

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	24APR2013 02:15:16
Data source version	GOMOS/6.01
Start time of products	22-07-2006 (22JUL2006 00:00:00)
Stop time of products	23-07-2006 (23JUL2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	239
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

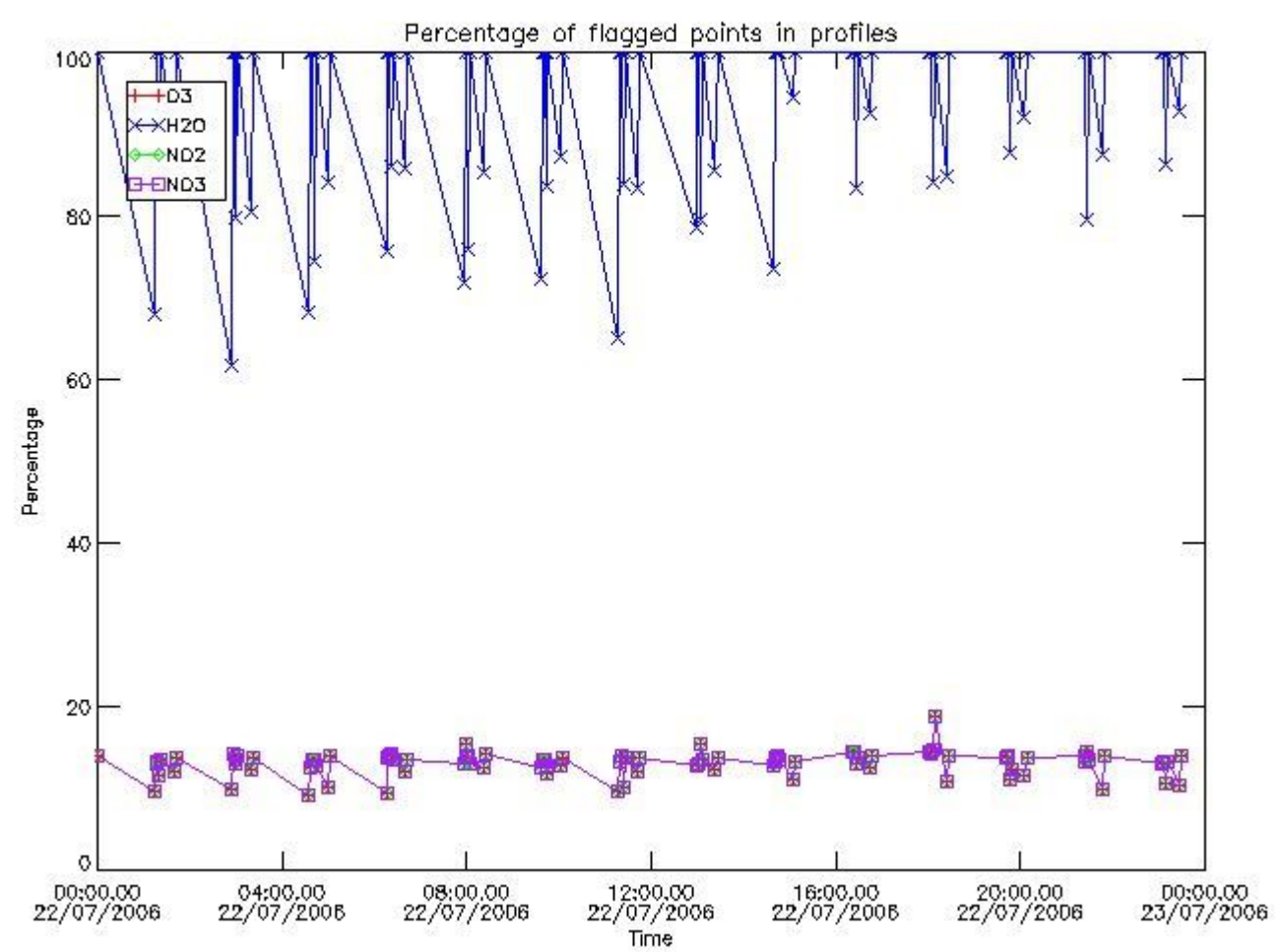
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060722_000108_000000372049_00360_22959_0169.N1	22-JUL-2006 00:01:08	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	22959	No
2	GOM_NL__2PRFIN20060722_000529_000000402049_00360_22959_0170.N1	22-JUL-2006 00:05:29	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	22959	No
3	GOM_NL__2PRFIN20060722_000907_000000402049_00360_22959_0171.N1	22-JUL-2006 00:09:07	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	22959	No
4	GOM_NL__2PRFIN20060722_001746_000000532049_00360_22959_0172.N1	22-JUL-2006 00:17:46	Bright	53.000	103	38Zet Sgr	2.6000	9700.0	106	22959	No
5	GOM_NL__2PRFIN20060722_002012_000000372049_00360_22959_0173.N1	22-JUL-2006 00:20:12	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	22959	No
6	GOM_NL__2PRFIN20060722_003026_000000362049_00360_22959_0174.N1	22-JUL-2006 00:30:26	Bright	36.000	168	17Zet Aql	2.9860	11000.	72	22959	No
7	GOM_NL__2PRFIN20060722_003730_000000402049_00360_22959_0175.N1	22-JUL-2006 00:37:30	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	22959	No
8	GOM_NL__2PRFIN20060722_004102_000000352049_00360_22959_0176.N1	22-JUL-2006 00:41:02	Bright	35.000	69	33Gam Dra	2.2310	3800.0	70	22959	No
9	GOM_NL__2PRFIN20060722_005202_000000342049_00360_22959_0177.N1	22-JUL-2006 00:52:02	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	22959	No
10	GOM_NL__2PRFIN20060722_010435_000000412049_00360_22959_0178.N1	22-JUL-2006 01:04:35	Bright	41.000	6	13Alp Aur	0.080000	3400.0	82	22959	No
11	GOM_NL__2PRFIN20060722_010827_000000392049_00360_22959_0179.N1	22-JUL-2006 01:08:27	Bright	39.000	114	3Iot Aur	2.6930	4600.0	78	22959	No
12	GOM_NL__2PRFIN20060722_011341_000000542049_00360_22959_0180.N1	22-JUL-2006 01:13:41	Dark	53.500	13	87Alp Tau	0.86700	3800.0	107	22959	No
13	GOM_NL__2PRFIN20060722_011548_000000392049_00360_22959_0181.N1	22-JUL-2006 01:15:48	Dark	38.500	27	24Gam Ori	1.6360	26000.	77	22959	No
14	GOM_NL__2PRFIN20060722_011744_000000392049_00360_22959_0182.N1	22-JUL-2006 01:17:44	Dark	39.000	30	46Eps Ori	1.6940	30000.	78	22959	No
15	GOM_NL__2PRFIN20060722_011959_000000442049_00360_22959_0183.N1	22-JUL-2006 01:19:59	Dark	44.000	7	19Bet Ori	0.10000	14000.	88	22959	No
16	GOM_NL__2PRFIN20060722_012220_000000382049_00360_22959_0184.N1	22-JUL-2006 01:22:20	Dark	37.500	101	11Alp Lep	2.5820	7000.0	75	22959	No
17	GOM_NL__2PRFIN20060722_013845_000000422049_00361_22960_0168.N1	22-JUL-2006 01:38:45	Dark	42.000	9	Alp Eri	0.45300	24000.	84	22960	No
18	GOM_NL__2PRFIN20060722_014144_000000372049_00361_22960_0169.N1	22-JUL-2006 01:41:44	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	22960	No
19	GOM_NL__2PRFIN20060722_014605_000000412049_00361_22960_0170.N1	22-JUL-2006 01:46:05	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	22960	No
20	GOM_NL__2PRFIN20060722_014943_000000462049_00361_22960_0171.N1	22-JUL-2006 01:49:43	Straylight	45.500	45	Alp Pav	1.9400	26000.	91	22960	No
21	GOM_NL__2PRFIN20060722_015822_000000432049_00361_22960_0172.N1	22-JUL-2006 01:58:22	Bright	42.500	103	38Zet Sgr	2.6000	9700.0	85	22960	No
22	GOM_NL__2PRFIN20060722_020048_000000382049_00361_22960_0173.N1	22-JUL-2006 02:00:48	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	22960	No
23	GOM_NL__2PRFIN20060722_021102_000000372049_00361_22960_0174.N1	22-JUL-2006 02:11:02	Bright	37.000	168	17Zet Aql	2.9860	11000.	74	22960	No
24	GOM_NL__2PRFIN20060722_021806_000000412049_00361_22960_0175.N1	22-JUL-2006 02:18:06	Bright	40.500	5	3Alp Lyr	0.033000	11000.	81	22960	No
25	GOM_NL__2PRFIN20060722_022138_000000352049_00361_22960_0176.N1	22-JUL-2006 02:21:38	Bright	35.000	69	33Gam Dra	2.2310	3800.0	70	22960	No
26	GOM_NL__2PRFIN20060722_023238_000000342049_00361_22960_0177.N1	22-JUL-2006 02:32:38	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	22960	No
27	GOM_NL__2PRFIN20060722_024511_000000392049_00361_22960_0178.N1	22-JUL-2006 02:45:11	Bright	38.500	6	13Alp Aur	0.080000	3400.0	77	22960	No
28	GOM_NL__2PRFIN20060722_024903_000000402049_00361_22960_0179.N1	22-JUL-2006 02:49:03	Bright	40.000	114	3Iot Aur	2.6930	4600.0	80	22960	No
29	GOM_NL__2PRFIN20060722_025417_000000522049_00361_22960_0180.N1	22-JUL-2006 02:54:17	Dark	51.500	13	87Alp Tau	0.86700	3800.0	103	22960	No
30	GOM_NL__2PRFIN20060722_025624_000000402049_00361_22960_0181.N1	22-JUL-2006 02:56:24	Dark	39.500	27	24Gam Ori	1.6360	26000.	79	22960	No
31	GOM_NL__2PRFIN20060722_025820_000000392049_00361_22960_0182.N1	22-JUL-2006 02:58:20	Dark	39.000	30	46Eps Ori	1.6940	30000.	78	22960	No
32	GOM_NL__2PRFIN20060722_030035_000000382049_00361_22960_0183.N1	22-JUL-2006 03:00:35	Dark	37.500	7	19Bet Ori	0.10000	14000.	75	22960	No
33	GOM_NL__2PRFIN20060722_030256_000000372049_00361_22960_0184.N1	22-JUL-2006 03:02:56	Dark	36.500	101	11Alp Lep	2.5820	7000.0	73	22960	No
34	GOM_NL__2PRFIN20060722_031921_000000422049_00362_22961_0168.N1	22-JUL-2006 03:19:21	Dark	41.500	9	Alp Eri	0.45300	24000.	83	22961	No
35	GOM_NL__2PRFIN20060722_032220_000000372049_00362_22961_0169.N1	22-JUL-2006 03:22:20	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	22961	No
36	GOM_NL__2PRFIN20060722_032642_000000422049_00362_22961_0170.N1	22-JUL-2006 03:26:42	Straylight	41.500	148	Alp Tuc	2.8780	4100.0	83	22961	No
37	GOM_NL__2PRFIN20060722_033020_000000412049_00362_22961_0171.N1	22-JUL-2006 03:30:20	Straylight	40.500	45	Alp Pav	1.9400	26000.	81	22961	No
38	GOM_NL__2PRFIN20060722_033858_000000422049_00362_22961_0172.N1	22-JUL-2006 03:38:58	Bright	41.500	103	38Zet Sgr	2.6000	9700.0	83	22961	No
39	GOM_NL__2PRFIN20060722_034124_000000382049_00362_22961_0173.N1	22-JUL-2006 03:41:24	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	22961	No
40	GOM_NL__2PRFIN20060722_035138_000000372049_00362_22961_0174.N1	22-JUL-2006 03:51:38	Bright	36.500	168	17Zet Aql	2.9860	11000.	73	22961	No
41	GOM_NL__2PRFIN20060722_035842_000000372049_00362_22961_0175.N1	22-JUL-2006 03:58:42	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	22961	No
42	GOM_NL__2PRFIN20060722_040214_000000362049_00362_22961_0176.N1	22-JUL-2006 04:02:14	Bright	36.000	69	33Gam Dra	2.2310	3800.0	72	22961	No

220	GOM_NL__2PRFIN20060722_215659_000000402049_00373_22972_0191.N1	22-JUL-2006 21:56:59	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	22972	No
221	GOM_NL__2PRFIN20060722_220535_000000432049_00373_22972_0192.N1	22-JUL-2006 22:05:35	Bright	43.000	103	38Zet Sgr	2.6000	9700.0	86	22972	No
222	GOM_NL__2PRFIN20060722_220801_000000372049_00373_22972_0193.N1	22-JUL-2006 22:08:01	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	22972	No
223	GOM_NL__2PRFIN20060722_221813_000000362049_00373_22972_0194.N1	22-JUL-2006 22:18:13	Bright	36.000	168	17Zet Aql	2.9860	11000.	72	22972	No
224	GOM_NL__2PRFIN20060722_222516_000000362049_00373_22972_0195.N1	22-JUL-2006 22:25:16	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	22972	No
225	GOM_NL__2PRFIN20060722_222850_000000382049_00373_22972_0196.N1	22-JUL-2006 22:28:50	Bright	37.500	69	33Gam Dra	2.2310	3800.0	75	22972	No
226	GOM_NL__2PRFIN20060722_223949_000000352049_00373_22972_0197.N1	22-JUL-2006 22:39:49	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	22972	No
227	GOM_NL__2PRFIN20060722_225222_000000532049_00373_22972_0198.N1	22-JUL-2006 22:52:22	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	22972	No
228	GOM_NL__2PRFIN20060722_225616_000000392049_00373_22972_0199.N1	22-JUL-2006 22:56:16	Bright	39.000	114	3lot Aur	2.6930	4600.0	78	22972	No
229	GOM_NL__2PRFIN20060722_230338_000000402049_00373_22972_0200.N1	22-JUL-2006 23:03:38	Dark	39.500	27	24Gam Ori	1.6360	26000.	79	22972	No
230	GOM_NL__2PRFIN20060722_230534_000000392049_00373_22972_0201.N1	22-JUL-2006 23:05:34	Dark	38.500	30	46Eps Ori	1.6940	30000.	77	22972	No
231	GOM_NL__2PRFIN20060722_230750_000000482049_00373_22972_0202.N1	22-JUL-2006 23:07:50	Dark	48.000	7	19Bet Ori	0.10000	14000.	96	22972	No
232	GOM_NL__2PRFIN20060722_231010_000000392049_00373_22972_0203.N1	22-JUL-2006 23:10:10	Dark	38.500	101	11Alp Lep	2.5820	7000.0	77	22972	No
233	GOM_NL__2PRFIN20060722_232640_000000502049_00374_22973_0188.N1	22-JUL-2006 23:26:40	Dark	49.500	9	Alp Eri	0.45300	24000.	99	22973	No
234	GOM_NL__2PRFIN20060722_232935_000000372049_00374_22973_0189.N1	22-JUL-2006 23:29:35	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	22973	No
235	GOM_NL__2PRFIN20060722_233359_000000412049_00374_22973_0190.N1	22-JUL-2006 23:33:59	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	22973	No
236	GOM_NL__2PRFIN20060722_233735_000000402049_00374_22973_0191.N1	22-JUL-2006 23:37:35	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	22973	No
237	GOM_NL__2PRFIN20060722_234612_000000472049_00374_22973_0192.N1	22-JUL-2006 23:46:12	Bright	46.500	103	38Zet Sgr	2.6000	9700.0	93	22973	No
238	GOM_NL__2PRFIN20060722_234837_000000382049_00374_22973_0193.N1	22-JUL-2006 23:48:37	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	22973	No
239	GOM_NL__2PRFIN20060722_235848_000000372049_00374_22973_0194.N1	22-JUL-2006 23:58:48	Bright	37.000	168	17Zet Aql	2.9860	11000.	74	22973	No

3. Quality information per product

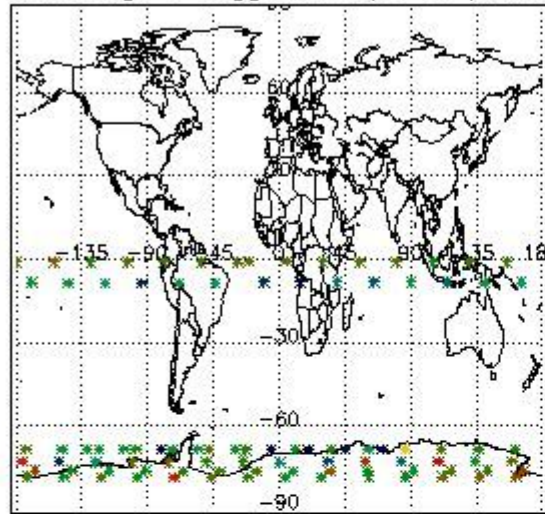
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

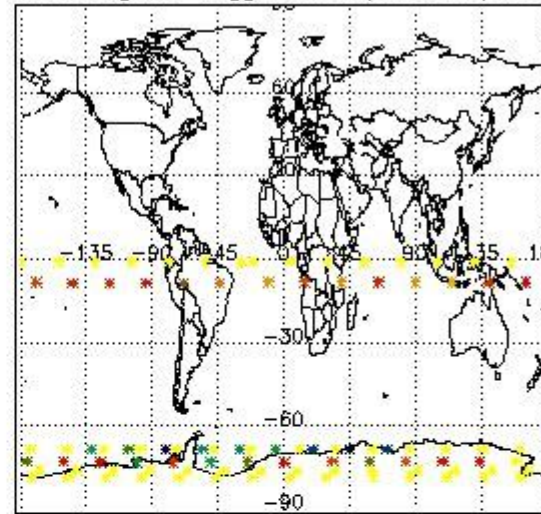


3.2 Plot quality information per product (world map)

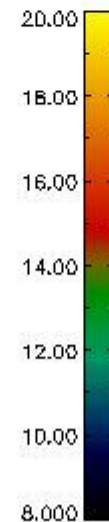
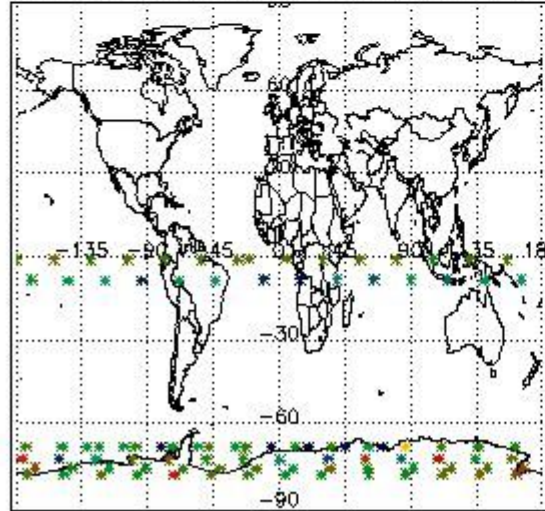
Percentage of flagged data per O3 profile



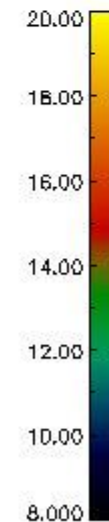
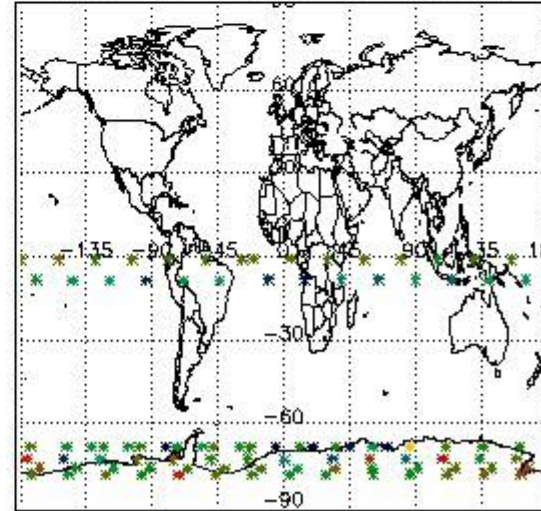
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

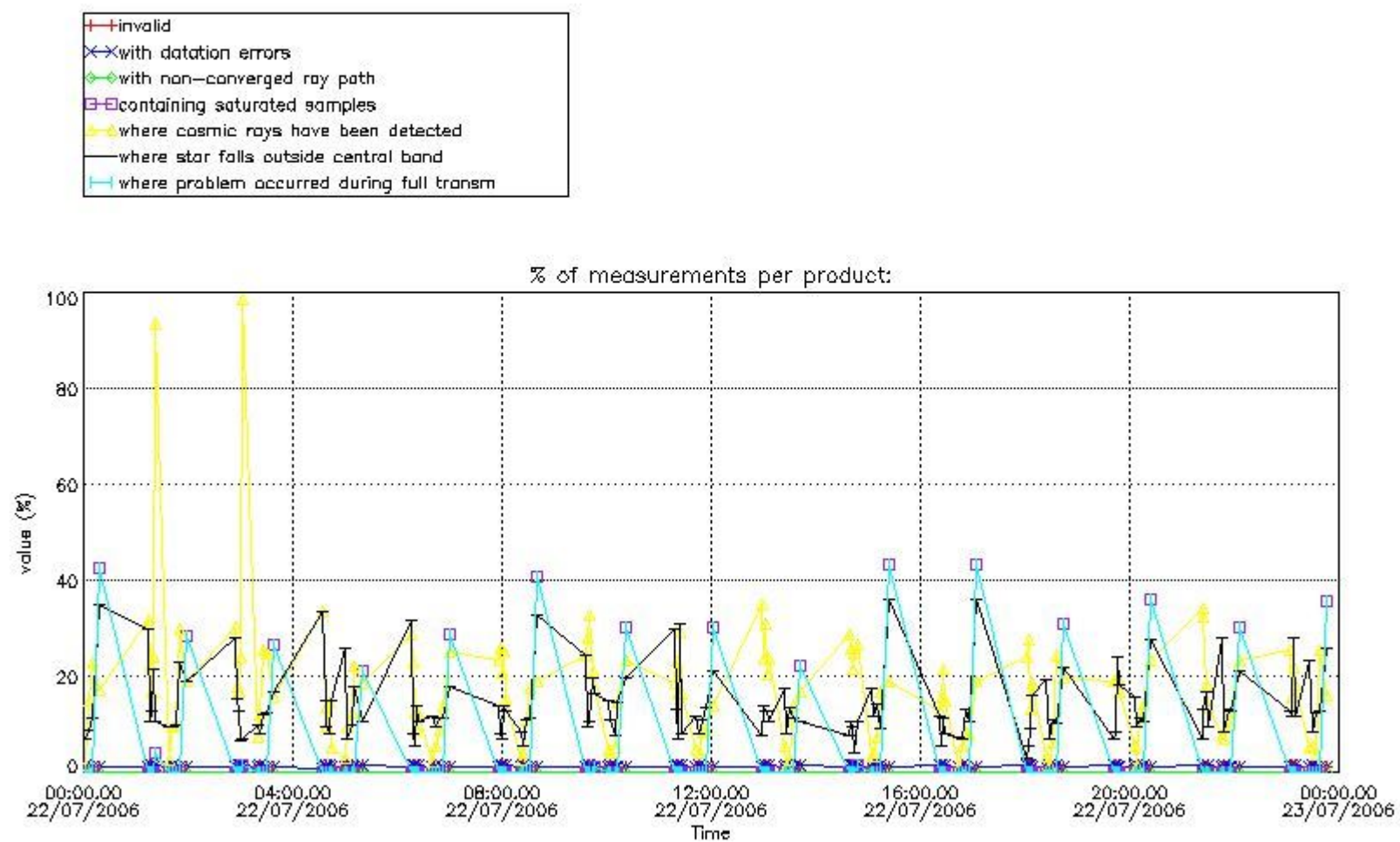


4. Level 1 quality information per product

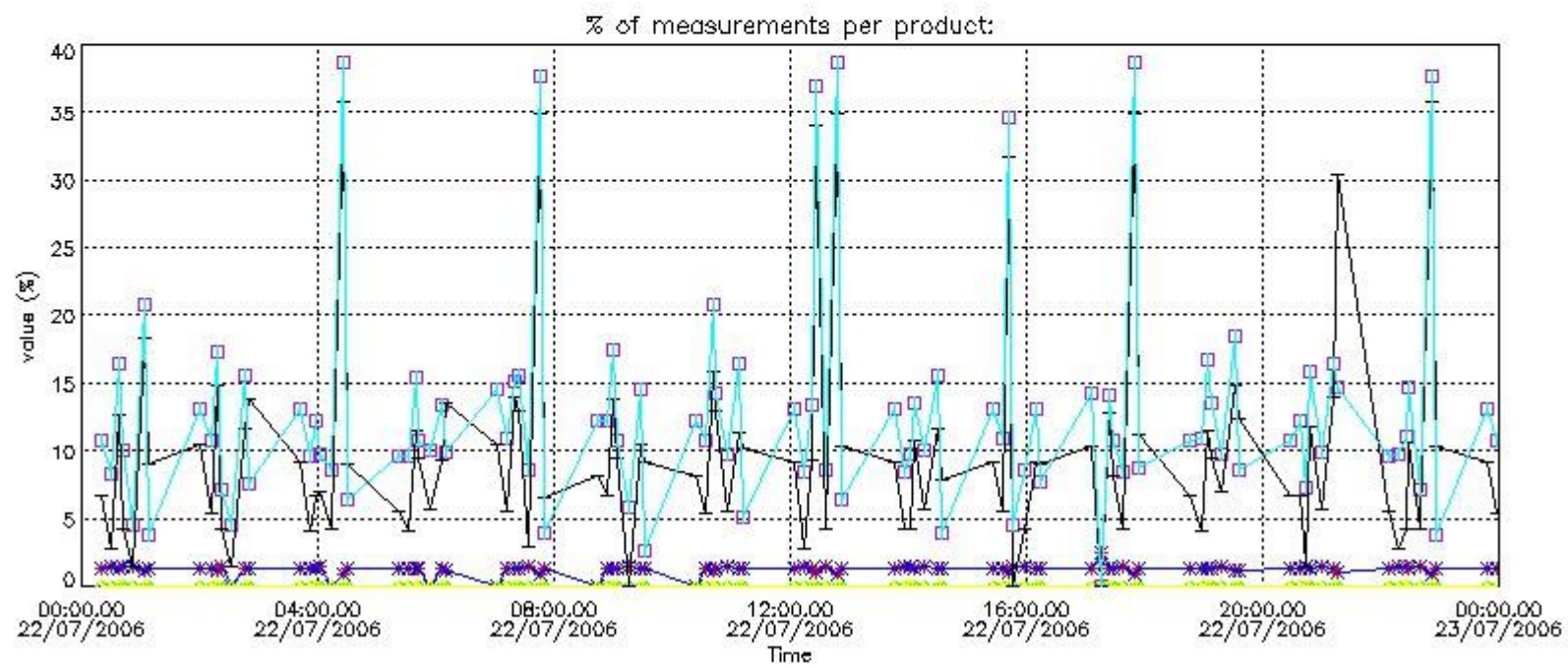
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

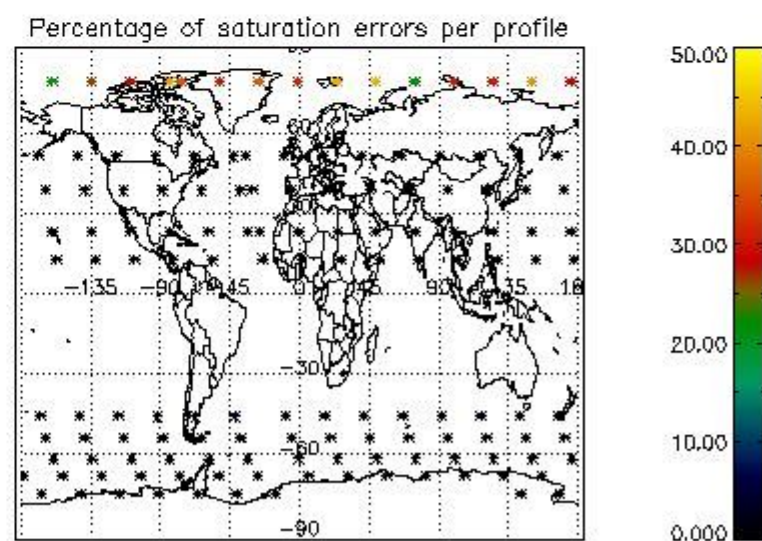
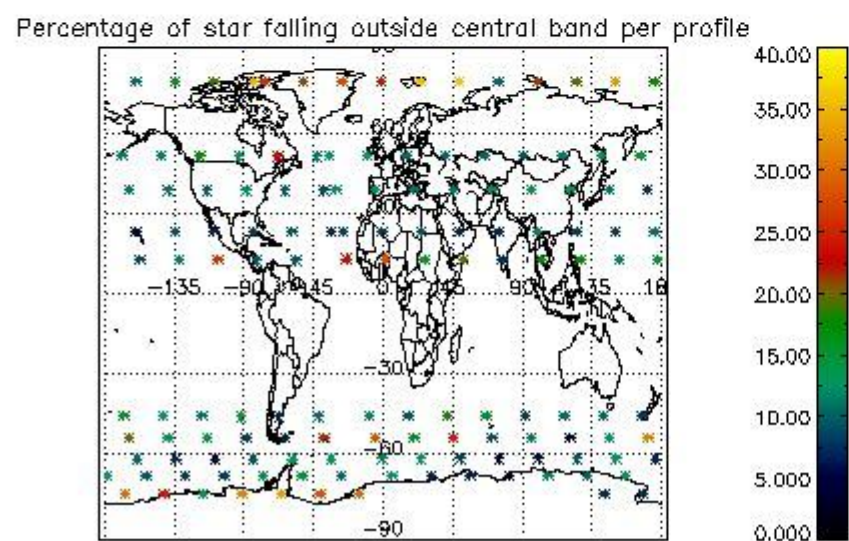
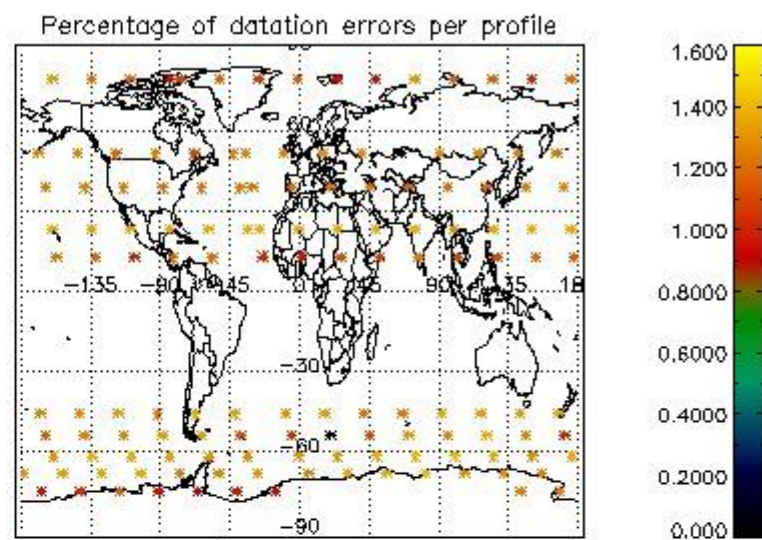
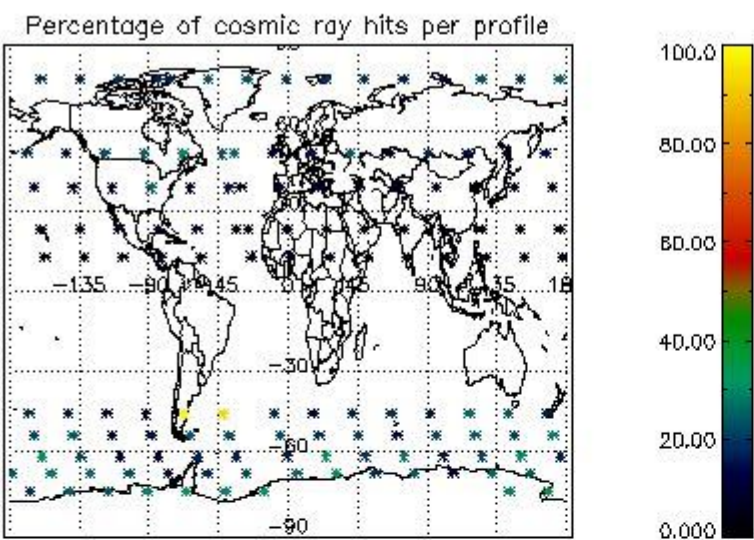


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

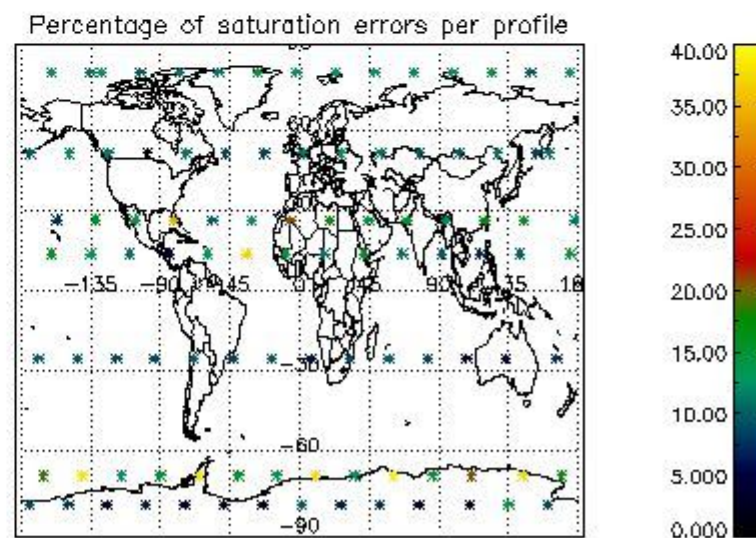
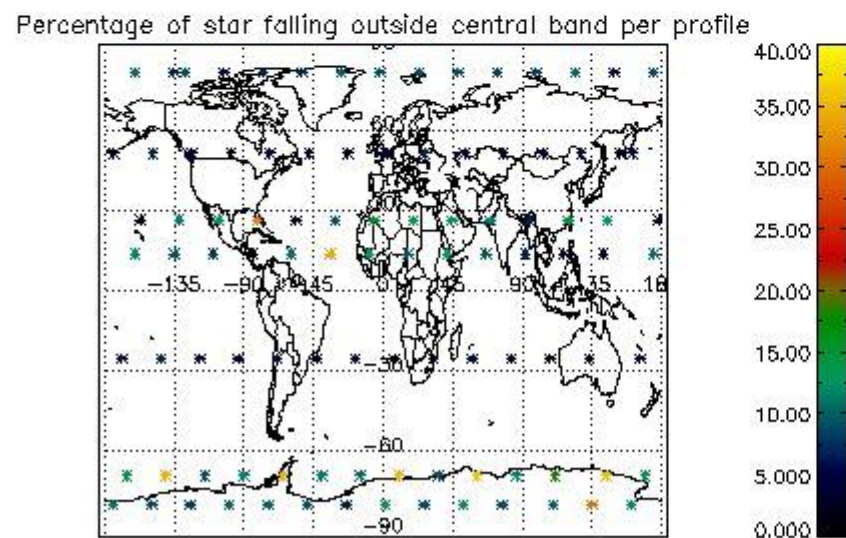
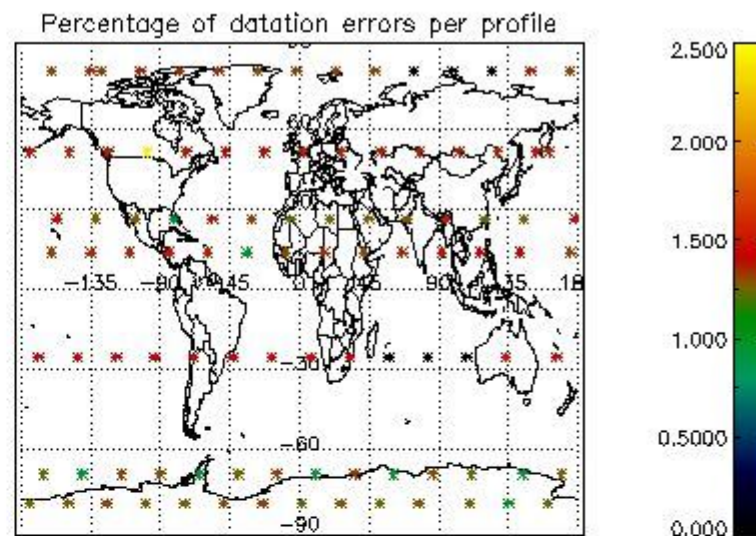
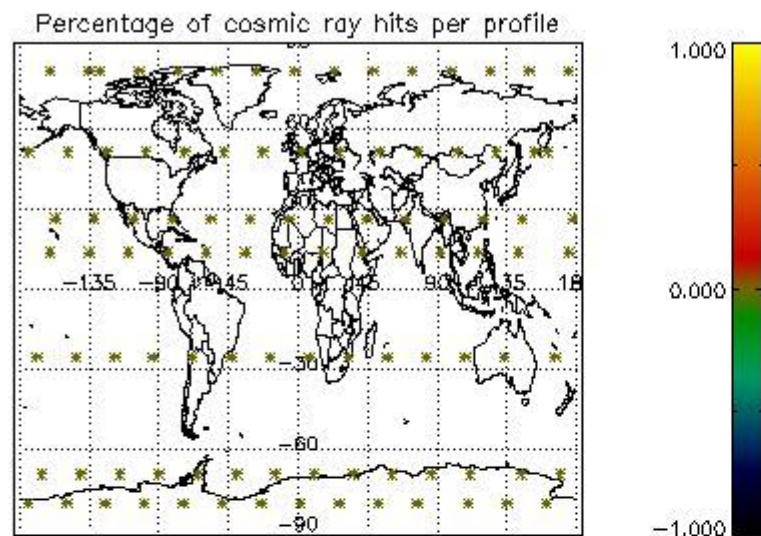


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

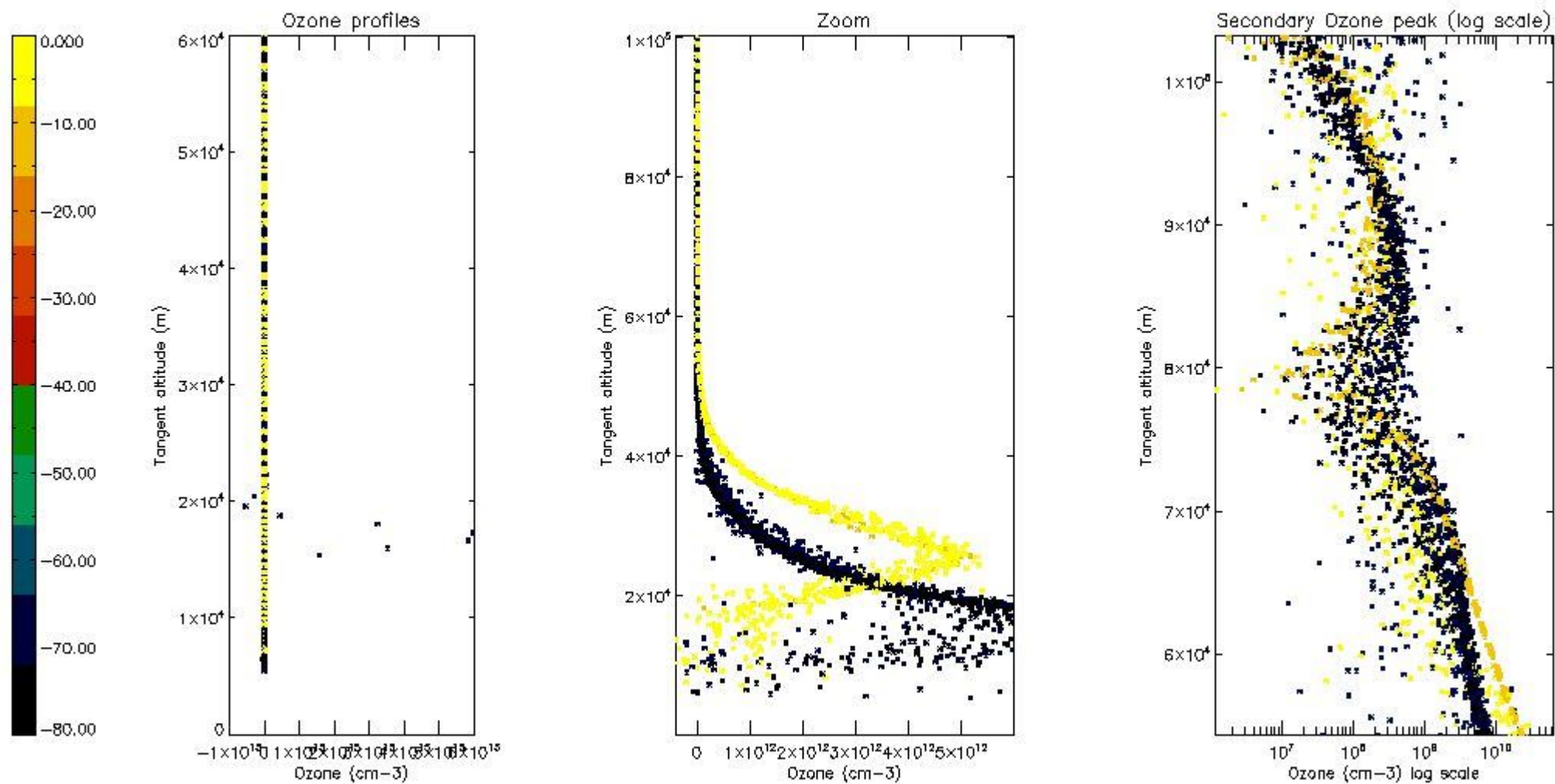
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	41
STD < 20	25

STD < 10	20
STD < 5	15

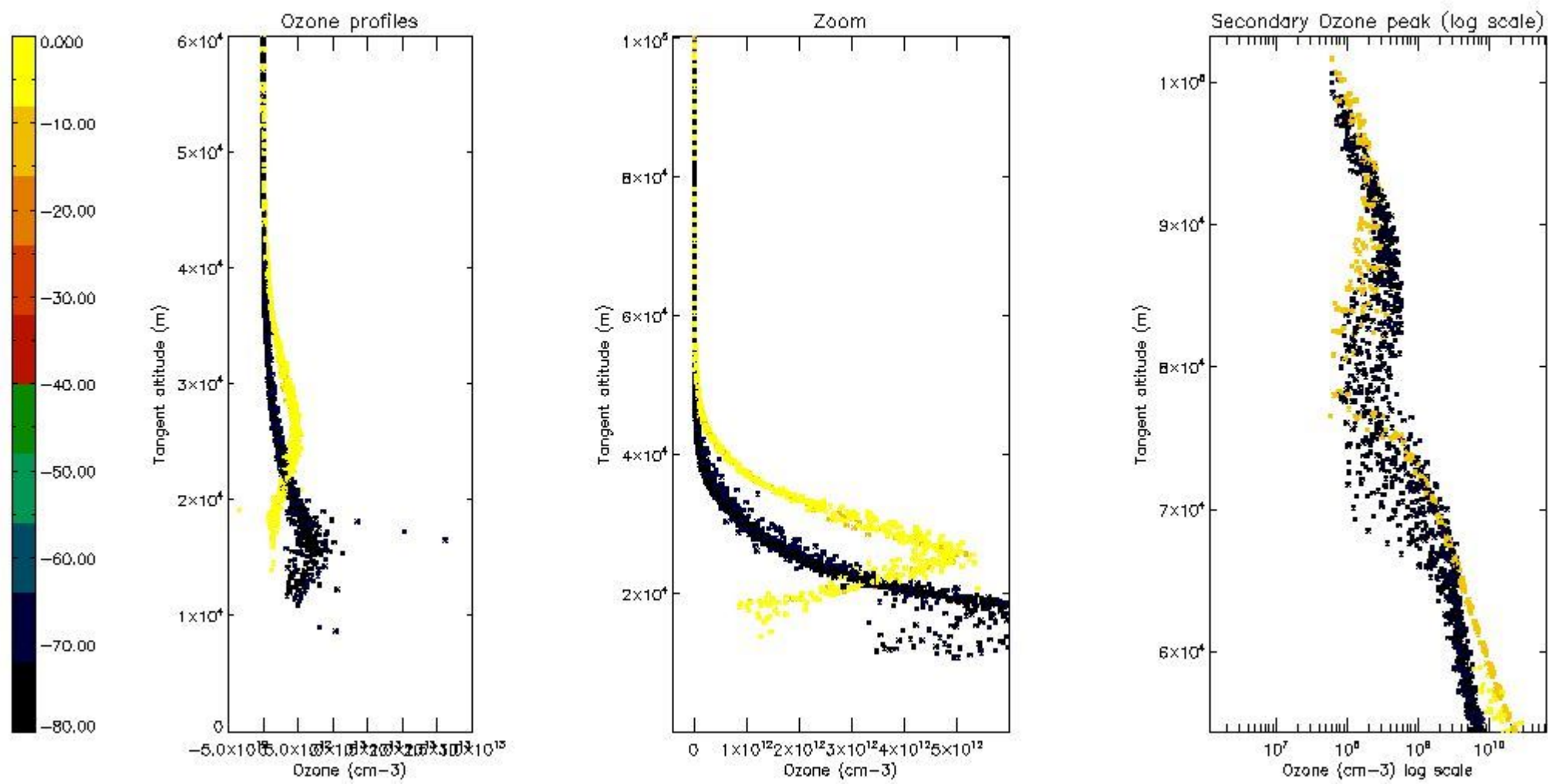
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



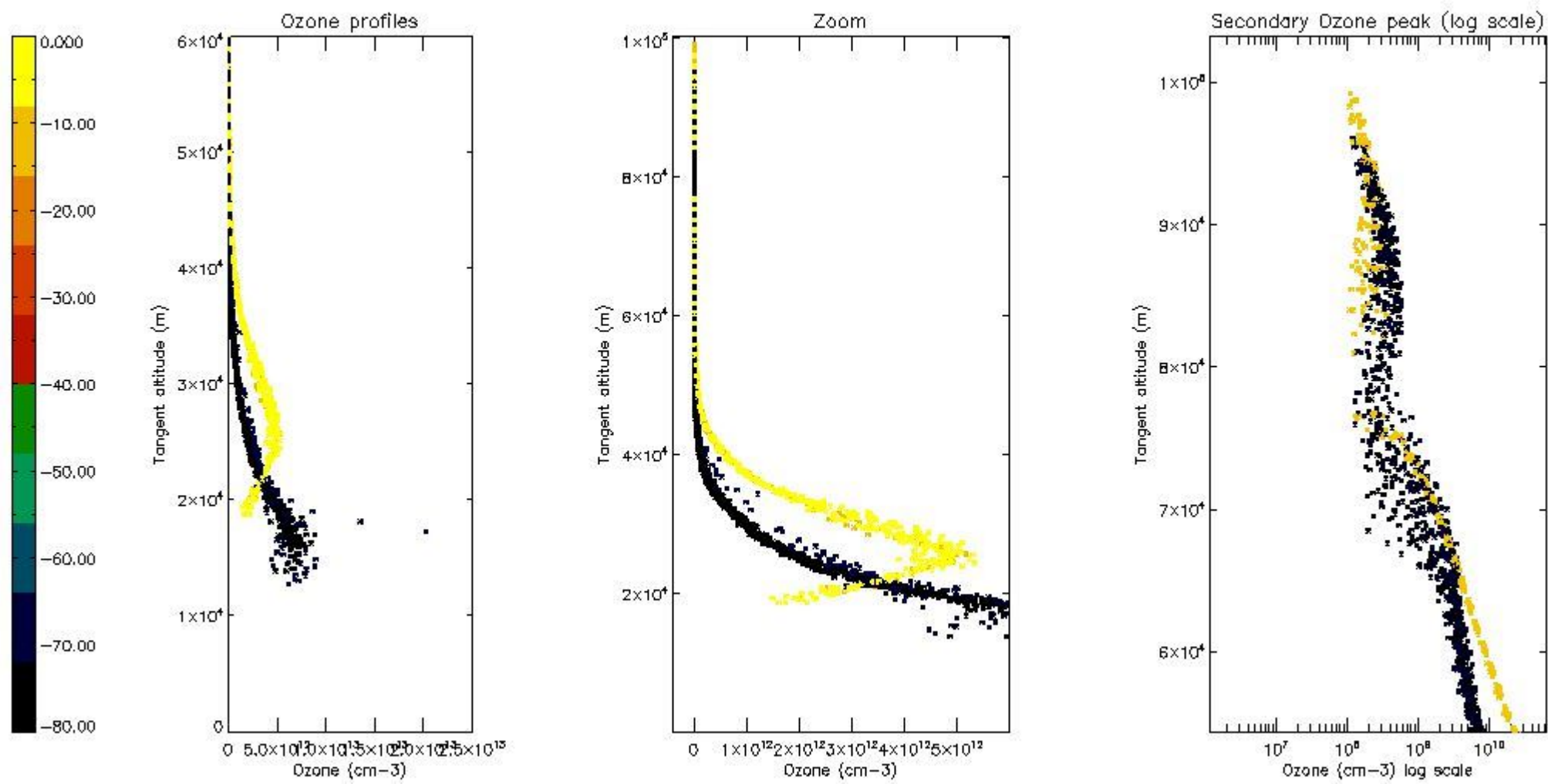
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



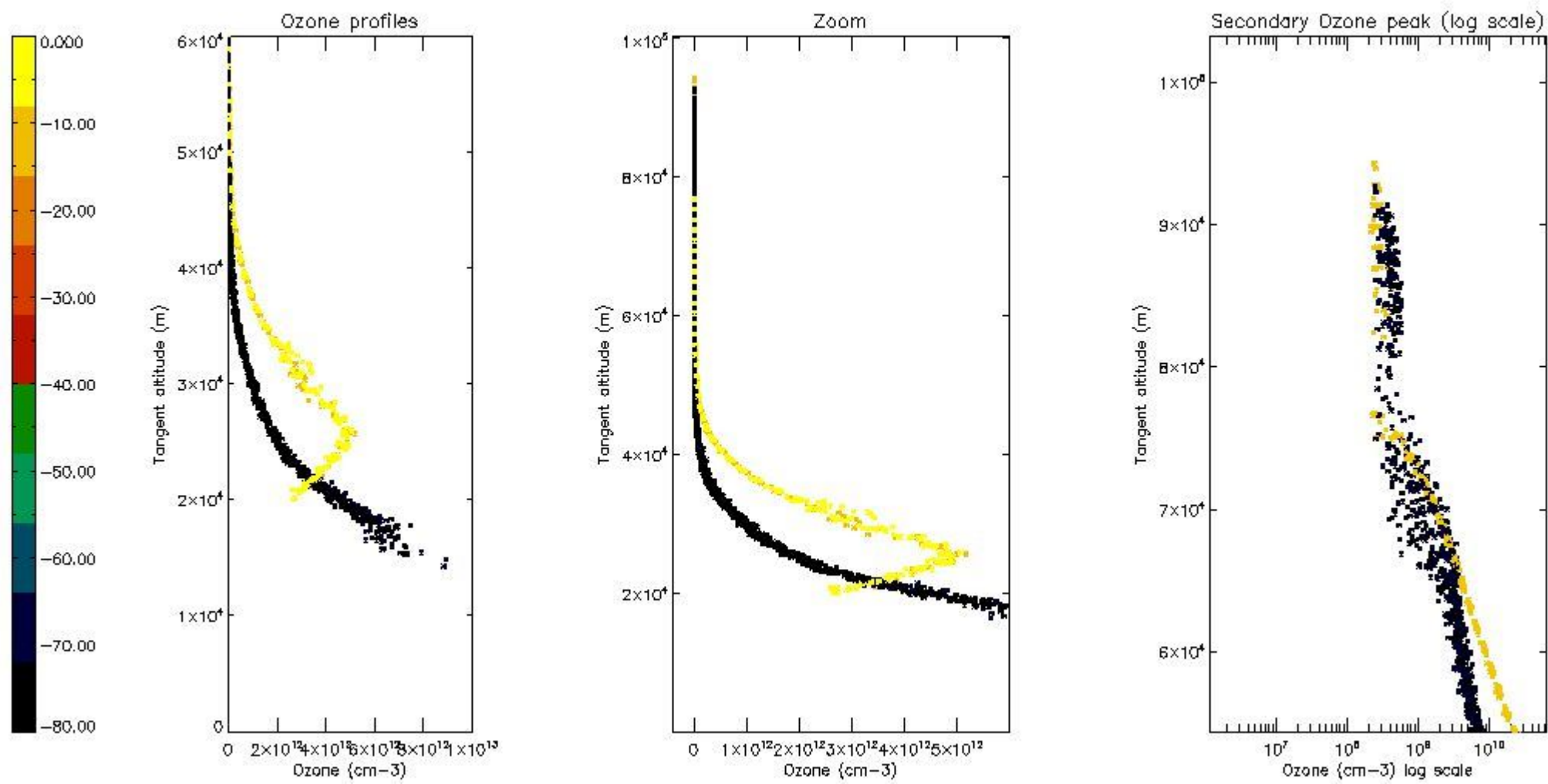
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



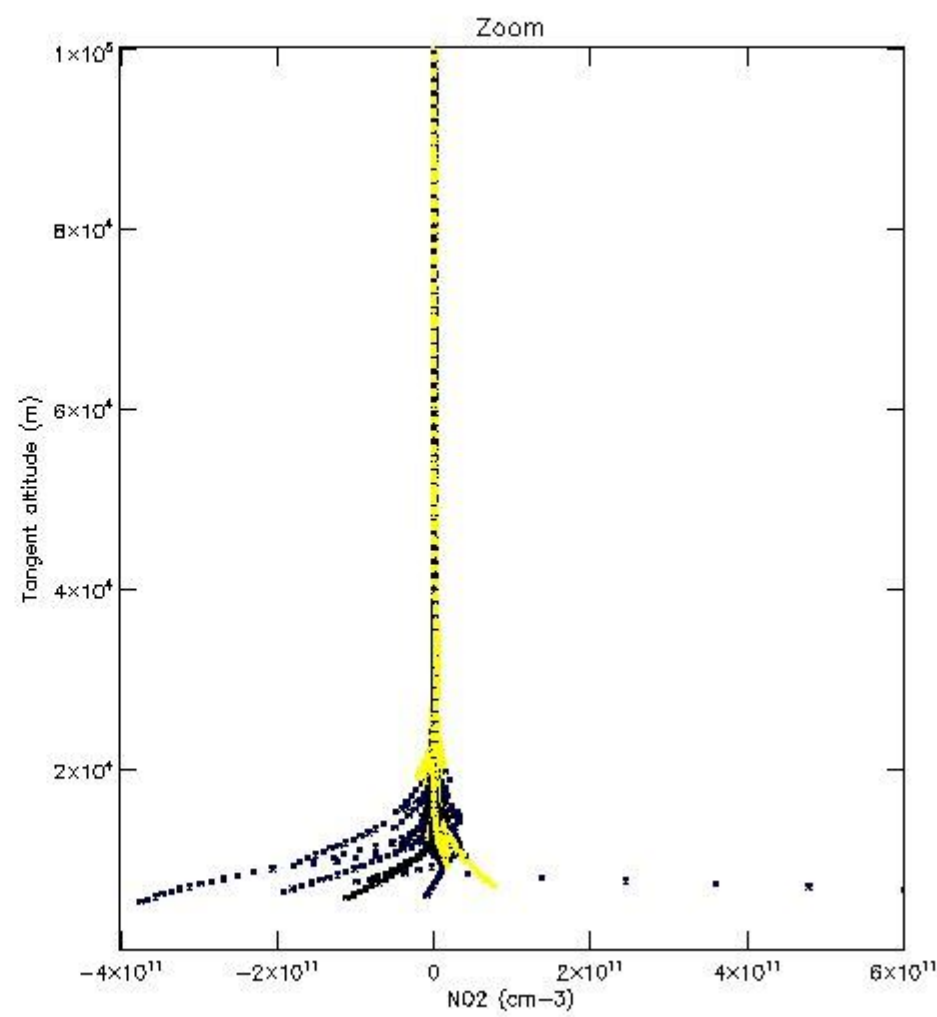
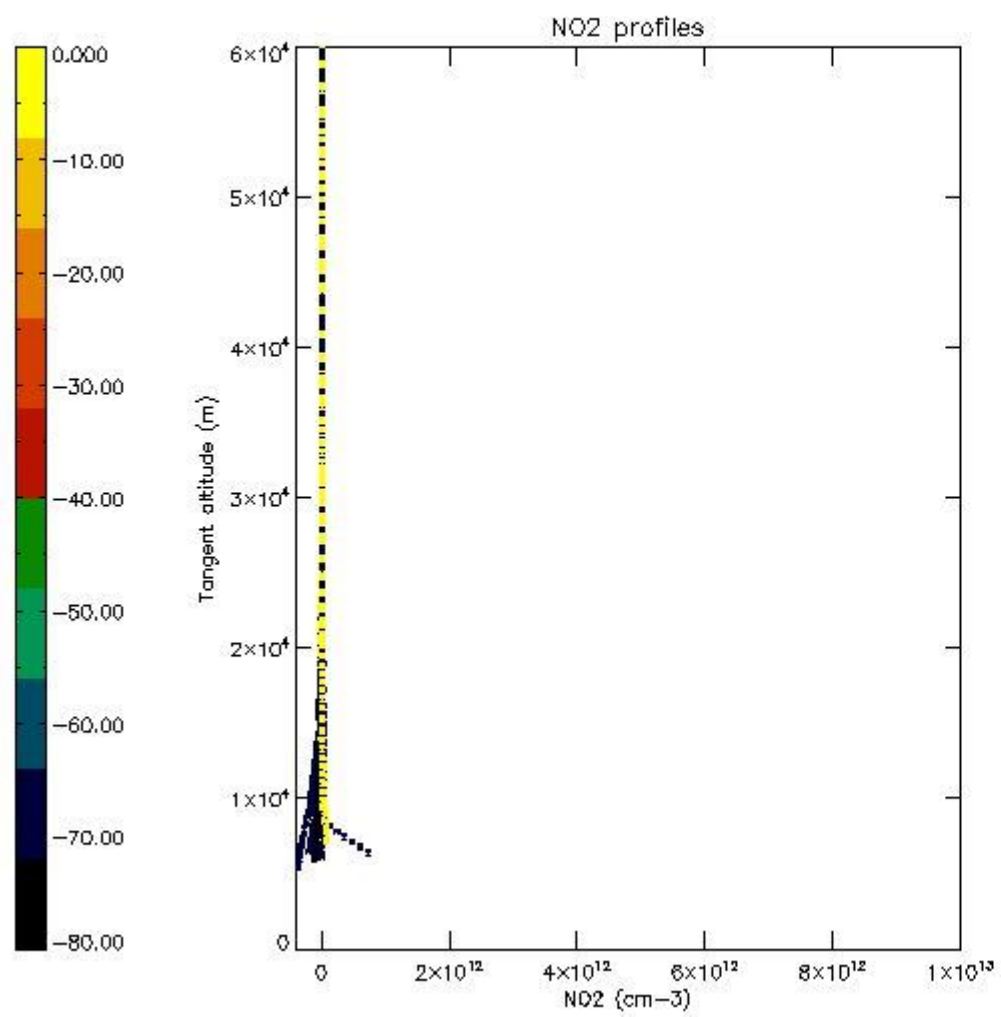
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



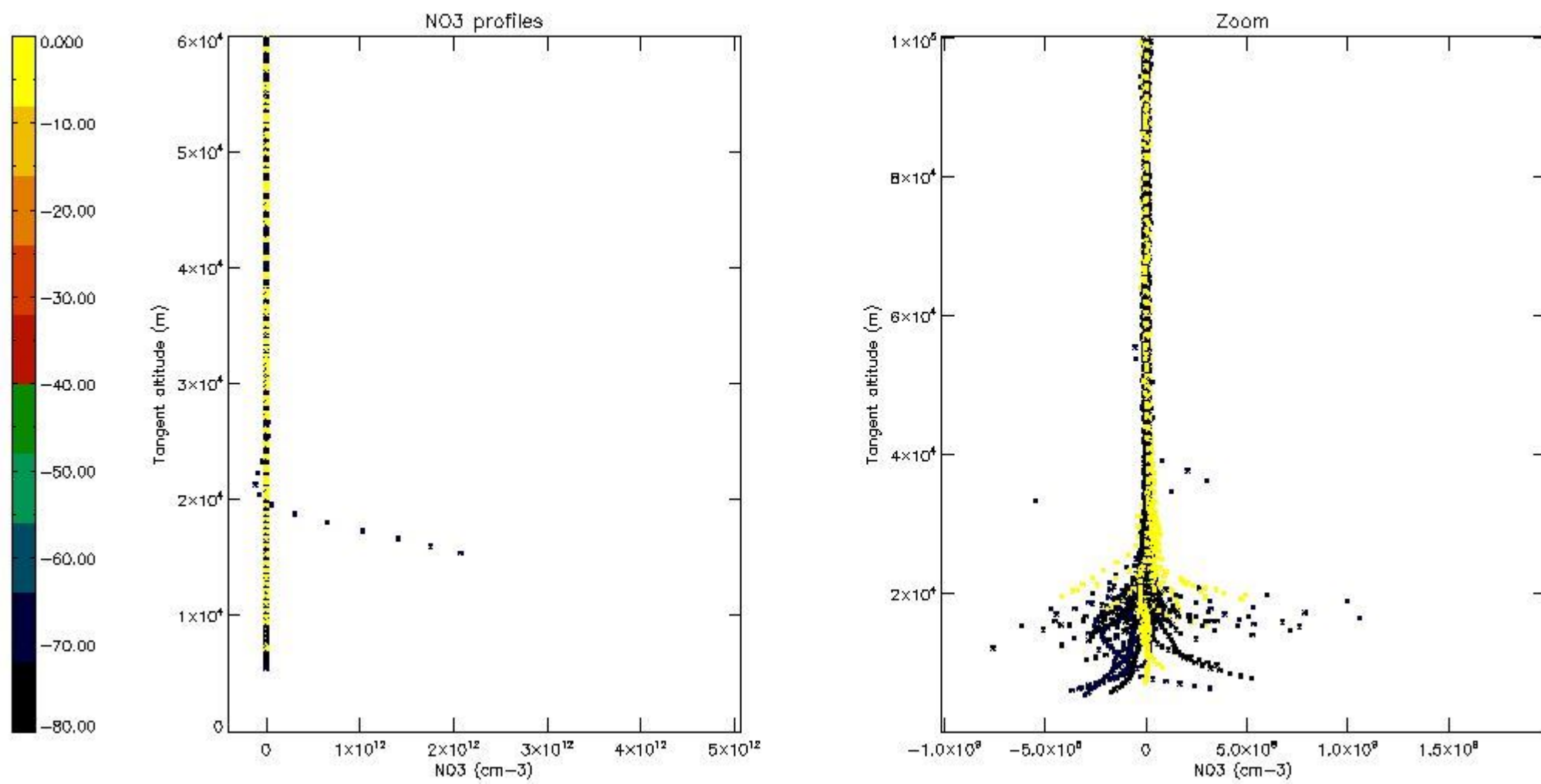
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



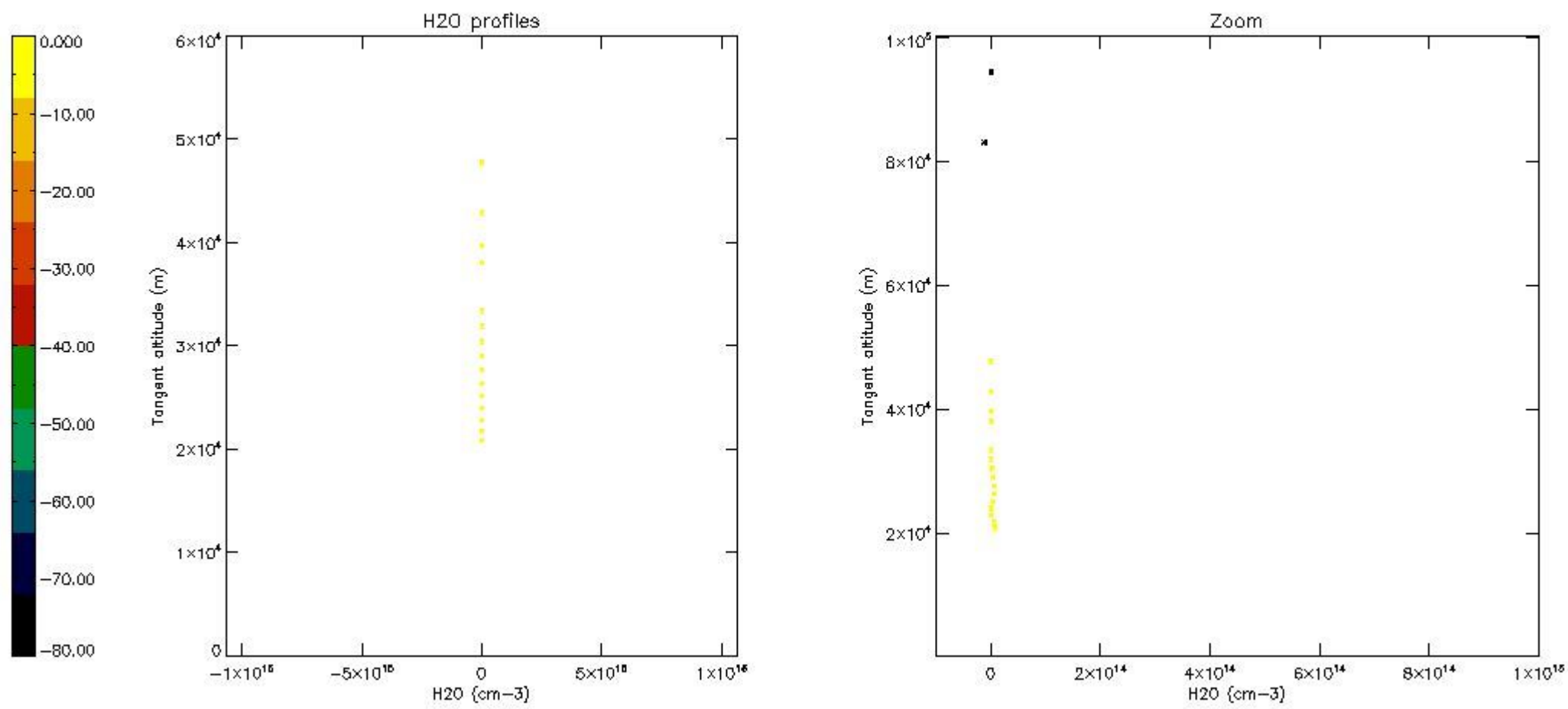
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	22-JUL-2006 00:01:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-JUL-2006 00:01:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-JUL-2006 00:01:08

GOMOS Level 2 Daily Report

SUMMARY

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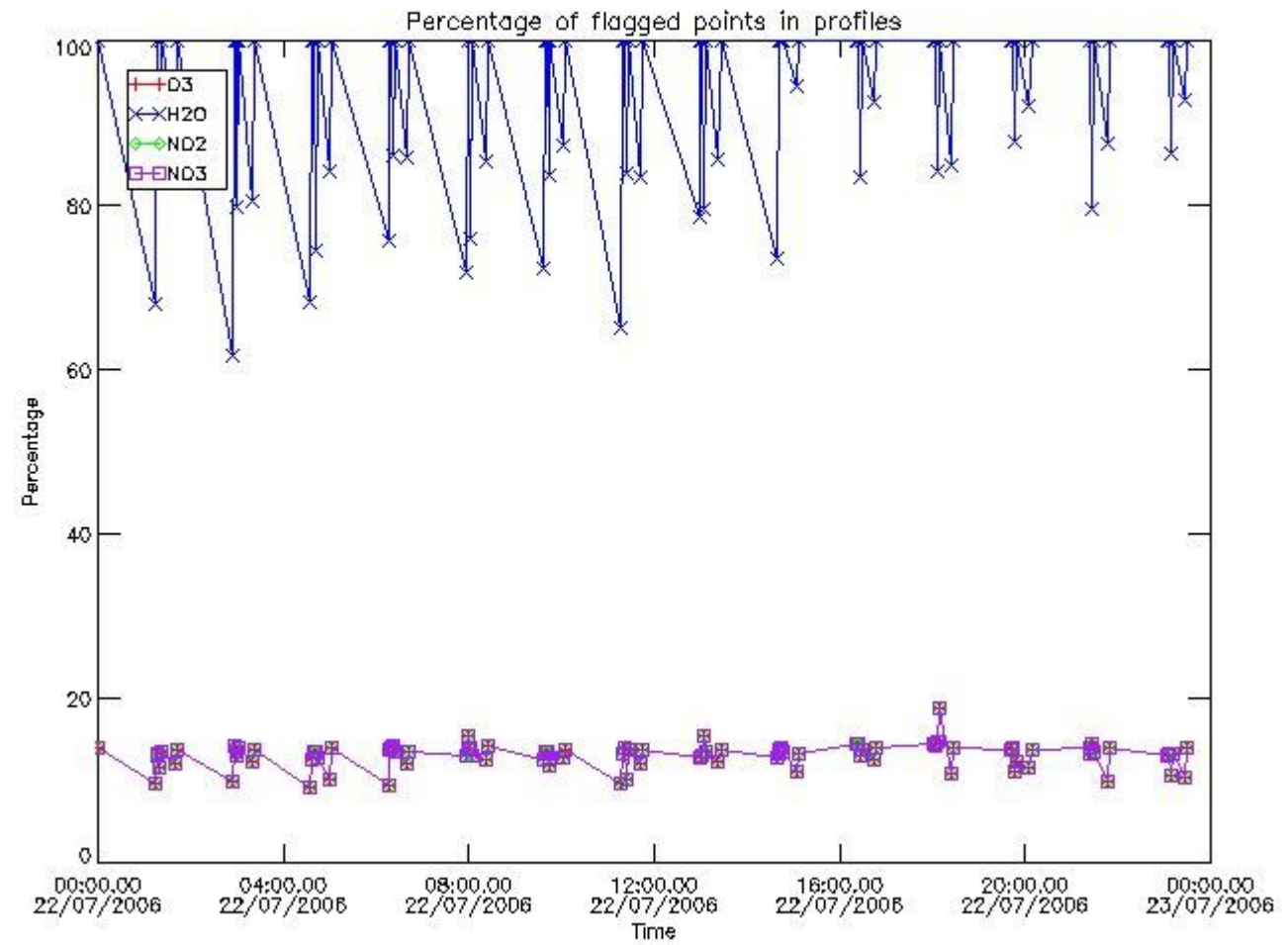
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20060722_215659_000000402049_00373_22972_0191.N1	22-JUL-2006 21:56:59	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	22972	No
221	GOM_NL__2PRFIN20060722_220535_000000432049_00373_22972_0192.N1	22-JUL-2006 22:05:35	Bright	43.000	103	38Zet Sgr	2.6000	9700.0	86	22972	No
222	GOM_NL__2PRFIN20060722_220801_000000372049_00373_22972_0193.N1	22-JUL-2006 22:08:01	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	22972	No
223	GOM_NL__2PRFIN20060722_221813_000000362049_00373_22972_0194.N1	22-JUL-2006 22:18:13	Bright	36.000	168	17Zet Aql	2.9860	11000.	72	22972	No
224	GOM_NL__2PRFIN20060722_222516_000000362049_00373_22972_0195.N1	22-JUL-2006 22:25:16	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	22972	No
225	GOM_NL__2PRFIN20060722_222850_000000382049_00373_22972_0196.N1	22-JUL-2006 22:28:50	Bright	37.500	69	33Gam Dra	2.2310	3800.0	75	22972	No
226	GOM_NL__2PRFIN20060722_223949_000000352049_00373_22972_0197.N1	22-JUL-2006 22:39:49	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	22972	No
227	GOM_NL__2PRFIN20060722_225222_000000532049_00373_22972_0198.N1	22-JUL-2006 22:52:22	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	22972	No
228	GOM_NL__2PRFIN20060722_225616_000000392049_00373_22972_0199.N1	22-JUL-2006 22:56:16	Bright	39.000	114	3lot Aur	2.6930	4600.0	78	22972	No
229	GOM_NL__2PRFIN20060722_230338_000000402049_00373_22972_0200.N1	22-JUL-2006 23:03:38	Dark	39.500	27	24Gam Ori	1.6360	26000.	79	22972	No
230	GOM_NL__2PRFIN20060722_230534_000000392049_00373_22972_0201.N1	22-JUL-2006 23:05:34	Dark	38.500	30	46Eps Ori	1.6940	30000.	77	22972	No
231	GOM_NL__2PRFIN20060722_230750_000000482049_00373_22972_0202.N1	22-JUL-2006 23:07:50	Dark	48.000	7	19Bet Ori	0.10000	14000.	96	22972	No
232	GOM_NL__2PRFIN20060722_231010_000000392049_00373_22972_0203.N1	22-JUL-2006 23:10:10	Dark	38.500	101	11Alp Lep	2.5820	7000.0	77	22972	No
233	GOM_NL__2PRFIN20060722_232640_000000502049_00374_22973_0188.N1	22-JUL-2006 23:26:40	Dark	49.500	9	Alp Eri	0.45300	24000.	99	22973	No
234	GOM_NL__2PRFIN20060722_232935_000000372049_00374_22973_0189.N1	22-JUL-2006 23:29:35	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	22973	No
235	GOM_NL__2PRFIN20060722_233359_000000412049_00374_22973_0190.N1	22-JUL-2006 23:33:59	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	22973	No
236	GOM_NL__2PRFIN20060722_233735_000000402049_00374_22973_0191.N1	22-JUL-2006 23:37:35	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	22973	No
237	GOM_NL__2PRFIN20060722_234612_000000472049_00374_22973_0192.N1	22-JUL-2006 23:46:12	Bright	46.500	103	38Zet Sgr	2.6000	9700.0	93	22973	No
238	GOM_NL__2PRFIN20060722_234837_000000382049_00374_22973_0193.N1	22-JUL-2006 23:48:37	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	22973	No
239	GOM_NL__2PRFIN20060722_235848_000000372049_00374_22973_0194.N1	22-JUL-2006 23:58:48	Bright	37.000	168	17Zet Aql	2.9860	11000.	74	22973	No

3. Quality information per product

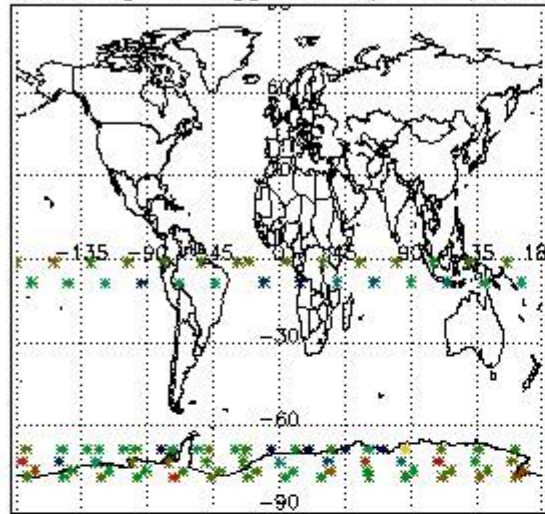
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

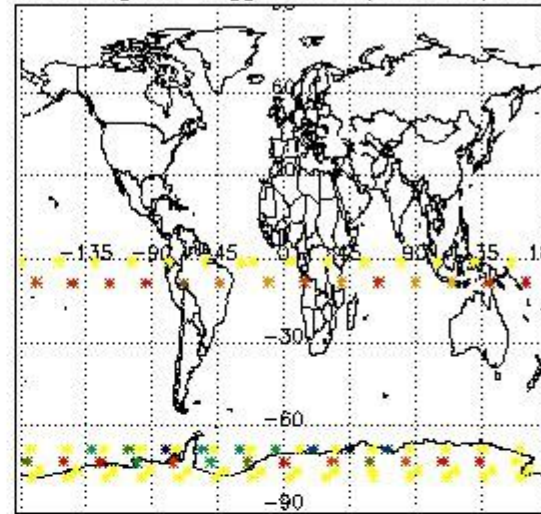


3.2 Plot quality information per product (world map)

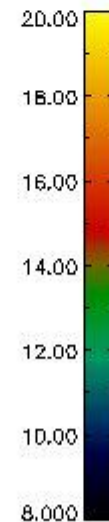
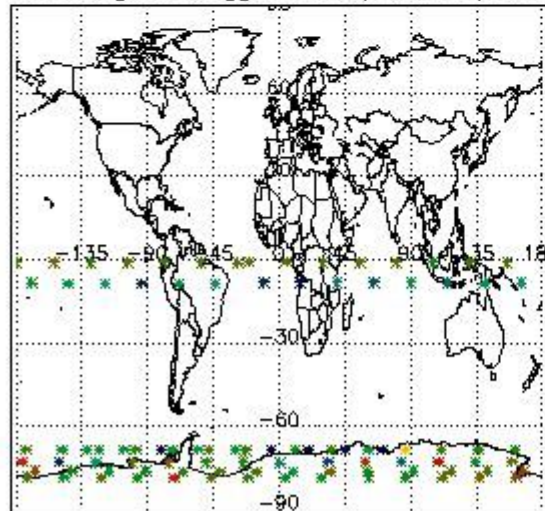
Percentage of flagged data per O3 profile



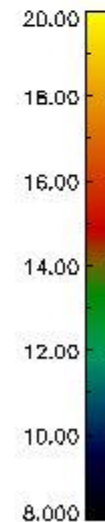
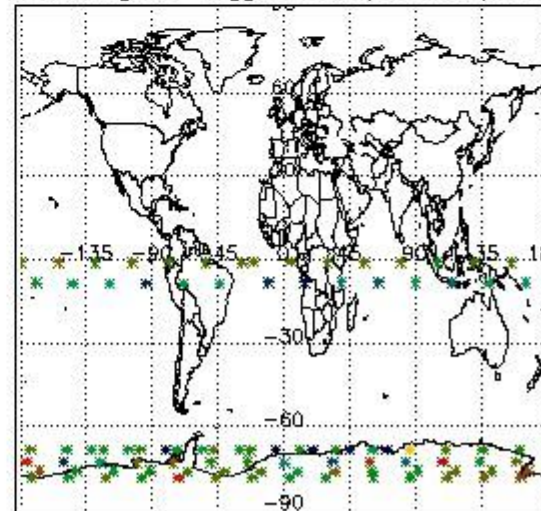
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

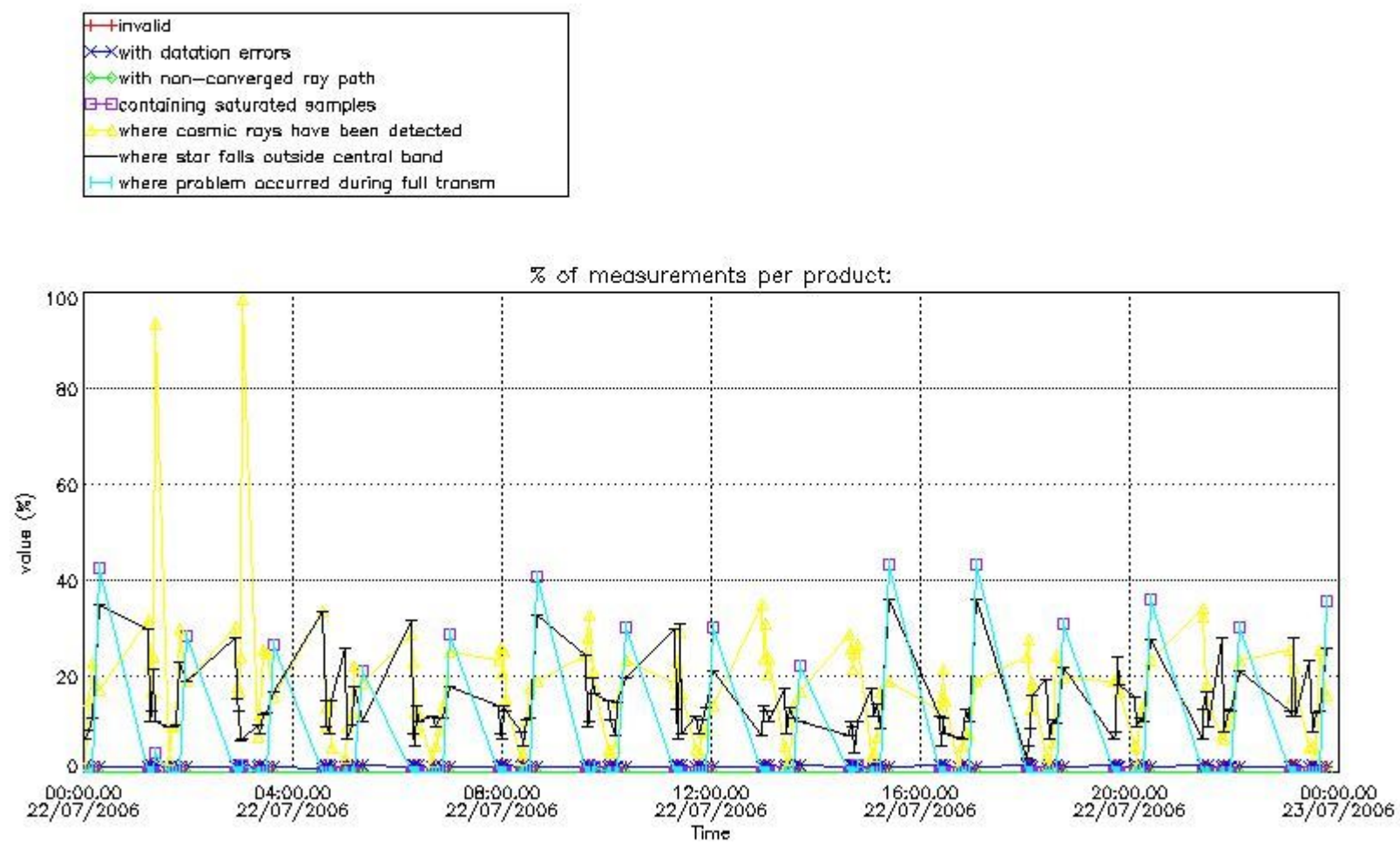


4. Level 1 quality information per product

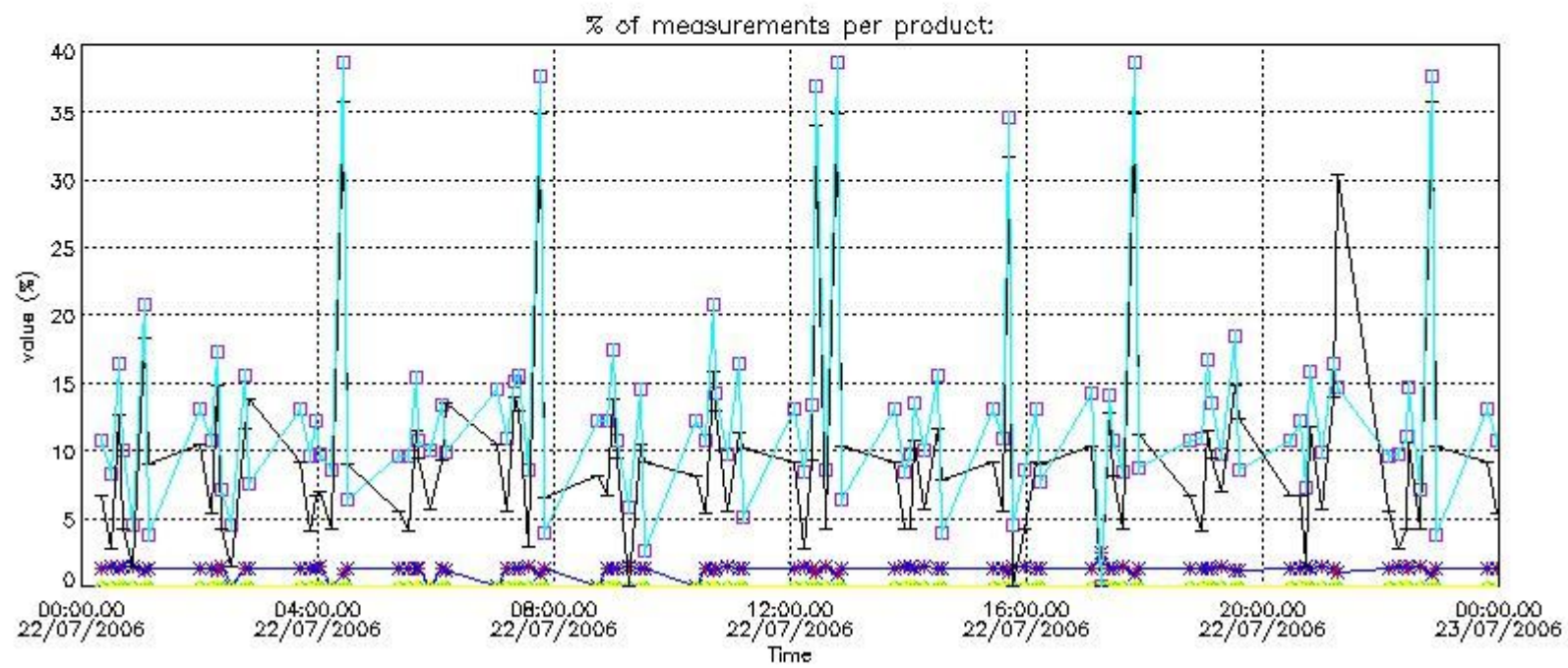
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

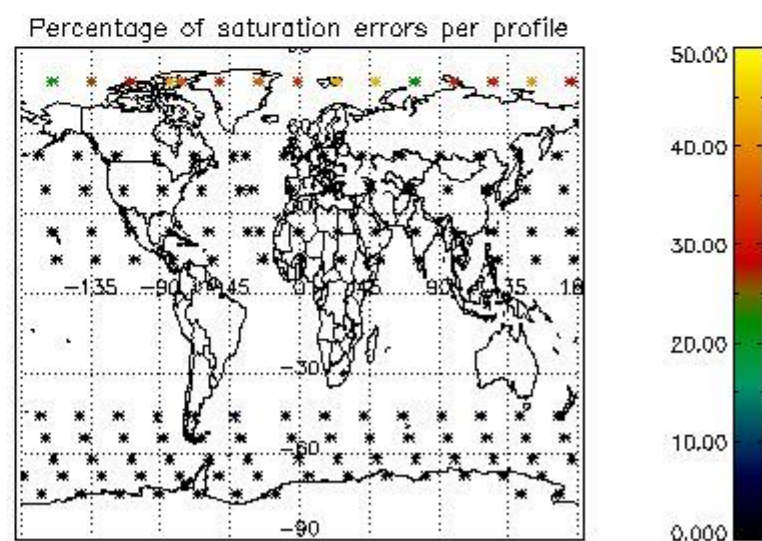
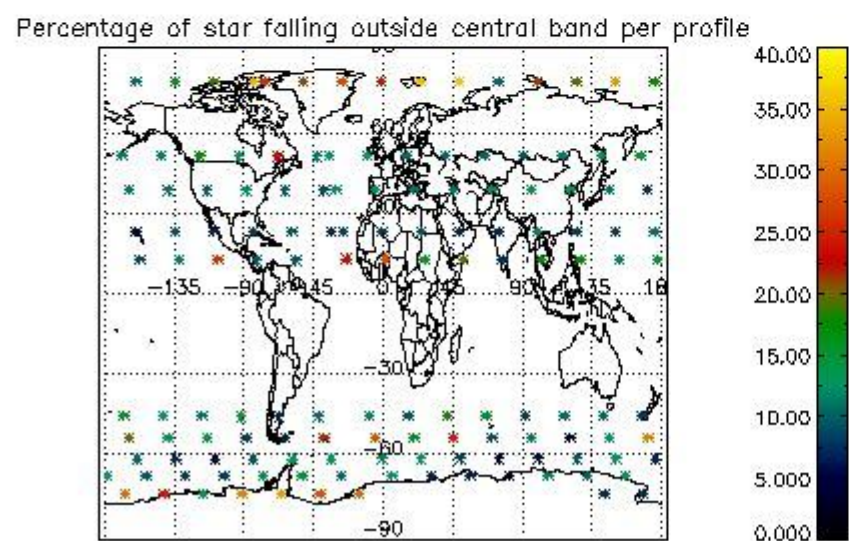
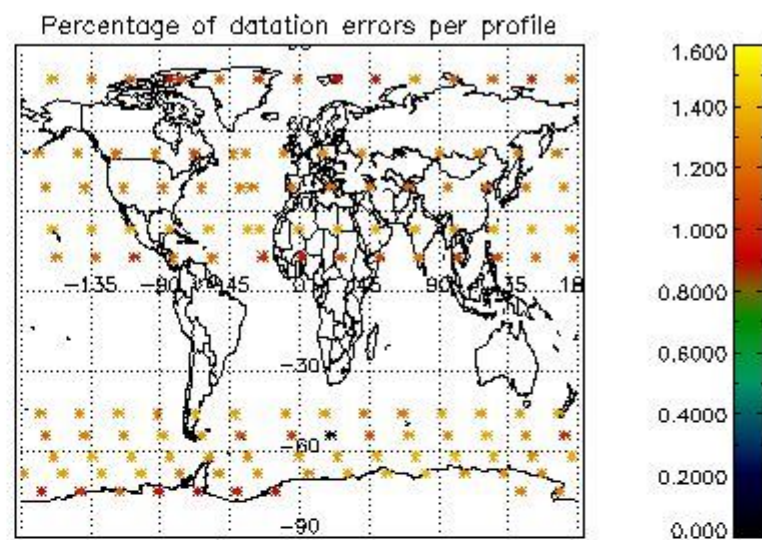
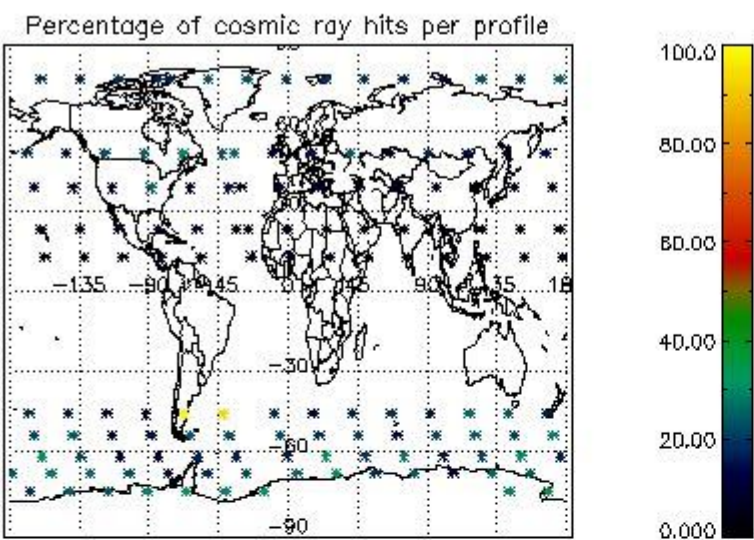


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

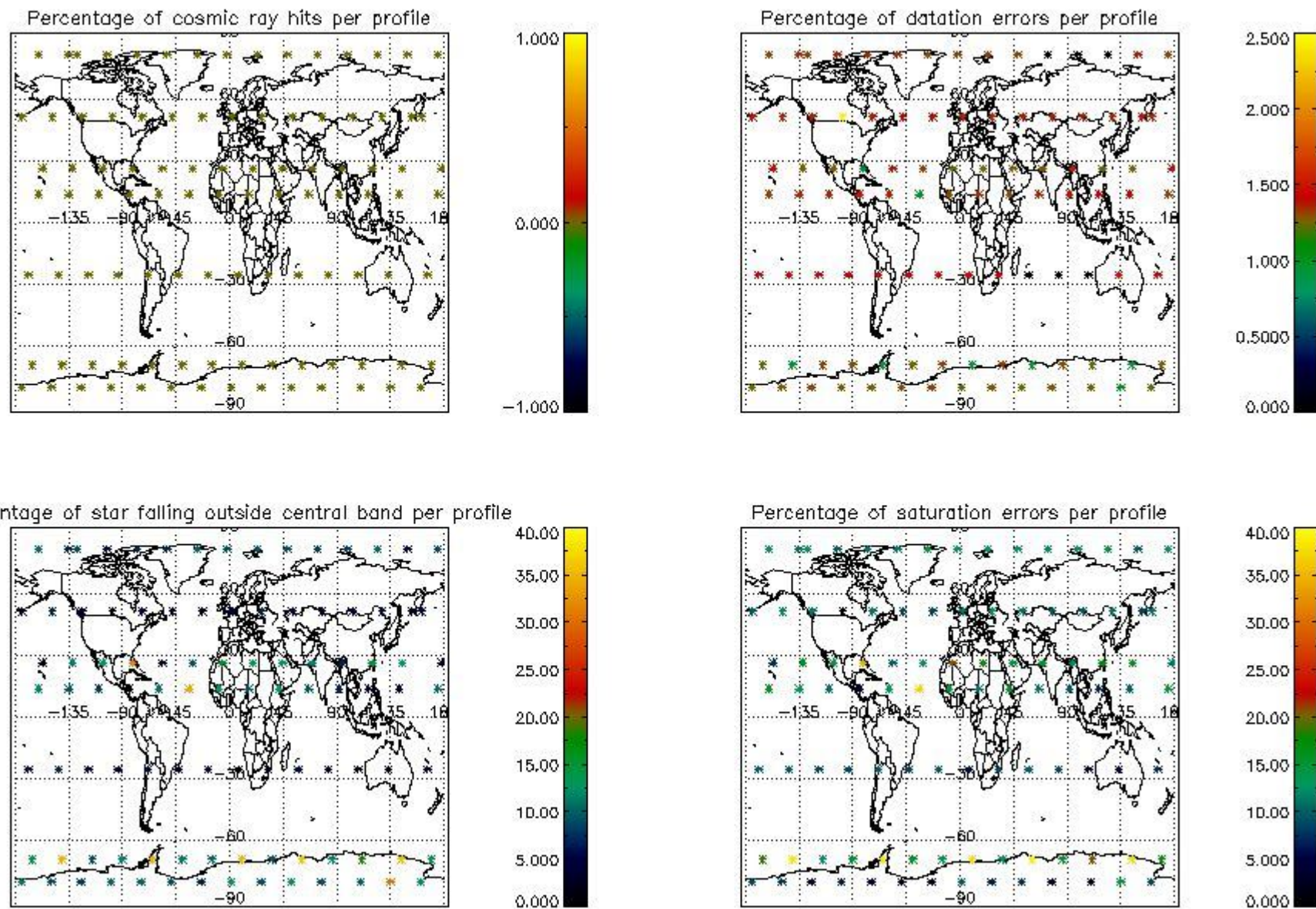


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

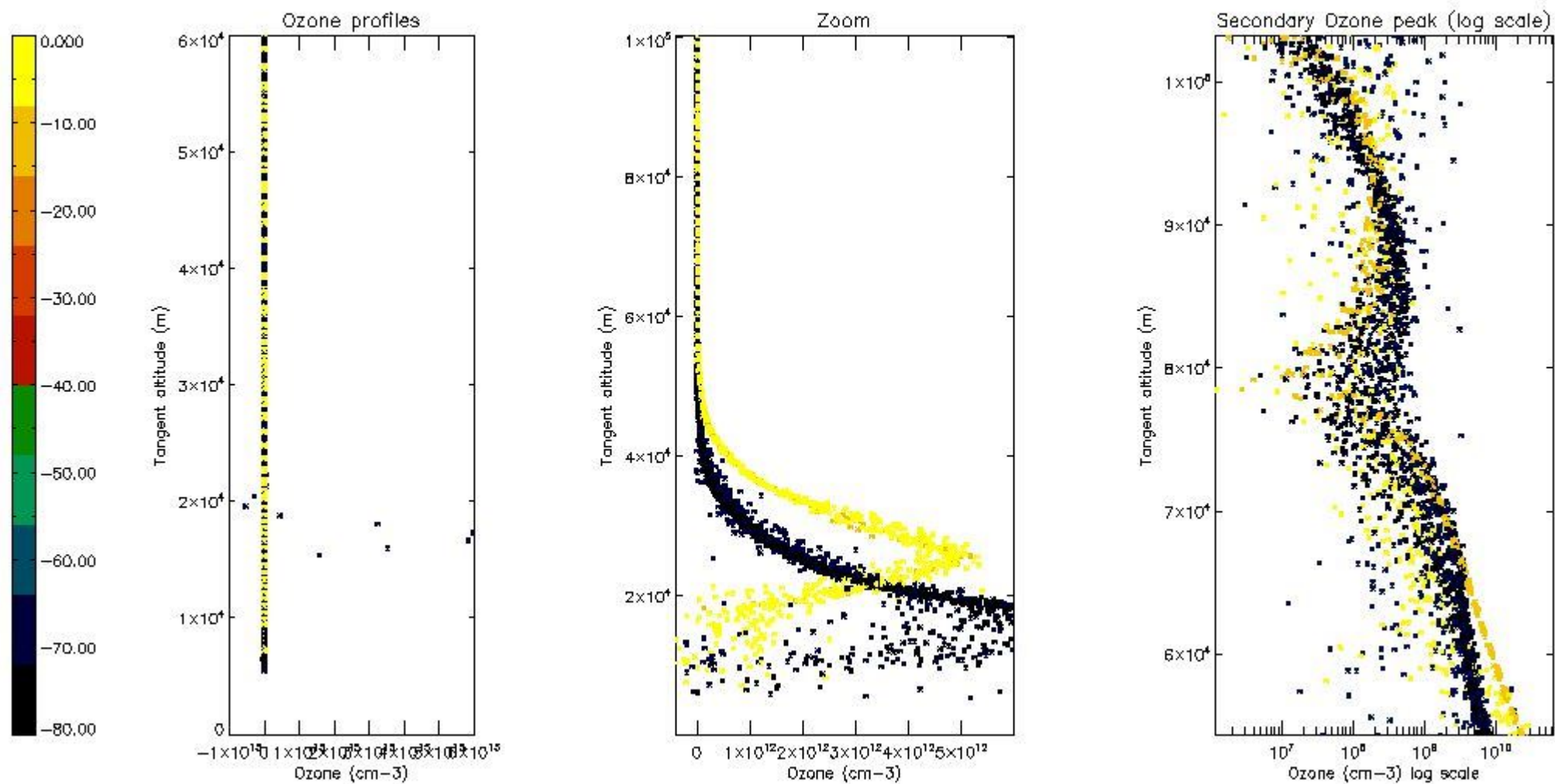
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	41
STD < 20	25

STD < 10	20
STD < 5	15

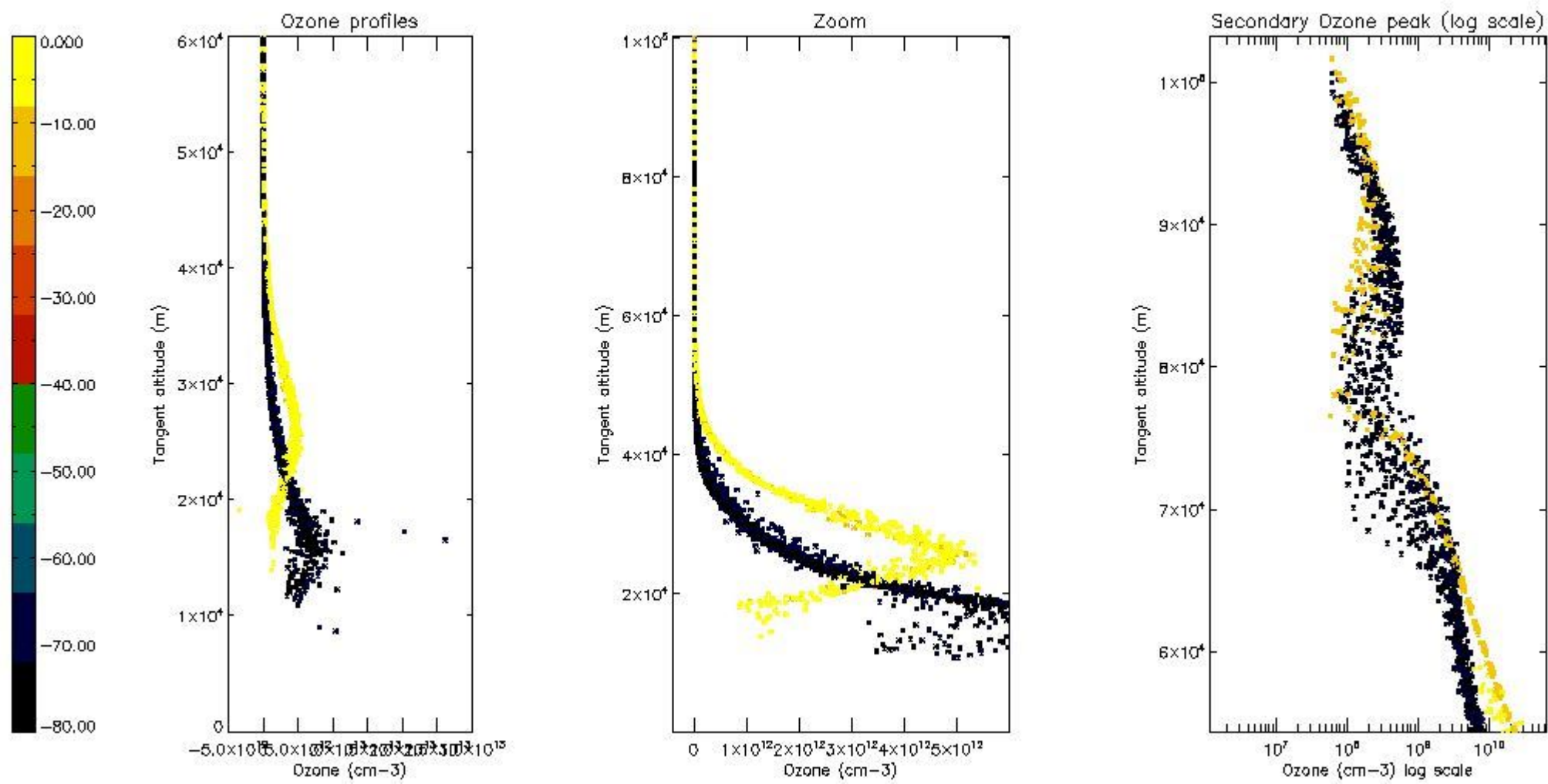
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



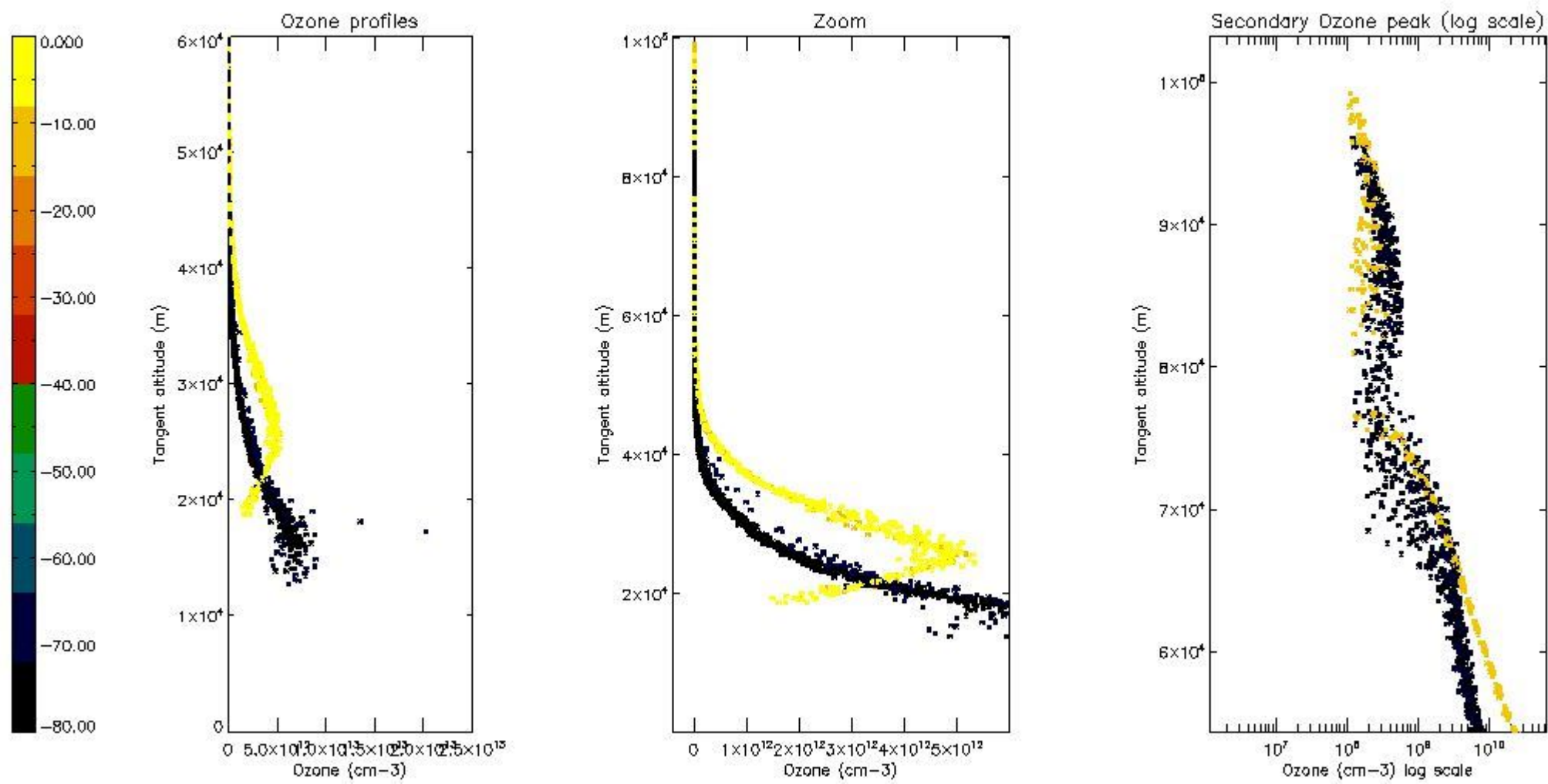
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



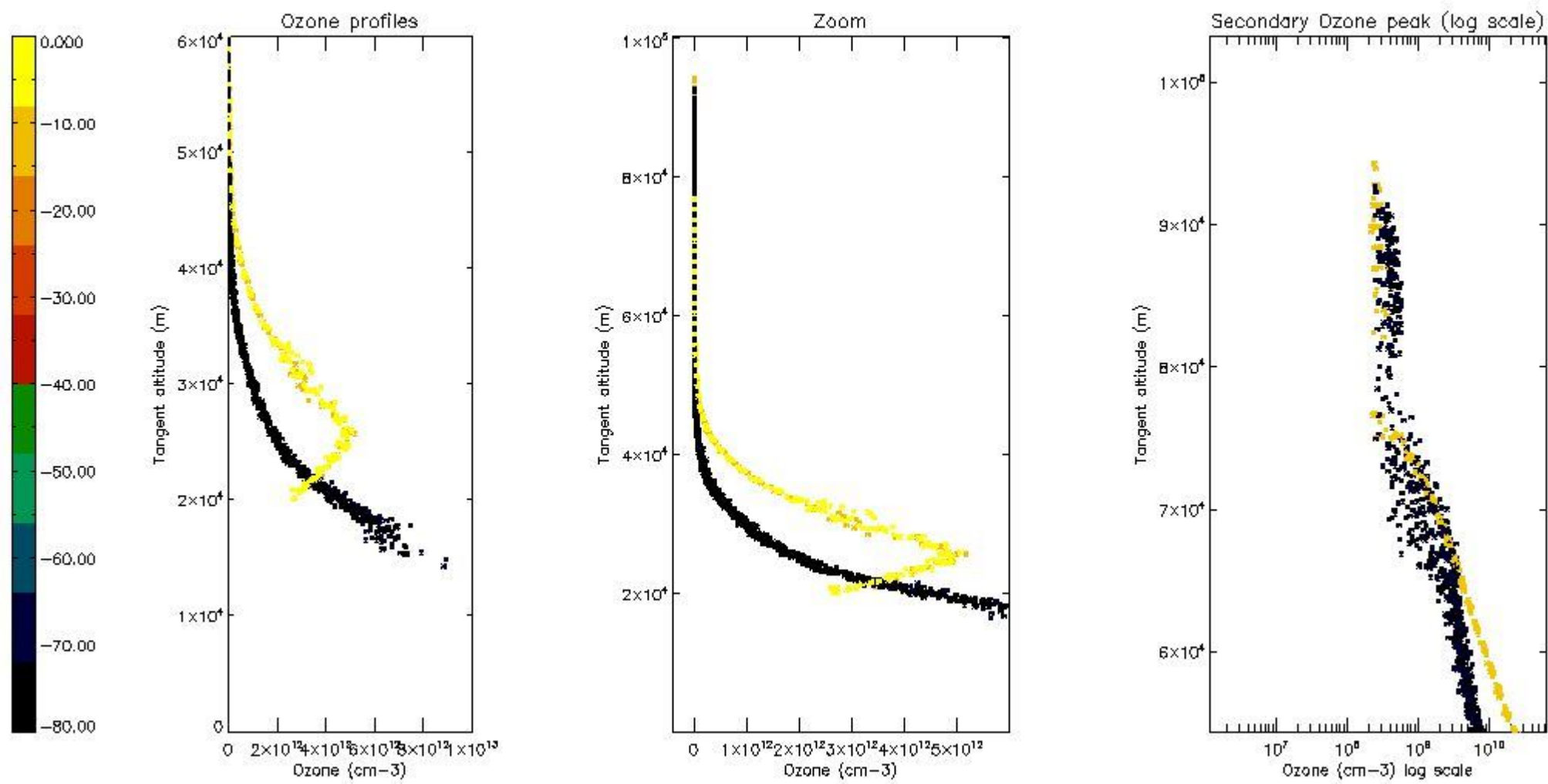
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



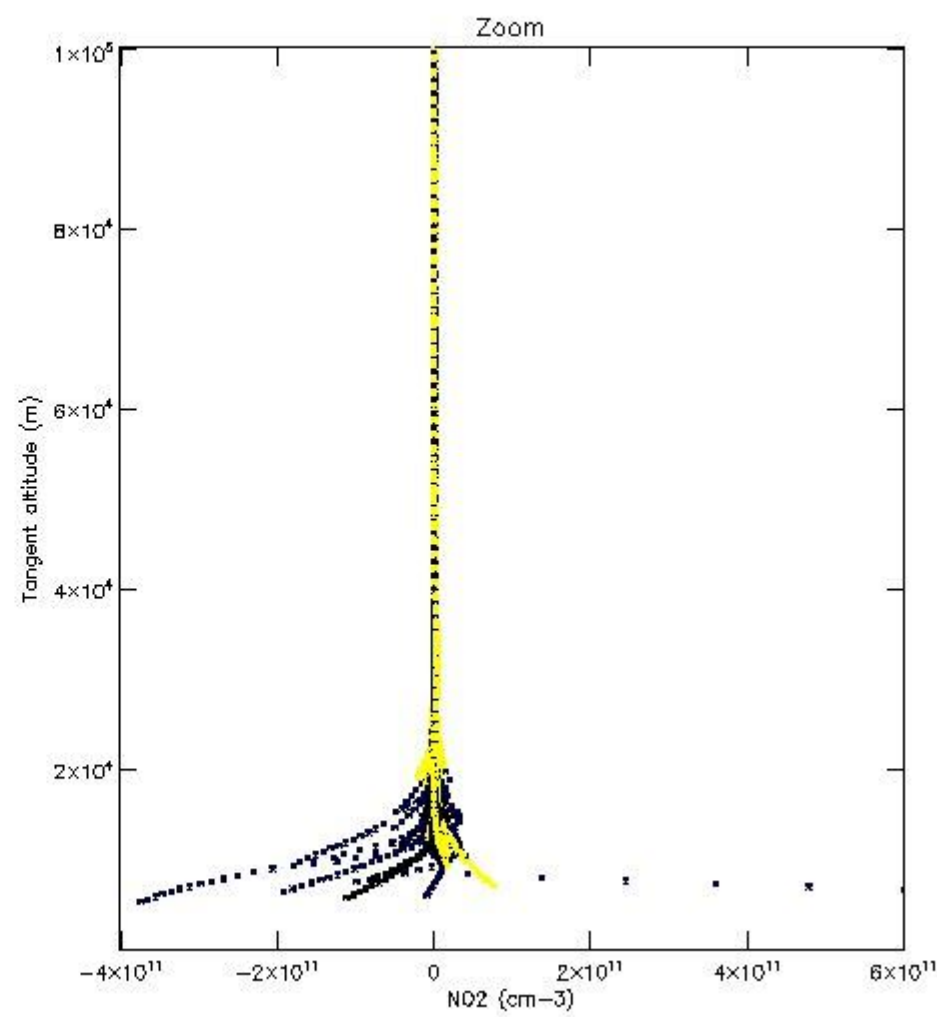
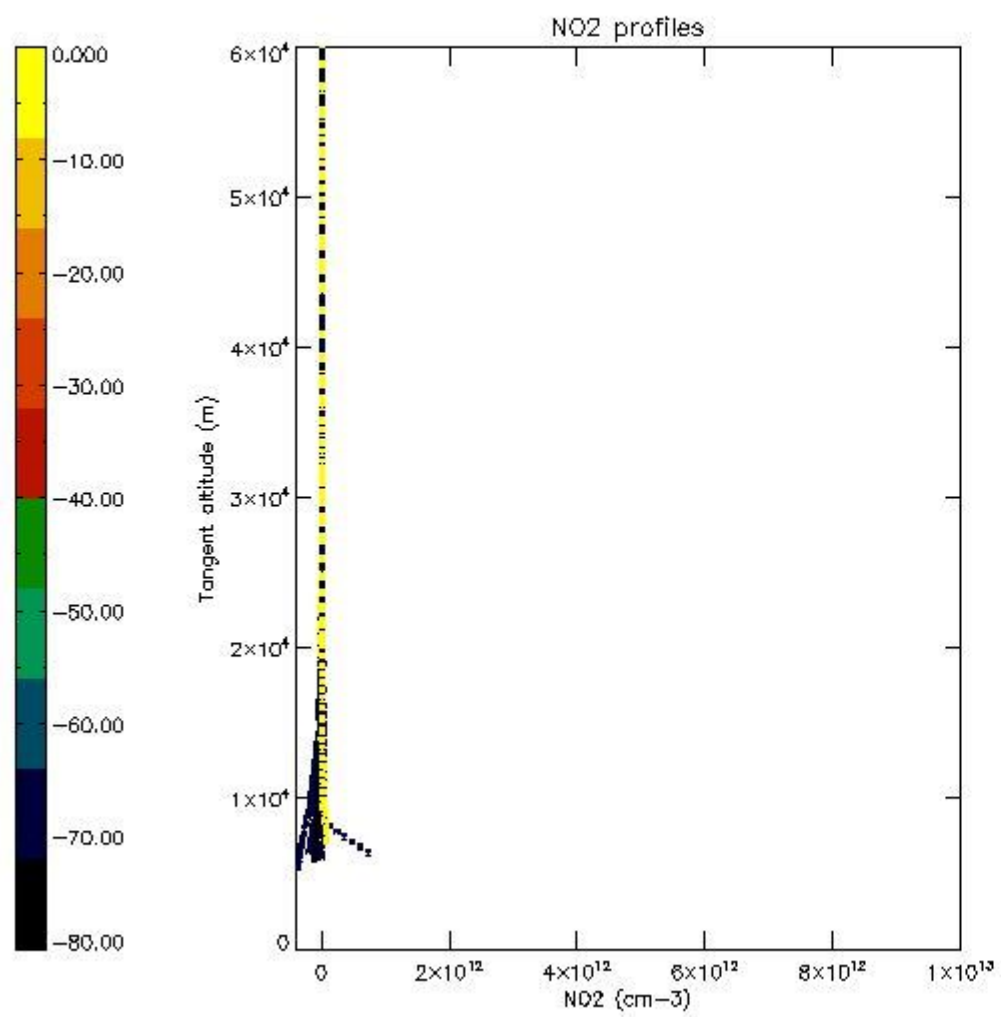
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



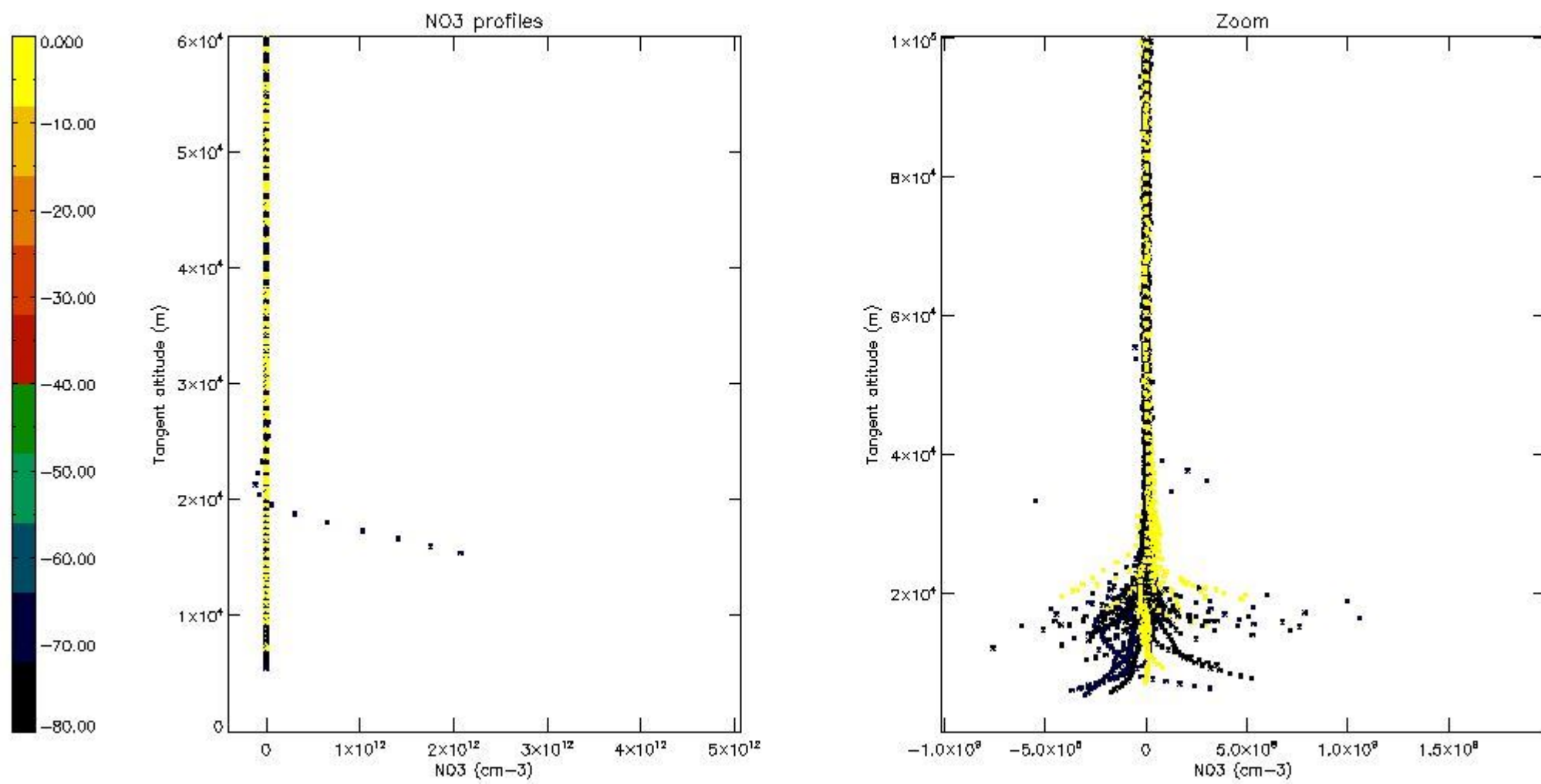
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



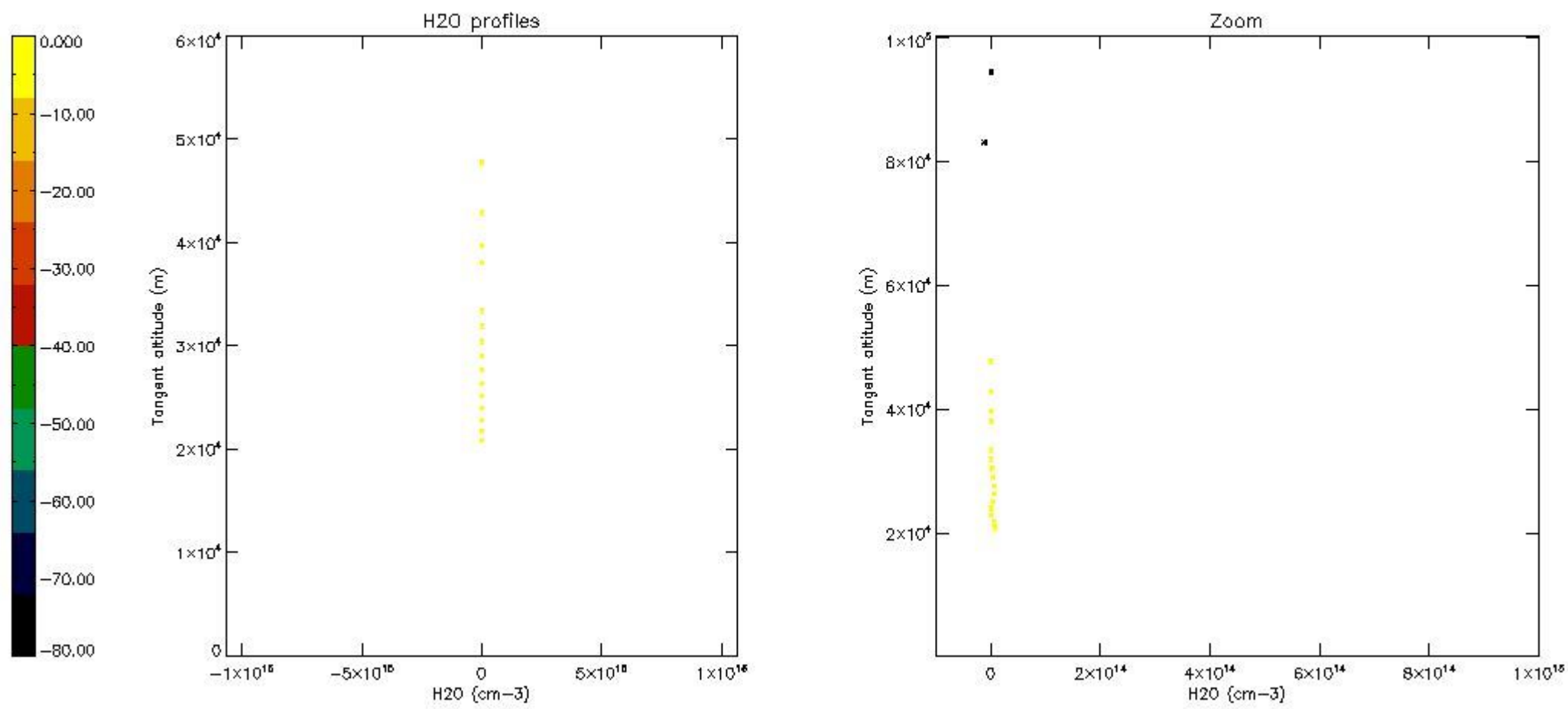
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

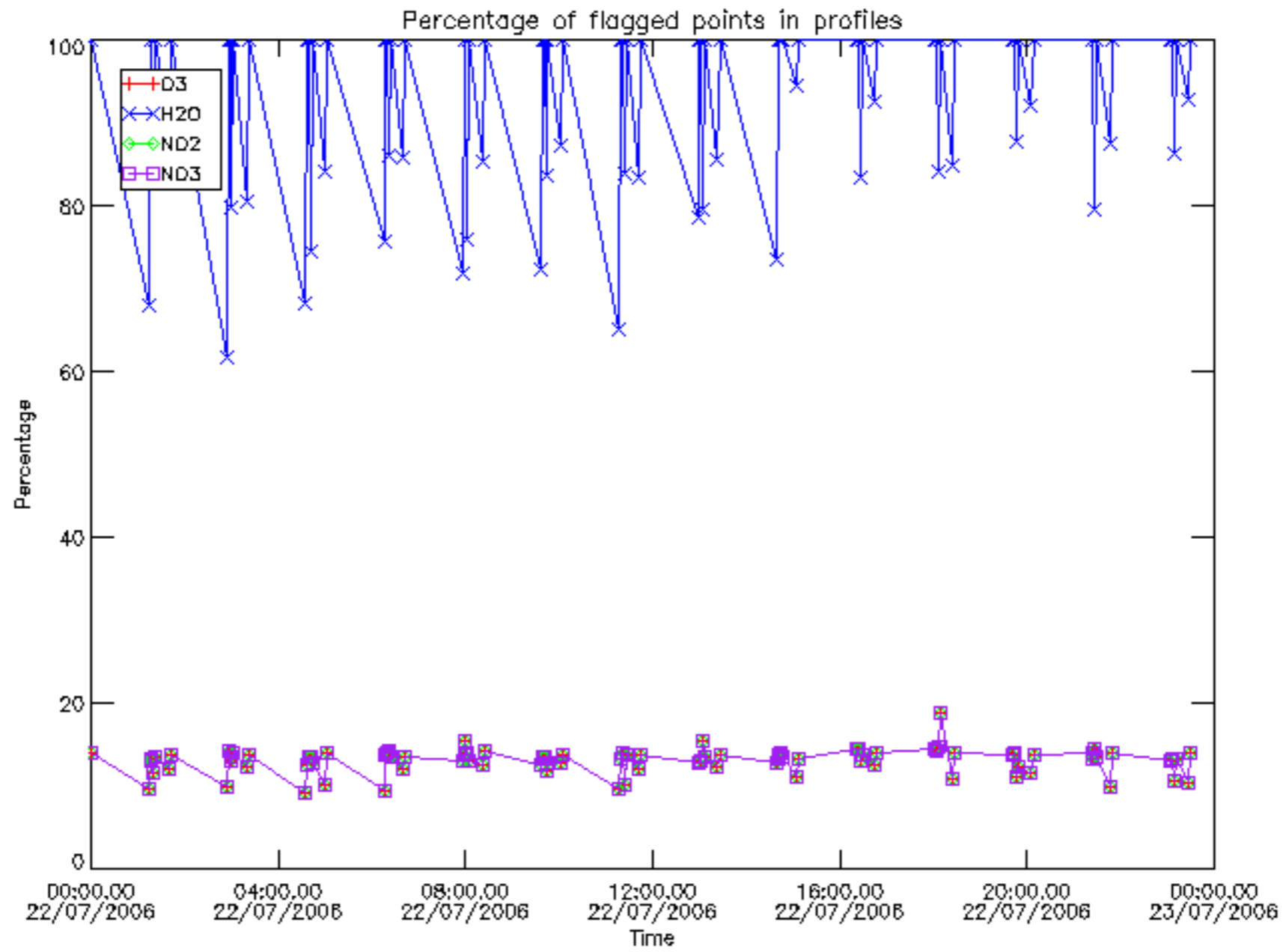
The colorbar represents the latitude.



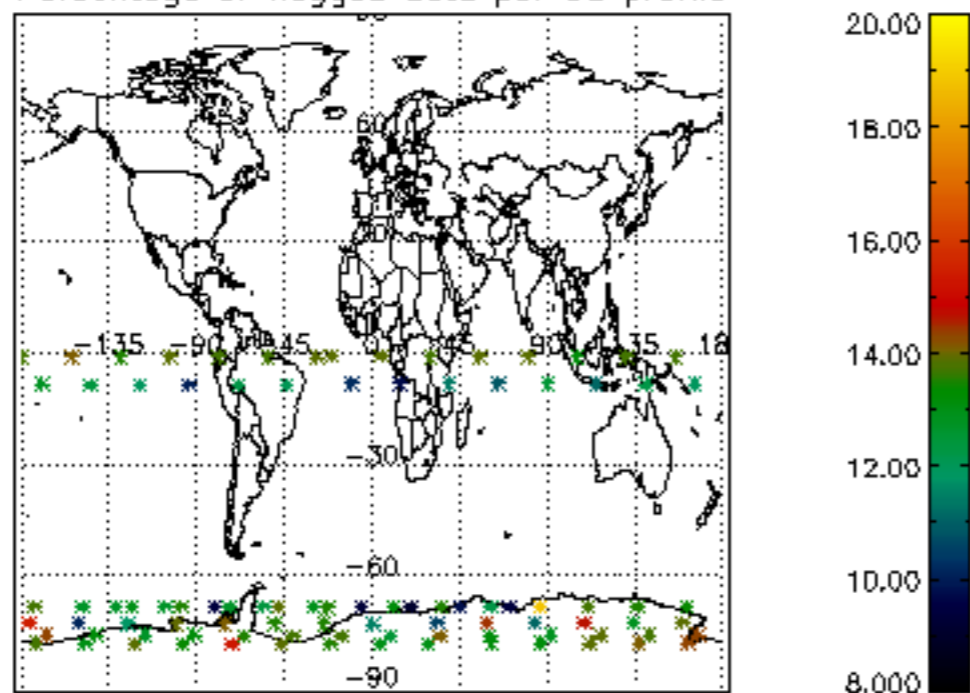
6. Auxiliary Data Files used for the production reported in section 2

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

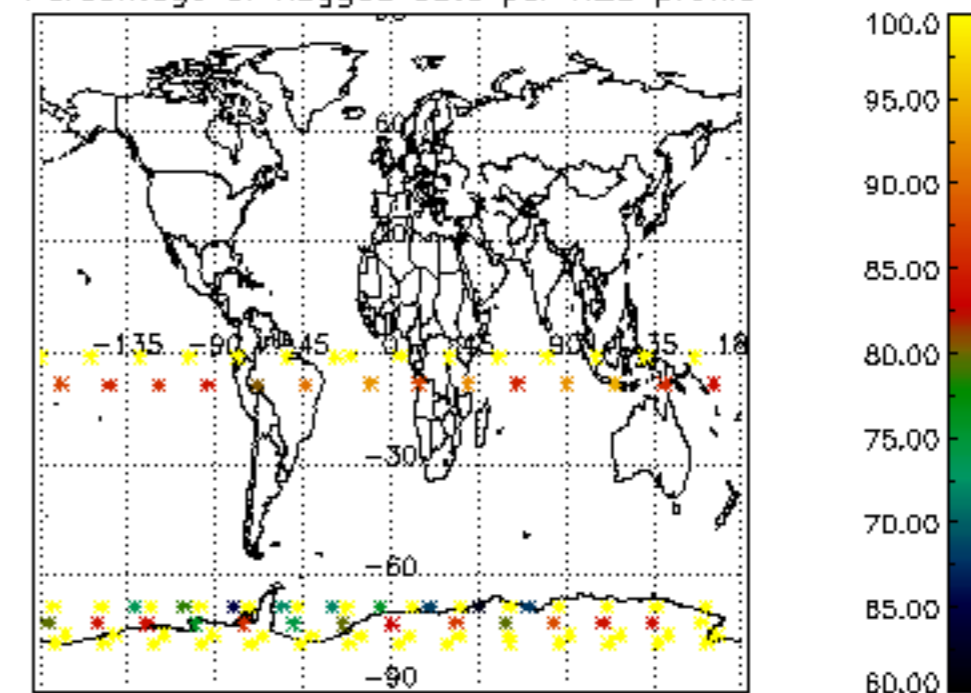
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	22-JUL-2006 00:01:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-JUL-2006 00:01:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-JUL-2006 00:01:08



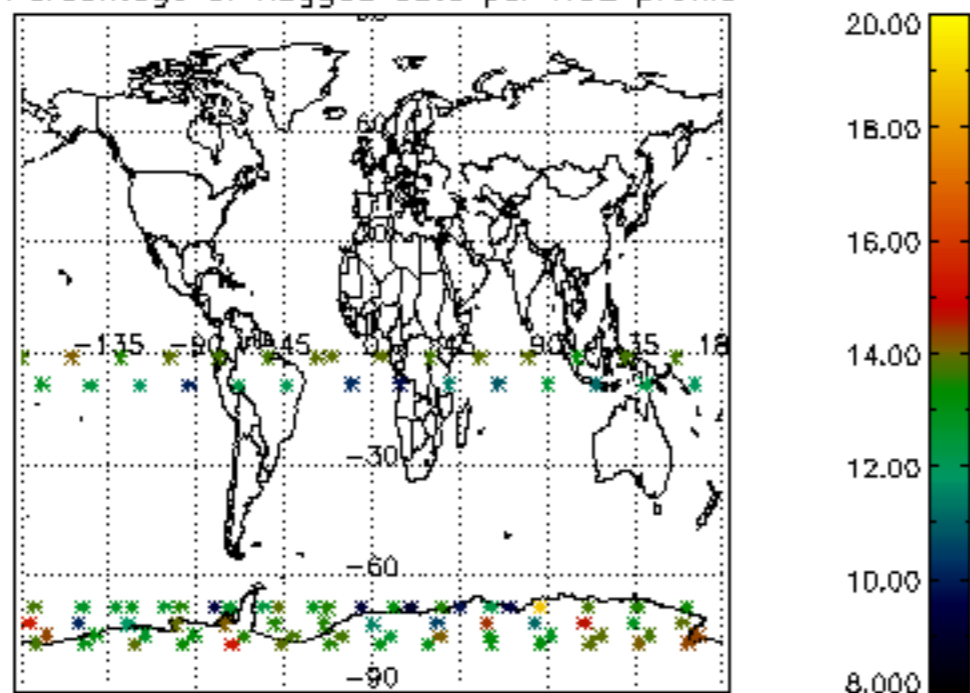
Percentage of flagged data per D3 profile



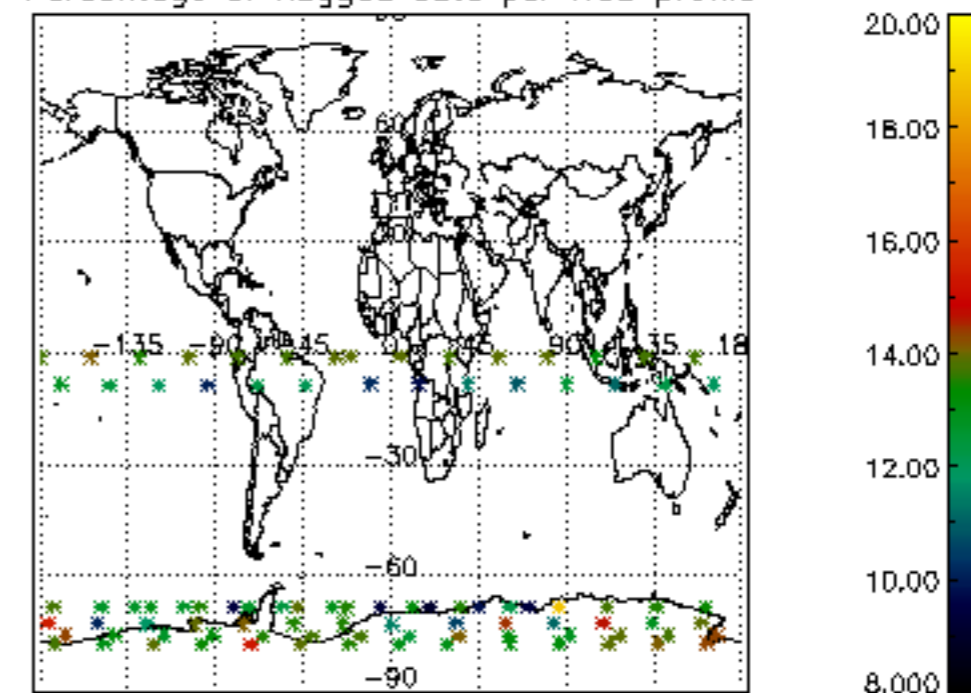
Percentage of flagged data per H2O profile

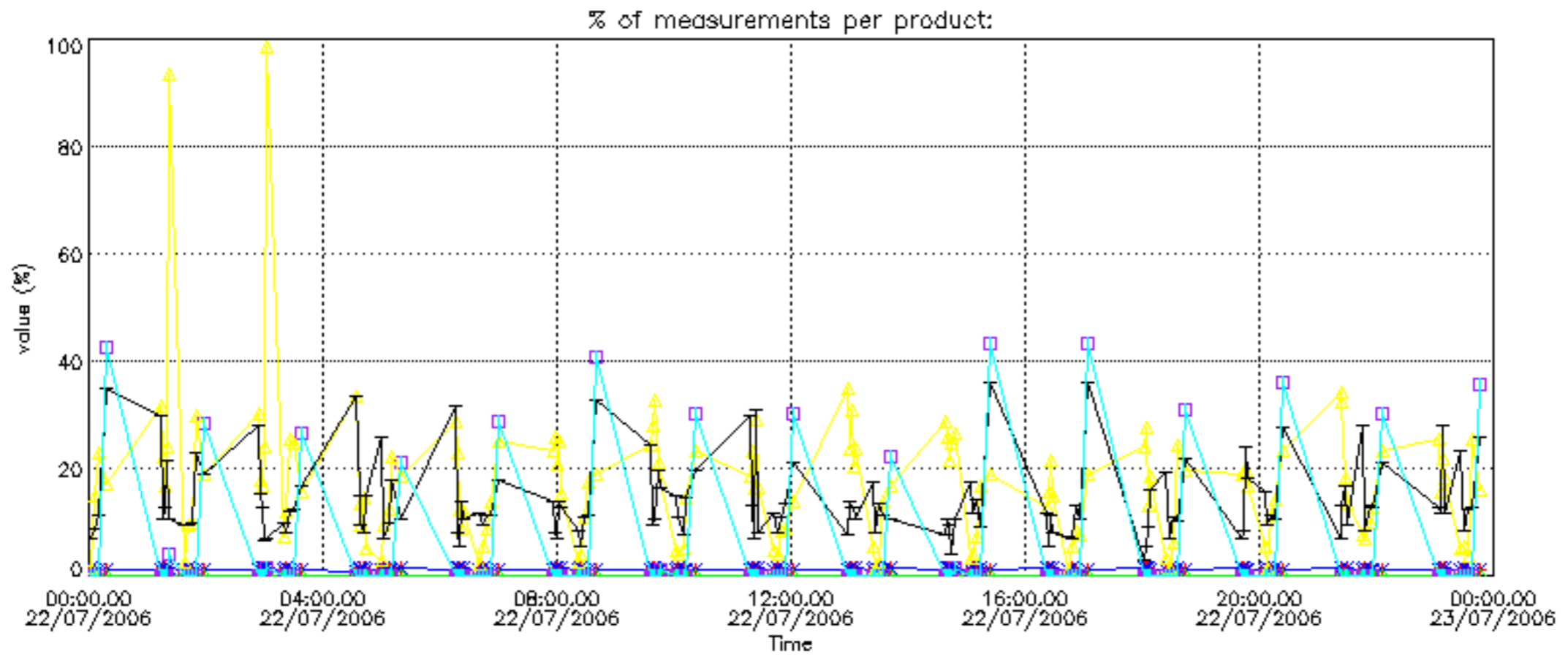


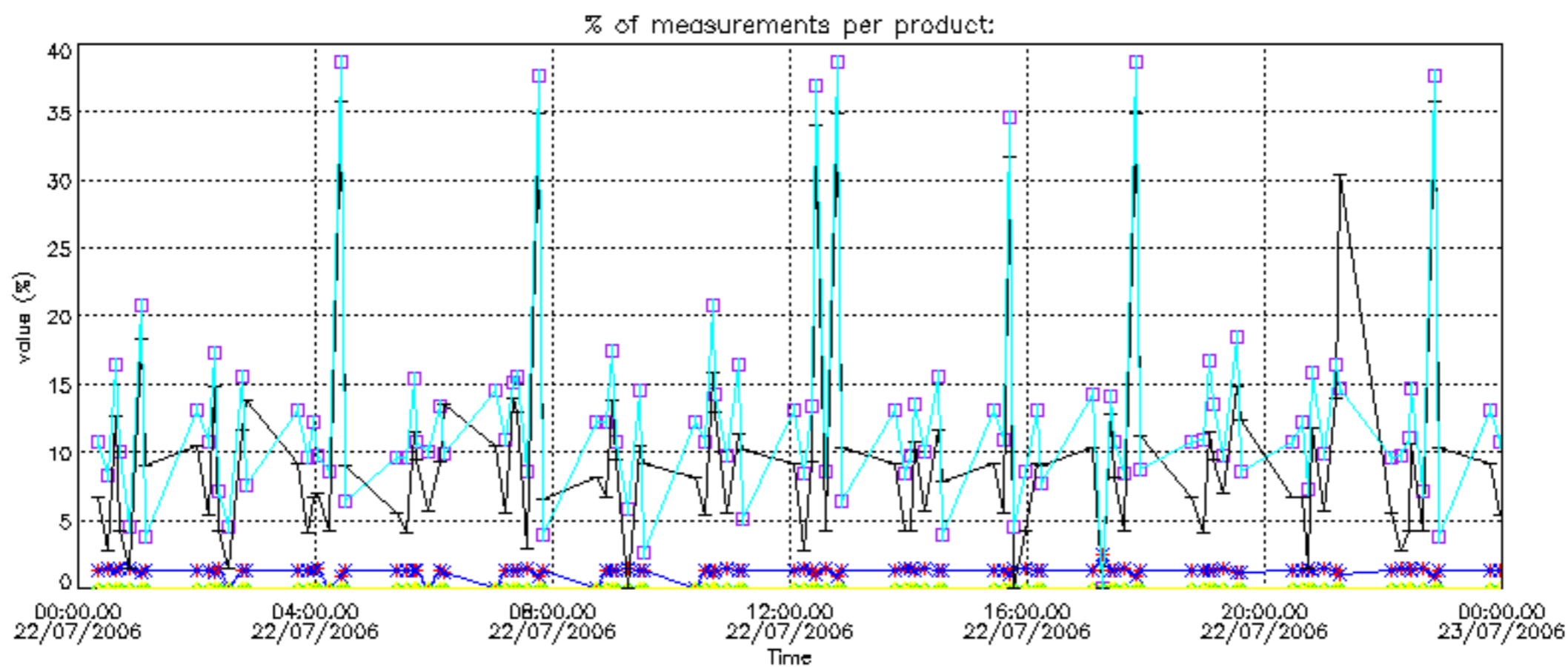
Percentage of flagged data per NO2 profile



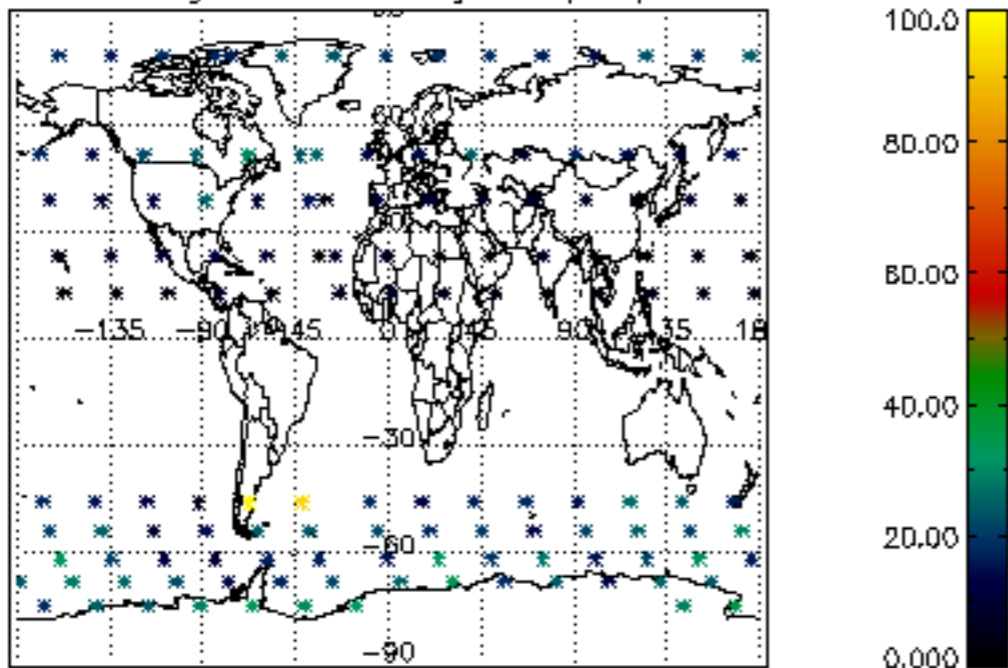
Percentage of flagged data per NO3 profile



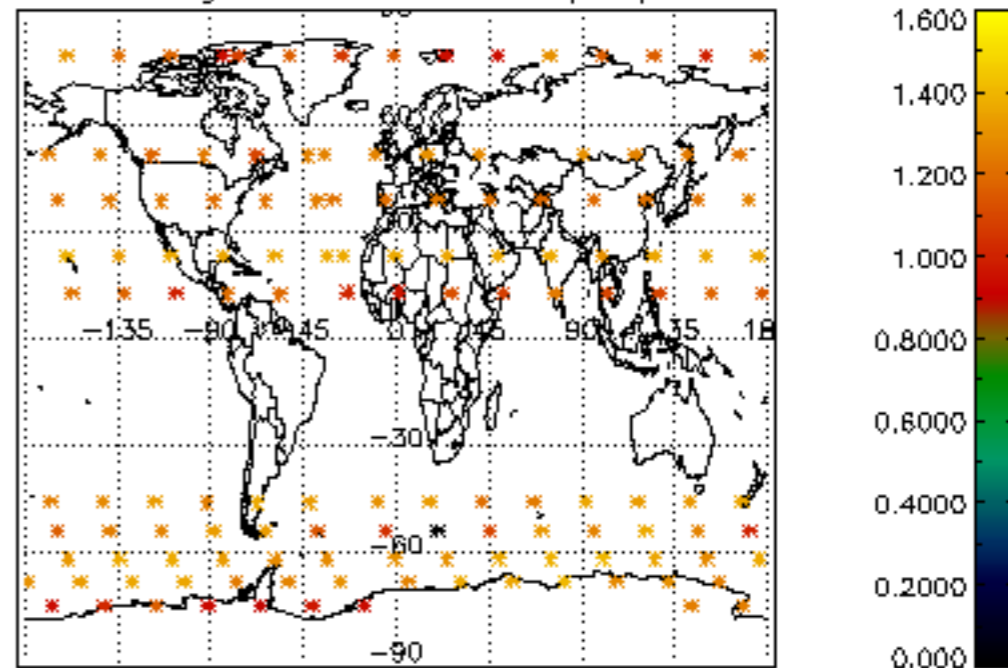




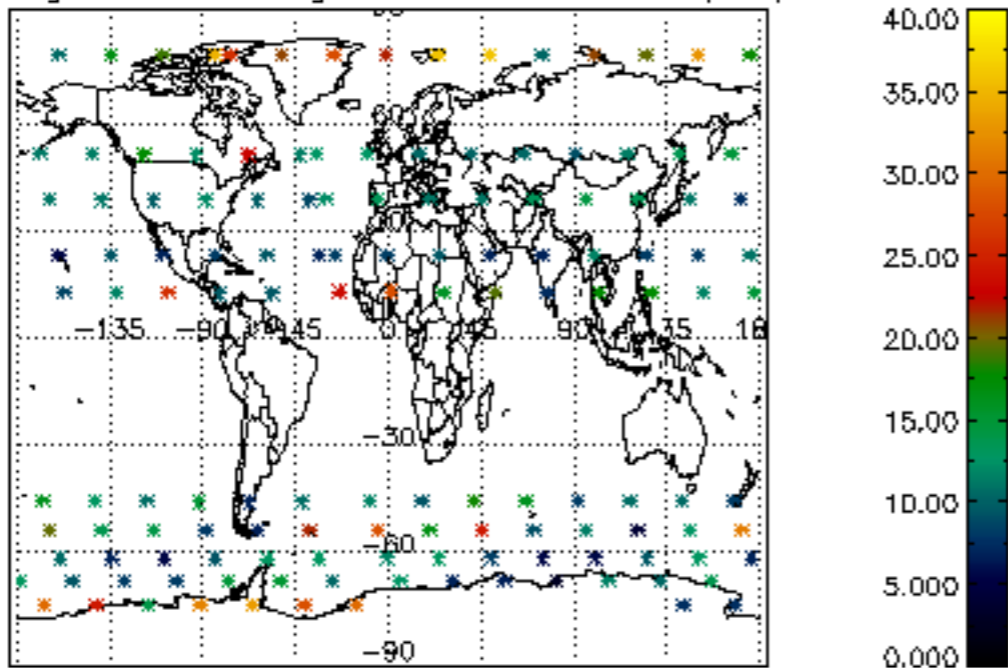
Percentage of cosmic ray hits per profile



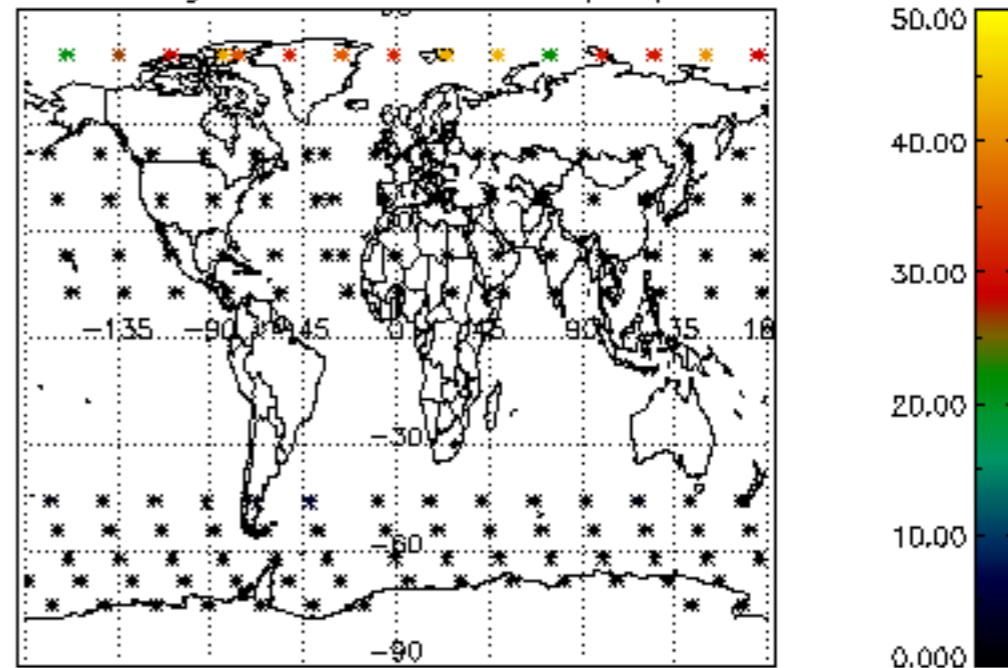
Percentage of datation errors per profile



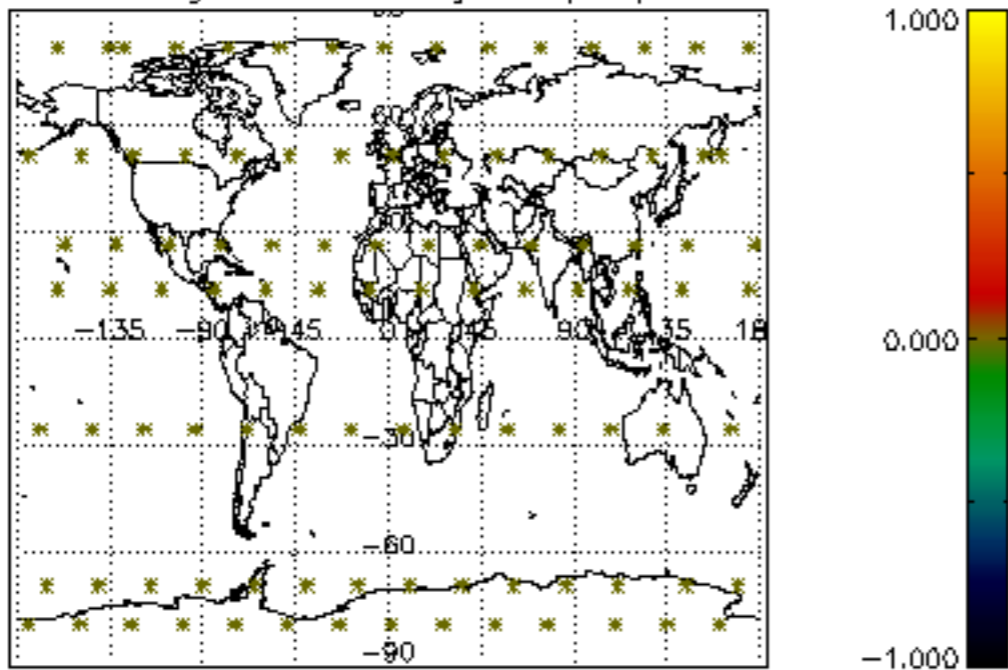
Percentage of star falling outside central band per profile



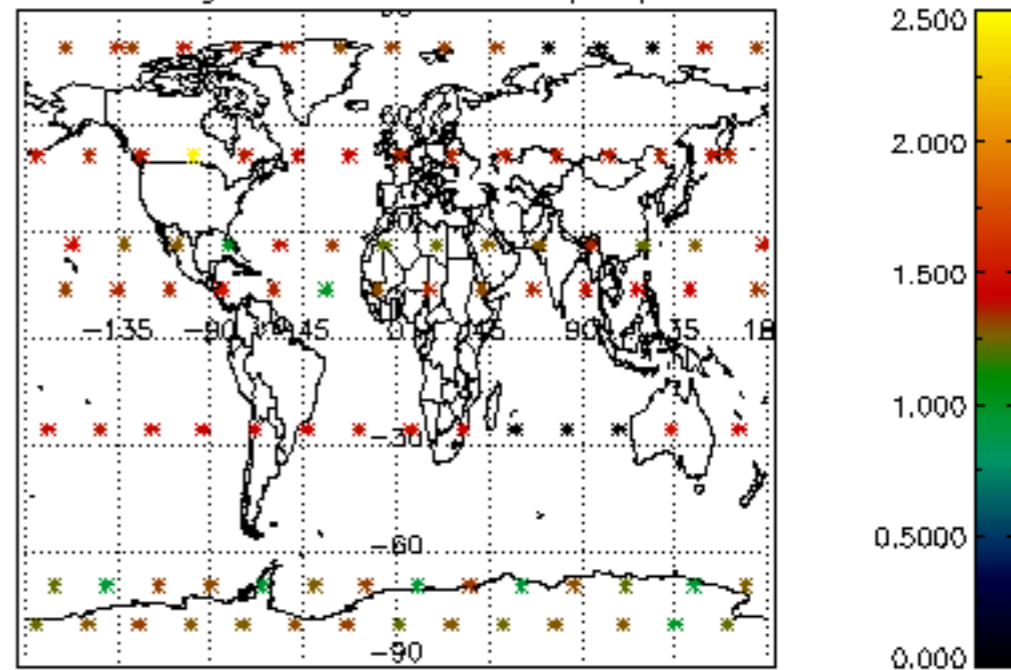
Percentage of saturation errors per profile



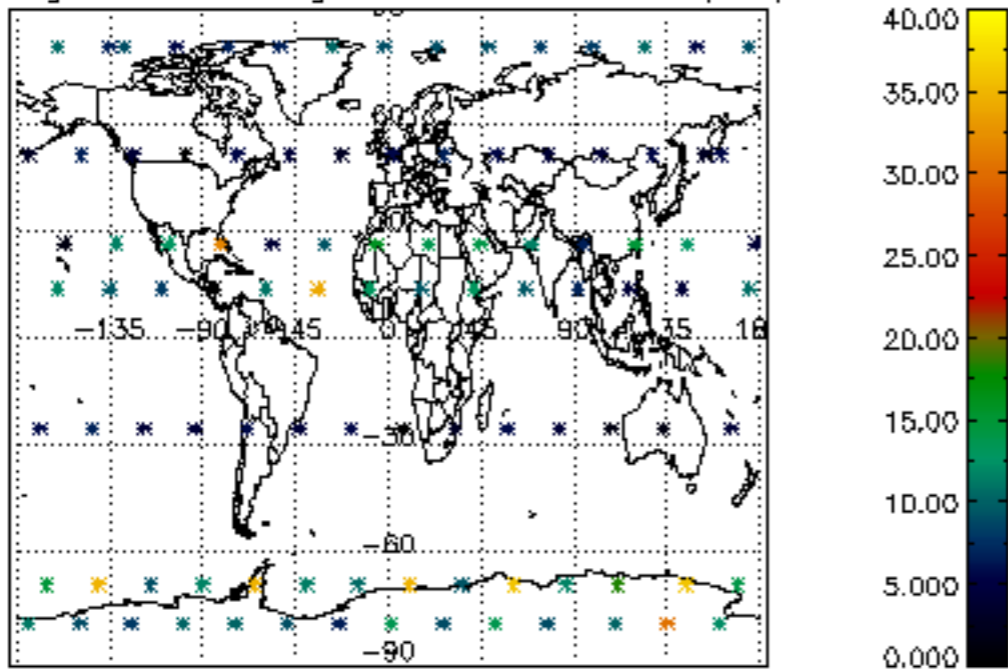
Percentage of cosmic ray hits per profile



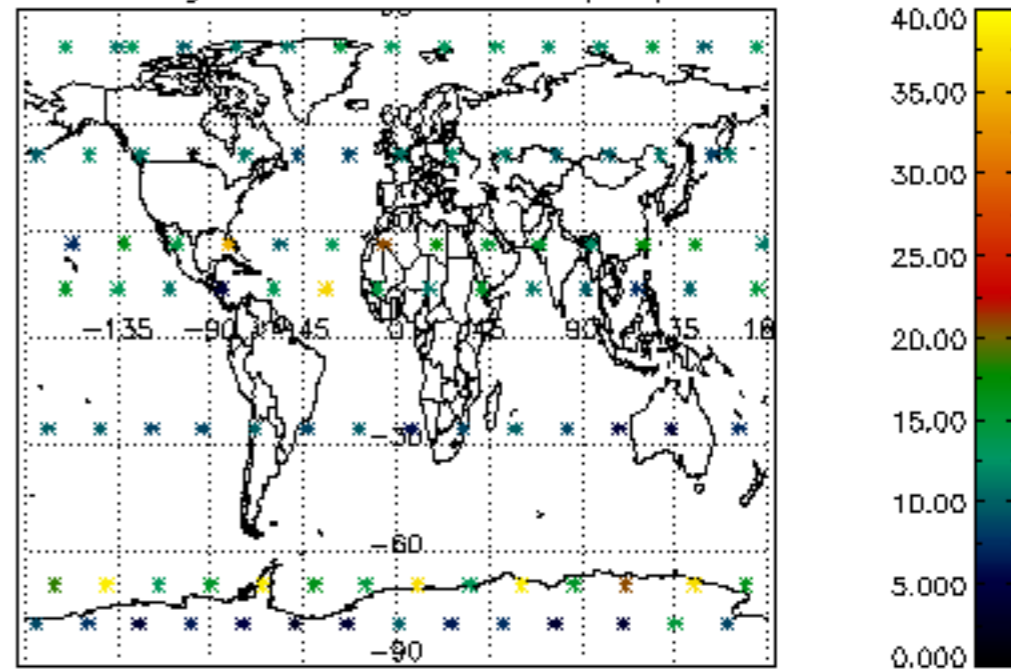
Percentage of datation errors per profile

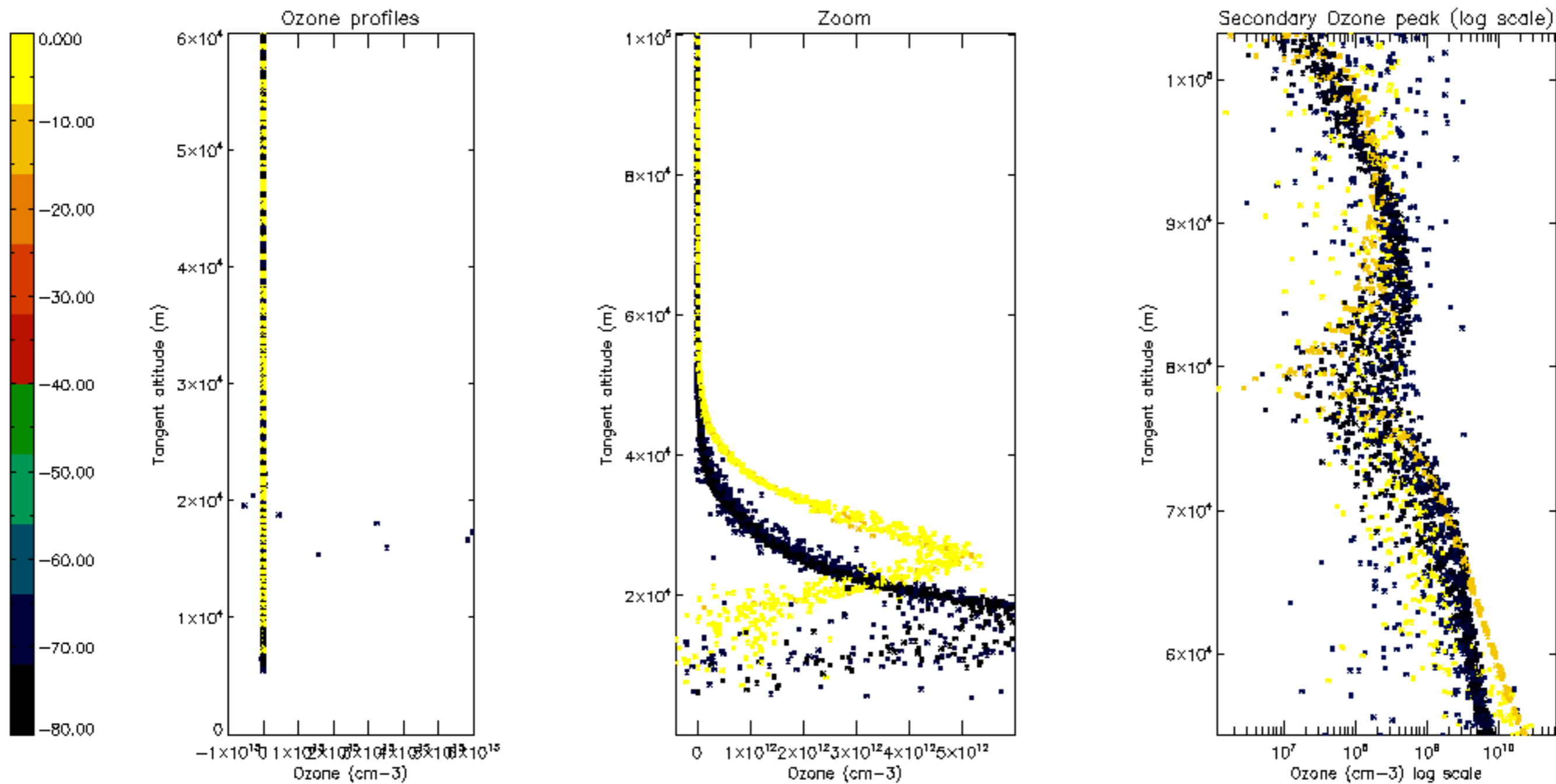


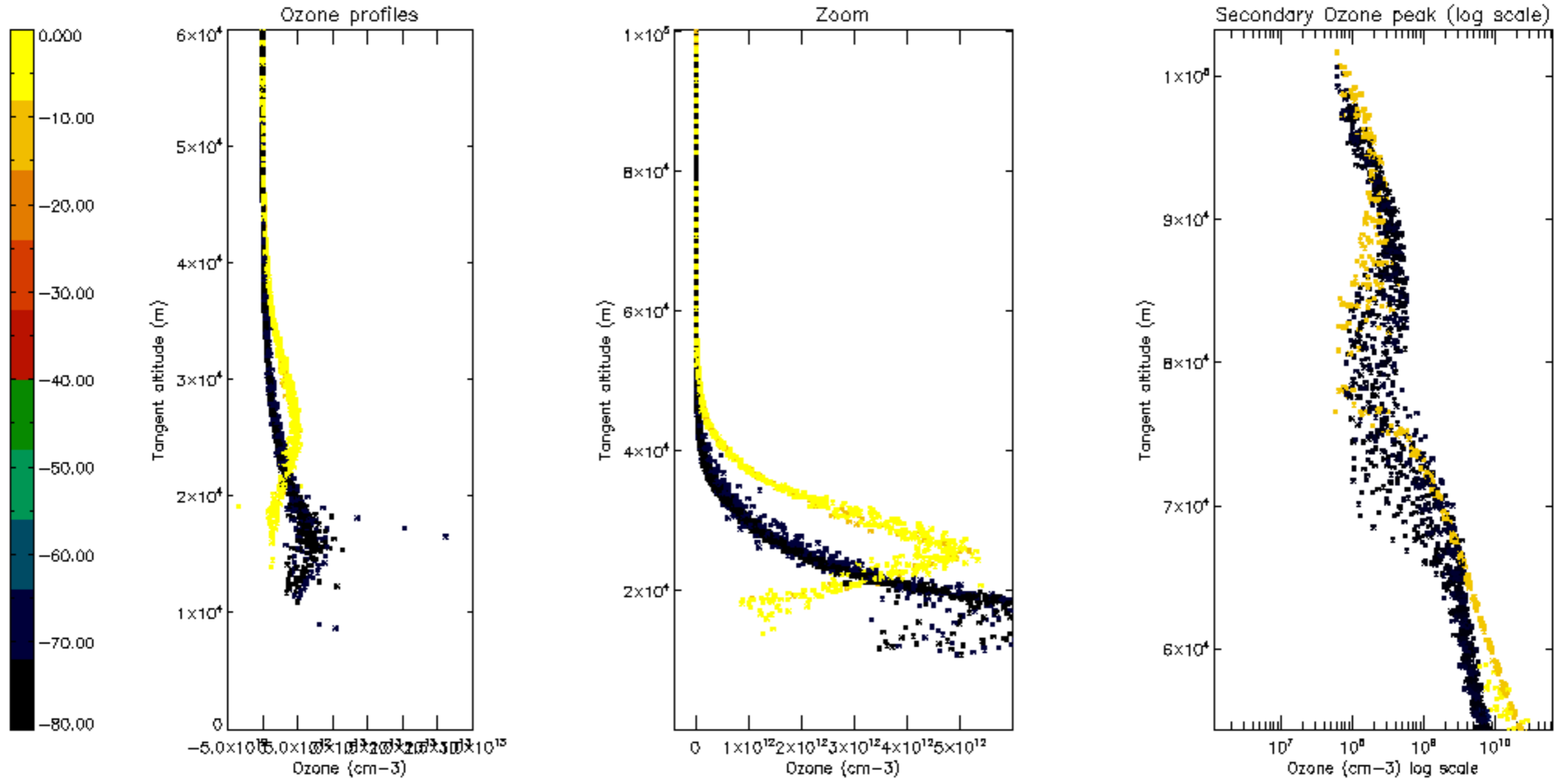
Percentage of star falling outside central band per profile

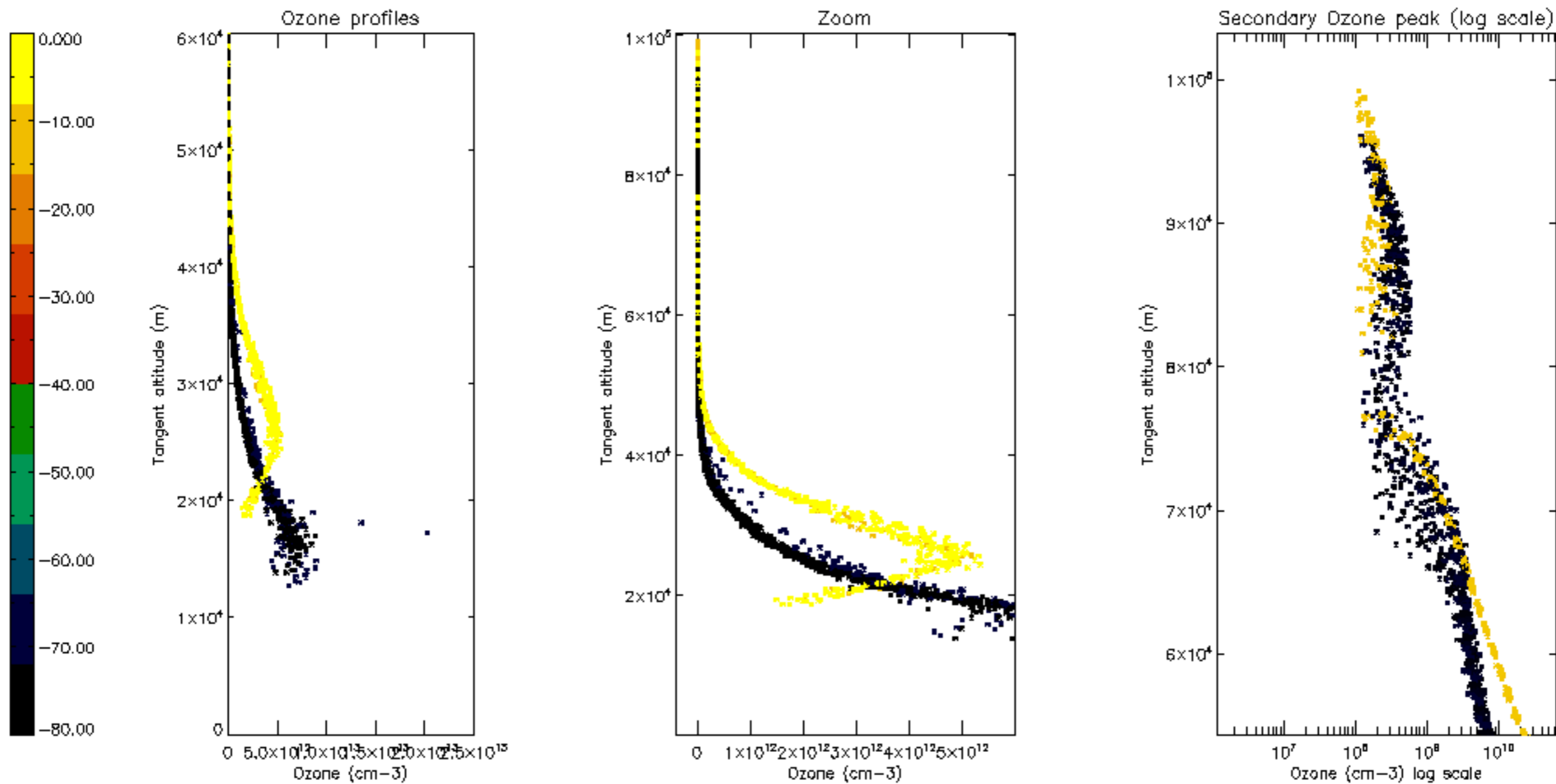


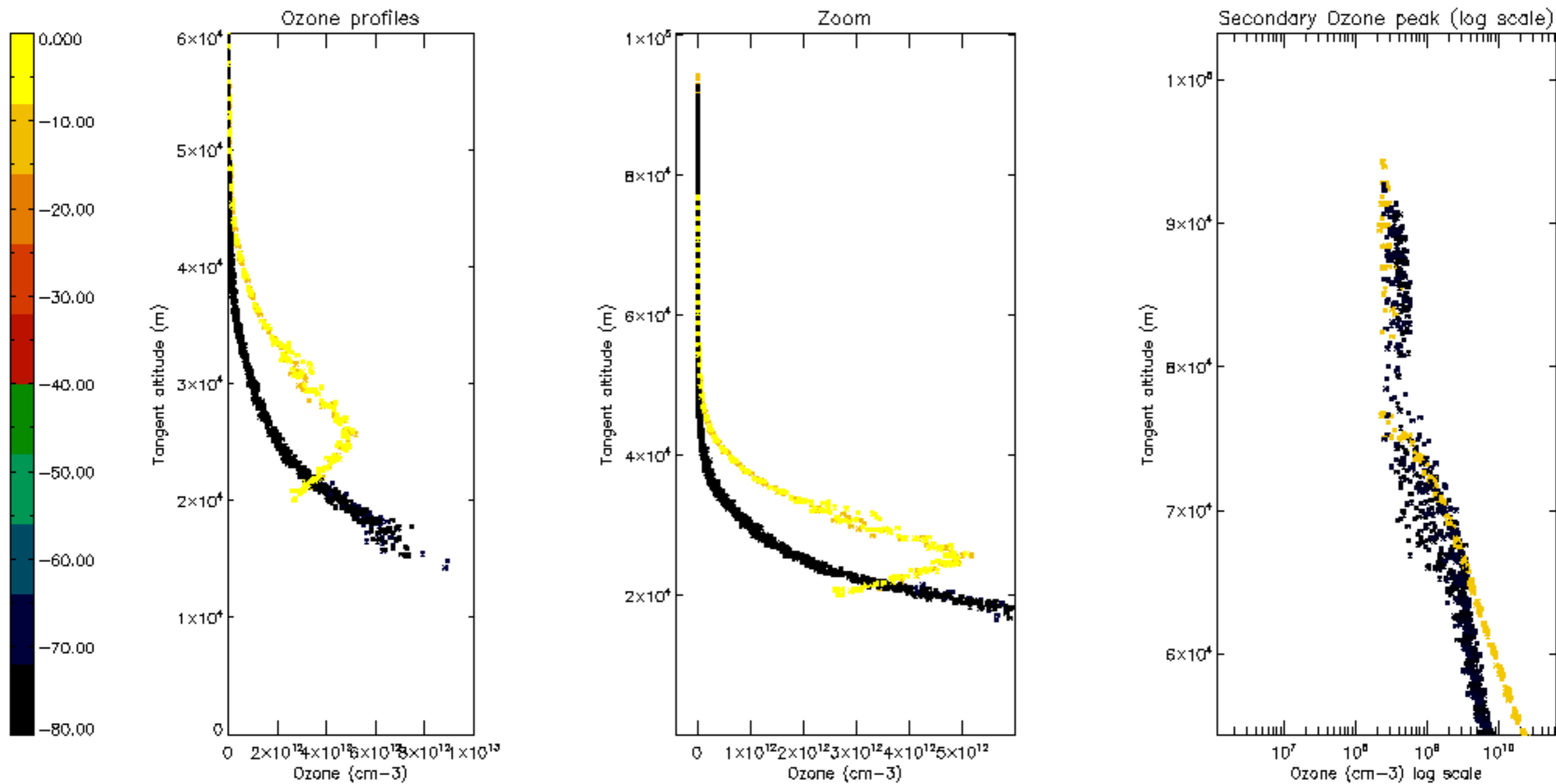
Percentage of saturation errors per profile

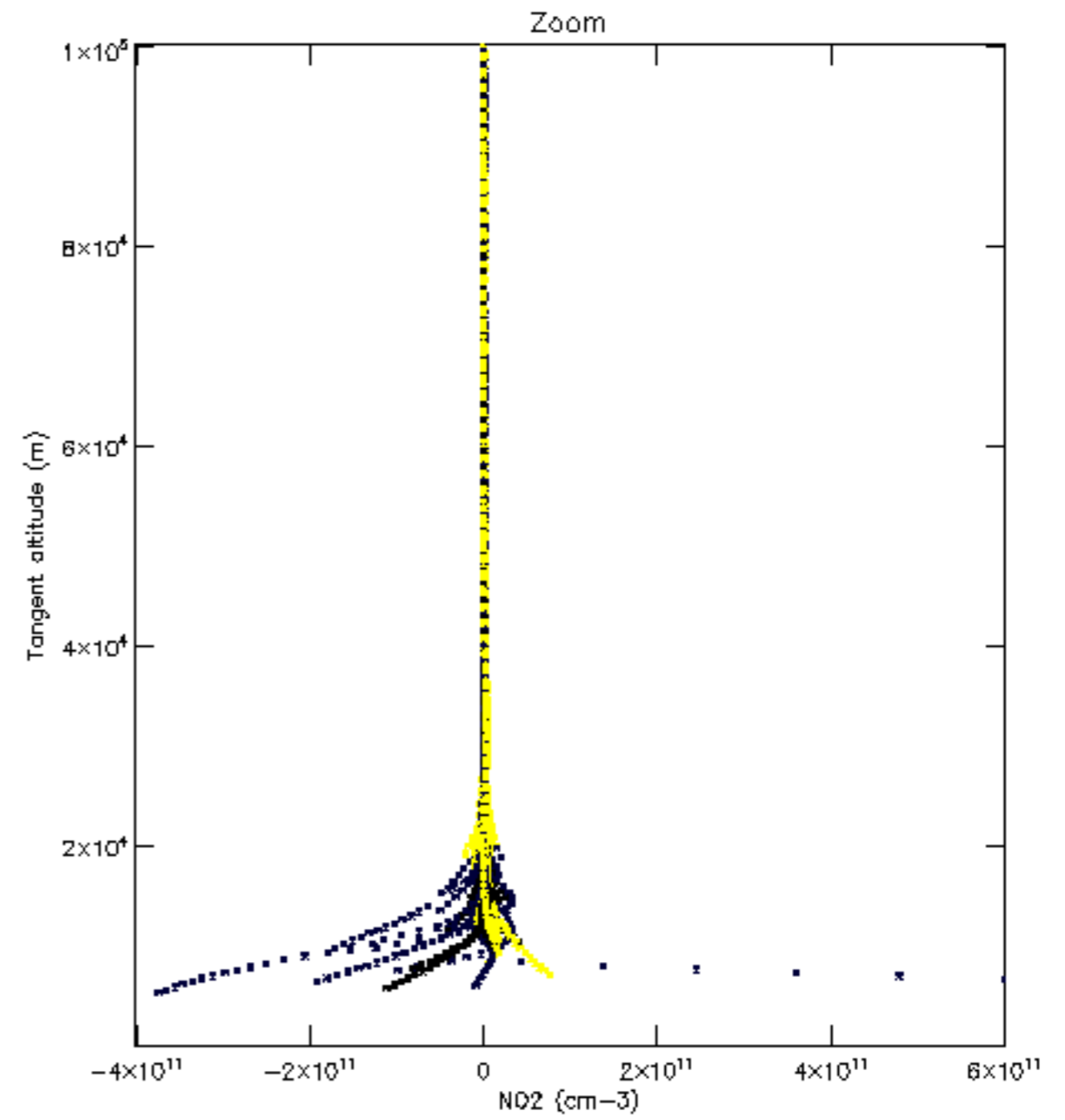
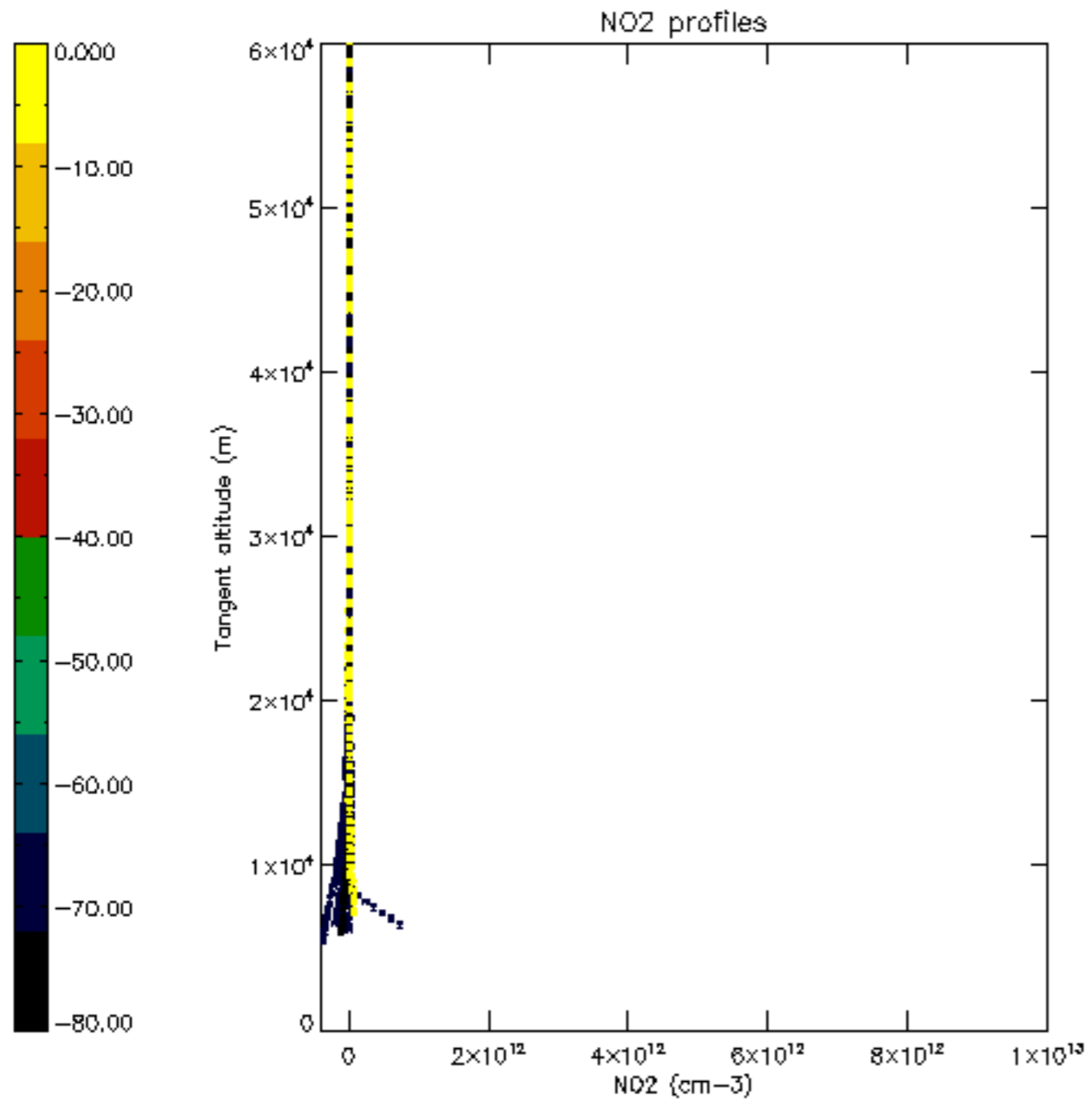


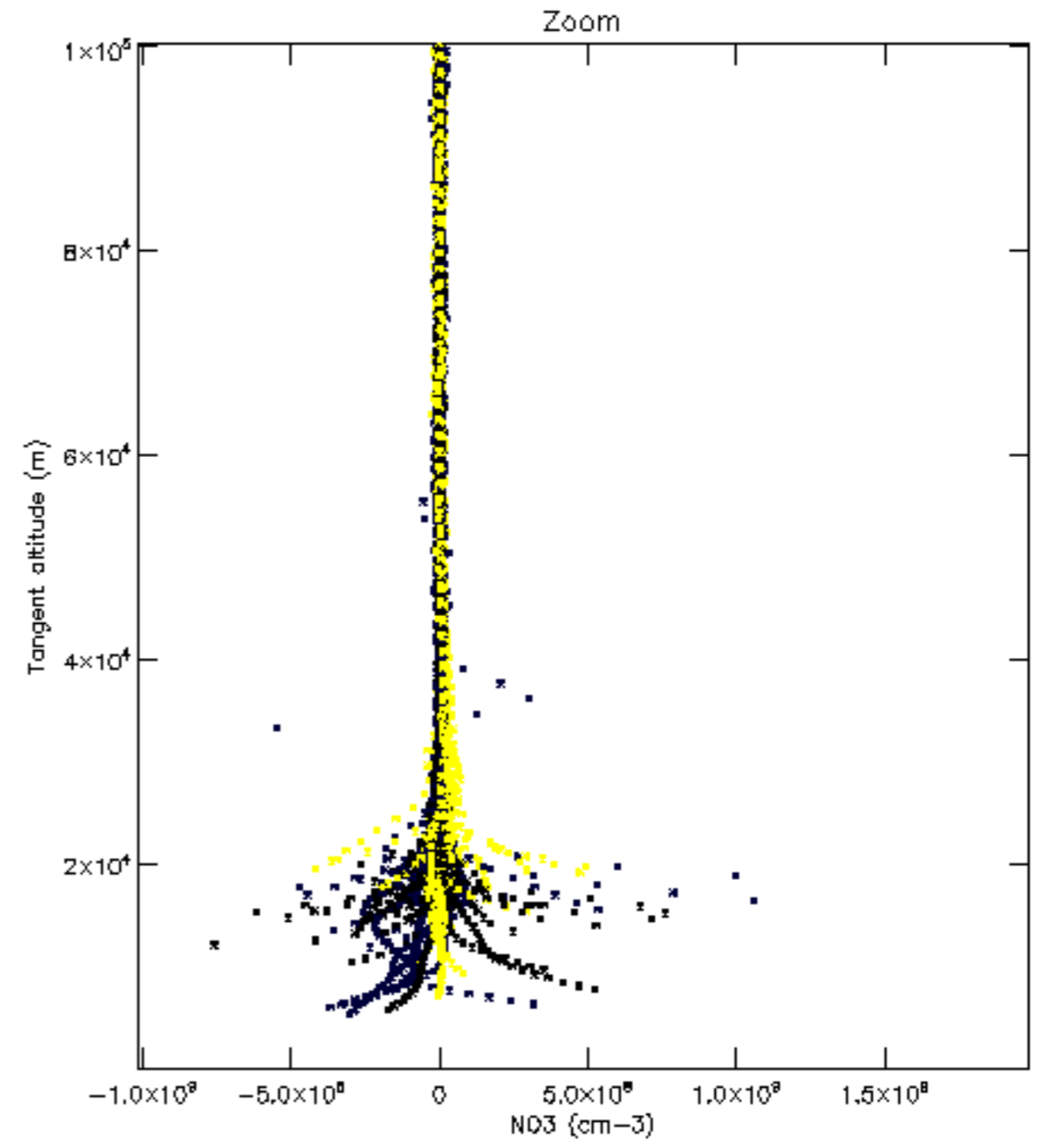
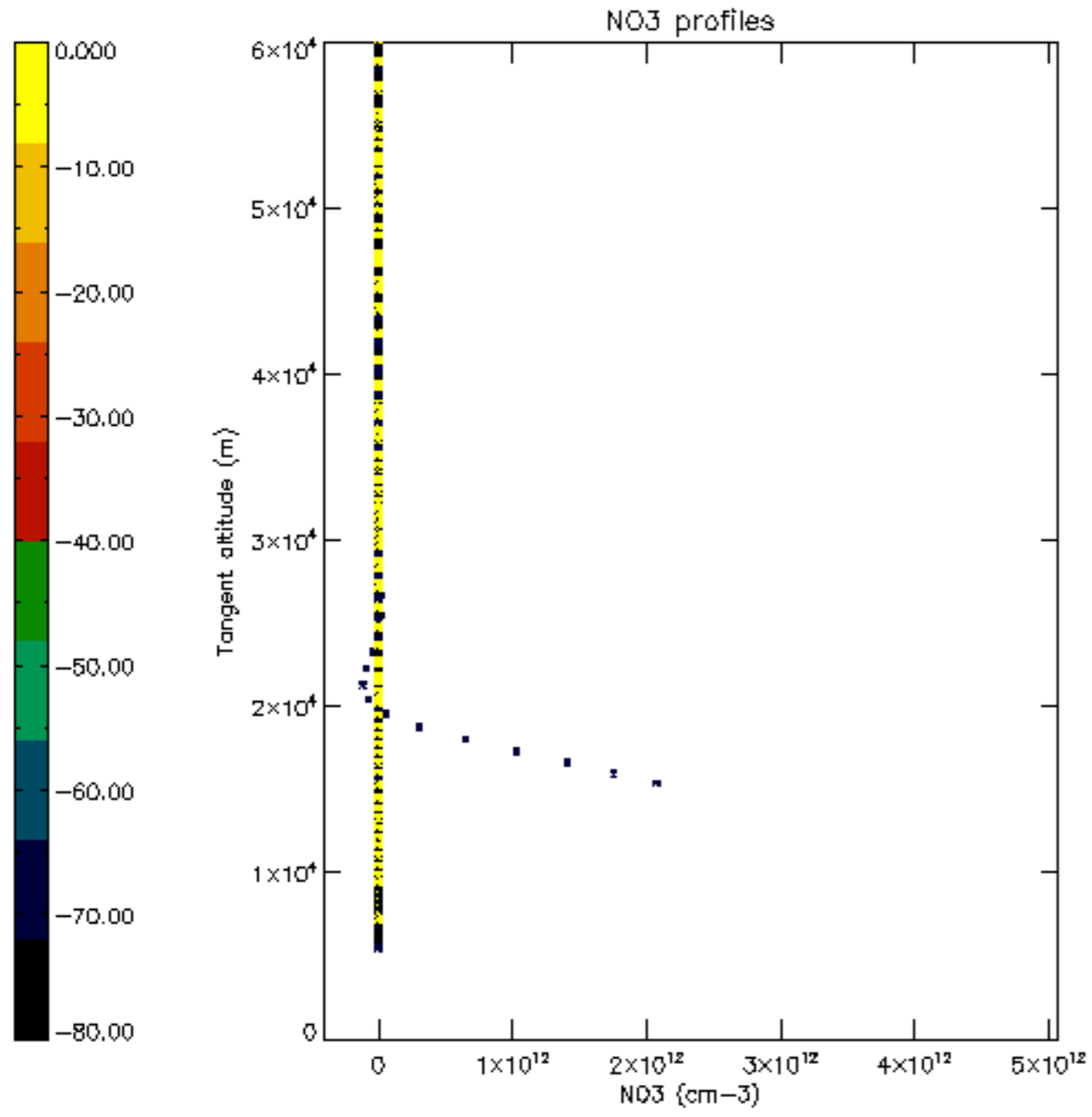


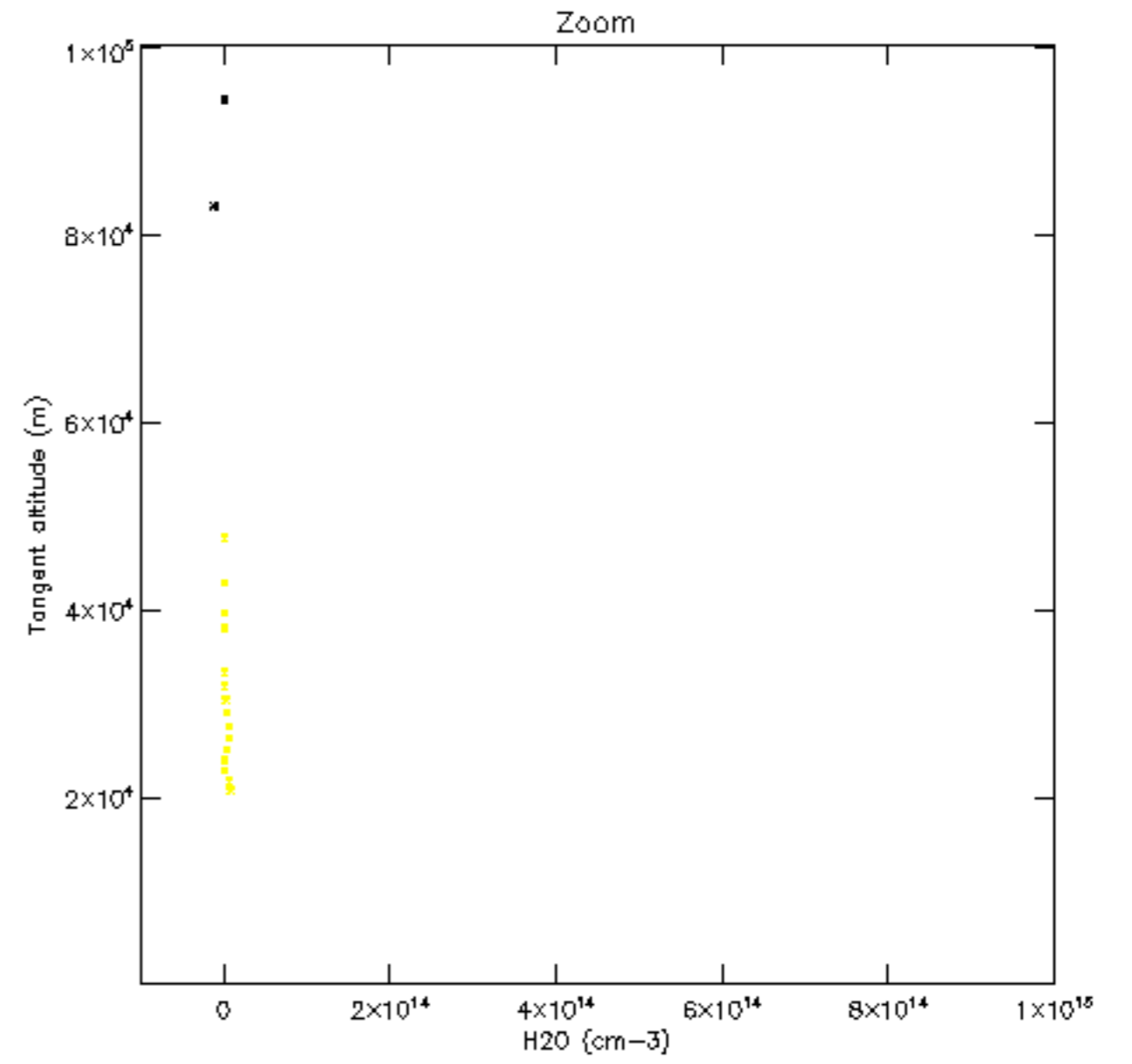
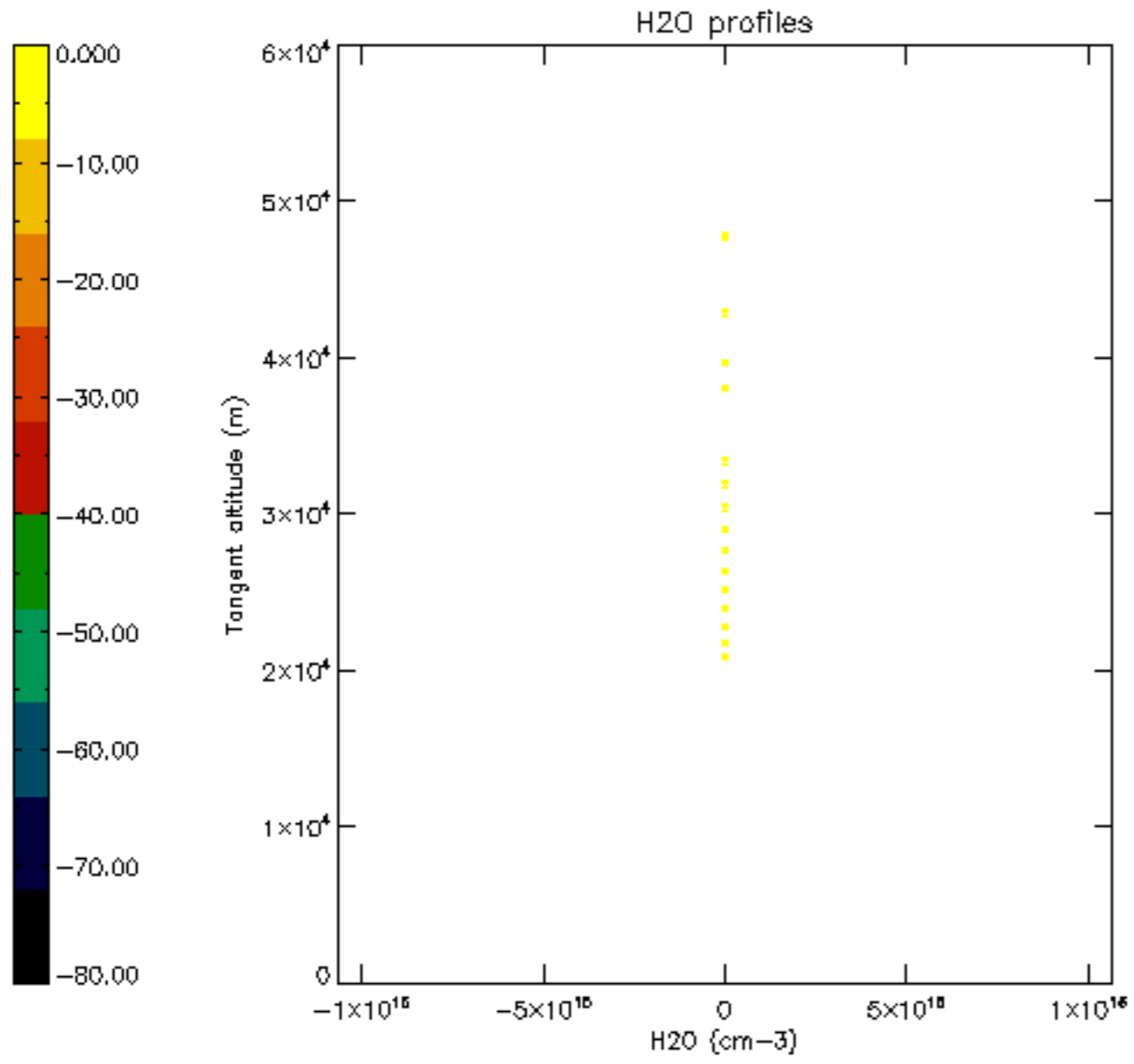


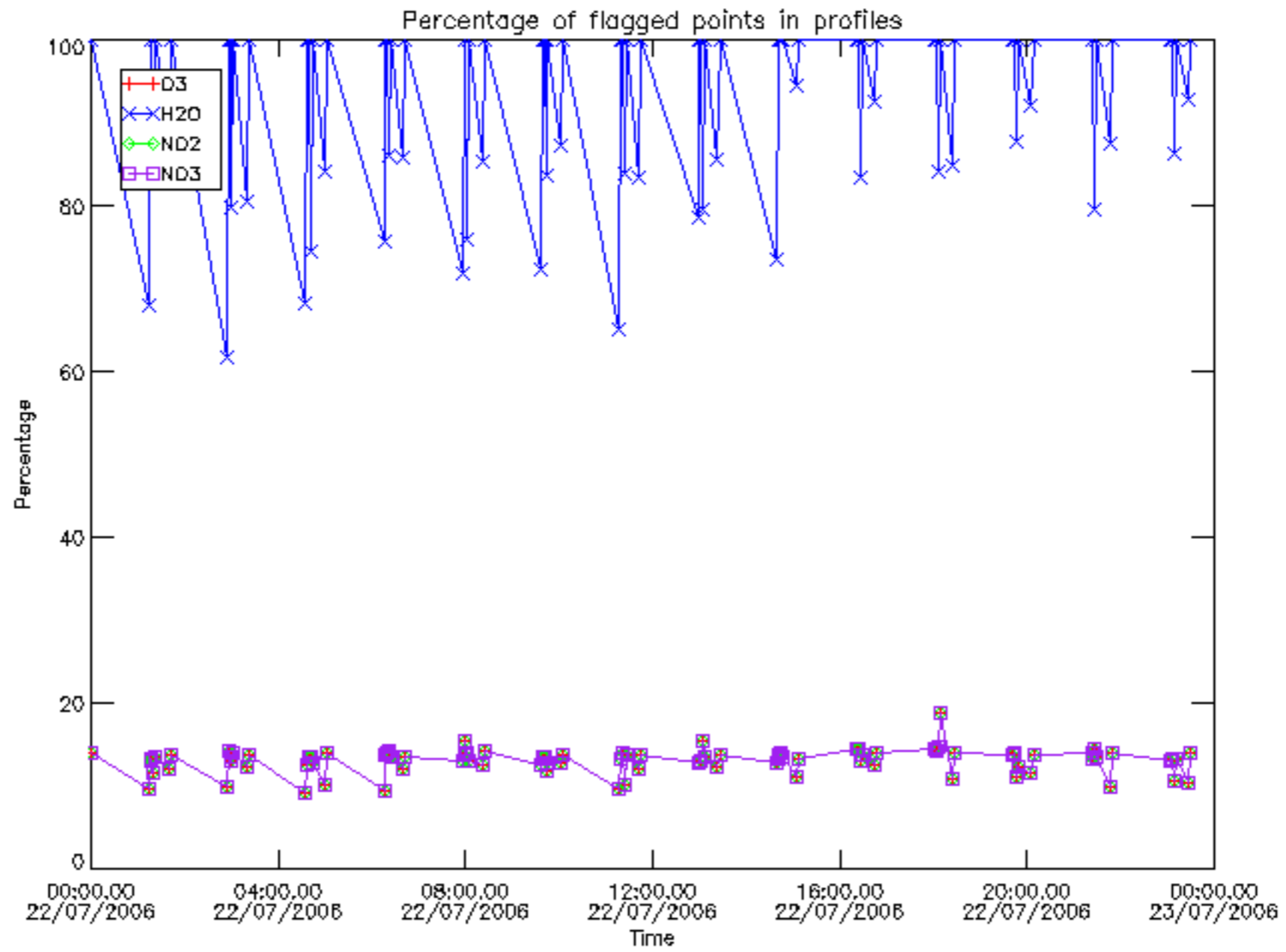




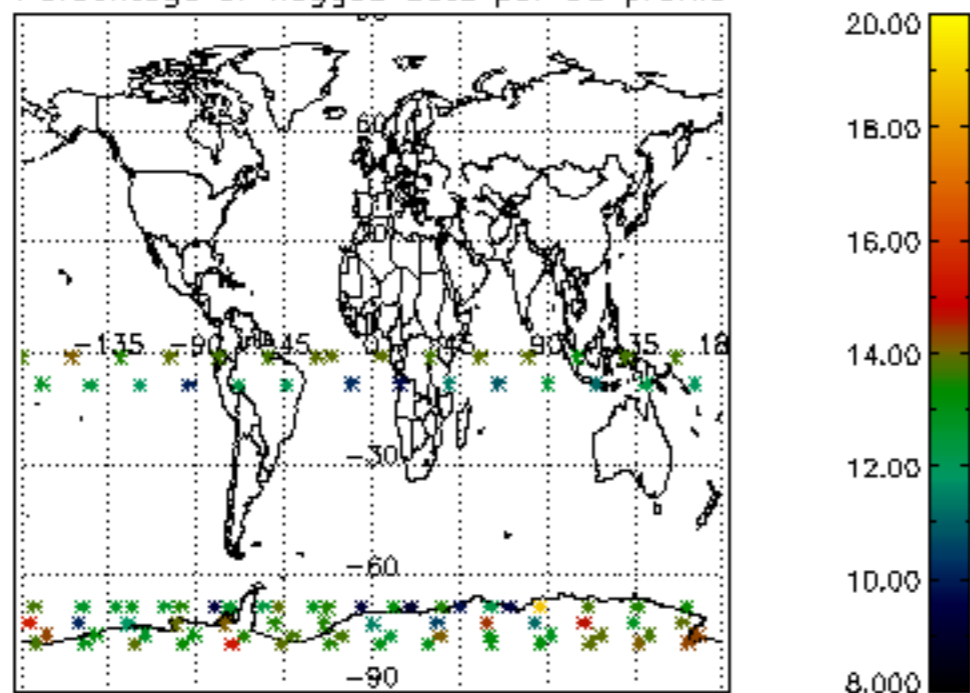




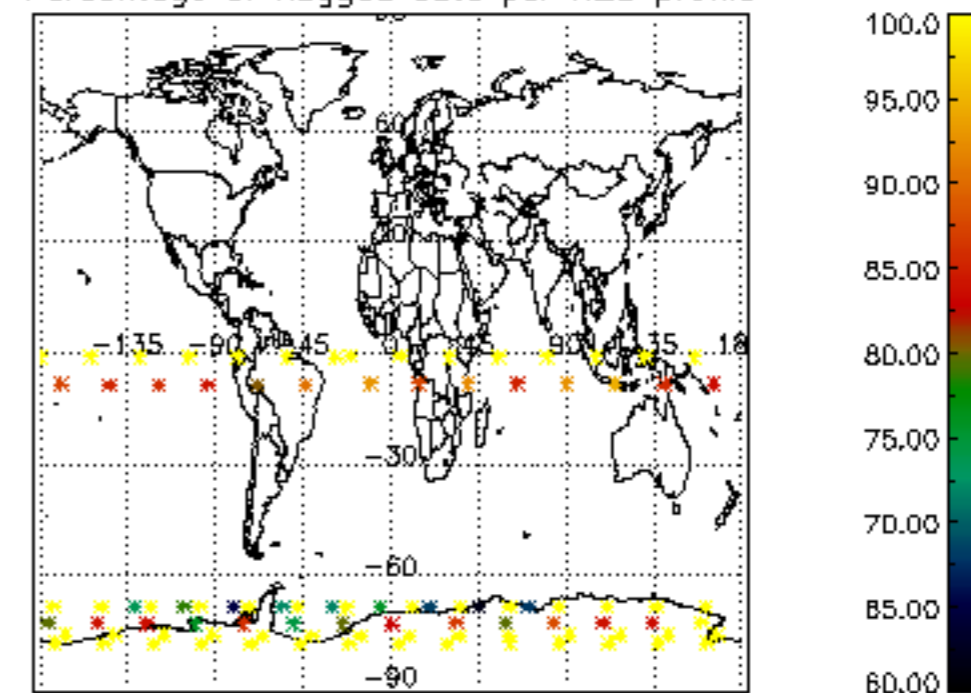




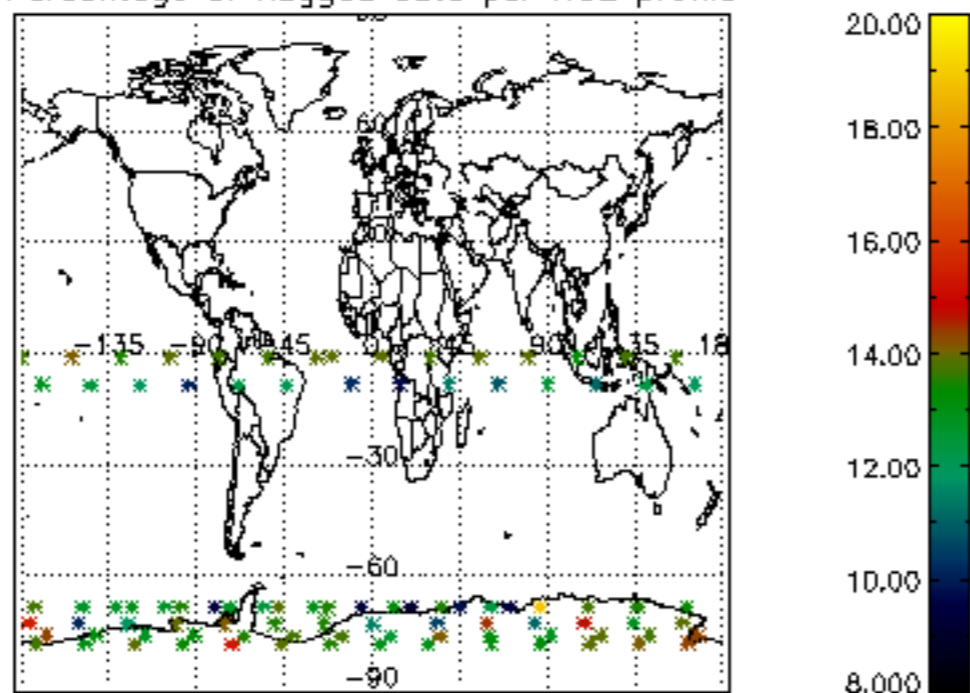
Percentage of flagged data per D3 profile



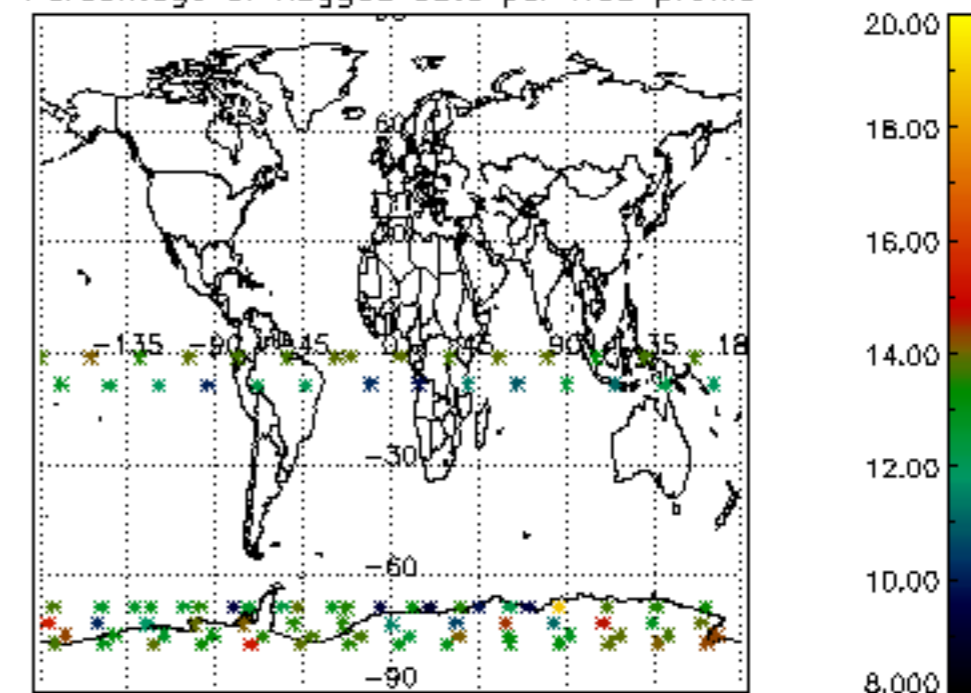
Percentage of flagged data per H2O profile

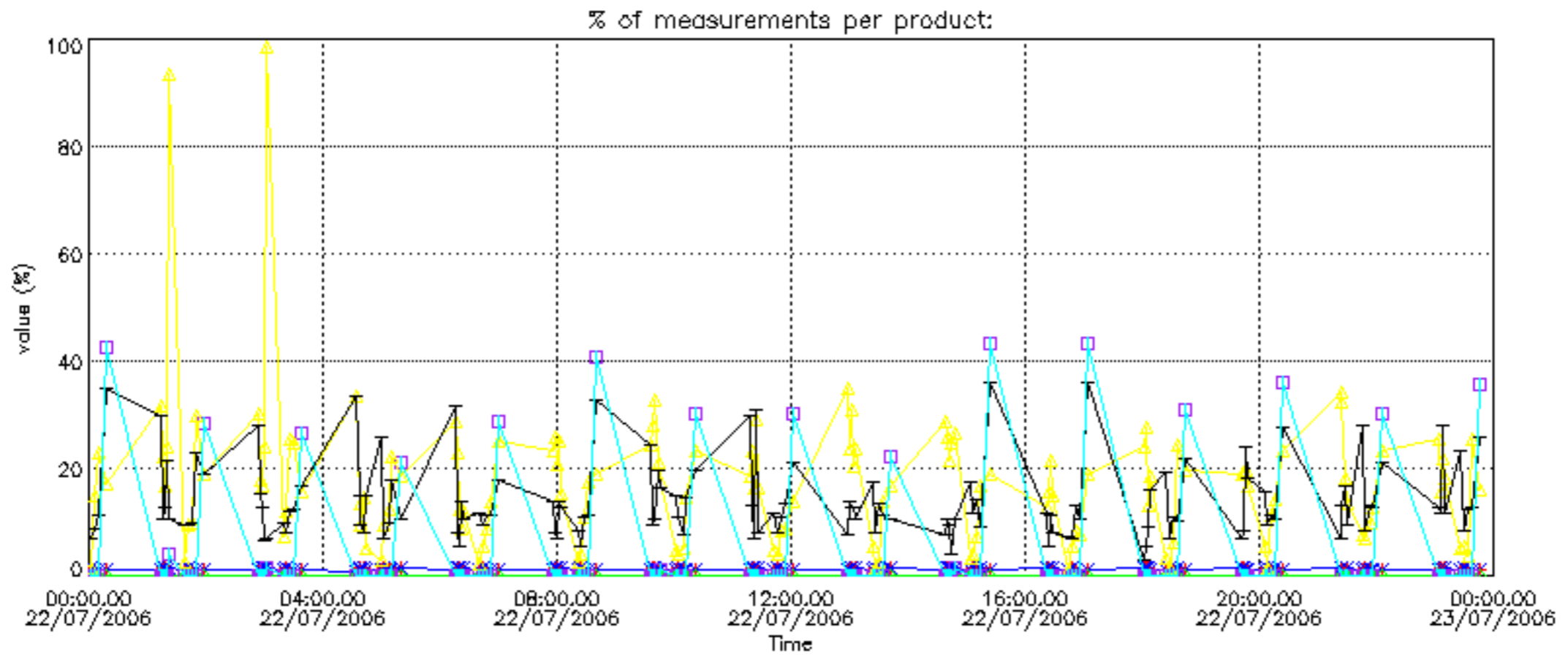


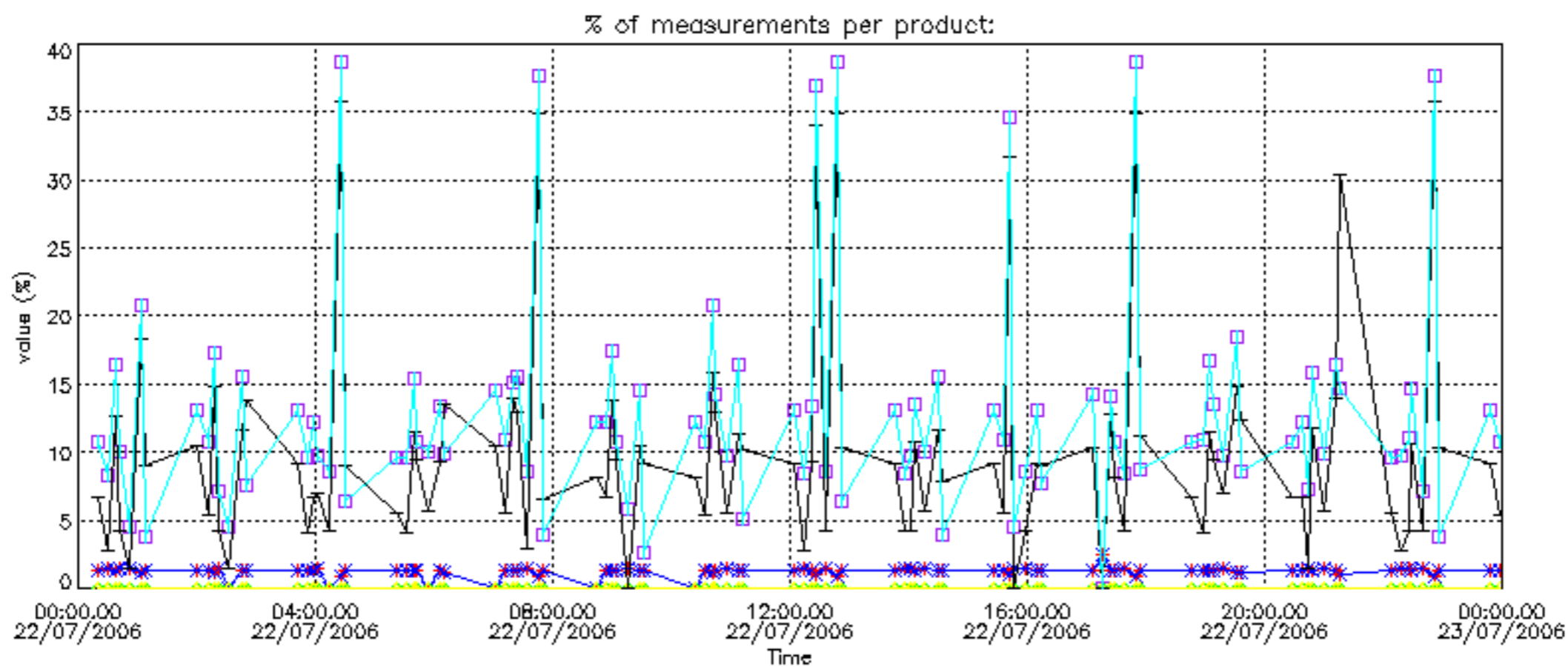
Percentage of flagged data per NO2 profile



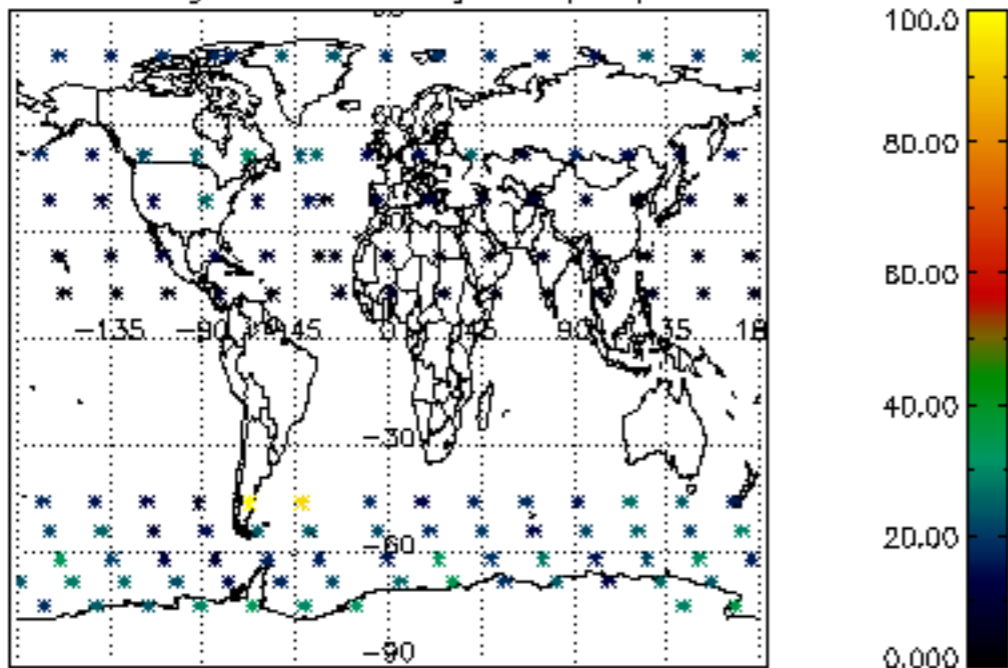
Percentage of flagged data per NO3 profile



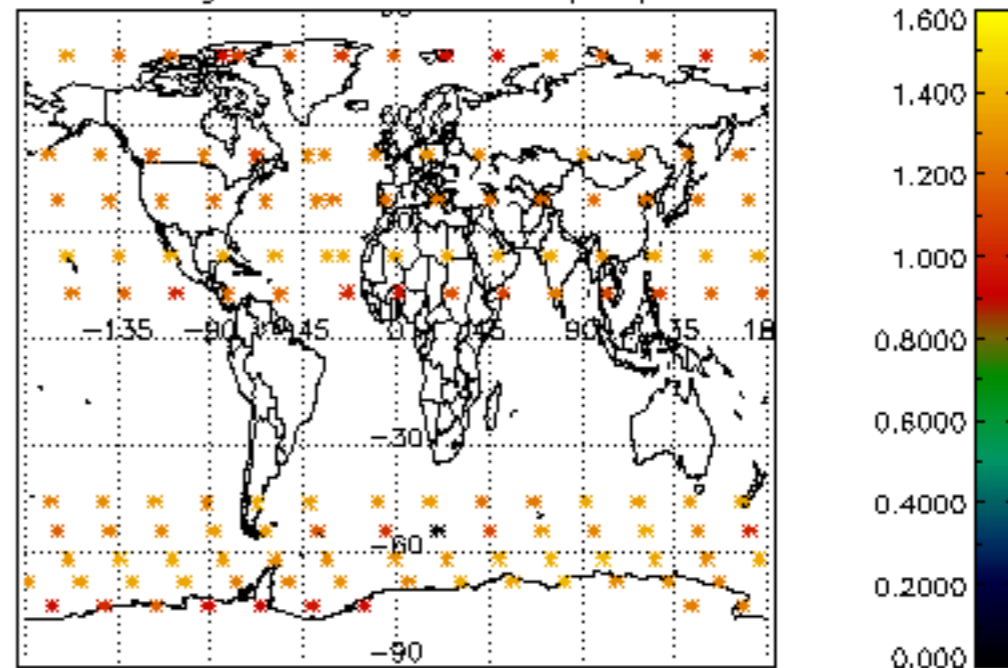




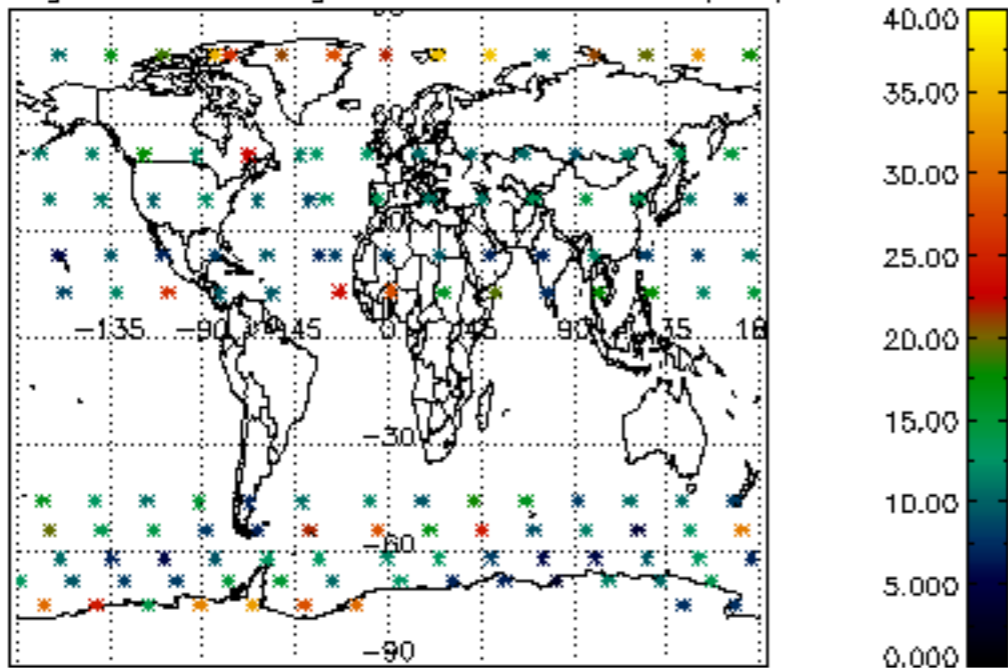
Percentage of cosmic ray hits per profile



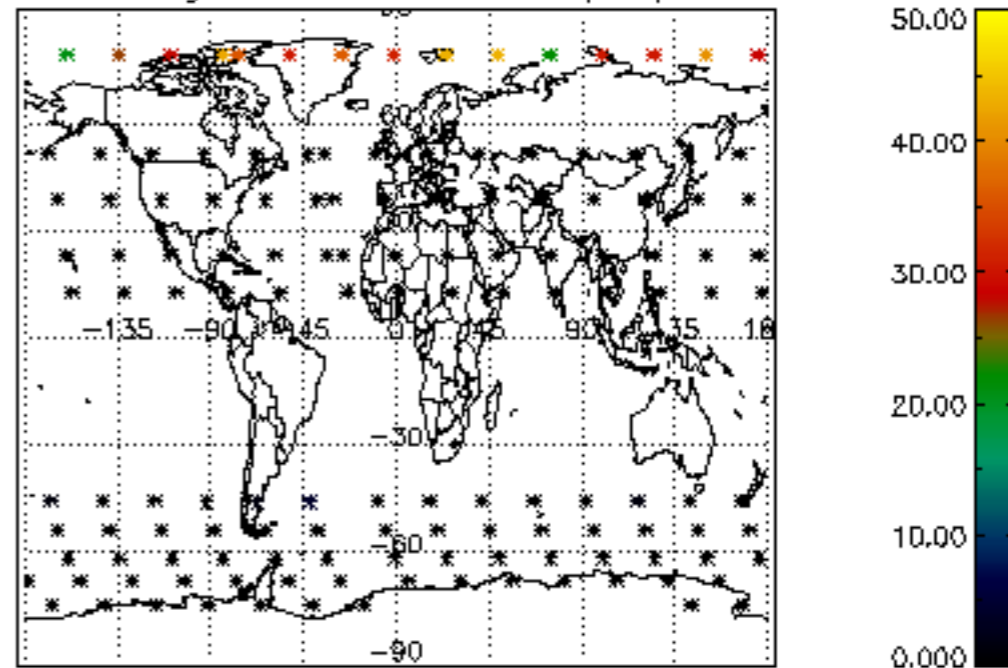
Percentage of datation errors per profile



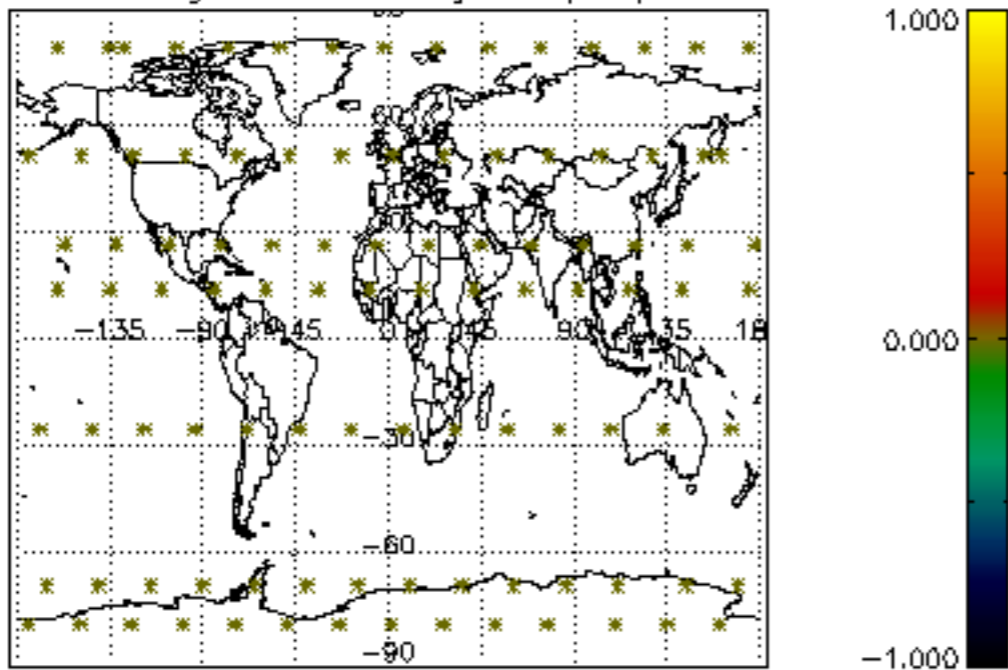
Percentage of star falling outside central band per profile



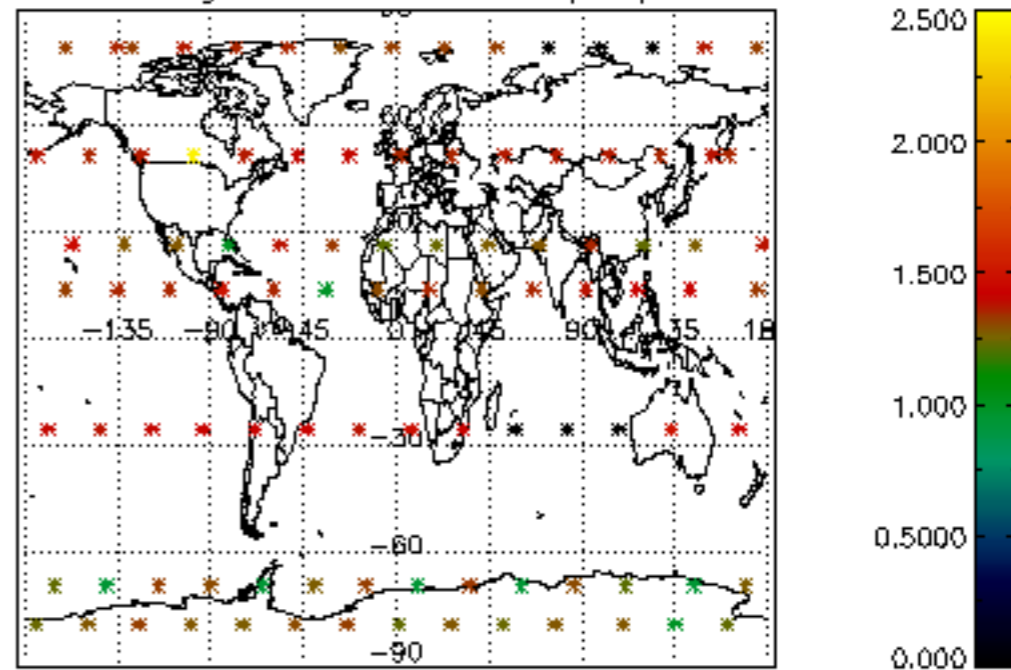
Percentage of saturation errors per profile



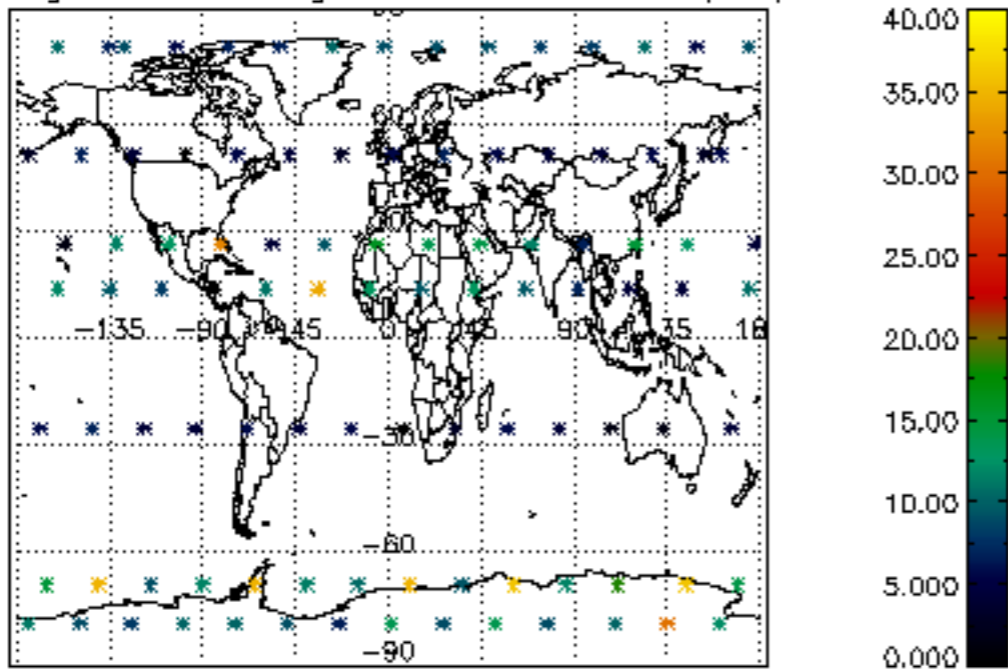
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

