

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 12:36:22
Data source version	GOMOS/6.01
Start time of products	19-04-2011 (19APR2011 00:00:00)
Stop time of products	20-04-2011 (20APR2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	305
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

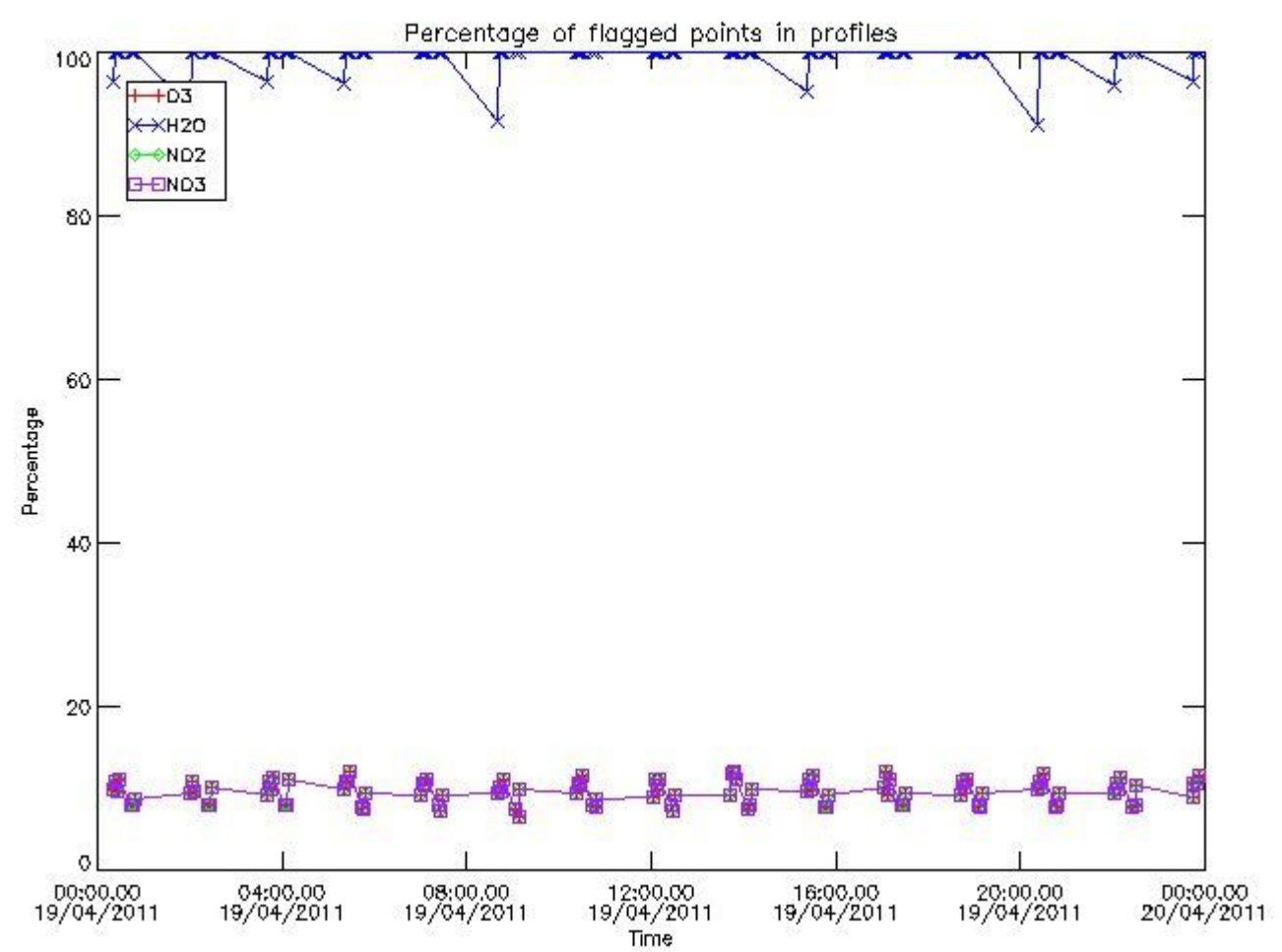
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110419_000228_000000403101_00332_47760_5120.N1	19-APR-2011 00:02:28	Bright	40.000	89	5Alp Cep	2.4510	8000.0	80	47760	No
2	GOM_NL__2PRFIN20110419_000643_000000393101_00332_47760_5121.N1	19-APR-2011 00:06:43	Twi_and_stray	39.000	144	18Del Cyg	2.8600	11000.	78	47760	No
3	GOM_NL__2PRFIN20110419_000930_000000583101_00332_47760_5122.N1	19-APR-2011 00:09:30	Bright	57.500	66	37Gam Cyg	2.2080	5900.0	115	47760	No
4	GOM_NL__2PRFIN20110419_001214_000000633101_00332_47760_5123.N1	19-APR-2011 00:12:14	Bright	63.000	92	53Eps Cyg	2.5000	4500.0	126	47760	No
5	GOM_NL__2PRFIN20110419_002000_000000563101_00332_47760_5124.N1	19-APR-2011 00:20:00	Dark	56.000	61	8Eps Peg	2.1000	3900.0	112	47760	No
6	GOM_NL__2PRFIN20110419_002228_000000483101_00332_47760_5125.N1	19-APR-2011 00:22:28	Dark	47.500	162	34Alp Aqr	2.9440	5350.0	95	47760	No
7	GOM_NL__2PRFIN20110419_002517_000000533101_00332_47760_5126.N1	19-APR-2011 00:25:17	Dark	52.500	154	22Bet Aqr	2.8990	5700.0	105	47760	No
8	GOM_NL__2PRFIN20110419_002736_000000463101_00332_47760_5127.N1	19-APR-2011 00:27:36	Dark	46.000	142	49Del Cap	2.8500	8900.0	92	47760	No
9	GOM_NL__2PRFIN20110419_004231_000000643101_00333_47761_5141.N1	19-APR-2011 00:42:31	Dark	64.000	103	38Zet Sgr	2.6000	9700.0	128	47761	No
10	GOM_NL__2PRFIN20110419_004555_000000643101_00333_47761_5142.N1	19-APR-2011 00:45:55	Dark	64.000	38	20Eps Sgr	1.8360	11000.	128	47761	No
11	GOM_NL__2PRFIN20110419_004800_000000603101_00333_47761_5143.N1	19-APR-2011 00:48:00	Dark	59.500	178	lot1Sco	3.0220	6550.0	119	47761	No
12	GOM_NL__2PRFIN20110419_004936_000000653101_00333_47761_5144.N1	19-APR-2011 00:49:36	Straylight	64.500	25	35Lam Sco	1.6200	28000.	129	47761	No
13	GOM_NL__2PRFIN20110419_005321_000000683101_00333_47761_5145.N1	19-APR-2011 00:53:21	Straylight	68.000	75	26Eps Sco	2.2910	4250.0	136	47761	No
14	GOM_NL__2PRFIN20110419_005523_000000453101_00333_47761_5146.N1	19-APR-2011 00:55:23	Straylight	44.500	109	Bet Lup	2.6770	26000.	89	47761	No
15	GOM_NL__2PRFIN20110419_005906_000000653101_00333_47761_5147.N1	19-APR-2011 00:59:06	Twi_and_stray	65.000	158	6Pi Sco	2.9060	28000.	130	47761	No
16	GOM_NL__2PRFIN20110419_010434_000000593101_00333_47761_5148.N1	19-APR-2011 01:04:34	Bright	58.500	122	9Alp2Lib	2.7470	9700.0	117	47761	No
17	GOM_NL__2PRFIN20110419_011618_000000453101_00333_47761_5149.N1	19-APR-2011 01:16:18	Bright	45.000	111	8Eta Boo	2.6800	6000.0	90	47761	No
18	GOM_NL__2PRFIN20110419_012109_000000563101_00333_47761_5150.N1	19-APR-2011 01:21:09	Bright	56.000	83		2.3780	11000.	112	47761	No
19	GOM_NL__2PRFIN20110419_012351_000000483101_00333_47761_5151.N1	19-APR-2011 01:23:51	Bright	47.500	180	27Gam Boo	3.0400	8000.0	95	47761	No
20	GOM_NL__2PRFIN20110419_012622_000000393101_00333_47761_5152.N1	19-APR-2011 01:26:22	Bright	39.000	55	79Zet UMa	2.0600	10200.	78	47761	No
21	GOM_NL__2PRFIN20110419_013236_000000383101_00333_47761_5153.N1	19-APR-2011 01:32:36	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	47761	No
22	GOM_NL__2PRFIN20110419_014241_000000413101_00333_47761_5154.N1	19-APR-2011 01:42:41	Bright	40.500	89	5Alp Cep	2.4510	8000.0	81	47761	No
23	GOM_NL__2PRFIN20110419_014656_000000393101_00333_47761_5155.N1	19-APR-2011 01:46:56	Twi_and_stray	39.000	144	18Del Cyg	2.8600	11000.	78	47761	No
24	GOM_NL__2PRFIN20110419_014944_000000593101_00333_47761_5156.N1	19-APR-2011 01:49:44	Bright	59.000	66	37Gam Cyg	2.2080	5900.0	118	47761	No
25	GOM_NL__2PRFIN20110419_015228_000000633101_00333_47761_5157.N1	19-APR-2011 01:52:28	Bright	62.500	92	53Eps Cyg	2.5000	4500.0	125	47761	No
26	GOM_NL__2PRFIN20110419_020015_000000553101_00333_47761_5158.N1	19-APR-2011 02:00:15	Dark	54.500	61	8Eps Peg	2.1000	3900.0	109	47761	No
27	GOM_NL__2PRFIN20110419_020242_000000463101_00333_47761_5159.N1	19-APR-2011 02:02:42	Dark	46.000	162	34Alp Aqr	2.9440	5350.0	92	47761	No
28	GOM_NL__2PRFIN20110419_020531_000000533101_00333_47761_5160.N1	19-APR-2011 02:05:31	Dark	53.000	154	22Bet Aqr	2.8990	5700.0	106	47761	No
29	GOM_NL__2PRFIN20110419_022246_000000653101_00334_47762_5155.N1	19-APR-2011 02:22:46	Dark	65.000	103	38Zet Sgr	2.6000	9700.0	130	47762	No
30	GOM_NL__2PRFIN20110419_022611_000000653101_00334_47762_5156.N1	19-APR-2011 02:26:11	Dark	64.500	38	20Eps Sgr	1.8360	11000.	129	47762	No
31	GOM_NL__2PRFIN20110419_022815_000000553101_00334_47762_5157.N1	19-APR-2011 02:28:15	Dark	55.000	178	lot1Sco	3.0220	6550.0	110	47762	No
32	GOM_NL__2PRFIN20110419_022951_000000623101_00334_47762_5158.N1	19-APR-2011 02:29:51	Straylight	61.500	25	35Lam Sco	1.6200	28000.	123	47762	No
33	GOM_NL__2PRFIN20110419_023336_000000703101_00334_47762_5159.N1	19-APR-2011 02:33:36	Straylight	70.000	75	26Eps Sco	2.2910	4250.0	140	47762	No
34	GOM_NL__2PRFIN20110419_023537_000000453101_00334_47762_5160.N1	19-APR-2011 02:35:37	Straylight	44.500	109	Bet Lup	2.6770	26000.	89	47762	No
35	GOM_NL__2PRFIN20110419_023920_000000633101_00334_47762_5161.N1	19-APR-2011 02:39:20	Twi_and_stray	62.500	158	6Pi Sco	2.9060	28000.	125	47762	No
36	GOM_NL__2PRFIN20110419_024448_000000563101_00334_47762_5162.N1	19-APR-2011 02:44:48	Bright	56.000	122	9Alp2Lib	2.7470	9700.0	112	47762	No
37	GOM_NL__2PRFIN20110419_025632_000000443101_00334_47762_5163.N1	19-APR-2011 02:56:32	Bright	44.000	111	8Eta Boo	2.6800	6000.0	88	47762	No
38	GOM_NL__2PRFIN20110419_030122_000000533101_00334_47762_5164.N1	19-APR-2011 03:01:22	Bright	52.500	83		2.3780	11000.	105	47762	No
39	GOM_NL__2PRFIN20110419_030405_000000493101_00334_47762_5165.N1	19-APR-2011 03:04:05	Bright	48.500	180	27Gam Boo	3.0400	8000.0	97	47762	No
40	GOM_NL__2PRFIN20110419_030635_000000393101_00334_47762_5166.N1	19-APR-2011 03:06:35	Bright	39.000	55	79Zet UMa	2.0600	10200.	78	47762	No
41	GOM_NL__2PRFIN20110419_031346_000000473101_00334_47762_5167.N1	19-APR-2011 03:13:46	Bright	47.000	119	14Eta Dra	2.7270	4700.0	94	47762	No
42	GOM_NL__2PRFIN20110419_032255_000000413101_00334_47762_5168.N1	19-APR-2011 03:22:55	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	47762	No

279	GOM_NL__2PRFIN20110419_215041_000000533101_00345_47773_5534.N1	19-APR-2011 21:50:41	Bright	52.500	19	50Alp Cyg	1.2460	10500.	105	47773	No
280	GOM_NL__2PRFIN20110419_215230_000000613101_00345_47773_5535.N1	19-APR-2011 21:52:30	Bright	60.500	66	37Gam Cyg	2.2080	5900.0	121	47773	No
281	GOM_NL__2PRFIN20110419_215518_000000673101_00345_47773_5536.N1	19-APR-2011 21:55:18	Bright	67.000	92	53Eps Cyg	2.5000	4500.0	134	47773	No
282	GOM_NL__2PRFIN20110419_220309_000000603101_00345_47773_5537.N1	19-APR-2011 22:03:09	Dark	60.000	61	8Eps Peg	2.1000	3900.0	120	47773	No
283	GOM_NL__2PRFIN20110419_220537_000000483101_00345_47773_5538.N1	19-APR-2011 22:05:37	Dark	48.000	162	34Alp Aqr	2.9440	5350.0	96	47773	No
284	GOM_NL__2PRFIN20110419_220828_000000523101_00345_47773_5539.N1	19-APR-2011 22:08:28	Dark	52.000	154	22Bet Aqr	2.8990	5700.0	104	47773	No
285	GOM_NL__2PRFIN20110419_221047_000000453101_00345_47773_5540.N1	19-APR-2011 22:10:47	Dark	45.000	142	49Del Cap	2.8500	8900.0	90	47773	No
286	GOM_NL__2PRFIN20110419_222555_000000663101_00346_47774_5533.N1	19-APR-2011 22:25:55	Dark	66.000	103	38Zet Sgr	2.6000	9700.0	132	47774	No
287	GOM_NL__2PRFIN20110419_222916_000000653101_00346_47774_5534.N1	19-APR-2011 22:29:16	Dark	65.000	38	20Eps Sgr	1.8360	11000.	130	47774	No
288	GOM_NL__2PRFIN20110419_223117_000000543101_00346_47774_5535.N1	19-APR-2011 22:31:17	Dark	53.500	178	lot1Sco	3.0220	6550.0	107	47774	No
289	GOM_NL__2PRFIN20110419_223254_000000623101_00346_47774_5536.N1	19-APR-2011 22:32:54	Straylight	61.500	25	35Lam Sco	1.6200	28000.	123	47774	No
290	GOM_NL__2PRFIN20110419_223637_000000703101_00346_47774_5537.N1	19-APR-2011 22:36:37	Straylight	69.500	75	26Eps Sco	2.2910	4250.0	139	47774	No
291	GOM_NL__2PRFIN20110419_224215_000000613101_00346_47774_5538.N1	19-APR-2011 22:42:15	Tw_i_and_stray	60.500	158	6Pi Sco	2.9060	28000.	121	47774	No
292	GOM_NL__2PRFIN20110419_224737_000000613101_00346_47774_5539.N1	19-APR-2011 22:47:37	Bright	61.000	122	9Alp2Lib	2.7470	9700.0	122	47774	No
293	GOM_NL__2PRFIN20110419_225915_000000443101_00346_47774_5540.N1	19-APR-2011 22:59:15	Bright	43.500	111	8Eta Boo	2.6800	6000.0	87	47774	No
294	GOM_NL__2PRFIN20110419_230400_000000523101_00346_47774_5541.N1	19-APR-2011 23:04:00	Bright	51.500	83		2.3780	11000.	103	47774	No
295	GOM_NL__2PRFIN20110419_230643_000000483101_00346_47774_5542.N1	19-APR-2011 23:06:43	Bright	47.500	180	27Gam Boo	3.0400	8000.0	95	47774	No
296	GOM_NL__2PRFIN20110419_230920_000000573101_00346_47774_5543.N1	19-APR-2011 23:09:20	Bright	57.000	55	79Zet UMa	2.0600	10200.	114	47774	No
297	GOM_NL__2PRFIN20110419_231626_000000433101_00346_47774_5544.N1	19-APR-2011 23:16:26	Bright	43.000	119	14Eta Dra	2.7270	4700.0	86	47774	No
298	GOM_NL__2PRFIN20110419_232541_000000403101_00346_47774_5545.N1	19-APR-2011 23:25:41	Bright	40.000	89	5Alp Cep	2.4510	8000.0	80	47774	No
299	GOM_NL__2PRFIN20110419_233055_000000523101_00346_47774_5546.N1	19-APR-2011 23:30:55	Bright	52.000	19	50Alp Cyg	1.2460	10500.	104	47774	No
300	GOM_NL__2PRFIN20110419_233244_000000613101_00346_47774_5547.N1	19-APR-2011 23:32:44	Bright	60.500	66	37Gam Cyg	2.2080	5900.0	121	47774	No
301	GOM_NL__2PRFIN20110419_233531_000000673101_00346_47774_5548.N1	19-APR-2011 23:35:31	Bright	66.500	92	53Eps Cyg	2.5000	4500.0	133	47774	No
302	GOM_NL__2PRFIN20110419_234323_000000583101_00346_47774_5549.N1	19-APR-2011 23:43:23	Dark	57.500	61	8Eps Peg	2.1000	3900.0	115	47774	No
303	GOM_NL__2PRFIN20110419_234551_000000483101_00346_47774_5550.N1	19-APR-2011 23:45:51	Dark	48.000	162	34Alp Aqr	2.9440	5350.0	96	47774	No
304	GOM_NL__2PRFIN20110419_234843_000000533101_00346_47774_5551.N1	19-APR-2011 23:48:43	Dark	53.000	154	22Bet Aqr	2.8990	5700.0	106	47774	No
305	GOM_NL__2PRFIN20110419_235101_000000453101_00346_47774_5552.N1	19-APR-2011 23:51:01	Dark	44.500	142	49Del Cap	2.8500	8900.0	89	47774	No

3. Quality information per product

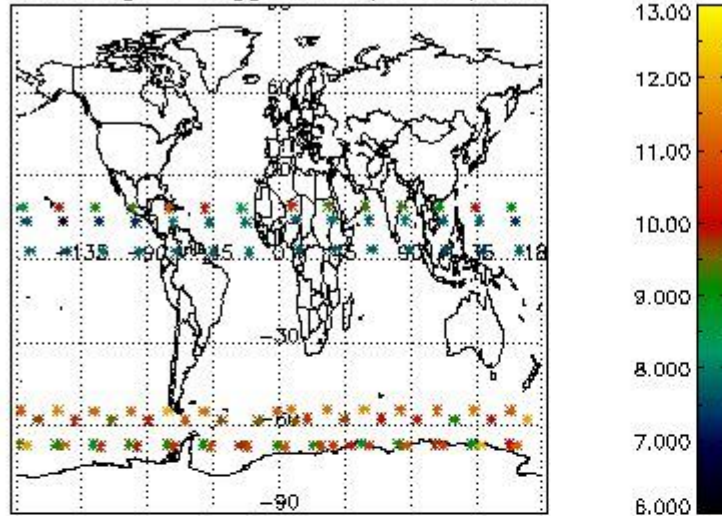
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

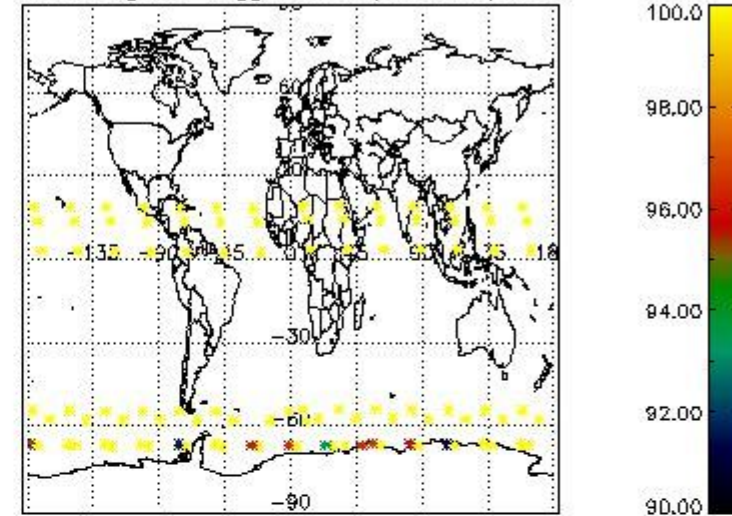


3.2 Plot quality information per product (world map)

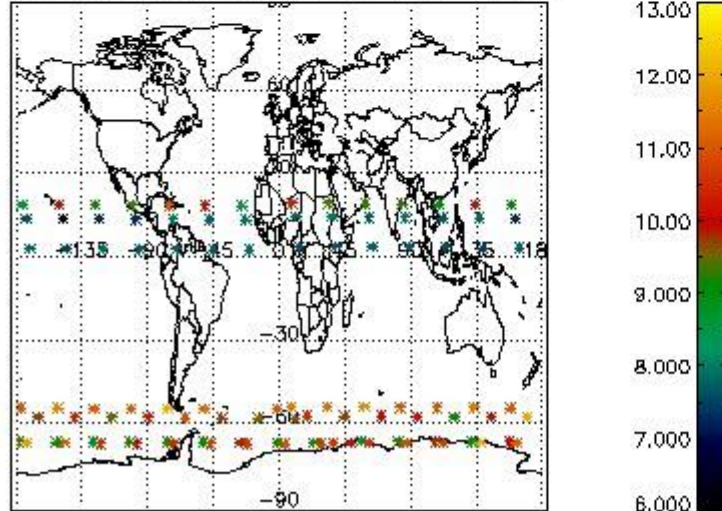
Percentage of flagged data per O3 profile



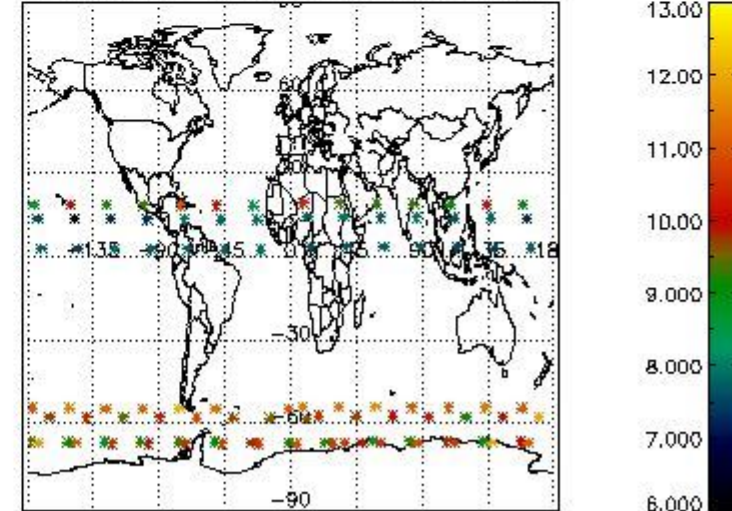
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

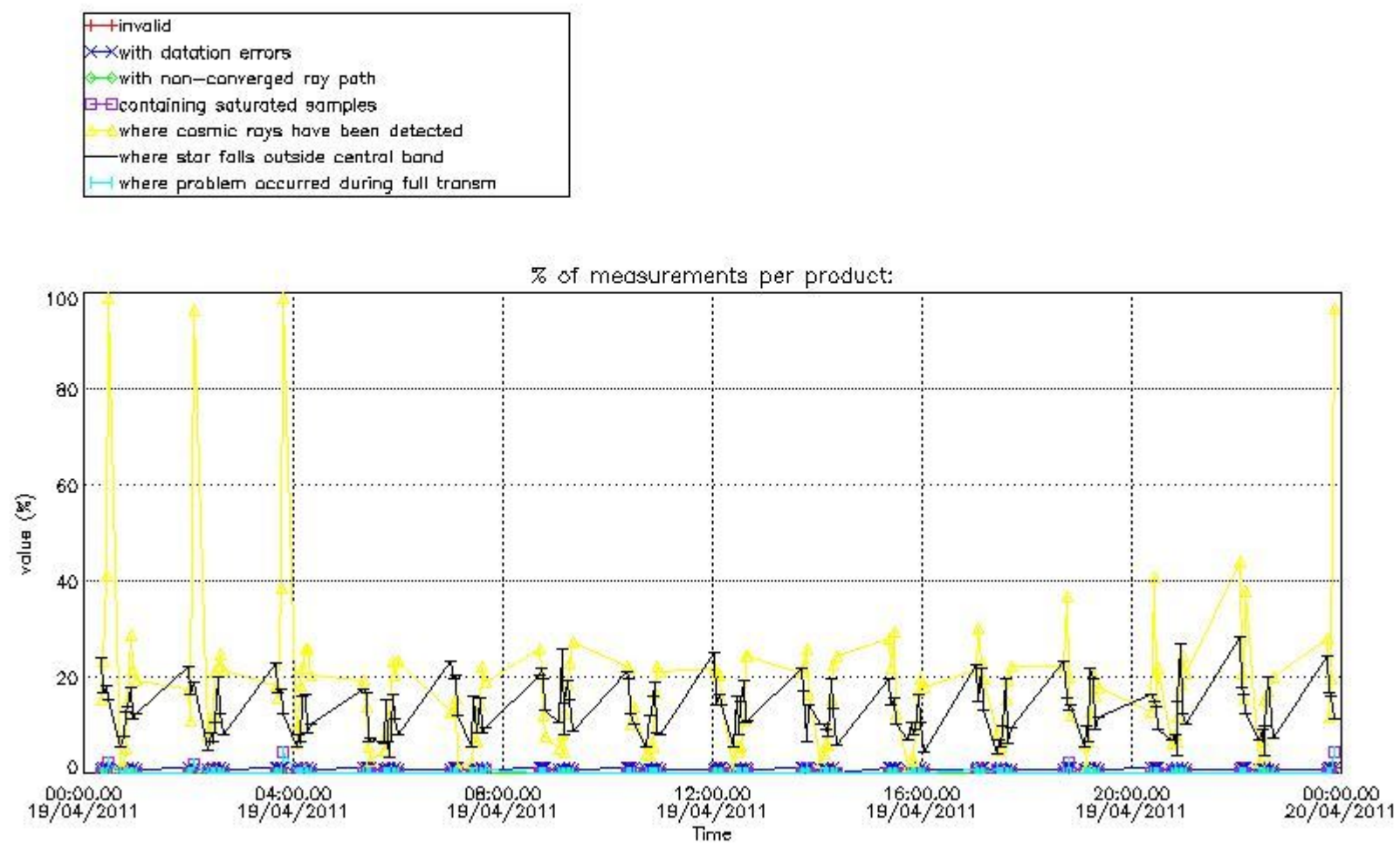


4. Level 1 quality information per product

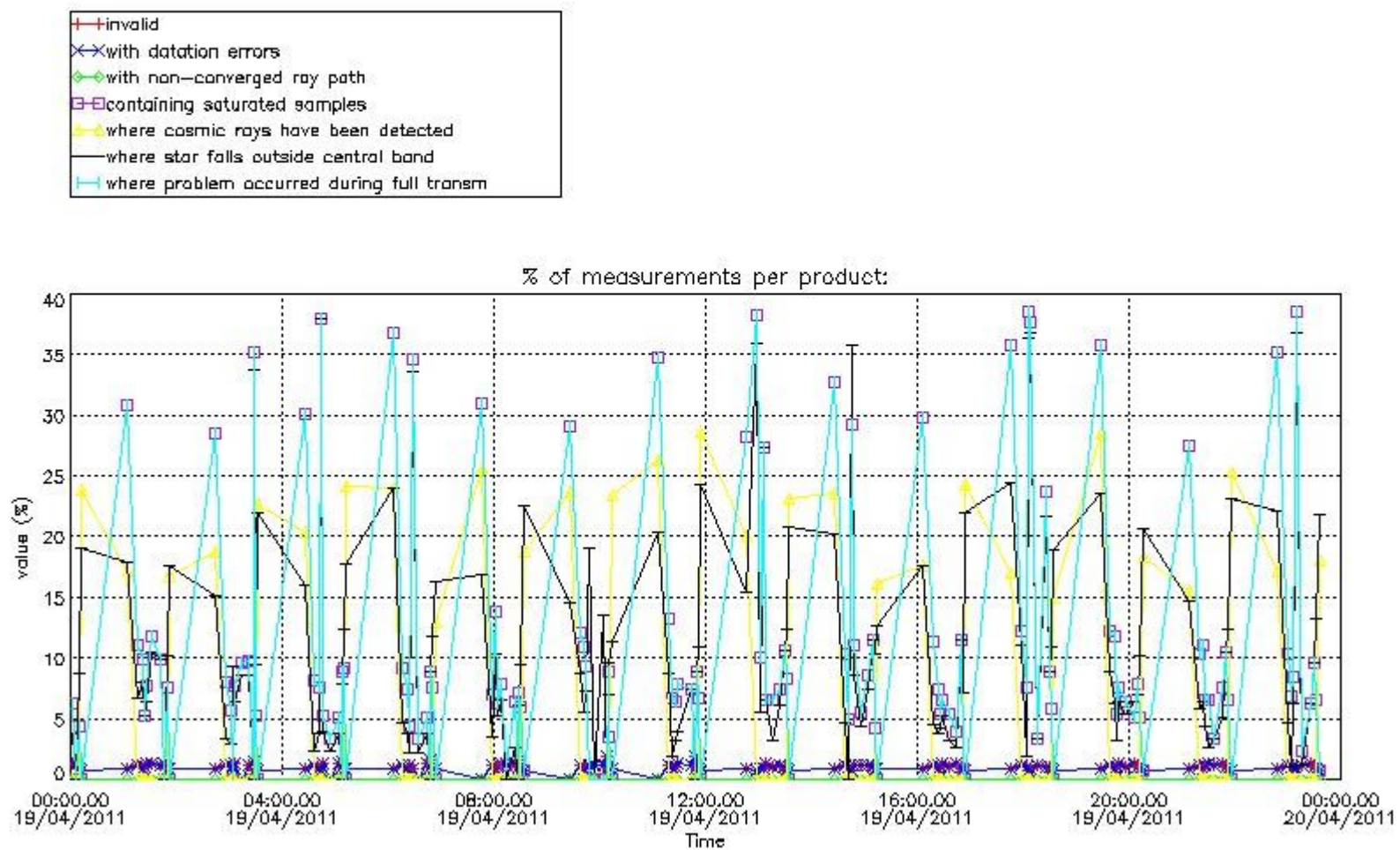
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



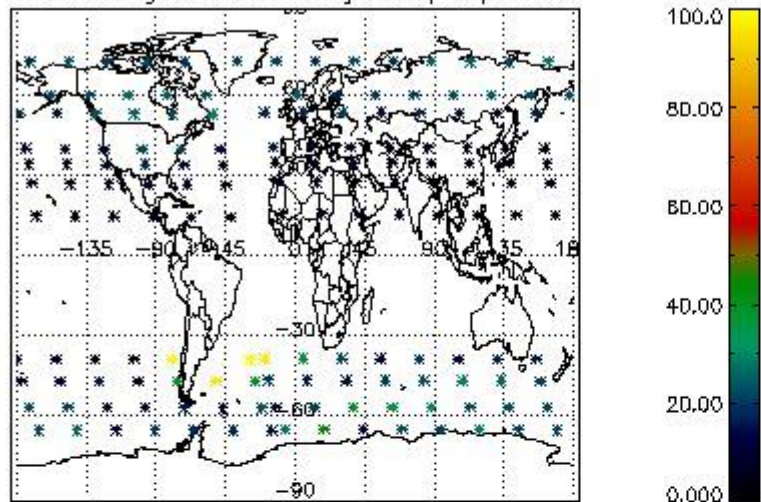
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



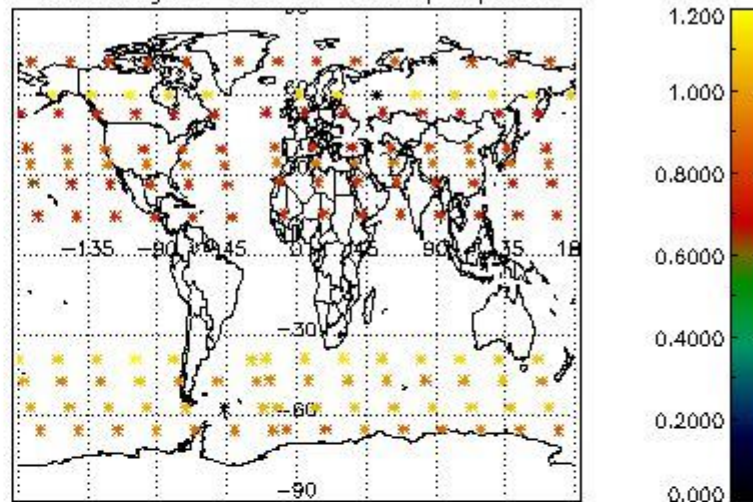
4.2 Plot quality information per product coming from level 1b processing (world map)

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

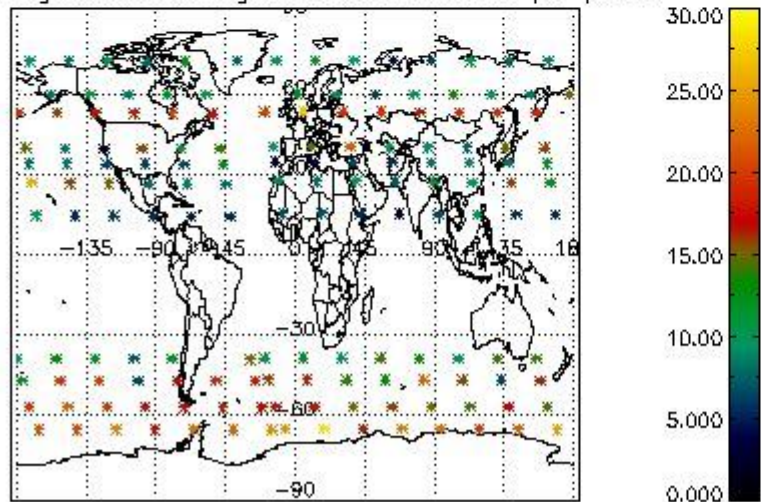
Percentage of cosmic ray hits per profile



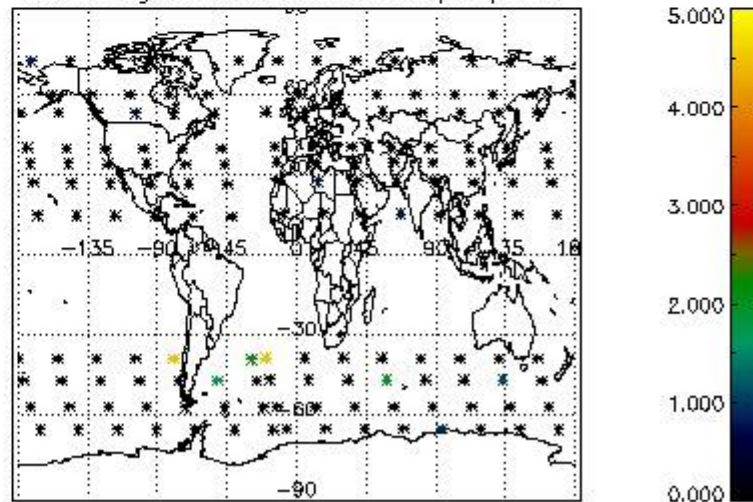
Percentage of datation errors per profile



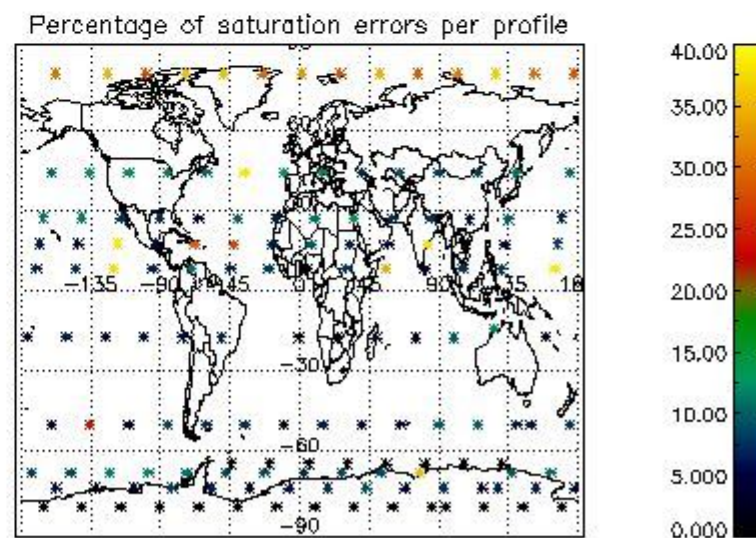
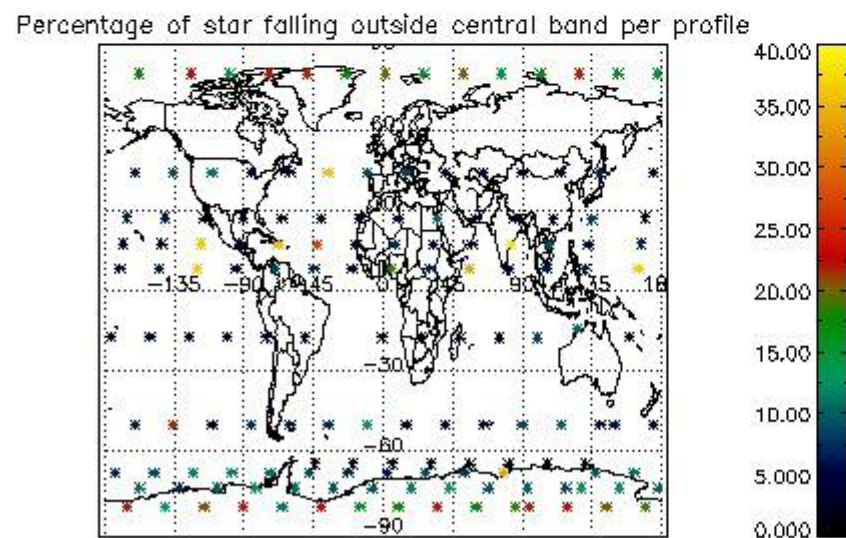
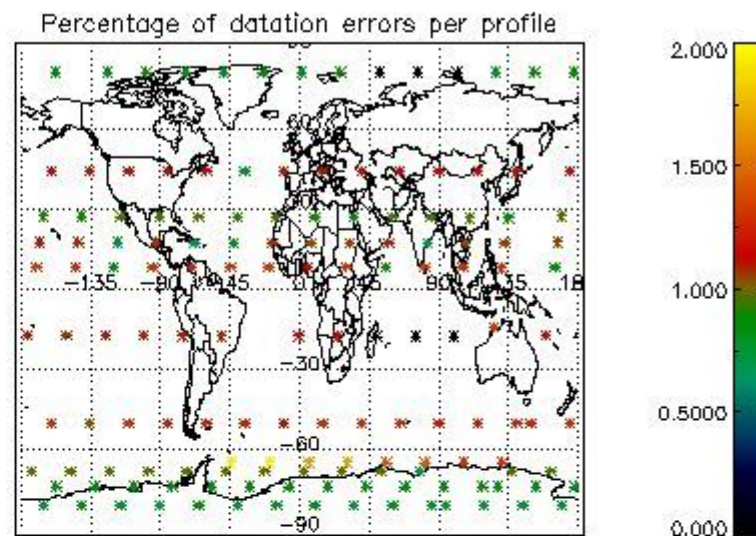
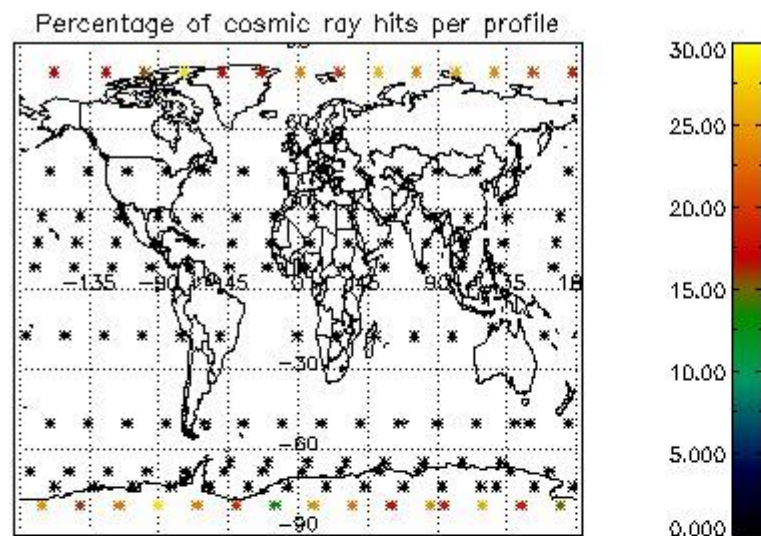
Percentage of star falling outside central band per profile



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

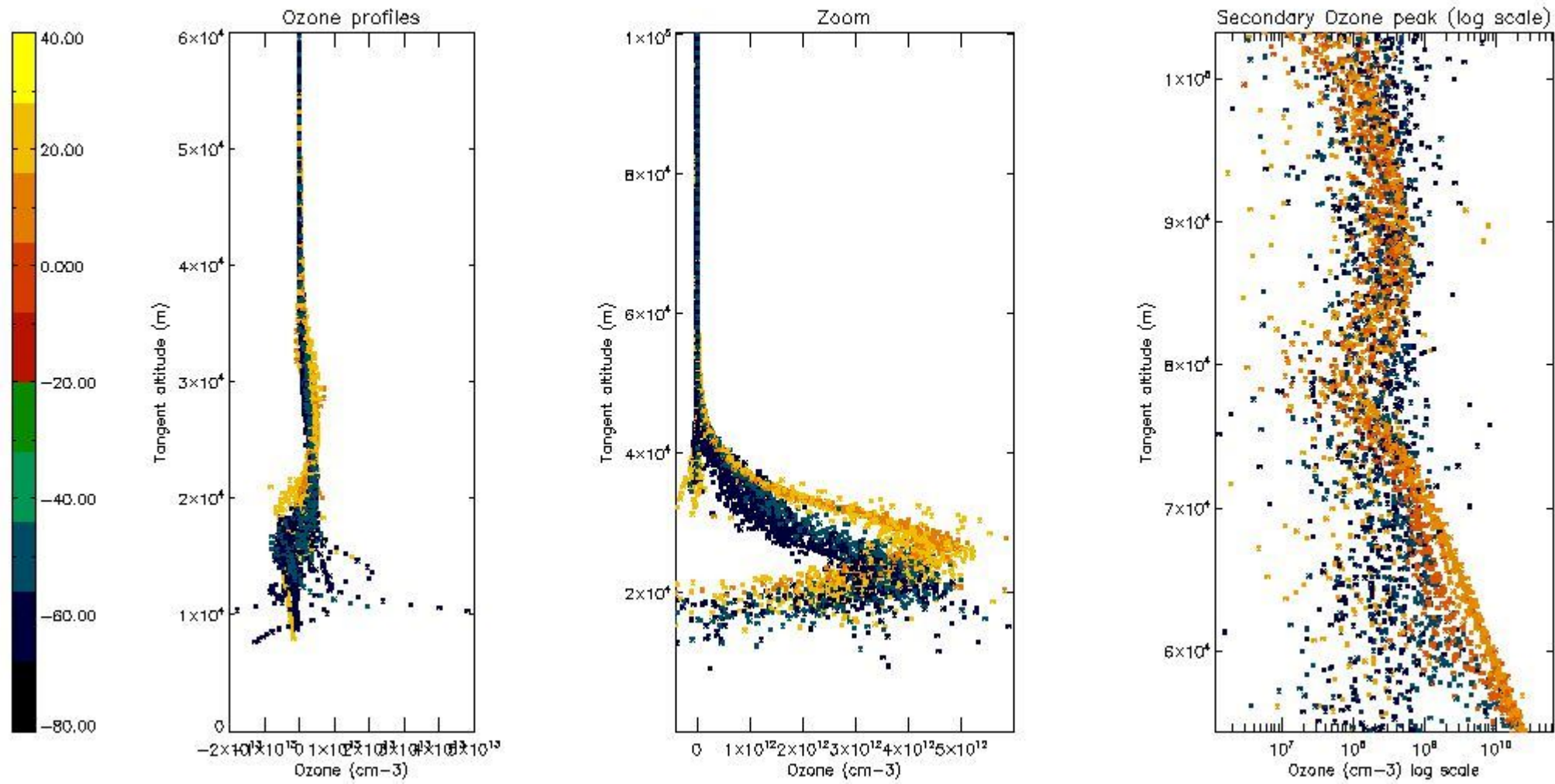
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	12

STD < 10	7
STD < 5	3

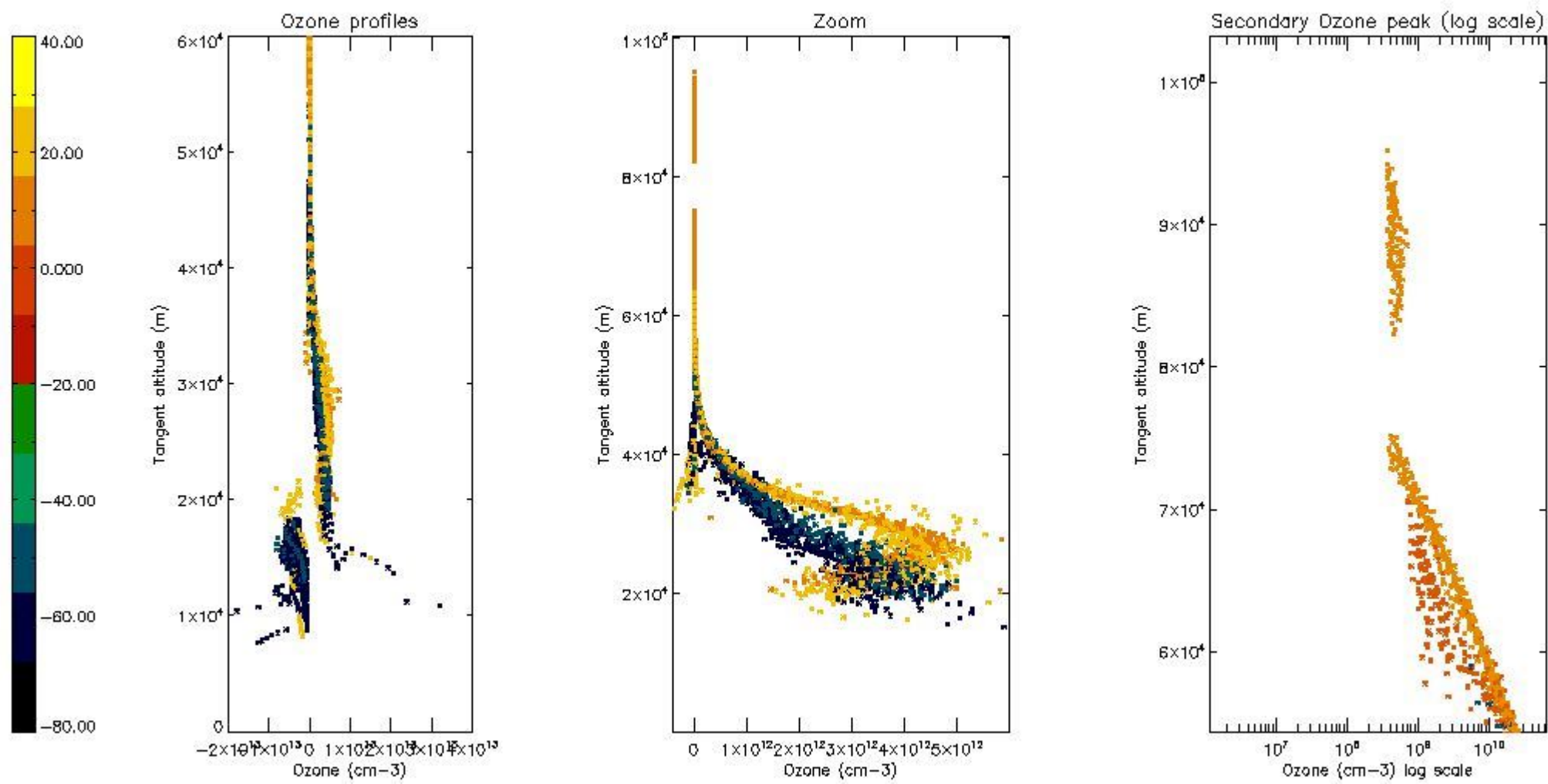
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



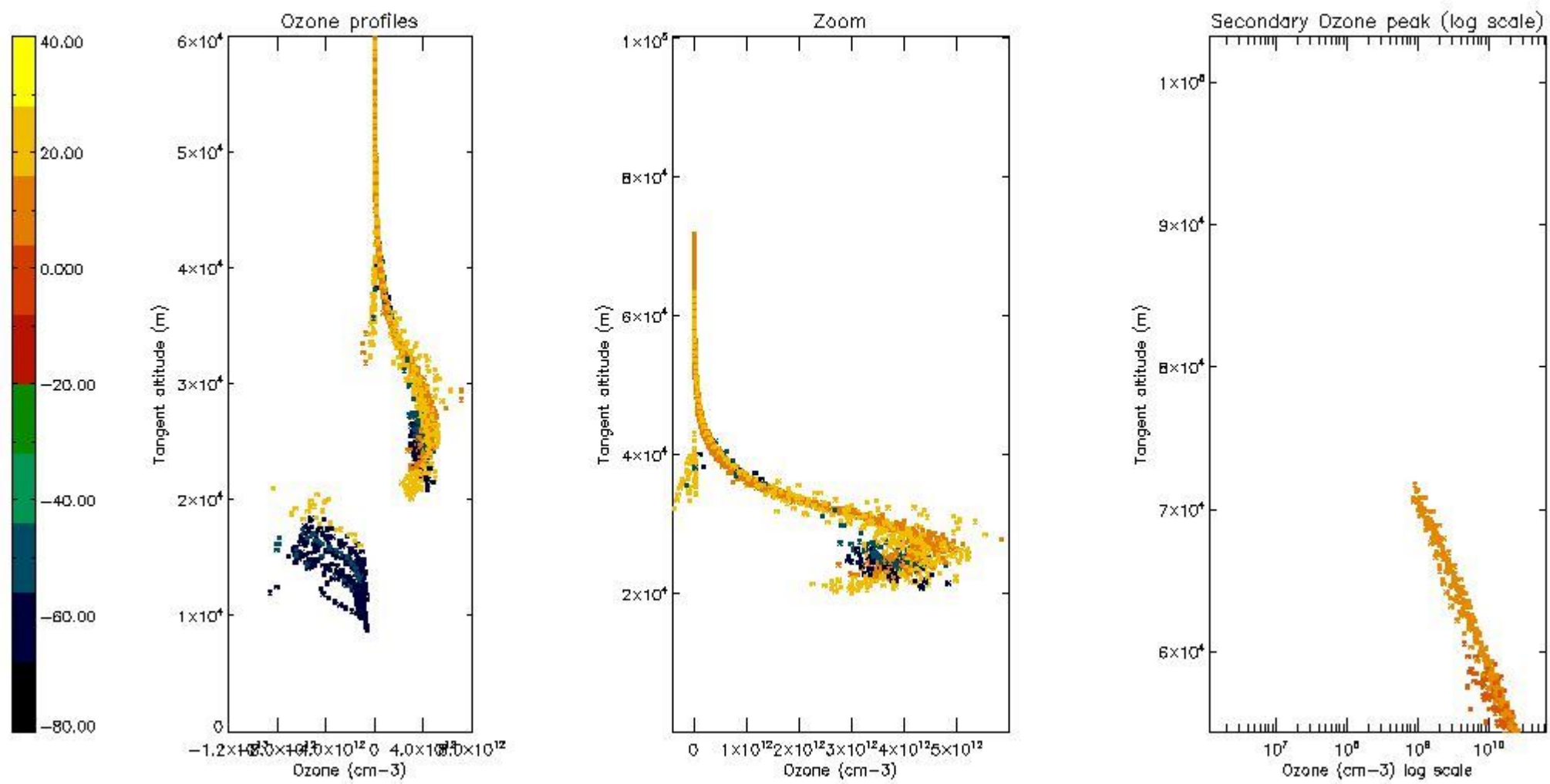
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



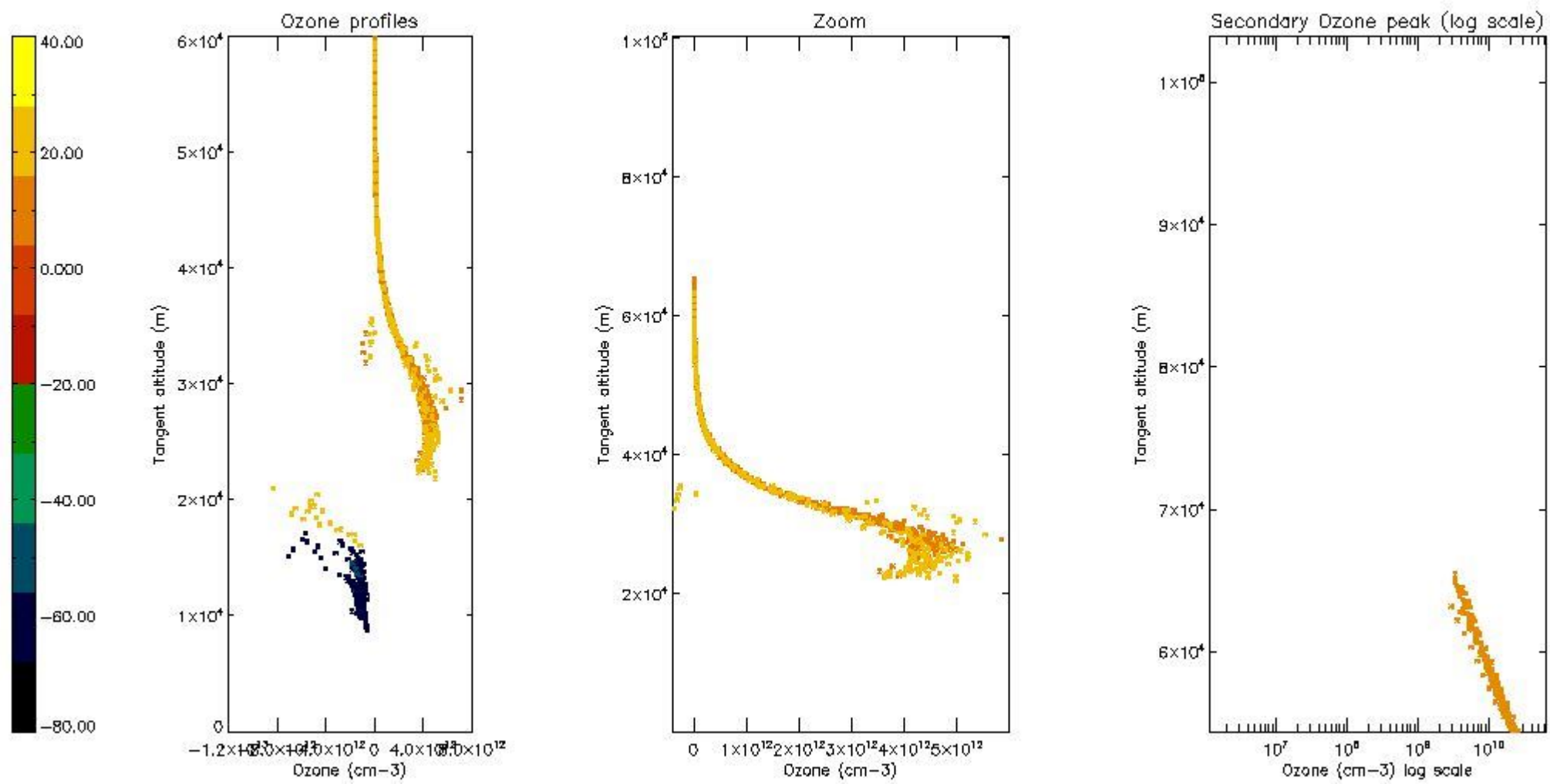
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



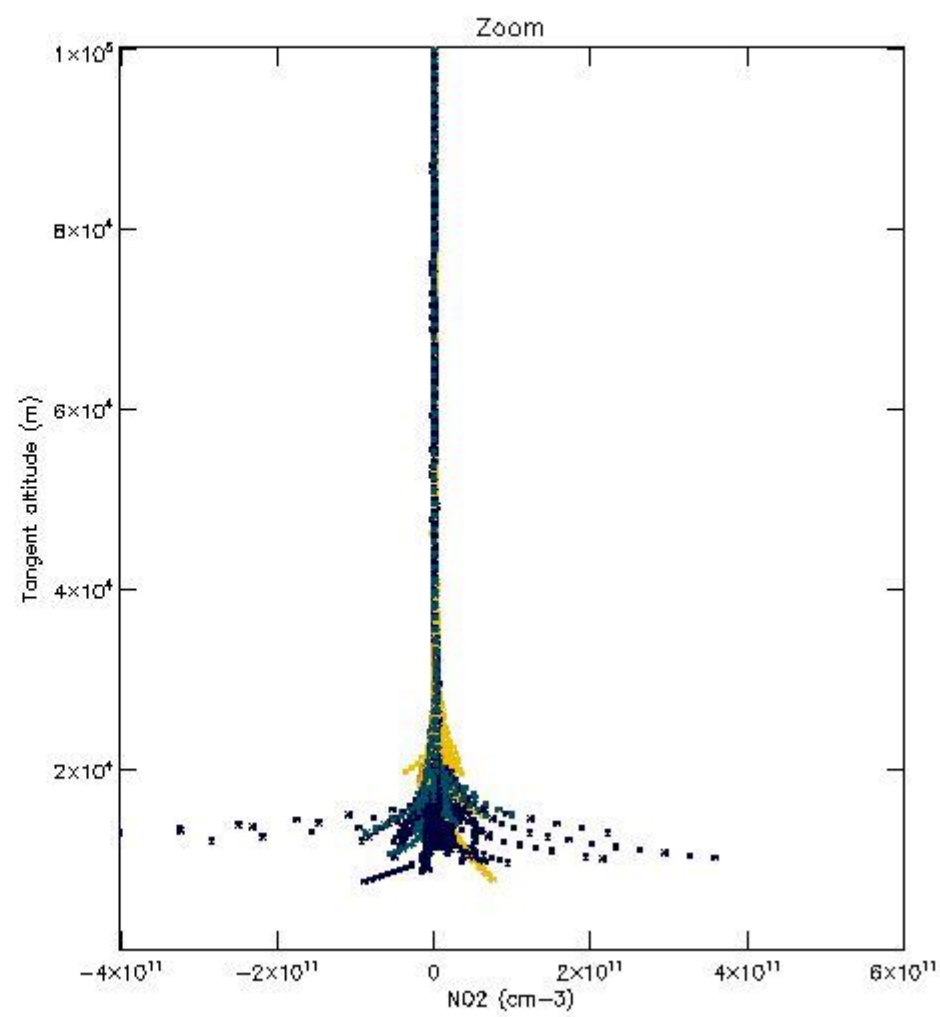
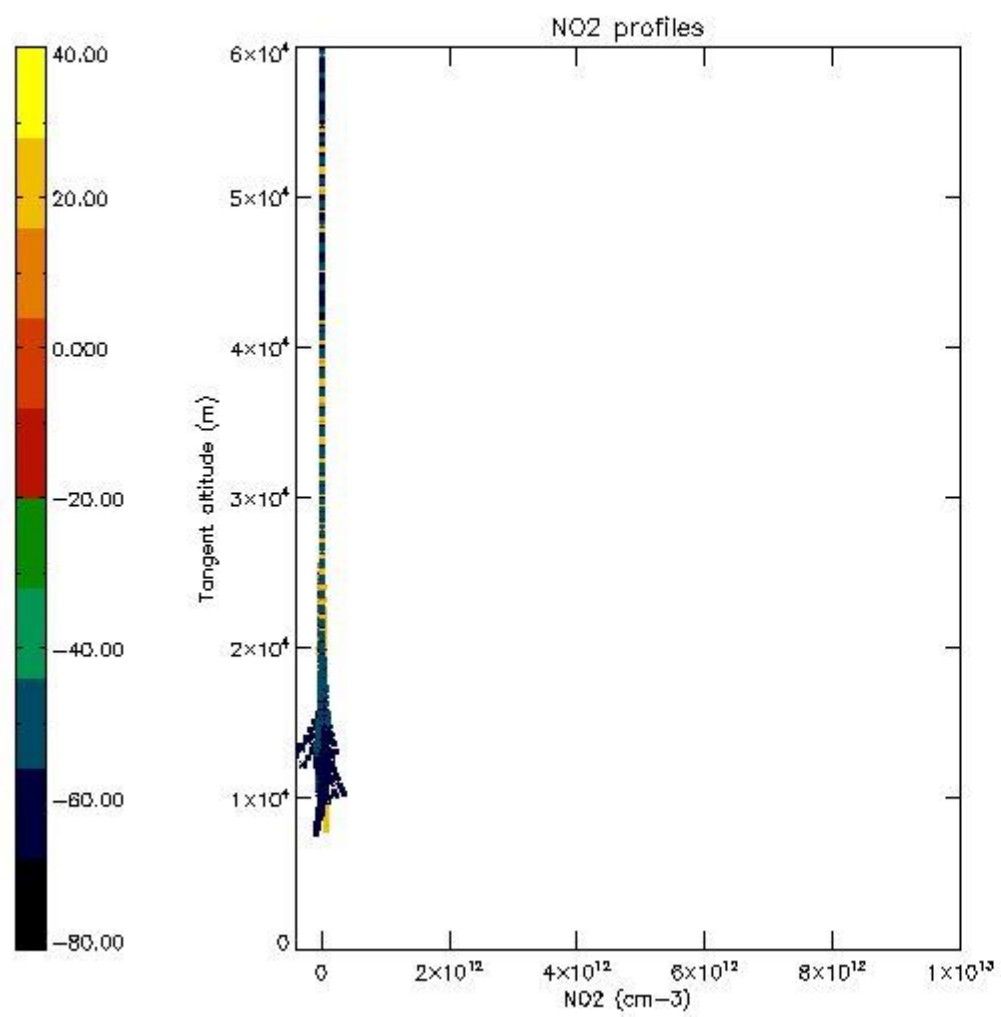
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



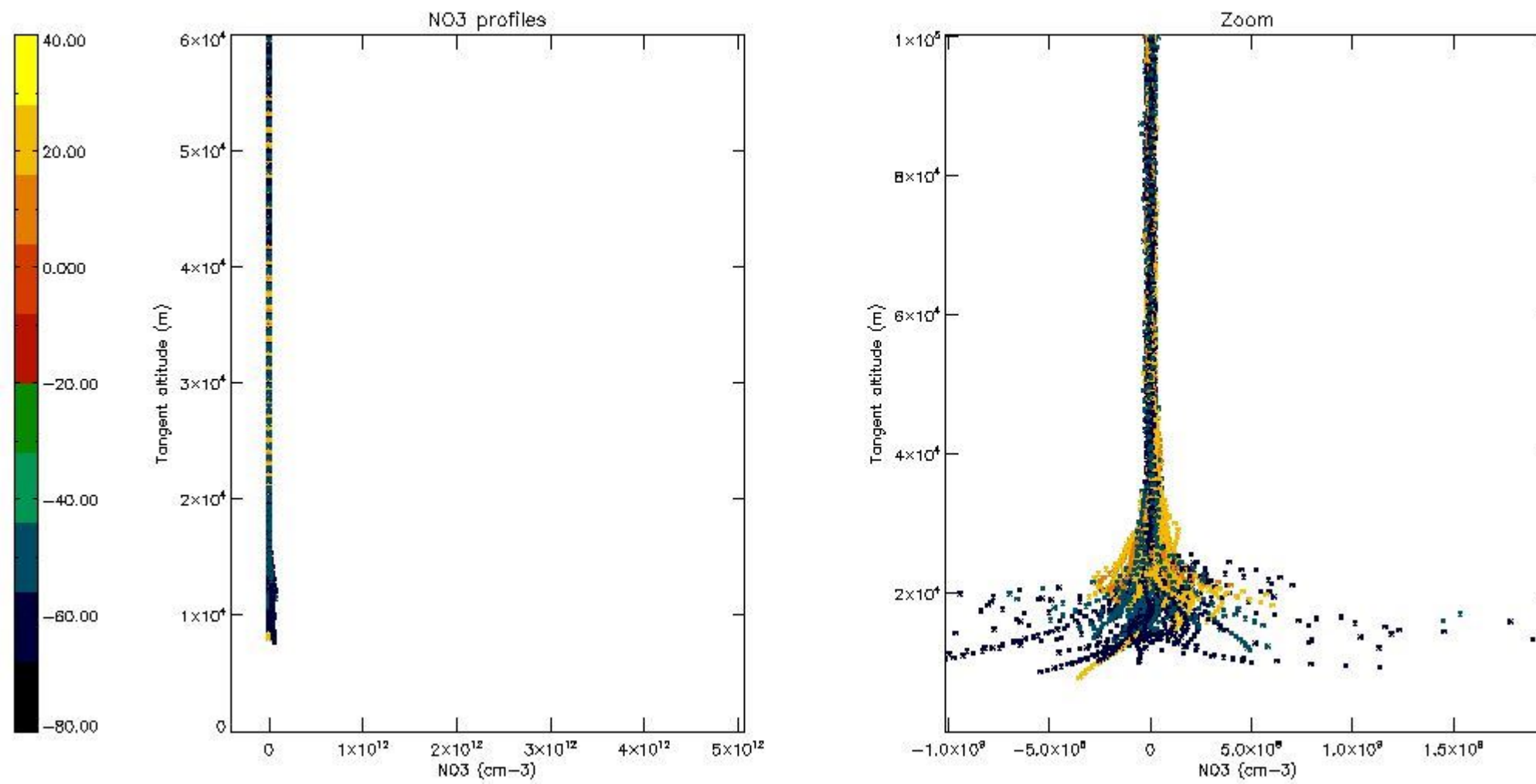
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	19-APR-2011 00:02:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-APR-2011 00:02:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-APR-2011 00:02:28

GOMOS Level 2 Daily Report

SUMMARY

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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 \(dark without errors\)](#)

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

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[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](#)

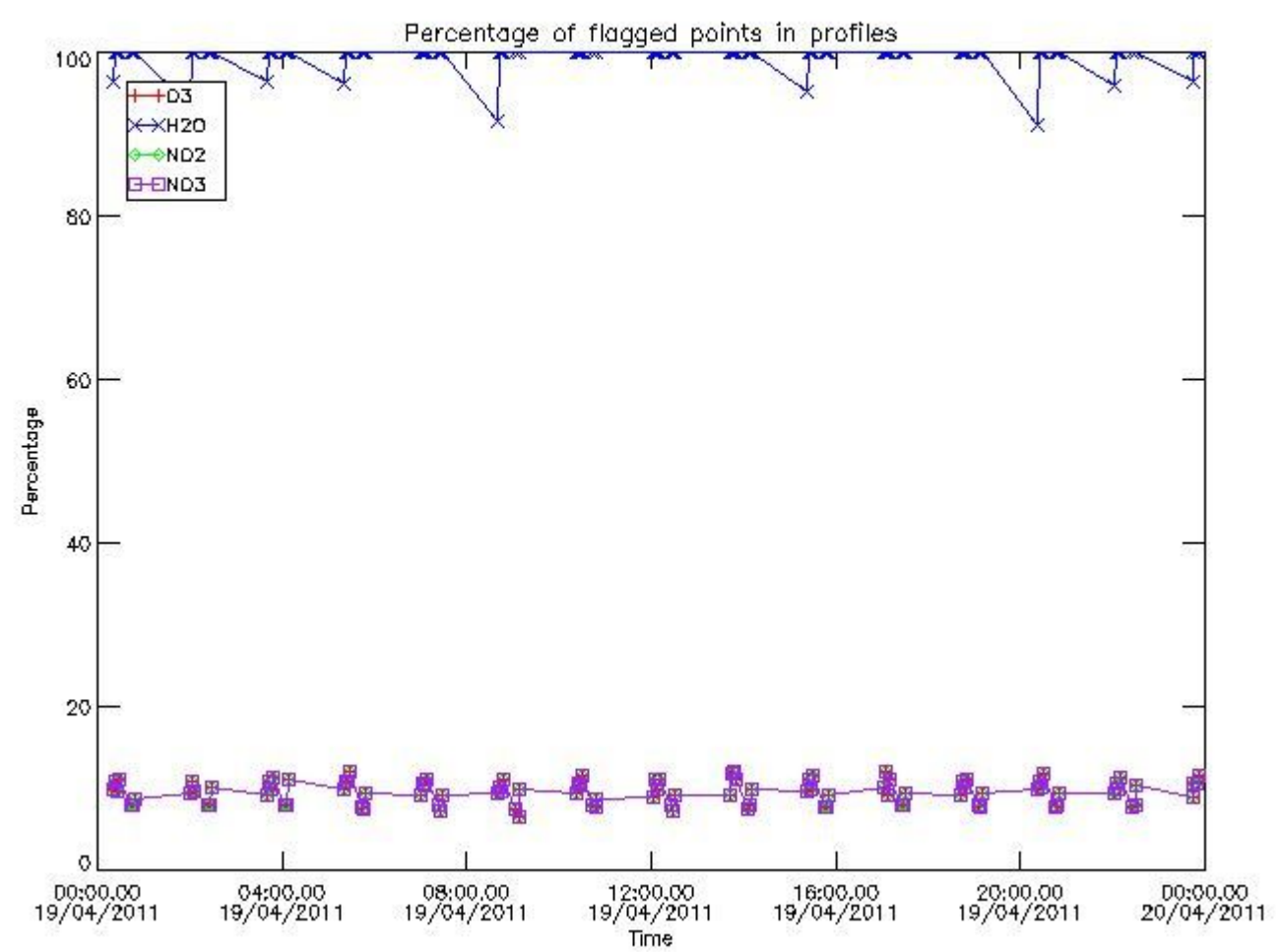
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20110419_215041_000000533101_00345_47773_5534.N1	19-APR-2011 21:50:41	Bright	52.500	19	50Alp Cyg	1.2460	10500.	105	47773	No
280	GOM_NL__2PRFIN20110419_215230_000000613101_00345_47773_5535.N1	19-APR-2011 21:52:30	Bright	60.500	66	37Gam Cyg	2.2080	5900.0	121	47773	No
281	GOM_NL__2PRFIN20110419_215518_000000673101_00345_47773_5536.N1	19-APR-2011 21:55:18	Bright	67.000	92	53Eps Cyg	2.5000	4500.0	134	47773	No
282	GOM_NL__2PRFIN20110419_220309_000000603101_00345_47773_5537.N1	19-APR-2011 22:03:09	Dark	60.000	61	8Eps Peg	2.1000	3900.0	120	47773	No
283	GOM_NL__2PRFIN20110419_220537_000000483101_00345_47773_5538.N1	19-APR-2011 22:05:37	Dark	48.000	162	34Alp Aqr	2.9440	5350.0	96	47773	No
284	GOM_NL__2PRFIN20110419_220828_000000523101_00345_47773_5539.N1	19-APR-2011 22:08:28	Dark	52.000	154	22Bet Aqr	2.8990	5700.0	104	47773	No
285	GOM_NL__2PRFIN20110419_221047_000000453101_00345_47773_5540.N1	19-APR-2011 22:10:47	Dark	45.000	142	49Del Cap	2.8500	8900.0	90	47773	No
286	GOM_NL__2PRFIN20110419_222555_000000663101_00346_47774_5533.N1	19-APR-2011 22:25:55	Dark	66.000	103	38Zet Sgr	2.6000	9700.0	132	47774	No
287	GOM_NL__2PRFIN20110419_222916_000000653101_00346_47774_5534.N1	19-APR-2011 22:29:16	Dark	65.000	38	20Eps Sgr	1.8360	11000.	130	47774	No
288	GOM_NL__2PRFIN20110419_223117_000000543101_00346_47774_5535.N1	19-APR-2011 22:31:17	Dark	53.500	178	lot1Sco	3.0220	6550.0	107	47774	No
289	GOM_NL__2PRFIN20110419_223254_000000623101_00346_47774_5536.N1	19-APR-2011 22:32:54	Straylight	61.500	25	35Lam Sco	1.6200	28000.	123	47774	No
290	GOM_NL__2PRFIN20110419_223637_000000703101_00346_47774_5537.N1	19-APR-2011 22:36:37	Straylight	69.500	75	26Eps Sco	2.2910	4250.0	139	47774	No
291	GOM_NL__2PRFIN20110419_224215_000000613101_00346_47774_5538.N1	19-APR-2011 22:42:15	Tw_i_and_stray	60.500	158	6Pi Sco	2.9060	28000.	121	47774	No
292	GOM_NL__2PRFIN20110419_224737_000000613101_00346_47774_5539.N1	19-APR-2011 22:47:37	Bright	61.000	122	9Alp2Lib	2.7470	9700.0	122	47774	No
293	GOM_NL__2PRFIN20110419_225915_000000443101_00346_47774_5540.N1	19-APR-2011 22:59:15	Bright	43.500	111	8Eta Boo	2.6800	6000.0	87	47774	No
294	GOM_NL__2PRFIN20110419_230400_000000523101_00346_47774_5541.N1	19-APR-2011 23:04:00	Bright	51.500	83		2.3780	11000.	103	47774	No
295	GOM_NL__2PRFIN20110419_230643_000000483101_00346_47774_5542.N1	19-APR-2011 23:06:43	Bright	47.500	180	27Gam Boo	3.0400	8000.0	95	47774	No
296	GOM_NL__2PRFIN20110419_230920_000000573101_00346_47774_5543.N1	19-APR-2011 23:09:20	Bright	57.000	55	79Zet UMa	2.0600	10200.	114	47774	No
297	GOM_NL__2PRFIN20110419_231626_000000433101_00346_47774_5544.N1	19-APR-2011 23:16:26	Bright	43.000	119	14Eta Dra	2.7270	4700.0	86	47774	No
298	GOM_NL__2PRFIN20110419_232541_000000403101_00346_47774_5545.N1	19-APR-2011 23:25:41	Bright	40.000	89	5Alp Cep	2.4510	8000.0	80	47774	No
299	GOM_NL__2PRFIN20110419_233055_000000523101_00346_47774_5546.N1	19-APR-2011 23:30:55	Bright	52.000	19	50Alp Cyg	1.2460	10500.	104	47774	No
300	GOM_NL__2PRFIN20110419_233244_000000613101_00346_47774_5547.N1	19-APR-2011 23:32:44	Bright	60.500	66	37Gam Cyg	2.2080	5900.0	121	47774	No
301	GOM_NL__2PRFIN20110419_233531_000000673101_00346_47774_5548.N1	19-APR-2011 23:35:31	Bright	66.500	92	53Eps Cyg	2.5000	4500.0	133	47774	No
302	GOM_NL__2PRFIN20110419_234323_000000583101_00346_47774_5549.N1	19-APR-2011 23:43:23	Dark	57.500	61	8Eps Peg	2.1000	3900.0	115	47774	No
303	GOM_NL__2PRFIN20110419_234551_000000483101_00346_47774_5550.N1	19-APR-2011 23:45:51	Dark	48.000	162	34Alp Aqr	2.9440	5350.0	96	47774	No
304	GOM_NL__2PRFIN20110419_234843_000000533101_00346_47774_5551.N1	19-APR-2011 23:48:43	Dark	53.000	154	22Bet Aqr	2.8990	5700.0	106	47774	No
305	GOM_NL__2PRFIN20110419_235101_000000453101_00346_47774_5552.N1	19-APR-2011 23:51:01	Dark	44.500	142	49Del Cap	2.8500	8900.0	89	47774	No

3. Quality information per product

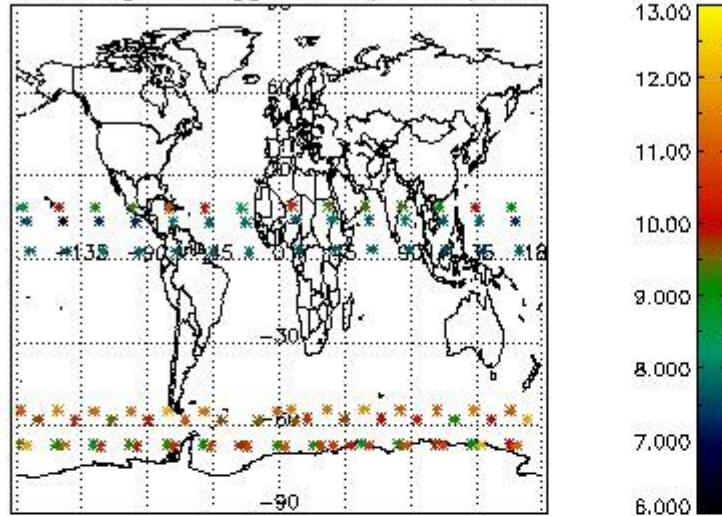
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

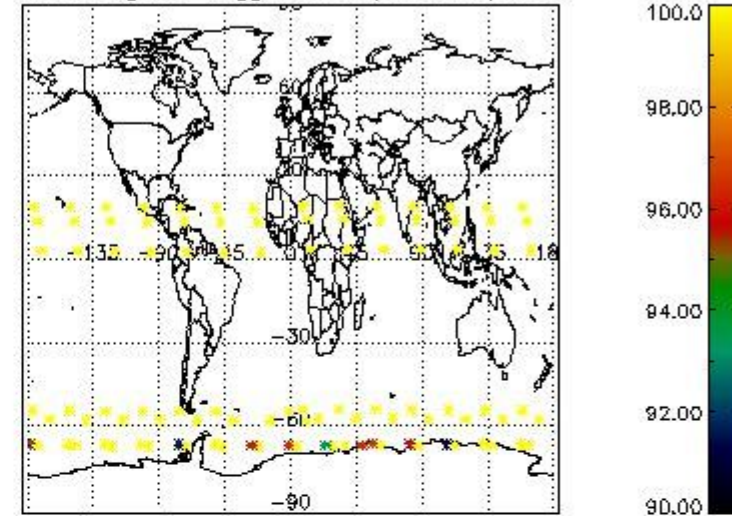


3.2 Plot quality information per product (world map)

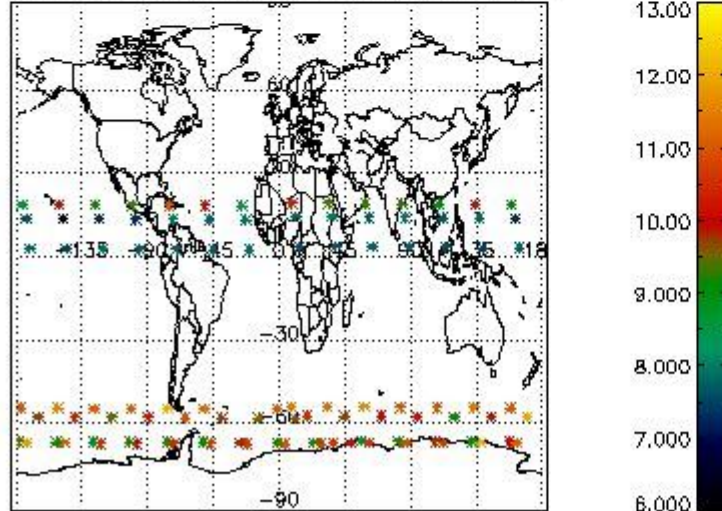
Percentage of flagged data per O3 profile



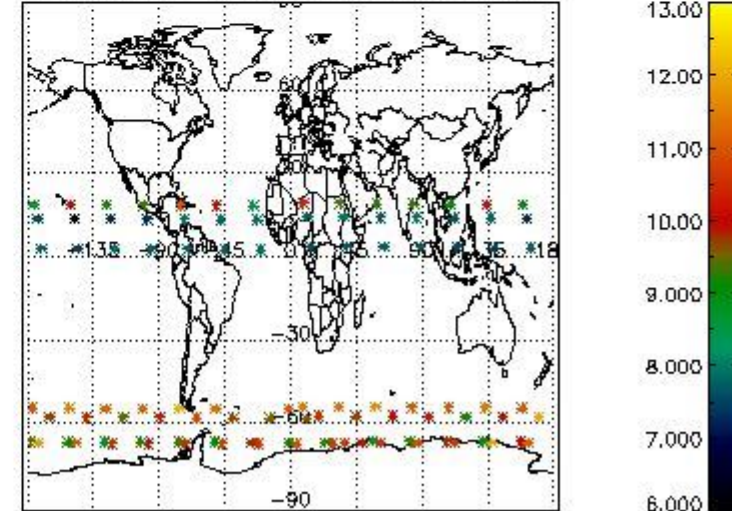
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

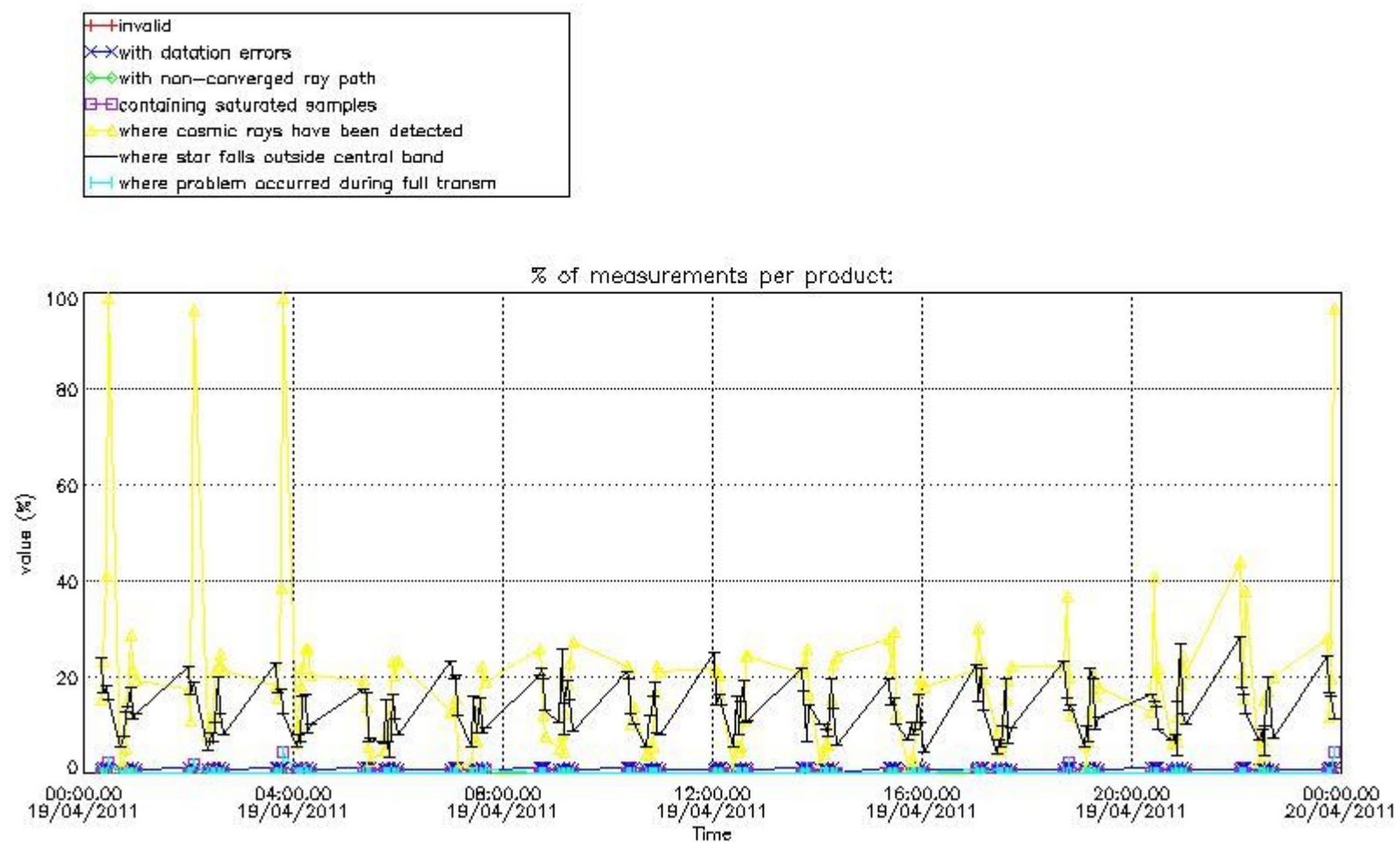


4. Level 1 quality information per product

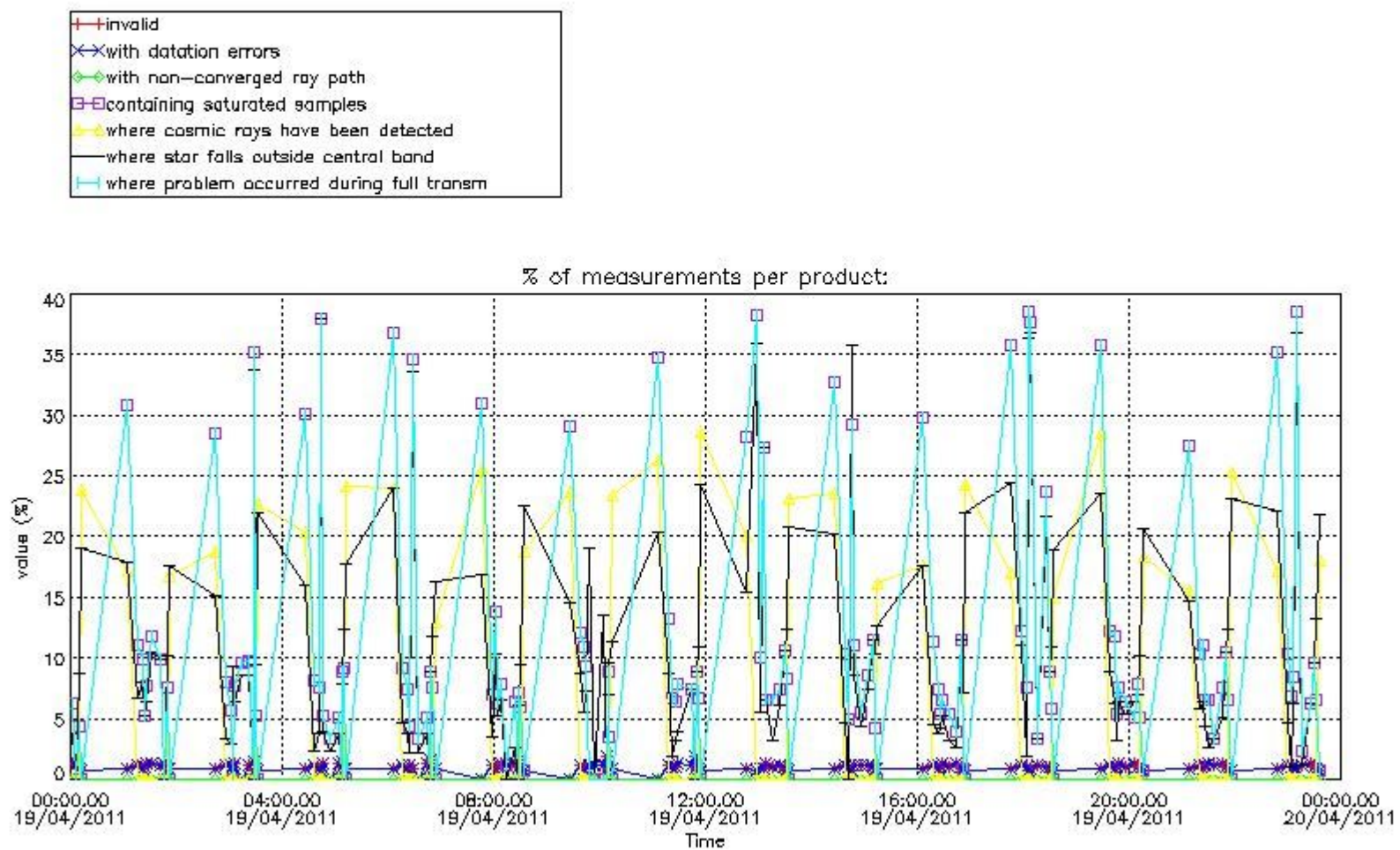
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



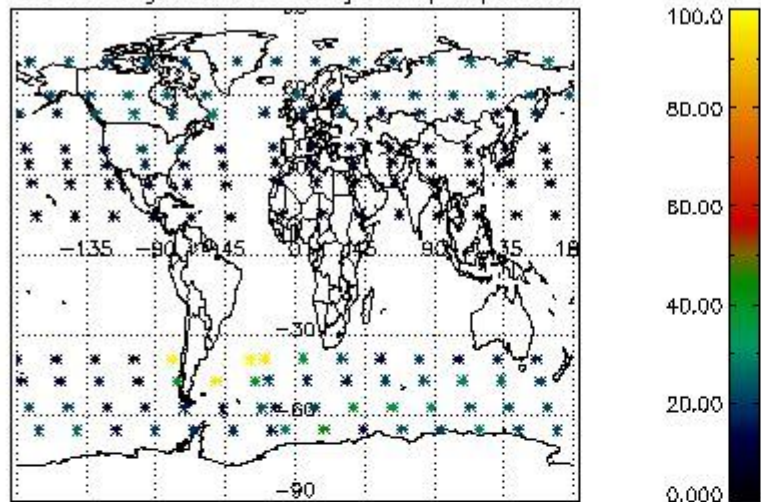
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



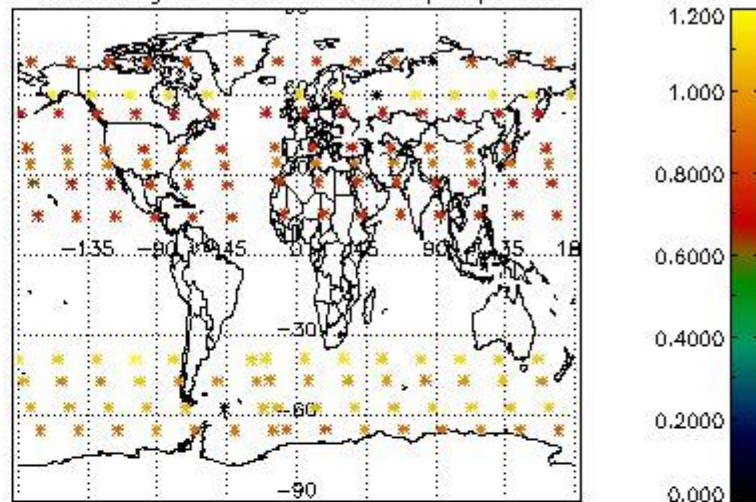
4.2 Plot quality information per product coming from level 1b processing (world map)

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

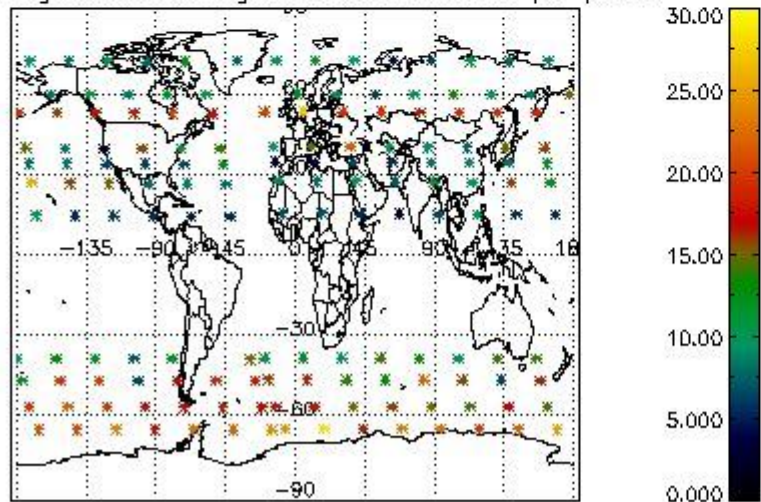
Percentage of cosmic ray hits per profile



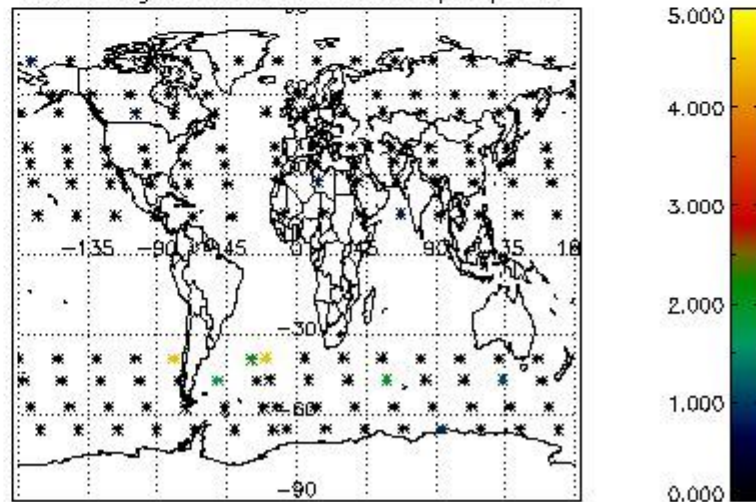
Percentage of datation errors per profile



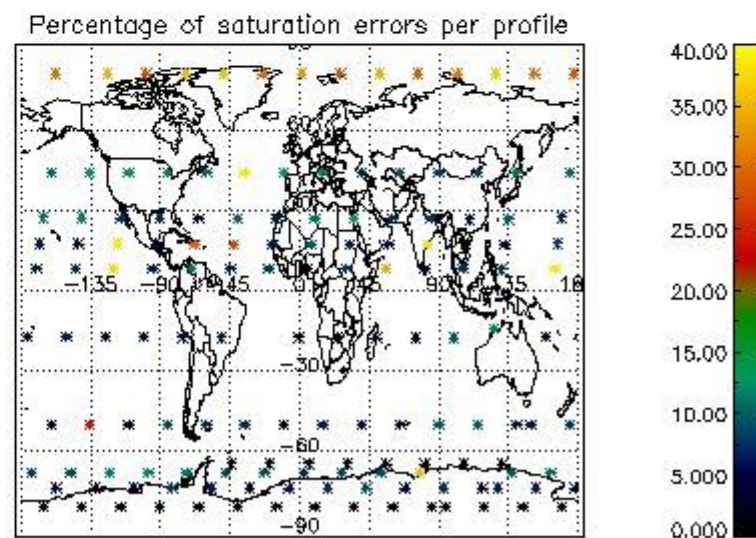
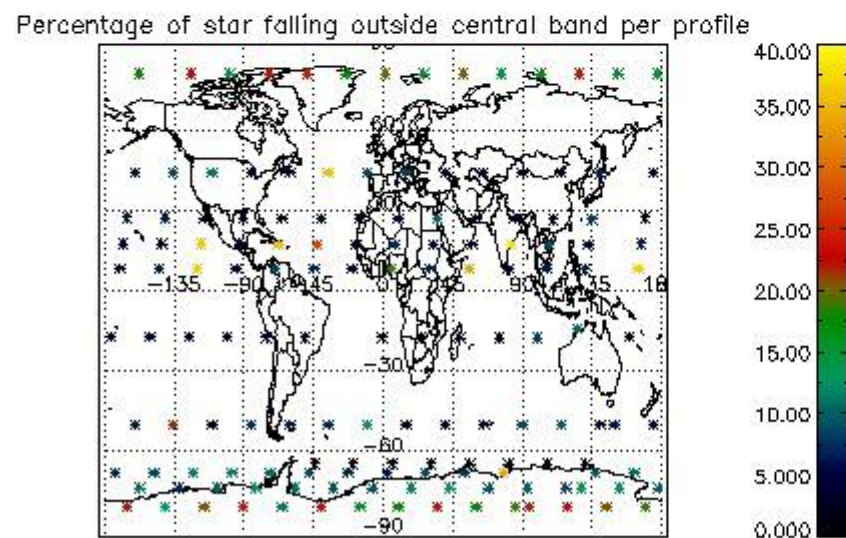
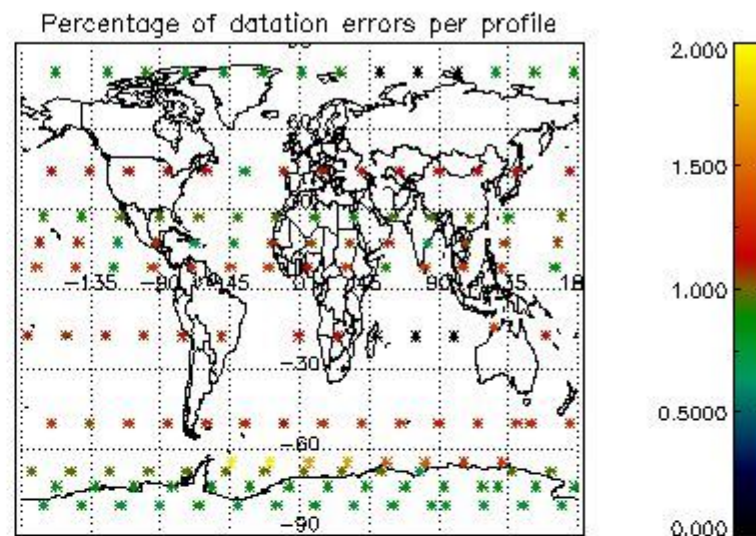
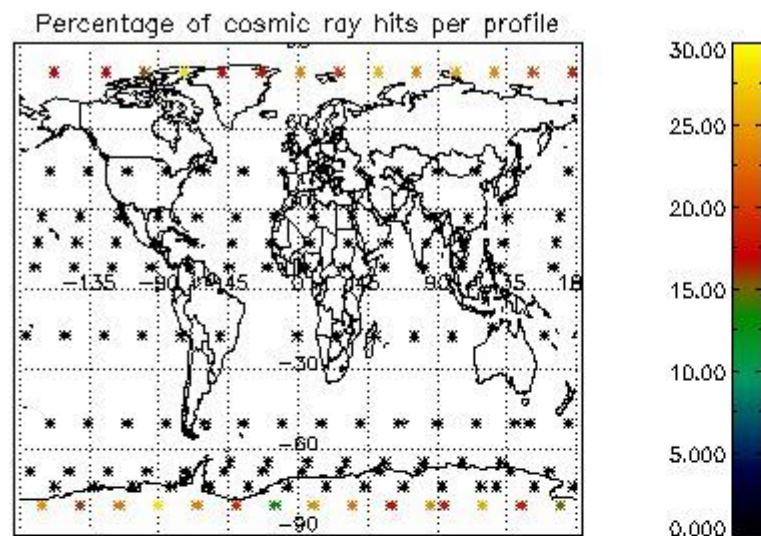
Percentage of star falling outside central band per profile



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

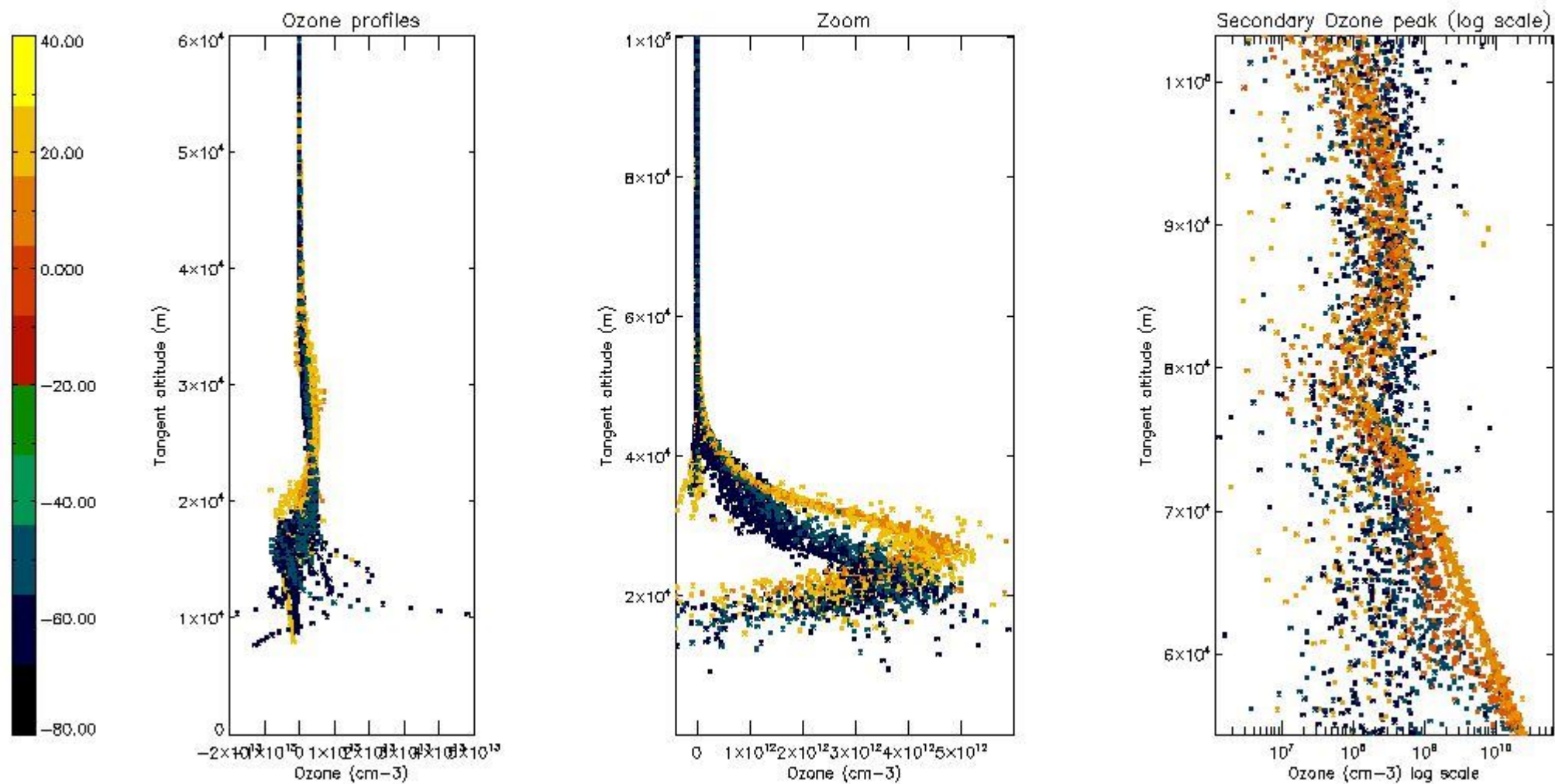
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	12

STD < 10	7
STD < 5	3

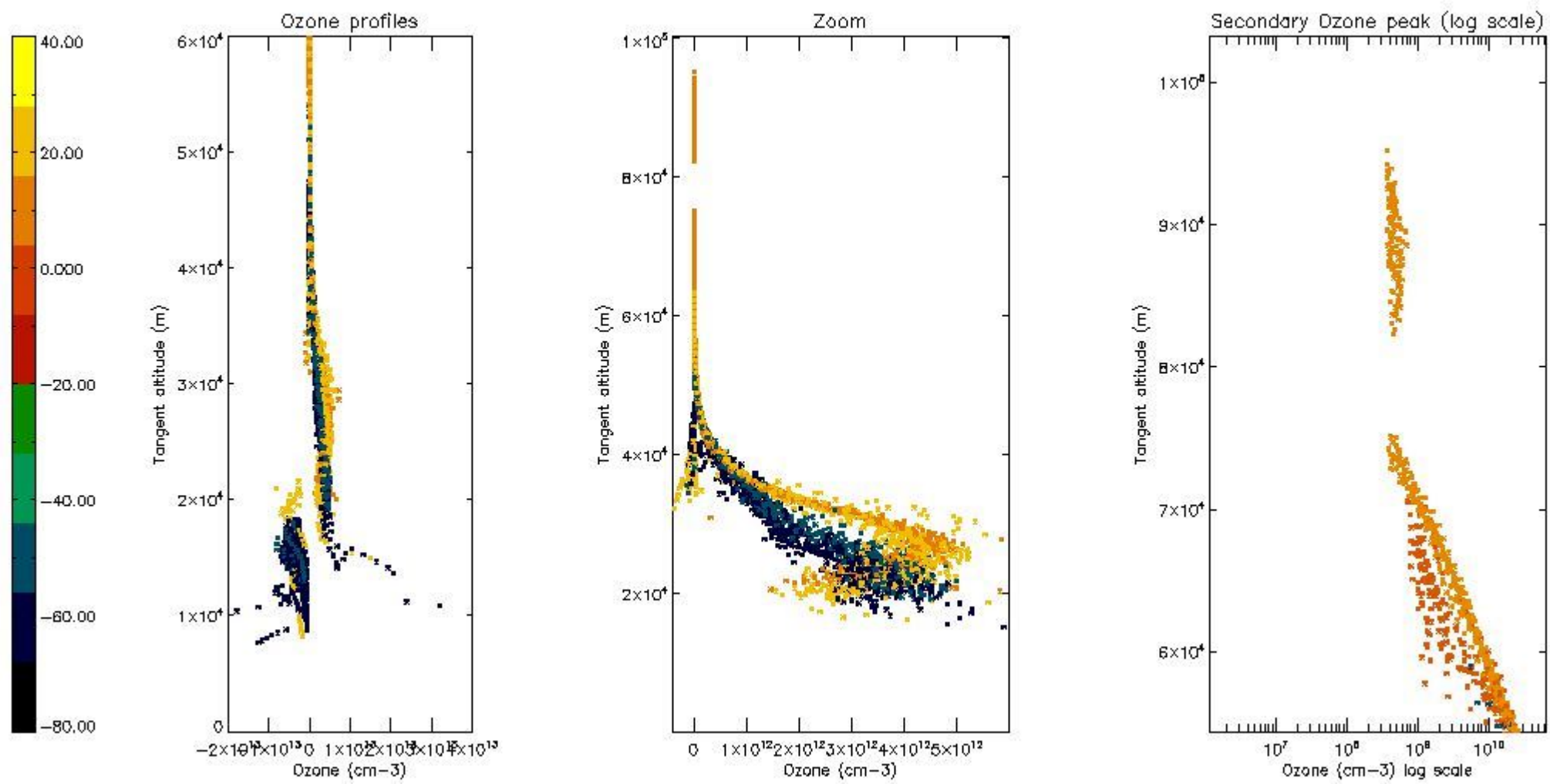
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



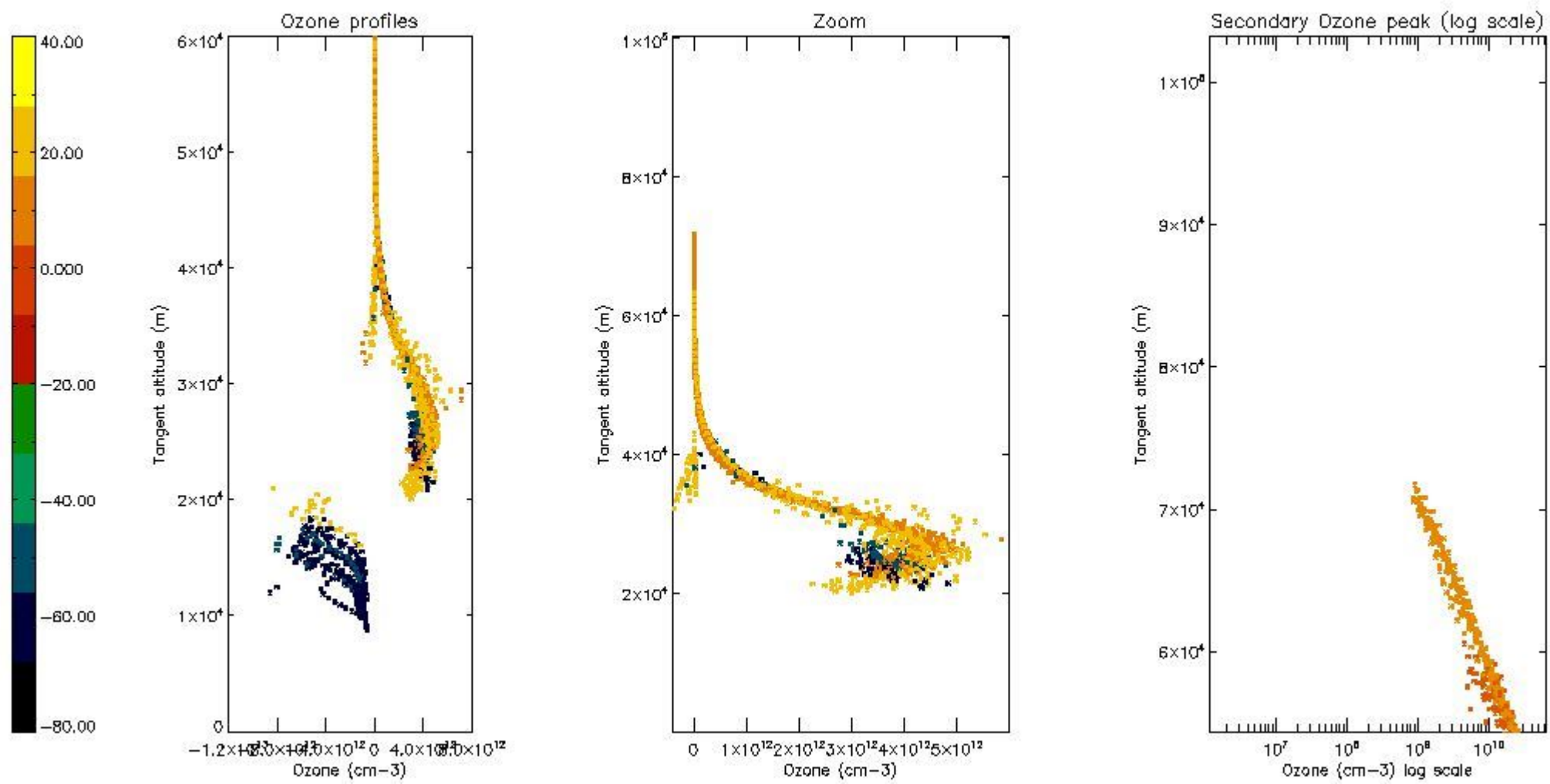
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



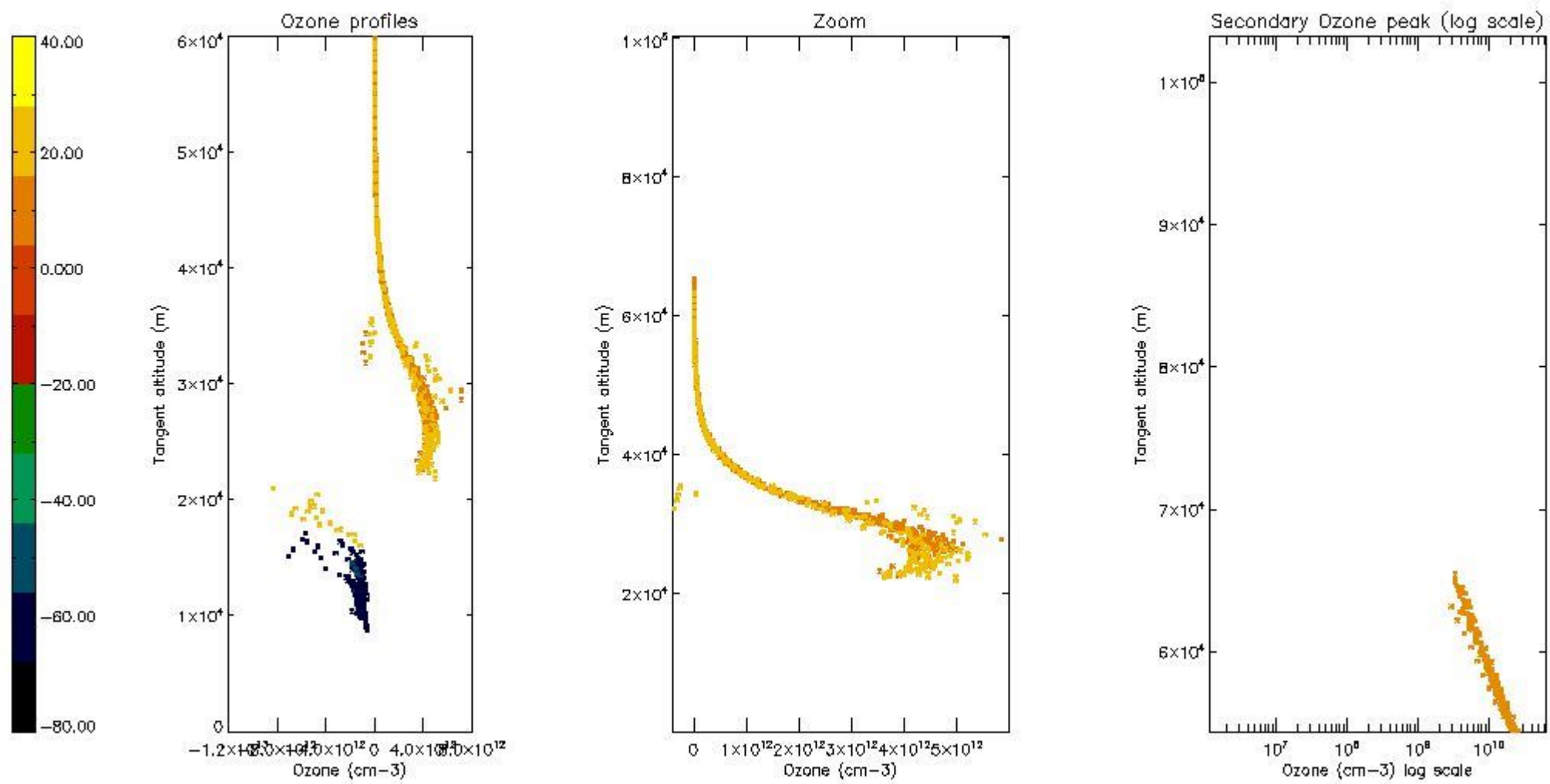
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



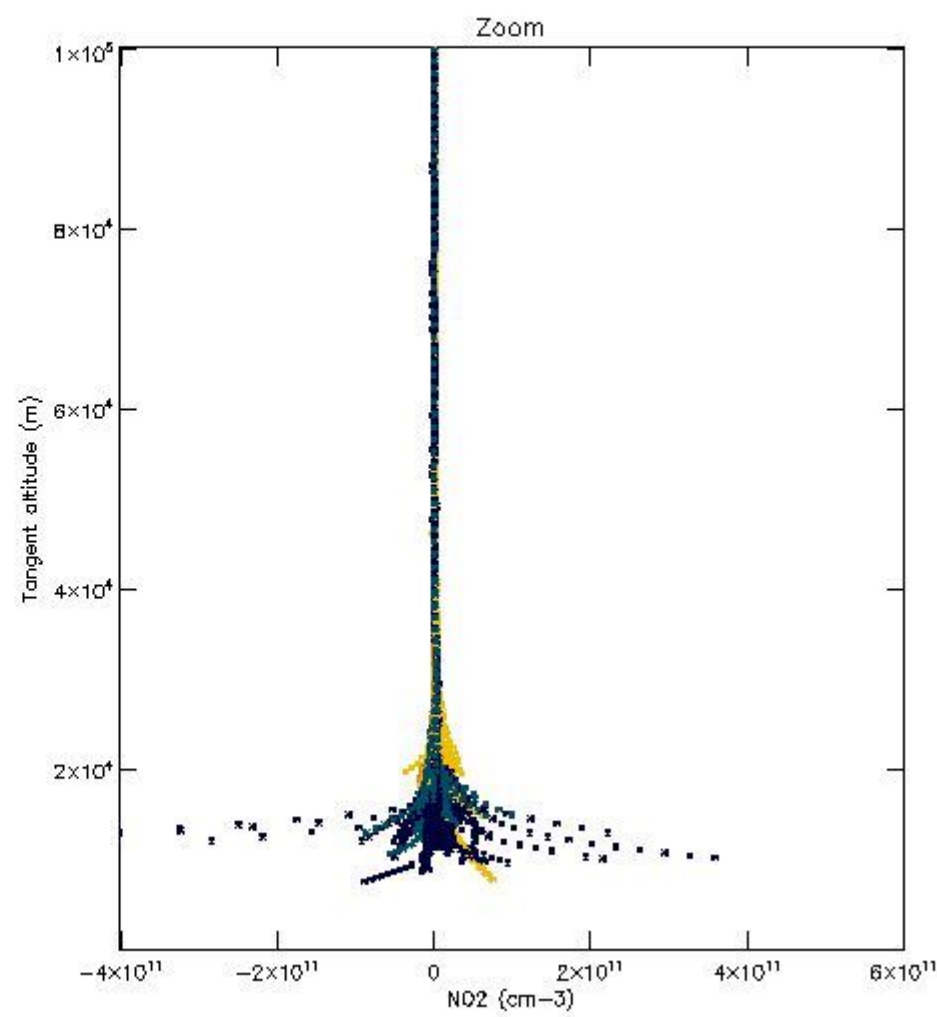
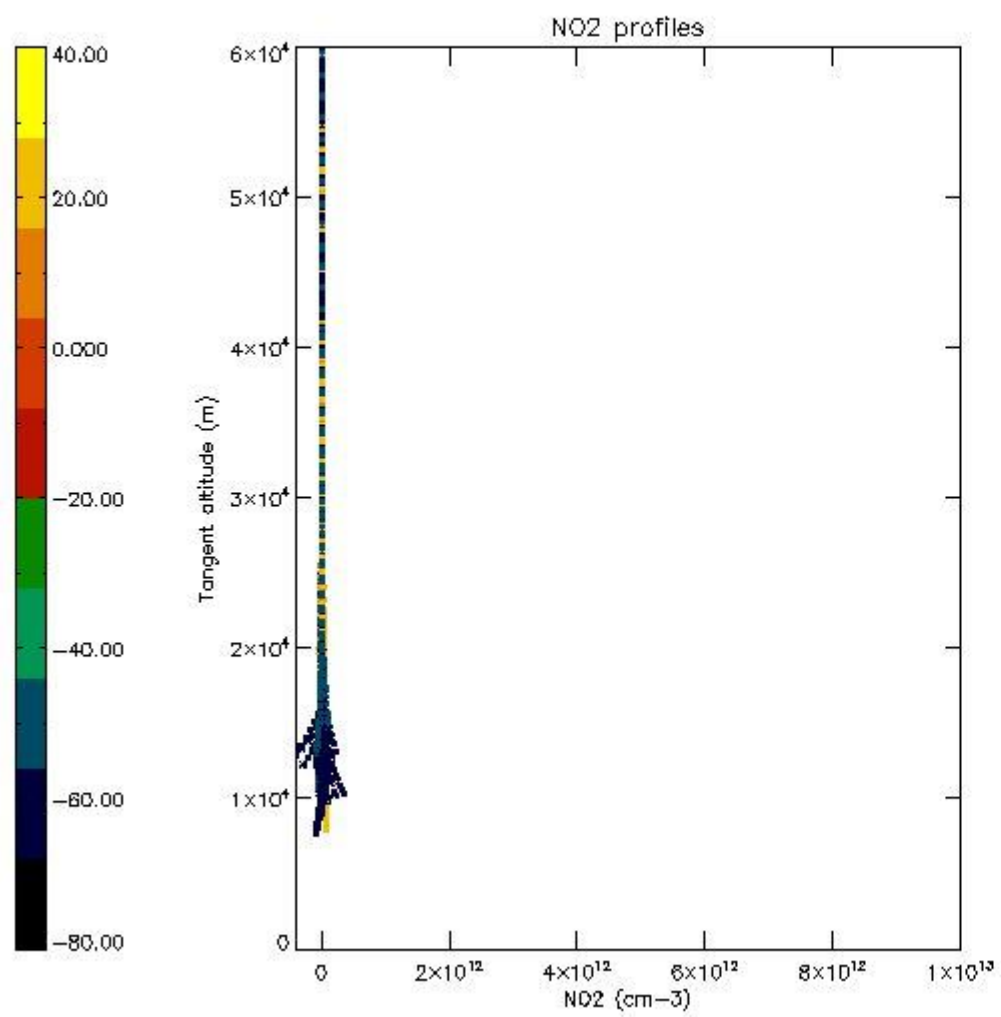
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



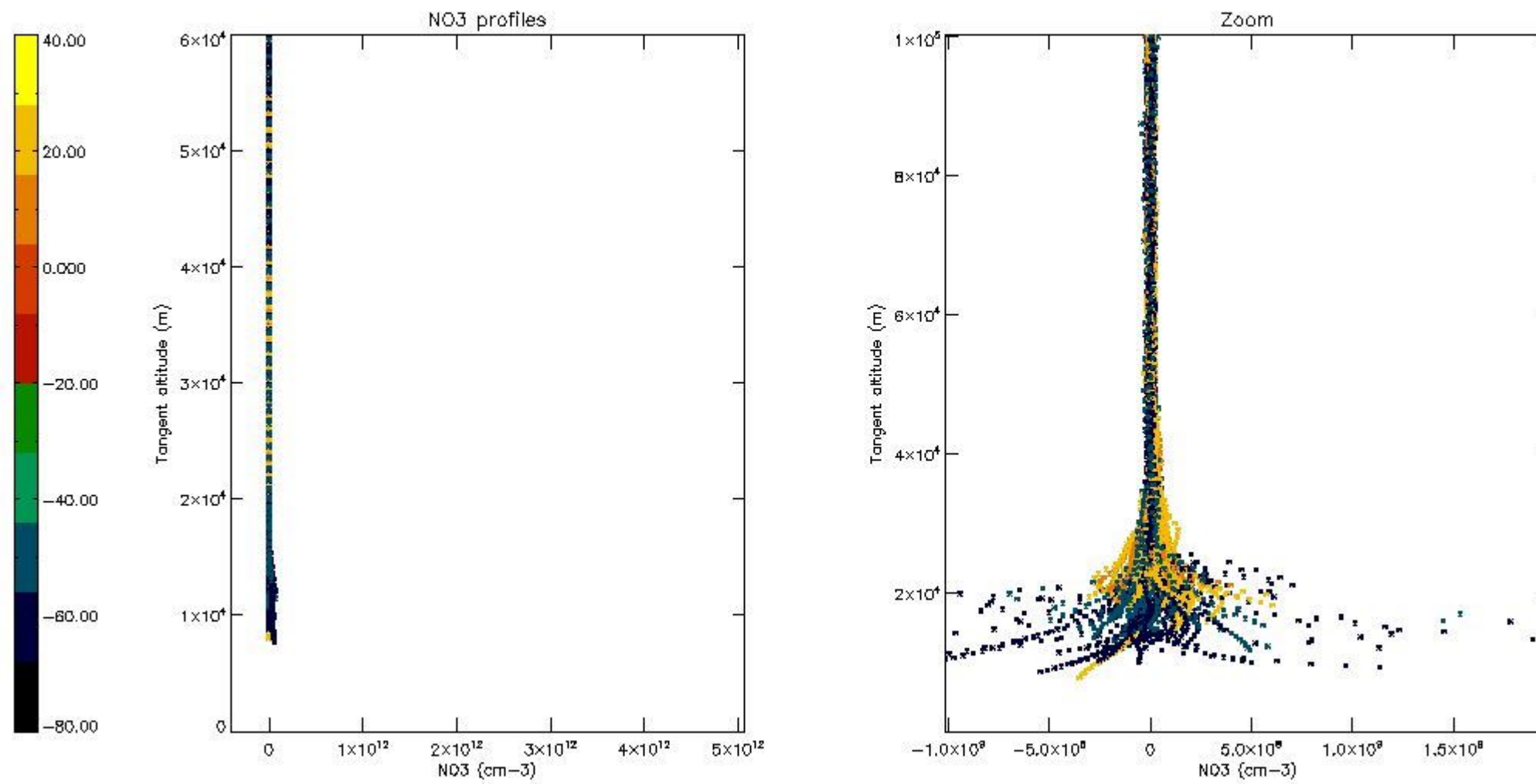
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

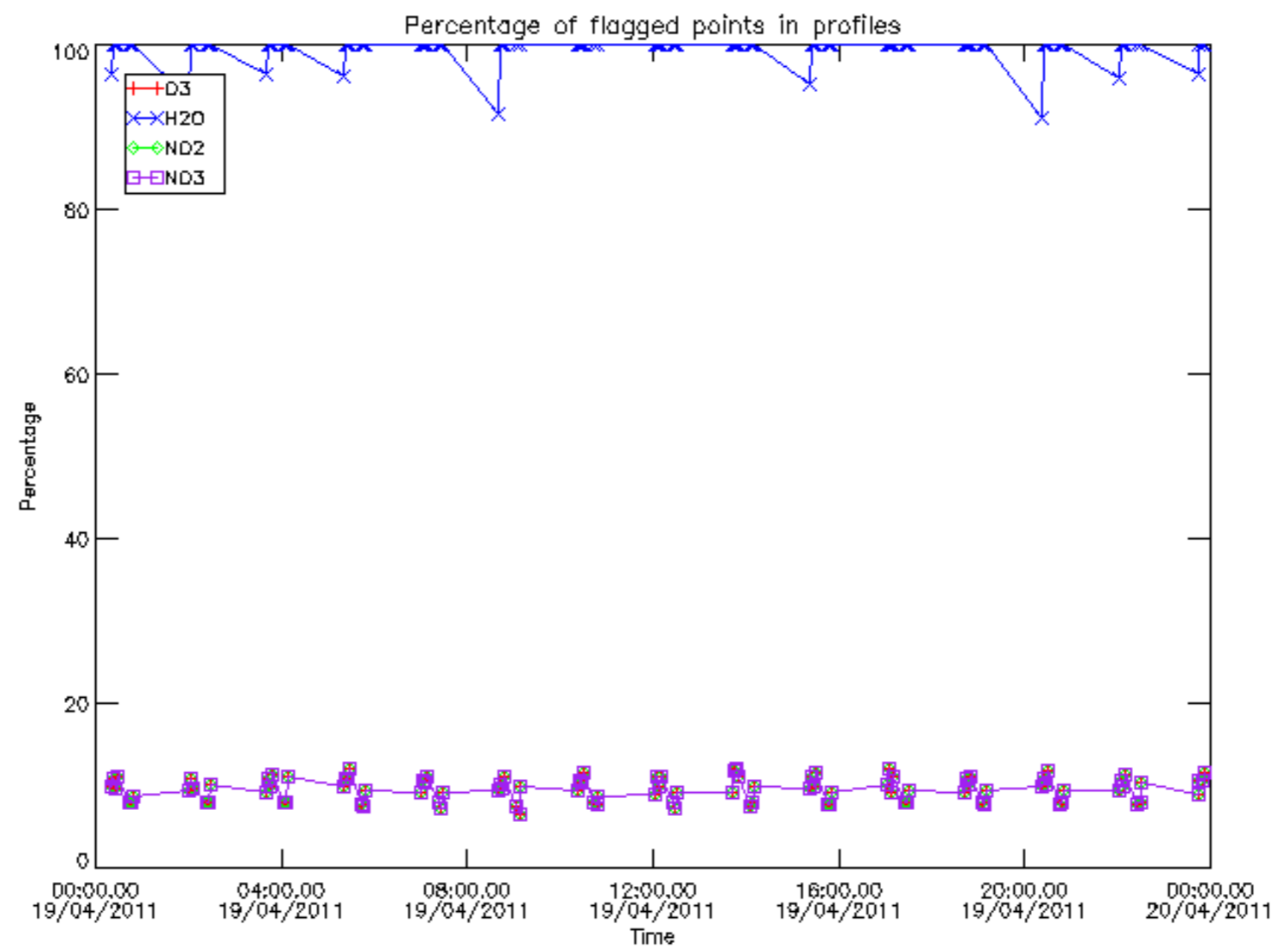
The colorbar represents the latitude.



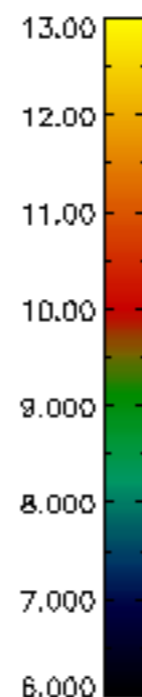
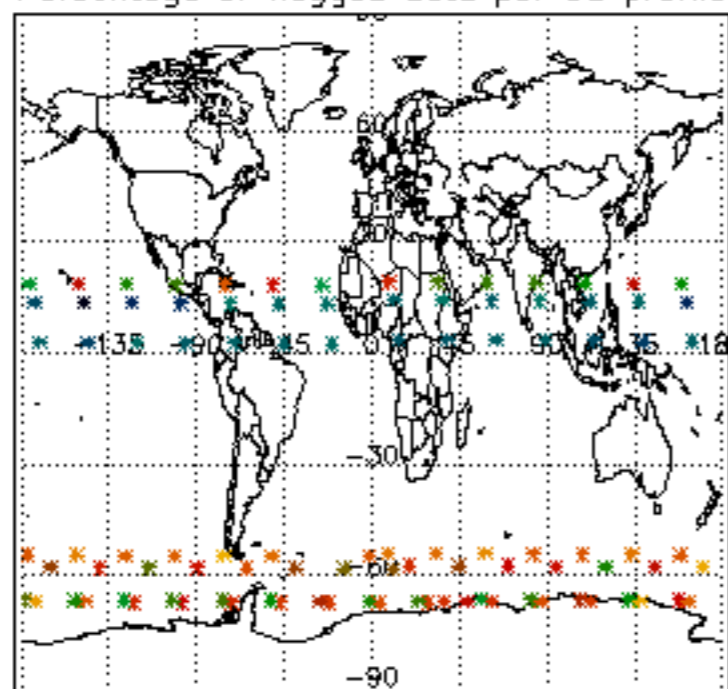
6. Auxiliary Data Files used for the production reported in section 2

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.

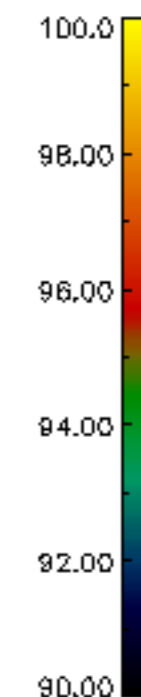
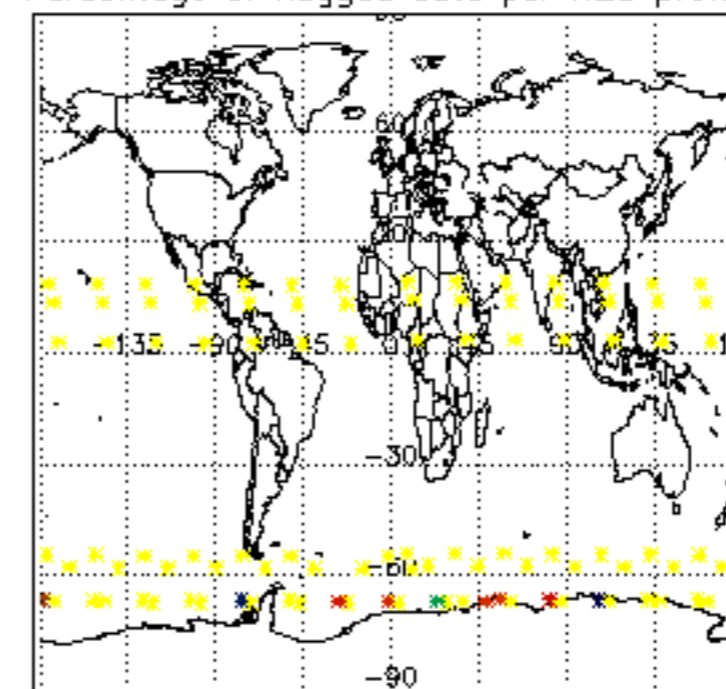
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	19-APR-2011 00:02:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-APR-2011 00:02:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-APR-2011 00:02:28



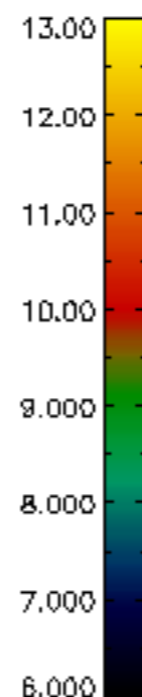
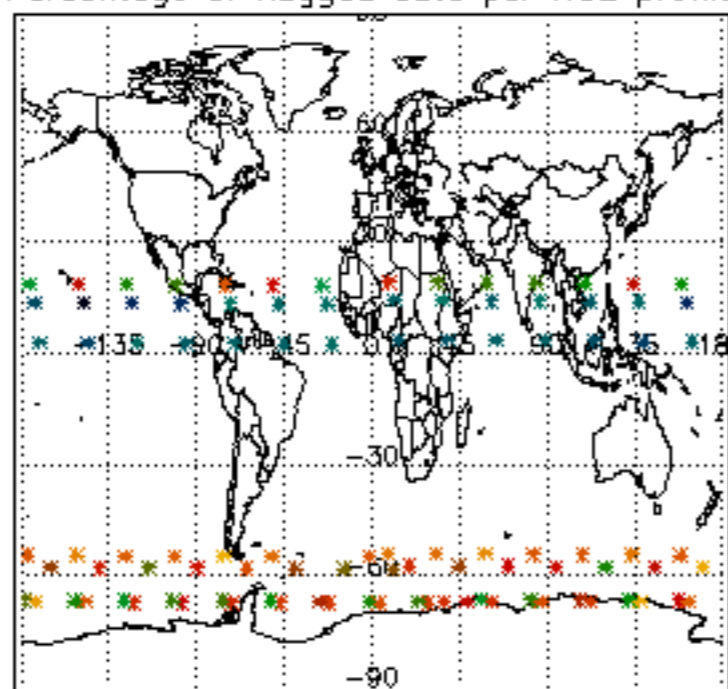
Percentage of flagged data per D3 profile



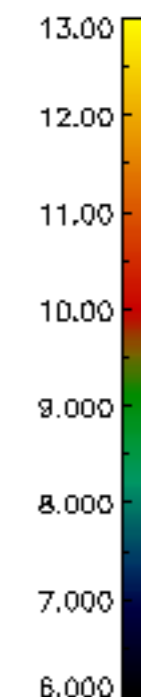
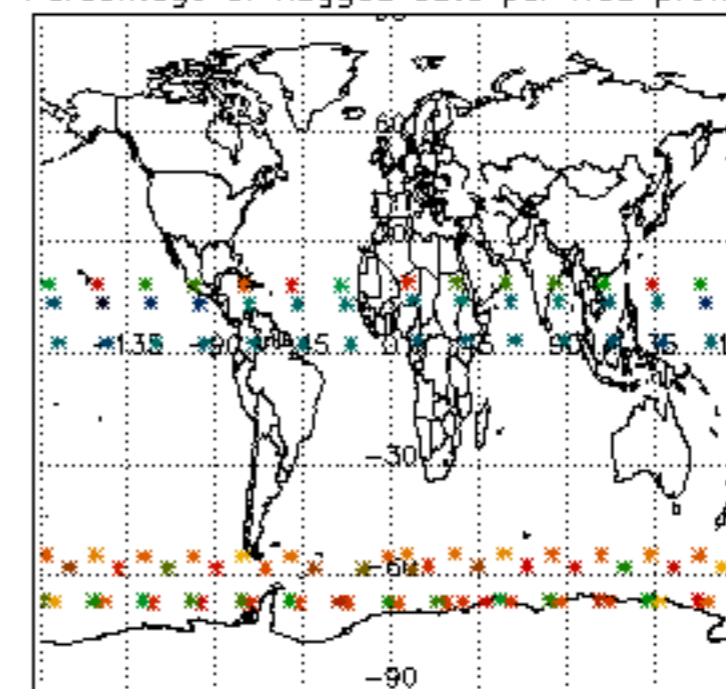
Percentage of flagged data per H2O profile

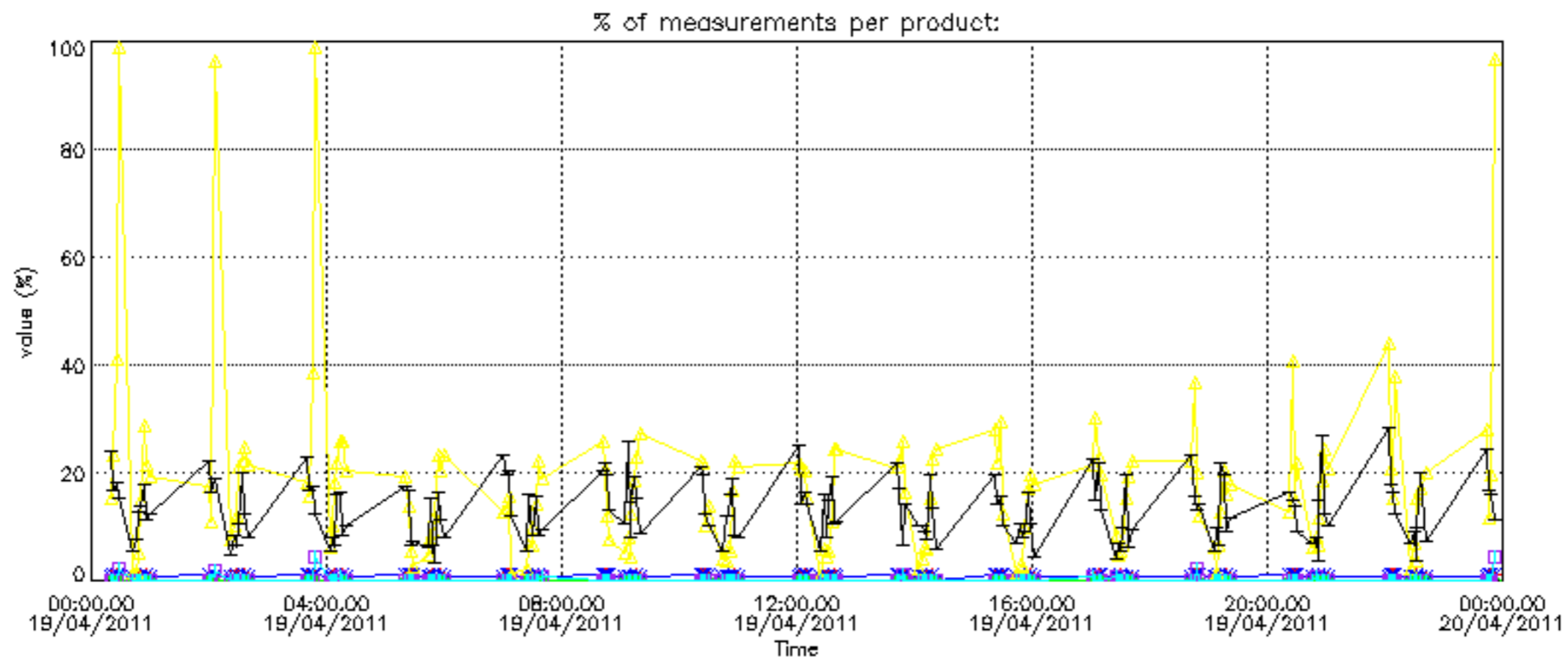


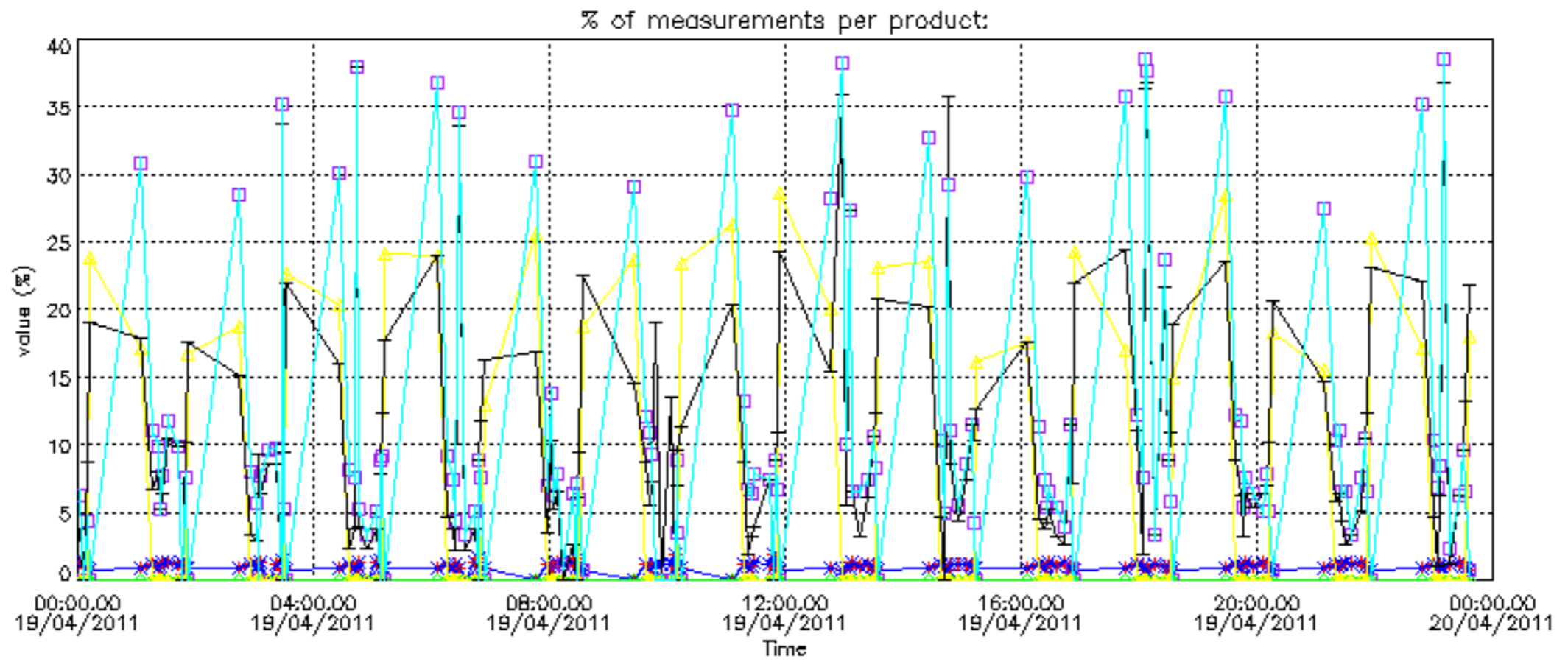
Percentage of flagged data per NO2 profile



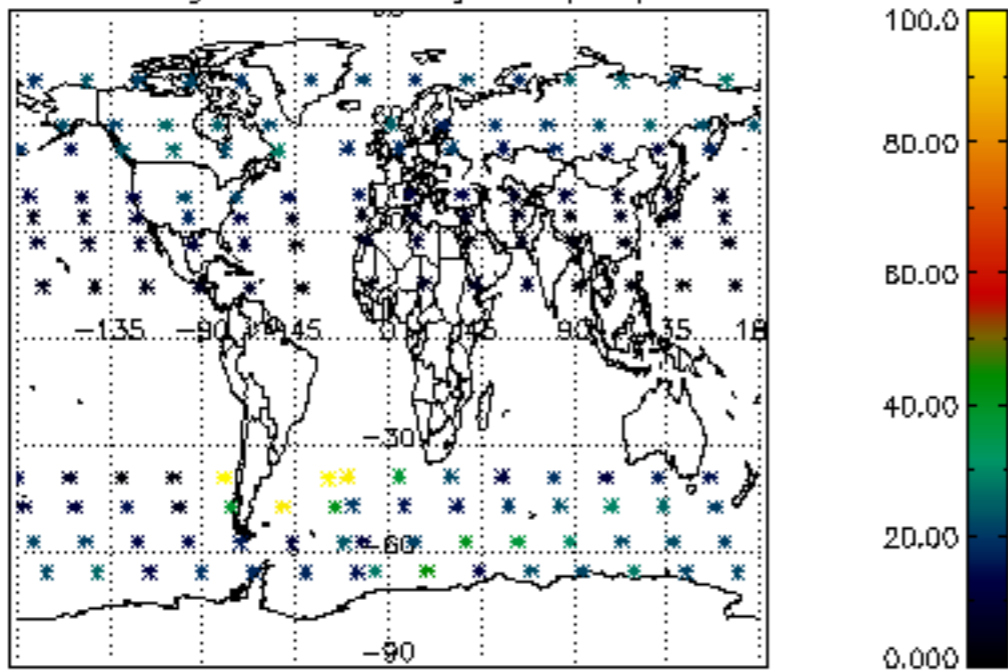
Percentage of flagged data per NO3 profile



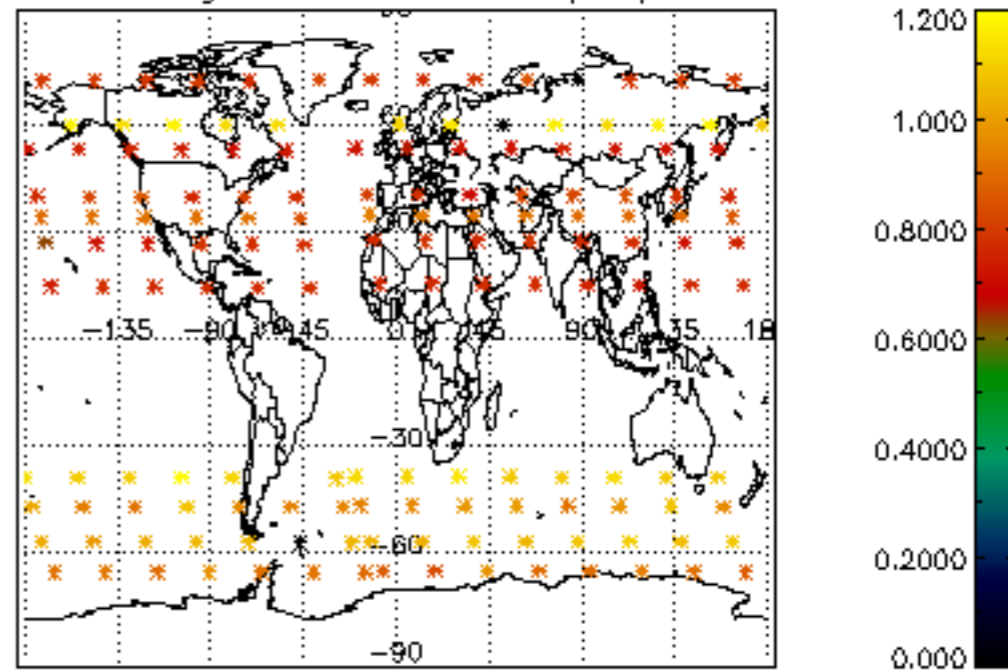




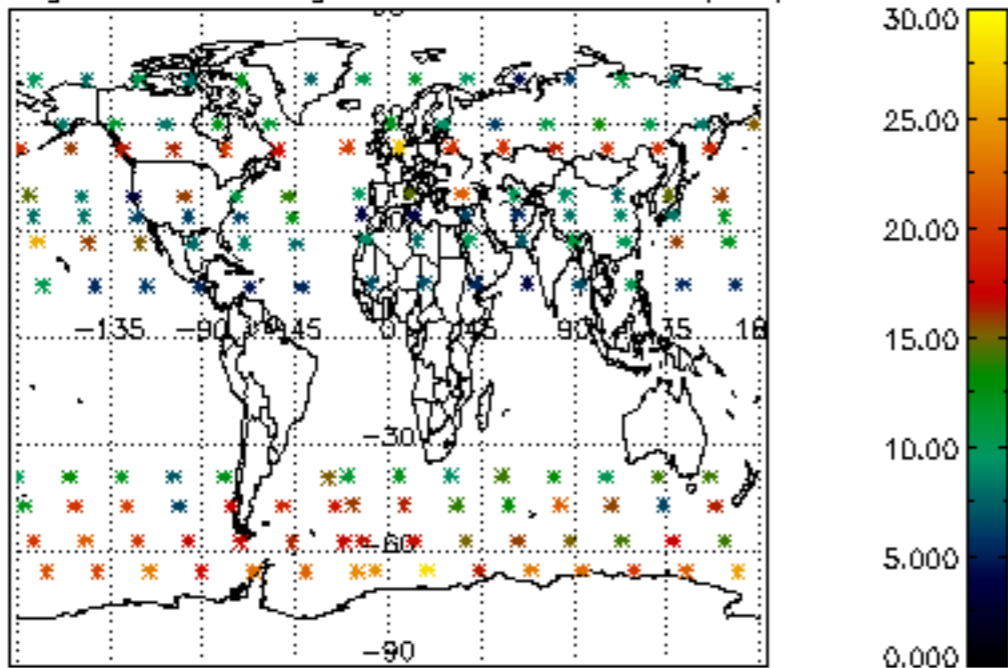
Percentage of cosmic ray hits per profile



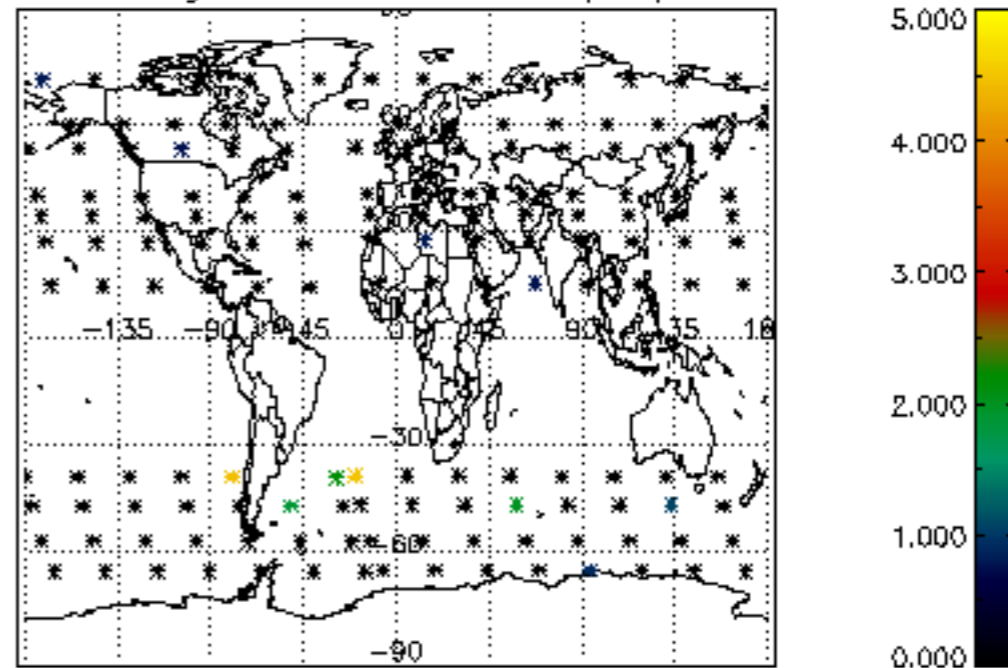
Percentage of datation errors per profile



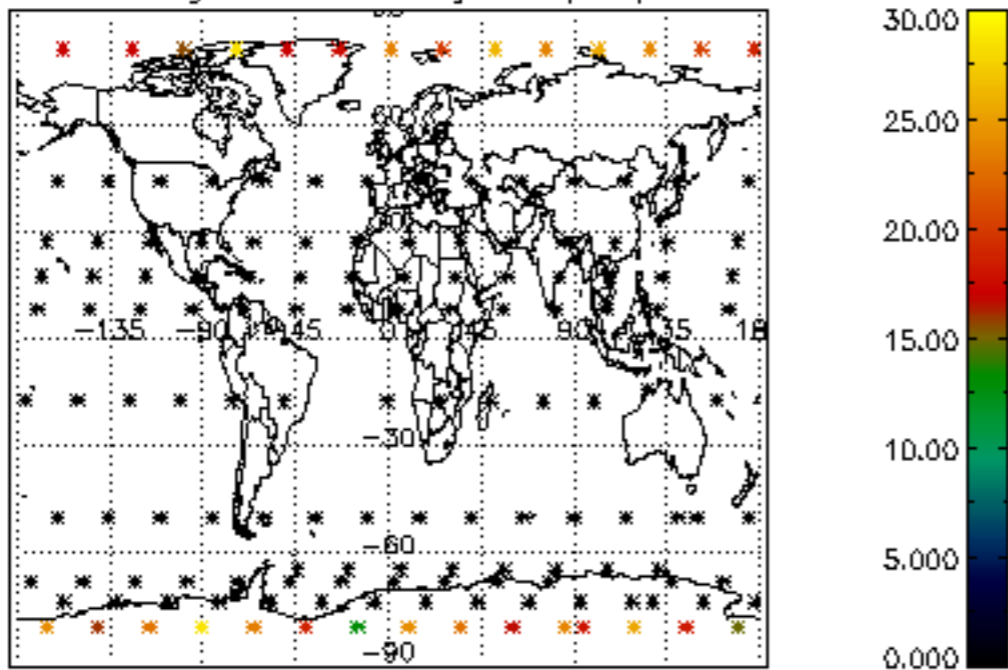
Percentage of star falling outside central band per profile



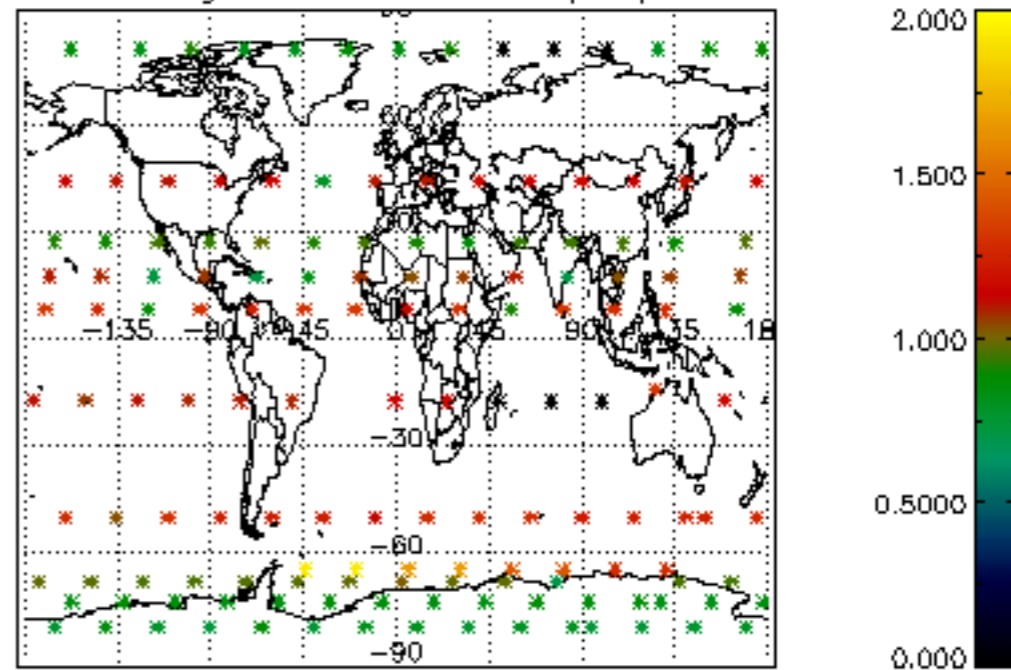
Percentage of saturation errors per profile



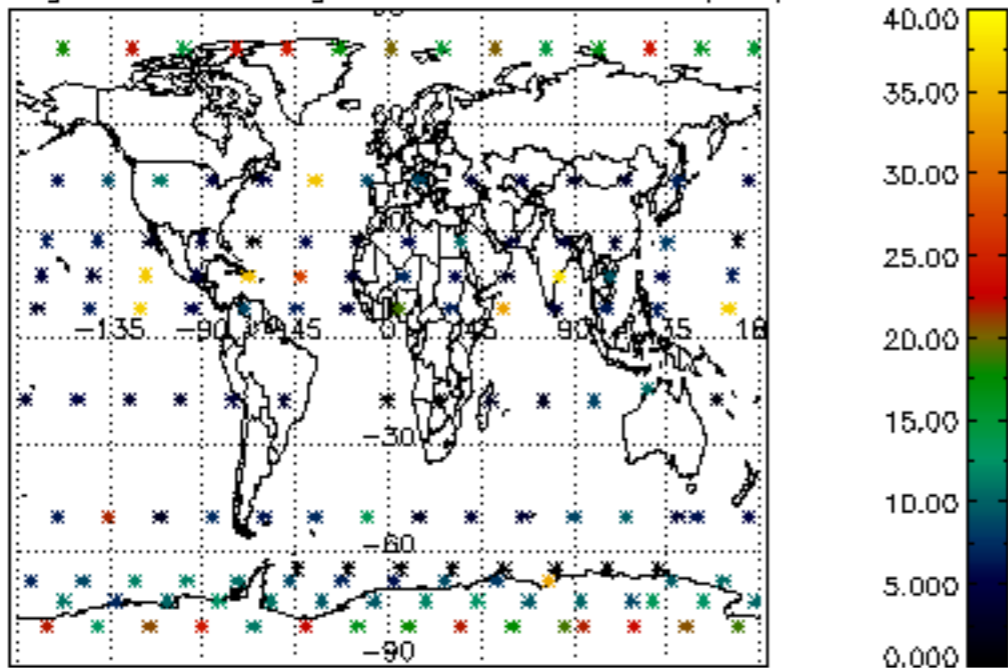
Percentage of cosmic ray hits per profile



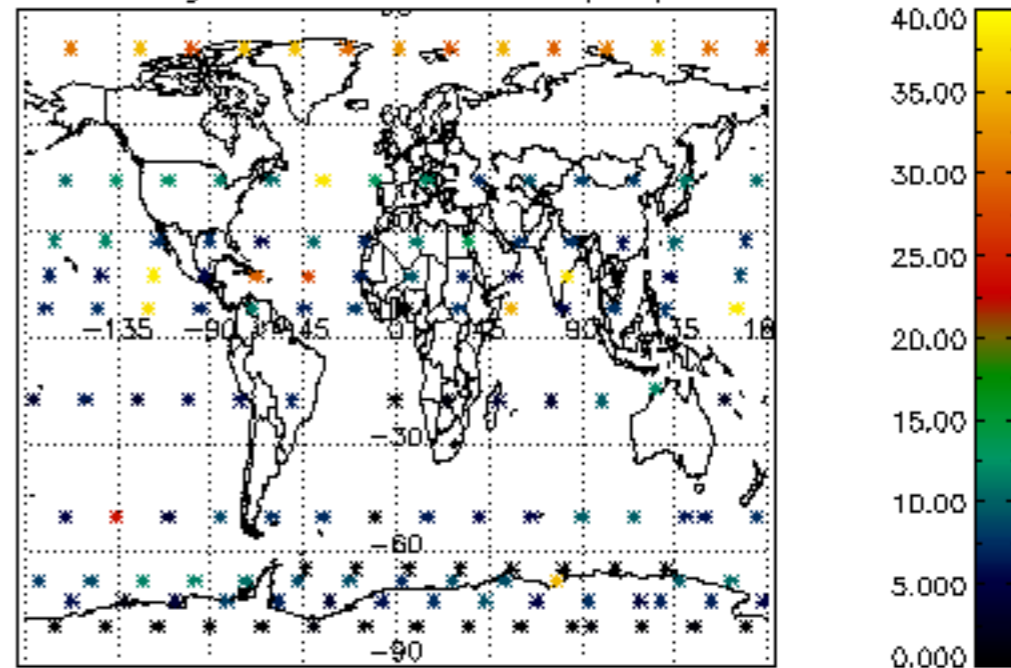
Percentage of datation errors per profile

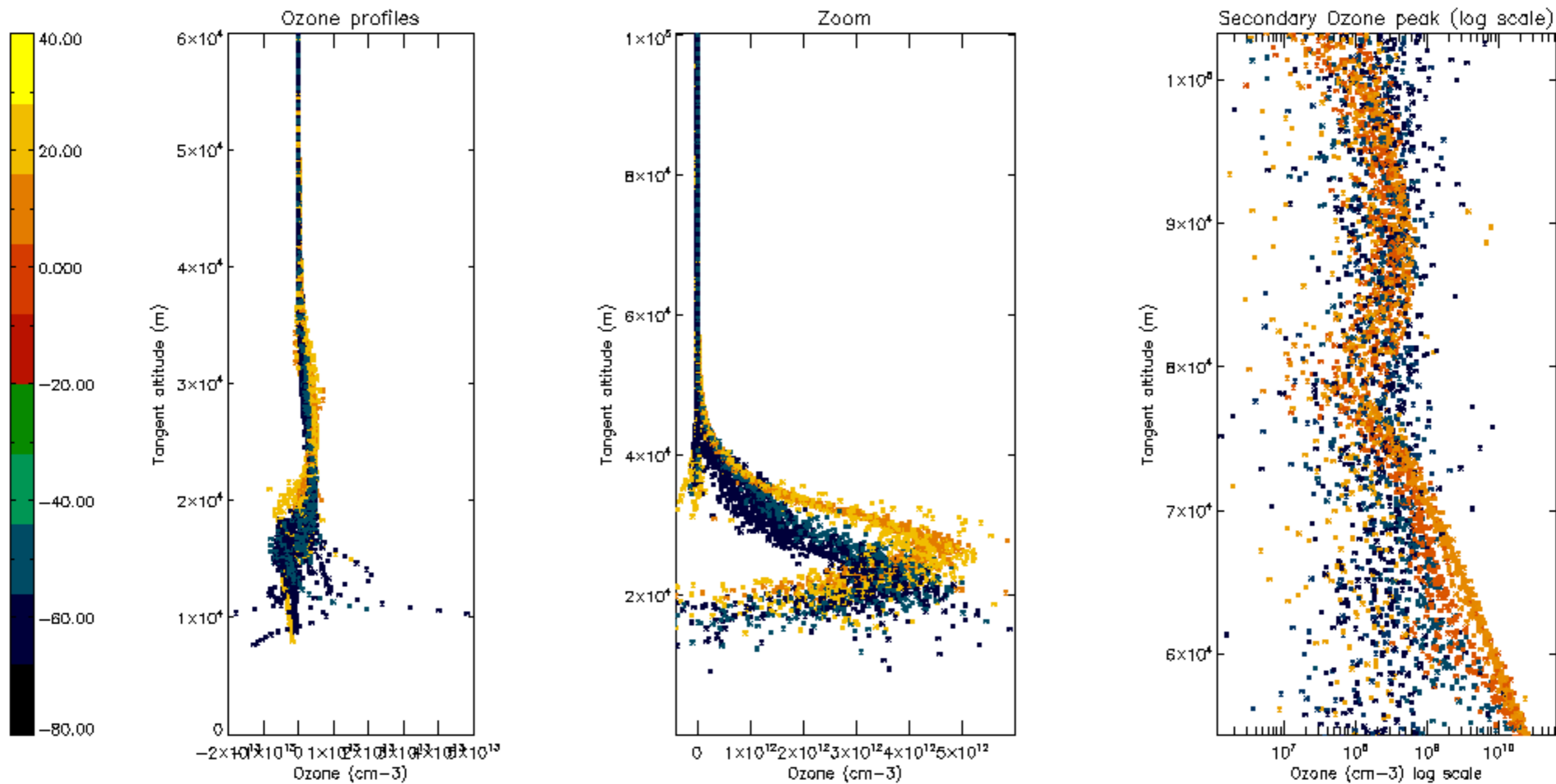


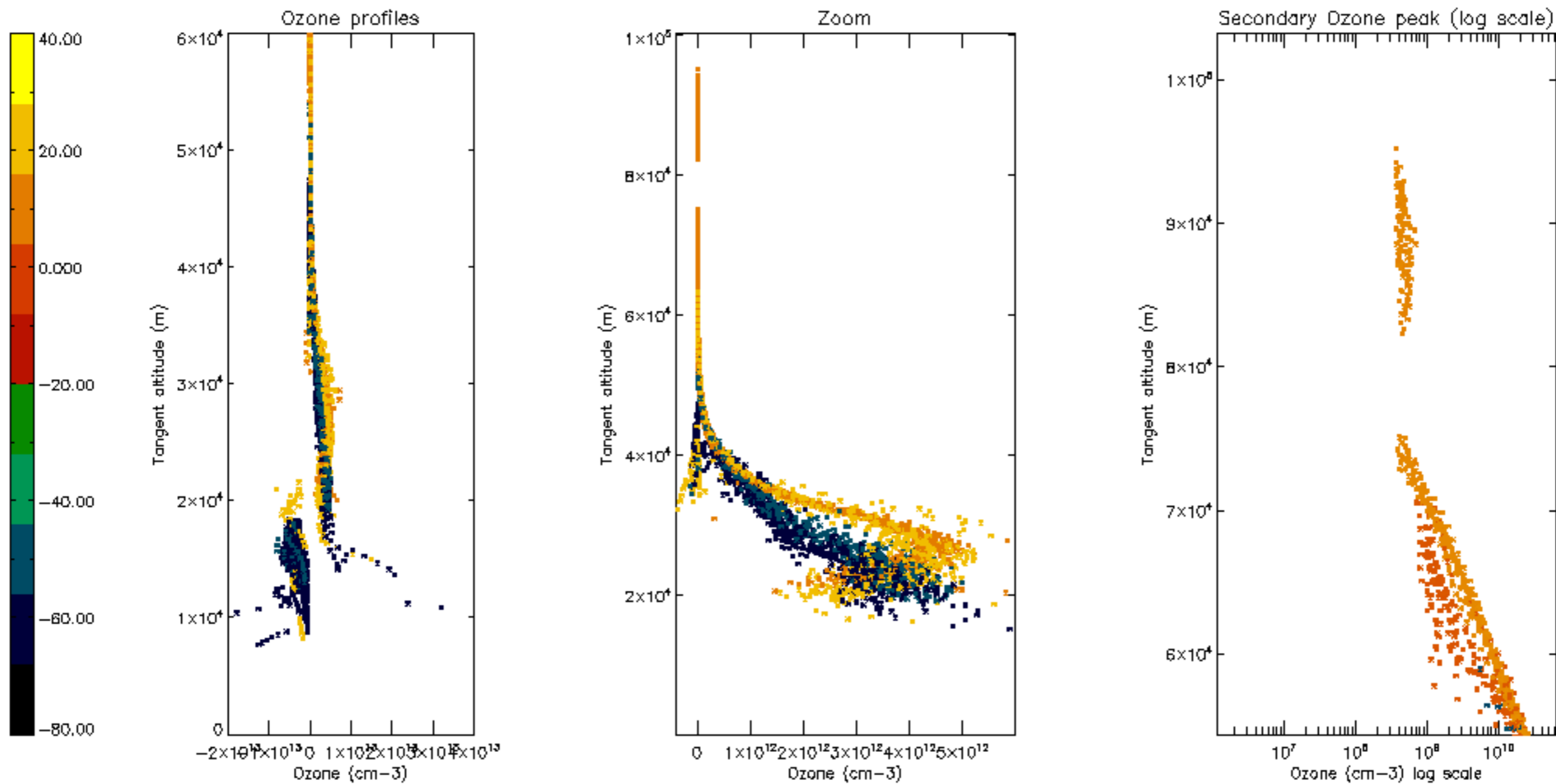
Percentage of star falling outside central band per profile

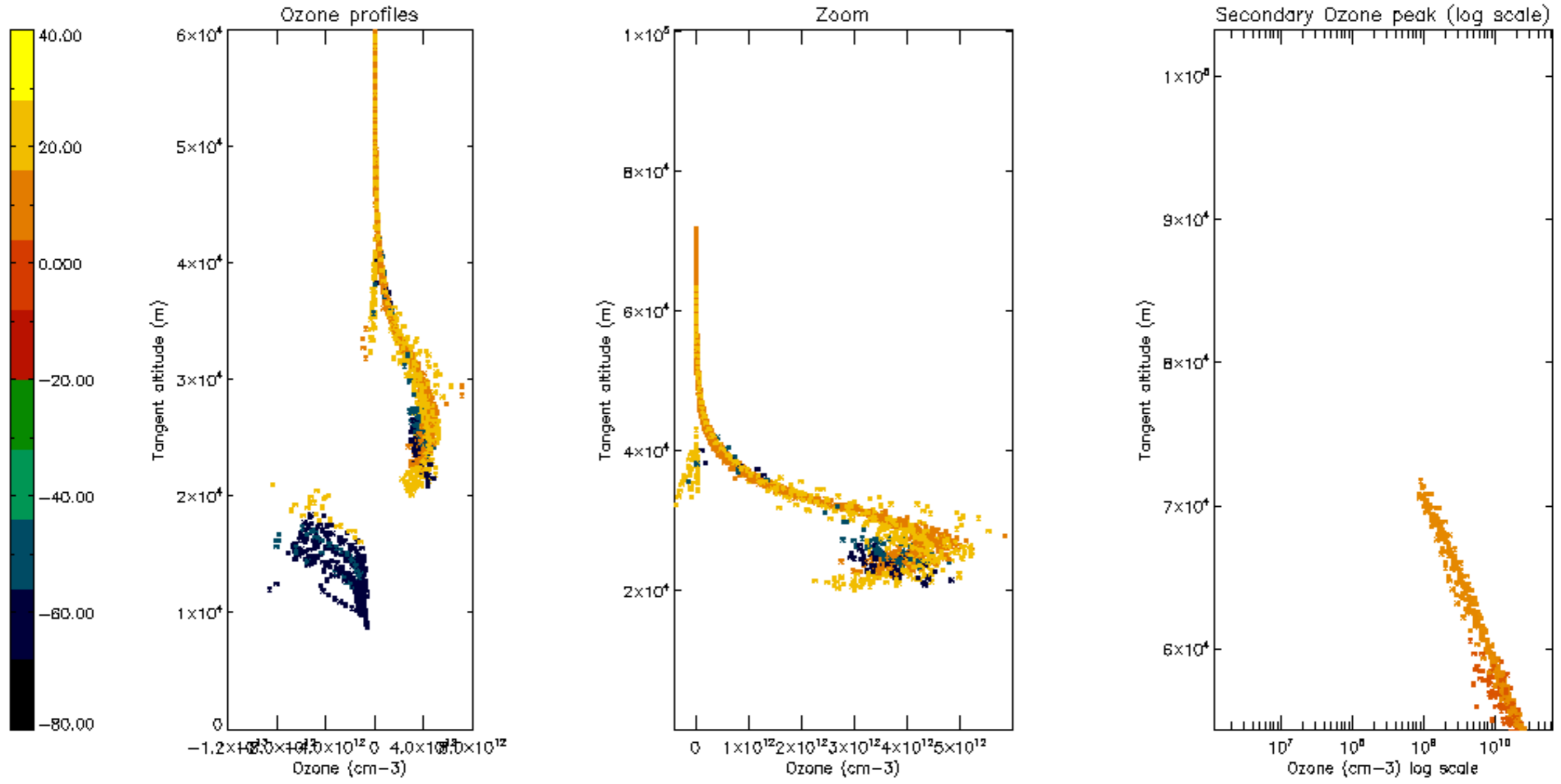


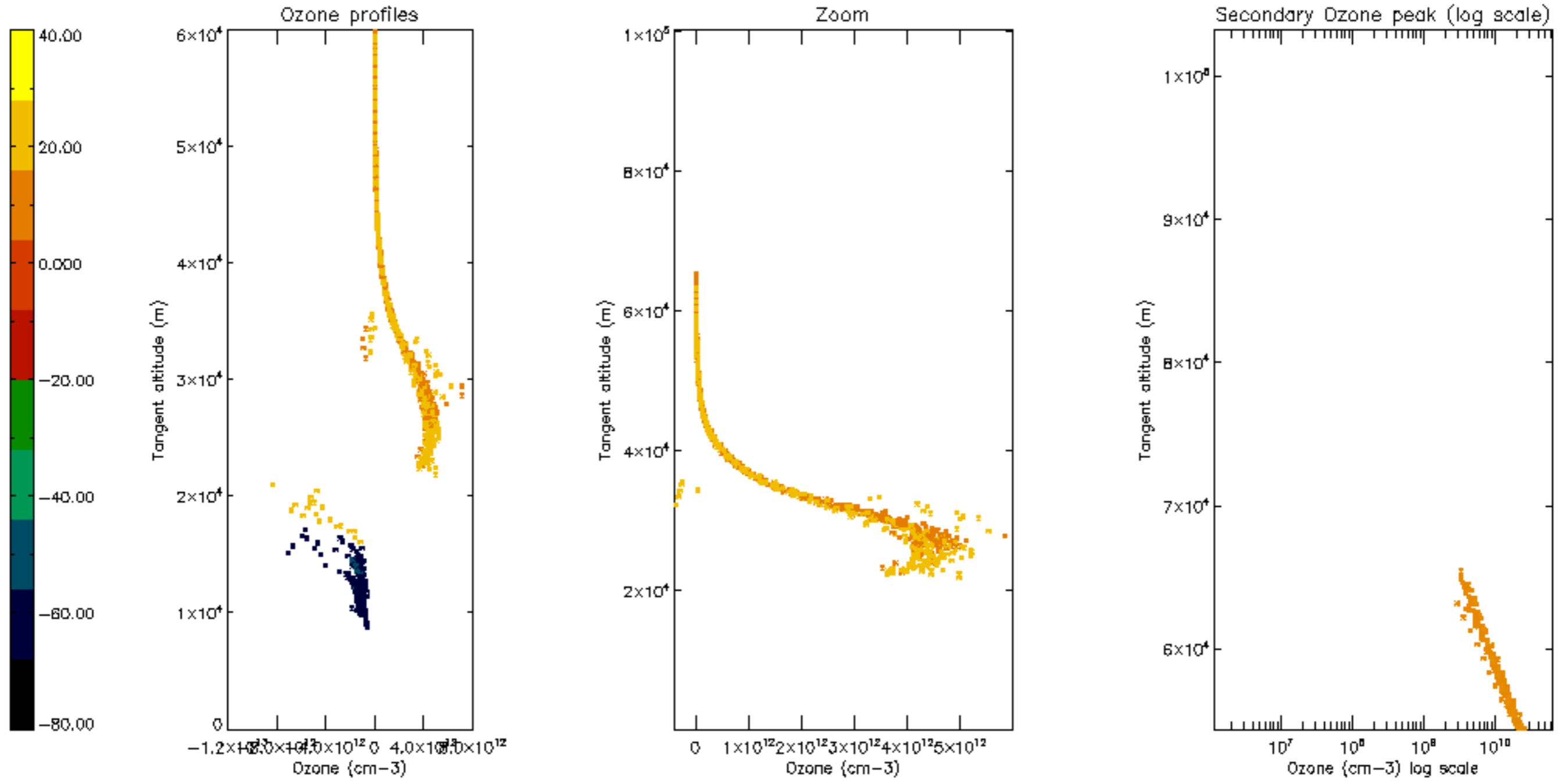
Percentage of saturation errors per profile

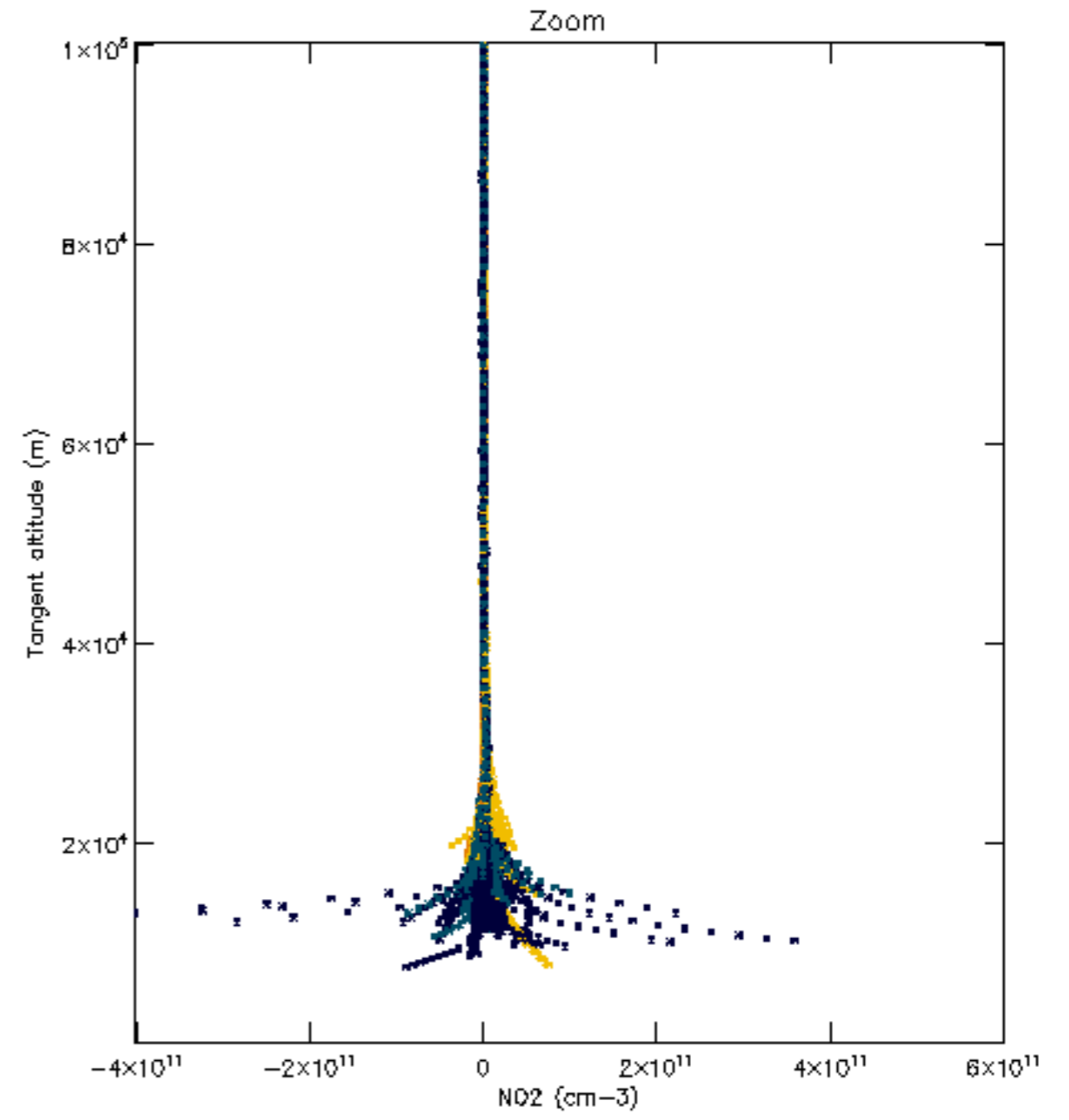
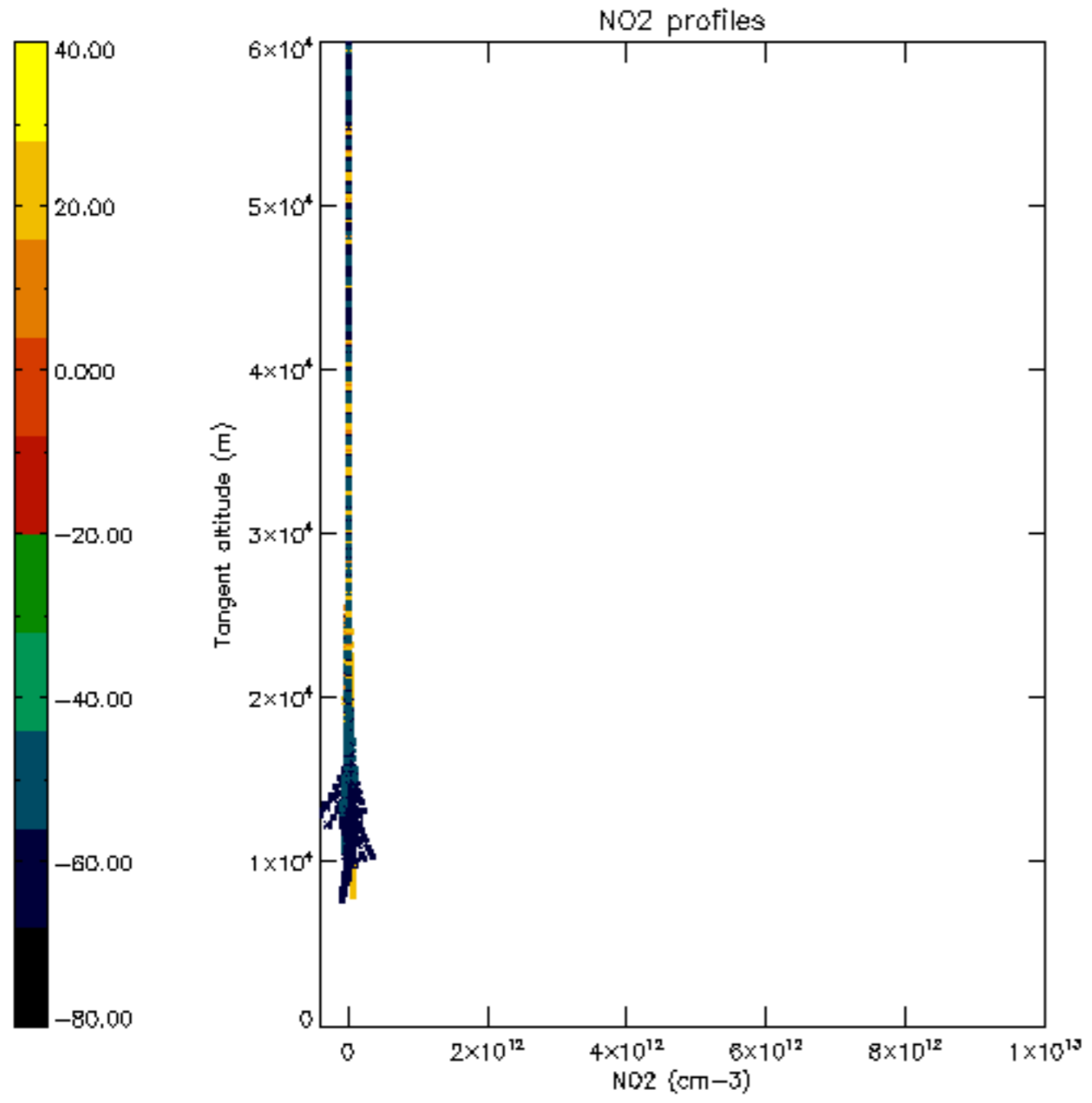


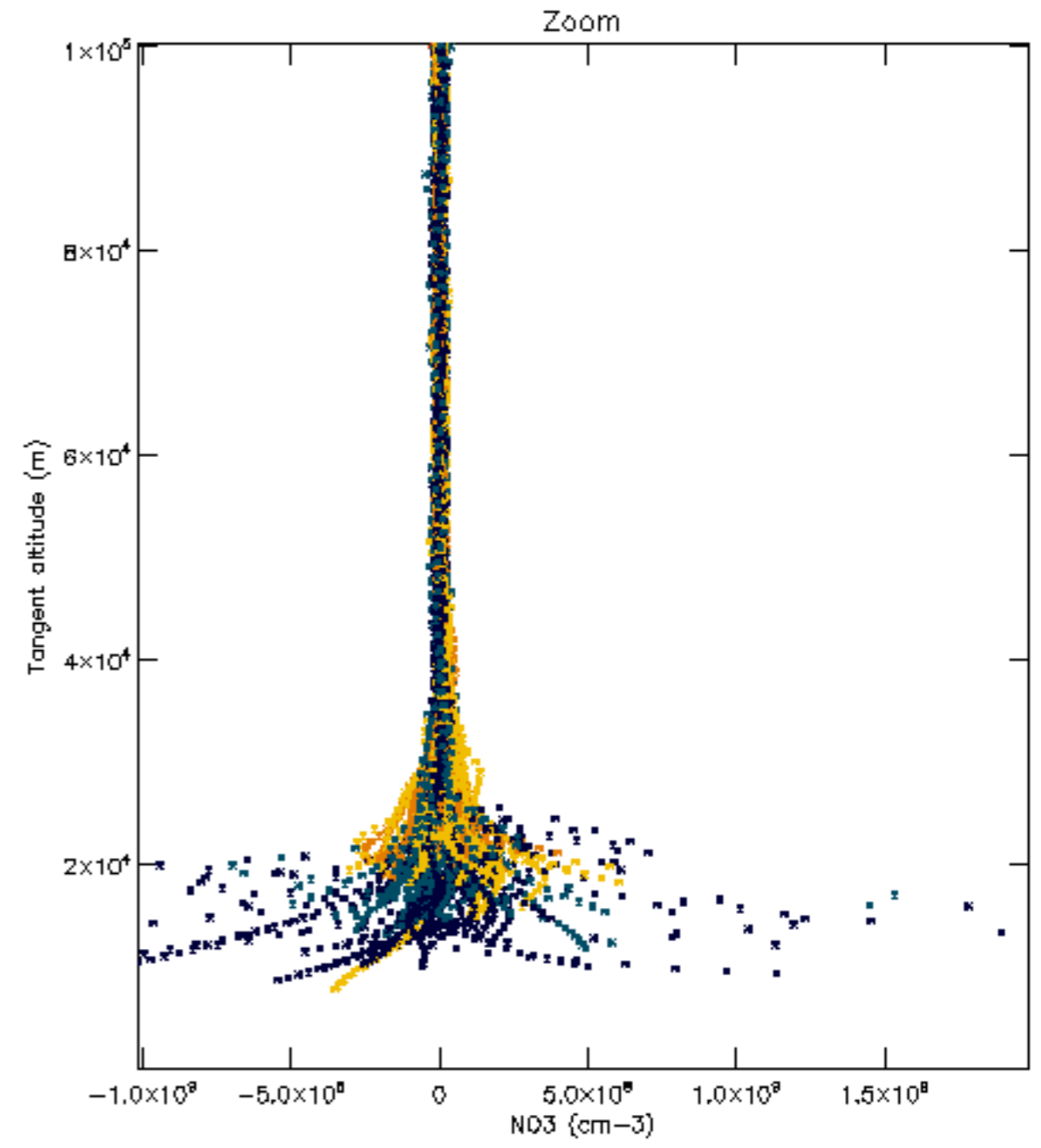
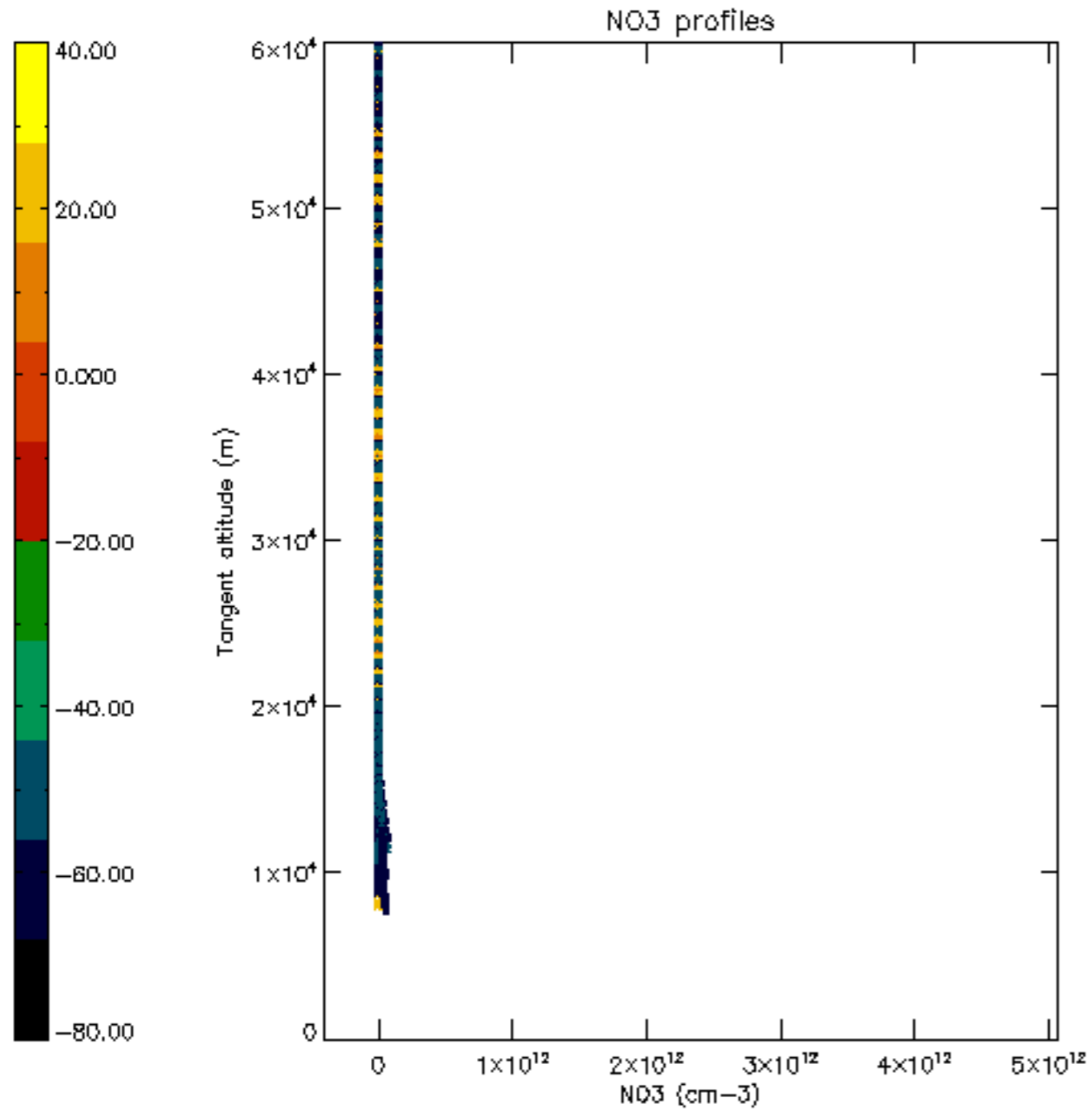


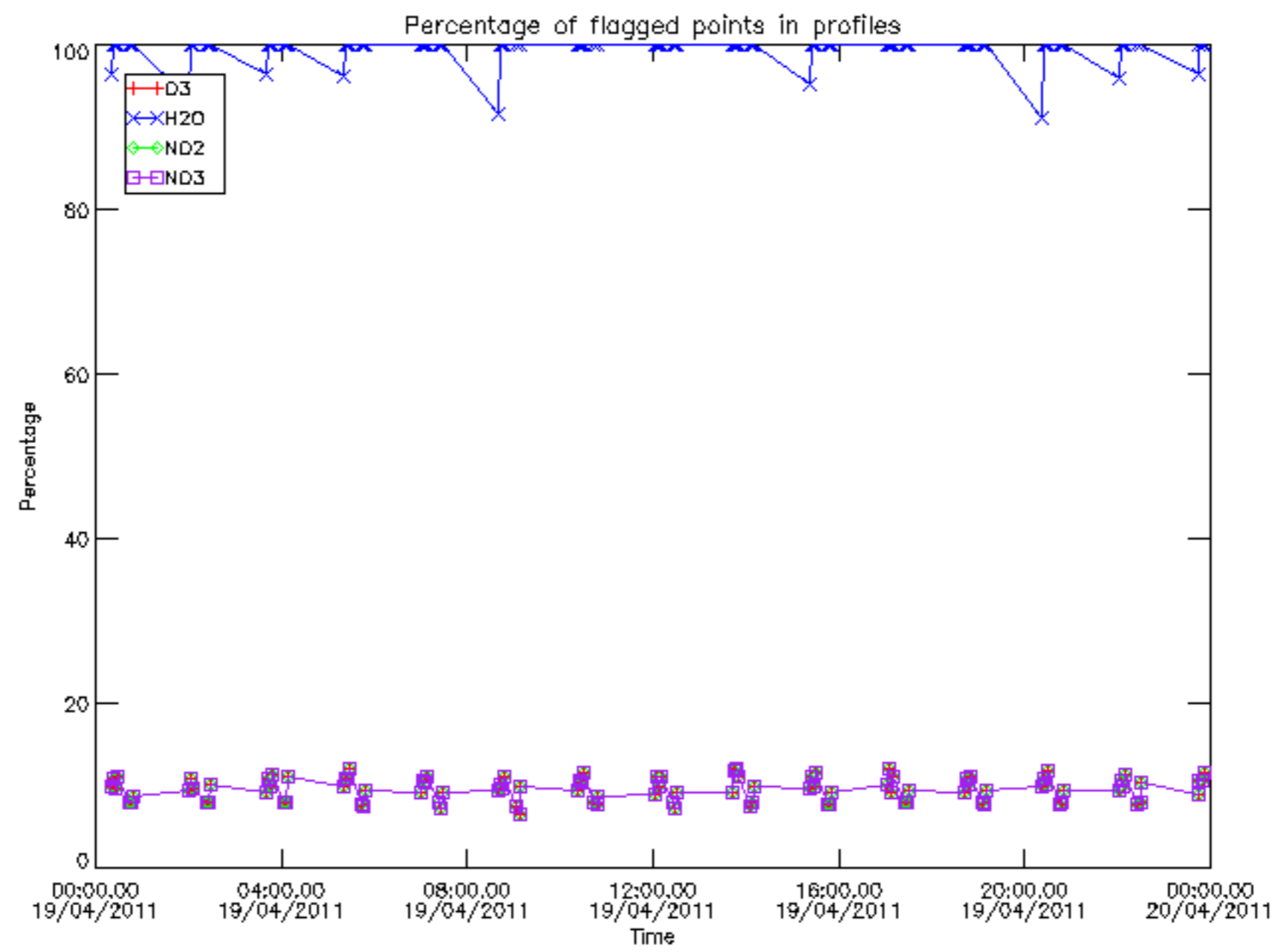




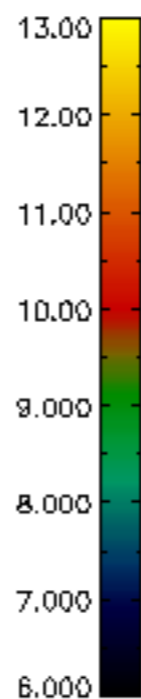
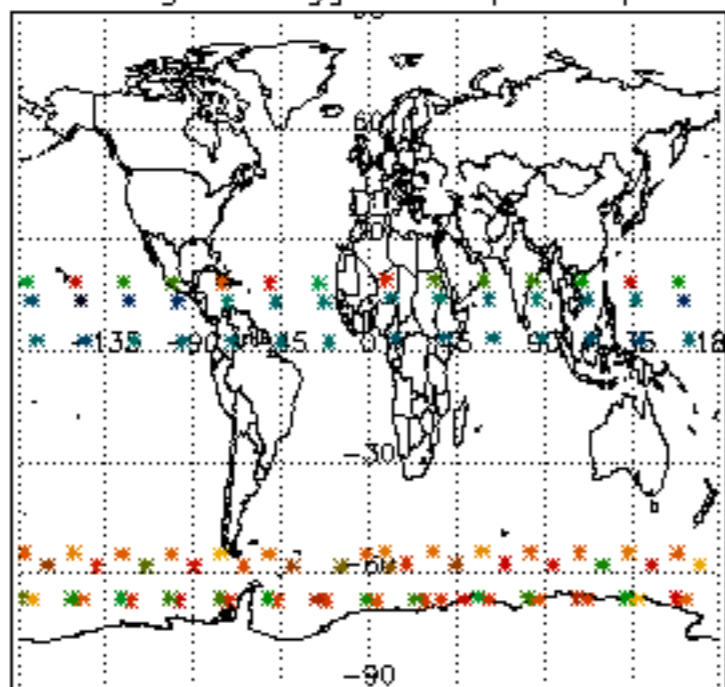




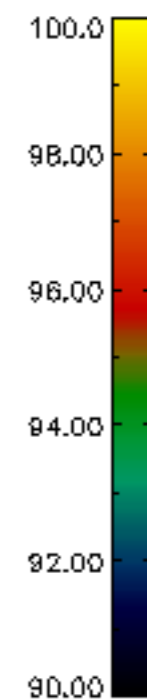
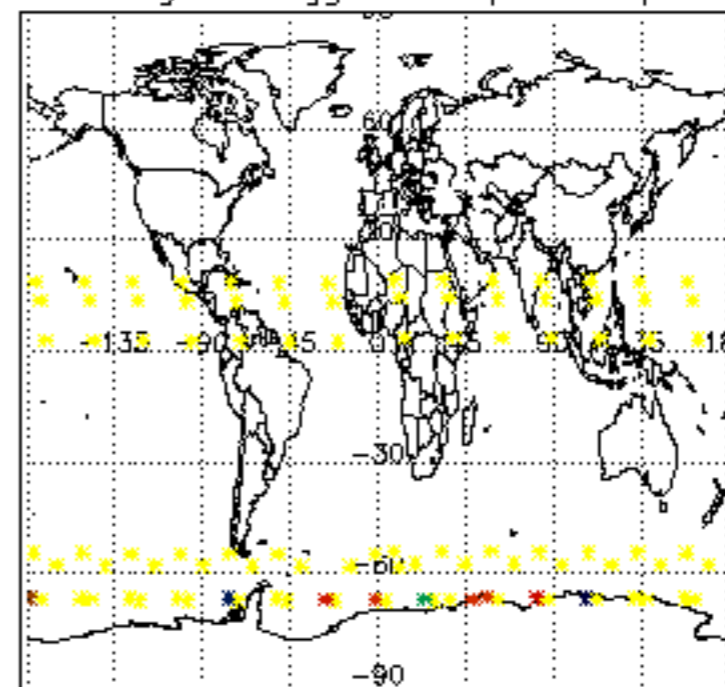




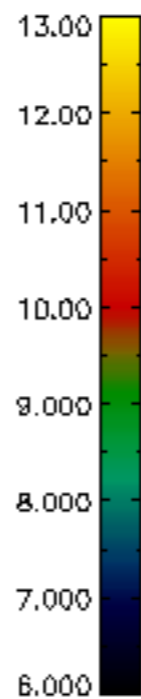
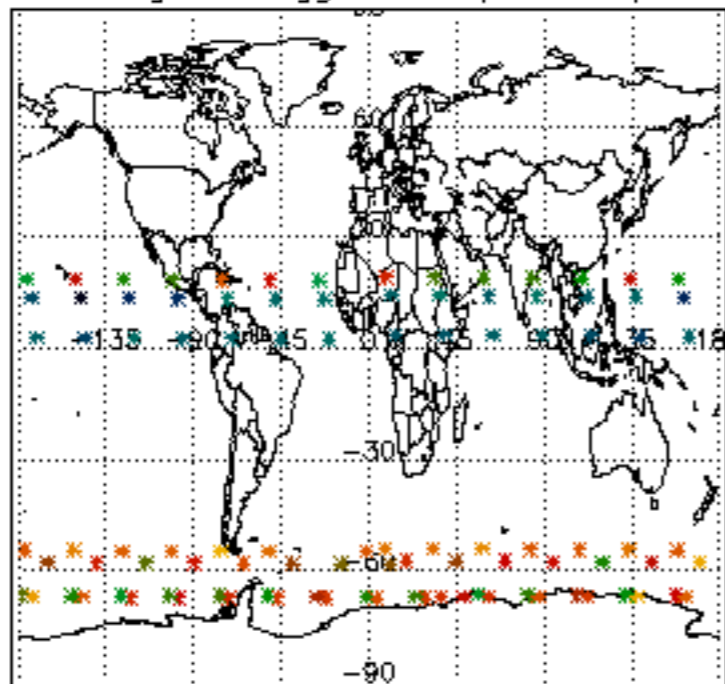
Percentage of flagged data per D3 profile



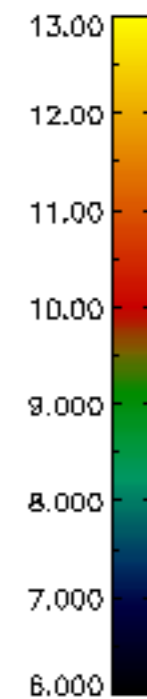
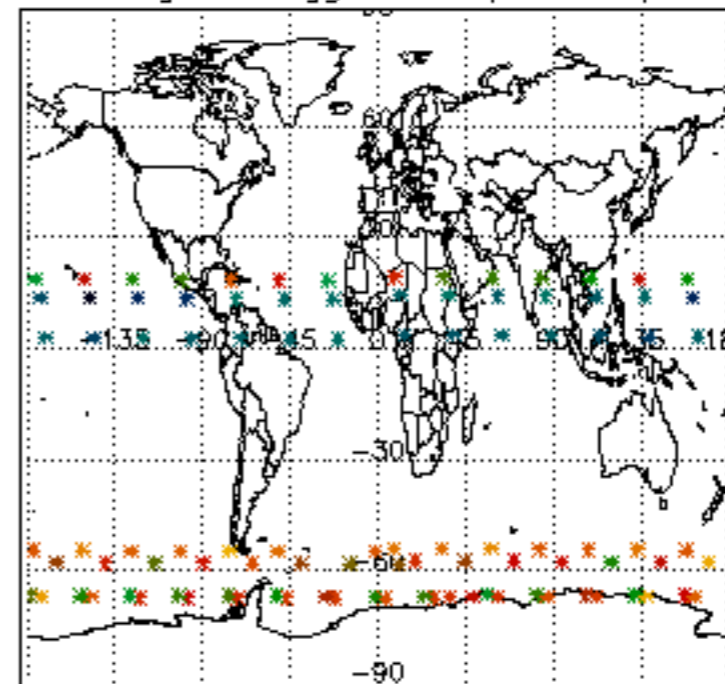
Percentage of flagged data per H2O profile

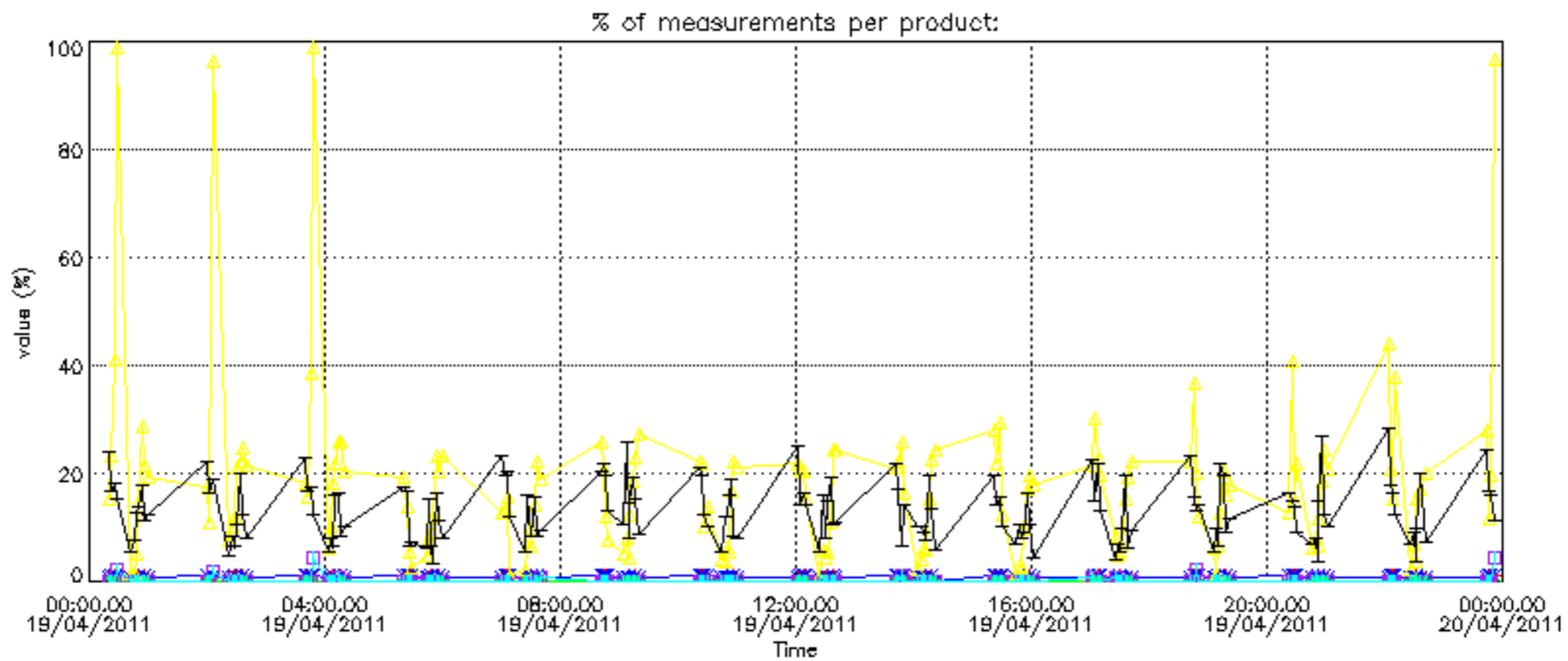


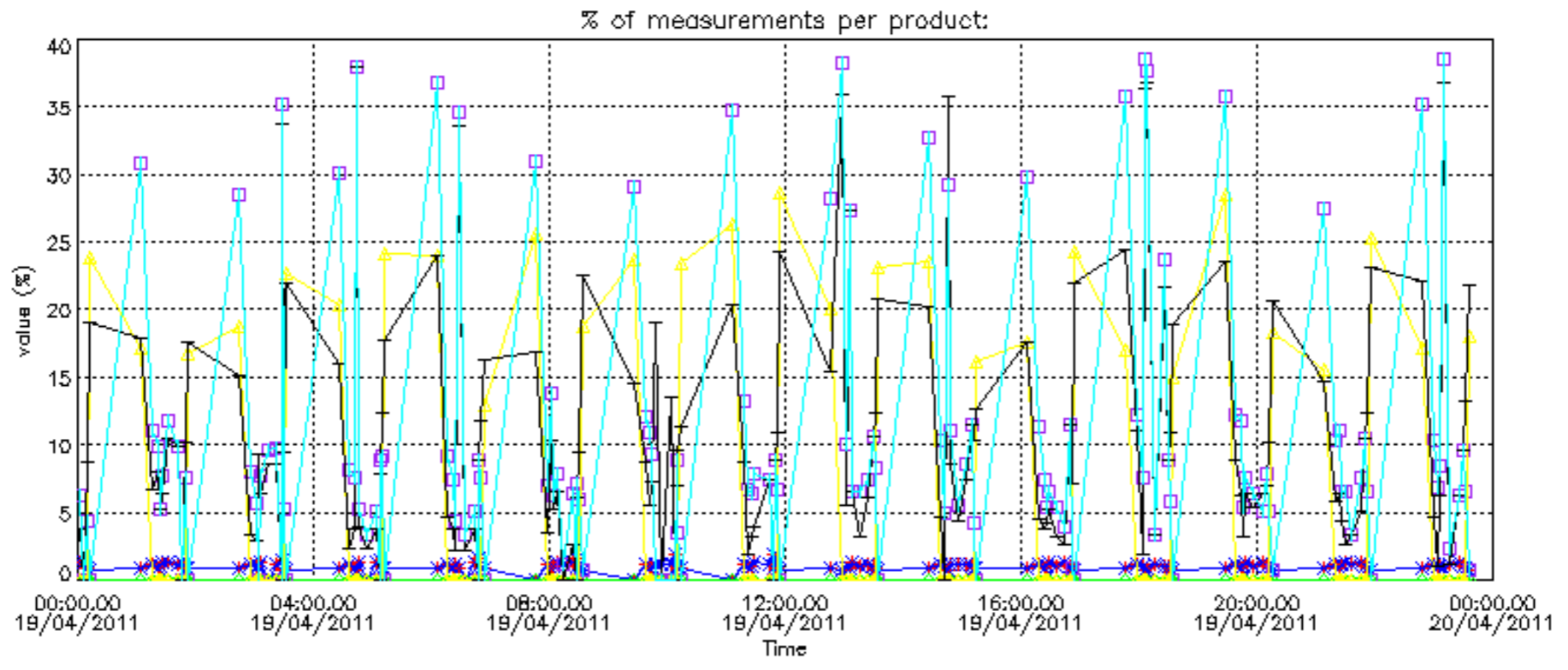
Percentage of flagged data per NO2 profile



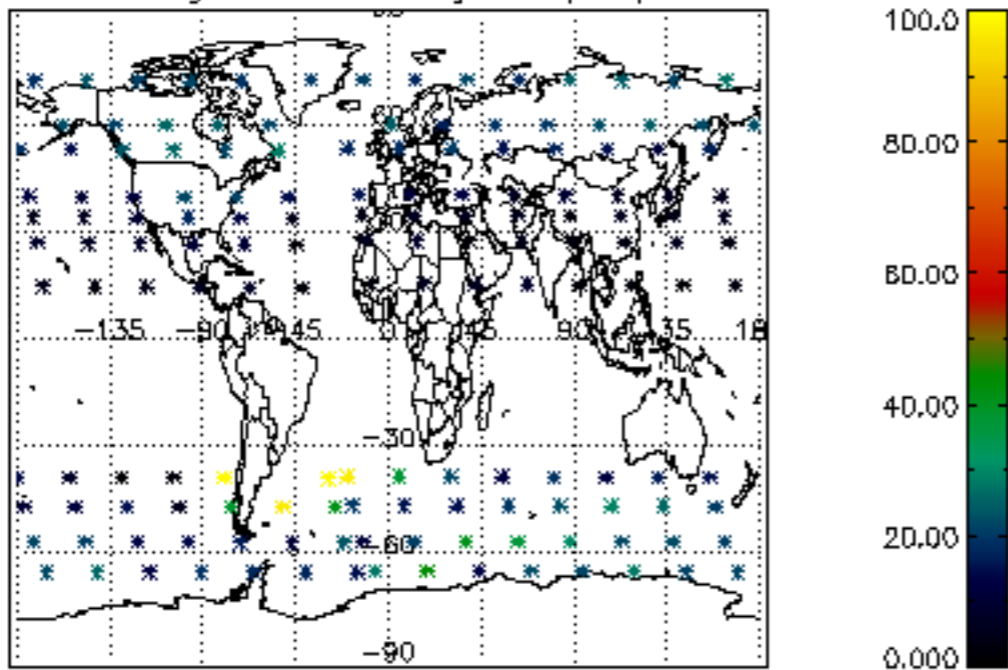
Percentage of flagged data per NO3 profile



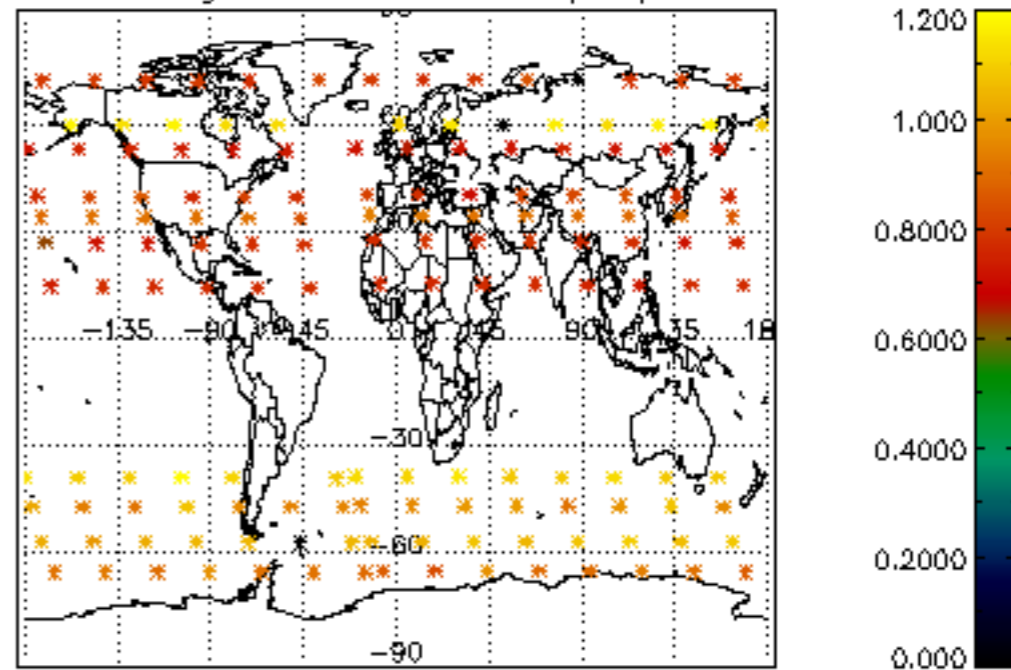




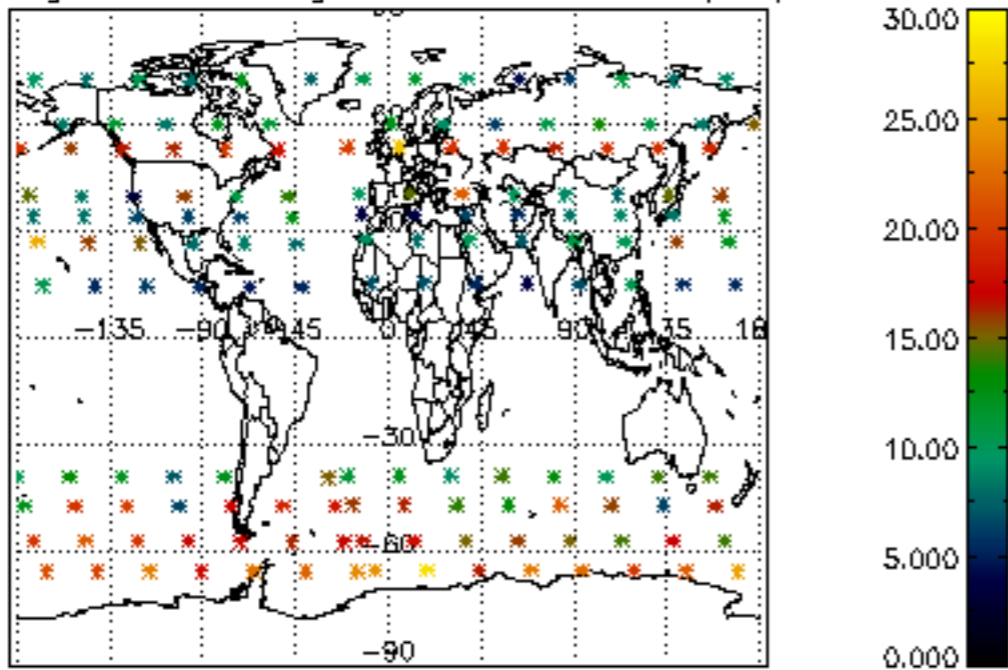
Percentage of cosmic ray hits per profile



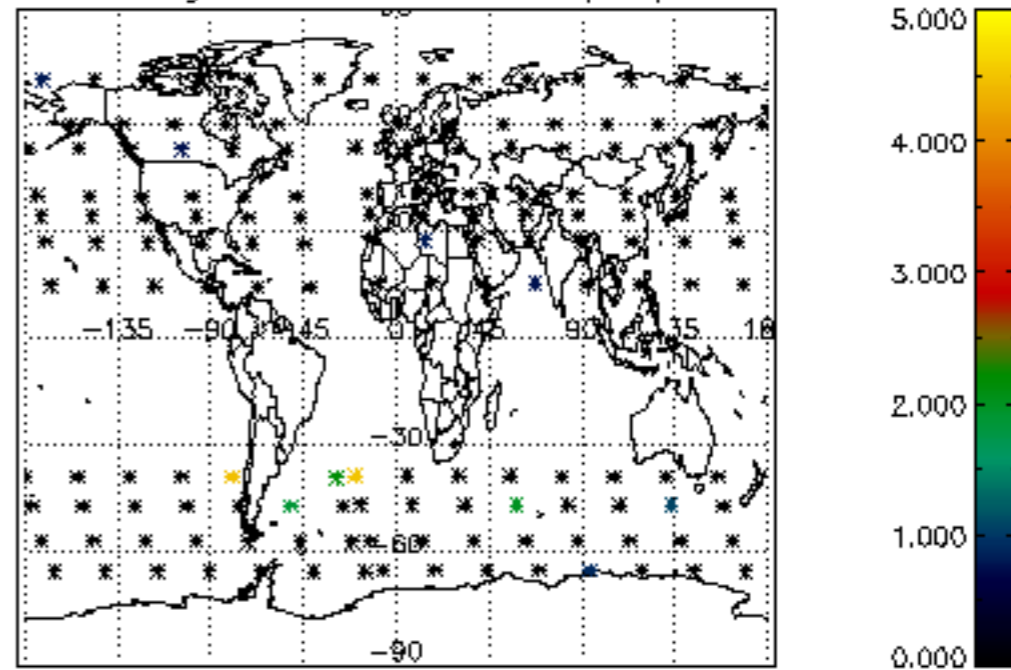
Percentage of datation errors per profile



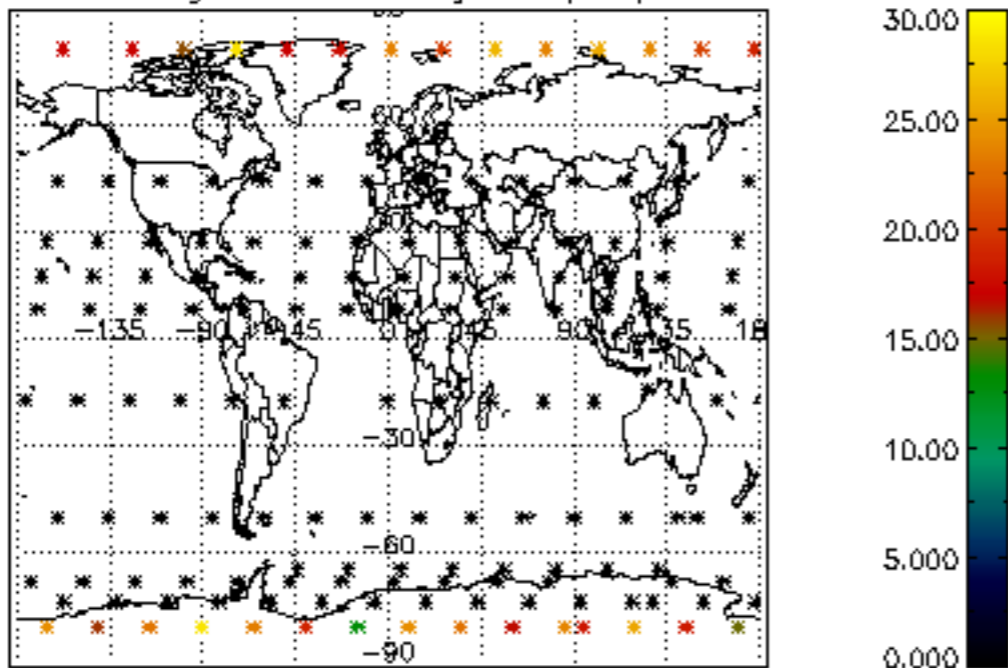
Percentage of star falling outside central band per profile



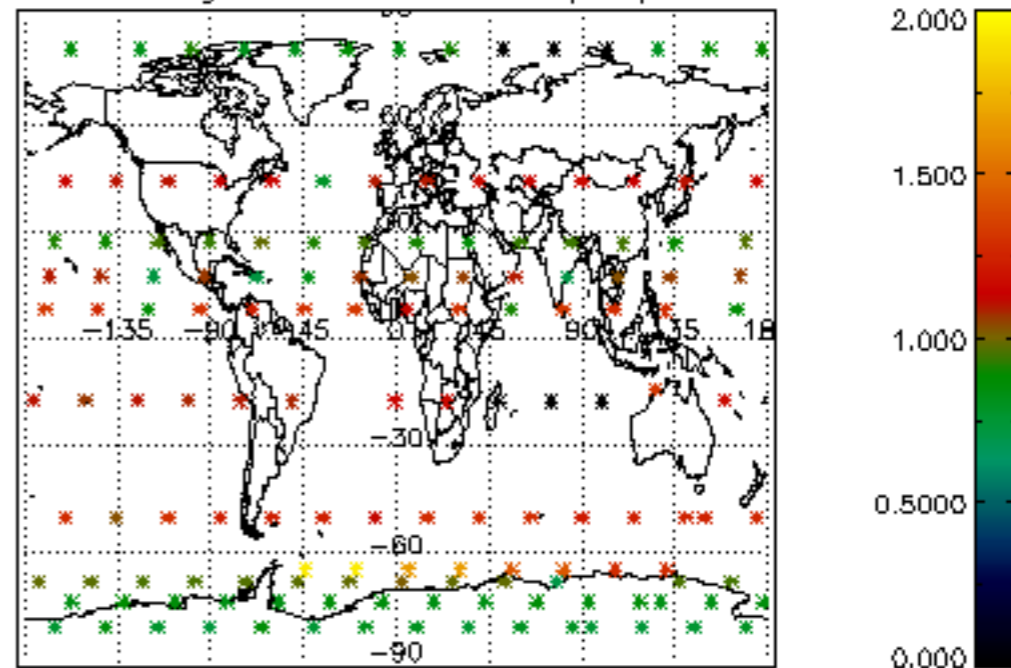
Percentage of saturation errors per profile



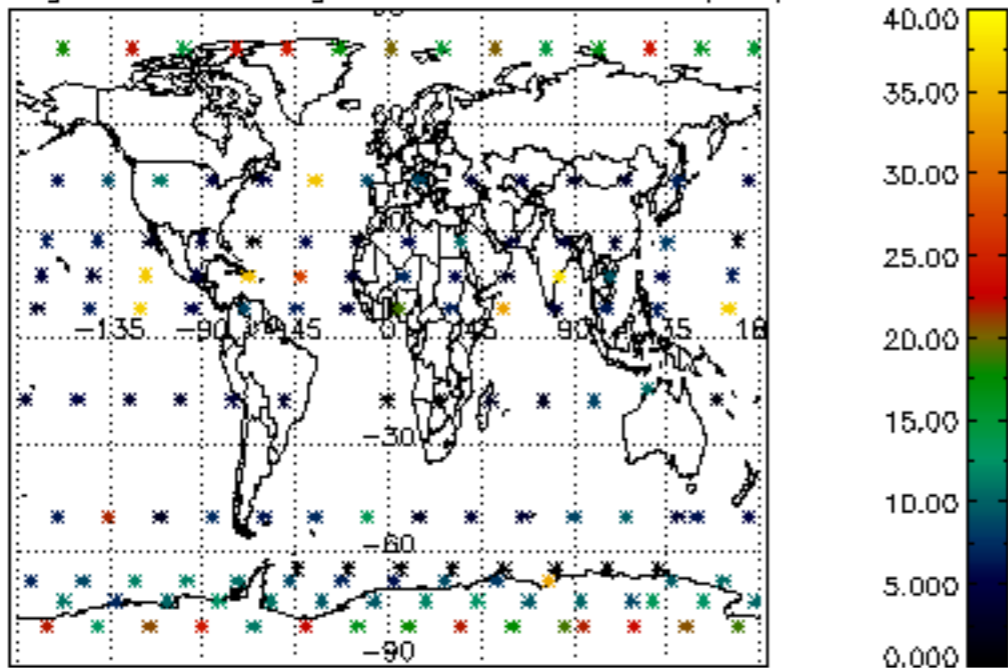
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

