

GOMOS Level 2 Daily Report

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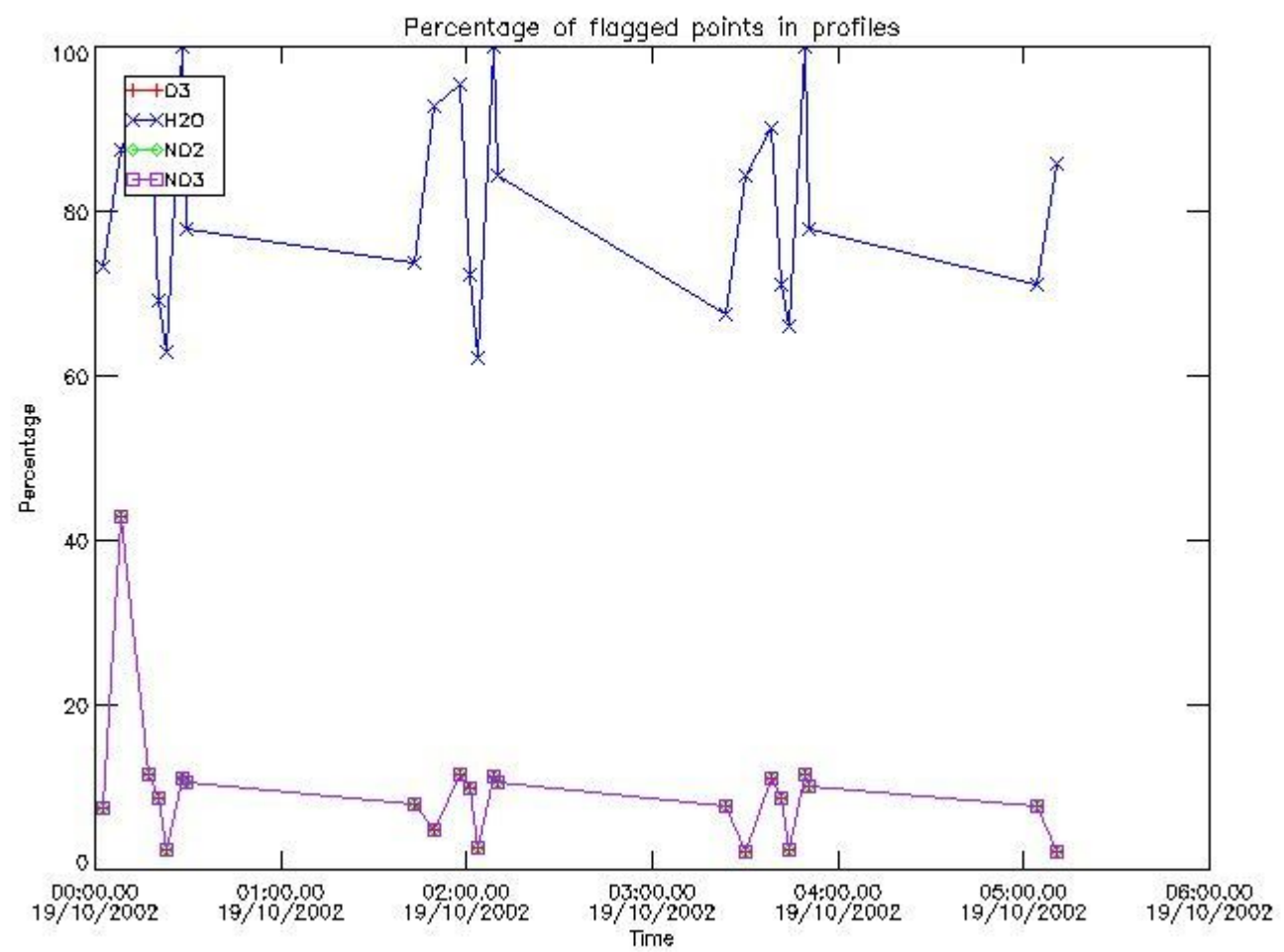
[6. Auxiliary Data Files used for the production reported in section 2](#)

43	GOM_NL__2PRFIN20021019_030024_000000472010_00261_03321_9109.N1	19-OCT-2002 03:00:24	Bright	47.000	36	50Alp UMa	1.8000	6300.0	94	3321	No
44	GOM_NL__2PRFIN20021019_030159_000000452010_00261_03321_9110.N1	19-OCT-2002 03:01:59	Bright	45.000	82	48Bet UMa	2.3650	10600.	90	3321	No
45	GOM_NL__2PRFIN20021019_030524_000000602010_00261_03321_2637.N1	19-OCT-2002 03:05:24	Bright	60.000	174	52Psi UMa	3.0040	4400.0	120	3321	No
46	GOM_NL__2PRFIN20021019_031325_000001422010_00261_03321_2638.N1	19-OCT-2002 03:13:25	Twilight	141.50	17	78Bet Gem	1.1610	4500.0	283	3321	No
47	GOM_NL__2PRFIN20021019_032332_000000672010_00261_03321_2639.N1	19-OCT-2002 03:23:32	Dark	66.500	48	30Alp Hya	1.9770	4100.0	133	3321	No
48	GOM_NL__2PRFIN20021019_032954_000002532010_00261_03321_2640.N1	19-OCT-2002 03:29:54	Dark	253.00	8	10Alp CMi	0.40000	6500.0	506	3321	No
49	GOM_NL__2PRFIN20021019_033816_000000462010_00262_03322_2616.N1	19-OCT-2002 03:38:16	Dark	45.500	29	Bet Car	1.6720	10200.	91	3322	No
50	GOM_NL__2PRFIN20021019_034155_000000592010_00262_03322_2617.N1	19-OCT-2002 03:41:55	Dark	59.000	2	Alp Car	-0.73600	7000.0	118	3322	No
51	GOM_NL__2PRFIN20021019_034414_000002182010_00262_03322_2618.N1	19-OCT-2002 03:44:14	Dark	217.50	1	9Alp CMa	-1.4400	11000.	435	3322	No
52	GOM_NL__2PRFIN20021019_034919_000000452010_00262_03322_2619.N1	19-OCT-2002 03:49:19	Dark	44.500	143	Alp Hya	2.8570	7200.0	89	3322	No
53	GOM_NL__2PRFIN20021019_035045_000000502010_00262_03322_2620.N1	19-OCT-2002 03:50:45	Dark	50.000	9	Alp Eri	0.45300	24000.	100	3322	No
54	GOM_NL__2PRFIN20021019_035328_000000552010_00262_03322_2621.N1	19-OCT-2002 03:53:28	Straylight	54.500	157	The1Eri	2.9060	9300.0	109	3322	No
55	GOM_NL__2PRFIN20021019_035543_000000452010_00262_03322_2622.N1	19-OCT-2002 03:55:43	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	3322	No
56	GOM_NL__2PRFIN20021019_040217_000000502010_00262_03322_2623.N1	19-OCT-2002 04:02:17	Straylight	49.500	52	16Bet Cet	2.0370	4500.0	99	3322	No
57	GOM_NL__2PRFIN20021019_041150_000000432010_00262_03322_2624.N1	19-OCT-2002 04:11:50	Bright	43.000	140	88Gam Peg	2.8340	26000.	86	3322	No
58	GOM_NL__2PRFIN20021019_041546_000000452010_00262_03322_2625.N1	19-OCT-2002 04:15:46	Bright	44.500	58	21Alp And	2.0730	11000.	89	3322	No
59	GOM_NL__2PRFIN20021019_041803_000000512010_00262_03322_2626.N1	19-OCT-2002 04:18:03	Bright	51.000	53	43Bet And	2.0480	3300.0	102	3322	No
60	GOM_NL__2PRFIN20021019_042119_000000542010_00262_03322_2627.N1	19-OCT-2002 04:21:19	Bright	53.500	73	57Gam1And	2.2600	13100.	107	3322	No
61	GOM_NL__2PRFIN20021019_042341_000000452010_00262_03322_2628.N1	19-OCT-2002 04:23:41	Bright	44.500	68	18Alp Cas	2.2250	4500.0	89	3322	No
62	GOM_NL__2PRFIN20021019_042501_000000462010_00262_03322_2629.N1	19-OCT-2002 04:25:01	Bright	45.500	76	27Gam Cas	2.3000	30000.	91	3322	No
63	GOM_NL__2PRFIN20021019_042655_000000442010_00262_03322_2630.N1	19-OCT-2002 04:26:55	Bright	44.000	89	5Alp Cep	2.4510	8000.0	88	3322	No
64	GOM_NL__2PRFIN20021019_043248_000000422010_00262_03322_2631.N1	19-OCT-2002 04:32:48	Bright	42.000	49	1Alp UMi	1.9900	6300.0	84	3322	No
65	GOM_NL__2PRFIN20021019_043559_000000452010_00262_03322_2632.N1	19-OCT-2002 04:35:59	Bright	45.000	60	7Bet UMi	2.0810	3950.0	90	3322	No
66	GOM_NL__2PRFIN20021019_044102_000000482010_00262_03322_2633.N1	19-OCT-2002 04:41:02	Bright	47.500	36	50Alp UMa	1.8000	6300.0	95	3322	No
67	GOM_NL__2PRFIN20021019_044236_000000442010_00262_03322_2634.N1	19-OCT-2002 04:42:36	Bright	44.000	82	48Bet UMa	2.3650	10600.	88	3322	No
68	GOM_NL__2PRFIN20021019_044602_000000432010_00262_03322_2635.N1	19-OCT-2002 04:46:02	Bright	43.000	174	52Psi UMa	3.0040	4400.0	86	3322	No
69	GOM_NL__2PRFIN20021019_045402_000001482010_00262_03322_2636.N1	19-OCT-2002 04:54:02	Twilight	147.50	17	78Bet Gem	1.1610	4500.0	295	3322	No
70	GOM_NL__2PRFIN20021019_050409_000000662010_00262_03322_2637.N1	19-OCT-2002 05:04:09	Dark	66.000	48	30Alp Hya	1.9770	4100.0	132	3322	No
71	GOM_NL__2PRFIN20021019_051035_000002532010_00262_03322_2638.N1	19-OCT-2002 05:10:35	Dark	253.00	8	10Alp CMi	0.40000	6500.0	506	3322	No

3. Quality information per product

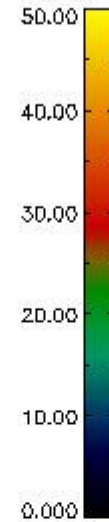
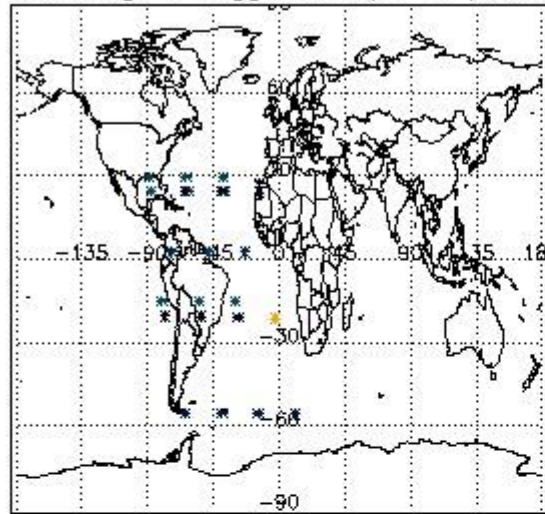
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

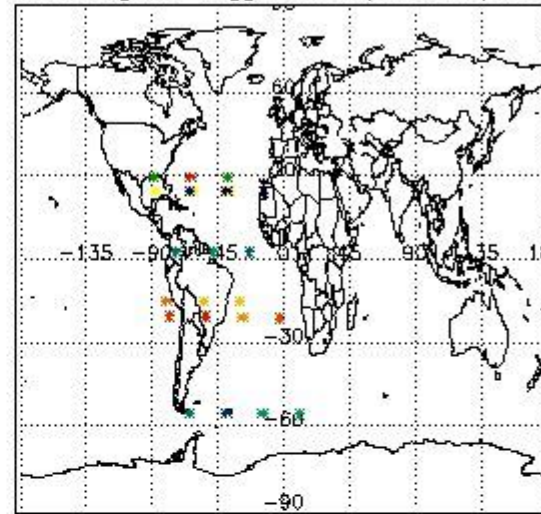


3.2 Plot quality information per product (world map)

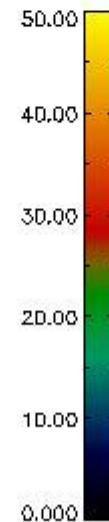
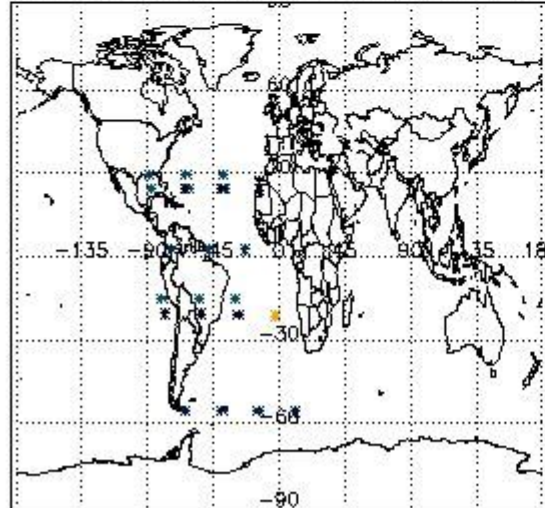
Percentage of flagged data per O3 profile



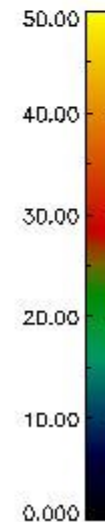
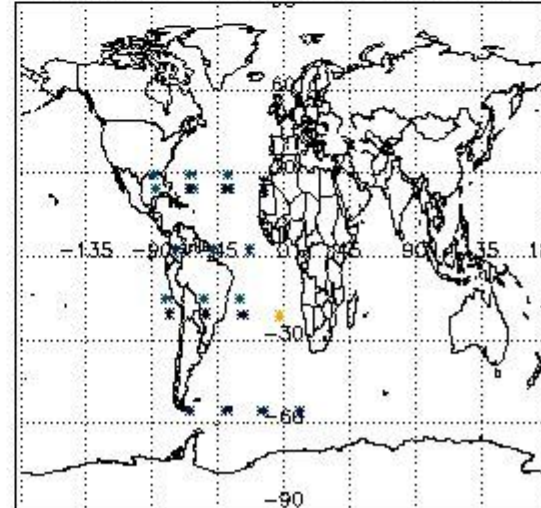
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

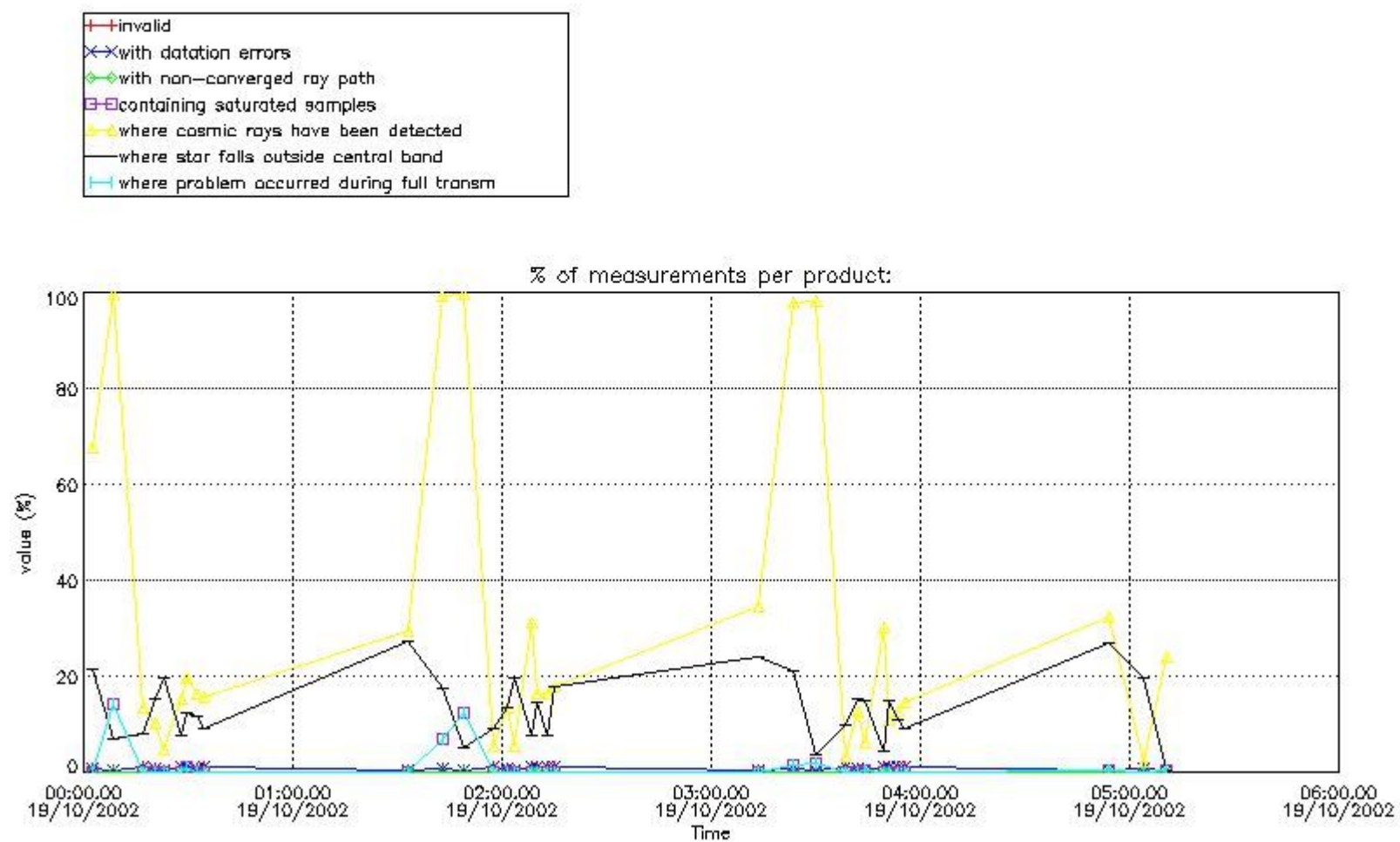


4. Level 1 quality information per product

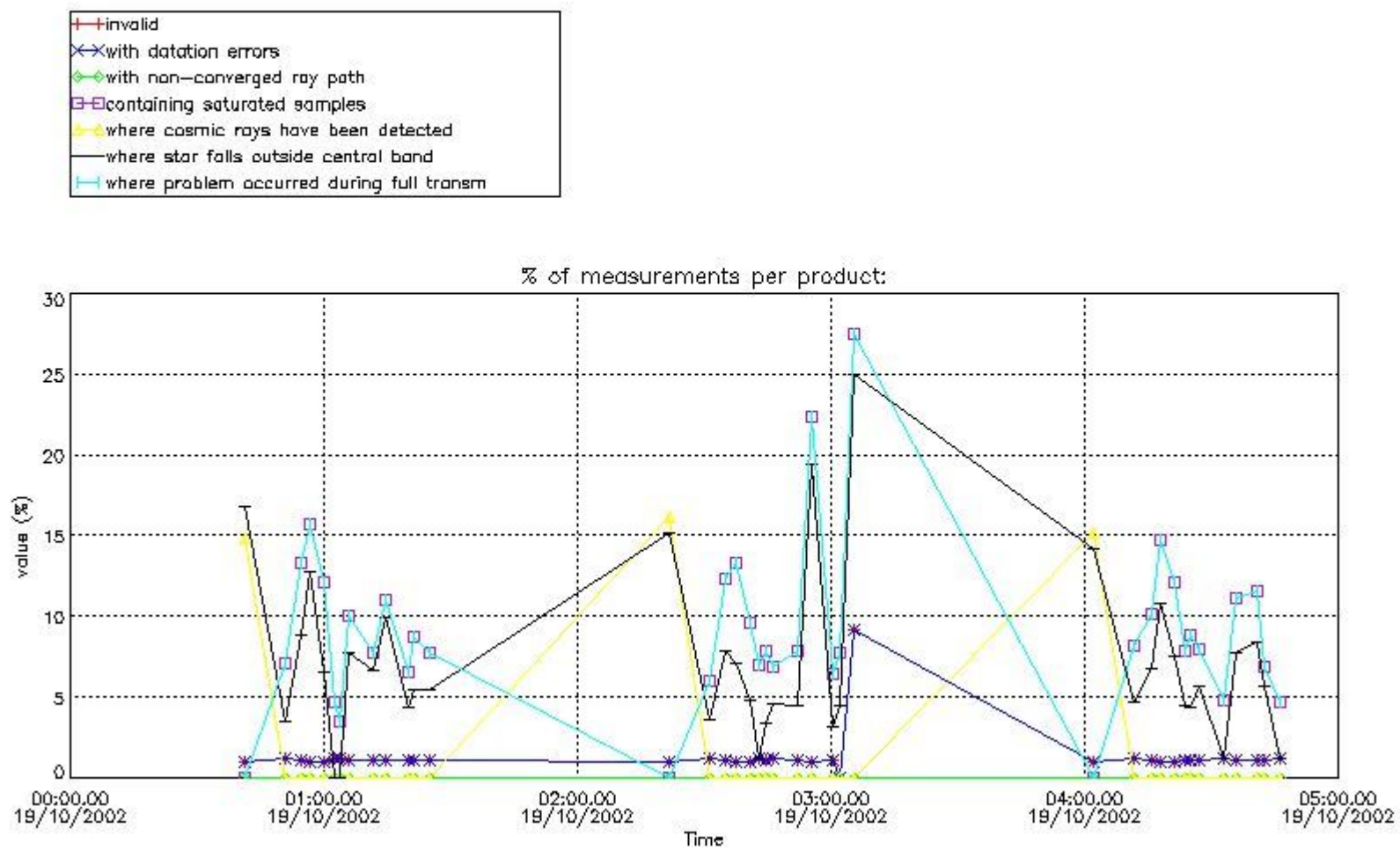
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



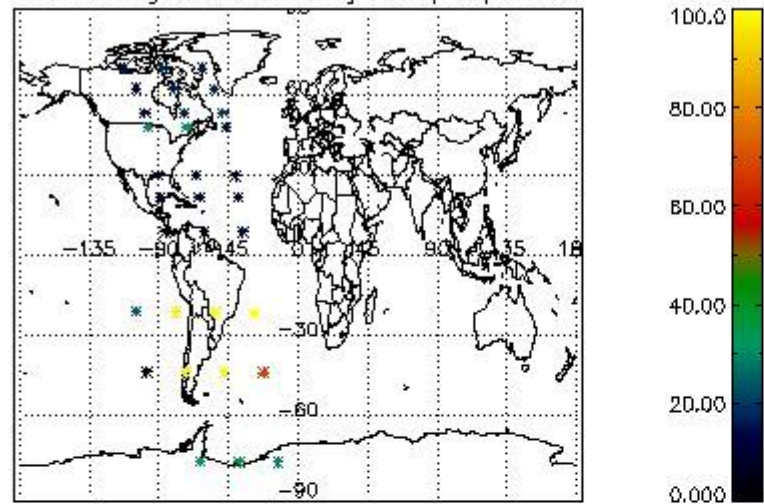
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



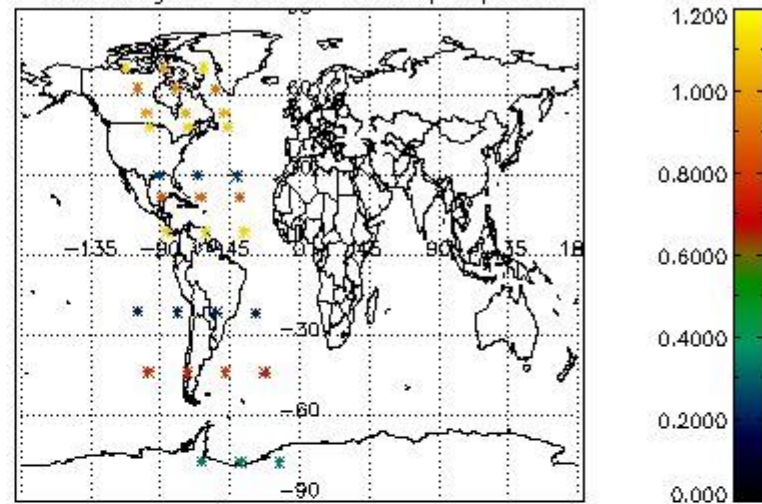
4.2 Plot quality information per product coming from level 1b processing (world map)

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

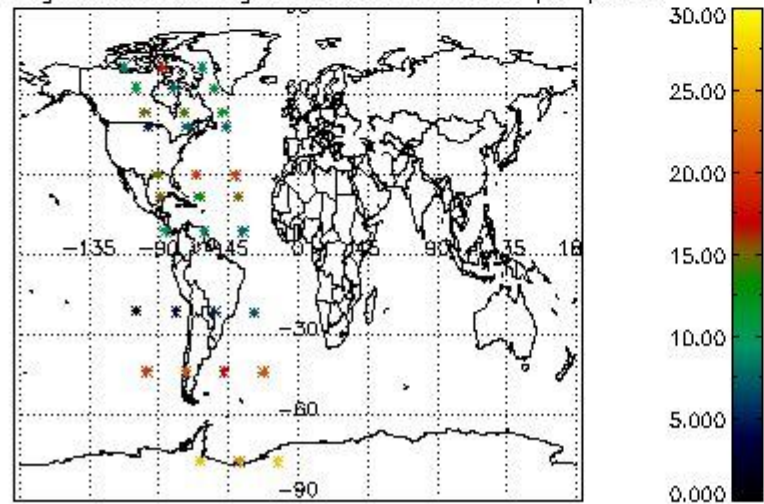
Percentage of cosmic ray hits per profile



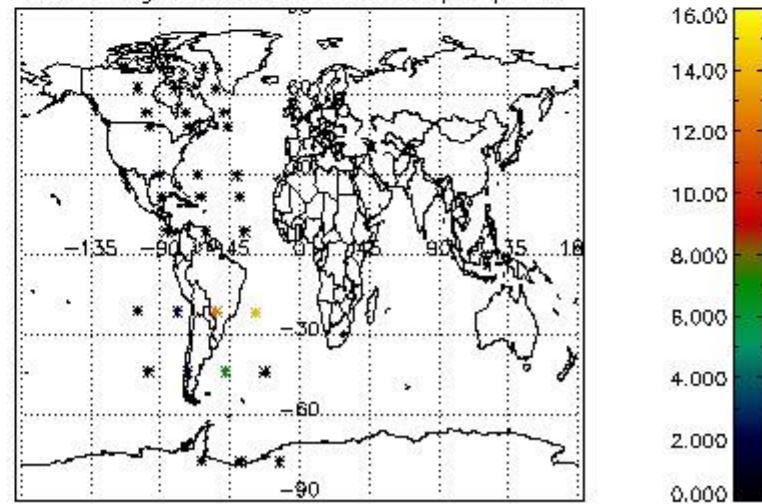
Percentage of datation errors per profile



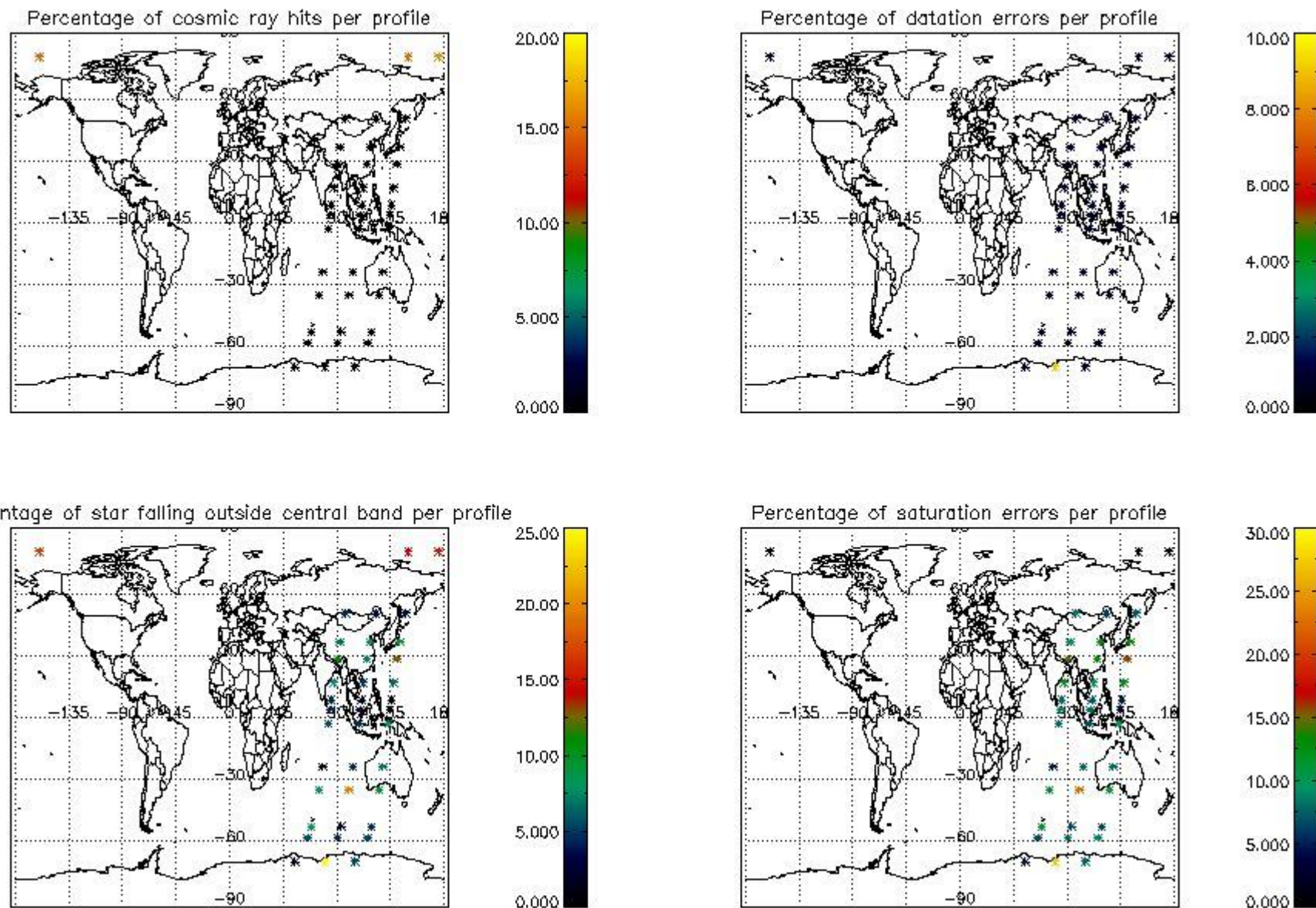
Percentage of star falling outside central band per profile



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

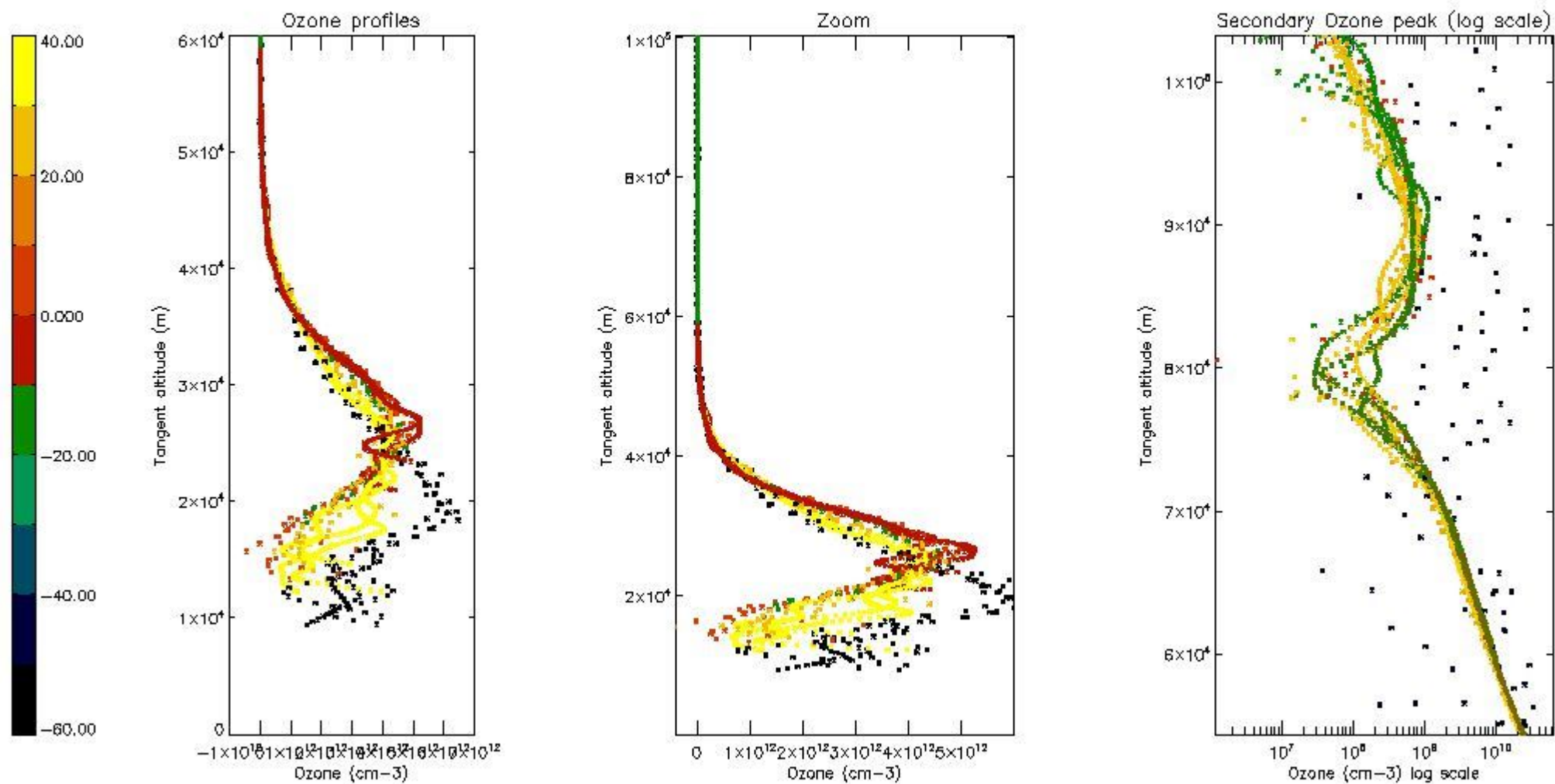
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	51
STD < 20	31

STD < 10	29
STD < 5	25

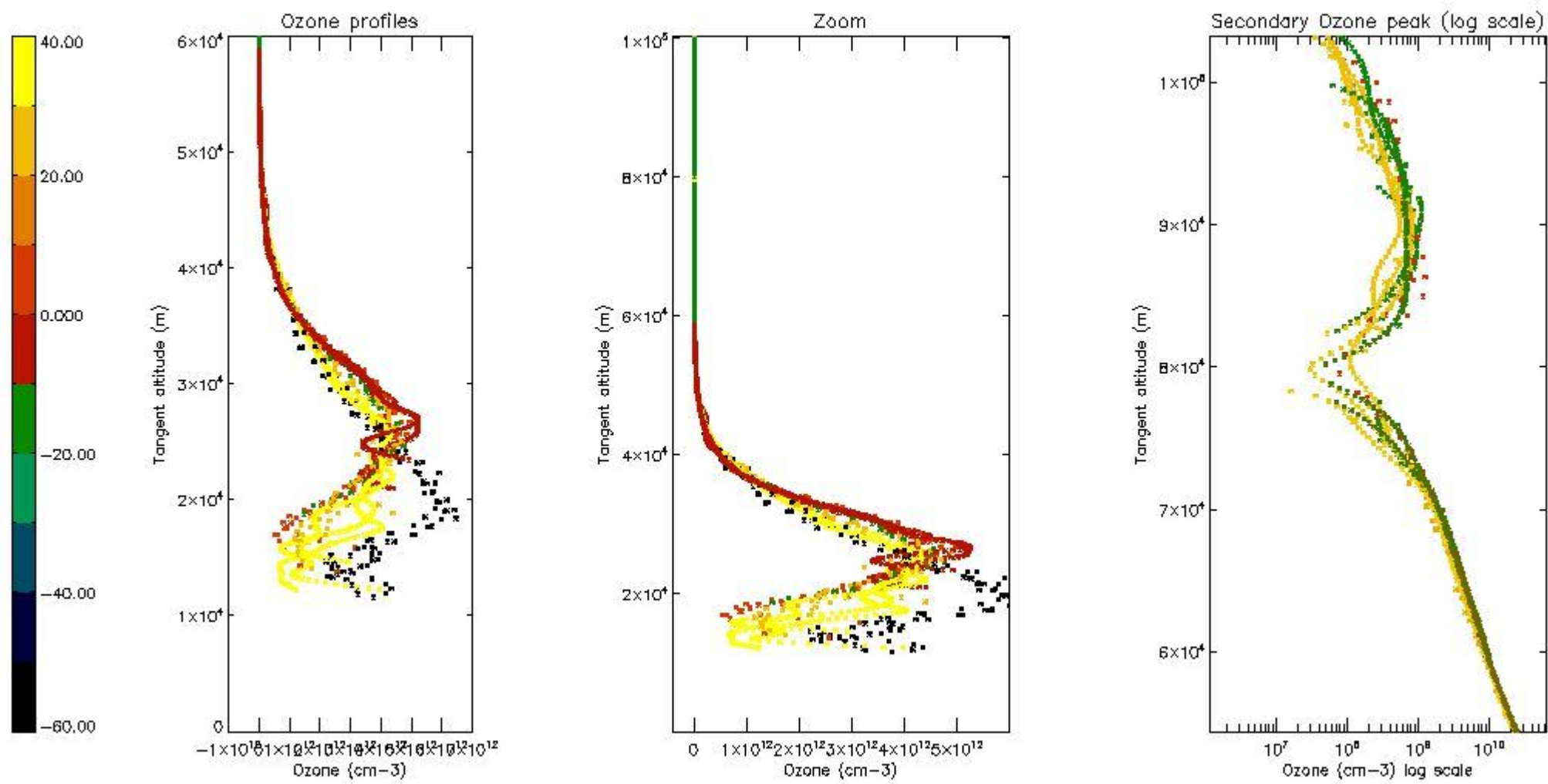
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



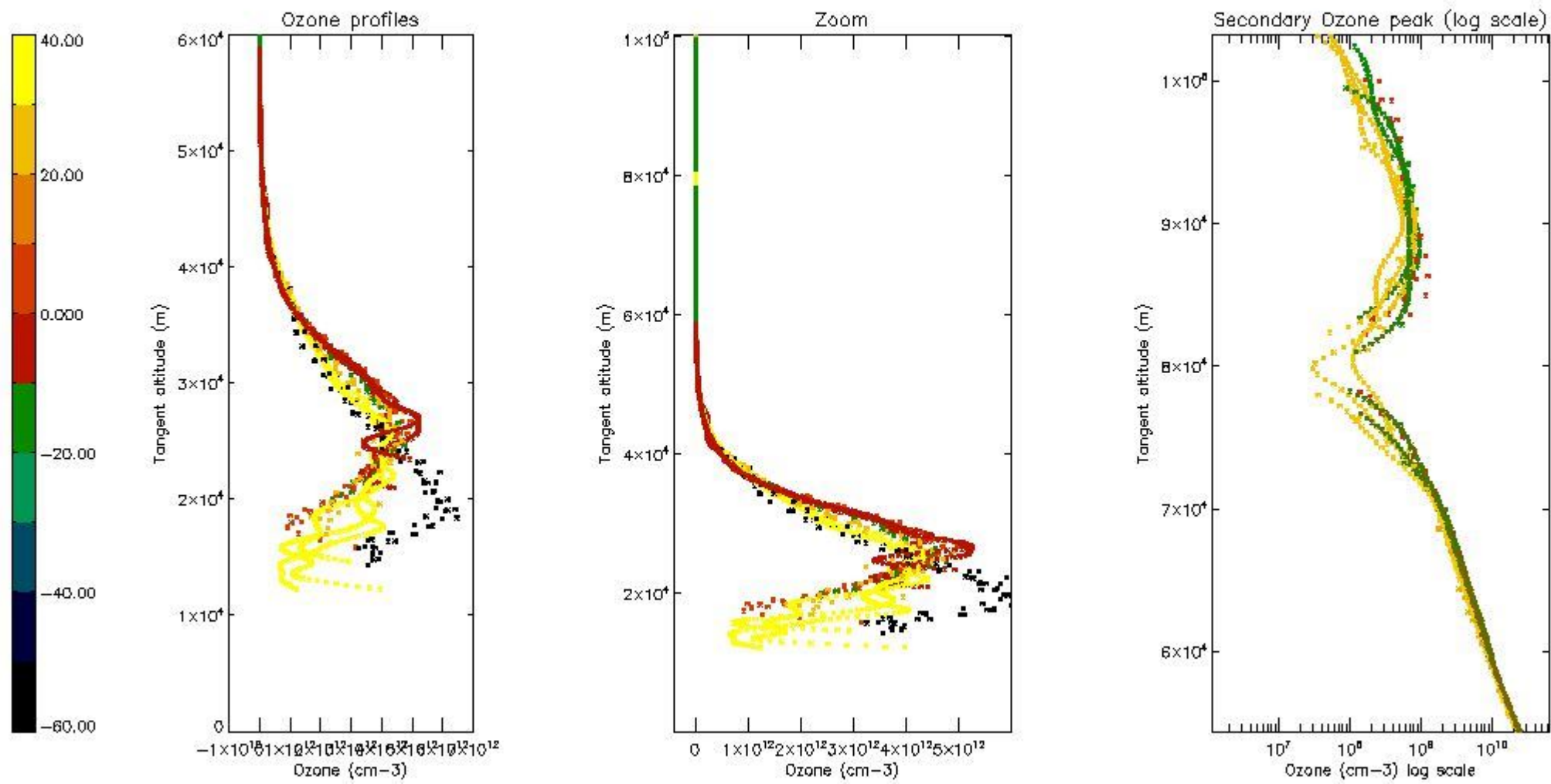
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



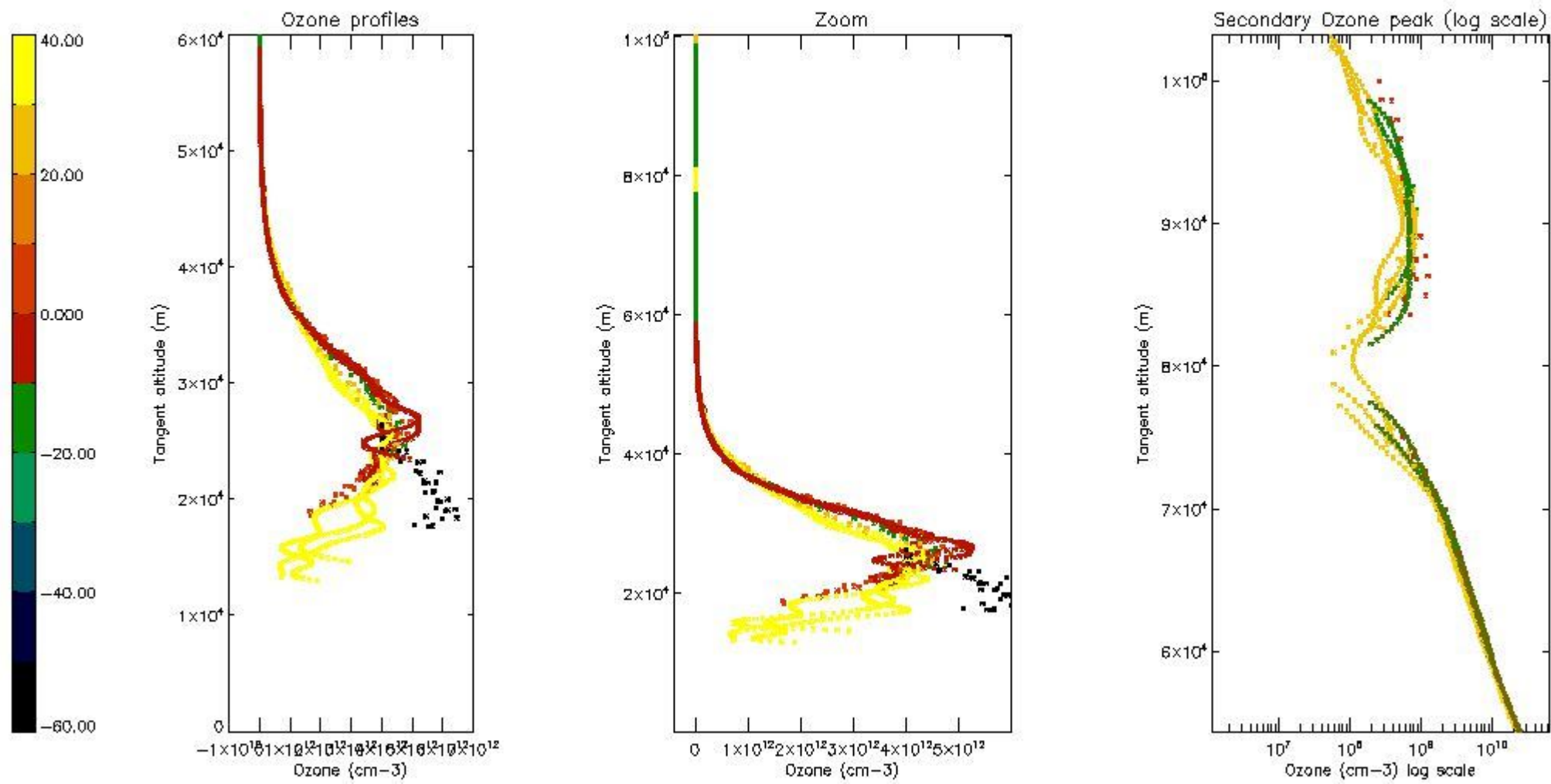
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



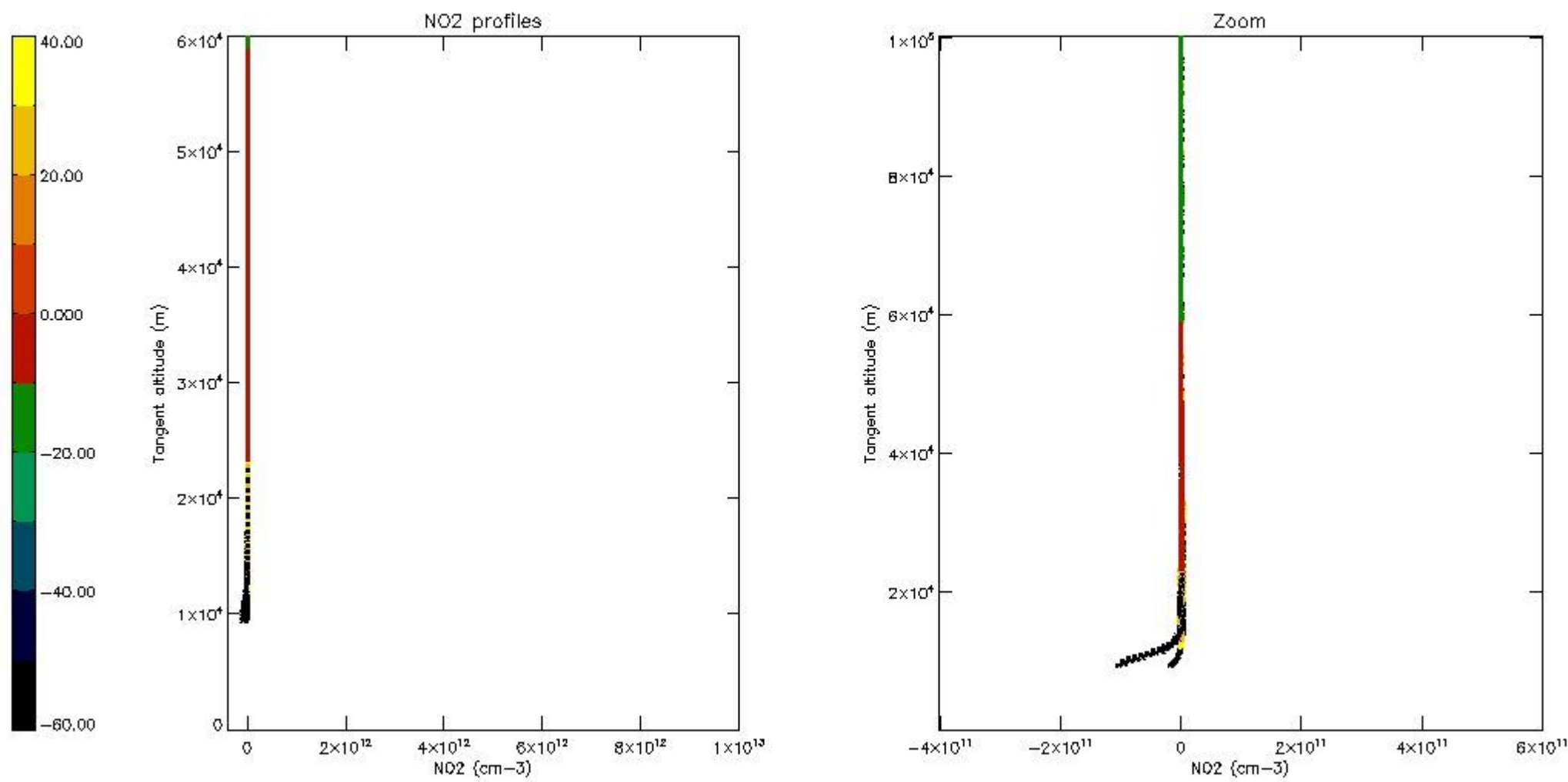
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



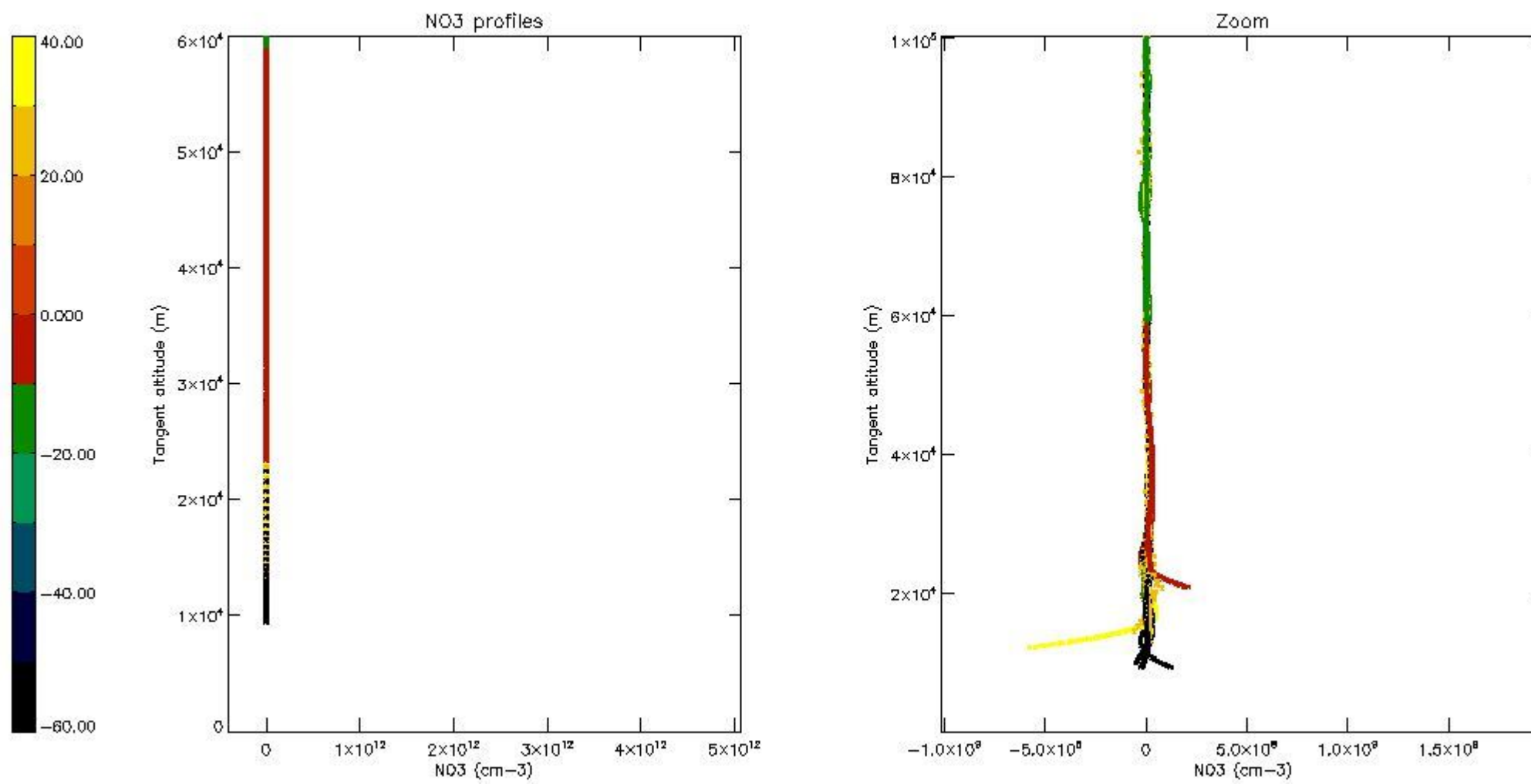
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



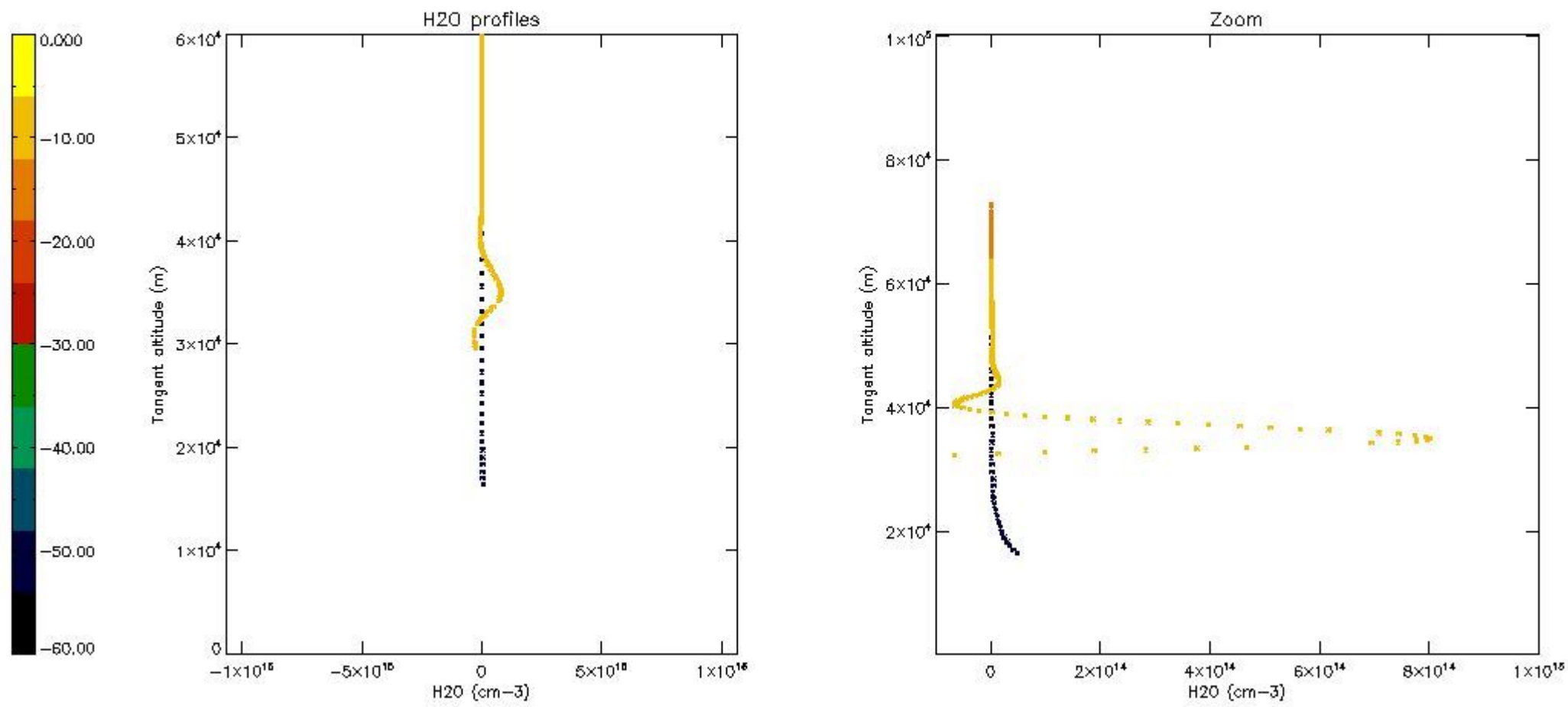
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	19-OCT-2002 00:02:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-OCT-2002 00:02:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-OCT-2002 00:02:17

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

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

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

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[5.6 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	17APR2013 19:33:44
Data source version	GOMOS/6.01
Start time of products	19-10-2002 (19OCT2002 00:00:00)
Stop time of products	20-10-2002 (20OCT2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	71
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

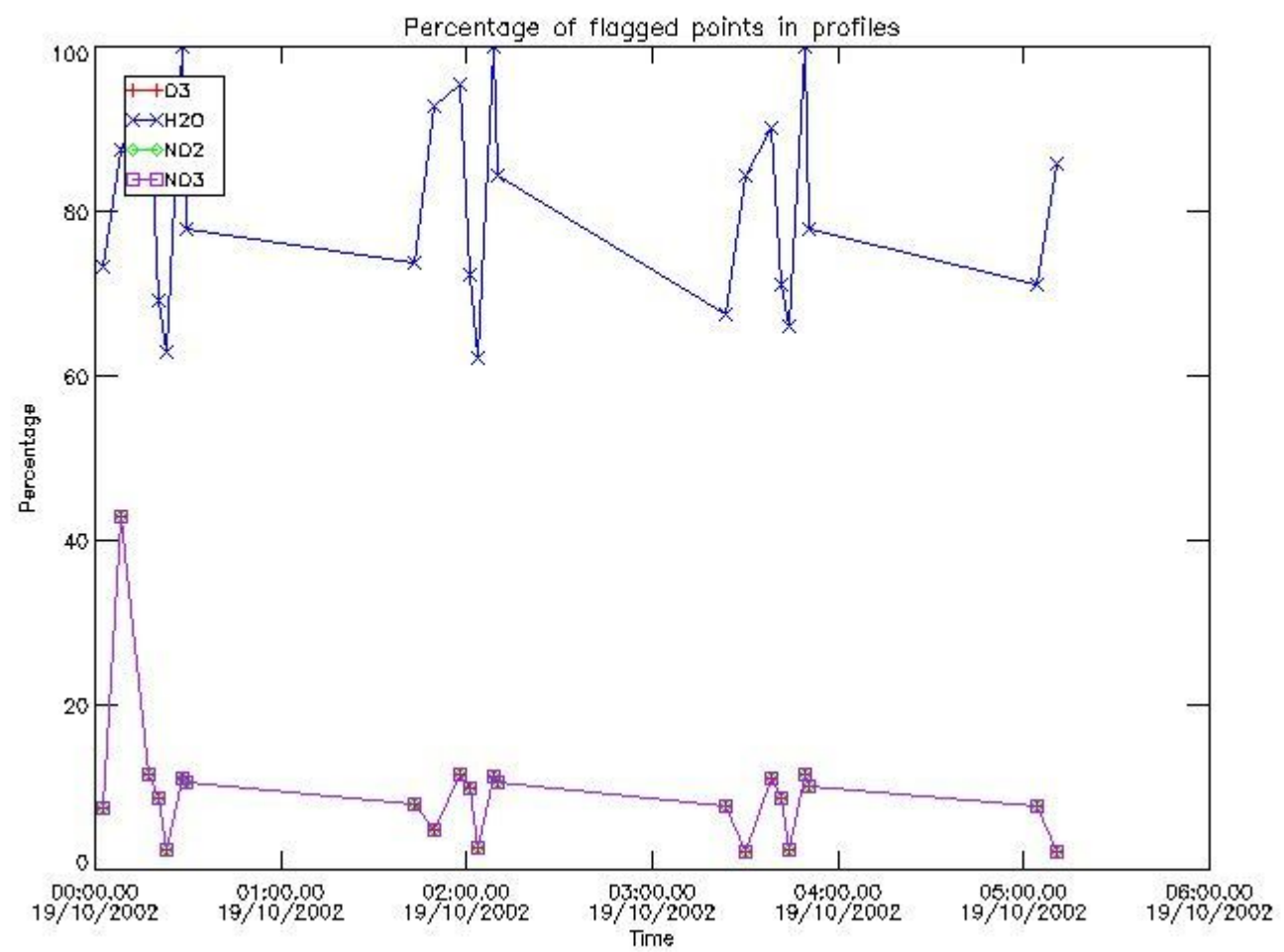
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021019_000217_000000682010_00259_03319_2756.N1	19-OCT-2002 00:02:17	Dark	68.000	48	30Alp Hya	1.9770	4100.0	136	3319	No
2	GOM_NL__2PRFIN20021019_000833_000002532010_00259_03319_2757.N1	19-OCT-2002 00:08:33	Dark	253.00	8	10Alp CMi	0.40000	6500.0	506	3319	No
3	GOM_NL__2PRFIN20021019_001704_000000452010_00260_03320_2621.N1	19-OCT-2002 00:17:04	Dark	44.500	29	Bet Car	1.6720	10200.	89	3320	No
4	GOM_NL__2PRFIN20021019_002042_000000592010_00260_03320_2622.N1	19-OCT-2002 00:20:42	Dark	59.000	2	Alp Car	-0.73600	7000.0	118	3320	No
5	GOM_NL__2PRFIN20021019_002255_000002262010_00260_03320_2623.N1	19-OCT-2002 00:22:55	Dark	226.00	1	9Alp CMa	-1.4400	11000.	452	3320	No
6	GOM_NL__2PRFIN20021019_002807_000000462010_00260_03320_2624.N1	19-OCT-2002 00:28:07	Dark	45.500	143	Alp Hyi	2.8570	7200.0	91	3320	No
7	GOM_NL__2PRFIN20021019_002933_000000482010_00260_03320_2625.N1	19-OCT-2002 00:29:33	Dark	48.000	9	Alp Eri	0.45300	24000.	96	3320	No
8	GOM_NL__2PRFIN20021019_003215_000000562010_00260_03320_2626.N1	19-OCT-2002 00:32:15	Straylight	55.500	157	The1Eri	2.9060	9300.0	111	3320	No
9	GOM_NL__2PRFIN20021019_003431_000000452010_00260_03320_2627.N1	19-OCT-2002 00:34:31	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	3320	No
10	GOM_NL__2PRFIN20021019_004104_000000512010_00260_03320_2628.N1	19-OCT-2002 00:41:04	Straylight	50.500	52	16Bet Cet	2.0370	4500.0	101	3320	No
11	GOM_NL__2PRFIN20021019_005038_000000432010_00260_03320_2629.N1	19-OCT-2002 00:50:38	Bright	42.500	140	88Gam Peg	2.8340	26000.	85	3320	No
12	GOM_NL__2PRFIN20021019_005434_000000452010_00260_03320_2630.N1	19-OCT-2002 00:54:34	Bright	45.000	58	21Alp And	2.0730	11000.	90	3320	No
13	GOM_NL__2PRFIN20021019_005652_000000512010_00260_03320_2631.N1	19-OCT-2002 00:56:52	Bright	51.000	53	43Bet And	2.0480	3300.0	102	3320	No
14	GOM_NL__2PRFIN20021019_010008_000000542010_00260_03320_2632.N1	19-OCT-2002 01:00:08	Bright	53.500	73	57Gam1And	2.2600	13100.	107	3320	No
15	GOM_NL__2PRFIN20021019_010229_000000432010_00260_03320_2633.N1	19-OCT-2002 01:02:29	Bright	42.500	68	18Alp Cas	2.2250	4500.0	85	3320	No
16	GOM_NL__2PRFIN20021019_010348_000000432010_00260_03320_2634.N1	19-OCT-2002 01:03:48	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	3320	No
17	GOM_NL__2PRFIN20021019_010542_000000452010_00260_03320_2635.N1	19-OCT-2002 01:05:42	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	3320	No
18	GOM_NL__2PRFIN20021019_011135_000000452010_00260_03320_2636.N1	19-OCT-2002 01:11:35	Bright	45.000	49	1Alp UMi	1.9900	6300.0	90	3320	No
19	GOM_NL__2PRFIN20021019_011446_000000462010_00260_03320_2637.N1	19-OCT-2002 01:14:46	Bright	45.500	60	7Bet UMi	2.0810	3950.0	91	3320	No
20	GOM_NL__2PRFIN20021019_011949_000000462010_00260_03320_2638.N1	19-OCT-2002 01:19:49	Bright	45.500	36	50Alp UMa	1.8000	6300.0	91	3320	No
21	GOM_NL__2PRFIN20021019_012123_000000462010_00260_03320_2639.N1	19-OCT-2002 01:21:23	Bright	46.000	82	48Bet UMa	2.3650	10600.	92	3320	No
22	GOM_NL__2PRFIN20021019_012449_000000462010_00260_03320_2640.N1	19-OCT-2002 01:24:49	Bright	45.500	174	52Psi UMa	3.0040	4400.0	91	3320	No
23	GOM_NL__2PRFIN20021019_013249_000001482010_00260_03320_2641.N1	19-OCT-2002 01:32:49	Twilight	147.50	17	78Bet Gem	1.1610	4500.0	295	3320	No
24	GOM_NL__2PRFIN20021019_014255_000000642010_00260_03320_2642.N1	19-OCT-2002 01:42:55	Dark	63.500	48	30Alp Hya	1.9770	4100.0	127	3320	No
25	GOM_NL__2PRFIN20021019_014913_000002532010_00260_03320_2643.N1	19-OCT-2002 01:49:13	Dark	253.00	8	10Alp CMi	0.40000	6500.0	506	3320	No
26	GOM_NL__2PRFIN20021019_015740_000000452010_00261_03321_9092.N1	19-OCT-2002 01:57:40	Dark	44.500	29	Bet Car	1.6720	10200.	89	3321	No
27	GOM_NL__2PRFIN20021019_020119_000000572010_00261_03321_9093.N1	19-OCT-2002 02:01:19	Dark	56.500	2	Alp Car	-0.73600	7000.0	113	3321	No
28	GOM_NL__2PRFIN20021019_020335_000002262010_00261_03321_9094.N1	19-OCT-2002 02:03:35	Dark	226.00	1	9Alp CMa	-1.4400	11000.	452	3321	No
29	GOM_NL__2PRFIN20021019_020843_000000452010_00261_03321_9095.N1	19-OCT-2002 02:08:43	Dark	45.000	143	Alp Hyi	2.8570	7200.0	90	3321	No
30	GOM_NL__2PRFIN20021019_021010_000000492010_00261_03321_9096.N1	19-OCT-2002 02:10:10	Dark	48.500	9	Alp Eri	0.45300	24000.	97	3321	No
31	GOM_NL__2PRFIN20021019_021252_000000532010_00261_03321_9097.N1	19-OCT-2002 02:12:52	Straylight	52.500	157	The1Eri	2.9060	9300.0	105	3321	No
32	GOM_NL__2PRFIN20021019_021507_000000512010_00261_03321_9098.N1	19-OCT-2002 02:15:07	Straylight	50.500	84	Alp Phe	2.3970	4500.0	101	3321	No
33	GOM_NL__2PRFIN20021019_022141_000000502010_00261_03321_9099.N1	19-OCT-2002 02:21:41	Straylight	49.500	52	16Bet Cet	2.0370	4500.0	99	3321	No
34	GOM_NL__2PRFIN20021019_023115_000000422010_00261_03321_9100.N1	19-OCT-2002 02:31:15	Bright	42.000	140	88Gam Peg	2.8340	26000.	84	3321	No
35	GOM_NL__2PRFIN20021019_023510_000000452010_00261_03321_9101.N1	19-OCT-2002 02:35:10	Bright	44.500	58	21Alp And	2.0730	11000.	89	3321	No
36	GOM_NL__2PRFIN20021019_023728_000000492010_00261_03321_9102.N1	19-OCT-2002 02:37:28	Bright	49.000	53	43Bet And	2.0480	3300.0	98	3321	No
37	GOM_NL__2PRFIN20021019_024044_000000522010_00261_03321_9103.N1	19-OCT-2002 02:40:44	Bright	52.000	73	57Gam1And	2.2600	13100.	104	3321	No
38	GOM_NL__2PRFIN20021019_024305_000000432010_00261_03321_9104.N1	19-OCT-2002 02:43:05	Bright	43.000	68	18Alp Cas	2.2250	4500.0	86	3321	No
39	GOM_NL__2PRFIN20021019_024425_000000452010_00261_03321_9105.N1	19-OCT-2002 02:44:25	Bright	44.500	76	27Gam Cas	2.3000	30000.	89	3321	No
40	GOM_NL__2PRFIN20021019_024619_000000442010_00261_03321_9106.N1	19-OCT-2002 02:46:19	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	3321	No
41	GOM_NL__2PRFIN20021019_025211_000000452010_00261_03321_9107.N1	19-OCT-2002 02:52:11	Bright	44.500	49	1Alp UMi	1.9900	6300.0	89	3321	No
42	GOM_NL__2PRFIN20021019_025523_000000522010_00261_03321_9108.N1	19-OCT-2002 02:55:23	Bright	51.500	60	7Bet UMi	2.0810	3950.0	103	3321	No

43	GOM_NL__2PRFIN20021019_030024_000000472010_00261_03321_9109.N1	19-OCT-2002 03:00:24	Bright	47.000	36	50Alp UMa	1.8000	6300.0	94	3321	No
44	GOM_NL__2PRFIN20021019_030159_000000452010_00261_03321_9110.N1	19-OCT-2002 03:01:59	Bright	45.000	82	48Bet UMa	2.3650	10600.	90	3321	No
45	GOM_NL__2PRFIN20021019_030524_000000602010_00261_03321_2637.N1	19-OCT-2002 03:05:24	Bright	60.000	174	52Psi UMa	3.0040	4400.0	120	3321	No
46	GOM_NL__2PRFIN20021019_031325_000001422010_00261_03321_2638.N1	19-OCT-2002 03:13:25	Twilight	141.50	17	78Bet Gem	1.1610	4500.0	283	3321	No
47	GOM_NL__2PRFIN20021019_032332_000000672010_00261_03321_2639.N1	19-OCT-2002 03:23:32	Dark	66.500	48	30Alp Hya	1.9770	4100.0	133	3321	No
48	GOM_NL__2PRFIN20021019_032954_000002532010_00261_03321_2640.N1	19-OCT-2002 03:29:54	Dark	253.00	8	10Alp CMi	0.40000	6500.0	506	3321	No
49	GOM_NL__2PRFIN20021019_033816_000000462010_00262_03322_2616.N1	19-OCT-2002 03:38:16	Dark	45.500	29	Bet Car	1.6720	10200.	91	3322	No
50	GOM_NL__2PRFIN20021019_034155_000000592010_00262_03322_2617.N1	19-OCT-2002 03:41:55	Dark	59.000	2	Alp Car	-0.73600	7000.0	118	3322	No
51	GOM_NL__2PRFIN20021019_034414_000002182010_00262_03322_2618.N1	19-OCT-2002 03:44:14	Dark	217.50	1	9Alp CMa	-1.4400	11000.	435	3322	No
52	GOM_NL__2PRFIN20021019_034919_000000452010_00262_03322_2619.N1	19-OCT-2002 03:49:19	Dark	44.500	143	Alp Hya	2.8570	7200.0	89	3322	No
53	GOM_NL__2PRFIN20021019_035045_000000502010_00262_03322_2620.N1	19-OCT-2002 03:50:45	Dark	50.000	9	Alp Eri	0.45300	24000.	100	3322	No
54	GOM_NL__2PRFIN20021019_035328_000000552010_00262_03322_2621.N1	19-OCT-2002 03:53:28	Straylight	54.500	157	The1Eri	2.9060	9300.0	109	3322	No
55	GOM_NL__2PRFIN20021019_035543_000000452010_00262_03322_2622.N1	19-OCT-2002 03:55:43	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	3322	No
56	GOM_NL__2PRFIN20021019_040217_000000502010_00262_03322_2623.N1	19-OCT-2002 04:02:17	Straylight	49.500	52	16Bet Cet	2.0370	4500.0	99	3322	No
57	GOM_NL__2PRFIN20021019_041150_000000432010_00262_03322_2624.N1	19-OCT-2002 04:11:50	Bright	43.000	140	88Gam Peg	2.8340	26000.	86	3322	No
58	GOM_NL__2PRFIN20021019_041546_000000452010_00262_03322_2625.N1	19-OCT-2002 04:15:46	Bright	44.500	58	21Alp And	2.0730	11000.	89	3322	No
59	GOM_NL__2PRFIN20021019_041803_000000512010_00262_03322_2626.N1	19-OCT-2002 04:18:03	Bright	51.000	53	43Bet And	2.0480	3300.0	102	3322	No
60	GOM_NL__2PRFIN20021019_042119_000000542010_00262_03322_2627.N1	19-OCT-2002 04:21:19	Bright	53.500	73	57Gam1And	2.2600	13100.	107	3322	No
61	GOM_NL__2PRFIN20021019_042341_000000452010_00262_03322_2628.N1	19-OCT-2002 04:23:41	Bright	44.500	68	18Alp Cas	2.2250	4500.0	89	3322	No
62	GOM_NL__2PRFIN20021019_042501_000000462010_00262_03322_2629.N1	19-OCT-2002 04:25:01	Bright	45.500	76	27Gam Cas	2.3000	30000.	91	3322	No
63	GOM_NL__2PRFIN20021019_042655_000000442010_00262_03322_2630.N1	19-OCT-2002 04:26:55	Bright	44.000	89	5Alp Cep	2.4510	8000.0	88	3322	No
64	GOM_NL__2PRFIN20021019_043248_000000422010_00262_03322_2631.N1	19-OCT-2002 04:32:48	Bright	42.000	49	1Alp UMi	1.9900	6300.0	84	3322	No
65	GOM_NL__2PRFIN20021019_043559_000000452010_00262_03322_2632.N1	19-OCT-2002 04:35:59	Bright	45.000	60	7Bet UMi	2.0810	3950.0	90	3322	No
66	GOM_NL__2PRFIN20021019_044102_000000482010_00262_03322_2633.N1	19-OCT-2002 04:41:02	Bright	47.500	36	50Alp UMa	1.8000	6300.0	95	3322	No
67	GOM_NL__2PRFIN20021019_044236_000000442010_00262_03322_2634.N1	19-OCT-2002 04:42:36	Bright	44.000	82	48Bet UMa	2.3650	10600.	88	3322	No
68	GOM_NL__2PRFIN20021019_044602_000000432010_00262_03322_2635.N1	19-OCT-2002 04:46:02	Bright	43.000	174	52Psi UMa	3.0040	4400.0	86	3322	No
69	GOM_NL__2PRFIN20021019_045402_000001482010_00262_03322_2636.N1	19-OCT-2002 04:54:02	Twilight	147.50	17	78Bet Gem	1.1610	4500.0	295	3322	No
70	GOM_NL__2PRFIN20021019_050409_000000662010_00262_03322_2637.N1	19-OCT-2002 05:04:09	Dark	66.000	48	30Alp Hya	1.9770	4100.0	132	3322	No
71	GOM_NL__2PRFIN20021019_051035_000002532010_00262_03322_2638.N1	19-OCT-2002 05:10:35	Dark	253.00	8	10Alp CMi	0.40000	6500.0	506	3322	No

3. Quality information per product

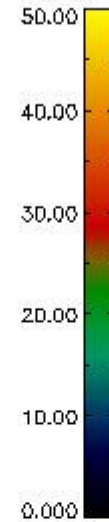
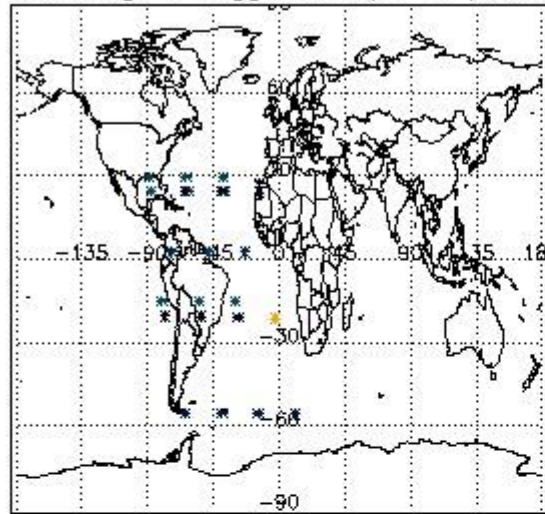
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

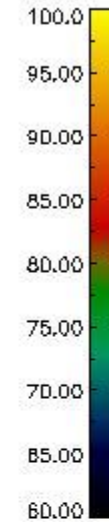
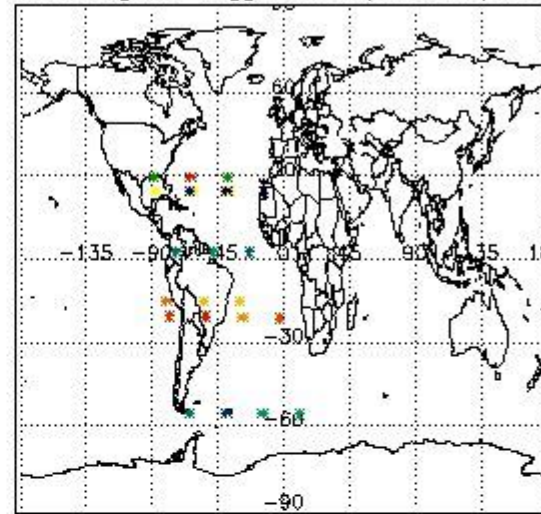


3.2 Plot quality information per product (world map)

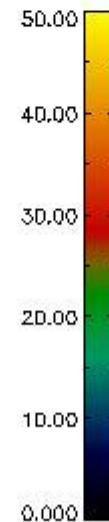
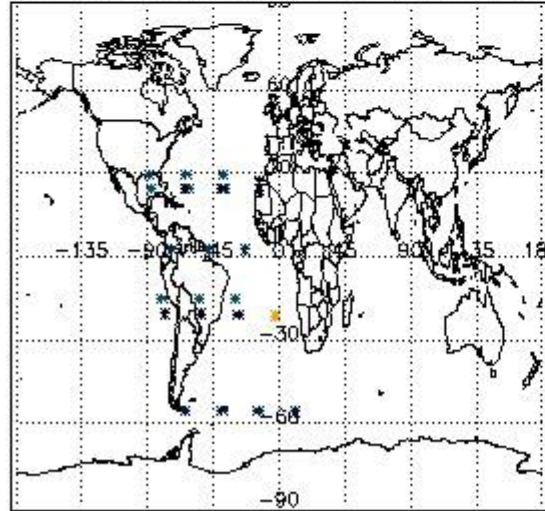
Percentage of flagged data per O3 profile



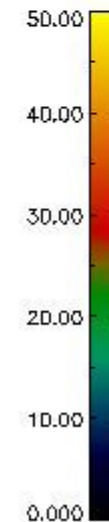
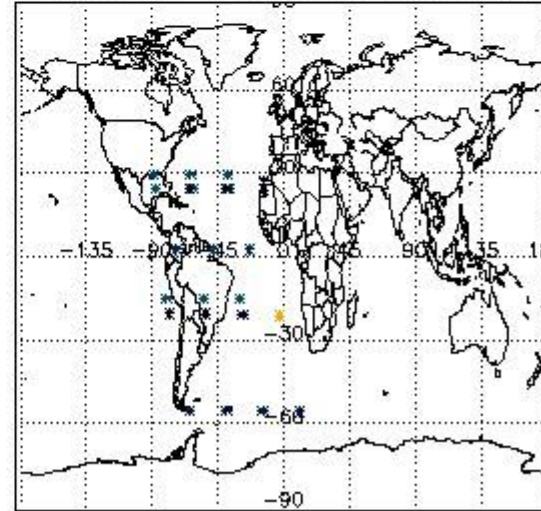
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

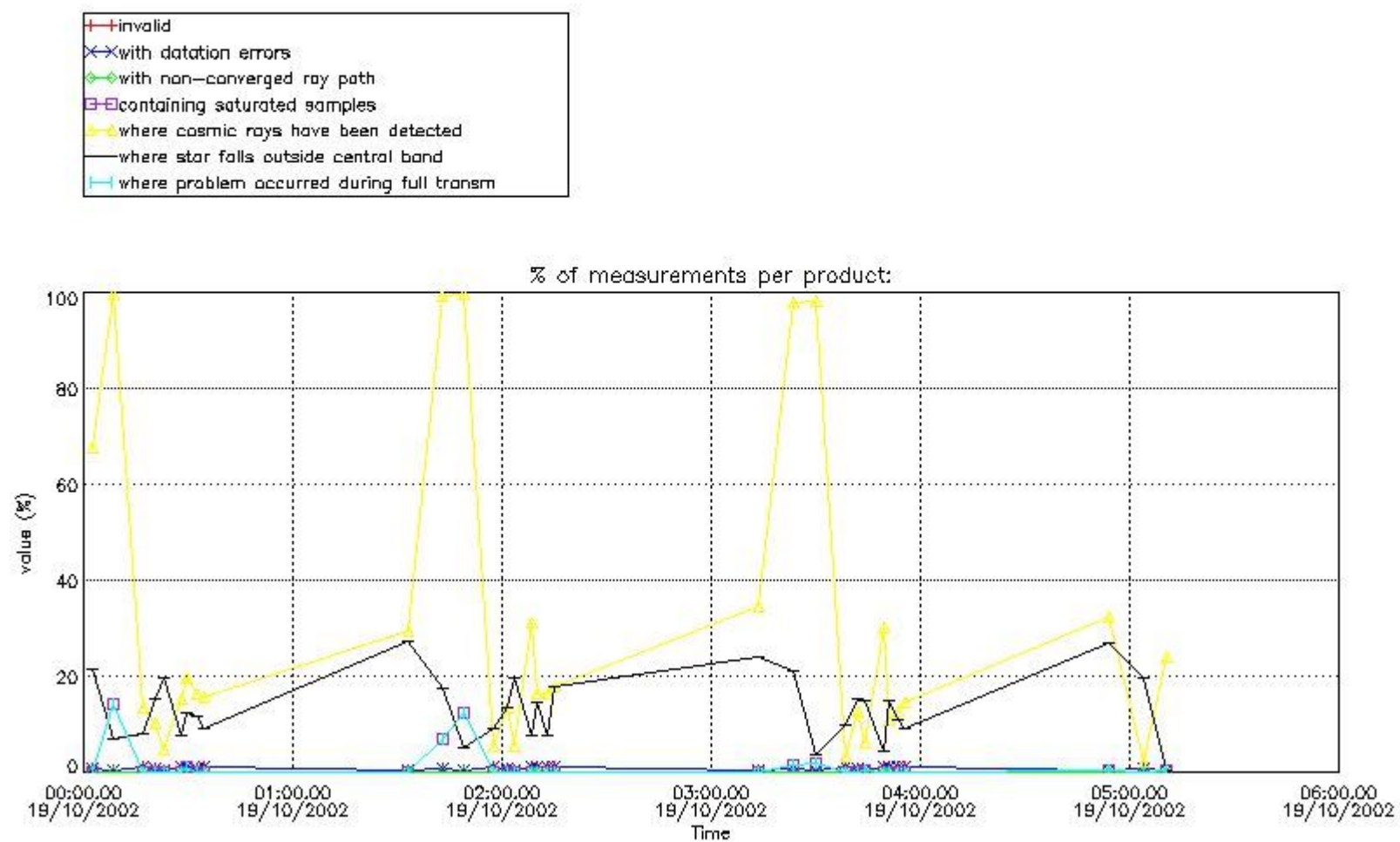


4. Level 1 quality information per product

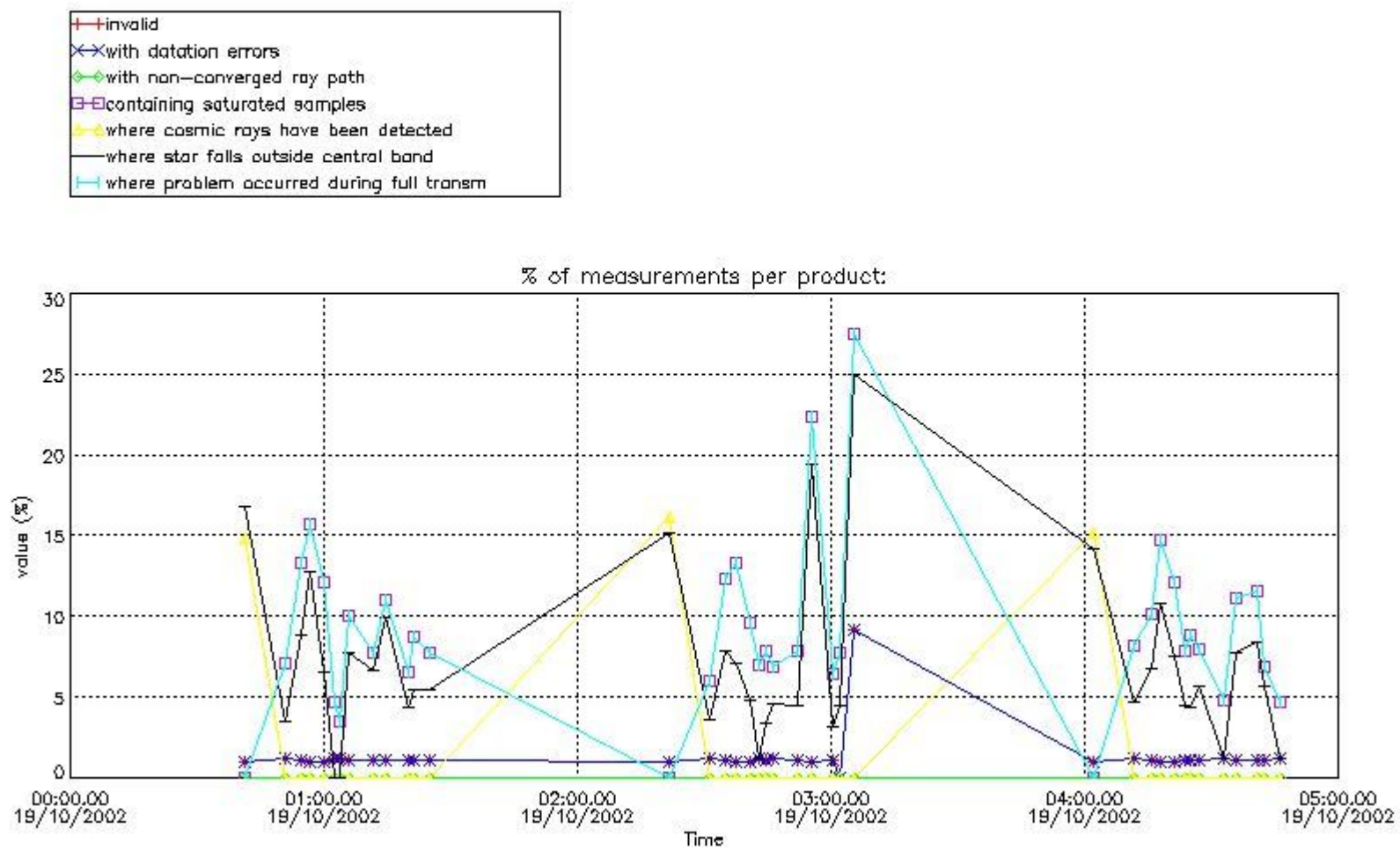
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



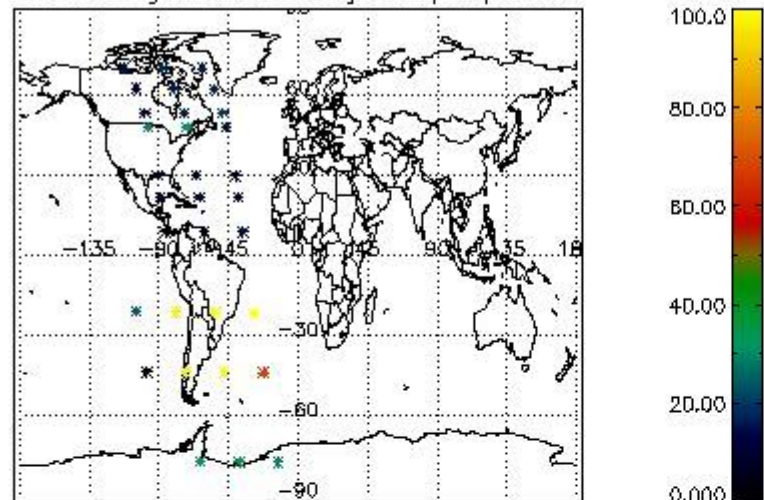
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



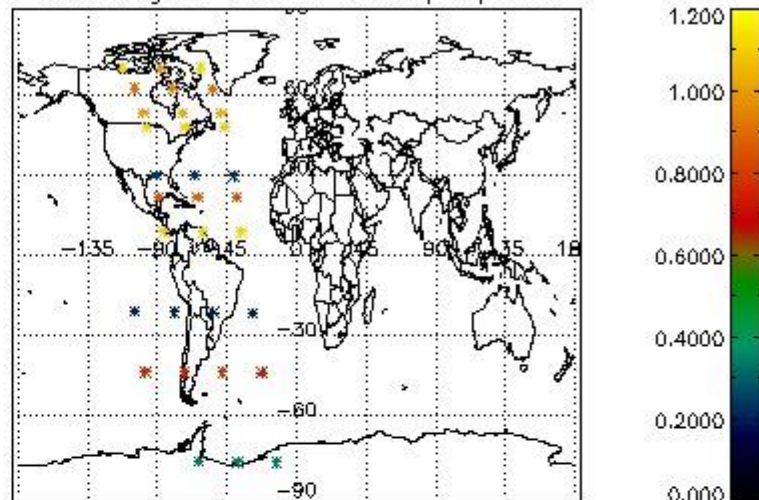
4.2 Plot quality information per product coming from level 1b processing (world map)

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

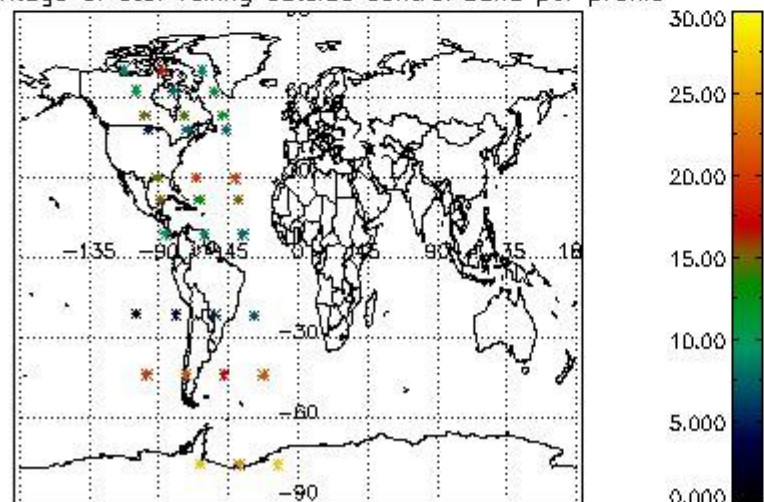
Percentage of cosmic ray hits per profile



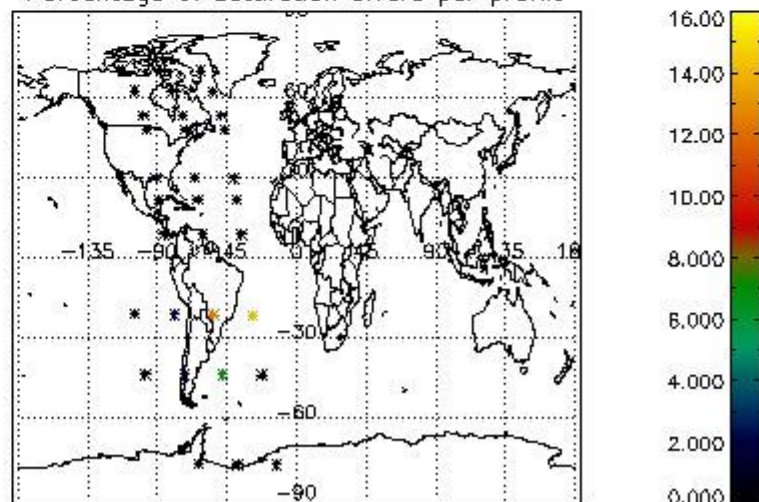
Percentage of datation errors per profile



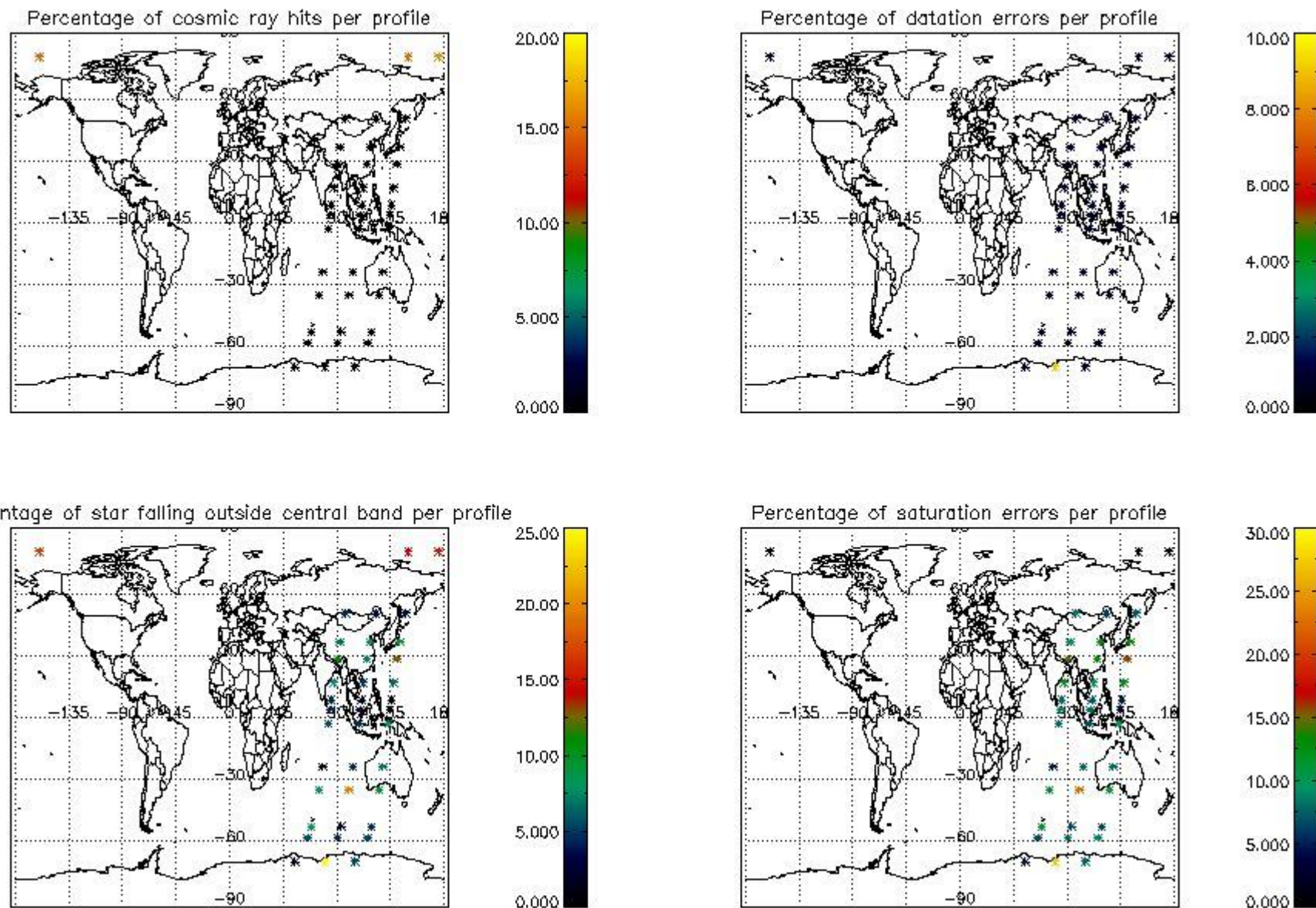
Percentage of star falling outside central band per profile



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

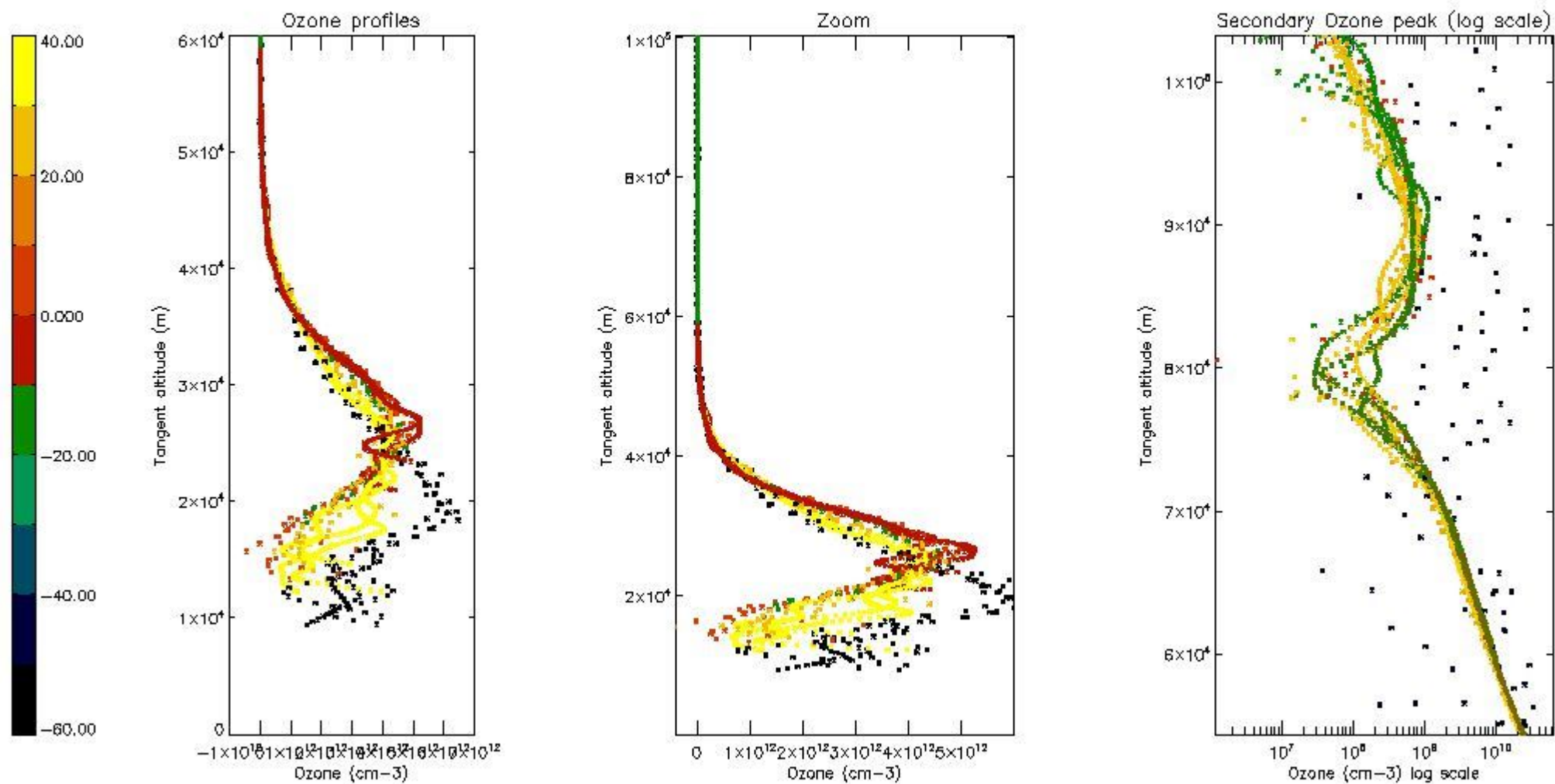
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	51
STD < 20	31

STD < 10	29
STD < 5	25

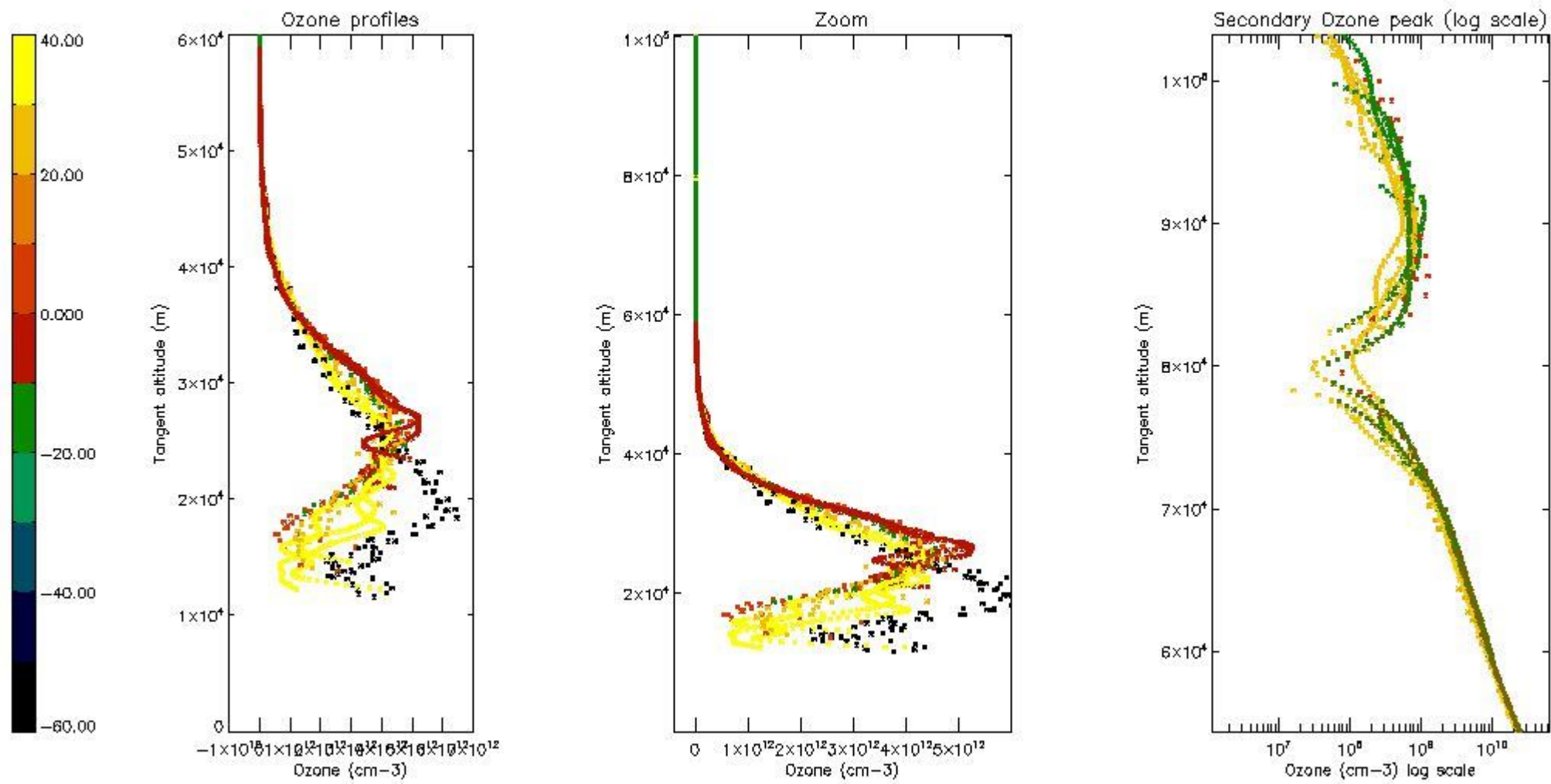
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



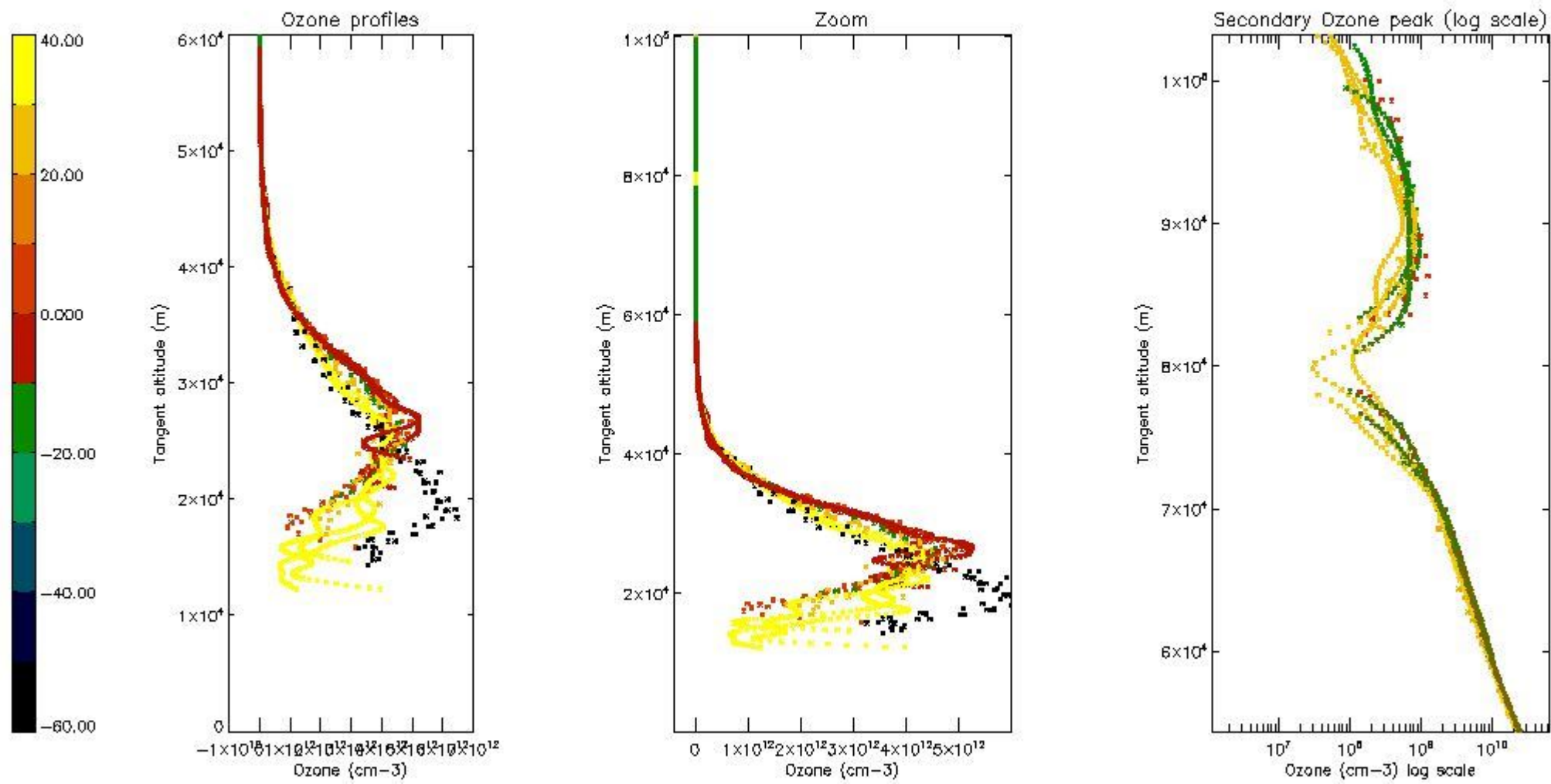
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



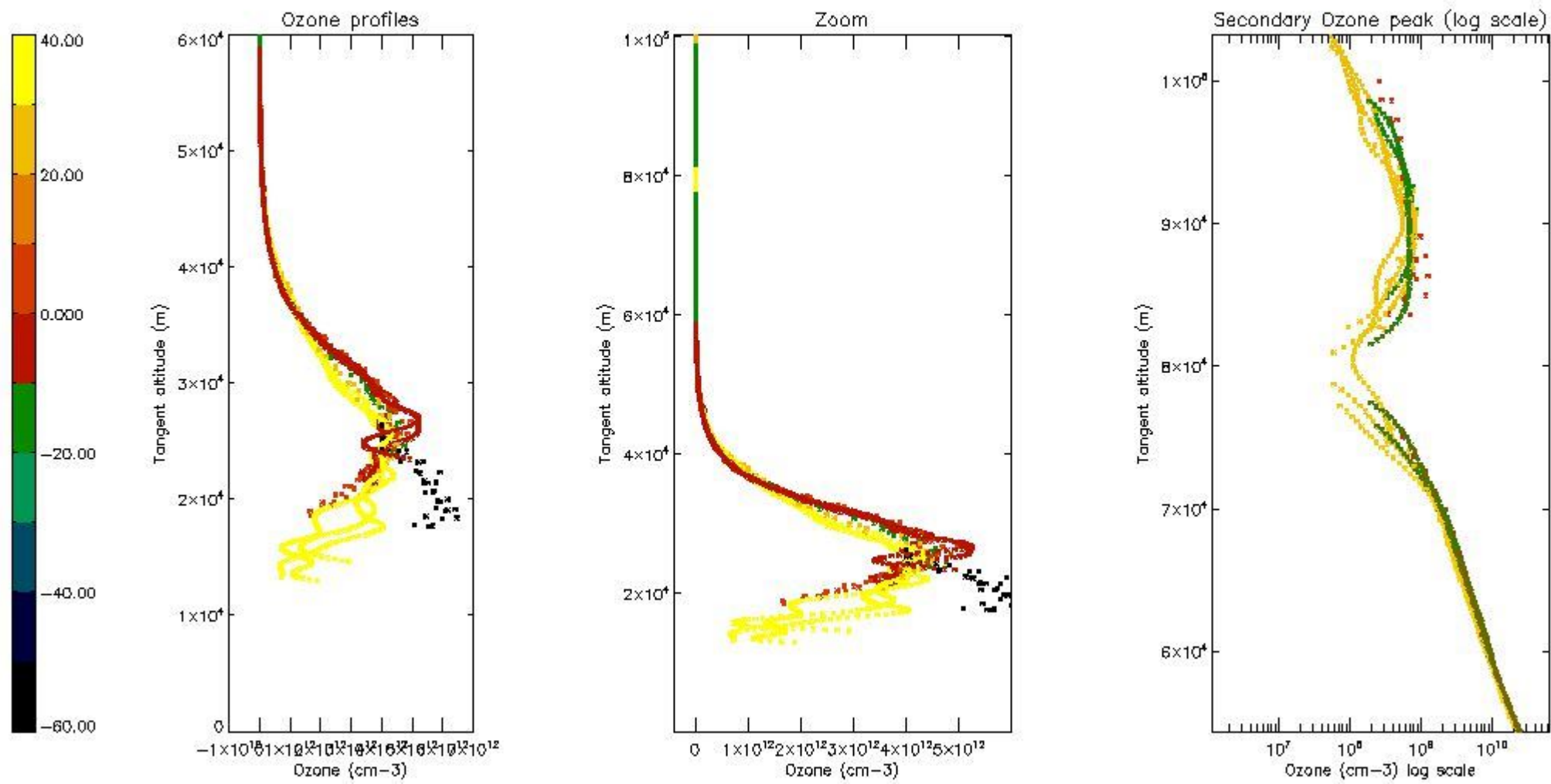
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



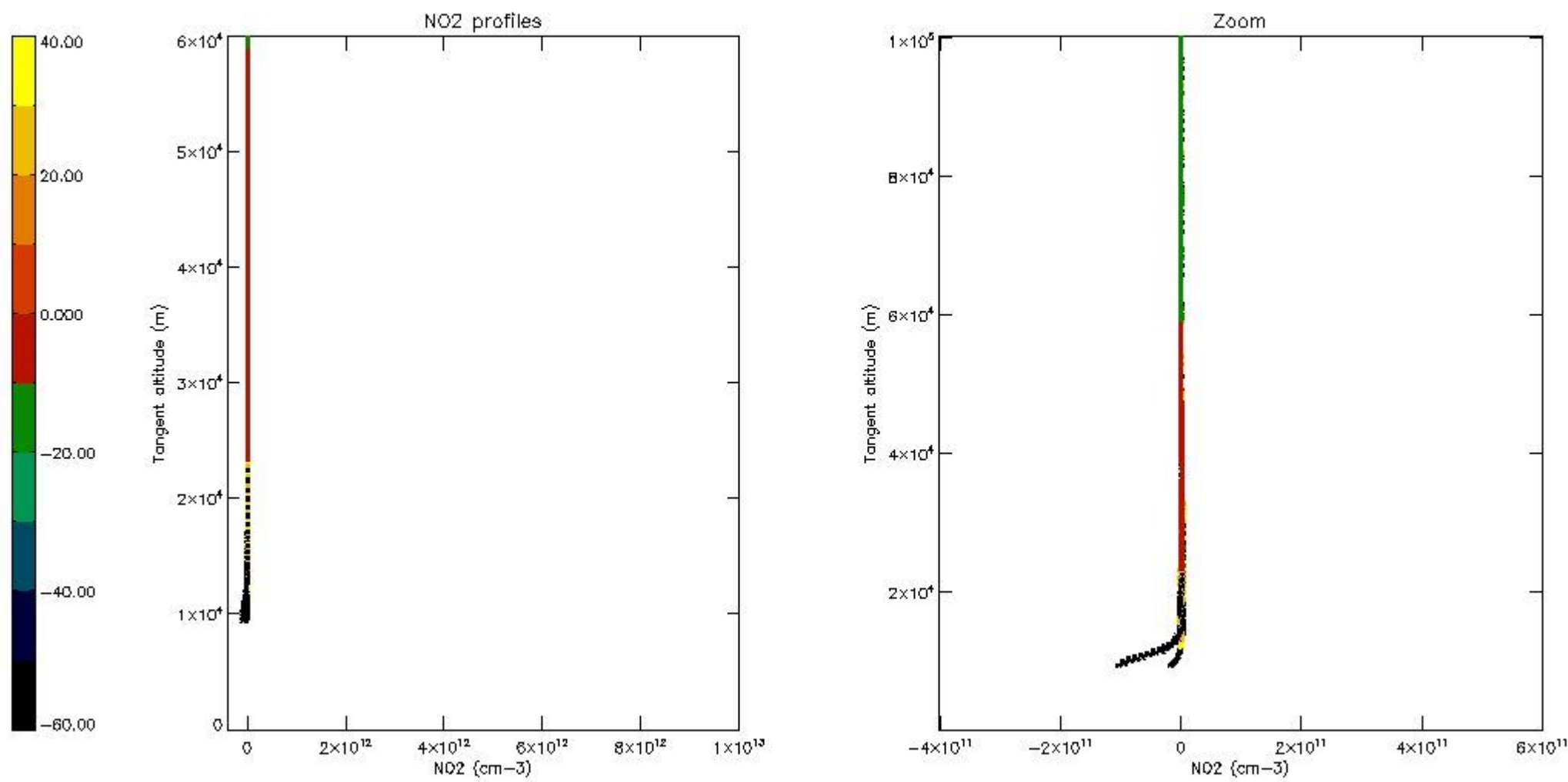
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



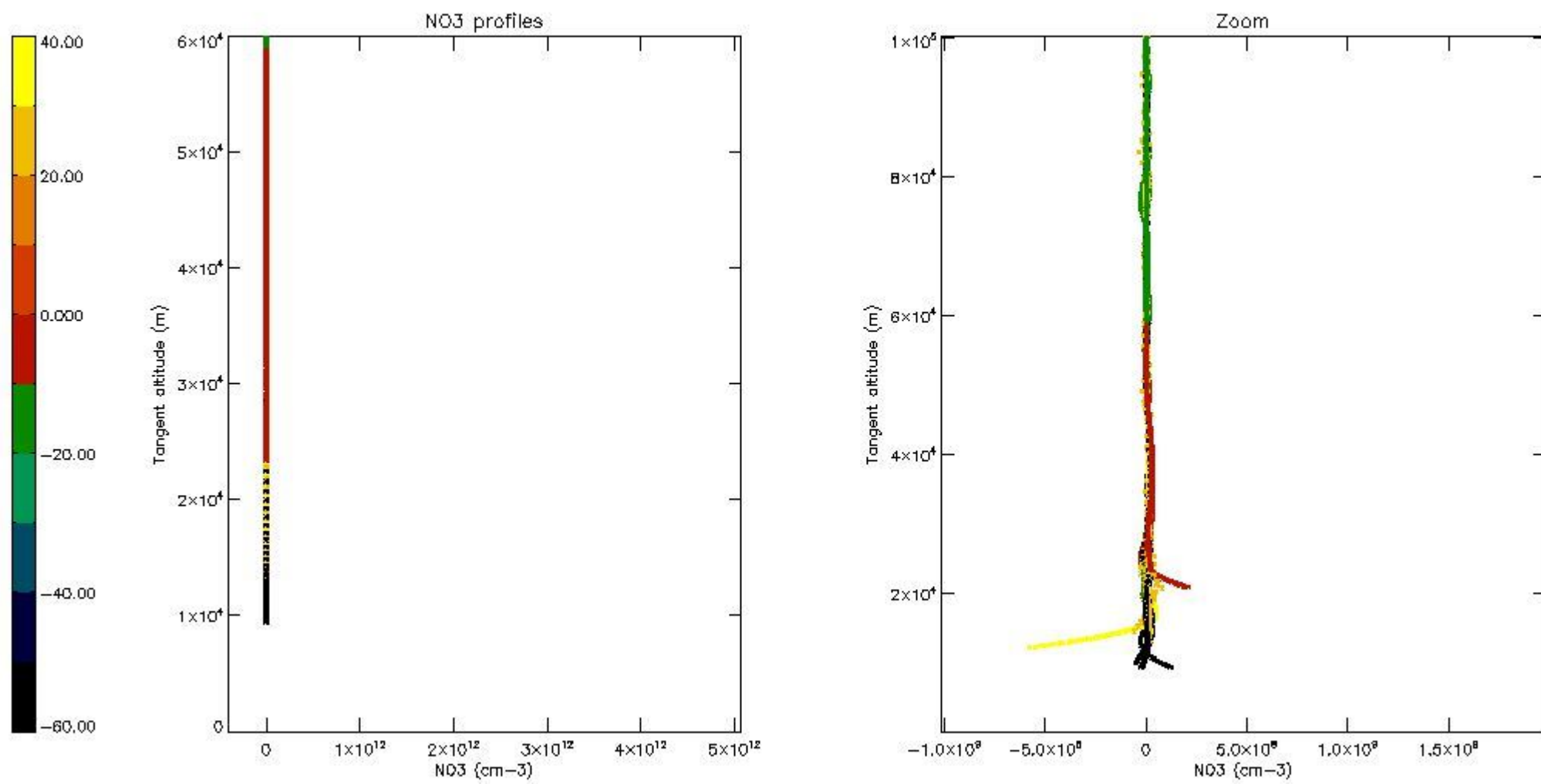
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



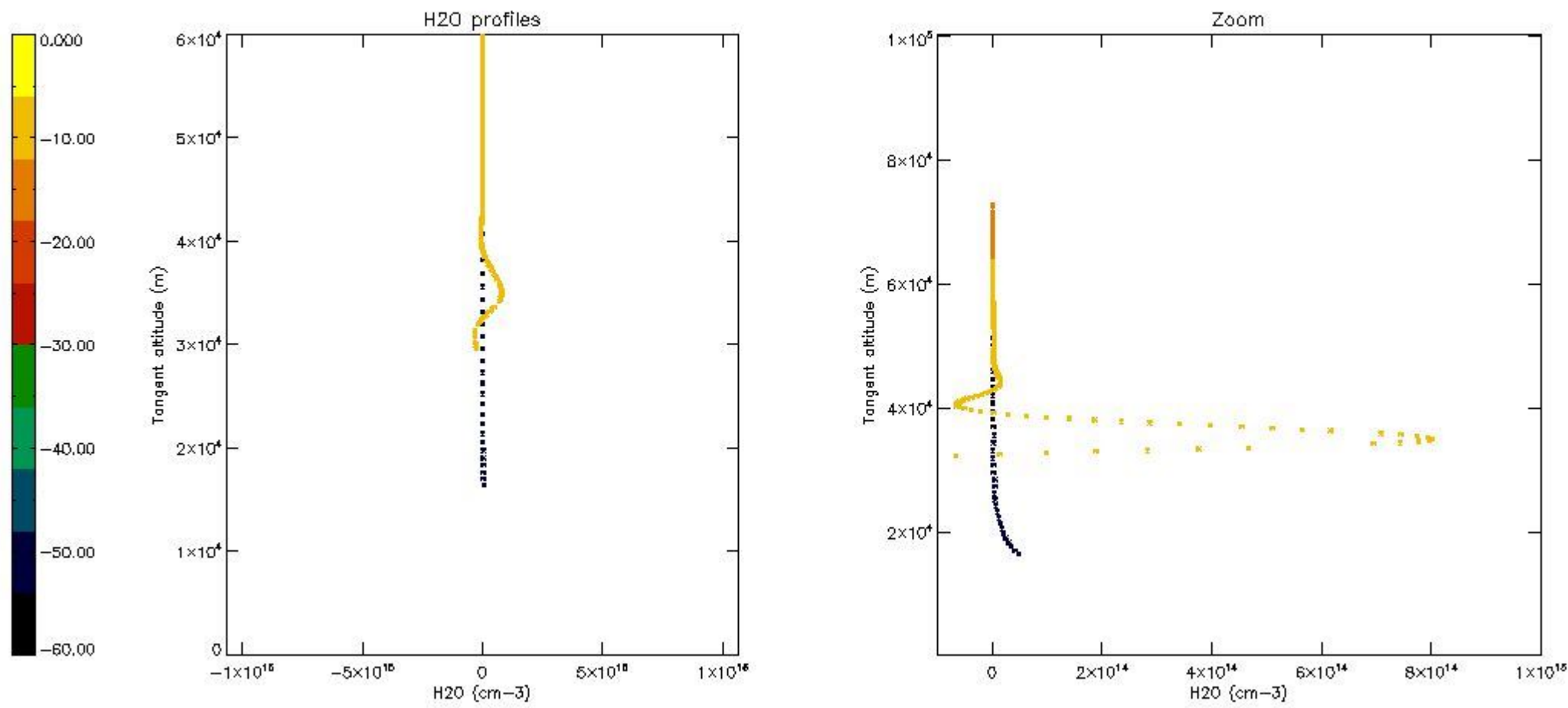
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

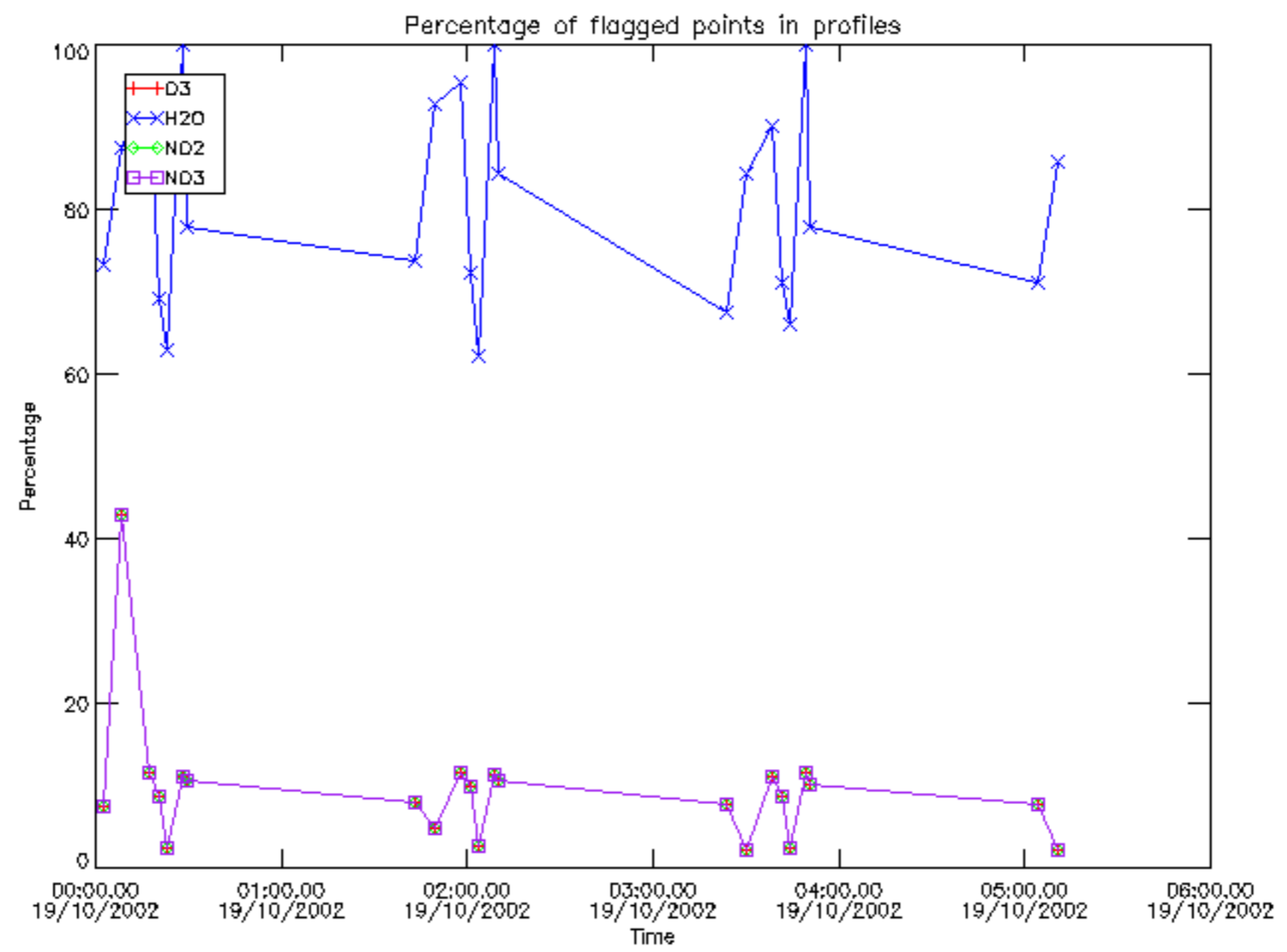
The colorbar represents the latitude.



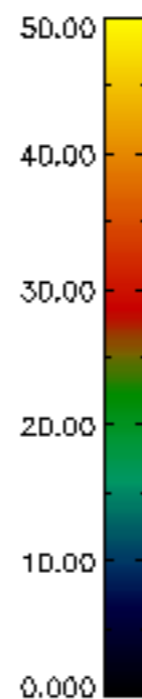
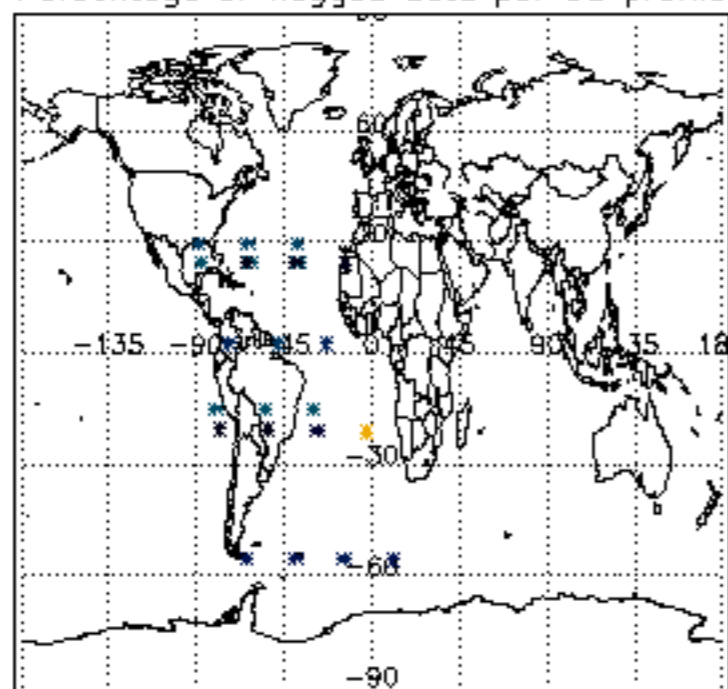
6. Auxiliary Data Files used for the production reported in section 2

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

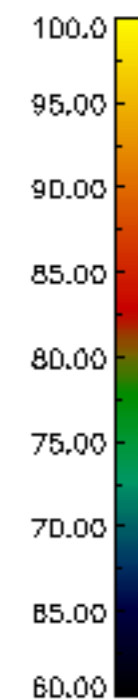
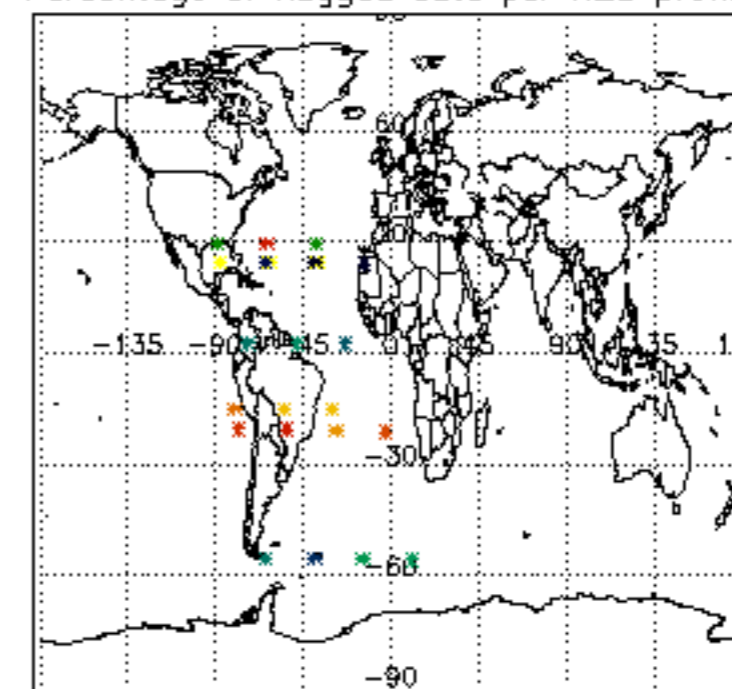
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	19-OCT-2002 00:02:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-OCT-2002 00:02:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-OCT-2002 00:02:17



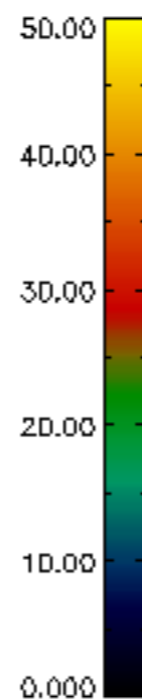
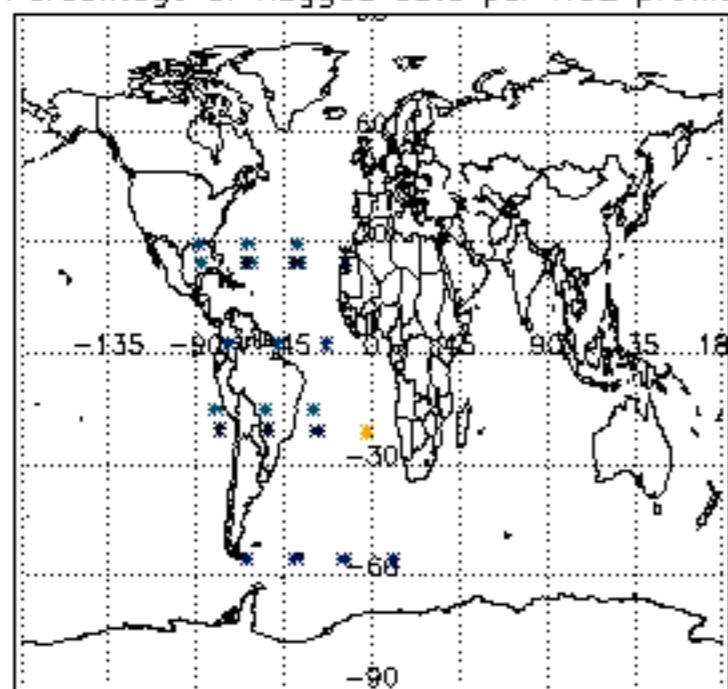
Percentage of flagged data per D3 profile



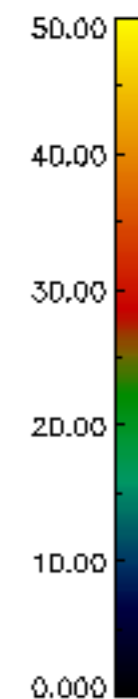
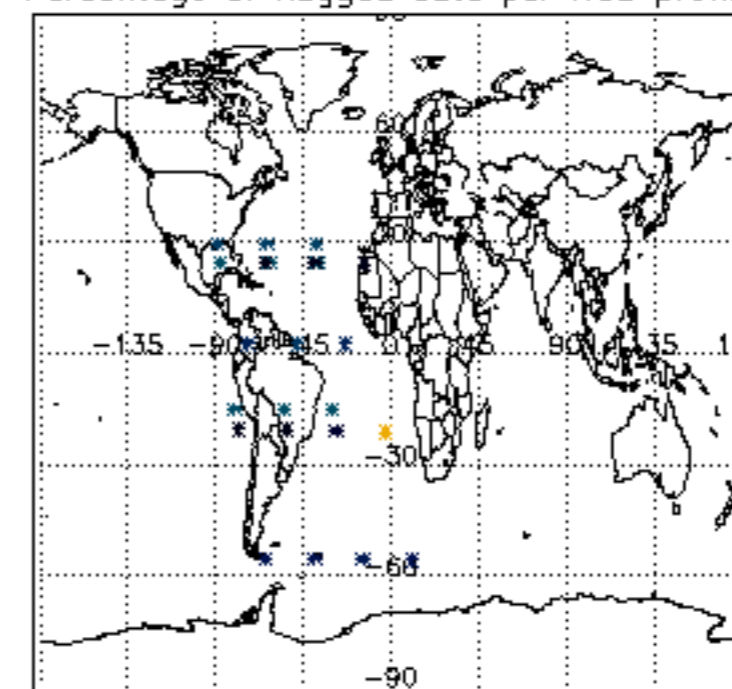
Percentage of flagged data per H2O profile

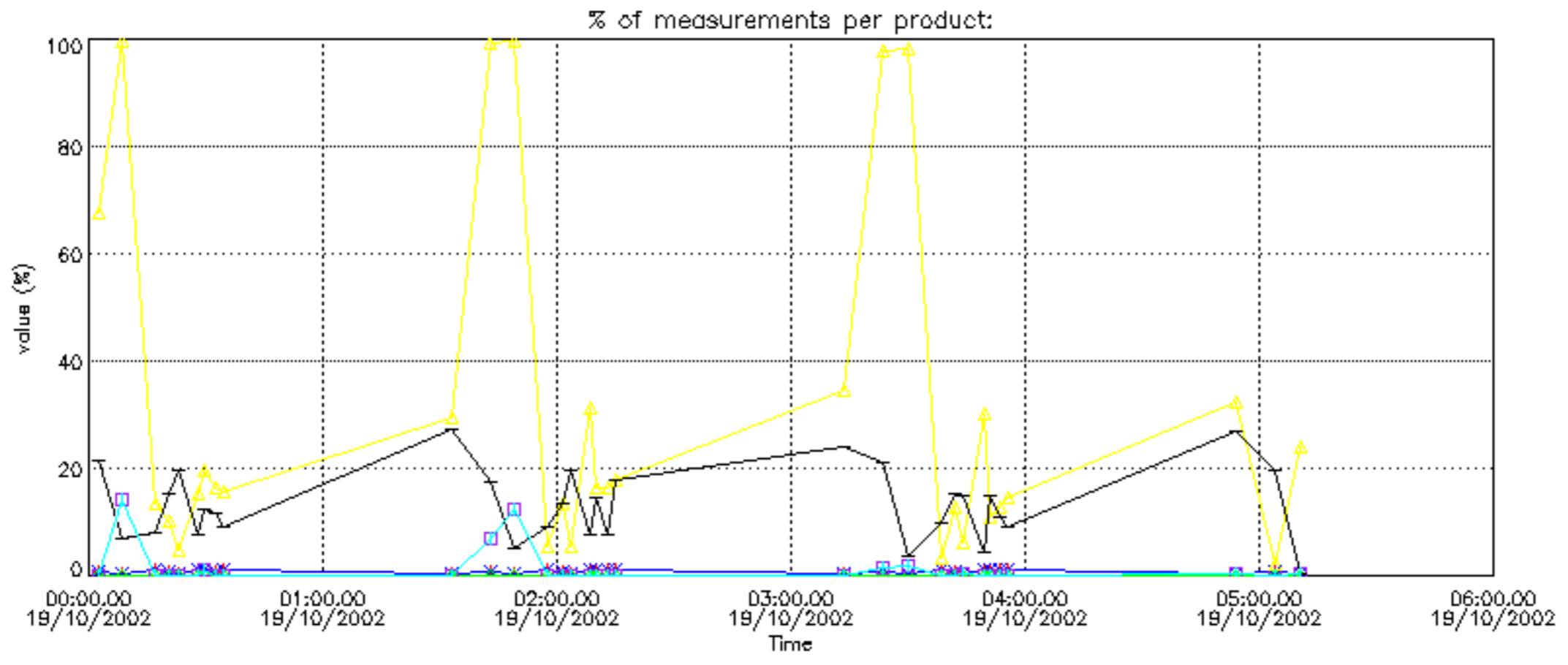


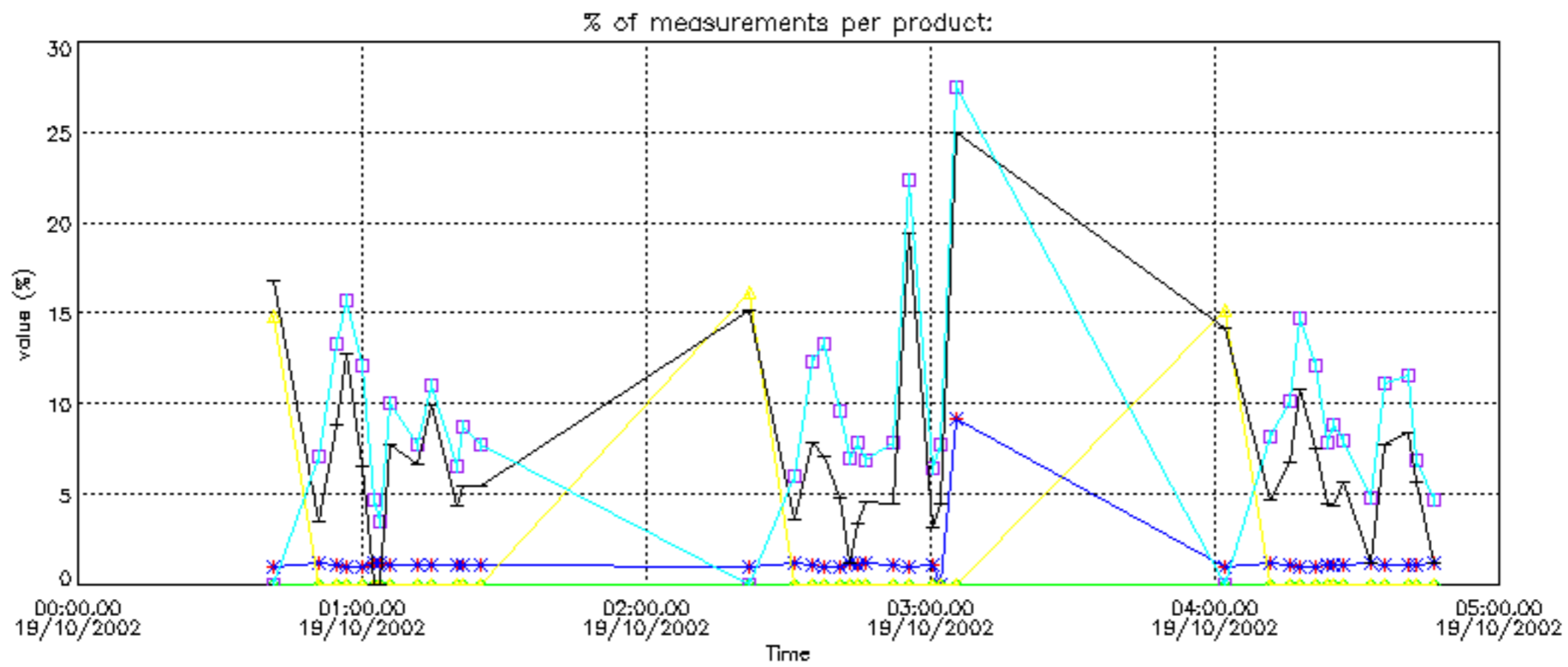
Percentage of flagged data per NO2 profile



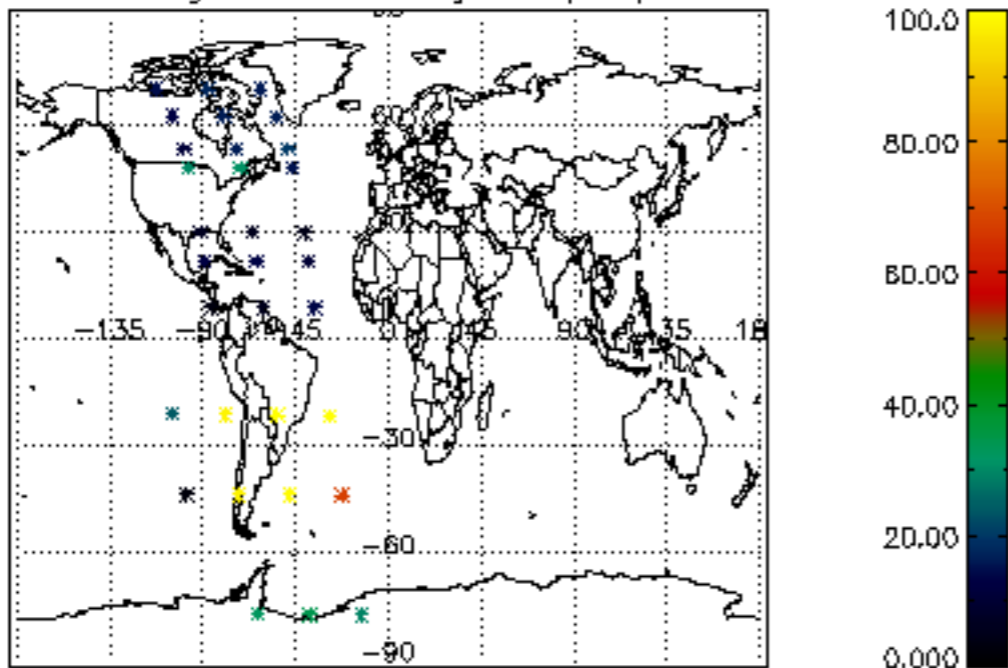
Percentage of flagged data per NO3 profile



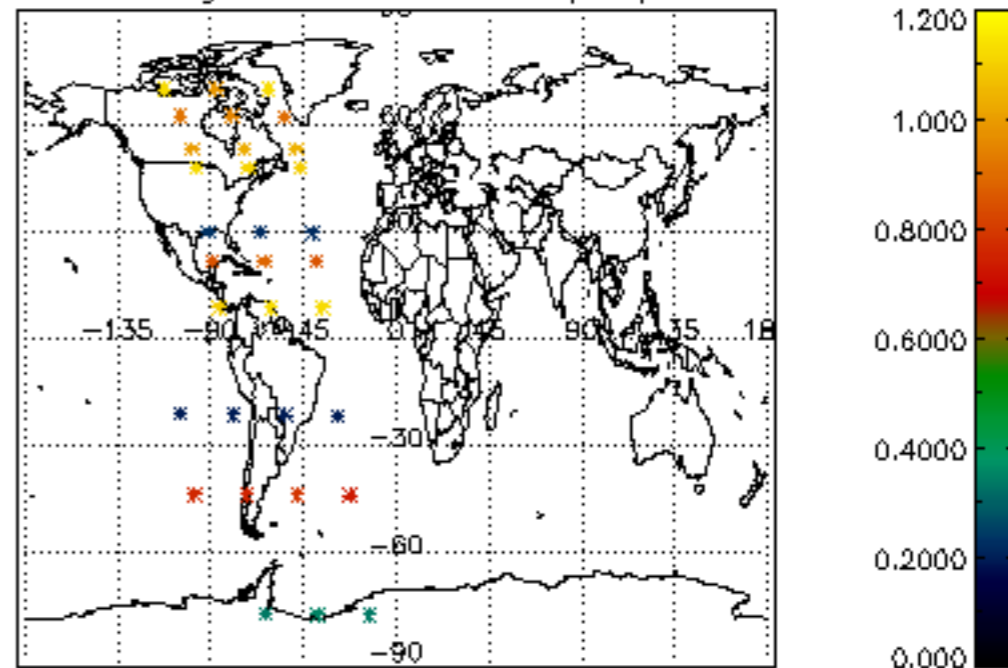




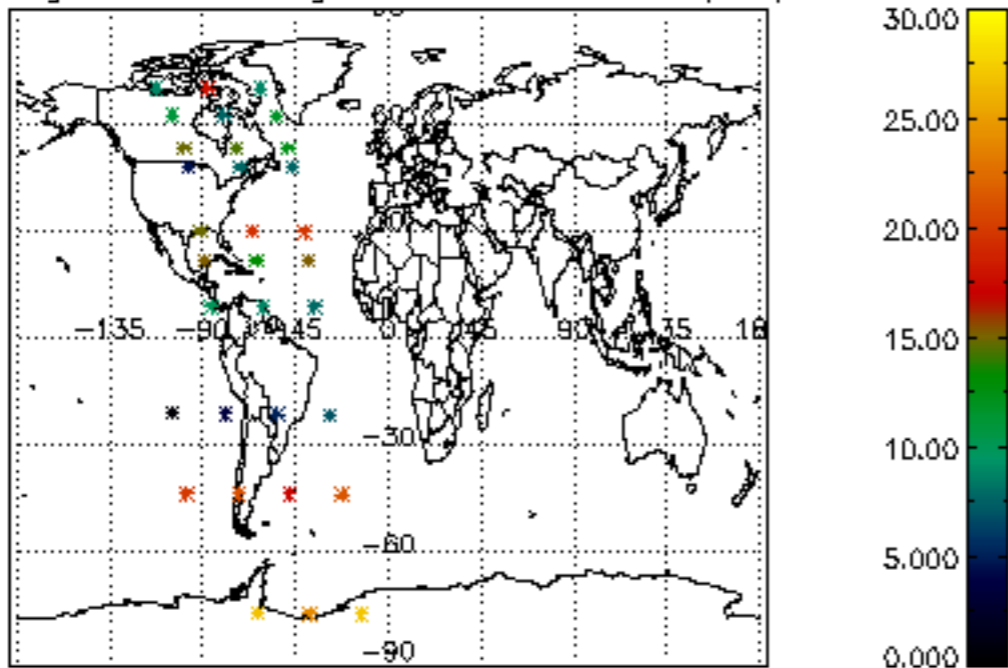
Percentage of cosmic ray hits per profile



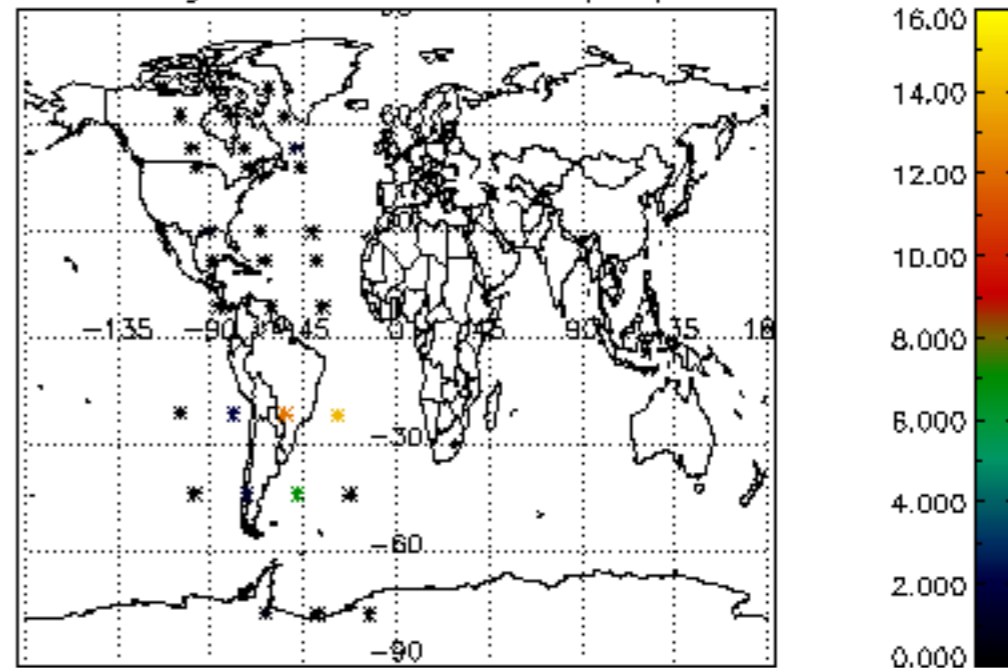
Percentage of datation errors per profile



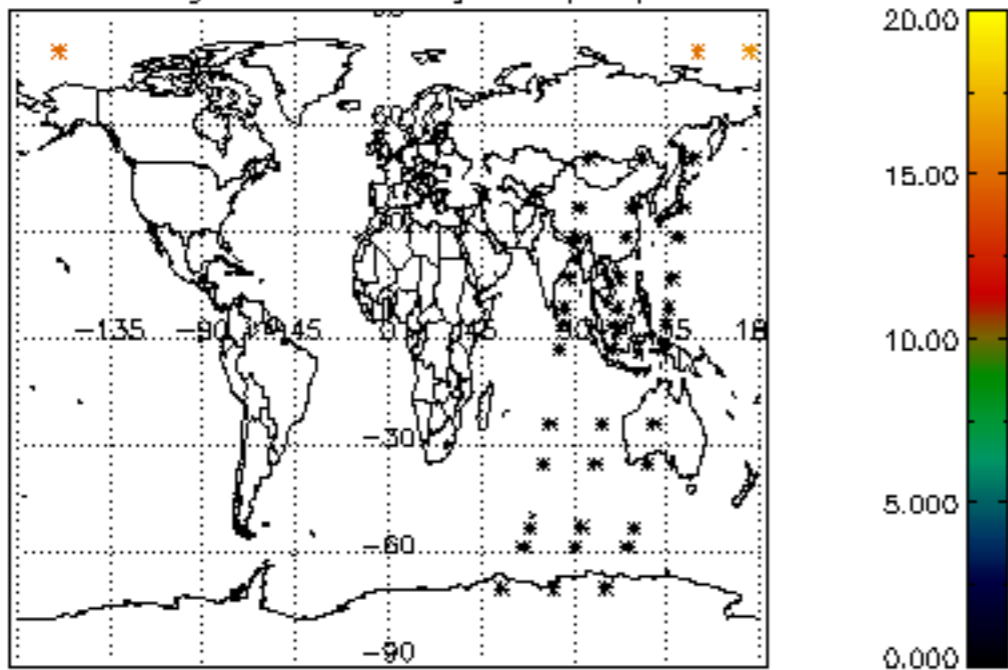
Percentage of star falling outside central band per profile



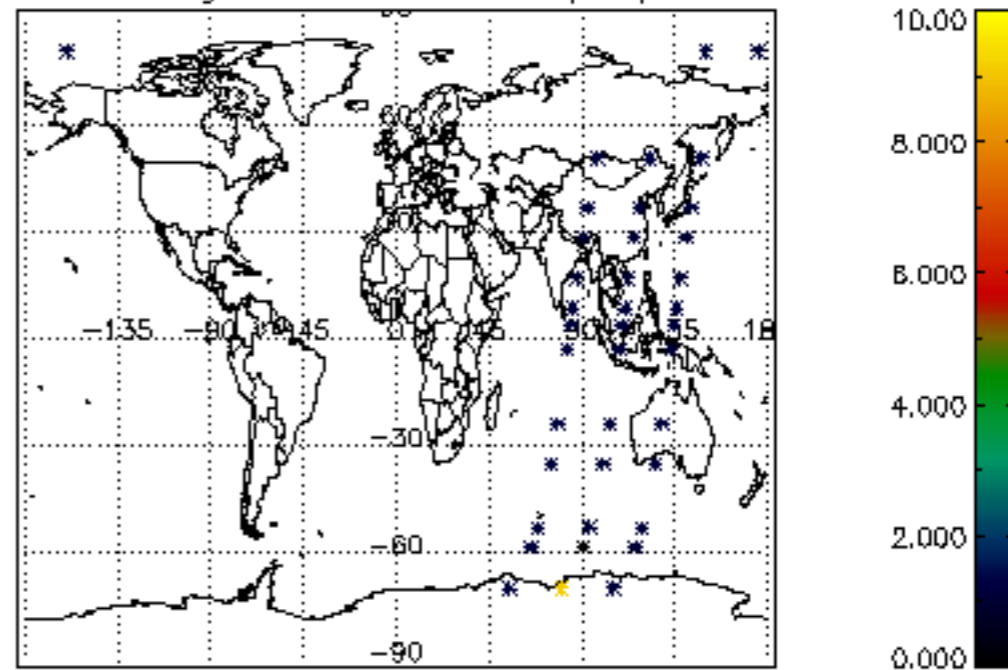
Percentage of saturation errors per profile



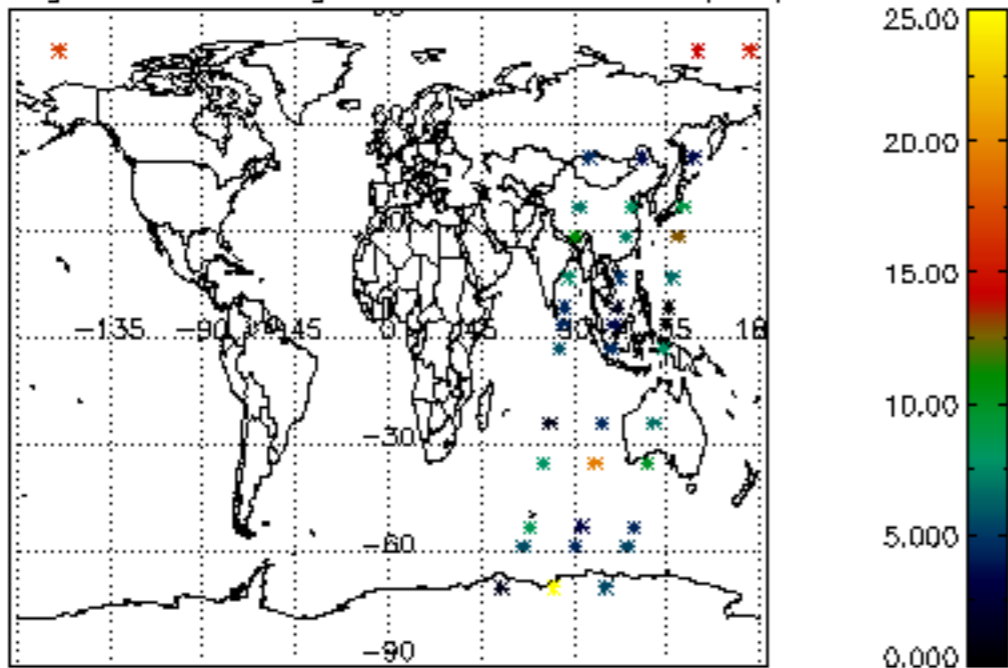
Percentage of cosmic ray hits per profile



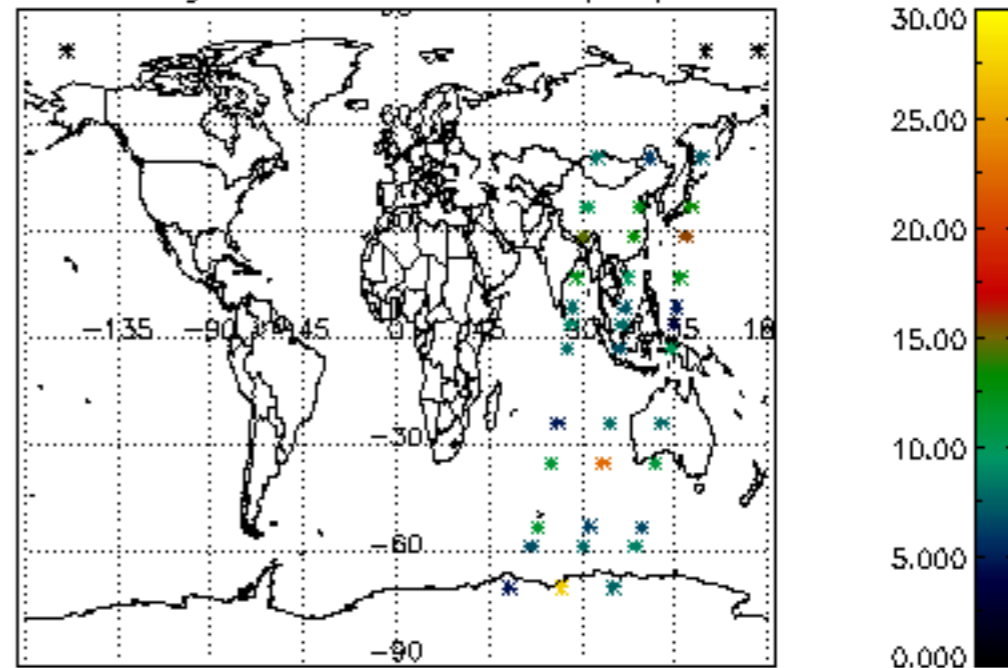
Percentage of datation errors per profile

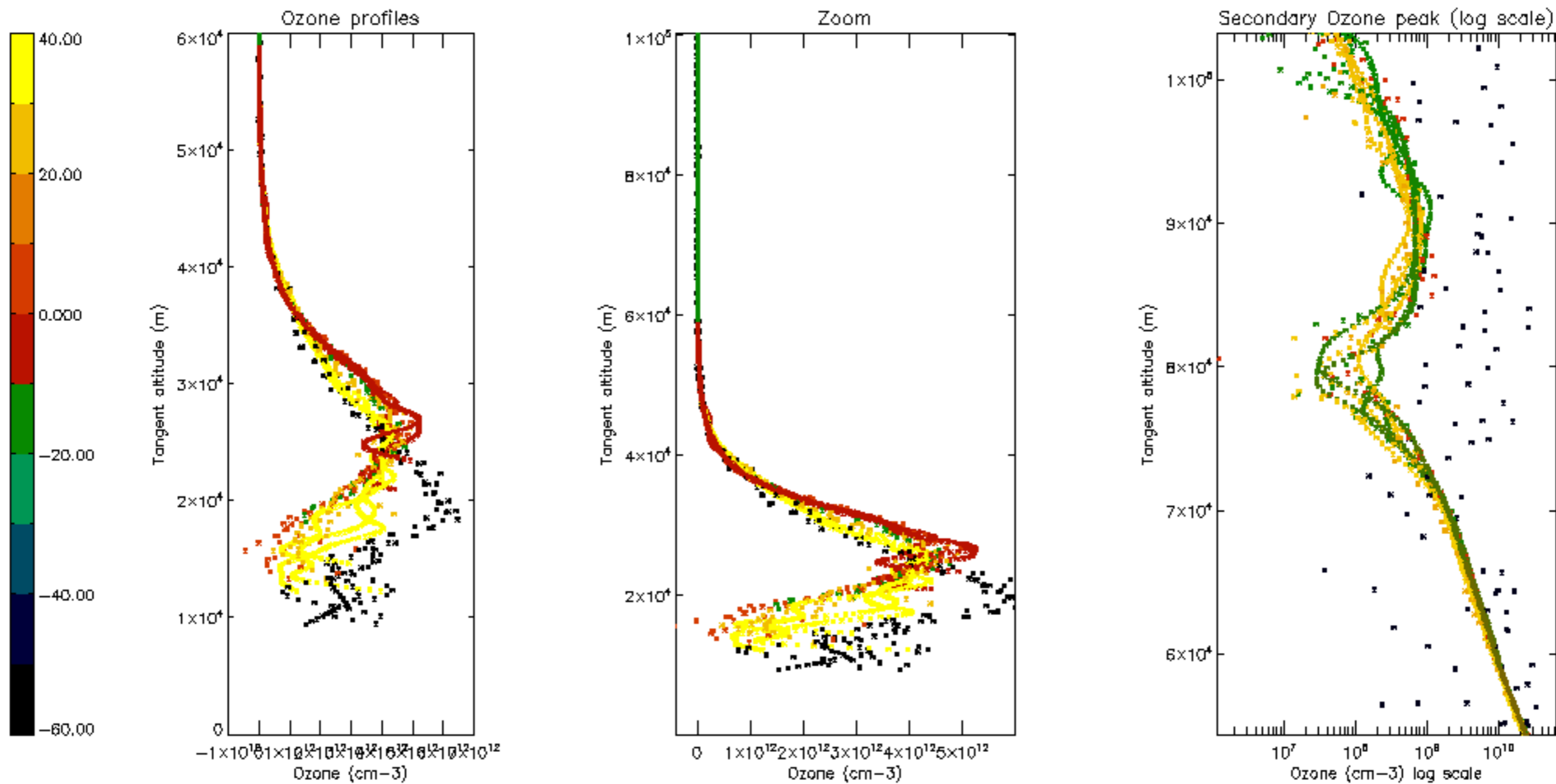


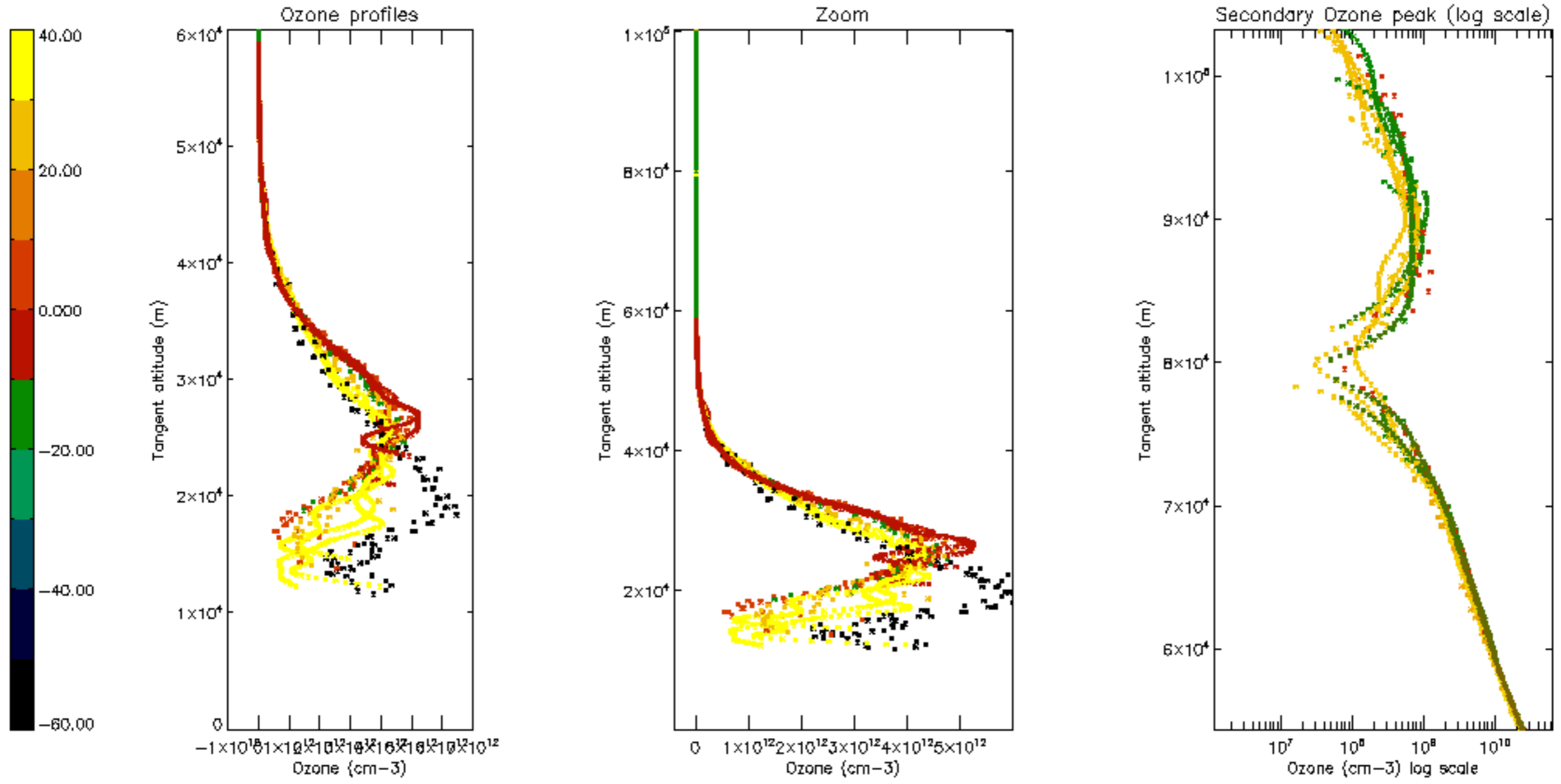
Percentage of star falling outside central band per profile

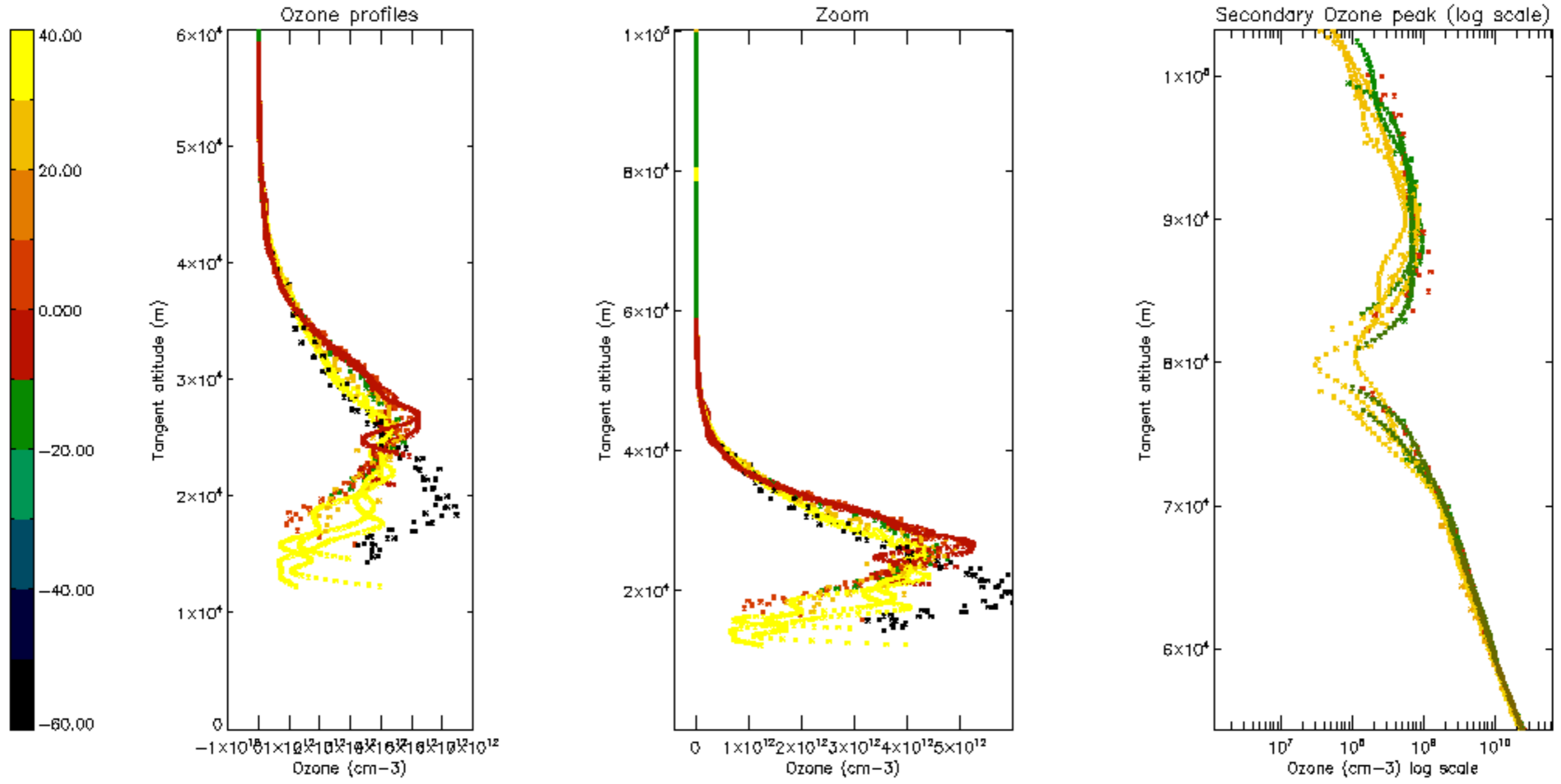


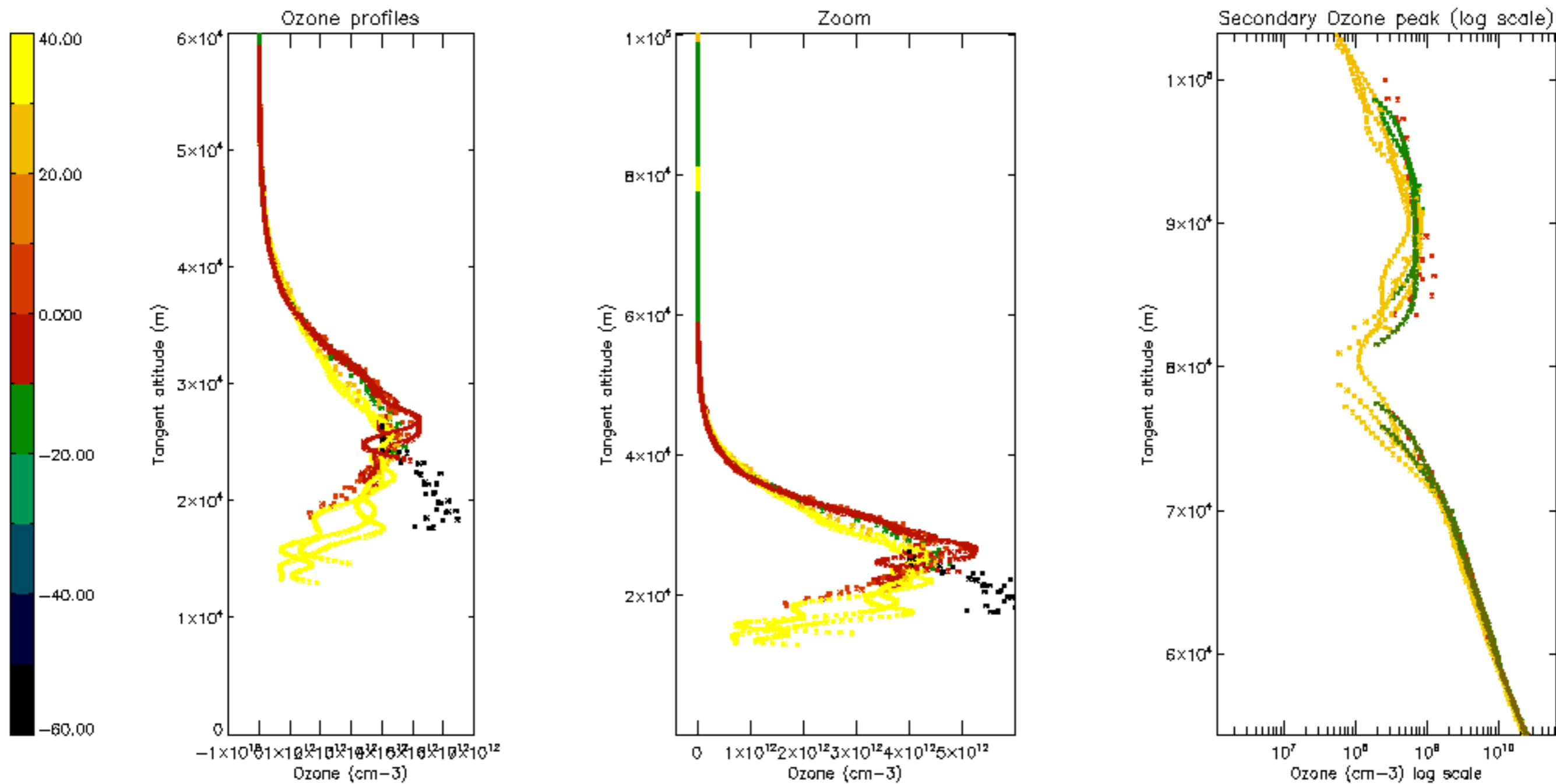
Percentage of saturation errors per profile

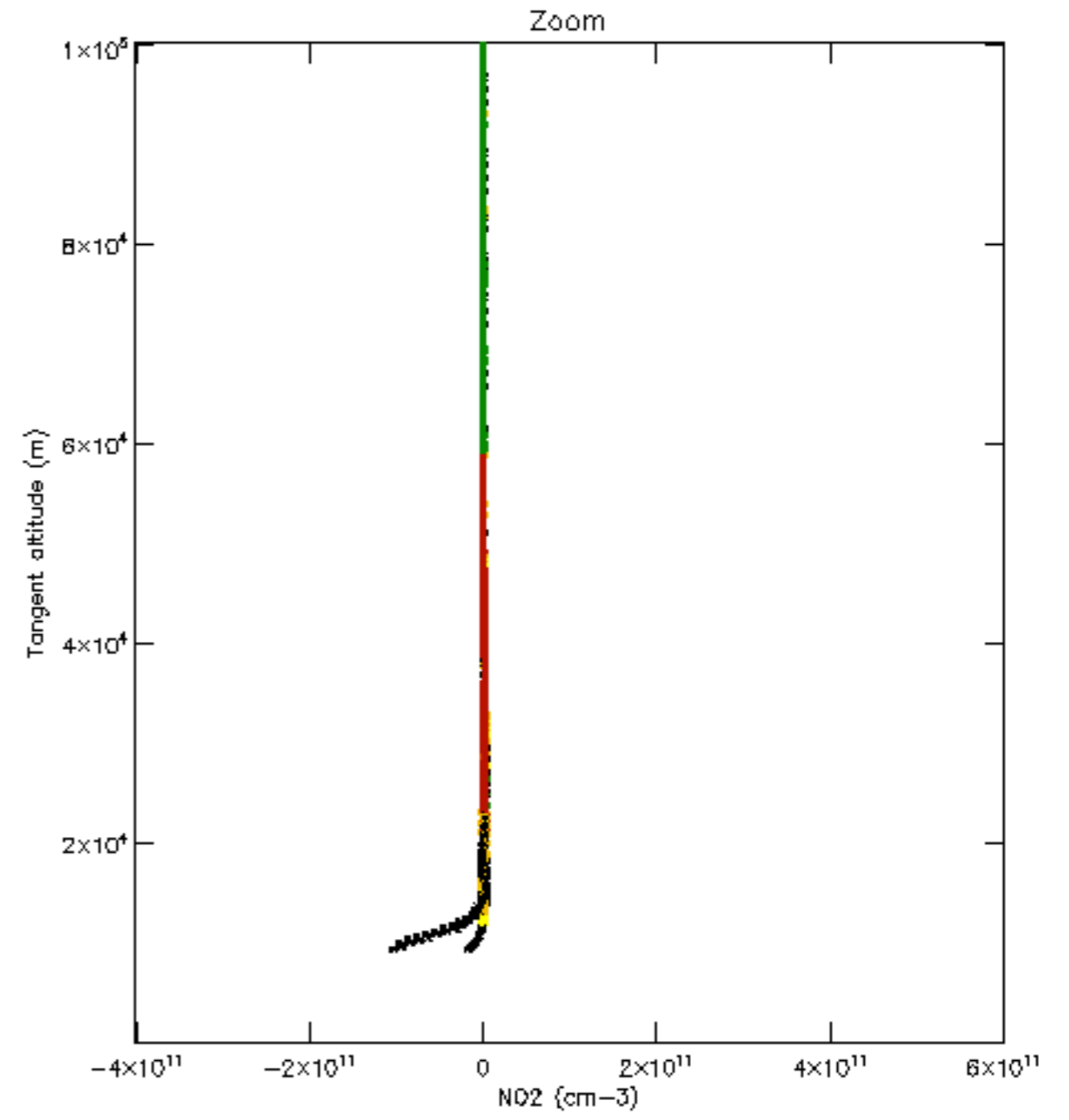
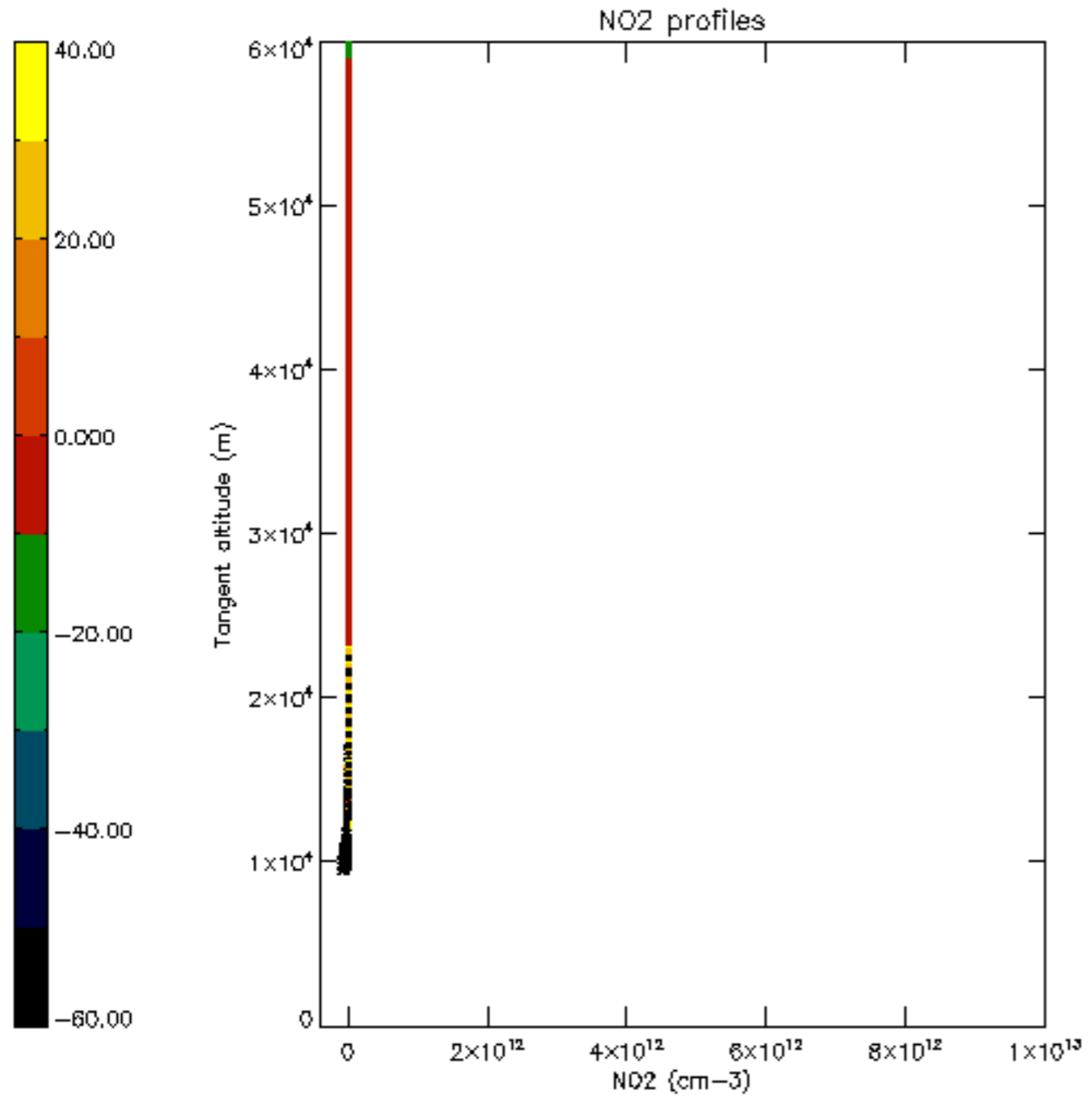


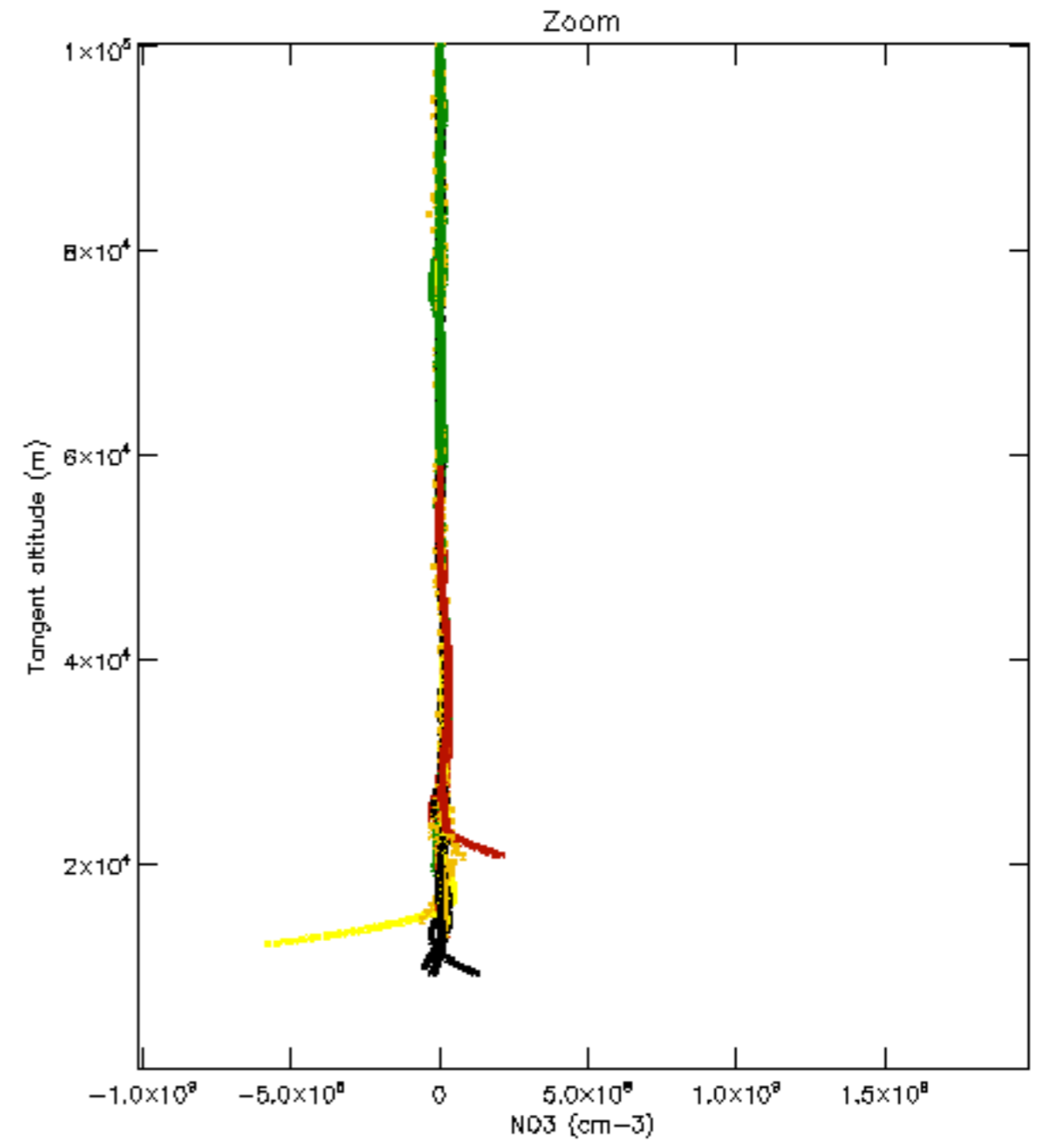
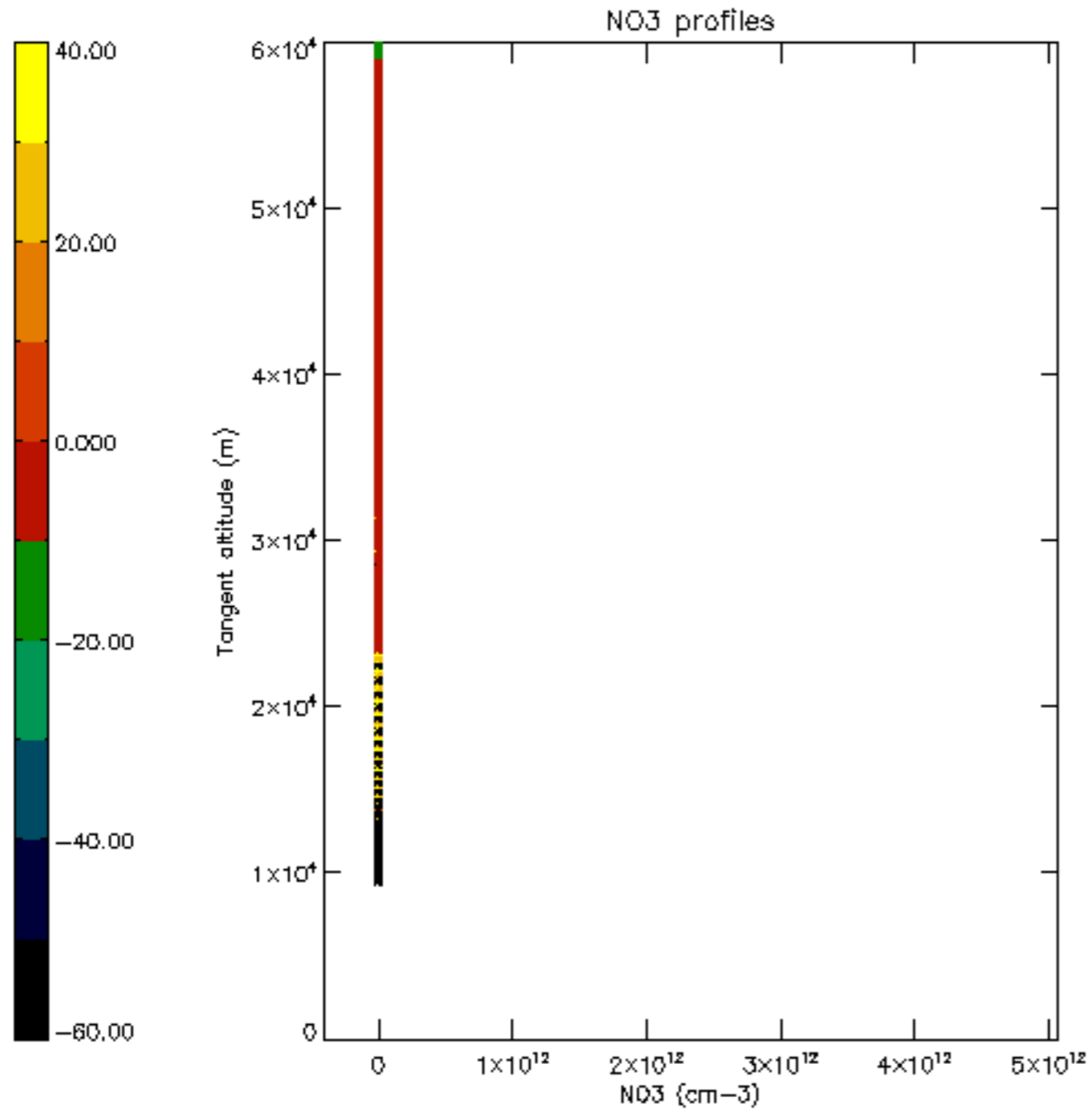


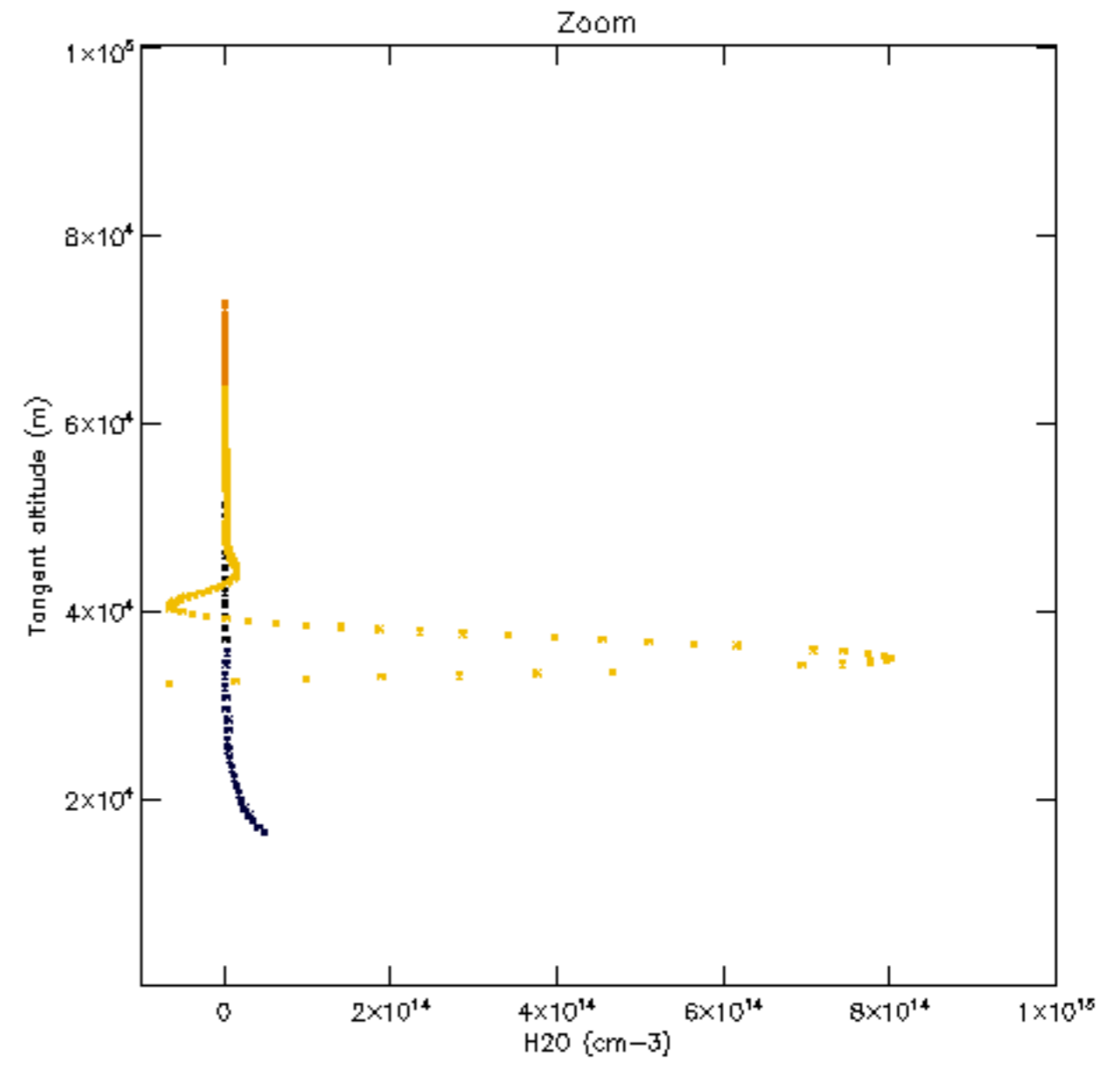
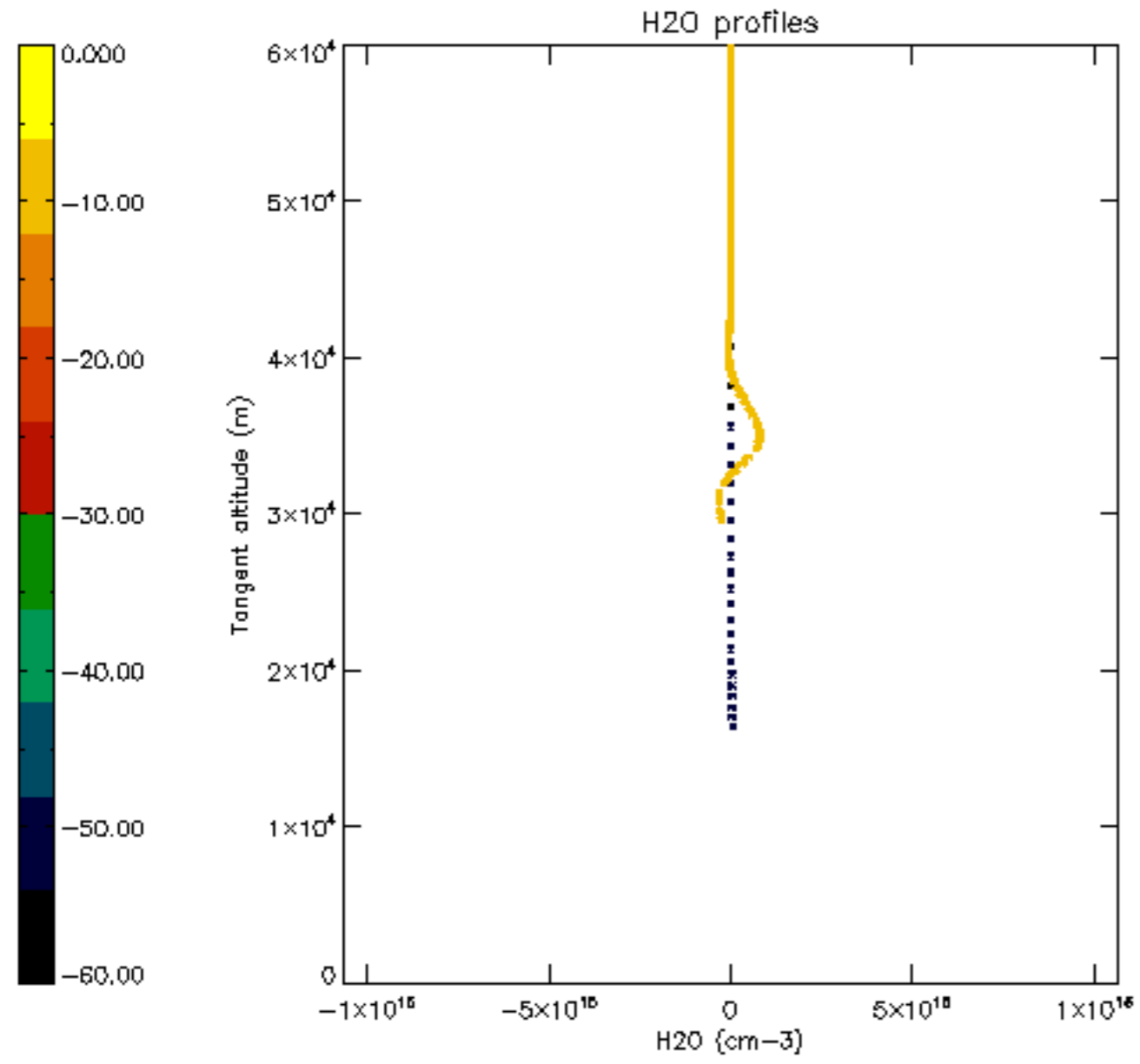


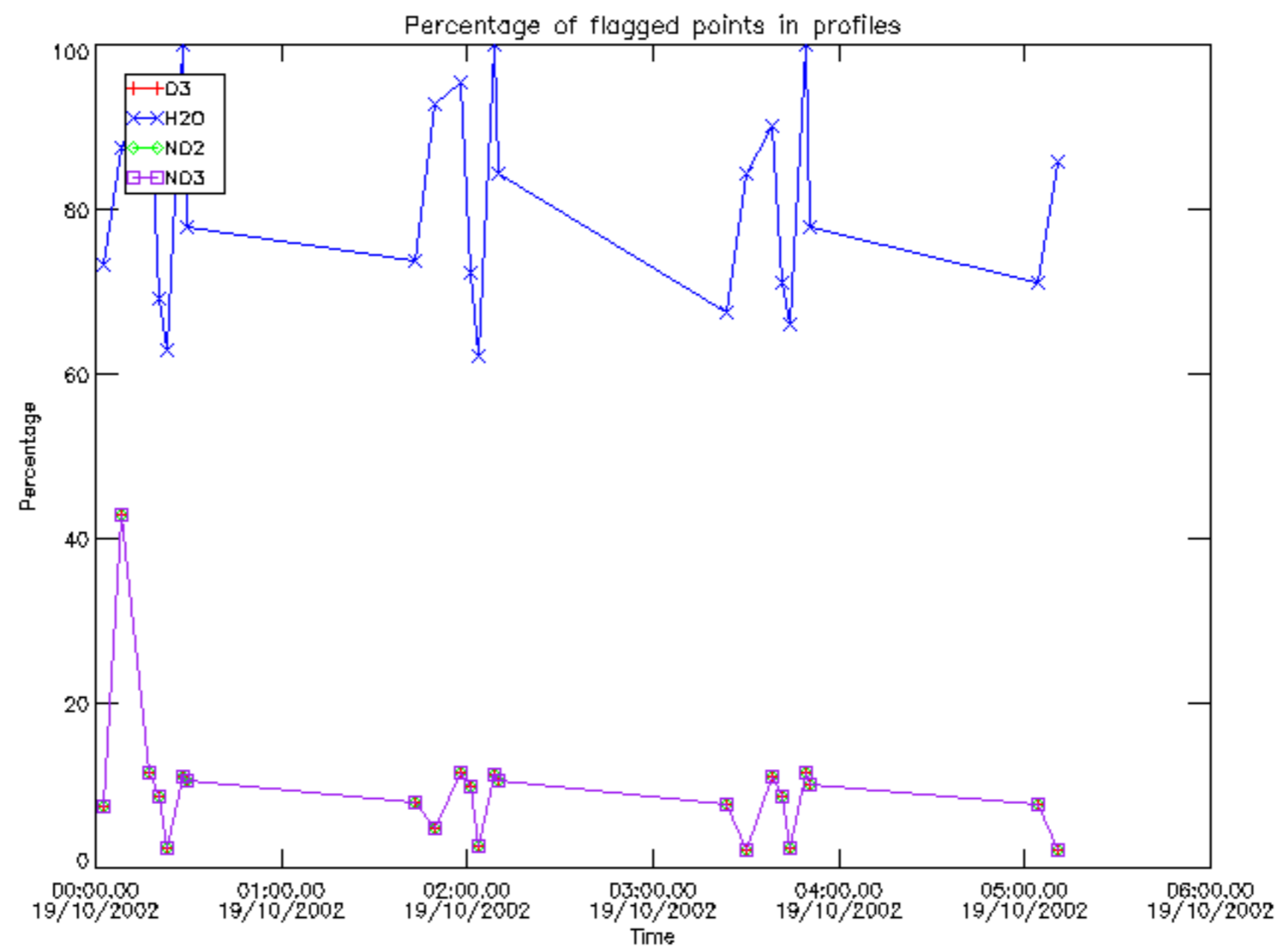




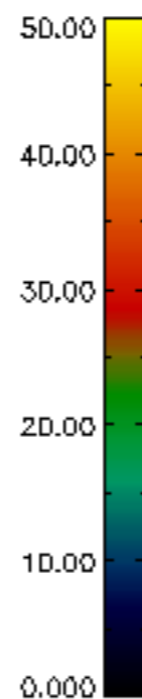
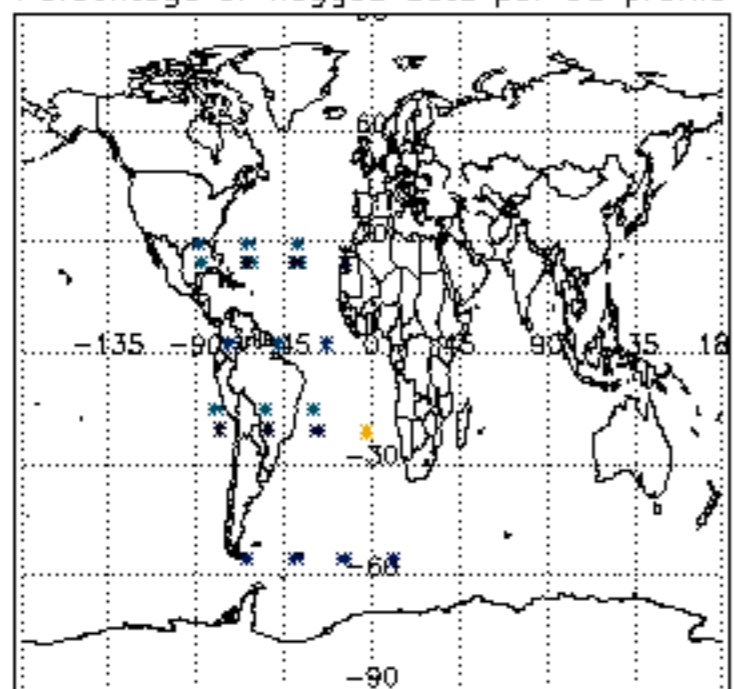




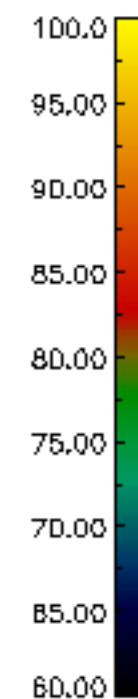
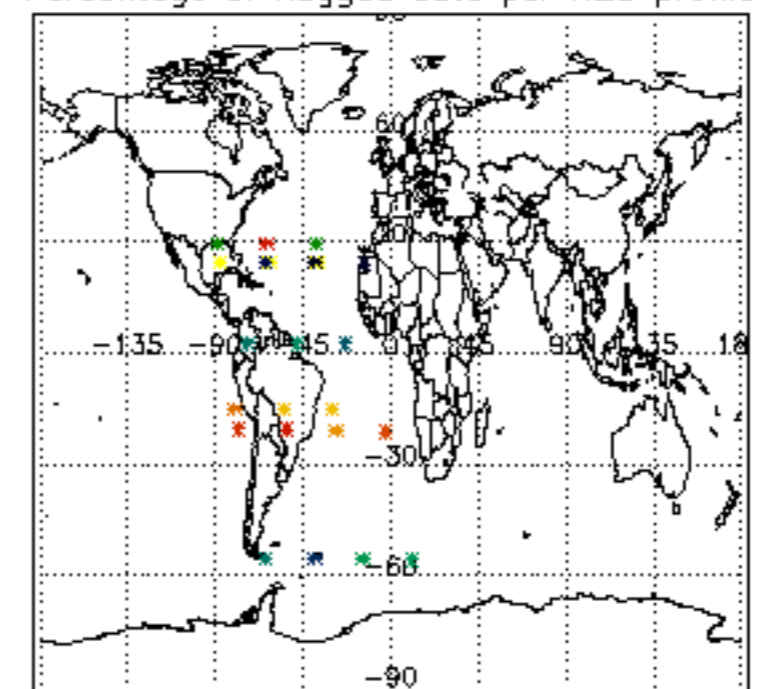




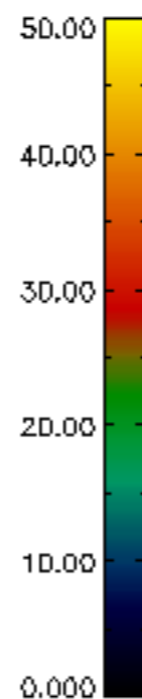
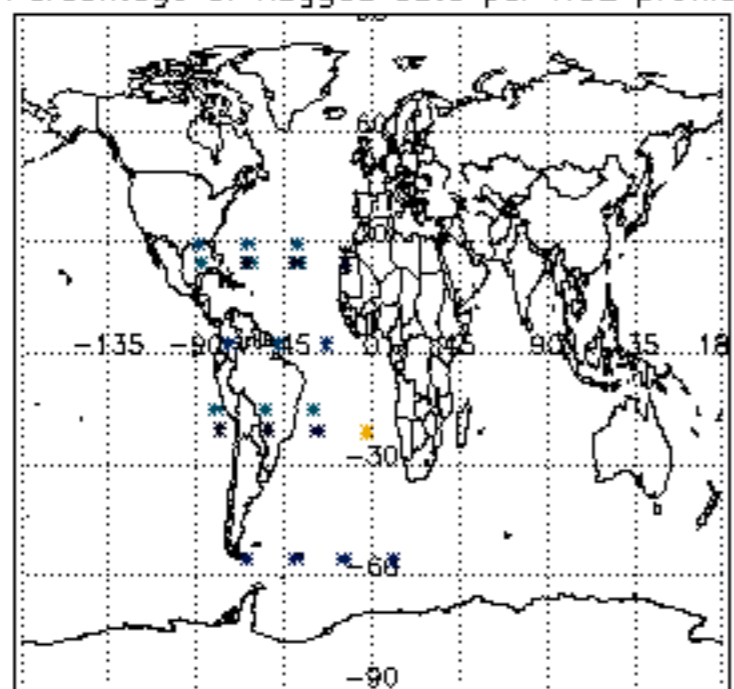
Percentage of flagged data per D3 profile



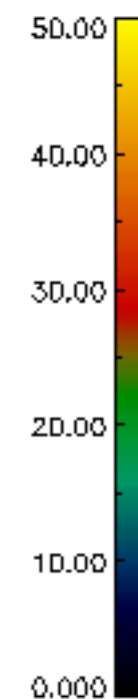
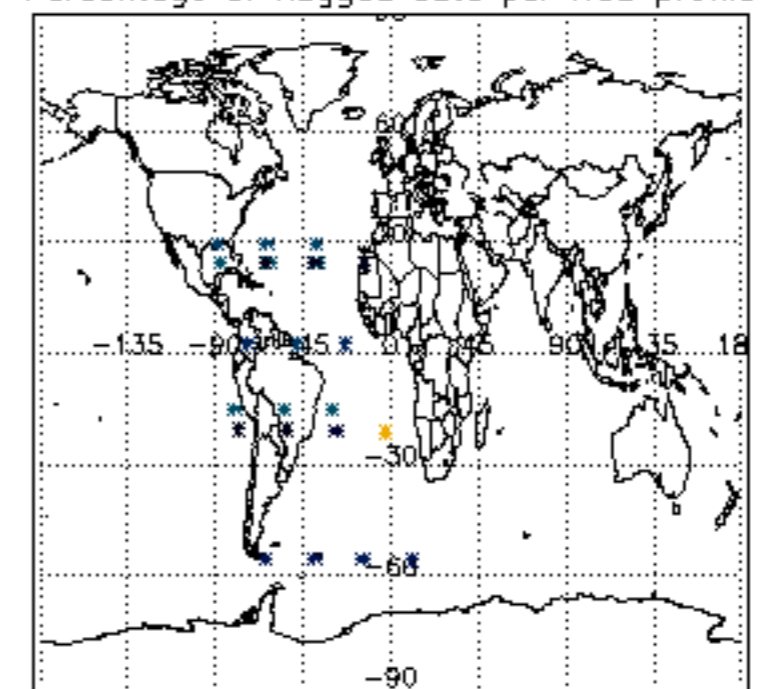
Percentage of flagged data per H2O profile

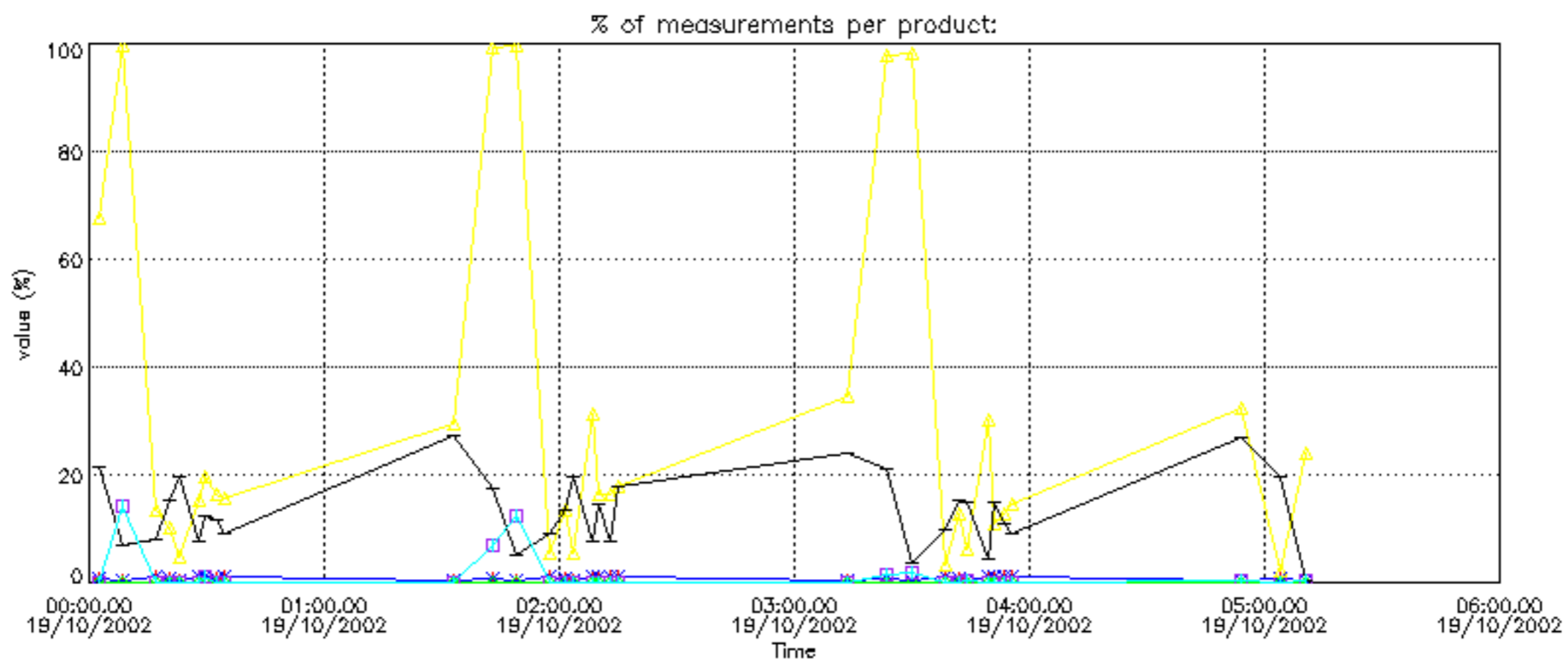


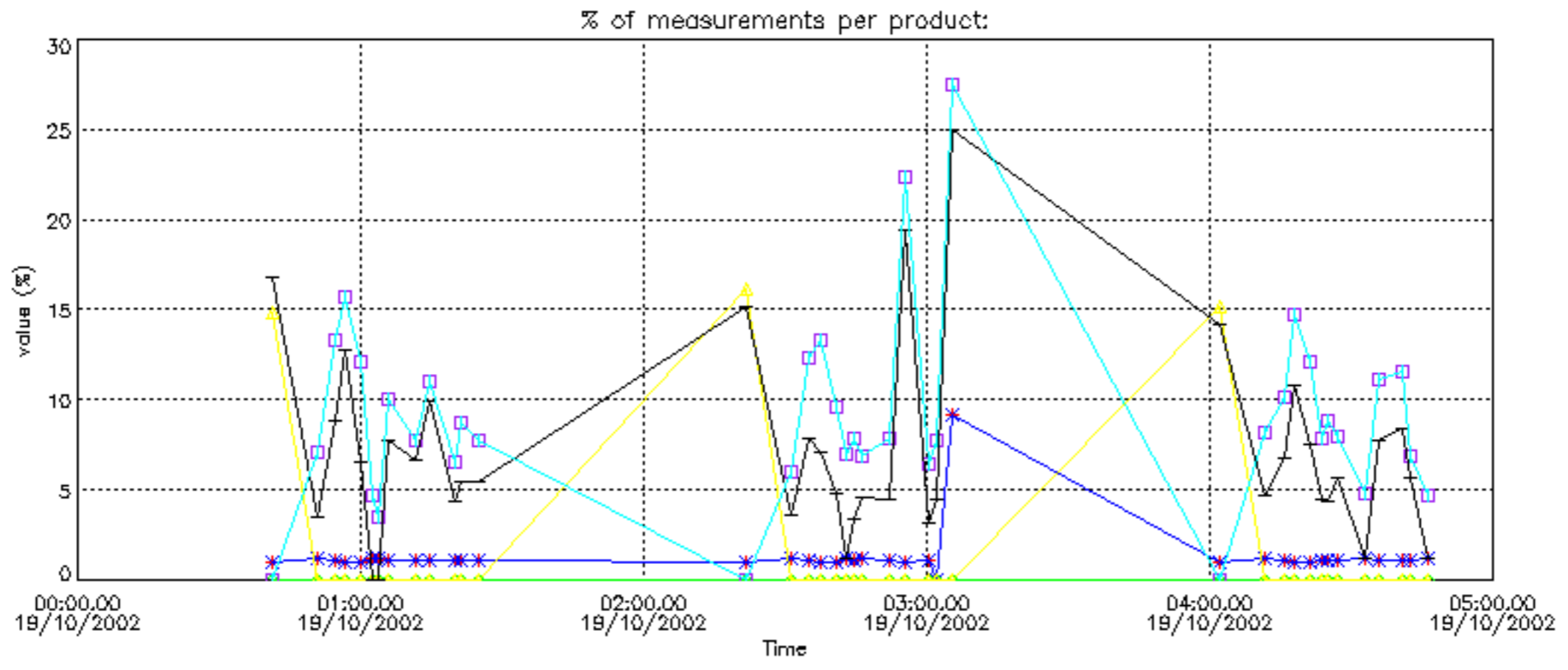
Percentage of flagged data per NO2 profile



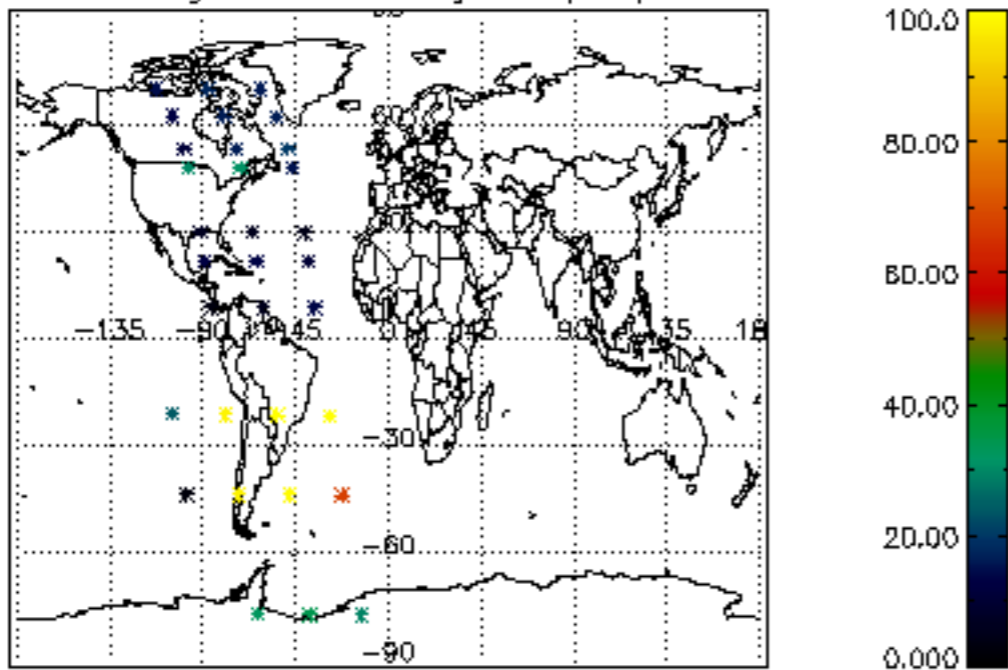
Percentage of flagged data per NO3 profile



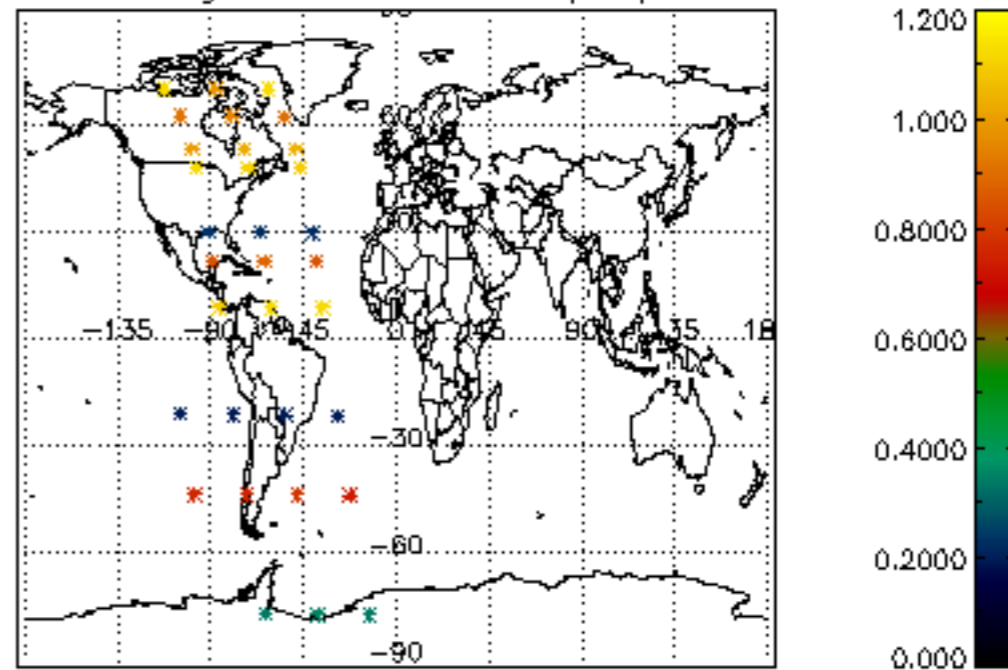




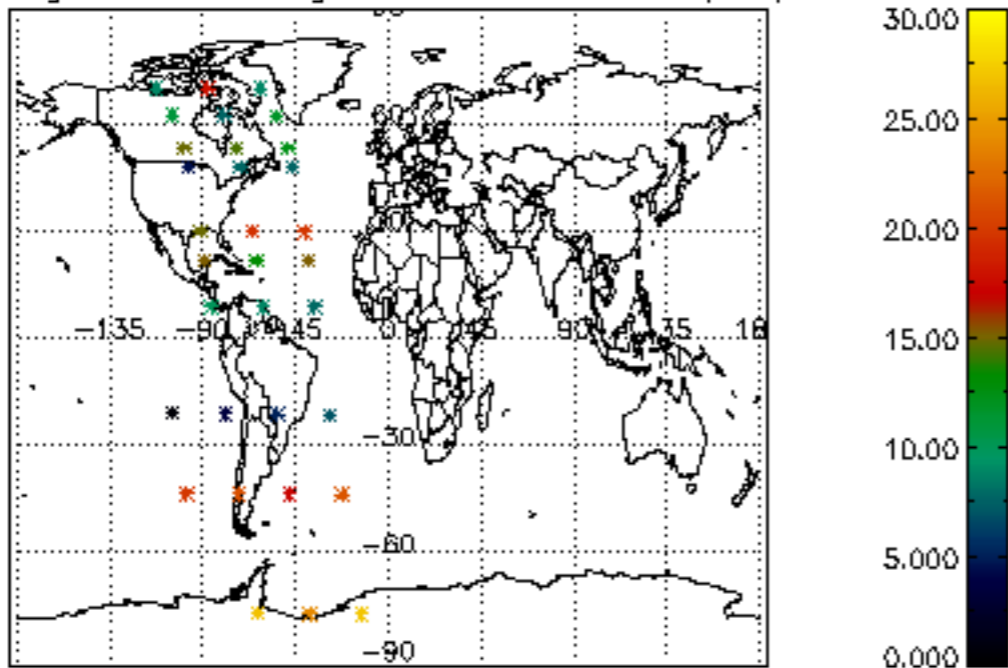
Percentage of cosmic ray hits per profile



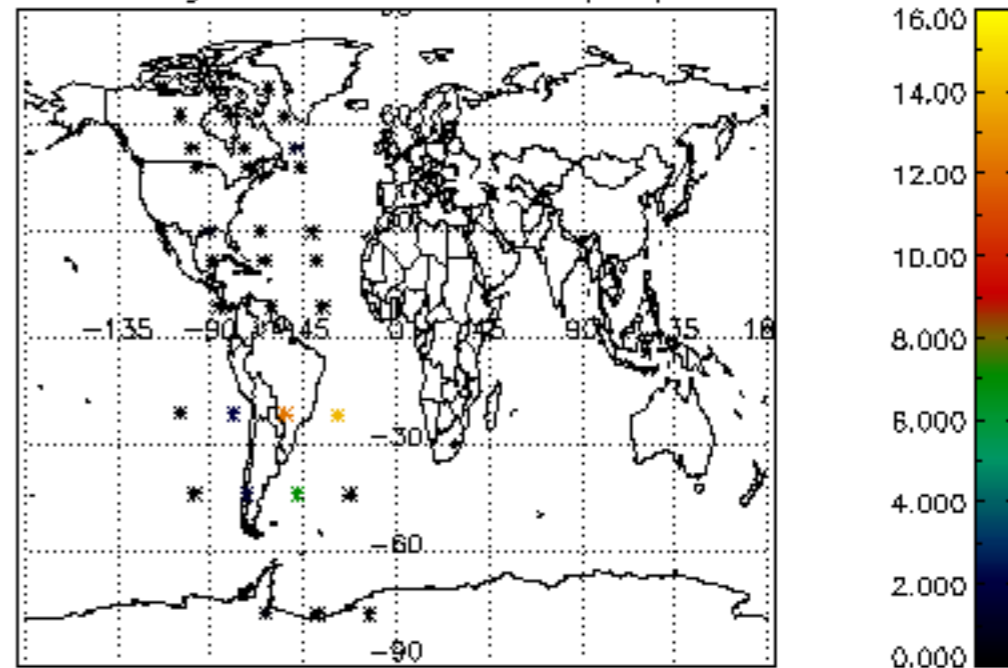
Percentage of datation errors per profile



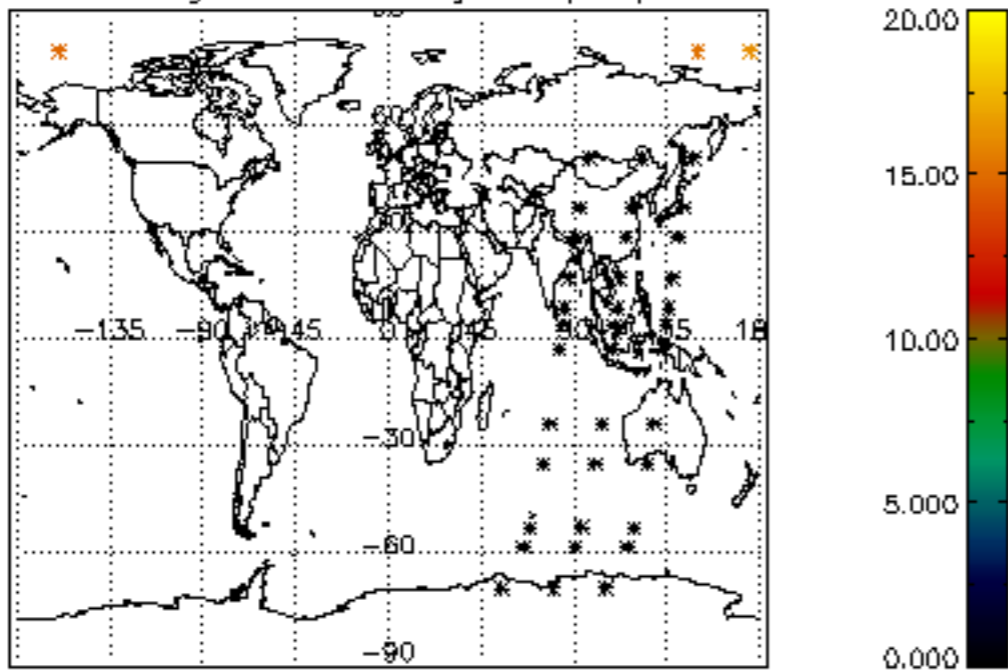
Percentage of star falling outside central band per profile



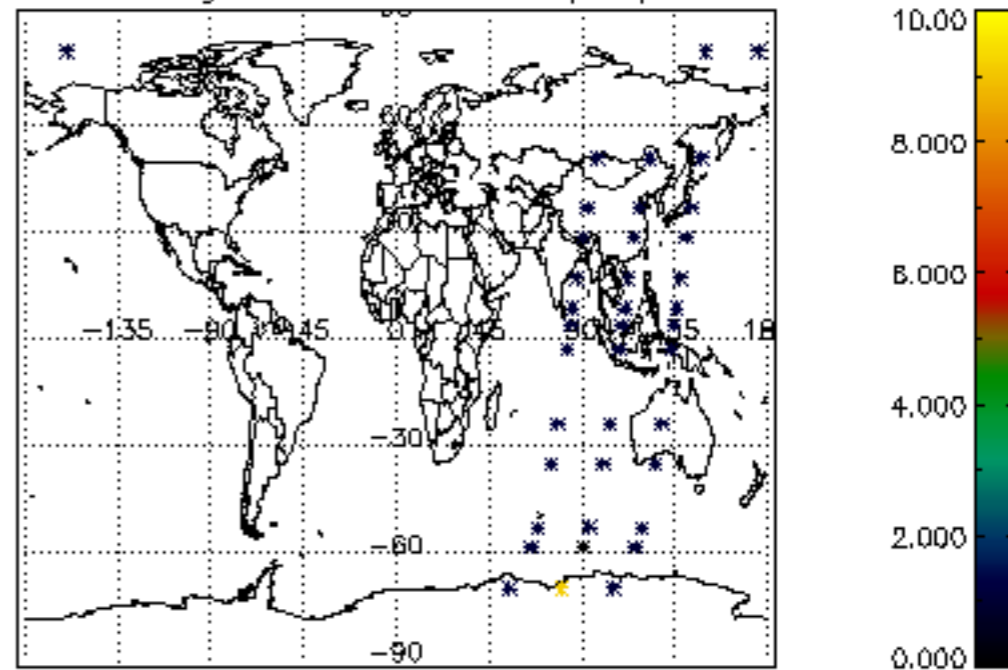
Percentage of saturation errors per profile



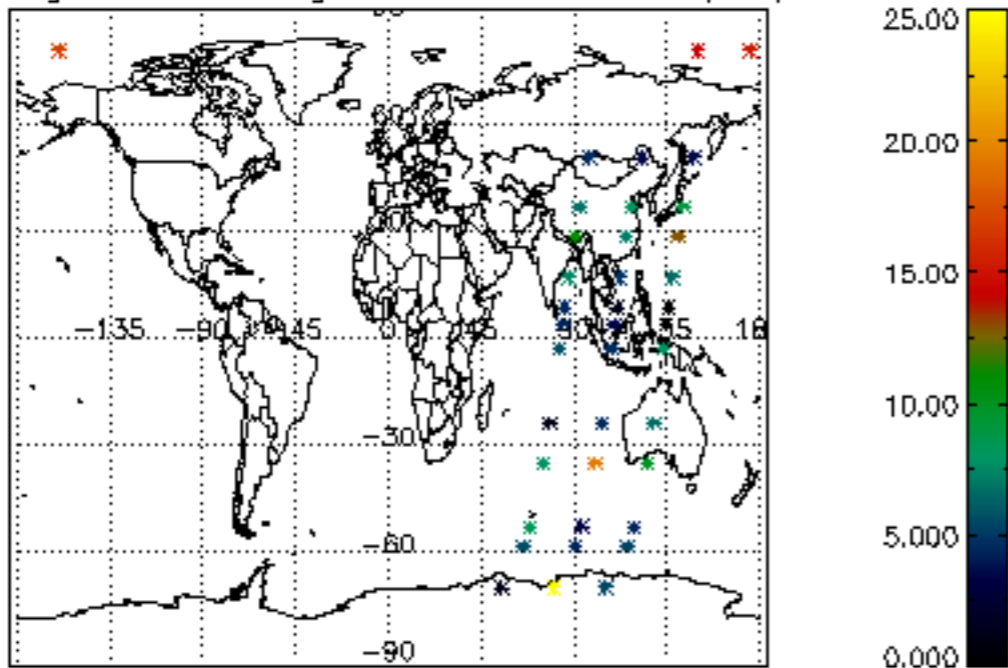
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

