

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	18APR2013 10:20:47
Data source version	GOMOS/6.01
Start time of products	05-08-2005 (05AUG2005 00:00:00)
Stop time of products	06-08-2005 (06AUG2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	185
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

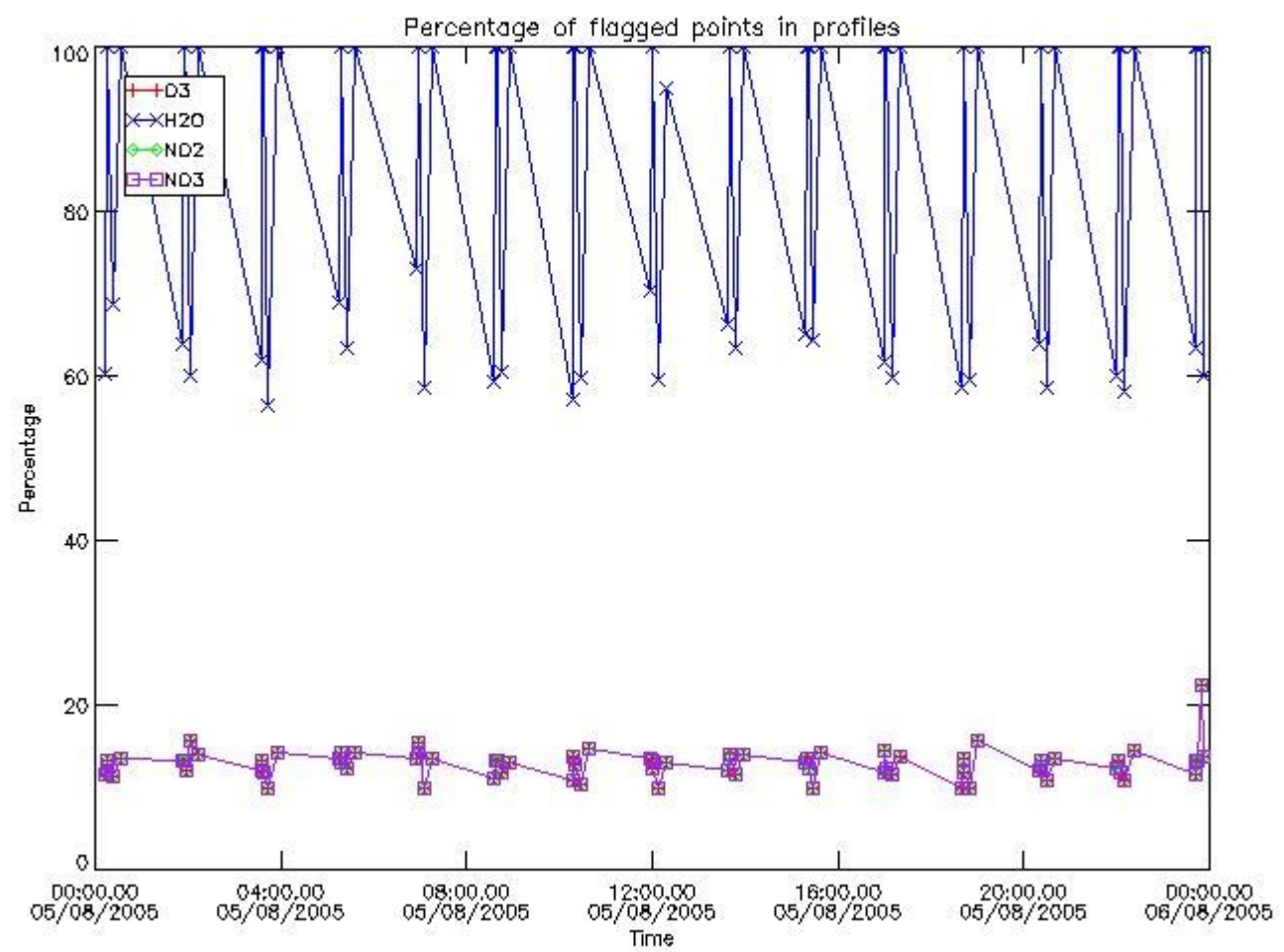
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050805_001252_000000452039_00345_17934_5479.N1	05-AUG-2005 00:12:52	Dark	44.500	1	9Alp CMa	-1.4400	11000.	89	17934	No
2	GOM_NL__2PRFIN20050805_001442_000000392039_00345_17934_5480.N1	05-AUG-2005 00:14:42	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17934	No
3	GOM_NL__2PRFIN20050805_001609_000000422039_00345_17934_5481.N1	05-AUG-2005 00:16:09	Dark	42.000	23	21Eps CMa	1.5020	26000.	84	17934	No
4	GOM_NL__2PRFIN20050805_002255_000000452039_00345_17934_5482.N1	05-AUG-2005 00:22:55	Dark	45.000	2	Alp Car	-0.73600	7000.0	90	17934	No
5	GOM_NL__2PRFIN20050805_003337_000000382039_00346_17935_5471.N1	05-AUG-2005 00:33:37	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	17935	No
6	GOM_NL__2PRFIN20050805_004143_000000432039_00346_17935_5472.N1	05-AUG-2005 00:41:43	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	17935	No
7	GOM_NL__2PRFIN20050805_005000_000000382039_00346_17935_5473.N1	05-AUG-2005 00:50:00	Bright	38.000	103	38Zet Sgr	2.6000	9700.0	76	17935	No
8	GOM_NL__2PRFIN20050805_005223_000000372039_00346_17935_5474.N1	05-AUG-2005 00:52:23	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	17935	No
9	GOM_NL__2PRFIN20050805_010207_000000352039_00346_17935_5475.N1	05-AUG-2005 01:02:07	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	17935	No
10	GOM_NL__2PRFIN20050805_010913_000000392039_00346_17935_5476.N1	05-AUG-2005 01:09:13	Bright	38.500	5	3Alp Lyr	0.033000	11000.	77	17935	No
11	GOM_NL__2PRFIN20050805_011305_000000382039_00346_17935_5477.N1	05-AUG-2005 01:13:05	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	17935	No
12	GOM_NL__2PRFIN20050805_011714_000000352039_00346_17935_5478.N1	05-AUG-2005 01:17:14	Bright	35.000	119	14Eta Dra	2.7270	4700.0	70	17935	No
13	GOM_NL__2PRFIN20050805_012119_000000332039_00346_17935_5479.N1	05-AUG-2005 01:21:19	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	17935	No
14	GOM_NL__2PRFIN20050805_015328_000000422039_00346_17935_5480.N1	05-AUG-2005 01:53:28	Dark	42.000	1	9Alp CMa	-1.4400	11000.	84	17935	No
15	GOM_NL__2PRFIN20050805_015518_000000392039_00346_17935_5481.N1	05-AUG-2005 01:55:18	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17935	No
16	GOM_NL__2PRFIN20050805_015645_000000432039_00346_17935_5482.N1	05-AUG-2005 01:56:45	Dark	42.500	23	21Eps CMa	1.5020	26000.	85	17935	No
17	GOM_NL__2PRFIN20050805_020331_000000462039_00346_17935_5483.N1	05-AUG-2005 02:03:31	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	17935	No
18	GOM_NL__2PRFIN20050805_021413_000000372039_00347_17936_5472.N1	05-AUG-2005 02:14:13	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	17936	No
19	GOM_NL__2PRFIN20050805_022219_000000382039_00347_17936_5473.N1	05-AUG-2005 02:22:19	Straylight	38.000	45	Alp Pav	1.9400	26000.	76	17936	No
20	GOM_NL__2PRFIN20050805_023036_000000422039_00347_17936_5474.N1	05-AUG-2005 02:30:36	Bright	41.500	103	38Zet Sgr	2.6000	9700.0	83	17936	No
21	GOM_NL__2PRFIN20050805_023259_000000382039_00347_17936_5475.N1	05-AUG-2005 02:32:59	Bright	37.500	155	41Pi Sgr	2.9000	6600.0	75	17936	No
22	GOM_NL__2PRFIN20050805_024243_000000352039_00347_17936_5476.N1	05-AUG-2005 02:42:43	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	17936	No
23	GOM_NL__2PRFIN20050805_024949_000000392039_00347_17936_5477.N1	05-AUG-2005 02:49:49	Bright	39.000	5	3Alp Lyr	0.033000	11000.	78	17936	No
24	GOM_NL__2PRFIN20050805_025341_000000372039_00347_17936_5478.N1	05-AUG-2005 02:53:41	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	17936	No
25	GOM_NL__2PRFIN20050805_025751_000000382039_00347_17936_5479.N1	05-AUG-2005 02:57:51	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	17936	No
26	GOM_NL__2PRFIN20050805_030156_000000342039_00347_17936_5480.N1	05-AUG-2005 03:01:56	Bright	33.500	60	7Bet UMi	2.0810	3950.0	67	17936	No
27	GOM_NL__2PRFIN20050805_033404_000000432039_00347_17936_5481.N1	05-AUG-2005 03:34:04	Dark	42.500	1	9Alp CMa	-1.4400	11000.	85	17936	No
28	GOM_NL__2PRFIN20050805_033554_000000392039_00347_17936_5482.N1	05-AUG-2005 03:35:54	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17936	No
29	GOM_NL__2PRFIN20050805_033721_000000432039_00347_17936_5483.N1	05-AUG-2005 03:37:21	Dark	43.000	23	21Eps CMa	1.5020	26000.	86	17936	No
30	GOM_NL__2PRFIN20050805_034407_000000512039_00347_17936_5484.N1	05-AUG-2005 03:44:07	Dark	51.000	2	Alp Car	-0.73600	7000.0	102	17936	No
31	GOM_NL__2PRFIN20050805_035450_000000362039_00348_17937_5472.N1	05-AUG-2005 03:54:50	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	17937	No
32	GOM_NL__2PRFIN20050805_040255_000000392039_00348_17937_5473.N1	05-AUG-2005 04:02:55	Straylight	39.000	45	Alp Pav	1.9400	26000.	78	17937	No
33	GOM_NL__2PRFIN20050805_041112_000000372039_00348_17937_5474.N1	05-AUG-2005 04:11:12	Bright	37.000	103	38Zet Sgr	2.6000	9700.0	74	17937	No
34	GOM_NL__2PRFIN20050805_041335_000000372039_00348_17937_5475.N1	05-AUG-2005 04:13:35	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	17937	No
35	GOM_NL__2PRFIN20050805_042319_000000352039_00348_17937_5476.N1	05-AUG-2005 04:23:19	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	17937	No
36	GOM_NL__2PRFIN20050805_043025_000000352039_00348_17937_5477.N1	05-AUG-2005 04:30:25	Bright	34.500	5	3Alp Lyr	0.033000	11000.	69	17937	No
37	GOM_NL__2PRFIN20050805_043418_000000382039_00348_17937_5478.N1	05-AUG-2005 04:34:18	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	17937	No
38	GOM_NL__2PRFIN20050805_043827_000000332039_00348_17937_5479.N1	05-AUG-2005 04:38:27	Bright	32.500	119	14Eta Dra	2.7270	4700.0	65	17937	No
39	GOM_NL__2PRFIN20050805_044232_000000362039_00348_17937_5480.N1	05-AUG-2005 04:42:32	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	17937	No
40	GOM_NL__2PRFIN20050805_051440_000000382039_00348_17937_5481.N1	05-AUG-2005 05:14:40	Dark	37.500	1	9Alp CMa	-1.4400	11000.	75	17937	No
41	GOM_NL__2PRFIN20050805_051630_000000362039_00348_17937_5482.N1	05-AUG-2005 05:16:30	Dark	36.000	179	24Omi2CMa	3.0320	24000.	72	17937	No
42	GOM_NL__2PRFIN20050805_051758_000000402039_00348_17937_5483.N1	05-AUG-2005 05:17:58	Dark	39.500	23	21Eps CMa	1.5020	26000.	79	17937	No

161	GOM_NL__2PRFIN20050805_204856_000000372039_00358_17947_5500.N1	05-AUG-2005 20:48:56	Straylight	37.000	45	Alp Pav	1.9400	26000.	74	17947	No
162	GOM_NL__2PRFIN20050805_205713_000000462039_00358_17947_5501.N1	05-AUG-2005 20:57:13	Bright	45.500	103	38Zet Sgr	2.6000	9700.0	91	17947	No
163	GOM_NL__2PRFIN20050805_205936_000000382039_00358_17947_5502.N1	05-AUG-2005 20:59:36	Bright	37.500	155	41Pi Sgr	2.9000	6600.0	75	17947	No
164	GOM_NL__2PRFIN20050805_210919_000000352039_00358_17947_5503.N1	05-AUG-2005 21:09:19	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	17947	No
165	GOM_NL__2PRFIN20050805_211625_000000362039_00358_17947_5504.N1	05-AUG-2005 21:16:25	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	17947	No
166	GOM_NL__2PRFIN20050805_212019_000000382039_00358_17947_5505.N1	05-AUG-2005 21:20:19	Bright	37.500	69	33Gam Dra	2.2310	3800.0	75	17947	No
167	GOM_NL__2PRFIN20050805_212430_000000372039_00358_17947_5506.N1	05-AUG-2005 21:24:30	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	17947	No
168	GOM_NL__2PRFIN20050805_212834_000000352039_00358_17947_5507.N1	05-AUG-2005 21:28:34	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	17947	No
169	GOM_NL__2PRFIN20050805_220041_000000462039_00358_17947_5508.N1	05-AUG-2005 22:00:41	Dark	45.500	1	9Alp CMa	-1.4400	11000.	91	17947	No
170	GOM_NL__2PRFIN20050805_220230_000000392039_00358_17947_5509.N1	05-AUG-2005 22:02:30	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17947	No
171	GOM_NL__2PRFIN20050805_220358_000000432039_00358_17947_5510.N1	05-AUG-2005 22:03:58	Dark	43.000	23	21Eps CMa	1.5020	26000.	86	17947	No
172	GOM_NL__2PRFIN20050805_221044_000000472039_00358_17947_5511.N1	05-AUG-2005 22:10:44	Dark	47.000	2	Alp Car	-0.73600	7000.0	94	17947	No
173	GOM_NL__2PRFIN20050805_222128_000000362039_00359_17948_5501.N1	05-AUG-2005 22:21:28	Dark	35.500	135	Bet Hyi	2.8200	5800.0	71	17948	No
174	GOM_NL__2PRFIN20050805_222933_000000382039_00359_17948_5502.N1	05-AUG-2005 22:29:33	Straylight	38.000	45	Alp Pav	1.9400	26000.	76	17948	No
175	GOM_NL__2PRFIN20050805_223749_000000422039_00359_17948_5503.N1	05-AUG-2005 22:37:49	Bright	41.500	103	38Zet Sgr	2.6000	9700.0	83	17948	No
176	GOM_NL__2PRFIN20050805_224012_000000372039_00359_17948_5504.N1	05-AUG-2005 22:40:12	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	17948	No
177	GOM_NL__2PRFIN20050805_225701_000000352039_00359_17948_5505.N1	05-AUG-2005 22:57:01	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	17948	No
178	GOM_NL__2PRFIN20050805_230055_000000332039_00359_17948_5506.N1	05-AUG-2005 23:00:55	Bright	33.000	69	33Gam Dra	2.2310	3800.0	66	17948	No
179	GOM_NL__2PRFIN20050805_230506_000000342039_00359_17948_5507.N1	05-AUG-2005 23:05:06	Bright	34.000	119	14Eta Dra	2.7270	4700.0	68	17948	No
180	GOM_NL__2PRFIN20050805_230910_000000332039_00359_17948_5508.N1	05-AUG-2005 23:09:10	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	17948	No
181	GOM_NL__2PRFIN20050805_234117_000000442039_00359_17948_5509.N1	05-AUG-2005 23:41:17	Dark	44.000	1	9Alp CMa	-1.4400	11000.	88	17948	No
182	GOM_NL__2PRFIN20050805_234306_000000392039_00359_17948_5510.N1	05-AUG-2005 23:43:06	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17948	No
183	GOM_NL__2PRFIN20050805_234433_000000432039_00359_17948_5511.N1	05-AUG-2005 23:44:33	Dark	42.500	23	21Eps CMa	1.5020	26000.	85	17948	No
184	GOM_NL__2PRFIN20050805_235036_000000232039_00359_17948_5512.N1	05-AUG-2005 23:50:36	Dark	23.000	161	Tau Pup	2.9310	4500.0	46	17948	No
185	GOM_NL__2PRFIN20050805_235120_000000482039_00359_17948_5513.N1	05-AUG-2005 23:51:20	Dark	48.000	2	Alp Car	-0.73600	7000.0	96	17948	No

3. Quality information per product

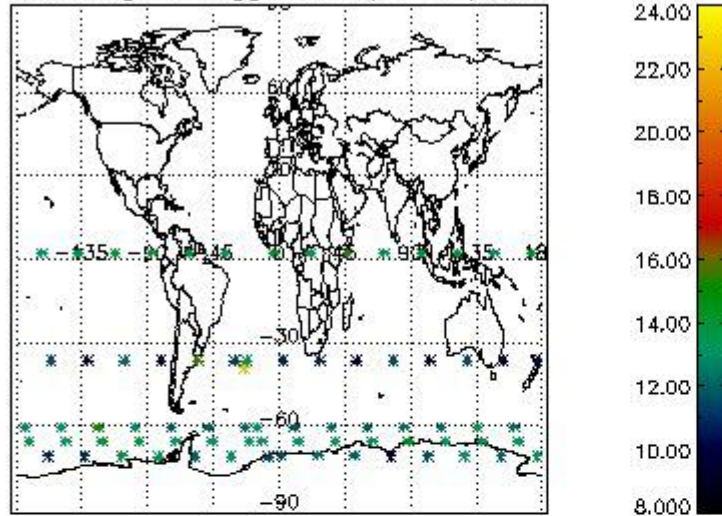
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

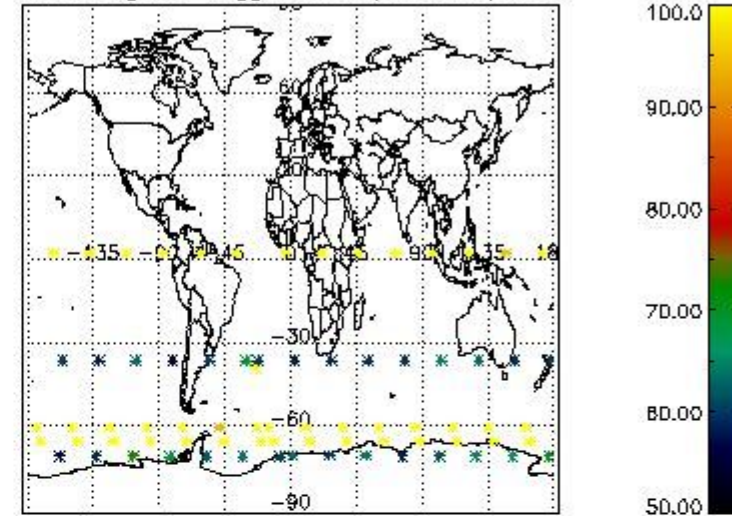


3.2 Plot quality information per product (world map)

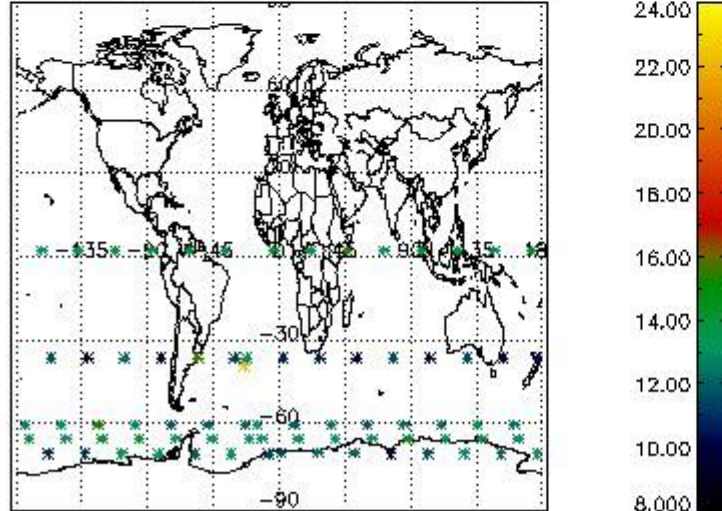
Percentage of flagged data per O3 profile



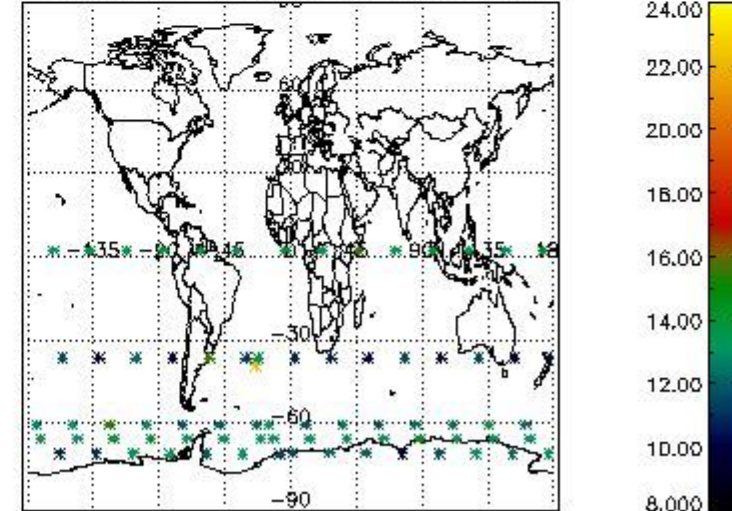
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

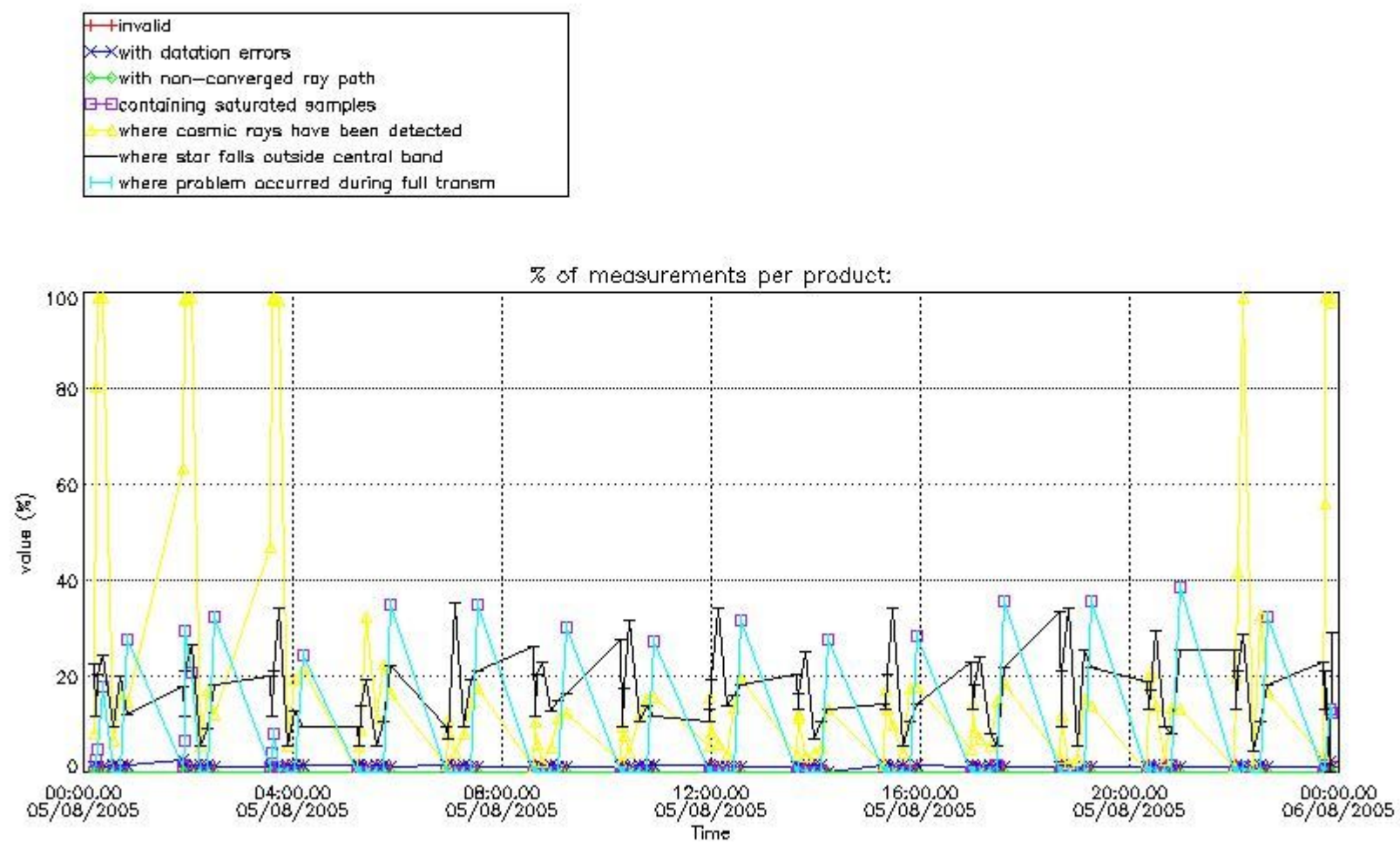


4. Level 1 quality information per product

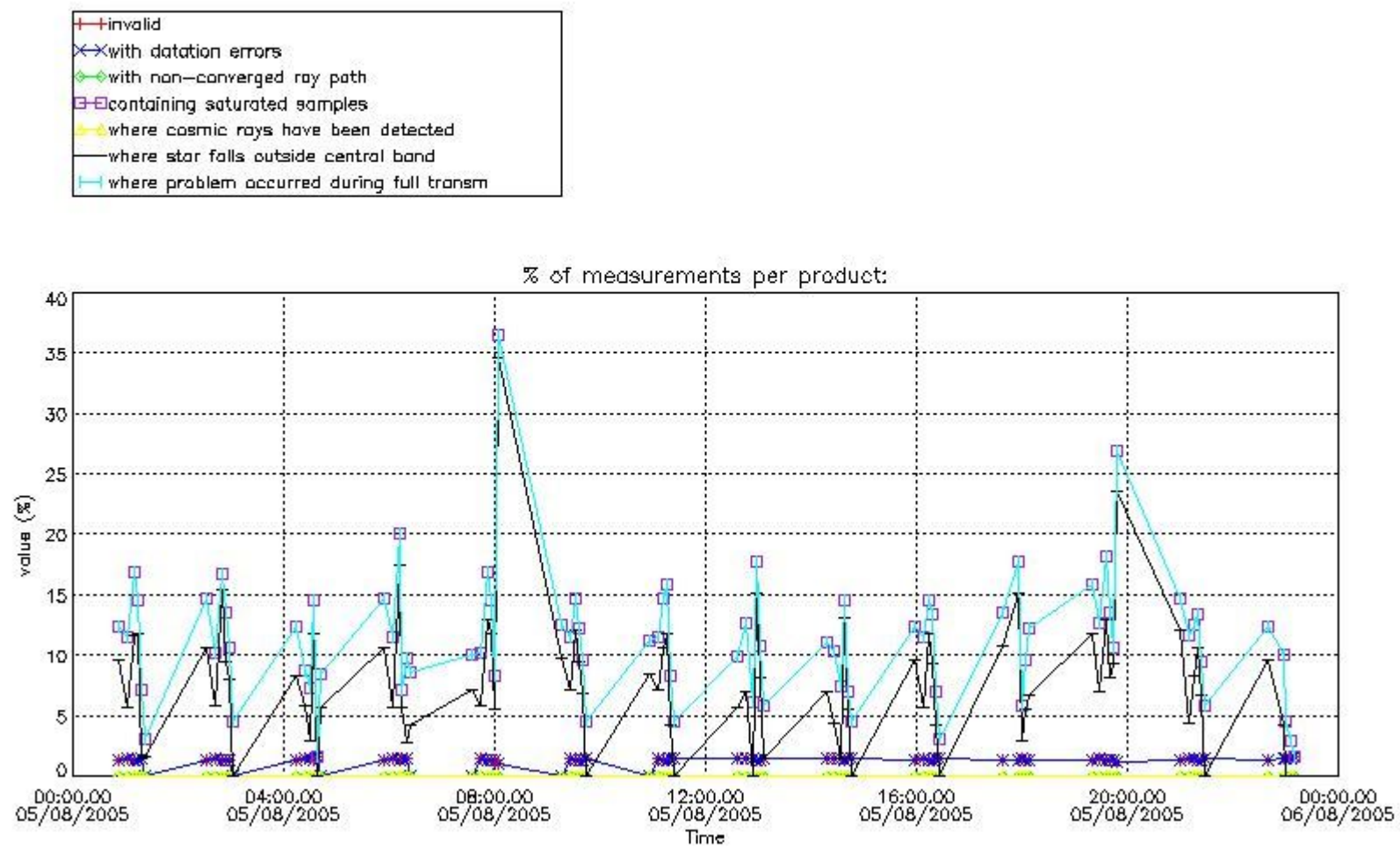
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

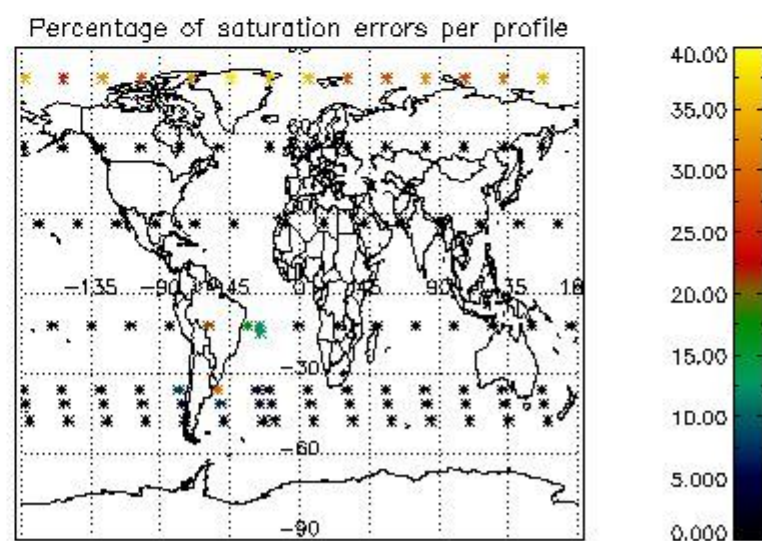
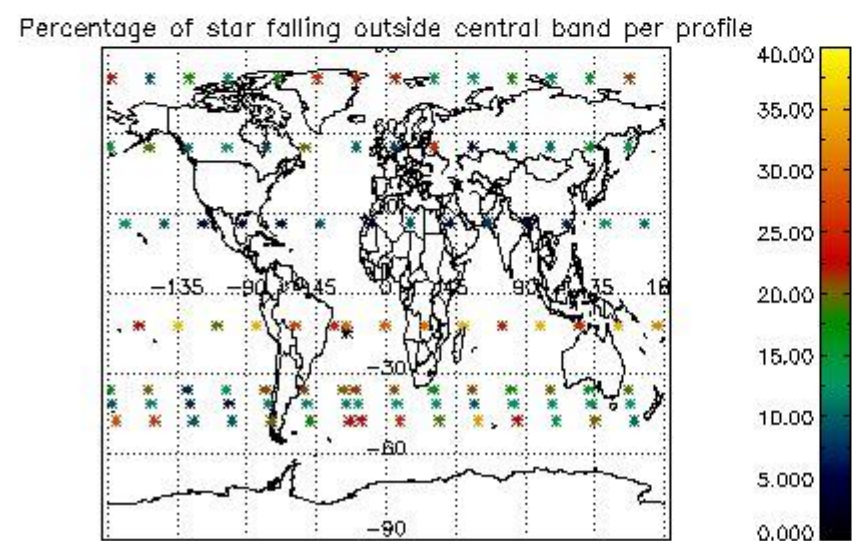
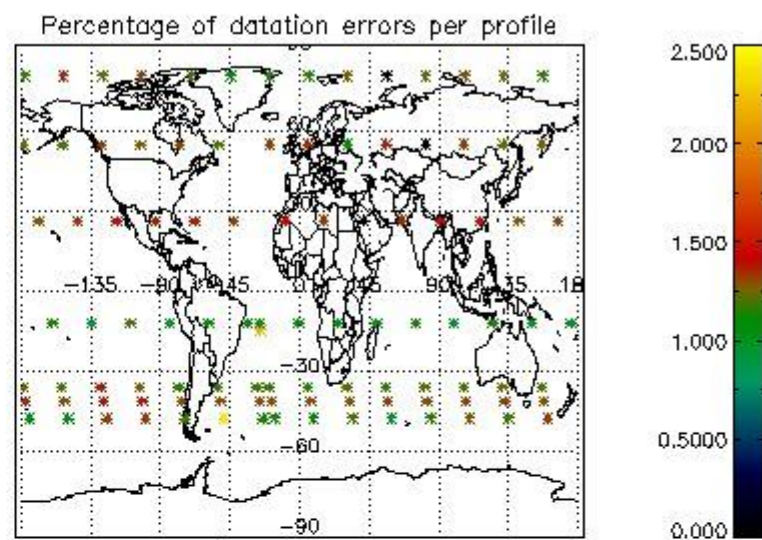
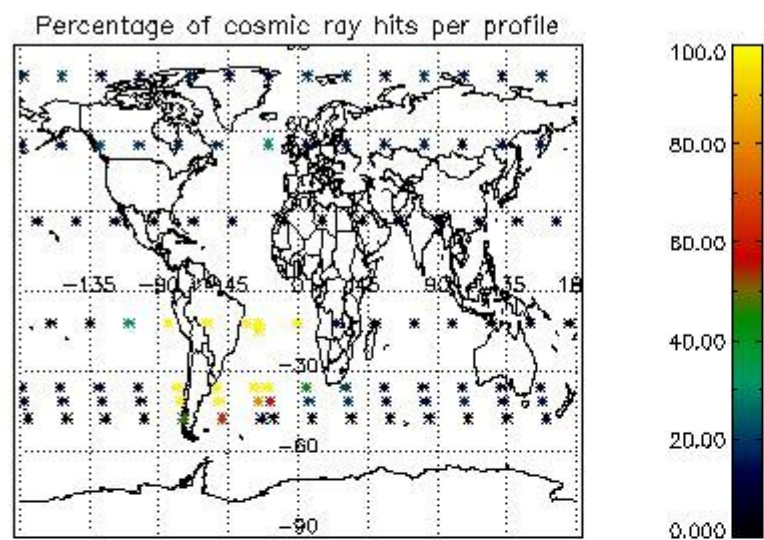


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

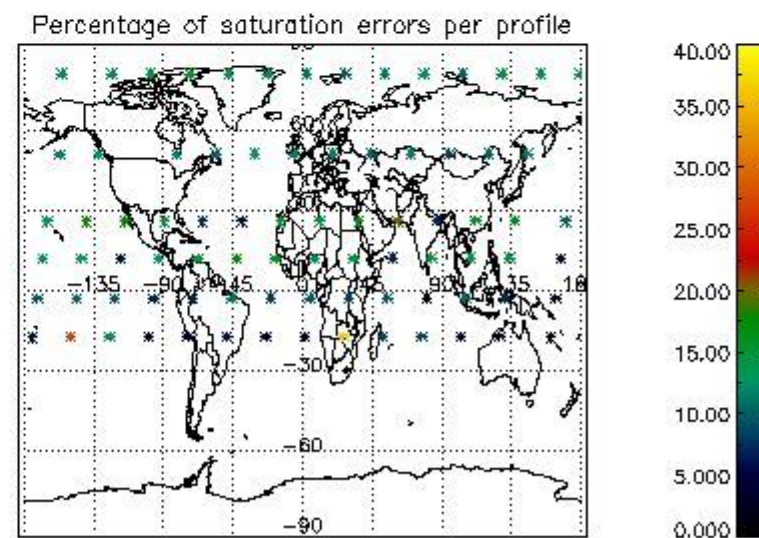
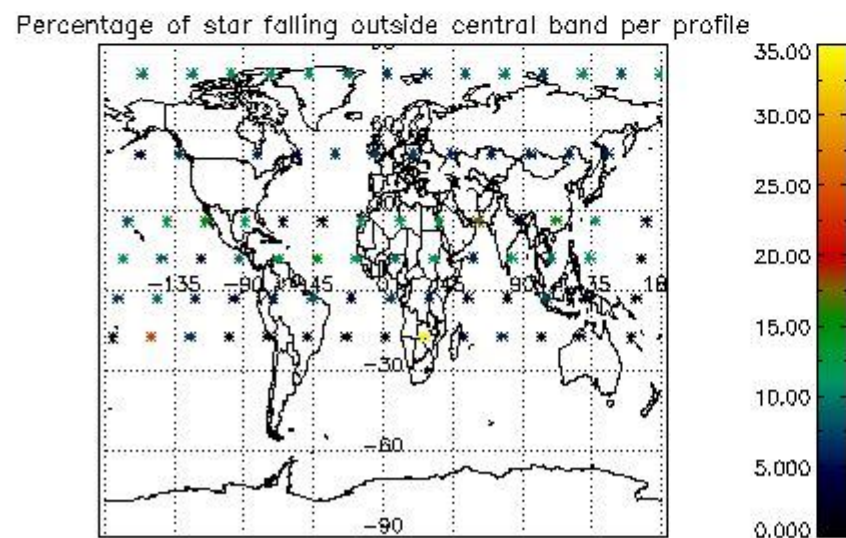
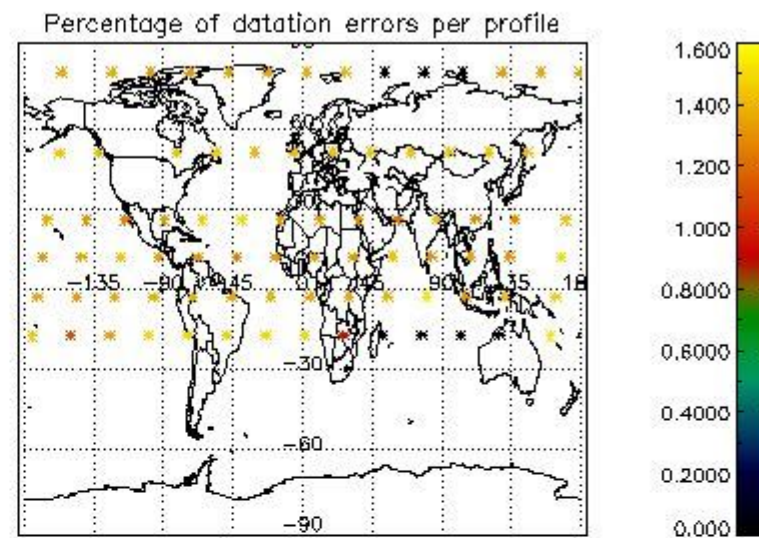
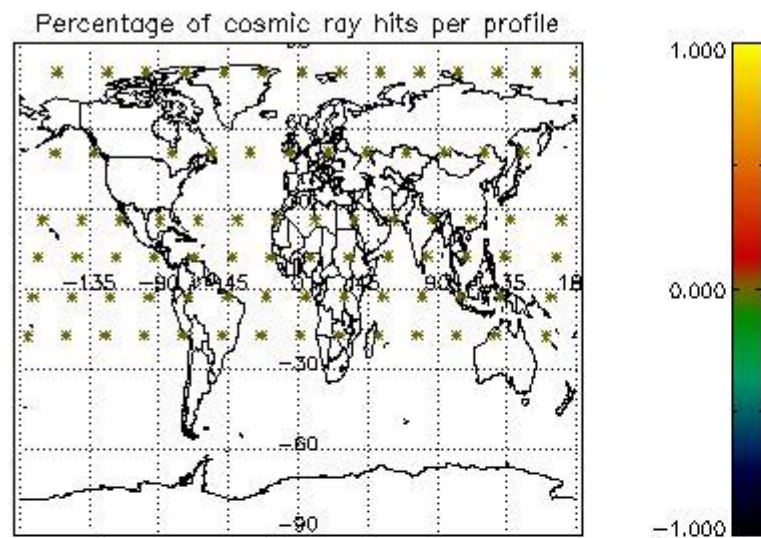


4.2 Plot quality information per product coming from level 1b processing (world map)

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

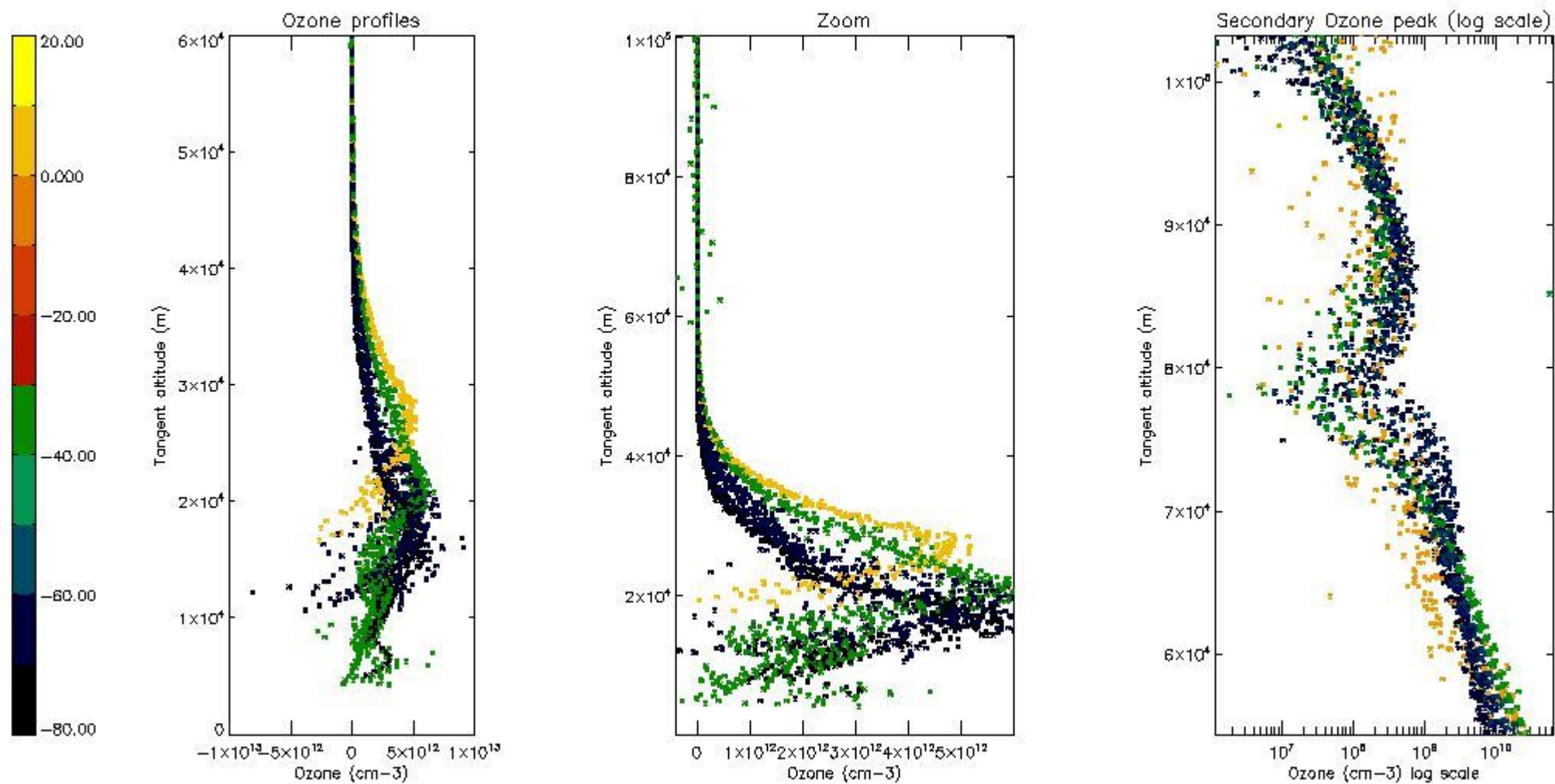
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	30

STD < 10	25
STD < 5	19

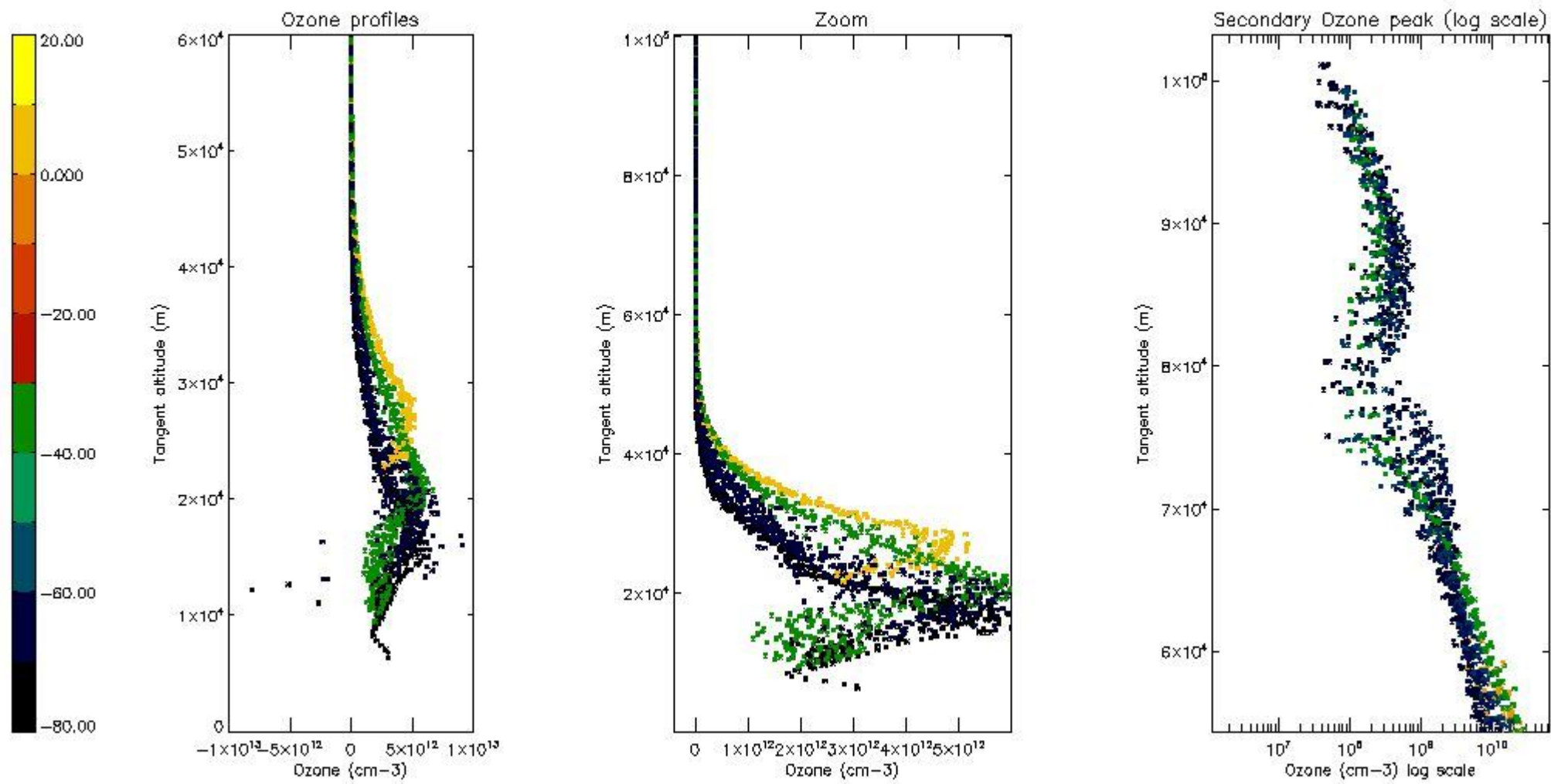
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



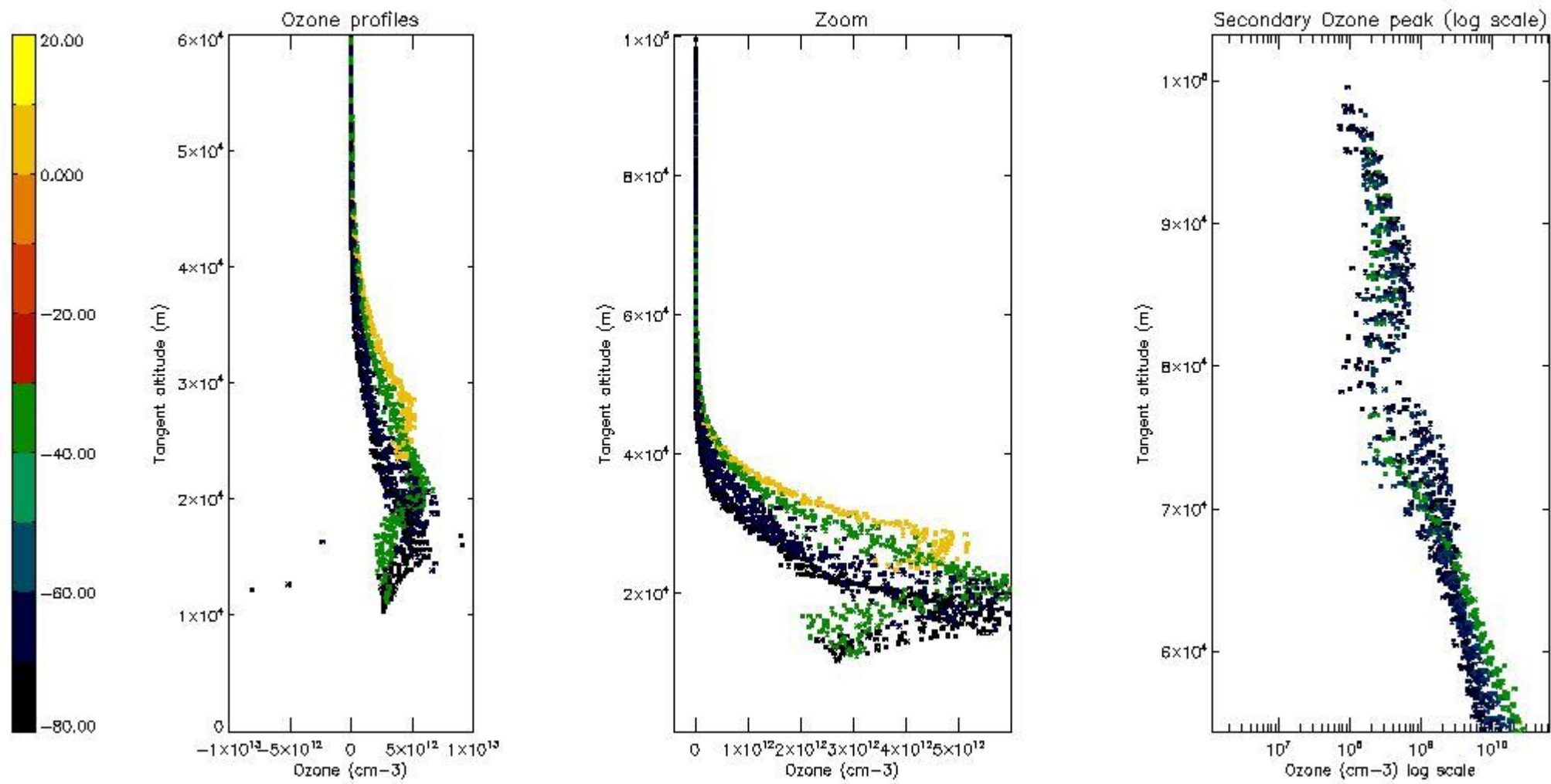
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



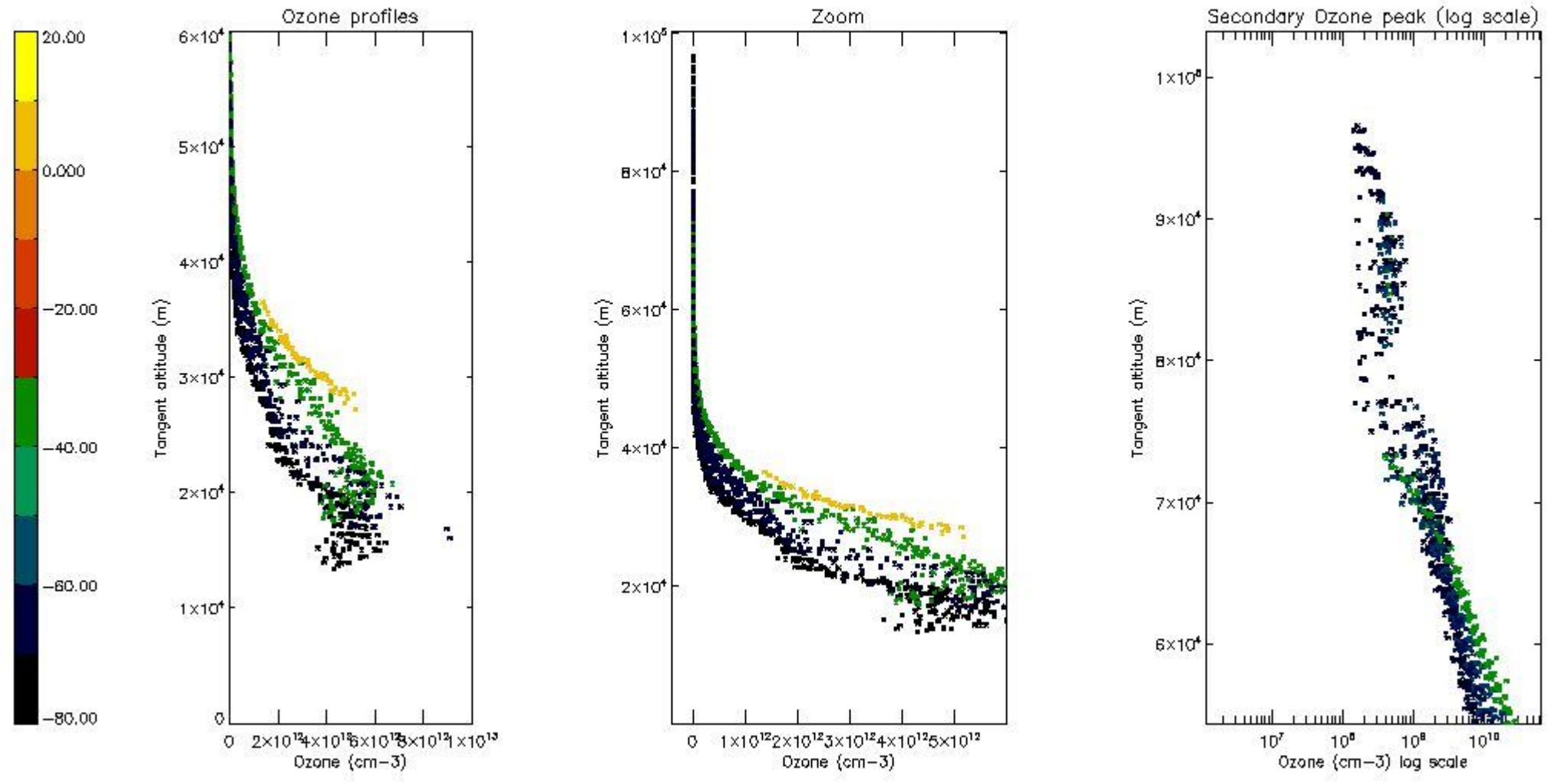
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



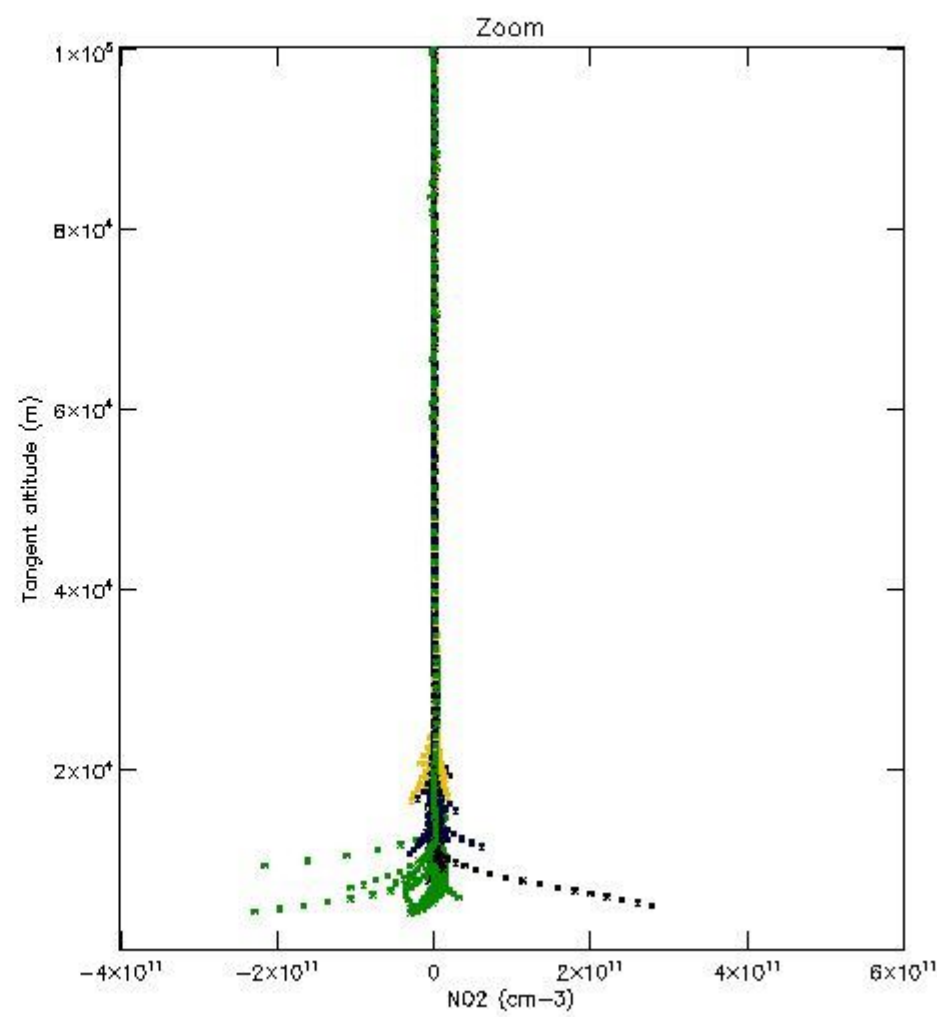
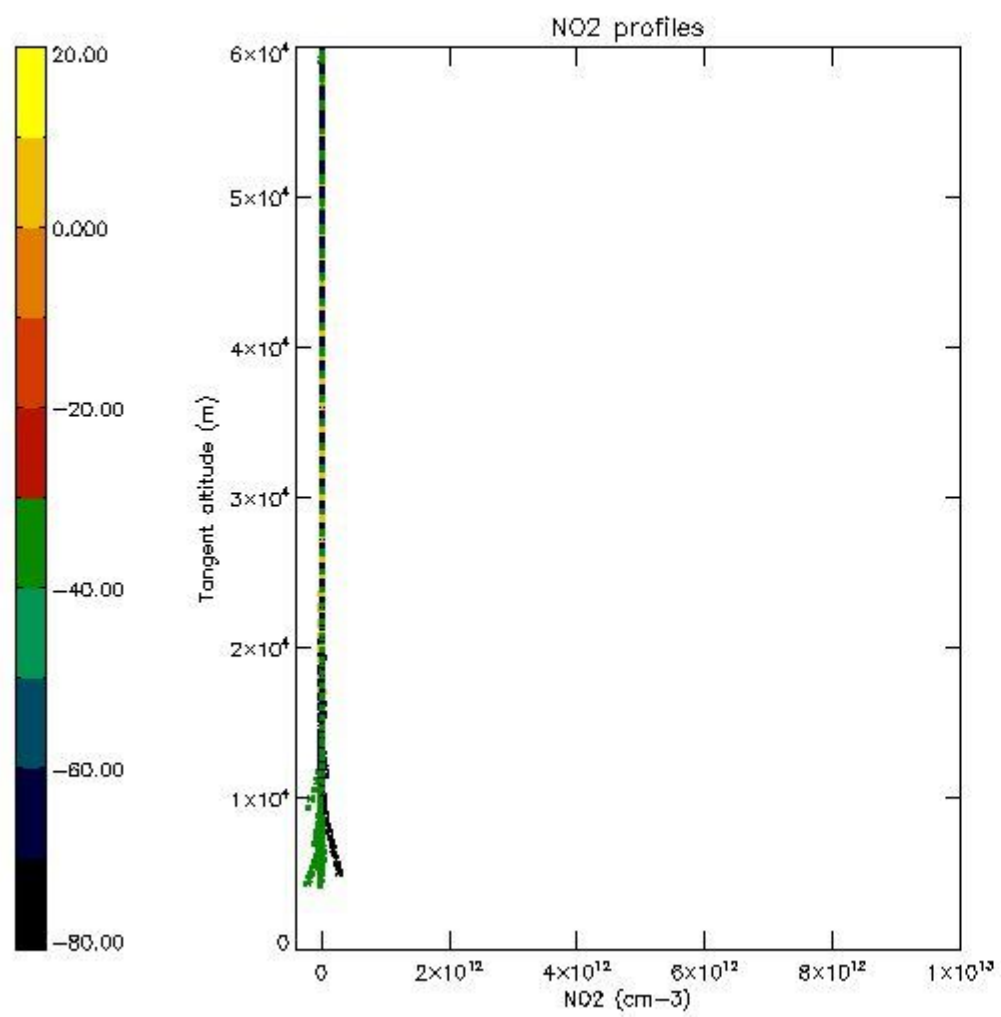
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



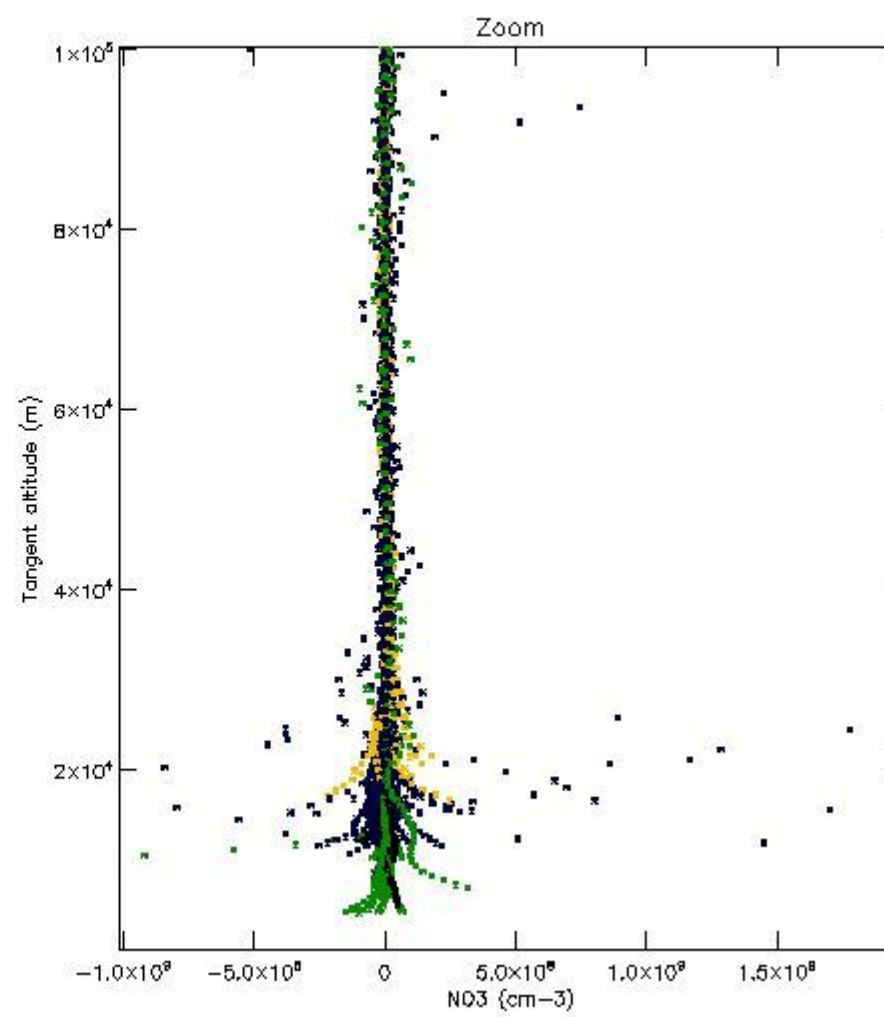
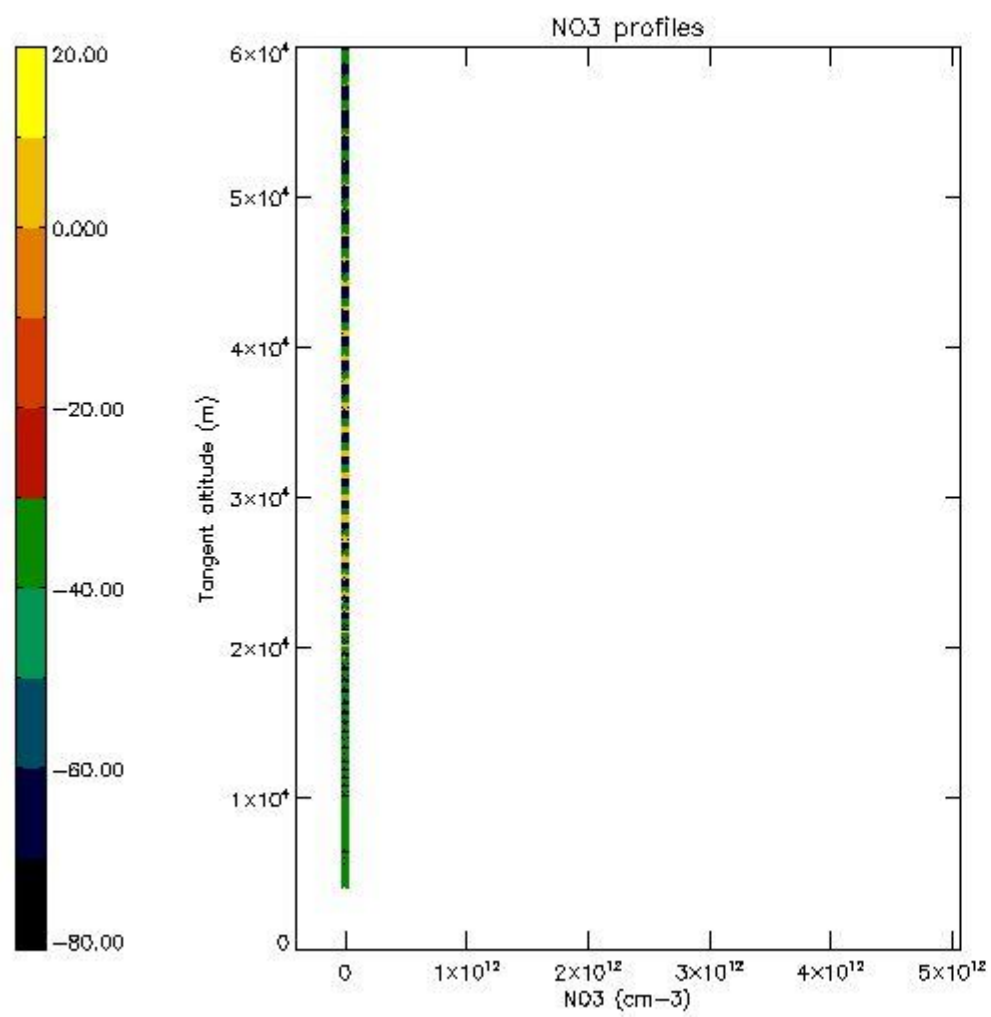
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



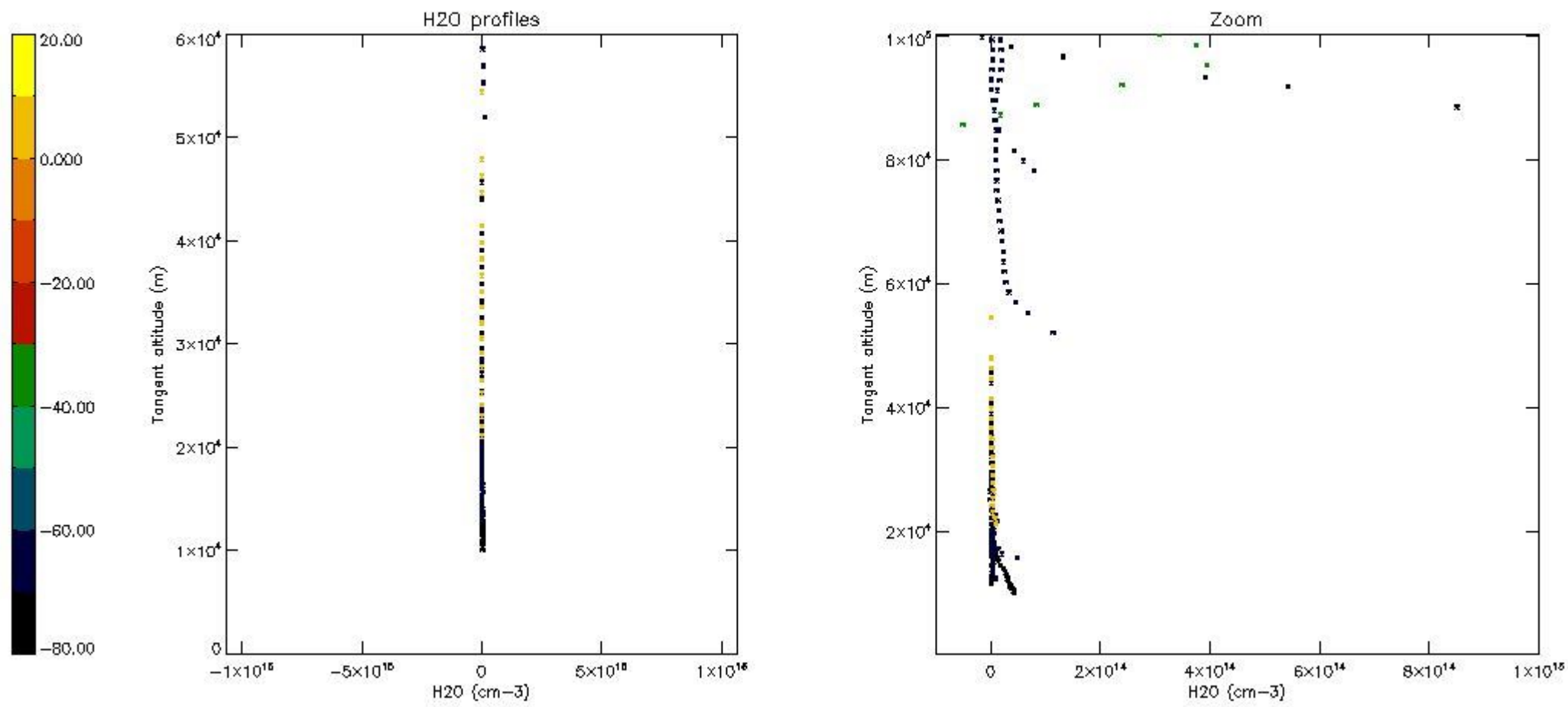
5.7 Plot NO3 profiles for all STD (dark without errors)

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	05-AUG-2005 00:12:52
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-AUG-2005 00:12:52
CROSS_SECTIONS_FILE	GOM_CR2_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-AUG-2005 00:12:52

GOMOS Level 2 Daily Report

SUMMARY

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[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 10:20:47
Data source version	GOMOS/6.01
Start time of products	05-08-2005 (05AUG2005 00:00:00)
Stop time of products	06-08-2005 (06AUG2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	185
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

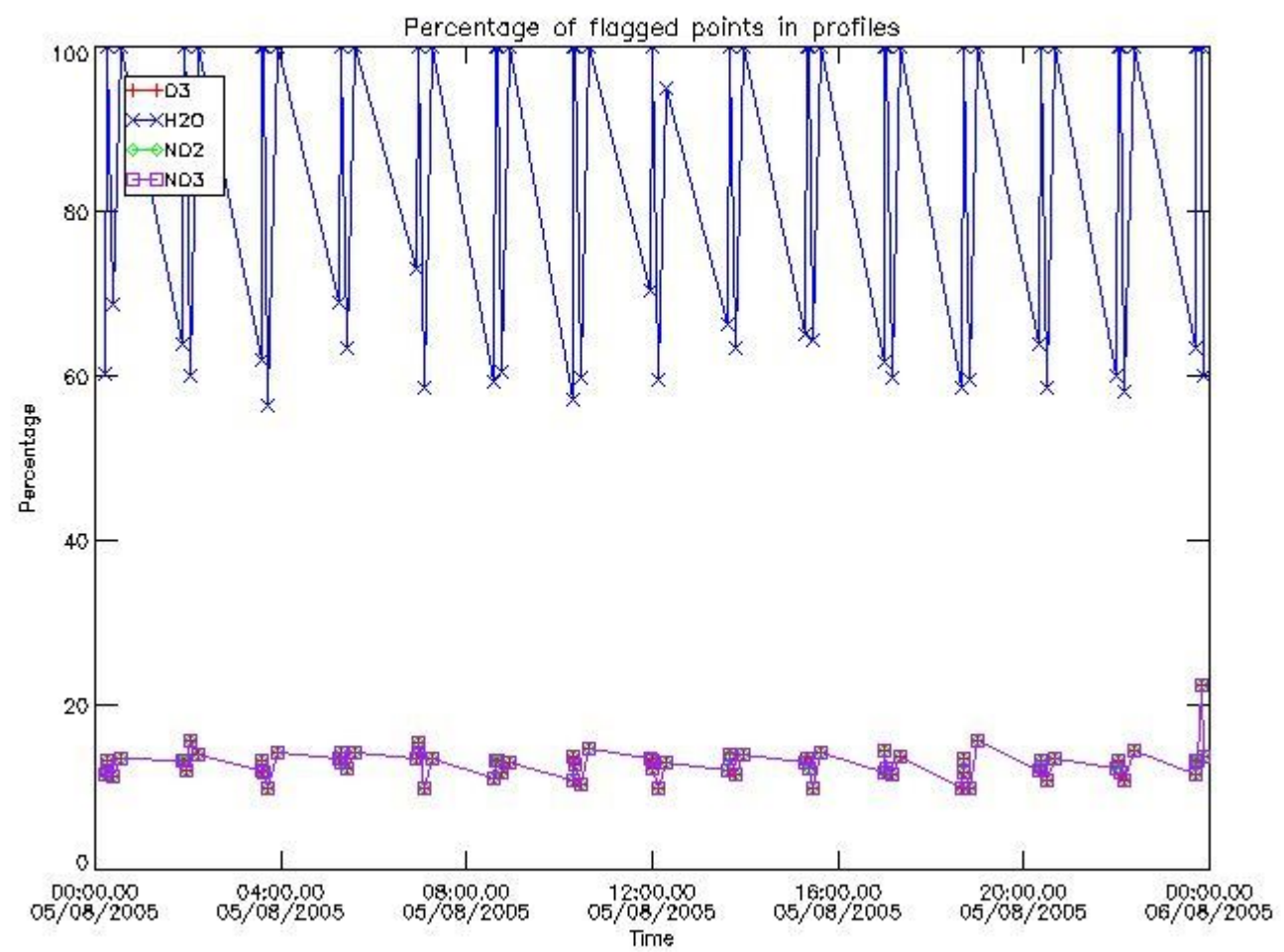
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050805_001252_000000452039_00345_17934_5479.N1	05-AUG-2005 00:12:52	Dark	44.500	1	9Alp CMa	-1.4400	11000.	89	17934	No
2	GOM_NL__2PRFIN20050805_001442_000000392039_00345_17934_5480.N1	05-AUG-2005 00:14:42	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17934	No
3	GOM_NL__2PRFIN20050805_001609_000000422039_00345_17934_5481.N1	05-AUG-2005 00:16:09	Dark	42.000	23	21Eps CMa	1.5020	26000.	84	17934	No
4	GOM_NL__2PRFIN20050805_002255_000000452039_00345_17934_5482.N1	05-AUG-2005 00:22:55	Dark	45.000	2	Alp Car	-0.73600	7000.0	90	17934	No
5	GOM_NL__2PRFIN20050805_003337_000000382039_00346_17935_5471.N1	05-AUG-2005 00:33:37	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	17935	No
6	GOM_NL__2PRFIN20050805_004143_000000432039_00346_17935_5472.N1	05-AUG-2005 00:41:43	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	17935	No
7	GOM_NL__2PRFIN20050805_005000_000000382039_00346_17935_5473.N1	05-AUG-2005 00:50:00	Bright	38.000	103	38Zet Sgr	2.6000	9700.0	76	17935	No
8	GOM_NL__2PRFIN20050805_005223_000000372039_00346_17935_5474.N1	05-AUG-2005 00:52:23	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	17935	No
9	GOM_NL__2PRFIN20050805_010207_000000352039_00346_17935_5475.N1	05-AUG-2005 01:02:07	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	17935	No
10	GOM_NL__2PRFIN20050805_010913_000000392039_00346_17935_5476.N1	05-AUG-2005 01:09:13	Bright	38.500	5	3Alp Lyr	0.033000	11000.	77	17935	No
11	GOM_NL__2PRFIN20050805_011305_000000382039_00346_17935_5477.N1	05-AUG-2005 01:13:05	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	17935	No
12	GOM_NL__2PRFIN20050805_011714_000000352039_00346_17935_5478.N1	05-AUG-2005 01:17:14	Bright	35.000	119	14Eta Dra	2.7270	4700.0	70	17935	No
13	GOM_NL__2PRFIN20050805_012119_000000332039_00346_17935_5479.N1	05-AUG-2005 01:21:19	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	17935	No
14	GOM_NL__2PRFIN20050805_015328_000000422039_00346_17935_5480.N1	05-AUG-2005 01:53:28	Dark	42.000	1	9Alp CMa	-1.4400	11000.	84	17935	No
15	GOM_NL__2PRFIN20050805_015518_000000392039_00346_17935_5481.N1	05-AUG-2005 01:55:18	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17935	No
16	GOM_NL__2PRFIN20050805_015645_000000432039_00346_17935_5482.N1	05-AUG-2005 01:56:45	Dark	42.500	23	21Eps CMa	1.5020	26000.	85	17935	No
17	GOM_NL__2PRFIN20050805_020331_000000462039_00346_17935_5483.N1	05-AUG-2005 02:03:31	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	17935	No
18	GOM_NL__2PRFIN20050805_021413_000000372039_00347_17936_5472.N1	05-AUG-2005 02:14:13	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	17936	No
19	GOM_NL__2PRFIN20050805_022219_000000382039_00347_17936_5473.N1	05-AUG-2005 02:22:19	Straylight	38.000	45	Alp Pav	1.9400	26000.	76	17936	No
20	GOM_NL__2PRFIN20050805_023036_000000422039_00347_17936_5474.N1	05-AUG-2005 02:30:36	Bright	41.500	103	38Zet Sgr	2.6000	9700.0	83	17936	No
21	GOM_NL__2PRFIN20050805_023259_000000382039_00347_17936_5475.N1	05-AUG-2005 02:32:59	Bright	37.500	155	41Pi Sgr	2.9000	6600.0	75	17936	No
22	GOM_NL__2PRFIN20050805_024243_000000352039_00347_17936_5476.N1	05-AUG-2005 02:42:43	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	17936	No
23	GOM_NL__2PRFIN20050805_024949_000000392039_00347_17936_5477.N1	05-AUG-2005 02:49:49	Bright	39.000	5	3Alp Lyr	0.033000	11000.	78	17936	No
24	GOM_NL__2PRFIN20050805_025341_000000372039_00347_17936_5478.N1	05-AUG-2005 02:53:41	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	17936	No
25	GOM_NL__2PRFIN20050805_025751_000000382039_00347_17936_5479.N1	05-AUG-2005 02:57:51	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	17936	No
26	GOM_NL__2PRFIN20050805_030156_000000342039_00347_17936_5480.N1	05-AUG-2005 03:01:56	Bright	33.500	60	7Bet UMi	2.0810	3950.0	67	17936	No
27	GOM_NL__2PRFIN20050805_033404_000000432039_00347_17936_5481.N1	05-AUG-2005 03:34:04	Dark	42.500	1	9Alp CMa	-1.4400	11000.	85	17936	No
28	GOM_NL__2PRFIN20050805_033554_000000392039_00347_17936_5482.N1	05-AUG-2005 03:35:54	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17936	No
29	GOM_NL__2PRFIN20050805_033721_000000432039_00347_17936_5483.N1	05-AUG-2005 03:37:21	Dark	43.000	23	21Eps CMa	1.5020	26000.	86	17936	No
30	GOM_NL__2PRFIN20050805_034407_000000512039_00347_17936_5484.N1	05-AUG-2005 03:44:07	Dark	51.000	2	Alp Car	-0.73600	7000.0	102	17936	No
31	GOM_NL__2PRFIN20050805_035450_000000362039_00348_17937_5472.N1	05-AUG-2005 03:54:50	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	17937	No
32	GOM_NL__2PRFIN20050805_040255_000000392039_00348_17937_5473.N1	05-AUG-2005 04:02:55	Straylight	39.000	45	Alp Pav	1.9400	26000.	78	17937	No
33	GOM_NL__2PRFIN20050805_041112_000000372039_00348_17937_5474.N1	05-AUG-2005 04:11:12	Bright	37.000	103	38Zet Sgr	2.6000	9700.0	74	17937	No
34	GOM_NL__2PRFIN20050805_041335_000000372039_00348_17937_5475.N1	05-AUG-2005 04:13:35	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	17937	No
35	GOM_NL__2PRFIN20050805_042319_000000352039_00348_17937_5476.N1	05-AUG-2005 04:23:19	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	17937	No
36	GOM_NL__2PRFIN20050805_043025_000000352039_00348_17937_5477.N1	05-AUG-2005 04:30:25	Bright	34.500	5	3Alp Lyr	0.033000	11000.	69	17937	No
37	GOM_NL__2PRFIN20050805_043418_000000382039_00348_17937_5478.N1	05-AUG-2005 04:34:18	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	17937	No
38	GOM_NL__2PRFIN20050805_043827_000000332039_00348_17937_5479.N1	05-AUG-2005 04:38:27	Bright	32.500	119	14Eta Dra	2.7270	4700.0	65	17937	No
39	GOM_NL__2PRFIN20050805_044232_000000362039_00348_17937_5480.N1	05-AUG-2005 04:42:32	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	17937	No
40	GOM_NL__2PRFIN20050805_051440_000000382039_00348_17937_5481.N1	05-AUG-2005 05:14:40	Dark	37.500	1	9Alp CMa	-1.4400	11000.	75	17937	No
41	GOM_NL__2PRFIN20050805_051630_000000362039_00348_17937_5482.N1	05-AUG-2005 05:16:30	Dark	36.000	179	24Omi2CMa	3.0320	24000.	72	17937	No
42	GOM_NL__2PRFIN20050805_051758_000000402039_00348_17937_5483.N1	05-AUG-2005 05:17:58	Dark	39.500	23	21Eps CMa	1.5020	26000.	79	17937	No

161	GOM_NL__2PRFIN20050805_204856_000000372039_00358_17947_5500.N1	05-AUG-2005 20:48:56	Straylight	37.000	45	Alp Pav	1.9400	26000.	74	17947	No
162	GOM_NL__2PRFIN20050805_205713_000000462039_00358_17947_5501.N1	05-AUG-2005 20:57:13	Bright	45.500	103	38Zet Sgr	2.6000	9700.0	91	17947	No
163	GOM_NL__2PRFIN20050805_205936_000000382039_00358_17947_5502.N1	05-AUG-2005 20:59:36	Bright	37.500	155	41Pi Sgr	2.9000	6600.0	75	17947	No
164	GOM_NL__2PRFIN20050805_210919_000000352039_00358_17947_5503.N1	05-AUG-2005 21:09:19	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	17947	No
165	GOM_NL__2PRFIN20050805_211625_000000362039_00358_17947_5504.N1	05-AUG-2005 21:16:25	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	17947	No
166	GOM_NL__2PRFIN20050805_212019_000000382039_00358_17947_5505.N1	05-AUG-2005 21:20:19	Bright	37.500	69	33Gam Dra	2.2310	3800.0	75	17947	No
167	GOM_NL__2PRFIN20050805_212430_000000372039_00358_17947_5506.N1	05-AUG-2005 21:24:30	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	17947	No
168	GOM_NL__2PRFIN20050805_212834_000000352039_00358_17947_5507.N1	05-AUG-2005 21:28:34	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	17947	No
169	GOM_NL__2PRFIN20050805_220041_000000462039_00358_17947_5508.N1	05-AUG-2005 22:00:41	Dark	45.500	1	9Alp CMa	-1.4400	11000.	91	17947	No
170	GOM_NL__2PRFIN20050805_220230_000000392039_00358_17947_5509.N1	05-AUG-2005 22:02:30	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17947	No
171	GOM_NL__2PRFIN20050805_220358_000000432039_00358_17947_5510.N1	05-AUG-2005 22:03:58	Dark	43.000	23	21Eps CMa	1.5020	26000.	86	17947	No
172	GOM_NL__2PRFIN20050805_221044_000000472039_00358_17947_5511.N1	05-AUG-2005 22:10:44	Dark	47.000	2	Alp Car	-0.73600	7000.0	94	17947	No
173	GOM_NL__2PRFIN20050805_222128_000000362039_00359_17948_5501.N1	05-AUG-2005 22:21:28	Dark	35.500	135	Bet Hyi	2.8200	5800.0	71	17948	No
174	GOM_NL__2PRFIN20050805_222933_000000382039_00359_17948_5502.N1	05-AUG-2005 22:29:33	Straylight	38.000	45	Alp Pav	1.9400	26000.	76	17948	No
175	GOM_NL__2PRFIN20050805_223749_000000422039_00359_17948_5503.N1	05-AUG-2005 22:37:49	Bright	41.500	103	38Zet Sgr	2.6000	9700.0	83	17948	No
176	GOM_NL__2PRFIN20050805_224012_000000372039_00359_17948_5504.N1	05-AUG-2005 22:40:12	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	17948	No
177	GOM_NL__2PRFIN20050805_225701_000000352039_00359_17948_5505.N1	05-AUG-2005 22:57:01	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	17948	No
178	GOM_NL__2PRFIN20050805_230055_000000332039_00359_17948_5506.N1	05-AUG-2005 23:00:55	Bright	33.000	69	33Gam Dra	2.2310	3800.0	66	17948	No
179	GOM_NL__2PRFIN20050805_230506_000000342039_00359_17948_5507.N1	05-AUG-2005 23:05:06	Bright	34.000	119	14Eta Dra	2.7270	4700.0	68	17948	No
180	GOM_NL__2PRFIN20050805_230910_000000332039_00359_17948_5508.N1	05-AUG-2005 23:09:10	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	17948	No
181	GOM_NL__2PRFIN20050805_234117_000000442039_00359_17948_5509.N1	05-AUG-2005 23:41:17	Dark	44.000	1	9Alp CMa	-1.4400	11000.	88	17948	No
182	GOM_NL__2PRFIN20050805_234306_000000392039_00359_17948_5510.N1	05-AUG-2005 23:43:06	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	17948	No
183	GOM_NL__2PRFIN20050805_234433_000000432039_00359_17948_5511.N1	05-AUG-2005 23:44:33	Dark	42.500	23	21Eps CMa	1.5020	26000.	85	17948	No
184	GOM_NL__2PRFIN20050805_235036_000000232039_00359_17948_5512.N1	05-AUG-2005 23:50:36	Dark	23.000	161	Tau Pup	2.9310	4500.0	46	17948	No
185	GOM_NL__2PRFIN20050805_235120_000000482039_00359_17948_5513.N1	05-AUG-2005 23:51:20	Dark	48.000	2	Alp Car	-0.73600	7000.0	96	17948	No

3. Quality information per product

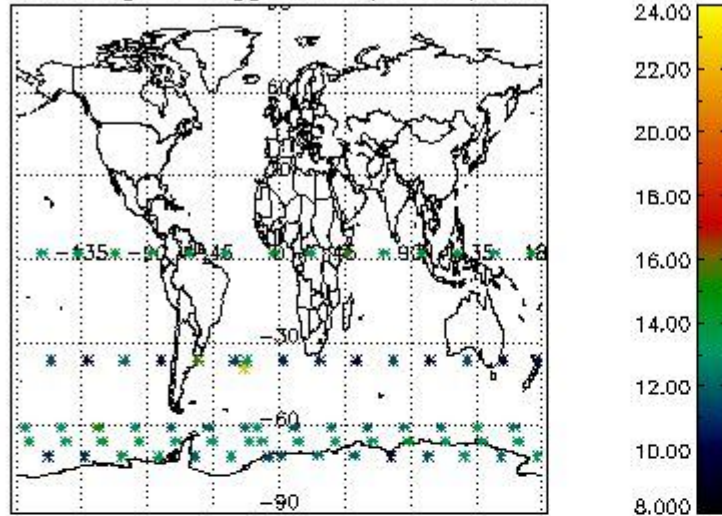
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

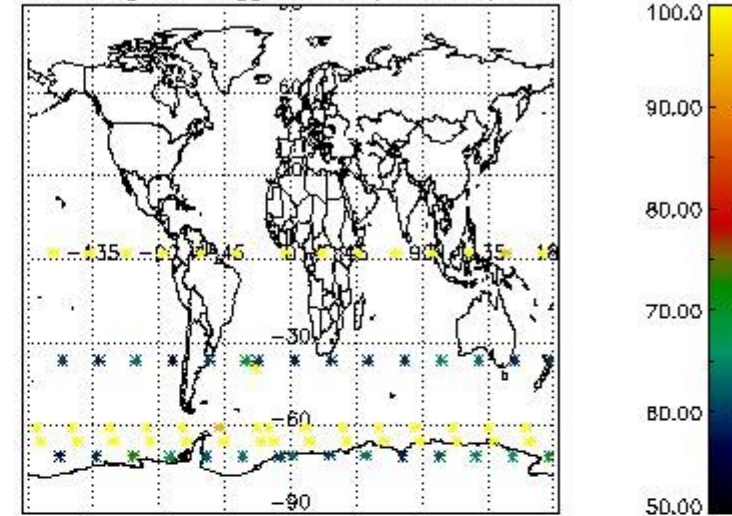


3.2 Plot quality information per product (world map)

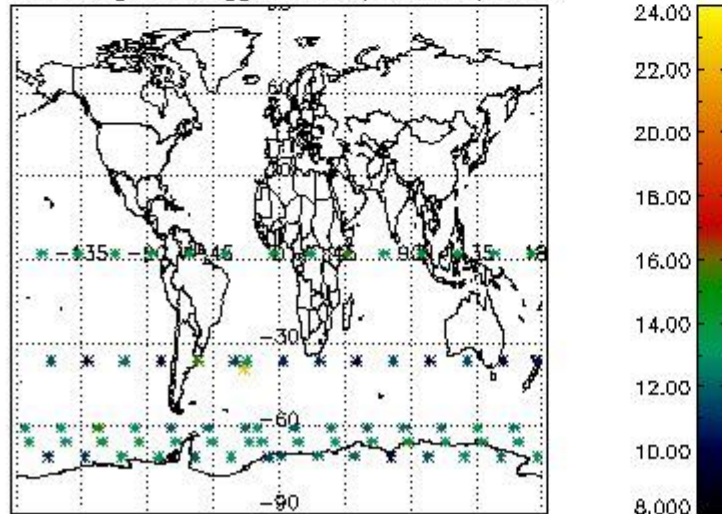
Percentage of flagged data per O3 profile



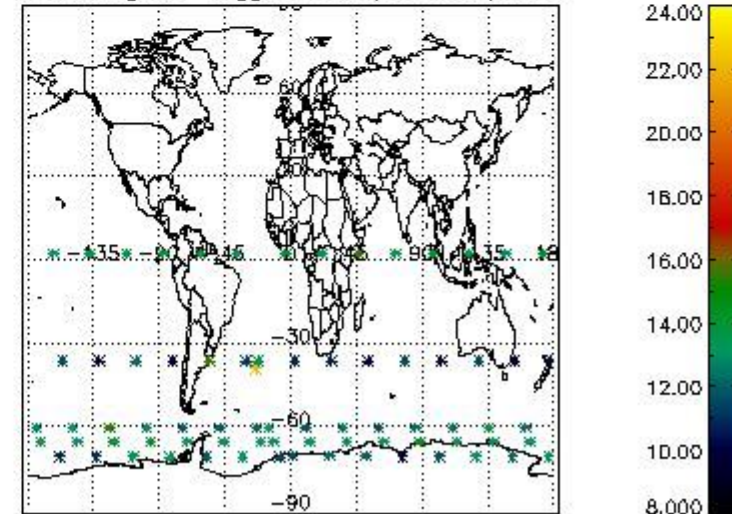
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

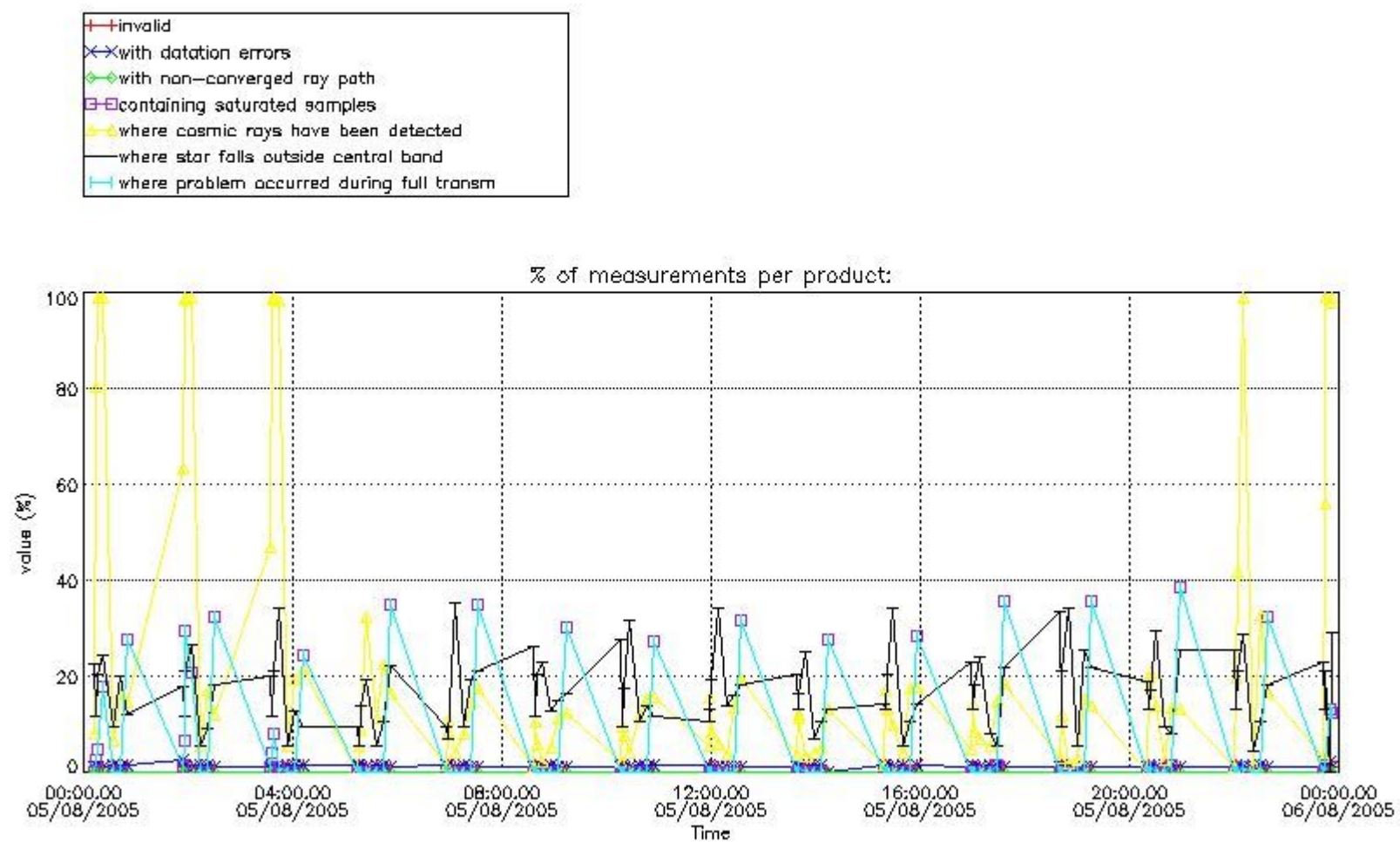


4. Level 1 quality information per product

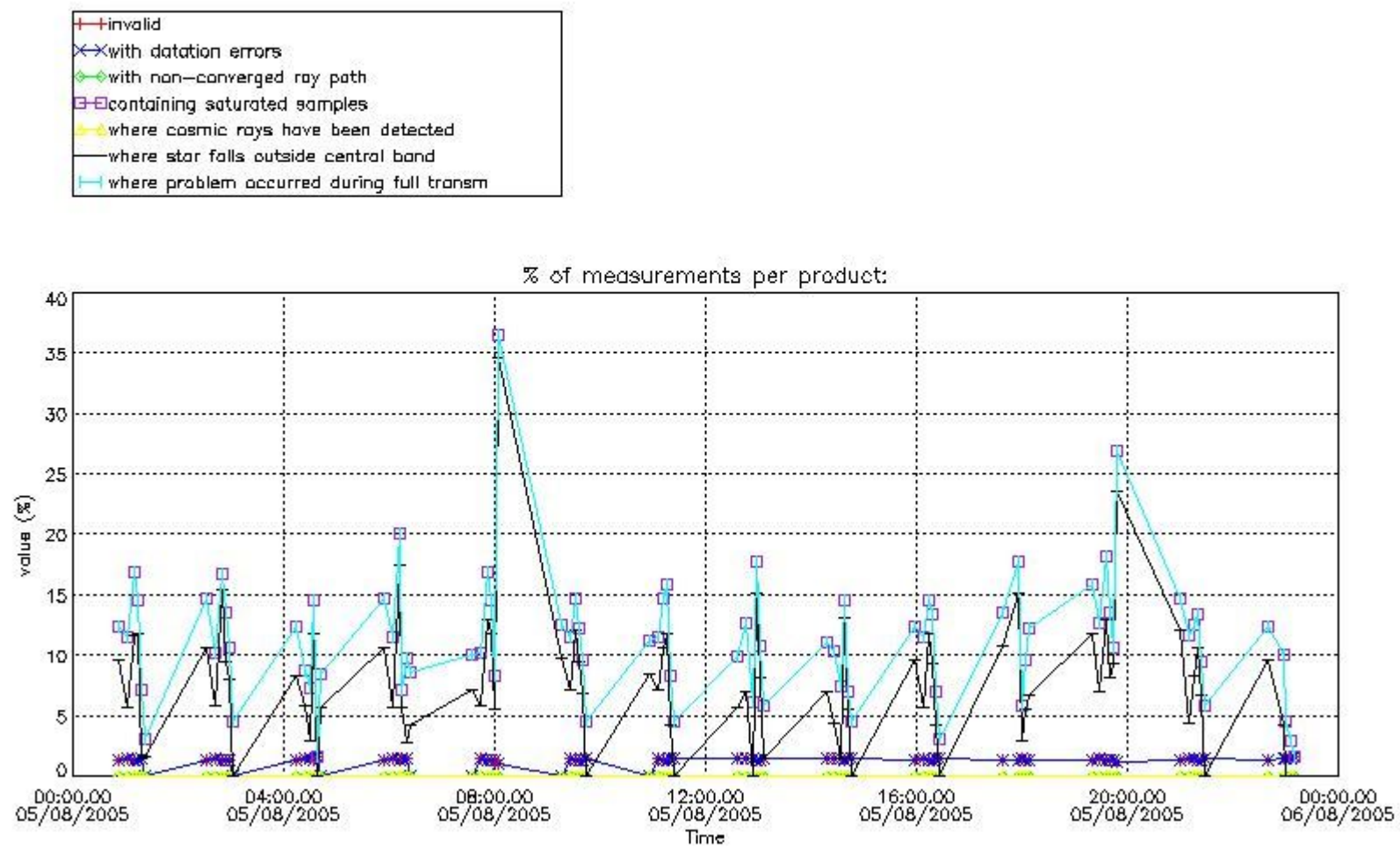
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

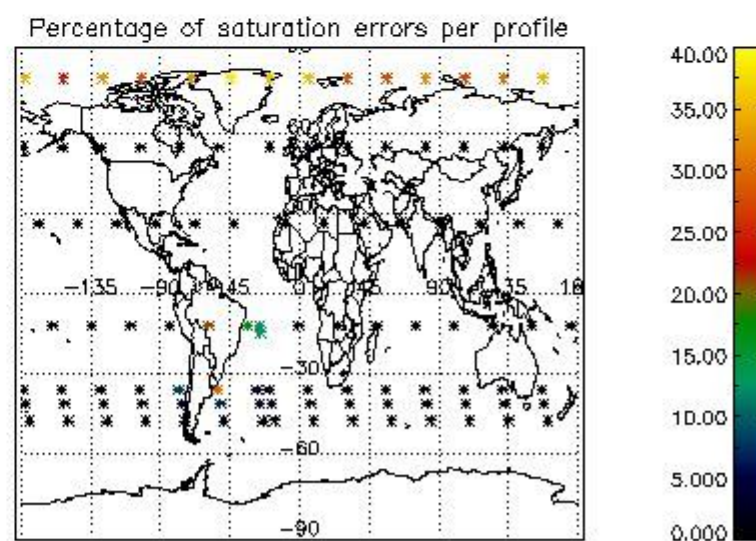
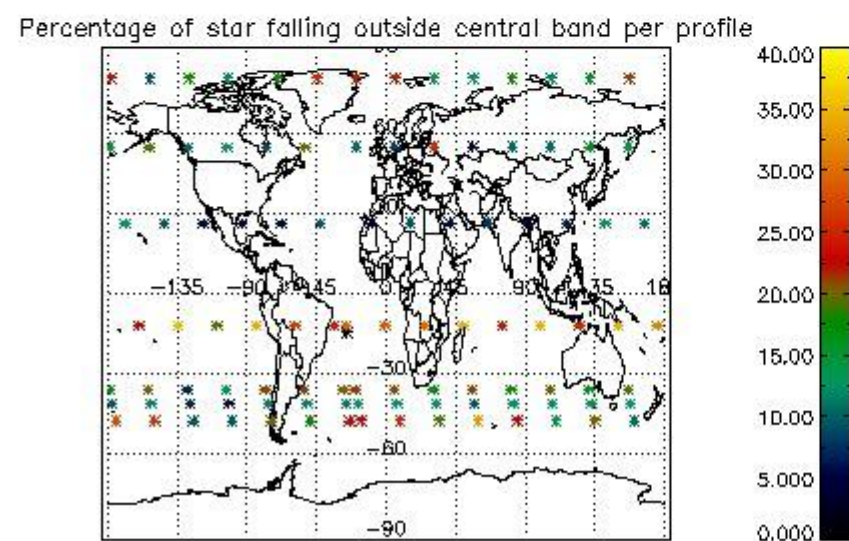
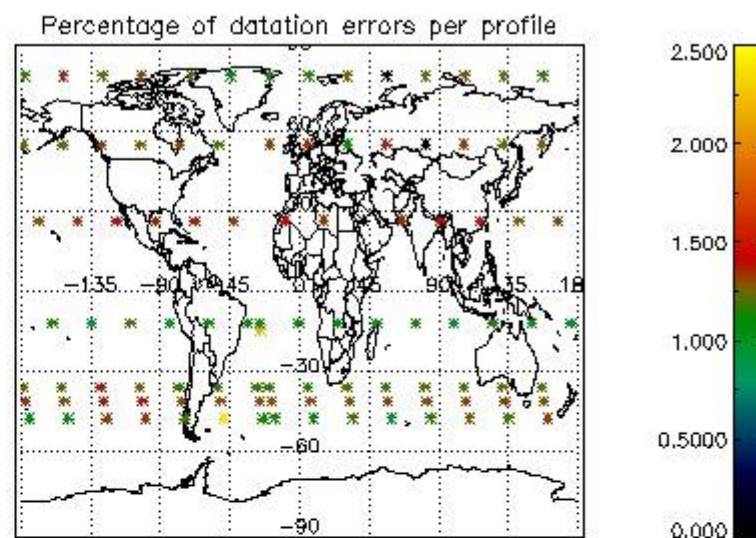
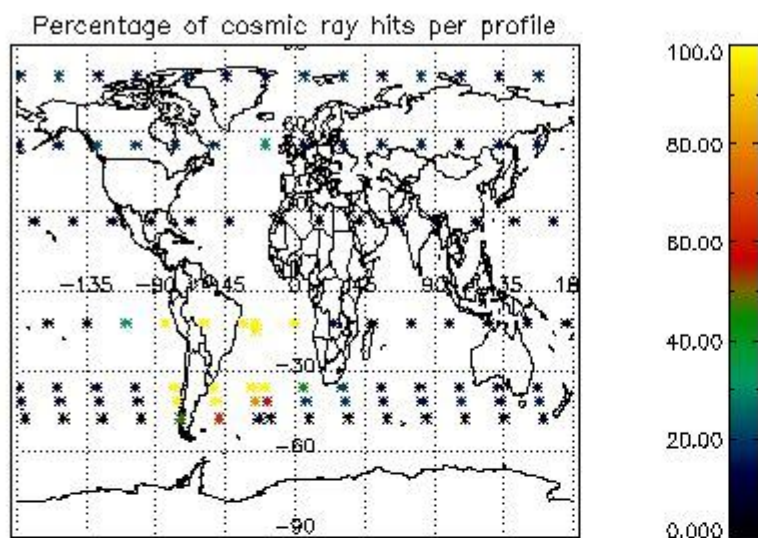


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

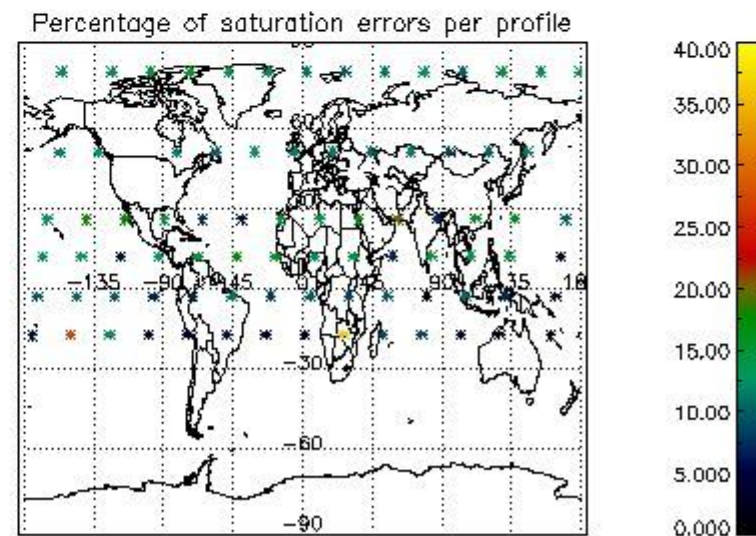
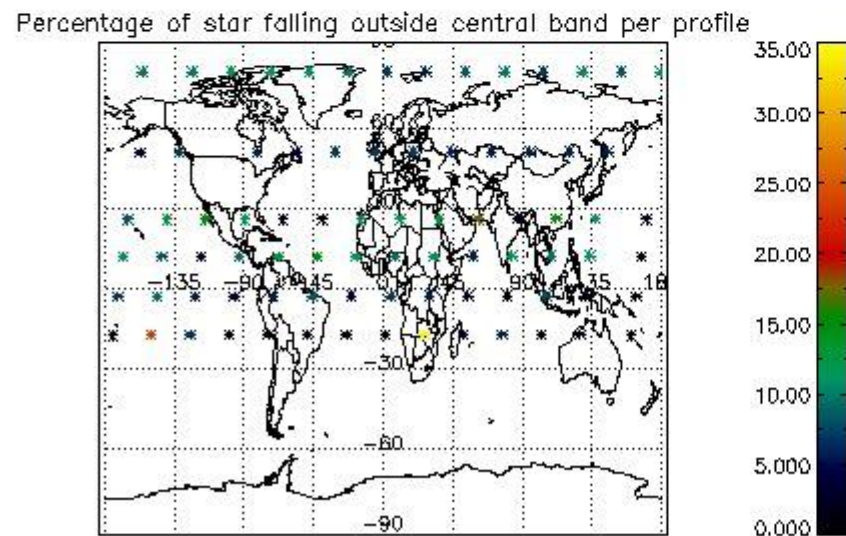
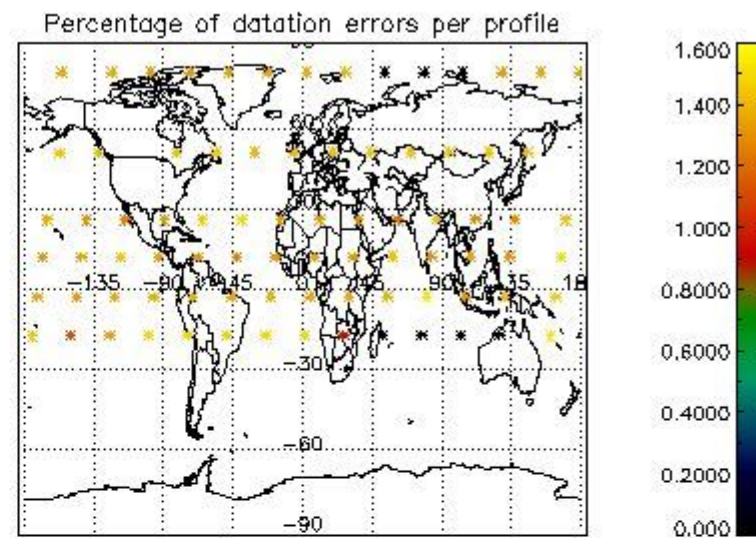
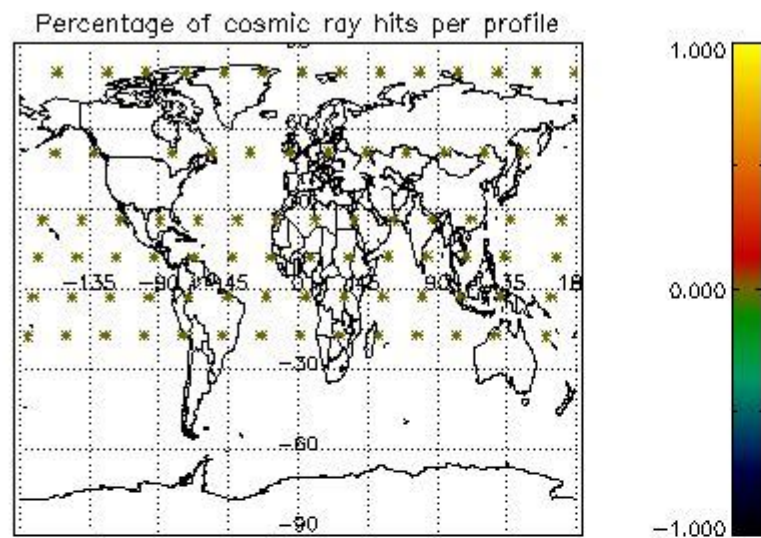


4.2 Plot quality information per product coming from level 1b processing (world map)

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

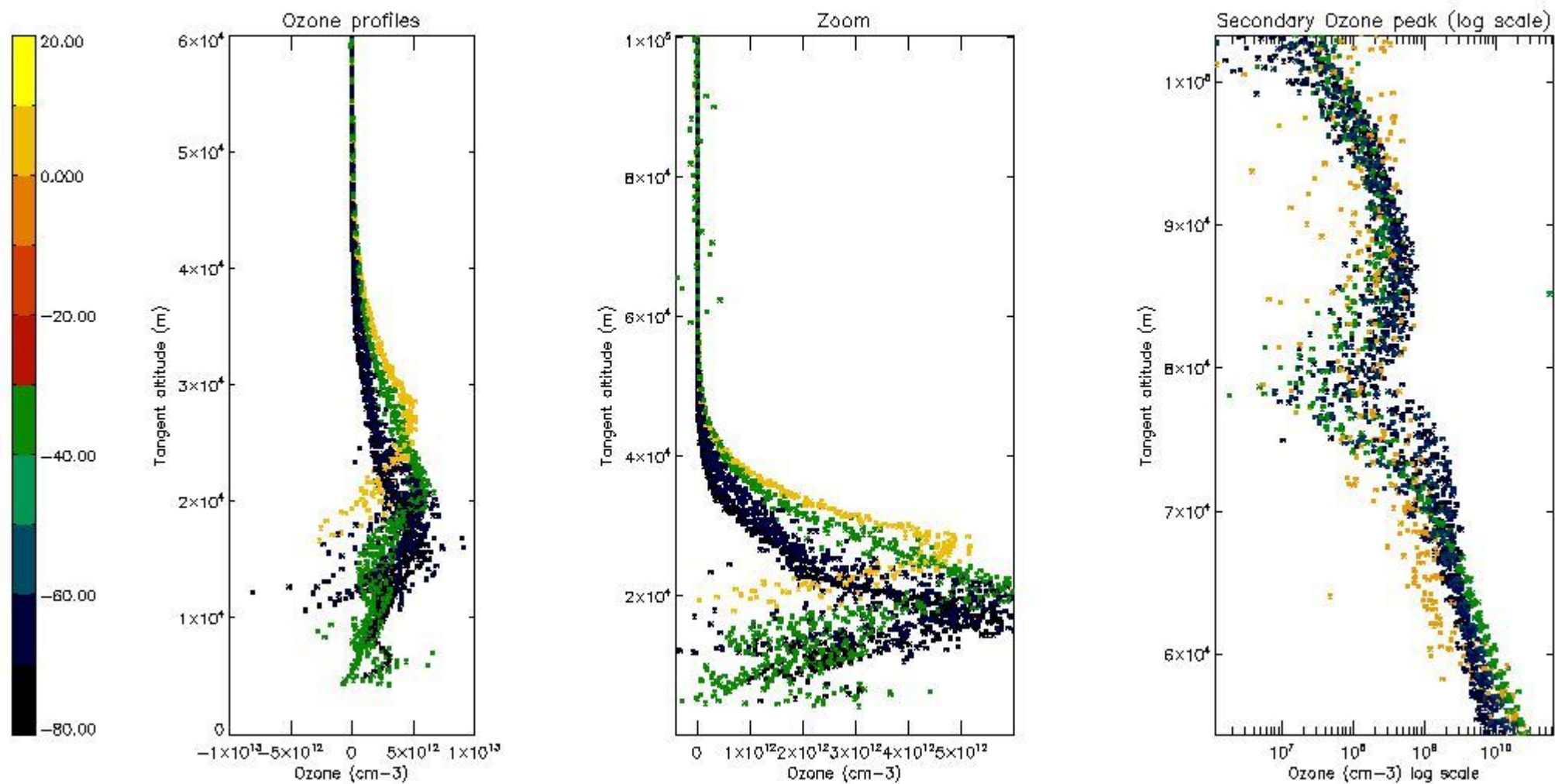
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	30

STD < 10	25
STD < 5	19

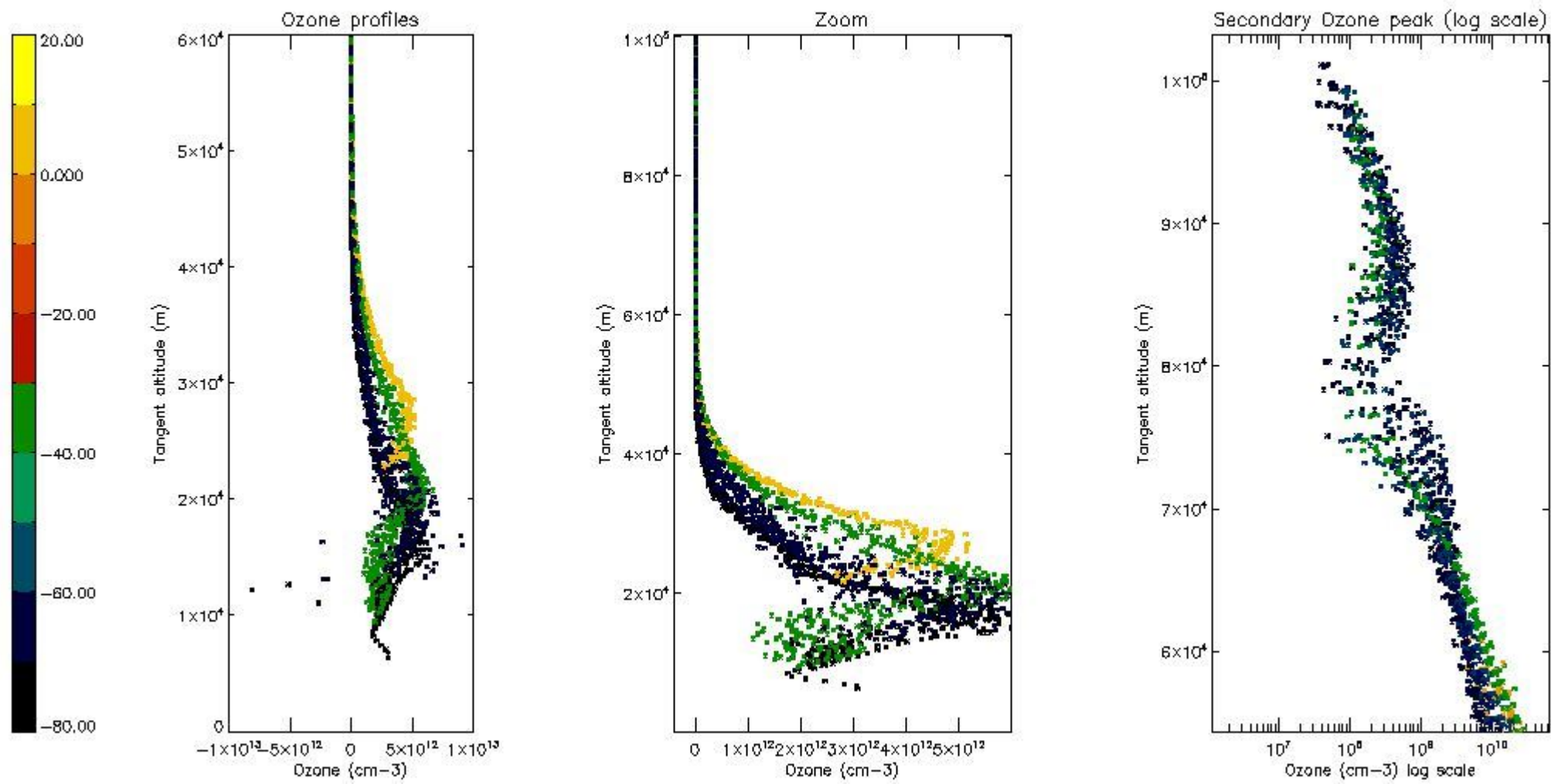
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



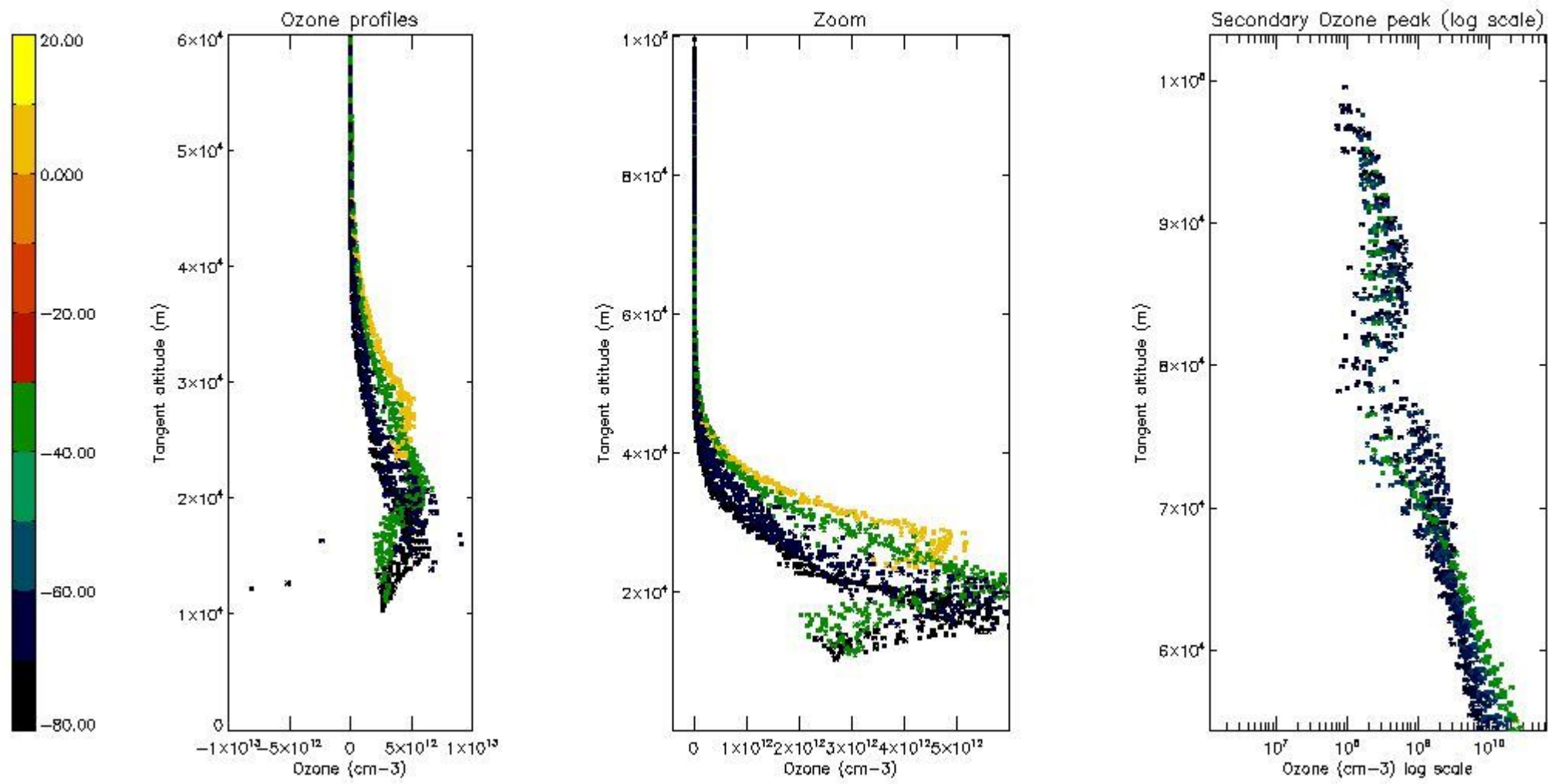
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



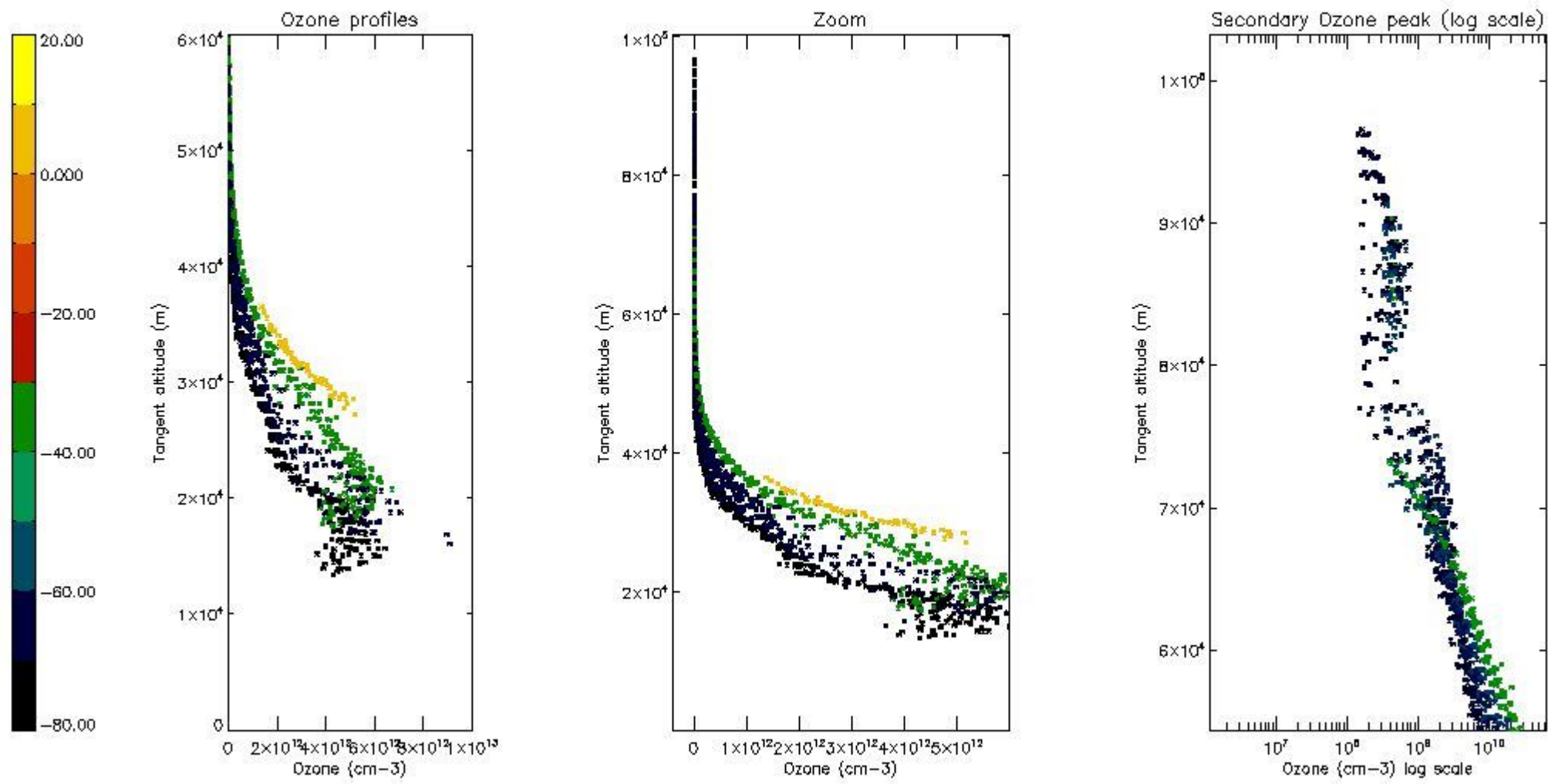
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



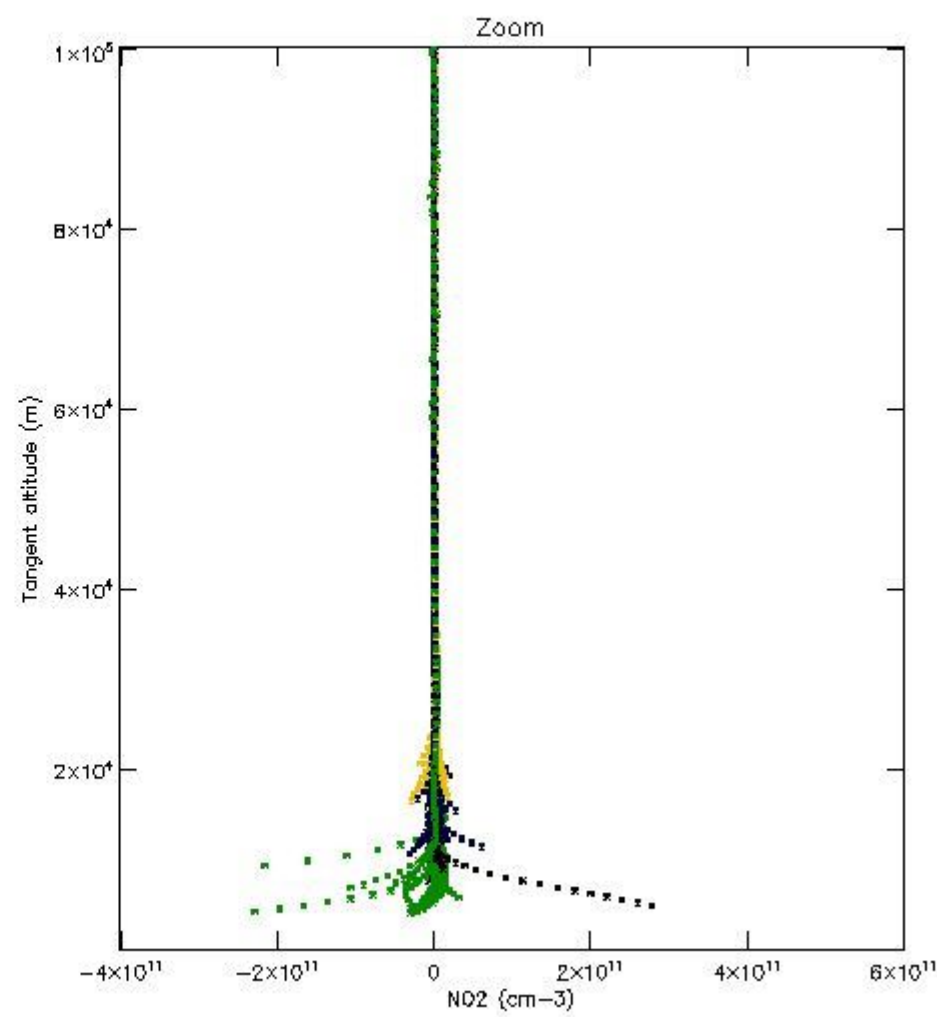
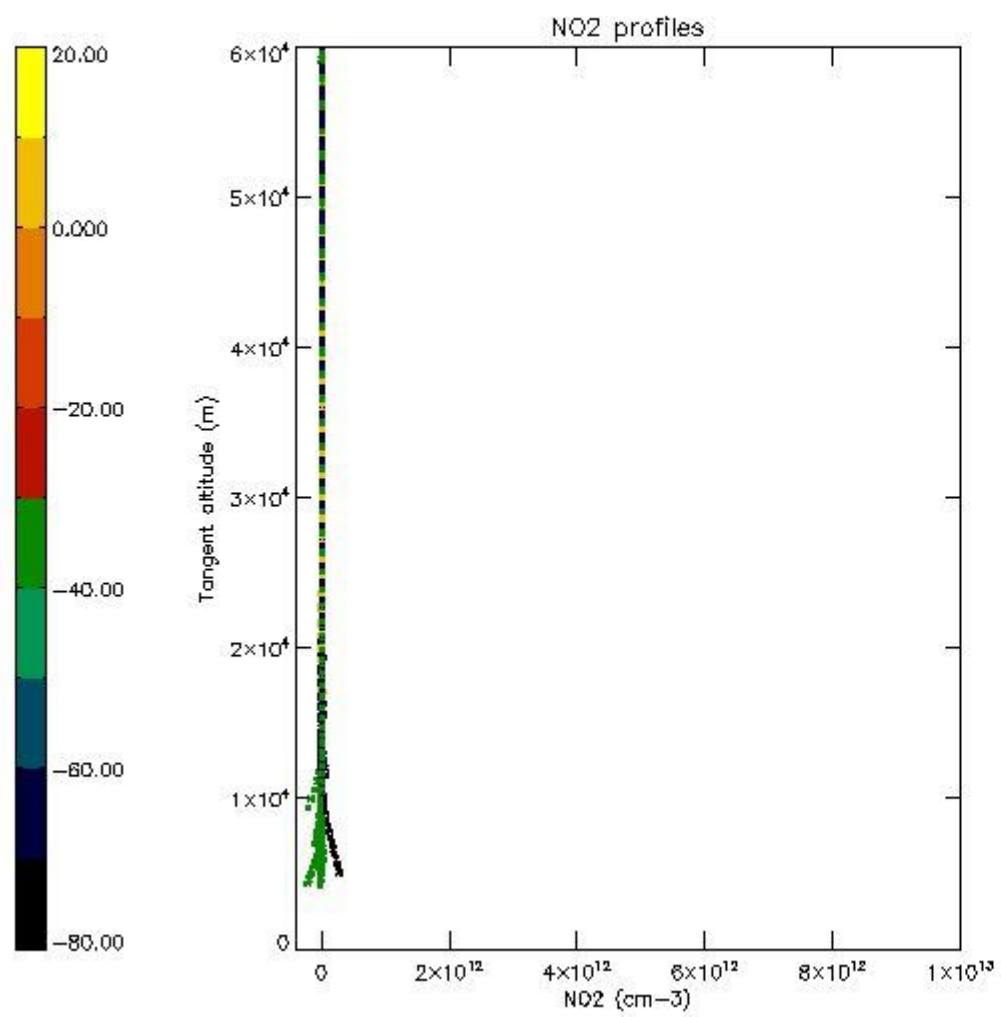
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



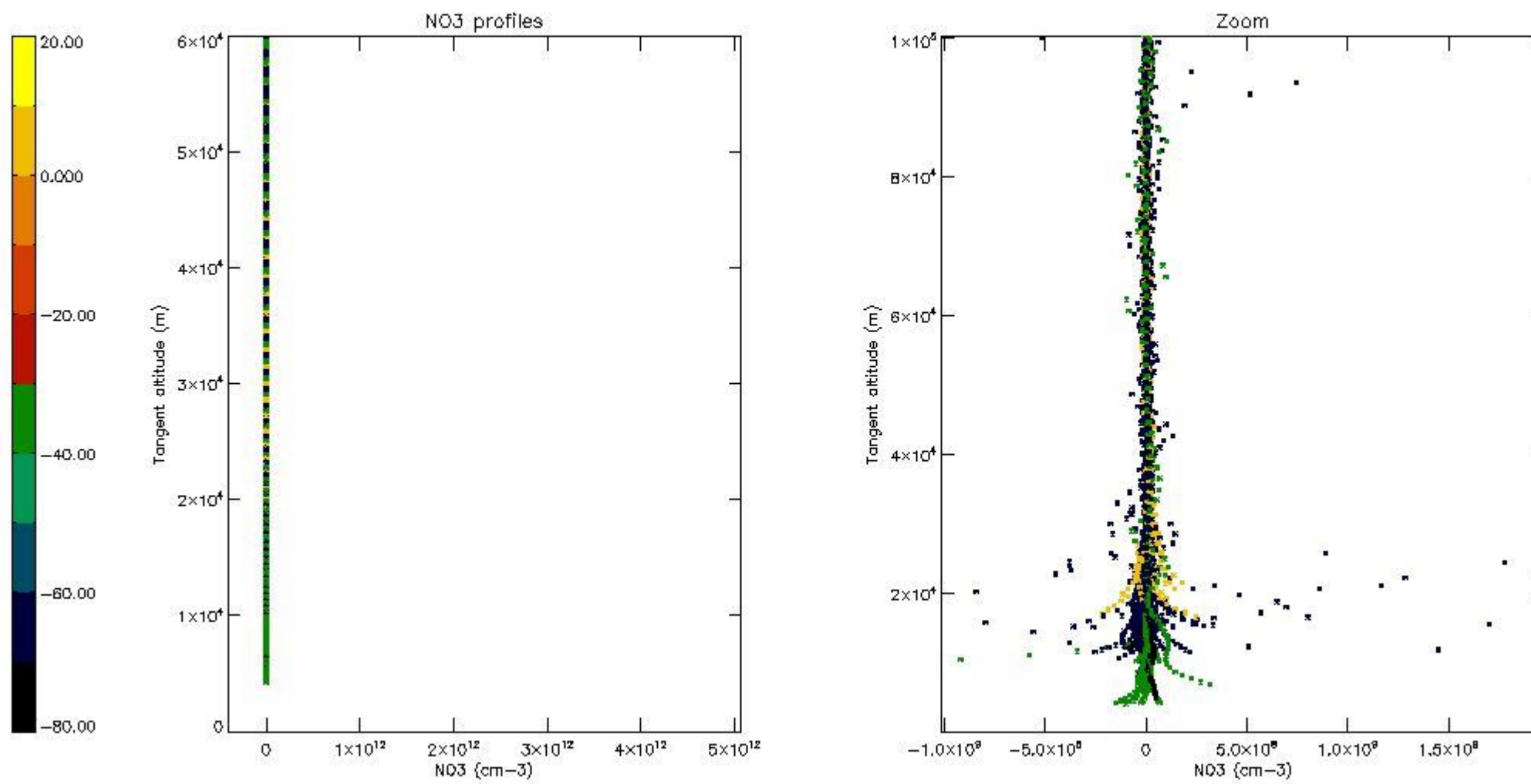
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



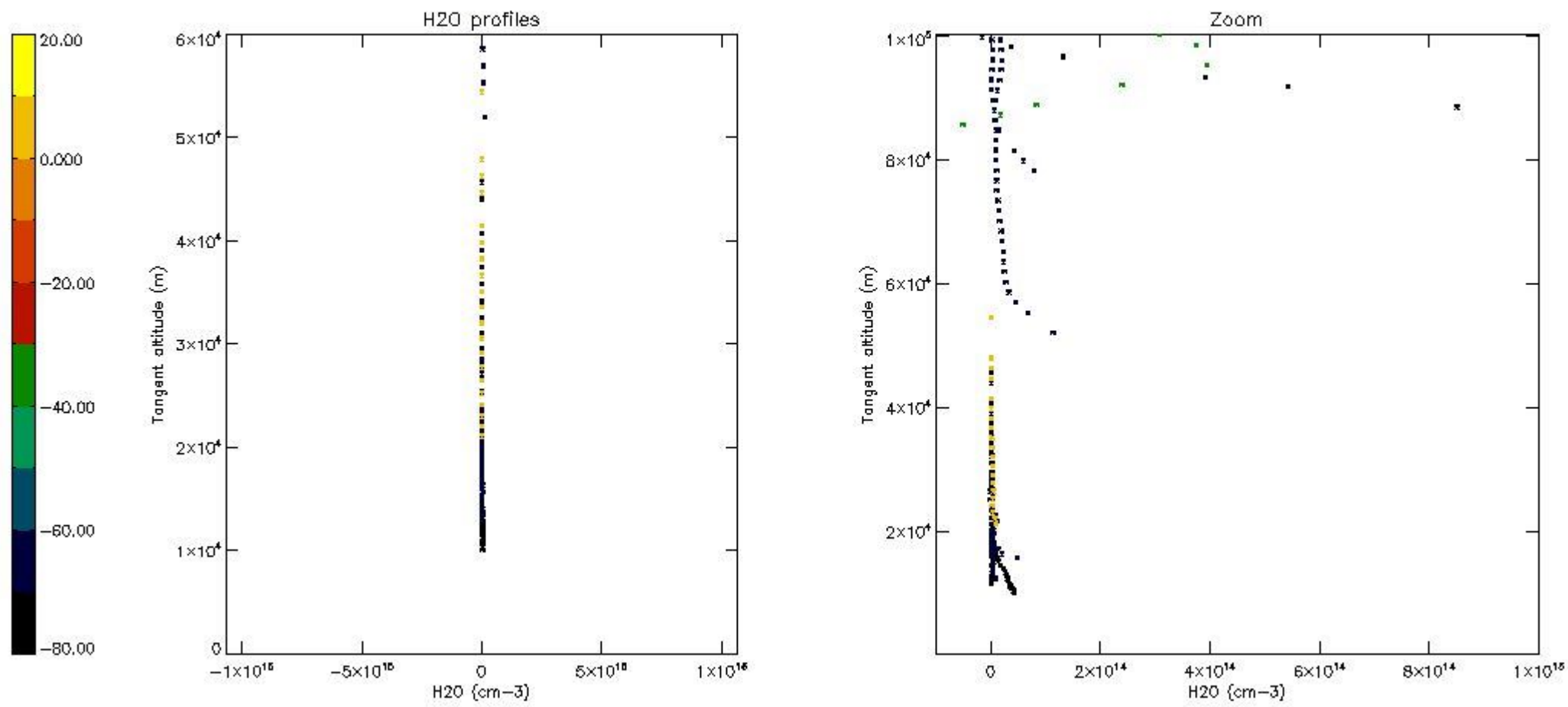
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

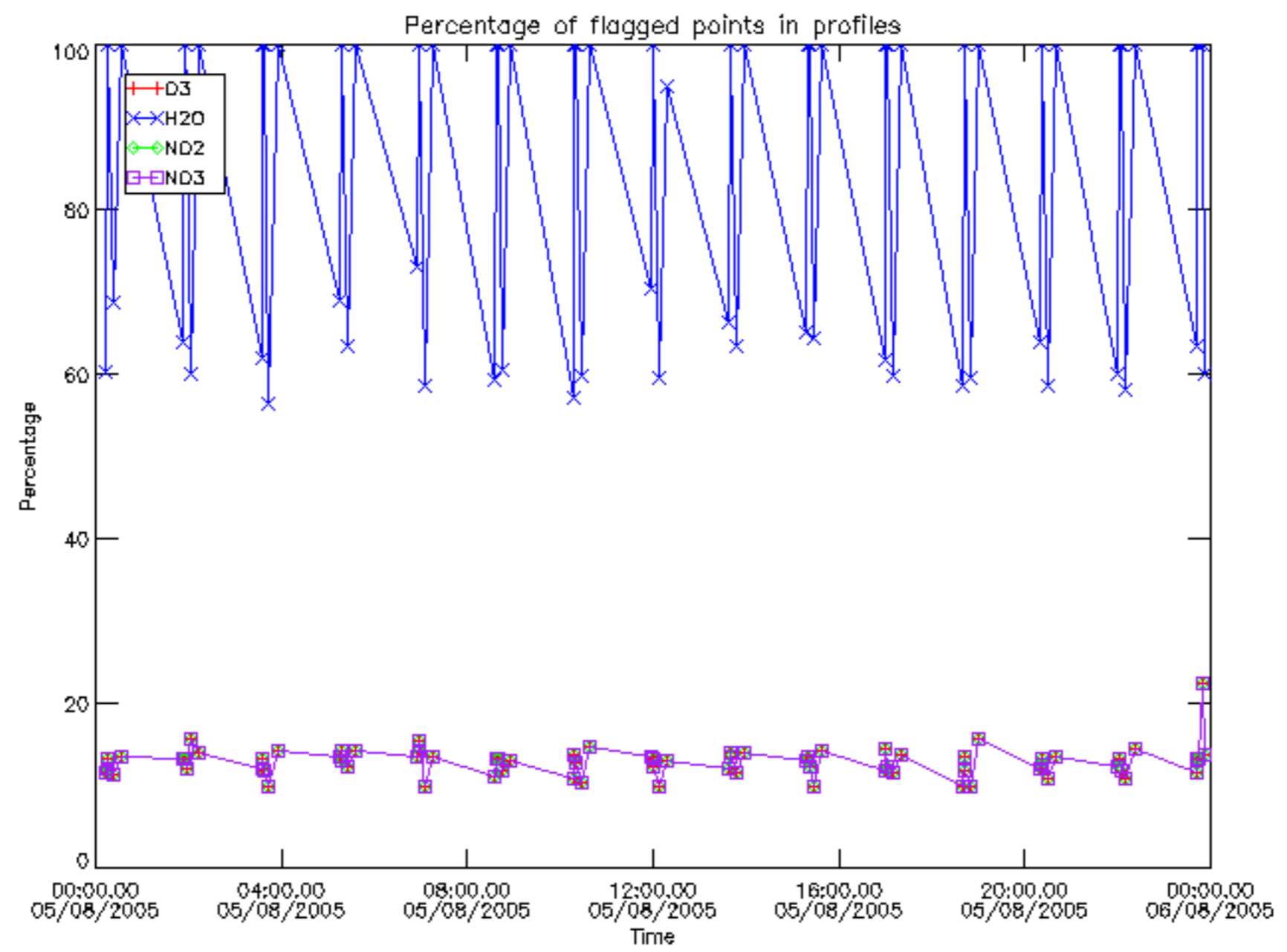
The colorbar represents the latitude.



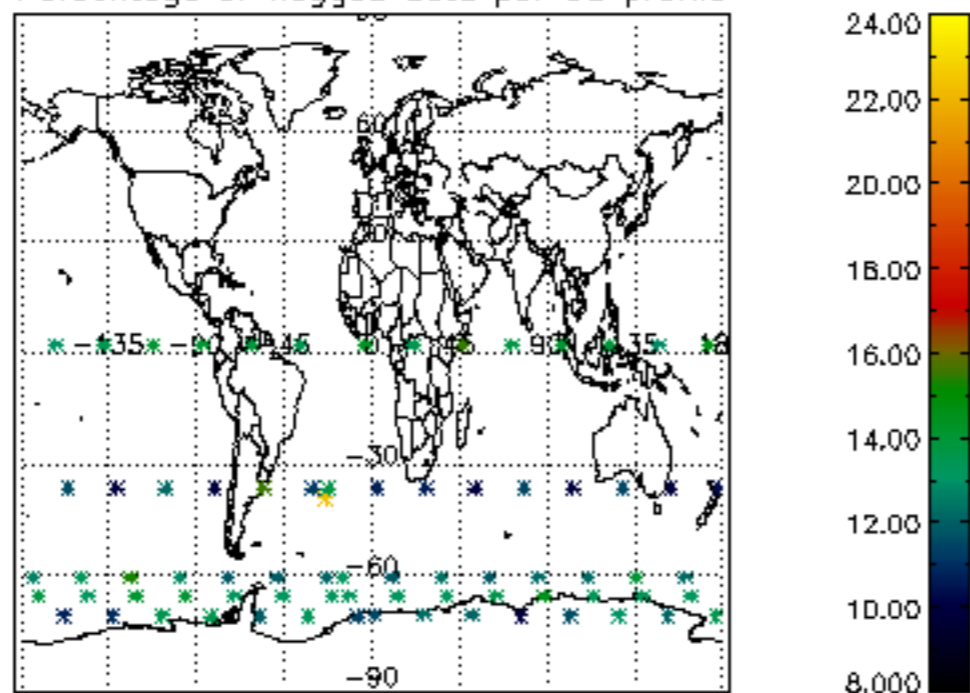
6. Auxiliary Data Files used for the production reported in section 2

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.

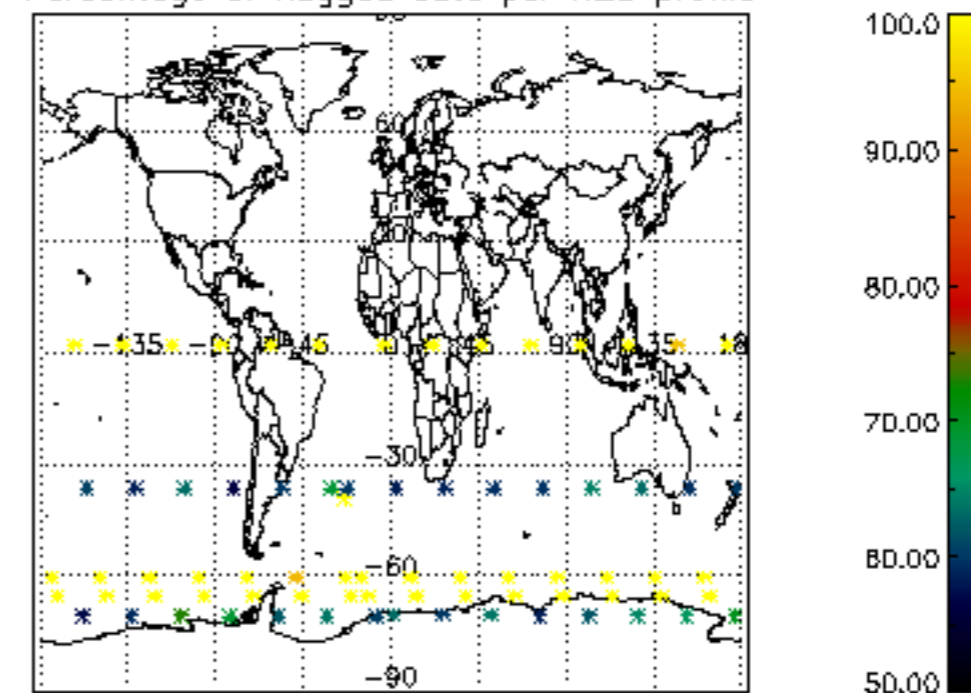
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	05-AUG-2005 00:12:52
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-AUG-2005 00:12:52
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-AUG-2005 00:12:52



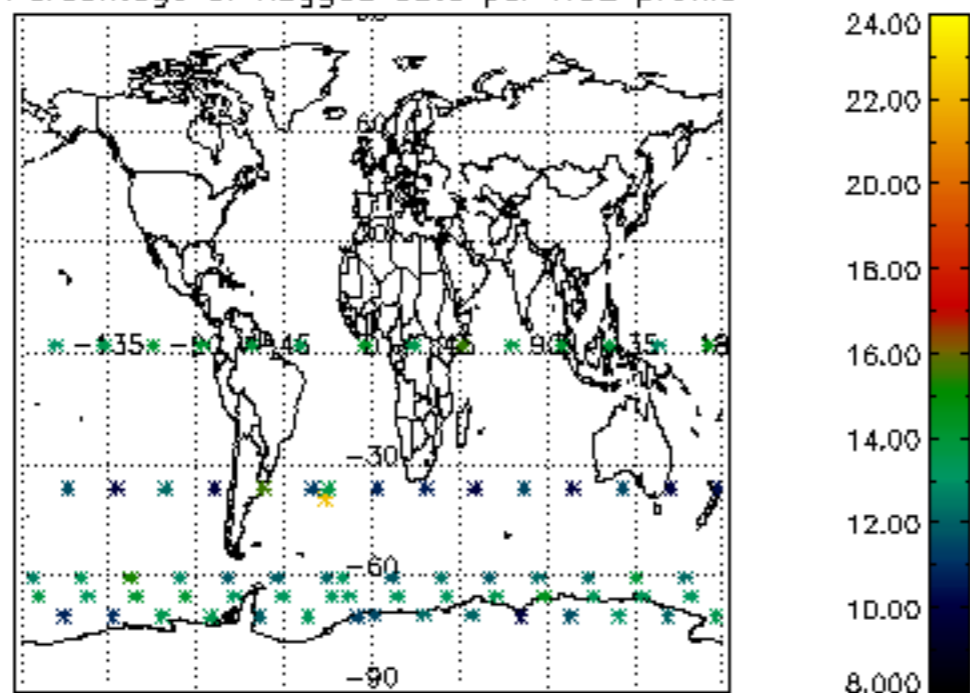
Percentage of flagged data per D3 profile



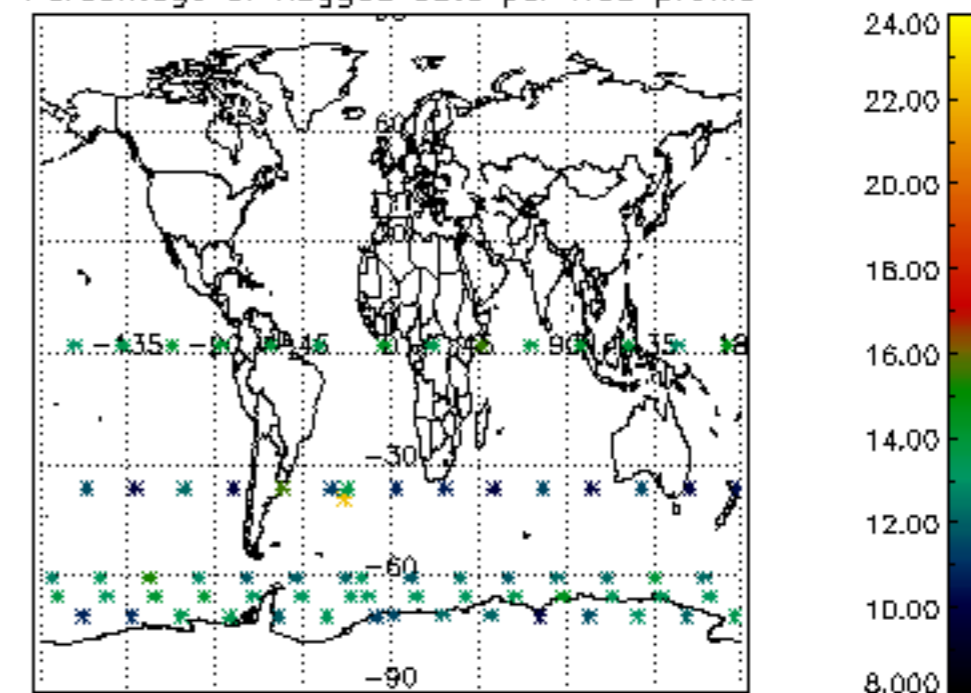
Percentage of flagged data per H2O profile

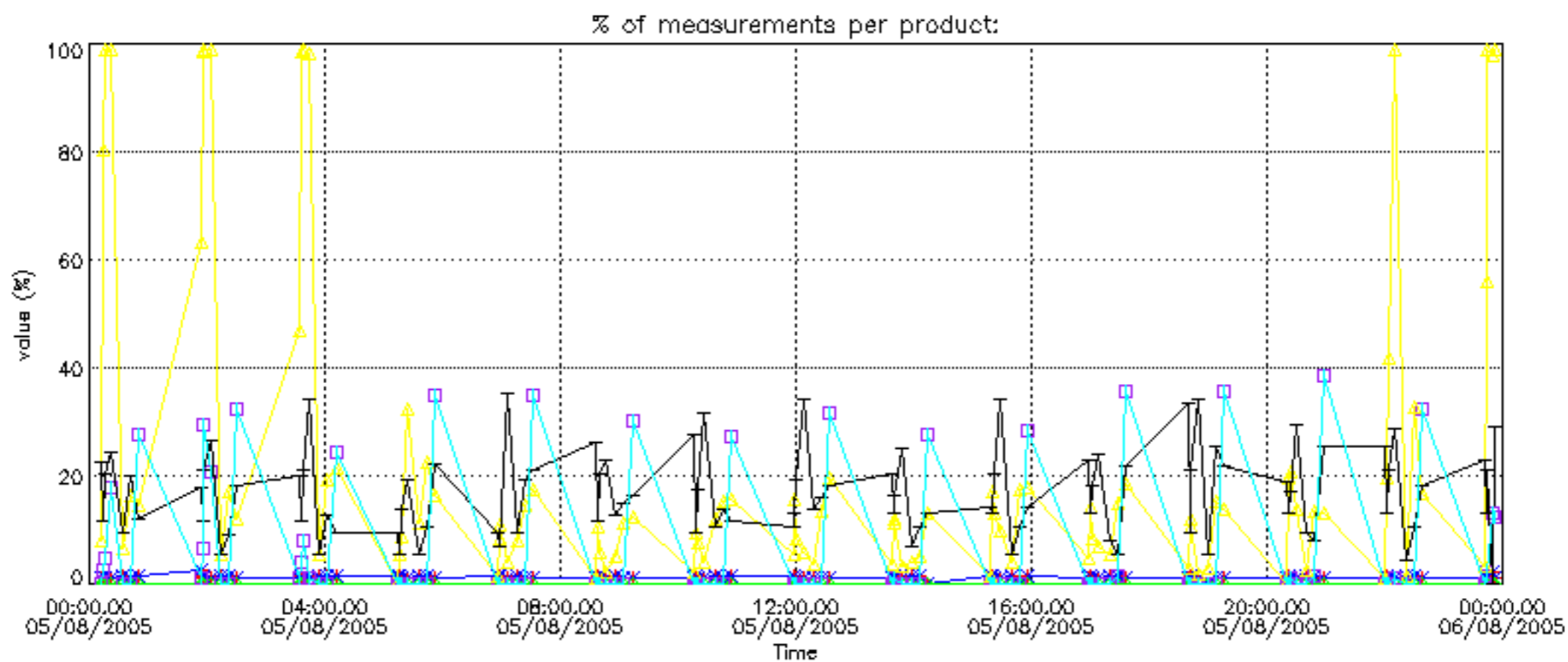


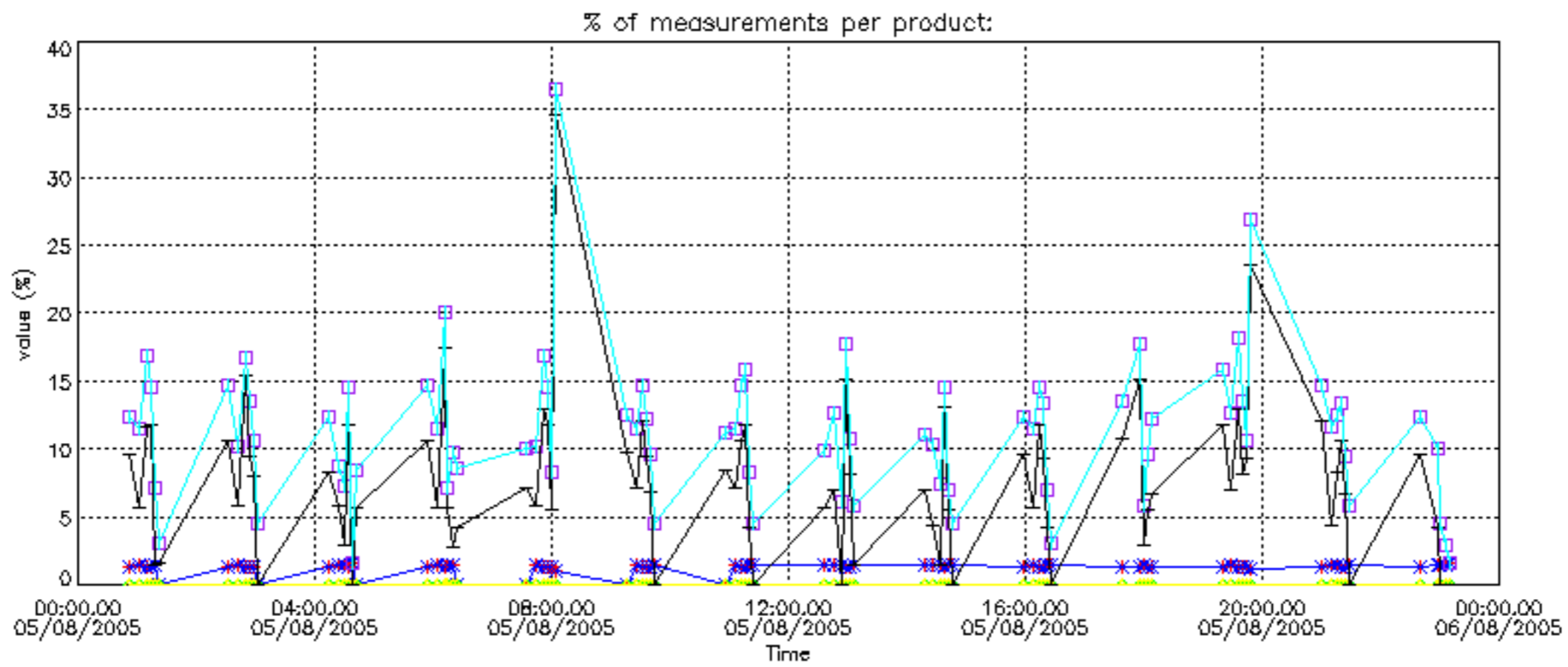
Percentage of flagged data per NO2 profile



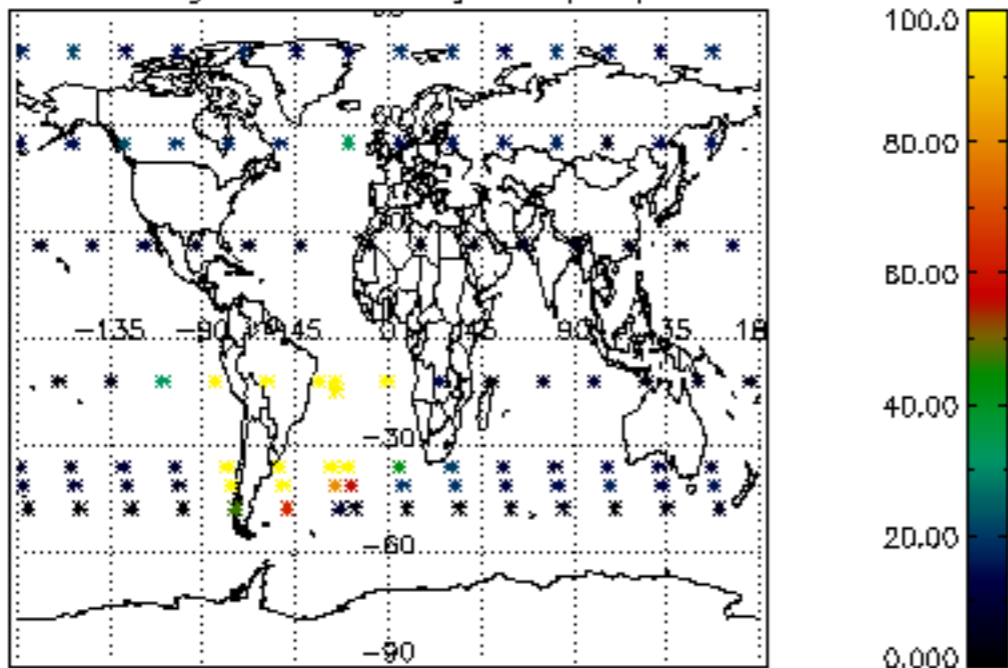
Percentage of flagged data per NO3 profile



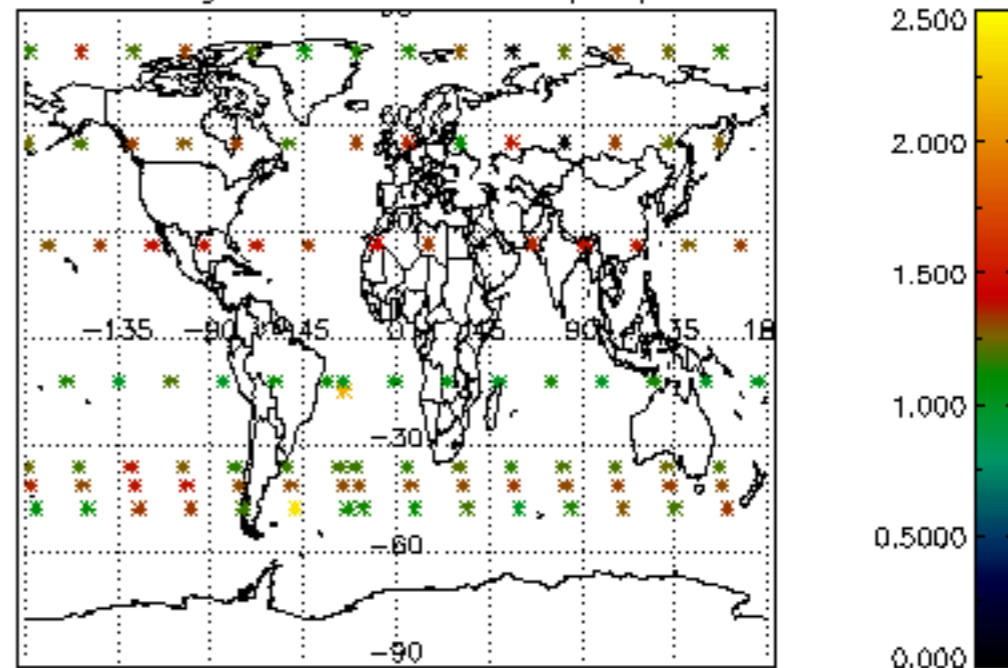




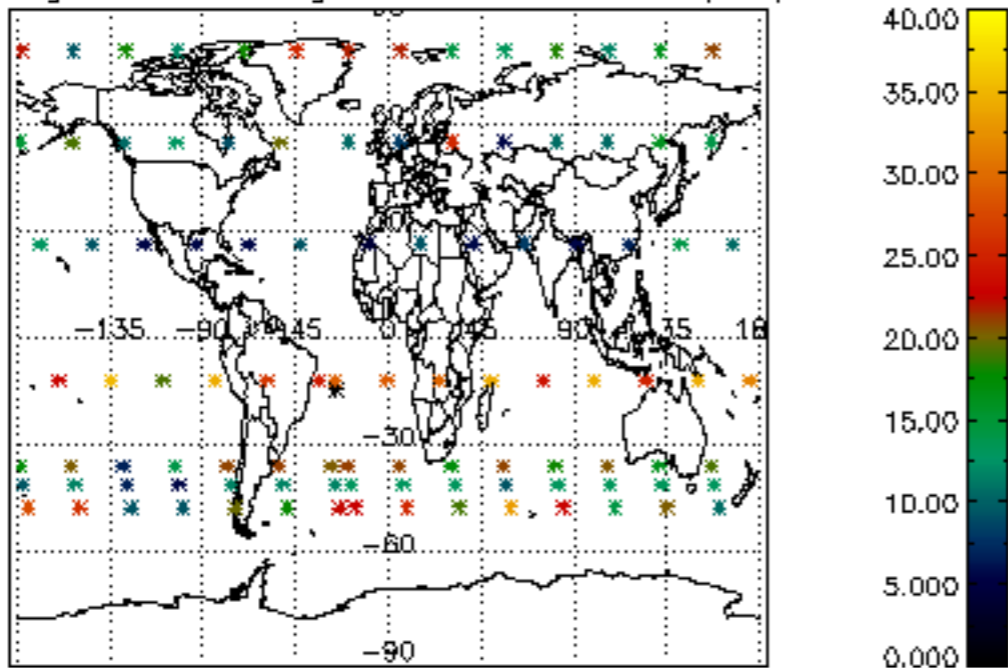
Percentage of cosmic ray hits per profile



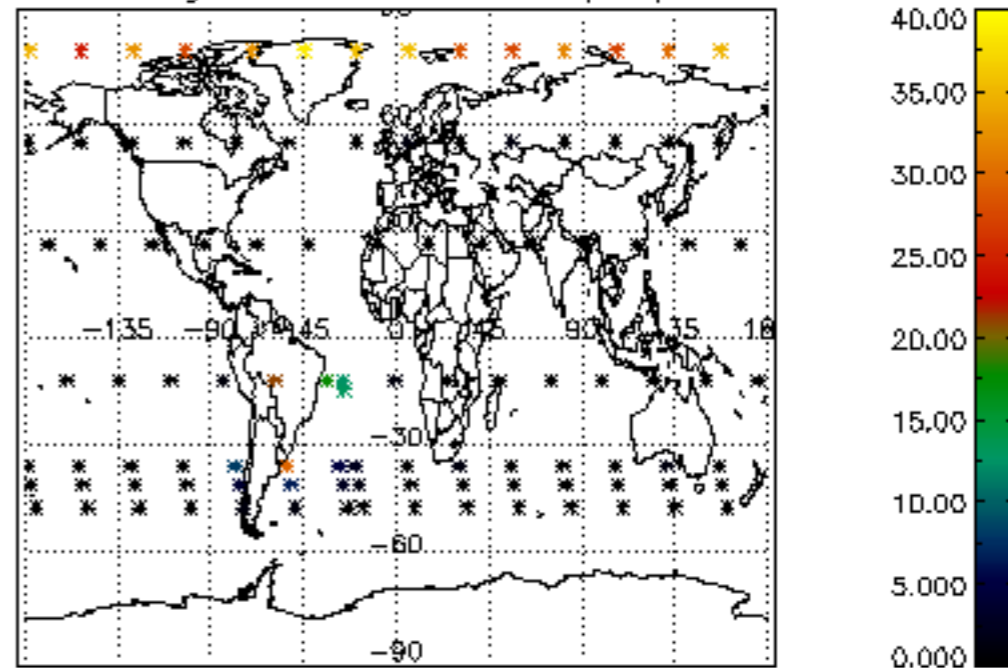
Percentage of datation errors per profile



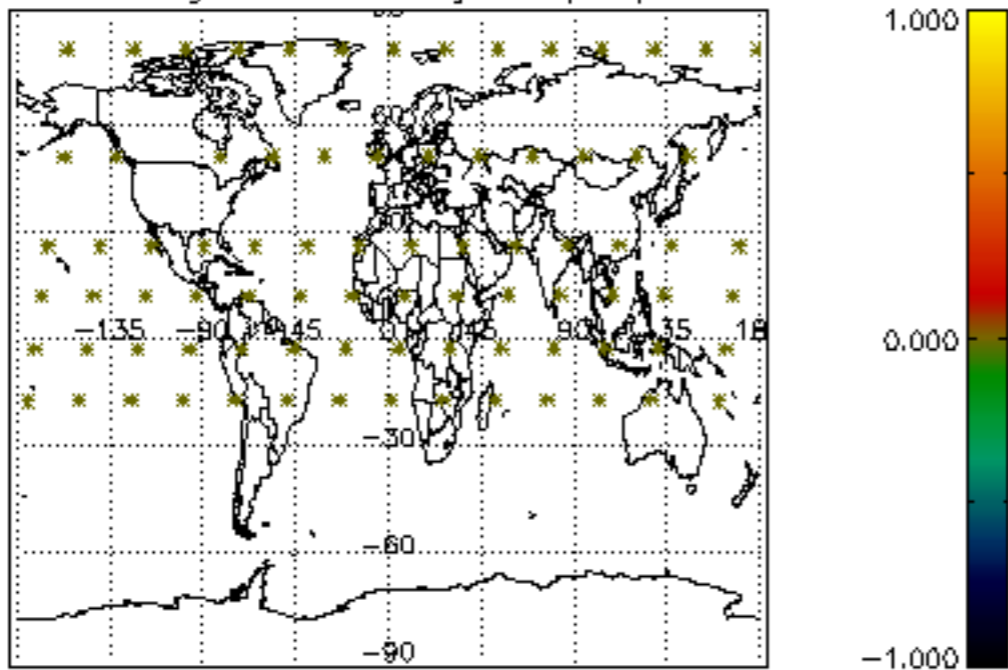
Percentage of star falling outside central band per profile



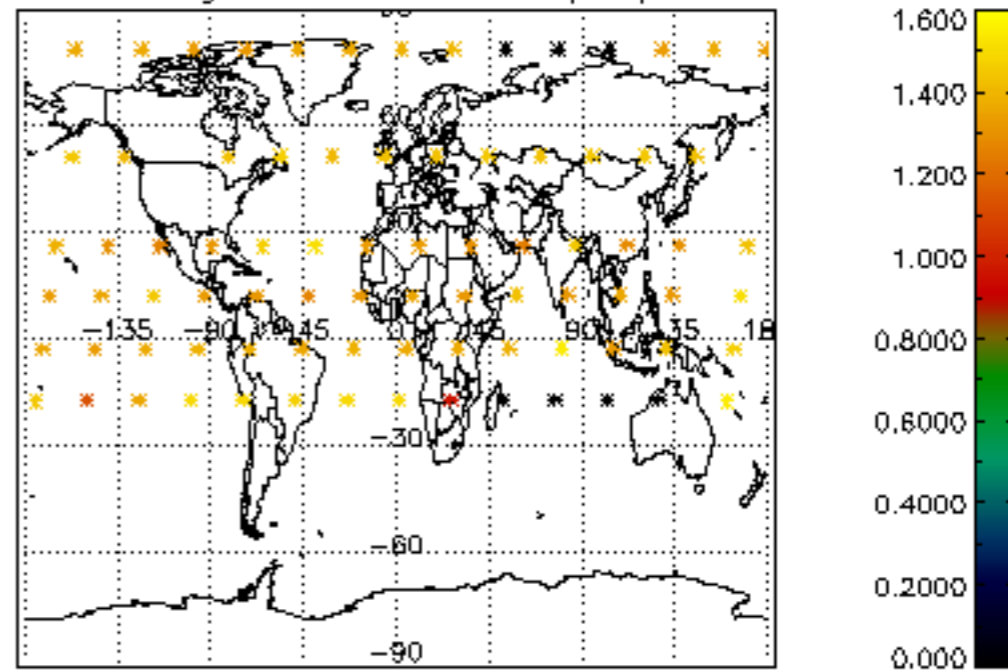
Percentage of saturation errors per profile



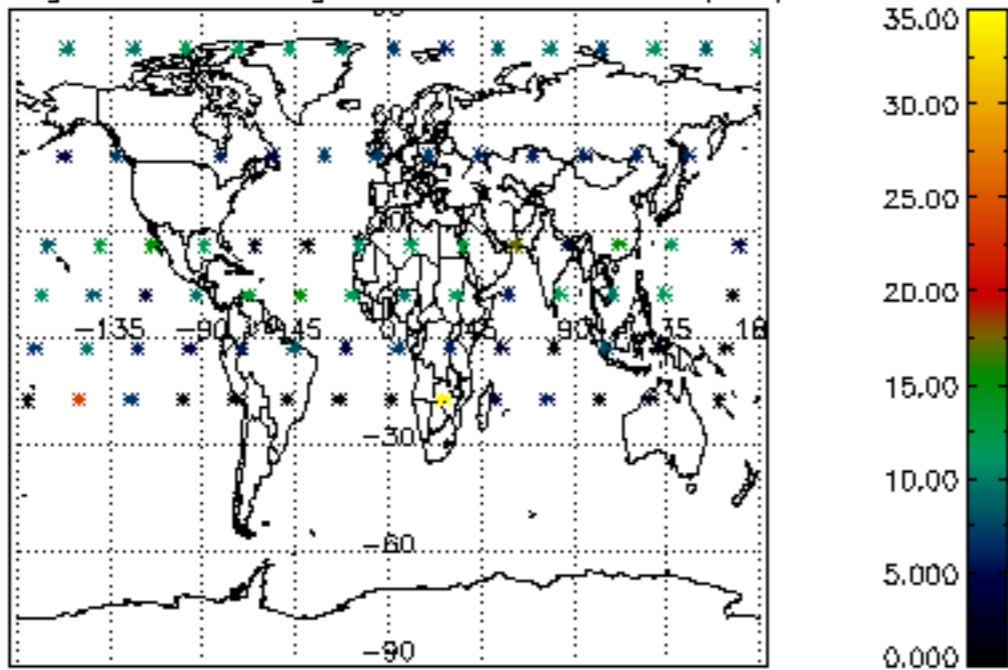
Percentage of cosmic ray hits per profile



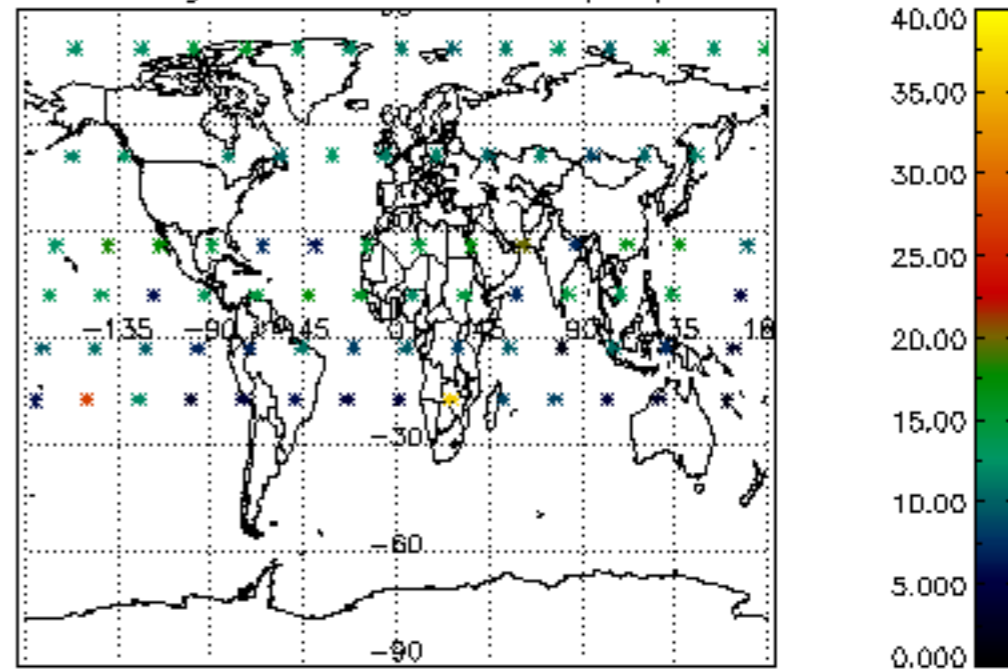
Percentage of datation errors per profile

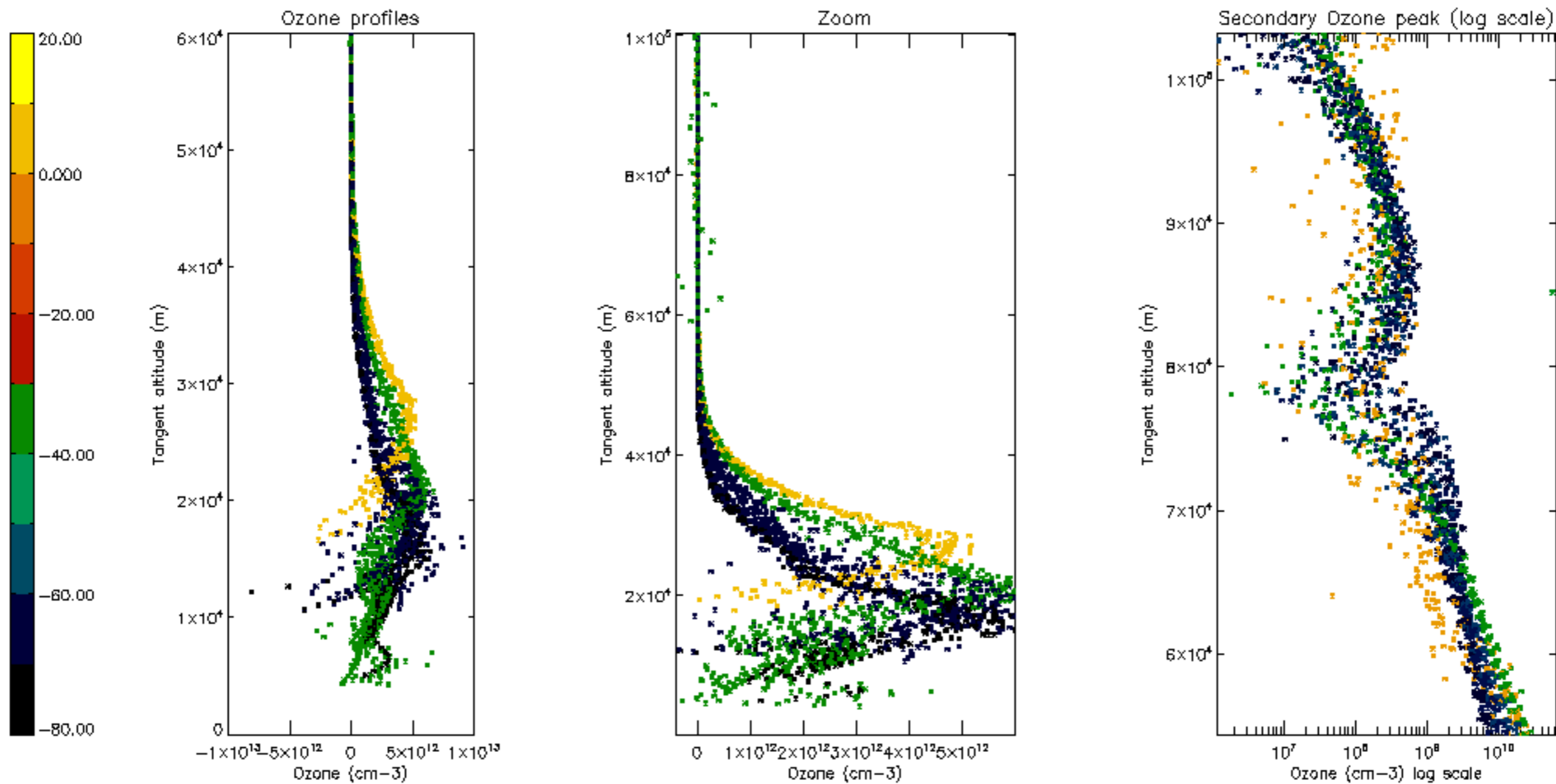


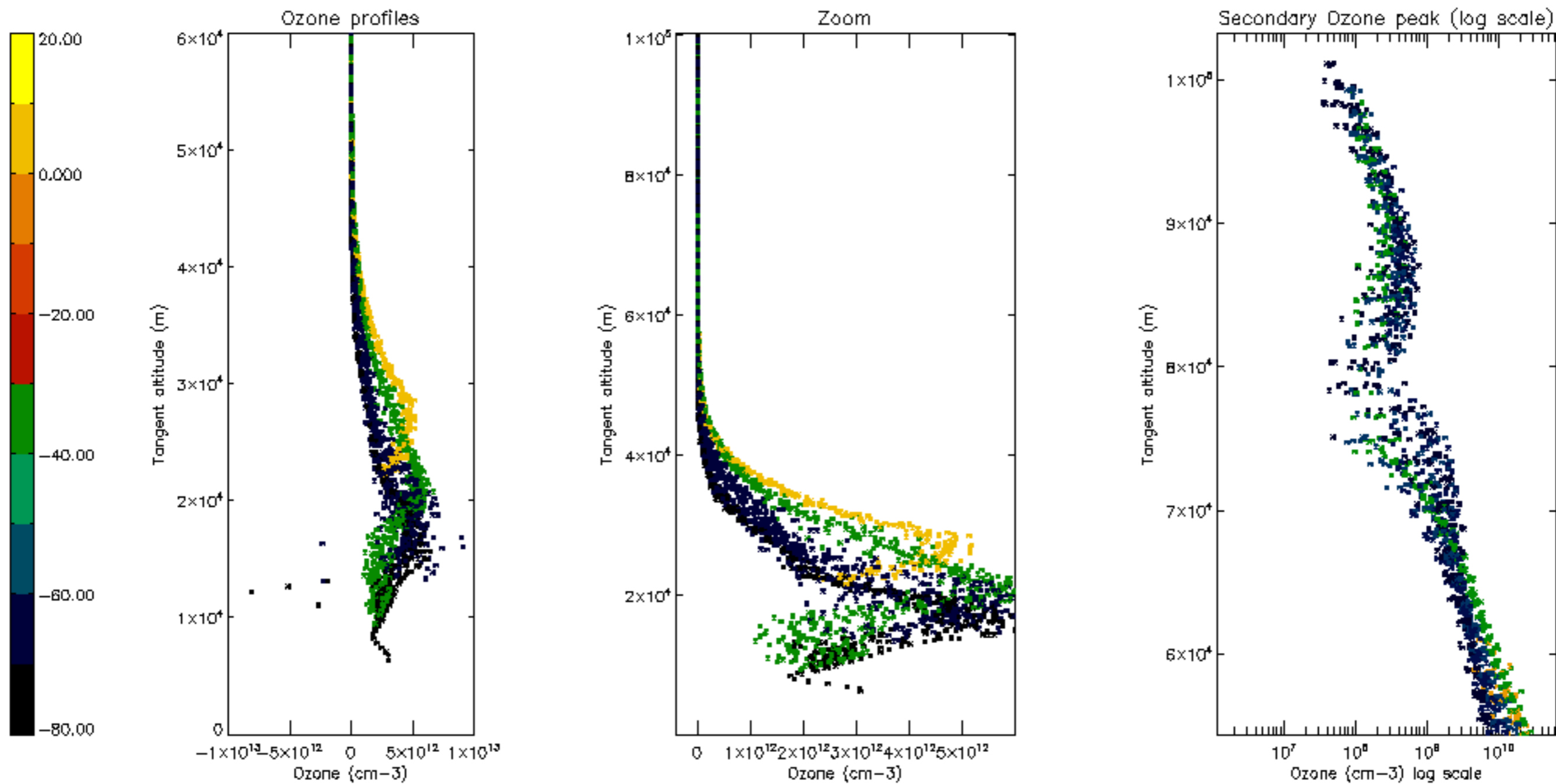
Percentage of star falling outside central band per profile

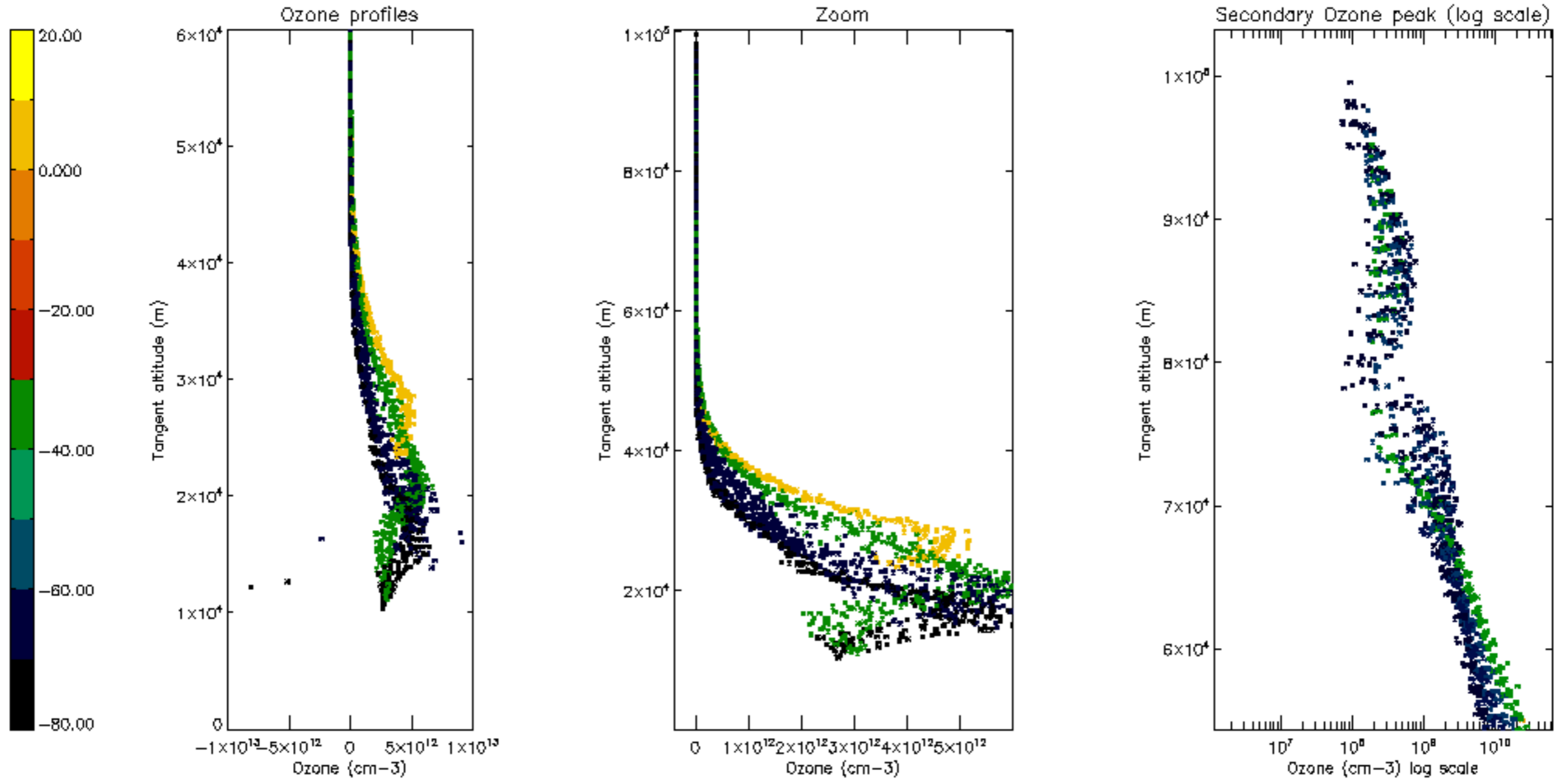


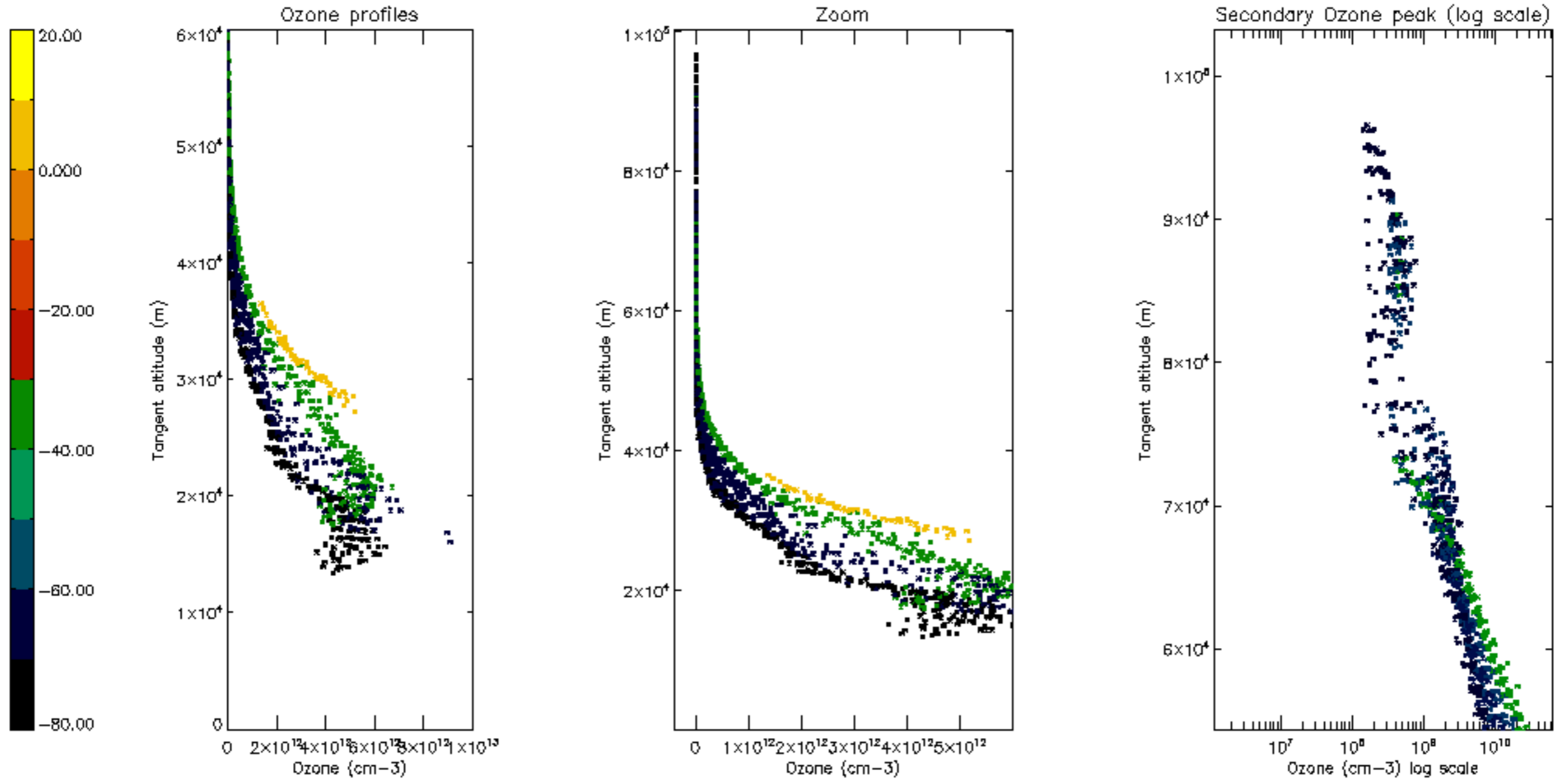
Percentage of saturation errors per profile

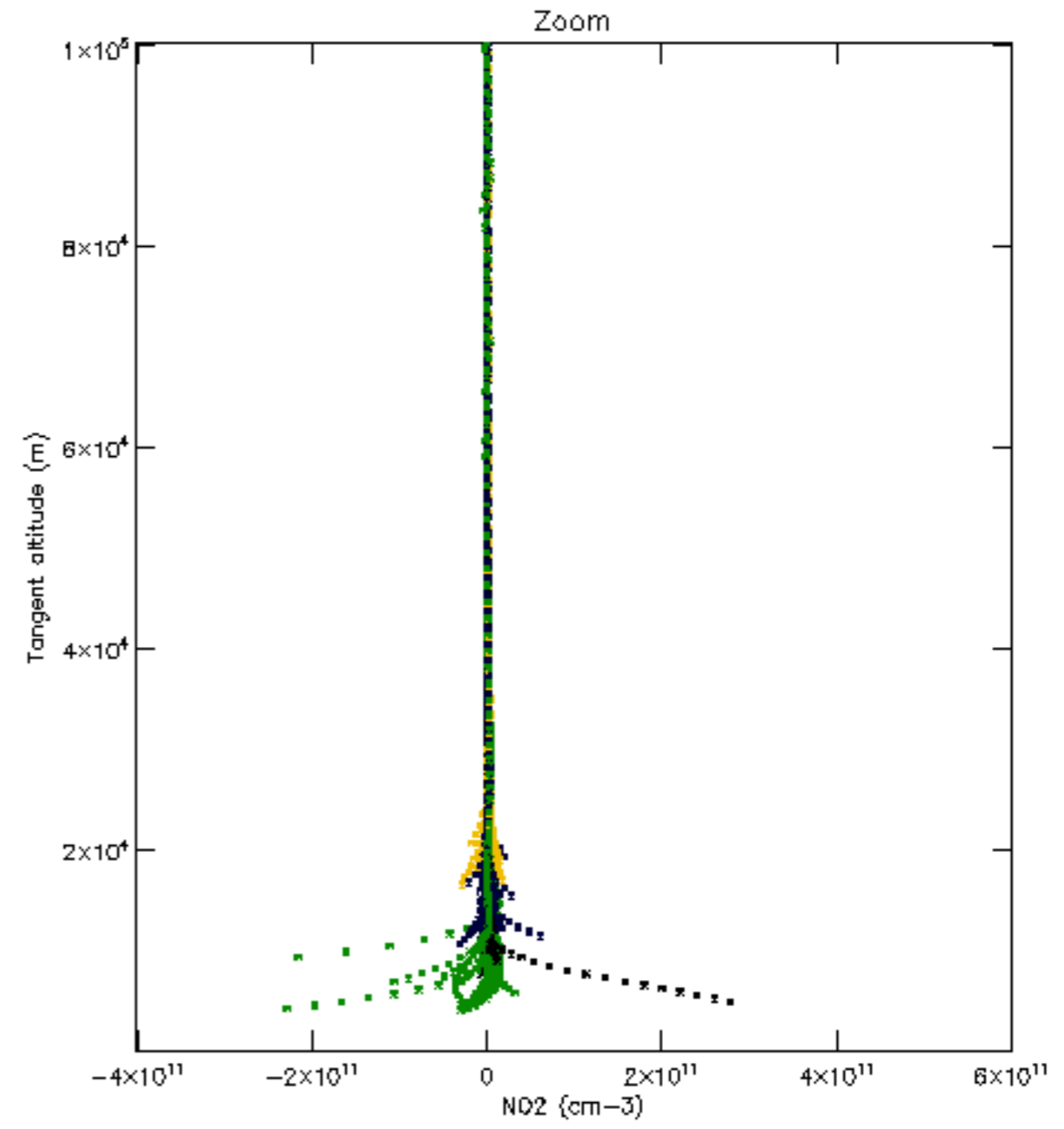
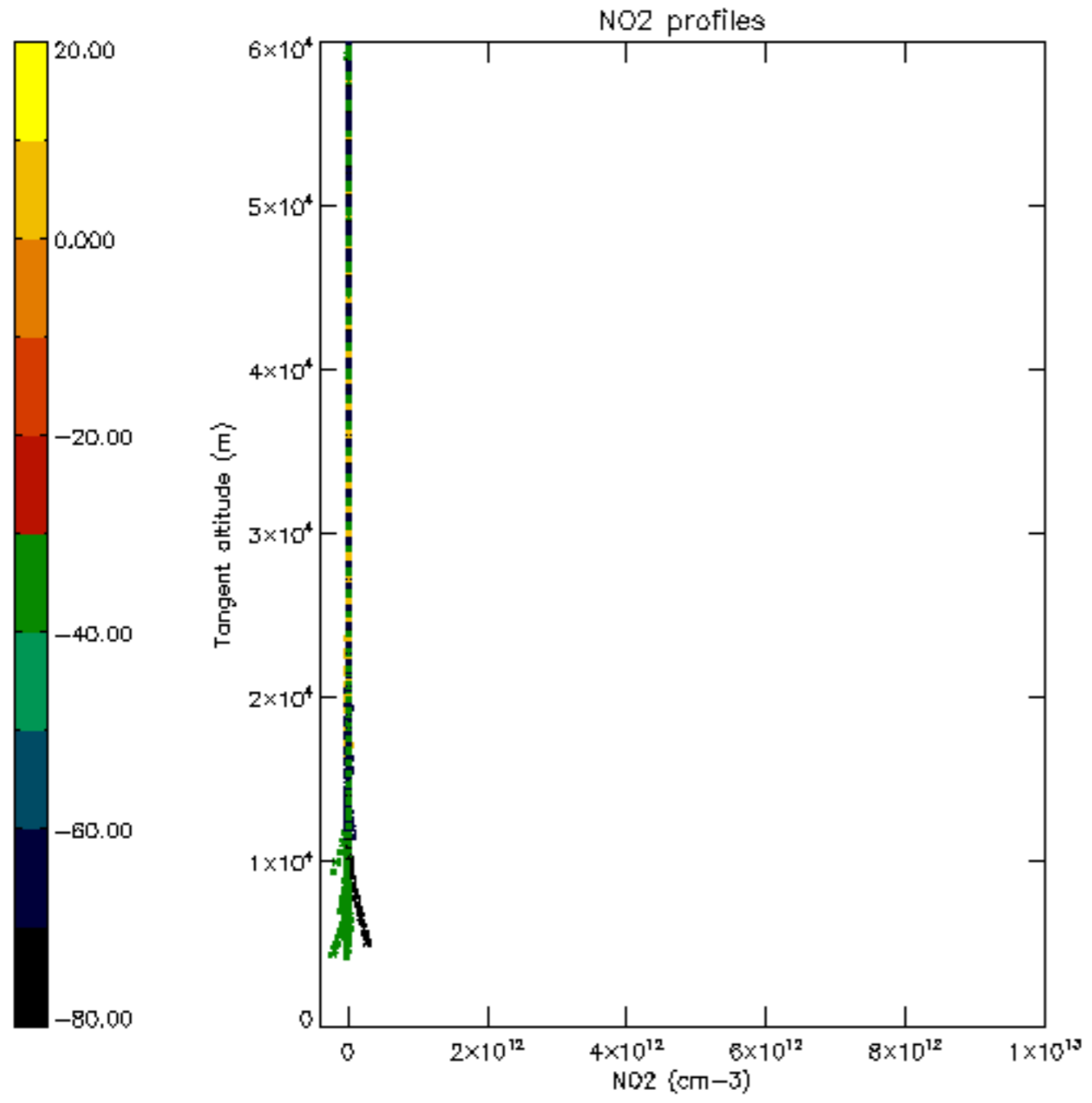


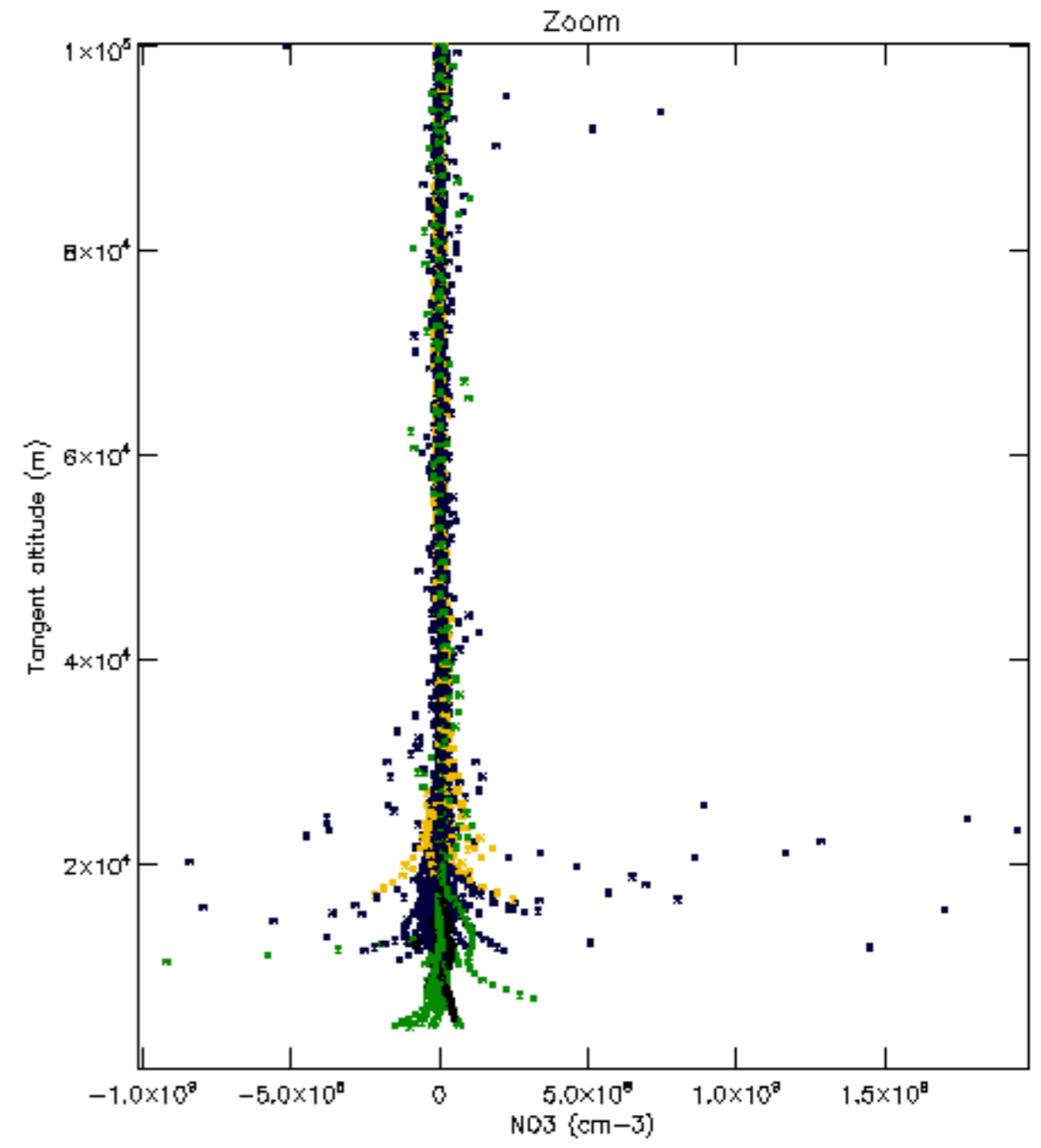
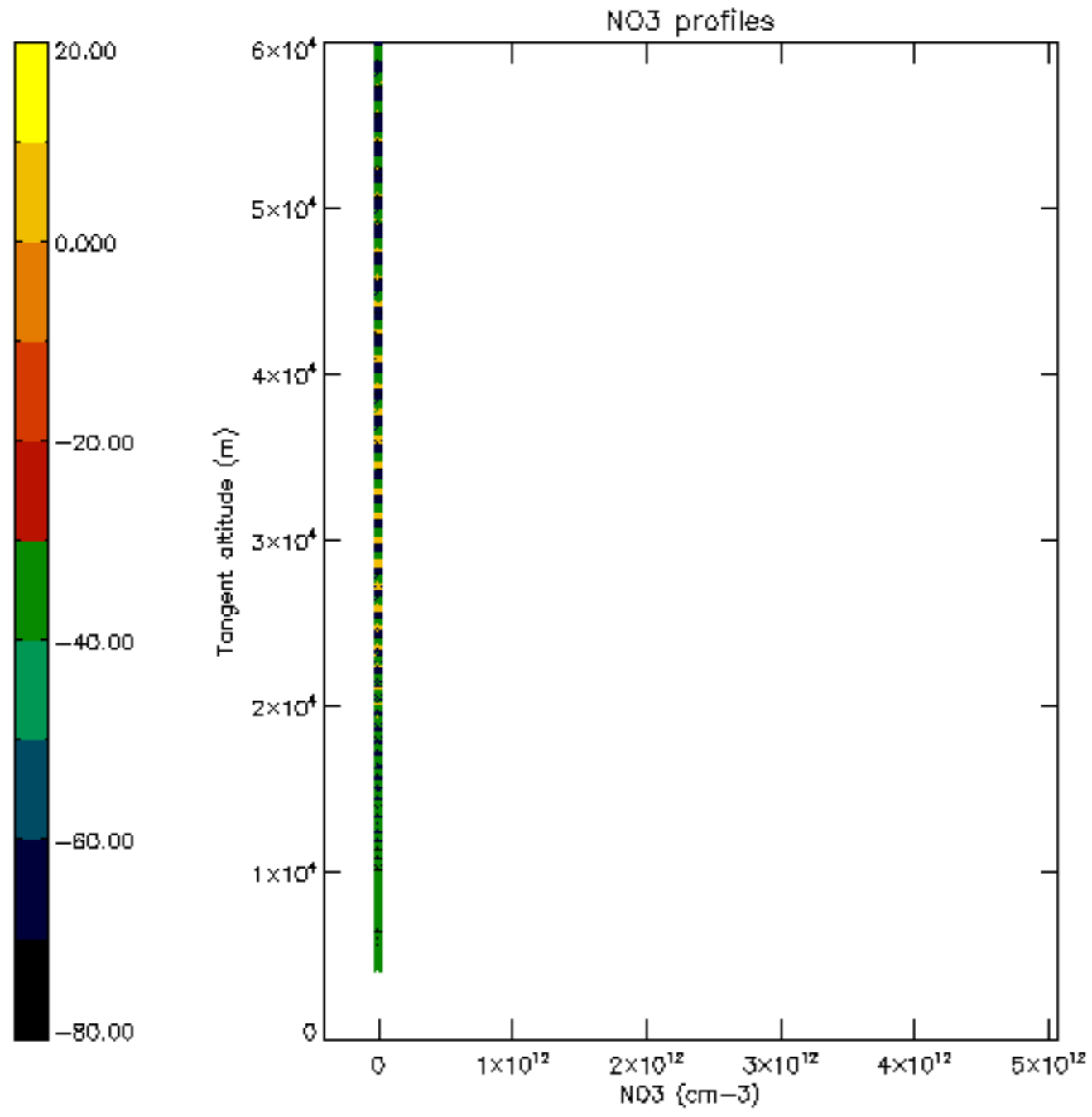


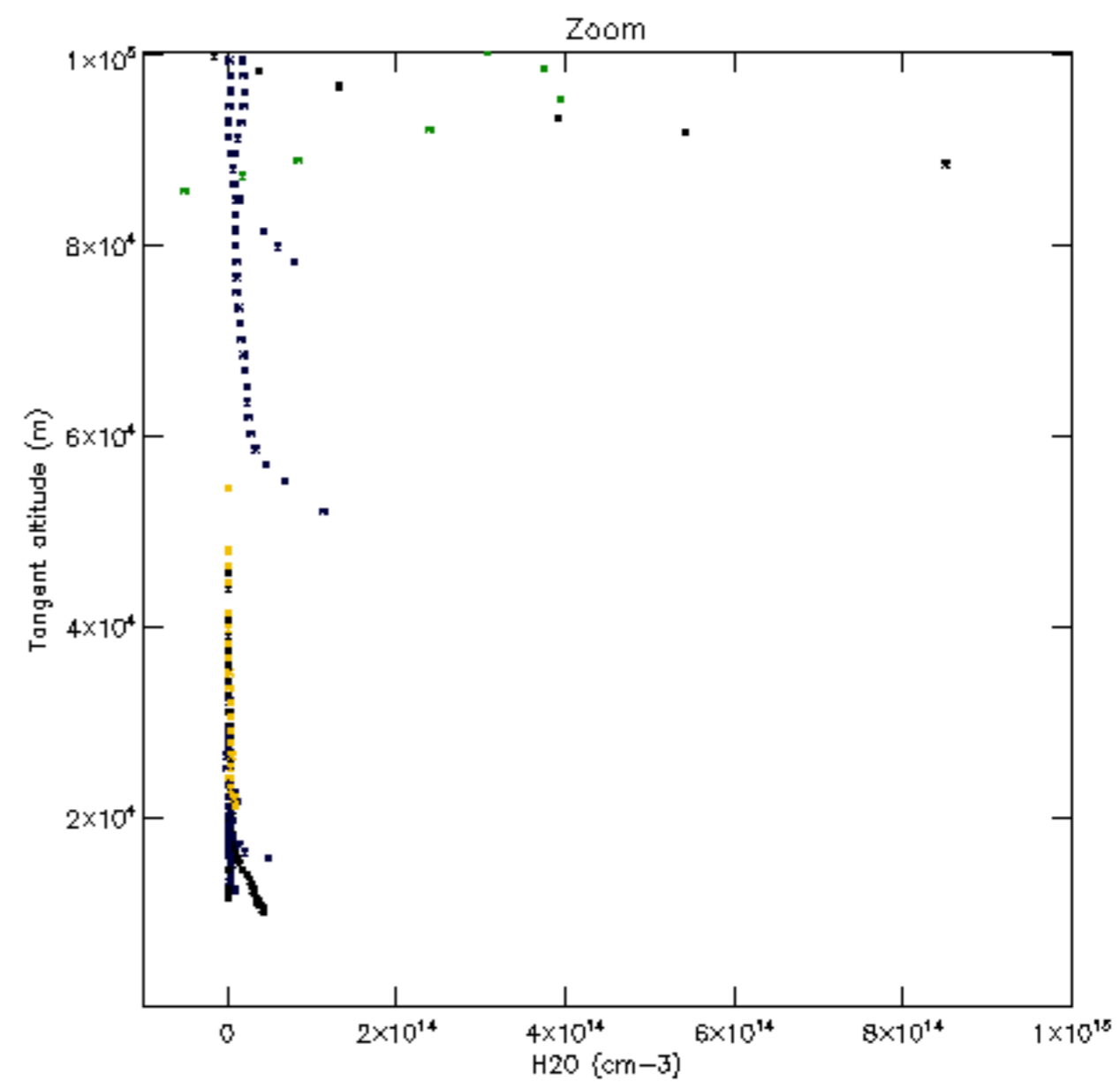
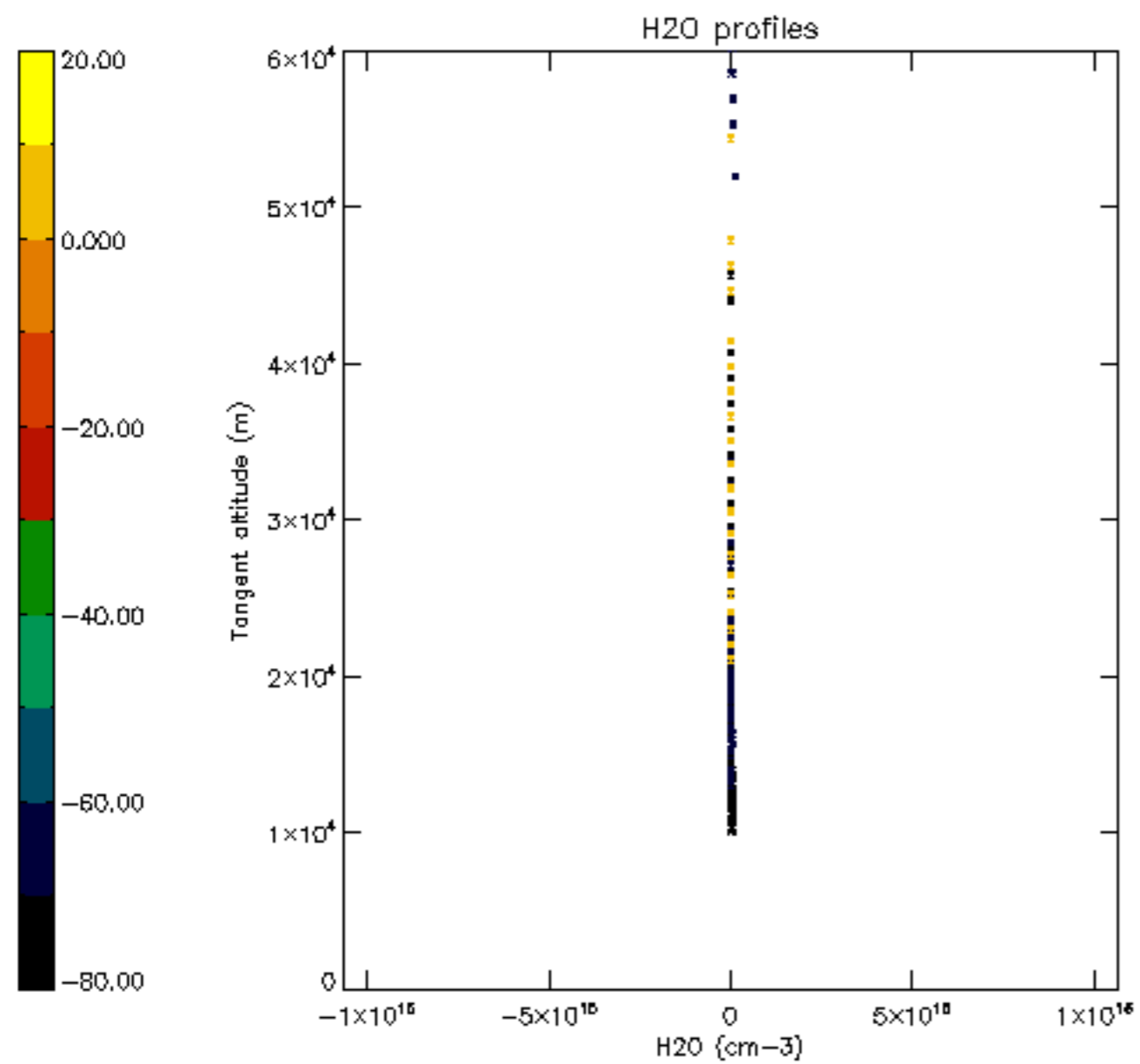


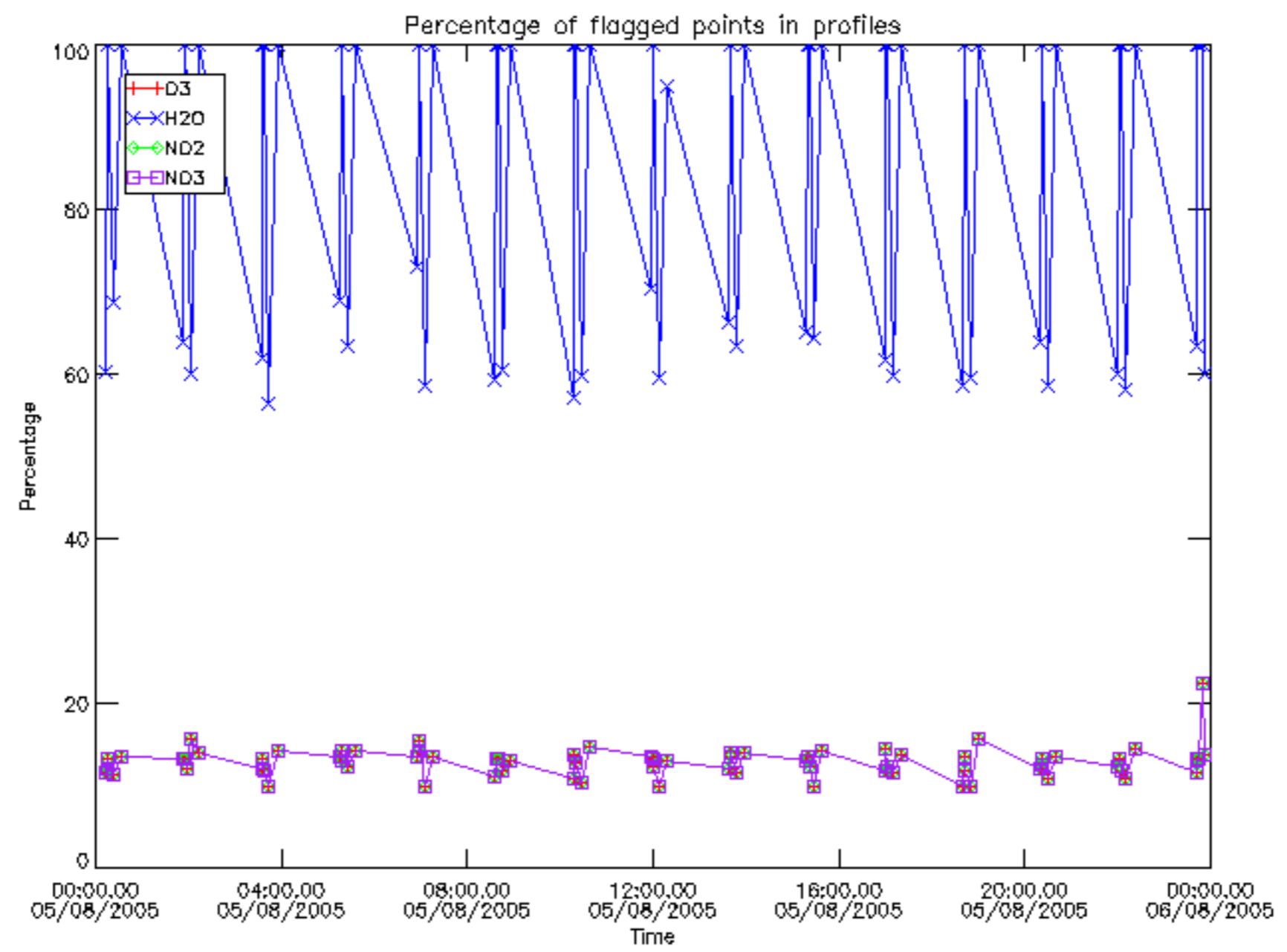




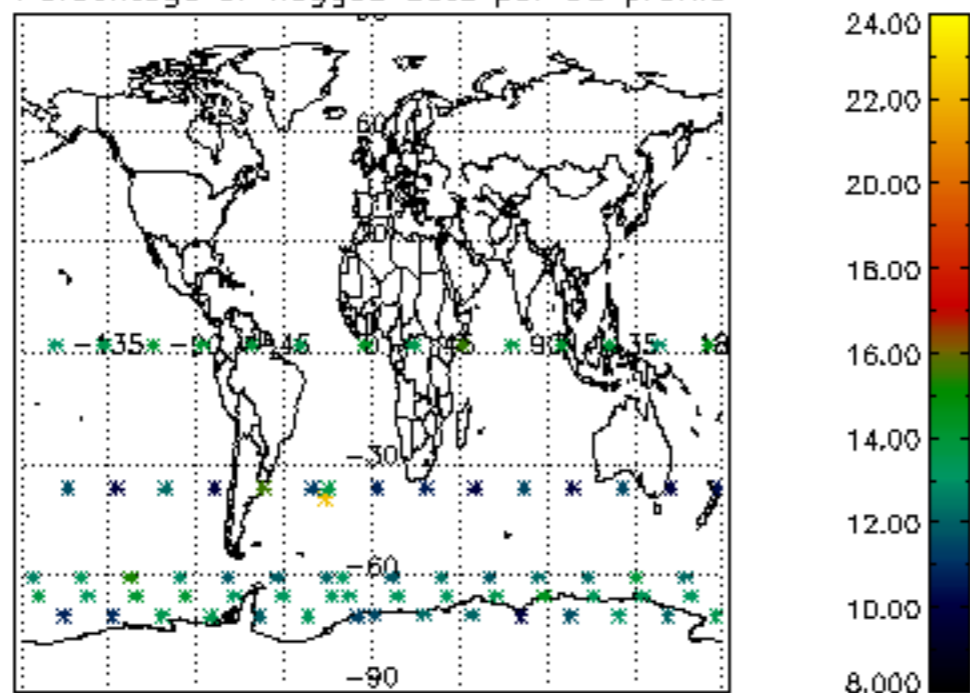




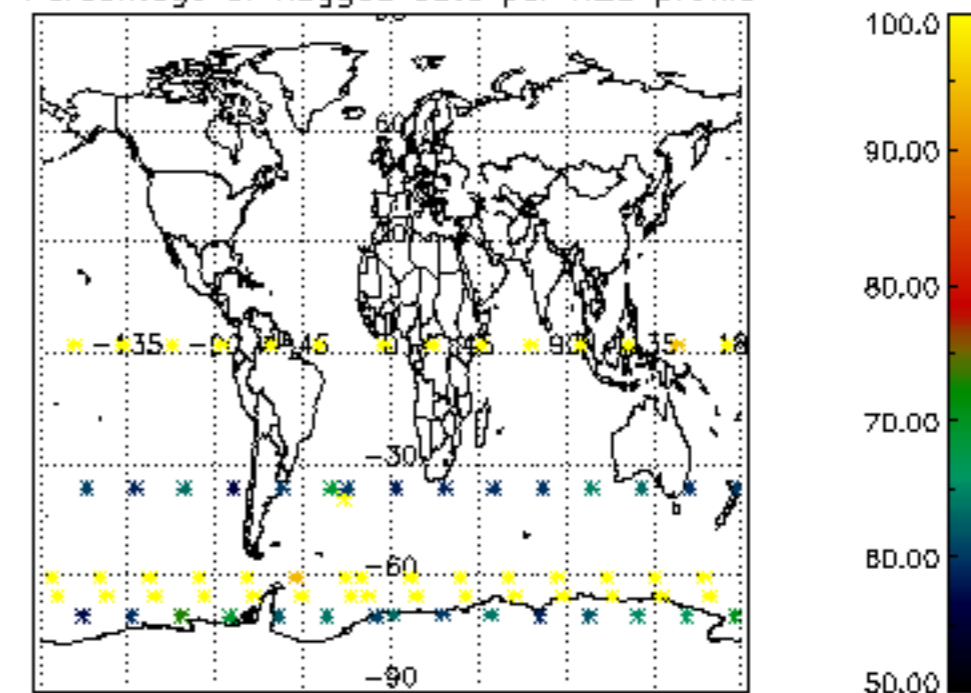




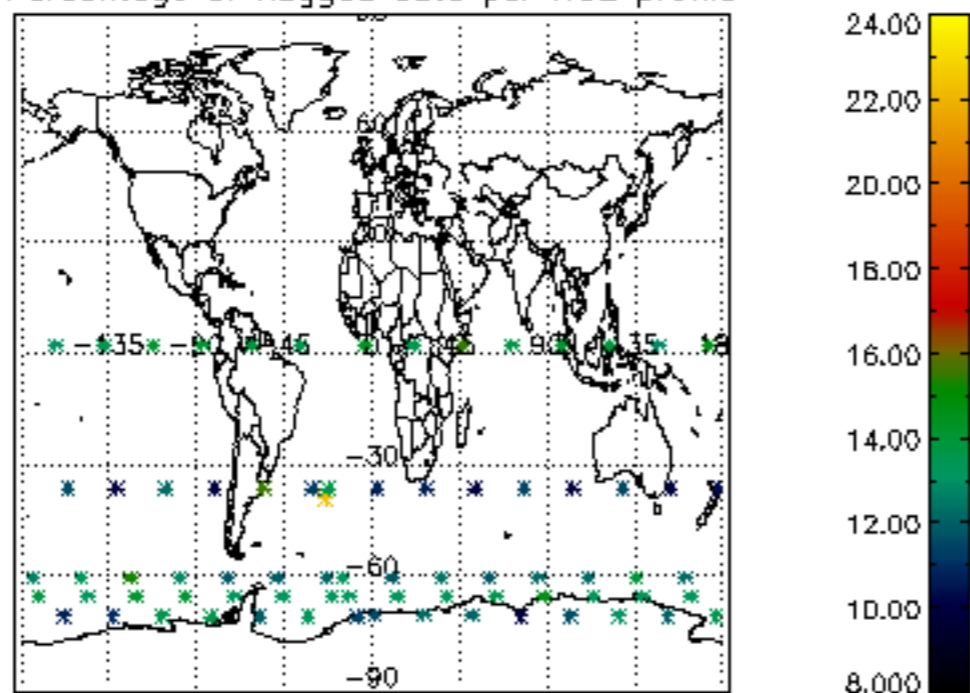
Percentage of flagged data per D3 profile



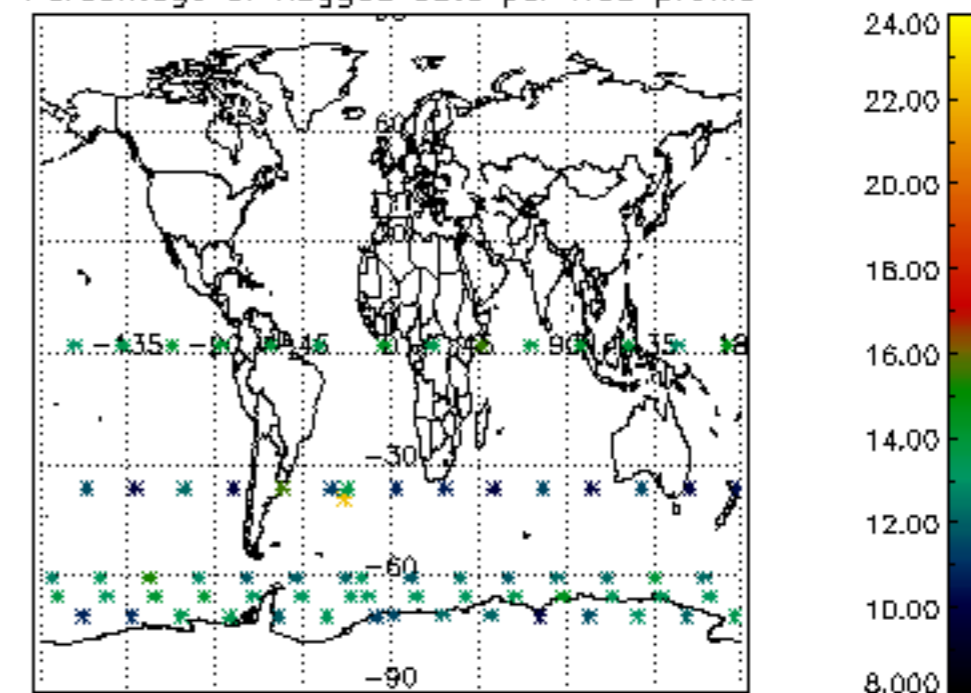
Percentage of flagged data per H2O profile

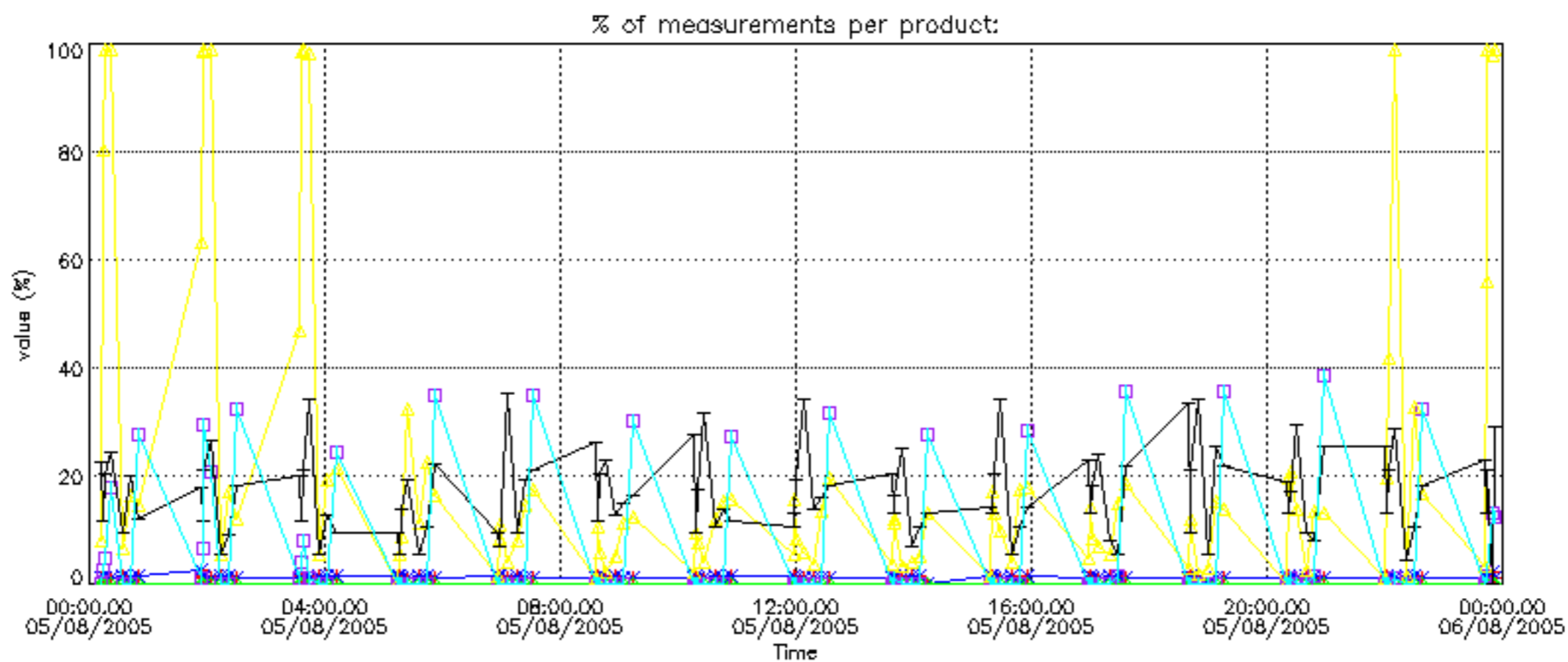


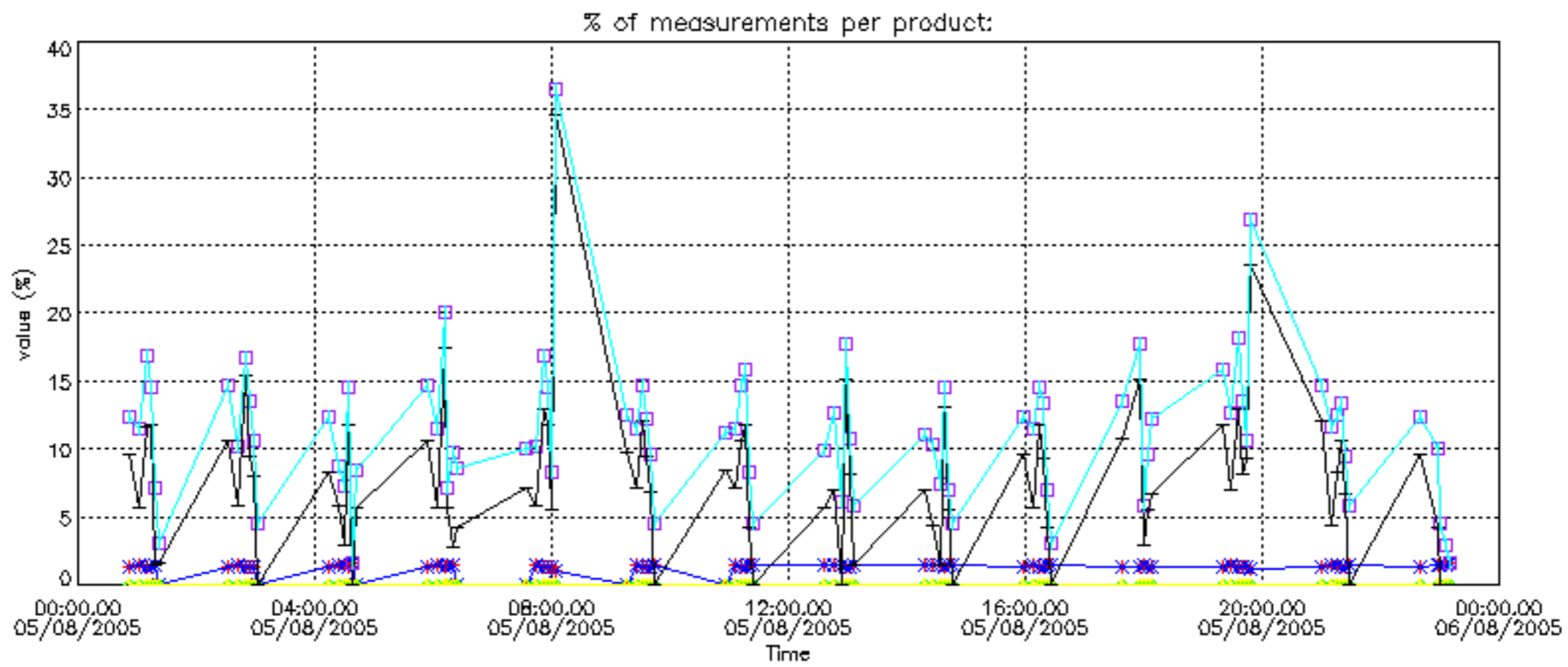
Percentage of flagged data per NO2 profile



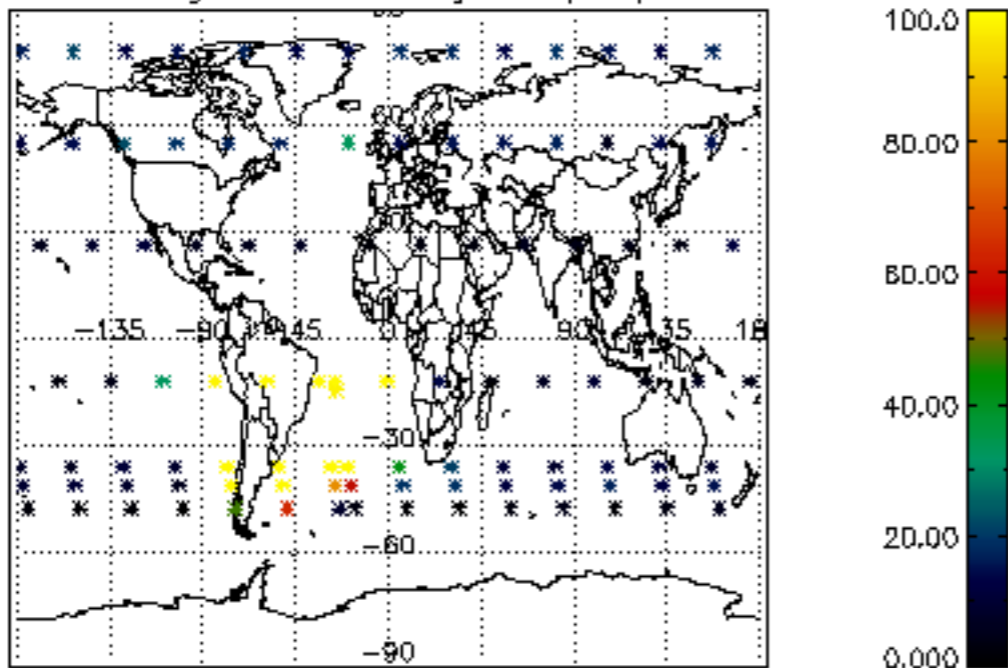
Percentage of flagged data per NO3 profile



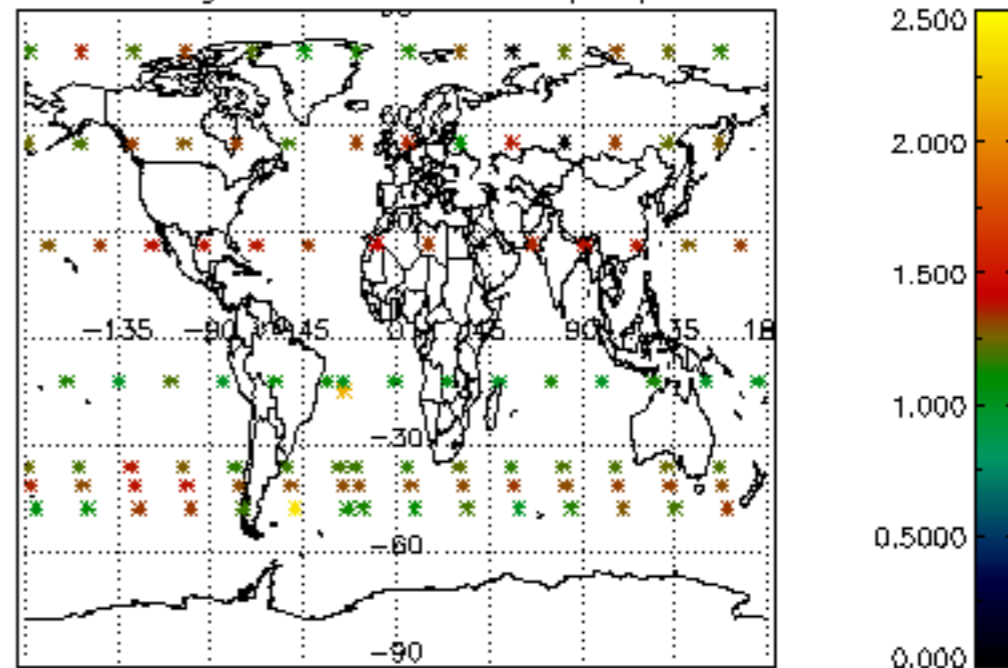




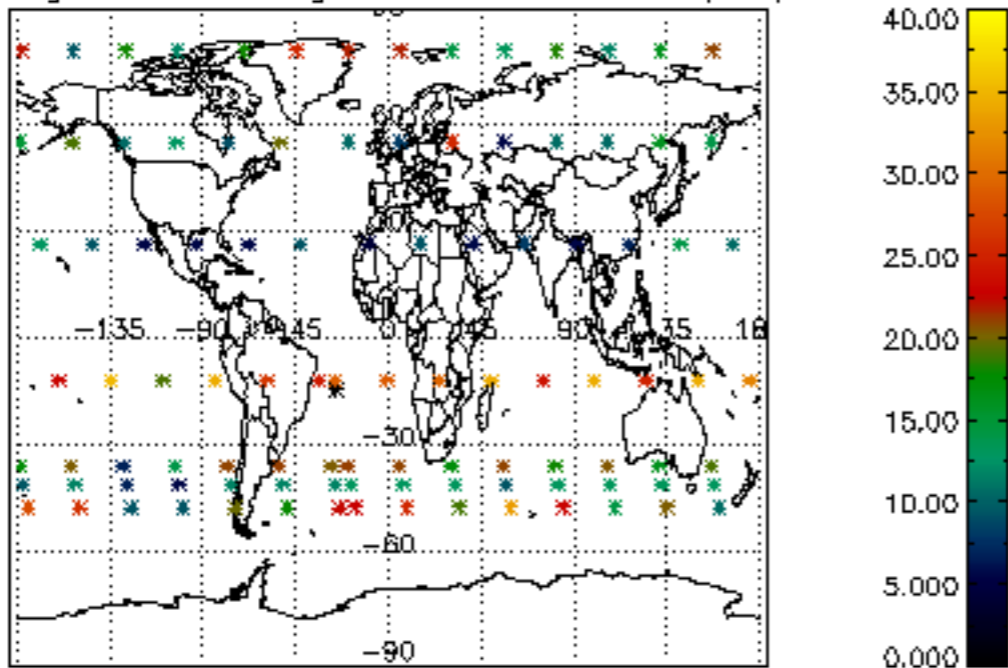
Percentage of cosmic ray hits per profile



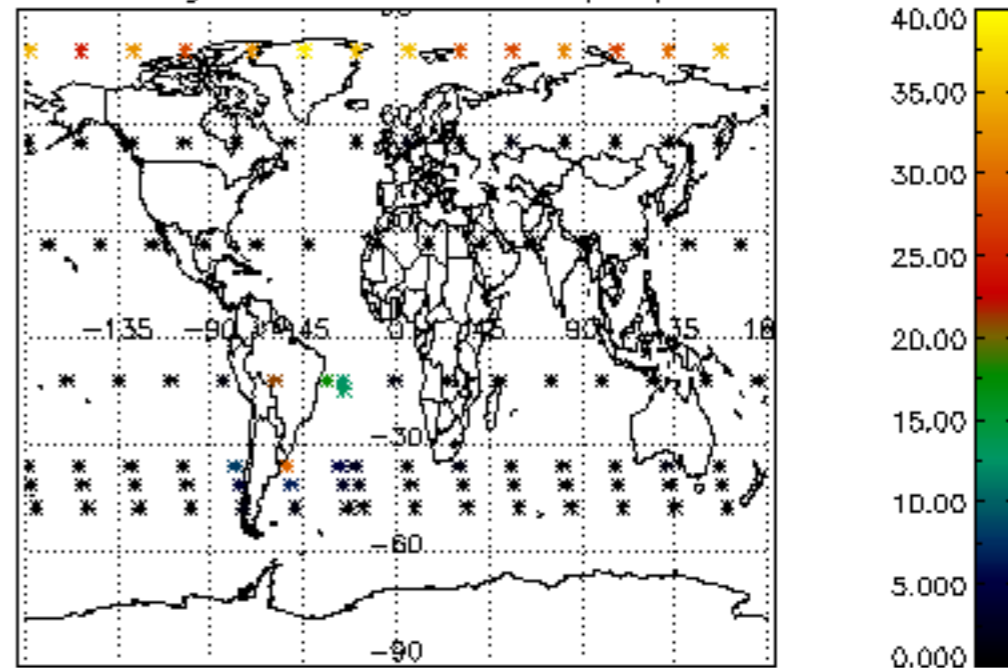
Percentage of datation errors per profile



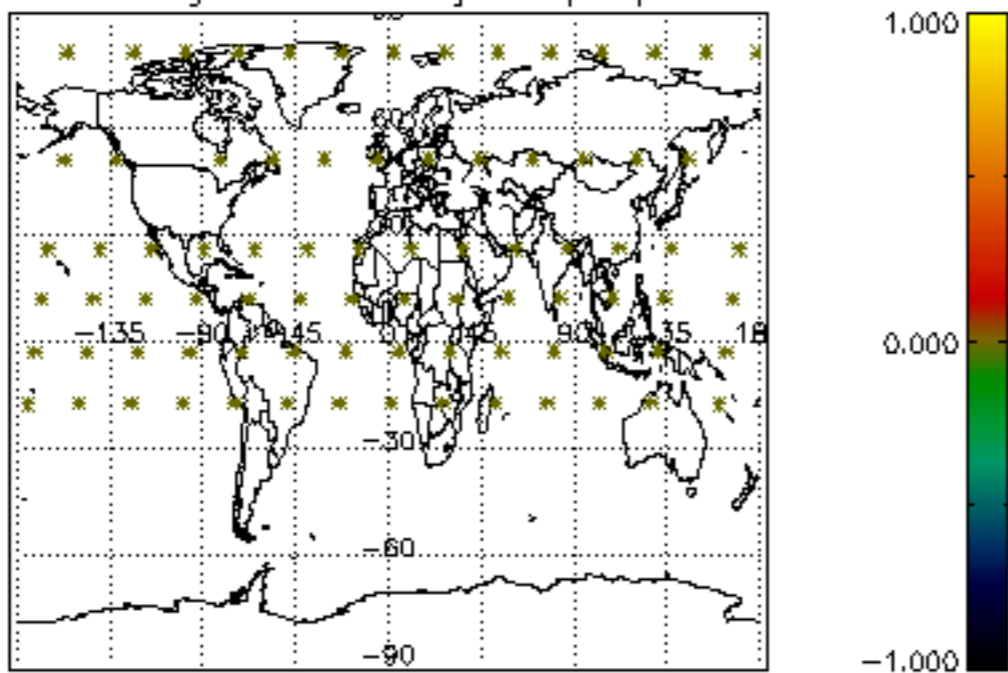
Percentage of star falling outside central band per profile



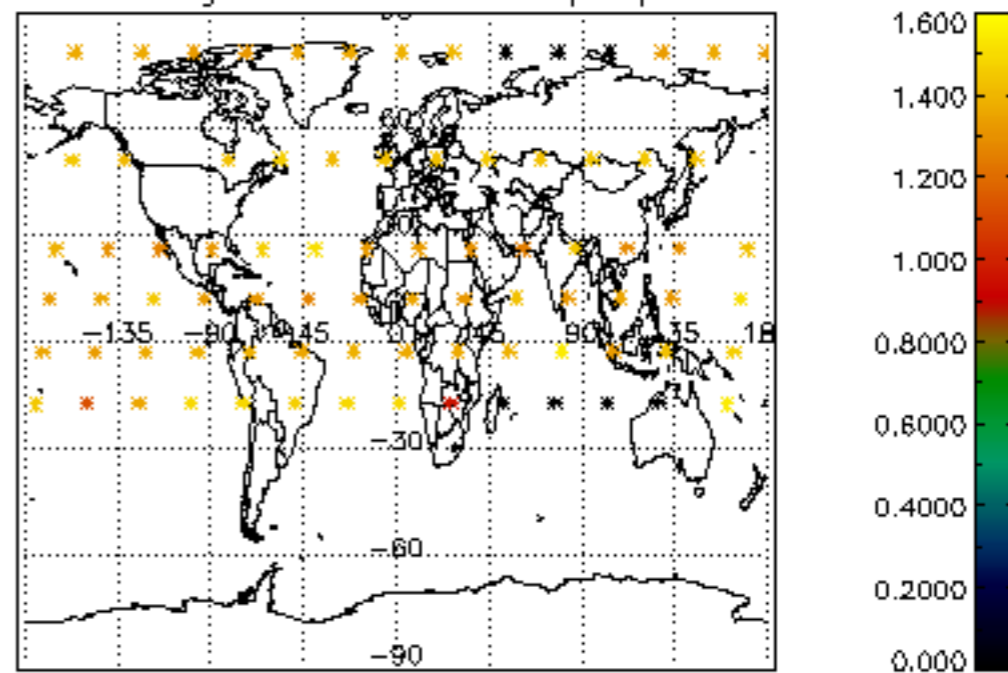
Percentage of saturation errors per profile



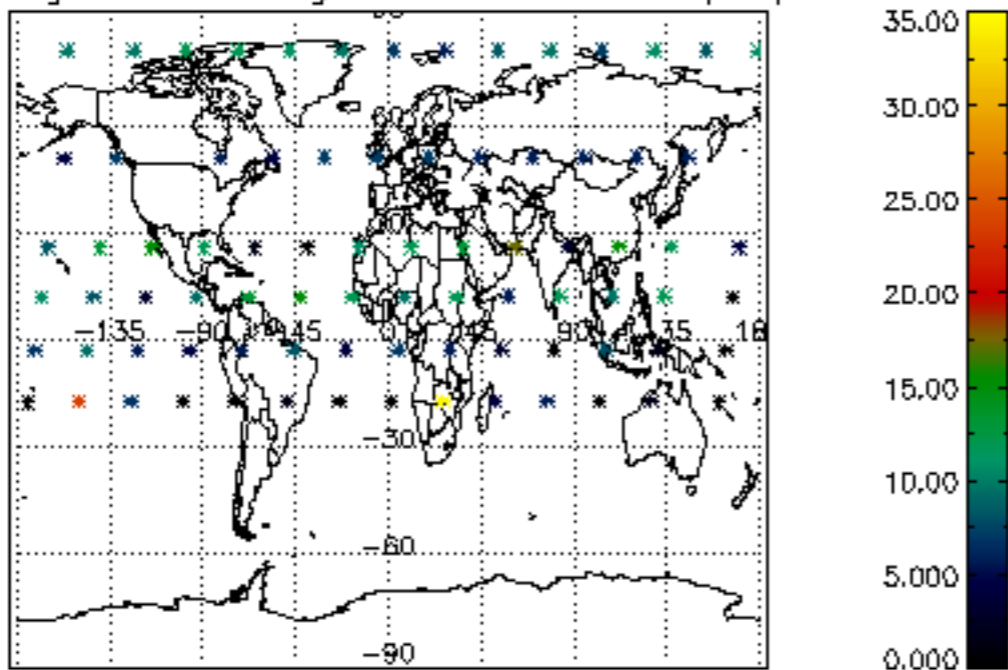
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

