

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	26APR2013 08:32:02
Data source version	GOMOS/6.01
Start time of products	31-03-2009 (31MAR2009 00:00:00)
Stop time of products	01-04-2009 (01APR2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	76
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

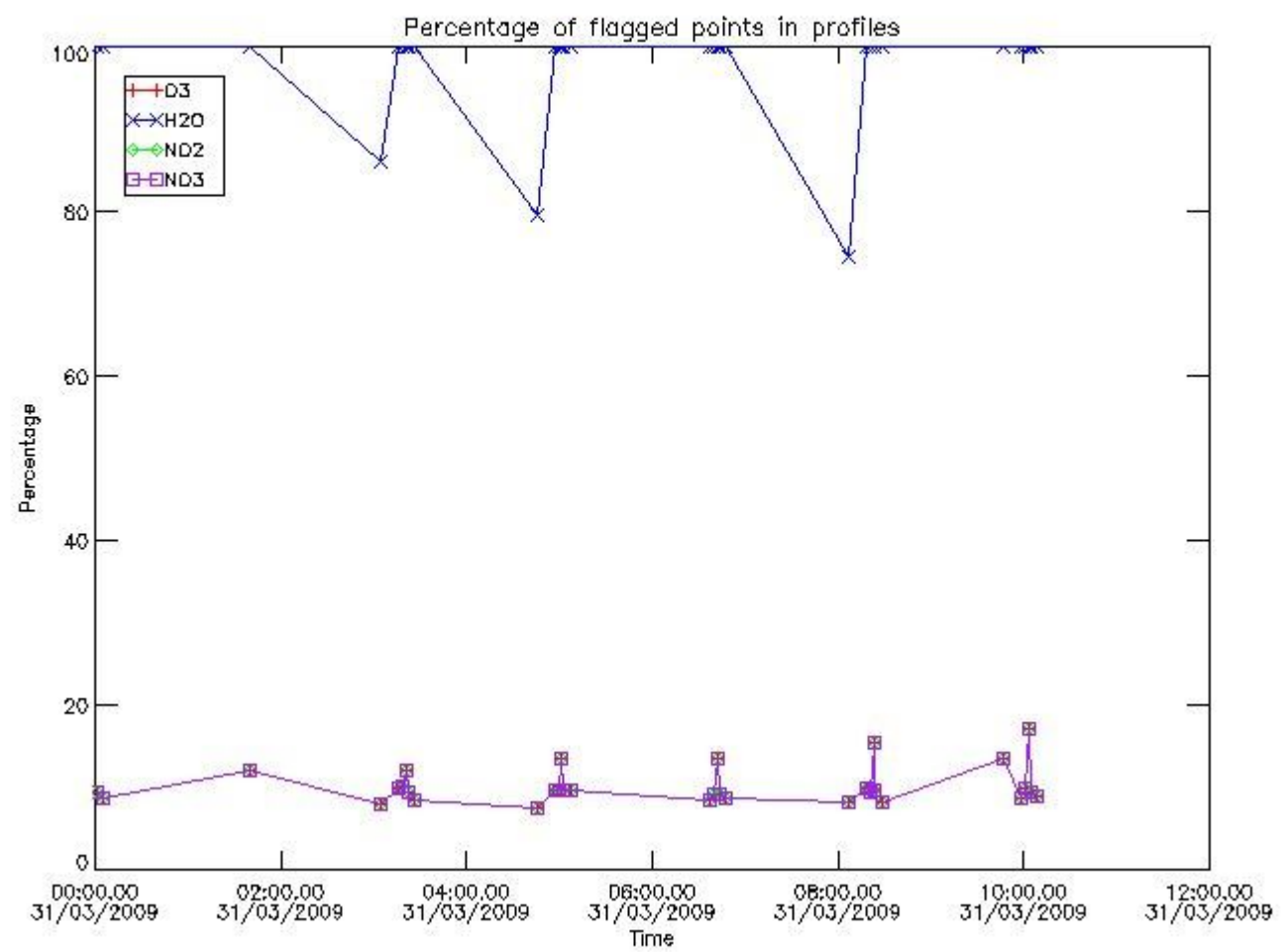
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090331_000059_000000552077_00403_37030_3329.N1	31-MAR-2009 00:00:59	Dark	54.500	38	20Eps Sgr	1.8360	11000.	109	37030	No
2	GOM_NL__2PRFIN20090331_000511_000000582077_00403_37030_3330.N1	31-MAR-2009 00:05:11	Dark	57.500	25	35Lam Sco	1.6200	28000.	115	37030	No
3	GOM_NL__2PRFIN20090331_014021_000000422077_00403_37030_3331.N1	31-MAR-2009 01:40:21	Dark	42.000	137	22Lam Sgr	2.8240	4400.0	84	37030	No
4	GOM_NL__2PRFIN20090331_021654_000000082077_00404_37031_3350.N1	31-MAR-2009 02:16:54	Straylight	8.0000	138	47Eps Vir	2.8280	4700.0	16	37031	No
5	GOM_NL__2PRFIN20090331_022531_000000292077_00404_37031_3351.N1	31-MAR-2009 02:25:31	Twi_and_stray	29.000	152	12Alp2CVn	2.8900	11000.	58	37031	No
6	GOM_NL__2PRFIN20090331_023924_000000232077_00404_37031_3352.N1	31-MAR-2009 02:39:24	Twi_and_stray	22.500	119	14Eta Dra	2.7270	4700.0	45	37031	No
7	GOM_NL__2PRFIN20090331_025046_000000182077_00404_37031_3353.N1	31-MAR-2009 02:50:46	Twi_and_stray	18.000	144	18Del Cyg	2.8600	11000.	36	37031	No
8	GOM_NL__2PRFIN20090331_025237_000000442077_00404_37031_3354.N1	31-MAR-2009 02:52:37	Bright	44.000	66	37Gam Cyg	2.2080	5900.0	88	37031	No
9	GOM_NL__2PRFIN20090331_025438_000000592077_00404_37031_3355.N1	31-MAR-2009 02:54:38	Bright	59.000	92	53Eps Cyg	2.5000	4500.0	118	37031	No
10	GOM_NL__2PRFIN20090331_030436_000000652077_00404_37031_3356.N1	31-MAR-2009 03:04:36	Dark	65.000	11	53Alp Aql	0.76500	8000.0	130	37031	No
11	GOM_NL__2PRFIN20090331_031626_000000572077_00404_37031_3357.N1	31-MAR-2009 03:16:26	Dark	57.000	155	41Pi Sgr	2.9000	6600.0	114	37031	No
12	GOM_NL__2PRFIN20090331_031838_000000552077_00404_37031_3358.N1	31-MAR-2009 03:18:38	Dark	55.000	57	34Sig Sgr	2.0660	26000.	110	37031	No
13	GOM_NL__2PRFIN20090331_032058_000000422077_00404_37031_3359.N1	31-MAR-2009 03:20:58	Dark	42.000	137	22Lam Sgr	2.8240	4400.0	84	37031	No
14	GOM_NL__2PRFIN20090331_032213_000000552077_00405_37032_3363.N1	31-MAR-2009 03:22:13	Dark	54.500	38	20Eps Sgr	1.8360	11000.	109	37032	No
15	GOM_NL__2PRFIN20090331_032625_000000612077_00405_37032_3364.N1	31-MAR-2009 03:26:25	Dark	61.000	25	35Lam Sco	1.6200	28000.	122	37032	No
16	GOM_NL__2PRFIN20090331_033417_000000502077_00405_37032_3365.N1	31-MAR-2009 03:34:17	Straylight	49.500	131	Gam Lup	2.8000	26000.	99	37032	No
17	GOM_NL__2PRFIN20090331_034507_000000242077_00405_37032_3366.N1	31-MAR-2009 03:45:07	Straylight	24.000	169	46Gam Hya	2.9910	4700.0	48	37032	No
18	GOM_NL__2PRFIN20090331_035728_000000502077_00405_37032_3367.N1	31-MAR-2009 03:57:28	Bright	50.000	138	47Eps Vir	2.8280	4700.0	100	37032	No
19	GOM_NL__2PRFIN20090331_041959_000000482077_00405_37032_3368.N1	31-MAR-2009 04:19:59	Bright	47.500	119	14Eta Dra	2.7270	4700.0	95	37032	No
20	GOM_NL__2PRFIN20090331_043122_000000472077_00405_37032_3369.N1	31-MAR-2009 04:31:22	Bright	46.500	144	18Del Cyg	2.8600	11000.	93	37032	No
21	GOM_NL__2PRFIN20090331_043313_000000442077_00405_37032_3370.N1	31-MAR-2009 04:33:13	Bright	43.500	66	37Gam Cyg	2.2080	5900.0	87	37032	No
22	GOM_NL__2PRFIN20090331_043514_000000422077_00405_37032_3371.N1	31-MAR-2009 04:35:14	Bright	42.000	92	53Eps Cyg	2.5000	4500.0	84	37032	No
23	GOM_NL__2PRFIN20090331_044513_000000692077_00405_37032_3372.N1	31-MAR-2009 04:45:13	Dark	68.500	11	53Alp Aql	0.76500	8000.0	137	37032	No
24	GOM_NL__2PRFIN20090331_045704_000000542077_00405_37032_3373.N1	31-MAR-2009 04:57:04	Dark	53.500	155	41Pi Sgr	2.9000	6600.0	107	37032	No
25	GOM_NL__2PRFIN20090331_045916_000000542077_00405_37032_3374.N1	31-MAR-2009 04:59:16	Dark	53.500	57	34Sig Sgr	2.0660	26000.	107	37032	No
26	GOM_NL__2PRFIN20090331_050135_000000382077_00405_37032_3375.N1	31-MAR-2009 05:01:35	Dark	38.000	137	22Lam Sgr	2.8240	4400.0	76	37032	No
27	GOM_NL__2PRFIN20090331_050251_000000532077_00406_37033_3379.N1	31-MAR-2009 05:02:51	Dark	53.000	38	20Eps Sgr	1.8360	11000.	106	37033	No
28	GOM_NL__2PRFIN20090331_050703_000000582077_00406_37033_3380.N1	31-MAR-2009 05:07:03	Dark	58.000	25	35Lam Sco	1.6200	28000.	116	37033	No
29	GOM_NL__2PRFIN20090331_051454_000000502077_00406_37033_3381.N1	31-MAR-2009 05:14:54	Straylight	50.000	131	Gam Lup	2.8000	26000.	100	37033	No
30	GOM_NL__2PRFIN20090331_051726_000000442077_00406_37033_3382.N1	31-MAR-2009 05:17:26	Straylight	43.500	81	Eta Cen	2.3560	28000.	87	37033	No
31	GOM_NL__2PRFIN20090331_052011_000000442077_00406_37033_3383.N1	31-MAR-2009 05:20:11	Straylight	44.000	54	5The Cen	2.0550	4500.0	88	37033	No
32	GOM_NL__2PRFIN20090331_053005_000000672077_00406_37033_3384.N1	31-MAR-2009 05:30:05	Bright	67.000	15	67Alp Vir	0.97600	28000.	134	37033	No
33	GOM_NL__2PRFIN20090331_053321_000000462077_00406_37033_3385.N1	31-MAR-2009 05:33:21	Bright	46.000	121	29Gam Vir	2.7400	7200.0	92	37033	No
34	GOM_NL__2PRFIN20090331_054642_000000442077_00406_37033_3386.N1	31-MAR-2009 05:46:42	Bright	43.500	152	12Alp2CVn	2.8900	11000.	87	37033	No
35	GOM_NL__2PRFIN20090331_055121_000000402077_00406_37033_3387.N1	31-MAR-2009 05:51:21	Bright	39.500	32	77Eps UMa	1.7630	11000.	79	37033	No
36	GOM_NL__2PRFIN20090331_060035_000000472077_00406_37033_3388.N1	31-MAR-2009 06:00:35	Bright	46.500	119	14Eta Dra	2.7270	4700.0	93	37033	No
37	GOM_NL__2PRFIN20090331_061158_000000672077_00406_37033_3389.N1	31-MAR-2009 06:11:58	Bright	67.000	144	18Del Cyg	2.8600	11000.	134	37033	No
38	GOM_NL__2PRFIN20090331_061350_000000422077_00406_37033_3390.N1	31-MAR-2009 06:13:50	Bright	41.500	66	37Gam Cyg	2.2080	5900.0	83	37033	No
39	GOM_NL__2PRFIN20090331_061550_000000452077_00406_37033_3391.N1	31-MAR-2009 06:15:50	Bright	45.000	92	53Eps Cyg	2.5000	4500.0	90	37033	No
40	GOM_NL__2PRFIN20090331_063741_000000612077_00406_37033_3392.N1	31-MAR-2009 06:37:41	Dark	61.000	155	41Pi Sgr	2.9000	6600.0	122	37033	No
41	GOM_NL__2PRFIN20090331_063953_000000562077_00406_37033_3393.N1	31-MAR-2009 06:39:53	Dark	56.000	57	34Sig Sgr	2.0660	26000.	112	37033	No
42	GOM_NL__2PRFIN20090331_064213_000000382077_00406_37033_3394.N1	31-MAR-2009 06:42:13	Dark	38.000	137	22Lam Sgr	2.8240	4400.0	76	37033	No

43	GOM_NL__2PRFIN20090331_064328_000000562077_00407_37034_3393.N1	31-MAR-2009 06:43:28	Dark	56.000	38	20Eps Sgr	1.8360	11000.	112	37034	No
44	GOM_NL__2PRFIN20090331_064740_000000582077_00407_37034_3394.N1	31-MAR-2009 06:47:40	Dark	58.000	25	35Lam Sco	1.6200	28000.	116	37034	No
45	GOM_NL__2PRFIN20090331_065531_000000532077_00407_37034_3395.N1	31-MAR-2009 06:55:31	Straylight	53.000	131	Gam Lup	2.8000	26000.	106	37034	No
46	GOM_NL__2PRFIN20090331_070047_000000272077_00407_37034_3396.N1	31-MAR-2009 07:00:47	Straylight	26.500	54	5The Cen	2.0550	4500.0	53	37034	No
47	GOM_NL__2PRFIN20090331_070620_000000282077_00407_37034_3397.N1	31-MAR-2009 07:06:20	Straylight	27.500	169	46Gam Hya	2.9910	4700.0	55	37034	No
48	GOM_NL__2PRFIN20090331_071041_000000702077_00407_37034_3398.N1	31-MAR-2009 07:10:41	Bright	69.500	15	67Alp Vir	0.97600	28000.	139	37034	No
49	GOM_NL__2PRFIN20090331_071357_000000262077_00407_37034_3399.N1	31-MAR-2009 07:13:57	Tw_i_and_stray	25.500	121	29Gam Vir	2.7400	7200.0	51	37034	No
50	GOM_NL__2PRFIN20090331_071839_000000502077_00407_37034_3400.N1	31-MAR-2009 07:18:39	Bright	50.000	138	47Eps Vir	2.8280	4700.0	100	37034	No
51	GOM_NL__2PRFIN20090331_072717_000000442077_00407_37034_3401.N1	31-MAR-2009 07:27:17	Bright	44.000	152	12Alp2CVn	2.8900	11000.	88	37034	No
52	GOM_NL__2PRFIN20090331_073156_000000402077_00407_37034_3402.N1	31-MAR-2009 07:31:56	Bright	39.500	32	77Eps UMa	1.7630	11000.	79	37034	No
53	GOM_NL__2PRFIN20090331_074110_000000472077_00407_37034_3403.N1	31-MAR-2009 07:41:10	Bright	47.000	119	14Eta Dra	2.7270	4700.0	94	37034	No
54	GOM_NL__2PRFIN20090331_075233_000000452077_00407_37034_3404.N1	31-MAR-2009 07:52:33	Bright	45.000	144	18Del Cyg	2.8600	11000.	90	37034	No
55	GOM_NL__2PRFIN20090331_075426_000000442077_00407_37034_3405.N1	31-MAR-2009 07:54:26	Bright	44.000	66	37Gam Cyg	2.2080	5900.0	88	37034	No
56	GOM_NL__2PRFIN20090331_075626_000000432077_00407_37034_3406.N1	31-MAR-2009 07:56:26	Bright	42.500	92	53Eps Cyg	2.5000	4500.0	85	37034	No
57	GOM_NL__2PRFIN20090331_080626_000000632077_00407_37034_3407.N1	31-MAR-2009 08:06:26	Dark	63.000	11	53Alp Aql	0.76500	8000.0	126	37034	No
58	GOM_NL__2PRFIN20090331_081819_000000562077_00407_37034_3408.N1	31-MAR-2009 08:18:19	Dark	56.000	155	41Pi Sgr	2.9000	6600.0	112	37034	No
59	GOM_NL__2PRFIN20090331_082030_000000662077_00407_37034_3409.N1	31-MAR-2009 08:20:30	Dark	65.500	57	34Sig Sgr	2.0660	26000.	131	37034	No
60	GOM_NL__2PRFIN20090331_082251_000000332077_00407_37034_3410.N1	31-MAR-2009 08:22:51	Dark	33.000	137	22Lam Sgr	2.8240	4400.0	66	37034	No
61	GOM_NL__2PRFIN20090331_082405_000000532077_00408_37035_3407.N1	31-MAR-2009 08:24:05	Dark	52.500	38	20Eps Sgr	1.8360	11000.	105	37035	No
62	GOM_NL__2PRFIN20090331_082817_000000622077_00408_37035_3408.N1	31-MAR-2009 08:28:17	Dark	62.000	25	35Lam Sco	1.6200	28000.	124	37035	No
63	GOM_NL__2PRFIN20090331_083607_000000532077_00408_37035_3409.N1	31-MAR-2009 08:36:07	Straylight	52.500	131	Gam Lup	2.8000	26000.	105	37035	No
64	GOM_NL__2PRFIN20090331_084124_000000532077_00408_37035_3410.N1	31-MAR-2009 08:41:24	Straylight	52.500	54	5The Cen	2.0550	4500.0	105	37035	No
65	GOM_NL__2PRFIN20090331_085118_000000722077_00408_37035_3411.N1	31-MAR-2009 08:51:18	Bright	72.000	15	67Alp Vir	0.97600	28000.	144	37035	No
66	GOM_NL__2PRFIN20090331_085433_000000432077_00408_37035_3412.N1	31-MAR-2009 08:54:33	Bright	43.000	121	29Gam Vir	2.7400	7200.0	86	37035	No
67	GOM_NL__2PRFIN20090331_085914_000000512077_00408_37035_3413.N1	31-MAR-2009 08:59:14	Bright	51.000	138	47Eps Vir	2.8280	4700.0	102	37035	No
68	GOM_NL__2PRFIN20090331_090753_000000442077_00408_37035_3414.N1	31-MAR-2009 09:07:53	Bright	44.000	152	12Alp2CVn	2.8900	11000.	88	37035	No
69	GOM_NL__2PRFIN20090331_093309_000000312077_00408_37035_3415.N1	31-MAR-2009 09:33:09	Tw_i_and_stray	31.000	144	18Del Cyg	2.8600	11000.	62	37035	No
70	GOM_NL__2PRFIN20090331_094703_000000382077_00408_37035_3416.N1	31-MAR-2009 09:47:03	Dark	38.000	11	53Alp Aql	0.76500	8000.0	76	37035	No
71	GOM_NL__2PRFIN20090331_095855_000000592077_00408_37035_3417.N1	31-MAR-2009 09:58:55	Dark	58.500	155	41Pi Sgr	2.9000	6600.0	117	37035	No
72	GOM_NL__2PRFIN20090331_100108_000000572077_00408_37035_3418.N1	31-MAR-2009 10:01:08	Dark	57.000	57	34Sig Sgr	2.0660	26000.	114	37035	No
73	GOM_NL__2PRFIN20090331_100328_000000332077_00408_37035_3419.N1	31-MAR-2009 10:03:28	Dark	33.000	137	22Lam Sgr	2.8240	4400.0	66	37035	No
74	GOM_NL__2PRFIN20090331_100442_000000552077_00409_37036_3422.N1	31-MAR-2009 10:04:42	Dark	54.500	38	20Eps Sgr	1.8360	11000.	109	37036	No
75	GOM_NL__2PRFIN20090331_100855_000000572077_00409_37036_3423.N1	31-MAR-2009 10:08:55	Dark	57.000	25	35Lam Sco	1.6200	28000.	114	37036	No
76	GOM_NL__2PRFIN20090331_101644_000000512077_00409_37036_3424.N1	31-MAR-2009 10:16:44	Straylight	51.000	131	Gam Lup	2.8000	26000.	102	37036	No

3. Quality information per product

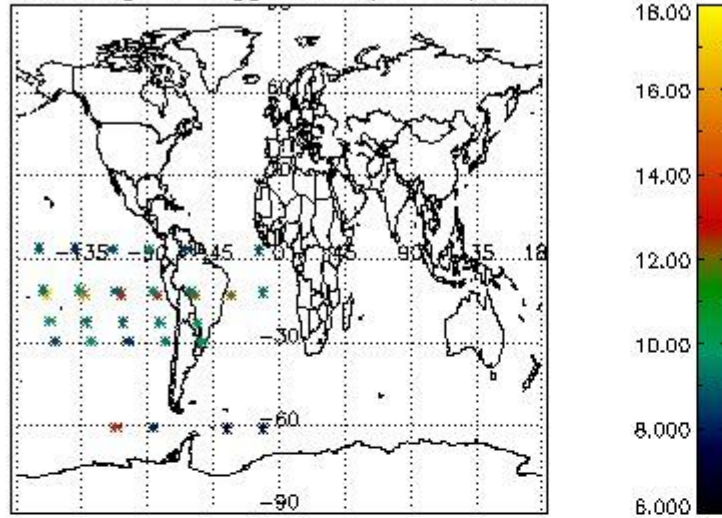
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

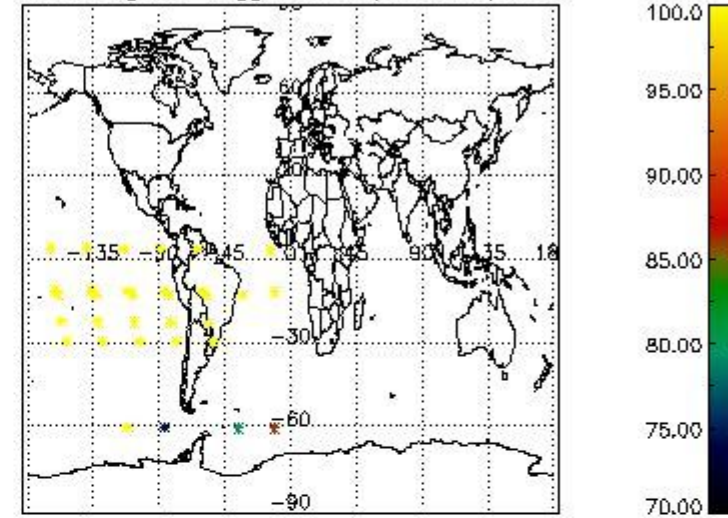


3.2 Plot quality information per product (world map)

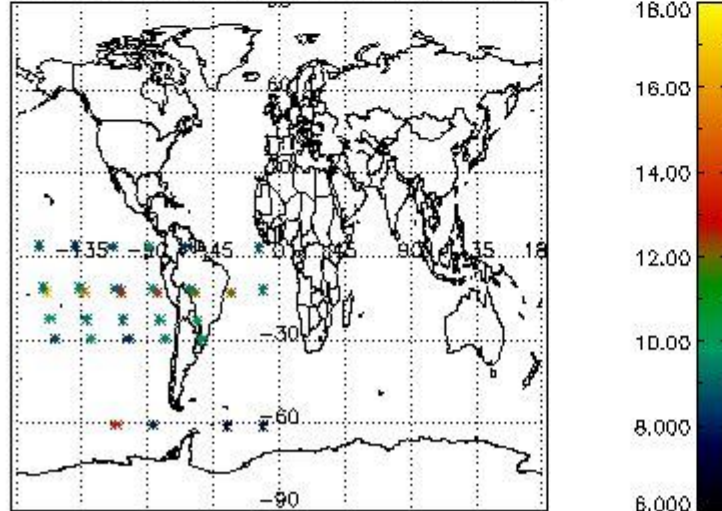
Percentage of flagged data per O3 profile



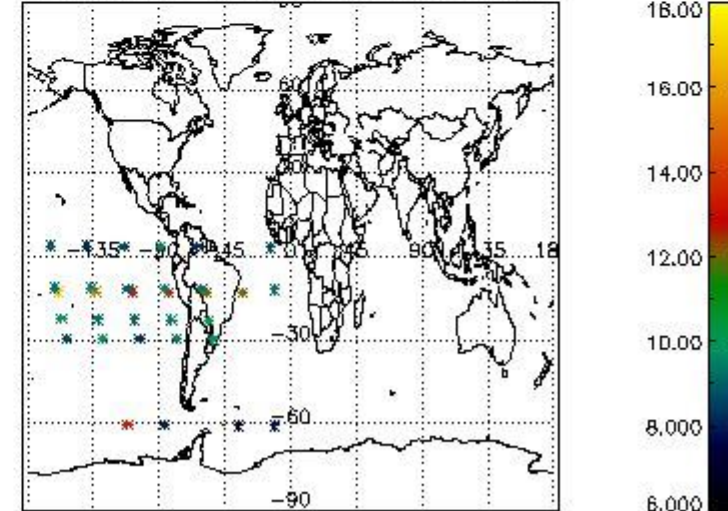
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

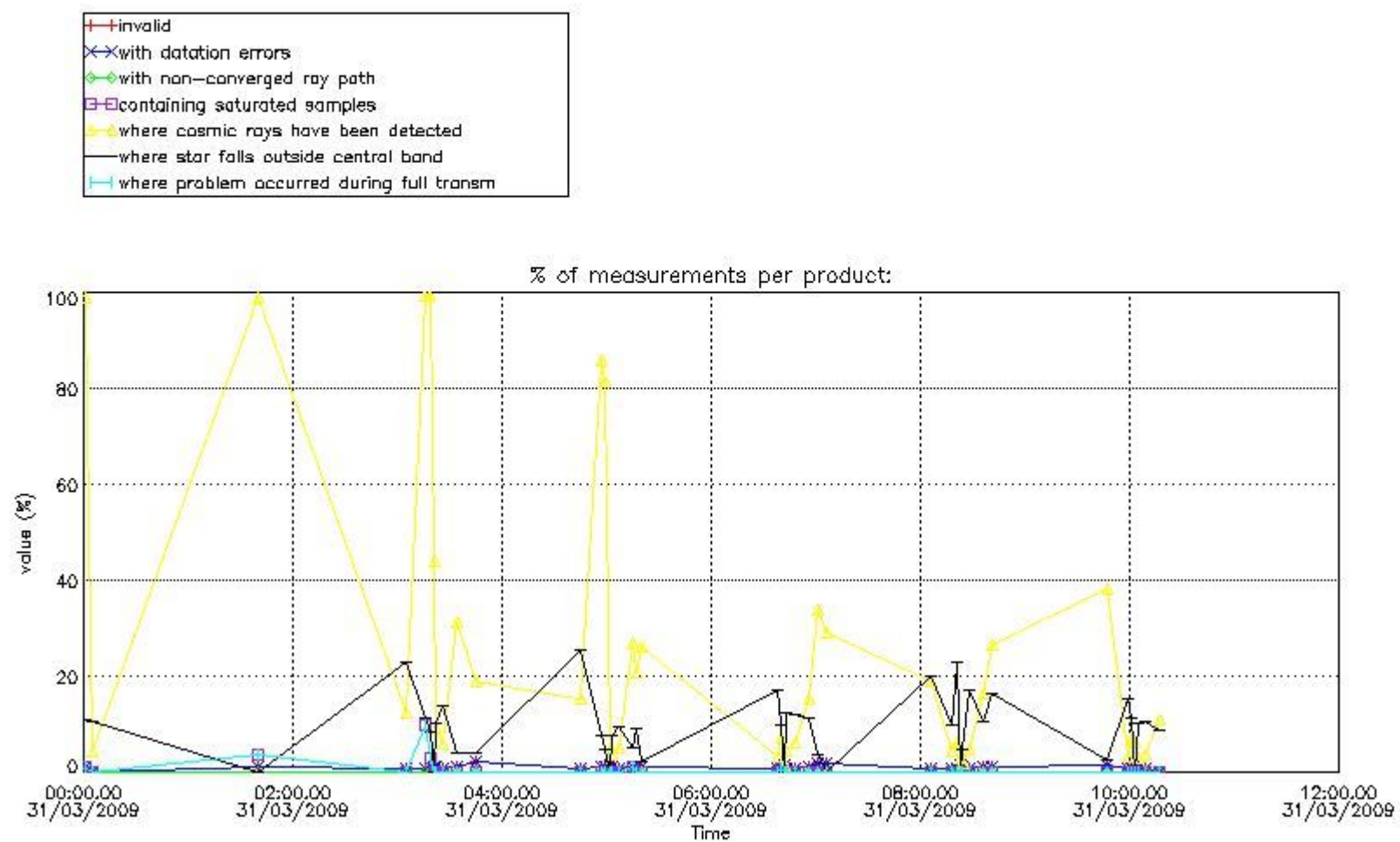


4. Level 1 quality information per product

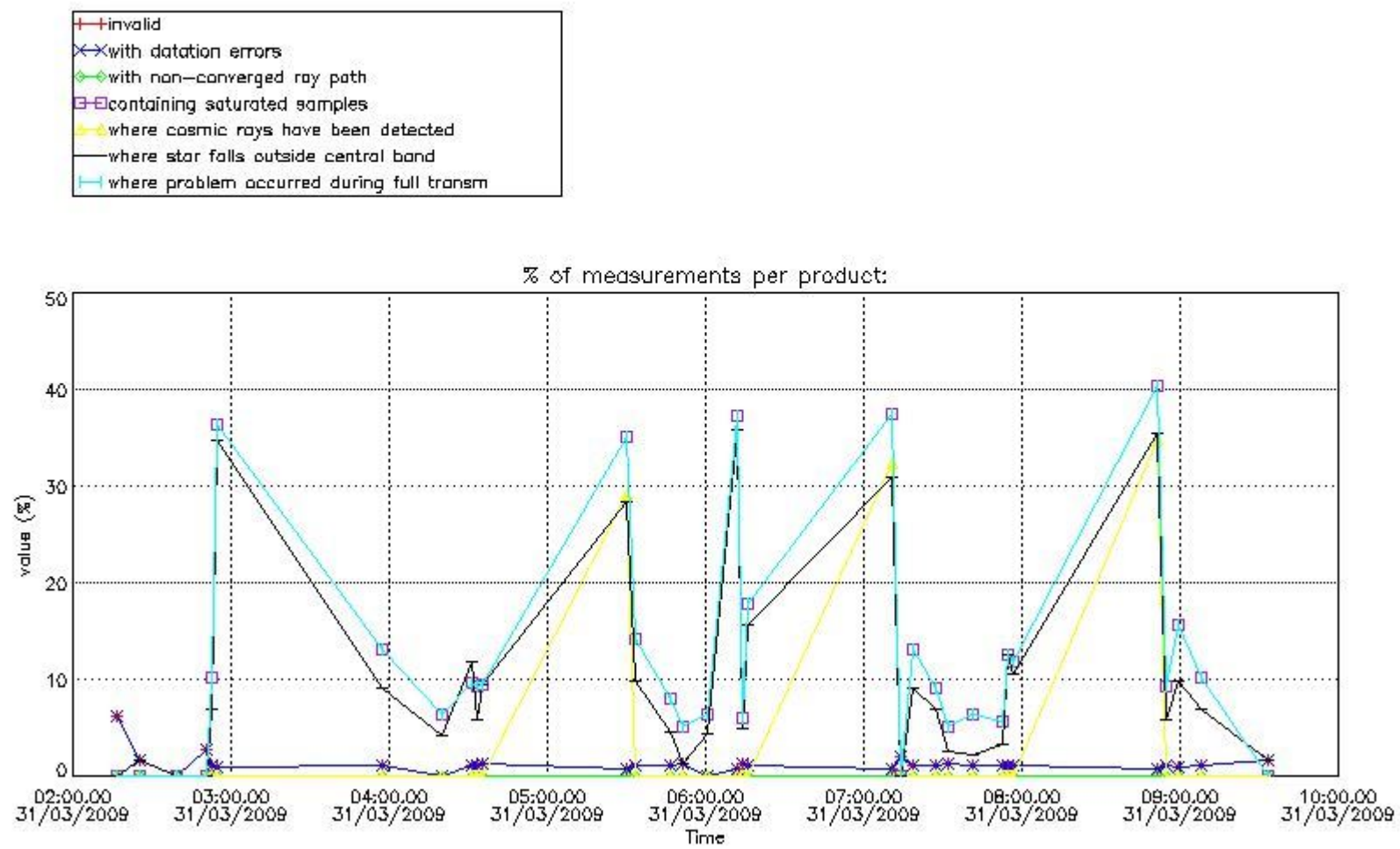
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

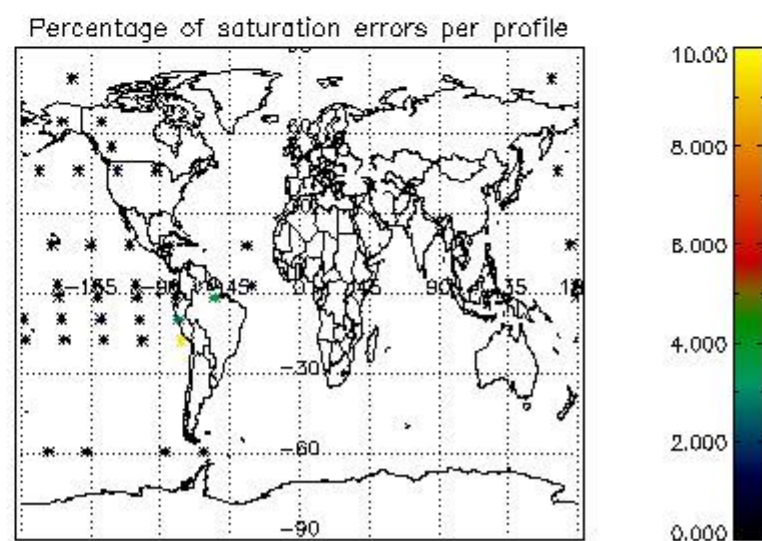
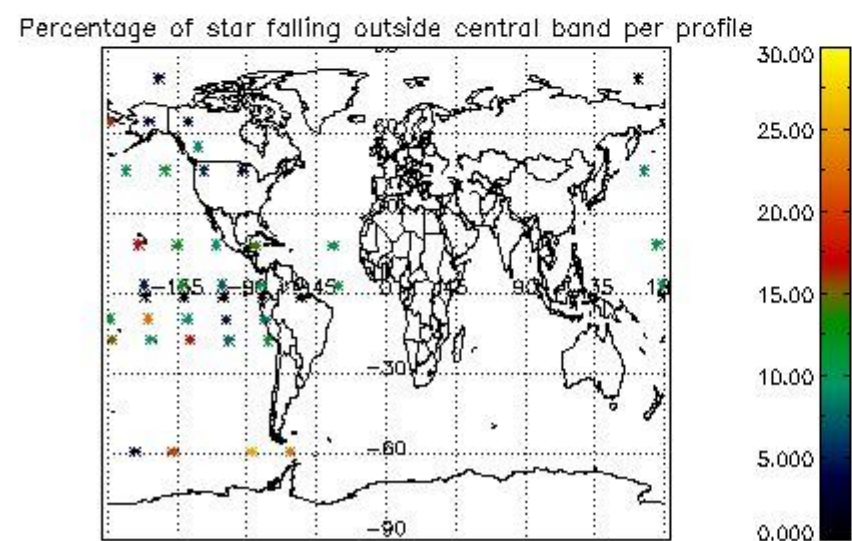
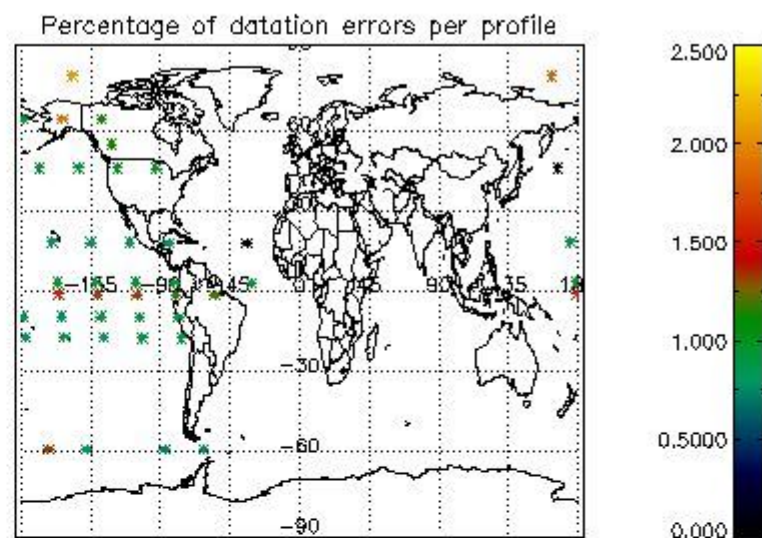
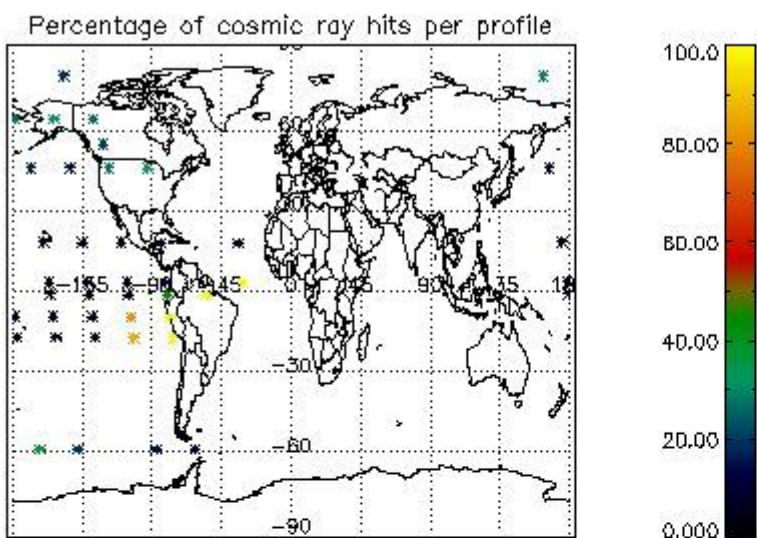


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



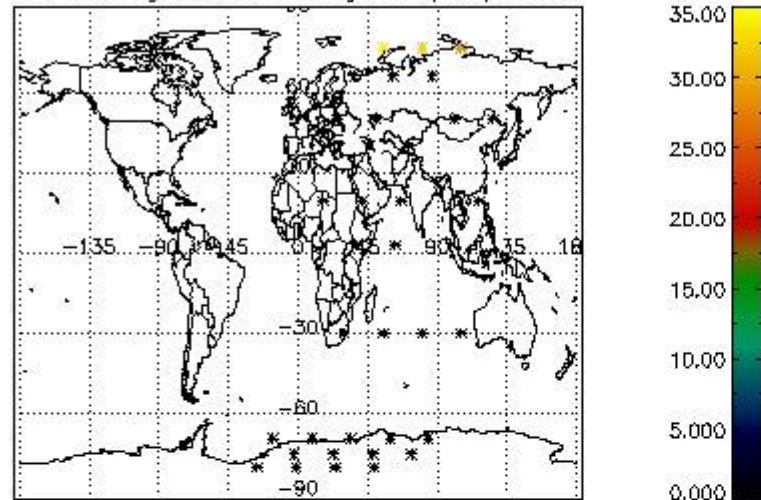
4.2 Plot quality information per product coming from level 1b processing (world map)

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

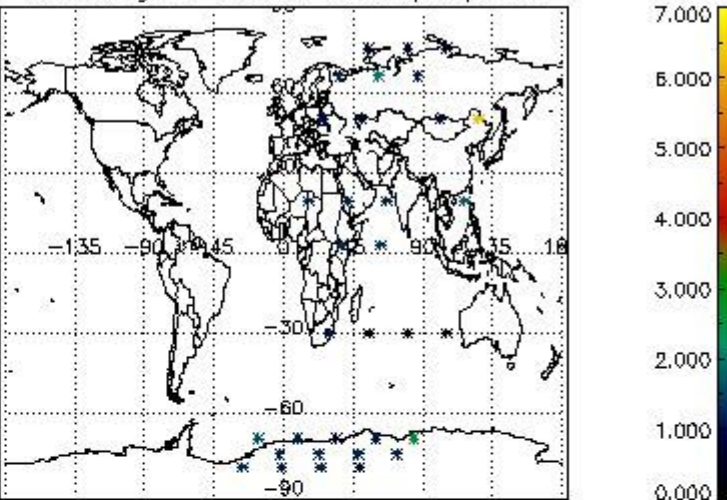


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

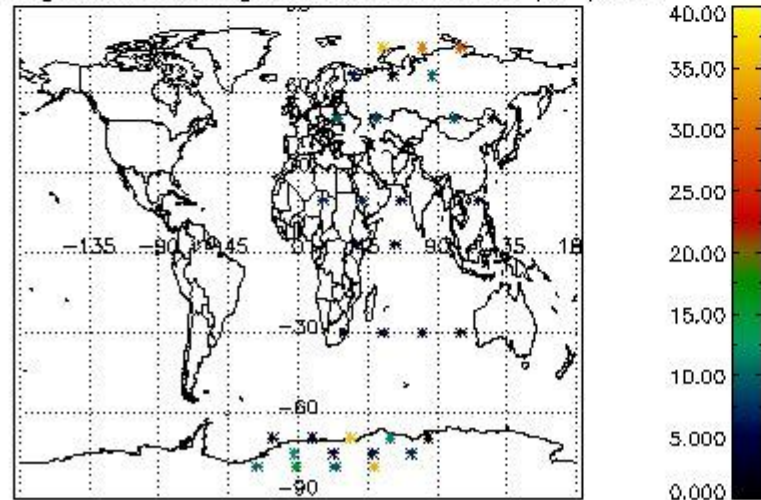
Percentage of cosmic ray hits per profile



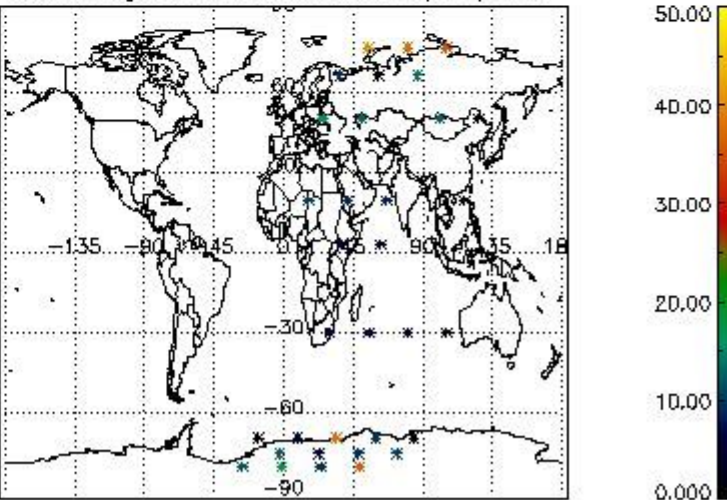
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

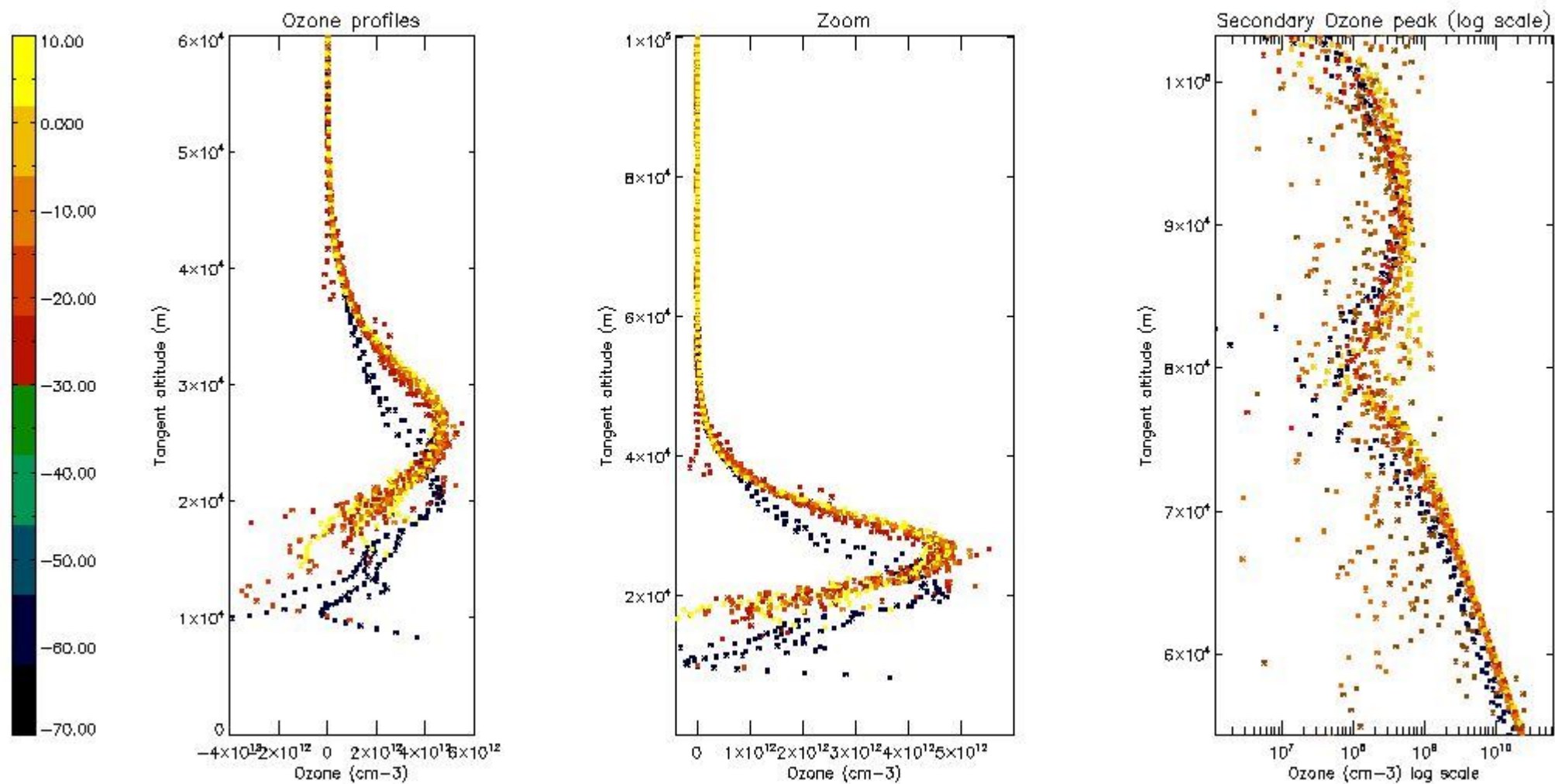
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	49
STD < 20	26

STD < 10	21
STD < 5	17

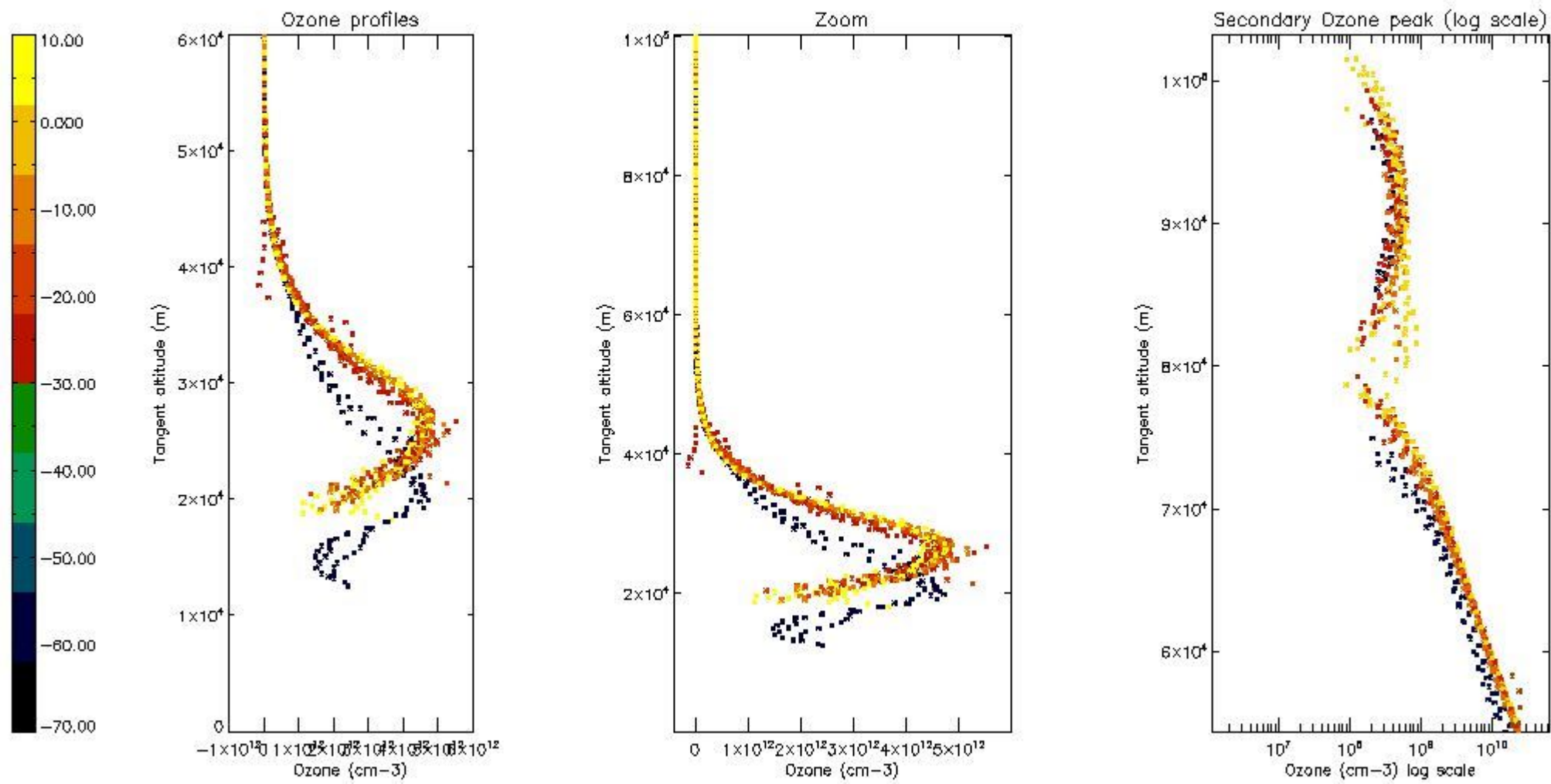
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



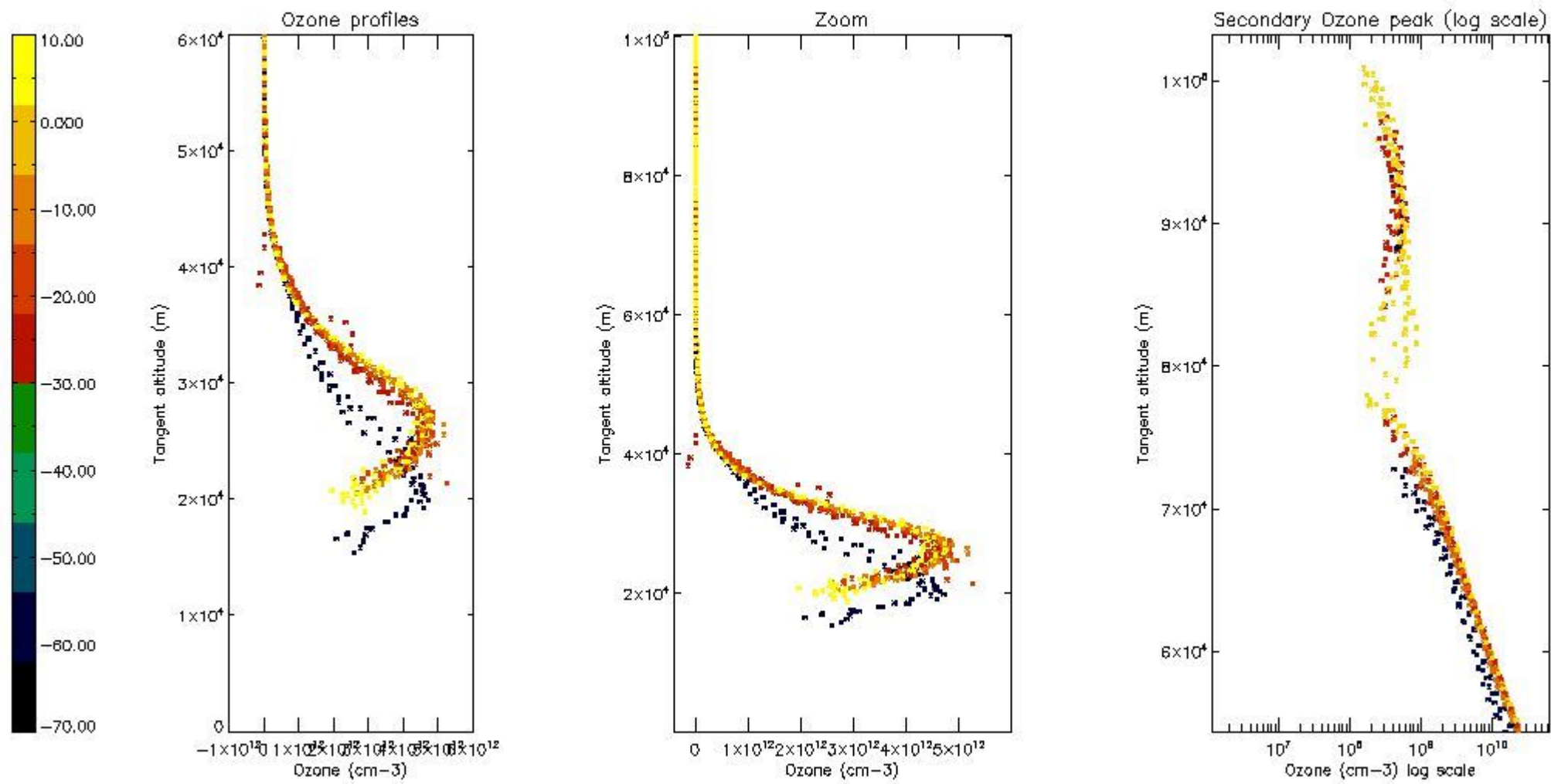
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



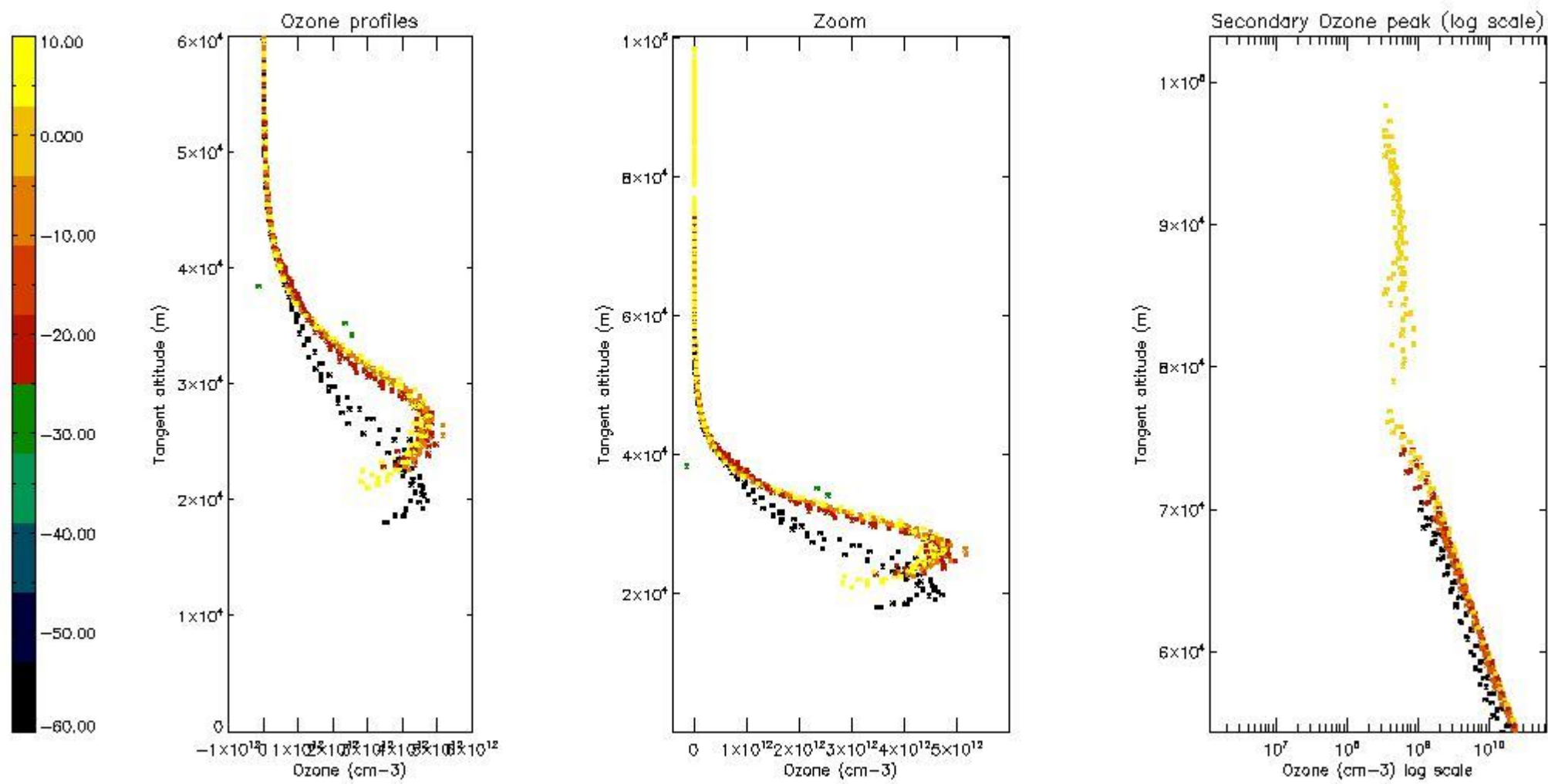
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



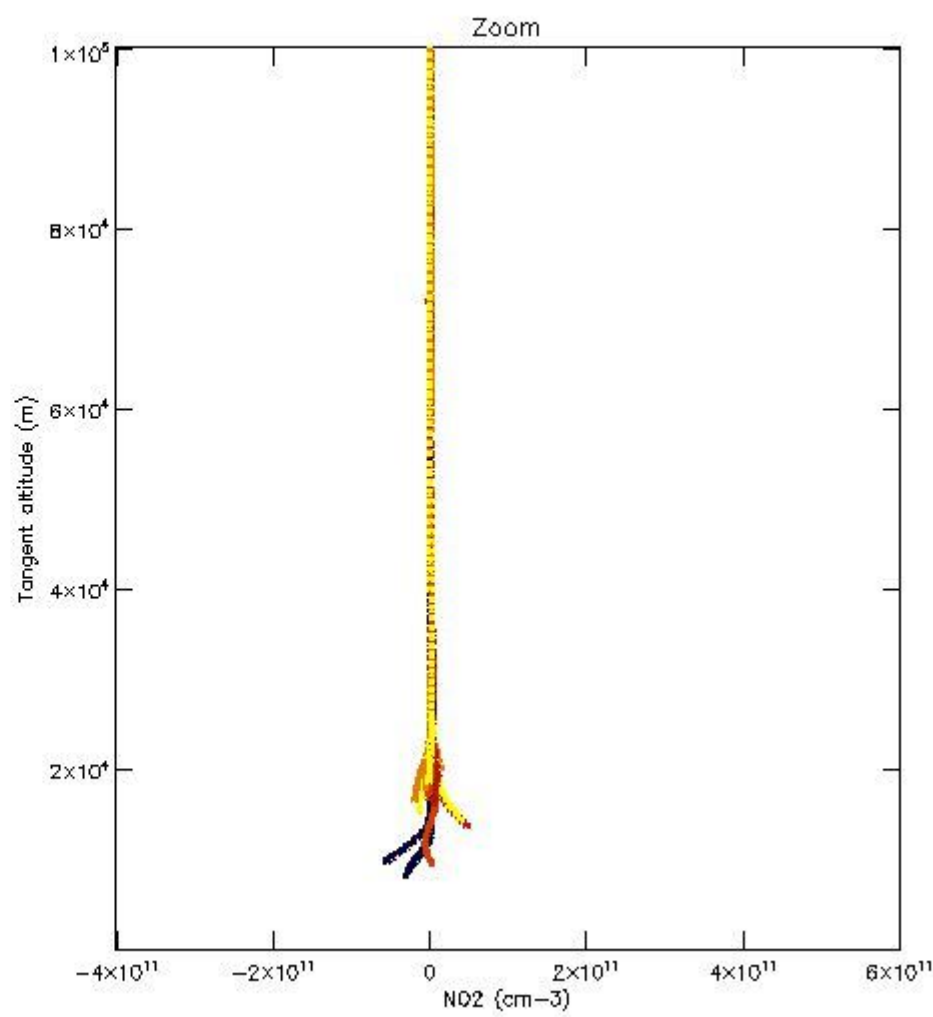
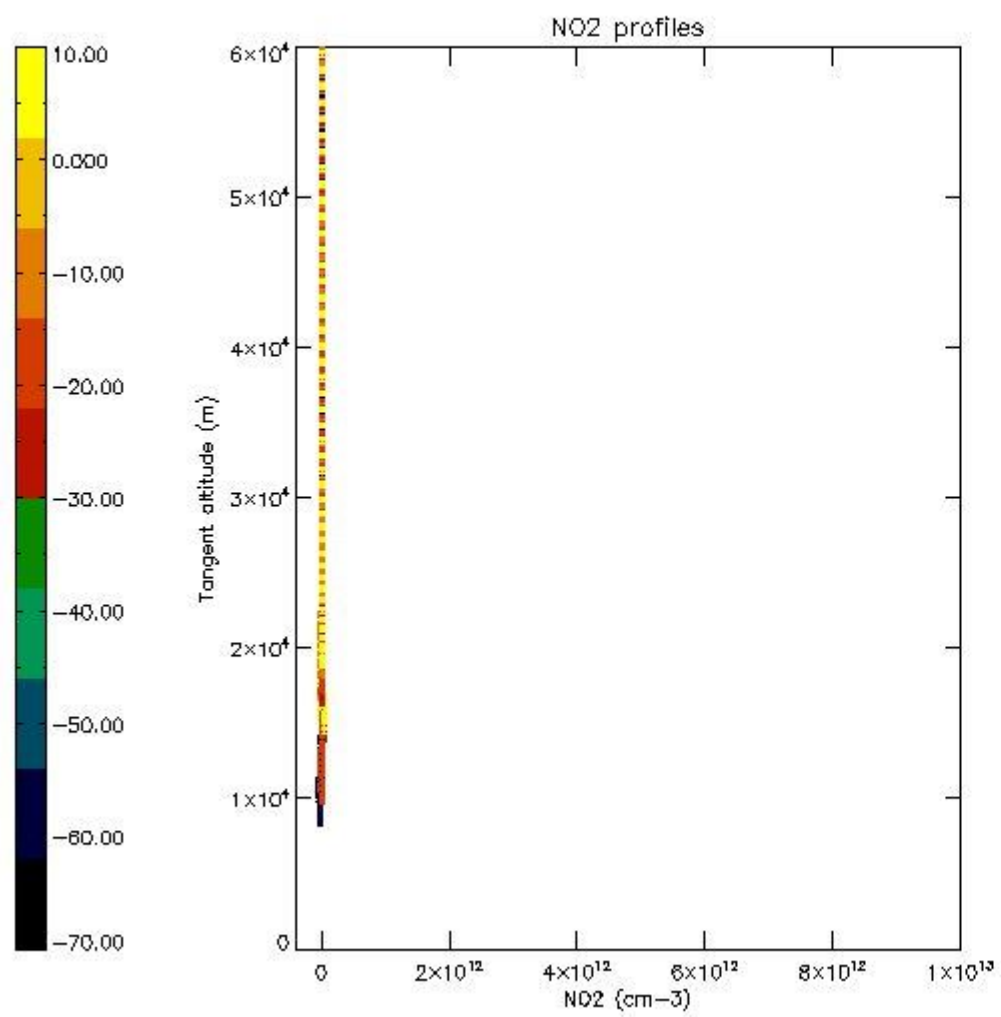
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



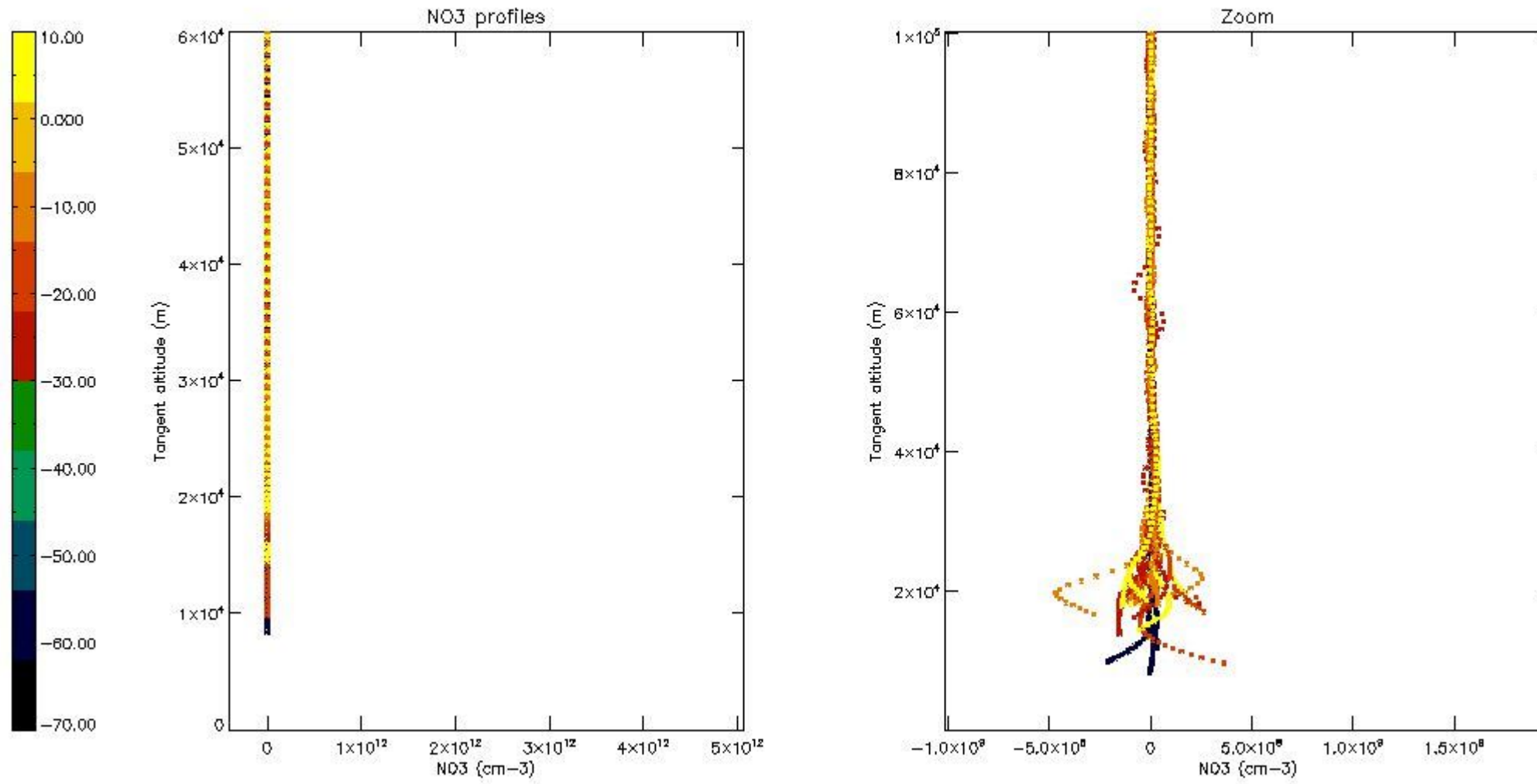
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	31-MAR-2009 00:00:59
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-MAR-2009 00:00:59
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-MAR-2009 00:00:59

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Item	Value
Time of report generation	26APR2013 08:32:02
Data source version	GOMOS/6.01
Start time of products	31-03-2009 (31MAR2009 00:00:00)
Stop time of products	01-04-2009 (01APR2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	76
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

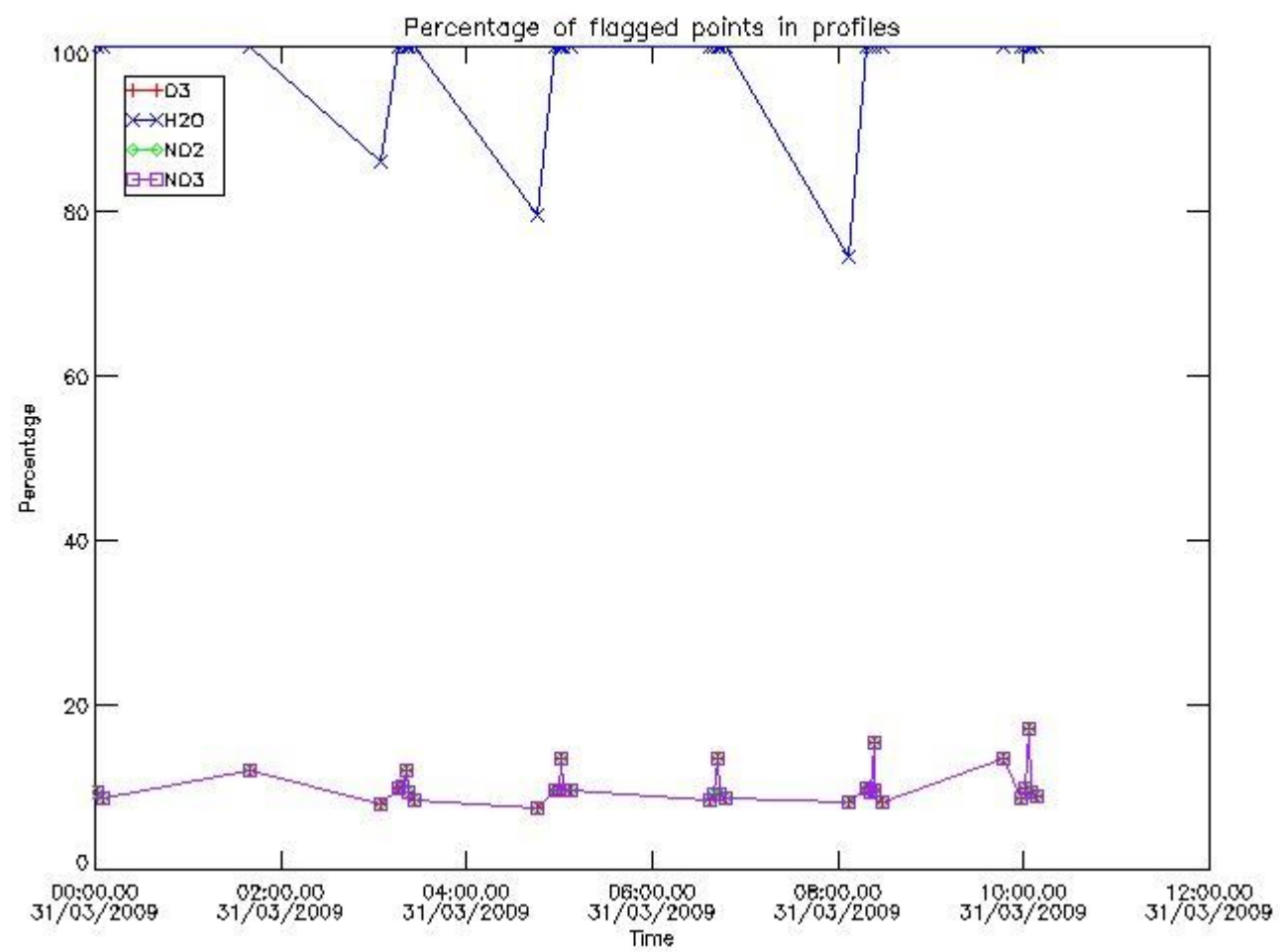
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090331_000059_000000552077_00403_37030_3329.N1	31-MAR-2009 00:00:59	Dark	54.500	38	20Eps Sgr	1.8360	11000.	109	37030	No
2	GOM_NL__2PRFIN20090331_000511_000000582077_00403_37030_3330.N1	31-MAR-2009 00:05:11	Dark	57.500	25	35Lam Sco	1.6200	28000.	115	37030	No
3	GOM_NL__2PRFIN20090331_014021_000000422077_00403_37030_3331.N1	31-MAR-2009 01:40:21	Dark	42.000	137	22Lam Sgr	2.8240	4400.0	84	37030	No
4	GOM_NL__2PRFIN20090331_021654_000000082077_00404_37031_3350.N1	31-MAR-2009 02:16:54	Straylight	8.0000	138	47Eps Vir	2.8280	4700.0	16	37031	No
5	GOM_NL__2PRFIN20090331_022531_000000292077_00404_37031_3351.N1	31-MAR-2009 02:25:31	Twi_and_stray	29.000	152	12Alp2CVn	2.8900	11000.	58	37031	No
6	GOM_NL__2PRFIN20090331_023924_000000232077_00404_37031_3352.N1	31-MAR-2009 02:39:24	Twi_and_stray	22.500	119	14Eta Dra	2.7270	4700.0	45	37031	No
7	GOM_NL__2PRFIN20090331_025046_000000182077_00404_37031_3353.N1	31-MAR-2009 02:50:46	Twi_and_stray	18.000	144	18Del Cyg	2.8600	11000.	36	37031	No
8	GOM_NL__2PRFIN20090331_025237_000000442077_00404_37031_3354.N1	31-MAR-2009 02:52:37	Bright	44.000	66	37Gam Cyg	2.2080	5900.0	88	37031	No
9	GOM_NL__2PRFIN20090331_025438_000000592077_00404_37031_3355.N1	31-MAR-2009 02:54:38	Bright	59.000	92	53Eps Cyg	2.5000	4500.0	118	37031	No
10	GOM_NL__2PRFIN20090331_030436_000000652077_00404_37031_3356.N1	31-MAR-2009 03:04:36	Dark	65.000	11	53Alp Aql	0.76500	8000.0	130	37031	No
11	GOM_NL__2PRFIN20090331_031626_000000572077_00404_37031_3357.N1	31-MAR-2009 03:16:26	Dark	57.000	155	41Pi Sgr	2.9000	6600.0	114	37031	No
12	GOM_NL__2PRFIN20090331_031838_000000552077_00404_37031_3358.N1	31-MAR-2009 03:18:38	Dark	55.000	57	34Sig Sgr	2.0660	26000.	110	37031	No
13	GOM_NL__2PRFIN20090331_032058_000000422077_00404_37031_3359.N1	31-MAR-2009 03:20:58	Dark	42.000	137	22Lam Sgr	2.8240	4400.0	84	37031	No
14	GOM_NL__2PRFIN20090331_032213_000000552077_00405_37032_3363.N1	31-MAR-2009 03:22:13	Dark	54.500	38	20Eps Sgr	1.8360	11000.	109	37032	No
15	GOM_NL__2PRFIN20090331_032625_000000612077_00405_37032_3364.N1	31-MAR-2009 03:26:25	Dark	61.000	25	35Lam Sco	1.6200	28000.	122	37032	No
16	GOM_NL__2PRFIN20090331_033417_000000502077_00405_37032_3365.N1	31-MAR-2009 03:34:17	Straylight	49.500	131	Gam Lup	2.8000	26000.	99	37032	No
17	GOM_NL__2PRFIN20090331_034507_000000242077_00405_37032_3366.N1	31-MAR-2009 03:45:07	Straylight	24.000	169	46Gam Hya	2.9910	4700.0	48	37032	No
18	GOM_NL__2PRFIN20090331_035728_000000502077_00405_37032_3367.N1	31-MAR-2009 03:57:28	Bright	50.000	138	47Eps Vir	2.8280	4700.0	100	37032	No
19	GOM_NL__2PRFIN20090331_041959_000000482077_00405_37032_3368.N1	31-MAR-2009 04:19:59	Bright	47.500	119	14Eta Dra	2.7270	4700.0	95	37032	No
20	GOM_NL__2PRFIN20090331_043122_000000472077_00405_37032_3369.N1	31-MAR-2009 04:31:22	Bright	46.500	144	18Del Cyg	2.8600	11000.	93	37032	No
21	GOM_NL__2PRFIN20090331_043313_000000442077_00405_37032_3370.N1	31-MAR-2009 04:33:13	Bright	43.500	66	37Gam Cyg	2.2080	5900.0	87	37032	No
22	GOM_NL__2PRFIN20090331_043514_000000422077_00405_37032_3371.N1	31-MAR-2009 04:35:14	Bright	42.000	92	53Eps Cyg	2.5000	4500.0	84	37032	No
23	GOM_NL__2PRFIN20090331_044513_000000692077_00405_37032_3372.N1	31-MAR-2009 04:45:13	Dark	68.500	11	53Alp Aql	0.76500	8000.0	137	37032	No
24	GOM_NL__2PRFIN20090331_045704_000000542077_00405_37032_3373.N1	31-MAR-2009 04:57:04	Dark	53.500	155	41Pi Sgr	2.9000	6600.0	107	37032	No
25	GOM_NL__2PRFIN20090331_045916_000000542077_00405_37032_3374.N1	31-MAR-2009 04:59:16	Dark	53.500	57	34Sig Sgr	2.0660	26000.	107	37032	No
26	GOM_NL__2PRFIN20090331_050135_000000382077_00405_37032_3375.N1	31-MAR-2009 05:01:35	Dark	38.000	137	22Lam Sgr	2.8240	4400.0	76	37032	No
27	GOM_NL__2PRFIN20090331_050251_000000532077_00406_37033_3379.N1	31-MAR-2009 05:02:51	Dark	53.000	38	20Eps Sgr	1.8360	11000.	106	37033	No
28	GOM_NL__2PRFIN20090331_050703_000000582077_00406_37033_3380.N1	31-MAR-2009 05:07:03	Dark	58.000	25	35Lam Sco	1.6200	28000.	116	37033	No
29	GOM_NL__2PRFIN20090331_051454_000000502077_00406_37033_3381.N1	31-MAR-2009 05:14:54	Straylight	50.000	131	Gam Lup	2.8000	26000.	100	37033	No
30	GOM_NL__2PRFIN20090331_051726_000000442077_00406_37033_3382.N1	31-MAR-2009 05:17:26	Straylight	43.500	81	Eta Cen	2.3560	28000.	87	37033	No
31	GOM_NL__2PRFIN20090331_052011_000000442077_00406_37033_3383.N1	31-MAR-2009 05:20:11	Straylight	44.000	54	5The Cen	2.0550	4500.0	88	37033	No
32	GOM_NL__2PRFIN20090331_053005_000000672077_00406_37033_3384.N1	31-MAR-2009 05:30:05	Bright	67.000	15	67Alp Vir	0.97600	28000.	134	37033	No
33	GOM_NL__2PRFIN20090331_053321_000000462077_00406_37033_3385.N1	31-MAR-2009 05:33:21	Bright	46.000	121	29Gam Vir	2.7400	7200.0	92	37033	No
34	GOM_NL__2PRFIN20090331_054642_000000442077_00406_37033_3386.N1	31-MAR-2009 05:46:42	Bright	43.500	152	12Alp2CVn	2.8900	11000.	87	37033	No
35	GOM_NL__2PRFIN20090331_055121_000000402077_00406_37033_3387.N1	31-MAR-2009 05:51:21	Bright	39.500	32	77Eps UMa	1.7630	11000.	79	37033	No
36	GOM_NL__2PRFIN20090331_060035_000000472077_00406_37033_3388.N1	31-MAR-2009 06:00:35	Bright	46.500	119	14Eta Dra	2.7270	4700.0	93	37033	No
37	GOM_NL__2PRFIN20090331_061158_000000672077_00406_37033_3389.N1	31-MAR-2009 06:11:58	Bright	67.000	144	18Del Cyg	2.8600	11000.	134	37033	No
38	GOM_NL__2PRFIN20090331_061350_000000422077_00406_37033_3390.N1	31-MAR-2009 06:13:50	Bright	41.500	66	37Gam Cyg	2.2080	5900.0	83	37033	No
39	GOM_NL__2PRFIN20090331_061550_000000452077_00406_37033_3391.N1	31-MAR-2009 06:15:50	Bright	45.000	92	53Eps Cyg	2.5000	4500.0	90	37033	No
40	GOM_NL__2PRFIN20090331_063741_000000612077_00406_37033_3392.N1	31-MAR-2009 06:37:41	Dark	61.000	155	41Pi Sgr	2.9000	6600.0	122	37033	No
41	GOM_NL__2PRFIN20090331_063953_000000562077_00406_37033_3393.N1	31-MAR-2009 06:39:53	Dark	56.000	57	34Sig Sgr	2.0660	26000.	112	37033	No
42	GOM_NL__2PRFIN20090331_064213_000000382077_00406_37033_3394.N1	31-MAR-2009 06:42:13	Dark	38.000	137	22Lam Sgr	2.8240	4400.0	76	37033	No

43	GOM_NL__2PRFIN20090331_064328_000000562077_00407_37034_3393.N1	31-MAR-2009 06:43:28	Dark	56.000	38	20Eps Sgr	1.8360	11000.	112	37034	No
44	GOM_NL__2PRFIN20090331_064740_000000582077_00407_37034_3394.N1	31-MAR-2009 06:47:40	Dark	58.000	25	35Lam Sco	1.6200	28000.	116	37034	No
45	GOM_NL__2PRFIN20090331_065531_000000532077_00407_37034_3395.N1	31-MAR-2009 06:55:31	Straylight	53.000	131	Gam Lup	2.8000	26000.	106	37034	No
46	GOM_NL__2PRFIN20090331_070047_000000272077_00407_37034_3396.N1	31-MAR-2009 07:00:47	Straylight	26.500	54	5The Cen	2.0550	4500.0	53	37034	No
47	GOM_NL__2PRFIN20090331_070620_000000282077_00407_37034_3397.N1	31-MAR-2009 07:06:20	Straylight	27.500	169	46Gam Hya	2.9910	4700.0	55	37034	No
48	GOM_NL__2PRFIN20090331_071041_000000702077_00407_37034_3398.N1	31-MAR-2009 07:10:41	Bright	69.500	15	67Alp Vir	0.97600	28000.	139	37034	No
49	GOM_NL__2PRFIN20090331_071357_000000262077_00407_37034_3399.N1	31-MAR-2009 07:13:57	Tw_i_and_stray	25.500	121	29Gam Vir	2.7400	7200.0	51	37034	No
50	GOM_NL__2PRFIN20090331_071839_000000502077_00407_37034_3400.N1	31-MAR-2009 07:18:39	Bright	50.000	138	47Eps Vir	2.8280	4700.0	100	37034	No
51	GOM_NL__2PRFIN20090331_072717_000000442077_00407_37034_3401.N1	31-MAR-2009 07:27:17	Bright	44.000	152	12Alp2CVn	2.8900	11000.	88	37034	No
52	GOM_NL__2PRFIN20090331_073156_000000402077_00407_37034_3402.N1	31-MAR-2009 07:31:56	Bright	39.500	32	77Eps UMa	1.7630	11000.	79	37034	No
53	GOM_NL__2PRFIN20090331_074110_000000472077_00407_37034_3403.N1	31-MAR-2009 07:41:10	Bright	47.000	119	14Eta Dra	2.7270	4700.0	94	37034	No
54	GOM_NL__2PRFIN20090331_075233_000000452077_00407_37034_3404.N1	31-MAR-2009 07:52:33	Bright	45.000	144	18Del Cyg	2.8600	11000.	90	37034	No
55	GOM_NL__2PRFIN20090331_075426_000000442077_00407_37034_3405.N1	31-MAR-2009 07:54:26	Bright	44.000	66	37Gam Cyg	2.2080	5900.0	88	37034	No
56	GOM_NL__2PRFIN20090331_075626_000000432077_00407_37034_3406.N1	31-MAR-2009 07:56:26	Bright	42.500	92	53Eps Cyg	2.5000	4500.0	85	37034	No
57	GOM_NL__2PRFIN20090331_080626_000000632077_00407_37034_3407.N1	31-MAR-2009 08:06:26	Dark	63.000	11	53Alp Aql	0.76500	8000.0	126	37034	No
58	GOM_NL__2PRFIN20090331_081819_000000562077_00407_37034_3408.N1	31-MAR-2009 08:18:19	Dark	56.000	155	41Pi Sgr	2.9000	6600.0	112	37034	No
59	GOM_NL__2PRFIN20090331_082030_000000662077_00407_37034_3409.N1	31-MAR-2009 08:20:30	Dark	65.500	57	34Sig Sgr	2.0660	26000.	131	37034	No
60	GOM_NL__2PRFIN20090331_082251_000000332077_00407_37034_3410.N1	31-MAR-2009 08:22:51	Dark	33.000	137	22Lam Sgr	2.8240	4400.0	66	37034	No
61	GOM_NL__2PRFIN20090331_082405_000000532077_00408_37035_3407.N1	31-MAR-2009 08:24:05	Dark	52.500	38	20Eps Sgr	1.8360	11000.	105	37035	No
62	GOM_NL__2PRFIN20090331_082817_000000622077_00408_37035_3408.N1	31-MAR-2009 08:28:17	Dark	62.000	25	35Lam Sco	1.6200	28000.	124	37035	No
63	GOM_NL__2PRFIN20090331_083607_000000532077_00408_37035_3409.N1	31-MAR-2009 08:36:07	Straylight	52.500	131	Gam Lup	2.8000	26000.	105	37035	No
64	GOM_NL__2PRFIN20090331_084124_000000532077_00408_37035_3410.N1	31-MAR-2009 08:41:24	Straylight	52.500	54	5The Cen	2.0550	4500.0	105	37035	No
65	GOM_NL__2PRFIN20090331_085118_000000722077_00408_37035_3411.N1	31-MAR-2009 08:51:18	Bright	72.000	15	67Alp Vir	0.97600	28000.	144	37035	No
66	GOM_NL__2PRFIN20090331_085433_000000432077_00408_37035_3412.N1	31-MAR-2009 08:54:33	Bright	43.000	121	29Gam Vir	2.7400	7200.0	86	37035	No
67	GOM_NL__2PRFIN20090331_085914_000000512077_00408_37035_3413.N1	31-MAR-2009 08:59:14	Bright	51.000	138	47Eps Vir	2.8280	4700.0	102	37035	No
68	GOM_NL__2PRFIN20090331_090753_000000442077_00408_37035_3414.N1	31-MAR-2009 09:07:53	Bright	44.000	152	12Alp2CVn	2.8900	11000.	88	37035	No
69	GOM_NL__2PRFIN20090331_093309_000000312077_00408_37035_3415.N1	31-MAR-2009 09:33:09	Tw_i_and_stray	31.000	144	18Del Cyg	2.8600	11000.	62	37035	No
70	GOM_NL__2PRFIN20090331_094703_000000382077_00408_37035_3416.N1	31-MAR-2009 09:47:03	Dark	38.000	11	53Alp Aql	0.76500	8000.0	76	37035	No
71	GOM_NL__2PRFIN20090331_095855_000000592077_00408_37035_3417.N1	31-MAR-2009 09:58:55	Dark	58.500	155	41Pi Sgr	2.9000	6600.0	117	37035	No
72	GOM_NL__2PRFIN20090331_100108_000000572077_00408_37035_3418.N1	31-MAR-2009 10:01:08	Dark	57.000	57	34Sig Sgr	2.0660	26000.	114	37035	No
73	GOM_NL__2PRFIN20090331_100328_000000332077_00408_37035_3419.N1	31-MAR-2009 10:03:28	Dark	33.000	137	22Lam Sgr	2.8240	4400.0	66	37035	No
74	GOM_NL__2PRFIN20090331_100442_000000552077_00409_37036_3422.N1	31-MAR-2009 10:04:42	Dark	54.500	38	20Eps Sgr	1.8360	11000.	109	37036	No
75	GOM_NL__2PRFIN20090331_100855_000000572077_00409_37036_3423.N1	31-MAR-2009 10:08:55	Dark	57.000	25	35Lam Sco	1.6200	28000.	114	37036	No
76	GOM_NL__2PRFIN20090331_101644_000000512077_00409_37036_3424.N1	31-MAR-2009 10:16:44	Straylight	51.000	131	Gam Lup	2.8000	26000.	102	37036	No

3. Quality information per product

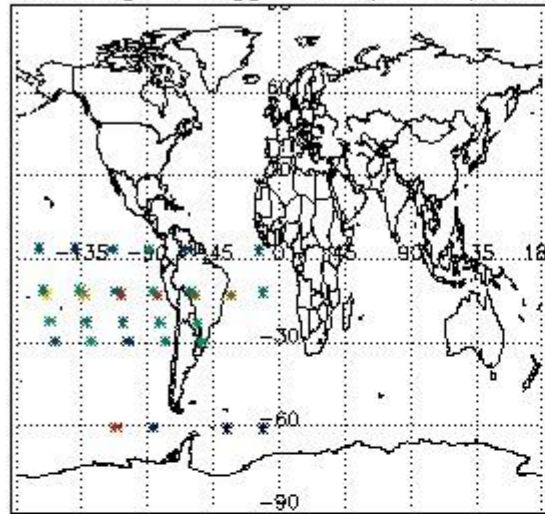
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

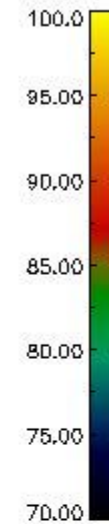
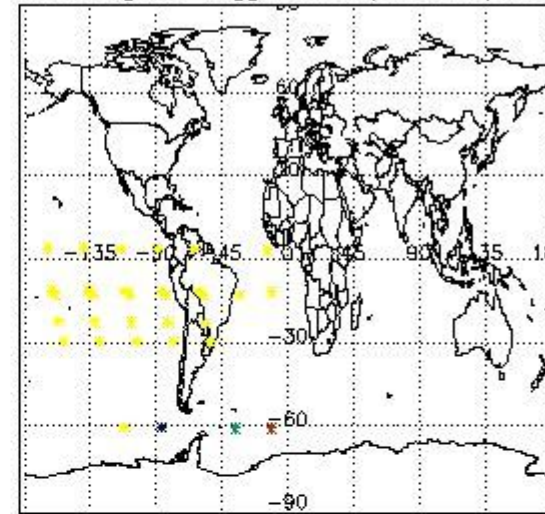


3.2 Plot quality information per product (world map)

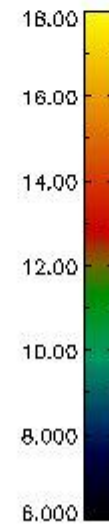
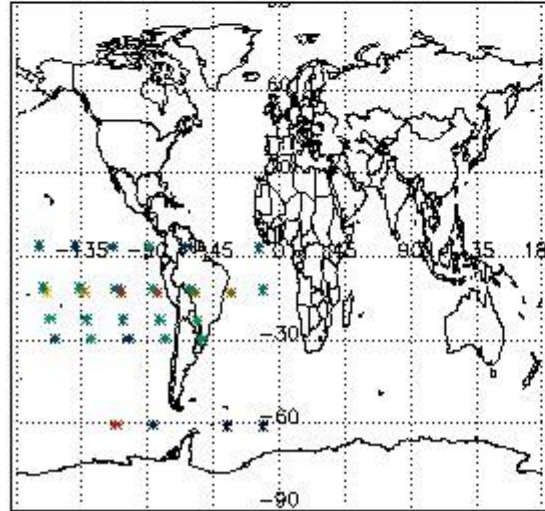
Percentage of flagged data per O3 profile



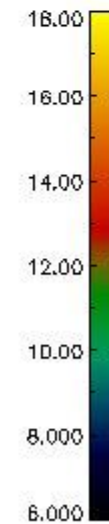
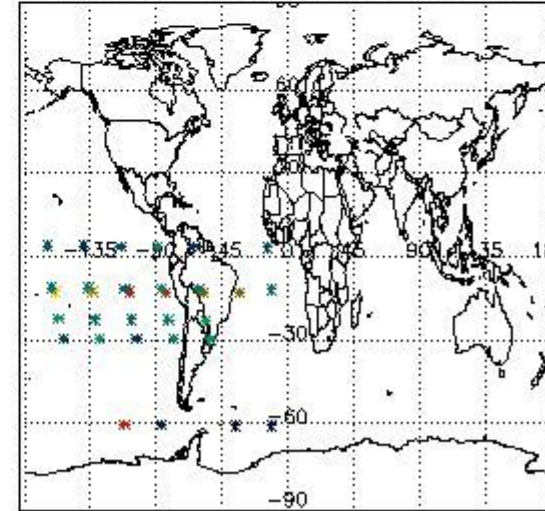
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

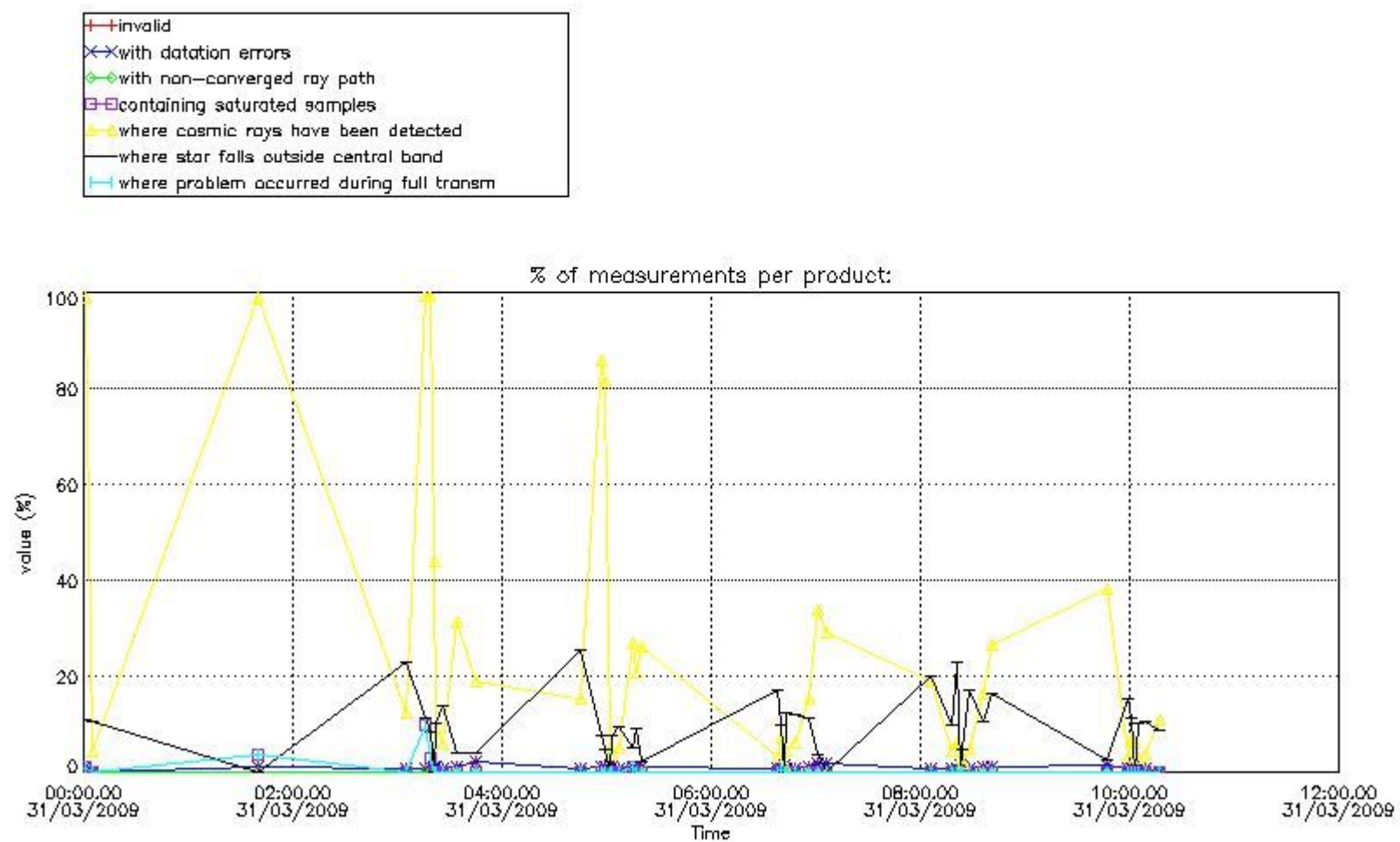


4. Level 1 quality information per product

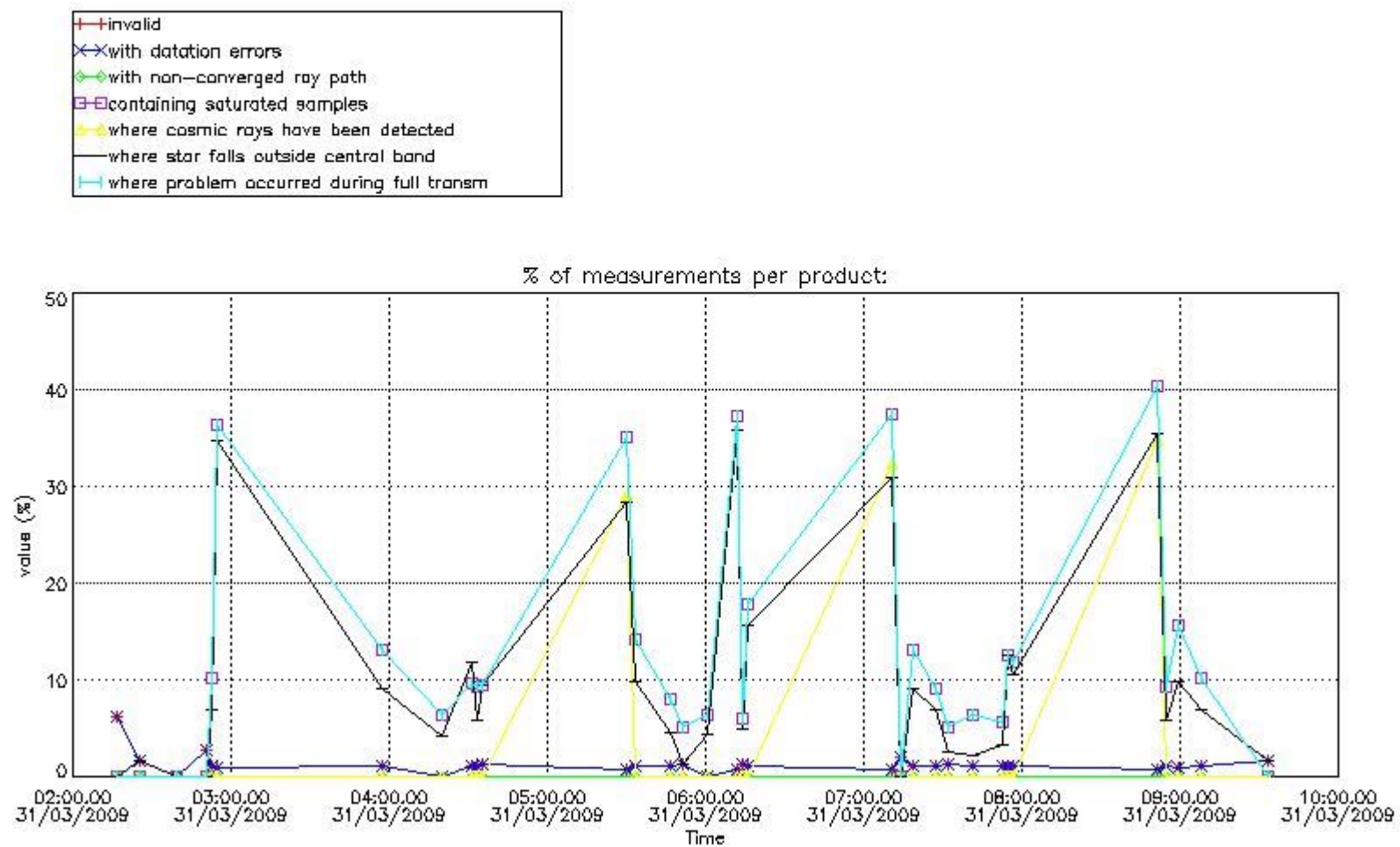
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

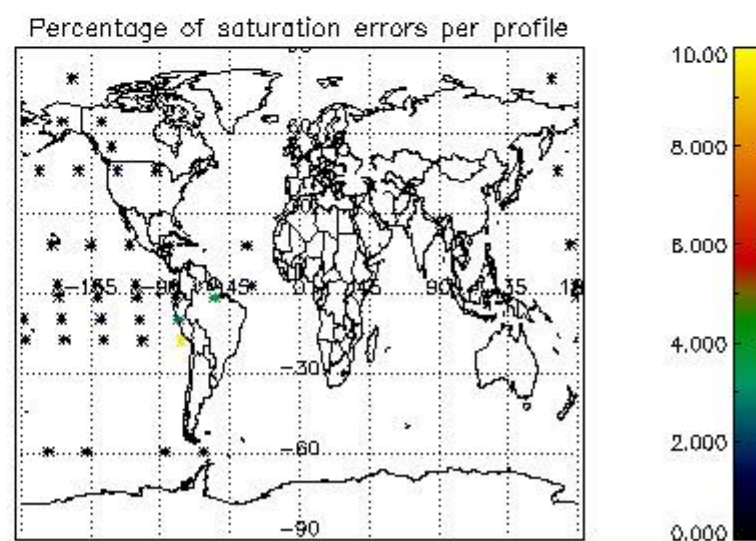
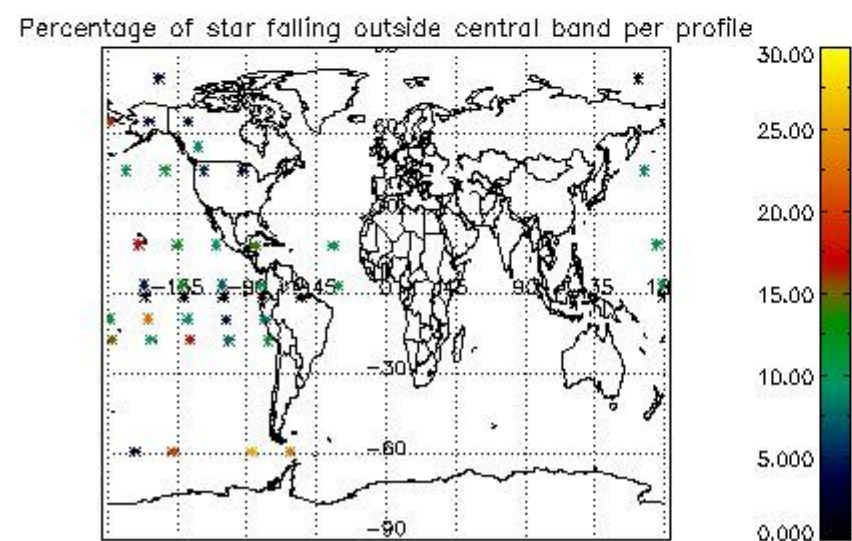
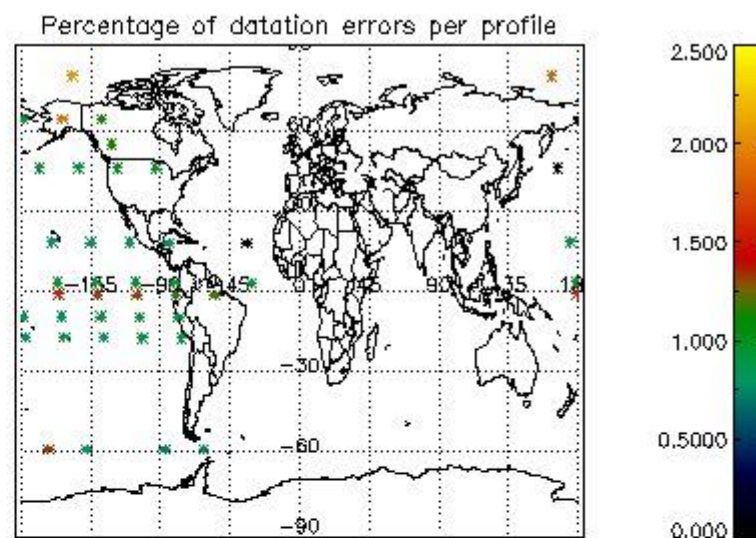
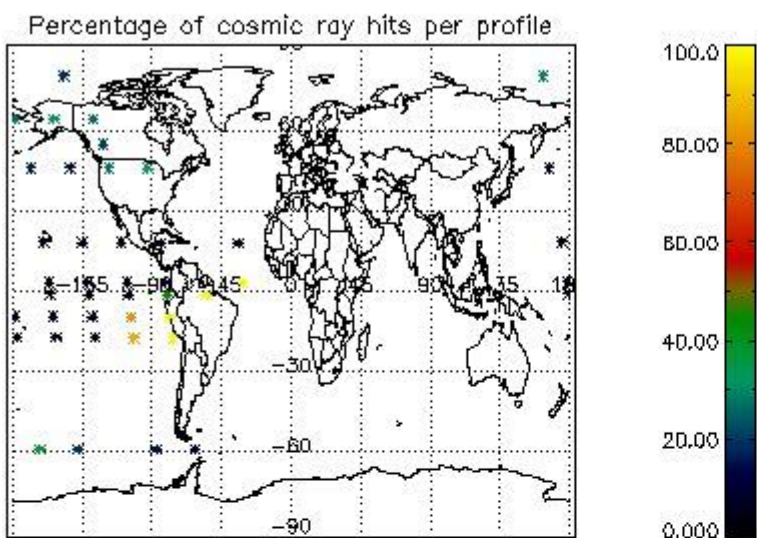


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



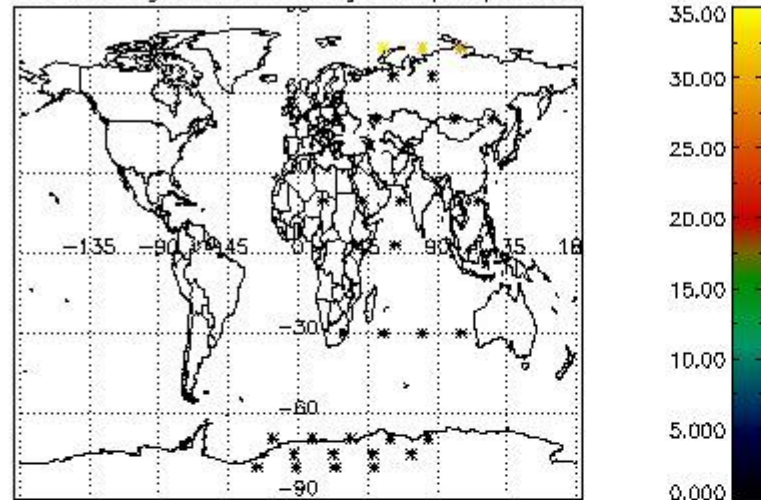
4.2 Plot quality information per product coming from level 1b processing (world map)

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

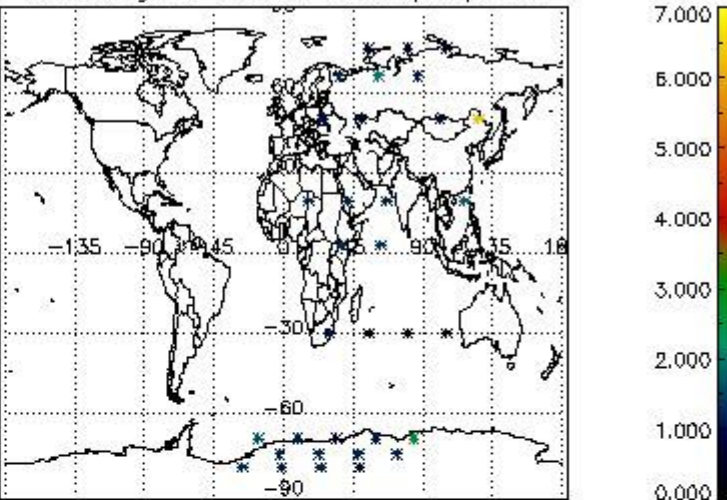


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

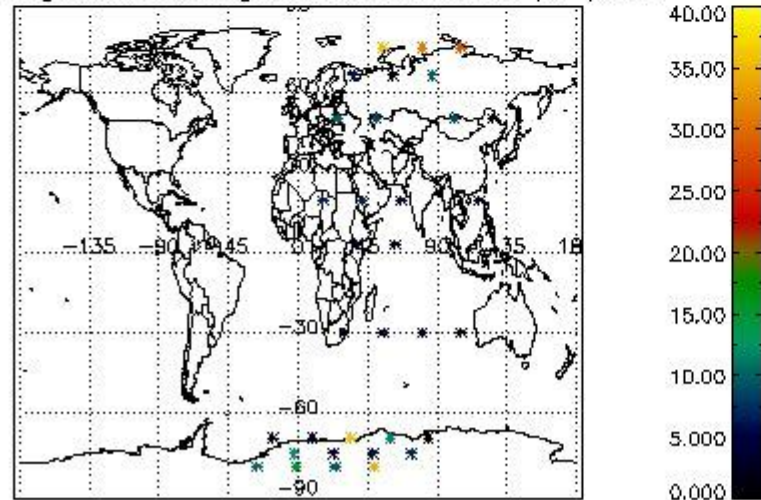
Percentage of cosmic ray hits per profile



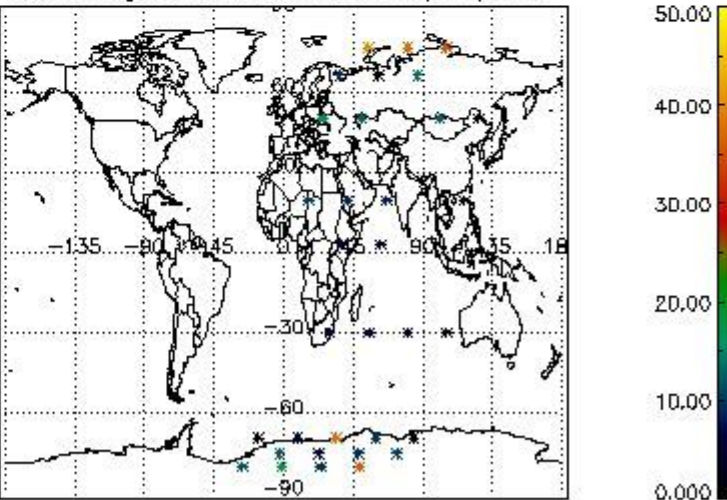
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

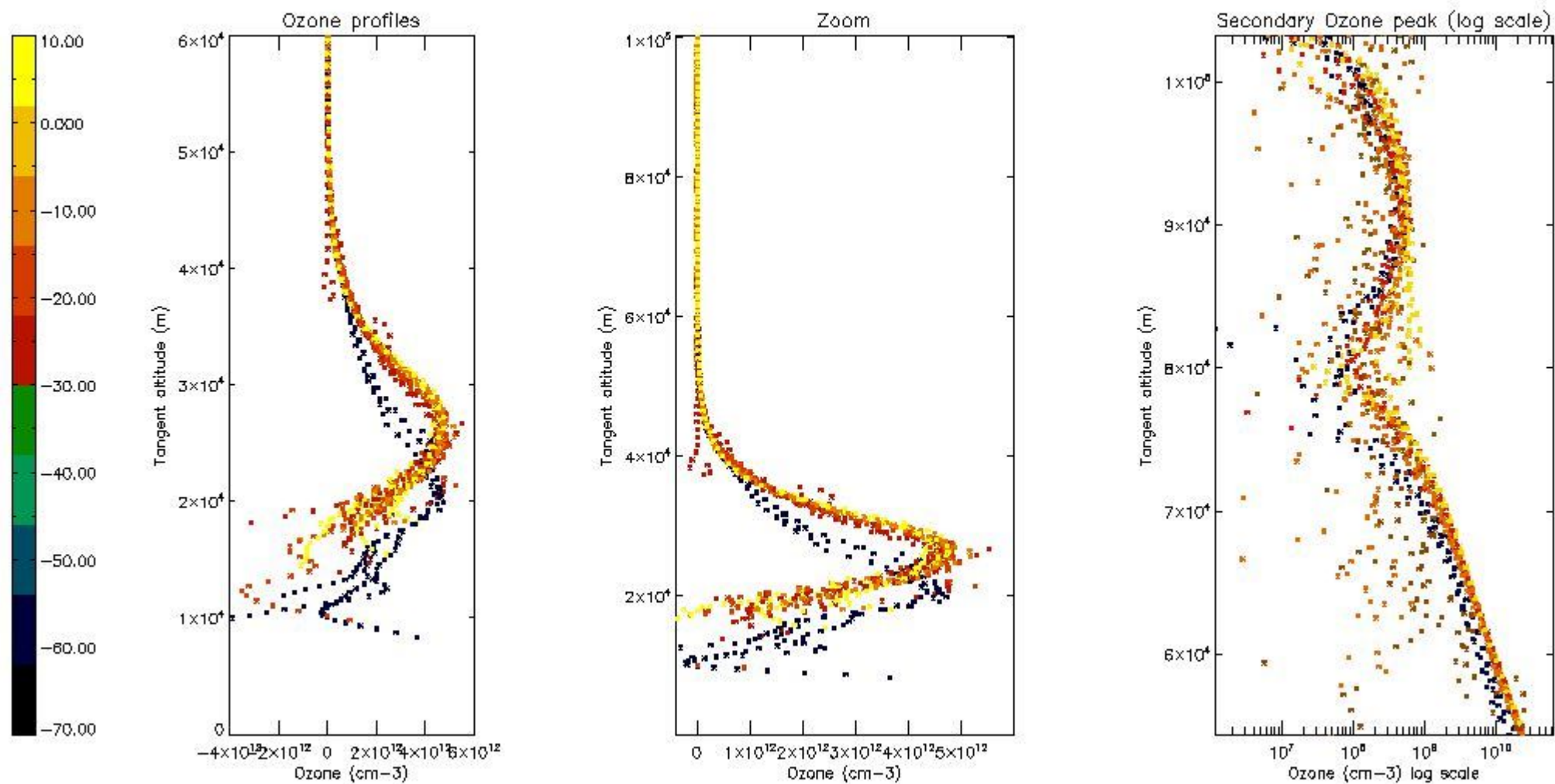
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	49
STD < 20	26

STD < 10	21
STD < 5	17

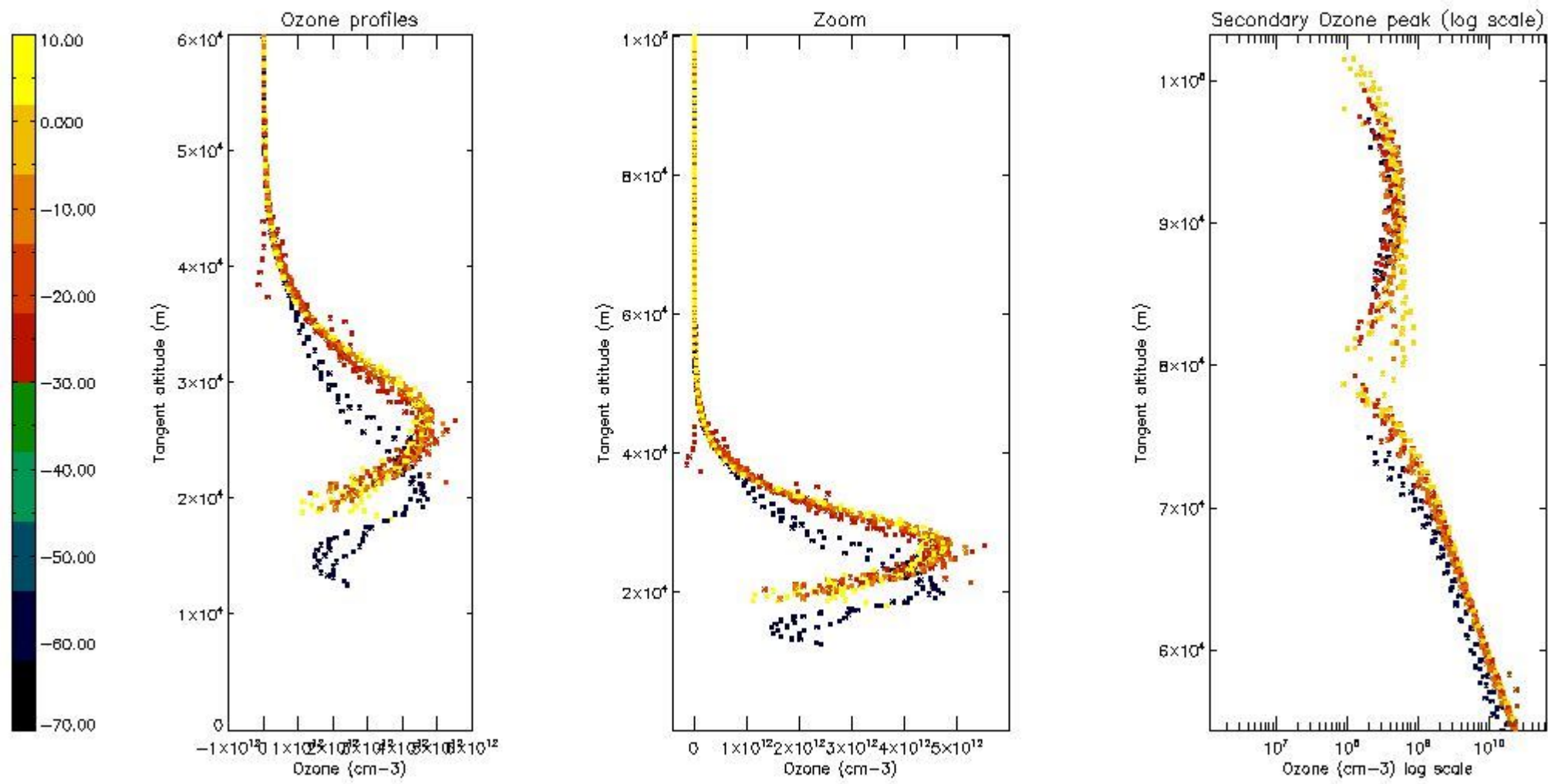
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



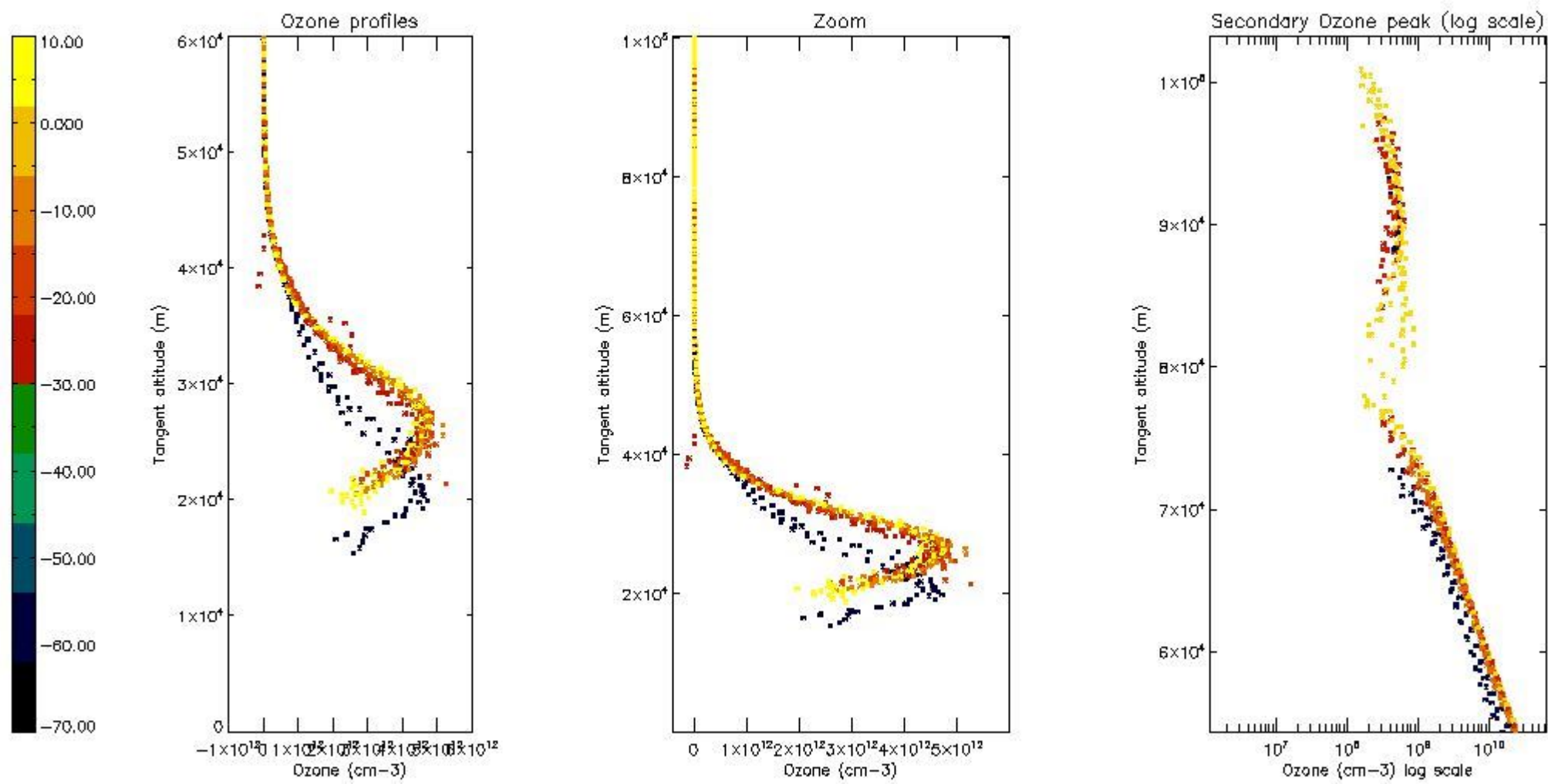
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



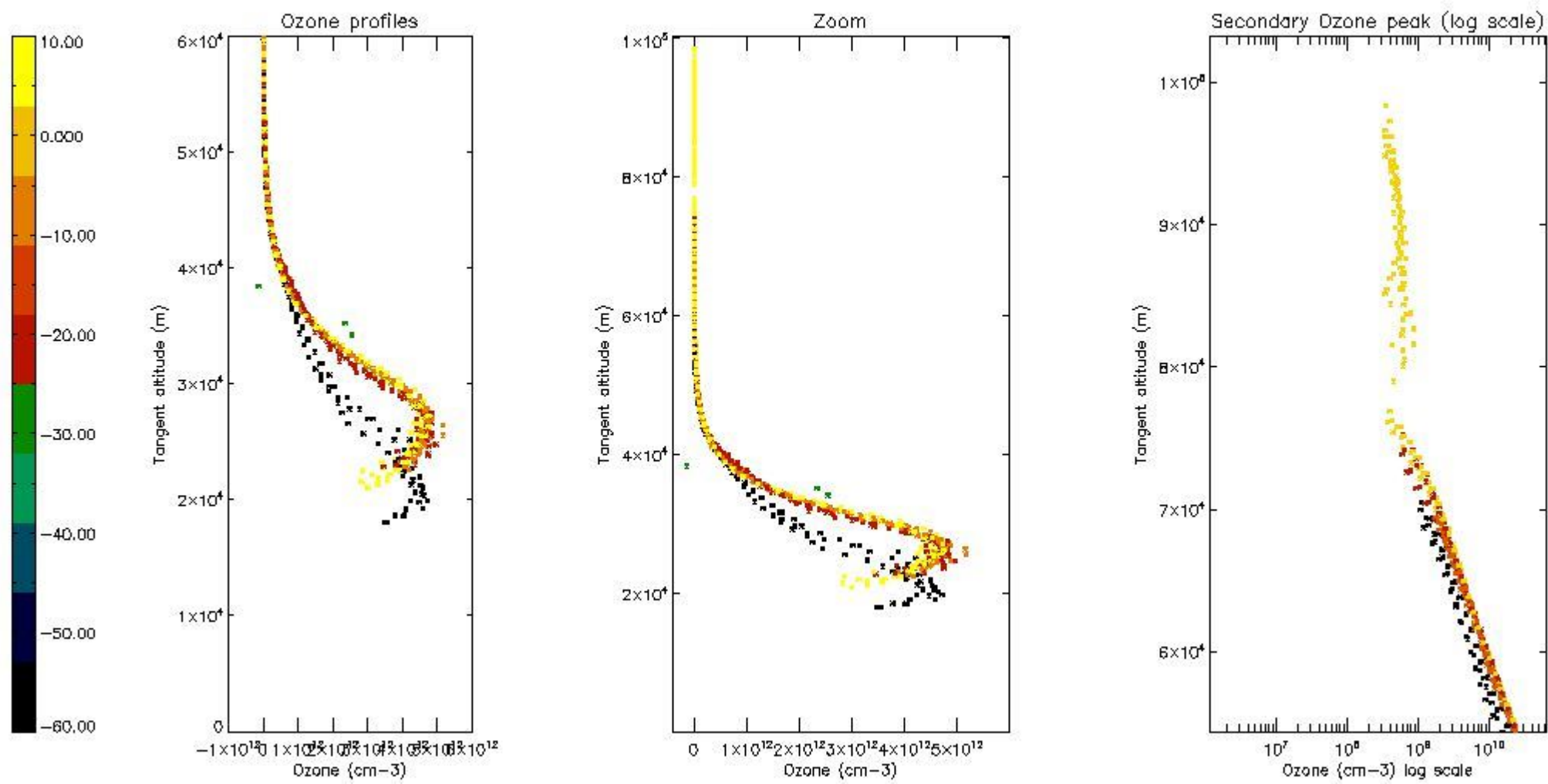
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



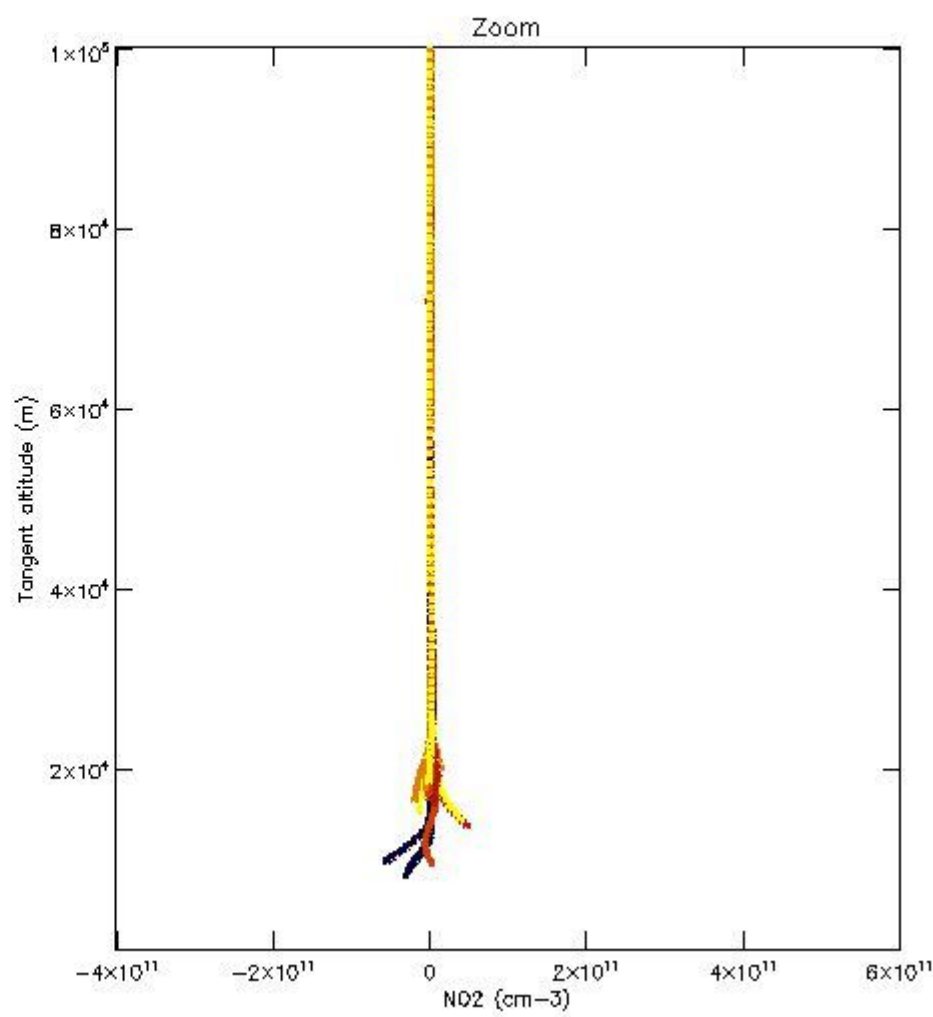
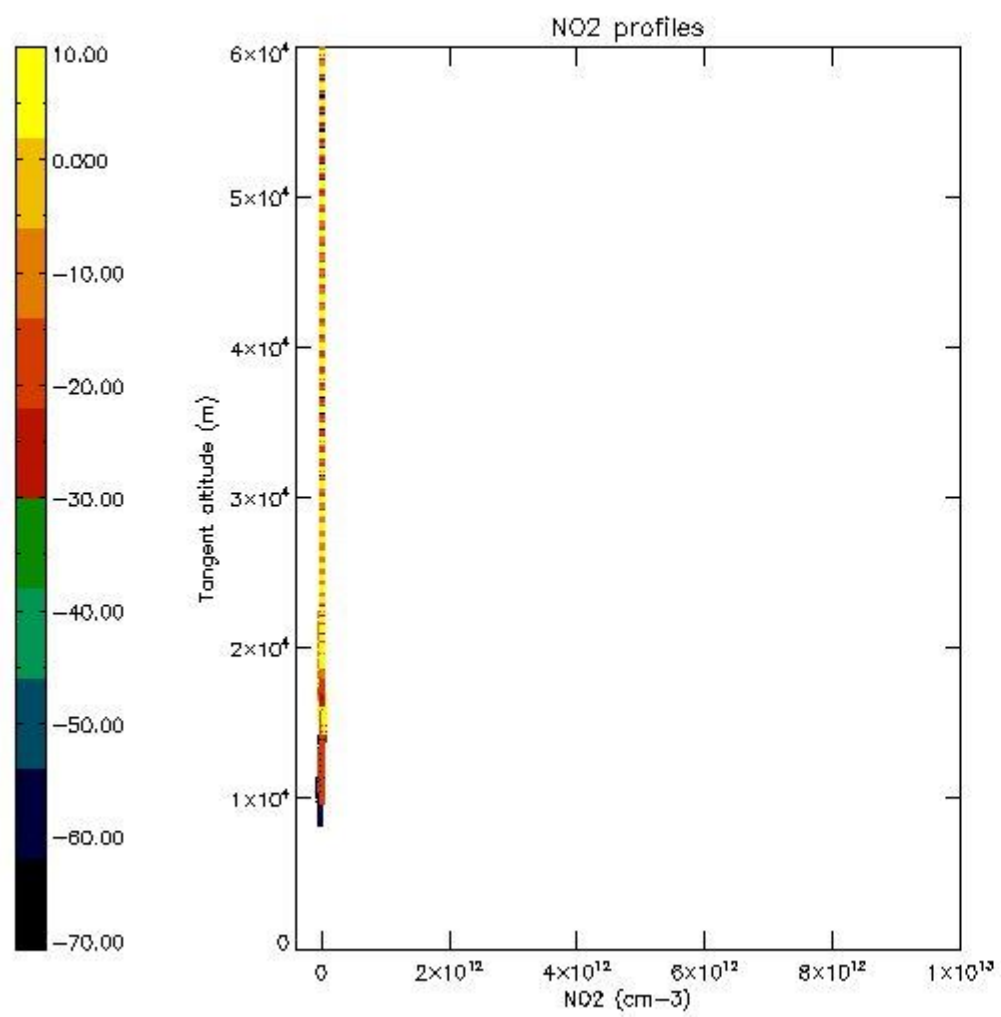
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



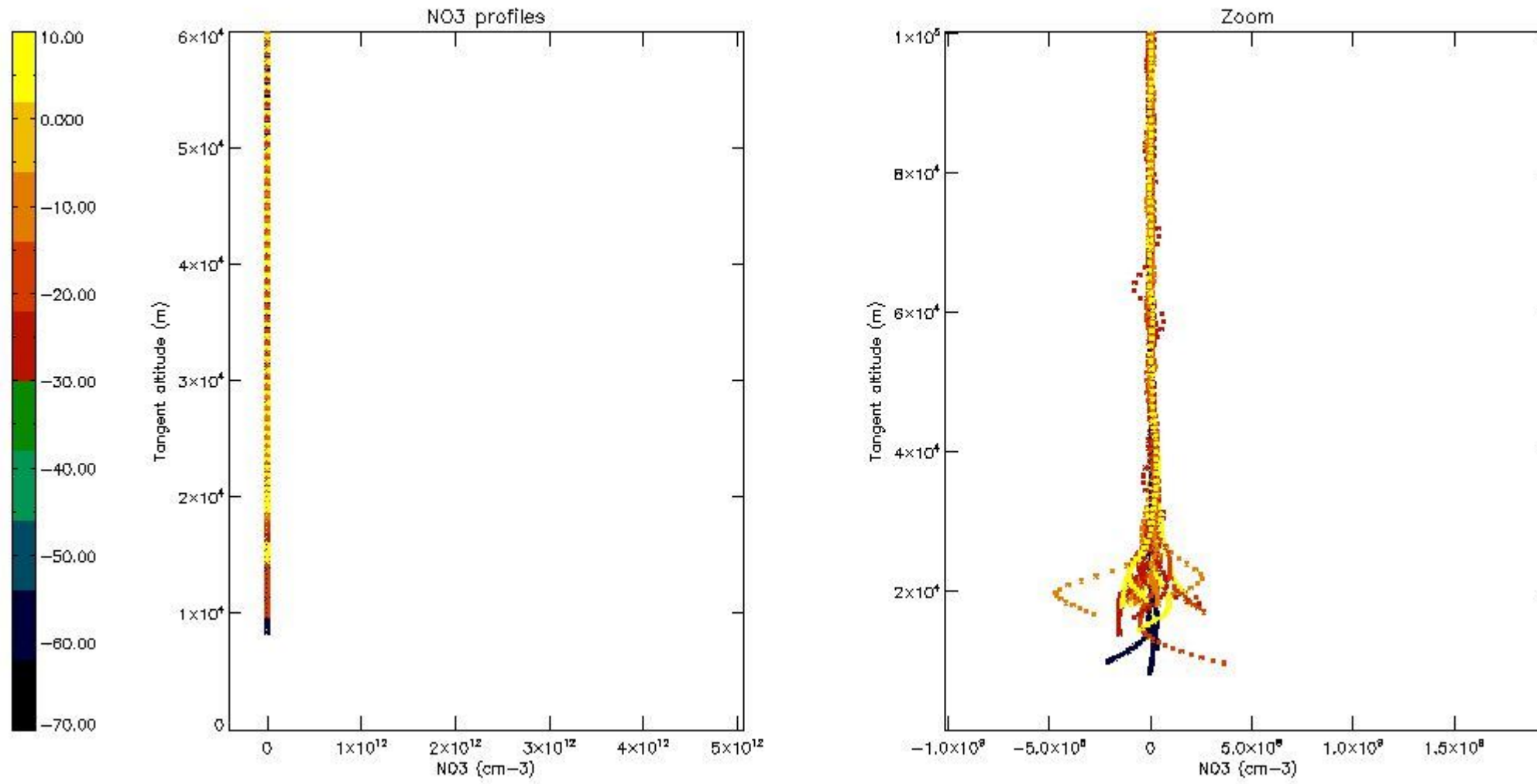
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

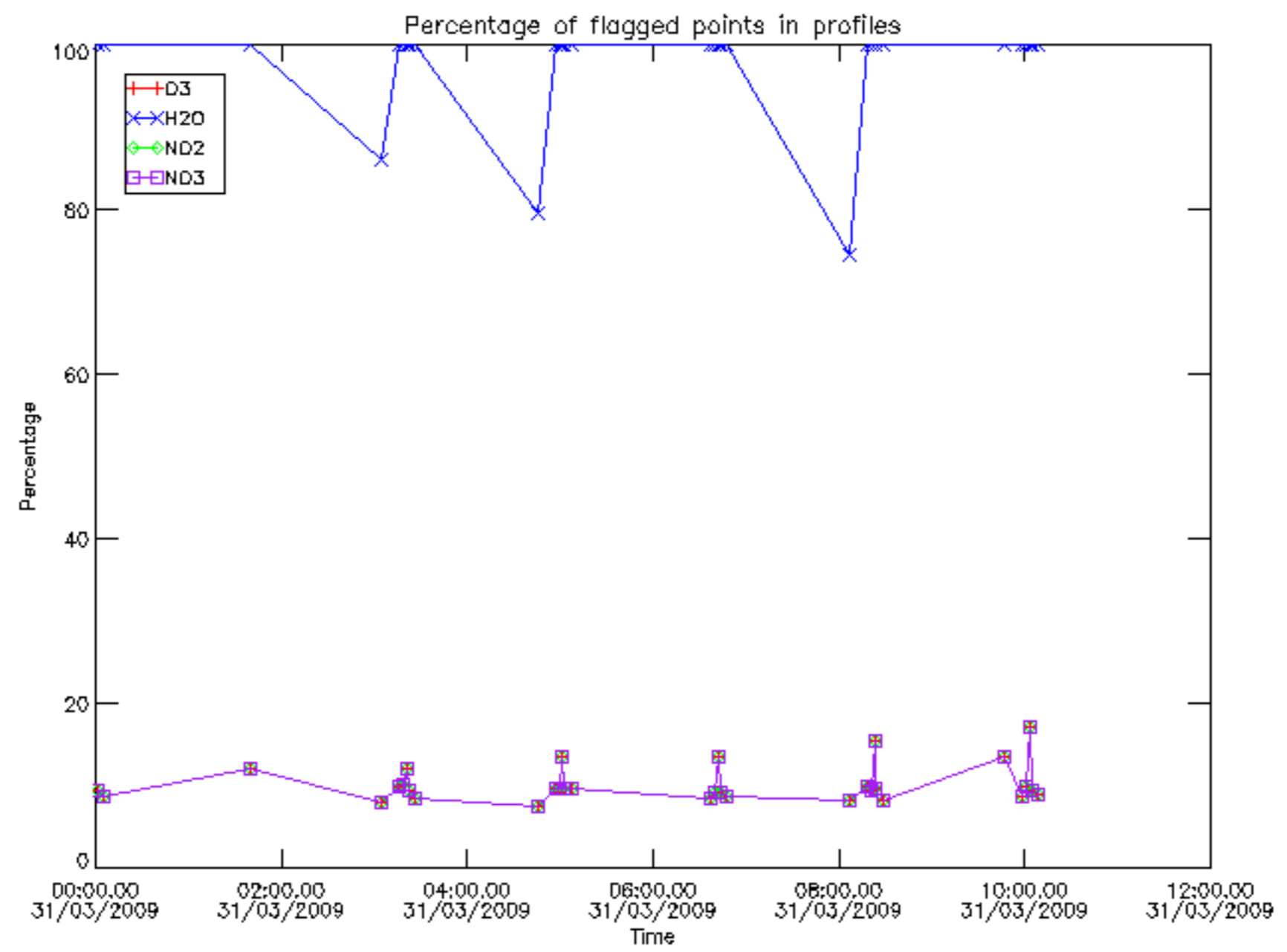
The colorbar represents the latitude.



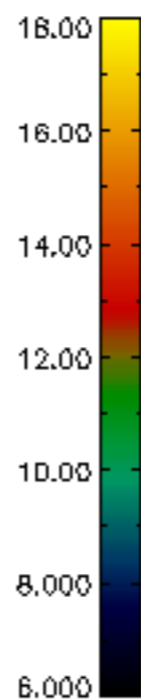
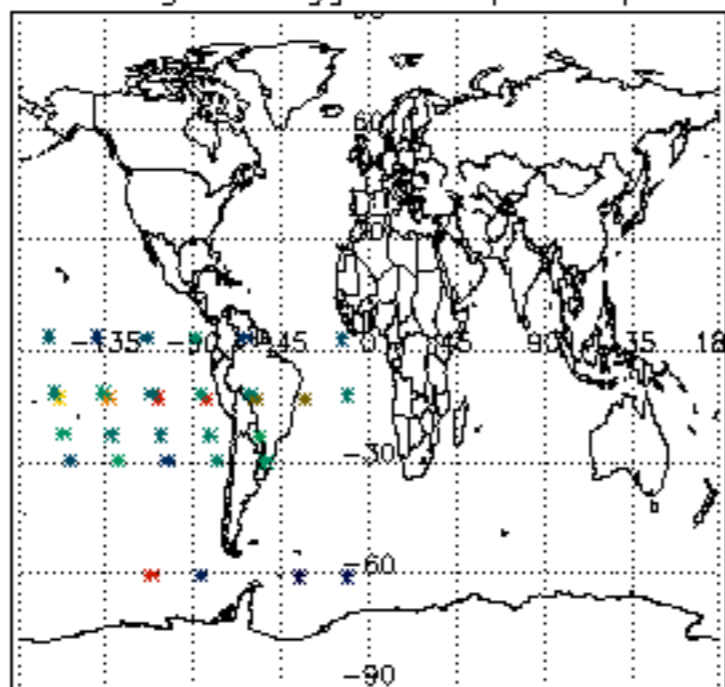
6. Auxiliary Data Files used for the production reported in section 2

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.

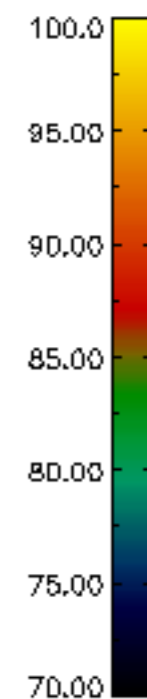
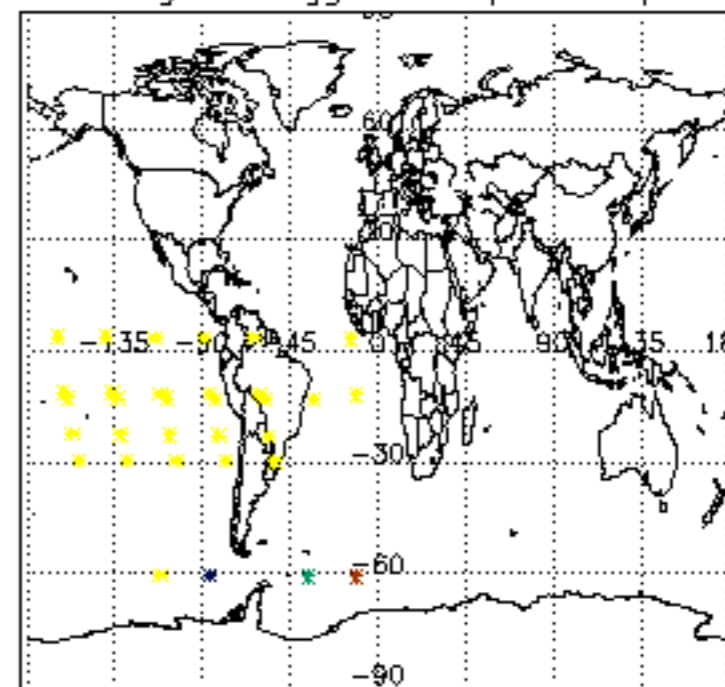
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	31-MAR-2009 00:00:59
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-MAR-2009 00:00:59
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-MAR-2009 00:00:59



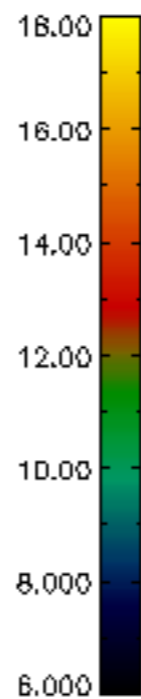
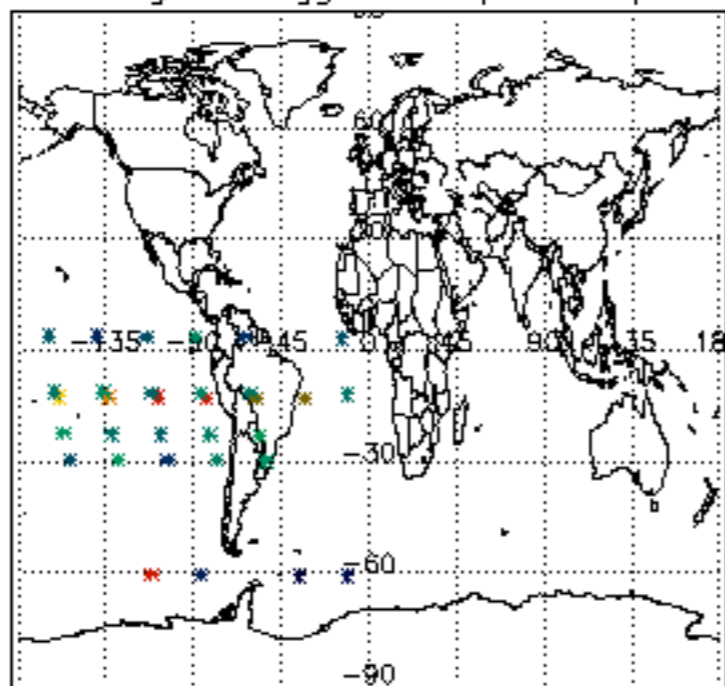
Percentage of flagged data per D3 profile



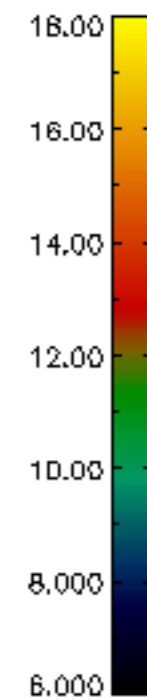
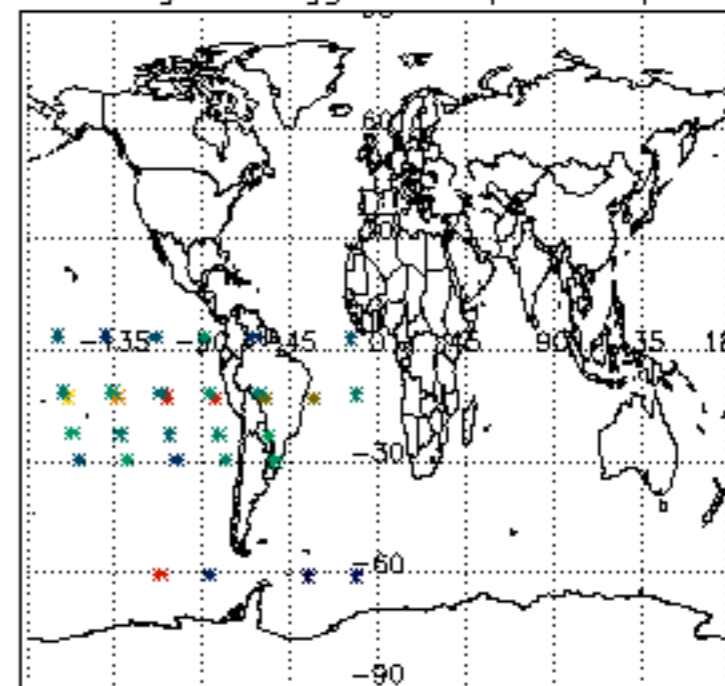
Percentage of flagged data per H2O profile

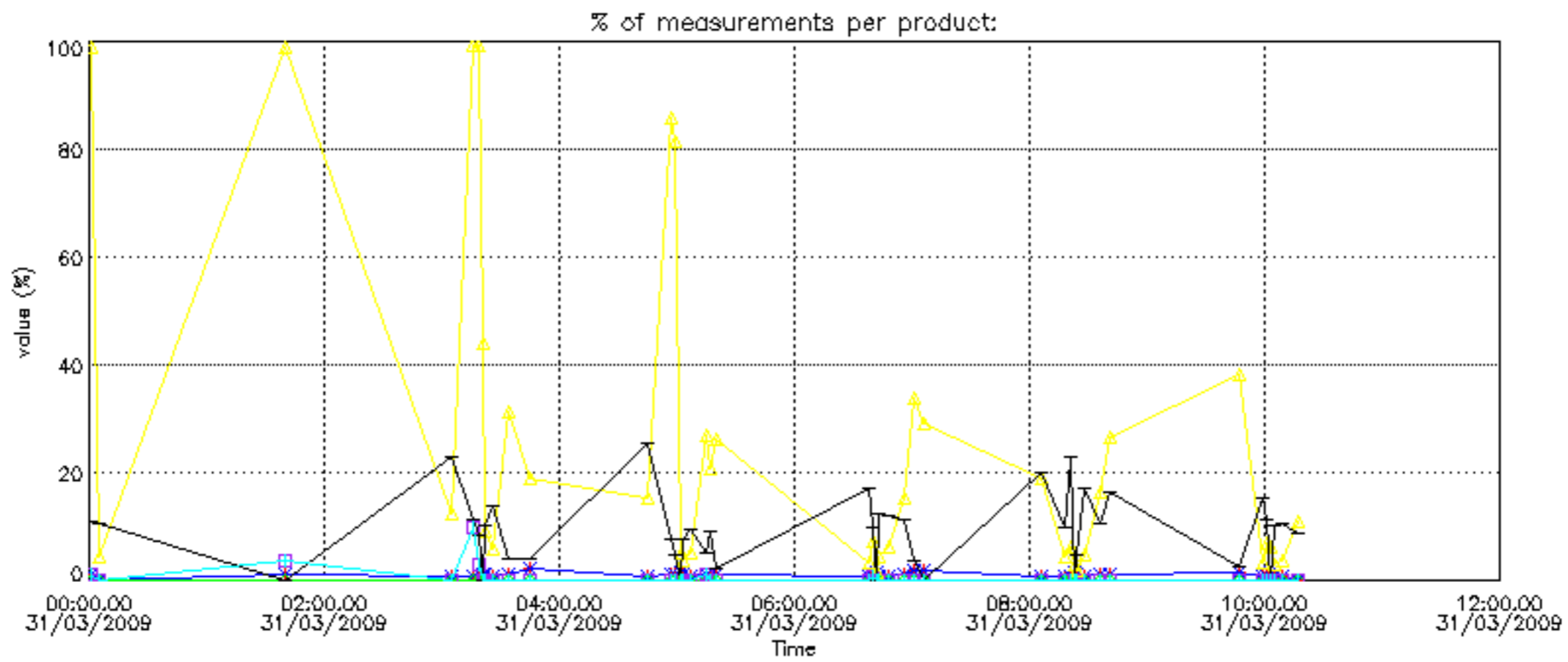


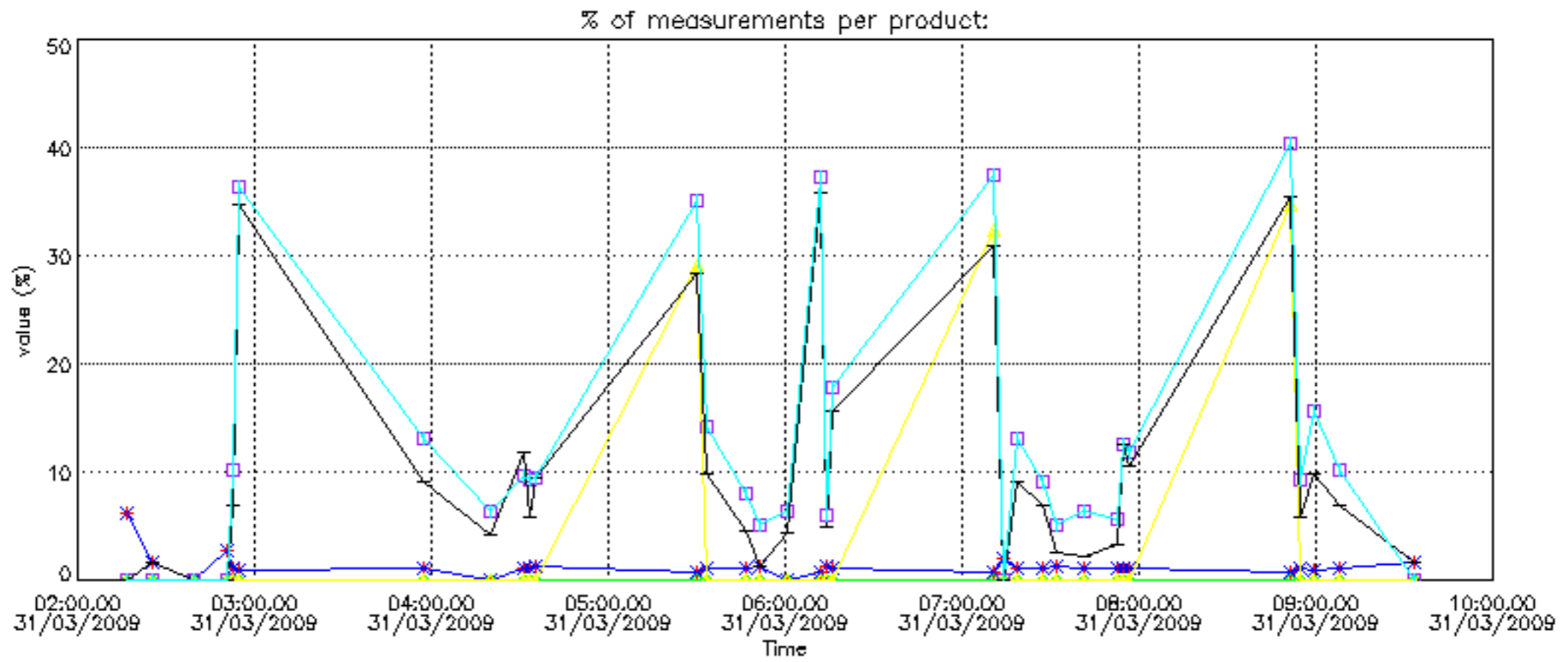
Percentage of flagged data per NO2 profile



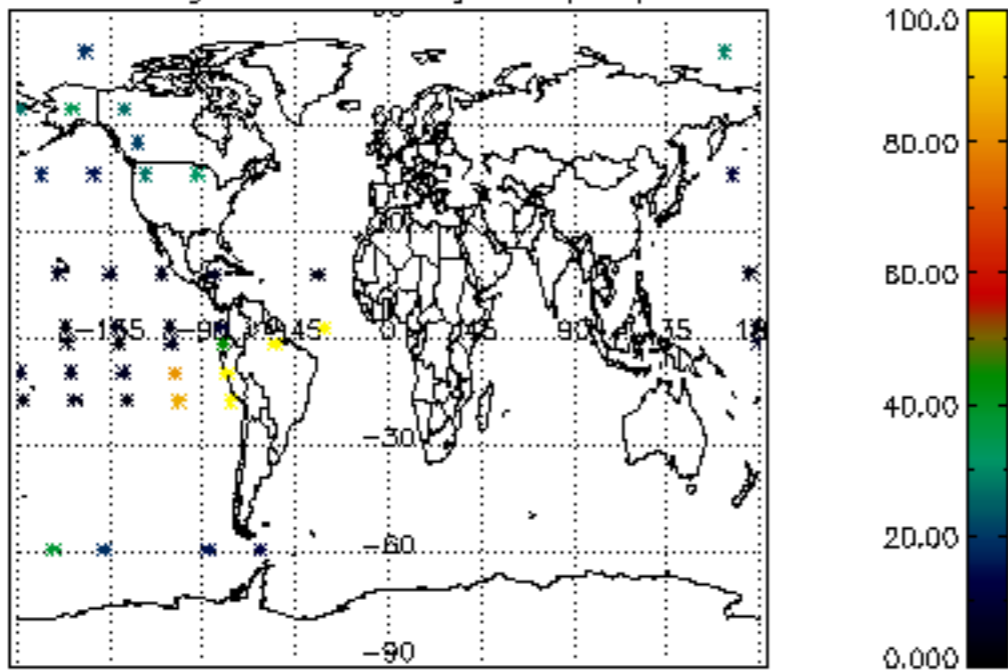
Percentage of flagged data per NO3 profile



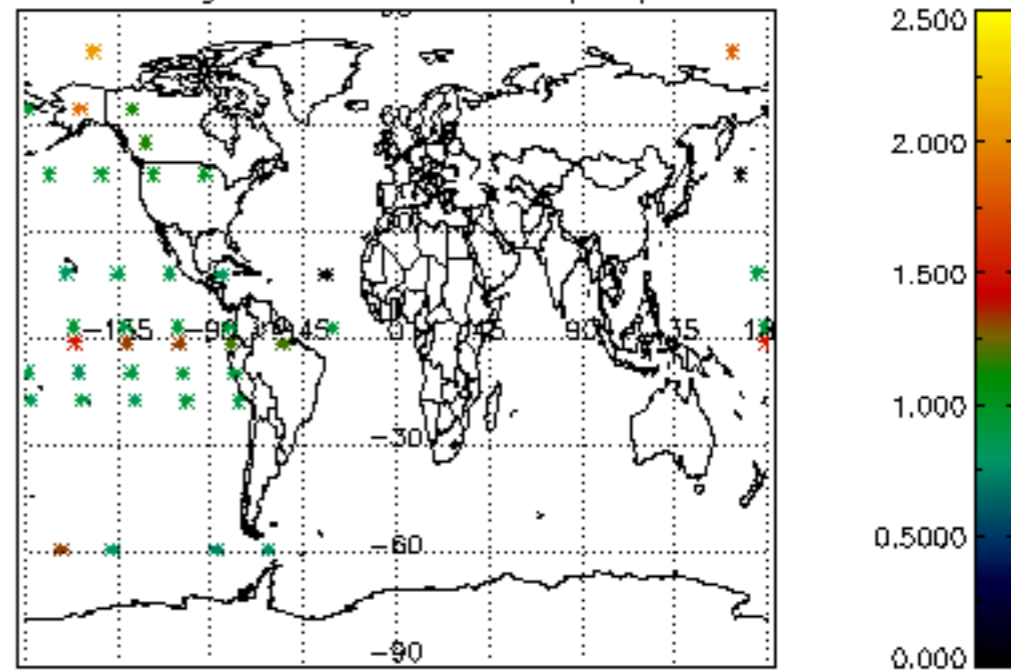




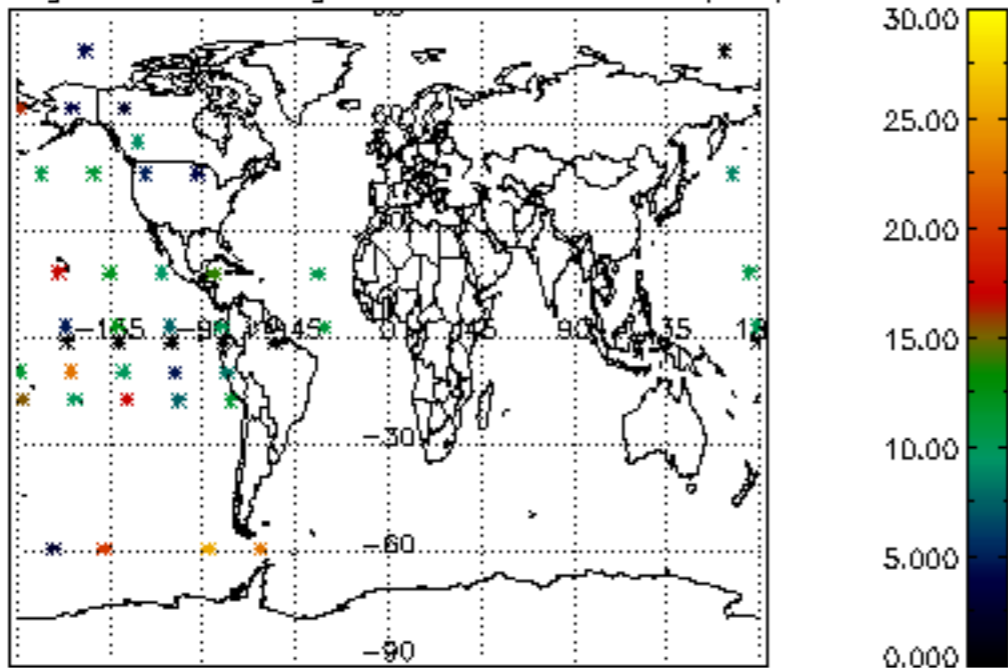
Percentage of cosmic ray hits per profile



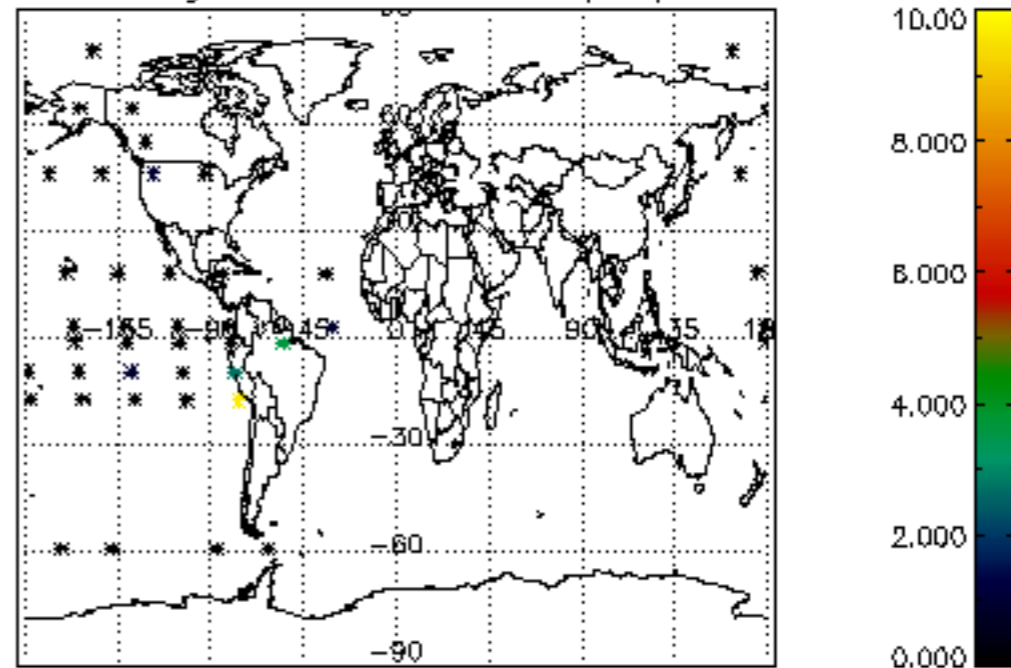
Percentage of datation errors per profile



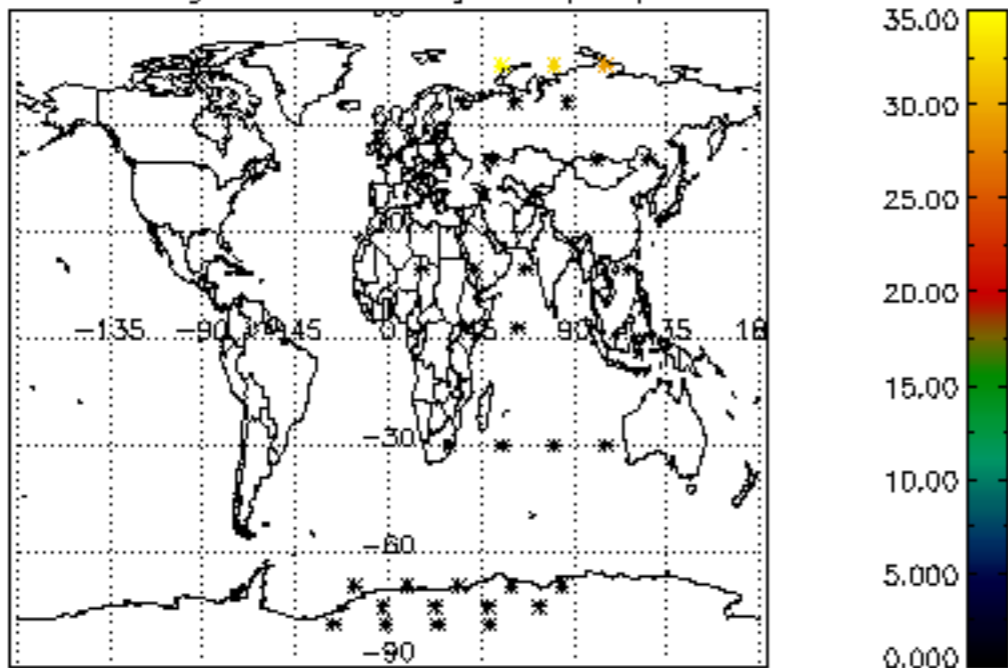
Percentage of star falling outside central band per profile



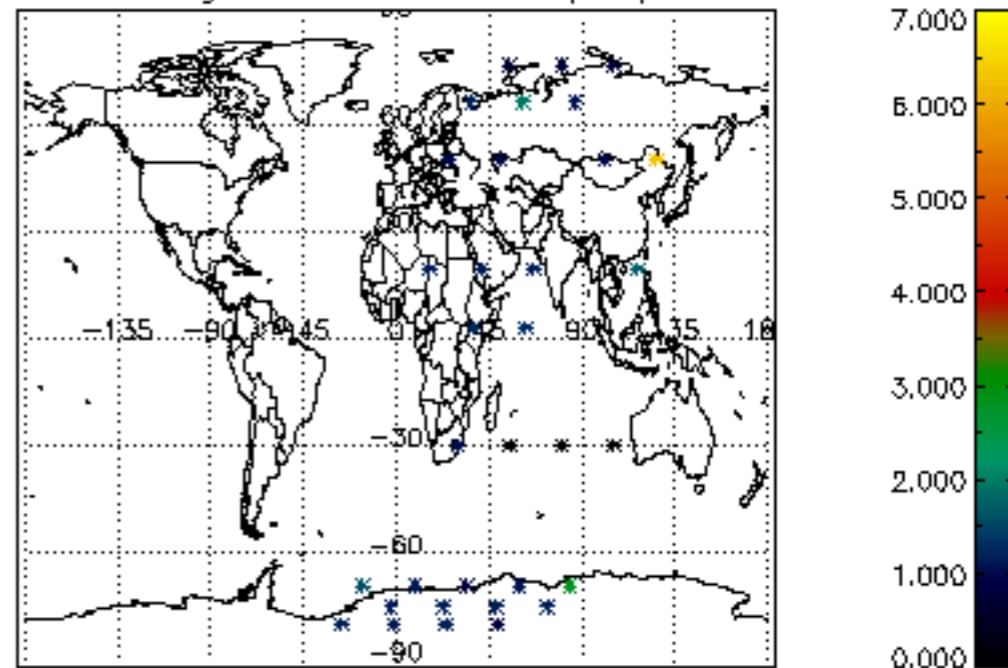
Percentage of saturation errors per profile



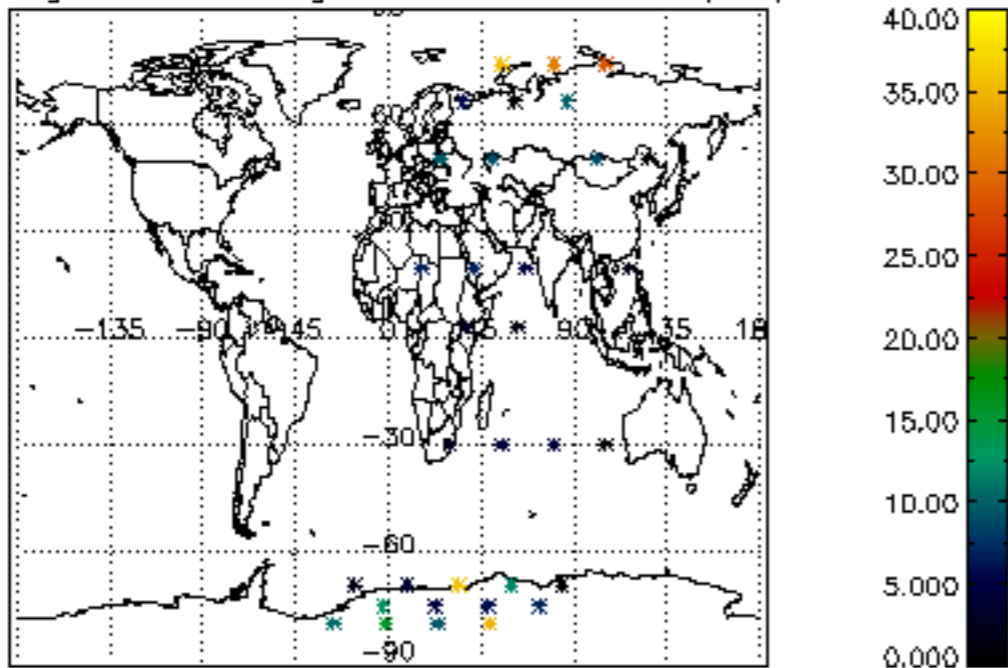
Percentage of cosmic ray hits per profile



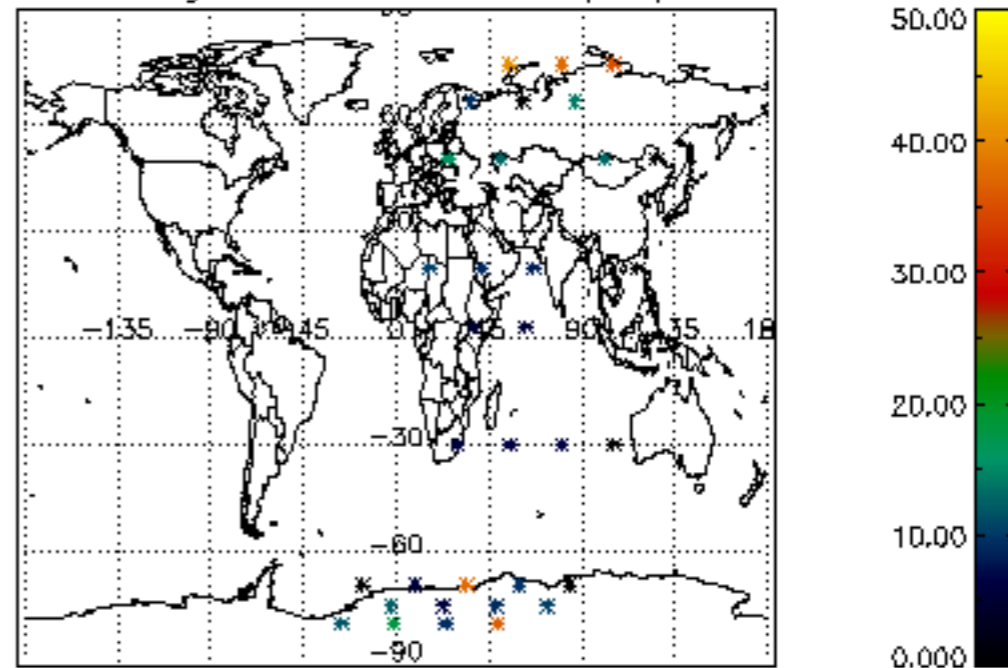
Percentage of datation errors per profile

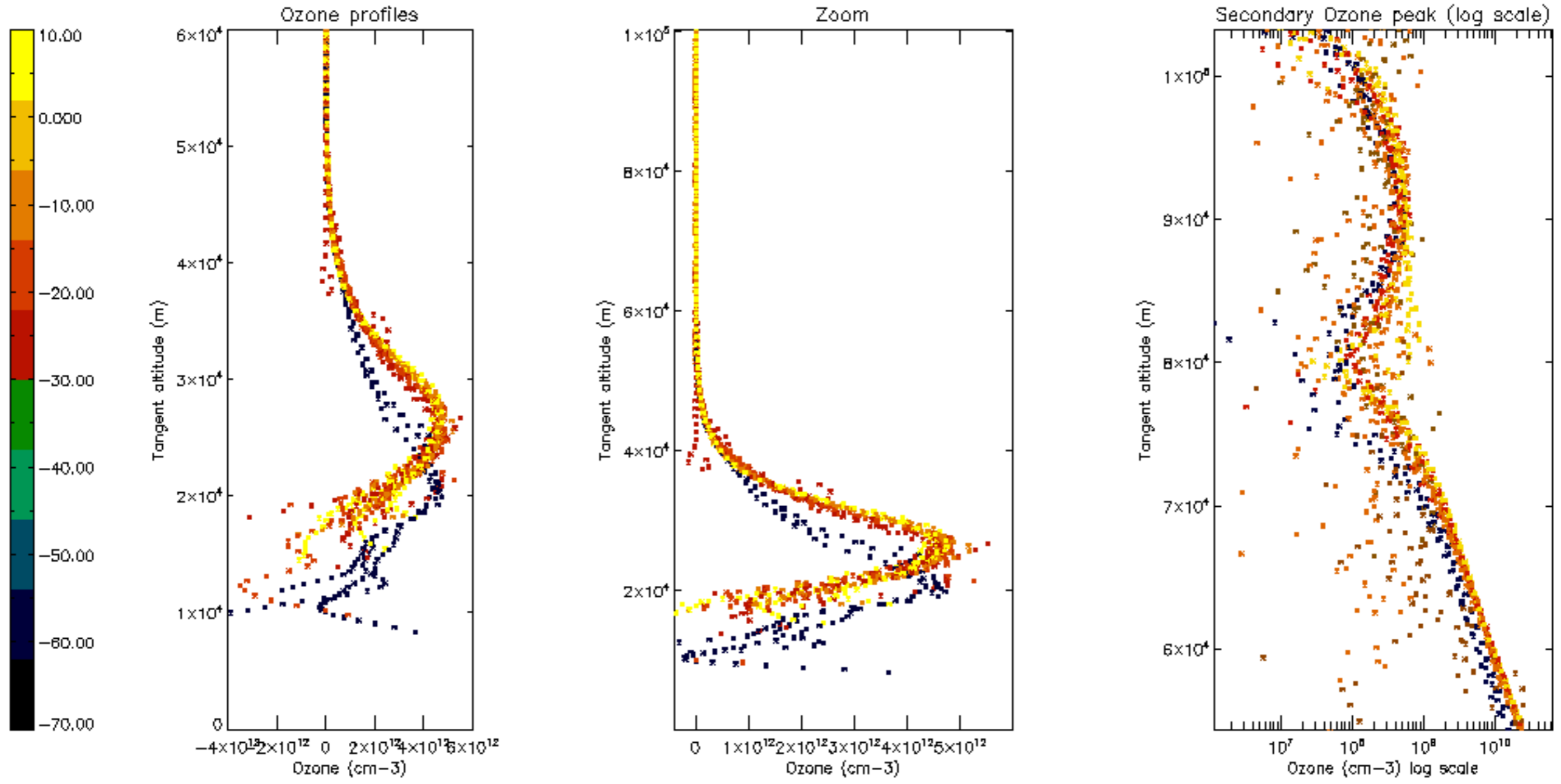


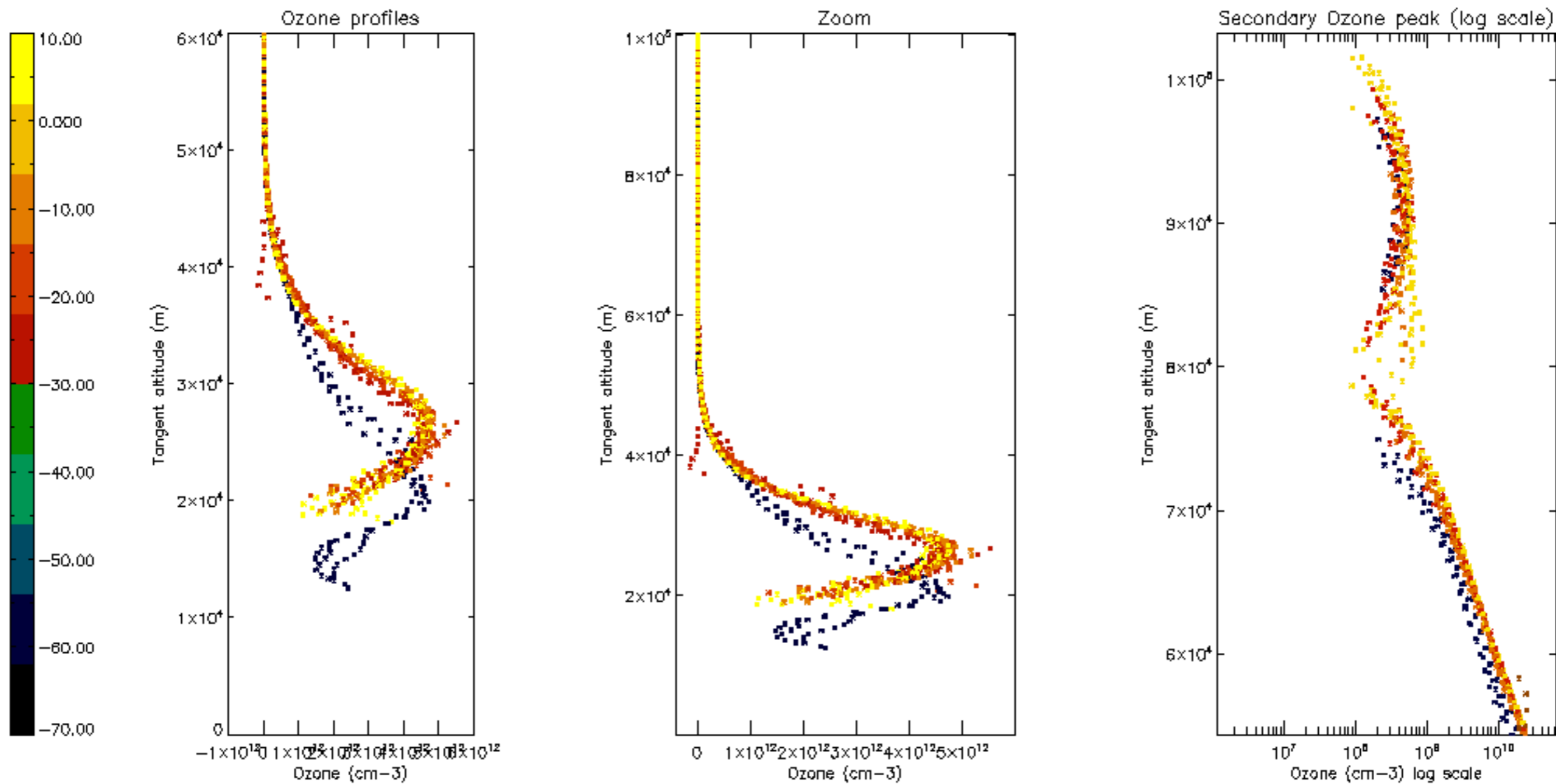
Percentage of star falling outside central band per profile

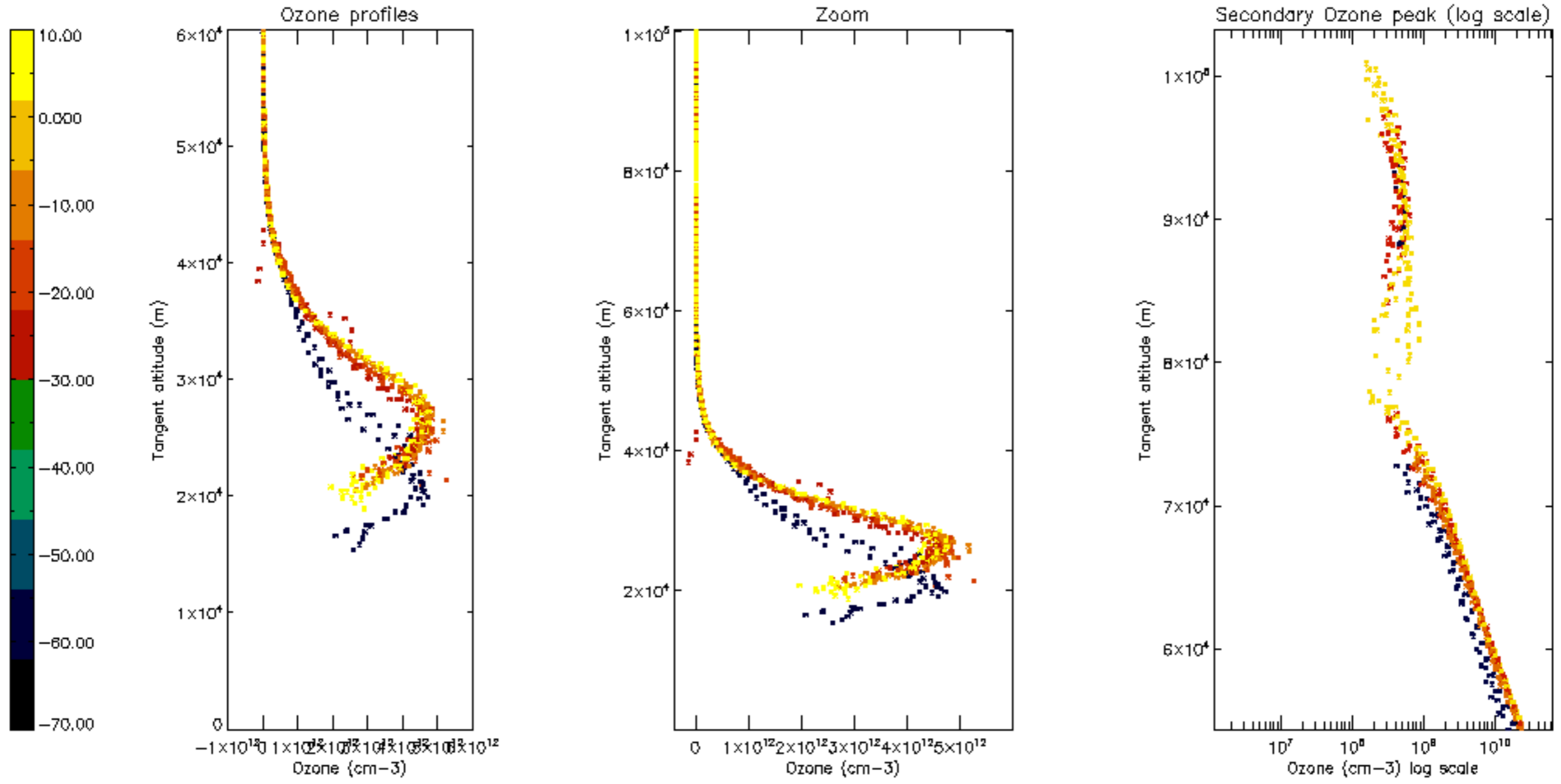


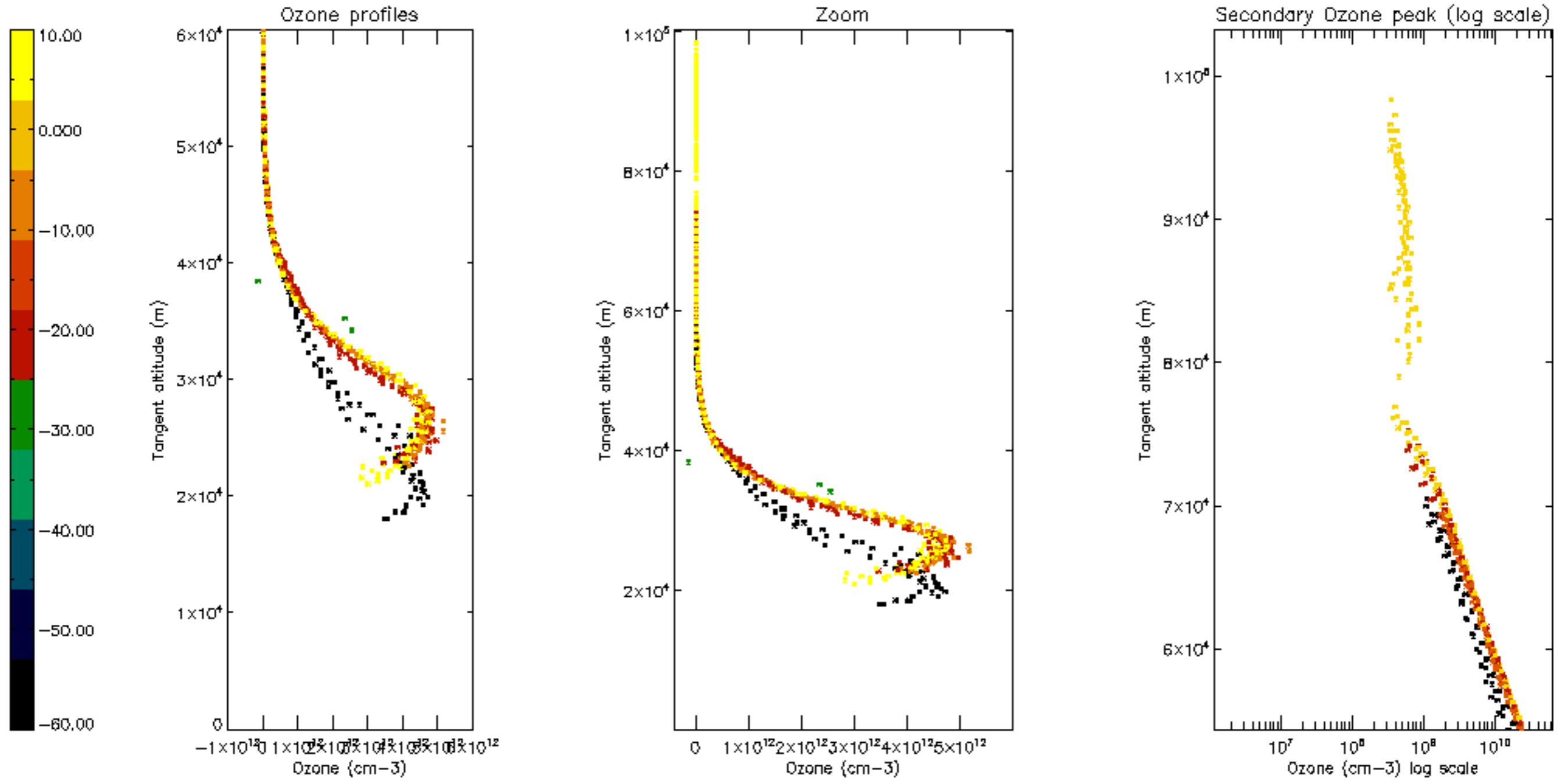
Percentage of saturation errors per profile

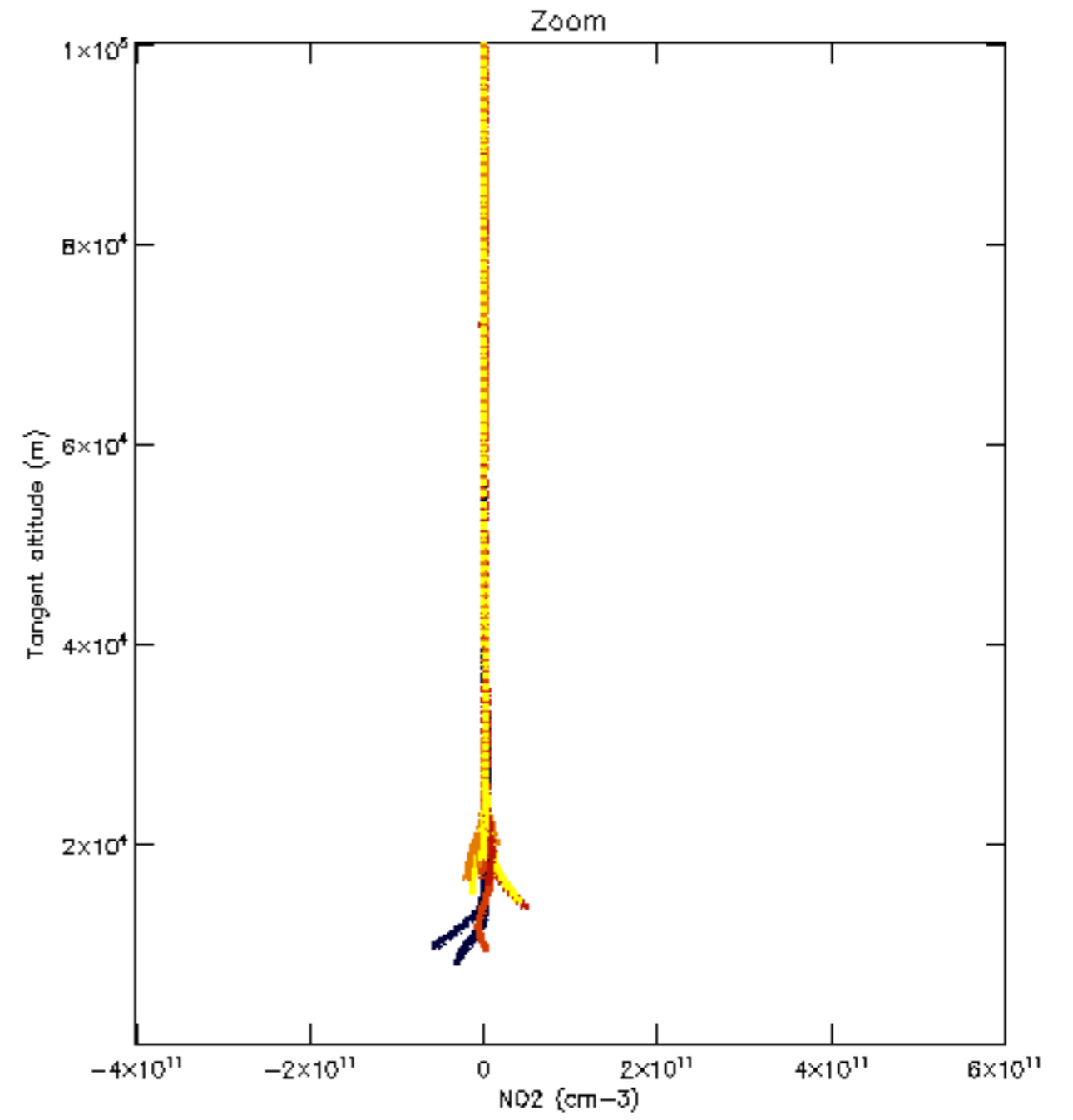
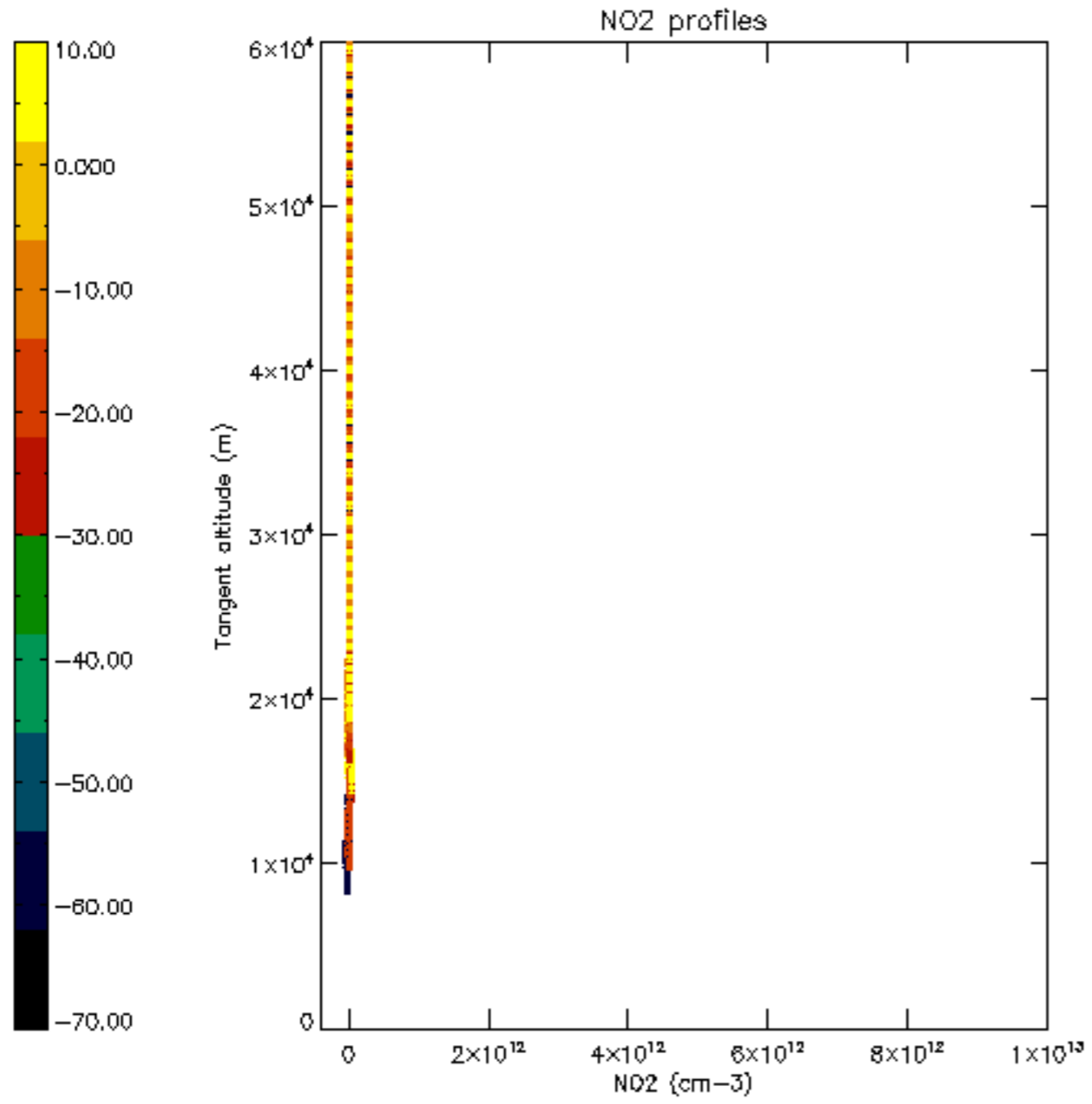


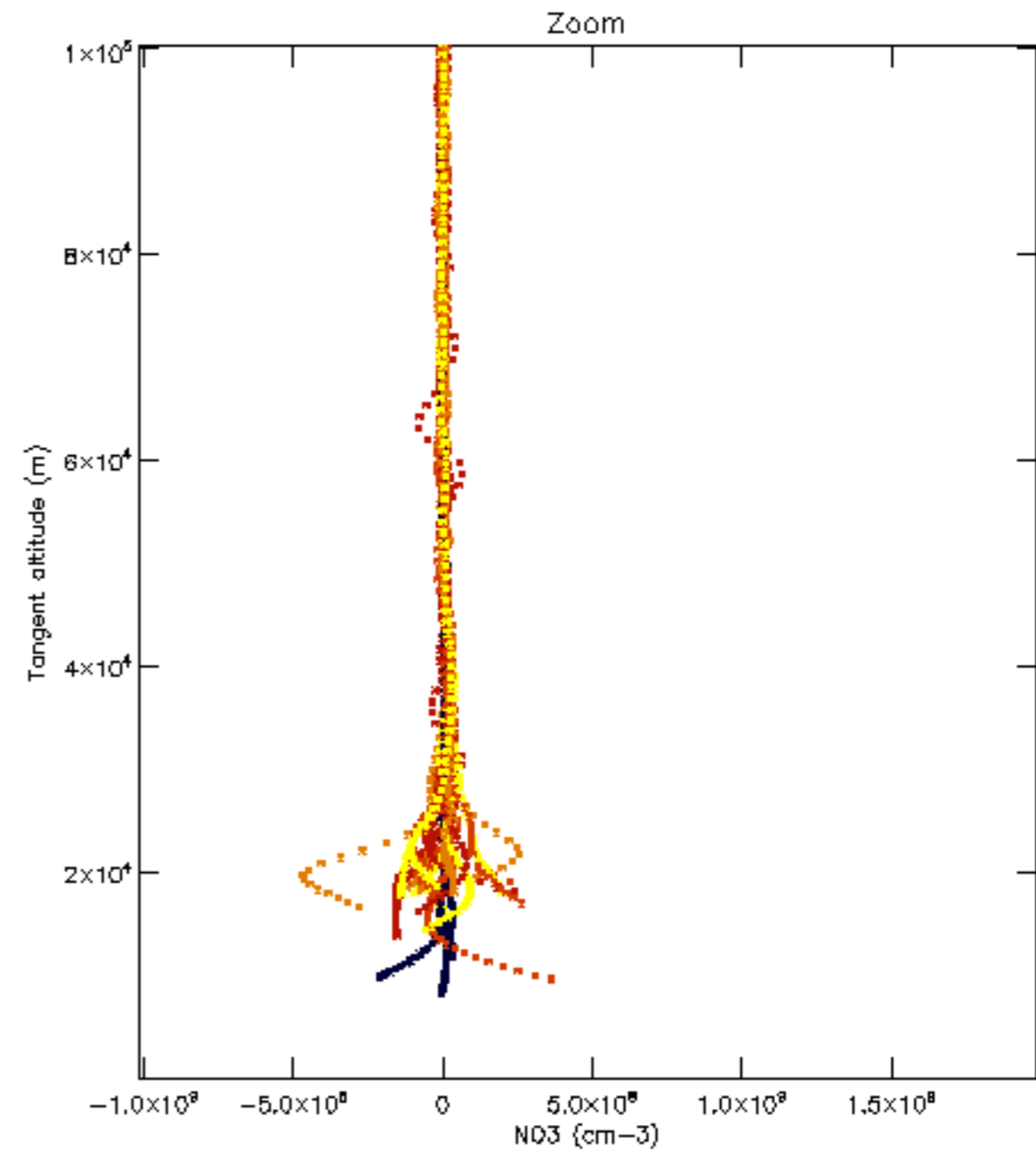
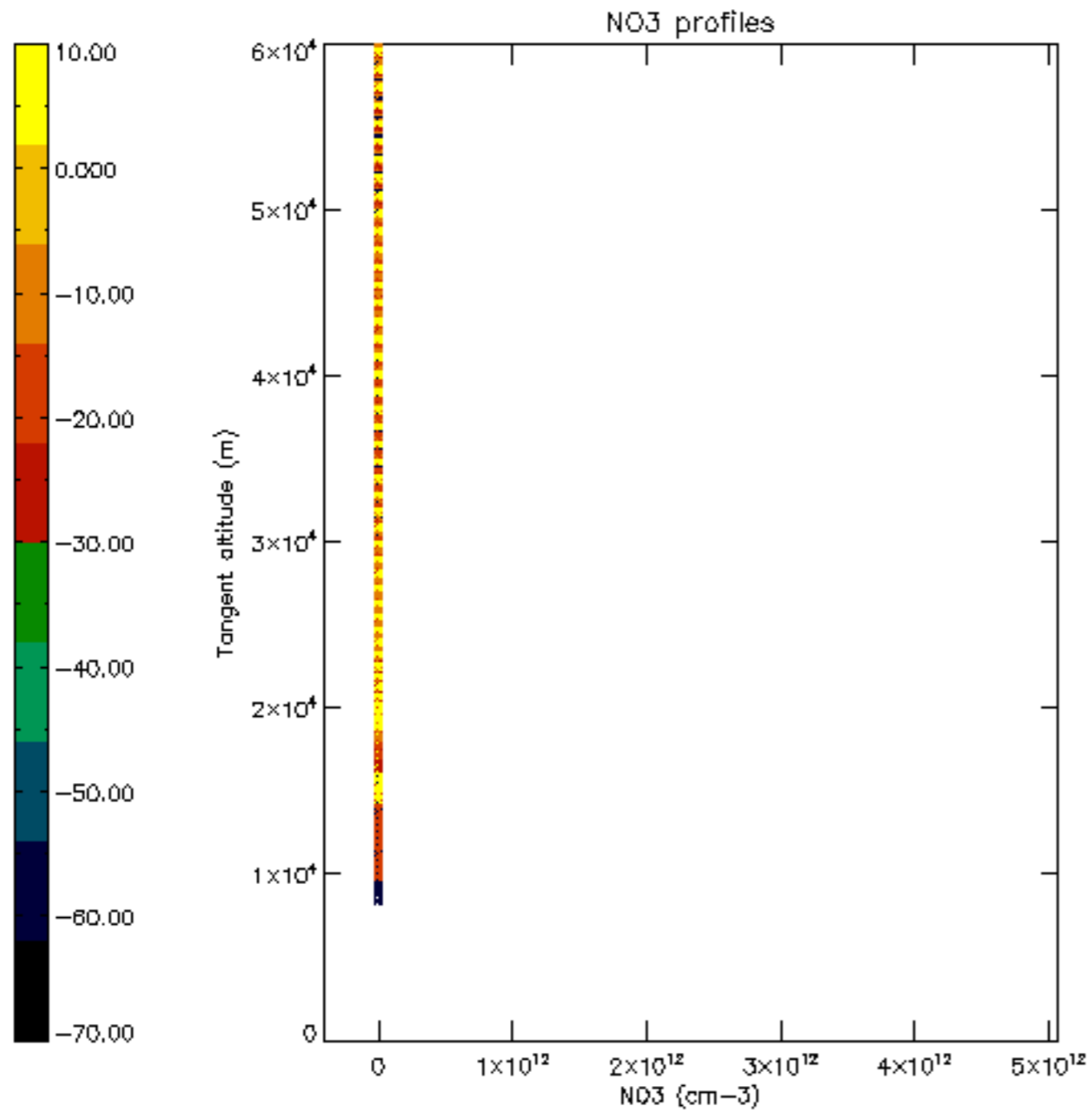


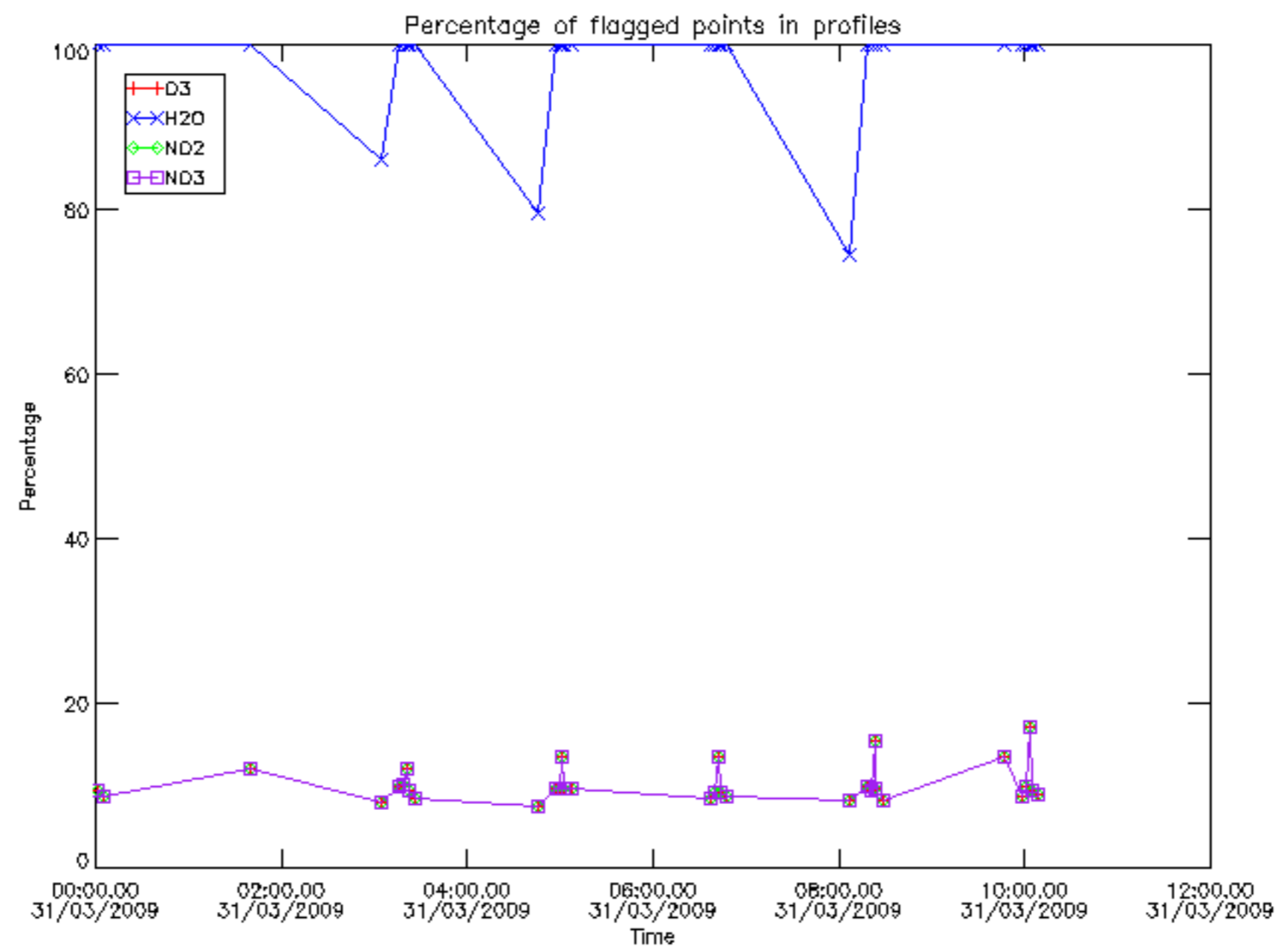




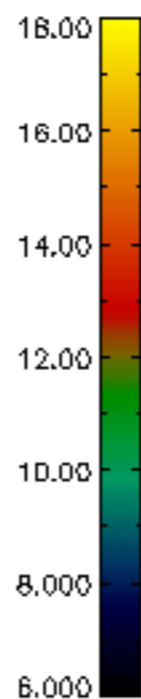
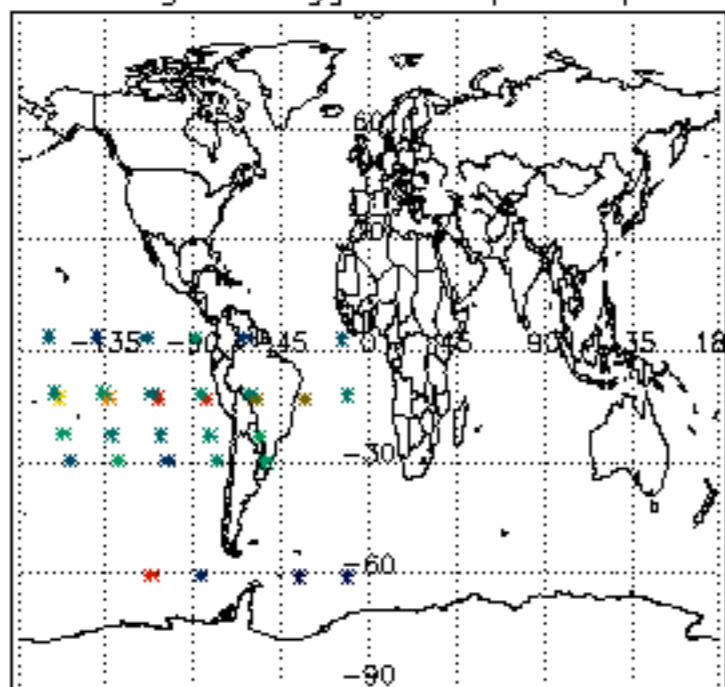




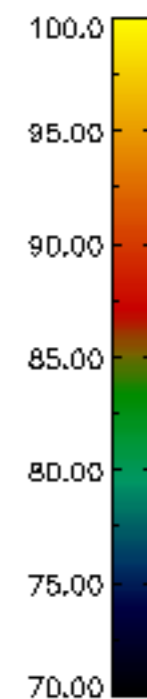
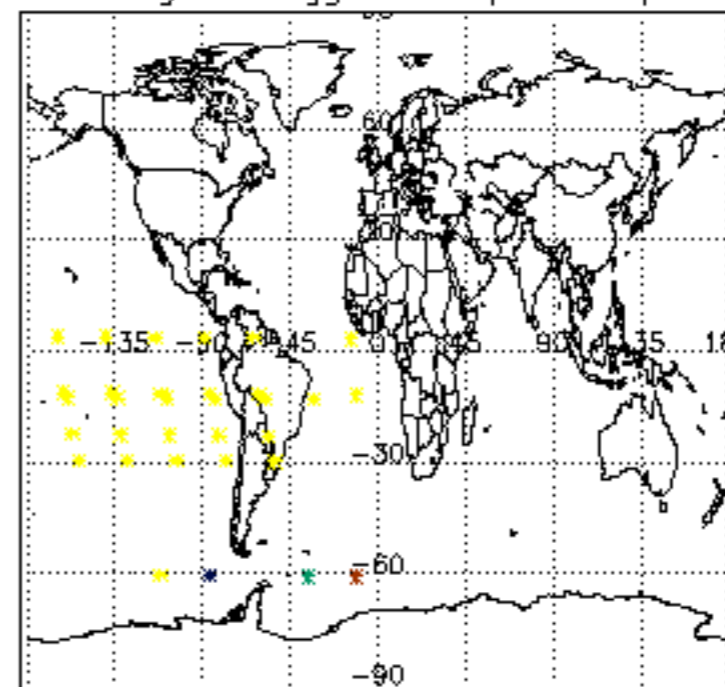




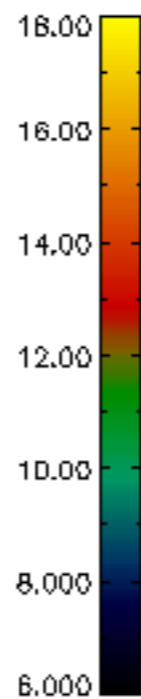
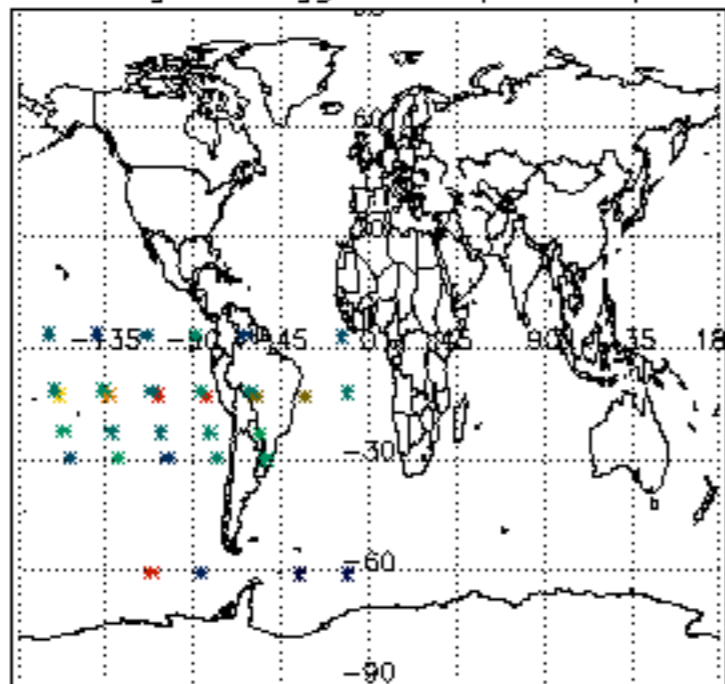
Percentage of flagged data per D3 profile



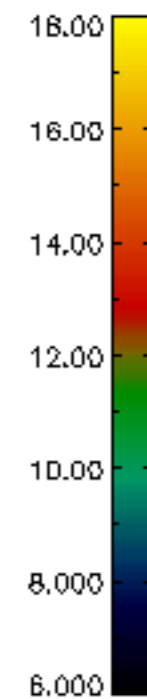
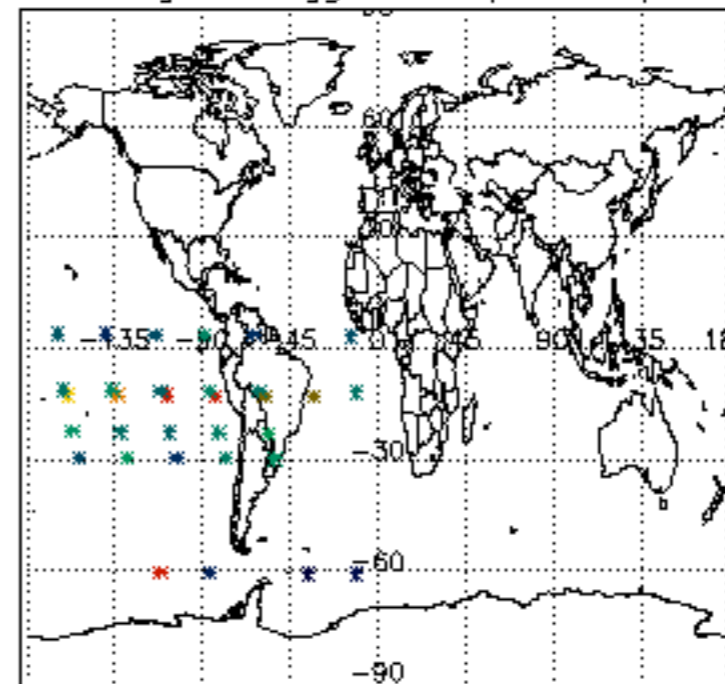
Percentage of flagged data per H2O profile

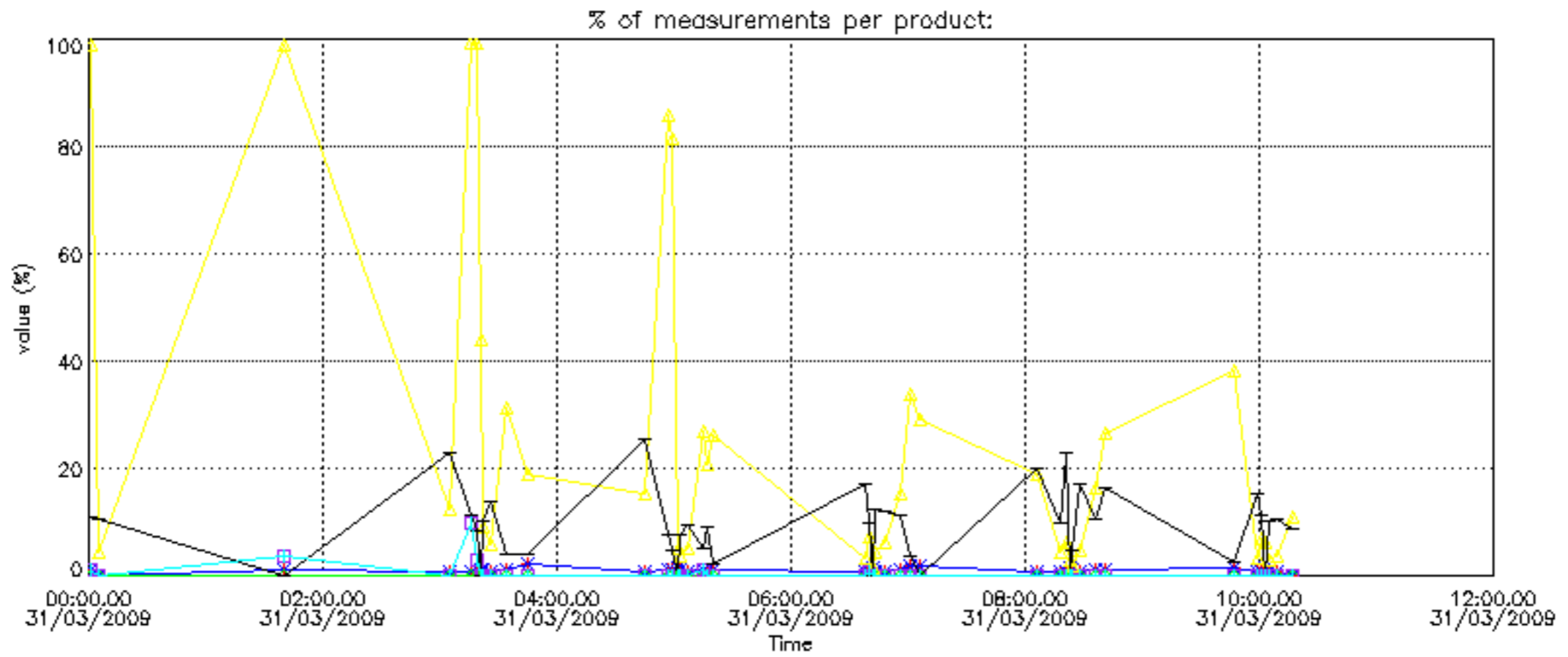


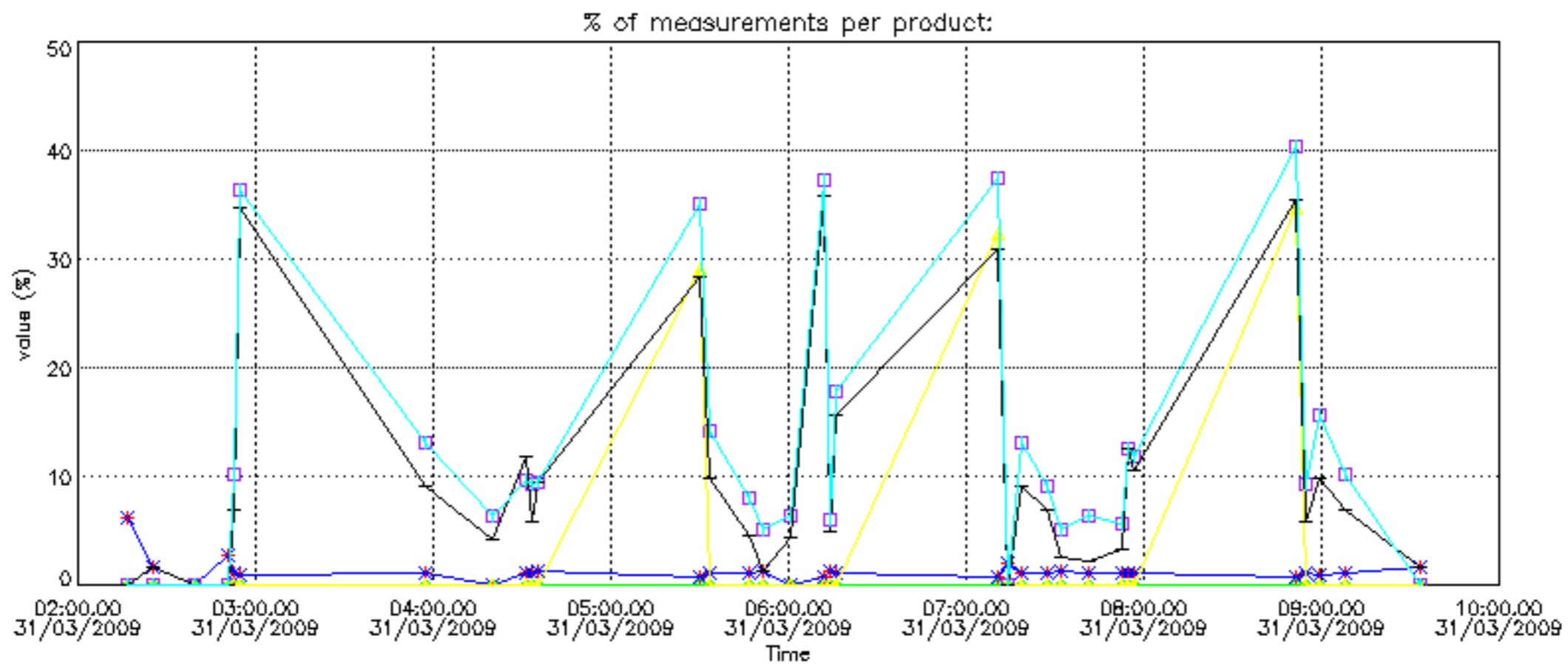
Percentage of flagged data per NO2 profile



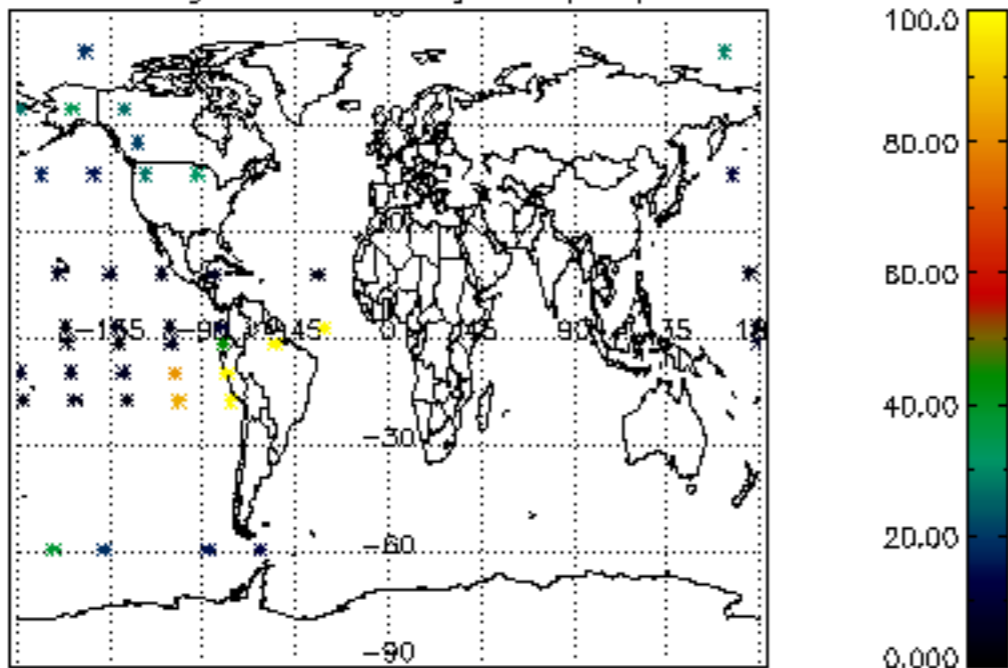
Percentage of flagged data per NO3 profile



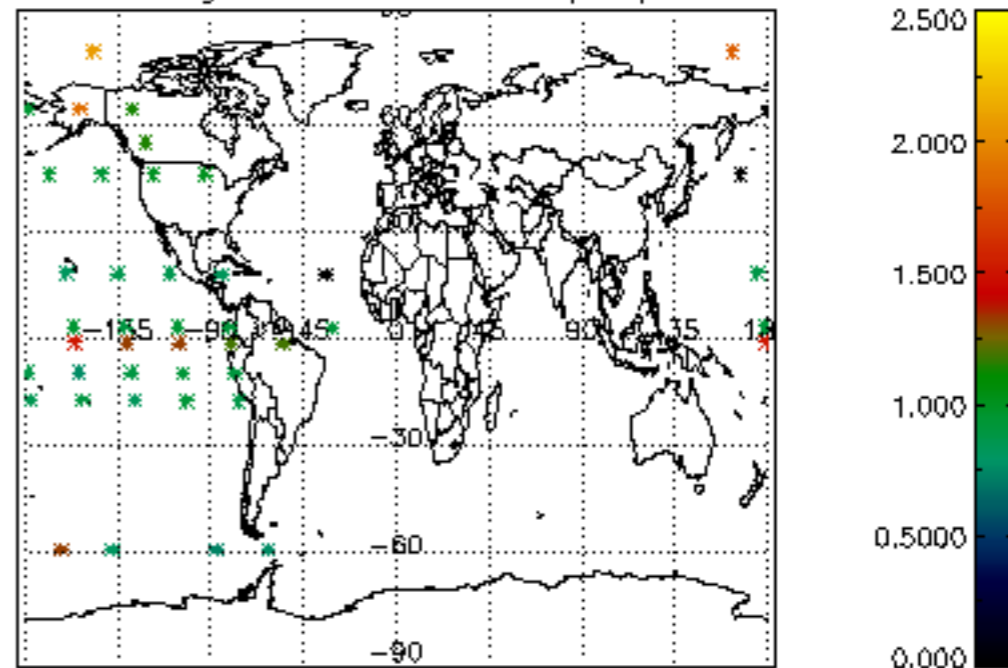




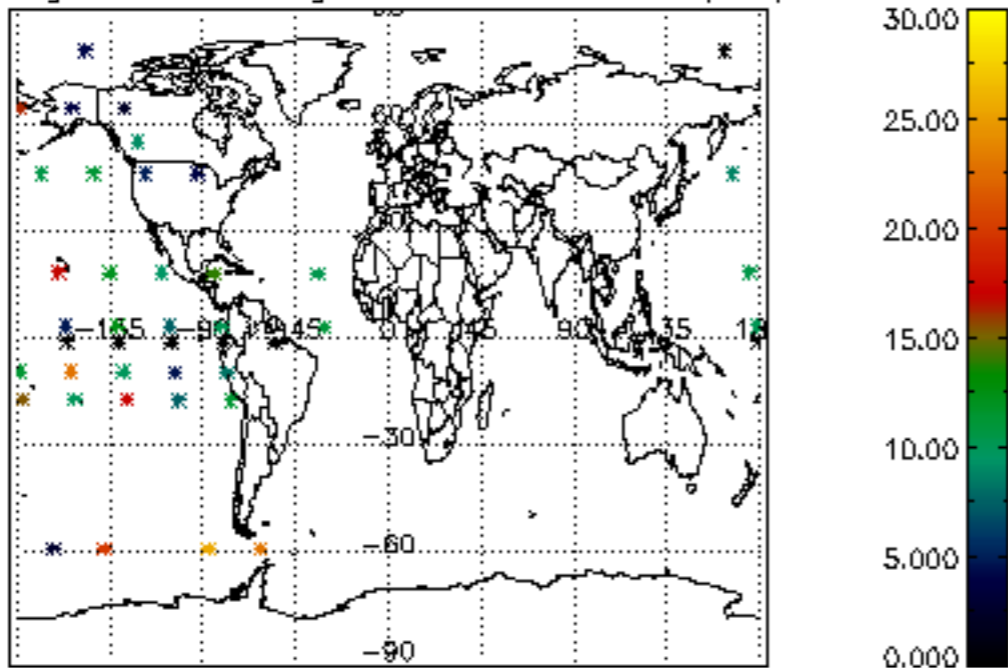
Percentage of cosmic ray hits per profile



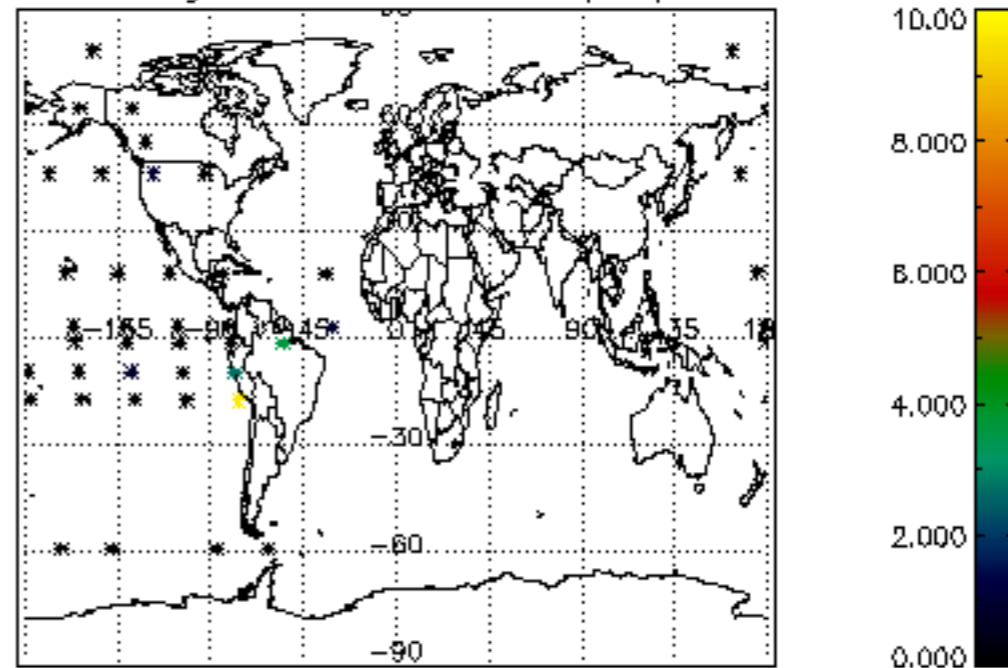
Percentage of datation errors per profile



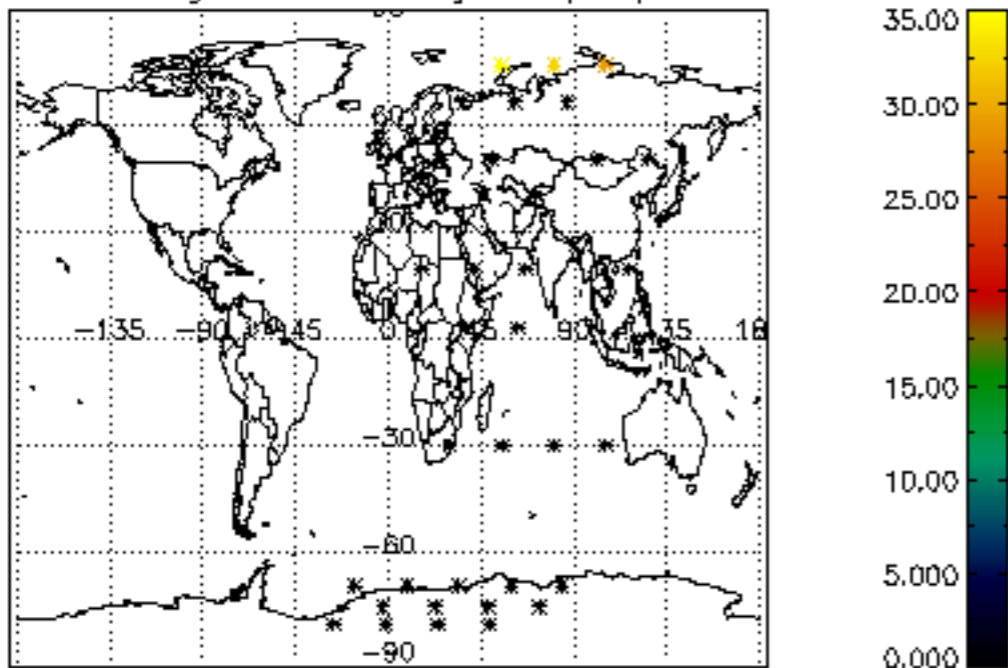
Percentage of star falling outside central band per profile



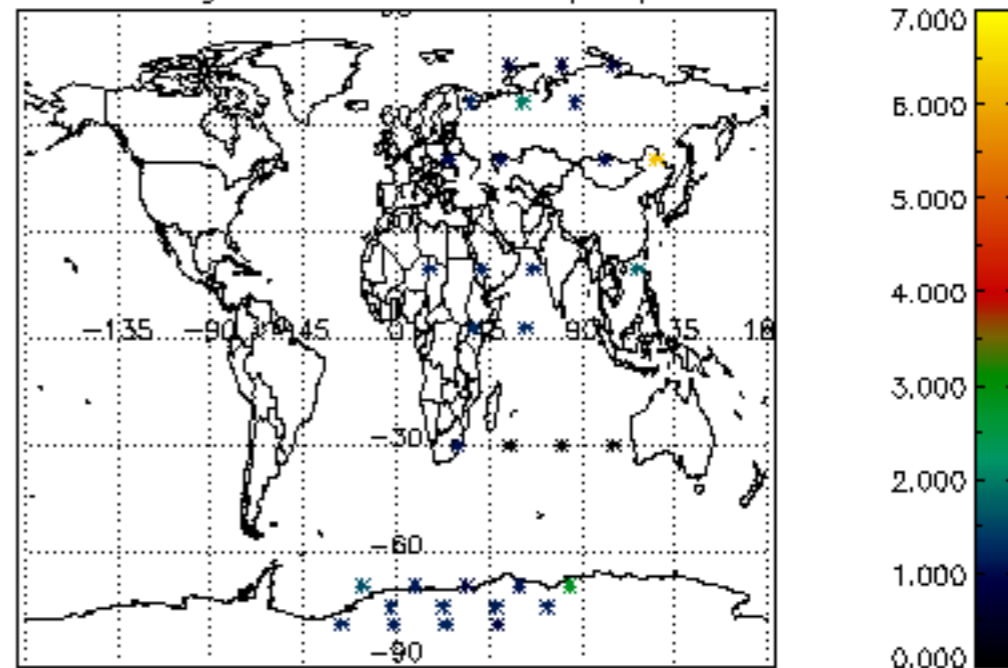
Percentage of saturation errors per profile



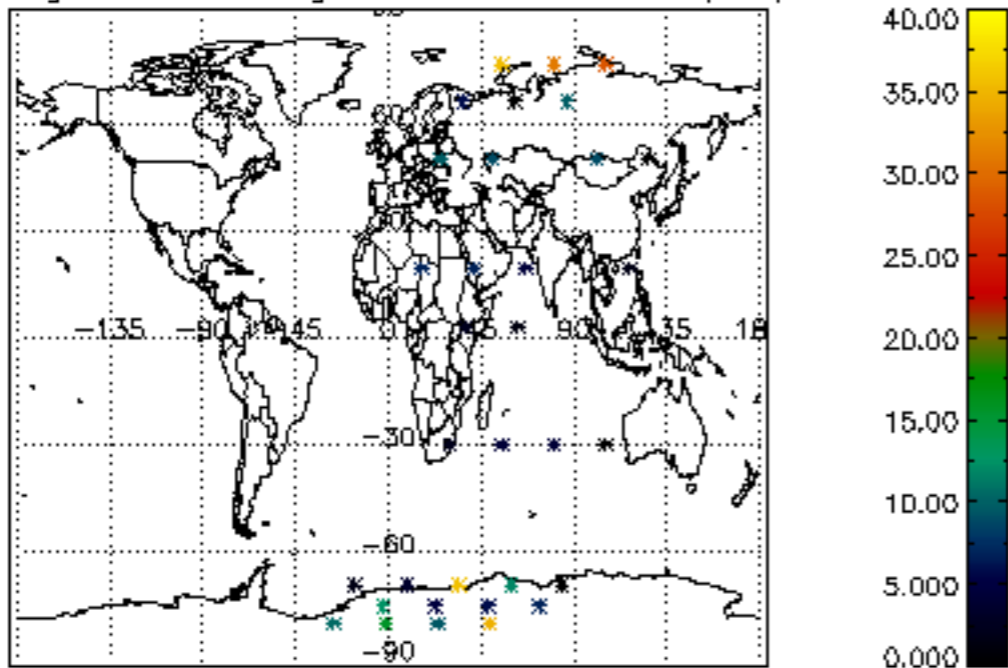
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

