

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	19APR2013 12:14:20
Data source version	GOMOS/6.01
Start time of products	01-10-2004 (01OCT2004 00:00:00)
Stop time of products	02-10-2004 (02OCT2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	420
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

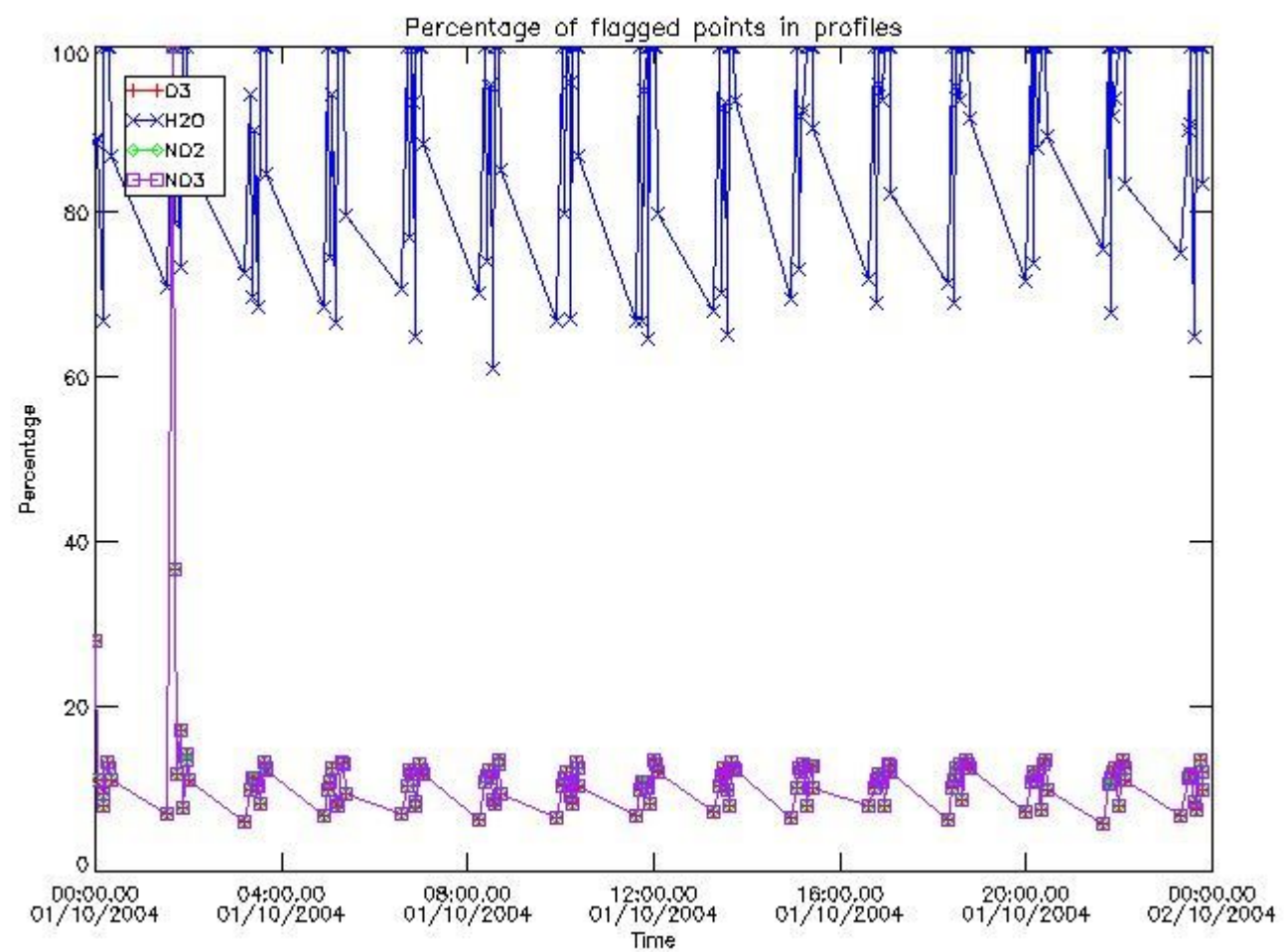
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20041001_000112_000000442030_00445_13525_4672.N1	01-OCT-2004 00:01:12	Dark	43.500	65	Lam Vel	2.2040	4400.0	87	13525	No
2	GOM_NL__2PRFIN20041001_000347_000000462030_00445_13525_4673.N1	01-OCT-2004 00:03:47	Dark	45.500	34	Gam2Vel	1.7930	23000.	91	13525	No
3	GOM_NL__2PRFIN20041001_000859_000000592030_00446_13526_4645.N1	01-OCT-2004 00:08:59	Dark	59.000	2	Alp Car	-0.73600	7000.0	118	13526	No
4	GOM_NL__2PRFIN20041001_001117_000000652030_00446_13526_4646.N1	01-OCT-2004 00:11:17	Dark	65.000	108	Alp Col	2.6520	15200.	130	13526	No
5	GOM_NL__2PRFIN20041001_001611_000000392030_00446_13526_4647.N1	01-OCT-2004 00:16:11	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	13526	No
6	GOM_NL__2PRFIN20041001_001820_000000412030_00446_13526_4648.N1	01-OCT-2004 00:18:20	Dark	41.000	143	Alp Hyi	2.8570	7200.0	82	13526	No
7	GOM_NL__2PRFIN20041001_001947_000000462030_00446_13526_4649.N1	01-OCT-2004 00:19:47	Dark	45.500	9	Alp Eri	0.45300	24000.	91	13526	No
8	GOM_NL__2PRFIN20041001_002124_000000512030_00446_13526_4650.N1	01-OCT-2004 00:21:24	Straylight	51.000	157	The1Eri	2.9060	9300.0	102	13526	No
9	GOM_NL__2PRFIN20041001_002509_000000522030_00446_13526_4651.N1	01-OCT-2004 00:25:09	Straylight	52.000	63	Bet Gru	2.1500	2800.0	104	13526	No
10	GOM_NL__2PRFIN20041001_002947_000000462030_00446_13526_4652.N1	01-OCT-2004 00:29:47	Straylight	46.000	18	24Alp PsA	1.1660	9700.0	92	13526	No
11	GOM_NL__2PRFIN20041001_003203_000000522030_00446_13526_4653.N1	01-OCT-2004 00:32:03	Straylight	51.500	52	16Bet Cet	2.0370	4500.0	103	13526	No
12	GOM_NL__2PRFIN20041001_003831_000000402030_00446_13526_4654.N1	01-OCT-2004 00:38:31	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	13526	No
13	GOM_NL__2PRFIN20041001_004213_000000392030_00446_13526_4655.N1	01-OCT-2004 00:42:13	Bright	39.000	90	54Alp Peg	2.4870	11000.	78	13526	No
14	GOM_NL__2PRFIN20041001_004551_000000402030_00446_13526_4656.N1	01-OCT-2004 00:45:51	Bright	39.500	93	53Bet Peg	2.5200	3100.0	79	13526	No
15	GOM_NL__2PRFIN20041001_004812_000000642030_00446_13526_4657.N1	01-OCT-2004 00:48:12	Bright	63.500	105	6Bet Ari	2.6450	8900.0	127	13526	No
16	GOM_NL__2PRFIN20041001_005023_000000482030_00446_13526_4658.N1	01-OCT-2004 00:50:23	Bright	47.500	53	43Bet And	2.0480	3300.0	95	13526	No
17	GOM_NL__2PRFIN20041001_005516_000000402030_00446_13526_4659.N1	01-OCT-2004 00:55:16	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	13526	No
18	GOM_NL__2PRFIN20041001_005635_000000432030_00446_13526_4660.N1	01-OCT-2004 00:56:35	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	13526	No
19	GOM_NL__2PRFIN20041001_010032_000000532030_00446_13526_4661.N1	01-OCT-2004 01:00:32	Bright	53.000	160	23Gam Per	2.9300	4700.0	106	13526	No
20	GOM_NL__2PRFIN20041001_010311_000000392030_00446_13526_4662.N1	01-OCT-2004 01:03:11	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	13526	No
21	GOM_NL__2PRFIN20041001_010519_000000392030_00446_13526_4663.N1	01-OCT-2004 01:05:19	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	13526	No
22	GOM_NL__2PRFIN20041001_011111_000000402030_00446_13526_4664.N1	01-OCT-2004 01:11:11	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	13526	No
23	GOM_NL__2PRFIN20041001_011241_000000382030_00446_13526_4665.N1	01-OCT-2004 01:12:41	Bright	37.500	82	48Bet UMa	2.3650	10600.	75	13526	No
24	GOM_NL__2PRFIN20041001_011555_000000362030_00446_13526_4666.N1	01-OCT-2004 01:15:55	Bright	36.000	174	52Psi UMa	3.0040	4400.0	72	13526	No
25	GOM_NL__2PRFIN20041001_011820_000000912030_00446_13526_4667.N1	01-OCT-2004 01:18:20	Bright	90.500	107	37The Aur	2.6490	11000.	181	13526	No
26	GOM_NL__2PRFIN20041001_012120_000000582030_00446_13526_4668.N1	01-OCT-2004 01:21:20	Bright	58.000	24	66Alp Gem	1.5800	10200.	116	13526	No
27	GOM_NL__2PRFIN20041001_012608_000001062030_00446_13526_4669.N1	01-OCT-2004 01:26:08	Tw_i_and_stray	106.00	170	27Eps Gem	3.0000	9700.0	212	13526	No
28	GOM_NL__2PRFIN20041001_013215_000000732030_00446_13526_4670.N1	01-OCT-2004 01:32:15	Dark	72.500	8	10Alp CMi	0.40000	6500.0	145	13526	No
29	GOM_NL__2PRFIN20041001_013915_000000542030_00446_13526_4671.N1	01-OCT-2004 01:39:15	Dark	54.000	132	15Rho Pup	2.8030	6900.0	108	13526	No
30	GOM_NL__2PRFIN20041001_014149_000000472030_00446_13526_4672.N1	01-OCT-2004 01:41:49	Dark	47.000	65	Lam Vel	2.2040	4400.0	94	13526	No
31	GOM_NL__2PRFIN20041001_014423_000000442030_00446_13526_4673.N1	01-OCT-2004 01:44:23	Dark	43.500	34	Gam2Vel	1.7930	23000.	87	13526	No
32	GOM_NL__2PRFIN20041001_014935_000000572030_00447_13527_4645.N1	01-OCT-2004 01:49:35	Dark	56.500	2	Alp Car	-0.73600	7000.0	113	13527	No
33	GOM_NL__2PRFIN20041001_015152_000000662030_00447_13527_4646.N1	01-OCT-2004 01:51:52	Dark	65.500	108	Alp Col	2.6520	15200.	131	13527	No
34	GOM_NL__2PRFIN20041001_015646_000000382030_00447_13527_4647.N1	01-OCT-2004 01:56:46	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	13527	No
35	GOM_NL__2PRFIN20041001_015856_000000402030_00447_13527_4648.N1	01-OCT-2004 01:58:56	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	13527	No
36	GOM_NL__2PRFIN20041001_020023_000000462030_00447_13527_4649.N1	01-OCT-2004 02:00:23	Dark	46.000	9	Alp Eri	0.45300	24000.	92	13527	No
37	GOM_NL__2PRFIN20041001_020201_000000512030_00447_13527_4650.N1	01-OCT-2004 02:02:01	Straylight	51.000	157	The1Eri	2.9060	9300.0	102	13527	No
38	GOM_NL__2PRFIN20041001_020545_000000492030_00447_13527_4651.N1	01-OCT-2004 02:05:45	Straylight	48.500	63	Bet Gru	2.1500	2800.0	97	13527	No
39	GOM_NL__2PRFIN20041001_021024_000000472030_00447_13527_4652.N1	01-OCT-2004 02:10:24	Straylight	46.500	18	24Alp PsA	1.1660	9700.0	93	13527	No
40	GOM_NL__2PRFIN20041001_021240_000000552030_00447_13527_4653.N1	01-OCT-2004 02:12:40	Straylight	54.500	52	16Bet Cet	2.0370	4500.0	109	13527	No
41	GOM_NL__2PRFIN20041001_021908_000000382030_00447_13527_4654.N1	01-OCT-2004 02:19:08	Bright	38.000	162	34Alp Aqr	2.9440	5350.0	76	13527	No
42	GOM_NL__2PRFIN20041001_022250_000000392030_00447_13527_4655.N1	01-OCT-2004 02:22:50	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	13527	No

397	GOM_NL__2PRFIN20041001_223802_000000492030_00459_13539_4638.N1	01-OCT-2004 22:38:02	Bright	49.000	53	43Bet And	2.0480	3300.0	98	13539	No
398	GOM_NL__2PRFIN20041001_224301_000000402030_00459_13539_4639.N1	01-OCT-2004 22:43:01	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	13539	No
399	GOM_NL__2PRFIN20041001_224419_000000422030_00459_13539_4640.N1	01-OCT-2004 22:44:19	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	13539	No
400	GOM_NL__2PRFIN20041001_224807_000000542030_00459_13539_4641.N1	01-OCT-2004 22:48:07	Bright	54.000	160	23Gam Per	2.9300	4700.0	108	13539	No
401	GOM_NL__2PRFIN20041001_225102_000000372030_00459_13539_4642.N1	01-OCT-2004 22:51:02	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	13539	No
402	GOM_NL__2PRFIN20041001_225309_000000372030_00459_13539_4643.N1	01-OCT-2004 22:53:09	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	13539	No
403	GOM_NL__2PRFIN20041001_225901_000000382030_00459_13539_4644.N1	01-OCT-2004 22:59:01	Bright	38.000	36	50Alp UMa	1.8000	6300.0	76	13539	No
404	GOM_NL__2PRFIN20041001_230031_000000522030_00459_13539_4645.N1	01-OCT-2004 23:00:31	Bright	52.000	82	48Bet UMa	2.3650	10600.	104	13539	No
405	GOM_NL__2PRFIN20041001_230345_000000352030_00459_13539_4646.N1	01-OCT-2004 23:03:45	Bright	35.000	174	52Psi UMa	3.0040	4400.0	70	13539	No
406	GOM_NL__2PRFIN20041001_230602_000000942030_00459_13539_4647.N1	01-OCT-2004 23:06:02	Bright	93.500	107	37The Aur	2.6490	11000.	187	13539	No
407	GOM_NL__2PRFIN20041001_230909_000000602030_00459_13539_4648.N1	01-OCT-2004 23:09:09	Bright	60.000	24	66Alp Gem	1.5800	10200.	120	13539	No
408	GOM_NL__2PRFIN20041001_231408_000001072030_00459_13539_4649.N1	01-OCT-2004 23:14:08	Tw_i_and_stray	107.00	170	27Eps Gem	3.0000	9700.0	214	13539	No
409	GOM_NL__2PRFIN20041001_232015_000000762030_00459_13539_4650.N1	01-OCT-2004 23:20:15	Dark	76.000	8	10Alp CMi	0.40000	6500.0	152	13539	No
410	GOM_NL__2PRFIN20041001_232942_000000452030_00459_13539_4651.N1	01-OCT-2004 23:29:42	Dark	45.000	65	Lam Vel	2.2040	4400.0	90	13539	No
411	GOM_NL__2PRFIN20041001_233100_000000452030_00459_13539_4652.N1	01-OCT-2004 23:31:00	Dark	44.500	70	Zet Pup	2.2460	39000.	89	13539	No
412	GOM_NL__2PRFIN20041001_233220_000000442030_00459_13539_4653.N1	01-OCT-2004 23:32:20	Dark	43.500	34	Gam2Vel	1.7930	23000.	87	13539	No
413	GOM_NL__2PRFIN20041001_233734_000000602030_00460_13540_4820.N1	01-OCT-2004 23:37:34	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	13540	No
414	GOM_NL__2PRFIN20041001_233959_000000692030_00460_13540_4821.N1	01-OCT-2004 23:39:59	Dark	68.500	108	Alp Col	2.6520	15200.	137	13540	No
415	GOM_NL__2PRFIN20041001_234435_000000382030_00460_13540_4822.N1	01-OCT-2004 23:44:35	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	13540	No
416	GOM_NL__2PRFIN20041001_234648_000000432030_00460_13540_4823.N1	01-OCT-2004 23:46:48	Dark	42.500	143	Alp Hyi	2.8570	7200.0	85	13540	No
417	GOM_NL__2PRFIN20041001_234815_000000522030_00460_13540_4824.N1	01-OCT-2004 23:48:15	Dark	51.500	9	Alp Eri	0.45300	24000.	103	13540	No
418	GOM_NL__2PRFIN20041001_234957_000000522030_00460_13540_4825.N1	01-OCT-2004 23:49:57	Straylight	52.000	157	The1Eri	2.9060	9300.0	104	13540	No
419	GOM_NL__2PRFIN20041001_235335_000000432030_00460_13540_4826.N1	01-OCT-2004 23:53:35	Straylight	42.500	84	Alp Phe	2.3970	4500.0	85	13540	No
420	GOM_NL__2PRFIN20041001_235812_000000472030_00460_13540_4827.N1	01-OCT-2004 23:58:12	Straylight	47.000	18	24Alp PsA	1.1660	9700.0	94	13540	No

3. Quality information per product

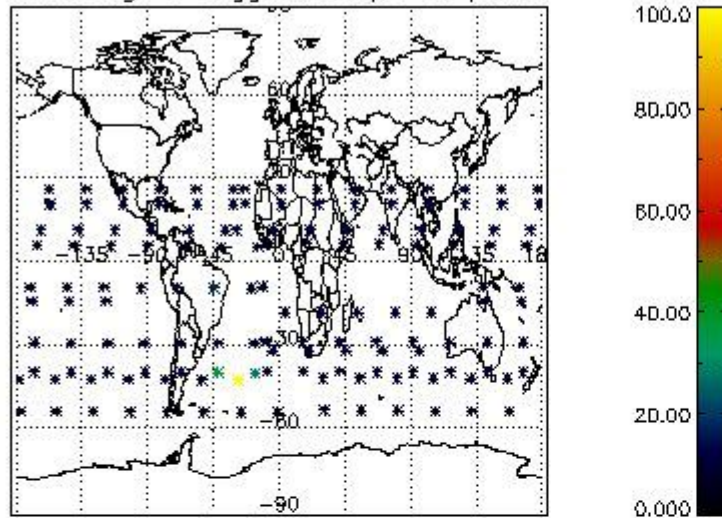
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

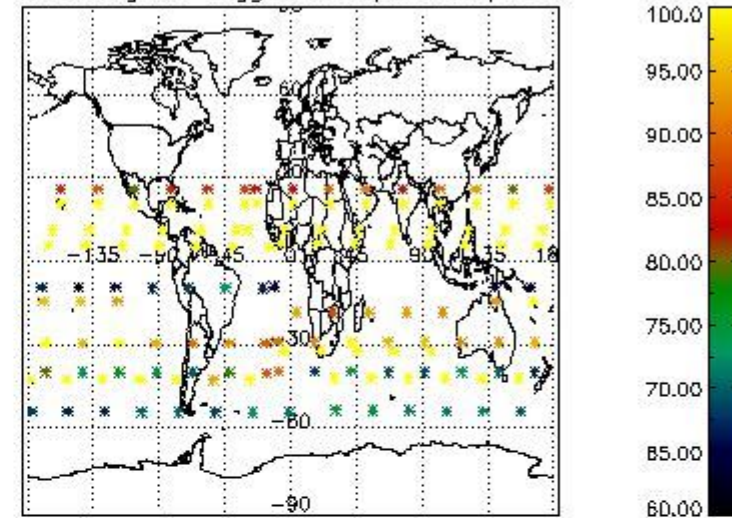


3.2 Plot quality information per product (world map)

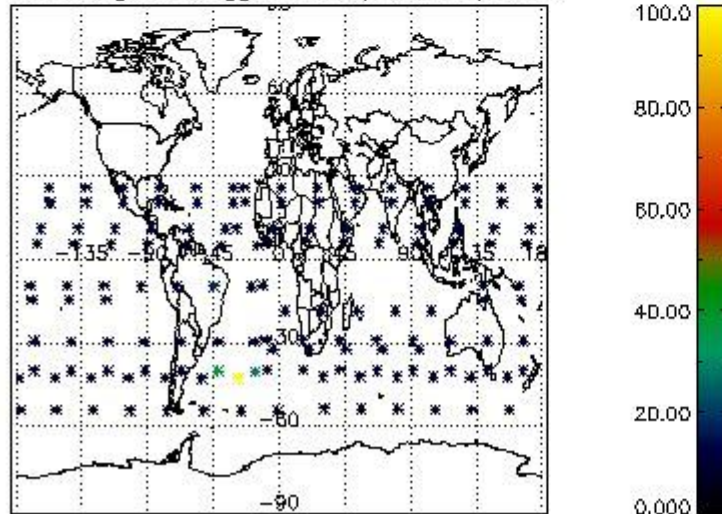
Percentage of flagged data per O3 profile



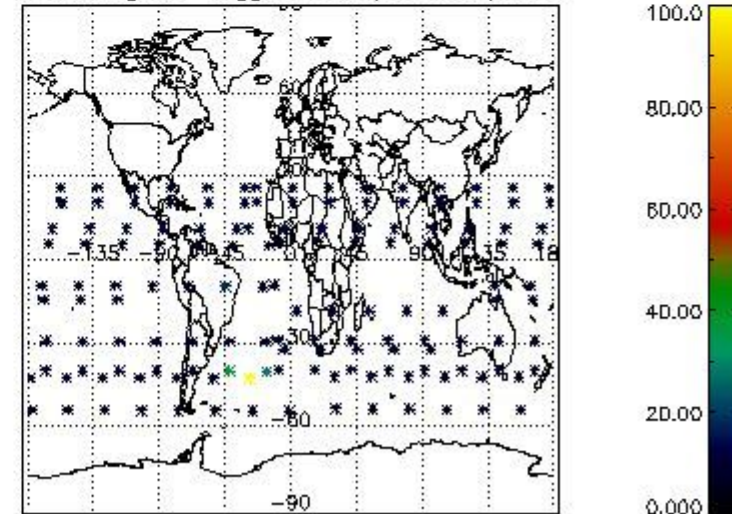
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

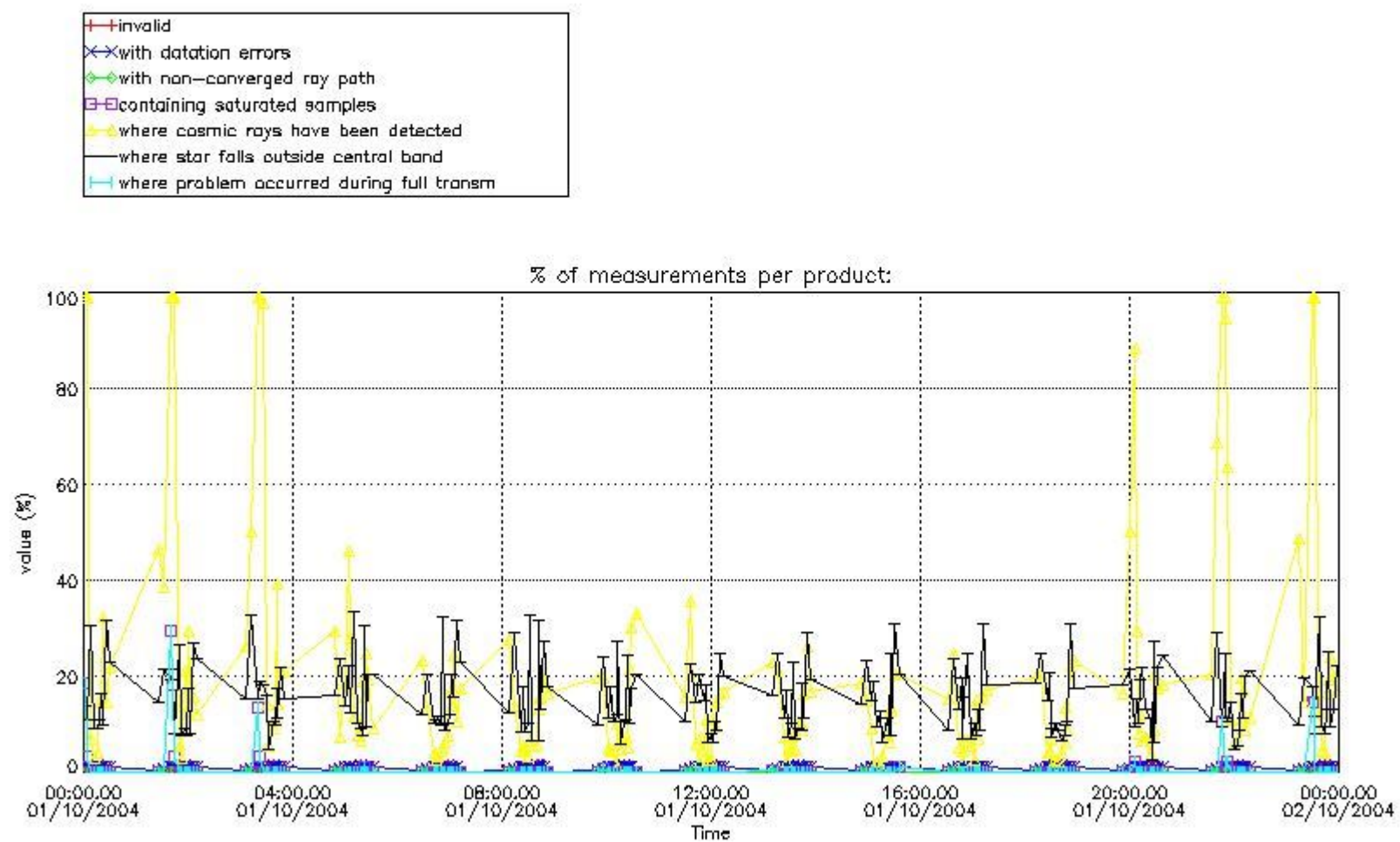


4. Level 1 quality information per product

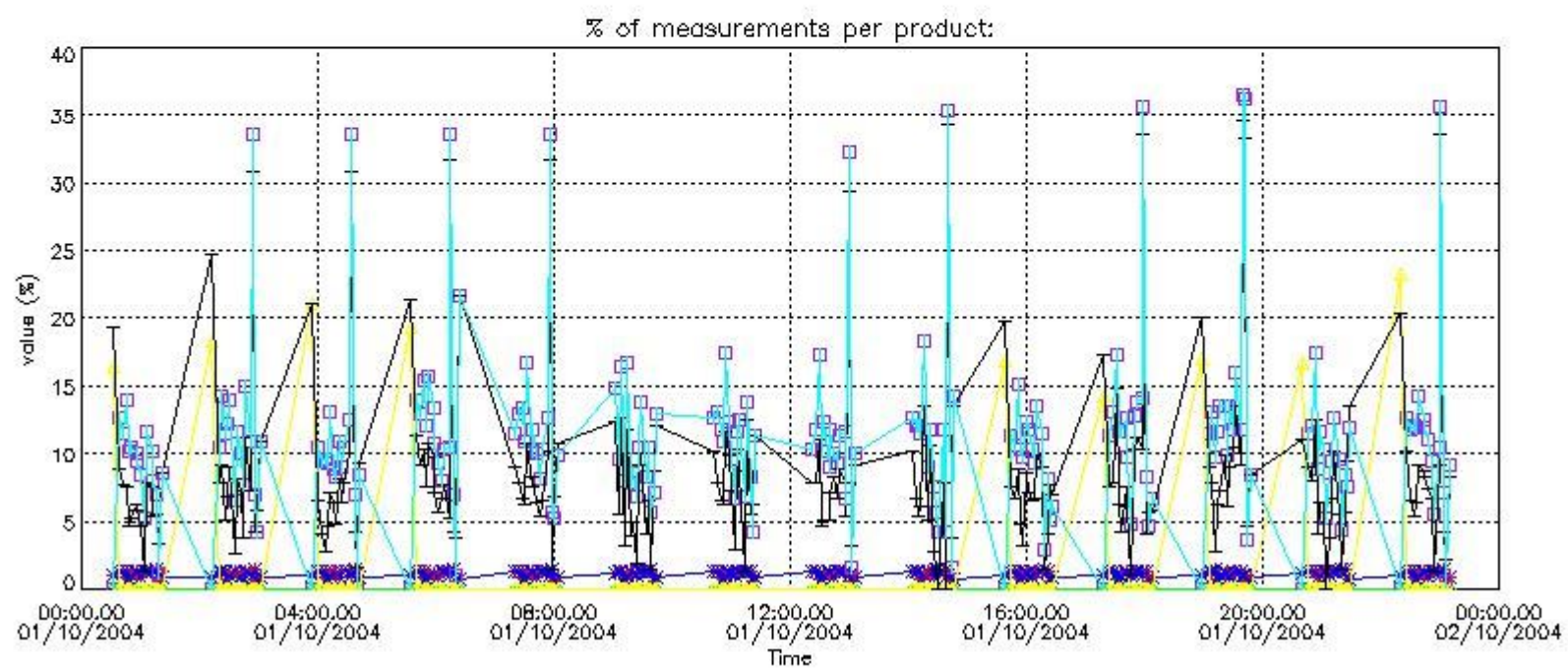
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

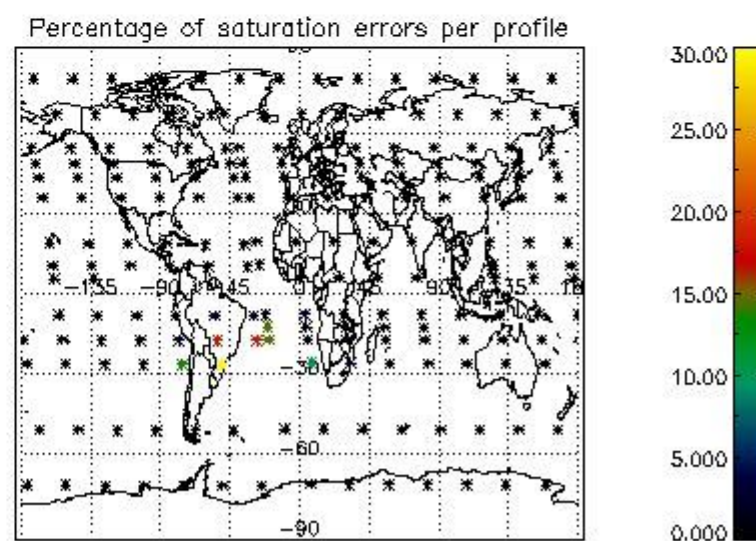
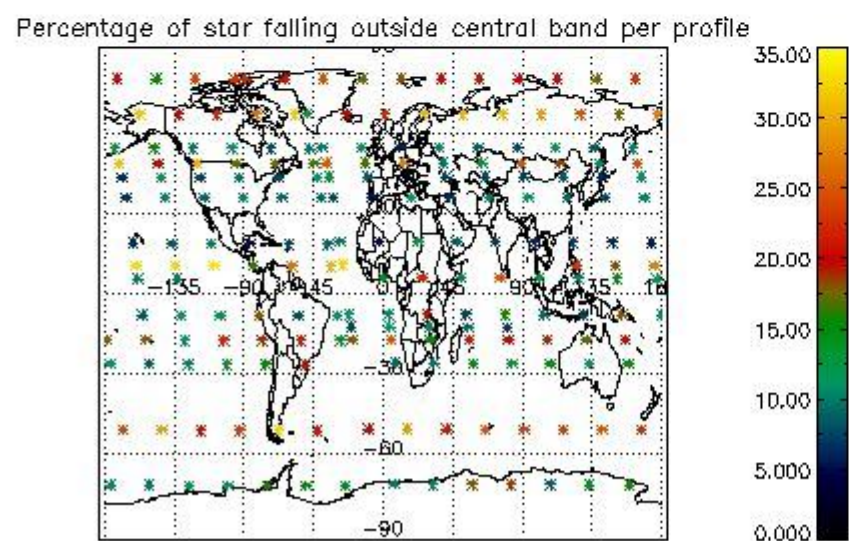
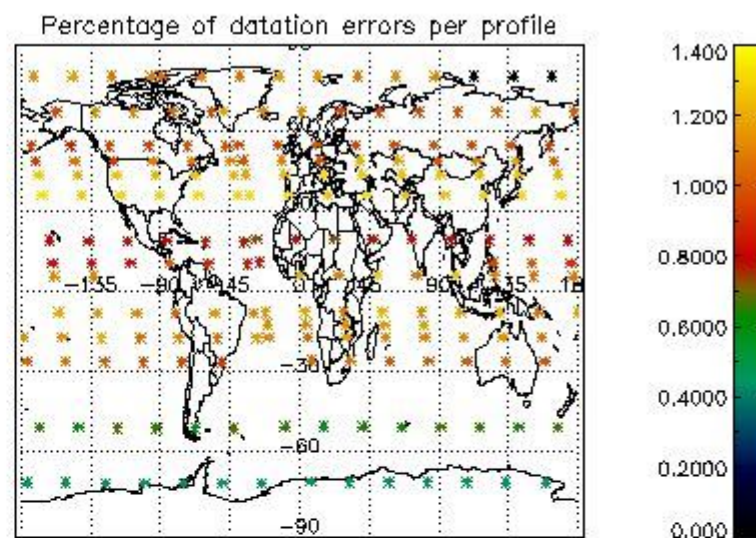
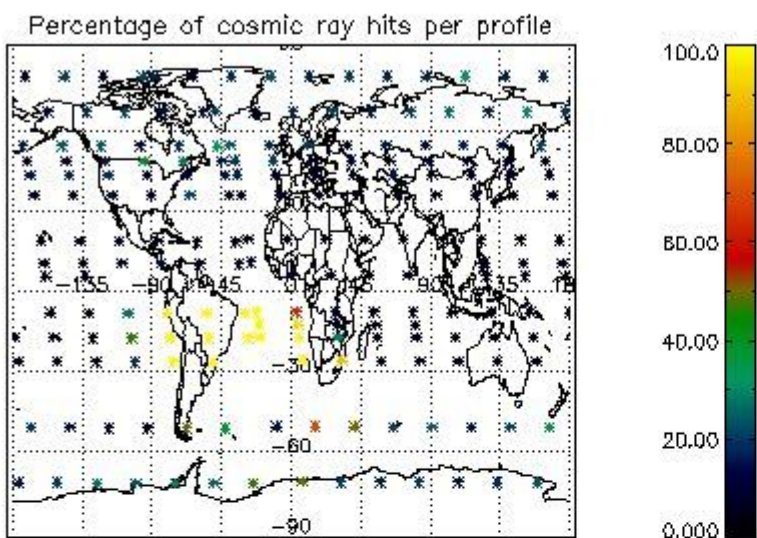


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

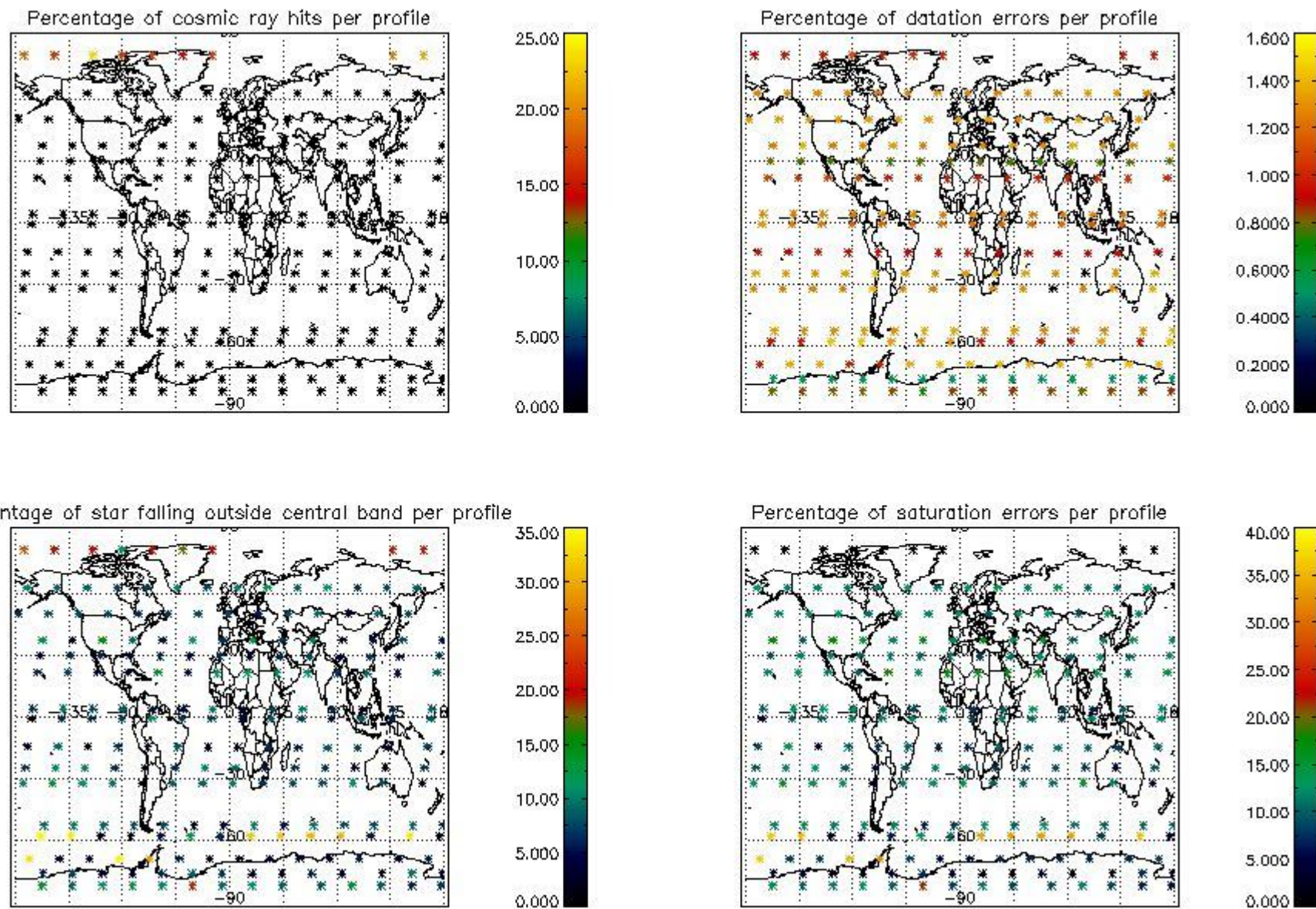


4.2 Plot quality information per product coming from level 1b processing (world map)

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

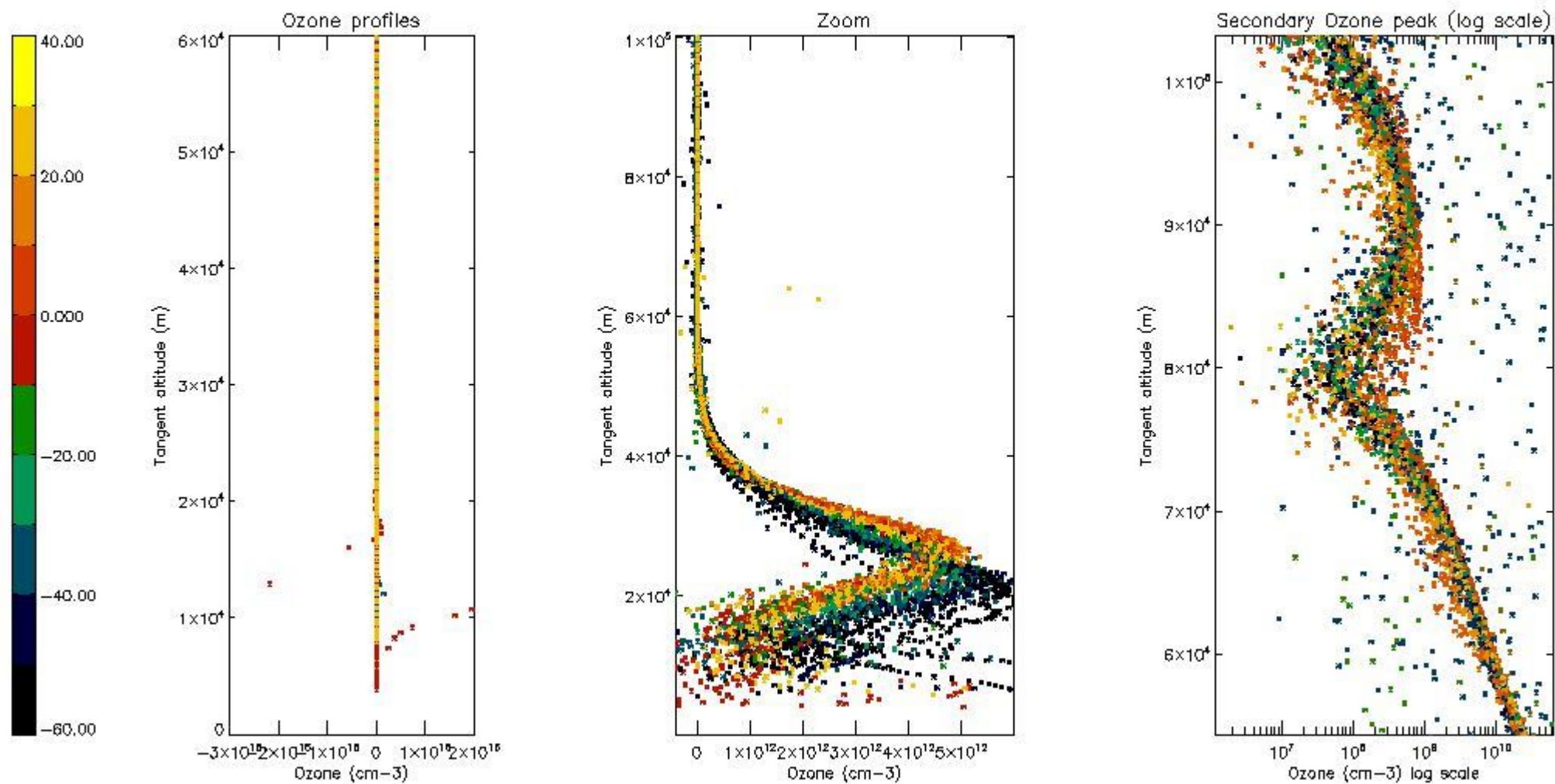
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	20

STD < 10	16
STD < 5	11

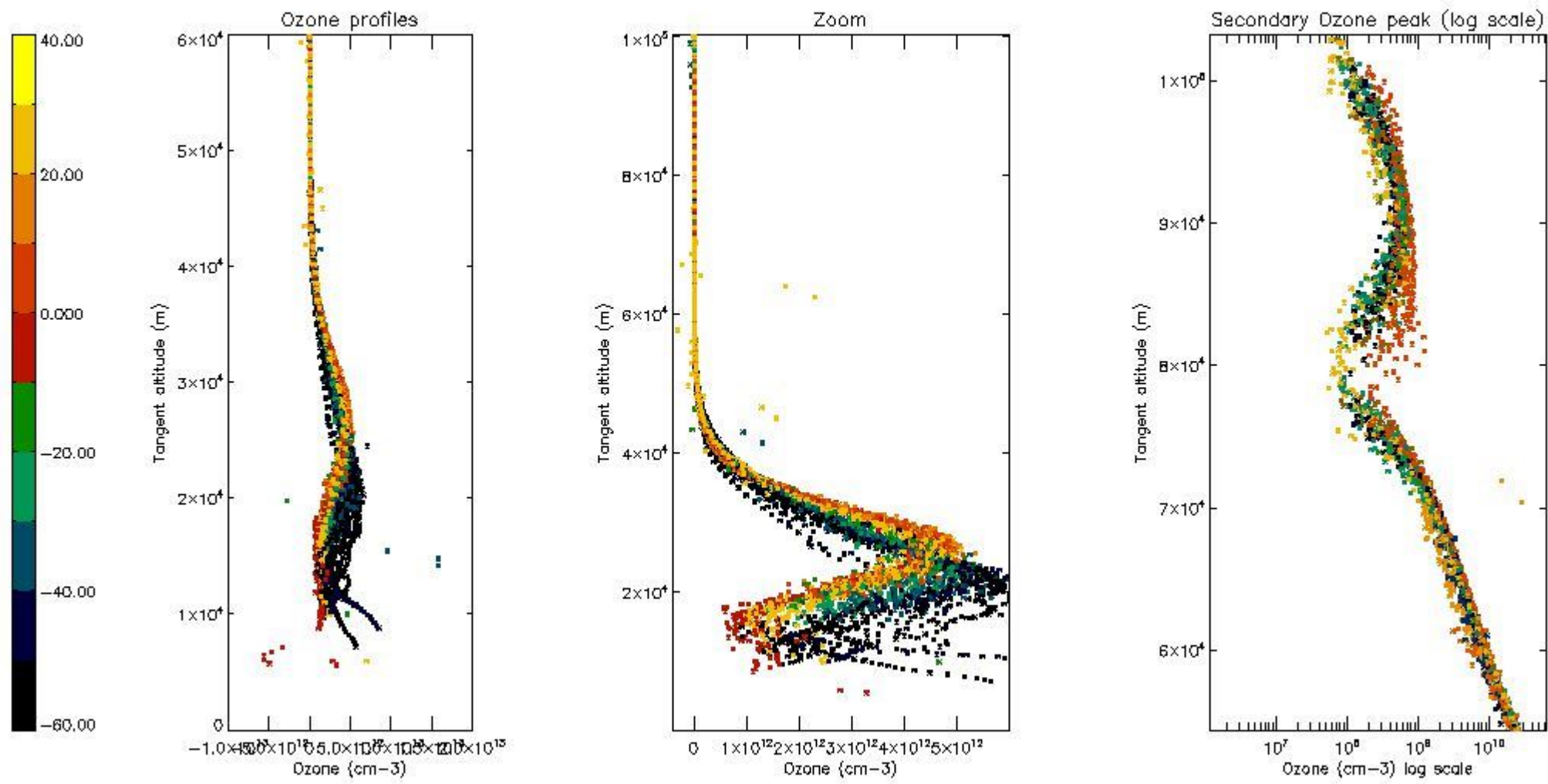
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



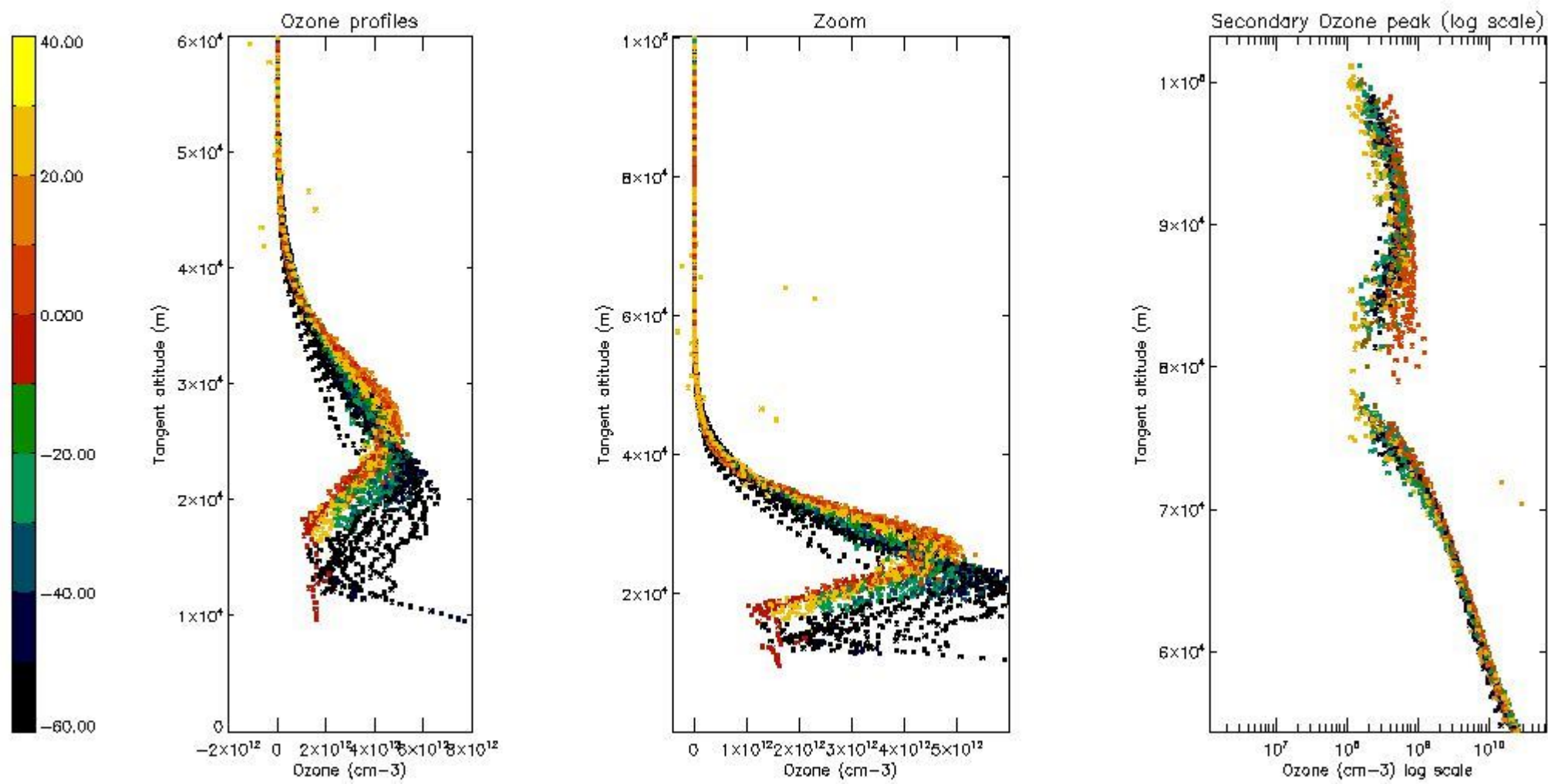
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



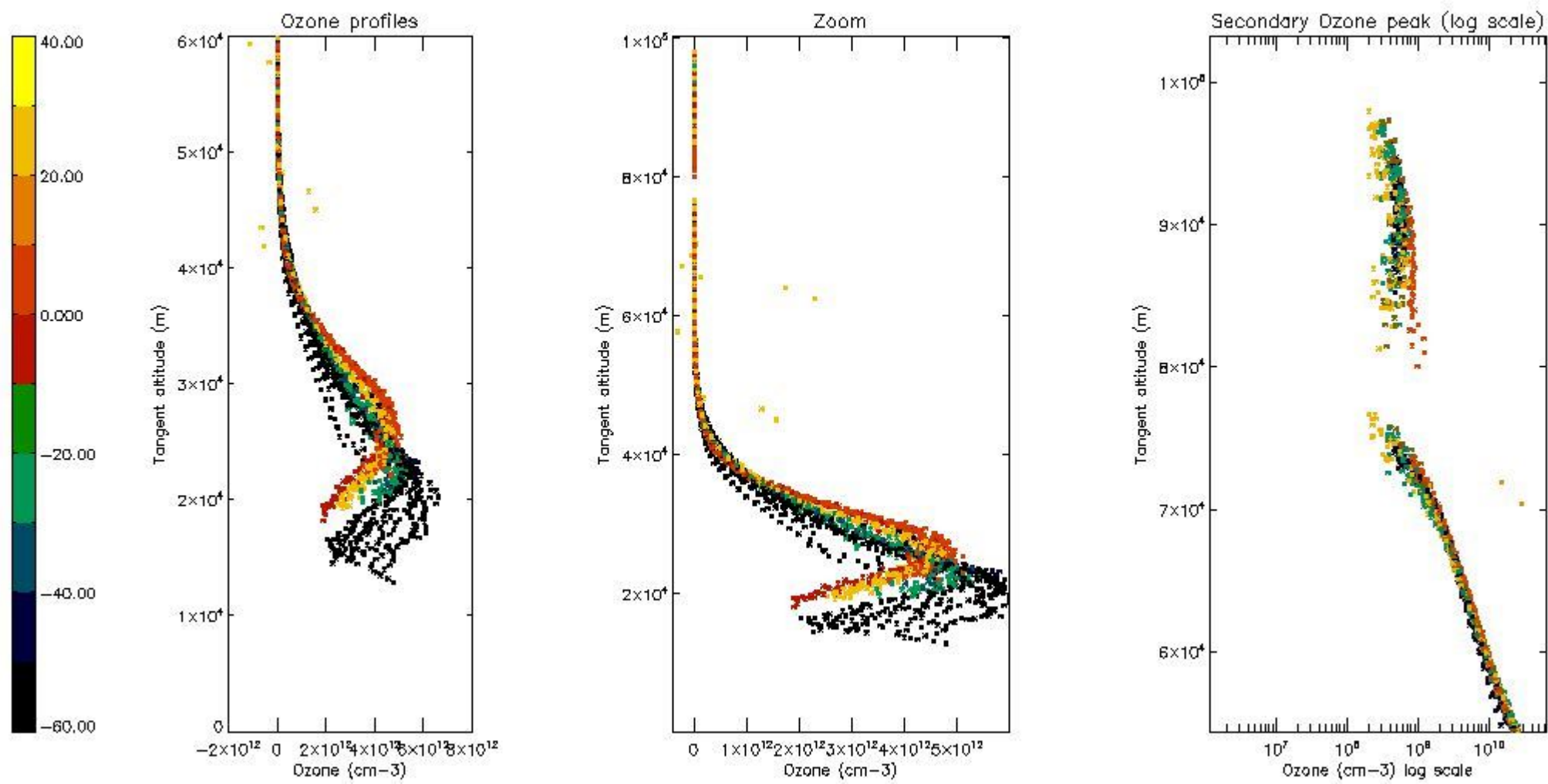
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



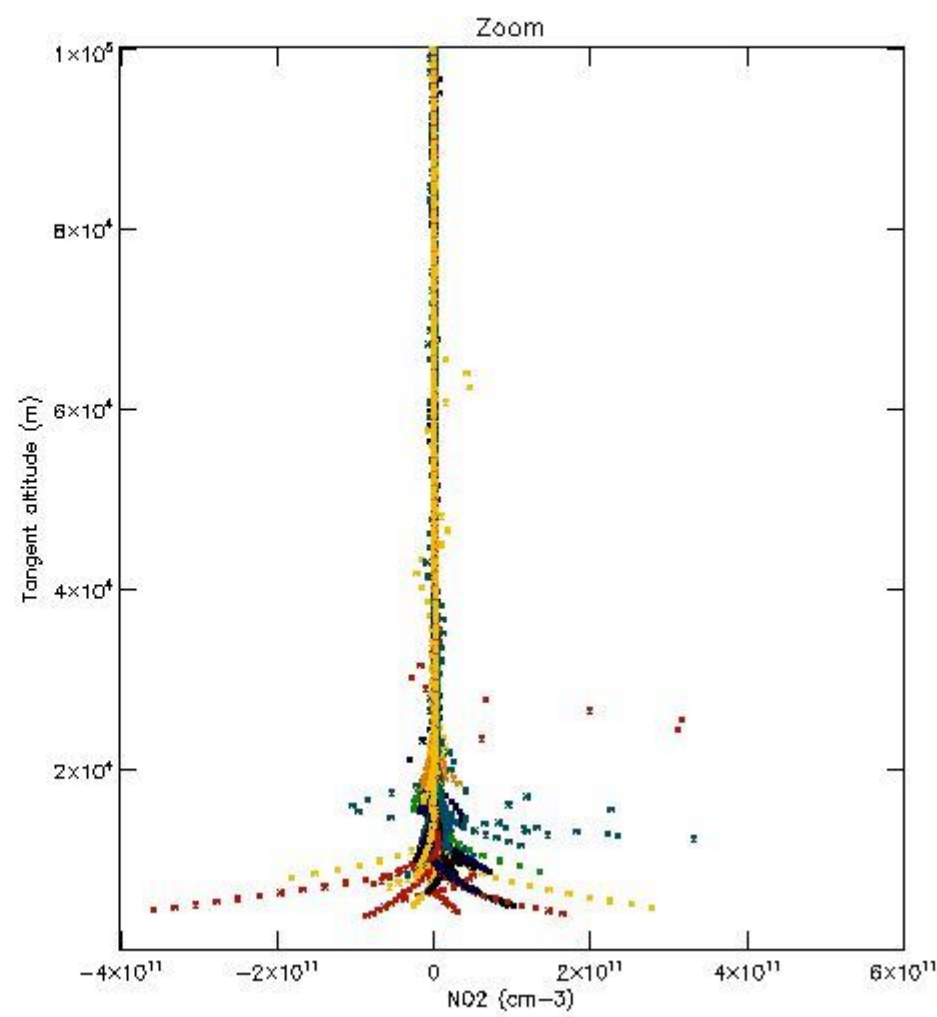
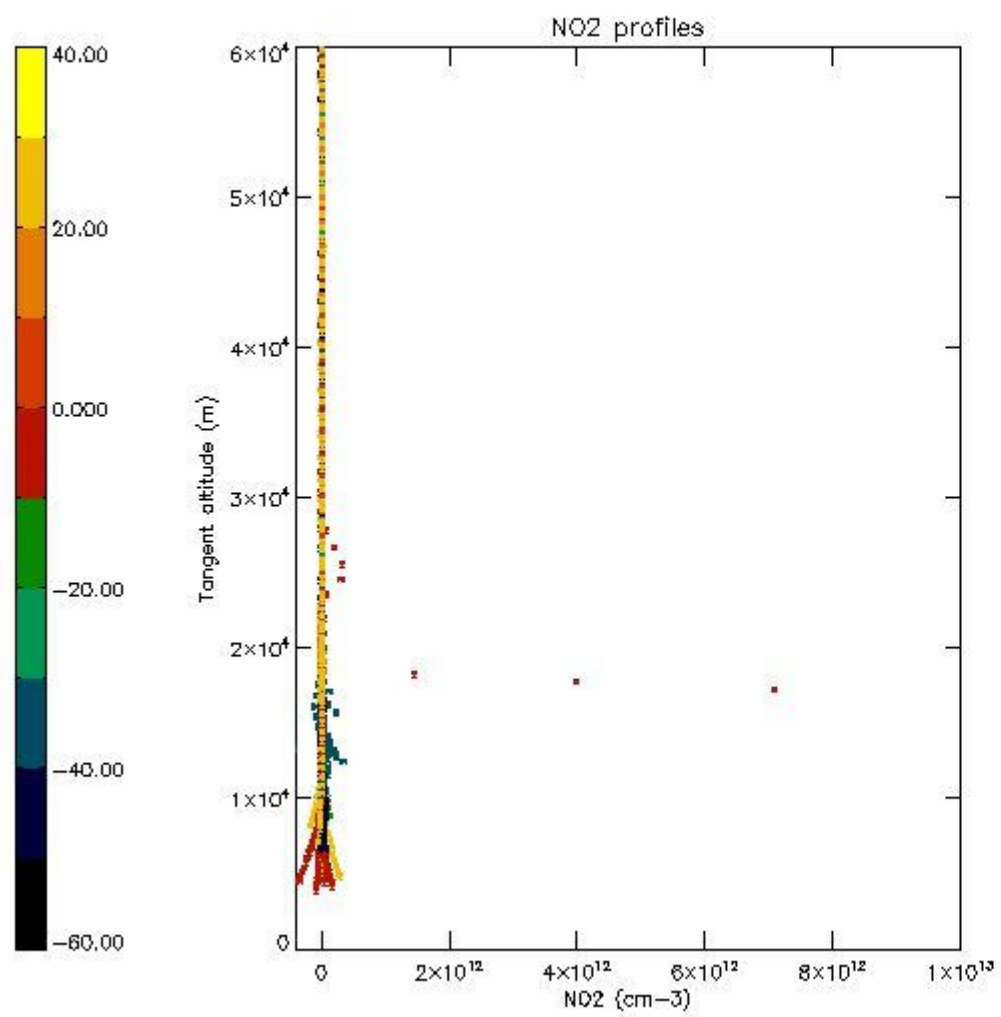
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



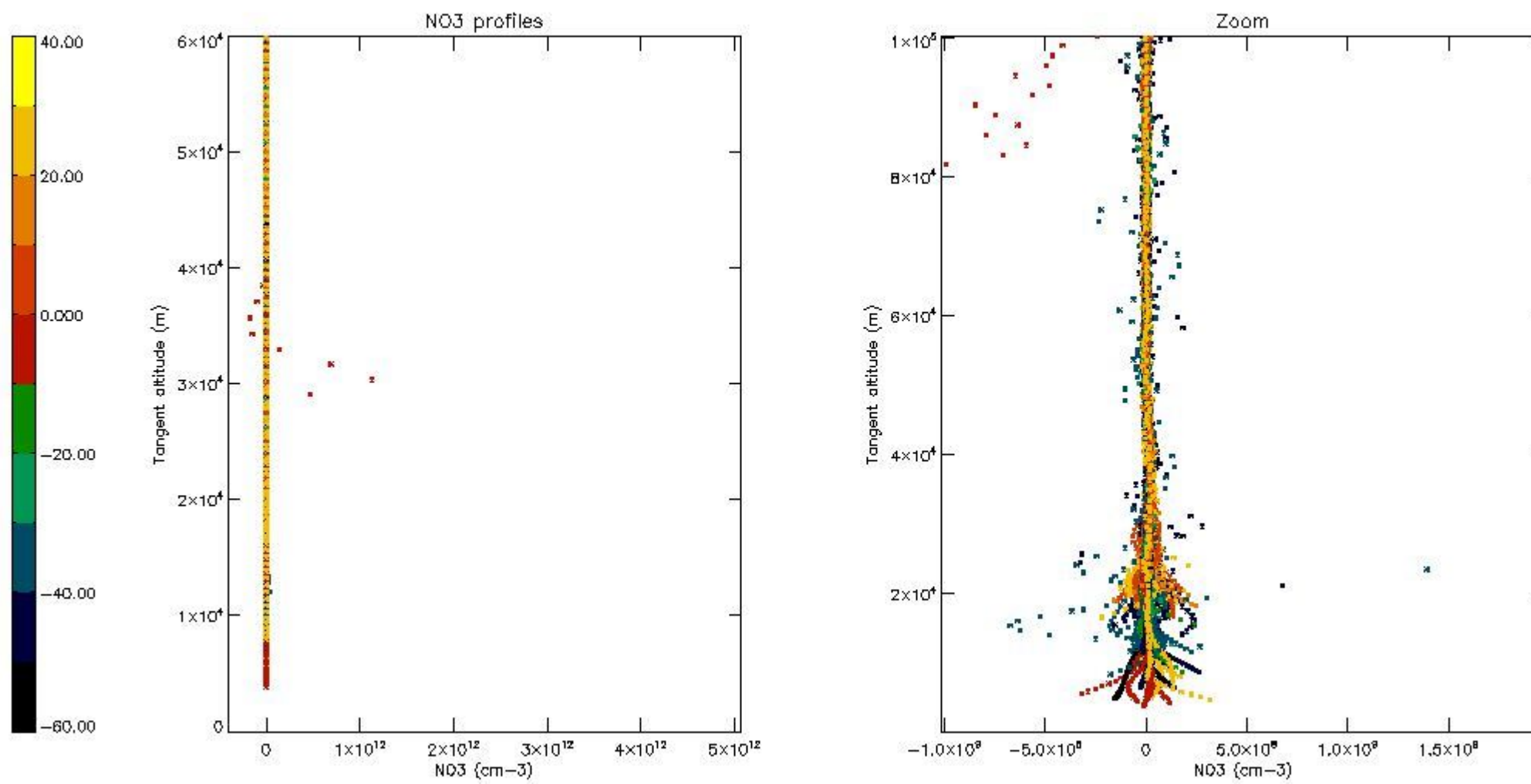
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



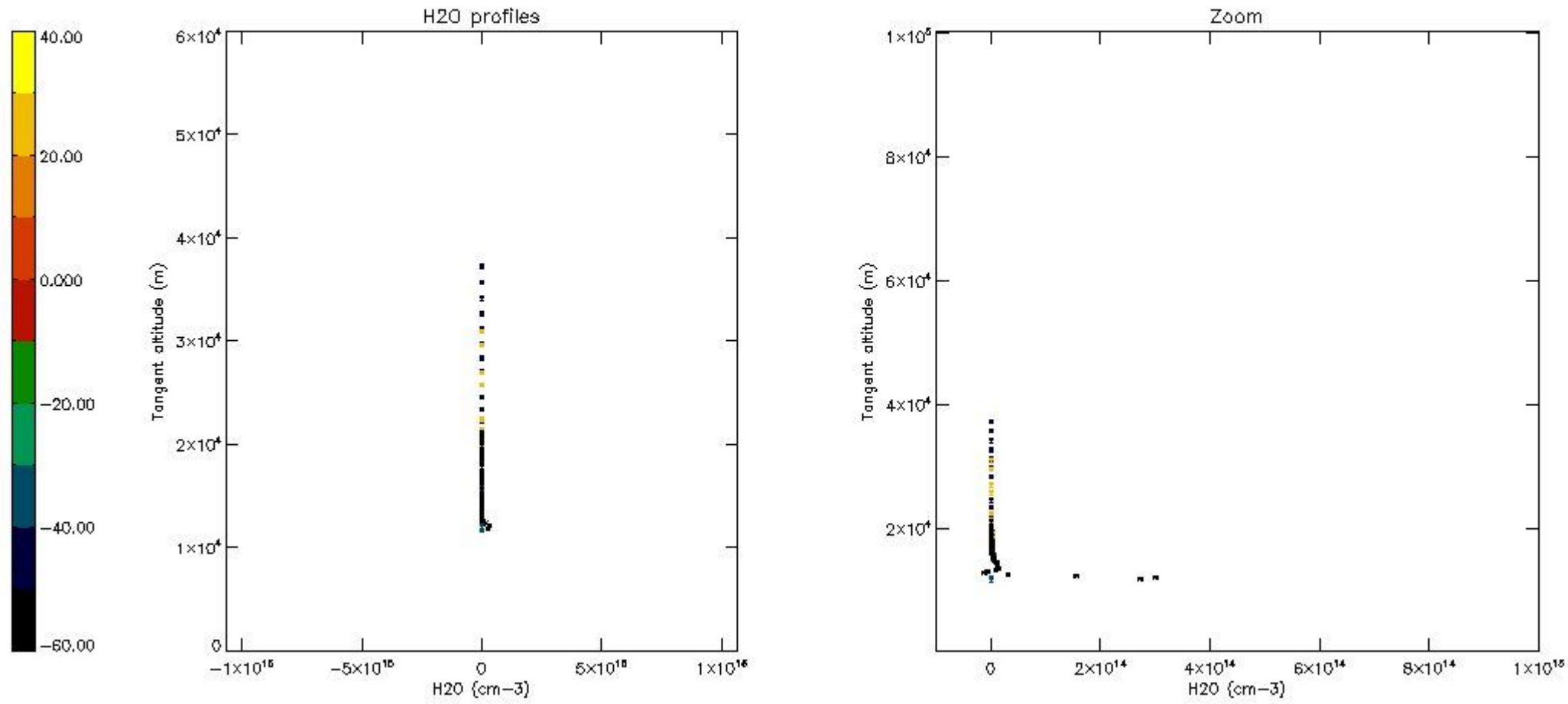
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-OCT-2004 00:01:12
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-OCT-2004 00:01:12
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-OCT-2004 00:01:12

GOMOS Level 2 Daily Report

SUMMARY

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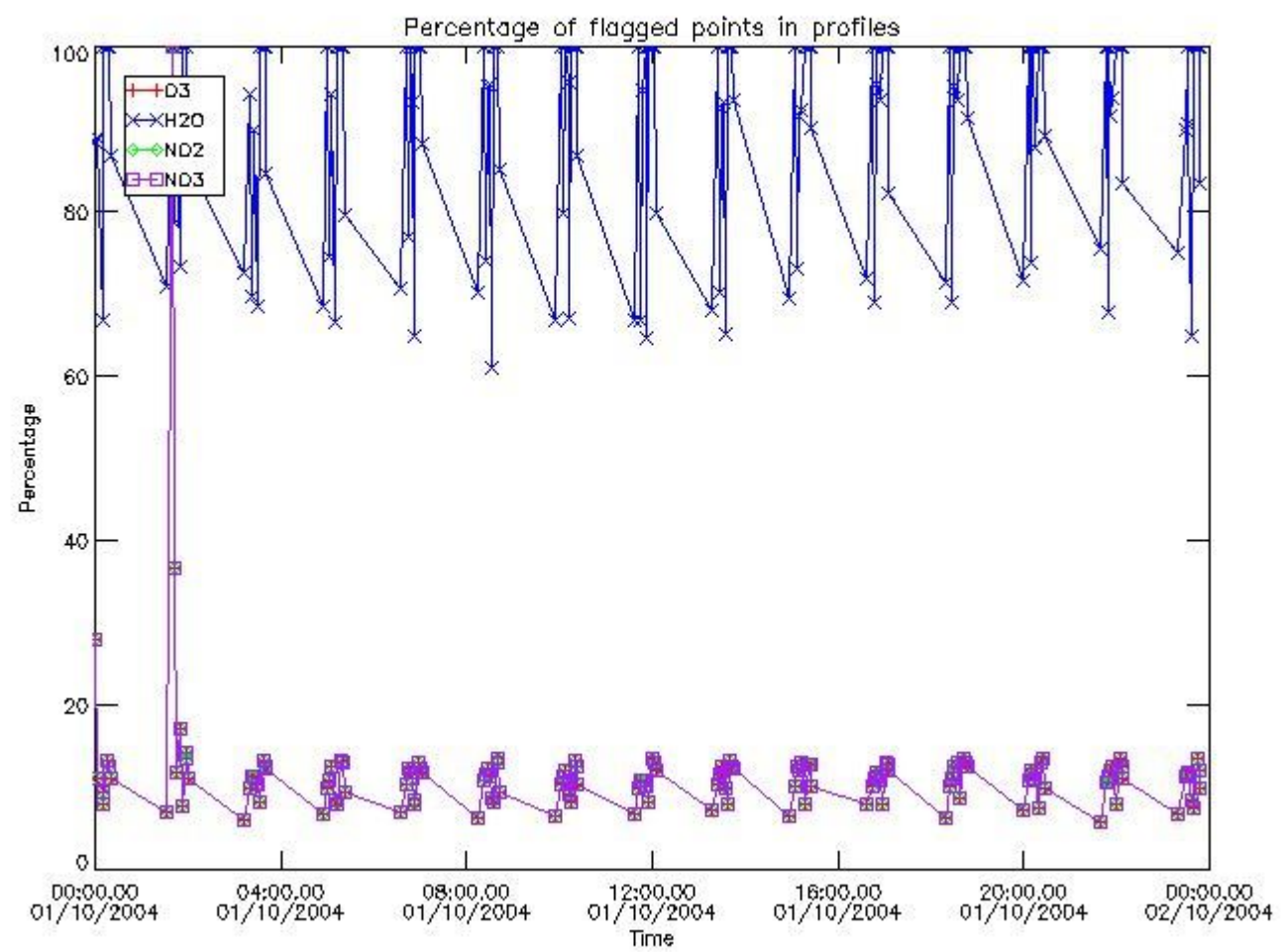
[6. Auxiliary Data Files used for the production reported in section 2](#)

397	GOM_NL__2PRFIN20041001_223802_000000492030_00459_13539_4638.N1	01-OCT-2004 22:38:02	Bright	49.000	53	43Bet And	2.0480	3300.0	98	13539	No
398	GOM_NL__2PRFIN20041001_224301_000000402030_00459_13539_4639.N1	01-OCT-2004 22:43:01	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	13539	No
399	GOM_NL__2PRFIN20041001_224419_000000422030_00459_13539_4640.N1	01-OCT-2004 22:44:19	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	13539	No
400	GOM_NL__2PRFIN20041001_224807_000000542030_00459_13539_4641.N1	01-OCT-2004 22:48:07	Bright	54.000	160	23Gam Per	2.9300	4700.0	108	13539	No
401	GOM_NL__2PRFIN20041001_225102_000000372030_00459_13539_4642.N1	01-OCT-2004 22:51:02	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	13539	No
402	GOM_NL__2PRFIN20041001_225309_000000372030_00459_13539_4643.N1	01-OCT-2004 22:53:09	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	13539	No
403	GOM_NL__2PRFIN20041001_225901_000000382030_00459_13539_4644.N1	01-OCT-2004 22:59:01	Bright	38.000	36	50Alp UMa	1.8000	6300.0	76	13539	No
404	GOM_NL__2PRFIN20041001_230031_000000522030_00459_13539_4645.N1	01-OCT-2004 23:00:31	Bright	52.000	82	48Bet UMa	2.3650	10600.	104	13539	No
405	GOM_NL__2PRFIN20041001_230345_000000352030_00459_13539_4646.N1	01-OCT-2004 23:03:45	Bright	35.000	174	52Psi UMa	3.0040	4400.0	70	13539	No
406	GOM_NL__2PRFIN20041001_230602_000000942030_00459_13539_4647.N1	01-OCT-2004 23:06:02	Bright	93.500	107	37The Aur	2.6490	11000.	187	13539	No
407	GOM_NL__2PRFIN20041001_230909_000000602030_00459_13539_4648.N1	01-OCT-2004 23:09:09	Bright	60.000	24	66Alp Gem	1.5800	10200.	120	13539	No
408	GOM_NL__2PRFIN20041001_231408_000001072030_00459_13539_4649.N1	01-OCT-2004 23:14:08	Tw_i_and_stray	107.00	170	27Eps Gem	3.0000	9700.0	214	13539	No
409	GOM_NL__2PRFIN20041001_232015_000000762030_00459_13539_4650.N1	01-OCT-2004 23:20:15	Dark	76.000	8	10Alp CMi	0.40000	6500.0	152	13539	No
410	GOM_NL__2PRFIN20041001_232942_000000452030_00459_13539_4651.N1	01-OCT-2004 23:29:42	Dark	45.000	65	Lam Vel	2.2040	4400.0	90	13539	No
411	GOM_NL__2PRFIN20041001_233100_000000452030_00459_13539_4652.N1	01-OCT-2004 23:31:00	Dark	44.500	70	Zet Pup	2.2460	39000.	89	13539	No
412	GOM_NL__2PRFIN20041001_233220_000000442030_00459_13539_4653.N1	01-OCT-2004 23:32:20	Dark	43.500	34	Gam2Vel	1.7930	23000.	87	13539	No
413	GOM_NL__2PRFIN20041001_233734_000000602030_00460_13540_4820.N1	01-OCT-2004 23:37:34	Dark	60.000	2	Alp Car	-0.73600	7000.0	120	13540	No
414	GOM_NL__2PRFIN20041001_233959_000000692030_00460_13540_4821.N1	01-OCT-2004 23:39:59	Dark	68.500	108	Alp Col	2.6520	15200.	137	13540	No
415	GOM_NL__2PRFIN20041001_234435_000000382030_00460_13540_4822.N1	01-OCT-2004 23:44:35	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	13540	No
416	GOM_NL__2PRFIN20041001_234648_000000432030_00460_13540_4823.N1	01-OCT-2004 23:46:48	Dark	42.500	143	Alp Hyi	2.8570	7200.0	85	13540	No
417	GOM_NL__2PRFIN20041001_234815_000000522030_00460_13540_4824.N1	01-OCT-2004 23:48:15	Dark	51.500	9	Alp Eri	0.45300	24000.	103	13540	No
418	GOM_NL__2PRFIN20041001_234957_000000522030_00460_13540_4825.N1	01-OCT-2004 23:49:57	Straylight	52.000	157	The1Eri	2.9060	9300.0	104	13540	No
419	GOM_NL__2PRFIN20041001_235335_000000432030_00460_13540_4826.N1	01-OCT-2004 23:53:35	Straylight	42.500	84	Alp Phe	2.3970	4500.0	85	13540	No
420	GOM_NL__2PRFIN20041001_235812_000000472030_00460_13540_4827.N1	01-OCT-2004 23:58:12	Straylight	47.000	18	24Alp PsA	1.1660	9700.0	94	13540	No

3. Quality information per product

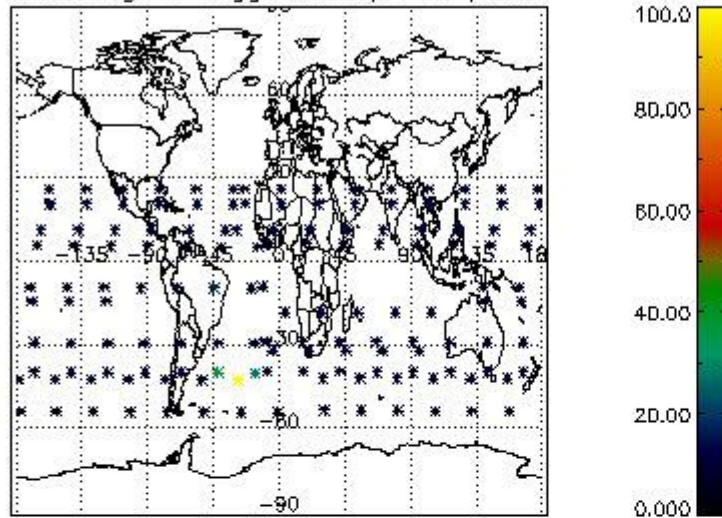
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

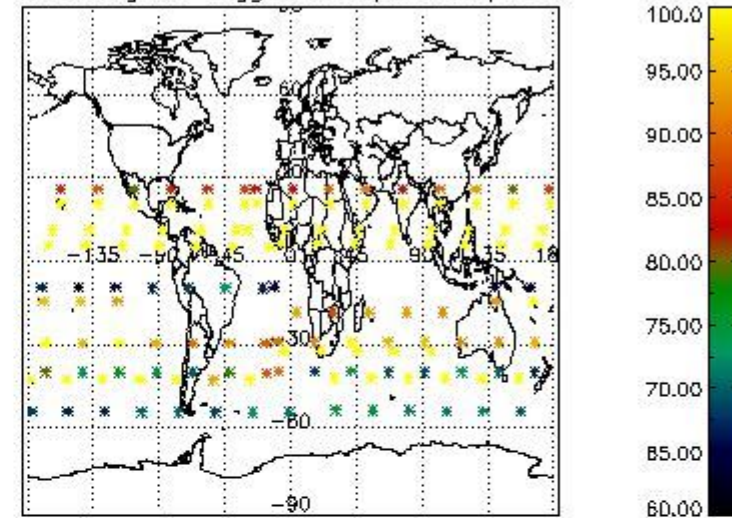


3.2 Plot quality information per product (world map)

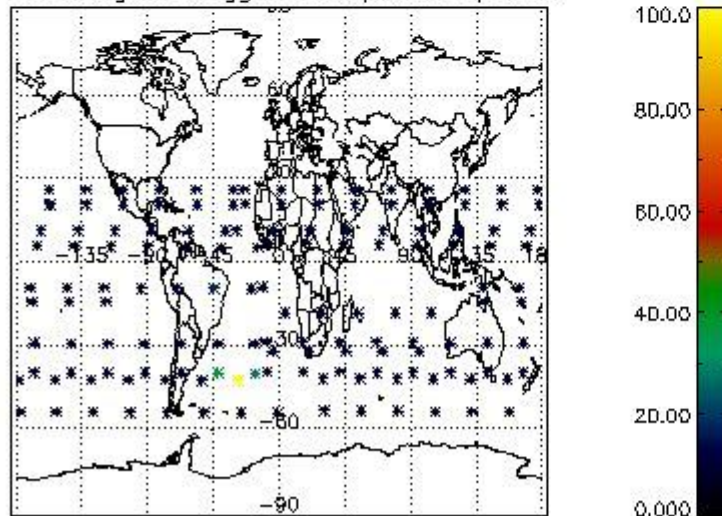
Percentage of flagged data per O3 profile



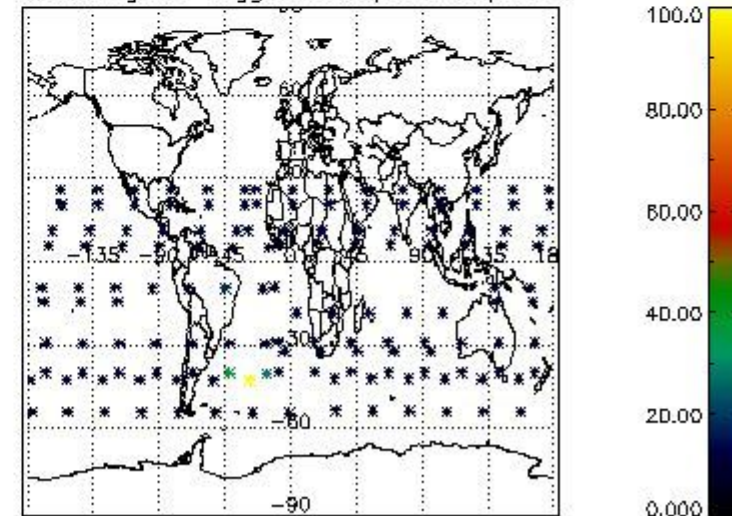
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

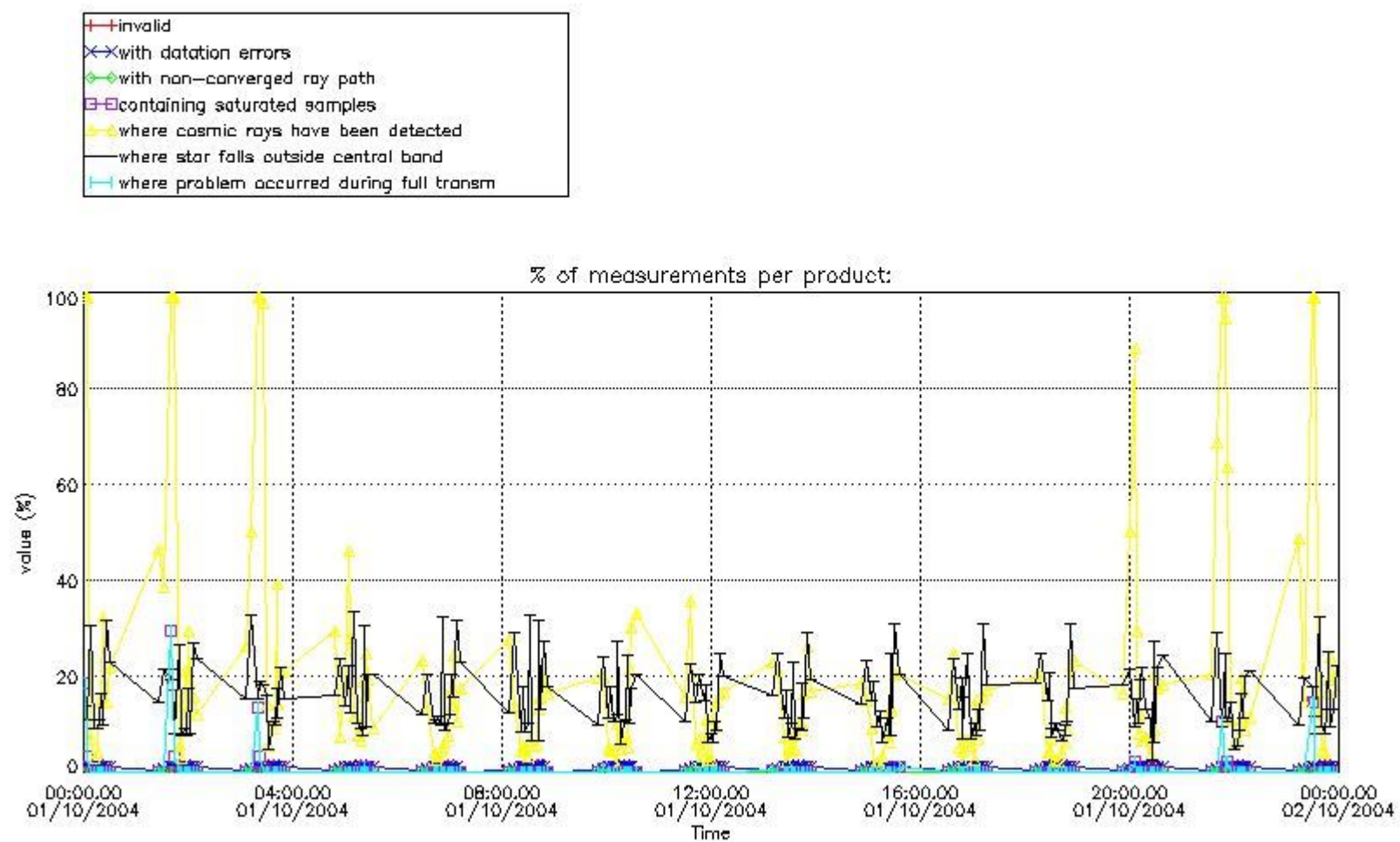


4. Level 1 quality information per product

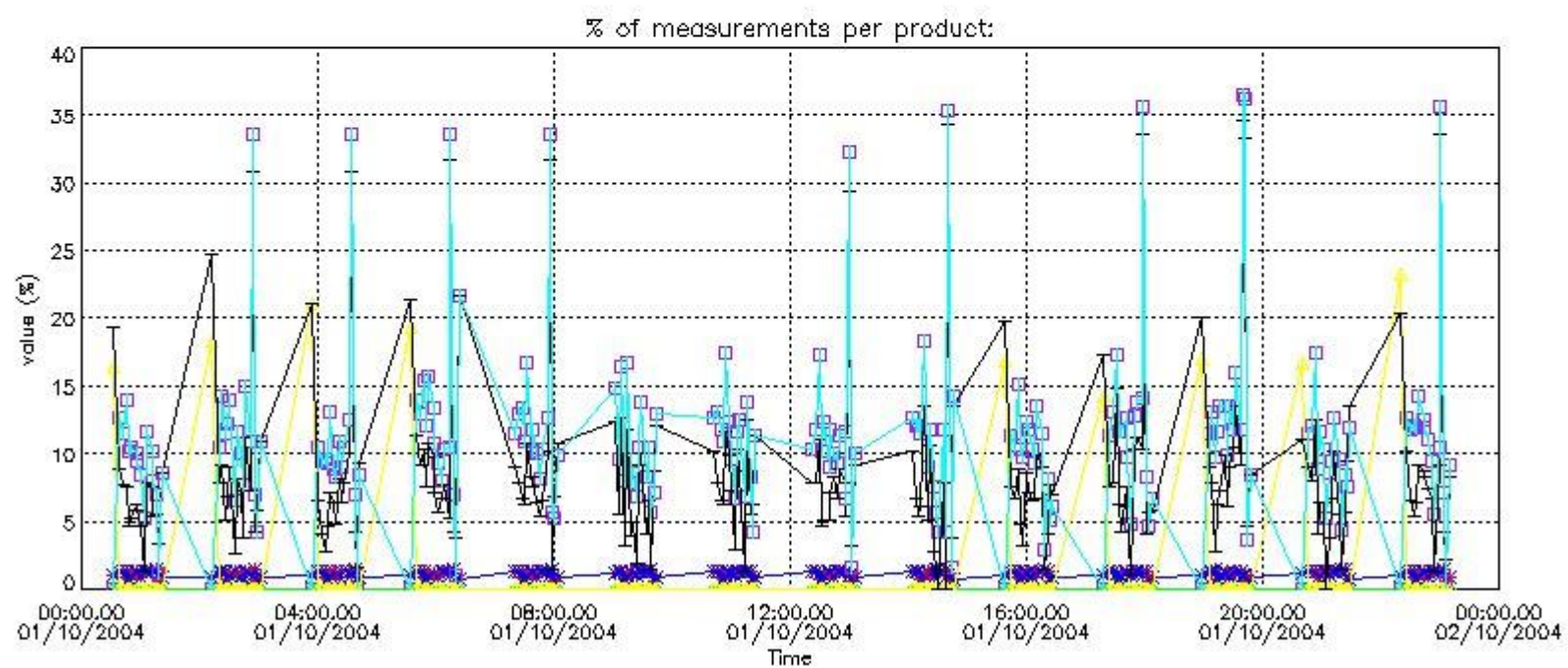
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

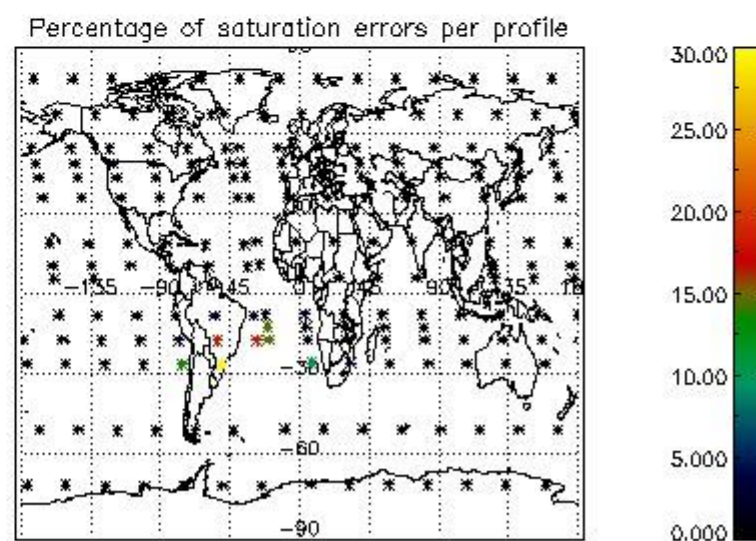
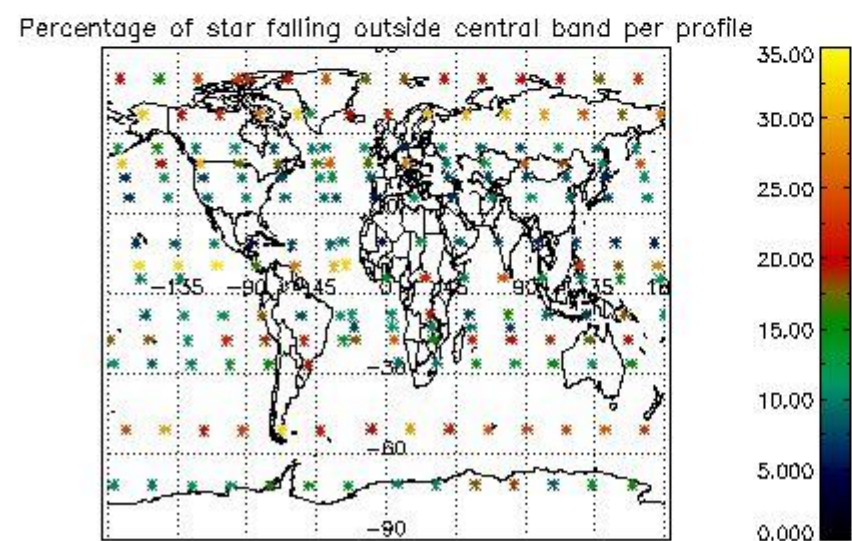
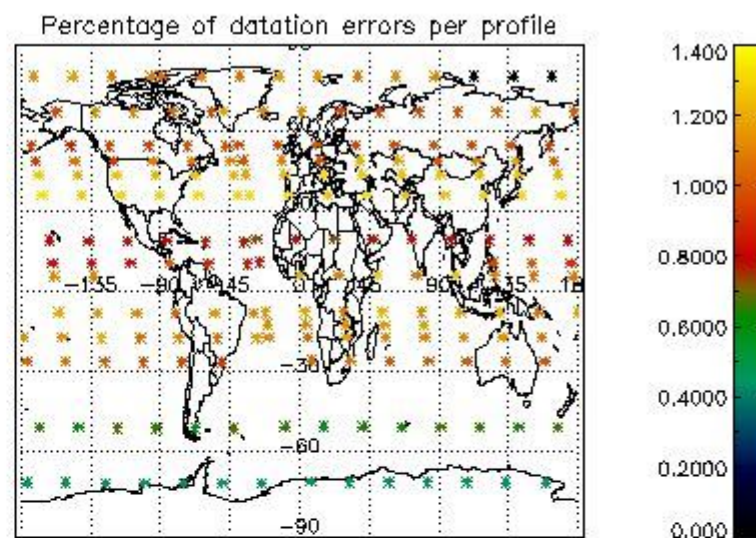
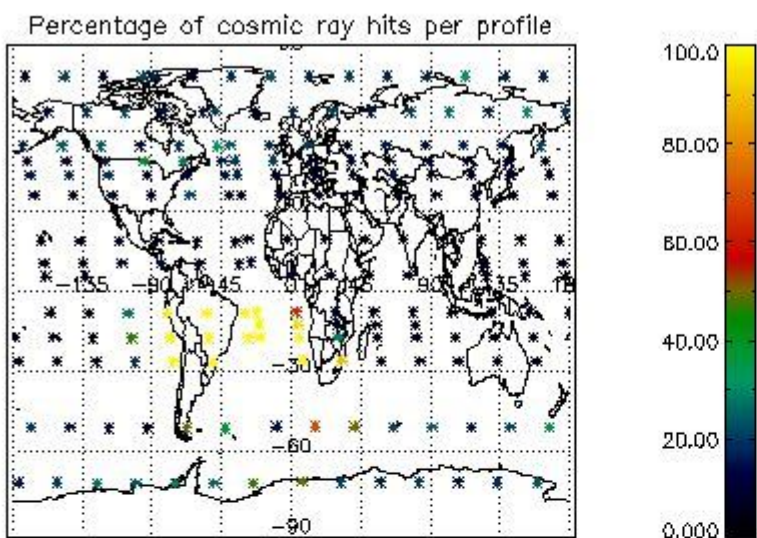


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

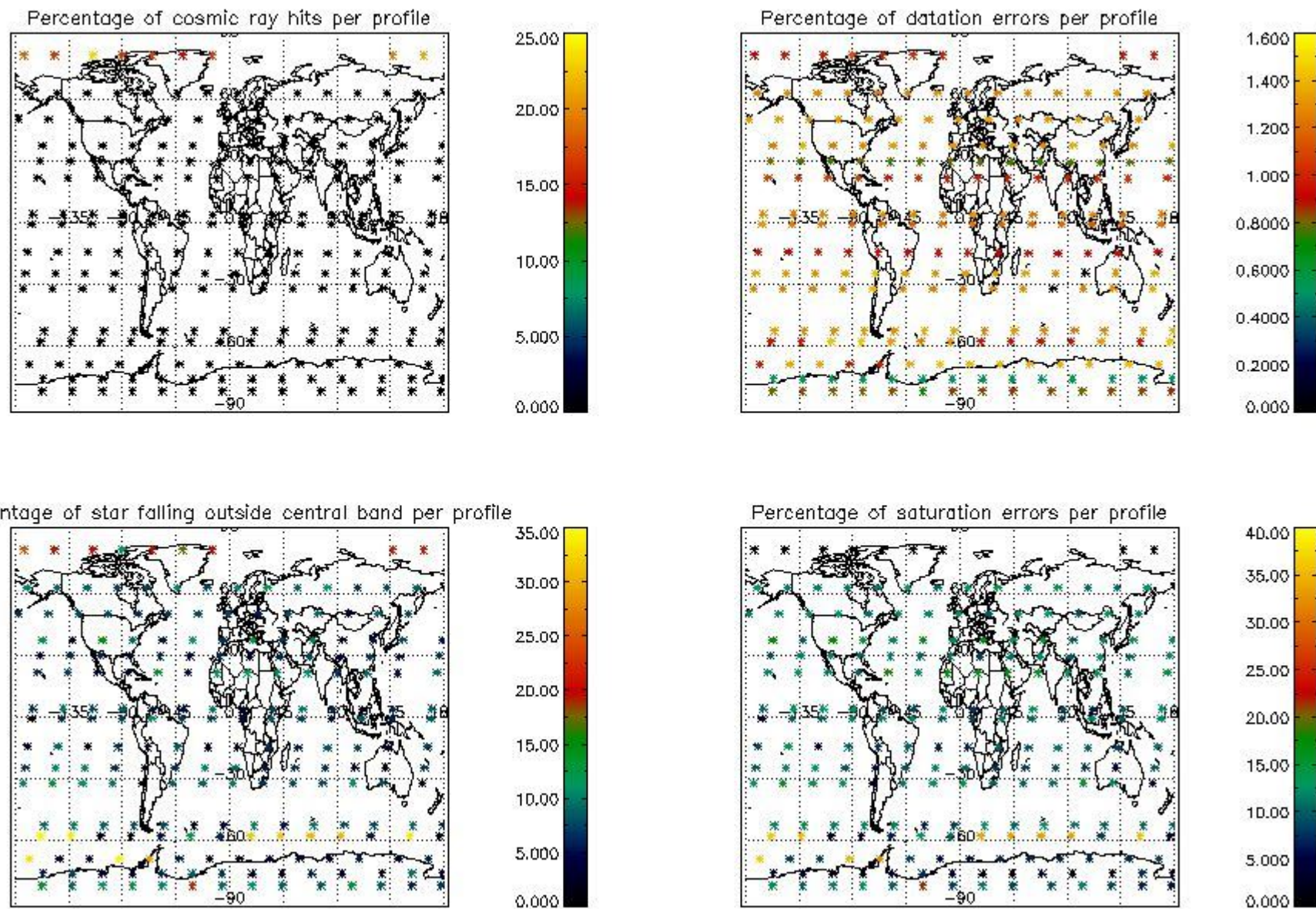


4.2 Plot quality information per product coming from level 1b processing (world map)

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

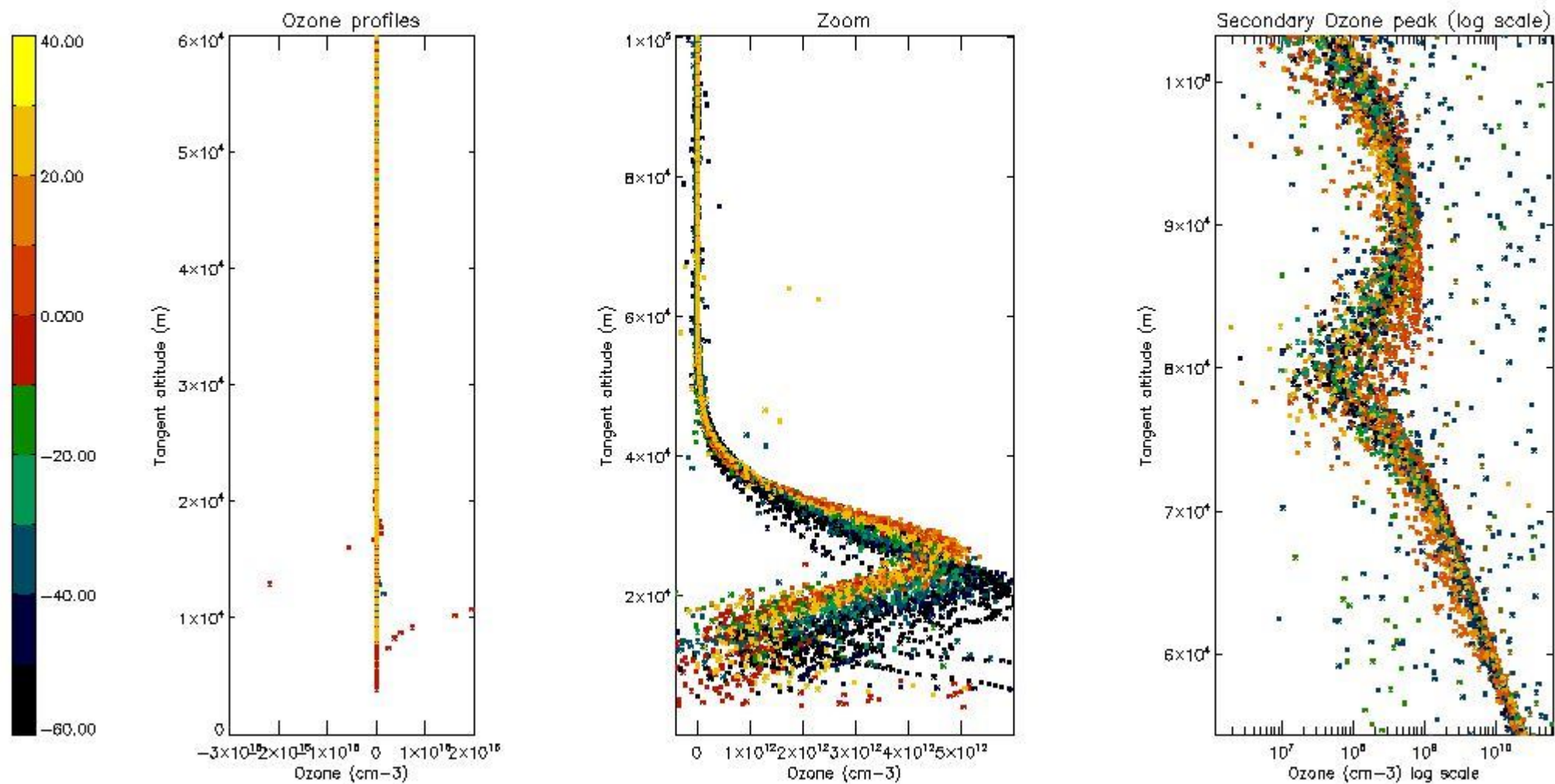
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	20

STD < 10	16
STD < 5	11

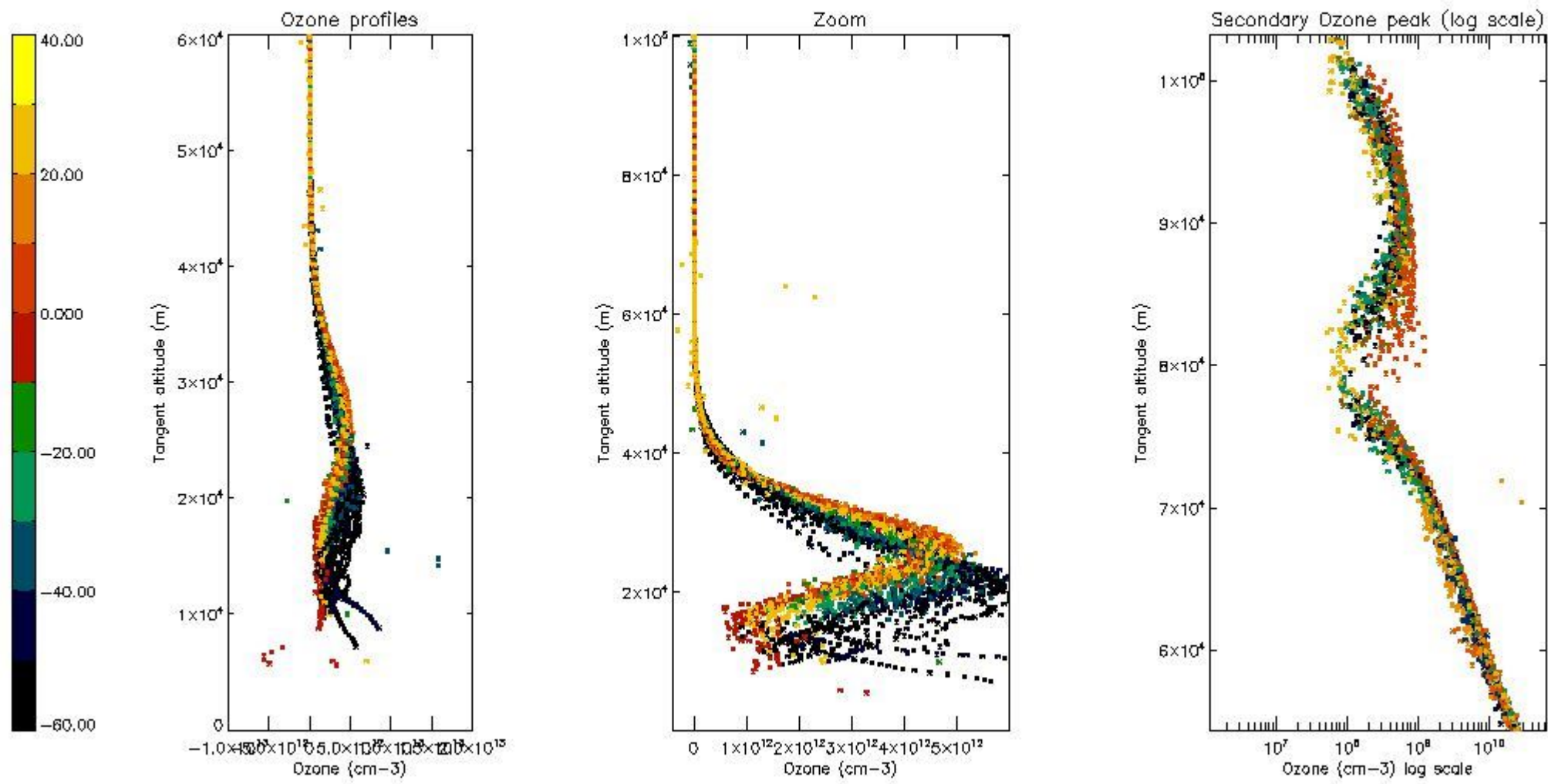
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



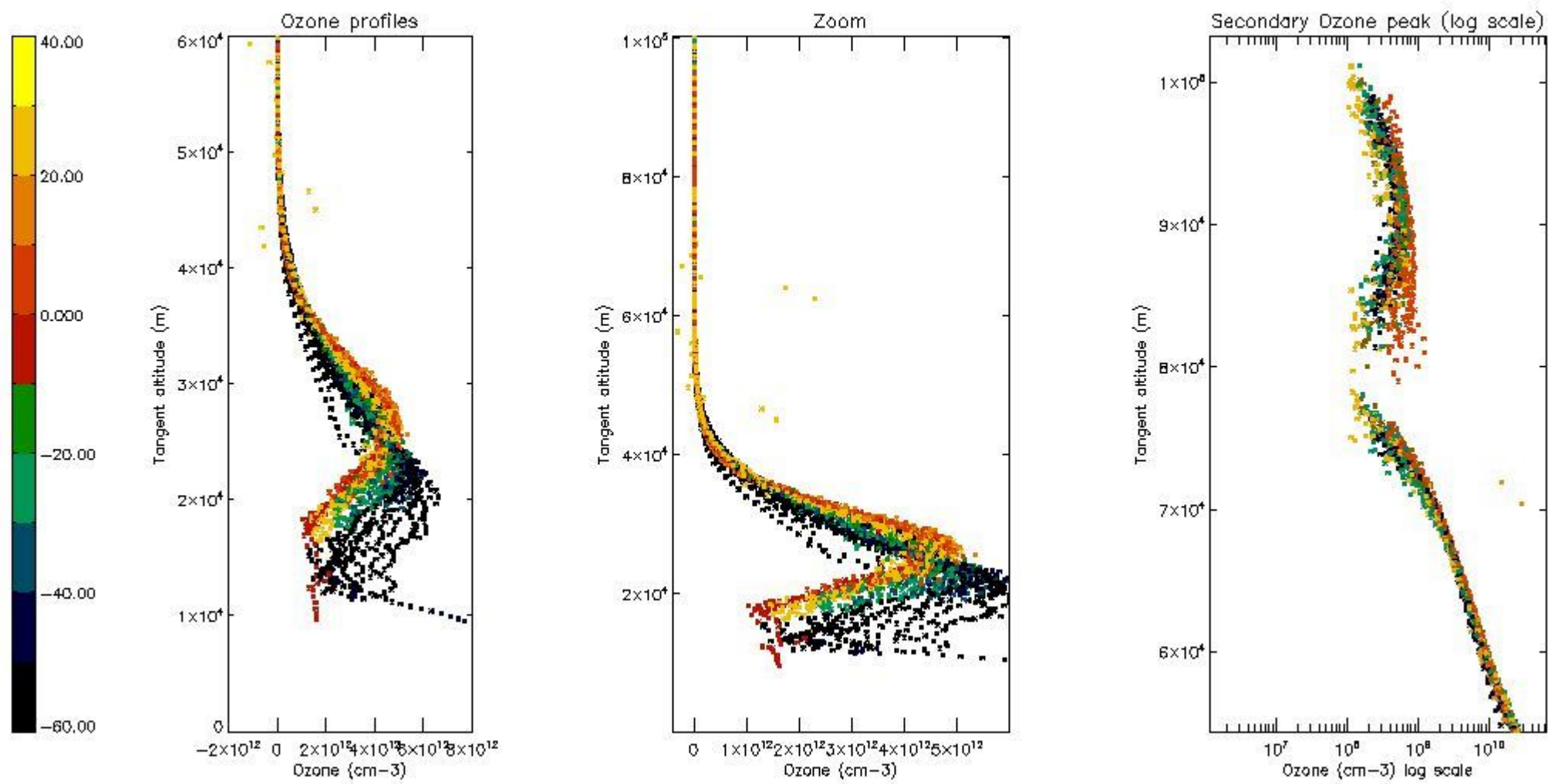
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



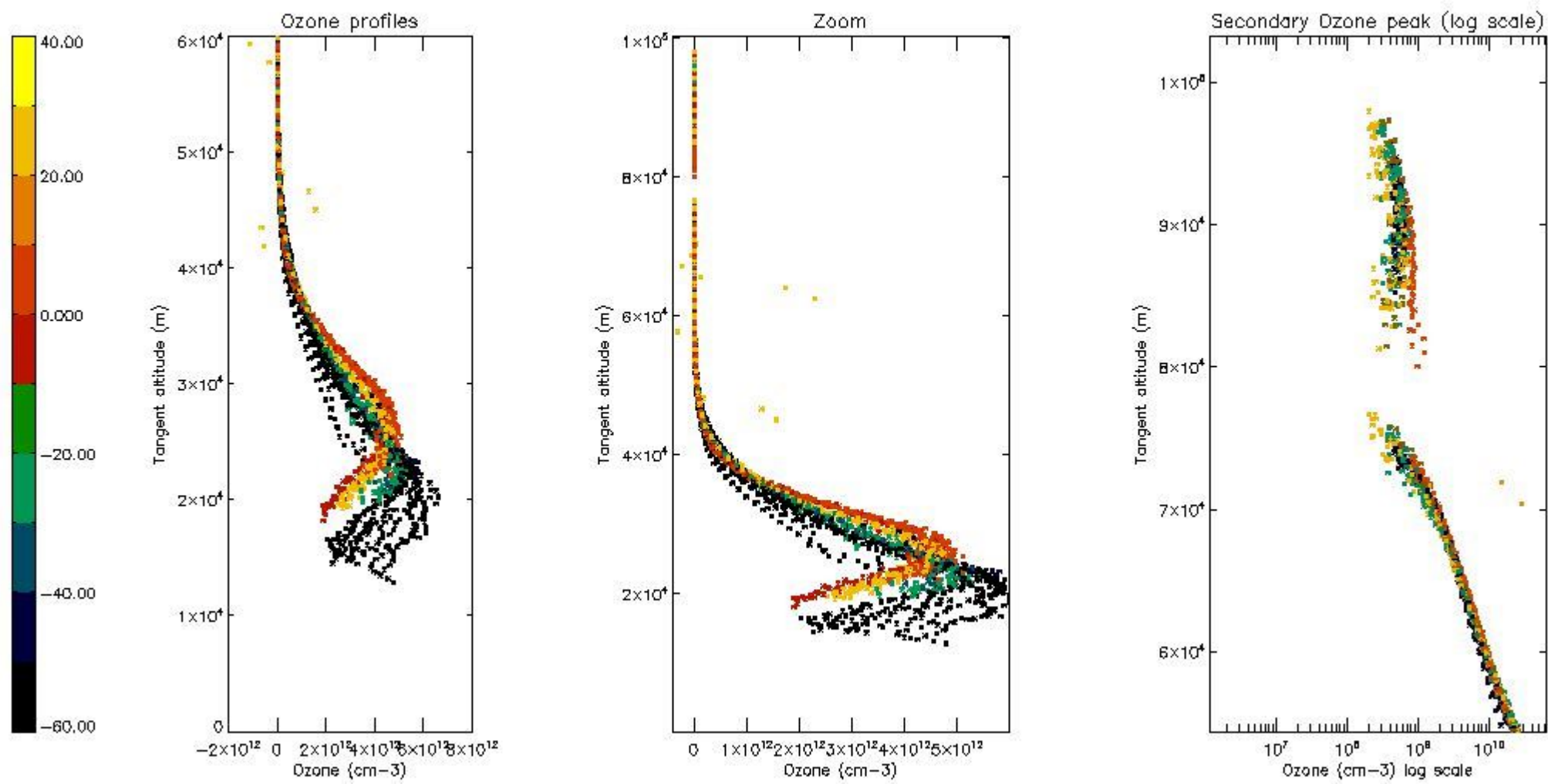
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



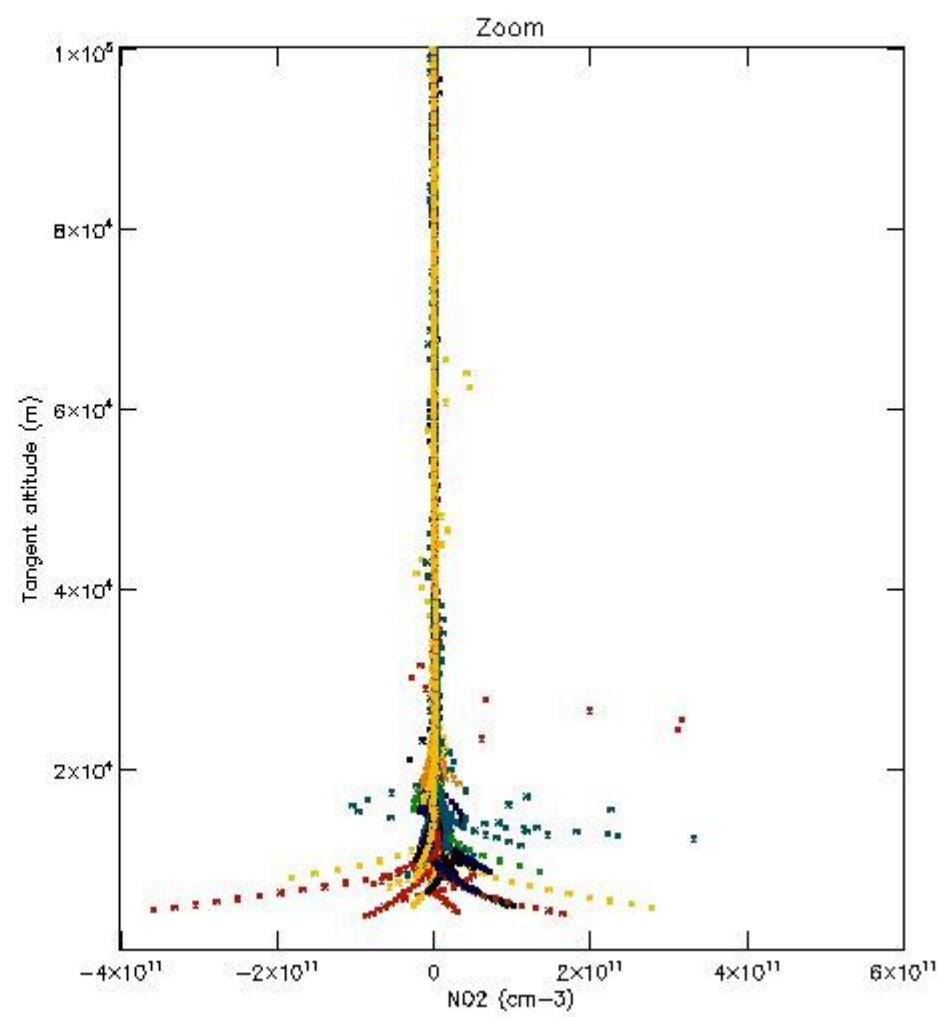
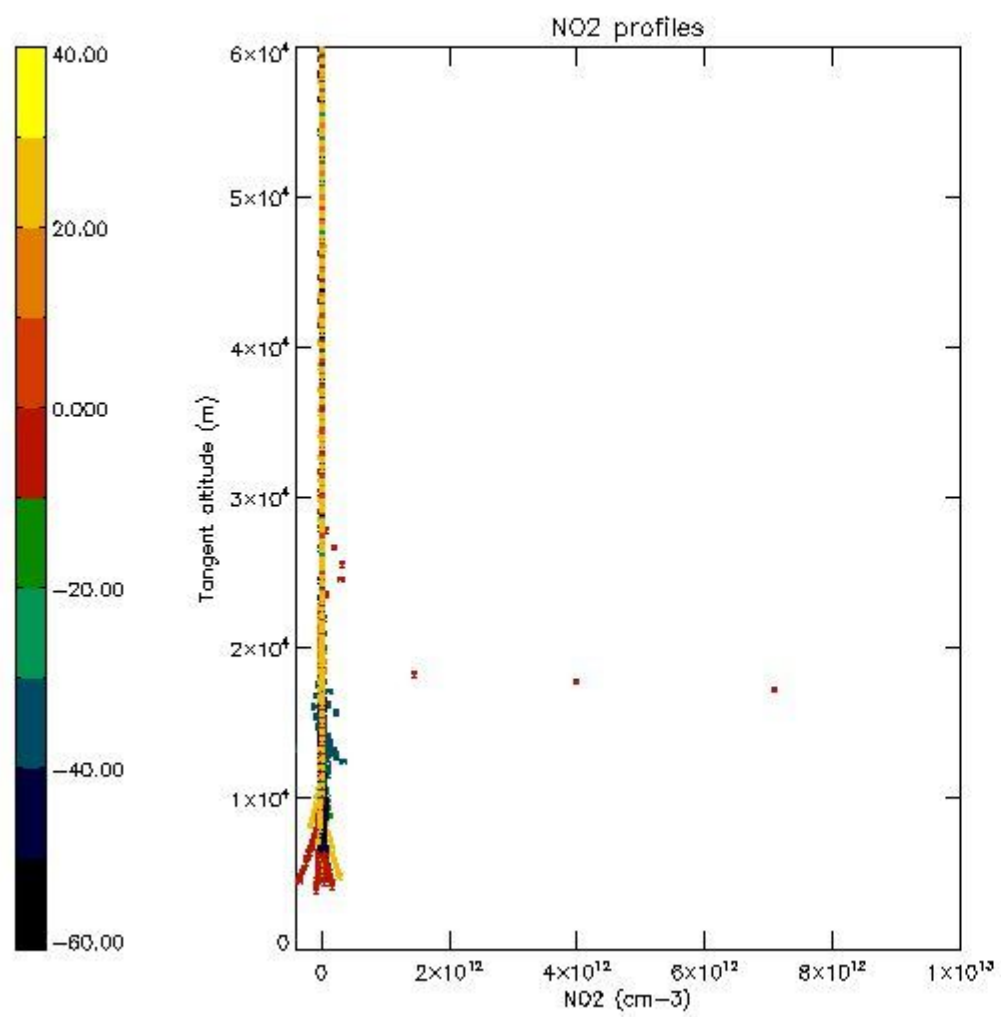
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



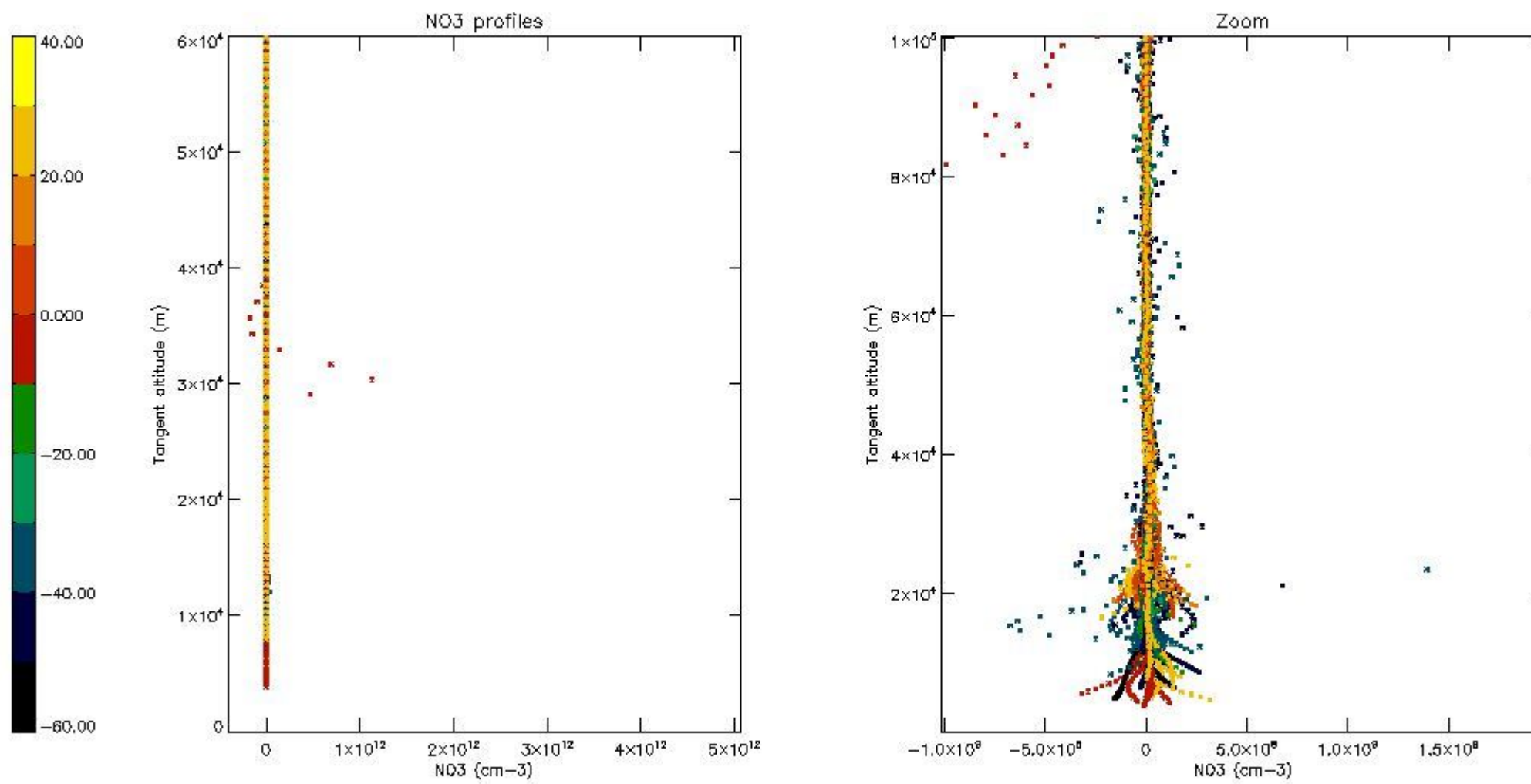
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



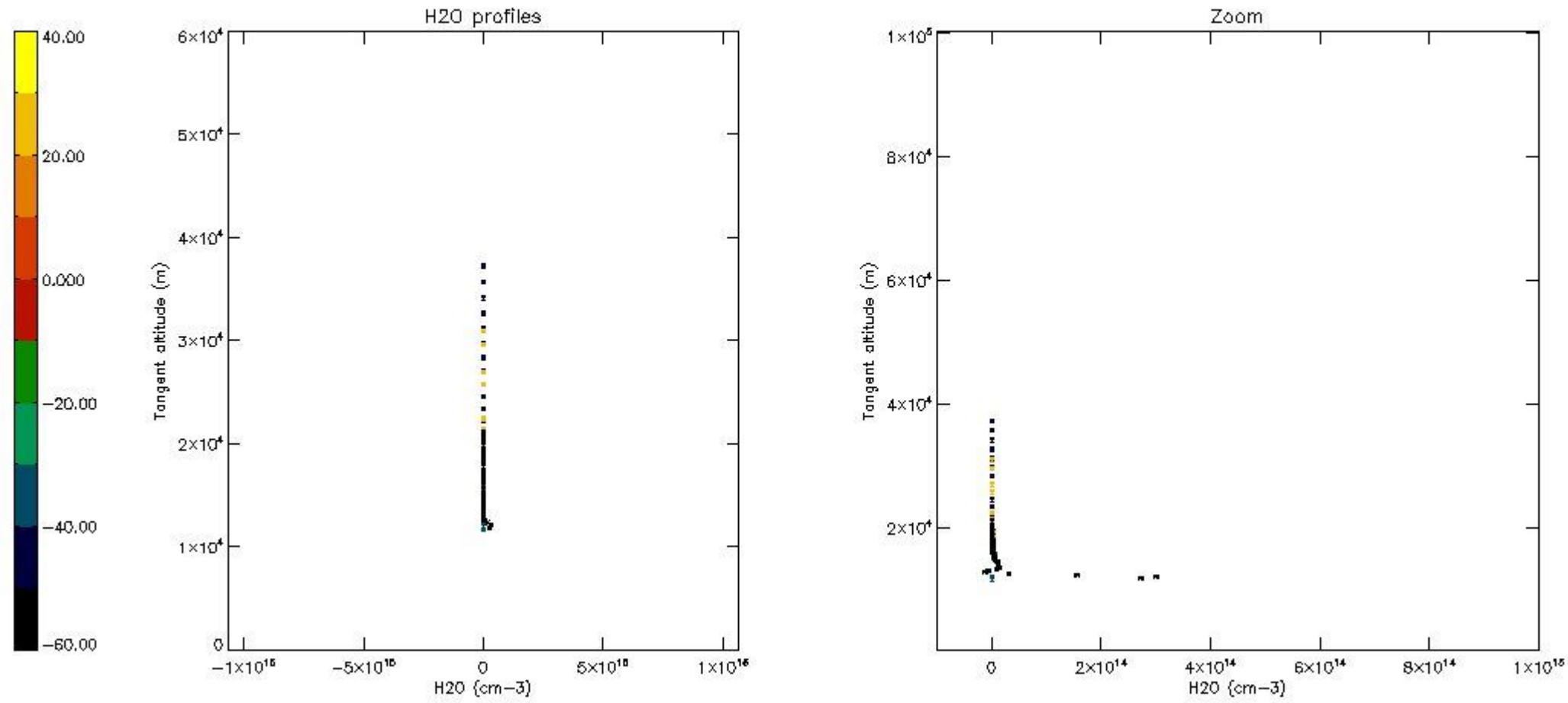
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

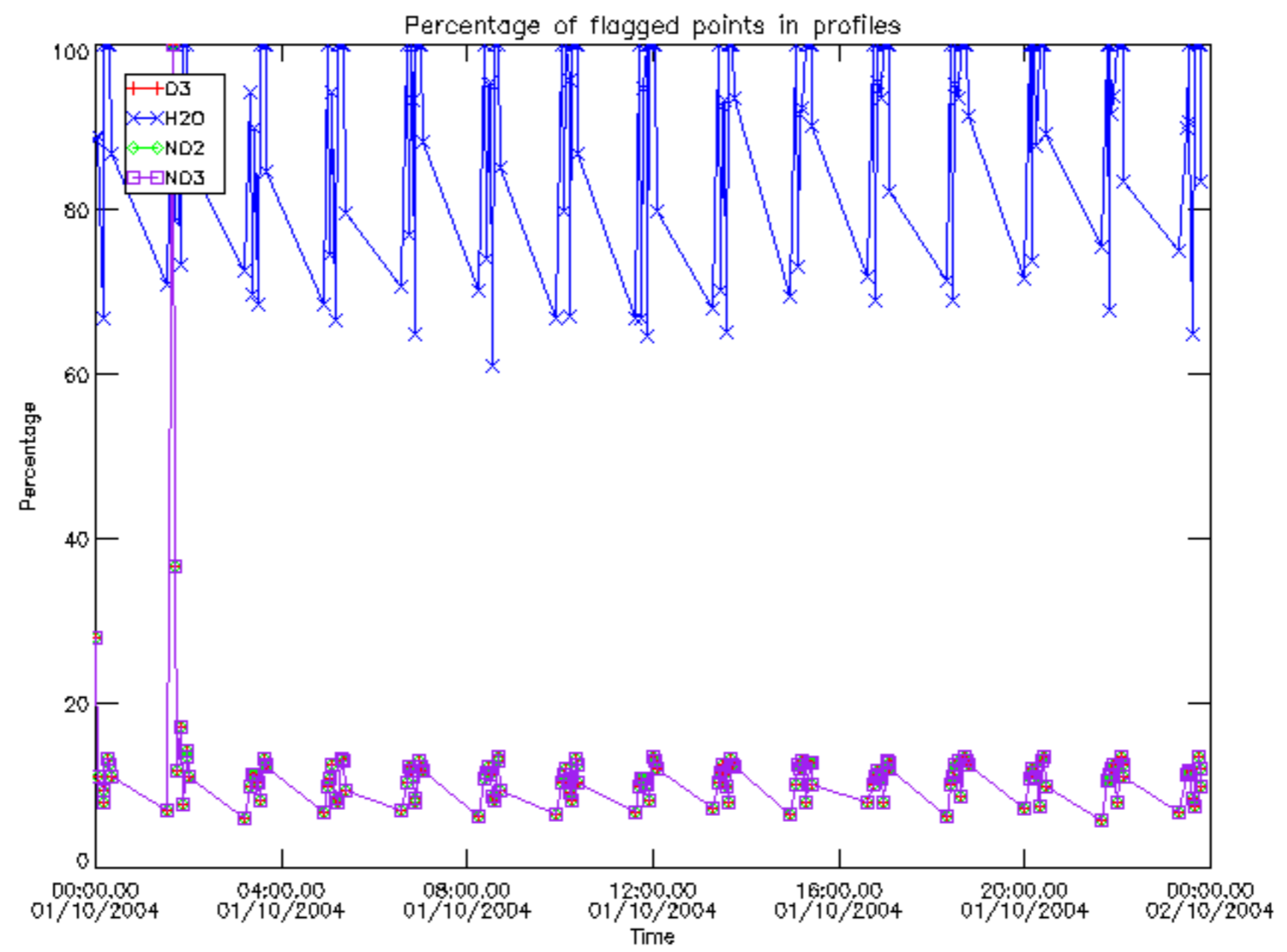
The colorbar represents the latitude.



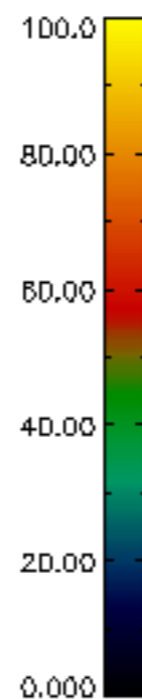
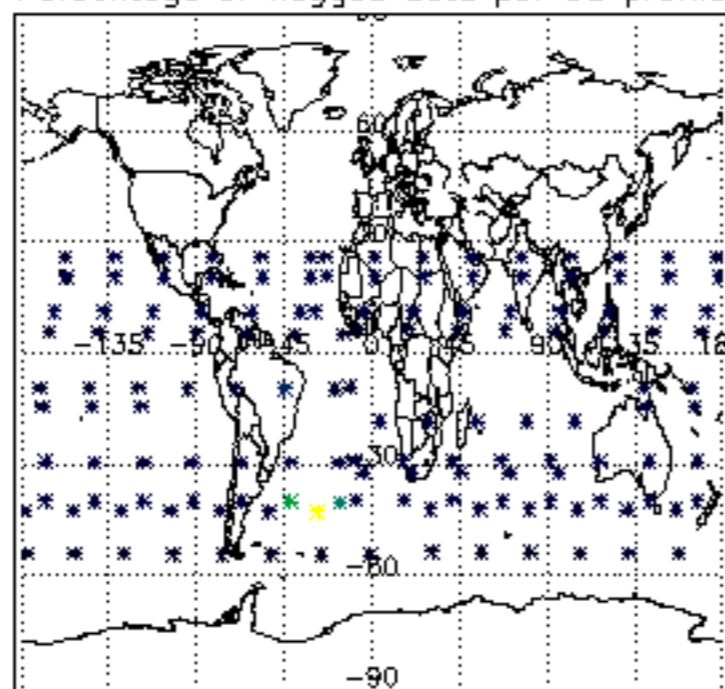
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

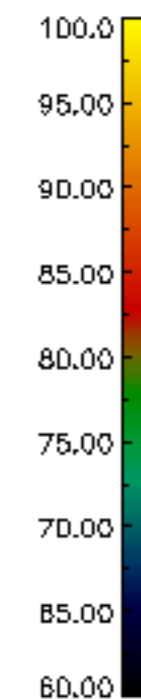
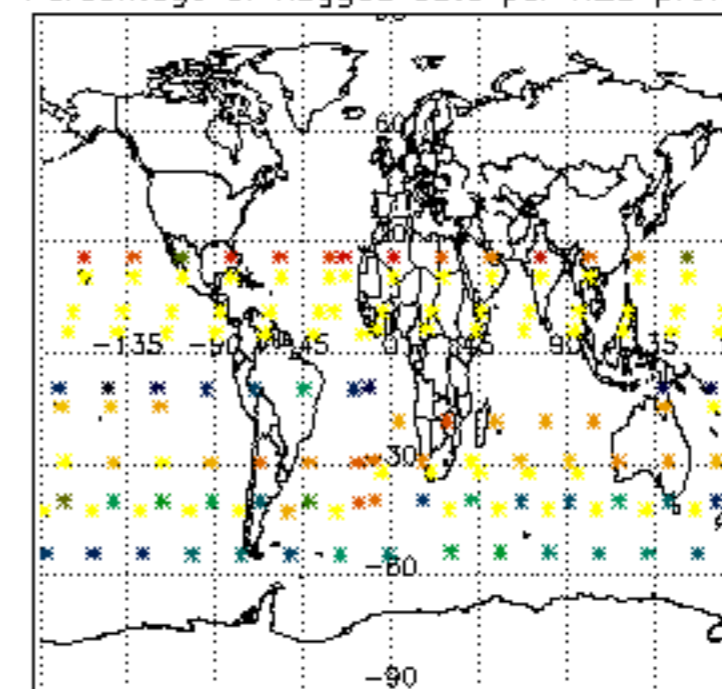
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-OCT-2004 00:01:12
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-OCT-2004 00:01:12
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-OCT-2004 00:01:12



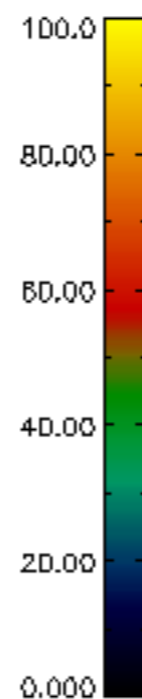
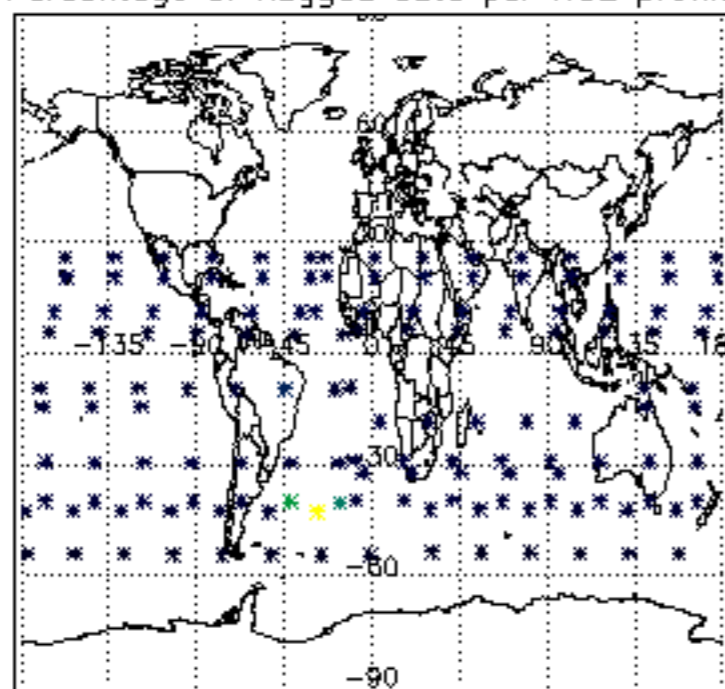
Percentage of flagged data per D3 profile



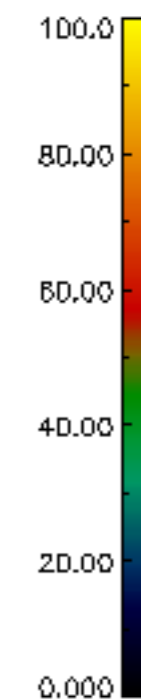
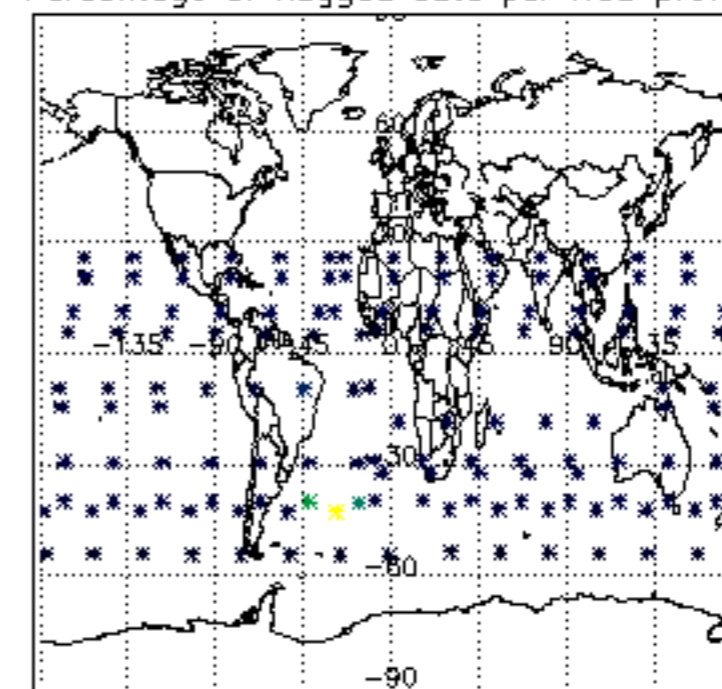
Percentage of flagged data per H2O profile

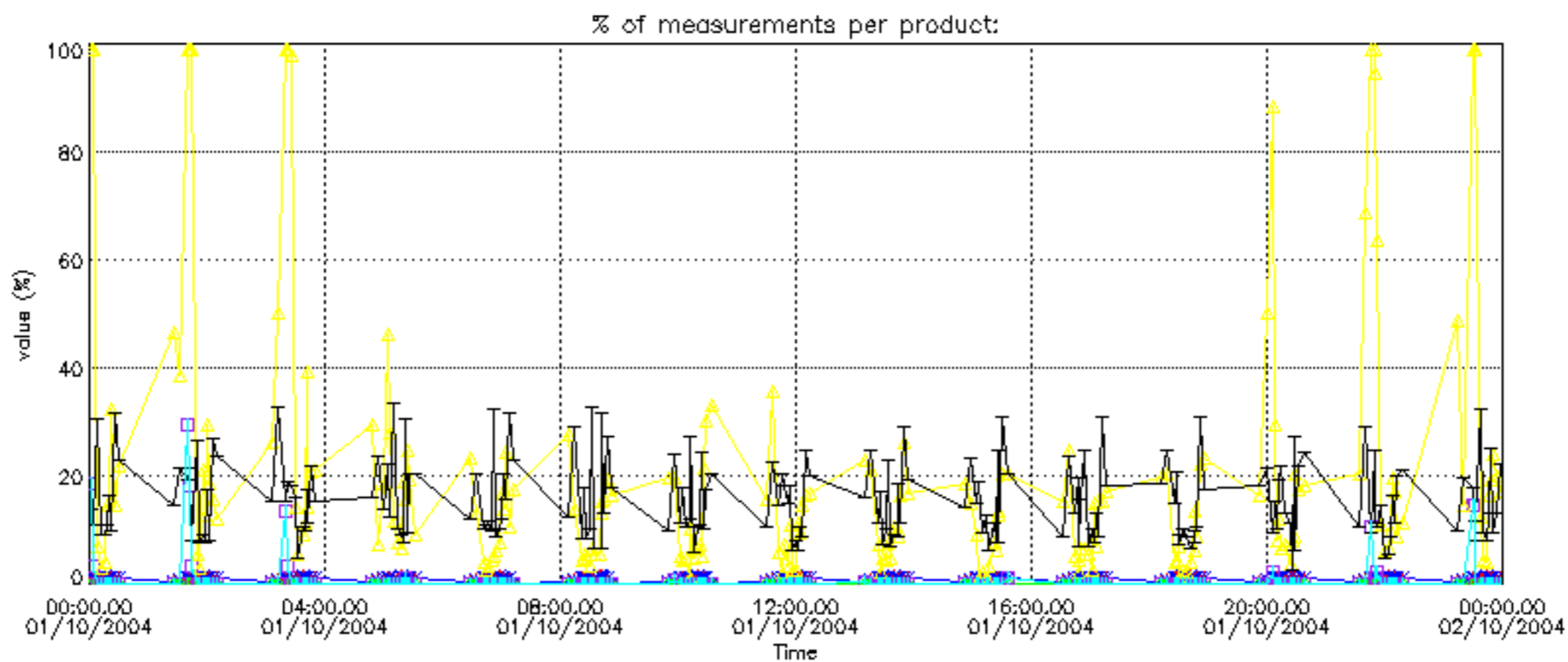


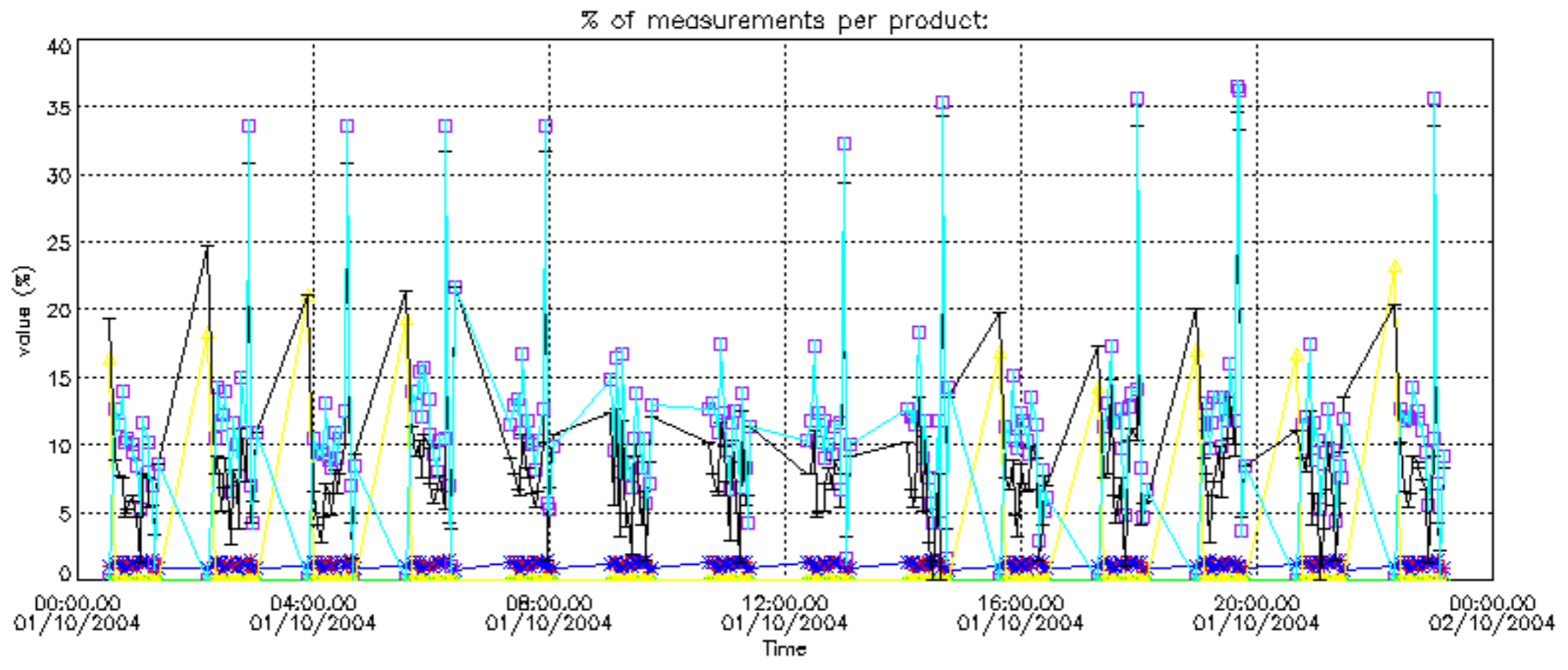
Percentage of flagged data per NO2 profile



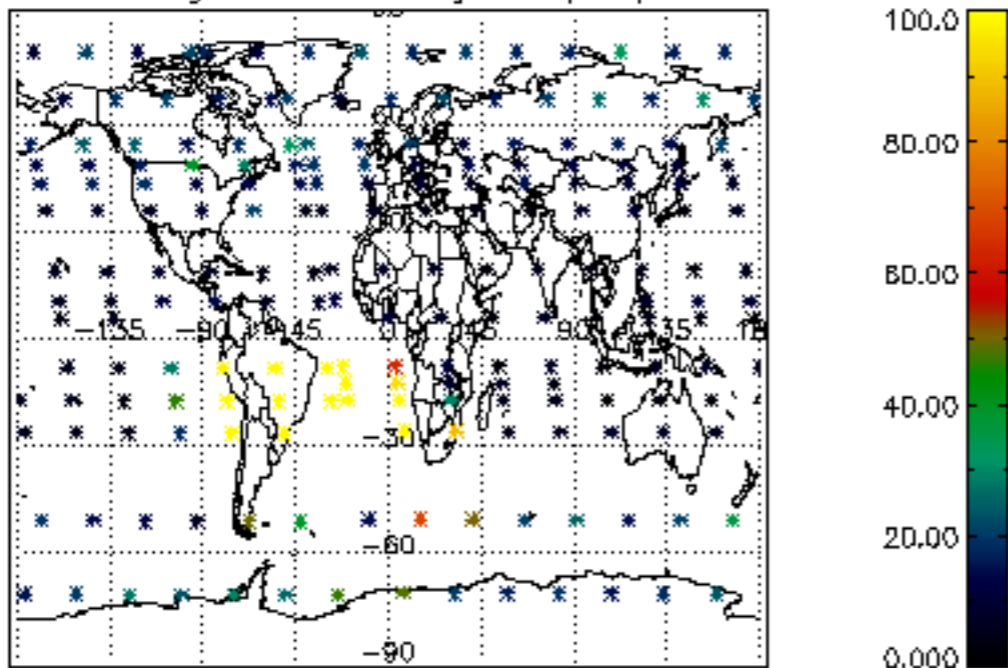
Percentage of flagged data per NO3 profile



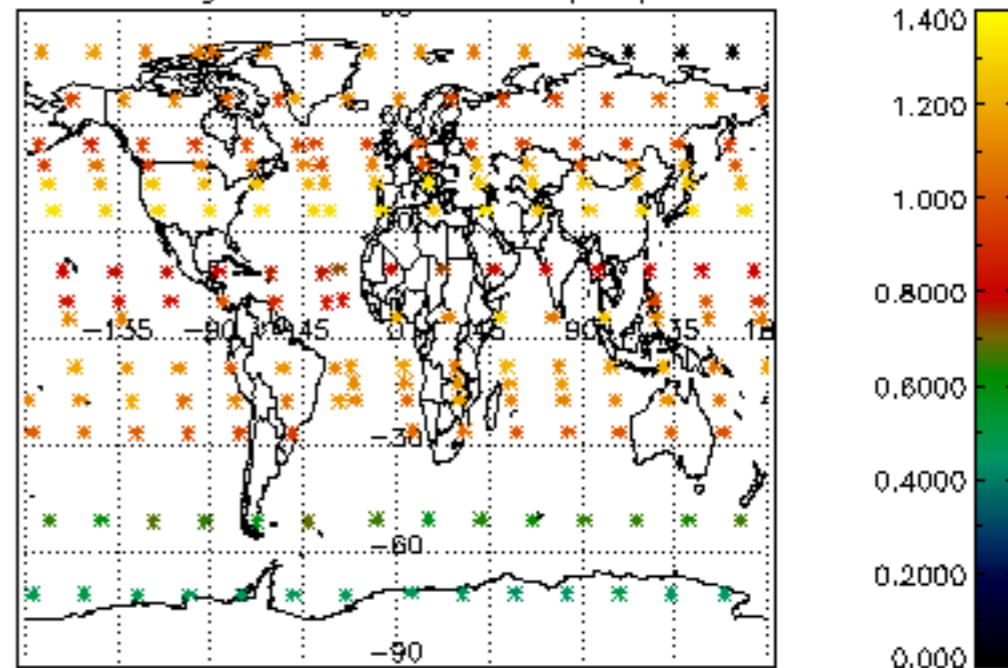




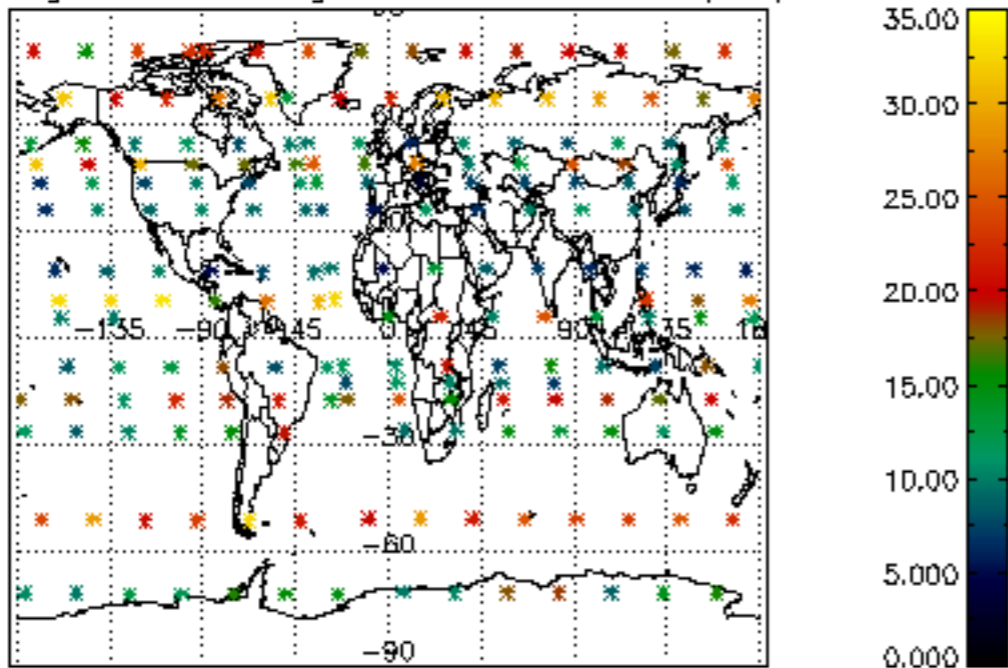
Percentage of cosmic ray hits per profile



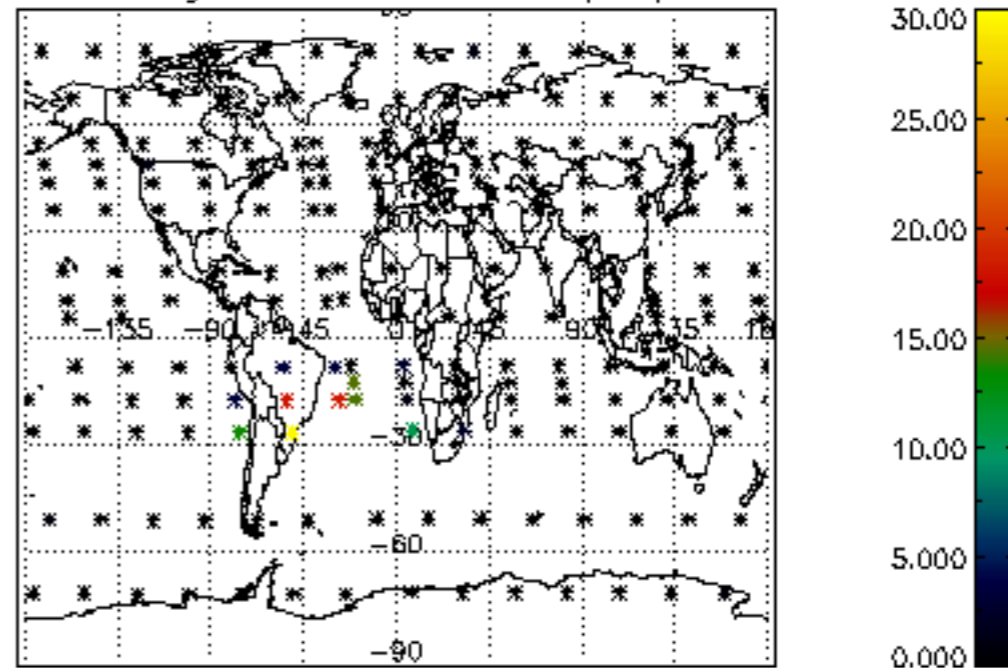
Percentage of datation errors per profile



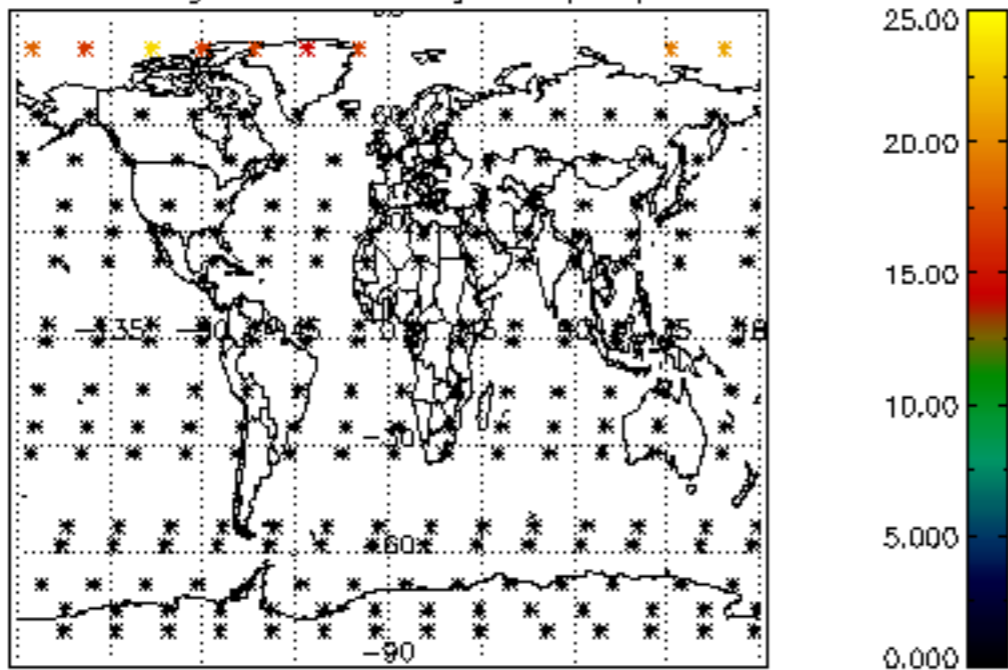
Percentage of star falling outside central band per profile



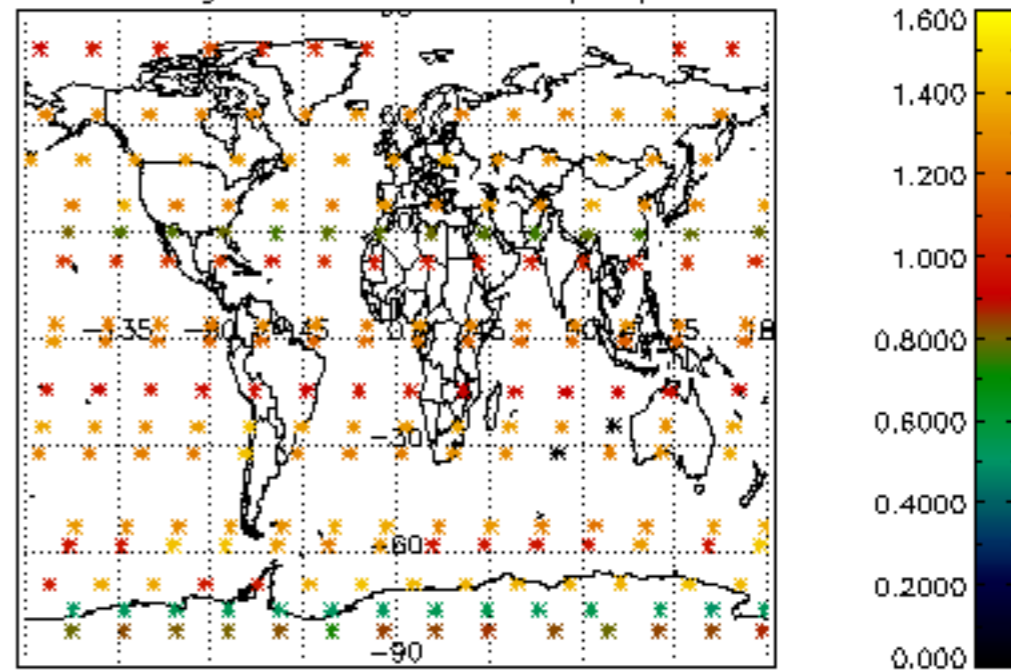
Percentage of saturation errors per profile



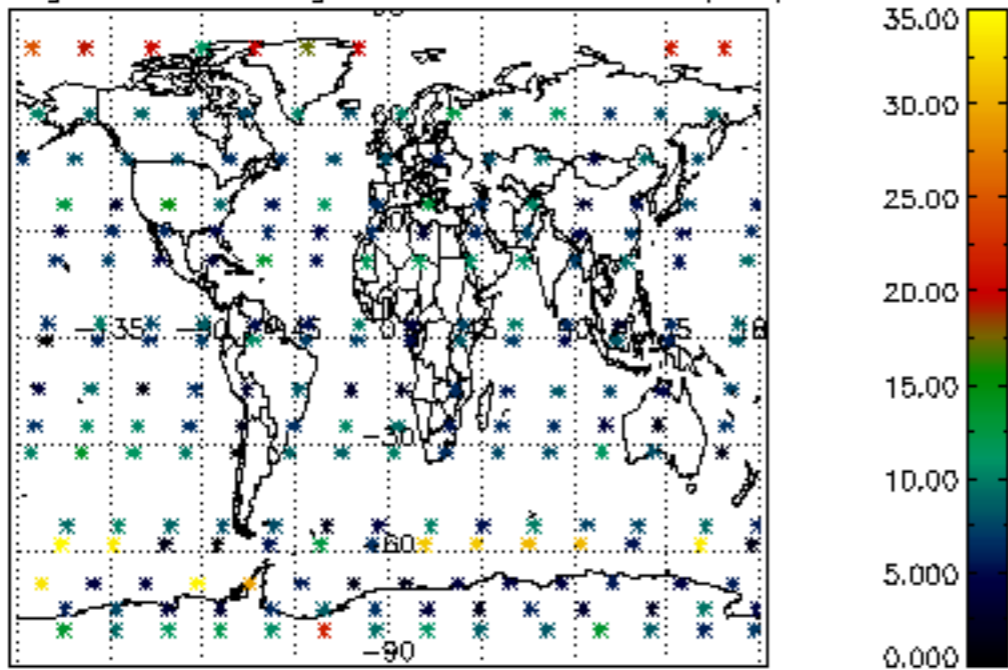
Percentage of cosmic ray hits per profile



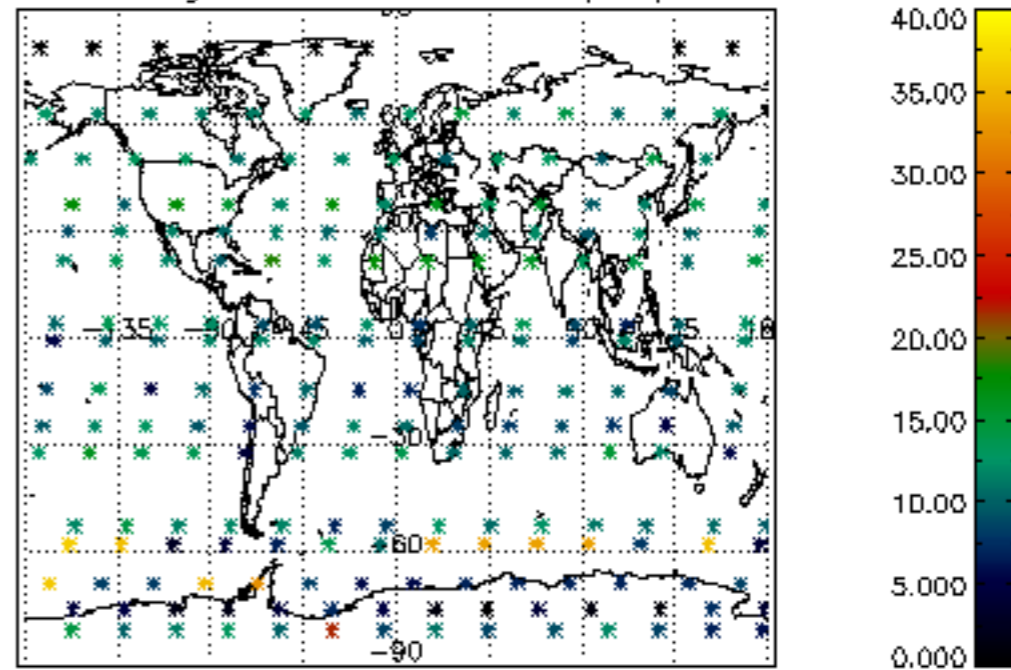
Percentage of datation errors per profile

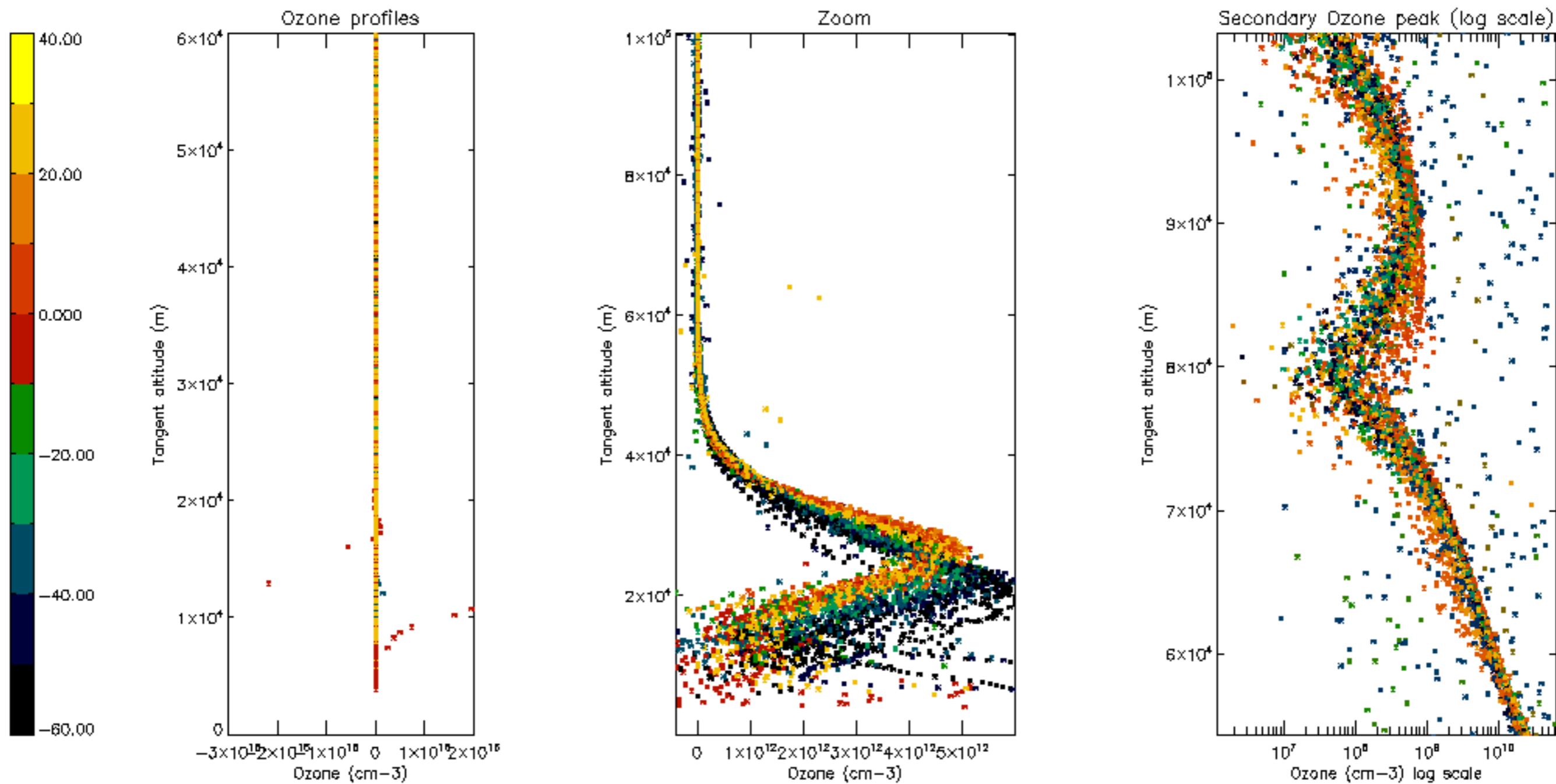


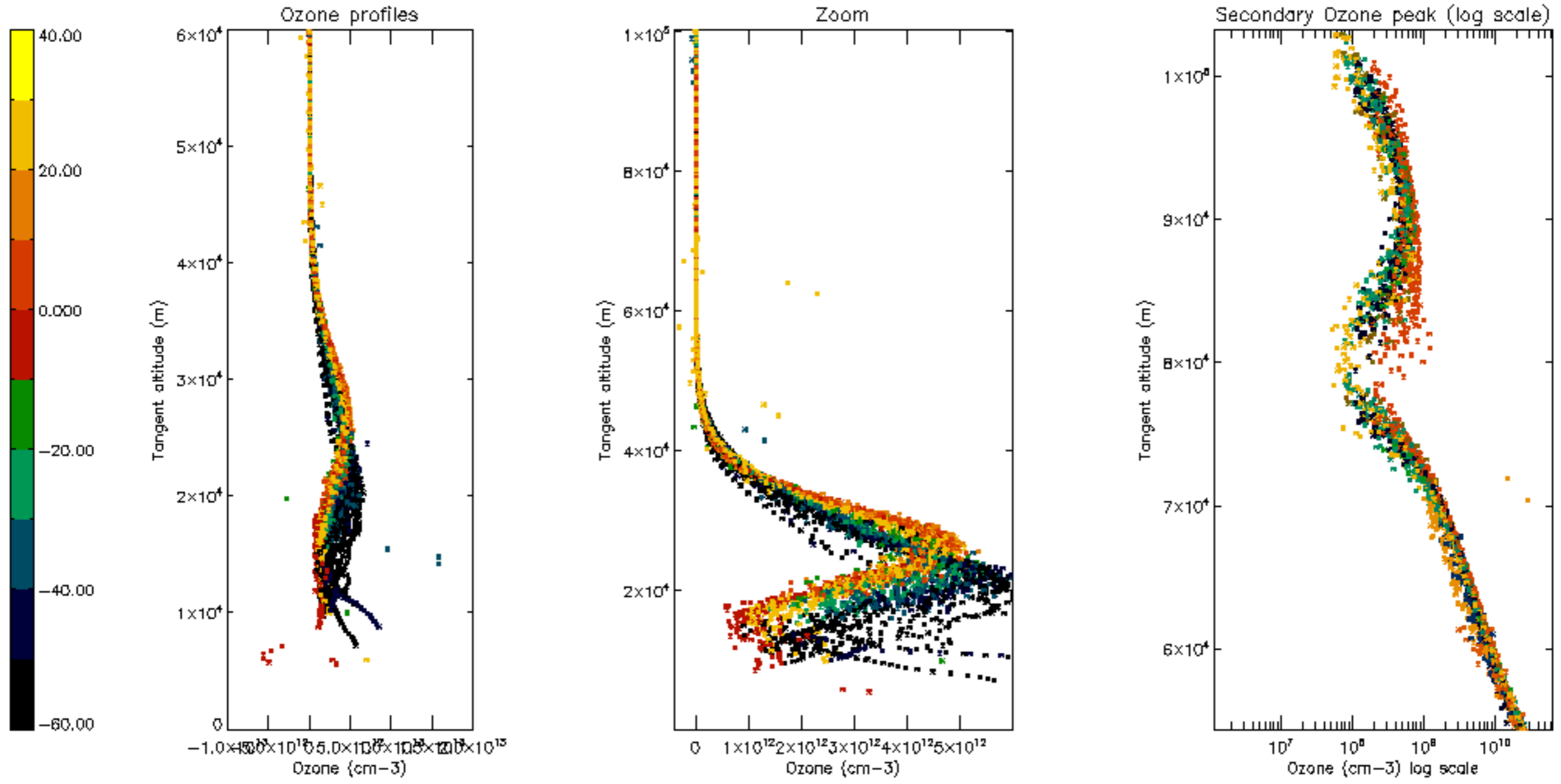
Percentage of star falling outside central band per profile

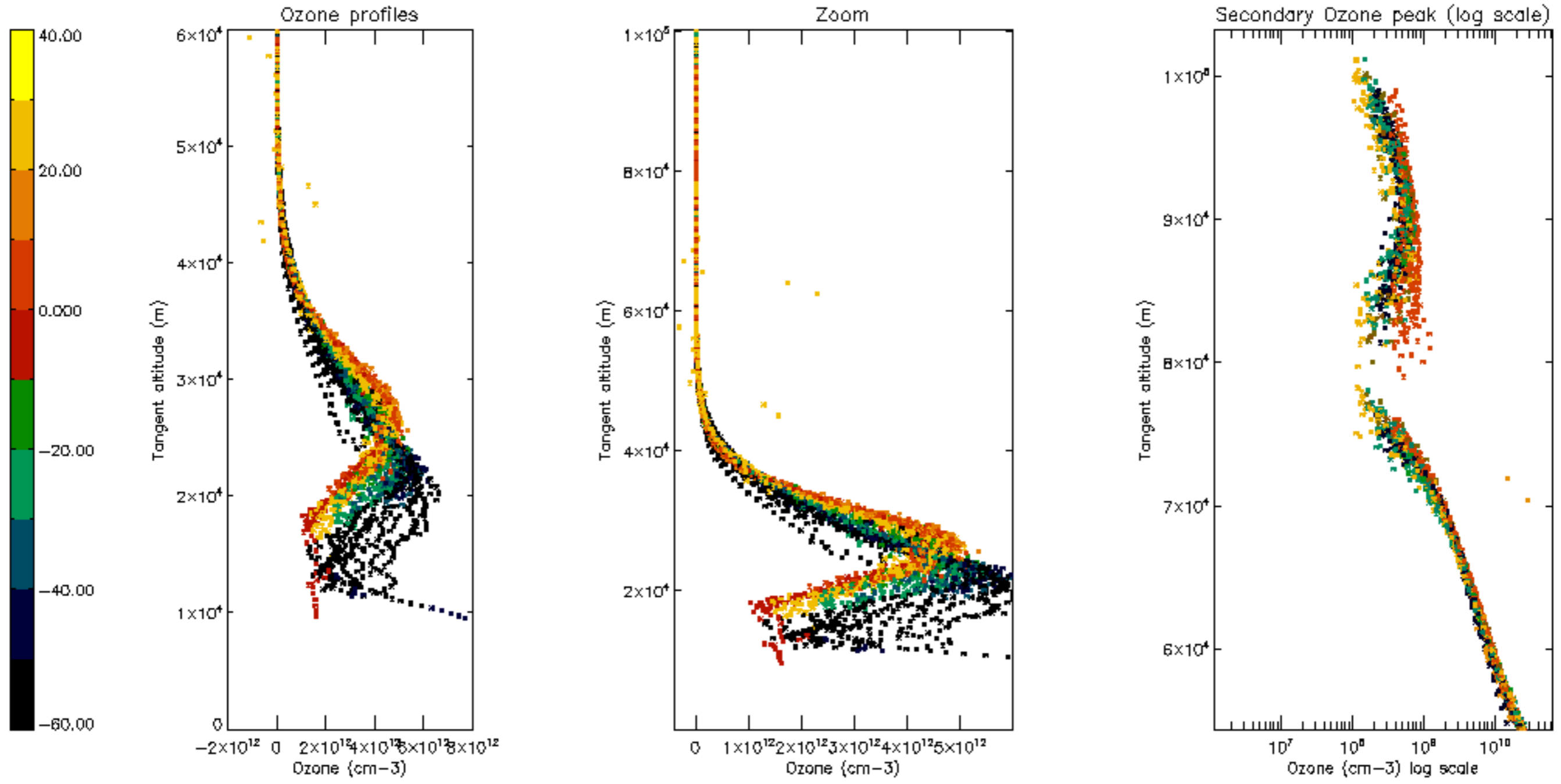


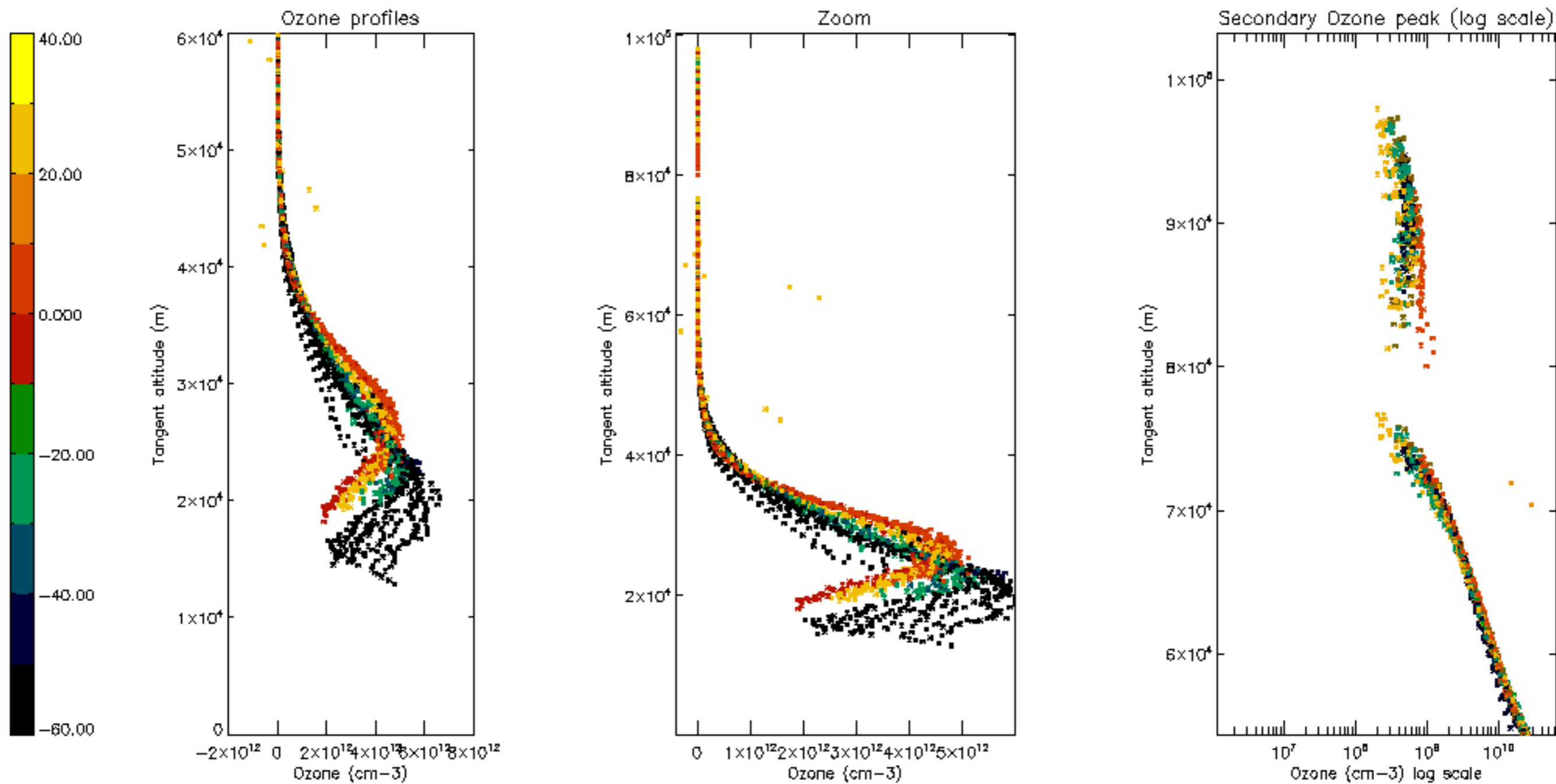
Percentage of saturation errors per profile

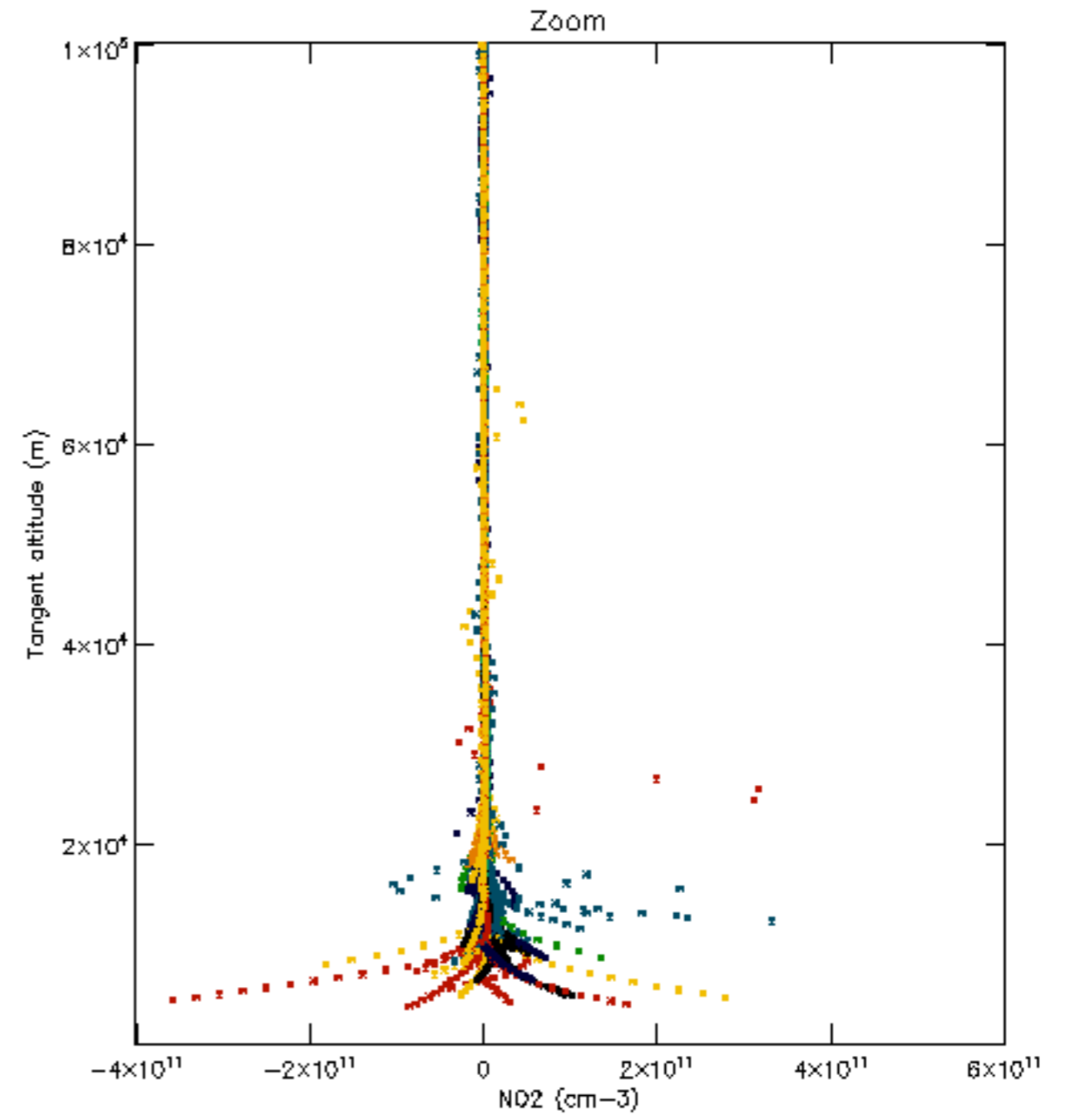
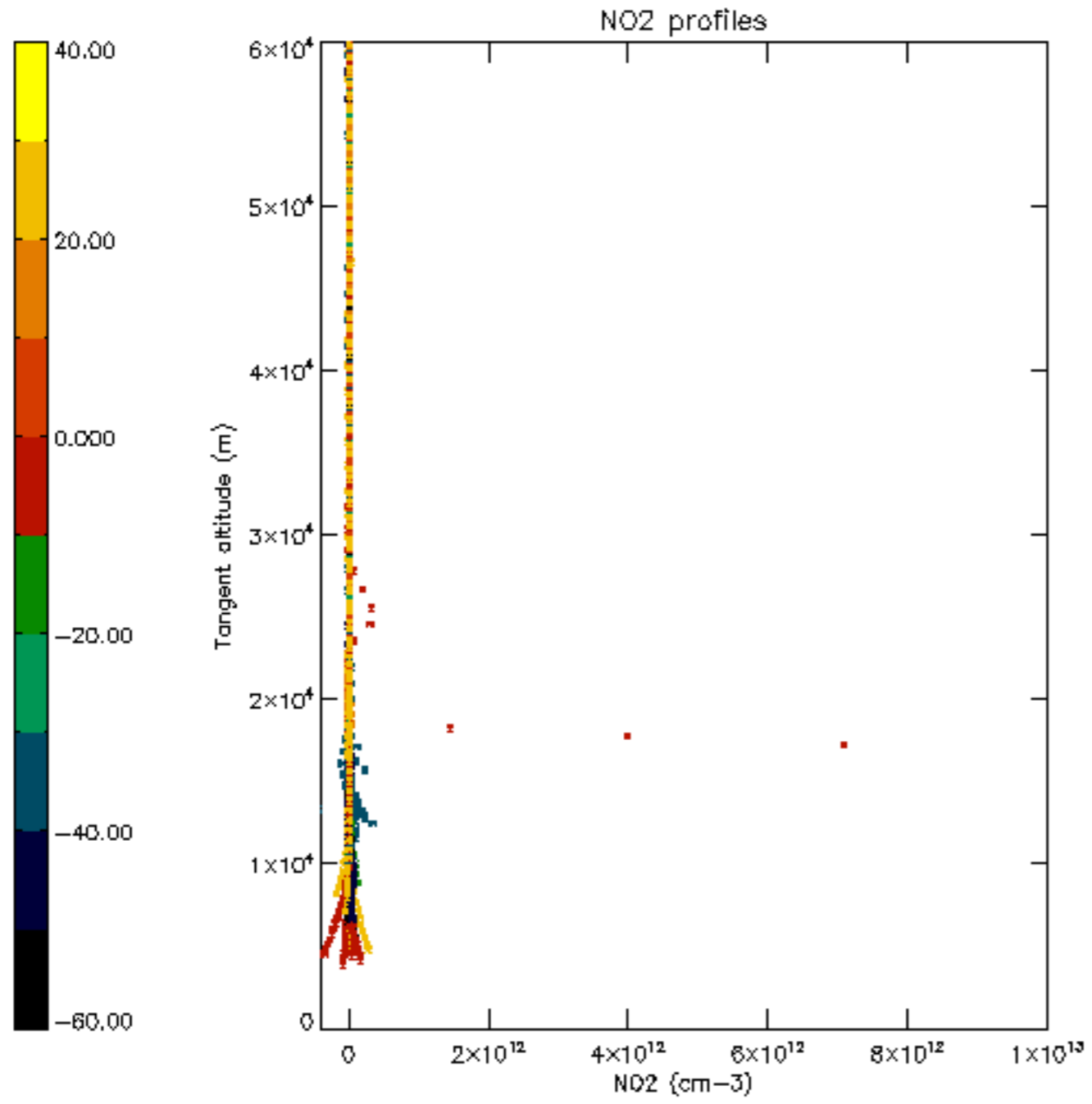


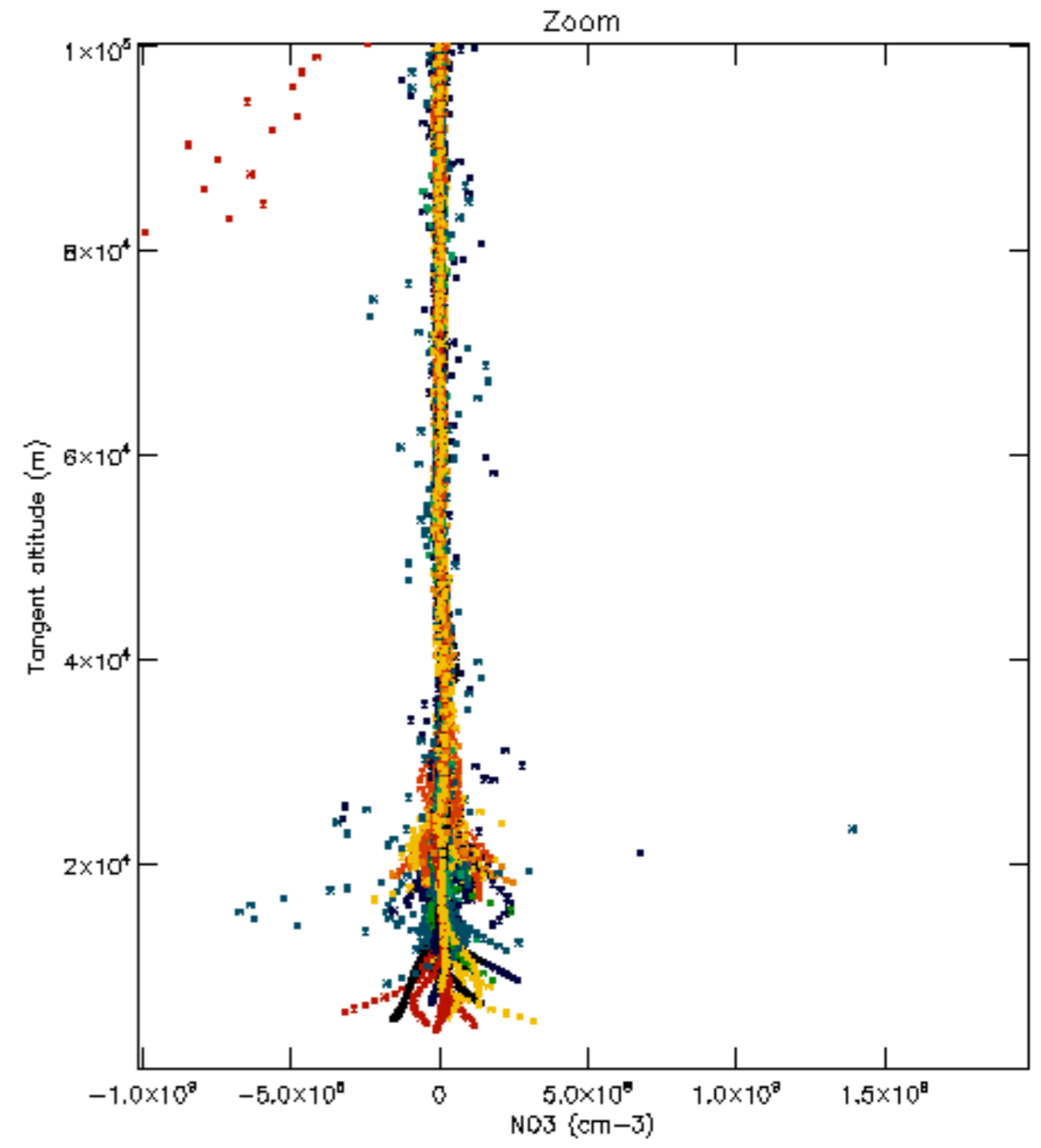
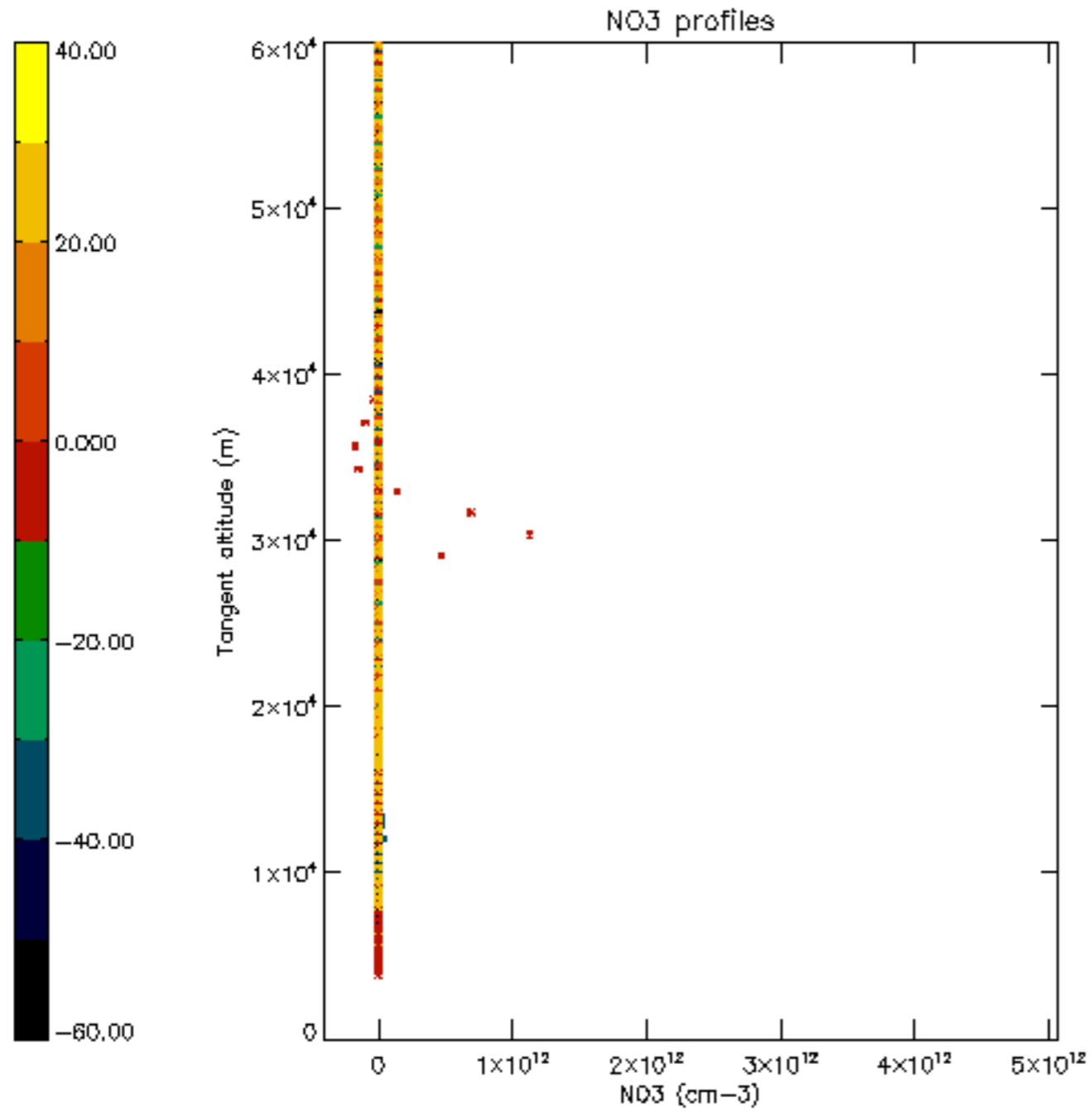


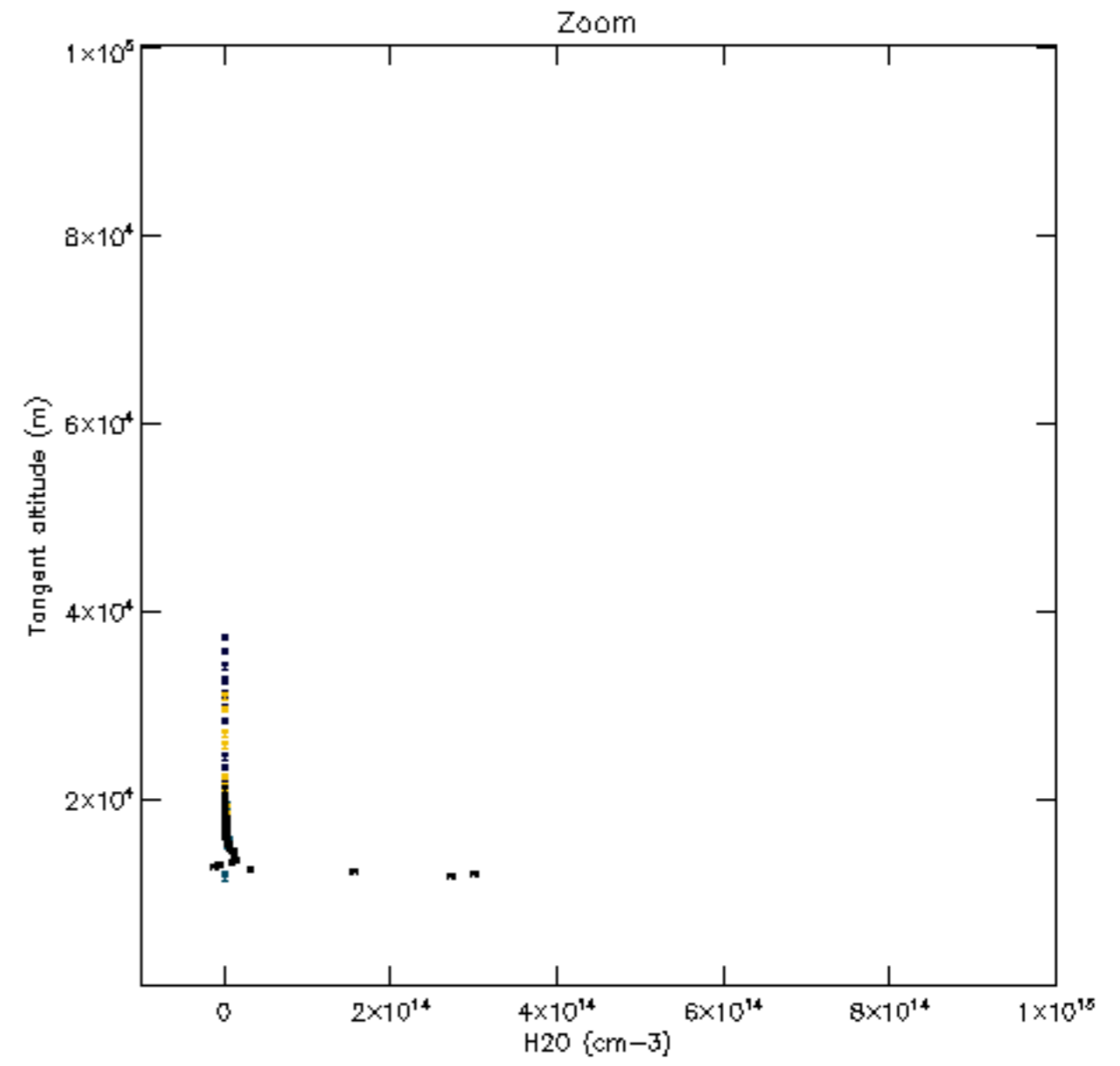
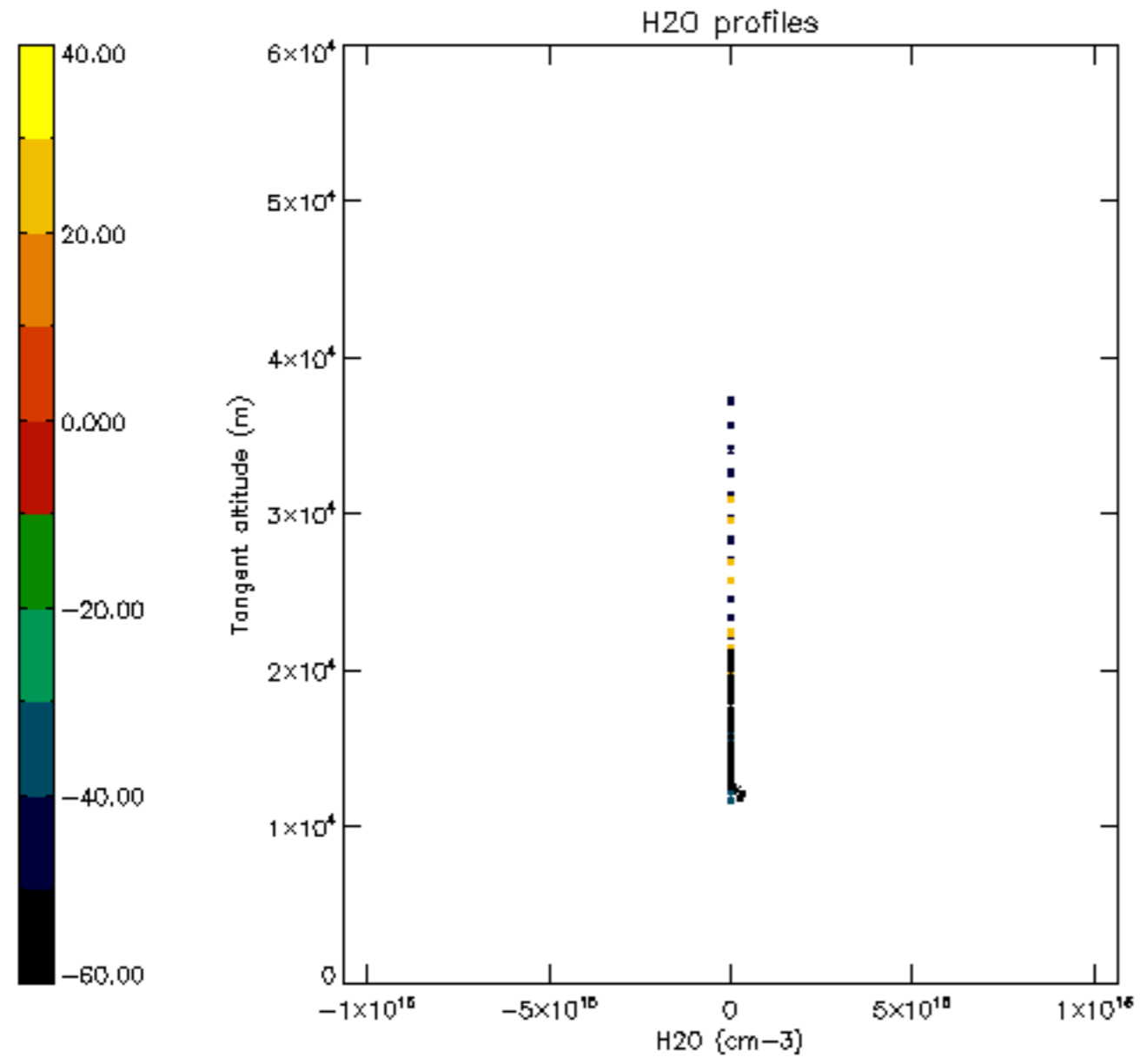


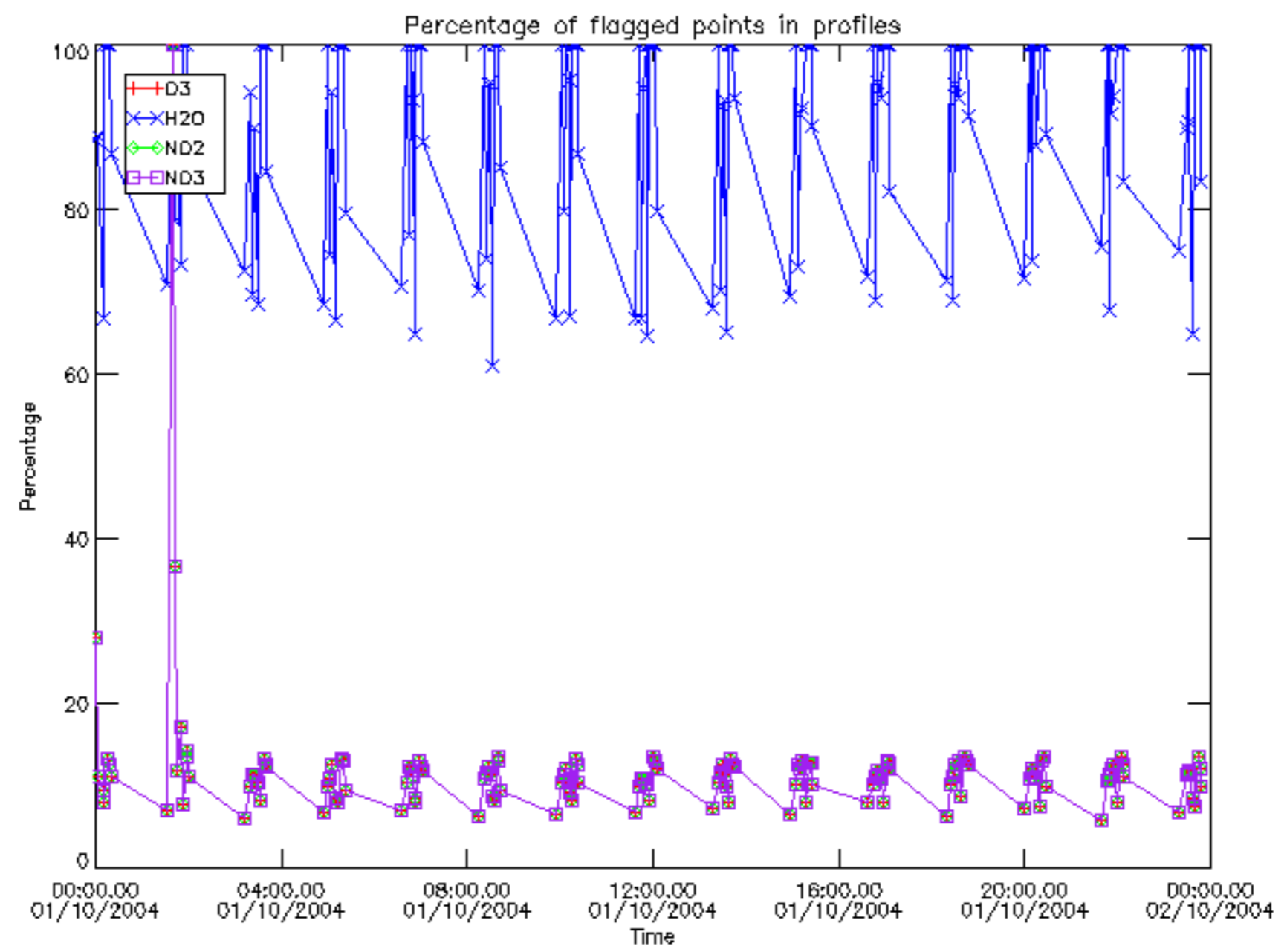




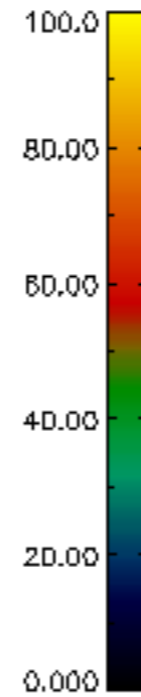
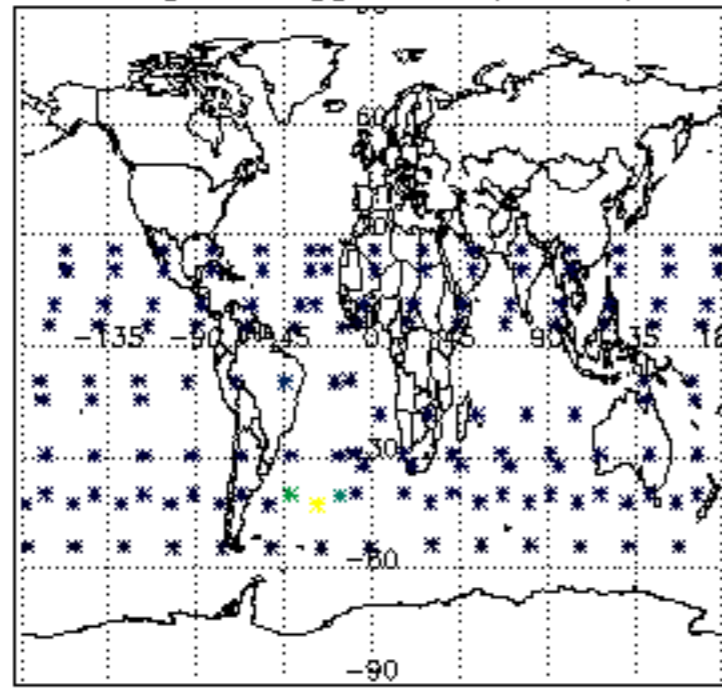




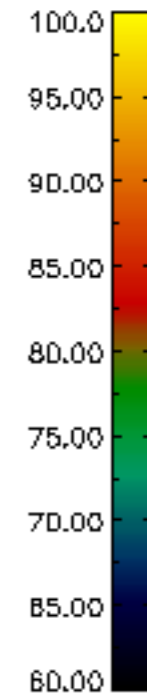
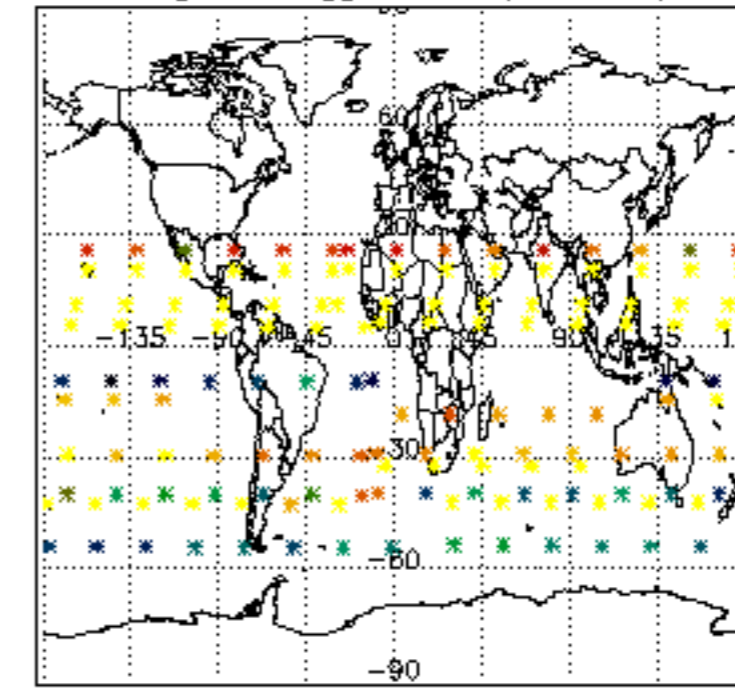




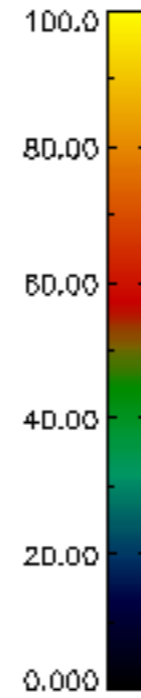
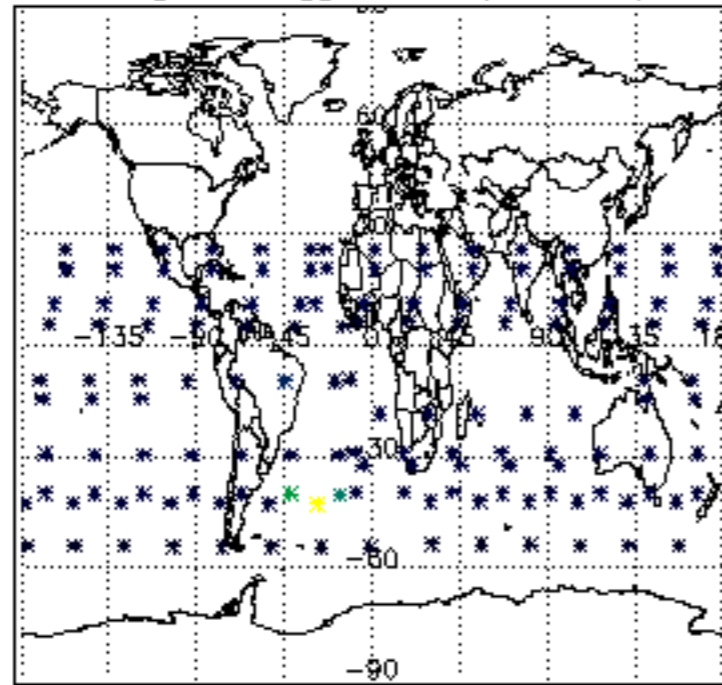
Percentage of flagged data per D3 profile



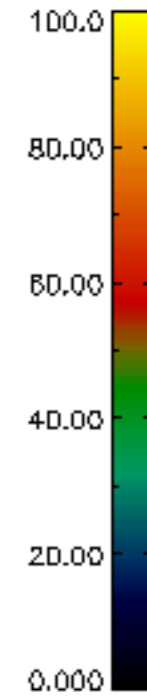
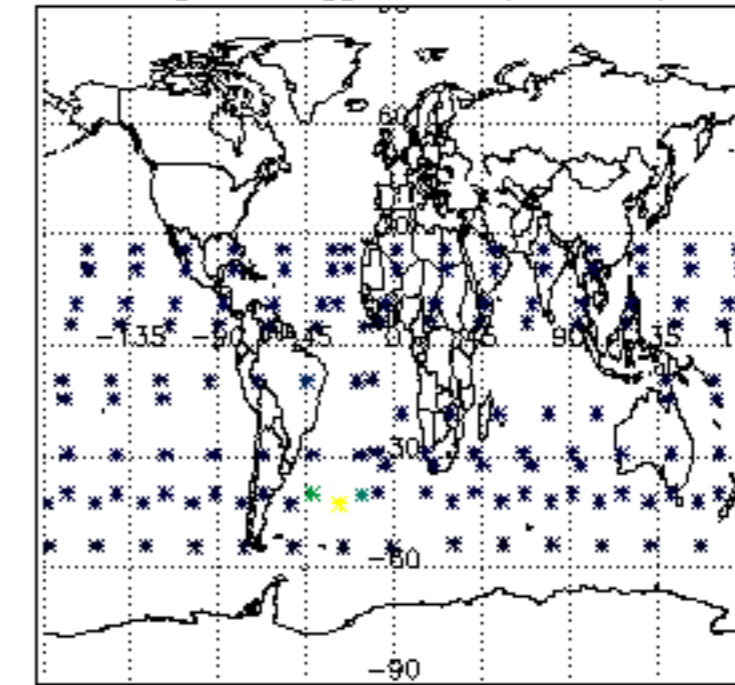
Percentage of flagged data per H2O profile

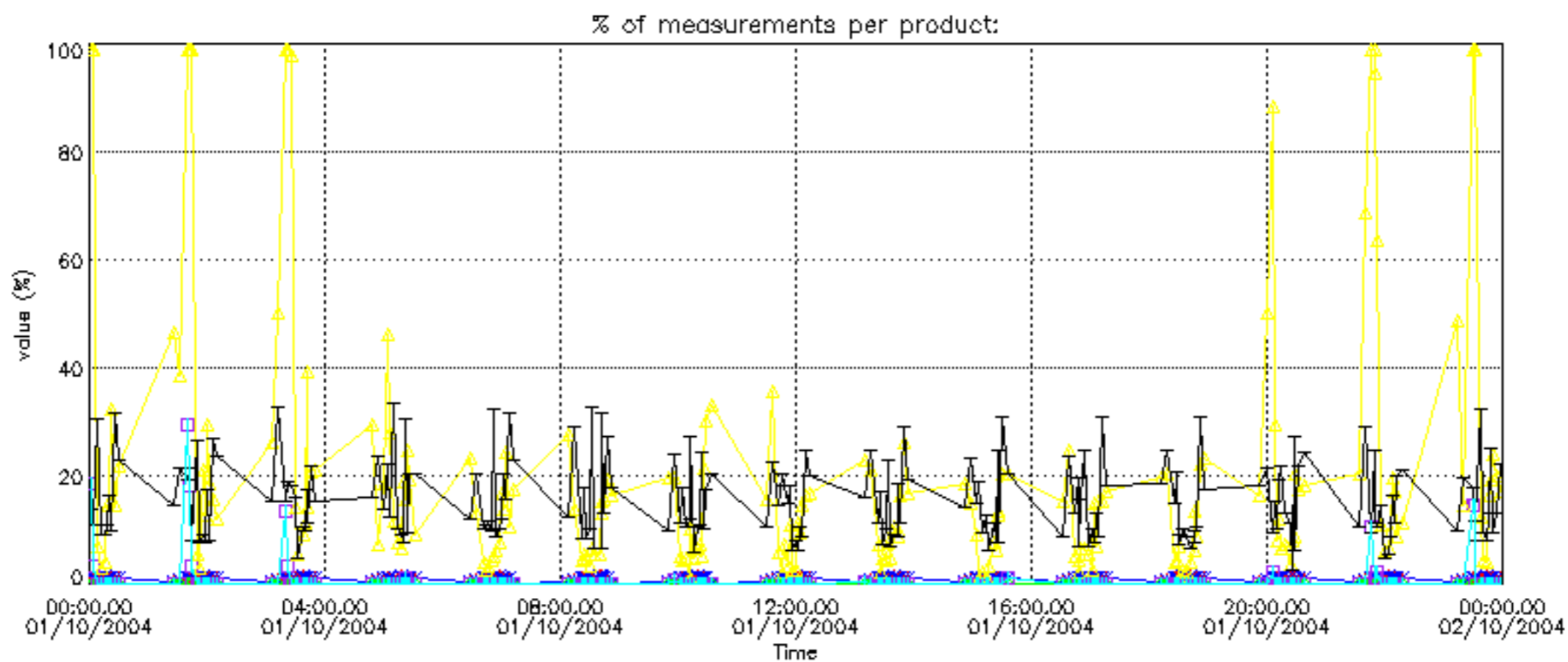


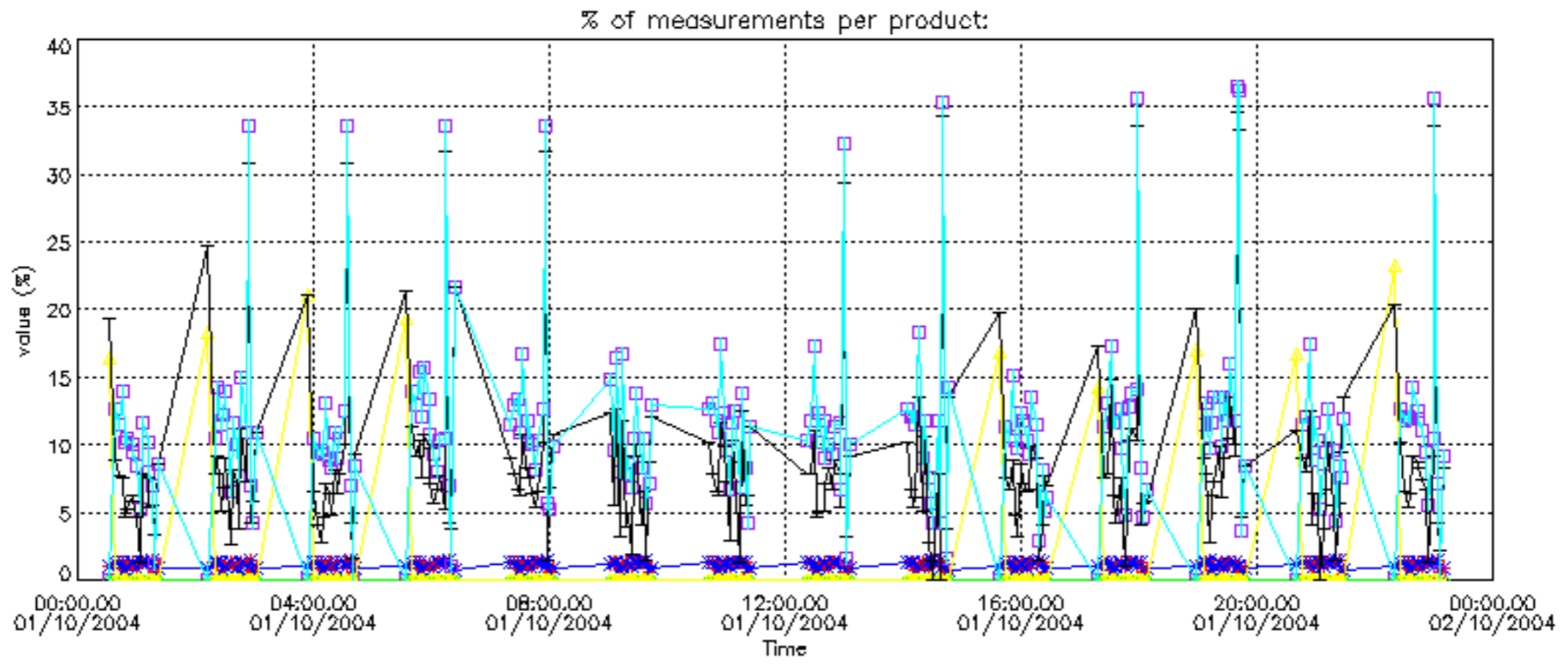
Percentage of flagged data per NO2 profile



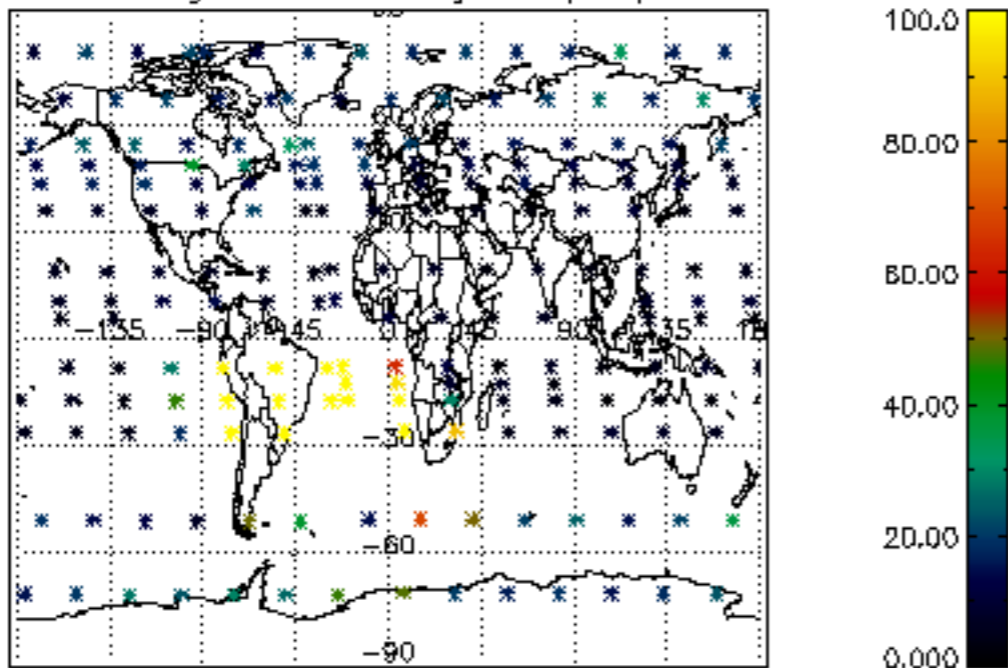
Percentage of flagged data per NO3 profile



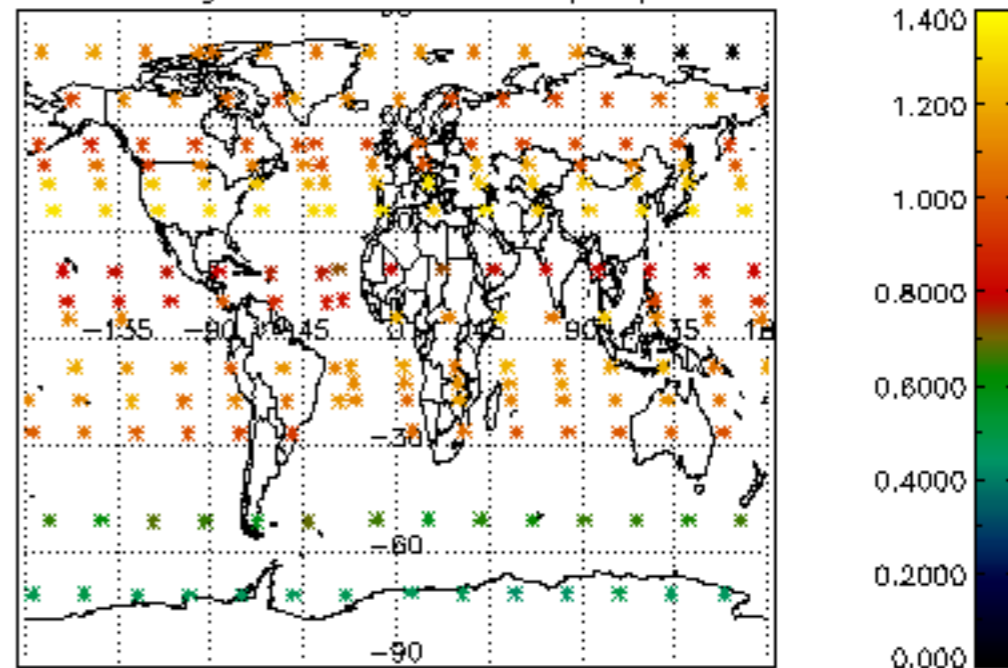




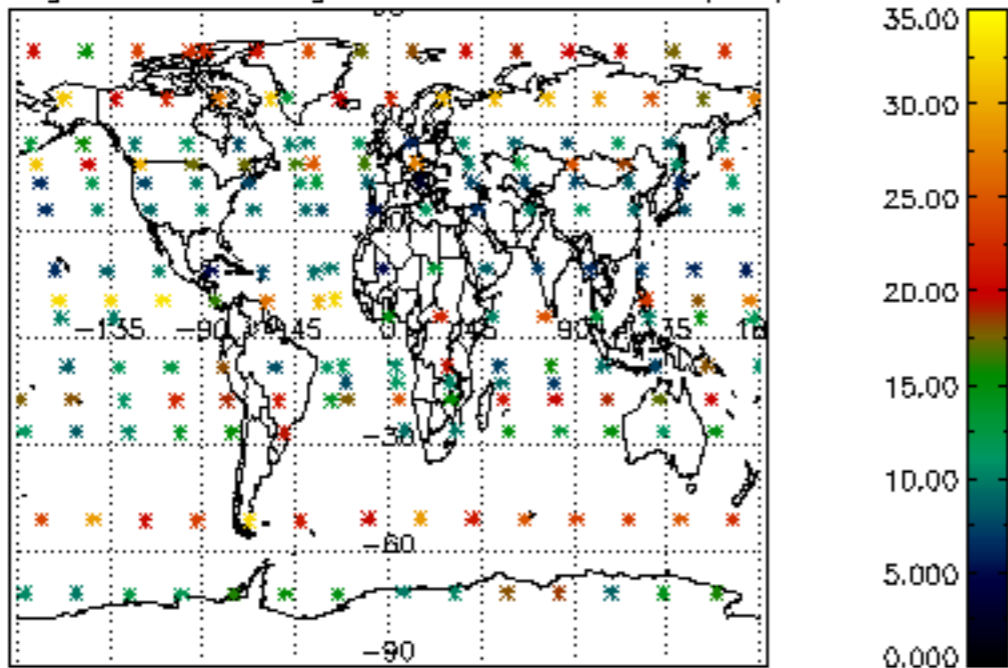
Percentage of cosmic ray hits per profile



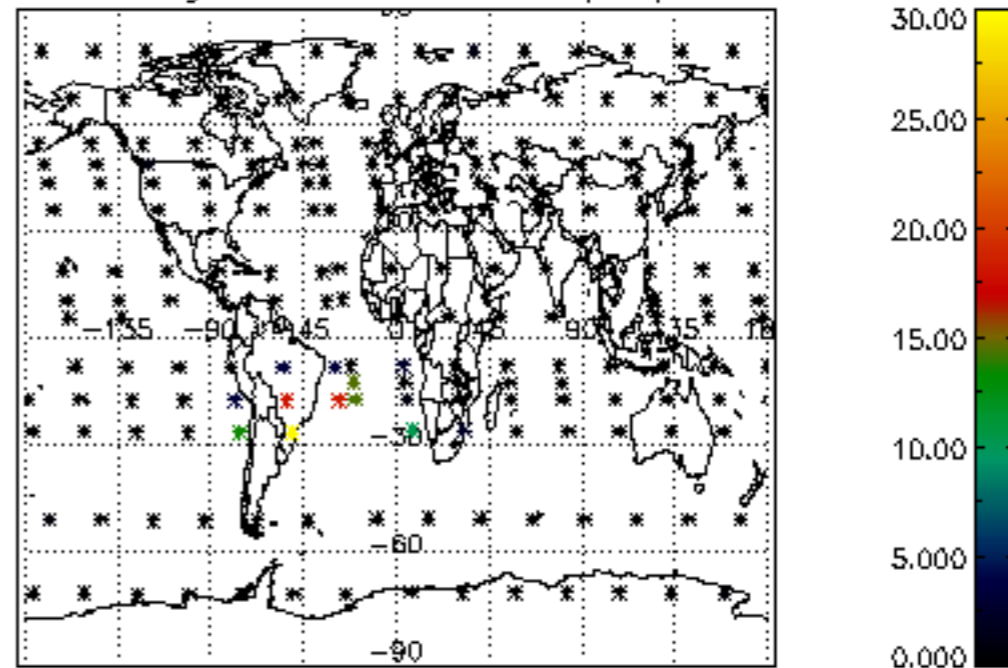
Percentage of datation errors per profile



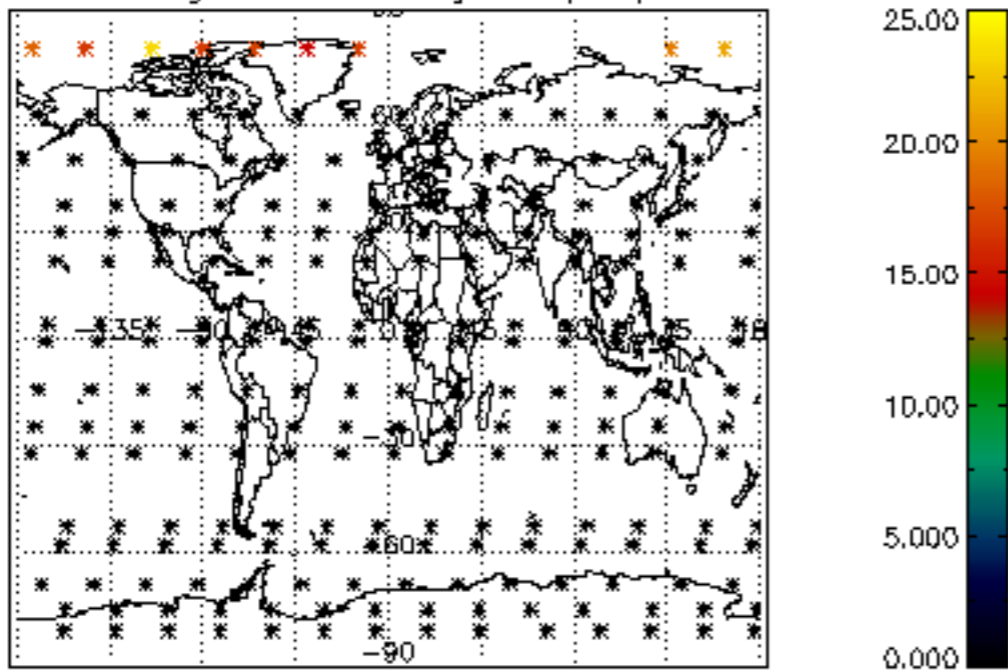
Percentage of star falling outside central band per profile



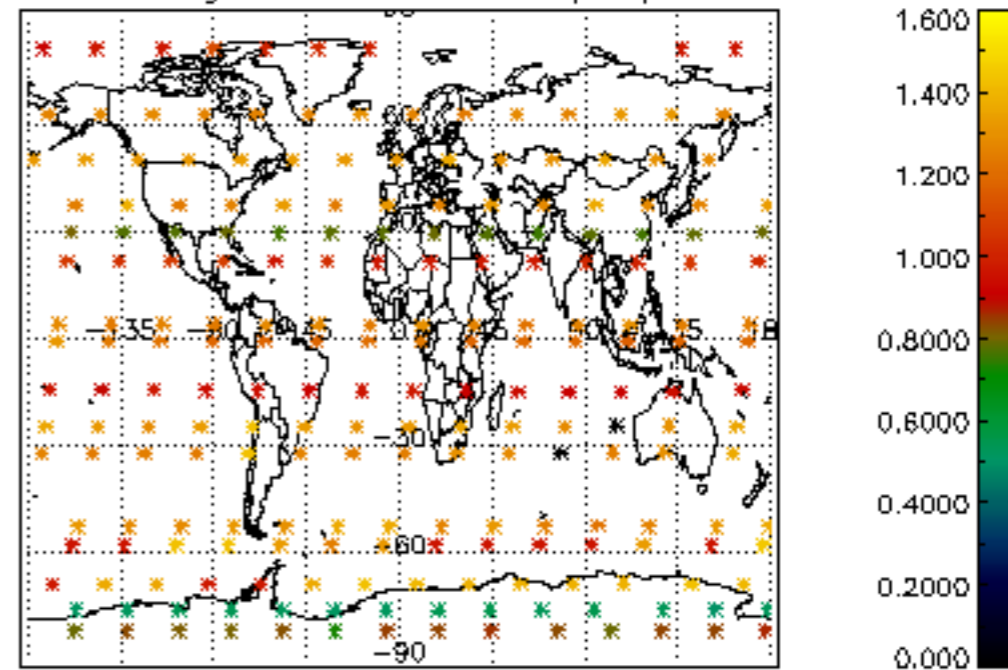
Percentage of saturation errors per profile



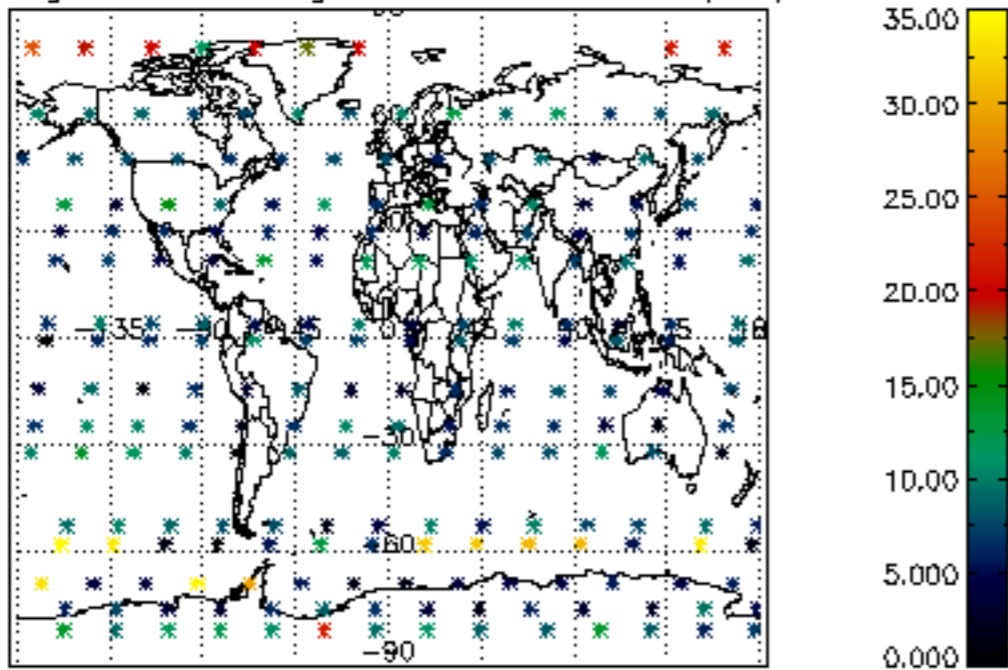
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

