

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	23APR2013 10:21:27
Data source version	GOMOS/6.01
Start time of products	06-11-2007 (06NOV2007 00:00:00)
Stop time of products	07-11-2007 (07NOV2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	189
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

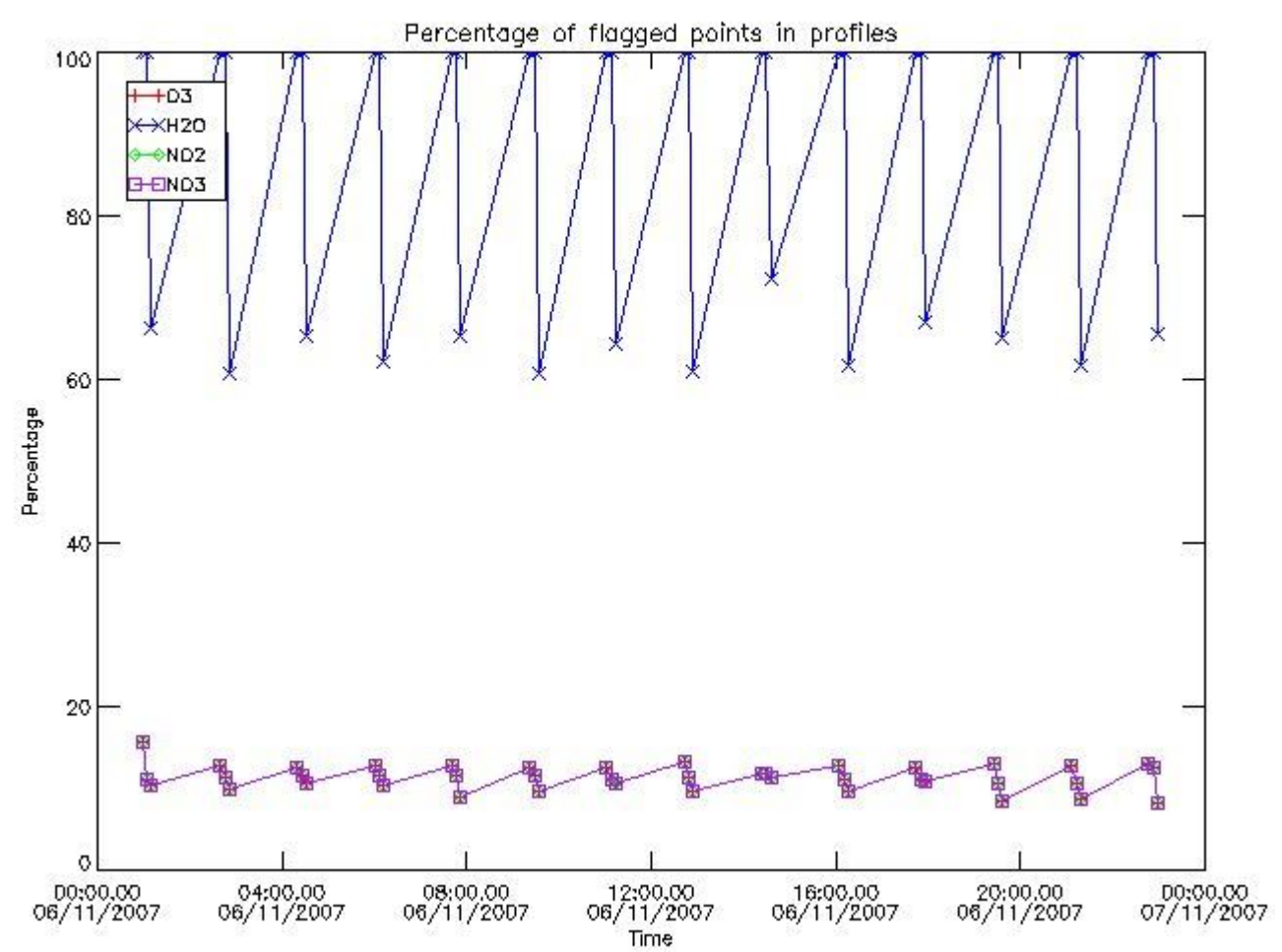
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20071106_000155_000000372063_00102_29715_9319.N1	06-NOV-2007 00:01:55	Bright	36.500	53	43Bet And	2.0480	3300.0	73	29715	No
2	GOM_NL__2PRFIN20071106_000406_000000382063_00102_29715_9320.N1	06-NOV-2007 00:04:06	Bright	38.000	73	57Gam1And	2.2600	13100.	76	29715	No
3	GOM_NL__2PRFIN20071106_000853_000000362063_00102_29715_9321.N1	06-NOV-2007 00:08:53	Bright	36.000	110	37Del Cas	2.6780	8900.0	72	29715	No
4	GOM_NL__2PRFIN20071106_001704_000000322063_00102_29715_9322.N1	06-NOV-2007 00:17:04	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	29715	No
5	GOM_NL__2PRFIN20071106_002506_000000412063_00102_29715_9323.N1	06-NOV-2007 00:25:06	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	29715	No
6	GOM_NL__2PRFIN20071106_002643_000000392063_00102_29715_9324.N1	06-NOV-2007 00:26:43	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	29715	No
7	GOM_NL__2PRFIN20071106_003030_000000392063_00102_29715_9325.N1	06-NOV-2007 00:30:30	Bright	39.000	174	52Psi UMa	3.0040	4400.0	78	29715	No
8	GOM_NL__2PRFIN20071106_003811_000000412063_00102_29715_9326.N1	06-NOV-2007 00:38:11	Bright	40.500	96	68Del Leo	2.5600	9300.0	81	29715	No
9	GOM_NL__2PRFIN20071106_005814_000000392063_00102_29715_9327.N1	06-NOV-2007 00:58:14	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	29715	No
10	GOM_NL__2PRFIN20071106_010455_000000462063_00103_29716_9320.N1	06-NOV-2007 01:04:55	Dark	45.500	34	Gam2Vel	1.7930	23000.	91	29716	No
11	GOM_NL__2PRFIN20071106_011010_000000502063_00103_29716_9321.N1	06-NOV-2007 01:10:10	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	29716	No
12	GOM_NL__2PRFIN20071106_011958_000000372063_00103_29716_9322.N1	06-NOV-2007 01:19:58	Straylight	37.000	157	The1Eri	2.9060	9300.0	74	29716	No
13	GOM_NL__2PRFIN20071106_013822_000000392063_00103_29716_9323.N1	06-NOV-2007 01:38:22	Bright	38.500	105	6Bet Ari	2.6450	8900.0	77	29716	No
14	GOM_NL__2PRFIN20071106_014231_000000372063_00103_29716_9324.N1	06-NOV-2007 01:42:31	Bright	36.500	53	43Bet And	2.0480	3300.0	73	29716	No
15	GOM_NL__2PRFIN20071106_014442_000000382063_00103_29716_9325.N1	06-NOV-2007 01:44:42	Bright	37.500	73	57Gam1And	2.2600	13100.	75	29716	No
16	GOM_NL__2PRFIN20071106_014929_000000342063_00103_29716_9326.N1	06-NOV-2007 01:49:29	Bright	34.000	110	37Del Cas	2.6780	8900.0	68	29716	No
17	GOM_NL__2PRFIN20071106_015740_000000342063_00103_29716_9327.N1	06-NOV-2007 01:57:40	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	29716	No
18	GOM_NL__2PRFIN20071106_020542_000000392063_00103_29716_9328.N1	06-NOV-2007 02:05:42	Bright	39.000	36	50Alp UMa	1.8000	6300.0	78	29716	No
19	GOM_NL__2PRFIN20071106_020719_000000572063_00103_29716_9329.N1	06-NOV-2007 02:07:19	Bright	57.000	82	48Bet UMa	2.3650	10600.	114	29716	No
20	GOM_NL__2PRFIN20071106_021106_000000402063_00103_29716_9330.N1	06-NOV-2007 02:11:06	Bright	39.500	174	52Psi UMa	3.0040	4400.0	79	29716	No
21	GOM_NL__2PRFIN20071106_021847_000000402063_00103_29716_9331.N1	06-NOV-2007 02:18:47	Bright	40.000	96	68Del Leo	2.5600	9300.0	80	29716	No
22	GOM_NL__2PRFIN20071106_023850_000000402063_00103_29716_9332.N1	06-NOV-2007 02:38:50	Dark	40.000	113	Mu Vel	2.6920	5000.0	80	29716	No
23	GOM_NL__2PRFIN20071106_024532_000000452063_00104_29717_9327.N1	06-NOV-2007 02:45:32	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	29717	No
24	GOM_NL__2PRFIN20071106_025047_000000522063_00104_29717_9328.N1	06-NOV-2007 02:50:47	Dark	51.500	2	Alp Car	-0.73600	7000.0	103	29717	No
25	GOM_NL__2PRFIN20071106_030035_000000392063_00104_29717_9329.N1	06-NOV-2007 03:00:35	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	29717	No
26	GOM_NL__2PRFIN20071106_031858_000000382063_00104_29717_9330.N1	06-NOV-2007 03:18:58	Bright	38.000	105	6Bet Ari	2.6450	8900.0	76	29717	No
27	GOM_NL__2PRFIN20071106_032307_000000392063_00104_29717_9331.N1	06-NOV-2007 03:23:07	Bright	39.000	53	43Bet And	2.0480	3300.0	78	29717	No
28	GOM_NL__2PRFIN20071106_032517_000000382063_00104_29717_9332.N1	06-NOV-2007 03:25:17	Bright	38.000	73	57Gam1And	2.2600	13100.	76	29717	No
29	GOM_NL__2PRFIN20071106_033005_000000352063_00104_29717_9333.N1	06-NOV-2007 03:30:05	Bright	34.500	110	37Del Cas	2.6780	8900.0	69	29717	No
30	GOM_NL__2PRFIN20071106_033816_000000342063_00104_29717_9334.N1	06-NOV-2007 03:38:16	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	29717	No
31	GOM_NL__2PRFIN20071106_034617_000000412063_00104_29717_9335.N1	06-NOV-2007 03:46:17	Bright	41.000	36	50Alp UMa	1.8000	6300.0	82	29717	No
32	GOM_NL__2PRFIN20071106_034755_000000402063_00104_29717_9336.N1	06-NOV-2007 03:47:55	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	29717	No
33	GOM_NL__2PRFIN20071106_035142_000000402063_00104_29717_9337.N1	06-NOV-2007 03:51:42	Bright	39.500	174	52Psi UMa	3.0040	4400.0	79	29717	No
34	GOM_NL__2PRFIN20071106_035924_000000392063_00104_29717_9338.N1	06-NOV-2007 03:59:24	Bright	38.500	96	68Del Leo	2.5600	9300.0	77	29717	No
35	GOM_NL__2PRFIN20071106_041926_000000412063_00104_29717_9339.N1	06-NOV-2007 04:19:26	Dark	40.500	113	Mu Vel	2.6920	5000.0	81	29717	No
36	GOM_NL__2PRFIN20071106_042609_000000442063_00105_29718_9331.N1	06-NOV-2007 04:26:09	Dark	44.000	34	Gam2Vel	1.7930	23000.	88	29718	No
37	GOM_NL__2PRFIN20071106_043124_000000482063_00105_29718_9332.N1	06-NOV-2007 04:31:24	Dark	48.000	2	Alp Car	-0.73600	7000.0	96	29718	No
38	GOM_NL__2PRFIN20071106_044111_000000402063_00105_29718_9333.N1	06-NOV-2007 04:41:11	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	29718	No
39	GOM_NL__2PRFIN20071106_045934_000000382063_00105_29718_9334.N1	06-NOV-2007 04:59:34	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	29718	No
40	GOM_NL__2PRFIN20071106_050343_000000382063_00105_29718_9335.N1	06-NOV-2007 05:03:43	Bright	37.500	53	43Bet And	2.0480	3300.0	75	29718	No
41	GOM_NL__2PRFIN20071106_050553_000000392063_00105_29718_9336.N1	06-NOV-2007 05:05:53	Bright	39.000	73	57Gam1And	2.2600	13100.	78	29718	No
42	GOM_NL__2PRFIN20071106_051041_000000372063_00105_29718_9337.N1	06-NOV-2007 05:10:41	Bright	36.500	110	37Del Cas	2.6780	8900.0	73	29718	No

161	GOM_NL__2PRFIN20071106_203215_000000372063_00114_29727_9514.N1	06-NOV-2007 20:32:15	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	29727	No
162	GOM_NL__2PRFIN20071106_203353_000000392063_00114_29727_9515.N1	06-NOV-2007 20:33:53	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	29727	No
163	GOM_NL__2PRFIN20071106_203741_000000412063_00114_29727_9516.N1	06-NOV-2007 20:37:41	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	29727	No
164	GOM_NL__2PRFIN20071106_204526_000000602063_00114_29727_9517.N1	06-NOV-2007 20:45:26	Bright	59.500	96	68Del Leo	2.5600	9300.0	119	29727	No
165	GOM_NL__2PRFIN20071106_210530_000000442063_00114_29727_9518.N1	06-NOV-2007 21:05:30	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	29727	No
166	GOM_NL__2PRFIN20071106_211218_000000492063_00115_29728_9529.N1	06-NOV-2007 21:12:18	Dark	48.500	34	Gam2Vel	1.7930	23000.	97	29728	No
167	GOM_NL__2PRFIN20071106_211731_000000582063_00115_29728_9530.N1	06-NOV-2007 21:17:31	Dark	58.000	2	Alp Car	-0.73600	7000.0	116	29728	No
168	GOM_NL__2PRFIN20071106_212713_000000412063_00115_29728_9531.N1	06-NOV-2007 21:27:13	Straylight	41.000	157	The1Eri	2.9060	9300.0	82	29728	No
169	GOM_NL__2PRFIN20071106_214532_000000372063_00115_29728_9532.N1	06-NOV-2007 21:45:32	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	29728	No
170	GOM_NL__2PRFIN20071106_214943_000000372063_00115_29728_9533.N1	06-NOV-2007 21:49:43	Bright	37.000	53	43Bet And	2.0480	3300.0	74	29728	No
171	GOM_NL__2PRFIN20071106_215151_000000392063_00115_29728_9534.N1	06-NOV-2007 21:51:51	Bright	38.500	73	57Gam1And	2.2600	13100.	77	29728	No
172	GOM_NL__2PRFIN20071106_215607_000000402063_00115_29728_9535.N1	06-NOV-2007 21:56:07	Bright	40.000	160	23Gam Per	2.9300	4700.0	80	29728	No
173	GOM_NL__2PRFIN20071106_220451_000000362063_00115_29728_9536.N1	06-NOV-2007 22:04:51	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	29728	No
174	GOM_NL__2PRFIN20071106_221251_000000402063_00115_29728_9537.N1	06-NOV-2007 22:12:51	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	29728	No
175	GOM_NL__2PRFIN20071106_221429_000000402063_00115_29728_9538.N1	06-NOV-2007 22:14:29	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	29728	No
176	GOM_NL__2PRFIN20071106_221817_000000412063_00115_29728_9539.N1	06-NOV-2007 22:18:17	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	29728	No
177	GOM_NL__2PRFIN20071106_222602_000000542063_00115_29728_9540.N1	06-NOV-2007 22:26:02	Bright	53.500	96	68Del Leo	2.5600	9300.0	107	29728	No
178	GOM_NL__2PRFIN20071106_224607_000000392063_00115_29728_9541.N1	06-NOV-2007 22:46:07	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	29728	No
179	GOM_NL__2PRFIN20071106_225255_000000452063_00116_29729_9537.N1	06-NOV-2007 22:52:55	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	29729	No
180	GOM_NL__2PRFIN20071106_225807_000000622063_00116_29729_9538.N1	06-NOV-2007 22:58:07	Dark	61.500	2	Alp Car	-0.73600	7000.0	123	29729	No
181	GOM_NL__2PRFIN20071106_230749_000000402063_00116_29729_9539.N1	06-NOV-2007 23:07:49	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	29729	No
182	GOM_NL__2PRFIN20071106_232608_000000382063_00116_29729_9540.N1	06-NOV-2007 23:26:08	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	29729	No
183	GOM_NL__2PRFIN20071106_233018_000000372063_00116_29729_9541.N1	06-NOV-2007 23:30:18	Bright	37.000	53	43Bet And	2.0480	3300.0	74	29729	No
184	GOM_NL__2PRFIN20071106_233226_000000382063_00116_29729_9542.N1	06-NOV-2007 23:32:26	Bright	38.000	73	57Gam1And	2.2600	13100.	76	29729	No
185	GOM_NL__2PRFIN20071106_233642_000000372063_00116_29729_9543.N1	06-NOV-2007 23:36:42	Bright	37.000	160	23Gam Per	2.9300	4700.0	74	29729	No
186	GOM_NL__2PRFIN20071106_234527_000000372063_00116_29729_9544.N1	06-NOV-2007 23:45:27	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	29729	No
187	GOM_NL__2PRFIN20071106_235327_000000402063_00116_29729_9545.N1	06-NOV-2007 23:53:27	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	29729	No
188	GOM_NL__2PRFIN20071106_235504_000000392063_00116_29729_9546.N1	06-NOV-2007 23:55:04	Bright	39.000	82	48Bet UMa	2.3650	10600.	78	29729	No
189	GOM_NL__2PRFIN20071106_235853_000000392063_00116_29729_9547.N1	06-NOV-2007 23:58:53	Bright	39.000	174	52Psi UMa	3.0040	4400.0	78	29729	No

3. Quality information per product

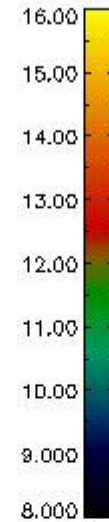
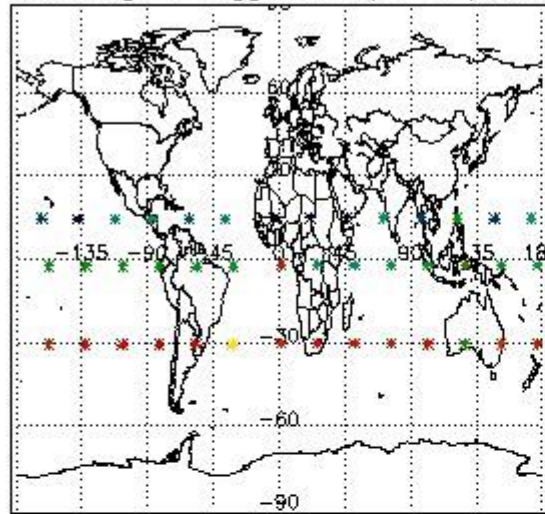
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

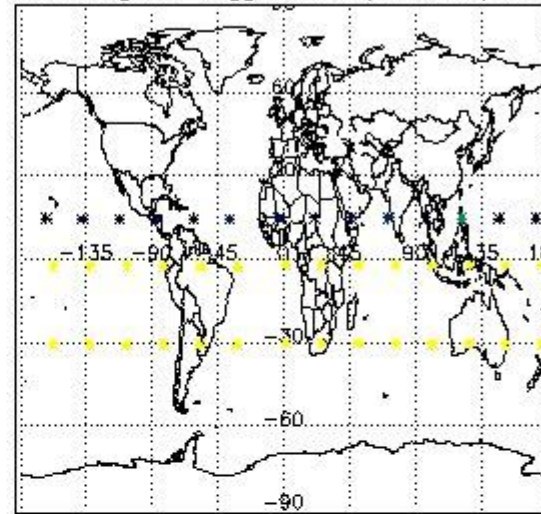


3.2 Plot quality information per product (world map)

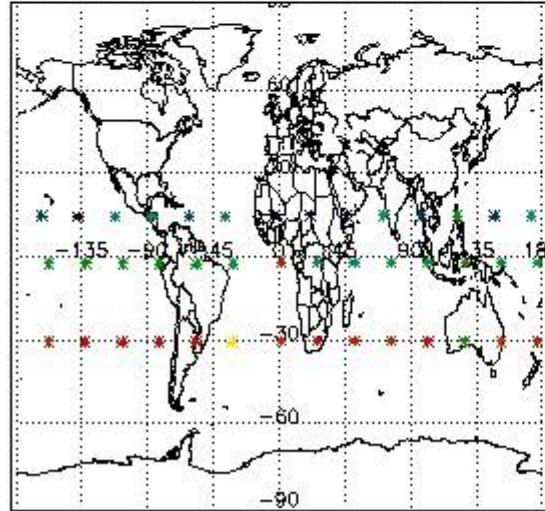
Percentage of flagged data per O3 profile



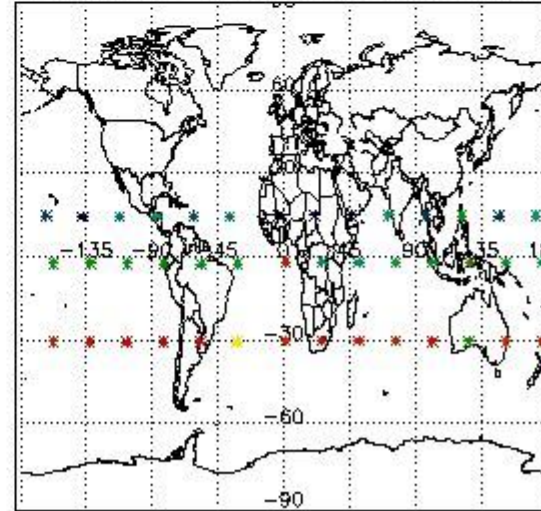
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

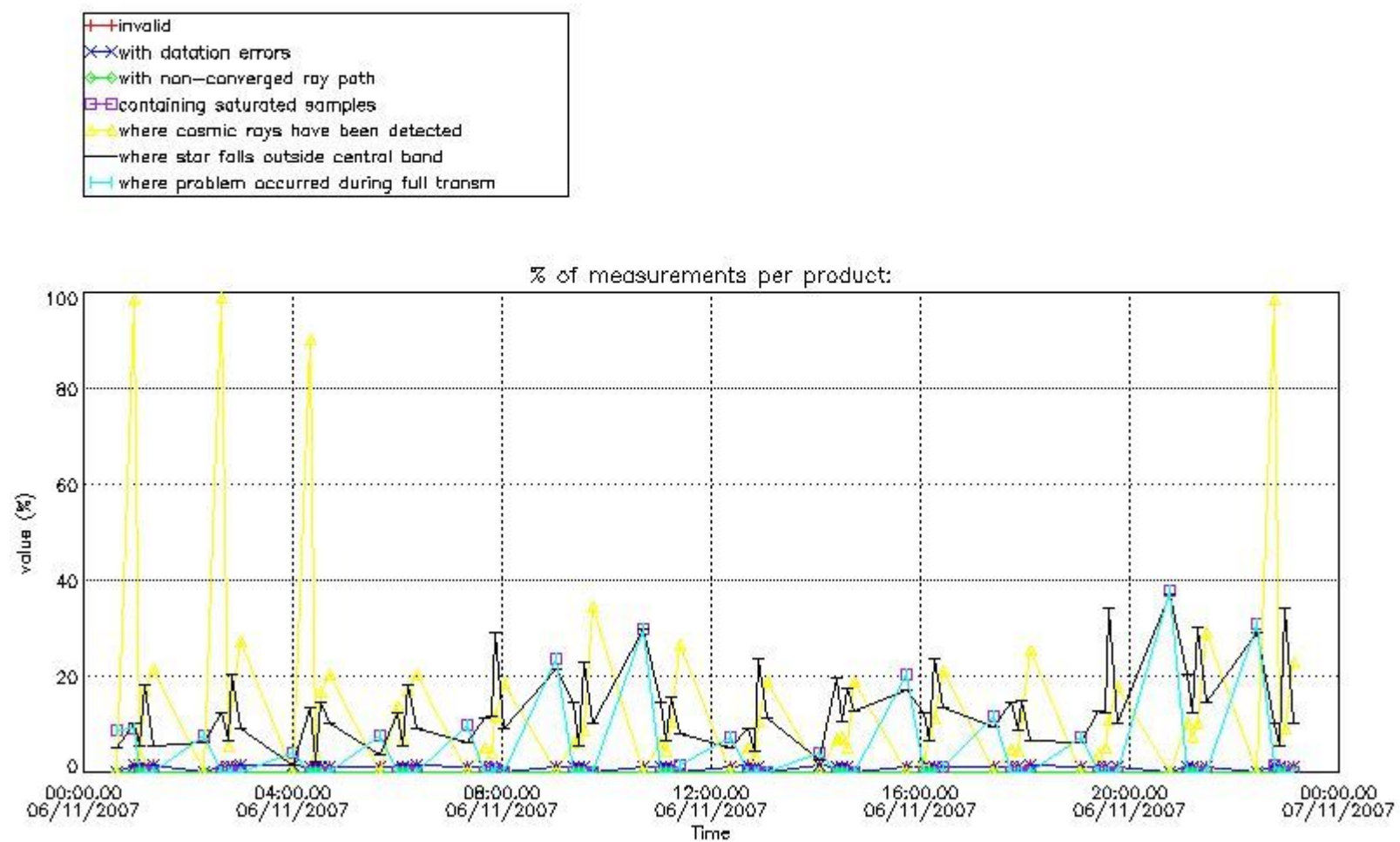


4. Level 1 quality information per product

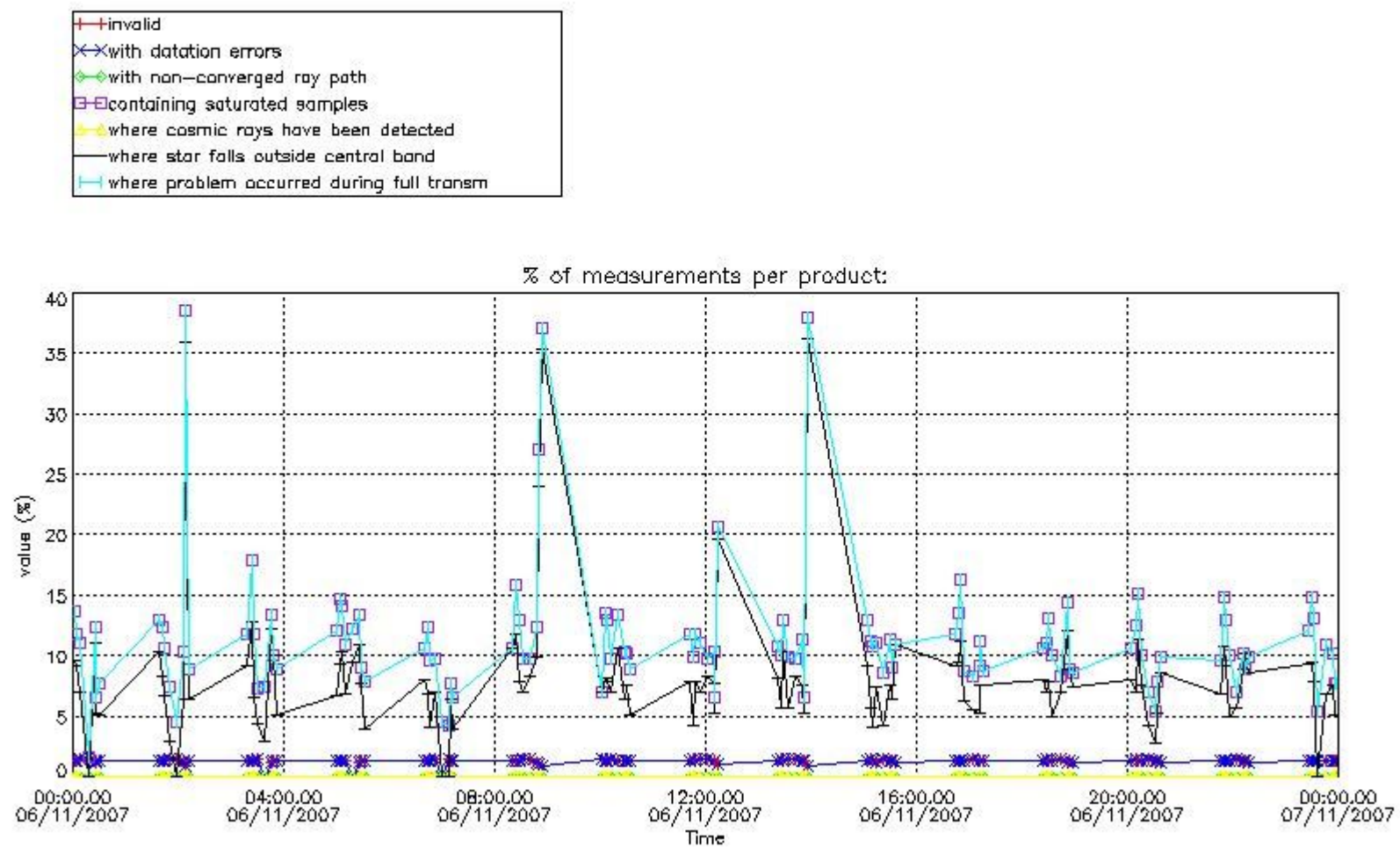
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



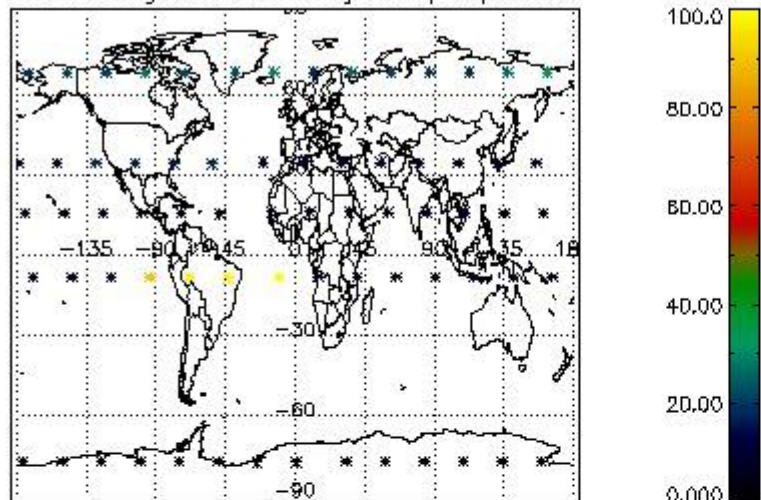
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



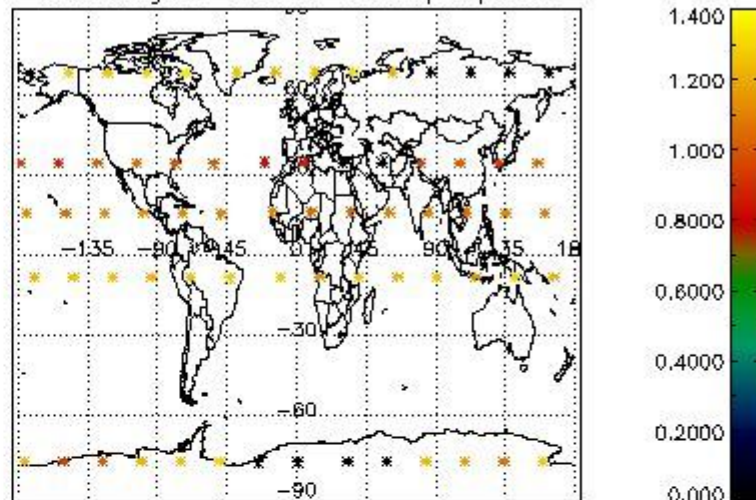
4.2 Plot quality information per product coming from level 1b processing (world map)

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

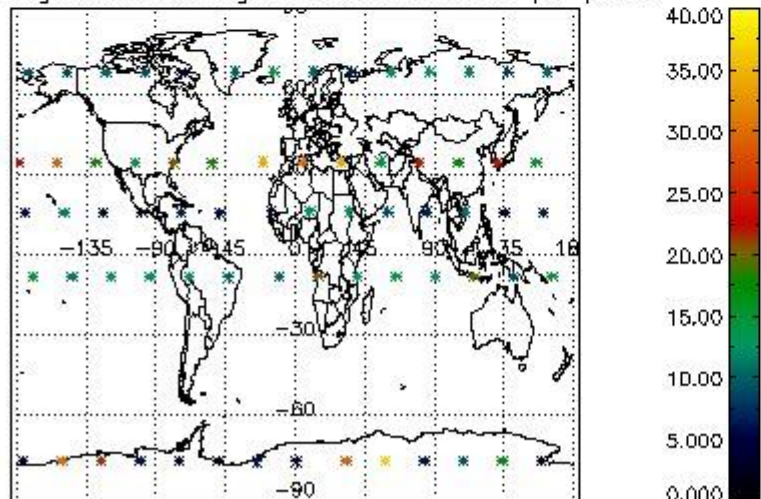
Percentage of cosmic ray hits per profile



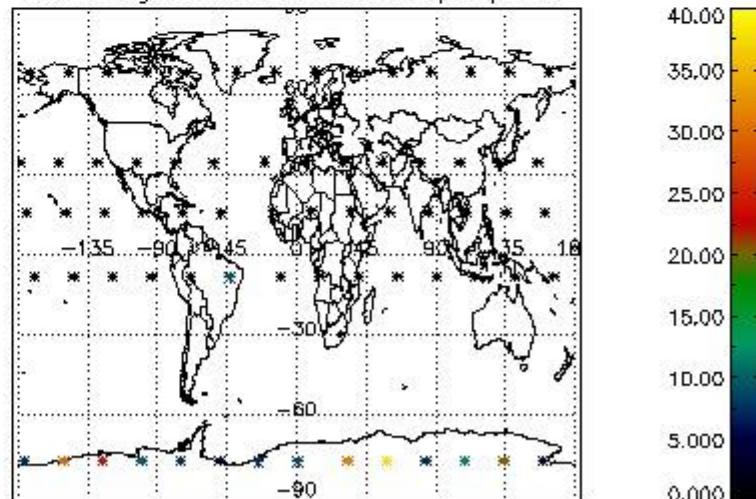
Percentage of datation errors per profile



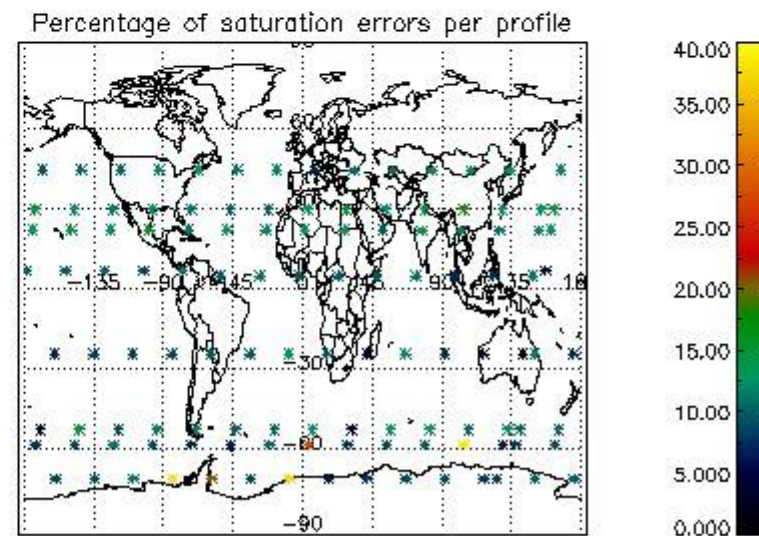
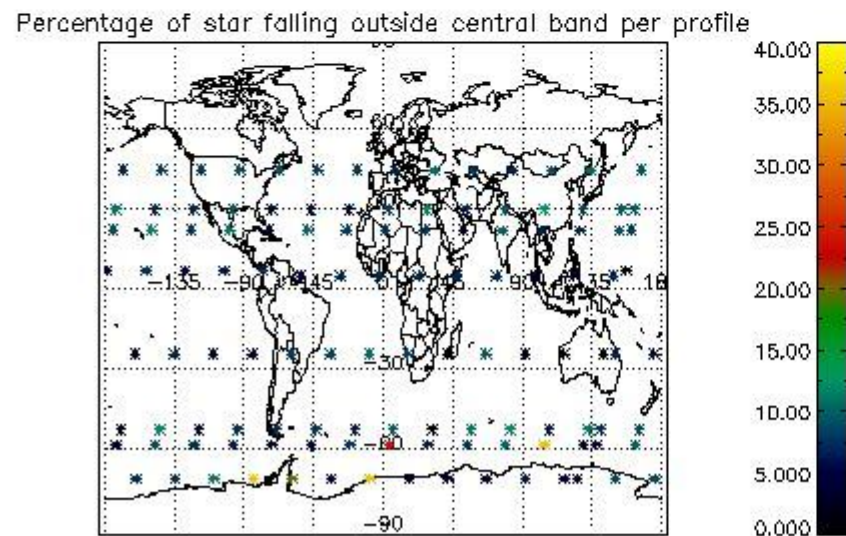
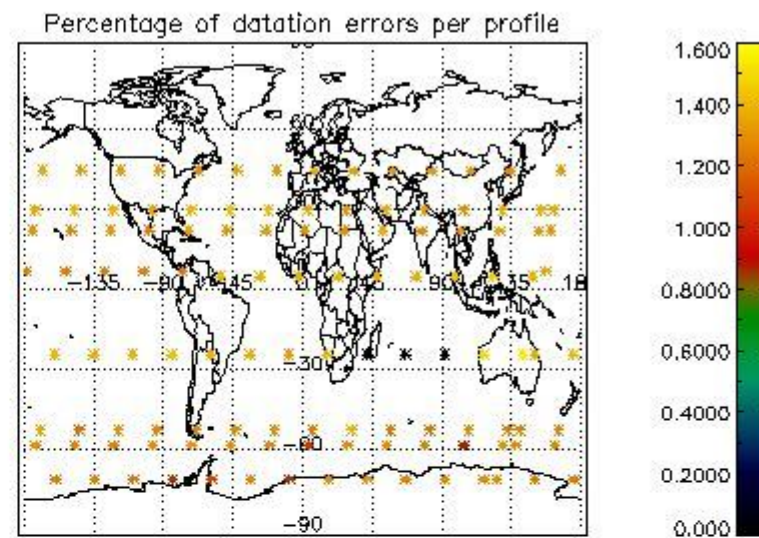
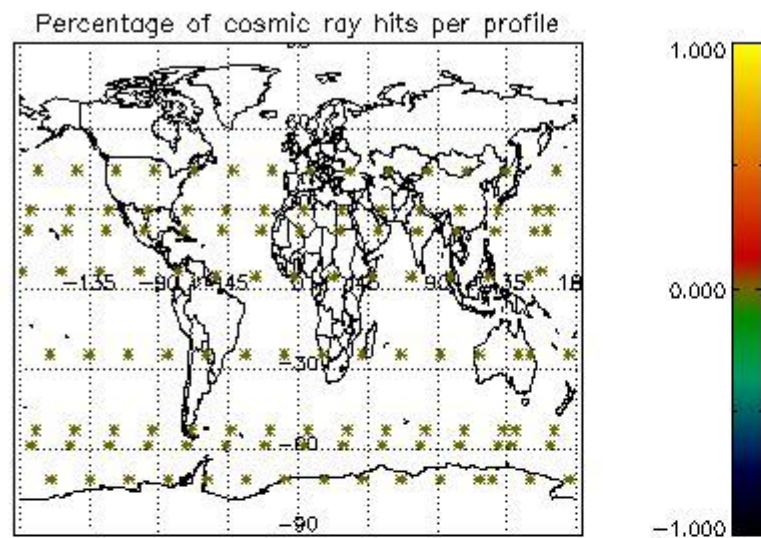
Percentage of star falling outside central band per profile



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

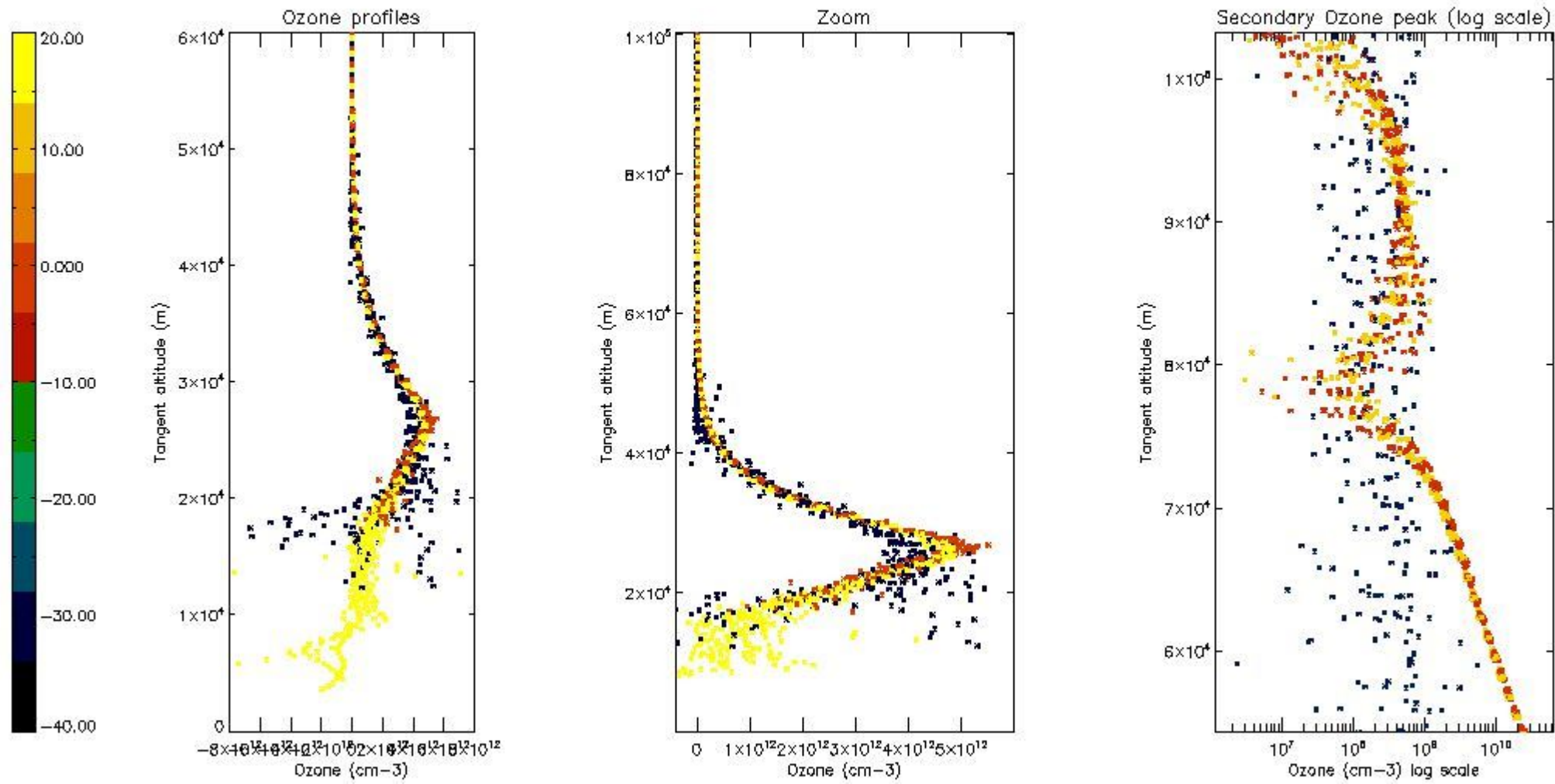
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	16

STD < 10	13
STD < 5	11

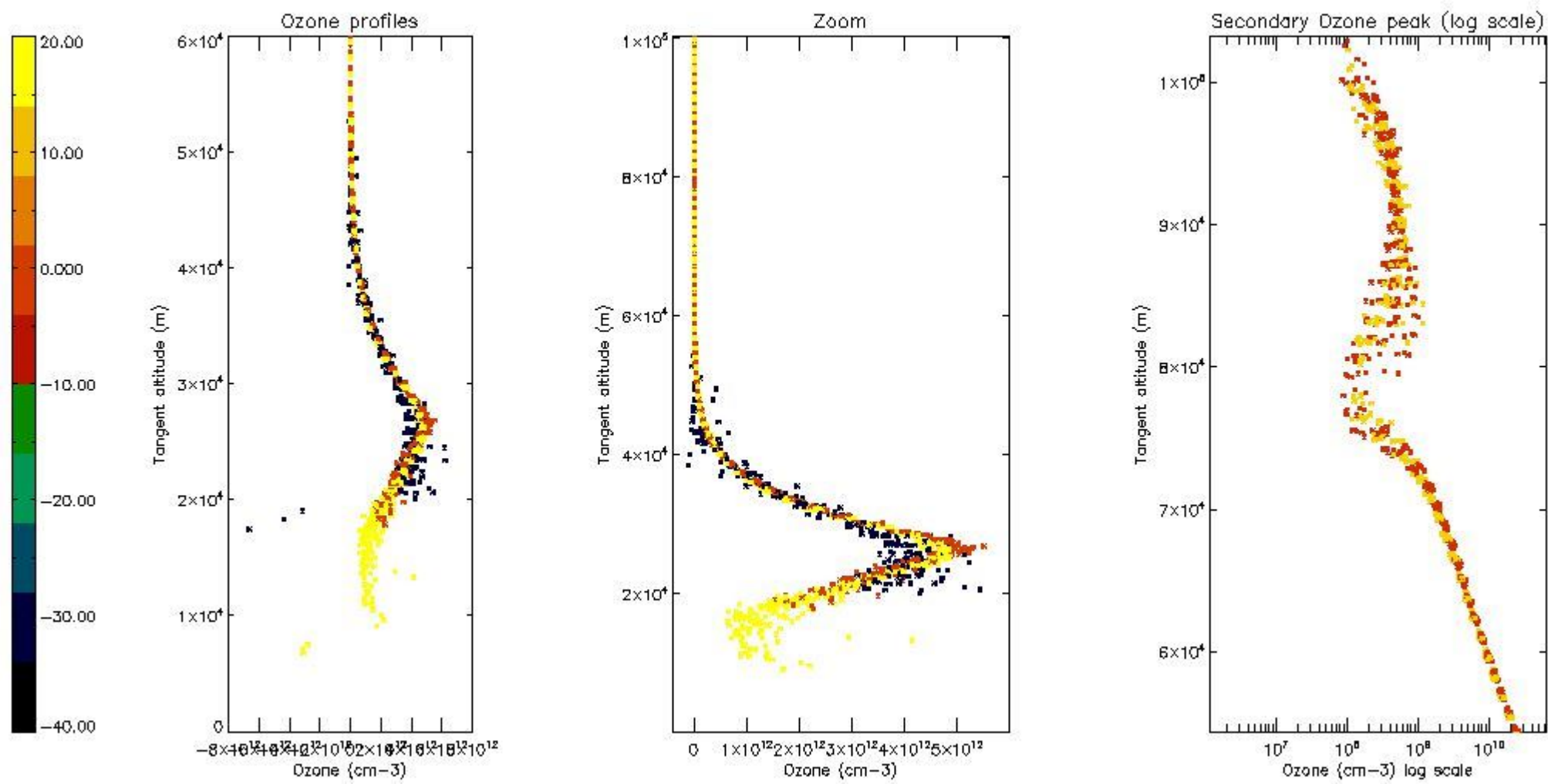
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



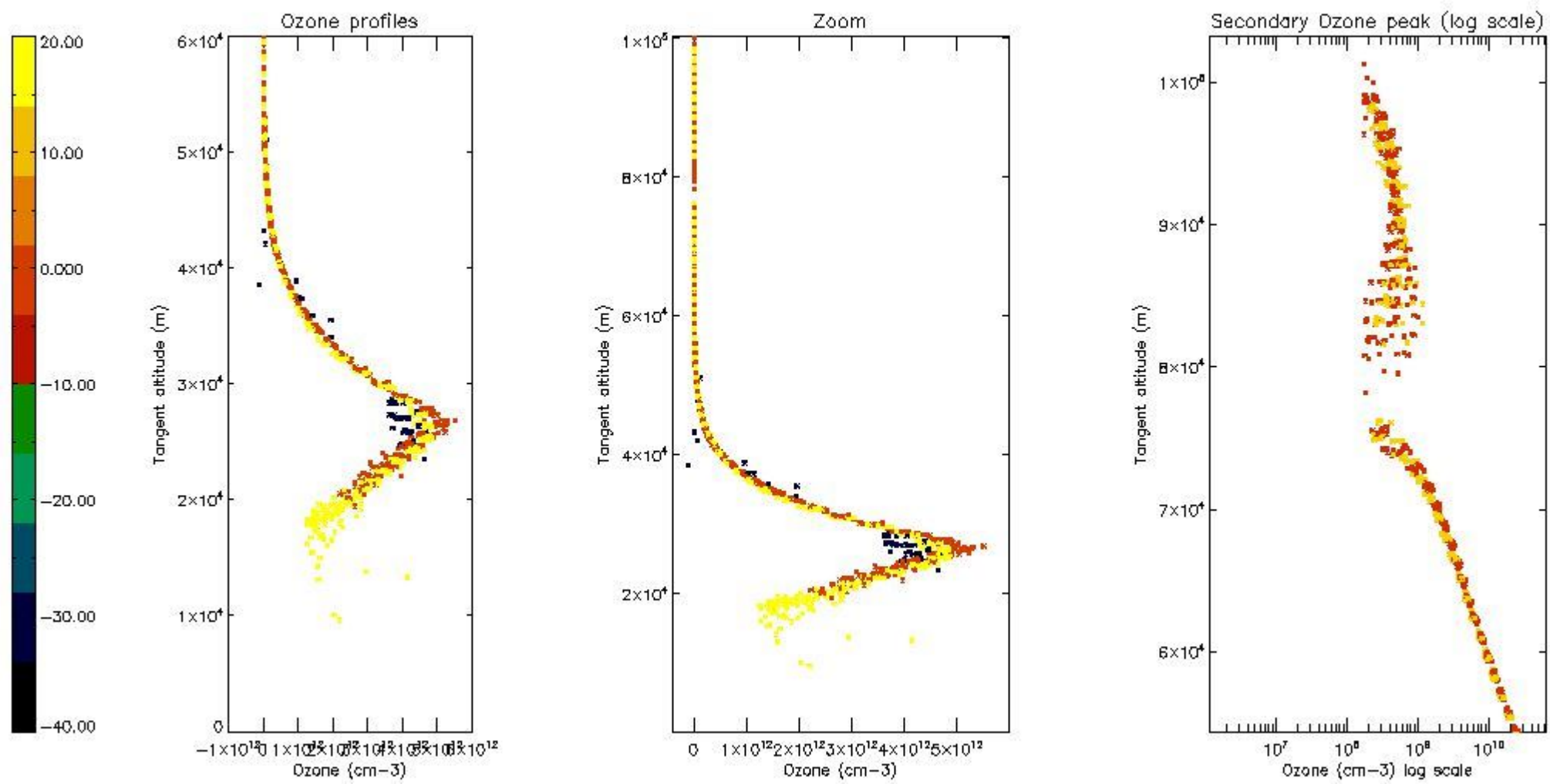
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



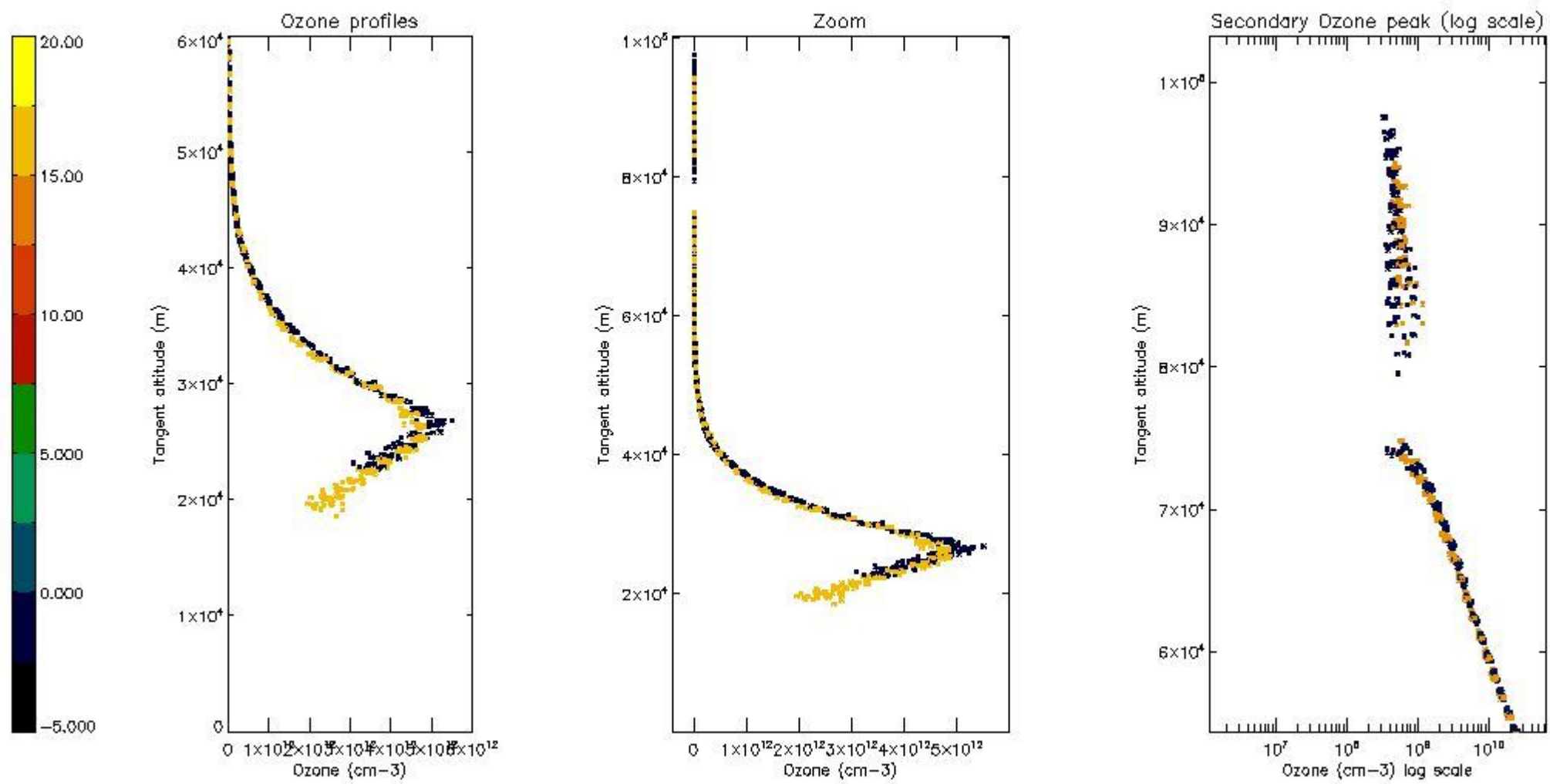
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



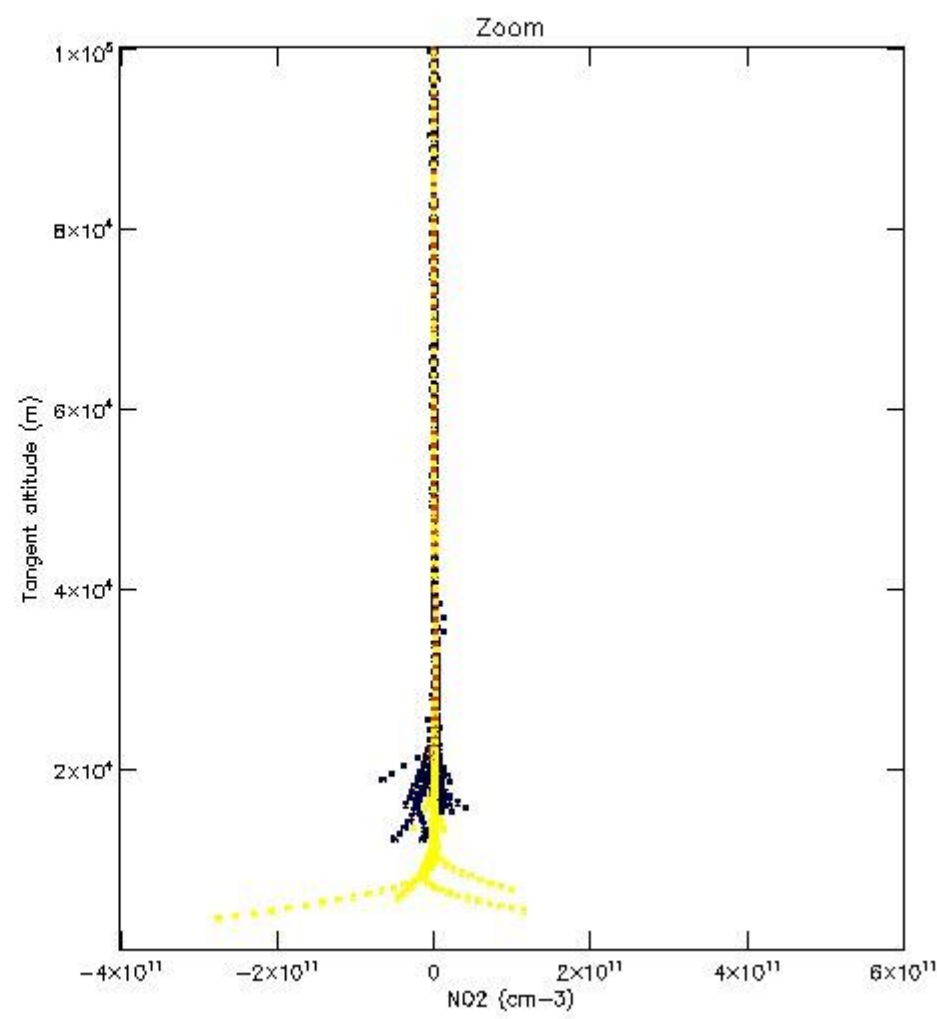
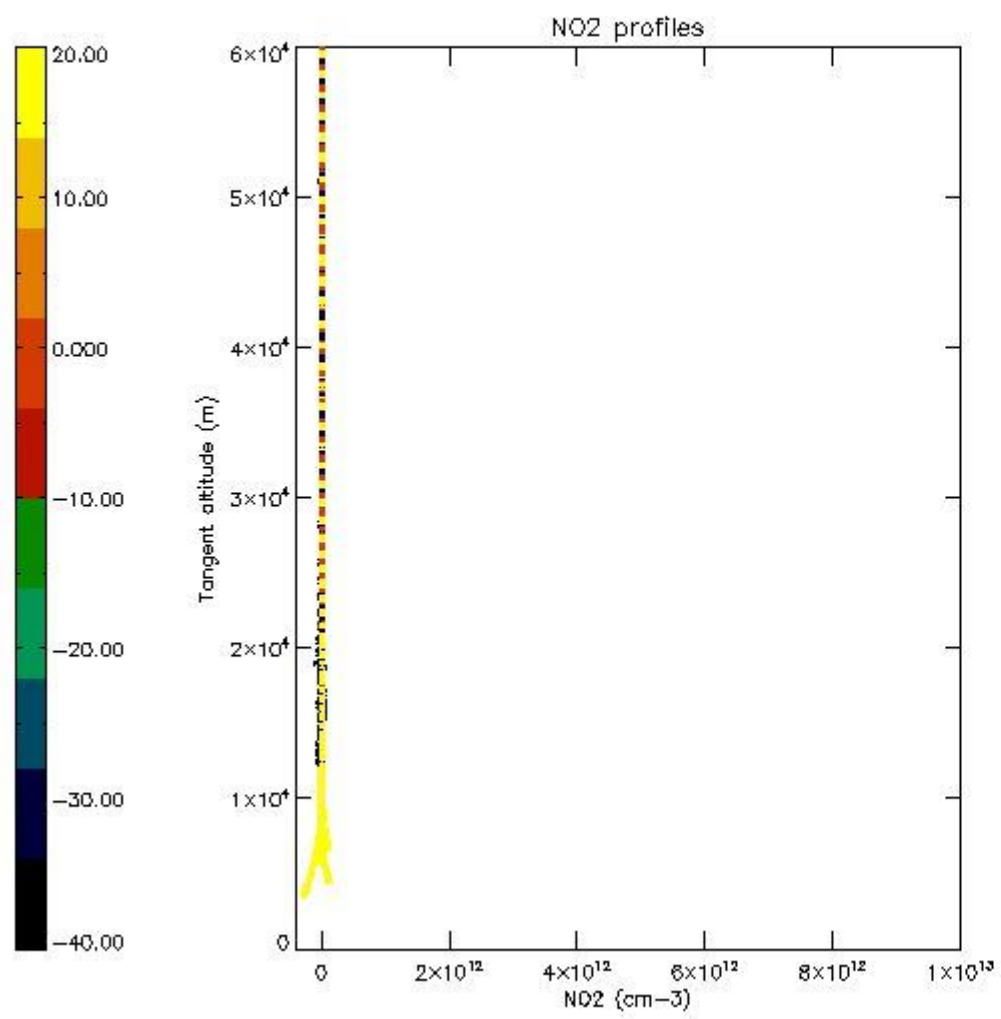
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



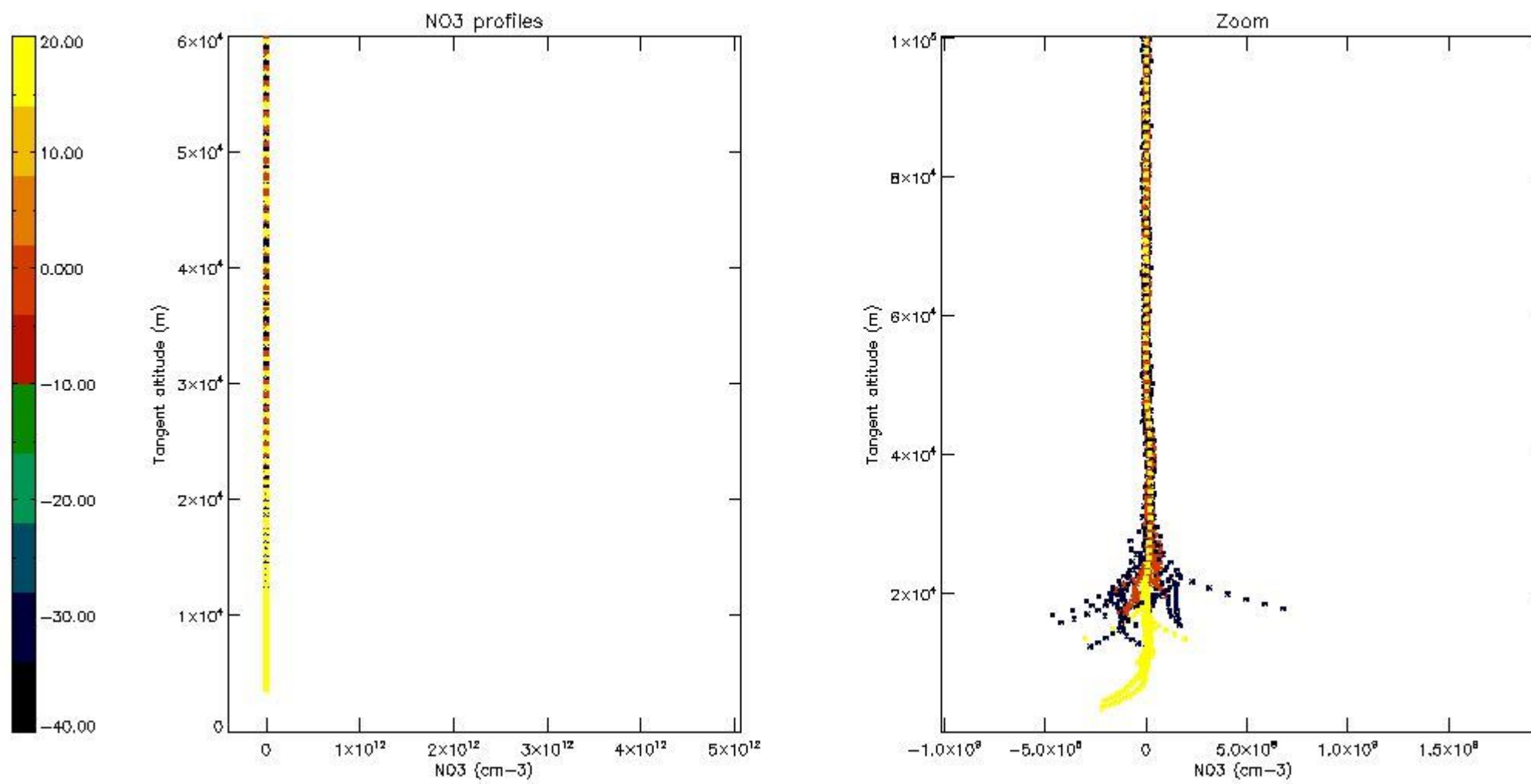
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



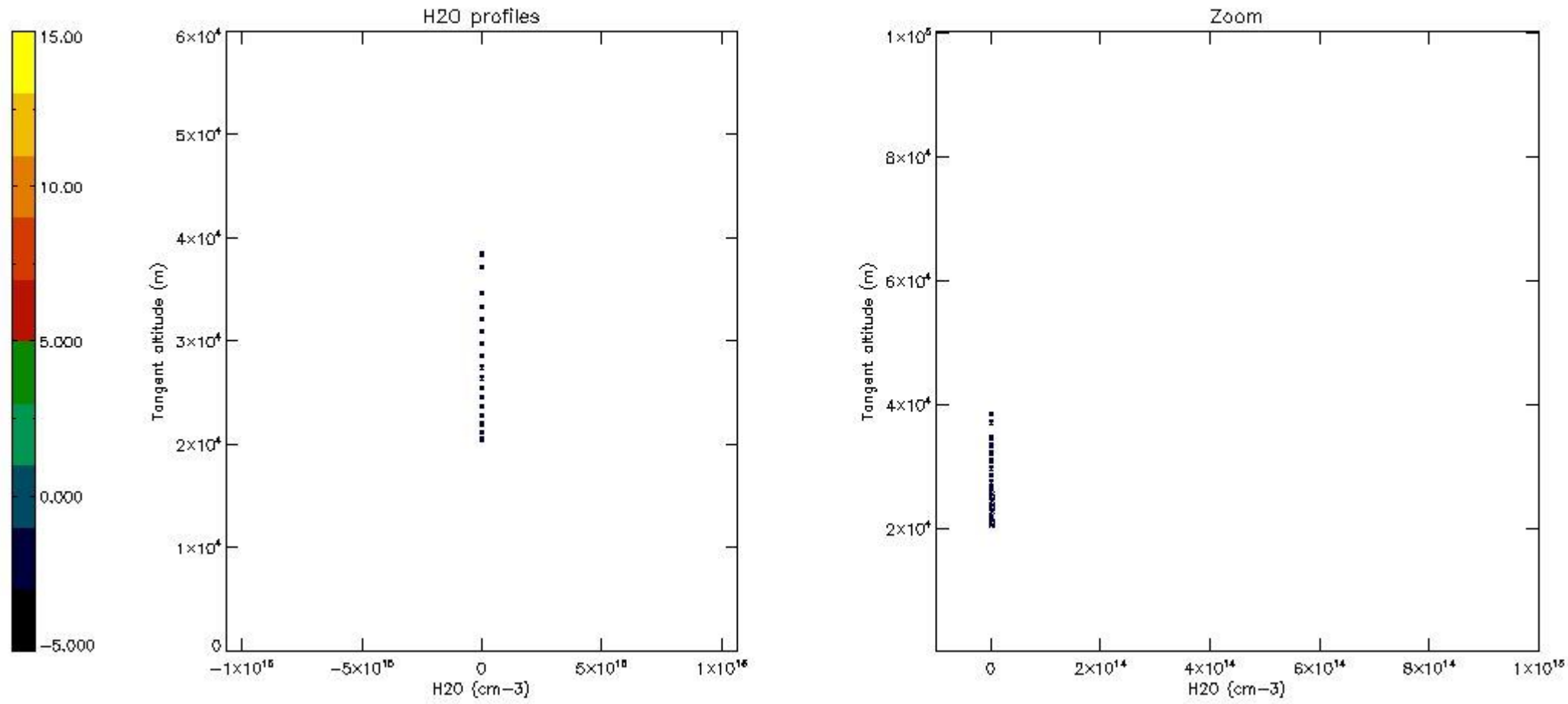
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	06-NOV-2007 00:01:55
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	06-NOV-2007 00:01:55
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	06-NOV-2007 00:01:55

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

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[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	23APR2013 10:21:27
Data source version	GOMOS/6.01
Start time of products	06-11-2007 (06NOV2007 00:00:00)
Stop time of products	07-11-2007 (07NOV2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	189
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

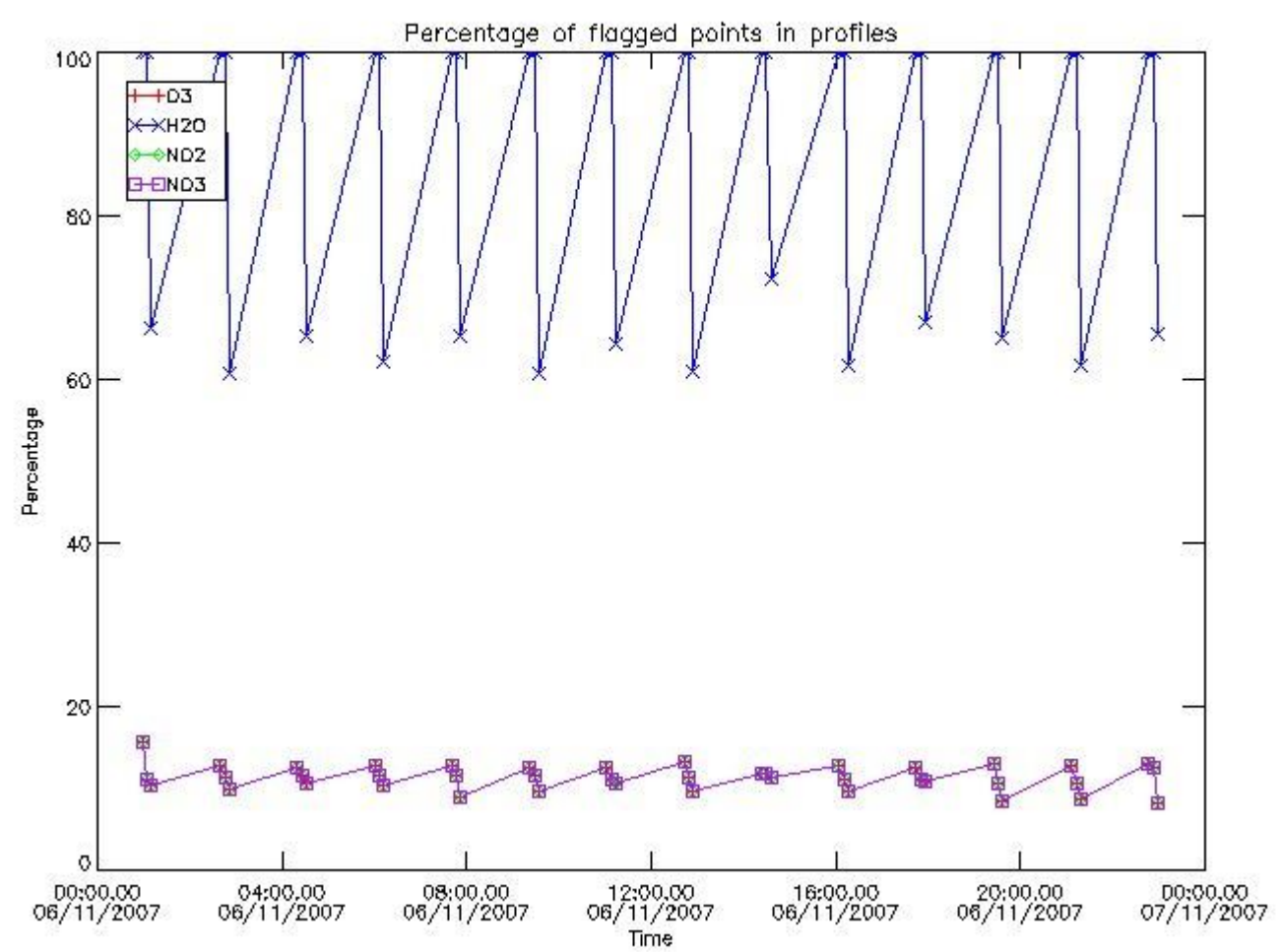
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20071106_000155_000000372063_00102_29715_9319.N1	06-NOV-2007 00:01:55	Bright	36.500	53	43Bet And	2.0480	3300.0	73	29715	No
2	GOM_NL__2PRFIN20071106_000406_000000382063_00102_29715_9320.N1	06-NOV-2007 00:04:06	Bright	38.000	73	57Gam1And	2.2600	13100.	76	29715	No
3	GOM_NL__2PRFIN20071106_000853_000000362063_00102_29715_9321.N1	06-NOV-2007 00:08:53	Bright	36.000	110	37Del Cas	2.6780	8900.0	72	29715	No
4	GOM_NL__2PRFIN20071106_001704_000000322063_00102_29715_9322.N1	06-NOV-2007 00:17:04	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	29715	No
5	GOM_NL__2PRFIN20071106_002506_000000412063_00102_29715_9323.N1	06-NOV-2007 00:25:06	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	29715	No
6	GOM_NL__2PRFIN20071106_002643_000000392063_00102_29715_9324.N1	06-NOV-2007 00:26:43	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	29715	No
7	GOM_NL__2PRFIN20071106_003030_000000392063_00102_29715_9325.N1	06-NOV-2007 00:30:30	Bright	39.000	174	52Psi UMa	3.0040	4400.0	78	29715	No
8	GOM_NL__2PRFIN20071106_003811_000000412063_00102_29715_9326.N1	06-NOV-2007 00:38:11	Bright	40.500	96	68Del Leo	2.5600	9300.0	81	29715	No
9	GOM_NL__2PRFIN20071106_005814_000000392063_00102_29715_9327.N1	06-NOV-2007 00:58:14	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	29715	No
10	GOM_NL__2PRFIN20071106_010455_000000462063_00103_29716_9320.N1	06-NOV-2007 01:04:55	Dark	45.500	34	Gam2Vel	1.7930	23000.	91	29716	No
11	GOM_NL__2PRFIN20071106_011010_000000502063_00103_29716_9321.N1	06-NOV-2007 01:10:10	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	29716	No
12	GOM_NL__2PRFIN20071106_011958_000000372063_00103_29716_9322.N1	06-NOV-2007 01:19:58	Straylight	37.000	157	The1Eri	2.9060	9300.0	74	29716	No
13	GOM_NL__2PRFIN20071106_013822_000000392063_00103_29716_9323.N1	06-NOV-2007 01:38:22	Bright	38.500	105	6Bet Ari	2.6450	8900.0	77	29716	No
14	GOM_NL__2PRFIN20071106_014231_000000372063_00103_29716_9324.N1	06-NOV-2007 01:42:31	Bright	36.500	53	43Bet And	2.0480	3300.0	73	29716	No
15	GOM_NL__2PRFIN20071106_014442_000000382063_00103_29716_9325.N1	06-NOV-2007 01:44:42	Bright	37.500	73	57Gam1And	2.2600	13100.	75	29716	No
16	GOM_NL__2PRFIN20071106_014929_000000342063_00103_29716_9326.N1	06-NOV-2007 01:49:29	Bright	34.000	110	37Del Cas	2.6780	8900.0	68	29716	No
17	GOM_NL__2PRFIN20071106_015740_000000342063_00103_29716_9327.N1	06-NOV-2007 01:57:40	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	29716	No
18	GOM_NL__2PRFIN20071106_020542_000000392063_00103_29716_9328.N1	06-NOV-2007 02:05:42	Bright	39.000	36	50Alp UMa	1.8000	6300.0	78	29716	No
19	GOM_NL__2PRFIN20071106_020719_000000572063_00103_29716_9329.N1	06-NOV-2007 02:07:19	Bright	57.000	82	48Bet UMa	2.3650	10600.	114	29716	No
20	GOM_NL__2PRFIN20071106_021106_000000402063_00103_29716_9330.N1	06-NOV-2007 02:11:06	Bright	39.500	174	52Psi UMa	3.0040	4400.0	79	29716	No
21	GOM_NL__2PRFIN20071106_021847_000000402063_00103_29716_9331.N1	06-NOV-2007 02:18:47	Bright	40.000	96	68Del Leo	2.5600	9300.0	80	29716	No
22	GOM_NL__2PRFIN20071106_023850_000000402063_00103_29716_9332.N1	06-NOV-2007 02:38:50	Dark	40.000	113	Mu Vel	2.6920	5000.0	80	29716	No
23	GOM_NL__2PRFIN20071106_024532_000000452063_00104_29717_9327.N1	06-NOV-2007 02:45:32	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	29717	No
24	GOM_NL__2PRFIN20071106_025047_000000522063_00104_29717_9328.N1	06-NOV-2007 02:50:47	Dark	51.500	2	Alp Car	-0.73600	7000.0	103	29717	No
25	GOM_NL__2PRFIN20071106_030035_000000392063_00104_29717_9329.N1	06-NOV-2007 03:00:35	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	29717	No
26	GOM_NL__2PRFIN20071106_031858_000000382063_00104_29717_9330.N1	06-NOV-2007 03:18:58	Bright	38.000	105	6Bet Ari	2.6450	8900.0	76	29717	No
27	GOM_NL__2PRFIN20071106_032307_000000392063_00104_29717_9331.N1	06-NOV-2007 03:23:07	Bright	39.000	53	43Bet And	2.0480	3300.0	78	29717	No
28	GOM_NL__2PRFIN20071106_032517_000000382063_00104_29717_9332.N1	06-NOV-2007 03:25:17	Bright	38.000	73	57Gam1And	2.2600	13100.	76	29717	No
29	GOM_NL__2PRFIN20071106_033005_000000352063_00104_29717_9333.N1	06-NOV-2007 03:30:05	Bright	34.500	110	37Del Cas	2.6780	8900.0	69	29717	No
30	GOM_NL__2PRFIN20071106_033816_000000342063_00104_29717_9334.N1	06-NOV-2007 03:38:16	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	29717	No
31	GOM_NL__2PRFIN20071106_034617_000000412063_00104_29717_9335.N1	06-NOV-2007 03:46:17	Bright	41.000	36	50Alp UMa	1.8000	6300.0	82	29717	No
32	GOM_NL__2PRFIN20071106_034755_000000402063_00104_29717_9336.N1	06-NOV-2007 03:47:55	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	29717	No
33	GOM_NL__2PRFIN20071106_035142_000000402063_00104_29717_9337.N1	06-NOV-2007 03:51:42	Bright	39.500	174	52Psi UMa	3.0040	4400.0	79	29717	No
34	GOM_NL__2PRFIN20071106_035924_000000392063_00104_29717_9338.N1	06-NOV-2007 03:59:24	Bright	38.500	96	68Del Leo	2.5600	9300.0	77	29717	No
35	GOM_NL__2PRFIN20071106_041926_000000412063_00104_29717_9339.N1	06-NOV-2007 04:19:26	Dark	40.500	113	Mu Vel	2.6920	5000.0	81	29717	No
36	GOM_NL__2PRFIN20071106_042609_000000442063_00105_29718_9331.N1	06-NOV-2007 04:26:09	Dark	44.000	34	Gam2Vel	1.7930	23000.	88	29718	No
37	GOM_NL__2PRFIN20071106_043124_000000482063_00105_29718_9332.N1	06-NOV-2007 04:31:24	Dark	48.000	2	Alp Car	-0.73600	7000.0	96	29718	No
38	GOM_NL__2PRFIN20071106_044111_000000402063_00105_29718_9333.N1	06-NOV-2007 04:41:11	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	29718	No
39	GOM_NL__2PRFIN20071106_045934_000000382063_00105_29718_9334.N1	06-NOV-2007 04:59:34	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	29718	No
40	GOM_NL__2PRFIN20071106_050343_000000382063_00105_29718_9335.N1	06-NOV-2007 05:03:43	Bright	37.500	53	43Bet And	2.0480	3300.0	75	29718	No
41	GOM_NL__2PRFIN20071106_050553_000000392063_00105_29718_9336.N1	06-NOV-2007 05:05:53	Bright	39.000	73	57Gam1And	2.2600	13100.	78	29718	No
42	GOM_NL__2PRFIN20071106_051041_000000372063_00105_29718_9337.N1	06-NOV-2007 05:10:41	Bright	36.500	110	37Del Cas	2.6780	8900.0	73	29718	No

161	GOM_NL__2PRFIN20071106_203215_000000372063_00114_29727_9514.N1	06-NOV-2007 20:32:15	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	29727	No
162	GOM_NL__2PRFIN20071106_203353_000000392063_00114_29727_9515.N1	06-NOV-2007 20:33:53	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	29727	No
163	GOM_NL__2PRFIN20071106_203741_000000412063_00114_29727_9516.N1	06-NOV-2007 20:37:41	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	29727	No
164	GOM_NL__2PRFIN20071106_204526_000000602063_00114_29727_9517.N1	06-NOV-2007 20:45:26	Bright	59.500	96	68Del Leo	2.5600	9300.0	119	29727	No
165	GOM_NL__2PRFIN20071106_210530_000000442063_00114_29727_9518.N1	06-NOV-2007 21:05:30	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	29727	No
166	GOM_NL__2PRFIN20071106_211218_000000492063_00115_29728_9529.N1	06-NOV-2007 21:12:18	Dark	48.500	34	Gam2Vel	1.7930	23000.	97	29728	No
167	GOM_NL__2PRFIN20071106_211731_000000582063_00115_29728_9530.N1	06-NOV-2007 21:17:31	Dark	58.000	2	Alp Car	-0.73600	7000.0	116	29728	No
168	GOM_NL__2PRFIN20071106_212713_000000412063_00115_29728_9531.N1	06-NOV-2007 21:27:13	Straylight	41.000	157	The1Eri	2.9060	9300.0	82	29728	No
169	GOM_NL__2PRFIN20071106_214532_000000372063_00115_29728_9532.N1	06-NOV-2007 21:45:32	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	29728	No
170	GOM_NL__2PRFIN20071106_214943_000000372063_00115_29728_9533.N1	06-NOV-2007 21:49:43	Bright	37.000	53	43Bet And	2.0480	3300.0	74	29728	No
171	GOM_NL__2PRFIN20071106_215151_000000392063_00115_29728_9534.N1	06-NOV-2007 21:51:51	Bright	38.500	73	57Gam1And	2.2600	13100.	77	29728	No
172	GOM_NL__2PRFIN20071106_215607_000000402063_00115_29728_9535.N1	06-NOV-2007 21:56:07	Bright	40.000	160	23Gam Per	2.9300	4700.0	80	29728	No
173	GOM_NL__2PRFIN20071106_220451_000000362063_00115_29728_9536.N1	06-NOV-2007 22:04:51	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	29728	No
174	GOM_NL__2PRFIN20071106_221251_000000402063_00115_29728_9537.N1	06-NOV-2007 22:12:51	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	29728	No
175	GOM_NL__2PRFIN20071106_221429_000000402063_00115_29728_9538.N1	06-NOV-2007 22:14:29	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	29728	No
176	GOM_NL__2PRFIN20071106_221817_000000412063_00115_29728_9539.N1	06-NOV-2007 22:18:17	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	29728	No
177	GOM_NL__2PRFIN20071106_222602_000000542063_00115_29728_9540.N1	06-NOV-2007 22:26:02	Bright	53.500	96	68Del Leo	2.5600	9300.0	107	29728	No
178	GOM_NL__2PRFIN20071106_224607_000000392063_00115_29728_9541.N1	06-NOV-2007 22:46:07	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	29728	No
179	GOM_NL__2PRFIN20071106_225255_000000452063_00116_29729_9537.N1	06-NOV-2007 22:52:55	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	29729	No
180	GOM_NL__2PRFIN20071106_225807_000000622063_00116_29729_9538.N1	06-NOV-2007 22:58:07	Dark	61.500	2	Alp Car	-0.73600	7000.0	123	29729	No
181	GOM_NL__2PRFIN20071106_230749_000000402063_00116_29729_9539.N1	06-NOV-2007 23:07:49	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	29729	No
182	GOM_NL__2PRFIN20071106_232608_000000382063_00116_29729_9540.N1	06-NOV-2007 23:26:08	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	29729	No
183	GOM_NL__2PRFIN20071106_233018_000000372063_00116_29729_9541.N1	06-NOV-2007 23:30:18	Bright	37.000	53	43Bet And	2.0480	3300.0	74	29729	No
184	GOM_NL__2PRFIN20071106_233226_000000382063_00116_29729_9542.N1	06-NOV-2007 23:32:26	Bright	38.000	73	57Gam1And	2.2600	13100.	76	29729	No
185	GOM_NL__2PRFIN20071106_233642_000000372063_00116_29729_9543.N1	06-NOV-2007 23:36:42	Bright	37.000	160	23Gam Per	2.9300	4700.0	74	29729	No
186	GOM_NL__2PRFIN20071106_234527_000000372063_00116_29729_9544.N1	06-NOV-2007 23:45:27	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	29729	No
187	GOM_NL__2PRFIN20071106_235327_000000402063_00116_29729_9545.N1	06-NOV-2007 23:53:27	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	29729	No
188	GOM_NL__2PRFIN20071106_235504_000000392063_00116_29729_9546.N1	06-NOV-2007 23:55:04	Bright	39.000	82	48Bet UMa	2.3650	10600.	78	29729	No
189	GOM_NL__2PRFIN20071106_235853_000000392063_00116_29729_9547.N1	06-NOV-2007 23:58:53	Bright	39.000	174	52Psi UMa	3.0040	4400.0	78	29729	No

3. Quality information per product

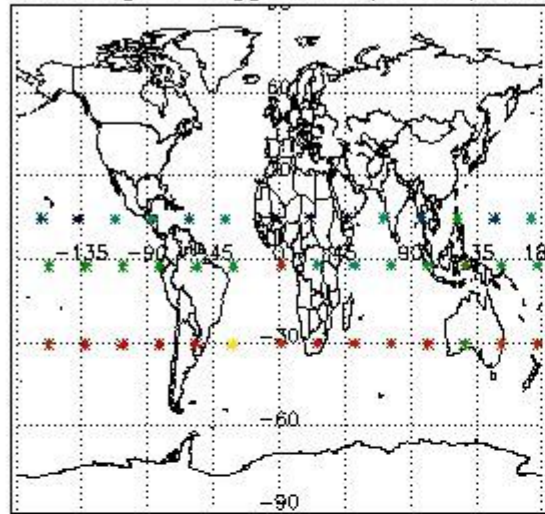
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

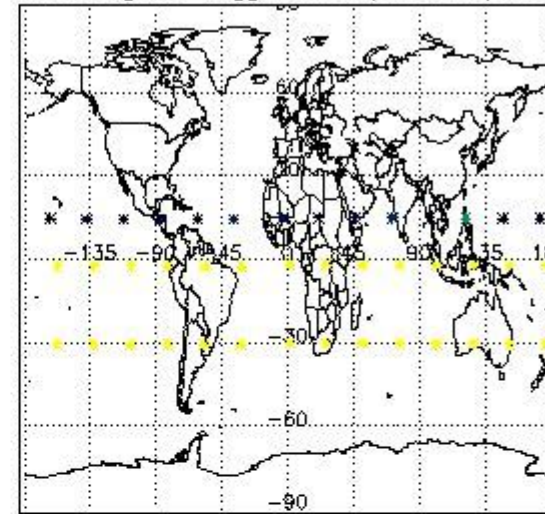


3.2 Plot quality information per product (world map)

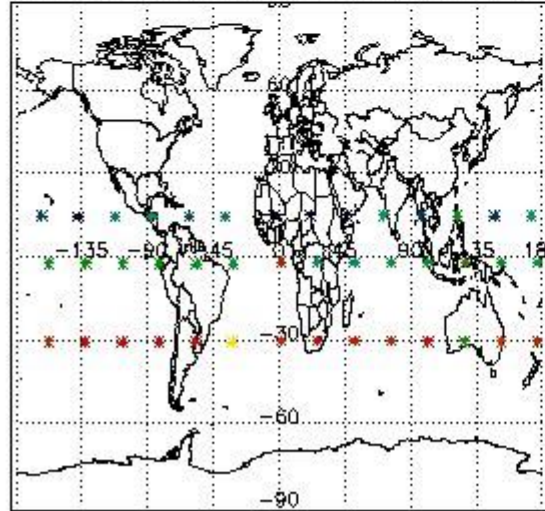
Percentage of flagged data per O3 profile



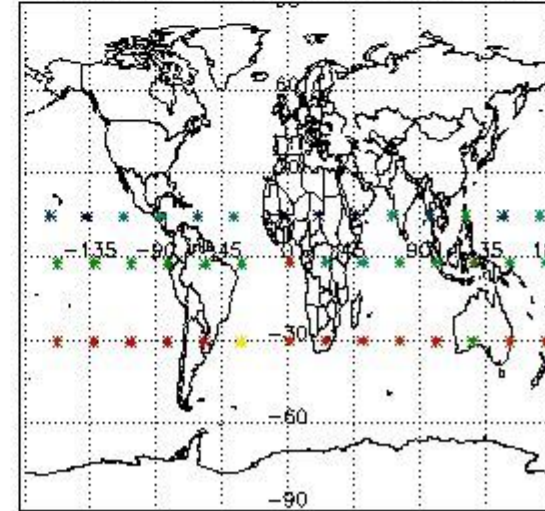
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

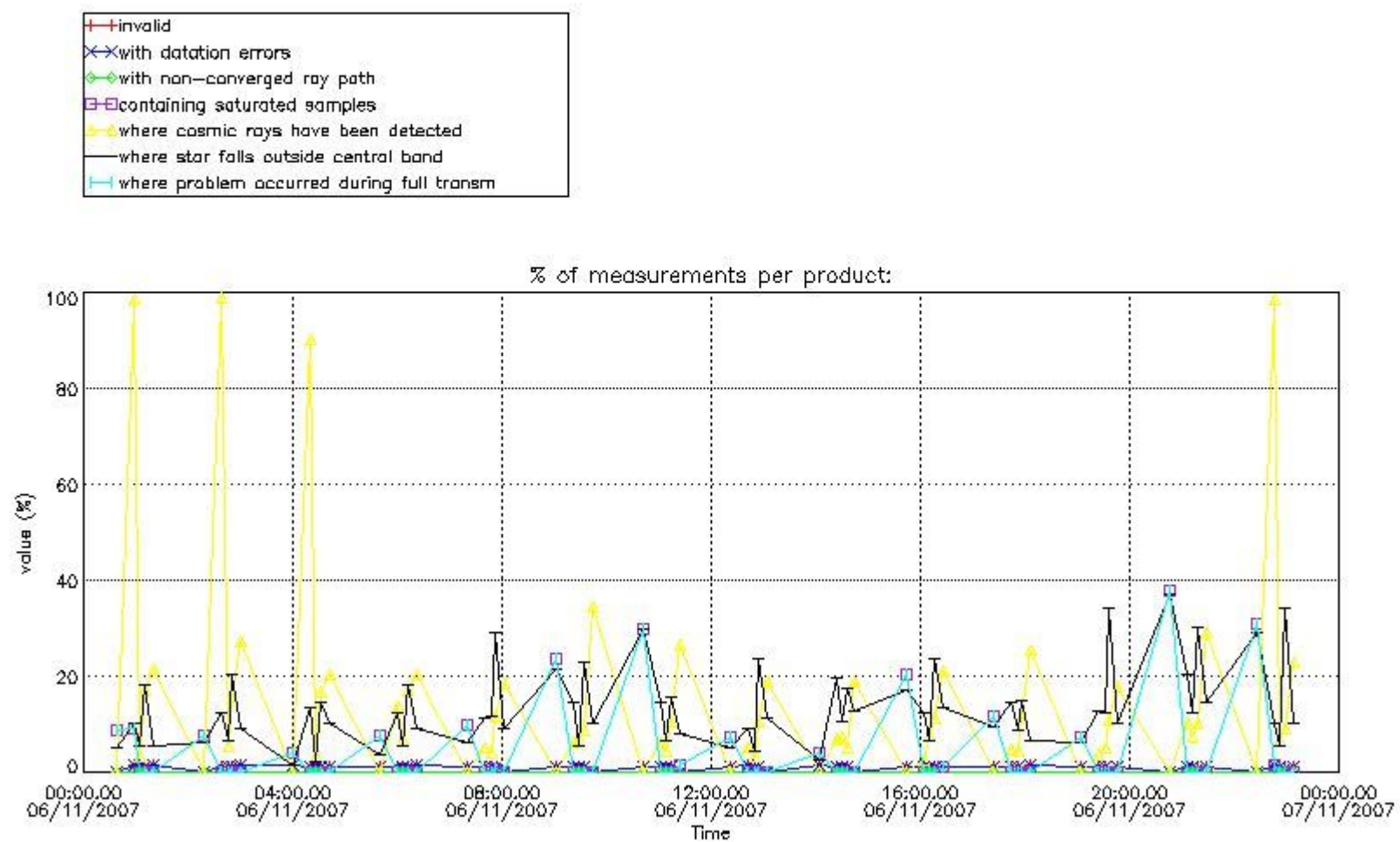


4. Level 1 quality information per product

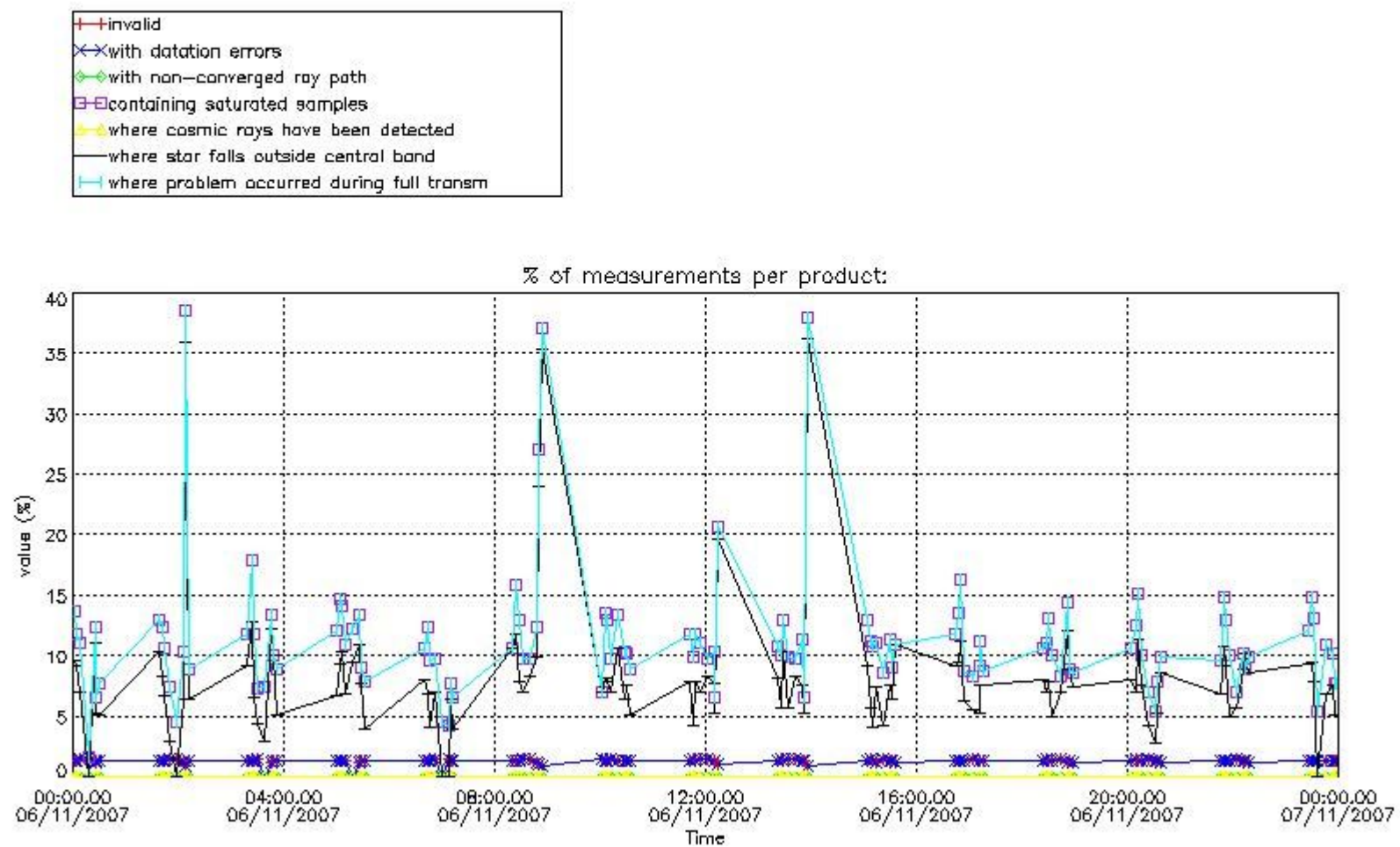
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



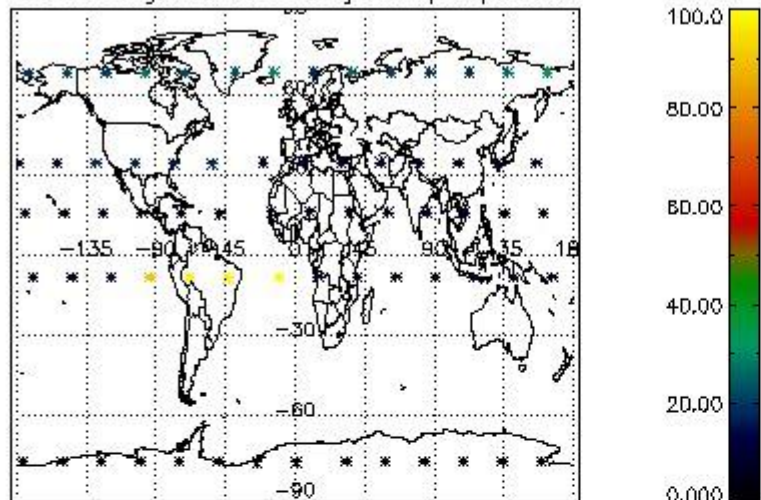
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



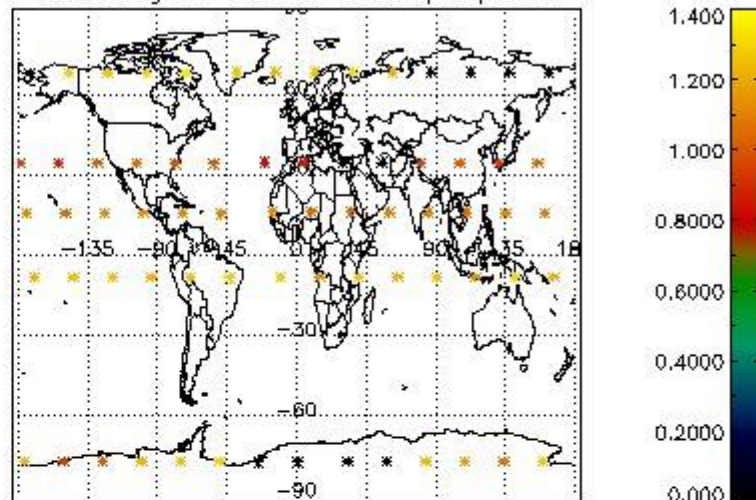
4.2 Plot quality information per product coming from level 1b processing (world map)

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

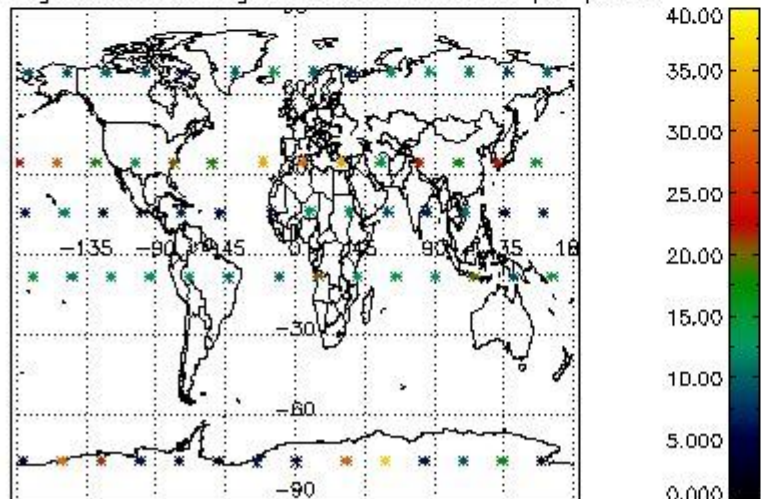
Percentage of cosmic ray hits per profile



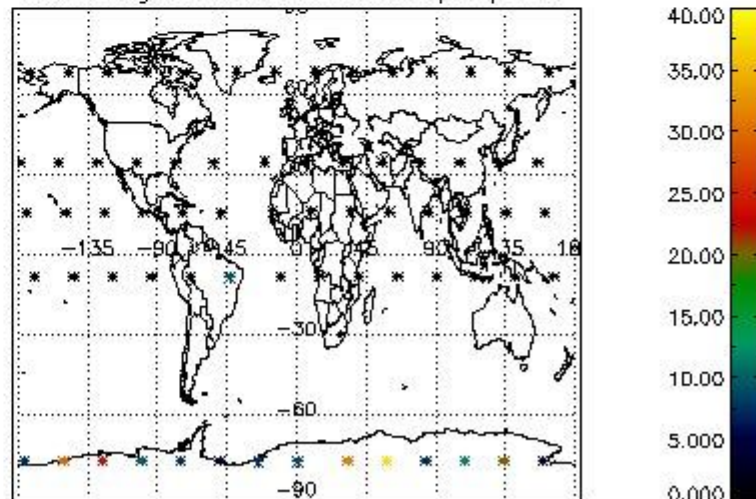
Percentage of datation errors per profile



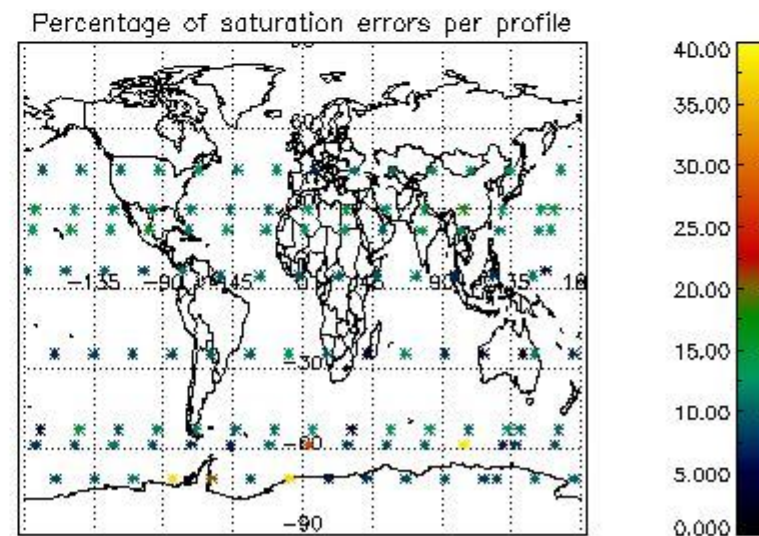
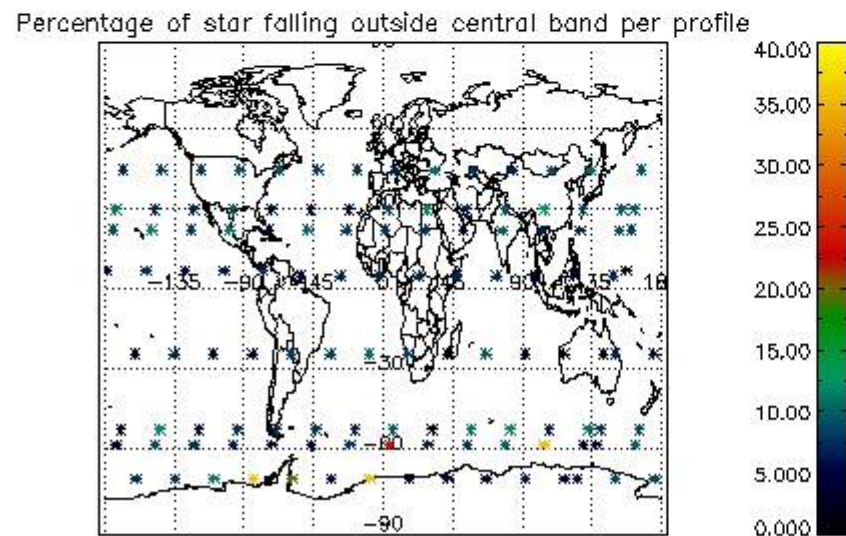
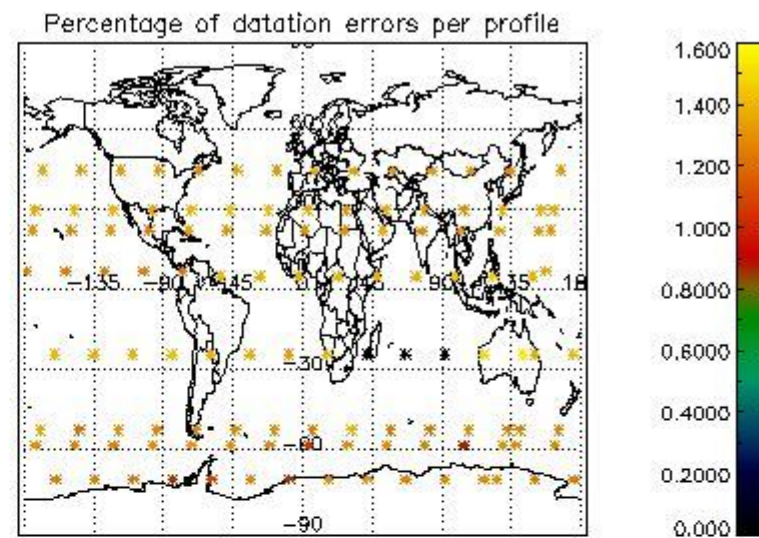
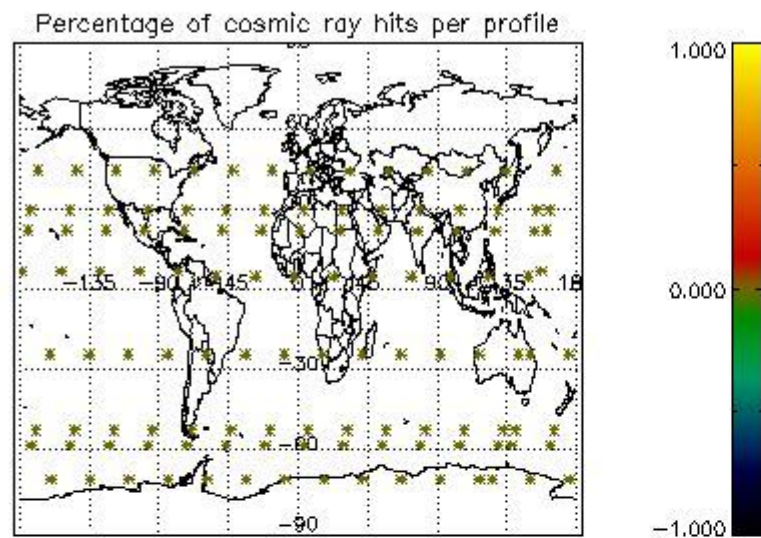
Percentage of star falling outside central band per profile



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

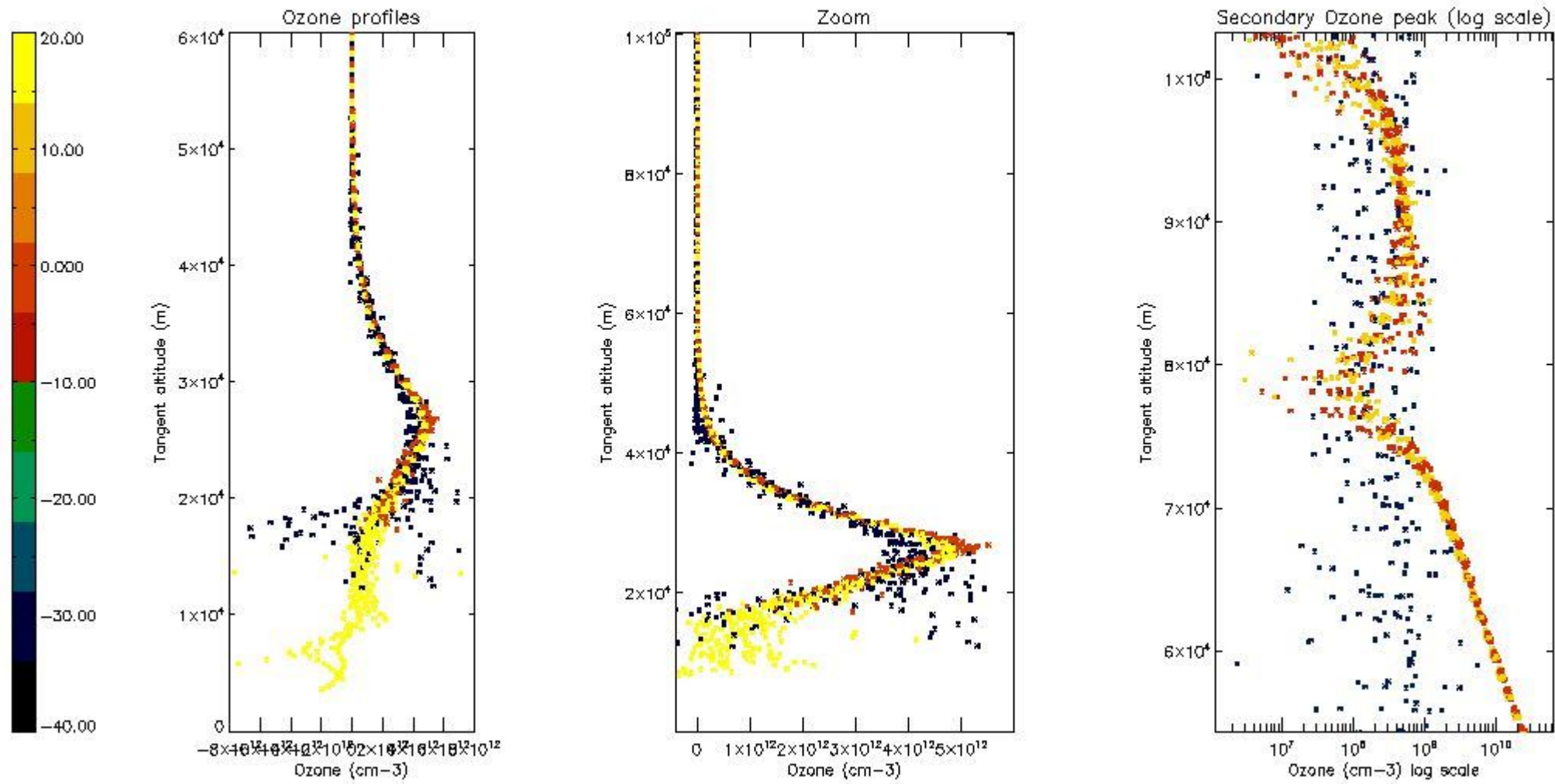
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	16

STD < 10	13
STD < 5	11

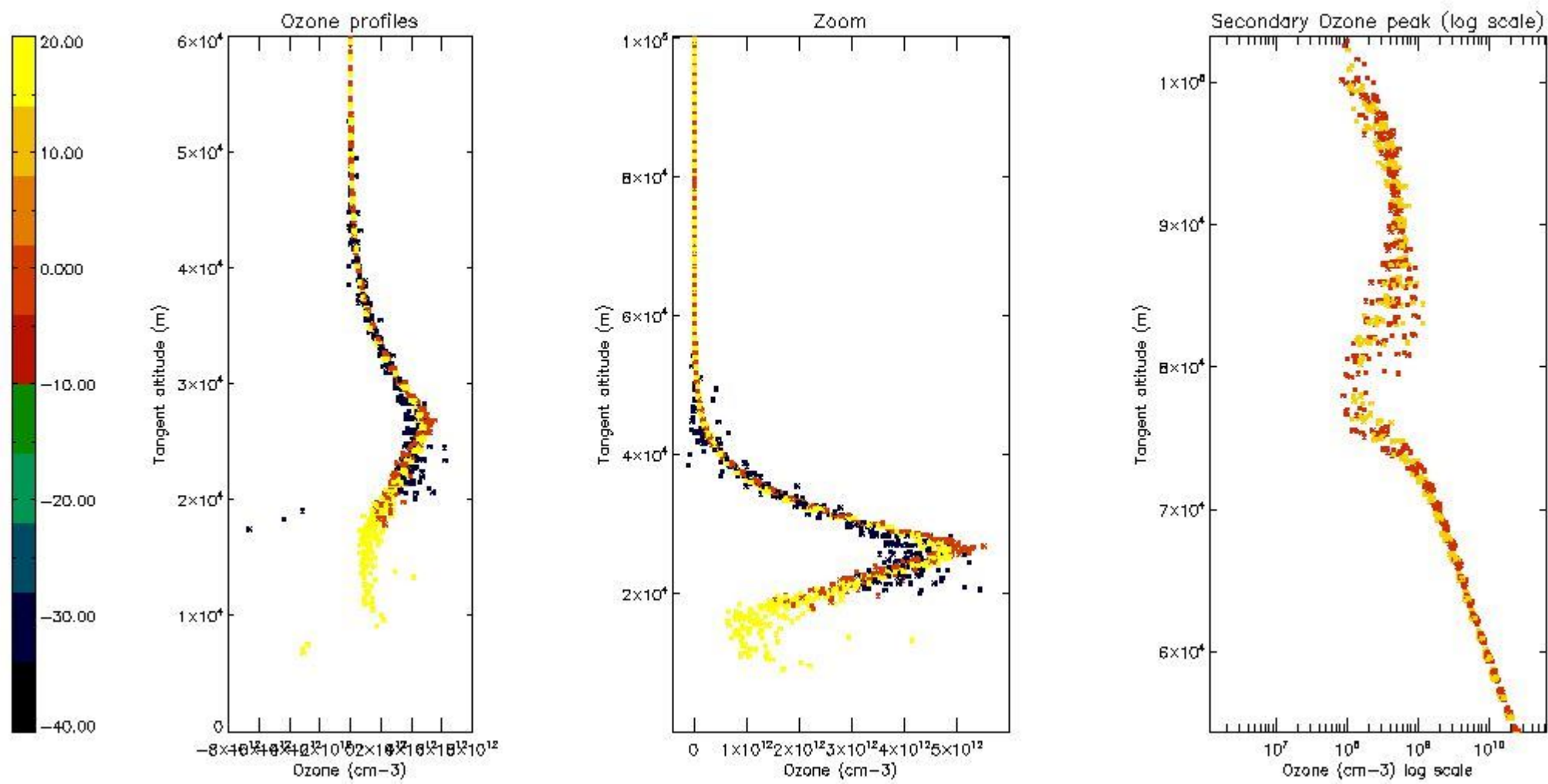
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



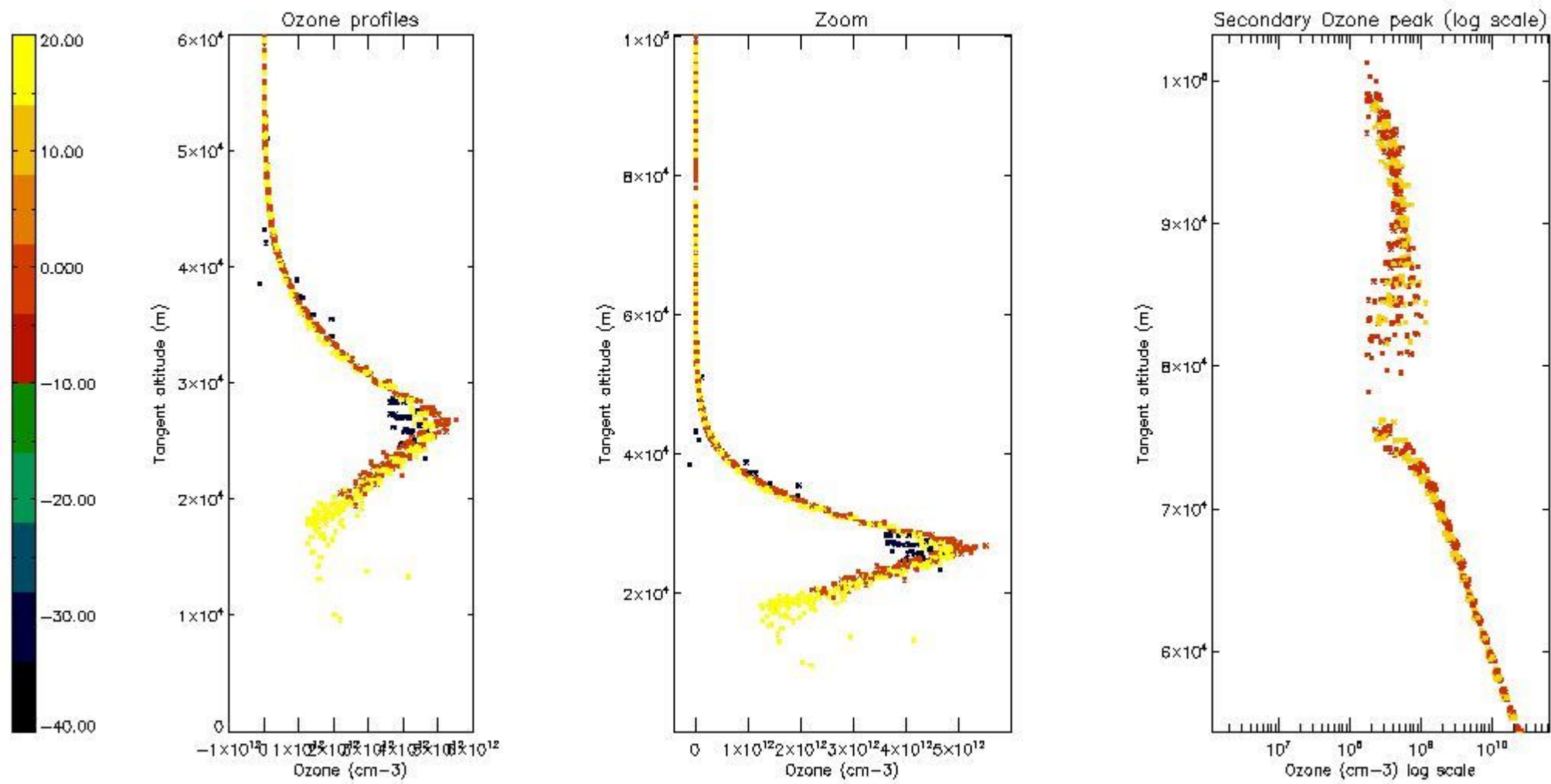
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



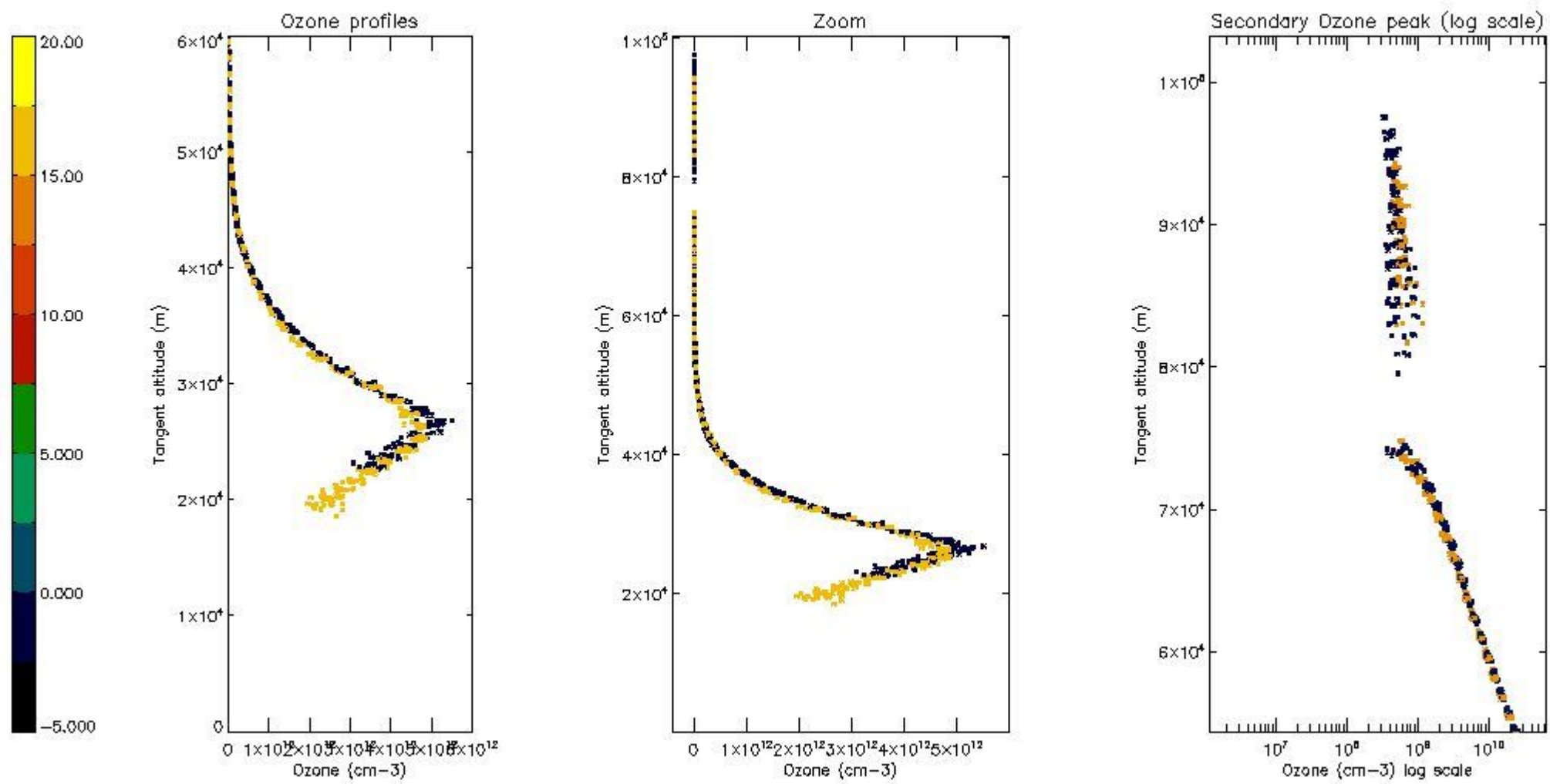
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



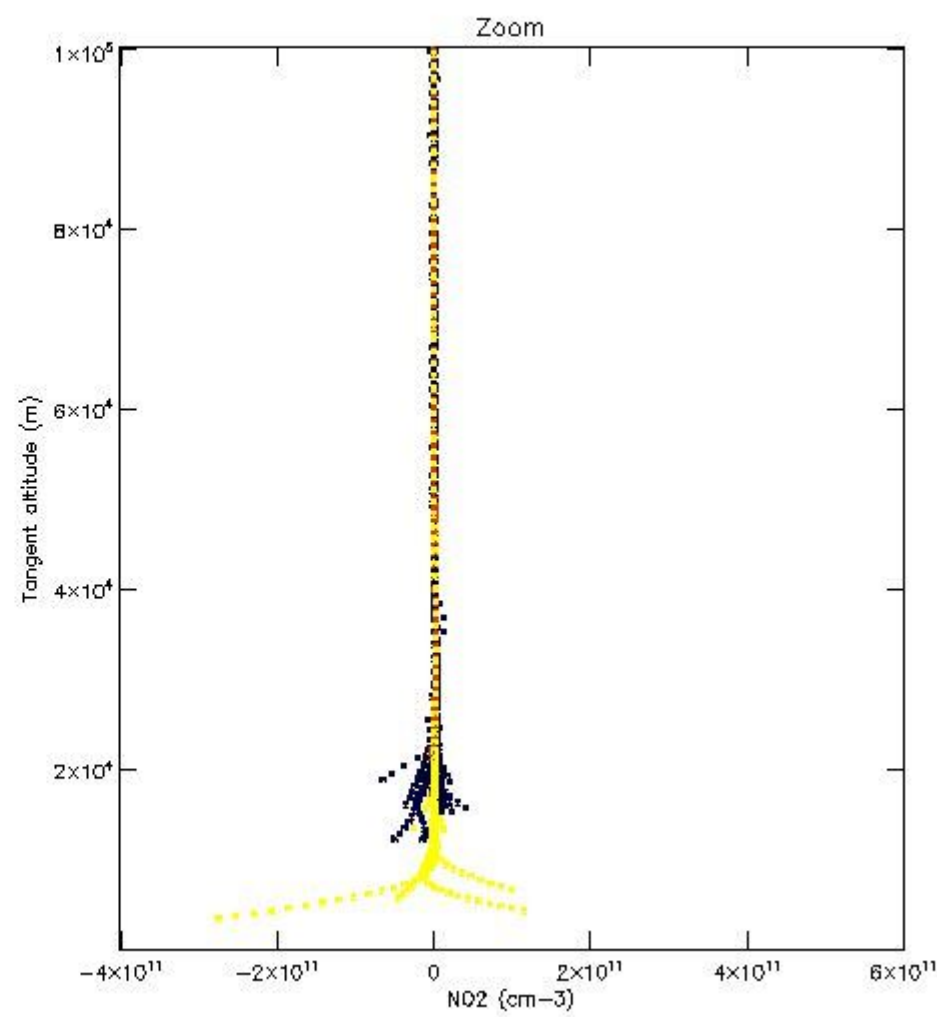
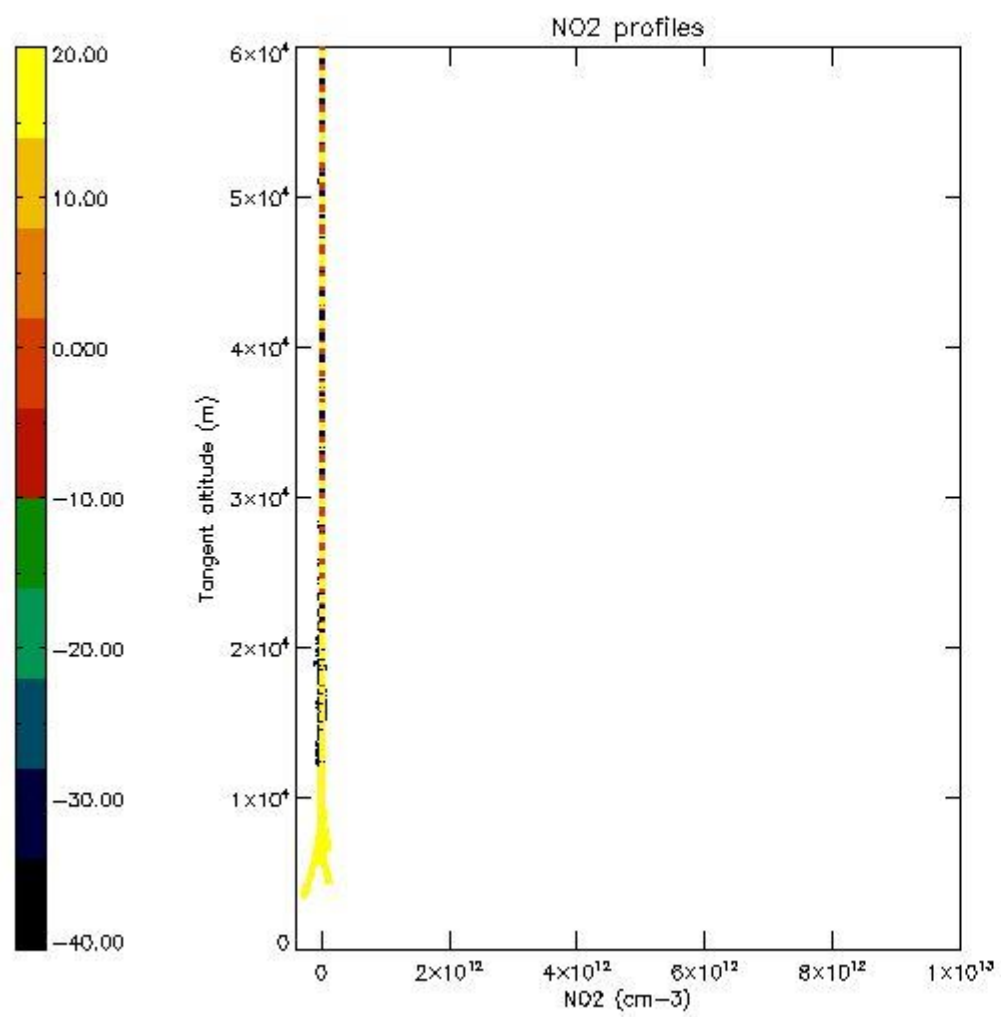
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



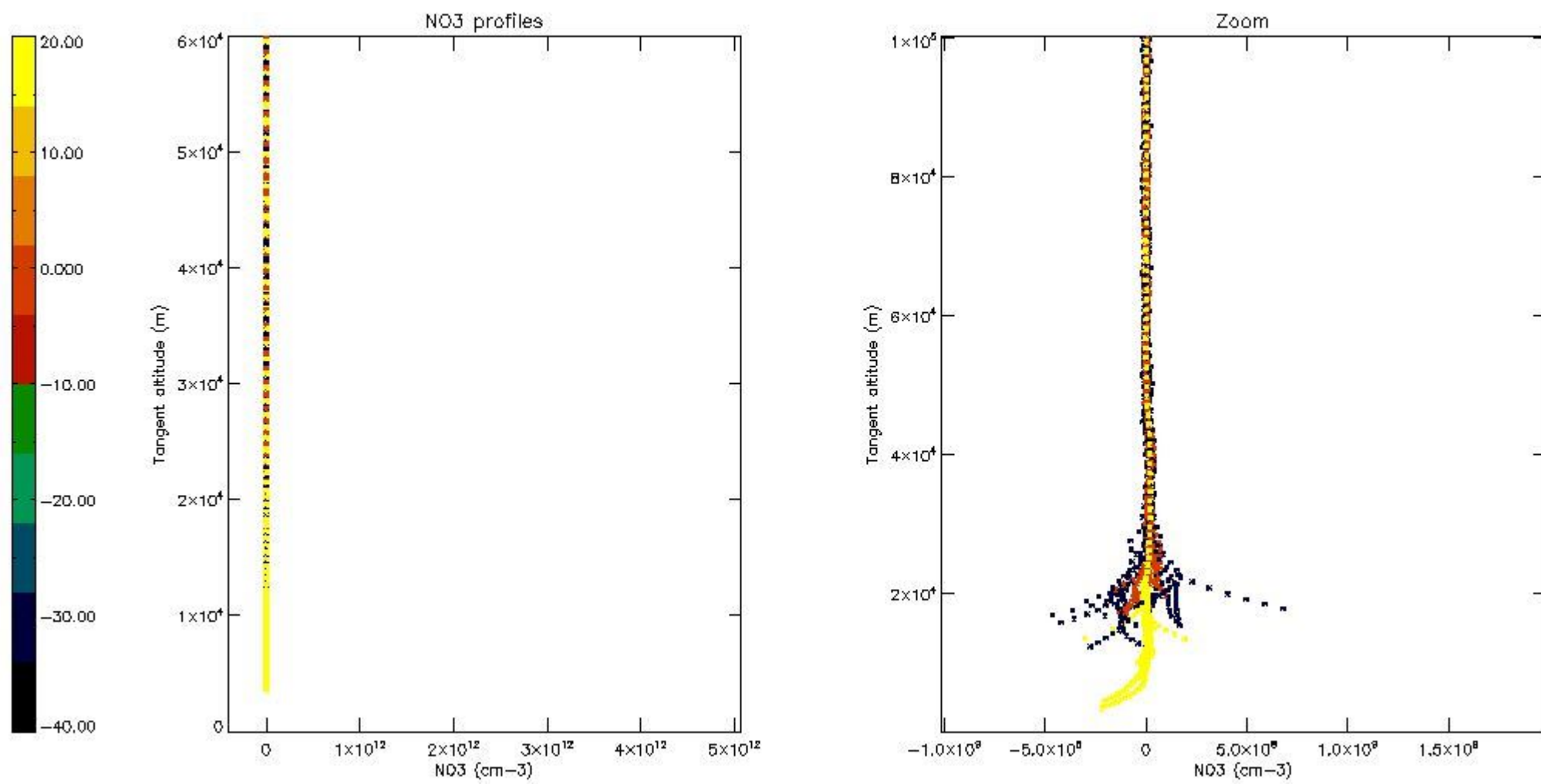
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



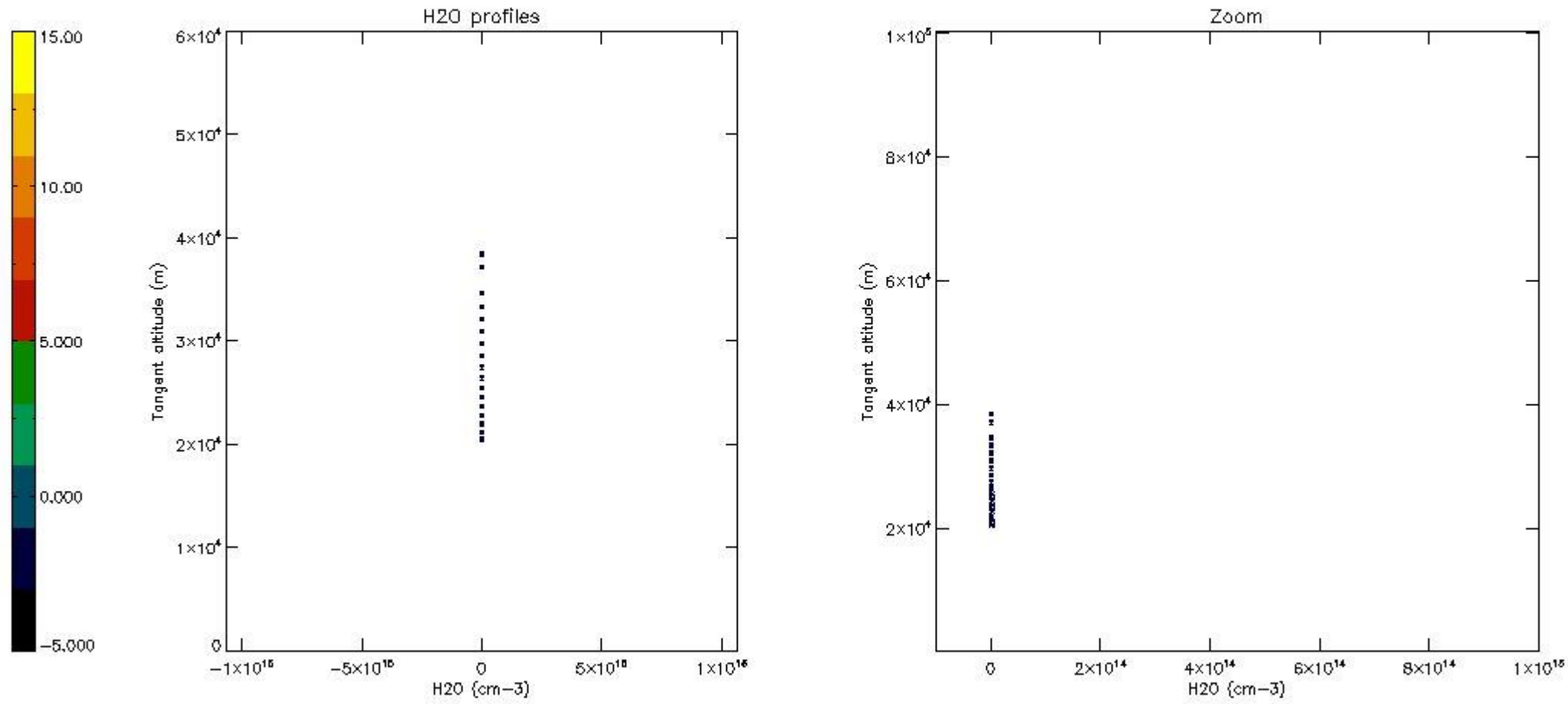
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

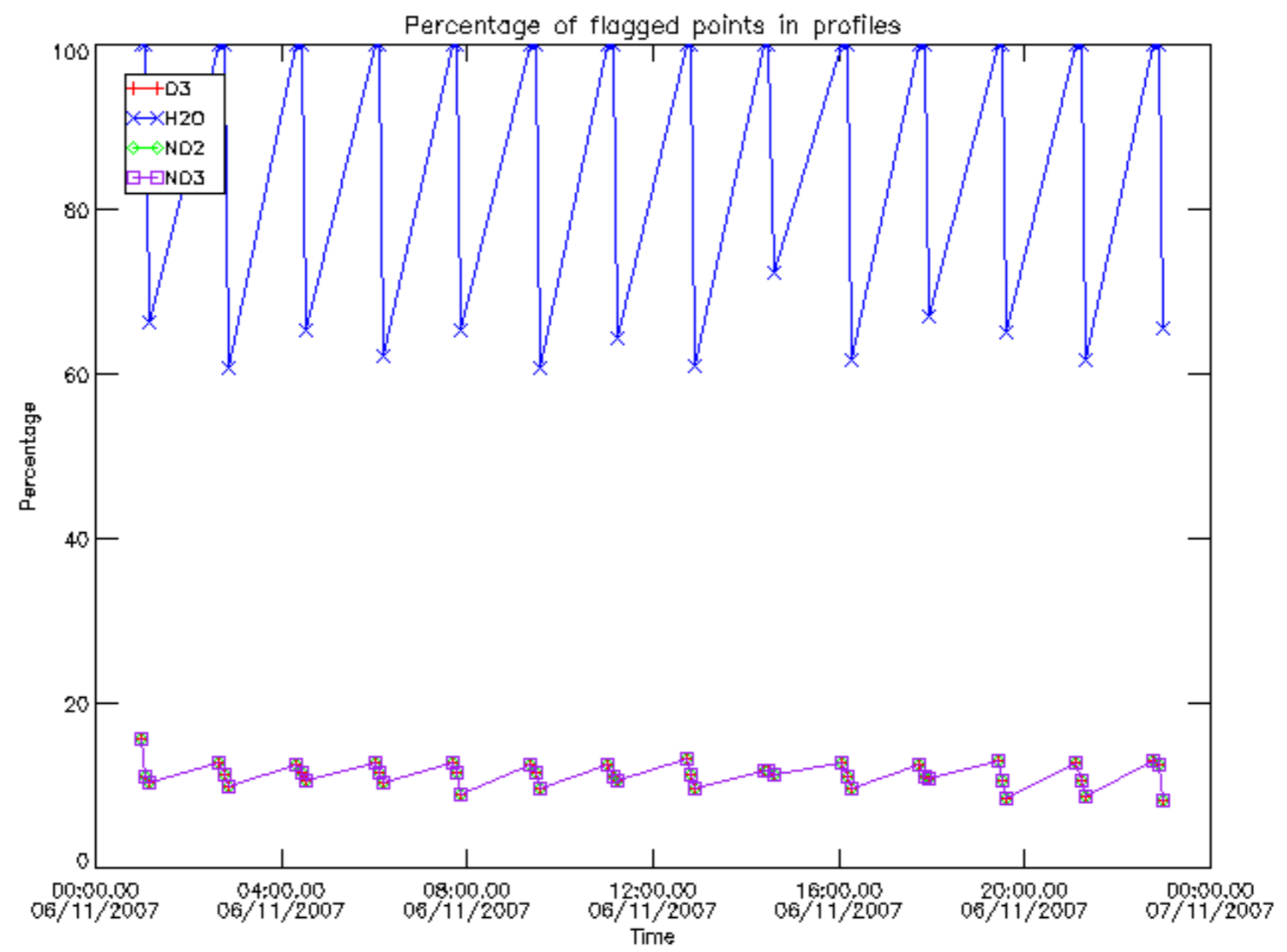
The colorbar represents the latitude.



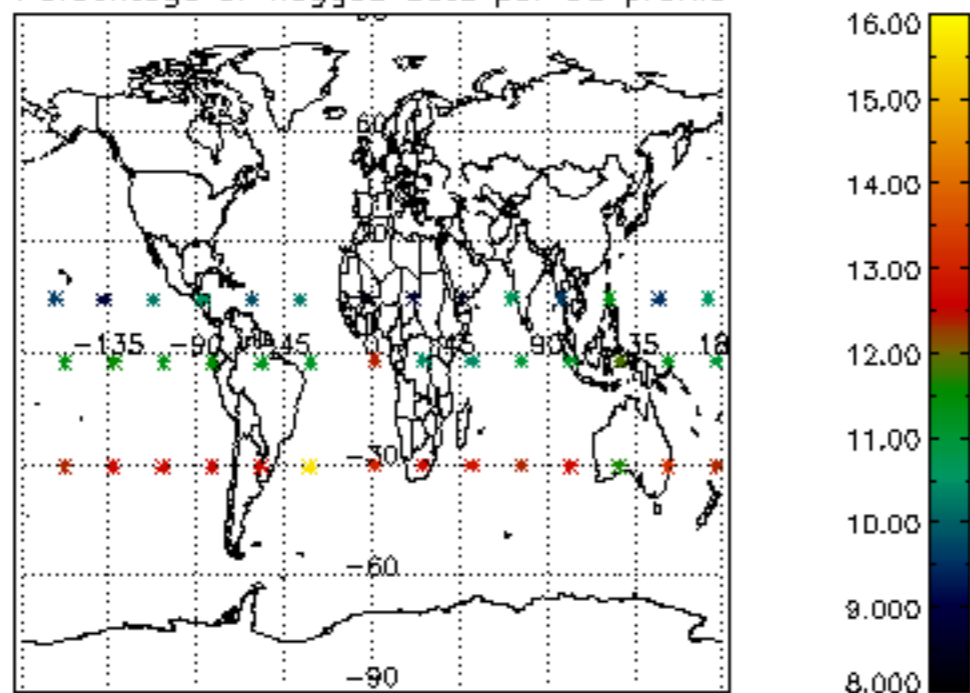
6. Auxiliary Data Files used for the production reported in section 2

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

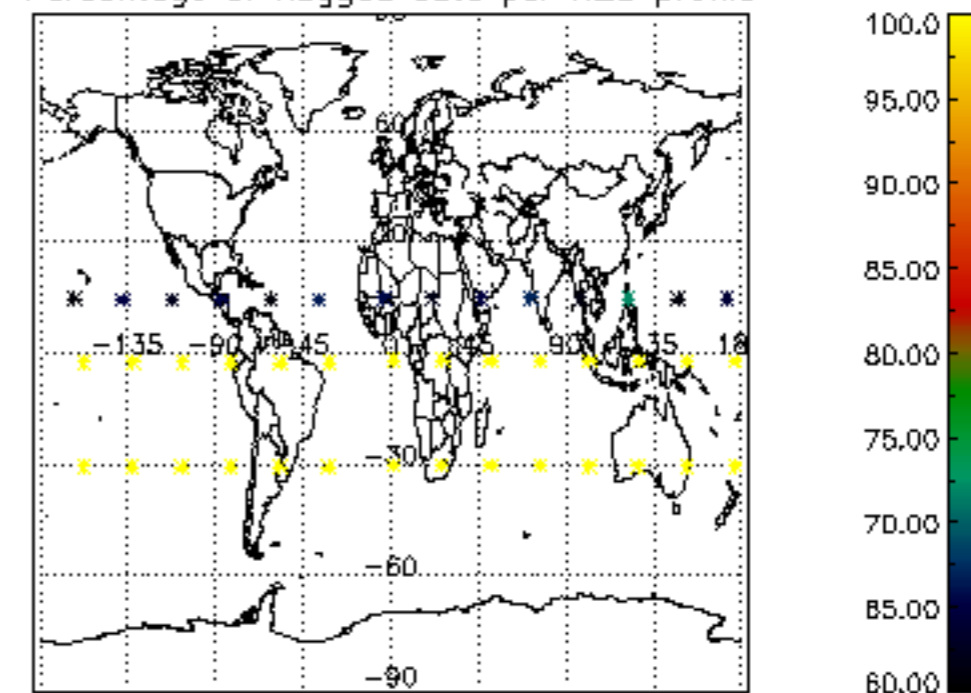
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	06-NOV-2007 00:01:55
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	06-NOV-2007 00:01:55
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	06-NOV-2007 00:01:55



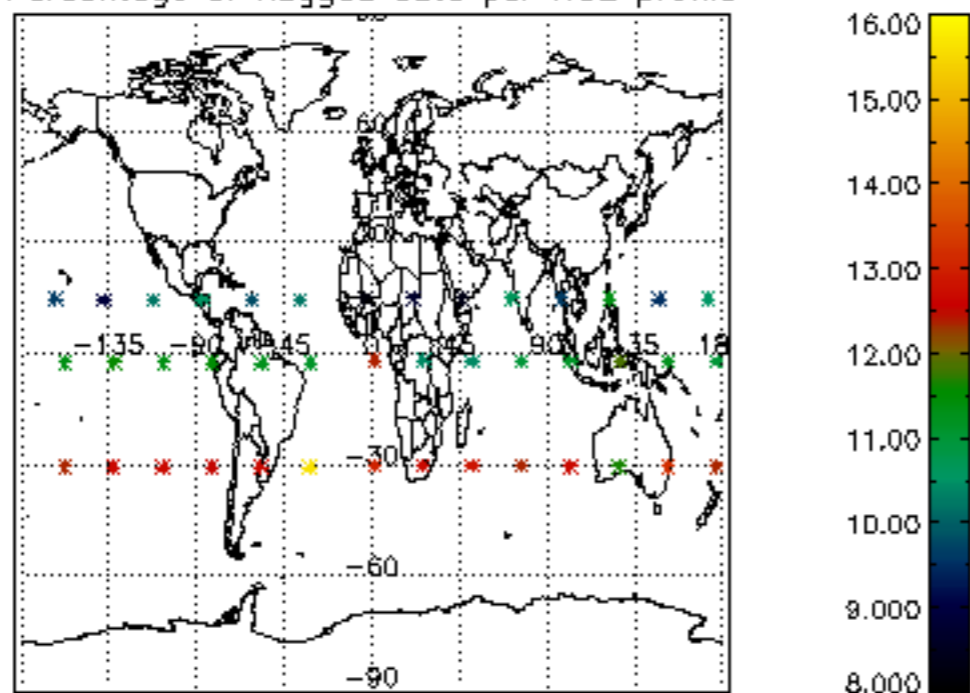
Percentage of flagged data per D3 profile



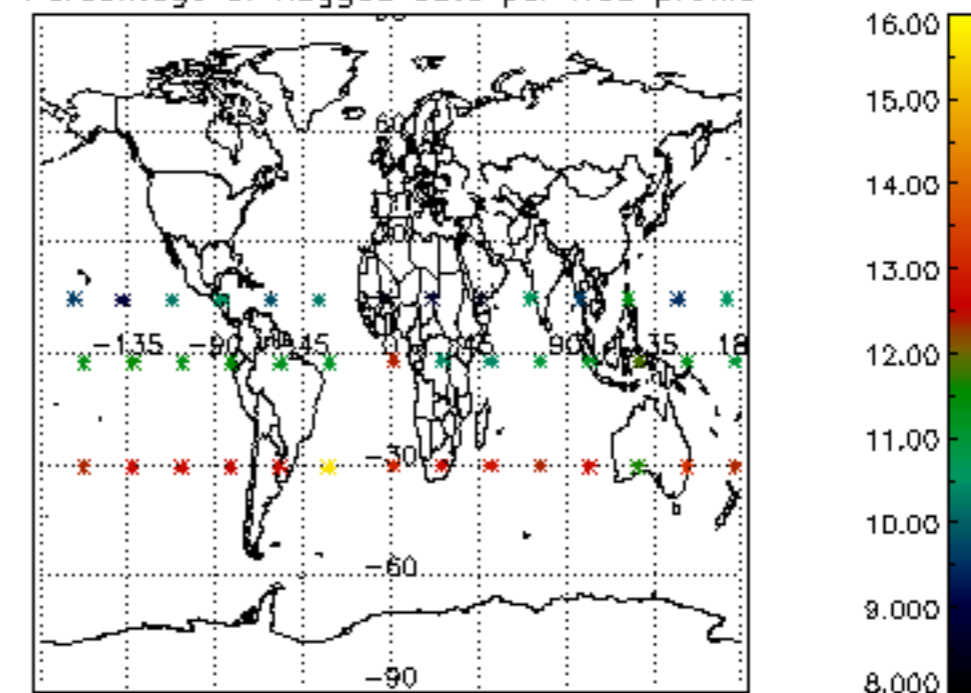
Percentage of flagged data per H2O profile

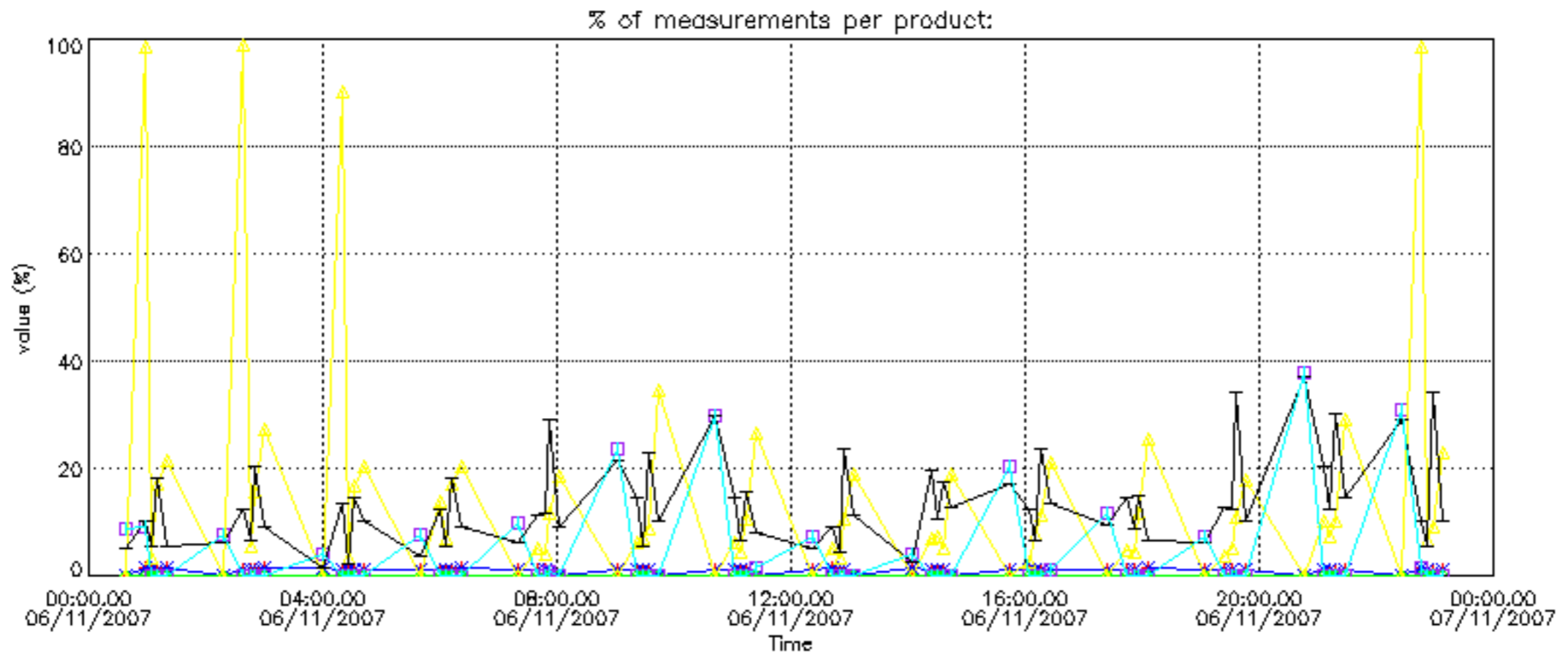


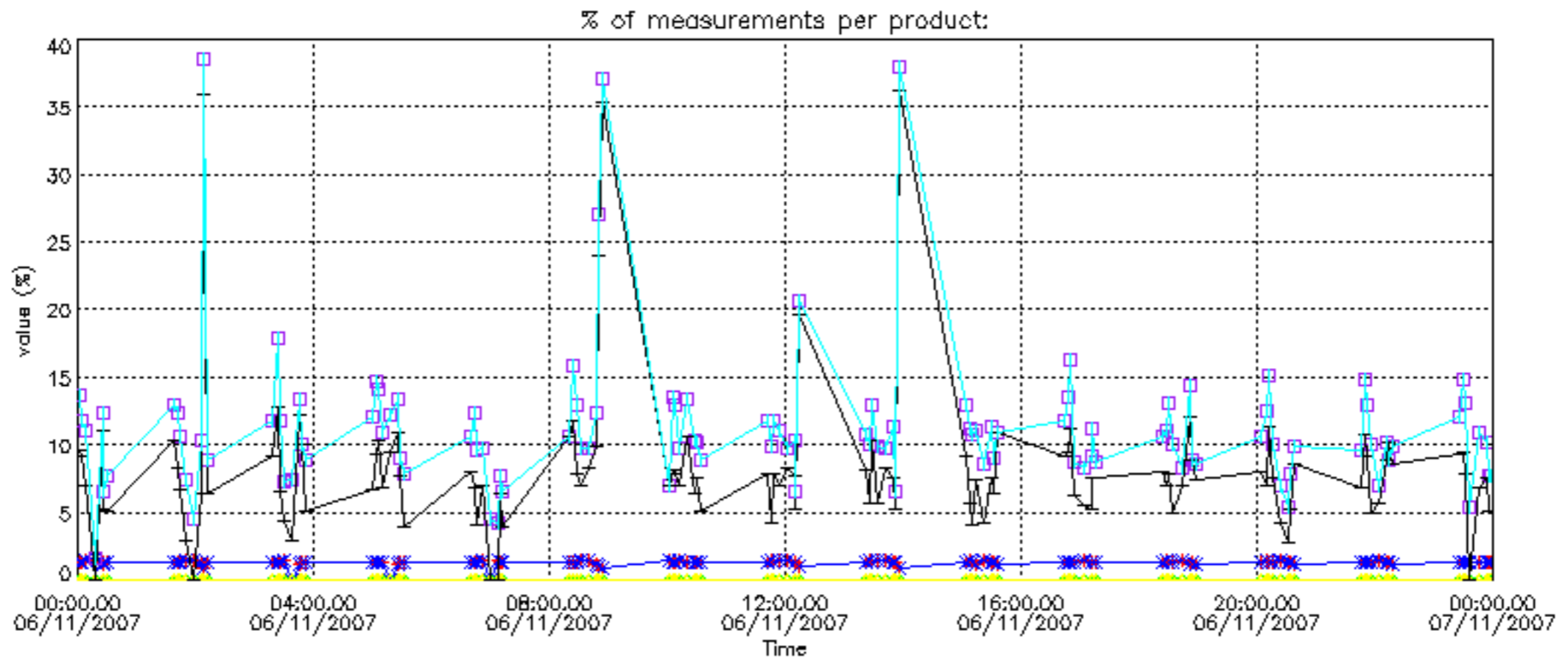
Percentage of flagged data per NO2 profile



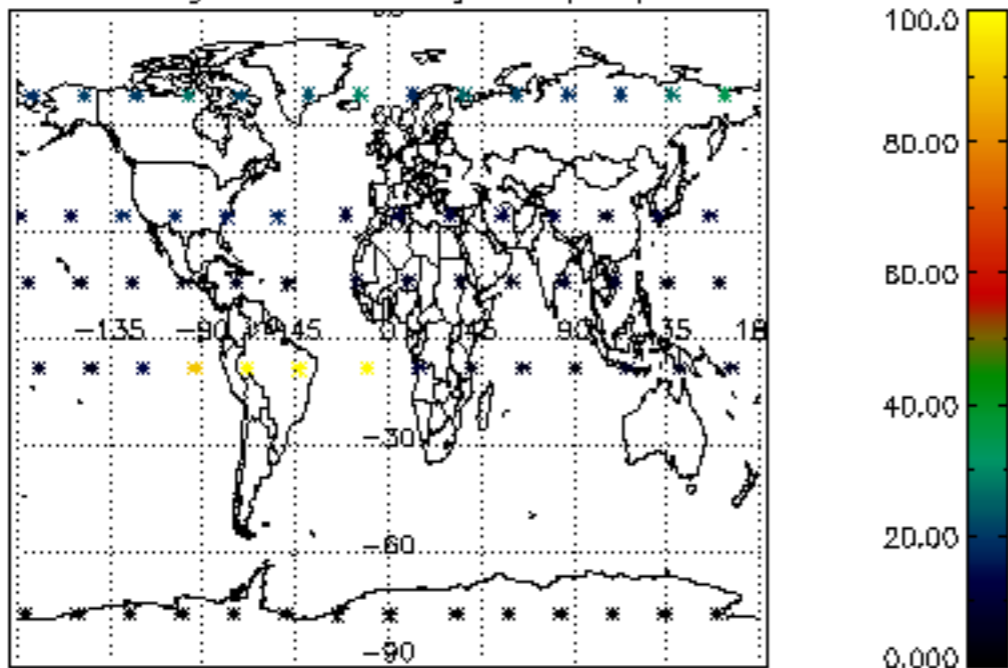
Percentage of flagged data per NO3 profile



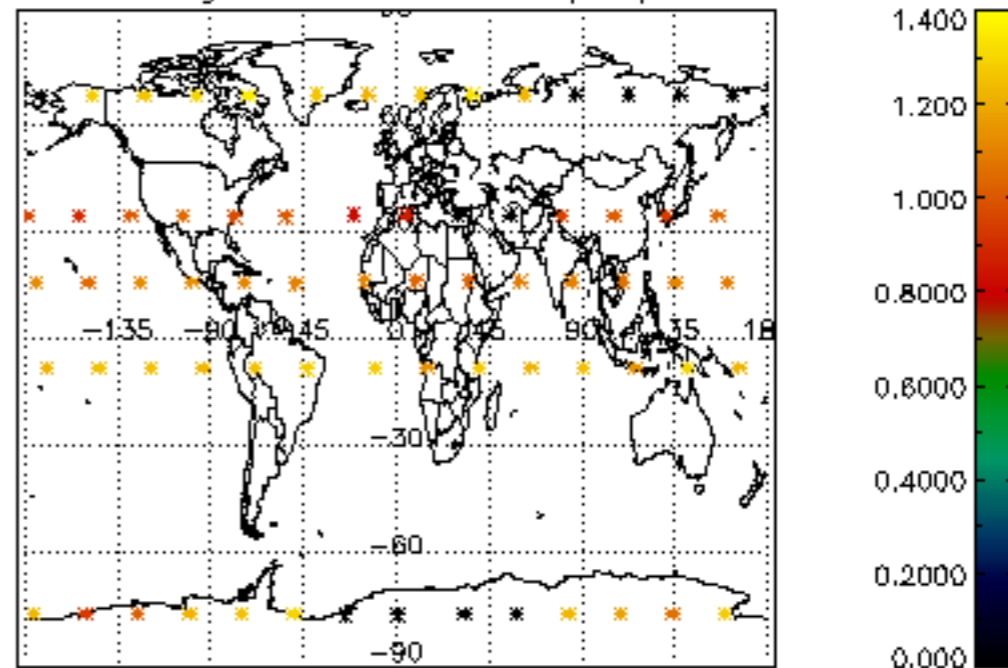




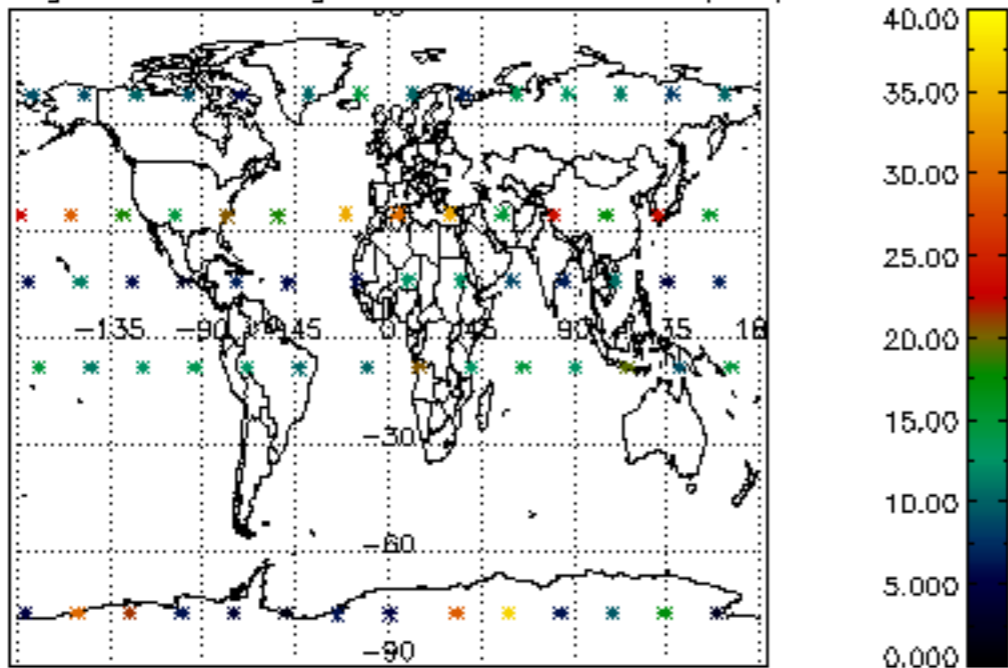
Percentage of cosmic ray hits per profile



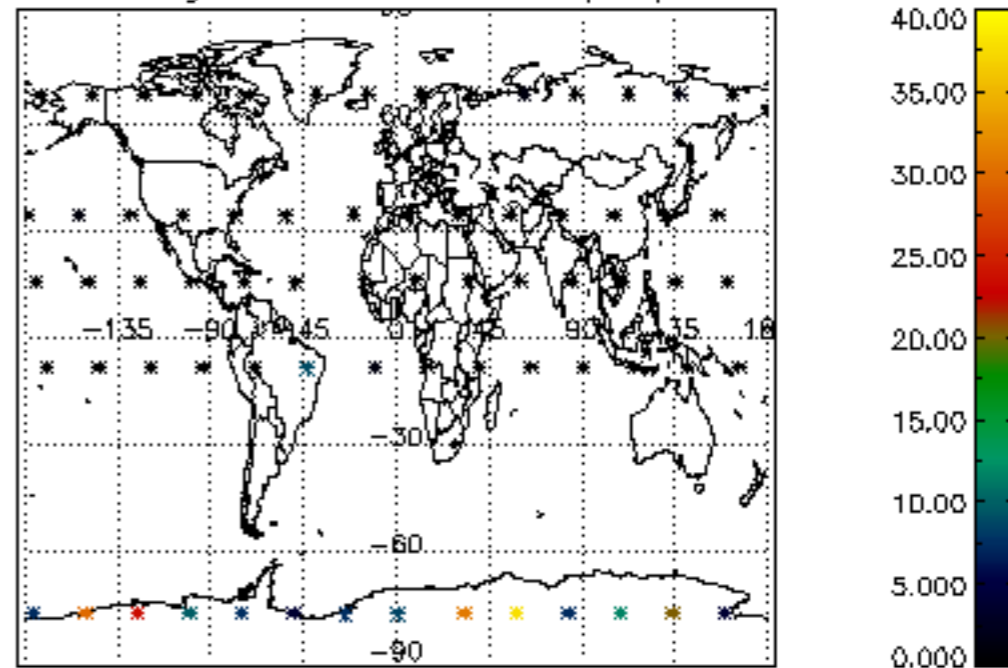
Percentage of datation errors per profile



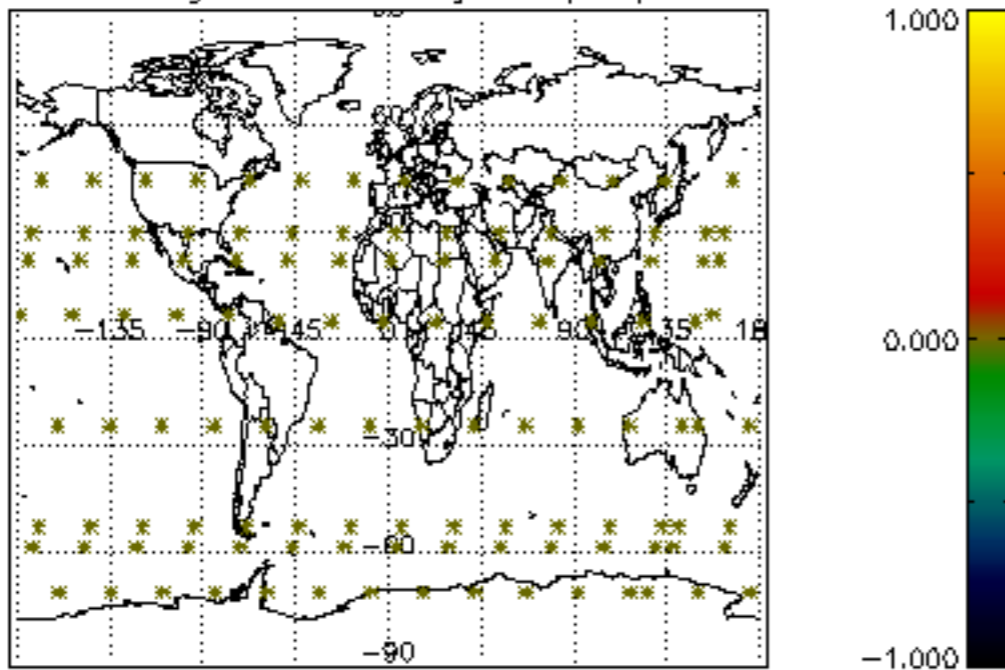
Percentage of star falling outside central band per profile



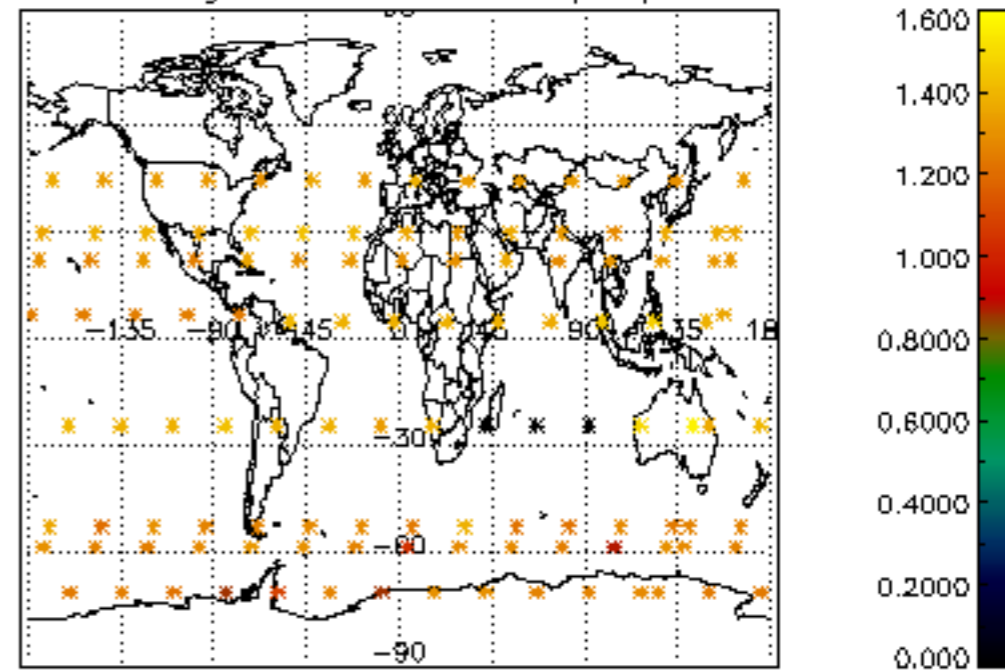
Percentage of saturation errors per profile



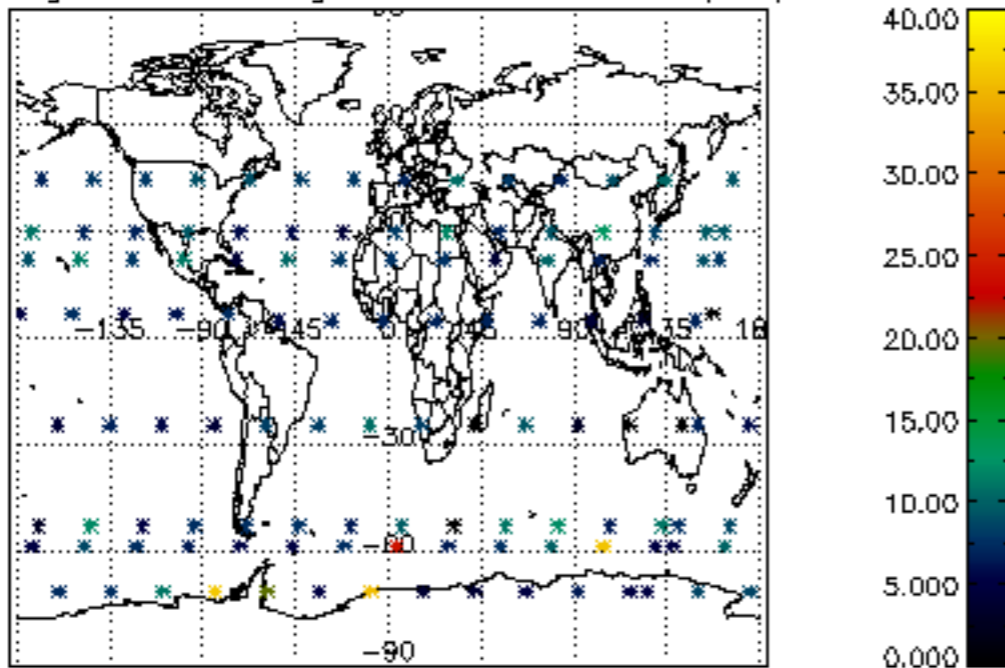
Percentage of cosmic ray hits per profile



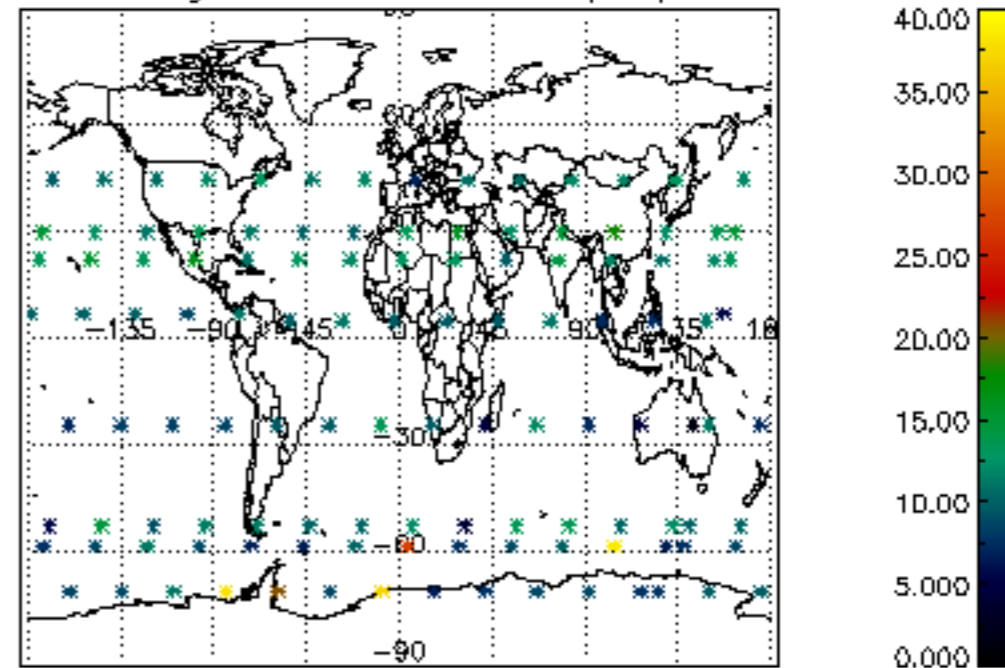
Percentage of datation errors per profile

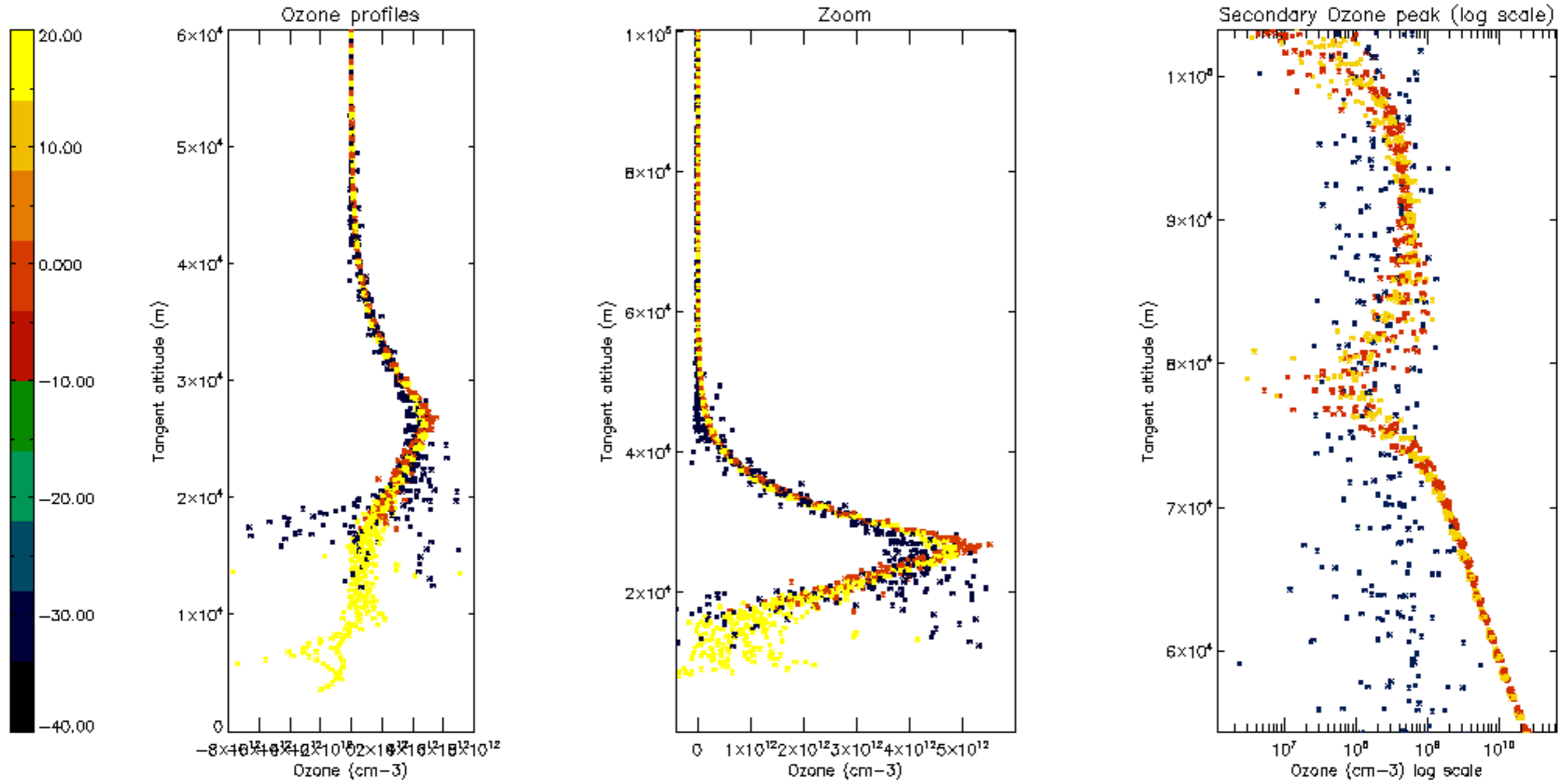


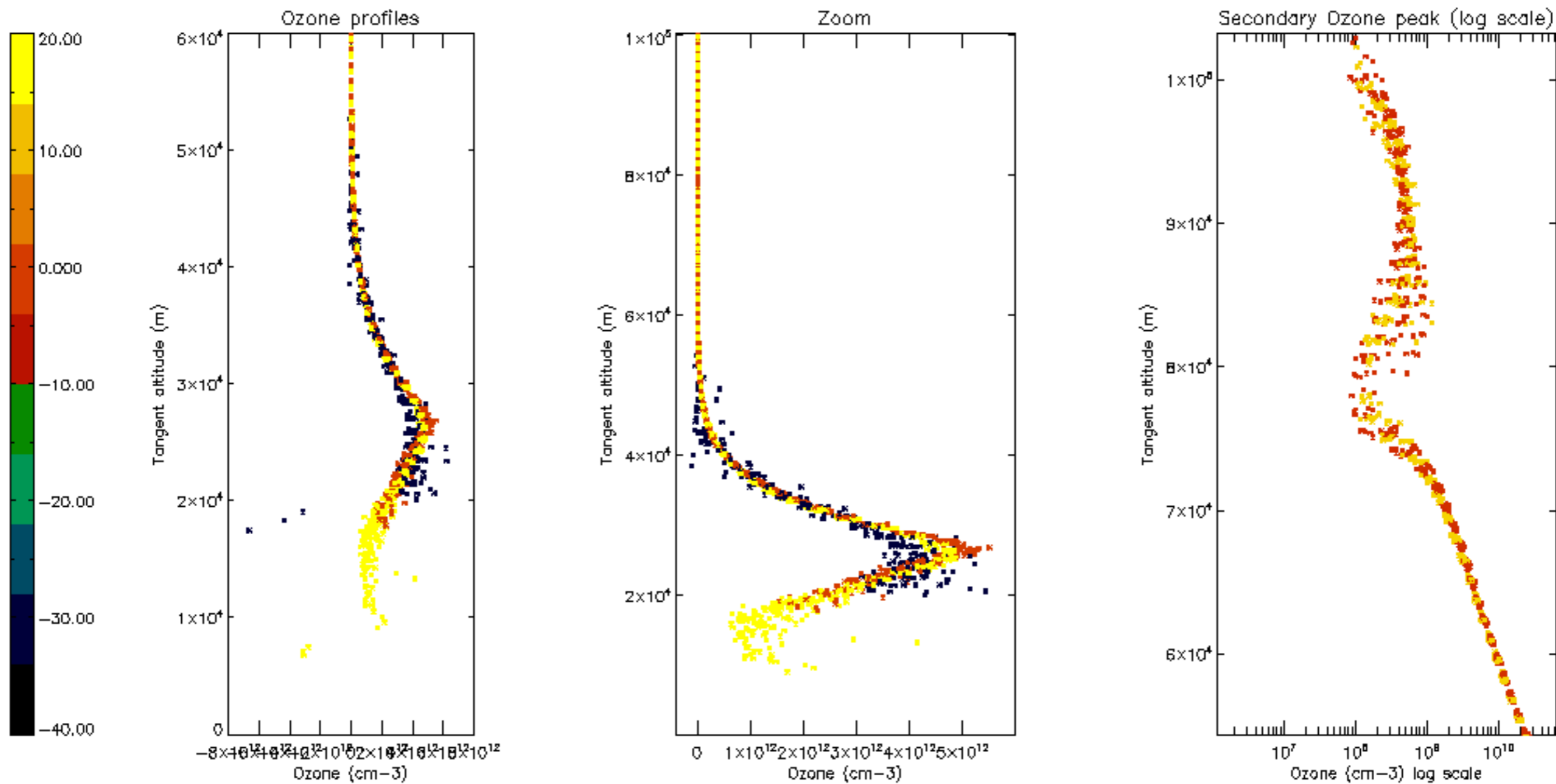
Percentage of star falling outside central band per profile

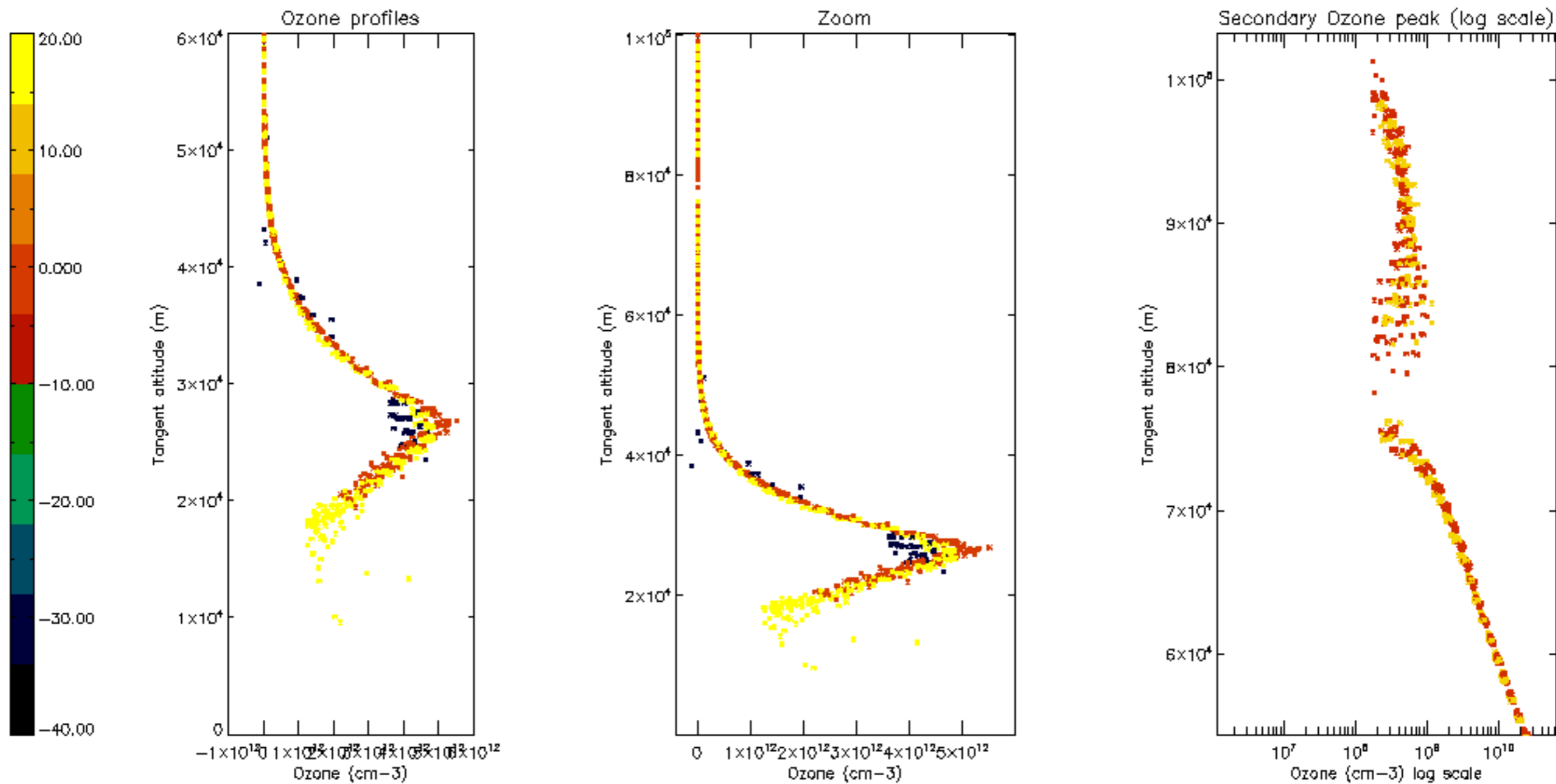


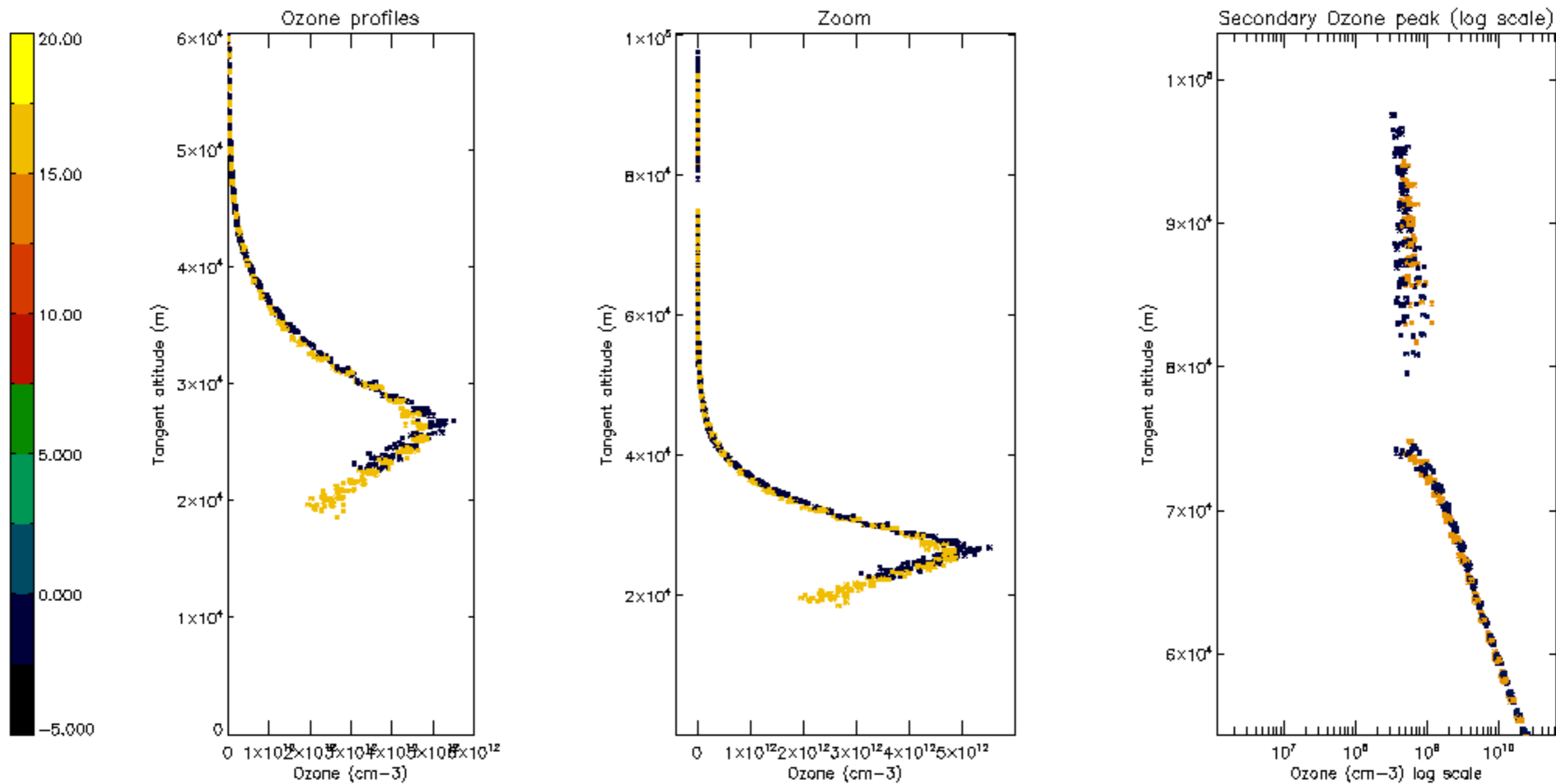
Percentage of saturation errors per profile

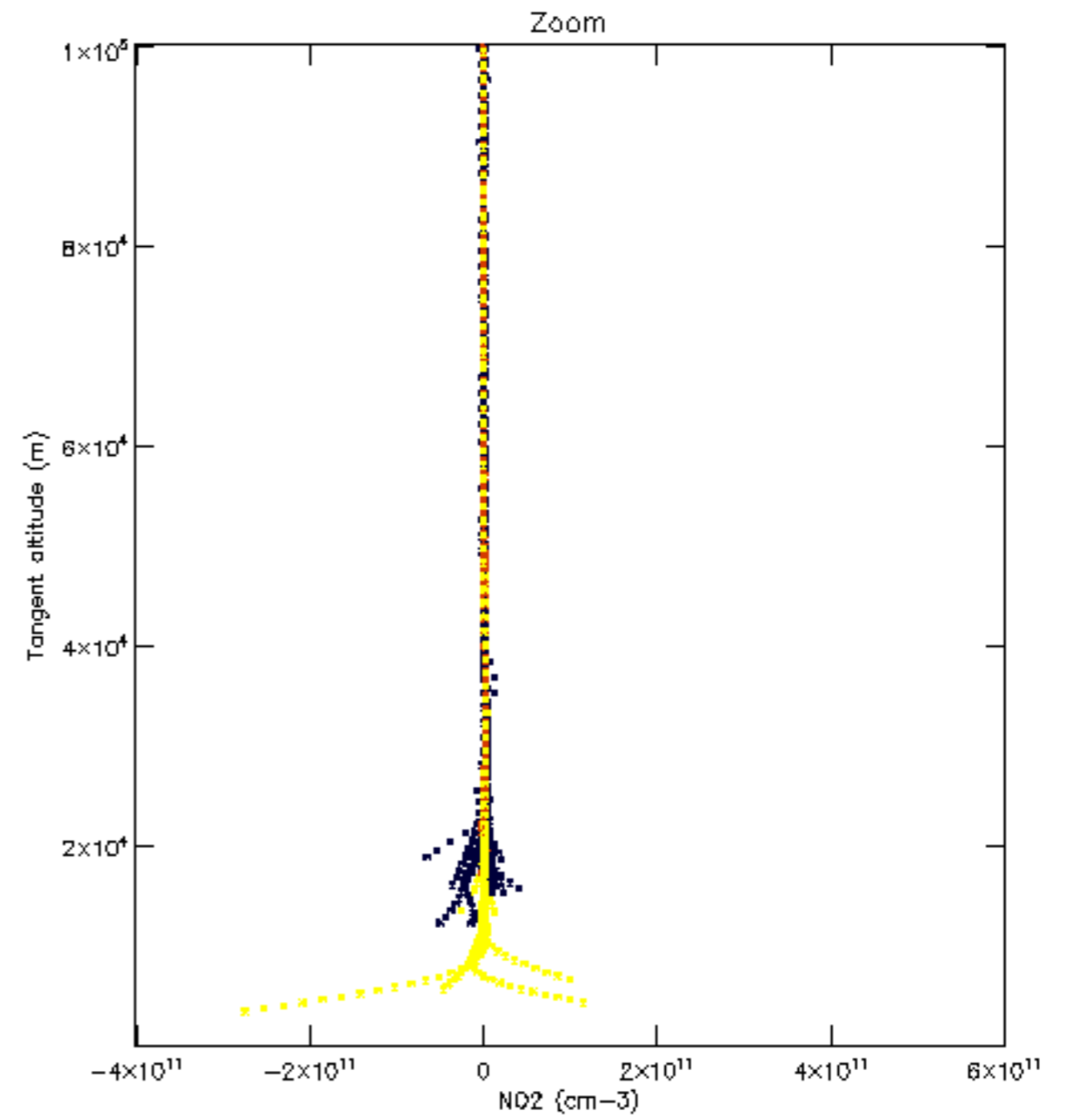
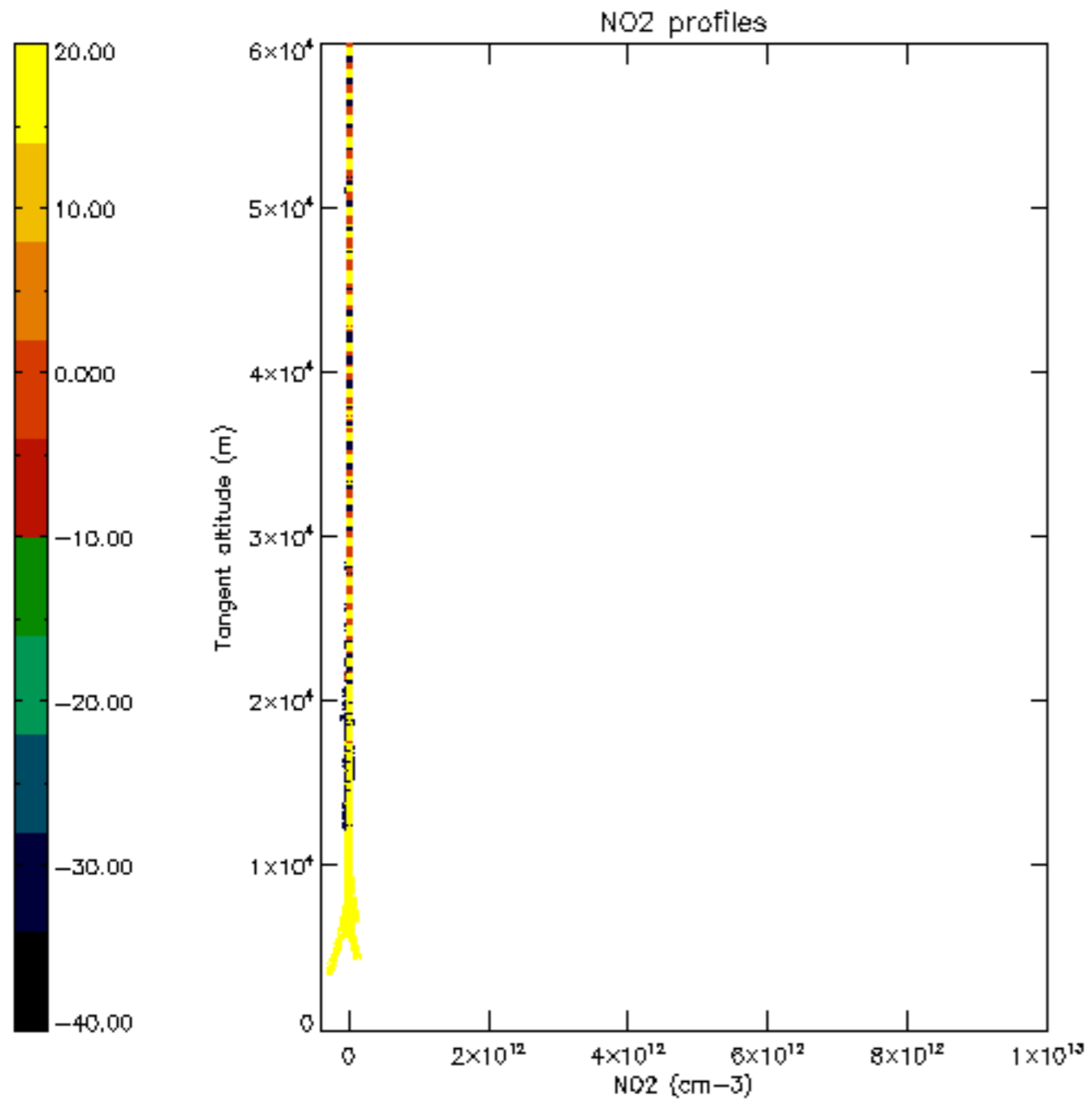


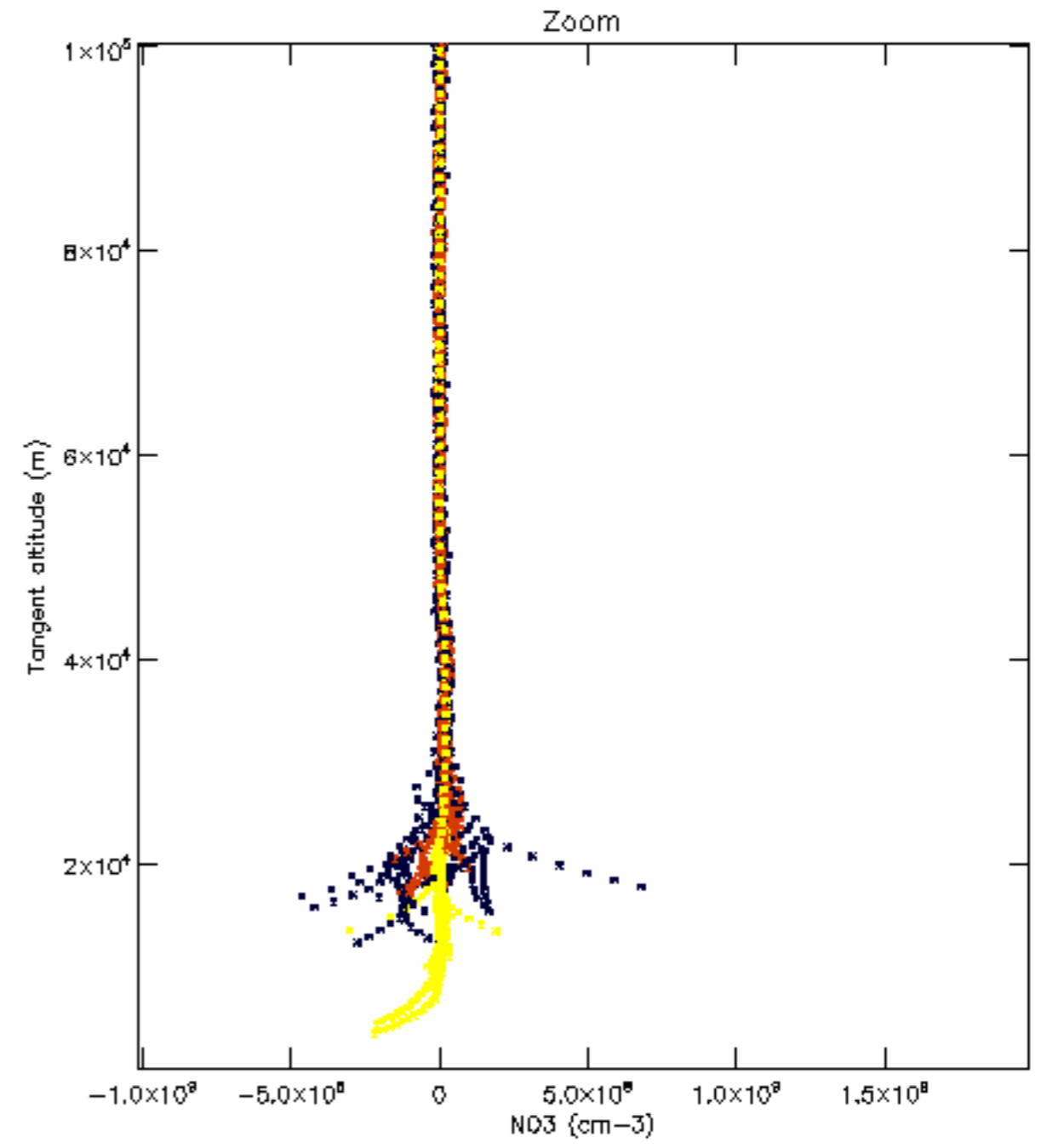
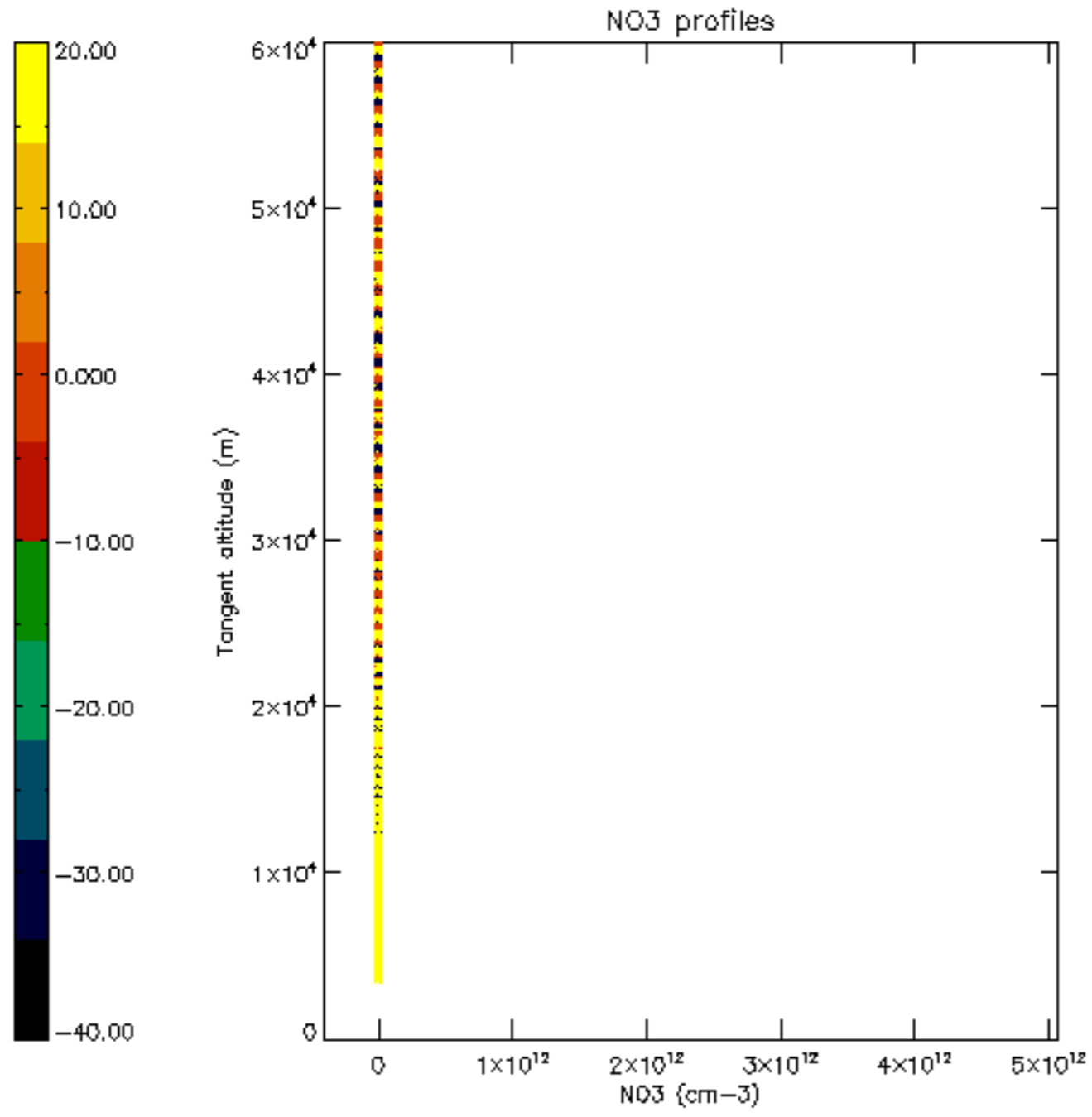


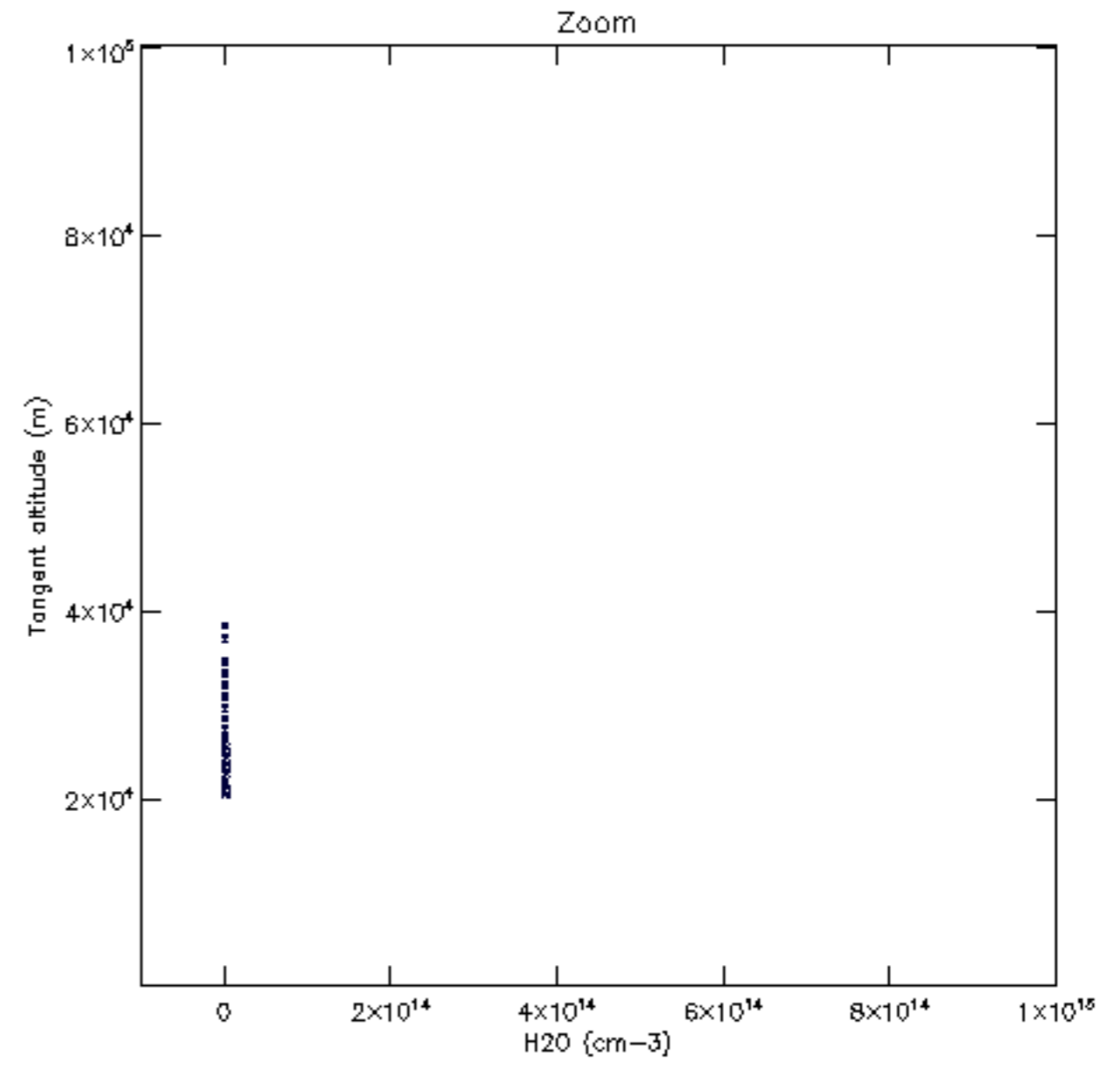
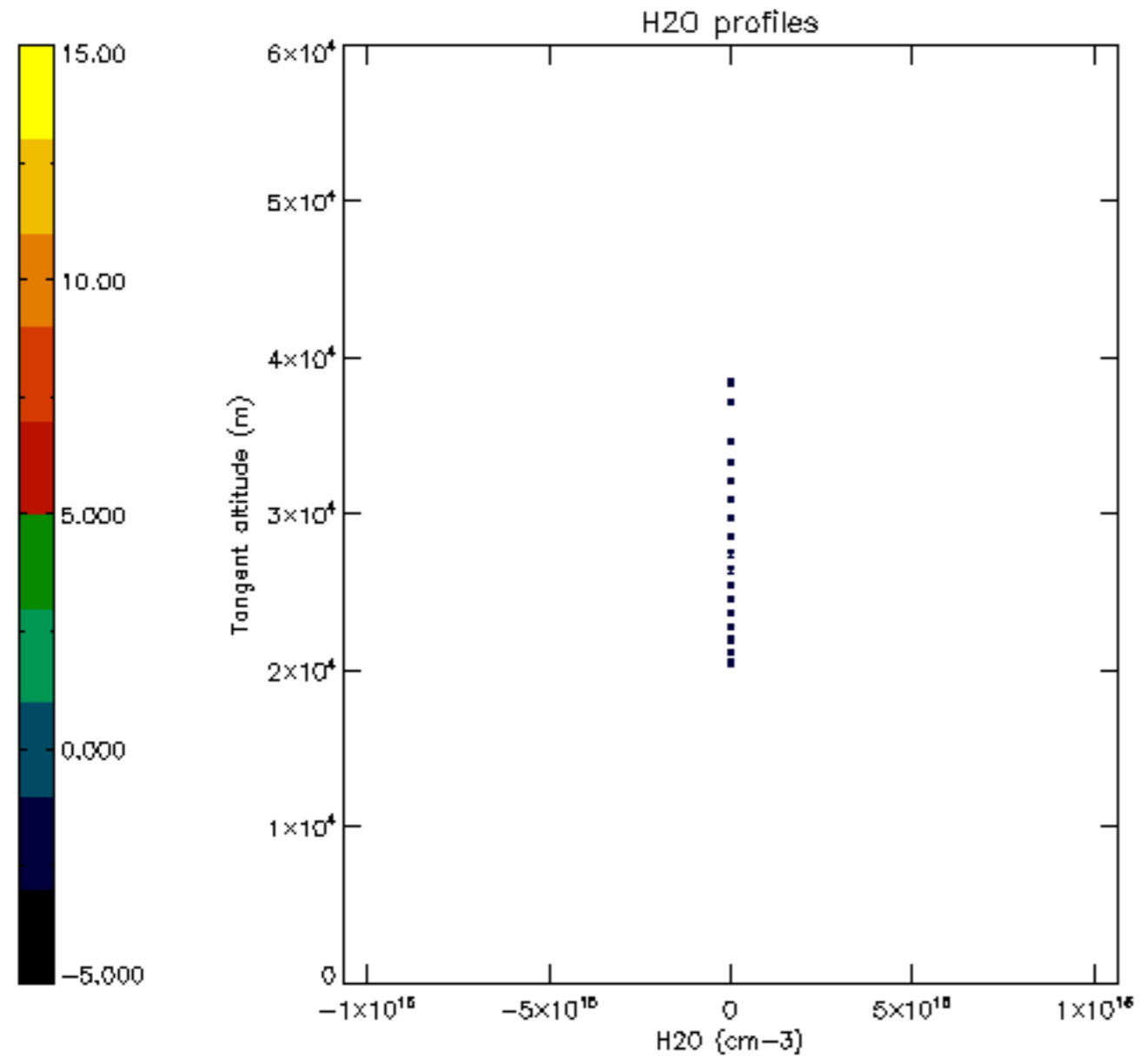


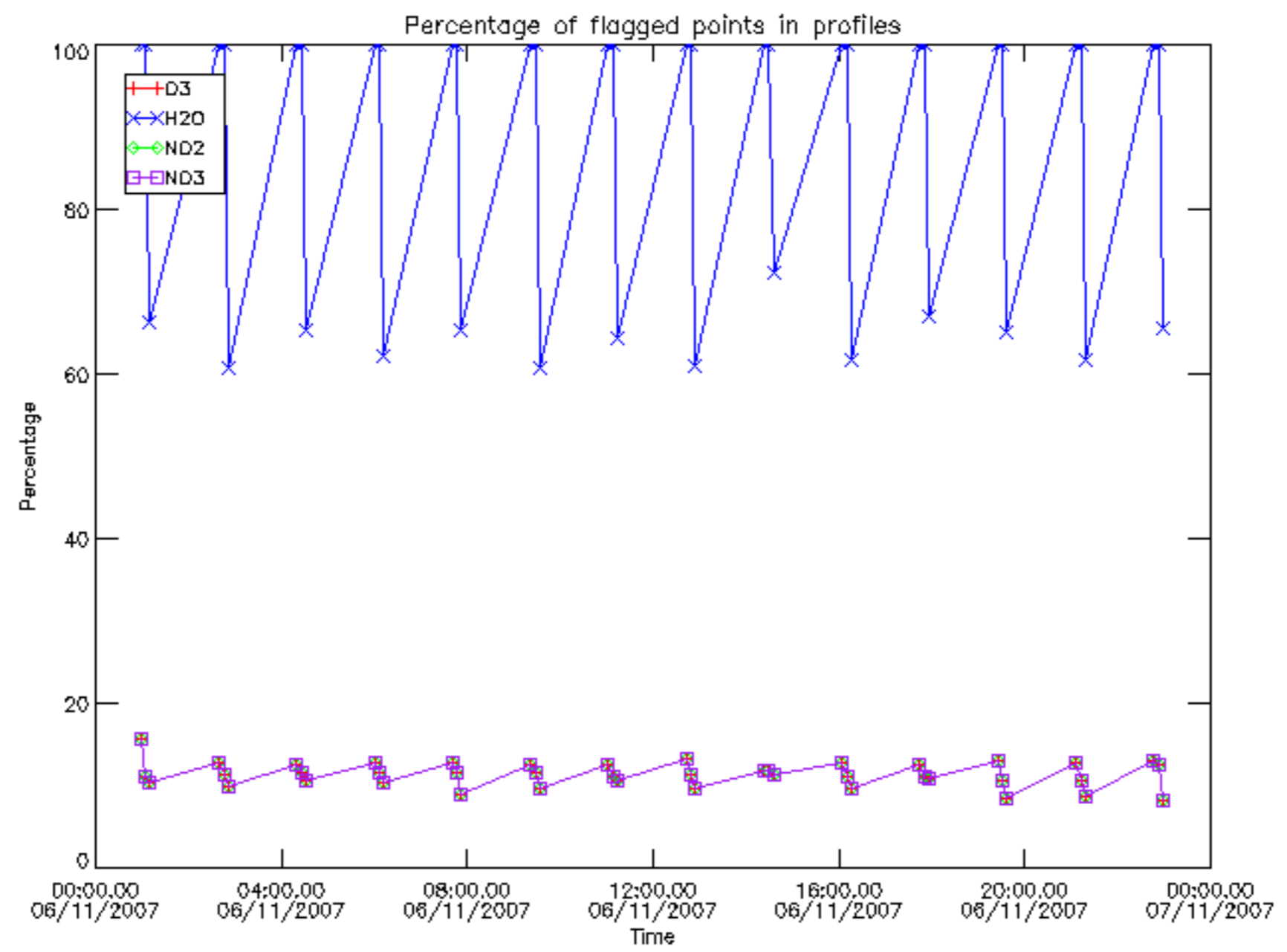




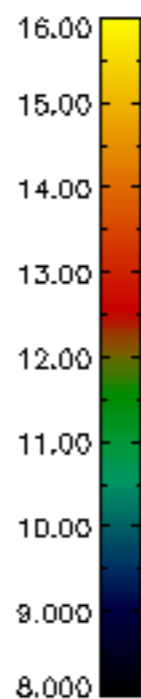
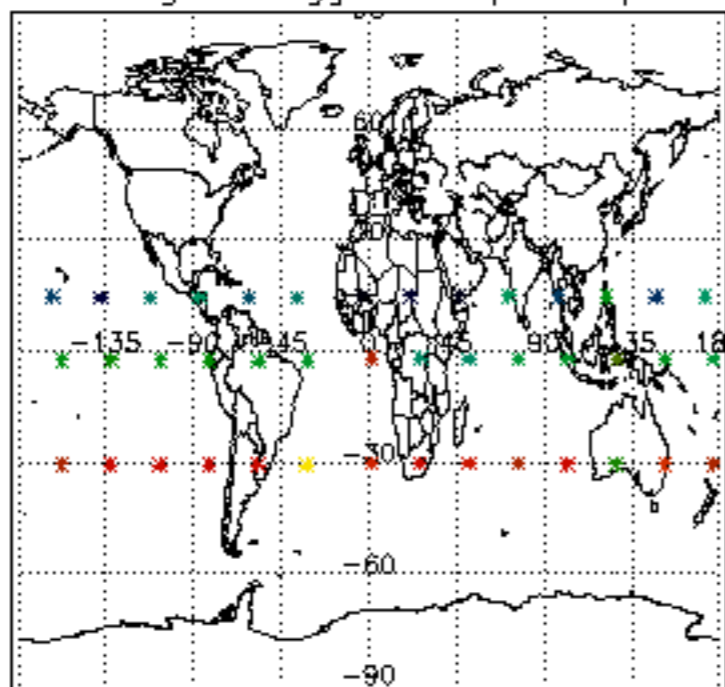




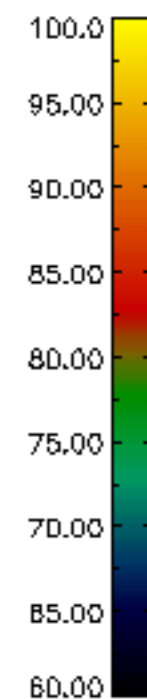
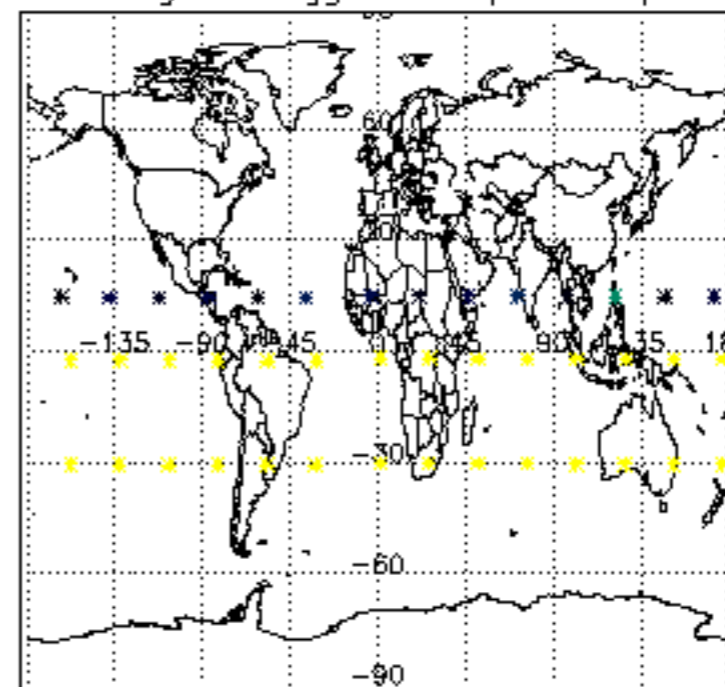




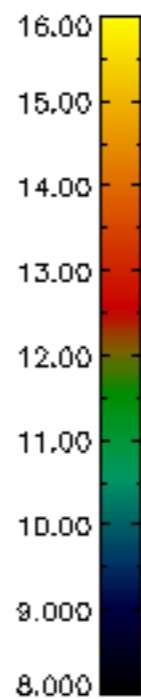
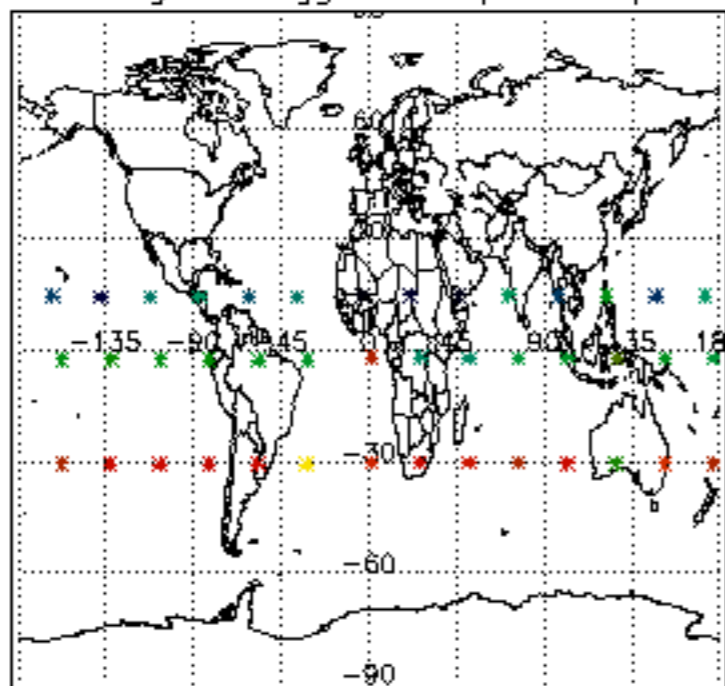
Percentage of flagged data per D3 profile



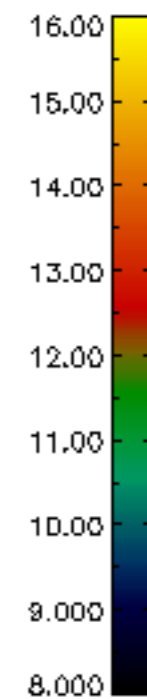
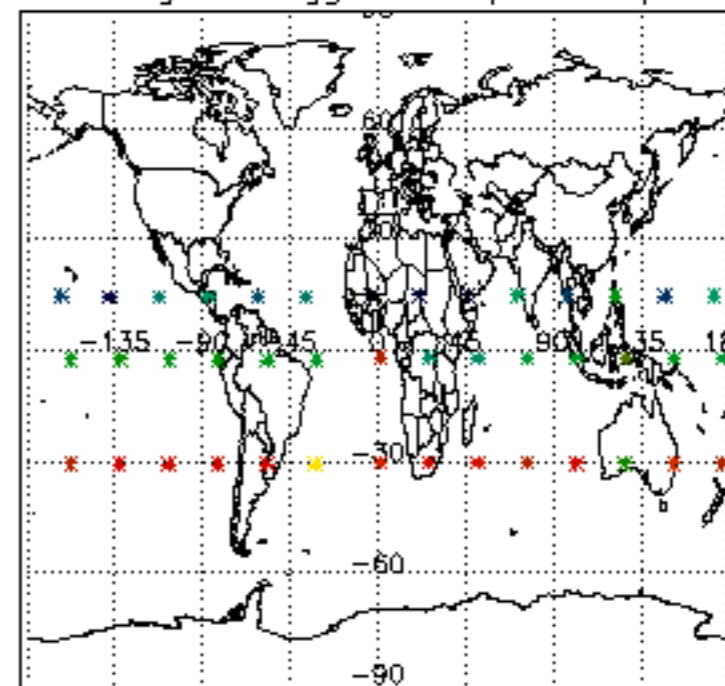
Percentage of flagged data per H2O profile

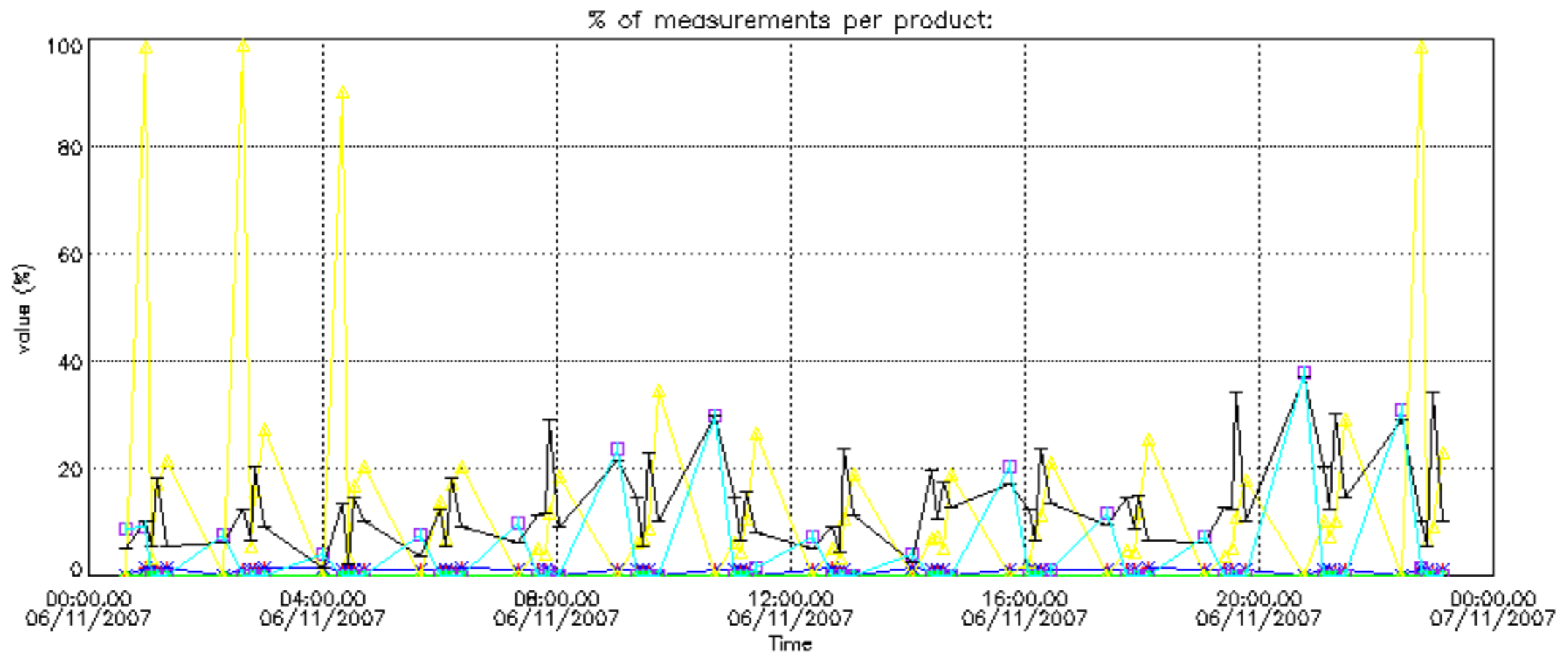


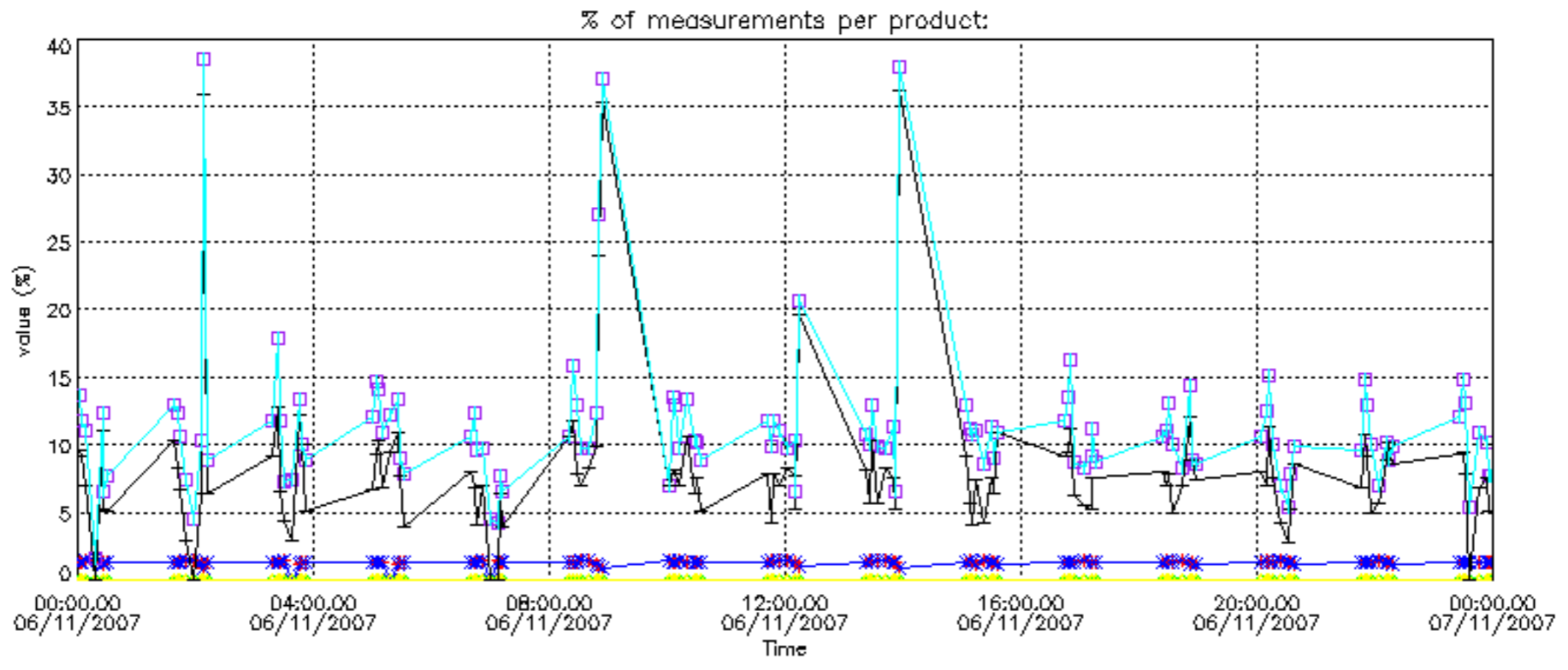
Percentage of flagged data per NO2 profile



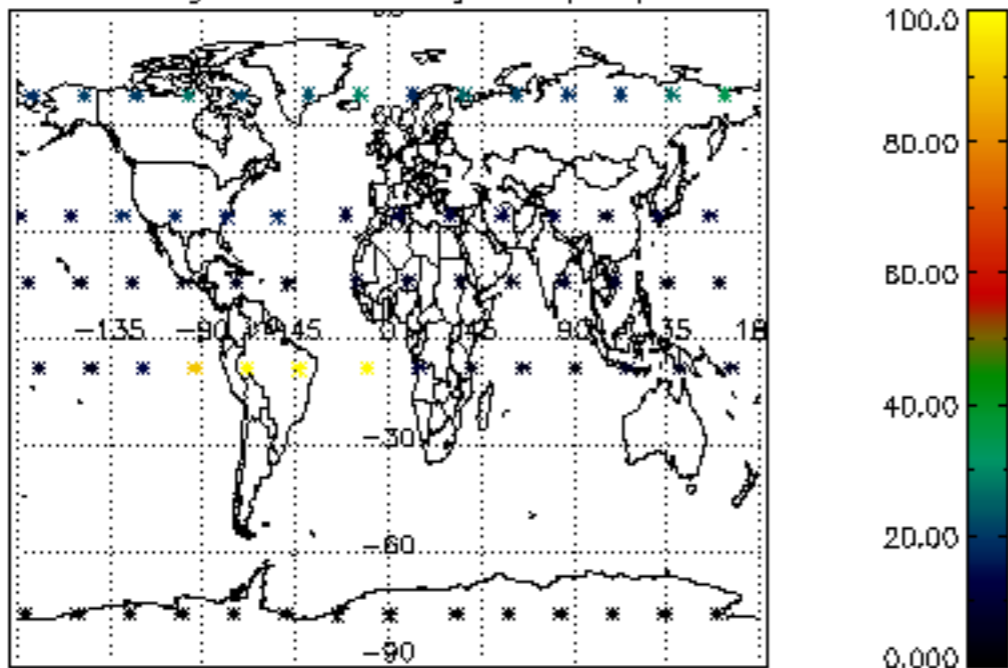
Percentage of flagged data per NO3 profile



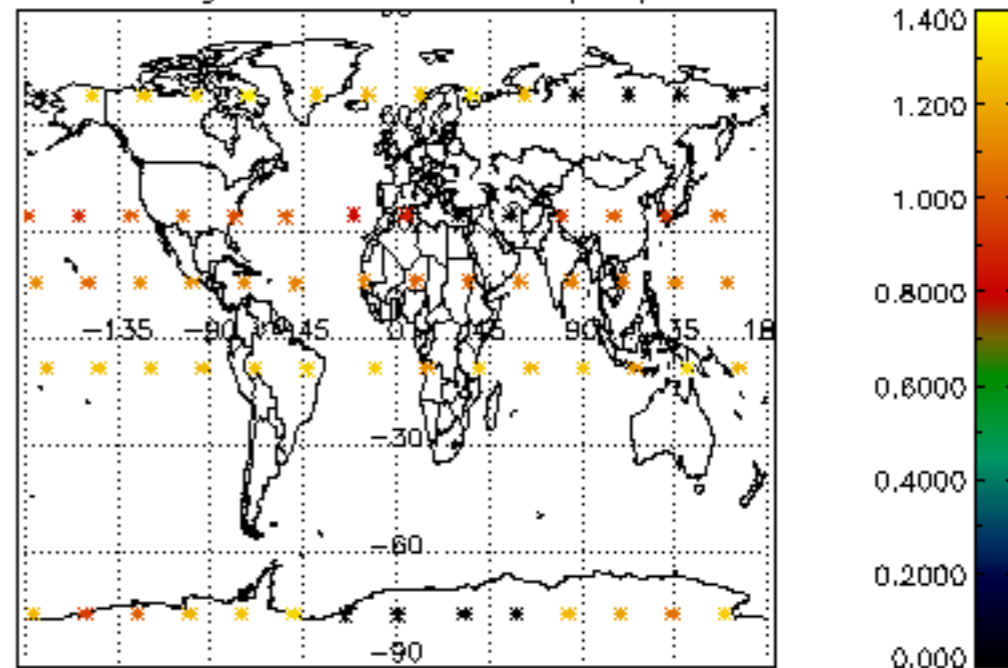




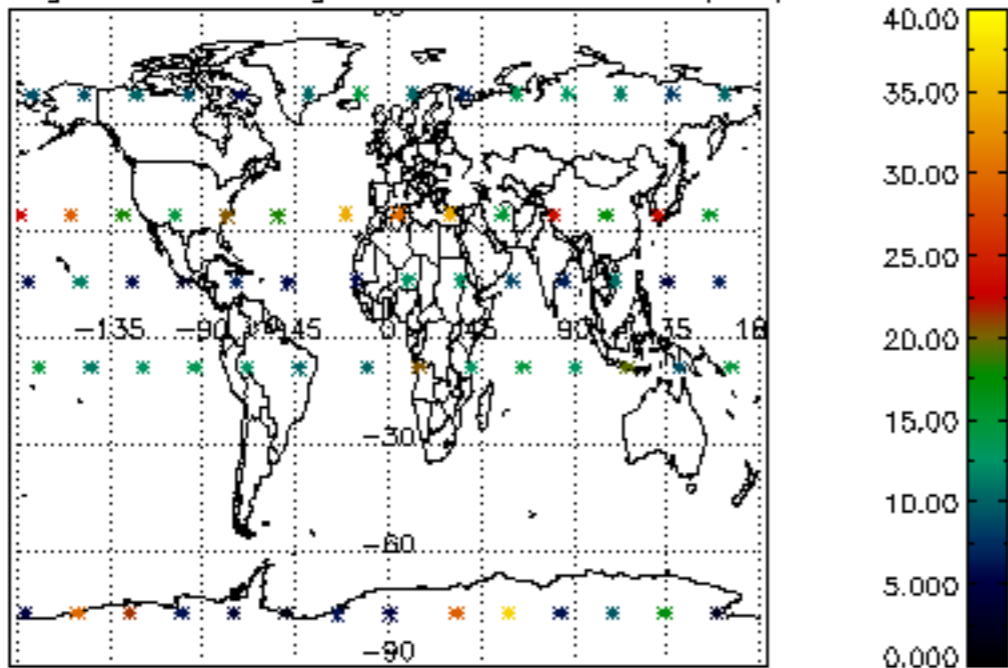
Percentage of cosmic ray hits per profile



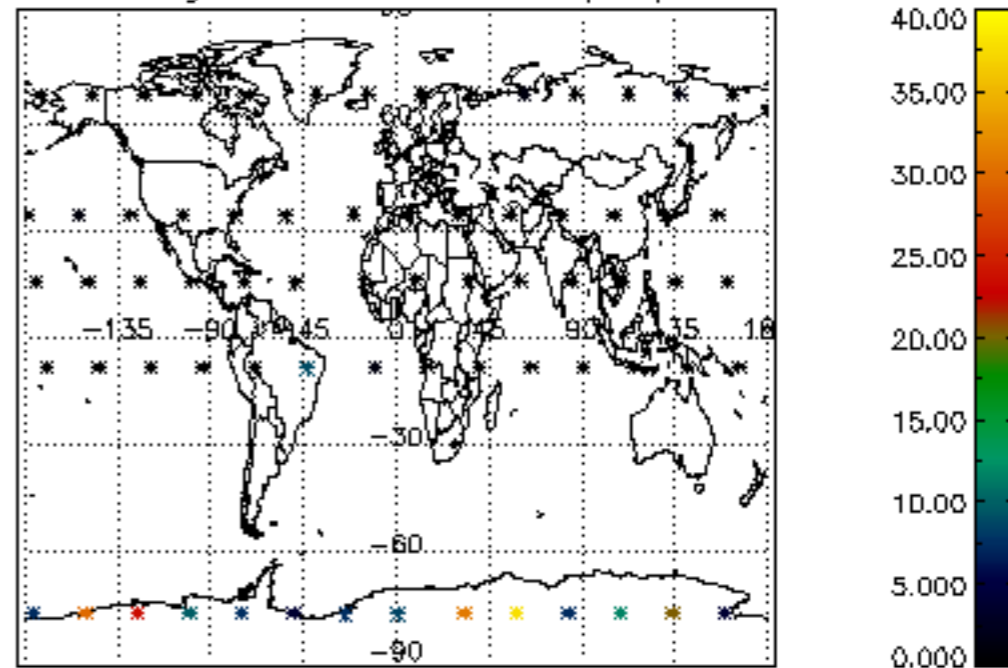
Percentage of datation errors per profile



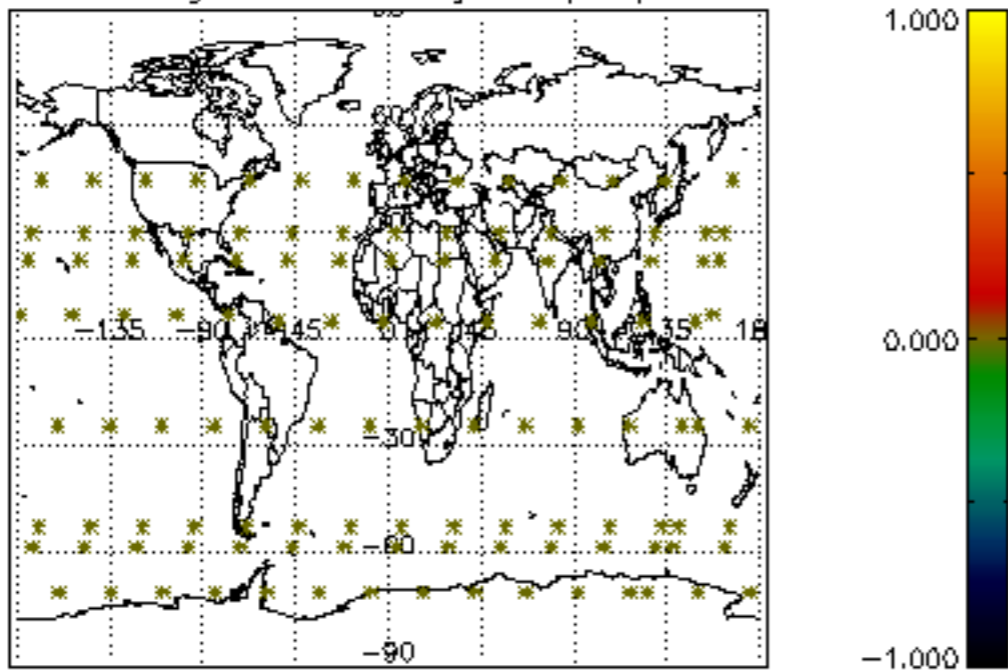
Percentage of star falling outside central band per profile



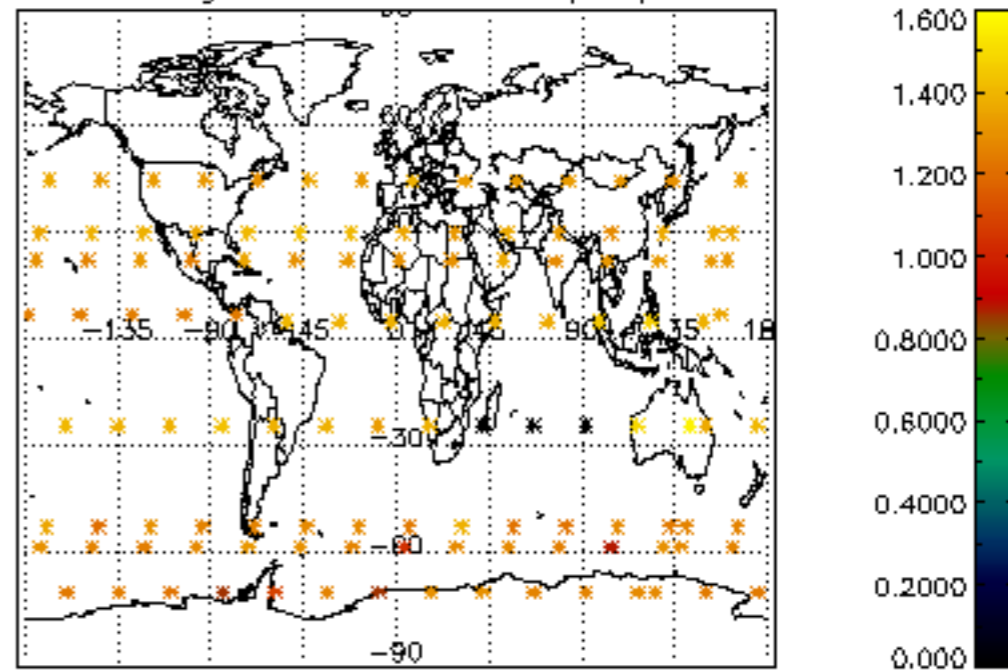
Percentage of saturation errors per profile



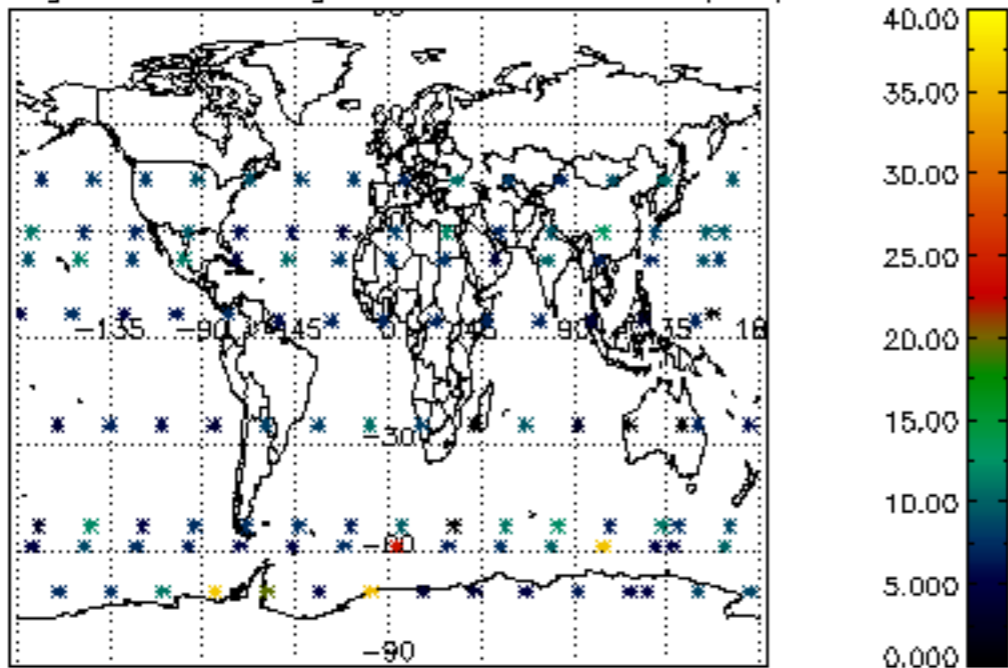
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

