

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 13:37:48
Data source version	GOMOS/6.01
Start time of products	20-04-2003 (20APR2003 00:00:00)
Stop time of products	21-04-2003 (21APR2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	368
Nb of prods with errors	9

2. Summary of processed GOM_NL__2P products.

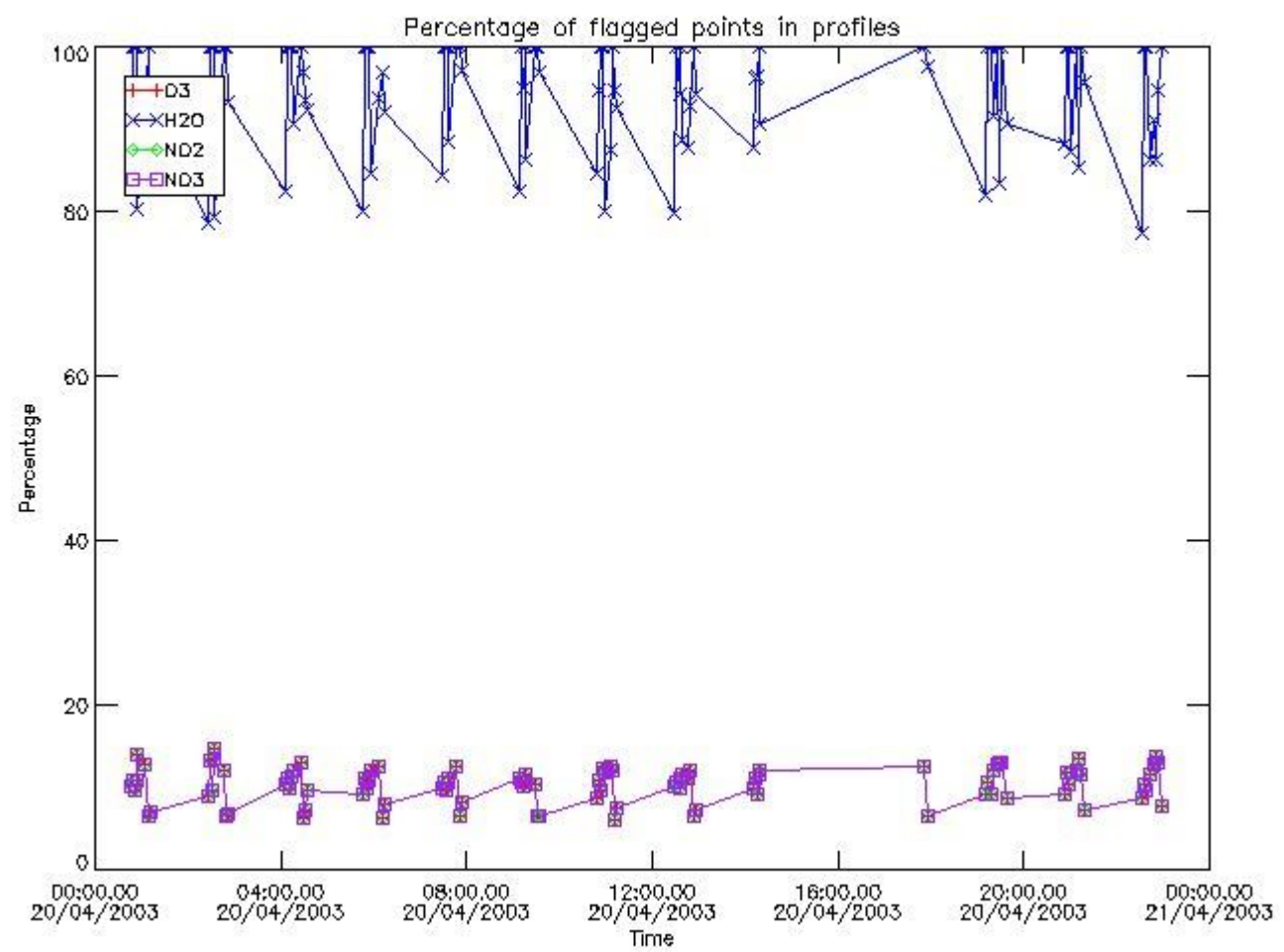
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20030420_000552_000000372015_00374_05939_6279.N1	20-APR-2003 00:05:52	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	5939	No
2	GOM_NL__2PRFIN20030420_000739_000000352015_00374_05939_6280.N1	20-APR-2003 00:07:39	Bright	34.500	174	52Psi UMa	3.0040	4400.0	69	5939	No
3	GOM_NL__2PRFIN20030420_000955_000000362015_00374_05939_6281.N1	20-APR-2003 00:09:55	Bright	35.500	87	64Gam UMa	2.4330	11000.	71	5939	No
4	GOM_NL__2PRFIN20030420_001223_000000522015_00374_05939_6282.N1	20-APR-2003 00:12:23	Bright	52.000	36	50Alp UMa	1.8000	6300.0	104	5939	No
5	GOM_NL__2PRFIN20030420_001714_000000402015_00374_05939_6283.N1	20-APR-2003 00:17:14	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	5939	No
6	GOM_NL__2PRFIN20030420_002019_000000342015_00374_05939_6284.N1	20-APR-2003 00:20:19	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	5939	No
7	GOM_NL__2PRFIN20030420_002217_000000632015_00374_05939_6285.N1	20-APR-2003 00:22:17	Bright	63.000	130	23Bet Dra	2.7990	5800.0	126	5939	No
8	GOM_NL__2PRFIN20030420_002409_000000652015_00374_05939_6286.N1	20-APR-2003 00:24:09	Bright	64.500	69	33Gam Dra	2.2310	3800.0	129	5939	No
9	GOM_NL__2PRFIN20030420_002725_000000402015_00374_05939_6287.N1	20-APR-2003 00:27:25	Bright	39.500	89	5Alp Cep	2.4510	8000.0	79	5939	No
10	GOM_NL__2PRFIN20030420_002915_000000352015_00374_05939_6288.N1	20-APR-2003 00:29:15	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	5939	No
11	GOM_NL__2PRFIN20030420_003246_000001432015_00374_05939_6289.N1	20-APR-2003 00:32:46	Bright	142.50	5	3Alp Lyr	0.033000	11000.	285	5939	No
12	GOM_NL__2PRFIN20030420_003716_000000682015_00374_05939_6290.N1	20-APR-2003 00:37:16	Bright	67.500	92	53Eps Cyg	2.5000	4500.0	135	5939	No
13	GOM_NL__2PRFIN20030420_004502_000000502015_00374_05939_6291.N1	20-APR-2003 00:45:02	Dark	50.000	61	8Eps Peg	2.1000	3900.0	100	5939	No
14	GOM_NL__2PRFIN20030420_004730_000000472015_00374_05939_6292.N1	20-APR-2003 00:47:30	Dark	47.000	162	34Alp Aqr	2.9440	5350.0	94	5939	No
15	GOM_NL__2PRFIN20030420_005021_000000532015_00374_05939_6293.N1	20-APR-2003 00:50:21	Dark	53.000	154	22Bet Aqr	2.8990	5700.0	106	5939	No
16	GOM_NL__2PRFIN20030420_005240_000000482015_00374_05939_6294.N1	20-APR-2003 00:52:40	Dark	47.500	142	49Del Cap	2.8500	8900.0	95	5939	No
17	GOM_NL__2PRFIN20030420_005414_000000442015_00374_05939_6295.N1	20-APR-2003 00:54:14	Dark	43.500	18	24Alp PsA	1.1660	9700.0	87	5939	No
18	GOM_NL__2PRFIN20030420_010039_000000842015_00374_05939_6296.N1	20-APR-2003 01:00:39	Dark	84.000	1014	Mars	0.0000	0.0000	168	5939	Yes
19	GOM_NL__2PRFIN20030420_010454_000000402015_00375_05940_6267.N1	20-APR-2003 01:04:54	Dark	40.000	45	Alp Pav	1.9400	26000.	80	5940	No
20	GOM_NL__2PRFIN20030420_010842_000000782015_00375_05940_6268.N1	20-APR-2003 01:08:42	Dark	77.500	57	34Sig Sgr	2.0660	26000.	155	5940	No
21	GOM_NL__2PRFIN20030420_011105_000000742015_00375_05940_6269.N1	20-APR-2003 01:11:05	Dark	73.500	38	20Eps Sgr	1.8360	11000.	147	5940	No
22	GOM_NL__2PRFIN20030420_011321_000000602015_00375_05940_6270.N1	20-APR-2003 01:13:21	Straylight	59.500	40	The Sco	1.8590	7100.0	119	5940	No
23	GOM_NL__2PRFIN20030420_011635_000000442015_00375_05940_6271.N1	20-APR-2003 01:16:35	Straylight	43.500	4	Alp1Cen	-0.010000	5800.0	87	5940	No
24	GOM_NL__2PRFIN20030420_011950_000000402015_00375_05940_6272.N1	20-APR-2003 01:19:50	Straylight	40.000	78	Alp Lup	2.3040	28000.	80	5940	No
25	GOM_NL__2PRFIN20030420_012252_000000872015_00375_05940_6273.N1	20-APR-2003 01:22:52	Straylight	86.500	16	21Alp Sco	1.0200	3000.0	173	5940	No
26	GOM_NL__2PRFIN20030420_012550_000000772015_00375_05940_6274.N1	20-APR-2003 01:25:50	Twi_and_stray	77.000	80	7Del Sco	2.3160	30000.	154	5940	No
27	GOM_NL__2PRFIN20030420_012841_000000432015_00375_05940_6275.N1	20-APR-2003 01:28:41	Twi_and_stray	42.500	106	9Bet Crv	2.6480	5600.0	85	5940	No
28	GOM_NL__2PRFIN20030420_013148_000000412015_00375_05940_6276.N1	20-APR-2003 01:31:48	Bright	40.500	15	67Alp Vir	0.97600	28000.	81	5940	No
29	GOM_NL__2PRFIN20030420_013450_000000382015_00375_05940_6277.N1	20-APR-2003 01:34:50	Bright	38.000	121	29Gam Vir	2.7400	7200.0	76	5940	No
30	GOM_NL__2PRFIN20030420_013828_000000392015_00375_05940_6278.N1	20-APR-2003 01:38:28	Bright	39.000	138	47Eps Vir	2.8280	4700.0	78	5940	No
31	GOM_NL__2PRFIN20030420_014628_000000382015_00375_05940_6279.N1	20-APR-2003 01:46:28	Bright	37.500	152	12Alp2CVn	2.8900	11000.	75	5940	No
32	GOM_NL__2PRFIN20030420_014815_000000352015_00375_05940_6280.N1	20-APR-2003 01:48:15	Bright	35.000	174	52Psi UMa	3.0040	4400.0	70	5940	No
33	GOM_NL__2PRFIN20030420_015031_000000372015_00375_05940_6281.N1	20-APR-2003 01:50:31	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	5940	No
34	GOM_NL__2PRFIN20030420_015258_000000382015_00375_05940_6282.N1	20-APR-2003 01:52:58	Bright	37.500	36	50Alp UMa	1.8000	6300.0	75	5940	No
35	GOM_NL__2PRFIN20030420_015749_000000412015_00375_05940_6283.N1	20-APR-2003 01:57:49	Bright	40.500	60	7Bet UMi	2.0810	3950.0	81	5940	No
36	GOM_NL__2PRFIN20030420_020055_000000372015_00375_05940_6284.N1	20-APR-2003 02:00:55	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	5940	No
37	GOM_NL__2PRFIN20030420_020252_000000602015_00375_05940_6285.N1	20-APR-2003 02:02:52	Bright	59.500	130	23Bet Dra	2.7990	5800.0	119	5940	No
38	GOM_NL__2PRFIN20030420_020444_000000662015_00375_05940_6286.N1	20-APR-2003 02:04:44	Bright	65.500	69	33Gam Dra	2.2310	3800.0	131	5940	No
39	GOM_NL__2PRFIN20030420_020801_000000412015_00375_05940_6287.N1	20-APR-2003 02:08:01	Bright	40.500	89	5Alp Cep	2.4510	8000.0	81	5940	No
40	GOM_NL__2PRFIN20030420_020951_000000332015_00375_05940_6288.N1	20-APR-2003 02:09:51	Bright	32.500	68	18Alp Cas	2.2250	4500.0	65	5940	No
41	GOM_NL__2PRFIN20030420_021321_000001312015_00375_05940_6289.N1	20-APR-2003 02:13:21	Bright	130.50	5	3Alp Lyr	0.033000	11000.	261	5940	No
42	GOM_NL__2PRFIN20030420_021752_000000632015_00375_05940_6290.N1	20-APR-2003 02:17:52	Bright	62.500	92	53Eps Cyg	2.5000	4500.0	125	5940	No

338	GOM_NL__2PRFIN20030420_220807_000000372015_00387_05952_6289.N1	20-APR-2003 22:08:07	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	5952	No
339	GOM_NL__2PRFIN20030420_220950_000000612015_00387_05952_6290.N1	20-APR-2003 22:09:50	Bright	61.000	130	23Bet Dra	2.7990	5800.0	122	5952	No
340	GOM_NL__2PRFIN20030420_221143_000000652015_00387_05952_6291.N1	20-APR-2003 22:11:43	Bright	65.000	69	33Gam Dra	2.2310	3800.0	130	5952	No
341	GOM_NL__2PRFIN20030420_222021_000001242015_00387_05952_6292.N1	20-APR-2003 22:20:21	Bright	124.00	5	3Alp Lyr	0.033000	11000.	248	5952	No
342	GOM_NL__2PRFIN20030420_222504_000000662015_00387_05952_6293.N1	20-APR-2003 22:25:04	Twi_and_stray	65.500	92	53Eps Cyg	2.5000	4500.0	131	5952	No
343	GOM_NL__2PRFIN20030420_222936_000000402015_00387_05952_6294.N1	20-APR-2003 22:29:36	Twi_and_stray	40.000	90	54Alp Peg	2.4870	11000.	80	5952	No
344	GOM_NL__2PRFIN20030420_223256_000000582015_00387_05952_6295.N1	20-APR-2003 22:32:56	Dark	58.000	61	8Eps Peg	2.1000	3900.0	116	5952	No
345	GOM_NL__2PRFIN20030420_223524_000000502015_00387_05952_6296.N1	20-APR-2003 22:35:24	Dark	49.500	162	34Alp Aqr	2.9440	5350.0	99	5952	No
346	GOM_NL__2PRFIN20030420_223818_000000532015_00387_05952_6297.N1	20-APR-2003 22:38:18	Dark	53.000	154	22Bet Aqr	2.8990	5700.0	106	5952	No
347	GOM_NL__2PRFIN20030420_224206_000000442015_00387_05952_6298.N1	20-APR-2003 22:42:06	Dark	44.000	18	24Alp PsA	1.1660	9700.0	88	5952	No
348	GOM_NL__2PRFIN20030420_224739_000000402015_00387_05952_6299.N1	20-APR-2003 22:47:39	Dark	40.000	31	Alp Gru	1.7340	15200.	80	5952	No
349	GOM_NL__2PRFIN20030420_225043_000000372015_00387_05952_6300.N1	20-APR-2003 22:50:43	Dark	37.000	148	Alp Tuc	2.8780	4100.0	74	5952	No
350	GOM_NL__2PRFIN20030420_225249_000000392015_00388_05953_6293.N1	20-APR-2003 22:52:49	Dark	39.000	45	Alp Pav	1.9400	26000.	78	5953	No
351	GOM_NL__2PRFIN20030420_225912_000000672015_00388_05953_6294.N1	20-APR-2003 22:59:12	Dark	66.500	38	20Eps Sgr	1.8360	11000.	133	5953	No
352	GOM_NL__2PRFIN20030420_230122_000000592015_00388_05953_6295.N1	20-APR-2003 23:01:22	Straylight	58.500	40	The Sco	1.8590	7100.0	117	5953	No
353	GOM_NL__2PRFIN20030420_230426_000000502015_00388_05953_6296.N1	20-APR-2003 23:04:26	Straylight	49.500	4	Alp1Cen	-0.010000	5800.0	99	5953	No
354	GOM_NL__2PRFIN20030420_230632_000000722015_00388_05953_6297.N1	20-APR-2003 23:06:32	Straylight	71.500	75	26Eps Sco	2.2910	4250.0	143	5953	No
355	GOM_NL__2PRFIN20030420_231133_000000462015_00388_05953_6298.N1	20-APR-2003 23:11:33	Straylight	45.500	54	5The Cen	2.0550	4500.0	91	5953	No
356	GOM_NL__2PRFIN20030420_231344_000000752015_00388_05953_6299.N1	20-APR-2003 23:13:44	Twi_and_stray	75.000	80	7Del Sco	2.3160	30000.	150	5953	No
357	GOM_NL__2PRFIN20030420_231630_000000412015_00388_05953_6300.N1	20-APR-2003 23:16:30	Twi_and_stray	40.500	106	9Bet Crv	2.6480	5600.0	81	5953	No
358	GOM_NL__2PRFIN20030420_231936_000000432015_00388_05953_6301.N1	20-APR-2003 23:19:36	Bright	42.500	15	67Alp Vir	0.97600	28000.	85	5953	No
359	GOM_NL__2PRFIN20030420_232238_000000372015_00388_05953_6302.N1	20-APR-2003 23:22:38	Bright	36.500	121	29Gam Vir	2.7400	7200.0	73	5953	No
360	GOM_NL__2PRFIN20030420_232615_000000382015_00388_05953_6303.N1	20-APR-2003 23:26:15	Bright	38.000	138	47Eps Vir	2.8280	4700.0	76	5953	No
361	GOM_NL__2PRFIN20030420_233413_000000372015_00388_05953_6304.N1	20-APR-2003 23:34:13	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	5953	No
362	GOM_NL__2PRFIN20030420_233605_000000352015_00388_05953_6305.N1	20-APR-2003 23:36:05	Bright	35.000	174	52Psi UMa	3.0040	4400.0	70	5953	No
363	GOM_NL__2PRFIN20030420_233819_000000342015_00388_05953_6306.N1	20-APR-2003 23:38:19	Bright	34.000	87	64Gam UMa	2.4330	11000.	68	5953	No
364	GOM_NL__2PRFIN20030420_234048_000000372015_00388_05953_6307.N1	20-APR-2003 23:40:48	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	5953	No
365	GOM_NL__2PRFIN20030420_234533_000000382015_00388_05953_6308.N1	20-APR-2003 23:45:33	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	5953	No
366	GOM_NL__2PRFIN20030420_234843_000000362015_00388_05953_6309.N1	20-APR-2003 23:48:43	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	5953	No
367	GOM_NL__2PRFIN20030420_235025_000000602015_00388_05953_6310.N1	20-APR-2003 23:50:25	Bright	60.000	130	23Bet Dra	2.7990	5800.0	120	5953	No
368	GOM_NL__2PRFIN20030420_235218_000000652015_00388_05953_6311.N1	20-APR-2003 23:52:18	Bright	65.000	69	33Gam Dra	2.2310	3800.0	130	5953	No

3. Quality information per product

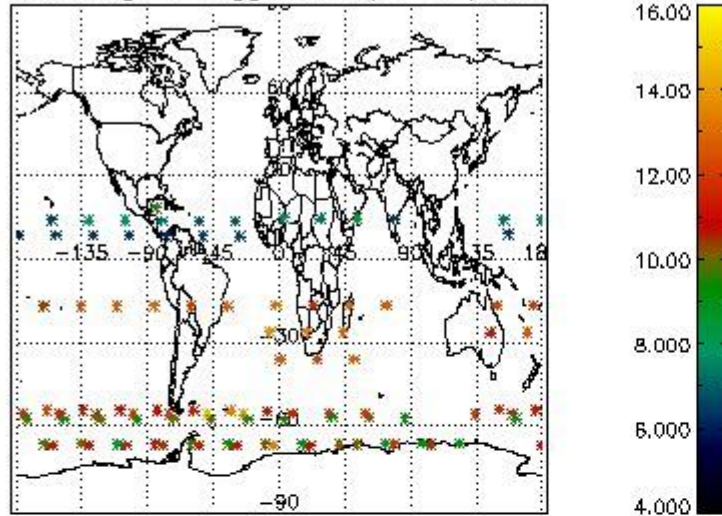
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

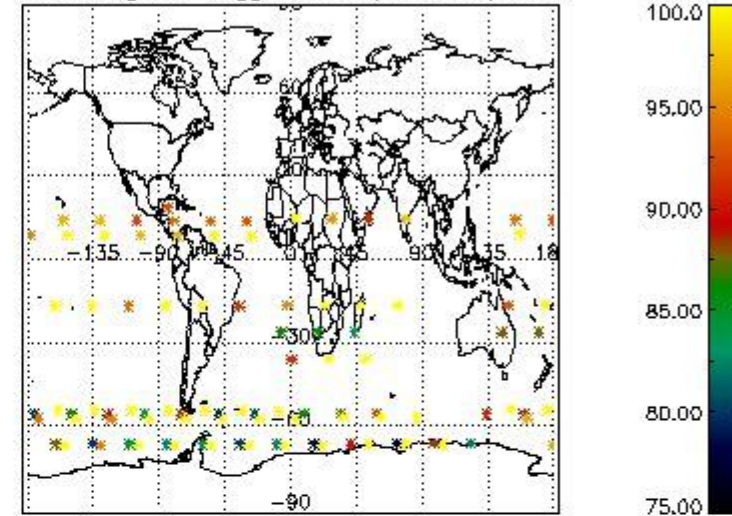


3.2 Plot quality information per product (world map)

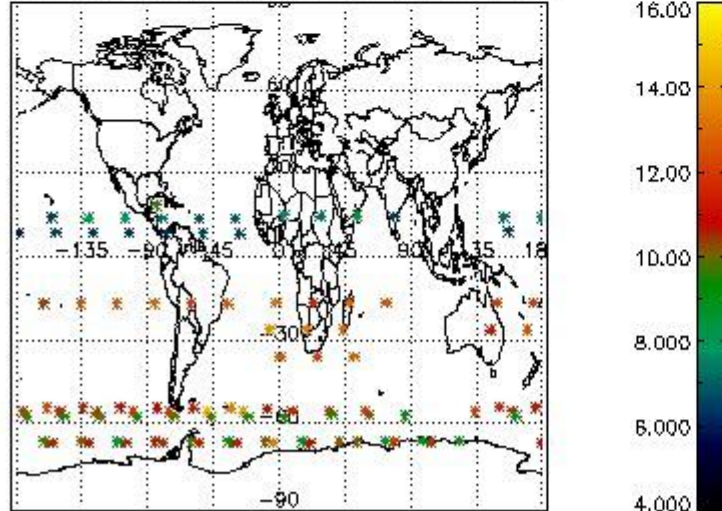
Percentage of flagged data per O3 profile



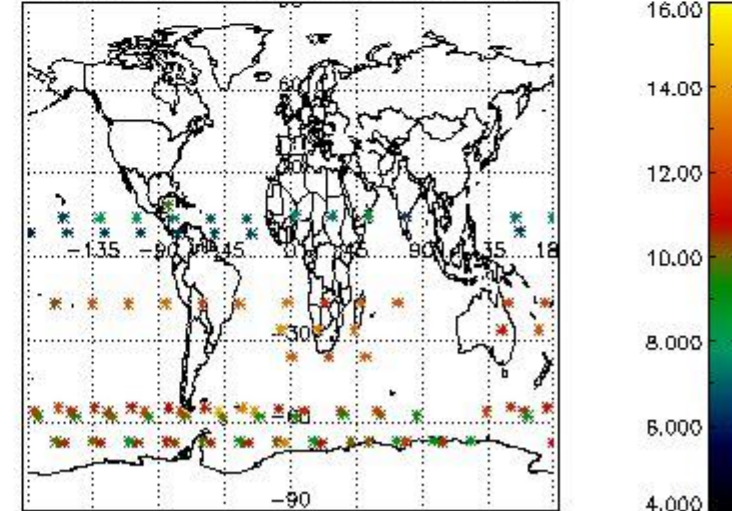
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

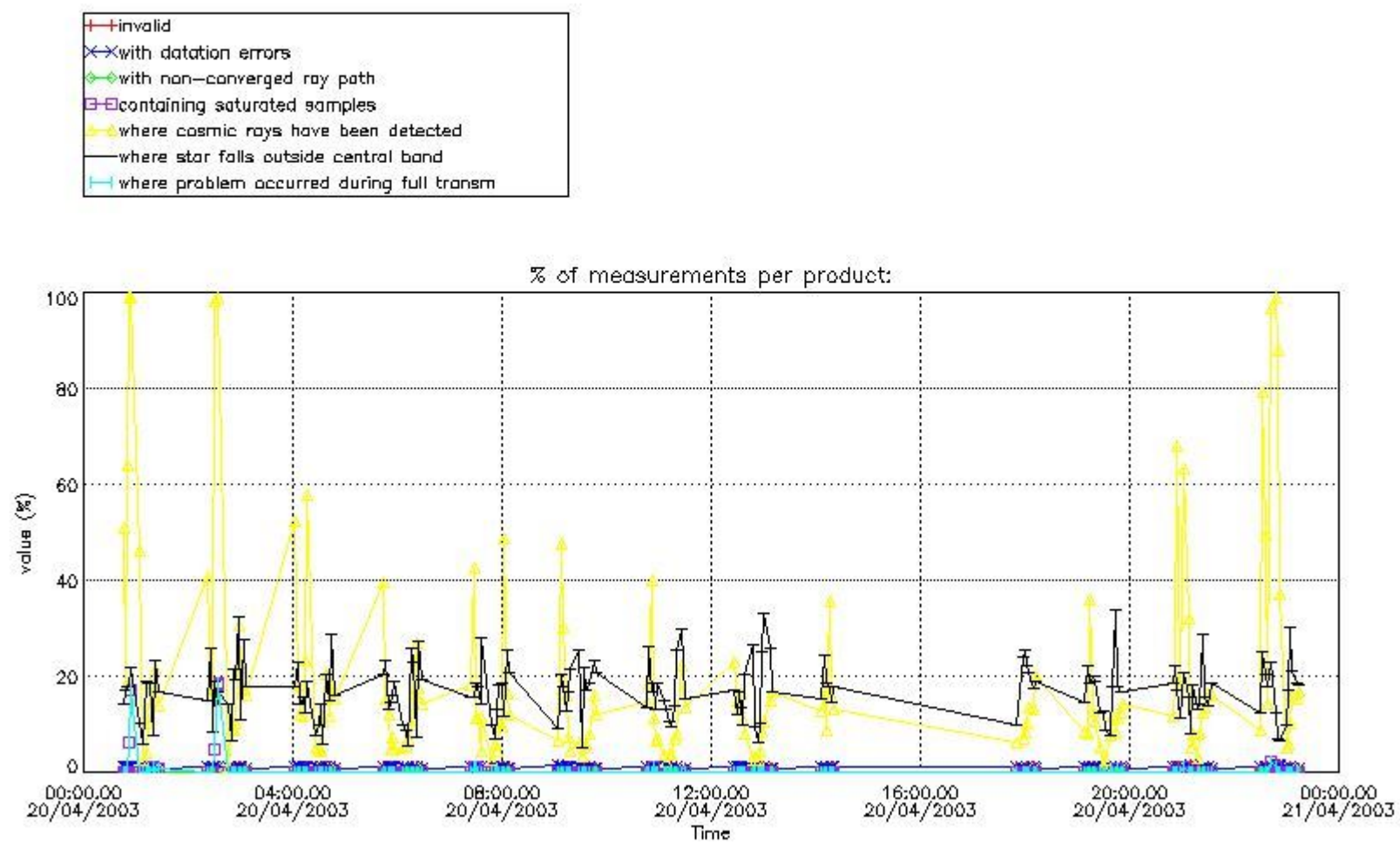


4. Level 1 quality information per product

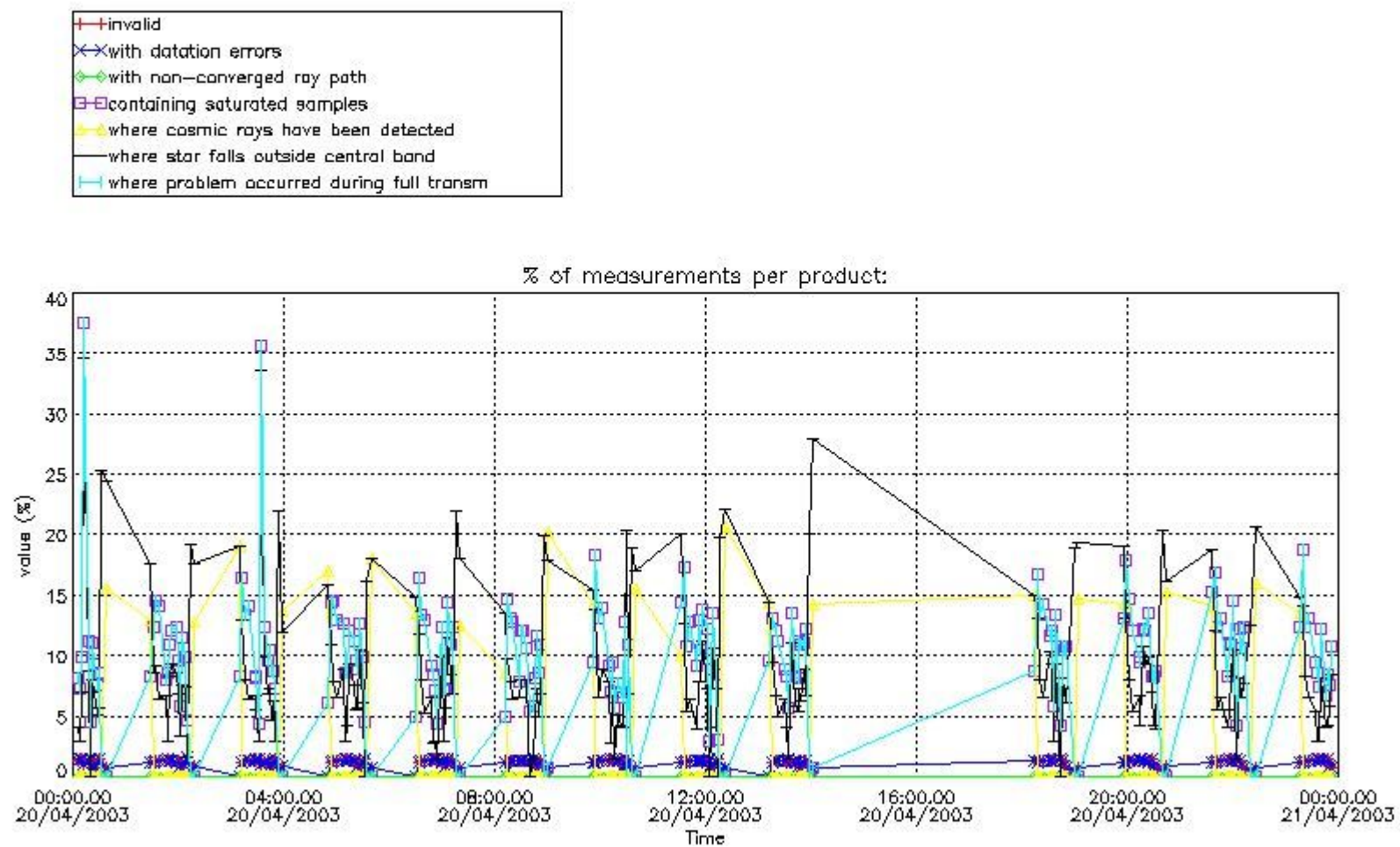
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



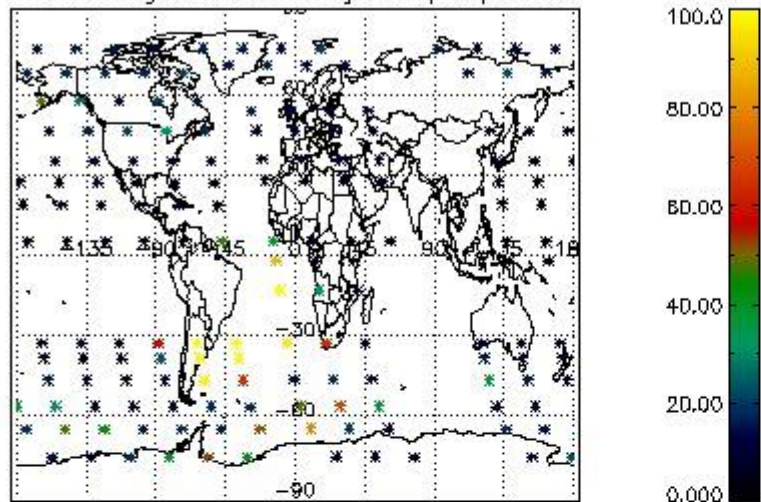
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



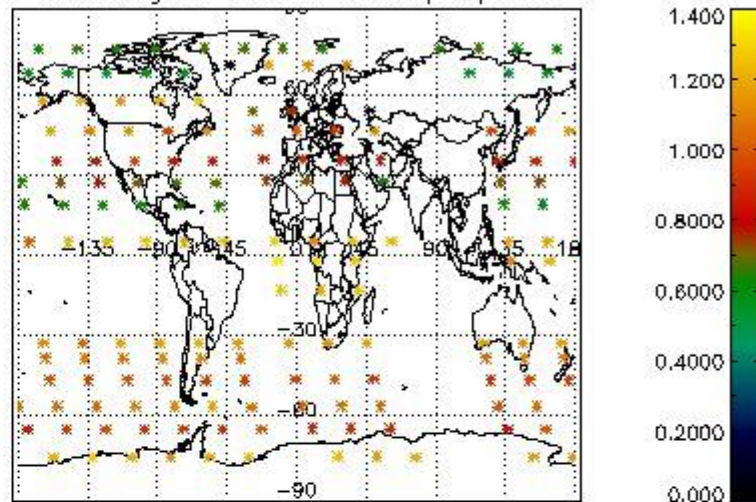
4.2 Plot quality information per product coming from level 1b processing (world map)

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

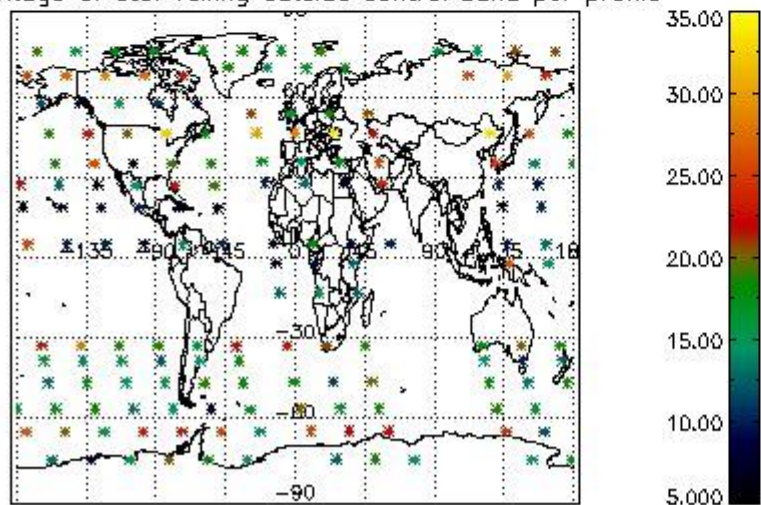
Percentage of cosmic ray hits per profile



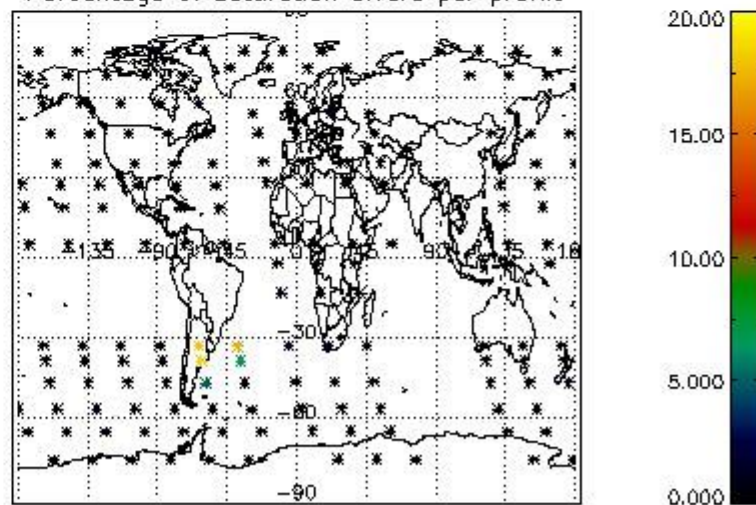
Percentage of datation errors per profile



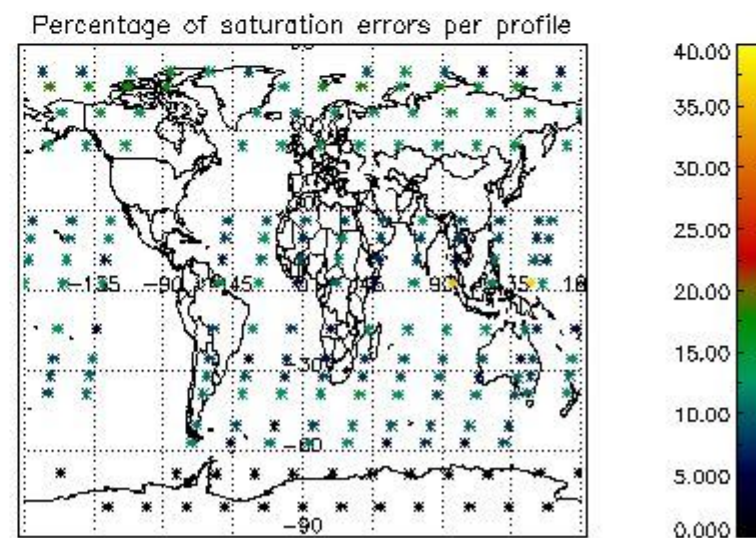
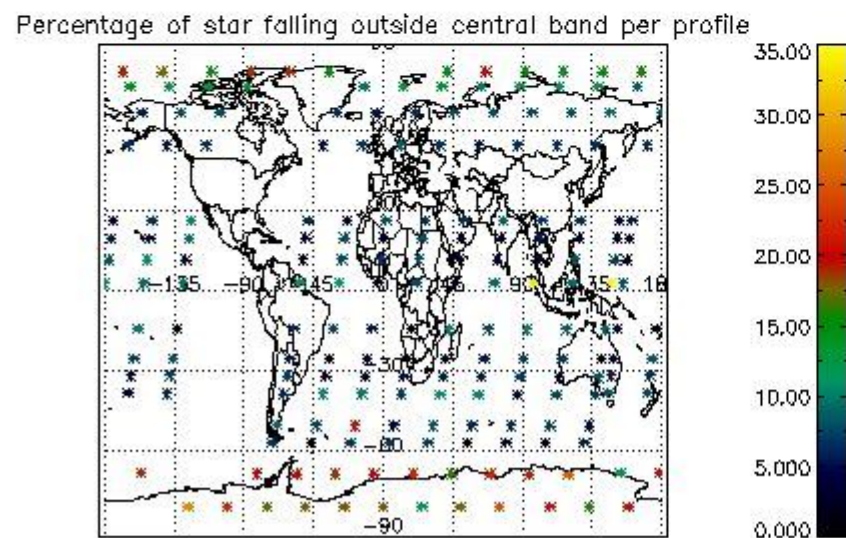
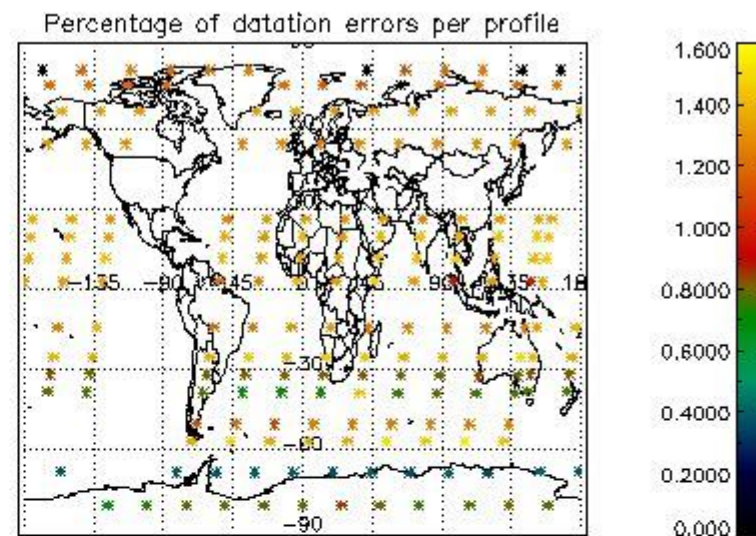
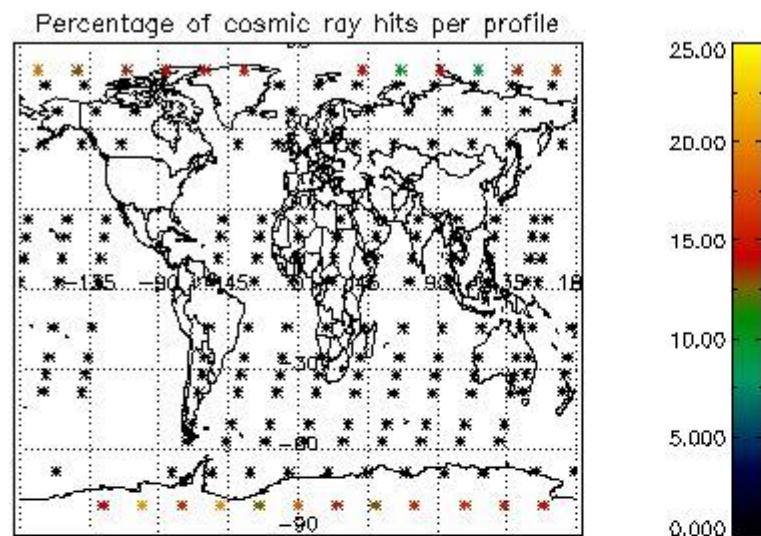
Percentage of star falling outside central band per profile



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

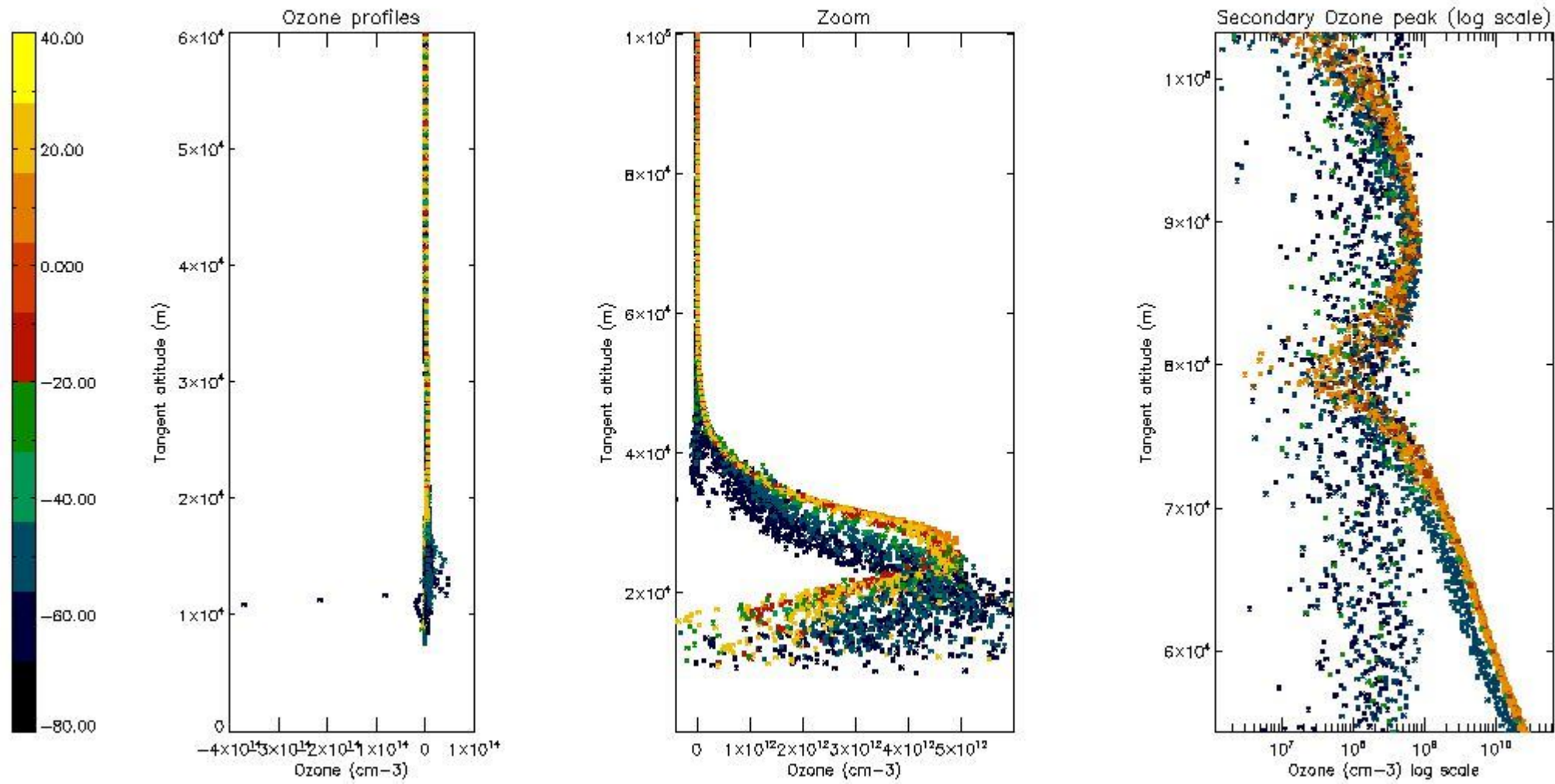
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	16

STD < 10	13
STD < 5	9

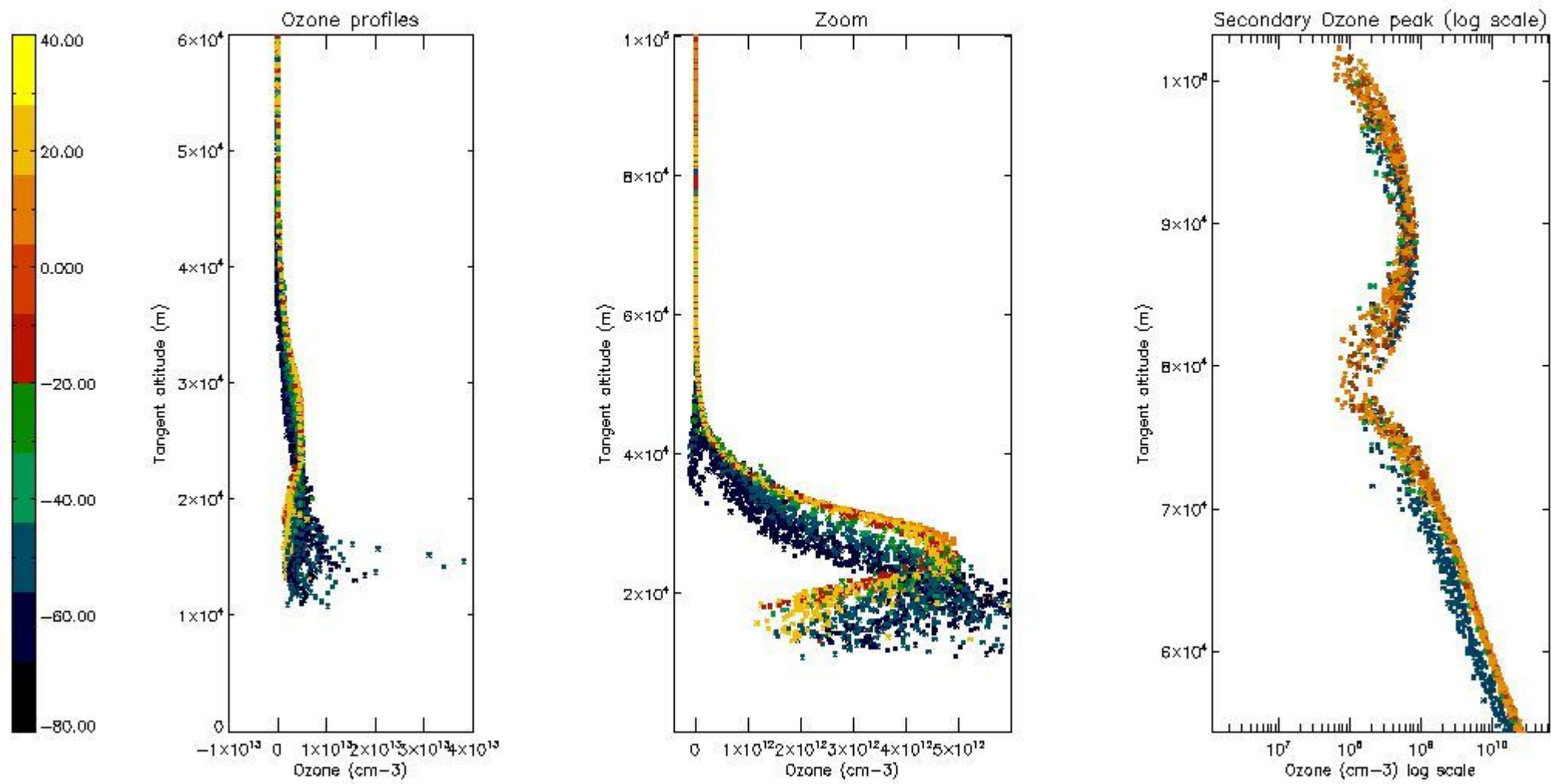
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



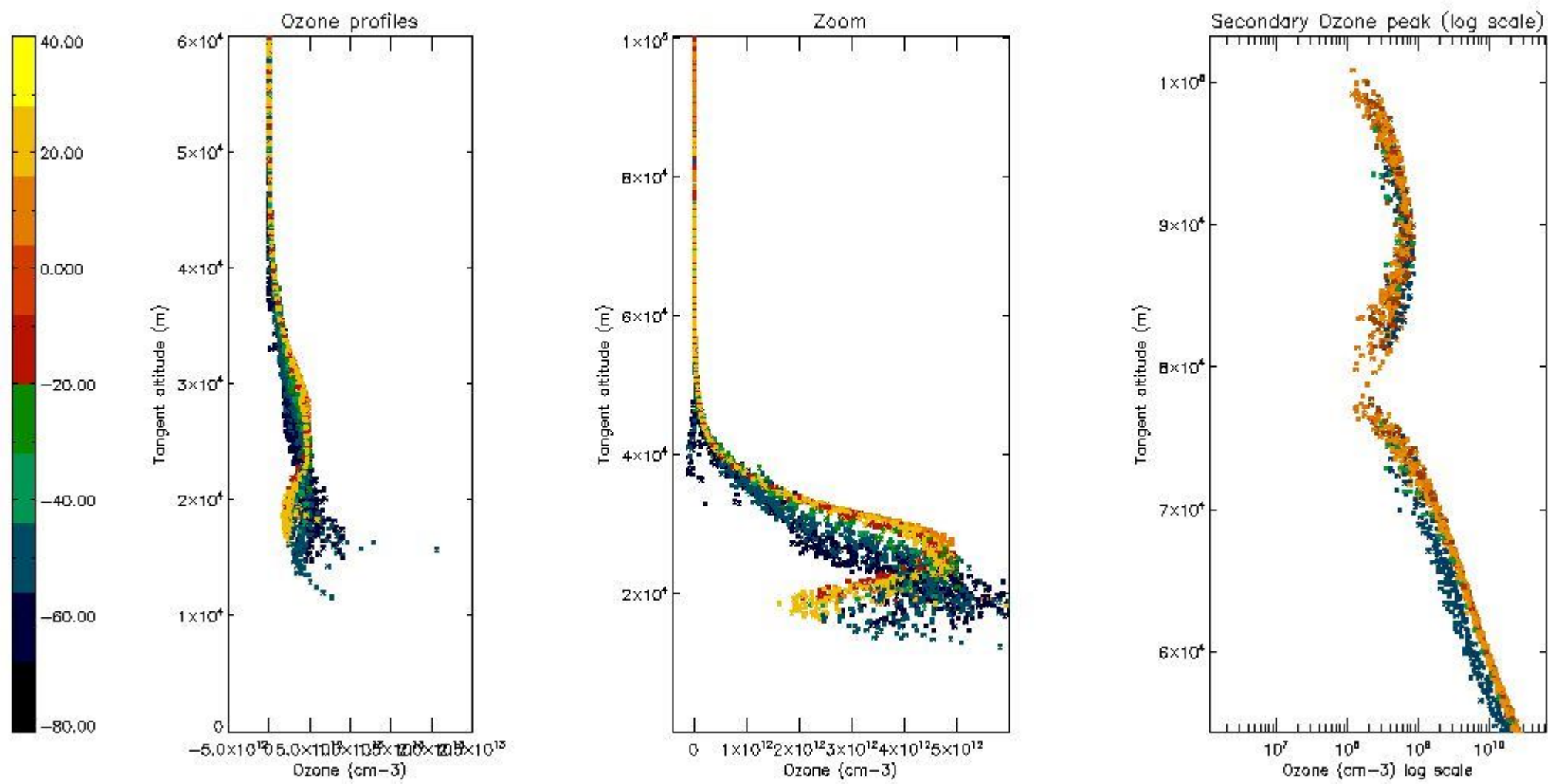
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



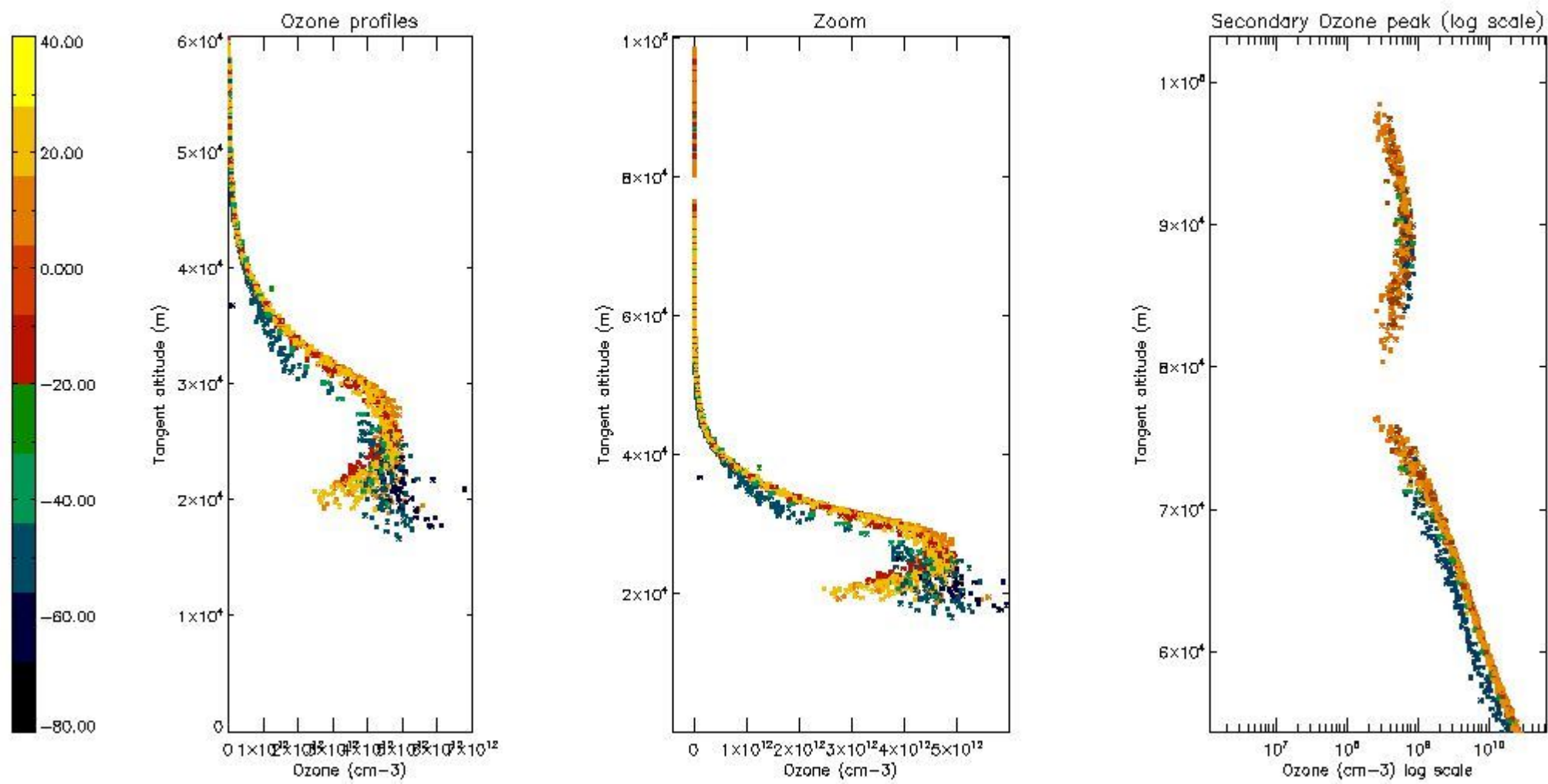
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



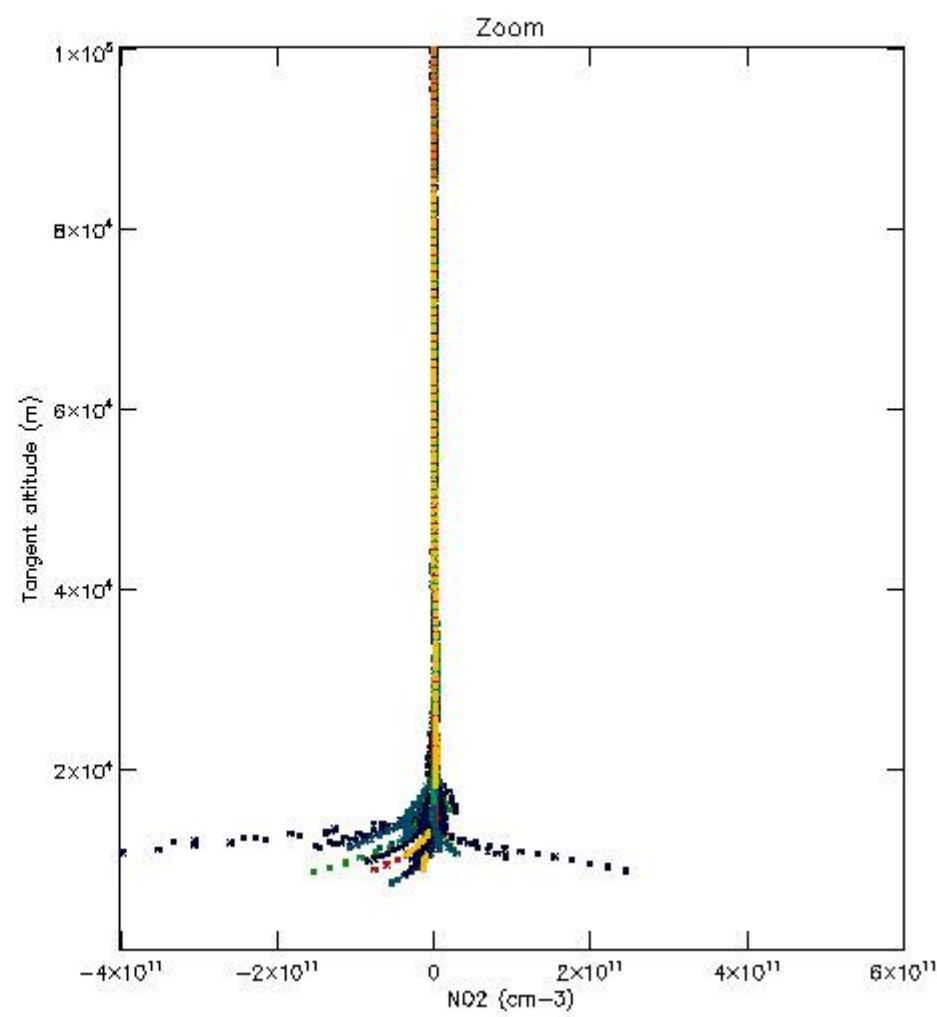
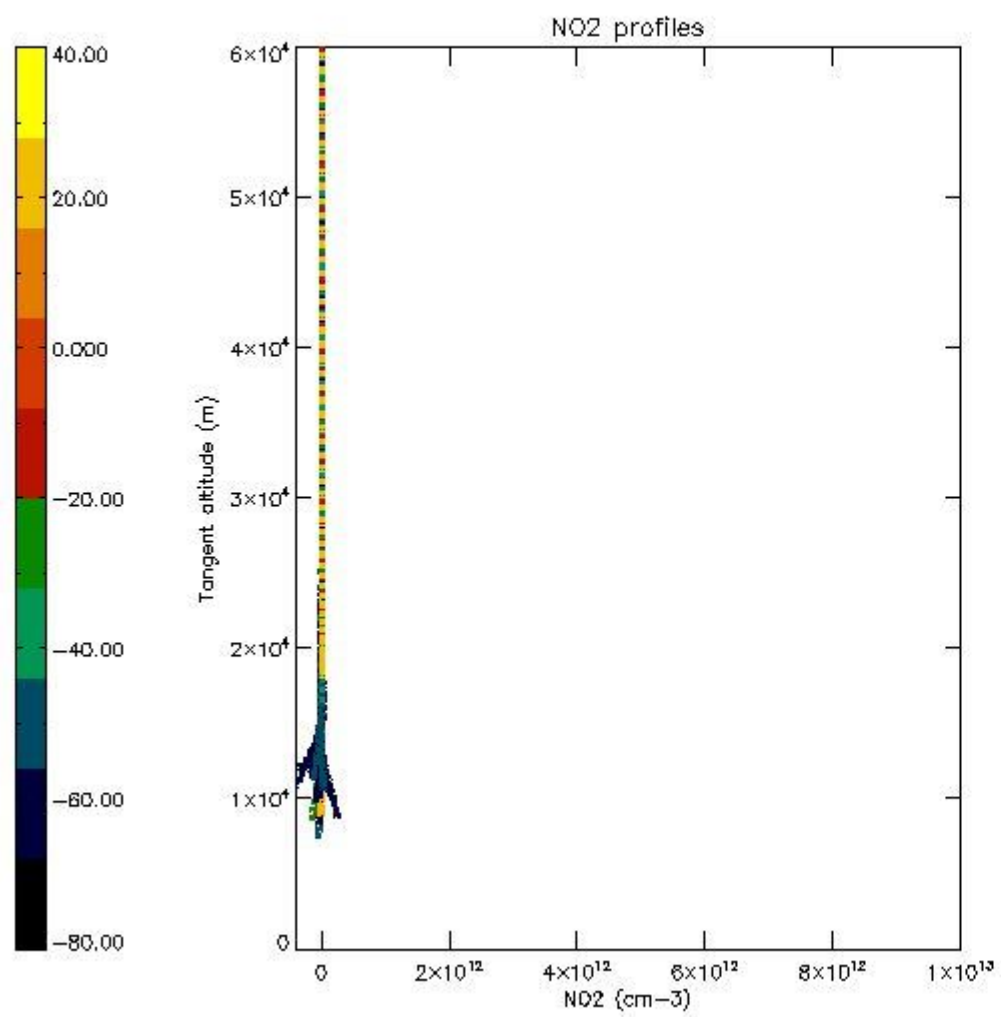
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



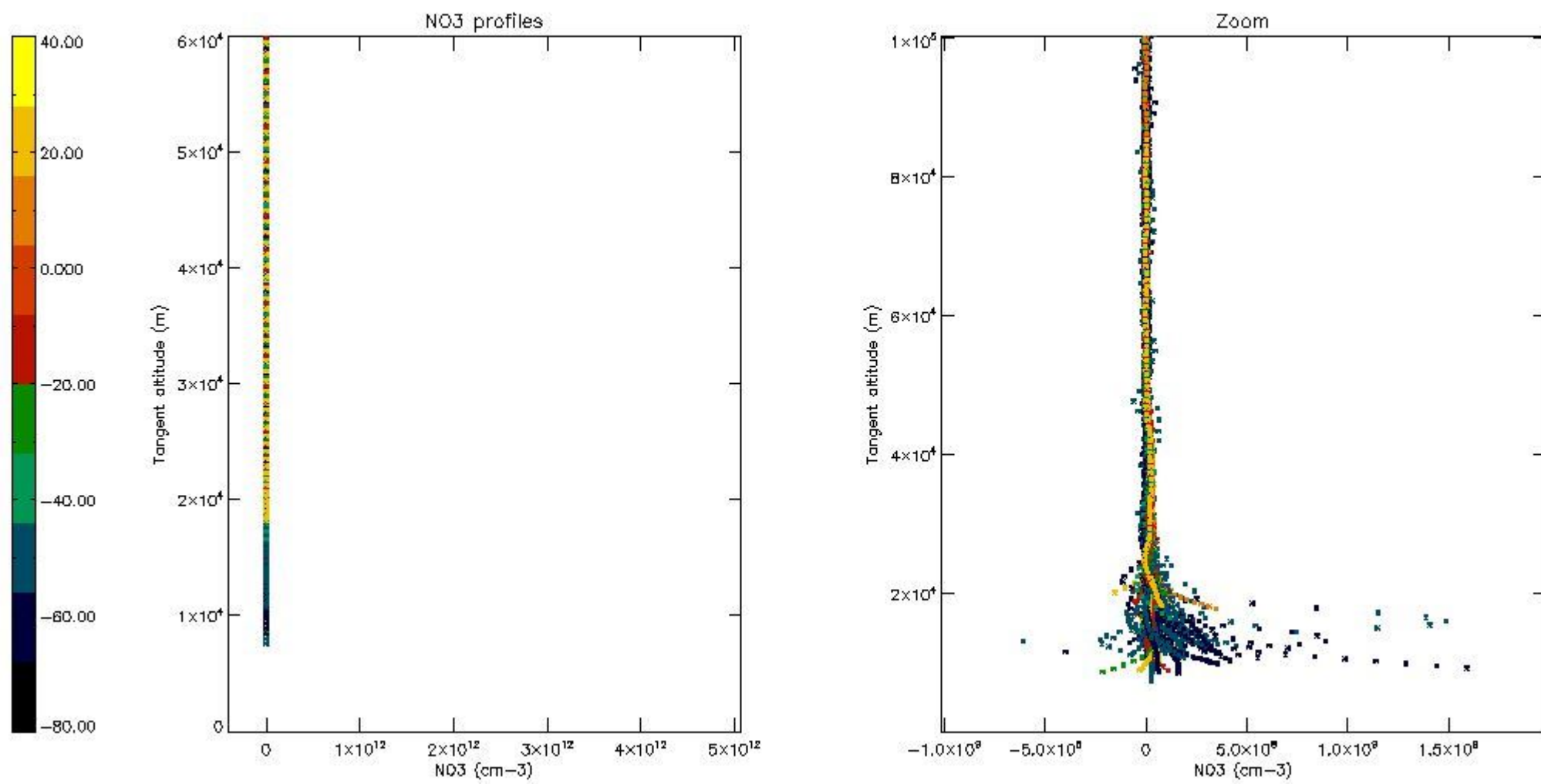
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



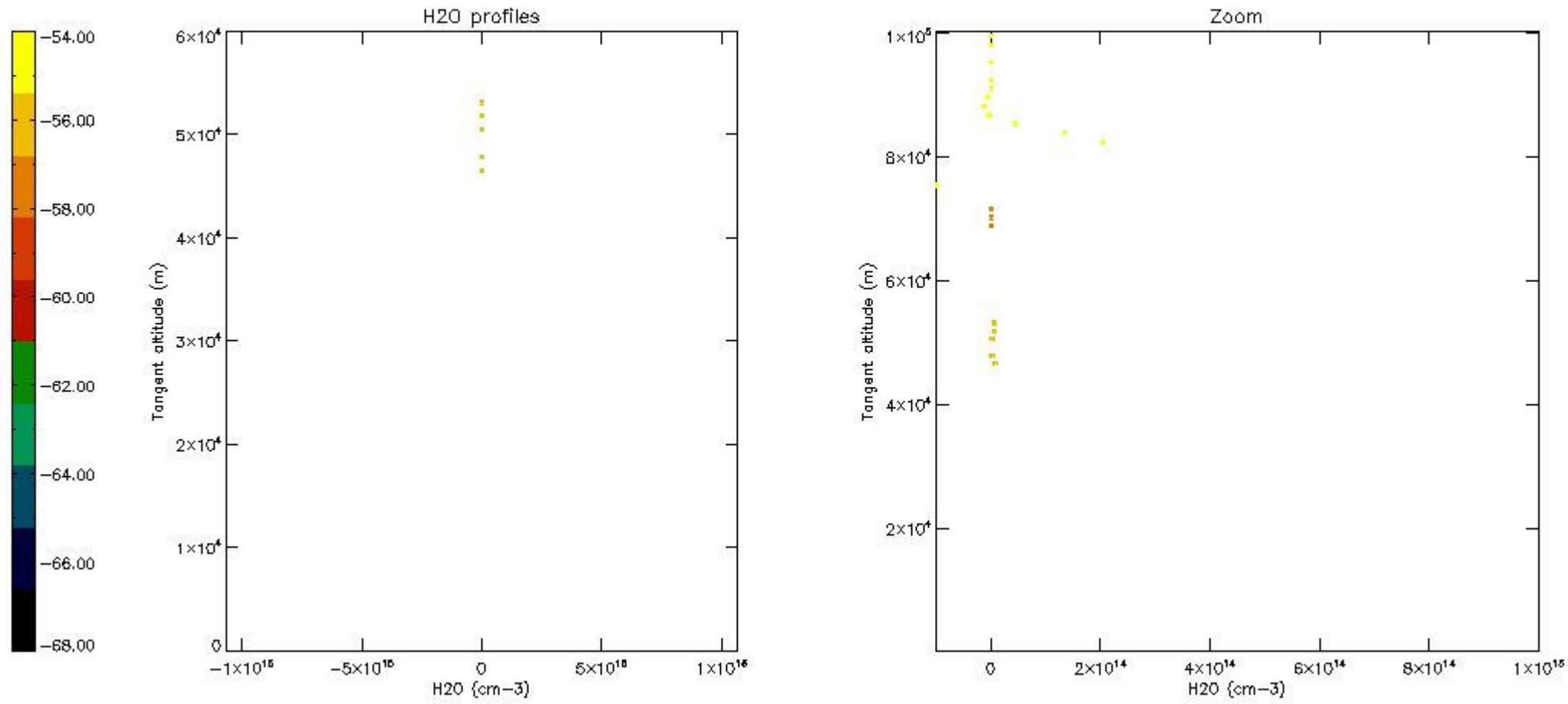
5.7 Plot NO3 profiles for all STD (dark without errors)

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	20-APR-2003 00:05:52
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-APR-2003 00:05:52
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-APR-2003 00:05:52

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

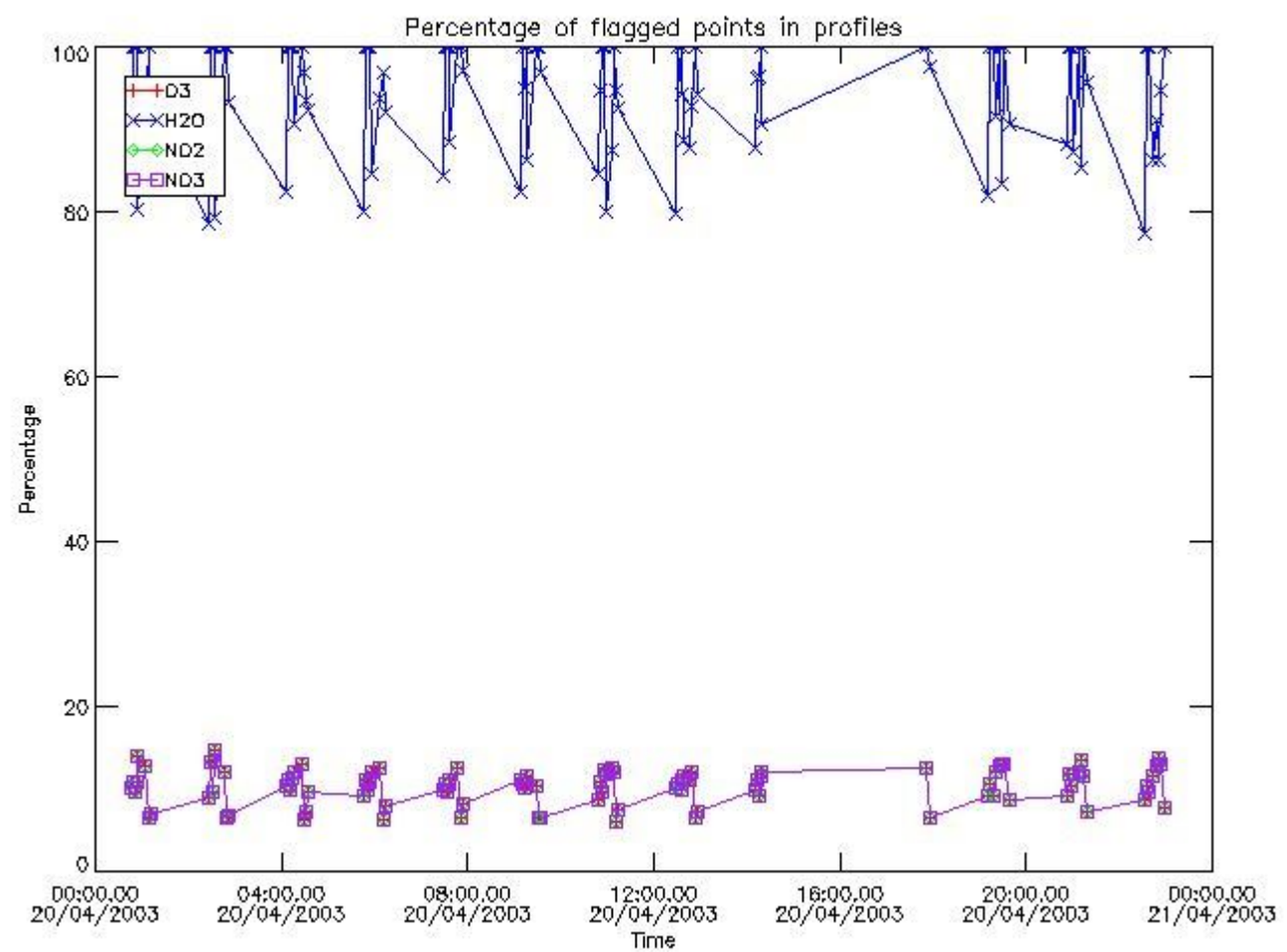
[6. Auxiliary Data Files used for the production reported in section 2](#)

338	GOM_NL__2PRFIN20030420_220807_000000372015_00387_05952_6289.N1	20-APR-2003 22:08:07	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	5952	No
339	GOM_NL__2PRFIN20030420_220950_000000612015_00387_05952_6290.N1	20-APR-2003 22:09:50	Bright	61.000	130	23Bet Dra	2.7990	5800.0	122	5952	No
340	GOM_NL__2PRFIN20030420_221143_000000652015_00387_05952_6291.N1	20-APR-2003 22:11:43	Bright	65.000	69	33Gam Dra	2.2310	3800.0	130	5952	No
341	GOM_NL__2PRFIN20030420_222021_000001242015_00387_05952_6292.N1	20-APR-2003 22:20:21	Bright	124.00	5	3Alp Lyr	0.033000	11000.	248	5952	No
342	GOM_NL__2PRFIN20030420_222504_000000662015_00387_05952_6293.N1	20-APR-2003 22:25:04	Tw_i_and_stray	65.500	92	53Eps Cyg	2.5000	4500.0	131	5952	No
343	GOM_NL__2PRFIN20030420_222936_000000402015_00387_05952_6294.N1	20-APR-2003 22:29:36	Tw_i_and_stray	40.000	90	54Alp Peg	2.4870	11000.	80	5952	No
344	GOM_NL__2PRFIN20030420_223256_000000582015_00387_05952_6295.N1	20-APR-2003 22:32:56	Dark	58.000	61	8Eps Peg	2.1000	3900.0	116	5952	No
345	GOM_NL__2PRFIN20030420_223524_000000502015_00387_05952_6296.N1	20-APR-2003 22:35:24	Dark	49.500	162	34Alp Aqr	2.9440	5350.0	99	5952	No
346	GOM_NL__2PRFIN20030420_223818_000000532015_00387_05952_6297.N1	20-APR-2003 22:38:18	Dark	53.000	154	22Bet Aqr	2.8990	5700.0	106	5952	No
347	GOM_NL__2PRFIN20030420_224206_000000442015_00387_05952_6298.N1	20-APR-2003 22:42:06	Dark	44.000	18	24Alp PsA	1.1660	9700.0	88	5952	No
348	GOM_NL__2PRFIN20030420_224739_000000402015_00387_05952_6299.N1	20-APR-2003 22:47:39	Dark	40.000	31	Alp Gru	1.7340	15200.	80	5952	No
349	GOM_NL__2PRFIN20030420_225043_000000372015_00387_05952_6300.N1	20-APR-2003 22:50:43	Dark	37.000	148	Alp Tuc	2.8780	4100.0	74	5952	No
350	GOM_NL__2PRFIN20030420_225249_000000392015_00388_05953_6293.N1	20-APR-2003 22:52:49	Dark	39.000	45	Alp Pav	1.9400	26000.	78	5953	No
351	GOM_NL__2PRFIN20030420_225912_000000672015_00388_05953_6294.N1	20-APR-2003 22:59:12	Dark	66.500	38	20Eps Sgr	1.8360	11000.	133	5953	No
352	GOM_NL__2PRFIN20030420_230122_000000592015_00388_05953_6295.N1	20-APR-2003 23:01:22	Straylight	58.500	40	The Sco	1.8590	7100.0	117	5953	No
353	GOM_NL__2PRFIN20030420_230426_000000502015_00388_05953_6296.N1	20-APR-2003 23:04:26	Straylight	49.500	4	Alp1Cen	-0.010000	5800.0	99	5953	No
354	GOM_NL__2PRFIN20030420_230632_000000722015_00388_05953_6297.N1	20-APR-2003 23:06:32	Straylight	71.500	75	26Eps Sco	2.2910	4250.0	143	5953	No
355	GOM_NL__2PRFIN20030420_231133_000000462015_00388_05953_6298.N1	20-APR-2003 23:11:33	Straylight	45.500	54	5The Cen	2.0550	4500.0	91	5953	No
356	GOM_NL__2PRFIN20030420_231344_000000752015_00388_05953_6299.N1	20-APR-2003 23:13:44	Tw_i_and_stray	75.000	80	7Del Sco	2.3160	30000.	150	5953	No
357	GOM_NL__2PRFIN20030420_231630_000000412015_00388_05953_6300.N1	20-APR-2003 23:16:30	Tw_i_and_stray	40.500	106	9Bet Crv	2.6480	5600.0	81	5953	No
358	GOM_NL__2PRFIN20030420_231936_000000432015_00388_05953_6301.N1	20-APR-2003 23:19:36	Bright	42.500	15	67Alp Vir	0.97600	28000.	85	5953	No
359	GOM_NL__2PRFIN20030420_232238_000000372015_00388_05953_6302.N1	20-APR-2003 23:22:38	Bright	36.500	121	29Gam Vir	2.7400	7200.0	73	5953	No
360	GOM_NL__2PRFIN20030420_232615_000000382015_00388_05953_6303.N1	20-APR-2003 23:26:15	Bright	38.000	138	47Eps Vir	2.8280	4700.0	76	5953	No
361	GOM_NL__2PRFIN20030420_233413_000000372015_00388_05953_6304.N1	20-APR-2003 23:34:13	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	5953	No
362	GOM_NL__2PRFIN20030420_233605_000000352015_00388_05953_6305.N1	20-APR-2003 23:36:05	Bright	35.000	174	52Psi UMa	3.0040	4400.0	70	5953	No
363	GOM_NL__2PRFIN20030420_233819_000000342015_00388_05953_6306.N1	20-APR-2003 23:38:19	Bright	34.000	87	64Gam UMa	2.4330	11000.	68	5953	No
364	GOM_NL__2PRFIN20030420_234048_000000372015_00388_05953_6307.N1	20-APR-2003 23:40:48	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	5953	No
365	GOM_NL__2PRFIN20030420_234533_000000382015_00388_05953_6308.N1	20-APR-2003 23:45:33	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	5953	No
366	GOM_NL__2PRFIN20030420_234843_000000362015_00388_05953_6309.N1	20-APR-2003 23:48:43	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	5953	No
367	GOM_NL__2PRFIN20030420_235025_000000602015_00388_05953_6310.N1	20-APR-2003 23:50:25	Bright	60.000	130	23Bet Dra	2.7990	5800.0	120	5953	No
368	GOM_NL__2PRFIN20030420_235218_000000652015_00388_05953_6311.N1	20-APR-2003 23:52:18	Bright	65.000	69	33Gam Dra	2.2310	3800.0	130	5953	No

3. Quality information per product

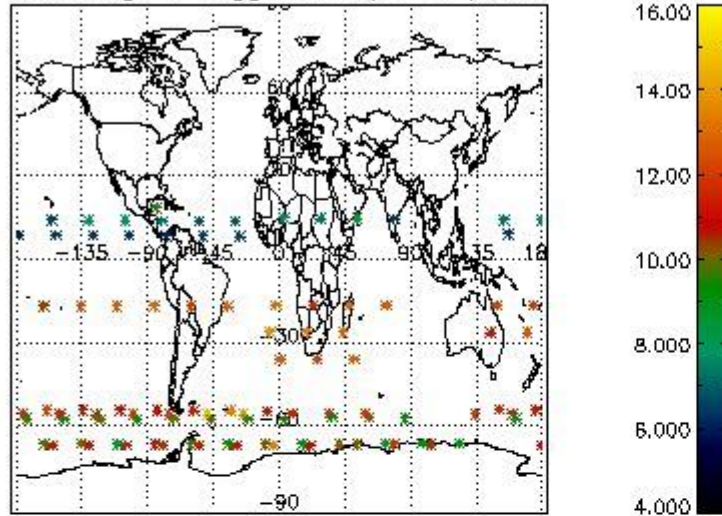
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

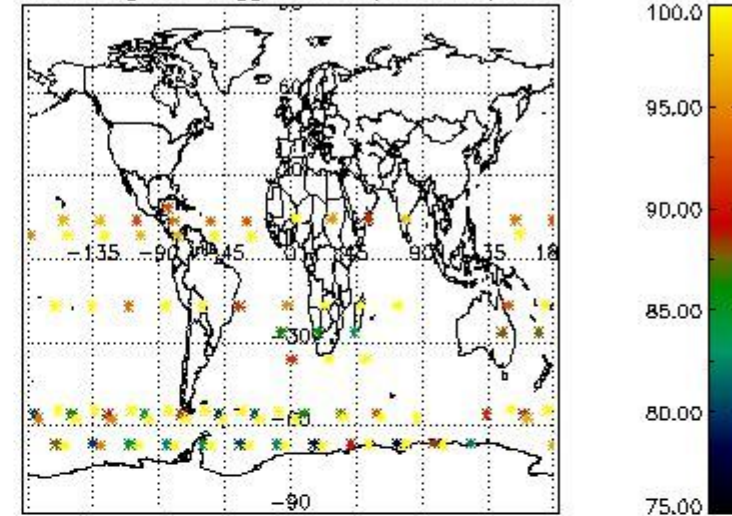


3.2 Plot quality information per product (world map)

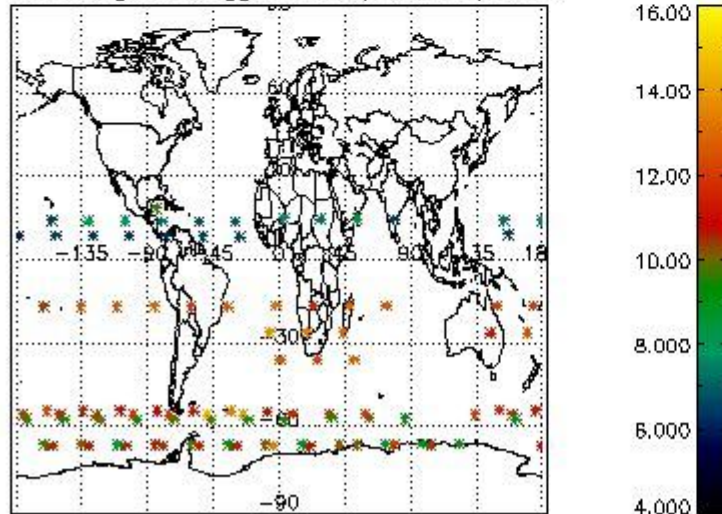
Percentage of flagged data per O3 profile



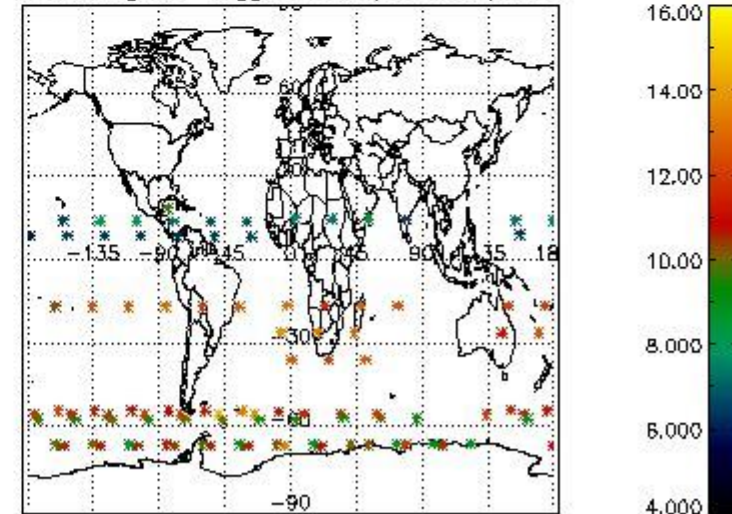
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

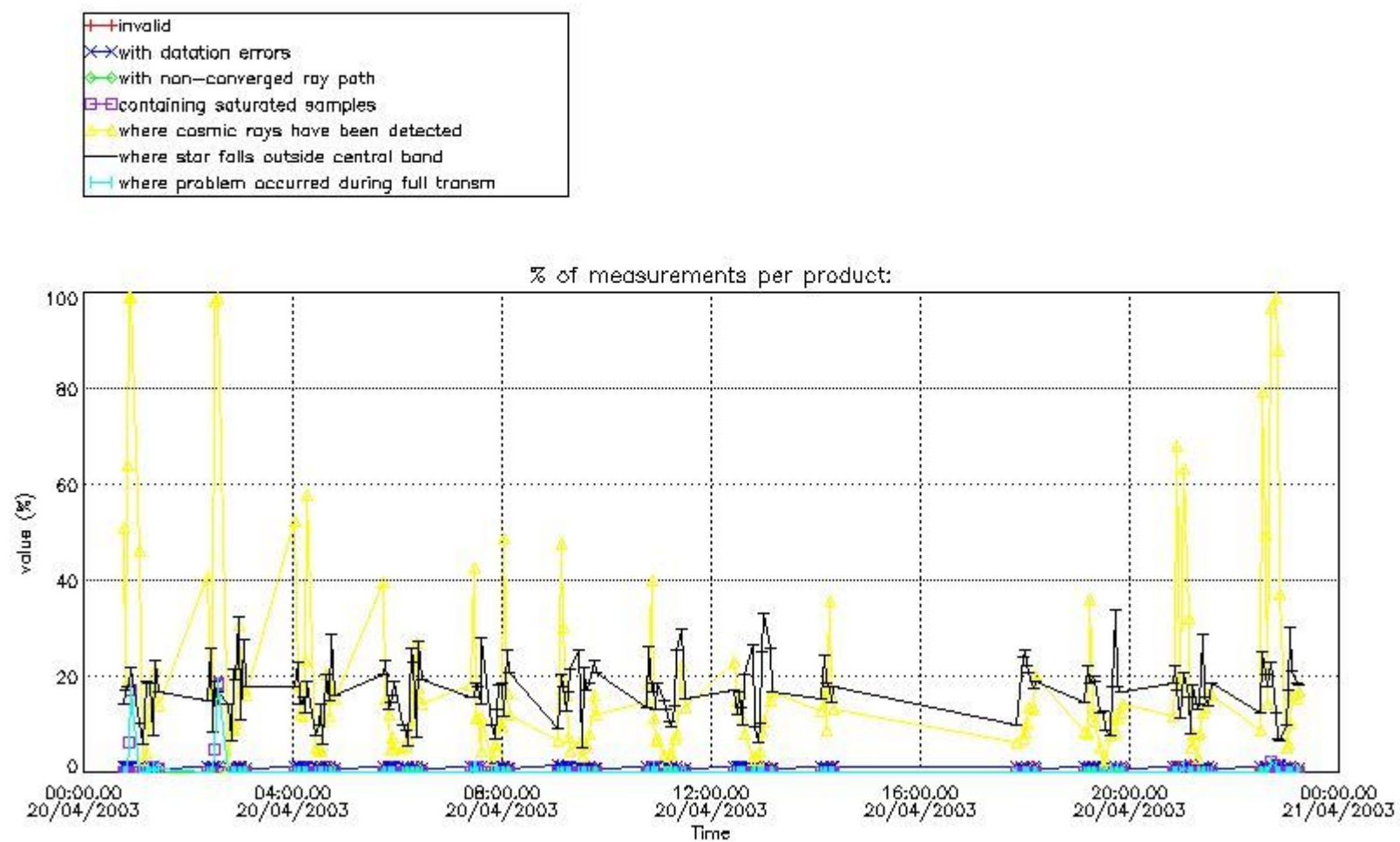


4. Level 1 quality information per product

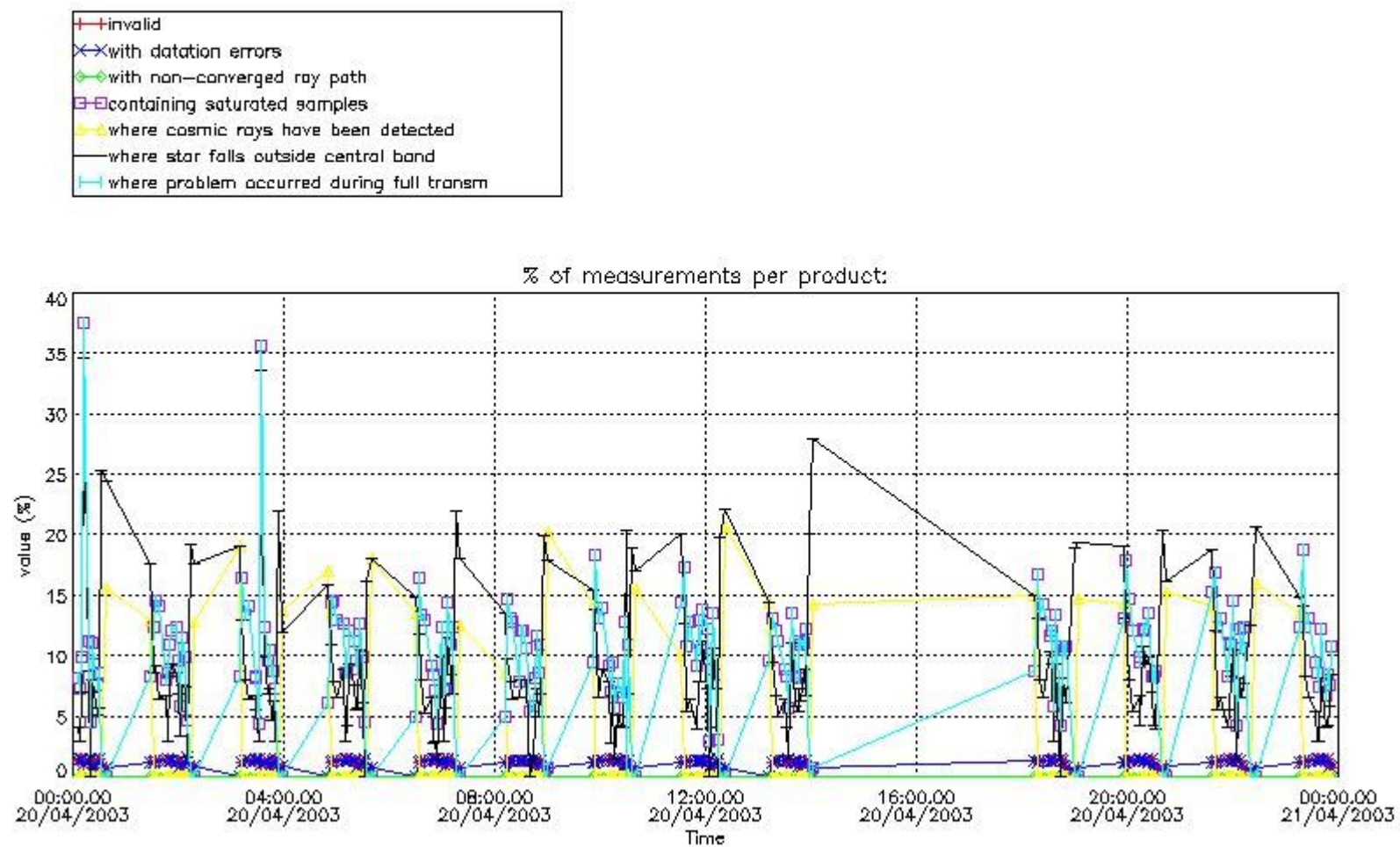
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

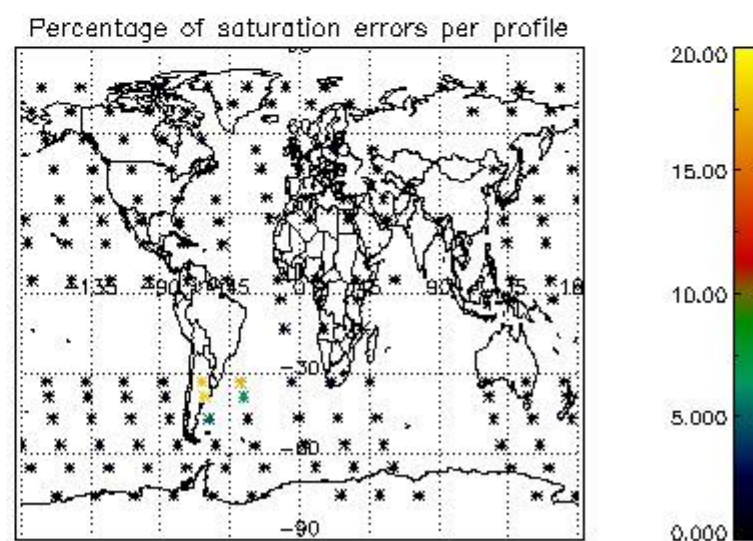
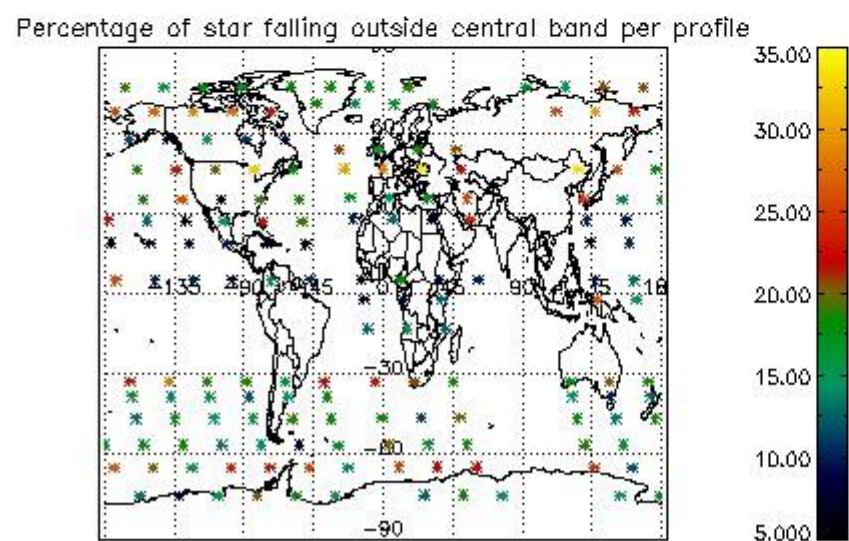
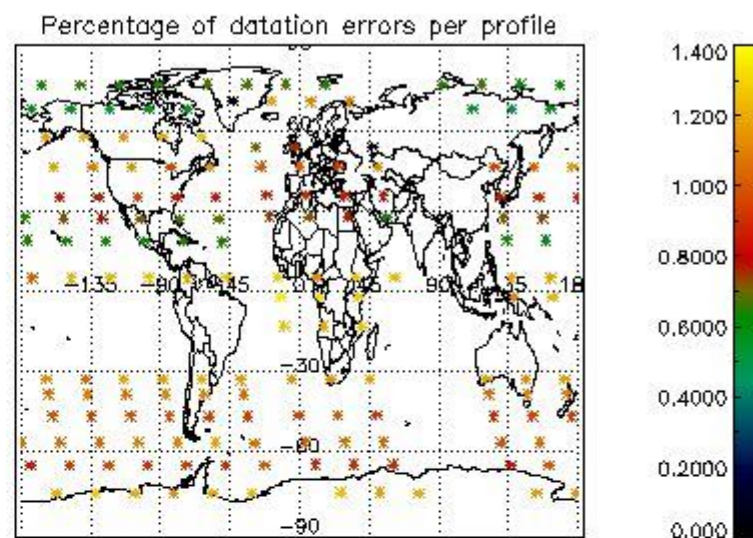
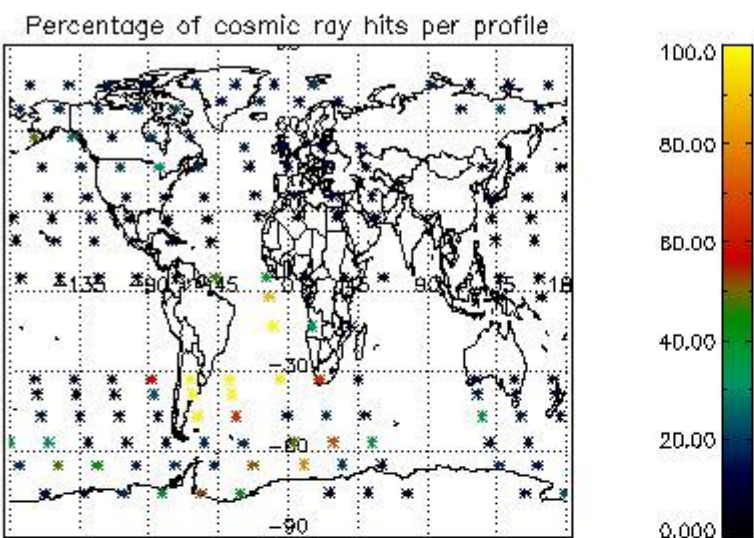


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

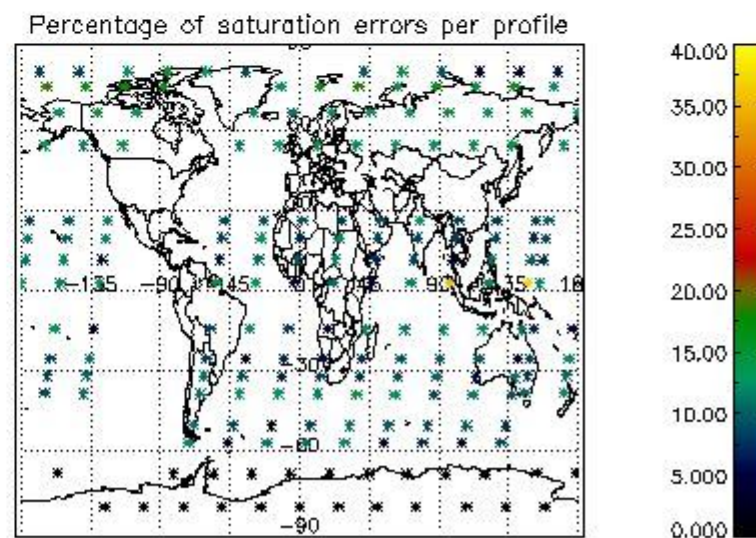
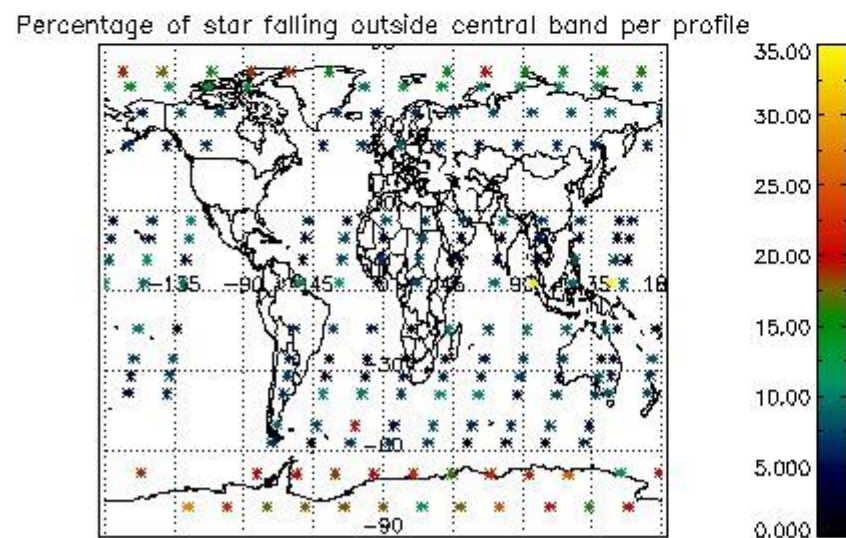
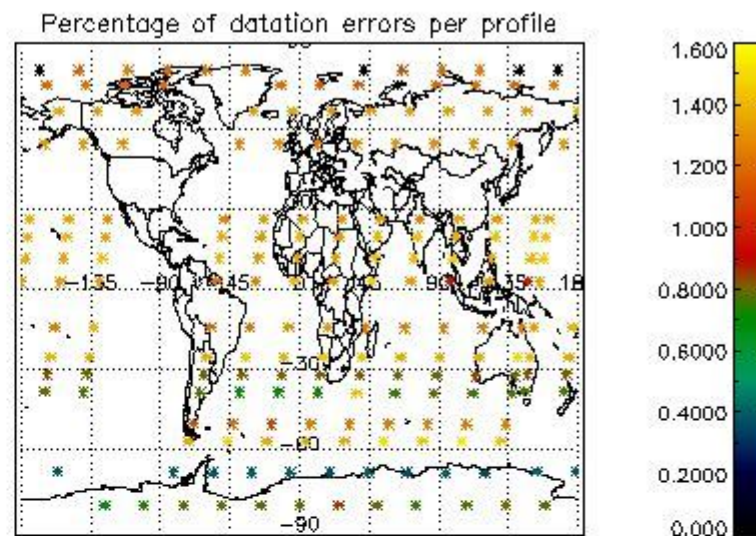
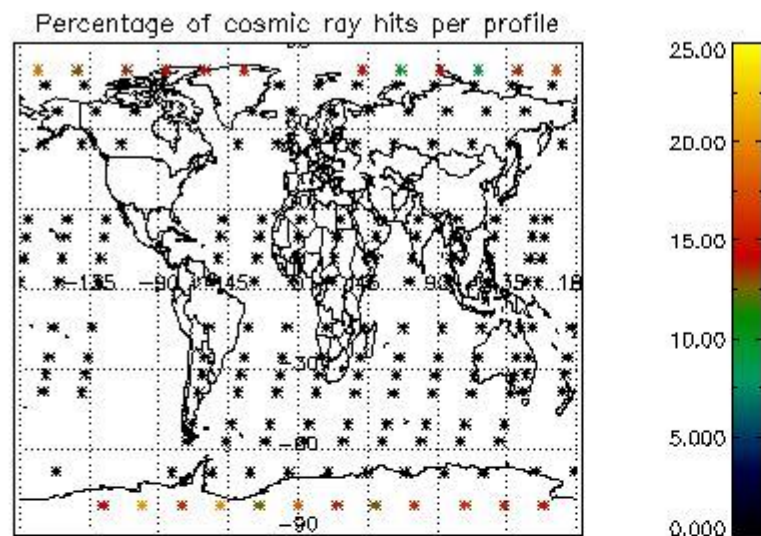


4.2 Plot quality information per product coming from level 1b processing (world map)

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

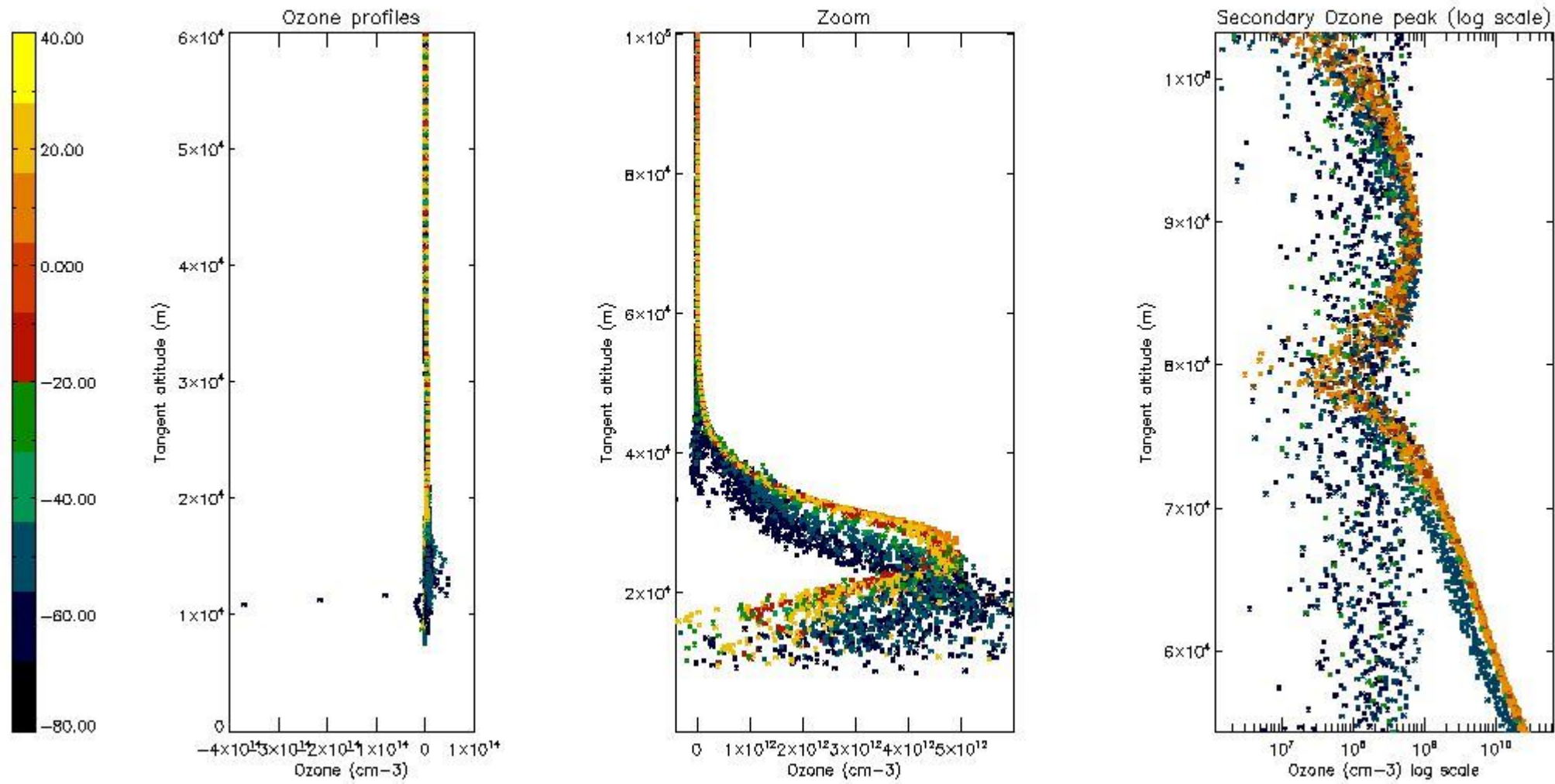
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	16

STD < 10	13
STD < 5	9

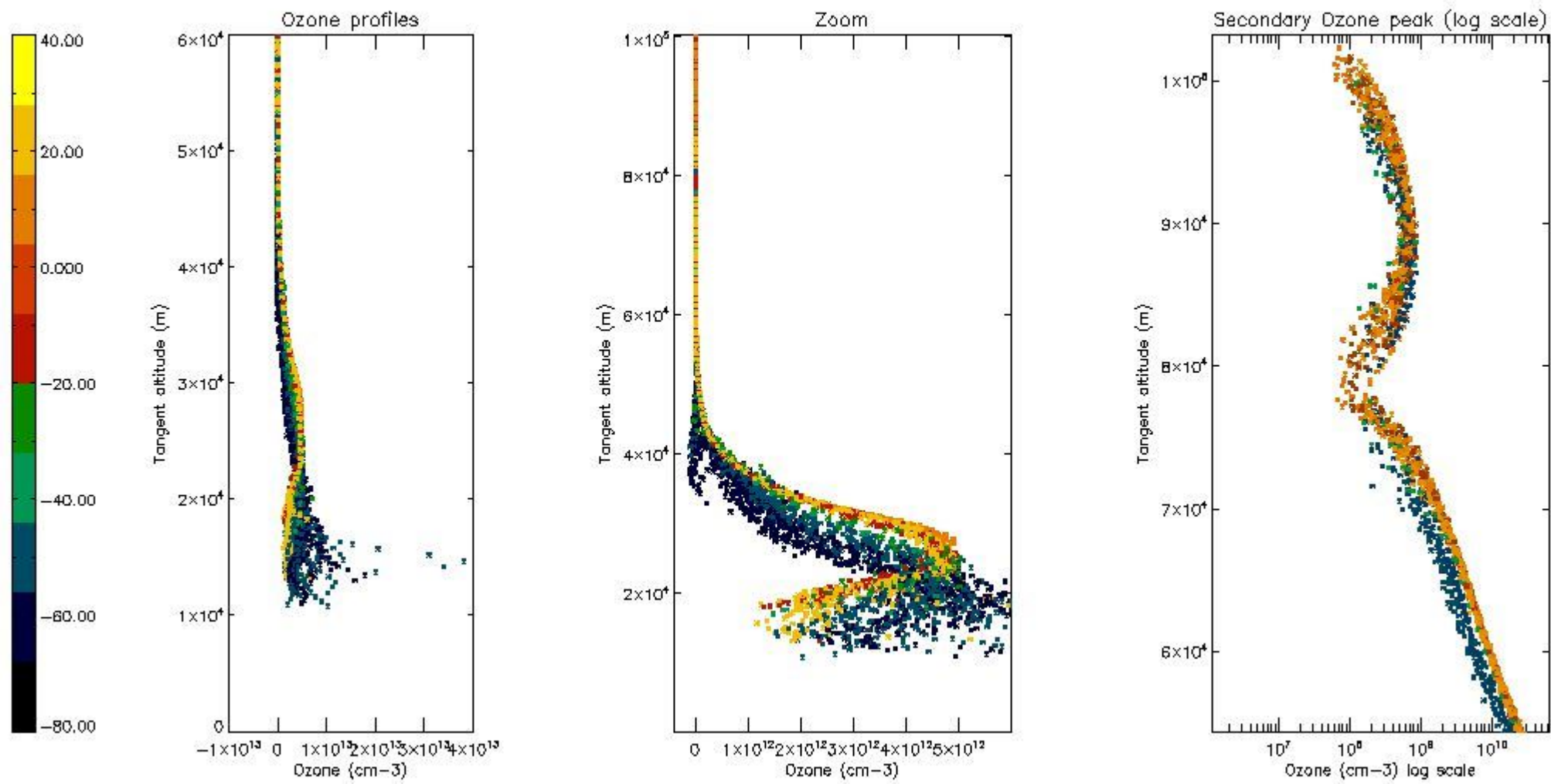
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



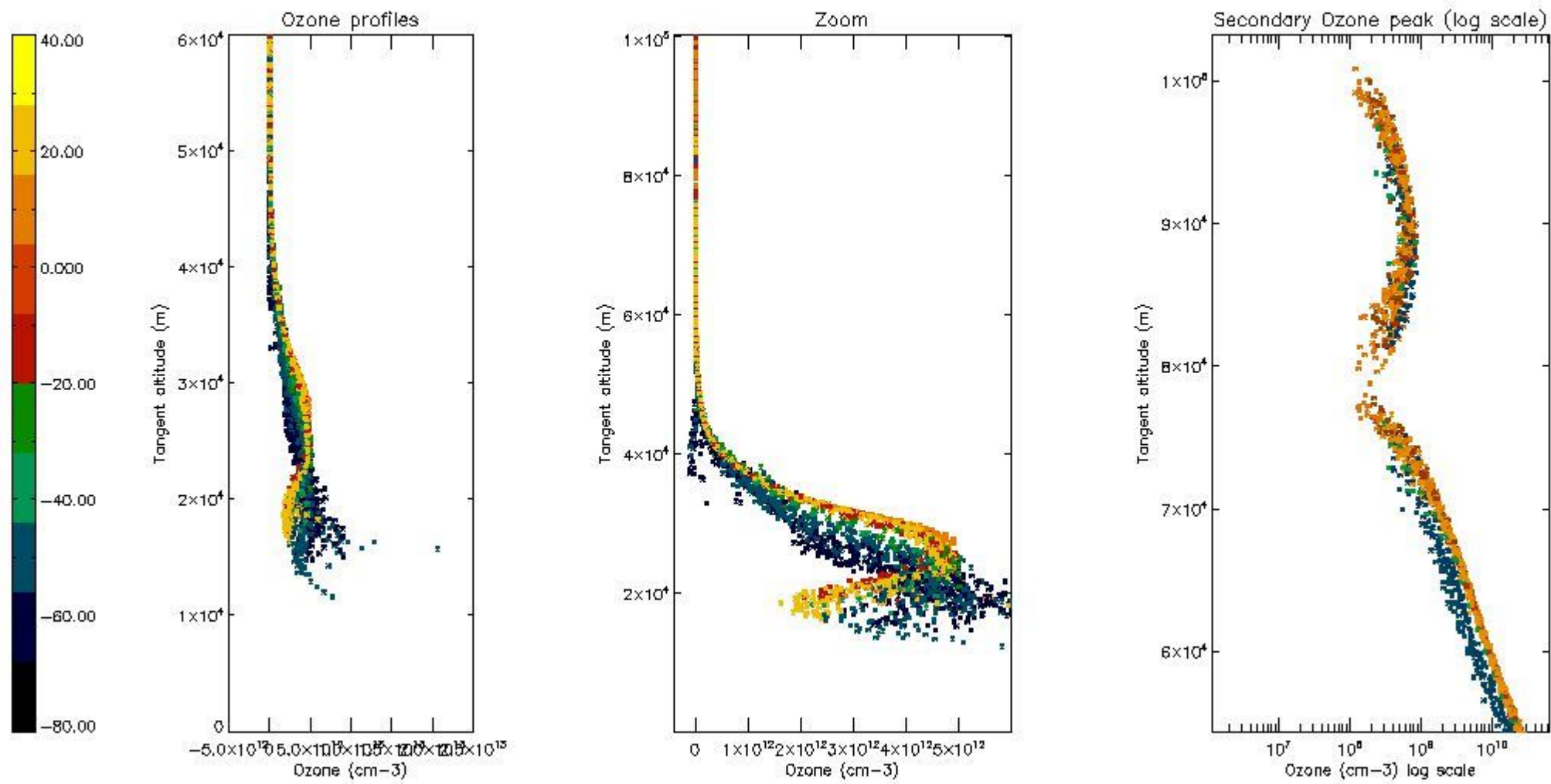
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



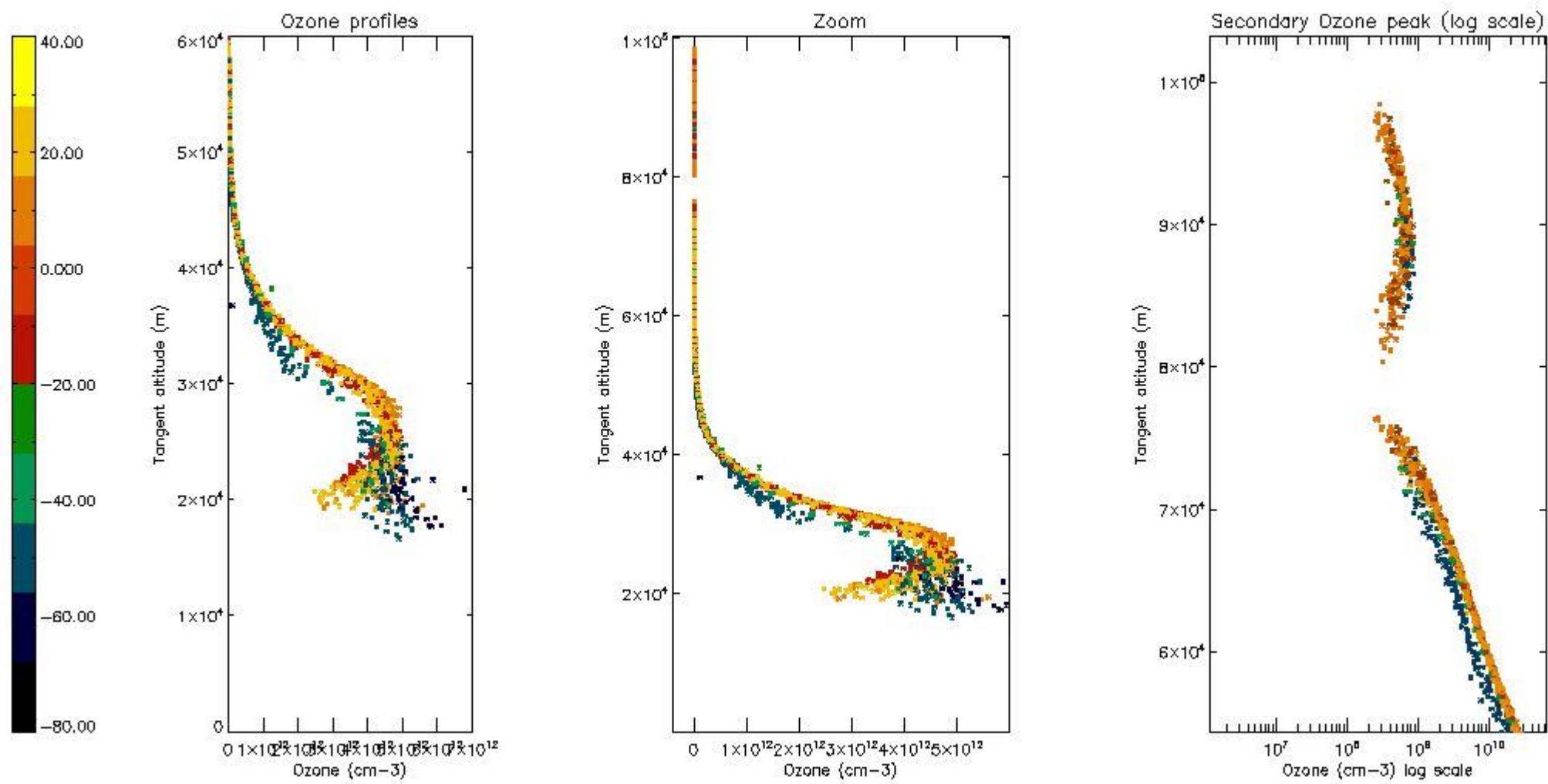
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



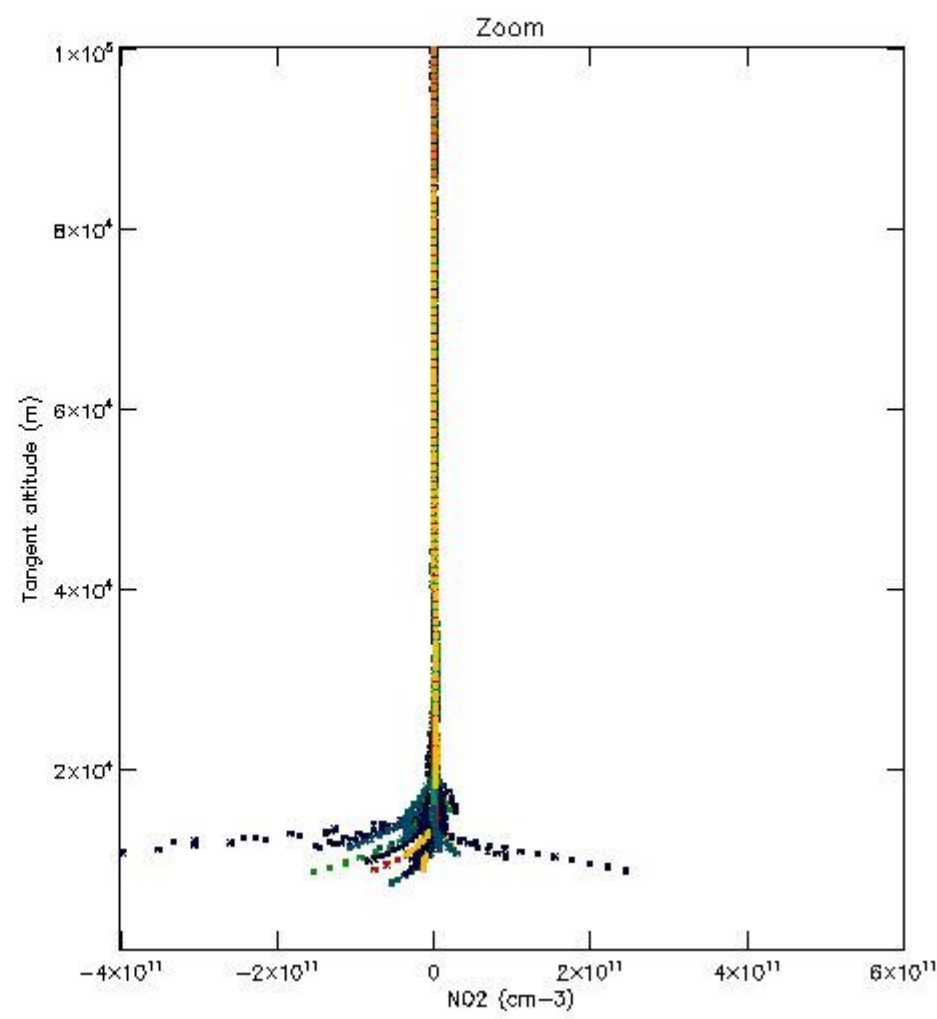
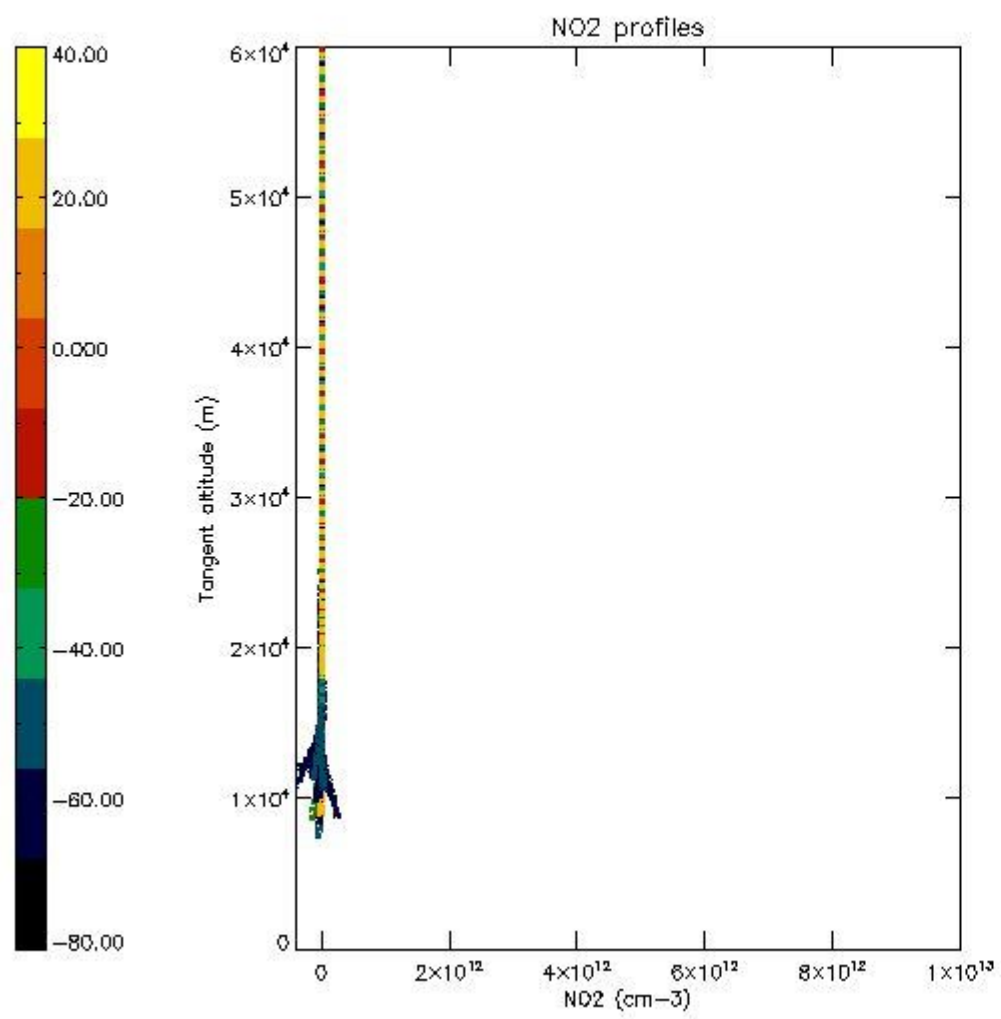
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



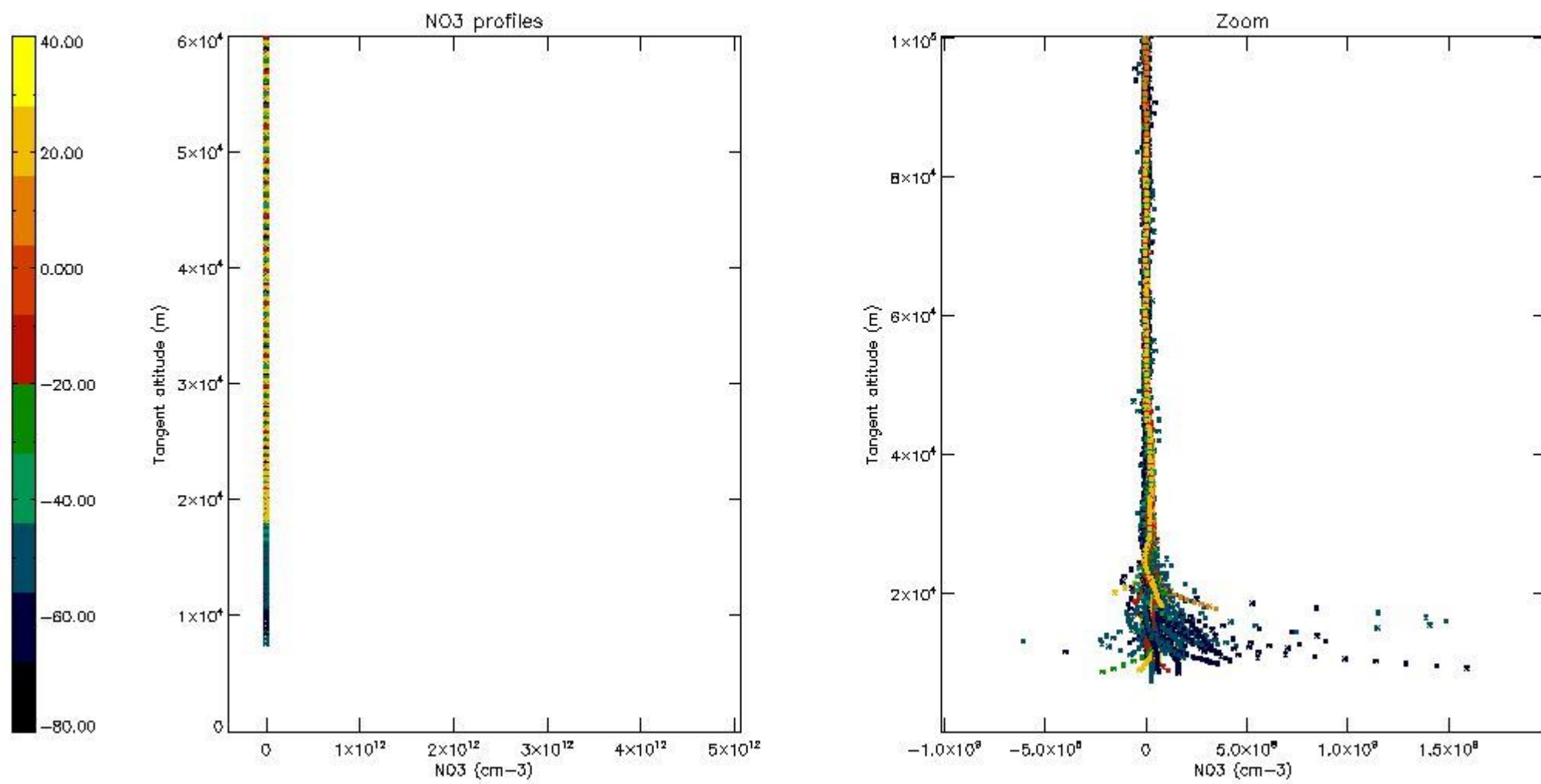
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



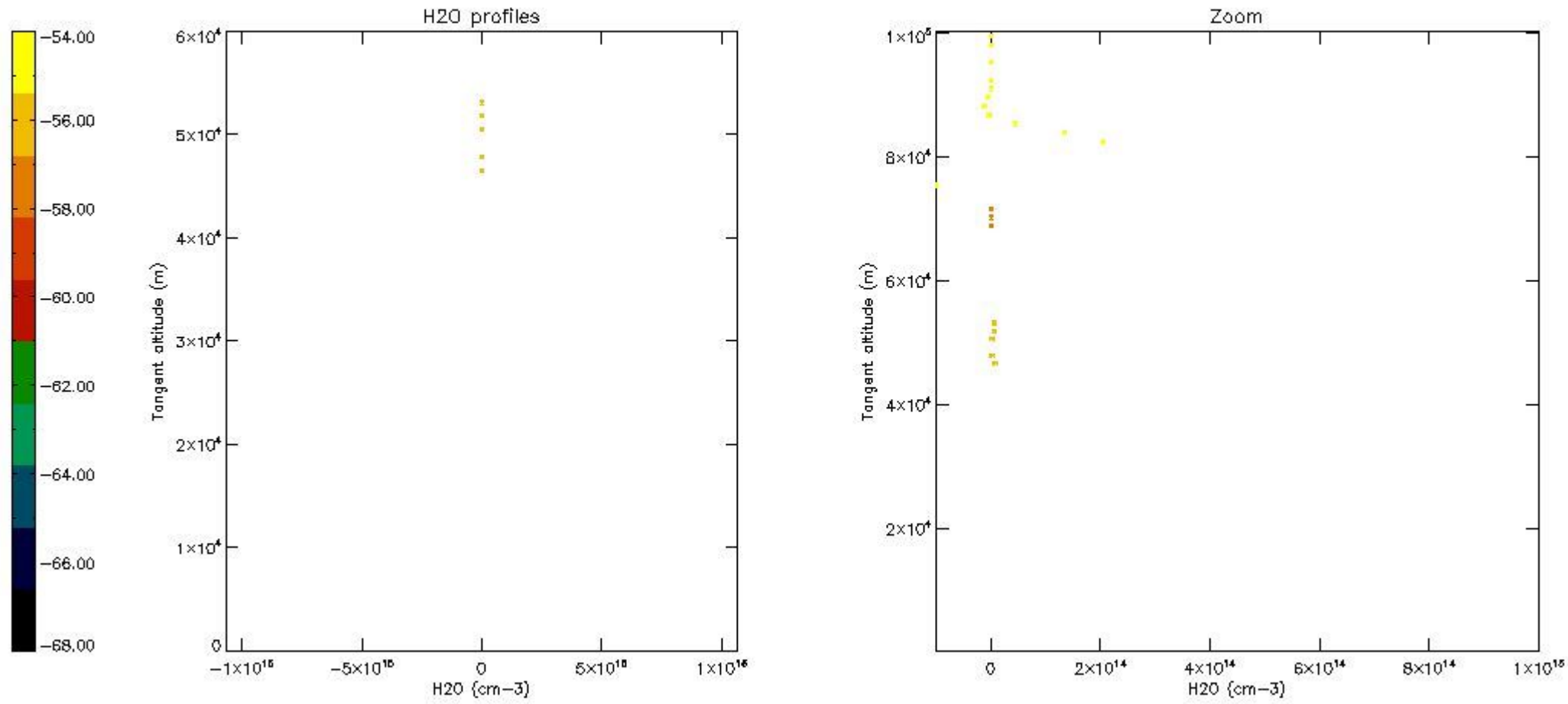
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

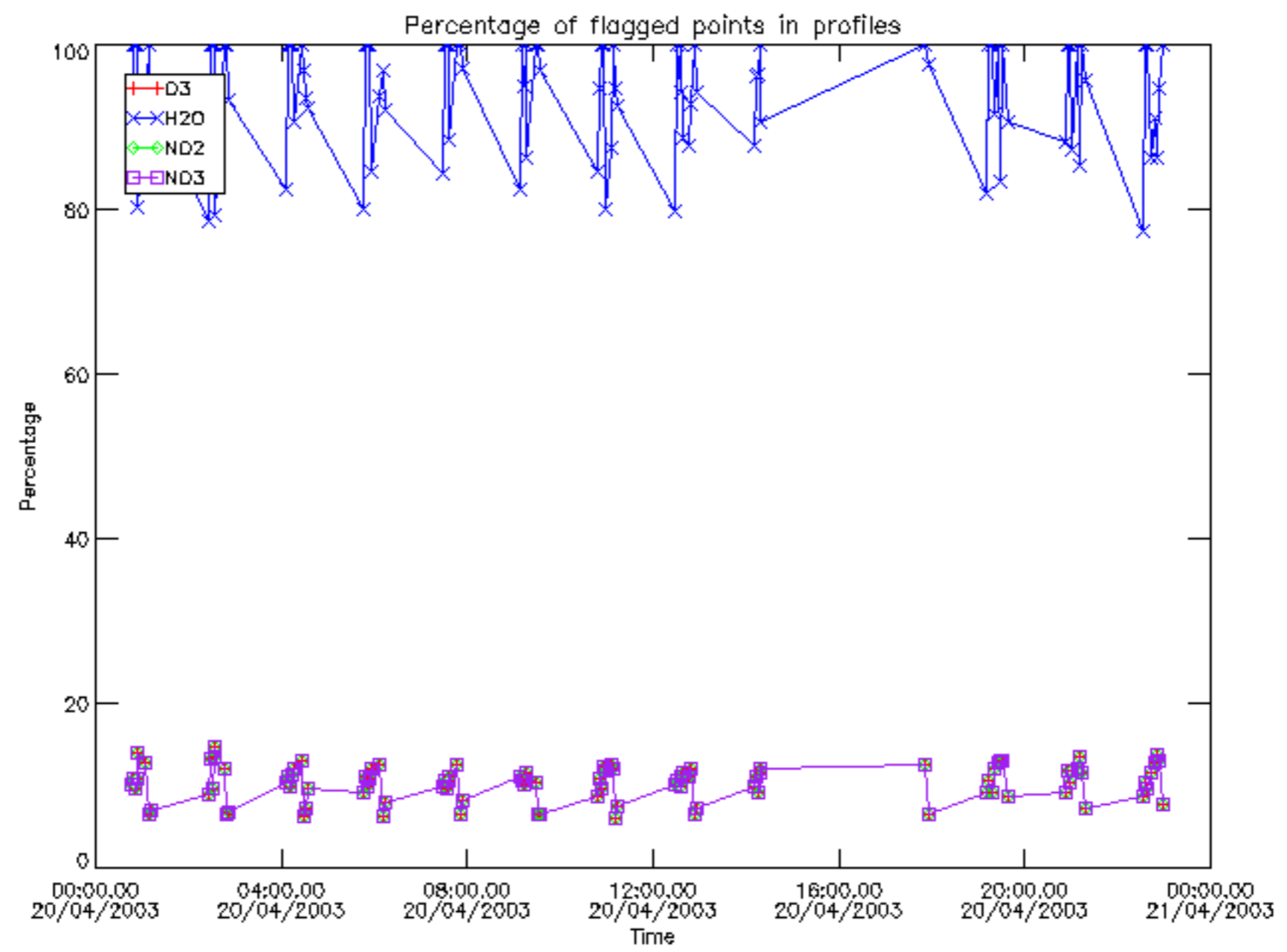
The colorbar represents the latitude.



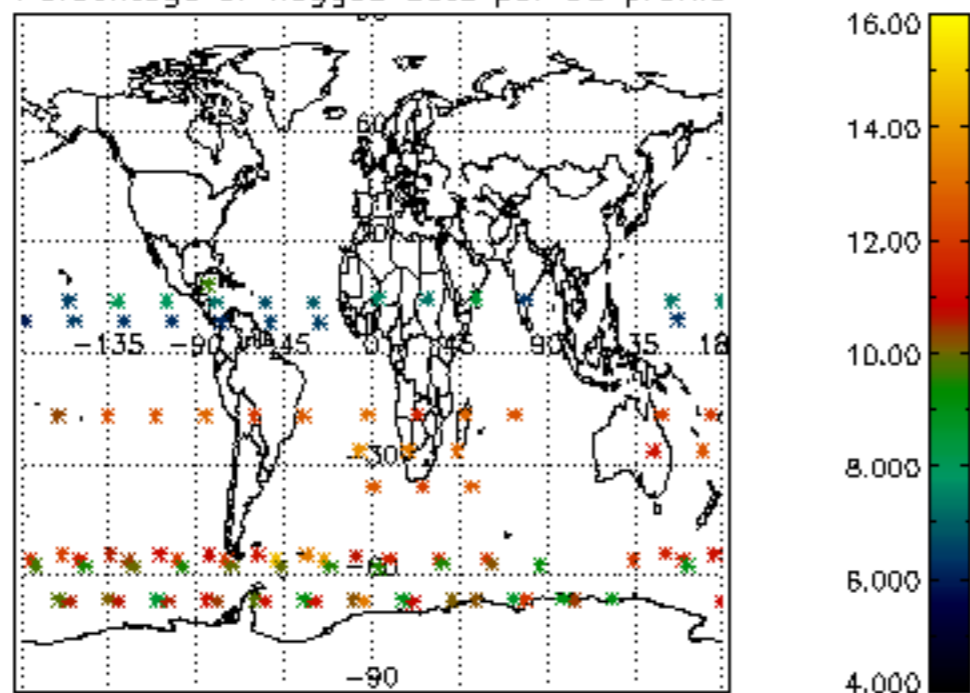
6. Auxiliary Data Files used for the production reported in section 2

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.

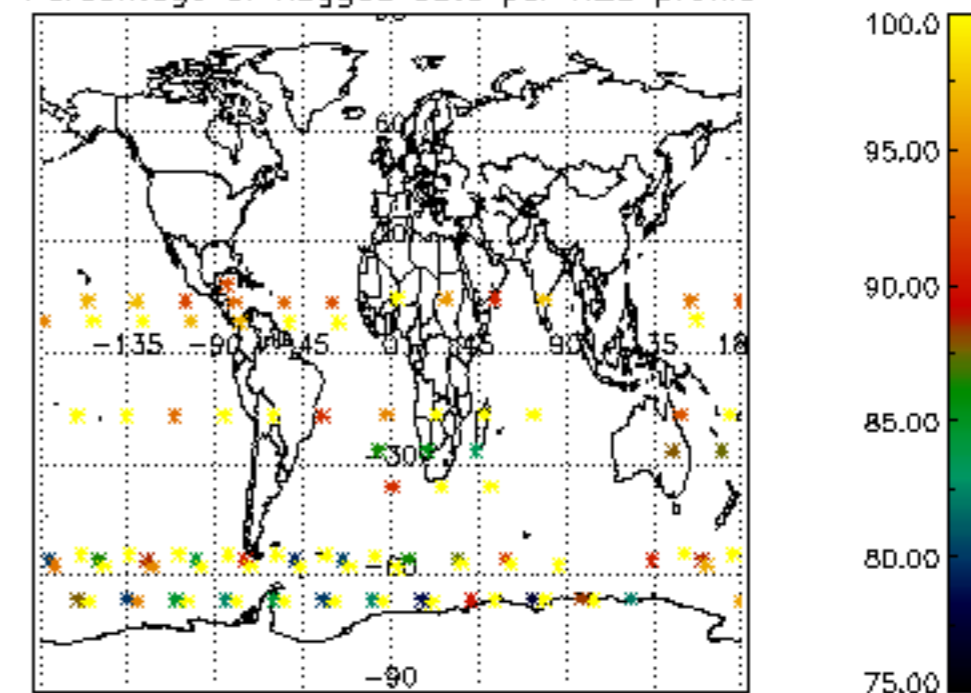
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	20-APR-2003 00:05:52
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-APR-2003 00:05:52
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-APR-2003 00:05:52



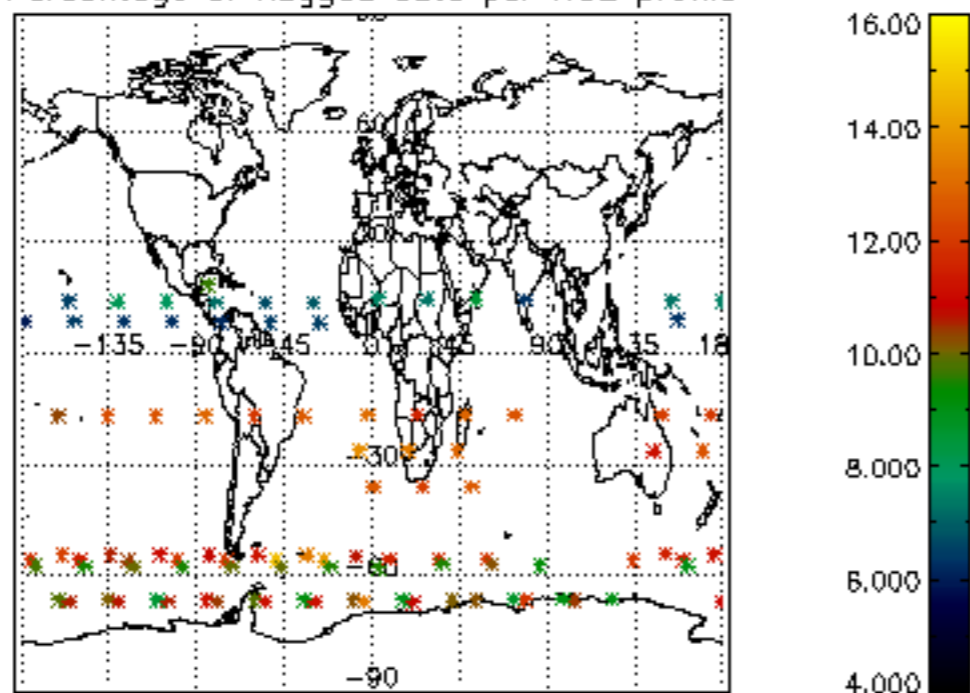
Percentage of flagged data per D3 profile



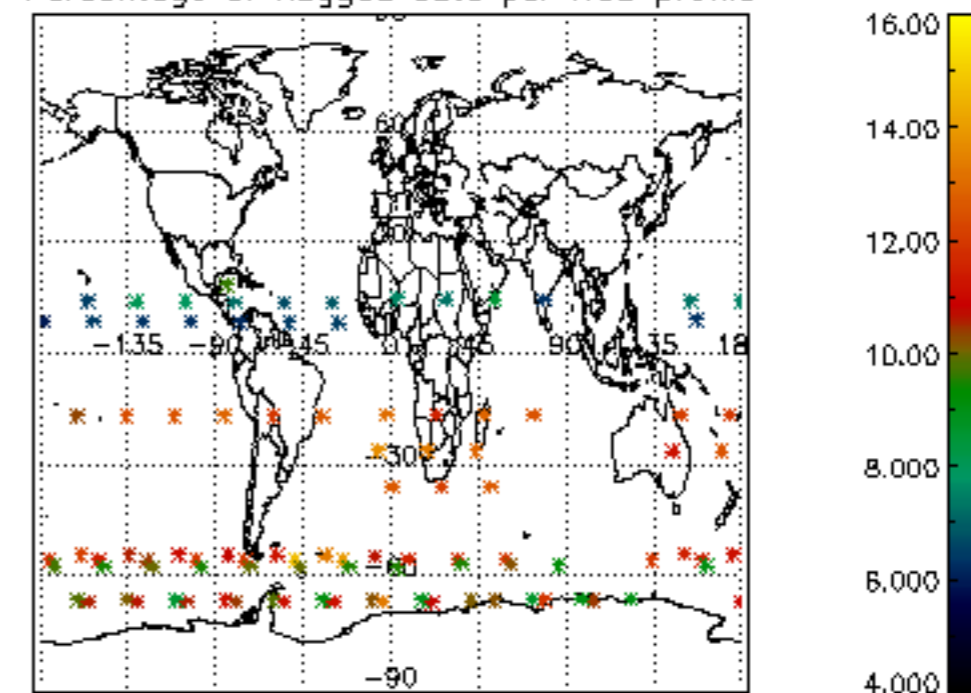
Percentage of flagged data per H2O profile

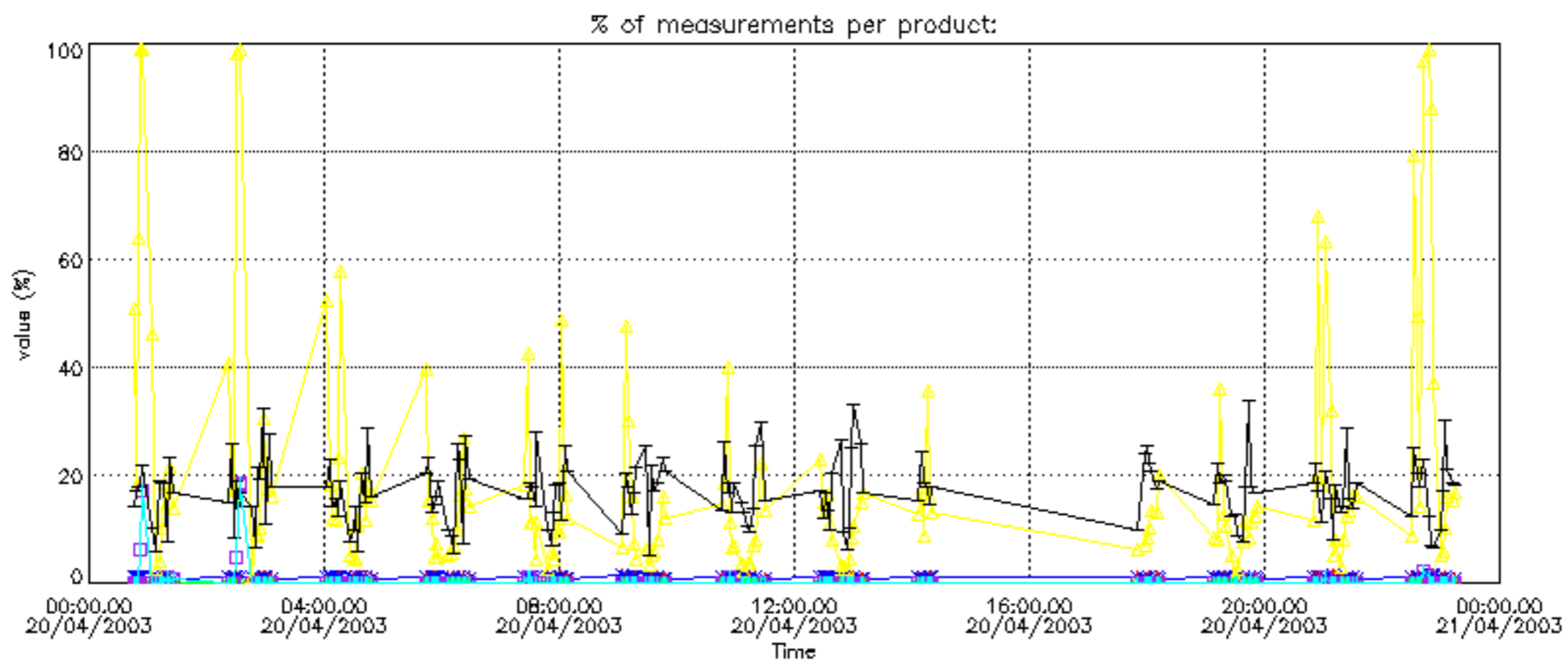


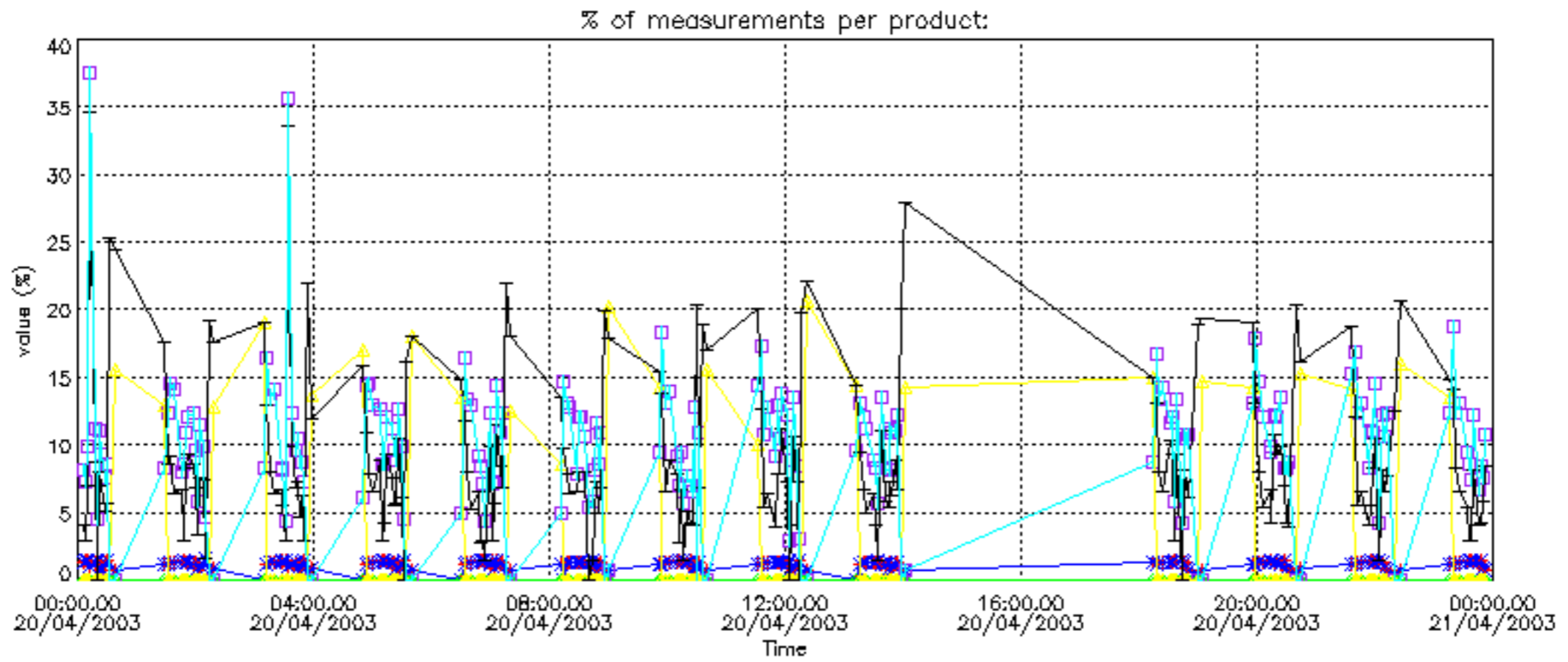
Percentage of flagged data per NO2 profile



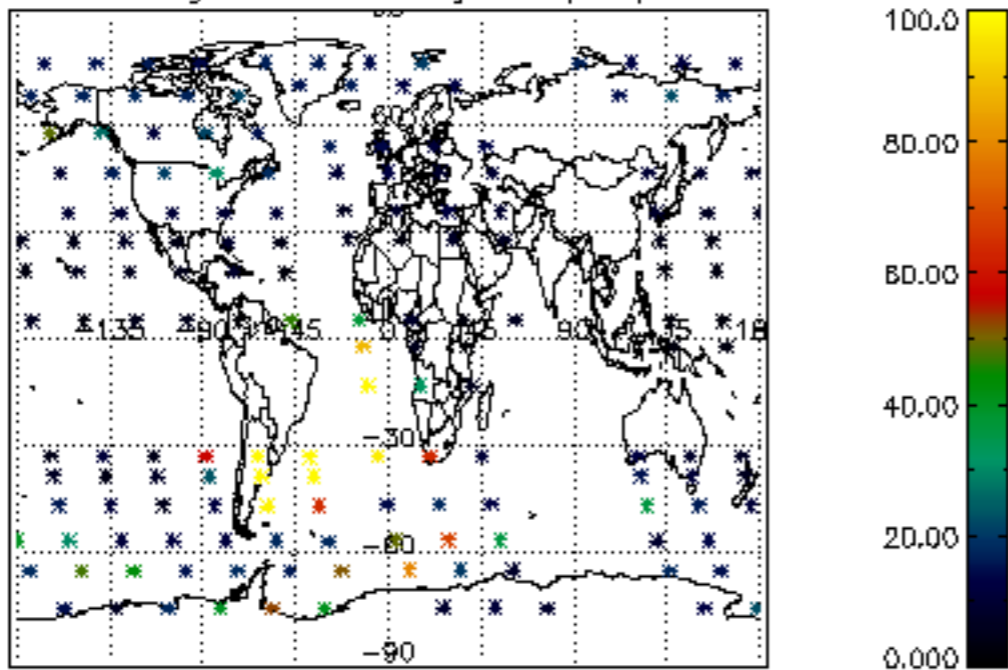
Percentage of flagged data per NO3 profile



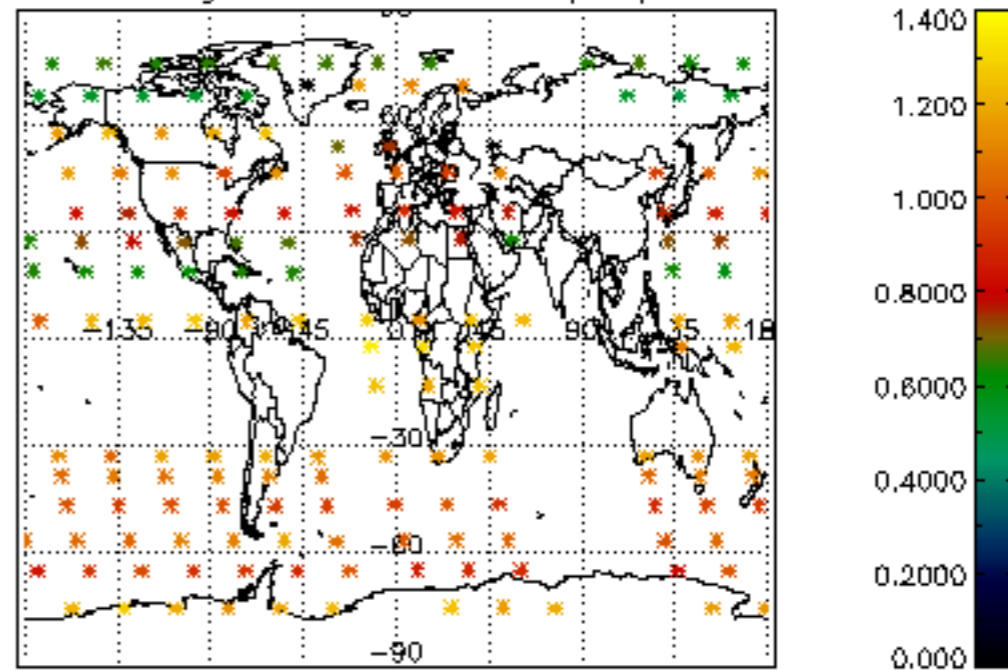




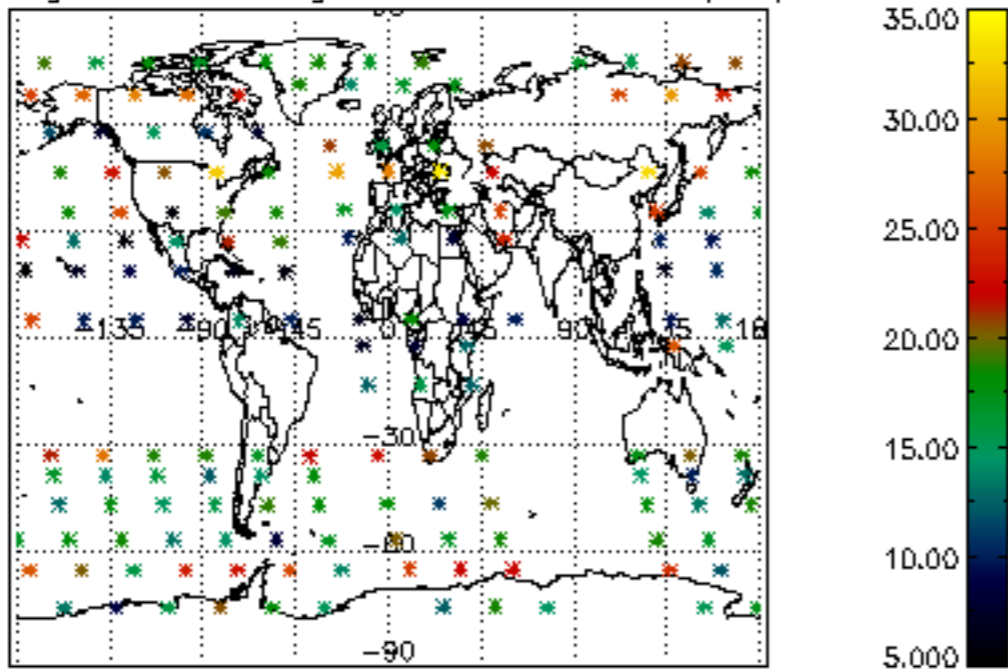
Percentage of cosmic ray hits per profile



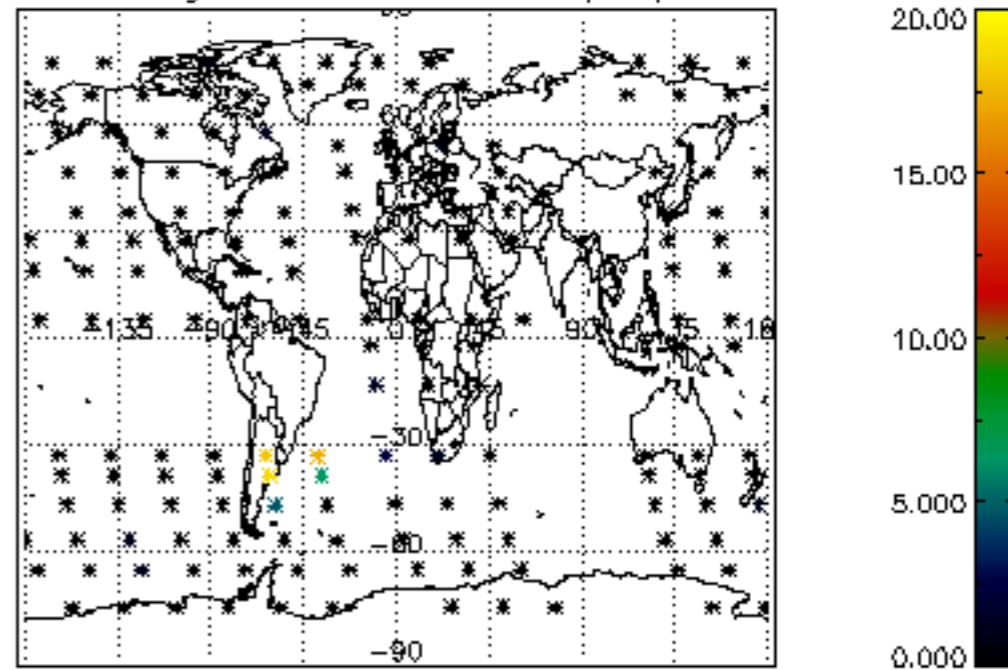
Percentage of datation errors per profile



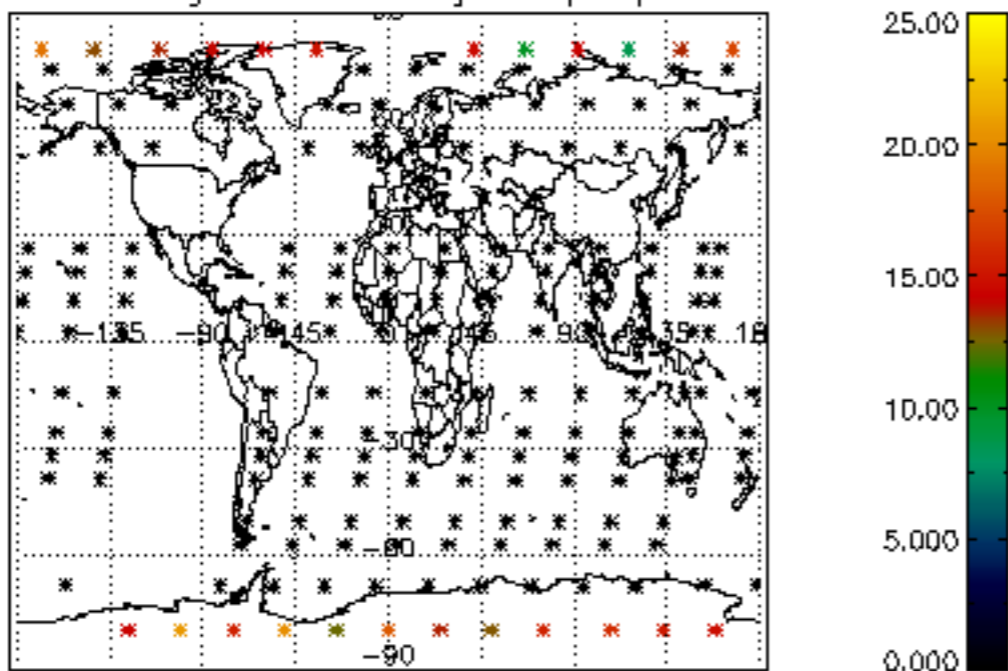
Percentage of star falling outside central band per profile



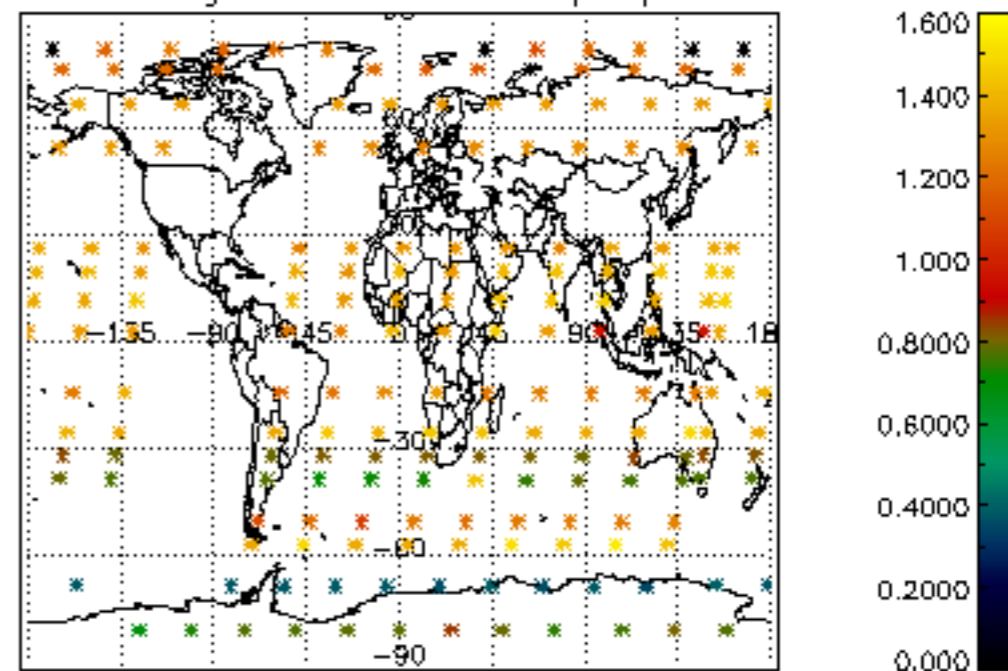
Percentage of saturation errors per profile



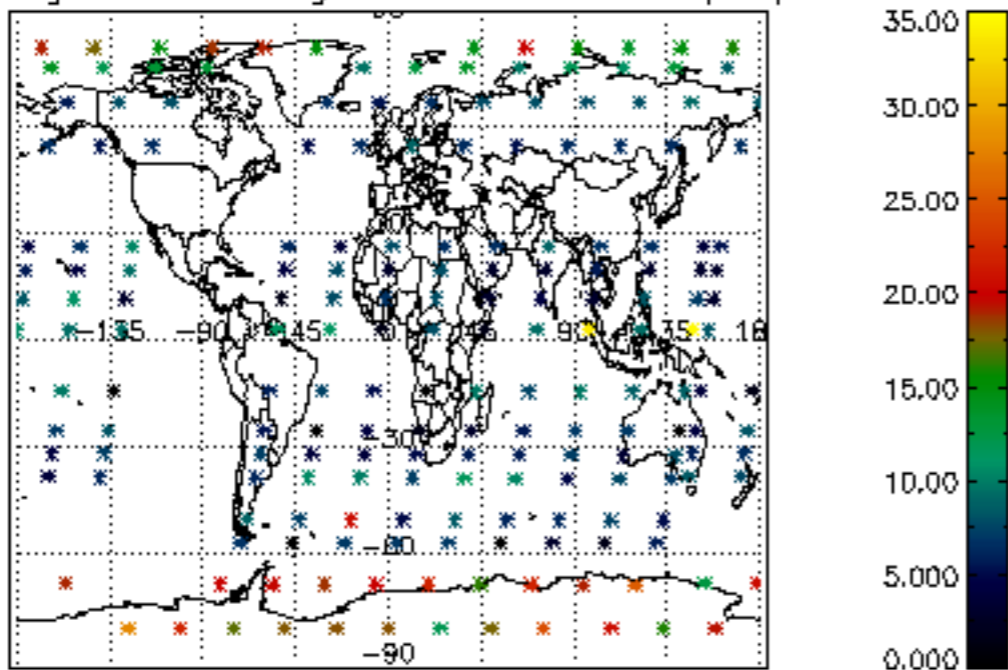
Percentage of cosmic ray hits per profile



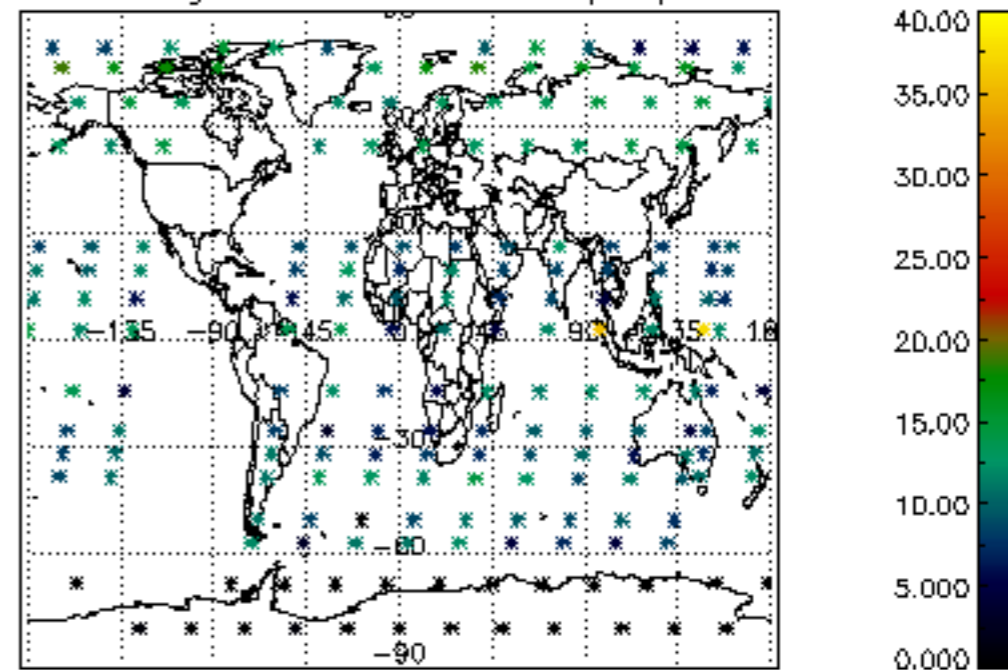
Percentage of datation errors per profile

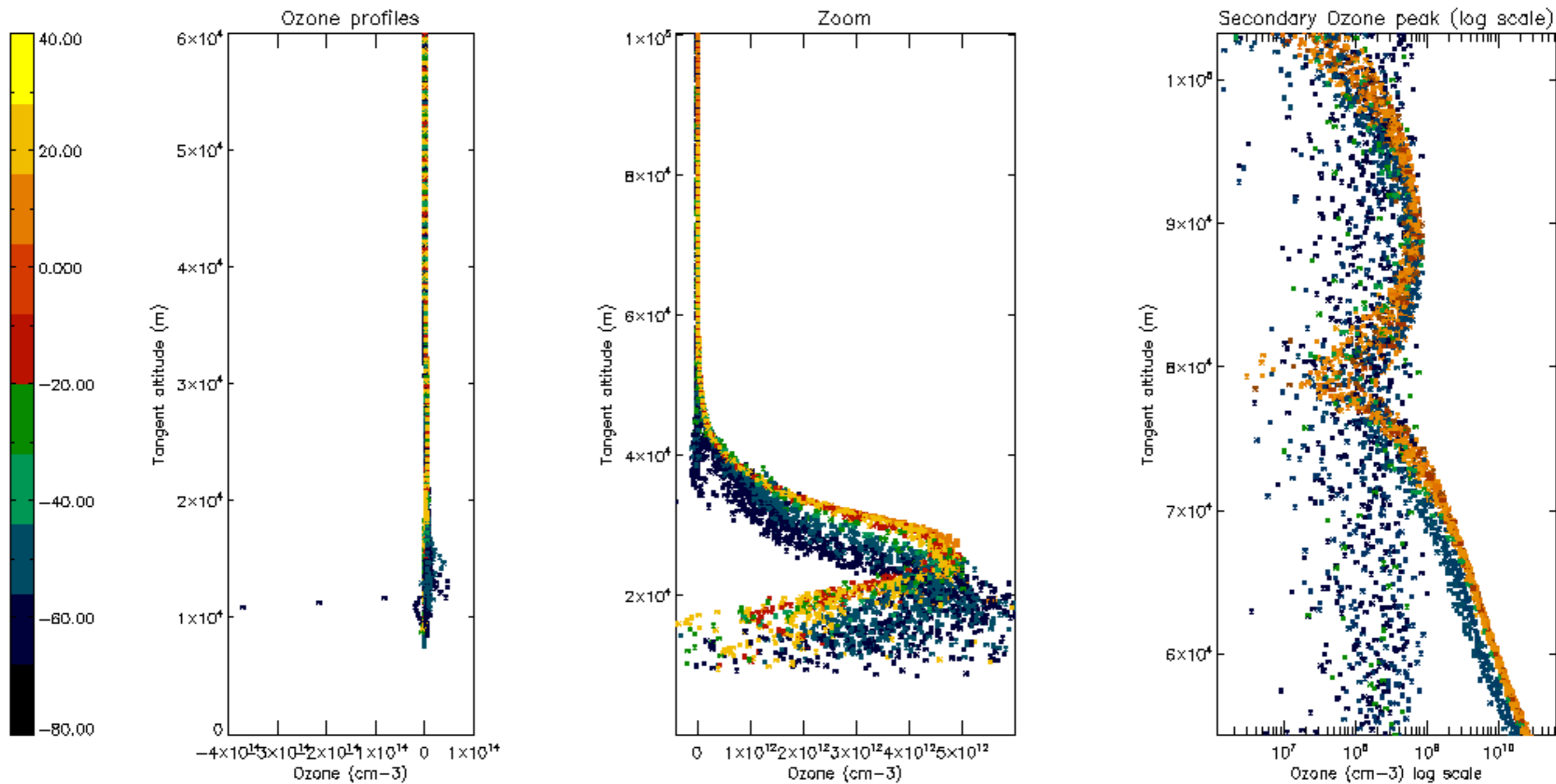


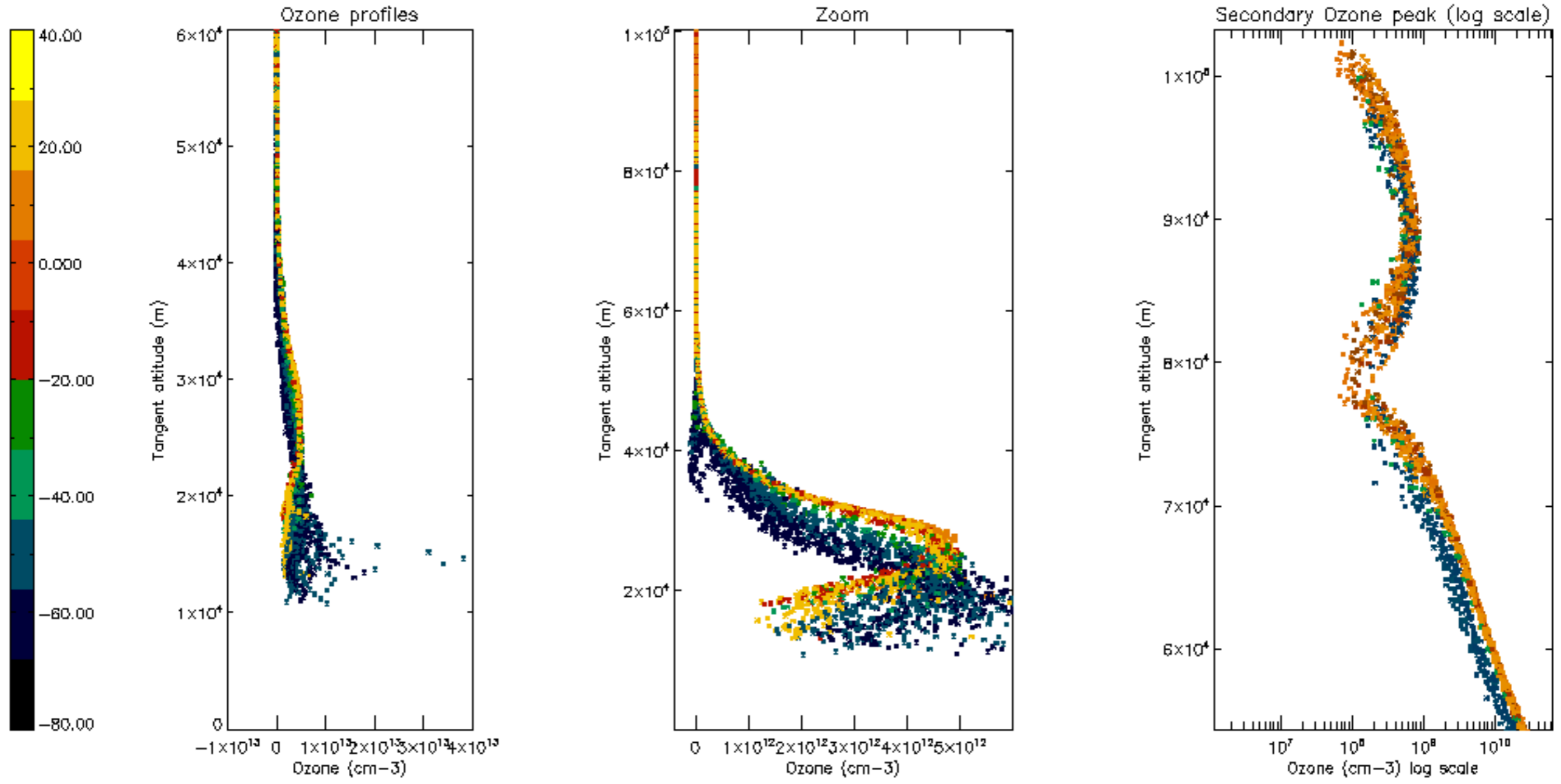
Percentage of star falling outside central band per profile

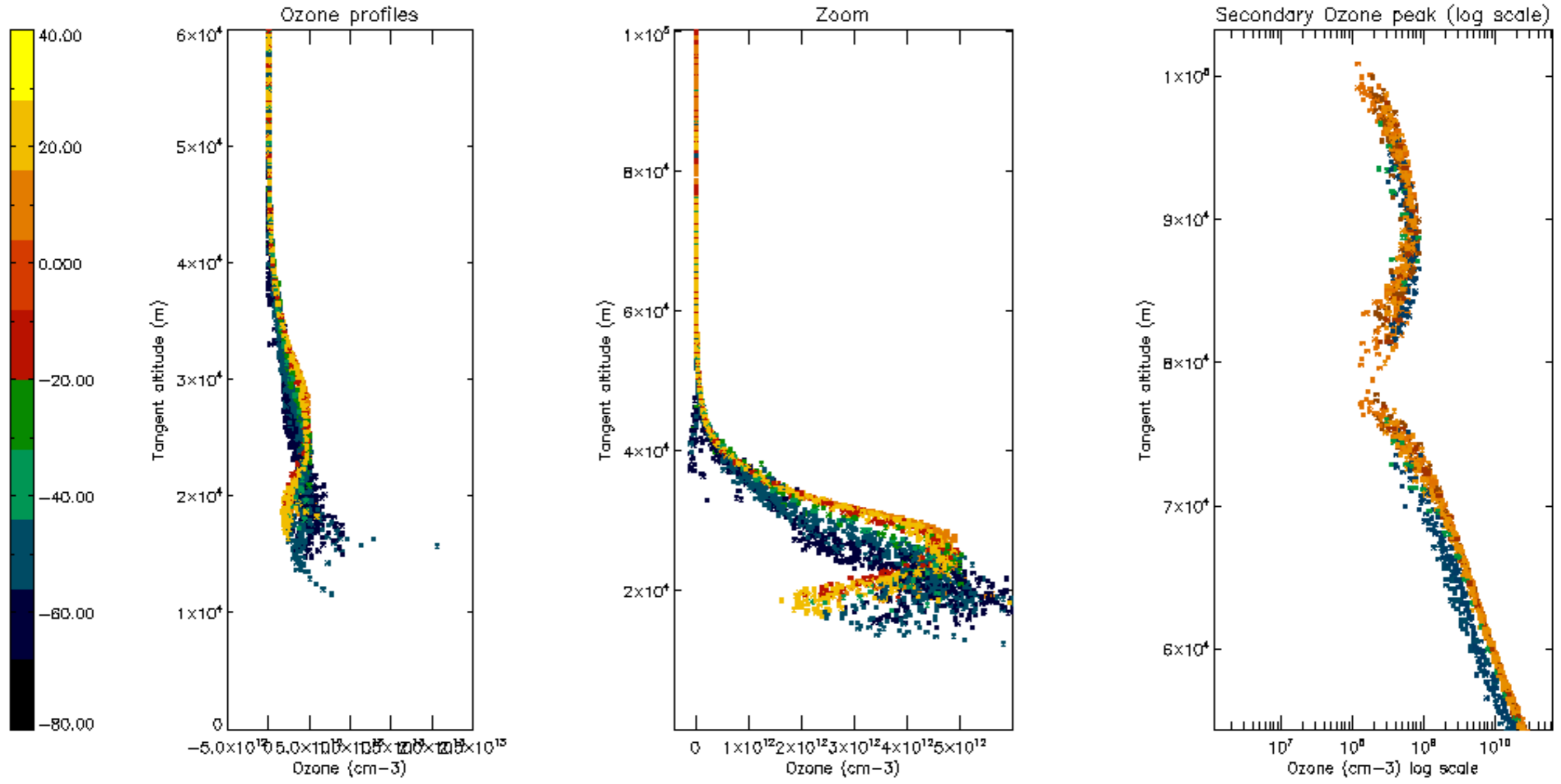


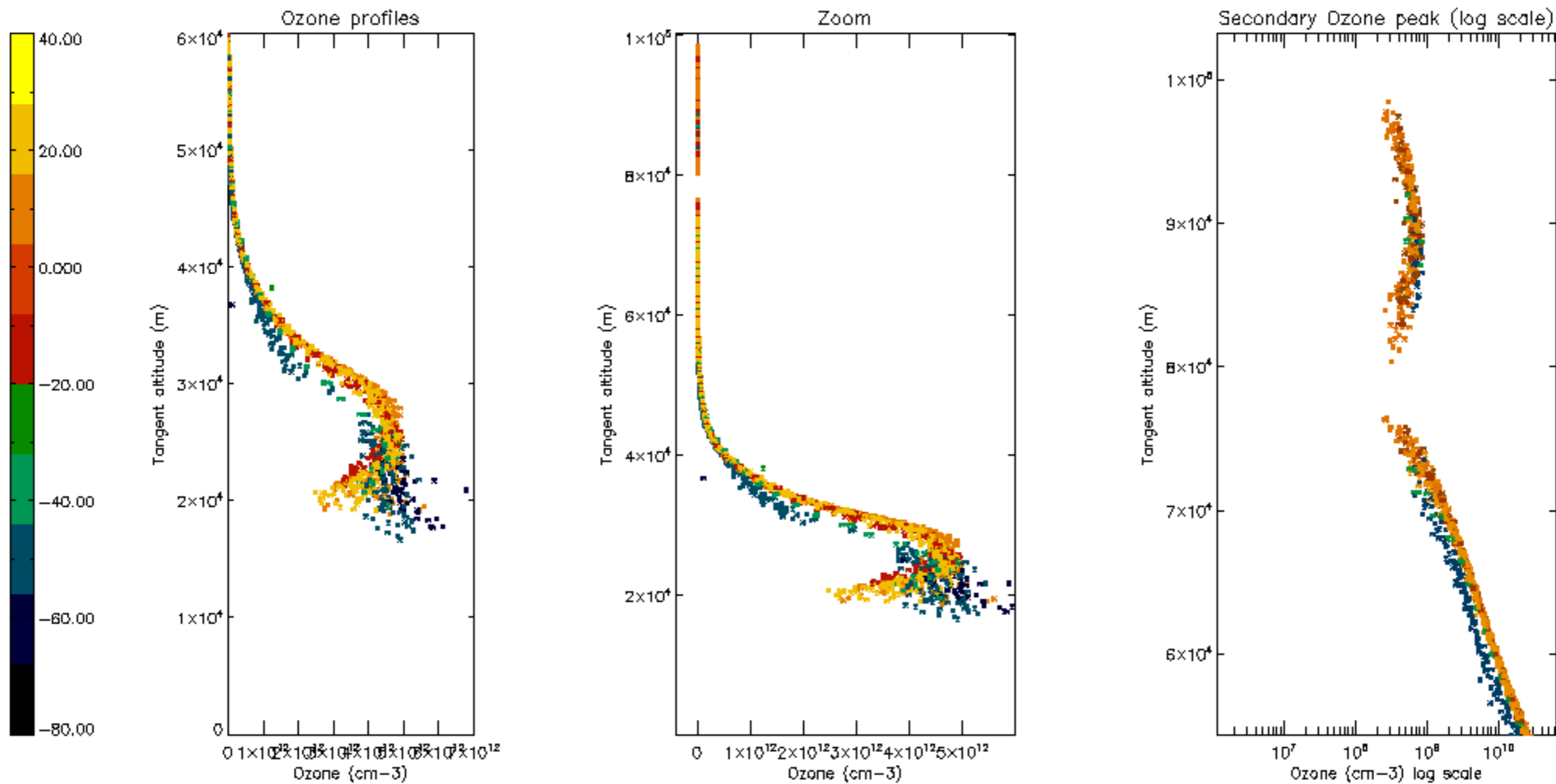
Percentage of saturation errors per profile

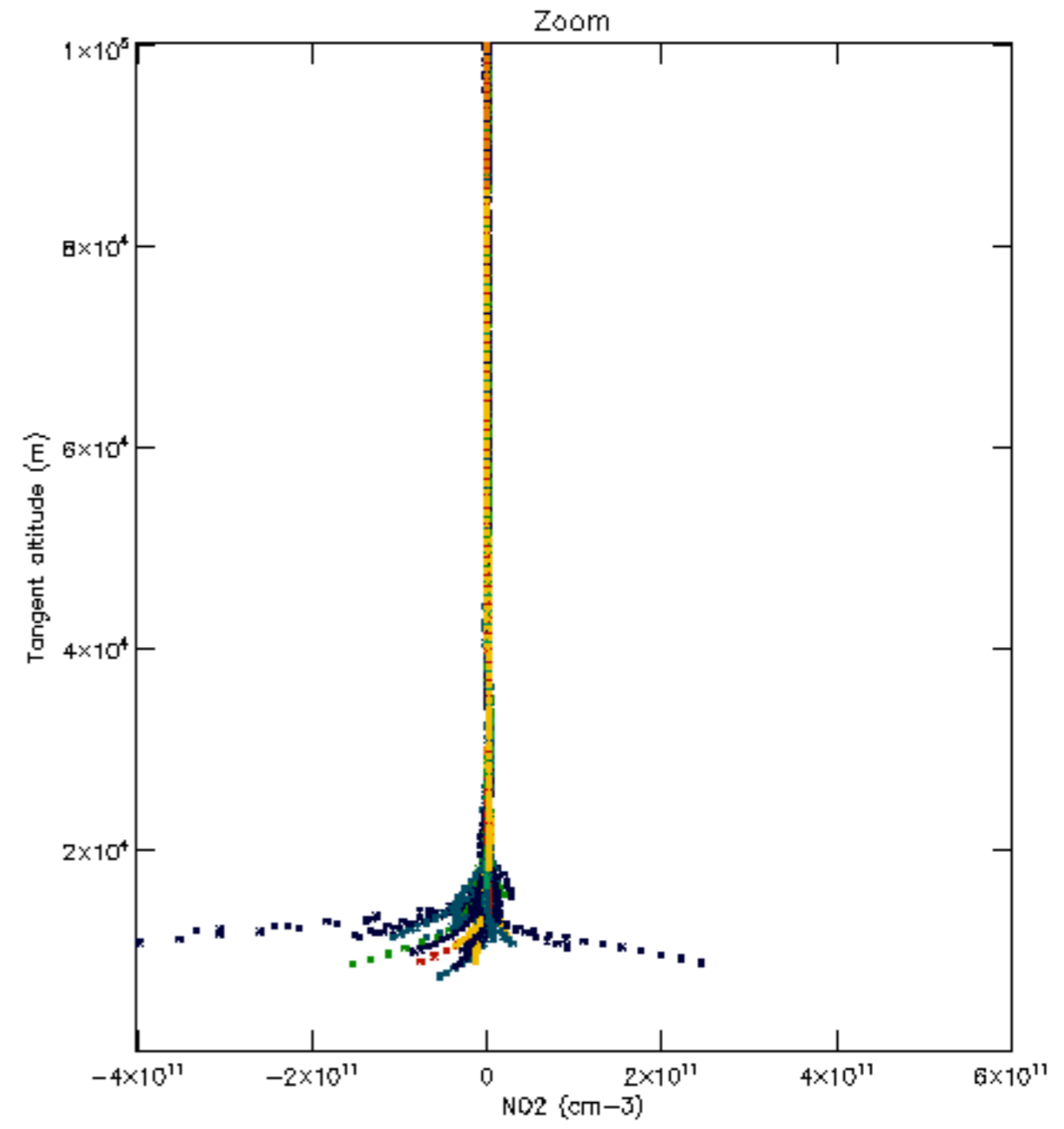
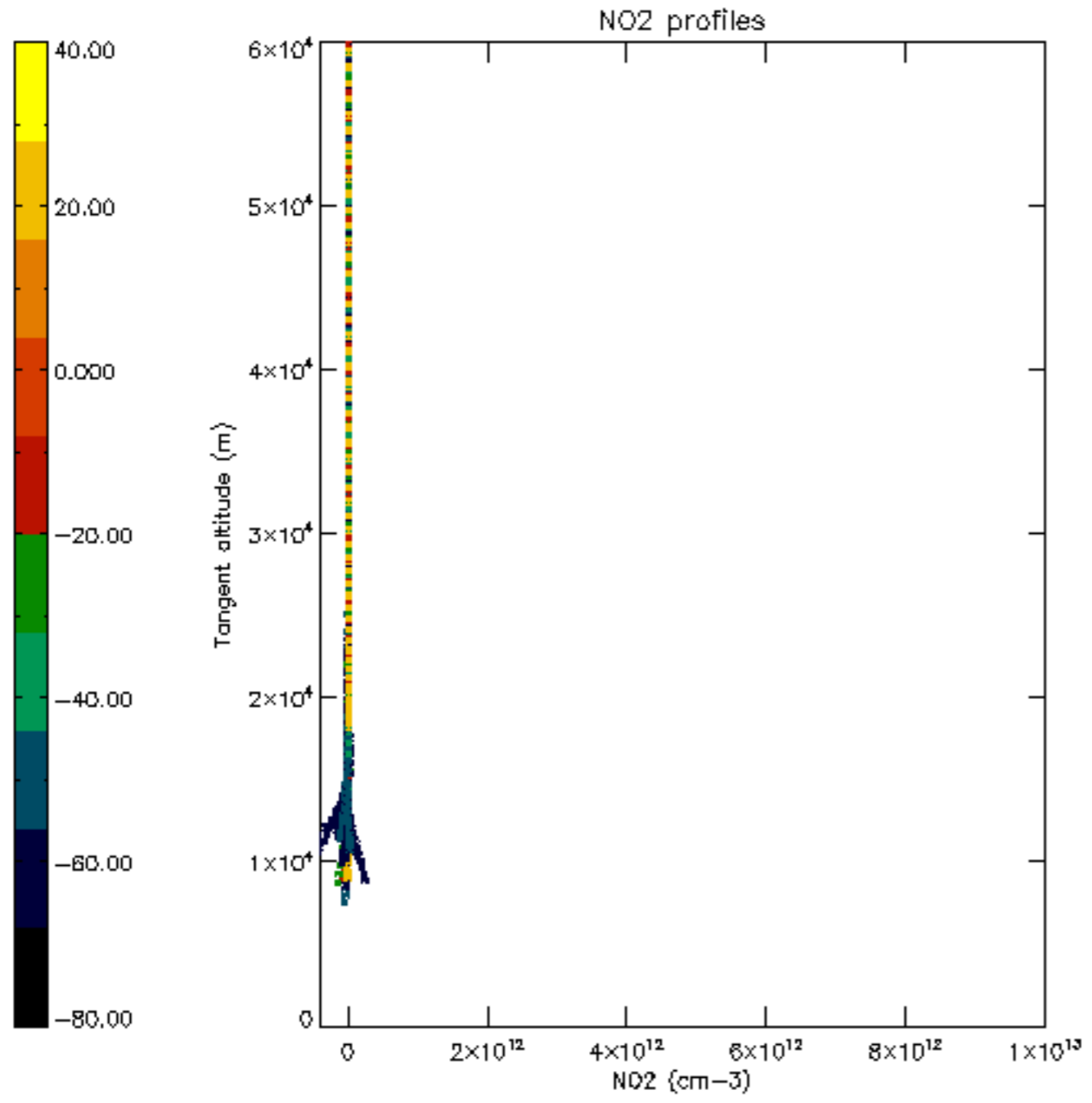


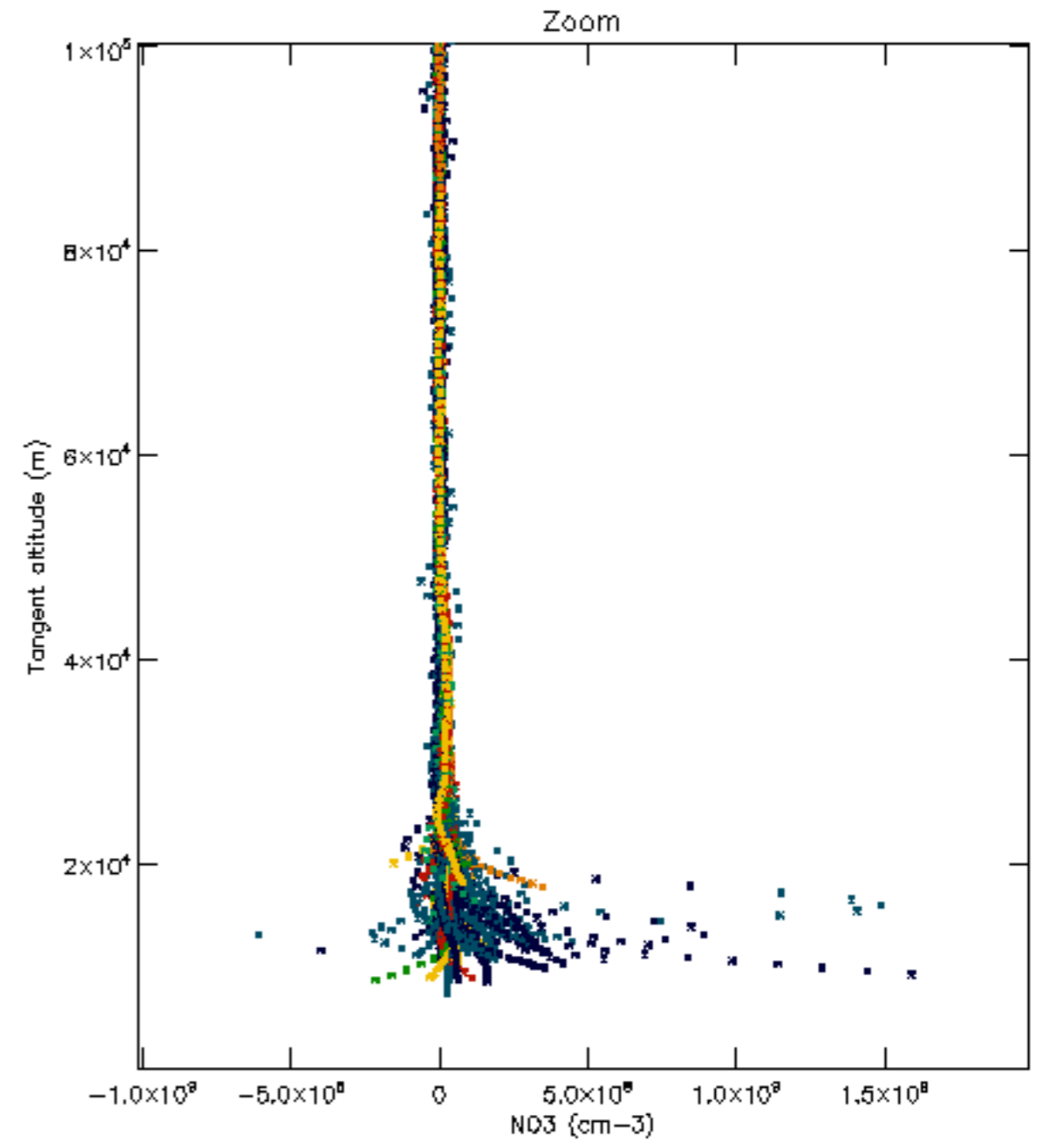
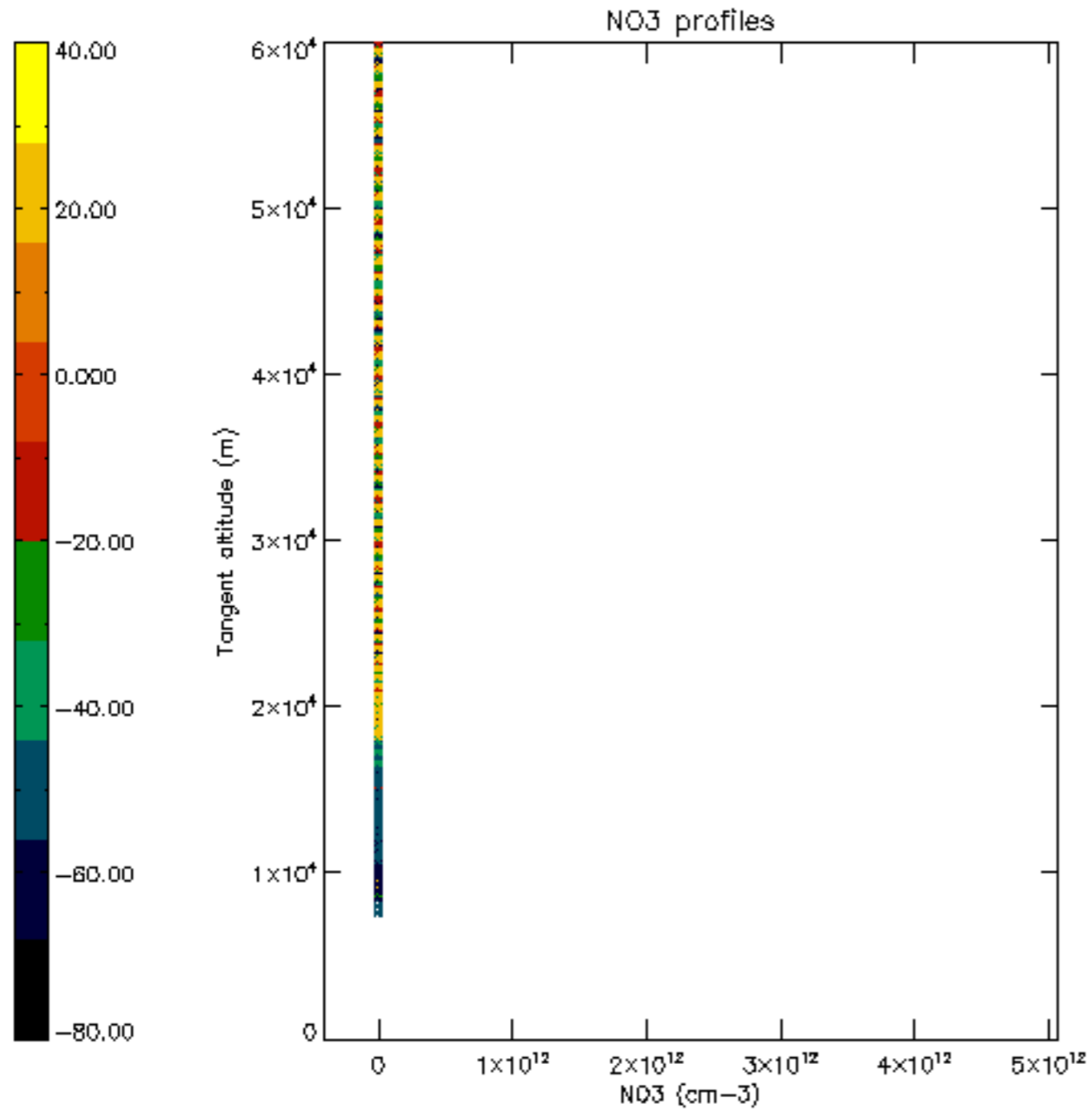


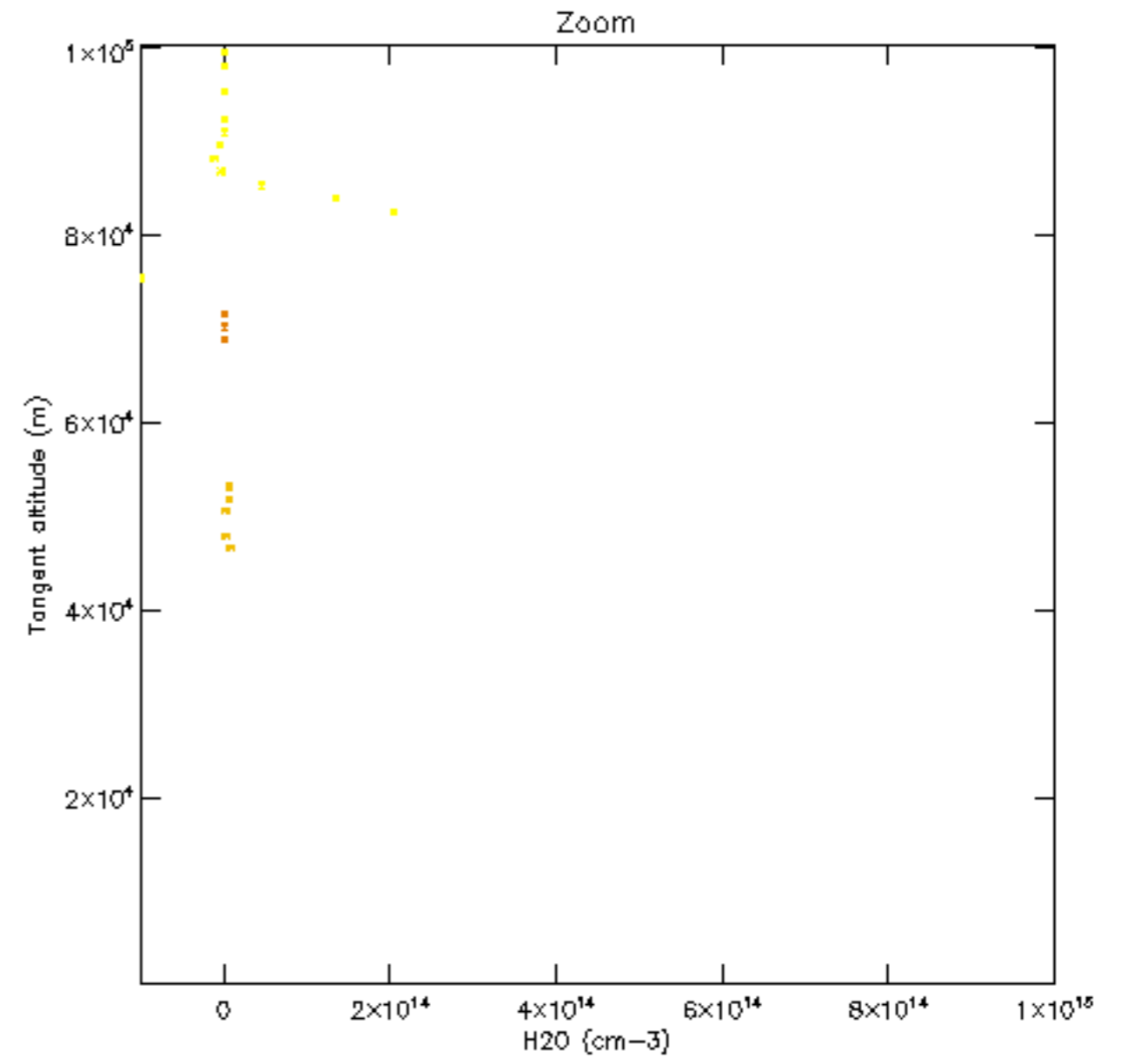
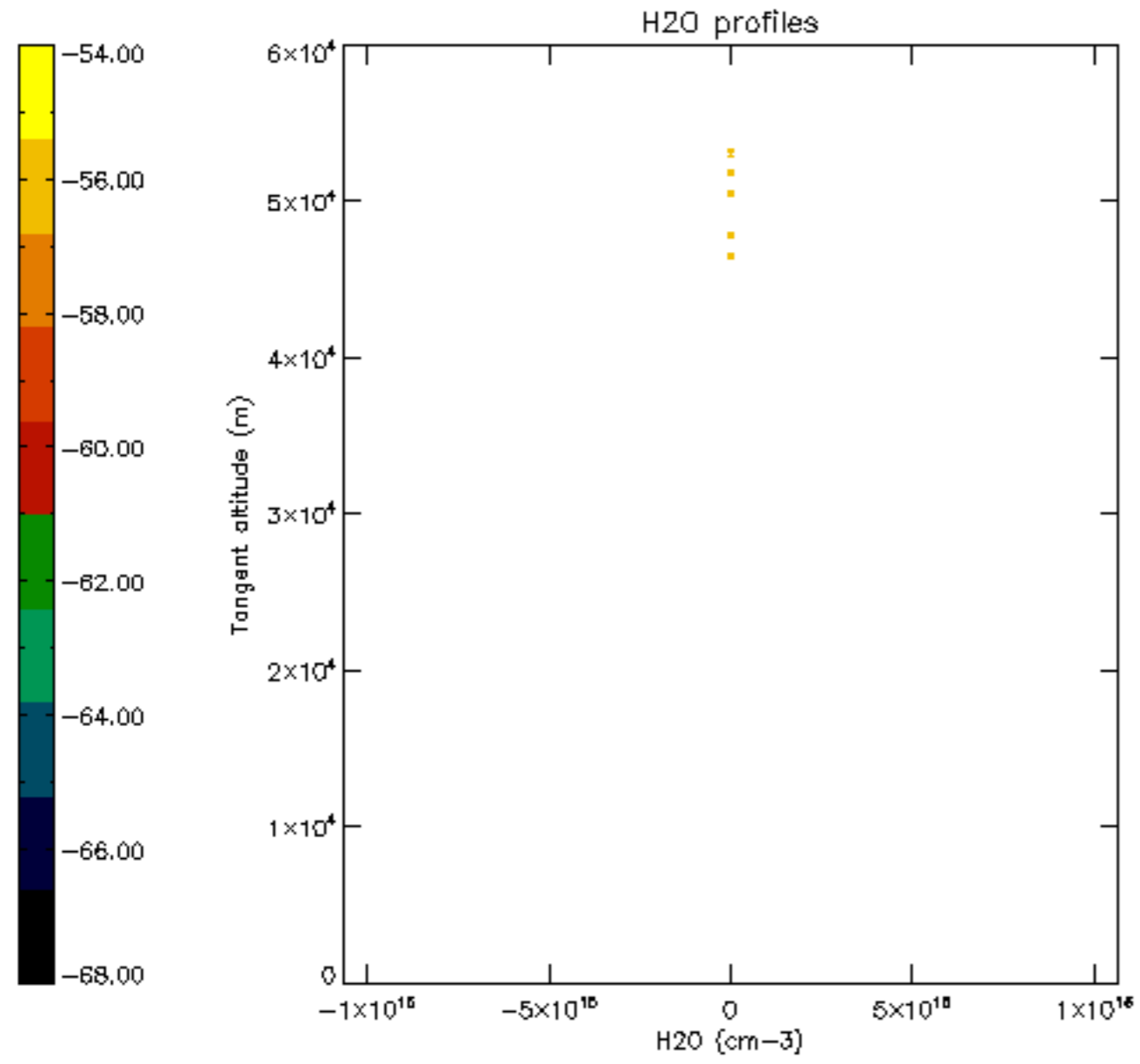


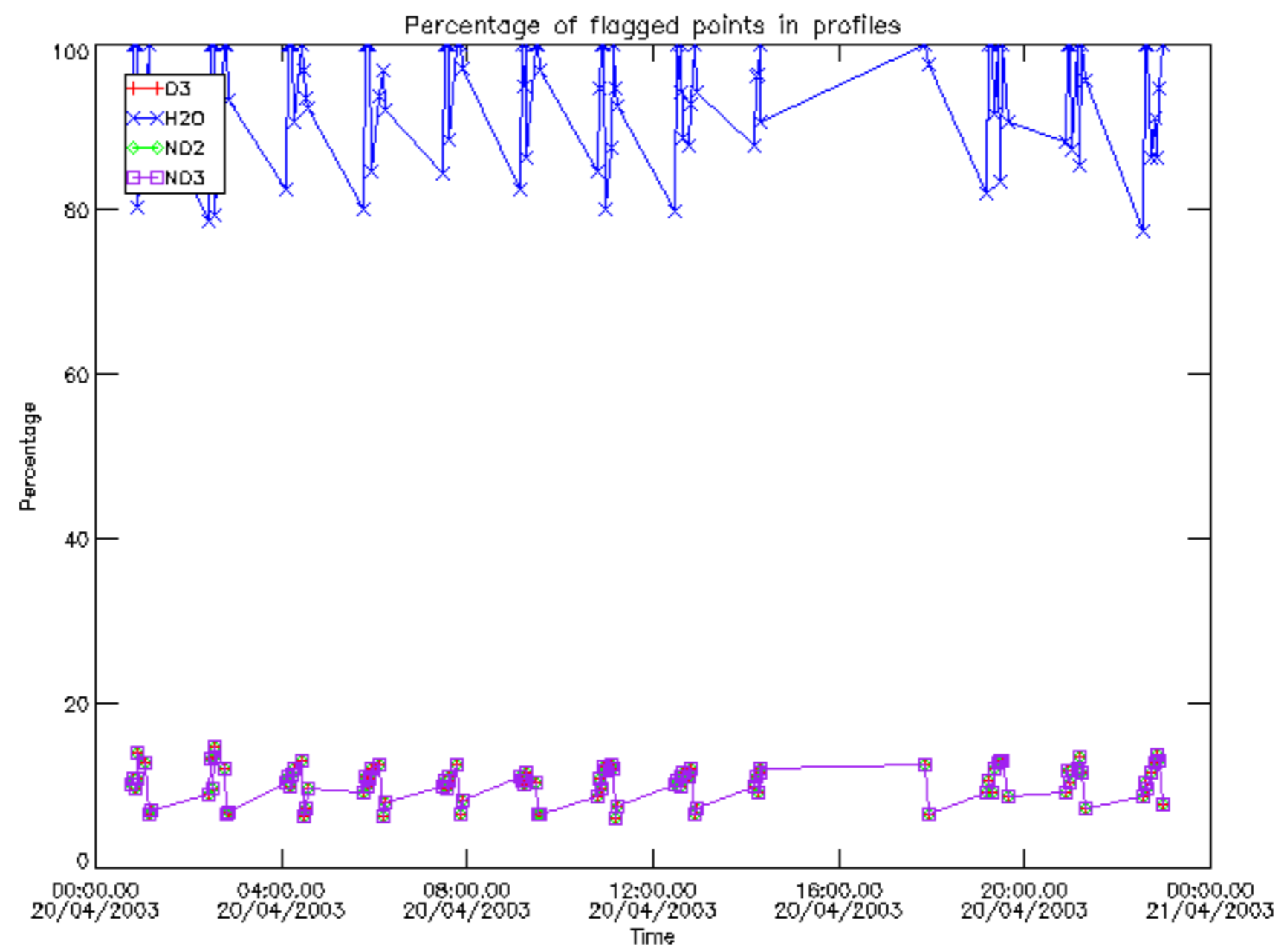




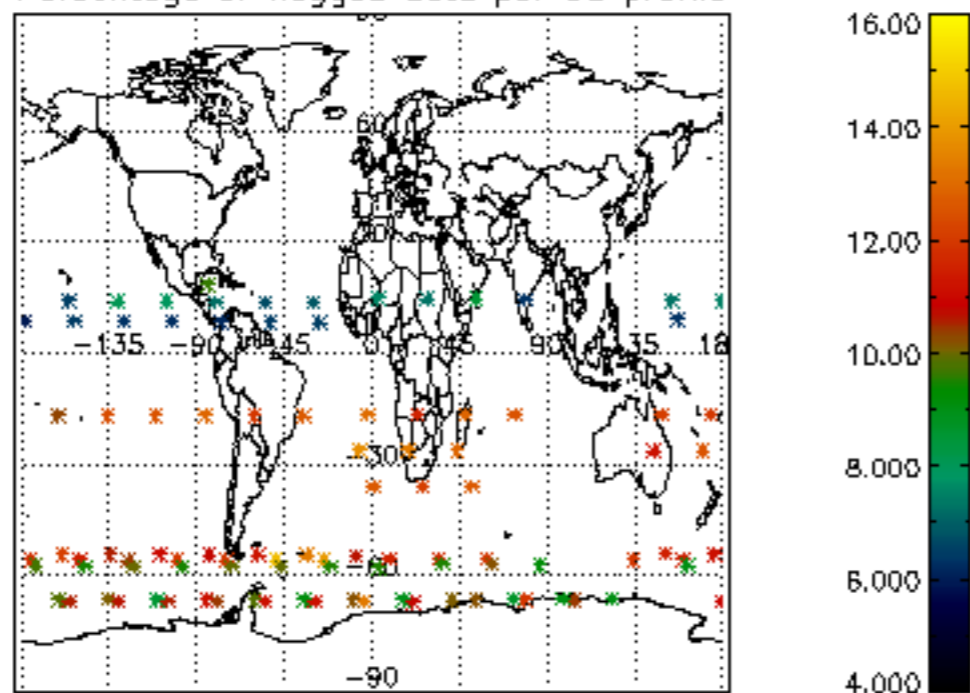




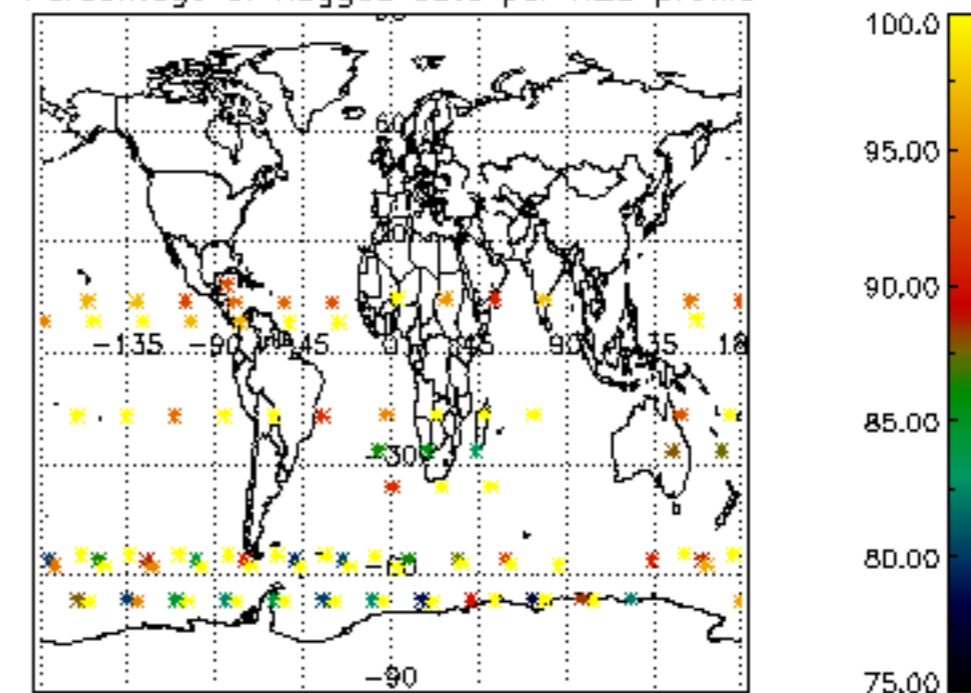




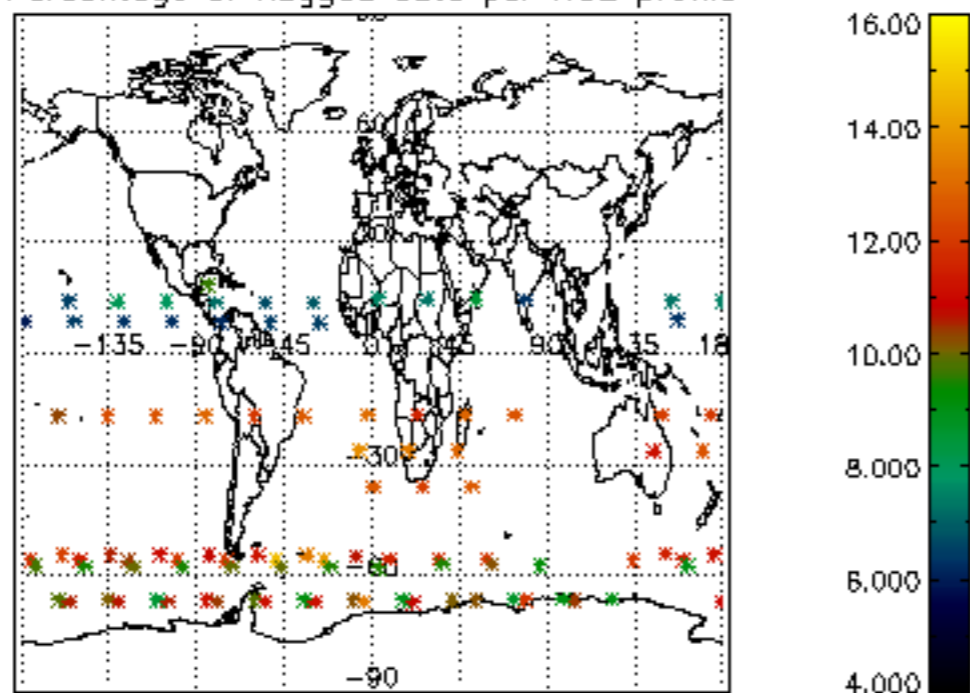
Percentage of flagged data per D3 profile



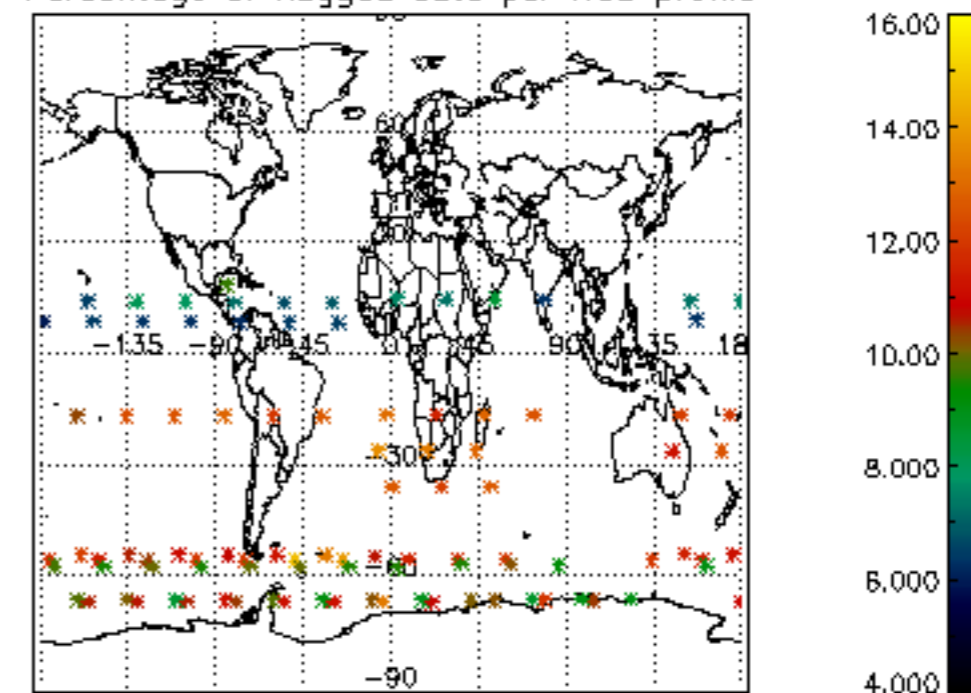
Percentage of flagged data per H2O profile

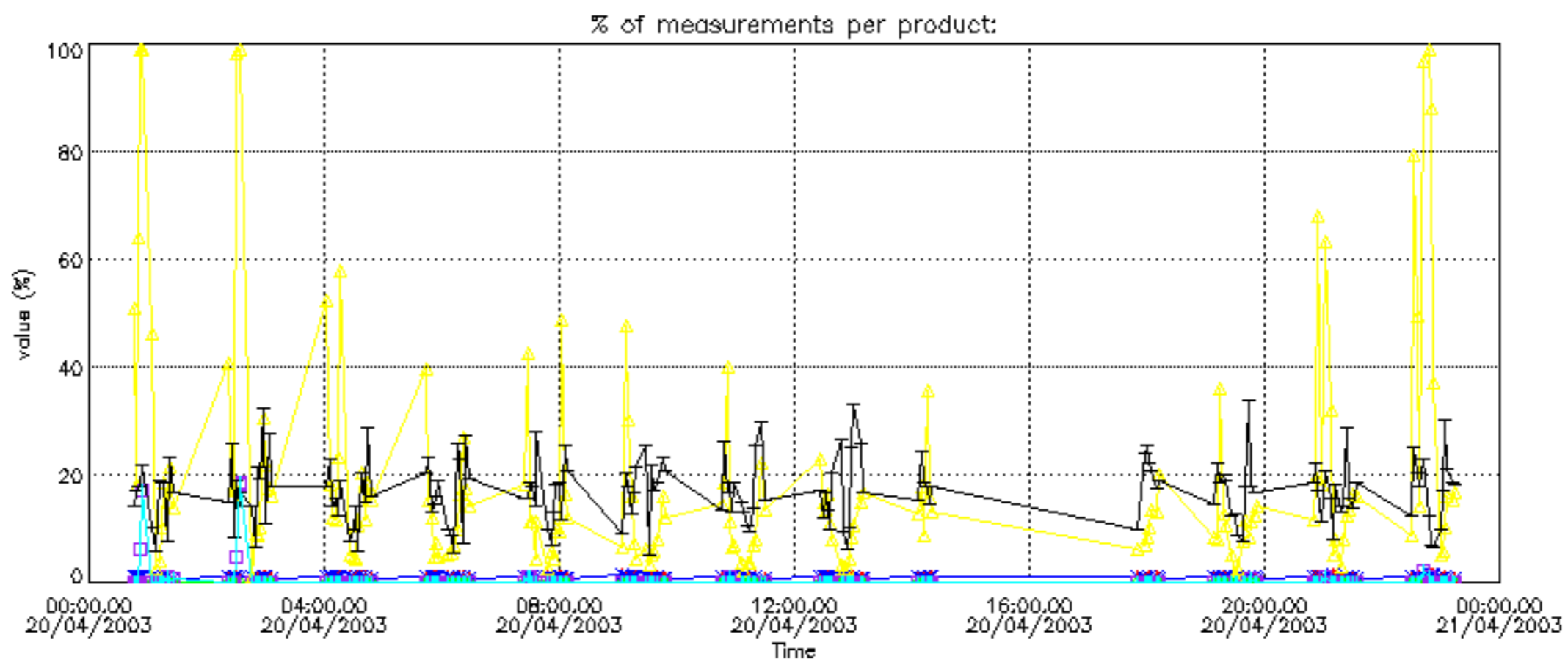


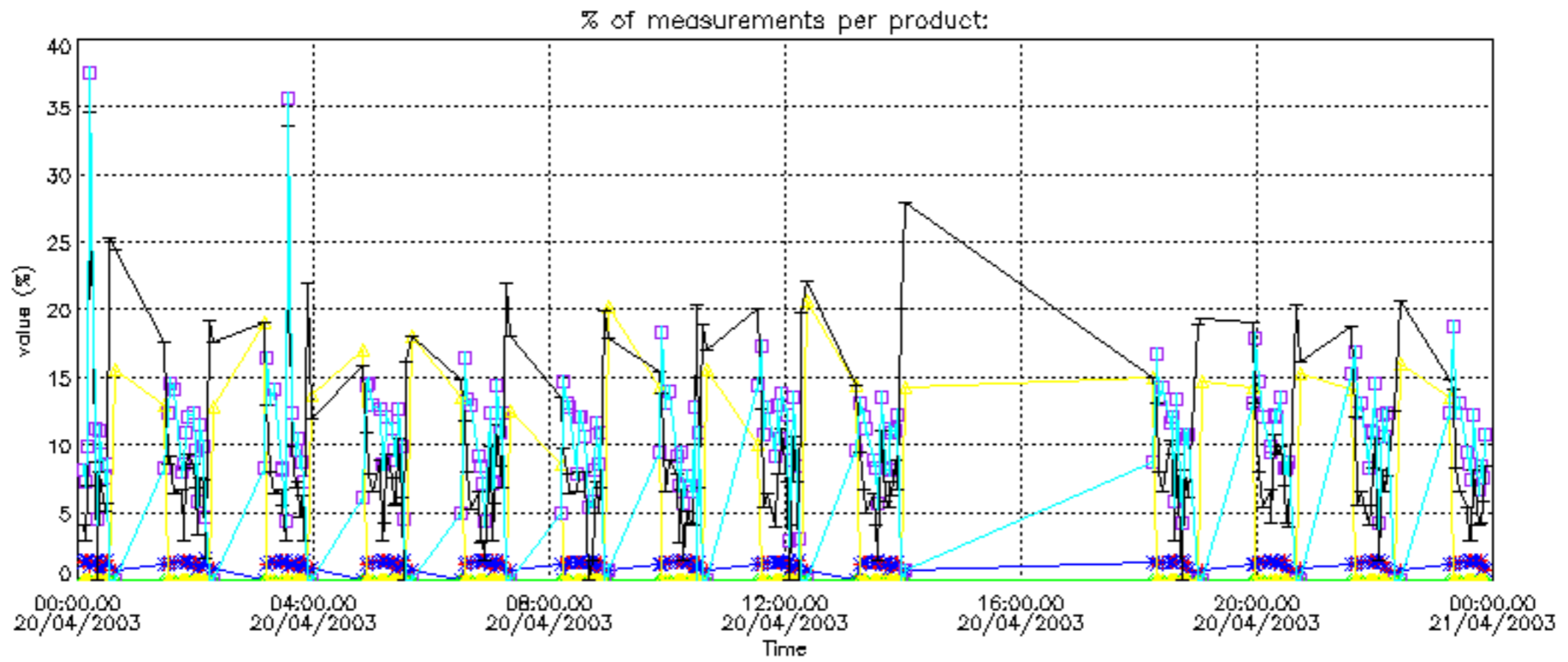
Percentage of flagged data per NO2 profile



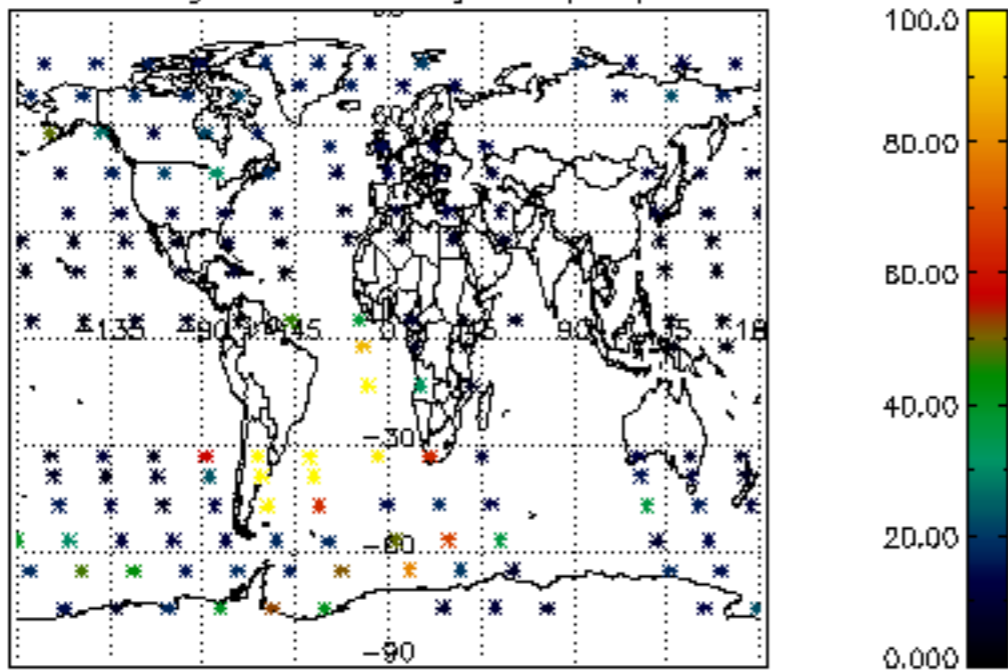
Percentage of flagged data per NO3 profile



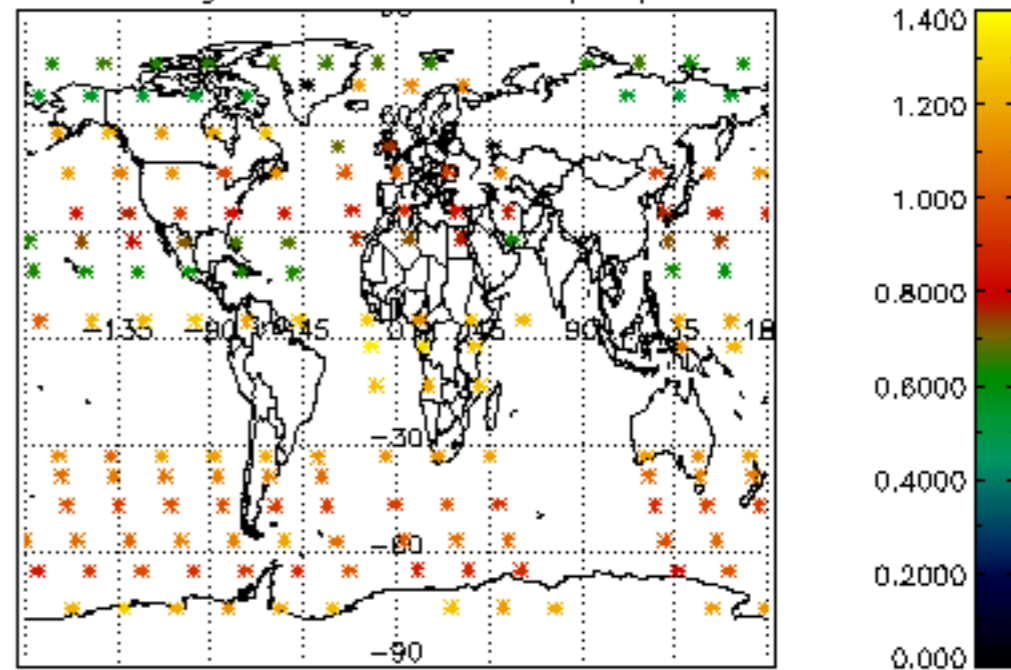




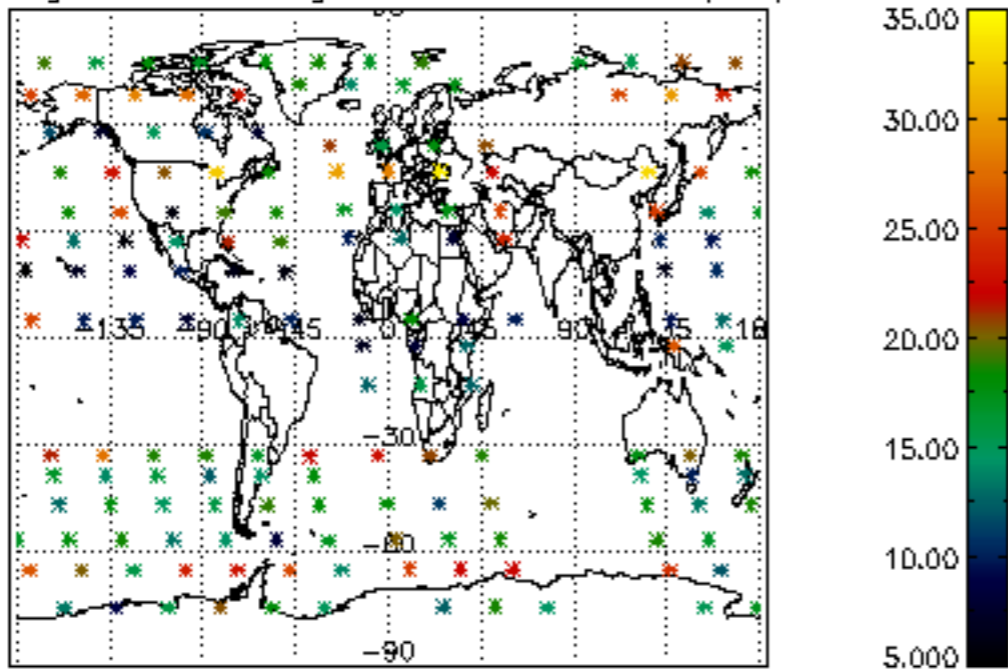
Percentage of cosmic ray hits per profile



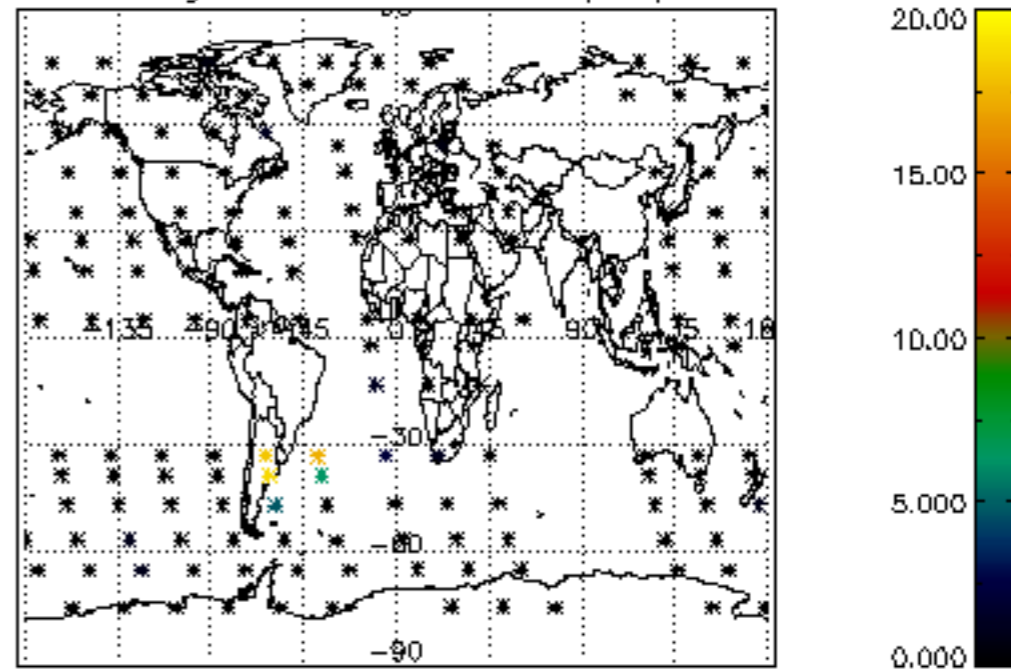
Percentage of datation errors per profile



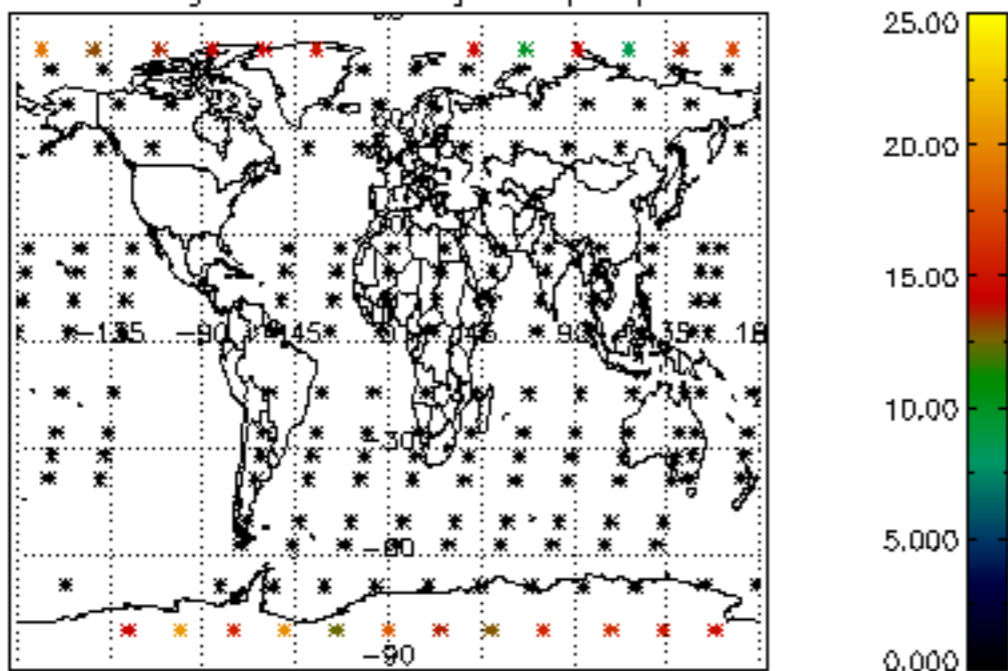
Percentage of star falling outside central band per profile



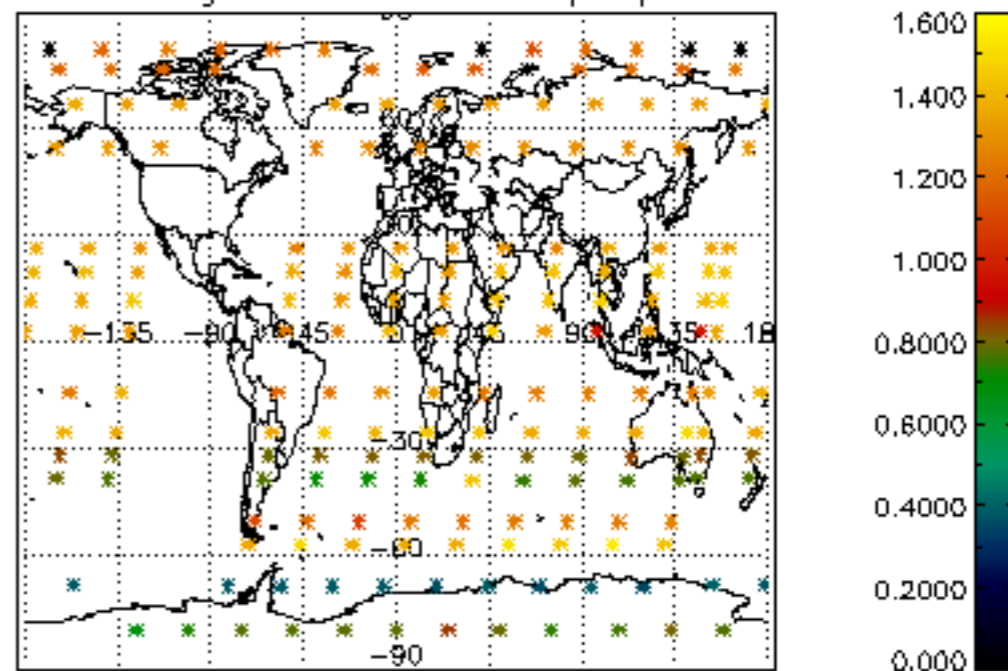
Percentage of saturation errors per profile



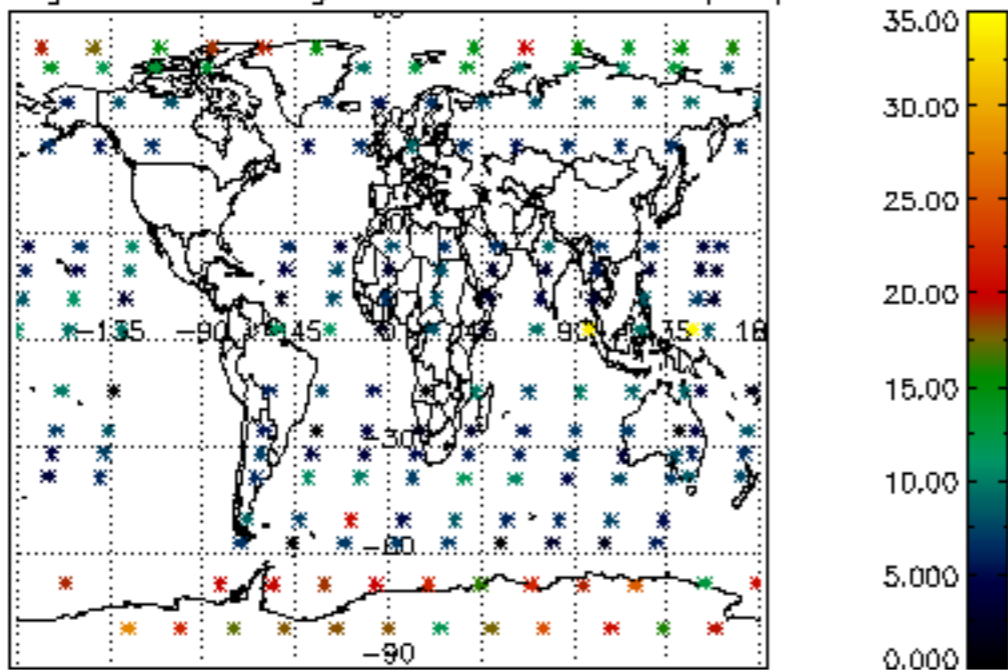
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

