

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	26APR2013 00:12:04
Data source version	GOMOS/6.01
Start time of products	24-12-2008 (24DEC2008 00:00:00)
Stop time of products	25-12-2008 (25DEC2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	453
Nb of prods with errors	0

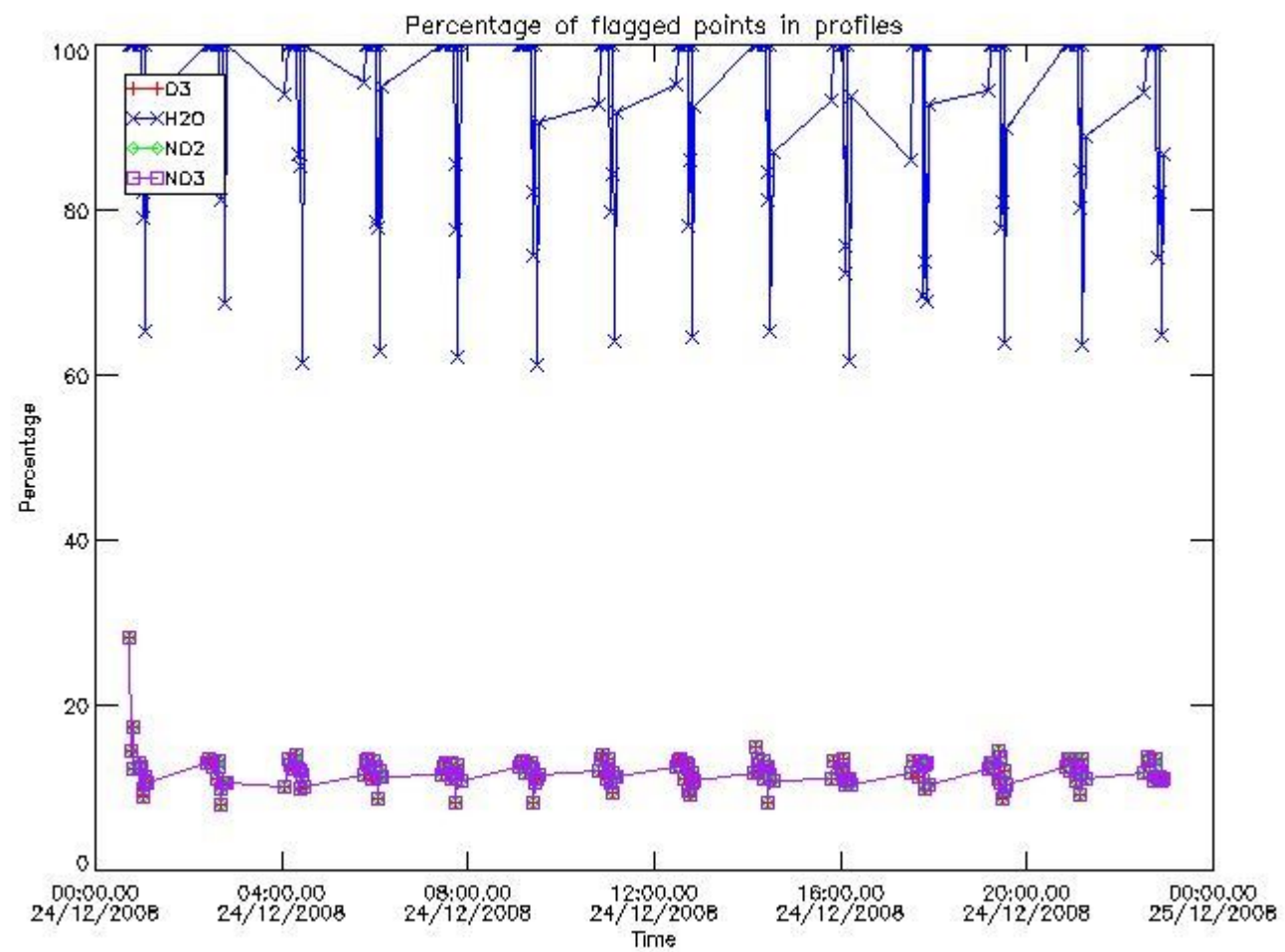
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081224_000530_000000332075_00016_35641_2468.N1	24-DEC-2008 00:05:30	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	35641	No
2	GOM_NL__2PRFIN20081224_001008_000000362075_00016_35641_2469.N1	24-DEC-2008 00:10:08	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	35641	No
3	GOM_NL__2PRFIN20081224_001419_000000392075_00016_35641_2470.N1	24-DEC-2008 00:14:19	Bright	39.000	32	77Eps UMa	1.7630	11000.	78	35641	No
4	GOM_NL__2PRFIN20081224_001715_000000432075_00016_35641_2471.N1	24-DEC-2008 00:17:15	Bright	43.000	39	85Eta UMa	1.8540	24000.	86	35641	No
5	GOM_NL__2PRFIN20081224_002055_000000542075_00016_35641_2472.N1	24-DEC-2008 00:20:55	Bright	54.000	180	27Gam Boo	3.0400	8000.0	108	35641	No
6	GOM_NL__2PRFIN20081224_002420_000000402075_00016_35641_2473.N1	24-DEC-2008 00:24:20	Bright	39.500	83		2.3780	11000.	79	35641	No
7	GOM_NL__2PRFIN20081224_002801_000000672075_00016_35641_2474.N1	24-DEC-2008 00:28:01	Bright	67.000	111	8Eta Boo	2.6800	6000.0	134	35641	No
8	GOM_NL__2PRFIN20081224_003419_000000532075_00016_35641_2475.N1	24-DEC-2008 00:34:19	Bright	53.000	104	27Bet Lib	2.6140	13100.	106	35641	No
9	GOM_NL__2PRFIN20081224_003644_000000382075_00016_35641_2476.N1	24-DEC-2008 00:36:44	Bright	37.500	122	9Alp2Lib	2.7470	9700.0	75	35641	No
10	GOM_NL__2PRFIN20081224_004323_000000452075_00016_35641_2477.N1	24-DEC-2008 00:43:23	Dark	45.000	54	5The Cen	2.0550	4500.0	90	35641	No
11	GOM_NL__2PRFIN20081224_004618_000000392075_00016_35641_2478.N1	24-DEC-2008 00:46:18	Dark	39.000	95	Zet Cen	2.5450	26000.	78	35641	No
12	GOM_NL__2PRFIN20081224_004807_000000382075_00016_35641_2479.N1	24-DEC-2008 00:48:07	Dark	38.000	77	Eps Cen	2.3030	28000.	76	35641	No
13	GOM_NL__2PRFIN20081224_004925_000000422075_00017_35642_2514.N1	24-DEC-2008 00:49:25	Dark	41.500	64	Gam Cen	2.2000	10600.	83	35642	No
14	GOM_NL__2PRFIN20081224_005520_000000462075_00017_35642_2515.N1	24-DEC-2008 00:55:20	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	35642	No
15	GOM_NL__2PRFIN20081224_005659_000000392075_00017_35642_2516.N1	24-DEC-2008 00:56:59	Dark	39.000	159	Ups Car	2.9200	7200.0	78	35642	No
16	GOM_NL__2PRFIN20081224_005832_000000412075_00017_35642_2517.N1	24-DEC-2008 00:58:32	Dark	40.500	71	Iot Car	2.2460	7700.0	81	35642	No
17	GOM_NL__2PRFIN20081224_010017_000000512075_00017_35642_2518.N1	24-DEC-2008 01:00:17	Dark	51.000	41	Eps Car	1.8600	4100.0	102	35642	No
18	GOM_NL__2PRFIN20081224_010141_000000582075_00017_35642_2519.N1	24-DEC-2008 01:01:41	Dark	57.500	65	Lam Vel	2.2040	4400.0	115	35642	No
19	GOM_NL__2PRFIN20081224_010318_000000452075_00017_35642_2520.N1	24-DEC-2008 01:03:18	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	35642	No
20	GOM_NL__2PRFIN20081224_010450_000000472075_00017_35642_2521.N1	24-DEC-2008 01:04:50	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	35642	No
21	GOM_NL__2PRFIN20081224_010751_000000482075_00017_35642_2522.N1	24-DEC-2008 01:07:51	Dark	48.000	117	Pi Pup	2.7060	3800.0	96	35642	No
22	GOM_NL__2PRFIN20081224_011051_000000492075_00017_35642_2523.N1	24-DEC-2008 01:10:51	Straylight	48.500	23	21Eps CMa	1.5020	26000.	97	35642	No
23	GOM_NL__2PRFIN20081224_011231_000000482075_00017_35642_2524.N1	24-DEC-2008 01:12:31	Straylight	48.000	179	24Omi2CMa	3.0320	24000.	96	35642	No
24	GOM_NL__2PRFIN20081224_011512_000000532075_00017_35642_2525.N1	24-DEC-2008 01:15:12	Straylight	53.000	1	9Alp CMa	-1.4400	11000.	106	35642	No
25	GOM_NL__2PRFIN20081224_011821_000000482075_00017_35642_2526.N1	24-DEC-2008 01:18:21	Straylight	48.000	7	19Bet Ori	0.10000	14000.	96	35642	No
26	GOM_NL__2PRFIN20081224_012023_000000452075_00017_35642_2527.N1	24-DEC-2008 01:20:23	Straylight	44.500	30	46Eps Ori	1.6940	30000.	89	35642	No
27	GOM_NL__2PRFIN20081224_012309_000000562075_00017_35642_2528.N1	24-DEC-2008 01:23:09	Tw_i_and_stray	56.000	14	58Alp Ori	0.87000	3000.0	112	35642	No
28	GOM_NL__2PRFIN20081224_012534_000000422075_00017_35642_2529.N1	24-DEC-2008 01:25:34	Tw_i_and_stray	42.000	13	87Alp Tau	0.86700	3800.0	84	35642	No
29	GOM_NL__2PRFIN20081224_012712_000000402075_00017_35642_2530.N1	24-DEC-2008 01:27:12	Bright	39.500	176	23Zet Tau	3.0200	22000.	79	35642	No
30	GOM_NL__2PRFIN20081224_012917_000000392075_00017_35642_2531.N1	24-DEC-2008 01:29:17	Bright	38.500	28	12Bet Tau	1.6500	15200.	77	35642	No
31	GOM_NL__2PRFIN20081224_013228_000000412075_00017_35642_2532.N1	24-DEC-2008 01:32:28	Bright	41.000	107	37The Aur	2.6490	11000.	82	35642	No
32	GOM_NL__2PRFIN20081224_013412_000000422075_00017_35642_2533.N1	24-DEC-2008 01:34:12	Bright	42.000	6	13Alp Aur	0.080000	3400.0	84	35642	No
33	GOM_NL__2PRFIN20081224_014606_000000362075_00017_35642_2534.N1	24-DEC-2008 01:46:06	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	35642	No
34	GOM_NL__2PRFIN20081224_015044_000000382075_00017_35642_2535.N1	24-DEC-2008 01:50:44	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	35642	No
35	GOM_NL__2PRFIN20081224_015455_000000342075_00017_35642_2536.N1	24-DEC-2008 01:54:55	Bright	34.000	32	77Eps UMa	1.7630	11000.	68	35642	No
36	GOM_NL__2PRFIN20081224_015751_000000422075_00017_35642_2537.N1	24-DEC-2008 01:57:51	Bright	41.500	39	85Eta UMa	1.8540	24000.	83	35642	No
37	GOM_NL__2PRFIN20081224_020131_000000572075_00017_35642_2538.N1	24-DEC-2008 02:01:31	Bright	57.000	180	27Gam Boo	3.0400	8000.0	114	35642	No
38	GOM_NL__2PRFIN20081224_020456_000000392075_00017_35642_2539.N1	24-DEC-2008 02:04:56	Bright	39.000	83		2.3780	11000.	78	35642	No
39	GOM_NL__2PRFIN20081224_020837_000000452075_00017_35642_2540.N1	24-DEC-2008 02:08:37	Bright	45.000	111	8Eta Boo	2.6800	6000.0	90	35642	No
40	GOM_NL__2PRFIN20081224_021455_000000532075_00017_35642_2541.N1	24-DEC-2008 02:14:55	Bright	53.000	104	27Bet Lib	2.6140	13100.	106	35642	No
41	GOM_NL__2PRFIN20081224_021721_000000382075_00017_35642_2542.N1	24-DEC-2008 02:17:21	Bright	37.500	122	9Alp2Lib	2.7470	9700.0	75	35642	No
42	GOM_NL__2PRFIN20081224_022400_000000472075_00017_35642_2543.N1	24-DEC-2008 02:24:00	Dark	46.500	54	5The Cen	2.0550	4500.0	93	35642	No

3. Quality information per product

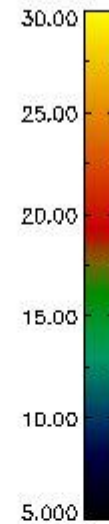
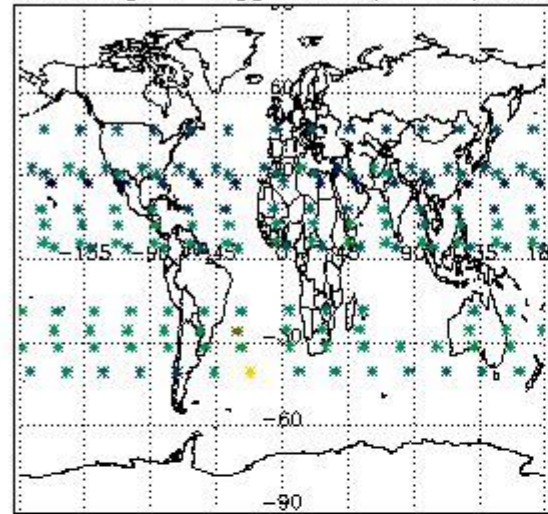
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

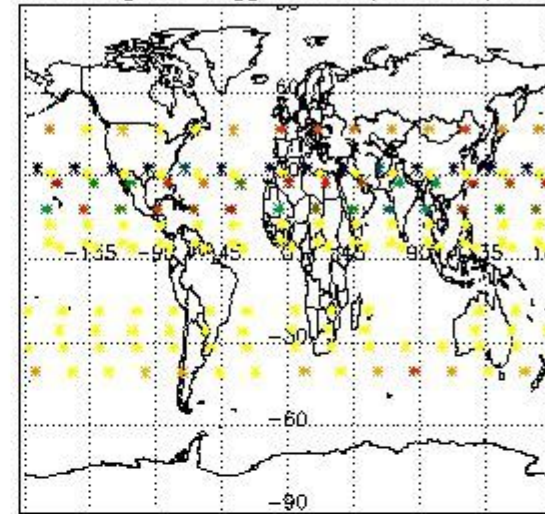


3.2 Plot quality information per product (world map)

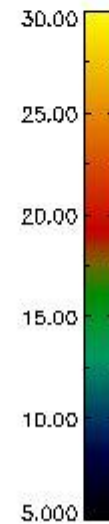
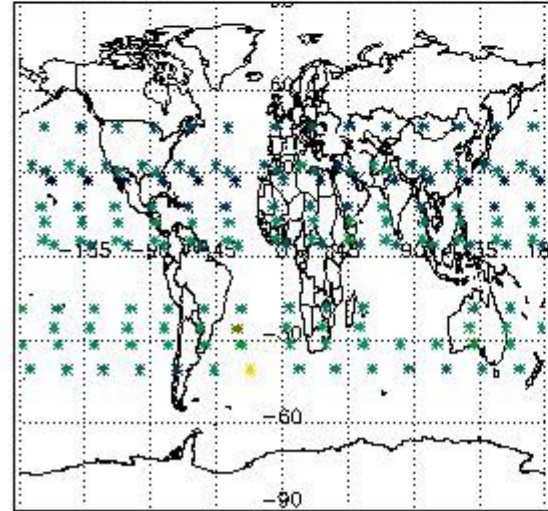
Percentage of flagged data per O3 profile



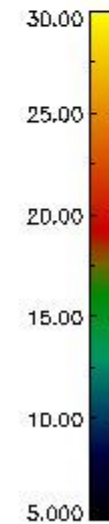
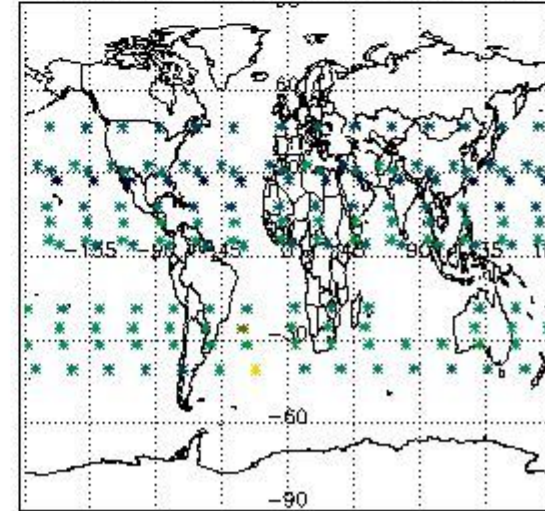
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

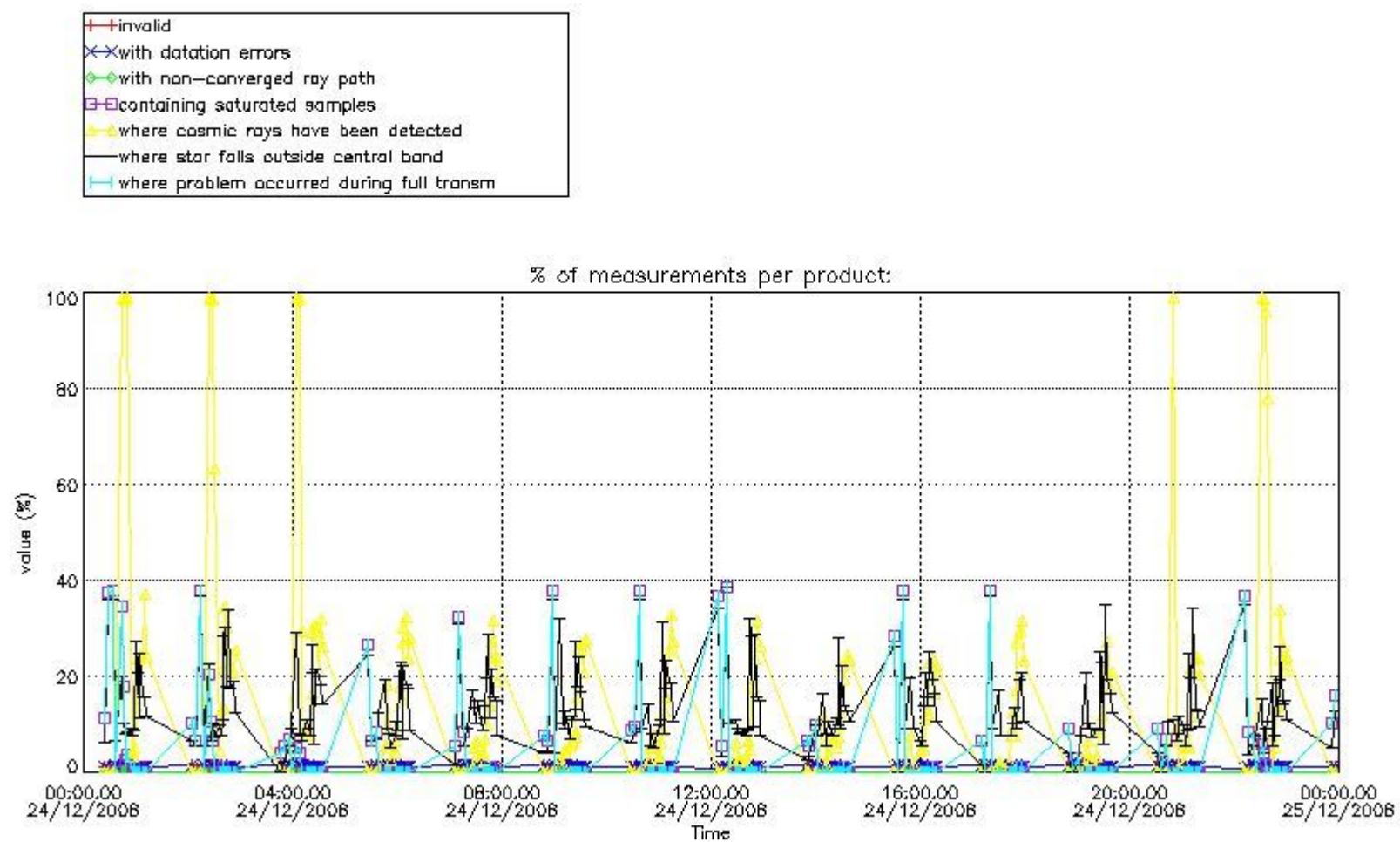


4. Level 1 quality information per product

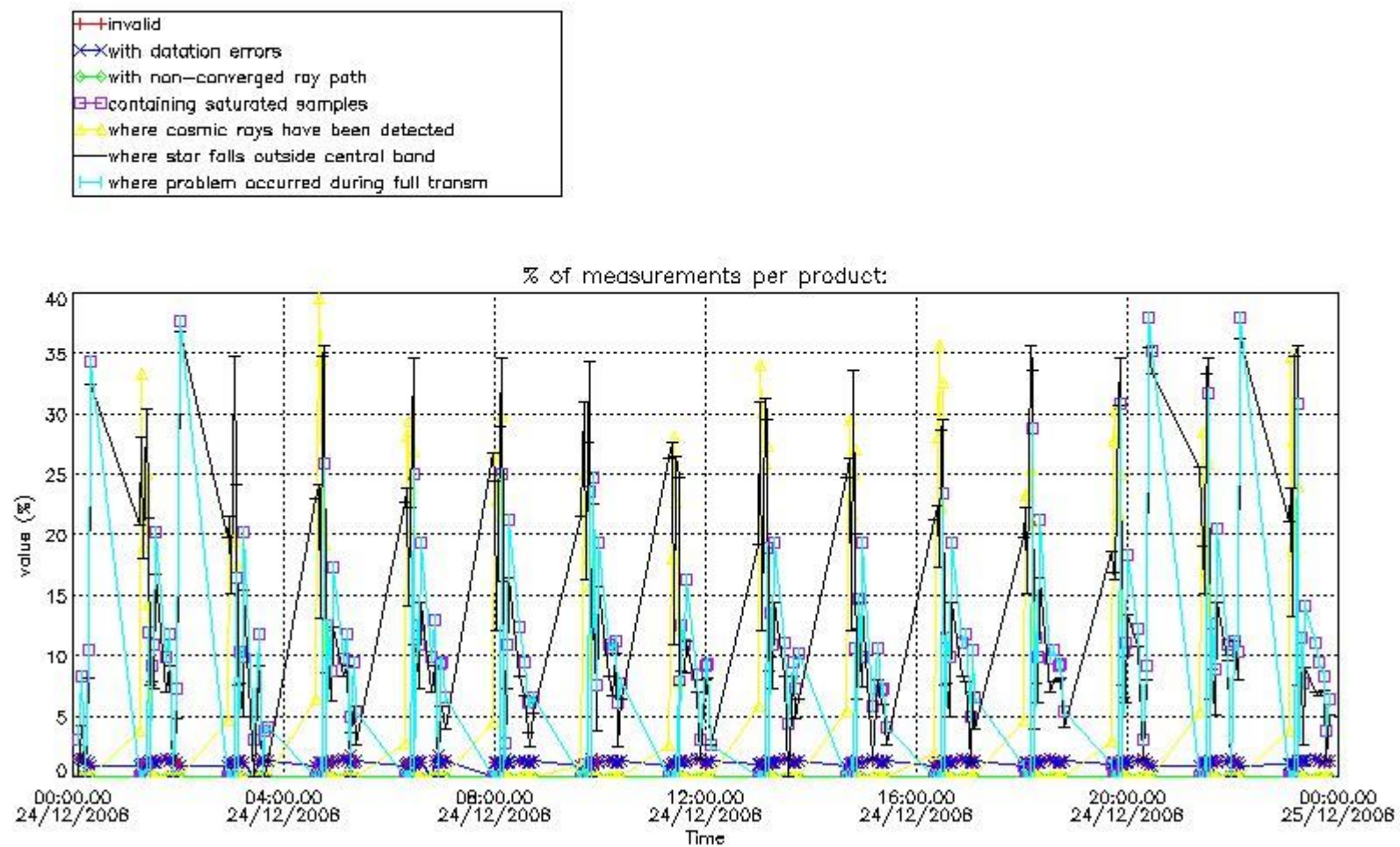
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

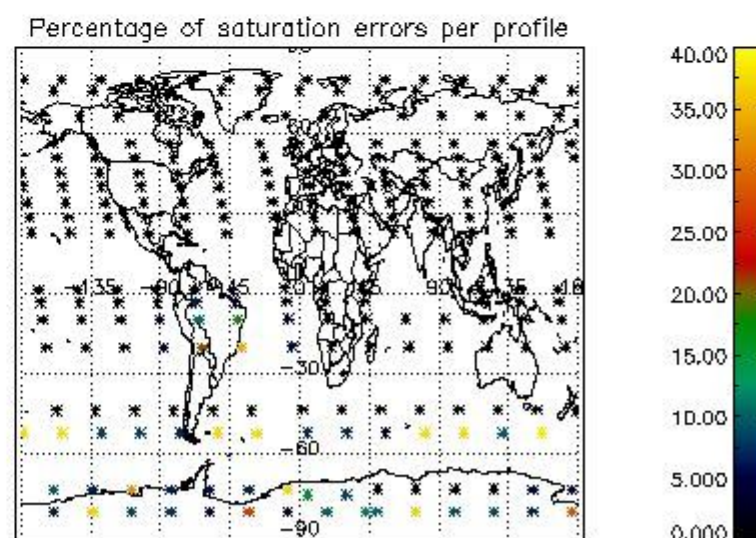
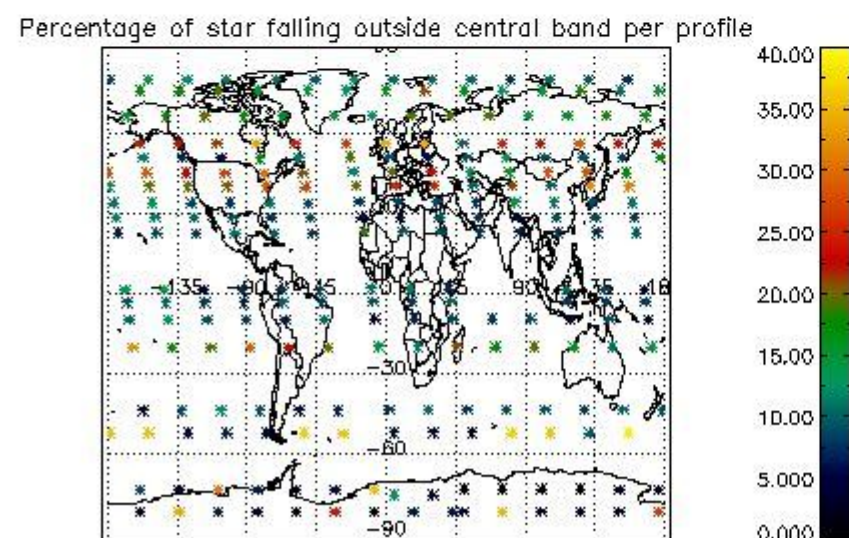
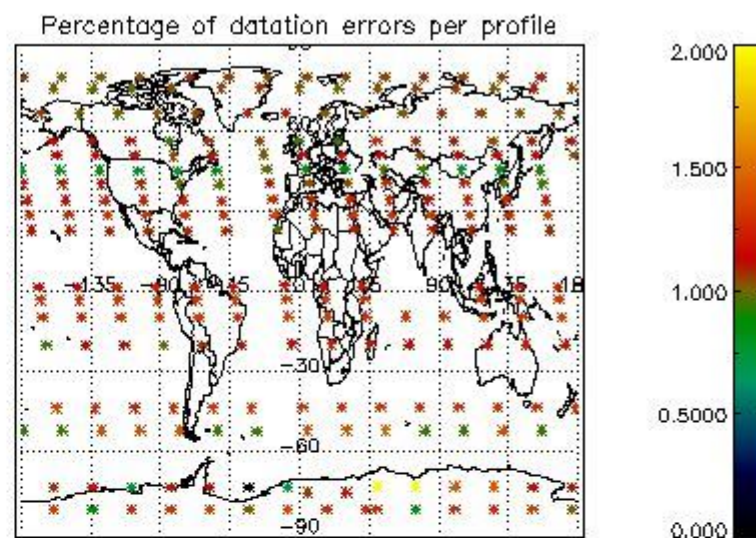
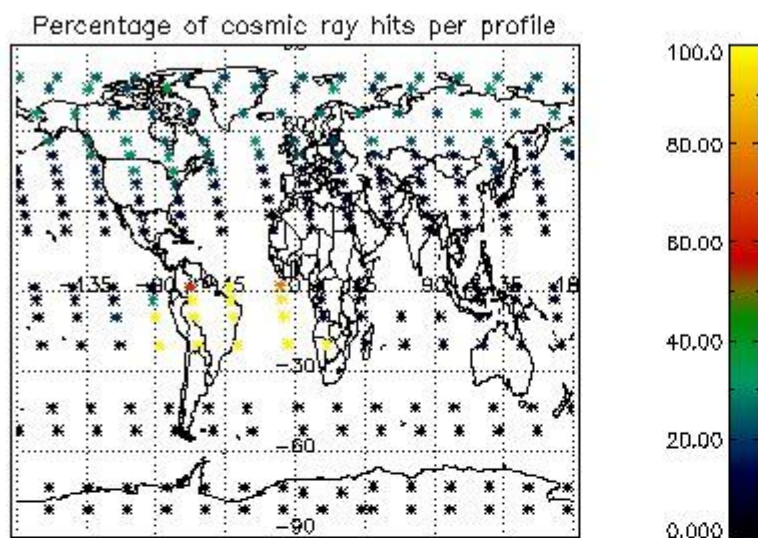


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

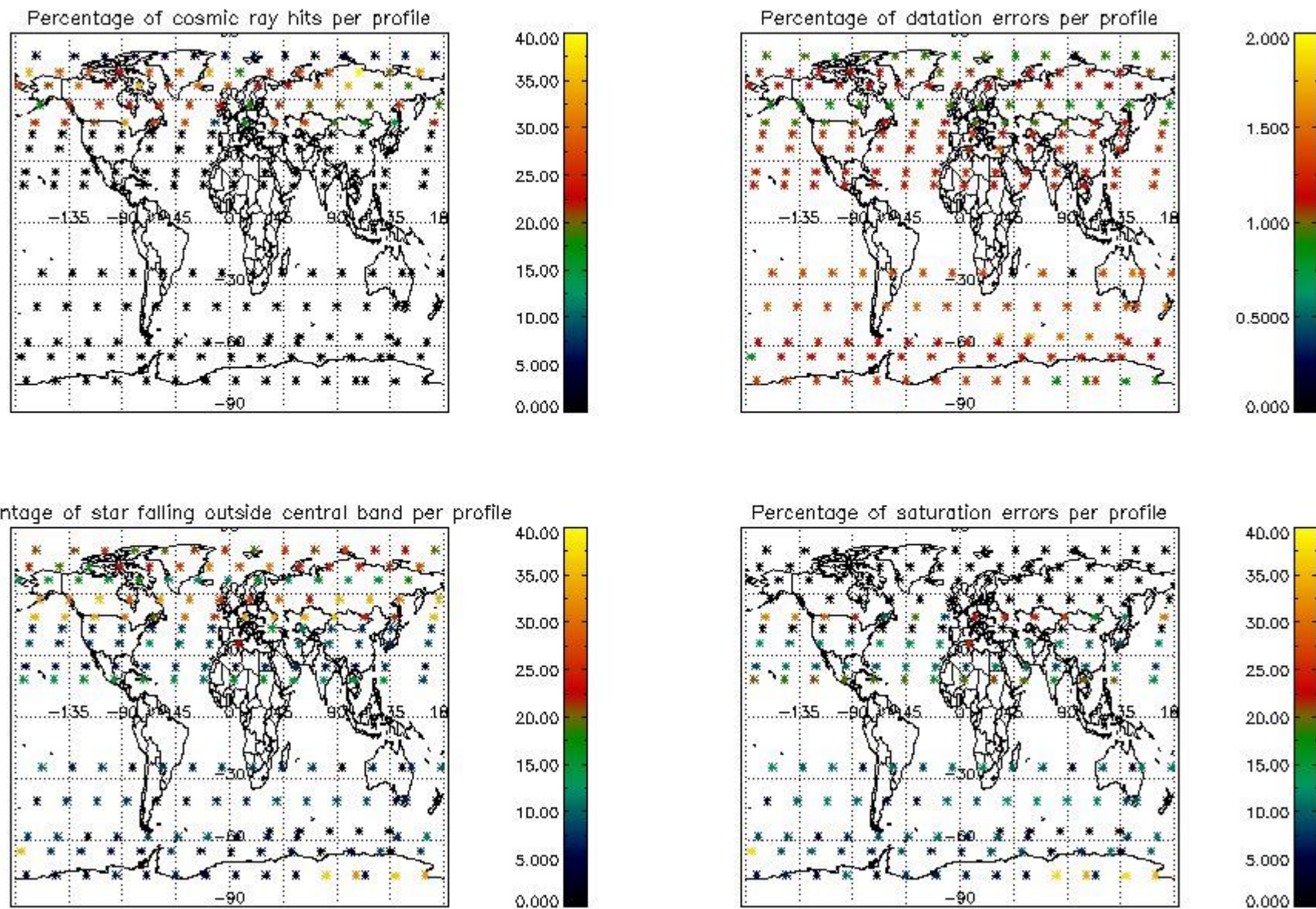


4.2 Plot quality information per product coming from level 1b processing (world map)

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

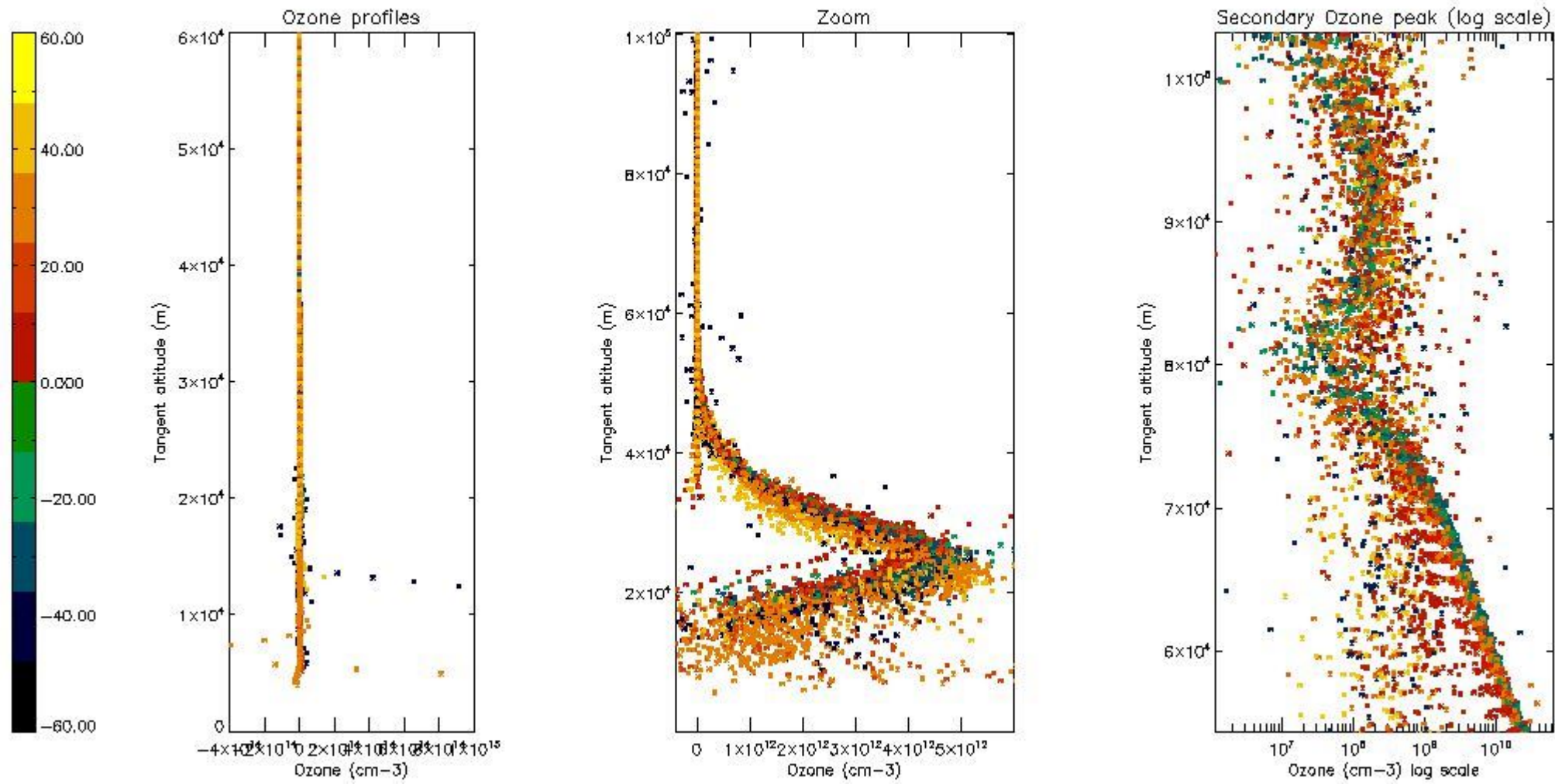
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	16

STD < 10	11
STD < 5	6

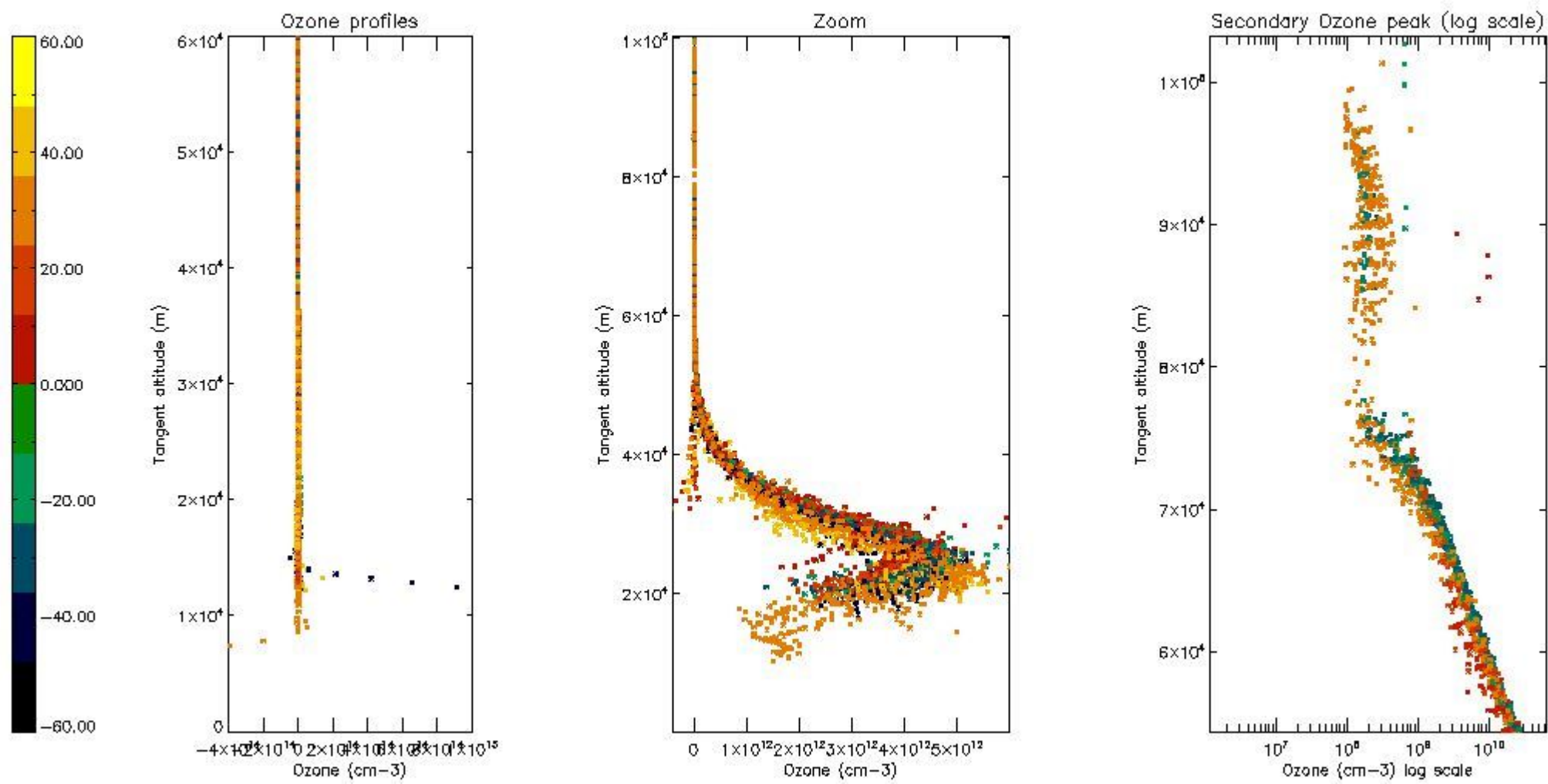
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



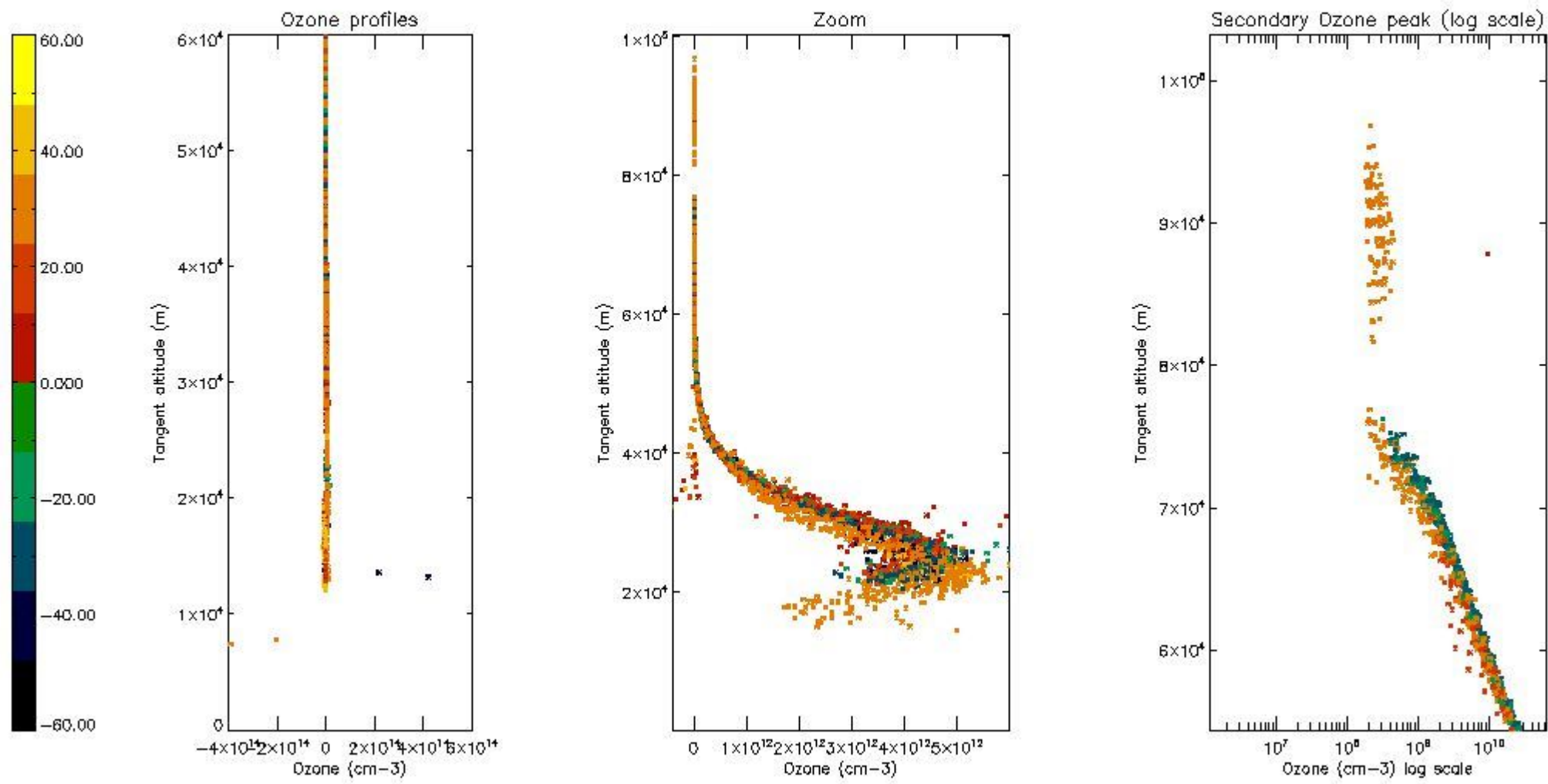
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



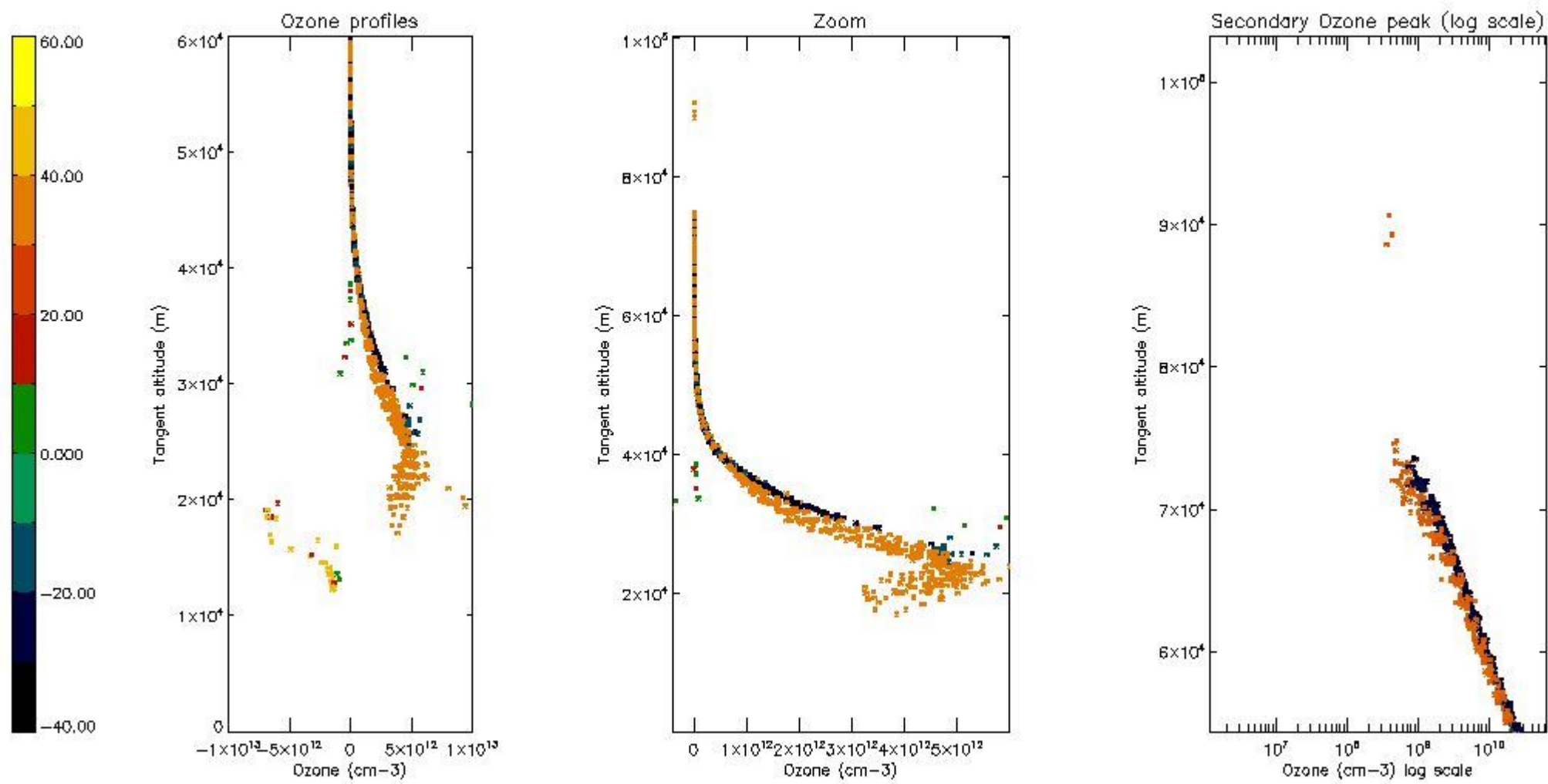
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



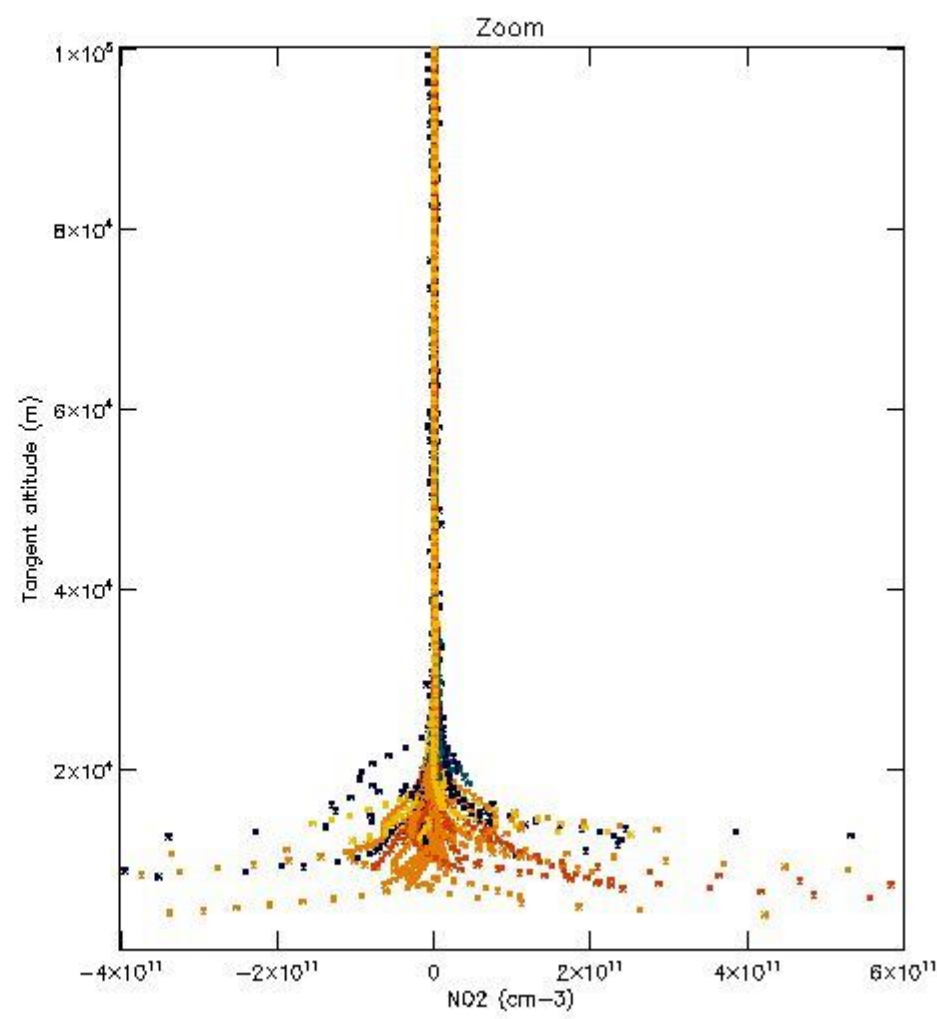
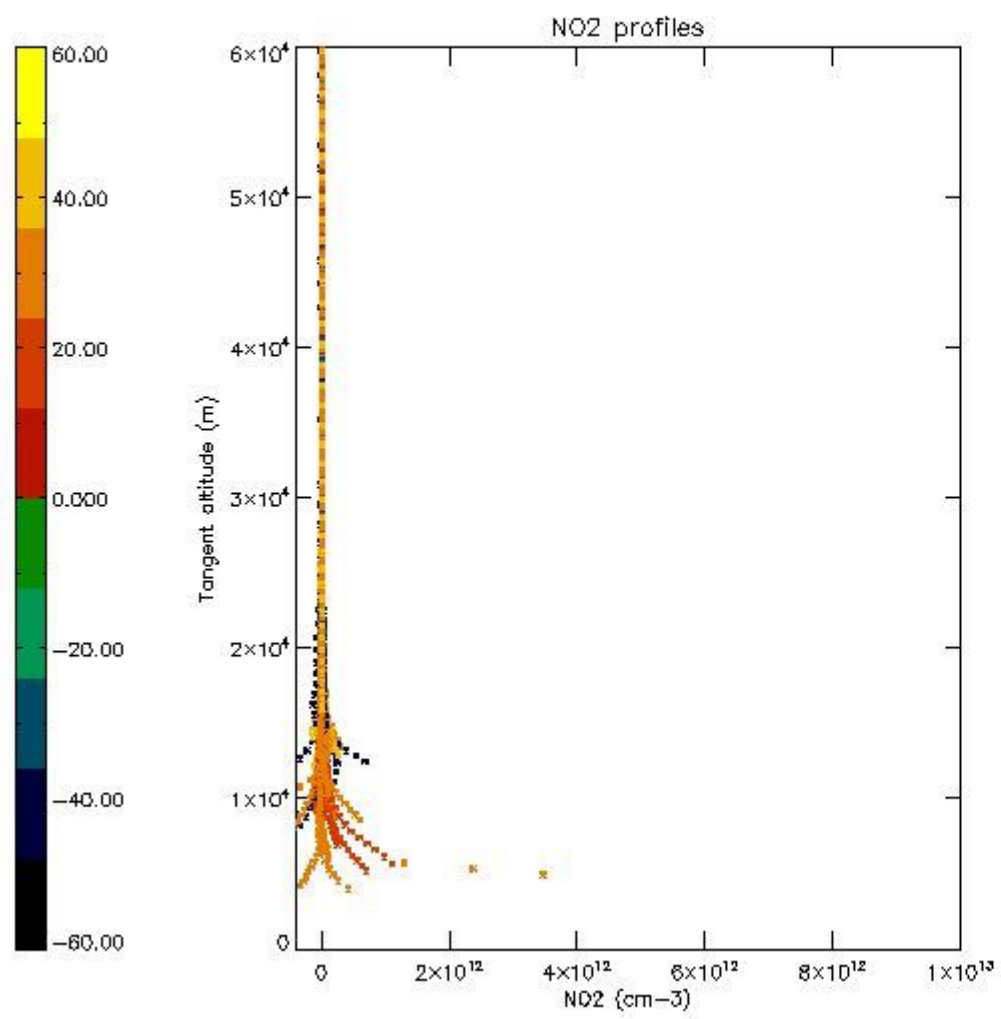
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



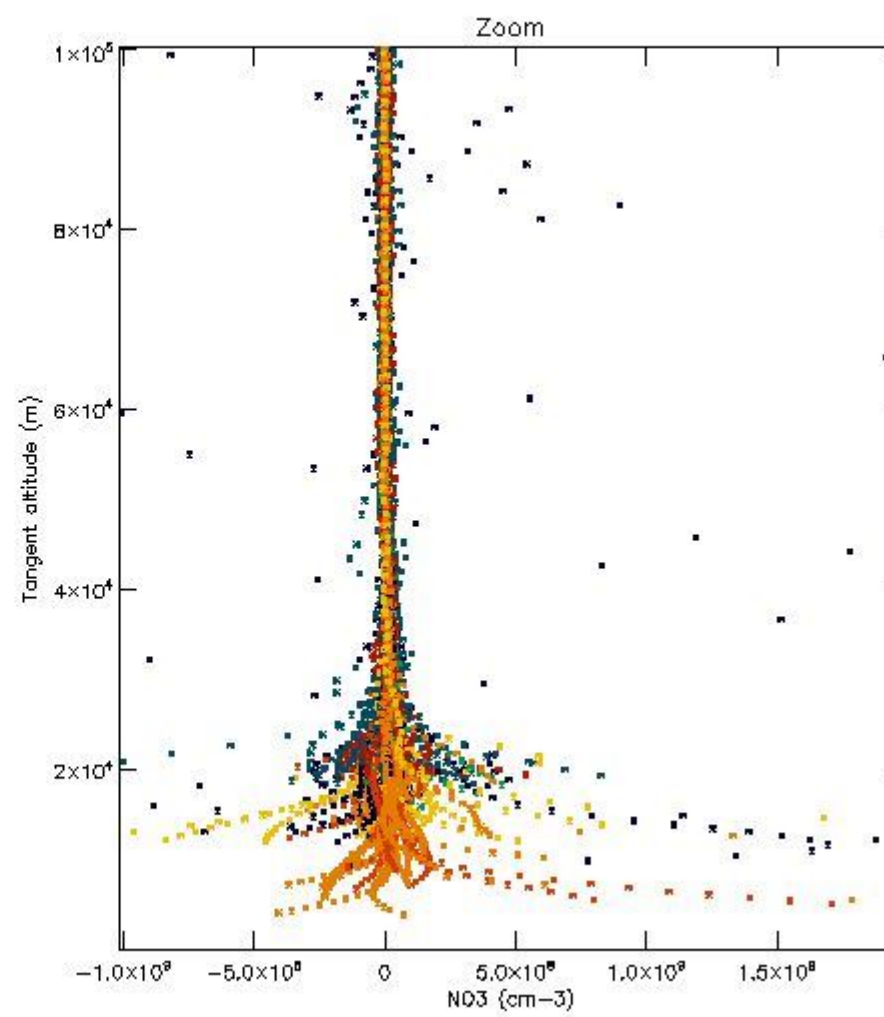
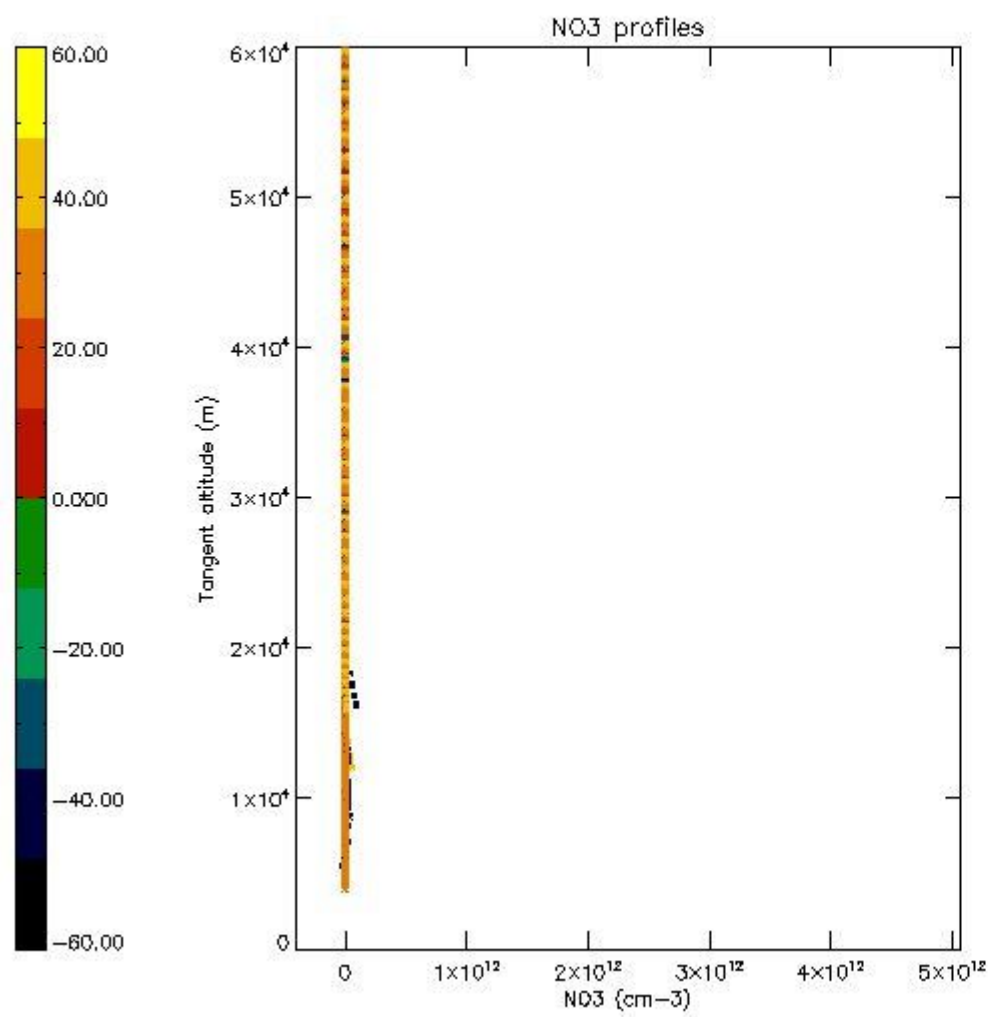
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



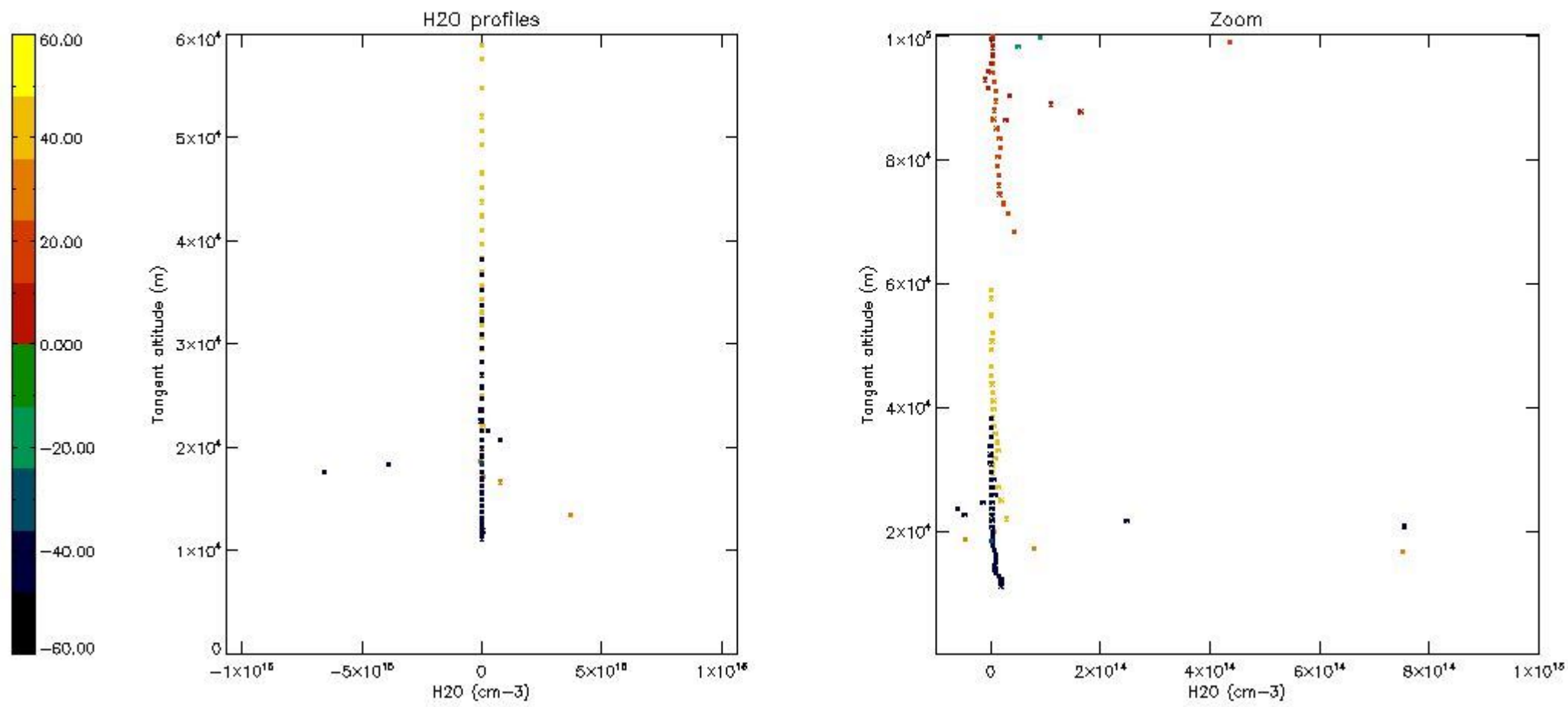
5.7 Plot NO3 profiles for all STD (dark without errors)

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	24-DEC-2008 00:05:30
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	24-DEC-2008 00:05:30
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	24-DEC-2008 00:05:30

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

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

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

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

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

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

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

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

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

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

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

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

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

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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.

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Time of report generation	26APR2013 00:12:04
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Start time of products	24-12-2008 (24DEC2008 00:00:00)
Stop time of products	25-12-2008 (25DEC2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	453
Nb of prods with errors	0

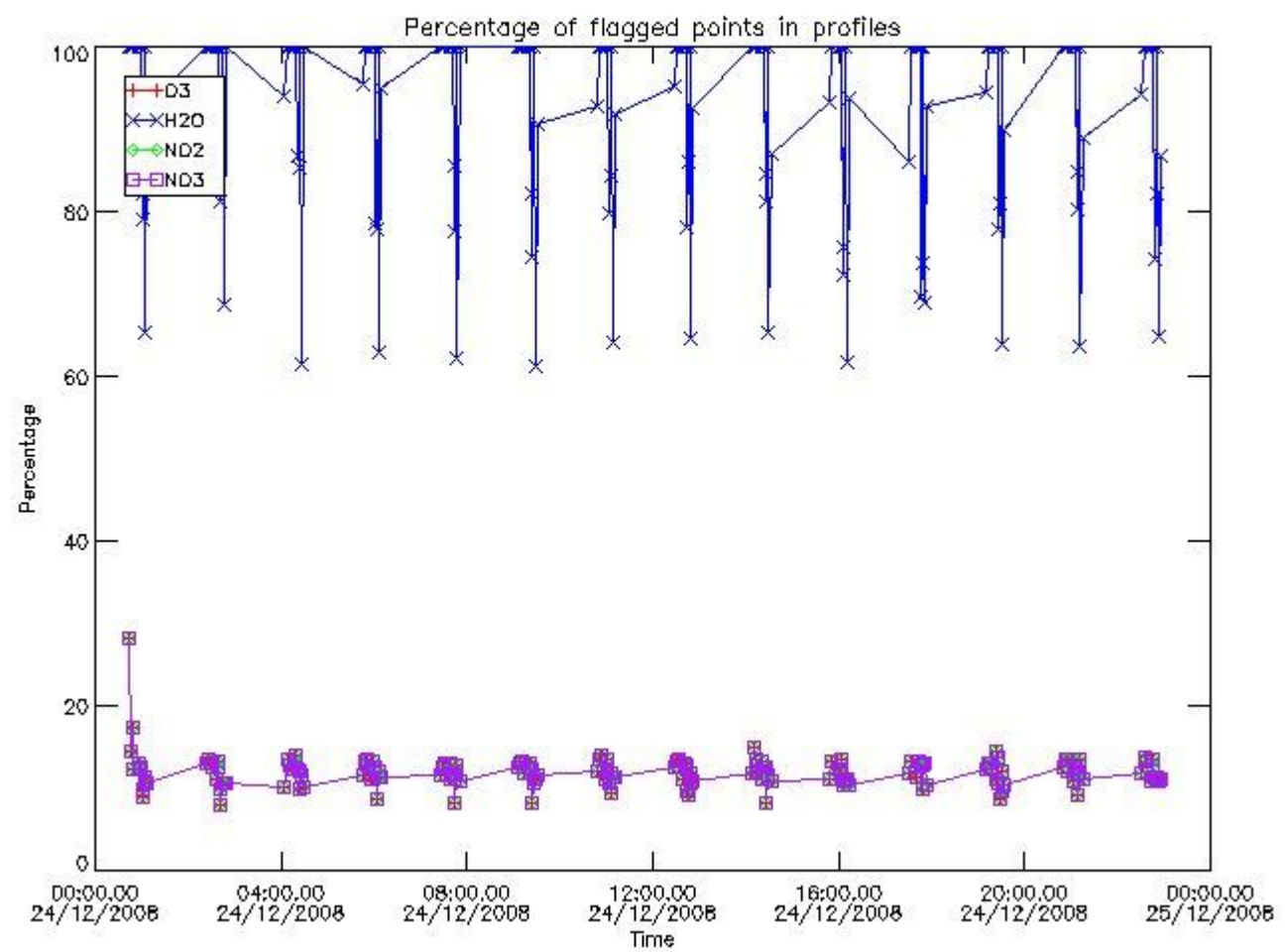
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081224_000530_000000332075_00016_35641_2468.N1	24-DEC-2008 00:05:30	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	35641	No
2	GOM_NL__2PRFIN20081224_001008_000000362075_00016_35641_2469.N1	24-DEC-2008 00:10:08	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	35641	No
3	GOM_NL__2PRFIN20081224_001419_000000392075_00016_35641_2470.N1	24-DEC-2008 00:14:19	Bright	39.000	32	77Eps UMa	1.7630	11000.	78	35641	No
4	GOM_NL__2PRFIN20081224_001715_000000432075_00016_35641_2471.N1	24-DEC-2008 00:17:15	Bright	43.000	39	85Eta UMa	1.8540	24000.	86	35641	No
5	GOM_NL__2PRFIN20081224_002055_000000542075_00016_35641_2472.N1	24-DEC-2008 00:20:55	Bright	54.000	180	27Gam Boo	3.0400	8000.0	108	35641	No
6	GOM_NL__2PRFIN20081224_002420_000000402075_00016_35641_2473.N1	24-DEC-2008 00:24:20	Bright	39.500	83		2.3780	11000.	79	35641	No
7	GOM_NL__2PRFIN20081224_002801_000000672075_00016_35641_2474.N1	24-DEC-2008 00:28:01	Bright	67.000	111	8Eta Boo	2.6800	6000.0	134	35641	No
8	GOM_NL__2PRFIN20081224_003419_000000532075_00016_35641_2475.N1	24-DEC-2008 00:34:19	Bright	53.000	104	27Bet Lib	2.6140	13100.	106	35641	No
9	GOM_NL__2PRFIN20081224_003644_000000382075_00016_35641_2476.N1	24-DEC-2008 00:36:44	Bright	37.500	122	9Alp2Lib	2.7470	9700.0	75	35641	No
10	GOM_NL__2PRFIN20081224_004323_000000452075_00016_35641_2477.N1	24-DEC-2008 00:43:23	Dark	45.000	54	5The Cen	2.0550	4500.0	90	35641	No
11	GOM_NL__2PRFIN20081224_004618_000000392075_00016_35641_2478.N1	24-DEC-2008 00:46:18	Dark	39.000	95	Zet Cen	2.5450	26000.	78	35641	No
12	GOM_NL__2PRFIN20081224_004807_000000382075_00016_35641_2479.N1	24-DEC-2008 00:48:07	Dark	38.000	77	Eps Cen	2.3030	28000.	76	35641	No
13	GOM_NL__2PRFIN20081224_004925_000000422075_00017_35642_2514.N1	24-DEC-2008 00:49:25	Dark	41.500	64	Gam Cen	2.2000	10600.	83	35642	No
14	GOM_NL__2PRFIN20081224_005520_000000462075_00017_35642_2515.N1	24-DEC-2008 00:55:20	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	35642	No
15	GOM_NL__2PRFIN20081224_005659_000000392075_00017_35642_2516.N1	24-DEC-2008 00:56:59	Dark	39.000	159	Ups Car	2.9200	7200.0	78	35642	No
16	GOM_NL__2PRFIN20081224_005832_000000412075_00017_35642_2517.N1	24-DEC-2008 00:58:32	Dark	40.500	71	Iot Car	2.2460	7700.0	81	35642	No
17	GOM_NL__2PRFIN20081224_010017_000000512075_00017_35642_2518.N1	24-DEC-2008 01:00:17	Dark	51.000	41	Eps Car	1.8600	4100.0	102	35642	No
18	GOM_NL__2PRFIN20081224_010141_000000582075_00017_35642_2519.N1	24-DEC-2008 01:01:41	Dark	57.500	65	Lam Vel	2.2040	4400.0	115	35642	No
19	GOM_NL__2PRFIN20081224_010318_000000452075_00017_35642_2520.N1	24-DEC-2008 01:03:18	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	35642	No
20	GOM_NL__2PRFIN20081224_010450_000000472075_00017_35642_2521.N1	24-DEC-2008 01:04:50	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	35642	No
21	GOM_NL__2PRFIN20081224_010751_000000482075_00017_35642_2522.N1	24-DEC-2008 01:07:51	Dark	48.000	117	Pi Pup	2.7060	3800.0	96	35642	No
22	GOM_NL__2PRFIN20081224_011051_000000492075_00017_35642_2523.N1	24-DEC-2008 01:10:51	Straylight	48.500	23	21Eps CMa	1.5020	26000.	97	35642	No
23	GOM_NL__2PRFIN20081224_011231_000000482075_00017_35642_2524.N1	24-DEC-2008 01:12:31	Straylight	48.000	179	24Omi2CMa	3.0320	24000.	96	35642	No
24	GOM_NL__2PRFIN20081224_011512_000000532075_00017_35642_2525.N1	24-DEC-2008 01:15:12	Straylight	53.000	1	9Alp CMa	-1.4400	11000.	106	35642	No
25	GOM_NL__2PRFIN20081224_011821_000000482075_00017_35642_2526.N1	24-DEC-2008 01:18:21	Straylight	48.000	7	19Bet Ori	0.10000	14000.	96	35642	No
26	GOM_NL__2PRFIN20081224_012023_000000452075_00017_35642_2527.N1	24-DEC-2008 01:20:23	Straylight	44.500	30	46Eps Ori	1.6940	30000.	89	35642	No
27	GOM_NL__2PRFIN20081224_012309_000000562075_00017_35642_2528.N1	24-DEC-2008 01:23:09	Tw_i_and_stray	56.000	14	58Alp Ori	0.87000	3000.0	112	35642	No
28	GOM_NL__2PRFIN20081224_012534_000000422075_00017_35642_2529.N1	24-DEC-2008 01:25:34	Tw_i_and_stray	42.000	13	87Alp Tau	0.86700	3800.0	84	35642	No
29	GOM_NL__2PRFIN20081224_012712_000000402075_00017_35642_2530.N1	24-DEC-2008 01:27:12	Bright	39.500	176	23Zet Tau	3.0200	22000.	79	35642	No
30	GOM_NL__2PRFIN20081224_012917_000000392075_00017_35642_2531.N1	24-DEC-2008 01:29:17	Bright	38.500	28	12Bet Tau	1.6500	15200.	77	35642	No
31	GOM_NL__2PRFIN20081224_013228_000000412075_00017_35642_2532.N1	24-DEC-2008 01:32:28	Bright	41.000	107	37The Aur	2.6490	11000.	82	35642	No
32	GOM_NL__2PRFIN20081224_013412_000000422075_00017_35642_2533.N1	24-DEC-2008 01:34:12	Bright	42.000	6	13Alp Aur	0.080000	3400.0	84	35642	No
33	GOM_NL__2PRFIN20081224_014606_000000362075_00017_35642_2534.N1	24-DEC-2008 01:46:06	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	35642	No
34	GOM_NL__2PRFIN20081224_015044_000000382075_00017_35642_2535.N1	24-DEC-2008 01:50:44	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	35642	No
35	GOM_NL__2PRFIN20081224_015455_000000342075_00017_35642_2536.N1	24-DEC-2008 01:54:55	Bright	34.000	32	77Eps UMa	1.7630	11000.	68	35642	No
36	GOM_NL__2PRFIN20081224_015751_000000422075_00017_35642_2537.N1	24-DEC-2008 01:57:51	Bright	41.500	39	85Eta UMa	1.8540	24000.	83	35642	No
37	GOM_NL__2PRFIN20081224_020131_000000572075_00017_35642_2538.N1	24-DEC-2008 02:01:31	Bright	57.000	180	27Gam Boo	3.0400	8000.0	114	35642	No
38	GOM_NL__2PRFIN20081224_020456_000000392075_00017_35642_2539.N1	24-DEC-2008 02:04:56	Bright	39.000	83		2.3780	11000.	78	35642	No
39	GOM_NL__2PRFIN20081224_020837_000000452075_00017_35642_2540.N1	24-DEC-2008 02:08:37	Bright	45.000	111	8Eta Boo	2.6800	6000.0	90	35642	No
40	GOM_NL__2PRFIN20081224_021455_000000532075_00017_35642_2541.N1	24-DEC-2008 02:14:55	Bright	53.000	104	27Bet Lib	2.6140	13100.	106	35642	No
41	GOM_NL__2PRFIN20081224_021721_000000382075_00017_35642_2542.N1	24-DEC-2008 02:17:21	Bright	37.500	122	9Alp2Lib	2.7470	9700.0	75	35642	No
42	GOM_NL__2PRFIN20081224_022400_000000472075_00017_35642_2543.N1	24-DEC-2008 02:24:00	Dark	46.500	54	5The Cen	2.0550	4500.0	93	35642	No

3. Quality information per product

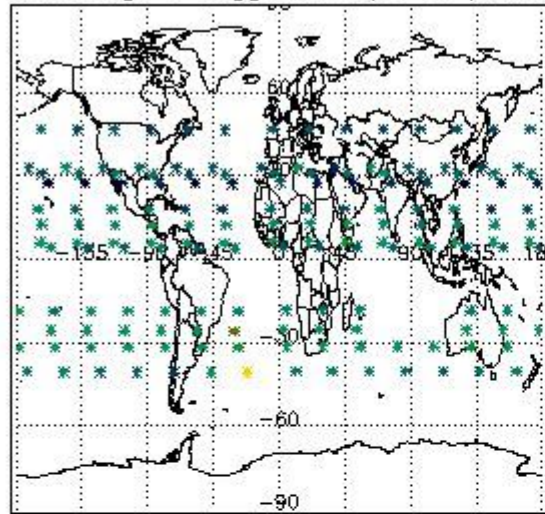
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

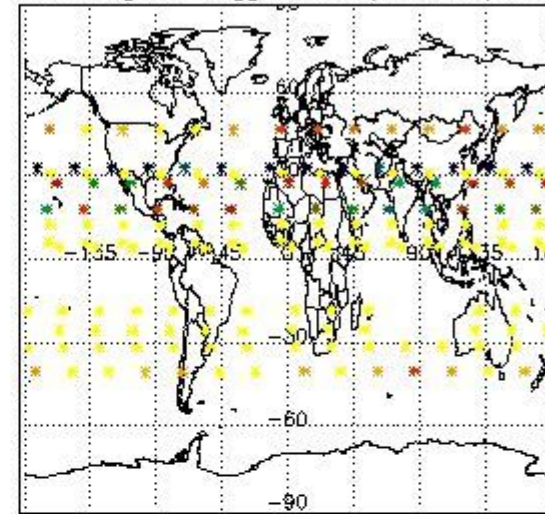


3.2 Plot quality information per product (world map)

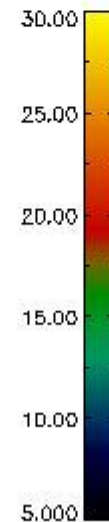
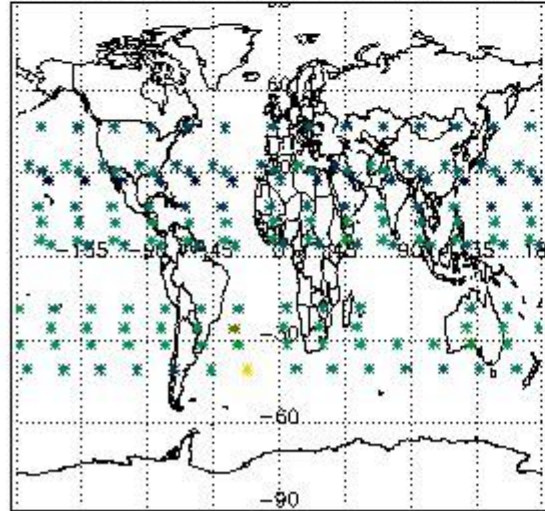
Percentage of flagged data per O3 profile



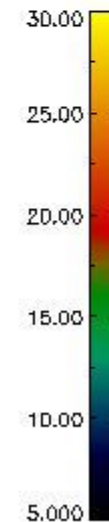
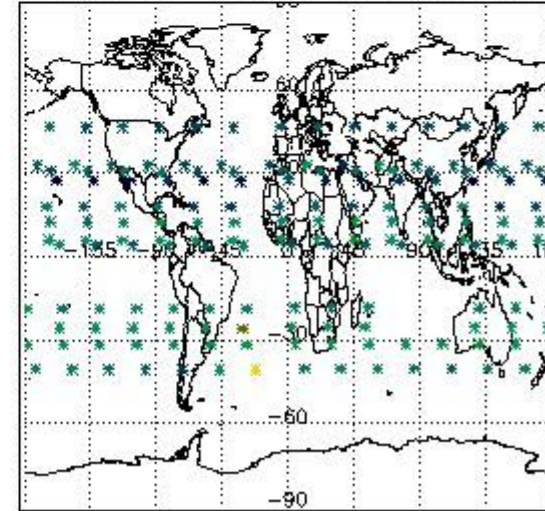
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

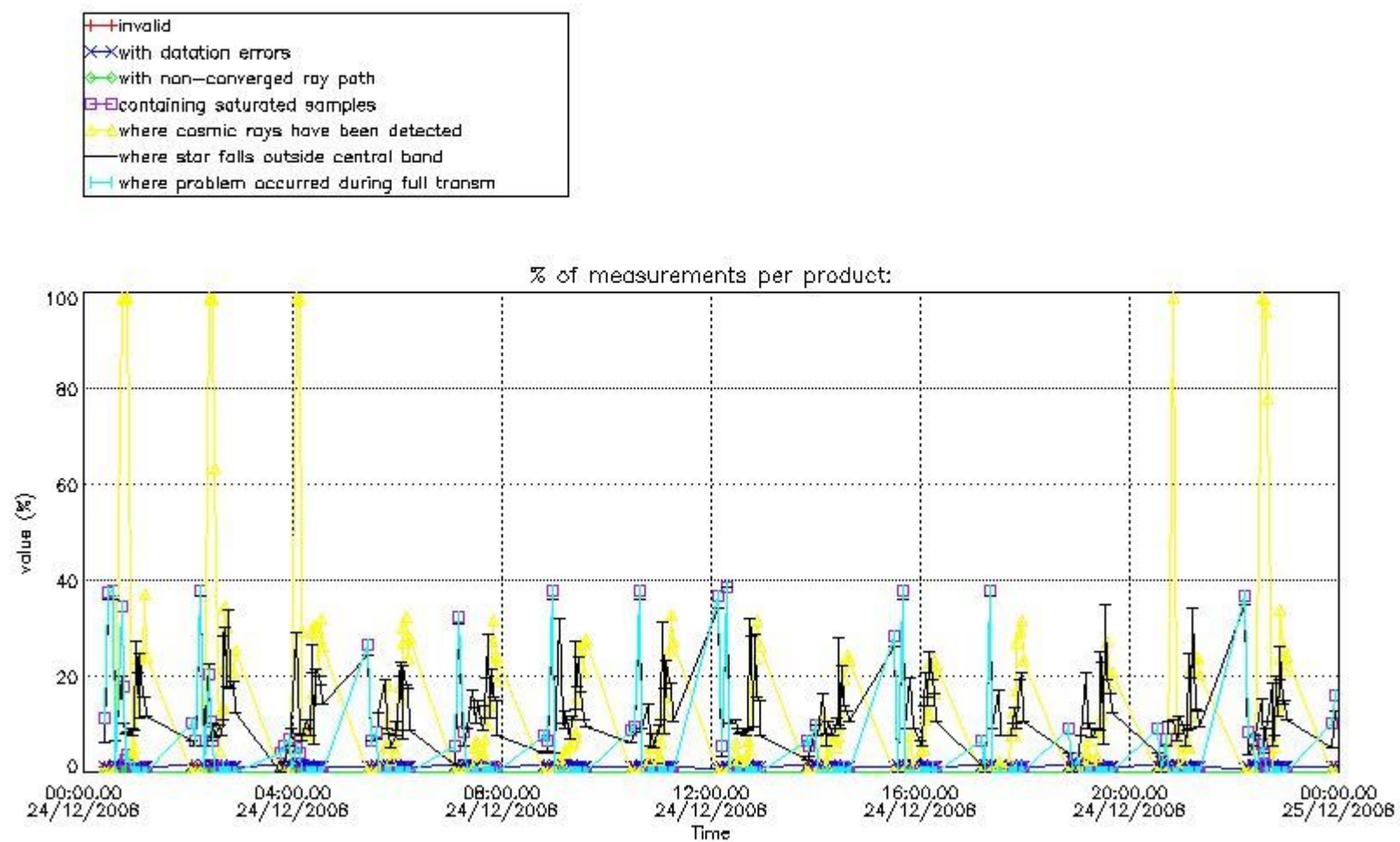


4. Level 1 quality information per product

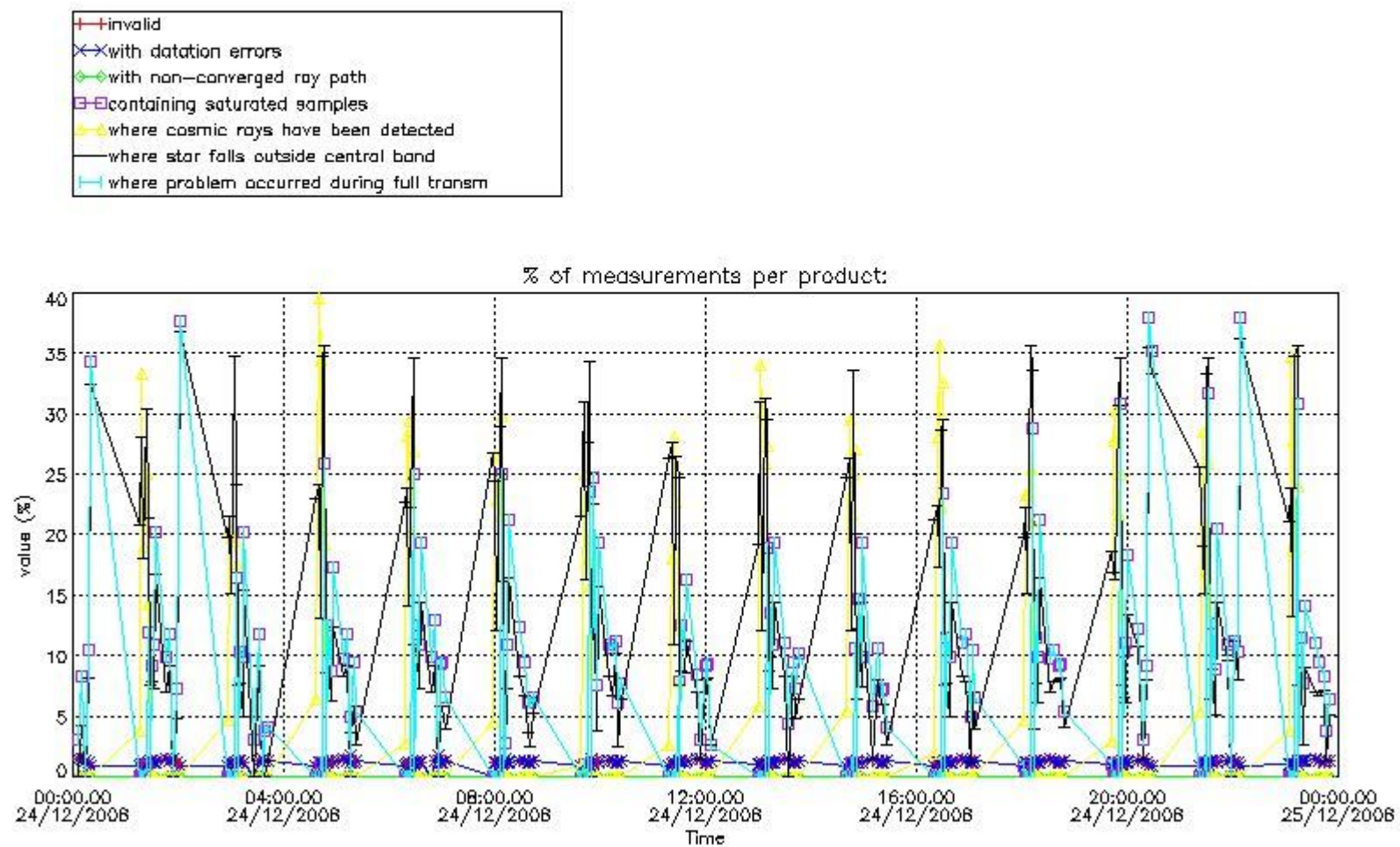
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

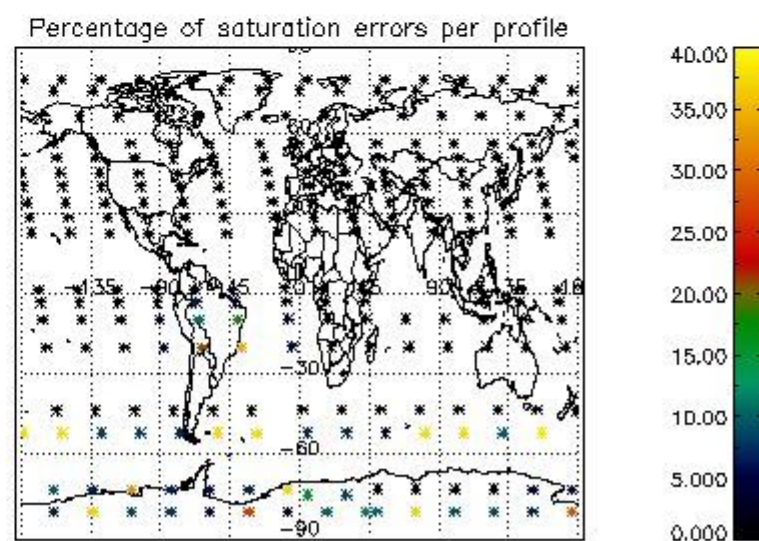
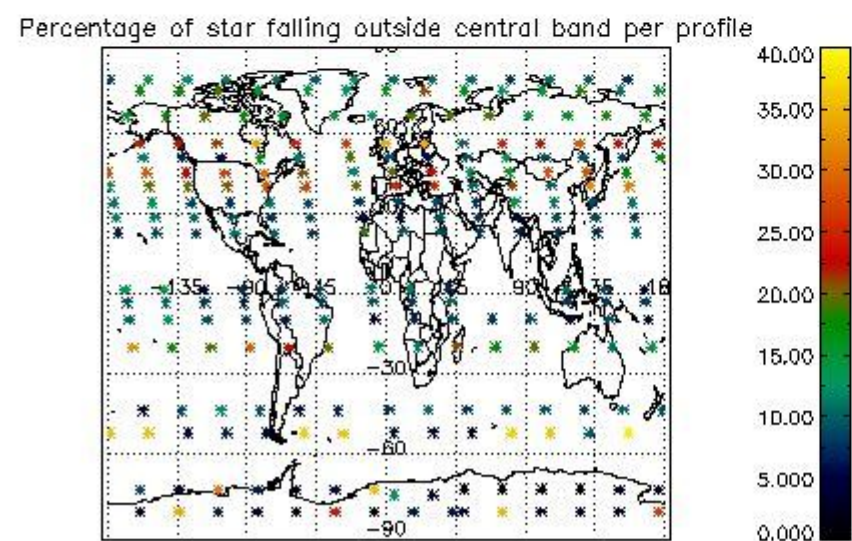
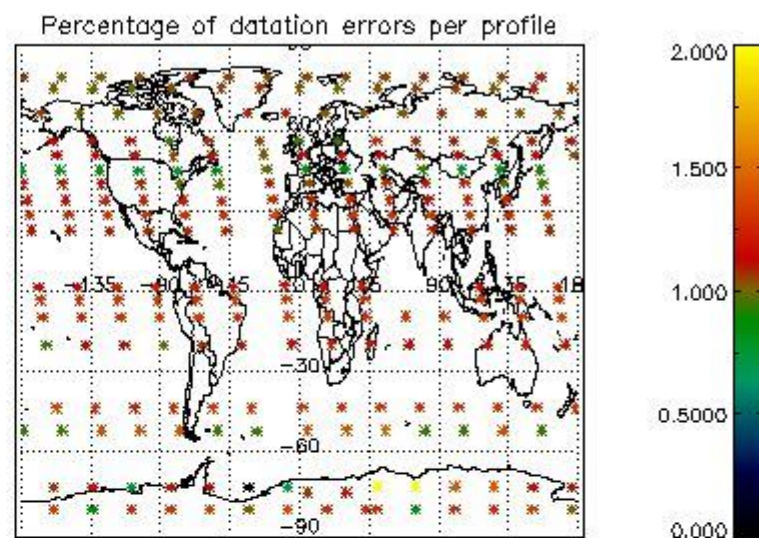
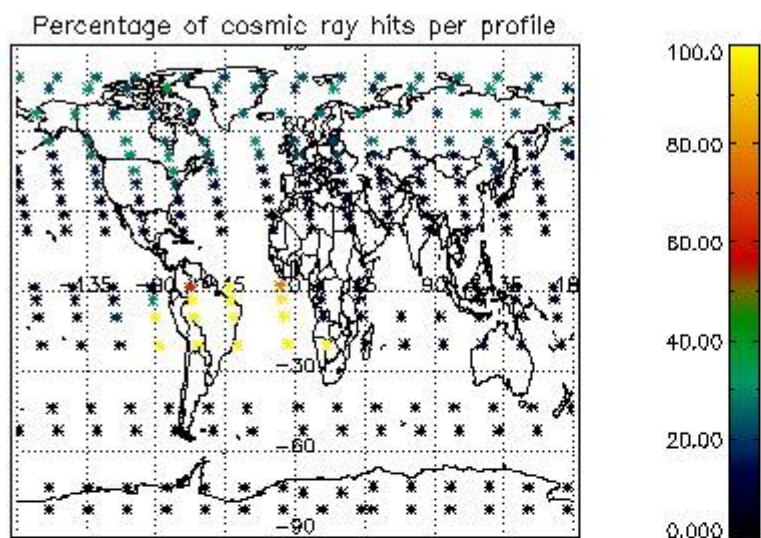


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

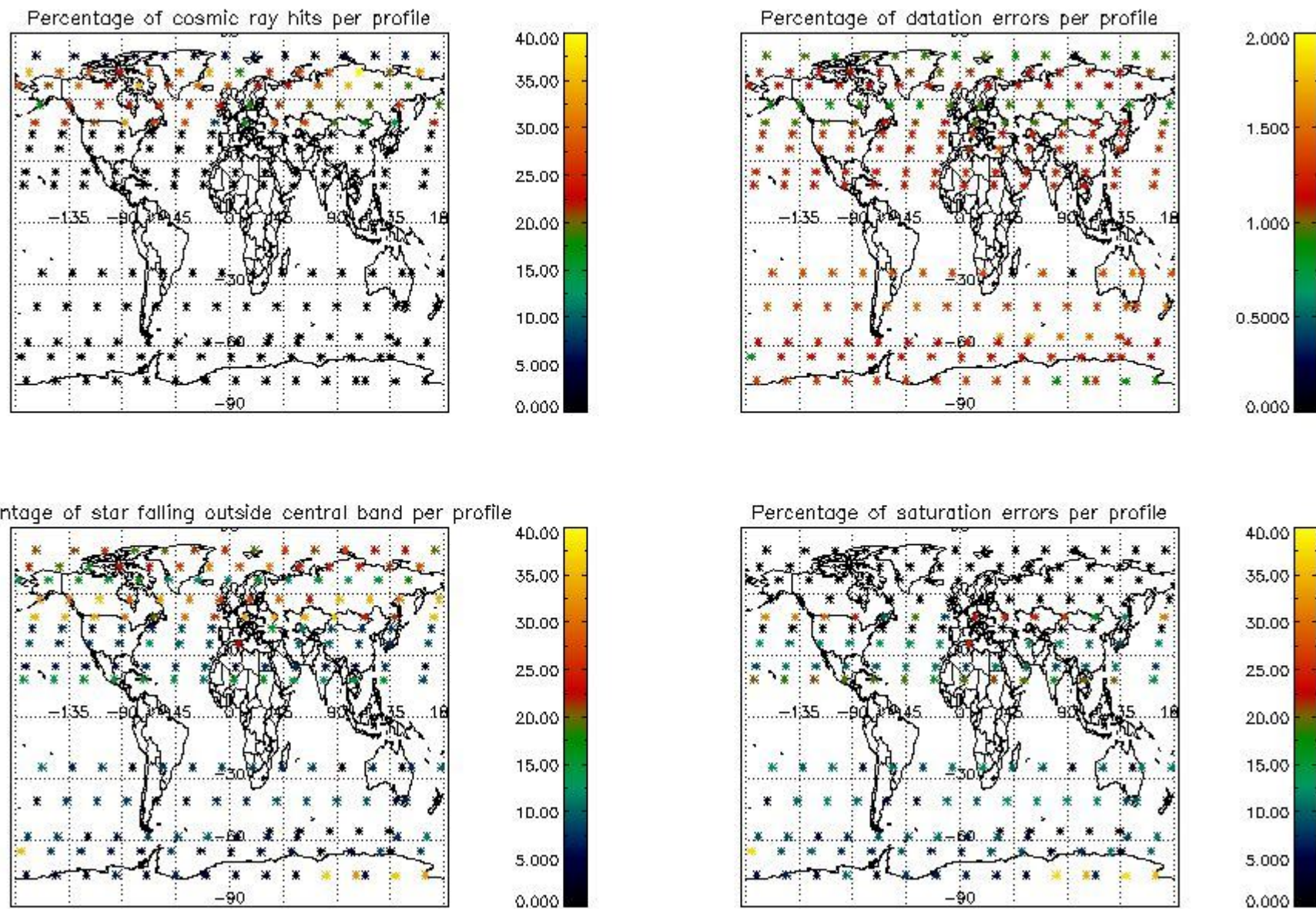


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



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

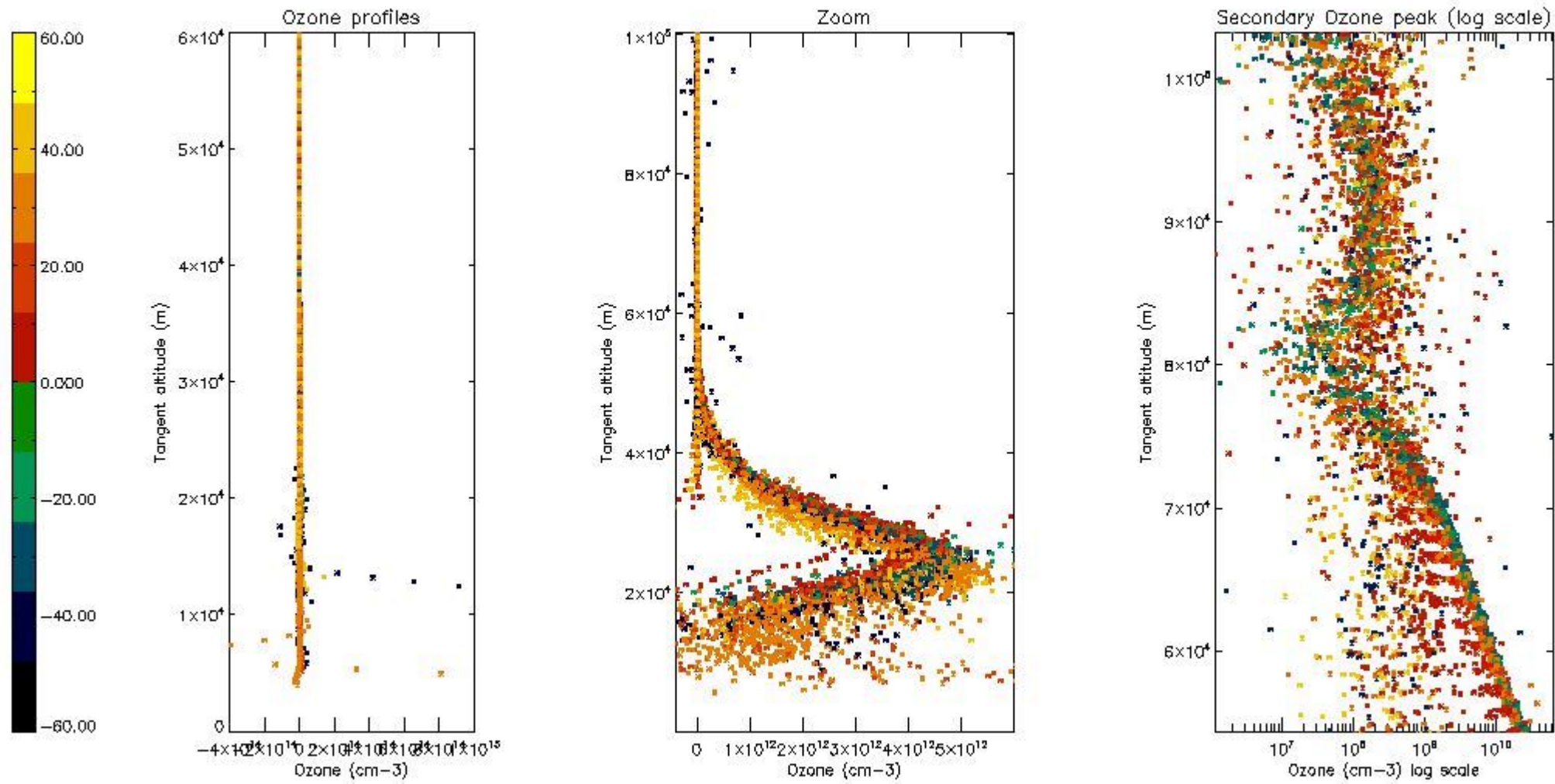
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	16

STD < 10	11
STD < 5	6

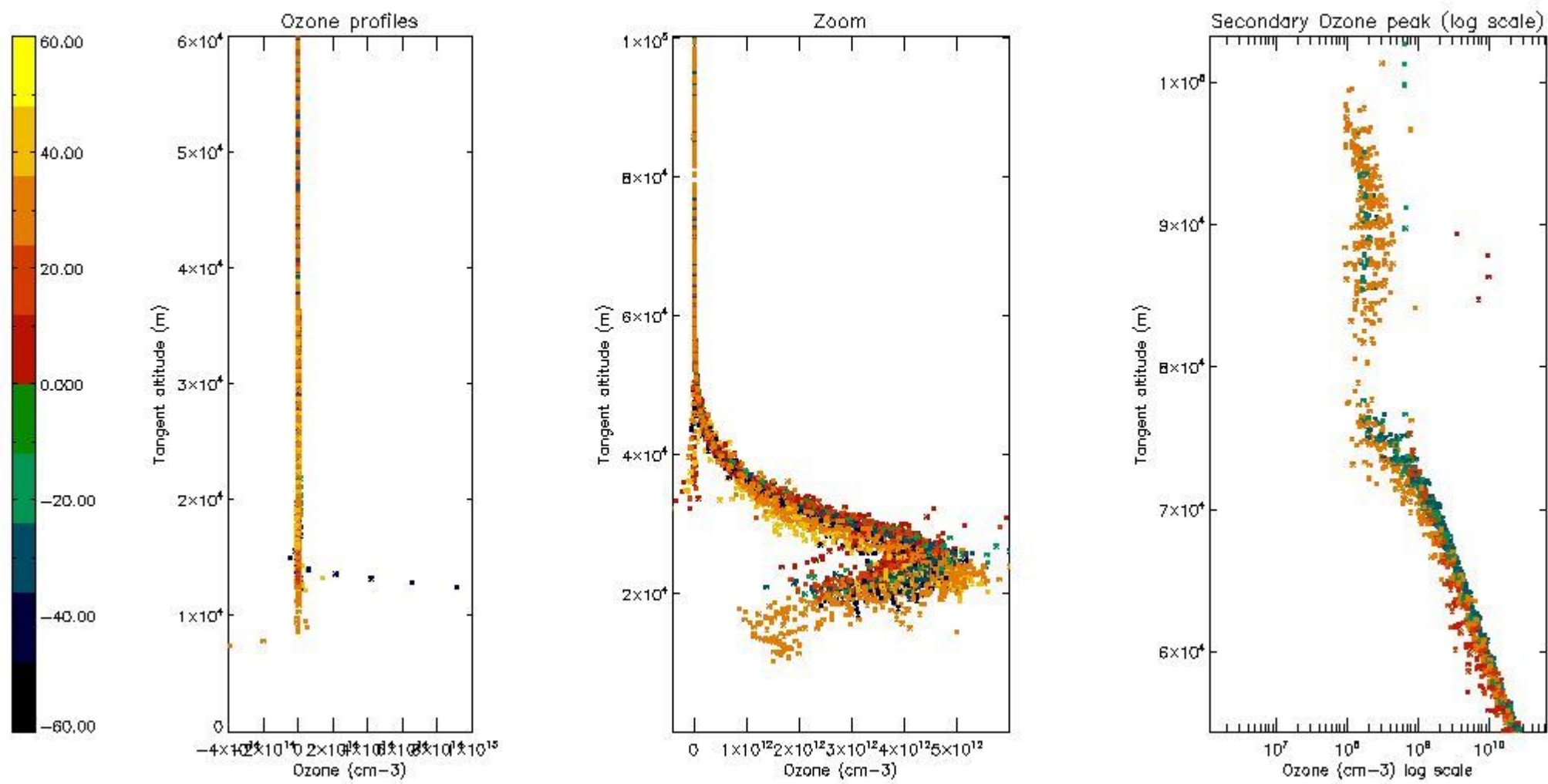
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



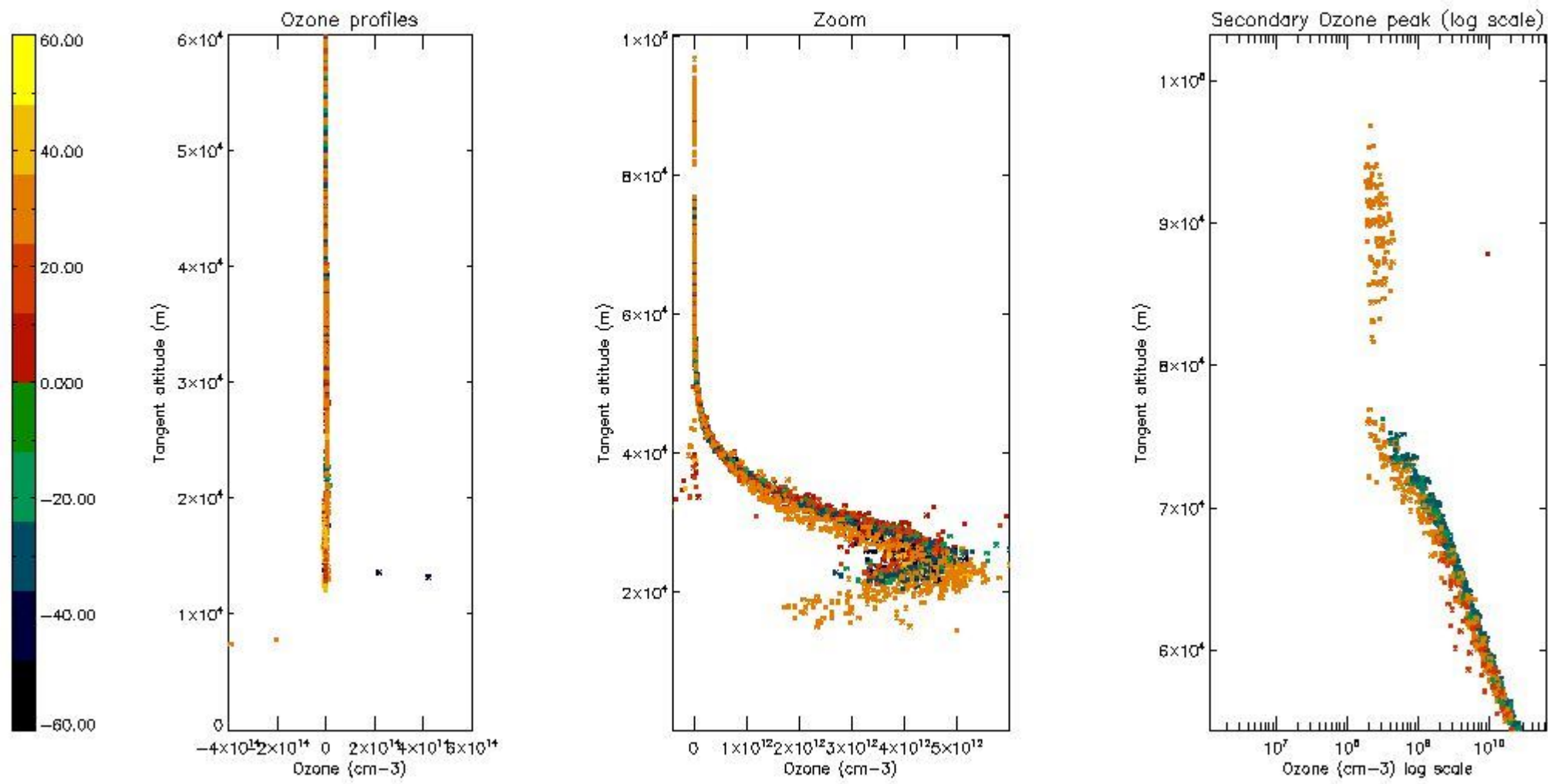
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



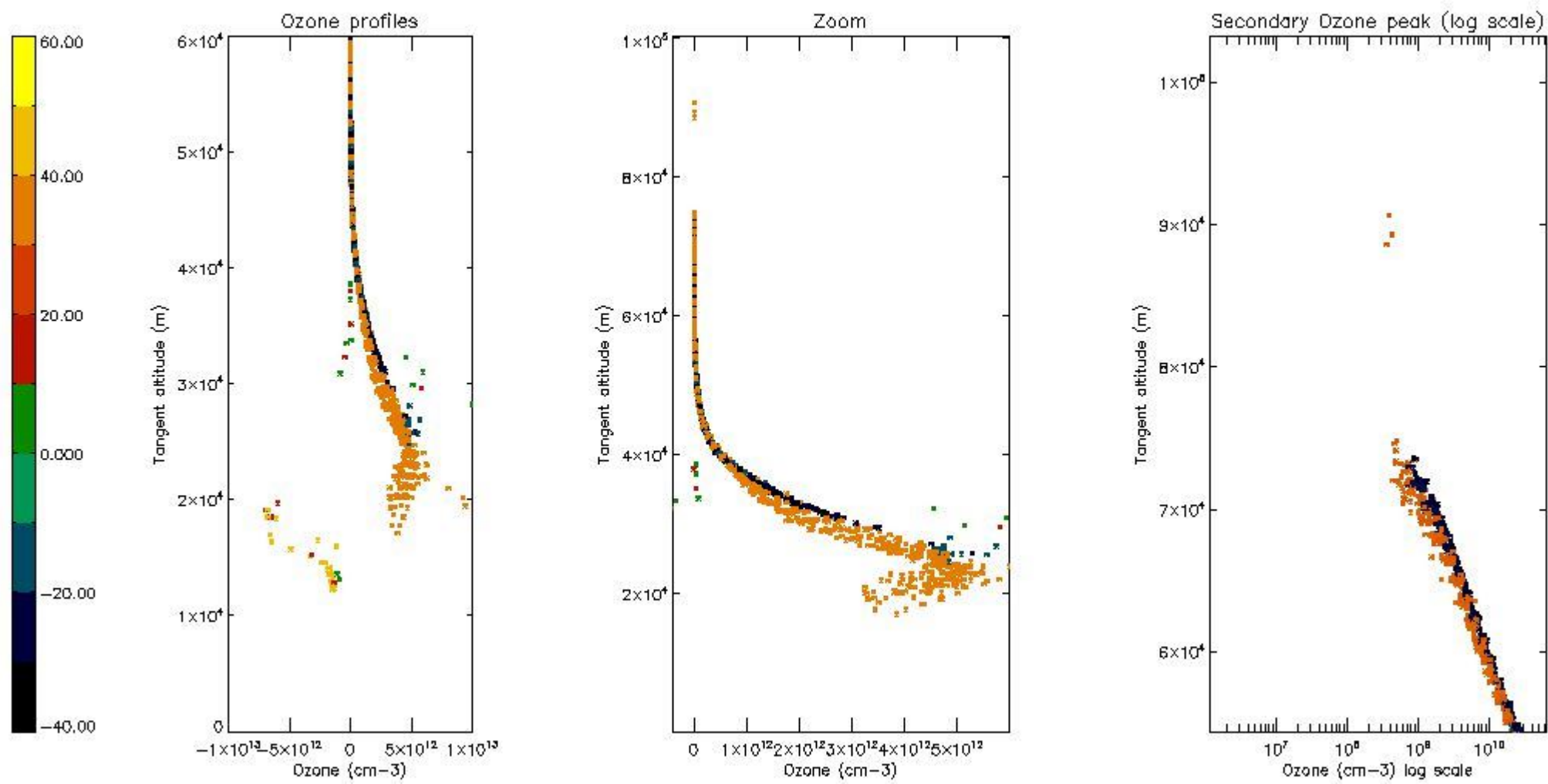
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



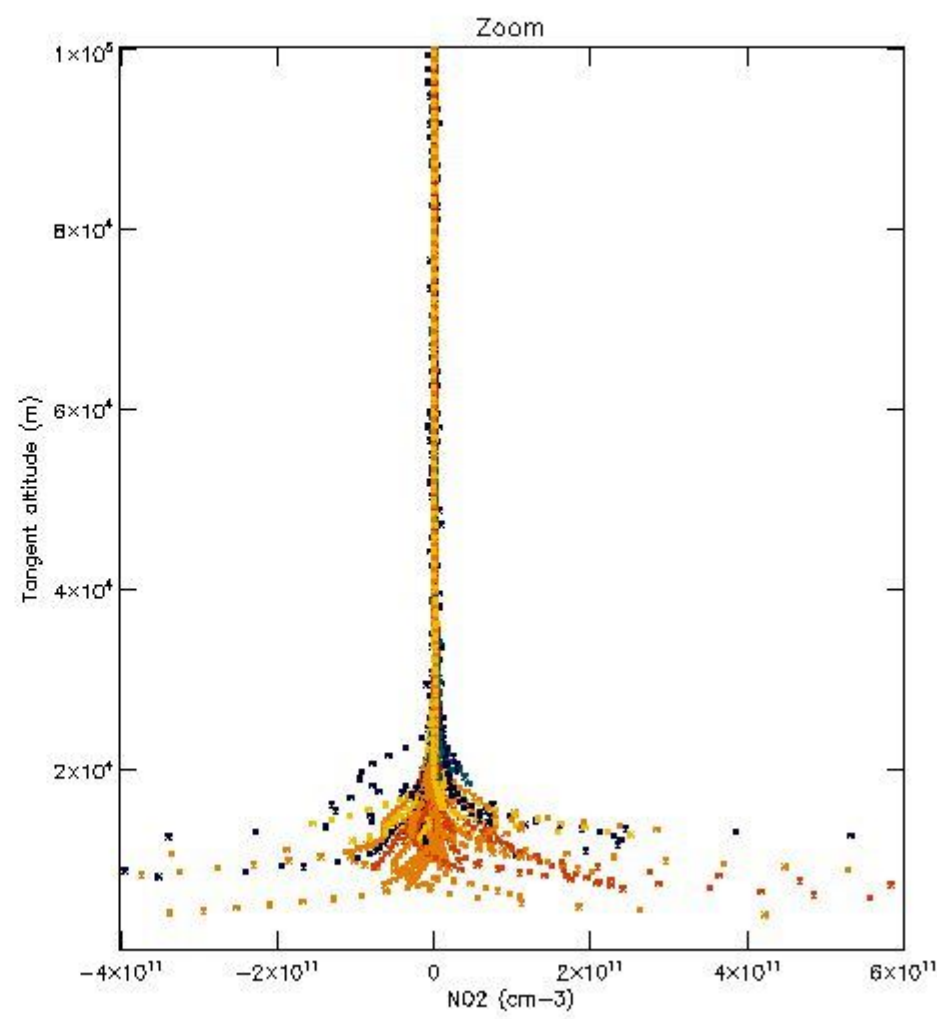
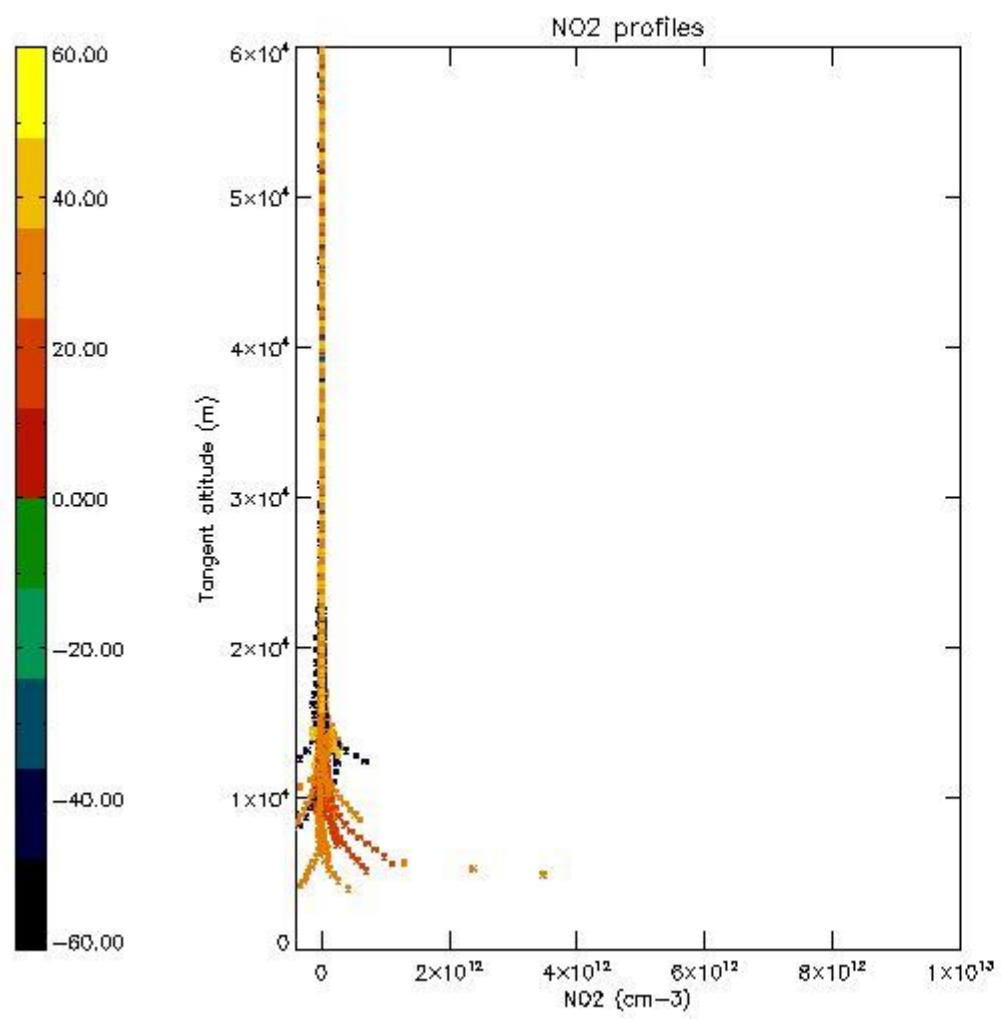
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



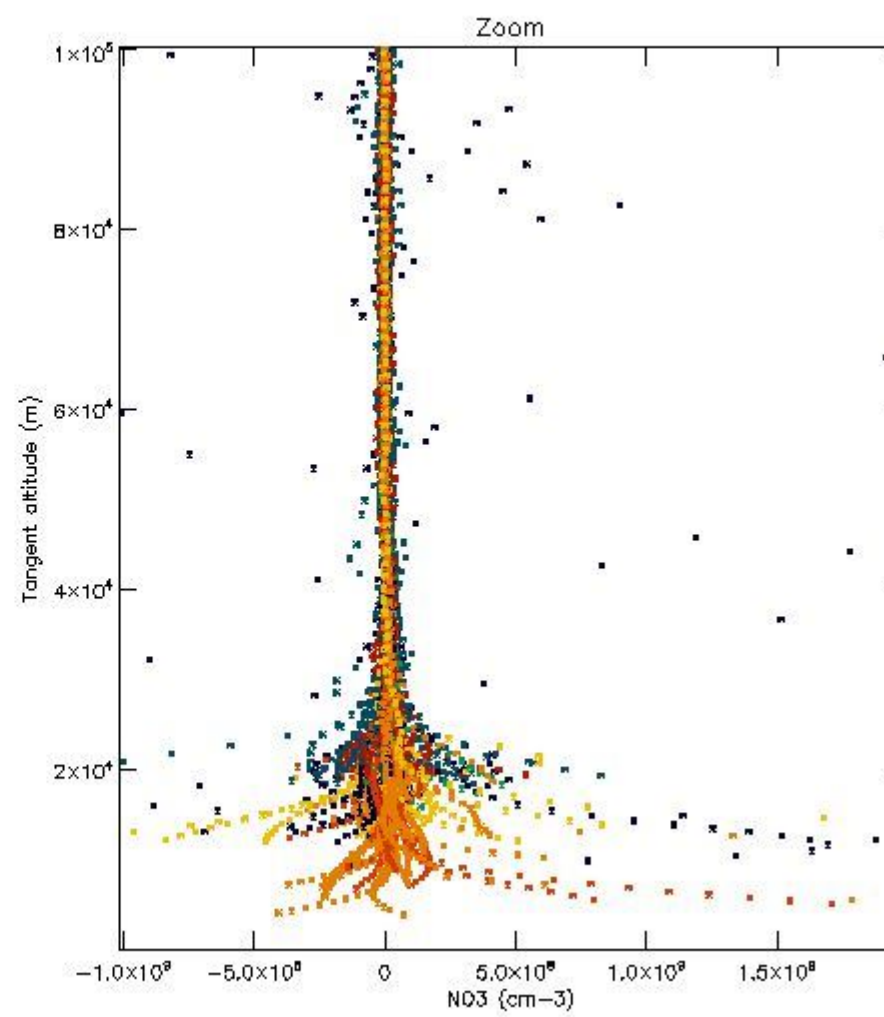
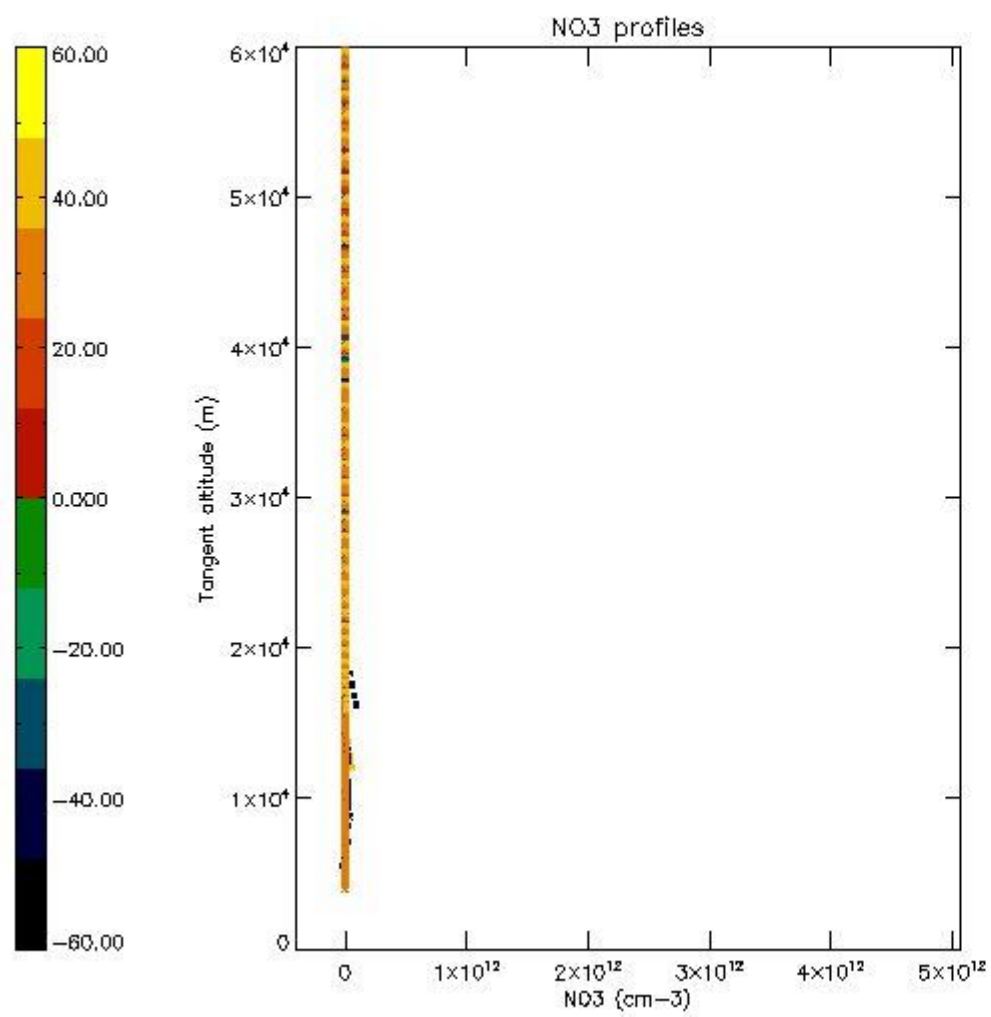
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



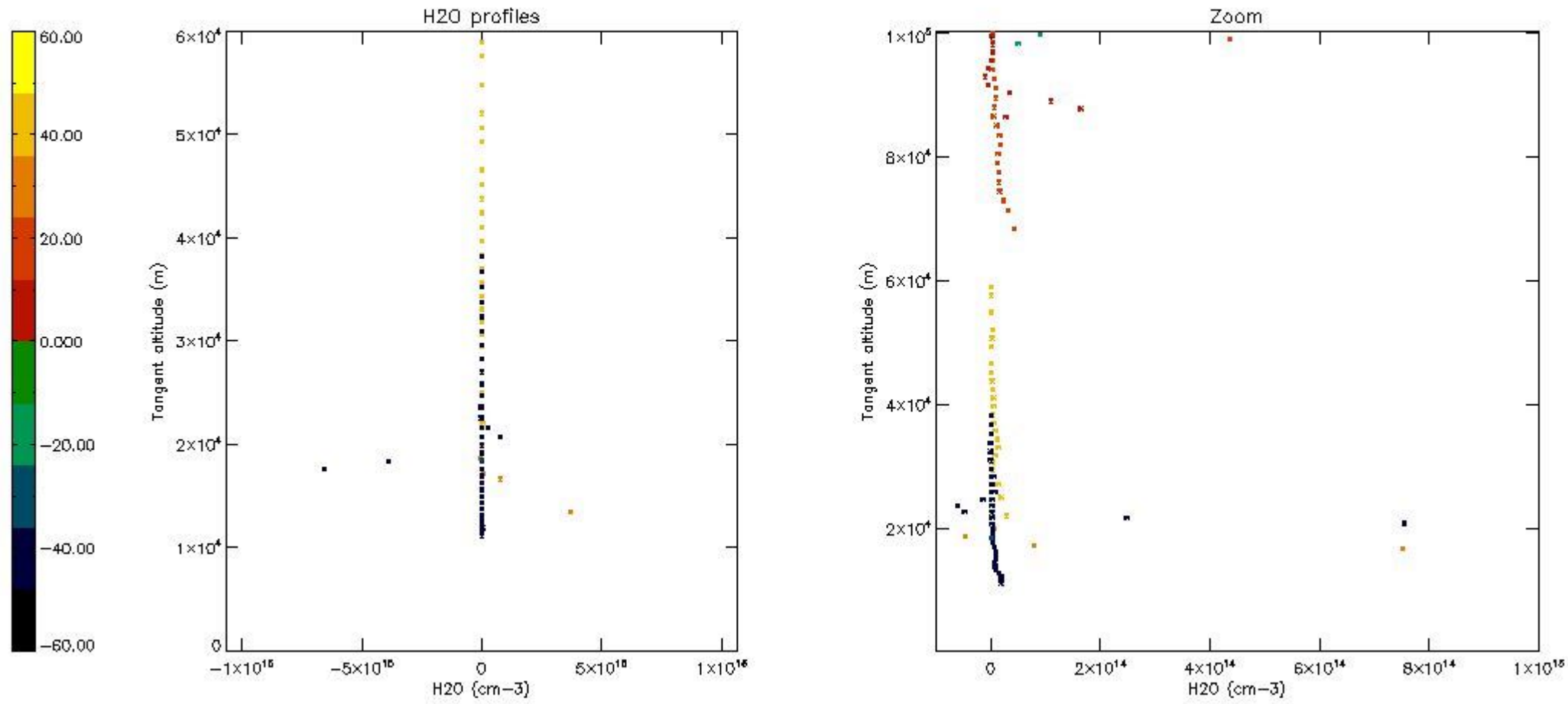
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

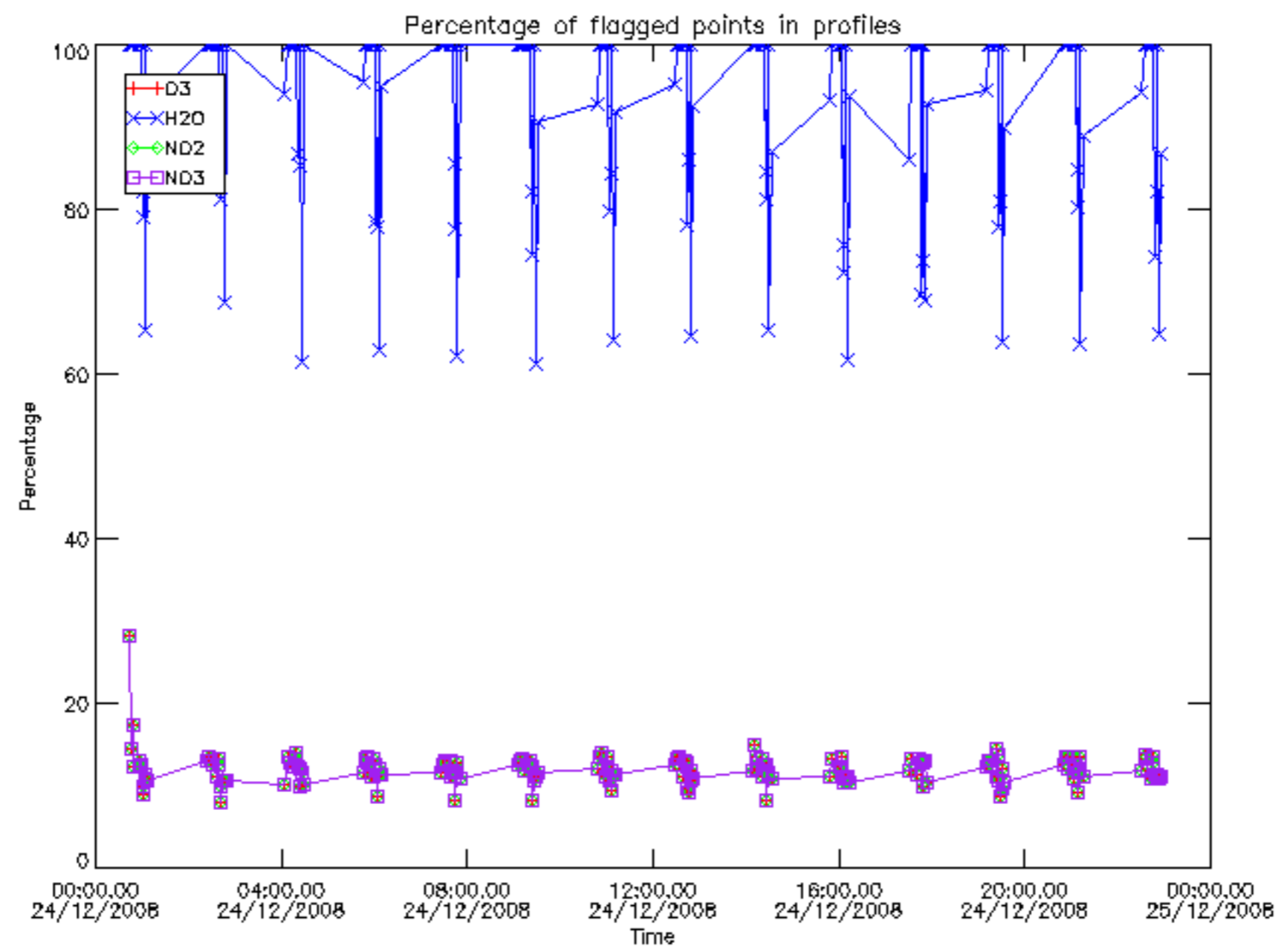
The colorbar represents the latitude.



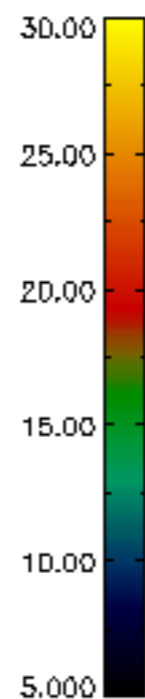
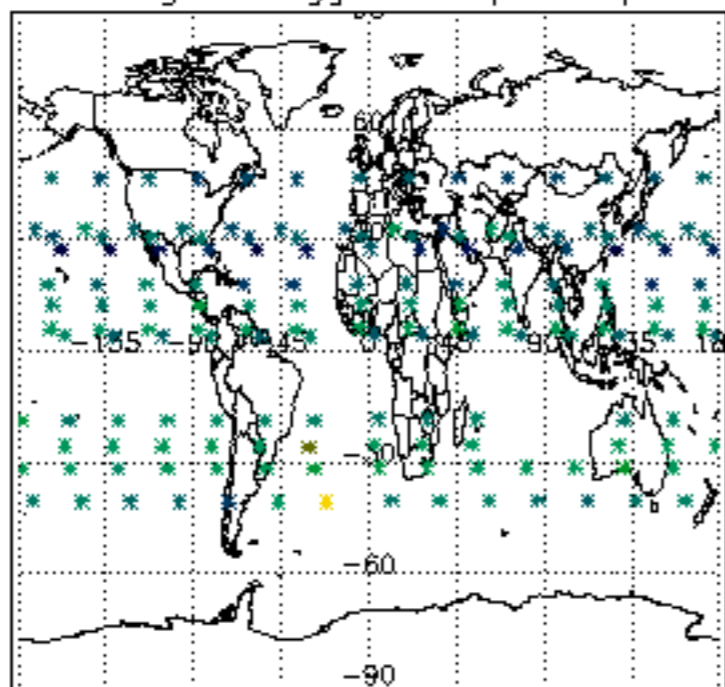
6. Auxiliary Data Files used for the production reported in section 2

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.

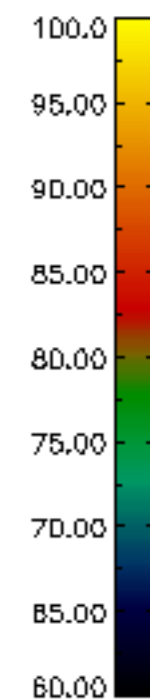
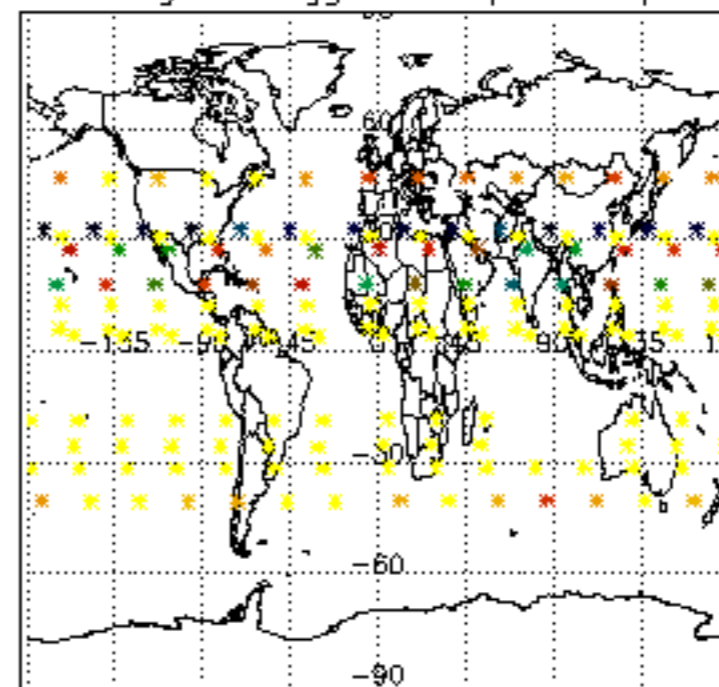
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	24-DEC-2008 00:05:30
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	24-DEC-2008 00:05:30
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	24-DEC-2008 00:05:30



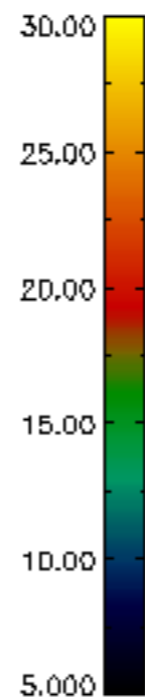
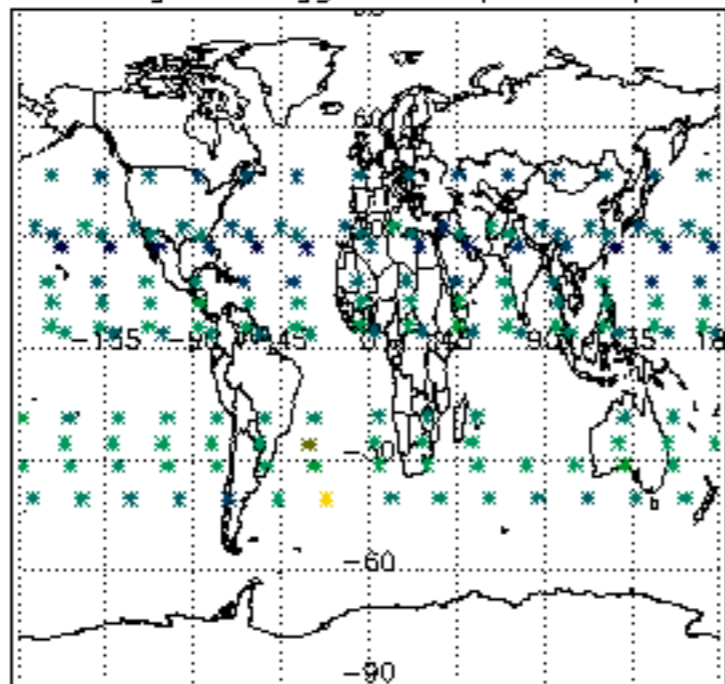
Percentage of flagged data per D3 profile



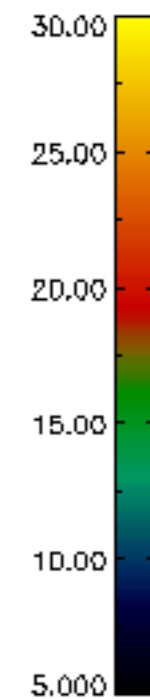
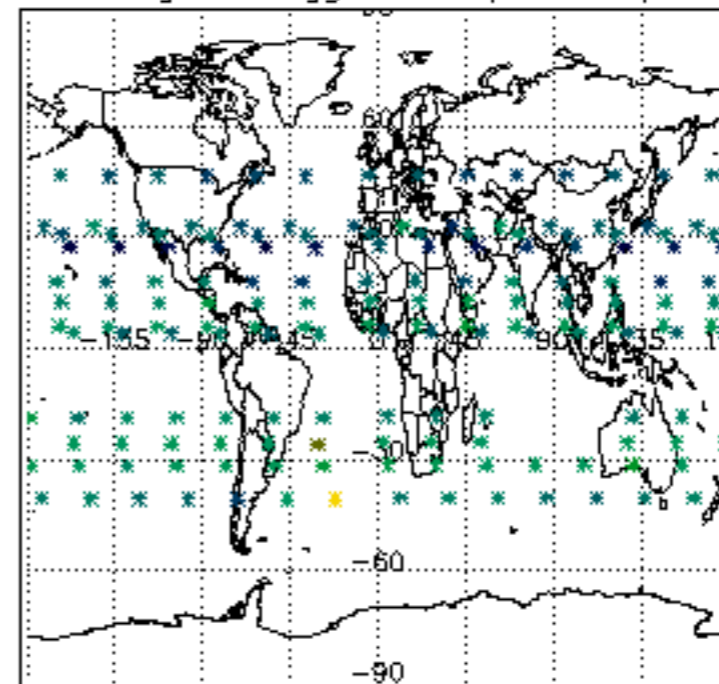
Percentage of flagged data per H2O profile

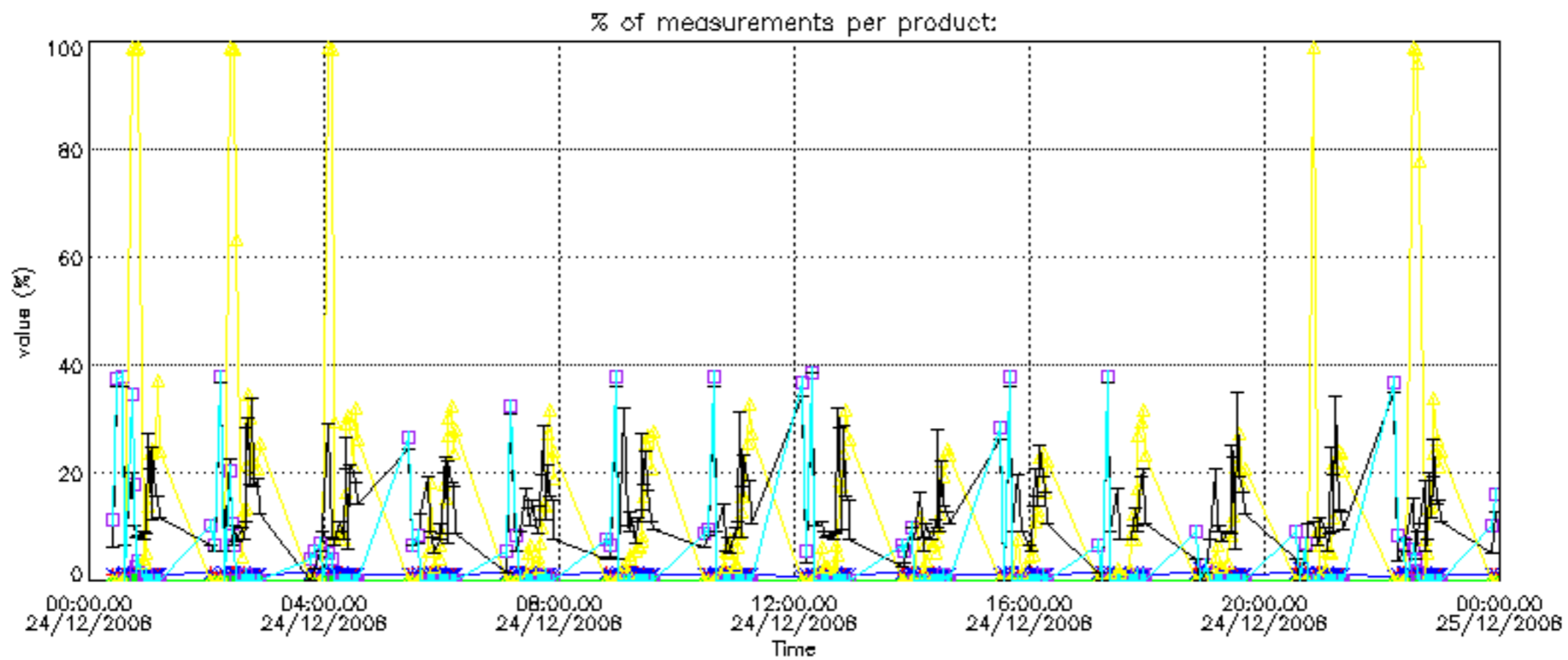


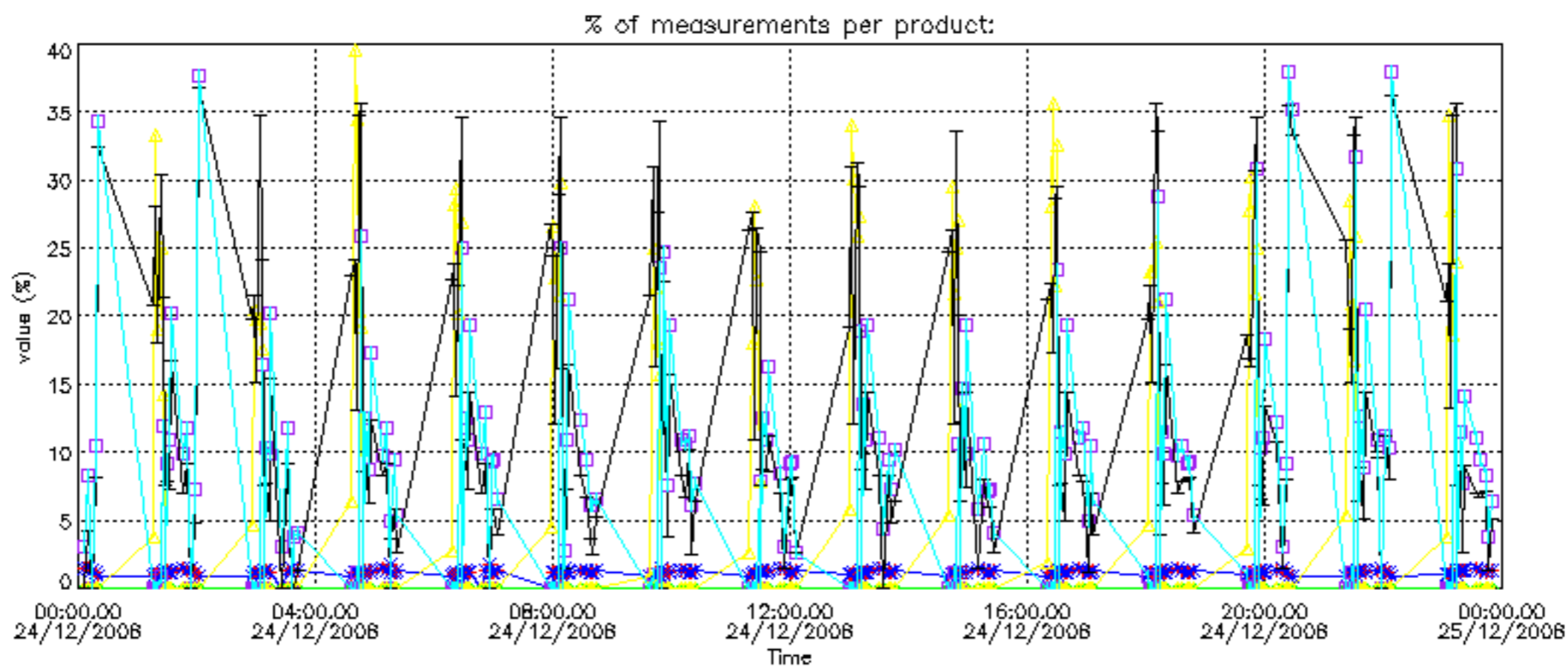
Percentage of flagged data per NO2 profile



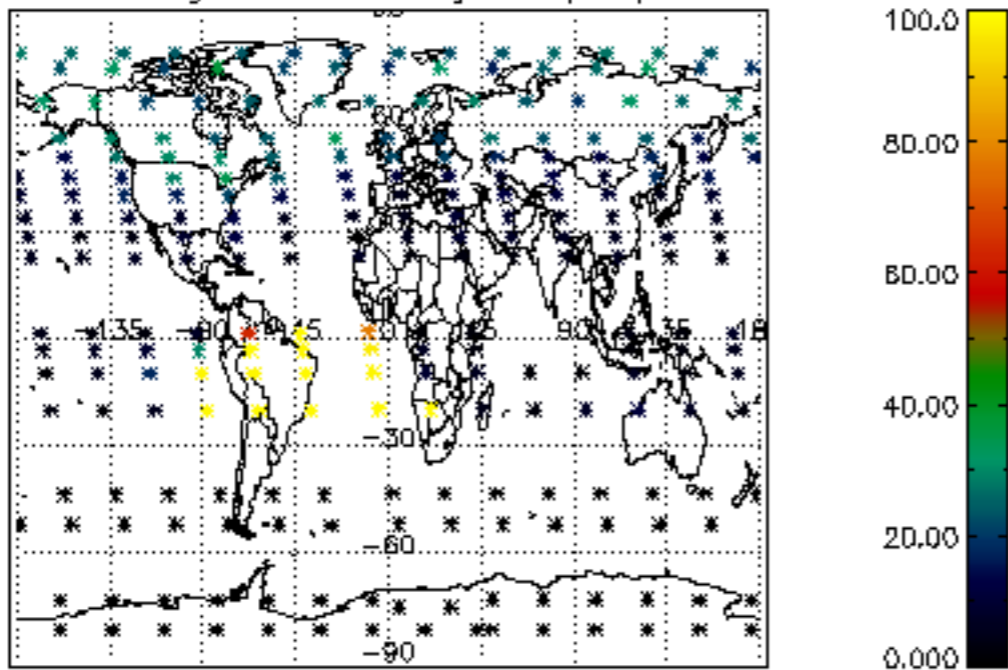
Percentage of flagged data per NO3 profile



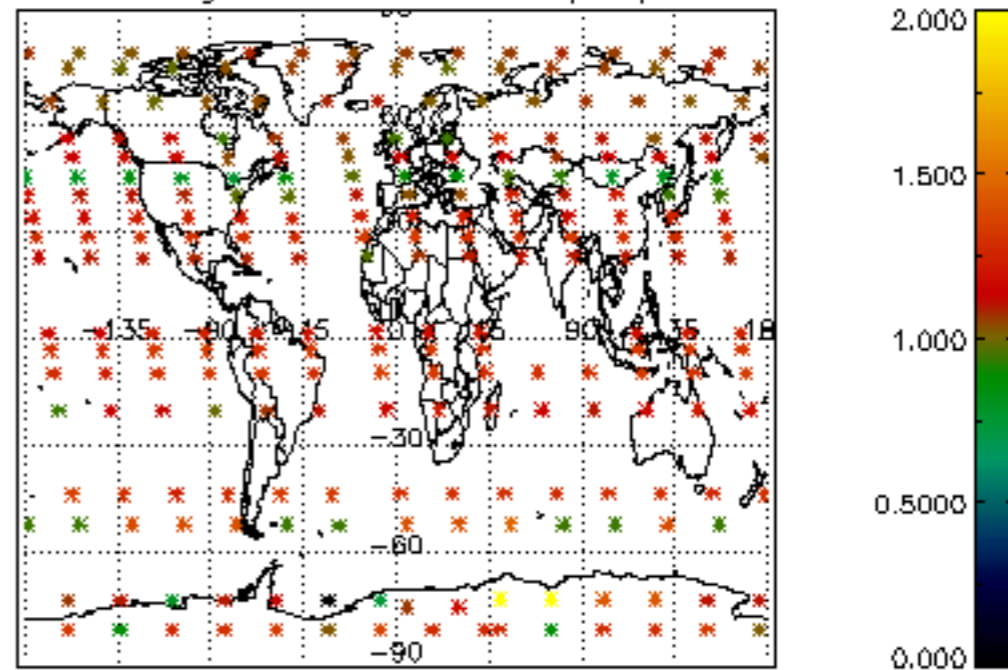




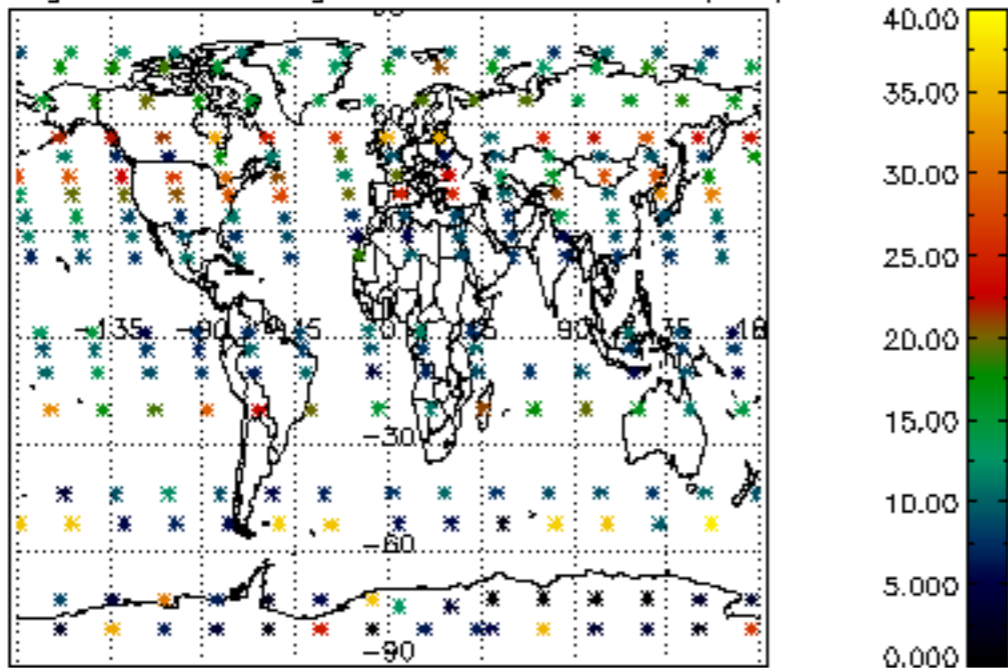
Percentage of cosmic ray hits per profile



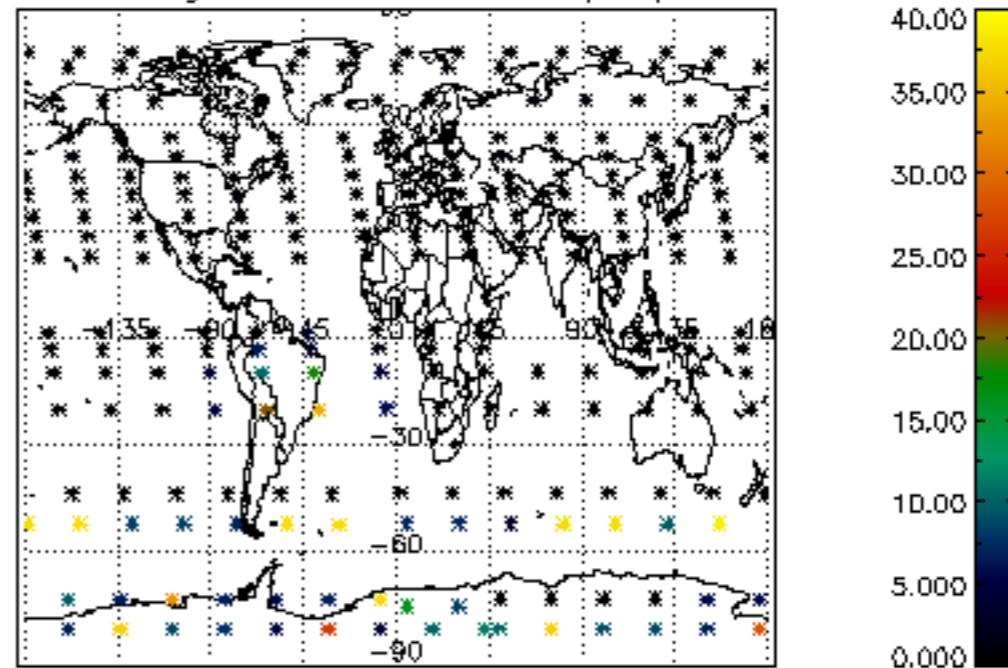
Percentage of datation errors per profile



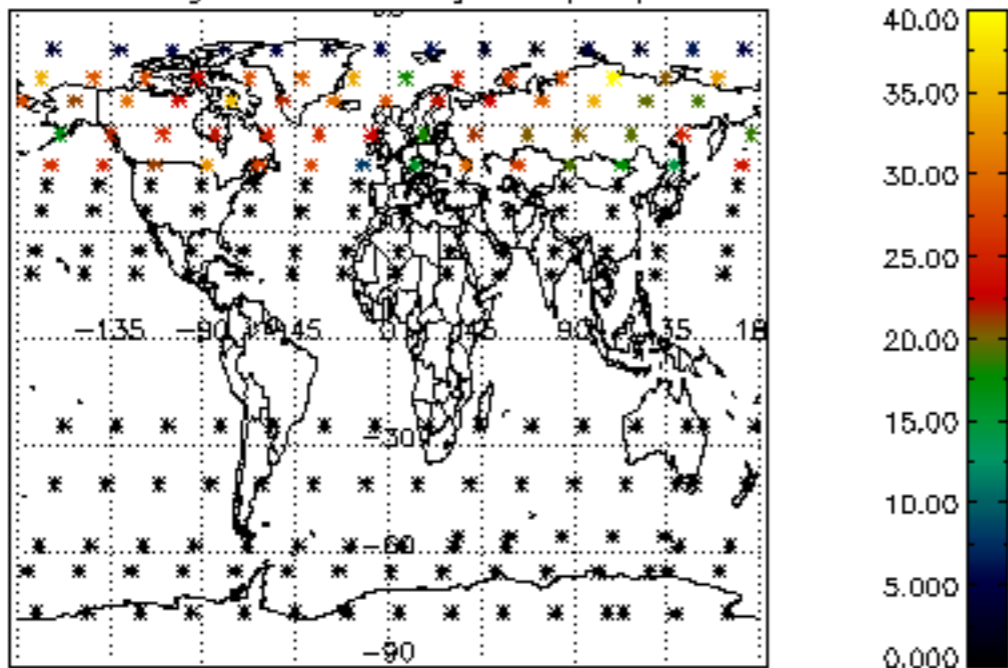
Percentage of star falling outside central band per profile



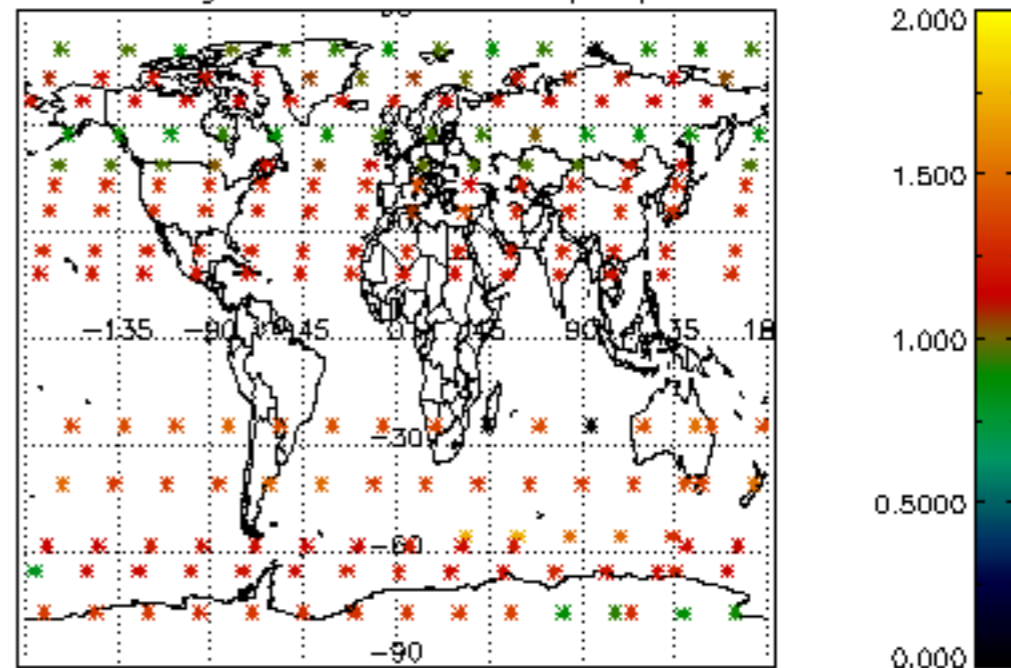
Percentage of saturation errors per profile



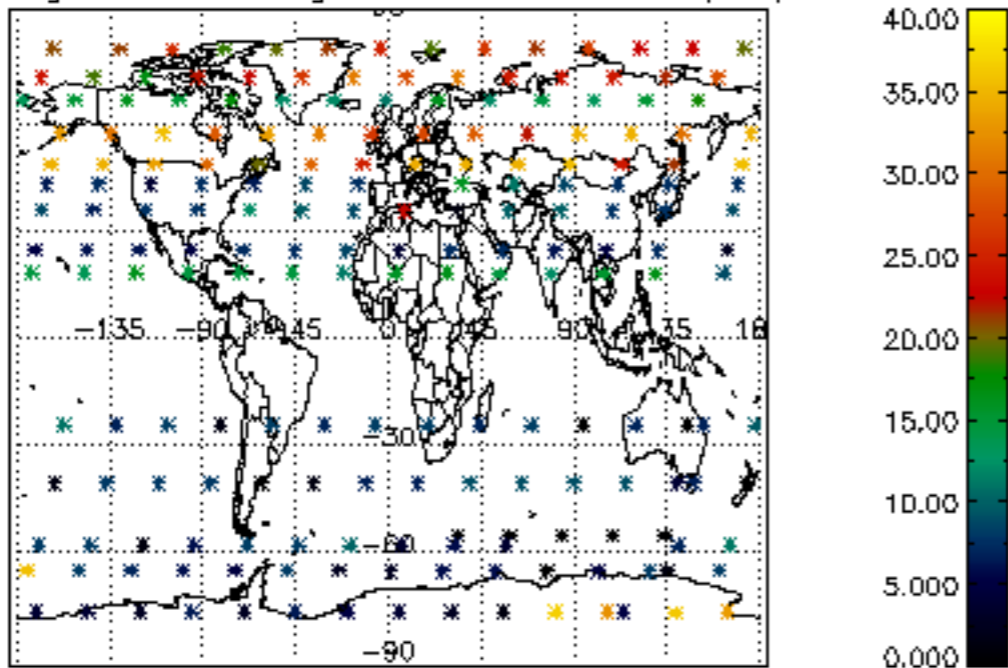
Percentage of cosmic ray hits per profile



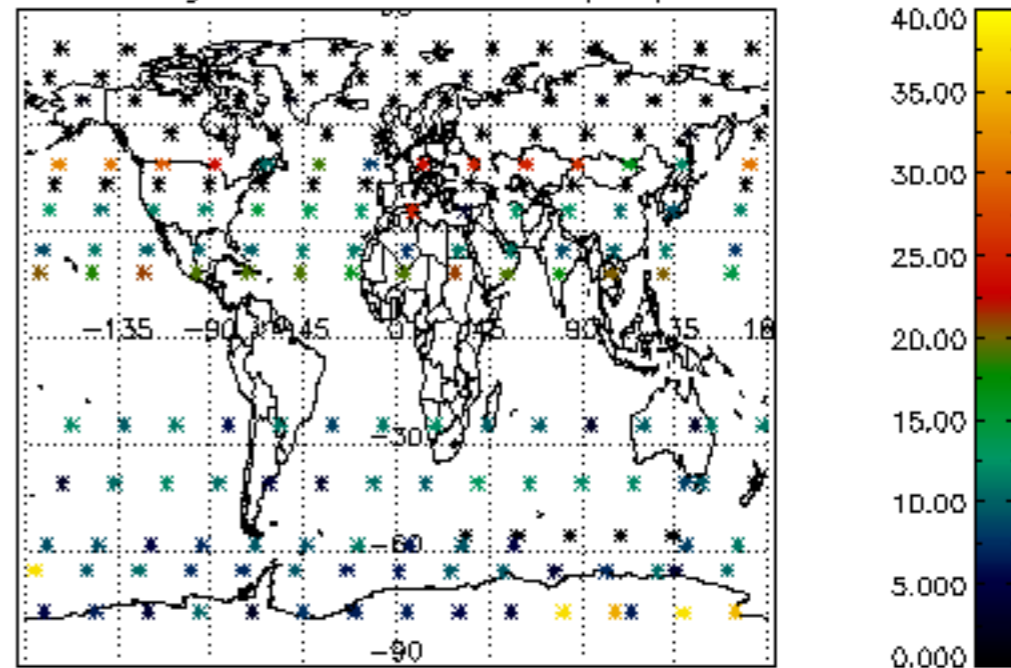
Percentage of datation errors per profile

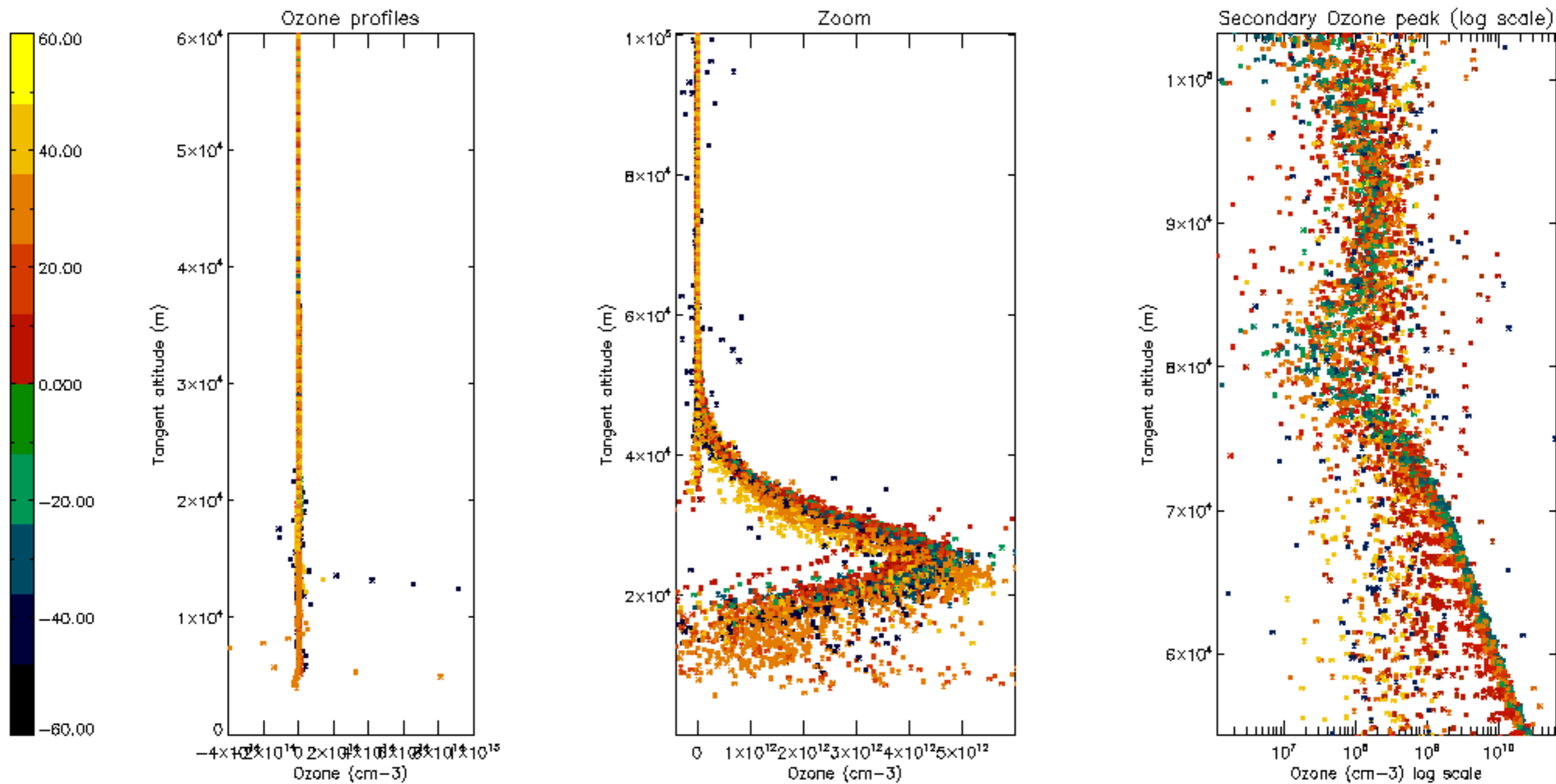


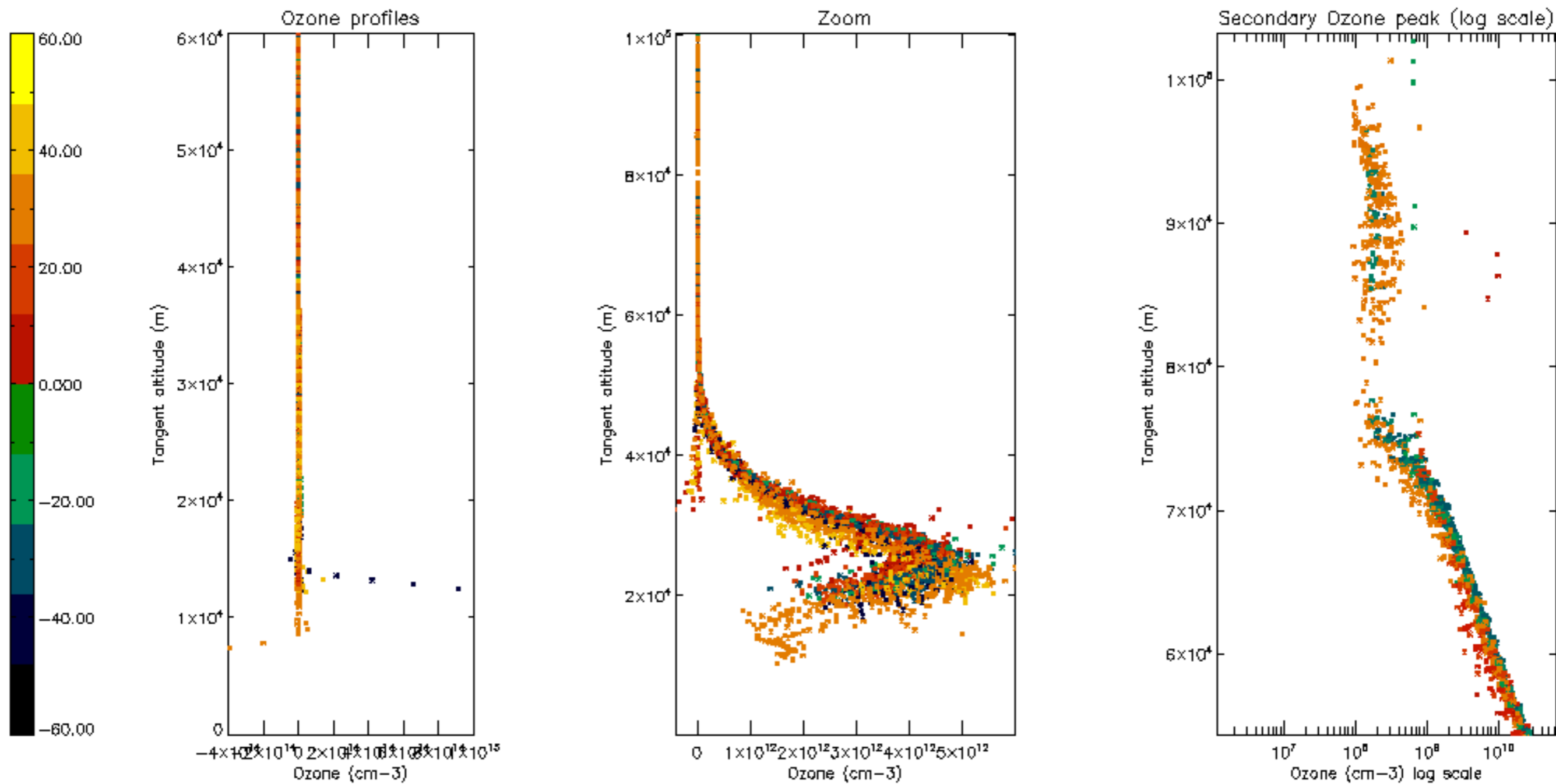
Percentage of star falling outside central band per profile

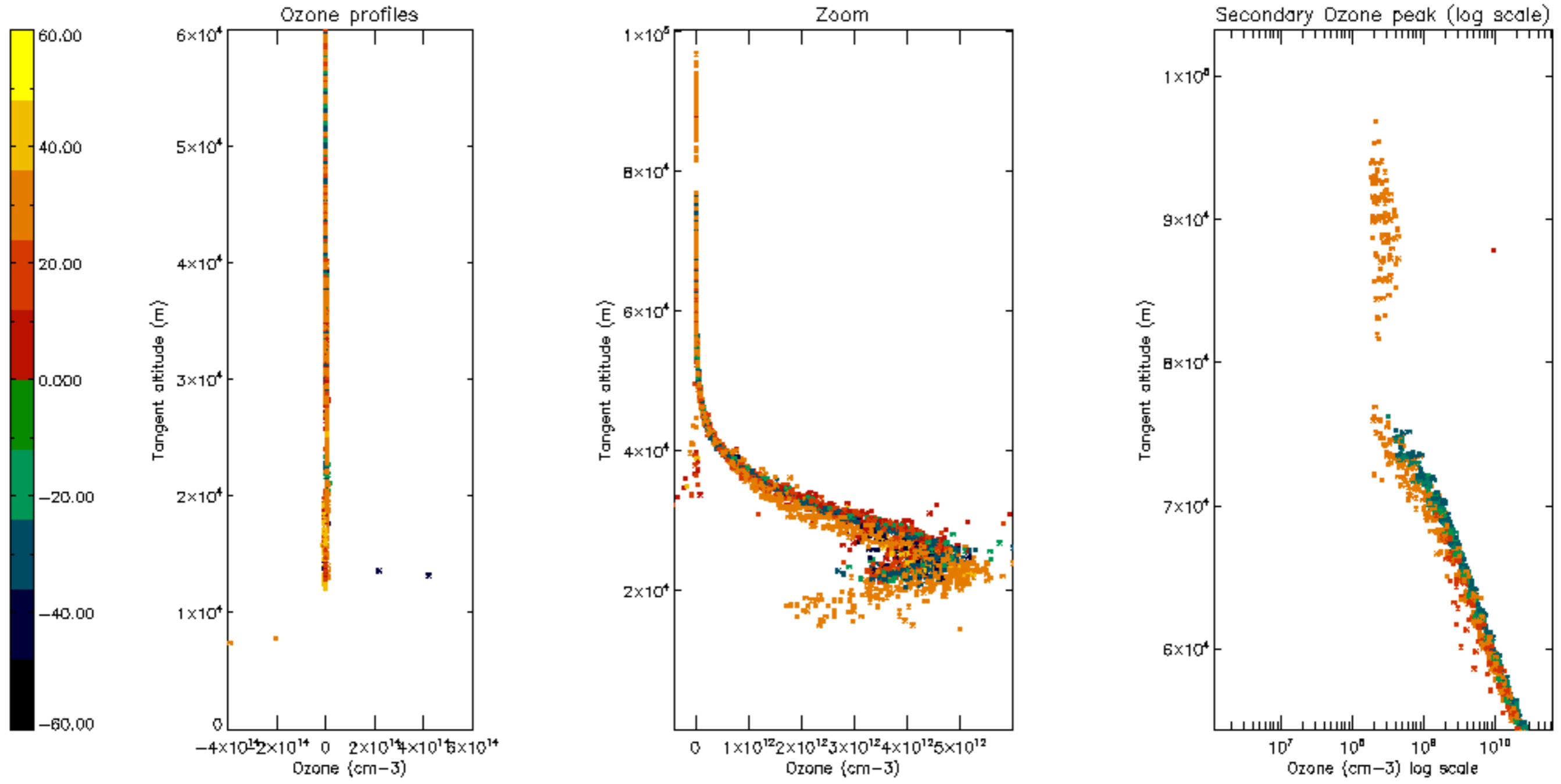


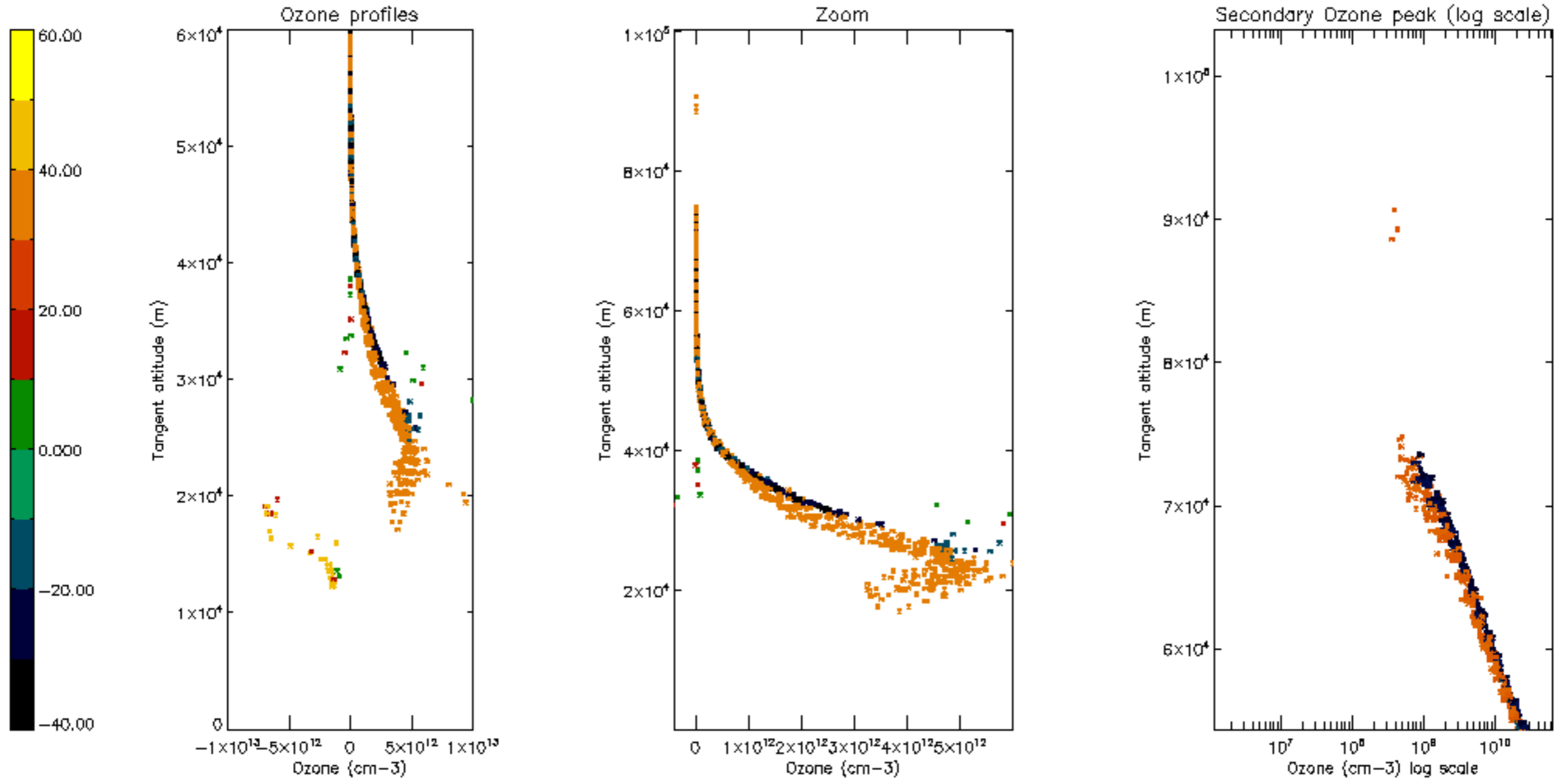
Percentage of saturation errors per profile

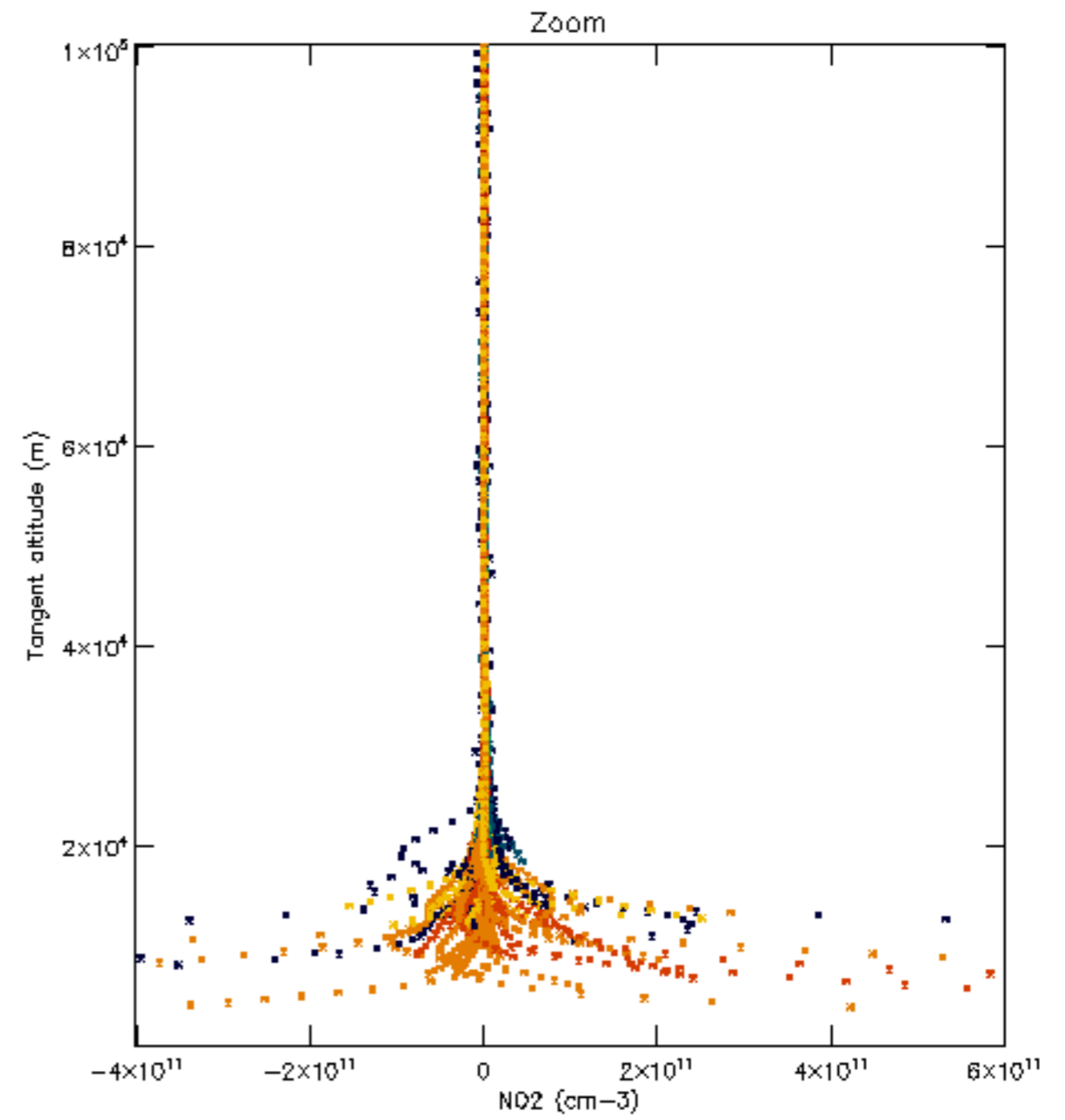
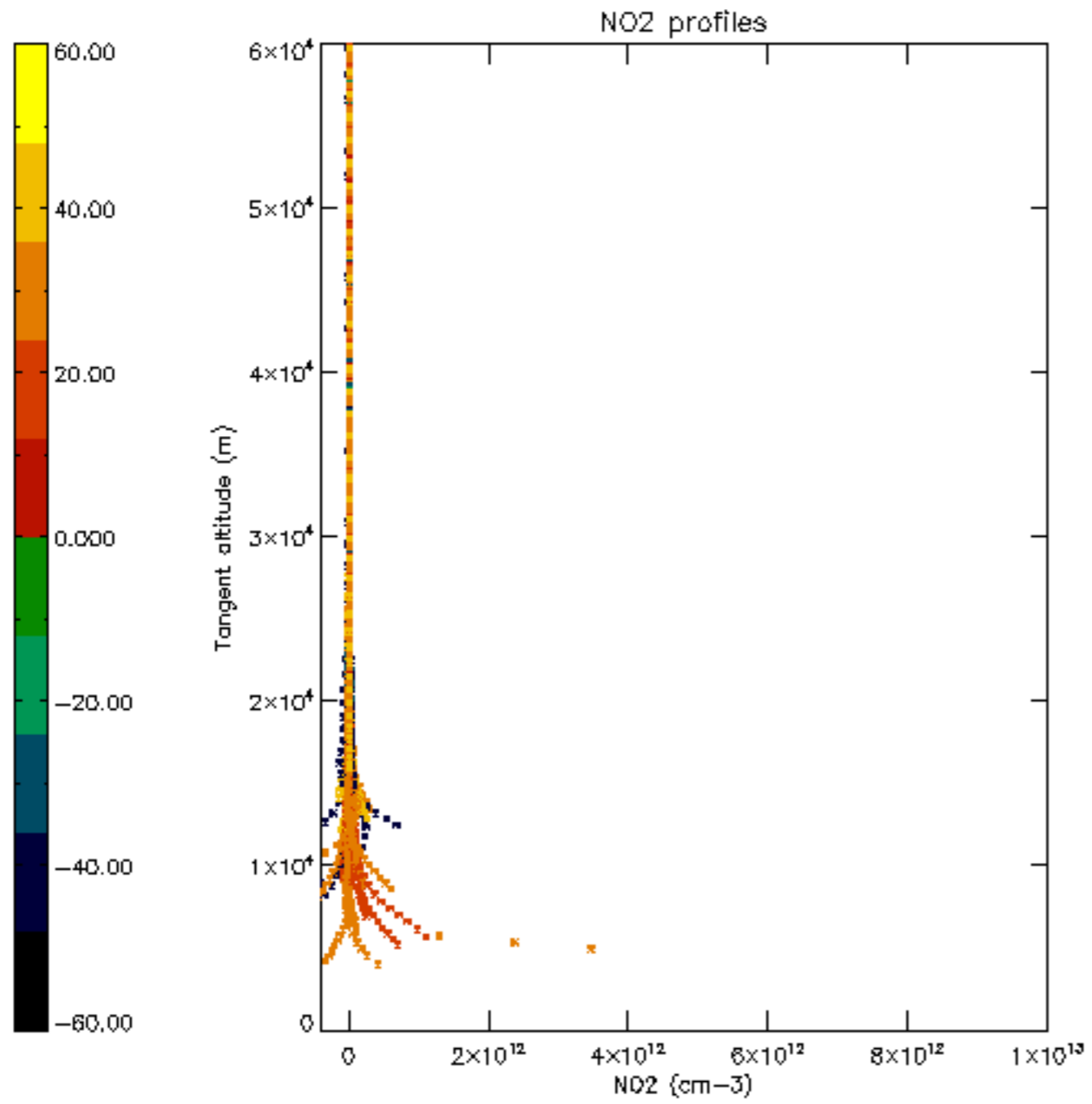


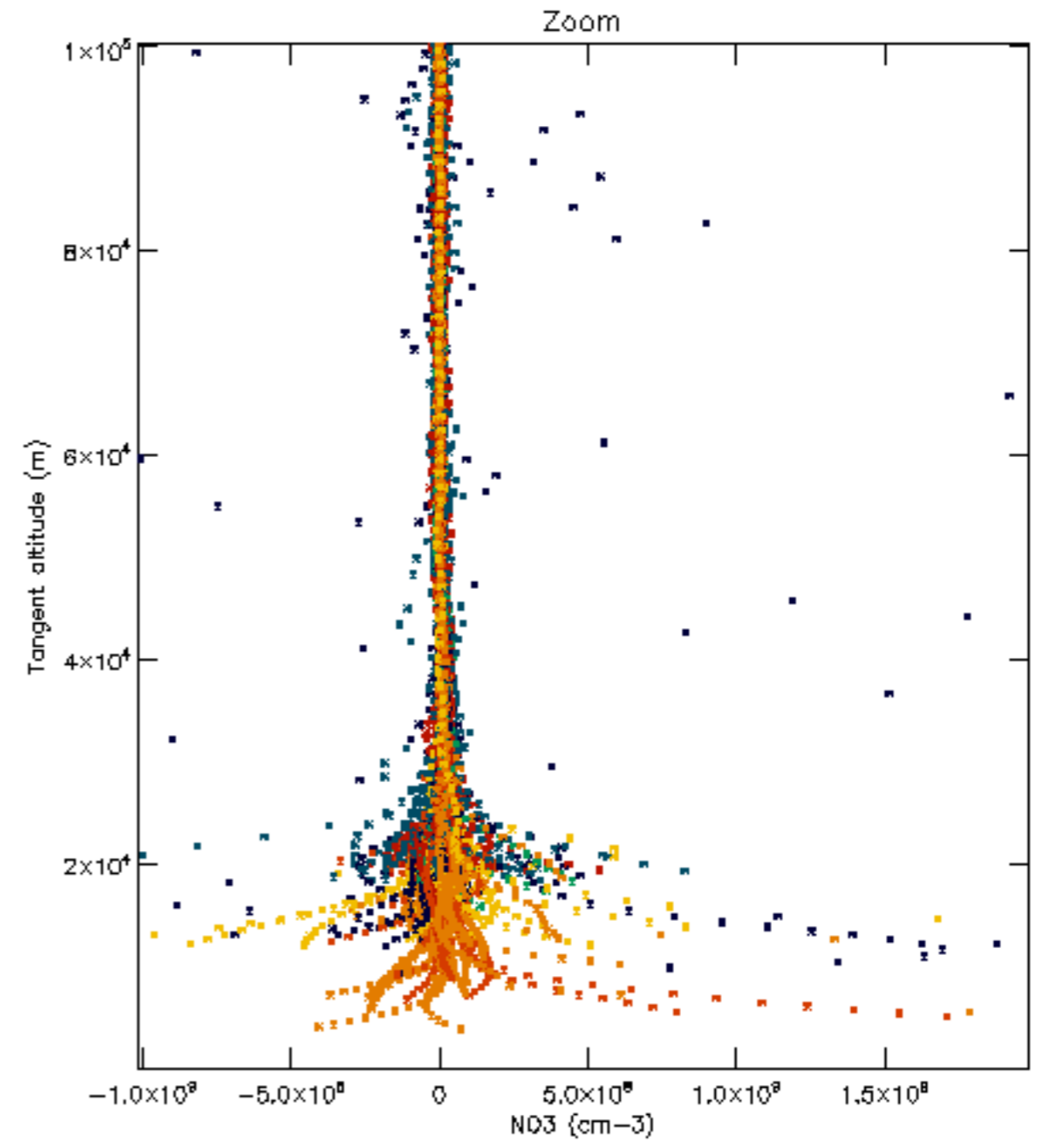
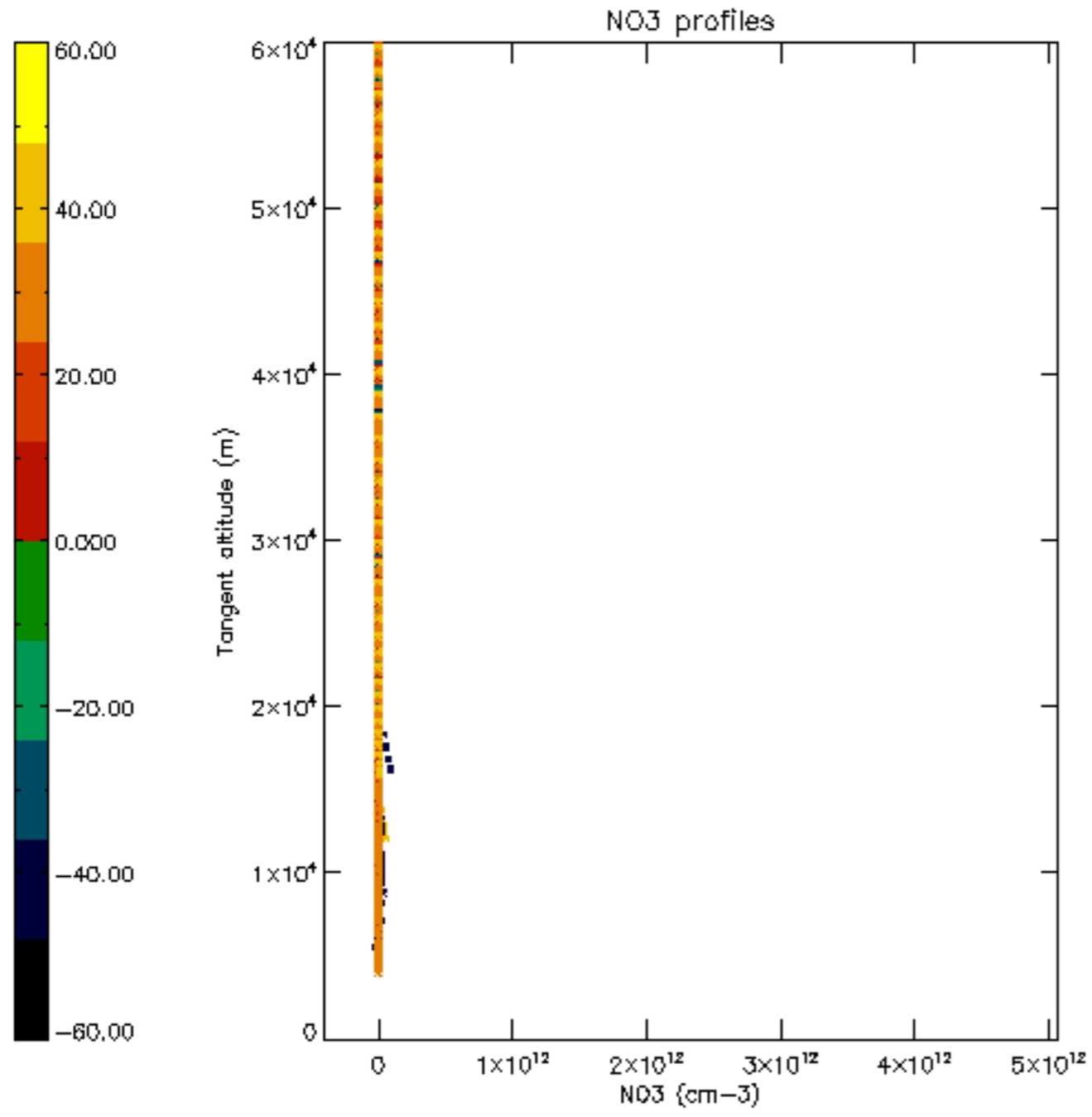


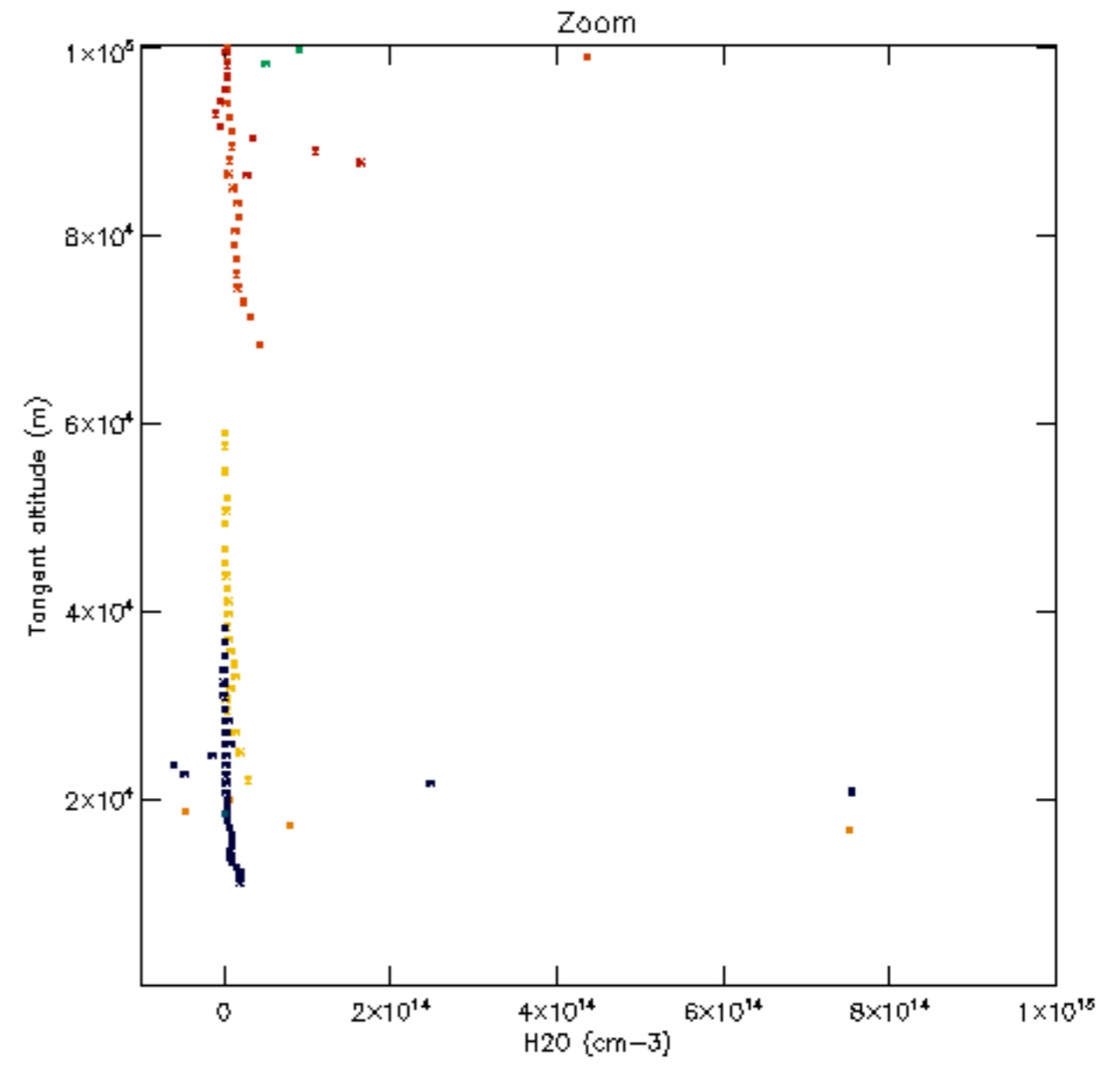
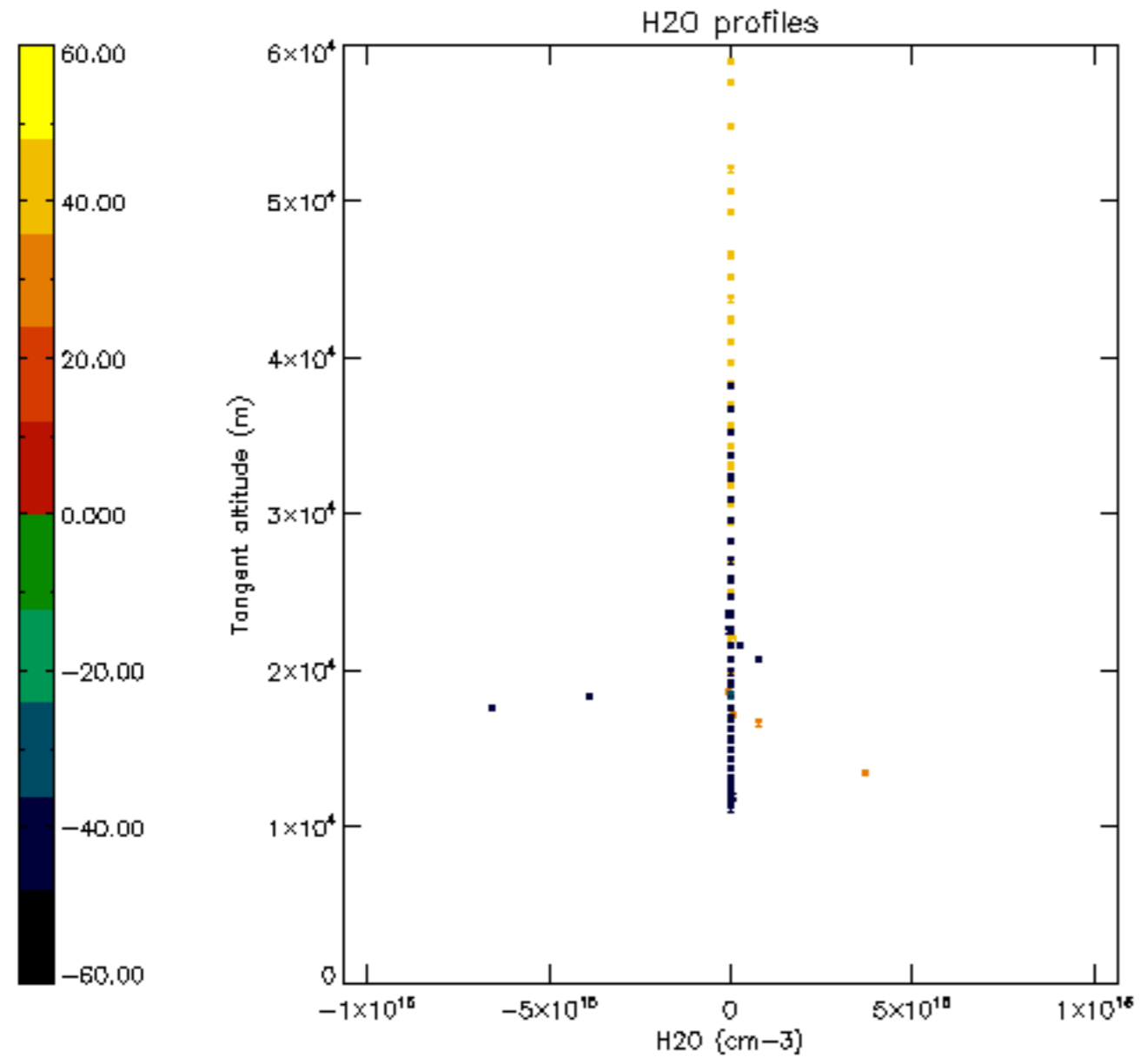


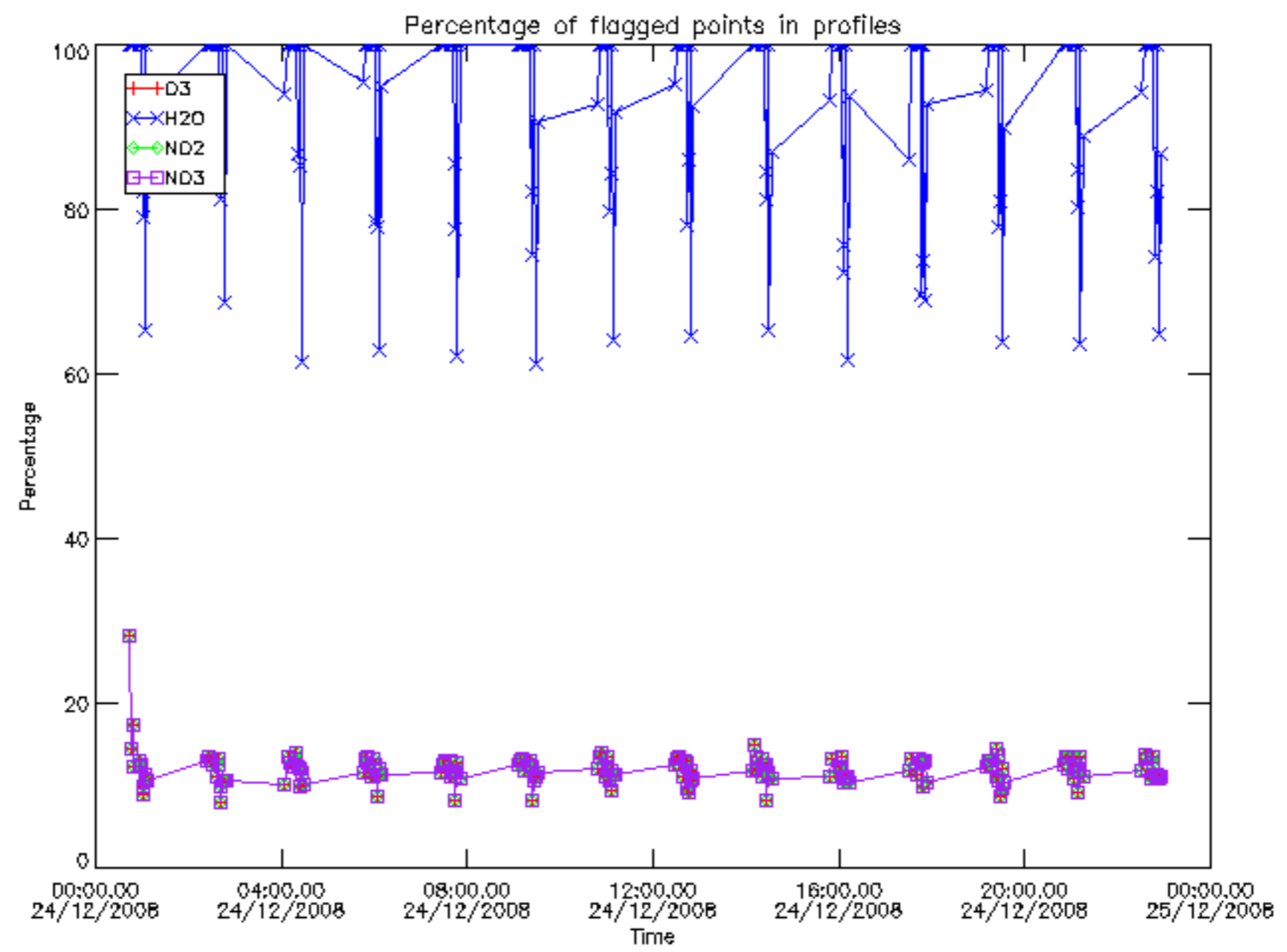




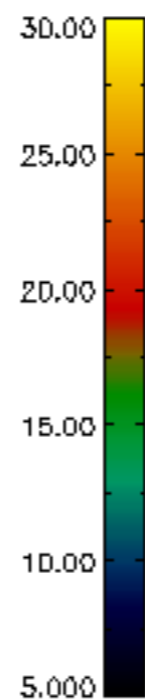
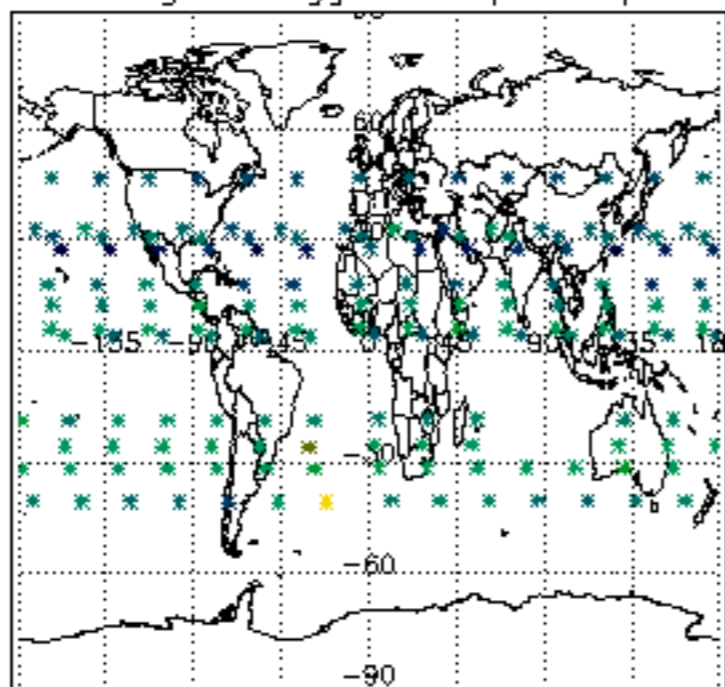




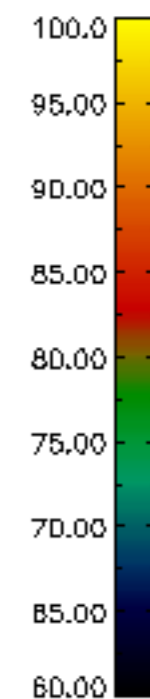
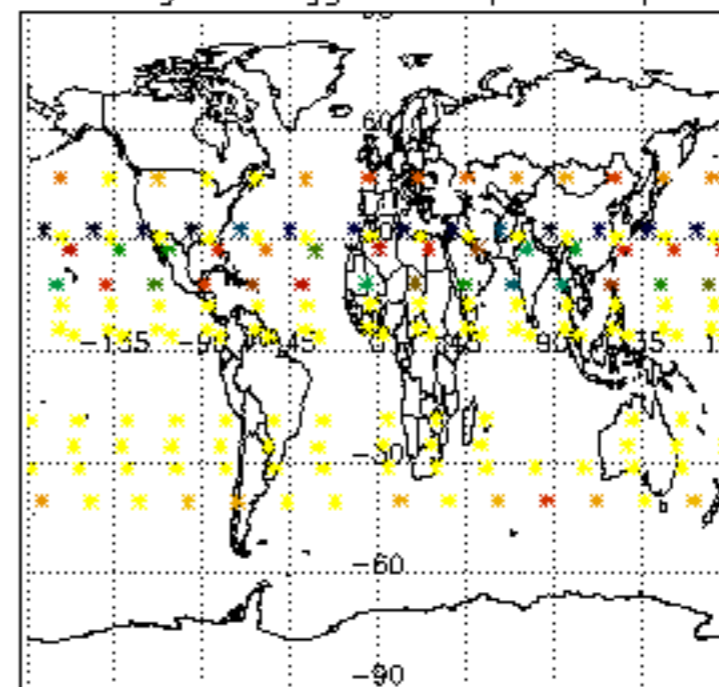




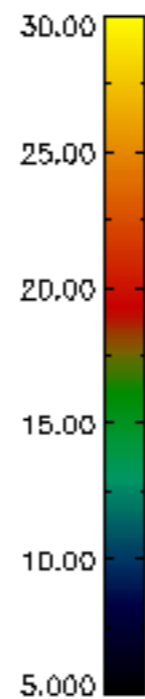
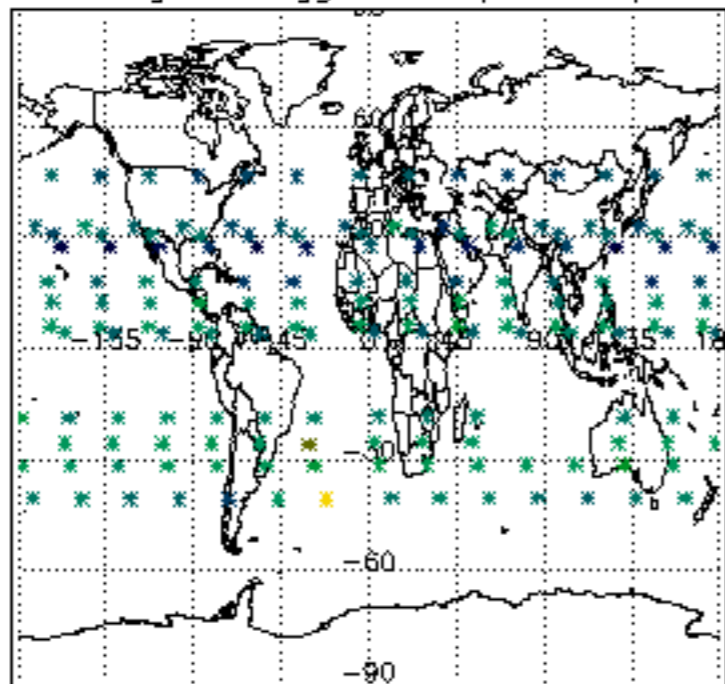
Percentage of flagged data per D3 profile



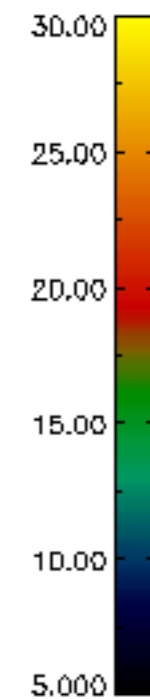
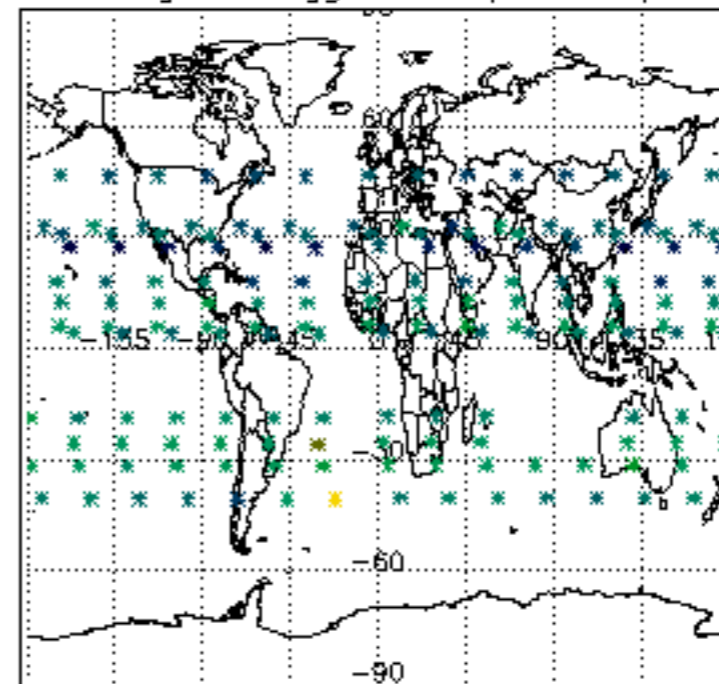
Percentage of flagged data per H2O profile

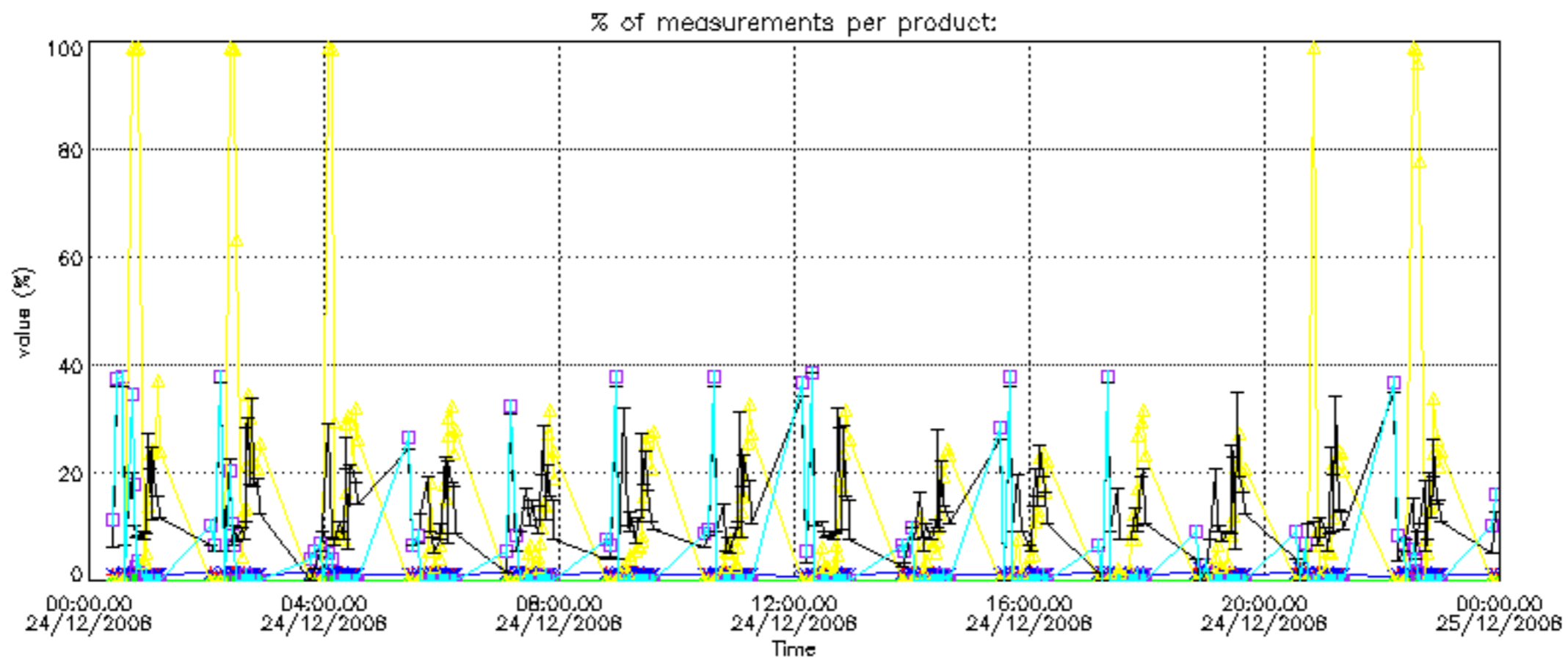


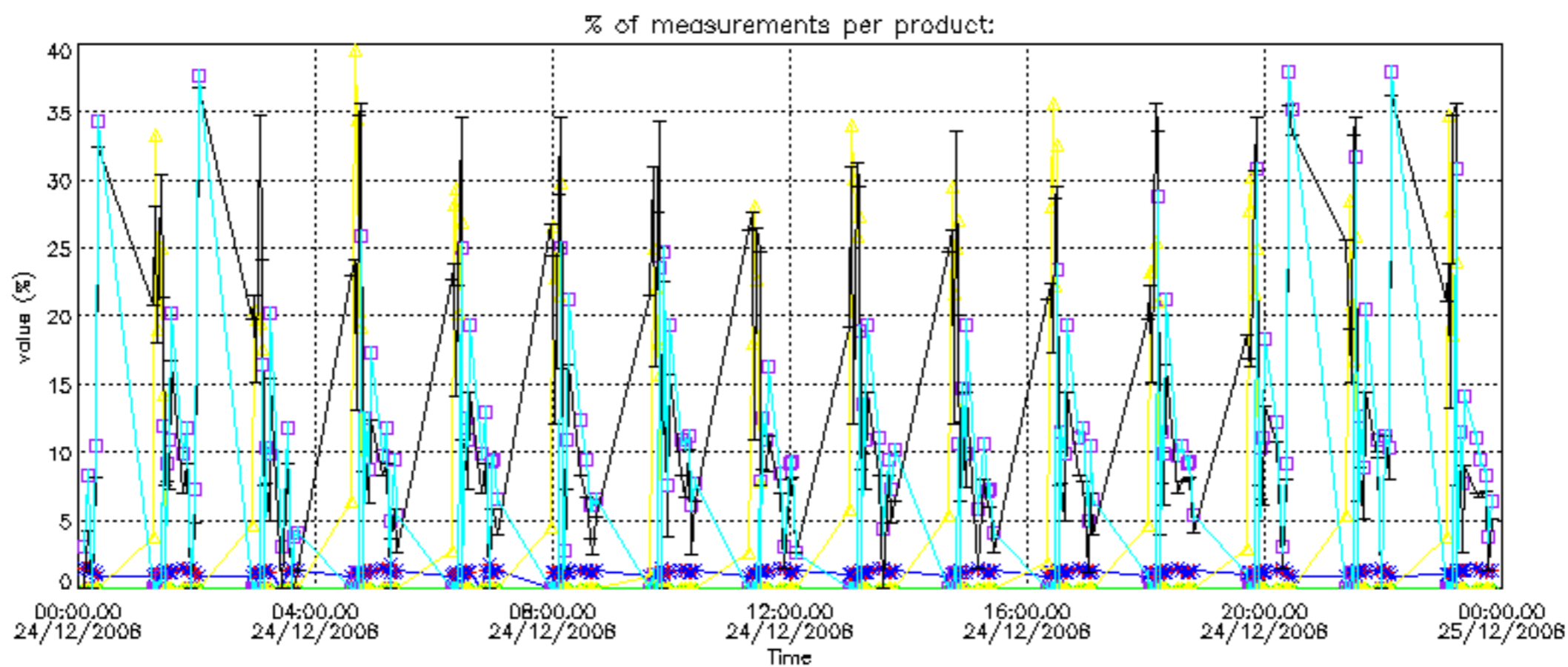
Percentage of flagged data per NO2 profile



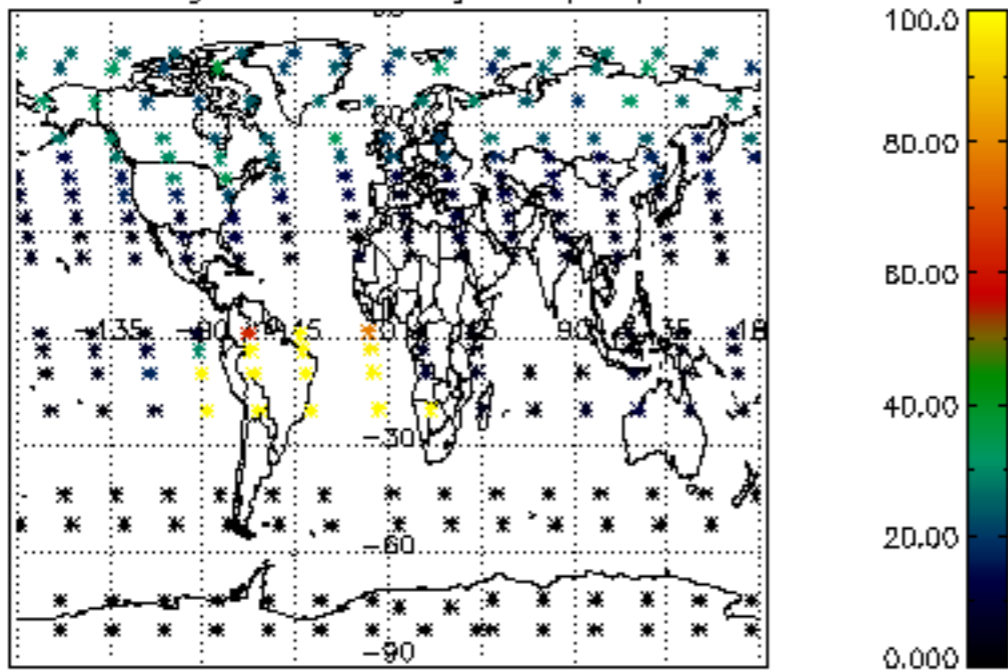
Percentage of flagged data per NO3 profile



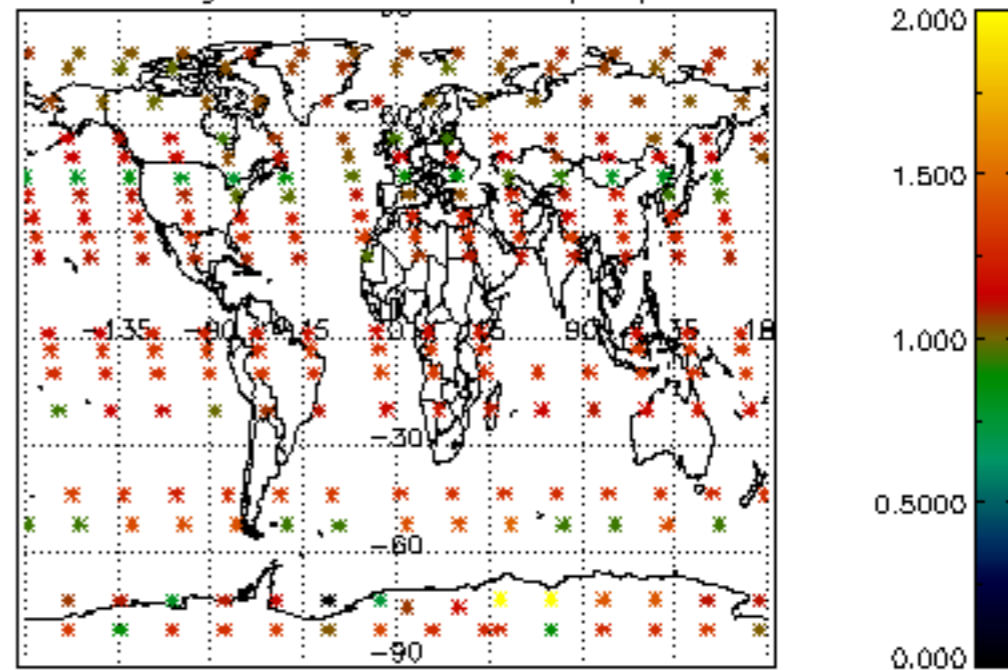




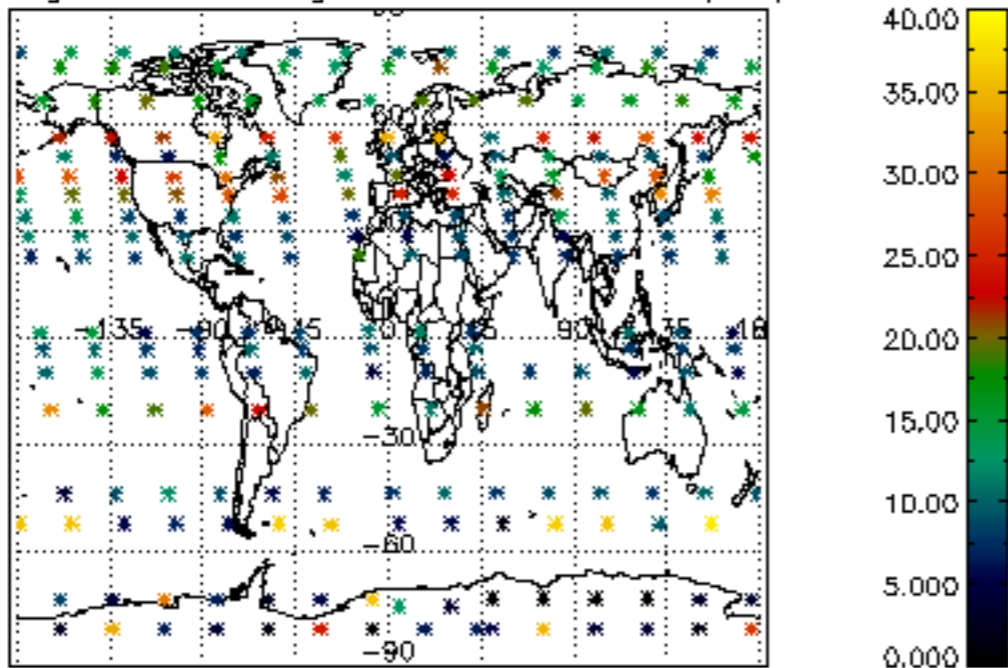
Percentage of cosmic ray hits per profile



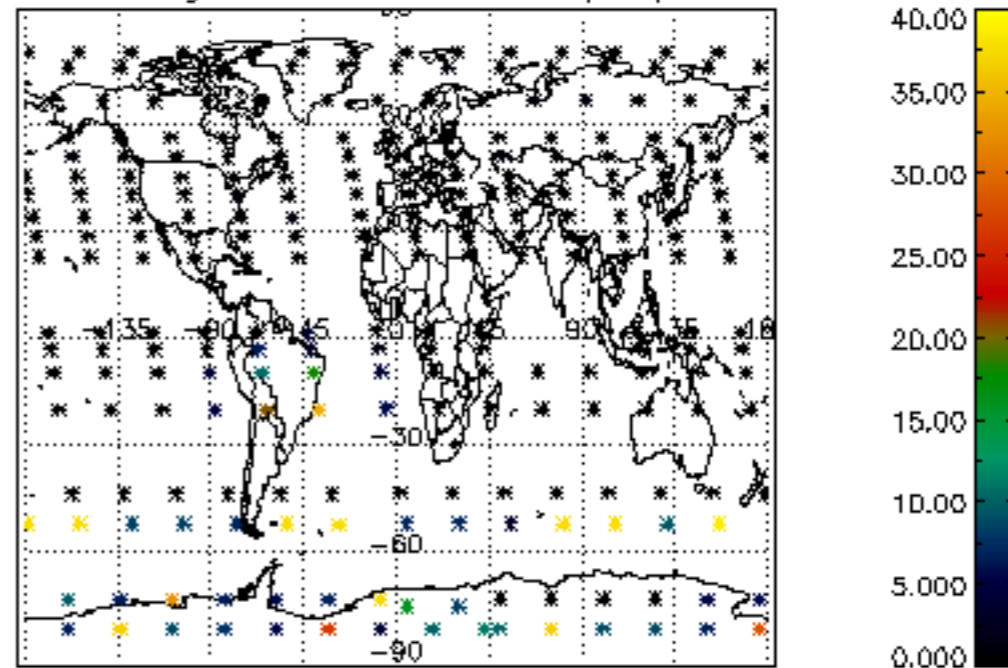
Percentage of datation errors per profile



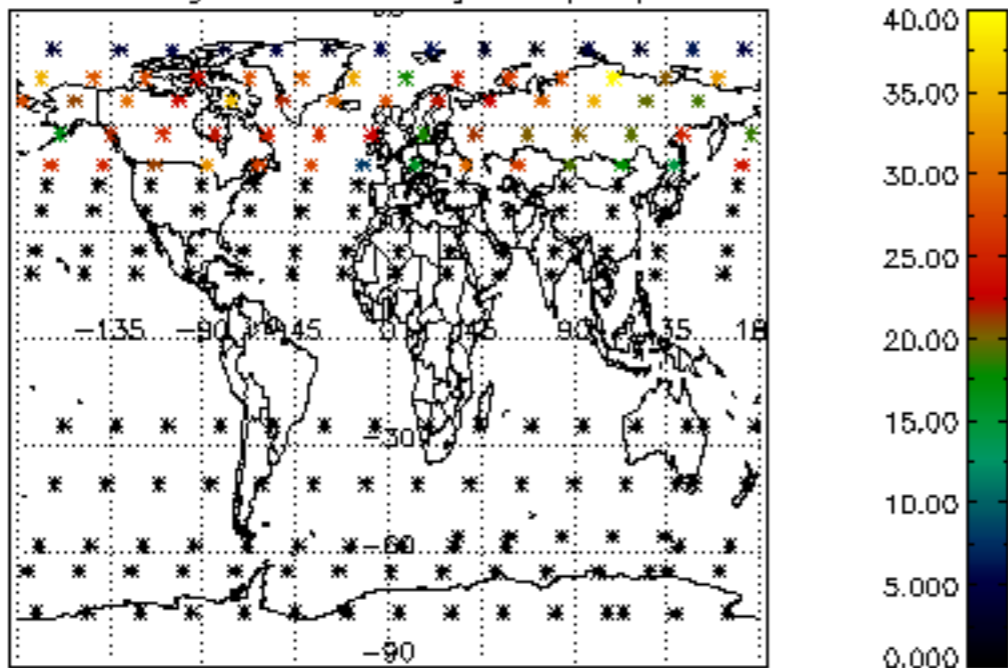
Percentage of star falling outside central band per profile



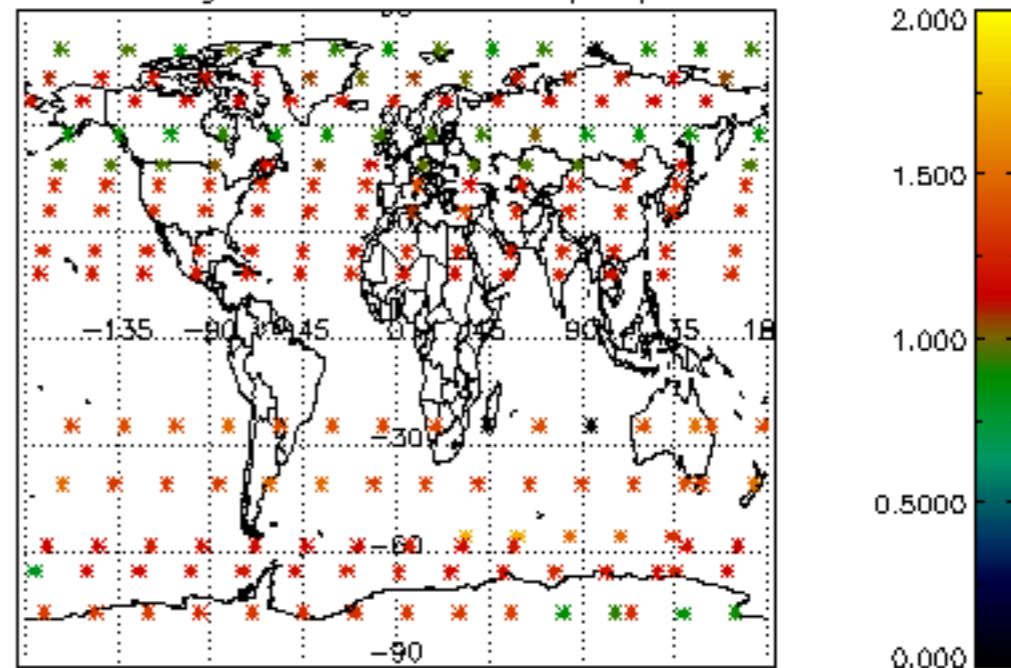
Percentage of saturation errors per profile



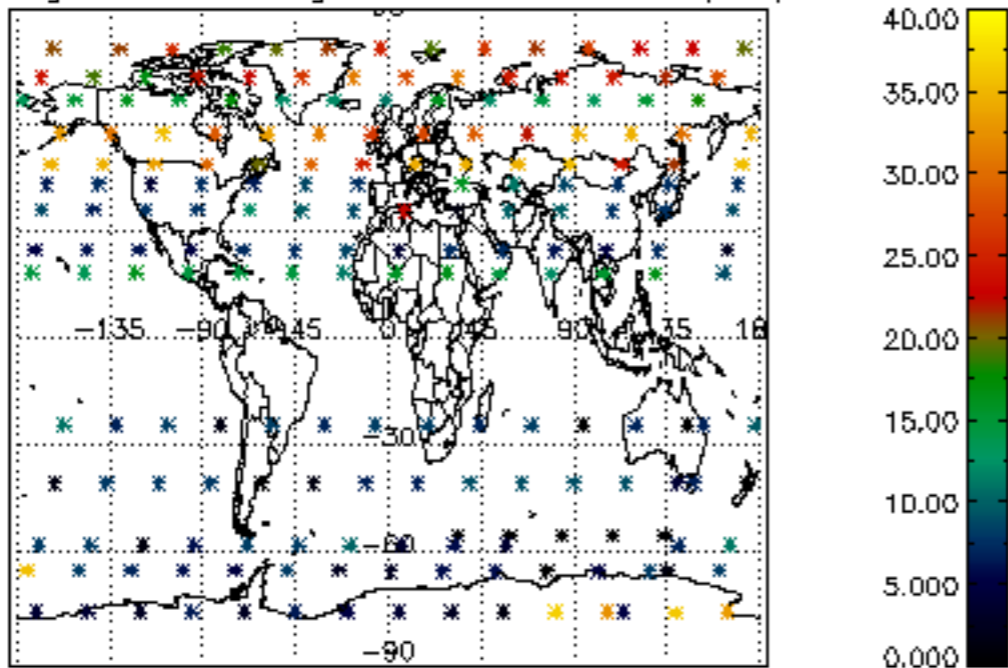
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

