

GOMOS Level 2 Daily Report

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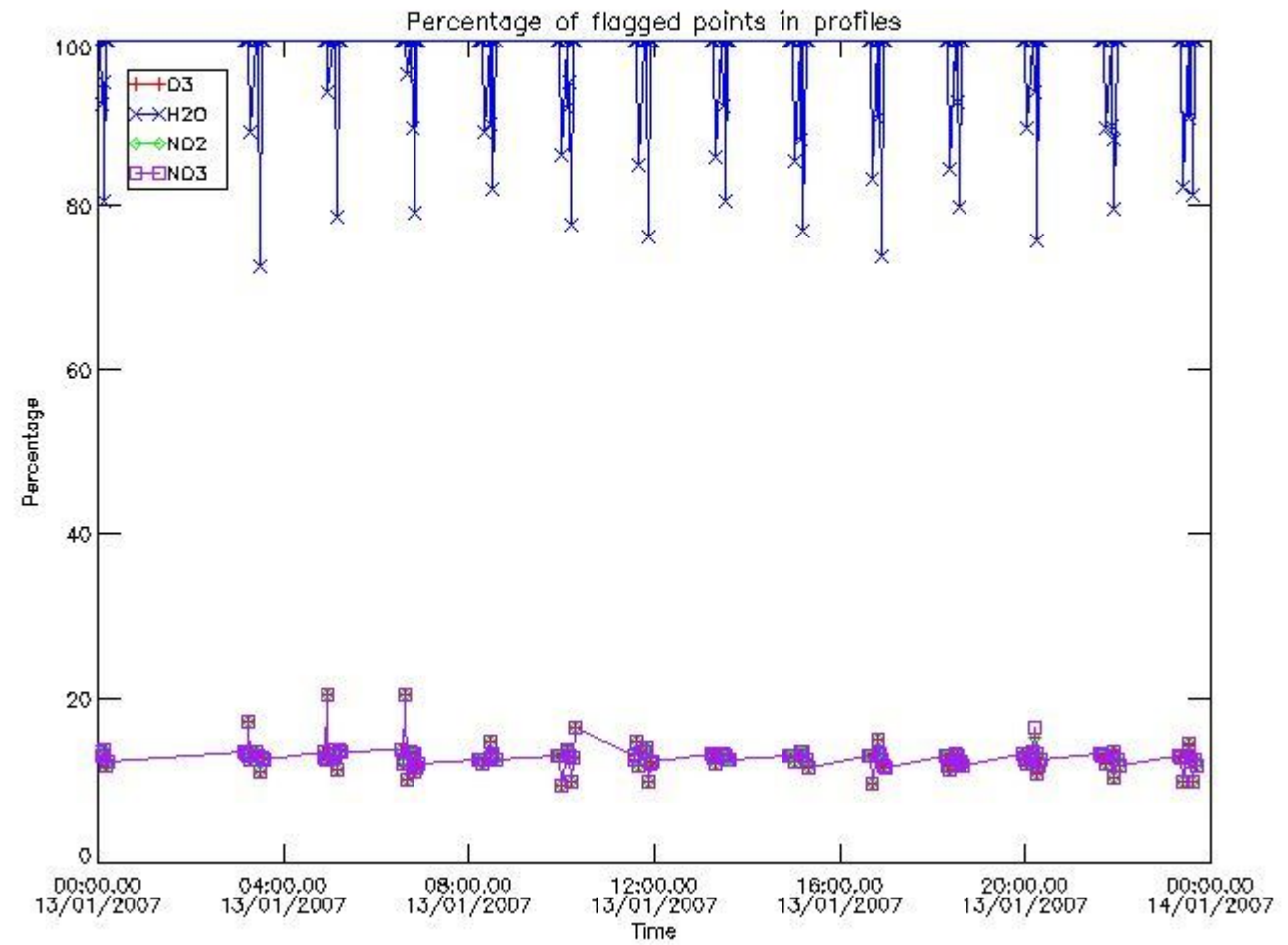
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397	GOM_NL_2PRFIN20070113_215420_000000382054_00373_25477_1058.N1	13-JAN-2007 21:54:20	Dark	38.000	71	lot Car	2.2460	7700.0	76	25477	No
398	GOM_NL_2PRFIN20070113_215537_000000492054_00373_25477_1059.N1	13-JAN-2007 21:55:37	Dark	49.000	41	Eps Car	1.8600	4100.0	98	25477	No
399	GOM_NL_2PRFIN20070113_215856_000000412054_00373_25477_1060.N1	13-JAN-2007 21:58:56	Dark	41.000	34	Gam2Vel	1.7930	23000.	82	25477	No
400	GOM_NL_2PRFIN20070113_220106_000000432054_00373_25477_1061.N1	13-JAN-2007 22:01:06	Dark	43.000	70	Zet Pup	2.2460	39000.	86	25477	No
401	GOM_NL_2PRFIN20070113_220248_000000412054_00373_25477_1062.N1	13-JAN-2007 22:02:48	Straylight	40.500	117	Pi Pup	2.7060	3800.0	81	25477	No
402	GOM_NL_2PRFIN20070113_220523_000000442054_00373_25477_1063.N1	13-JAN-2007 22:05:23	Straylight	43.500	23	21Eps CMa	1.5020	26000.	87	25477	No
403	GOM_NL_2PRFIN20070113_220649_000000392054_00373_25477_1064.N1	13-JAN-2007 22:06:49	Straylight	38.500	179	24Omi2CMa	3.0320	24000.	77	25477	No
404	GOM_NL_2PRFIN20070113_220904_000000482054_00373_25477_1065.N1	13-JAN-2007 22:09:04	Straylight	48.000	1	9Alp CMa	-1.4400	11000.	96	25477	No
405	GOM_NL_2PRFIN20070113_221133_000000392054_00373_25477_1066.N1	13-JAN-2007 22:11:33	Straylight	39.000	56	53Kap Ori	2.0650	30000.	78	25477	No
406	GOM_NL_2PRFIN20070113_221243_000000372054_00373_25477_1067.N1	13-JAN-2007 22:12:43	Straylight	37.000	125	44lot Ori	2.7700	30000.	74	25477	No
407	GOM_NL_2PRFIN20070113_221400_000000422054_00373_25477_1068.N1	13-JAN-2007 22:14:00	Tw_i_and_stray	41.500	30	46Eps Ori	1.6940	30000.	83	25477	No
408	GOM_NL_2PRFIN20070113_221615_000000522054_00373_25477_1069.N1	13-JAN-2007 22:16:15	Tw_i_and_stray	52.000	14	58Alp Ori	0.87000	3000.0	104	25477	No
409	GOM_NL_2PRFIN20070113_221850_000000422054_00373_25477_1070.N1	13-JAN-2007 22:18:50	Bright	41.500	44	24Gam Gem	1.9280	11000.	83	25477	No
410	GOM_NL_2PRFIN20070113_222011_000000352054_00373_25477_1071.N1	13-JAN-2007 22:20:11	Bright	35.000	176	23Zet Tau	3.0200	22000.	70	25477	No
411	GOM_NL_2PRFIN20070113_222220_000000372054_00373_25477_1072.N1	13-JAN-2007 22:22:20	Bright	36.500	28	12Bet Tau	1.6500	15200.	73	25477	No
412	GOM_NL_2PRFIN20070113_222353_000000362054_00373_25477_1073.N1	13-JAN-2007 22:23:53	Bright	35.500	114	3lot Aur	2.6930	4600.0	71	25477	No
413	GOM_NL_2PRFIN20070113_222652_000000372054_00373_25477_1074.N1	13-JAN-2007 22:26:52	Bright	36.500	42	34Bet Aur	1.9000	10200.	73	25477	No
414	GOM_NL_2PRFIN20070113_223923_000000342054_00373_25477_1075.N1	13-JAN-2007 22:39:23	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	25477	No
415	GOM_NL_2PRFIN20070113_224326_000000382054_00373_25477_1076.N1	13-JAN-2007 22:43:26	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	25477	No
416	GOM_NL_2PRFIN20070113_224742_000000372054_00373_25477_1077.N1	13-JAN-2007 22:47:42	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	25477	No
417	GOM_NL_2PRFIN20070113_225013_000000522054_00373_25477_1078.N1	13-JAN-2007 22:50:13	Bright	52.000	130	23Bet Dra	2.7990	5800.0	104	25477	No
418	GOM_NL_2PRFIN20070113_225629_000000482054_00373_25477_1079.N1	13-JAN-2007 22:56:29	Bright	47.500	133	40Zet Her	2.8070	6000.0	95	25477	No
419	GOM_NL_2PRFIN20070113_225933_000000542054_00373_25477_1080.N1	13-JAN-2007 22:59:33	Bright	54.000	127	27Bet Her	2.7810	4700.0	108	25477	No
420	GOM_NL_2PRFIN20070113_230706_000000552054_00373_25477_1081.N1	13-JAN-2007 23:07:06	Bright	55.000	120	1Del Oph	2.7340	3200.0	110	25477	No
421	GOM_NL_2PRFIN20070113_230830_000000362054_00373_25477_1082.N1	13-JAN-2007 23:08:30	Bright	35.500	98	13Zet Oph	2.5710	30000.	71	25477	No
422	GOM_NL_2PRFIN20070113_231257_000000532054_00373_25477_1083.N1	13-JAN-2007 23:12:57	Tw_i_and_stray	53.000	16	21Alp Sco	1.0200	3000.0	106	25477	No
423	GOM_NL_2PRFIN20070113_231950_000000402054_00373_25477_1084.N1	13-JAN-2007 23:19:50	Dark	39.500	109	Bet Lup	2.6770	26000.	79	25477	No
424	GOM_NL_2PRFIN20070113_232121_000000402054_00373_25477_1085.N1	13-JAN-2007 23:21:21	Dark	40.000	78	Alp Lup	2.3040	28000.	80	25477	No
425	GOM_NL_2PRFIN20070113_232401_000000512054_00374_25478_1071.N1	13-JAN-2007 23:24:01	Dark	51.000	4	Alp1Cen	-0.010000	5800.0	102	25478	No
426	GOM_NL_2PRFIN20070113_233138_000000392054_00374_25478_1072.N1	13-JAN-2007 23:31:38	Dark	39.000	124	The Car	2.7640	30000.	78	25478	No
427	GOM_NL_2PRFIN20070113_233304_000000382054_00374_25478_1073.N1	13-JAN-2007 23:33:04	Dark	38.000	29	Bet Car	1.6720	10200.	76	25478	No
428	GOM_NL_2PRFIN20070113_233456_000000422054_00374_25478_1074.N1	13-JAN-2007 23:34:56	Dark	41.500	71	lot Car	2.2460	7700.0	83	25478	No
429	GOM_NL_2PRFIN20070113_233613_000000512054_00374_25478_1075.N1	13-JAN-2007 23:36:13	Dark	51.000	41	Eps Car	1.8600	4100.0	102	25478	No
430	GOM_NL_2PRFIN20070113_233933_000000412054_00374_25478_1076.N1	13-JAN-2007 23:39:33	Dark	41.000	34	Gam2Vel	1.7930	23000.	82	25478	No
431	GOM_NL_2PRFIN20070113_234142_000000442054_00374_25478_1077.N1	13-JAN-2007 23:41:42	Dark	43.500	70	Zet Pup	2.2460	39000.	87	25478	No
432	GOM_NL_2PRFIN20070113_234325_000000432054_00374_25478_1078.N1	13-JAN-2007 23:43:25	Straylight	42.500	117	Pi Pup	2.7060	3800.0	85	25478	No
433	GOM_NL_2PRFIN20070113_234559_000000432054_00374_25478_1079.N1	13-JAN-2007 23:45:59	Straylight	43.000	23	21Eps CMa	1.5020	26000.	86	25478	No
434	GOM_NL_2PRFIN20070113_234725_000000412054_00374_25478_1080.N1	13-JAN-2007 23:47:25	Straylight	40.500	179	24Omi2CMa	3.0320	24000.	81	25478	No
435	GOM_NL_2PRFIN20070113_234940_000000462054_00374_25478_1081.N1	13-JAN-2007 23:49:40	Straylight	45.500	1	9Alp CMa	-1.4400	11000.	91	25478	No
436	GOM_NL_2PRFIN20070113_235209_000000382054_00374_25478_1082.N1	13-JAN-2007 23:52:09	Straylight	38.000	56	53Kap Ori	2.0650	30000.	76	25478	No
437	GOM_NL_2PRFIN20070113_235318_000000382054_00374_25478_1083.N1	13-JAN-2007 23:53:18	Straylight	38.000	125	44lot Ori	2.7700	30000.	76	25478	No
438	GOM_NL_2PRFIN20070113_235436_000000412054_00374_25478_1084.N1	13-JAN-2007 23:54:36	Tw_i_and_stray	41.000	30	46Eps Ori	1.6940	30000.	82	25478	No
439	GOM_NL_2PRFIN20070113_235651_000000512054_00374_25478_1085.N1	13-JAN-2007 23:56:51	Tw_i_and_stray	51.000	14	58Alp Ori	0.87000	3000.0	102	25478	No
440	GOM_NL_2PRFIN20070113_235926_000000412054_00374_25478_1086.N1	13-JAN-2007 23:59:26	Bright	41.000	44	24Gam Gem	1.9280	11000.	82	25478	No

3. Quality information per product

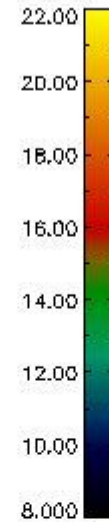
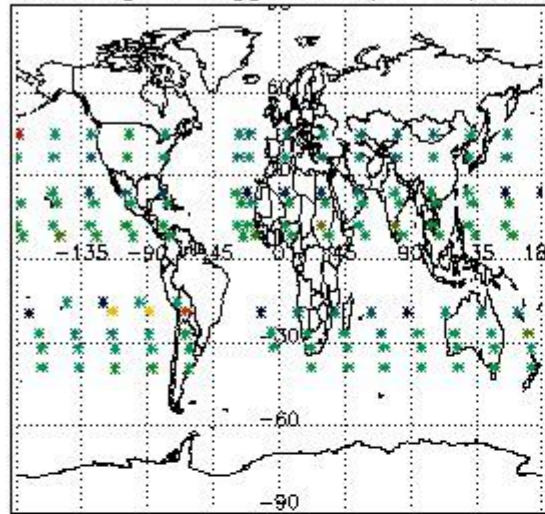
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

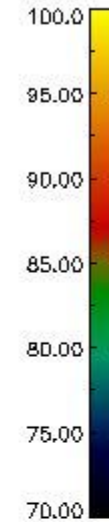
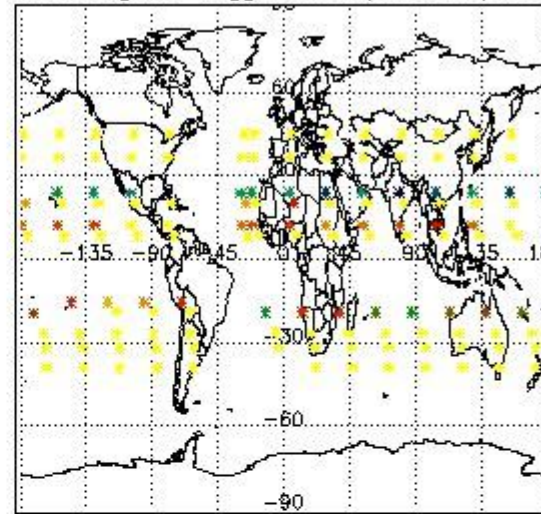


3.2 Plot quality information per product (world map)

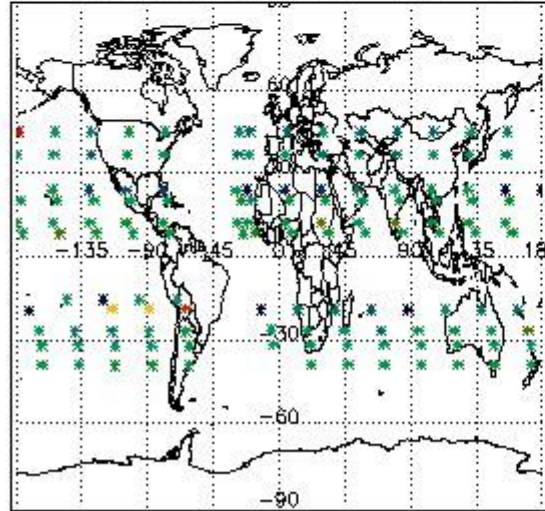
Percentage of flagged data per O3 profile



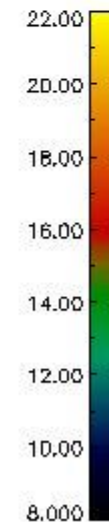
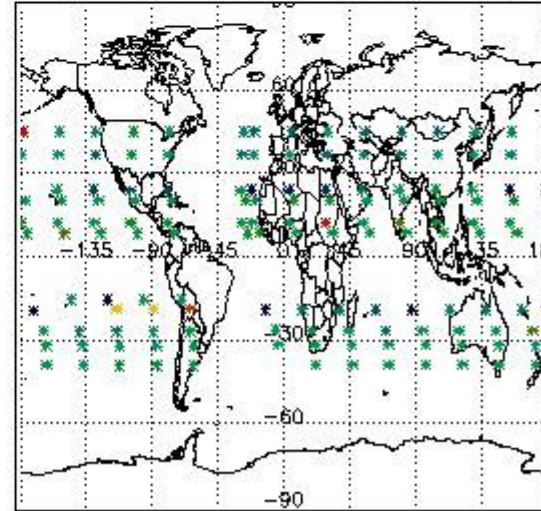
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

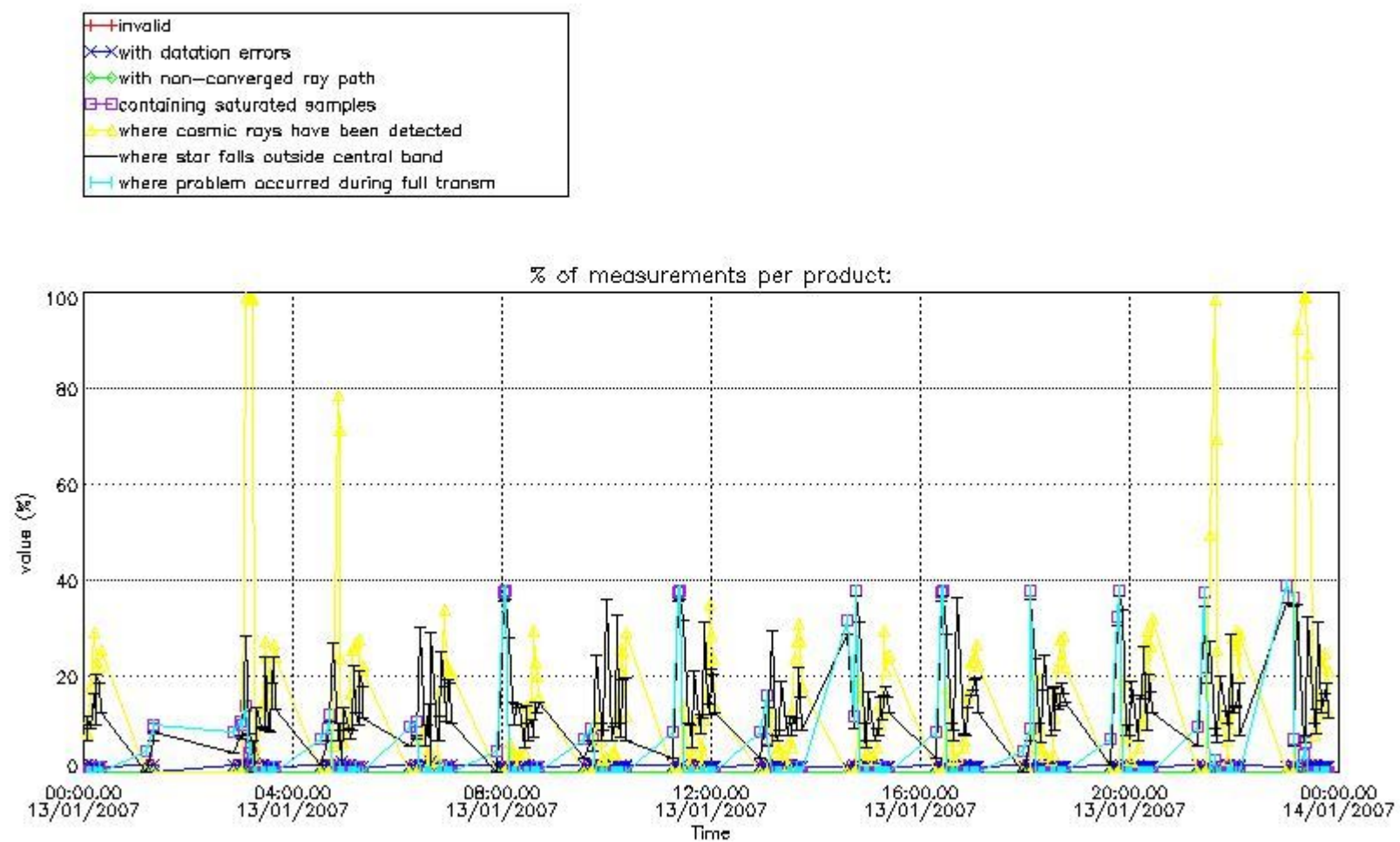


4. Level 1 quality information per product

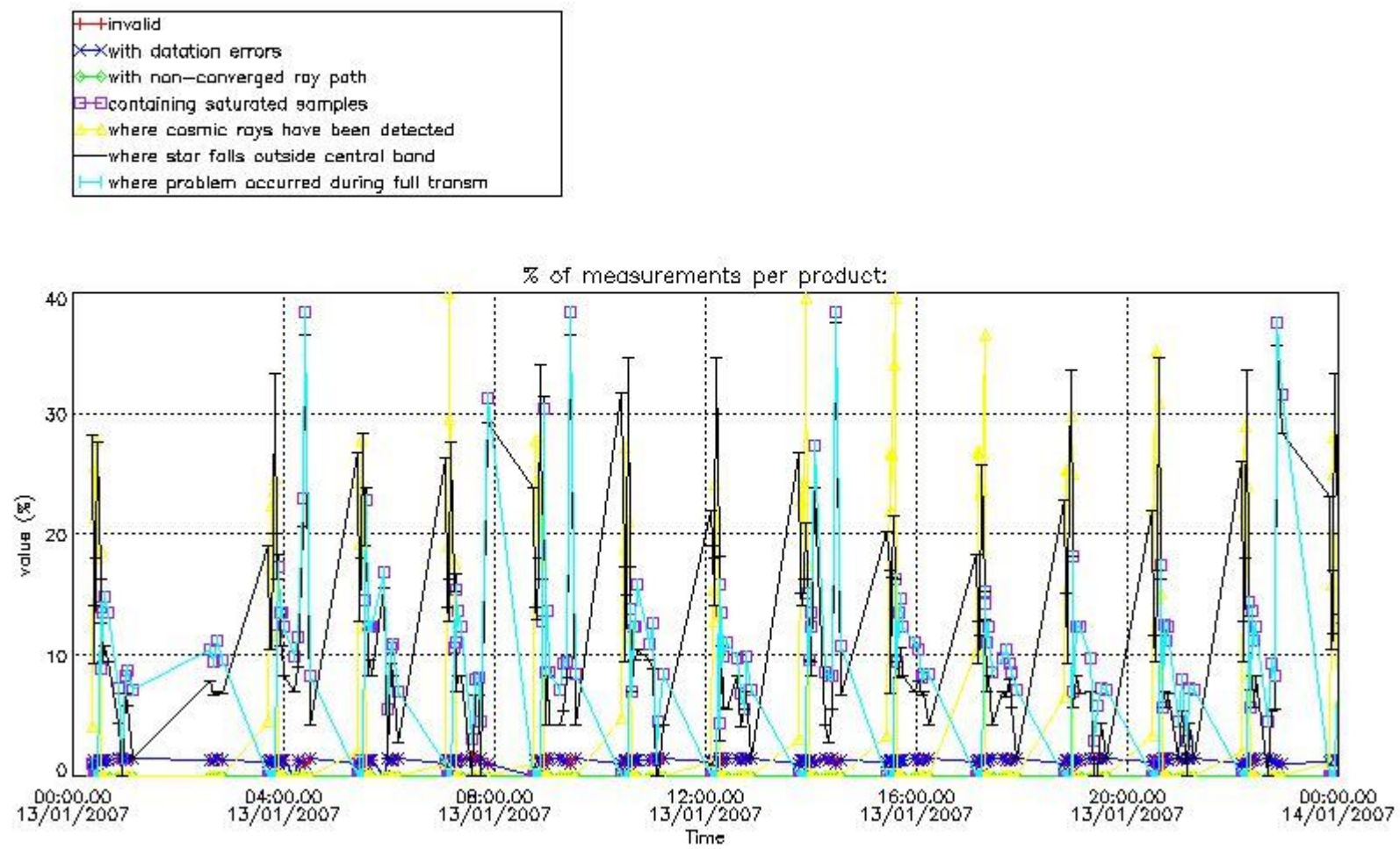
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

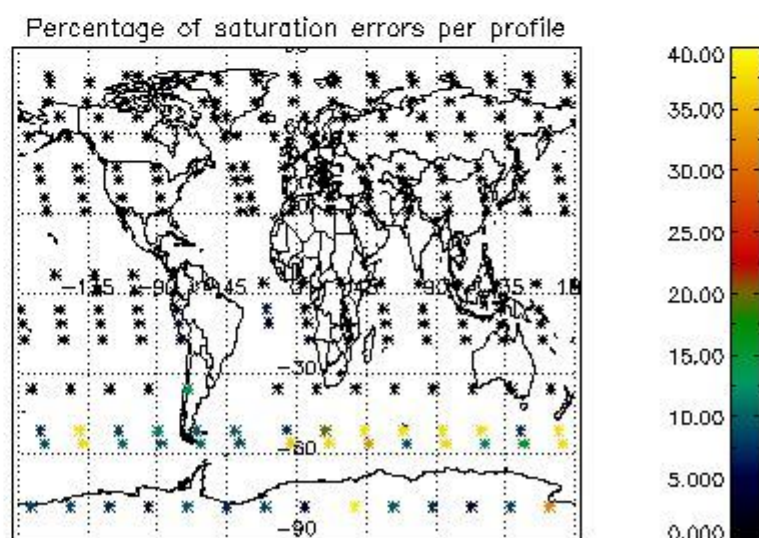
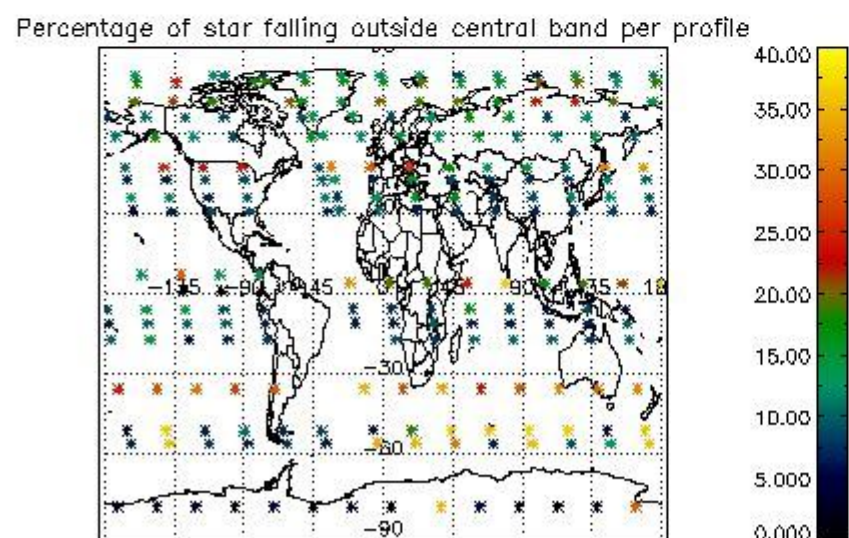
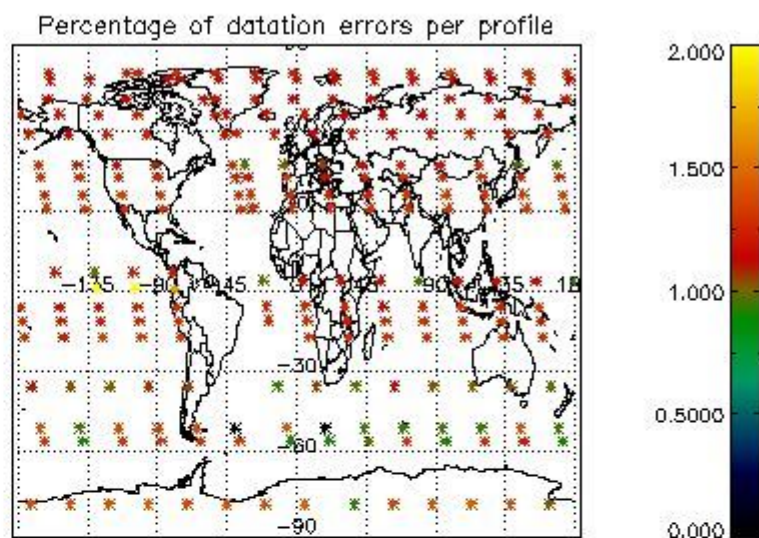
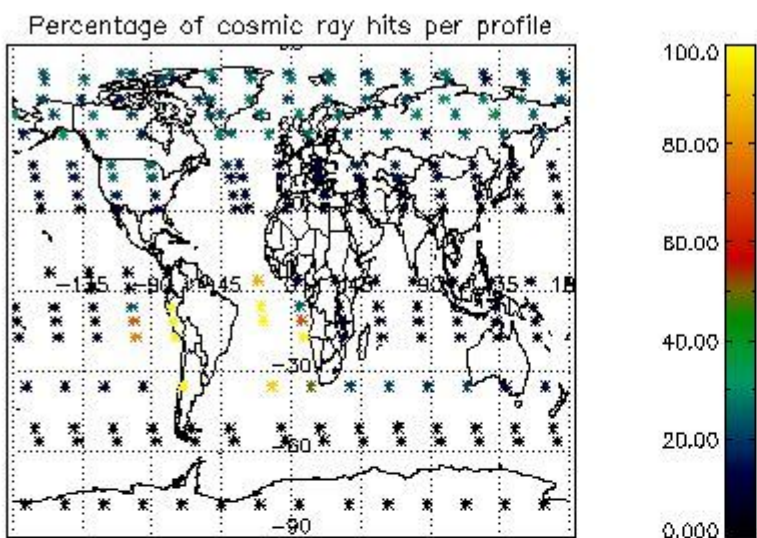


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

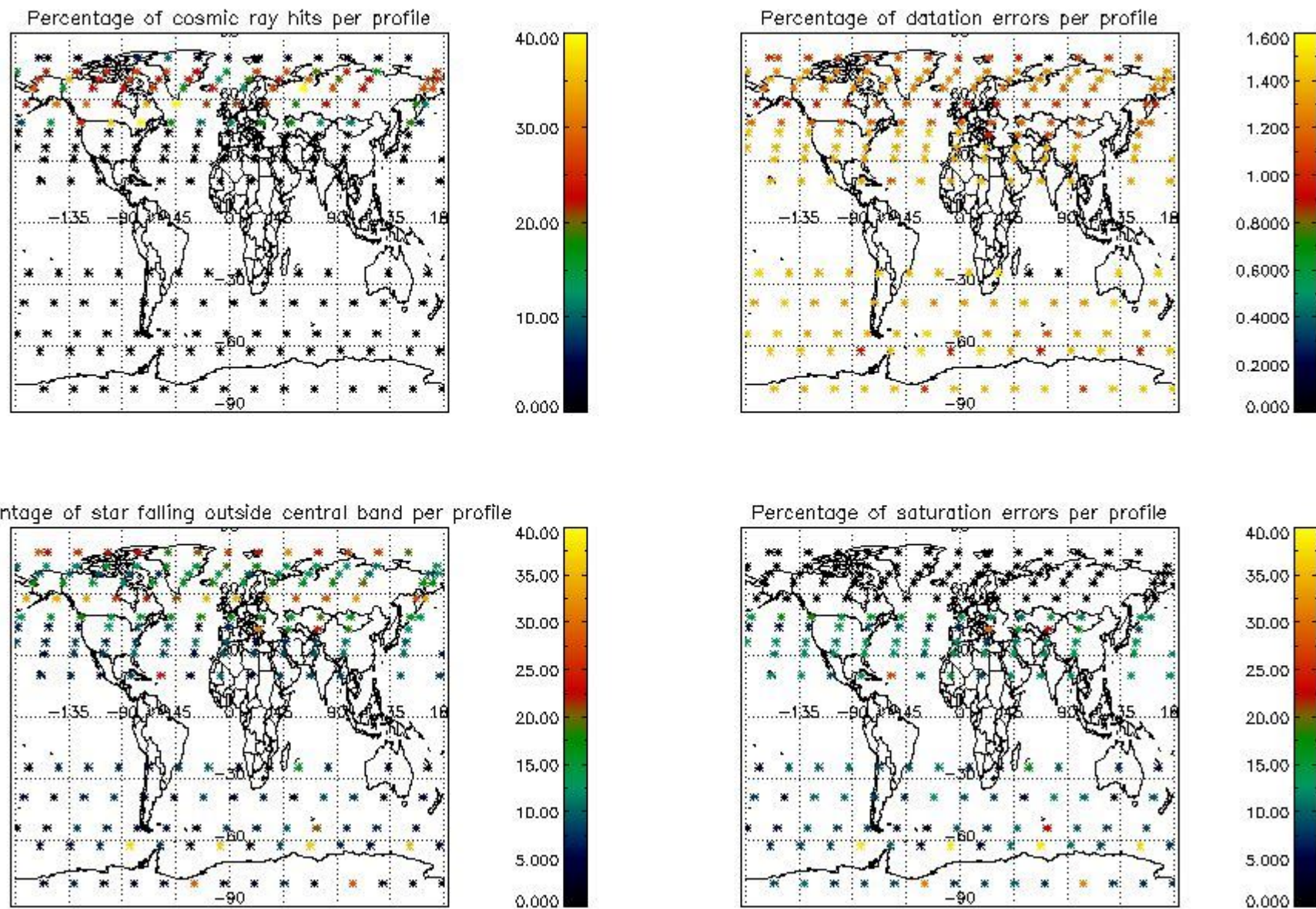


4.2 Plot quality information per product coming from level 1b processing (world map)

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

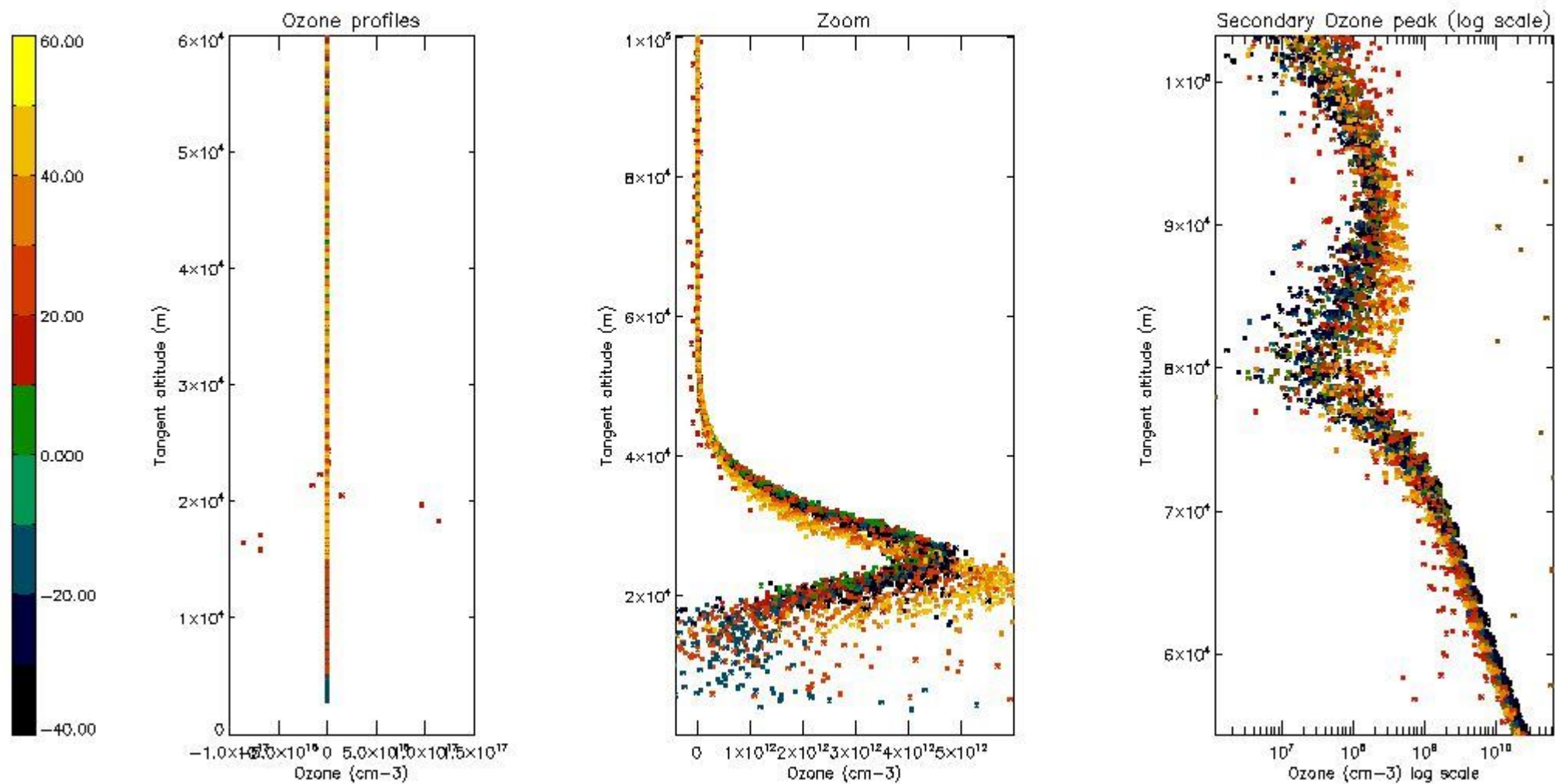
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	20

STD < 10	17
STD < 5	11

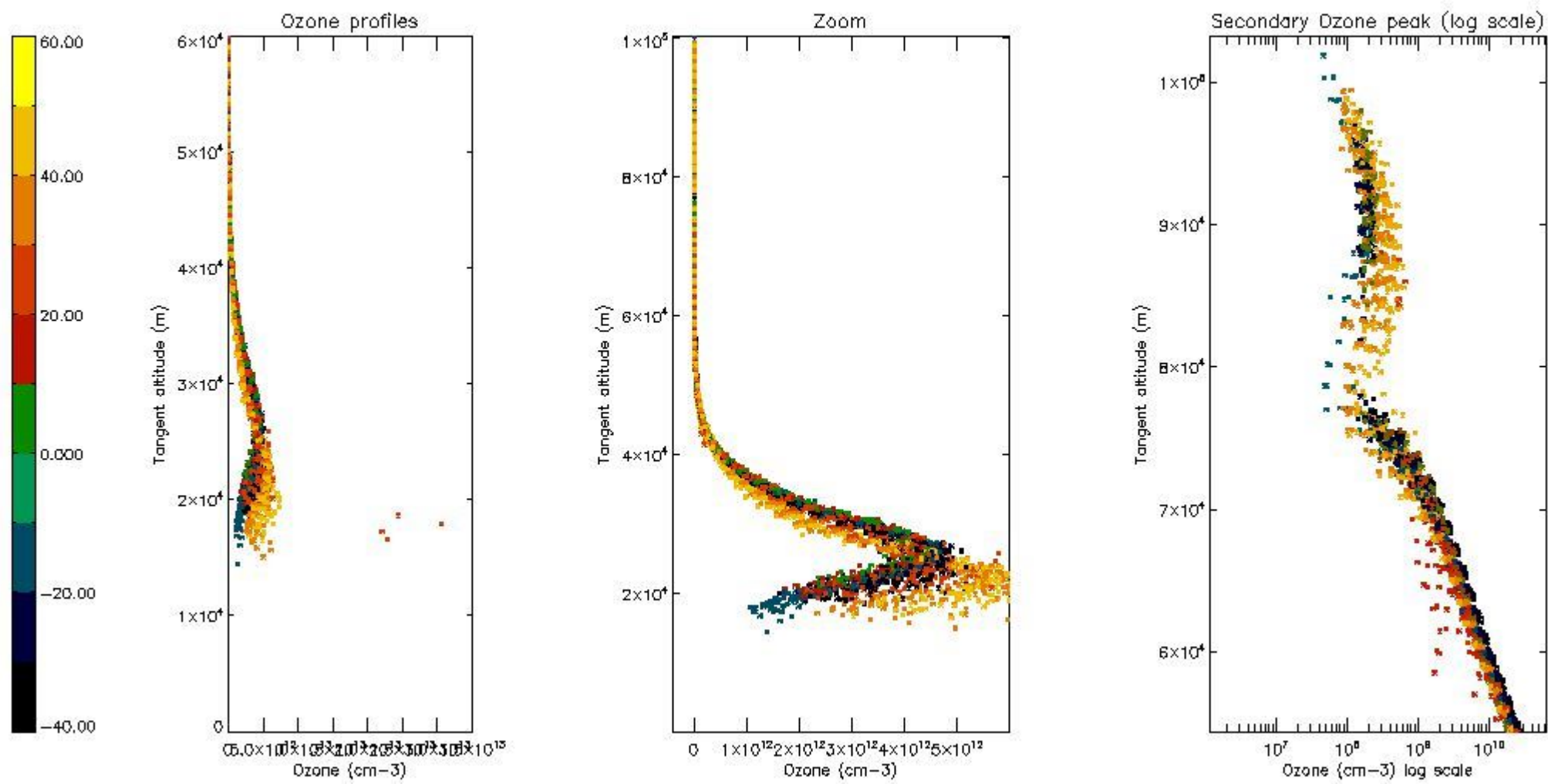
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



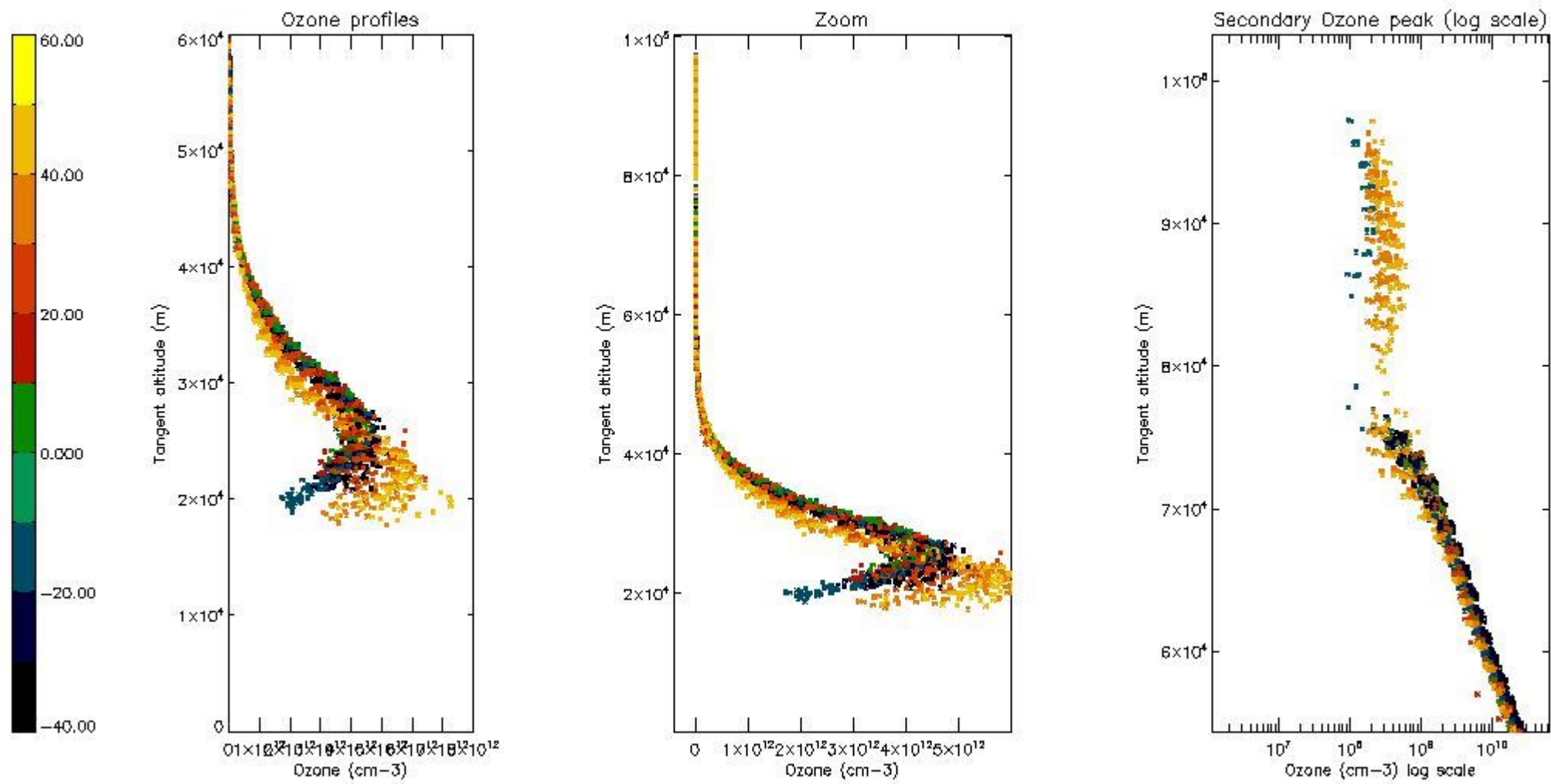
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



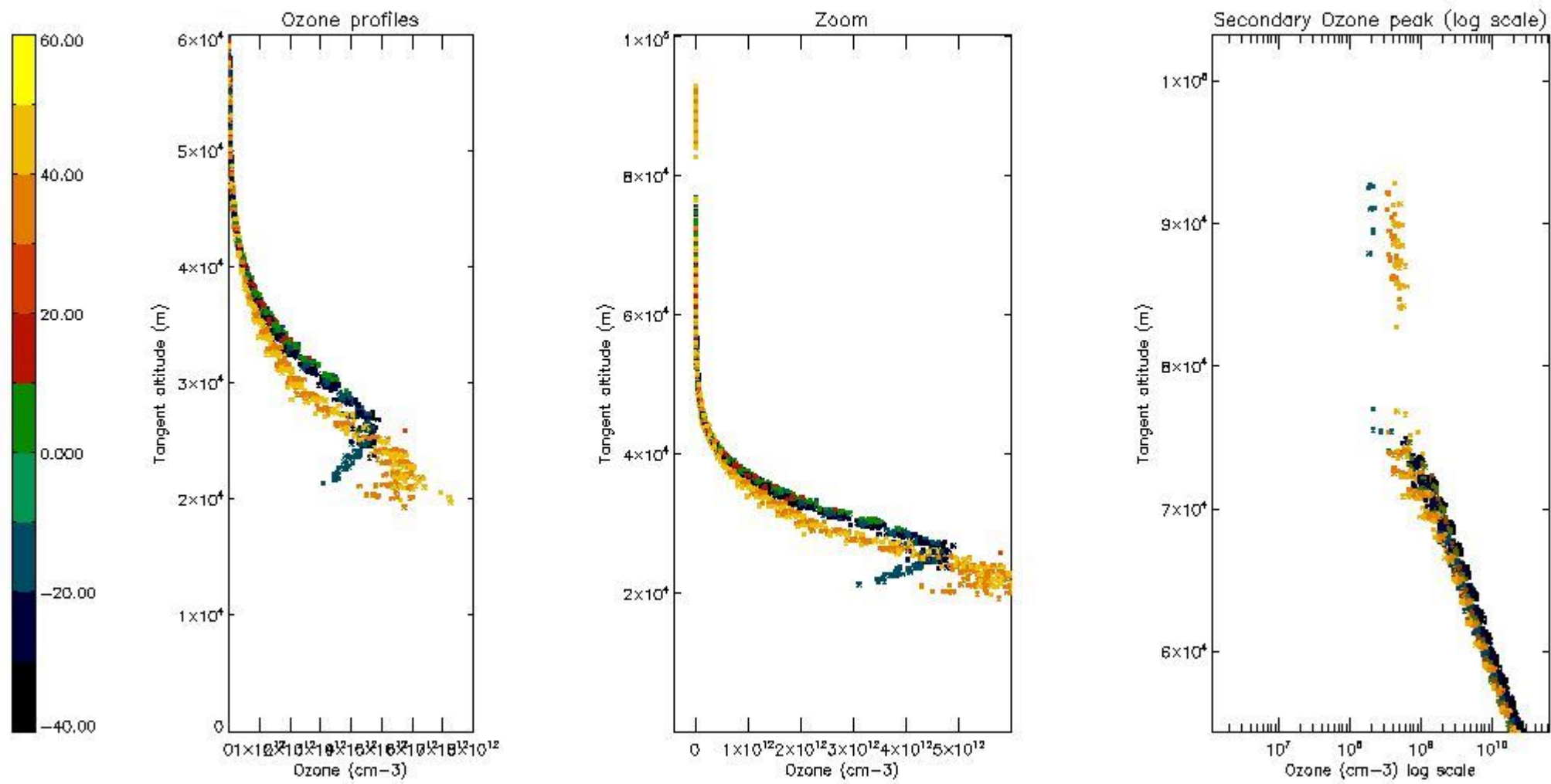
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



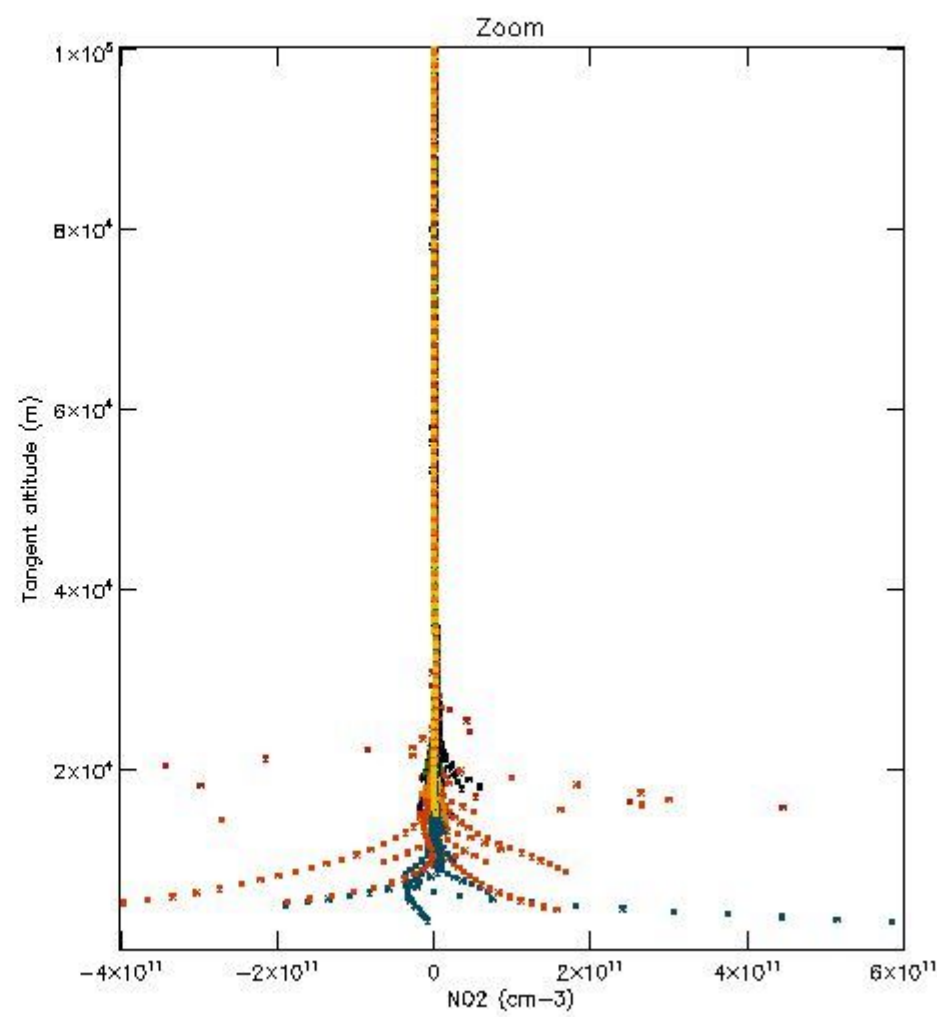
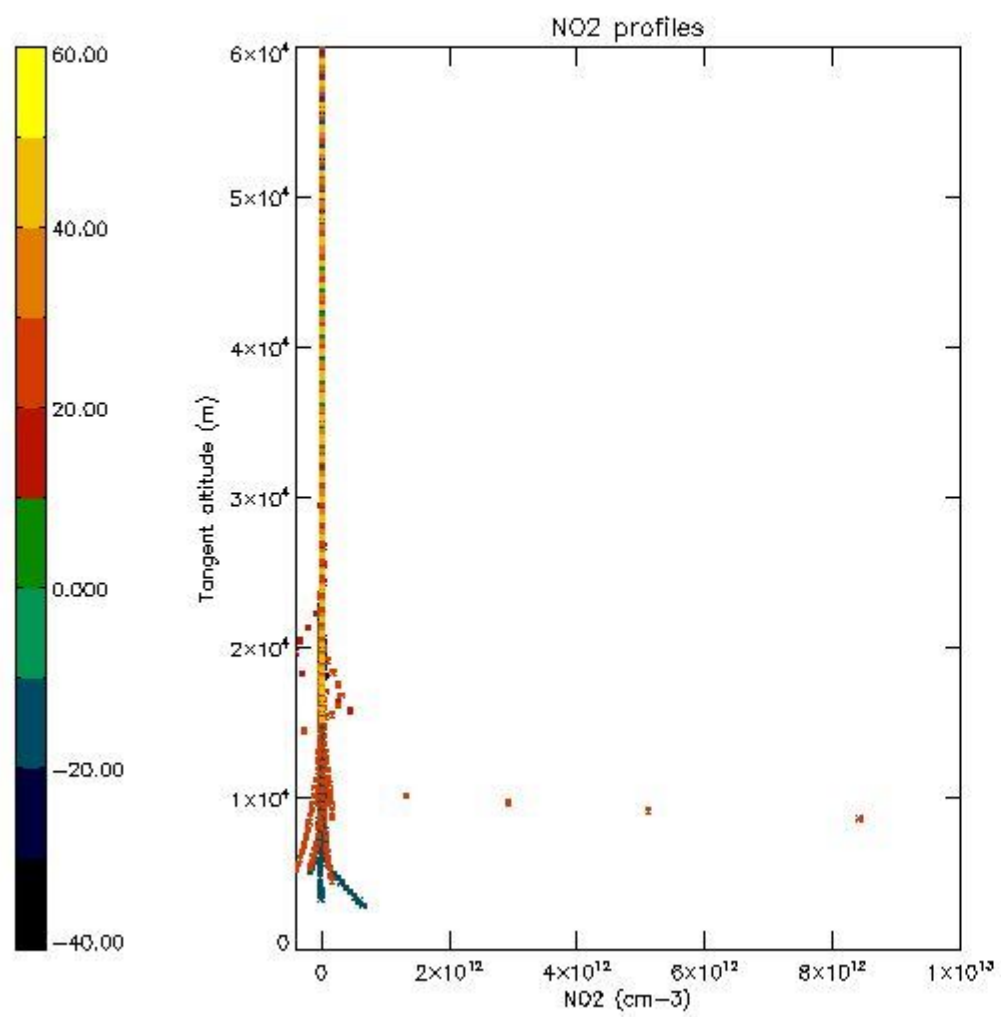
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



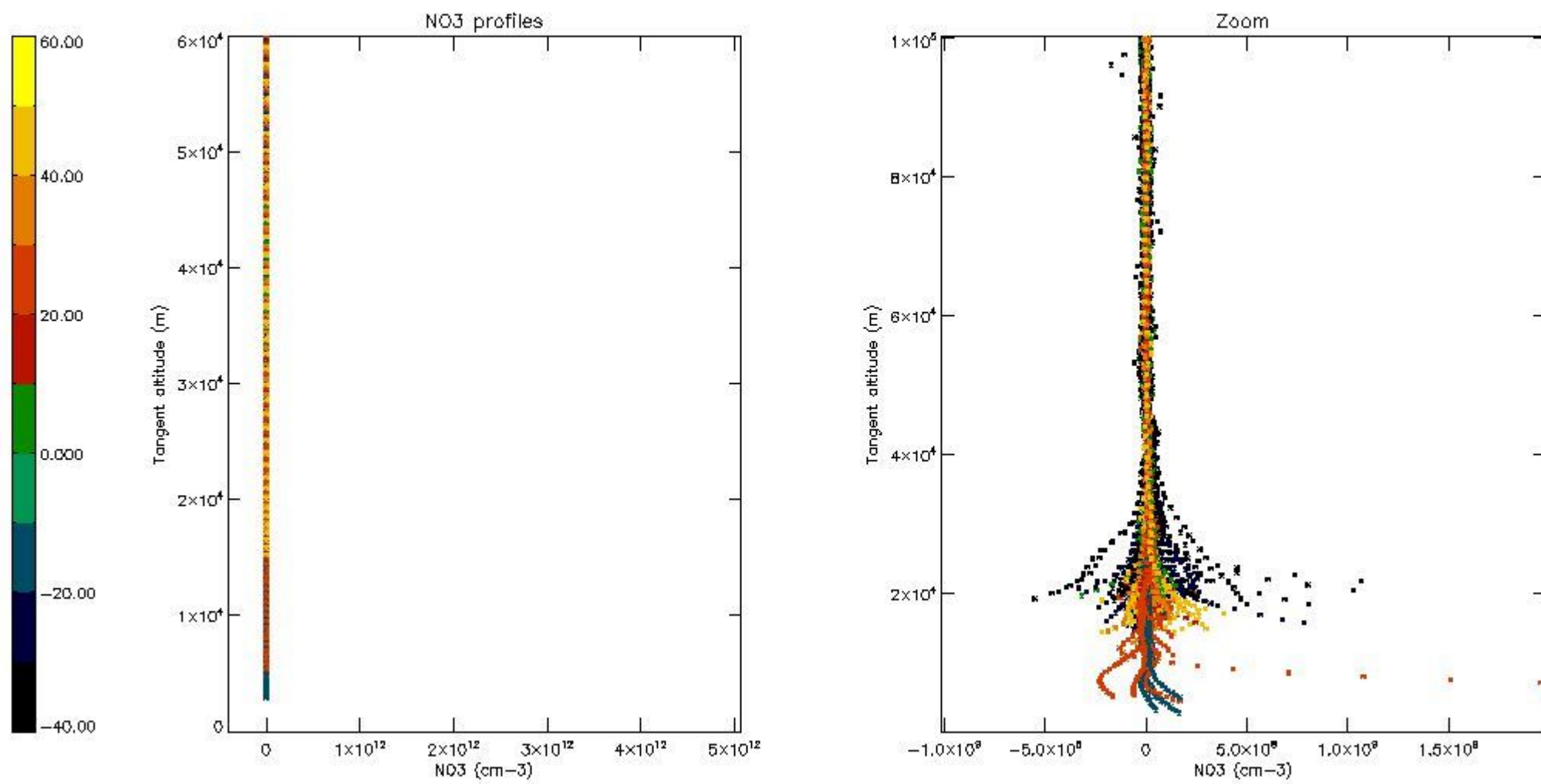
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



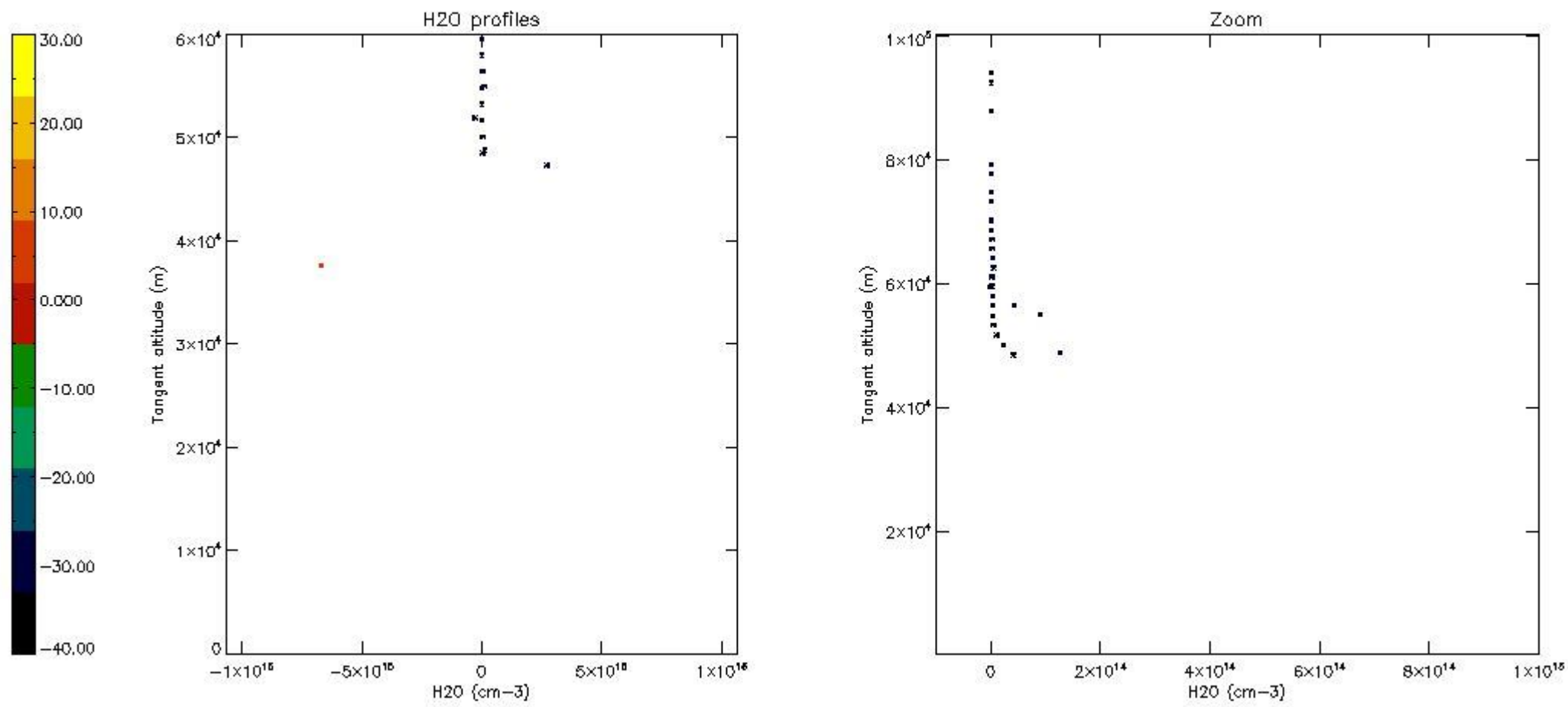
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	13-JAN-2007 00:03:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-JAN-2007 00:03:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-JAN-2007 00:03:08

GOMOS Level 2 Daily Report

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[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

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[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

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

[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% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

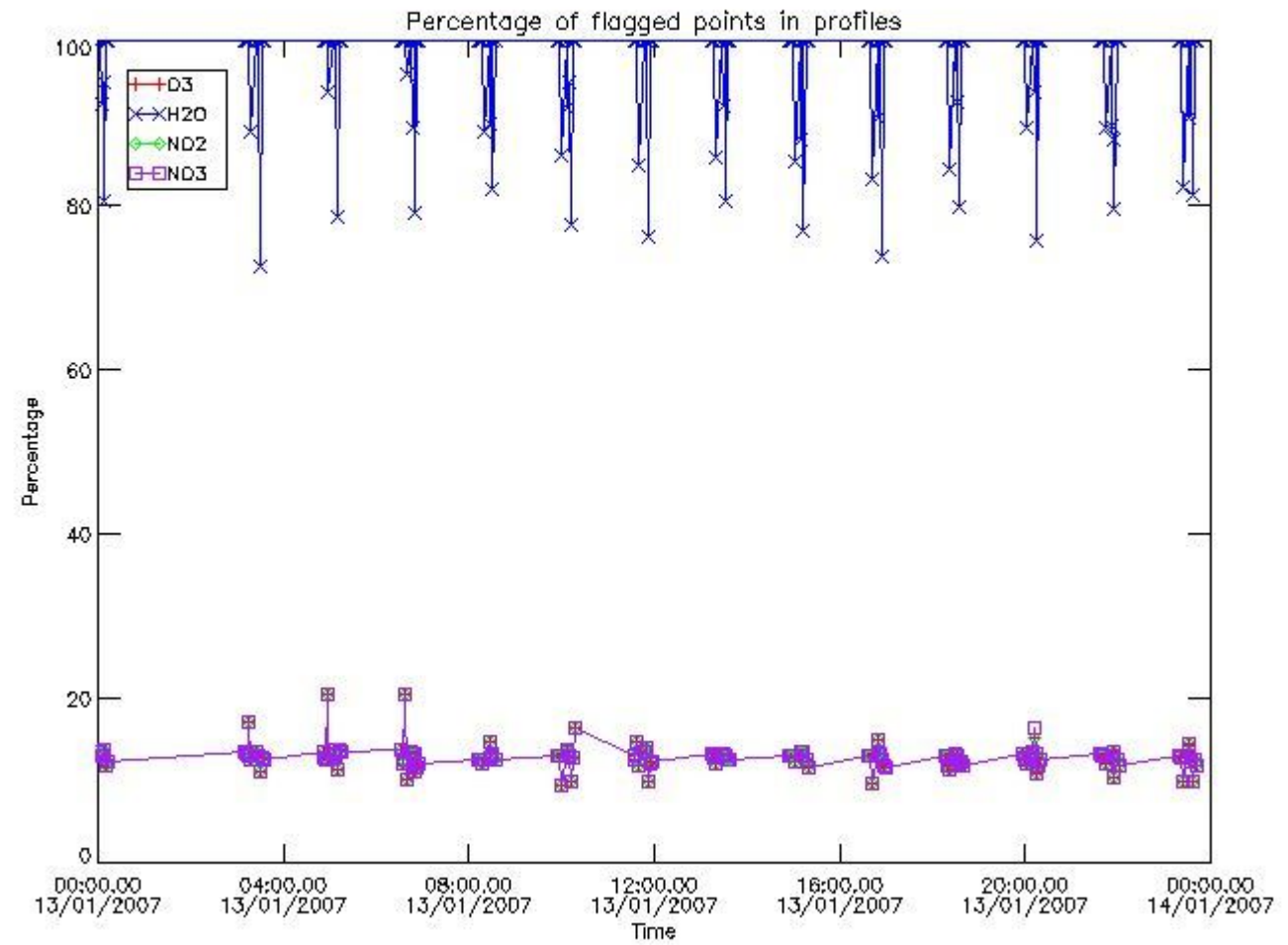
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

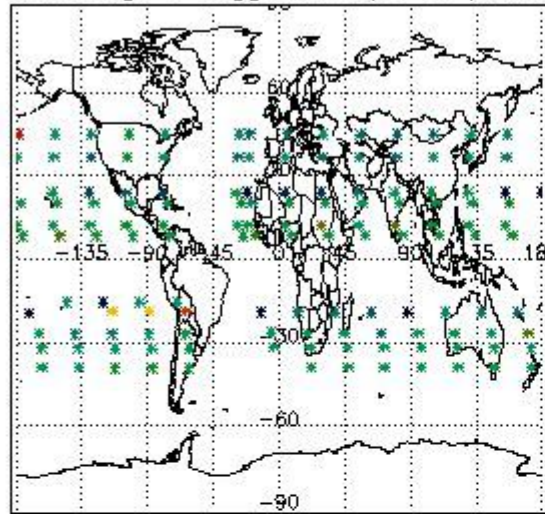
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

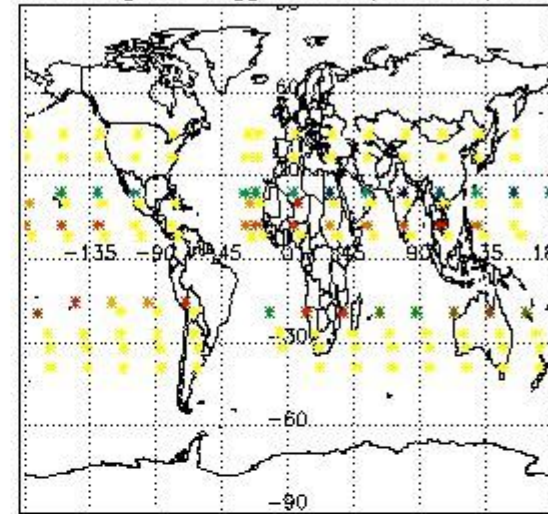


3.2 Plot quality information per product (world map)

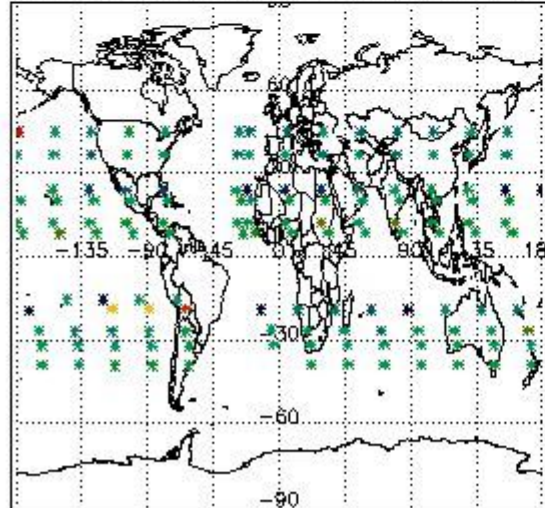
Percentage of flagged data per O3 profile



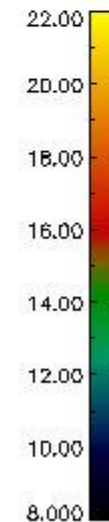
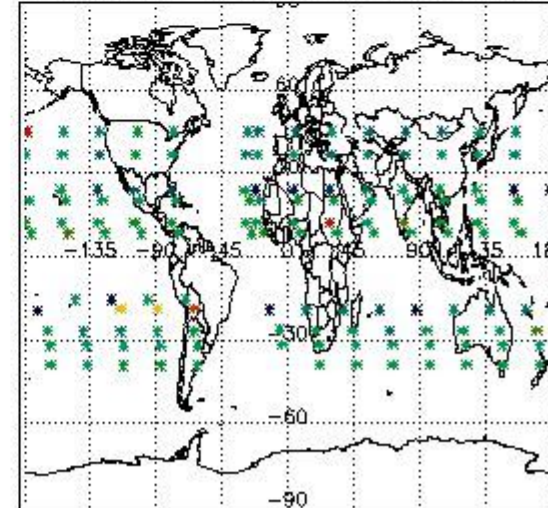
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

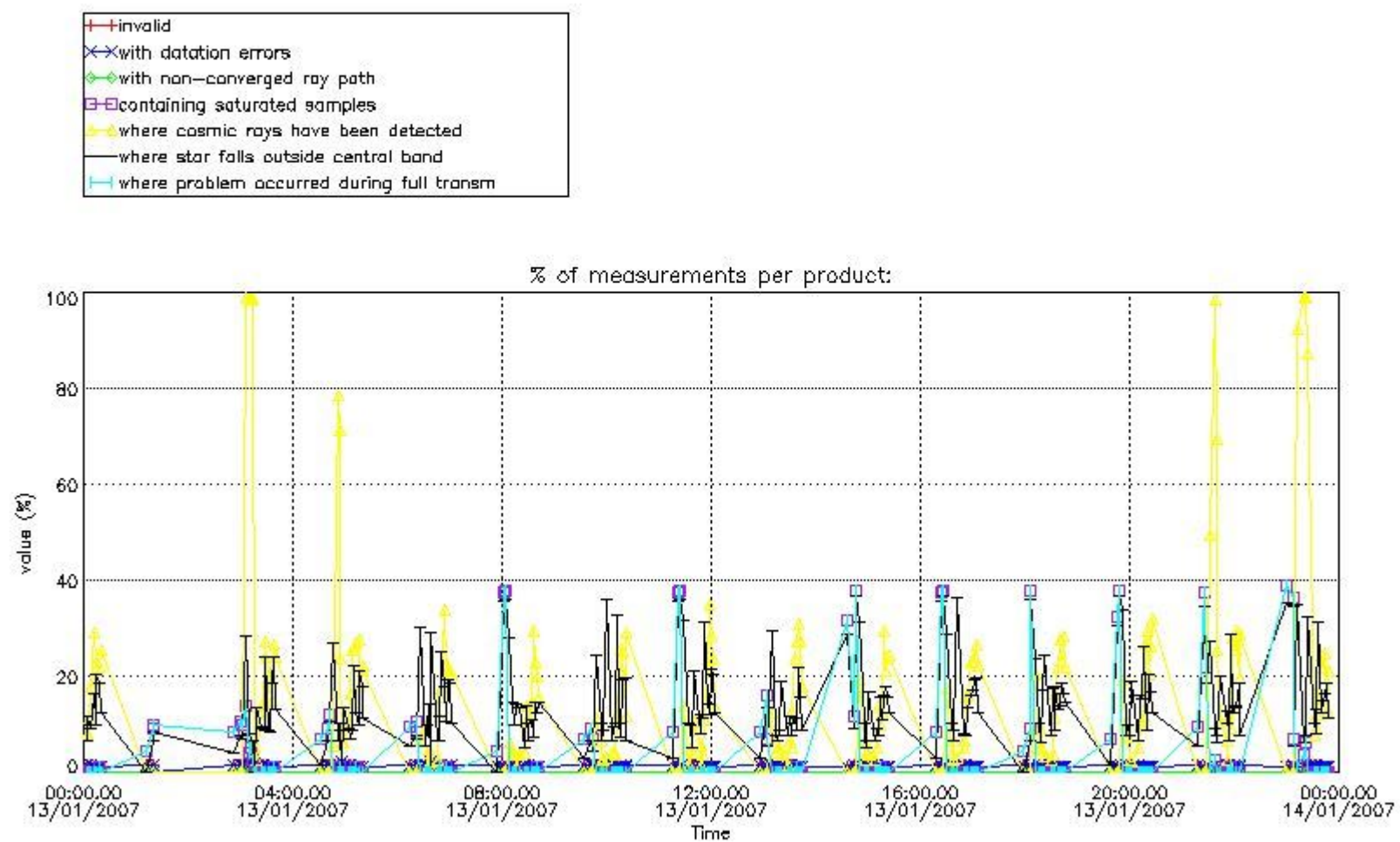


4. Level 1 quality information per product

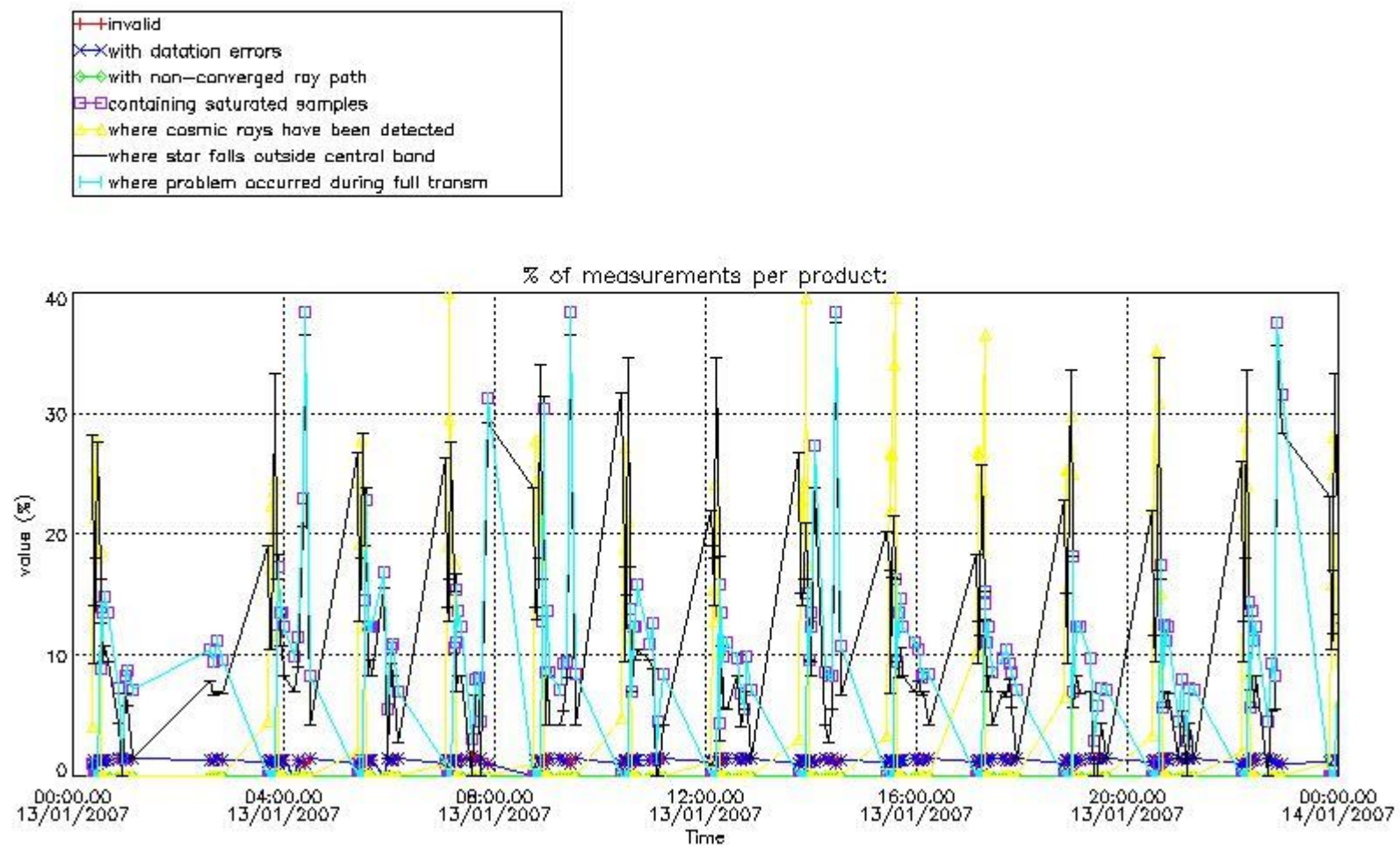
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

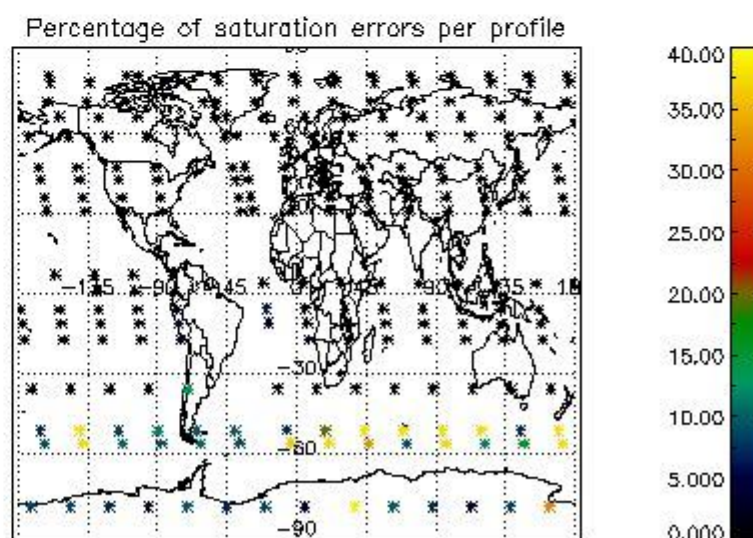
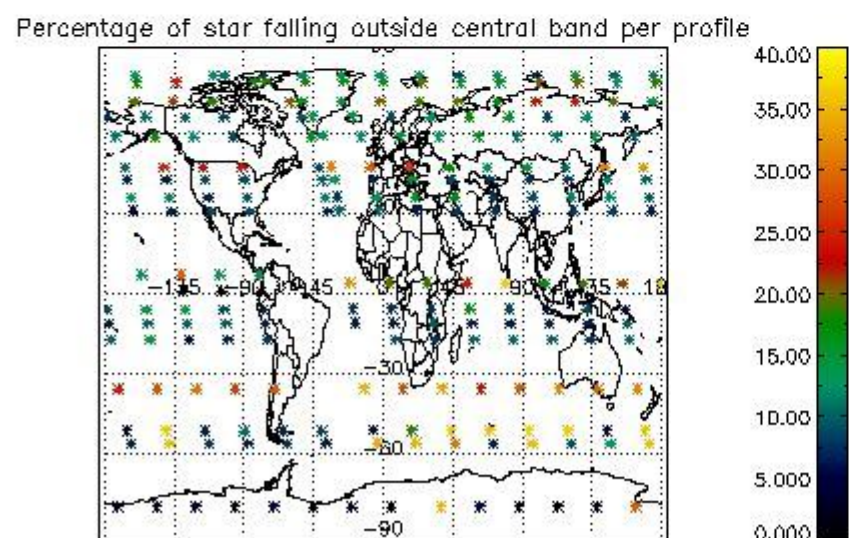
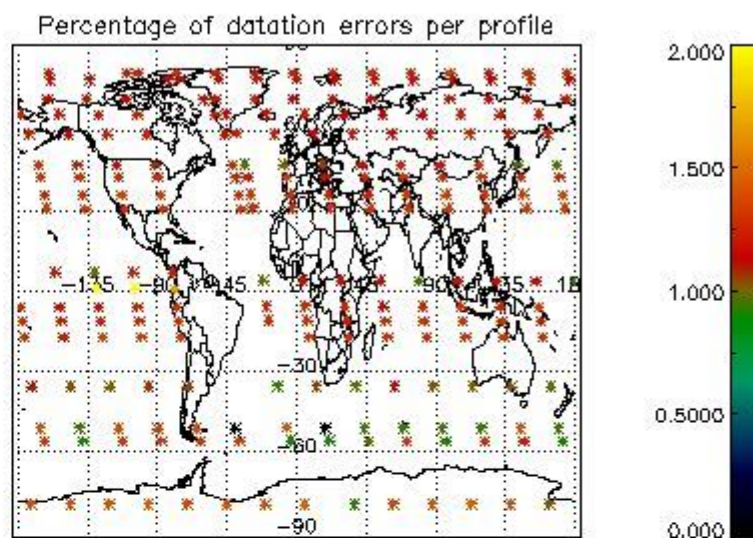
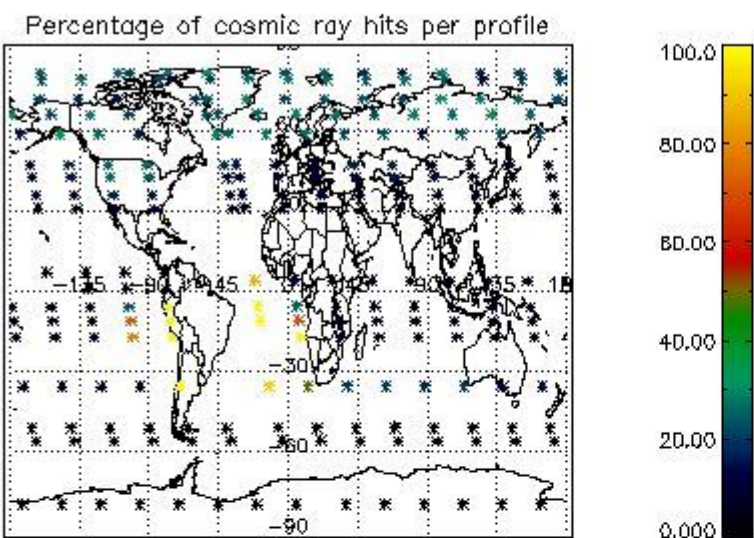


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



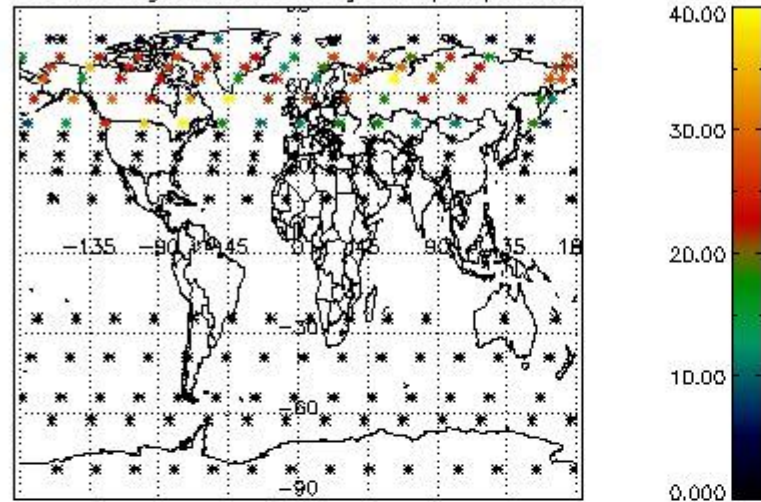
4.2 Plot quality information per product coming from level 1b processing (world map)

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

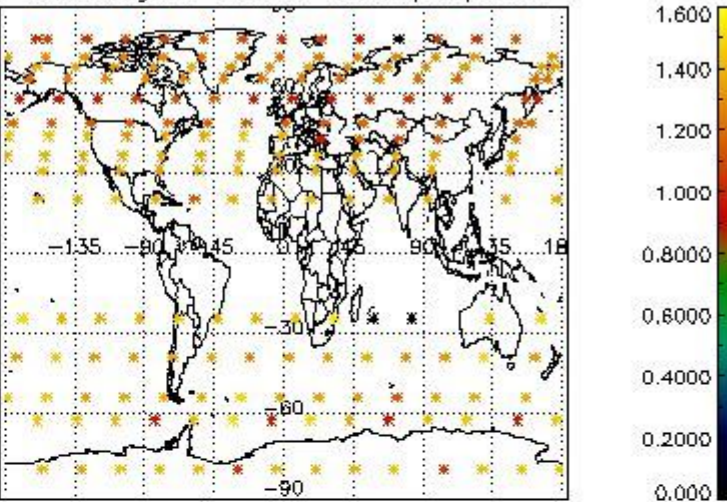


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

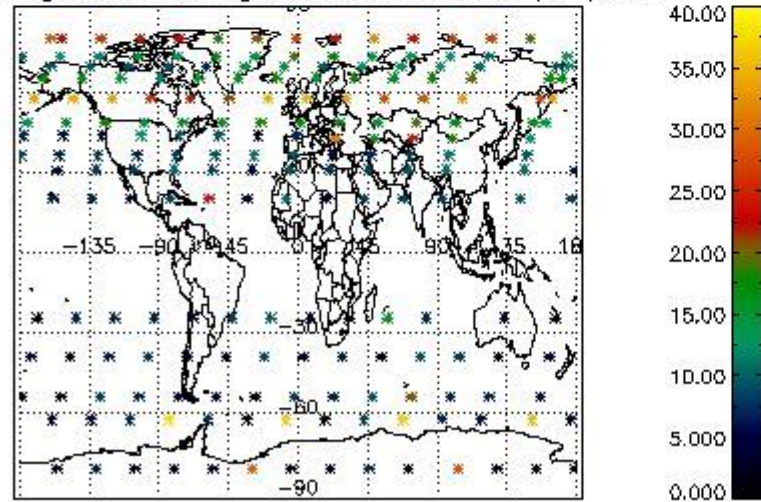
Percentage of cosmic ray hits per profile



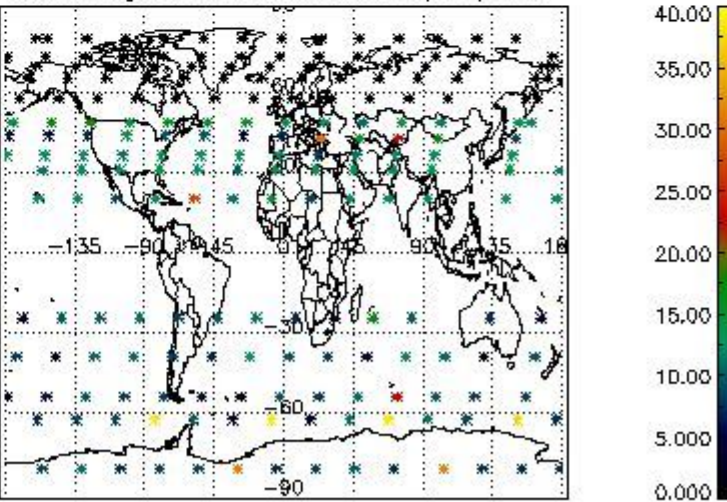
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

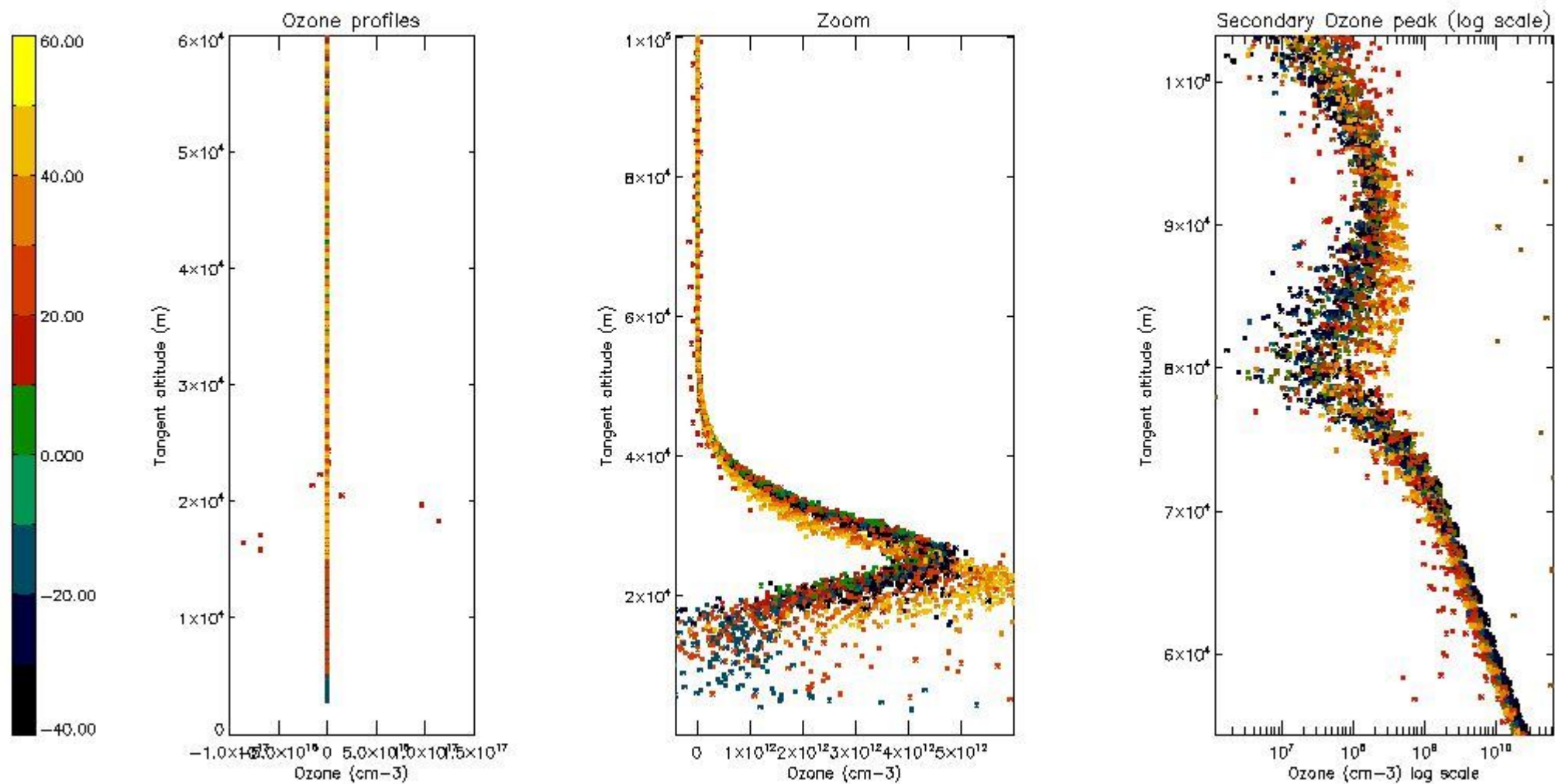
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	20

STD < 10	17
STD < 5	11

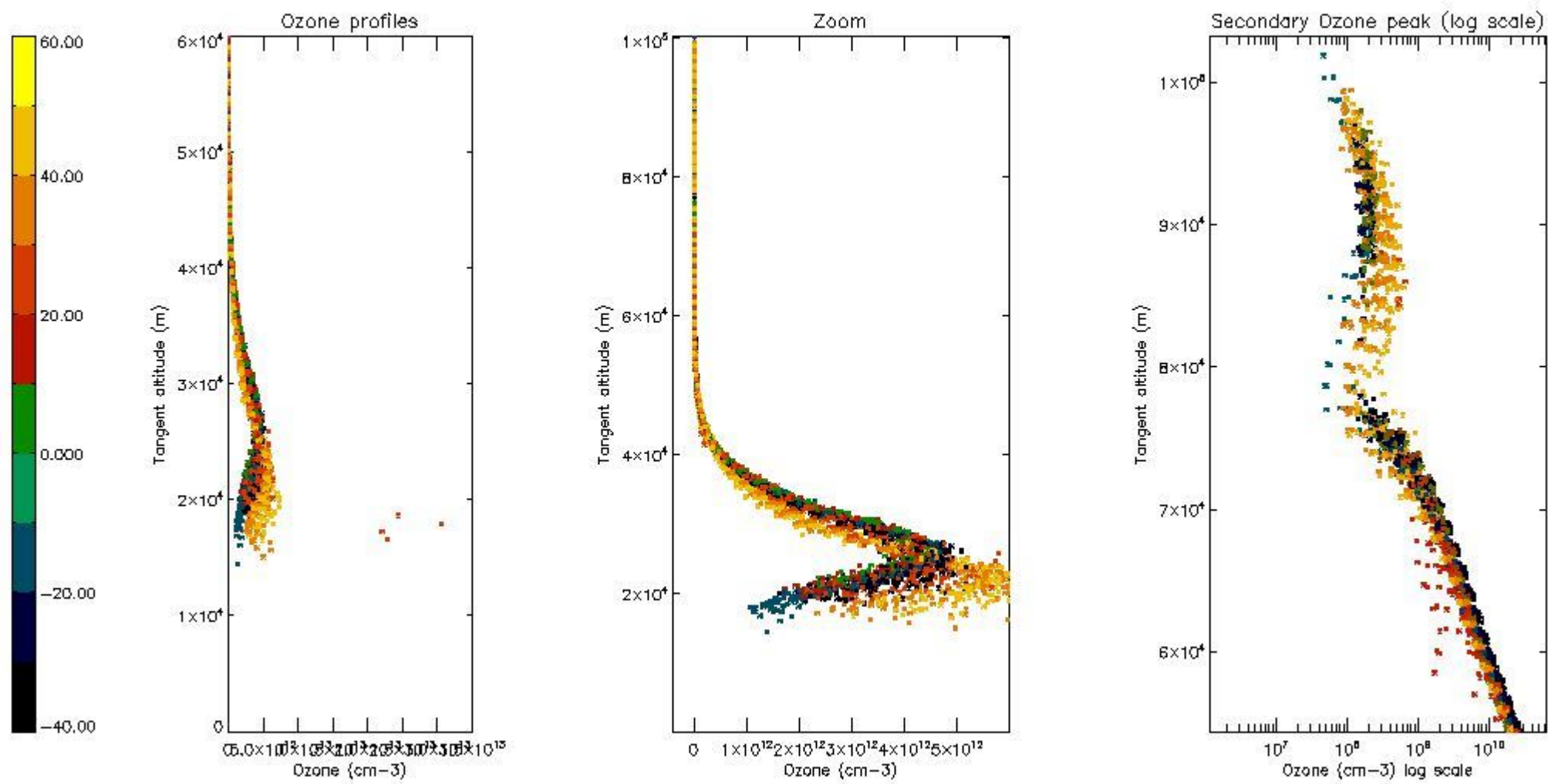
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



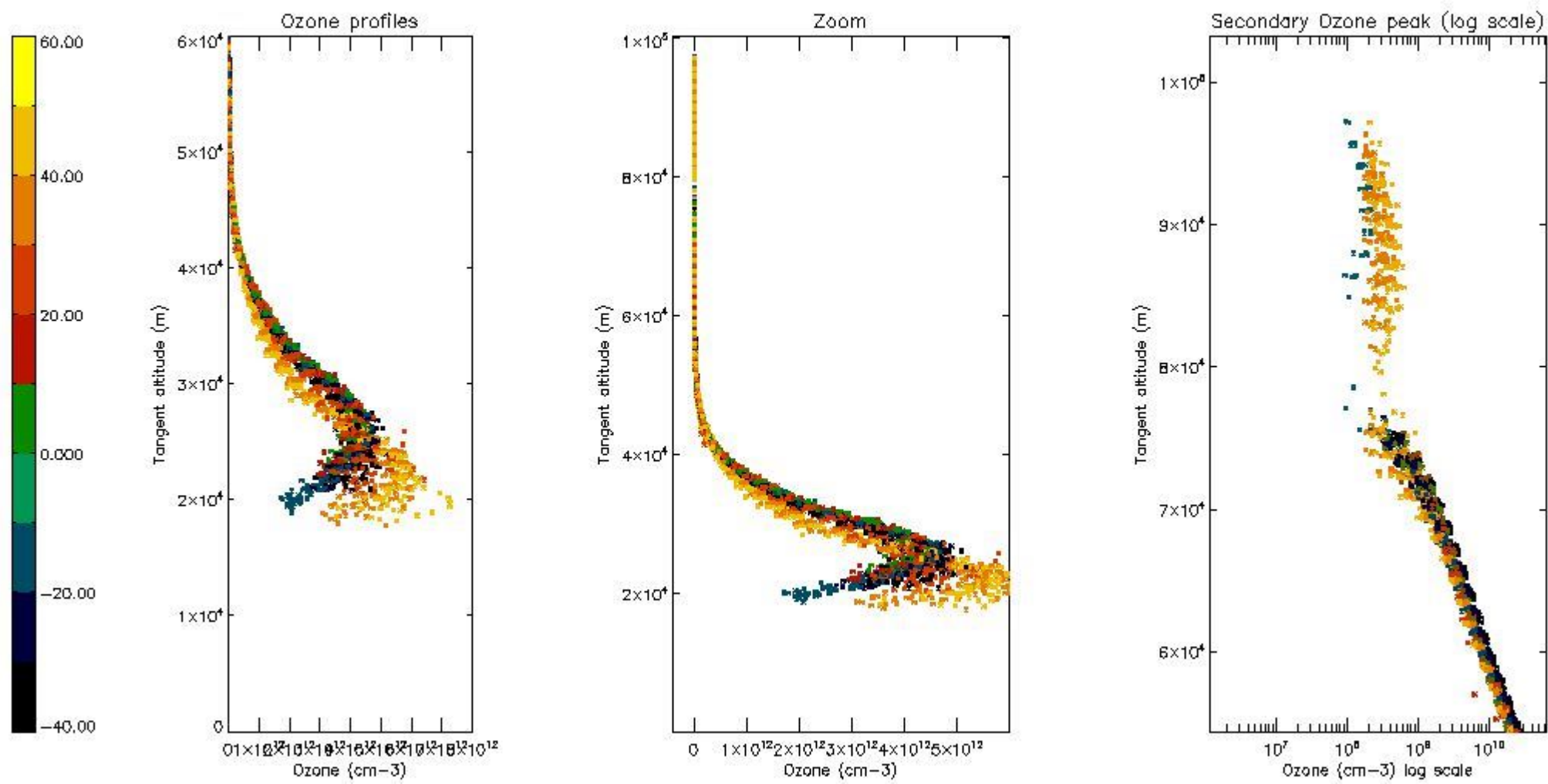
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



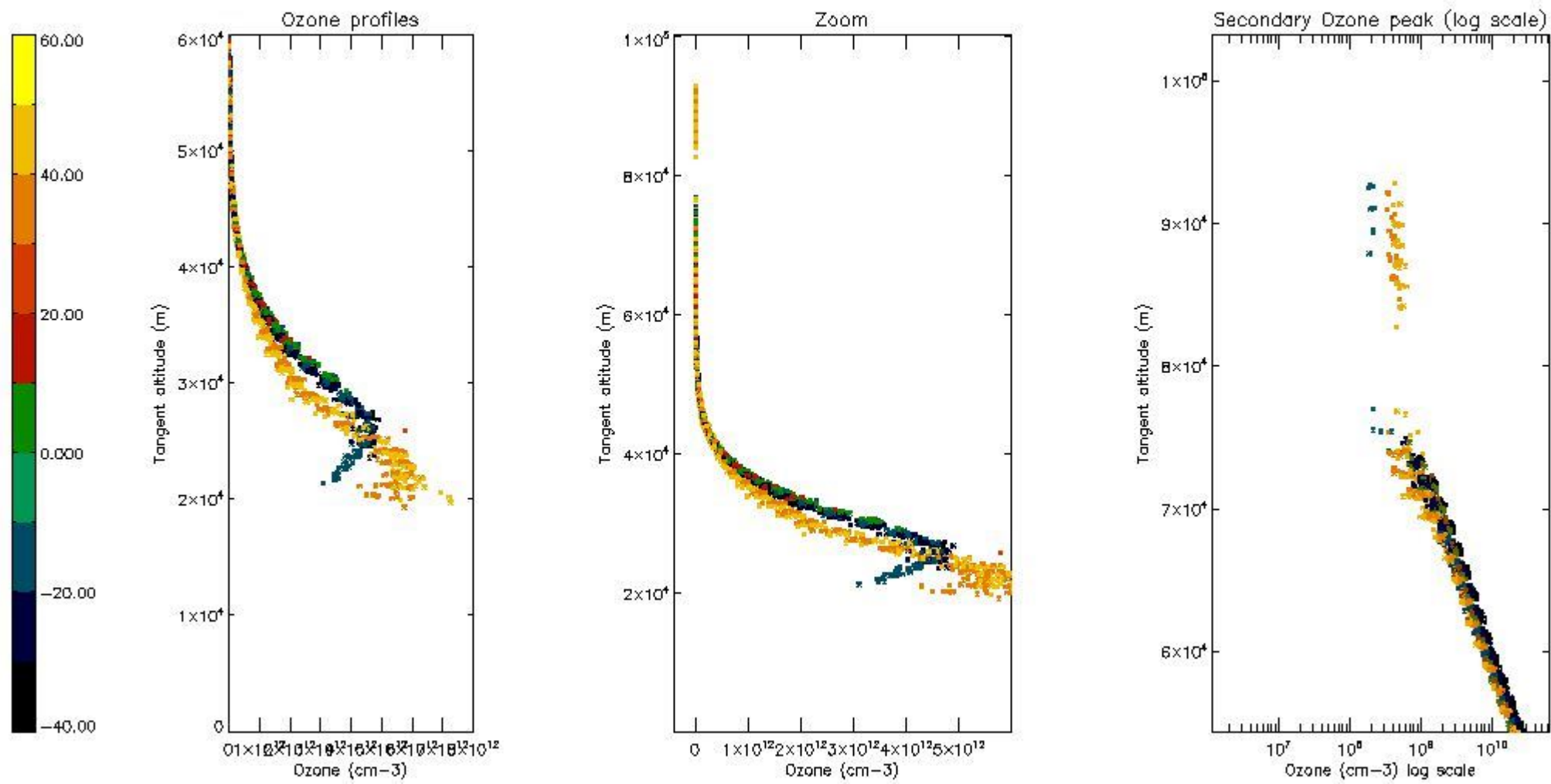
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



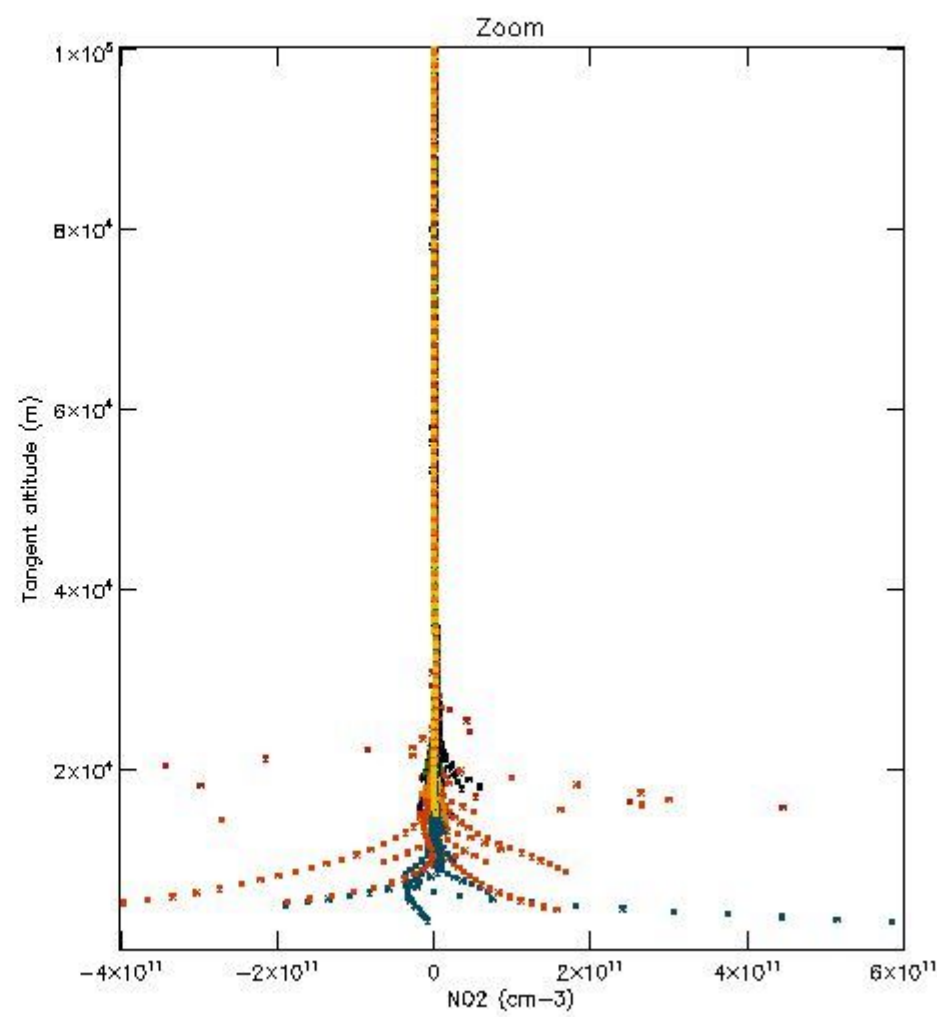
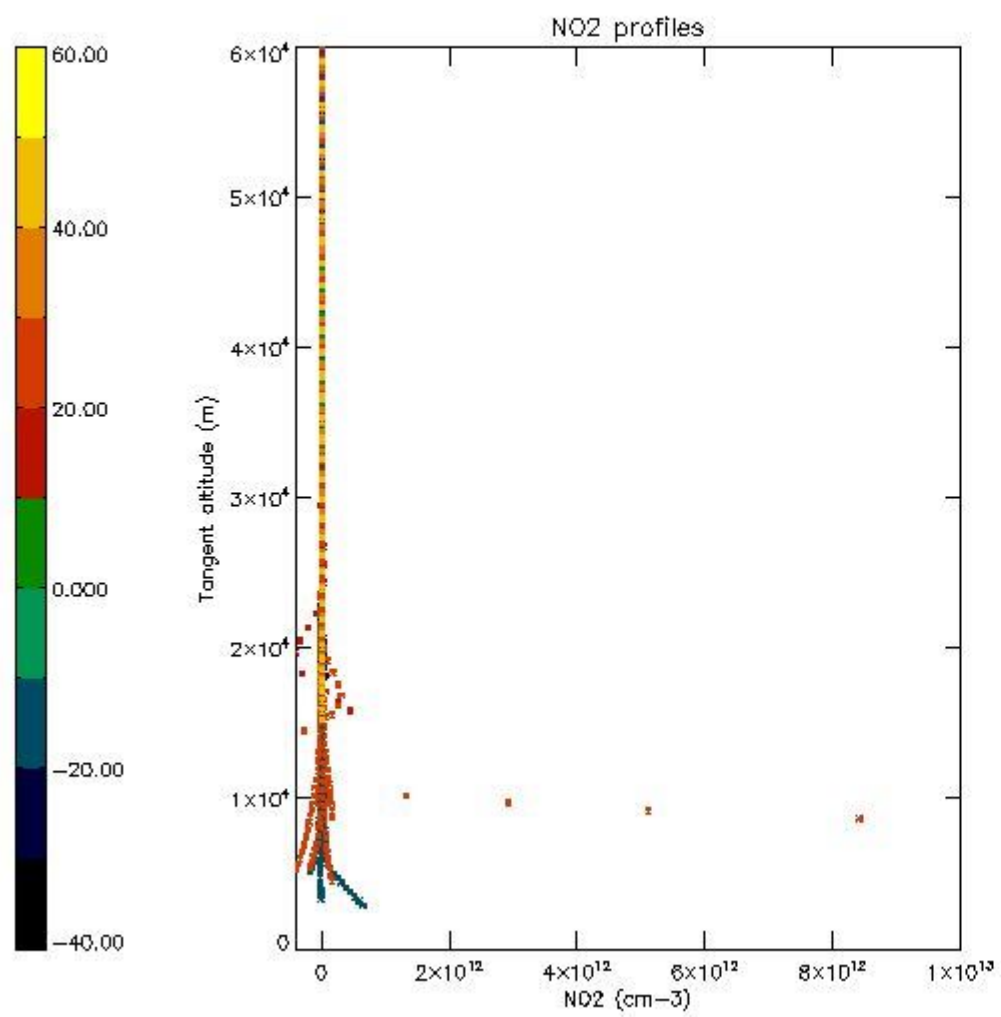
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



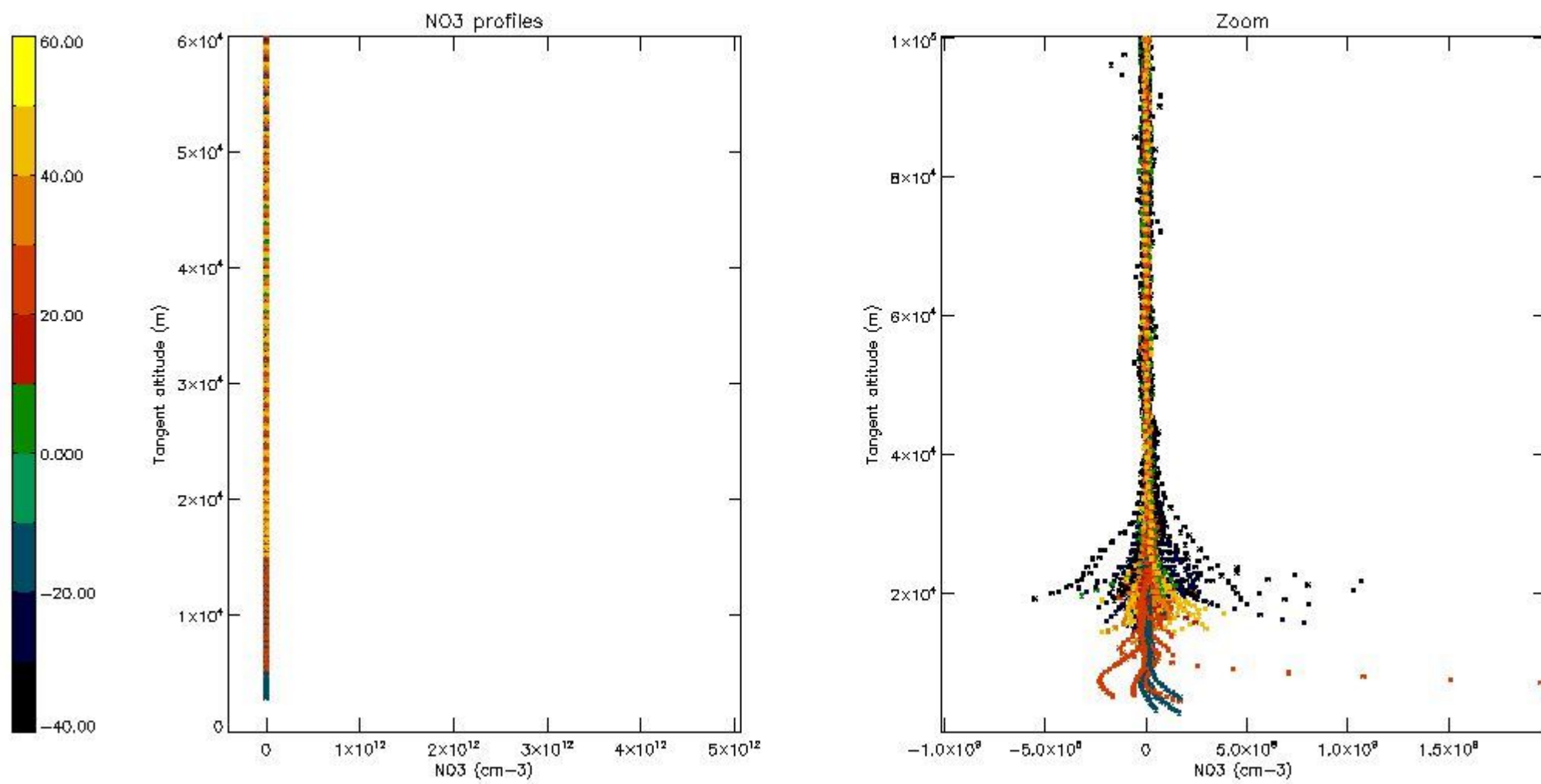
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



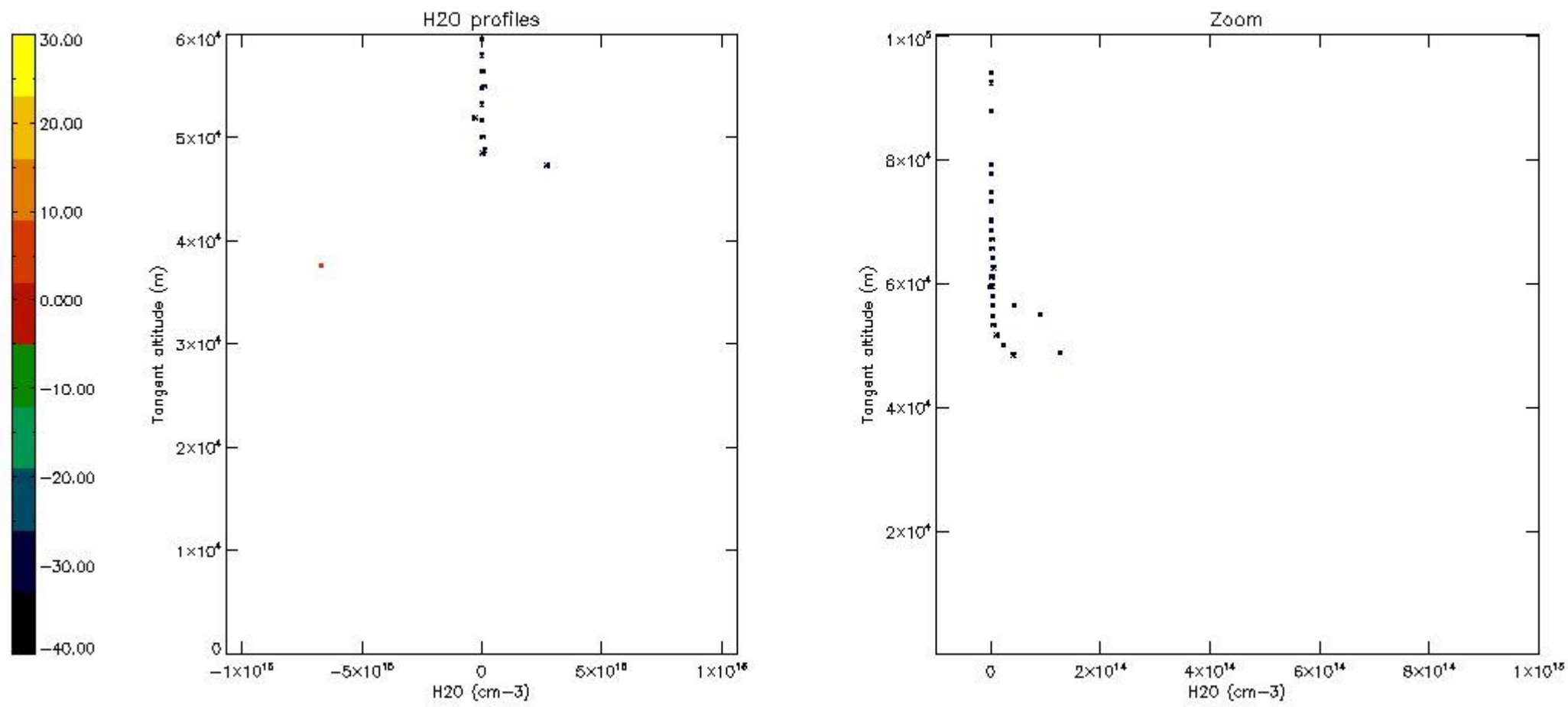
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

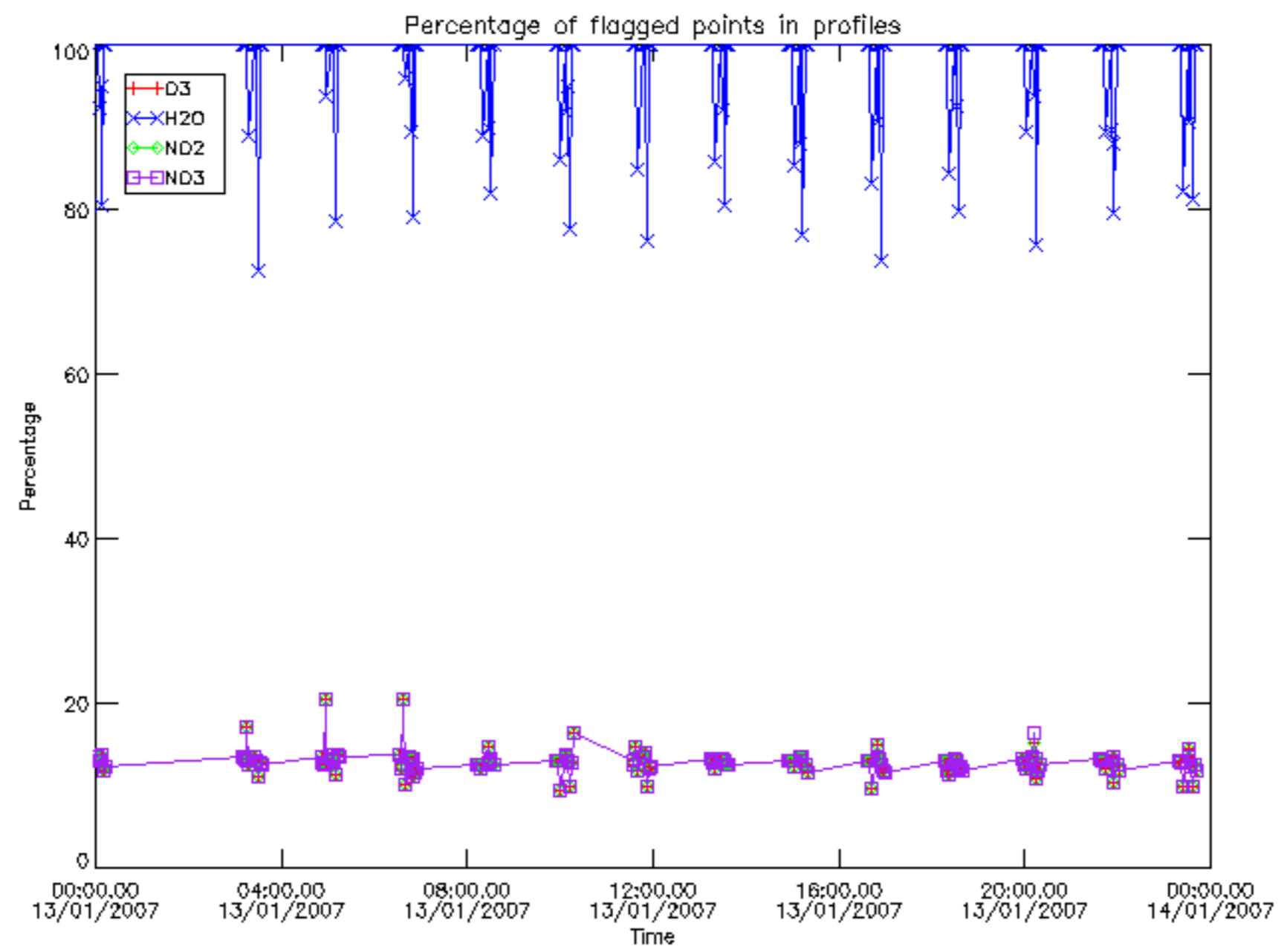
The colorbar represents the latitude.



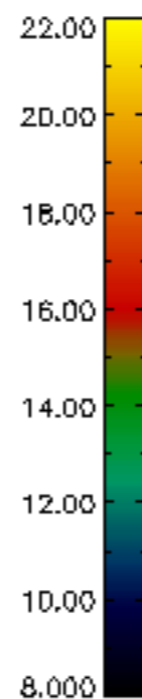
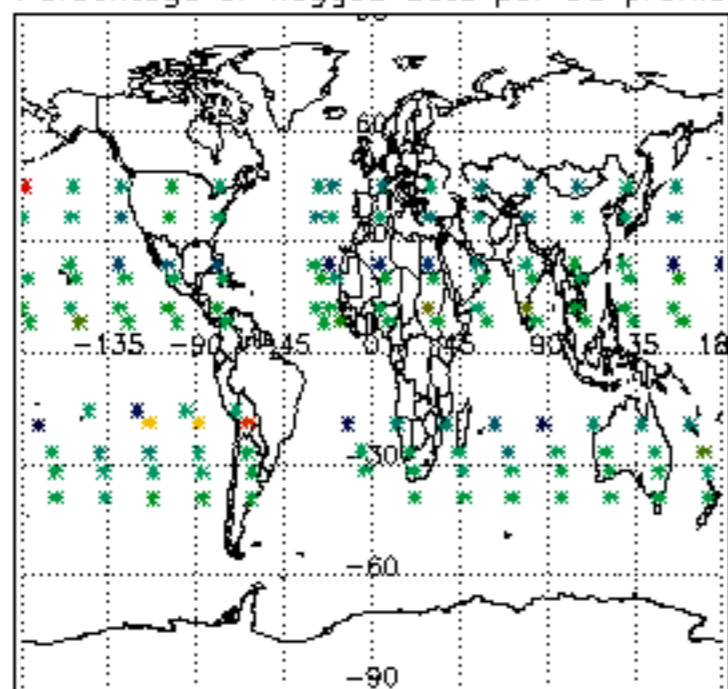
6. Auxiliary Data Files used for the production reported in section 2

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

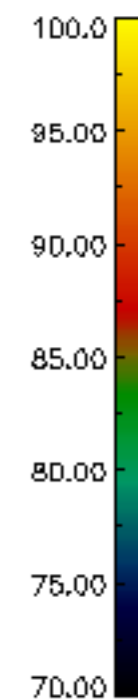
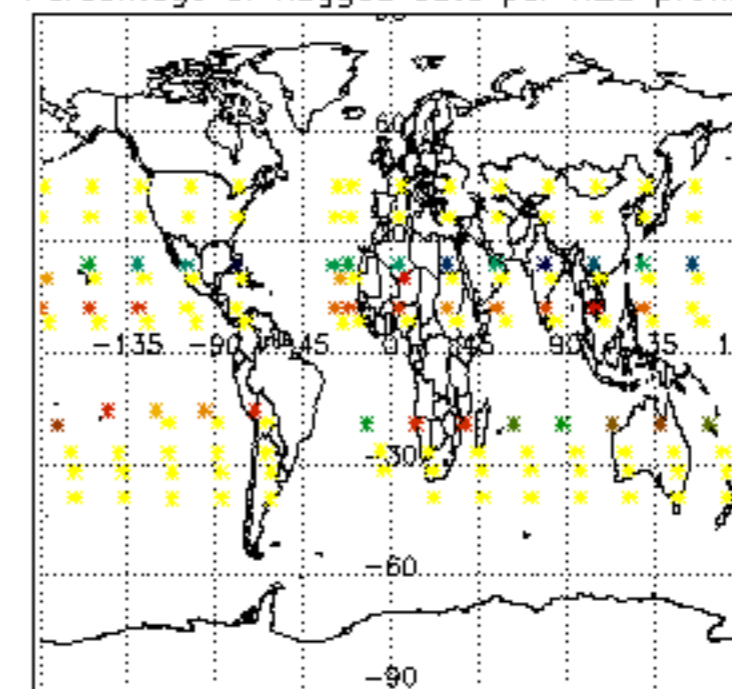
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	13-JAN-2007 00:03:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-JAN-2007 00:03:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-JAN-2007 00:03:08



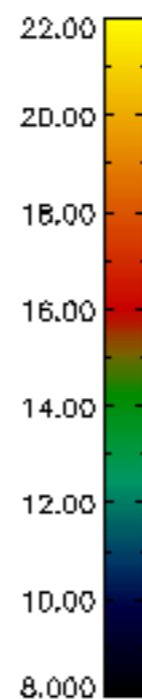
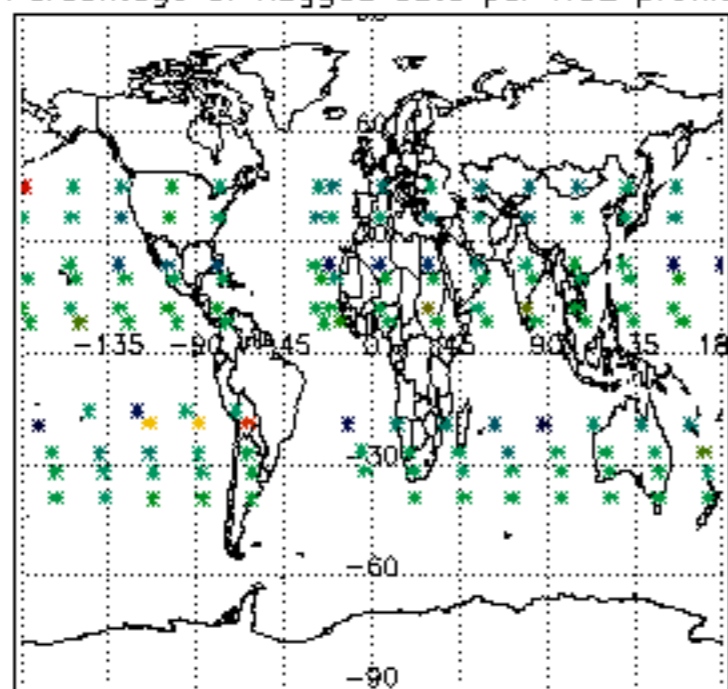
Percentage of flagged data per D3 profile



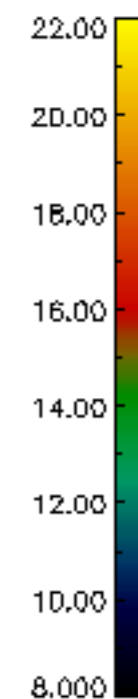
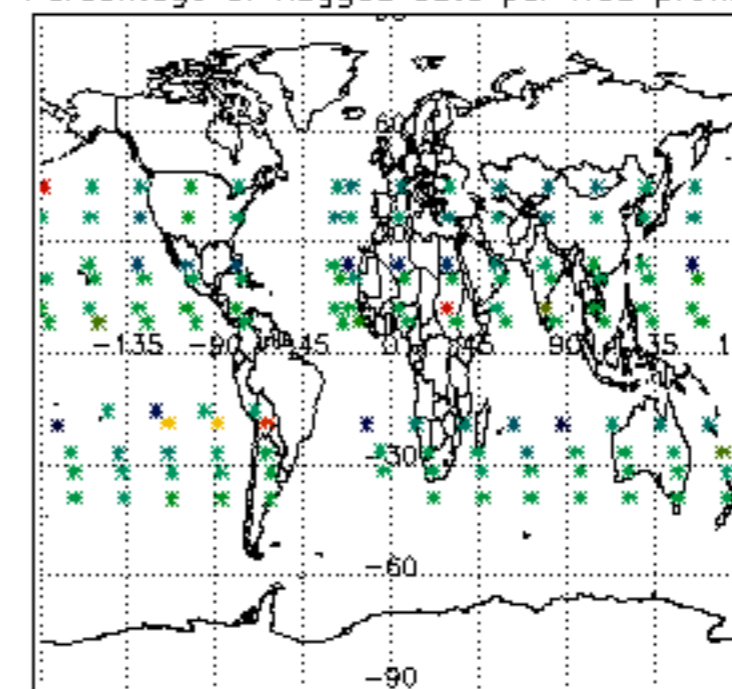
Percentage of flagged data per H2O profile

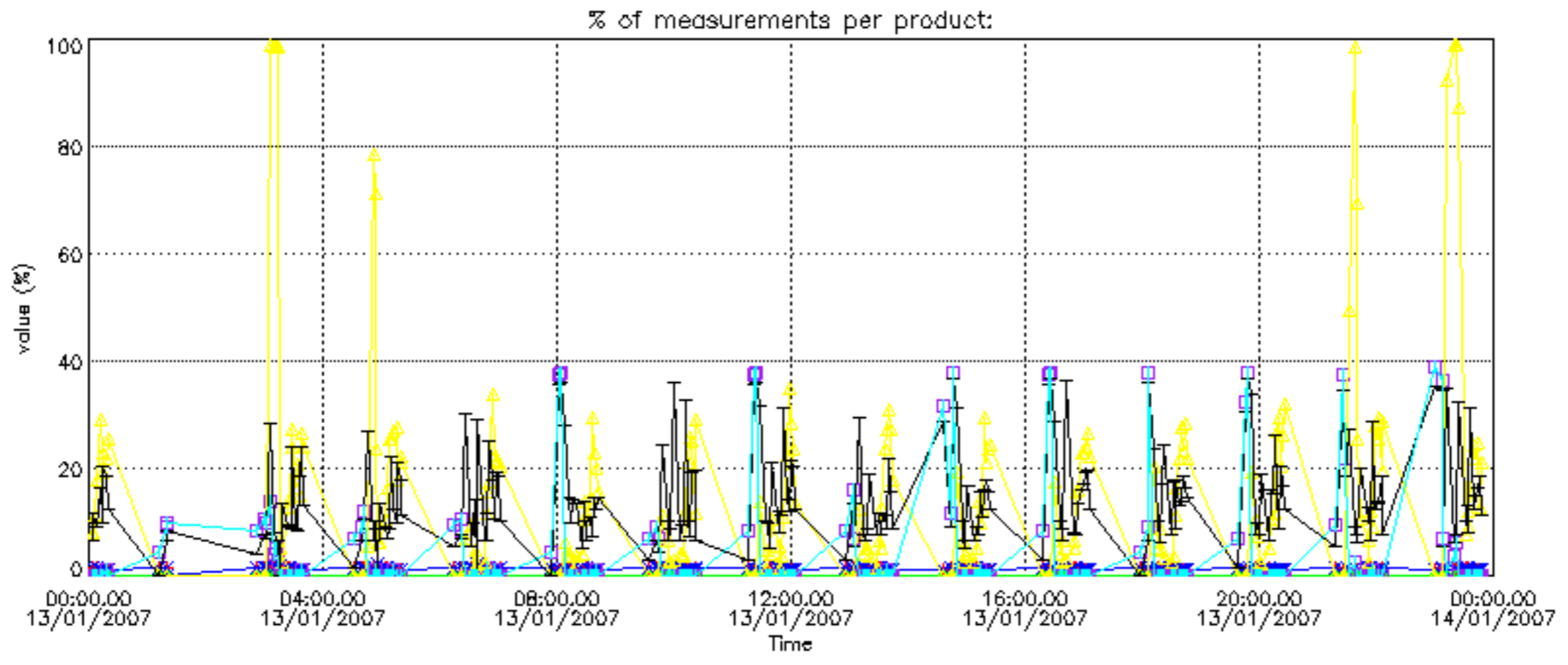


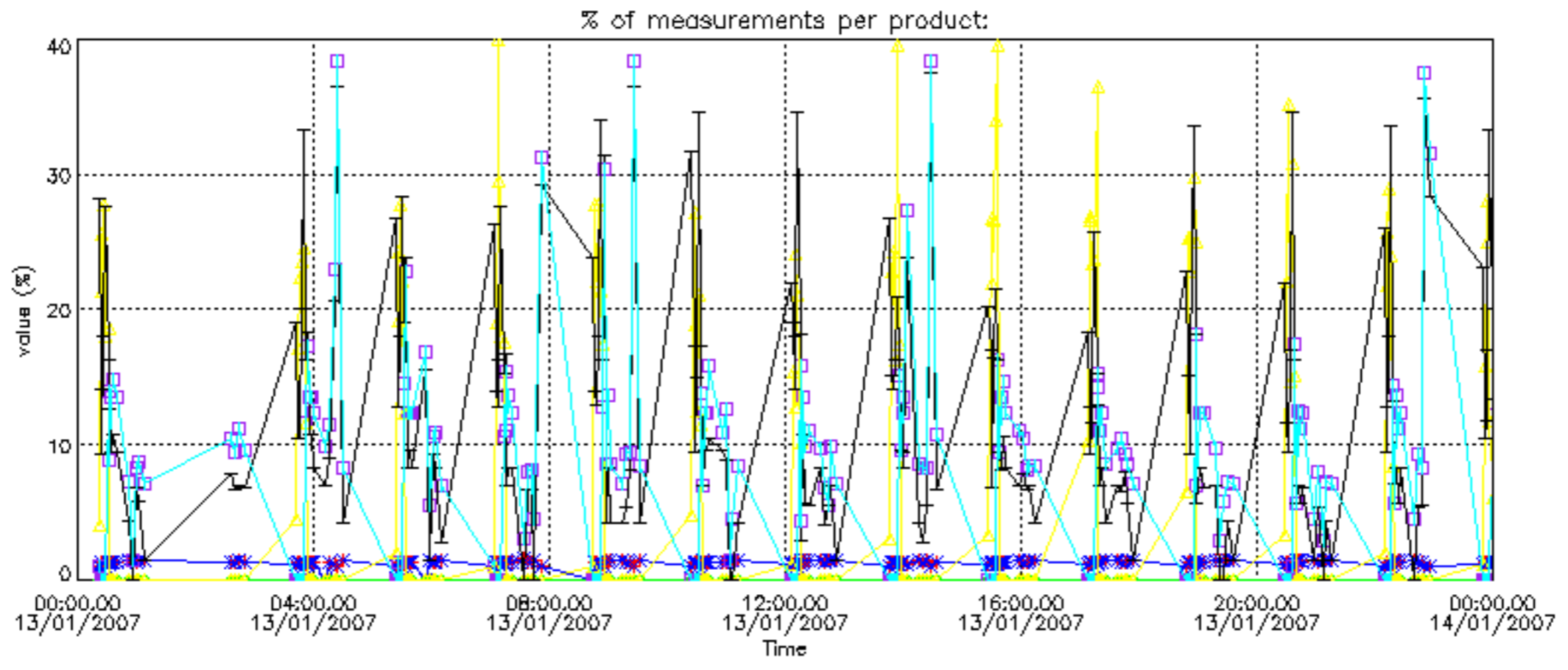
Percentage of flagged data per NO2 profile



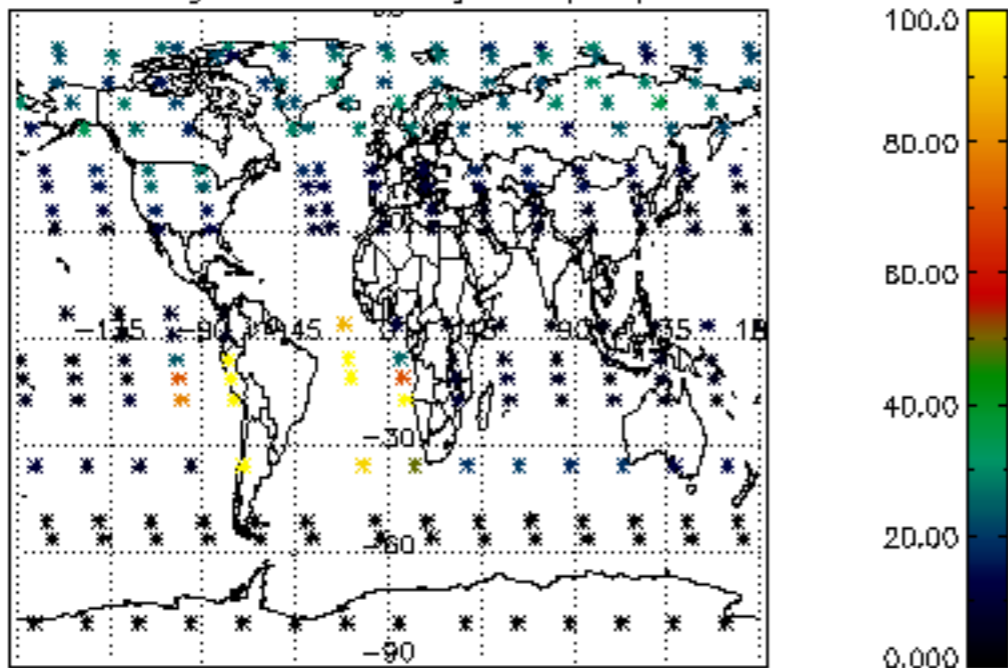
Percentage of flagged data per NO3 profile



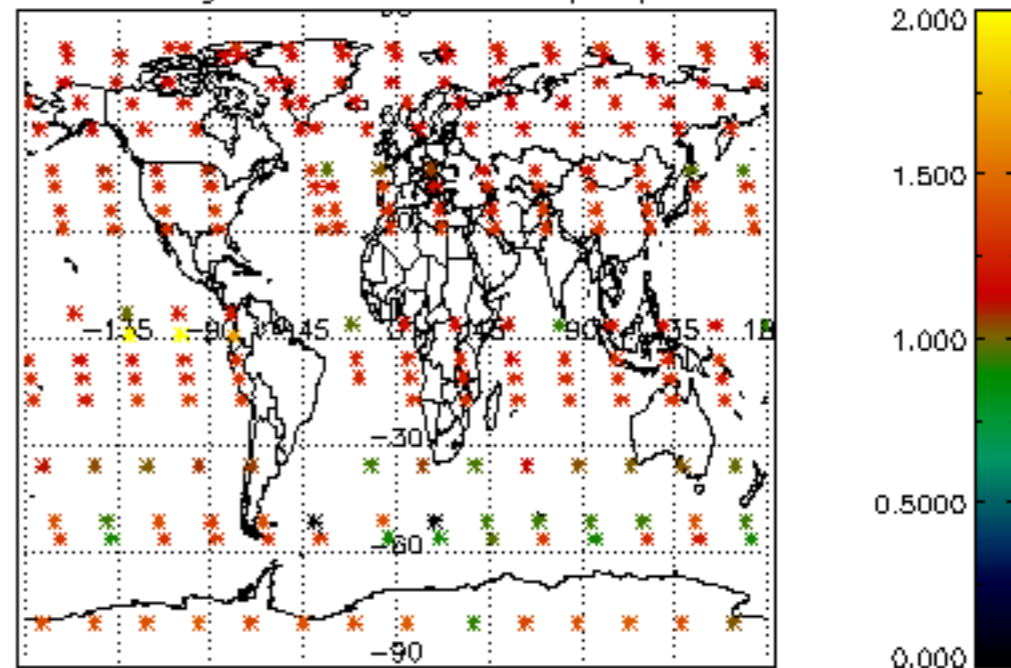




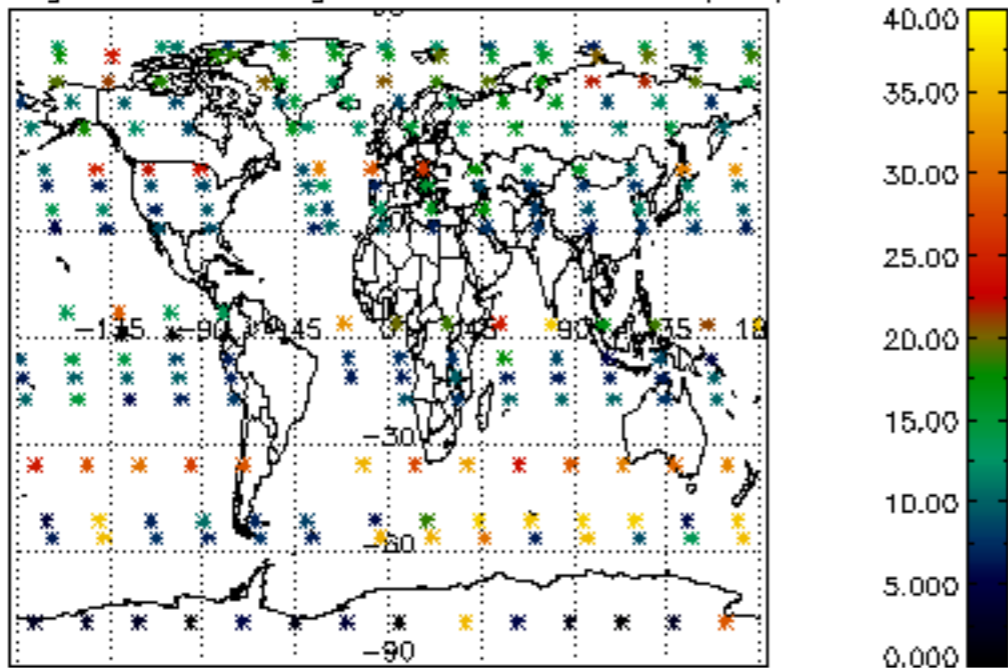
Percentage of cosmic ray hits per profile



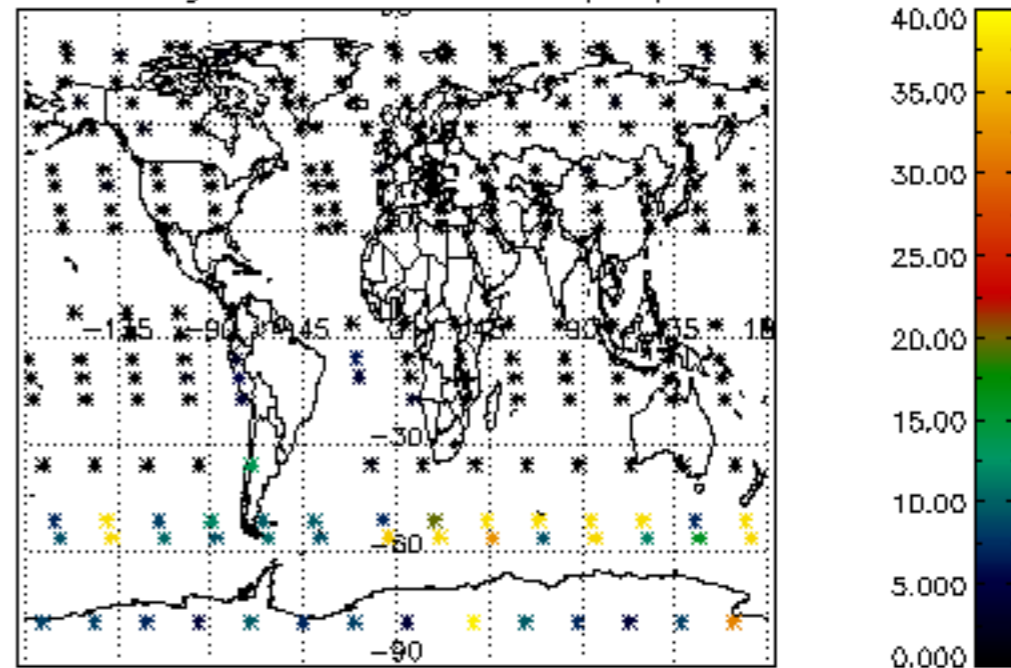
Percentage of datation errors per profile



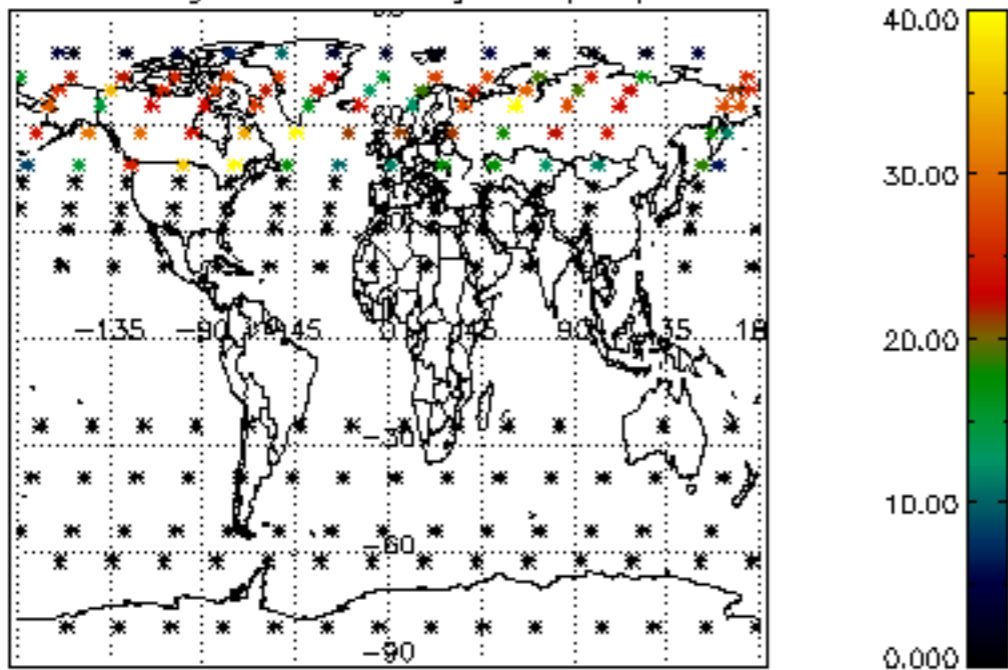
Percentage of star falling outside central band per profile



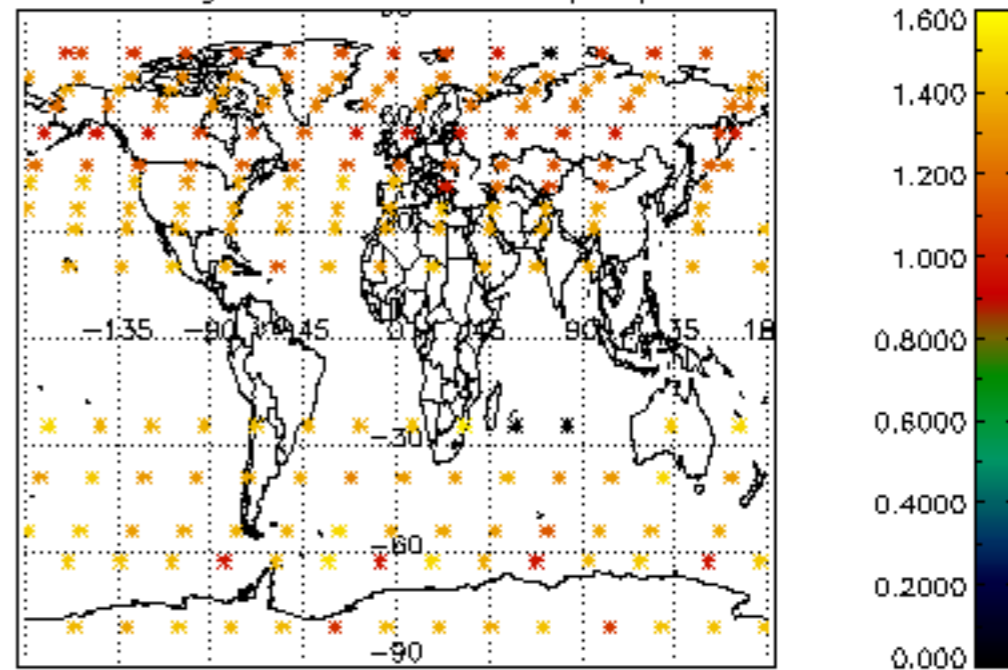
Percentage of saturation errors per profile



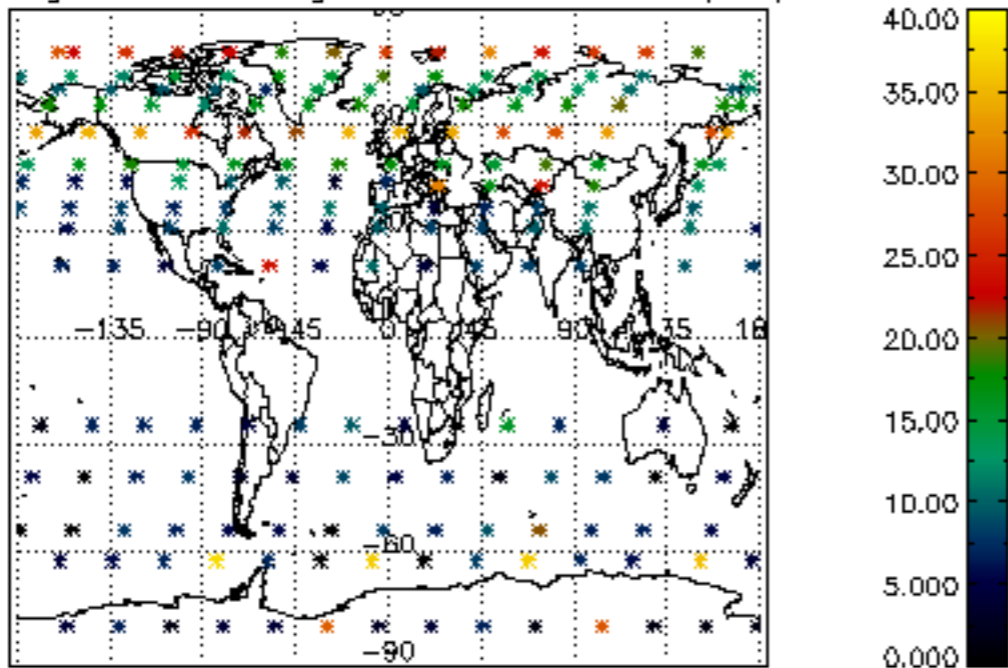
Percentage of cosmic ray hits per profile



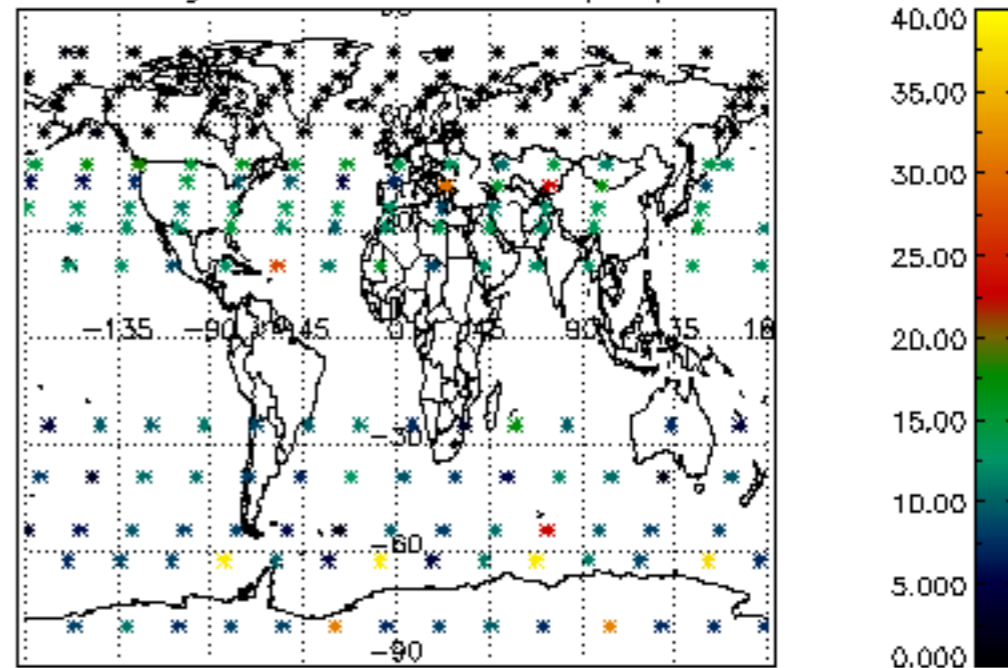
Percentage of datation errors per profile

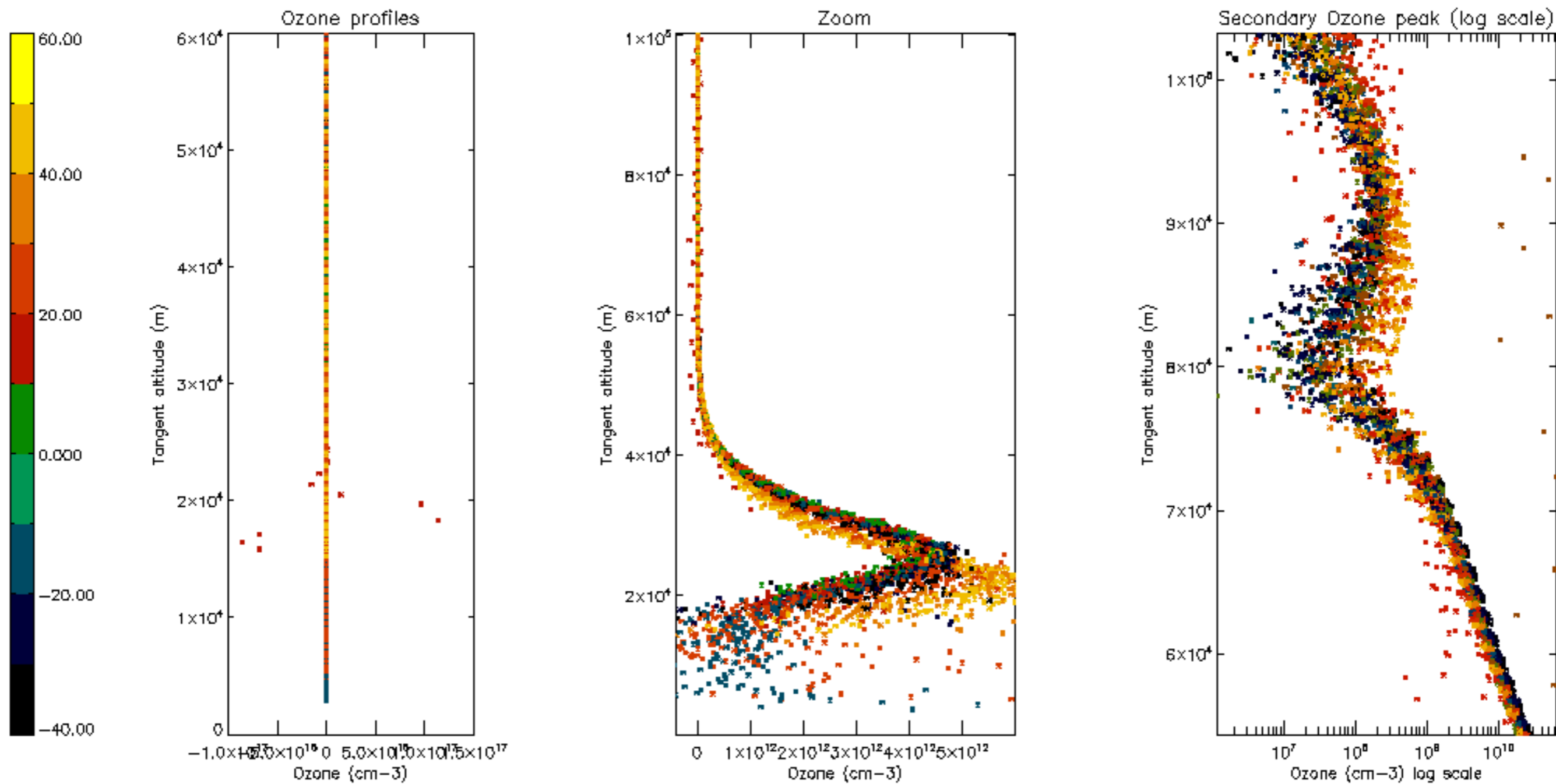


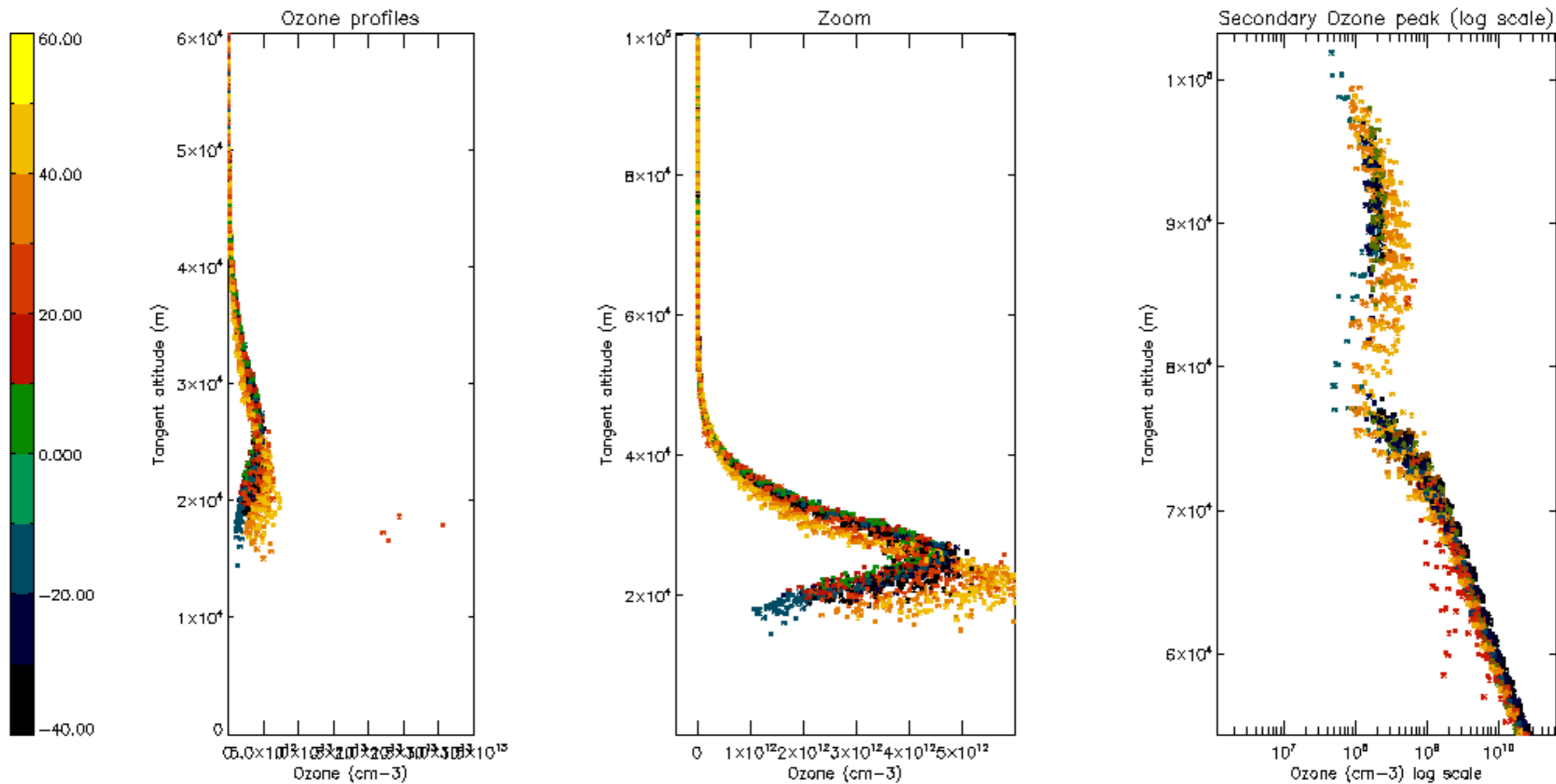
Percentage of star falling outside central band per profile

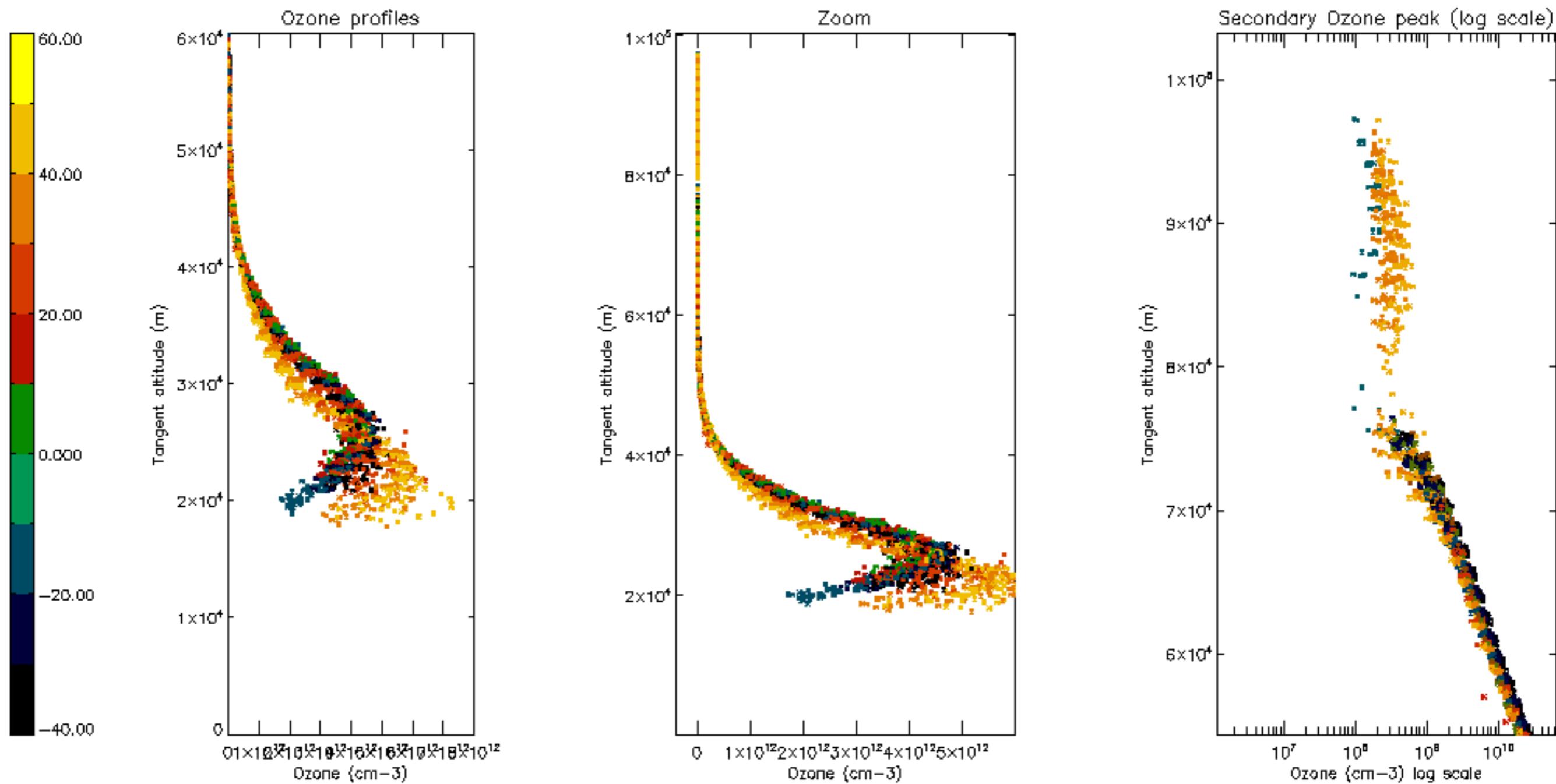


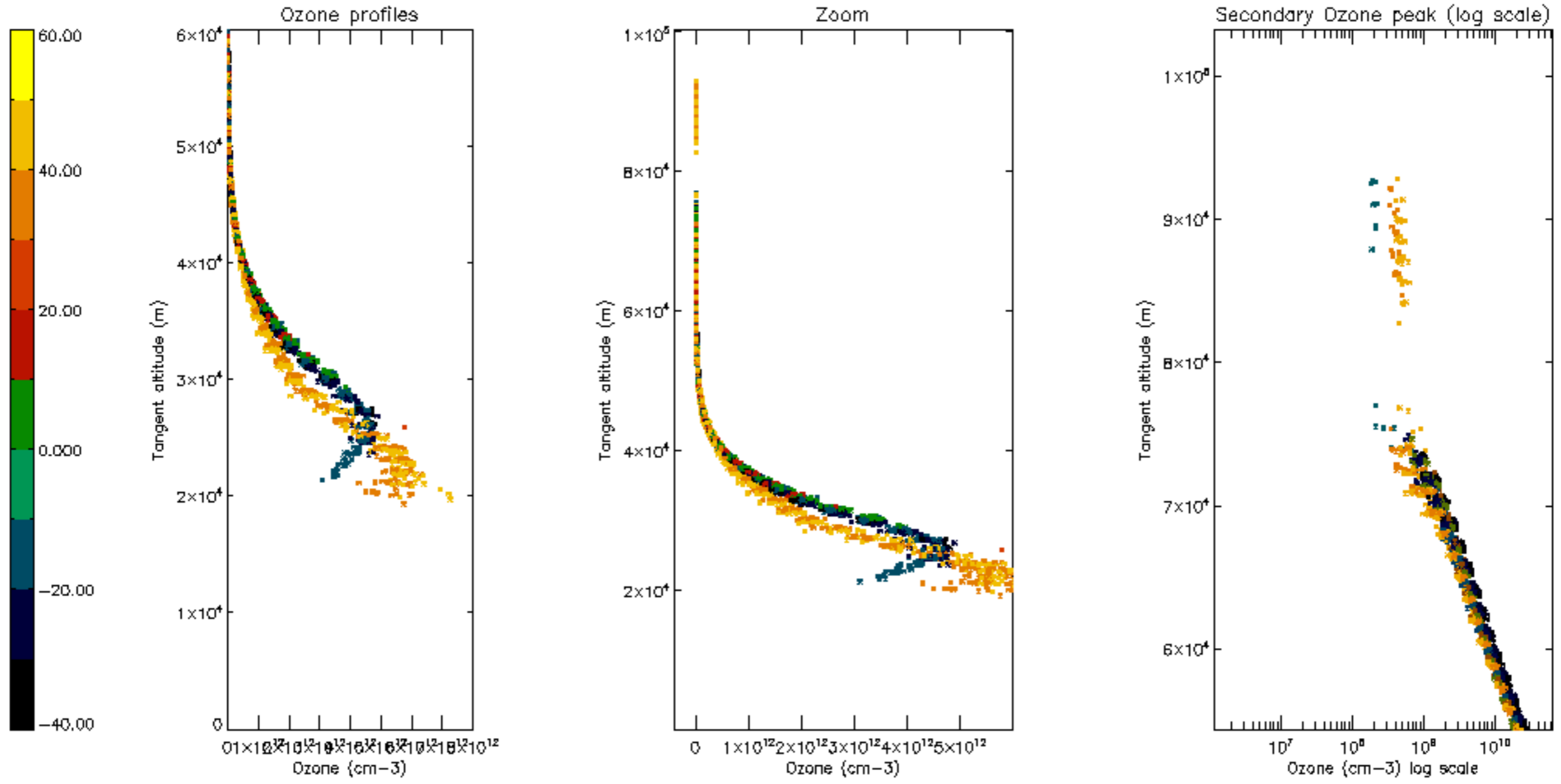
Percentage of saturation errors per profile

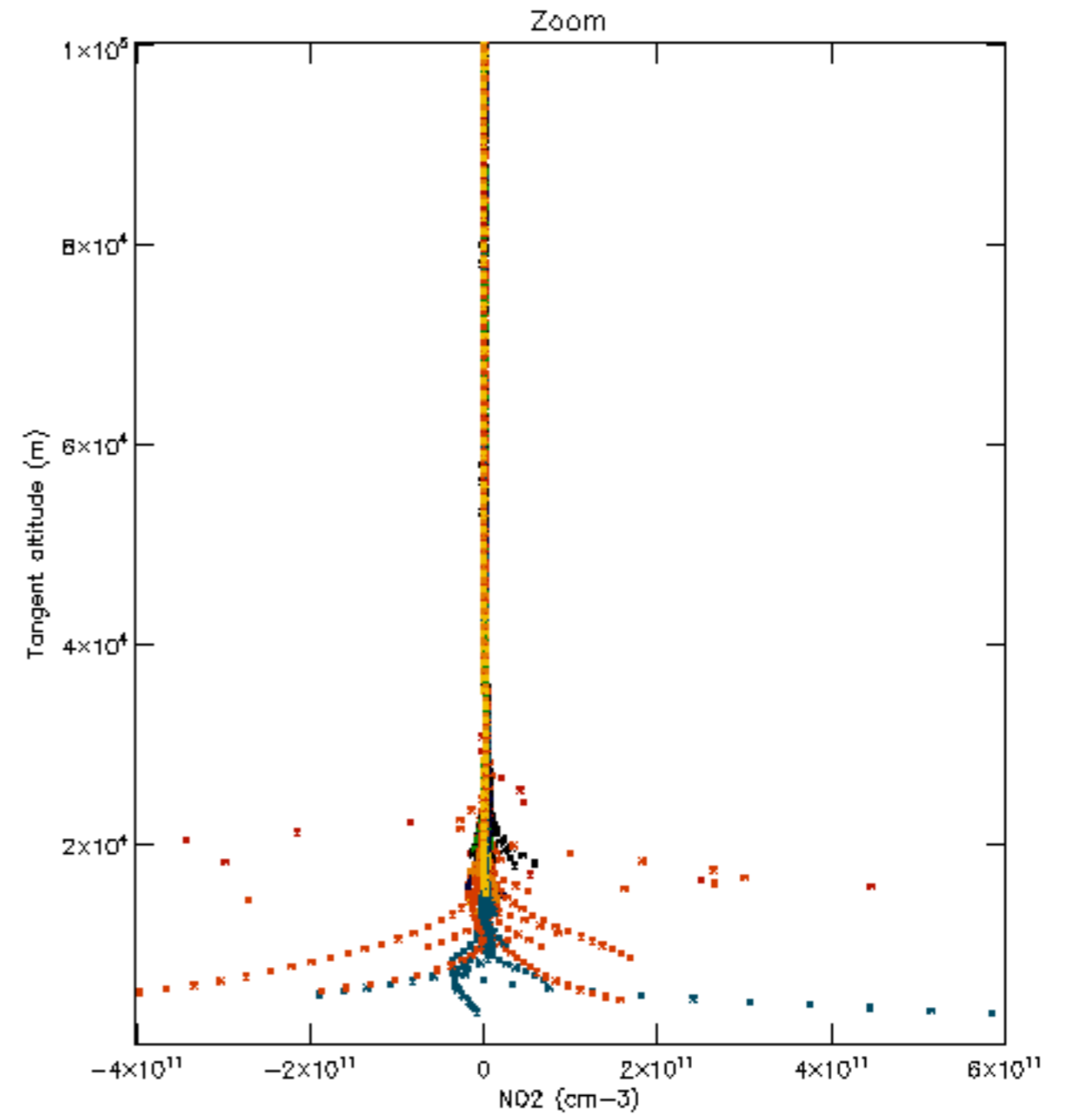
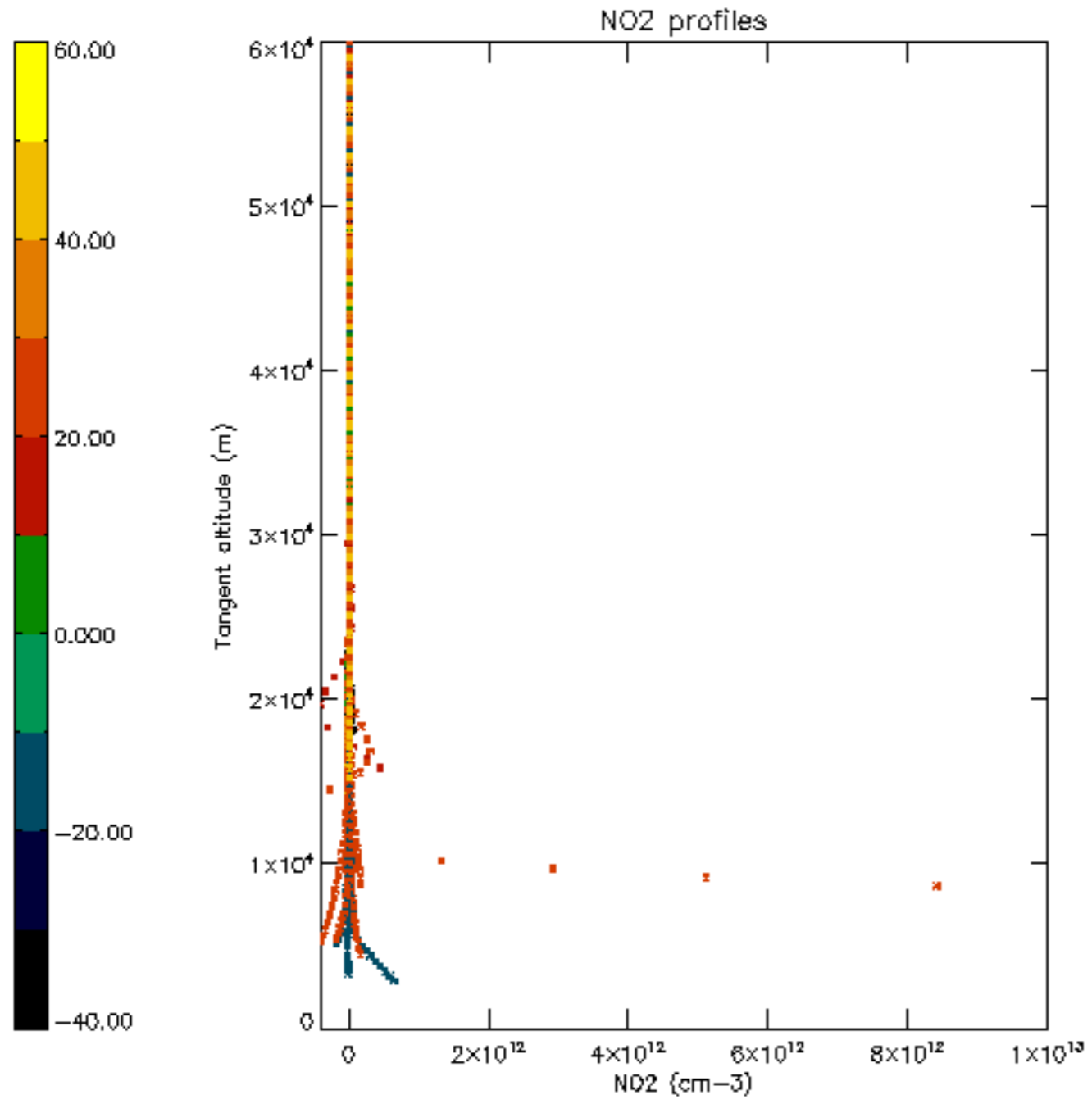


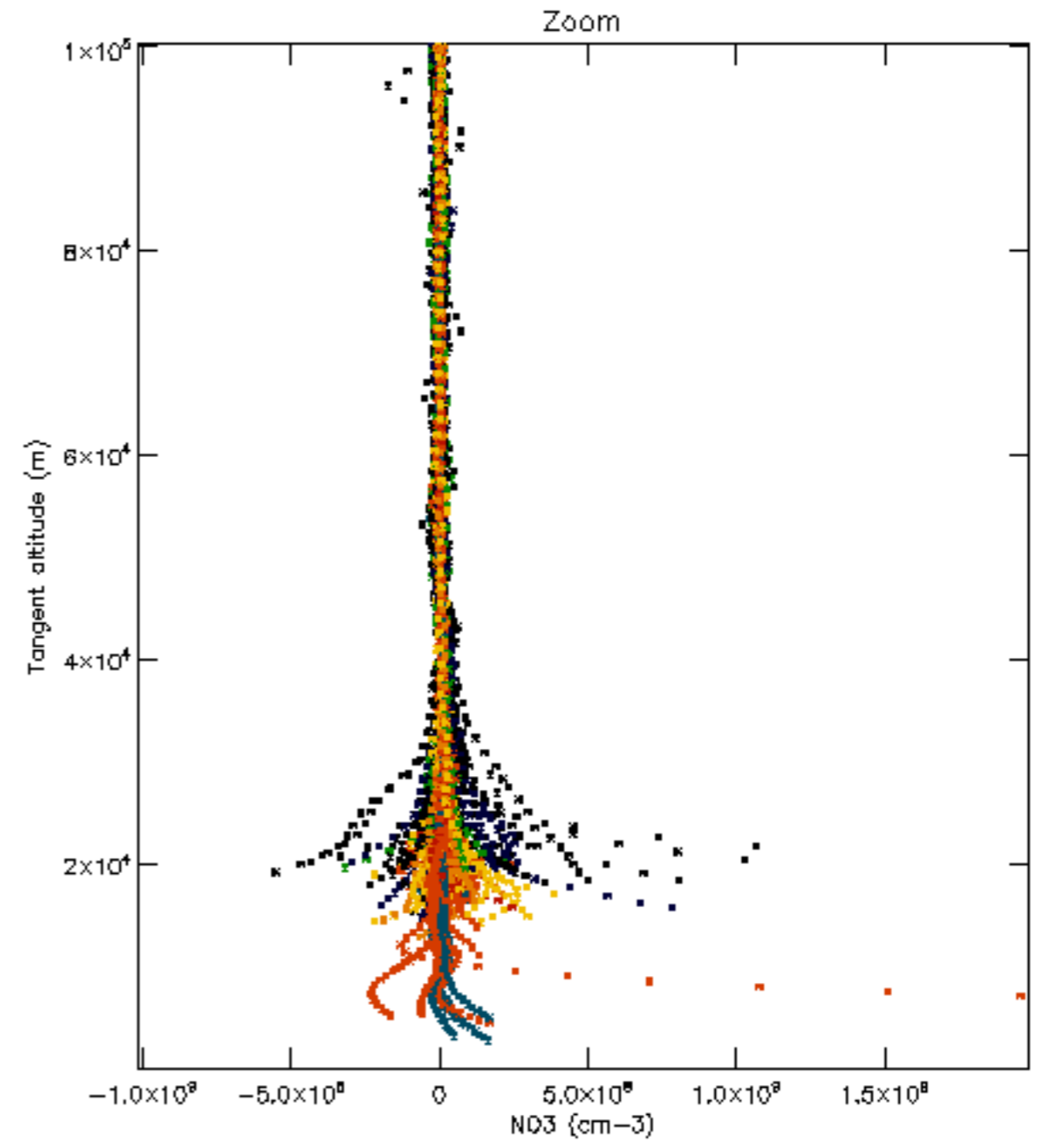
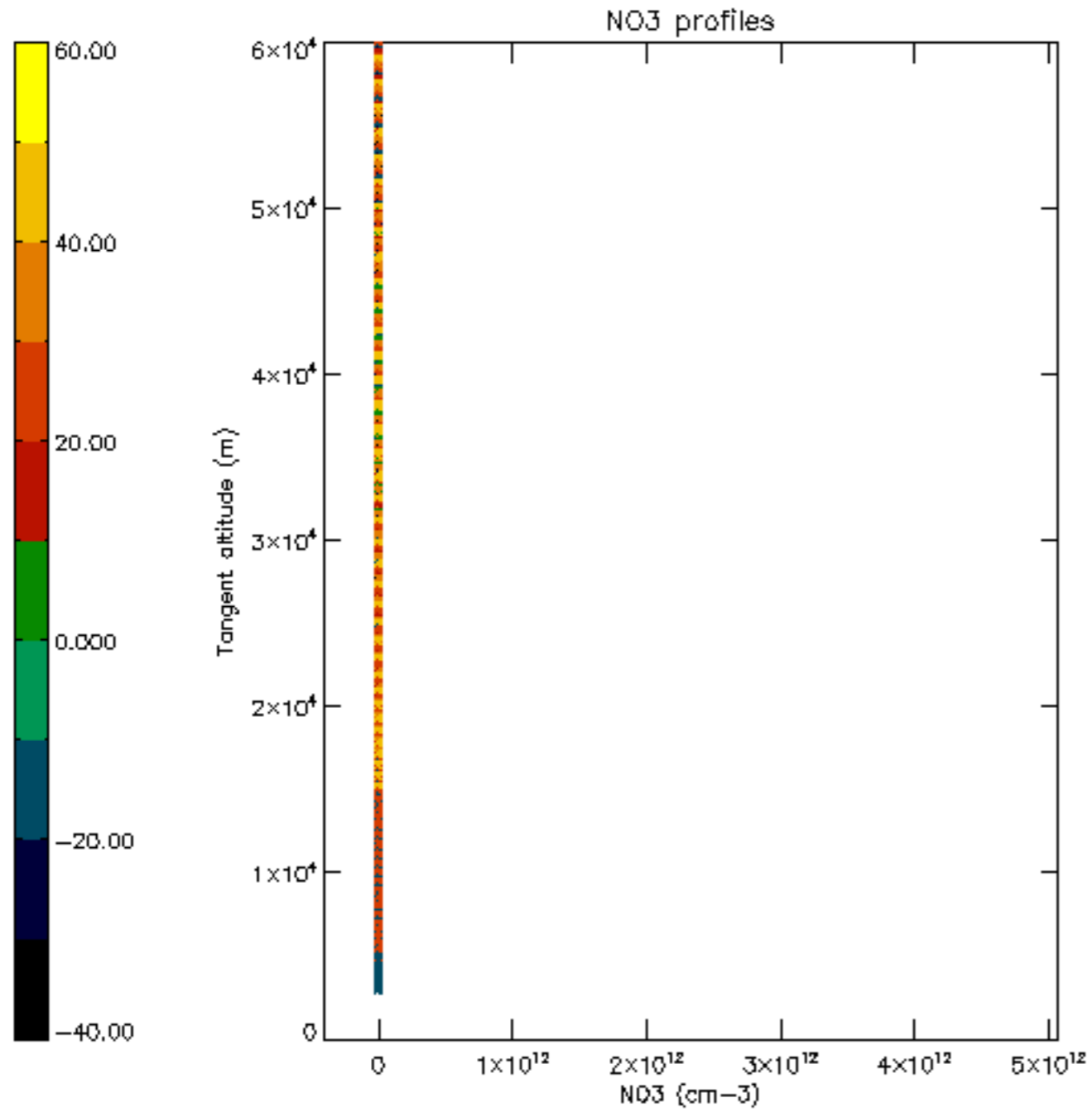


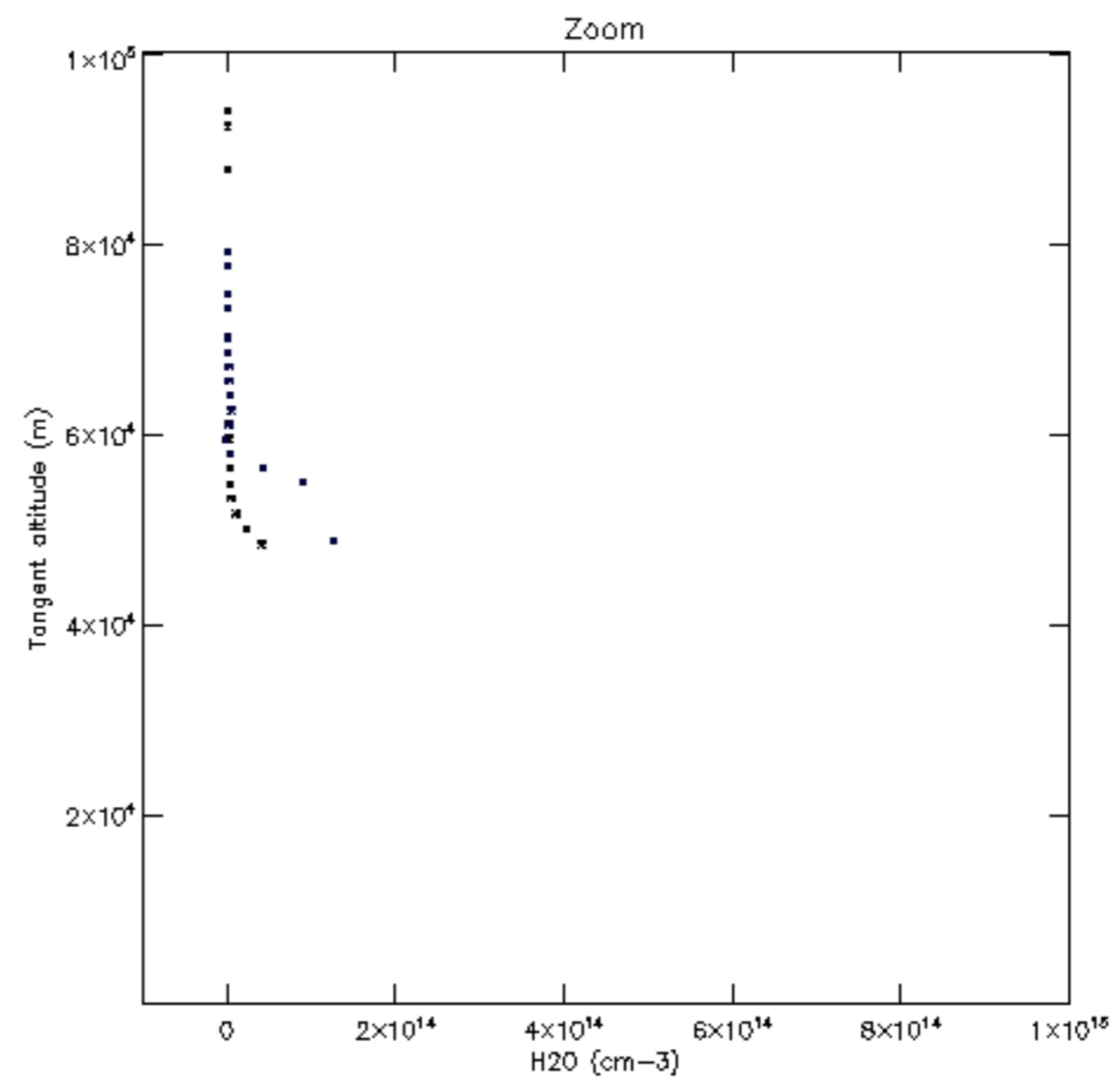
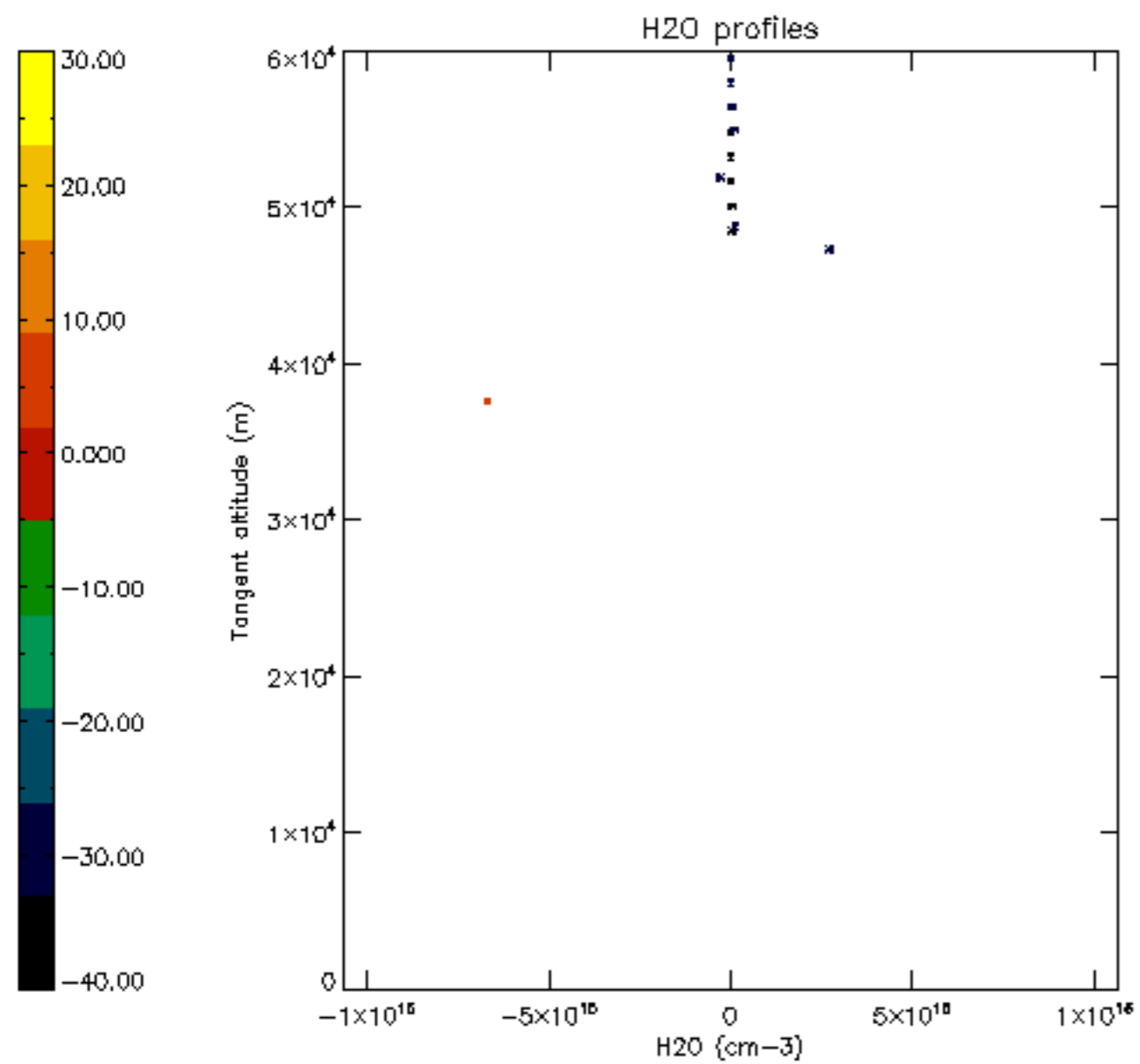


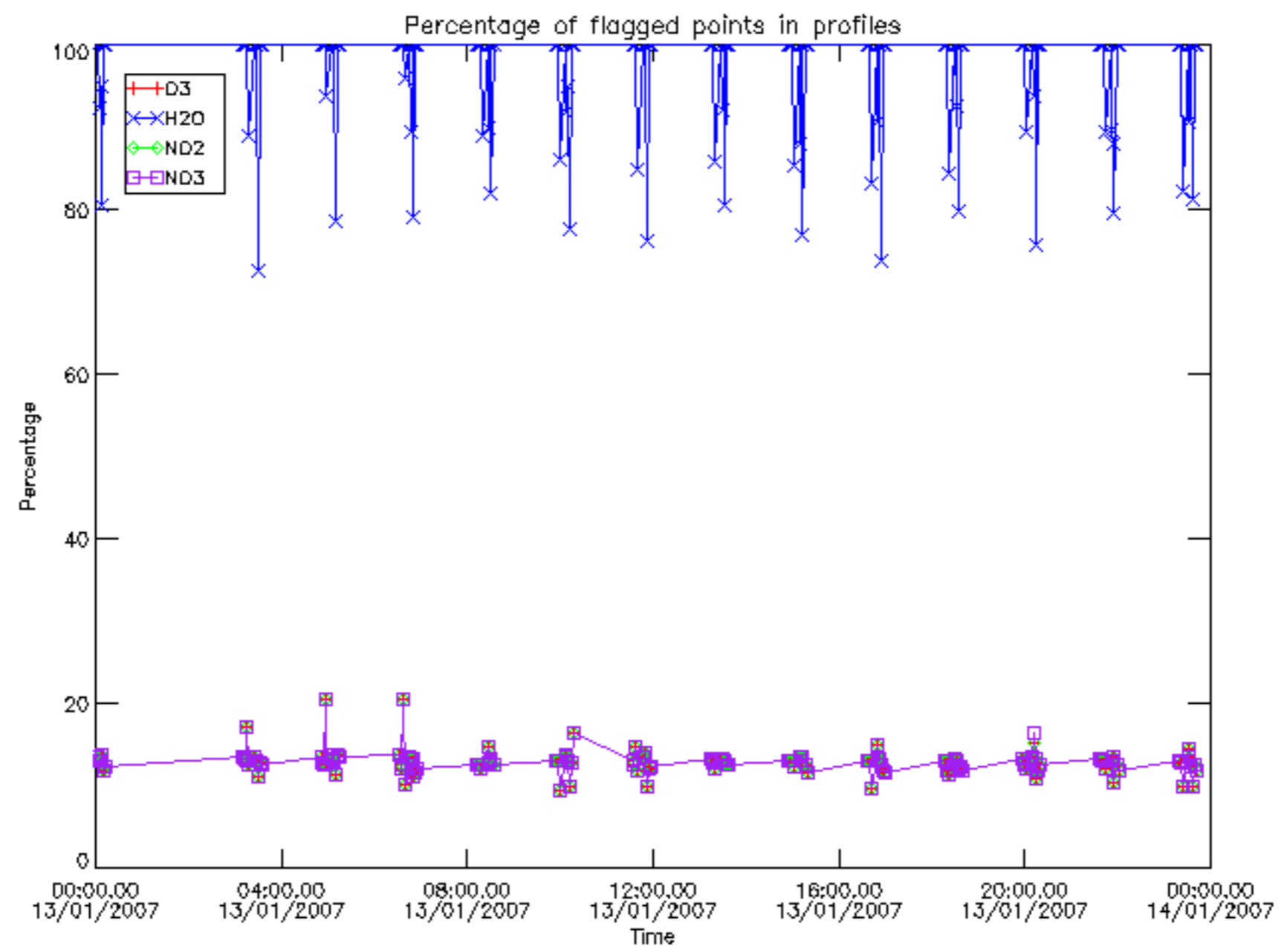




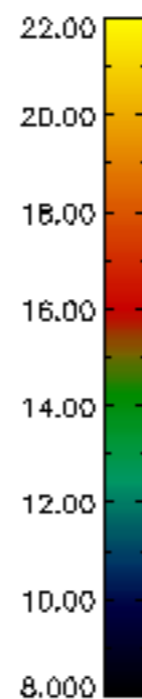
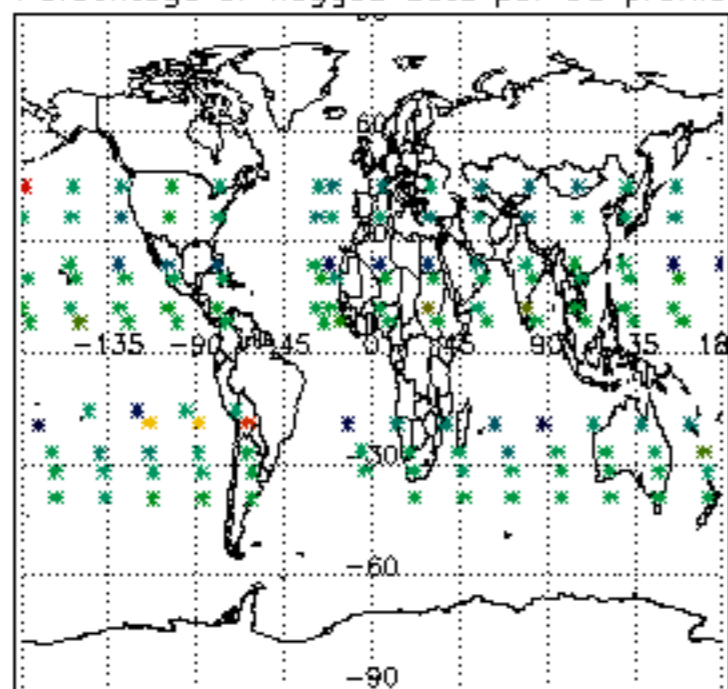




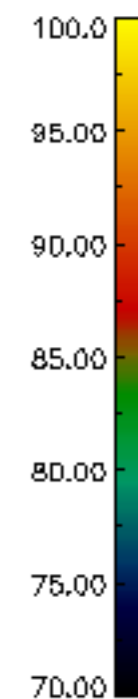
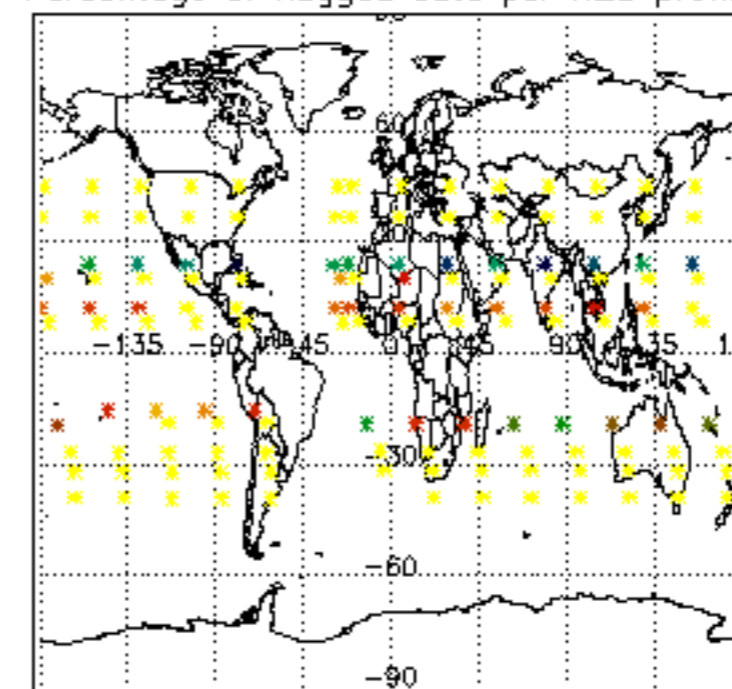




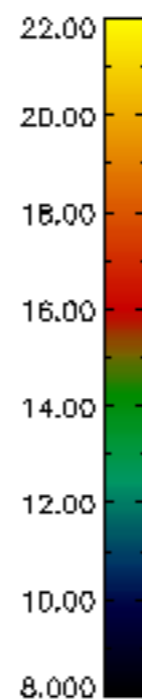
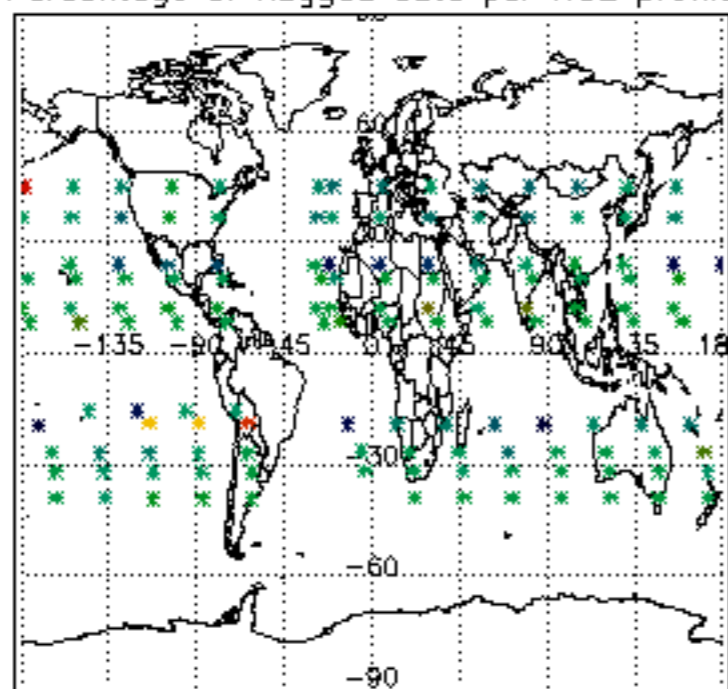
Percentage of flagged data per D3 profile



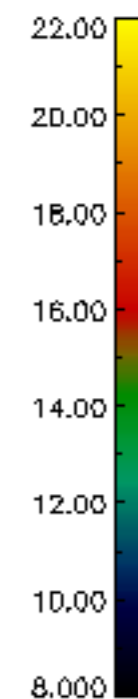
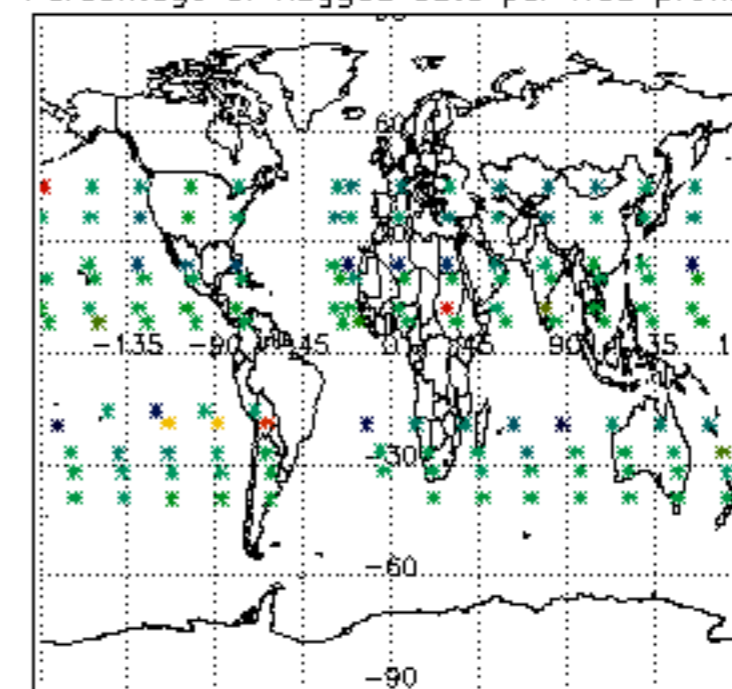
Percentage of flagged data per H2O profile

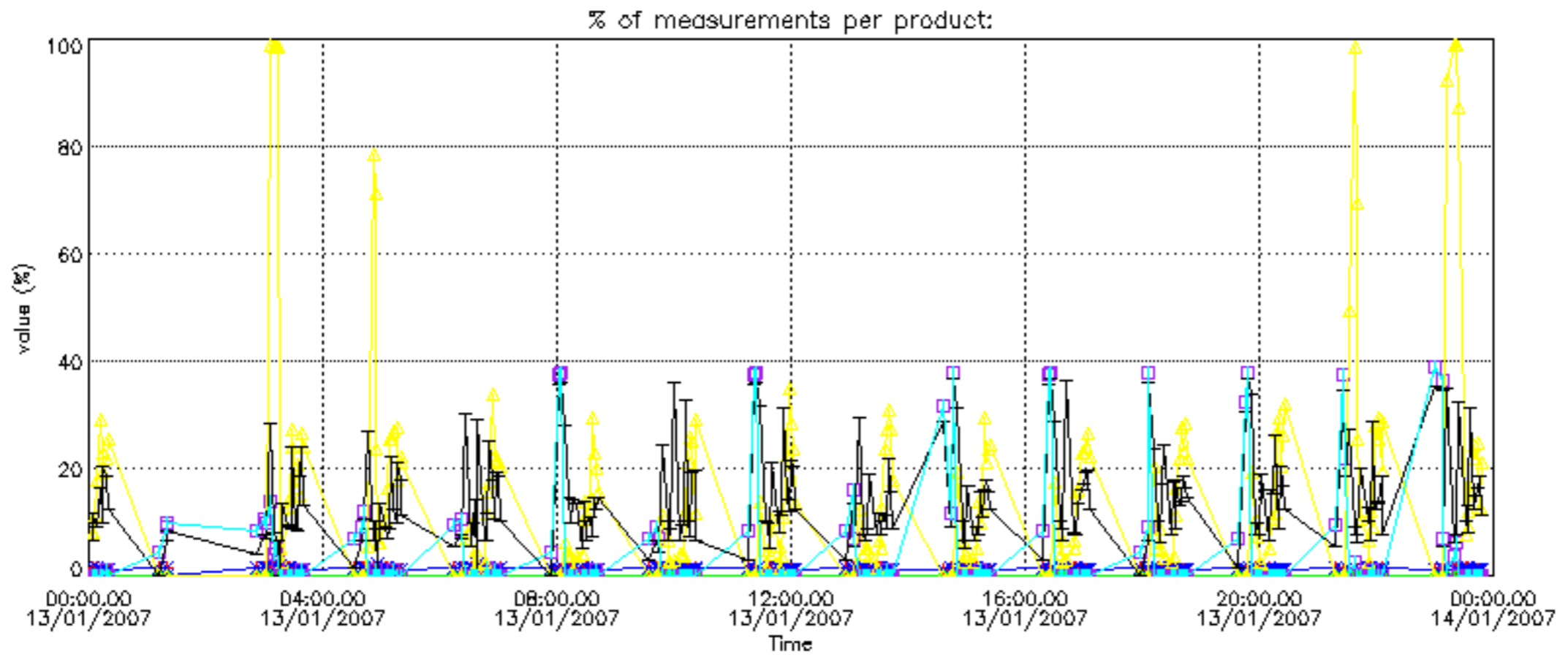


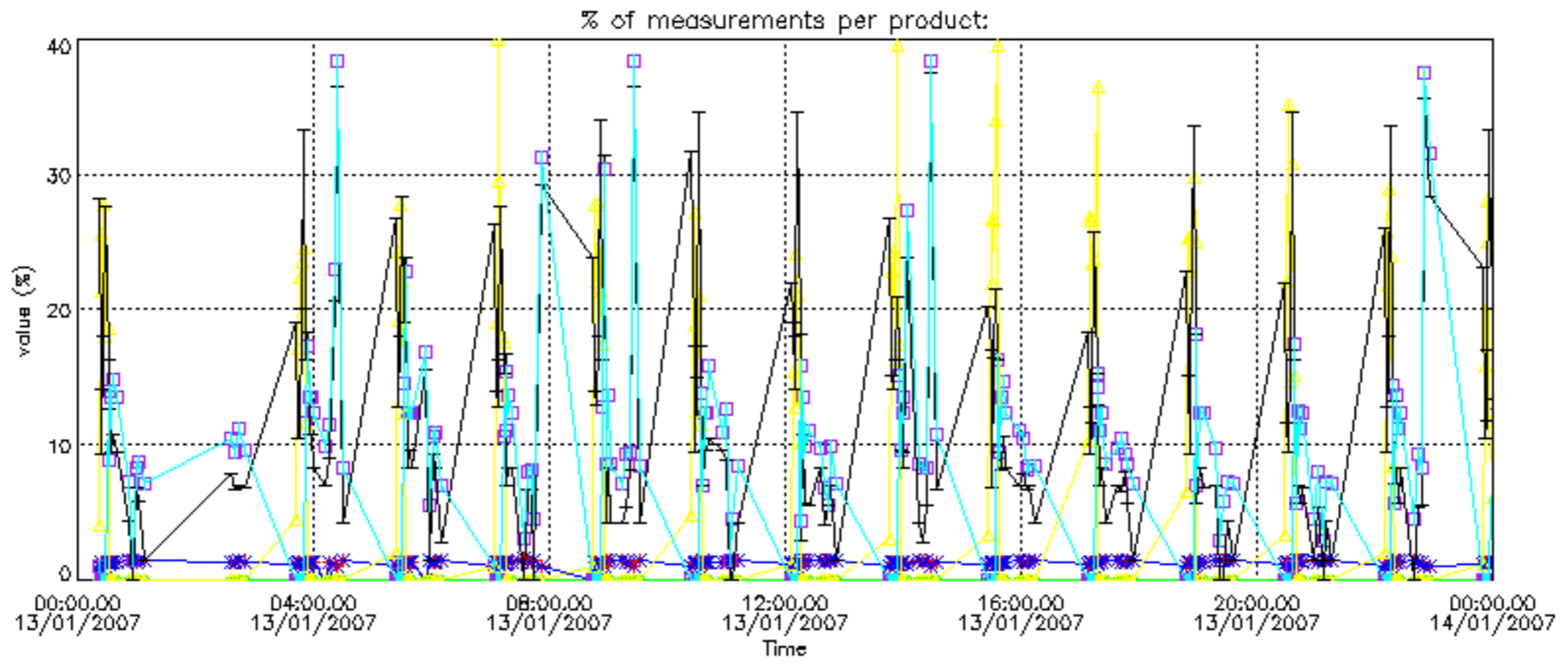
Percentage of flagged data per NO2 profile



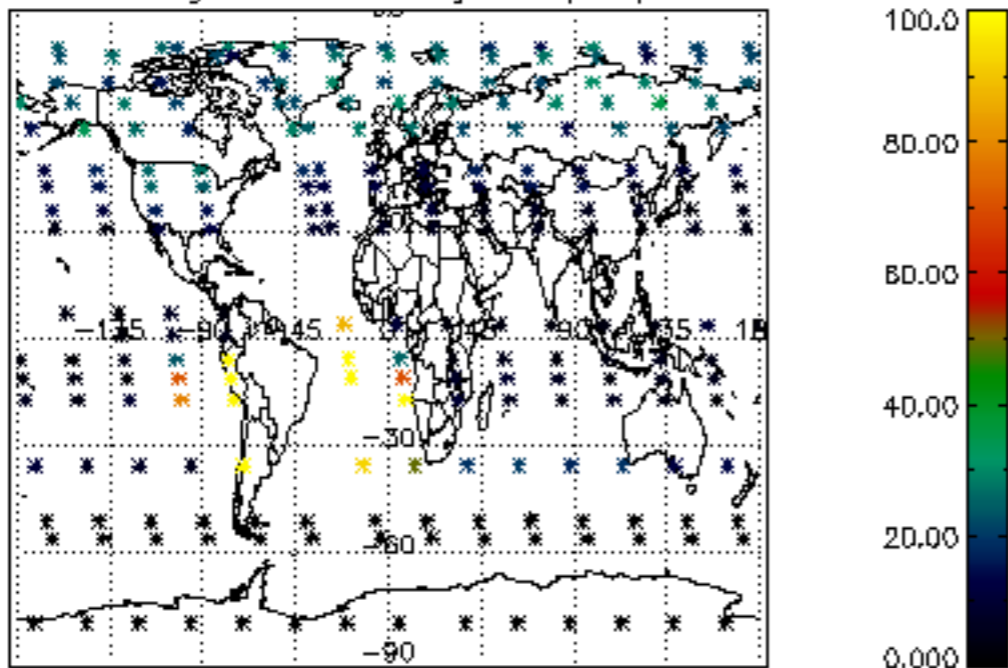
Percentage of flagged data per NO3 profile



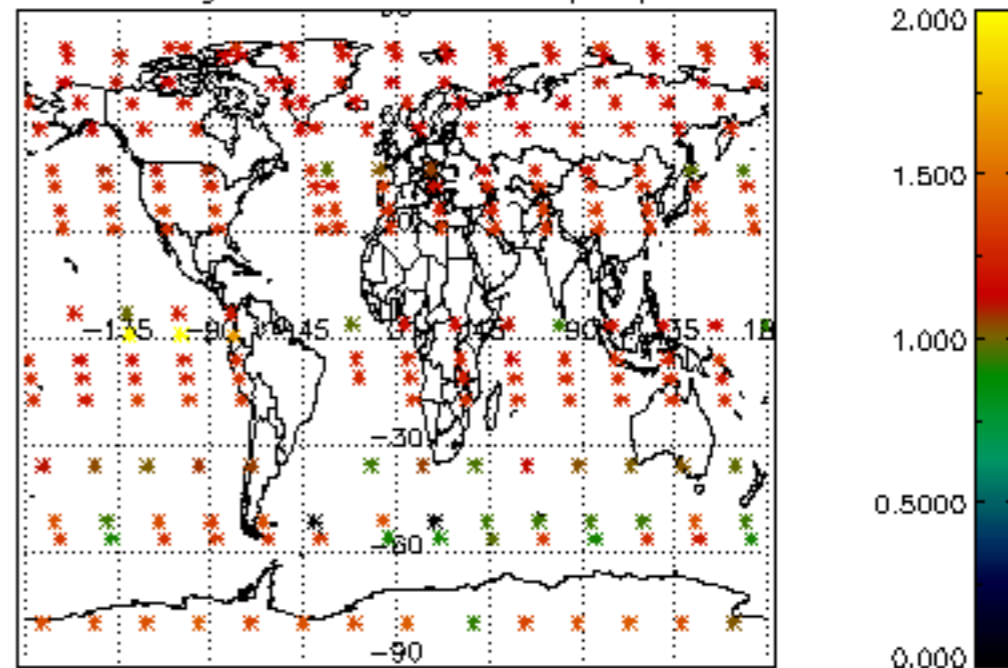




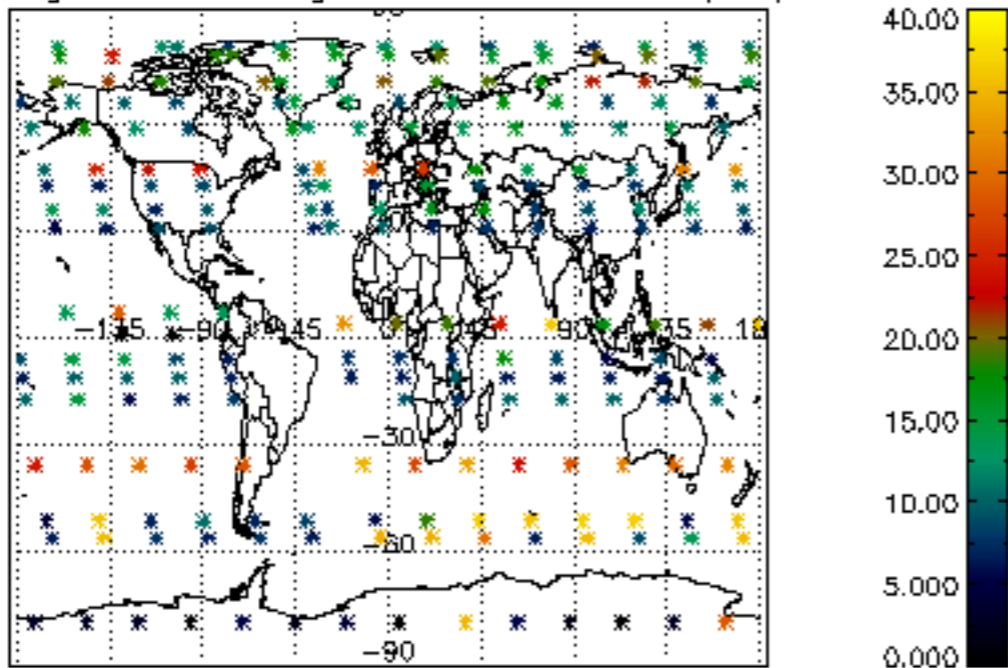
Percentage of cosmic ray hits per profile



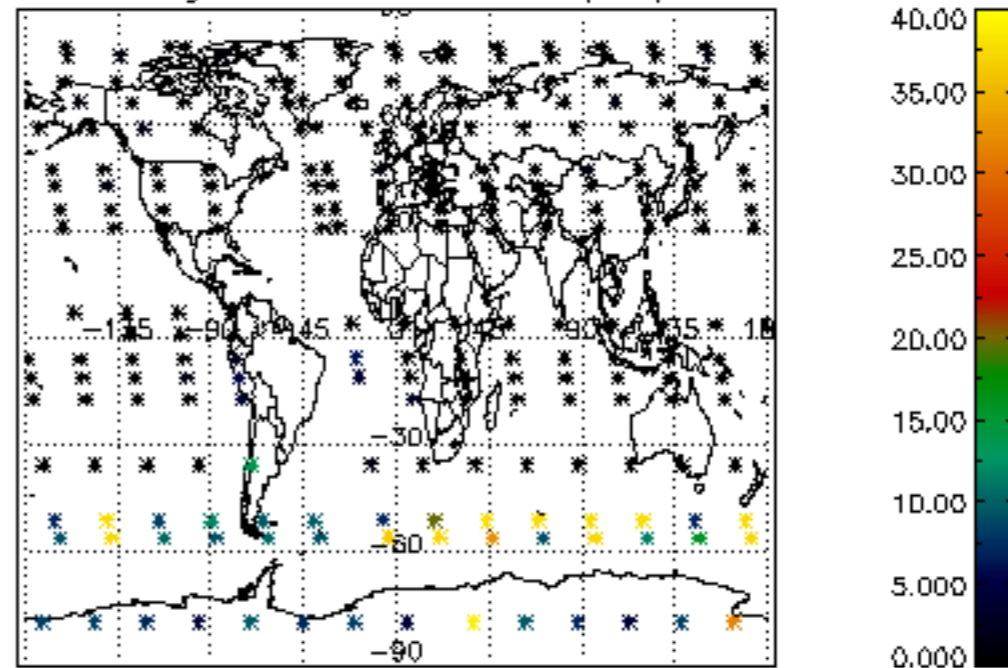
Percentage of datation errors per profile



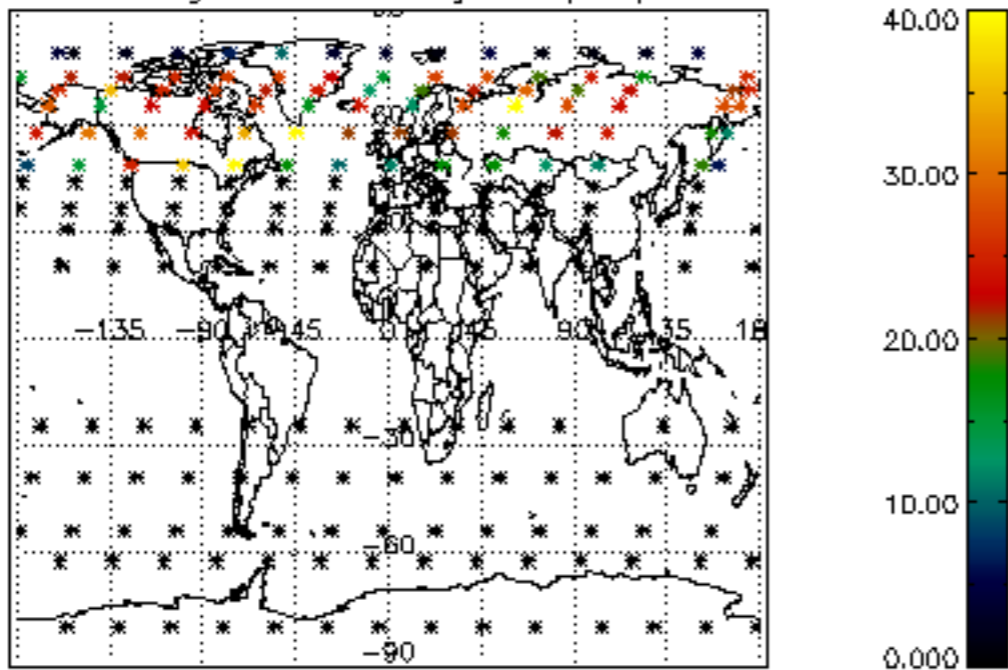
Percentage of star falling outside central band per profile



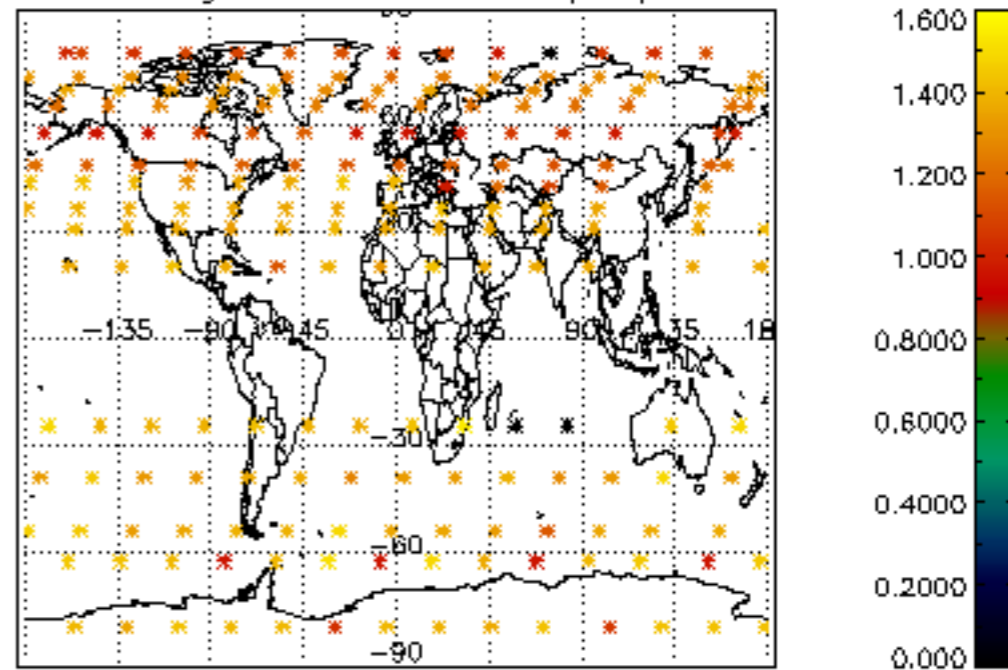
Percentage of saturation errors per profile



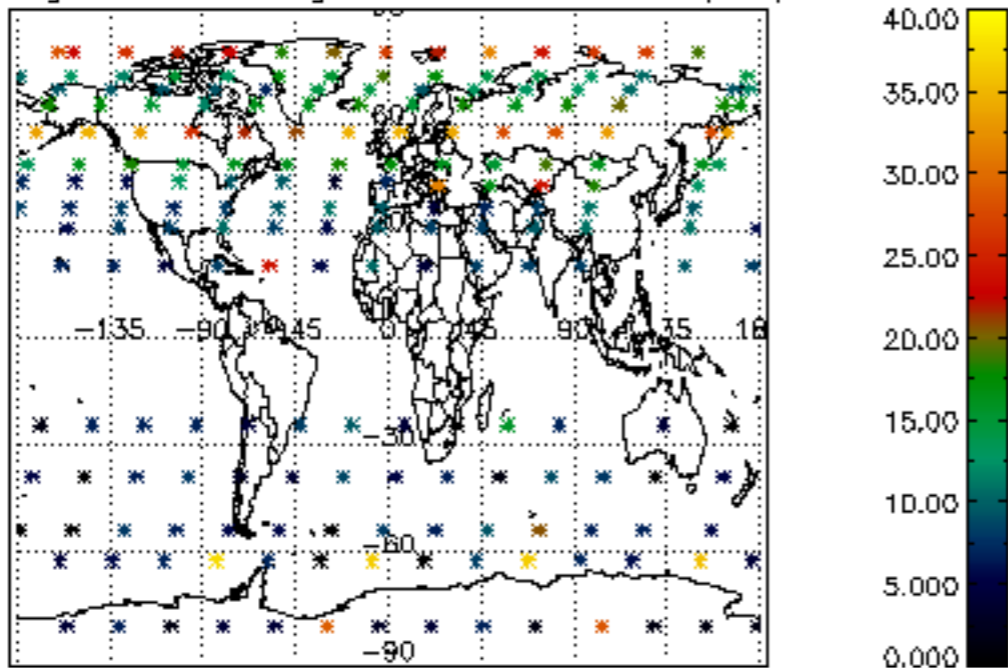
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

