

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	22APR2013 12:52:05
Data source version	GOMOS/6.01
Start time of products	23-01-2007 (23JAN2007 00:00:00)
Stop time of products	24-01-2007 (24JAN2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	69
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

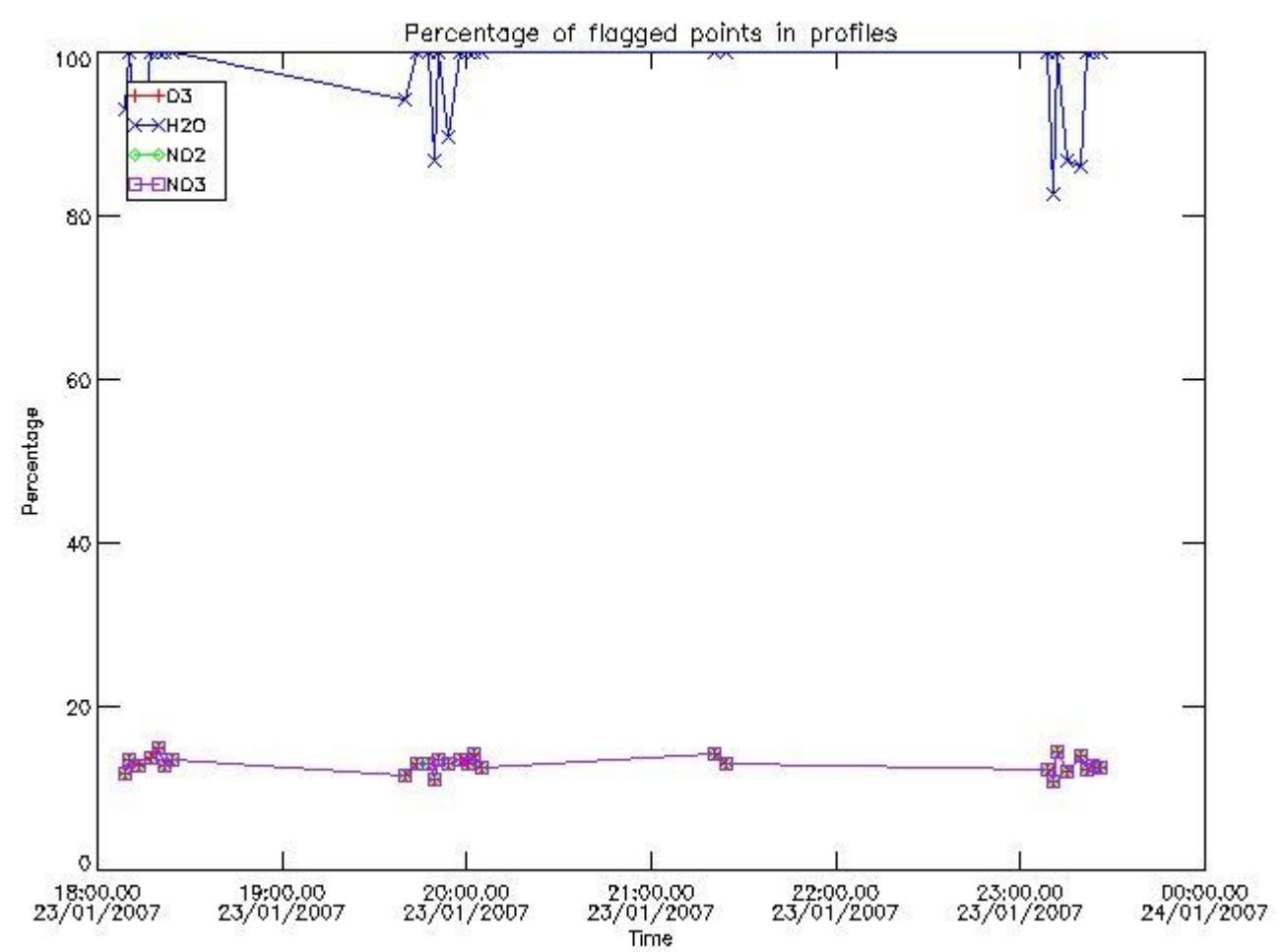
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070123_180853_000000432055_00013_25618_3889.N1	23-JAN-2007 18:08:53	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	25618	No
2	GOM_NL__2PRFIN20070123_181019_000000382055_00013_25618_3890.N1	23-JAN-2007 18:10:19	Dark	38.000	77	Eps Cen	2.3030	28000.	76	25618	No
3	GOM_NL__2PRFIN20070123_181326_000000402055_00013_25618_3891.N1	23-JAN-2007 18:13:26	Dark	40.000	12	Alp1Cru	0.77500	30000.	80	25618	No
4	GOM_NL__2PRFIN20070123_181733_000000372055_00013_25618_3892.N1	23-JAN-2007 18:17:33	Dark	37.000	29	Bet Car	1.6720	10200.	74	25618	No
5	GOM_NL__2PRFIN20070123_181942_000000382055_00013_25618_3893.N1	23-JAN-2007 18:19:42	Dark	37.500	71	Iot Car	2.2460	7700.0	75	25618	No
6	GOM_NL__2PRFIN20070123_182131_000000402055_00013_25618_3894.N1	23-JAN-2007 18:21:31	Dark	40.000	46	Del Vel	1.9540	10600.	80	25618	No
7	GOM_NL__2PRFIN20070123_182408_000000382055_00013_25618_3895.N1	23-JAN-2007 18:24:08	Dark	38.000	34	Gam2Vel	1.7930	23000.	76	25618	No
8	GOM_NL__2PRFIN20070123_182615_000000392055_00013_25618_3896.N1	23-JAN-2007 18:26:15	Straylight	39.000	70	Zet Pup	2.2460	39000.	78	25618	No
9	GOM_NL__2PRFIN20070123_182746_000000442055_00013_25618_3897.N1	23-JAN-2007 18:27:46	Straylight	44.000	117	Pi Pup	2.7060	3800.0	88	25618	No
10	GOM_NL__2PRFIN20070123_183014_000000412055_00013_25618_3898.N1	23-JAN-2007 18:30:14	Straylight	40.500	23	21Eps CMa	1.5020	26000.	81	25618	No
11	GOM_NL__2PRFIN20070123_183138_000000392055_00013_25618_3899.N1	23-JAN-2007 18:31:38	Straylight	38.500	179	24Omi2CMa	3.0320	24000.	77	25618	No
12	GOM_NL__2PRFIN20070123_183348_000000472055_00013_25618_3900.N1	23-JAN-2007 18:33:48	Straylight	46.500	1	9Alp CMa	-1.4400	11000.	93	25618	No
13	GOM_NL__2PRFIN20070123_184309_000000392055_00013_25618_3901.N1	23-JAN-2007 18:43:09	Bright	39.000	44	24Gam Gem	1.9280	11000.	78	25618	No
14	GOM_NL__2PRFIN20070123_184455_000000402055_00013_25618_3902.N1	23-JAN-2007 18:44:55	Bright	39.500	151	13Mu Gem	2.8900	3000.0	79	25618	No
15	GOM_NL__2PRFIN20070123_184909_000000382055_00013_25618_3903.N1	23-JAN-2007 18:49:09	Bright	38.000	107	37The Aur	2.6490	11000.	76	25618	No
16	GOM_NL__2PRFIN20070123_185117_000000352055_00013_25618_3904.N1	23-JAN-2007 18:51:17	Bright	35.000	42	34Bet Aur	1.9000	10200.	70	25618	No
17	GOM_NL__2PRFIN20070123_190348_000000362055_00013_25618_3905.N1	23-JAN-2007 19:03:48	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	25618	No
18	GOM_NL__2PRFIN20070123_191447_000000372055_00013_25618_3906.N1	23-JAN-2007 19:14:47	Bright	36.500	130	23Bet Dra	2.7990	5800.0	73	25618	No
19	GOM_NL__2PRFIN20070123_191808_000000342055_00013_25618_3907.N1	23-JAN-2007 19:18:08	Bright	33.500	5	3Alp Lyr	0.033000	11000.	67	25618	No
20	GOM_NL__2PRFIN20070123_192608_000000342055_00013_25618_3908.N1	23-JAN-2007 19:26:08	Bright	34.000	59	55Alp Oph	2.0800	8900.0	68	25618	No
21	GOM_NL__2PRFIN20070123_192815_000000342055_00013_25618_3909.N1	23-JAN-2007 19:28:15	Bright	33.500	126	60Bet Oph	2.7700	4250.0	67	25618	No
22	GOM_NL__2PRFIN20070123_193351_000000422055_00013_25618_3910.N1	23-JAN-2007 19:33:51	Bright	42.000	98	13Zet Oph	2.5710	30000.	84	25618	No
23	GOM_NL__2PRFIN20070123_193821_000000562055_00013_25618_3911.N1	23-JAN-2007 19:38:21	Twilight	56.000	16	21Alp Sco	1.0200	3000.0	112	25618	No
24	GOM_NL__2PRFIN20070123_193949_000000452055_00013_25618_3912.N1	23-JAN-2007 19:39:49	Dark	44.500	75	26Eps Sco	2.2910	4250.0	89	25618	No
25	GOM_NL__2PRFIN20070123_194353_000000402055_00013_25618_3913.N1	23-JAN-2007 19:43:53	Dark	39.500	131	Gam Lup	2.8000	26000.	79	25618	No
26	GOM_NL__2PRFIN20070123_194722_000000432055_00014_25619_3905.N1	23-JAN-2007 19:47:22	Dark	43.000	78	Alp Lup	2.3040	28000.	86	25619	No
27	GOM_NL__2PRFIN20070123_194930_000000462055_00014_25619_3906.N1	23-JAN-2007 19:49:30	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	25619	No
28	GOM_NL__2PRFIN20070123_195056_000000382055_00014_25619_3907.N1	23-JAN-2007 19:50:56	Dark	38.000	77	Eps Cen	2.3030	28000.	76	25619	No
29	GOM_NL__2PRFIN20070123_195402_000000392055_00014_25619_3908.N1	23-JAN-2007 19:54:02	Dark	39.000	12	Alp1Cru	0.77500	30000.	78	25619	No
30	GOM_NL__2PRFIN20070123_195809_000000382055_00014_25619_3909.N1	23-JAN-2007 19:58:09	Dark	37.500	29	Bet Car	1.6720	10200.	75	25619	No
31	GOM_NL__2PRFIN20070123_200018_000000392055_00014_25619_3910.N1	23-JAN-2007 20:00:18	Dark	39.000	71	Iot Car	2.2460	7700.0	78	25619	No
32	GOM_NL__2PRFIN20070123_200208_000000402055_00014_25619_3911.N1	23-JAN-2007 20:02:08	Dark	39.500	46	Del Vel	1.9540	10600.	79	25619	No
33	GOM_NL__2PRFIN20070123_200445_000000412055_00014_25619_3912.N1	23-JAN-2007 20:04:45	Dark	40.500	34	Gam2Vel	1.7930	23000.	81	25619	No
34	GOM_NL__2PRFIN20070123_200651_000000392055_00014_25619_3913.N1	23-JAN-2007 20:06:51	Straylight	39.000	70	Zet Pup	2.2460	39000.	78	25619	No
35	GOM_NL__2PRFIN20070123_200822_000000412055_00014_25619_3914.N1	23-JAN-2007 20:08:22	Straylight	41.000	117	Pi Pup	2.7060	3800.0	82	25619	No
36	GOM_NL__2PRFIN20070123_201050_000000422055_00014_25619_3915.N1	23-JAN-2007 20:10:50	Straylight	41.500	23	21Eps CMa	1.5020	26000.	83	25619	No
37	GOM_NL__2PRFIN20070123_201214_000000382055_00014_25619_3916.N1	23-JAN-2007 20:12:14	Straylight	38.000	179	24Omi2CMa	3.0320	24000.	76	25619	No
38	GOM_NL__2PRFIN20070123_201424_000000362055_00014_25619_3917.N1	23-JAN-2007 20:14:24	Straylight	36.000	1	9Alp CMa	-1.4400	11000.	72	25619	No
39	GOM_NL__2PRFIN20070123_202345_000000392055_00014_25619_3918.N1	23-JAN-2007 20:23:45	Bright	38.500	44	24Gam Gem	1.9280	11000.	77	25619	No
40	GOM_NL__2PRFIN20070123_202532_000000402055_00014_25619_3919.N1	23-JAN-2007 20:25:32	Bright	39.500	151	13Mu Gem	2.8900	3000.0	79	25619	No
41	GOM_NL__2PRFIN20070123_202945_000000352055_00014_25619_3920.N1	23-JAN-2007 20:29:45	Bright	34.500	107	37The Aur	2.6490	11000.	69	25619	No
42	GOM_NL__2PRFIN20070123_203153_000000352055_00014_25619_3921.N1	23-JAN-2007 20:31:53	Bright	35.000	42	34Bet Aur	1.9000	10200.	70	25619	No

43	GOM_NL__2PRFIN20070123_204424_000000342055_00014_25619_3922.N1	23-JAN-2007 20:44:24	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	25619	No
44	GOM_NL__2PRFIN20070123_205523_000000362055_00014_25619_3923.N1	23-JAN-2007 20:55:23	Bright	35.500	130	23Bet Dra	2.7990	5800.0	71	25619	No
45	GOM_NL__2PRFIN20070123_205844_000000362055_00014_25619_3924.N1	23-JAN-2007 20:58:44	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	25619	No
46	GOM_NL__2PRFIN20070123_210644_000000342055_00014_25619_3925.N1	23-JAN-2007 21:06:44	Bright	34.000	59	55Alp Oph	2.0800	8900.0	68	25619	No
47	GOM_NL__2PRFIN20070123_210851_000000332055_00014_25619_3926.N1	23-JAN-2007 21:08:51	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25619	No
48	GOM_NL__2PRFIN20070123_211427_000000442055_00014_25619_3927.N1	23-JAN-2007 21:14:27	Bright	43.500	98	13Zet Oph	2.5710	30000.	87	25619	No
49	GOM_NL__2PRFIN20070123_211857_000000562055_00014_25619_3928.N1	23-JAN-2007 21:18:57	Twilight	56.000	16	21Alp Sco	1.0200	3000.0	112	25619	No
50	GOM_NL__2PRFIN20070123_212025_000000402055_00014_25619_3929.N1	23-JAN-2007 21:20:25	Dark	39.500	75	26Eps Sco	2.2910	4250.0	79	25619	No
51	GOM_NL__2PRFIN20070123_212430_000000392055_00014_25619_3930.N1	23-JAN-2007 21:24:30	Dark	39.000	131	Gam Lup	2.8000	26000.	78	25619	No
52	GOM_NL__2PRFIN20070123_230835_000000422055_00016_25621_3938.N1	23-JAN-2007 23:08:35	Dark	41.500	78	Alp Lup	2.3040	28000.	83	25621	No
53	GOM_NL__2PRFIN20070123_231042_000000522055_00016_25621_3939.N1	23-JAN-2007 23:10:42	Dark	52.000	4	Alp1Cen	-0.010000	5800.0	104	25621	No
54	GOM_NL__2PRFIN20070123_231209_000000352055_00016_25621_3940.N1	23-JAN-2007 23:12:09	Dark	35.000	77	Eps Cen	2.3030	28000.	70	25621	No
55	GOM_NL__2PRFIN20070123_231515_000000422055_00016_25621_3941.N1	23-JAN-2007 23:15:15	Dark	42.000	12	Alp1Cru	0.77500	30000.	84	25621	No
56	GOM_NL__2PRFIN20070123_231921_000000372055_00016_25621_3942.N1	23-JAN-2007 23:19:21	Dark	36.500	29	Bet Car	1.6720	10200.	73	25621	No
57	GOM_NL__2PRFIN20070123_232131_000000422055_00016_25621_3943.N1	23-JAN-2007 23:21:31	Dark	41.500	71	Iot Car	2.2460	7700.0	83	25621	No
58	GOM_NL__2PRFIN20070123_232320_000000402055_00016_25621_3944.N1	23-JAN-2007 23:23:20	Dark	40.000	46	Del Vel	1.9540	10600.	80	25621	No
59	GOM_NL__2PRFIN20070123_232557_000000412055_00016_25621_3945.N1	23-JAN-2007 23:25:57	Dark	41.000	34	Gam2Vel	1.7930	23000.	82	25621	No
60	GOM_NL__2PRFIN20070123_232803_000000412055_00016_25621_3946.N1	23-JAN-2007 23:28:03	Straylight	41.000	70	Zet Pup	2.2460	39000.	82	25621	No
61	GOM_NL__2PRFIN20070123_232934_000000422055_00016_25621_3947.N1	23-JAN-2007 23:29:34	Straylight	42.000	117	Pi Pup	2.7060	3800.0	84	25621	No
62	GOM_NL__2PRFIN20070123_233203_000000402055_00016_25621_3948.N1	23-JAN-2007 23:32:03	Straylight	39.500	23	21Eps CMa	1.5020	26000.	79	25621	No
63	GOM_NL__2PRFIN20070123_233326_000000382055_00016_25621_3949.N1	23-JAN-2007 23:33:26	Straylight	38.000	179	24Omi2CMa	3.0320	24000.	76	25621	No
64	GOM_NL__2PRFIN20070123_233536_000000442055_00016_25621_3950.N1	23-JAN-2007 23:35:36	Straylight	44.000	1	9Alp CMa	-1.4400	11000.	88	25621	No
65	GOM_NL__2PRFIN20070123_234239_000000282055_00016_25621_3951.N1	23-JAN-2007 23:42:39	Tw_i_and_stray	28.000	153	3Bet CMi	2.8940	13100.	56	25621	No
66	GOM_NL__2PRFIN20070123_234457_000000392055_00016_25621_3952.N1	23-JAN-2007 23:44:57	Bright	38.500	44	24Gam Gem	1.9280	11000.	77	25621	No
67	GOM_NL__2PRFIN20070123_234643_000000382055_00016_25621_3953.N1	23-JAN-2007 23:46:43	Bright	38.000	151	13Mu Gem	2.8900	3000.0	76	25621	No
68	GOM_NL__2PRFIN20070123_235057_000000352055_00016_25621_3954.N1	23-JAN-2007 23:50:57	Bright	35.000	107	37The Aur	2.6490	11000.	70	25621	No
69	GOM_NL__2PRFIN20070123_235305_000000352055_00016_25621_3955.N1	23-JAN-2007 23:53:05	Bright	34.500	42	34Bet Aur	1.9000	10200.	69	25621	No

3. Quality information per product

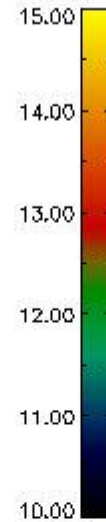
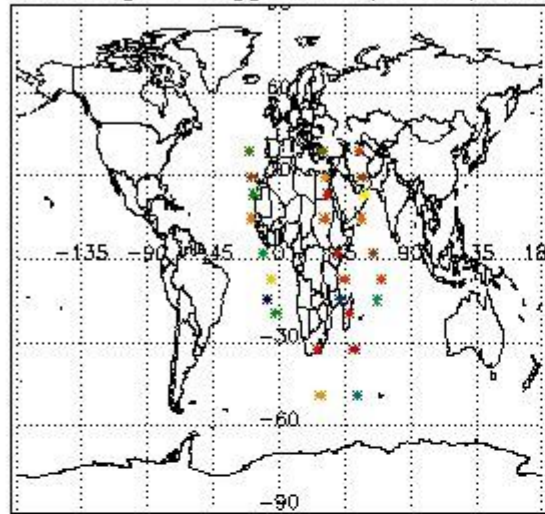
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

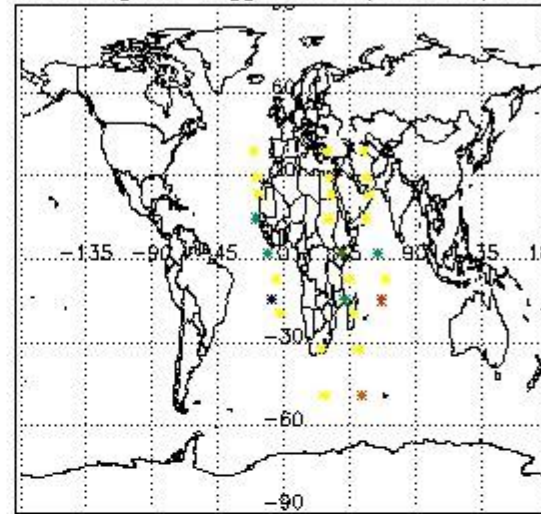


3.2 Plot quality information per product (world map)

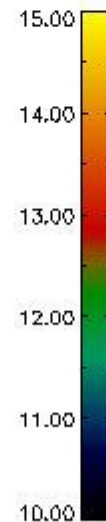
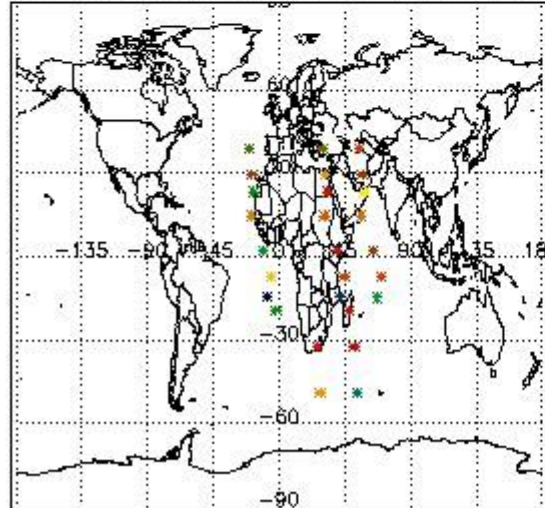
Percentage of flagged data per O3 profile



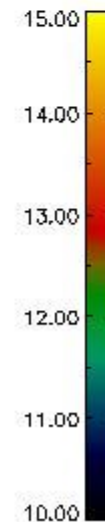
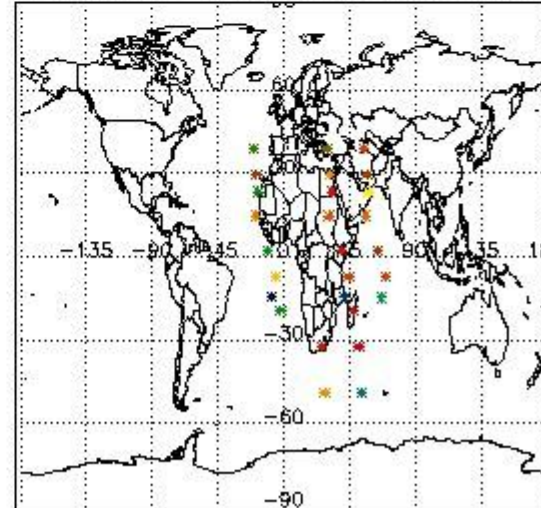
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

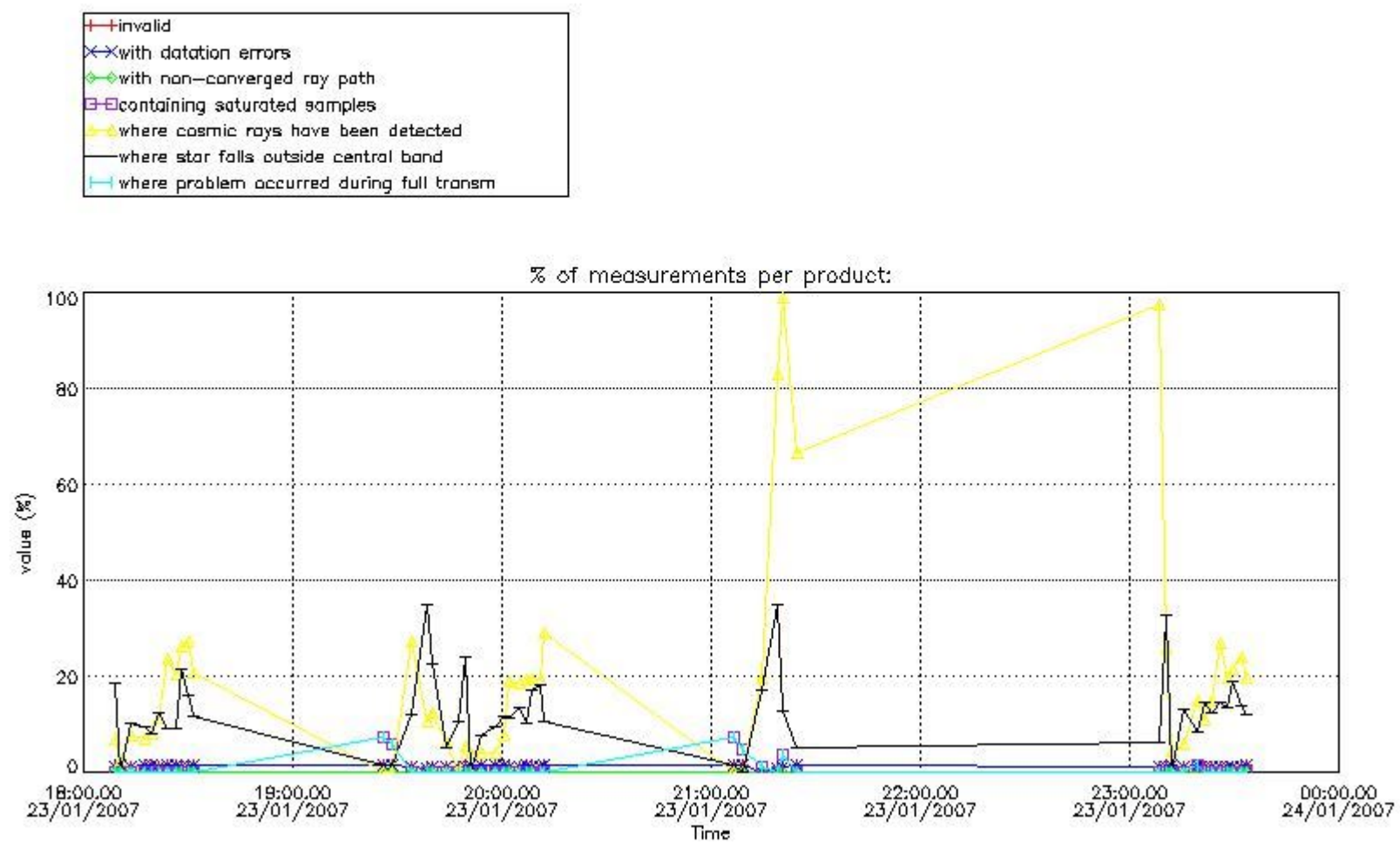


4. Level 1 quality information per product

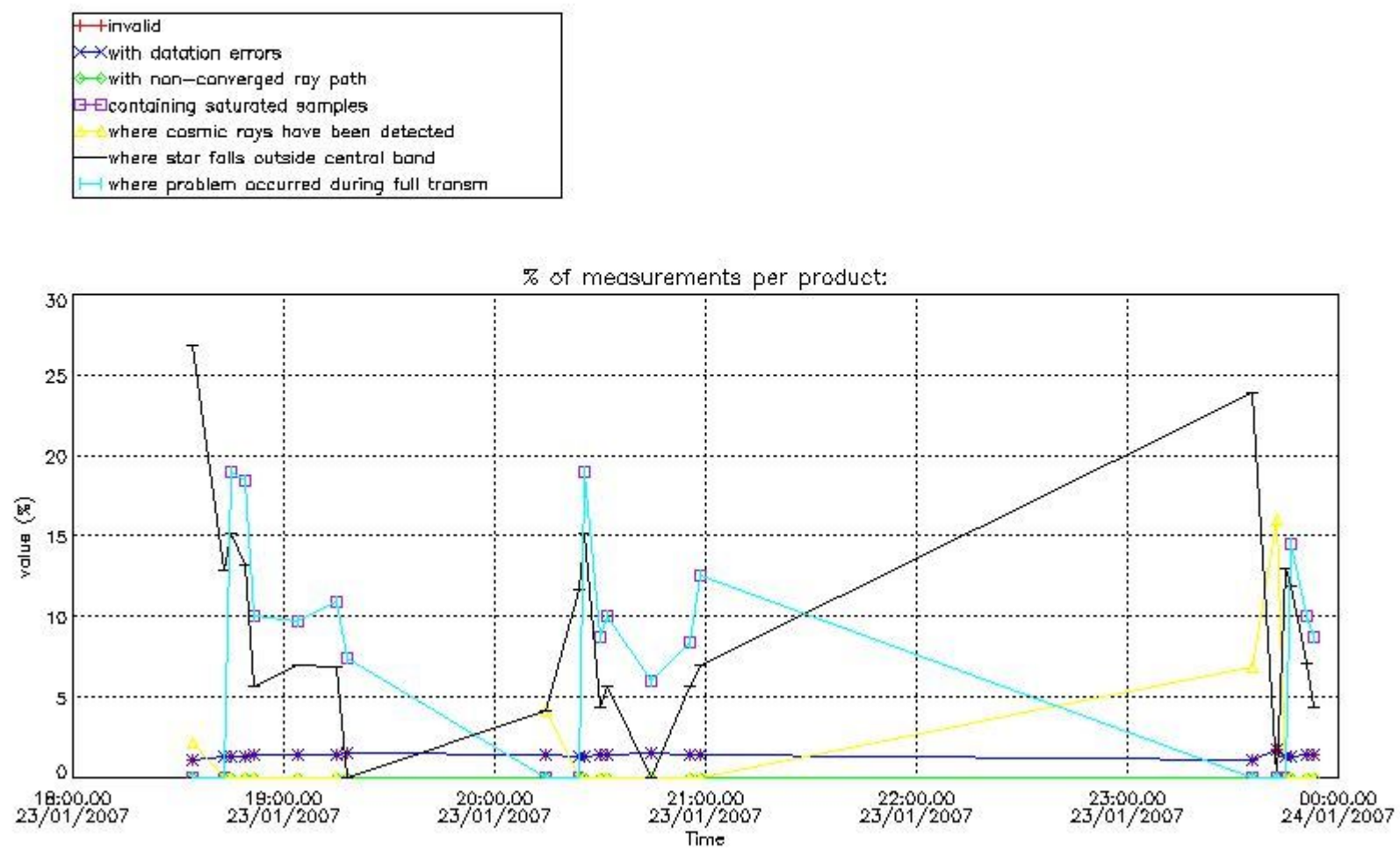
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



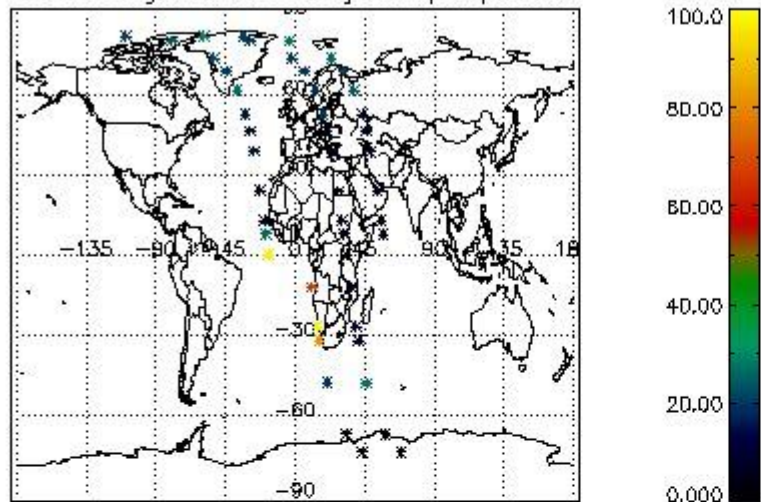
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



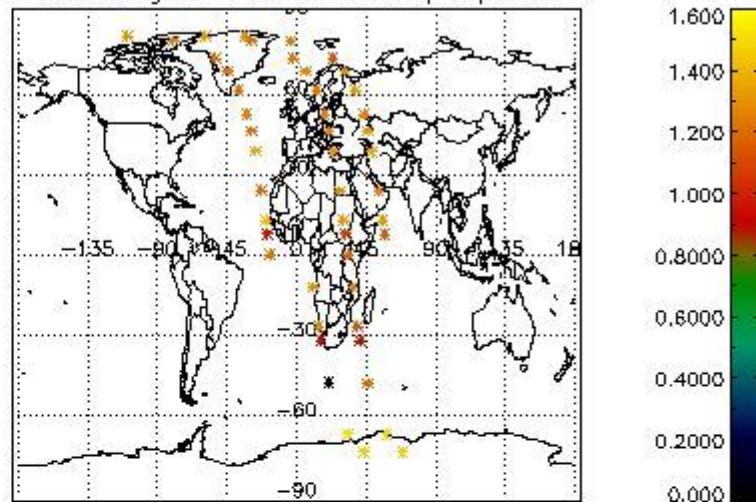
4.2 Plot quality information per product coming from level 1b processing (world map)

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

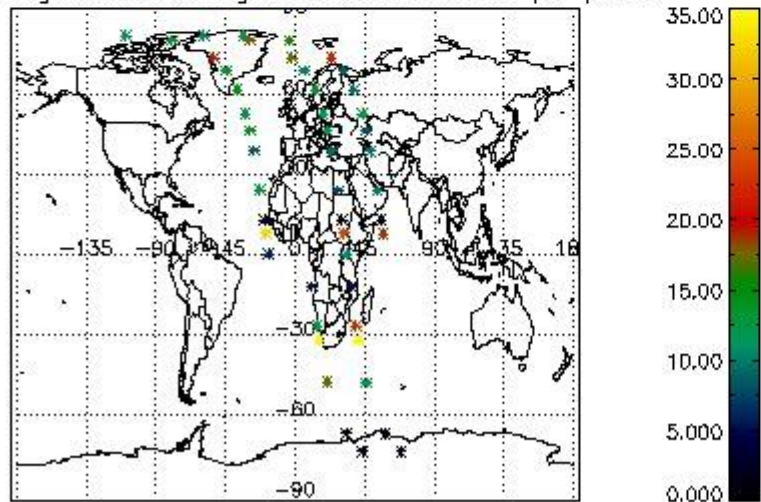
Percentage of cosmic ray hits per profile



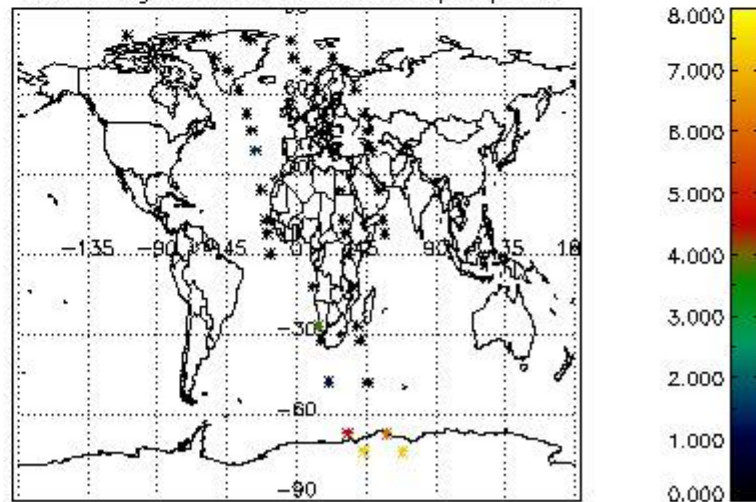
Percentage of datation errors per profile



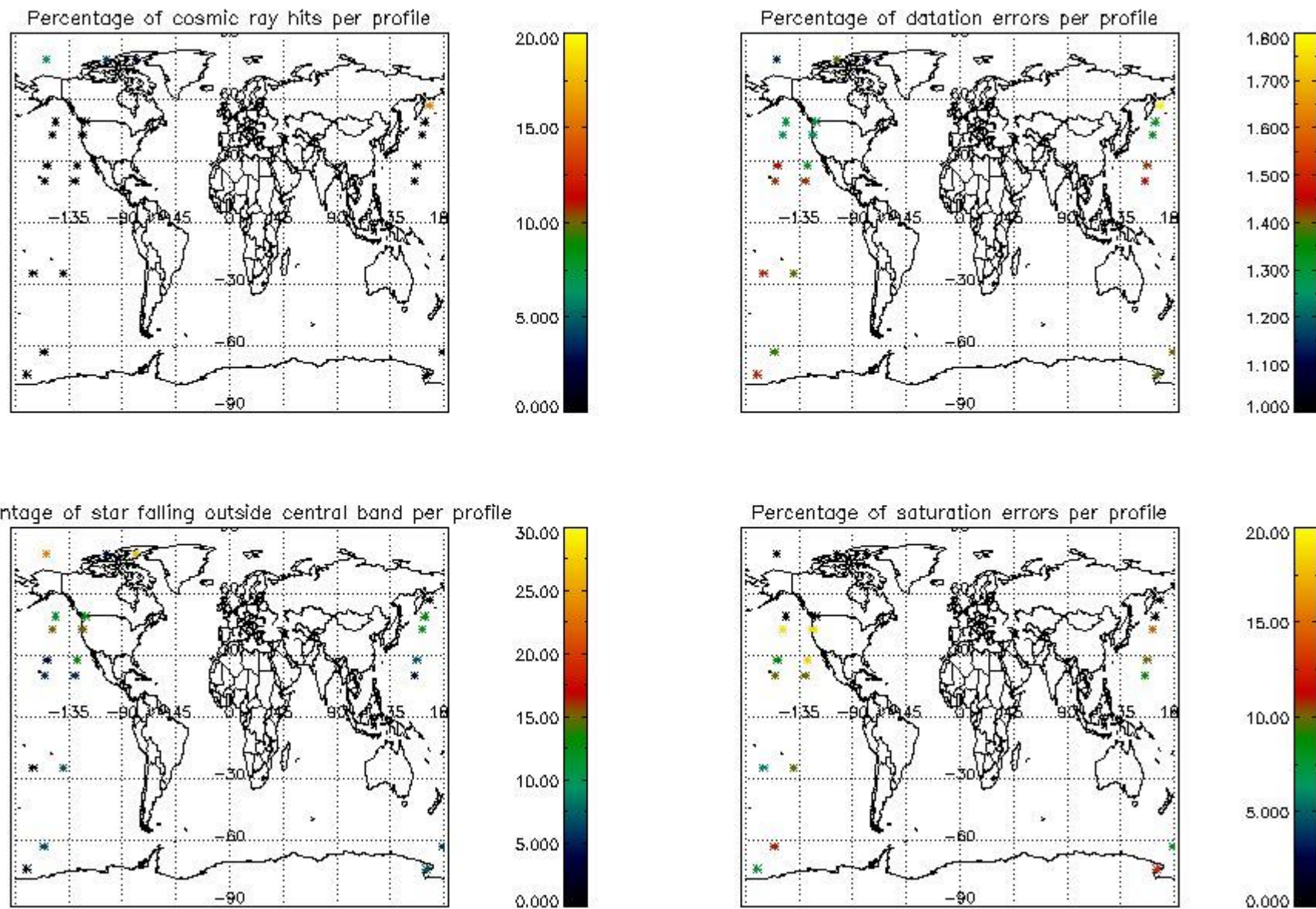
Percentage of star falling outside central band per profile



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

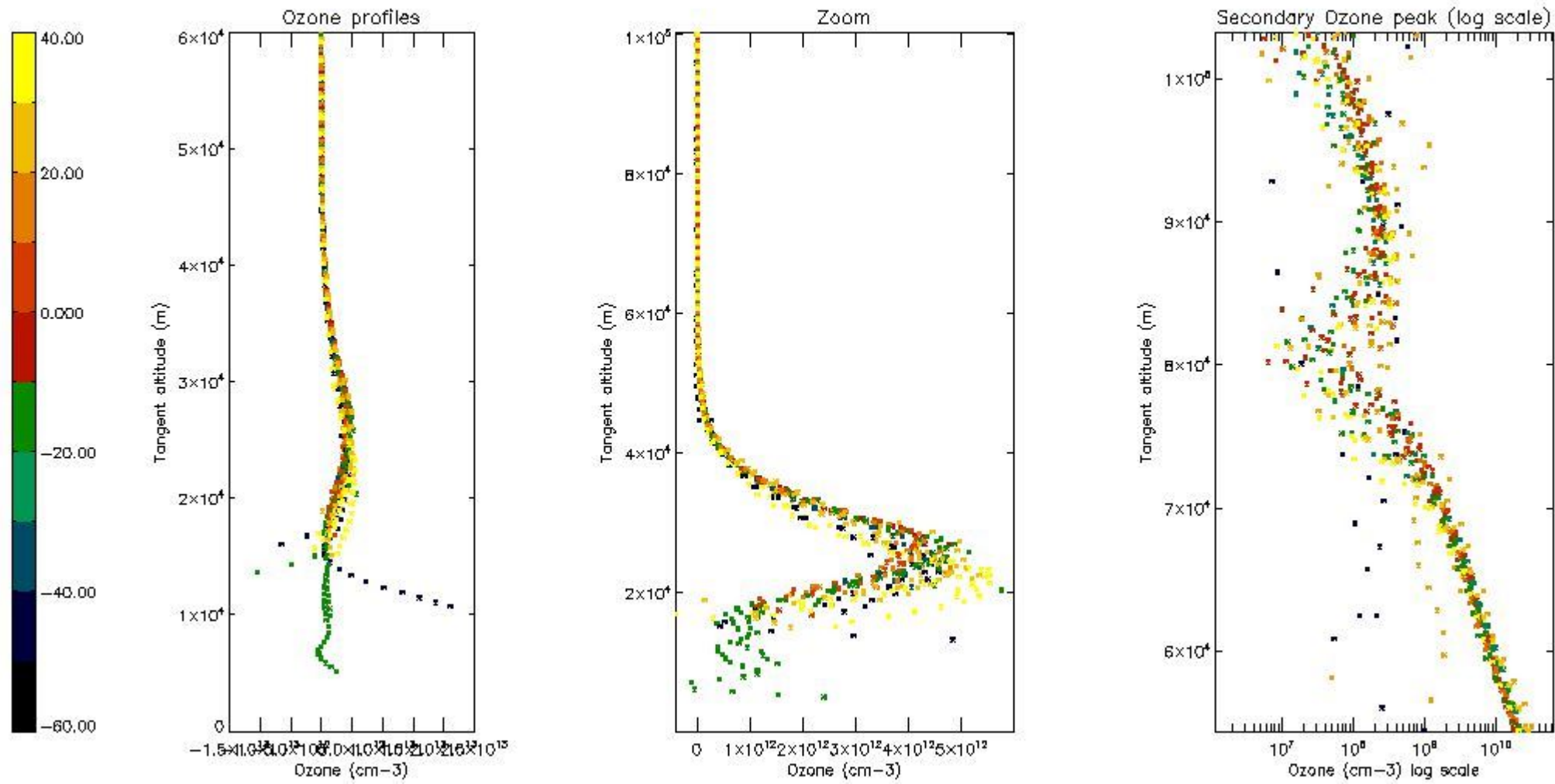
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	41
STD < 20	24

STD < 10	21
STD < 5	15

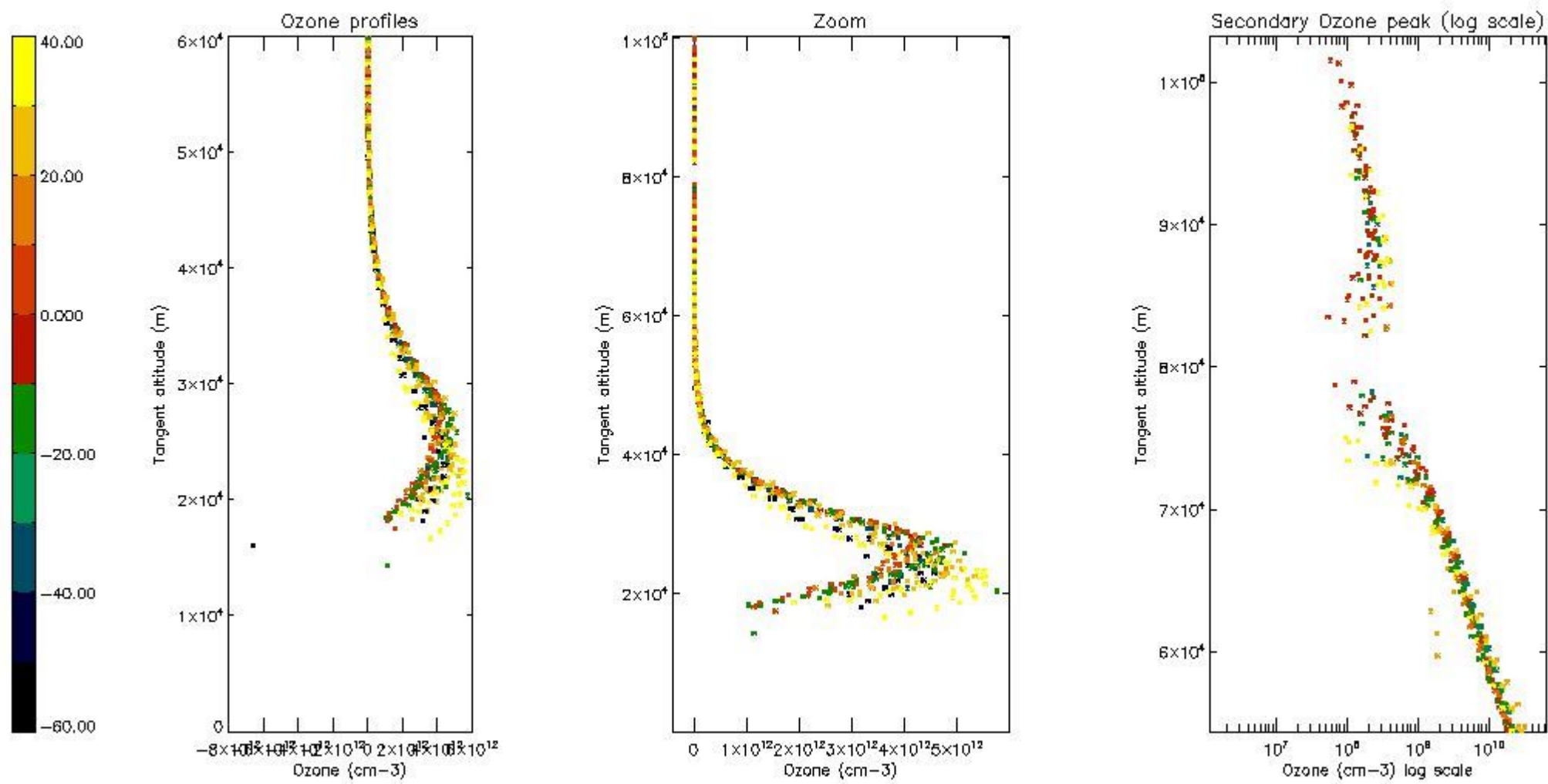
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



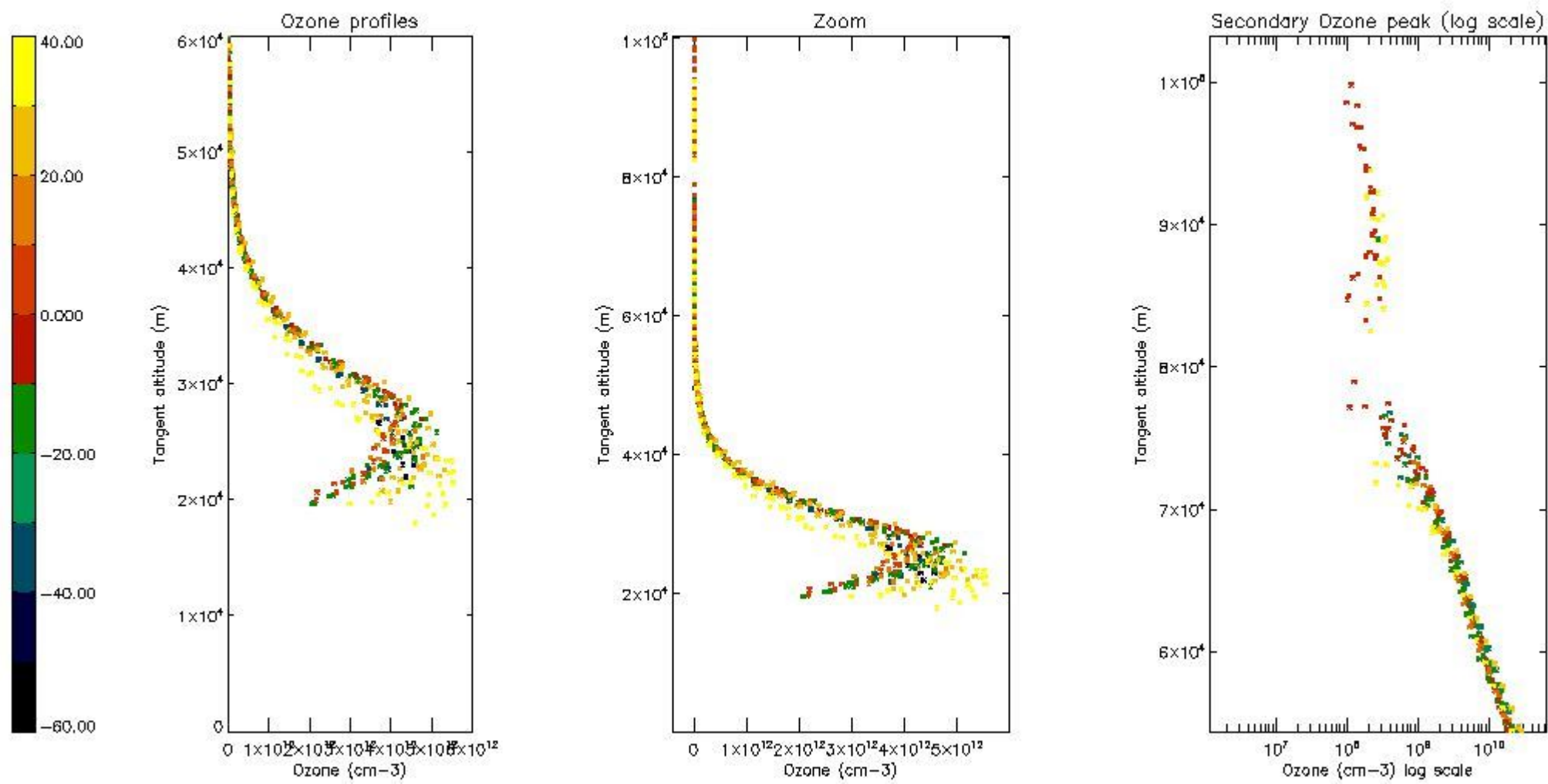
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



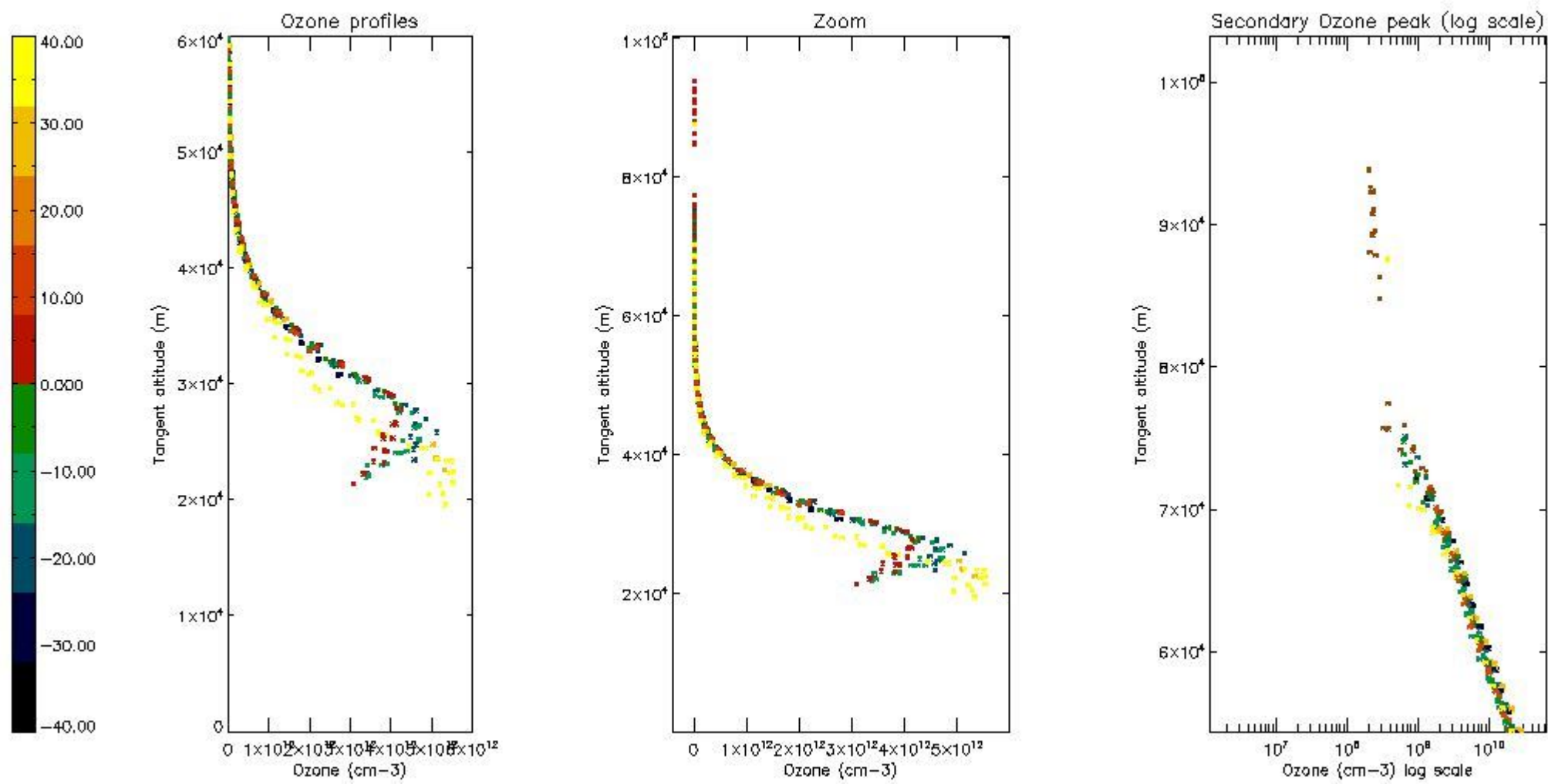
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



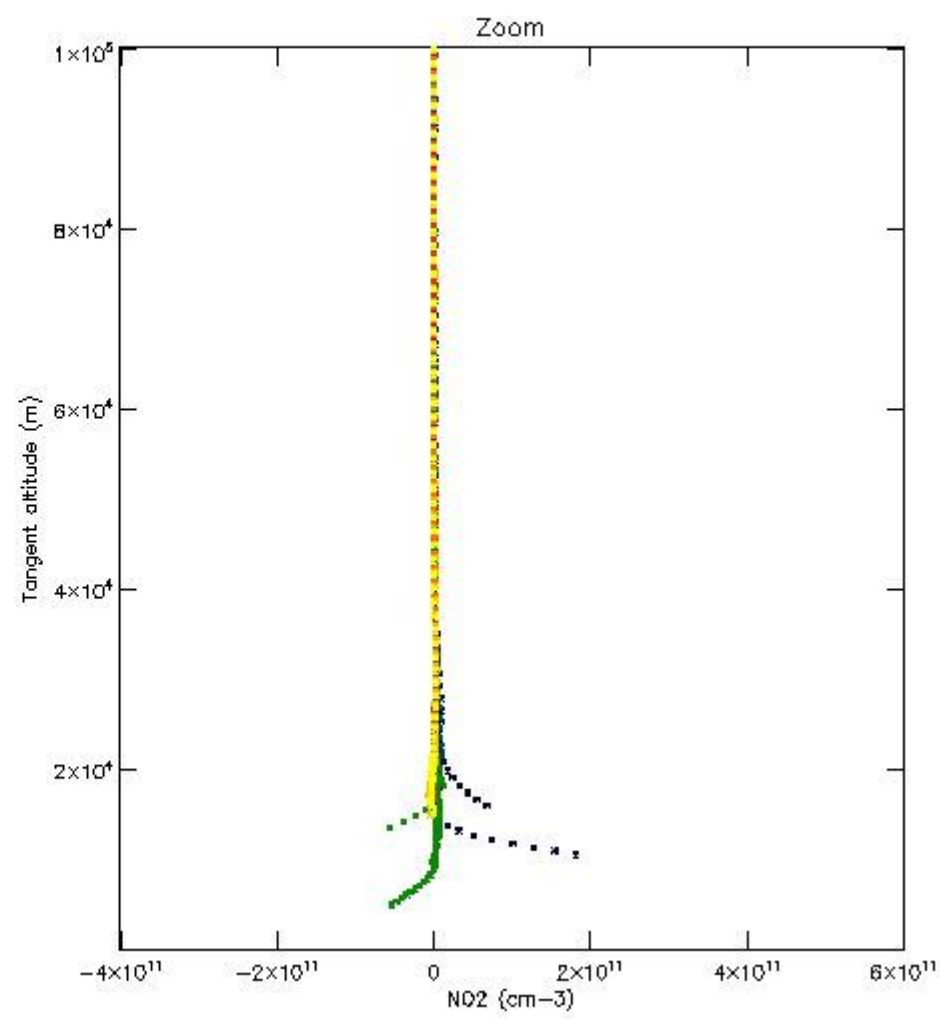
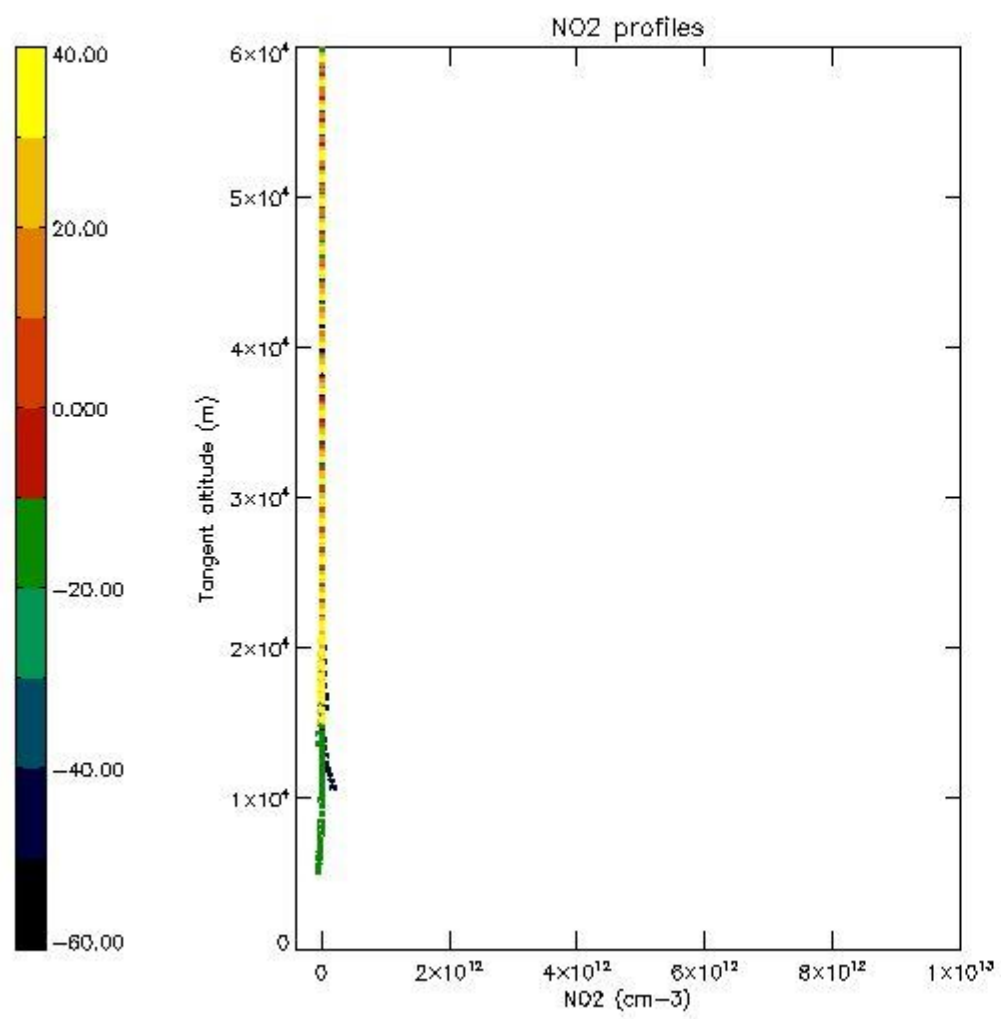
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



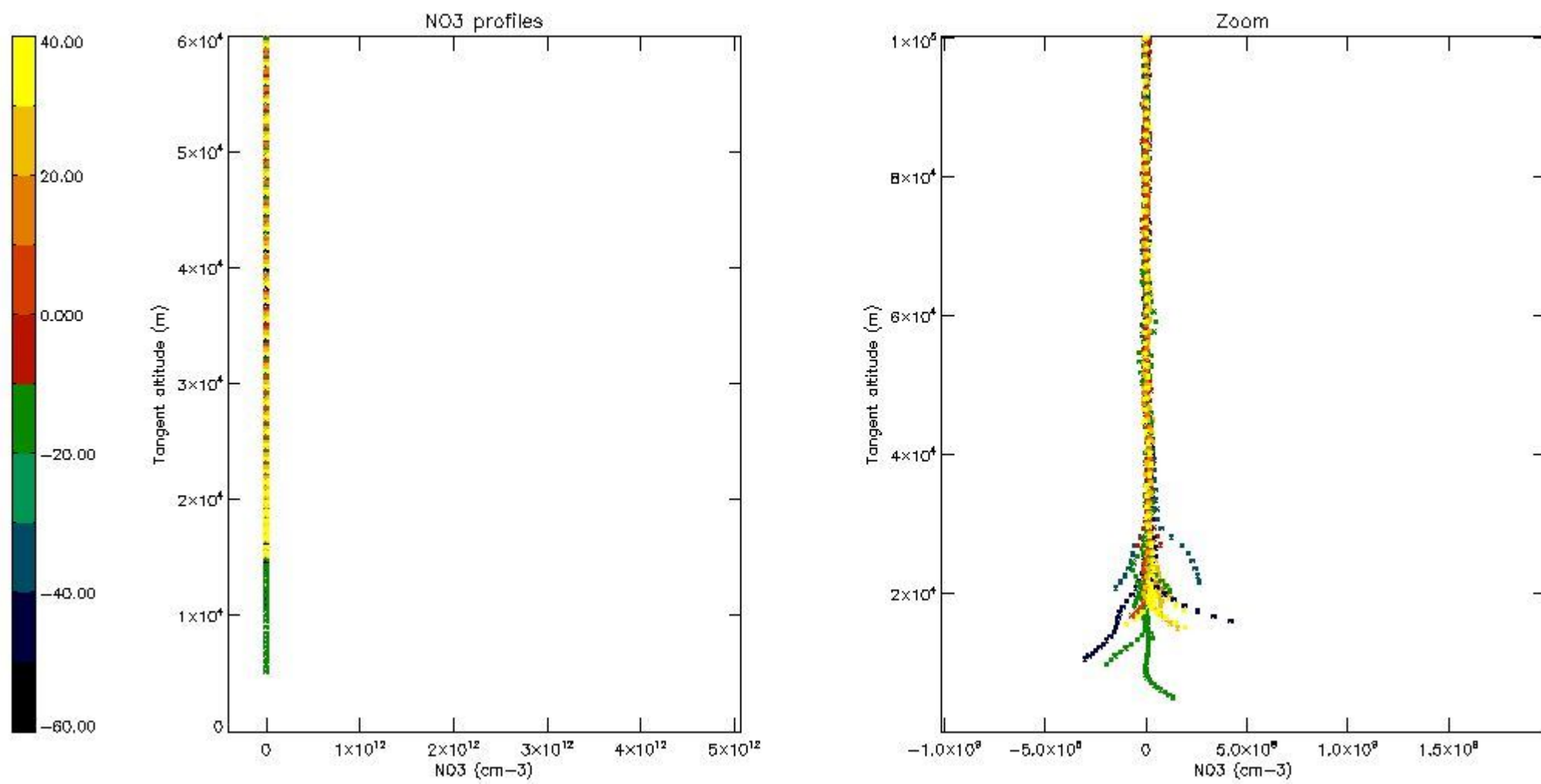
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



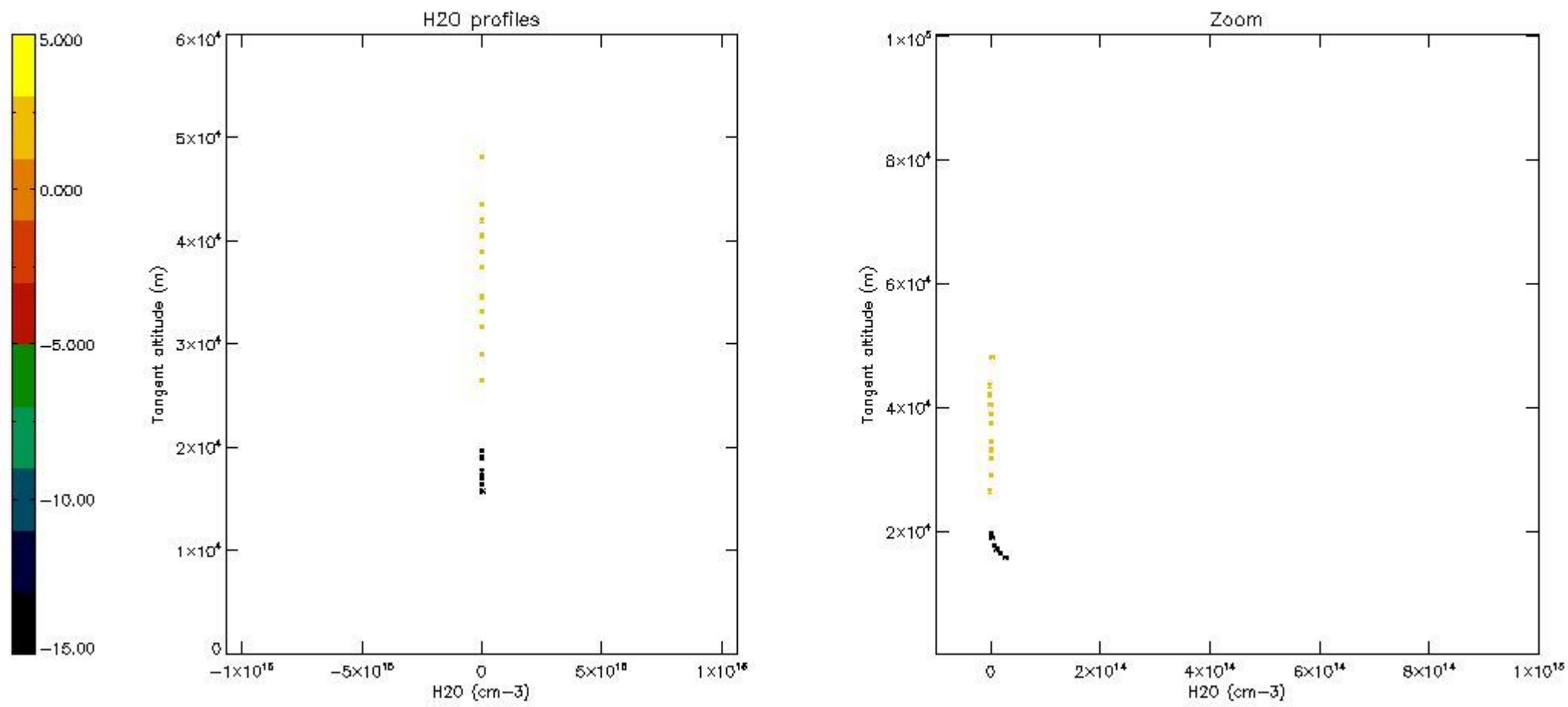
5.7 Plot NO3 profiles for all STD (dark without errors)

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	23-JAN-2007 18:08:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	23-JAN-2007 18:08:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	23-JAN-2007 18:08:53

GOMOS Level 2 Daily Report

SUMMARY

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[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](#)

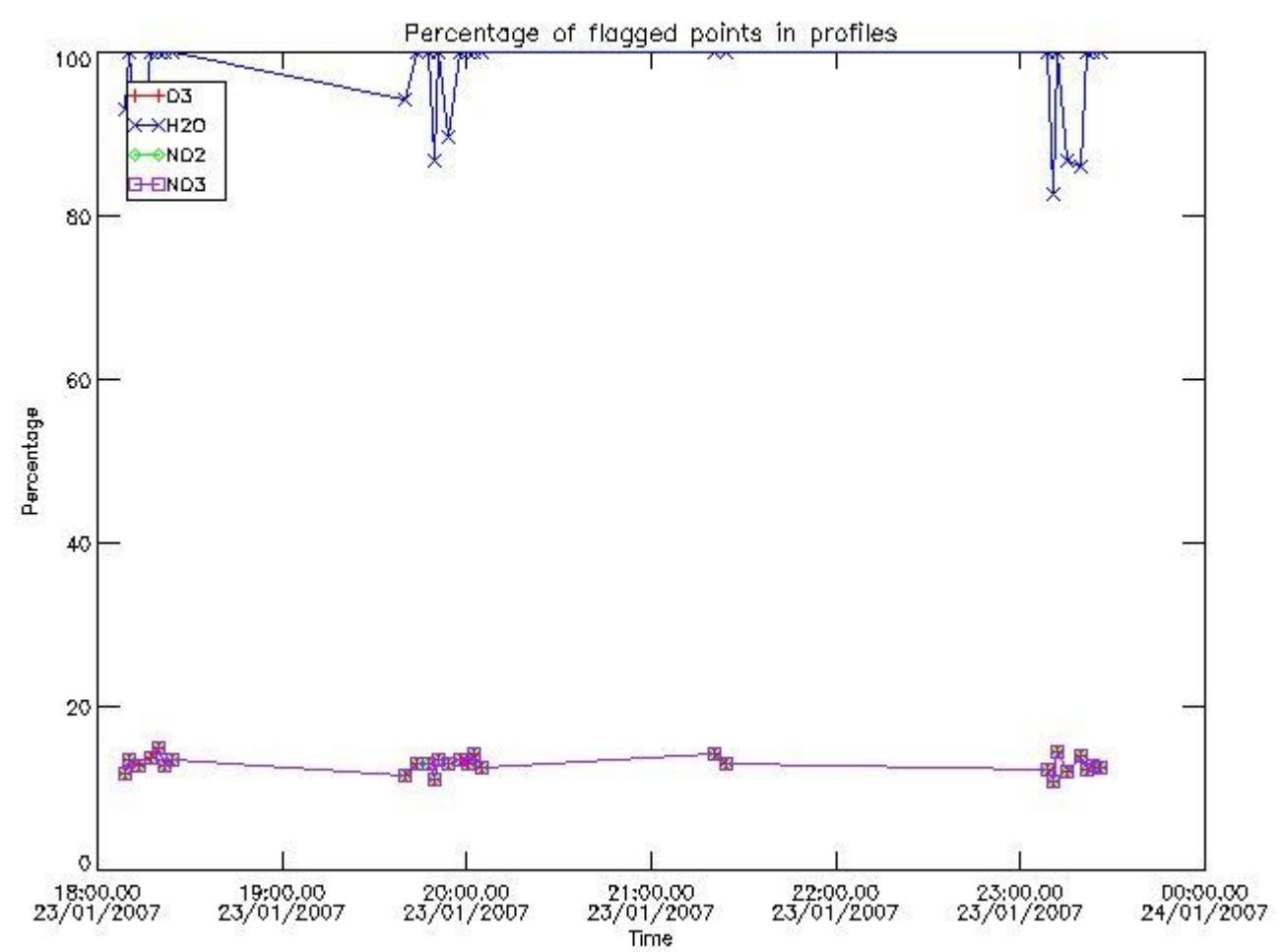
[6. Auxiliary Data Files used for the production reported in section 2](#)

43	GOM_NL__2PRFIN20070123_204424_000000342055_00014_25619_3922.N1	23-JAN-2007 20:44:24	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	25619	No
44	GOM_NL__2PRFIN20070123_205523_000000362055_00014_25619_3923.N1	23-JAN-2007 20:55:23	Bright	35.500	130	23Bet Dra	2.7990	5800.0	71	25619	No
45	GOM_NL__2PRFIN20070123_205844_000000362055_00014_25619_3924.N1	23-JAN-2007 20:58:44	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	25619	No
46	GOM_NL__2PRFIN20070123_210644_000000342055_00014_25619_3925.N1	23-JAN-2007 21:06:44	Bright	34.000	59	55Alp Oph	2.0800	8900.0	68	25619	No
47	GOM_NL__2PRFIN20070123_210851_000000332055_00014_25619_3926.N1	23-JAN-2007 21:08:51	Bright	33.000	126	60Bet Oph	2.7700	4250.0	66	25619	No
48	GOM_NL__2PRFIN20070123_211427_000000442055_00014_25619_3927.N1	23-JAN-2007 21:14:27	Bright	43.500	98	13Zet Oph	2.5710	30000.	87	25619	No
49	GOM_NL__2PRFIN20070123_211857_000000562055_00014_25619_3928.N1	23-JAN-2007 21:18:57	Twilight	56.000	16	21Alp Sco	1.0200	3000.0	112	25619	No
50	GOM_NL__2PRFIN20070123_212025_000000402055_00014_25619_3929.N1	23-JAN-2007 21:20:25	Dark	39.500	75	26Eps Sco	2.2910	4250.0	79	25619	No
51	GOM_NL__2PRFIN20070123_212430_000000392055_00014_25619_3930.N1	23-JAN-2007 21:24:30	Dark	39.000	131	Gam Lup	2.8000	26000.	78	25619	No
52	GOM_NL__2PRFIN20070123_230835_000000422055_00016_25621_3938.N1	23-JAN-2007 23:08:35	Dark	41.500	78	Alp Lup	2.3040	28000.	83	25621	No
53	GOM_NL__2PRFIN20070123_231042_000000522055_00016_25621_3939.N1	23-JAN-2007 23:10:42	Dark	52.000	4	Alp1Cen	-0.010000	5800.0	104	25621	No
54	GOM_NL__2PRFIN20070123_231209_000000352055_00016_25621_3940.N1	23-JAN-2007 23:12:09	Dark	35.000	77	Eps Cen	2.3030	28000.	70	25621	No
55	GOM_NL__2PRFIN20070123_231515_000000422055_00016_25621_3941.N1	23-JAN-2007 23:15:15	Dark	42.000	12	Alp1Cru	0.77500	30000.	84	25621	No
56	GOM_NL__2PRFIN20070123_231921_000000372055_00016_25621_3942.N1	23-JAN-2007 23:19:21	Dark	36.500	29	Bet Car	1.6720	10200.	73	25621	No
57	GOM_NL__2PRFIN20070123_232131_000000422055_00016_25621_3943.N1	23-JAN-2007 23:21:31	Dark	41.500	71	Iot Car	2.2460	7700.0	83	25621	No
58	GOM_NL__2PRFIN20070123_232320_000000402055_00016_25621_3944.N1	23-JAN-2007 23:23:20	Dark	40.000	46	Del Vel	1.9540	10600.	80	25621	No
59	GOM_NL__2PRFIN20070123_232557_000000412055_00016_25621_3945.N1	23-JAN-2007 23:25:57	Dark	41.000	34	Gam2Vel	1.7930	23000.	82	25621	No
60	GOM_NL__2PRFIN20070123_232803_000000412055_00016_25621_3946.N1	23-JAN-2007 23:28:03	Straylight	41.000	70	Zet Pup	2.2460	39000.	82	25621	No
61	GOM_NL__2PRFIN20070123_232934_000000422055_00016_25621_3947.N1	23-JAN-2007 23:29:34	Straylight	42.000	117	Pi Pup	2.7060	3800.0	84	25621	No
62	GOM_NL__2PRFIN20070123_233203_000000402055_00016_25621_3948.N1	23-JAN-2007 23:32:03	Straylight	39.500	23	21Eps CMa	1.5020	26000.	79	25621	No
63	GOM_NL__2PRFIN20070123_233326_000000382055_00016_25621_3949.N1	23-JAN-2007 23:33:26	Straylight	38.000	179	24Omi2CMa	3.0320	24000.	76	25621	No
64	GOM_NL__2PRFIN20070123_233536_000000442055_00016_25621_3950.N1	23-JAN-2007 23:35:36	Straylight	44.000	1	9Alp CMa	-1.4400	11000.	88	25621	No
65	GOM_NL__2PRFIN20070123_234239_000000282055_00016_25621_3951.N1	23-JAN-2007 23:42:39	Tw_i_and_stray	28.000	153	3Bet CMi	2.8940	13100.	56	25621	No
66	GOM_NL__2PRFIN20070123_234457_000000392055_00016_25621_3952.N1	23-JAN-2007 23:44:57	Bright	38.500	44	24Gam Gem	1.9280	11000.	77	25621	No
67	GOM_NL__2PRFIN20070123_234643_000000382055_00016_25621_3953.N1	23-JAN-2007 23:46:43	Bright	38.000	151	13Mu Gem	2.8900	3000.0	76	25621	No
68	GOM_NL__2PRFIN20070123_235057_000000352055_00016_25621_3954.N1	23-JAN-2007 23:50:57	Bright	35.000	107	37The Aur	2.6490	11000.	70	25621	No
69	GOM_NL__2PRFIN20070123_235305_000000352055_00016_25621_3955.N1	23-JAN-2007 23:53:05	Bright	34.500	42	34Bet Aur	1.9000	10200.	69	25621	No

3. Quality information per product

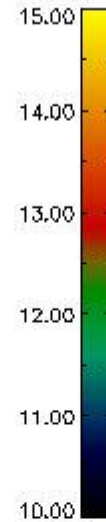
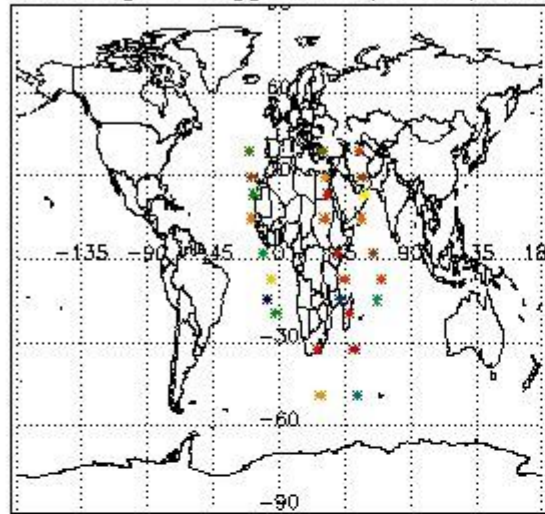
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

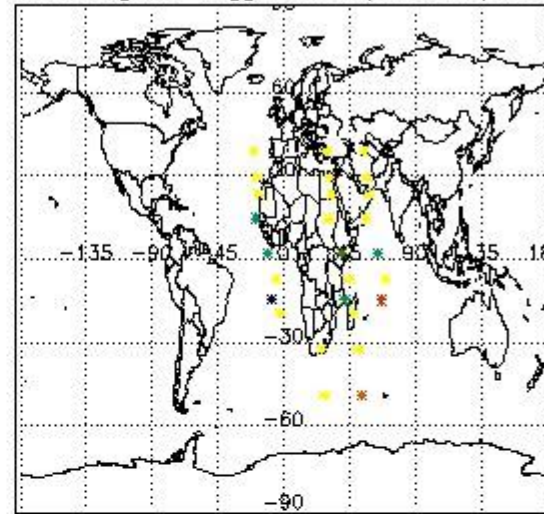


3.2 Plot quality information per product (world map)

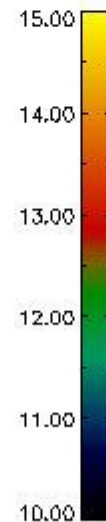
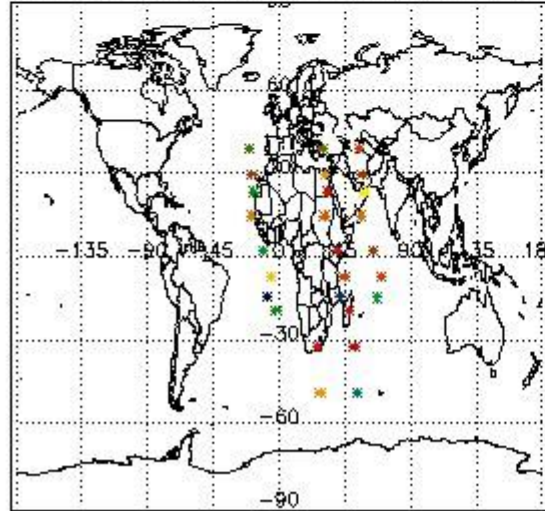
Percentage of flagged data per O3 profile



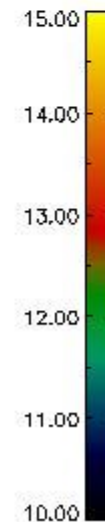
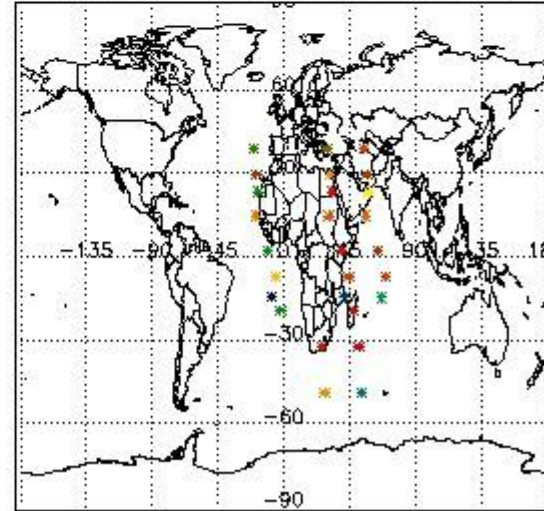
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

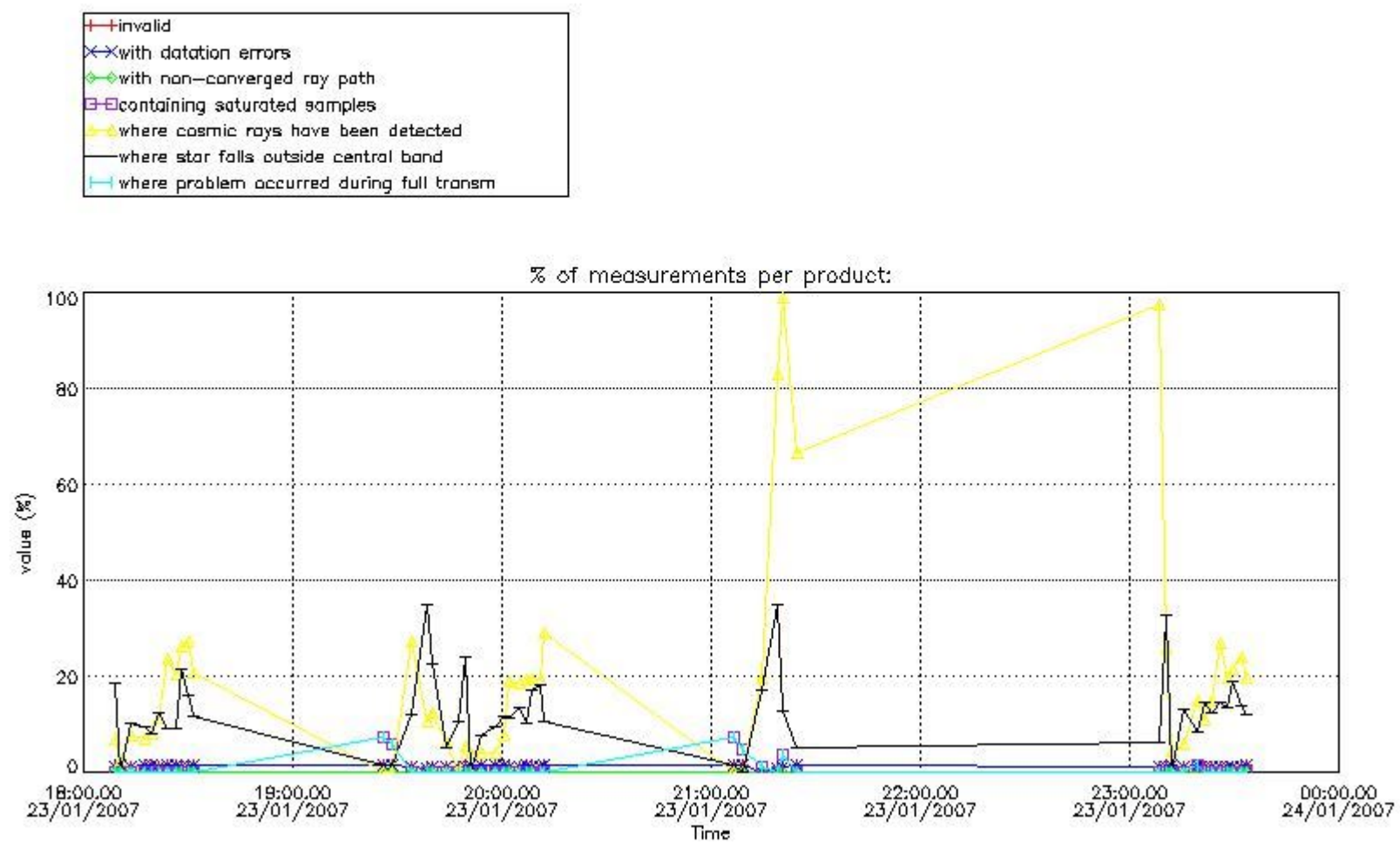


4. Level 1 quality information per product

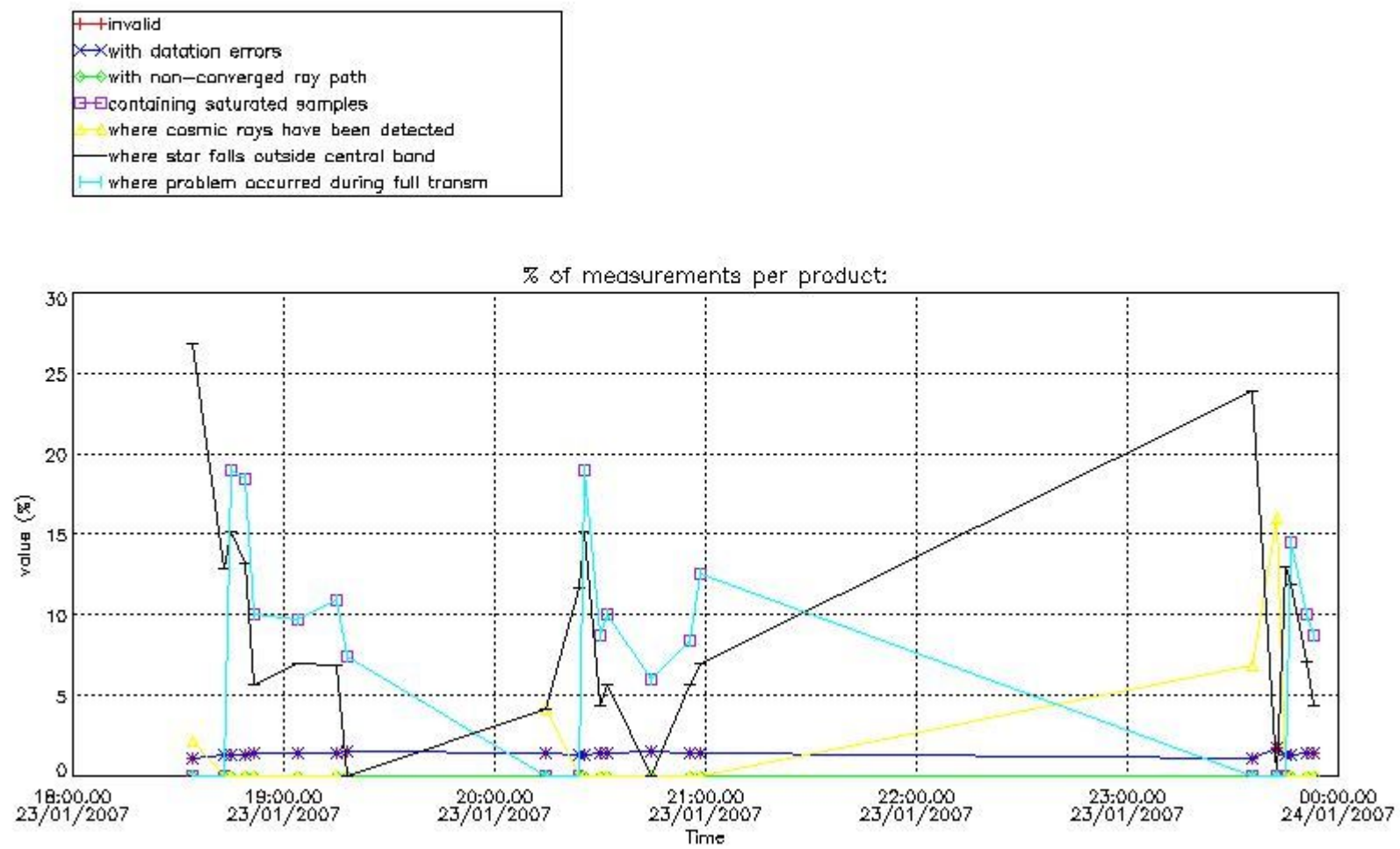
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



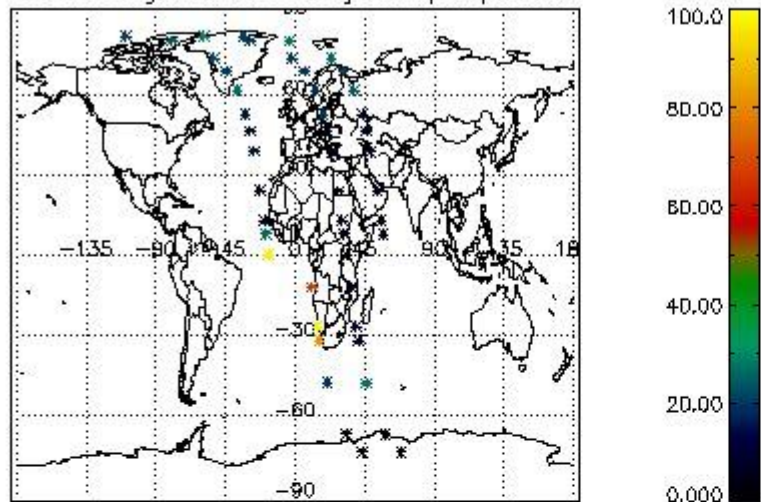
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



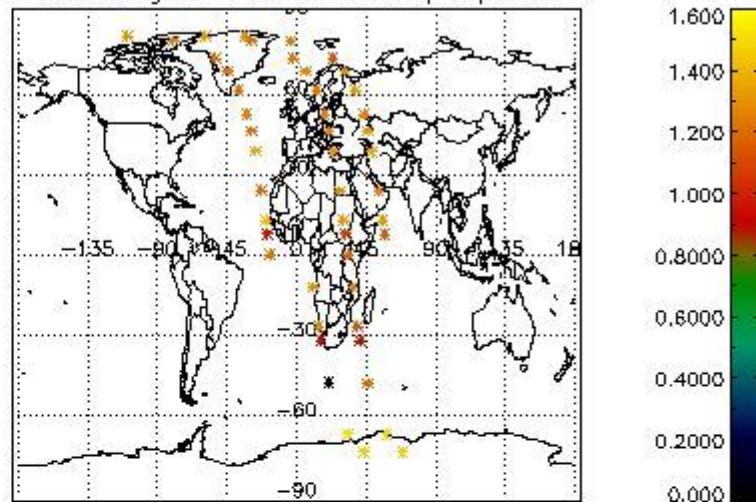
4.2 Plot quality information per product coming from level 1b processing (world map)

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

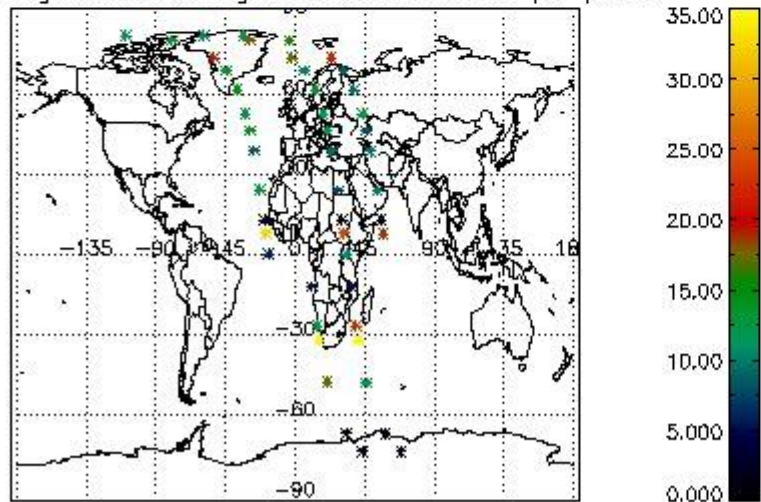
Percentage of cosmic ray hits per profile



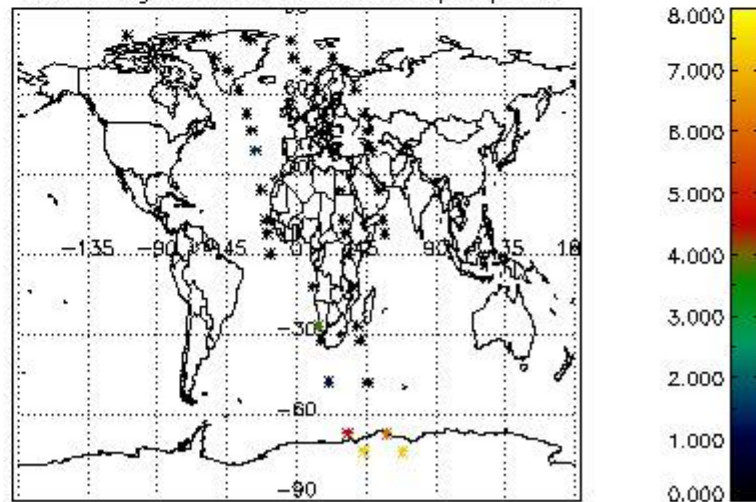
Percentage of datation errors per profile



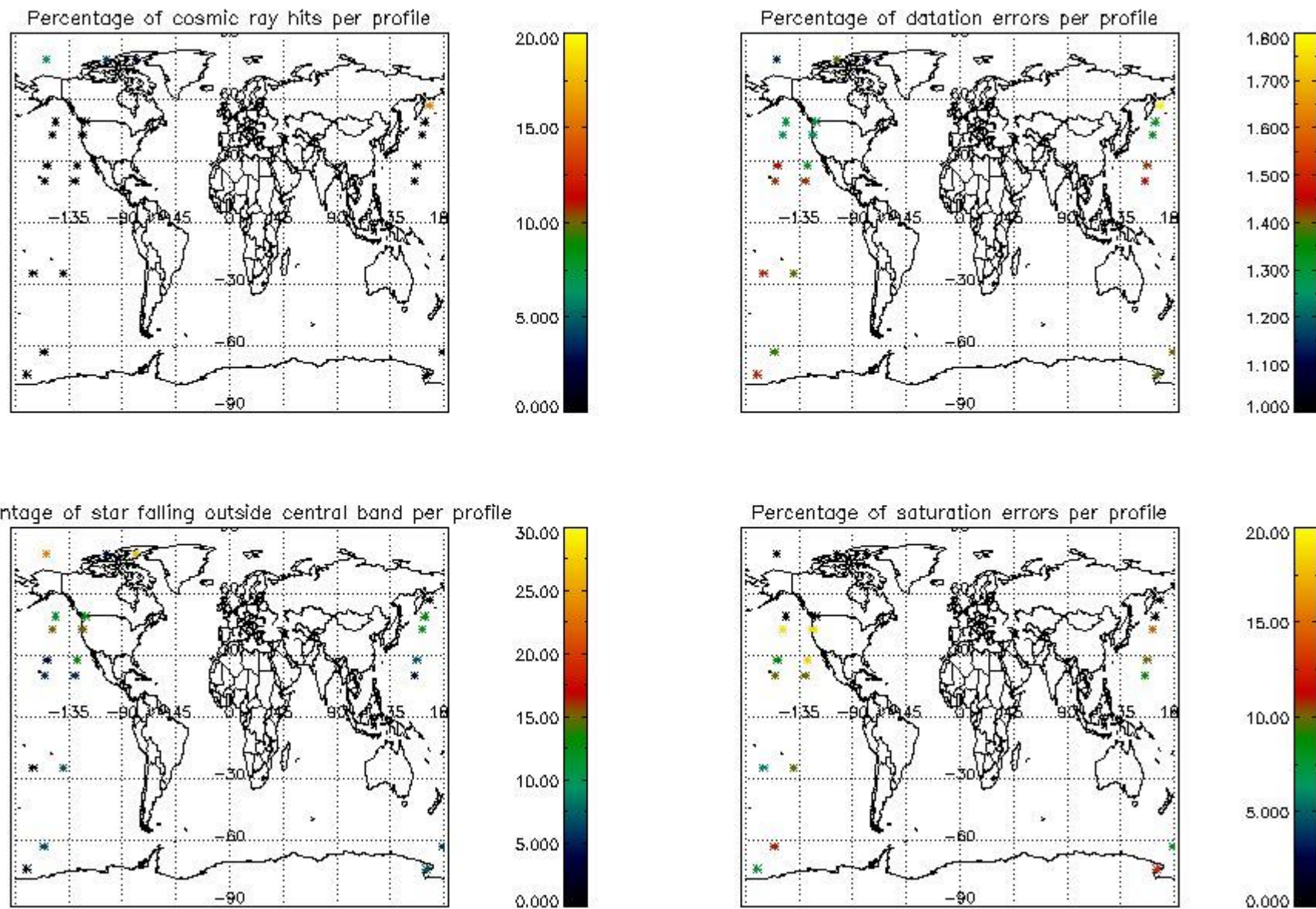
Percentage of star falling outside central band per profile



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

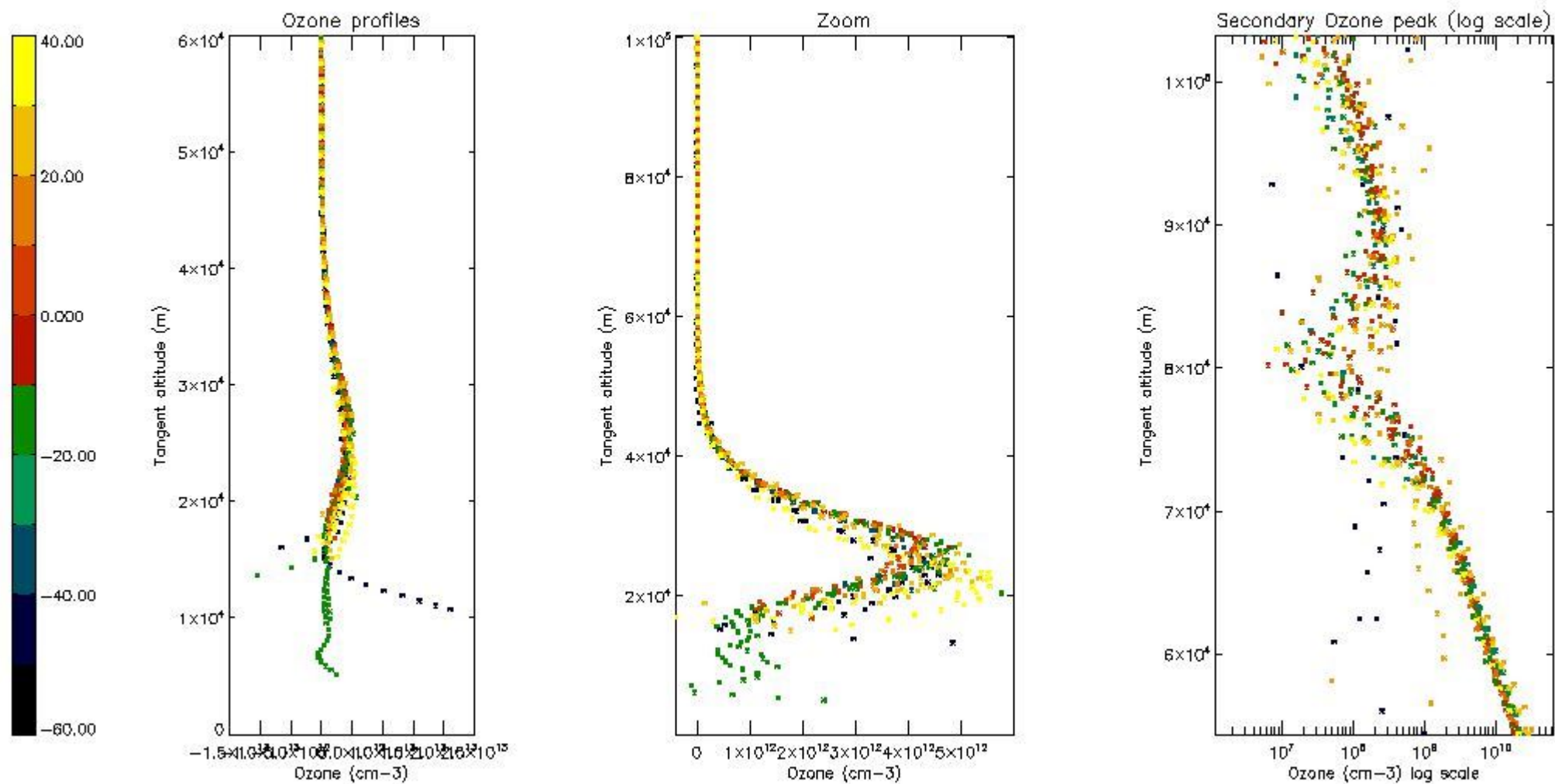
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	41
STD < 20	24

STD < 10	21
STD < 5	15

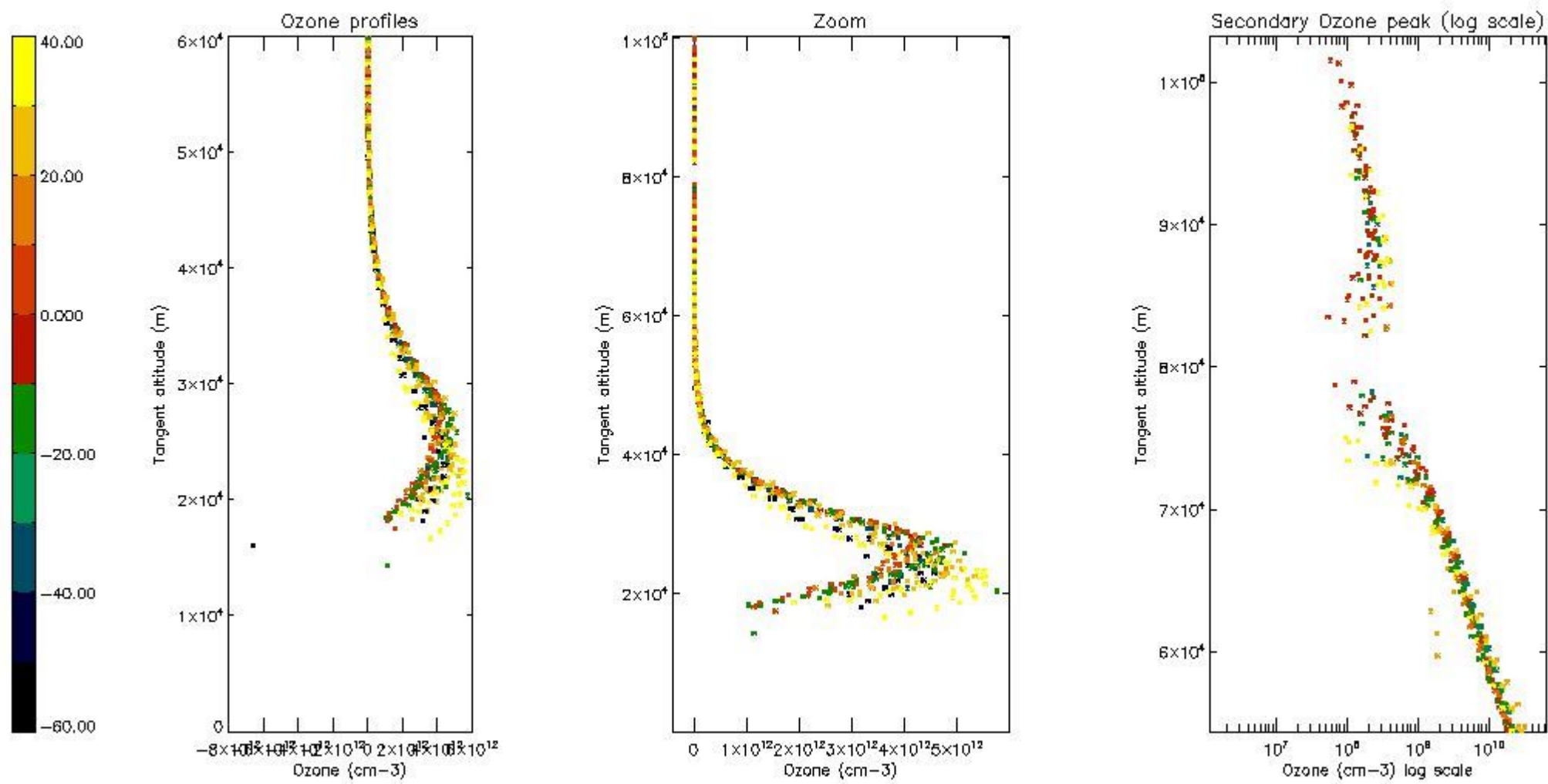
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



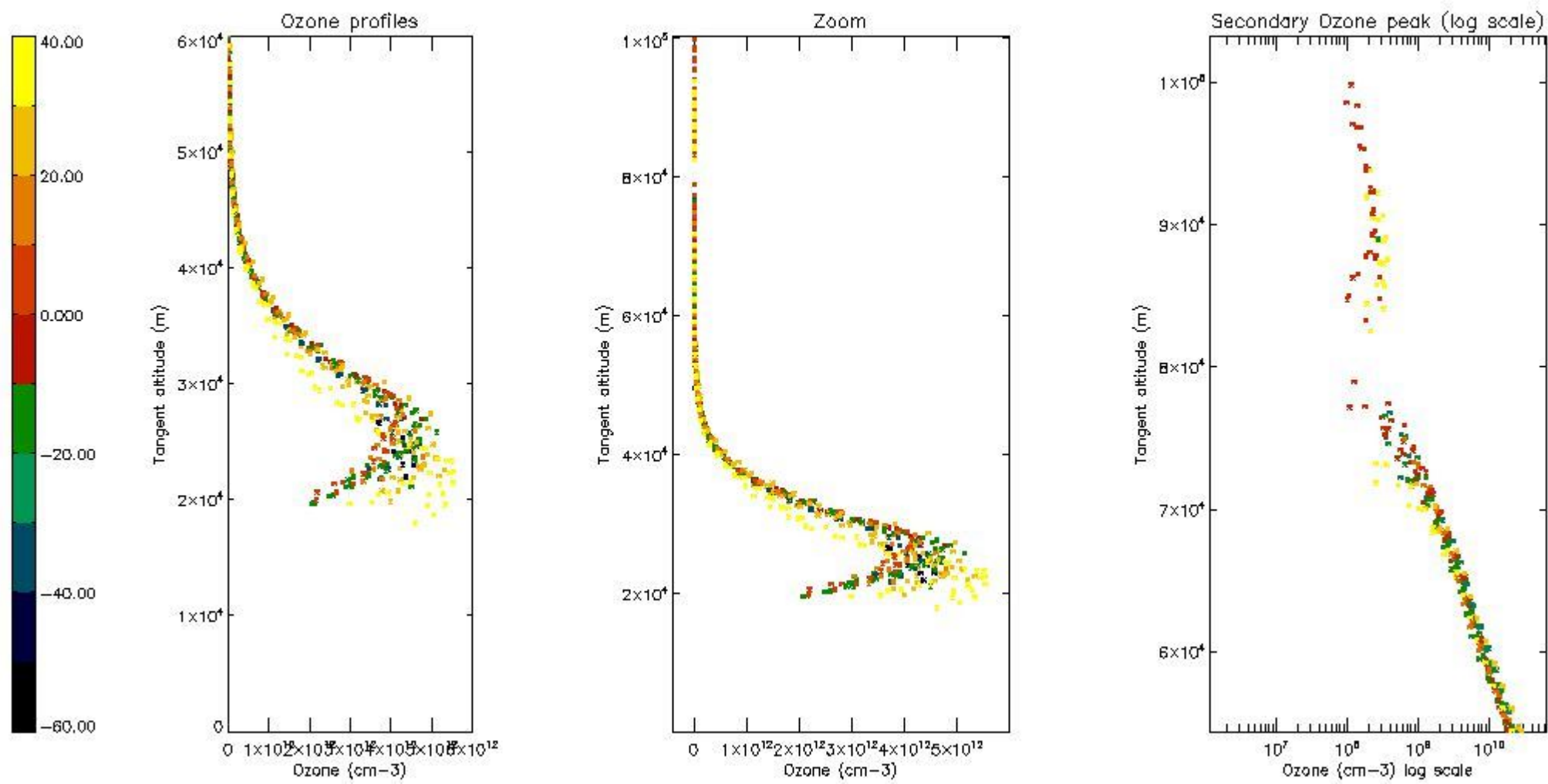
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



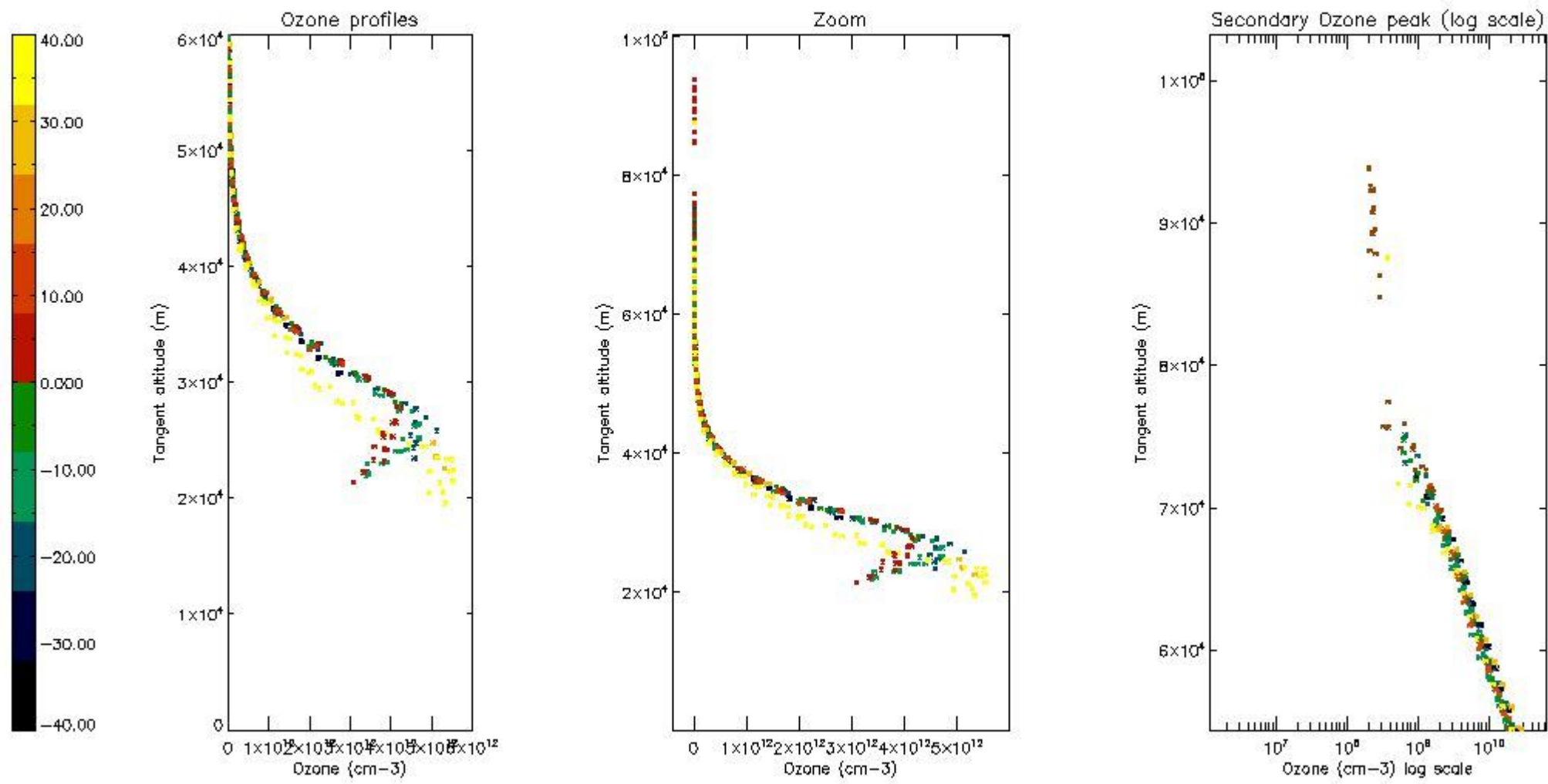
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



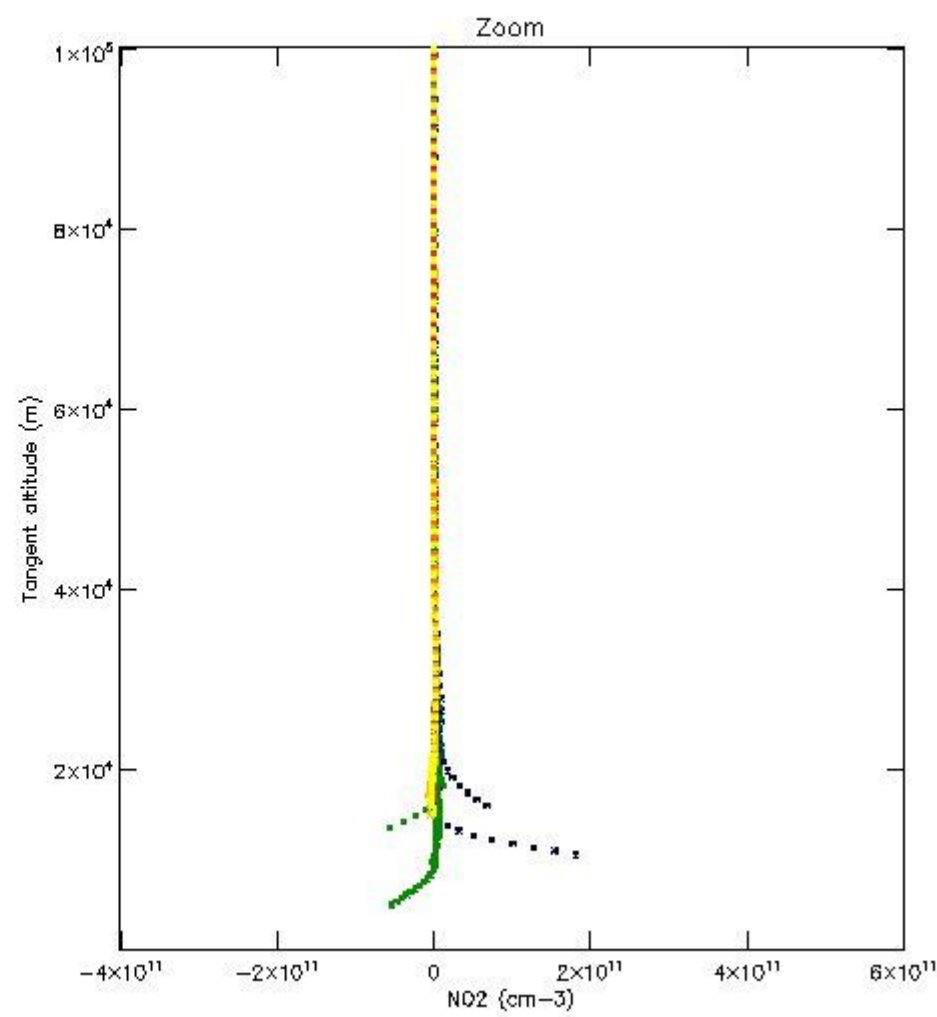
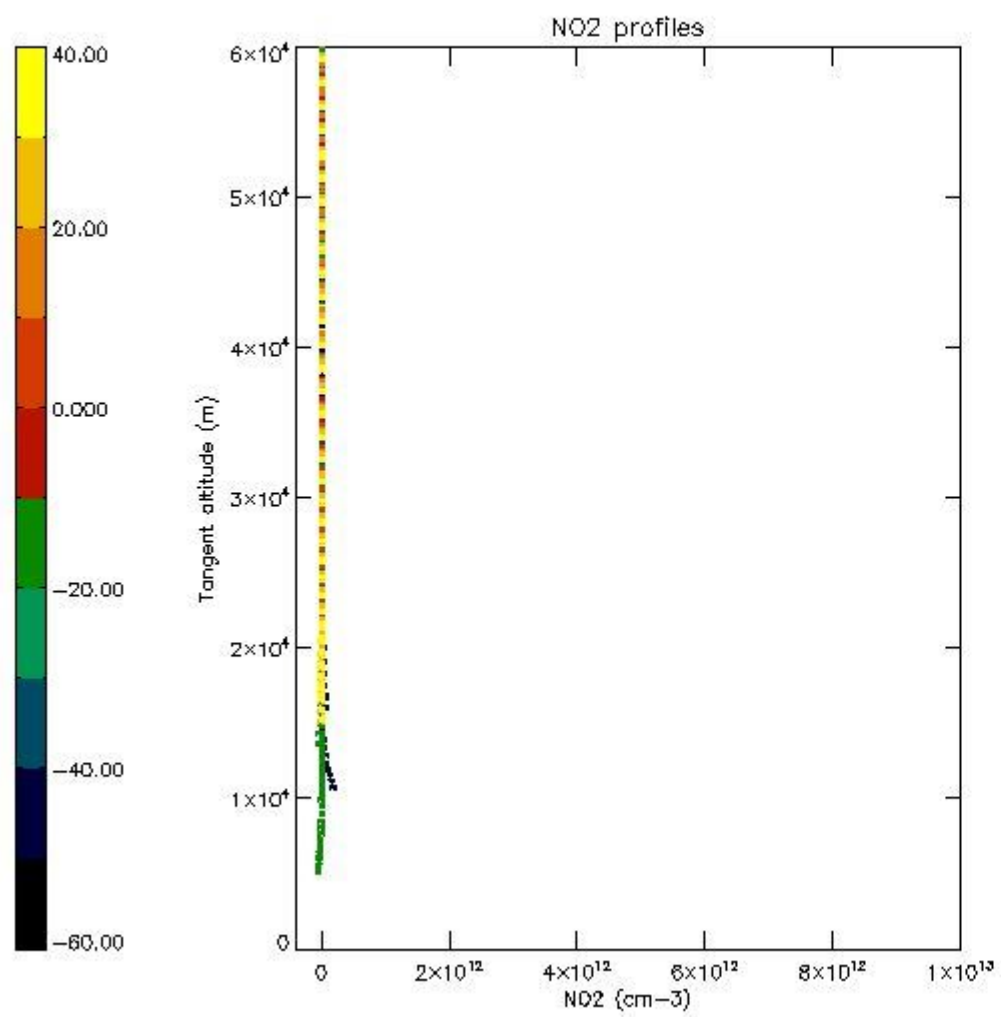
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



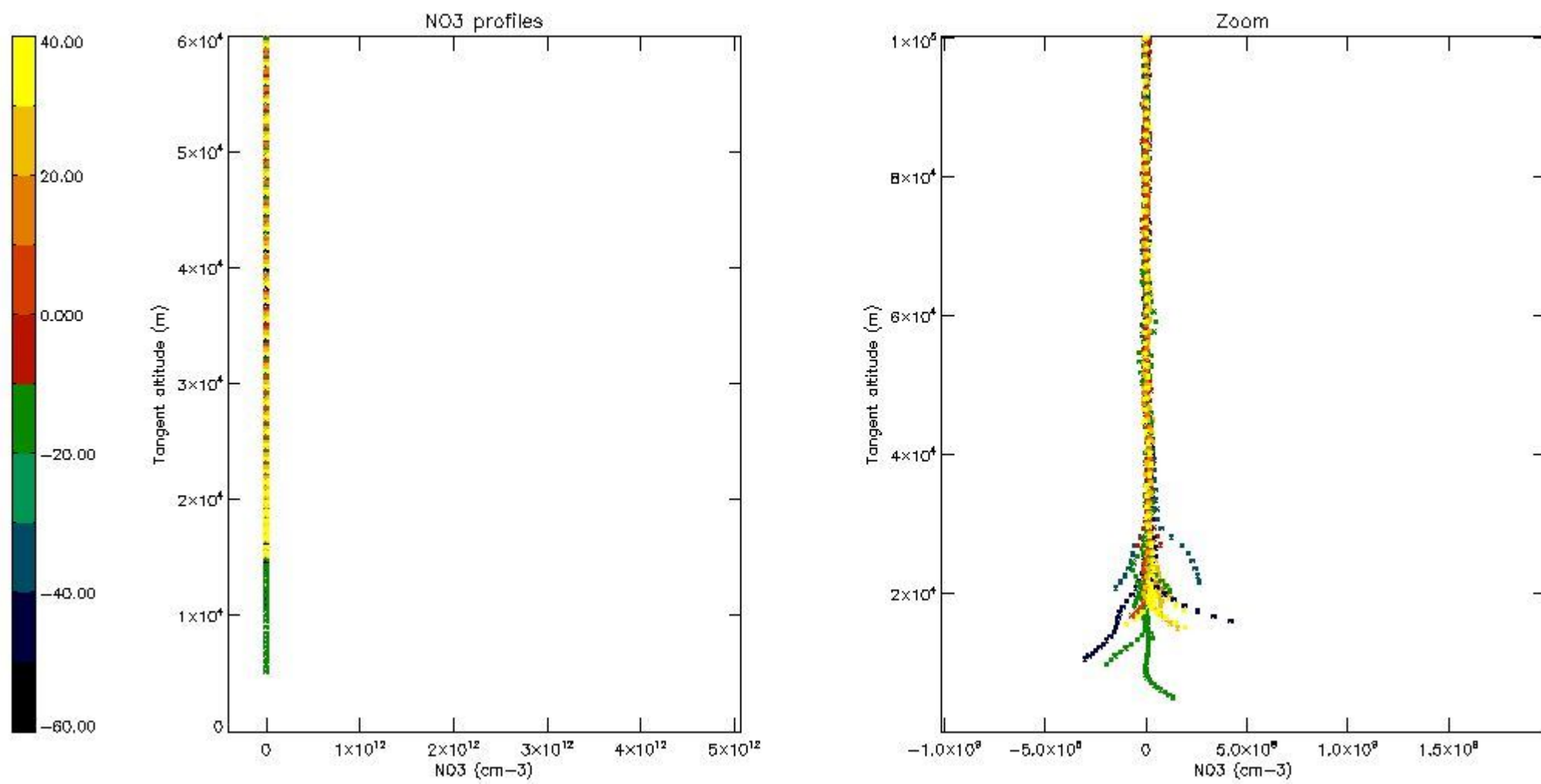
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



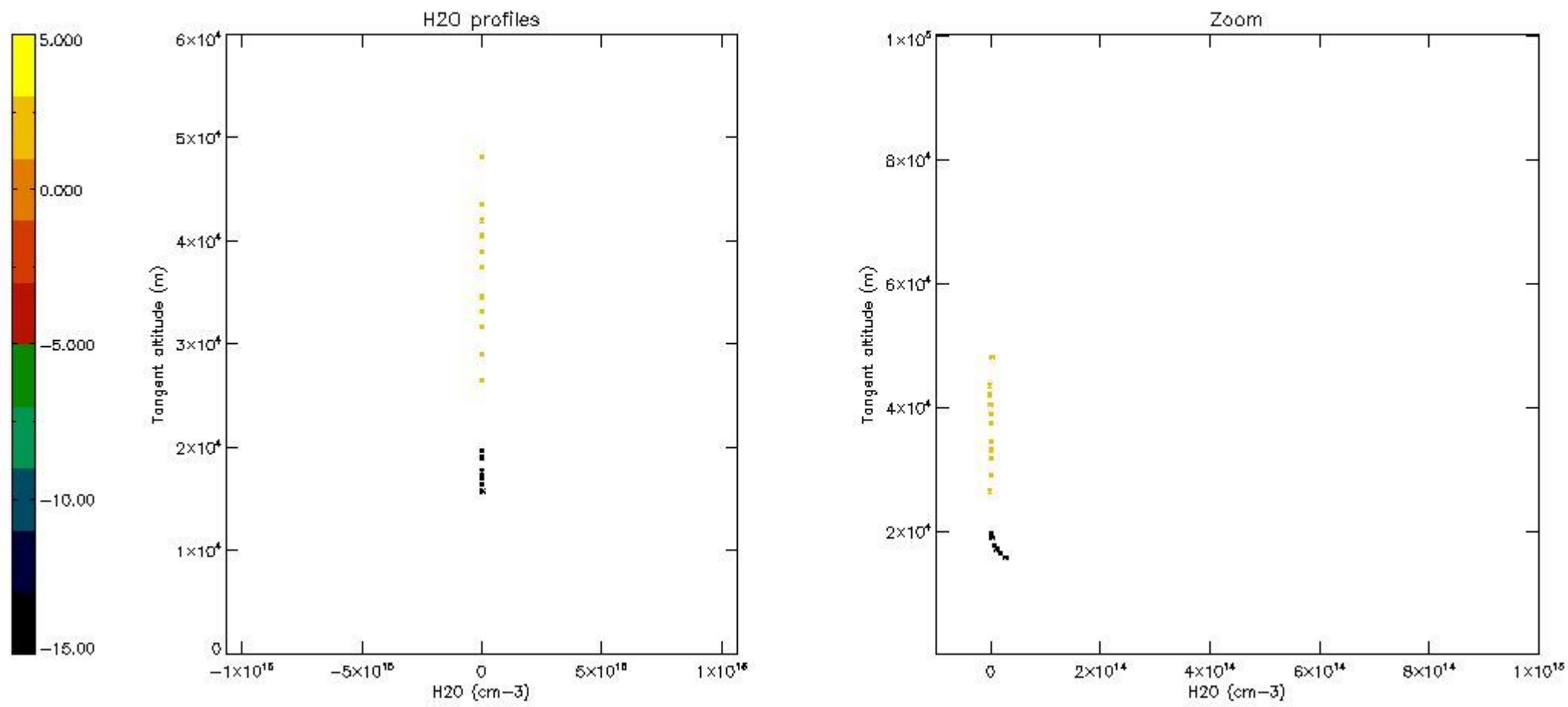
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

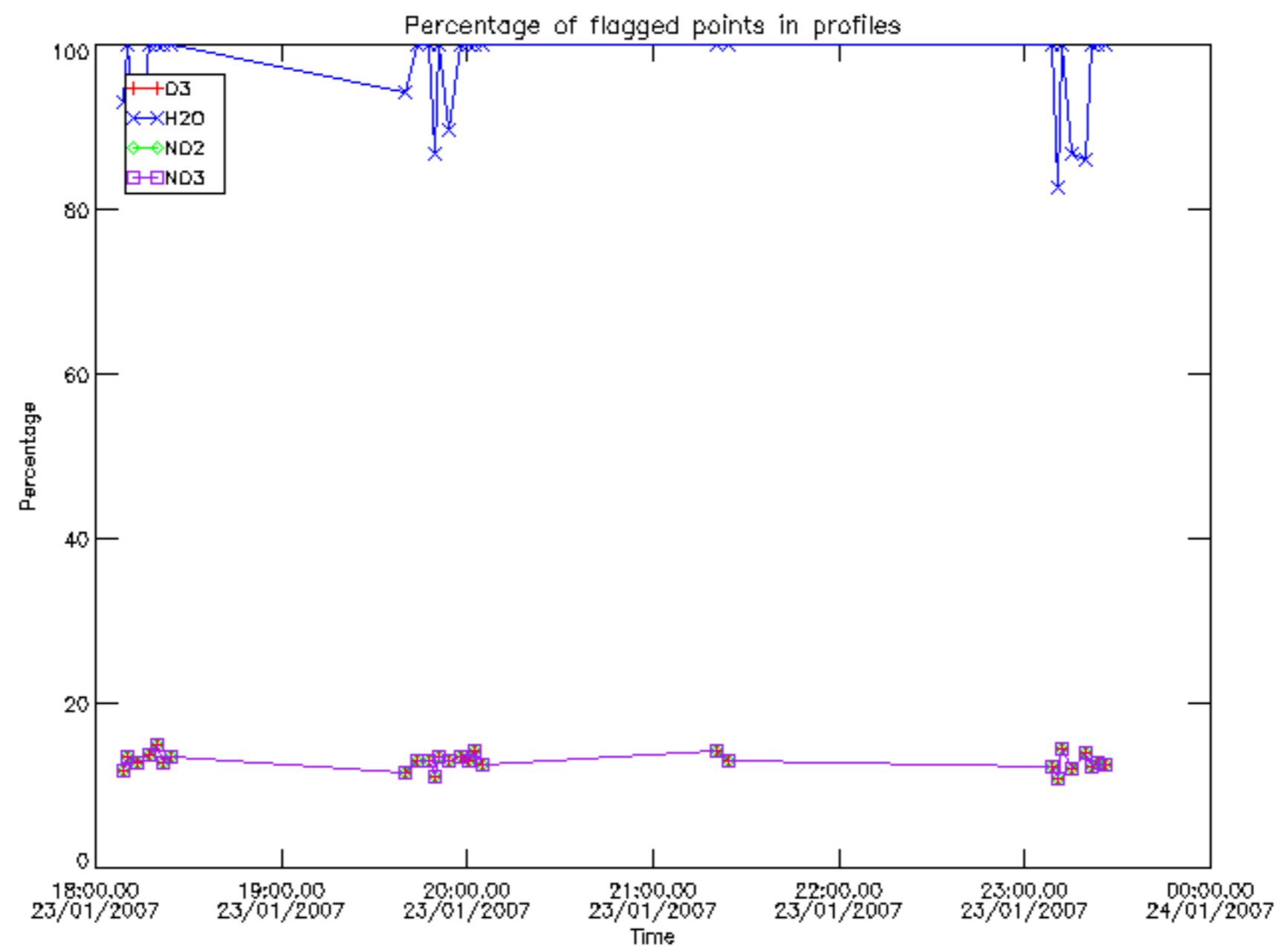
The colorbar represents the latitude.



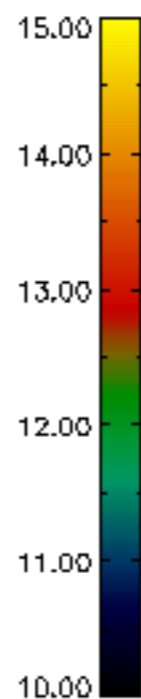
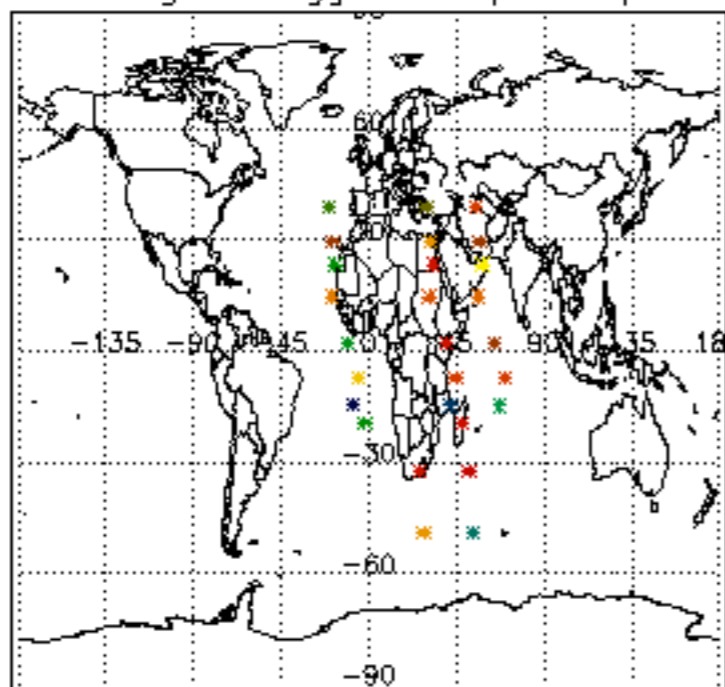
6. Auxiliary Data Files used for the production reported in section 2

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.

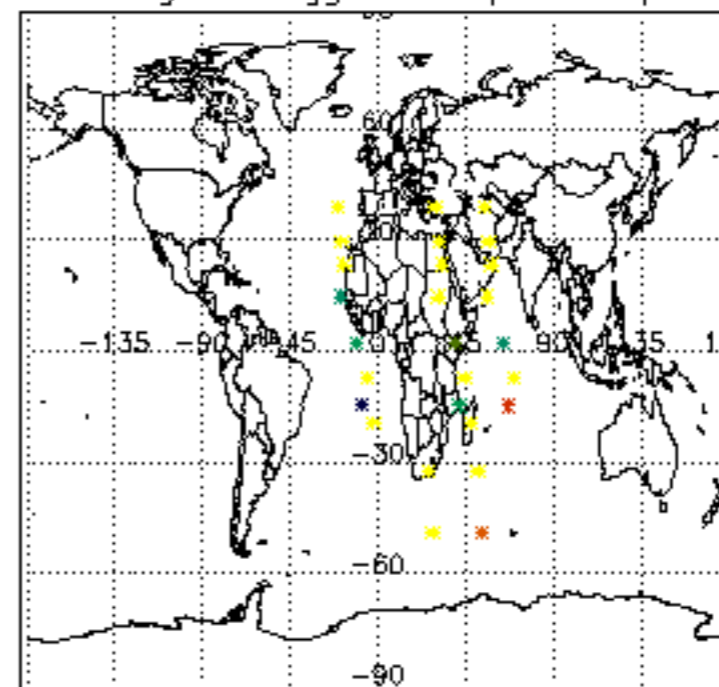
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	23-JAN-2007 18:08:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	23-JAN-2007 18:08:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	23-JAN-2007 18:08:53



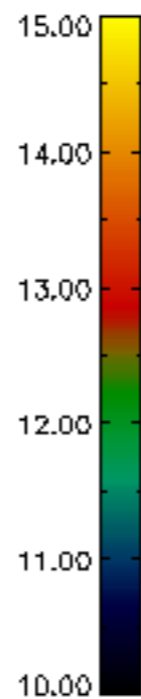
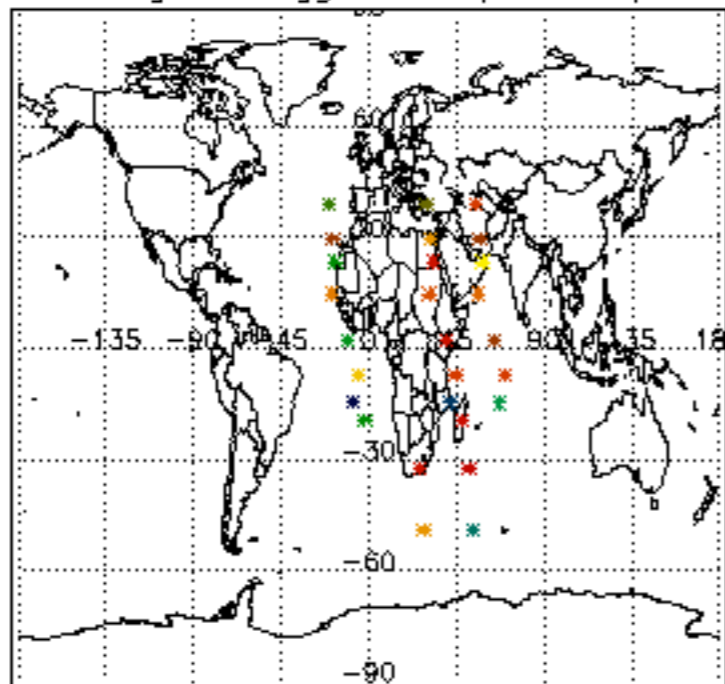
Percentage of flagged data per D3 profile



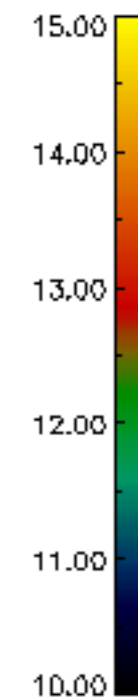
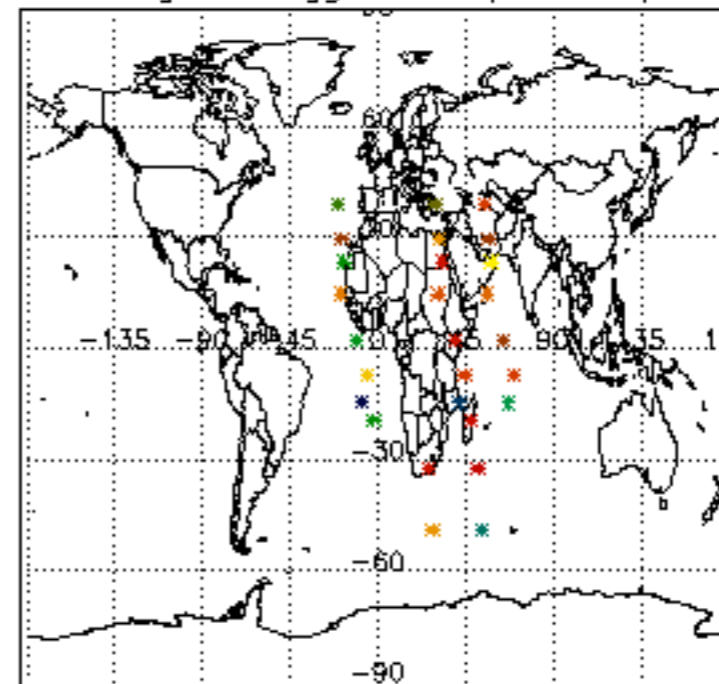
Percentage of flagged data per H2O profile

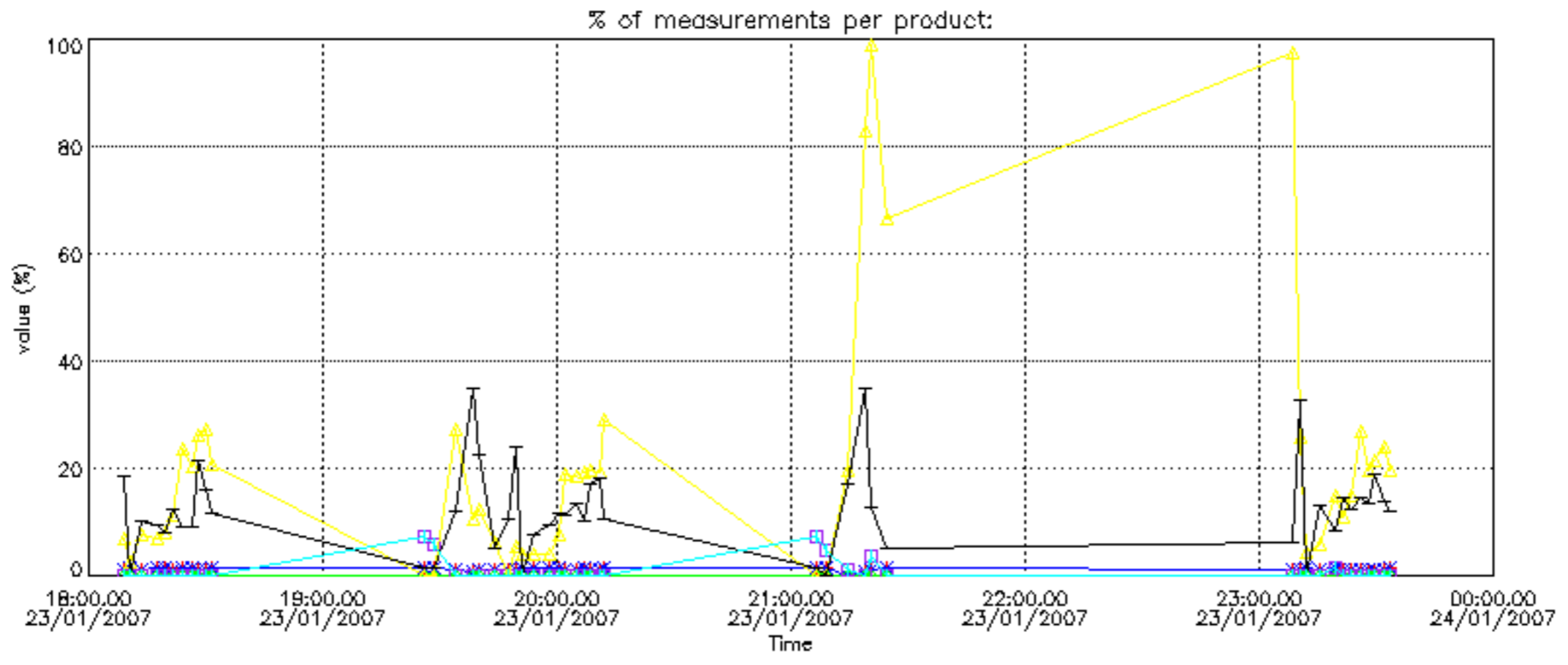


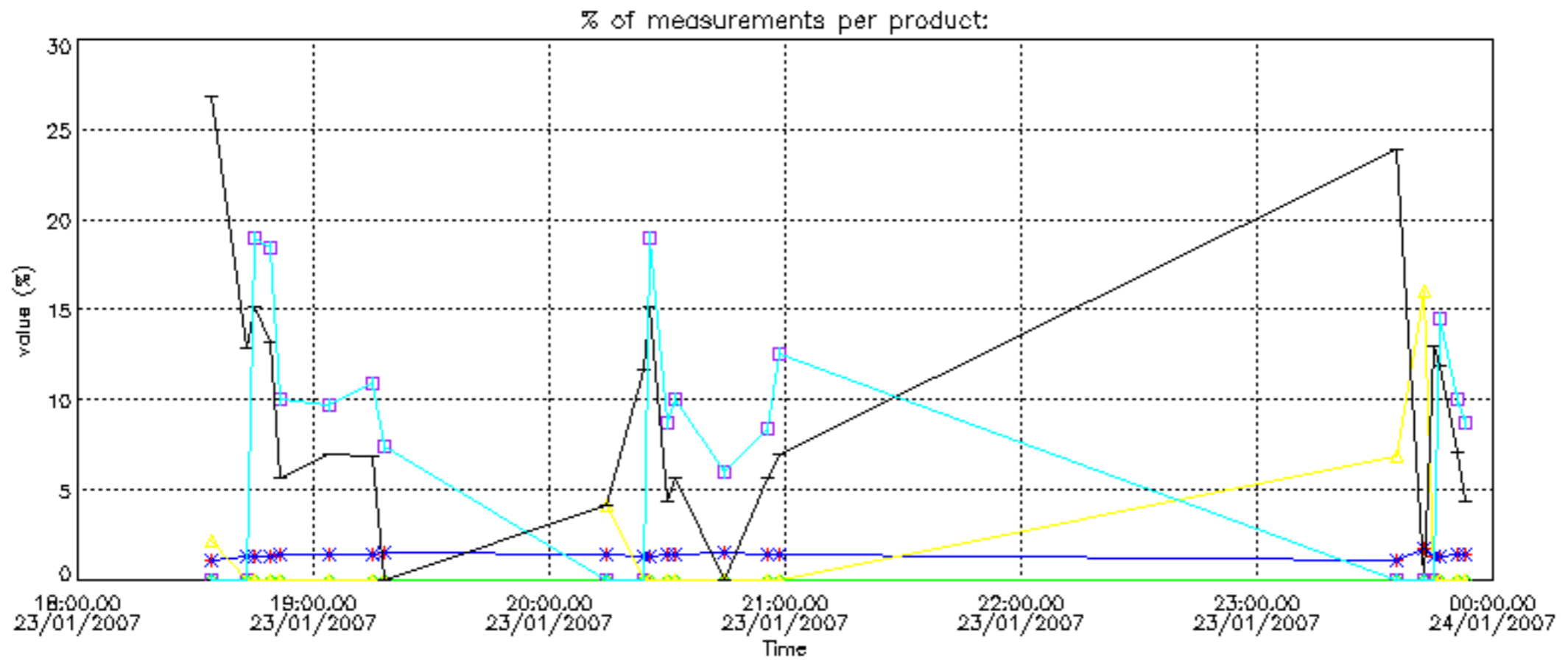
Percentage of flagged data per NO2 profile



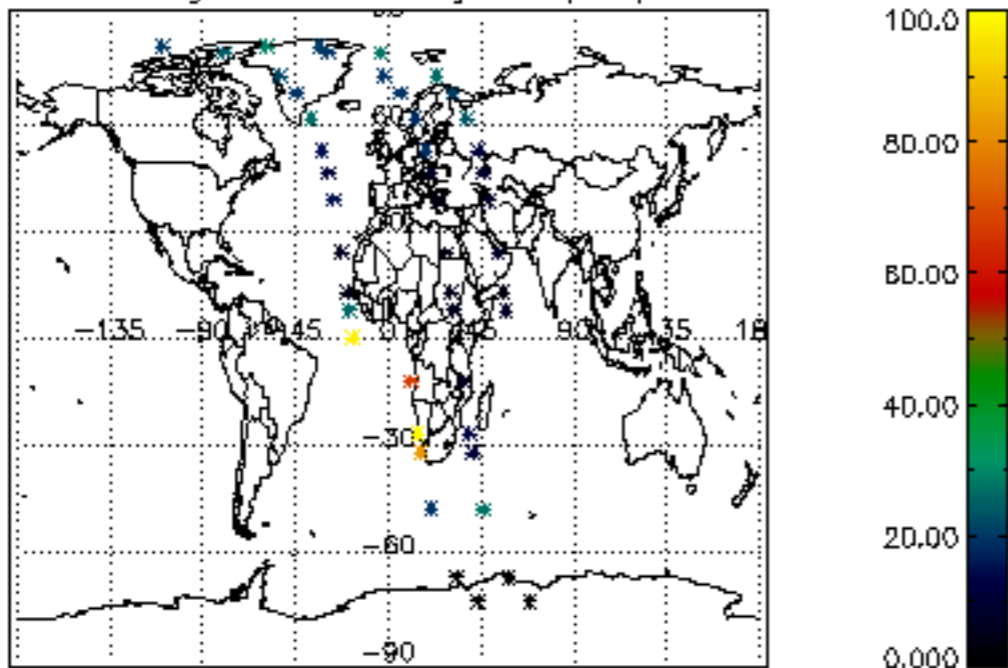
Percentage of flagged data per NO3 profile



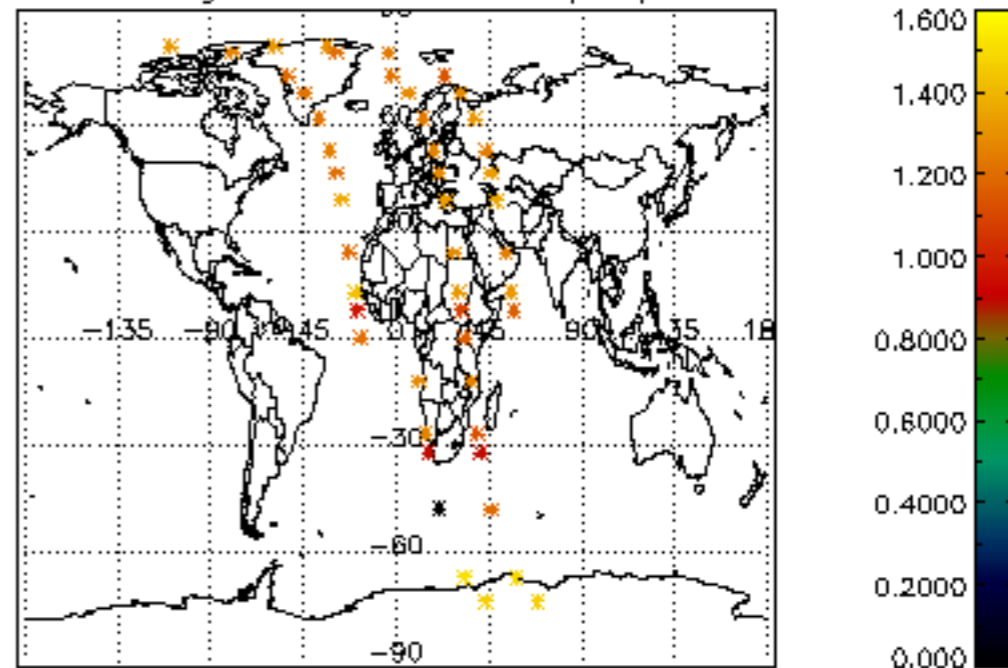




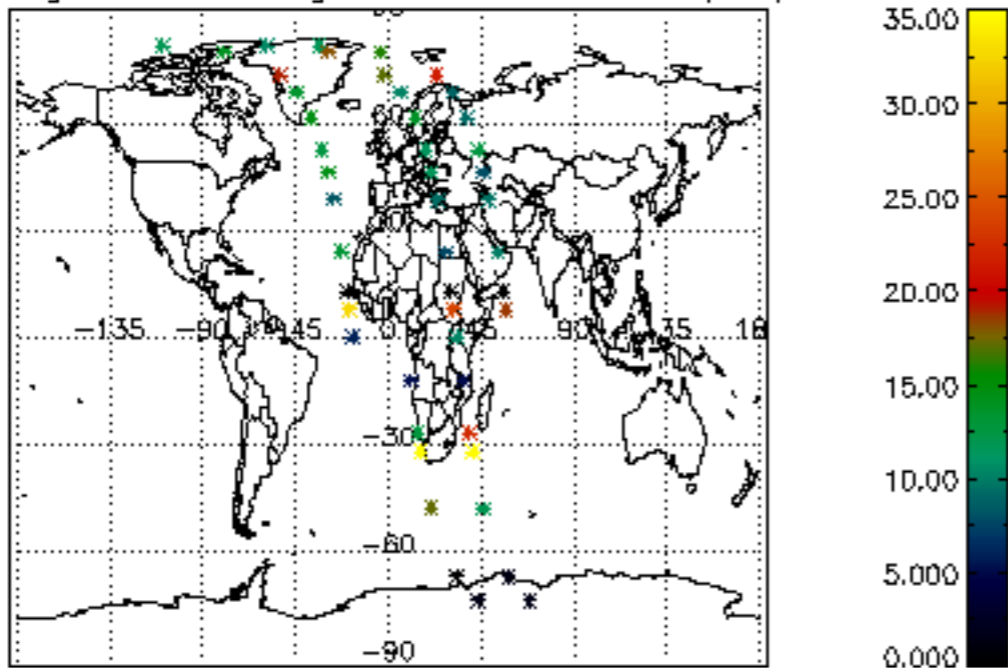
Percentage of cosmic ray hits per profile



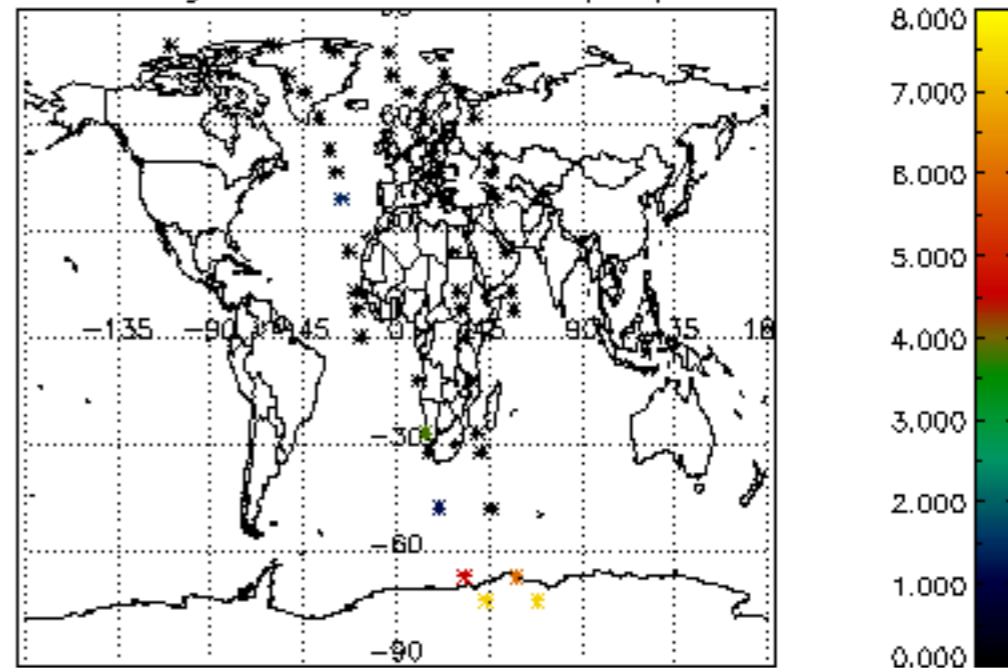
Percentage of datation errors per profile



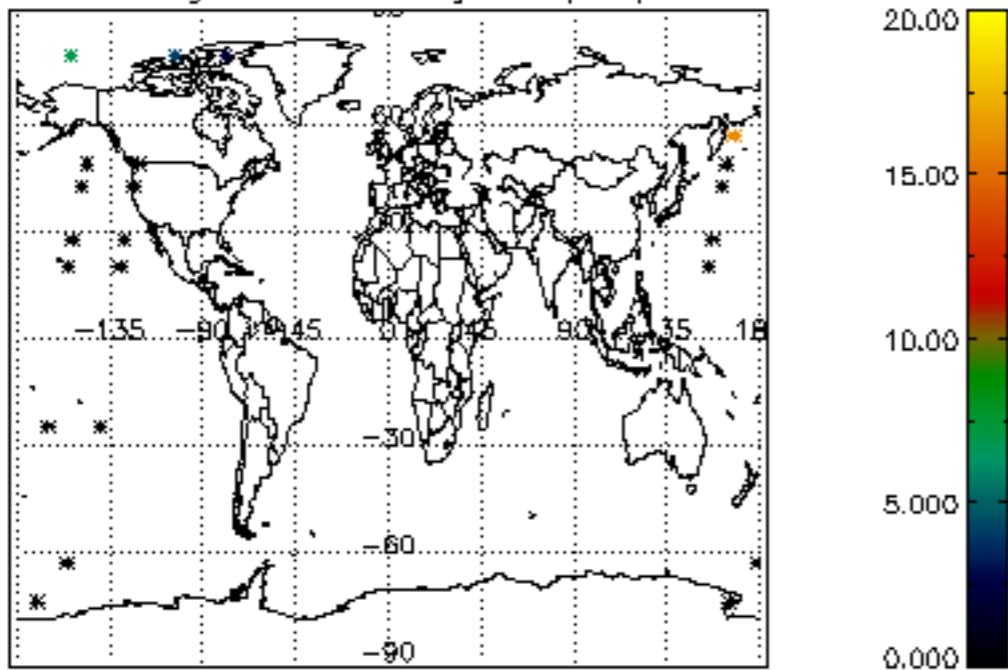
Percentage of star falling outside central band per profile



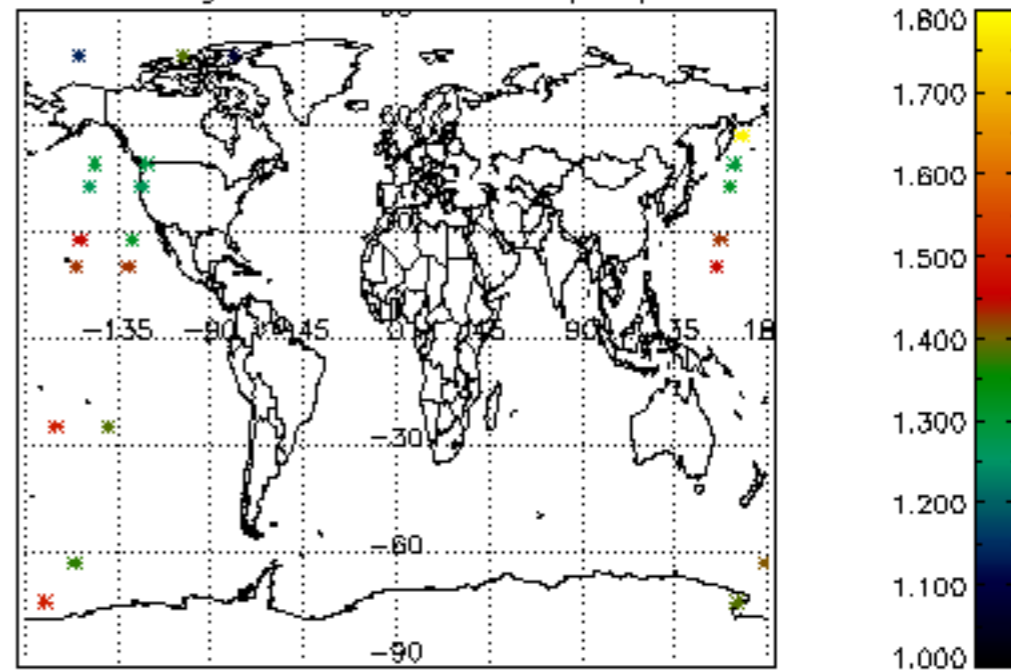
Percentage of saturation errors per profile



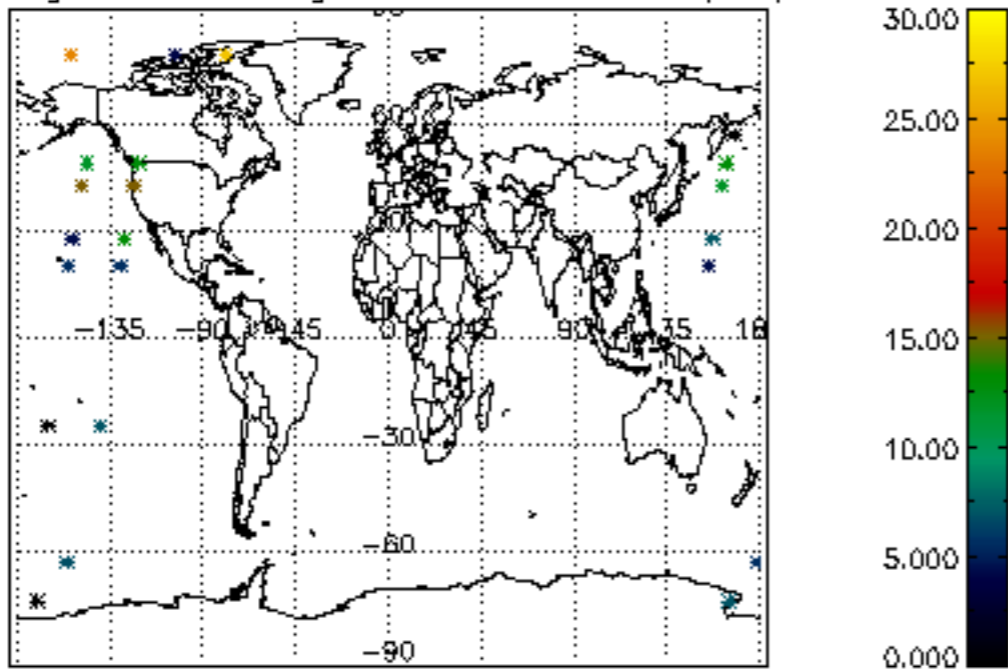
Percentage of cosmic ray hits per profile



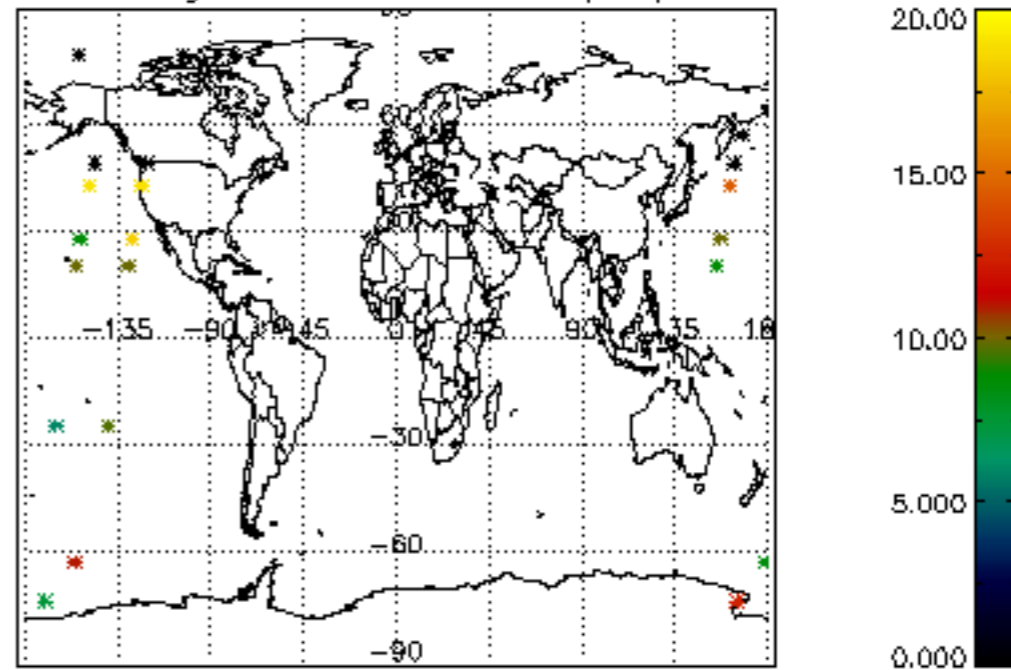
Percentage of datation errors per profile

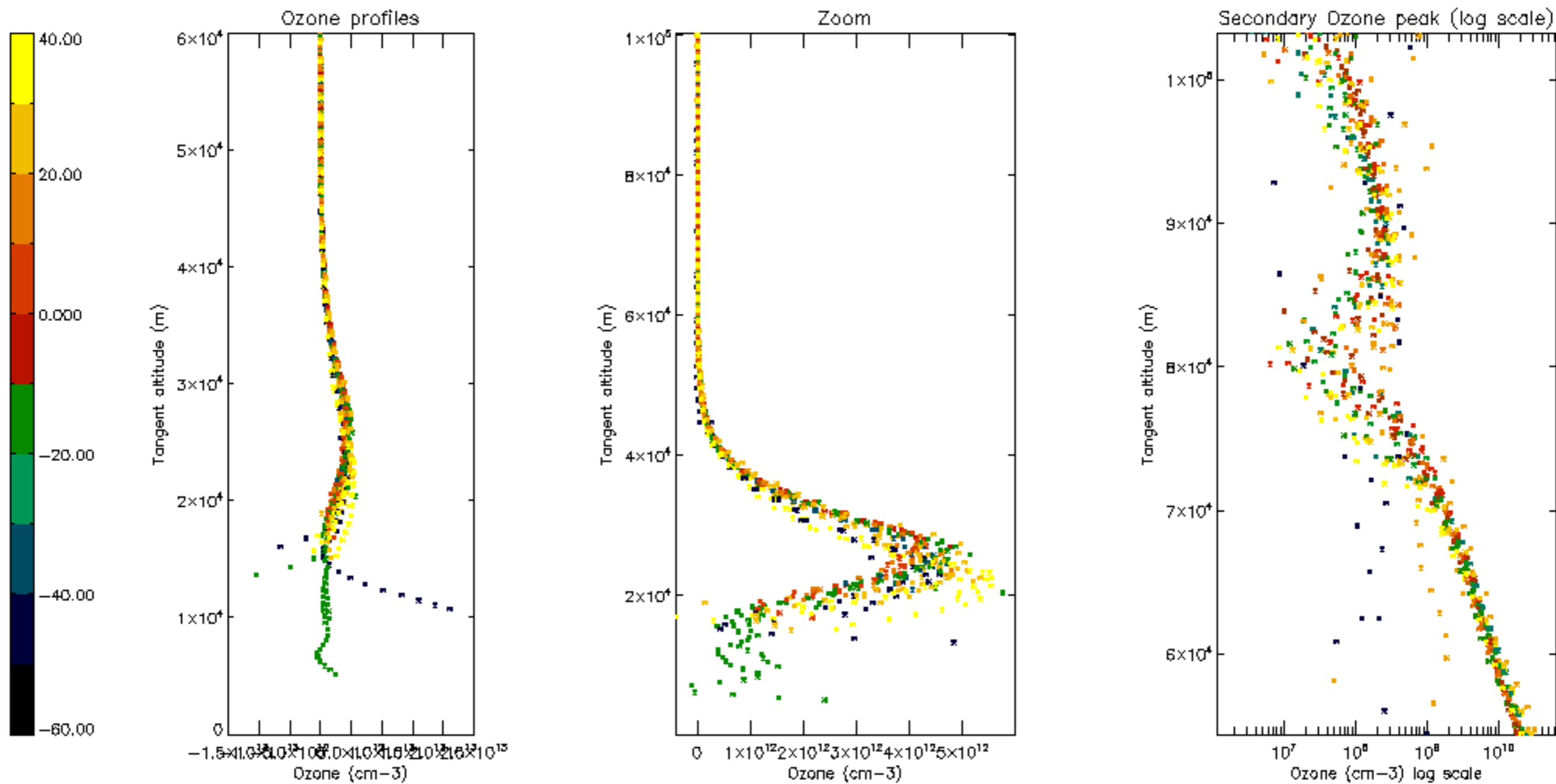


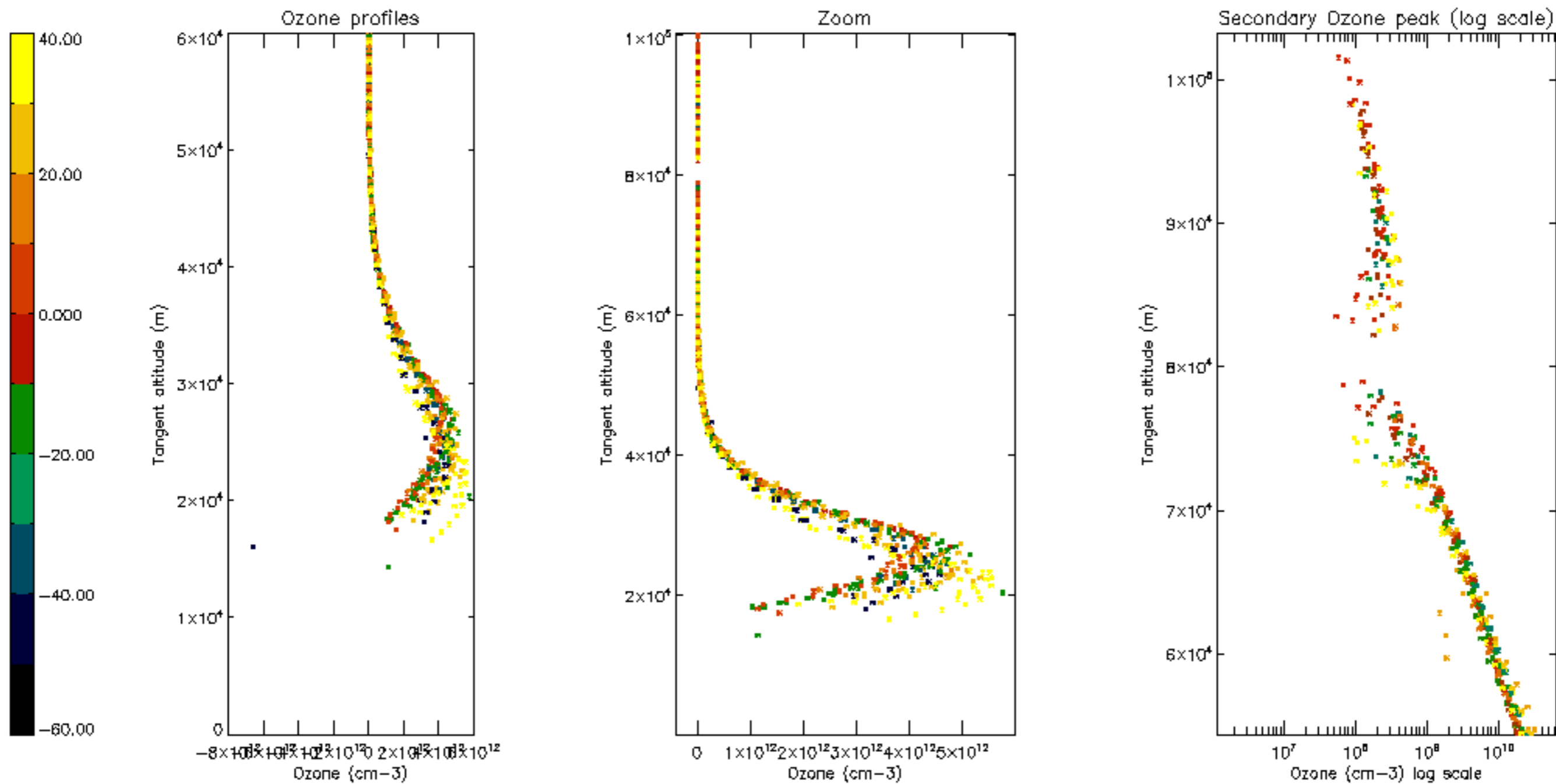
Percentage of star falling outside central band per profile

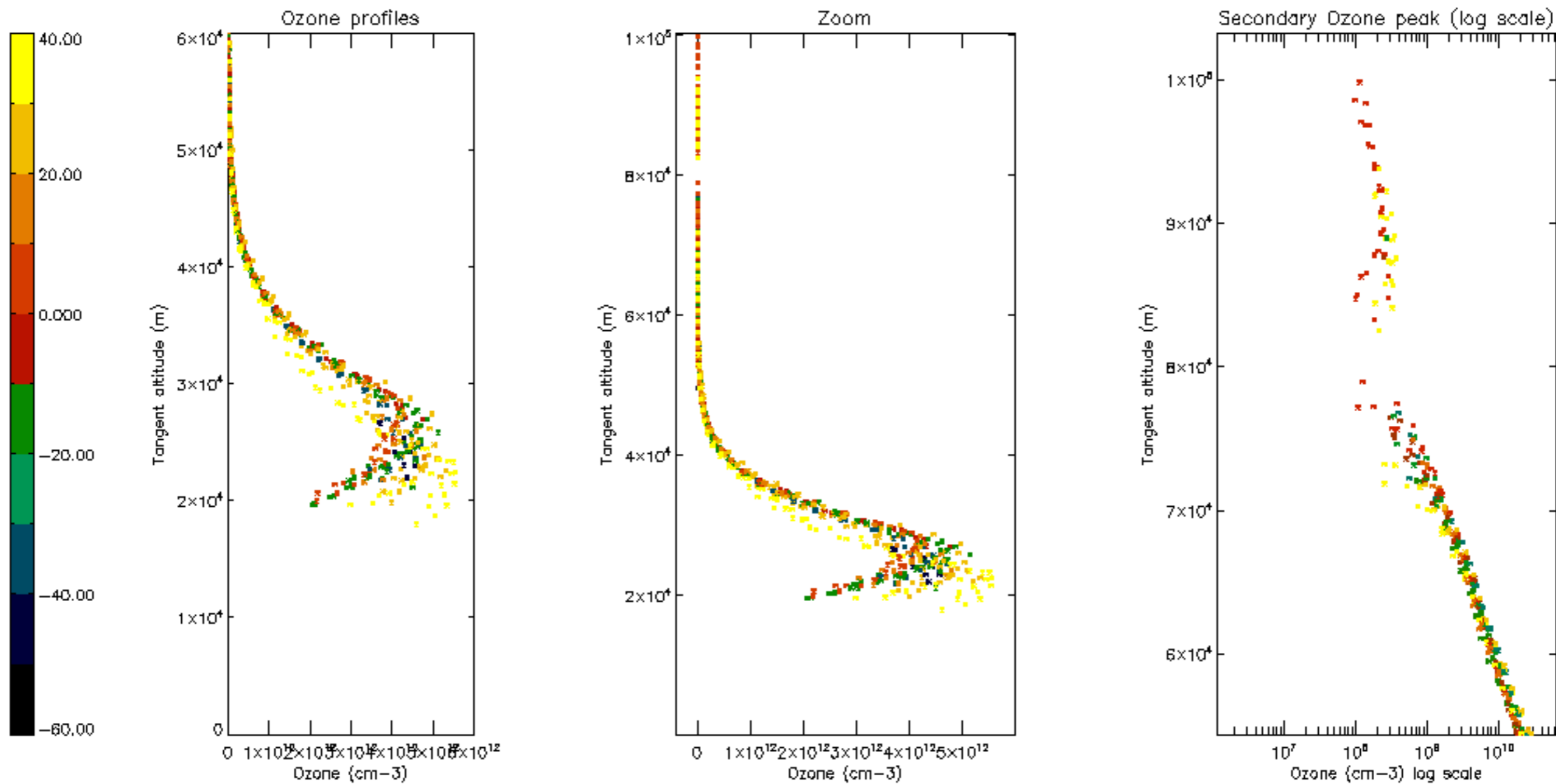


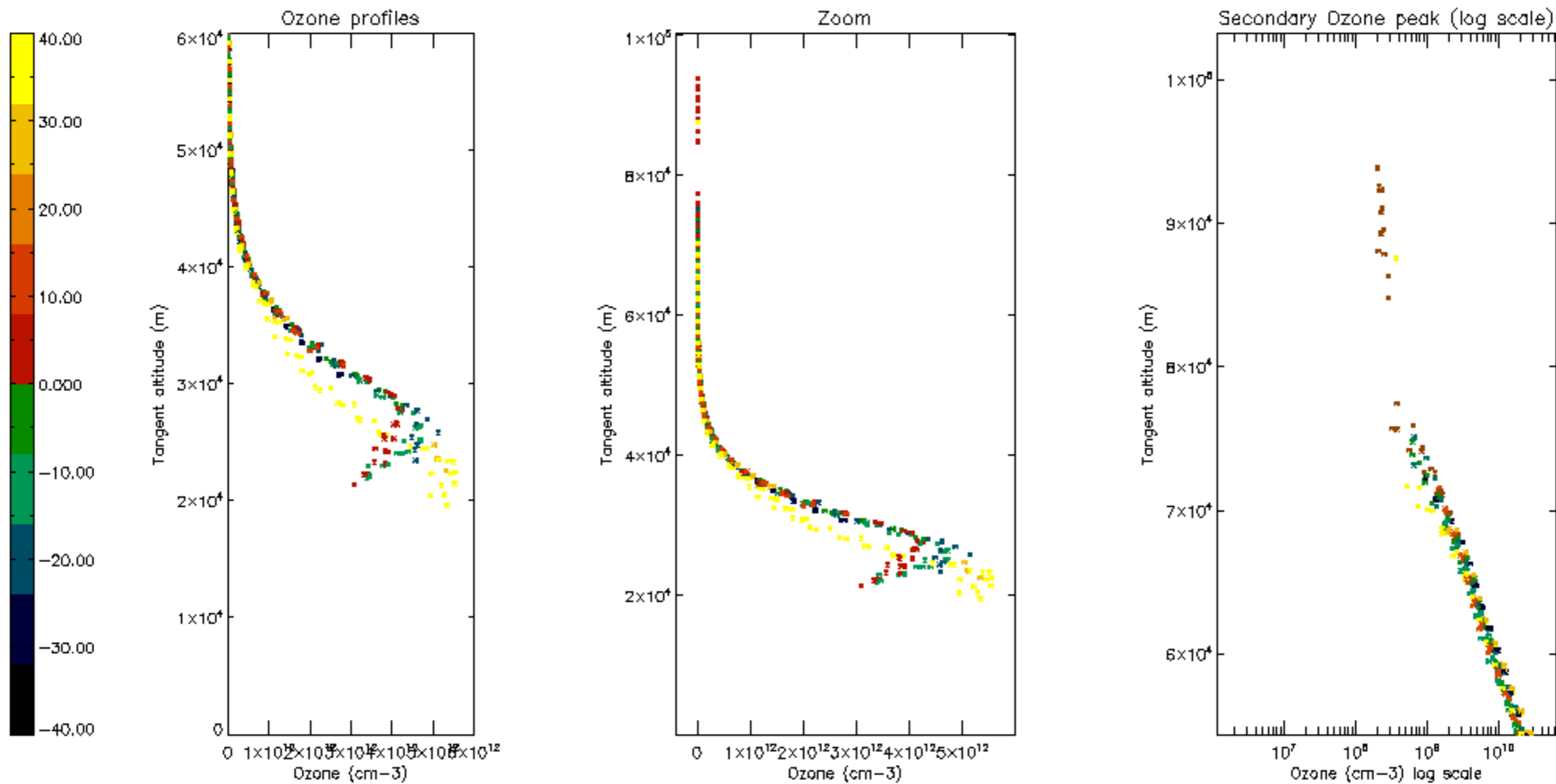
Percentage of saturation errors per profile

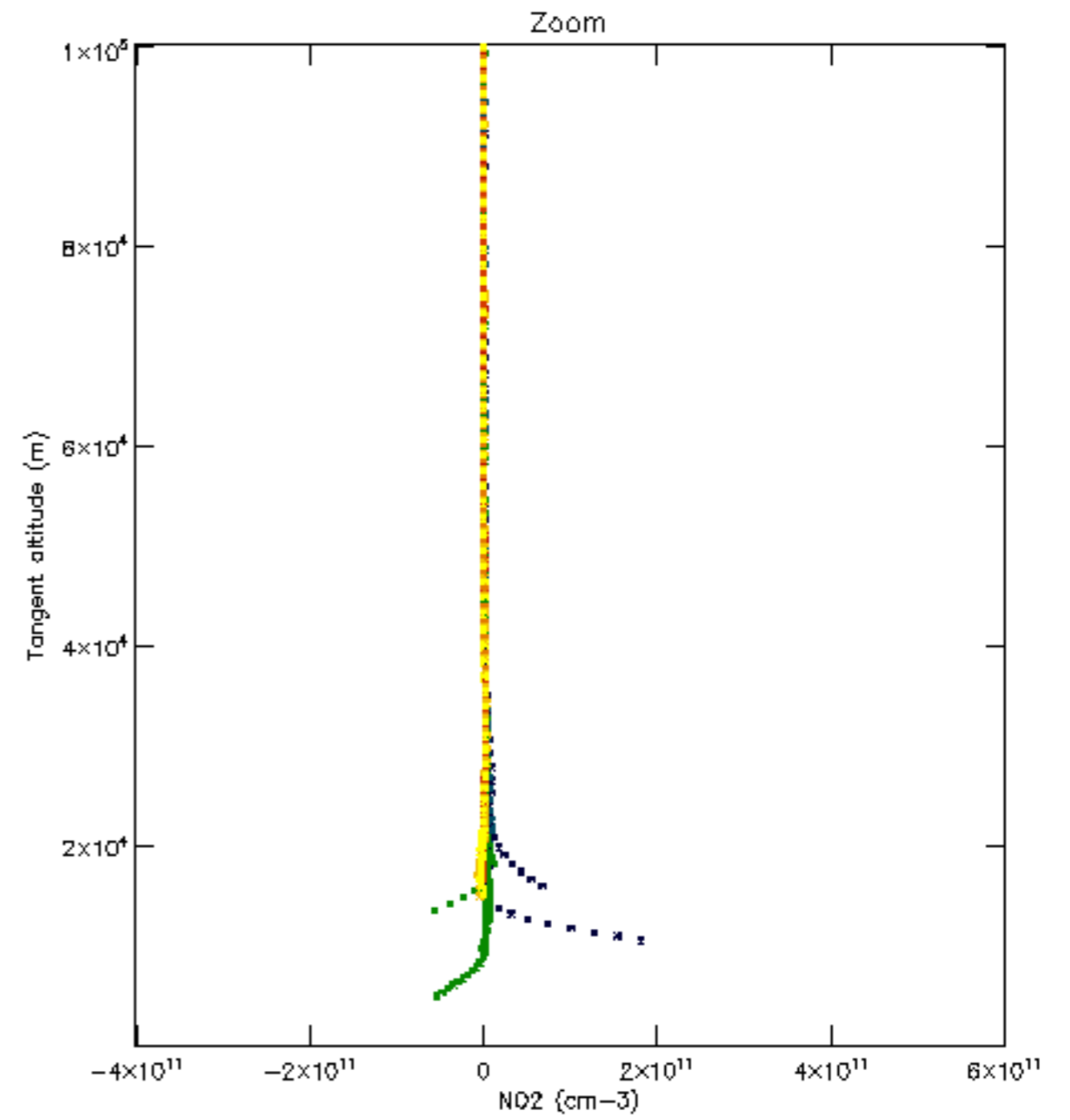
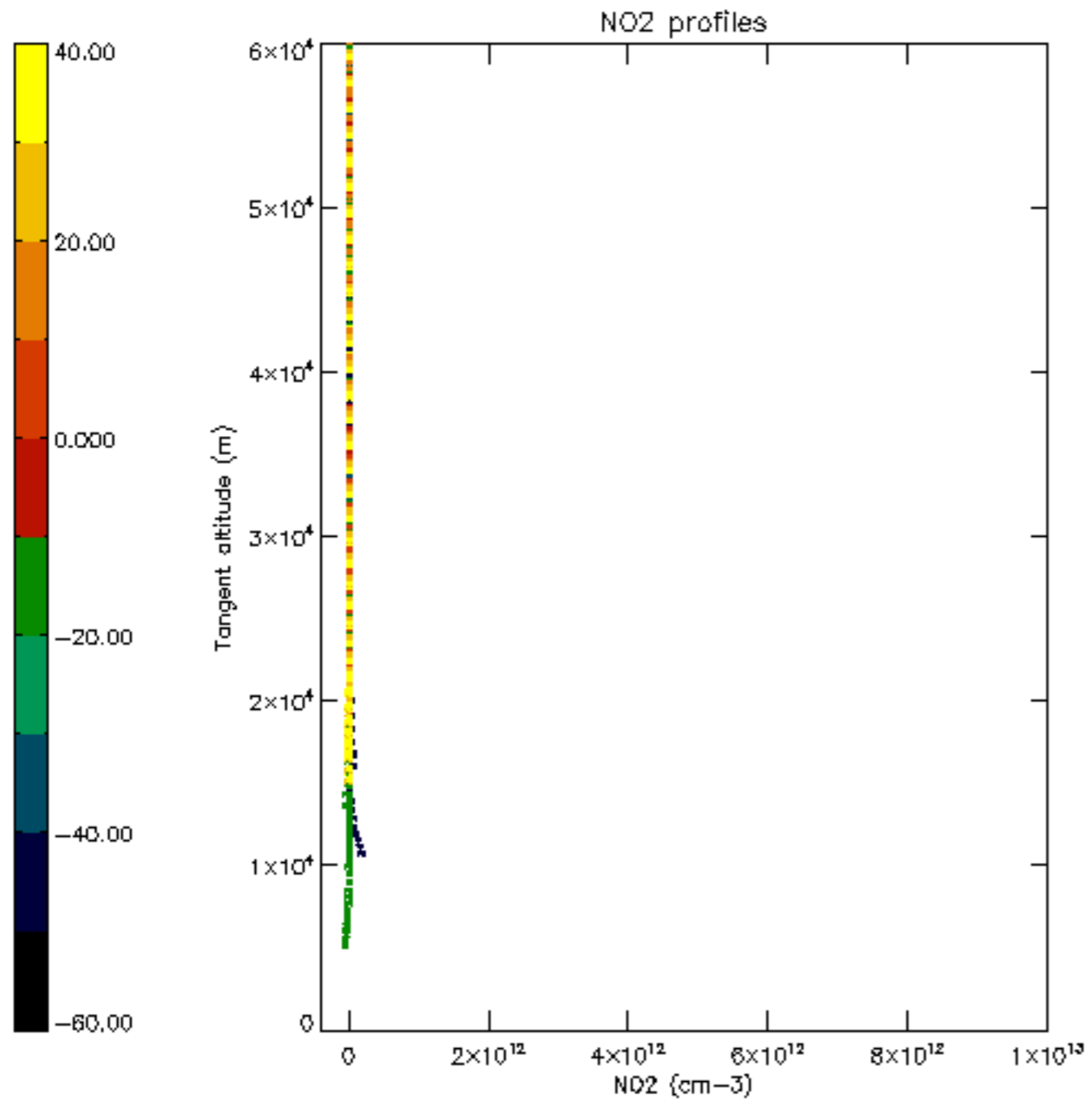


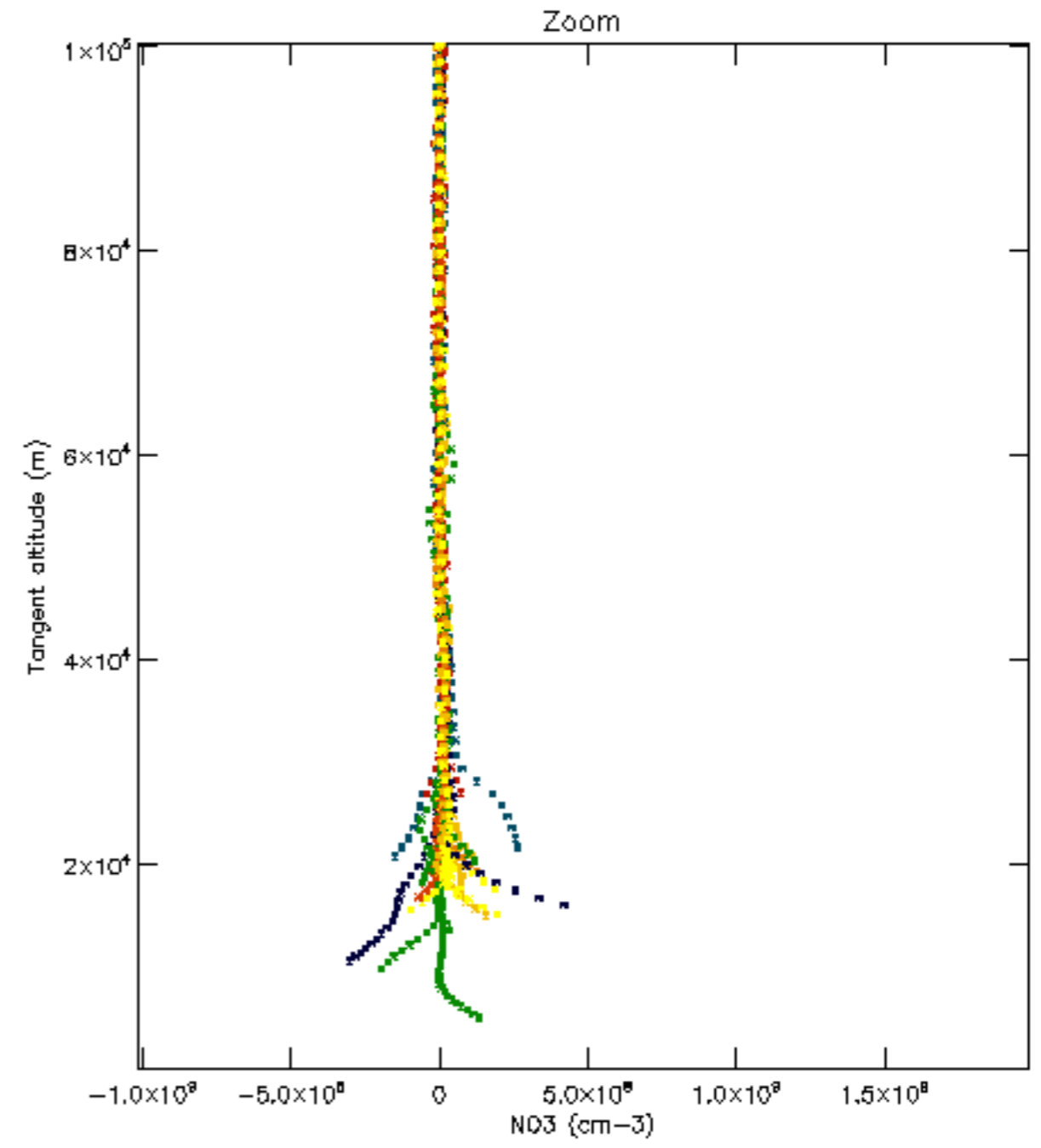
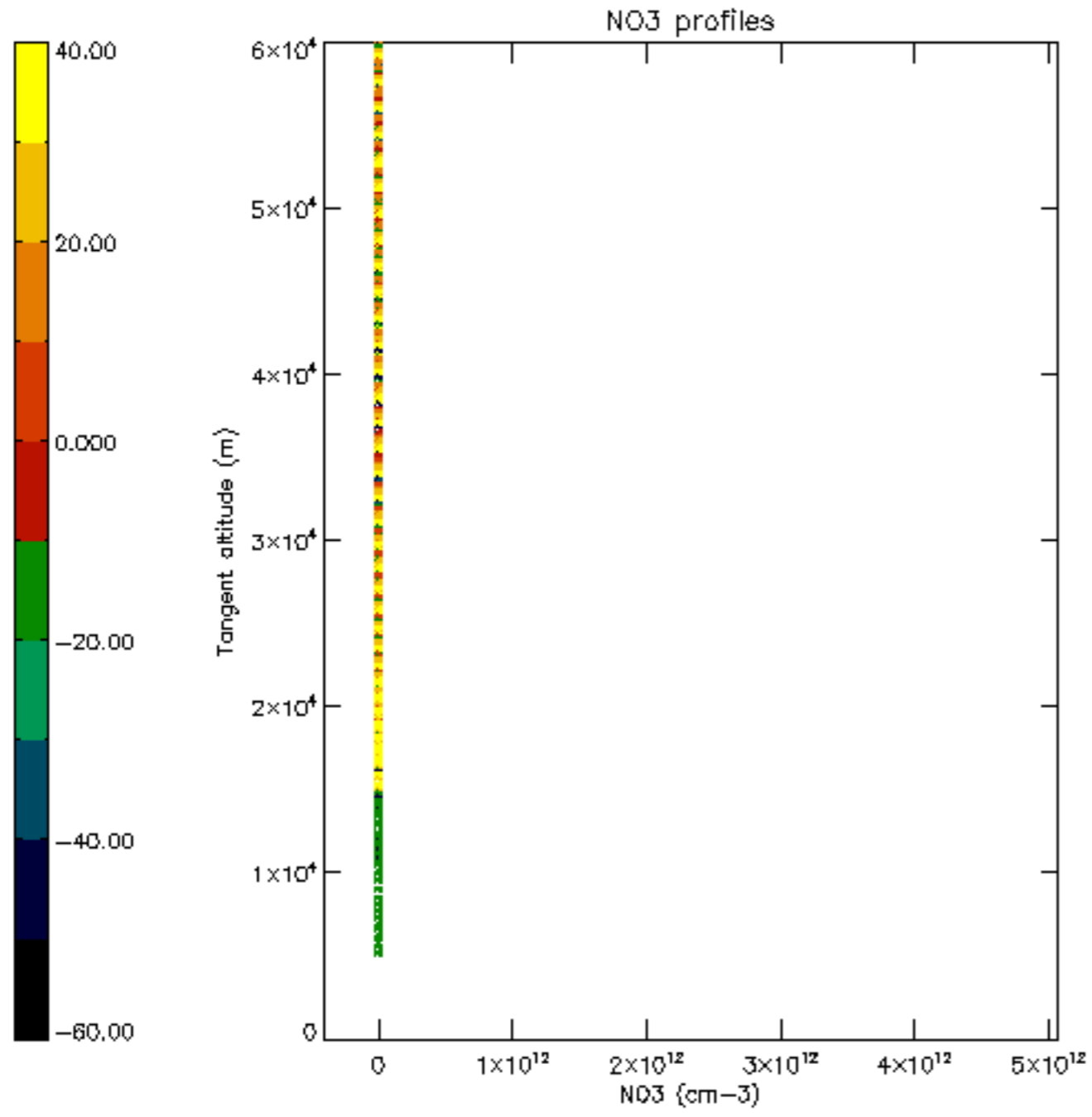


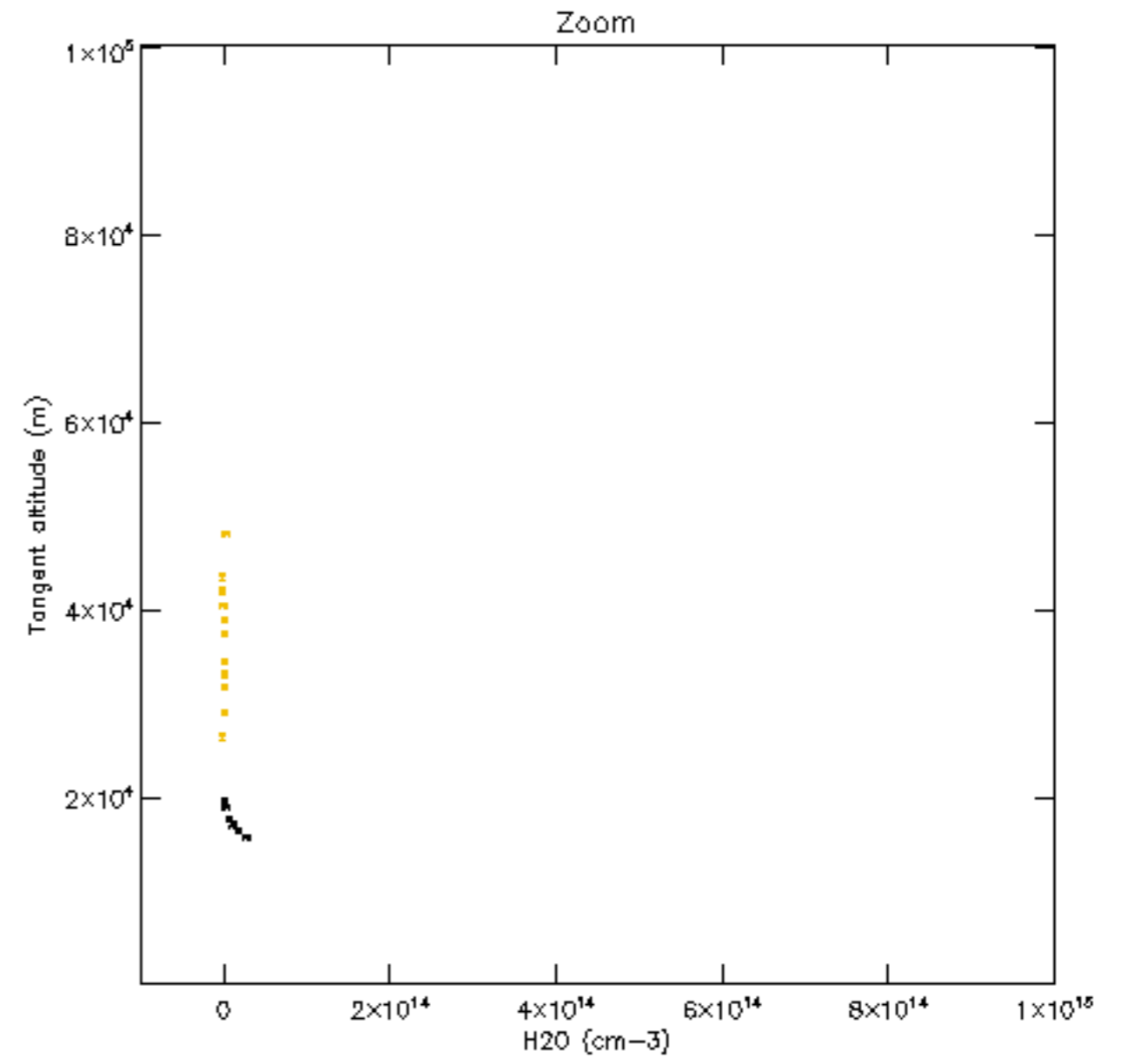
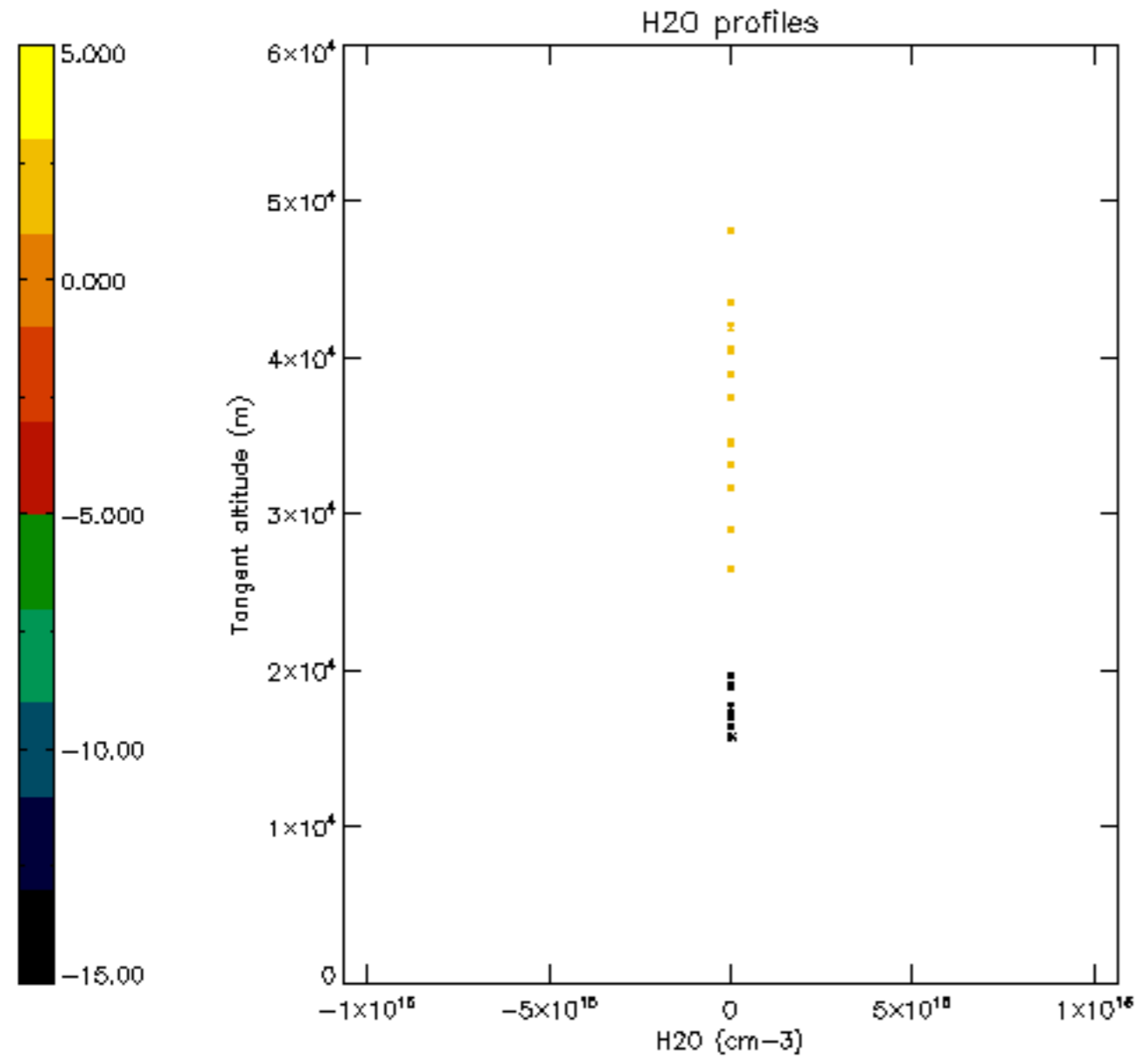


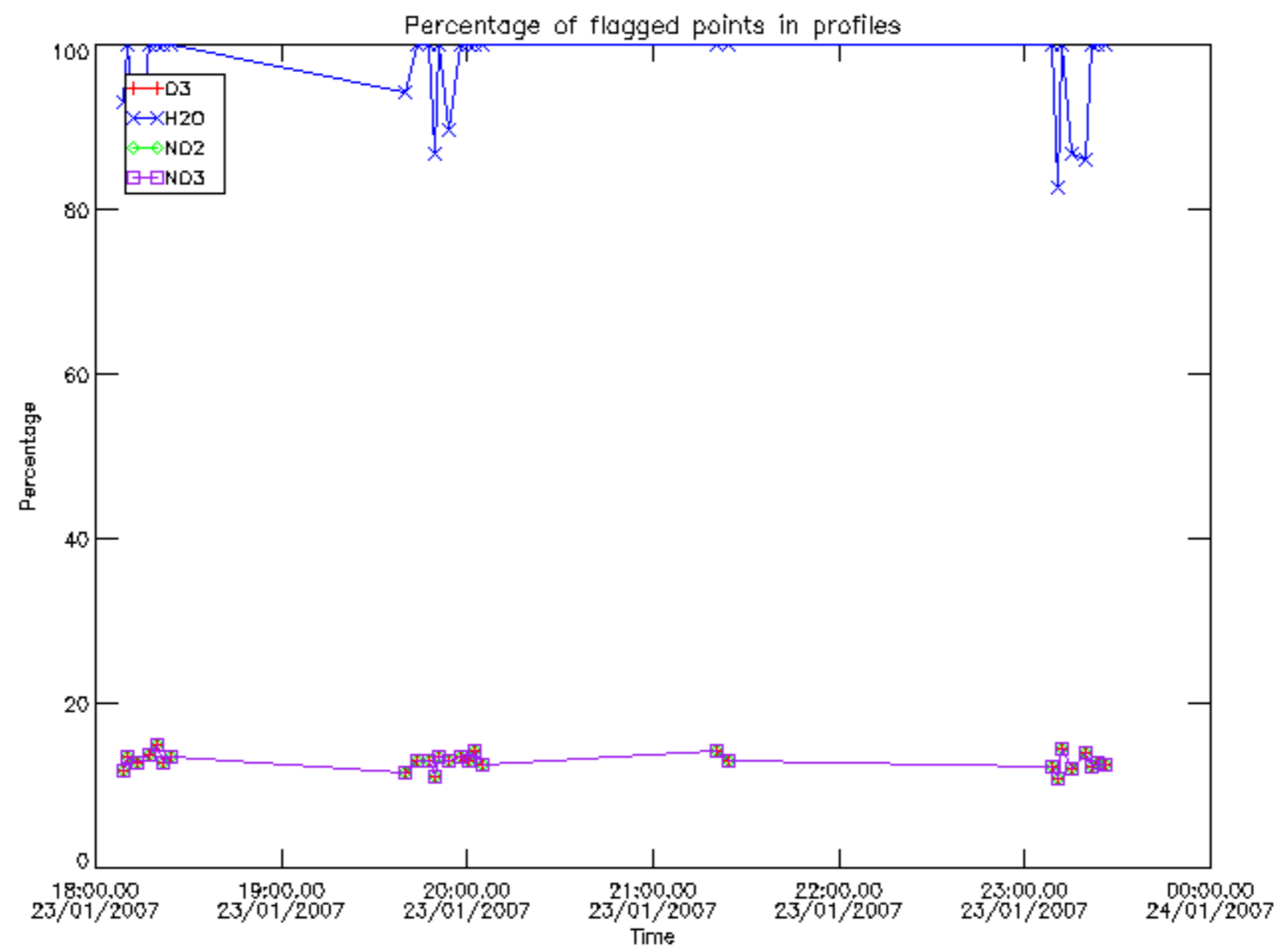




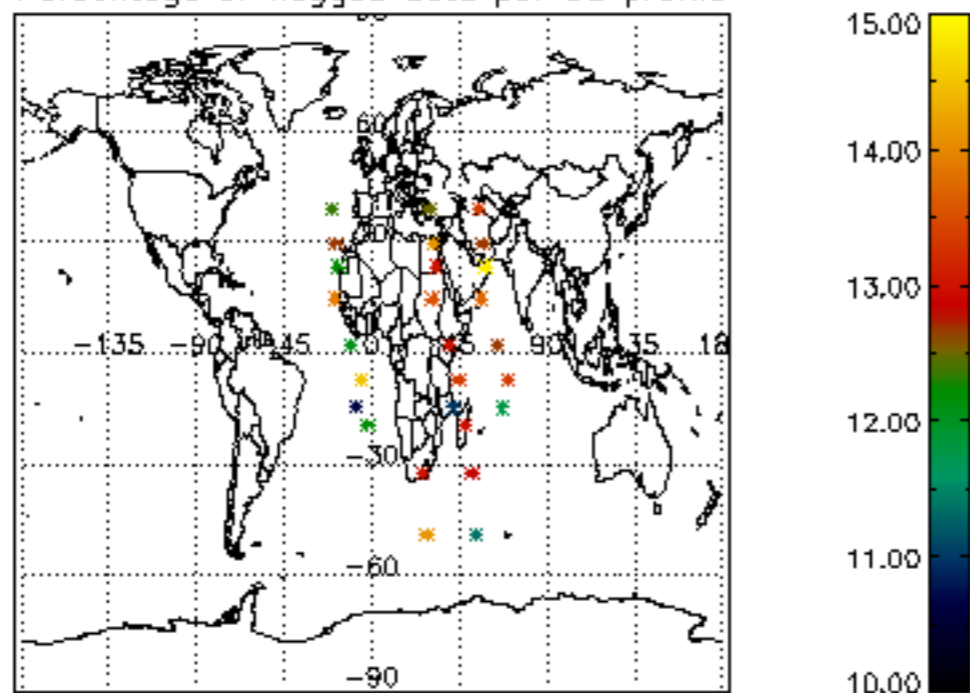




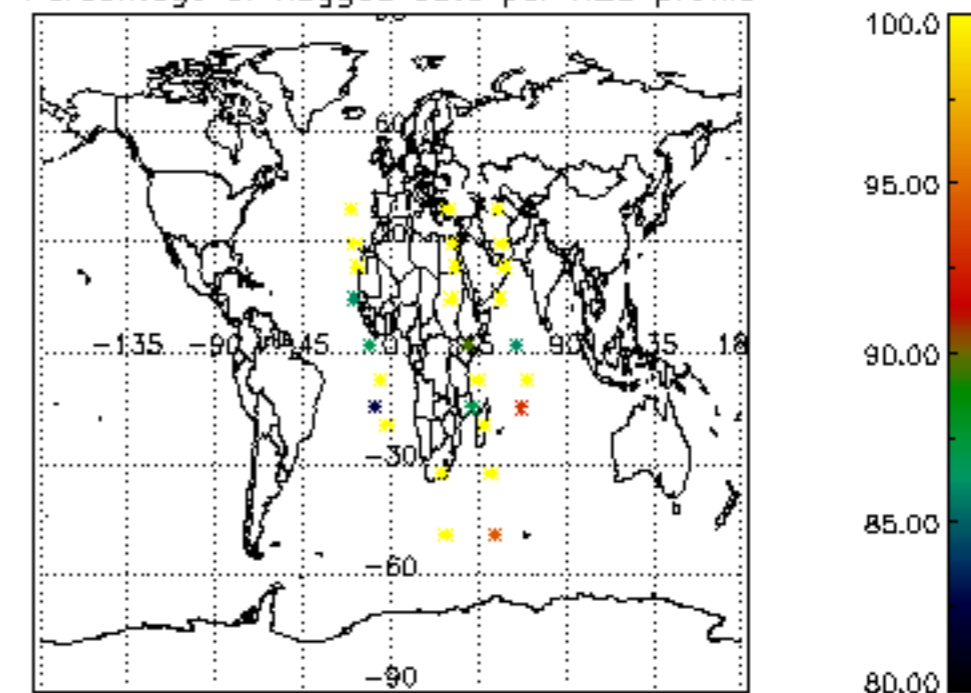




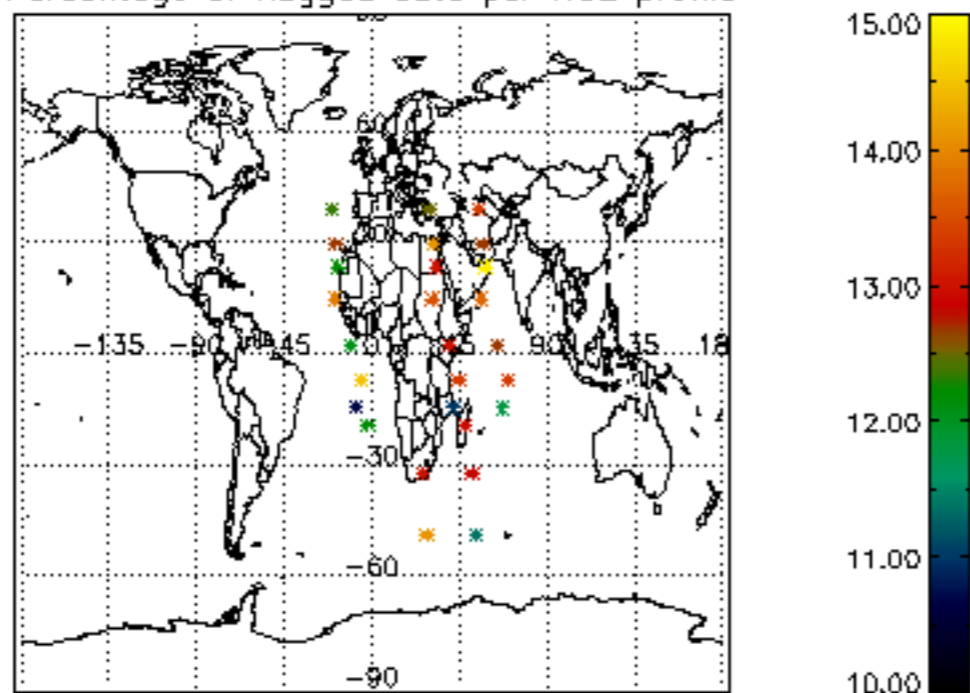
Percentage of flagged data per D3 profile



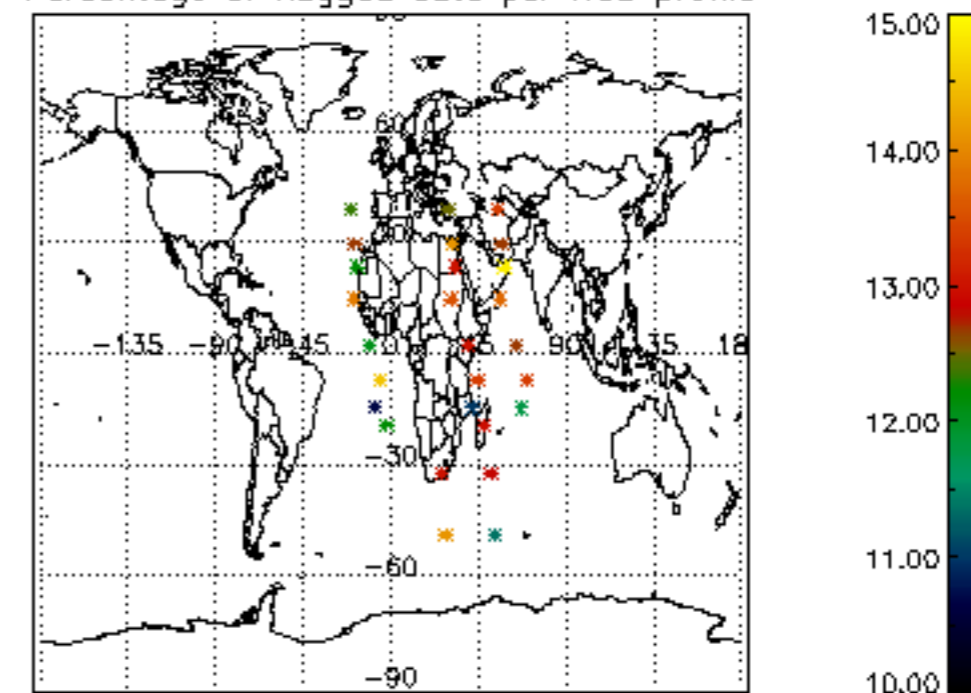
Percentage of flagged data per H2O profile

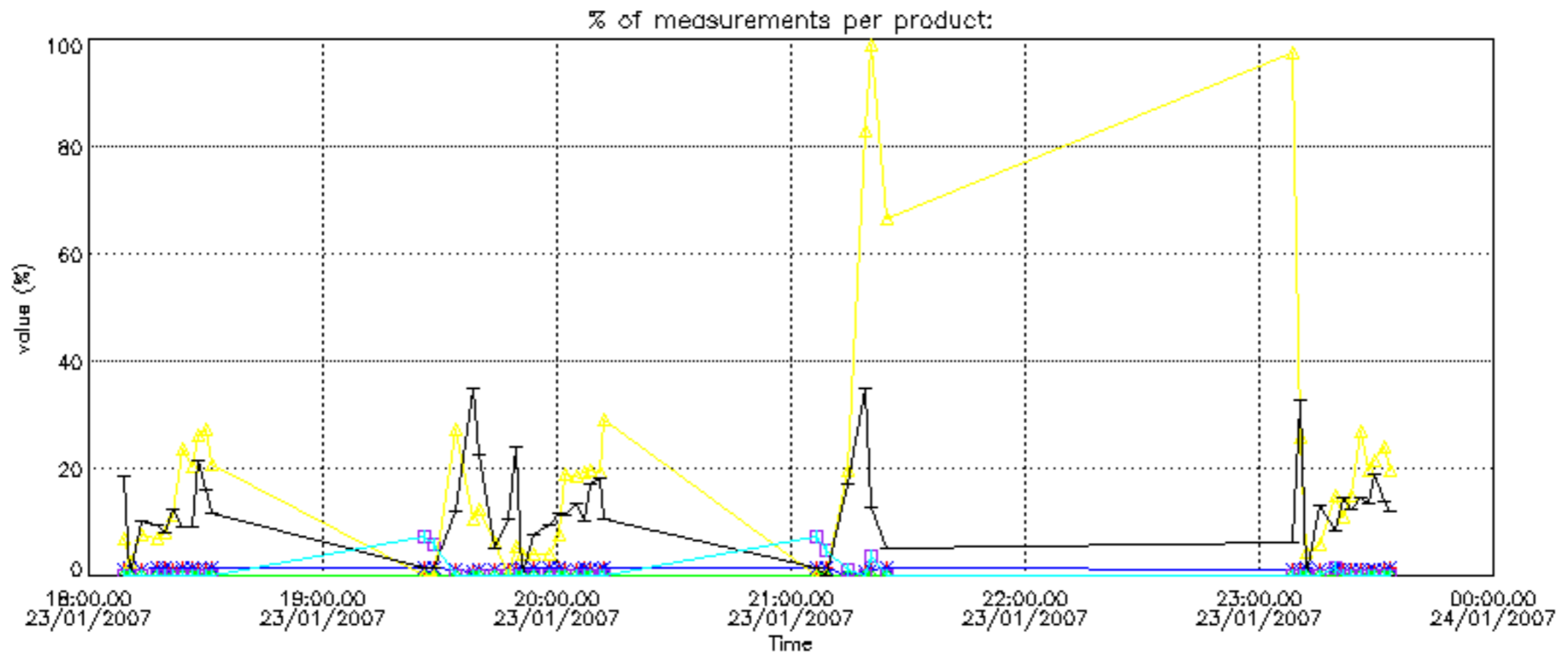


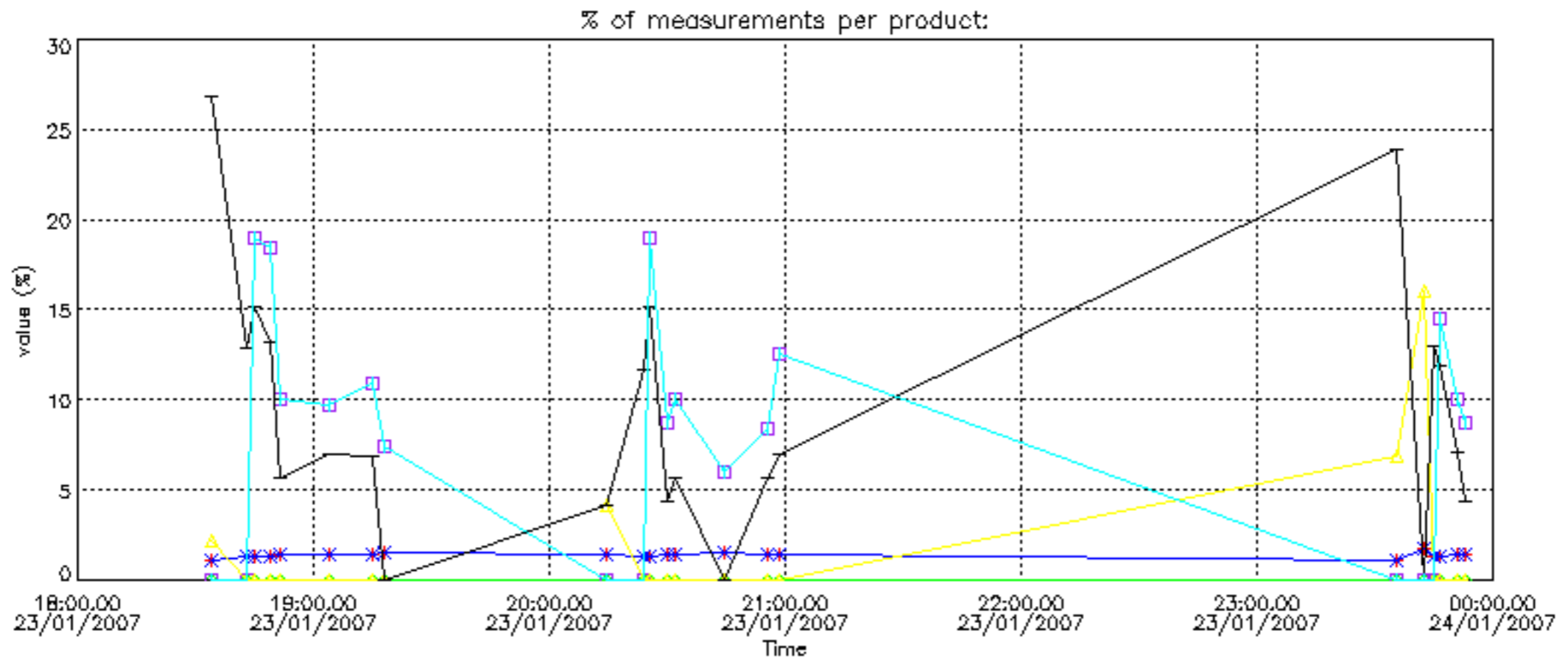
Percentage of flagged data per NO2 profile



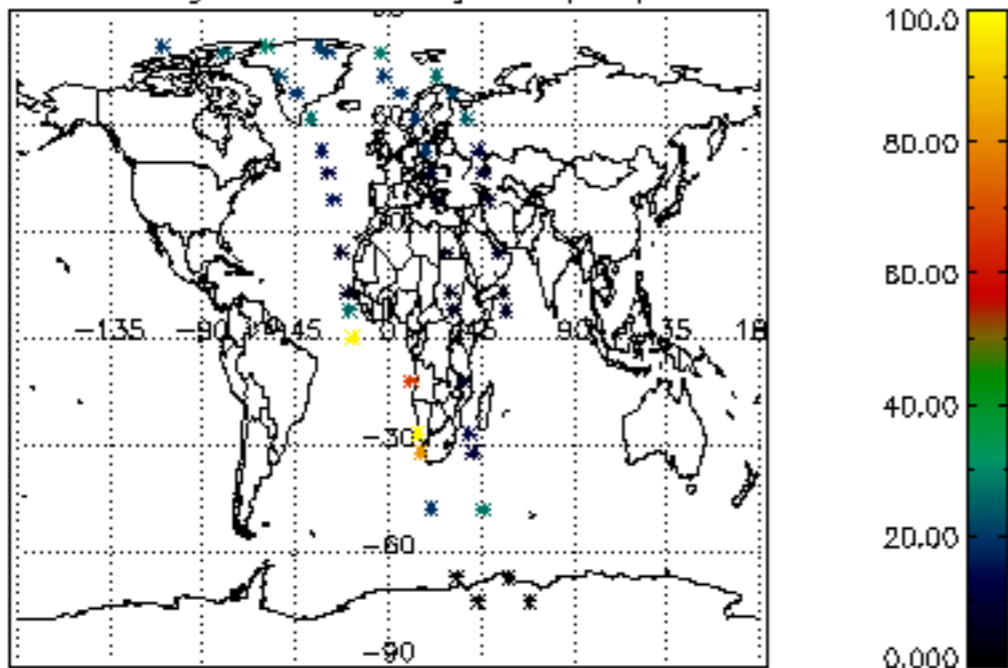
Percentage of flagged data per NO3 profile



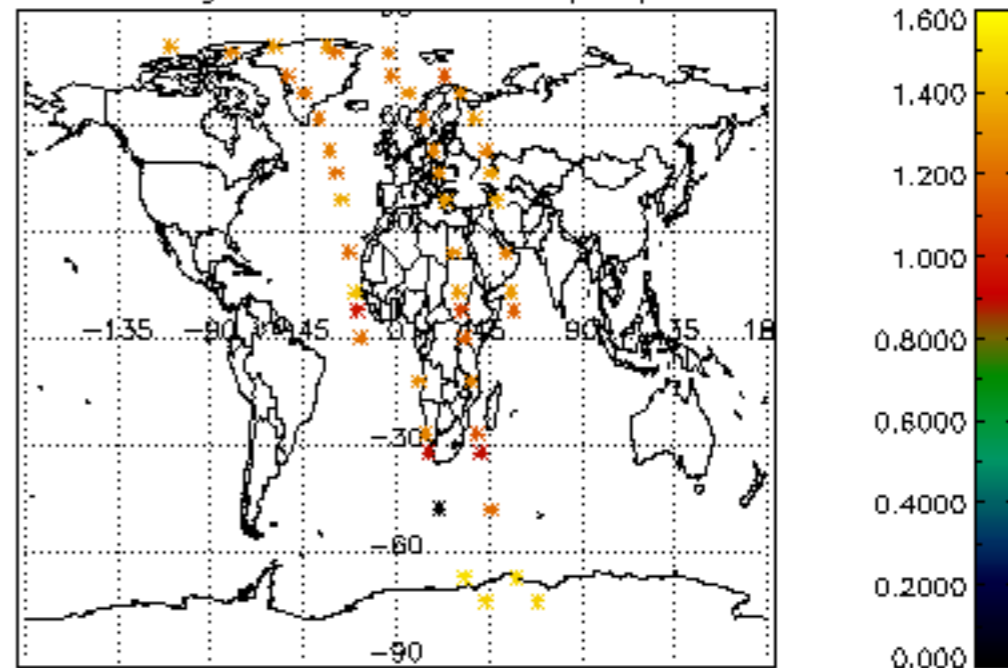




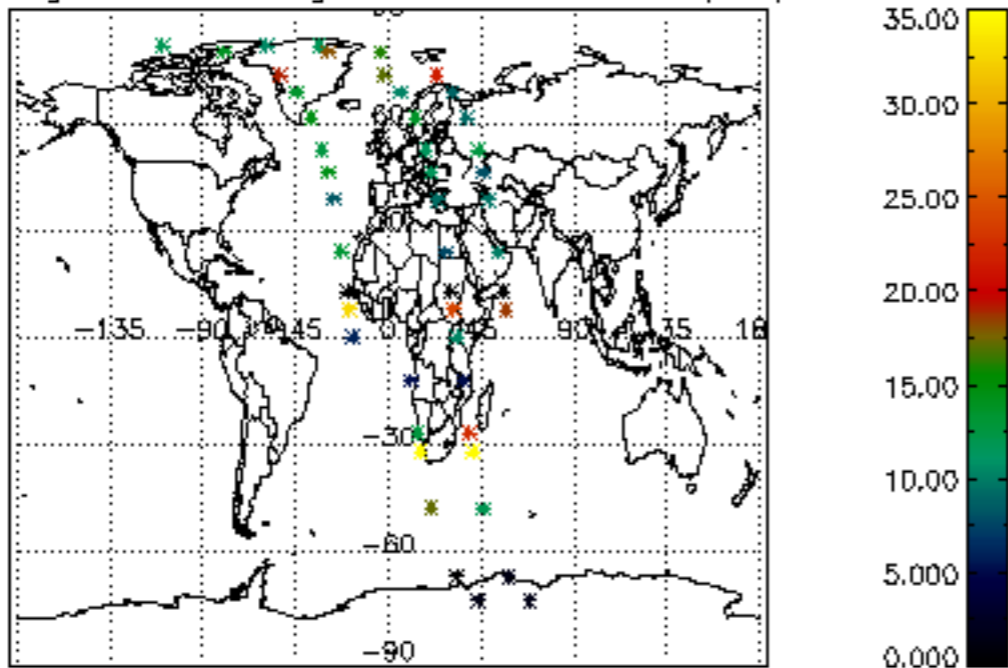
Percentage of cosmic ray hits per profile



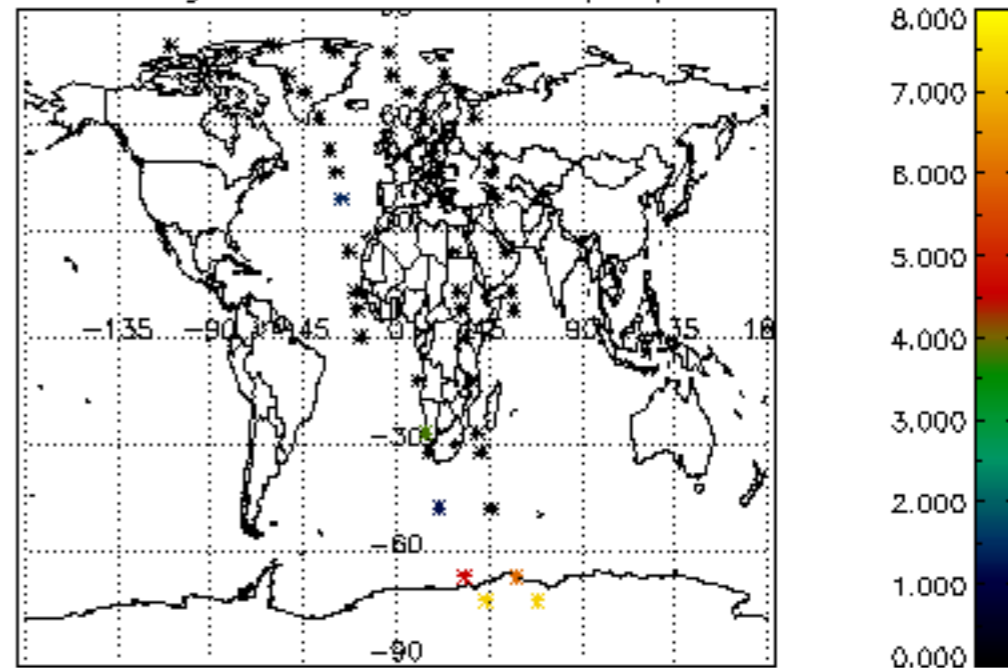
Percentage of datation errors per profile



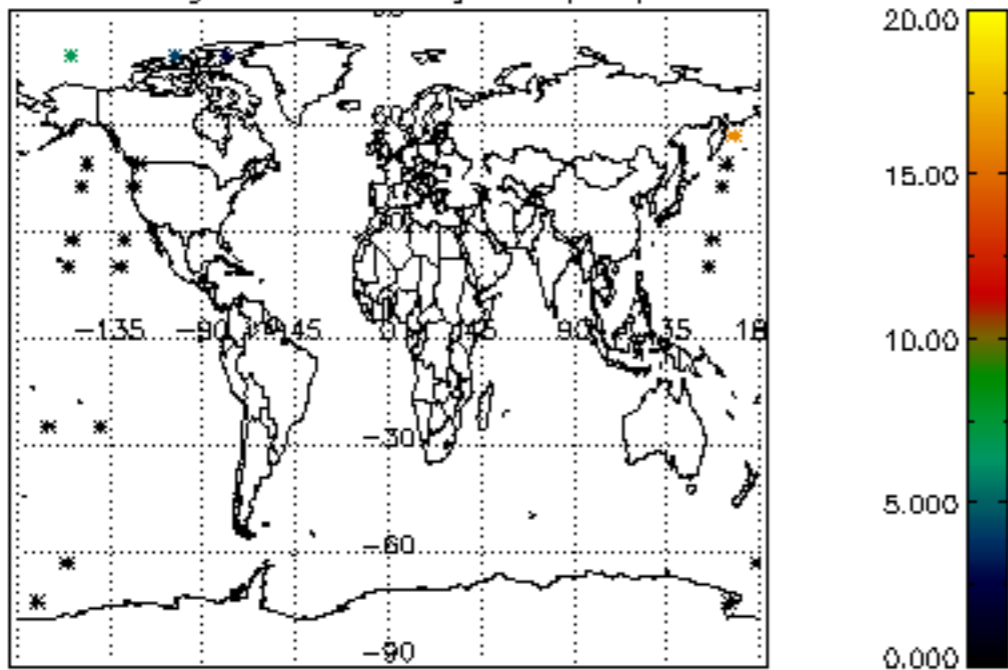
Percentage of star falling outside central band per profile



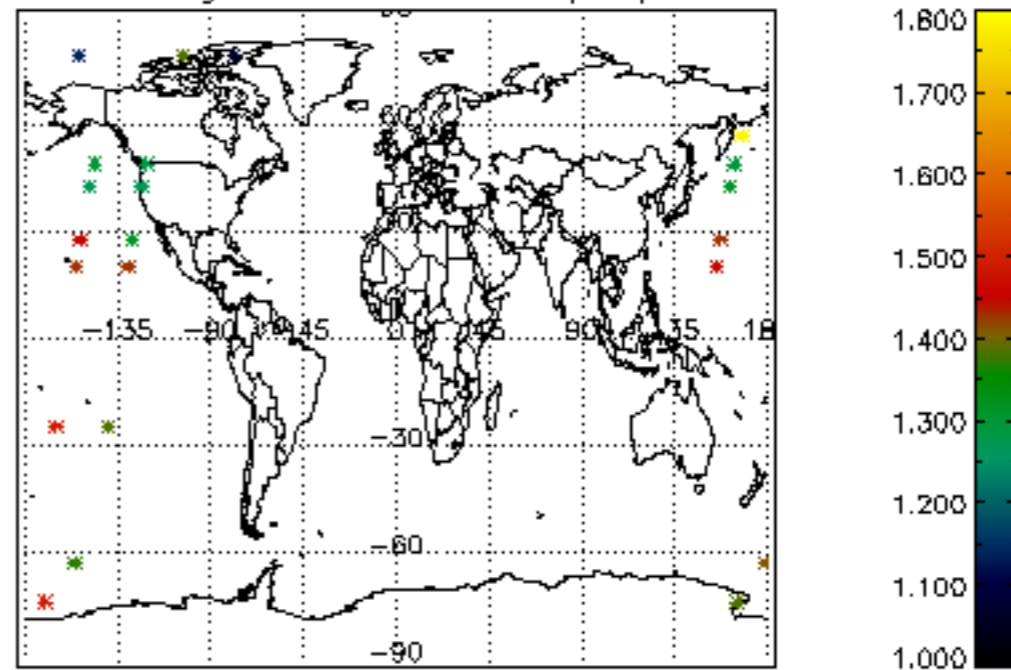
Percentage of saturation errors per profile



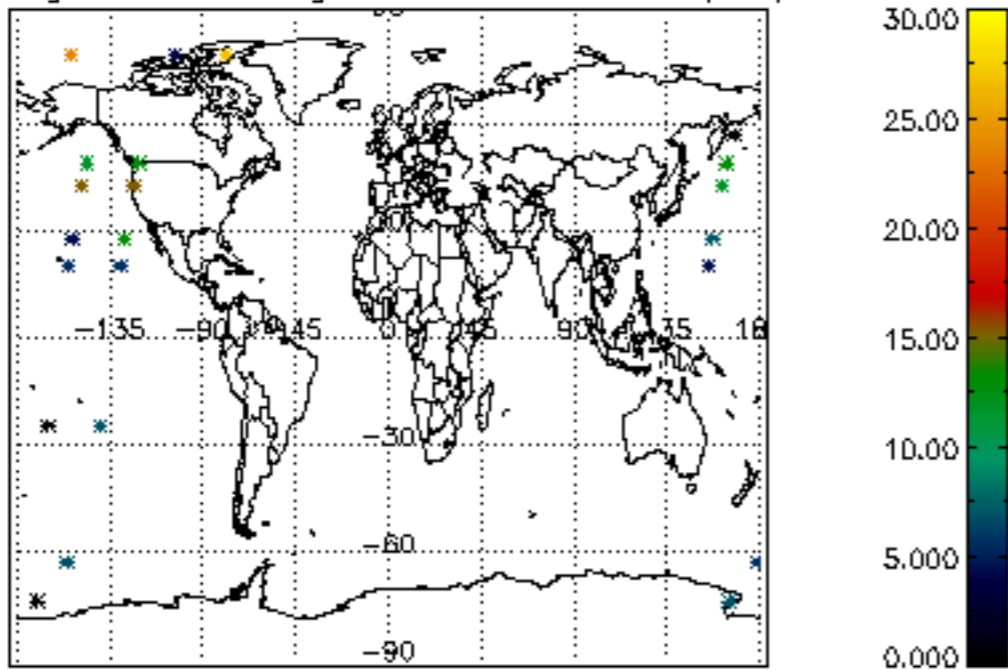
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

