

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

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

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

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[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](#)

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 23:56:02
Data source version	GOMOS/6.01
Start time of products	12-08-2007 (12AUG2007 00:00:00)
Stop time of products	13-08-2007 (13AUG2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	283
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

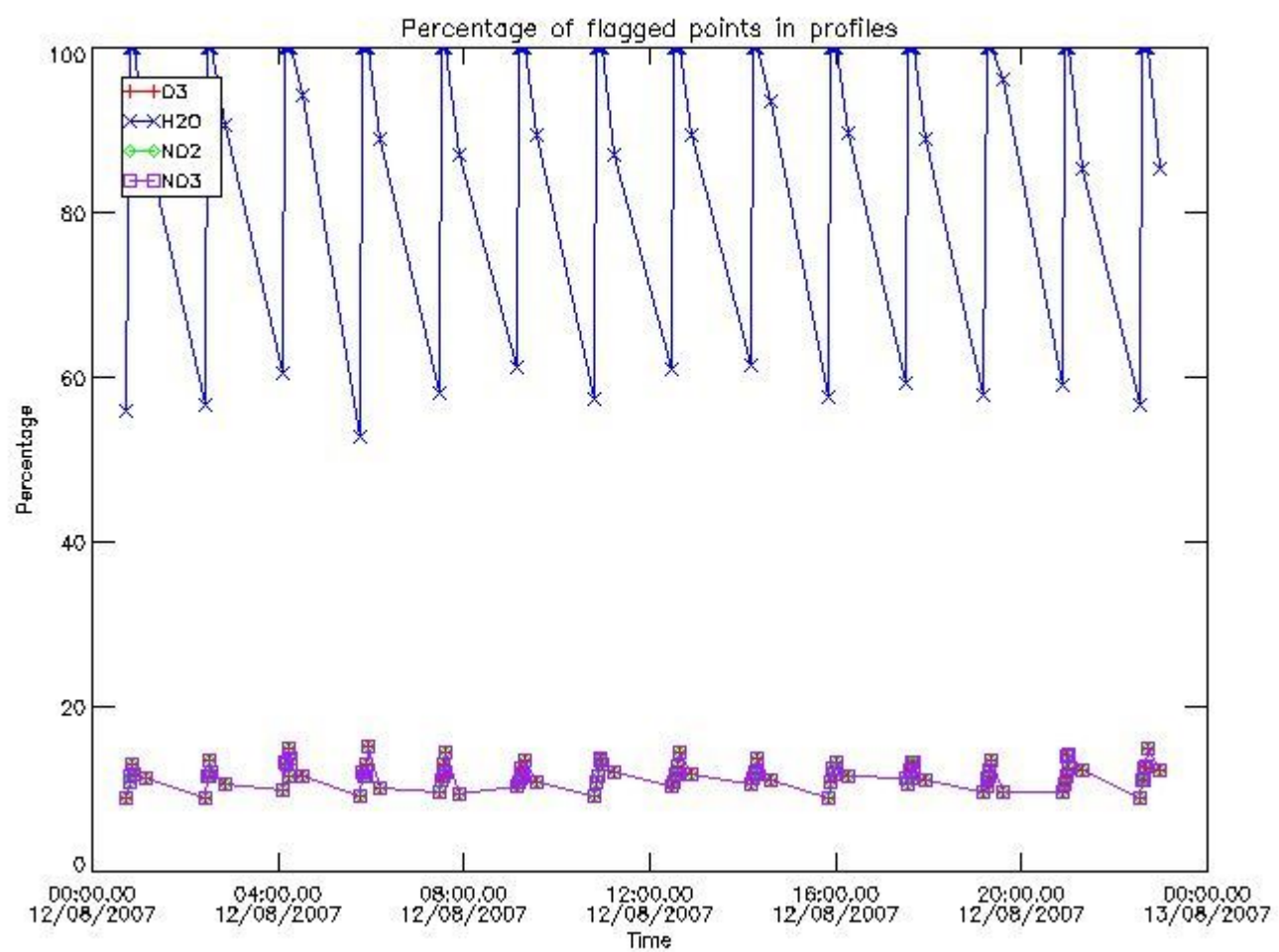
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070812_000457_000000402060_00374_28484_7064.N1	12-AUG-2007 00:04:57	Bright	39.500	92	53Eps Cyg	2.5000	4500.0	79	28484	No
2	GOM_NL__2PRFIN20070812_000626_000000372060_00374_28484_7065.N1	12-AUG-2007 00:06:26	Bright	36.500	66	37Gam Cyg	2.2080	5900.0	73	28484	No
3	GOM_NL__2PRFIN20070812_000809_000000412060_00374_28484_7066.N1	12-AUG-2007 00:08:09	Bright	40.500	19	50Alp Cyg	1.2460	10500.	81	28484	No
4	GOM_NL__2PRFIN20070812_001334_000000382060_00374_28484_7067.N1	12-AUG-2007 00:13:34	Bright	38.000	89	5Alp Cep	2.4510	8000.0	76	28484	No
5	GOM_NL__2PRFIN20070812_002017_000000342060_00374_28484_7068.N1	12-AUG-2007 00:20:17	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	28484	No
6	GOM_NL__2PRFIN20070812_003319_000000552060_00374_28484_7069.N1	12-AUG-2007 00:33:19	Bright	55.000	42	34Bet Aur	1.9000	10200.	110	28484	No
7	GOM_NL__2PRFIN20070812_003540_000000392060_00374_28484_7070.N1	12-AUG-2007 00:35:40	Bright	38.500	107	37The Aur	2.6490	11000.	77	28484	No
8	GOM_NL__2PRFIN20070812_003951_000000452060_00374_28484_7071.N1	12-AUG-2007 00:39:51	Bright	44.500	151	13Mu Gem	2.8900	3000.0	89	28484	No
9	GOM_NL__2PRFIN20070812_004124_000000412060_00374_28484_7072.N1	12-AUG-2007 00:41:24	Twilight	41.000	44	24Gam Gem	1.9280	11000.	82	28484	No
10	GOM_NL__2PRFIN20070812_004444_000000572060_00374_28484_7073.N1	12-AUG-2007 00:44:44	Dark	57.000	14	58Alp Ori	0.87000	3000.0	114	28484	No
11	GOM_NL__2PRFIN20070812_004746_000000472060_00374_28484_7074.N1	12-AUG-2007 00:47:46	Dark	46.500	30	46Eps Ori	1.6940	30000.	93	28484	No
12	GOM_NL__2PRFIN20070812_004949_000000452060_00374_28484_7075.N1	12-AUG-2007 00:49:49	Dark	44.500	56	53Kap Ori	2.0650	30000.	89	28484	No
13	GOM_NL__2PRFIN20070812_005113_000000402060_00374_28484_7076.N1	12-AUG-2007 00:51:13	Dark	39.500	47	2Bet CMa	1.9760	28000.	79	28484	No
14	GOM_NL__2PRFIN20070812_005233_000000442060_00374_28484_7077.N1	12-AUG-2007 00:52:33	Dark	43.500	101	11Alp Lep	2.5820	7000.0	87	28484	No
15	GOM_NL__2PRFIN20070812_011026_000000452060_00375_28485_7073.N1	12-AUG-2007 01:10:26	Dark	45.000	9	Alp Eri	0.45300	24000.	90	28485	No
16	GOM_NL__2PRFIN20070812_011633_000000402060_00375_28485_7074.N1	12-AUG-2007 01:16:33	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	28485	No
17	GOM_NL__2PRFIN20070812_012004_000000432060_00375_28485_7075.N1	12-AUG-2007 01:20:04	Straylight	43.000	31	Alp Gru	1.7340	15200.	86	28485	No
18	GOM_NL__2PRFIN20070812_012305_000000432060_00375_28485_7076.N1	12-AUG-2007 01:23:05	Straylight	42.500	172	Gam Gru	3.0030	13100.	85	28485	No
19	GOM_NL__2PRFIN20070812_013753_000000362060_00375_28485_7077.N1	12-AUG-2007 01:37:53	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	28485	No
20	GOM_NL__2PRFIN20070812_014533_000000412060_00375_28485_7078.N1	12-AUG-2007 01:45:33	Bright	40.500	92	53Eps Cyg	2.5000	4500.0	81	28485	No
21	GOM_NL__2PRFIN20070812_014702_000000382060_00375_28485_7079.N1	12-AUG-2007 01:47:02	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	28485	No
22	GOM_NL__2PRFIN20070812_014845_000000392060_00375_28485_7080.N1	12-AUG-2007 01:48:45	Bright	39.000	19	50Alp Cyg	1.2460	10500.	78	28485	No
23	GOM_NL__2PRFIN20070812_015409_000000352060_00375_28485_7081.N1	12-AUG-2007 01:54:09	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	28485	No
24	GOM_NL__2PRFIN20070812_020053_000000352060_00375_28485_7082.N1	12-AUG-2007 02:00:53	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	28485	No
25	GOM_NL__2PRFIN20070812_021355_000000382060_00375_28485_7083.N1	12-AUG-2007 02:13:55	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	28485	No
26	GOM_NL__2PRFIN20070812_021616_000000372060_00375_28485_7084.N1	12-AUG-2007 02:16:16	Bright	36.500	107	37The Aur	2.6490	11000.	73	28485	No
27	GOM_NL__2PRFIN20070812_022027_000000462060_00375_28485_7085.N1	12-AUG-2007 02:20:27	Bright	45.500	151	13Mu Gem	2.8900	3000.0	91	28485	No
28	GOM_NL__2PRFIN20070812_022201_000000412060_00375_28485_7086.N1	12-AUG-2007 02:22:01	Twilight	41.000	44	24Gam Gem	1.9280	11000.	82	28485	No
29	GOM_NL__2PRFIN20070812_022520_000000572060_00375_28485_7087.N1	12-AUG-2007 02:25:20	Dark	57.000	14	58Alp Ori	0.87000	3000.0	114	28485	No
30	GOM_NL__2PRFIN20070812_022822_000000452060_00375_28485_7088.N1	12-AUG-2007 02:28:22	Dark	44.500	30	46Eps Ori	1.6940	30000.	89	28485	No
31	GOM_NL__2PRFIN20070812_023026_000000442060_00375_28485_7089.N1	12-AUG-2007 02:30:26	Dark	44.000	56	53Kap Ori	2.0650	30000.	88	28485	No
32	GOM_NL__2PRFIN20070812_023149_000000382060_00375_28485_7090.N1	12-AUG-2007 02:31:49	Dark	38.000	47	2Bet CMa	1.9760	28000.	76	28485	No
33	GOM_NL__2PRFIN20070812_023309_000000422060_00375_28485_7091.N1	12-AUG-2007 02:33:09	Dark	42.000	101	11Alp Lep	2.5820	7000.0	84	28485	No
34	GOM_NL__2PRFIN20070812_025102_000000492060_00376_28486_7087.N1	12-AUG-2007 02:51:02	Dark	48.500	9	Alp Eri	0.45300	24000.	97	28486	No
35	GOM_NL__2PRFIN20070812_025709_000000392060_00376_28486_7088.N1	12-AUG-2007 02:57:09	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	28486	No
36	GOM_NL__2PRFIN20070812_030040_000000422060_00376_28486_7089.N1	12-AUG-2007 03:00:40	Straylight	41.500	31	Alp Gru	1.7340	15200.	83	28486	No
37	GOM_NL__2PRFIN20070812_030341_000000432060_00376_28486_7090.N1	12-AUG-2007 03:03:41	Straylight	43.000	172	Gam Gru	3.0030	13100.	86	28486	No
38	GOM_NL__2PRFIN20070812_031830_000000362060_00376_28486_7091.N1	12-AUG-2007 03:18:30	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	28486	No
39	GOM_NL__2PRFIN20070812_032608_000000372060_00376_28486_7092.N1	12-AUG-2007 03:26:08	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	28486	No
40	GOM_NL__2PRFIN20070812_032738_000000382060_00376_28486_7093.N1	12-AUG-2007 03:27:38	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	28486	No
41	GOM_NL__2PRFIN20070812_032920_000000392060_00376_28486_7094.N1	12-AUG-2007 03:29:20	Bright	38.500	19	50Alp Cyg	1.2460	10500.	77	28486	No
42	GOM_NL__2PRFIN20070812_033445_000000352060_00376_28486_7095.N1	12-AUG-2007 03:34:45	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	28486	No

279	GOM_NL__2PRFIN20070812_233316_000000372060_00388_28498_7301.N1	12-AUG-2007 23:33:16	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	28498	No
280	GOM_NL__2PRFIN20070812_233447_000000362060_00388_28498_7302.N1	12-AUG-2007 23:34:47	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	28498	No
281	GOM_NL__2PRFIN20070812_233628_000000372060_00388_28498_7303.N1	12-AUG-2007 23:36:28	Bright	36.500	19	50Alp Cyg	1.2460	10500.	73	28498	No
282	GOM_NL__2PRFIN20070812_234152_000000372060_00388_28498_7304.N1	12-AUG-2007 23:41:52	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	28498	No
283	GOM_NL__2PRFIN20070812_234840_000000342060_00388_28498_7305.N1	12-AUG-2007 23:48:40	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	28498	No

3. Quality information per product

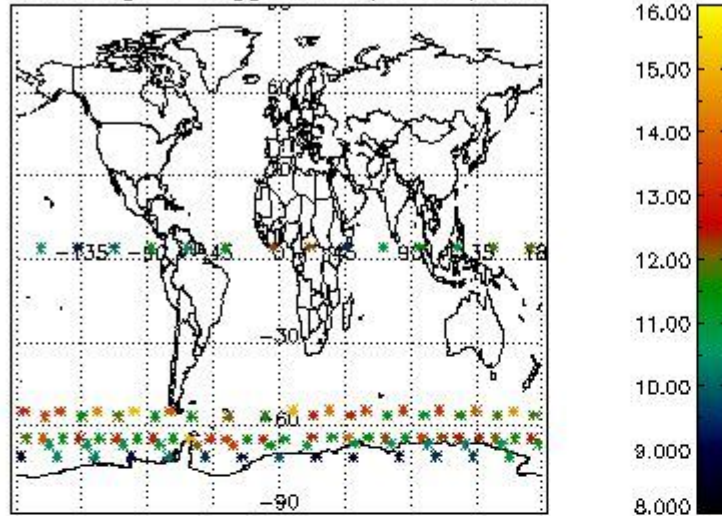
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

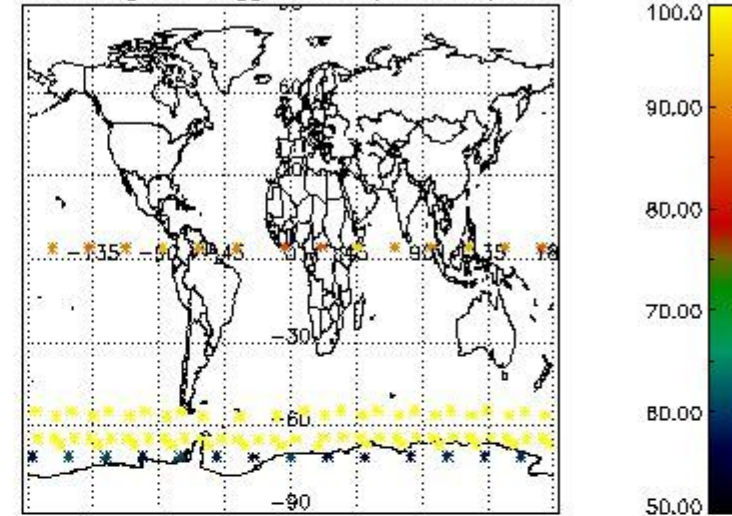


3.2 Plot quality information per product (world map)

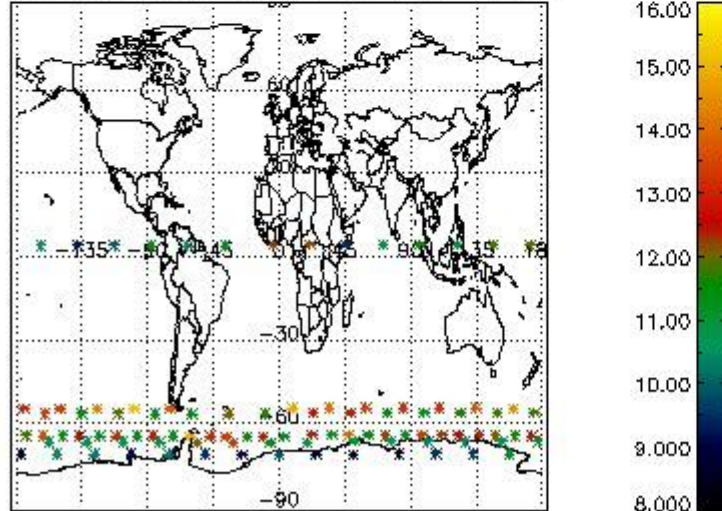
Percentage of flagged data per O3 profile



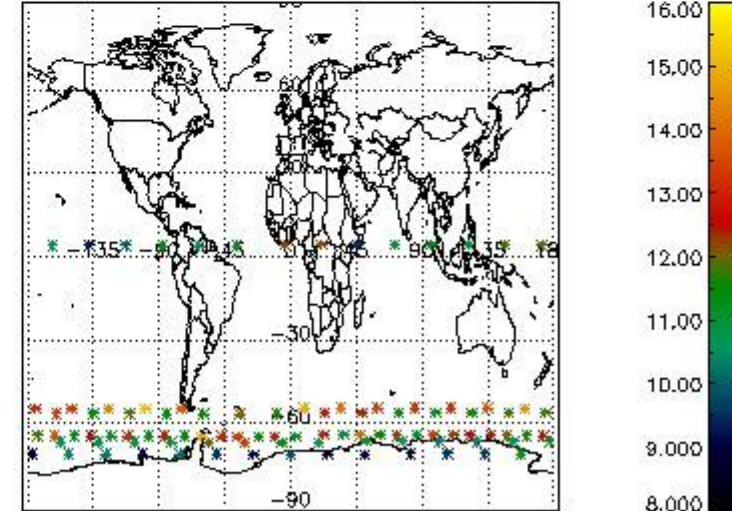
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

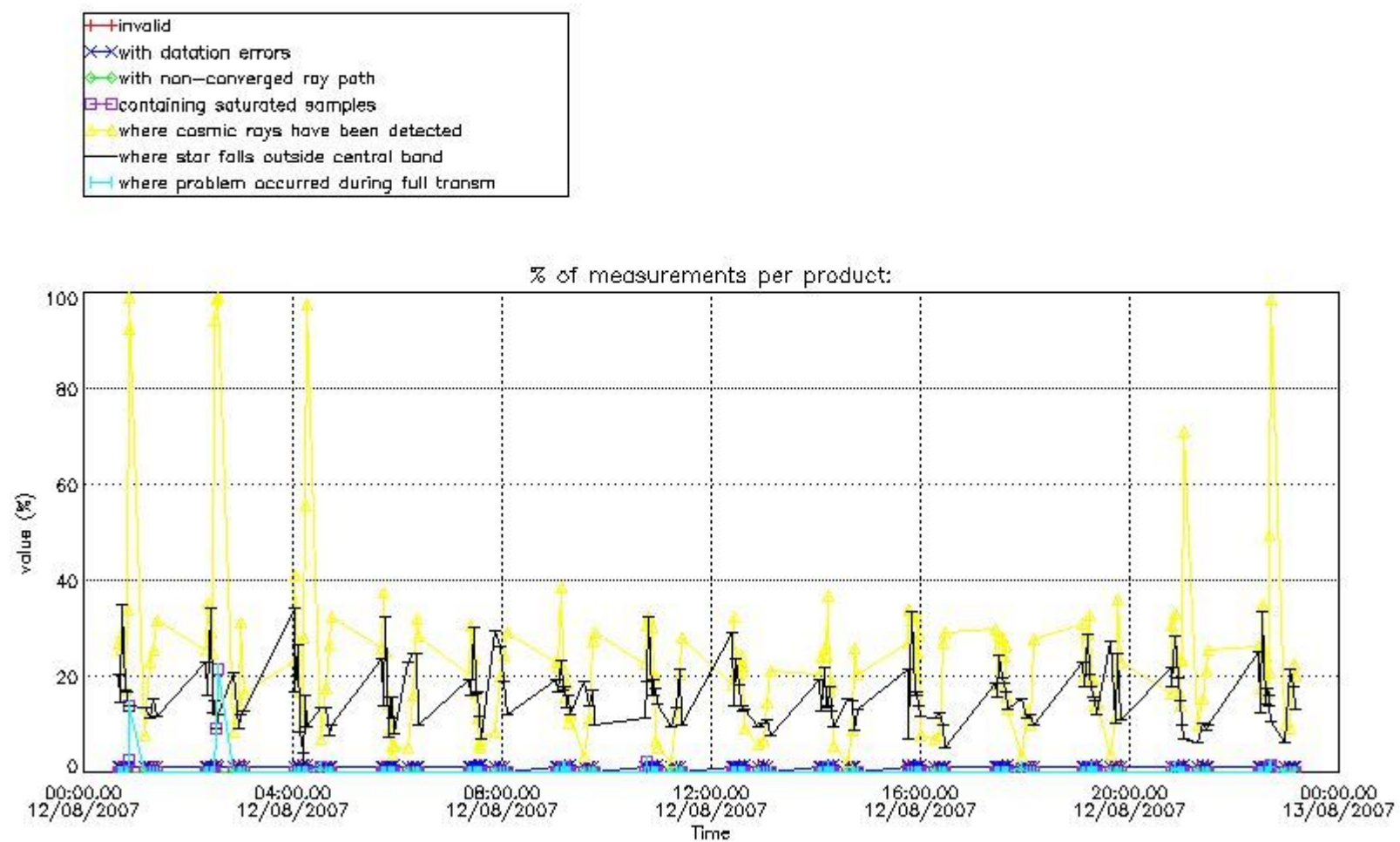


4. Level 1 quality information per product

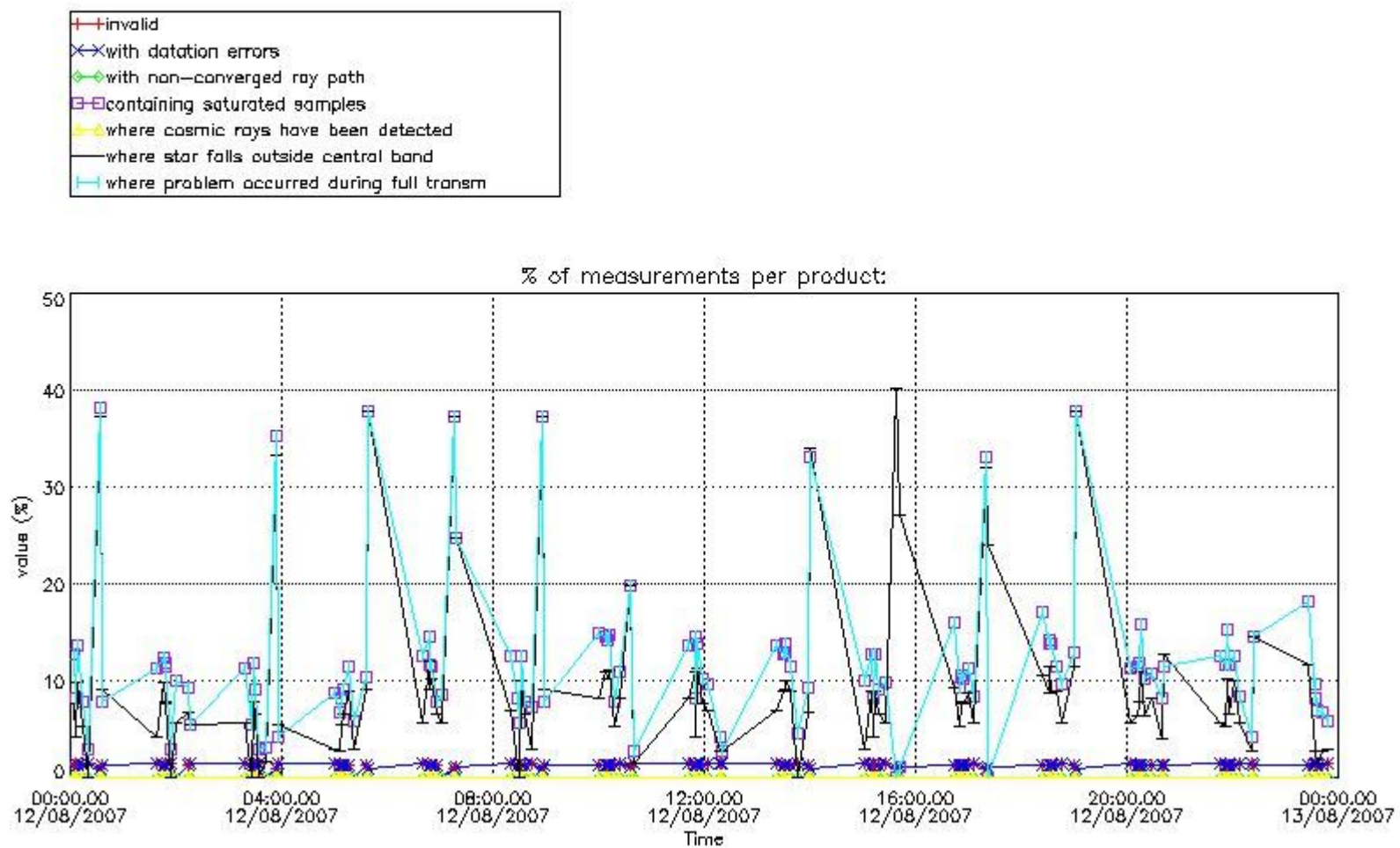
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



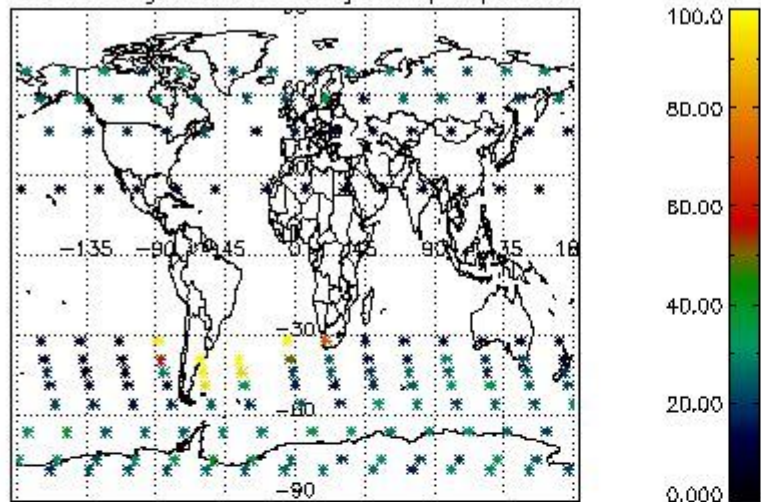
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



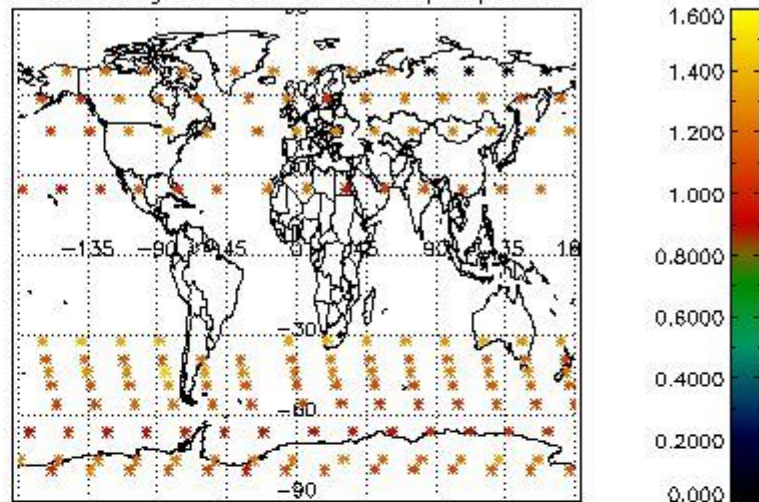
4.2 Plot quality information per product coming from level 1b processing (world map)

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

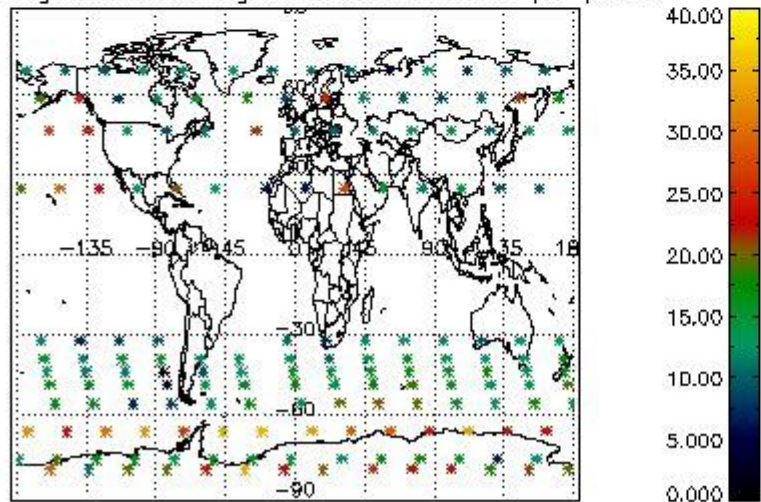
Percentage of cosmic ray hits per profile



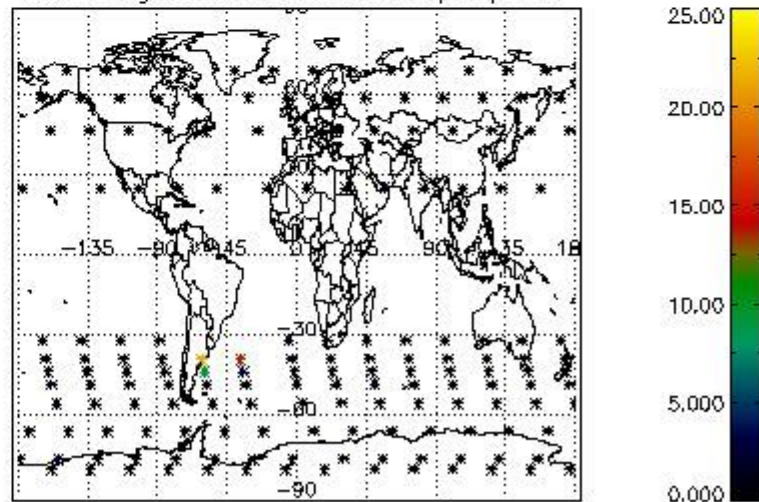
Percentage of datation errors per profile



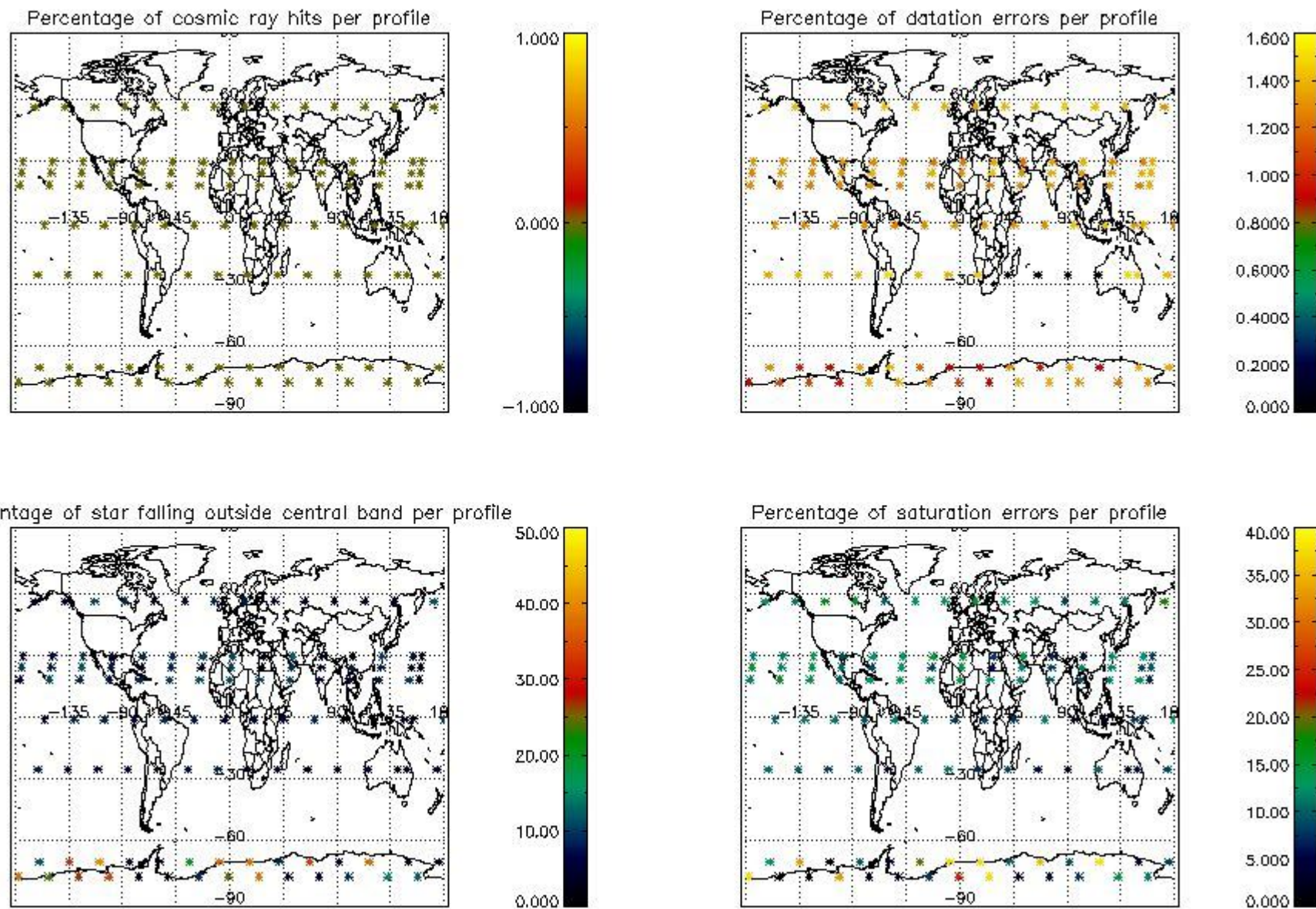
Percentage of star falling outside central band per profile



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

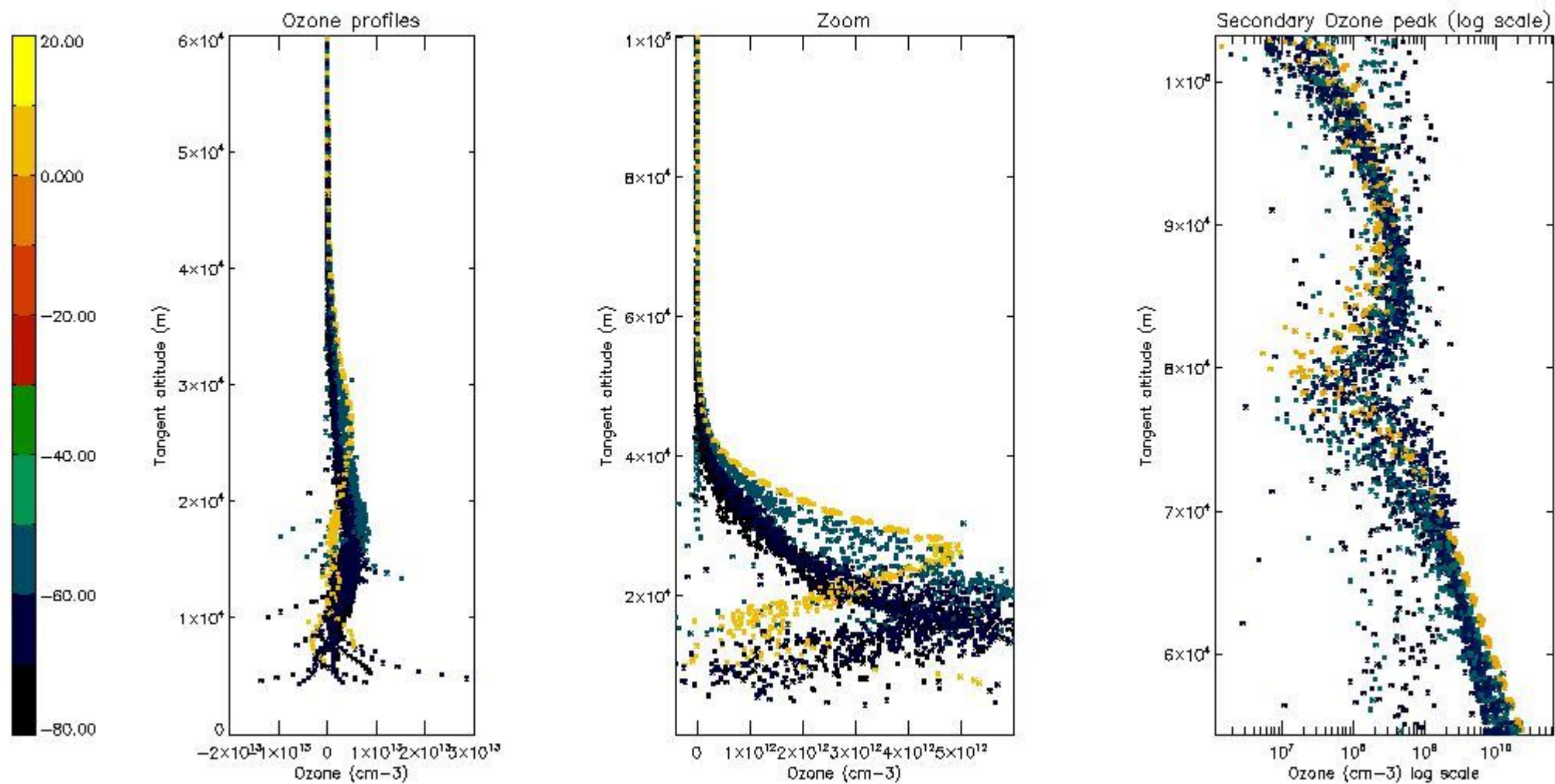
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	22

STD < 10	18
STD < 5	13

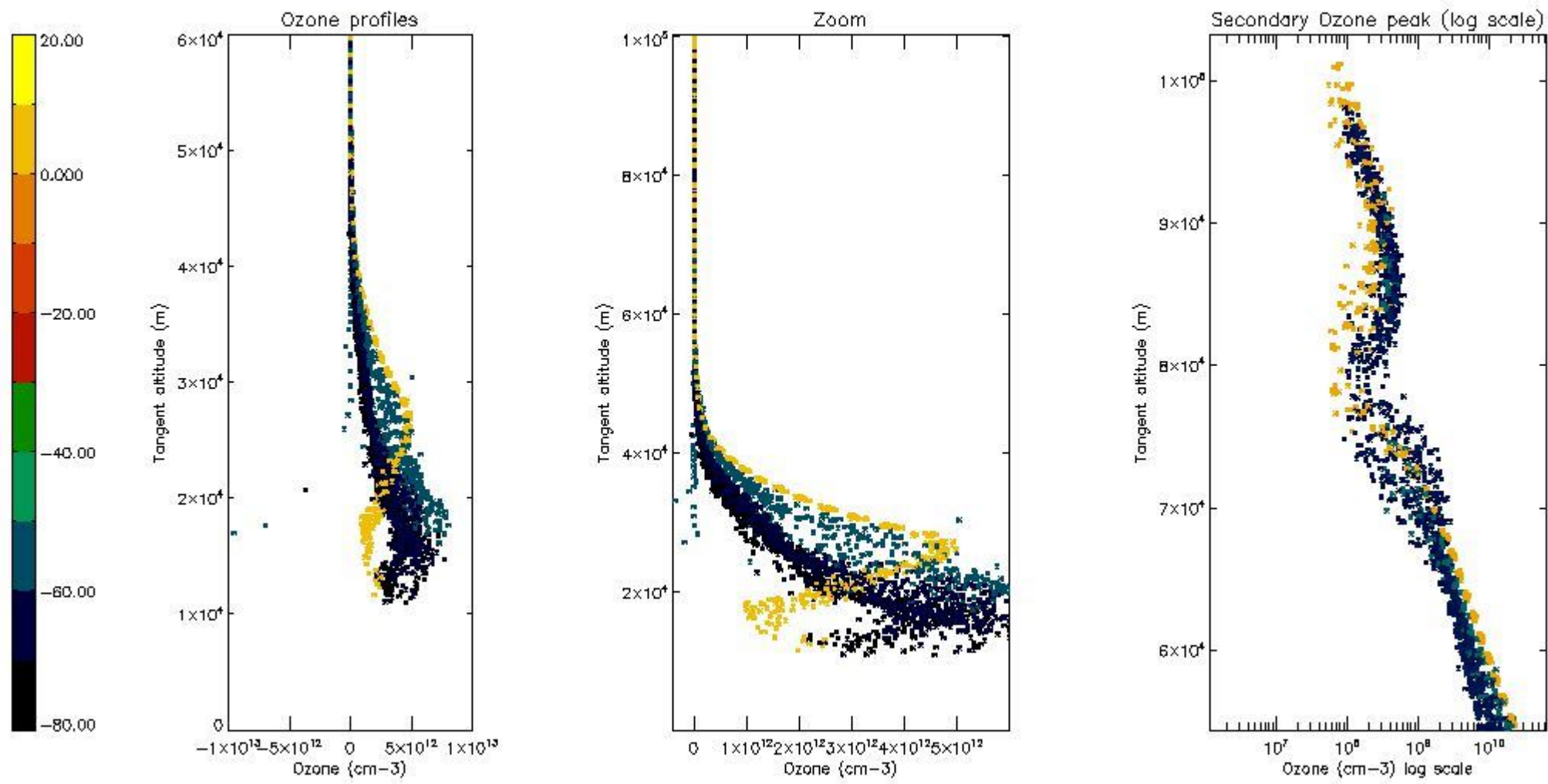
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



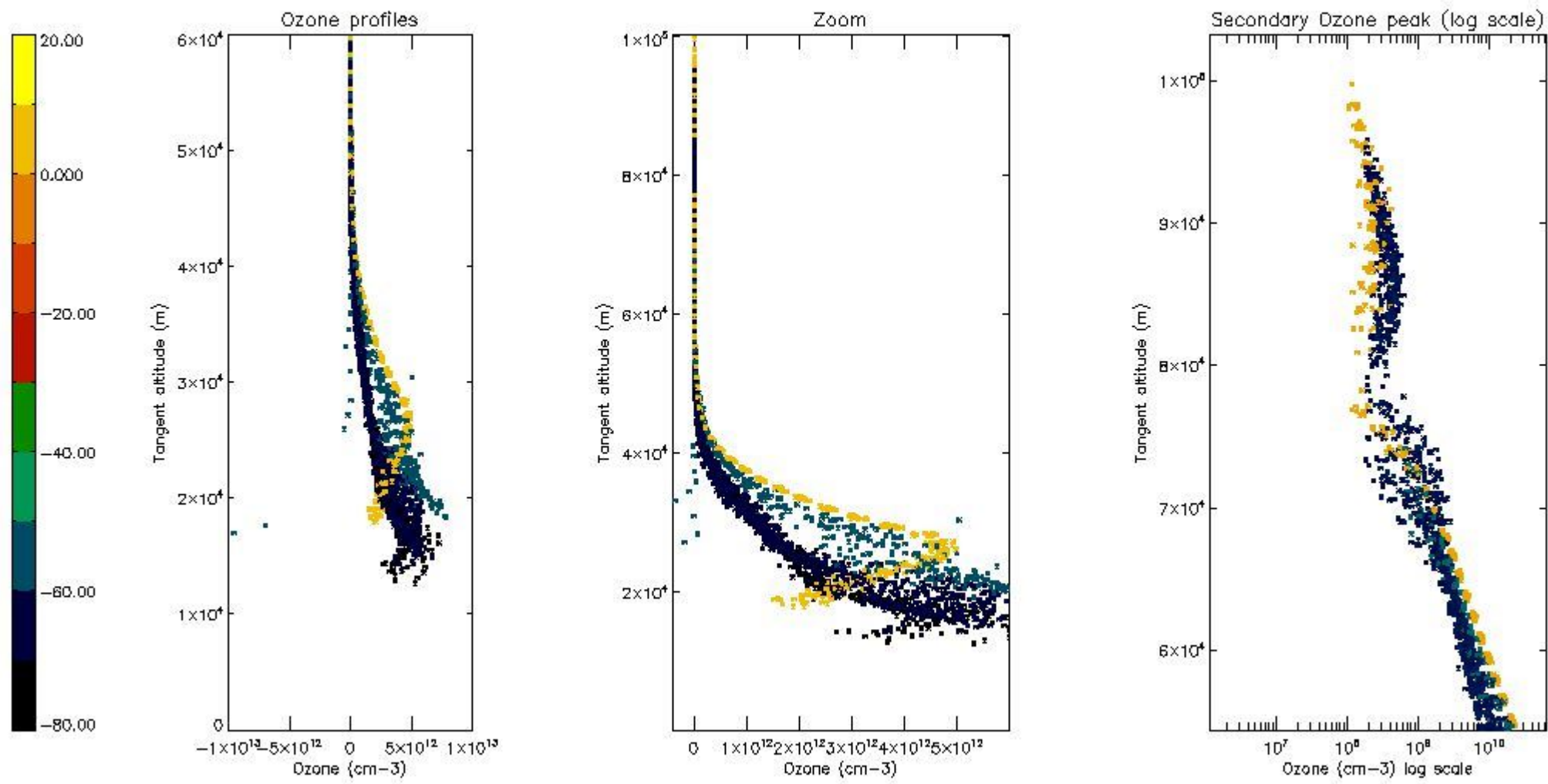
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



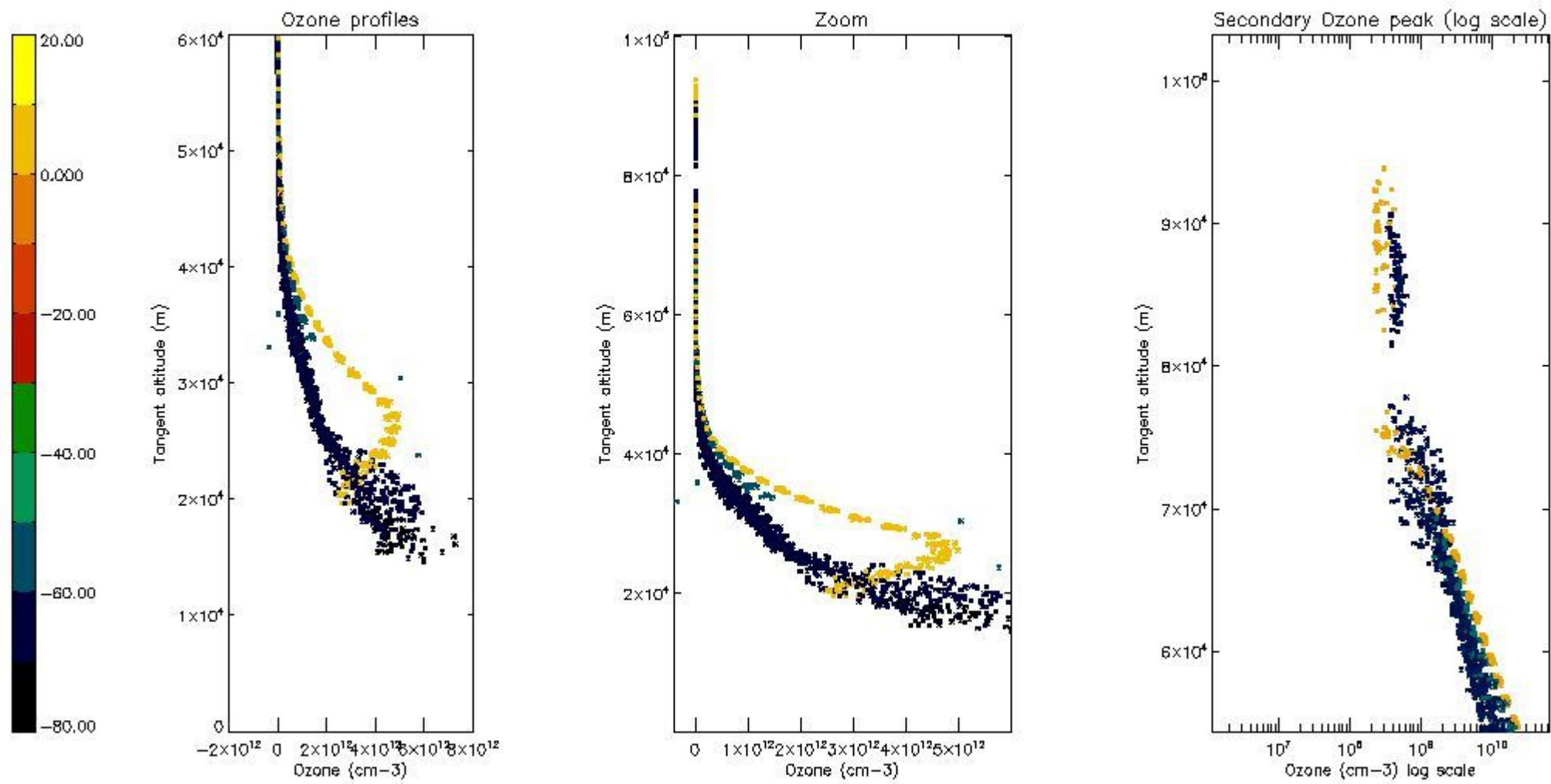
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



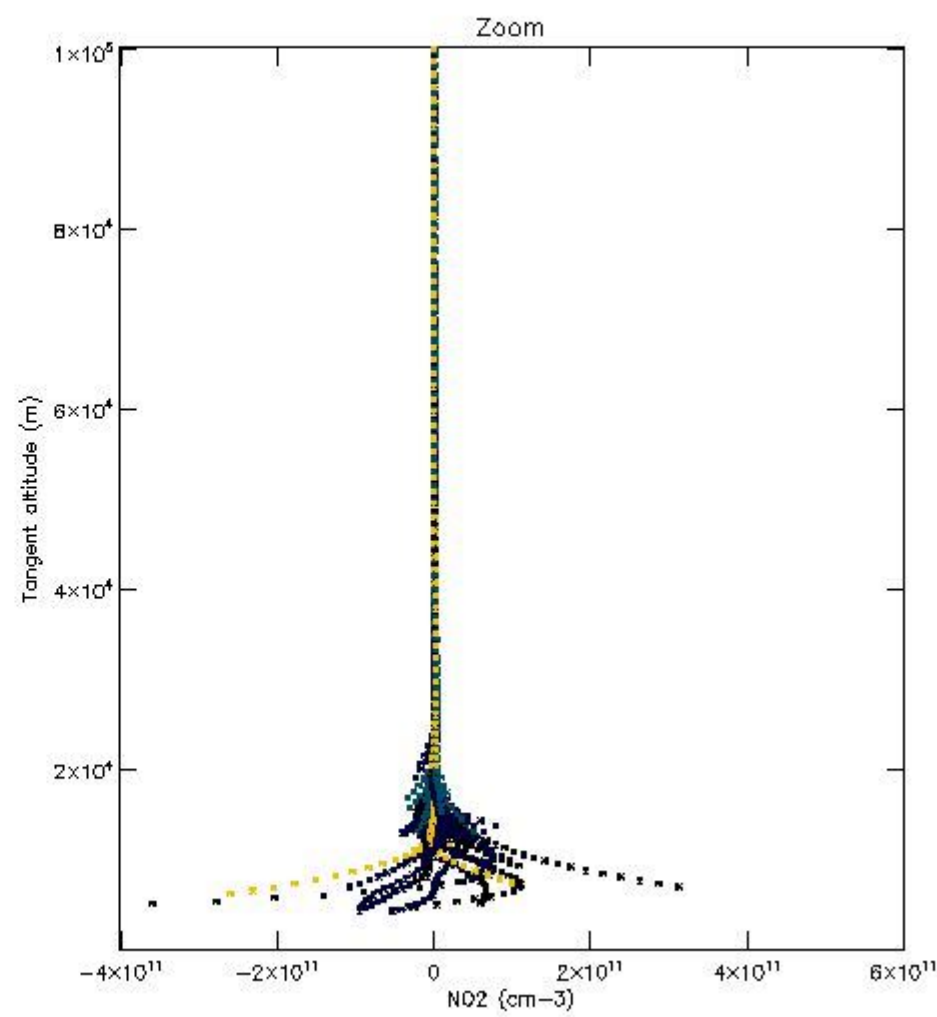
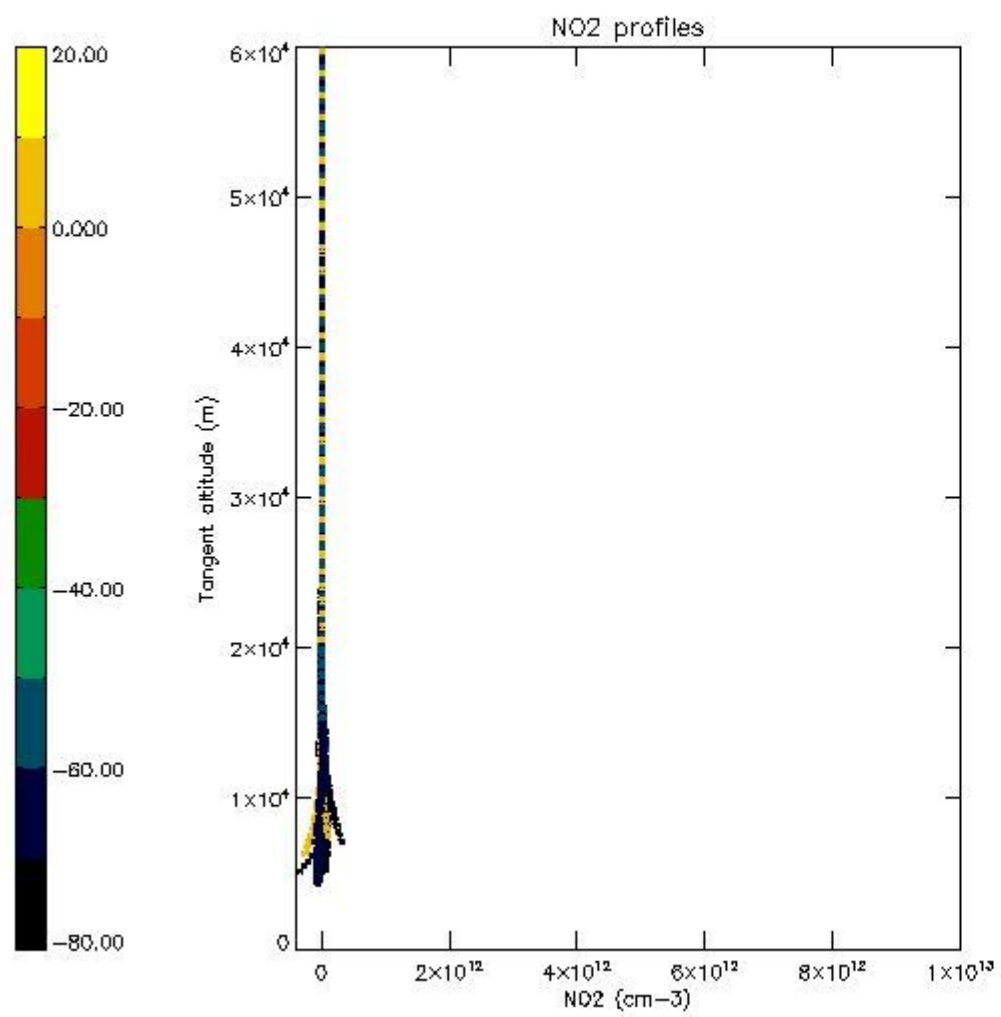
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



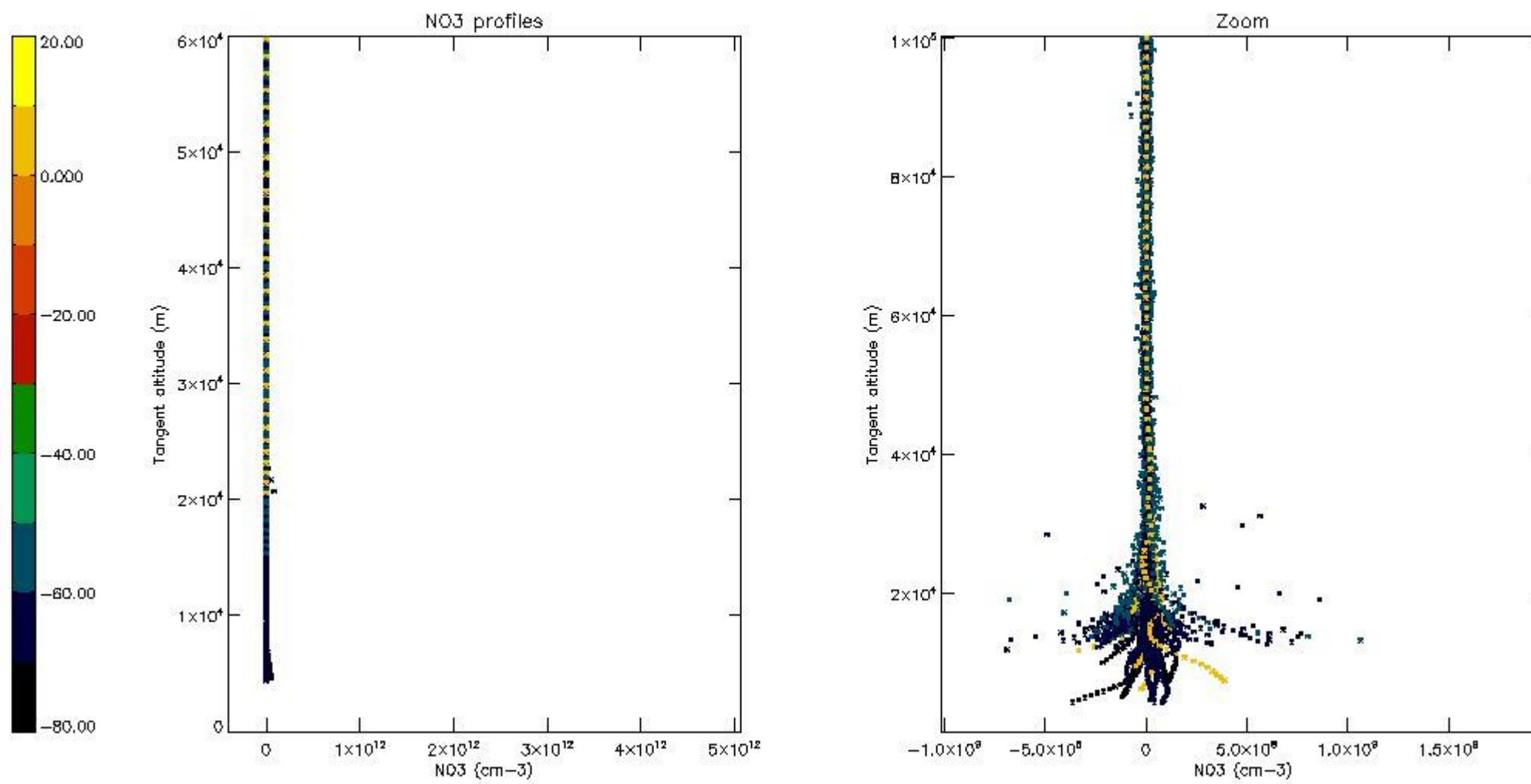
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



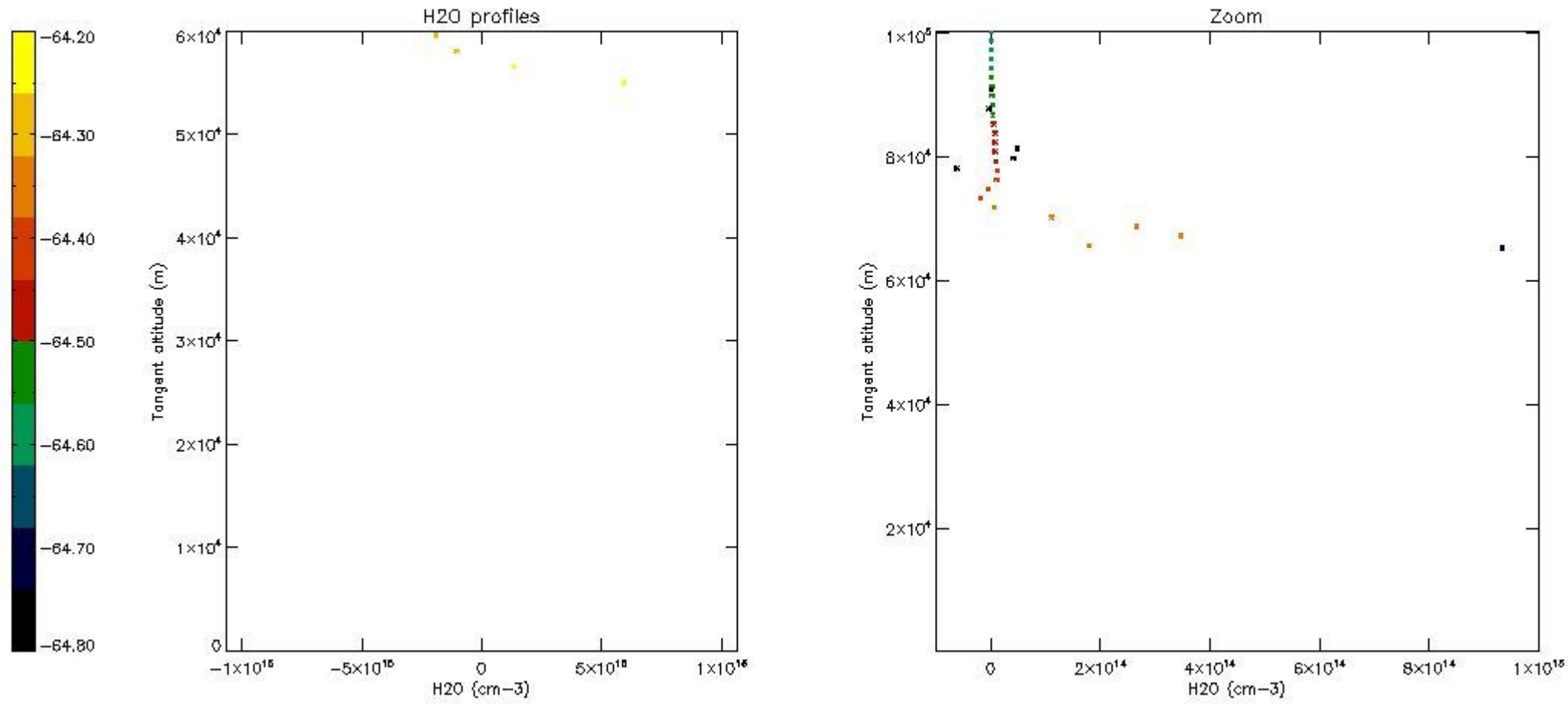
5.7 Plot NO3 profiles for all STD (dark without errors)

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	12-AUG-2007 00:04:57
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-AUG-2007 00:04:57
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-AUG-2007 00:04:57

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

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

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

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[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](#)

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 23:56:02
Data source version	GOMOS/6.01
Start time of products	12-08-2007 (12AUG2007 00:00:00)
Stop time of products	13-08-2007 (13AUG2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	283
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

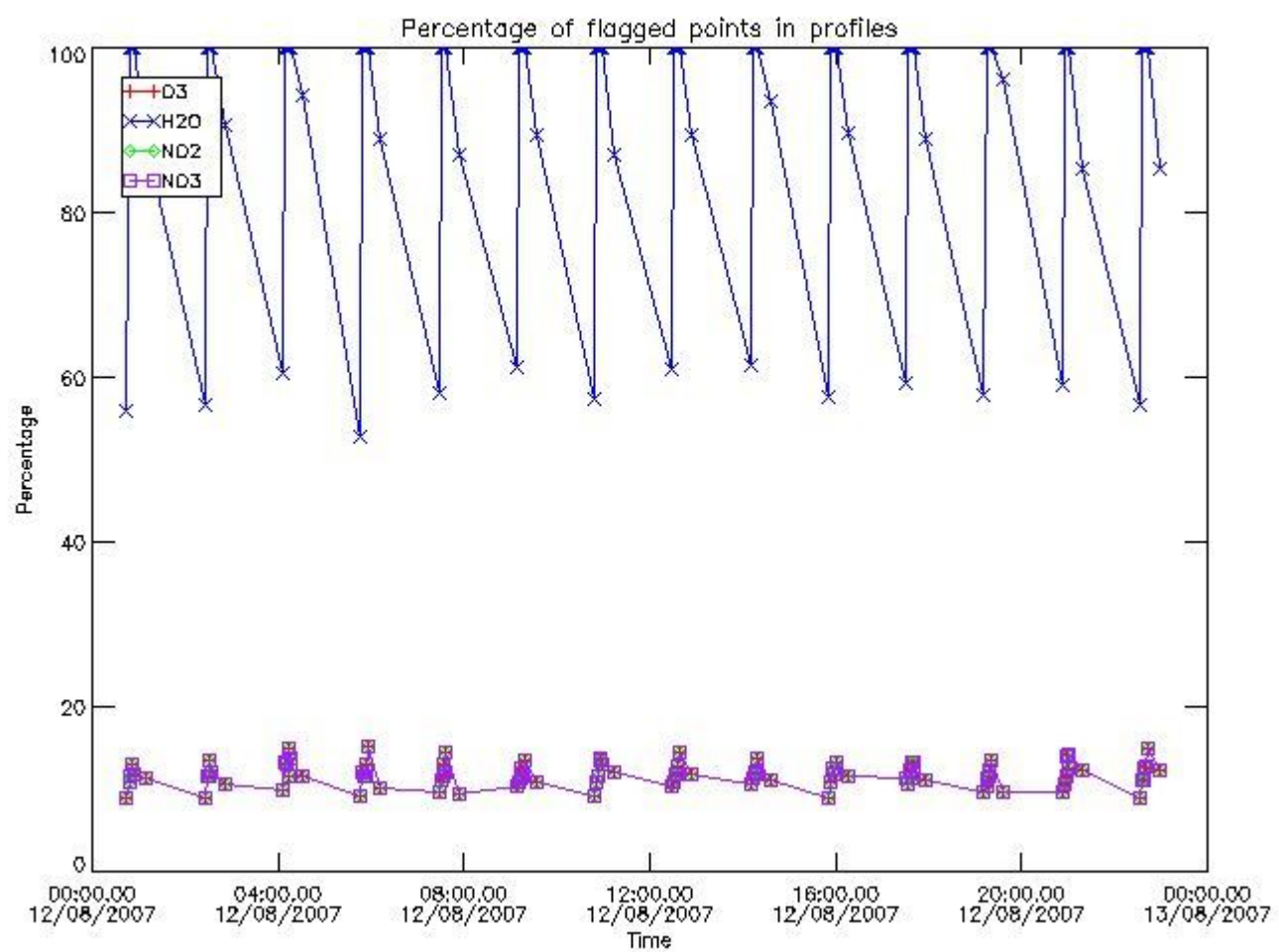
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070812_000457_000000402060_00374_28484_7064.N1	12-AUG-2007 00:04:57	Bright	39.500	92	53Eps Cyg	2.5000	4500.0	79	28484	No
2	GOM_NL__2PRFIN20070812_000626_000000372060_00374_28484_7065.N1	12-AUG-2007 00:06:26	Bright	36.500	66	37Gam Cyg	2.2080	5900.0	73	28484	No
3	GOM_NL__2PRFIN20070812_000809_000000412060_00374_28484_7066.N1	12-AUG-2007 00:08:09	Bright	40.500	19	50Alp Cyg	1.2460	10500.	81	28484	No
4	GOM_NL__2PRFIN20070812_001334_000000382060_00374_28484_7067.N1	12-AUG-2007 00:13:34	Bright	38.000	89	5Alp Cep	2.4510	8000.0	76	28484	No
5	GOM_NL__2PRFIN20070812_002017_000000342060_00374_28484_7068.N1	12-AUG-2007 00:20:17	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	28484	No
6	GOM_NL__2PRFIN20070812_003319_000000552060_00374_28484_7069.N1	12-AUG-2007 00:33:19	Bright	55.000	42	34Bet Aur	1.9000	10200.	110	28484	No
7	GOM_NL__2PRFIN20070812_003540_000000392060_00374_28484_7070.N1	12-AUG-2007 00:35:40	Bright	38.500	107	37The Aur	2.6490	11000.	77	28484	No
8	GOM_NL__2PRFIN20070812_003951_000000452060_00374_28484_7071.N1	12-AUG-2007 00:39:51	Bright	44.500	151	13Mu Gem	2.8900	3000.0	89	28484	No
9	GOM_NL__2PRFIN20070812_004124_000000412060_00374_28484_7072.N1	12-AUG-2007 00:41:24	Twilight	41.000	44	24Gam Gem	1.9280	11000.	82	28484	No
10	GOM_NL__2PRFIN20070812_004444_000000572060_00374_28484_7073.N1	12-AUG-2007 00:44:44	Dark	57.000	14	58Alp Ori	0.87000	3000.0	114	28484	No
11	GOM_NL__2PRFIN20070812_004746_000000472060_00374_28484_7074.N1	12-AUG-2007 00:47:46	Dark	46.500	30	46Eps Ori	1.6940	30000.	93	28484	No
12	GOM_NL__2PRFIN20070812_004949_000000452060_00374_28484_7075.N1	12-AUG-2007 00:49:49	Dark	44.500	56	53Kap Ori	2.0650	30000.	89	28484	No
13	GOM_NL__2PRFIN20070812_005113_000000402060_00374_28484_7076.N1	12-AUG-2007 00:51:13	Dark	39.500	47	2Bet CMa	1.9760	28000.	79	28484	No
14	GOM_NL__2PRFIN20070812_005233_000000442060_00374_28484_7077.N1	12-AUG-2007 00:52:33	Dark	43.500	101	11Alp Lep	2.5820	7000.0	87	28484	No
15	GOM_NL__2PRFIN20070812_011026_000000452060_00375_28485_7073.N1	12-AUG-2007 01:10:26	Dark	45.000	9	Alp Eri	0.45300	24000.	90	28485	No
16	GOM_NL__2PRFIN20070812_011633_000000402060_00375_28485_7074.N1	12-AUG-2007 01:16:33	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	28485	No
17	GOM_NL__2PRFIN20070812_012004_000000432060_00375_28485_7075.N1	12-AUG-2007 01:20:04	Straylight	43.000	31	Alp Gru	1.7340	15200.	86	28485	No
18	GOM_NL__2PRFIN20070812_012305_000000432060_00375_28485_7076.N1	12-AUG-2007 01:23:05	Straylight	42.500	172	Gam Gru	3.0030	13100.	85	28485	No
19	GOM_NL__2PRFIN20070812_013753_000000362060_00375_28485_7077.N1	12-AUG-2007 01:37:53	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	28485	No
20	GOM_NL__2PRFIN20070812_014533_000000412060_00375_28485_7078.N1	12-AUG-2007 01:45:33	Bright	40.500	92	53Eps Cyg	2.5000	4500.0	81	28485	No
21	GOM_NL__2PRFIN20070812_014702_000000382060_00375_28485_7079.N1	12-AUG-2007 01:47:02	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	28485	No
22	GOM_NL__2PRFIN20070812_014845_000000392060_00375_28485_7080.N1	12-AUG-2007 01:48:45	Bright	39.000	19	50Alp Cyg	1.2460	10500.	78	28485	No
23	GOM_NL__2PRFIN20070812_015409_000000352060_00375_28485_7081.N1	12-AUG-2007 01:54:09	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	28485	No
24	GOM_NL__2PRFIN20070812_020053_000000352060_00375_28485_7082.N1	12-AUG-2007 02:00:53	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	28485	No
25	GOM_NL__2PRFIN20070812_021355_000000382060_00375_28485_7083.N1	12-AUG-2007 02:13:55	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	28485	No
26	GOM_NL__2PRFIN20070812_021616_000000372060_00375_28485_7084.N1	12-AUG-2007 02:16:16	Bright	36.500	107	37The Aur	2.6490	11000.	73	28485	No
27	GOM_NL__2PRFIN20070812_022027_000000462060_00375_28485_7085.N1	12-AUG-2007 02:20:27	Bright	45.500	151	13Mu Gem	2.8900	3000.0	91	28485	No
28	GOM_NL__2PRFIN20070812_022201_000000412060_00375_28485_7086.N1	12-AUG-2007 02:22:01	Twilight	41.000	44	24Gam Gem	1.9280	11000.	82	28485	No
29	GOM_NL__2PRFIN20070812_022520_000000572060_00375_28485_7087.N1	12-AUG-2007 02:25:20	Dark	57.000	14	58Alp Ori	0.87000	3000.0	114	28485	No
30	GOM_NL__2PRFIN20070812_022822_000000452060_00375_28485_7088.N1	12-AUG-2007 02:28:22	Dark	44.500	30	46Eps Ori	1.6940	30000.	89	28485	No
31	GOM_NL__2PRFIN20070812_023026_000000442060_00375_28485_7089.N1	12-AUG-2007 02:30:26	Dark	44.000	56	53Kap Ori	2.0650	30000.	88	28485	No
32	GOM_NL__2PRFIN20070812_023149_000000382060_00375_28485_7090.N1	12-AUG-2007 02:31:49	Dark	38.000	47	2Bet CMa	1.9760	28000.	76	28485	No
33	GOM_NL__2PRFIN20070812_023309_000000422060_00375_28485_7091.N1	12-AUG-2007 02:33:09	Dark	42.000	101	11Alp Lep	2.5820	7000.0	84	28485	No
34	GOM_NL__2PRFIN20070812_025102_000000492060_00376_28486_7087.N1	12-AUG-2007 02:51:02	Dark	48.500	9	Alp Eri	0.45300	24000.	97	28486	No
35	GOM_NL__2PRFIN20070812_025709_000000392060_00376_28486_7088.N1	12-AUG-2007 02:57:09	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	28486	No
36	GOM_NL__2PRFIN20070812_030040_000000422060_00376_28486_7089.N1	12-AUG-2007 03:00:40	Straylight	41.500	31	Alp Gru	1.7340	15200.	83	28486	No
37	GOM_NL__2PRFIN20070812_030341_000000432060_00376_28486_7090.N1	12-AUG-2007 03:03:41	Straylight	43.000	172	Gam Gru	3.0030	13100.	86	28486	No
38	GOM_NL__2PRFIN20070812_031830_000000362060_00376_28486_7091.N1	12-AUG-2007 03:18:30	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	28486	No
39	GOM_NL__2PRFIN20070812_032608_000000372060_00376_28486_7092.N1	12-AUG-2007 03:26:08	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	28486	No
40	GOM_NL__2PRFIN20070812_032738_000000382060_00376_28486_7093.N1	12-AUG-2007 03:27:38	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	28486	No
41	GOM_NL__2PRFIN20070812_032920_000000392060_00376_28486_7094.N1	12-AUG-2007 03:29:20	Bright	38.500	19	50Alp Cyg	1.2460	10500.	77	28486	No
42	GOM_NL__2PRFIN20070812_033445_000000352060_00376_28486_7095.N1	12-AUG-2007 03:34:45	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	28486	No

279	GOM_NL__2PRFIN20070812_233316_000000372060_00388_28498_7301.N1	12-AUG-2007 23:33:16	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	28498	No
280	GOM_NL__2PRFIN20070812_233447_000000362060_00388_28498_7302.N1	12-AUG-2007 23:34:47	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	28498	No
281	GOM_NL__2PRFIN20070812_233628_000000372060_00388_28498_7303.N1	12-AUG-2007 23:36:28	Bright	36.500	19	50Alp Cyg	1.2460	10500.	73	28498	No
282	GOM_NL__2PRFIN20070812_234152_000000372060_00388_28498_7304.N1	12-AUG-2007 23:41:52	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	28498	No
283	GOM_NL__2PRFIN20070812_234840_000000342060_00388_28498_7305.N1	12-AUG-2007 23:48:40	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	28498	No

3. Quality information per product

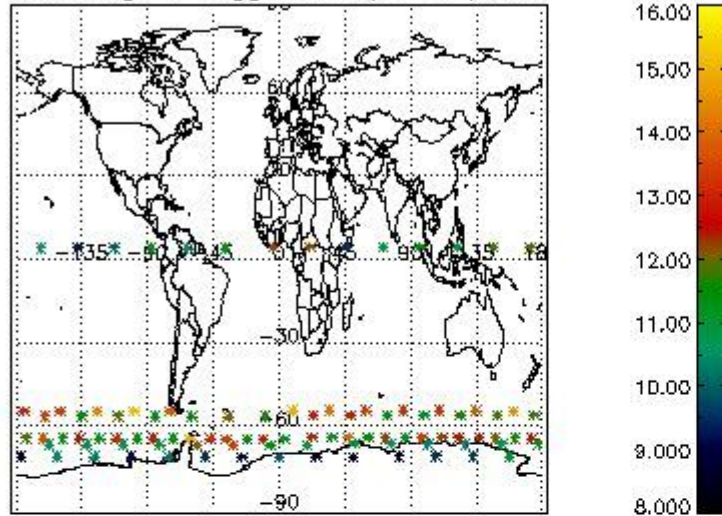
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

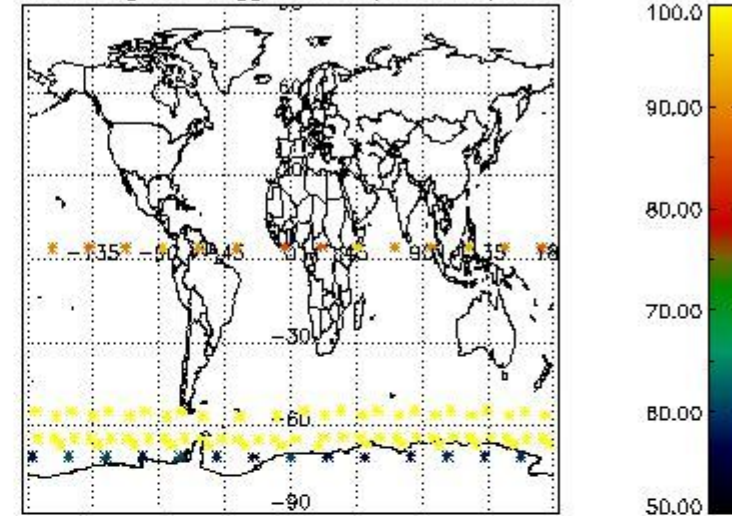


3.2 Plot quality information per product (world map)

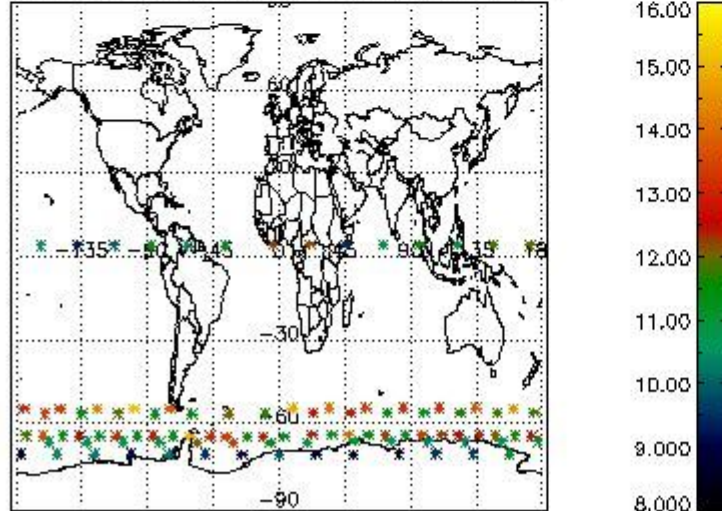
Percentage of flagged data per O3 profile



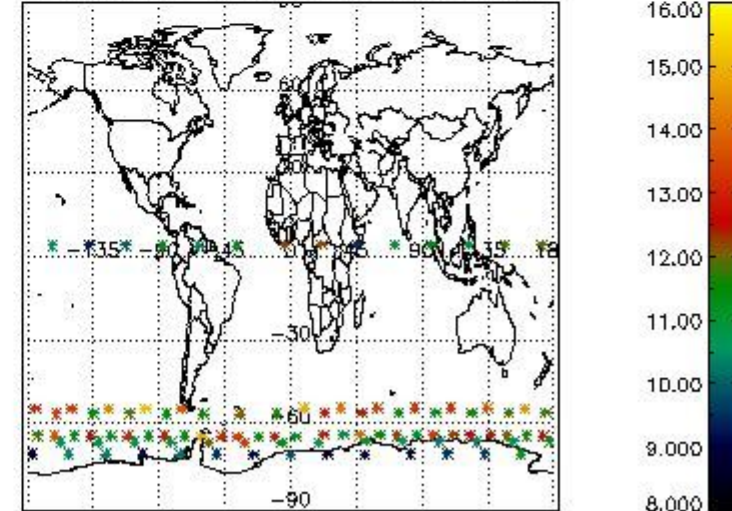
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

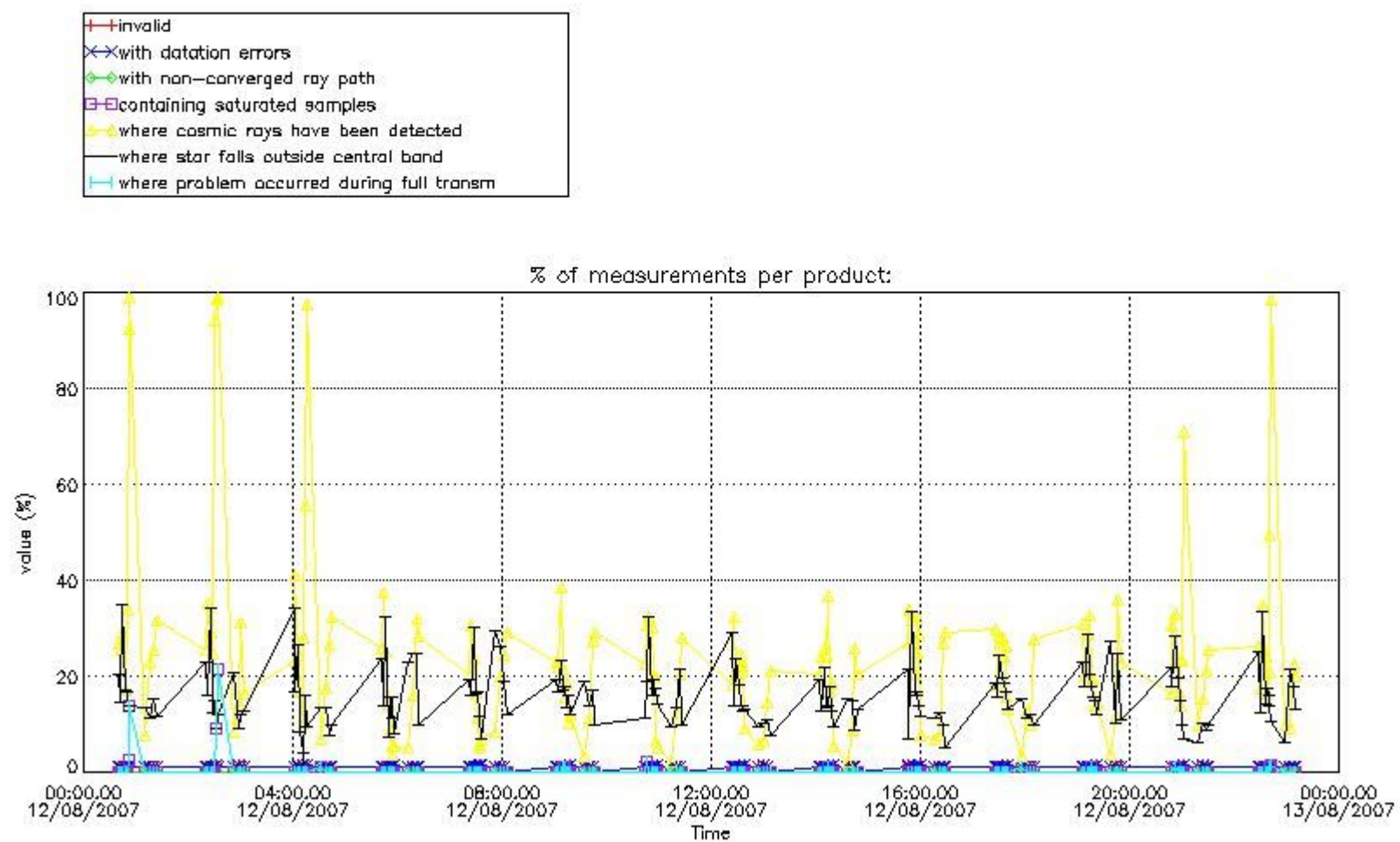


4. Level 1 quality information per product

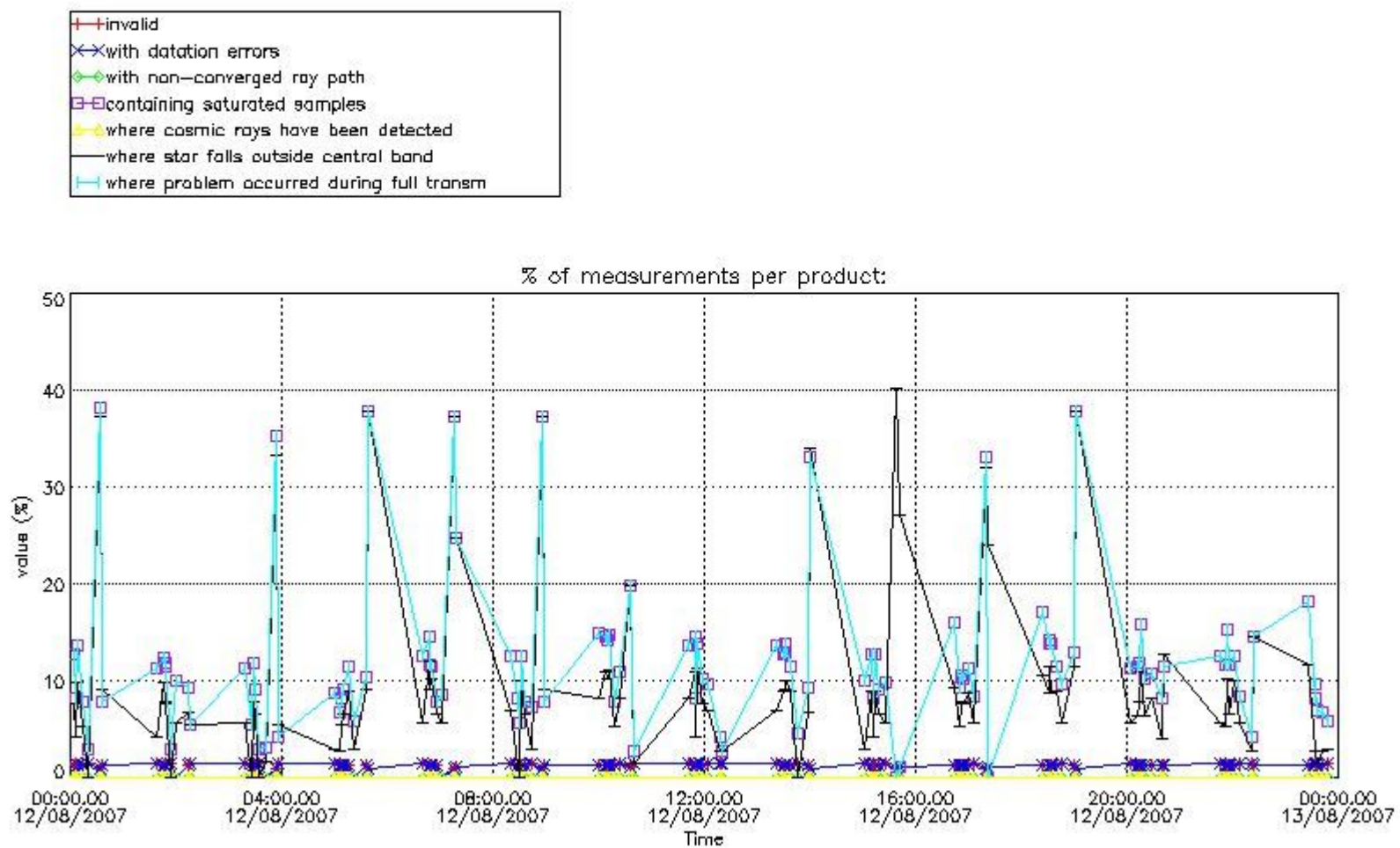
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



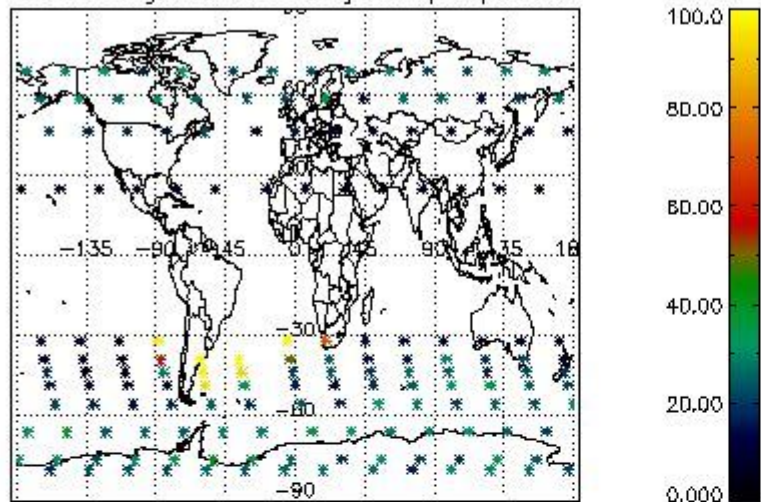
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



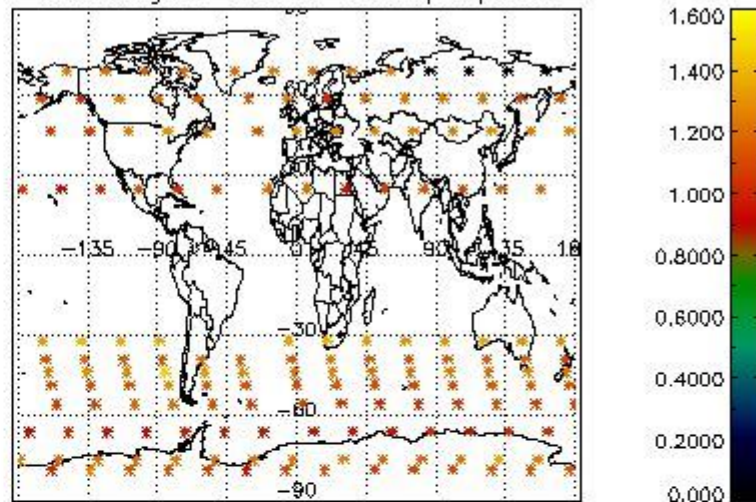
4.2 Plot quality information per product coming from level 1b processing (world map)

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

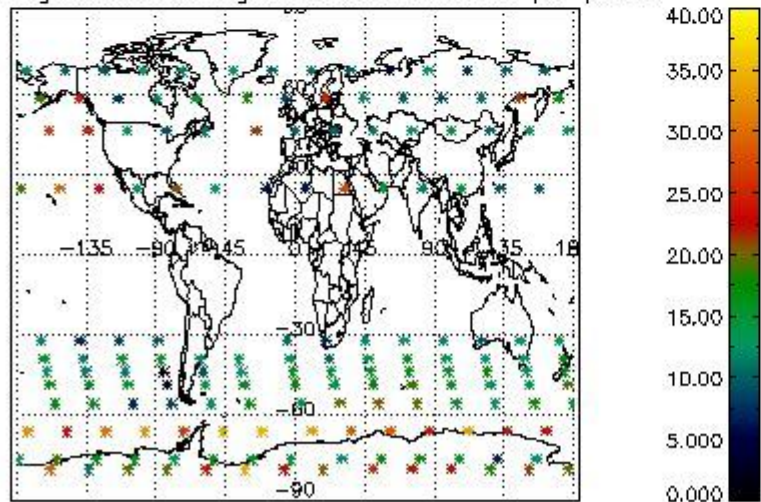
Percentage of cosmic ray hits per profile



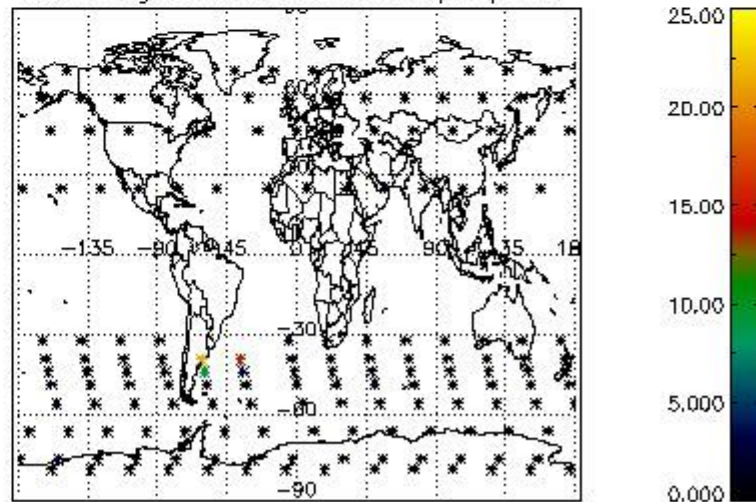
Percentage of datation errors per profile



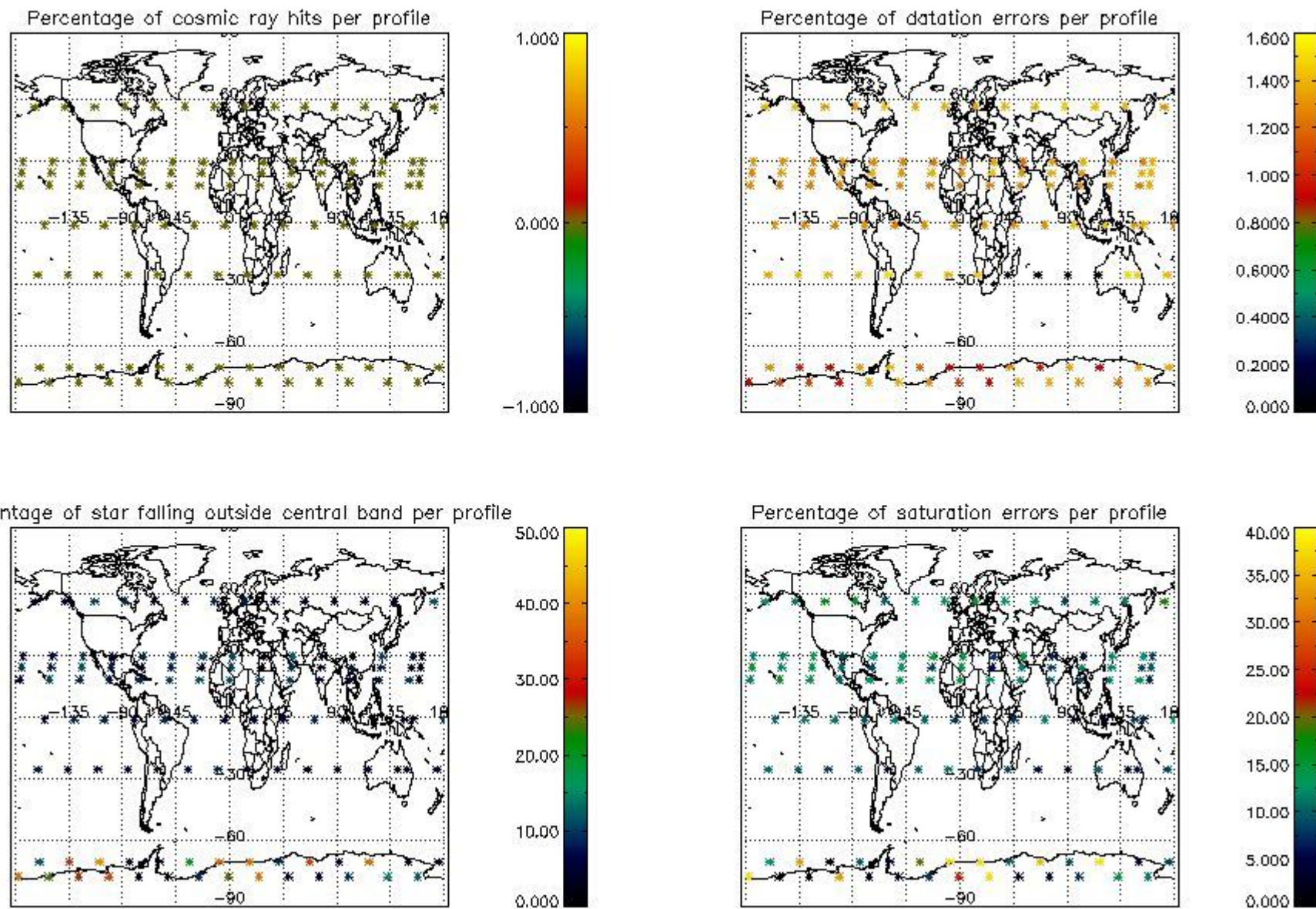
Percentage of star falling outside central band per profile



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

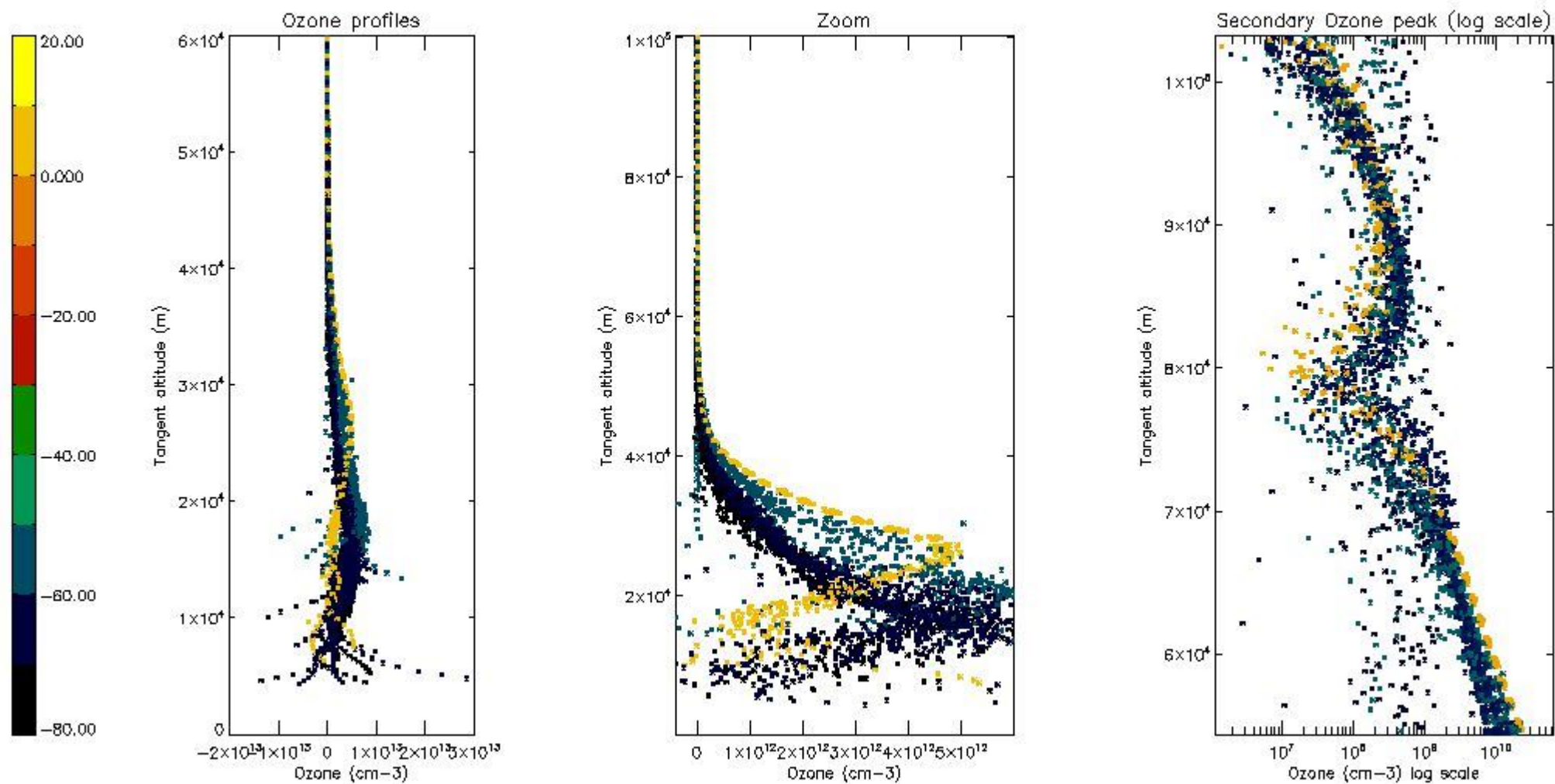
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	22

STD < 10	18
STD < 5	13

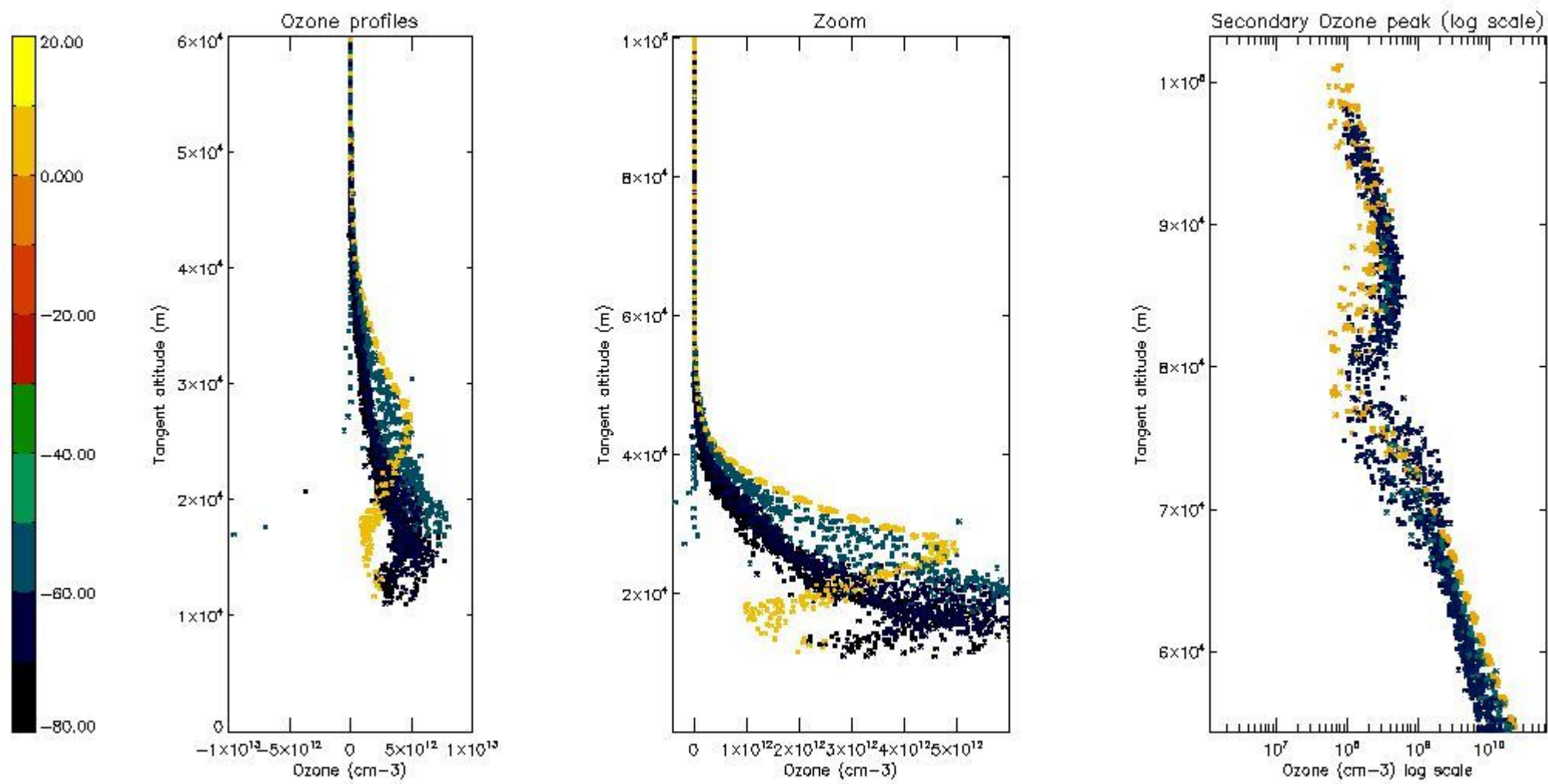
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



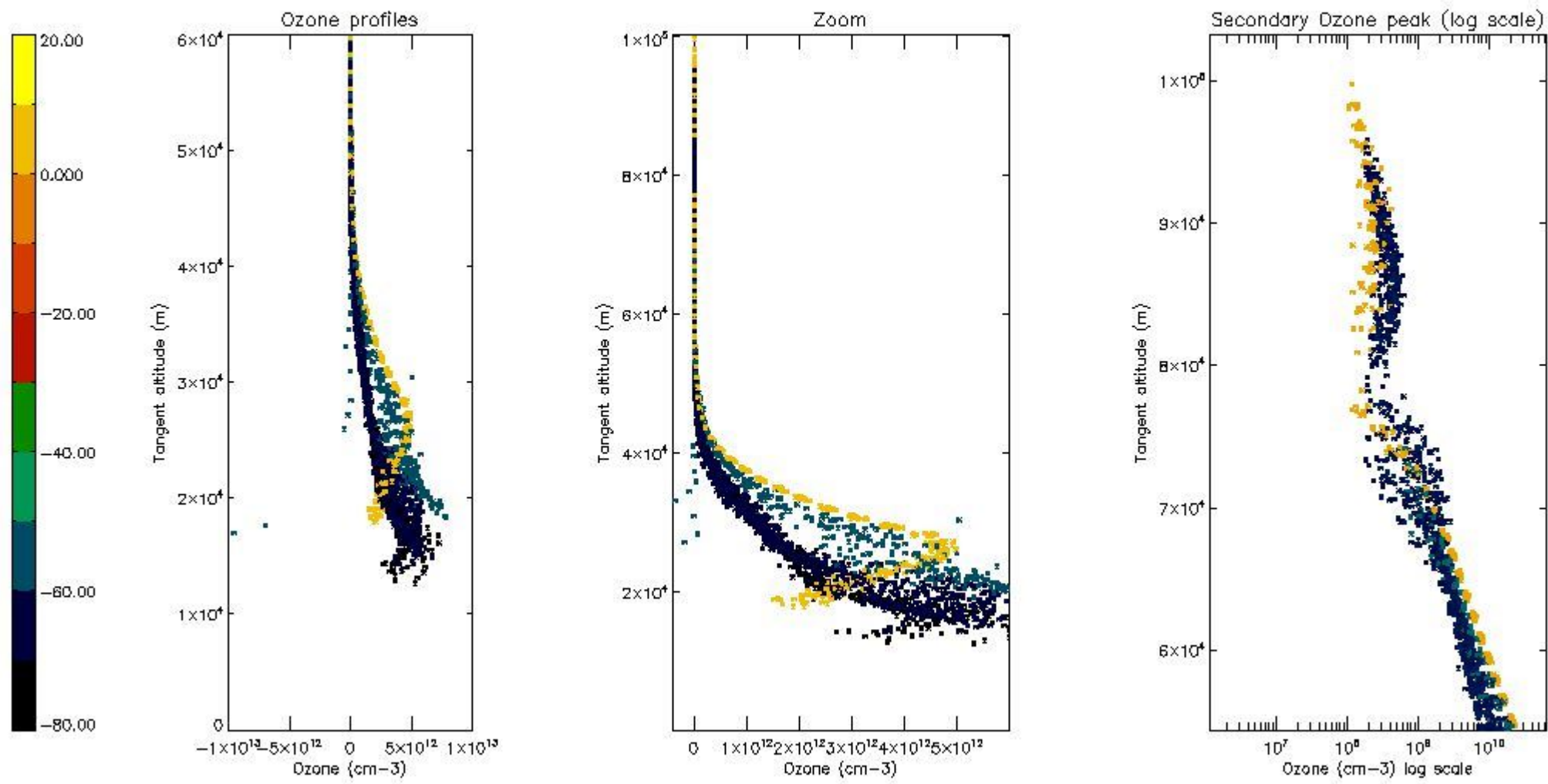
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



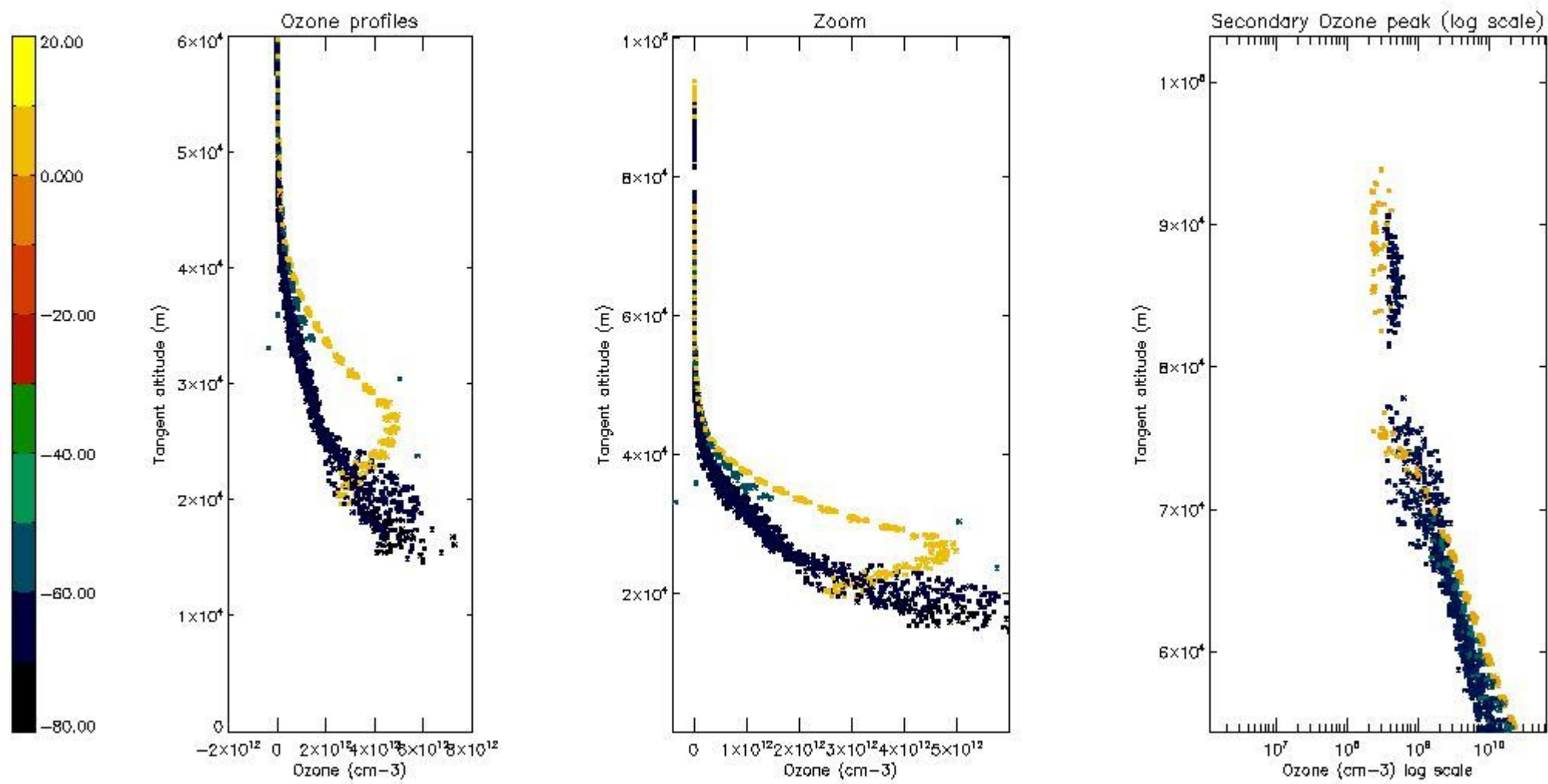
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



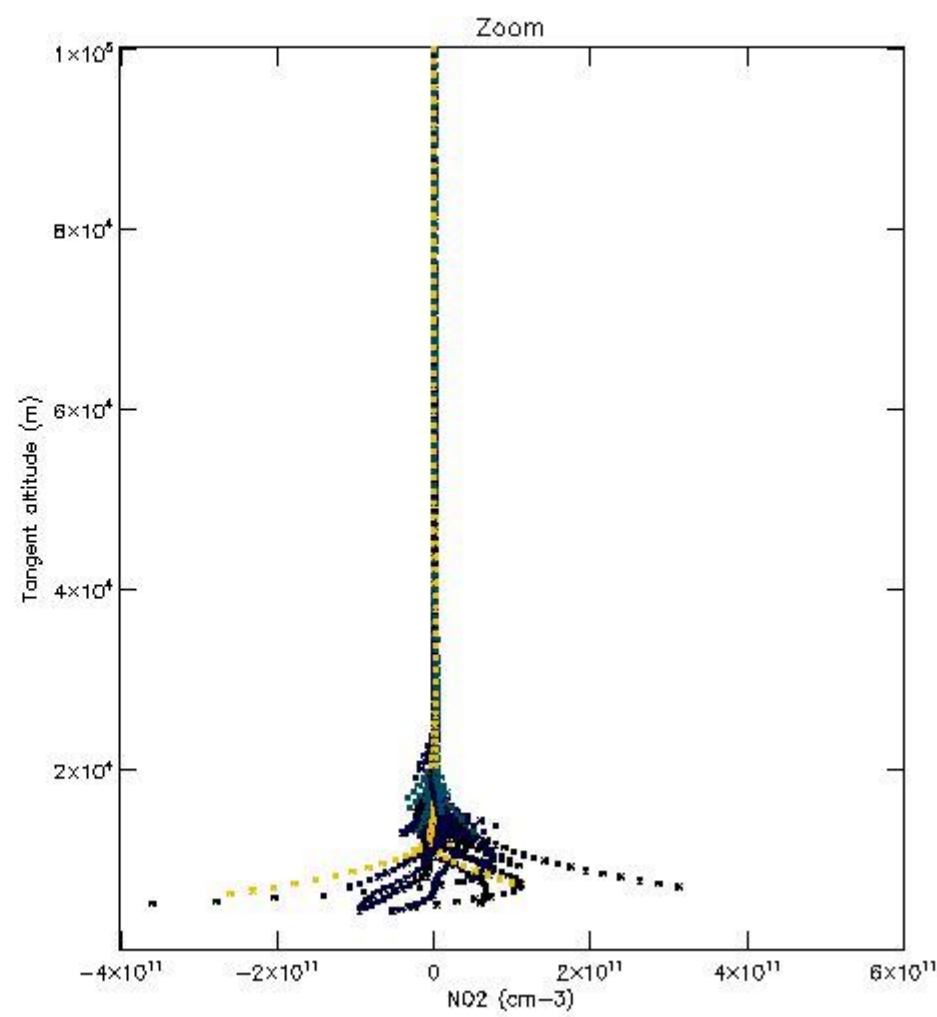
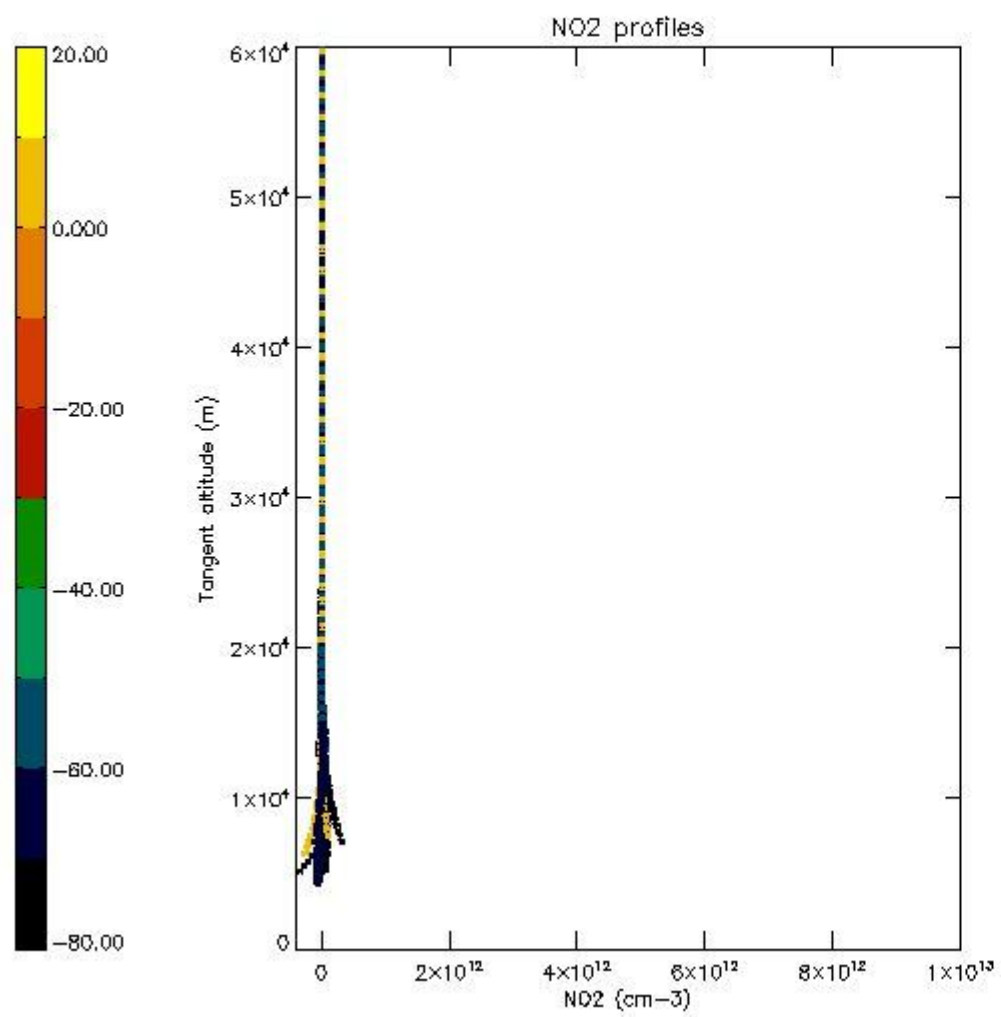
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



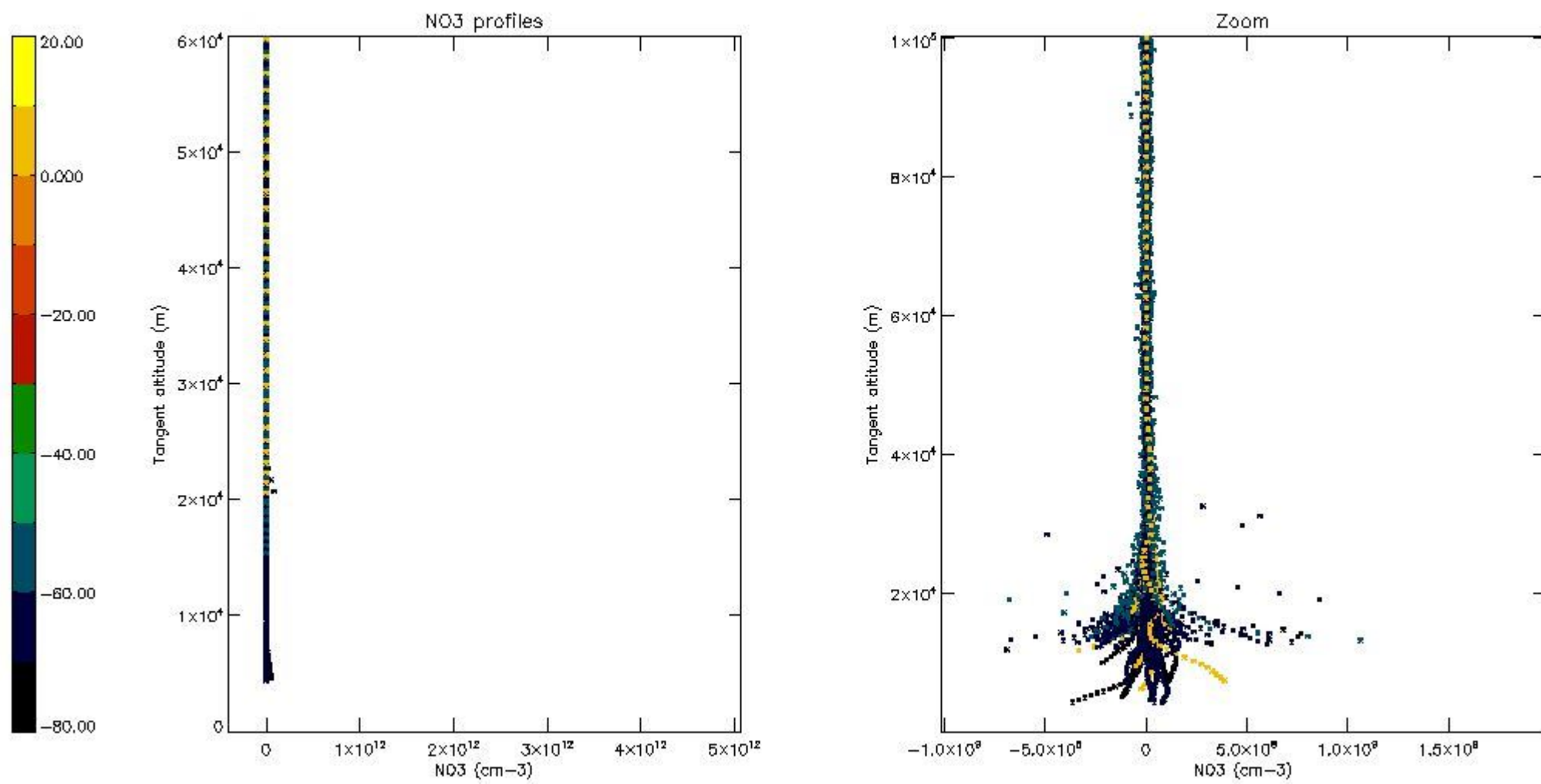
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



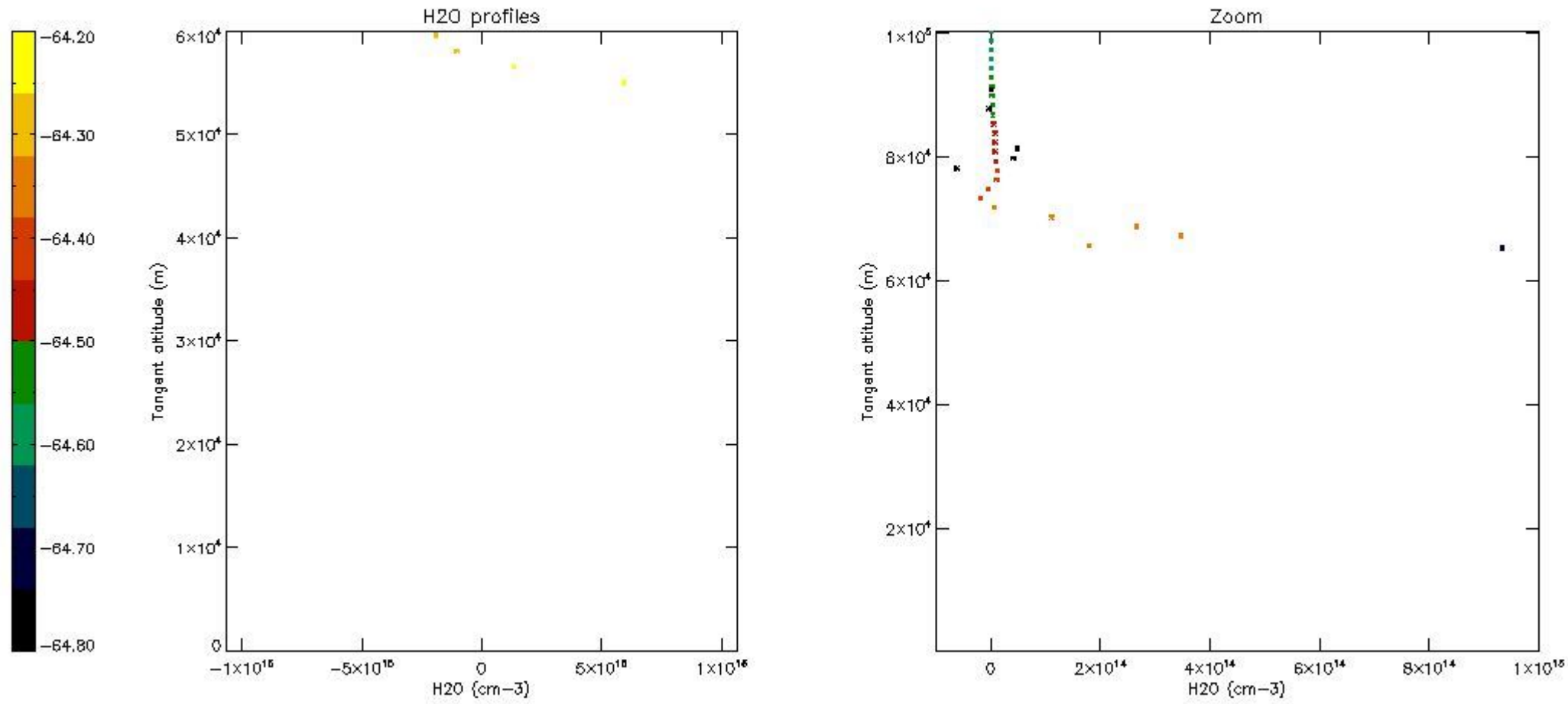
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

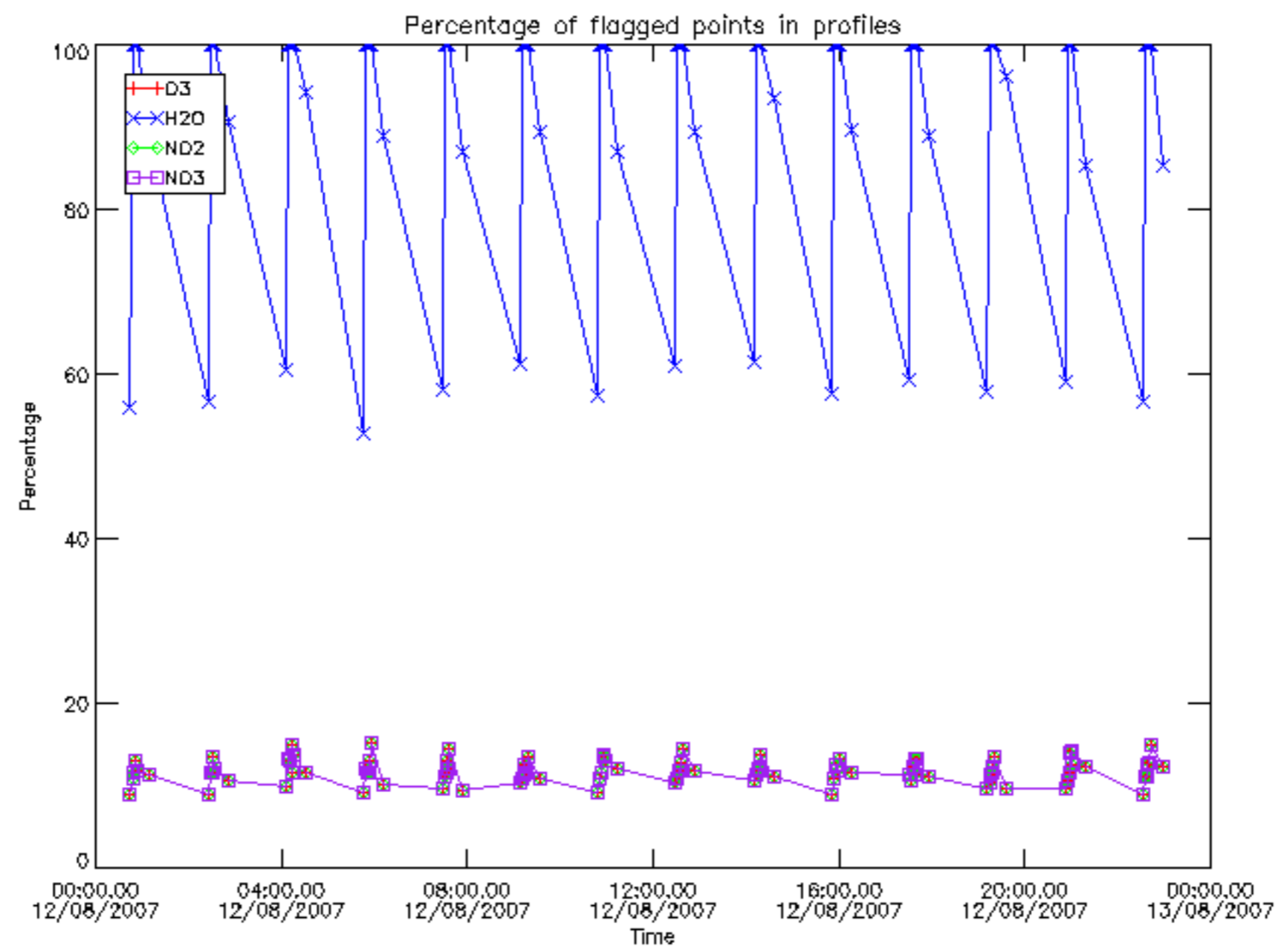
The colorbar represents the latitude.



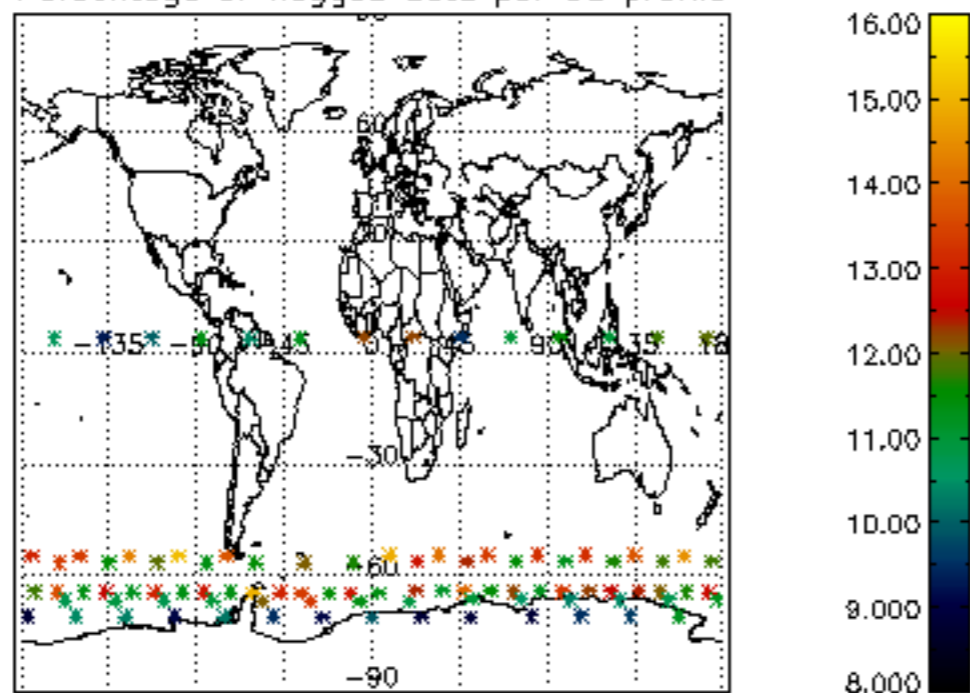
6. Auxiliary Data Files used for the production reported in section 2

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.

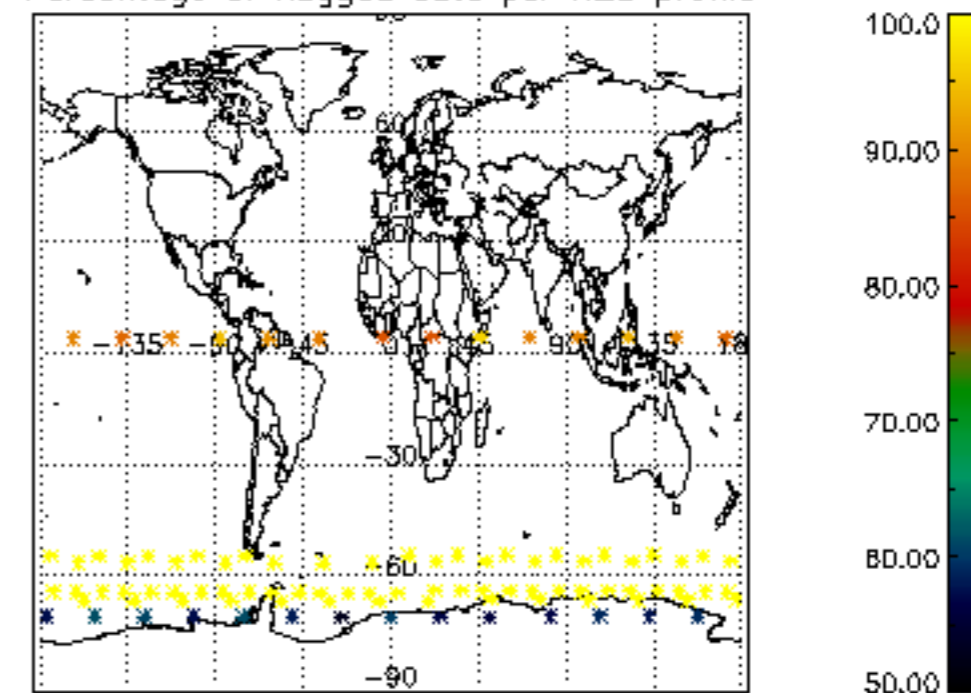
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-AUG-2007 00:04:57
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-AUG-2007 00:04:57
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-AUG-2007 00:04:57



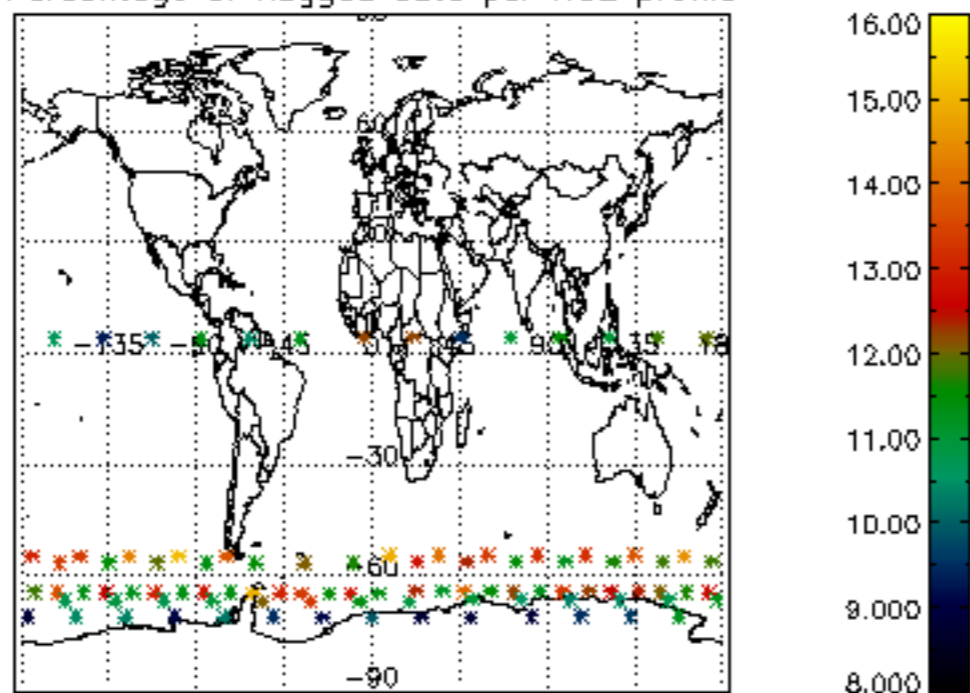
Percentage of flagged data per D3 profile



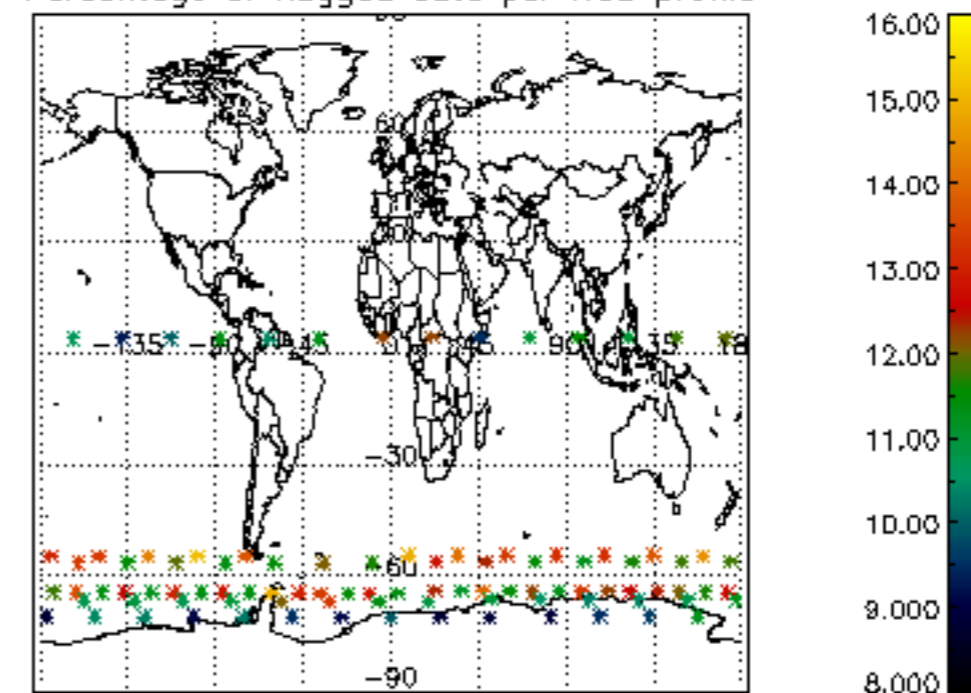
Percentage of flagged data per H2O profile

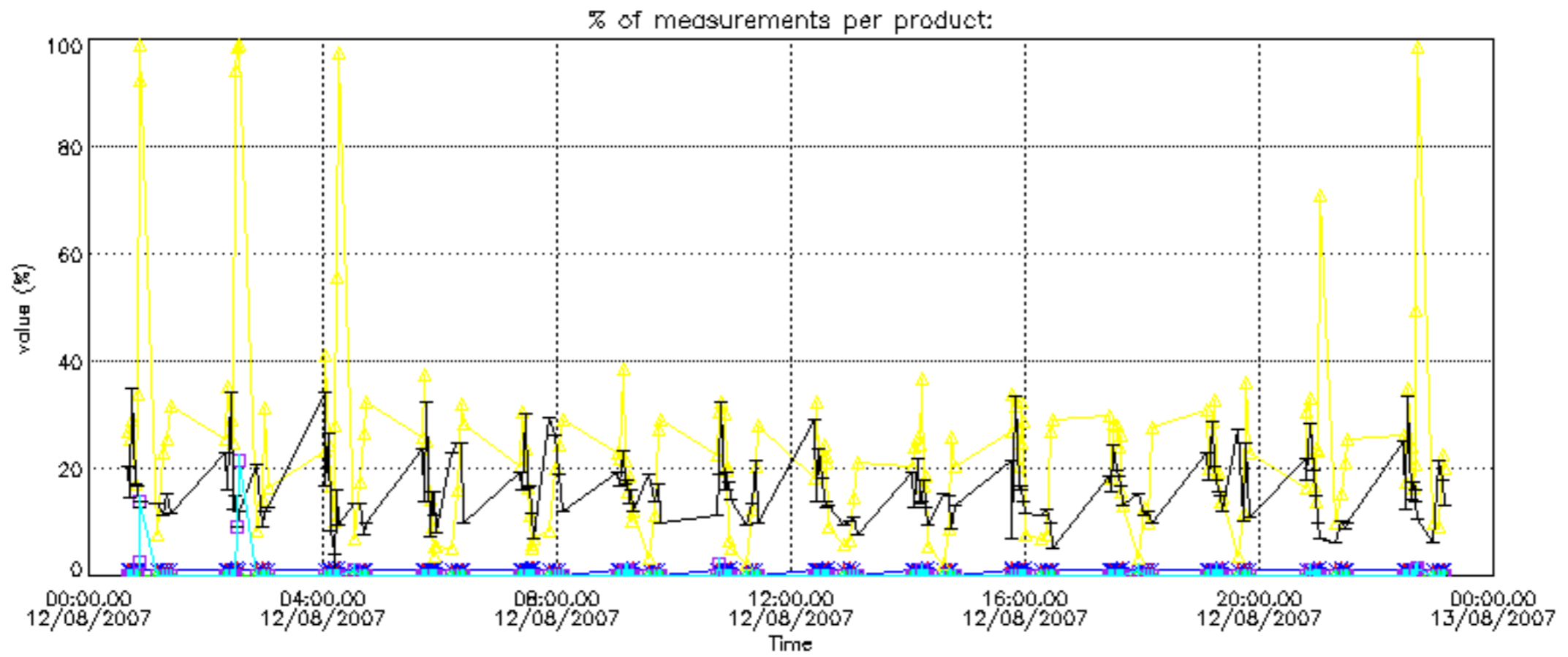


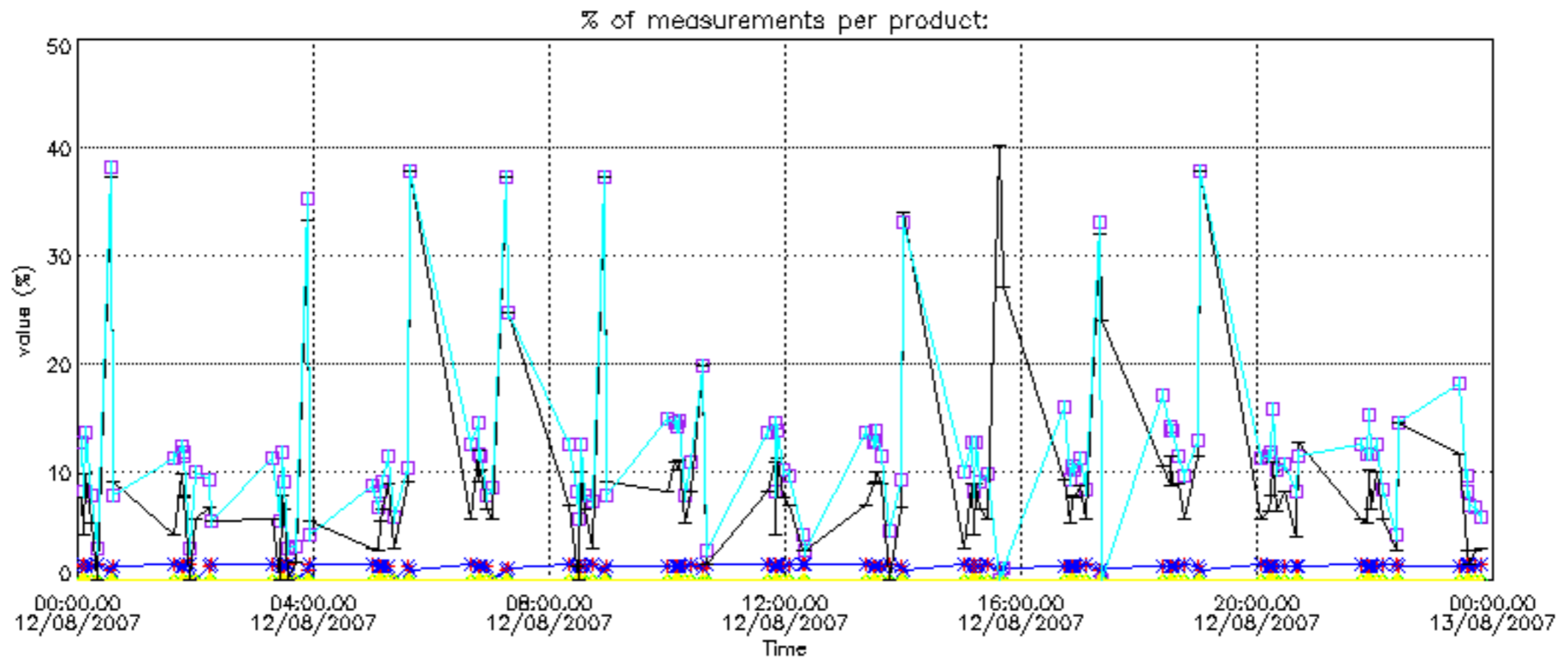
Percentage of flagged data per NO2 profile



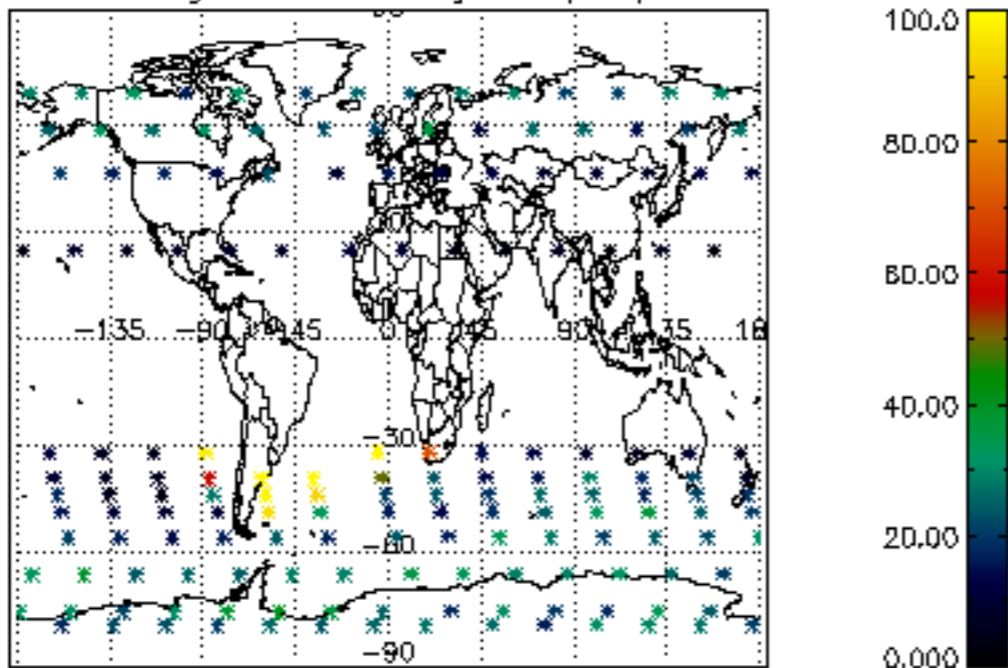
Percentage of flagged data per NO3 profile



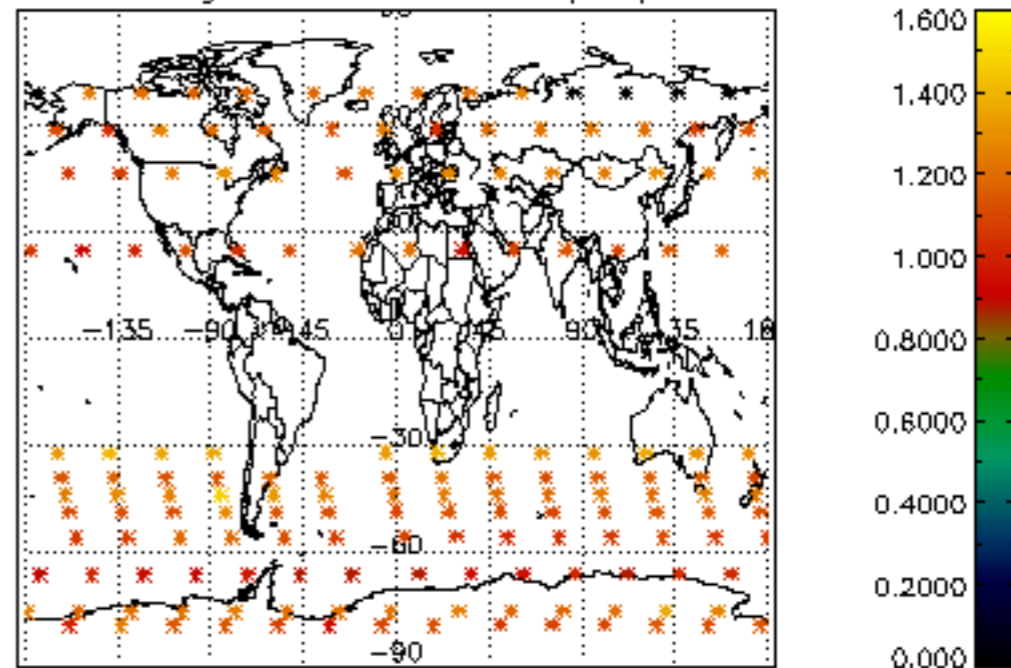




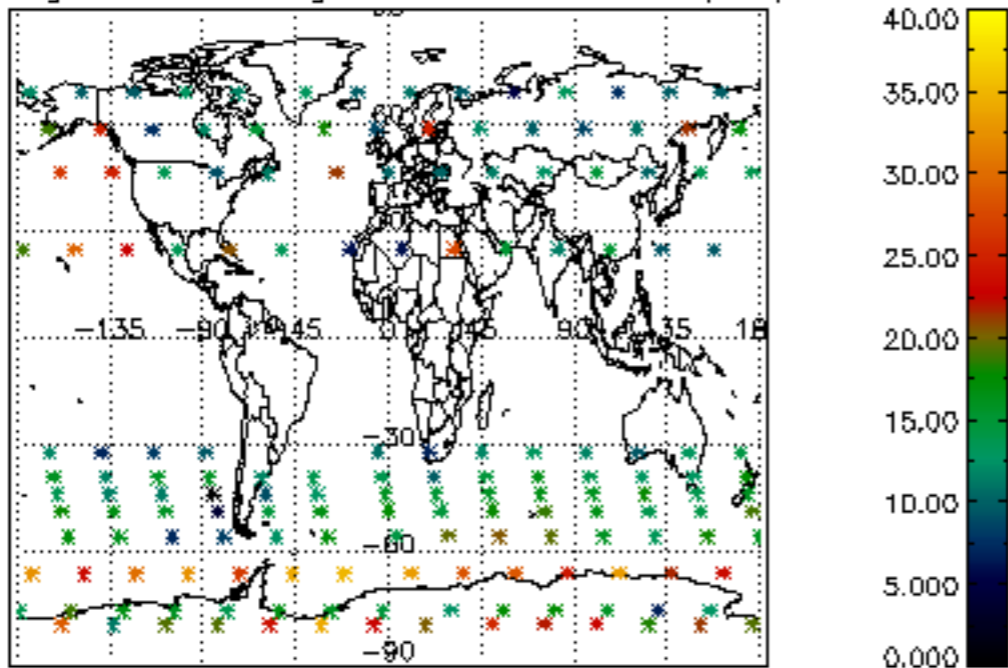
Percentage of cosmic ray hits per profile



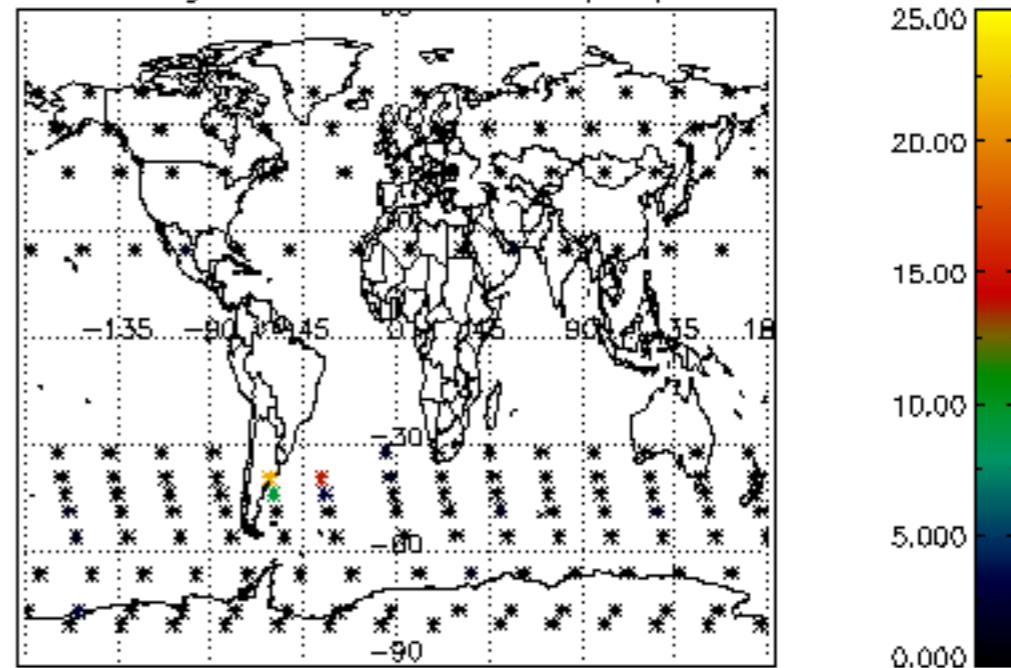
Percentage of datation errors per profile



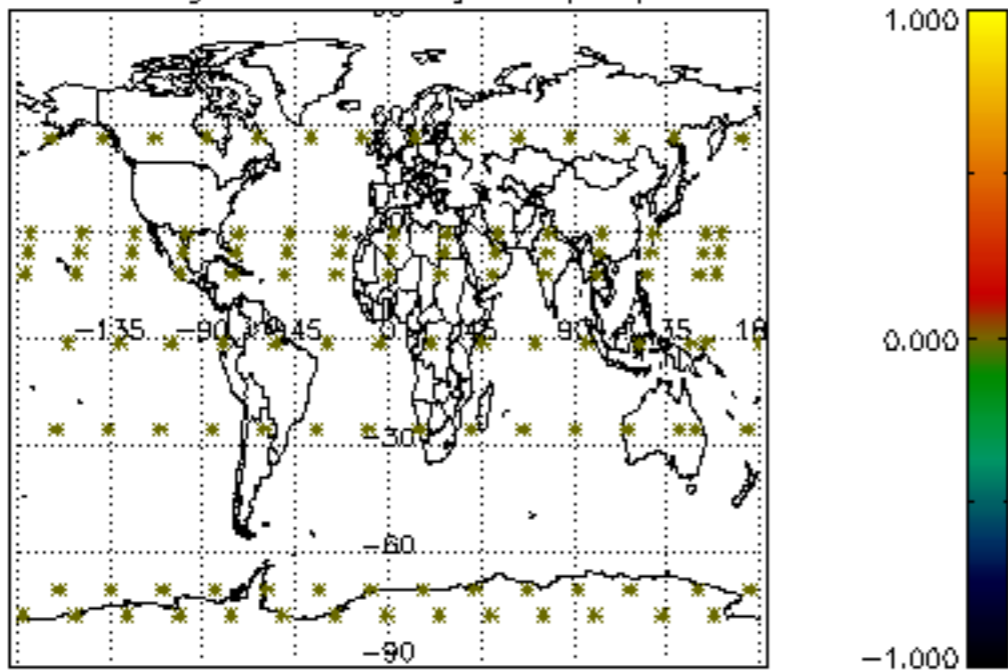
Percentage of star falling outside central band per profile



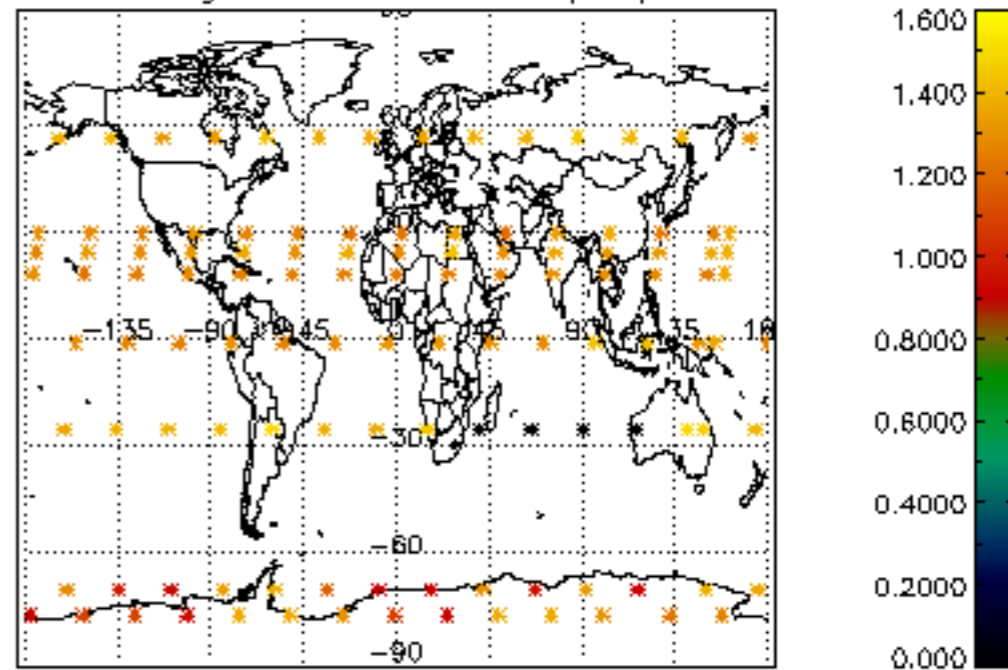
Percentage of saturation errors per profile



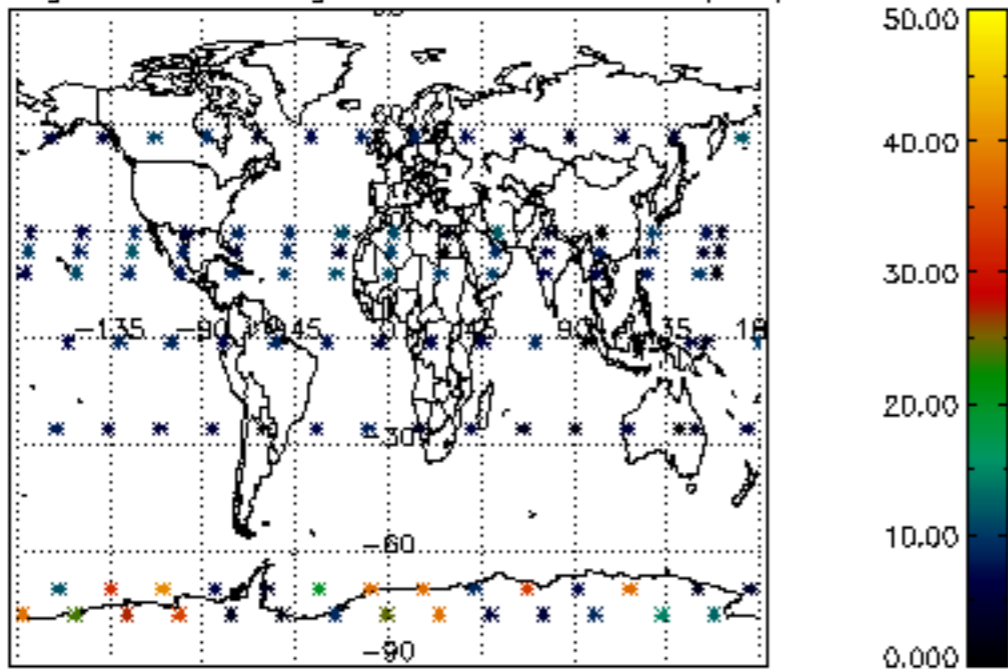
Percentage of cosmic ray hits per profile



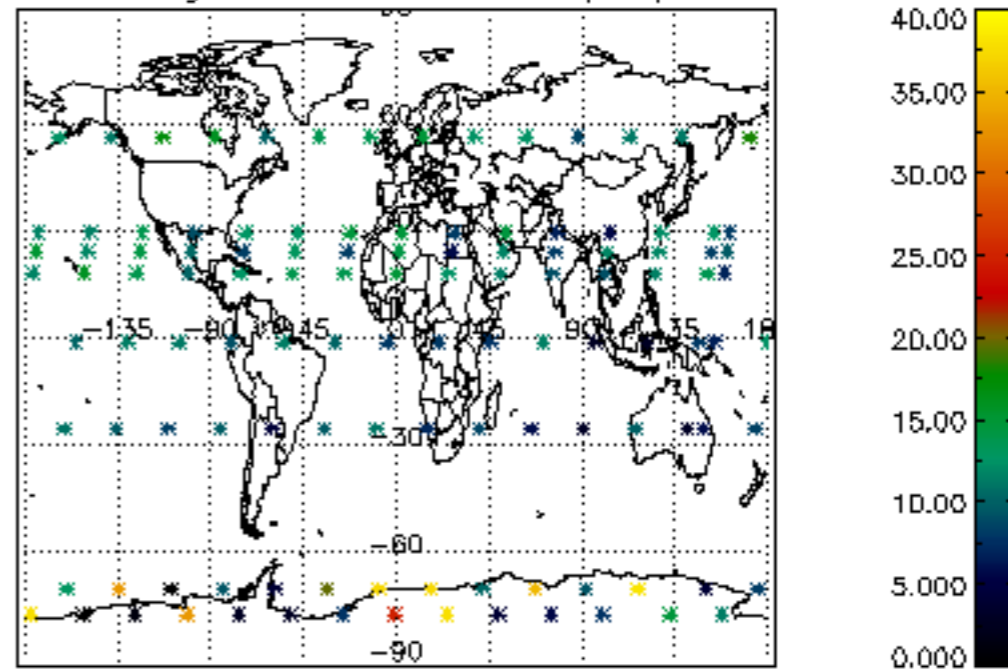
Percentage of datation errors per profile

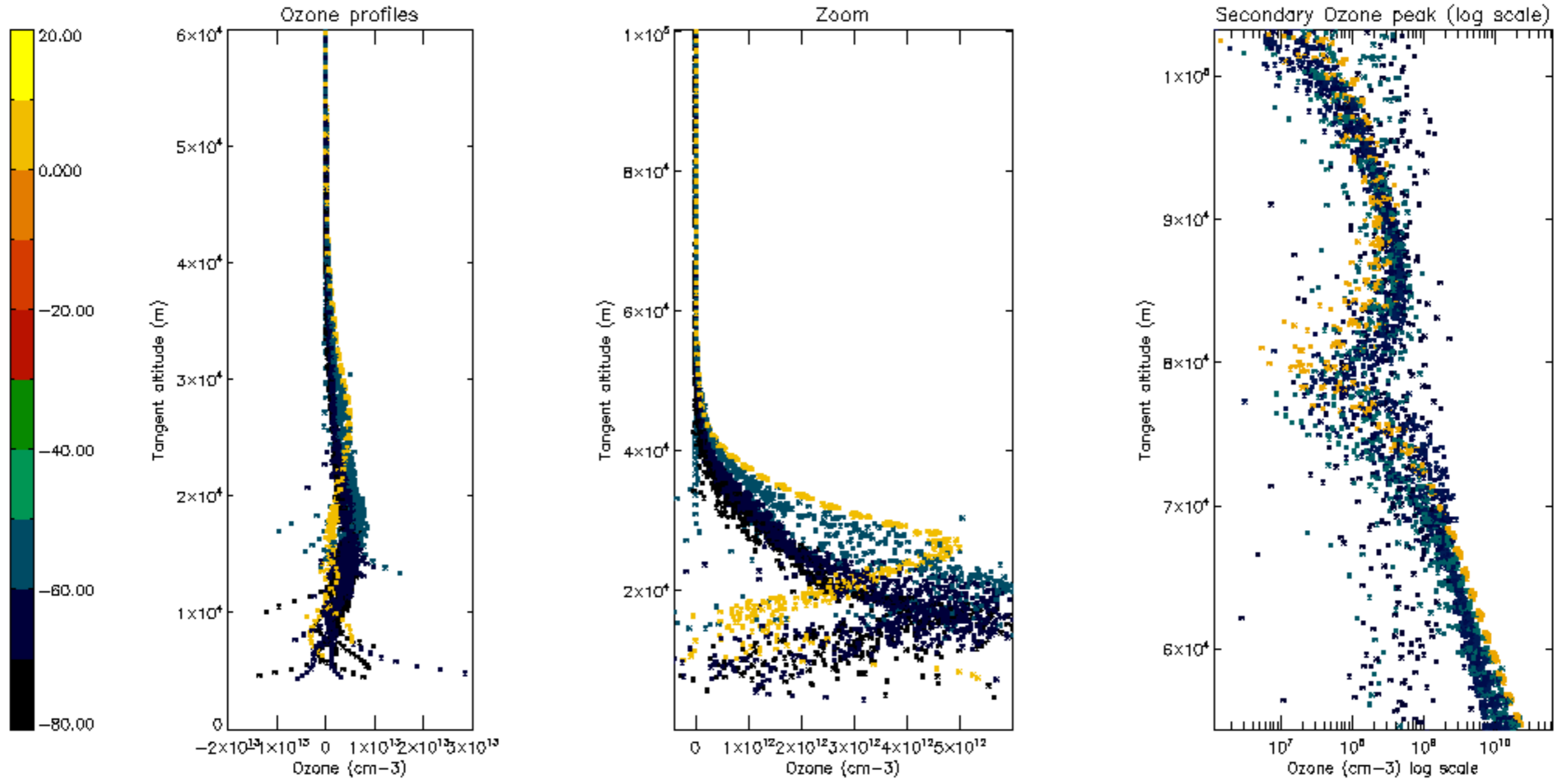


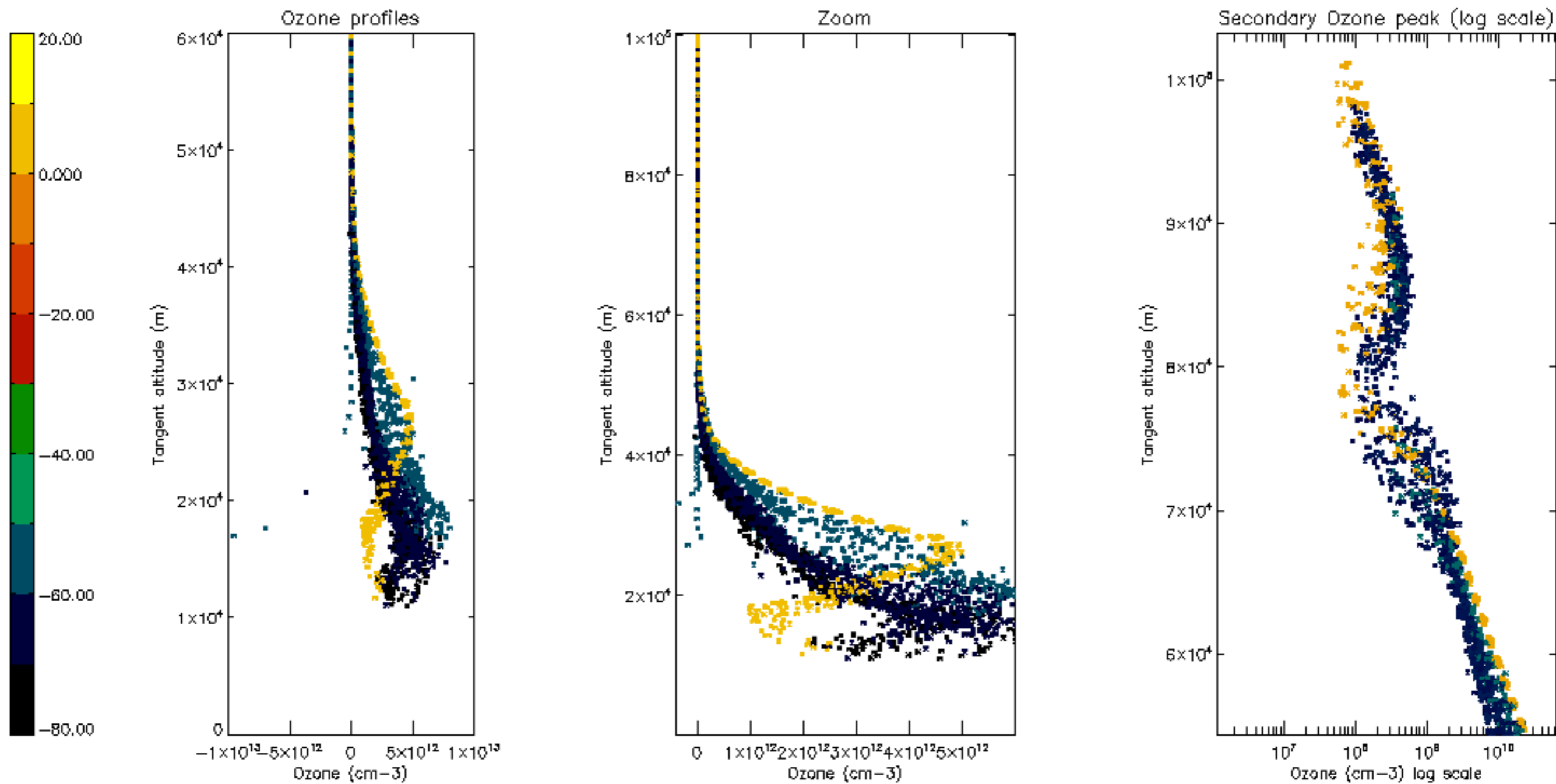
Percentage of star falling outside central band per profile

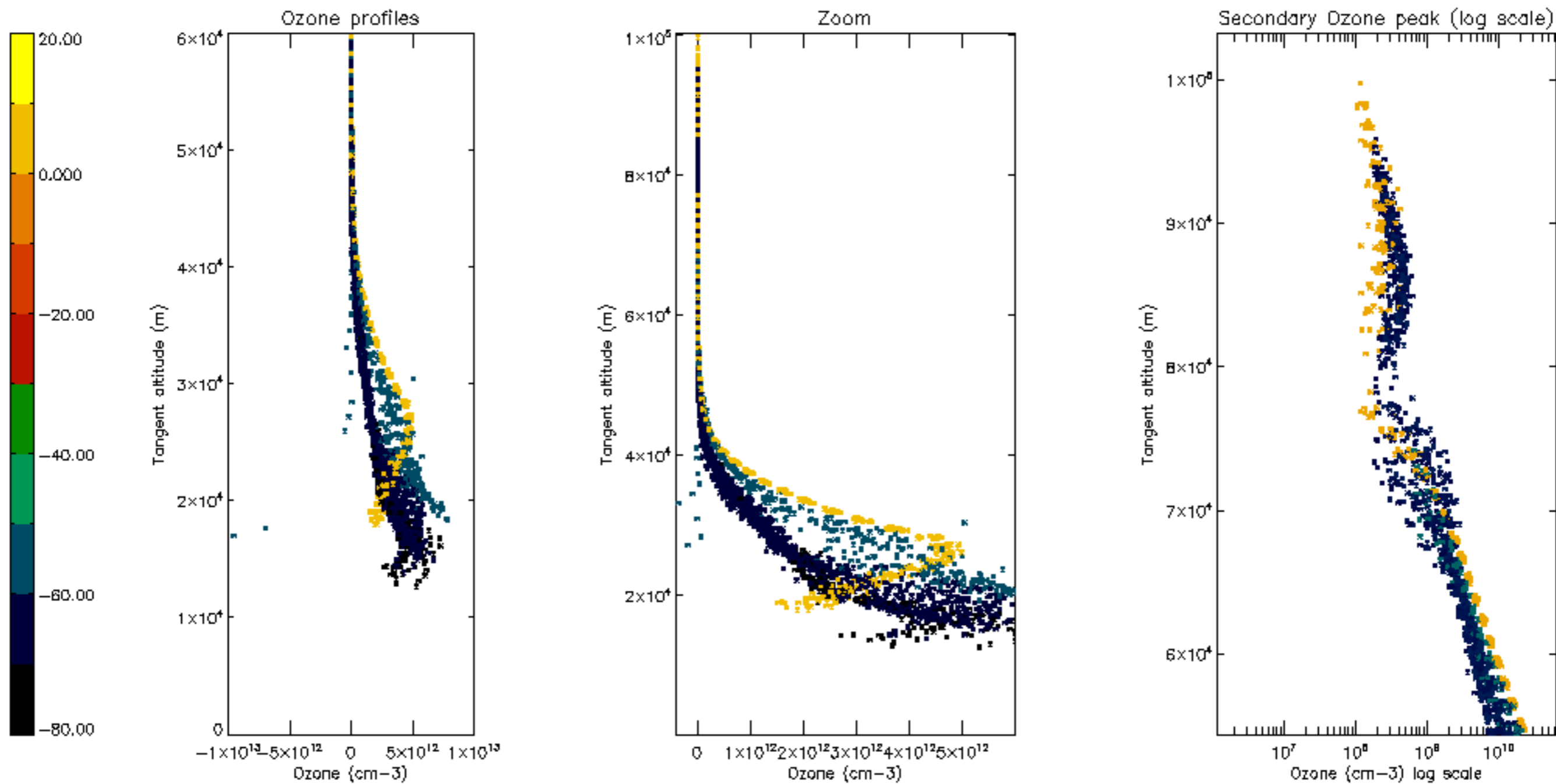


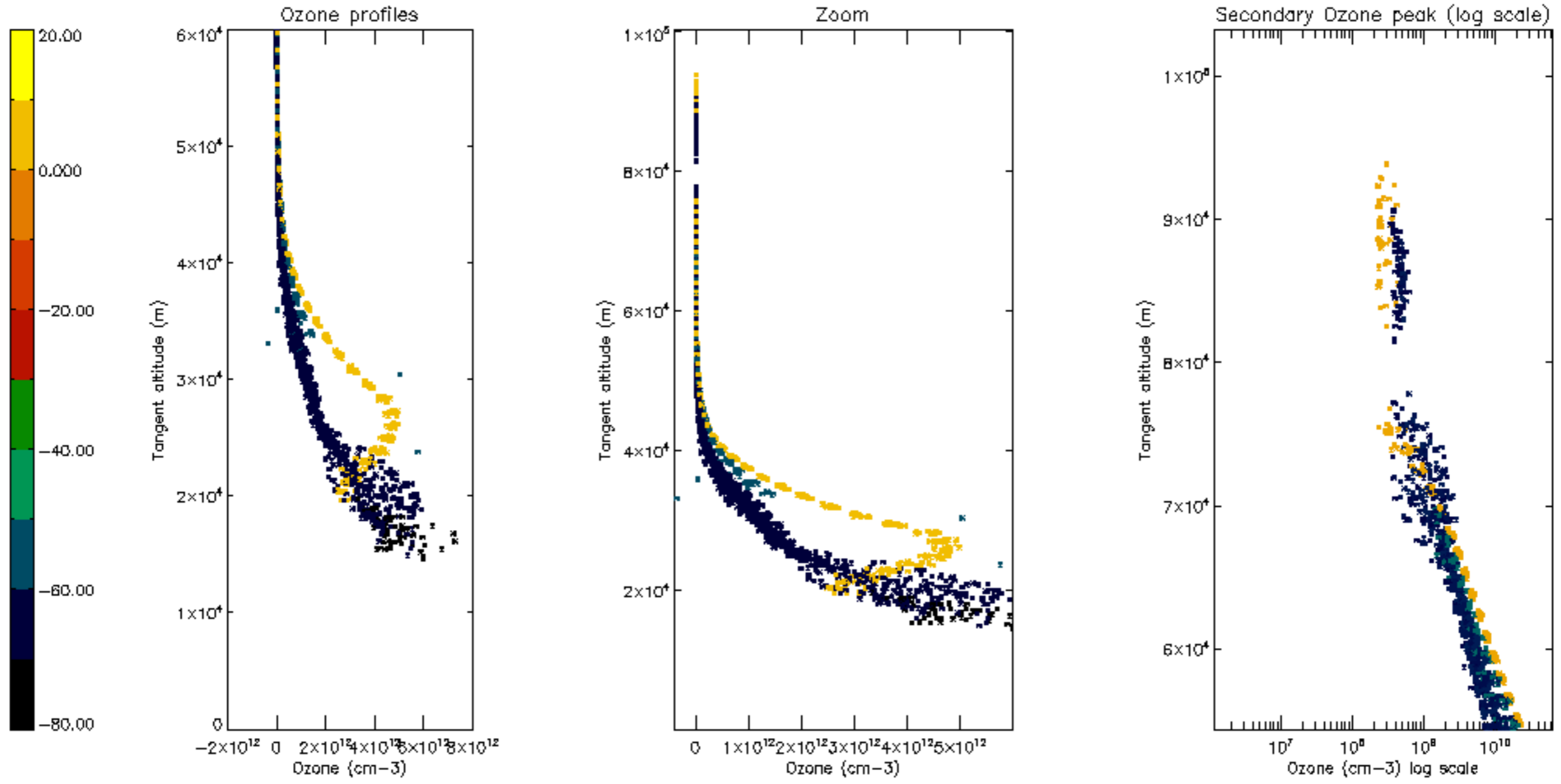
Percentage of saturation errors per profile

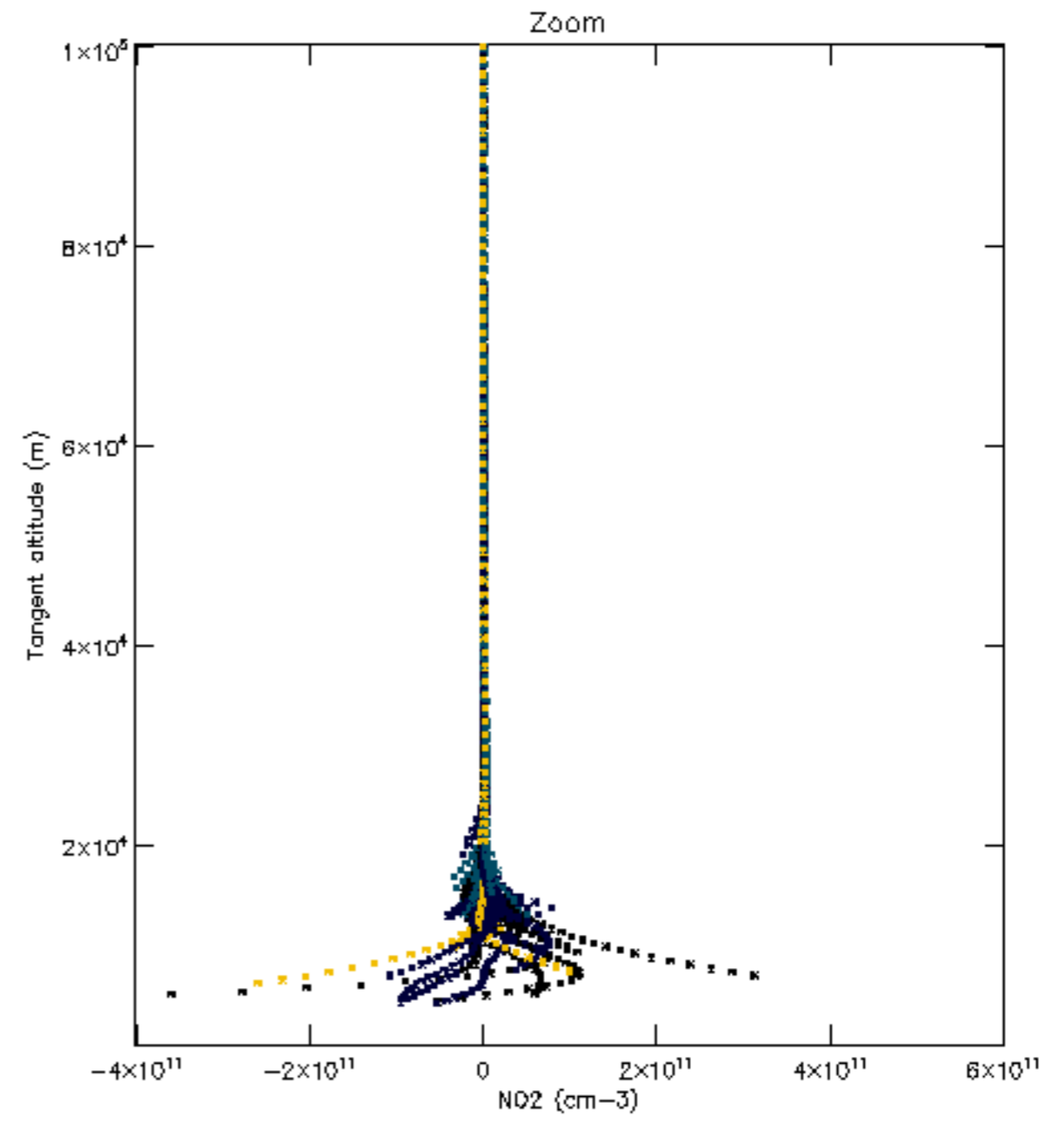
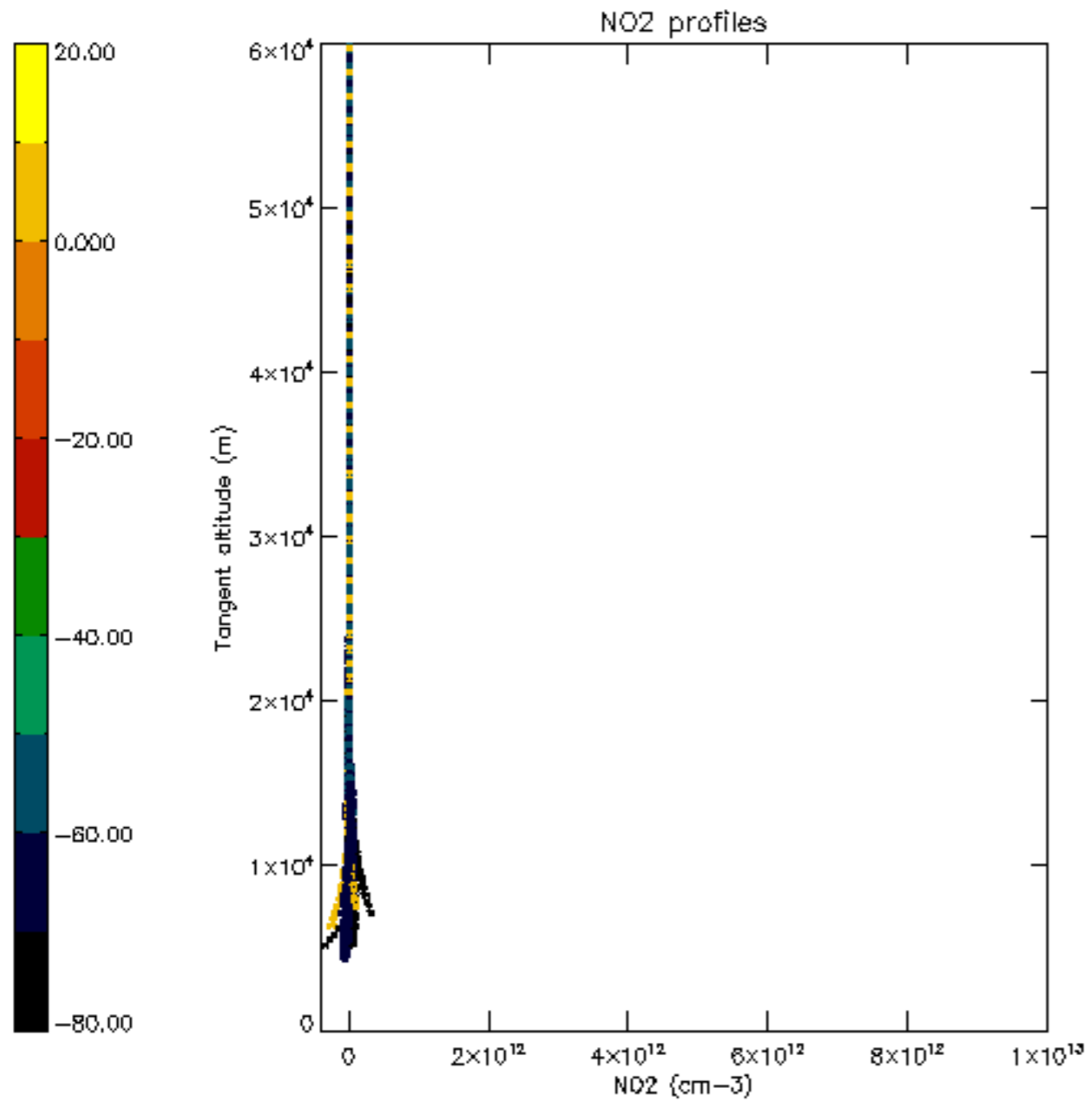


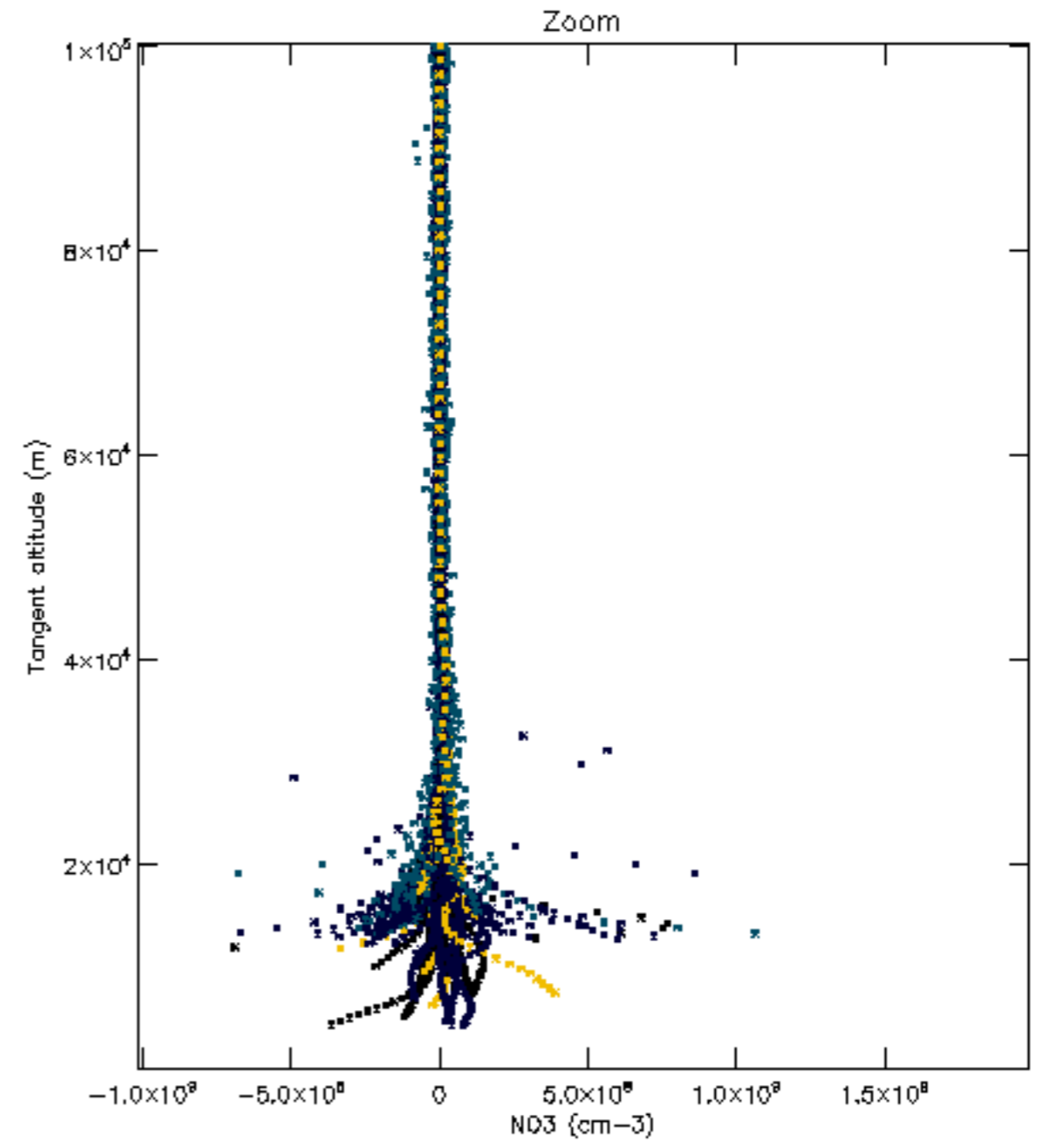
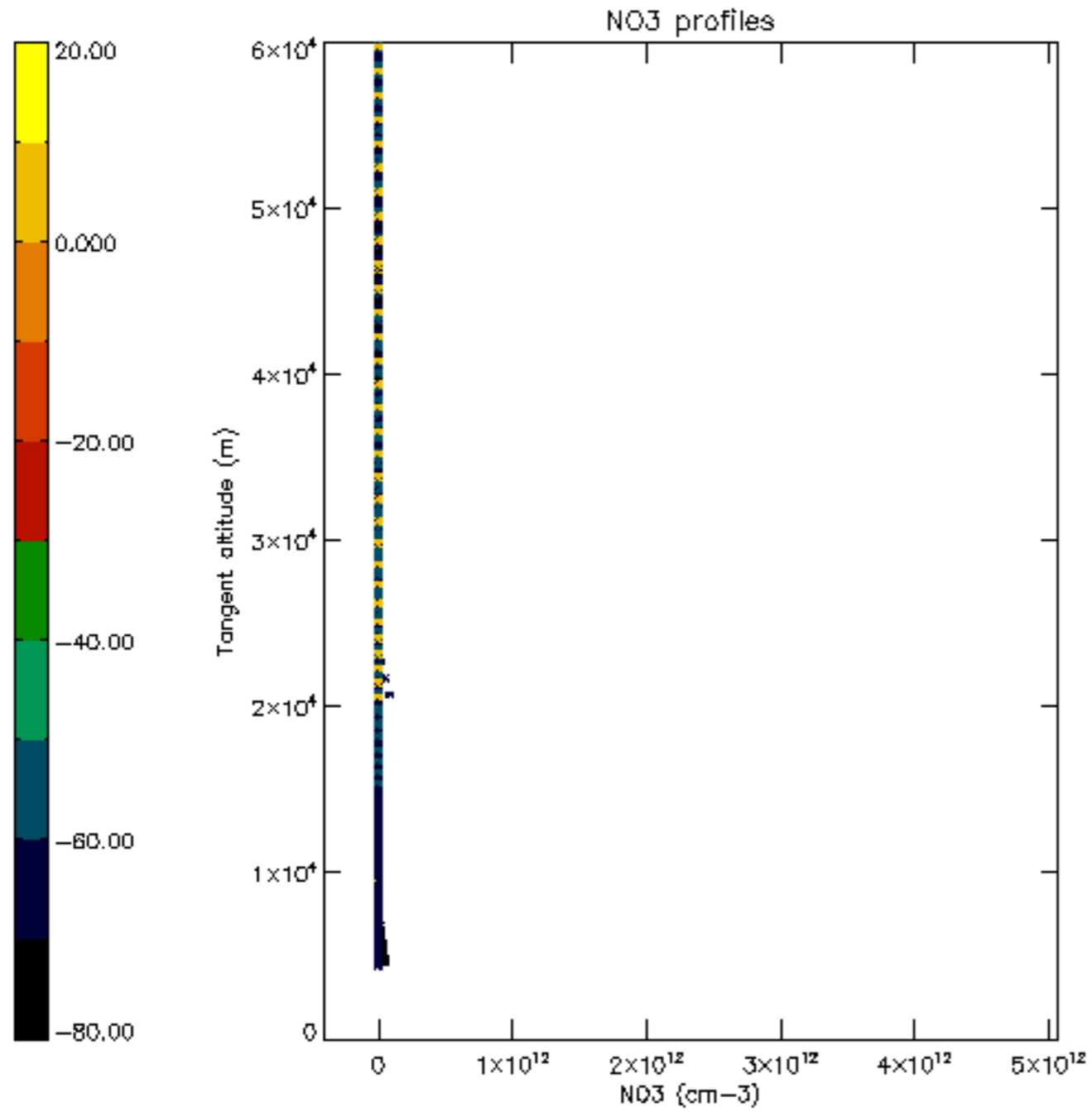


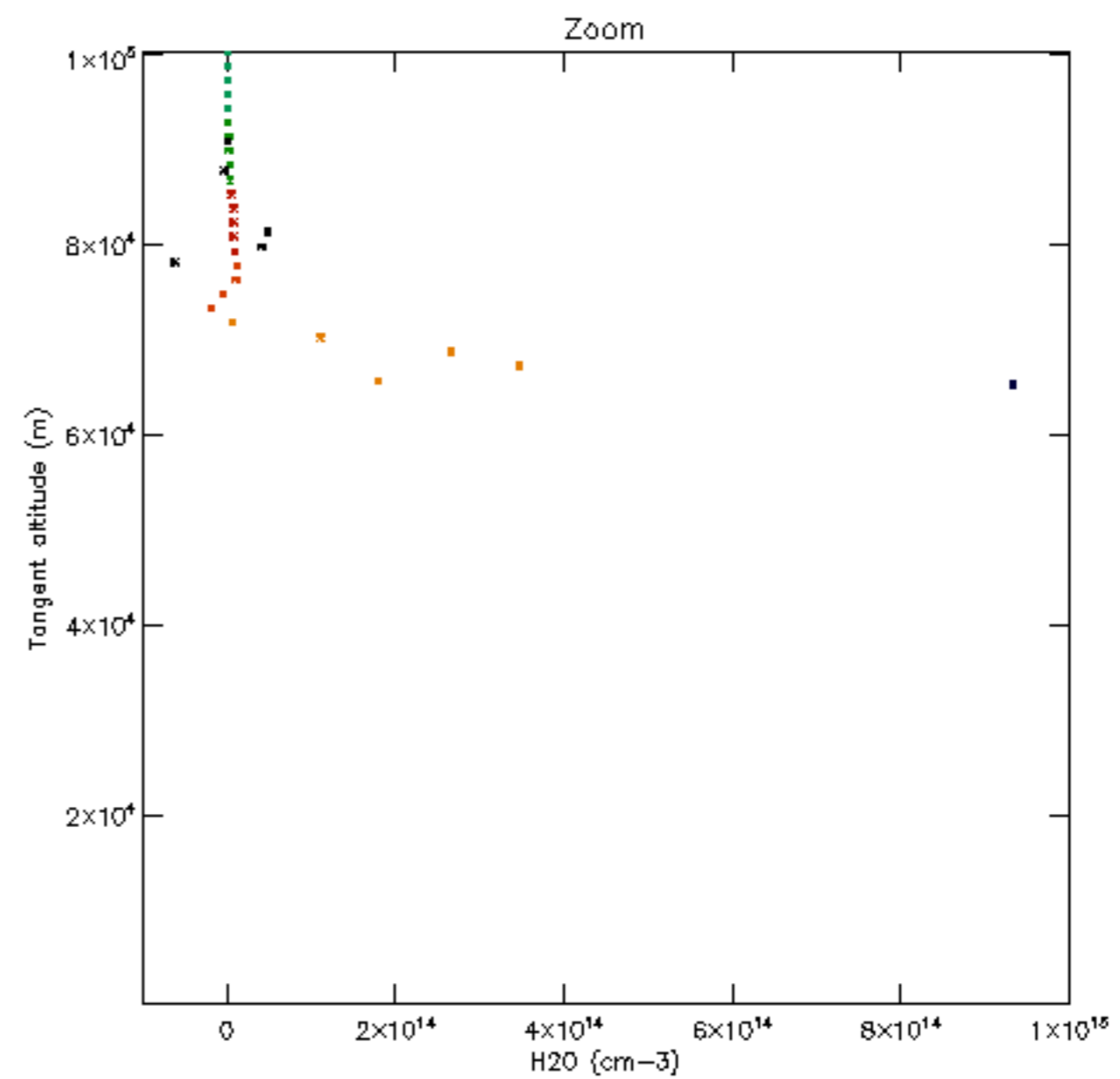
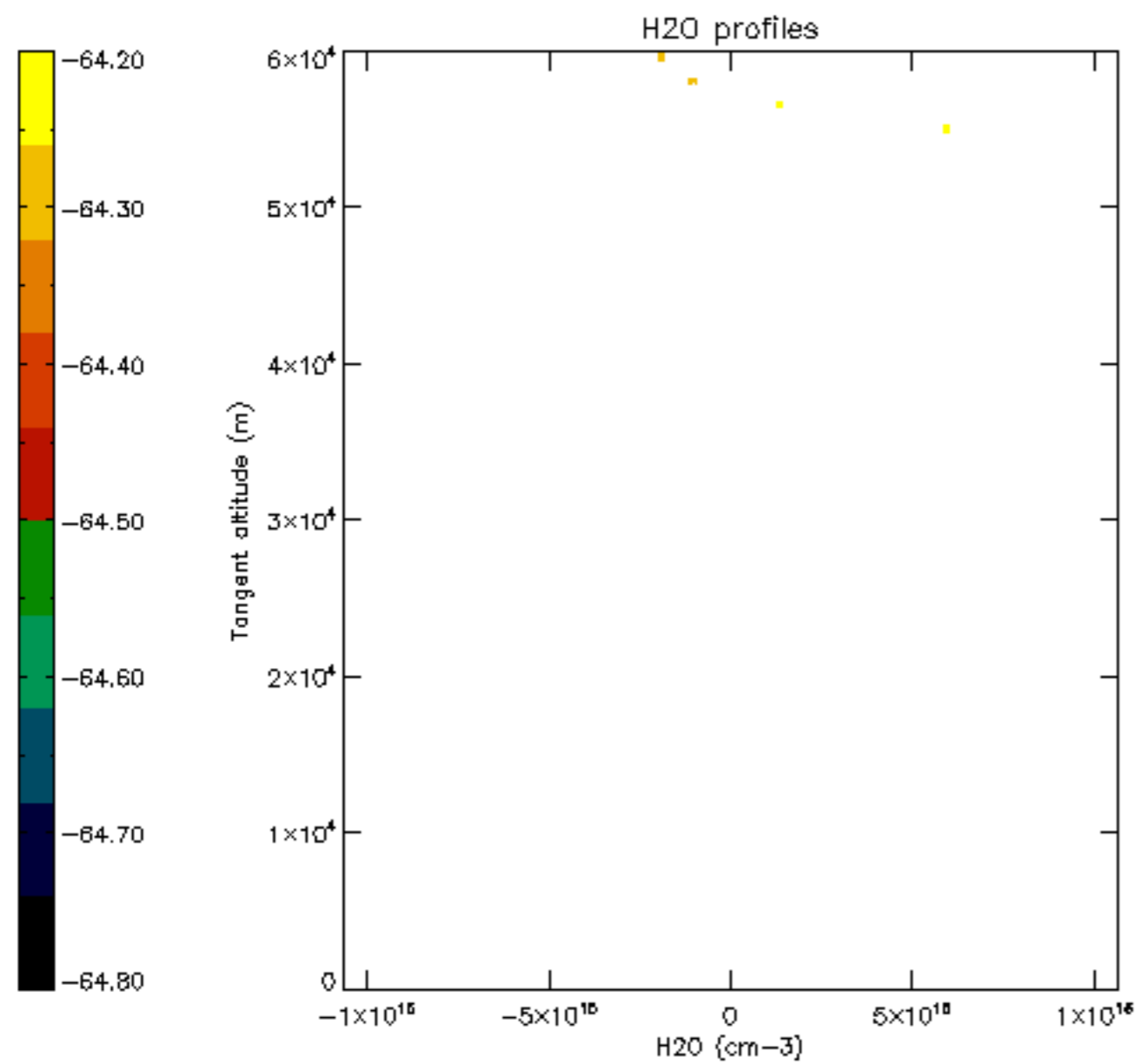


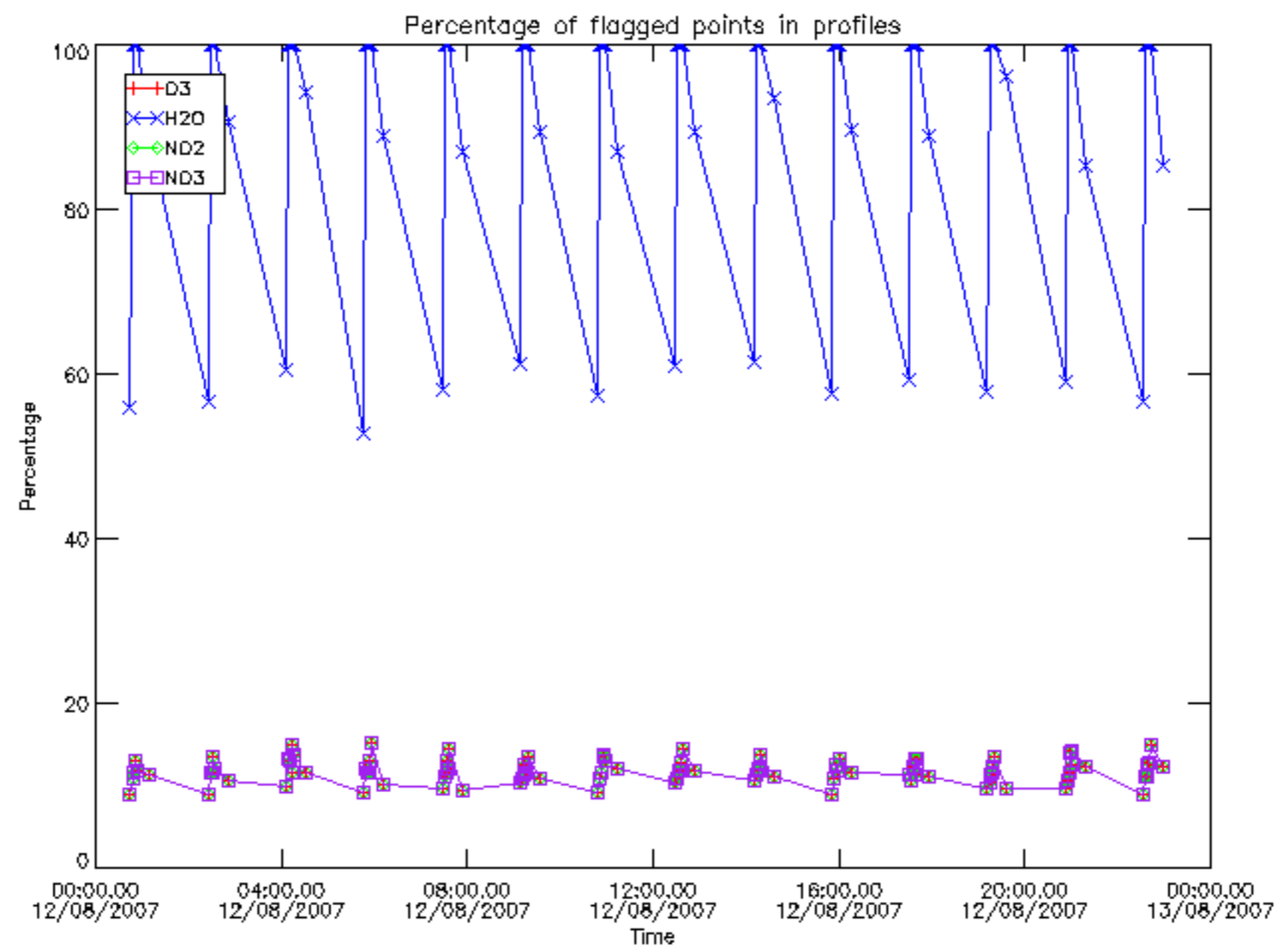




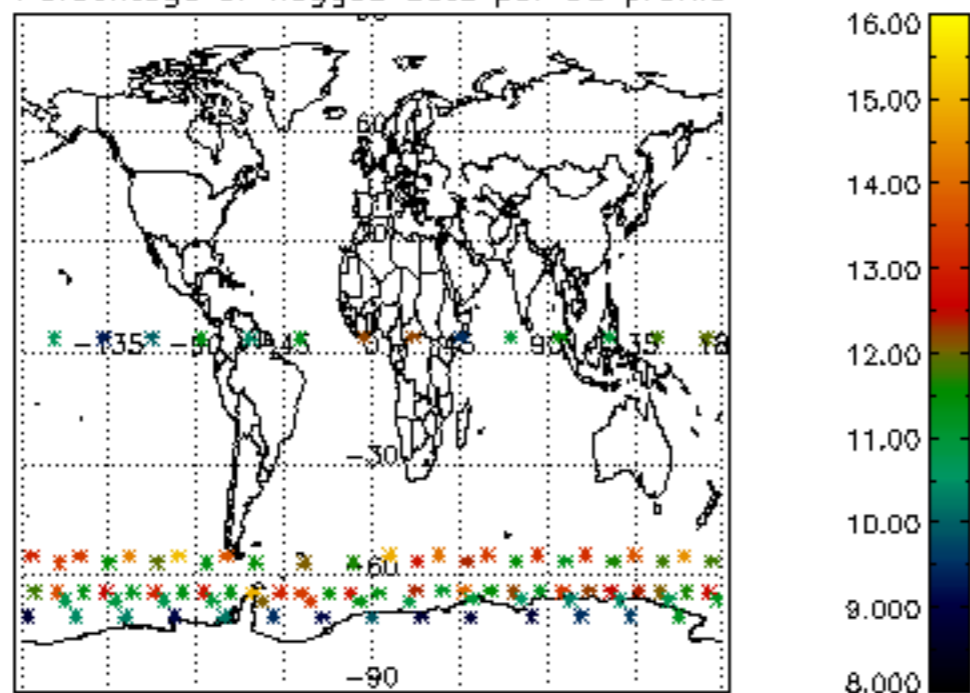




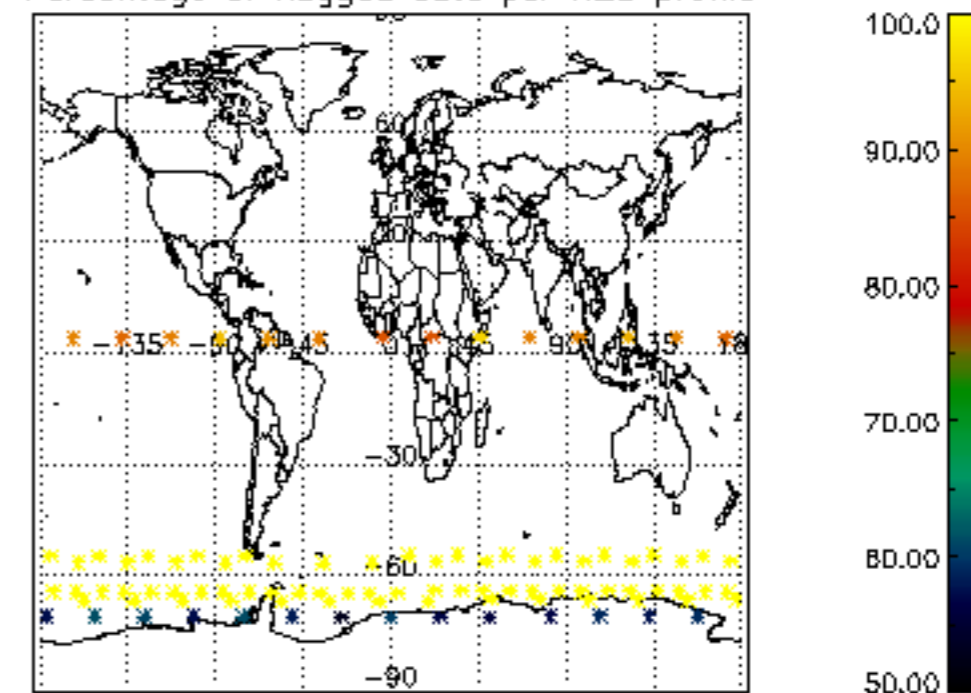




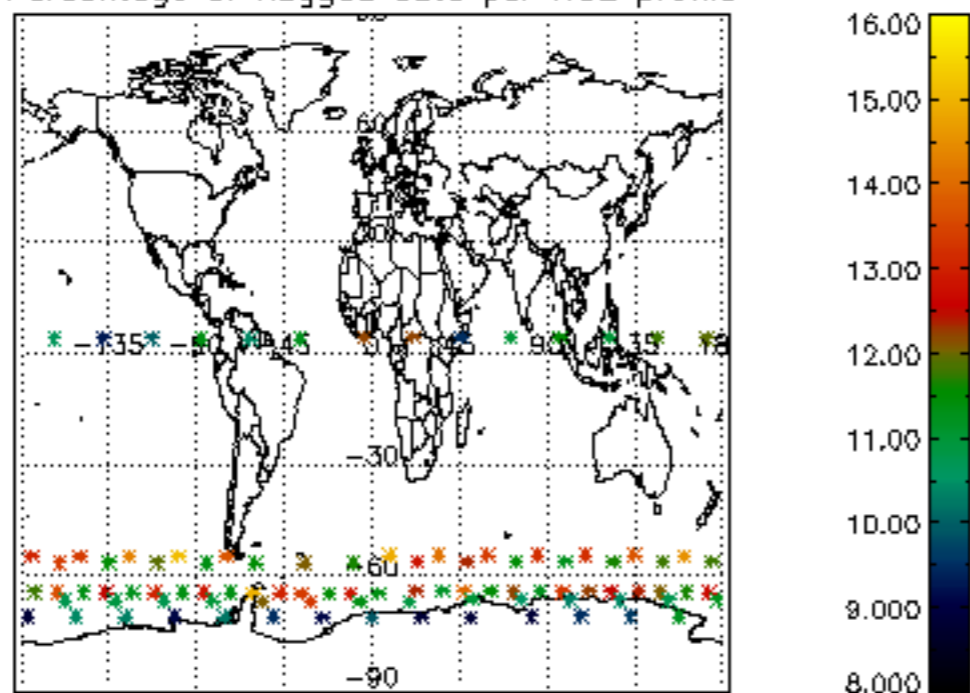
Percentage of flagged data per D3 profile



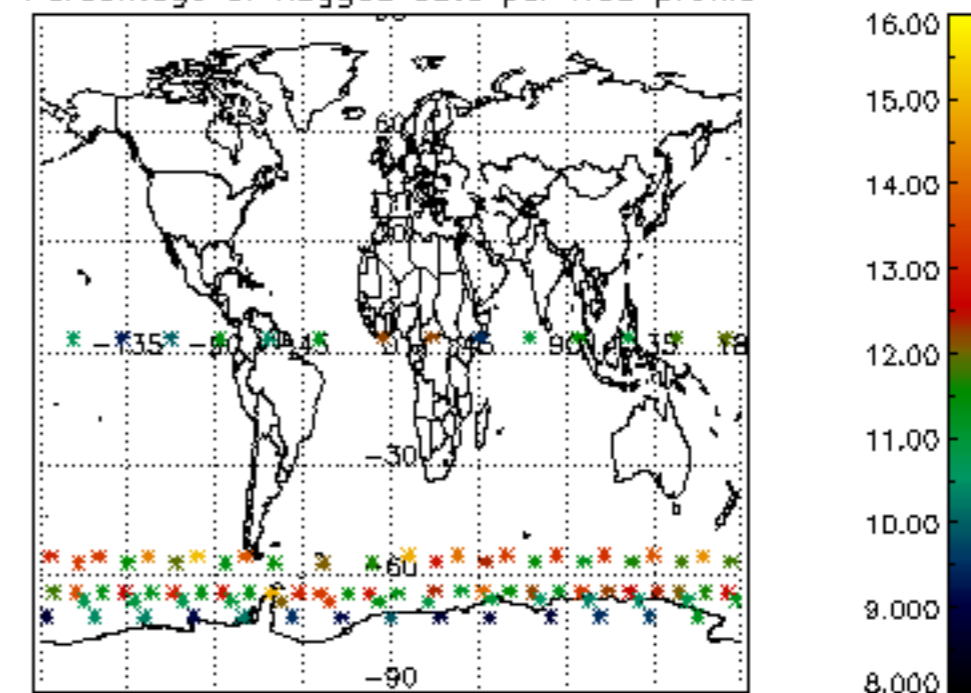
Percentage of flagged data per H2O profile

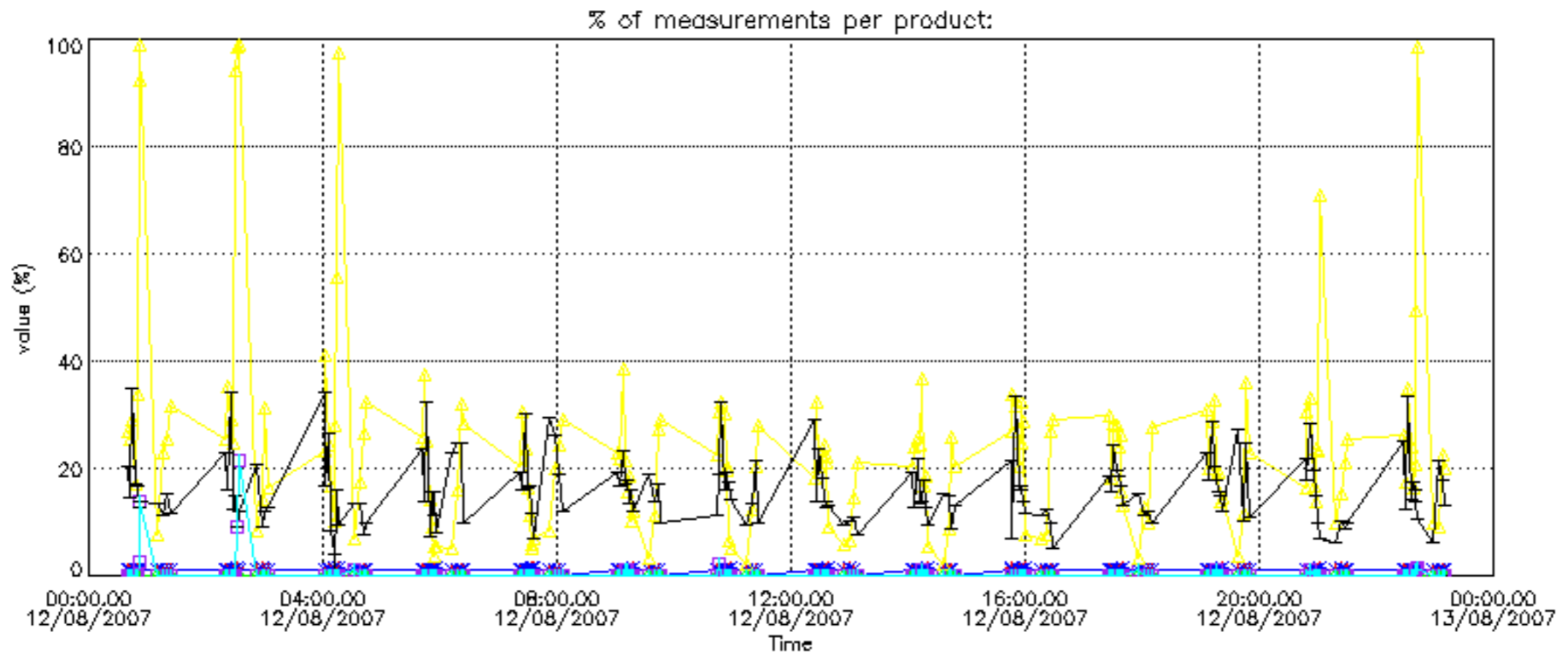


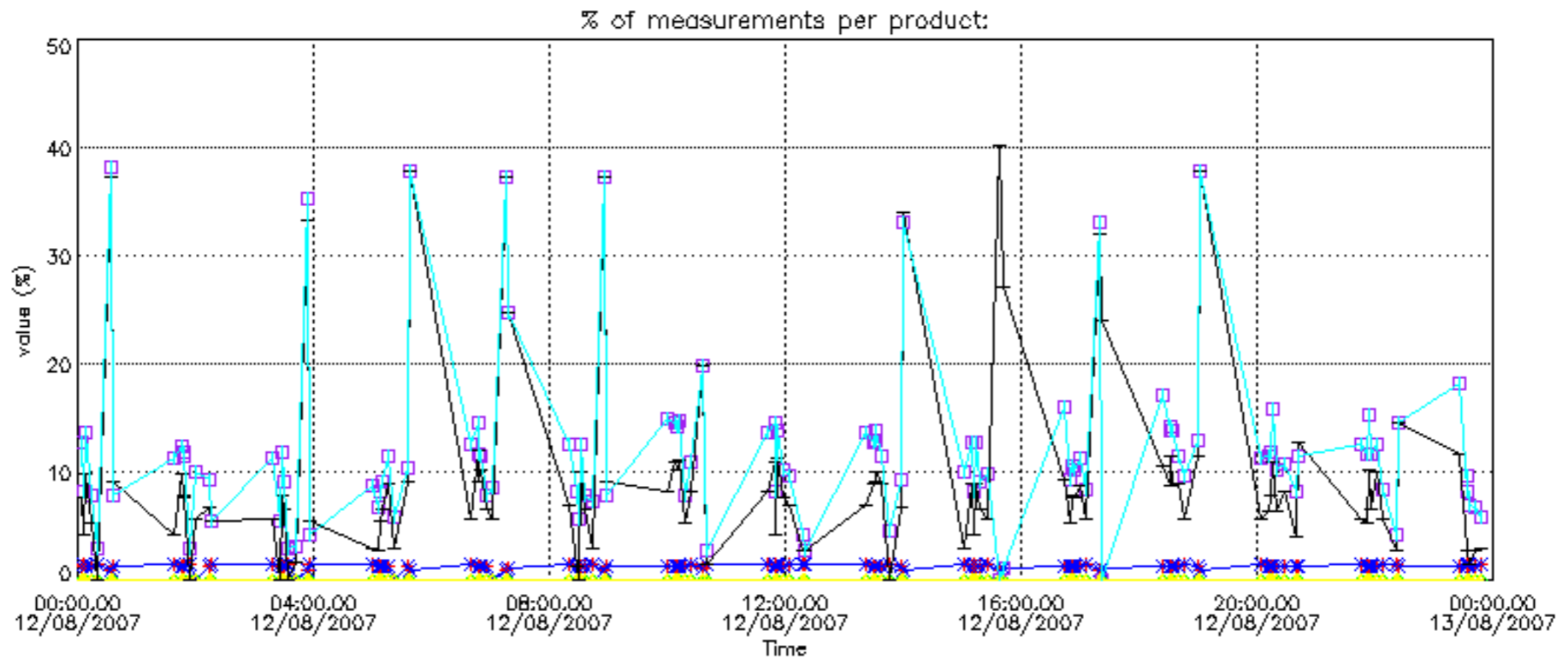
Percentage of flagged data per NO2 profile



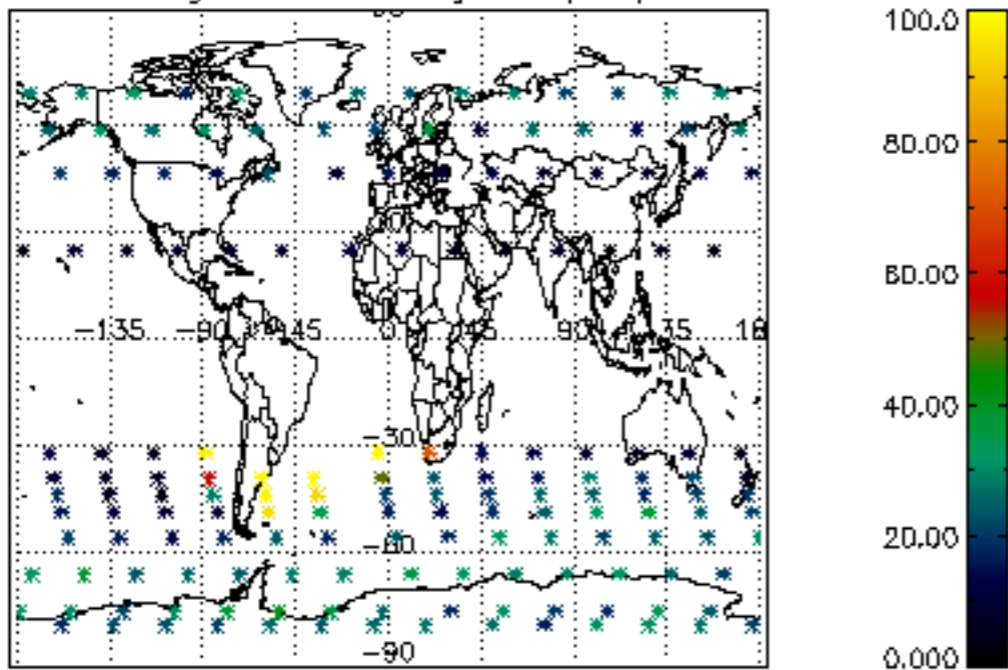
Percentage of flagged data per NO3 profile



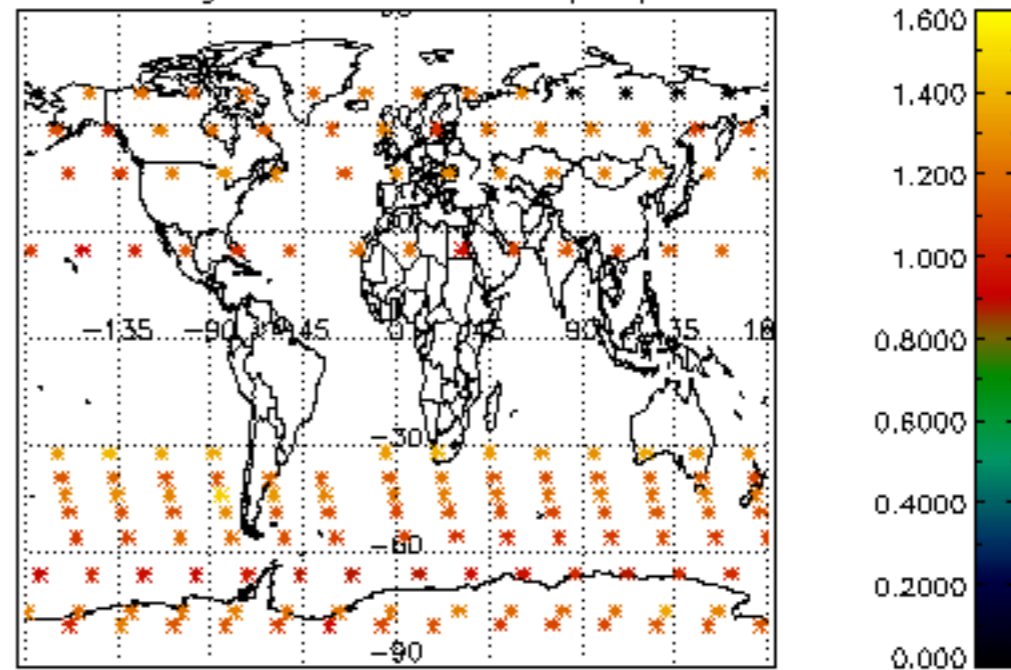




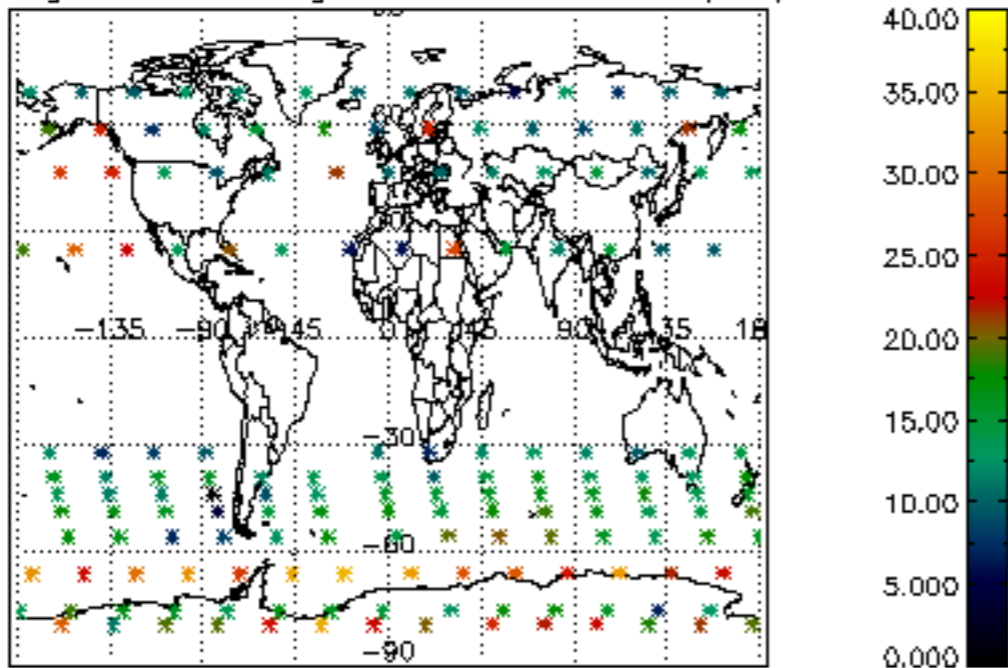
Percentage of cosmic ray hits per profile



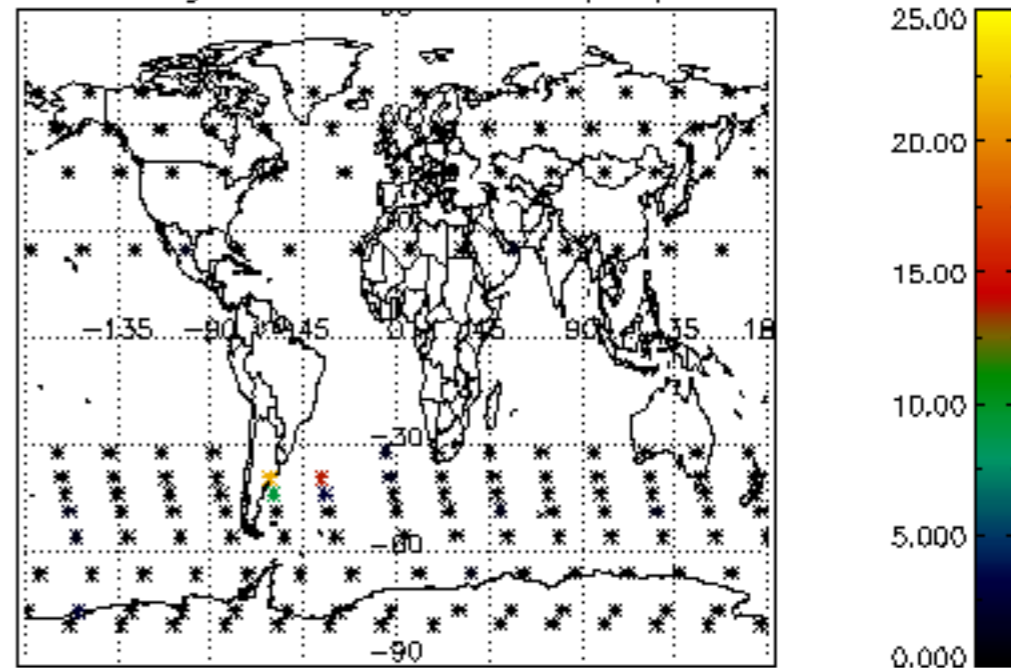
Percentage of datation errors per profile



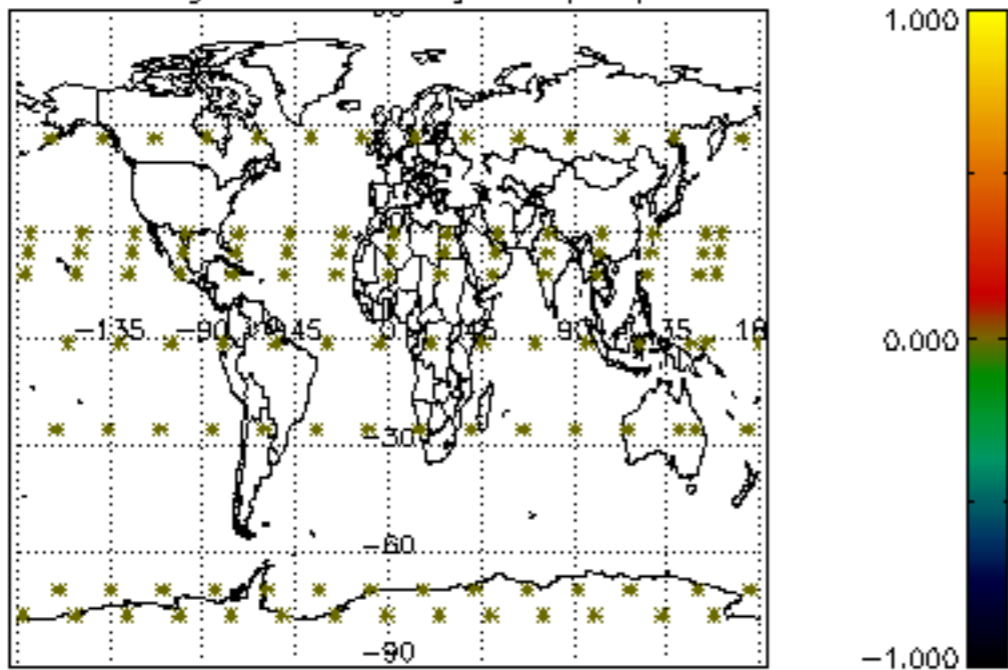
Percentage of star falling outside central band per profile



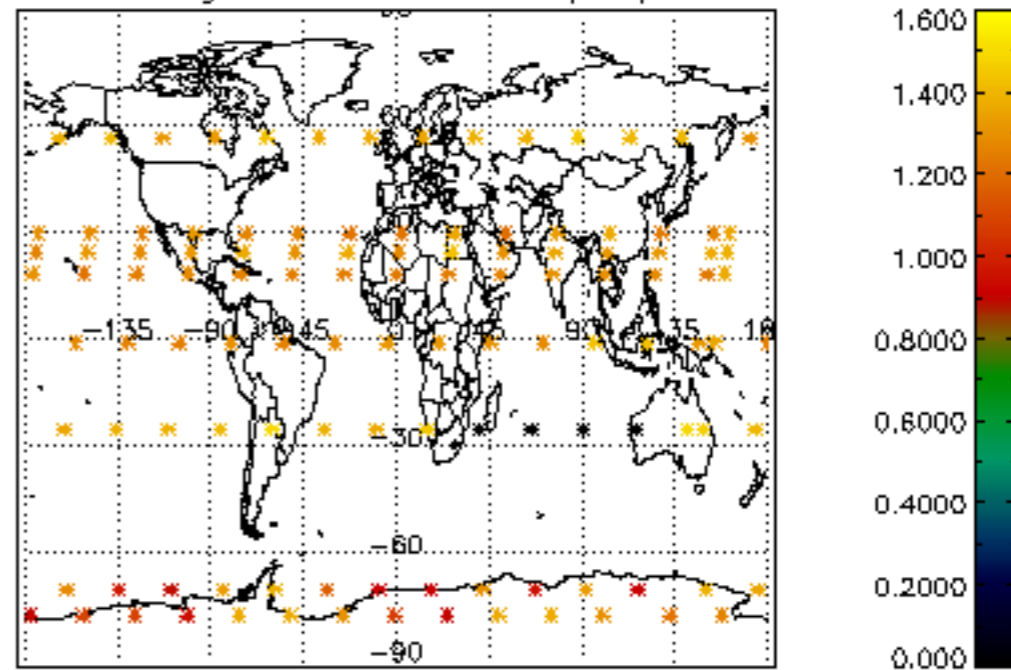
Percentage of saturation errors per profile



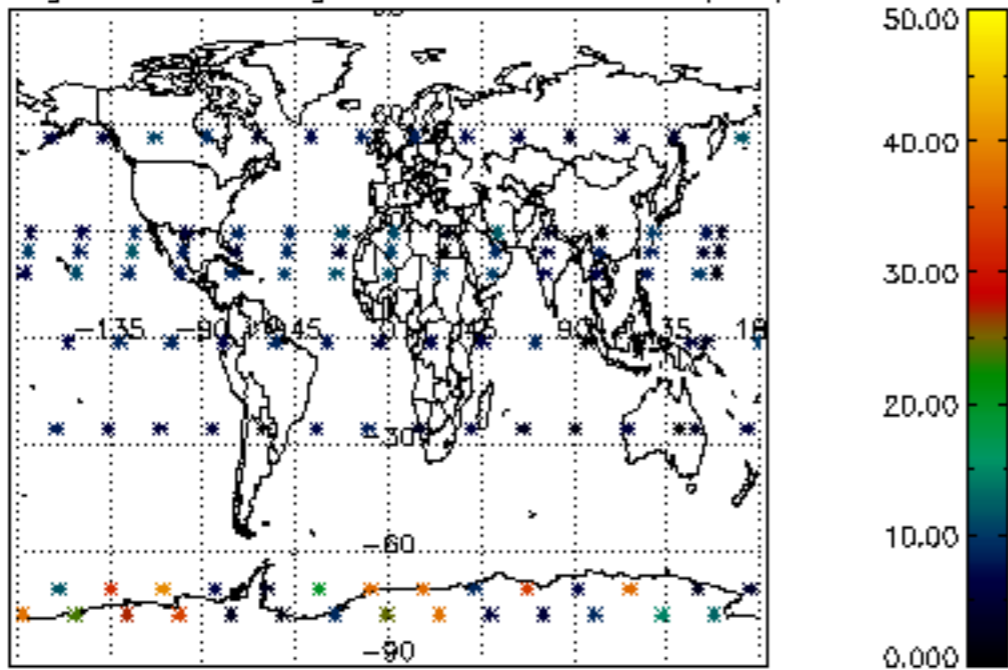
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

