

GOMOS Level 2 Daily Report

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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	18APR2013 12:21:13
Data source version	GOMOS/6.01
Start time of products	09-11-2005 (09NOV2005 00:00:00)
Stop time of products	10-11-2005 (10NOV2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	191
Nb of prods with errors	4

2. Summary of processed GOM_NL__2P products.

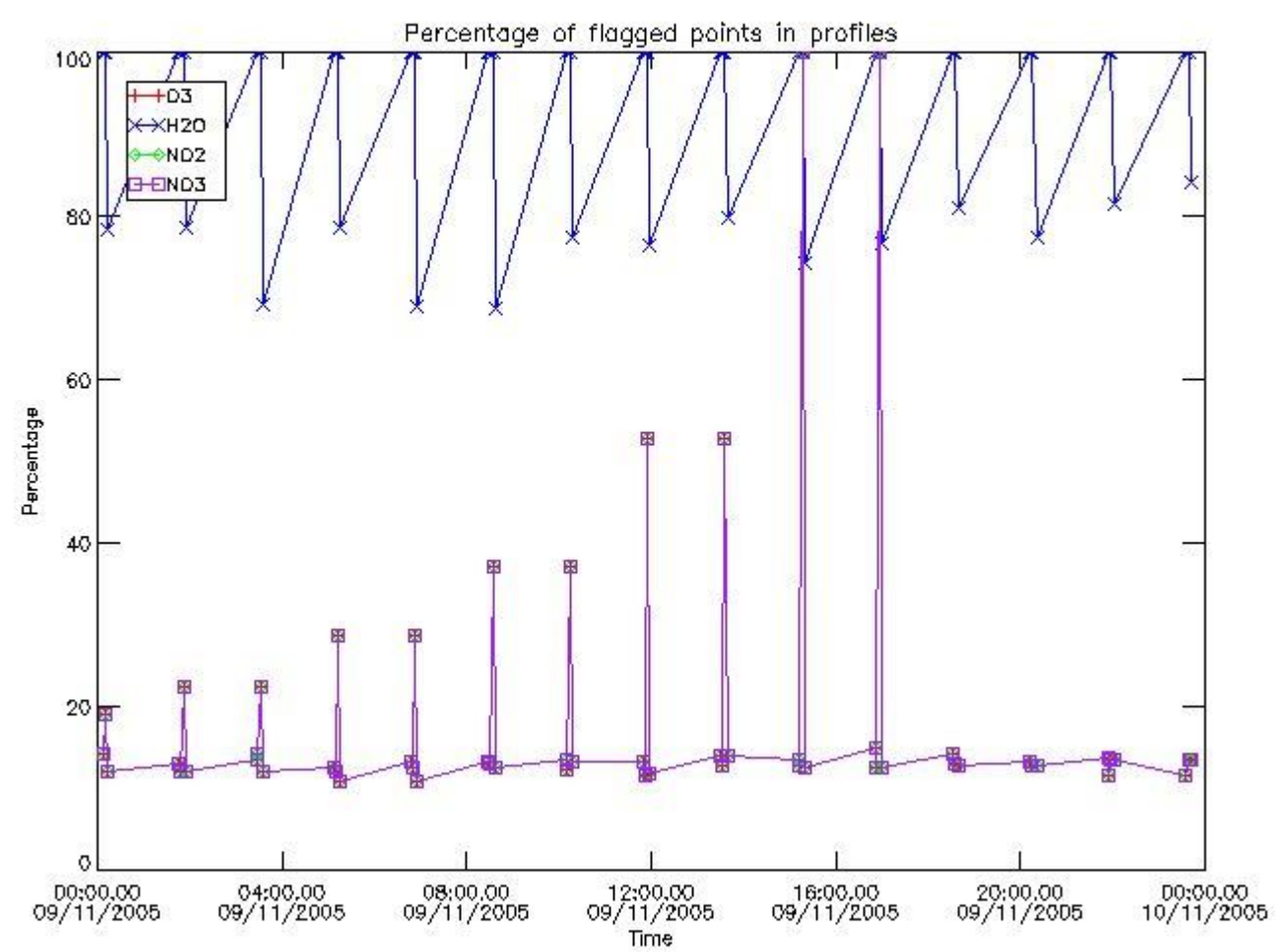
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20051109_000704_000000402042_00216_19308_8323.N1	09-NOV-2005 00:07:04	Dark	39.500	113	Mu Vel	2.6920	5000.0	79	19308	No
2	GOM_NL__2PRFIN20051109_001107_000000272042_00217_19309_8357.N1	09-NOV-2005 00:11:07	Dark	27.000	91	Kap Vel	2.4900	26000.	54	19309	No
3	GOM_NL__2PRFIN20051109_001349_000000422042_00217_19309_8358.N1	09-NOV-2005 00:13:49	Dark	42.000	41	Eps Car	1.8600	4100.0	84	19309	No
4	GOM_NL__2PRFIN20051109_002350_000000302042_00217_19309_8359.N1	09-NOV-2005 00:23:50	Dark	29.500	143	Alp Hyi	2.8570	7200.0	59	19309	Yes
5	GOM_NL__2PRFIN20051109_002839_000000392042_00217_19309_8360.N1	09-NOV-2005 00:28:39	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	19309	No
6	GOM_NL__2PRFIN20051109_004645_000000372042_00217_19309_8361.N1	09-NOV-2005 00:46:45	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	19309	No
7	GOM_NL__2PRFIN20051109_005100_000000372042_00217_19309_8362.N1	09-NOV-2005 00:51:00	Bright	36.500	53	43Bet And	2.0480	3300.0	73	19309	No
8	GOM_NL__2PRFIN20051109_005657_000000362042_00217_19309_8363.N1	09-NOV-2005 00:56:57	Bright	35.500	68	18Alp Cas	2.2250	4500.0	71	19309	No
9	GOM_NL__2PRFIN20051109_010605_000000362042_00217_19309_8364.N1	09-NOV-2005 01:06:05	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	19309	No
10	GOM_NL__2PRFIN20051109_011014_000000372042_00217_19309_8365.N1	09-NOV-2005 01:10:14	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	19309	No
11	GOM_NL__2PRFIN20051109_011600_000000382042_00217_19309_8366.N1	09-NOV-2005 01:16:00	Bright	37.500	32	77Eps UMa	1.7630	11000.	75	19309	No
12	GOM_NL__2PRFIN20051109_011729_000000362042_00217_19309_8367.N1	09-NOV-2005 01:17:29	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	19309	No
13	GOM_NL__2PRFIN20051109_012100_000000322042_00217_19309_8368.N1	09-NOV-2005 01:21:00	Bright	32.000	152	12Alp2CVn	2.8900	11000.	64	19309	No
14	GOM_NL__2PRFIN20051109_014607_000000392042_00217_19309_8369.N1	09-NOV-2005 01:46:07	Dark	39.000	99	Del Cen	2.5750	26000.	78	19309	No
15	GOM_NL__2PRFIN20051109_014741_000000422042_00217_19309_8370.N1	09-NOV-2005 01:47:41	Dark	42.000	113	Mu Vel	2.6920	5000.0	84	19309	No
16	GOM_NL__2PRFIN20051109_015143_000000232042_00218_19310_8311.N1	09-NOV-2005 01:51:43	Dark	23.000	91	Kap Vel	2.4900	26000.	46	19310	No
17	GOM_NL__2PRFIN20051109_015426_000000432042_00218_19310_8312.N1	09-NOV-2005 01:54:26	Dark	42.500	41	Eps Car	1.8600	4100.0	85	19310	No
18	GOM_NL__2PRFIN20051109_020444_000000072042_00218_19310_8313.N1	09-NOV-2005 02:04:44	Dark	7.0000	143	Alp Hyi	2.8570	7200.0	14	19310	Yes
19	GOM_NL__2PRFIN20051109_020915_000000392042_00218_19310_8314.N1	09-NOV-2005 02:09:15	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	19310	No
20	GOM_NL__2PRFIN20051109_022721_000000382042_00218_19310_8315.N1	09-NOV-2005 02:27:21	Bright	38.000	105	6Bet Ari	2.6450	8900.0	76	19310	No
21	GOM_NL__2PRFIN20051109_023136_000000392042_00218_19310_8316.N1	09-NOV-2005 02:31:36	Bright	38.500	53	43Bet And	2.0480	3300.0	77	19310	No
22	GOM_NL__2PRFIN20051109_023733_000000342042_00218_19310_8317.N1	09-NOV-2005 02:37:33	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	19310	No
23	GOM_NL__2PRFIN20051109_024641_000000332042_00218_19310_8318.N1	09-NOV-2005 02:46:41	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	19310	No
24	GOM_NL__2PRFIN20051109_025050_000000382042_00218_19310_8319.N1	09-NOV-2005 02:50:50	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	19310	No
25	GOM_NL__2PRFIN20051109_025636_000000352042_00218_19310_8320.N1	09-NOV-2005 02:56:36	Bright	35.000	32	77Eps UMa	1.7630	11000.	70	19310	No
26	GOM_NL__2PRFIN20051109_025805_000000332042_00218_19310_8321.N1	09-NOV-2005 02:58:05	Bright	33.000	39	85Eta UMa	1.8540	24000.	66	19310	No
27	GOM_NL__2PRFIN20051109_030136_000000362042_00218_19310_8322.N1	09-NOV-2005 03:01:36	Bright	36.000	152	12Alp2CVn	2.8900	11000.	72	19310	No
28	GOM_NL__2PRFIN20051109_032643_000000382042_00218_19310_8323.N1	09-NOV-2005 03:26:43	Dark	38.000	99	Del Cen	2.5750	26000.	76	19310	No
29	GOM_NL__2PRFIN20051109_032817_000000402042_00218_19310_8324.N1	09-NOV-2005 03:28:17	Dark	39.500	113	Mu Vel	2.6920	5000.0	79	19310	No
30	GOM_NL__2PRFIN20051109_033220_000000232042_00219_19311_8311.N1	09-NOV-2005 03:32:20	Dark	23.000	91	Kap Vel	2.4900	26000.	46	19311	No
31	GOM_NL__2PRFIN20051109_033502_000000432042_00219_19311_8312.N1	09-NOV-2005 03:35:02	Dark	42.500	41	Eps Car	1.8600	4100.0	85	19311	No
32	GOM_NL__2PRFIN20051109_034951_000000402042_00219_19311_8313.N1	09-NOV-2005 03:49:51	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	19311	No
33	GOM_NL__2PRFIN20051109_040757_000000372042_00219_19311_8314.N1	09-NOV-2005 04:07:57	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	19311	No
34	GOM_NL__2PRFIN20051109_041212_000000372042_00219_19311_8315.N1	09-NOV-2005 04:12:12	Bright	36.500	53	43Bet And	2.0480	3300.0	73	19311	No
35	GOM_NL__2PRFIN20051109_041810_000000362042_00219_19311_8316.N1	09-NOV-2005 04:18:10	Bright	35.500	68	18Alp Cas	2.2250	4500.0	71	19311	No
36	GOM_NL__2PRFIN20051109_042717_000000352042_00219_19311_8317.N1	09-NOV-2005 04:27:17	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	19311	No
37	GOM_NL__2PRFIN20051109_043126_000000382042_00219_19311_8318.N1	09-NOV-2005 04:31:26	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	19311	No
38	GOM_NL__2PRFIN20051109_043712_000000372042_00219_19311_8319.N1	09-NOV-2005 04:37:12	Bright	37.000	32	77Eps UMa	1.7630	11000.	74	19311	No
39	GOM_NL__2PRFIN20051109_043841_000000352042_00219_19311_8320.N1	09-NOV-2005 04:38:41	Bright	34.500	39	85Eta UMa	1.8540	24000.	69	19311	No
40	GOM_NL__2PRFIN20051109_044212_000000342042_00219_19311_8321.N1	09-NOV-2005 04:42:12	Bright	33.500	152	12Alp2CVn	2.8900	11000.	67	19311	No
41	GOM_NL__2PRFIN20051109_050720_000000412042_00219_19311_8322.N1	09-NOV-2005 05:07:20	Dark	40.500	99	Del Cen	2.5750	26000.	81	19311	No
42	GOM_NL__2PRFIN20051109_050854_000000432042_00219_19311_8323.N1	09-NOV-2005 05:08:54	Dark	42.500	113	Mu Vel	2.6920	5000.0	85	19311	No

161	GOM_NL__2PRFIN20051109_201826_00000012042_00229_19321_8331.N1	09-NOV-2005 20:18:26	Dark	1.0000	91	Kap Vel	2.4900	26000.	2	19321	Yes
162	GOM_NL__2PRFIN20051109_202108_000000402042_00229_19321_8332.N1	09-NOV-2005 20:21:08	Dark	39.500	41	Eps Car	1.8600	4100.0	79	19321	No
163	GOM_NL__2PRFIN20051109_203554_000000412042_00229_19321_8333.N1	09-NOV-2005 20:35:54	Straylight	40.500	157	The1Eri	2.9060	9300.0	81	19321	No
164	GOM_NL__2PRFIN20051109_205356_000000352042_00229_19321_8334.N1	09-NOV-2005 20:53:56	Bright	35.000	105	6Bet Ari	2.6450	8900.0	70	19321	No
165	GOM_NL__2PRFIN20051109_205812_000000362042_00229_19321_8335.N1	09-NOV-2005 20:58:12	Bright	36.000	53	43Bet And	2.0480	3300.0	72	19321	No
166	GOM_NL__2PRFIN20051109_210410_000000372042_00229_19321_8336.N1	09-NOV-2005 21:04:10	Bright	36.500	68	18Alp Cas	2.2250	4500.0	73	19321	No
167	GOM_NL__2PRFIN20051109_211316_000000372042_00229_19321_8337.N1	09-NOV-2005 21:13:16	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	19321	No
168	GOM_NL__2PRFIN20051109_211727_000000322042_00229_19321_8338.N1	09-NOV-2005 21:17:27	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	19321	No
169	GOM_NL__2PRFIN20051109_212312_000000372042_00229_19321_8339.N1	09-NOV-2005 21:23:12	Bright	37.000	32	77Eps UMa	1.7630	11000.	74	19321	No
170	GOM_NL__2PRFIN20051109_212442_000000522042_00229_19321_8340.N1	09-NOV-2005 21:24:42	Bright	52.000	39	85Eta UMa	1.8540	24000.	104	19321	No
171	GOM_NL__2PRFIN20051109_212813_000000362042_00229_19321_8341.N1	09-NOV-2005 21:28:13	Bright	36.000	152	12Alp2CVn	2.8900	11000.	72	19321	No
172	GOM_NL__2PRFIN20051109_214556_000000402042_00229_19321_8342.N1	09-NOV-2005 21:45:56	Twilight	40.000	171	2Eps Crv	3.0010	4250.0	80	19321	No
173	GOM_NL__2PRFIN20051109_215322_000000372042_00229_19321_8343.N1	09-NOV-2005 21:53:22	Dark	37.000	99	Del Cen	2.5750	26000.	74	19321	No
174	GOM_NL__2PRFIN20051109_215458_000000442042_00229_19321_8344.N1	09-NOV-2005 21:54:58	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	19321	No
175	GOM_NL__2PRFIN20051109_215813_000000382042_00230_19322_8331.N1	09-NOV-2005 21:58:13	Dark	37.500	124	The Car	2.7640	30000.	75	19322	No
176	GOM_NL__2PRFIN20051109_220144_000000382042_00230_19322_8332.N1	09-NOV-2005 22:01:44	Dark	38.000	41	Eps Car	1.8600	4100.0	76	19322	No
177	GOM_NL__2PRFIN20051109_221630_000000412042_00230_19322_8333.N1	09-NOV-2005 22:16:30	Straylight	41.000	157	The1Eri	2.9060	9300.0	82	19322	No
178	GOM_NL__2PRFIN20051109_223432_000000382042_00230_19322_8334.N1	09-NOV-2005 22:34:32	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	19322	No
179	GOM_NL__2PRFIN20051109_223848_000000382042_00230_19322_8335.N1	09-NOV-2005 22:38:48	Bright	37.500	53	43Bet And	2.0480	3300.0	75	19322	No
180	GOM_NL__2PRFIN20051109_224446_000000352042_00230_19322_8336.N1	09-NOV-2005 22:44:46	Bright	34.500	68	18Alp Cas	2.2250	4500.0	69	19322	No
181	GOM_NL__2PRFIN20051109_225352_000000362042_00230_19322_8337.N1	09-NOV-2005 22:53:52	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	19322	No
182	GOM_NL__2PRFIN20051109_225803_000000362042_00230_19322_8338.N1	09-NOV-2005 22:58:03	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	19322	No
183	GOM_NL__2PRFIN20051109_230348_000000352042_00230_19322_8339.N1	09-NOV-2005 23:03:48	Bright	35.000	32	77Eps UMa	1.7630	11000.	70	19322	No
184	GOM_NL__2PRFIN20051109_230518_000000522042_00230_19322_8340.N1	09-NOV-2005 23:05:18	Bright	52.000	39	85Eta UMa	1.8540	24000.	104	19322	No
185	GOM_NL__2PRFIN20051109_230849_000000342042_00230_19322_8341.N1	09-NOV-2005 23:08:49	Bright	34.000	152	12Alp2CVn	2.8900	11000.	68	19322	No
186	GOM_NL__2PRFIN20051109_231625_000000332042_00230_19322_8342.N1	09-NOV-2005 23:16:25	Bright	33.000	138	47Eps Vir	2.8280	4700.0	66	19322	No
187	GOM_NL__2PRFIN20051109_232632_000000432042_00230_19322_8343.N1	09-NOV-2005 23:26:32	Twilight	42.500	171	2Eps Crv	3.0010	4250.0	85	19322	No
188	GOM_NL__2PRFIN20051109_233534_000000442042_00230_19322_8344.N1	09-NOV-2005 23:35:34	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	19322	No
189	GOM_NL__2PRFIN20051109_233849_000000382042_00231_19323_8351.N1	09-NOV-2005 23:38:49	Dark	37.500	124	The Car	2.7640	30000.	75	19323	No
190	GOM_NL__2PRFIN20051109_234221_000000382042_00231_19323_8352.N1	09-NOV-2005 23:42:21	Dark	38.000	41	Eps Car	1.8600	4100.0	76	19323	No
191	GOM_NL__2PRFIN20051109_235706_000000392042_00231_19323_8353.N1	09-NOV-2005 23:57:06	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	19323	No

3. Quality information per product

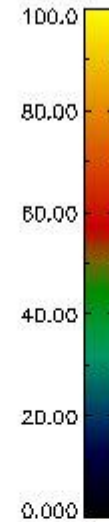
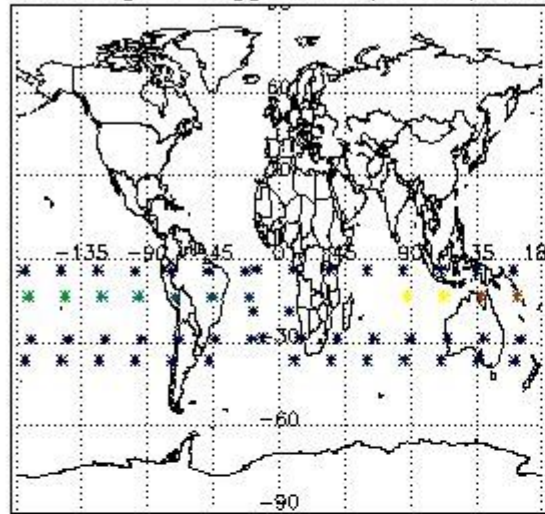
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

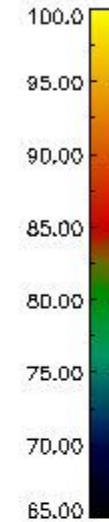
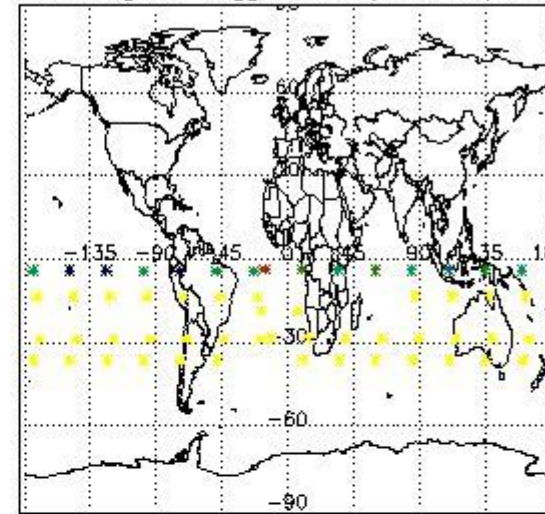


3.2 Plot quality information per product (world map)

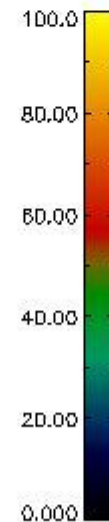
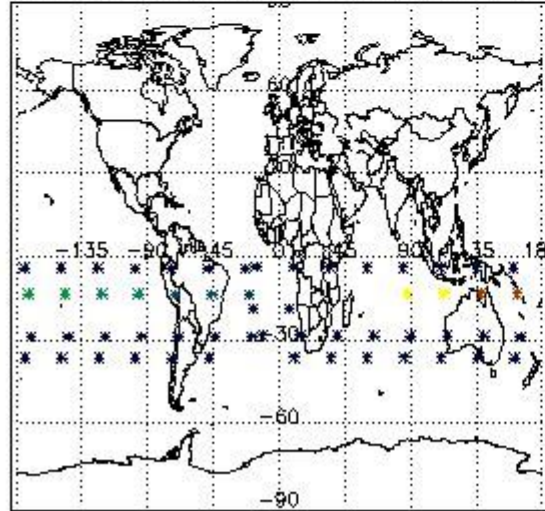
Percentage of flagged data per O3 profile



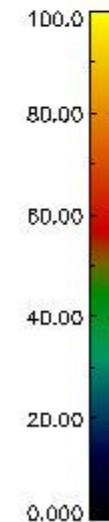
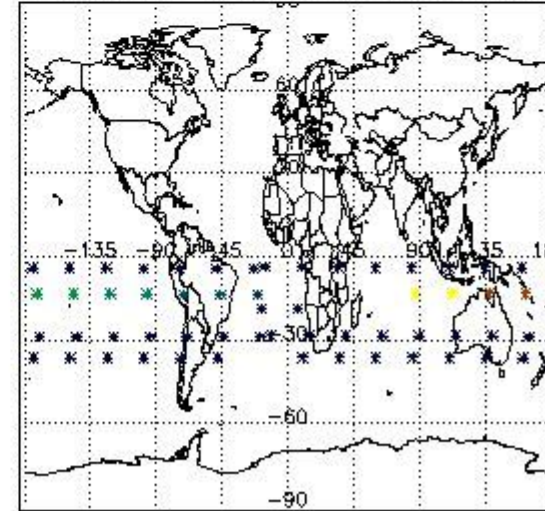
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

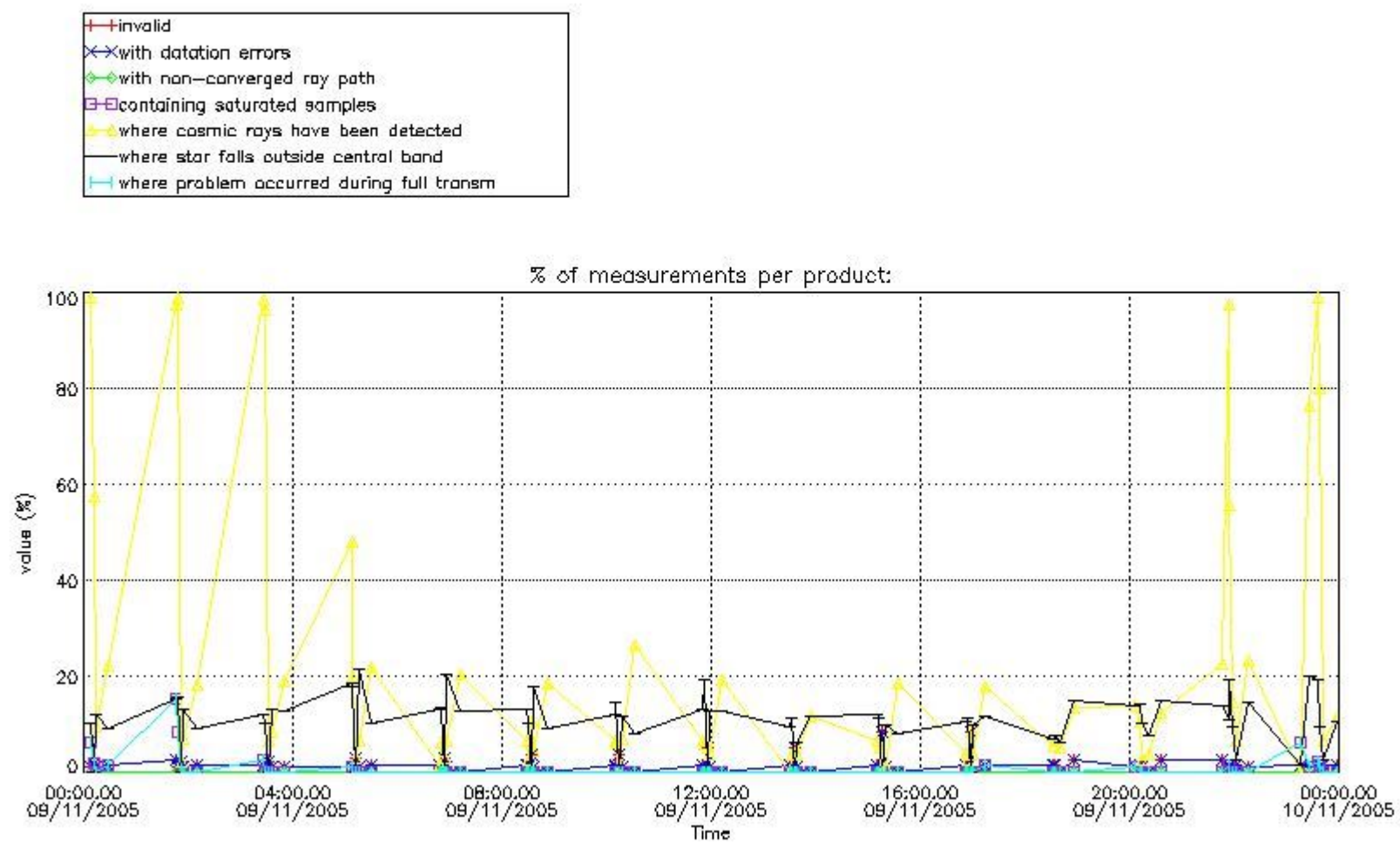


4. Level 1 quality information per product

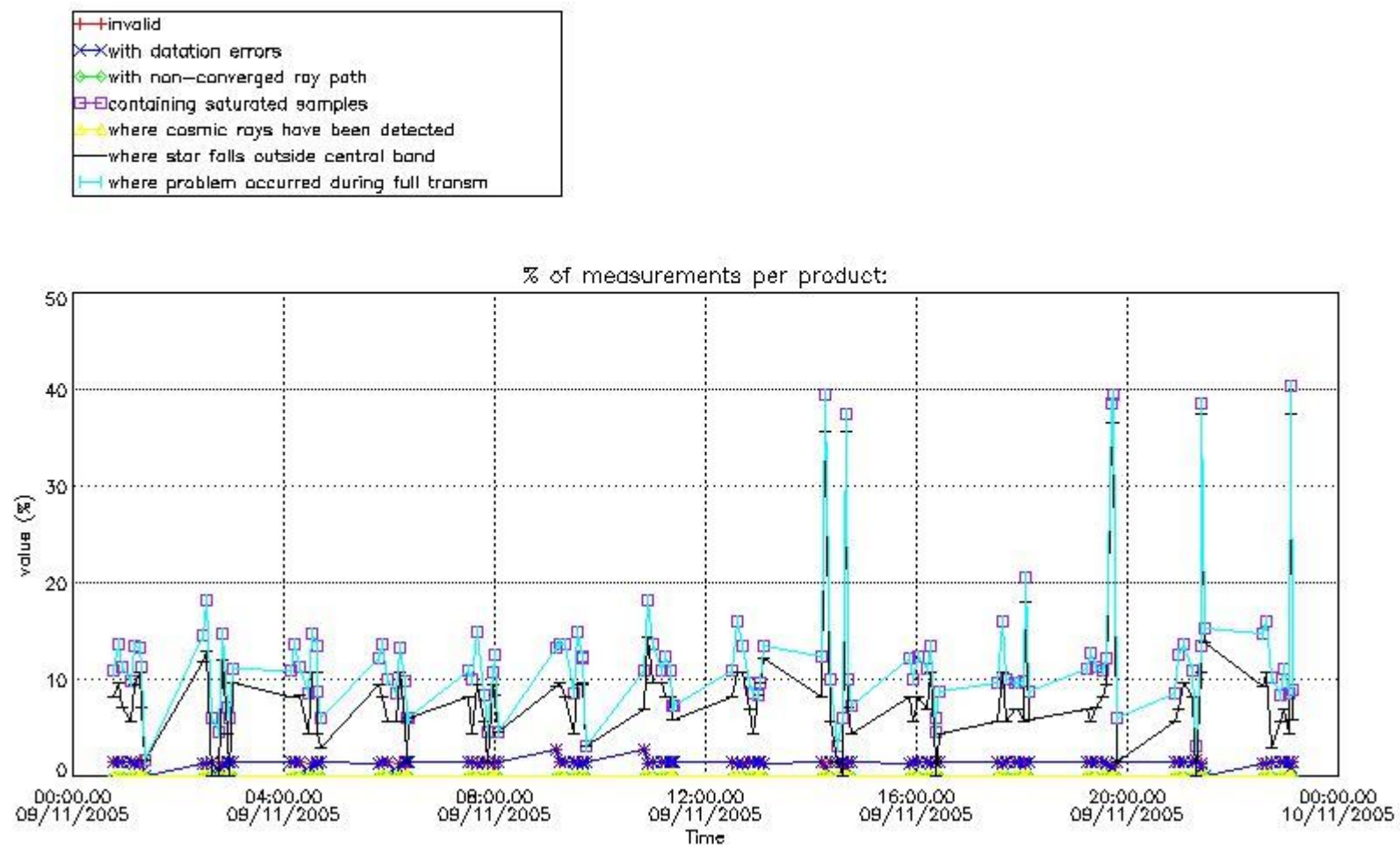
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



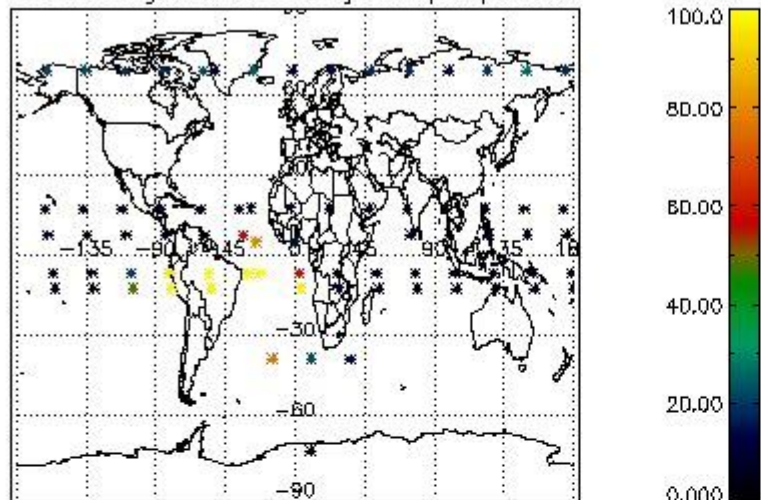
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



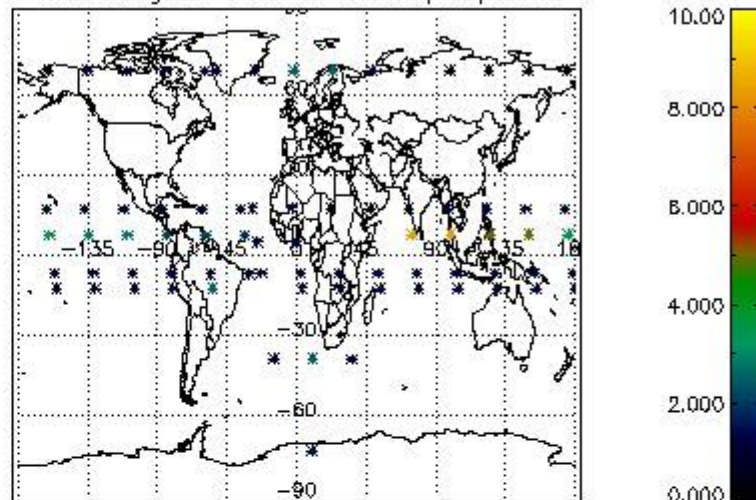
4.2 Plot quality information per product coming from level 1b processing (world map)

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

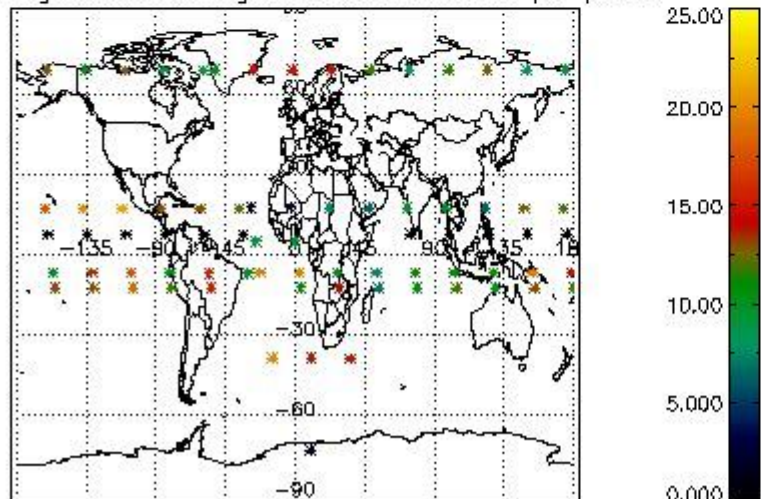
Percentage of cosmic ray hits per profile



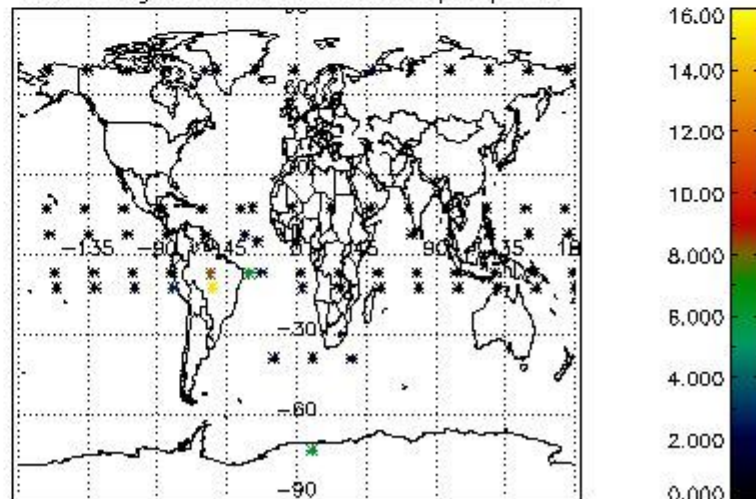
Percentage of datation errors per profile



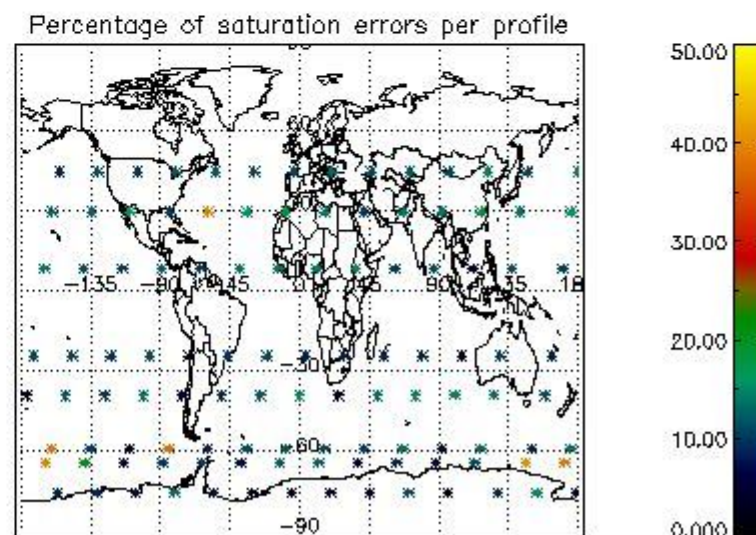
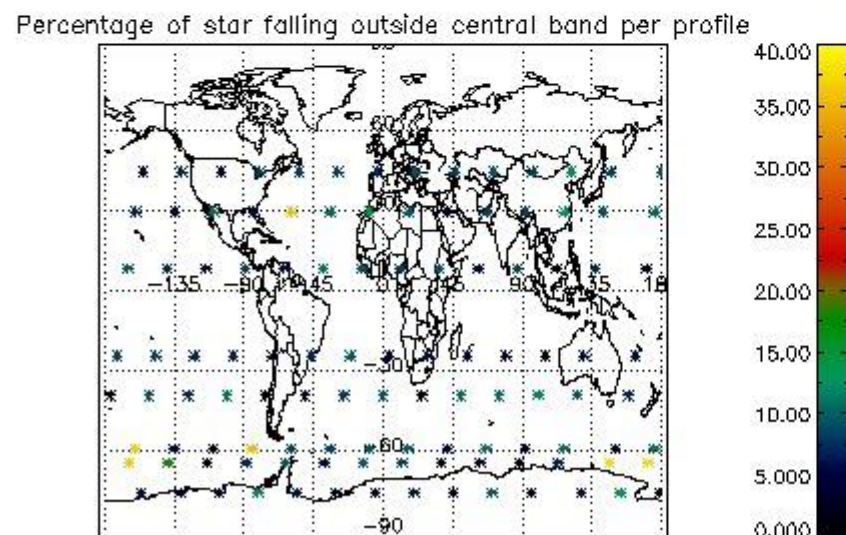
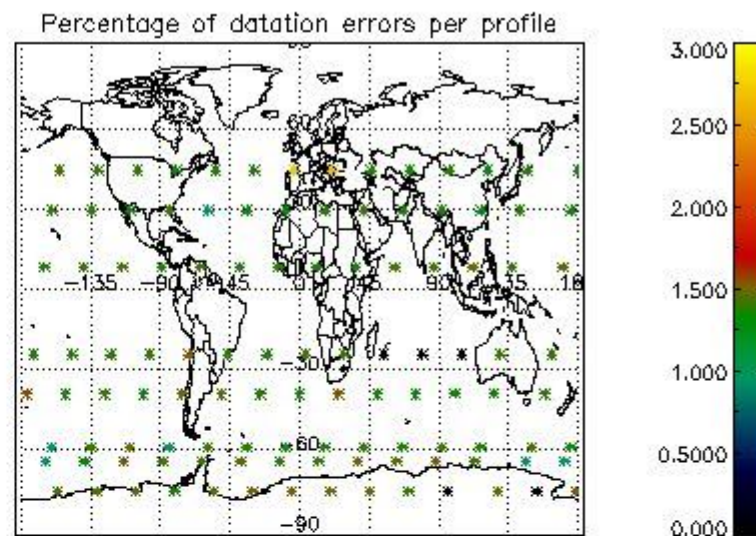
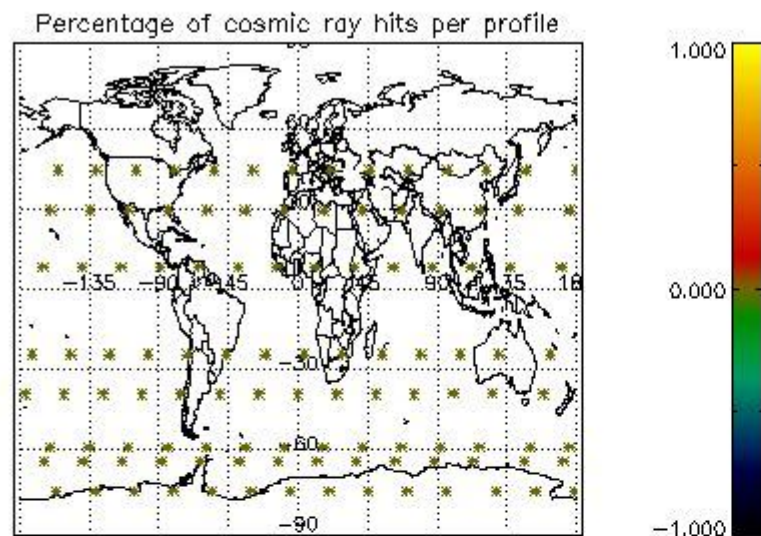
Percentage of star falling outside central band per profile



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

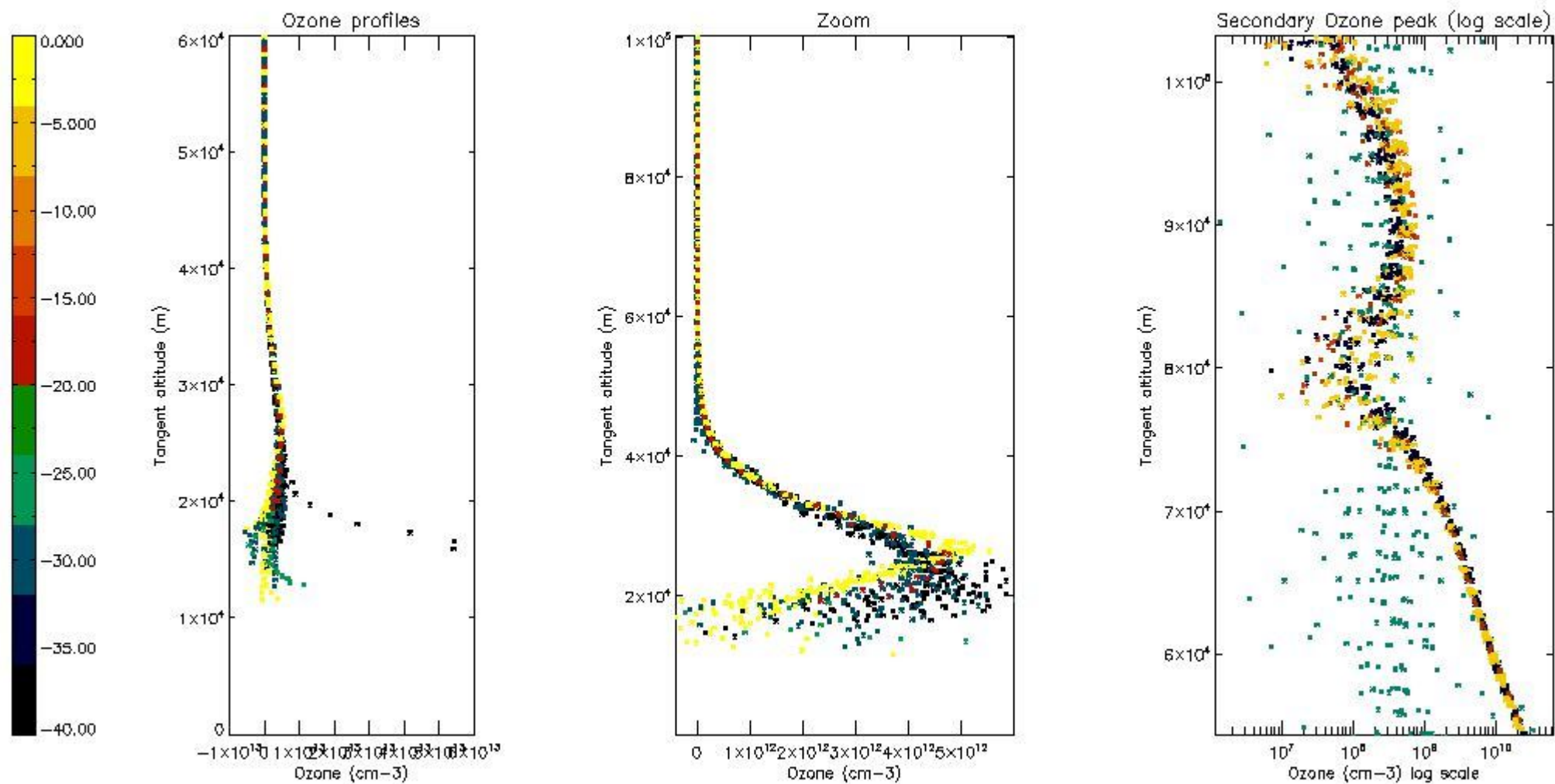
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	16

STD < 10	12
STD < 5	5

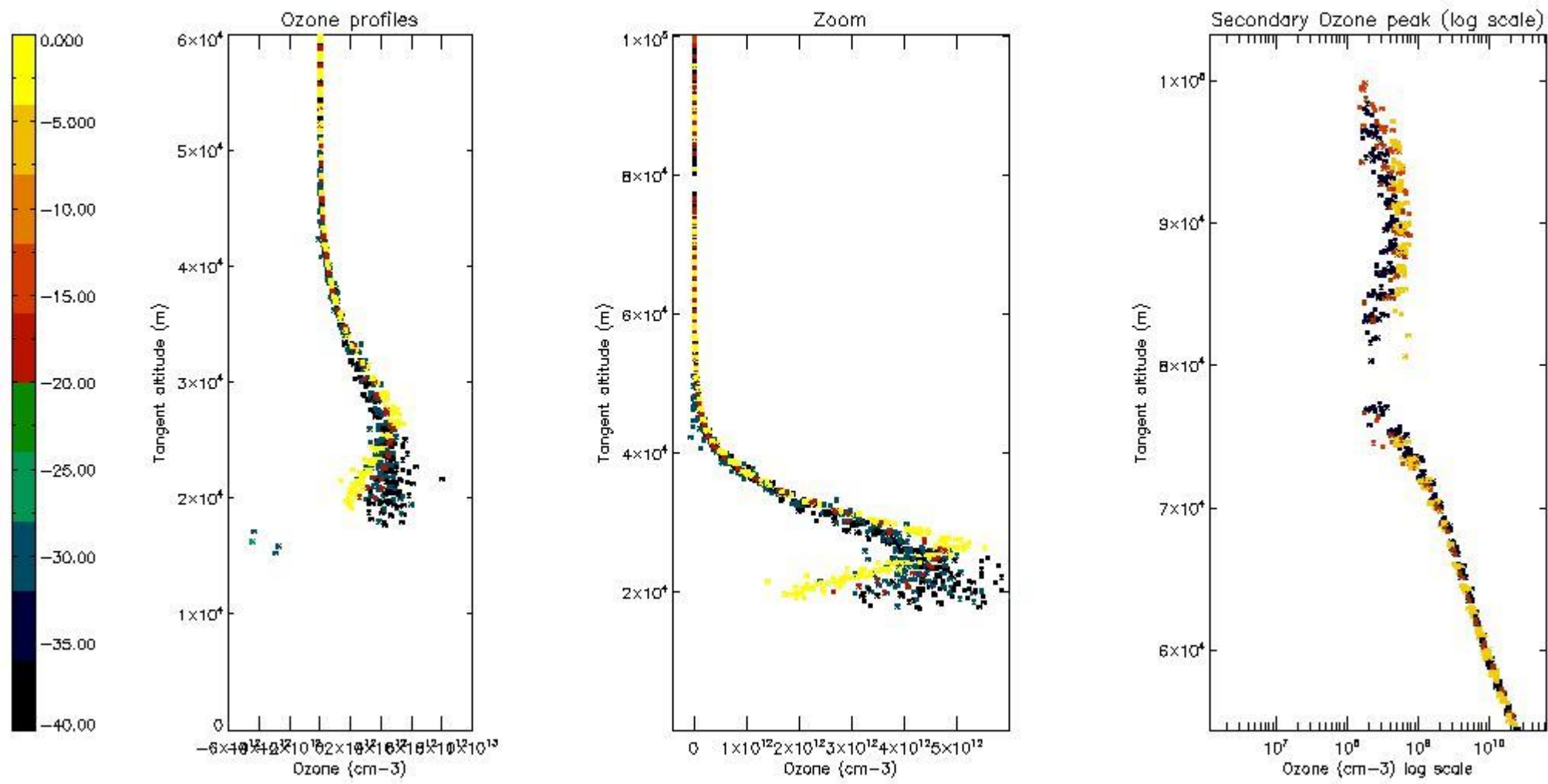
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



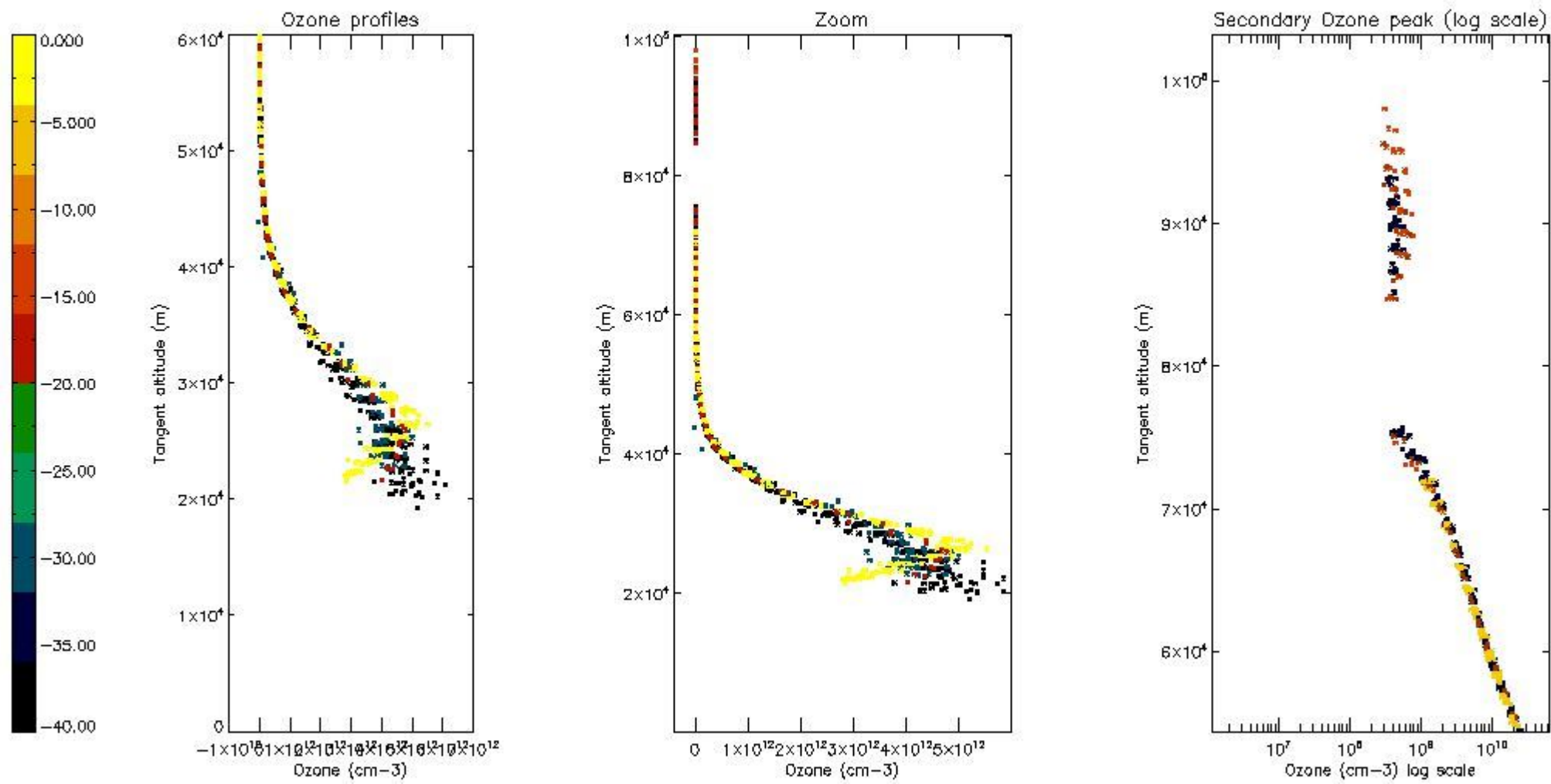
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



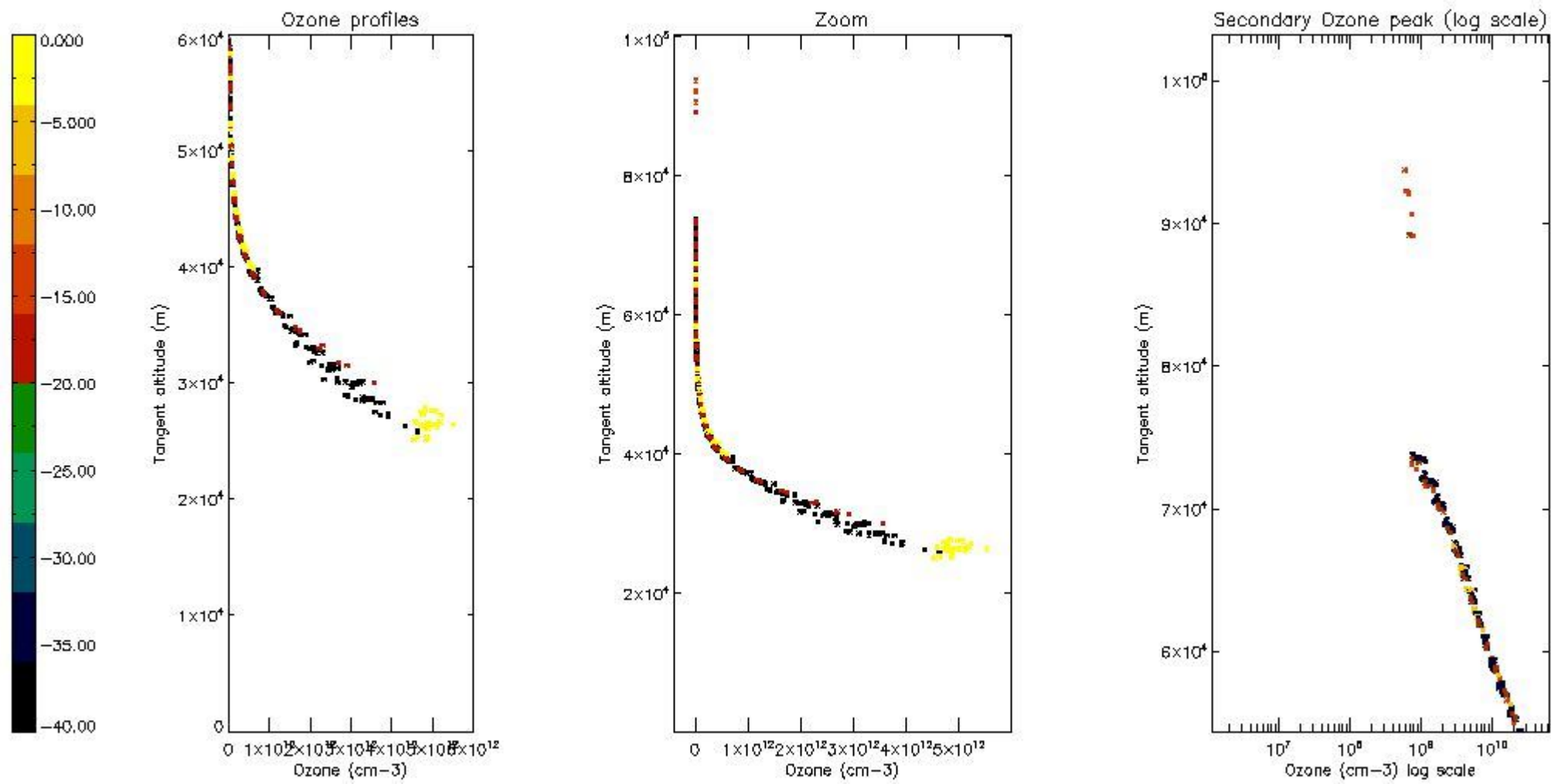
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



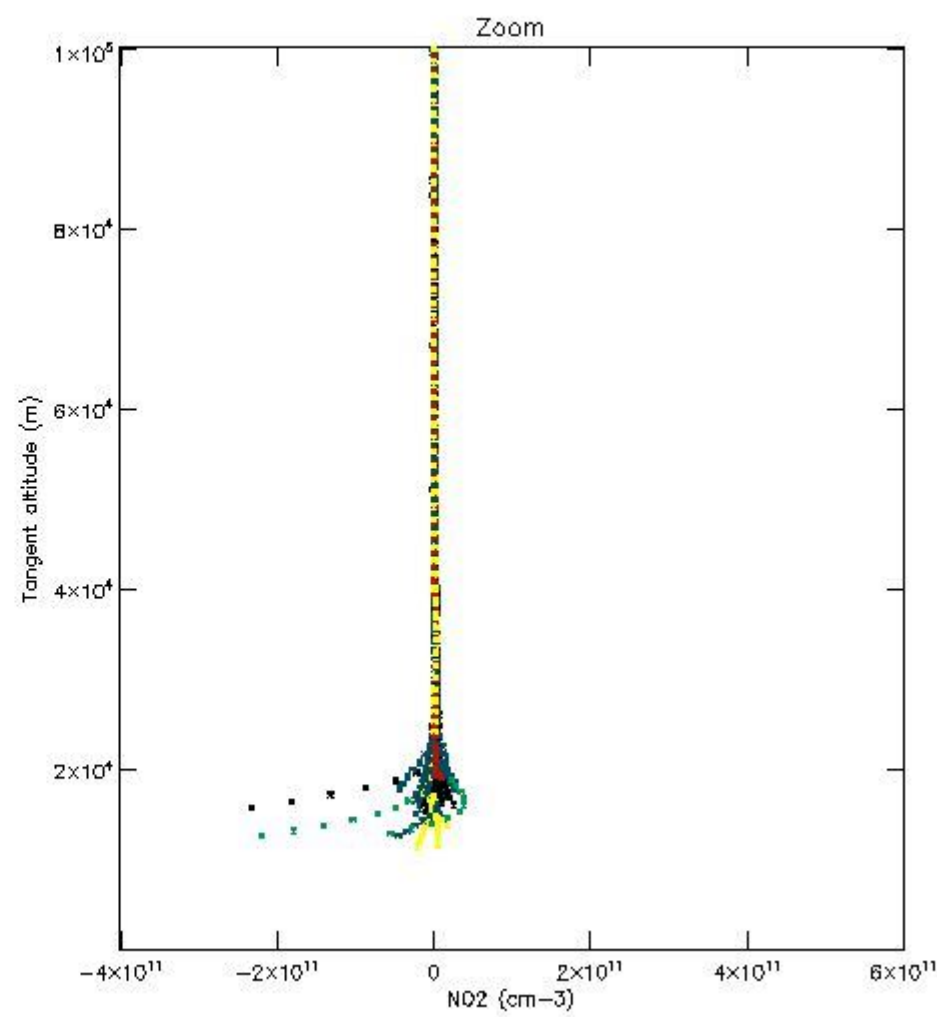
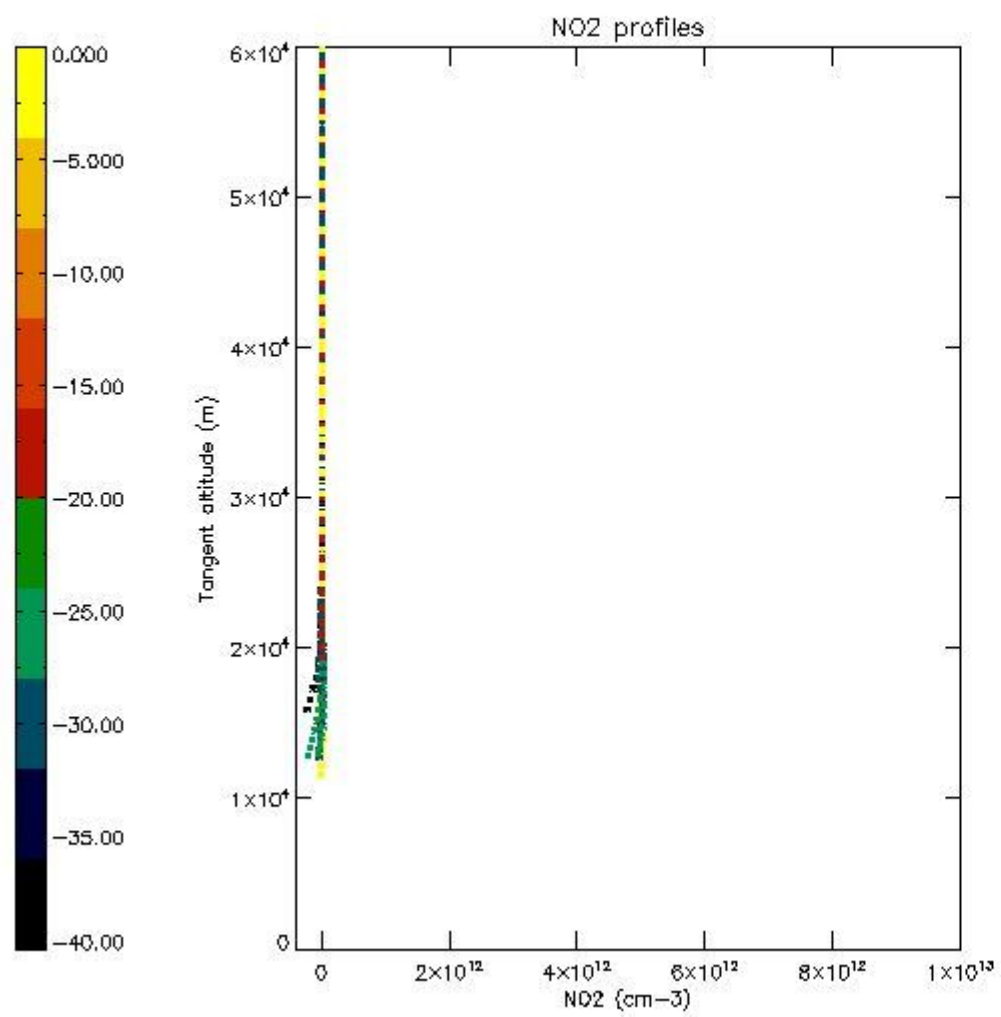
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



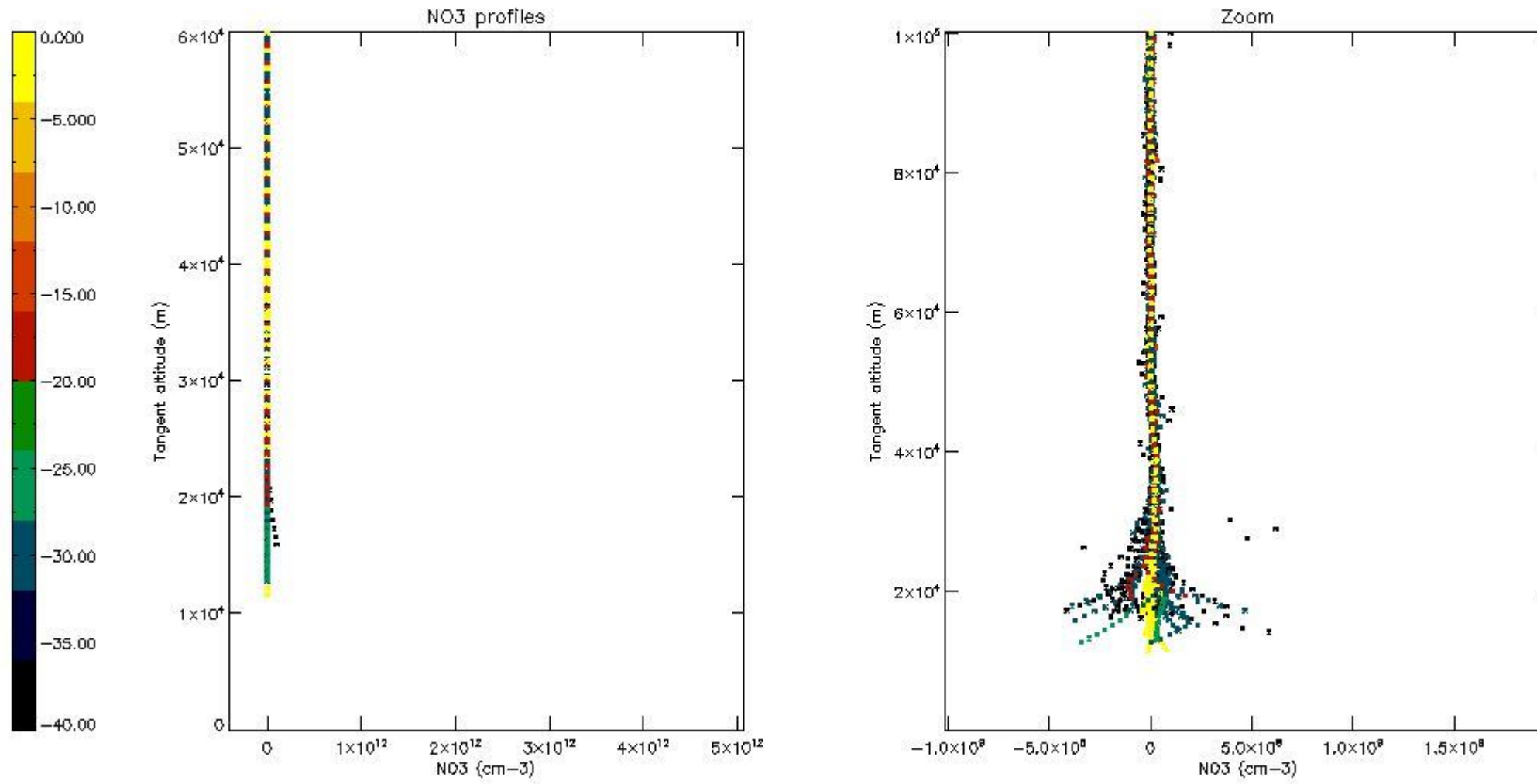
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	09-NOV-2005 00:07:04
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-NOV-2005 00:07:04
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-NOV-2005 00:07:04

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

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

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

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

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

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

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

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

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

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

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

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

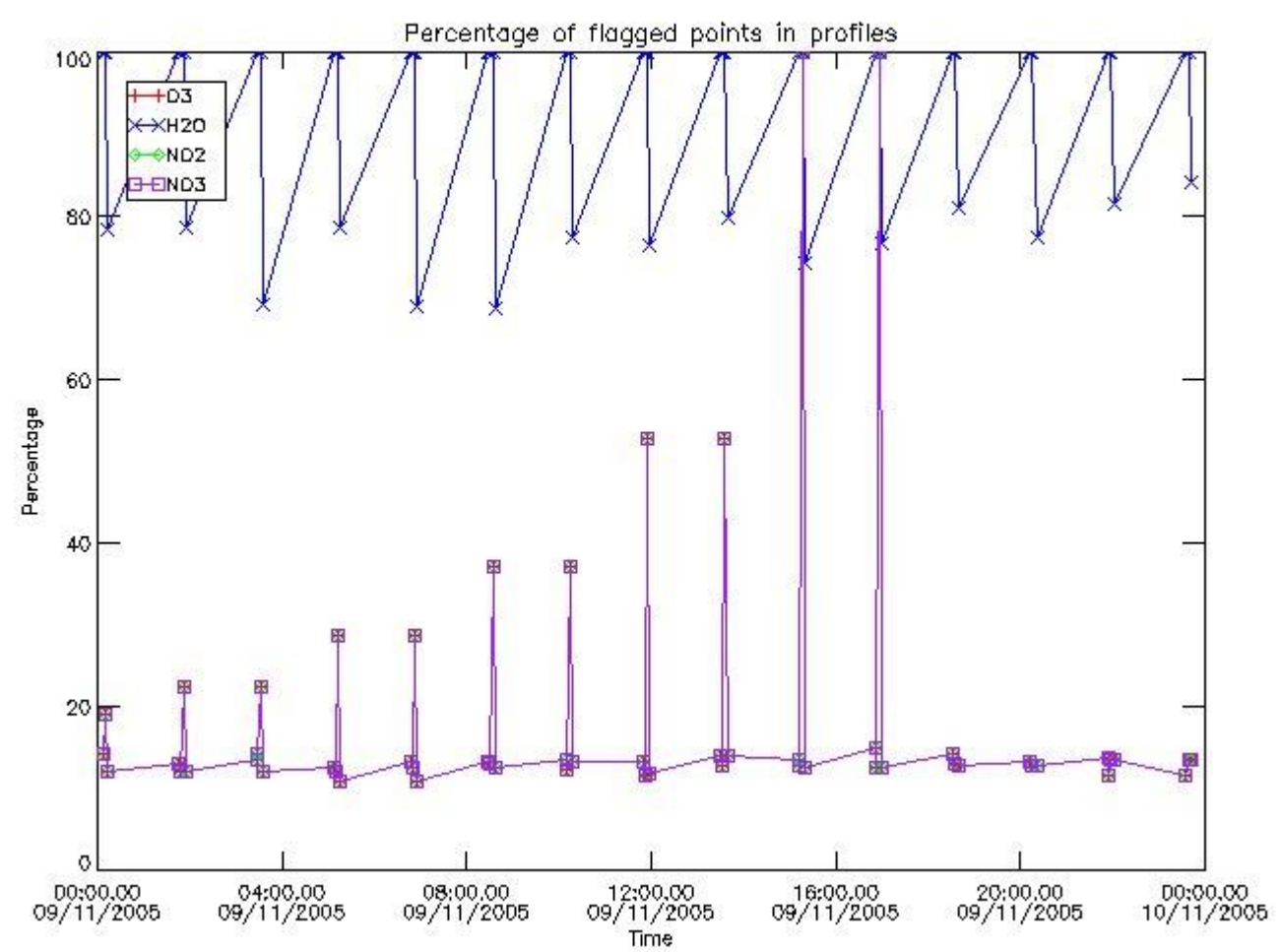
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20051109_201826_00000012042_00229_19321_8331.N1	09-NOV-2005 20:18:26	Dark	1.0000	91	Kap Vel	2.4900	26000.	2	19321	Yes
162	GOM_NL__2PRFIN20051109_202108_000000402042_00229_19321_8332.N1	09-NOV-2005 20:21:08	Dark	39.500	41	Eps Car	1.8600	4100.0	79	19321	No
163	GOM_NL__2PRFIN20051109_203554_000000412042_00229_19321_8333.N1	09-NOV-2005 20:35:54	Straylight	40.500	157	The1Eri	2.9060	9300.0	81	19321	No
164	GOM_NL__2PRFIN20051109_205356_000000352042_00229_19321_8334.N1	09-NOV-2005 20:53:56	Bright	35.000	105	6Bet Ari	2.6450	8900.0	70	19321	No
165	GOM_NL__2PRFIN20051109_205812_000000362042_00229_19321_8335.N1	09-NOV-2005 20:58:12	Bright	36.000	53	43Bet And	2.0480	3300.0	72	19321	No
166	GOM_NL__2PRFIN20051109_210410_000000372042_00229_19321_8336.N1	09-NOV-2005 21:04:10	Bright	36.500	68	18Alp Cas	2.2250	4500.0	73	19321	No
167	GOM_NL__2PRFIN20051109_211316_000000372042_00229_19321_8337.N1	09-NOV-2005 21:13:16	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	19321	No
168	GOM_NL__2PRFIN20051109_211727_000000322042_00229_19321_8338.N1	09-NOV-2005 21:17:27	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	19321	No
169	GOM_NL__2PRFIN20051109_212312_000000372042_00229_19321_8339.N1	09-NOV-2005 21:23:12	Bright	37.000	32	77Eps UMa	1.7630	11000.	74	19321	No
170	GOM_NL__2PRFIN20051109_212442_000000522042_00229_19321_8340.N1	09-NOV-2005 21:24:42	Bright	52.000	39	85Eta UMa	1.8540	24000.	104	19321	No
171	GOM_NL__2PRFIN20051109_212813_000000362042_00229_19321_8341.N1	09-NOV-2005 21:28:13	Bright	36.000	152	12Alp2CVn	2.8900	11000.	72	19321	No
172	GOM_NL__2PRFIN20051109_214556_000000402042_00229_19321_8342.N1	09-NOV-2005 21:45:56	Twilight	40.000	171	2Eps Crv	3.0010	4250.0	80	19321	No
173	GOM_NL__2PRFIN20051109_215322_000000372042_00229_19321_8343.N1	09-NOV-2005 21:53:22	Dark	37.000	99	Del Cen	2.5750	26000.	74	19321	No
174	GOM_NL__2PRFIN20051109_215458_000000442042_00229_19321_8344.N1	09-NOV-2005 21:54:58	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	19321	No
175	GOM_NL__2PRFIN20051109_215813_000000382042_00230_19322_8331.N1	09-NOV-2005 21:58:13	Dark	37.500	124	The Car	2.7640	30000.	75	19322	No
176	GOM_NL__2PRFIN20051109_220144_000000382042_00230_19322_8332.N1	09-NOV-2005 22:01:44	Dark	38.000	41	Eps Car	1.8600	4100.0	76	19322	No
177	GOM_NL__2PRFIN20051109_221630_000000412042_00230_19322_8333.N1	09-NOV-2005 22:16:30	Straylight	41.000	157	The1Eri	2.9060	9300.0	82	19322	No
178	GOM_NL__2PRFIN20051109_223432_000000382042_00230_19322_8334.N1	09-NOV-2005 22:34:32	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	19322	No
179	GOM_NL__2PRFIN20051109_223848_000000382042_00230_19322_8335.N1	09-NOV-2005 22:38:48	Bright	37.500	53	43Bet And	2.0480	3300.0	75	19322	No
180	GOM_NL__2PRFIN20051109_224446_000000352042_00230_19322_8336.N1	09-NOV-2005 22:44:46	Bright	34.500	68	18Alp Cas	2.2250	4500.0	69	19322	No
181	GOM_NL__2PRFIN20051109_225352_000000362042_00230_19322_8337.N1	09-NOV-2005 22:53:52	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	19322	No
182	GOM_NL__2PRFIN20051109_225803_000000362042_00230_19322_8338.N1	09-NOV-2005 22:58:03	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	19322	No
183	GOM_NL__2PRFIN20051109_230348_000000352042_00230_19322_8339.N1	09-NOV-2005 23:03:48	Bright	35.000	32	77Eps UMa	1.7630	11000.	70	19322	No
184	GOM_NL__2PRFIN20051109_230518_000000522042_00230_19322_8340.N1	09-NOV-2005 23:05:18	Bright	52.000	39	85Eta UMa	1.8540	24000.	104	19322	No
185	GOM_NL__2PRFIN20051109_230849_000000342042_00230_19322_8341.N1	09-NOV-2005 23:08:49	Bright	34.000	152	12Alp2CVn	2.8900	11000.	68	19322	No
186	GOM_NL__2PRFIN20051109_231625_000000332042_00230_19322_8342.N1	09-NOV-2005 23:16:25	Bright	33.000	138	47Eps Vir	2.8280	4700.0	66	19322	No
187	GOM_NL__2PRFIN20051109_232632_000000432042_00230_19322_8343.N1	09-NOV-2005 23:26:32	Twilight	42.500	171	2Eps Crv	3.0010	4250.0	85	19322	No
188	GOM_NL__2PRFIN20051109_233534_000000442042_00230_19322_8344.N1	09-NOV-2005 23:35:34	Dark	44.000	113	Mu Vel	2.6920	5000.0	88	19322	No
189	GOM_NL__2PRFIN20051109_233849_000000382042_00231_19323_8351.N1	09-NOV-2005 23:38:49	Dark	37.500	124	The Car	2.7640	30000.	75	19323	No
190	GOM_NL__2PRFIN20051109_234221_000000382042_00231_19323_8352.N1	09-NOV-2005 23:42:21	Dark	38.000	41	Eps Car	1.8600	4100.0	76	19323	No
191	GOM_NL__2PRFIN20051109_235706_000000392042_00231_19323_8353.N1	09-NOV-2005 23:57:06	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	19323	No

3. Quality information per product

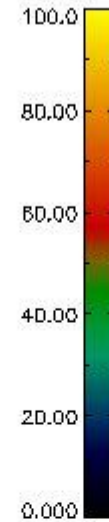
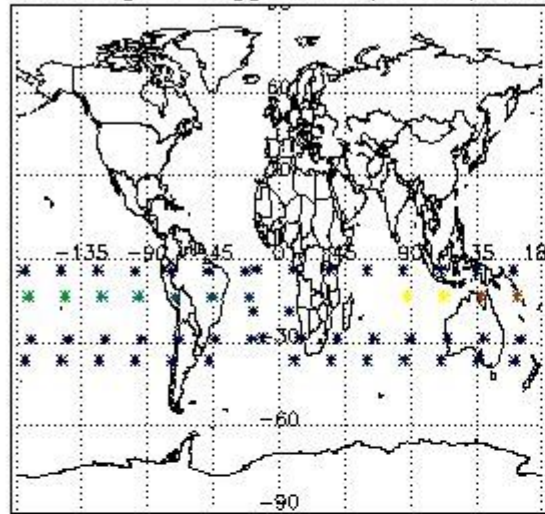
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

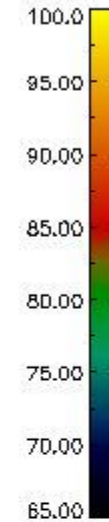
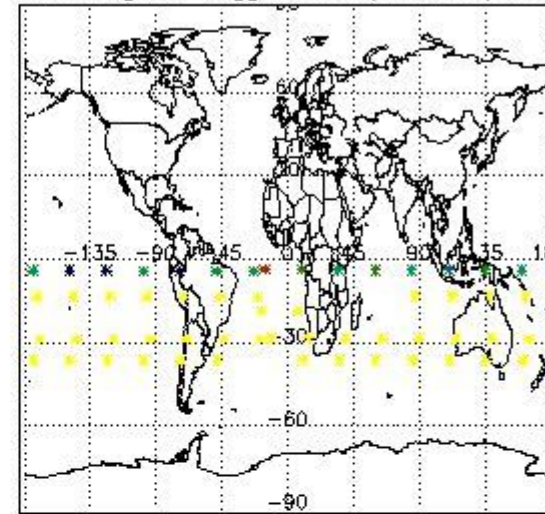


3.2 Plot quality information per product (world map)

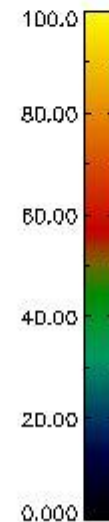
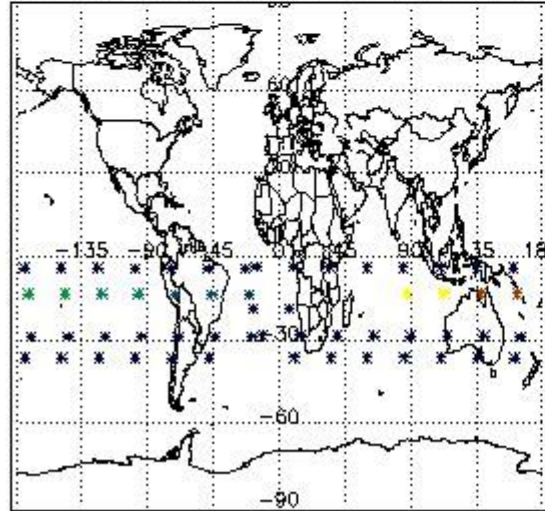
Percentage of flagged data per O3 profile



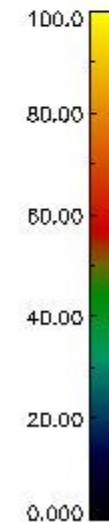
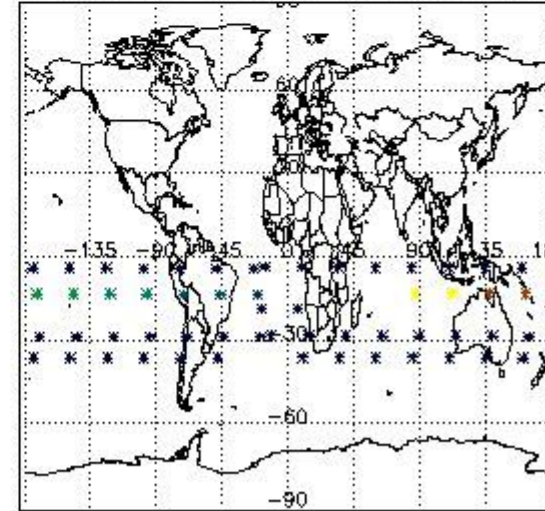
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

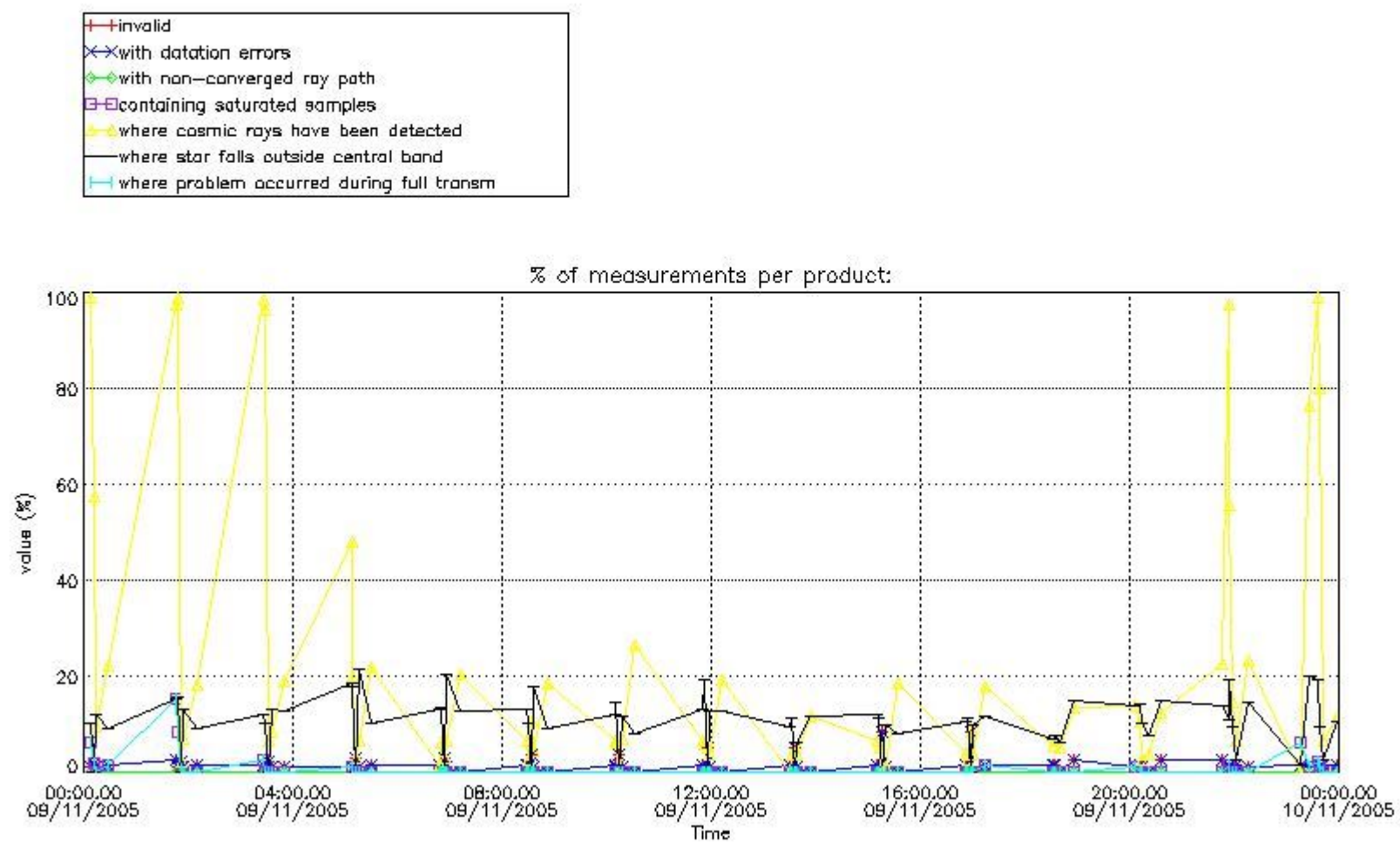


4. Level 1 quality information per product

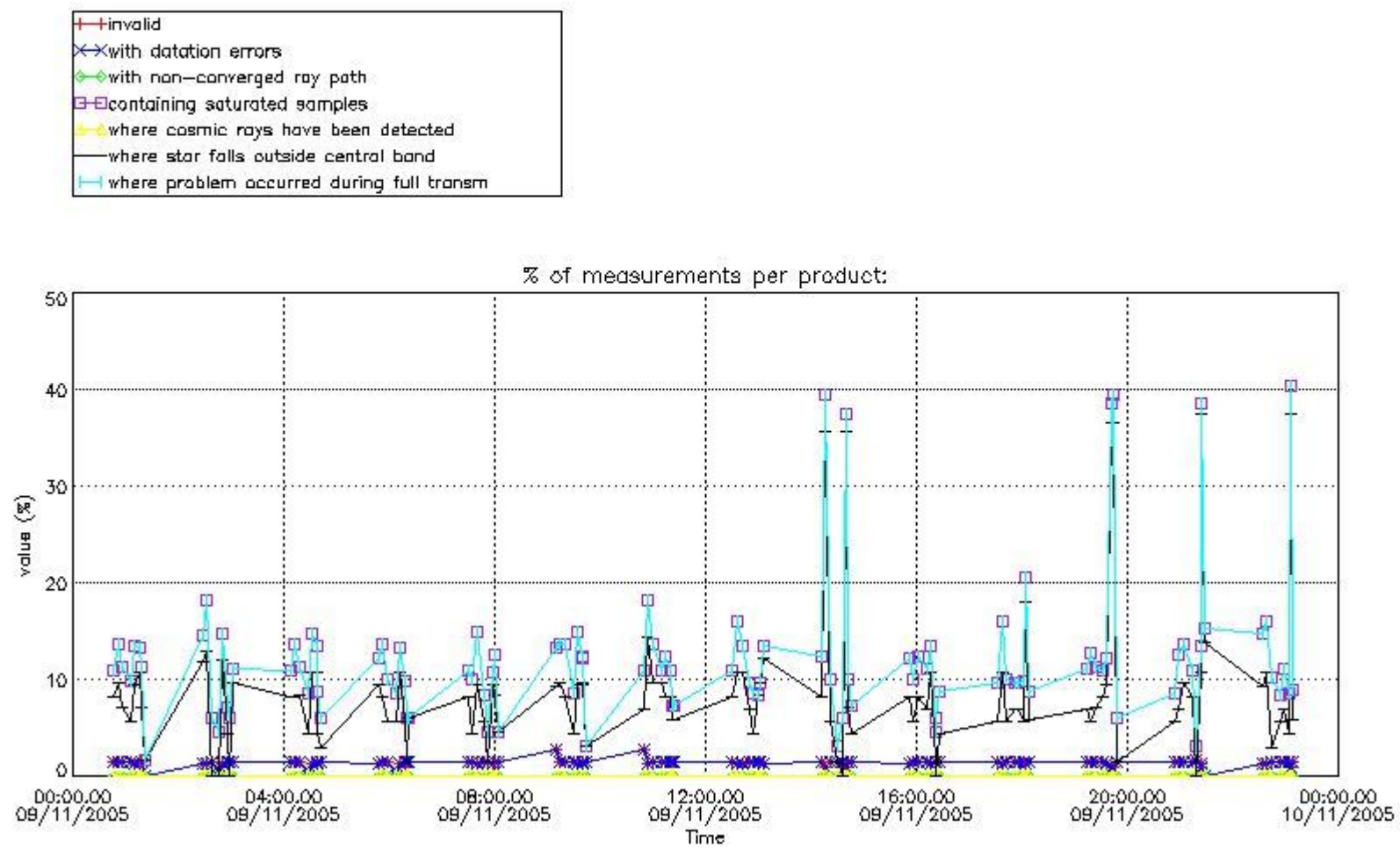
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



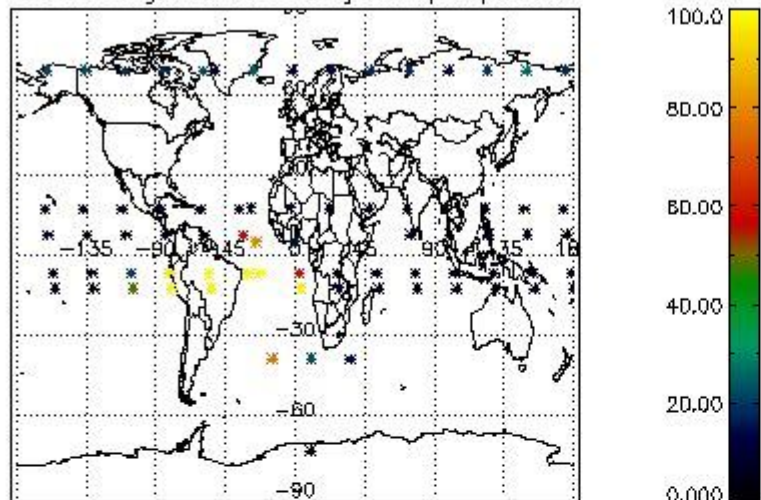
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



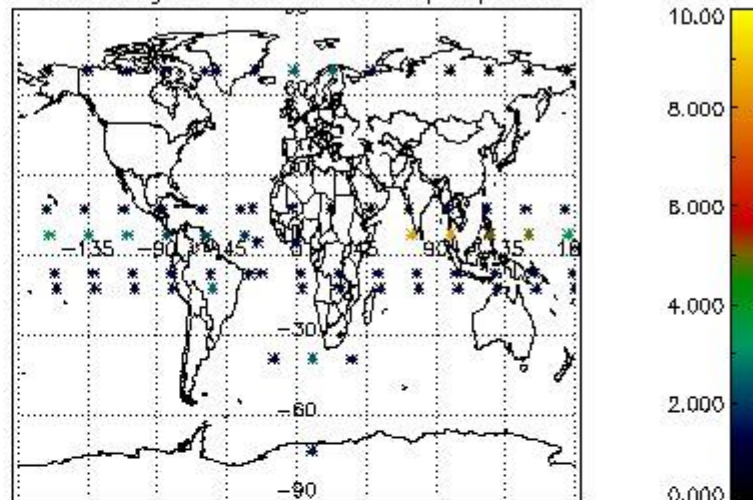
4.2 Plot quality information per product coming from level 1b processing (world map)

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

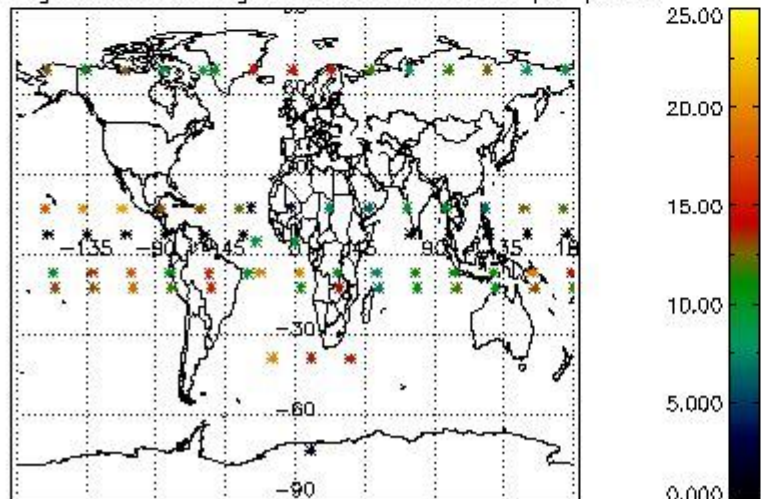
Percentage of cosmic ray hits per profile



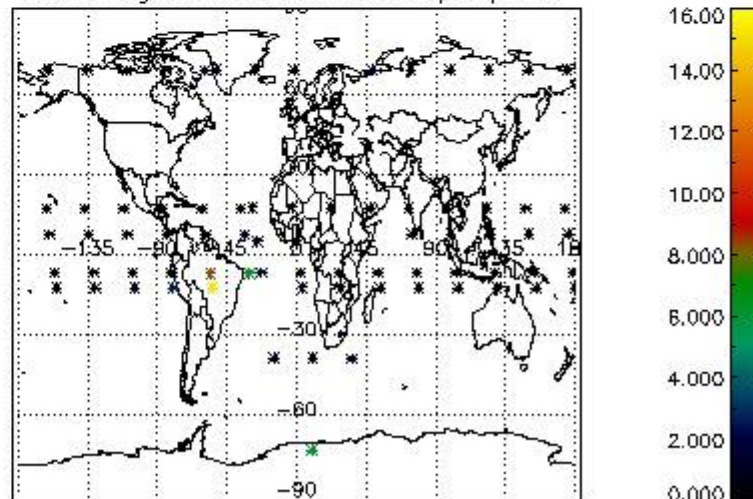
Percentage of datation errors per profile



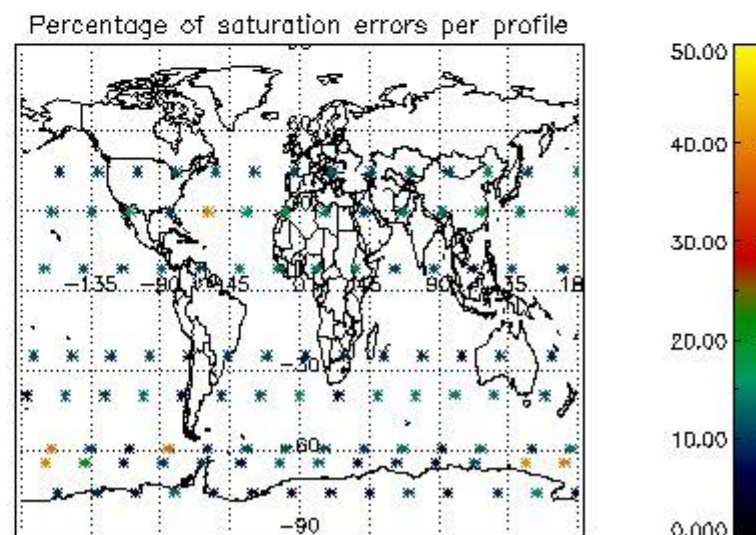
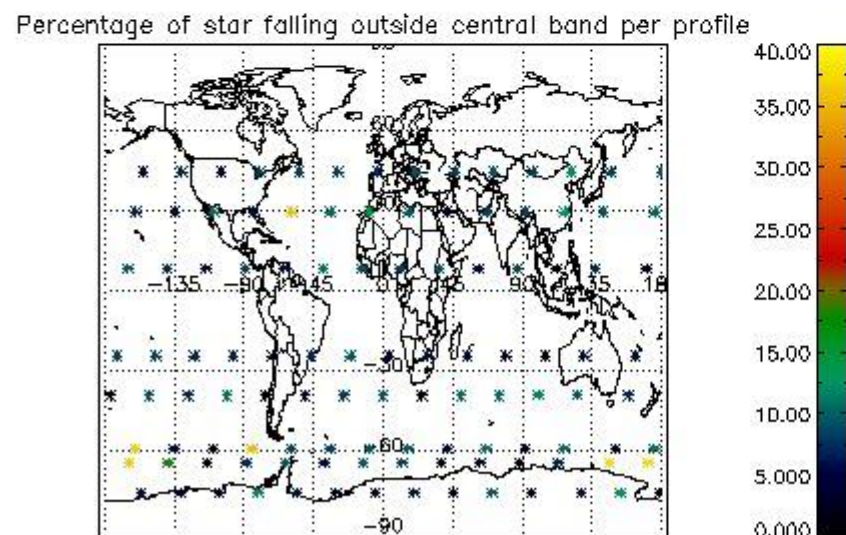
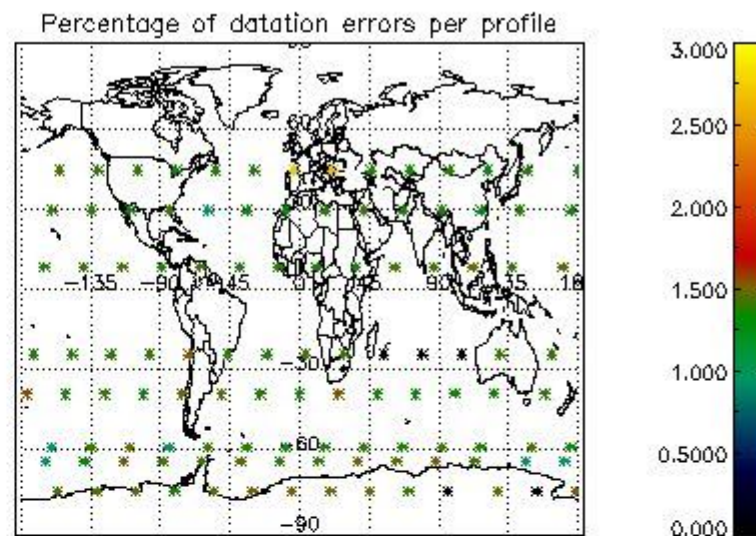
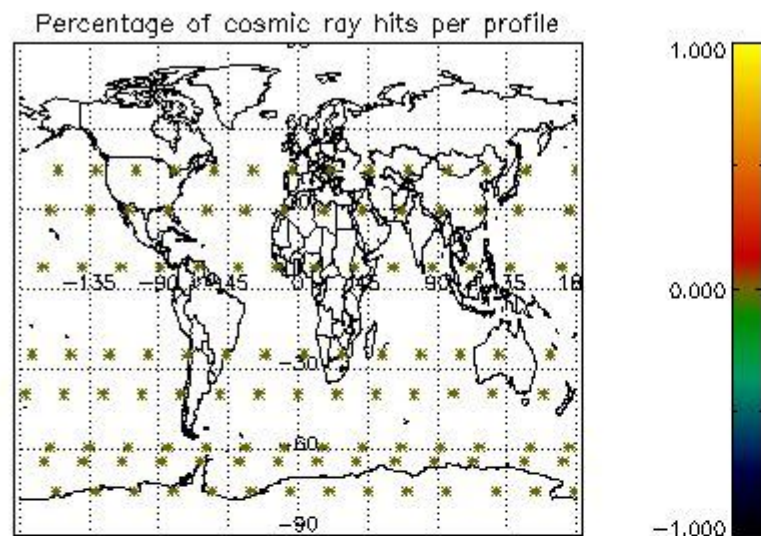
Percentage of star falling outside central band per profile



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

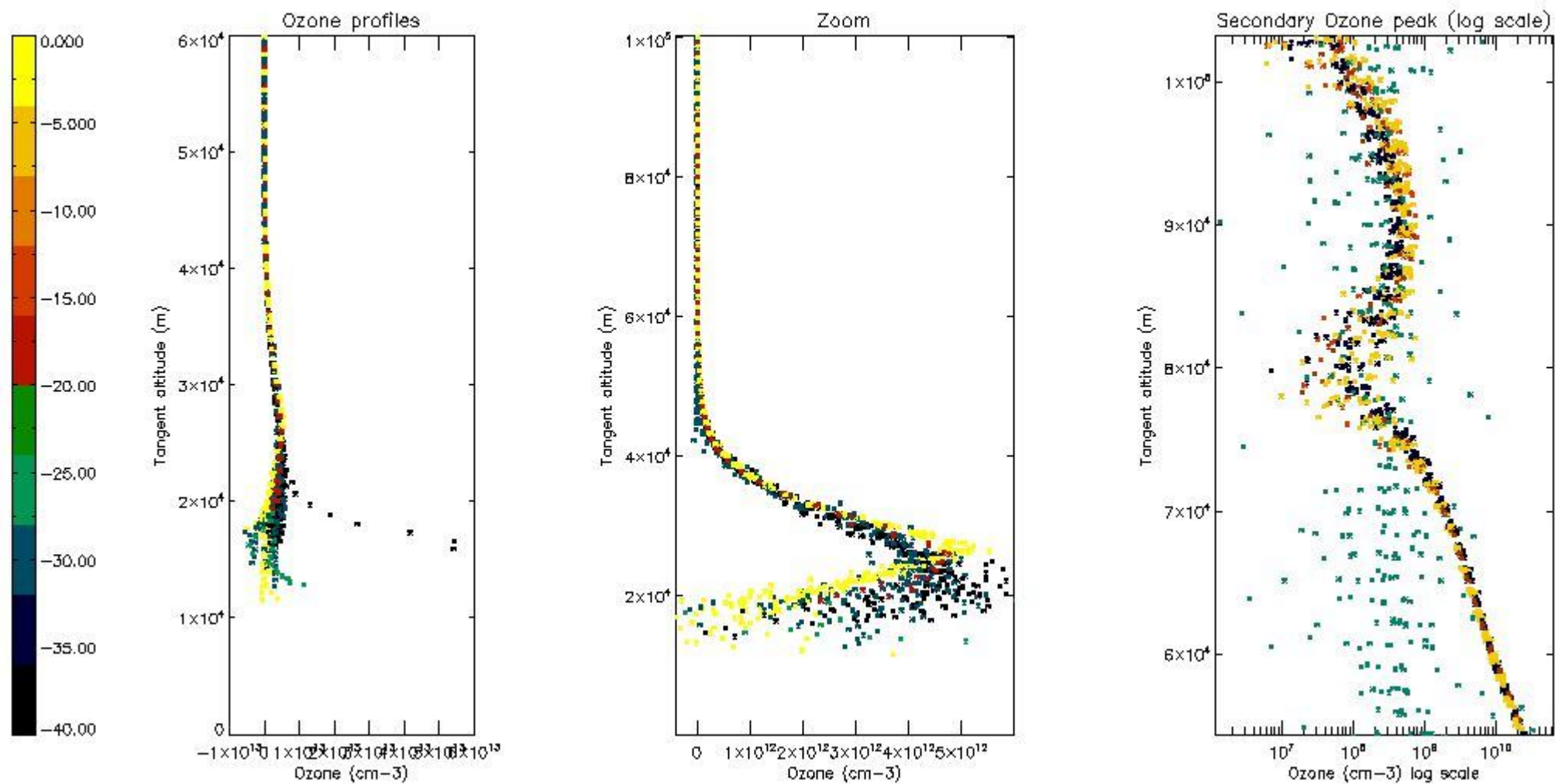
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	16

STD < 10	12
STD < 5	5

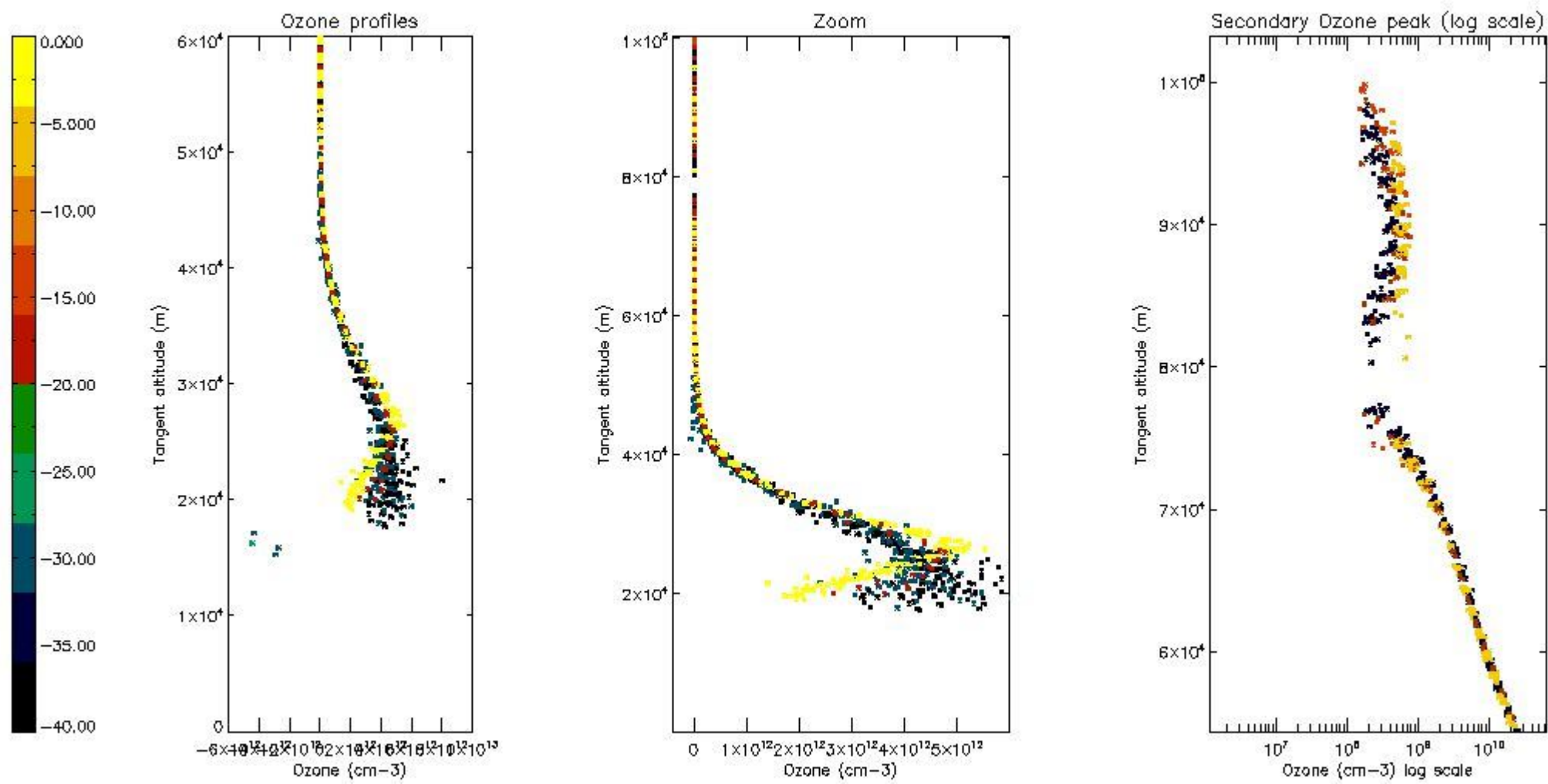
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



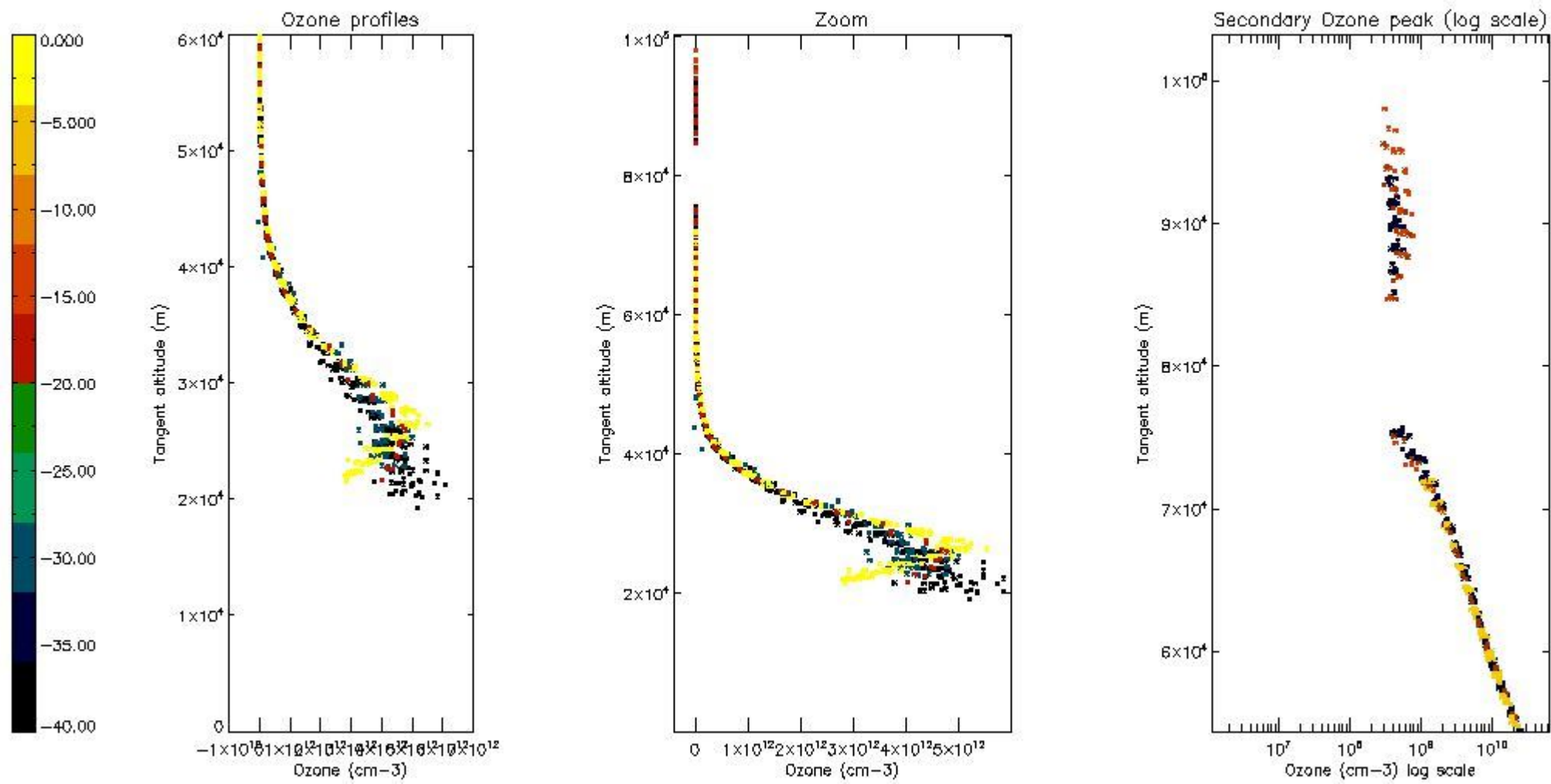
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



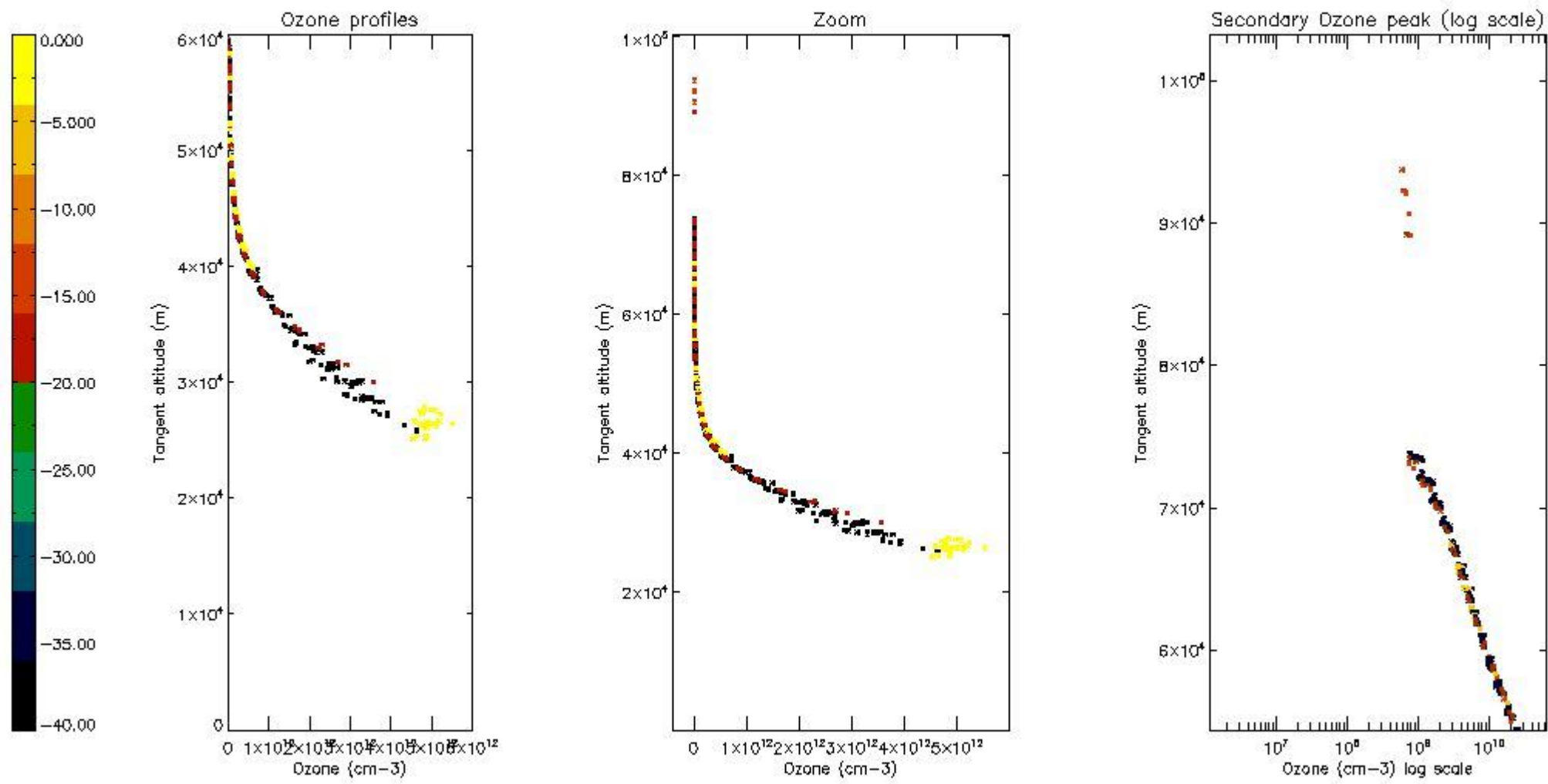
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



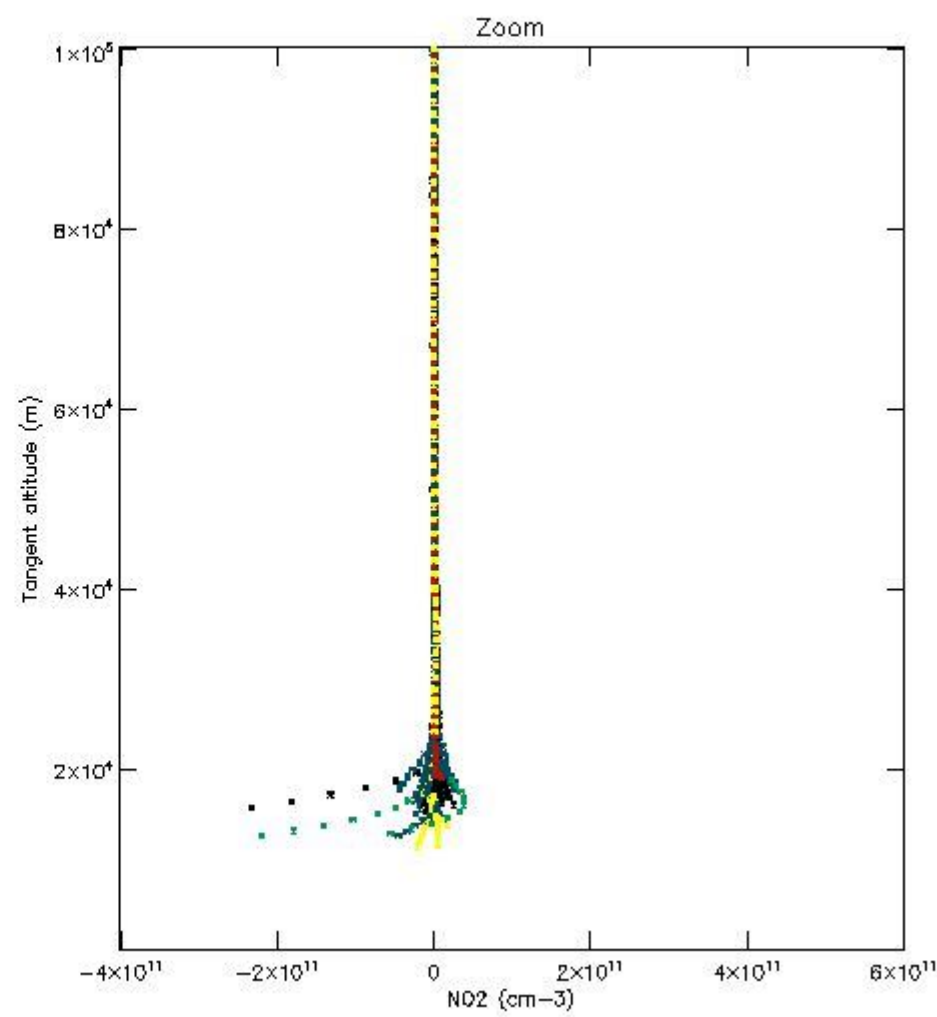
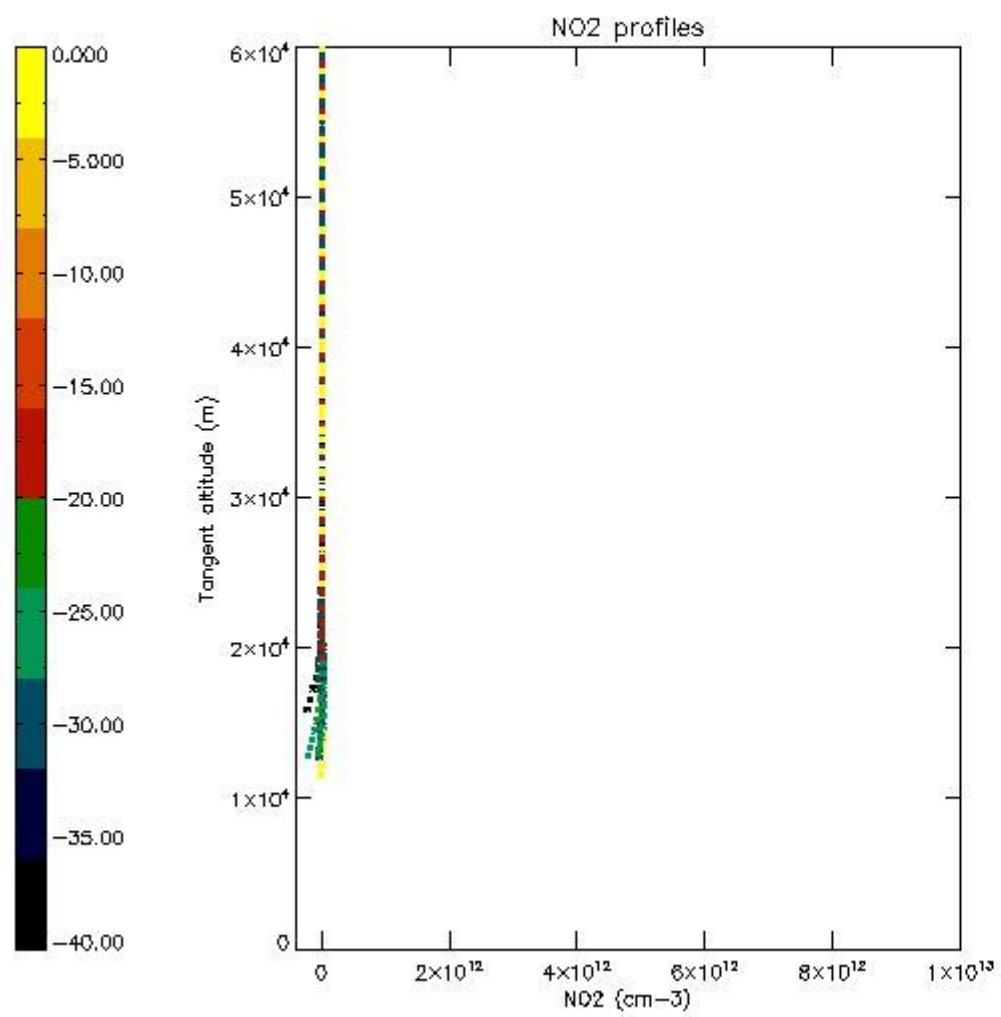
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



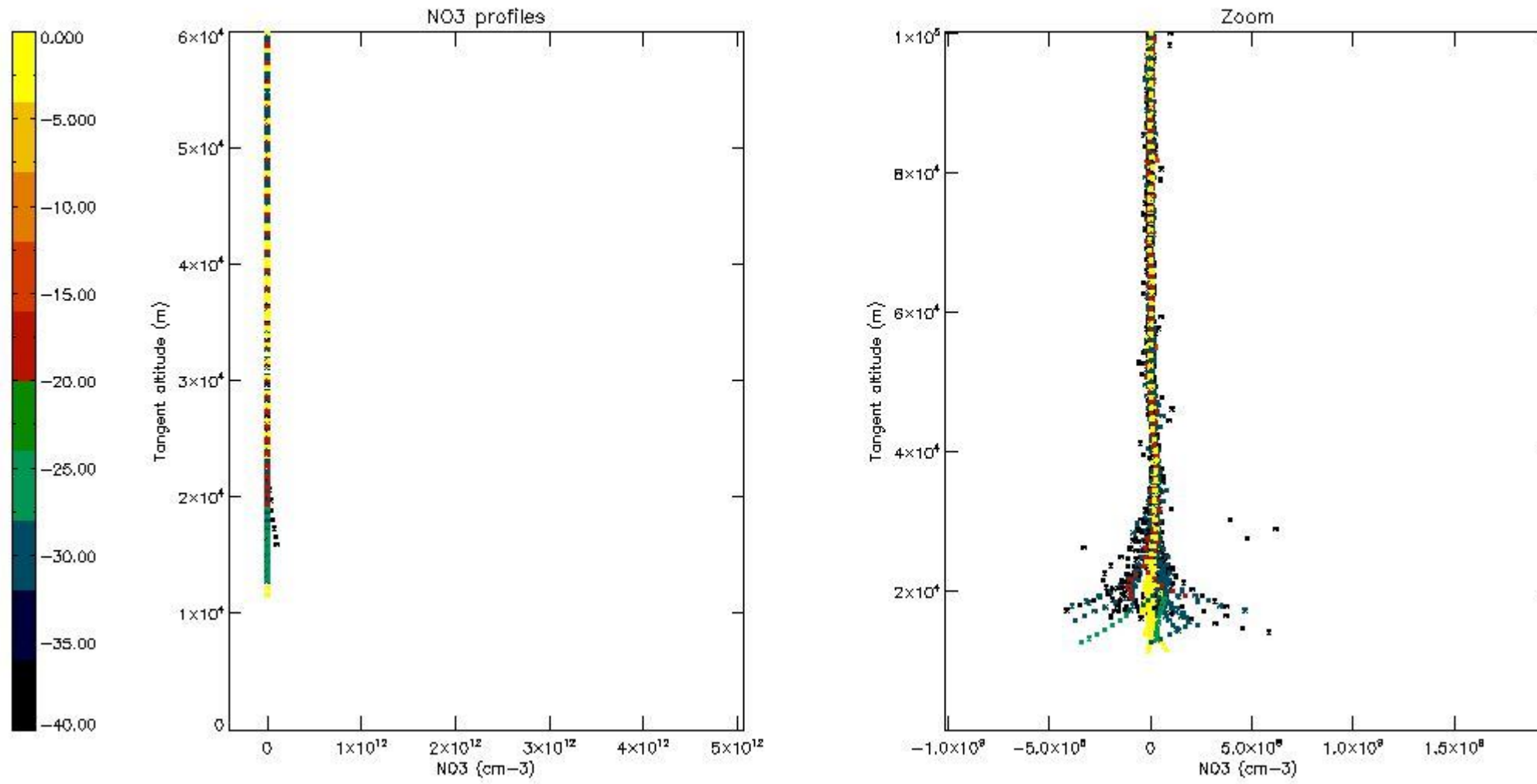
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

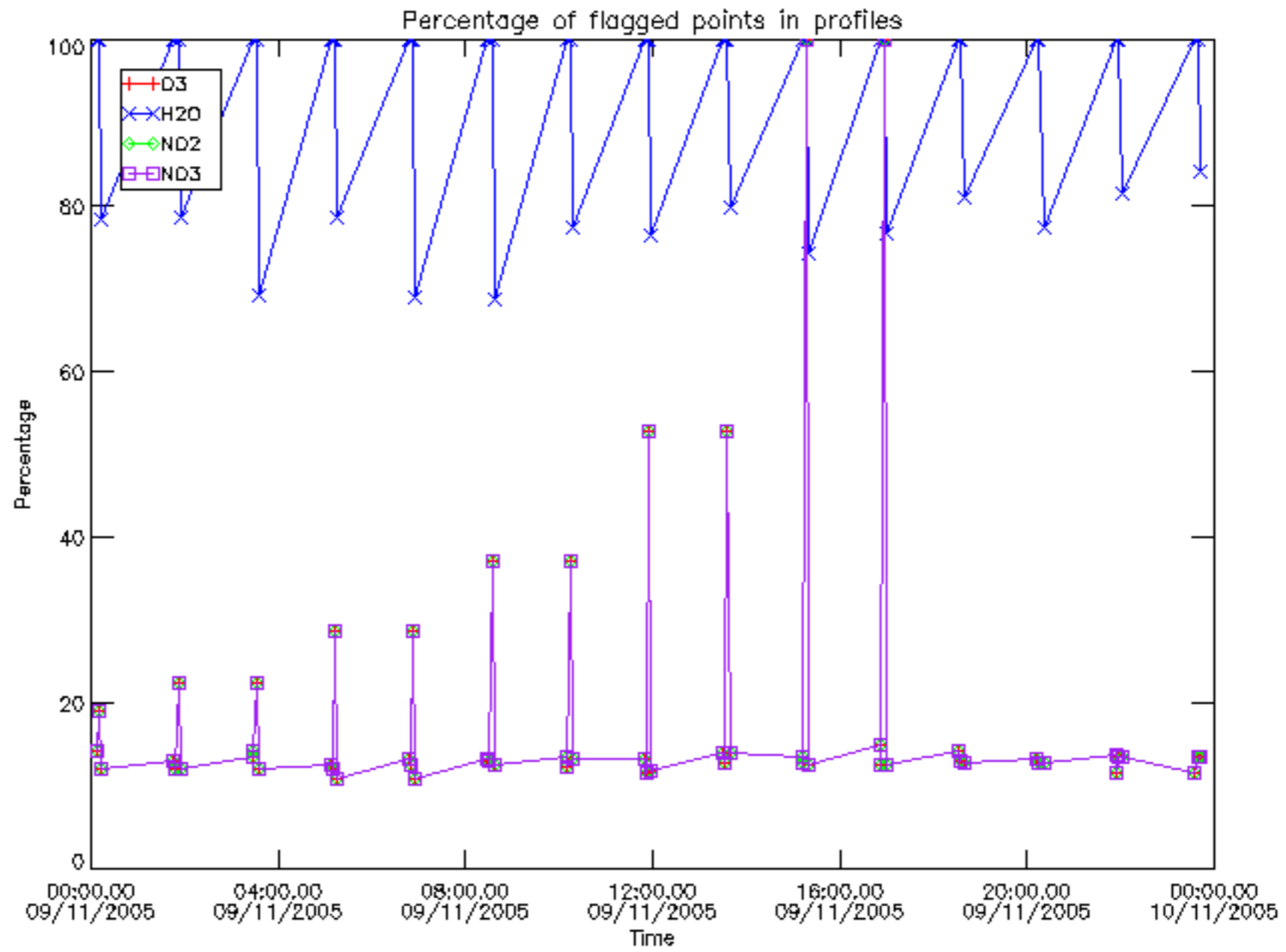
The colorbar represents the latitude.



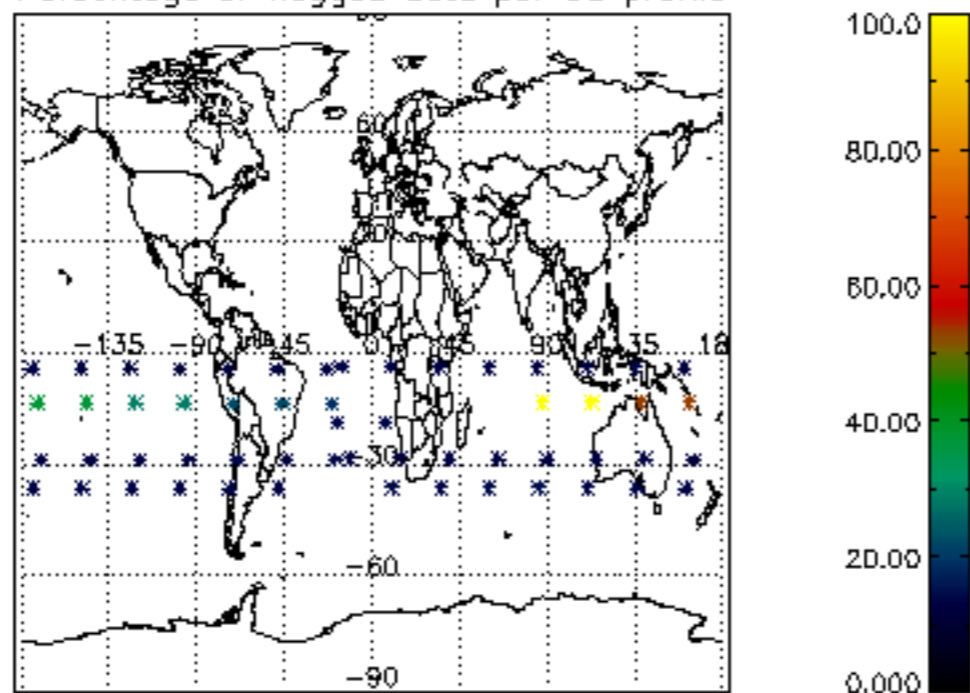
6. Auxiliary Data Files used for the production reported in section 2

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.

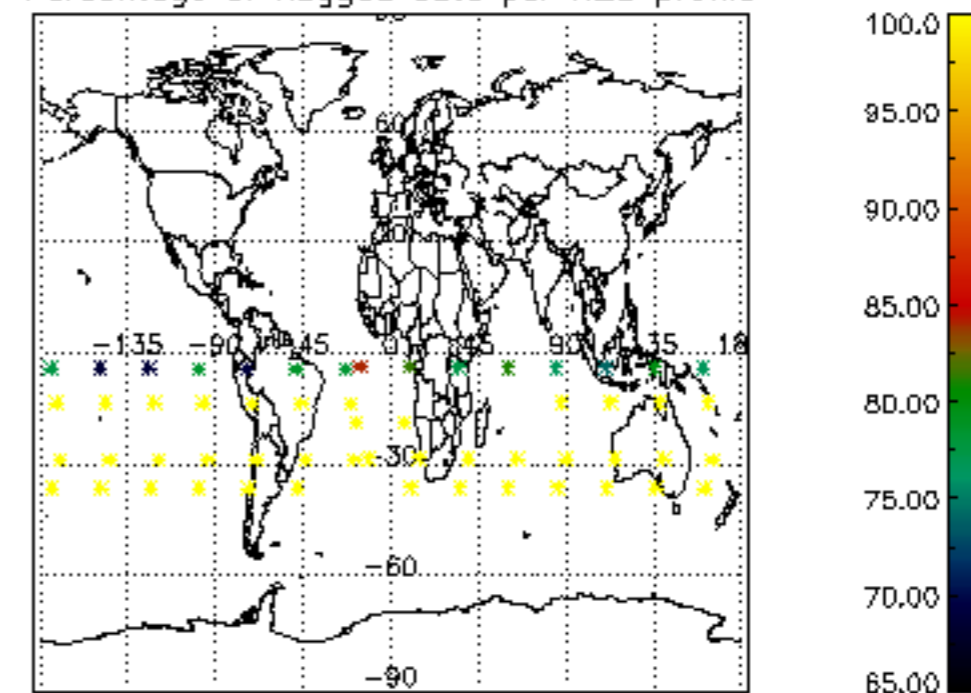
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	09-NOV-2005 00:07:04
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-NOV-2005 00:07:04
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-NOV-2005 00:07:04



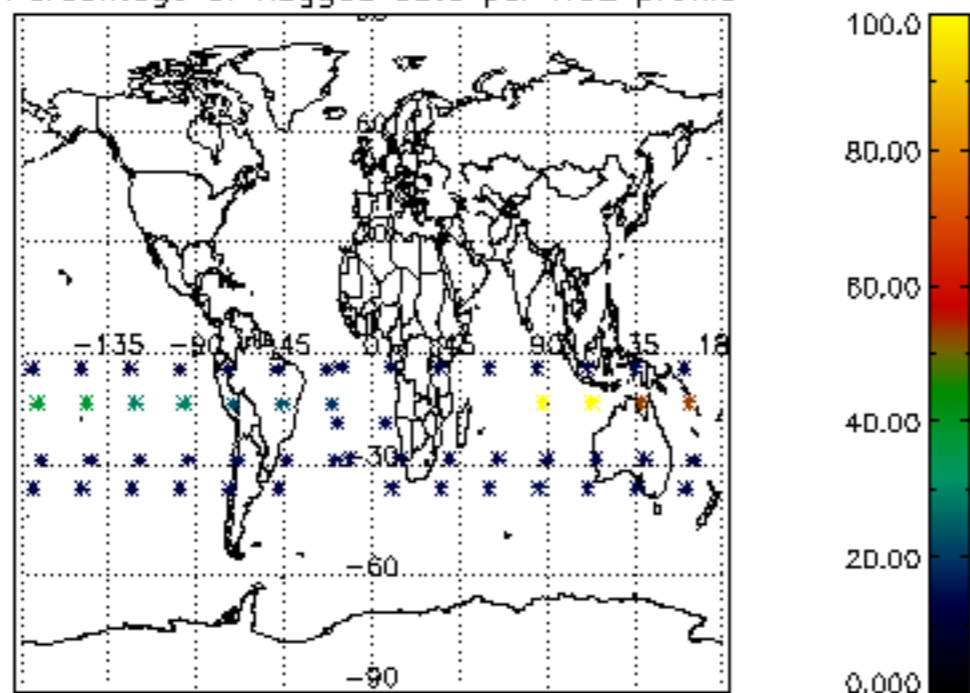
Percentage of flagged data per D3 profile



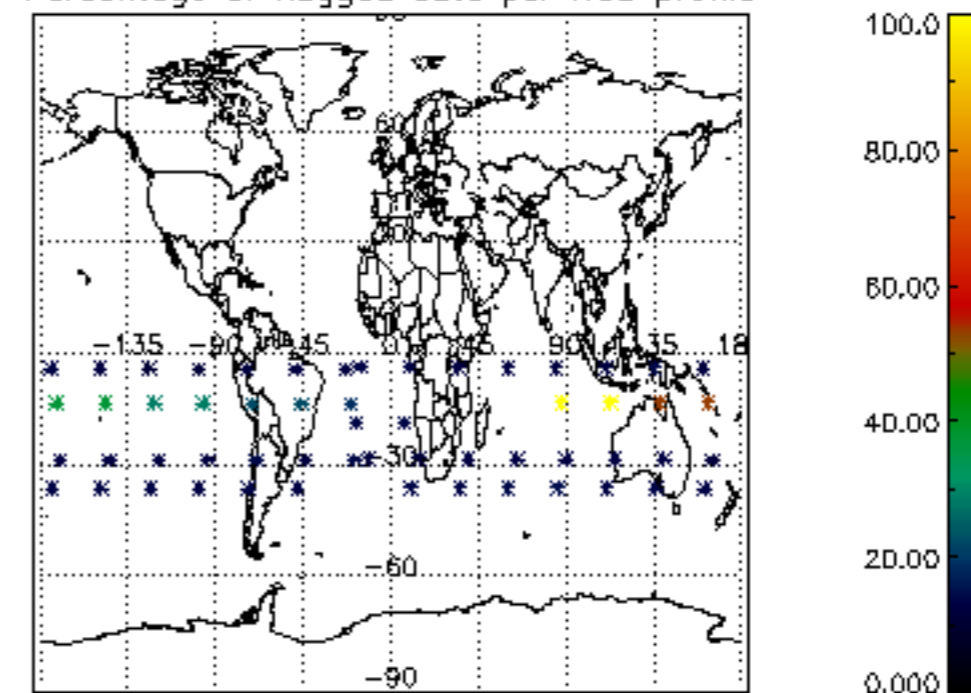
Percentage of flagged data per H2O profile

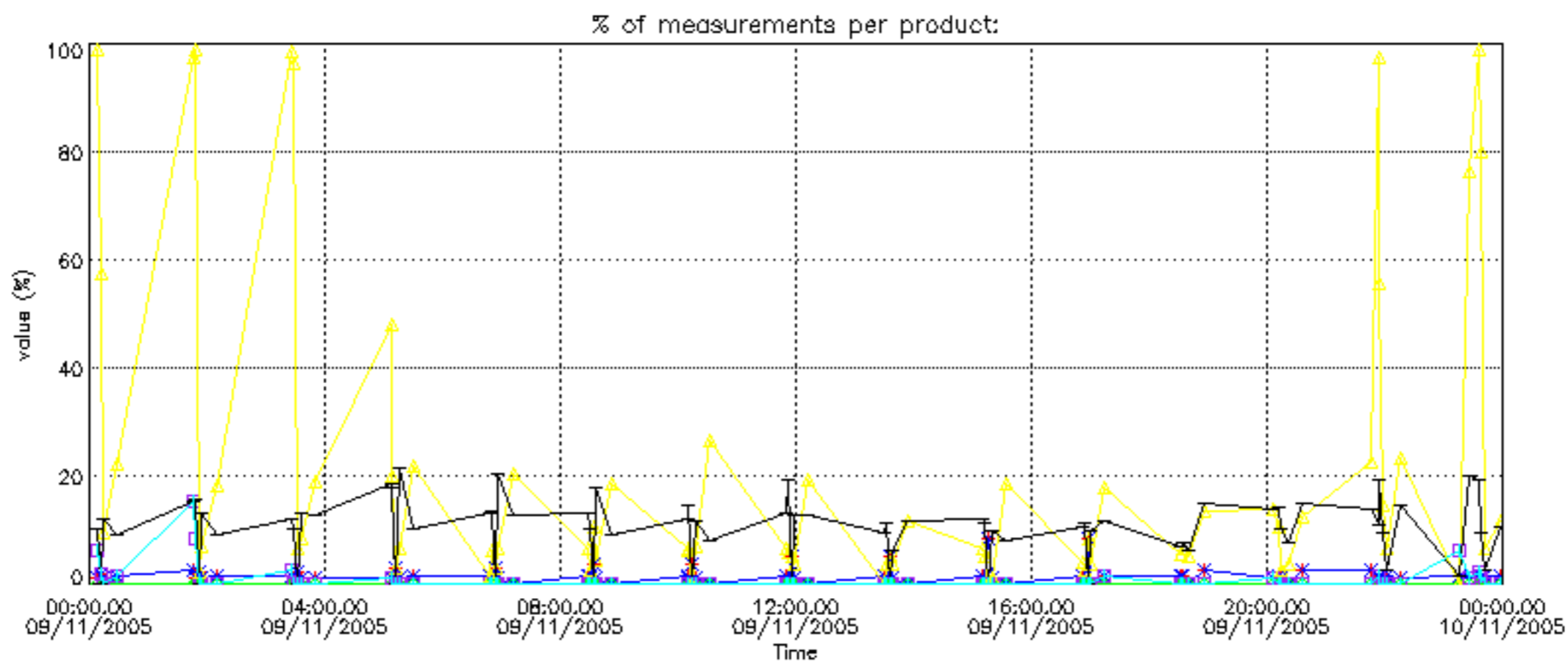


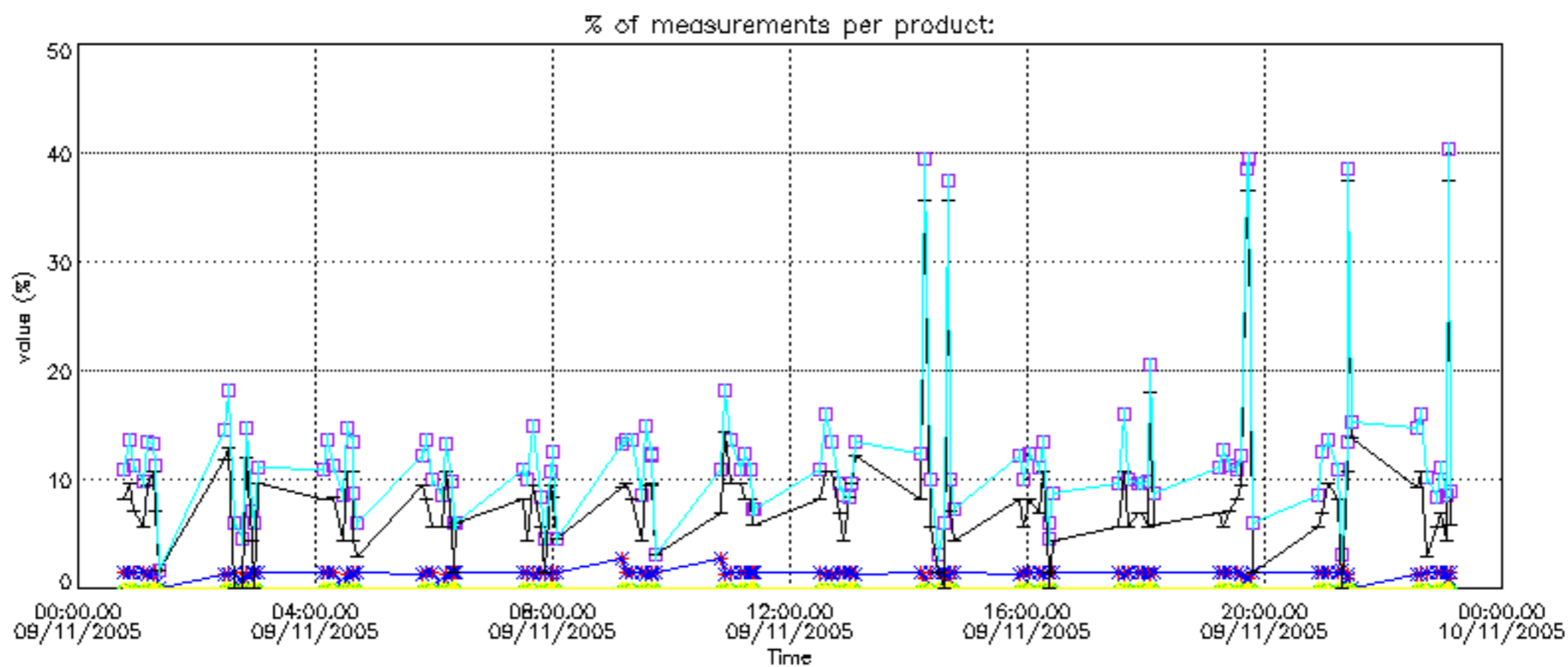
Percentage of flagged data per NO2 profile



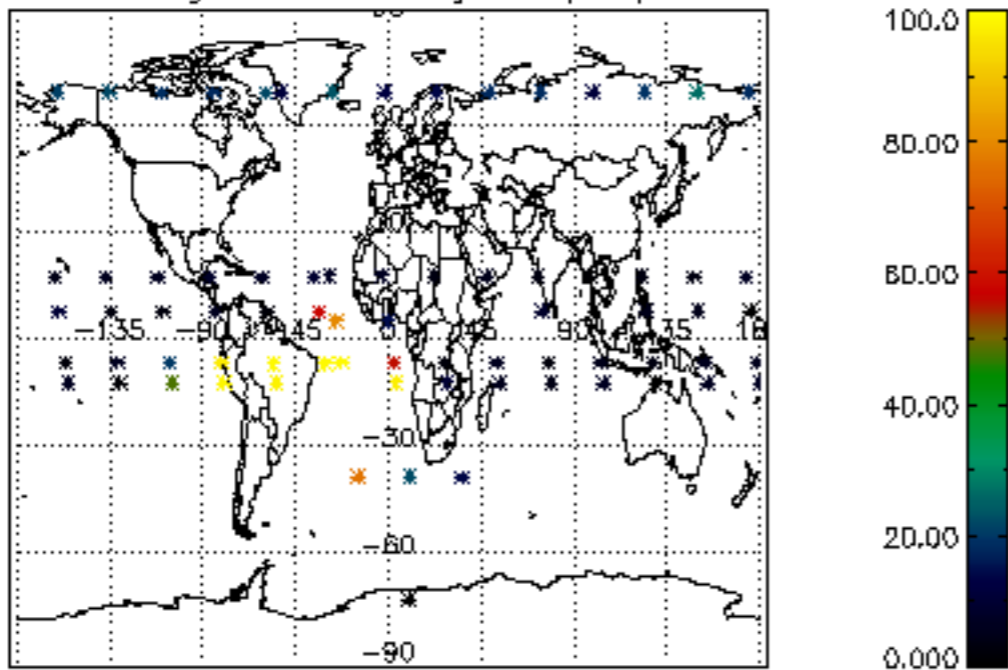
Percentage of flagged data per NO3 profile



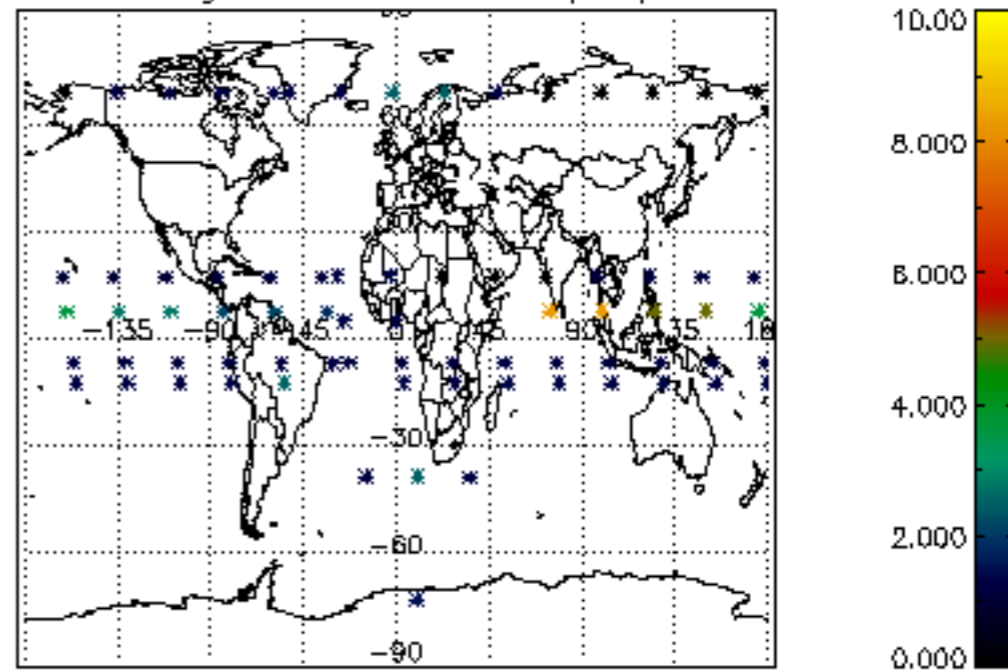




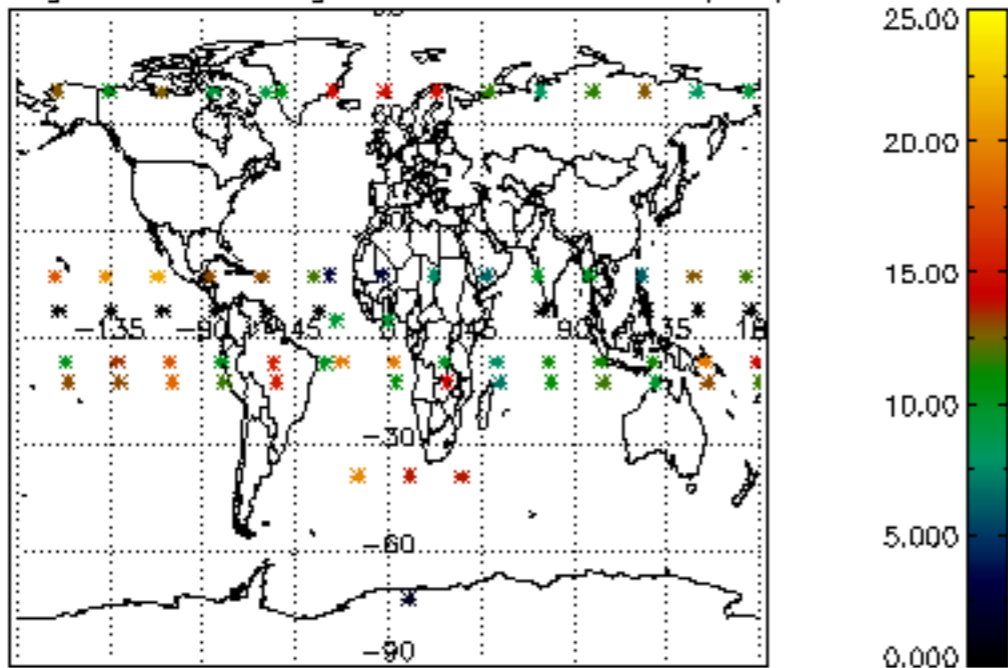
Percentage of cosmic ray hits per profile



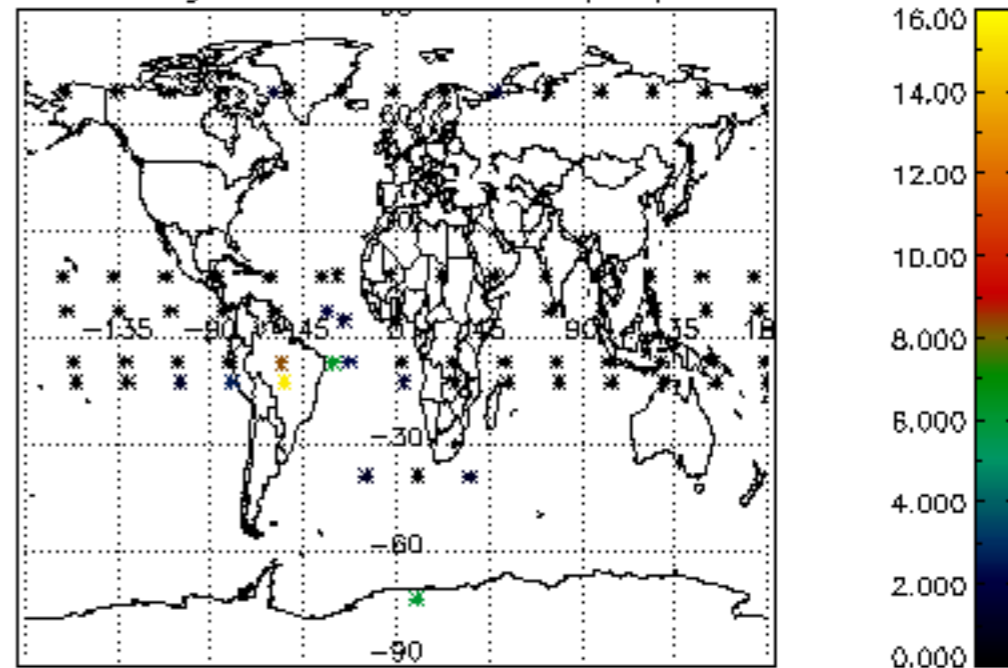
Percentage of datation errors per profile



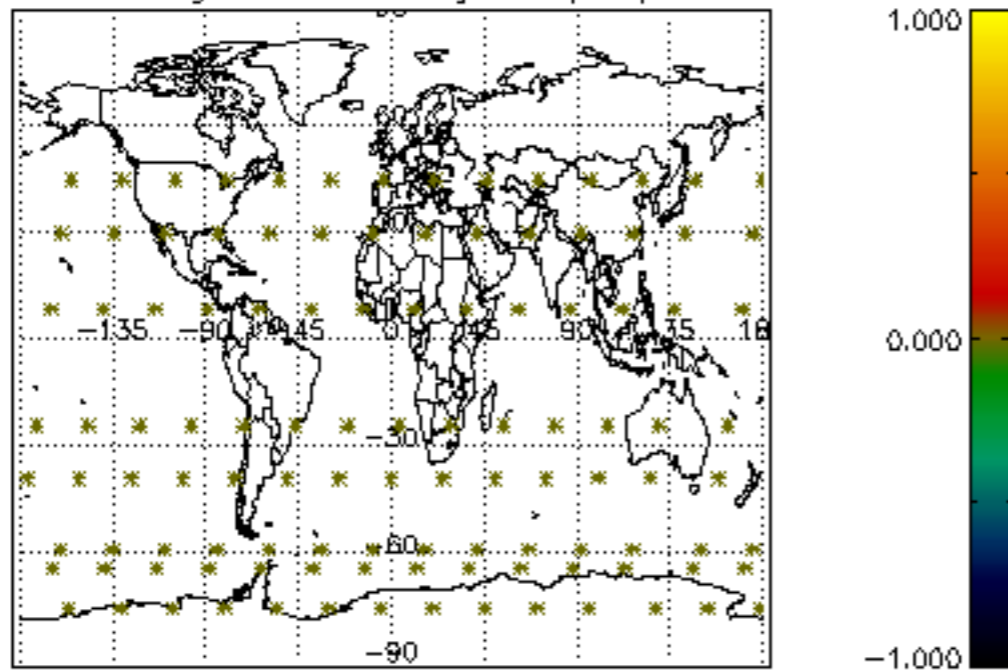
Percentage of star falling outside central band per profile



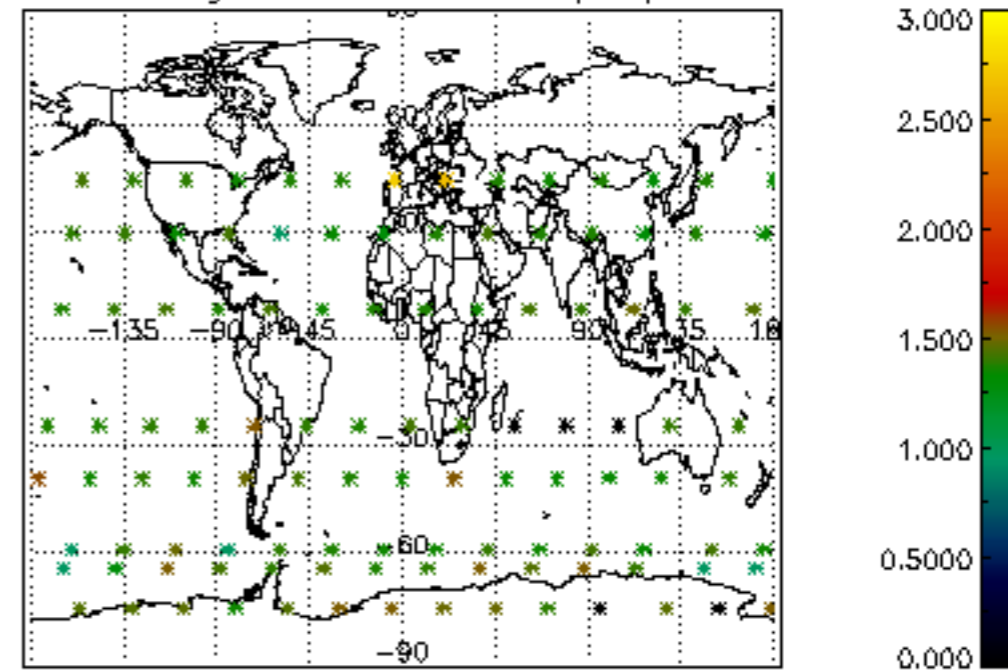
Percentage of saturation errors per profile



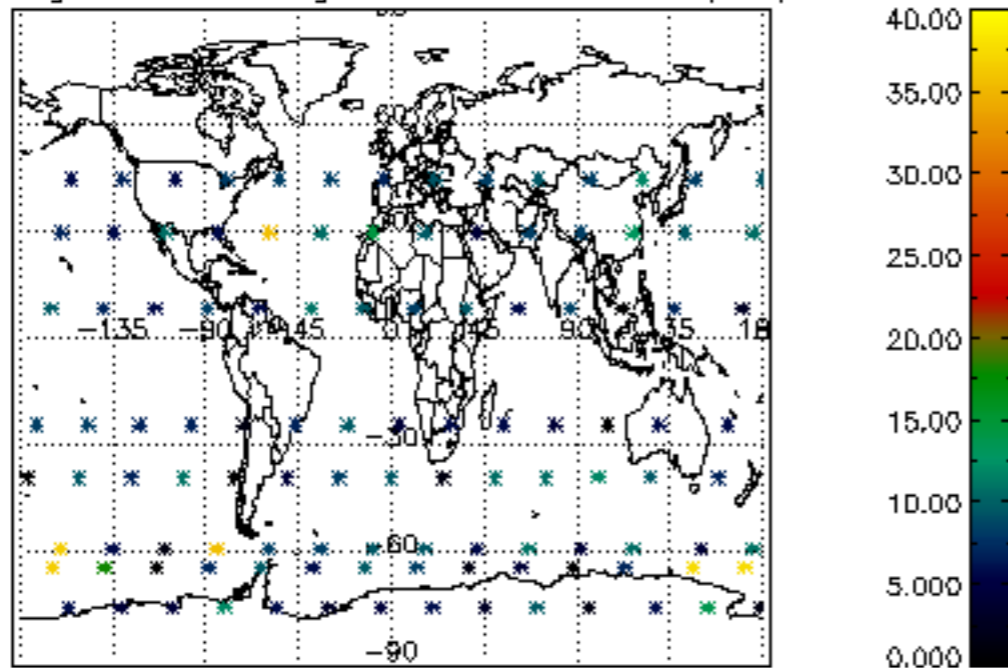
Percentage of cosmic ray hits per profile



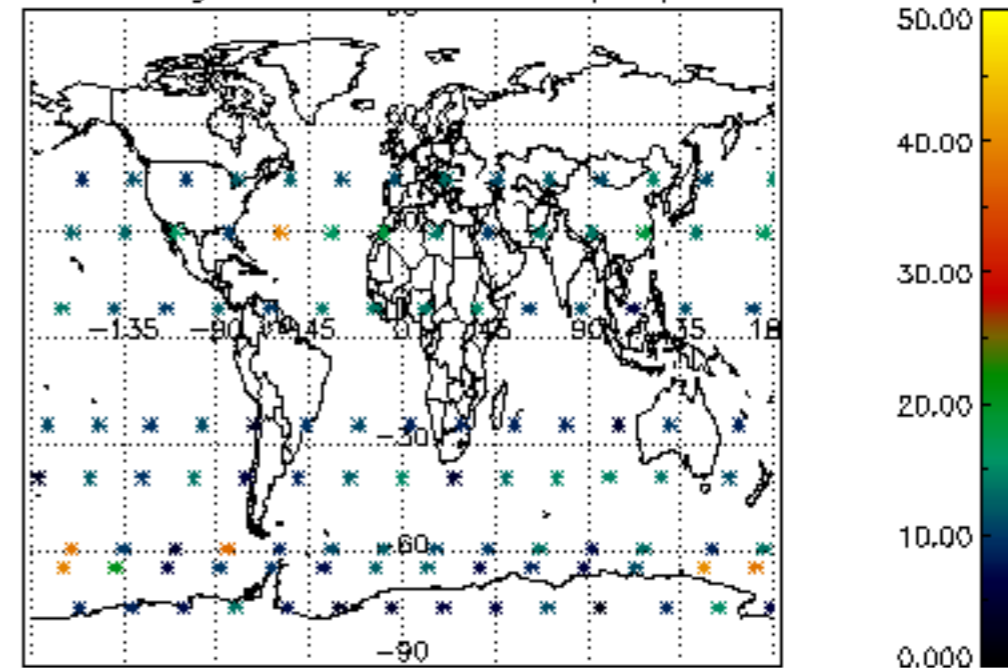
Percentage of datation errors per profile

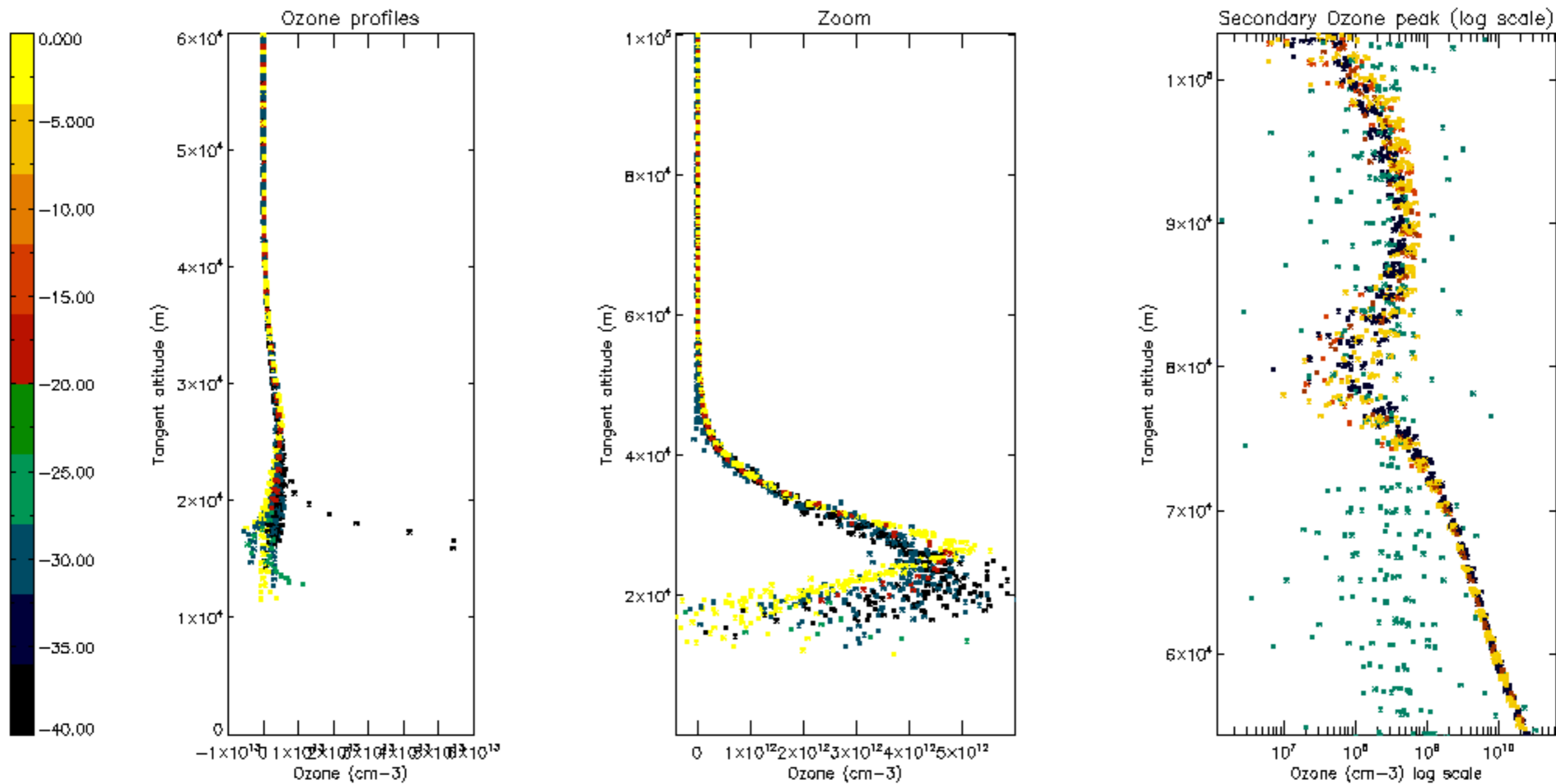


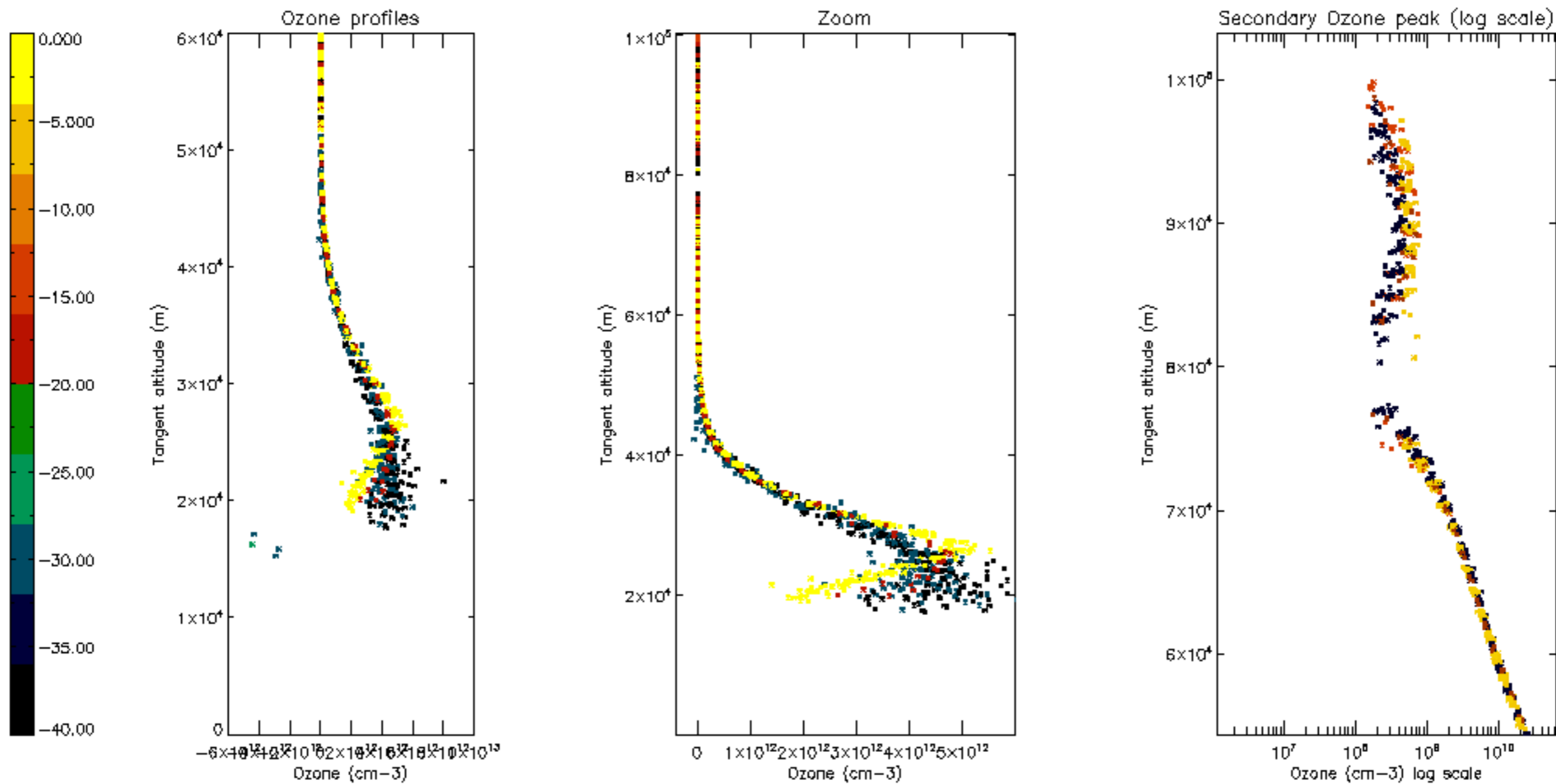
Percentage of star falling outside central band per profile

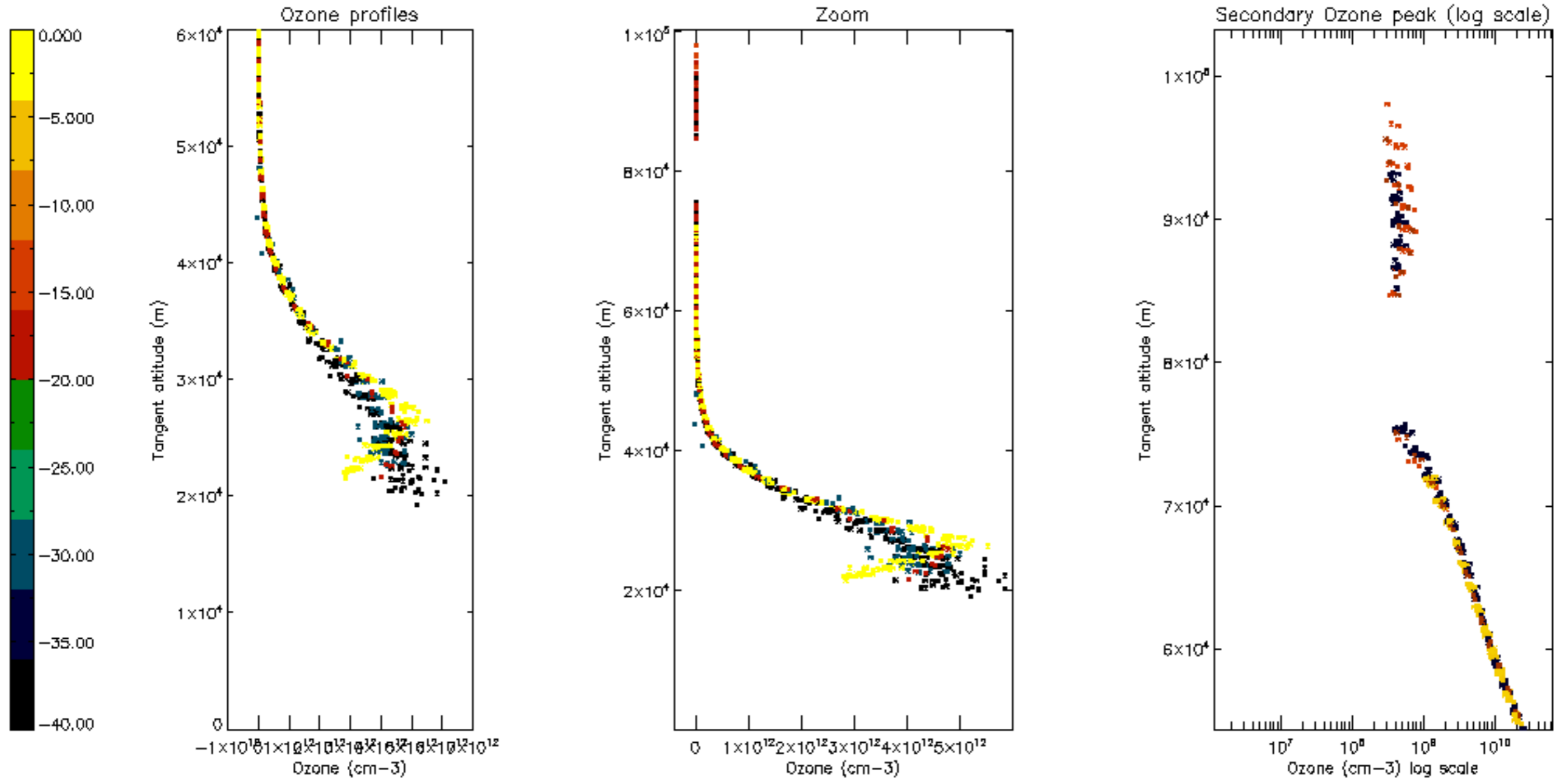


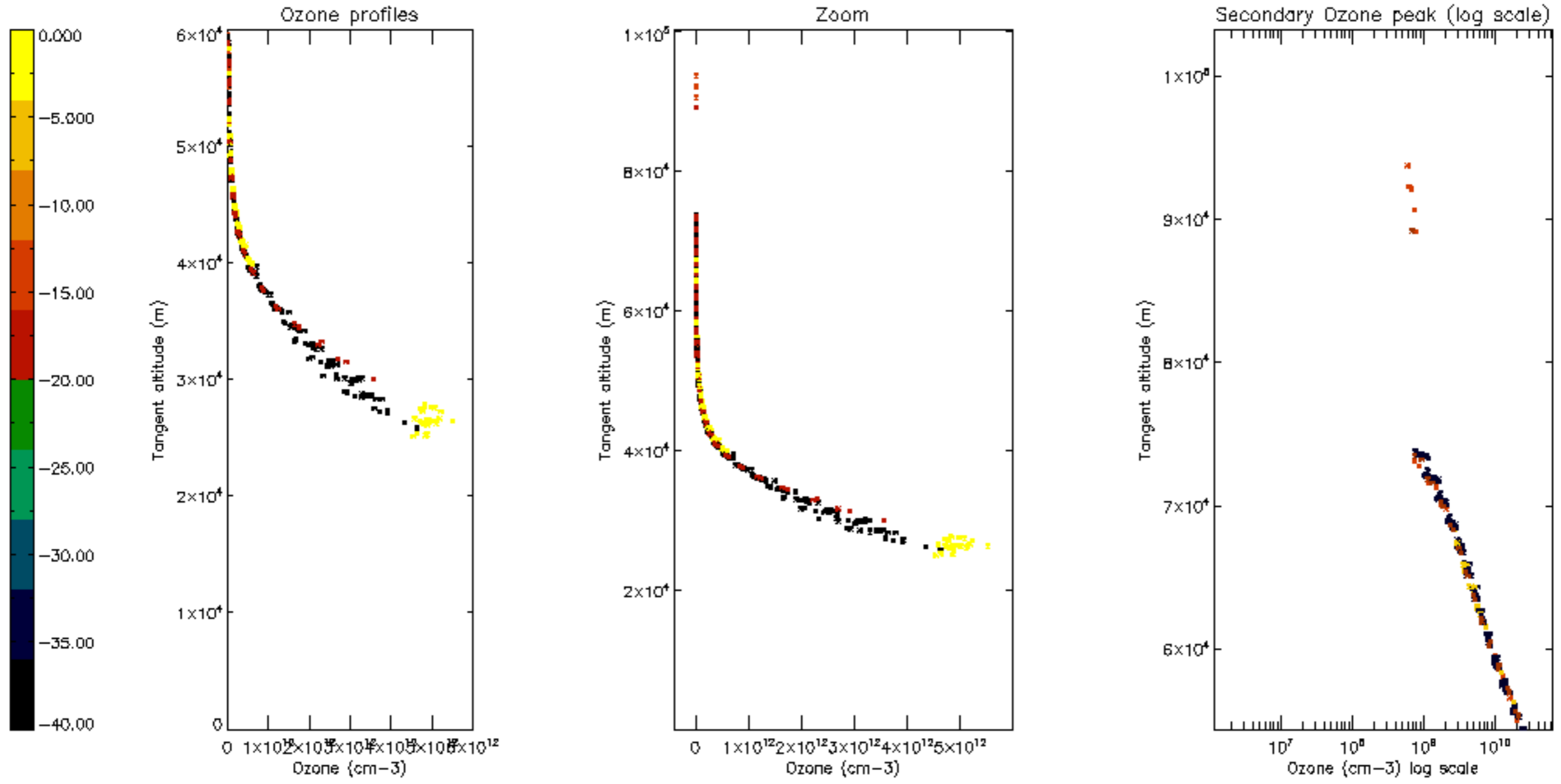
Percentage of saturation errors per profile

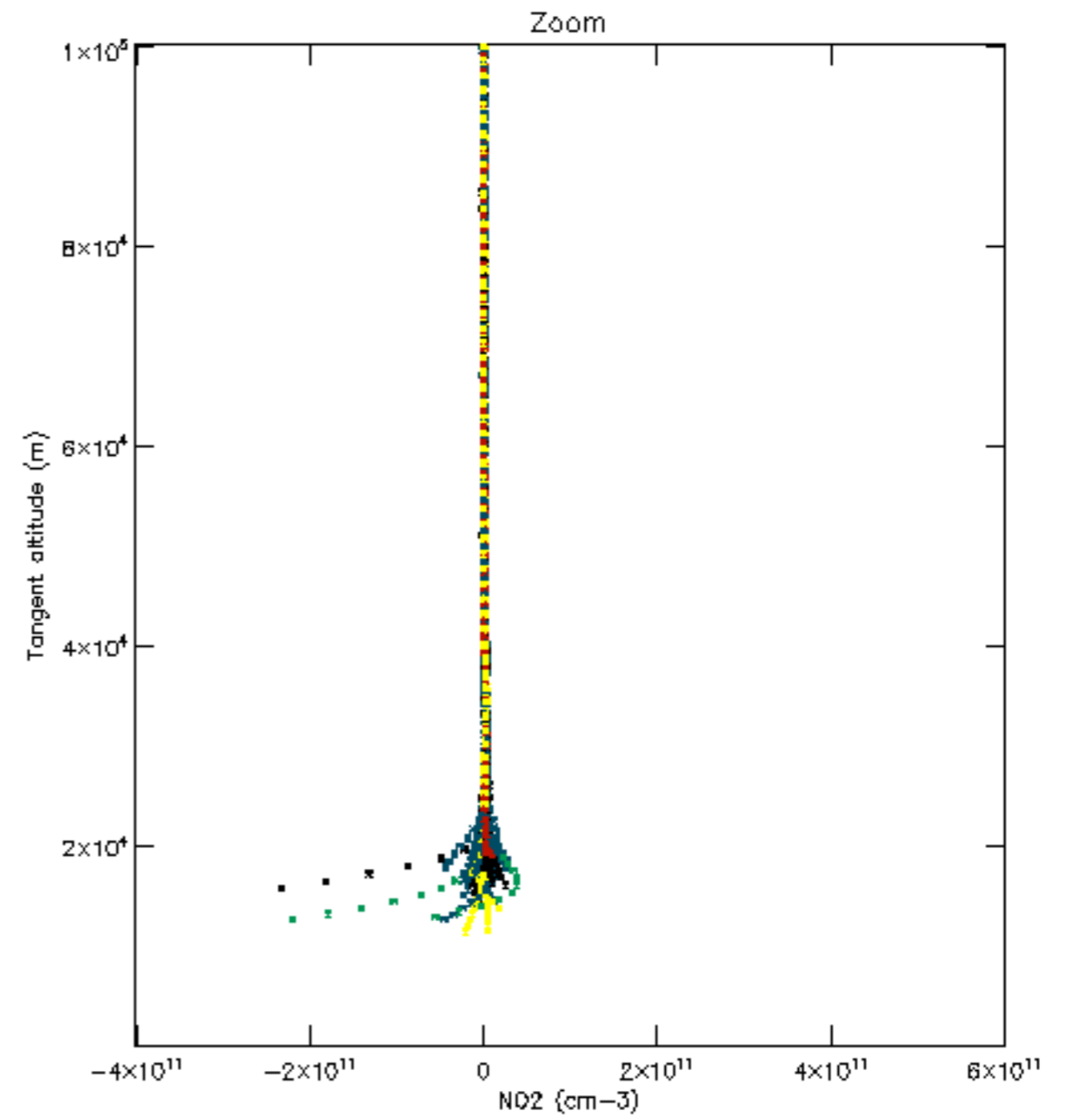
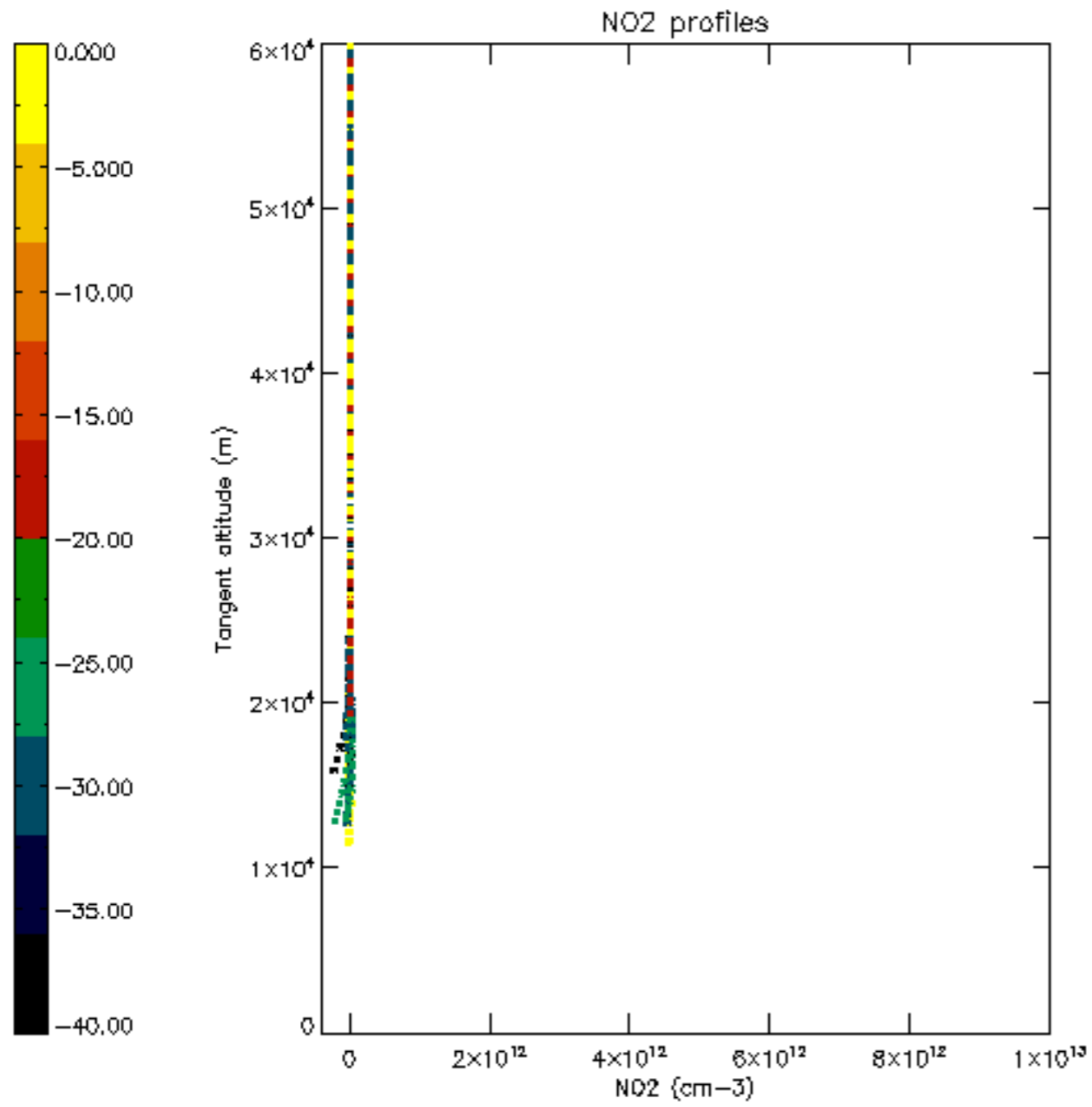


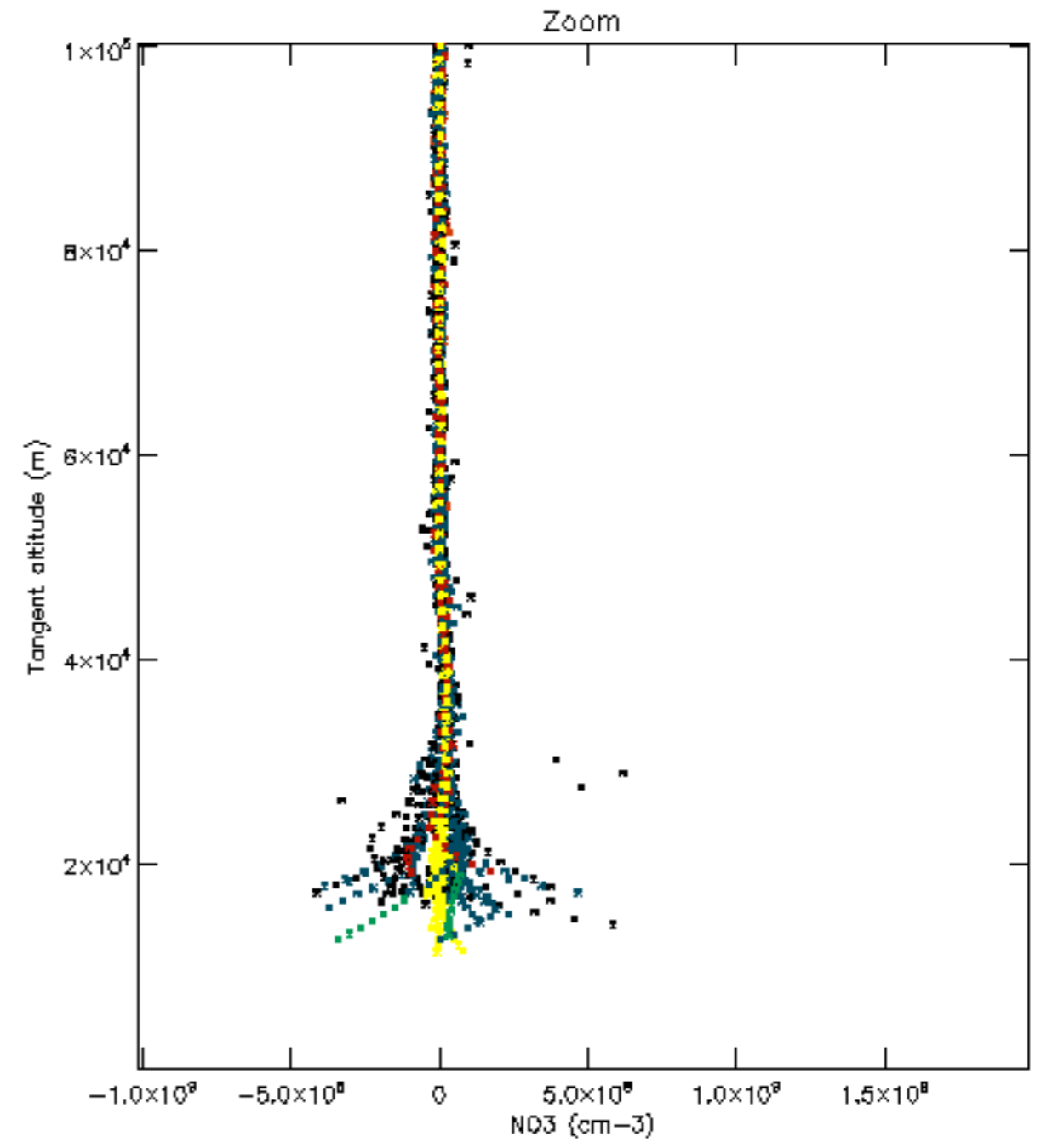
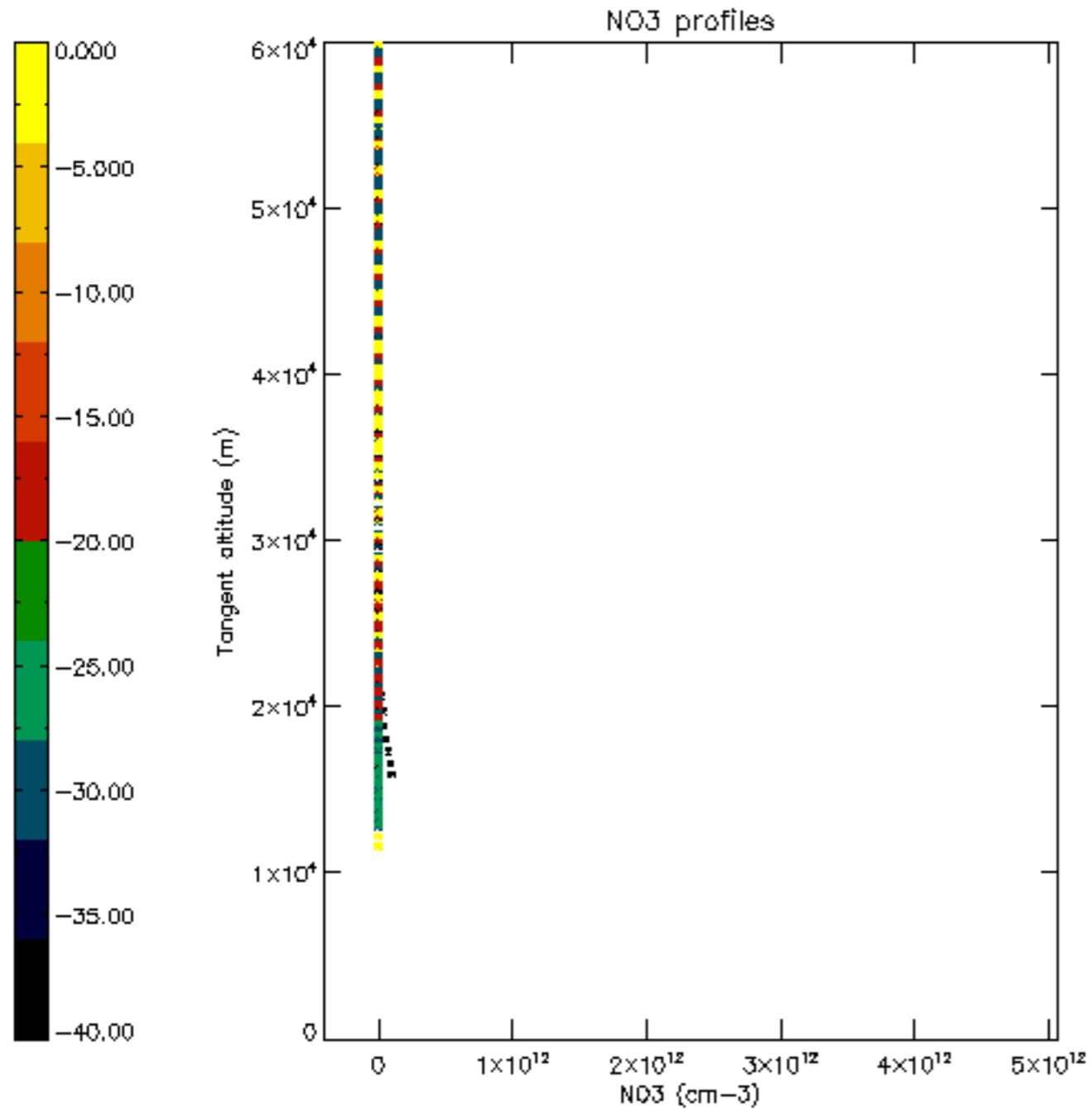


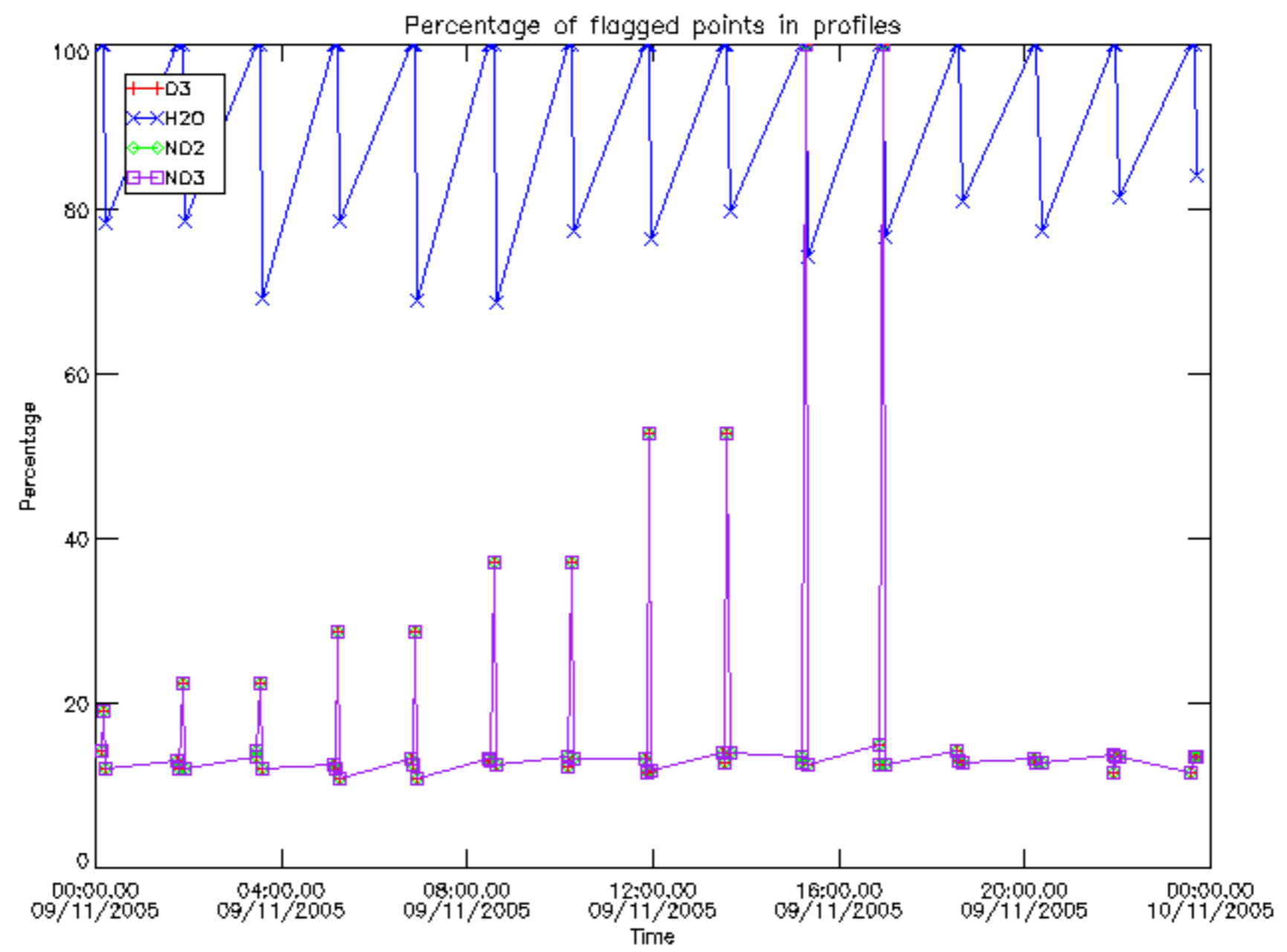




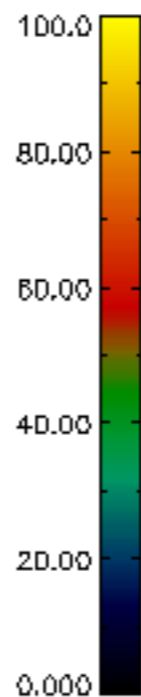
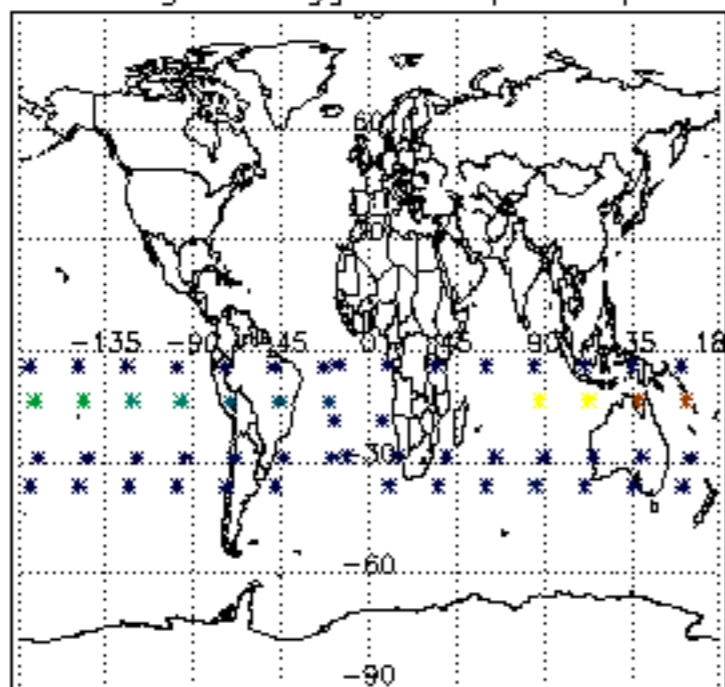




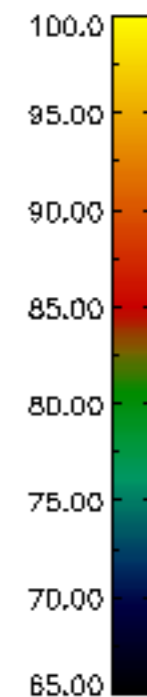
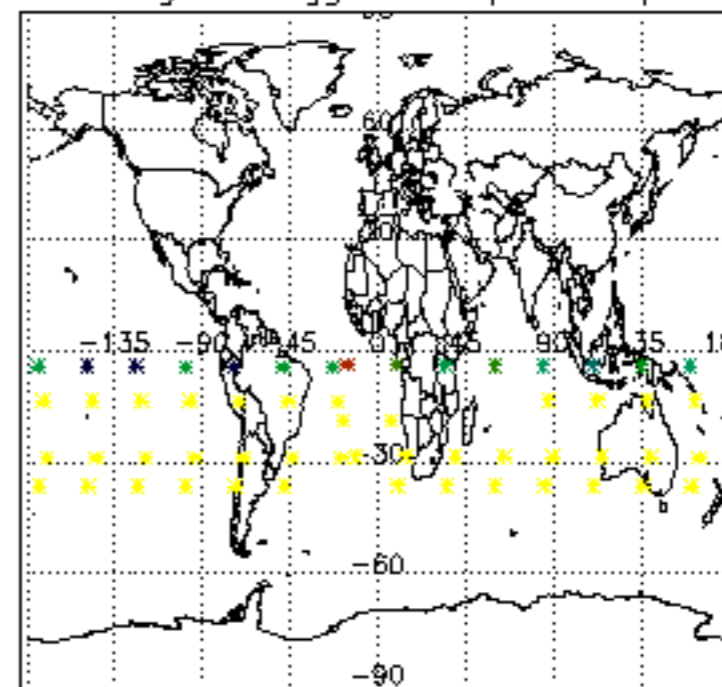




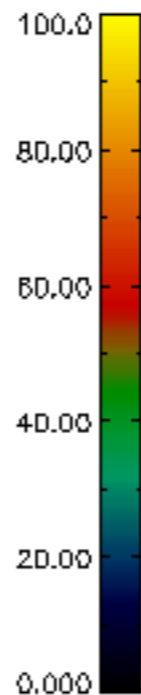
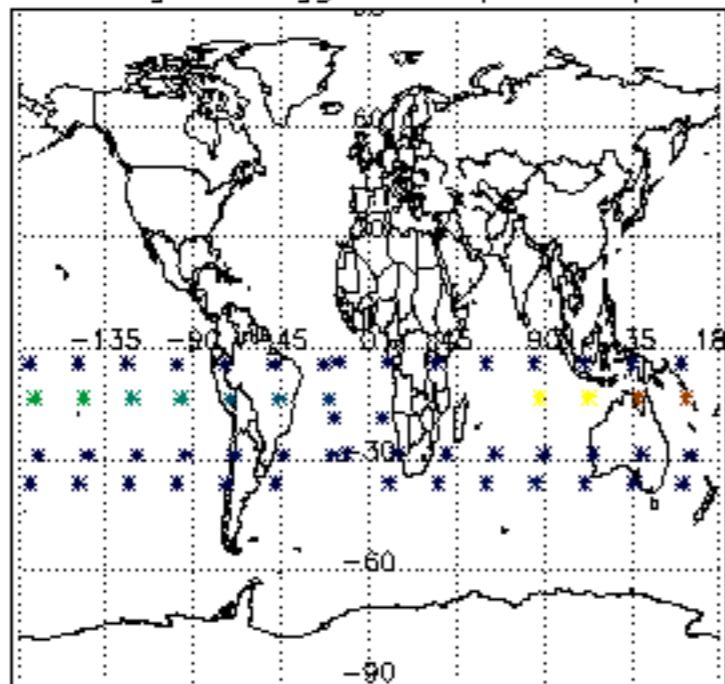
Percentage of flagged data per D3 profile



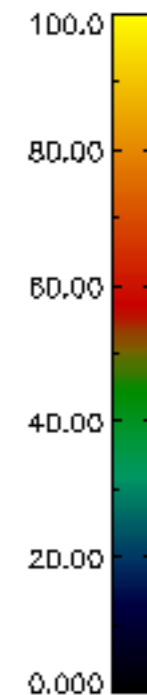
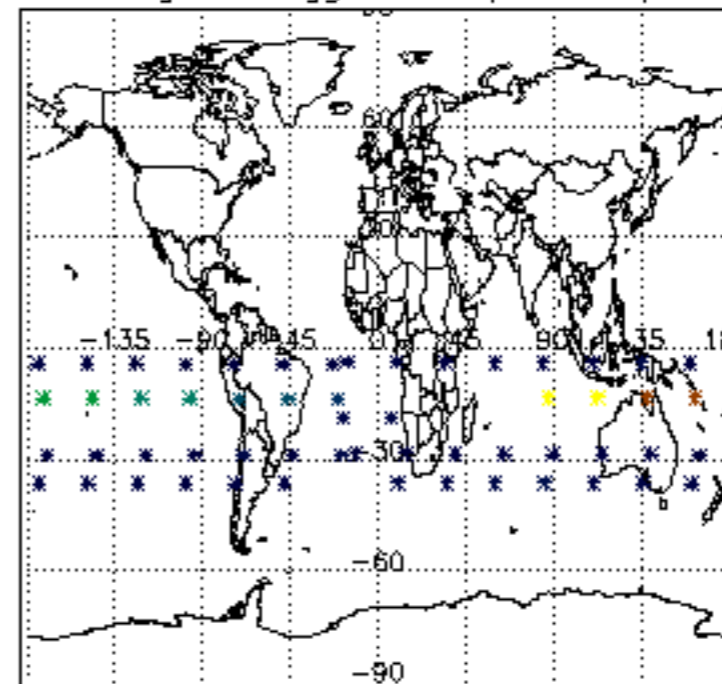
Percentage of flagged data per H2O profile

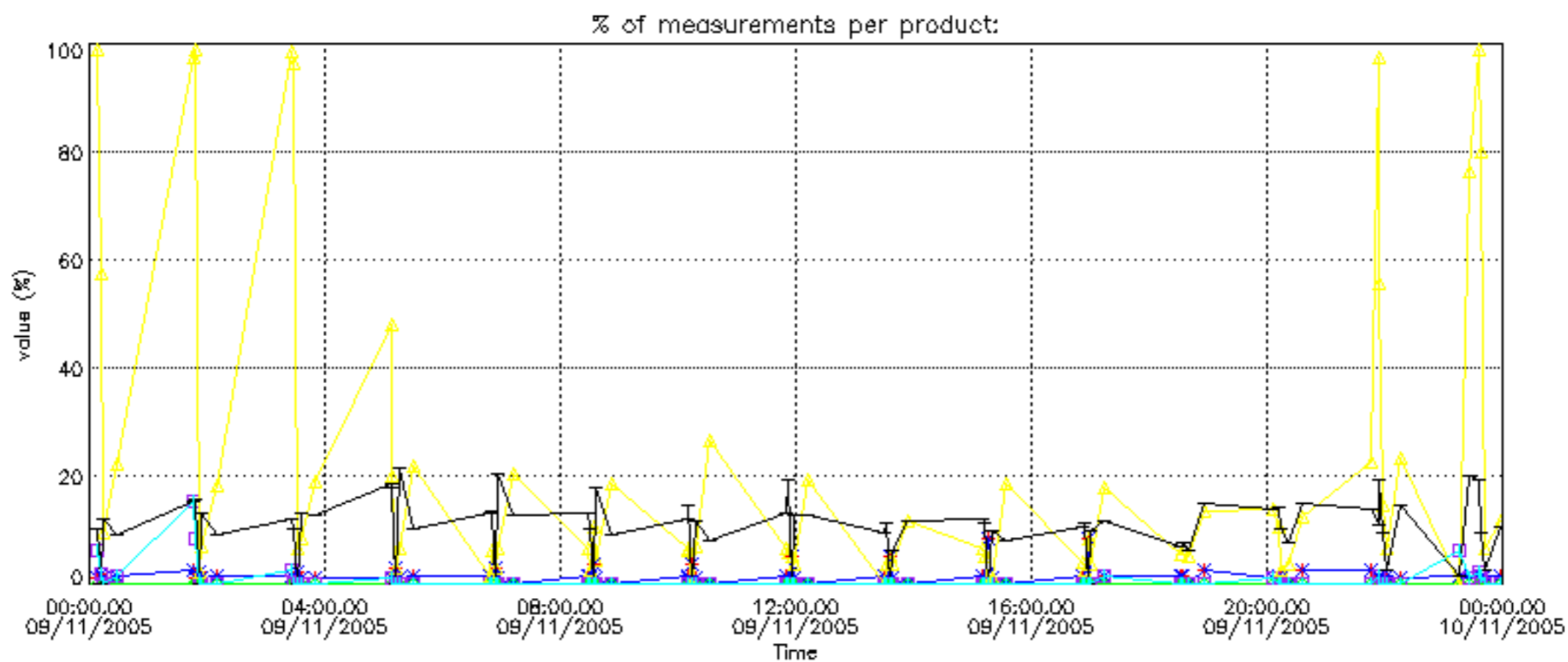


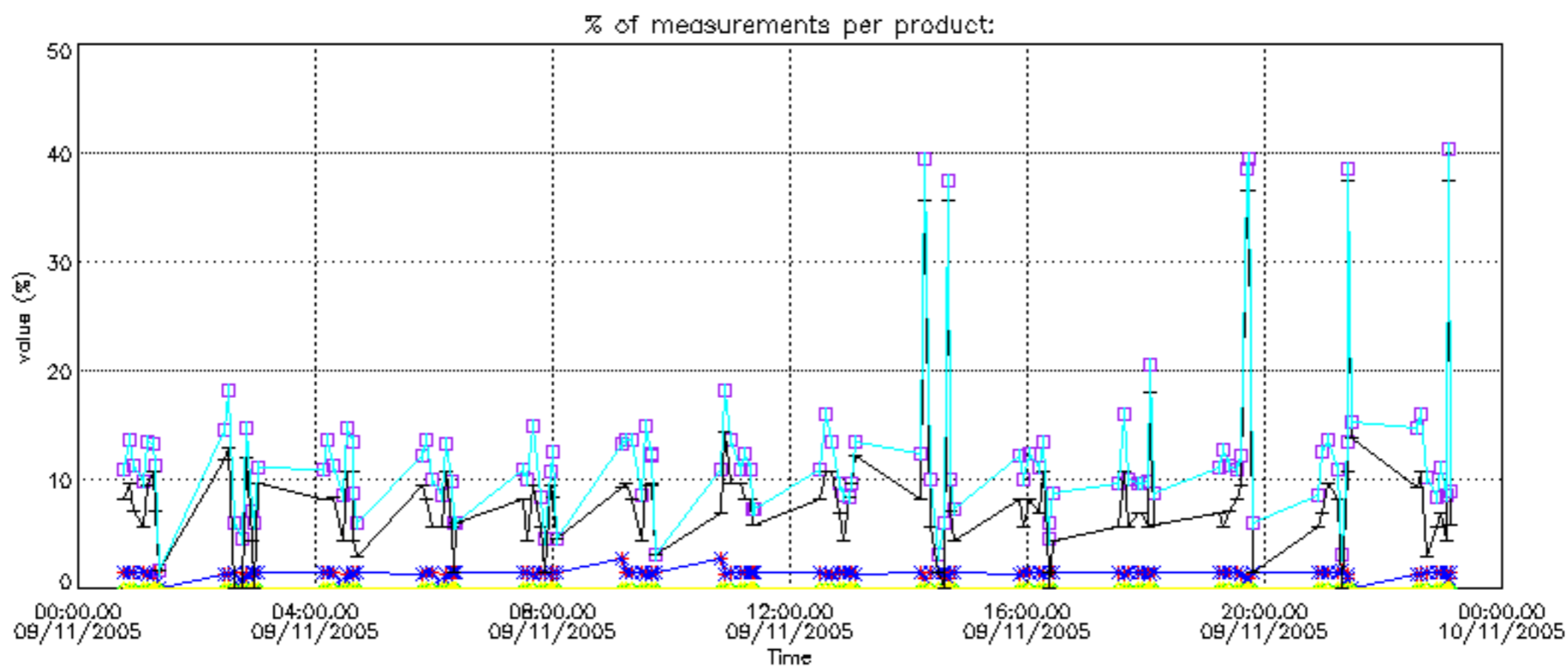
Percentage of flagged data per NO2 profile



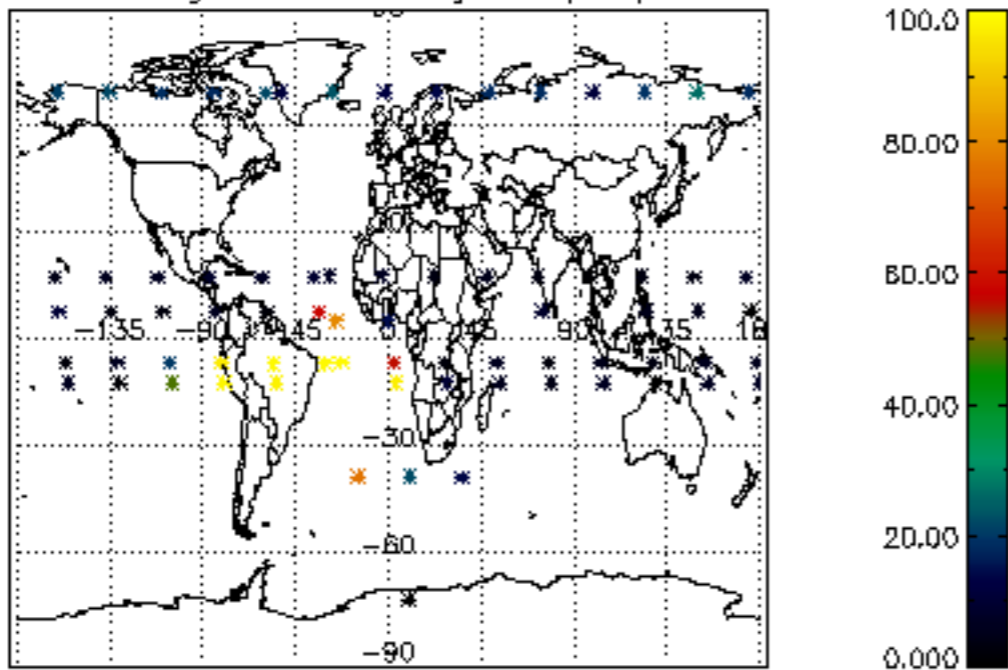
Percentage of flagged data per NO3 profile



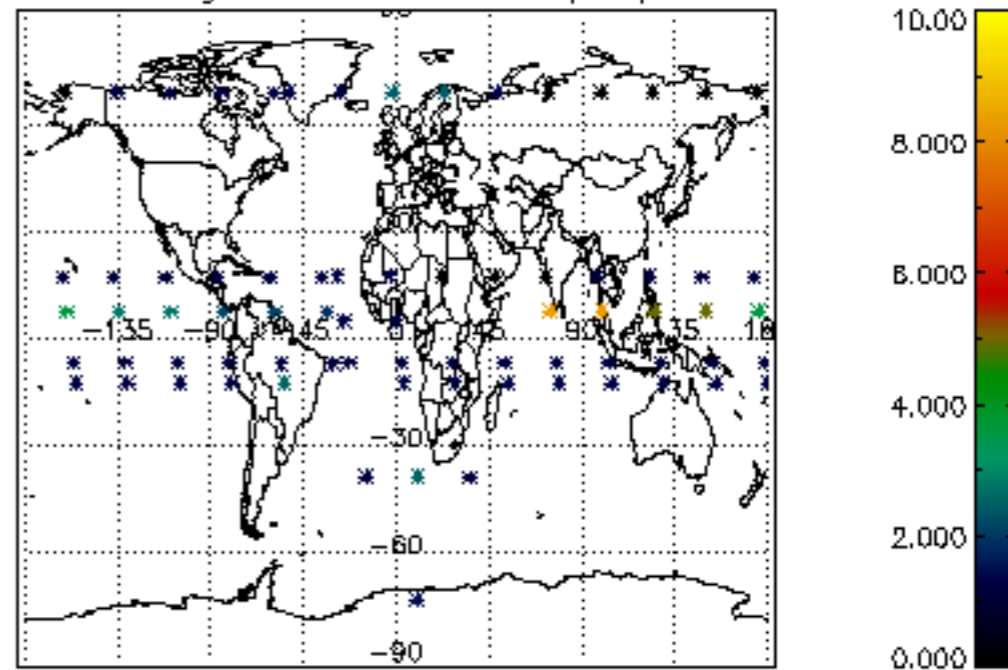




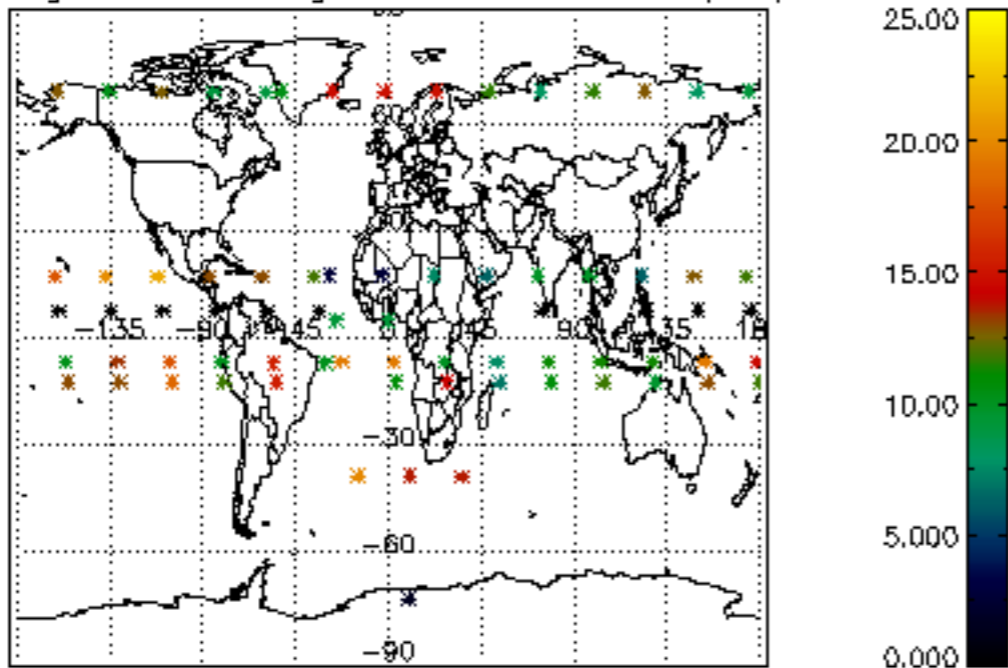
Percentage of cosmic ray hits per profile



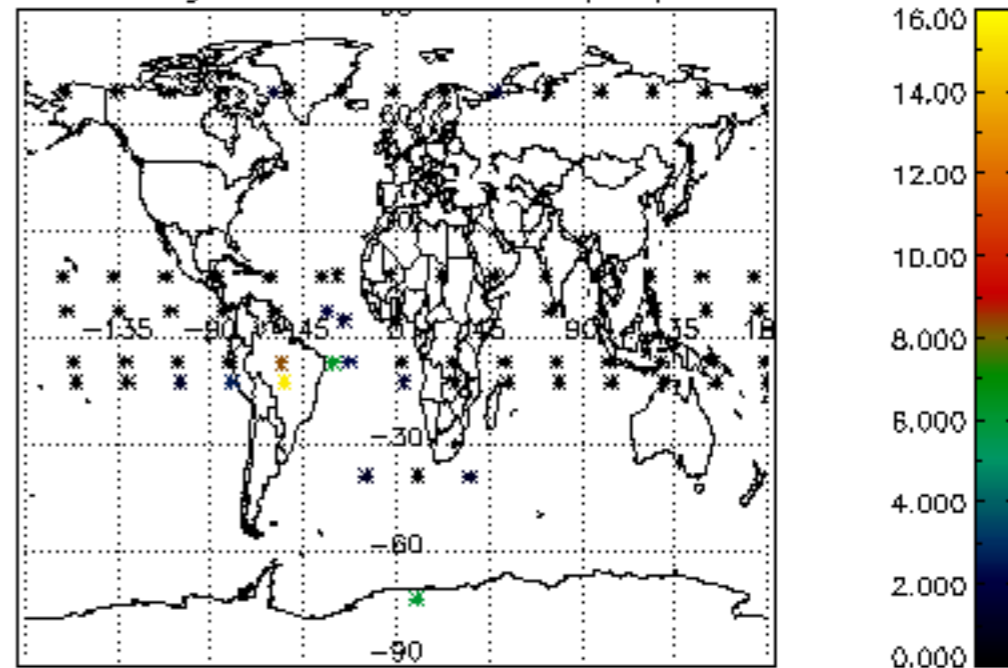
Percentage of datation errors per profile



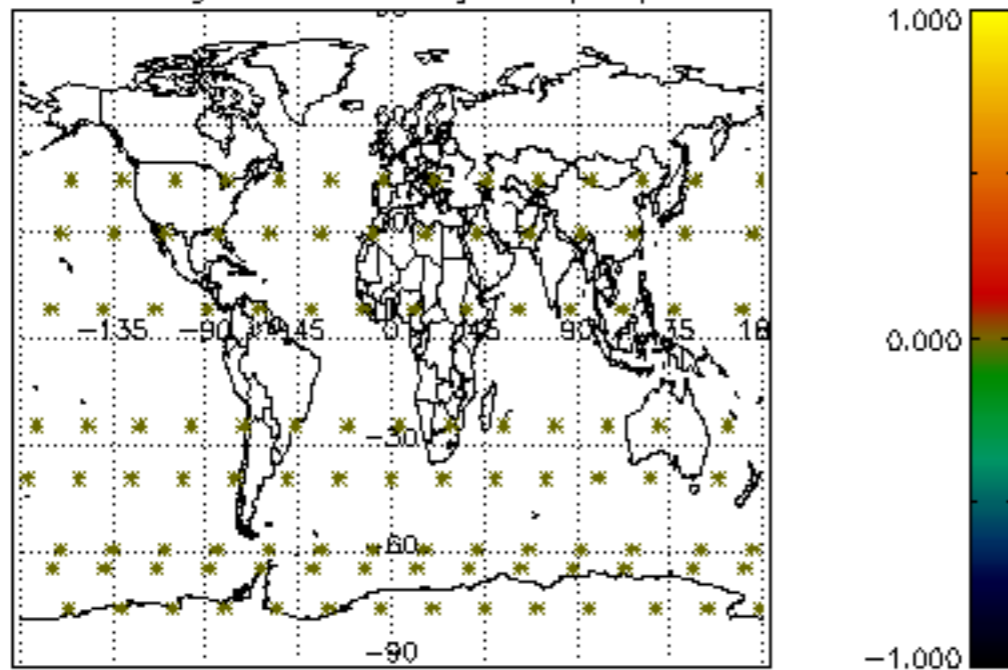
Percentage of star falling outside central band per profile



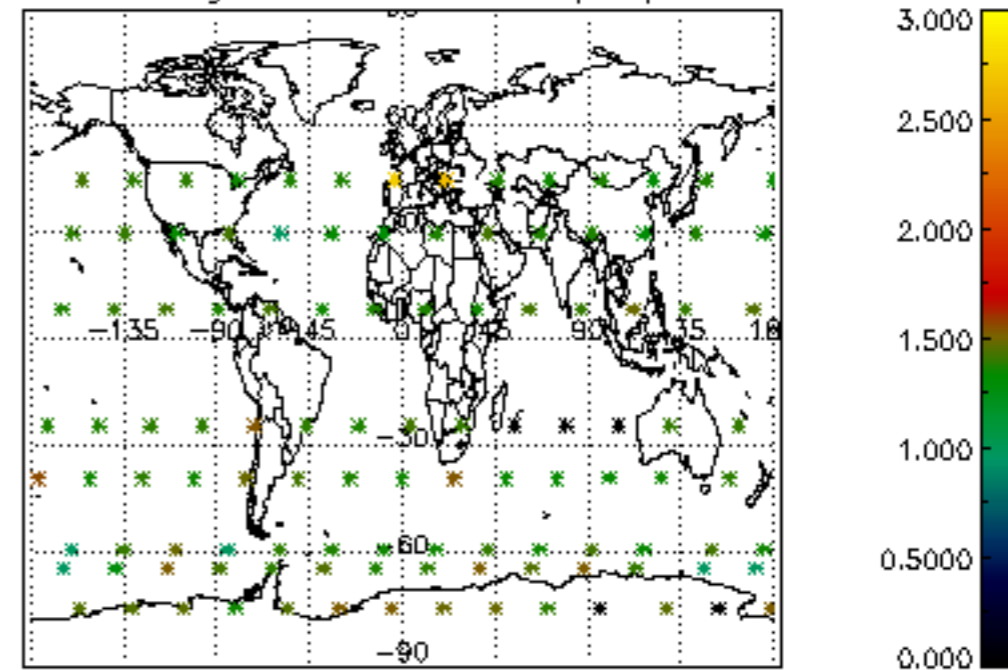
Percentage of saturation errors per profile



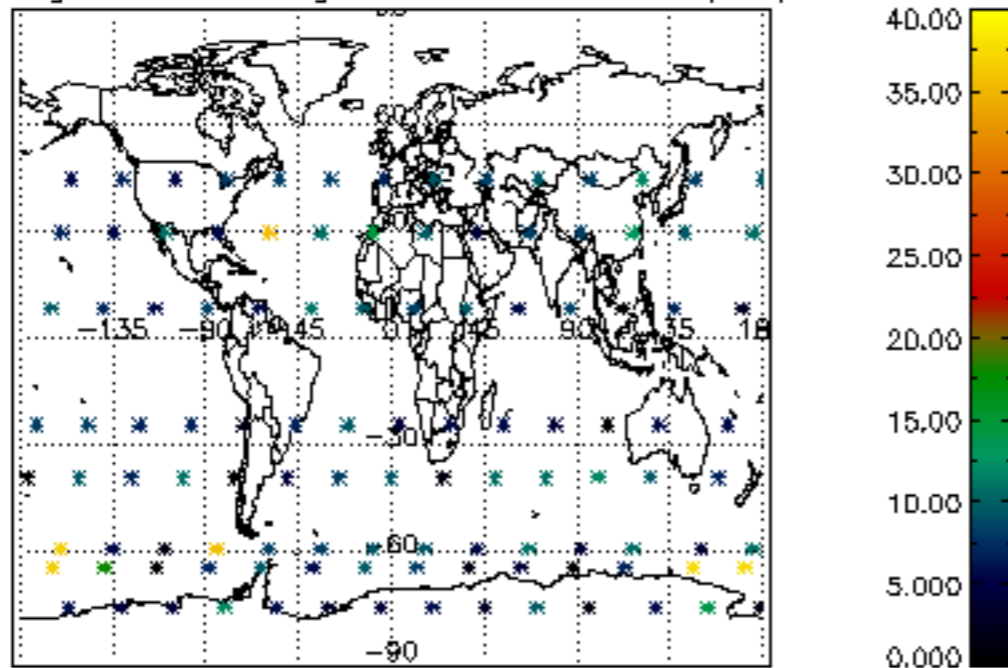
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

