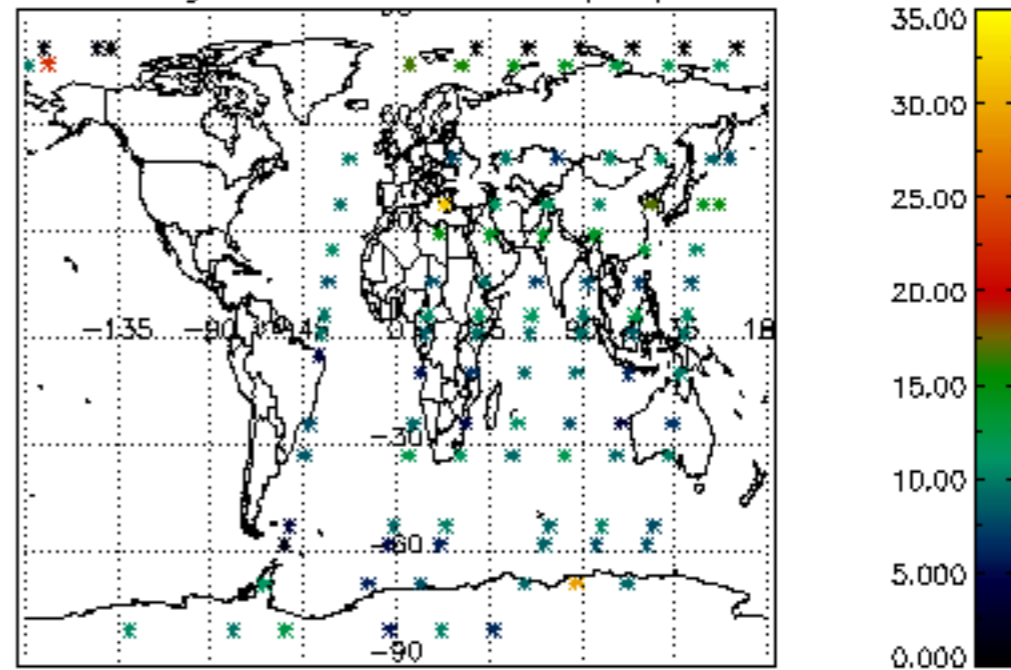
Percentage of datation errors per profile

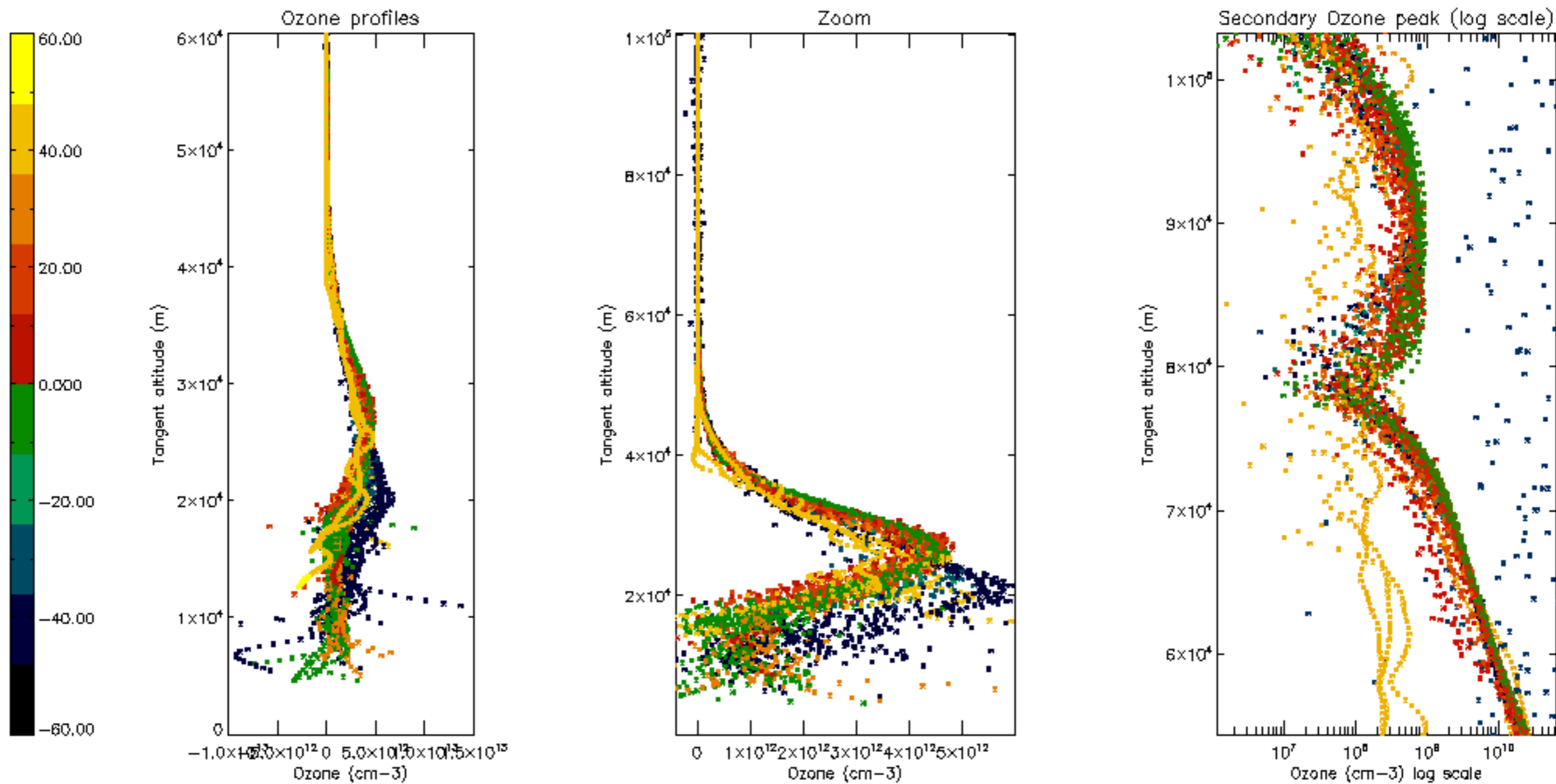


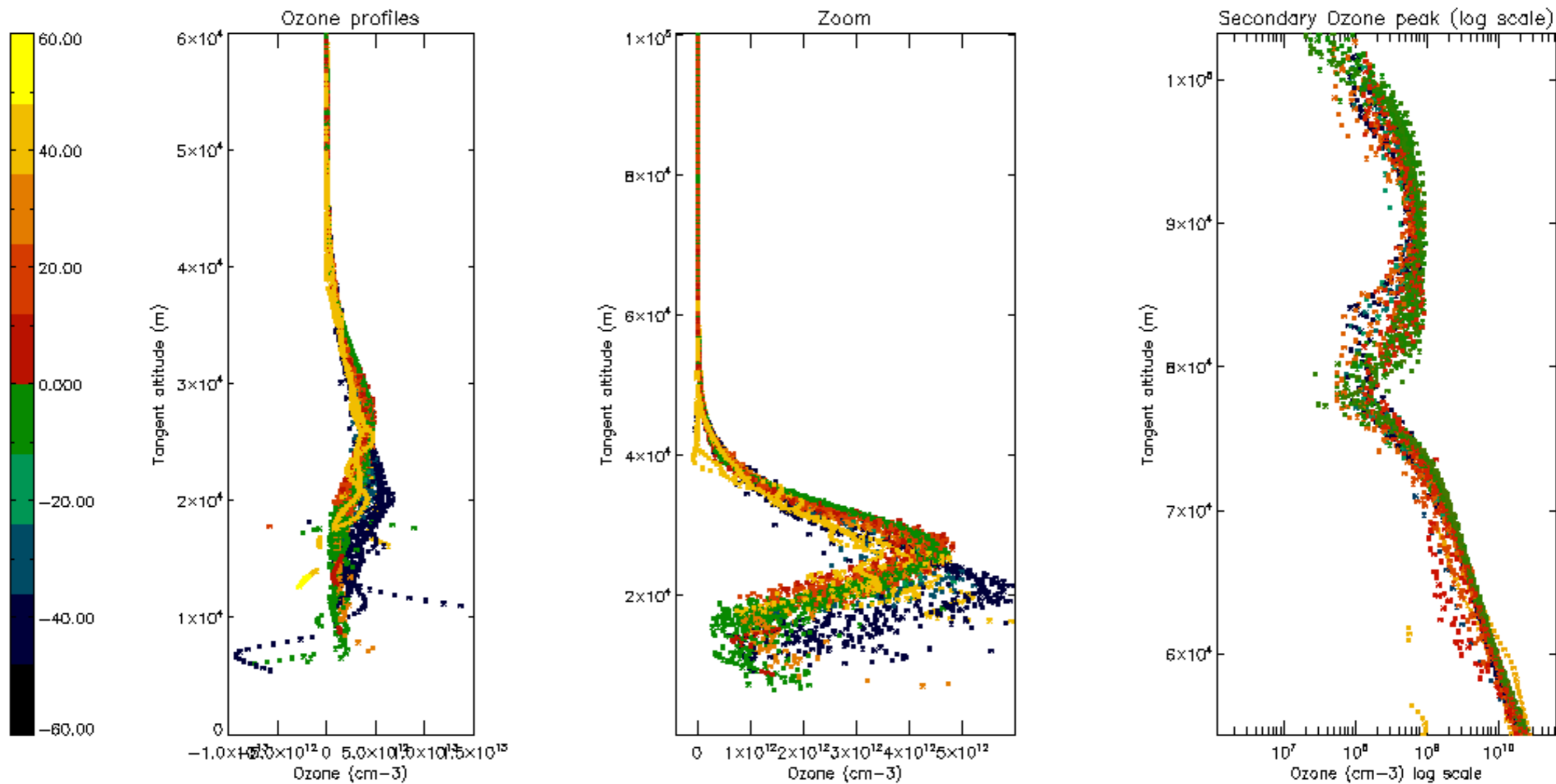
Percentage of star falling outside central band per profile

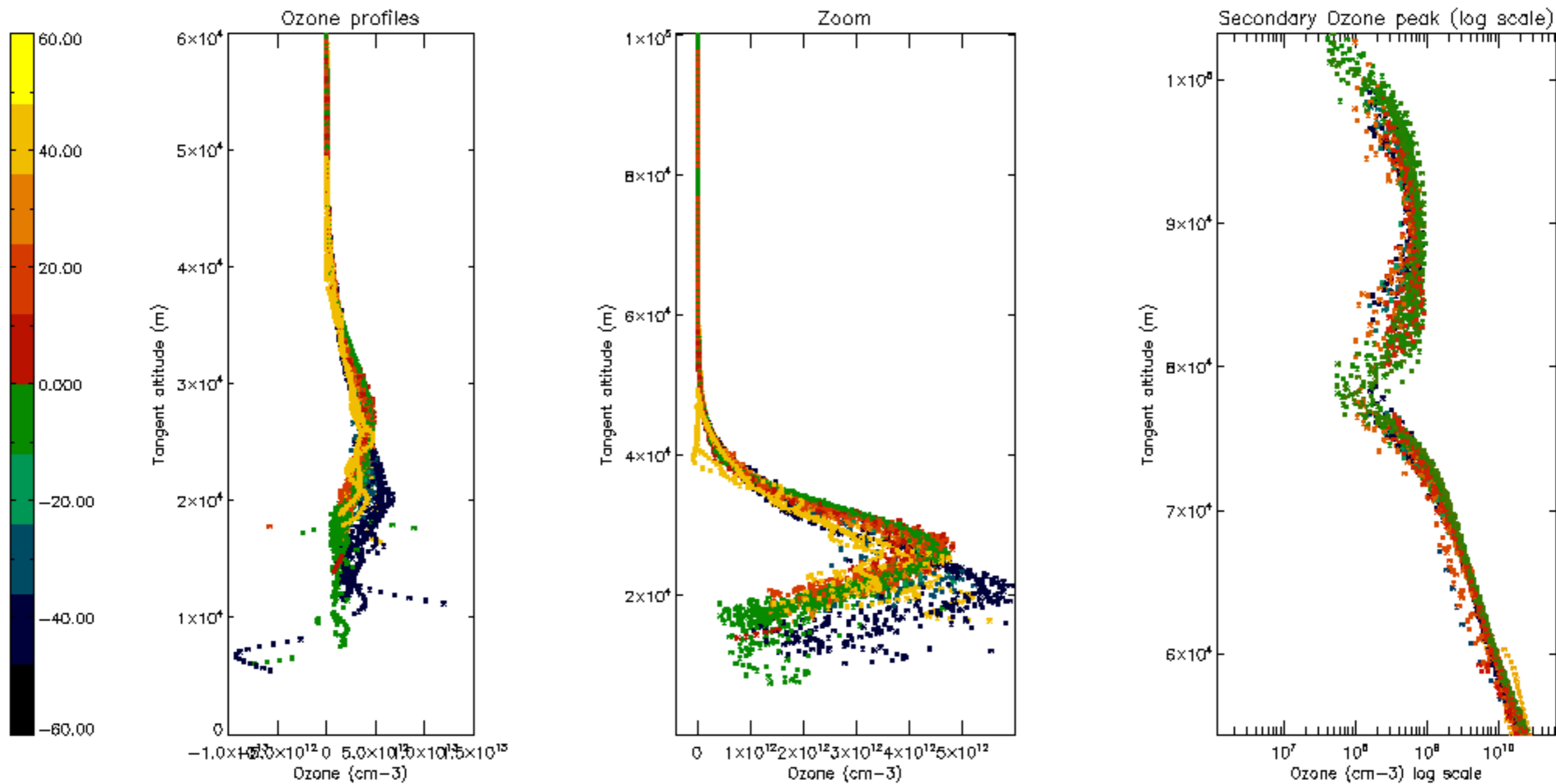


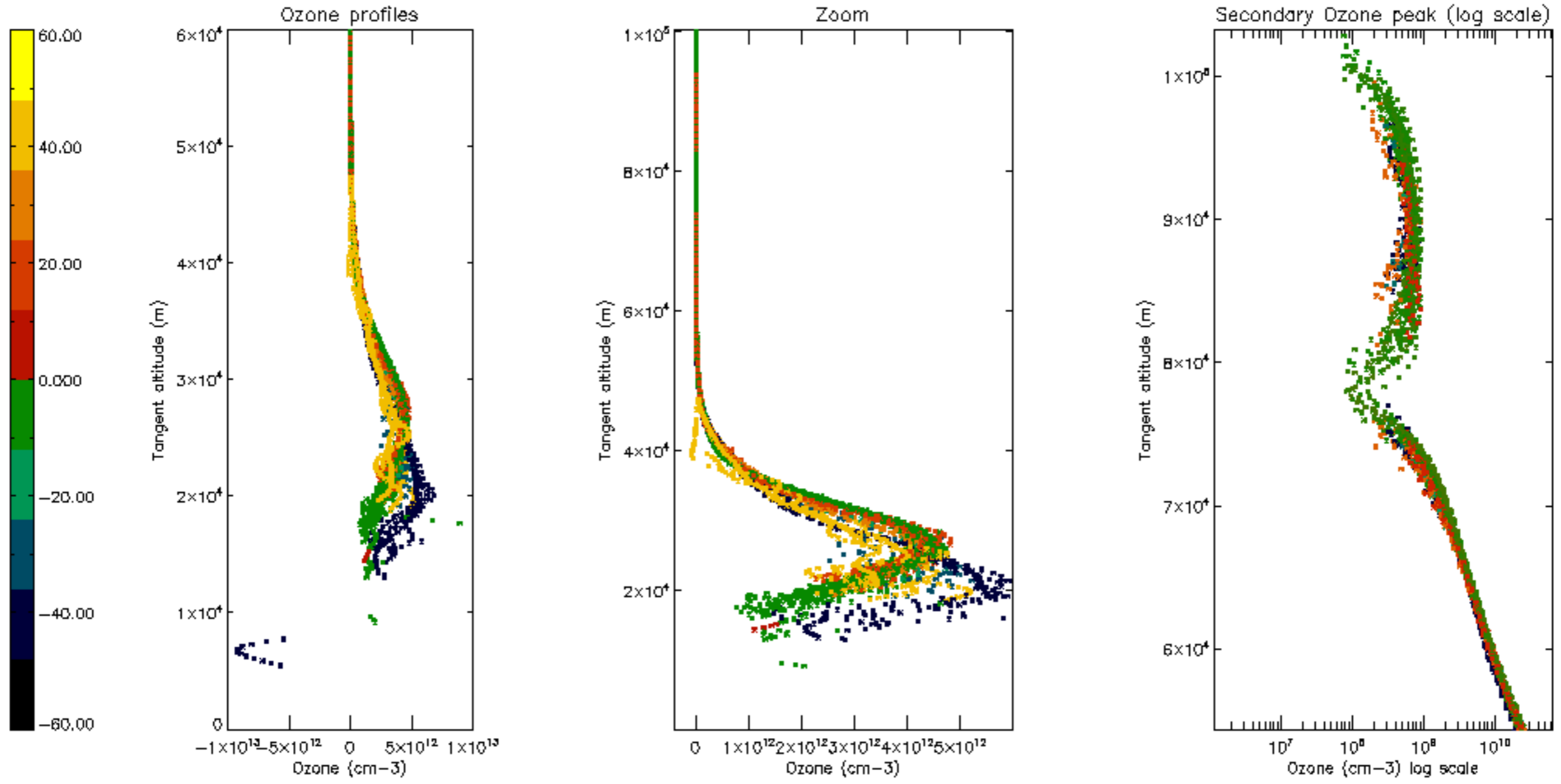
Percentage of saturation errors per profile

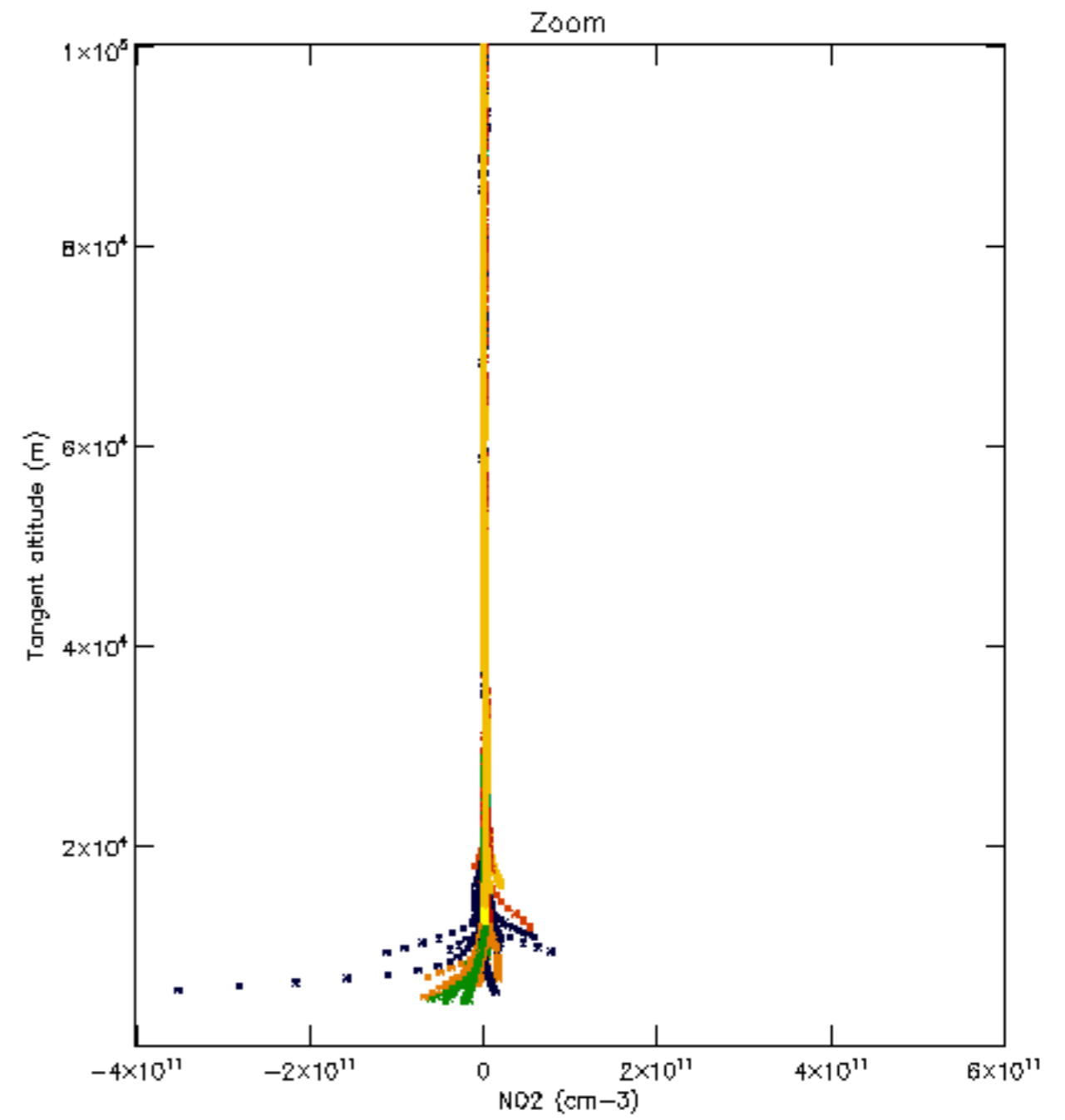
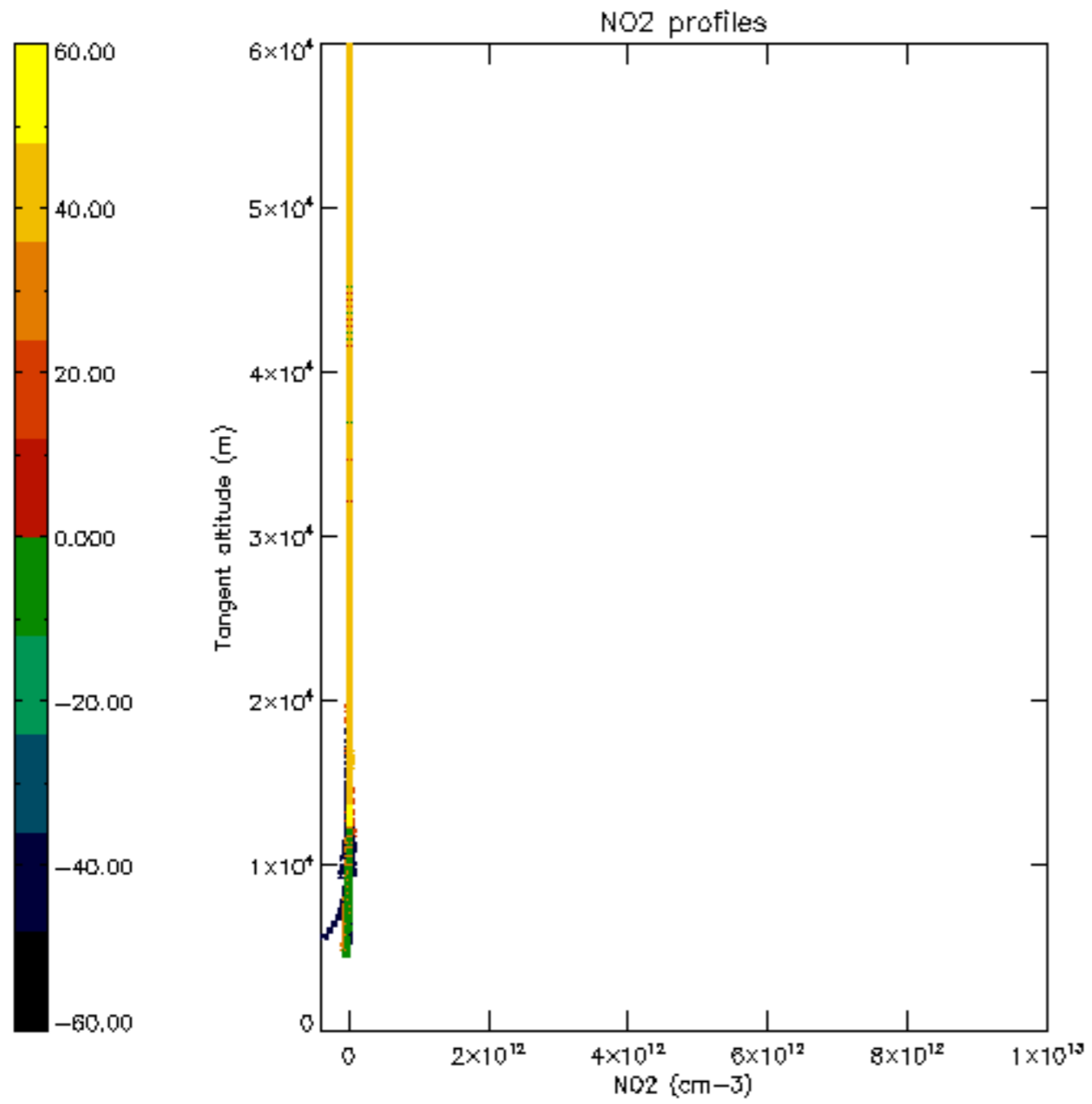


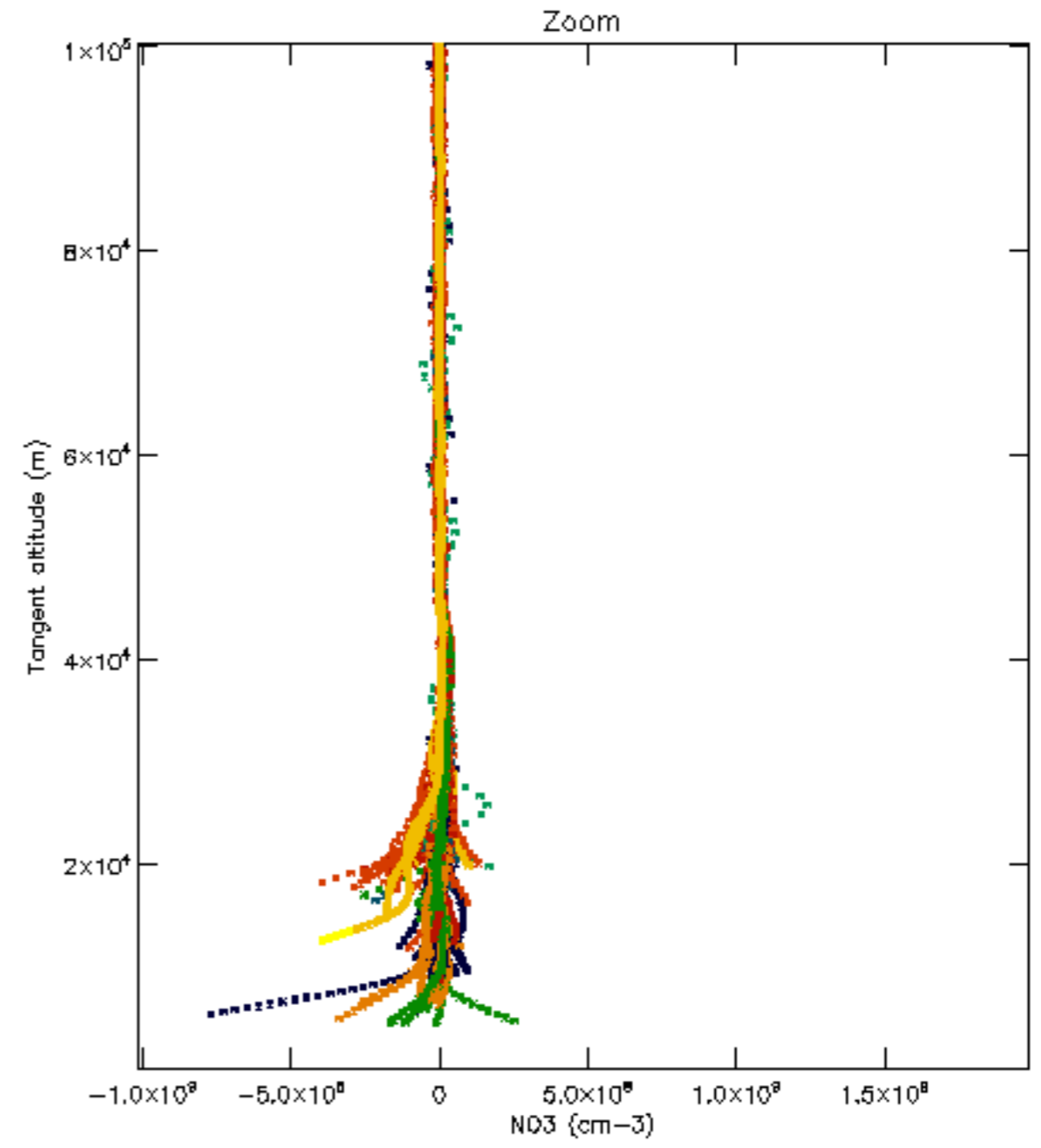
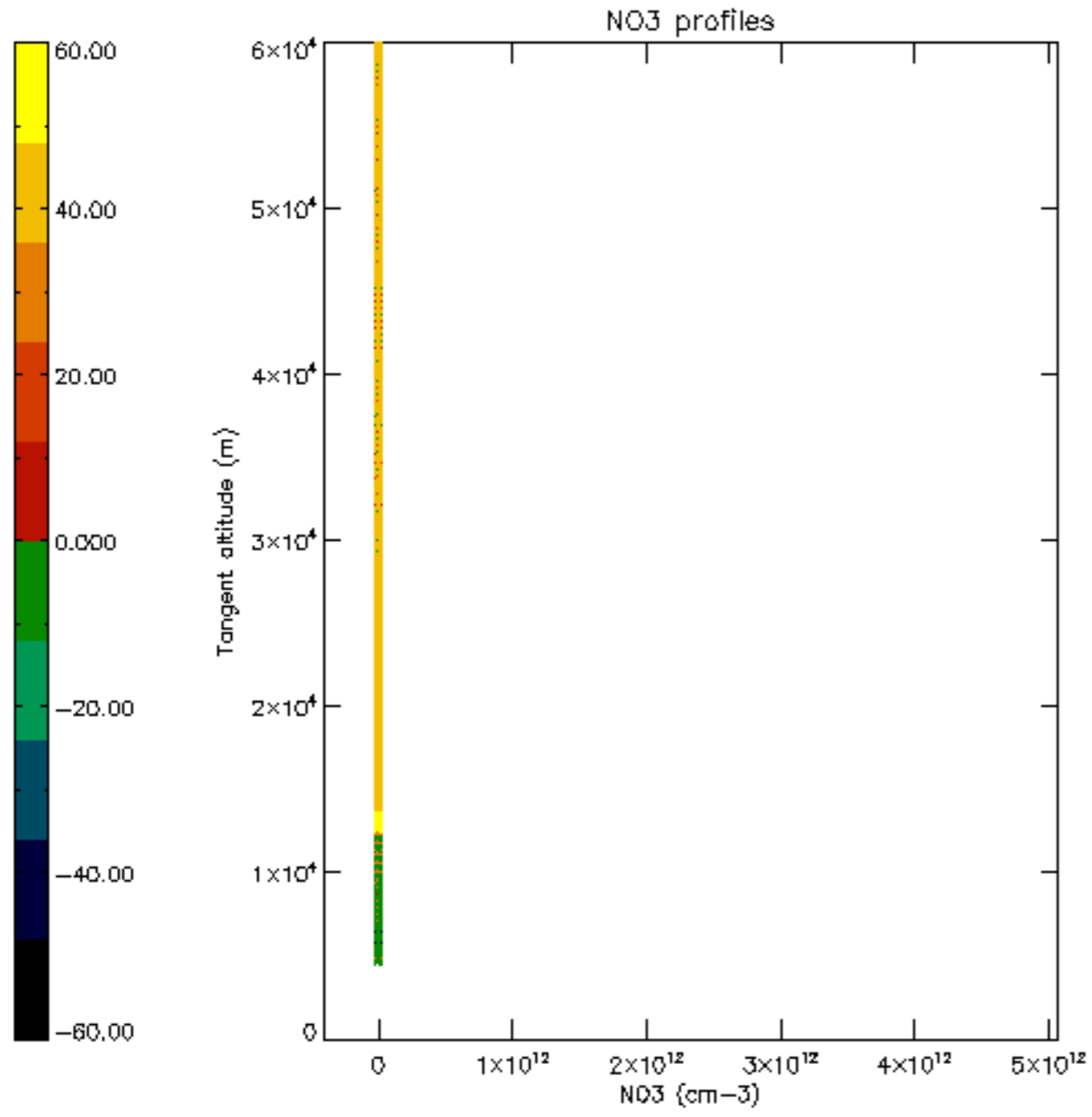


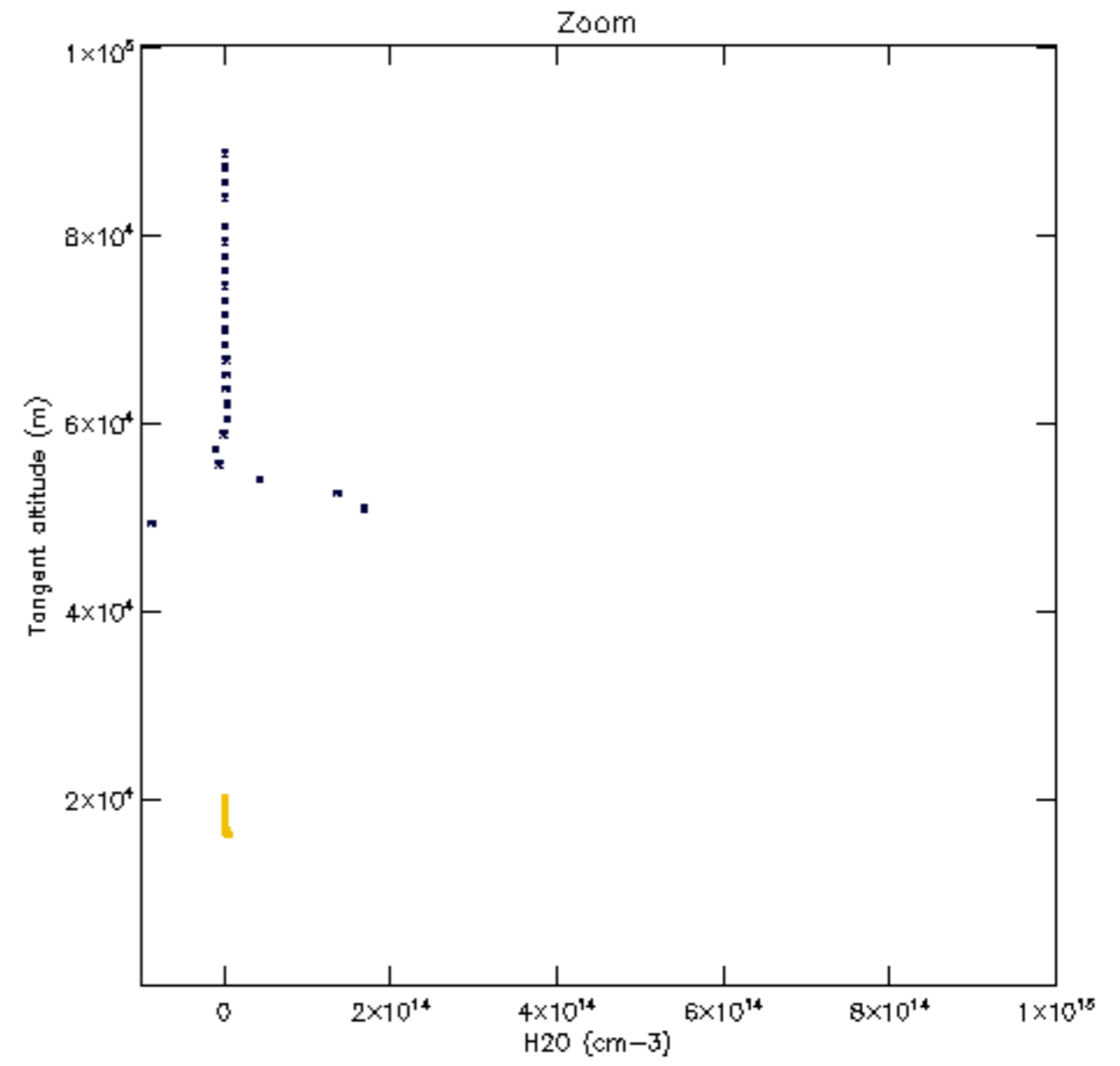
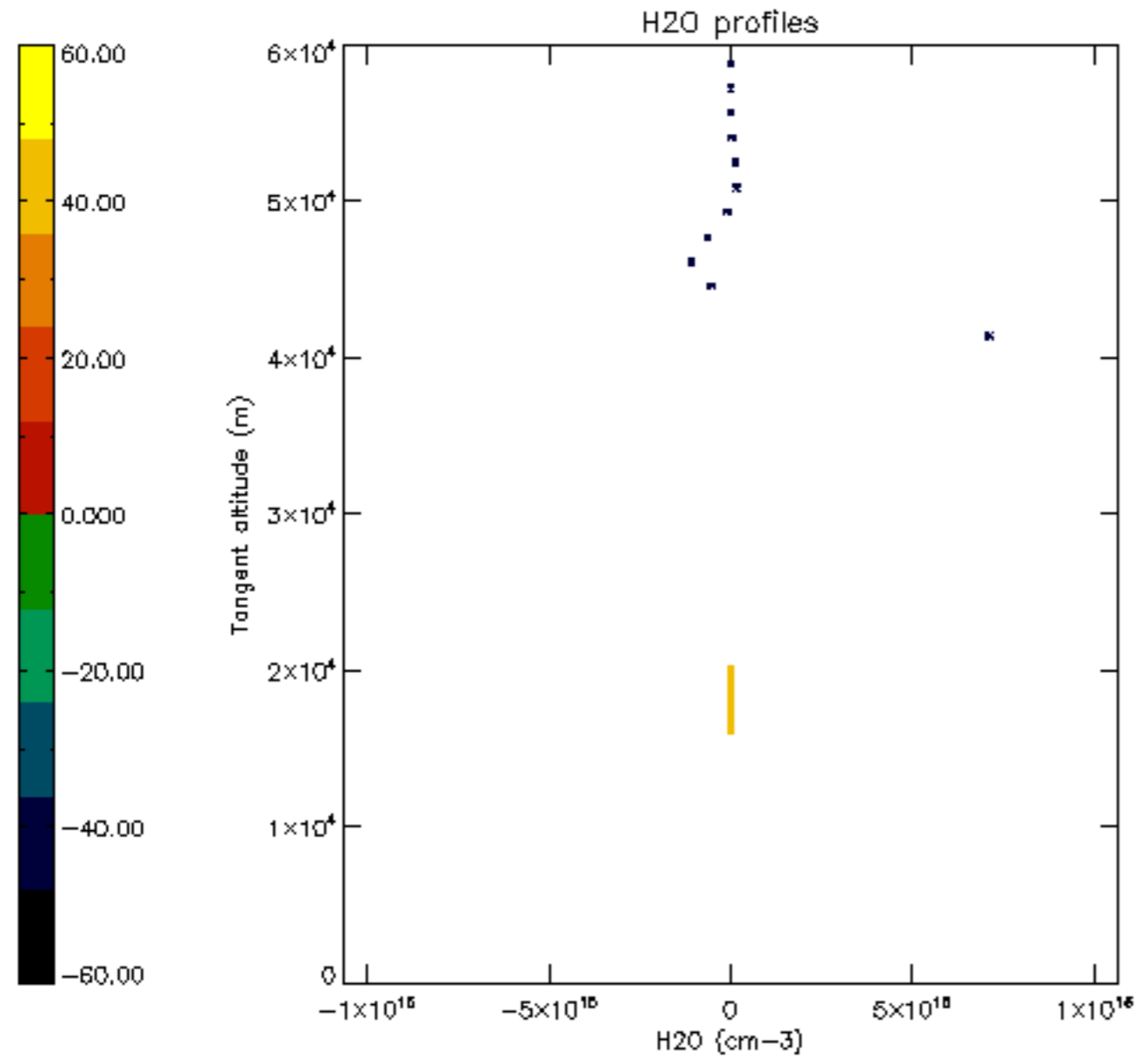


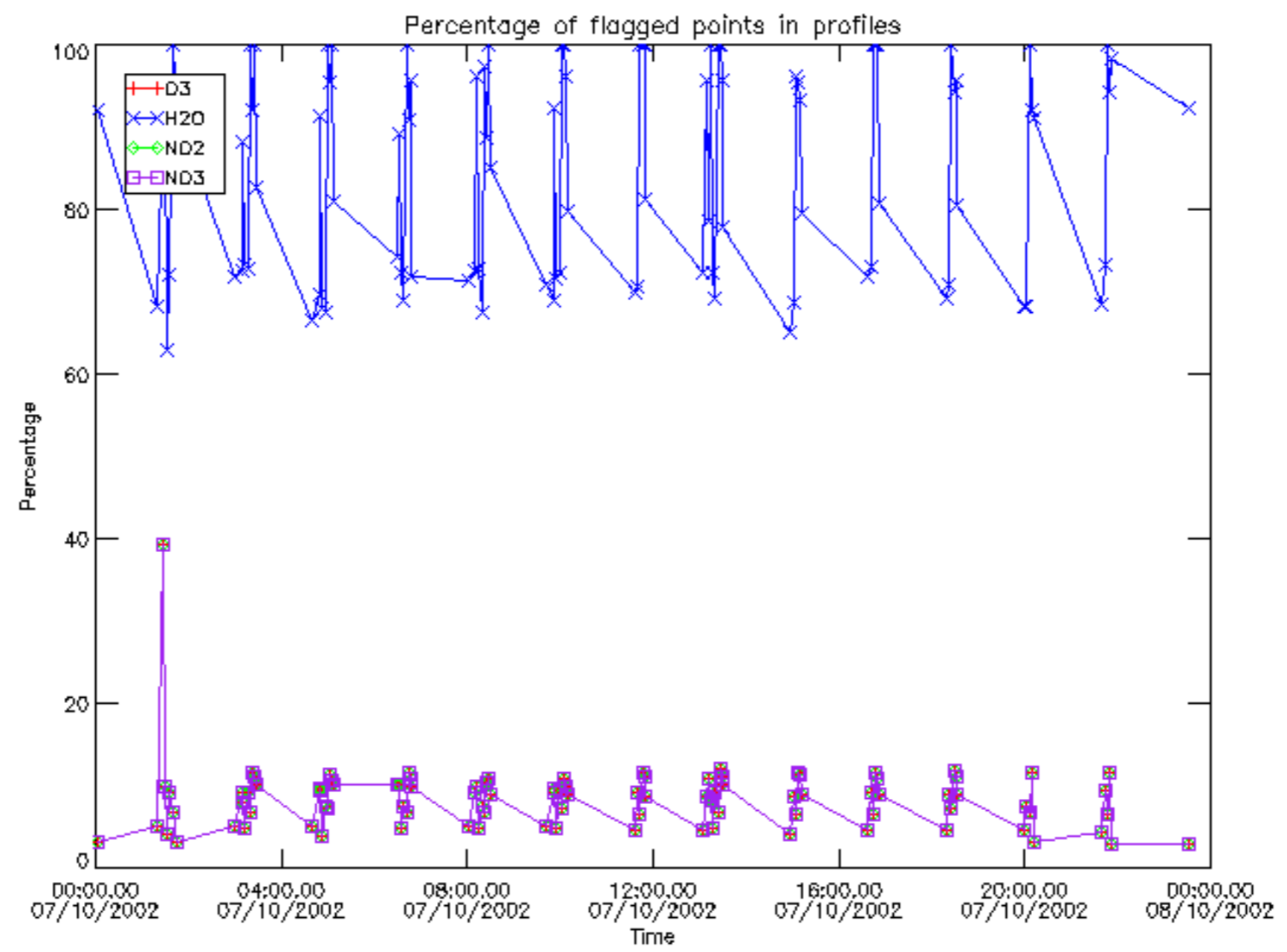




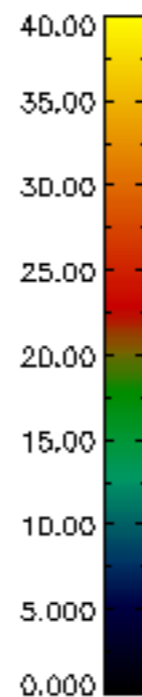
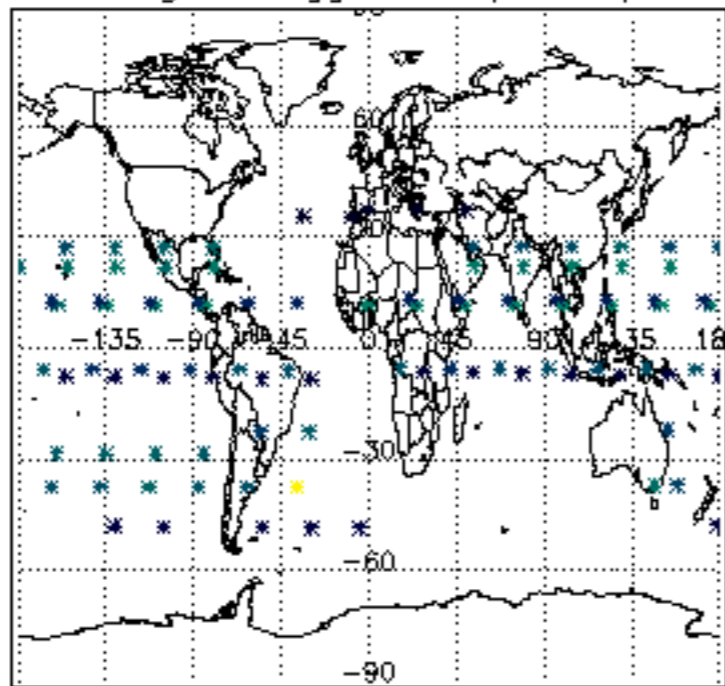




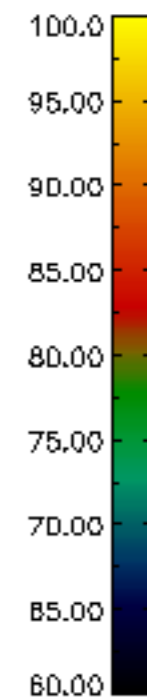
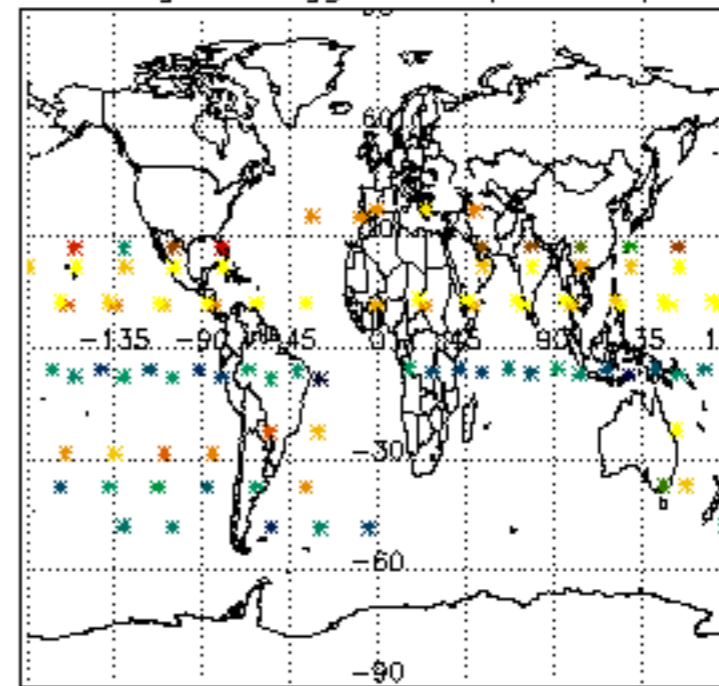




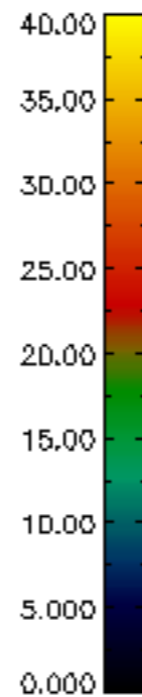
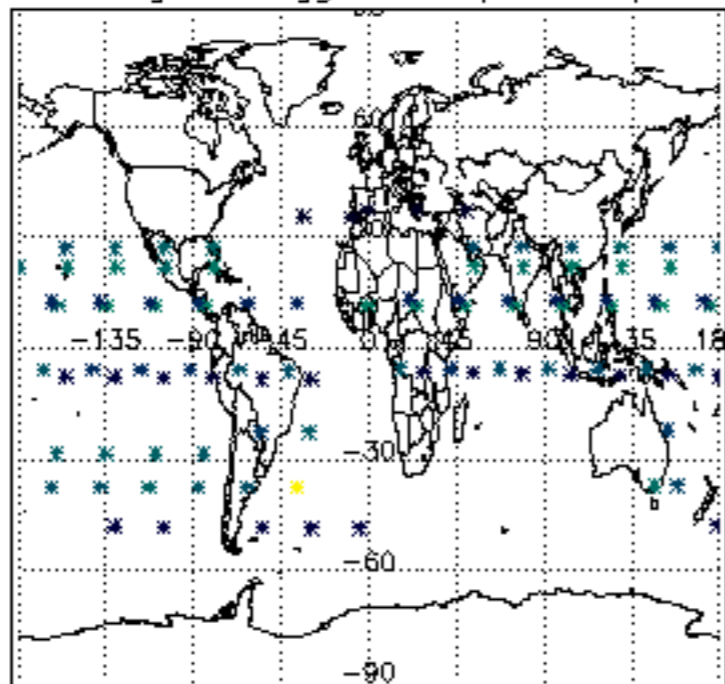
Percentage of flagged data per D3 profile



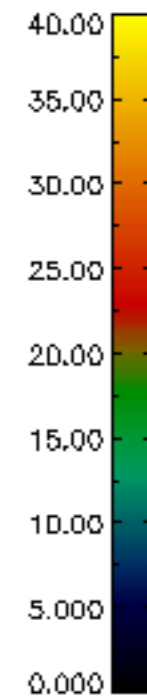
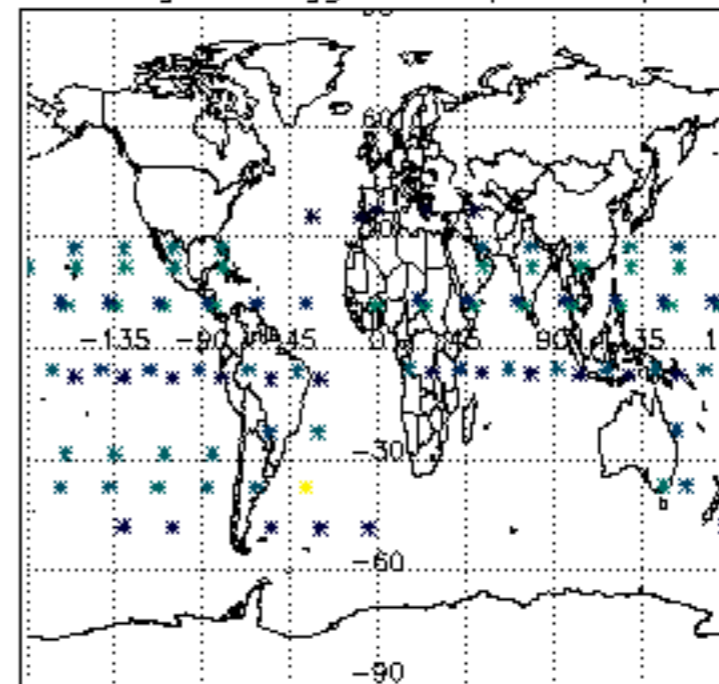
Percentage of flagged data per H2O profile

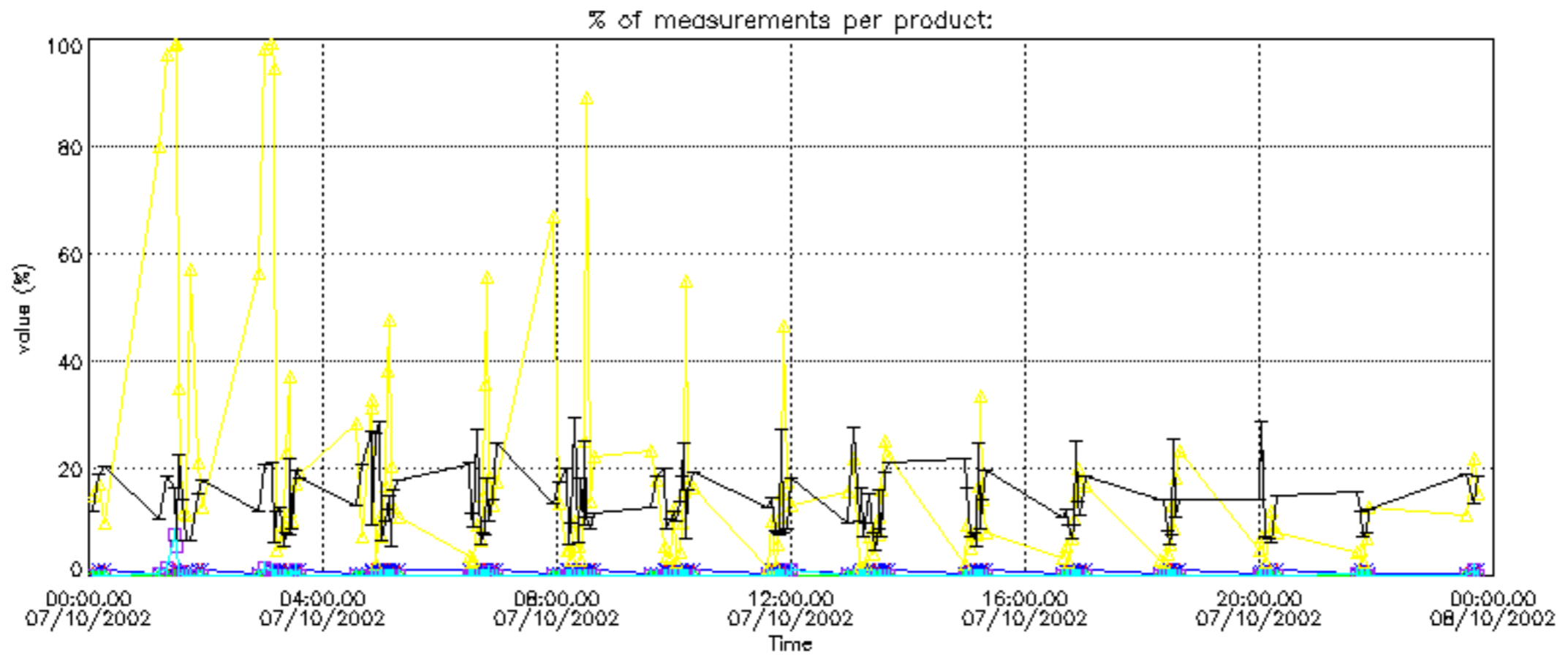
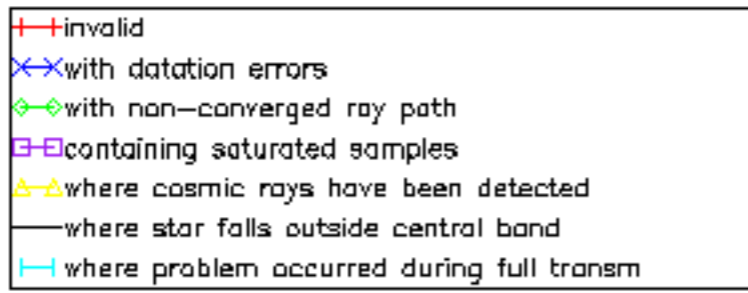


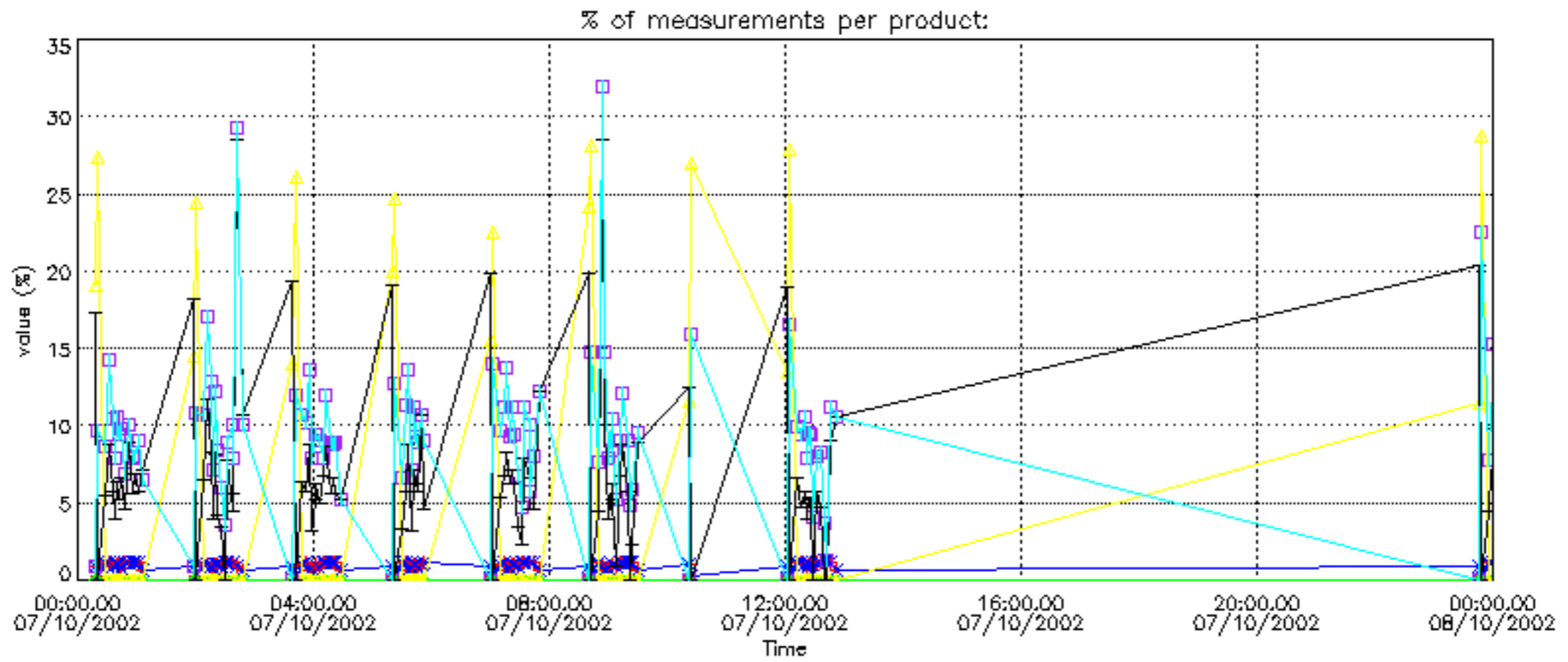
Percentage of flagged data per NO2 profile



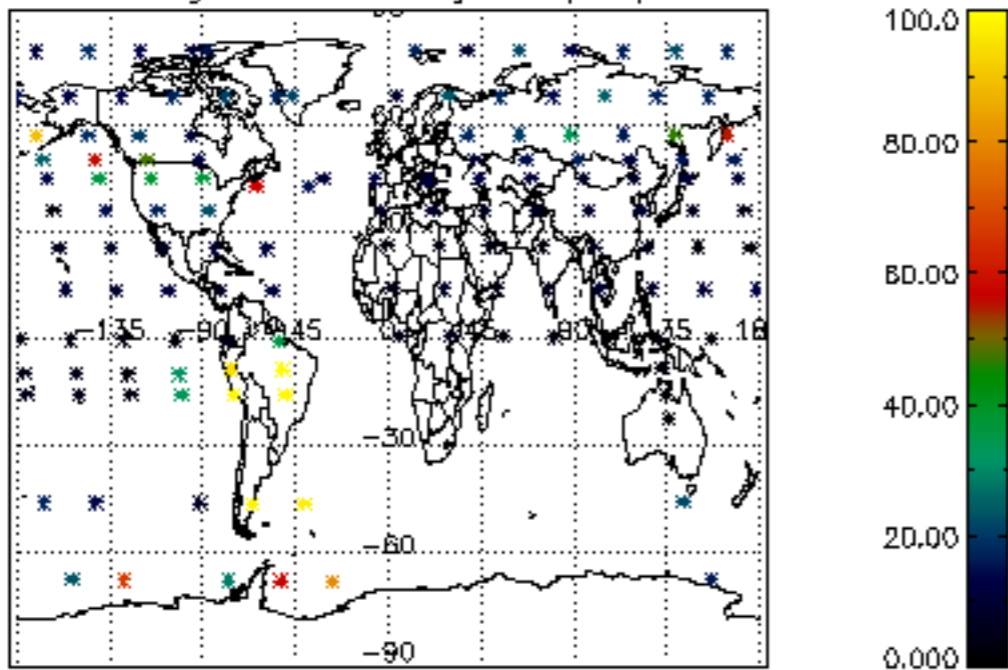
Percentage of flagged data per NO3 profile



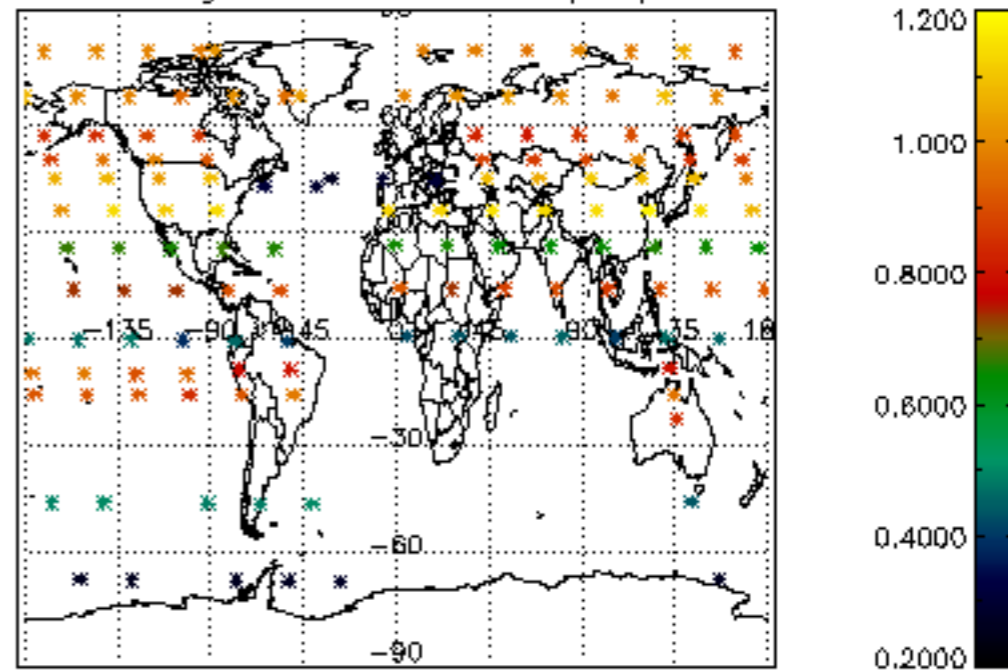




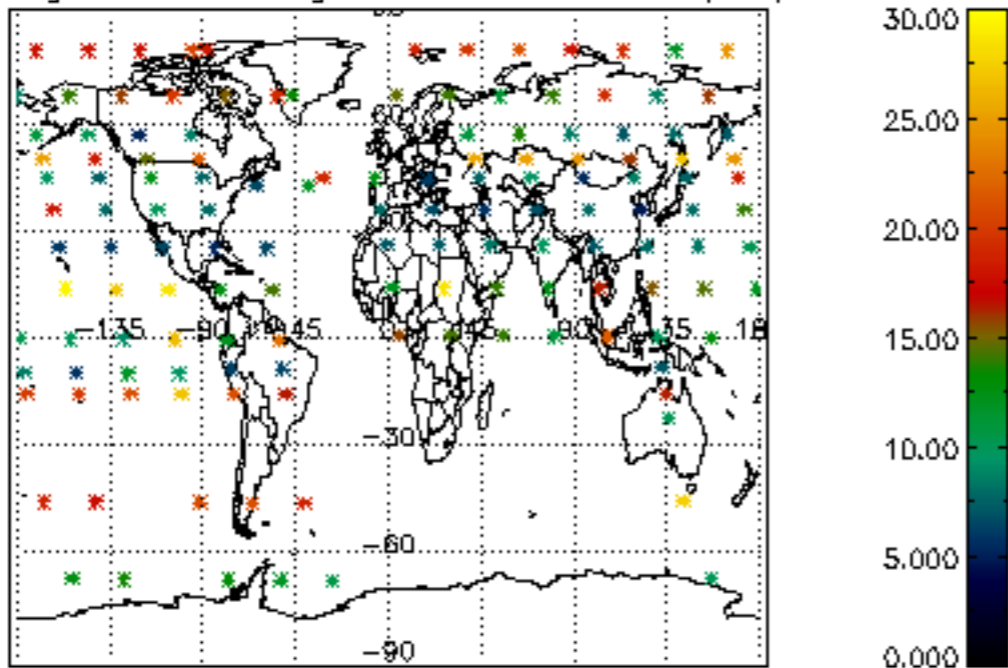
Percentage of cosmic ray hits per profile



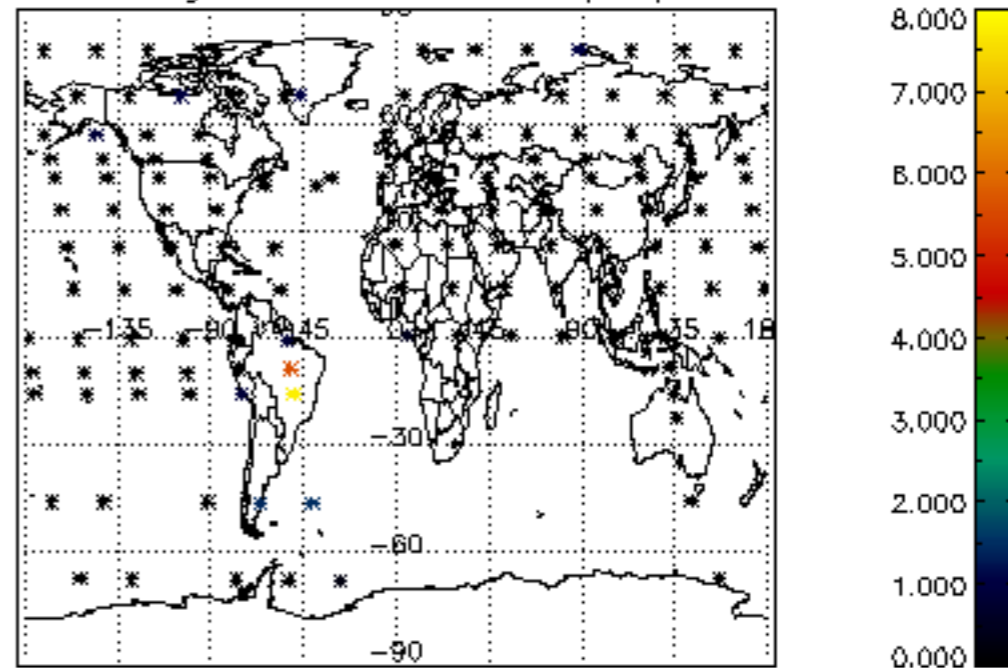
Percentage of datation errors per profile



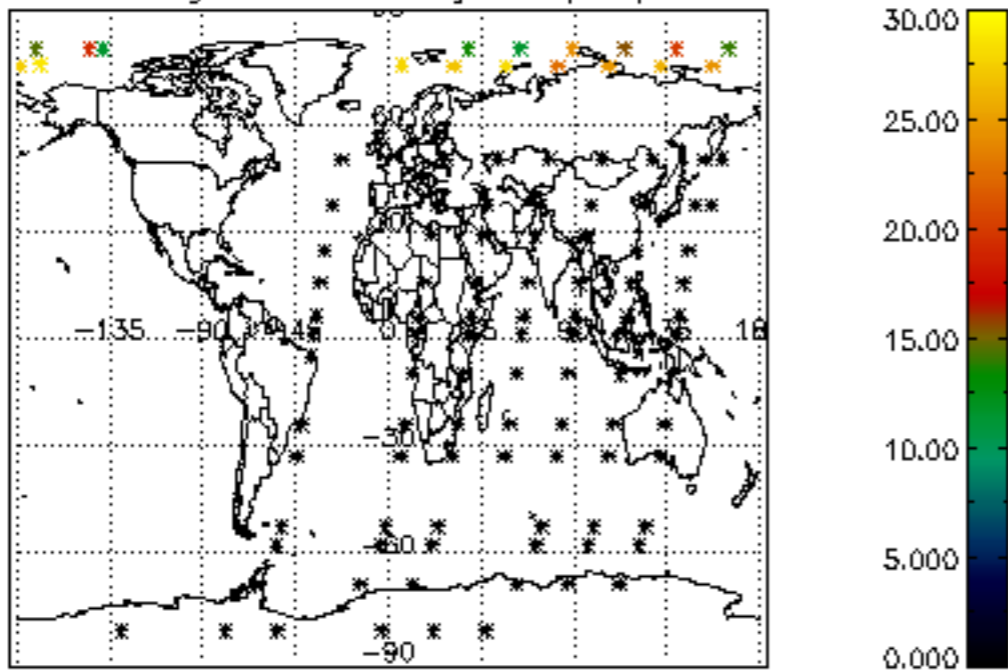
Percentage of star falling outside central band per profile



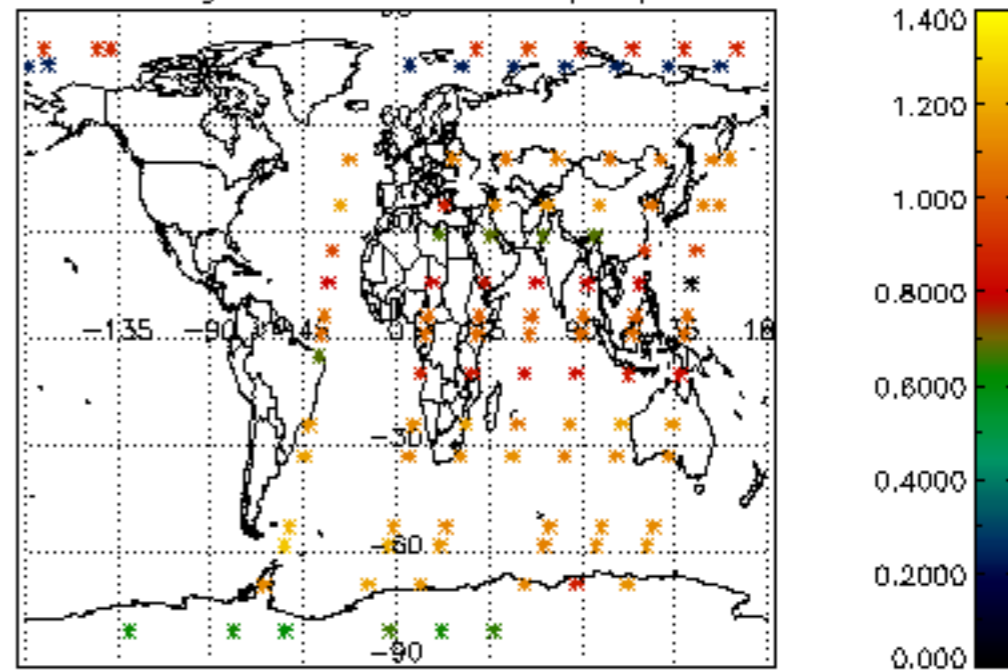
Percentage of saturation errors per profile



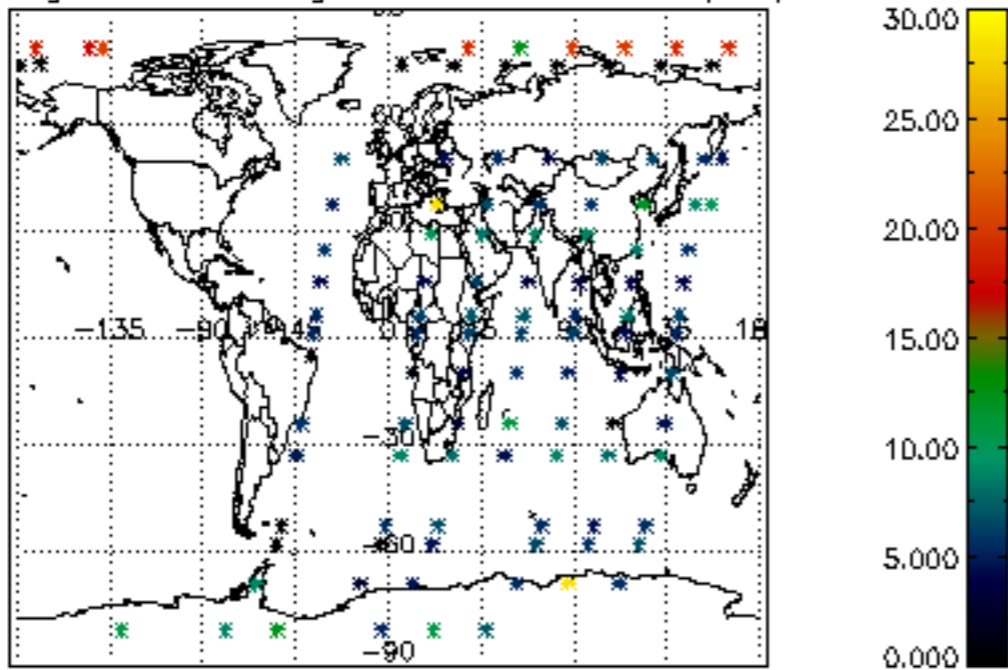
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

