

GOMOS Level 2 Daily Report

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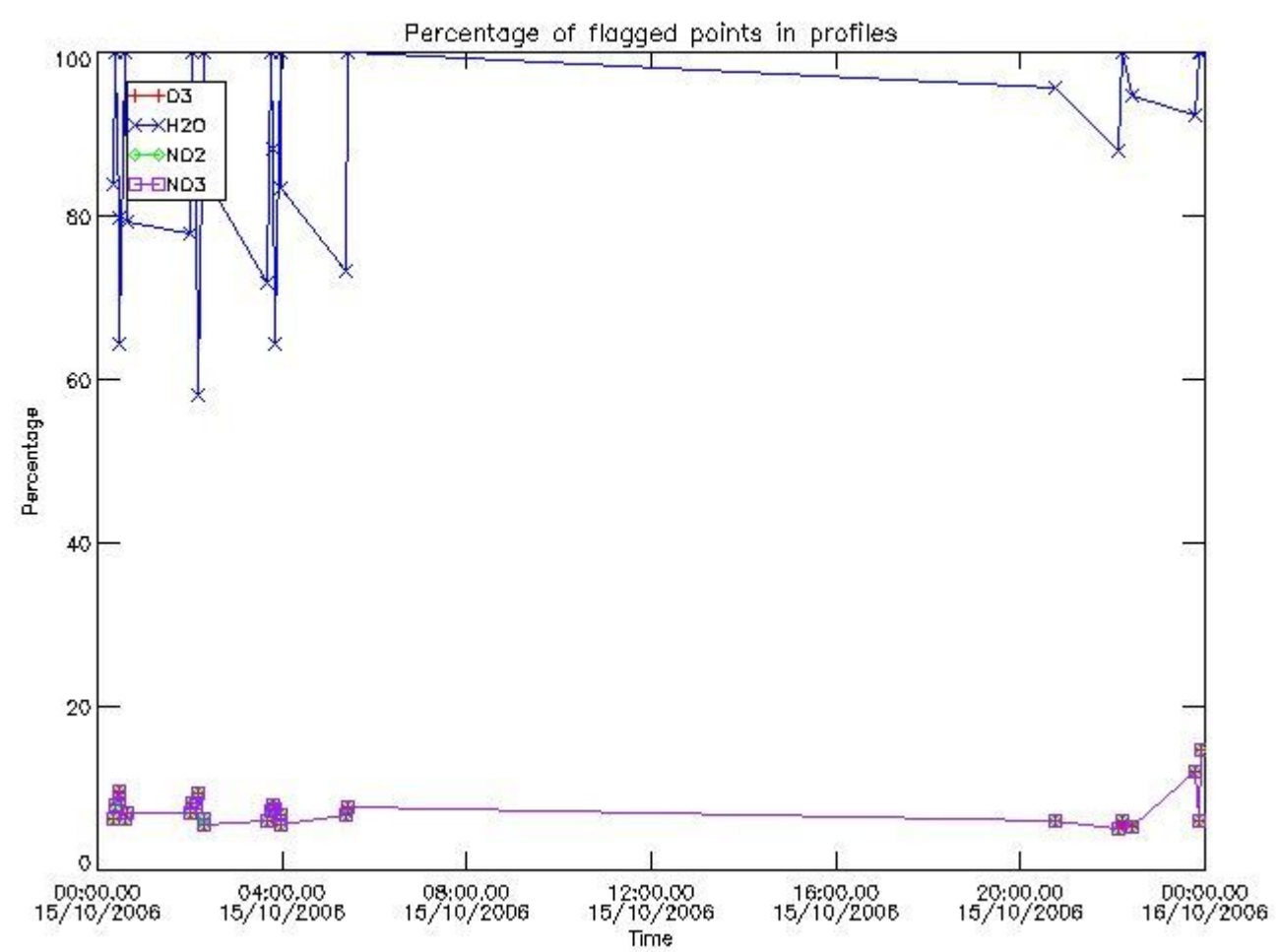
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43	GOM_NL__2PRFIN20061015_041106_000000362052_00076_24178_2741.N1	15-OCT-2006 04:11:06	Straylight	36.000	52	16Bet Cet	2.0370	4500.0	72	24178	No
44	GOM_NL__2PRFIN20061015_042046_000000292052_00076_24178_2742.N1	15-OCT-2006 04:20:46	Bright	29.000	140	88Gam Peg	2.8340	26000.	58	24178	No
45	GOM_NL__2PRFIN20061015_042444_000000312052_00076_24178_2743.N1	15-OCT-2006 04:24:44	Bright	30.500	58	21Alp And	2.0730	11000.	61	24178	No
46	GOM_NL__2PRFIN20061015_043248_000000322052_00076_24178_2744.N1	15-OCT-2006 04:32:48	Bright	32.000	68	18Alp Cas	2.2250	4500.0	64	24178	No
47	GOM_NL__2PRFIN20061015_043411_000000322052_00076_24178_2745.N1	15-OCT-2006 04:34:11	Bright	32.000	76	27Gam Cas	2.3000	30000.	64	24178	No
48	GOM_NL__2PRFIN20061015_044146_000000282052_00076_24178_2746.N1	15-OCT-2006 04:41:46	Bright	28.000	49	1Alp UMi	1.9900	6300.0	56	24178	No
49	GOM_NL__2PRFIN20061015_044959_000000322052_00076_24178_2747.N1	15-OCT-2006 04:49:59	Bright	31.500	36	50Alp UMa	1.8000	6300.0	63	24178	No
50	GOM_NL__2PRFIN20061015_045133_000000322052_00076_24178_2748.N1	15-OCT-2006 04:51:33	Bright	31.500	82	48Bet UMa	2.3650	10600.	63	24178	No
51	GOM_NL__2PRFIN20061015_045455_000000292052_00076_24178_2749.N1	15-OCT-2006 04:54:55	Bright	29.000	174	52Psi UMa	3.0040	4400.0	58	24178	No
52	GOM_NL__2PRFIN20061015_050234_000000322052_00076_24178_2750.N1	15-OCT-2006 05:02:34	Bright	31.500	51	41Gam1Leo	2.0100	4500.0	63	24178	No
53	GOM_NL__2PRFIN20061015_050507_000000342052_00076_24178_2751.N1	15-OCT-2006 05:05:07	Bright	34.000	22	32Alp Leo	1.3600	15200.	68	24178	No
54	GOM_NL__2PRFIN20061015_052200_000000382052_00076_24178_2752.N1	15-OCT-2006 05:22:00	Dark	38.000	65	Lam Vel	2.2040	4400.0	76	24178	No
55	GOM_NL__2PRFIN20061015_052508_000000392052_00077_24179_2753.N1	15-OCT-2006 05:25:08	Dark	39.000	34	Gam2Vel	1.7930	23000.	78	24179	No
56	GOM_NL__2PRFIN20061015_204433_000000932052_00086_24188_2739.N1	15-OCT-2006 20:44:33	Dark	93.000	9	Alp Eri	0.45300	24000.	186	24188	No
57	GOM_NL__2PRFIN20061015_204934_000000922052_00086_24188_2740.N1	15-OCT-2006 20:49:34	Straylight	91.500	84	Alp Phe	2.3970	4500.0	183	24188	No
58	GOM_NL__2PRFIN20061015_205608_000001002052_00086_24188_2741.N1	15-OCT-2006 20:56:08	Straylight	100.00	52	16Bet Cet	2.0370	4500.0	200	24188	No
59	GOM_NL__2PRFIN20061015_210549_000000862052_00086_24188_2742.N1	15-OCT-2006 21:05:49	Bright	86.000	140	88Gam Peg	2.8340	26000.	172	24188	No
60	GOM_NL__2PRFIN20061015_210947_000000852052_00086_24188_2743.N1	15-OCT-2006 21:09:47	Bright	84.500	58	21Alp And	2.0730	11000.	169	24188	No
61	GOM_NL__2PRFIN20061015_212648_000000892052_00086_24188_2744.N1	15-OCT-2006 21:26:48	Bright	88.500	49	1Alp UMi	1.9900	6300.0	177	24188	No
62	GOM_NL__2PRFIN20061015_212948_000000842052_00086_24188_2745.N1	15-OCT-2006 21:29:48	Bright	84.000	60	7Bet UMi	2.0810	3950.0	168	24188	No
63	GOM_NL__2PRFIN20061015_213501_000000892052_00086_24188_2746.N1	15-OCT-2006 21:35:01	Bright	88.500	36	50Alp UMa	1.8000	6300.0	177	24188	No
64	GOM_NL__2PRFIN20061015_213959_000000862052_00086_24188_2747.N1	15-OCT-2006 21:39:59	Bright	86.000	174	52Psi UMa	3.0040	4400.0	172	24188	No
65	GOM_NL__2PRFIN20061015_214645_000000842052_00086_24188_2748.N1	15-OCT-2006 21:46:45	Bright	83.500	96	68Del Leo	2.5600	9300.0	167	24188	No
66	GOM_NL__2PRFIN20061015_220706_000001002052_00086_24188_2749.N1	15-OCT-2006 22:07:06	Dark	99.500	65	Lam Vel	2.2040	4400.0	199	24188	No
67	GOM_NL__2PRFIN20061015_221108_000000872052_00087_24189_2750.N1	15-OCT-2006 22:11:08	Dark	86.500	159	Ups Car	2.9200	7200.0	173	24189	No
68	GOM_NL__2PRFIN20061015_222509_000000962052_00087_24189_2739.N1	15-OCT-2006 22:25:09	Dark	95.500	9	Alp Eri	0.45300	24000.	191	24189	No
69	GOM_NL__2PRFIN20061015_223010_000000922052_00087_24189_2740.N1	15-OCT-2006 22:30:10	Straylight	91.500	84	Alp Phe	2.3970	4500.0	183	24189	No
70	GOM_NL__2PRFIN20061015_223644_000000972052_00087_24189_2741.N1	15-OCT-2006 22:36:44	Straylight	96.500	52	16Bet Cet	2.0370	4500.0	193	24189	No
71	GOM_NL__2PRFIN20061015_224625_000000862052_00087_24189_2742.N1	15-OCT-2006 22:46:25	Bright	86.000	140	88Gam Peg	2.8340	26000.	172	24189	No
72	GOM_NL__2PRFIN20061015_225023_000000862052_00087_24189_2743.N1	15-OCT-2006 22:50:23	Bright	86.000	58	21Alp And	2.0730	11000.	172	24189	No
73	GOM_NL__2PRFIN20061015_230724_000000872052_00087_24189_2744.N1	15-OCT-2006 23:07:24	Bright	87.000	49	1Alp UMi	1.9900	6300.0	174	24189	No
74	GOM_NL__2PRFIN20061015_231024_000000862052_00087_24189_2745.N1	15-OCT-2006 23:10:24	Bright	86.000	60	7Bet UMi	2.0810	3950.0	172	24189	No
75	GOM_NL__2PRFIN20061015_231537_000000902052_00087_24189_2746.N1	15-OCT-2006 23:15:37	Bright	89.500	36	50Alp UMa	1.8000	6300.0	179	24189	No
76	GOM_NL__2PRFIN20061015_232035_000000862052_00087_24189_2747.N1	15-OCT-2006 23:20:35	Bright	85.500	174	52Psi UMa	3.0040	4400.0	171	24189	No
77	GOM_NL__2PRFIN20061015_232721_000000942052_00087_24189_2748.N1	15-OCT-2006 23:27:21	Bright	93.500	96	68Del Leo	2.5600	9300.0	187	24189	No
78	GOM_NL__2PRFIN20061015_234742_000000982052_00087_24189_2749.N1	15-OCT-2006 23:47:42	Dark	97.500	65	Lam Vel	2.2040	4400.0	195	24189	No
79	GOM_NL__2PRFIN20061015_235144_000000872052_00088_24190_2750.N1	15-OCT-2006 23:51:44	Dark	86.500	159	Ups Car	2.9200	7200.0	173	24190	No
80	GOM_NL__2PRFIN20061015_235407_000000382052_00088_24190_2739.N1	15-OCT-2006 23:54:07	Dark	38.000	29	Bet Car	1.6720	10200.	76	24190	No

3. Quality information per product

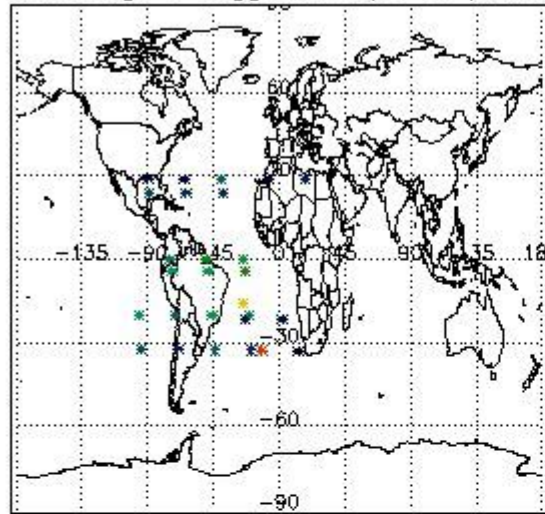
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

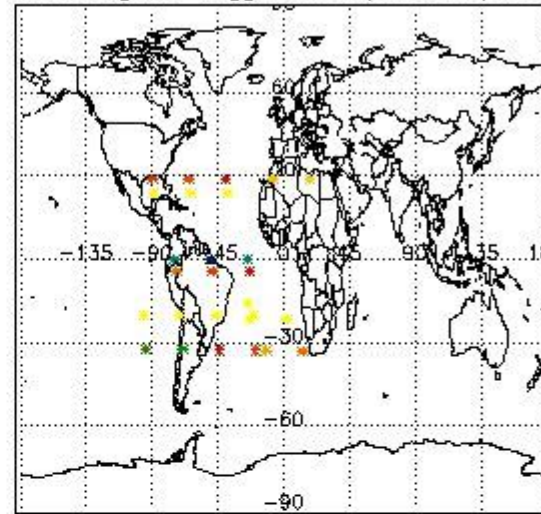


3.2 Plot quality information per product (world map)

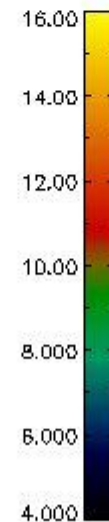
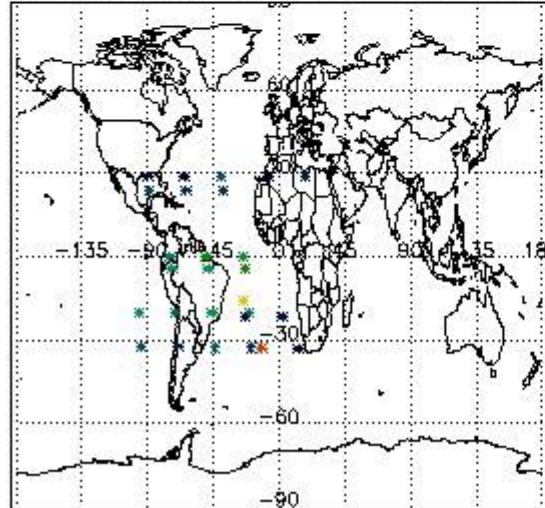
Percentage of flagged data per O3 profile



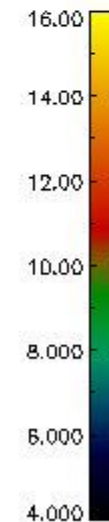
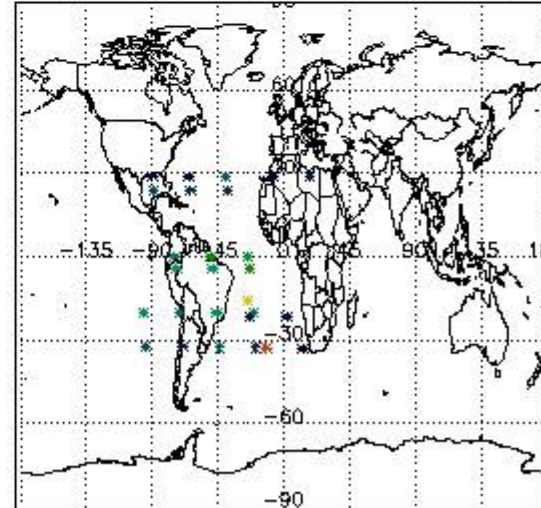
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

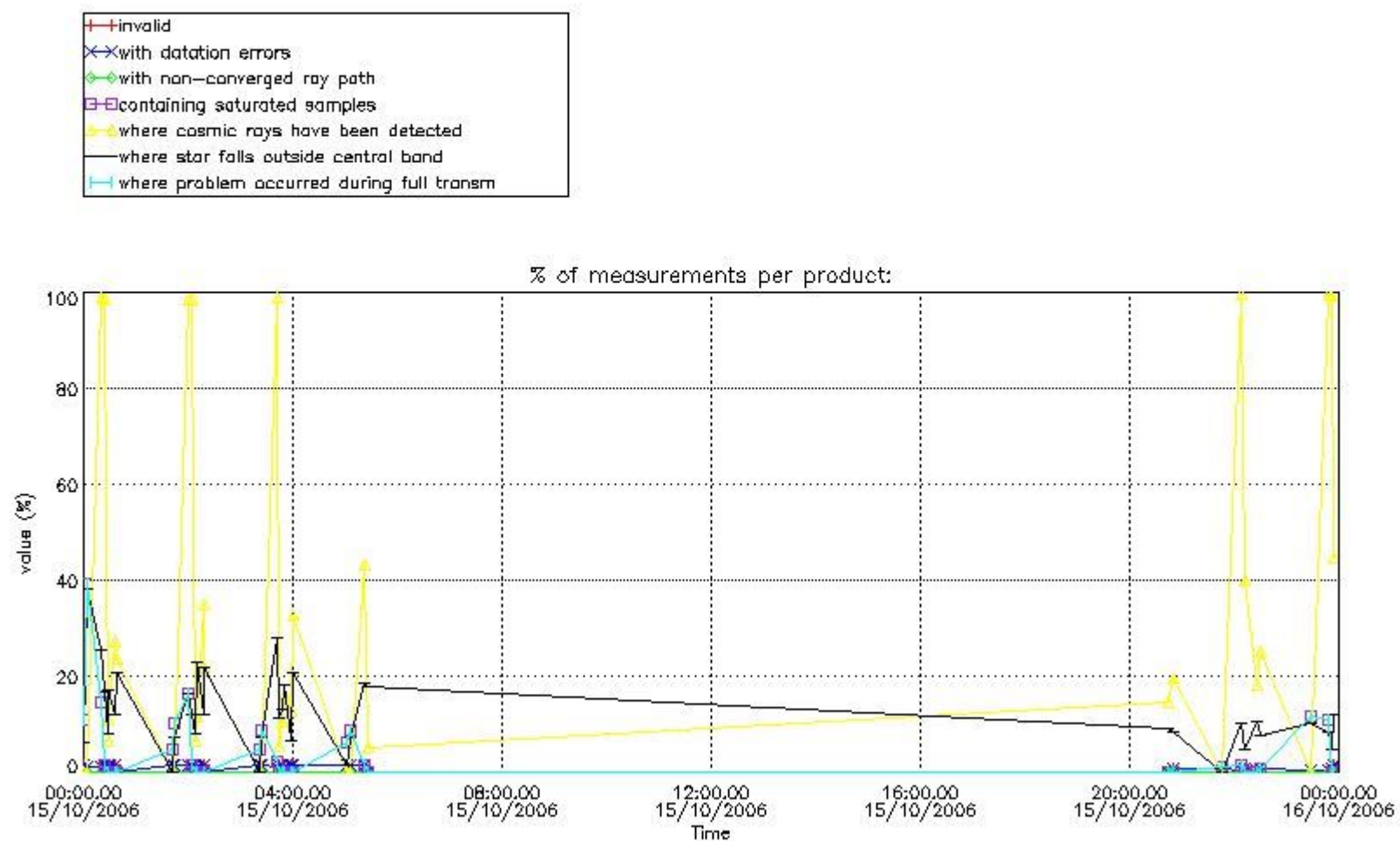


4. Level 1 quality information per product

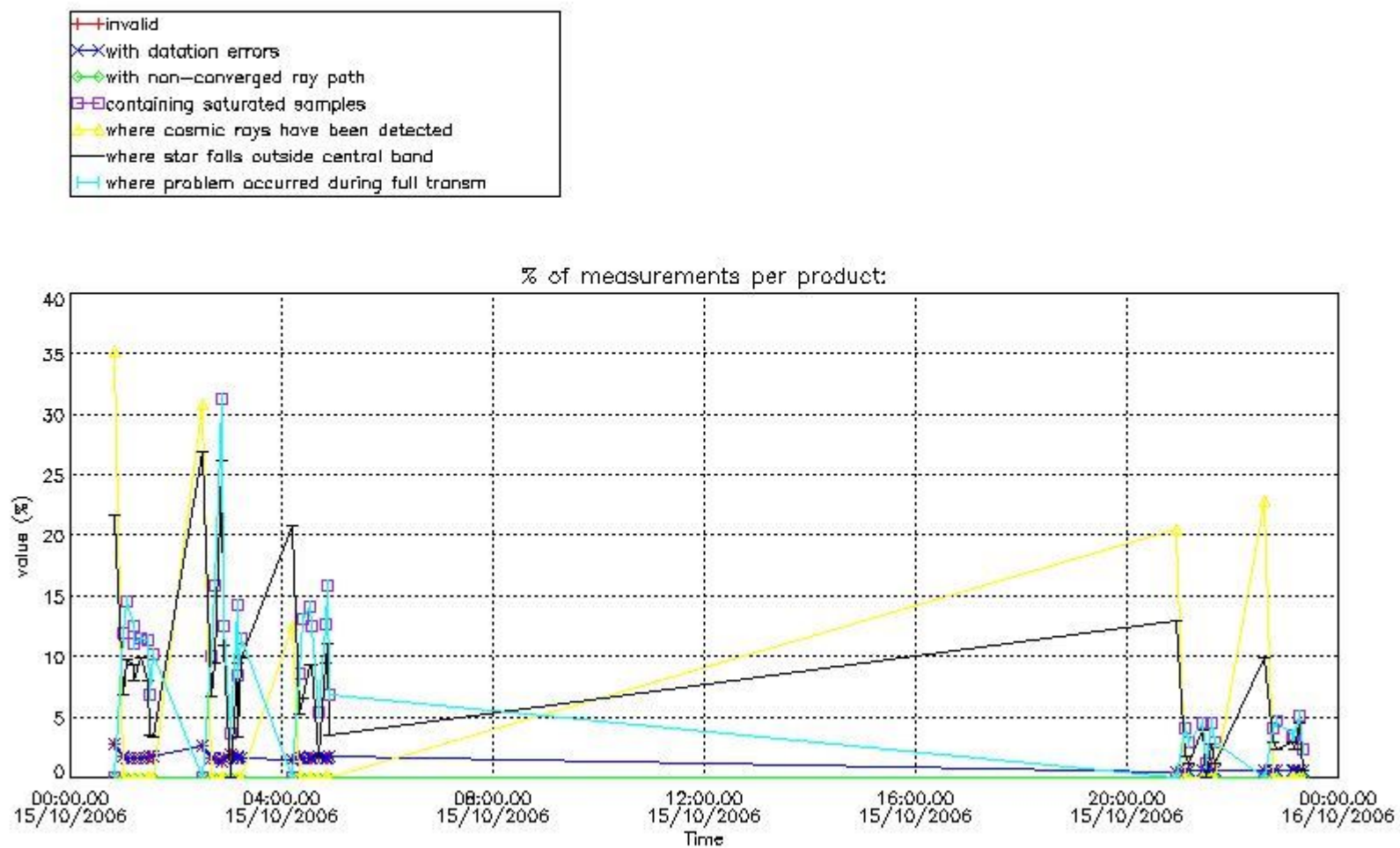
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



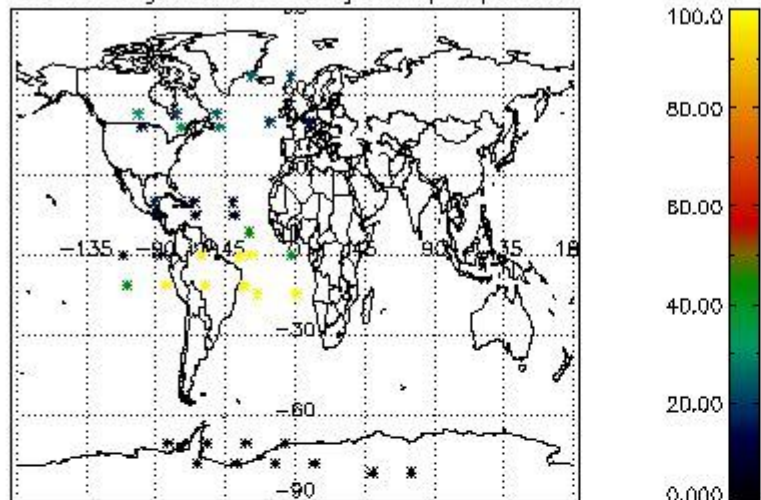
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



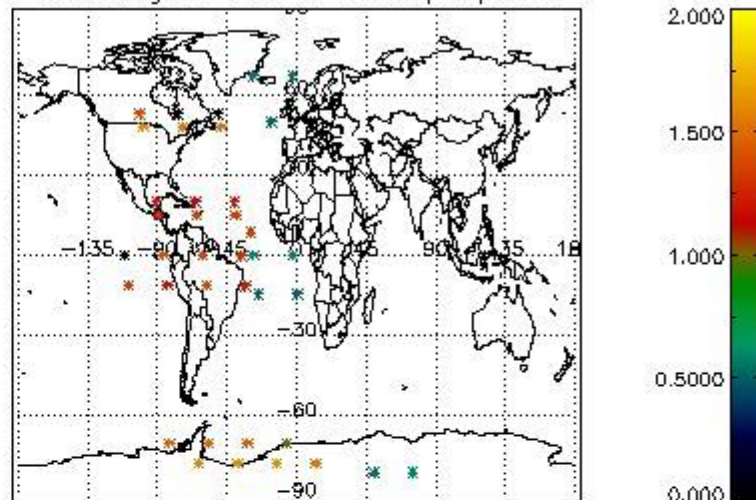
4.2 Plot quality information per product coming from level 1b processing (world map)

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

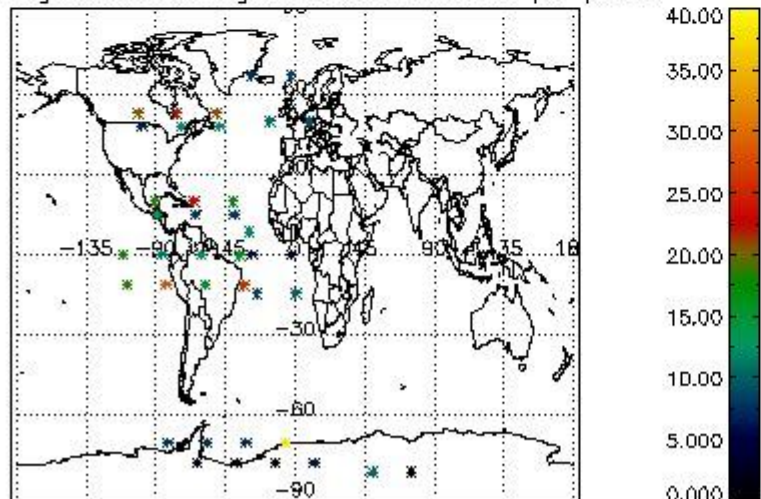
Percentage of cosmic ray hits per profile



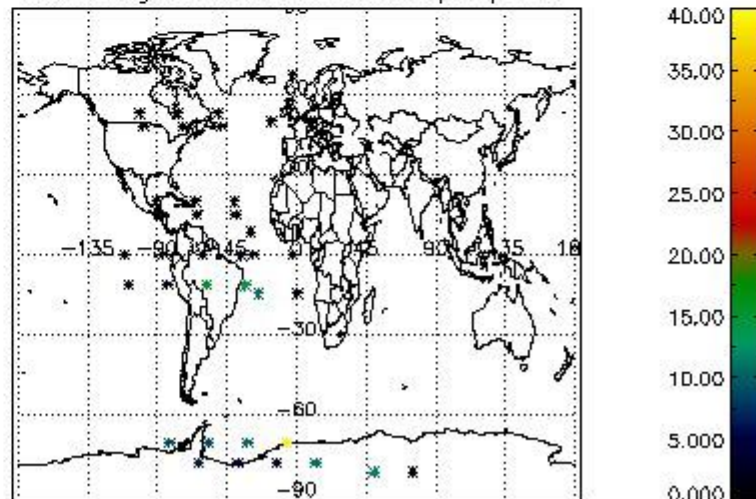
Percentage of datation errors per profile



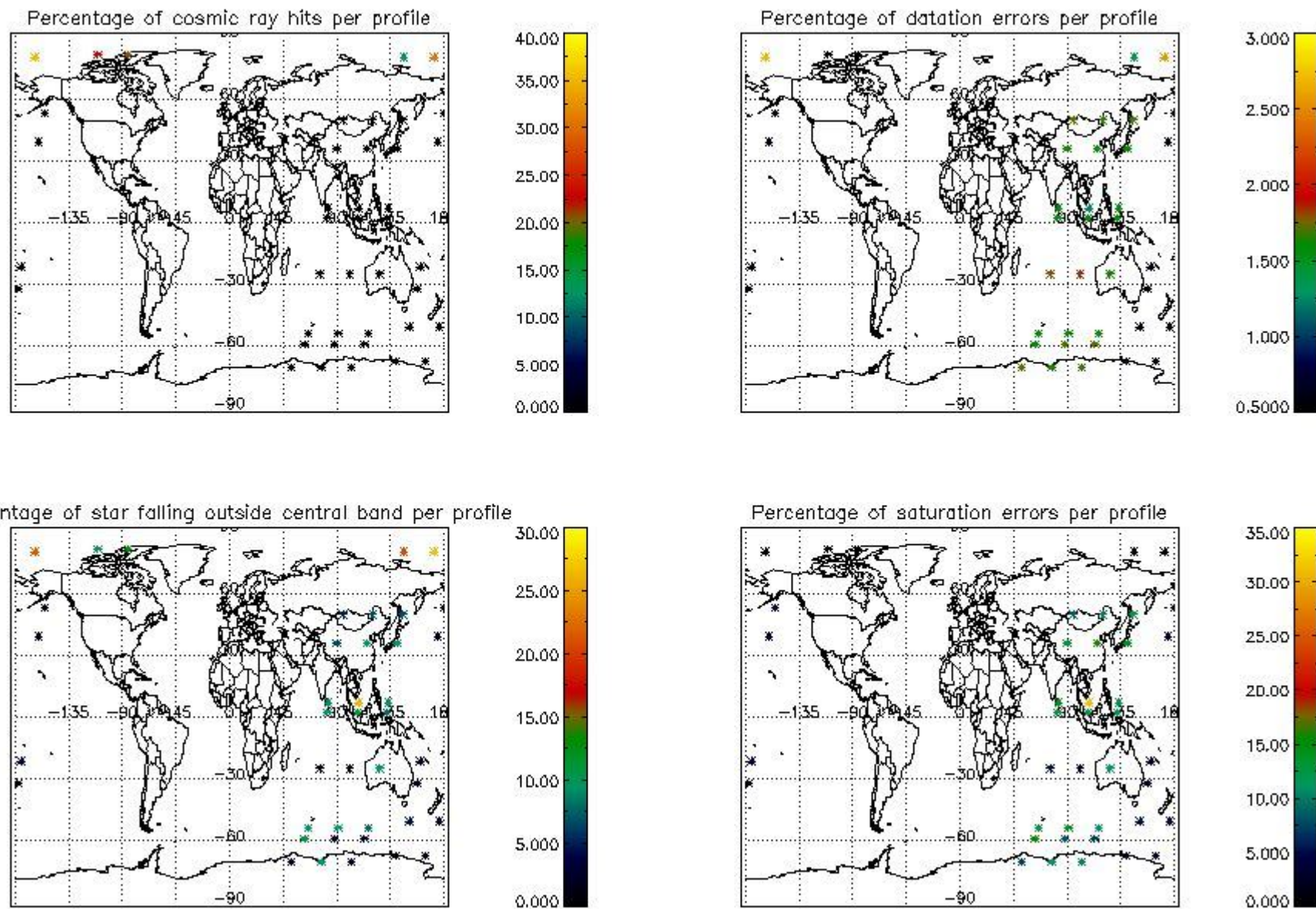
Percentage of star falling outside central band per profile



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

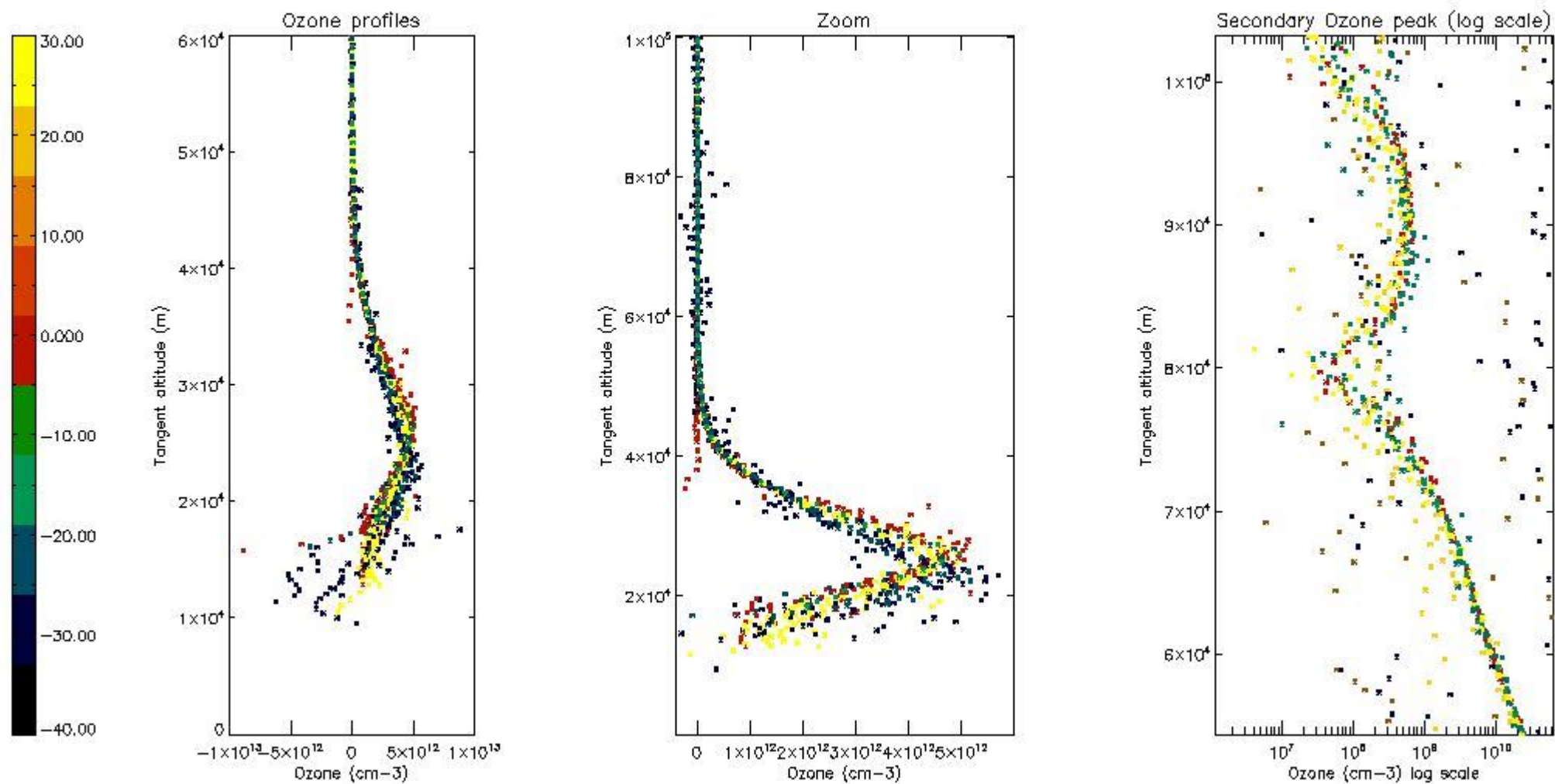
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	14

STD < 10	11
STD < 5	8

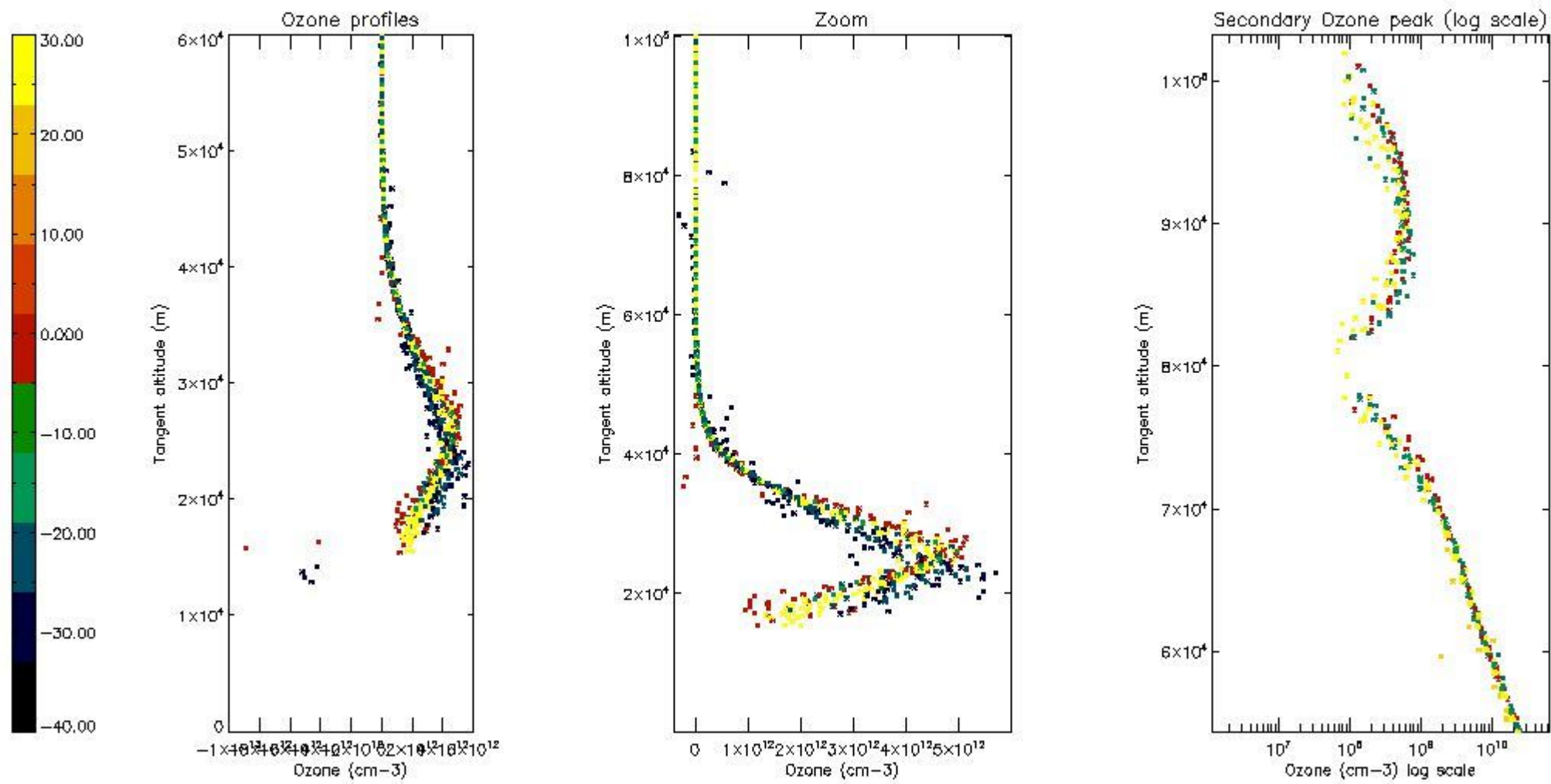
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



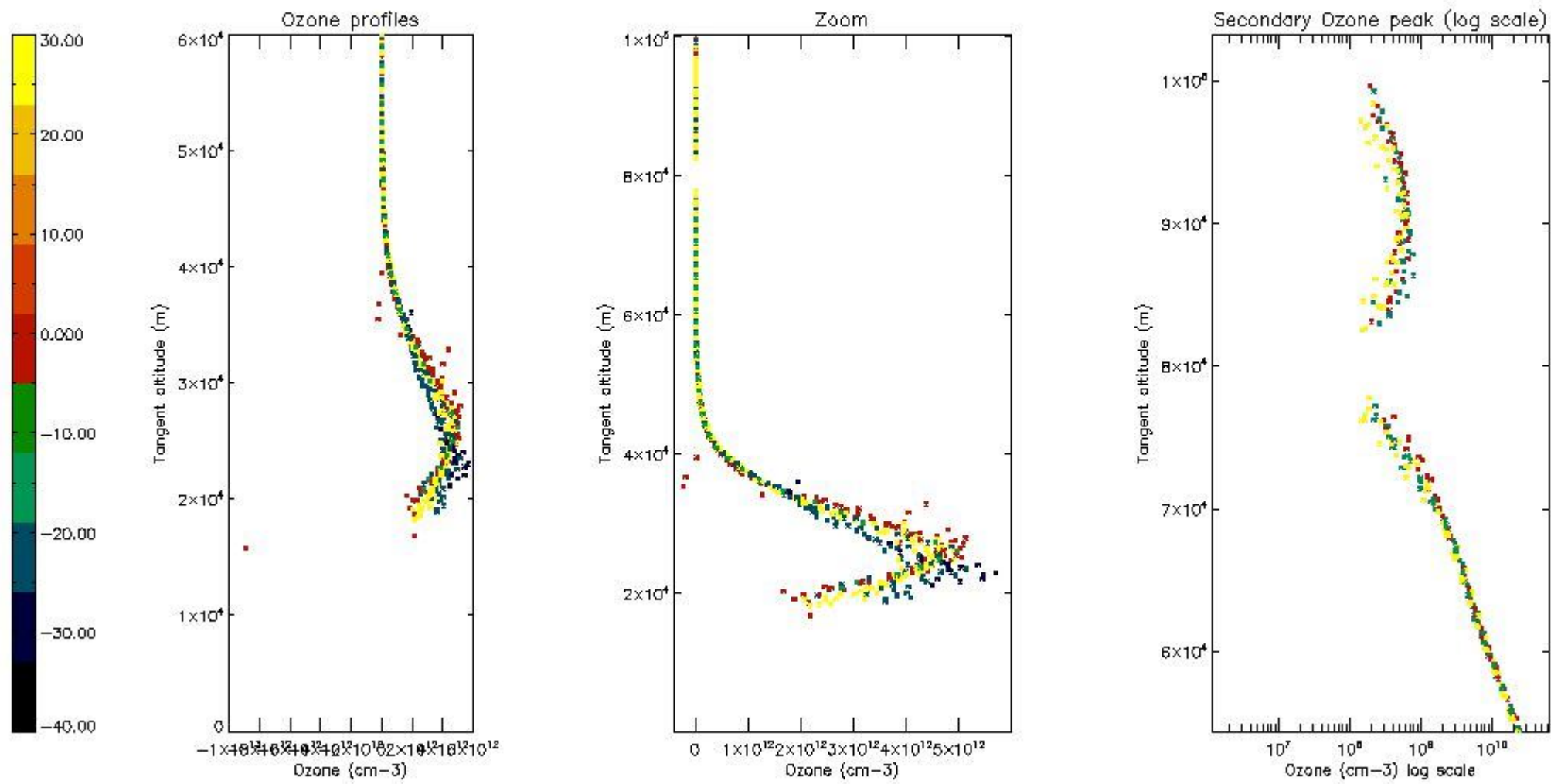
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



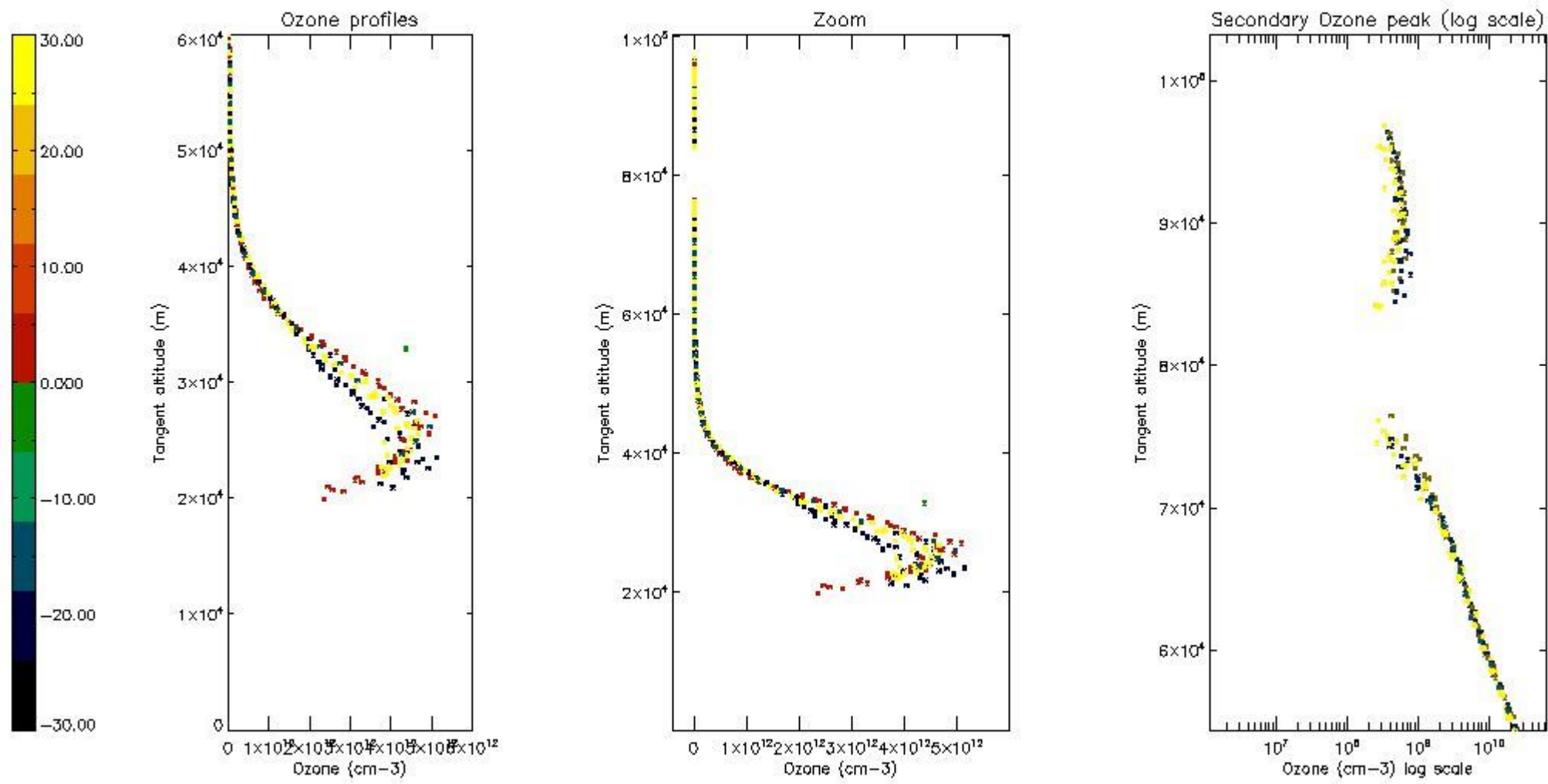
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



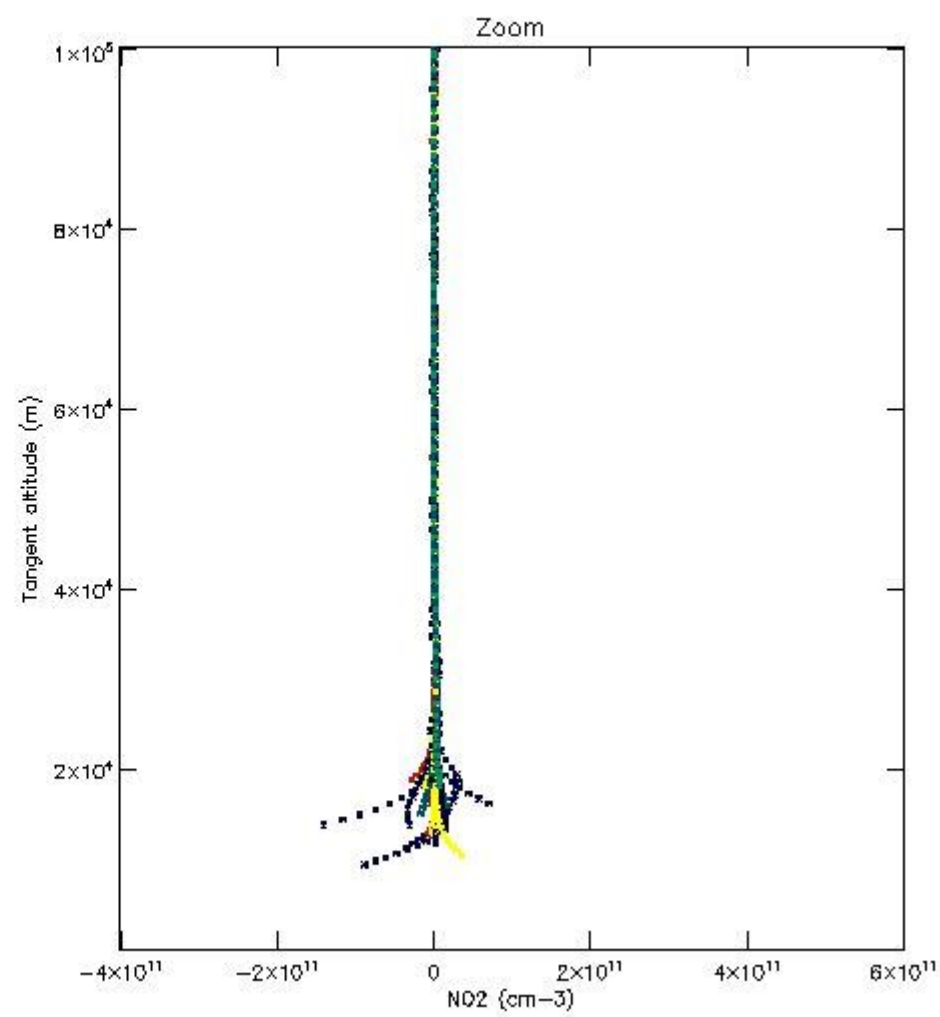
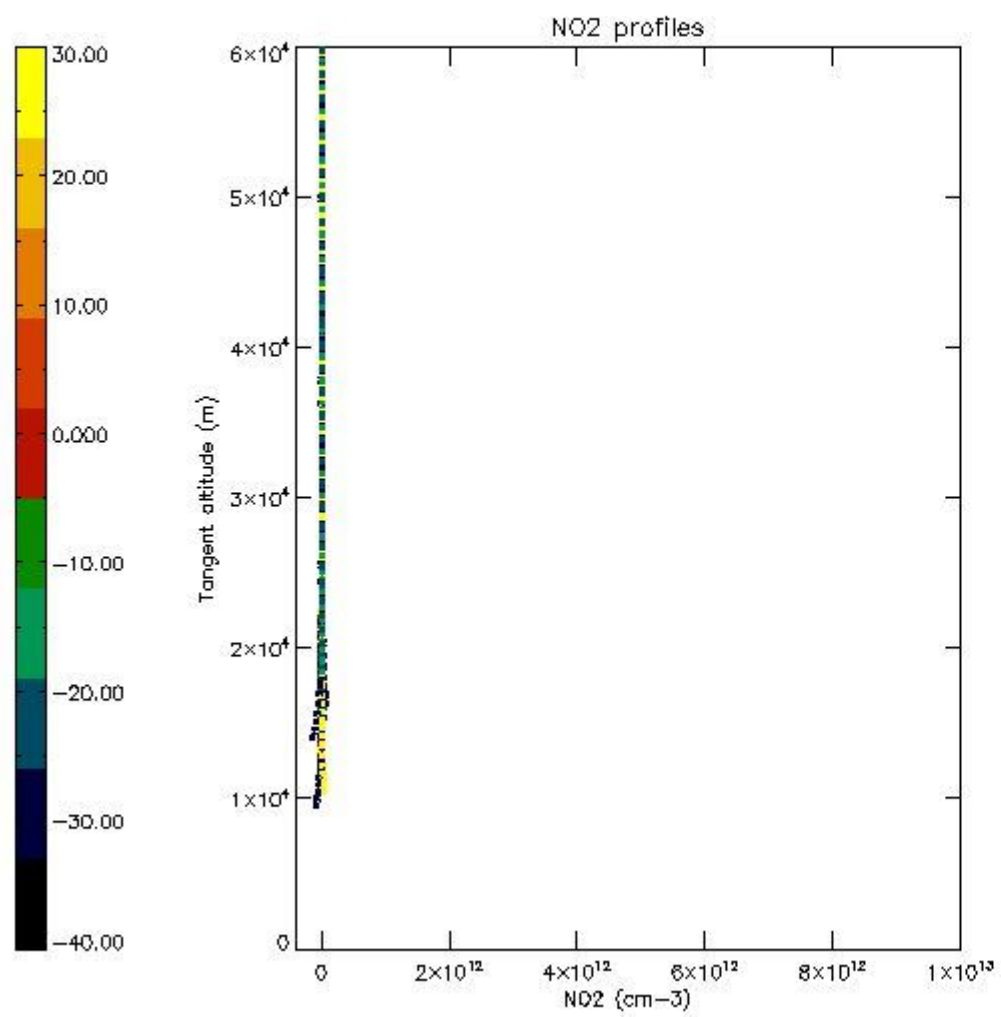
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



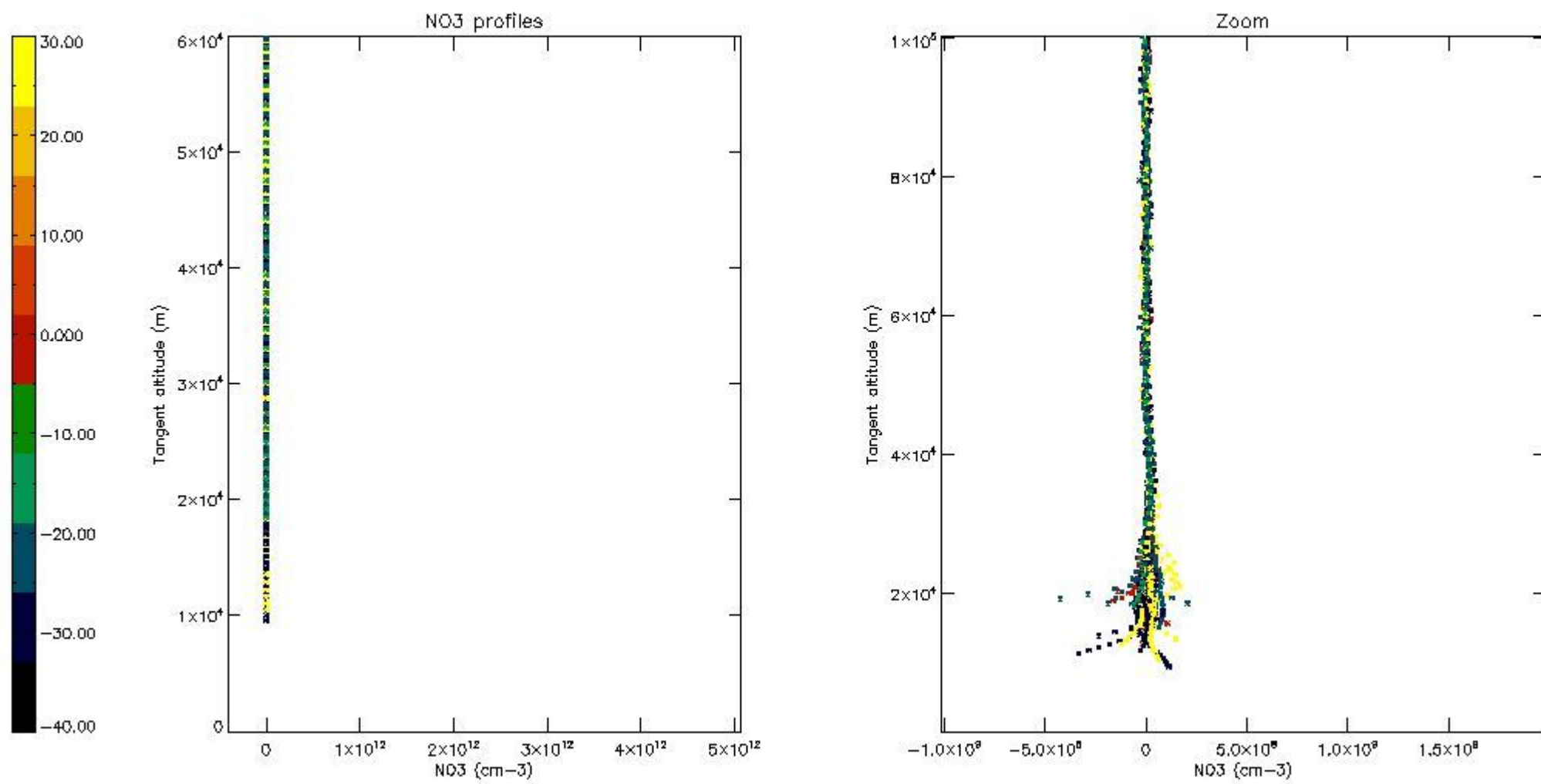
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



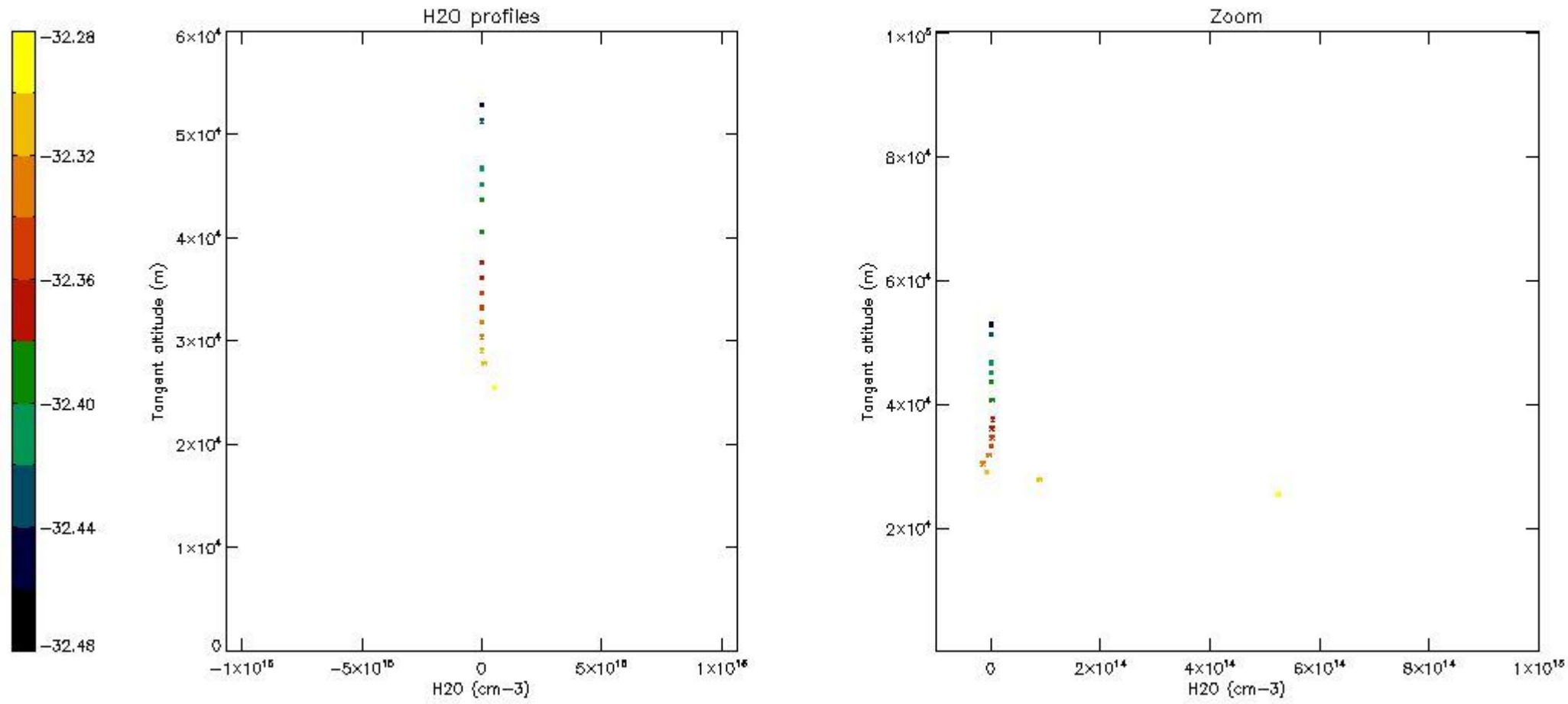
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	15-OCT-2006 00:00:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-OCT-2006 00:00:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-OCT-2006 00:00:45

GOMOS Level 2 Daily Report

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

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[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 \(dark without errors\)](#)

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[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	24APR2013 04:59:07
Data source version	GOMOS/6.01
Start time of products	15-10-2006 (15OCT2006 00:00:00)
Stop time of products	16-10-2006 (16OCT2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	80
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

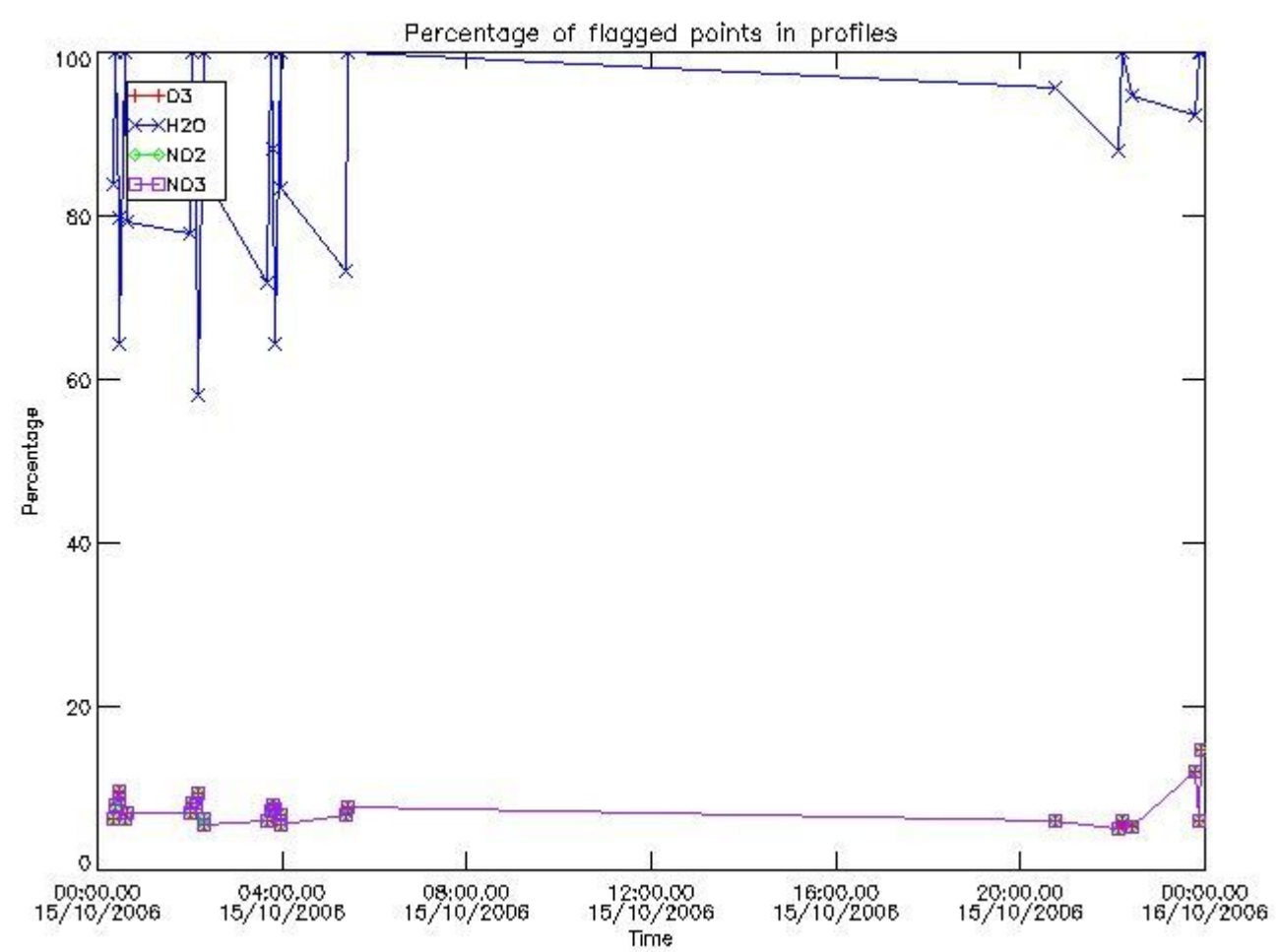
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20061015_000045_000000332052_00073_24175_2750.N1	15-OCT-2006 00:00:45	Bright	32.500	51	41Gam1Leo	2.0100	4500.0	65	24175	No
2	GOM_NL__2PRFIN20061015_000318_000000512052_00073_24175_2751.N1	15-OCT-2006 00:03:18	Bright	51.000	22	32Alp Leo	1.3600	15200.	102	24175	No
3	GOM_NL__2PRFIN20061015_002010_000000412052_00073_24175_2752.N1	15-OCT-2006 00:20:10	Dark	41.000	65	Lam Vel	2.2040	4400.0	82	24175	No
4	GOM_NL__2PRFIN20061015_002318_000000392052_00074_24176_2753.N1	15-OCT-2006 00:23:18	Dark	39.000	34	Gam2Vel	1.7930	23000.	78	24176	No
5	GOM_NL__2PRFIN20061015_002734_000000382052_00074_24176_2969.N1	15-OCT-2006 00:27:34	Dark	37.500	161	Tau Pup	2.9310	4500.0	75	24176	No
6	GOM_NL__2PRFIN20061015_002855_000000412052_00074_24176_2970.N1	15-OCT-2006 00:28:55	Dark	41.000	2	Alp Car	-0.73600	7000.0	82	24176	No
7	GOM_NL__2PRFIN20061015_003648_000000332052_00074_24176_2971.N1	15-OCT-2006 00:36:48	Dark	33.000	143	Alp Hyi	2.8570	7200.0	66	24176	No
8	GOM_NL__2PRFIN20061015_003814_000000362052_00074_24176_2972.N1	15-OCT-2006 00:38:14	Dark	36.000	9	Alp Eri	0.45300	24000.	72	24176	No
9	GOM_NL__2PRFIN20061015_004953_000000372052_00074_24176_2973.N1	15-OCT-2006 00:49:53	Straylight	37.000	52	16Bet Cet	2.0370	4500.0	74	24176	No
10	GOM_NL__2PRFIN20061015_005934_000000302052_00074_24176_2974.N1	15-OCT-2006 00:59:34	Bright	29.500	140	88Gam Peg	2.8340	26000.	59	24176	No
11	GOM_NL__2PRFIN20061015_010332_000000312052_00074_24176_2975.N1	15-OCT-2006 01:03:32	Bright	31.000	58	21Alp And	2.0730	11000.	62	24176	No
12	GOM_NL__2PRFIN20061015_011137_000000322052_00074_24176_2976.N1	15-OCT-2006 01:11:37	Bright	32.000	68	18Alp Cas	2.2250	4500.0	64	24176	No
13	GOM_NL__2PRFIN20061015_011259_000000322052_00074_24176_2977.N1	15-OCT-2006 01:12:59	Bright	31.500	76	27Gam Cas	2.3000	30000.	63	24176	No
14	GOM_NL__2PRFIN20061015_012034_000000312052_00074_24176_2978.N1	15-OCT-2006 01:20:34	Bright	30.500	49	1Alp UMi	1.9900	6300.0	61	24176	No
15	GOM_NL__2PRFIN20061015_012847_000000312052_00074_24176_2979.N1	15-OCT-2006 01:28:47	Bright	31.000	36	50Alp UMa	1.8000	6300.0	62	24176	No
16	GOM_NL__2PRFIN20061015_013020_000000292052_00074_24176_2980.N1	15-OCT-2006 01:30:20	Bright	29.000	82	48Bet UMa	2.3650	10600.	58	24176	No
17	GOM_NL__2PRFIN20061015_013343_000000302052_00074_24176_2981.N1	15-OCT-2006 01:33:43	Bright	29.500	174	52Psi UMa	3.0040	4400.0	59	24176	No
18	GOM_NL__2PRFIN20061015_014121_000000312052_00074_24176_2982.N1	15-OCT-2006 01:41:21	Bright	31.000	51	41Gam1Leo	2.0100	4500.0	62	24176	No
19	GOM_NL__2PRFIN20061015_014354_000000352052_00074_24176_2983.N1	15-OCT-2006 01:43:54	Bright	34.500	22	32Alp Leo	1.3600	15200.	69	24176	No
20	GOM_NL__2PRFIN20061015_020046_000000372052_00074_24176_2984.N1	15-OCT-2006 02:00:46	Dark	36.500	65	Lam Vel	2.2040	4400.0	73	24176	No
21	GOM_NL__2PRFIN20061015_020355_000000372052_00075_24177_2985.N1	15-OCT-2006 02:03:55	Dark	37.000	34	Gam2Vel	1.7930	23000.	74	24177	No
22	GOM_NL__2PRFIN20061015_020811_000000382052_00075_24177_2737.N1	15-OCT-2006 02:08:11	Dark	37.500	161	Tau Pup	2.9310	4500.0	75	24177	No
23	GOM_NL__2PRFIN20061015_020932_000000442052_00075_24177_2738.N1	15-OCT-2006 02:09:32	Dark	43.500	2	Alp Car	-0.73600	7000.0	87	24177	No
24	GOM_NL__2PRFIN20061015_021724_000000332052_00075_24177_2739.N1	15-OCT-2006 02:17:24	Dark	33.000	143	Alp Hyi	2.8570	7200.0	66	24177	No
25	GOM_NL__2PRFIN20061015_021850_000000372052_00075_24177_2740.N1	15-OCT-2006 02:18:50	Dark	36.500	9	Alp Eri	0.45300	24000.	73	24177	No
26	GOM_NL__2PRFIN20061015_023029_000000392052_00075_24177_2741.N1	15-OCT-2006 02:30:29	Straylight	39.000	52	16Bet Cet	2.0370	4500.0	78	24177	No
27	GOM_NL__2PRFIN20061015_024010_000000302052_00075_24177_2742.N1	15-OCT-2006 02:40:10	Bright	30.000	140	88Gam Peg	2.8340	26000.	60	24177	No
28	GOM_NL__2PRFIN20061015_024408_000000322052_00075_24177_2743.N1	15-OCT-2006 02:44:08	Bright	31.500	58	21Alp And	2.0730	11000.	63	24177	No
29	GOM_NL__2PRFIN20061015_025213_000000402052_00075_24177_2744.N1	15-OCT-2006 02:52:13	Bright	40.000	68	18Alp Cas	2.2250	4500.0	80	24177	No
30	GOM_NL__2PRFIN20061015_025335_000000322052_00075_24177_2745.N1	15-OCT-2006 02:53:35	Bright	32.000	76	27Gam Cas	2.3000	30000.	64	24177	No
31	GOM_NL__2PRFIN20061015_030110_000000272052_00075_24177_2746.N1	15-OCT-2006 03:01:10	Bright	27.000	49	1Alp UMi	1.9900	6300.0	54	24177	No
32	GOM_NL__2PRFIN20061015_030923_000000322052_00075_24177_2747.N1	15-OCT-2006 03:09:23	Bright	31.500	36	50Alp UMa	1.8000	6300.0	63	24177	No
33	GOM_NL__2PRFIN20061015_031056_000000302052_00075_24177_2748.N1	15-OCT-2006 03:10:56	Bright	29.500	82	48Bet UMa	2.3650	10600.	59	24177	No
34	GOM_NL__2PRFIN20061015_031419_000000312052_00075_24177_2749.N1	15-OCT-2006 03:14:19	Bright	30.500	174	52Psi UMa	3.0040	4400.0	61	24177	No
35	GOM_NL__2PRFIN20061015_032157_000000312052_00075_24177_2750.N1	15-OCT-2006 03:21:57	Bright	31.000	51	41Gam1Leo	2.0100	4500.0	62	24177	No
36	GOM_NL__2PRFIN20061015_032430_000000342052_00075_24177_2751.N1	15-OCT-2006 03:24:30	Bright	34.000	22	32Alp Leo	1.3600	15200.	68	24177	No
37	GOM_NL__2PRFIN20061015_034123_000000432052_00075_24177_2752.N1	15-OCT-2006 03:41:23	Dark	43.000	65	Lam Vel	2.2040	4400.0	86	24177	No
38	GOM_NL__2PRFIN20061015_034432_000000362052_00076_24178_2753.N1	15-OCT-2006 03:44:32	Dark	36.000	34	Gam2Vel	1.7930	23000.	72	24178	No
39	GOM_NL__2PRFIN20061015_034848_000000392052_00076_24178_2737.N1	15-OCT-2006 03:48:48	Dark	38.500	161	Tau Pup	2.9310	4500.0	77	24178	No
40	GOM_NL__2PRFIN20061015_035009_000000412052_00076_24178_2738.N1	15-OCT-2006 03:50:09	Dark	41.000	2	Alp Car	-0.73600	7000.0	82	24178	No
41	GOM_NL__2PRFIN20061015_035800_000000312052_00076_24178_2739.N1	15-OCT-2006 03:58:00	Dark	31.000	143	Alp Hyi	2.8570	7200.0	62	24178	No
42	GOM_NL__2PRFIN20061015_035927_000000372052_00076_24178_2740.N1	15-OCT-2006 03:59:27	Dark	36.500	9	Alp Eri	0.45300	24000.	73	24178	No

43	GOM_NL__2PRFIN20061015_041106_000000362052_00076_24178_2741.N1	15-OCT-2006 04:11:06	Straylight	36.000	52	16Bet Cet	2.0370	4500.0	72	24178	No
44	GOM_NL__2PRFIN20061015_042046_000000292052_00076_24178_2742.N1	15-OCT-2006 04:20:46	Bright	29.000	140	88Gam Peg	2.8340	26000.	58	24178	No
45	GOM_NL__2PRFIN20061015_042444_000000312052_00076_24178_2743.N1	15-OCT-2006 04:24:44	Bright	30.500	58	21Alp And	2.0730	11000.	61	24178	No
46	GOM_NL__2PRFIN20061015_043248_000000322052_00076_24178_2744.N1	15-OCT-2006 04:32:48	Bright	32.000	68	18Alp Cas	2.2250	4500.0	64	24178	No
47	GOM_NL__2PRFIN20061015_043411_000000322052_00076_24178_2745.N1	15-OCT-2006 04:34:11	Bright	32.000	76	27Gam Cas	2.3000	30000.	64	24178	No
48	GOM_NL__2PRFIN20061015_044146_000000282052_00076_24178_2746.N1	15-OCT-2006 04:41:46	Bright	28.000	49	1Alp UMi	1.9900	6300.0	56	24178	No
49	GOM_NL__2PRFIN20061015_044959_000000322052_00076_24178_2747.N1	15-OCT-2006 04:49:59	Bright	31.500	36	50Alp UMa	1.8000	6300.0	63	24178	No
50	GOM_NL__2PRFIN20061015_045133_000000322052_00076_24178_2748.N1	15-OCT-2006 04:51:33	Bright	31.500	82	48Bet UMa	2.3650	10600.	63	24178	No
51	GOM_NL__2PRFIN20061015_045455_000000292052_00076_24178_2749.N1	15-OCT-2006 04:54:55	Bright	29.000	174	52Psi UMa	3.0040	4400.0	58	24178	No
52	GOM_NL__2PRFIN20061015_050234_000000322052_00076_24178_2750.N1	15-OCT-2006 05:02:34	Bright	31.500	51	41Gam1Leo	2.0100	4500.0	63	24178	No
53	GOM_NL__2PRFIN20061015_050507_000000342052_00076_24178_2751.N1	15-OCT-2006 05:05:07	Bright	34.000	22	32Alp Leo	1.3600	15200.	68	24178	No
54	GOM_NL__2PRFIN20061015_052200_000000382052_00076_24178_2752.N1	15-OCT-2006 05:22:00	Dark	38.000	65	Lam Vel	2.2040	4400.0	76	24178	No
55	GOM_NL__2PRFIN20061015_052508_000000392052_00077_24179_2753.N1	15-OCT-2006 05:25:08	Dark	39.000	34	Gam2Vel	1.7930	23000.	78	24179	No
56	GOM_NL__2PRFIN20061015_204433_000000932052_00086_24188_2739.N1	15-OCT-2006 20:44:33	Dark	93.000	9	Alp Eri	0.45300	24000.	186	24188	No
57	GOM_NL__2PRFIN20061015_204934_000000922052_00086_24188_2740.N1	15-OCT-2006 20:49:34	Straylight	91.500	84	Alp Phe	2.3970	4500.0	183	24188	No
58	GOM_NL__2PRFIN20061015_205608_000001002052_00086_24188_2741.N1	15-OCT-2006 20:56:08	Straylight	100.00	52	16Bet Cet	2.0370	4500.0	200	24188	No
59	GOM_NL__2PRFIN20061015_210549_000000862052_00086_24188_2742.N1	15-OCT-2006 21:05:49	Bright	86.000	140	88Gam Peg	2.8340	26000.	172	24188	No
60	GOM_NL__2PRFIN20061015_210947_000000852052_00086_24188_2743.N1	15-OCT-2006 21:09:47	Bright	84.500	58	21Alp And	2.0730	11000.	169	24188	No
61	GOM_NL__2PRFIN20061015_212648_000000892052_00086_24188_2744.N1	15-OCT-2006 21:26:48	Bright	88.500	49	1Alp UMi	1.9900	6300.0	177	24188	No
62	GOM_NL__2PRFIN20061015_212948_000000842052_00086_24188_2745.N1	15-OCT-2006 21:29:48	Bright	84.000	60	7Bet UMi	2.0810	3950.0	168	24188	No
63	GOM_NL__2PRFIN20061015_213501_000000892052_00086_24188_2746.N1	15-OCT-2006 21:35:01	Bright	88.500	36	50Alp UMa	1.8000	6300.0	177	24188	No
64	GOM_NL__2PRFIN20061015_213959_000000862052_00086_24188_2747.N1	15-OCT-2006 21:39:59	Bright	86.000	174	52Psi UMa	3.0040	4400.0	172	24188	No
65	GOM_NL__2PRFIN20061015_214645_000000842052_00086_24188_2748.N1	15-OCT-2006 21:46:45	Bright	83.500	96	68Del Leo	2.5600	9300.0	167	24188	No
66	GOM_NL__2PRFIN20061015_220706_000001002052_00086_24188_2749.N1	15-OCT-2006 22:07:06	Dark	99.500	65	Lam Vel	2.2040	4400.0	199	24188	No
67	GOM_NL__2PRFIN20061015_221108_000000872052_00087_24189_2750.N1	15-OCT-2006 22:11:08	Dark	86.500	159	Ups Car	2.9200	7200.0	173	24189	No
68	GOM_NL__2PRFIN20061015_222509_000000962052_00087_24189_2739.N1	15-OCT-2006 22:25:09	Dark	95.500	9	Alp Eri	0.45300	24000.	191	24189	No
69	GOM_NL__2PRFIN20061015_223010_000000922052_00087_24189_2740.N1	15-OCT-2006 22:30:10	Straylight	91.500	84	Alp Phe	2.3970	4500.0	183	24189	No
70	GOM_NL__2PRFIN20061015_223644_000000972052_00087_24189_2741.N1	15-OCT-2006 22:36:44	Straylight	96.500	52	16Bet Cet	2.0370	4500.0	193	24189	No
71	GOM_NL__2PRFIN20061015_224625_000000862052_00087_24189_2742.N1	15-OCT-2006 22:46:25	Bright	86.000	140	88Gam Peg	2.8340	26000.	172	24189	No
72	GOM_NL__2PRFIN20061015_225023_000000862052_00087_24189_2743.N1	15-OCT-2006 22:50:23	Bright	86.000	58	21Alp And	2.0730	11000.	172	24189	No
73	GOM_NL__2PRFIN20061015_230724_000000872052_00087_24189_2744.N1	15-OCT-2006 23:07:24	Bright	87.000	49	1Alp UMi	1.9900	6300.0	174	24189	No
74	GOM_NL__2PRFIN20061015_231024_000000862052_00087_24189_2745.N1	15-OCT-2006 23:10:24	Bright	86.000	60	7Bet UMi	2.0810	3950.0	172	24189	No
75	GOM_NL__2PRFIN20061015_231537_000000902052_00087_24189_2746.N1	15-OCT-2006 23:15:37	Bright	89.500	36	50Alp UMa	1.8000	6300.0	179	24189	No
76	GOM_NL__2PRFIN20061015_232035_000000862052_00087_24189_2747.N1	15-OCT-2006 23:20:35	Bright	85.500	174	52Psi UMa	3.0040	4400.0	171	24189	No
77	GOM_NL__2PRFIN20061015_232721_000000942052_00087_24189_2748.N1	15-OCT-2006 23:27:21	Bright	93.500	96	68Del Leo	2.5600	9300.0	187	24189	No
78	GOM_NL__2PRFIN20061015_234742_000000982052_00087_24189_2749.N1	15-OCT-2006 23:47:42	Dark	97.500	65	Lam Vel	2.2040	4400.0	195	24189	No
79	GOM_NL__2PRFIN20061015_235144_000000872052_00088_24190_2750.N1	15-OCT-2006 23:51:44	Dark	86.500	159	Ups Car	2.9200	7200.0	173	24190	No
80	GOM_NL__2PRFIN20061015_235407_000000382052_00088_24190_2739.N1	15-OCT-2006 23:54:07	Dark	38.000	29	Bet Car	1.6720	10200.	76	24190	No

3. Quality information per product

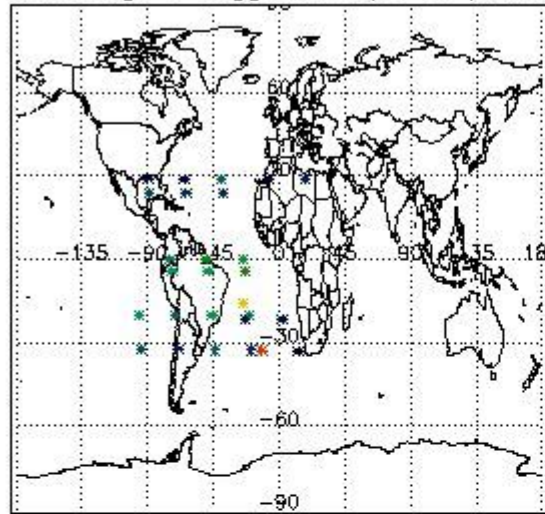
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

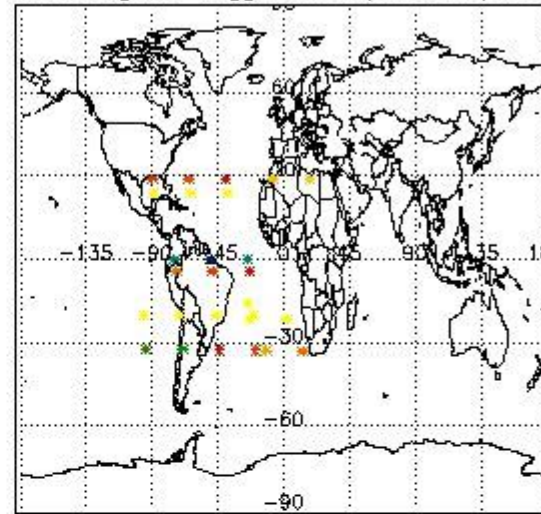


3.2 Plot quality information per product (world map)

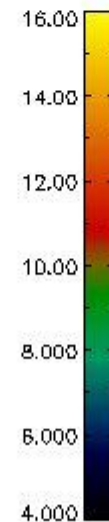
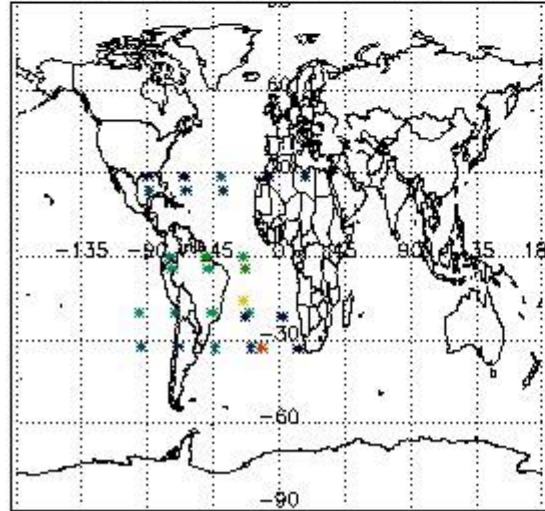
Percentage of flagged data per O3 profile



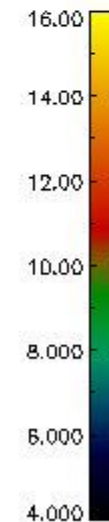
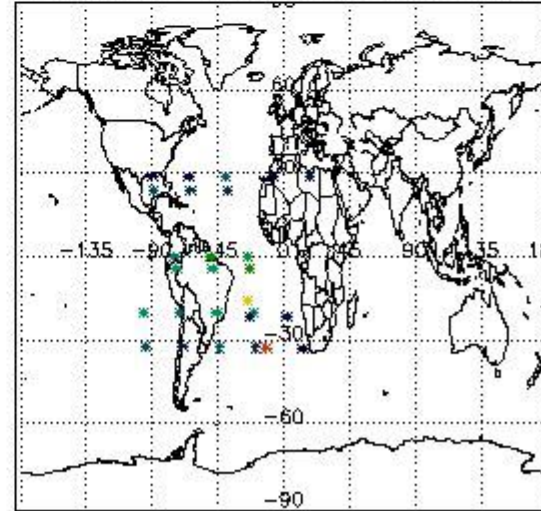
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

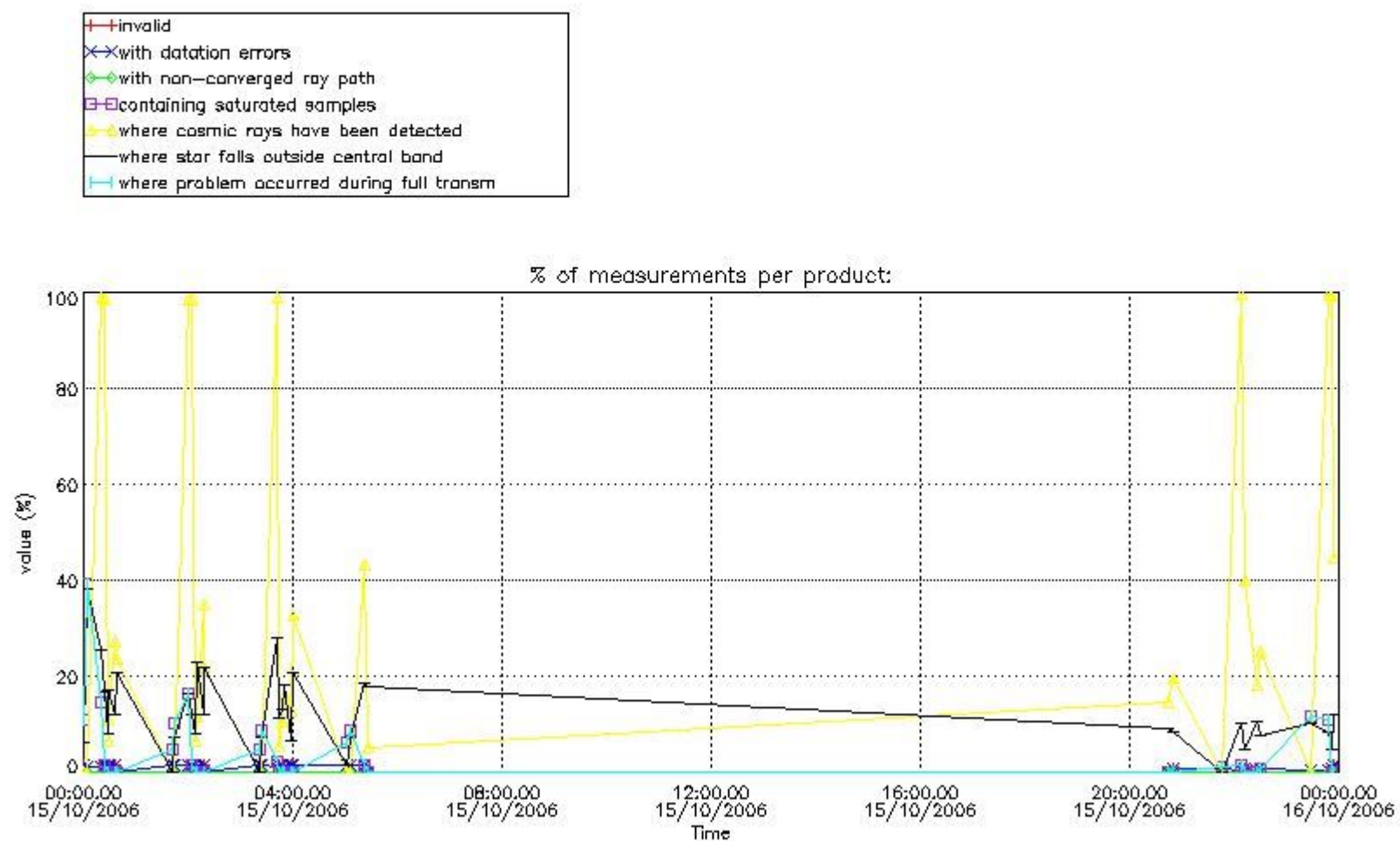


4. Level 1 quality information per product

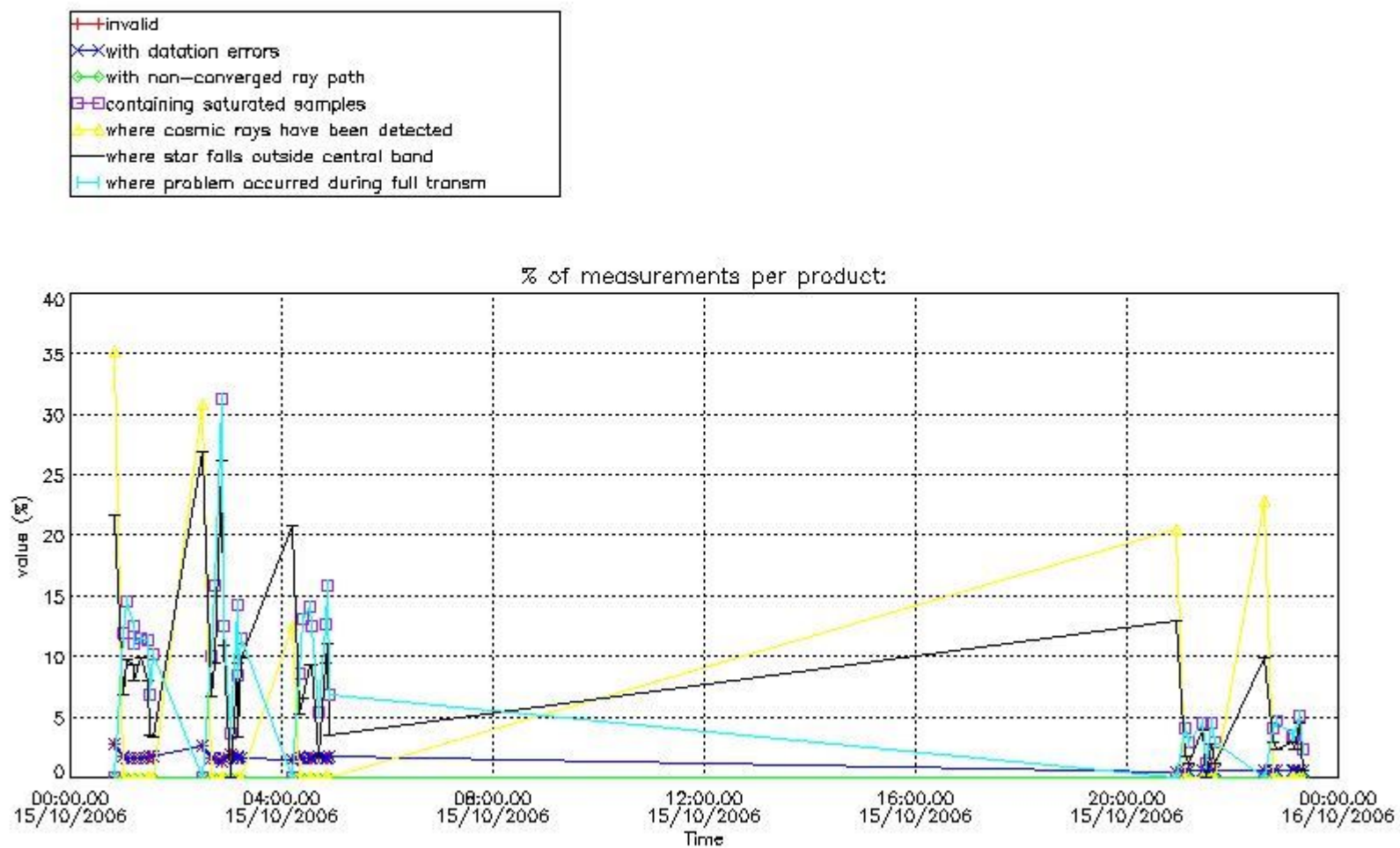
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



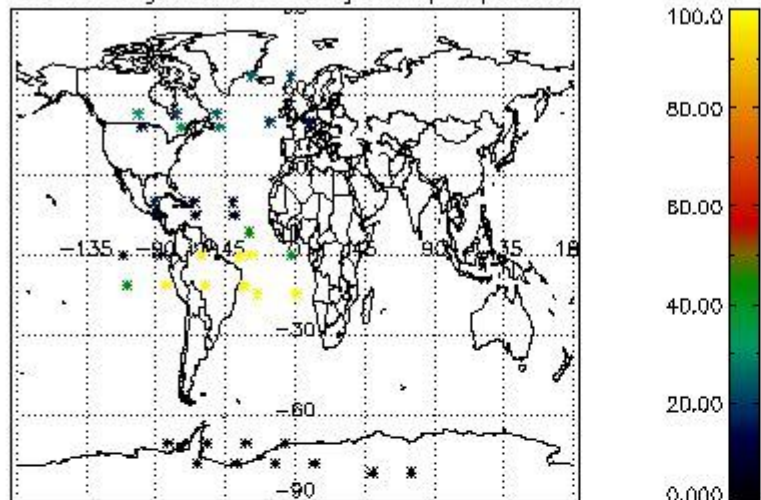
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



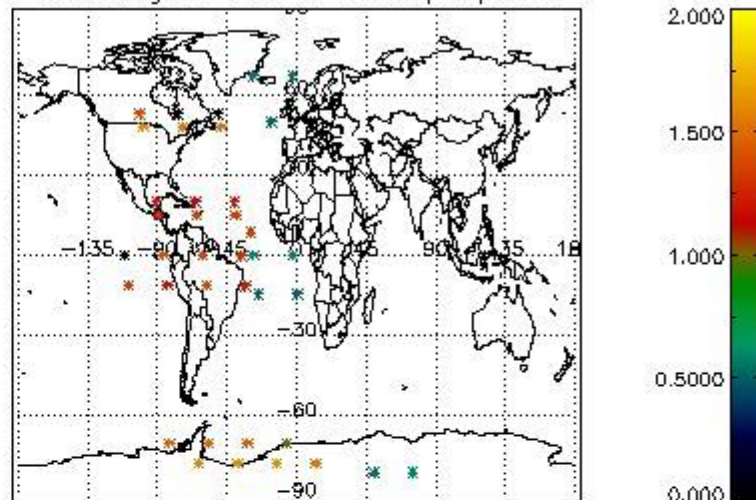
4.2 Plot quality information per product coming from level 1b processing (world map)

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

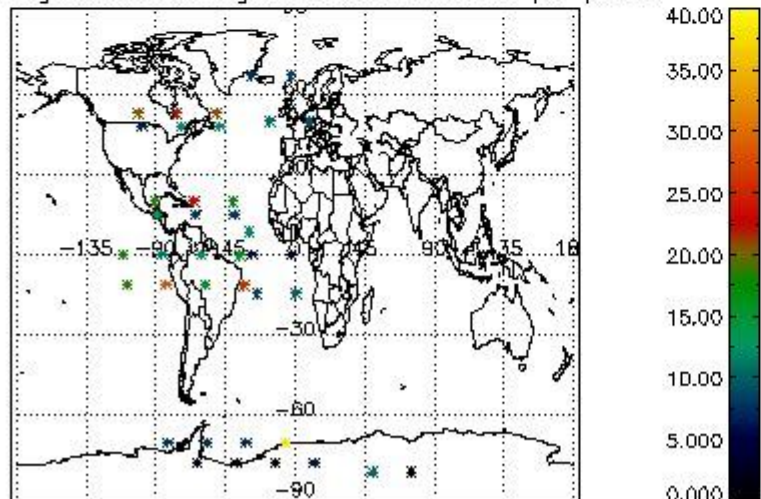
Percentage of cosmic ray hits per profile



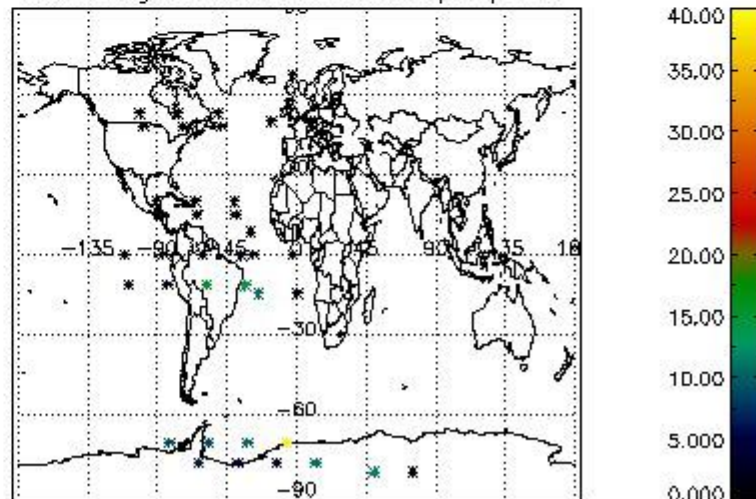
Percentage of datation errors per profile



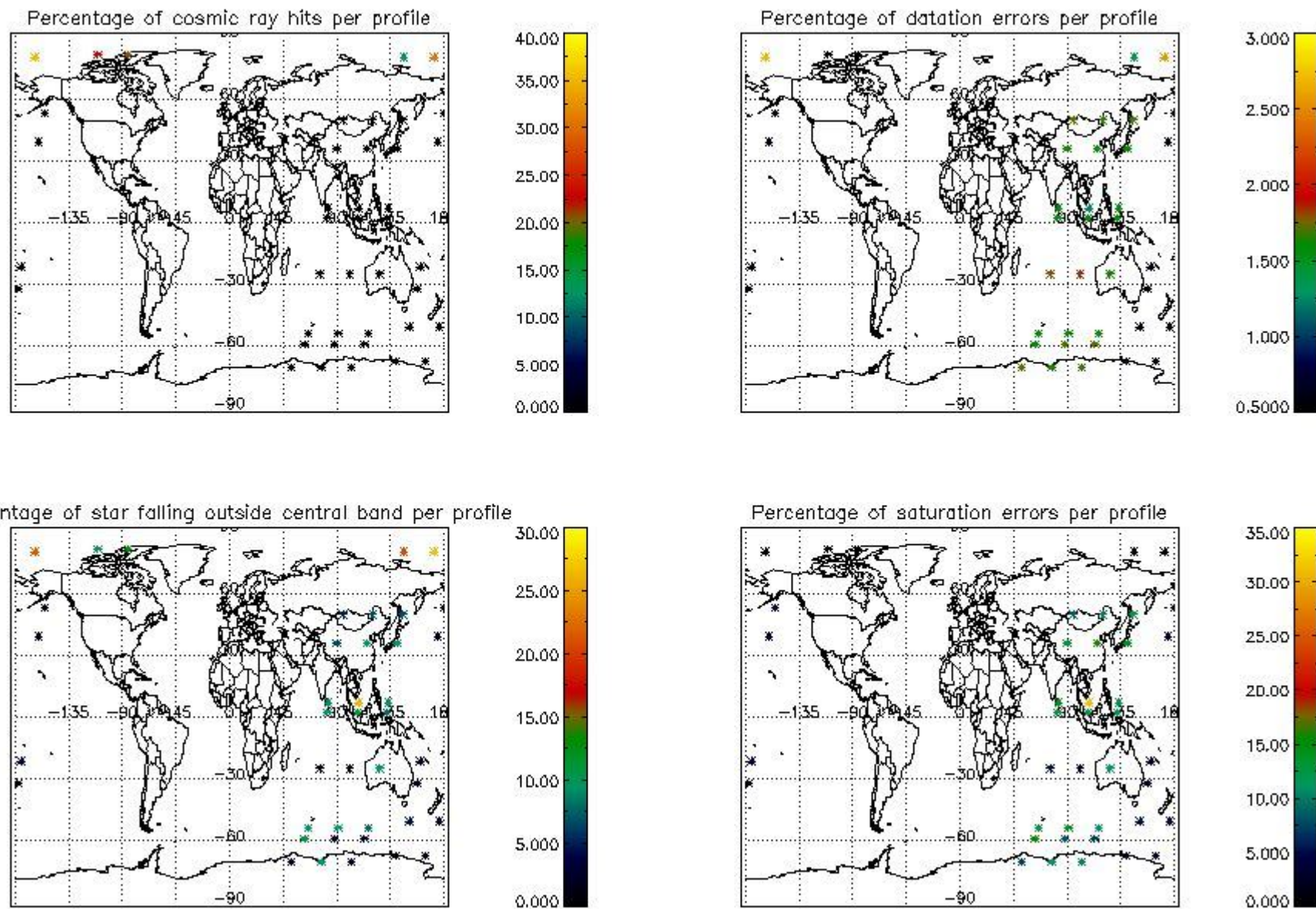
Percentage of star falling outside central band per profile



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

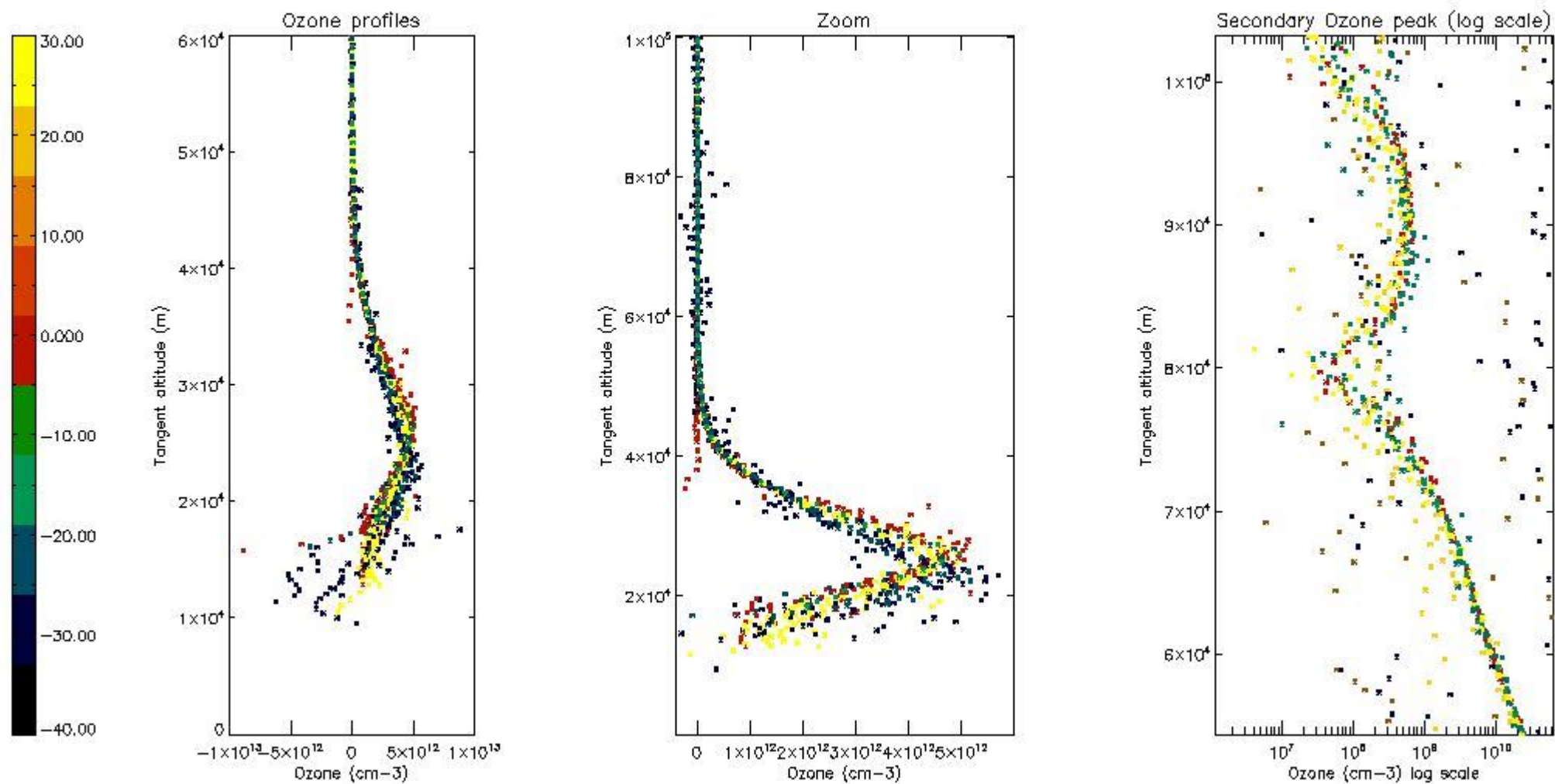
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	14

STD < 10	11
STD < 5	8

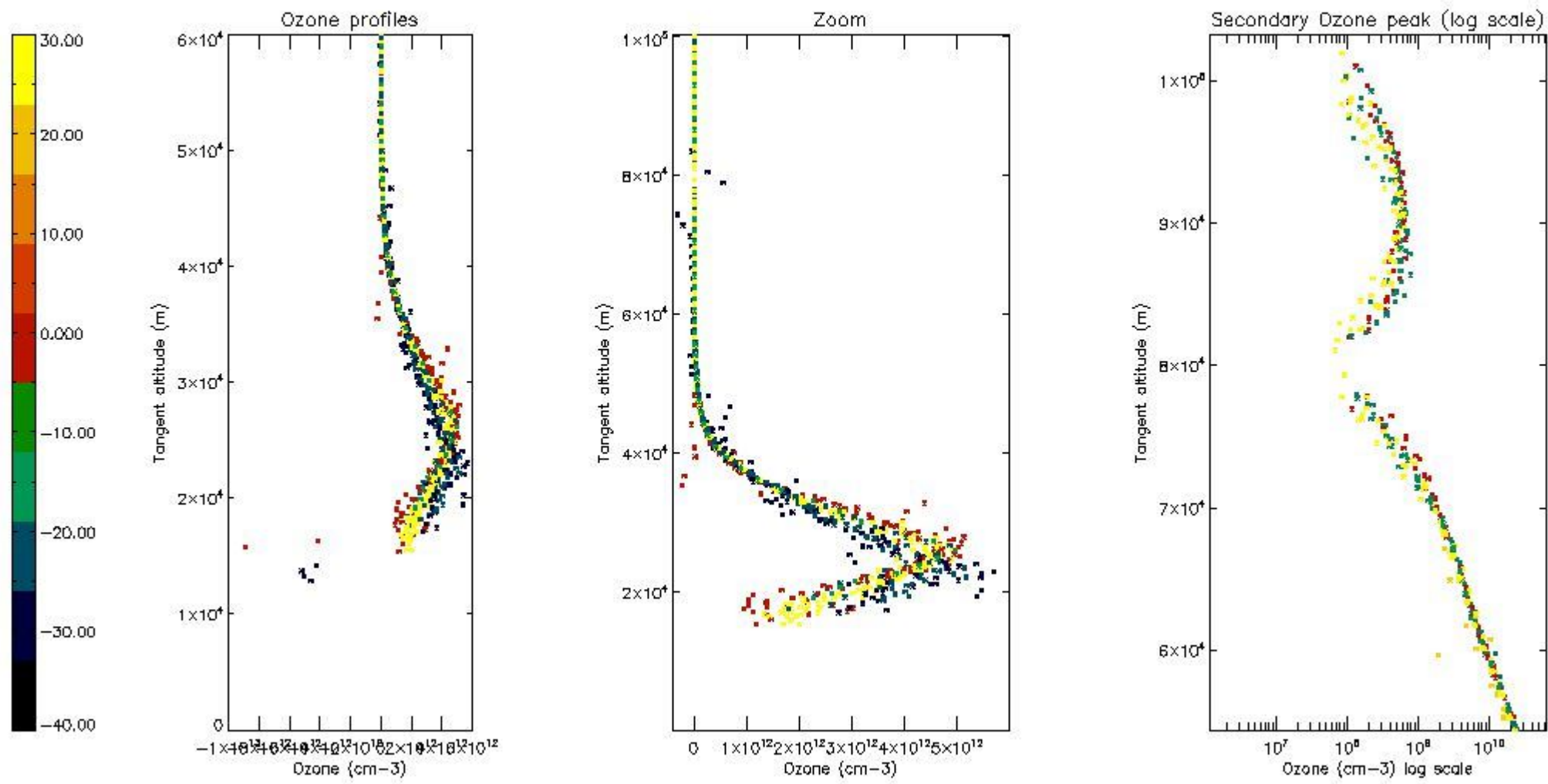
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



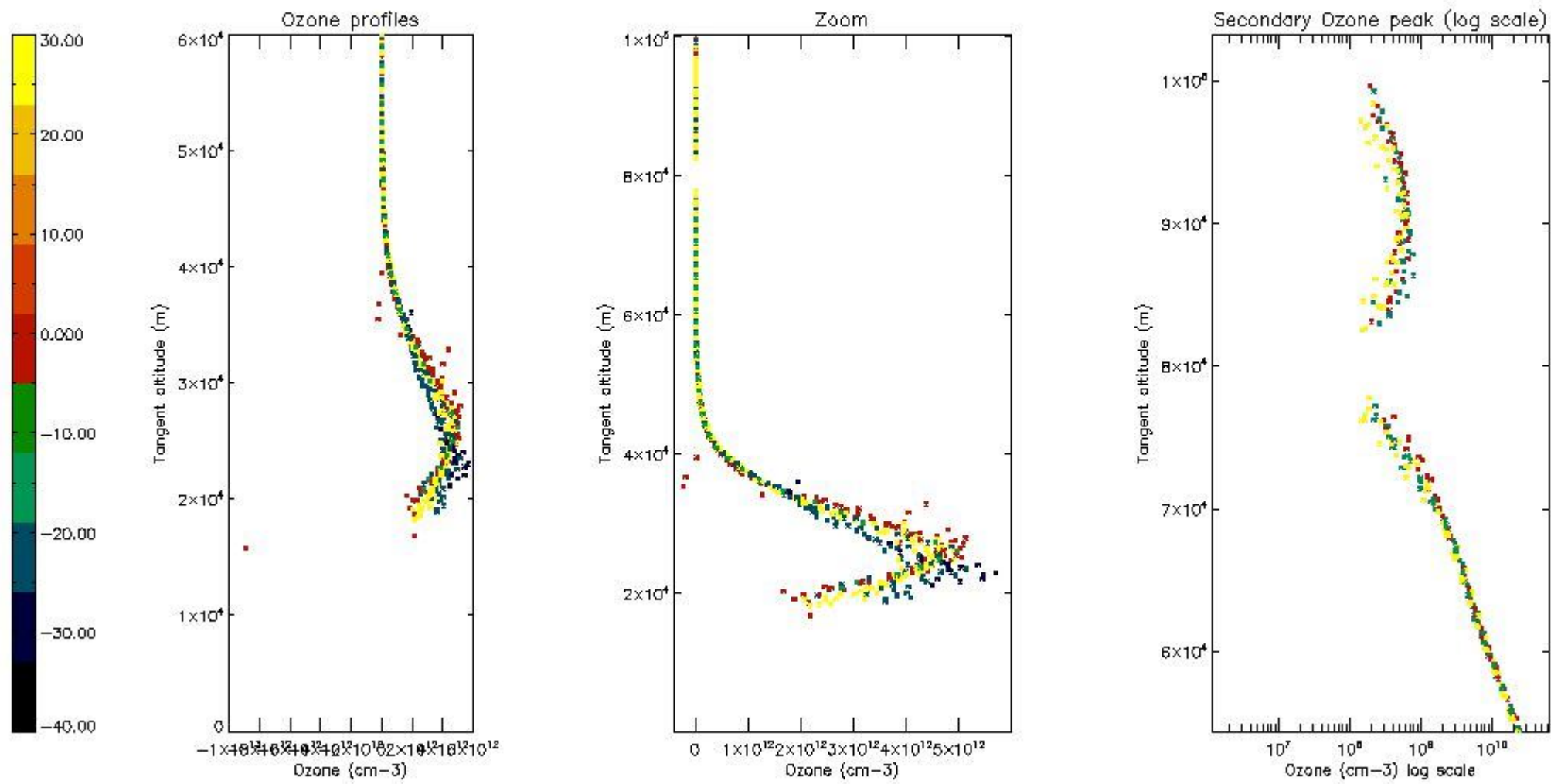
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



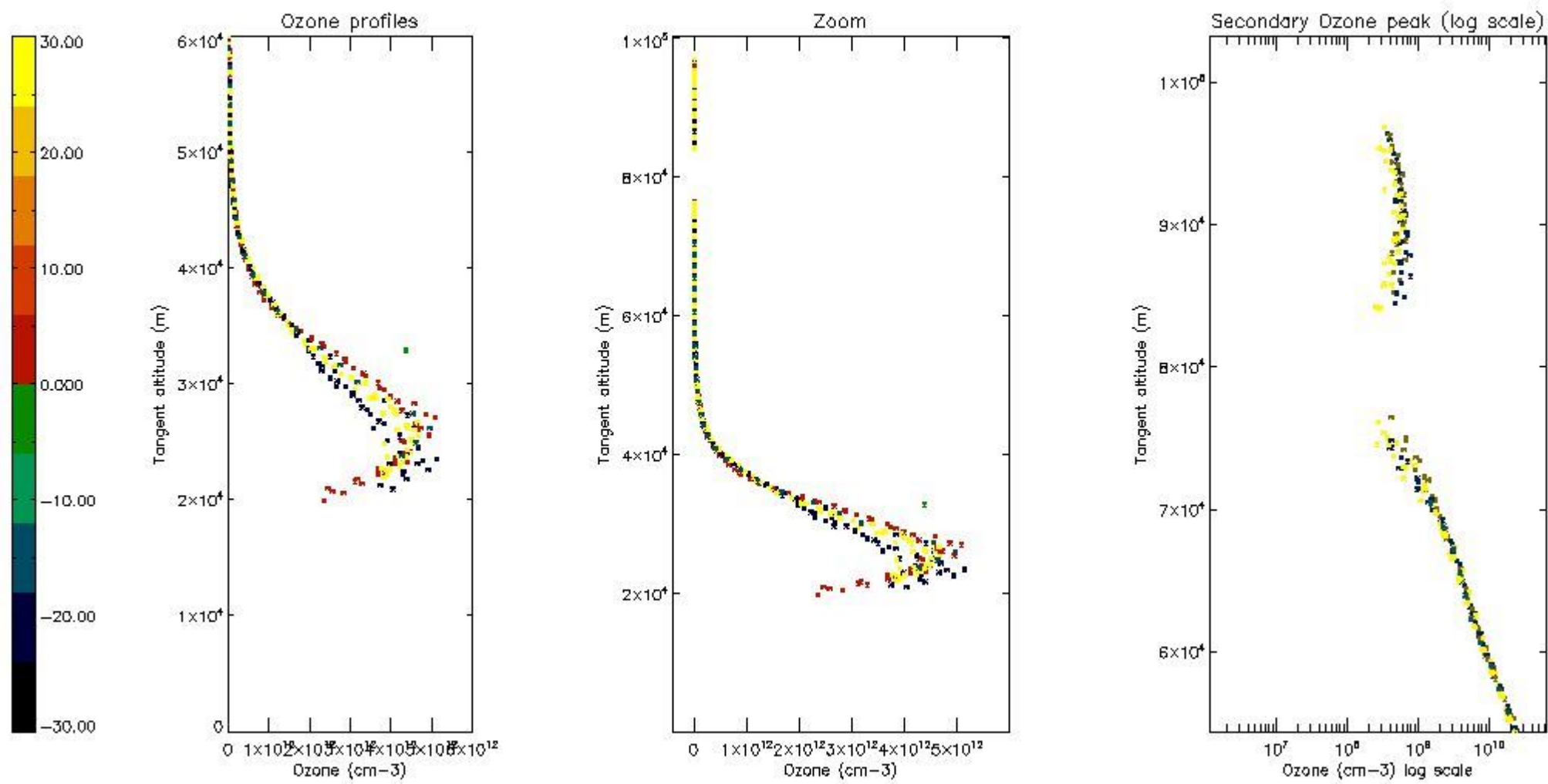
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



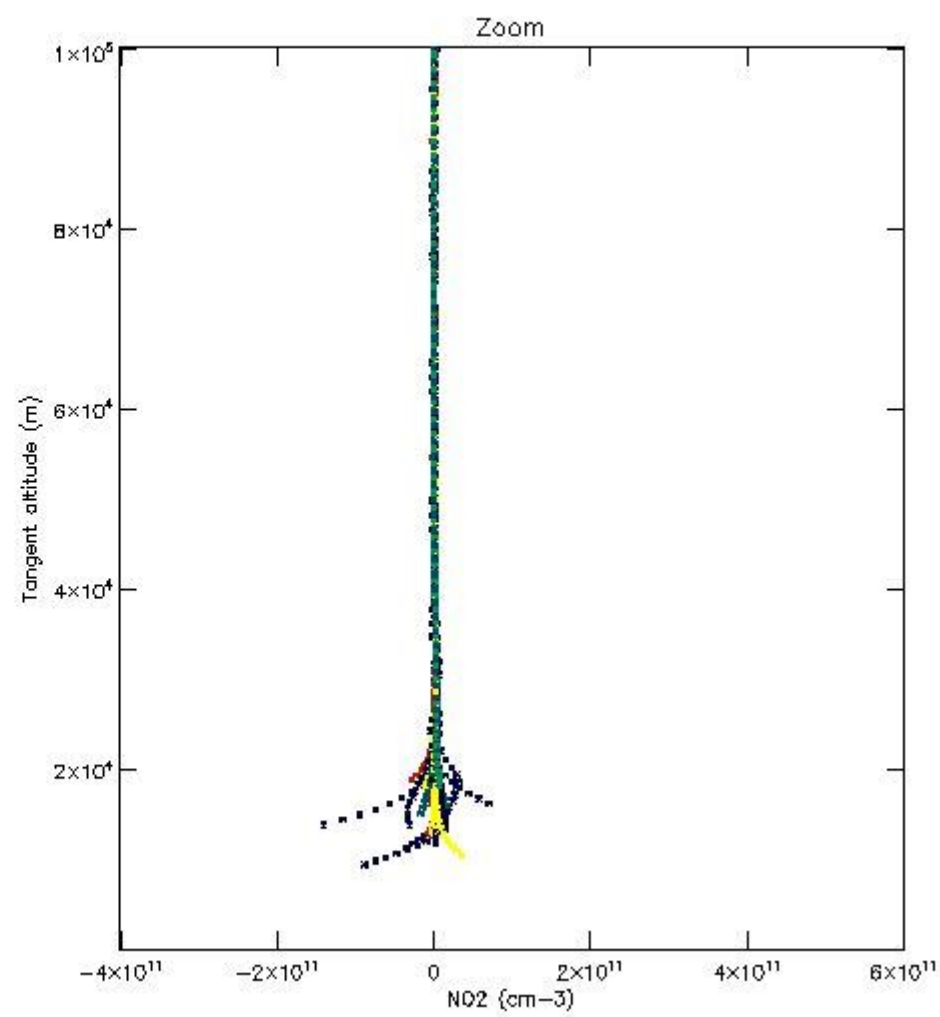
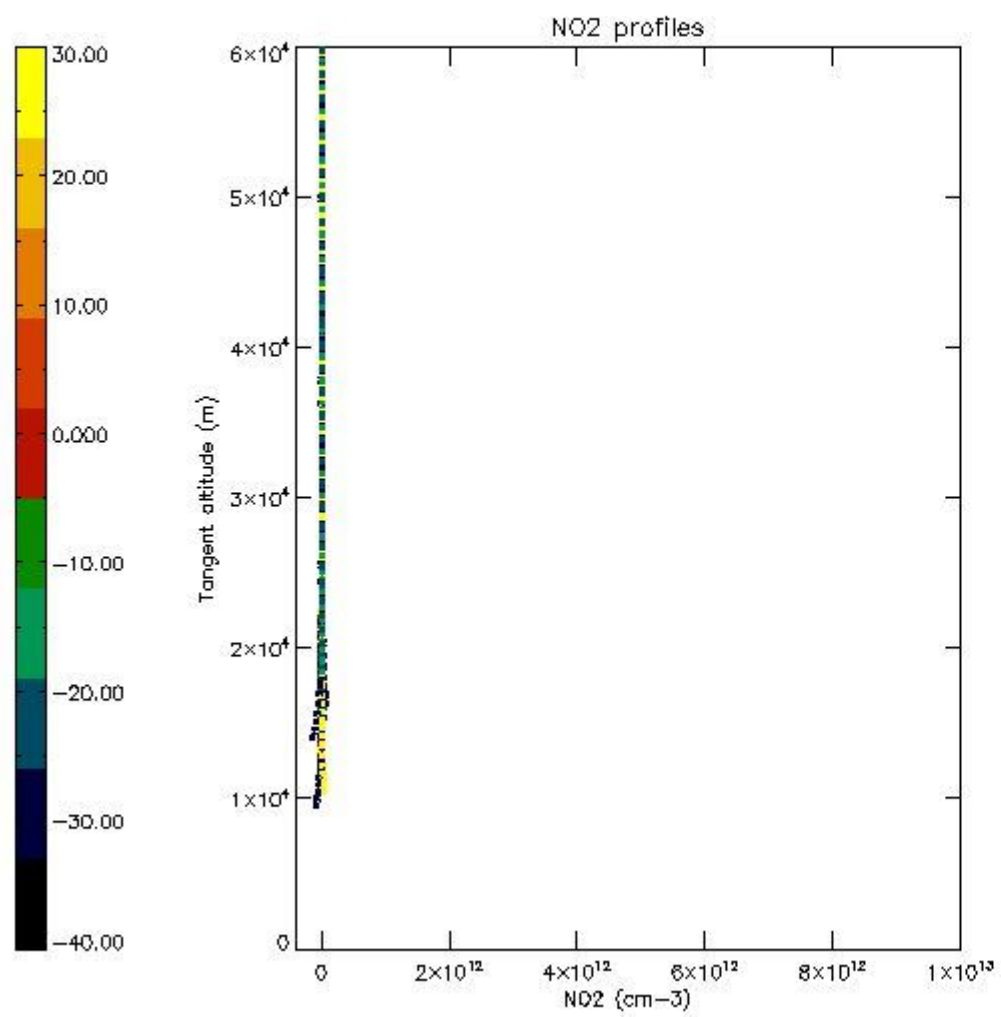
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



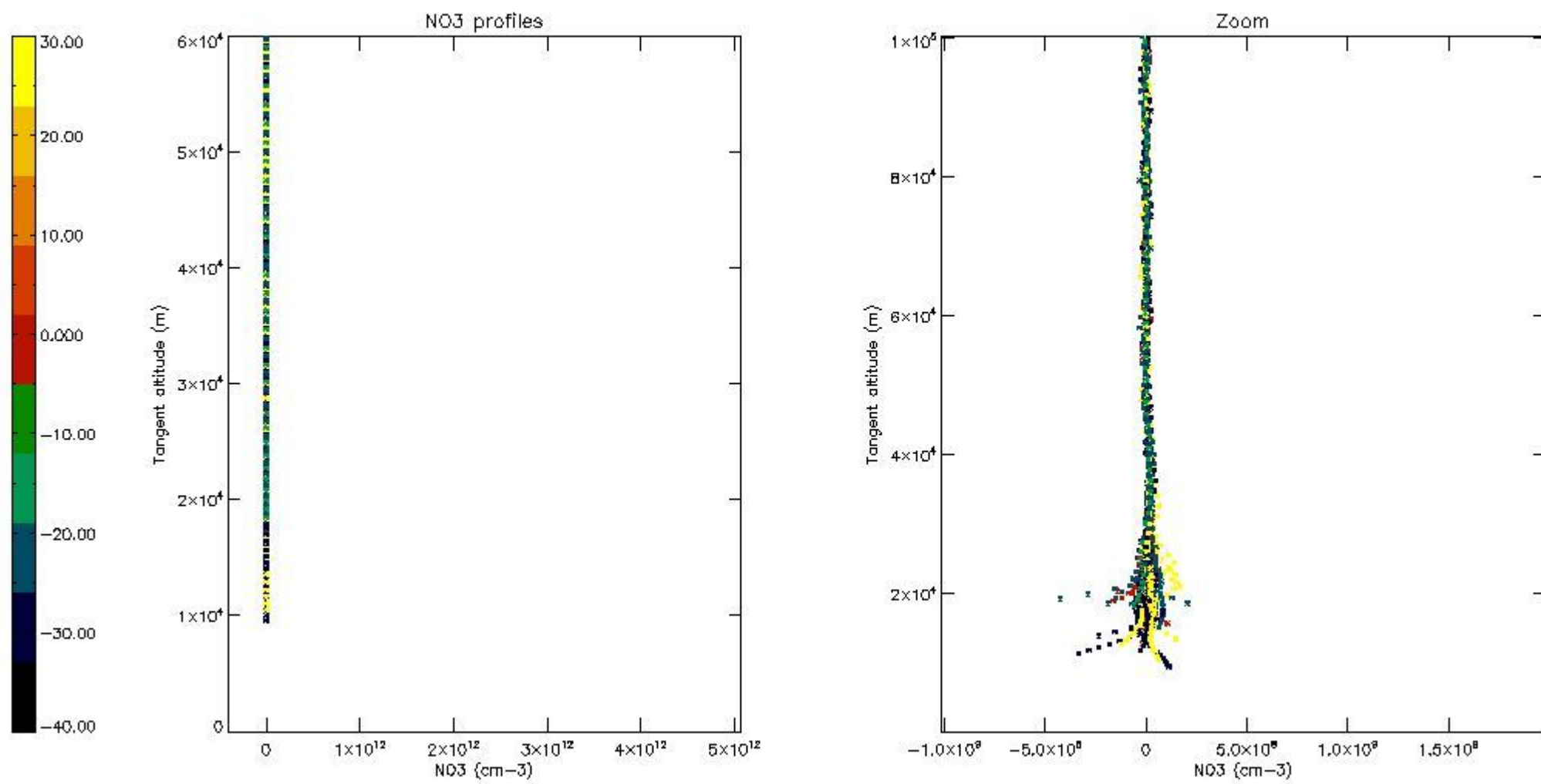
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



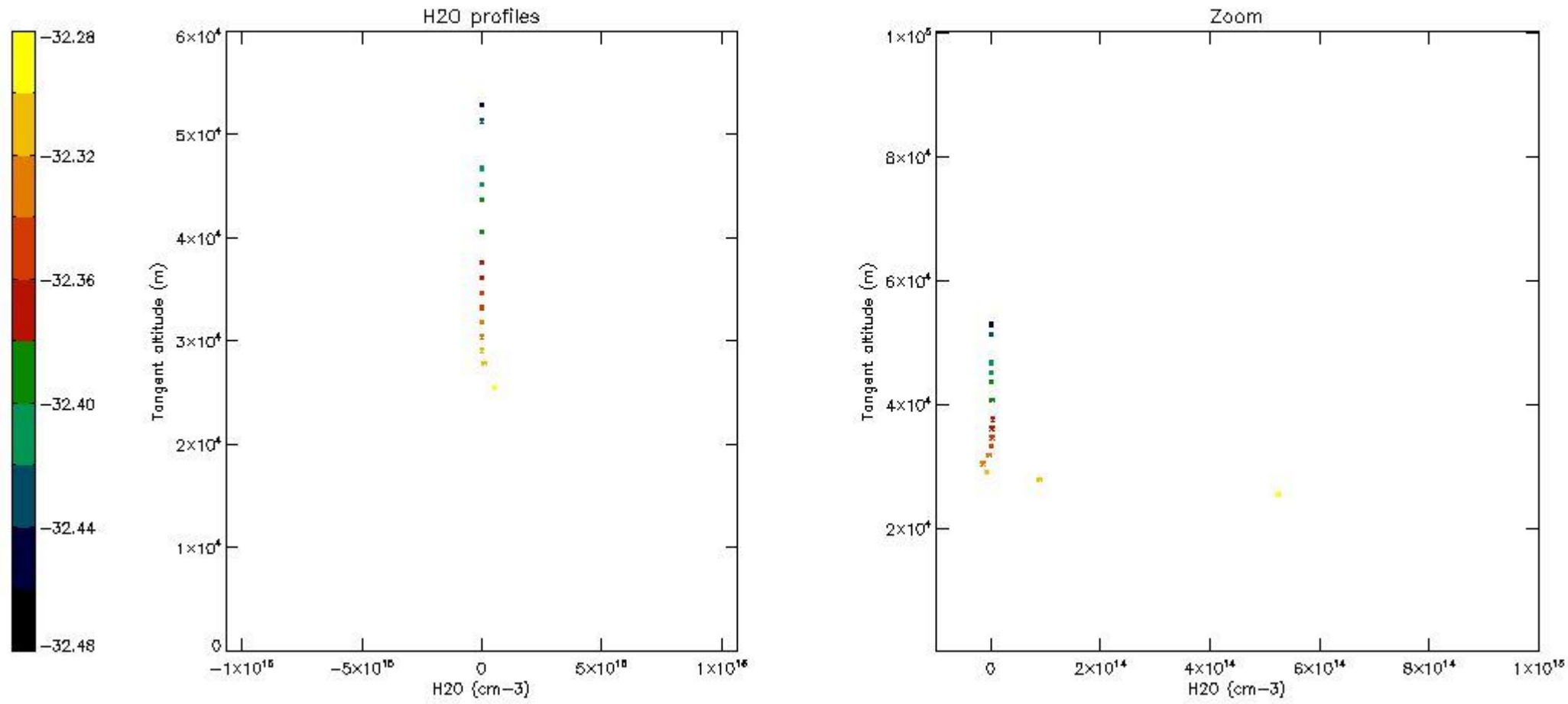
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

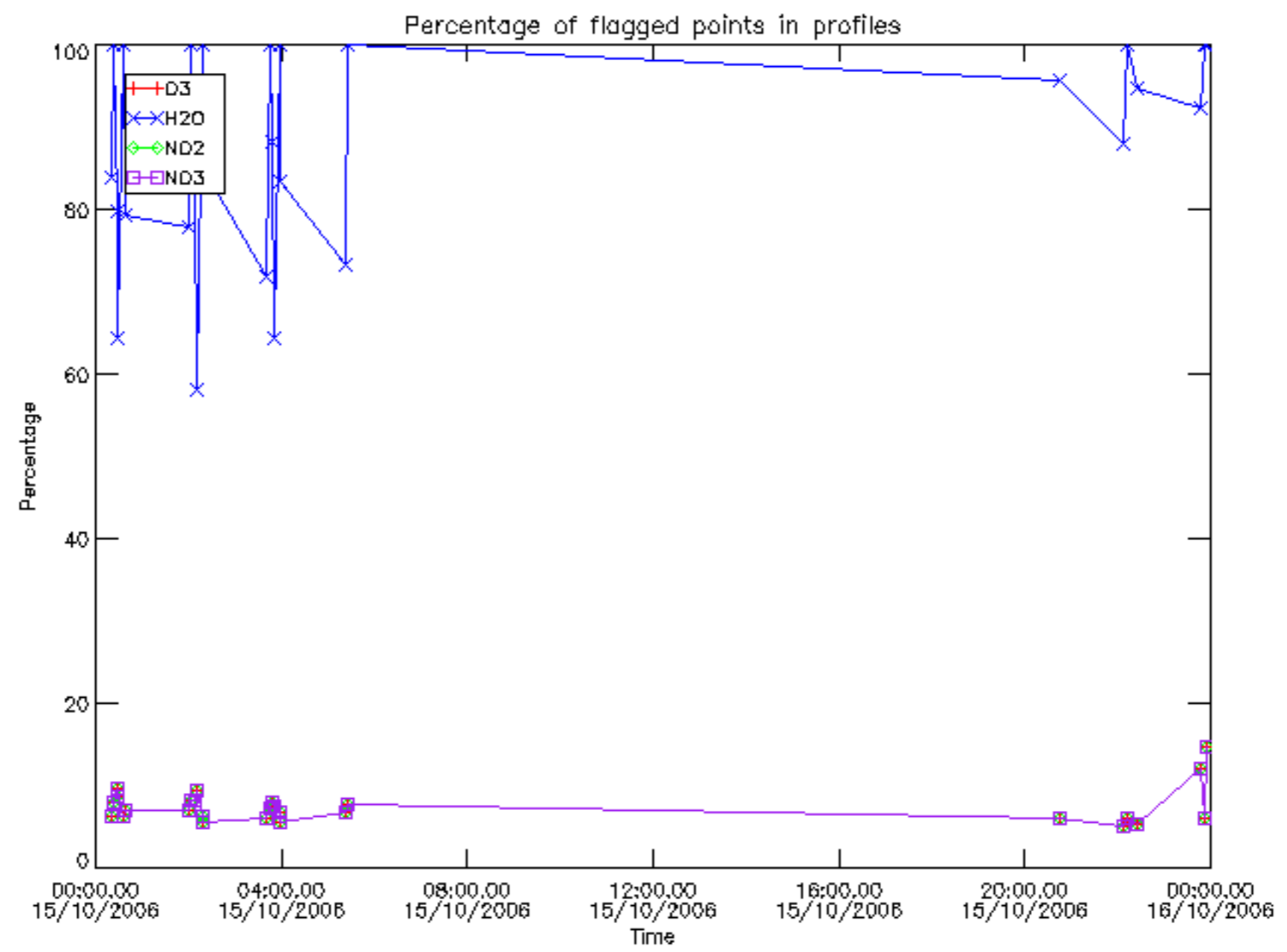
The colorbar represents the latitude.



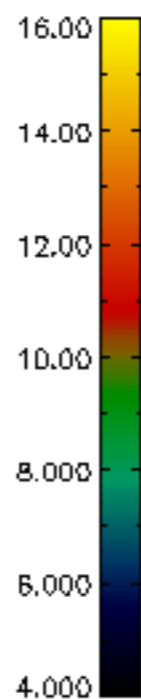
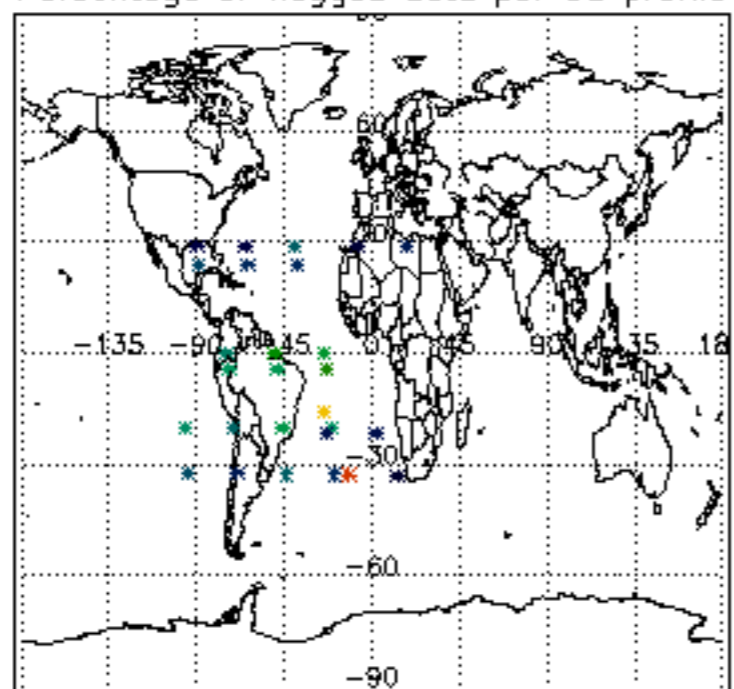
6. Auxiliary Data Files used for the production reported in section 2

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

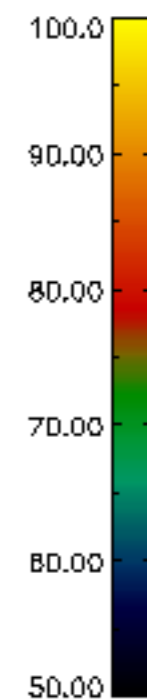
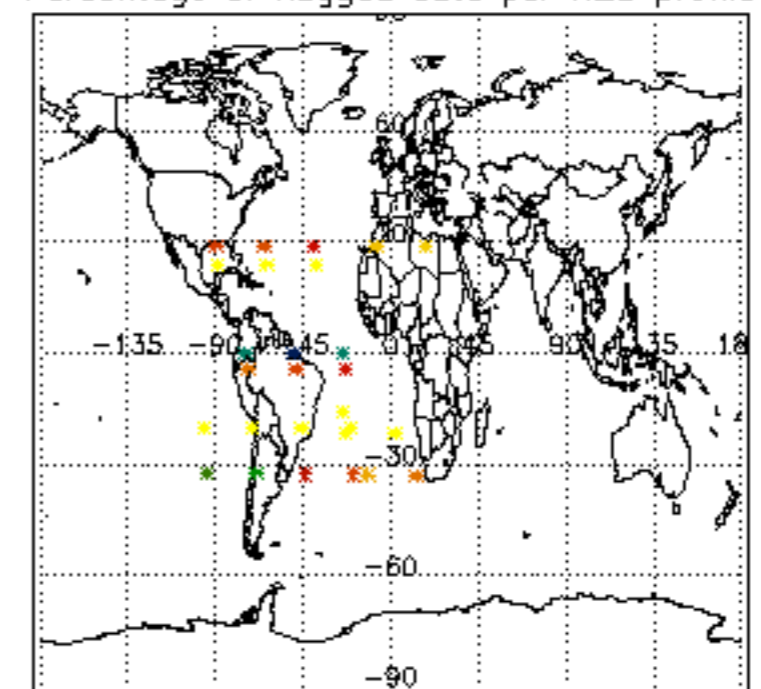
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	15-OCT-2006 00:00:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-OCT-2006 00:00:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-OCT-2006 00:00:45



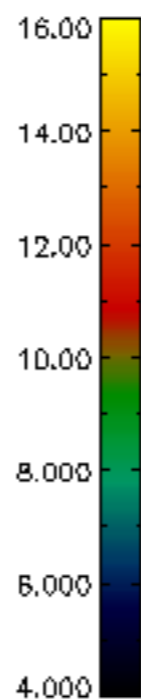
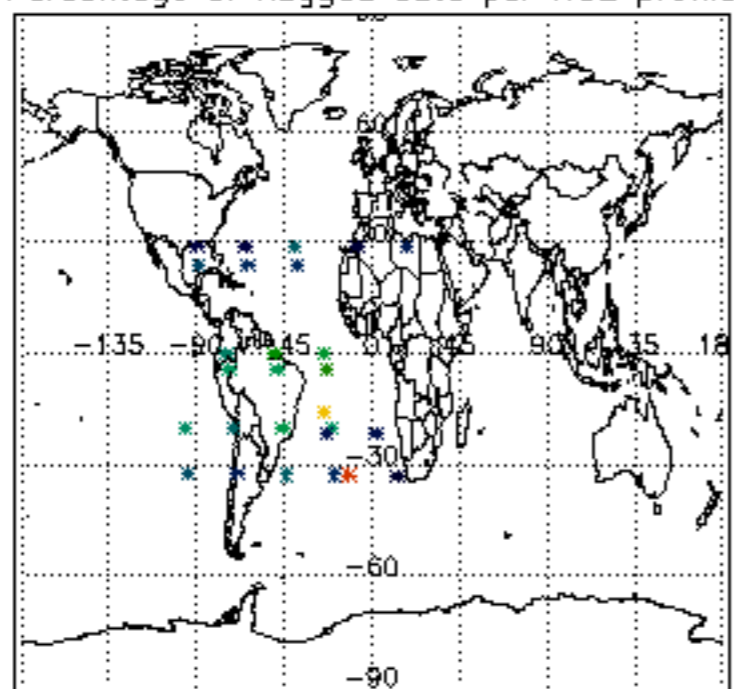
Percentage of flagged data per D3 profile



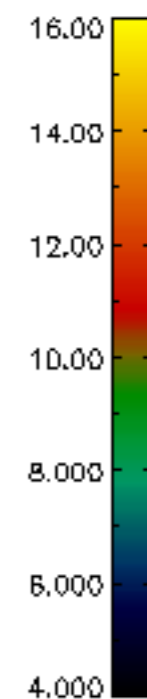
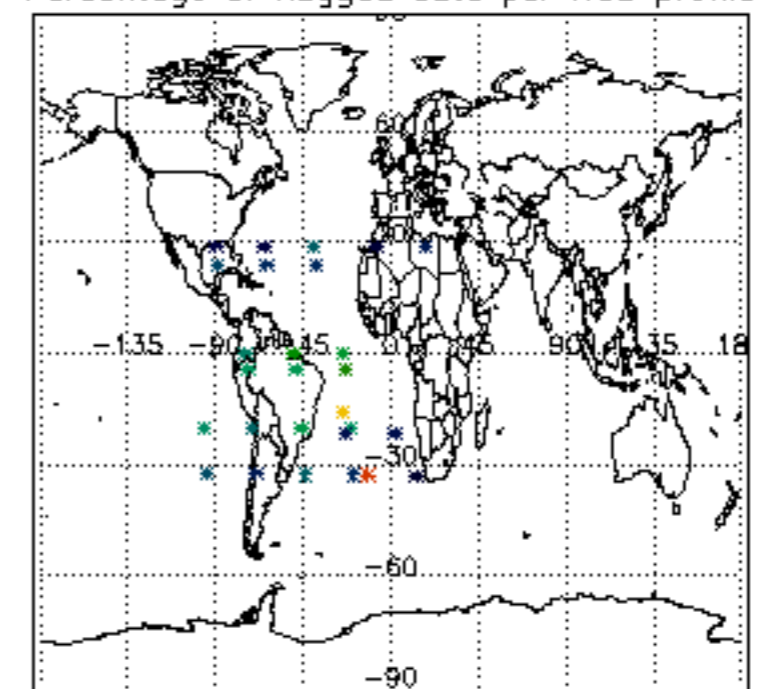
Percentage of flagged data per H2O profile

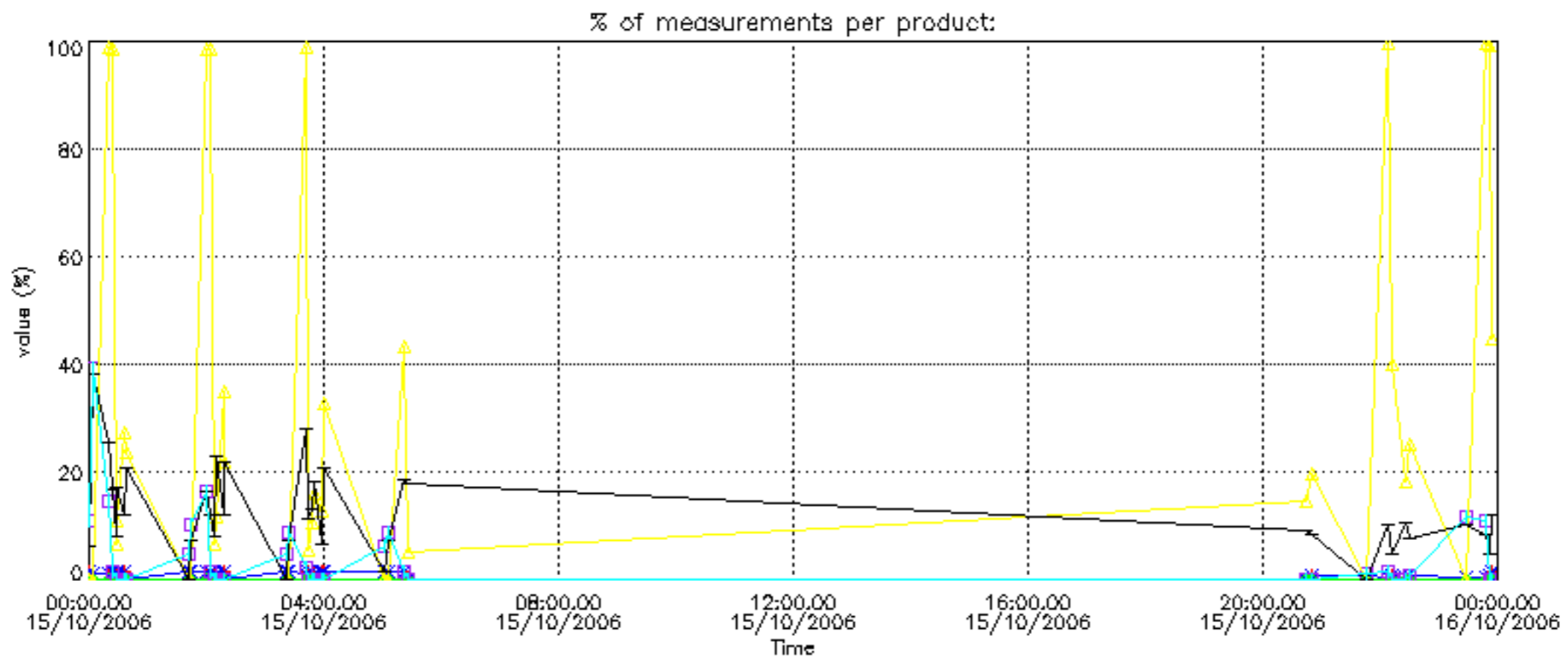


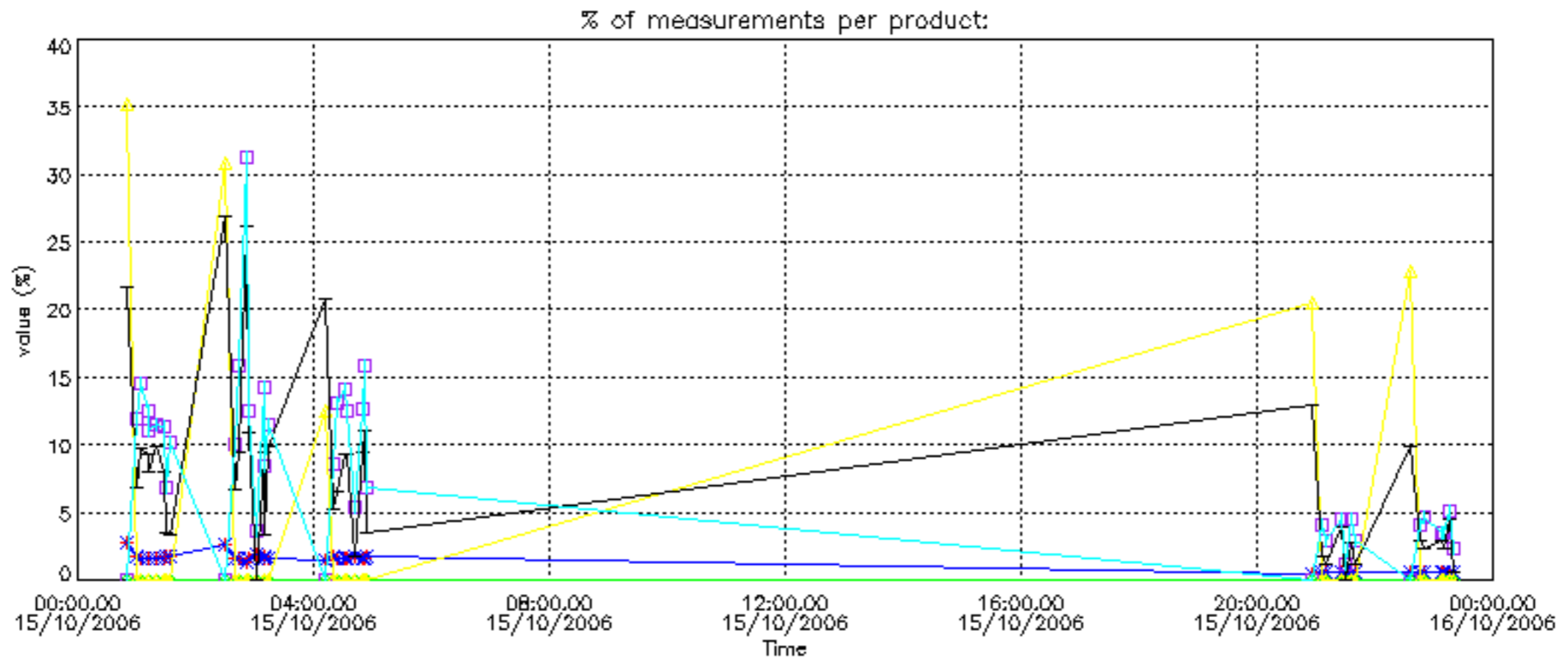
Percentage of flagged data per NO2 profile



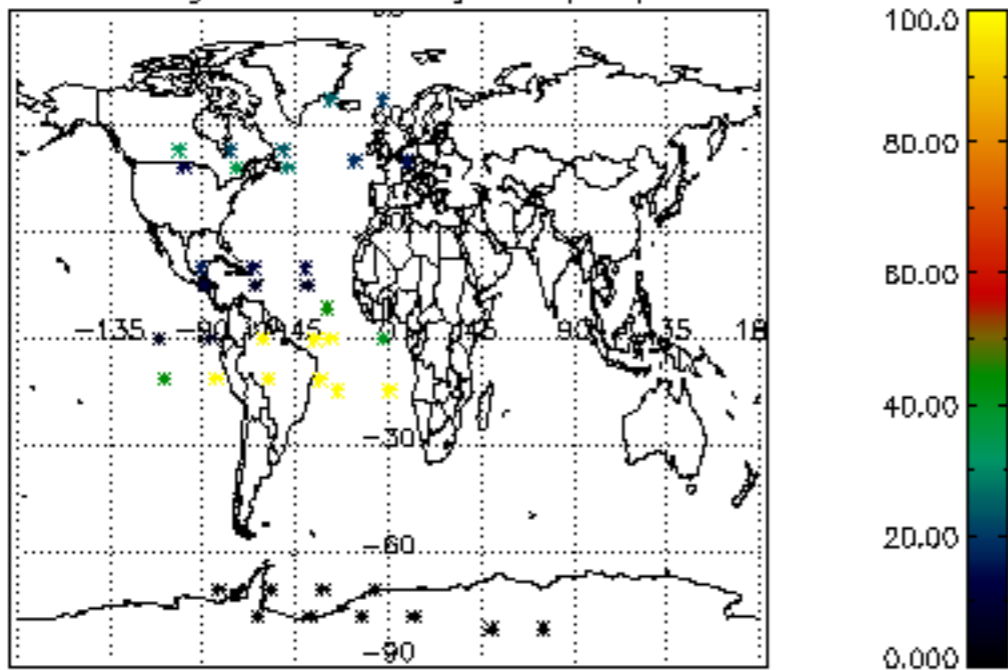
Percentage of flagged data per NO3 profile



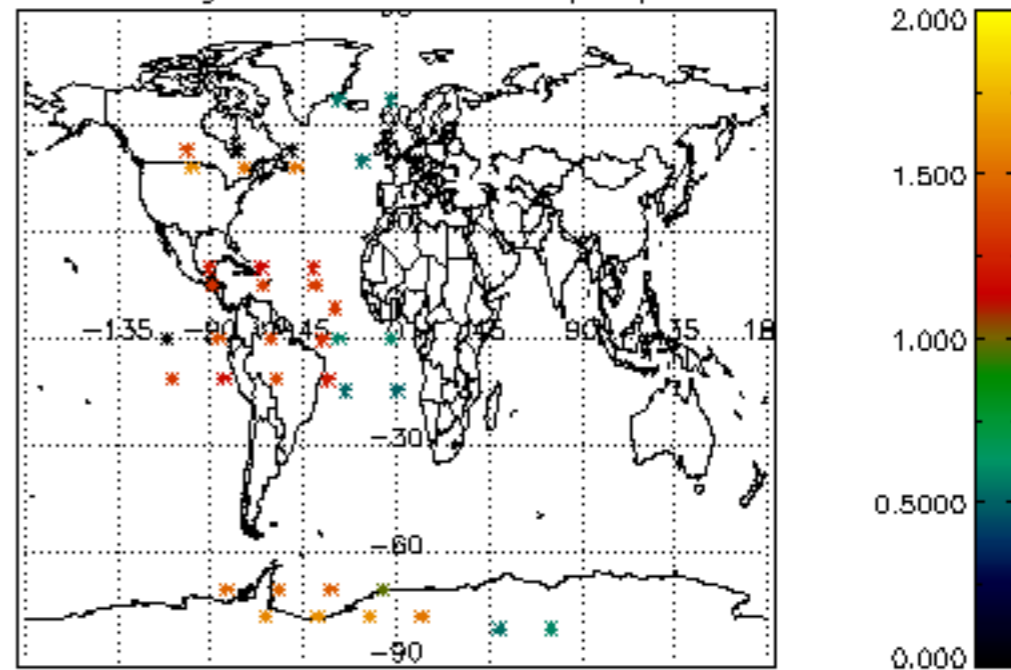




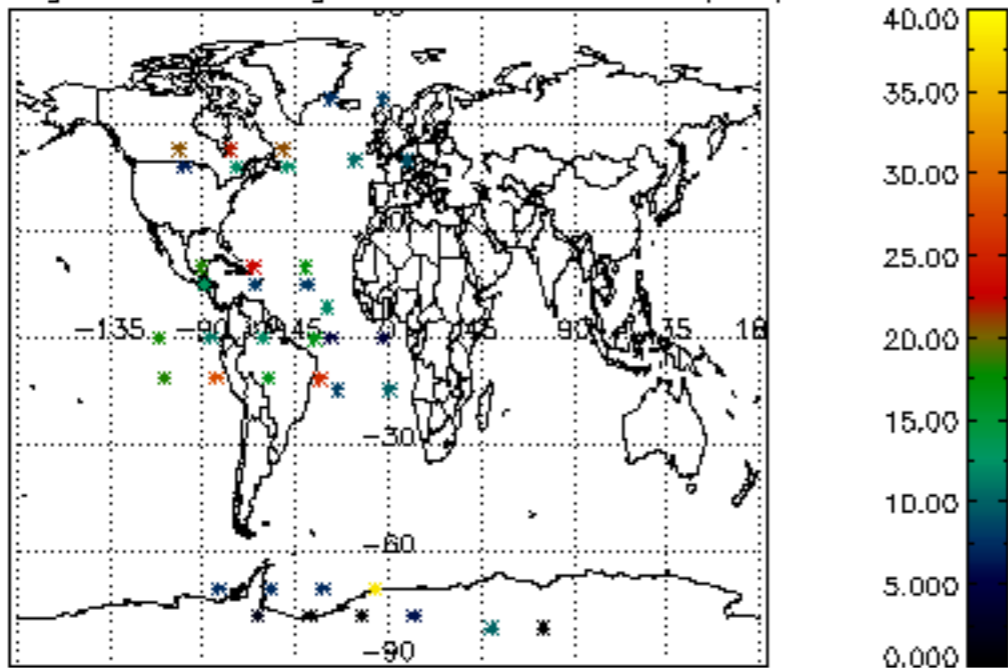
Percentage of cosmic ray hits per profile



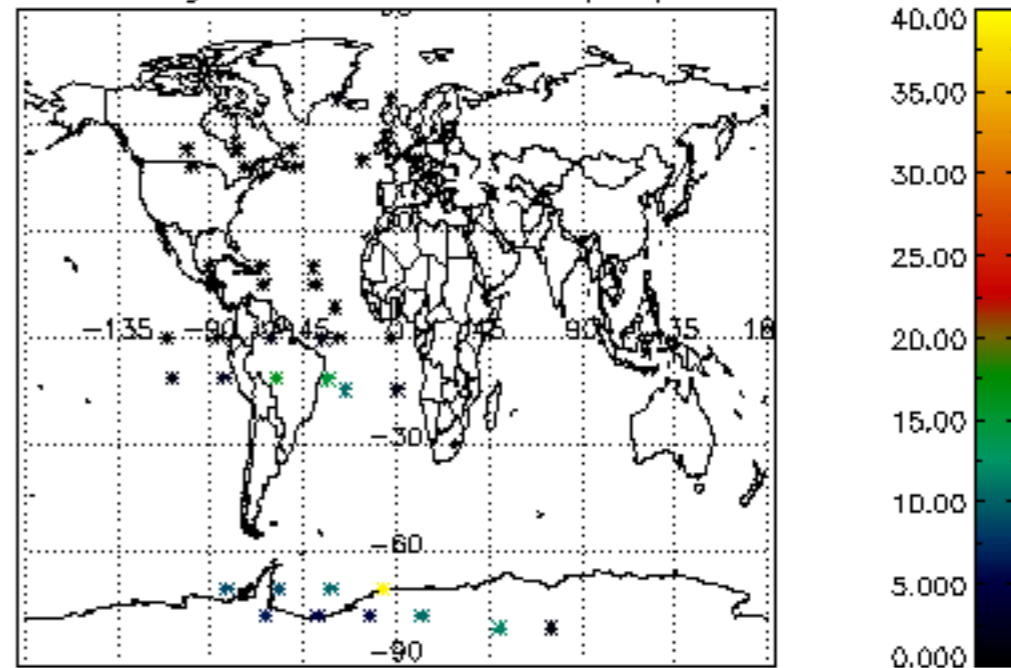
Percentage of datation errors per profile



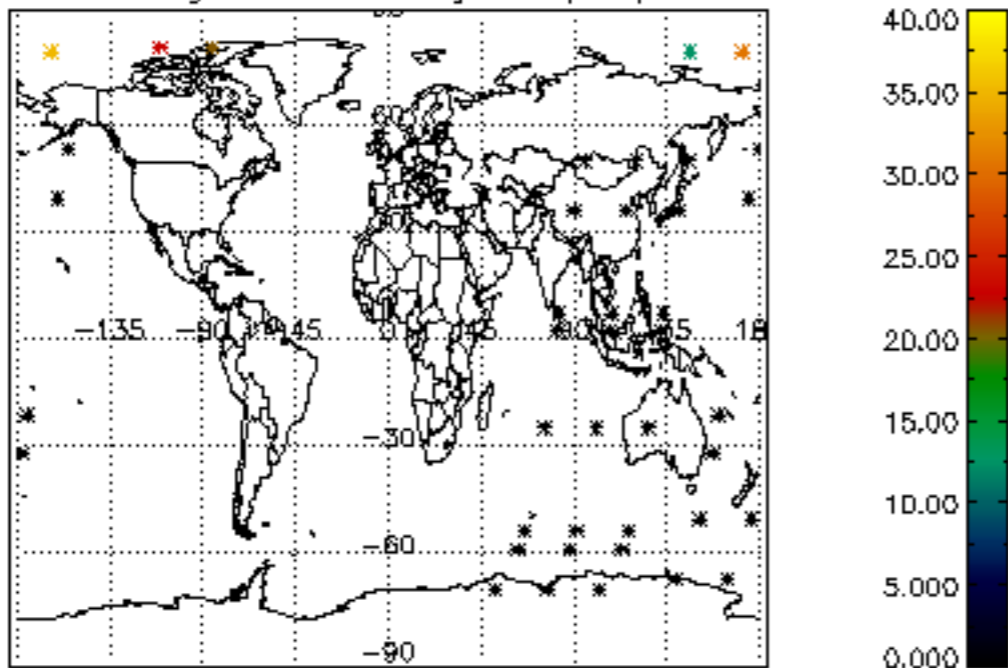
Percentage of star falling outside central band per profile



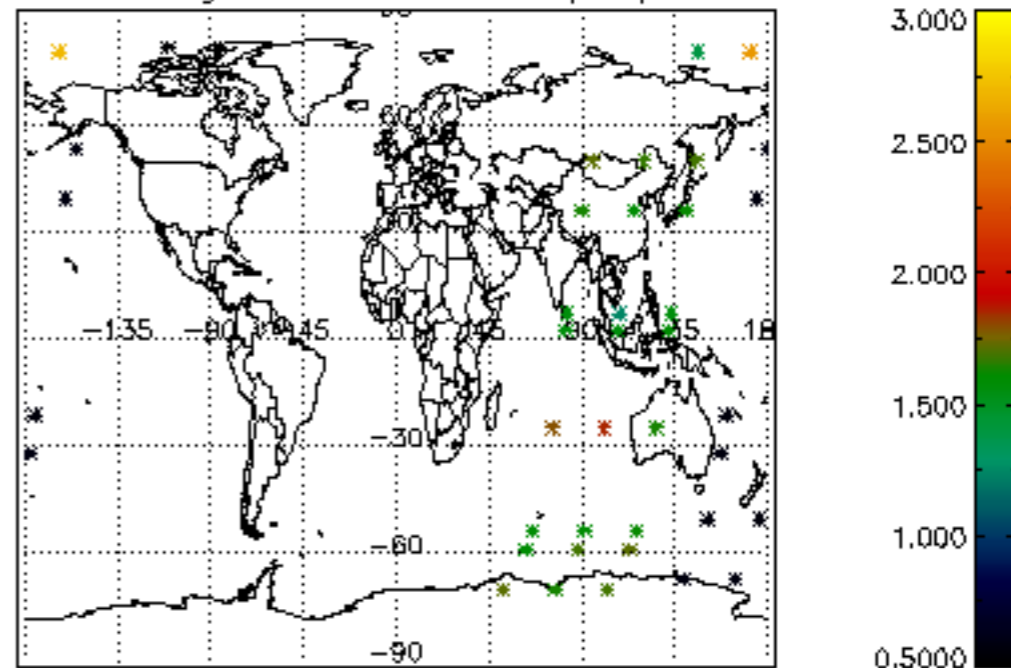
Percentage of saturation errors per profile



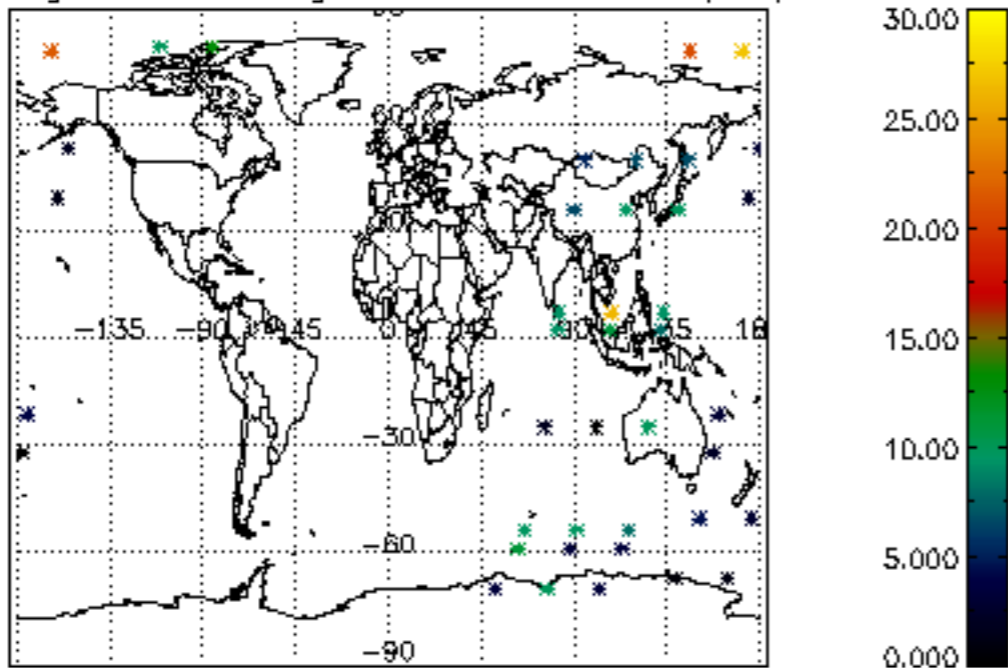
Percentage of cosmic ray hits per profile



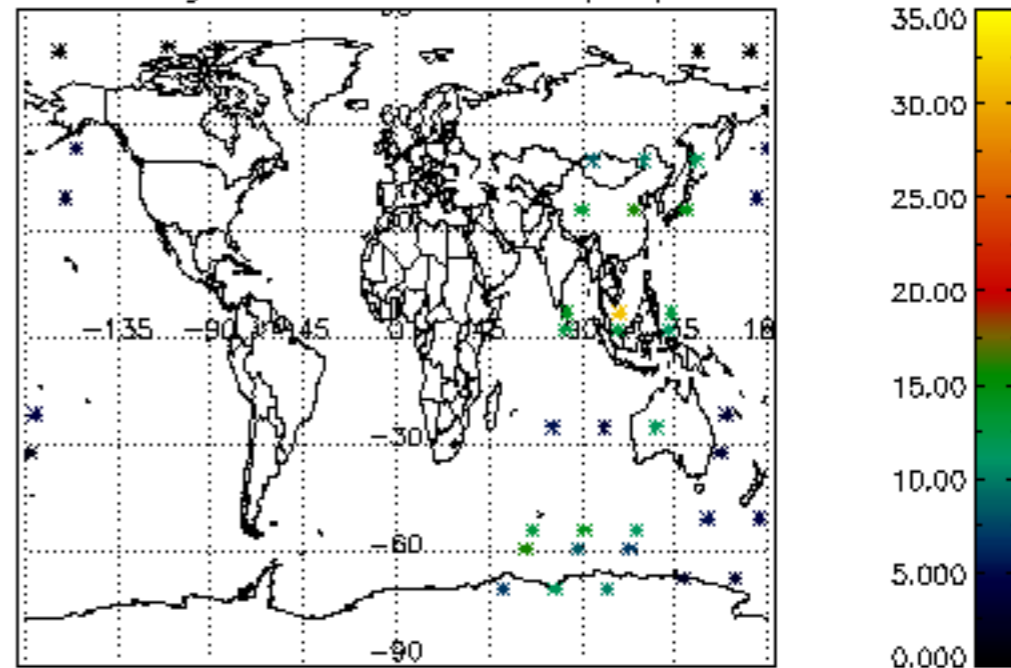
Percentage of datation errors per profile

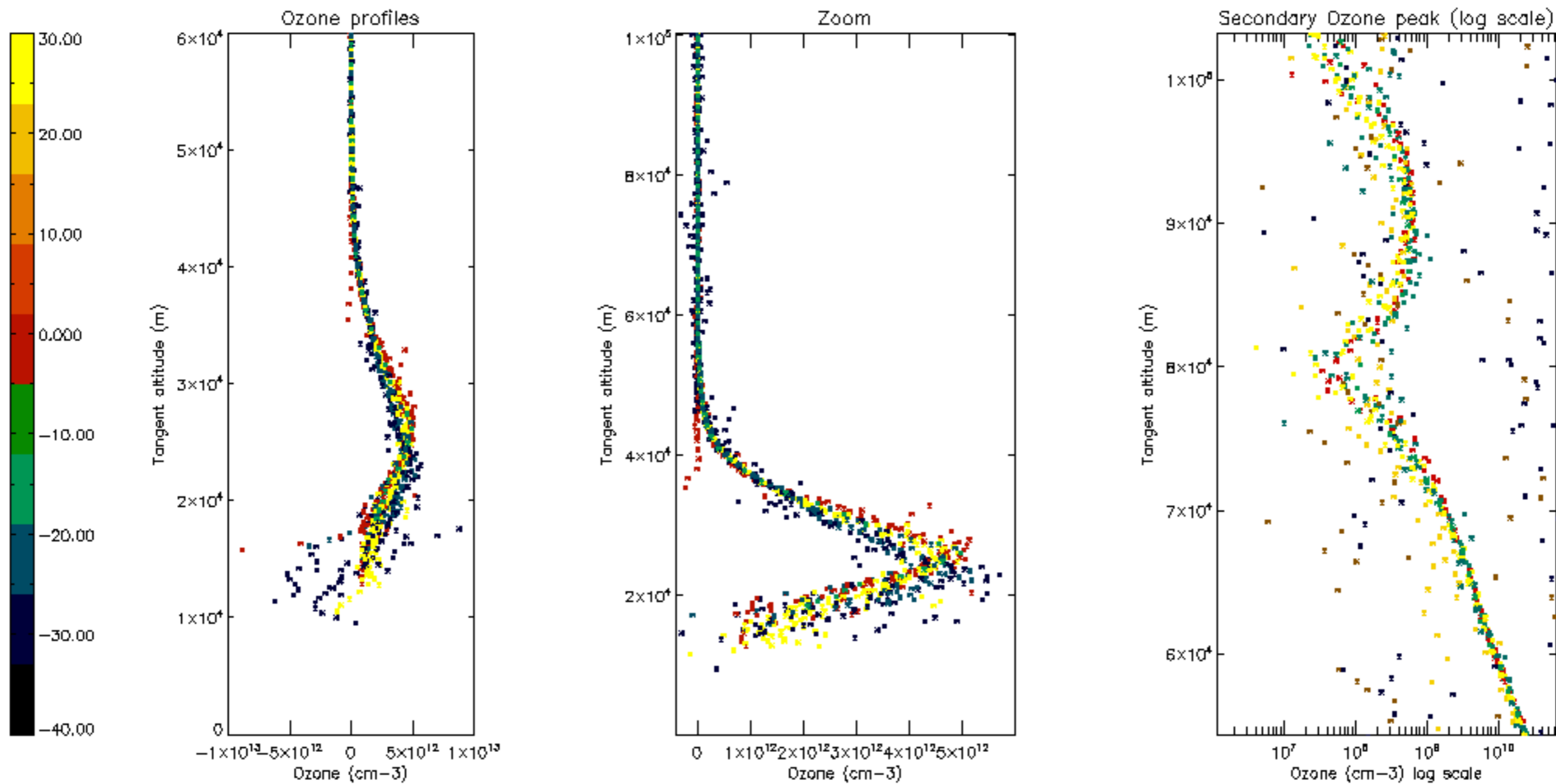


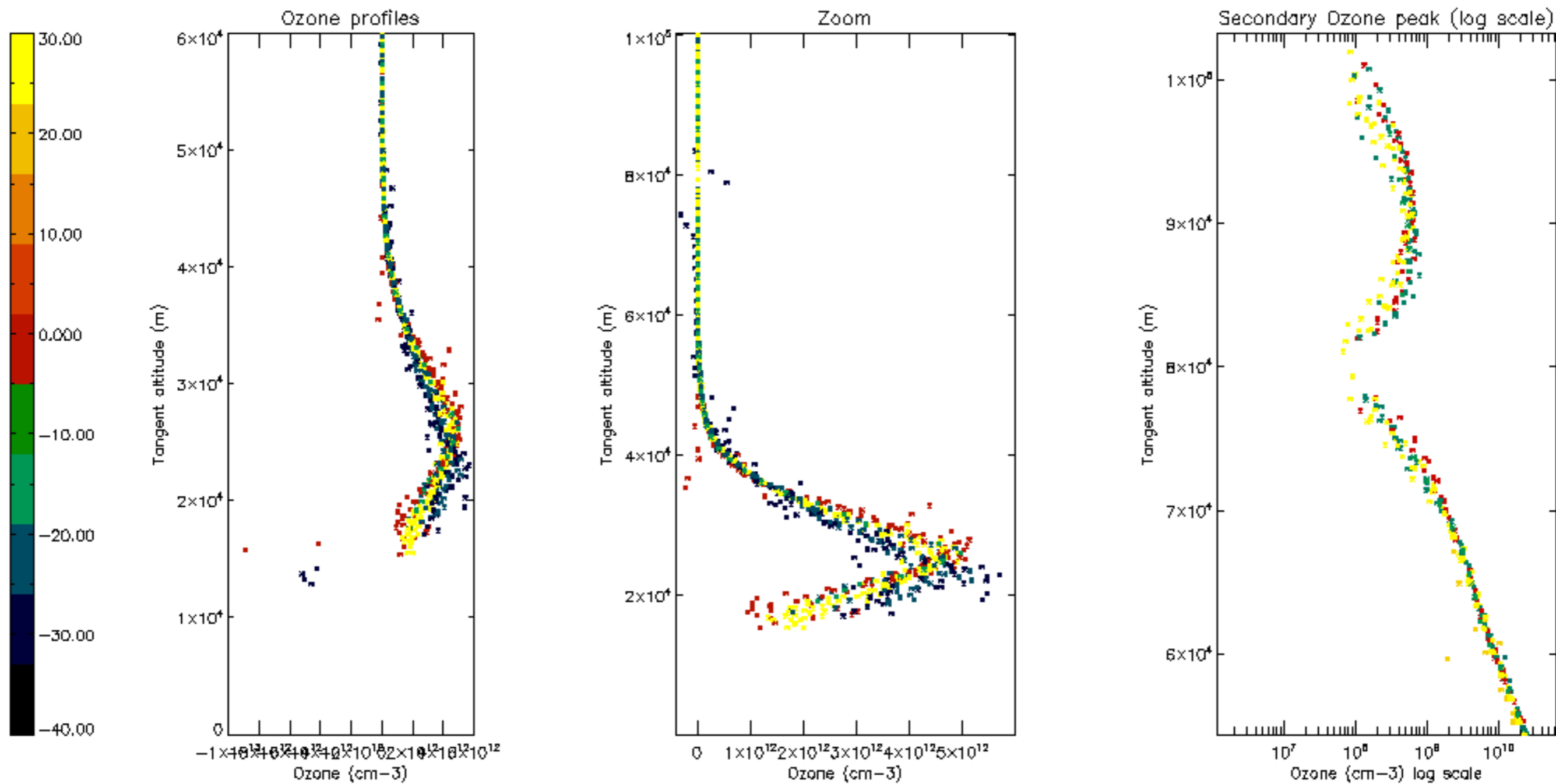
Percentage of star falling outside central band per profile

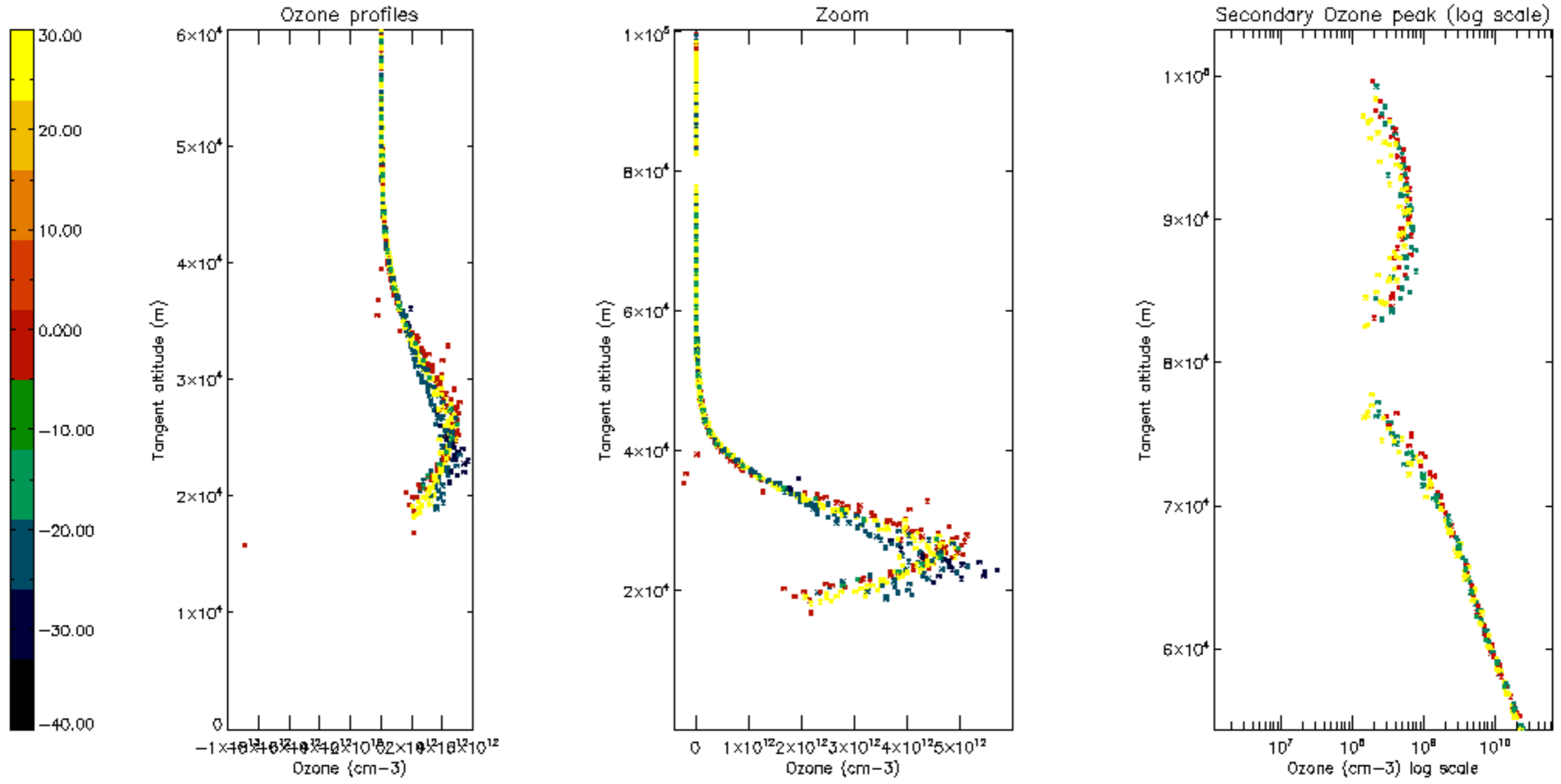


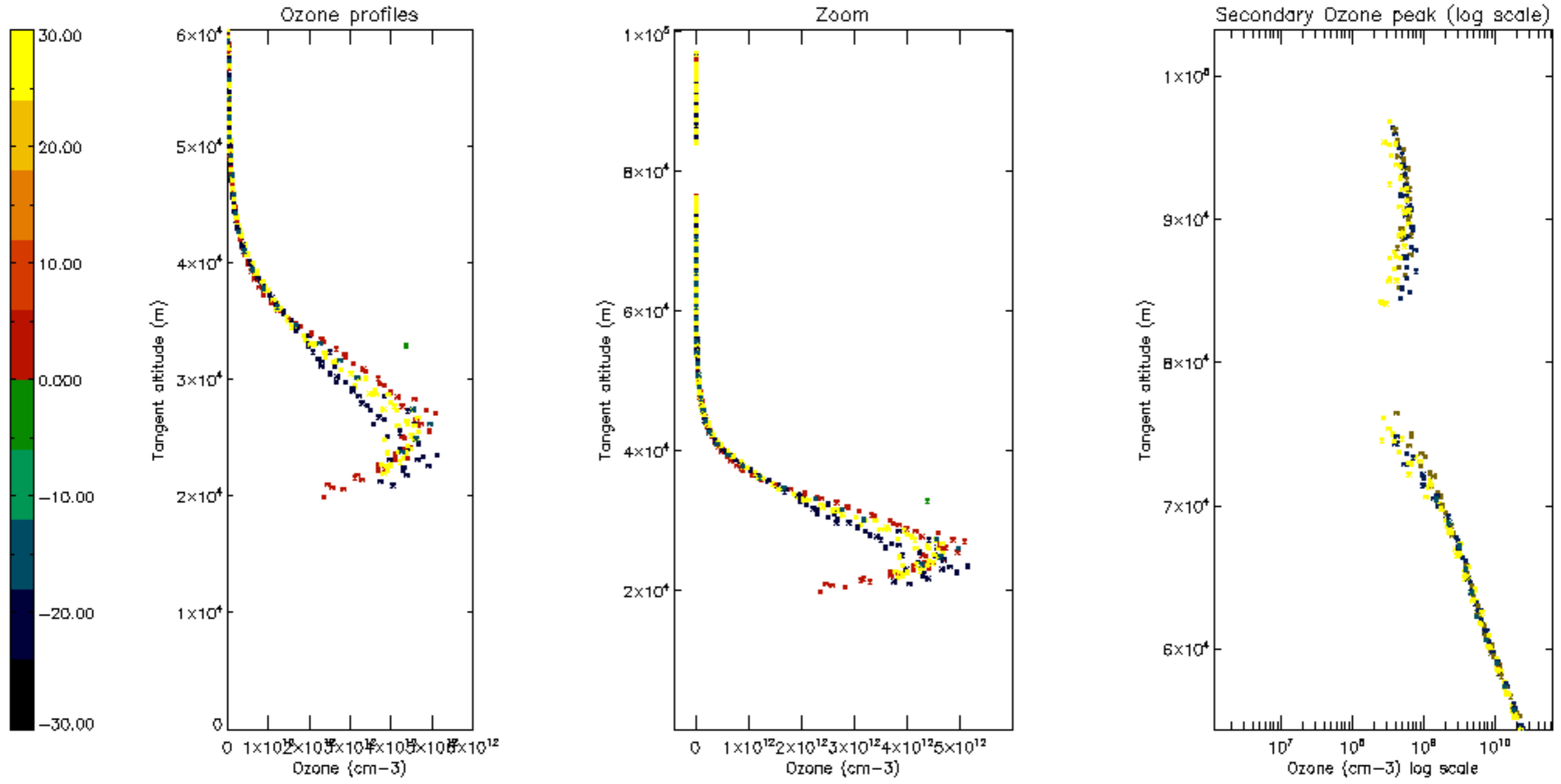
Percentage of saturation errors per profile

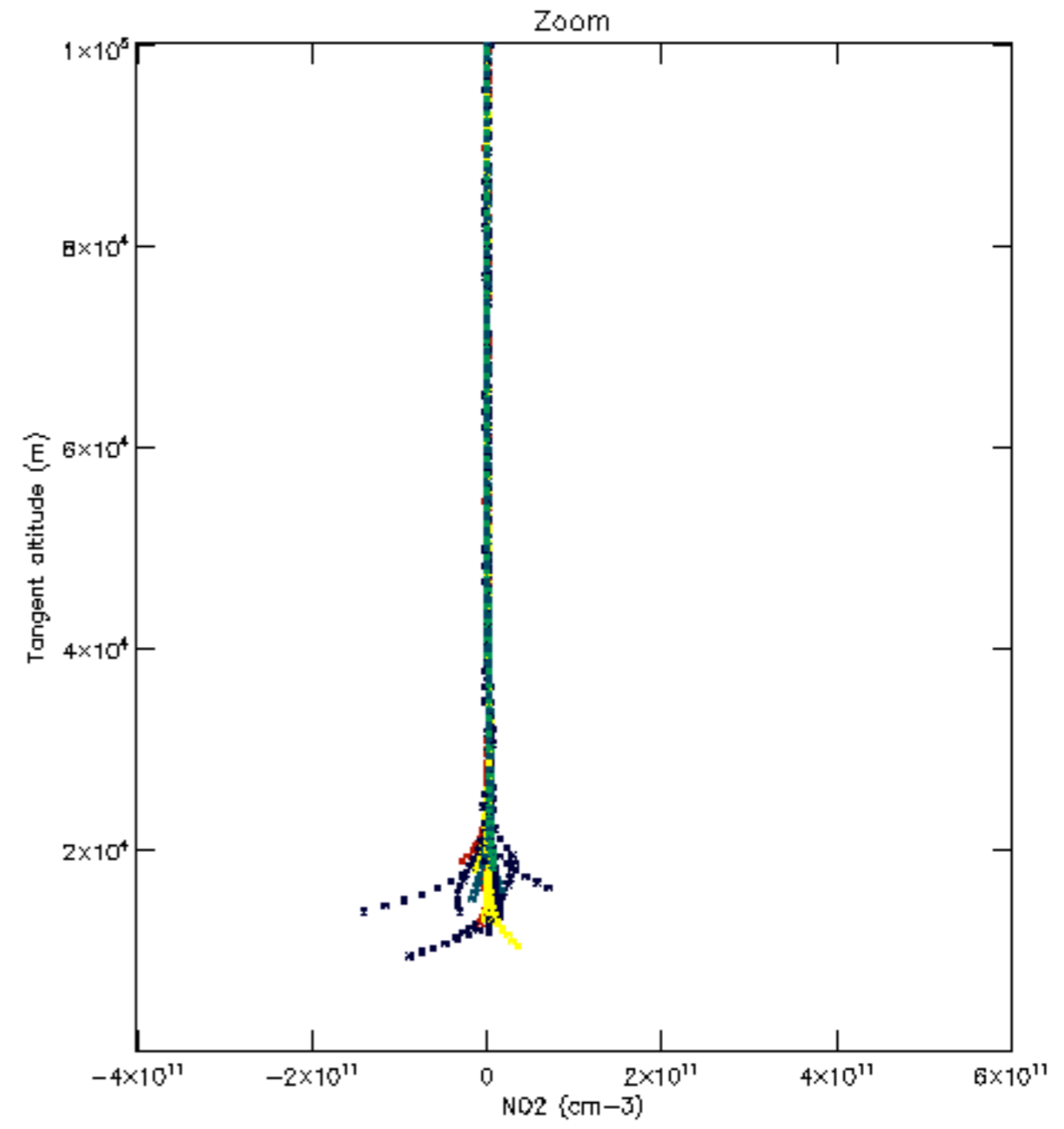
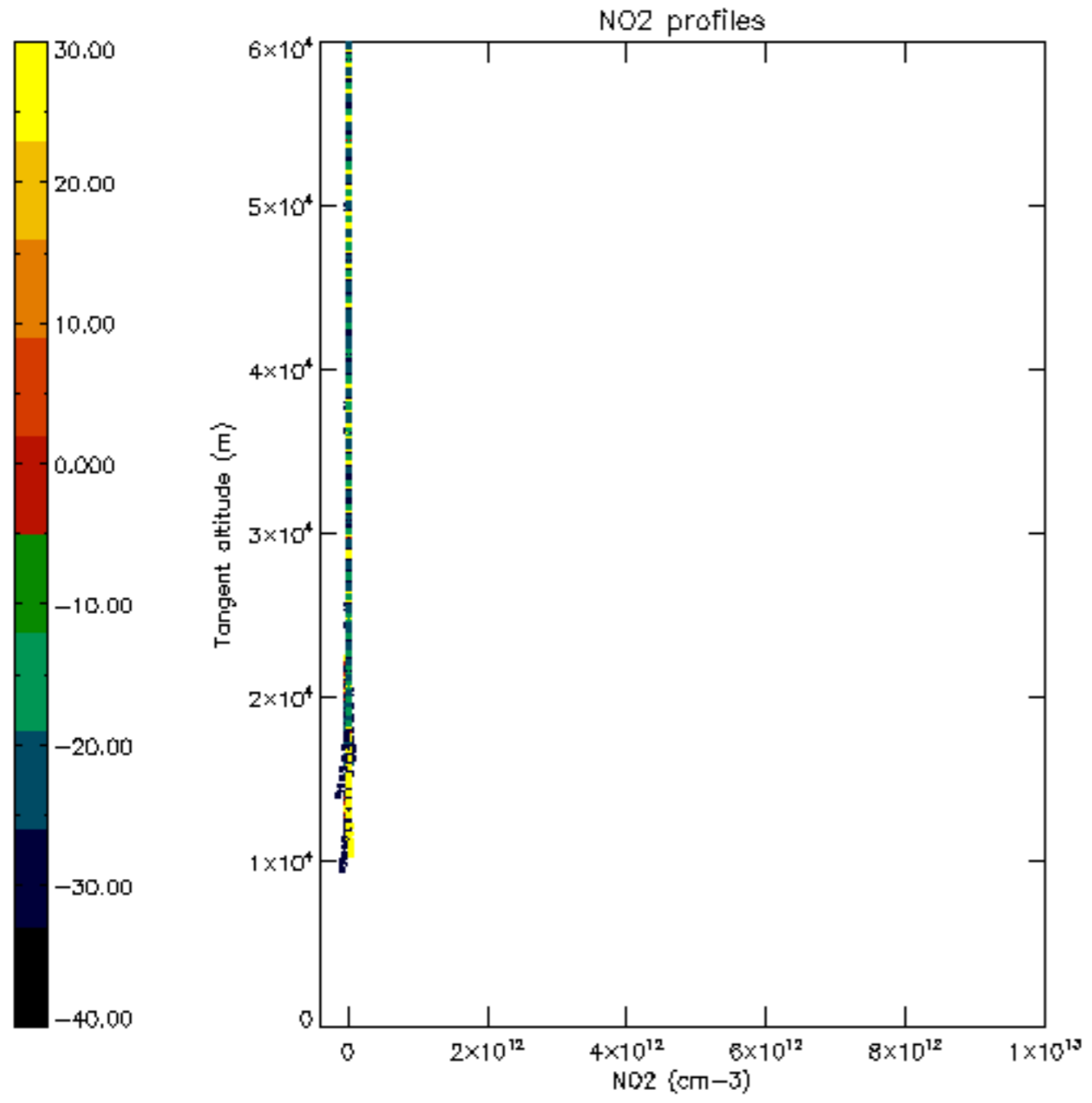


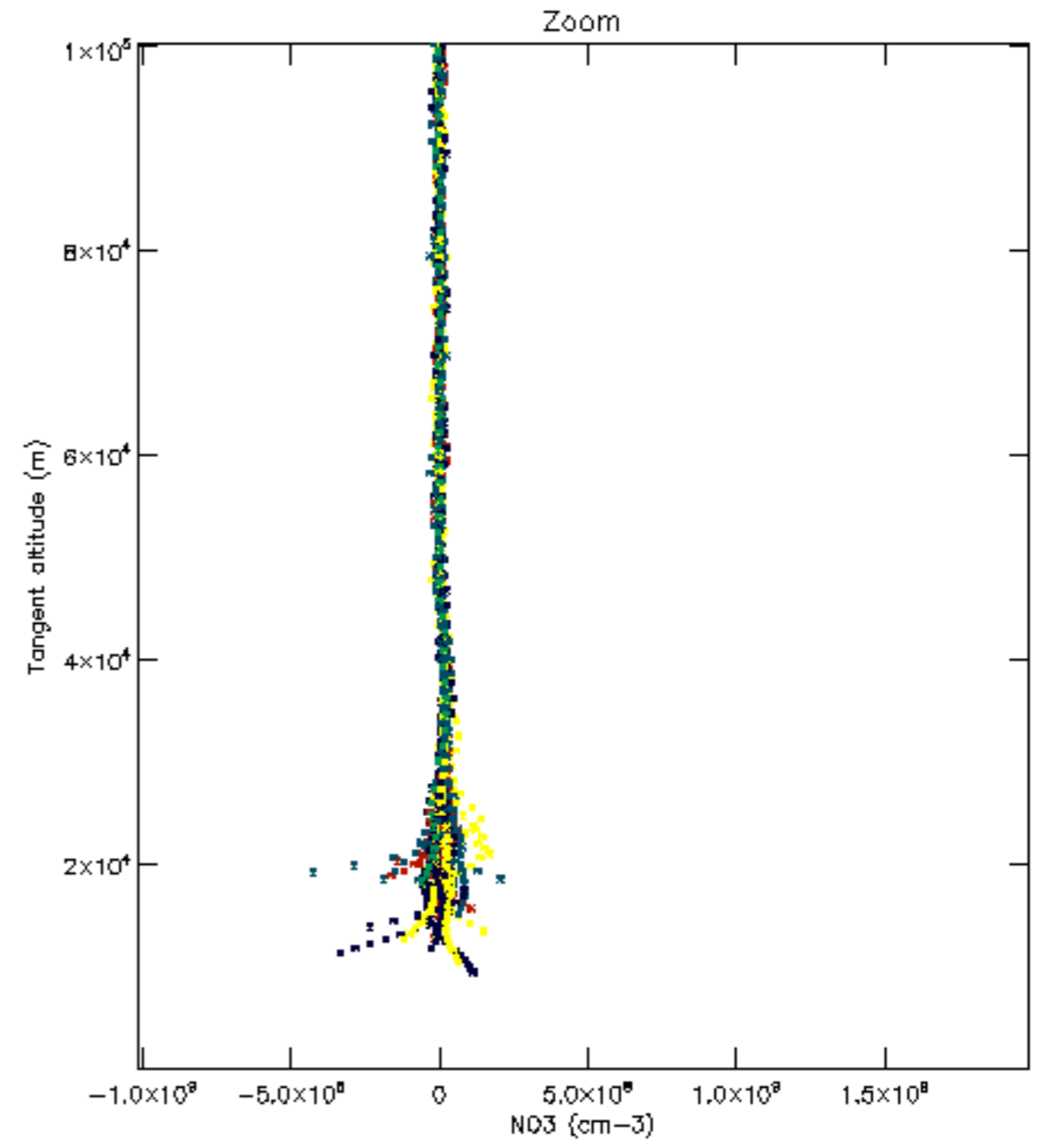
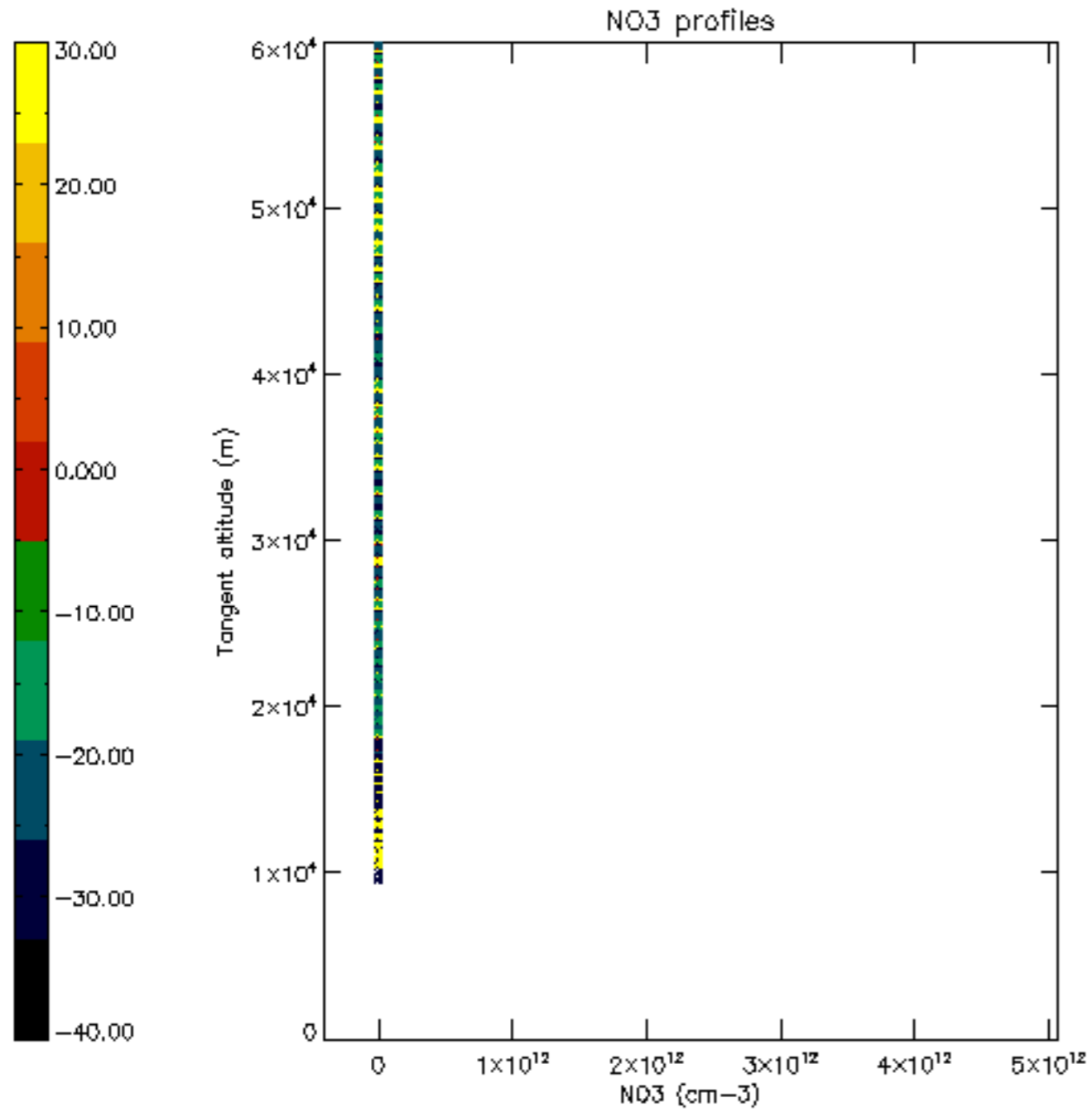


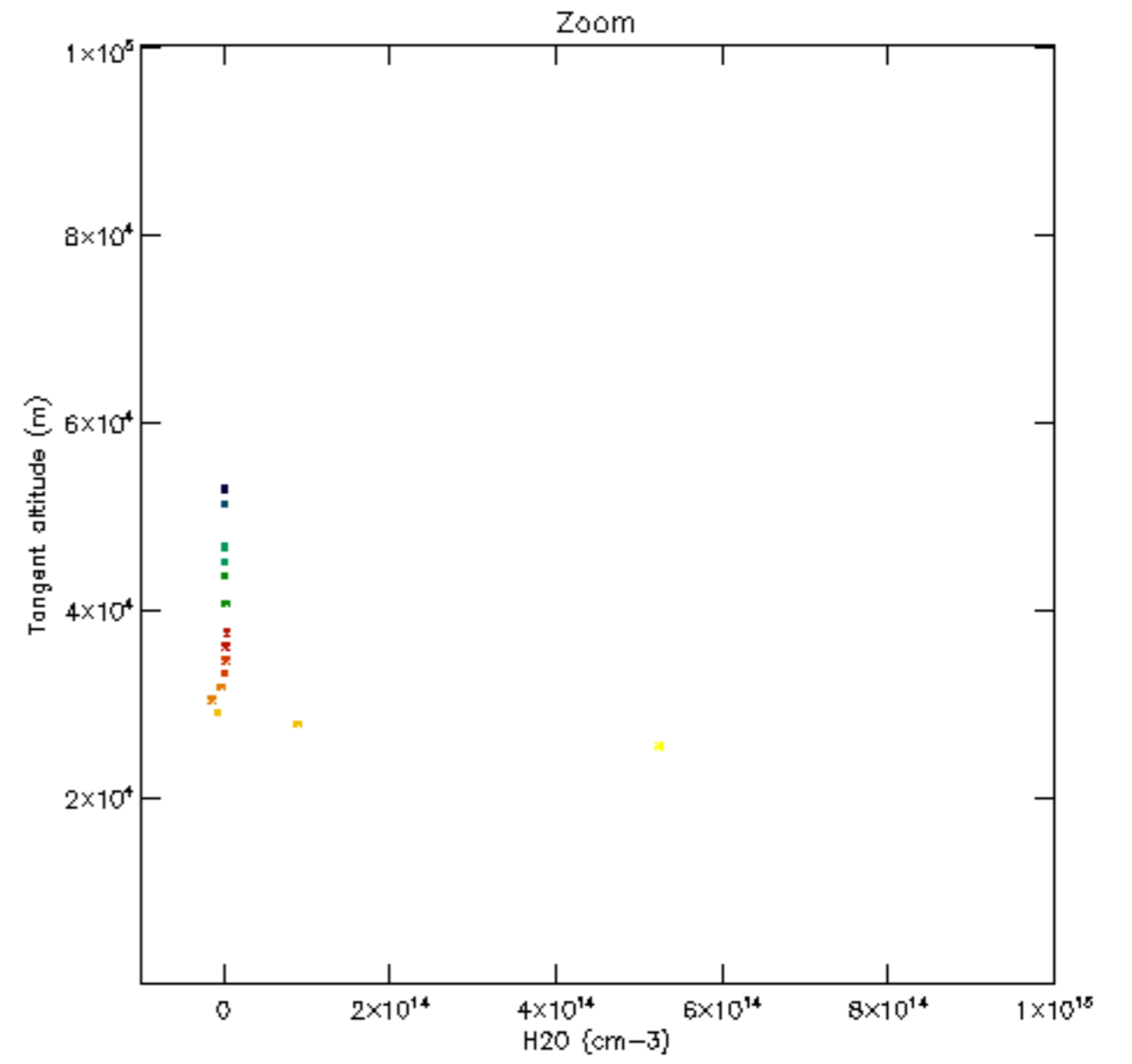
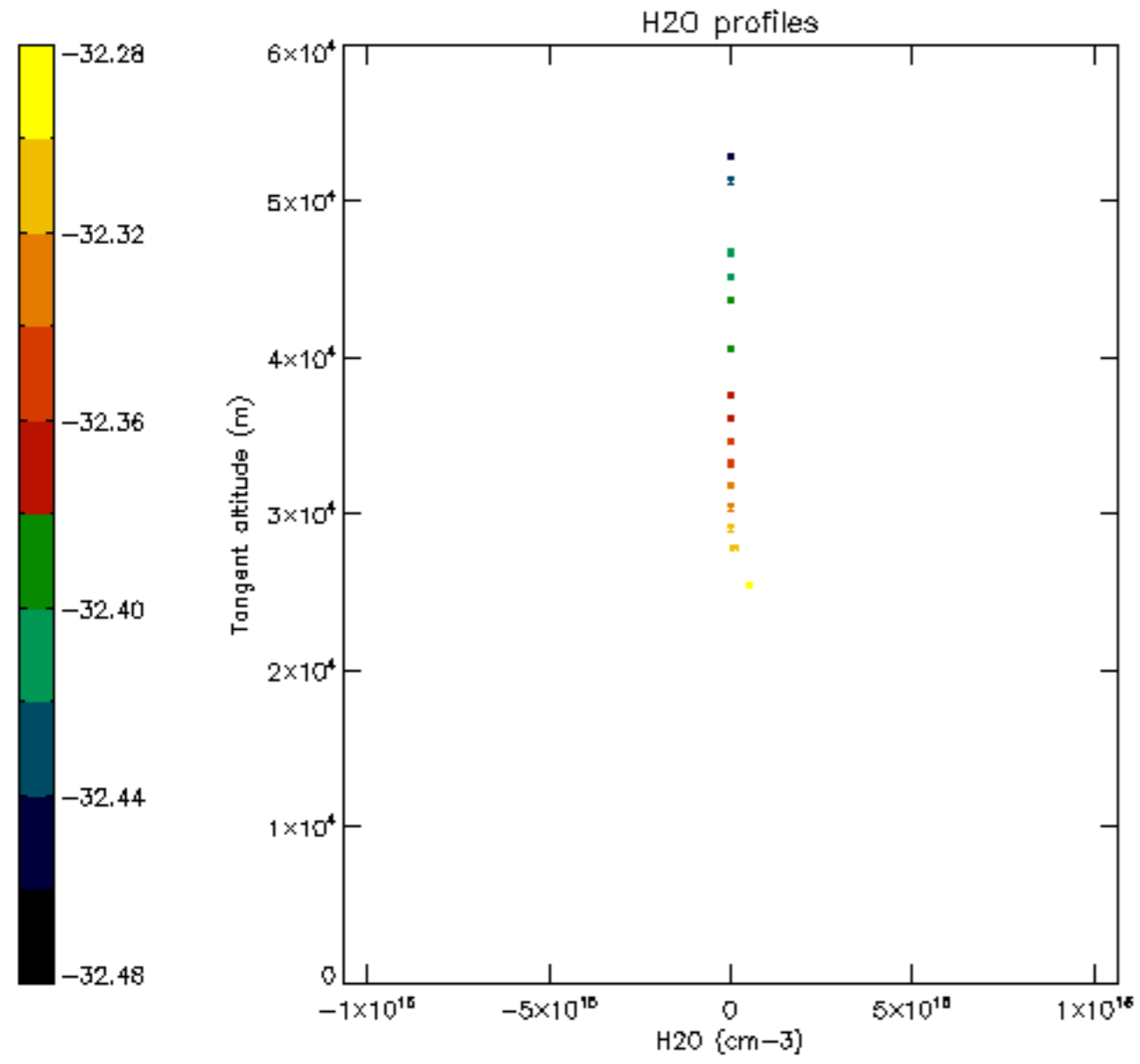


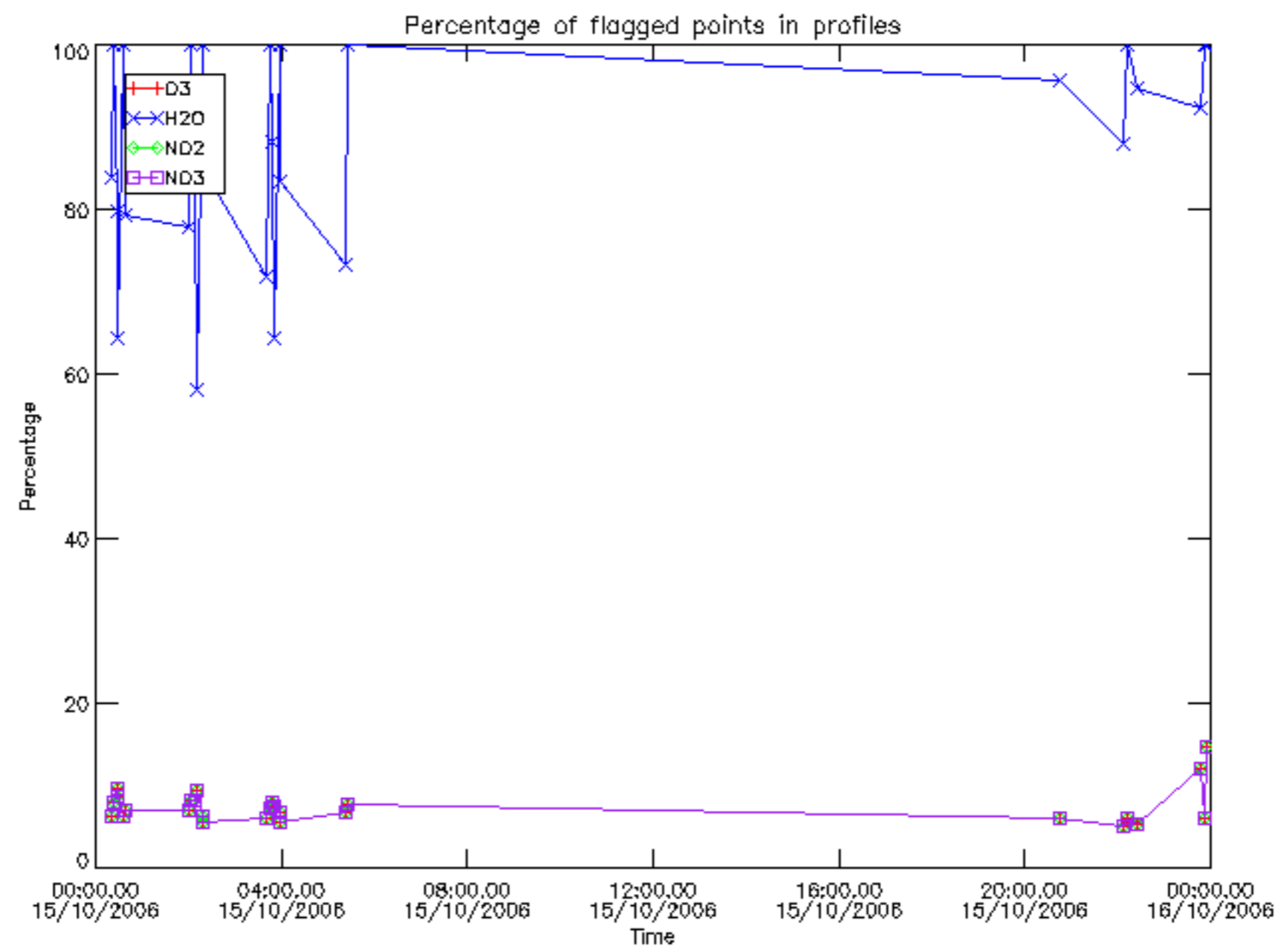




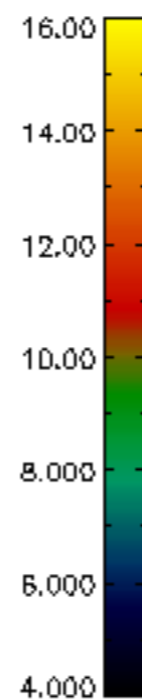
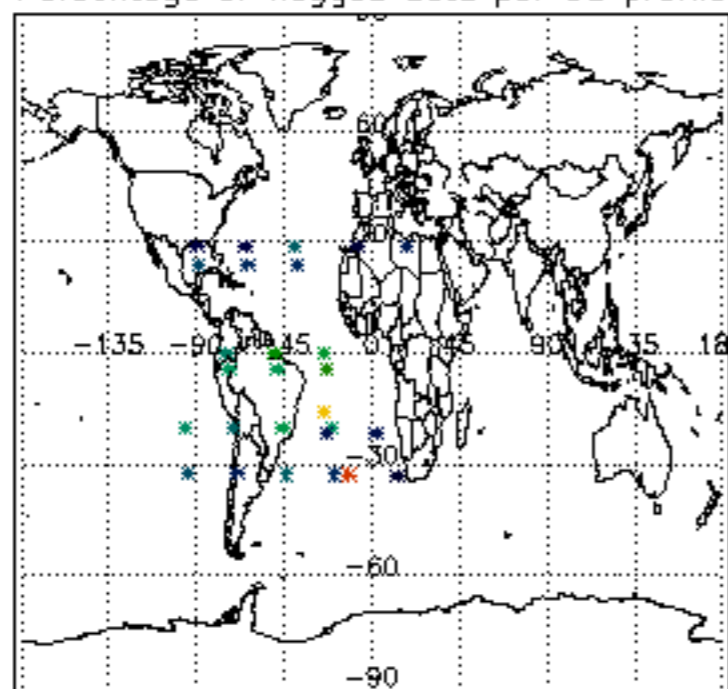




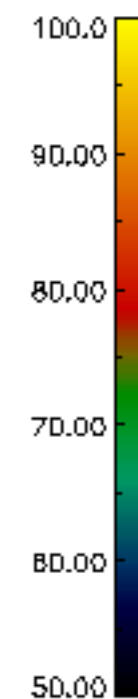
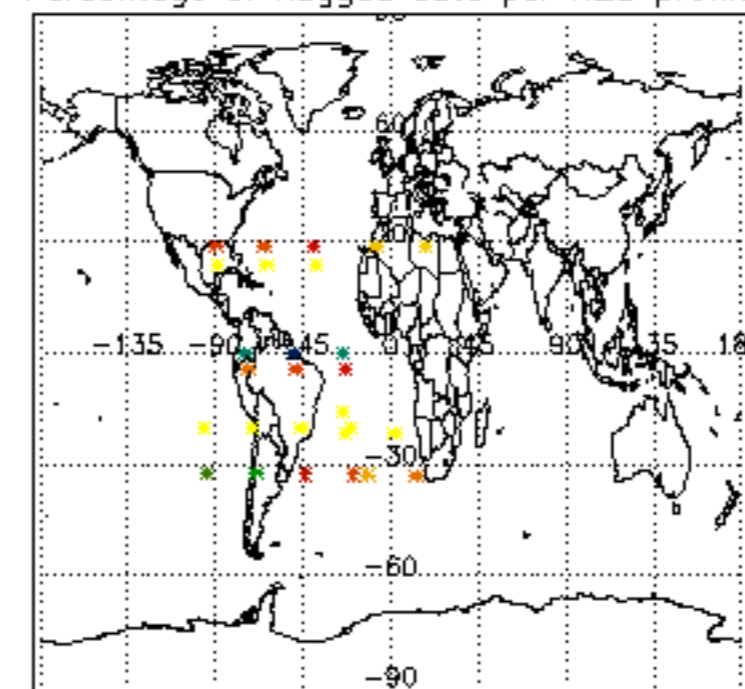




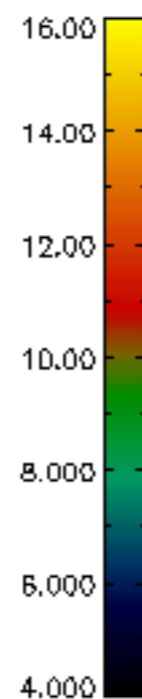
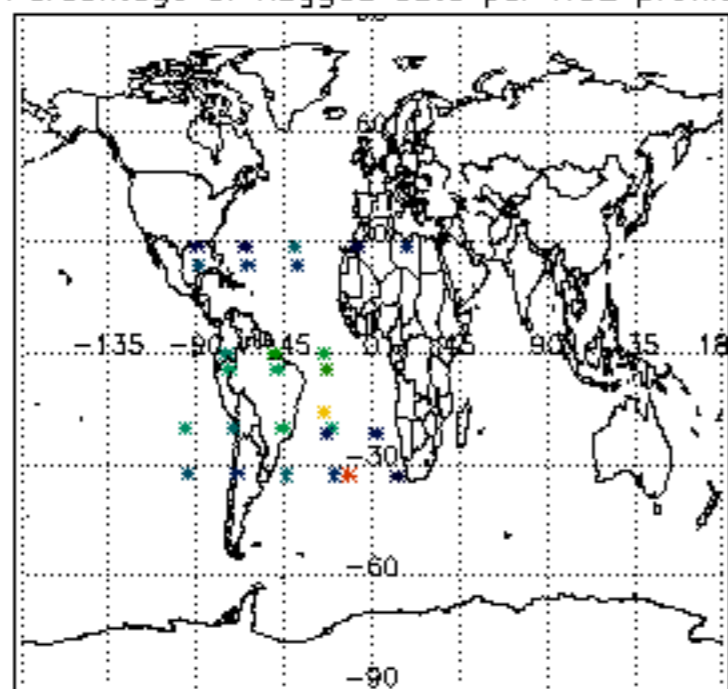
Percentage of flagged data per D3 profile



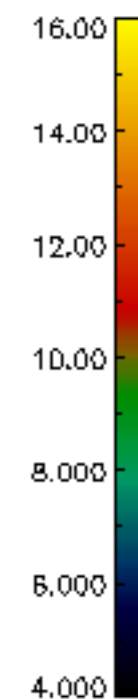
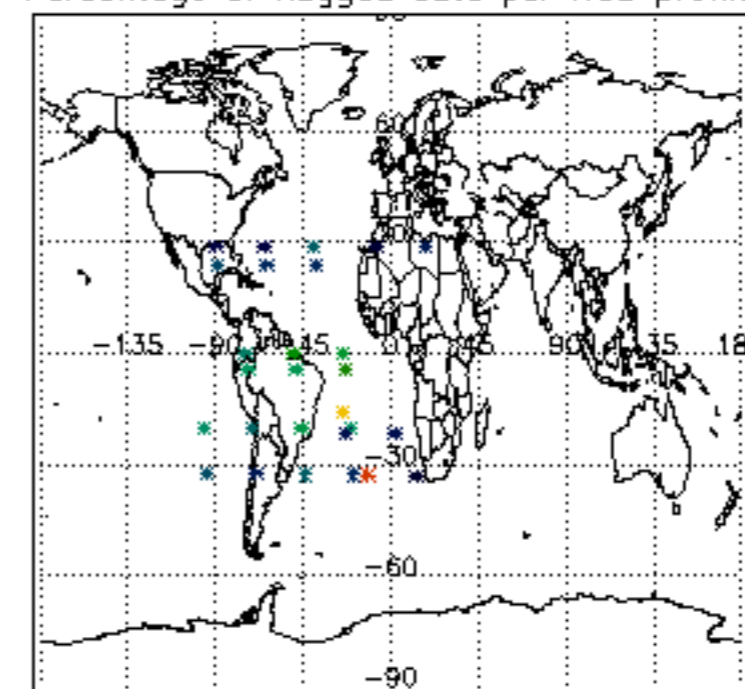
Percentage of flagged data per H2O profile

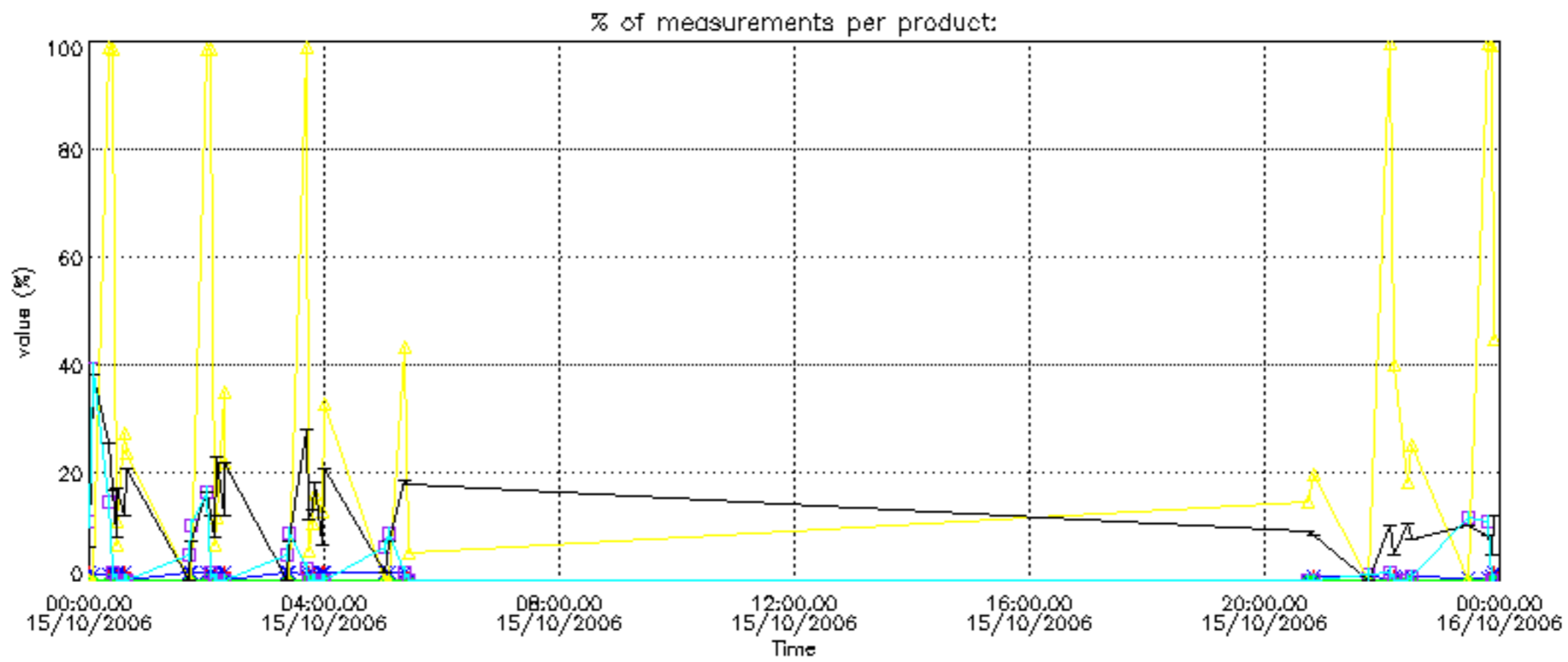


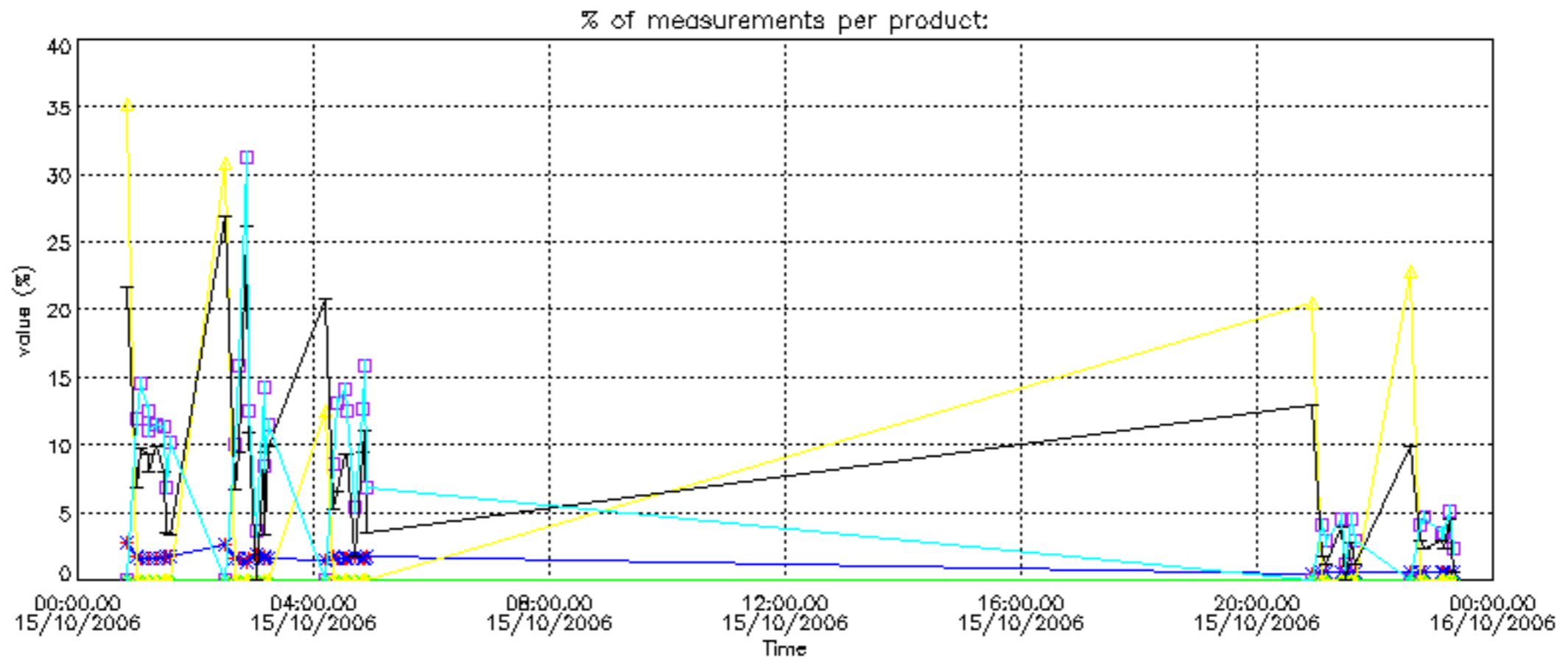
Percentage of flagged data per NO2 profile



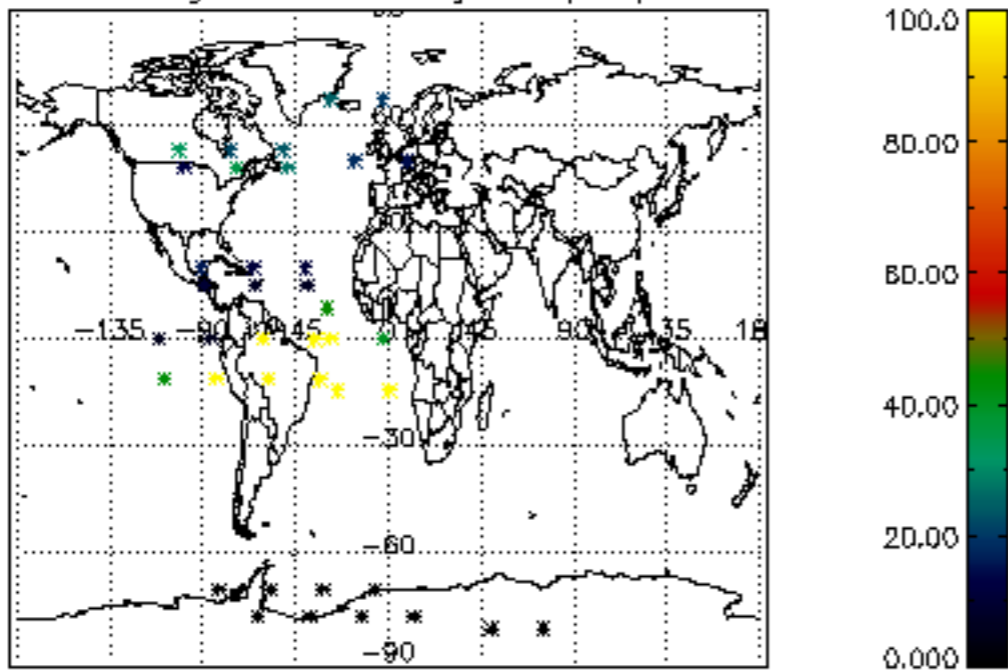
Percentage of flagged data per NO3 profile



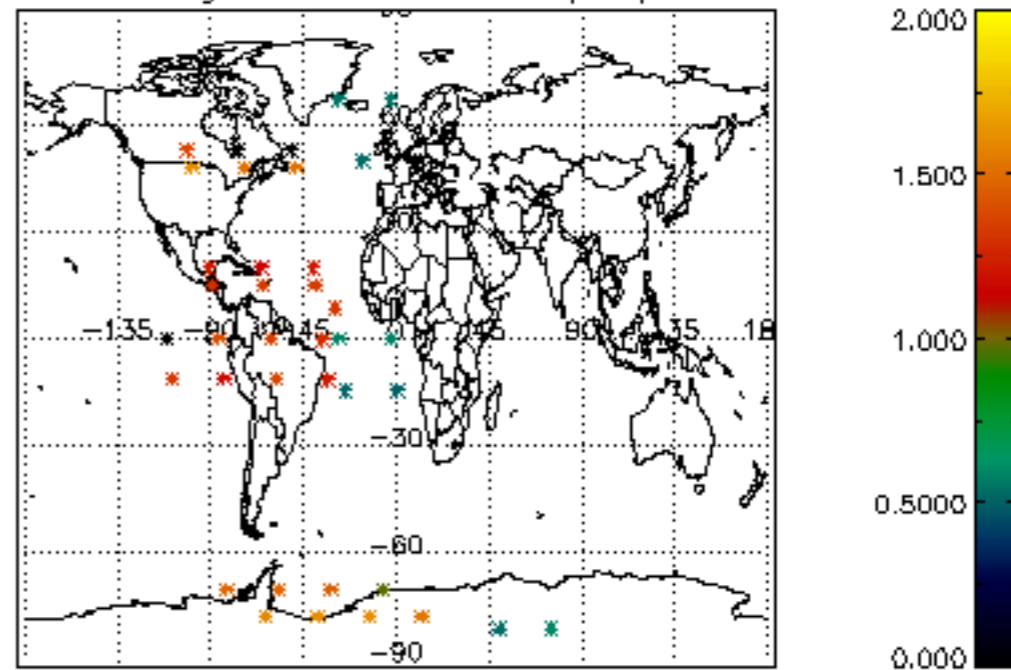




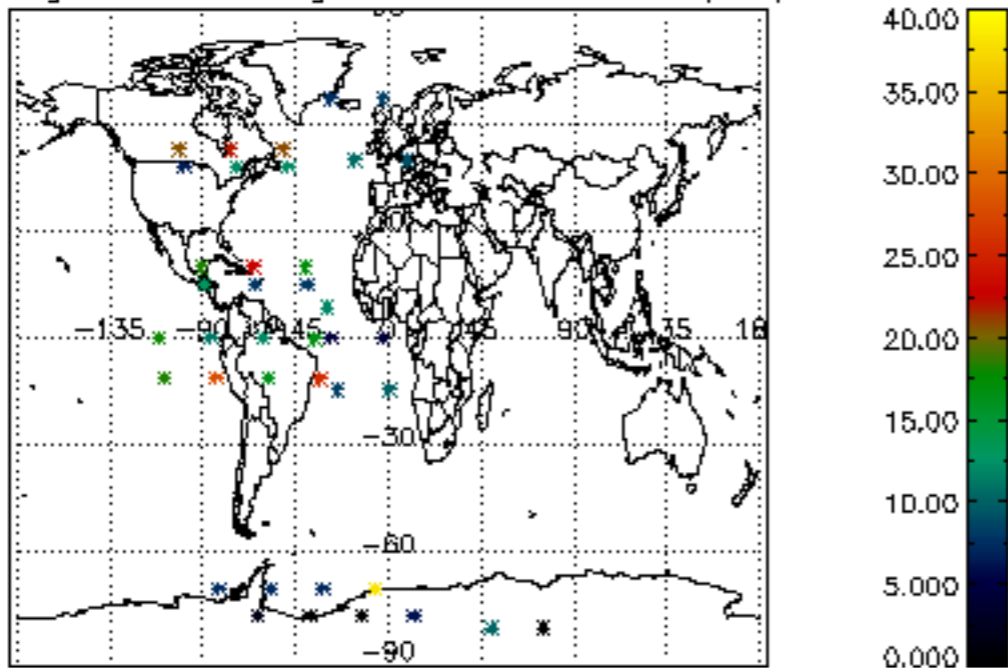
Percentage of cosmic ray hits per profile



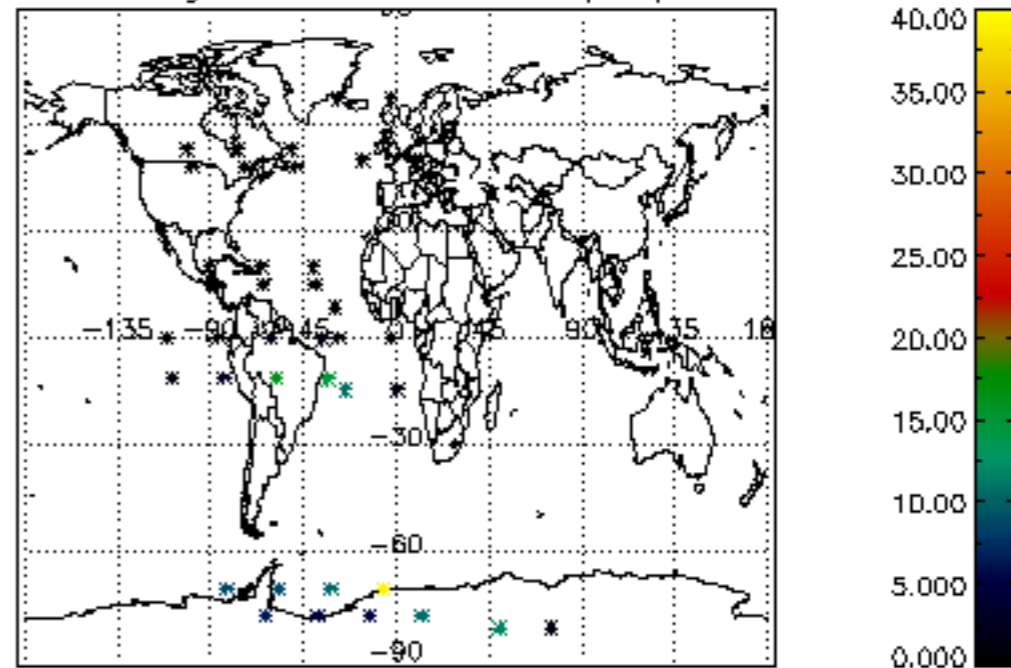
Percentage of datation errors per profile



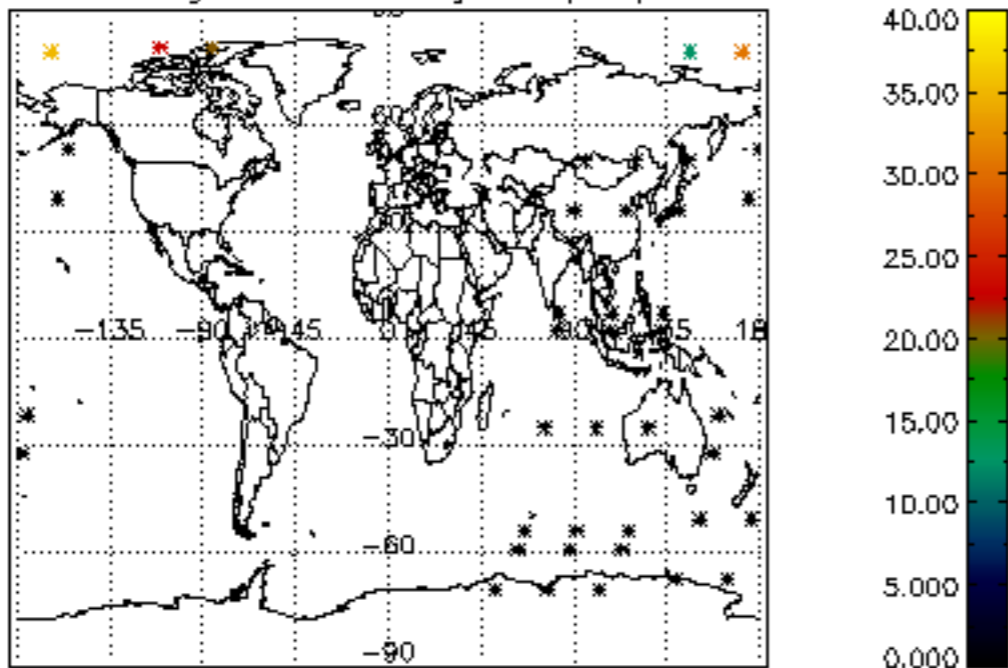
Percentage of star falling outside central band per profile



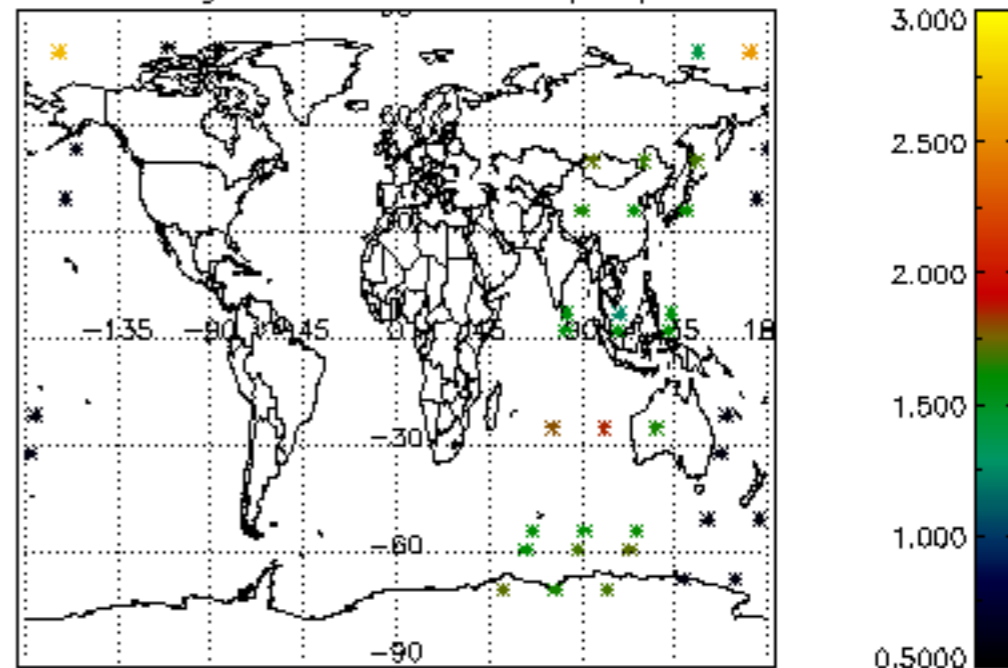
Percentage of saturation errors per profile



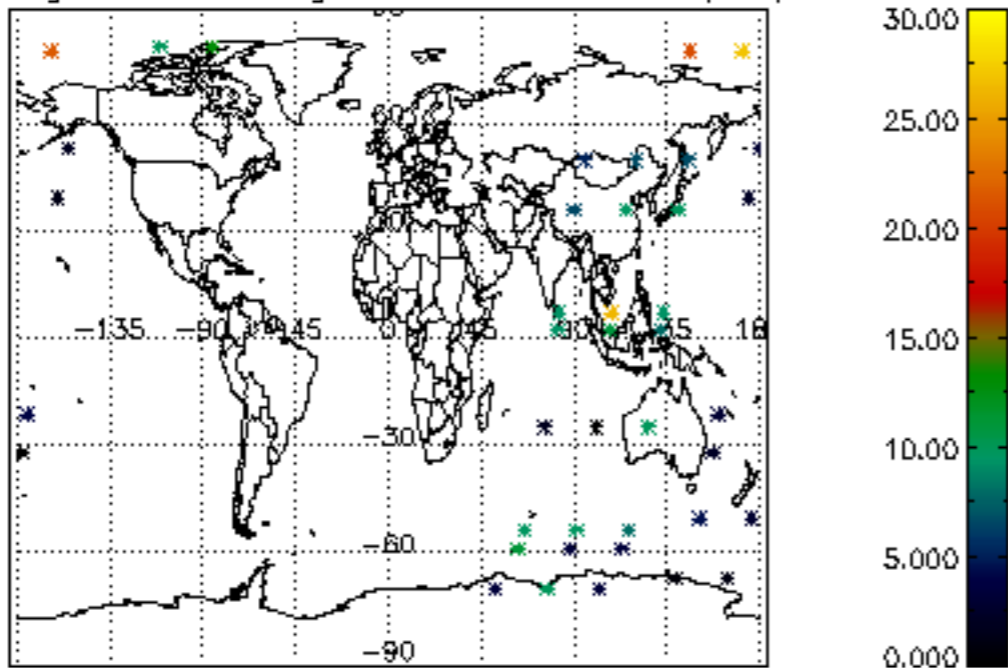
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

