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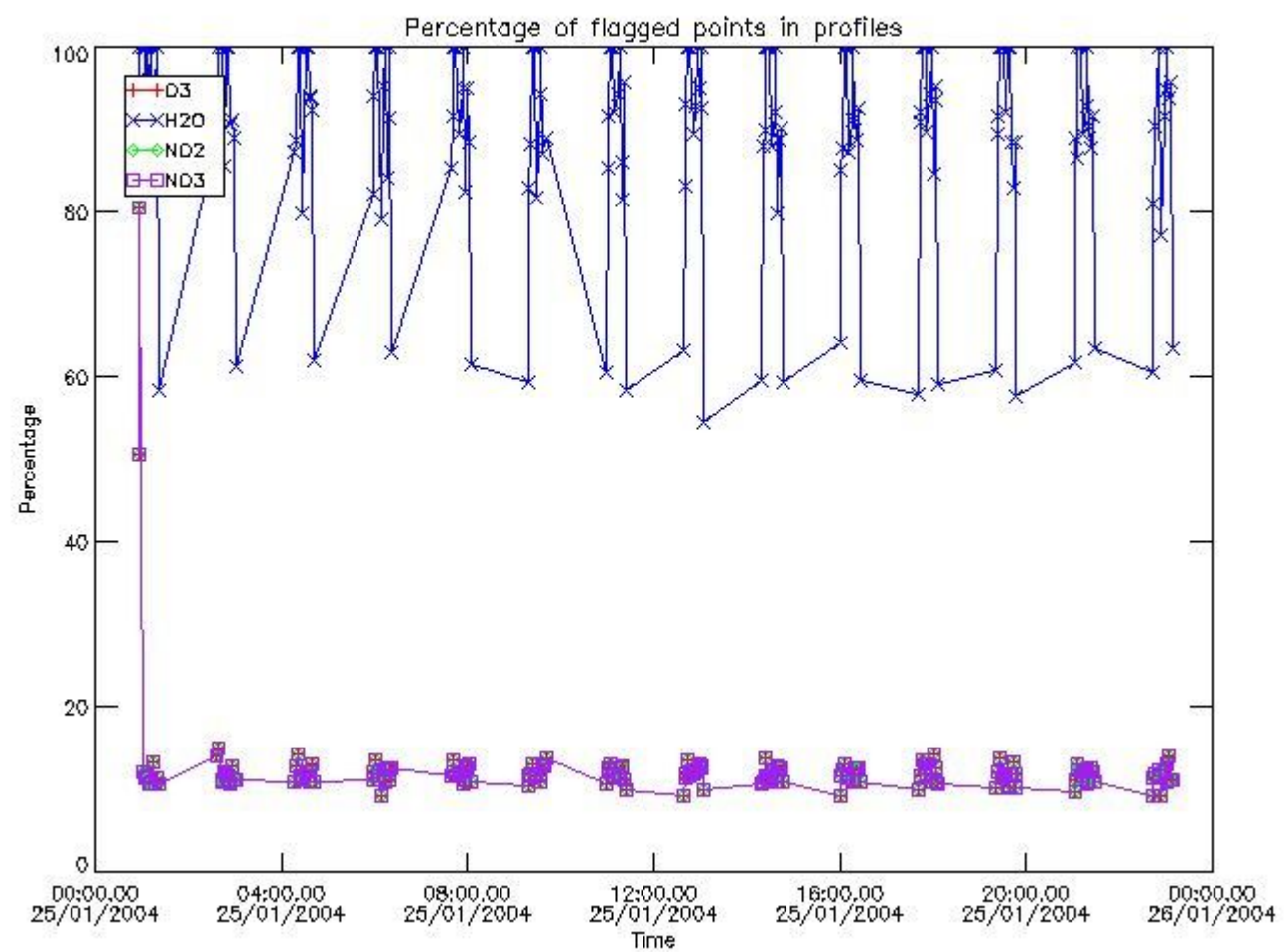
[6. Auxiliary Data Files used for the production reported in section 2](#)

456	GOM_NL__2PRFIN20040125_213022_000000452023_00387_09960_1092.N1	25-JAN-2004 21:30:22	Straylight	44.500	70	Zet Pup	2.2460	39000.	89	9960	No
457	GOM_NL__2PRFIN20040125_213153_000000442023_00387_09960_1093.N1	25-JAN-2004 21:31:53	Straylight	44.000	117	Pi Pup	2.7060	3800.0	88	9960	No
458	GOM_NL__2PRFIN20040125_213420_000000452023_00387_09960_1094.N1	25-JAN-2004 21:34:20	Straylight	44.500	23	21Eps CMa	1.5020	26000.	89	9960	No
459	GOM_NL__2PRFIN20040125_213542_000000432023_00387_09960_1095.N1	25-JAN-2004 21:35:42	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	9960	No
460	GOM_NL__2PRFIN20040125_213753_000000502023_00387_09960_1096.N1	25-JAN-2004 21:37:53	Straylight	49.500	1	9Alp CMa	-1.4400	11000.	99	9960	No
461	GOM_NL__2PRFIN20040125_214000_000000732023_00387_09960_1097.N1	25-JAN-2004 21:40:00	Straylight	73.000	48	30Alp Hya	1.9770	4100.0	146	9960	No
462	GOM_NL__2PRFIN20040125_214359_000000522023_00387_09960_1098.N1	25-JAN-2004 21:43:59	Tw_i_and_stray	51.500	8	10Alp CMi	0.40000	6500.0	103	9960	No
463	GOM_NL__2PRFIN20040125_214712_000000412023_00387_09960_1099.N1	25-JAN-2004 21:47:12	Bright	40.500	44	24Gam Gem	1.9280	11000.	81	9960	No
464	GOM_NL__2PRFIN20040125_214859_000000422023_00387_09960_1100.N1	25-JAN-2004 21:48:59	Bright	41.500	151	13Mu Gem	2.8900	3000.0	83	9960	No
465	GOM_NL__2PRFIN20040125_215057_000000452023_00387_09960_1101.N1	25-JAN-2004 21:50:57	Bright	45.000	17	78Bet Gem	1.1610	4500.0	90	9960	No
466	GOM_NL__2PRFIN20040125_215313_000000392023_00387_09960_1102.N1	25-JAN-2004 21:53:13	Bright	38.500	107	37The Aur	2.6490	11000.	77	9960	No
467	GOM_NL__2PRFIN20040125_215521_000000392023_00387_09960_1103.N1	25-JAN-2004 21:55:21	Bright	38.500	42	34Bet Aur	1.9000	10200.	77	9960	No
468	GOM_NL__2PRFIN20040125_215805_000001232023_00387_09960_1104.N1	25-JAN-2004 21:58:05	Bright	123.00	51	41Gam1Leo	2.0100	4500.0	246	9960	No
469	GOM_NL__2PRFIN20040125_220634_000000512023_00387_09960_1105.N1	25-JAN-2004 22:06:34	Bright	50.500	36	50Alp UMa	1.8000	6300.0	101	9960	No
470	GOM_NL__2PRFIN20040125_220938_000000582023_00387_09960_1106.N1	25-JAN-2004 22:09:38	Bright	57.500	87	64Gam UMa	2.4330	11000.	115	9960	No
471	GOM_NL__2PRFIN20040125_221228_000000562023_00387_09960_1107.N1	25-JAN-2004 22:12:28	Bright	55.500	32	77Eps UMa	1.7630	11000.	111	9960	No
472	GOM_NL__2PRFIN20040125_222517_000000412023_00387_09960_1108.N1	25-JAN-2004 22:25:17	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	9960	No
473	GOM_NL__2PRFIN20040125_222843_000000802023_00387_09960_1109.N1	25-JAN-2004 22:28:43	Bright	79.500	83		2.3780	11000.	159	9960	No
474	GOM_NL__2PRFIN20040125_223223_000000372023_00387_09960_1110.N1	25-JAN-2004 22:32:23	Bright	37.000	126	60Bet Oph	2.7700	4250.0	74	9960	No
475	GOM_NL__2PRFIN20040125_223527_000001582023_00387_09960_1111.N1	25-JAN-2004 22:35:27	Straylight	158.00	3	16Alp Boo	-0.050000	4250.0	316	9960	No
476	GOM_NL__2PRFIN20040125_224236_000000562023_00387_09960_1112.N1	25-JAN-2004 22:42:36	Dark	56.000	16	21Alp Sco	1.0200	3000.0	112	9960	No
477	GOM_NL__2PRFIN20040125_224401_000000452023_00387_09960_1113.N1	25-JAN-2004 22:44:01	Dark	45.000	75	26Eps Sco	2.2910	4250.0	90	9960	No
478	GOM_NL__2PRFIN20040125_224525_000000482023_00387_09960_1114.N1	25-JAN-2004 22:45:25	Dark	47.500	40	The Sco	1.8590	7100.0	95	9960	No
479	GOM_NL__2PRFIN20040125_225016_000000452023_00387_09960_1115.N1	25-JAN-2004 22:50:16	Dark	44.500	109	Bet Lup	2.6770	26000.	89	9960	No
480	GOM_NL__2PRFIN20040125_225144_000000462023_00388_09961_1085.N1	25-JAN-2004 22:51:44	Dark	46.000	78	Alp Lup	2.3040	28000.	92	9961	No
481	GOM_NL__2PRFIN20040125_225345_000000552023_00388_09961_1086.N1	25-JAN-2004 22:53:45	Dark	55.000	4	Alp1Cen	-0.010000	5800.0	110	9961	No
482	GOM_NL__2PRFIN20040125_225819_000000432023_00388_09961_1087.N1	25-JAN-2004 22:58:19	Dark	42.500	12	Alp1Cru	0.77500	30000.	85	9961	No
483	GOM_NL__2PRFIN20040125_225955_000000472023_00388_09961_1088.N1	25-JAN-2004 22:59:55	Dark	47.000	99	Del Cen	2.5750	26000.	94	9961	No
484	GOM_NL__2PRFIN20040125_230218_000000472023_00388_09961_1089.N1	25-JAN-2004 23:02:18	Dark	47.000	29	Bet Car	1.6720	10200.	94	9961	No
485	GOM_NL__2PRFIN20040125_230431_000000402023_00388_09961_1090.N1	25-JAN-2004 23:04:31	Dark	40.000	71	lot Car	2.2460	7700.0	80	9961	No
486	GOM_NL__2PRFIN20040125_230618_000000462023_00388_09961_1091.N1	25-JAN-2004 23:06:18	Dark	45.500	46	Del Vel	1.9540	10600.	91	9961	No
487	GOM_NL__2PRFIN20040125_230844_000000462023_00388_09961_1092.N1	25-JAN-2004 23:08:44	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	9961	No
488	GOM_NL__2PRFIN20040125_231100_000000432023_00388_09961_1093.N1	25-JAN-2004 23:11:00	Straylight	43.000	70	Zet Pup	2.2460	39000.	86	9961	No
489	GOM_NL__2PRFIN20040125_231229_000000412023_00388_09961_1094.N1	25-JAN-2004 23:12:29	Straylight	41.000	117	Pi Pup	2.7060	3800.0	82	9961	No
490	GOM_NL__2PRFIN20040125_231456_000000432023_00388_09961_1095.N1	25-JAN-2004 23:14:56	Straylight	43.000	23	21Eps CMa	1.5020	26000.	86	9961	No
491	GOM_NL__2PRFIN20040125_231619_000000412023_00388_09961_1096.N1	25-JAN-2004 23:16:19	Straylight	40.500	179	24Omi2CMa	3.0320	24000.	81	9961	No
492	GOM_NL__2PRFIN20040125_231829_000000462023_00388_09961_1097.N1	25-JAN-2004 23:18:29	Straylight	46.000	1	9Alp CMa	-1.4400	11000.	92	9961	No
493	GOM_NL__2PRFIN20040125_232037_000000712023_00388_09961_1098.N1	25-JAN-2004 23:20:37	Straylight	70.500	48	30Alp Hya	1.9770	4100.0	141	9961	No
494	GOM_NL__2PRFIN20040125_232434_000000562023_00388_09961_1099.N1	25-JAN-2004 23:24:34	Tw_i_and_stray	56.000	8	10Alp CMi	0.40000	6500.0	112	9961	No
495	GOM_NL__2PRFIN20040125_232746_000000432023_00388_09961_1100.N1	25-JAN-2004 23:27:46	Bright	43.000	44	24Gam Gem	1.9280	11000.	86	9961	No
496	GOM_NL__2PRFIN20040125_232933_000000422023_00388_09961_1101.N1	25-JAN-2004 23:29:33	Bright	42.000	151	13Mu Gem	2.8900	3000.0	84	9961	No
497	GOM_NL__2PRFIN20040125_233132_000000442023_00388_09961_1102.N1	25-JAN-2004 23:31:32	Bright	43.500	17	78Bet Gem	1.1610	4500.0	87	9961	No
498	GOM_NL__2PRFIN20040125_233347_000000402023_00388_09961_1103.N1	25-JAN-2004 23:33:47	Bright	40.000	107	37The Aur	2.6490	11000.	80	9961	No
499	GOM_NL__2PRFIN20040125_233557_000000392023_00388_09961_1104.N1	25-JAN-2004 23:35:57	Bright	38.500	42	34Bet Aur	1.9000	10200.	77	9961	No
500	GOM_NL__2PRFIN20040125_233838_000001182023_00388_09961_1105.N1	25-JAN-2004 23:38:38	Bright	118.00	51	41Gam1Leo	2.0100	4500.0	236	9961	No
501	GOM_NL__2PRFIN20040125_234710_000000502023_00388_09961_1106.N1	25-JAN-2004 23:47:10	Bright	49.500	36	50Alp UMa	1.8000	6300.0	99	9961	No
502	GOM_NL__2PRFIN20040125_235013_000000562023_00388_09961_1107.N1	25-JAN-2004 23:50:13	Bright	56.000	87	64Gam UMa	2.4330	11000.	112	9961	No
503	GOM_NL__2PRFIN20040125_235304_000000562023_00388_09961_1108.N1	25-JAN-2004 23:53:04	Bright	55.500	32	77Eps UMa	1.7630	11000.	111	9961	No

3. Quality information per product

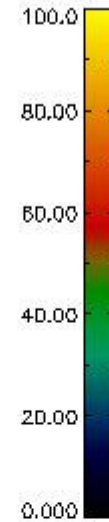
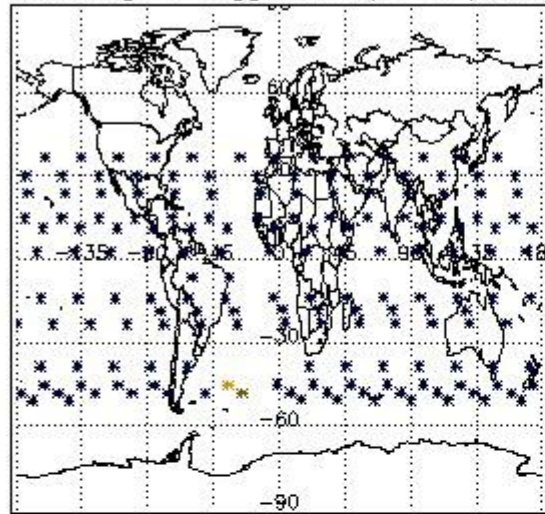
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

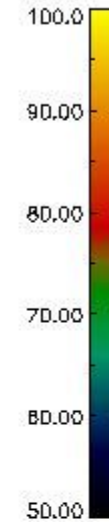
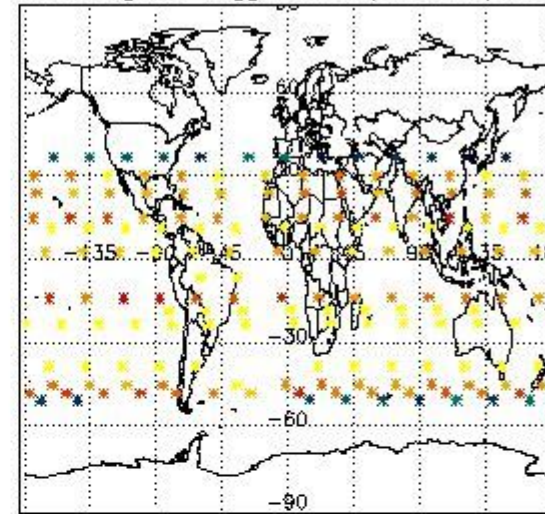


3.2 Plot quality information per product (world map)

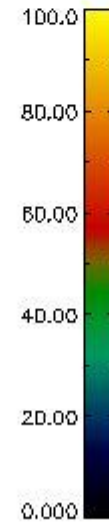
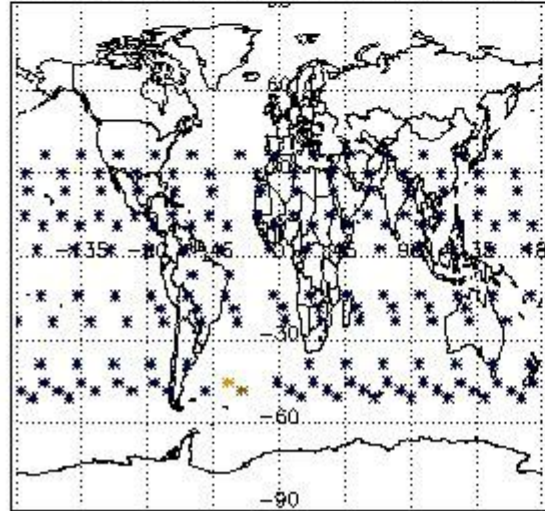
Percentage of flagged data per O3 profile



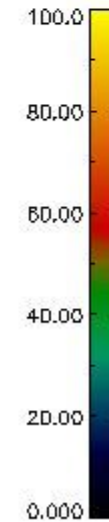
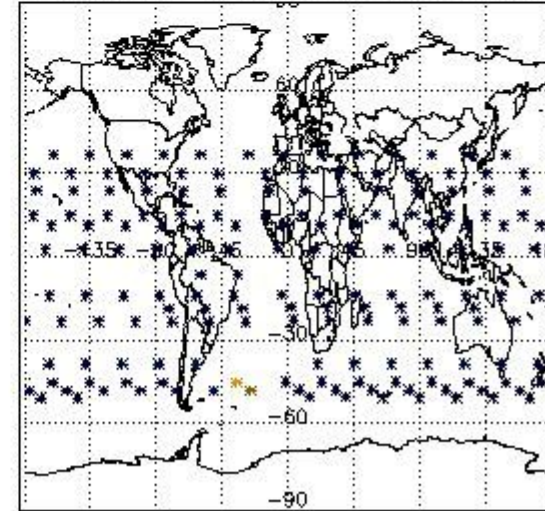
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

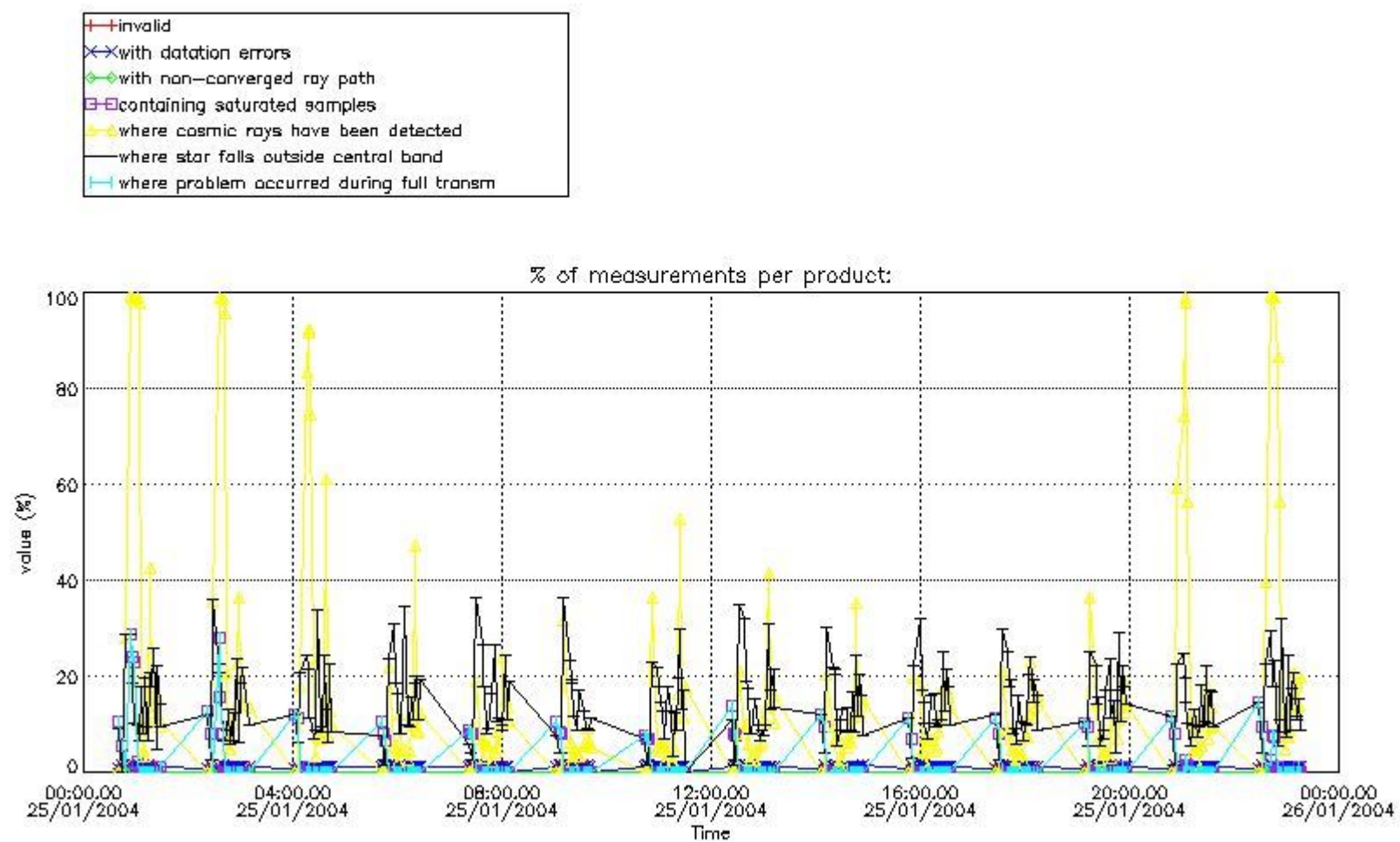


4. Level 1 quality information per product

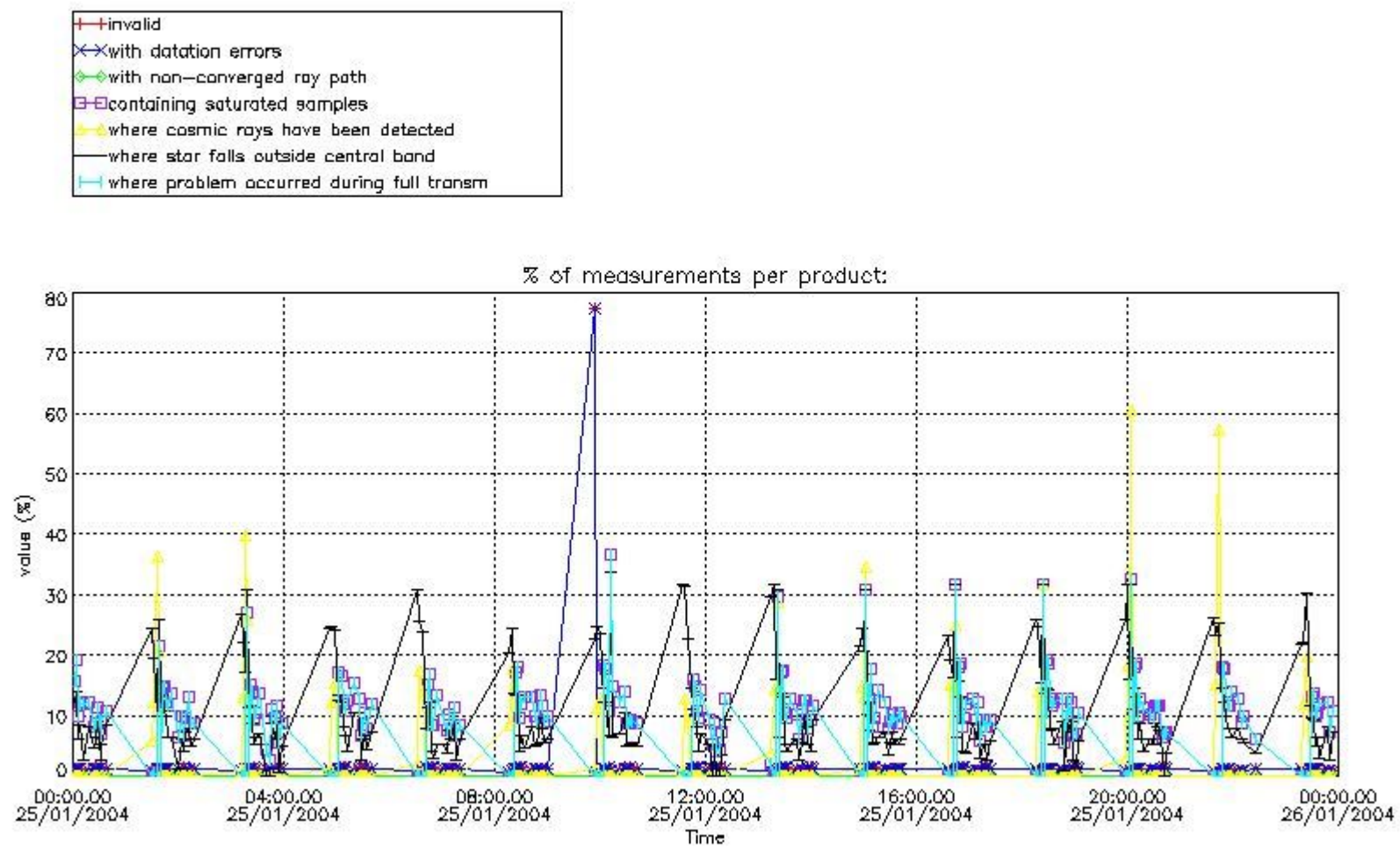
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



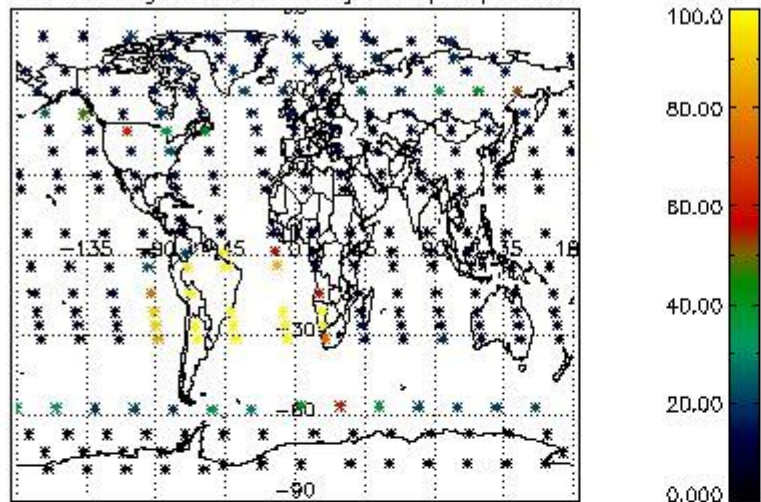
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



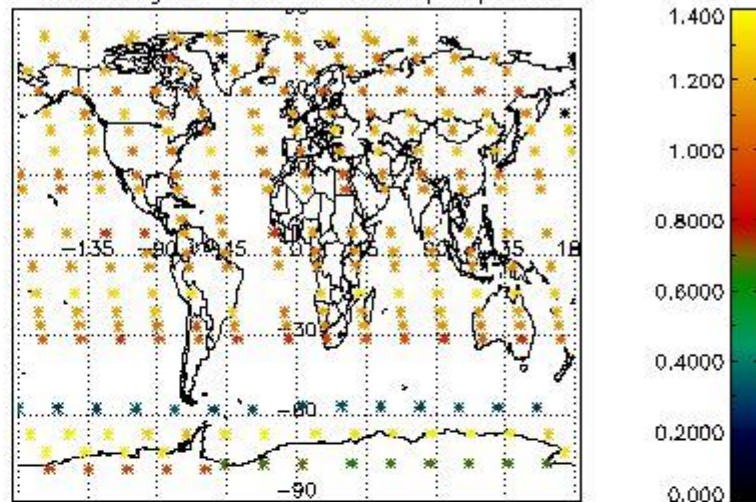
4.2 Plot quality information per product coming from level 1b processing (world map)

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

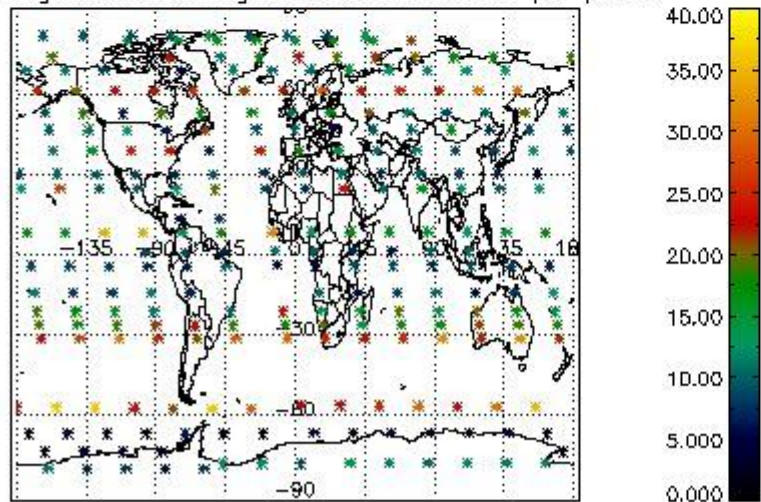
Percentage of cosmic ray hits per profile



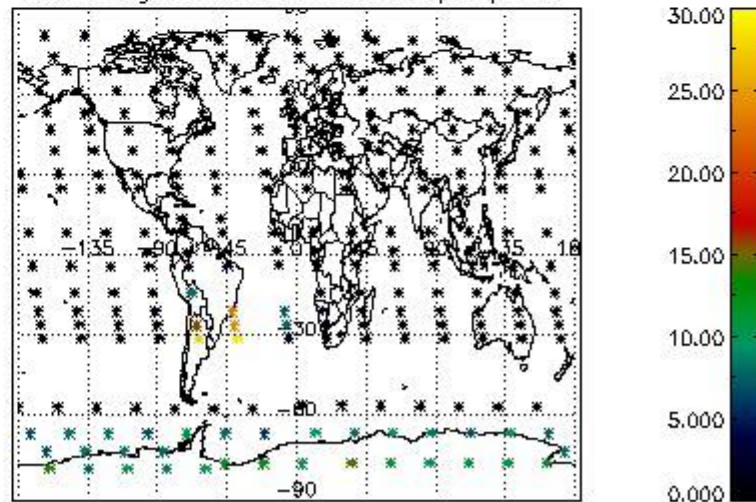
Percentage of datation errors per profile



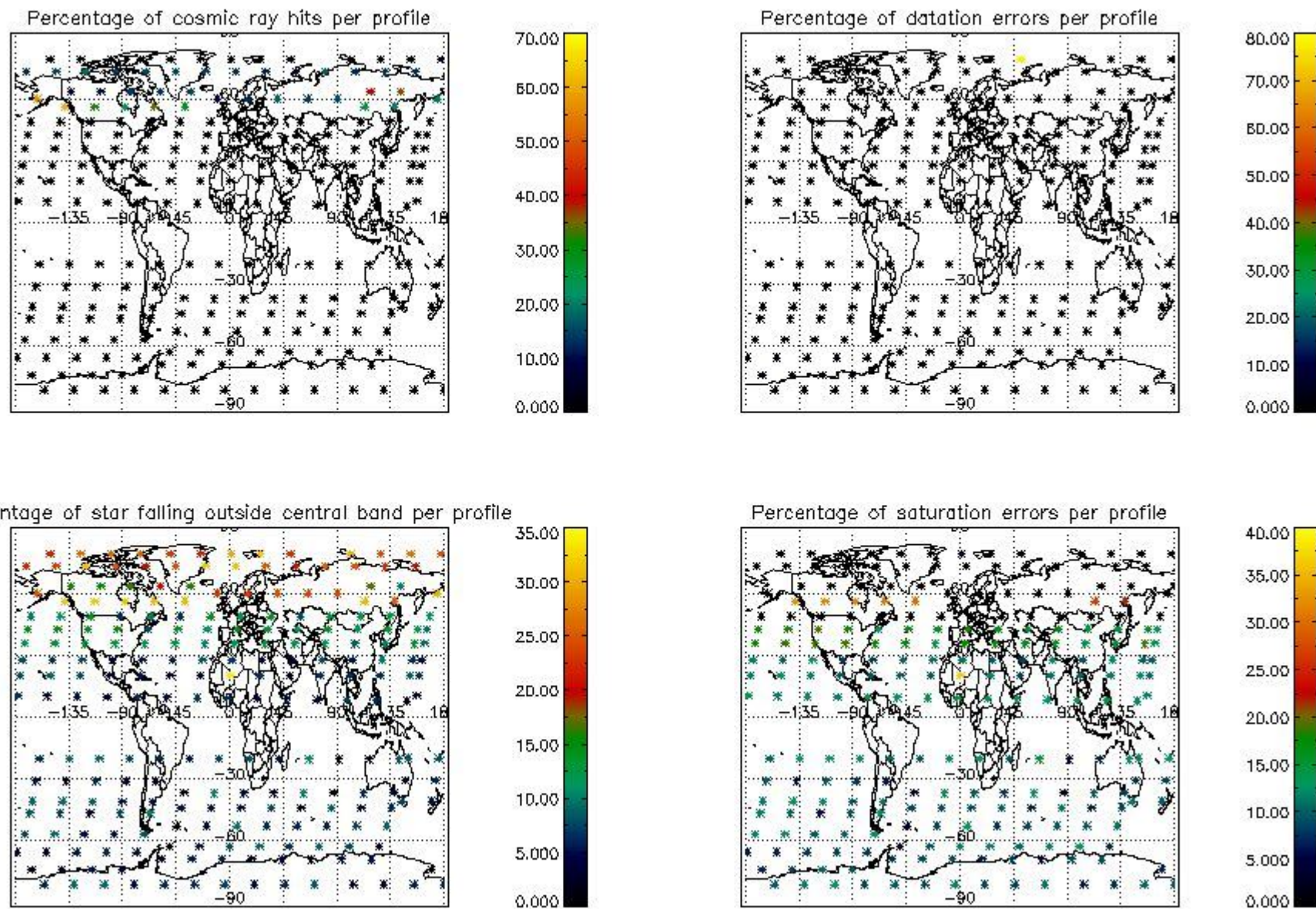
Percentage of star falling outside central band per profile



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

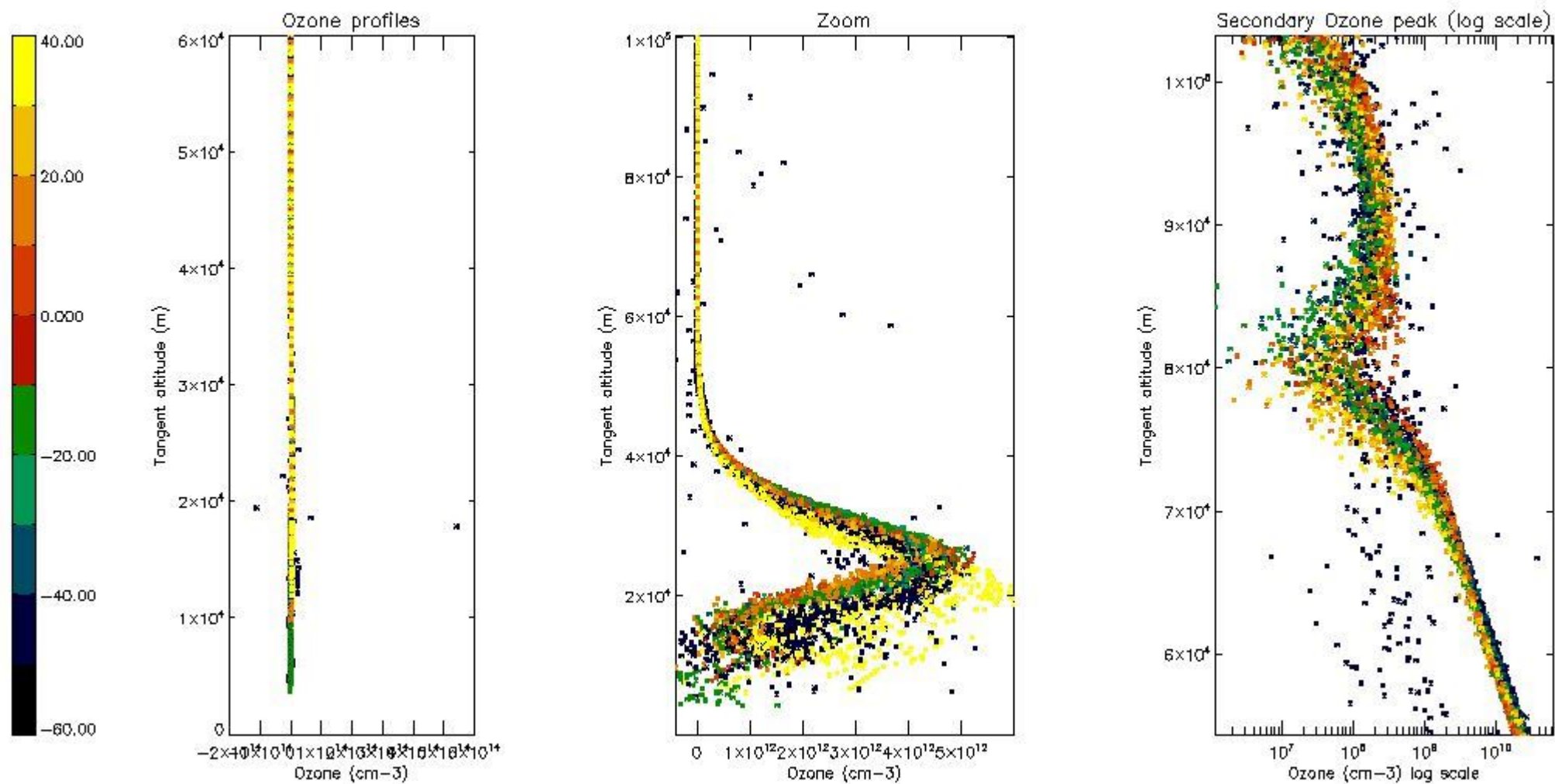
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	17

STD < 10	14
STD < 5	10

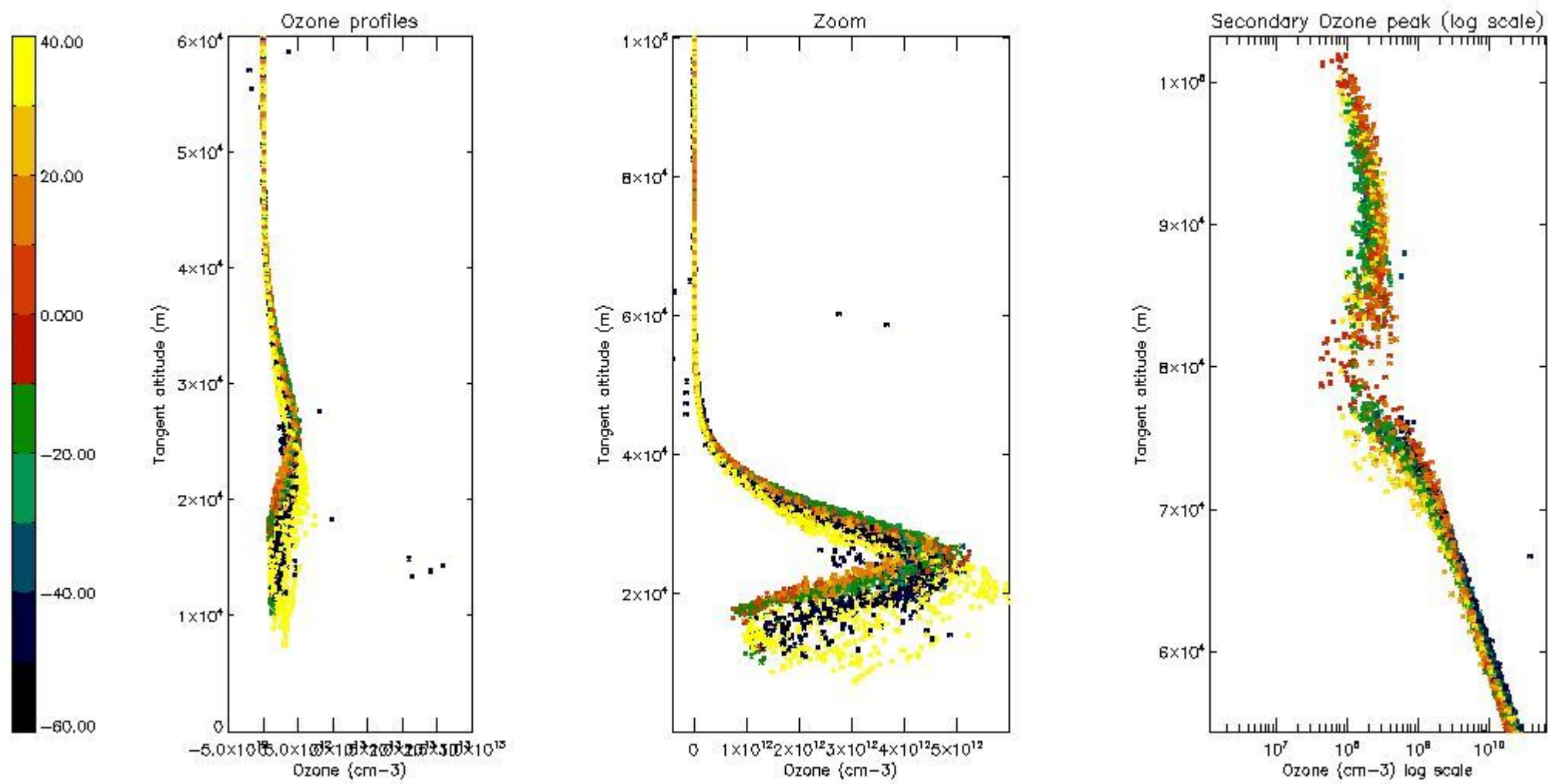
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



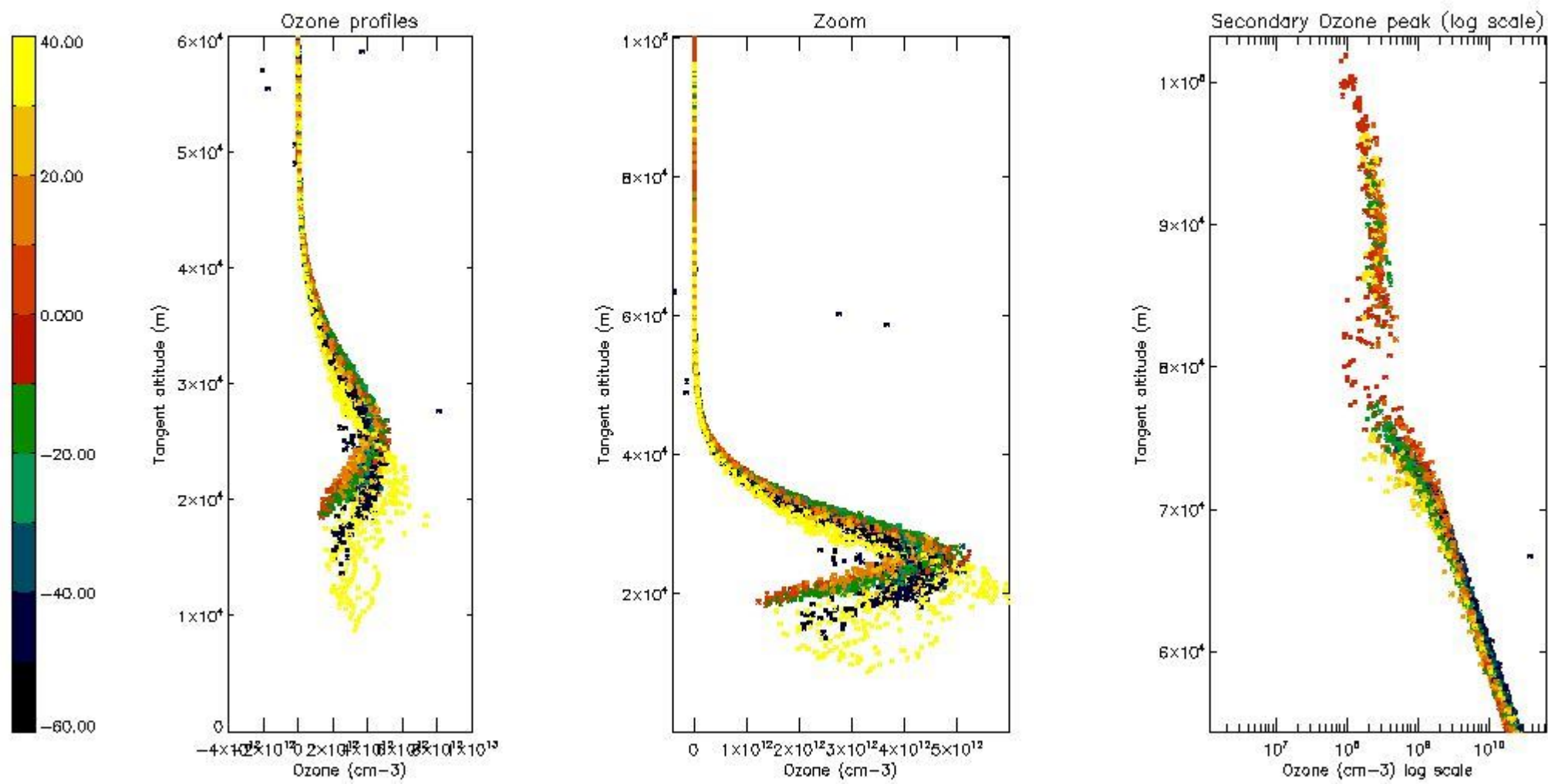
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



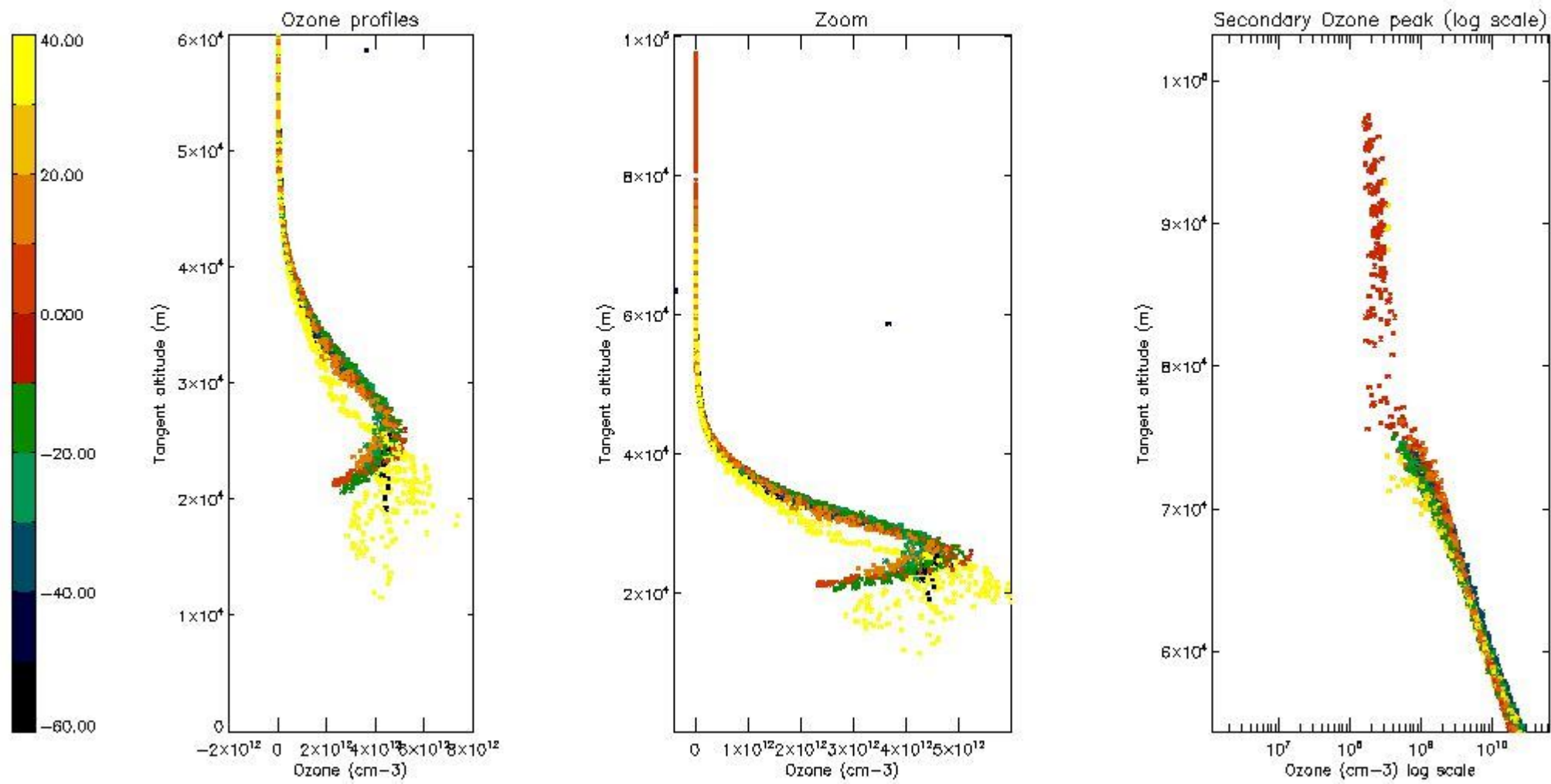
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



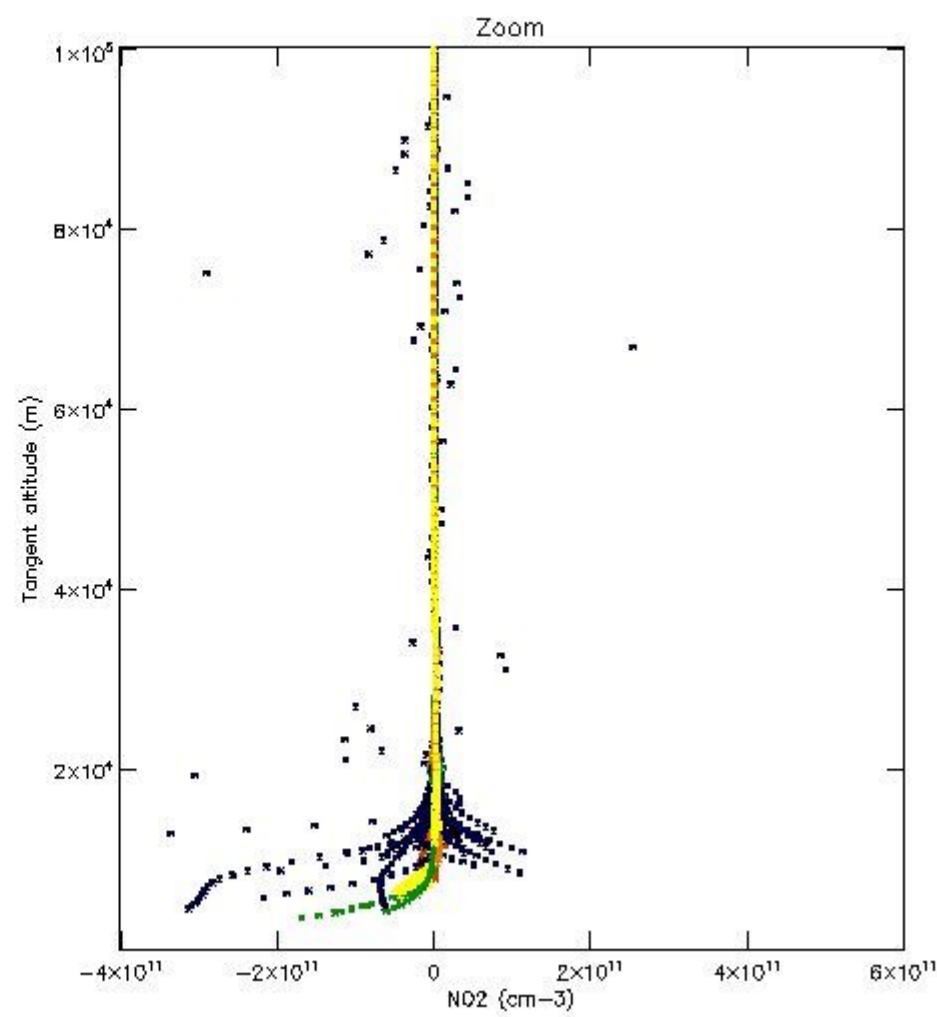
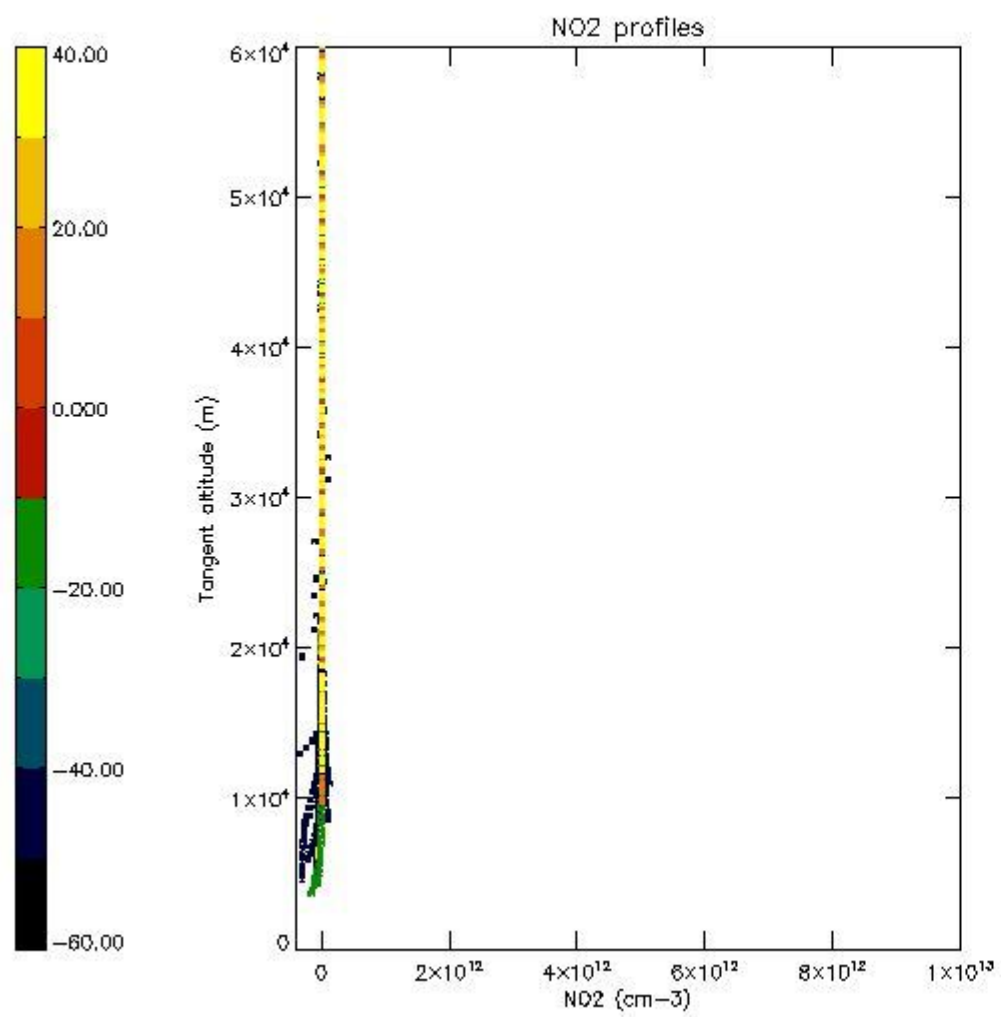
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



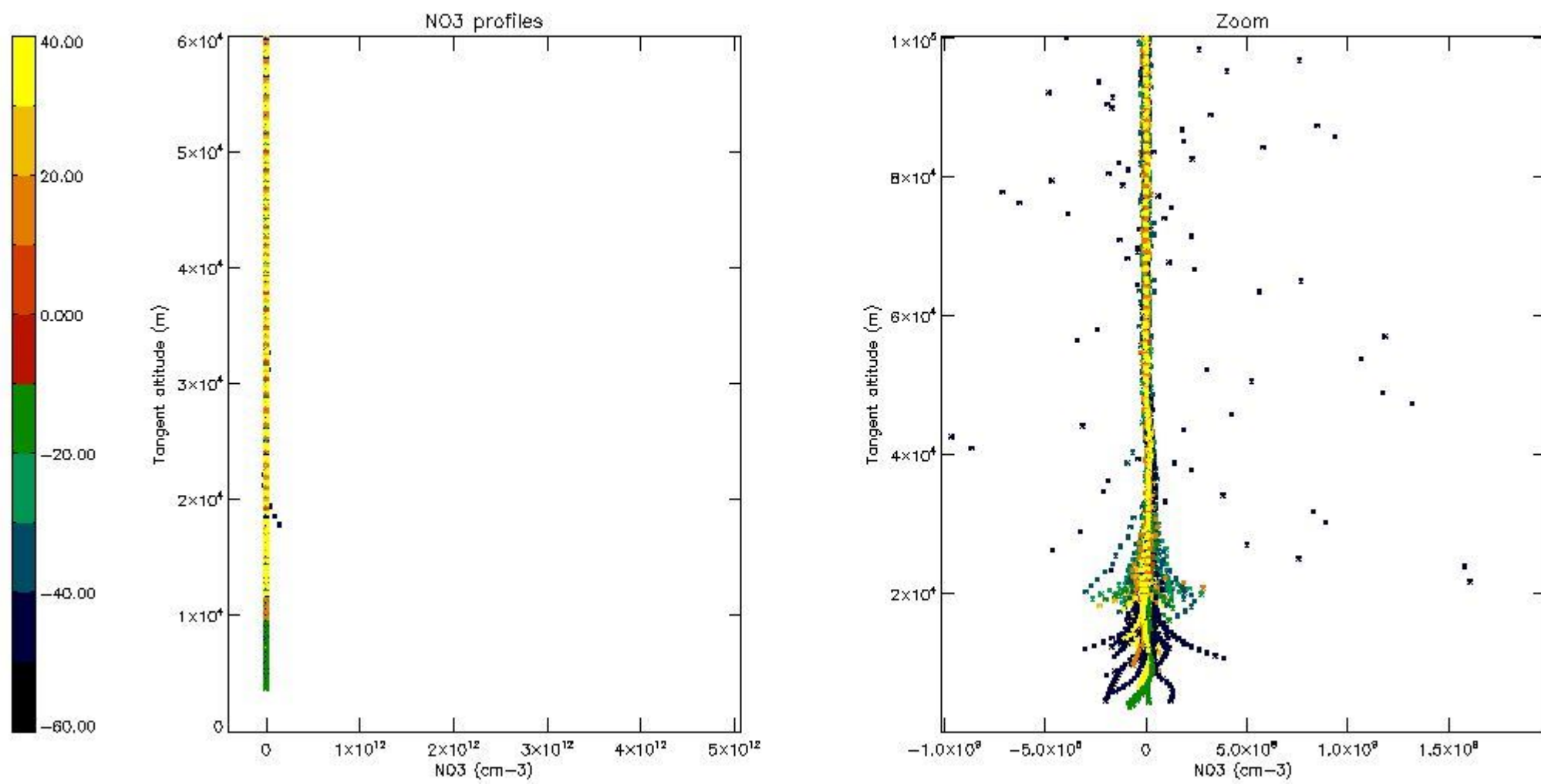
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



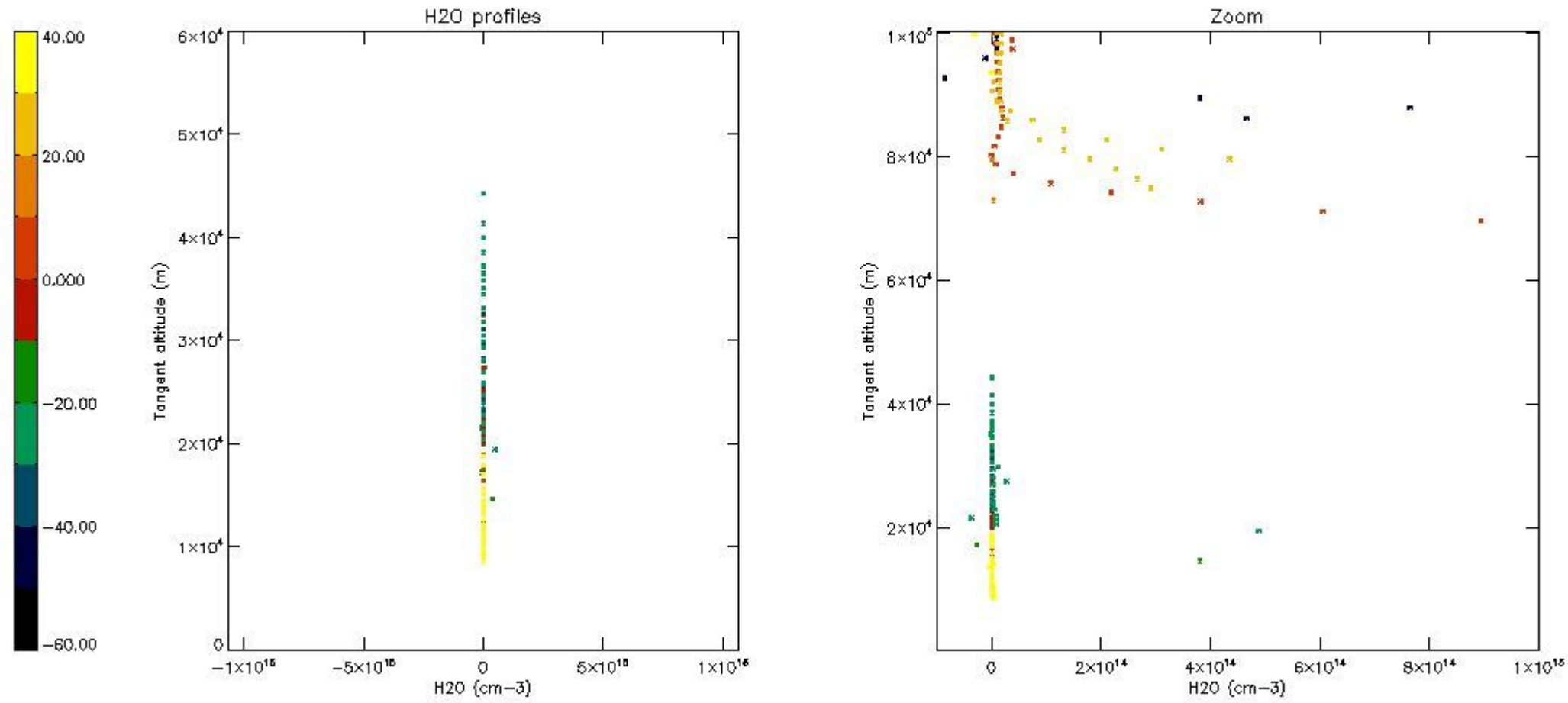
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	25-JAN-2004 00:01:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-JAN-2004 00:01:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-JAN-2004 00:01:10

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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](#)

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	18APR2013 18:10:31
Data source version	GOMOS/6.01
Start time of products	25-01-2004 (25JAN2004 00:00:00)
Stop time of products	26-01-2004 (26JAN2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	503
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

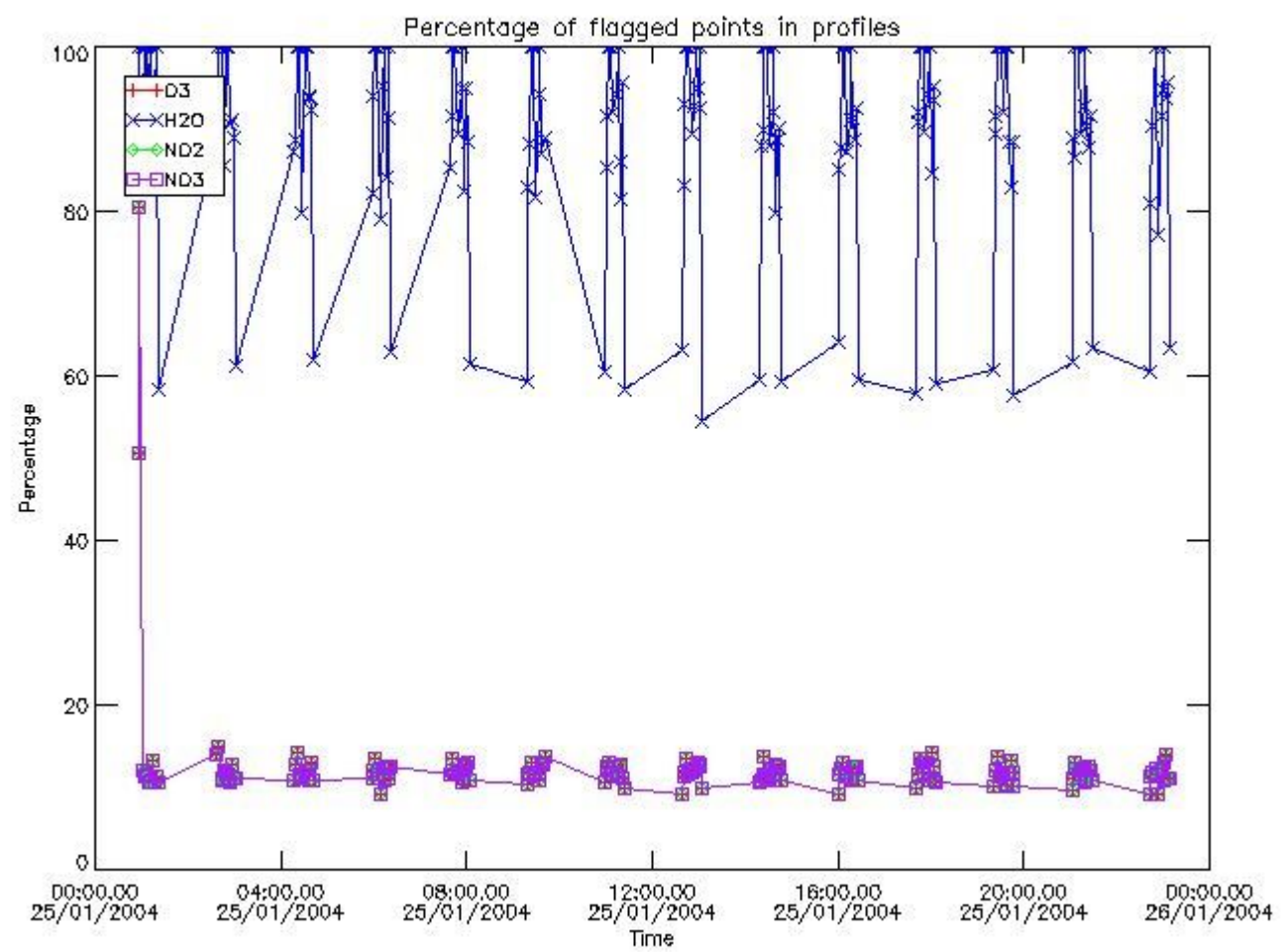
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040125_000110_000000412023_00374_09947_0451.N1	25-JAN-2004 00:01:10	Bright	41.000	151	13Mu Gem	2.8900	3000.0	82	9947	No
2	GOM_NL__2PRFIN20040125_000312_000000472023_00374_09947_0452.N1	25-JAN-2004 00:03:12	Bright	47.000	17	78Bet Gem	1.1610	4500.0	94	9947	No
3	GOM_NL__2PRFIN20040125_000522_000000402023_00374_09947_0453.N1	25-JAN-2004 00:05:22	Bright	40.000	107	37The Aur	2.6490	11000.	80	9947	No
4	GOM_NL__2PRFIN20040125_000730_000000412023_00374_09947_0454.N1	25-JAN-2004 00:07:30	Bright	41.000	42	34Bet Aur	1.9000	10200.	82	9947	No
5	GOM_NL__2PRFIN20040125_001100_000001312023_00374_09947_0455.N1	25-JAN-2004 00:11:00	Bright	131.00	51	41Gam1Leo	2.0100	4500.0	262	9947	No
6	GOM_NL__2PRFIN20040125_001856_000000502023_00374_09947_0456.N1	25-JAN-2004 00:18:56	Bright	49.500	36	50Alp UMa	1.8000	6300.0	99	9947	No
7	GOM_NL__2PRFIN20040125_002332_000000432023_00374_09947_0457.N1	25-JAN-2004 00:23:32	Bright	42.500	60	7Bet UMi	2.0810	3950.0	85	9947	No
8	GOM_NL__2PRFIN20040125_002534_000000402023_00374_09947_0458.N1	25-JAN-2004 00:25:34	Bright	39.500	89	5Alp Cep	2.4510	8000.0	79	9947	No
9	GOM_NL__2PRFIN20040125_002805_000000452023_00374_09947_0459.N1	25-JAN-2004 00:28:05	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	9947	No
10	GOM_NL__2PRFIN20040125_003102_000000372023_00374_09947_0460.N1	25-JAN-2004 00:31:02	Bright	36.500	130	23Bet Dra	2.7990	5800.0	73	9947	No
11	GOM_NL__2PRFIN20040125_003257_000001152023_00374_09947_0461.N1	25-JAN-2004 00:32:57	Bright	115.00	152	12Alp2CVn	2.8900	11000.	230	9947	No
12	GOM_NL__2PRFIN20040125_003729_000000422023_00374_09947_0462.N1	25-JAN-2004 00:37:29	Bright	41.500	133	40Zet Her	2.8070	6000.0	83	9947	No
13	GOM_NL__2PRFIN20040125_004050_000000722023_00374_09947_0463.N1	25-JAN-2004 00:40:50	Bright	72.000	83		2.3780	11000.	144	9947	No
14	GOM_NL__2PRFIN20040125_004431_000000372023_00374_09947_0464.N1	25-JAN-2004 00:44:31	Bright	36.500	126	60Bet Oph	2.7700	4250.0	73	9947	No
15	GOM_NL__2PRFIN20040125_004714_000001582023_00374_09947_0465.N1	25-JAN-2004 00:47:14	Twilight	158.00	3	16Alp Boo	-0.050000	4250.0	316	9947	No
16	GOM_NL__2PRFIN20040125_005442_000000562023_00374_09947_0466.N1	25-JAN-2004 00:54:42	Twilight	55.500	16	21Alp Sco	1.0200	3000.0	111	9947	No
17	GOM_NL__2PRFIN20040125_005608_000000462023_00374_09947_0467.N1	25-JAN-2004 00:56:08	Dark	46.000	75	26Eps Sco	2.2910	4250.0	92	9947	No
18	GOM_NL__2PRFIN20040125_005736_000000392023_00374_09947_0468.N1	25-JAN-2004 00:57:36	Dark	39.000	40	The Sco	1.8590	7100.0	78	9947	No
19	GOM_NL__2PRFIN20040125_010217_000000472023_00374_09947_0469.N1	25-JAN-2004 01:02:17	Dark	46.500	109	Bet Lup	2.6770	26000.	93	9947	No
20	GOM_NL__2PRFIN20040125_010346_000000452023_00375_09948_0433.N1	25-JAN-2004 01:03:46	Dark	45.000	78	Alp Lup	2.3040	28000.	90	9948	No
21	GOM_NL__2PRFIN20040125_010551_000000452023_00375_09948_0434.N1	25-JAN-2004 01:05:51	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	9948	No
22	GOM_NL__2PRFIN20040125_010720_000000452023_00375_09948_0435.N1	25-JAN-2004 01:07:20	Dark	44.500	77	Eps Cen	2.3030	28000.	89	9948	No
23	GOM_NL__2PRFIN20040125_011024_000000482023_00375_09948_0436.N1	25-JAN-2004 01:10:24	Dark	48.000	12	Alp1Cru	0.77500	30000.	96	9948	No
24	GOM_NL__2PRFIN20040125_011157_000000492023_00375_09948_0437.N1	25-JAN-2004 01:11:57	Dark	48.500	99	Del Cen	2.5750	26000.	97	9948	No
25	GOM_NL__2PRFIN20040125_011427_000000392023_00375_09948_0438.N1	25-JAN-2004 01:14:27	Dark	38.500	29	Bet Car	1.6720	10200.	77	9948	No
26	GOM_NL__2PRFIN20040125_011638_000000482023_00375_09948_0439.N1	25-JAN-2004 01:16:38	Dark	48.000	71	lot Car	2.2460	7700.0	96	9948	No
27	GOM_NL__2PRFIN20040125_011827_000000452023_00375_09948_0440.N1	25-JAN-2004 01:18:27	Dark	45.000	46	Del Vel	1.9540	10600.	90	9948	No
28	GOM_NL__2PRFIN20040125_012055_000000492023_00375_09948_0441.N1	25-JAN-2004 01:20:55	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	9948	No
29	GOM_NL__2PRFIN20040125_012307_000000422023_00375_09948_0442.N1	25-JAN-2004 01:23:07	Straylight	42.000	70	Zet Pup	2.2460	39000.	84	9948	No
30	GOM_NL__2PRFIN20040125_012437_000000502023_00375_09948_0443.N1	25-JAN-2004 01:24:37	Straylight	49.500	117	Pi Pup	2.7060	3800.0	99	9948	No
31	GOM_NL__2PRFIN20040125_012707_000000422023_00375_09948_1053.N1	25-JAN-2004 01:27:07	Straylight	42.000	23	21Eps CMa	1.5020	26000.	84	9948	No
32	GOM_NL__2PRFIN20040125_012828_000000432023_00375_09948_1054.N1	25-JAN-2004 01:28:28	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	9948	No
33	GOM_NL__2PRFIN20040125_013038_000000512023_00375_09948_1055.N1	25-JAN-2004 01:30:38	Straylight	51.000	1	9Alp CMa	-1.4400	11000.	102	9948	No
34	GOM_NL__2PRFIN20040125_013252_000000702023_00375_09948_1056.N1	25-JAN-2004 01:32:52	Straylight	69.500	48	30Alp Hya	1.9770	4100.0	139	9948	No
35	GOM_NL__2PRFIN20040125_013547_000000402023_00375_09948_1057.N1	25-JAN-2004 01:35:47	Twilight	40.000	30	46Eps Ori	1.6940	30000.	80	9948	No
36	GOM_NL__2PRFIN20040125_013752_000000492023_00375_09948_1058.N1	25-JAN-2004 01:37:52	Bright	48.500	14	58Alp Ori	0.87000	3000.0	97	9948	No
37	GOM_NL__2PRFIN20040125_013959_000000412023_00375_09948_1059.N1	25-JAN-2004 01:39:59	Bright	41.000	44	24Gam Gem	1.9280	11000.	82	9948	No
38	GOM_NL__2PRFIN20040125_014146_000000412023_00375_09948_1060.N1	25-JAN-2004 01:41:46	Bright	41.000	151	13Mu Gem	2.8900	3000.0	82	9948	No
39	GOM_NL__2PRFIN20040125_014346_000000472023_00375_09948_1061.N1	25-JAN-2004 01:43:46	Bright	47.000	17	78Bet Gem	1.1610	4500.0	94	9948	No
40	GOM_NL__2PRFIN20040125_014558_000000412023_00375_09948_1062.N1	25-JAN-2004 01:45:58	Bright	41.000	107	37The Aur	2.6490	11000.	82	9948	No
41	GOM_NL__2PRFIN20040125_014808_000000392023_00375_09948_1063.N1	25-JAN-2004 01:48:08	Bright	39.000	42	34Bet Aur	1.9000	10200.	78	9948	No
42	GOM_NL__2PRFIN20040125_015132_000001342023_00375_09948_1064.N1	25-JAN-2004 01:51:32	Bright	134.00	51	41Gam1Leo	2.0100	4500.0	268	9948	No

456	GOM_NL__2PRFIN20040125_213022_000000452023_00387_09960_1092.N1	25-JAN-2004 21:30:22	Straylight	44.500	70	Zet Pup	2.2460	39000.	89	9960	No
457	GOM_NL__2PRFIN20040125_213153_000000442023_00387_09960_1093.N1	25-JAN-2004 21:31:53	Straylight	44.000	117	Pi Pup	2.7060	3800.0	88	9960	No
458	GOM_NL__2PRFIN20040125_213420_000000452023_00387_09960_1094.N1	25-JAN-2004 21:34:20	Straylight	44.500	23	21Eps CMa	1.5020	26000.	89	9960	No
459	GOM_NL__2PRFIN20040125_213542_000000432023_00387_09960_1095.N1	25-JAN-2004 21:35:42	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	9960	No
460	GOM_NL__2PRFIN20040125_213753_000000502023_00387_09960_1096.N1	25-JAN-2004 21:37:53	Straylight	49.500	1	9Alp CMa	-1.4400	11000.	99	9960	No
461	GOM_NL__2PRFIN20040125_214000_000000732023_00387_09960_1097.N1	25-JAN-2004 21:40:00	Straylight	73.000	48	30Alp Hya	1.9770	4100.0	146	9960	No
462	GOM_NL__2PRFIN20040125_214359_000000522023_00387_09960_1098.N1	25-JAN-2004 21:43:59	Tw_i_and_stray	51.500	8	10Alp CMi	0.40000	6500.0	103	9960	No
463	GOM_NL__2PRFIN20040125_214712_000000412023_00387_09960_1099.N1	25-JAN-2004 21:47:12	Bright	40.500	44	24Gam Gem	1.9280	11000.	81	9960	No
464	GOM_NL__2PRFIN20040125_214859_000000422023_00387_09960_1100.N1	25-JAN-2004 21:48:59	Bright	41.500	151	13Mu Gem	2.8900	3000.0	83	9960	No
465	GOM_NL__2PRFIN20040125_215057_000000452023_00387_09960_1101.N1	25-JAN-2004 21:50:57	Bright	45.000	17	78Bet Gem	1.1610	4500.0	90	9960	No
466	GOM_NL__2PRFIN20040125_215313_000000392023_00387_09960_1102.N1	25-JAN-2004 21:53:13	Bright	38.500	107	37The Aur	2.6490	11000.	77	9960	No
467	GOM_NL__2PRFIN20040125_215521_000000392023_00387_09960_1103.N1	25-JAN-2004 21:55:21	Bright	38.500	42	34Bet Aur	1.9000	10200.	77	9960	No
468	GOM_NL__2PRFIN20040125_215805_000001232023_00387_09960_1104.N1	25-JAN-2004 21:58:05	Bright	123.00	51	41Gam1Leo	2.0100	4500.0	246	9960	No
469	GOM_NL__2PRFIN20040125_220634_000000512023_00387_09960_1105.N1	25-JAN-2004 22:06:34	Bright	50.500	36	50Alp UMa	1.8000	6300.0	101	9960	No
470	GOM_NL__2PRFIN20040125_220938_000000582023_00387_09960_1106.N1	25-JAN-2004 22:09:38	Bright	57.500	87	64Gam UMa	2.4330	11000.	115	9960	No
471	GOM_NL__2PRFIN20040125_221228_000000562023_00387_09960_1107.N1	25-JAN-2004 22:12:28	Bright	55.500	32	77Eps UMa	1.7630	11000.	111	9960	No
472	GOM_NL__2PRFIN20040125_222517_000000412023_00387_09960_1108.N1	25-JAN-2004 22:25:17	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	9960	No
473	GOM_NL__2PRFIN20040125_222843_000000802023_00387_09960_1109.N1	25-JAN-2004 22:28:43	Bright	79.500	83		2.3780	11000.	159	9960	No
474	GOM_NL__2PRFIN20040125_223223_000000372023_00387_09960_1110.N1	25-JAN-2004 22:32:23	Bright	37.000	126	60Bet Oph	2.7700	4250.0	74	9960	No
475	GOM_NL__2PRFIN20040125_223527_000001582023_00387_09960_1111.N1	25-JAN-2004 22:35:27	Straylight	158.00	3	16Alp Boo	-0.050000	4250.0	316	9960	No
476	GOM_NL__2PRFIN20040125_224236_000000562023_00387_09960_1112.N1	25-JAN-2004 22:42:36	Dark	56.000	16	21Alp Sco	1.0200	3000.0	112	9960	No
477	GOM_NL__2PRFIN20040125_224401_000000452023_00387_09960_1113.N1	25-JAN-2004 22:44:01	Dark	45.000	75	26Eps Sco	2.2910	4250.0	90	9960	No
478	GOM_NL__2PRFIN20040125_224525_000000482023_00387_09960_1114.N1	25-JAN-2004 22:45:25	Dark	47.500	40	The Sco	1.8590	7100.0	95	9960	No
479	GOM_NL__2PRFIN20040125_225016_000000452023_00387_09960_1115.N1	25-JAN-2004 22:50:16	Dark	44.500	109	Bet Lup	2.6770	26000.	89	9960	No
480	GOM_NL__2PRFIN20040125_225144_000000462023_00388_09961_1085.N1	25-JAN-2004 22:51:44	Dark	46.000	78	Alp Lup	2.3040	28000.	92	9961	No
481	GOM_NL__2PRFIN20040125_225345_000000552023_00388_09961_1086.N1	25-JAN-2004 22:53:45	Dark	55.000	4	Alp1Cen	-0.010000	5800.0	110	9961	No
482	GOM_NL__2PRFIN20040125_225819_000000432023_00388_09961_1087.N1	25-JAN-2004 22:58:19	Dark	42.500	12	Alp1Cru	0.77500	30000.	85	9961	No
483	GOM_NL__2PRFIN20040125_225955_000000472023_00388_09961_1088.N1	25-JAN-2004 22:59:55	Dark	47.000	99	Del Cen	2.5750	26000.	94	9961	No
484	GOM_NL__2PRFIN20040125_230218_000000472023_00388_09961_1089.N1	25-JAN-2004 23:02:18	Dark	47.000	29	Bet Car	1.6720	10200.	94	9961	No
485	GOM_NL__2PRFIN20040125_230431_000000402023_00388_09961_1090.N1	25-JAN-2004 23:04:31	Dark	40.000	71	lot Car	2.2460	7700.0	80	9961	No
486	GOM_NL__2PRFIN20040125_230618_000000462023_00388_09961_1091.N1	25-JAN-2004 23:06:18	Dark	45.500	46	Del Vel	1.9540	10600.	91	9961	No
487	GOM_NL__2PRFIN20040125_230844_000000462023_00388_09961_1092.N1	25-JAN-2004 23:08:44	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	9961	No
488	GOM_NL__2PRFIN20040125_231100_000000432023_00388_09961_1093.N1	25-JAN-2004 23:11:00	Straylight	43.000	70	Zet Pup	2.2460	39000.	86	9961	No
489	GOM_NL__2PRFIN20040125_231229_000000412023_00388_09961_1094.N1	25-JAN-2004 23:12:29	Straylight	41.000	117	Pi Pup	2.7060	3800.0	82	9961	No
490	GOM_NL__2PRFIN20040125_231456_000000432023_00388_09961_1095.N1	25-JAN-2004 23:14:56	Straylight	43.000	23	21Eps CMa	1.5020	26000.	86	9961	No
491	GOM_NL__2PRFIN20040125_231619_000000412023_00388_09961_1096.N1	25-JAN-2004 23:16:19	Straylight	40.500	179	24Omi2CMa	3.0320	24000.	81	9961	No
492	GOM_NL__2PRFIN20040125_231829_000000462023_00388_09961_1097.N1	25-JAN-2004 23:18:29	Straylight	46.000	1	9Alp CMa	-1.4400	11000.	92	9961	No
493	GOM_NL__2PRFIN20040125_232037_000000712023_00388_09961_1098.N1	25-JAN-2004 23:20:37	Straylight	70.500	48	30Alp Hya	1.9770	4100.0	141	9961	No
494	GOM_NL__2PRFIN20040125_232434_000000562023_00388_09961_1099.N1	25-JAN-2004 23:24:34	Tw_i_and_stray	56.000	8	10Alp CMi	0.40000	6500.0	112	9961	No
495	GOM_NL__2PRFIN20040125_232746_000000432023_00388_09961_1100.N1	25-JAN-2004 23:27:46	Bright	43.000	44	24Gam Gem	1.9280	11000.	86	9961	No
496	GOM_NL__2PRFIN20040125_232933_000000422023_00388_09961_1101.N1	25-JAN-2004 23:29:33	Bright	42.000	151	13Mu Gem	2.8900	3000.0	84	9961	No
497	GOM_NL__2PRFIN20040125_233132_000000442023_00388_09961_1102.N1	25-JAN-2004 23:31:32	Bright	43.500	17	78Bet Gem	1.1610	4500.0	87	9961	No
498	GOM_NL__2PRFIN20040125_233347_000000402023_00388_09961_1103.N1	25-JAN-2004 23:33:47	Bright	40.000	107	37The Aur	2.6490	11000.	80	9961	No
499	GOM_NL__2PRFIN20040125_233557_000000392023_00388_09961_1104.N1	25-JAN-2004 23:35:57	Bright	38.500	42	34Bet Aur	1.9000	10200.	77	9961	No
500	GOM_NL__2PRFIN20040125_233838_000001182023_00388_09961_1105.N1	25-JAN-2004 23:38:38	Bright	118.00	51	41Gam1Leo	2.0100	4500.0	236	9961	No
501	GOM_NL__2PRFIN20040125_234710_000000502023_00388_09961_1106.N1	25-JAN-2004 23:47:10	Bright	49.500	36	50Alp UMa	1.8000	6300.0	99	9961	No
502	GOM_NL__2PRFIN20040125_235013_000000562023_00388_09961_1107.N1	25-JAN-2004 23:50:13	Bright	56.000	87	64Gam UMa	2.4330	11000.	112	9961	No
503	GOM_NL__2PRFIN20040125_235304_000000562023_00388_09961_1108.N1	25-JAN-2004 23:53:04	Bright	55.500	32	77Eps UMa	1.7630	11000.	111	9961	No

3. Quality information per product

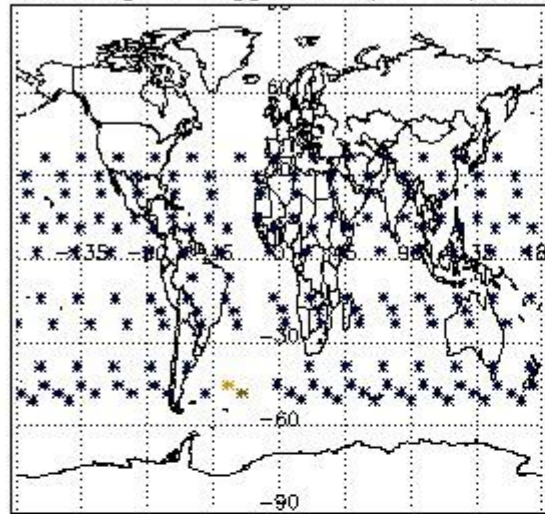
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

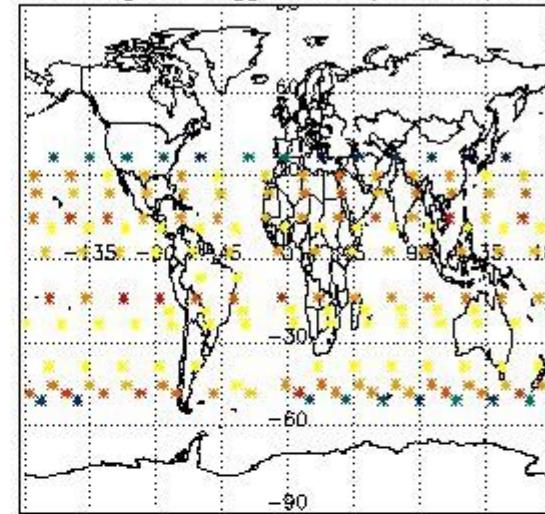


3.2 Plot quality information per product (world map)

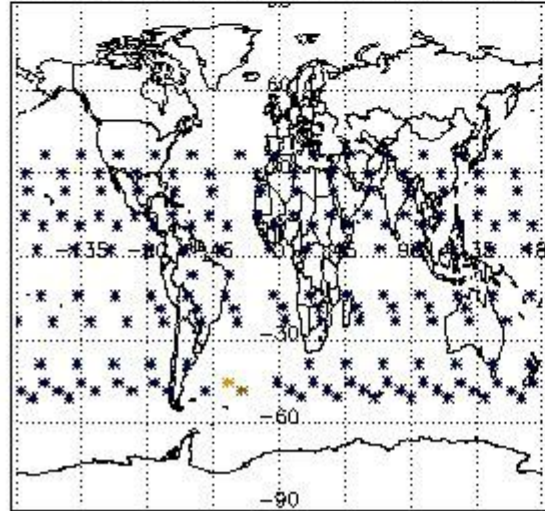
Percentage of flagged data per O3 profile



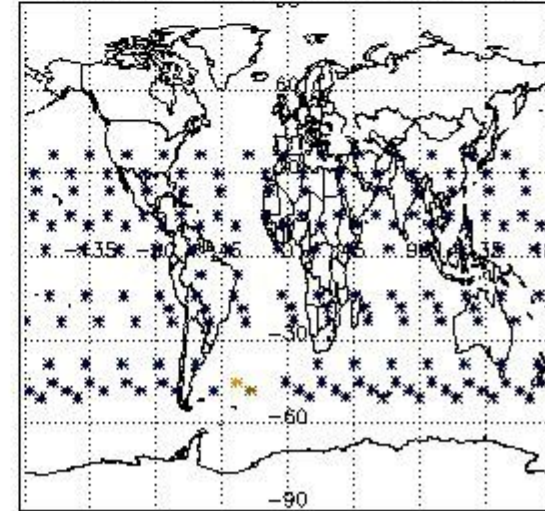
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

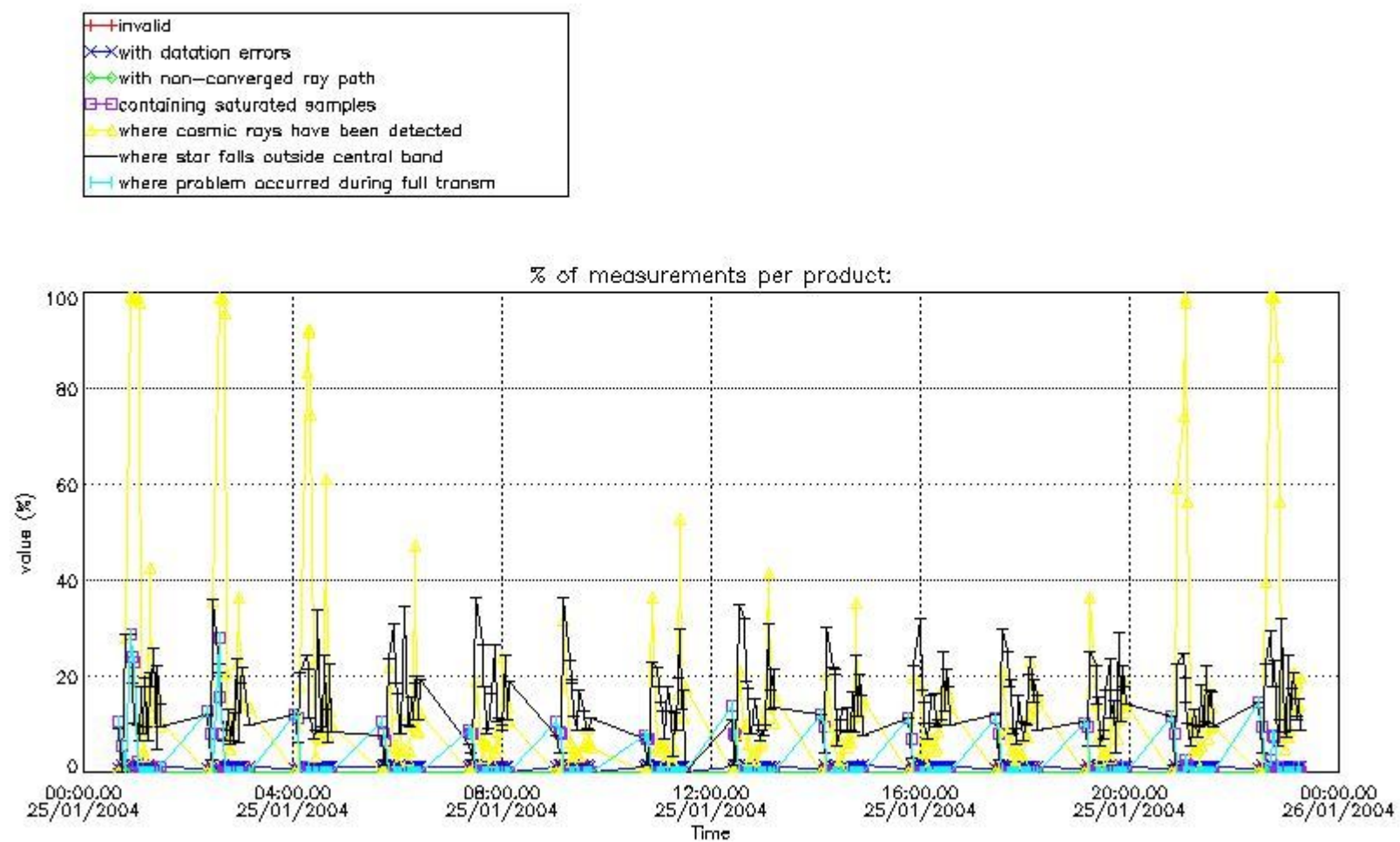


4. Level 1 quality information per product

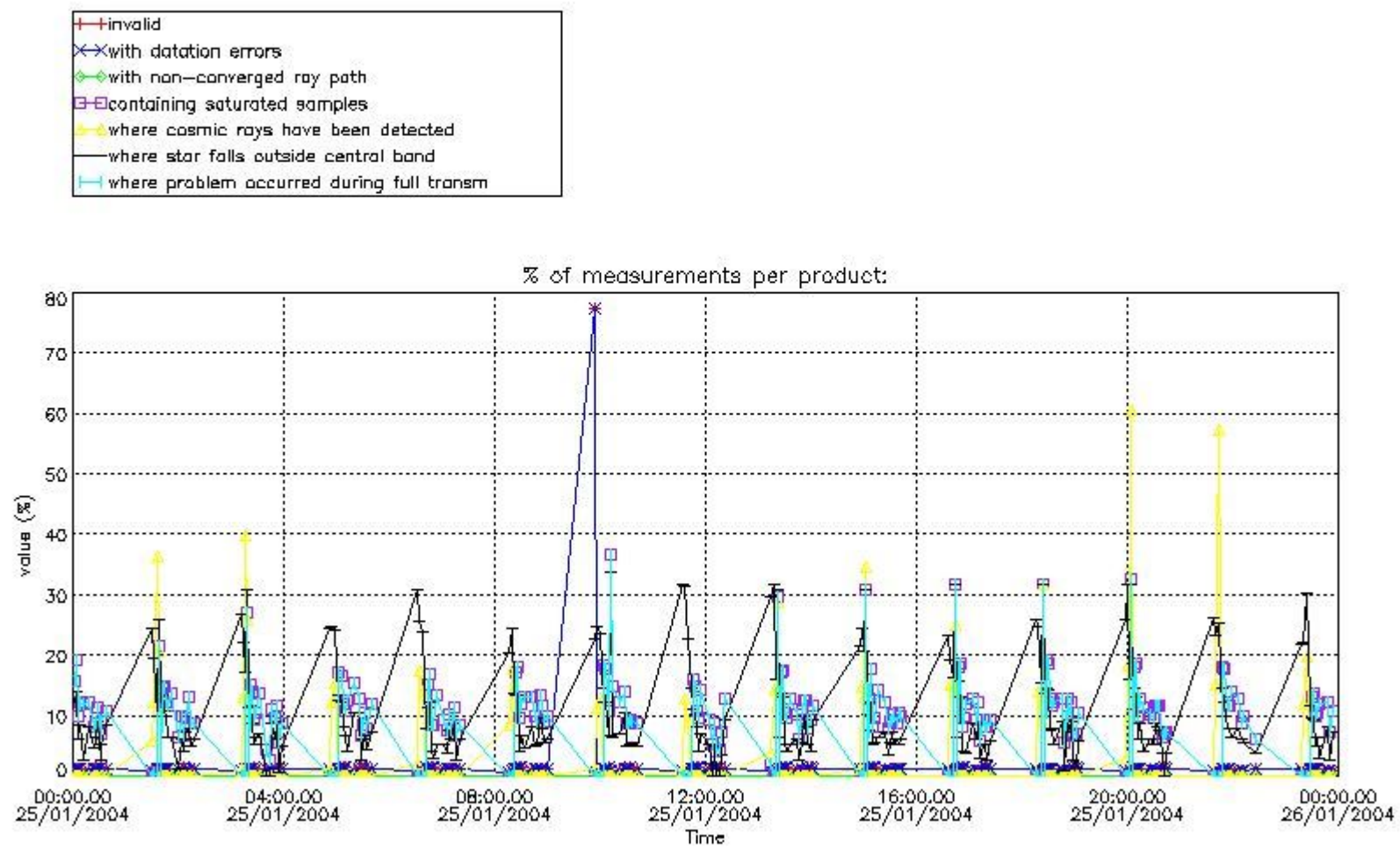
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

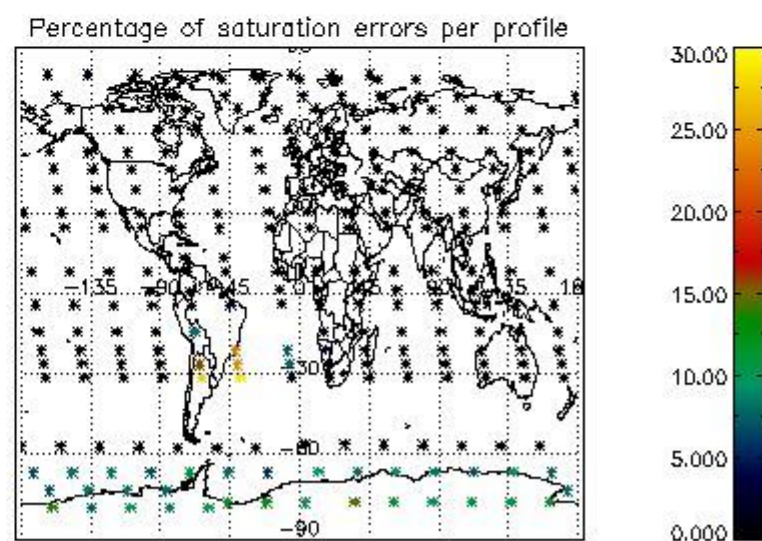
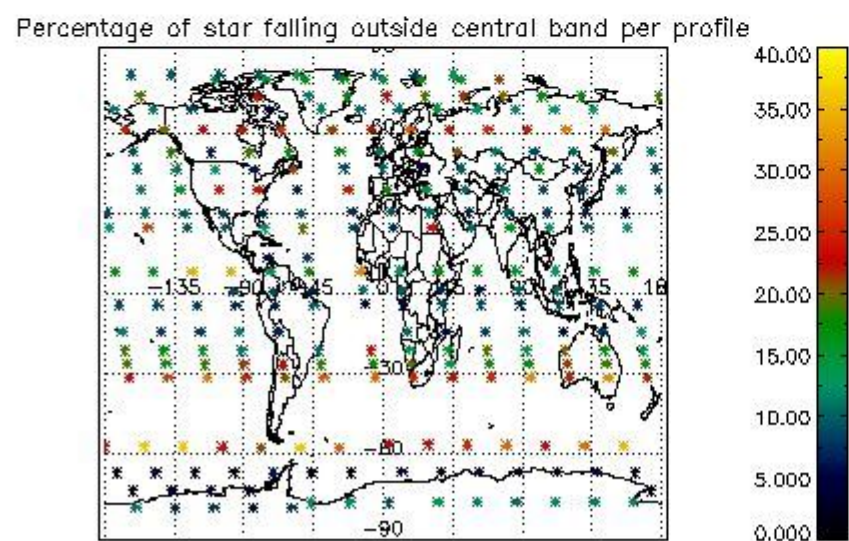
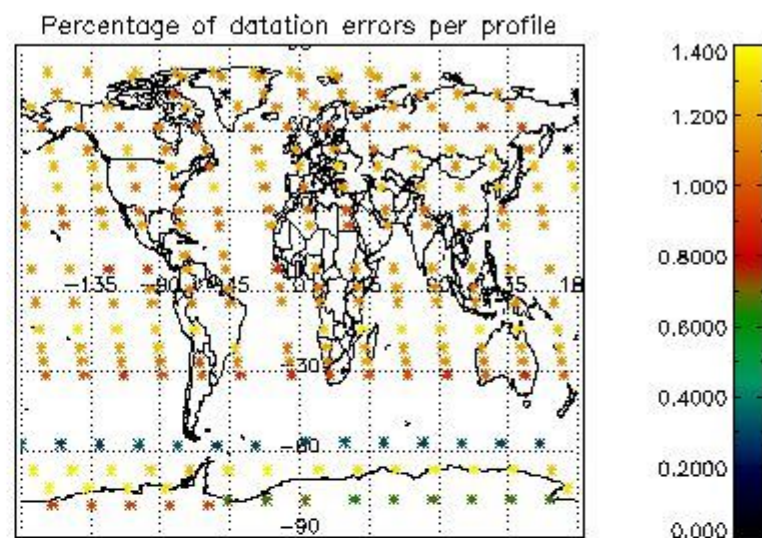
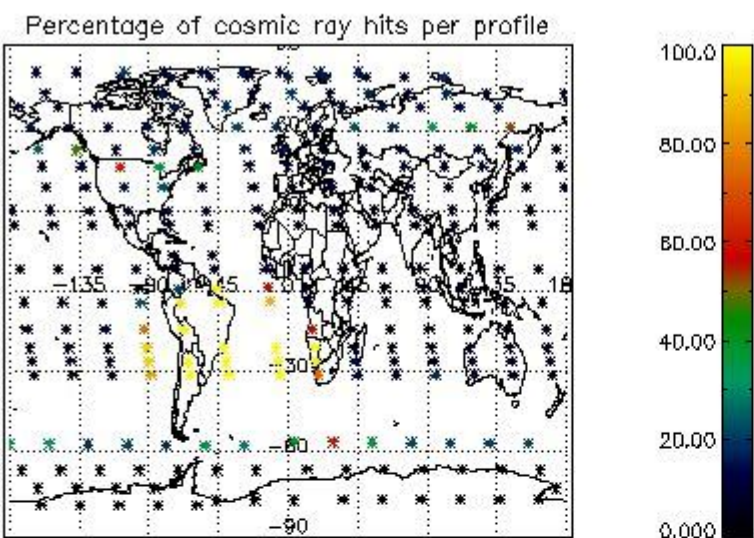


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

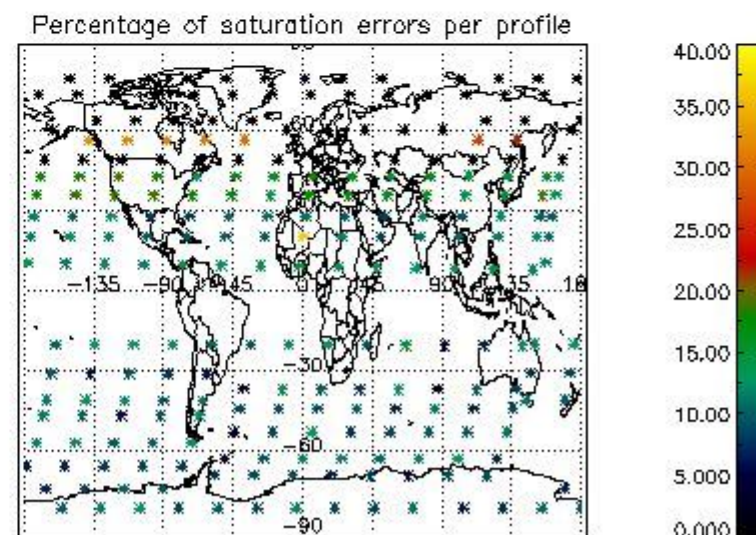
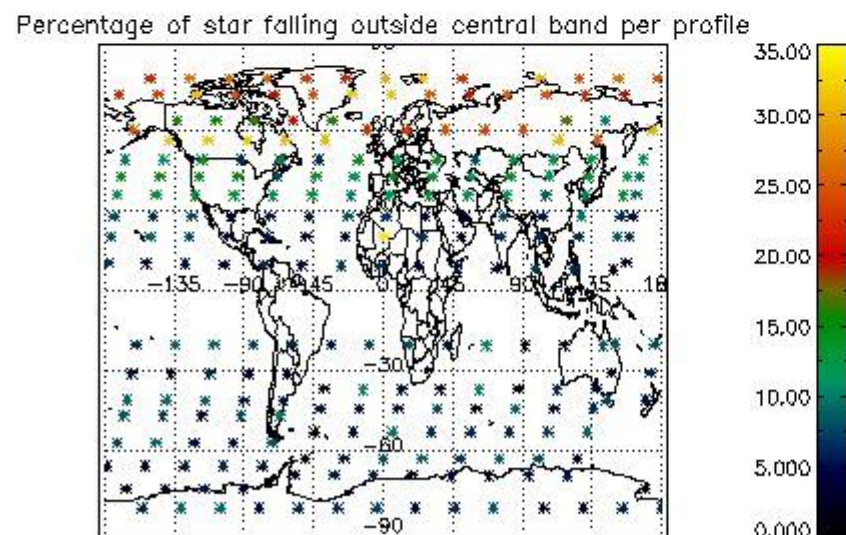
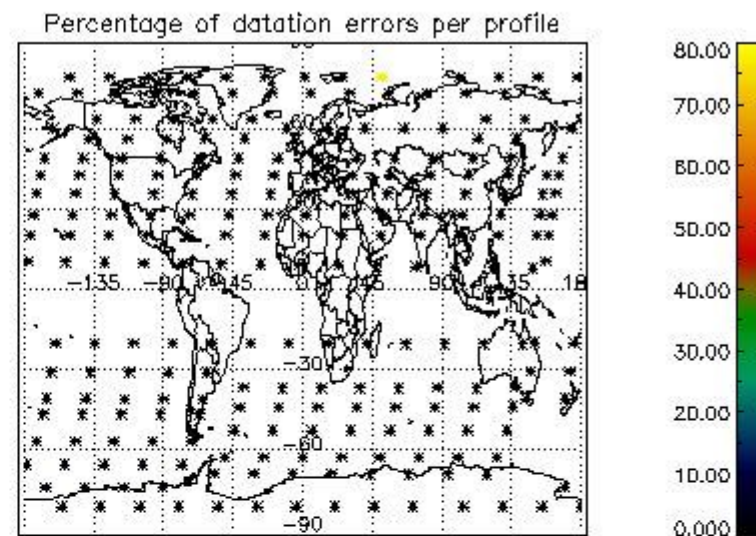
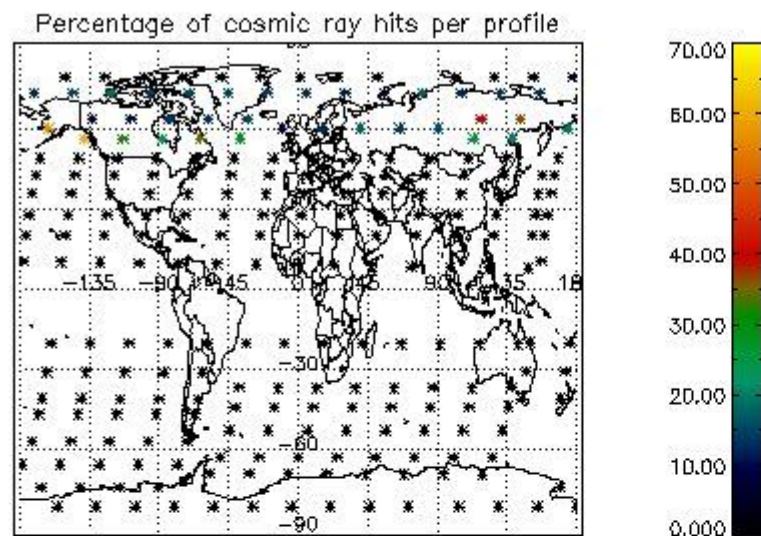


4.2 Plot quality information per product coming from level 1b processing (world map)

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

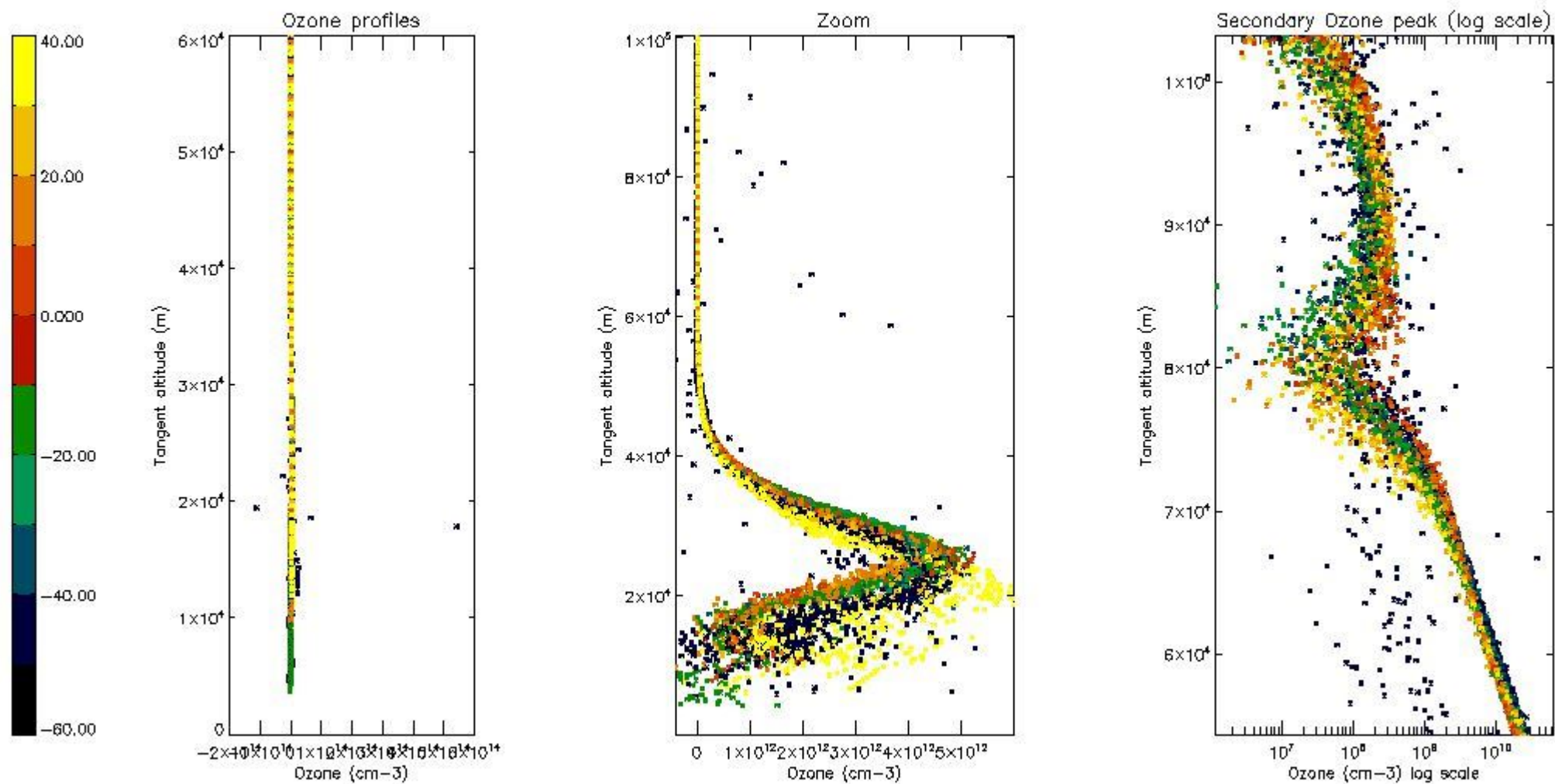
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	17

STD < 10	14
STD < 5	10

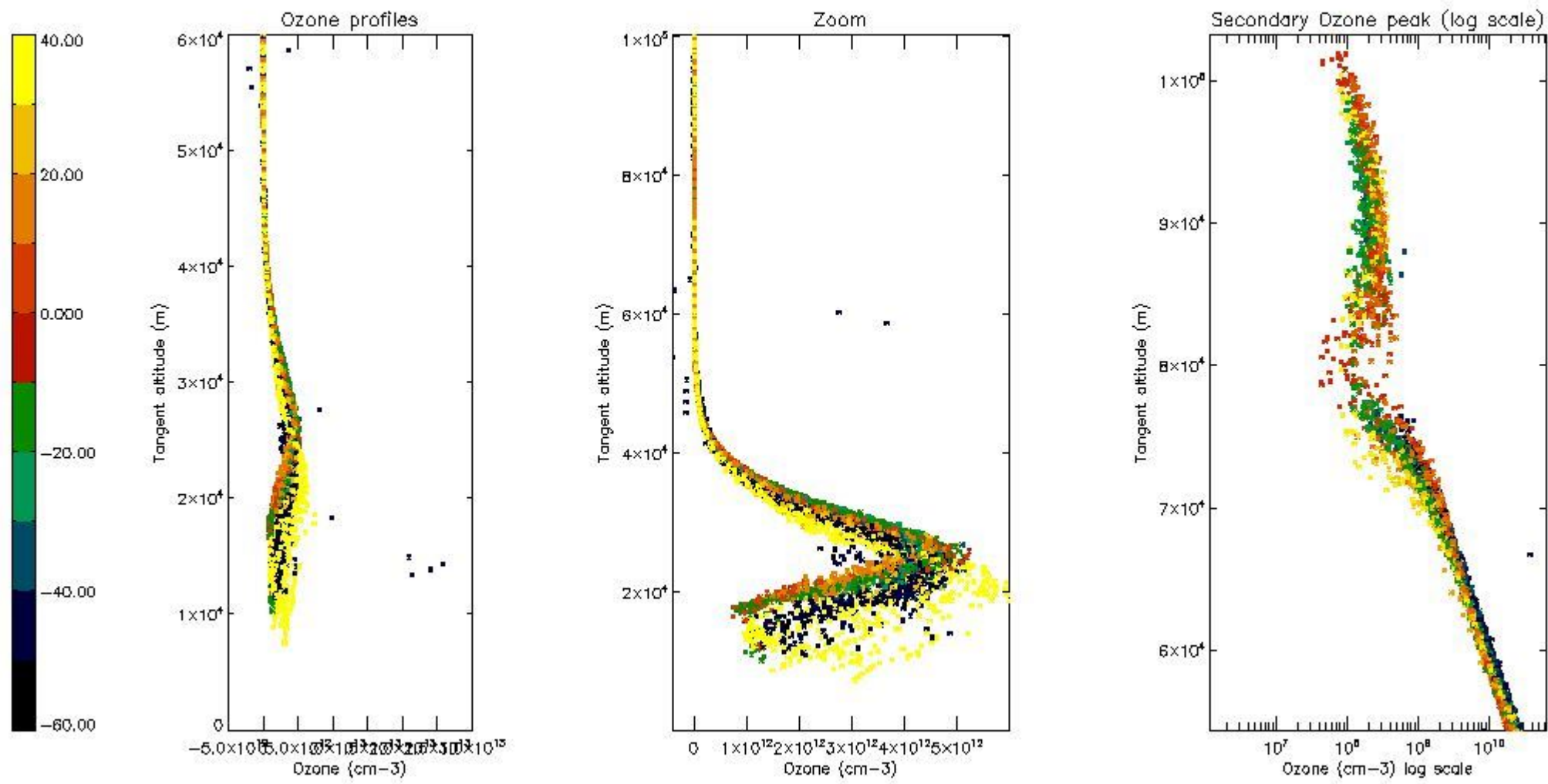
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



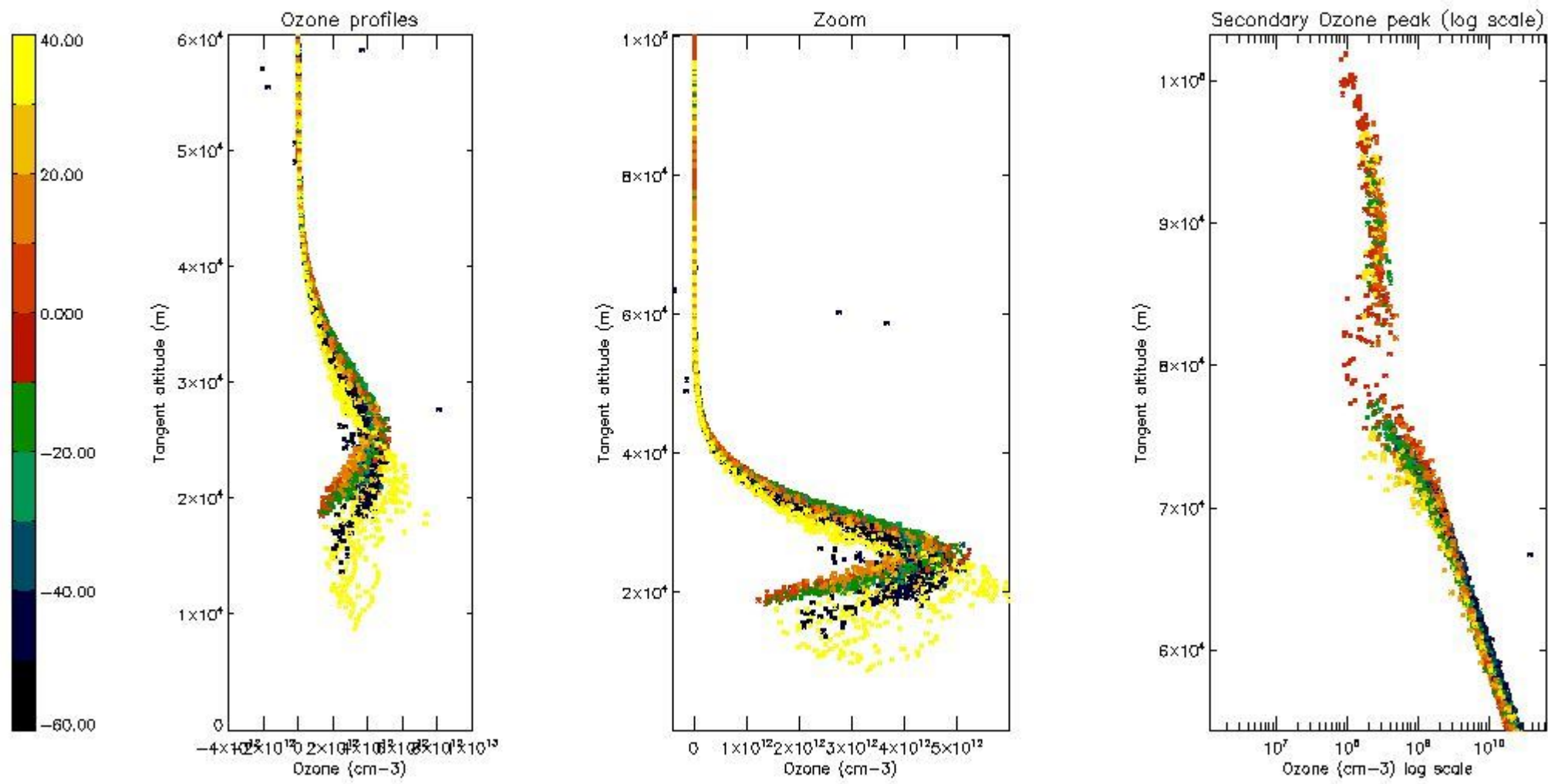
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



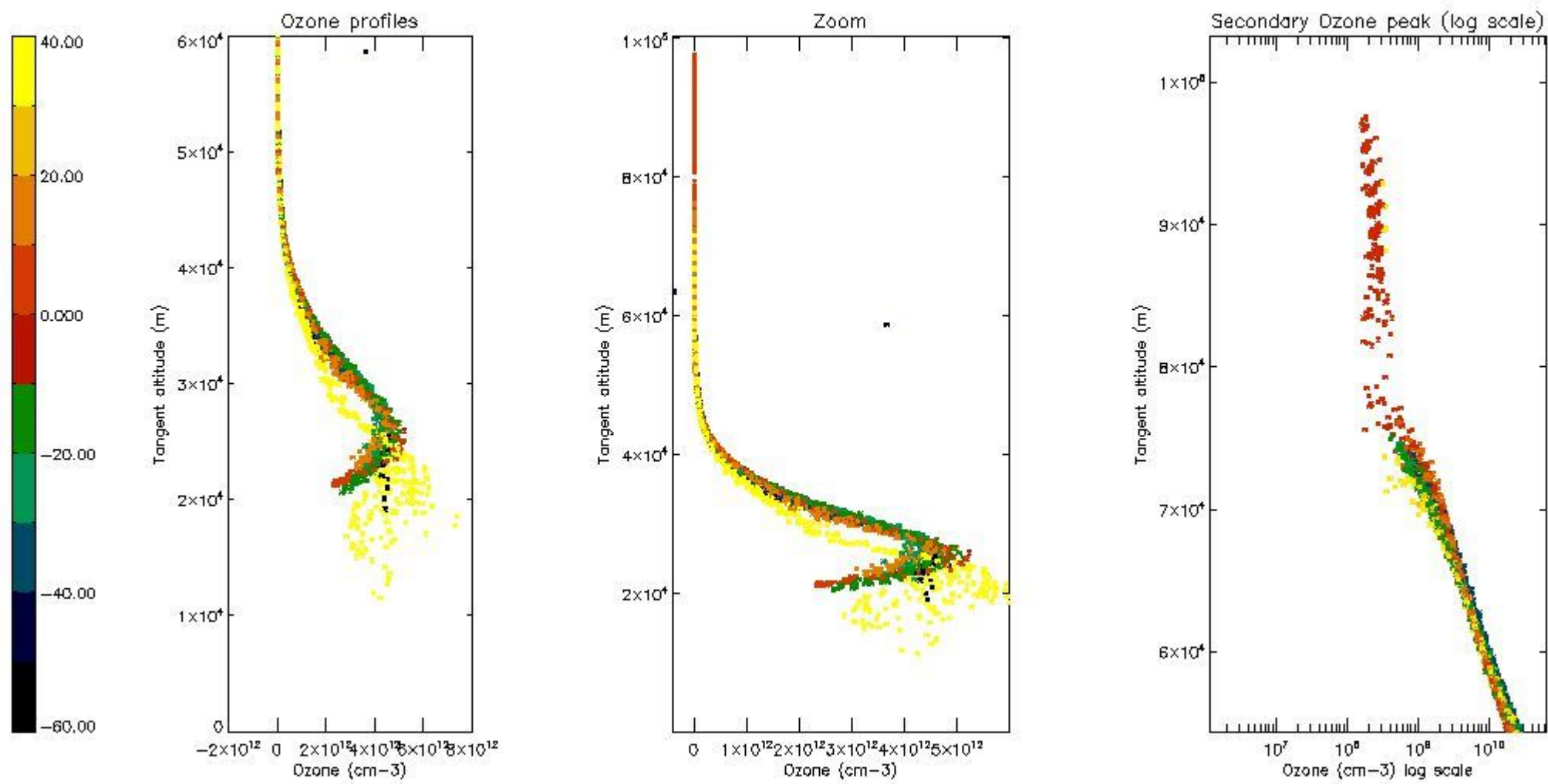
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



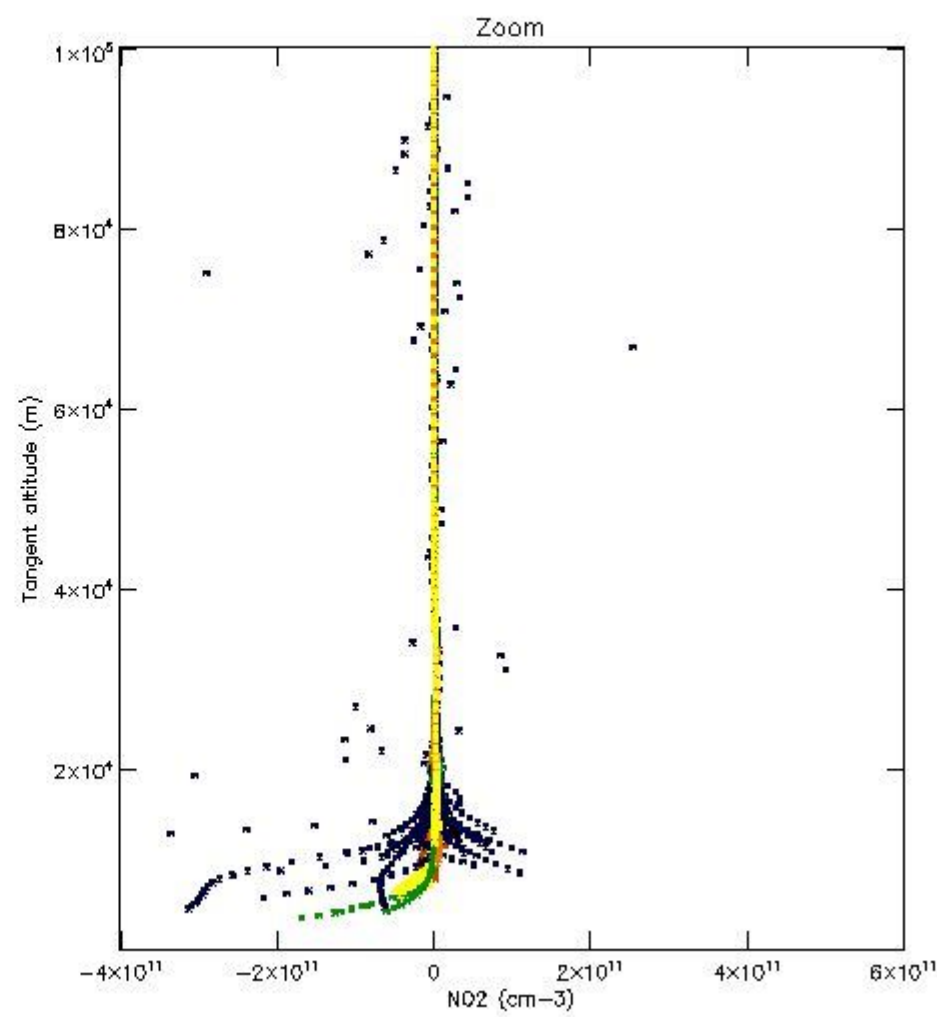
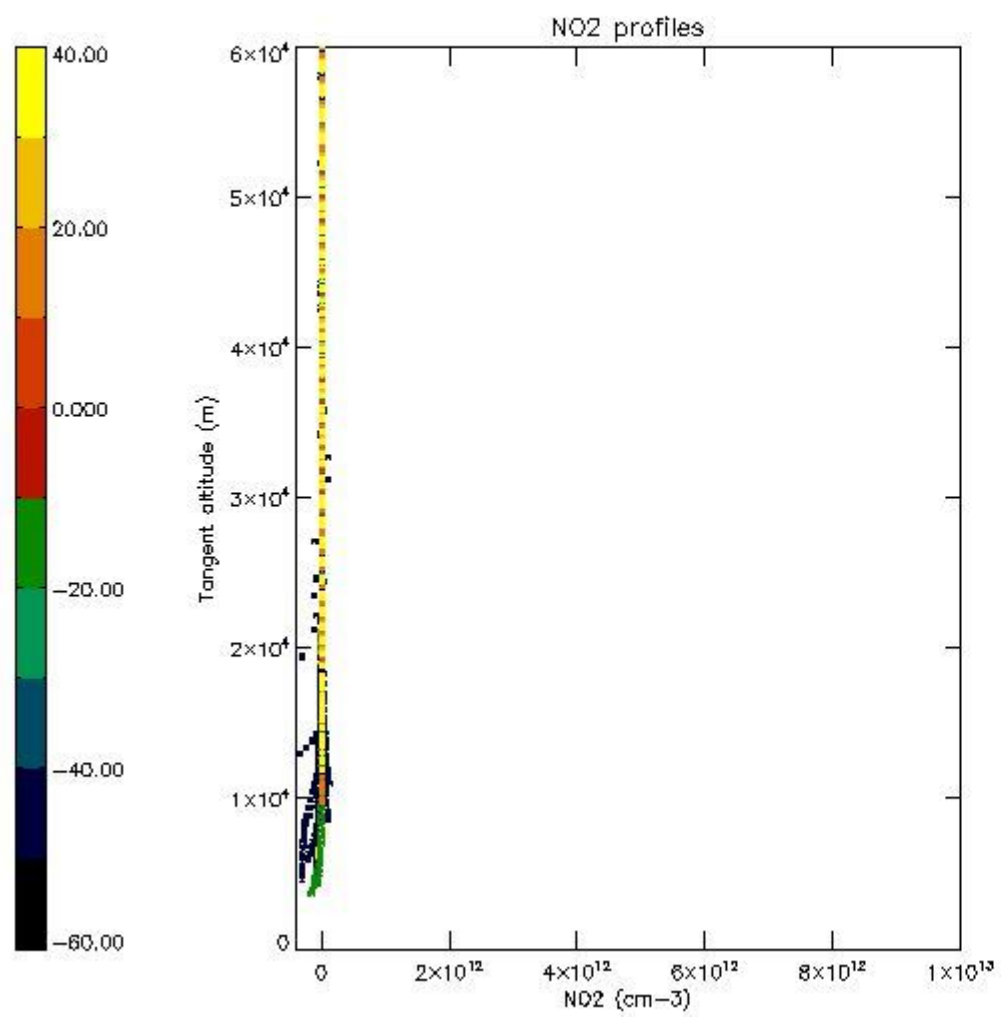
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



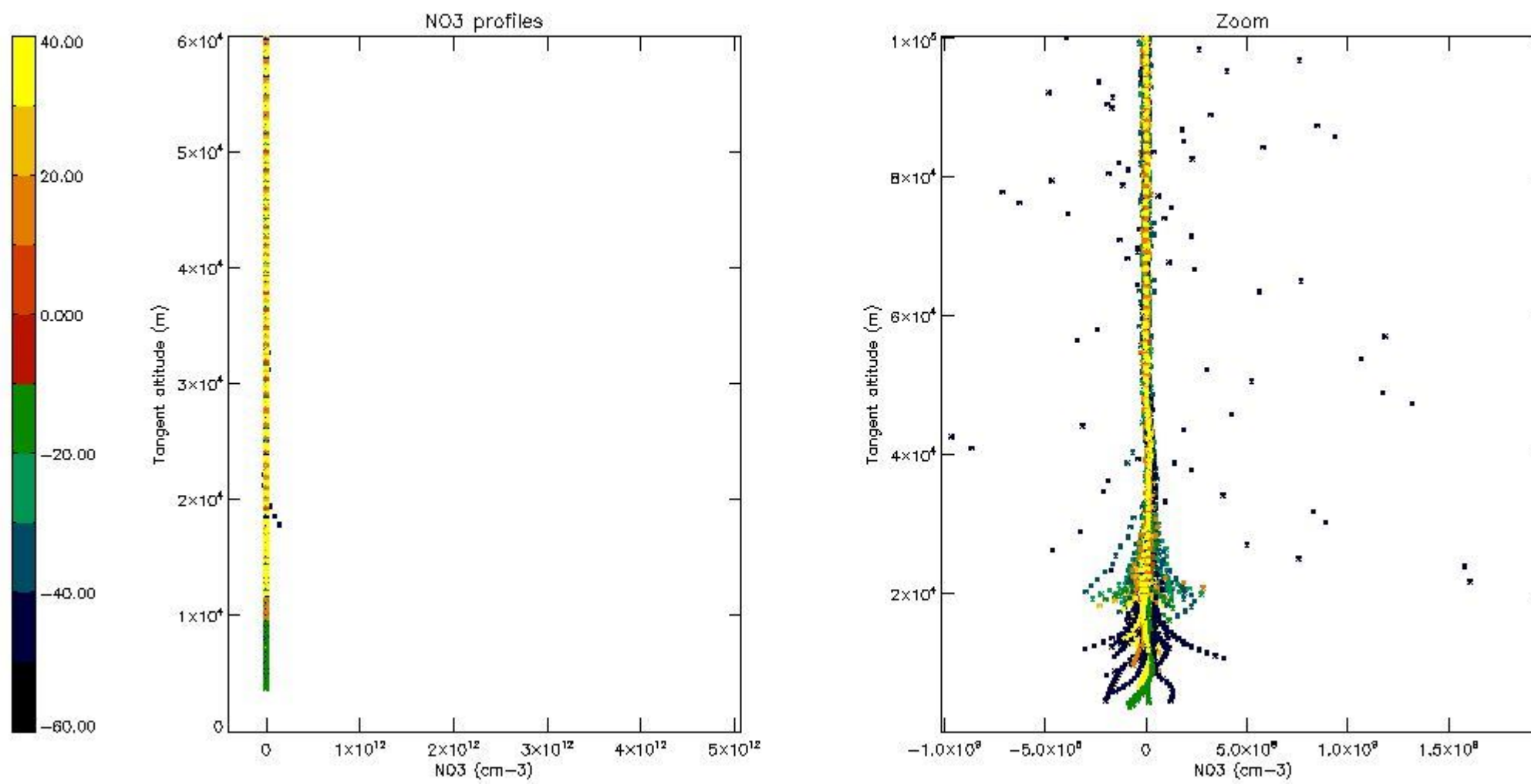
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



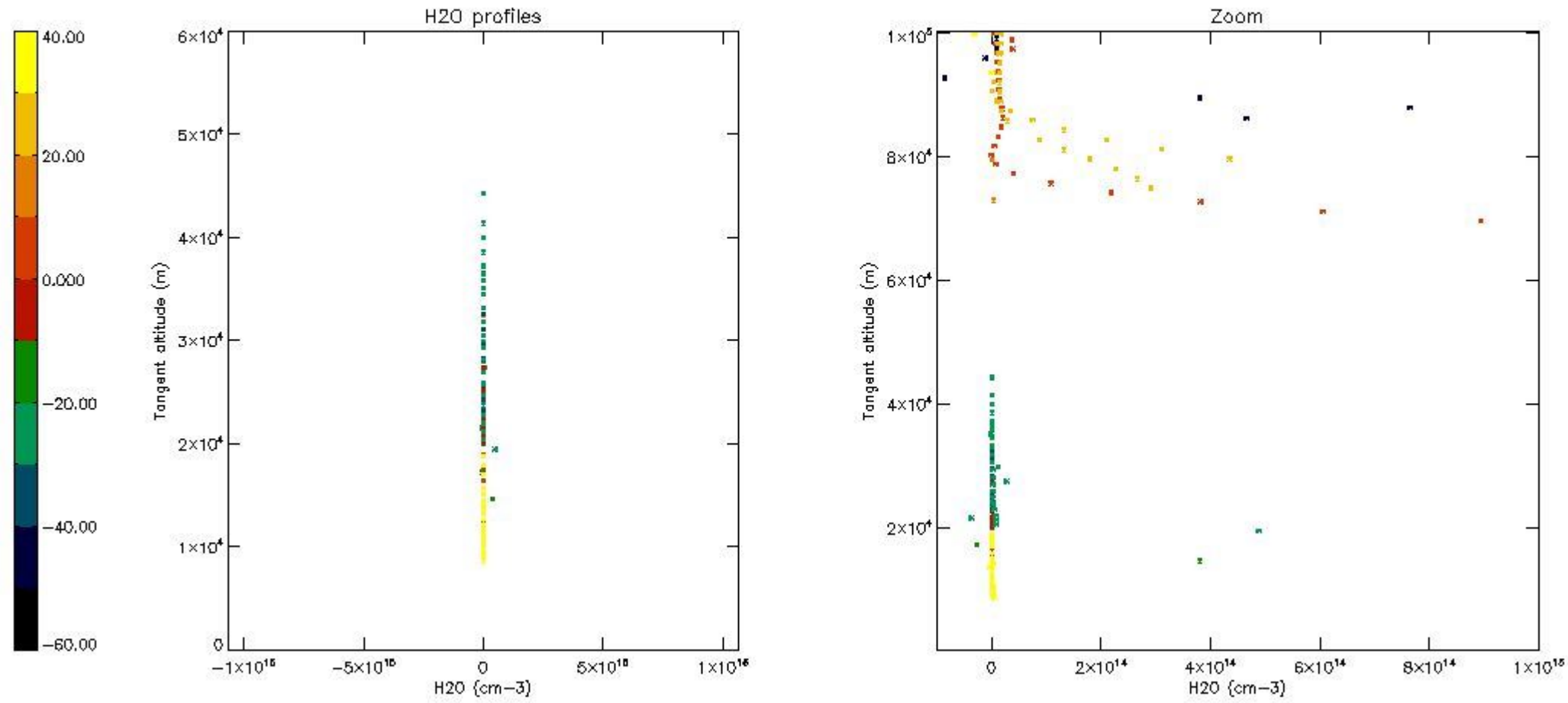
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

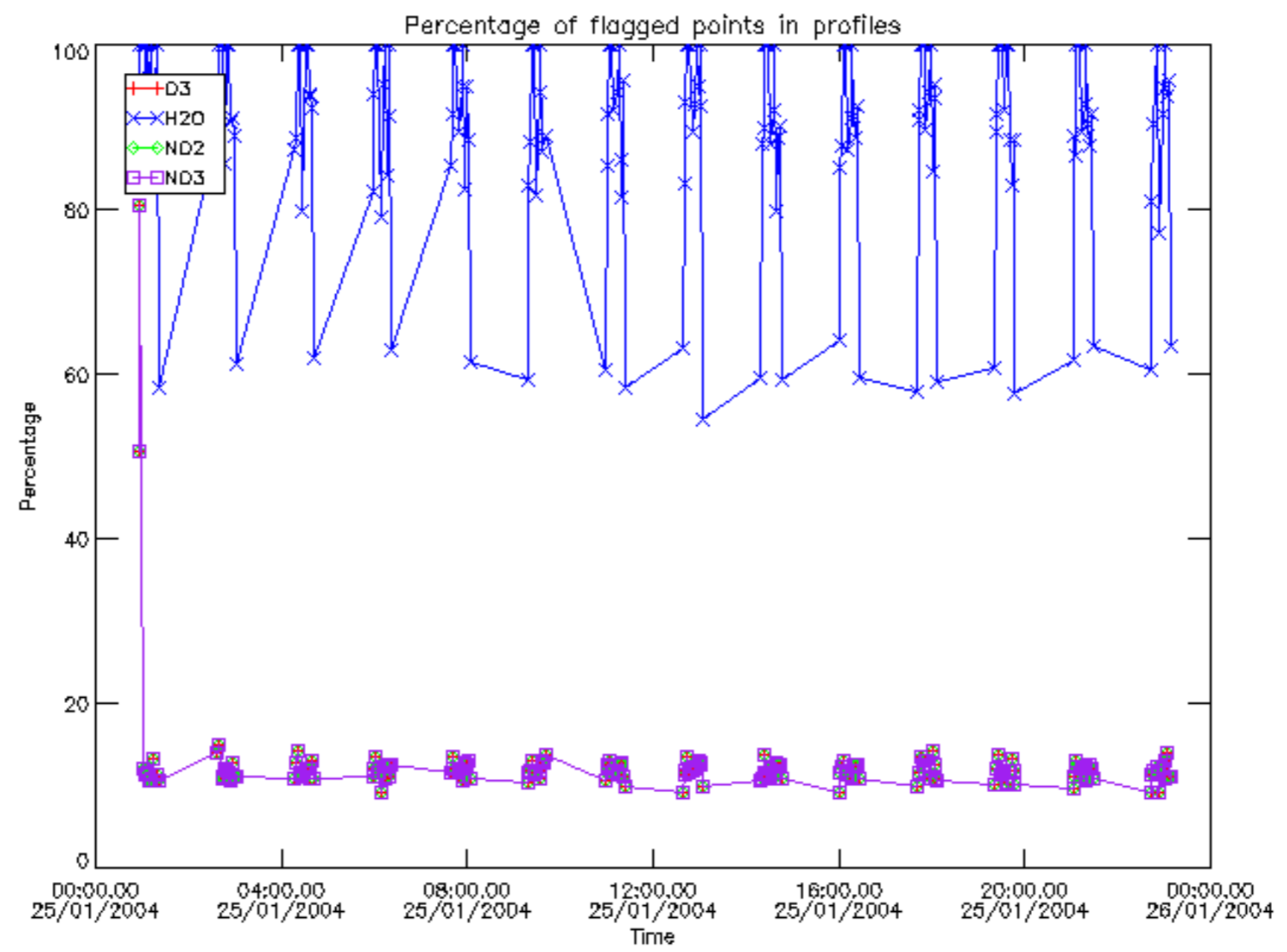
The colorbar represents the latitude.



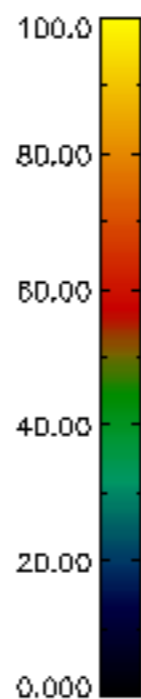
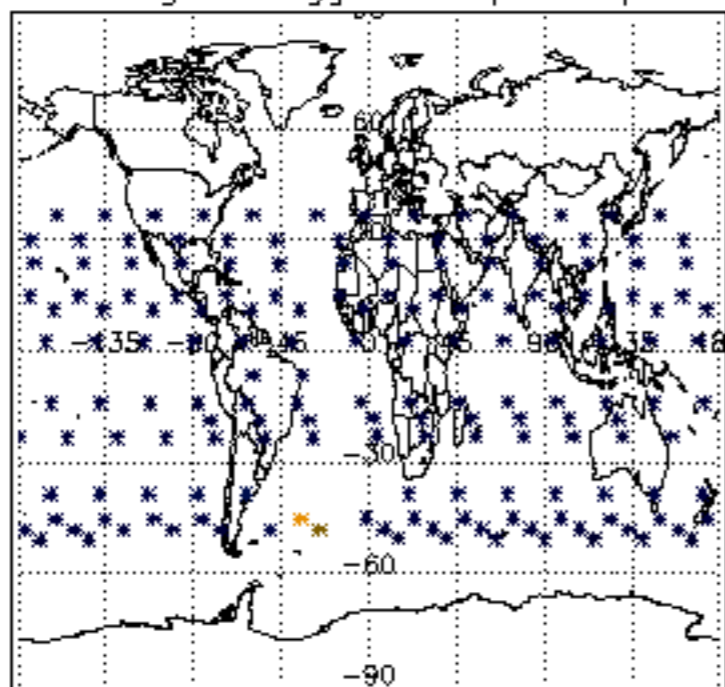
6. Auxiliary Data Files used for the production reported in section 2

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

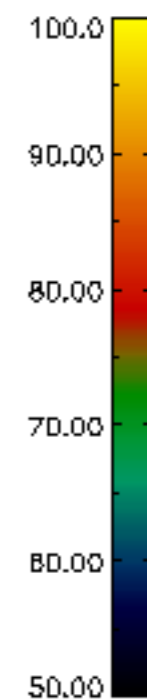
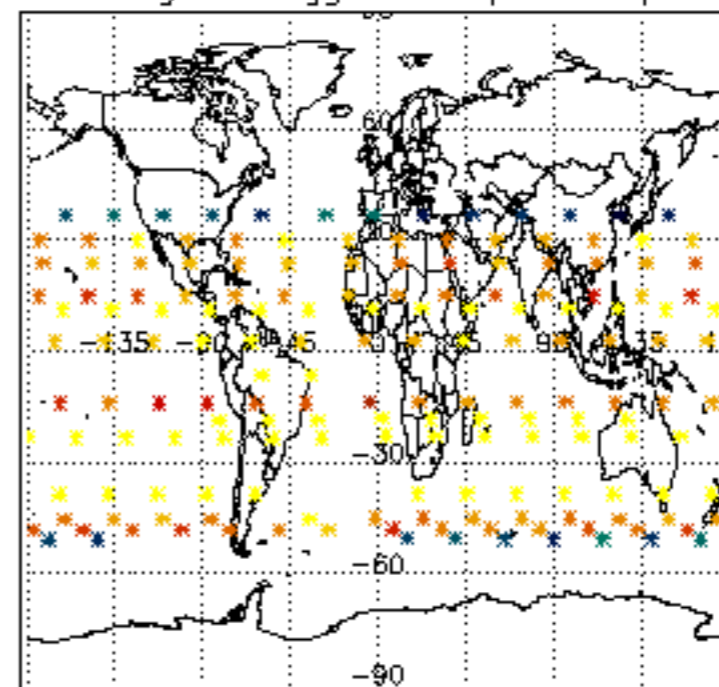
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	25-JAN-2004 00:01:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-JAN-2004 00:01:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-JAN-2004 00:01:10



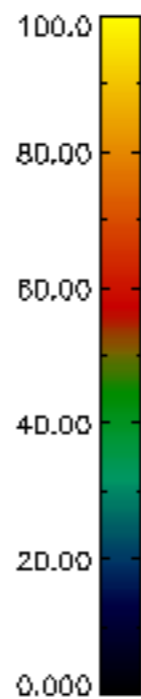
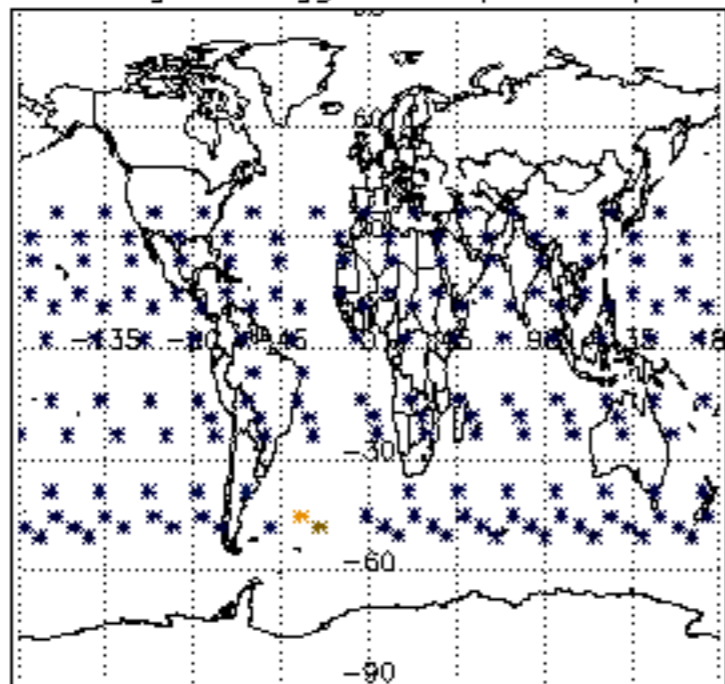
Percentage of flagged data per D3 profile



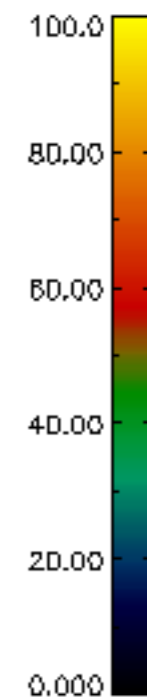
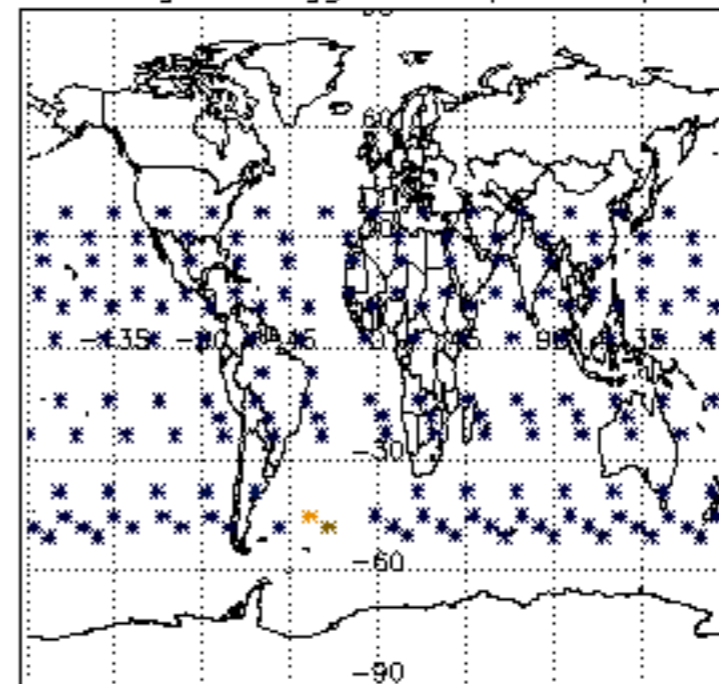
Percentage of flagged data per H2O profile

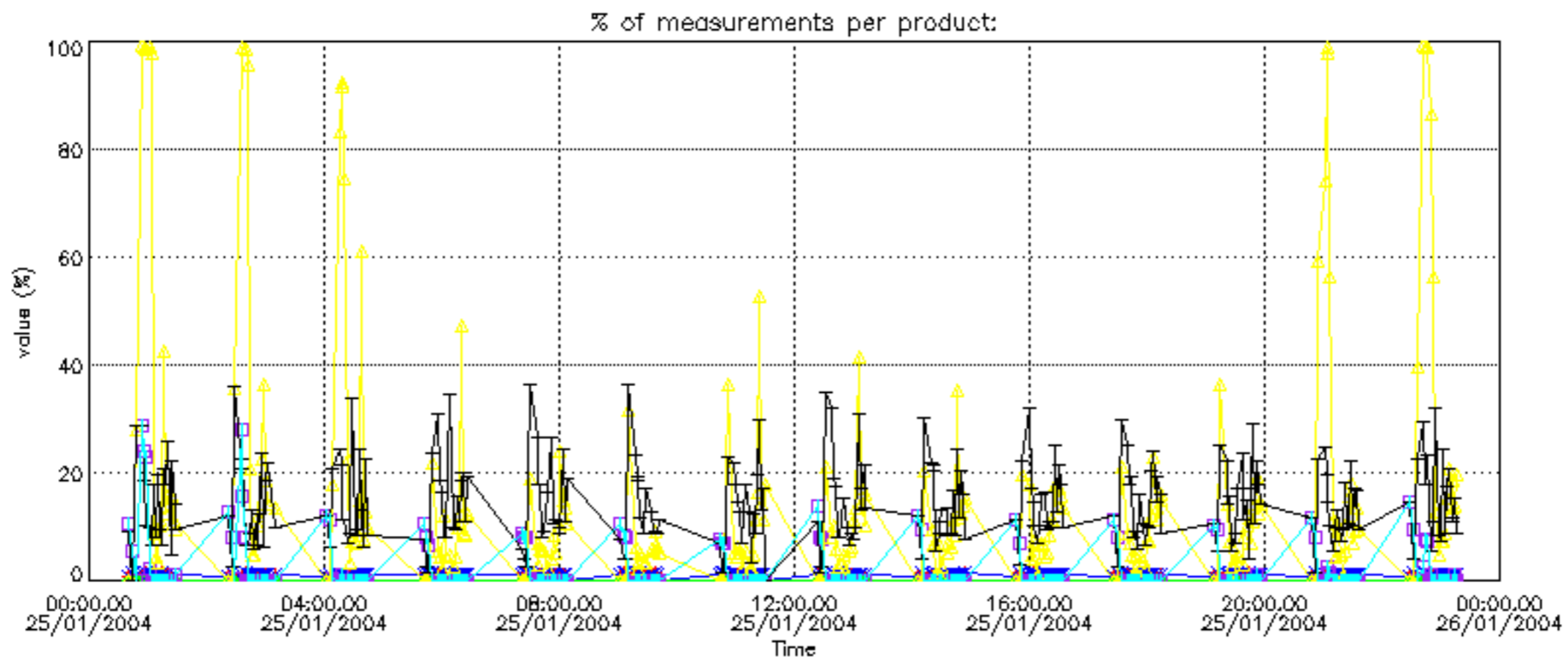


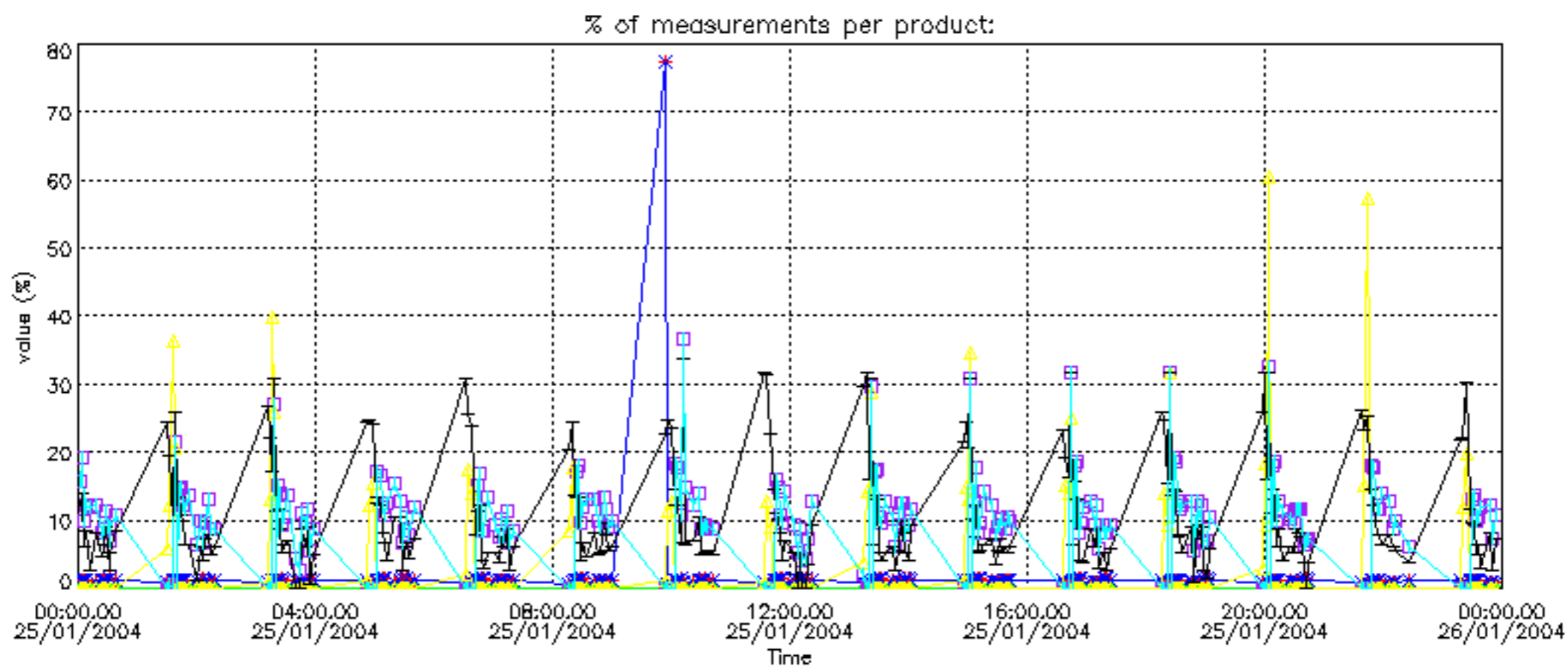
Percentage of flagged data per NO2 profile



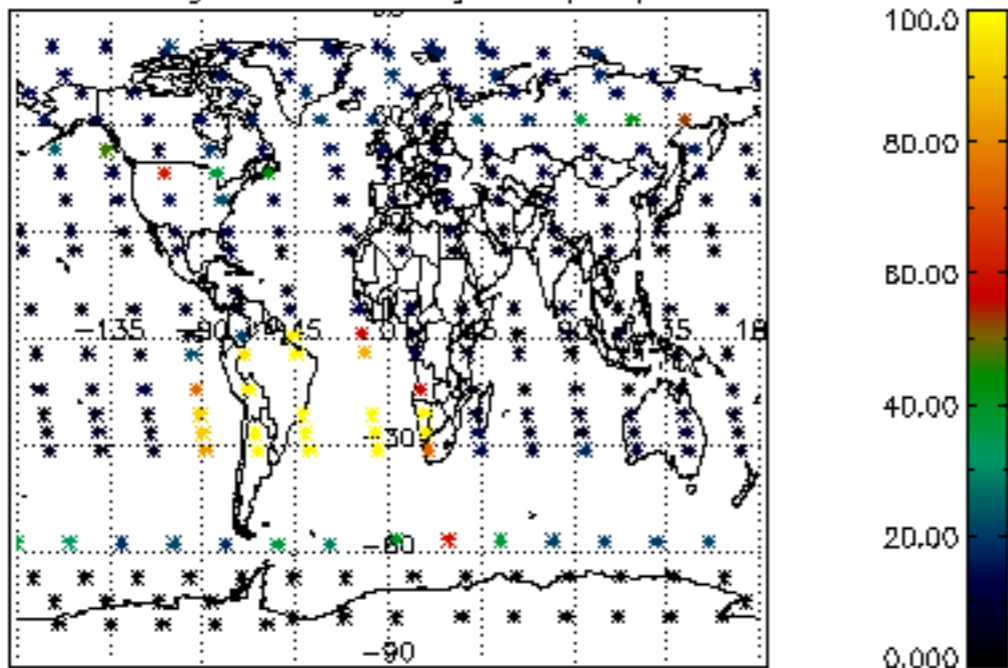
Percentage of flagged data per NO3 profile



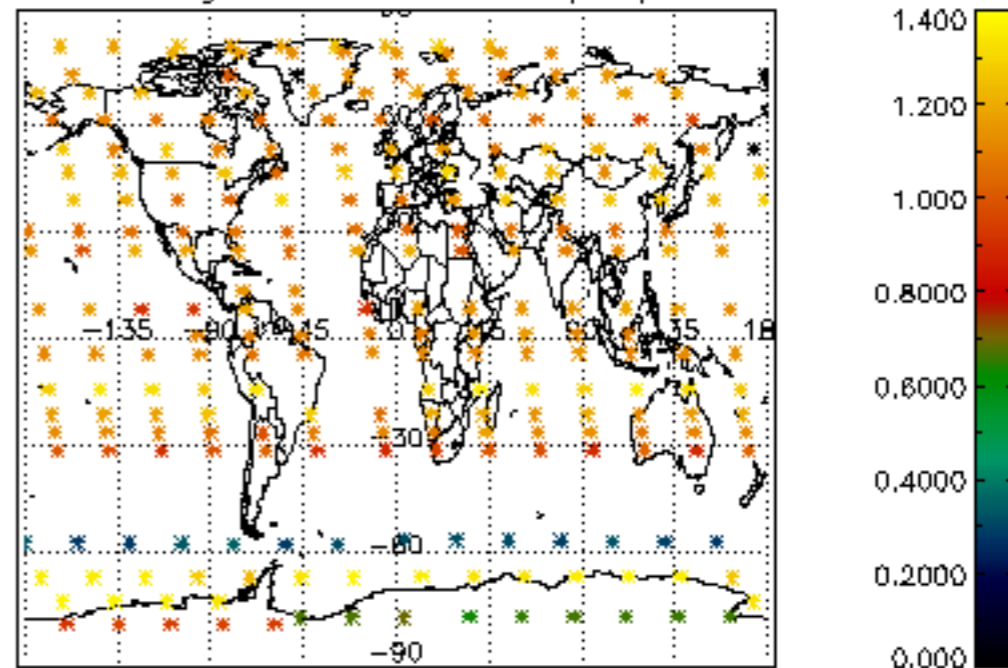




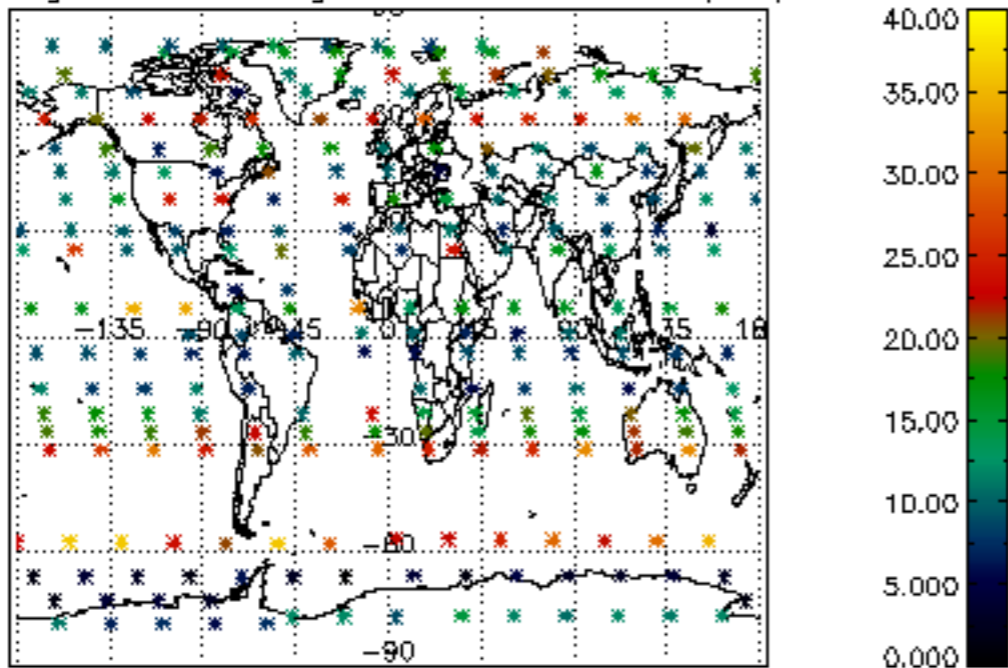
Percentage of cosmic ray hits per profile



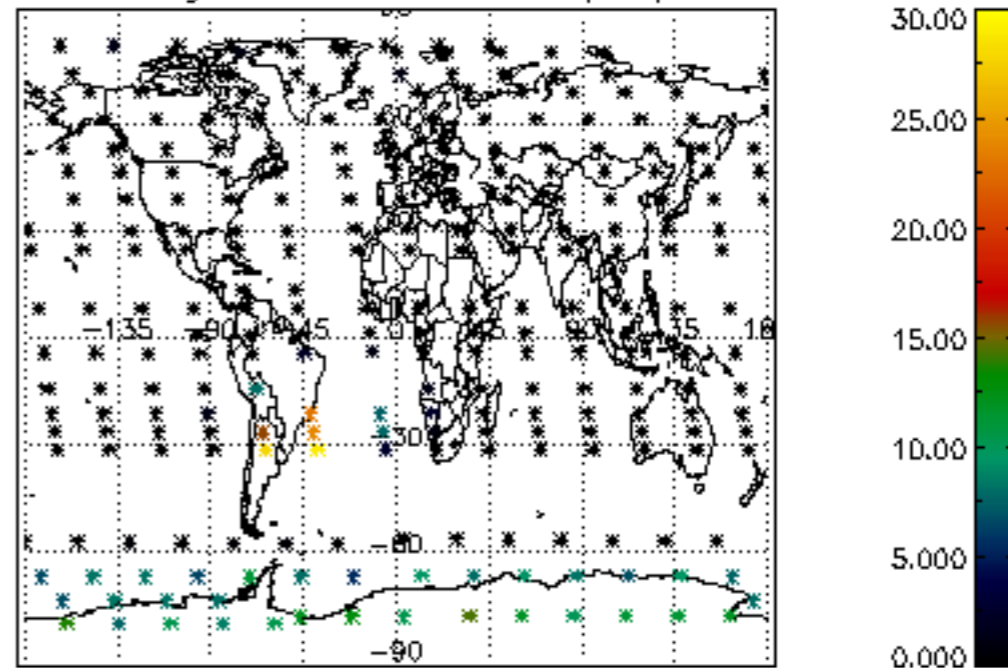
Percentage of datation errors per profile



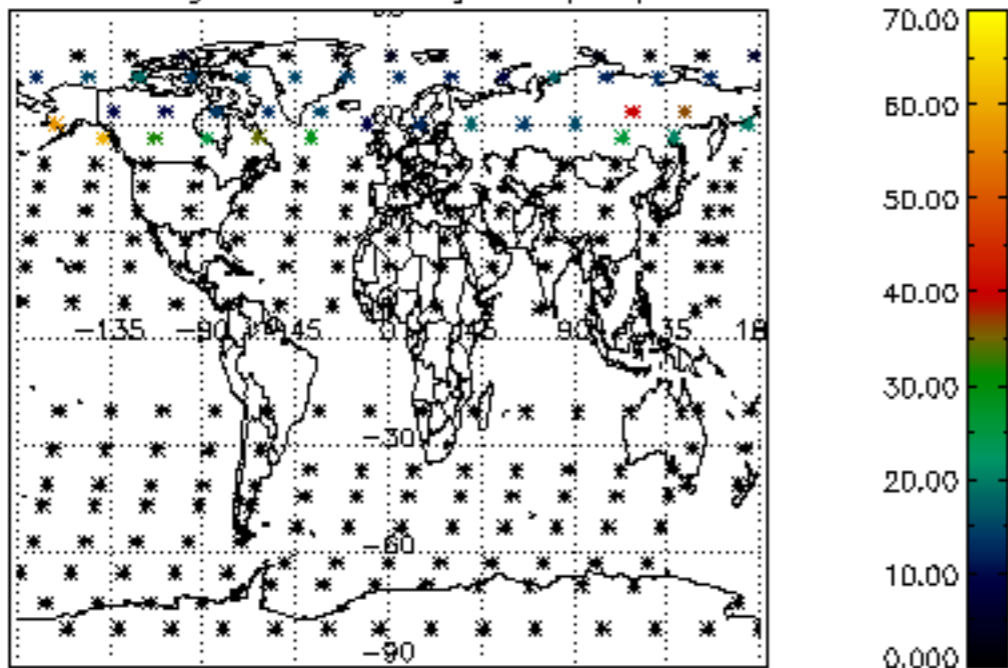
Percentage of star falling outside central band per profile



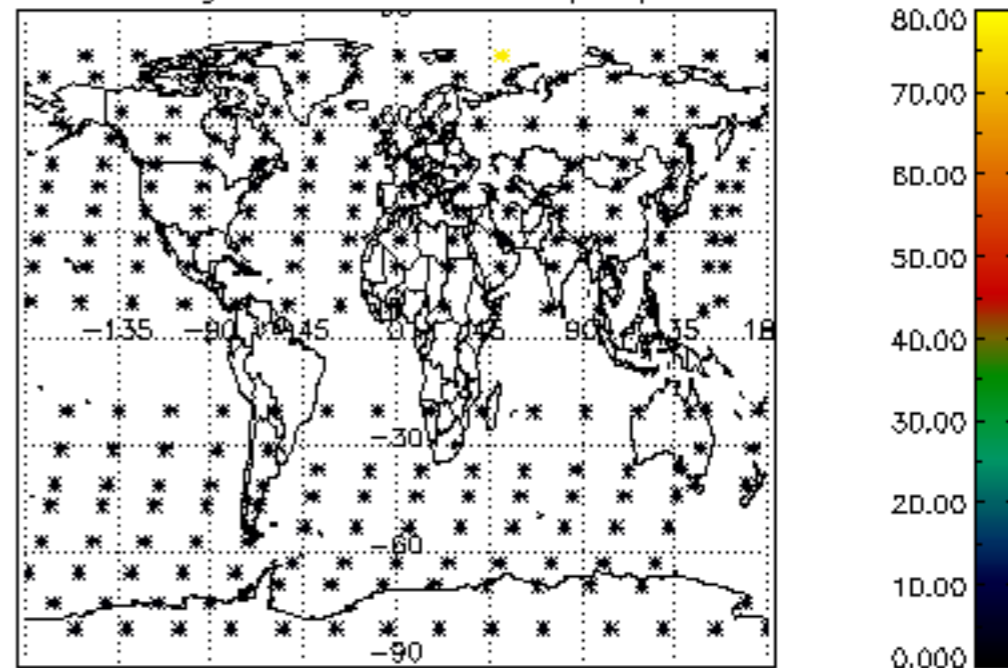
Percentage of saturation errors per profile



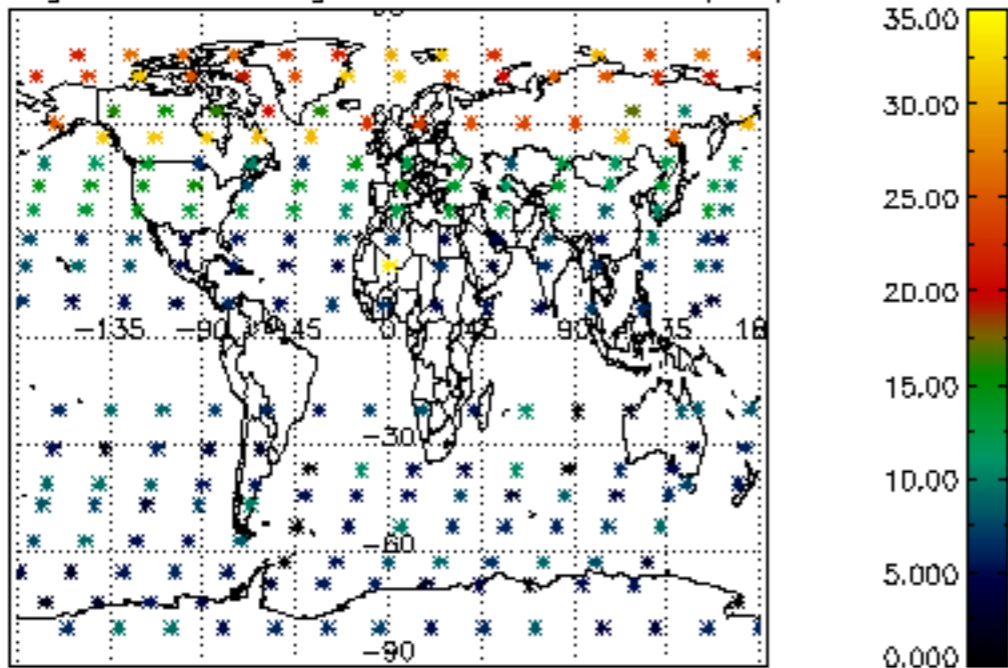
Percentage of cosmic ray hits per profile



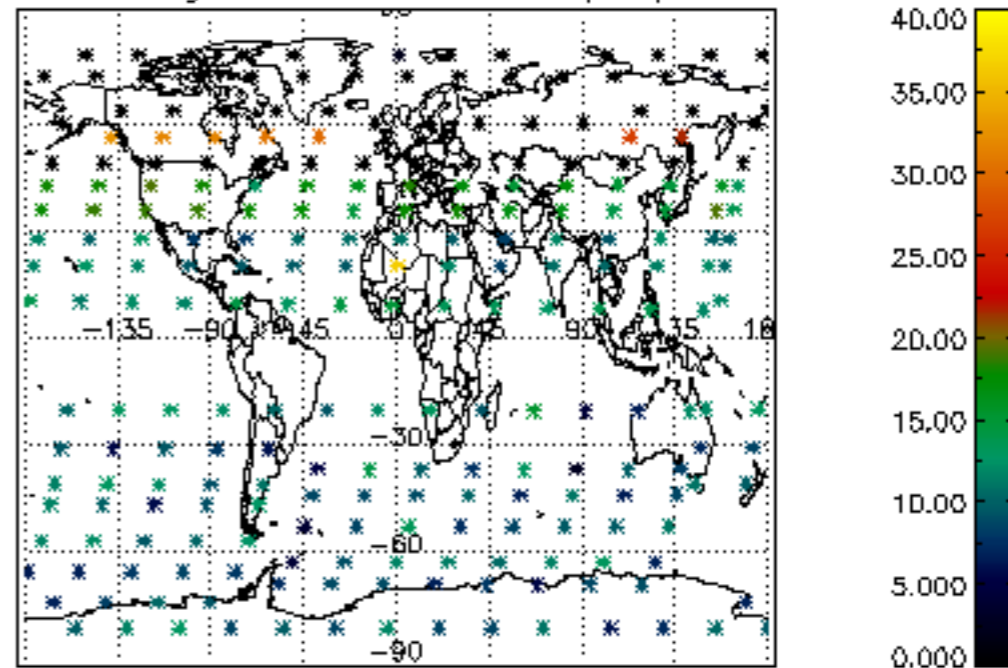
Percentage of datation errors per profile

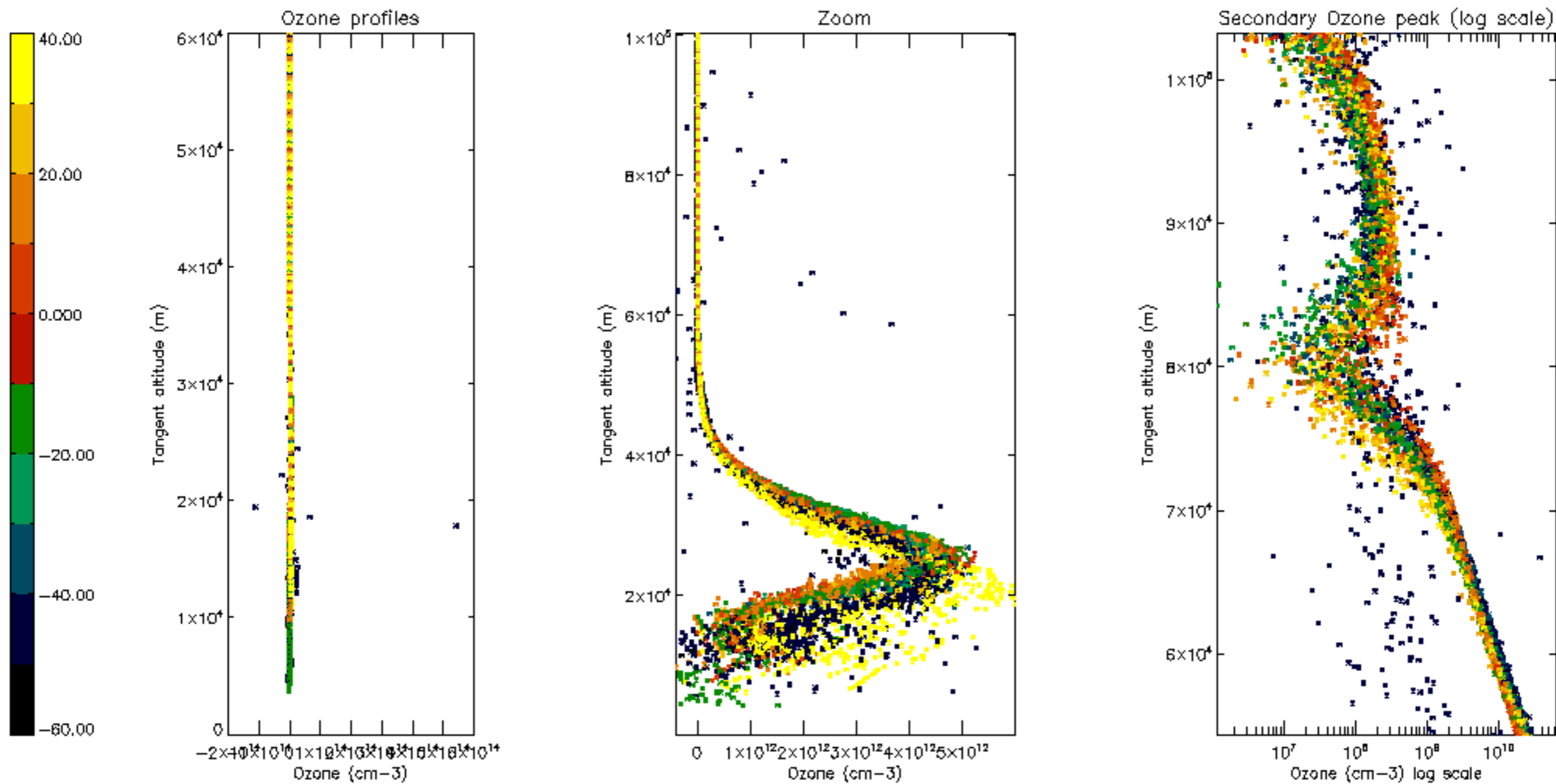


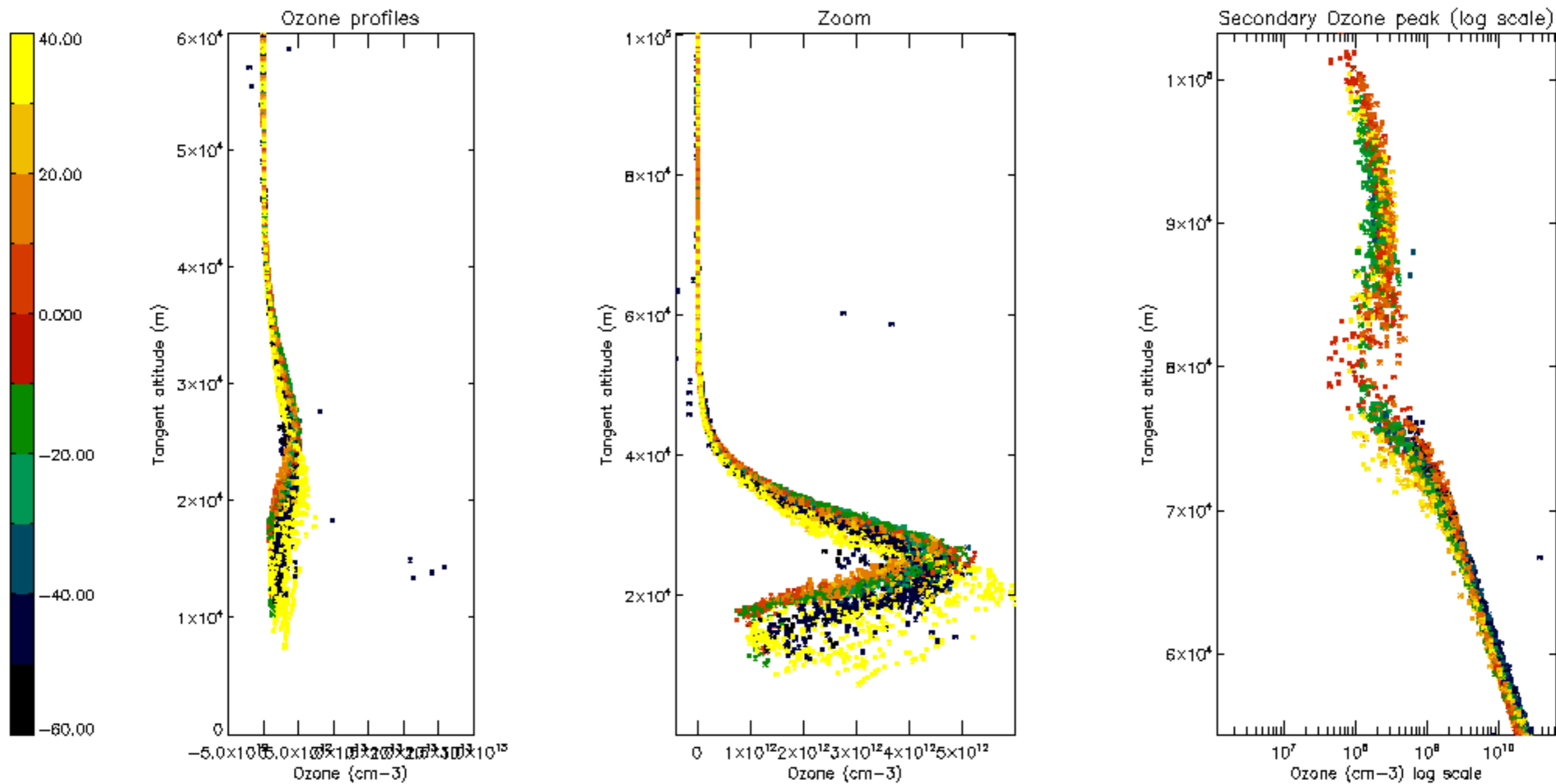
Percentage of star falling outside central band per profile

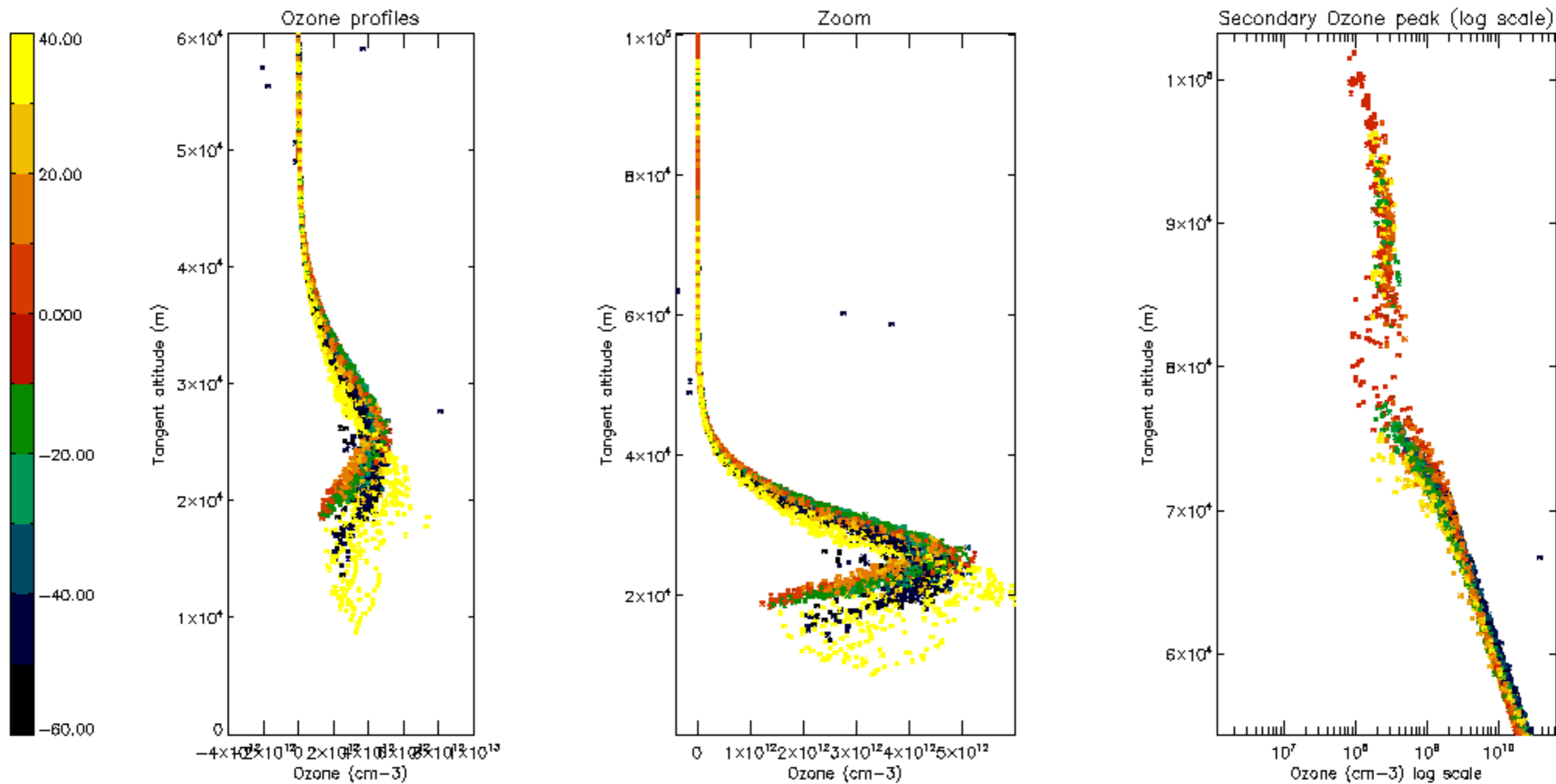


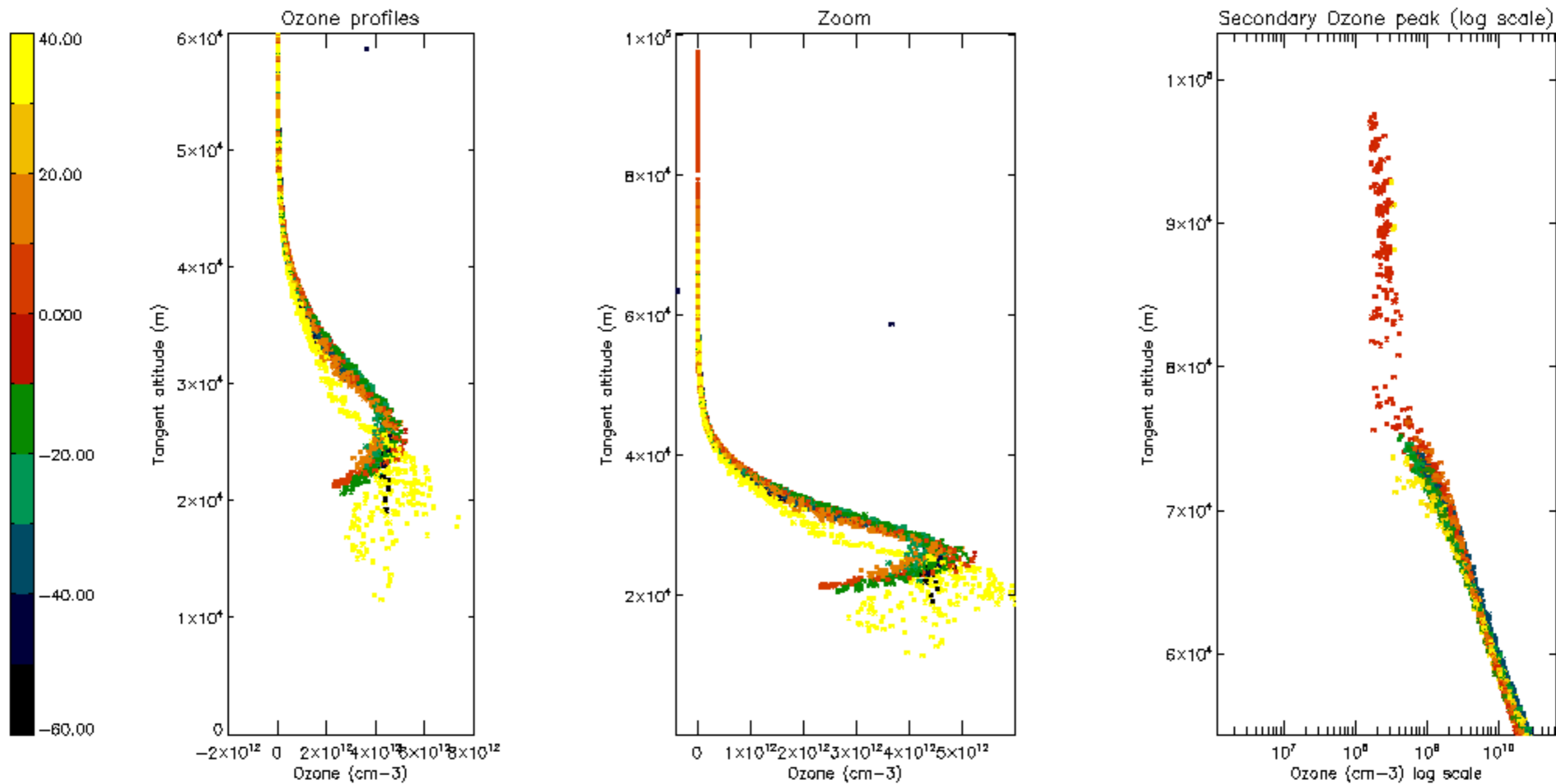
Percentage of saturation errors per profile

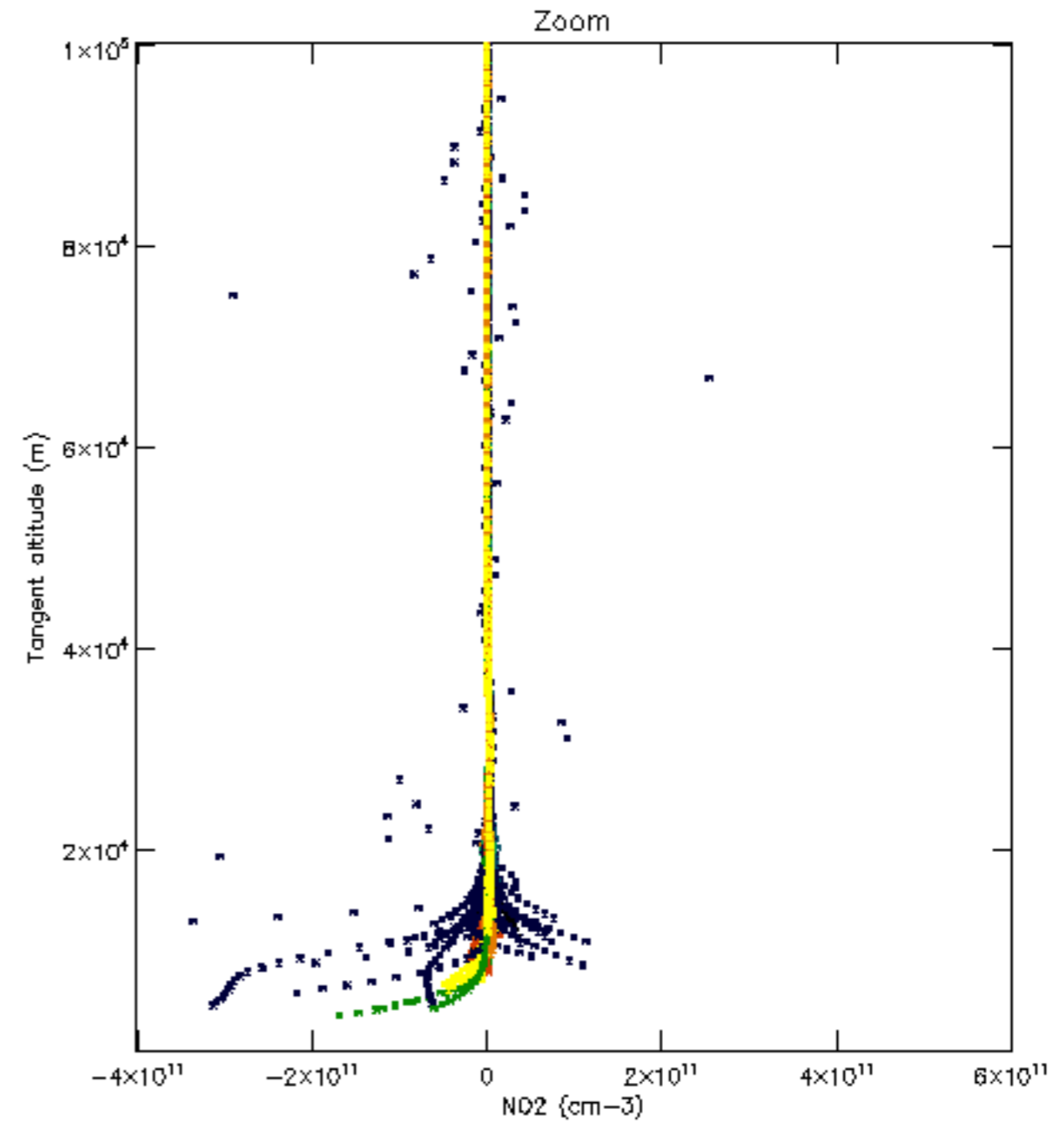
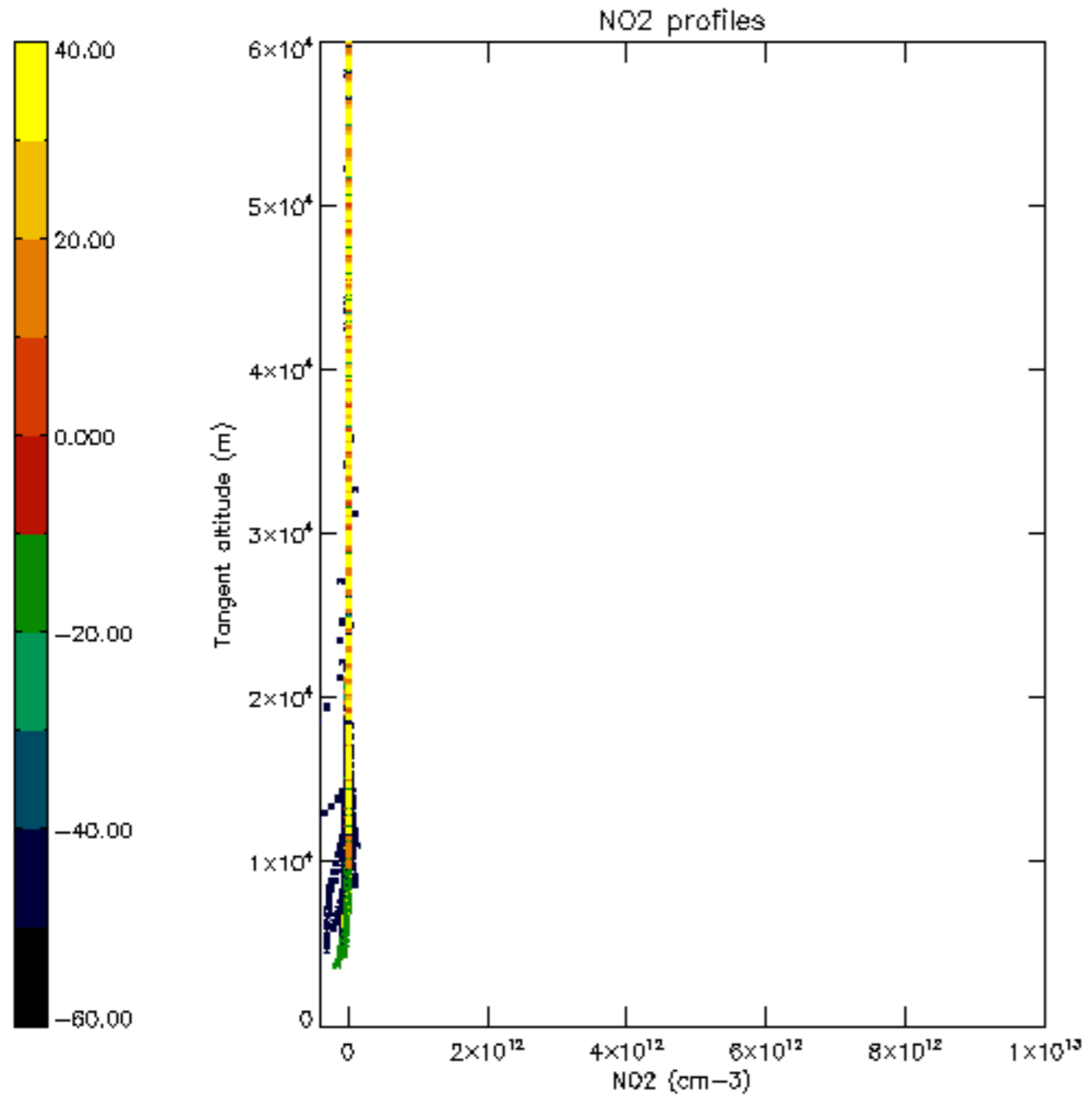


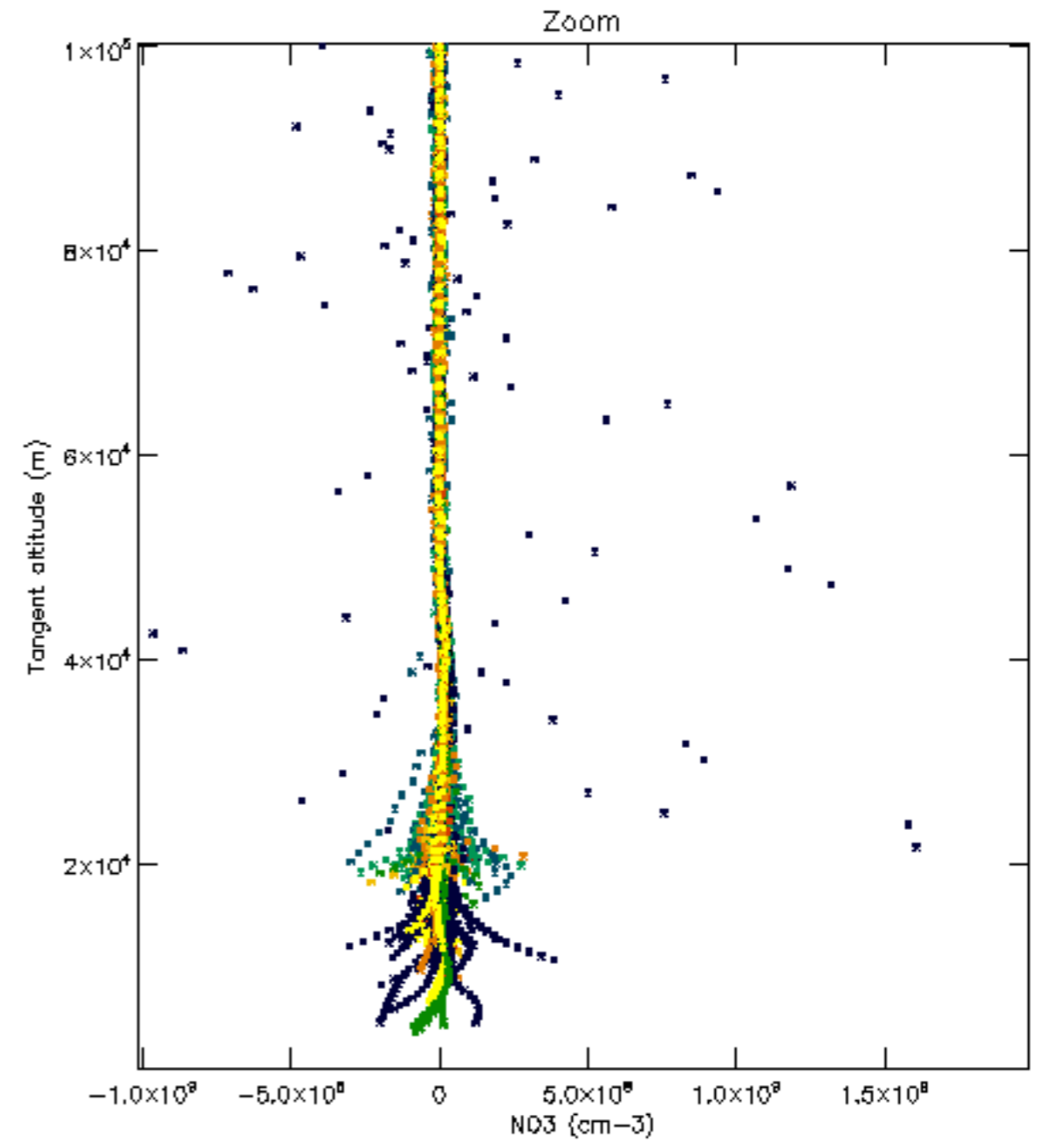
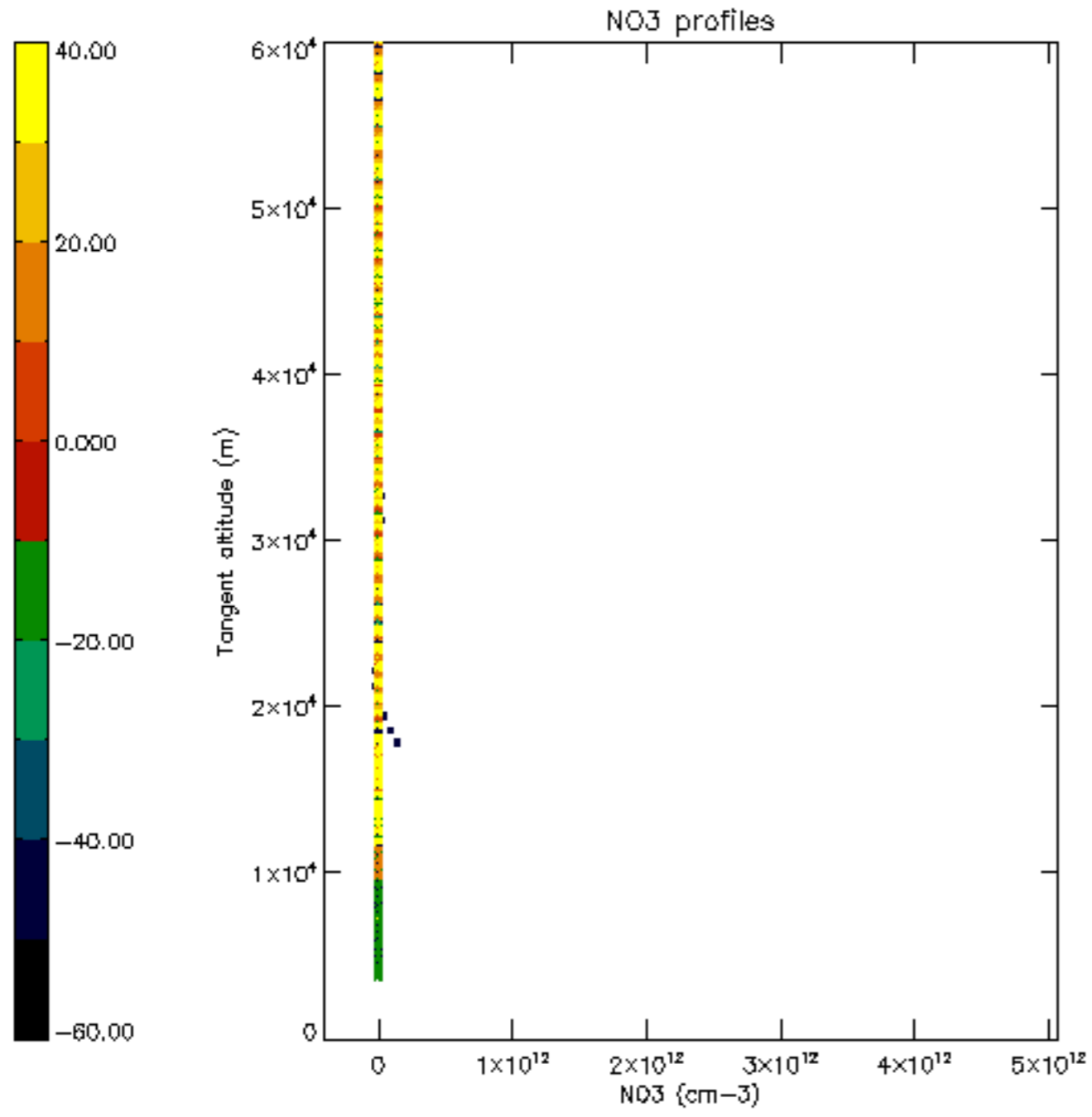


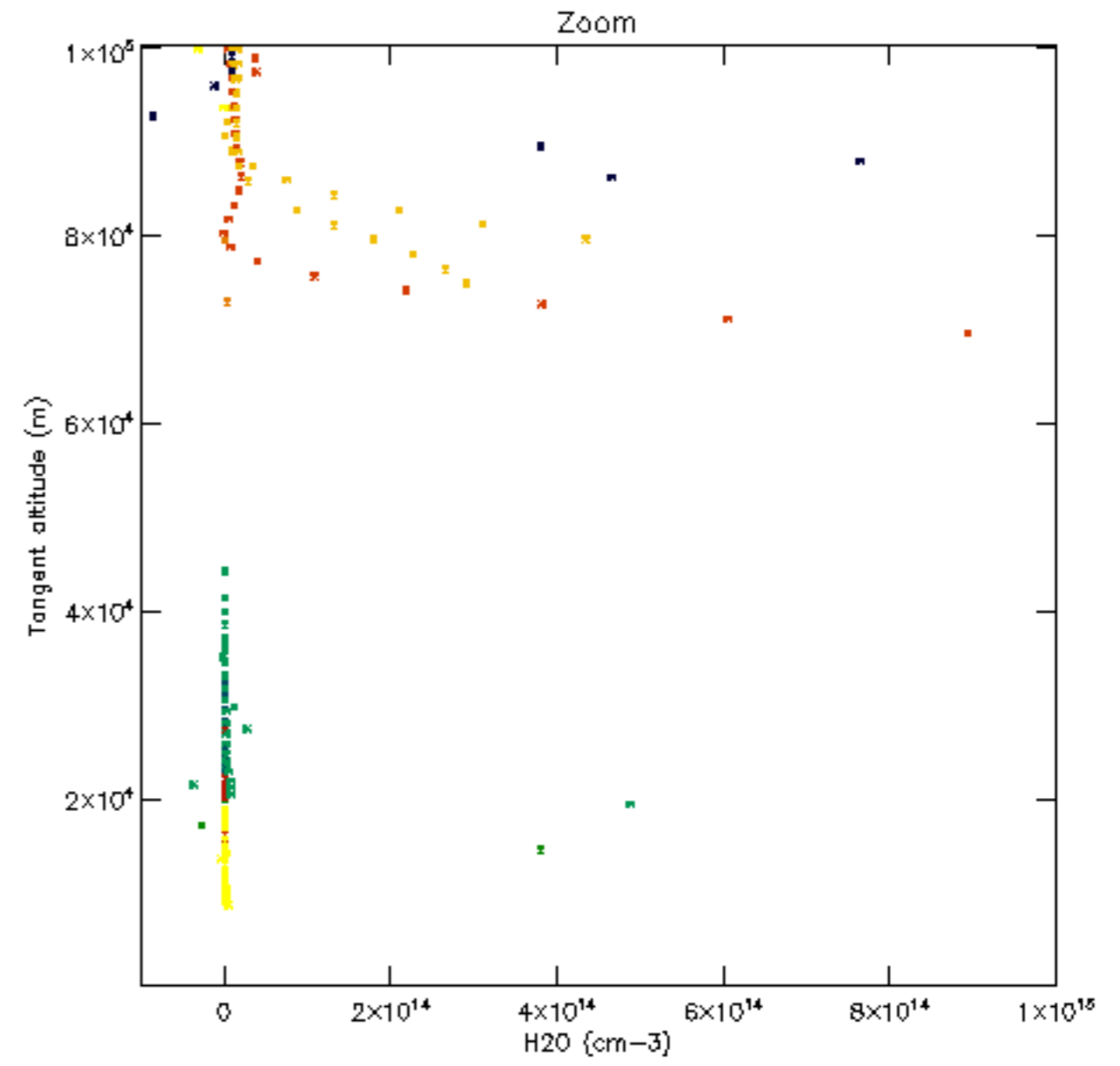
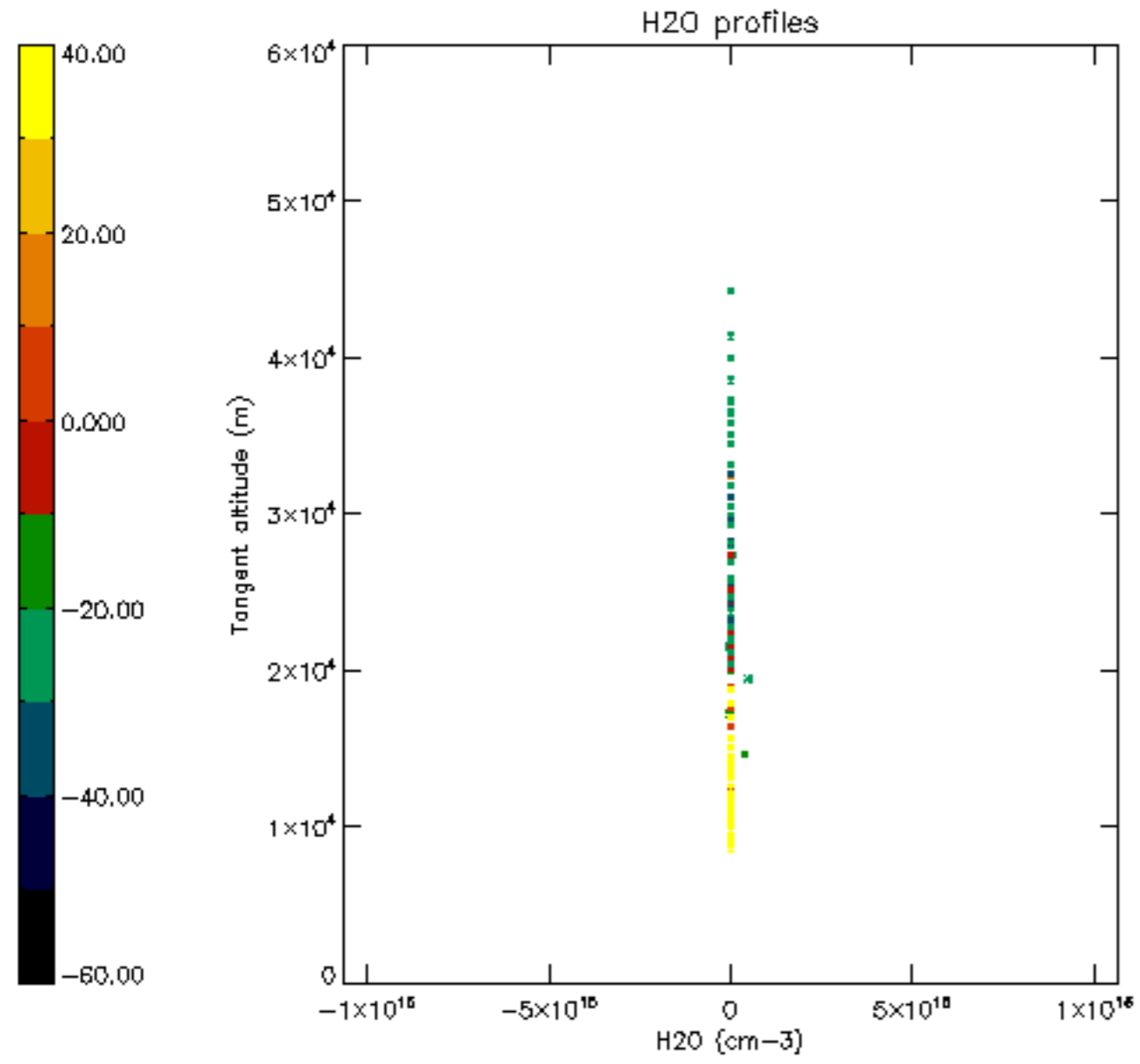


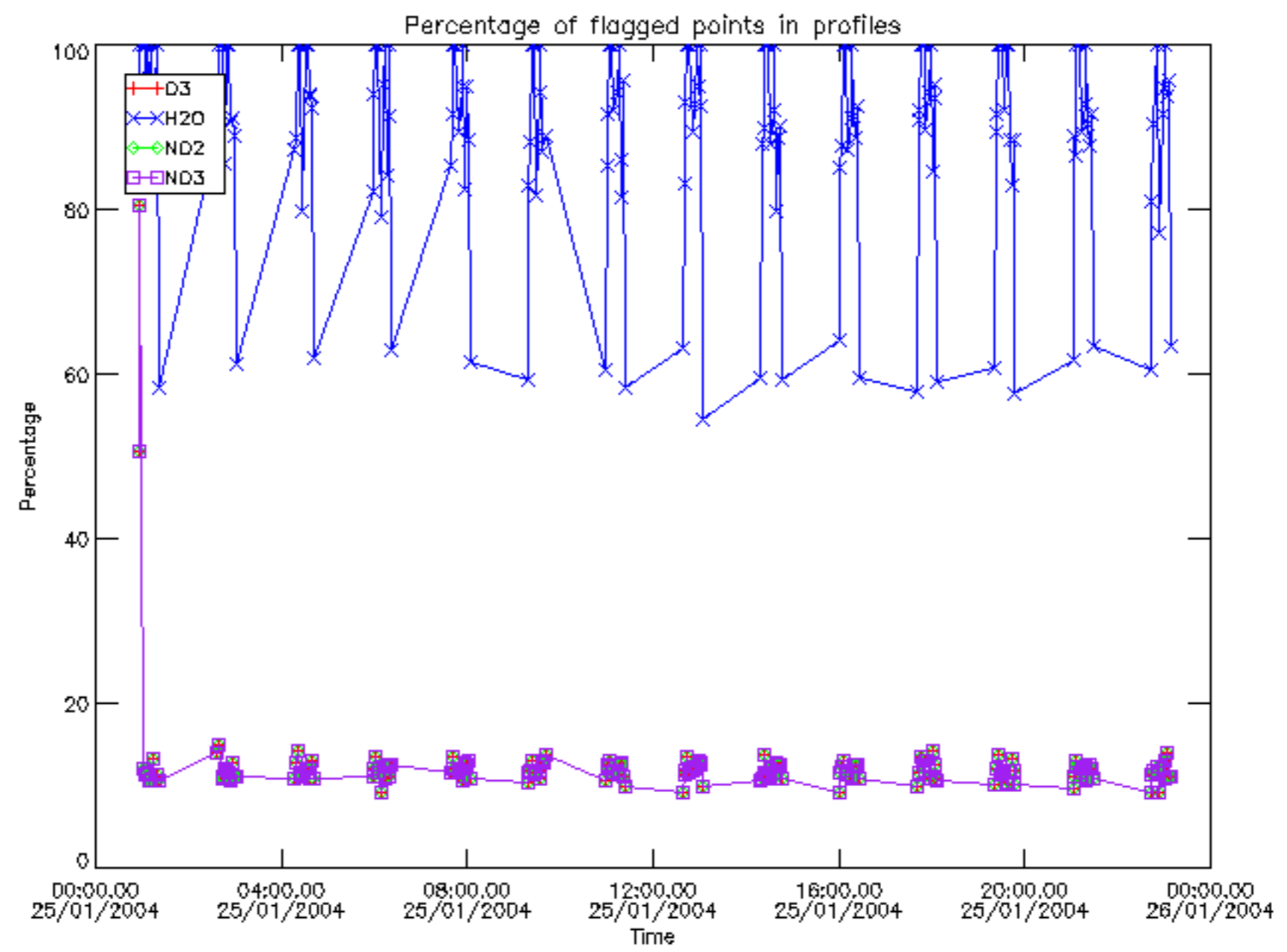




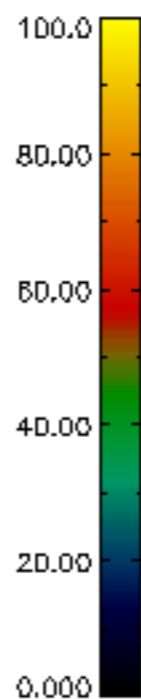
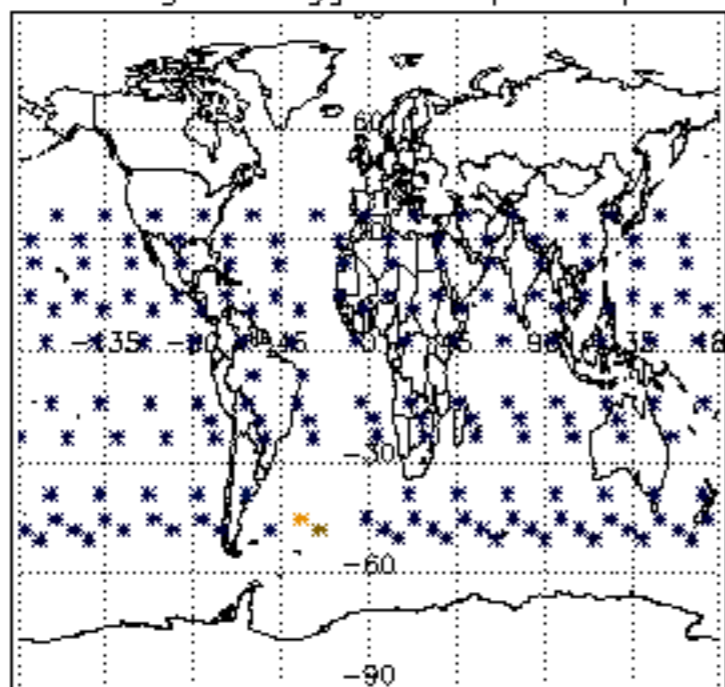




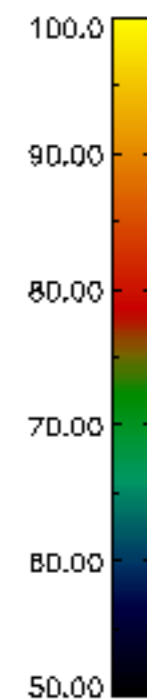
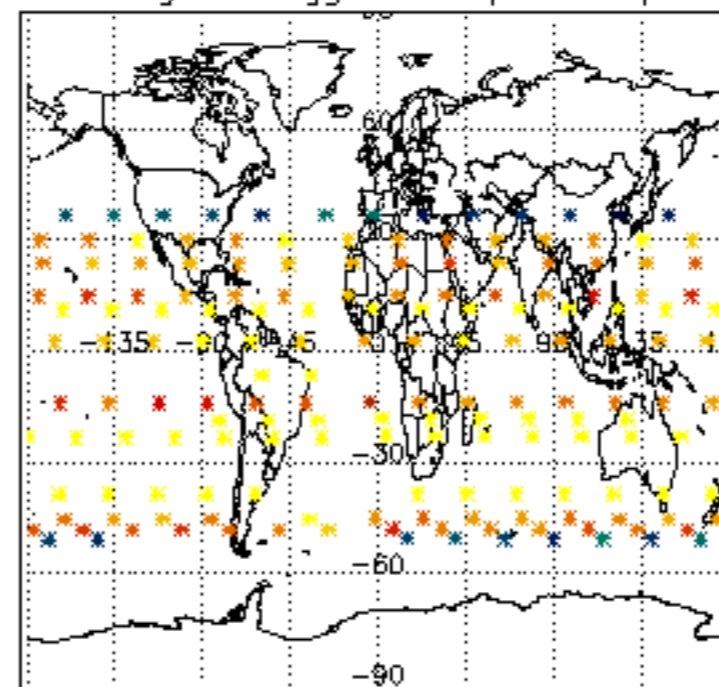




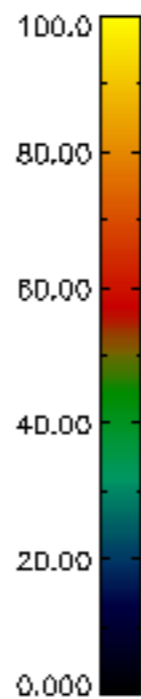
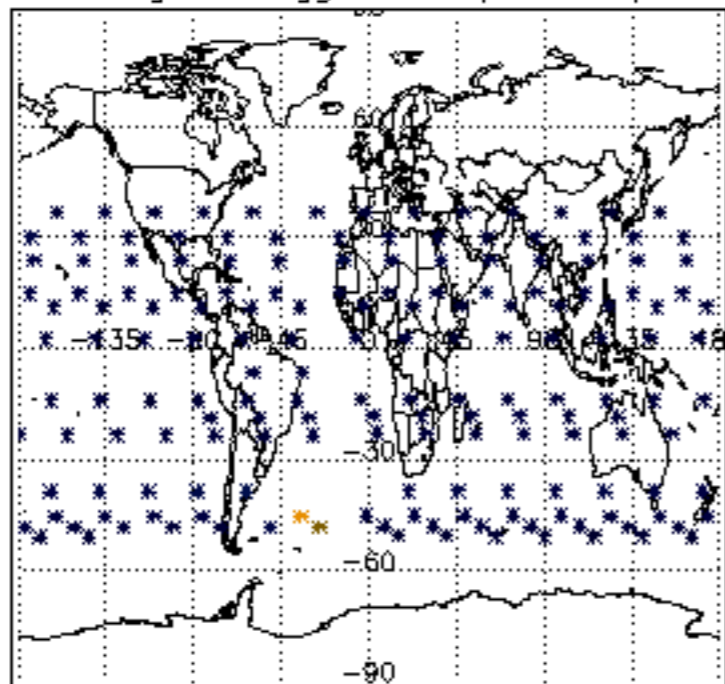
Percentage of flagged data per D3 profile



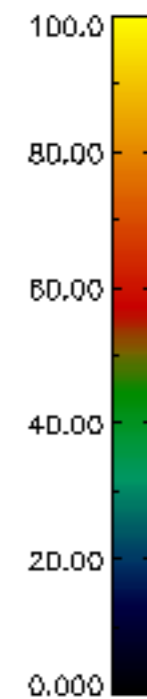
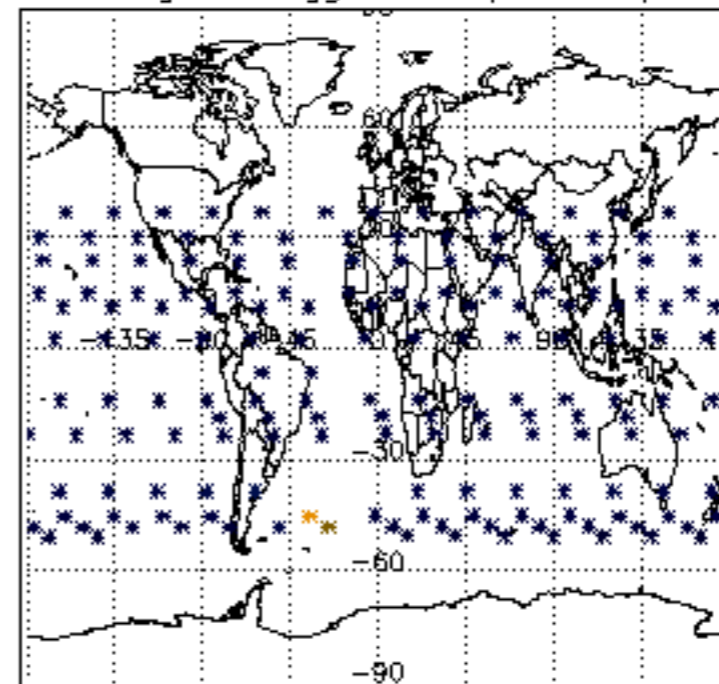
Percentage of flagged data per H2O profile

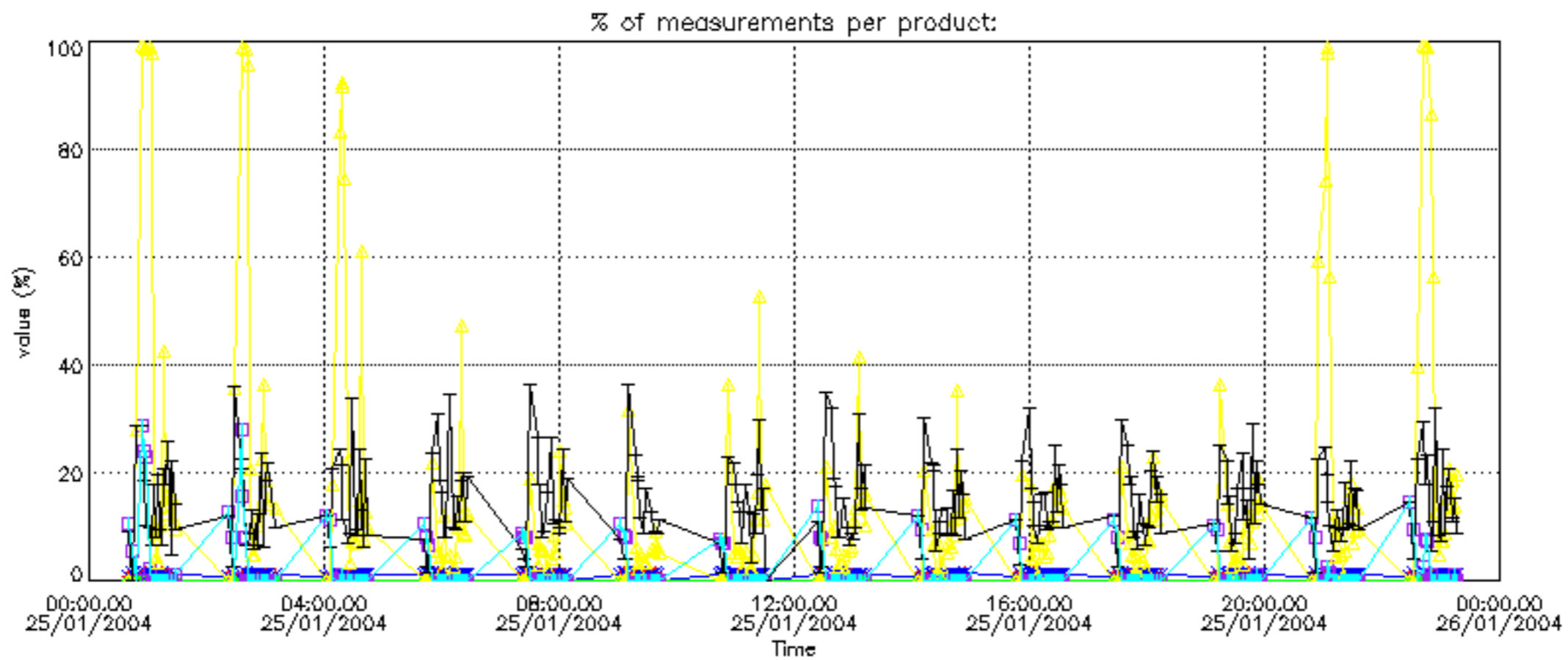


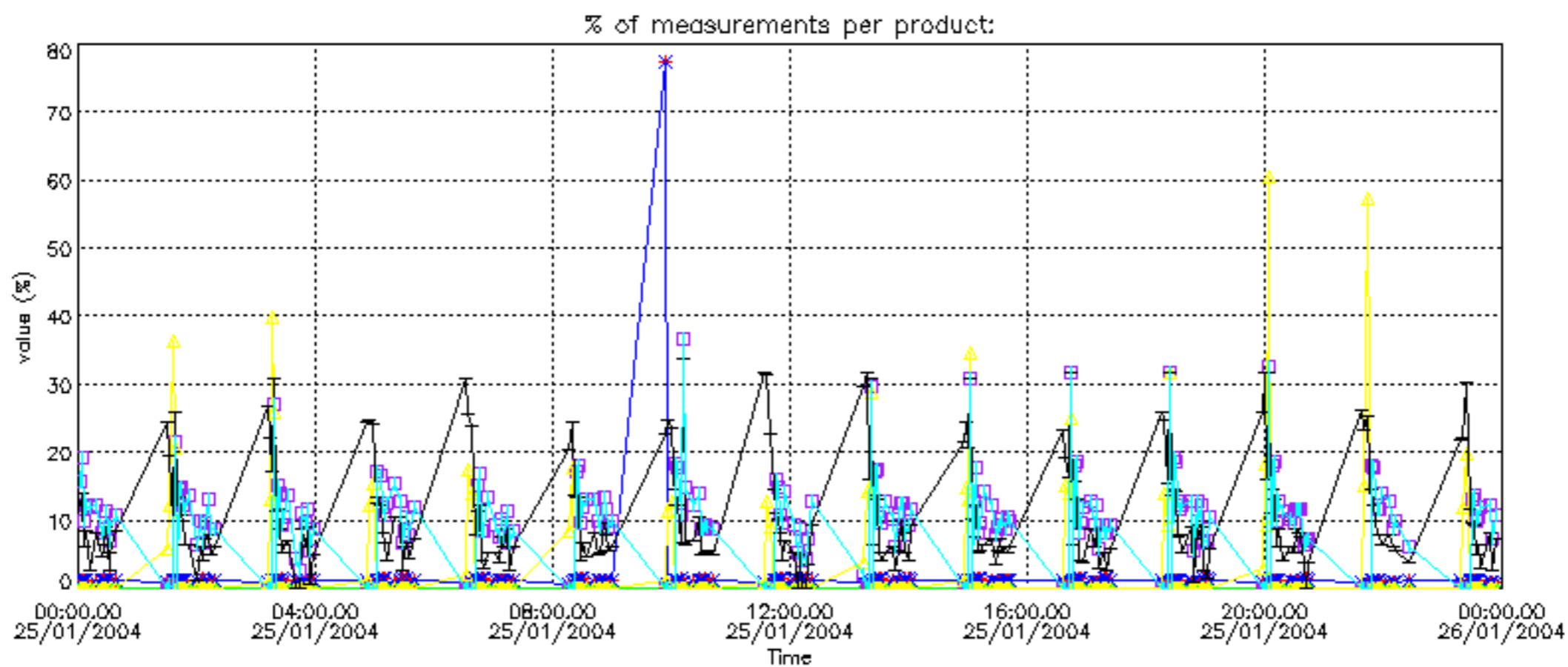
Percentage of flagged data per NO2 profile



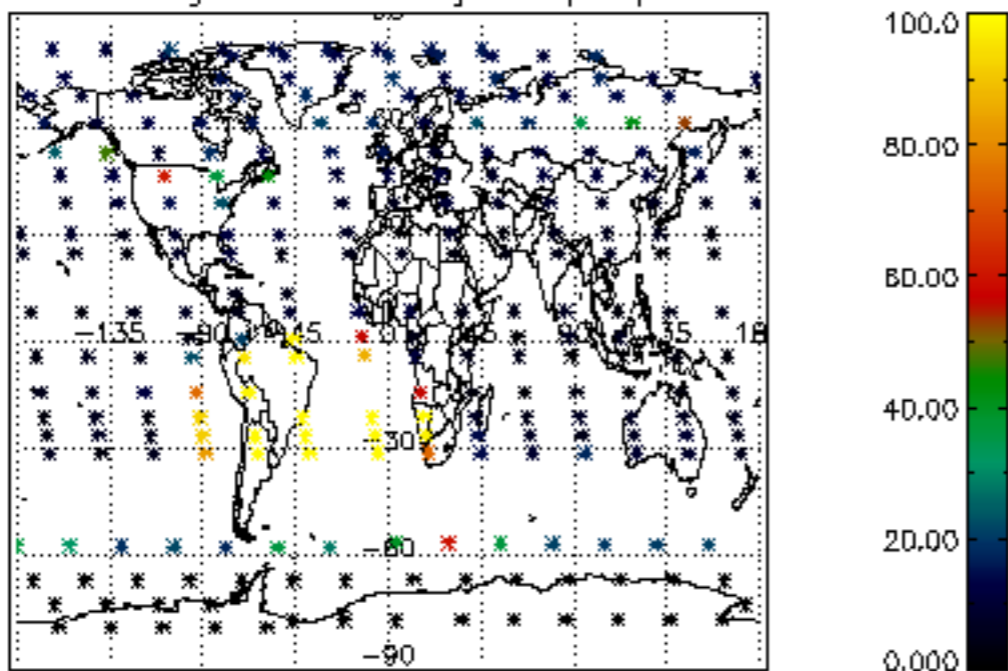
Percentage of flagged data per NO3 profile



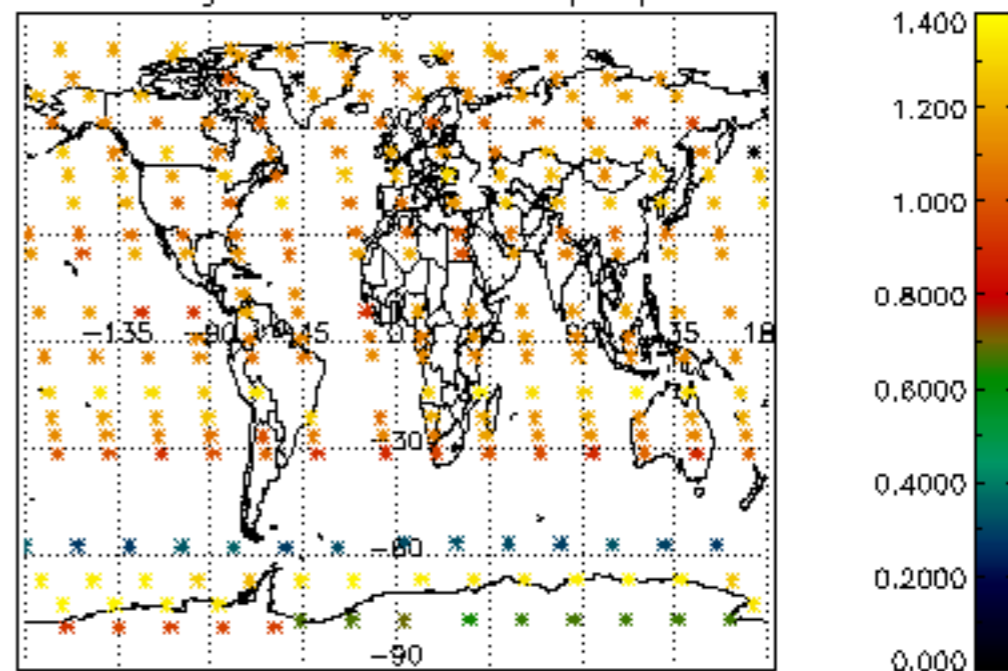




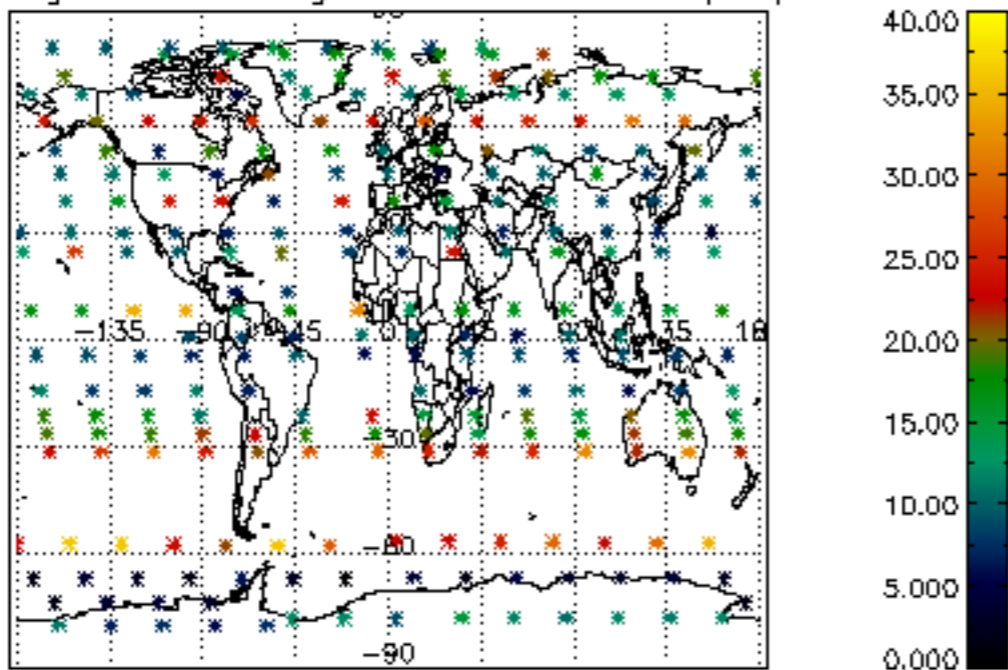
Percentage of cosmic ray hits per profile



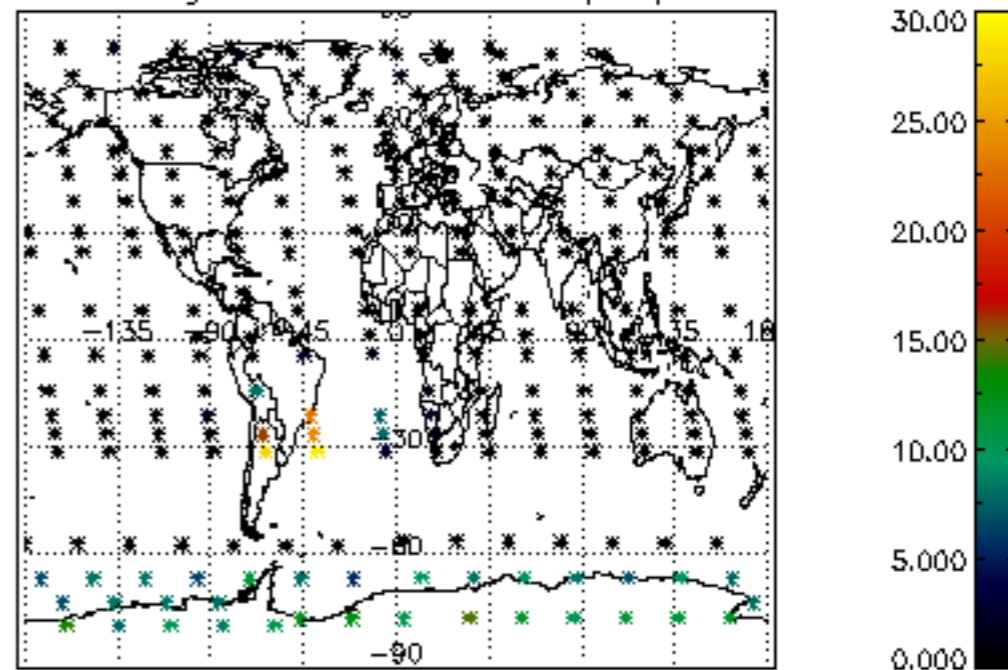
Percentage of datation errors per profile



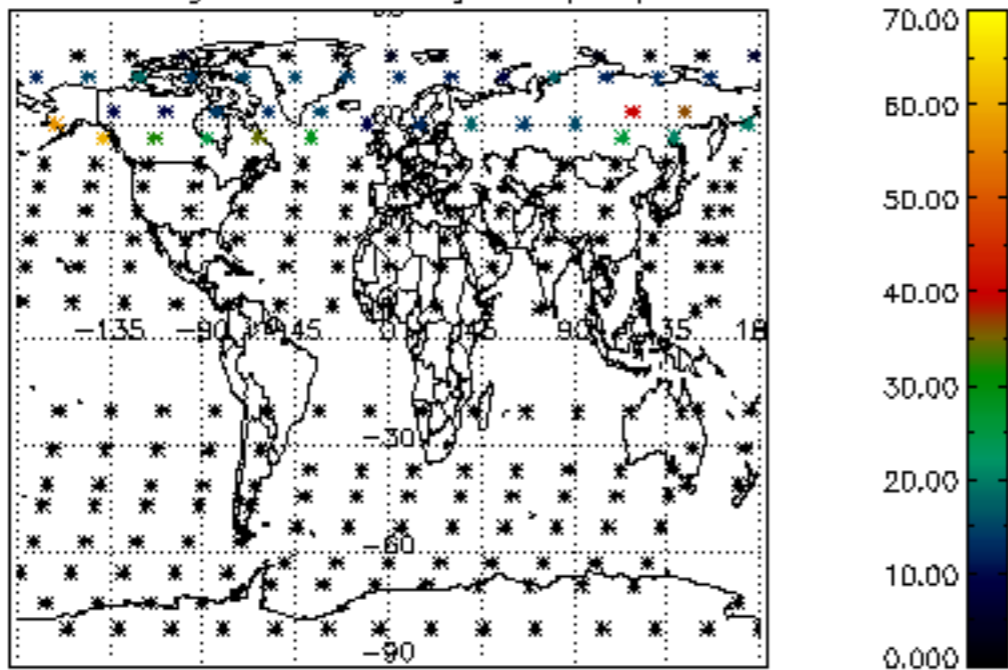
Percentage of star falling outside central band per profile



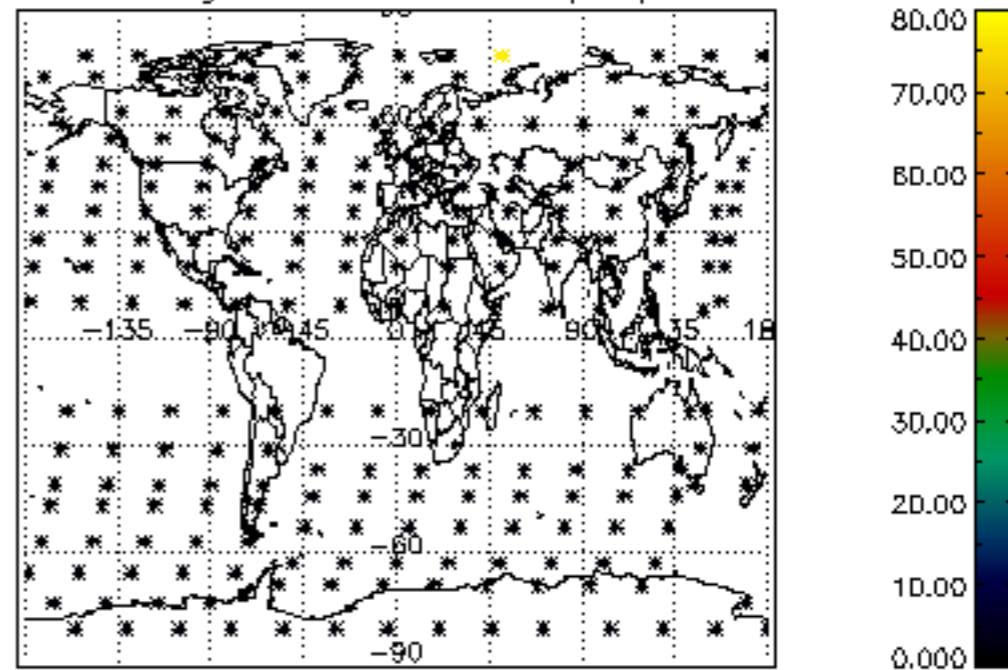
Percentage of saturation errors per profile



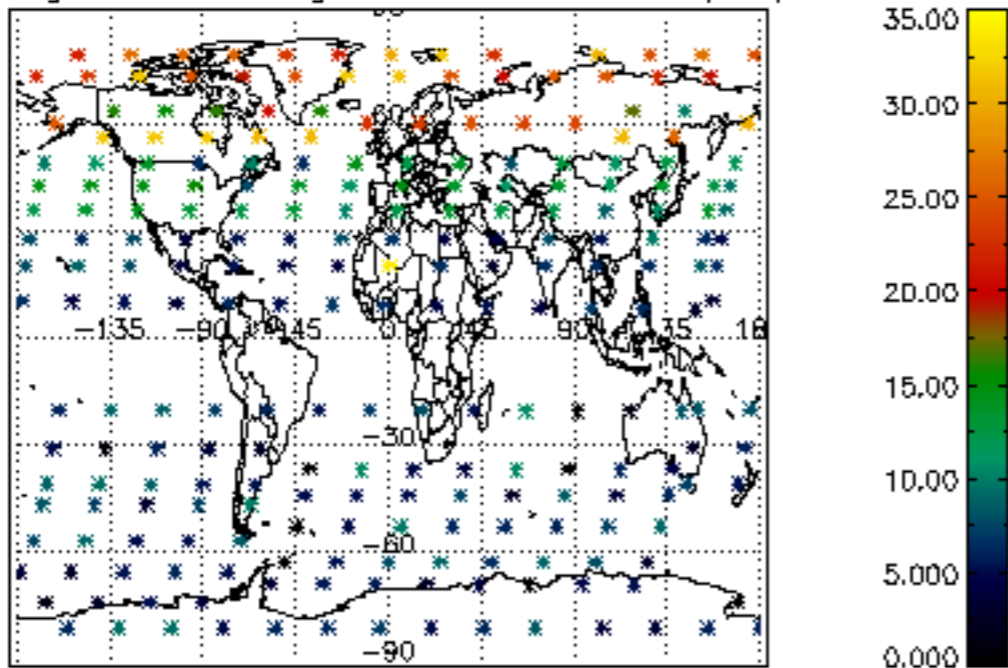
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

