

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	23APR2013 08:10:40
Data source version	GOMOS/6.01
Start time of products	20-10-2007 (20OCT2007 00:00:00)
Stop time of products	21-10-2007 (21OCT2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	50
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

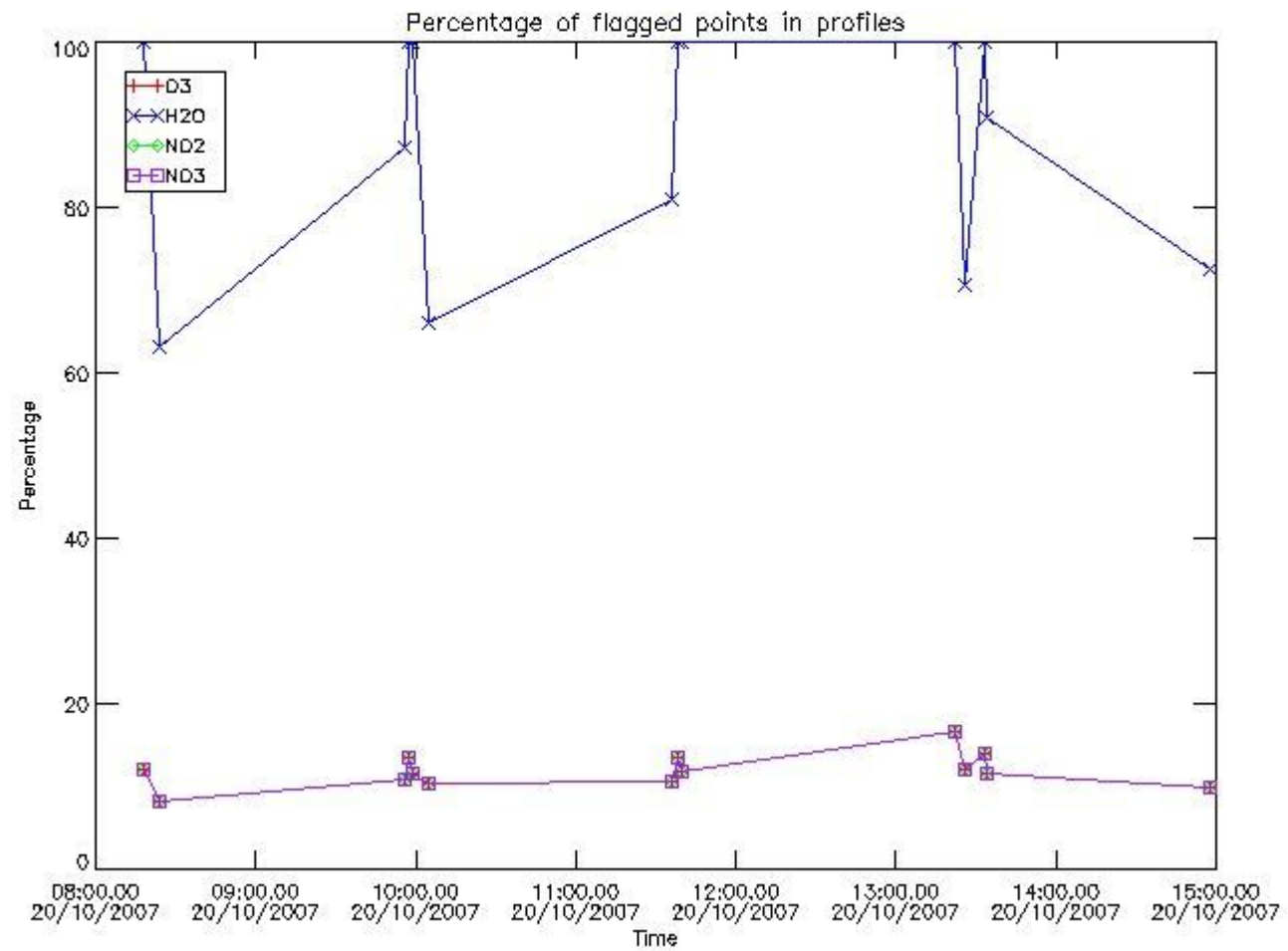
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20071020_081817_000000422062_00365_29477_6423.N1	20-OCT-2007 08:18:17	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	29477	No
2	GOM_NL__2PRFIN20071020_082356_000000622062_00365_29477_6424.N1	20-OCT-2007 08:23:56	Dark	61.500	2	Alp Car	-0.73600	7000.0	123	29477	No
3	GOM_NL__2PRFIN20071020_083523_000000442062_00365_29477_6425.N1	20-OCT-2007 08:35:23	Straylight	43.500	157	The1Eri	2.9060	9300.0	87	29477	No
4	GOM_NL__2PRFIN20071020_084406_000000432062_00365_29477_6426.N1	20-OCT-2007 08:44:06	Straylight	42.500	52	16Bet Cet	2.0370	4500.0	85	29477	No
5	GOM_NL__2PRFIN20071020_085734_000000372062_00365_29477_6427.N1	20-OCT-2007 08:57:34	Bright	36.500	58	21Alp And	2.0730	11000.	73	29477	No
6	GOM_NL__2PRFIN20071020_085949_000000412062_00365_29477_6428.N1	20-OCT-2007 08:59:49	Bright	40.500	53	43Bet And	2.0480	3300.0	81	29477	No
7	GOM_NL__2PRFIN20071020_090528_000000372062_00365_29477_6429.N1	20-OCT-2007 09:05:28	Bright	37.000	68	18Alp Cas	2.2250	4500.0	74	29477	No
8	GOM_NL__2PRFIN20071020_090647_000000362062_00365_29477_6430.N1	20-OCT-2007 09:06:47	Bright	36.000	76	27Gam Cas	2.3000	30000.	72	29477	No
9	GOM_NL__2PRFIN20071020_091436_000000362062_00365_29477_6431.N1	20-OCT-2007 09:14:36	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	29477	No
10	GOM_NL__2PRFIN20071020_092250_000000392062_00365_29477_6432.N1	20-OCT-2007 09:22:50	Bright	38.500	36	50Alp UMa	1.8000	6300.0	77	29477	No
11	GOM_NL__2PRFIN20071020_092425_000000352062_00365_29477_6433.N1	20-OCT-2007 09:24:25	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	29477	No
12	GOM_NL__2PRFIN20071020_092752_000000442062_00365_29477_6434.N1	20-OCT-2007 09:27:52	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	29477	No
13	GOM_NL__2PRFIN20071020_093542_000000412062_00365_29477_6435.N1	20-OCT-2007 09:35:42	Bright	40.500	51	41Gam1Leo	2.0100	4500.0	81	29477	No
14	GOM_NL__2PRFIN20071020_093822_000000432062_00365_29477_6436.N1	20-OCT-2007 09:38:22	Bright	43.000	22	32Alp Leo	1.3600	15200.	86	29477	No
15	GOM_NL__2PRFIN20071020_095534_000000472062_00365_29477_6437.N1	20-OCT-2007 09:55:34	Dark	47.000	65	Lam Vel	2.2040	4400.0	94	29477	No
16	GOM_NL__2PRFIN20071020_095729_000000382062_00365_29477_6438.N1	20-OCT-2007 09:57:29	Dark	38.000	91	Kap Vel	2.4900	26000.	76	29477	No
17	GOM_NL__2PRFIN20071020_095853_000000452062_00366_29478_6434.N1	20-OCT-2007 09:58:53	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	29478	No
18	GOM_NL__2PRFIN20071020_100432_000000492062_00366_29478_6435.N1	20-OCT-2007 10:04:32	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	29478	No
19	GOM_NL__2PRFIN20071020_101600_000000432062_00366_29478_6436.N1	20-OCT-2007 10:16:00	Straylight	43.000	157	The1Eri	2.9060	9300.0	86	29478	No
20	GOM_NL__2PRFIN20071020_102442_000000412062_00366_29478_6437.N1	20-OCT-2007 10:24:42	Straylight	41.000	52	16Bet Cet	2.0370	4500.0	82	29478	No
21	GOM_NL__2PRFIN20071020_103810_000000362062_00366_29478_6438.N1	20-OCT-2007 10:38:10	Bright	35.500	58	21Alp And	2.0730	11000.	71	29478	No
22	GOM_NL__2PRFIN20071020_104024_000000392062_00366_29478_6439.N1	20-OCT-2007 10:40:24	Bright	38.500	53	43Bet And	2.0480	3300.0	77	29478	No
23	GOM_NL__2PRFIN20071020_104603_000000382062_00366_29478_6440.N1	20-OCT-2007 10:46:03	Bright	38.000	68	18Alp Cas	2.2250	4500.0	76	29478	No
24	GOM_NL__2PRFIN20071020_104723_000000382062_00366_29478_6441.N1	20-OCT-2007 10:47:23	Bright	37.500	76	27Gam Cas	2.3000	30000.	75	29478	No
25	GOM_NL__2PRFIN20071020_105512_000000372062_00366_29478_6442.N1	20-OCT-2007 10:55:12	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	29478	No
26	GOM_NL__2PRFIN20071020_110326_000000342062_00366_29478_6443.N1	20-OCT-2007 11:03:26	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	29478	No
27	GOM_NL__2PRFIN20071020_110501_000000372062_00366_29478_6444.N1	20-OCT-2007 11:05:01	Bright	36.500	82	48Bet UMa	2.3650	10600.	73	29478	No
28	GOM_NL__2PRFIN20071020_110828_000000362062_00366_29478_6445.N1	20-OCT-2007 11:08:28	Bright	35.500	174	52Psi UMa	3.0040	4400.0	71	29478	No
29	GOM_NL__2PRFIN20071020_111618_000000582062_00366_29478_6446.N1	20-OCT-2007 11:16:18	Bright	58.000	51	41Gam1Leo	2.0100	4500.0	116	29478	No
30	GOM_NL__2PRFIN20071020_111859_000000412062_00366_29478_6447.N1	20-OCT-2007 11:18:59	Bright	40.500	22	32Alp Leo	1.3600	15200.	81	29478	No
31	GOM_NL__2PRFIN20071020_113611_000000482062_00366_29478_6448.N1	20-OCT-2007 11:36:11	Dark	48.000	65	Lam Vel	2.2040	4400.0	96	29478	No
32	GOM_NL__2PRFIN20071020_113806_000000382062_00366_29478_6449.N1	20-OCT-2007 11:38:06	Dark	38.000	91	Kap Vel	2.4900	26000.	76	29478	No
33	GOM_NL__2PRFIN20071020_113930_000000432062_00367_29479_6449.N1	20-OCT-2007 11:39:30	Dark	43.000	34	Gam2Vel	1.7930	23000.	86	29479	No
34	GOM_NL__2PRFIN20071020_132156_000000372062_00368_29480_6463.N1	20-OCT-2007 13:21:56	Dark	37.000	29	Bet Car	1.6720	10200.	74	29480	No
35	GOM_NL__2PRFIN20071020_132546_000000472062_00368_29480_6464.N1	20-OCT-2007 13:25:46	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	29480	No
36	GOM_NL__2PRFIN20071020_133259_000000372062_00368_29480_6465.N1	20-OCT-2007 13:32:59	Dark	36.500	143	Alp Hyi	2.8570	7200.0	73	29480	No
37	GOM_NL__2PRFIN20071020_133425_000000452062_00368_29480_6466.N1	20-OCT-2007 13:34:25	Dark	44.500	9	Alp Eri	0.45300	24000.	89	29480	No
38	GOM_NL__2PRFIN20071020_133712_000000452062_00368_29480_6467.N1	20-OCT-2007 13:37:12	Straylight	45.000	157	The1Eri	2.9060	9300.0	90	29480	No
39	GOM_NL__2PRFIN20071020_134554_000000432062_00368_29480_6468.N1	20-OCT-2007 13:45:54	Straylight	43.000	52	16Bet Cet	2.0370	4500.0	86	29480	No
40	GOM_NL__2PRFIN20071020_135527_000000352062_00368_29480_6469.N1	20-OCT-2007 13:55:27	Bright	35.000	140	88Gam Peg	2.8340	26000.	70	29480	No
41	GOM_NL__2PRFIN20071020_135922_000000362062_00368_29480_6470.N1	20-OCT-2007 13:59:22	Bright	36.000	58	21Alp And	2.0730	11000.	72	29480	No
42	GOM_NL__2PRFIN20071020_140135_000000372062_00368_29480_6471.N1	20-OCT-2007 14:01:35	Bright	36.500	53	43Bet And	2.0480	3300.0	73	29480	No

43	GOM_NL__2PRFIN20071020_140715_000000392062_00368_29480_6472.N1	20-OCT-2007 14:07:15	Bright	39.000	68	18Alp Cas	2.2250	4500.0	78	29480	No
44	GOM_NL__2PRFIN20071020_140834_000000362062_00368_29480_6473.N1	20-OCT-2007 14:08:34	Bright	36.000	76	27Gam Cas	2.3000	30000.	72	29480	No
45	GOM_NL__2PRFIN20071020_141623_000000342062_00368_29480_6474.N1	20-OCT-2007 14:16:23	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	29480	No
46	GOM_NL__2PRFIN20071020_142438_000000372062_00368_29480_6475.N1	20-OCT-2007 14:24:38	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	29480	No
47	GOM_NL__2PRFIN20071020_142612_000000362062_00368_29480_6476.N1	20-OCT-2007 14:26:12	Bright	36.000	82	48Bet UMa	2.3650	10600.	72	29480	No
48	GOM_NL__2PRFIN20071020_142940_000000362062_00368_29480_6477.N1	20-OCT-2007 14:29:40	Bright	35.500	174	52Psi UMa	3.0040	4400.0	71	29480	No
49	GOM_NL__2PRFIN20071020_143731_000000402062_00368_29480_6478.N1	20-OCT-2007 14:37:31	Bright	39.500	51	41Gam1Leo	2.0100	4500.0	79	29480	No
50	GOM_NL__2PRFIN20071020_145724_000000522062_00368_29480_6479.N1	20-OCT-2007 14:57:24	Dark	51.500	65	Lam Vel	2.2040	4400.0	103	29480	No

3. Quality information per product

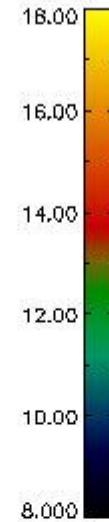
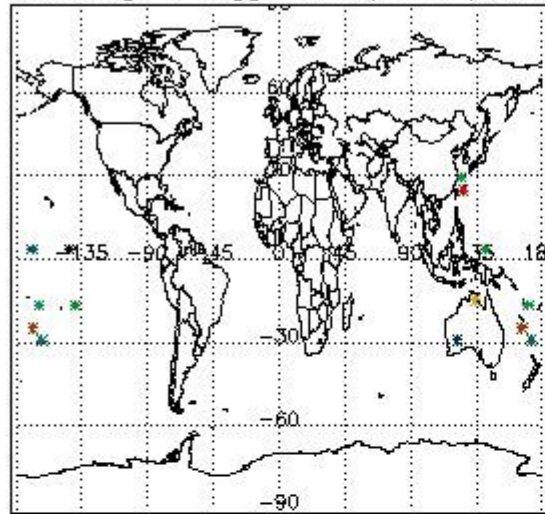
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

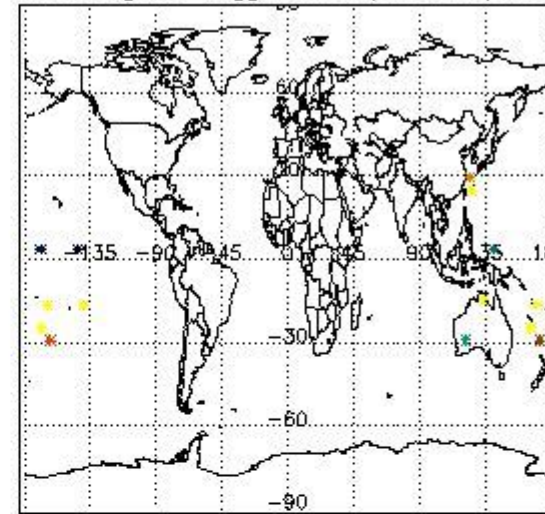


3.2 Plot quality information per product (world map)

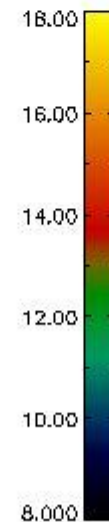
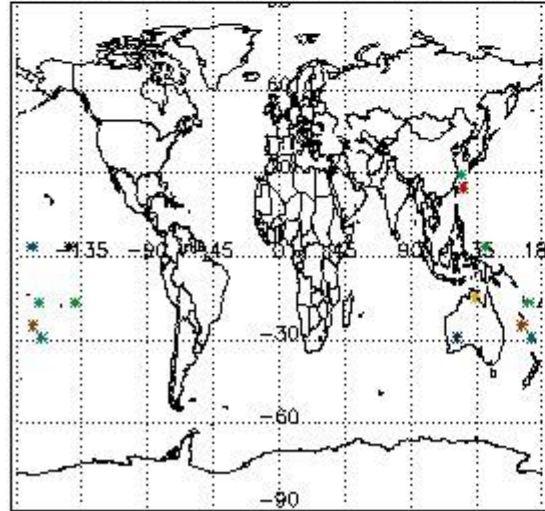
Percentage of flagged data per O3 profile



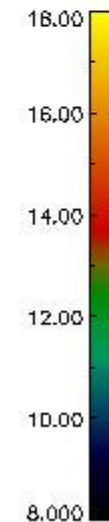
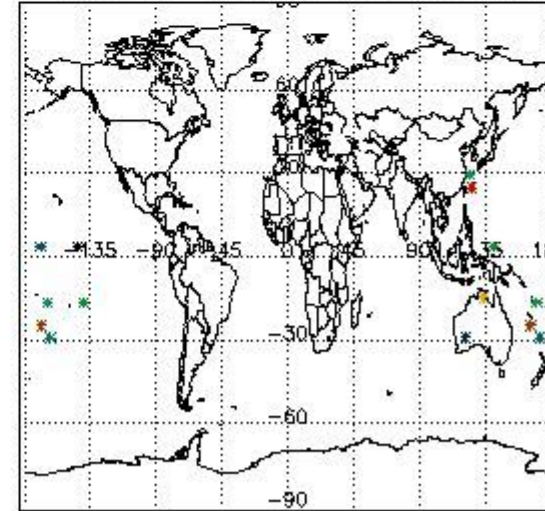
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

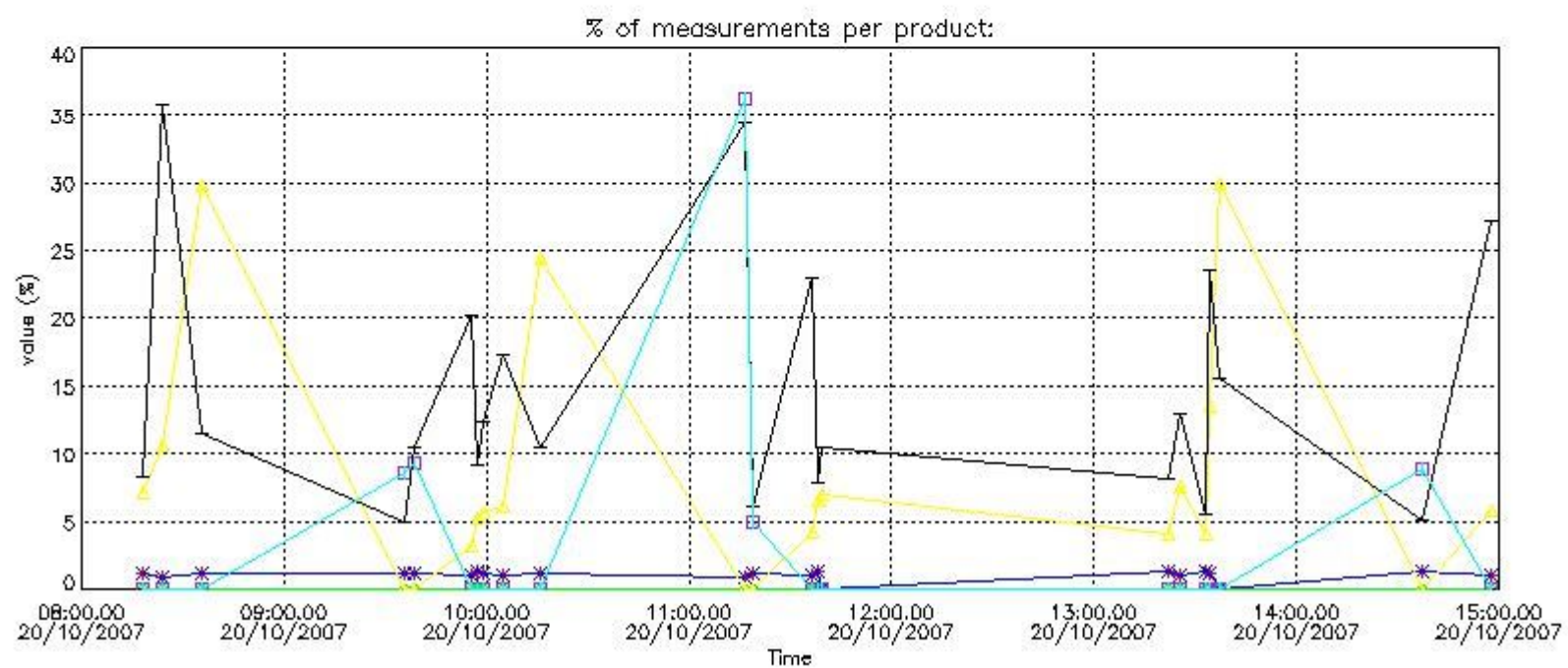


4. Level 1 quality information per product

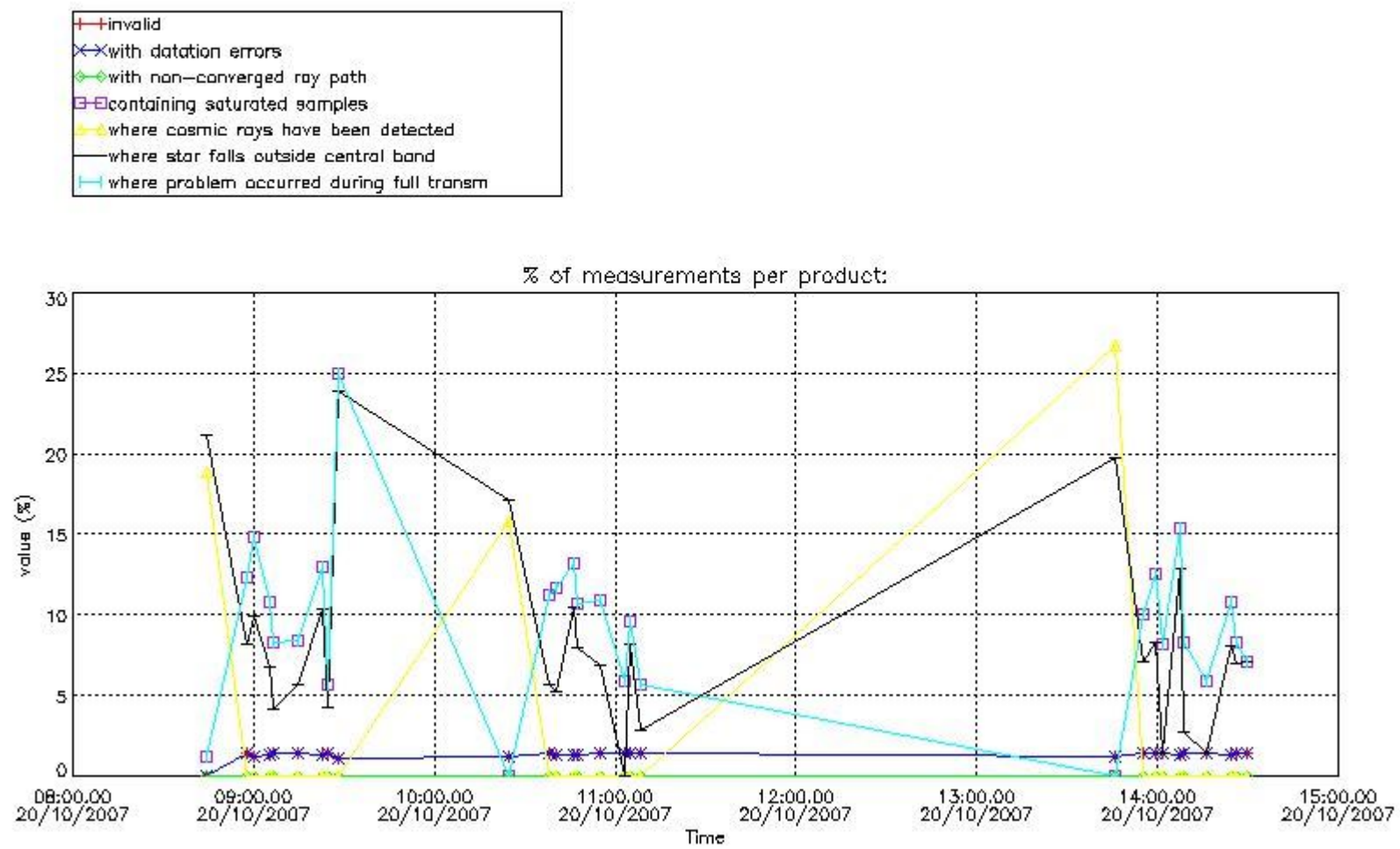
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



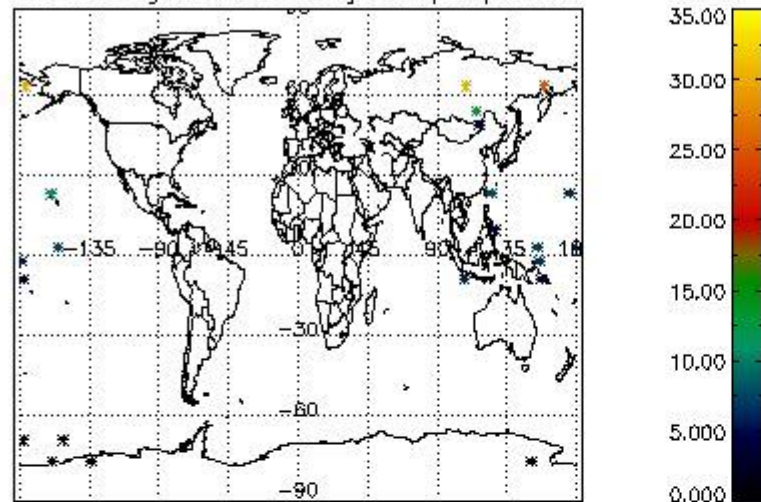
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



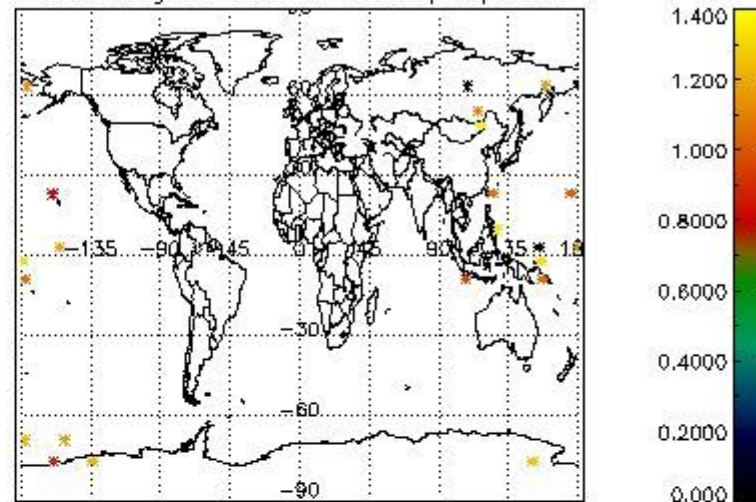
4.2 Plot quality information per product coming from level 1b processing (world map)

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

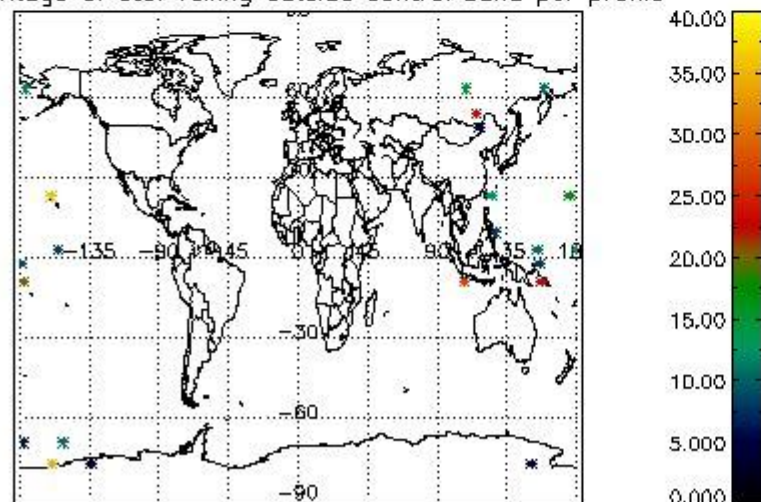
Percentage of cosmic ray hits per profile



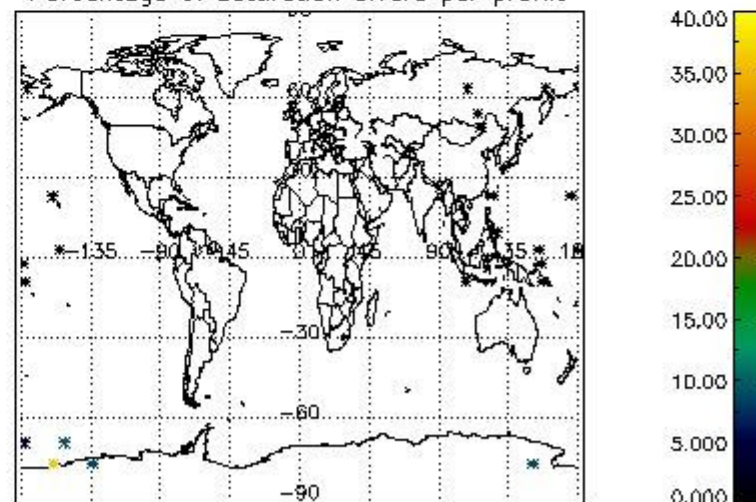
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

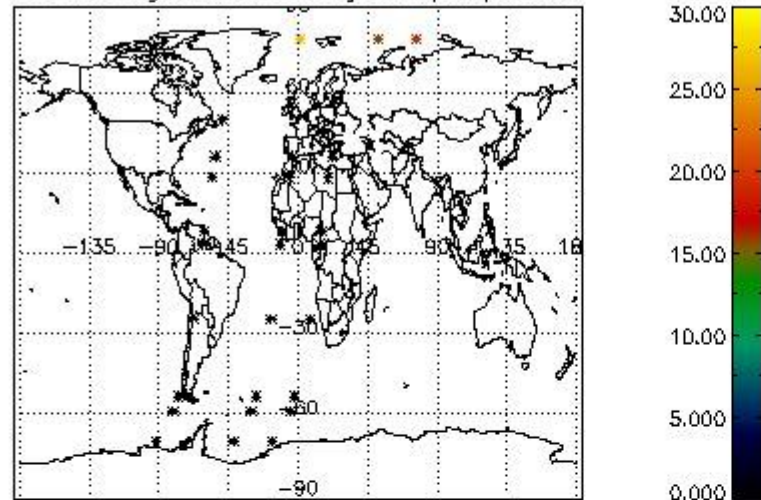


Percentage of saturation errors per profile

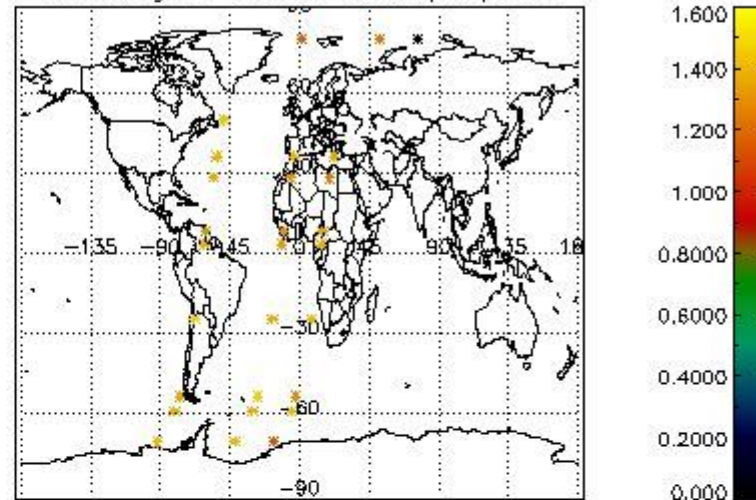


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

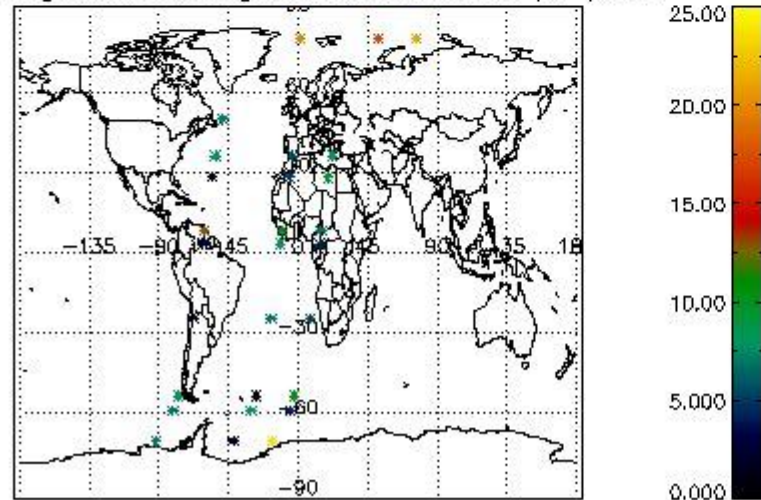
Percentage of cosmic ray hits per profile



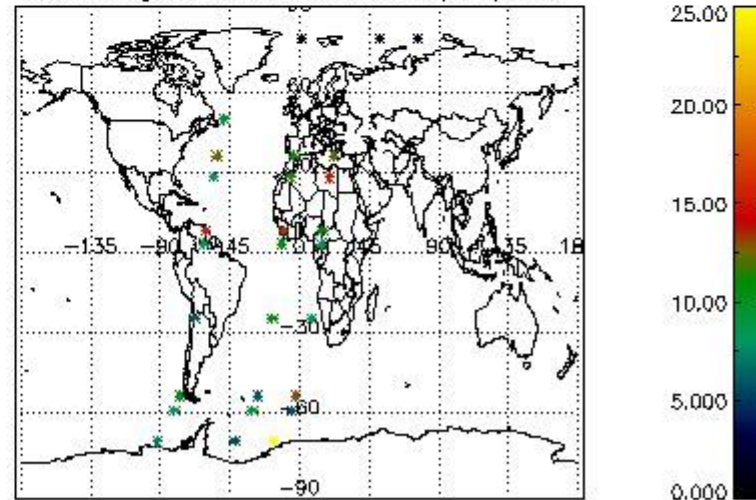
Percentage of datation errors per profile



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

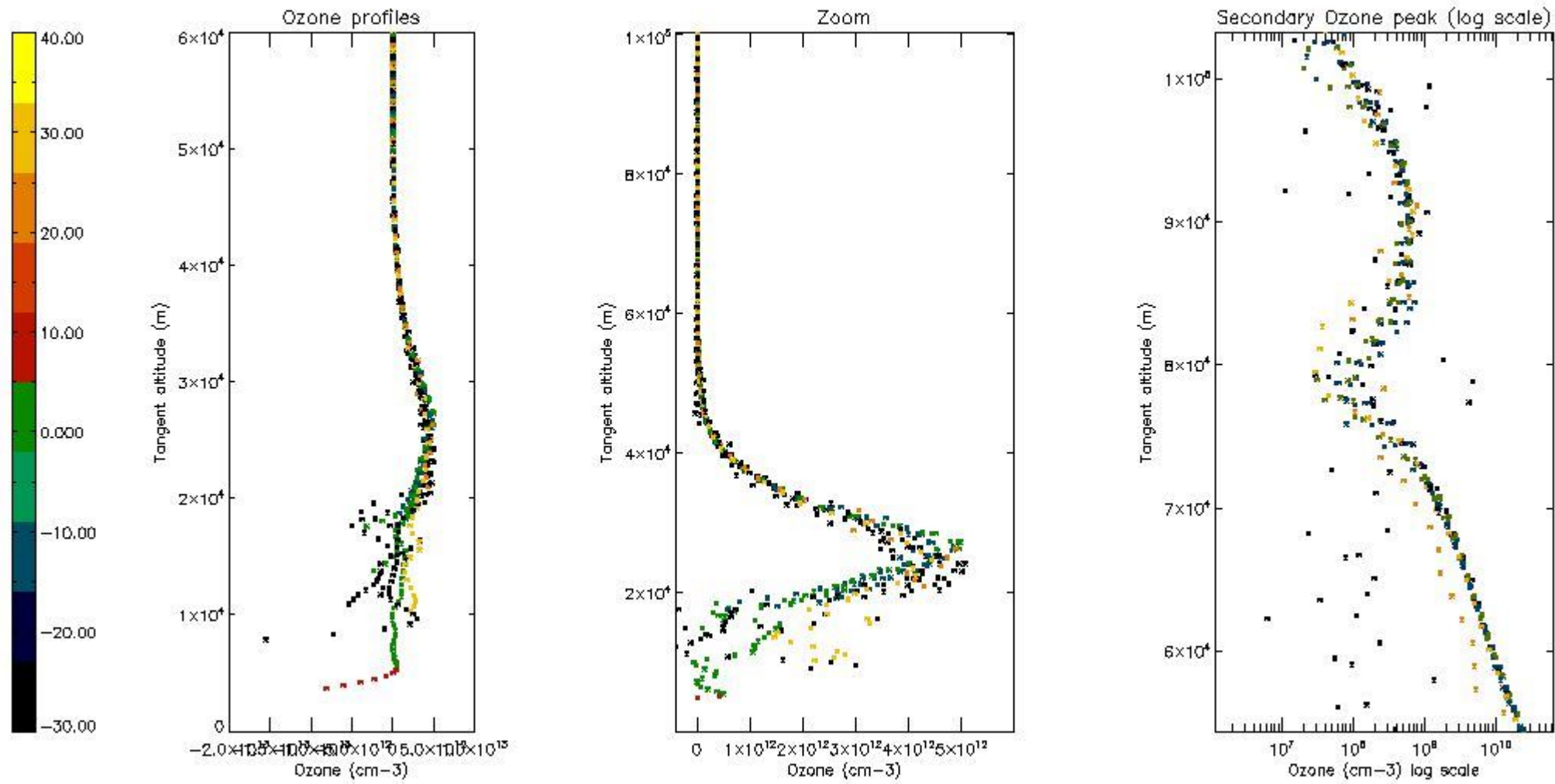
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	20

STD < 10	16
STD < 5	12

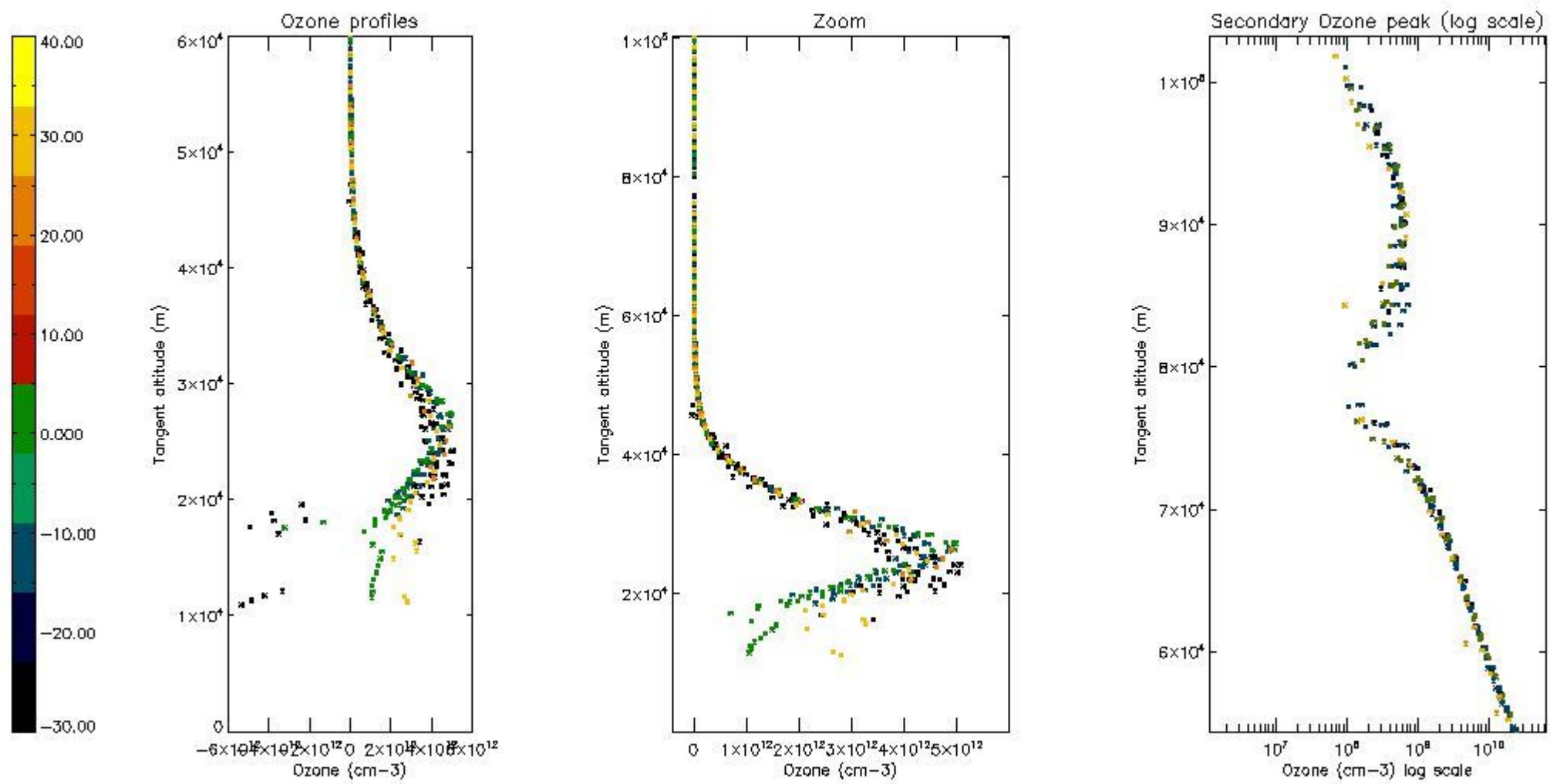
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



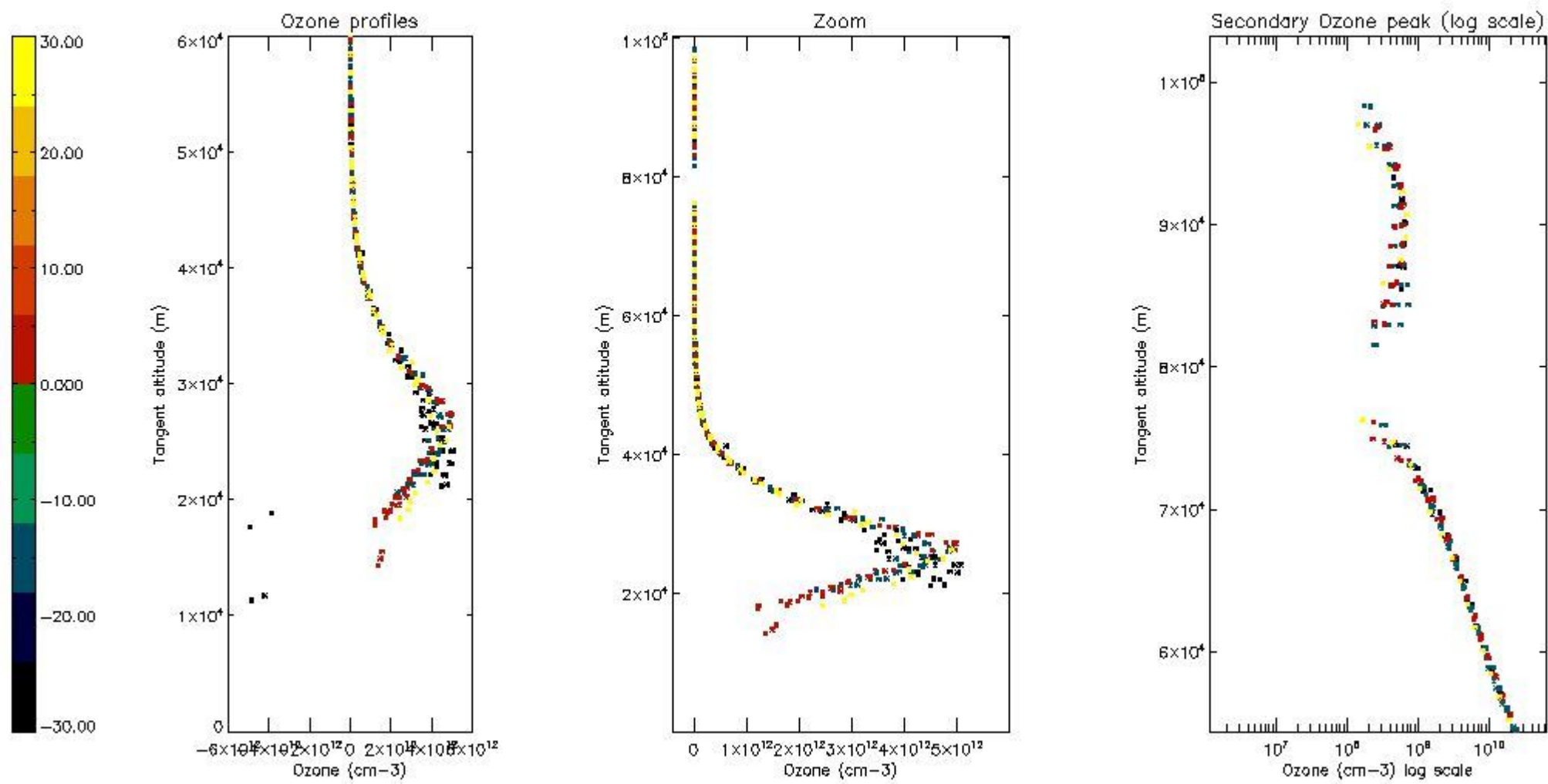
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



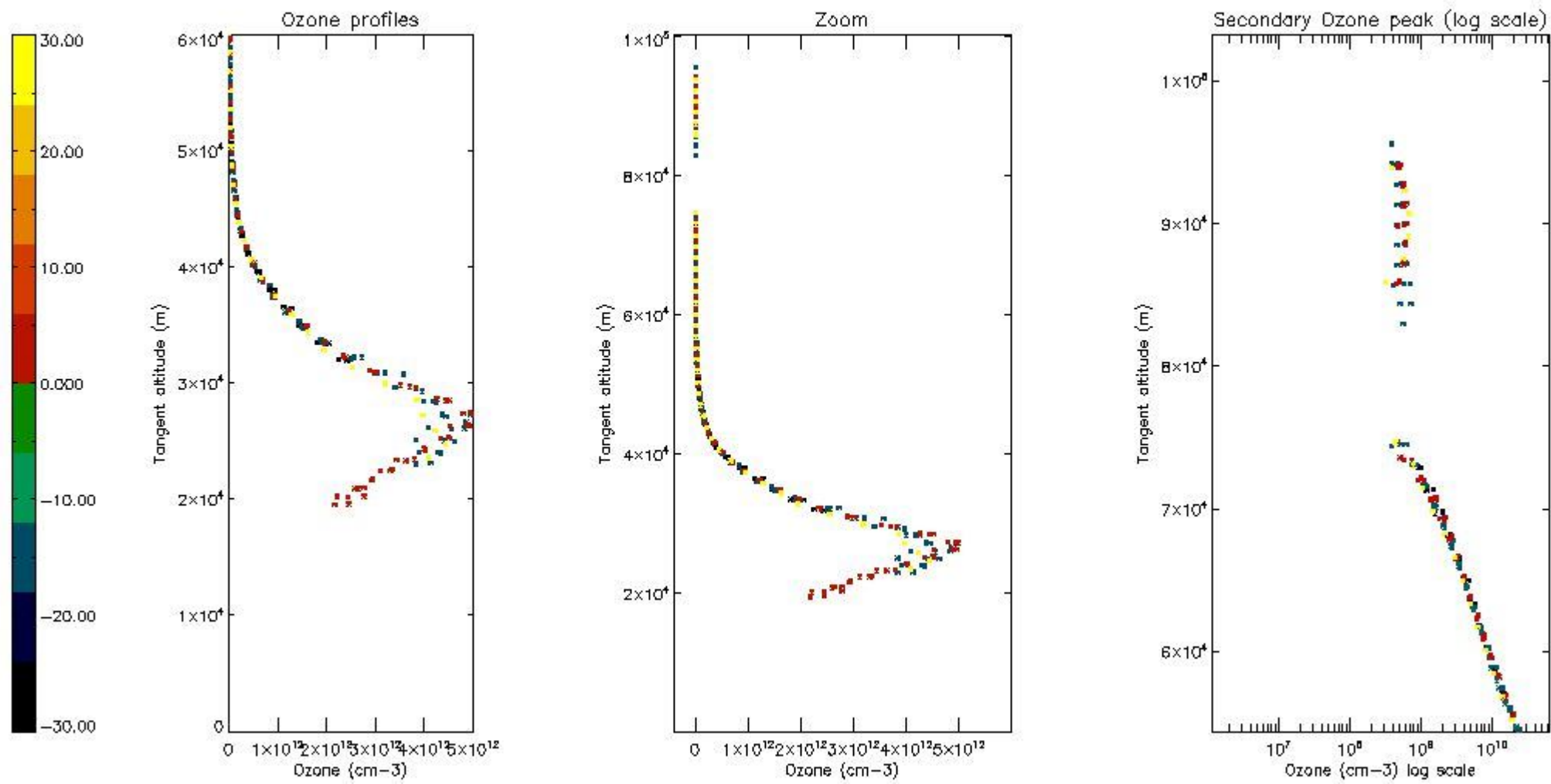
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



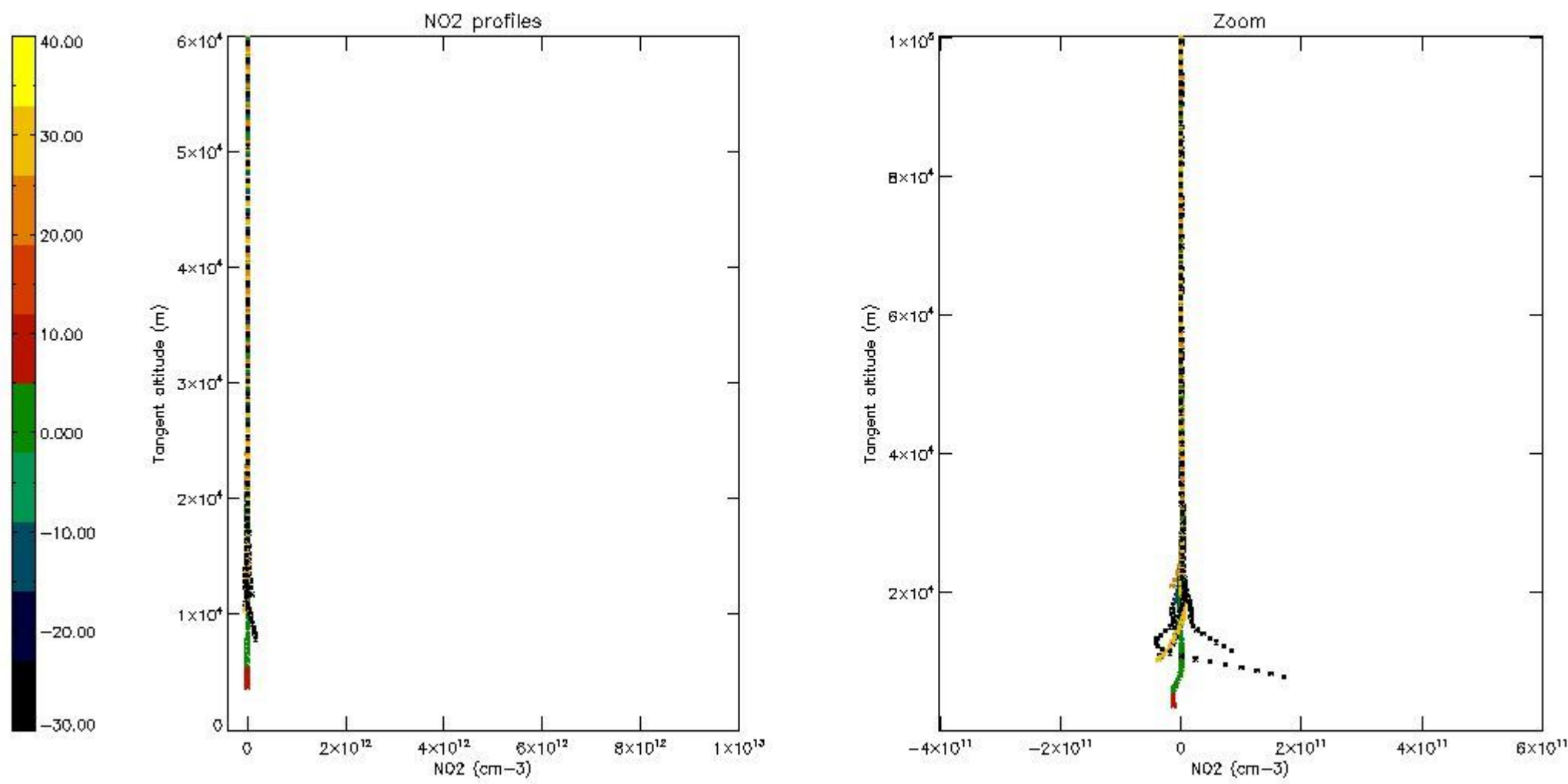
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



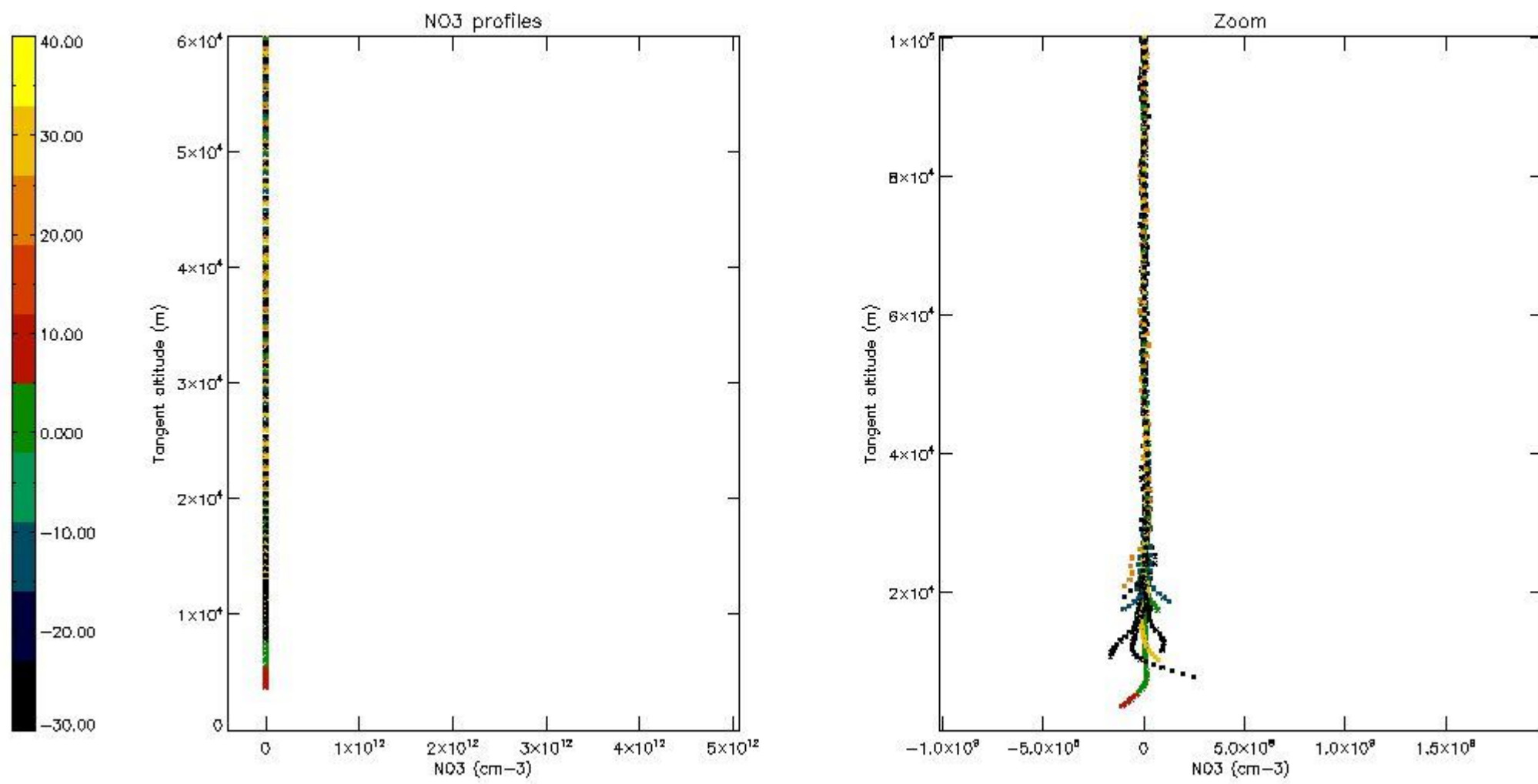
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



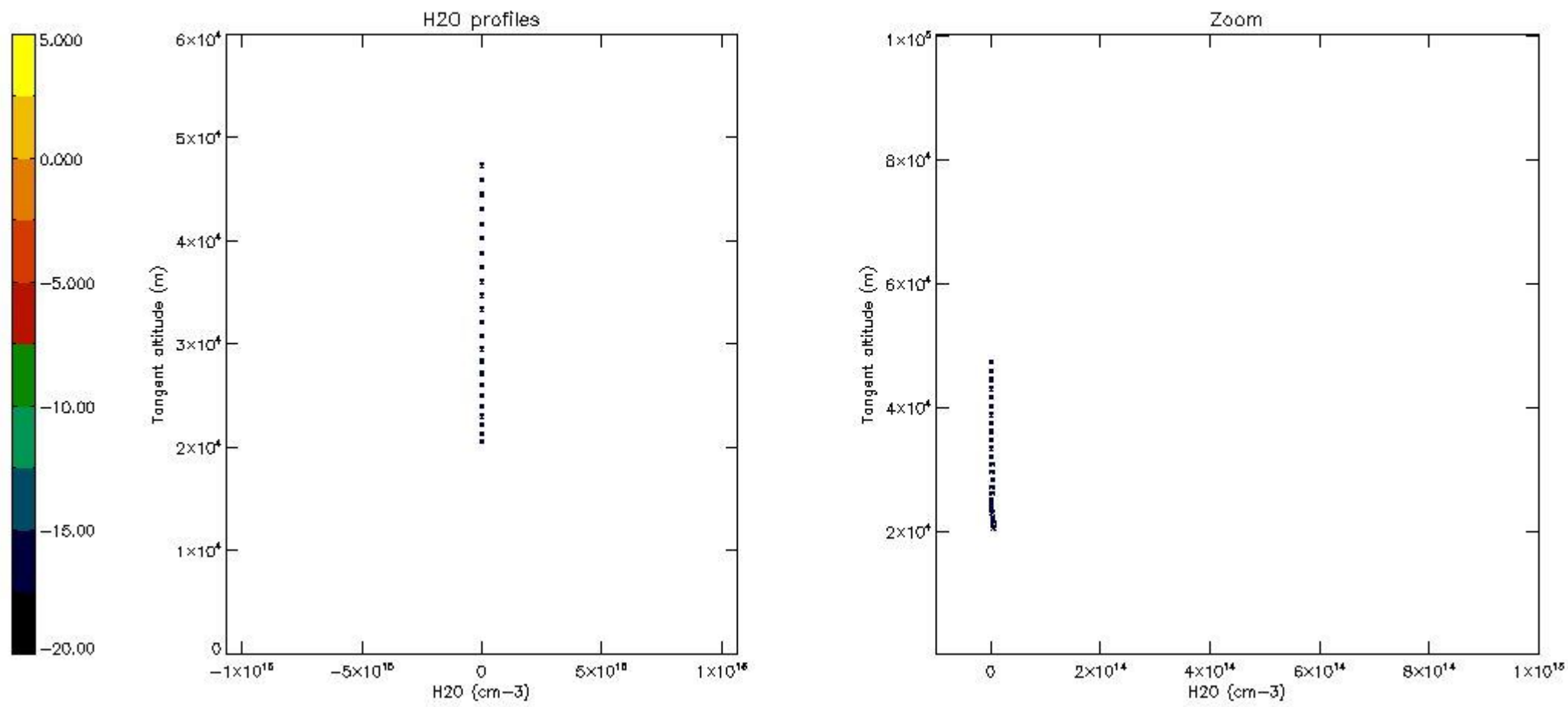
5.7 Plot NO3 profiles for all STD (dark without errors)

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	20-OCT-2007 08: 18: 17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-OCT-2007 08: 18: 17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-OCT-2007 08: 18: 17

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	23APR2013 08:10:40
Data source version	GOMOS/6.01
Start time of products	20-10-2007 (20OCT2007 00:00:00)
Stop time of products	21-10-2007 (21OCT2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	50
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

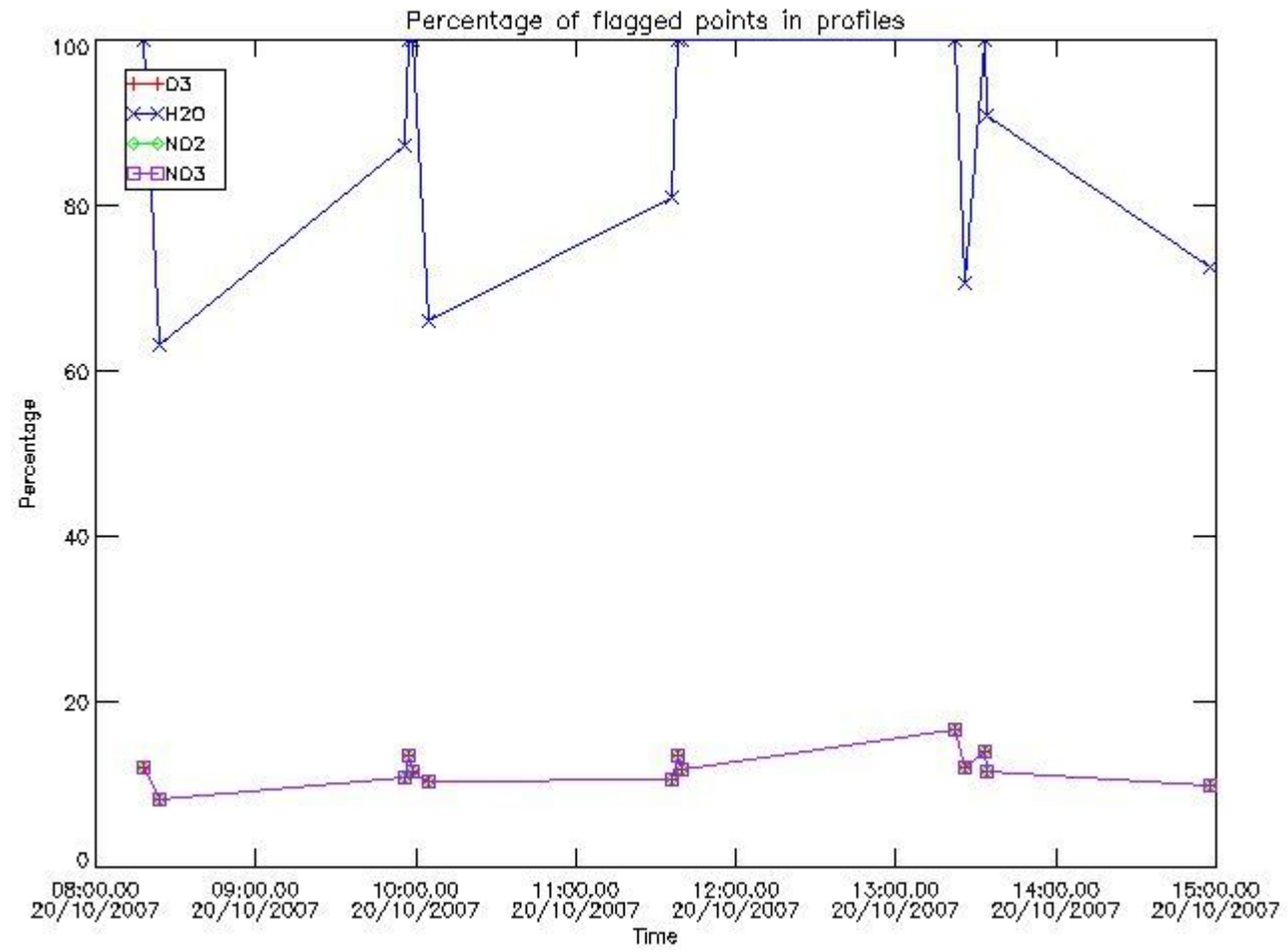
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20071020_081817_000000422062_00365_29477_6423.N1	20-OCT-2007 08:18:17	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	29477	No
2	GOM_NL__2PRFIN20071020_082356_000000622062_00365_29477_6424.N1	20-OCT-2007 08:23:56	Dark	61.500	2	Alp Car	-0.73600	7000.0	123	29477	No
3	GOM_NL__2PRFIN20071020_083523_000000442062_00365_29477_6425.N1	20-OCT-2007 08:35:23	Straylight	43.500	157	The1Eri	2.9060	9300.0	87	29477	No
4	GOM_NL__2PRFIN20071020_084406_000000432062_00365_29477_6426.N1	20-OCT-2007 08:44:06	Straylight	42.500	52	16Bet Cet	2.0370	4500.0	85	29477	No
5	GOM_NL__2PRFIN20071020_085734_000000372062_00365_29477_6427.N1	20-OCT-2007 08:57:34	Bright	36.500	58	21Alp And	2.0730	11000.	73	29477	No
6	GOM_NL__2PRFIN20071020_085949_000000412062_00365_29477_6428.N1	20-OCT-2007 08:59:49	Bright	40.500	53	43Bet And	2.0480	3300.0	81	29477	No
7	GOM_NL__2PRFIN20071020_090528_000000372062_00365_29477_6429.N1	20-OCT-2007 09:05:28	Bright	37.000	68	18Alp Cas	2.2250	4500.0	74	29477	No
8	GOM_NL__2PRFIN20071020_090647_000000362062_00365_29477_6430.N1	20-OCT-2007 09:06:47	Bright	36.000	76	27Gam Cas	2.3000	30000.	72	29477	No
9	GOM_NL__2PRFIN20071020_091436_000000362062_00365_29477_6431.N1	20-OCT-2007 09:14:36	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	29477	No
10	GOM_NL__2PRFIN20071020_092250_000000392062_00365_29477_6432.N1	20-OCT-2007 09:22:50	Bright	38.500	36	50Alp UMa	1.8000	6300.0	77	29477	No
11	GOM_NL__2PRFIN20071020_092425_000000352062_00365_29477_6433.N1	20-OCT-2007 09:24:25	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	29477	No
12	GOM_NL__2PRFIN20071020_092752_000000442062_00365_29477_6434.N1	20-OCT-2007 09:27:52	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	29477	No
13	GOM_NL__2PRFIN20071020_093542_000000412062_00365_29477_6435.N1	20-OCT-2007 09:35:42	Bright	40.500	51	41Gam1Leo	2.0100	4500.0	81	29477	No
14	GOM_NL__2PRFIN20071020_093822_000000432062_00365_29477_6436.N1	20-OCT-2007 09:38:22	Bright	43.000	22	32Alp Leo	1.3600	15200.	86	29477	No
15	GOM_NL__2PRFIN20071020_095534_000000472062_00365_29477_6437.N1	20-OCT-2007 09:55:34	Dark	47.000	65	Lam Vel	2.2040	4400.0	94	29477	No
16	GOM_NL__2PRFIN20071020_095729_000000382062_00365_29477_6438.N1	20-OCT-2007 09:57:29	Dark	38.000	91	Kap Vel	2.4900	26000.	76	29477	No
17	GOM_NL__2PRFIN20071020_095853_000000452062_00366_29478_6434.N1	20-OCT-2007 09:58:53	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	29478	No
18	GOM_NL__2PRFIN20071020_100432_000000492062_00366_29478_6435.N1	20-OCT-2007 10:04:32	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	29478	No
19	GOM_NL__2PRFIN20071020_101600_000000432062_00366_29478_6436.N1	20-OCT-2007 10:16:00	Straylight	43.000	157	The1Eri	2.9060	9300.0	86	29478	No
20	GOM_NL__2PRFIN20071020_102442_000000412062_00366_29478_6437.N1	20-OCT-2007 10:24:42	Straylight	41.000	52	16Bet Cet	2.0370	4500.0	82	29478	No
21	GOM_NL__2PRFIN20071020_103810_000000362062_00366_29478_6438.N1	20-OCT-2007 10:38:10	Bright	35.500	58	21Alp And	2.0730	11000.	71	29478	No
22	GOM_NL__2PRFIN20071020_104024_000000392062_00366_29478_6439.N1	20-OCT-2007 10:40:24	Bright	38.500	53	43Bet And	2.0480	3300.0	77	29478	No
23	GOM_NL__2PRFIN20071020_104603_000000382062_00366_29478_6440.N1	20-OCT-2007 10:46:03	Bright	38.000	68	18Alp Cas	2.2250	4500.0	76	29478	No
24	GOM_NL__2PRFIN20071020_104723_000000382062_00366_29478_6441.N1	20-OCT-2007 10:47:23	Bright	37.500	76	27Gam Cas	2.3000	30000.	75	29478	No
25	GOM_NL__2PRFIN20071020_105512_000000372062_00366_29478_6442.N1	20-OCT-2007 10:55:12	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	29478	No
26	GOM_NL__2PRFIN20071020_110326_000000342062_00366_29478_6443.N1	20-OCT-2007 11:03:26	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	29478	No
27	GOM_NL__2PRFIN20071020_110501_000000372062_00366_29478_6444.N1	20-OCT-2007 11:05:01	Bright	36.500	82	48Bet UMa	2.3650	10600.	73	29478	No
28	GOM_NL__2PRFIN20071020_110828_000000362062_00366_29478_6445.N1	20-OCT-2007 11:08:28	Bright	35.500	174	52Psi UMa	3.0040	4400.0	71	29478	No
29	GOM_NL__2PRFIN20071020_111618_000000582062_00366_29478_6446.N1	20-OCT-2007 11:16:18	Bright	58.000	51	41Gam1Leo	2.0100	4500.0	116	29478	No
30	GOM_NL__2PRFIN20071020_111859_000000412062_00366_29478_6447.N1	20-OCT-2007 11:18:59	Bright	40.500	22	32Alp Leo	1.3600	15200.	81	29478	No
31	GOM_NL__2PRFIN20071020_113611_000000482062_00366_29478_6448.N1	20-OCT-2007 11:36:11	Dark	48.000	65	Lam Vel	2.2040	4400.0	96	29478	No
32	GOM_NL__2PRFIN20071020_113806_000000382062_00366_29478_6449.N1	20-OCT-2007 11:38:06	Dark	38.000	91	Kap Vel	2.4900	26000.	76	29478	No
33	GOM_NL__2PRFIN20071020_113930_000000432062_00367_29479_6449.N1	20-OCT-2007 11:39:30	Dark	43.000	34	Gam2Vel	1.7930	23000.	86	29479	No
34	GOM_NL__2PRFIN20071020_132156_000000372062_00368_29480_6463.N1	20-OCT-2007 13:21:56	Dark	37.000	29	Bet Car	1.6720	10200.	74	29480	No
35	GOM_NL__2PRFIN20071020_132546_000000472062_00368_29480_6464.N1	20-OCT-2007 13:25:46	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	29480	No
36	GOM_NL__2PRFIN20071020_133259_000000372062_00368_29480_6465.N1	20-OCT-2007 13:32:59	Dark	36.500	143	Alp Hyi	2.8570	7200.0	73	29480	No
37	GOM_NL__2PRFIN20071020_133425_000000452062_00368_29480_6466.N1	20-OCT-2007 13:34:25	Dark	44.500	9	Alp Eri	0.45300	24000.	89	29480	No
38	GOM_NL__2PRFIN20071020_133712_000000452062_00368_29480_6467.N1	20-OCT-2007 13:37:12	Straylight	45.000	157	The1Eri	2.9060	9300.0	90	29480	No
39	GOM_NL__2PRFIN20071020_134554_000000432062_00368_29480_6468.N1	20-OCT-2007 13:45:54	Straylight	43.000	52	16Bet Cet	2.0370	4500.0	86	29480	No
40	GOM_NL__2PRFIN20071020_135527_000000352062_00368_29480_6469.N1	20-OCT-2007 13:55:27	Bright	35.000	140	88Gam Peg	2.8340	26000.	70	29480	No
41	GOM_NL__2PRFIN20071020_135922_000000362062_00368_29480_6470.N1	20-OCT-2007 13:59:22	Bright	36.000	58	21Alp And	2.0730	11000.	72	29480	No
42	GOM_NL__2PRFIN20071020_140135_000000372062_00368_29480_6471.N1	20-OCT-2007 14:01:35	Bright	36.500	53	43Bet And	2.0480	3300.0	73	29480	No

43	GOM_NL__2PRFIN20071020_140715_000000392062_00368_29480_6472.N1	20-OCT-2007 14:07:15	Bright	39.000	68	18Alp Cas	2.2250	4500.0	78	29480	No
44	GOM_NL__2PRFIN20071020_140834_000000362062_00368_29480_6473.N1	20-OCT-2007 14:08:34	Bright	36.000	76	27Gam Cas	2.3000	30000.	72	29480	No
45	GOM_NL__2PRFIN20071020_141623_000000342062_00368_29480_6474.N1	20-OCT-2007 14:16:23	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	29480	No
46	GOM_NL__2PRFIN20071020_142438_000000372062_00368_29480_6475.N1	20-OCT-2007 14:24:38	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	29480	No
47	GOM_NL__2PRFIN20071020_142612_000000362062_00368_29480_6476.N1	20-OCT-2007 14:26:12	Bright	36.000	82	48Bet UMa	2.3650	10600.	72	29480	No
48	GOM_NL__2PRFIN20071020_142940_000000362062_00368_29480_6477.N1	20-OCT-2007 14:29:40	Bright	35.500	174	52Psi UMa	3.0040	4400.0	71	29480	No
49	GOM_NL__2PRFIN20071020_143731_000000402062_00368_29480_6478.N1	20-OCT-2007 14:37:31	Bright	39.500	51	41Gam1Leo	2.0100	4500.0	79	29480	No
50	GOM_NL__2PRFIN20071020_145724_000000522062_00368_29480_6479.N1	20-OCT-2007 14:57:24	Dark	51.500	65	Lam Vel	2.2040	4400.0	103	29480	No

3. Quality information per product

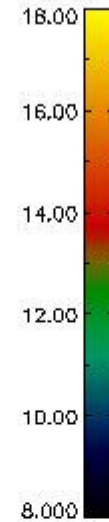
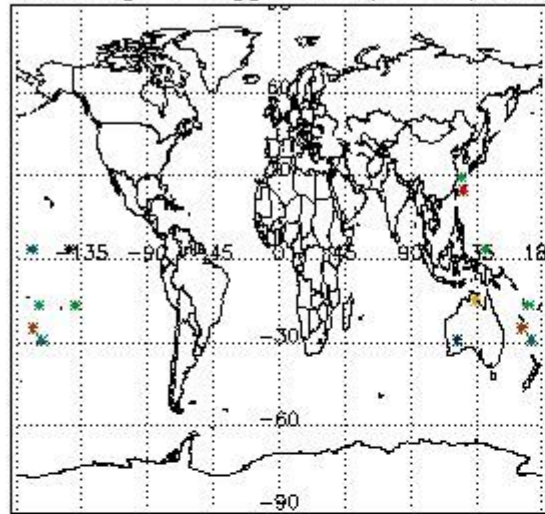
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

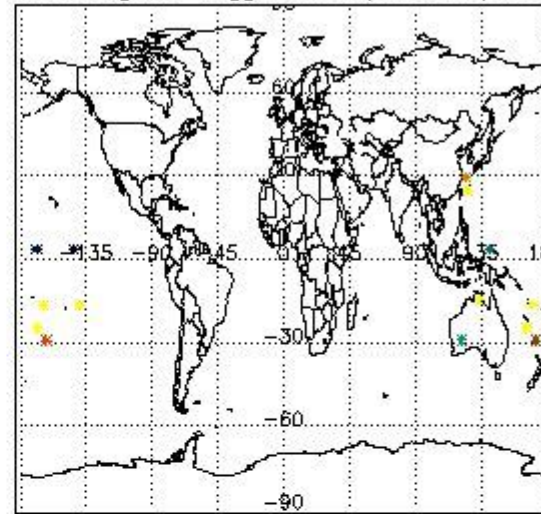


3.2 Plot quality information per product (world map)

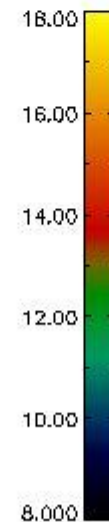
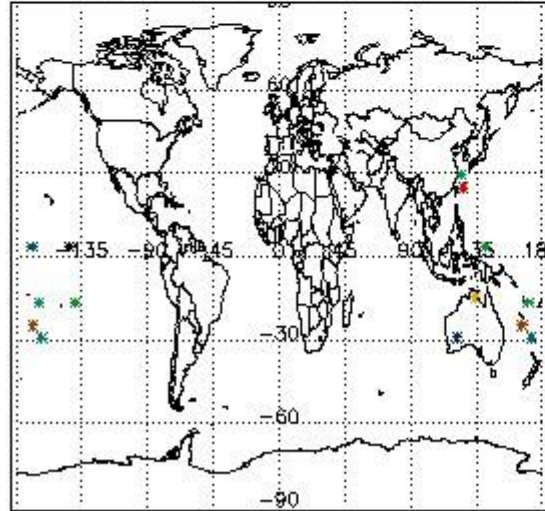
Percentage of flagged data per O3 profile



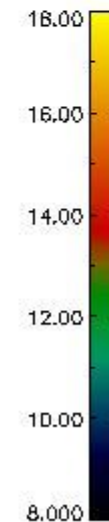
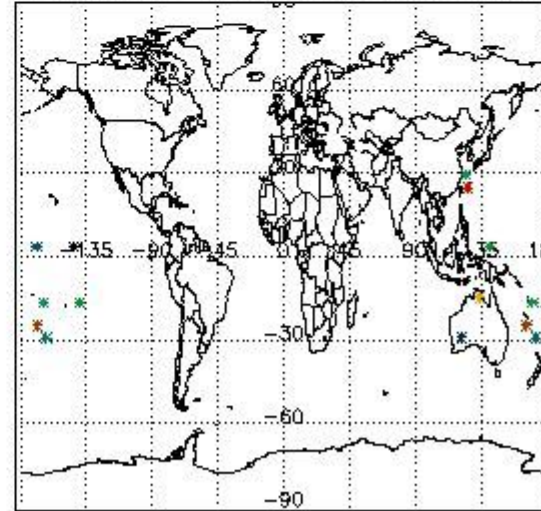
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

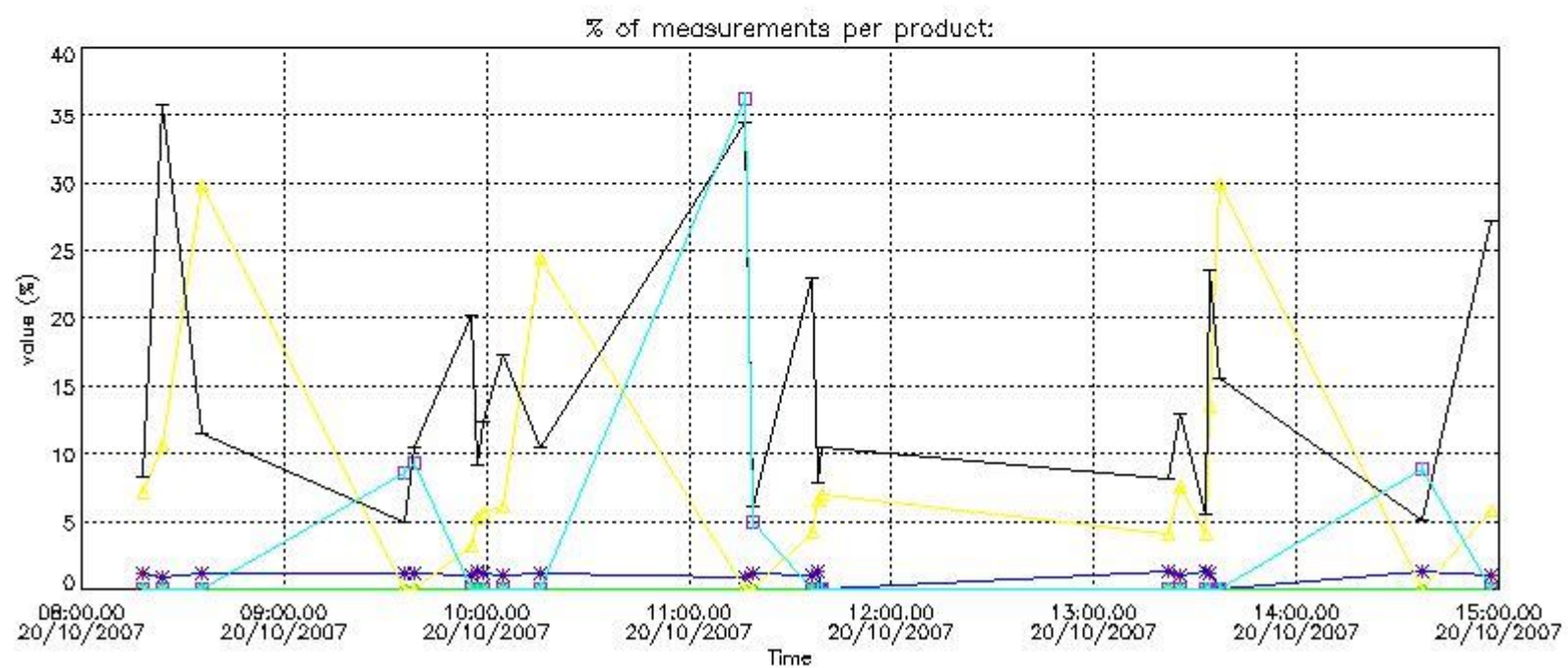


4. Level 1 quality information per product

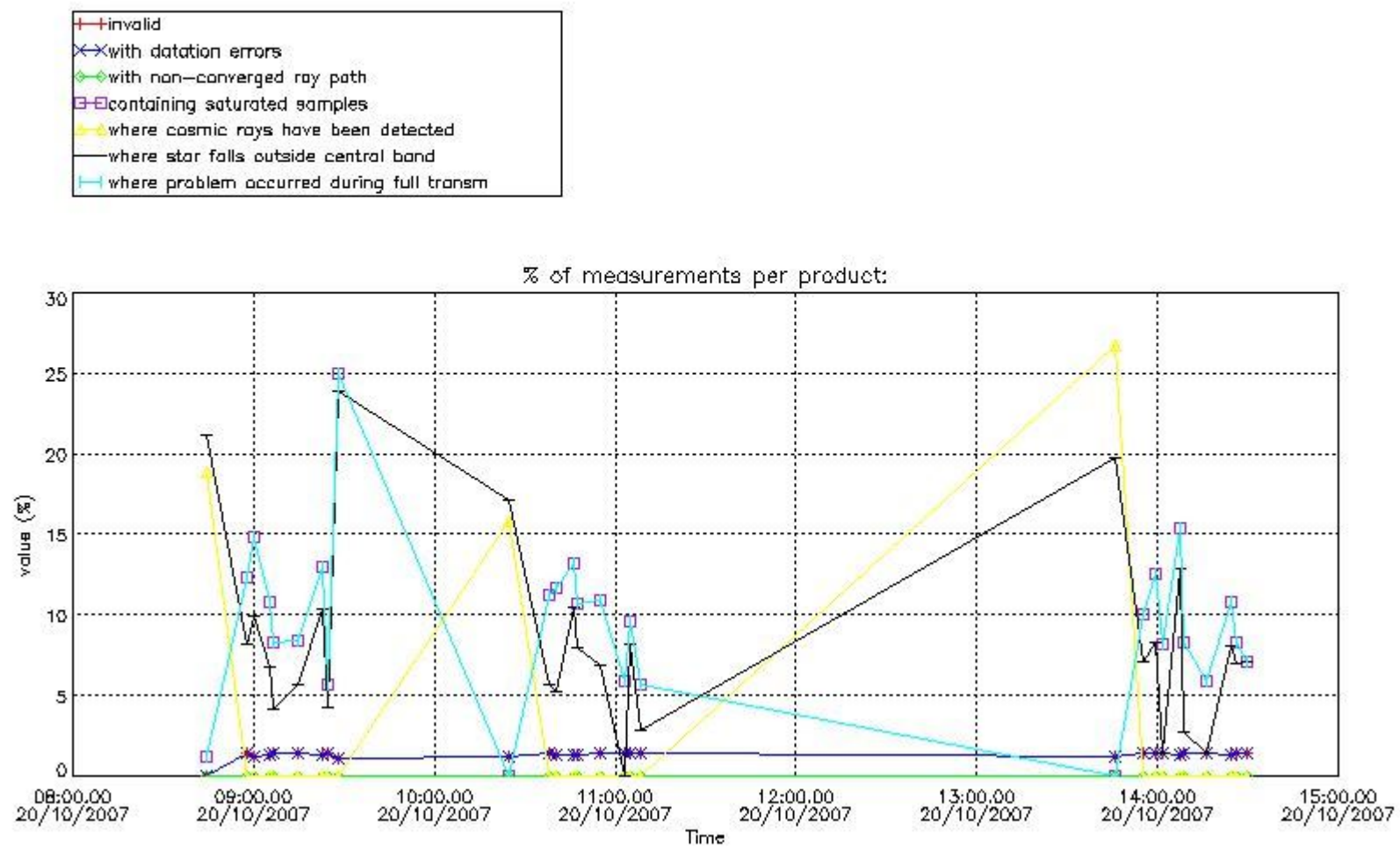
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



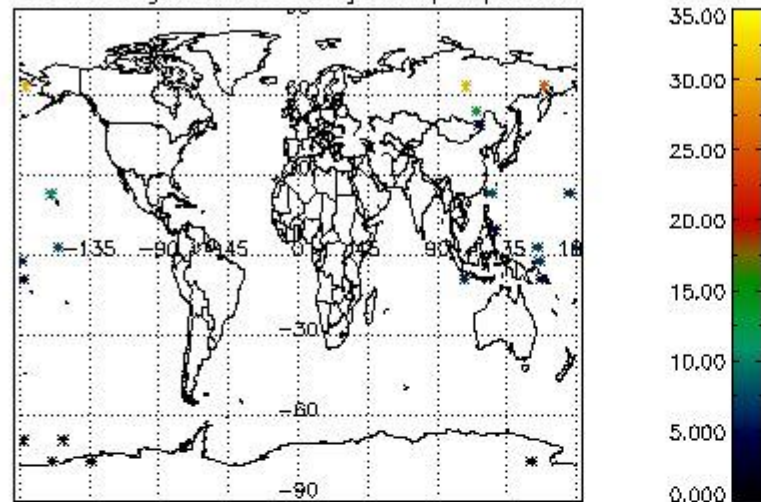
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



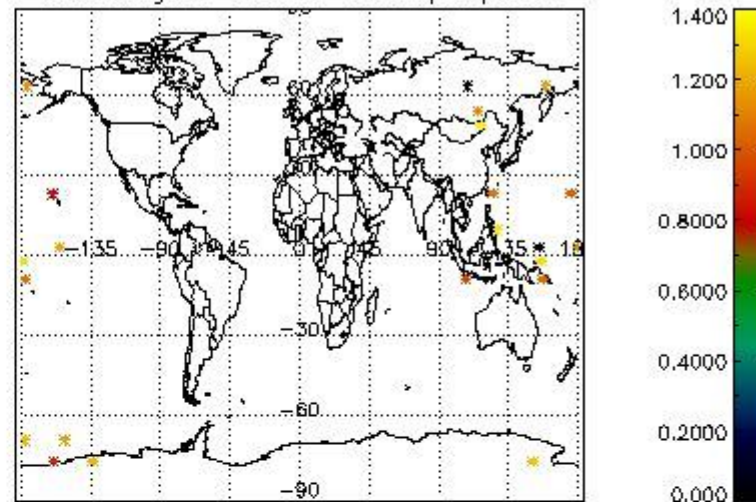
4.2 Plot quality information per product coming from level 1b processing (world map)

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

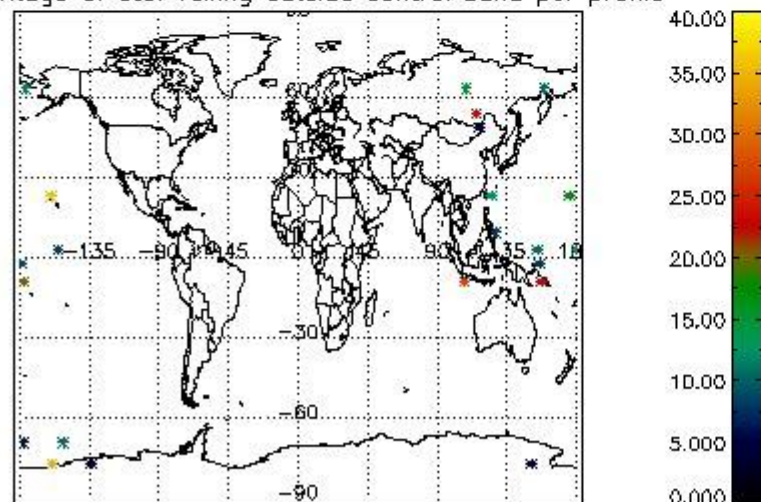
Percentage of cosmic ray hits per profile



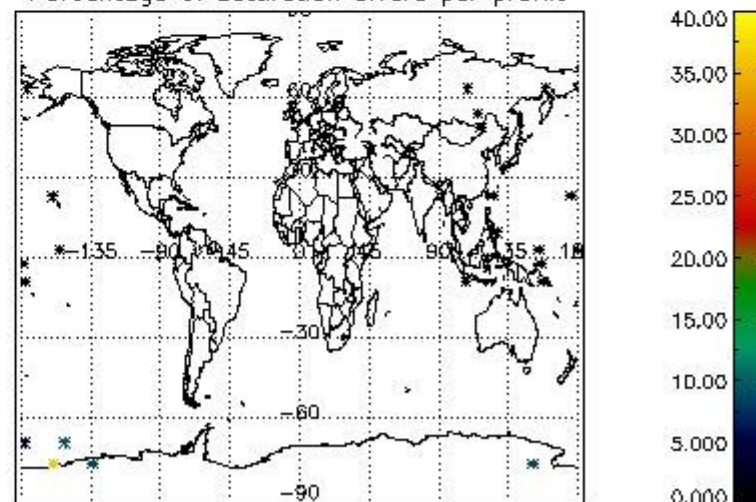
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

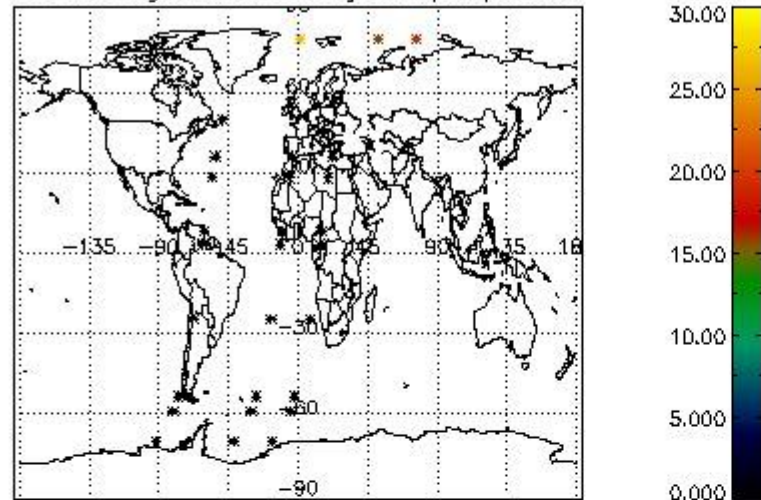


Percentage of saturation errors per profile

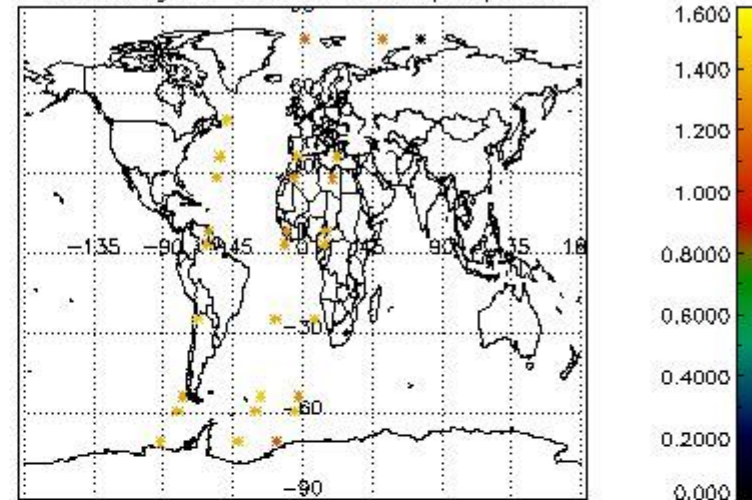


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

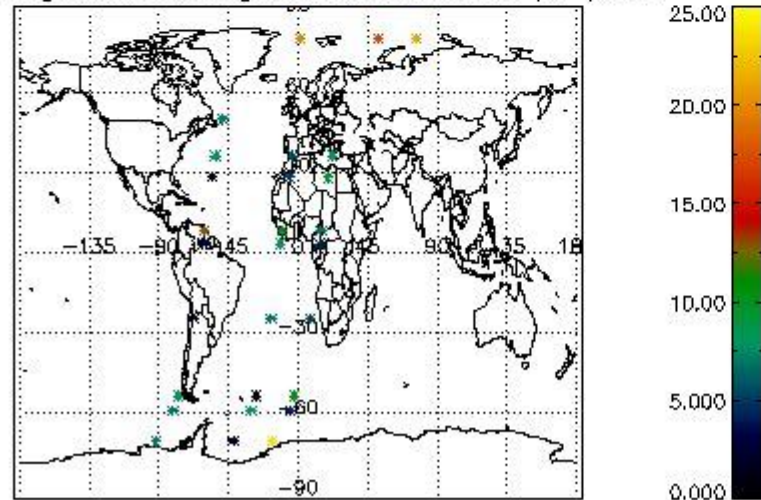
Percentage of cosmic ray hits per profile



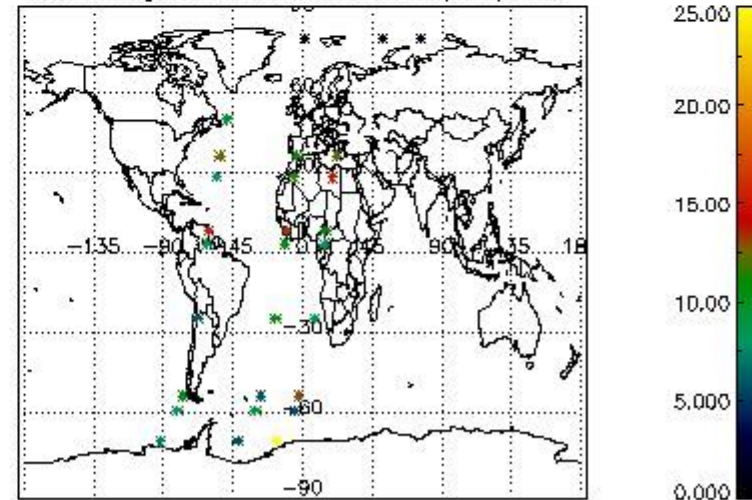
Percentage of datation errors per profile



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

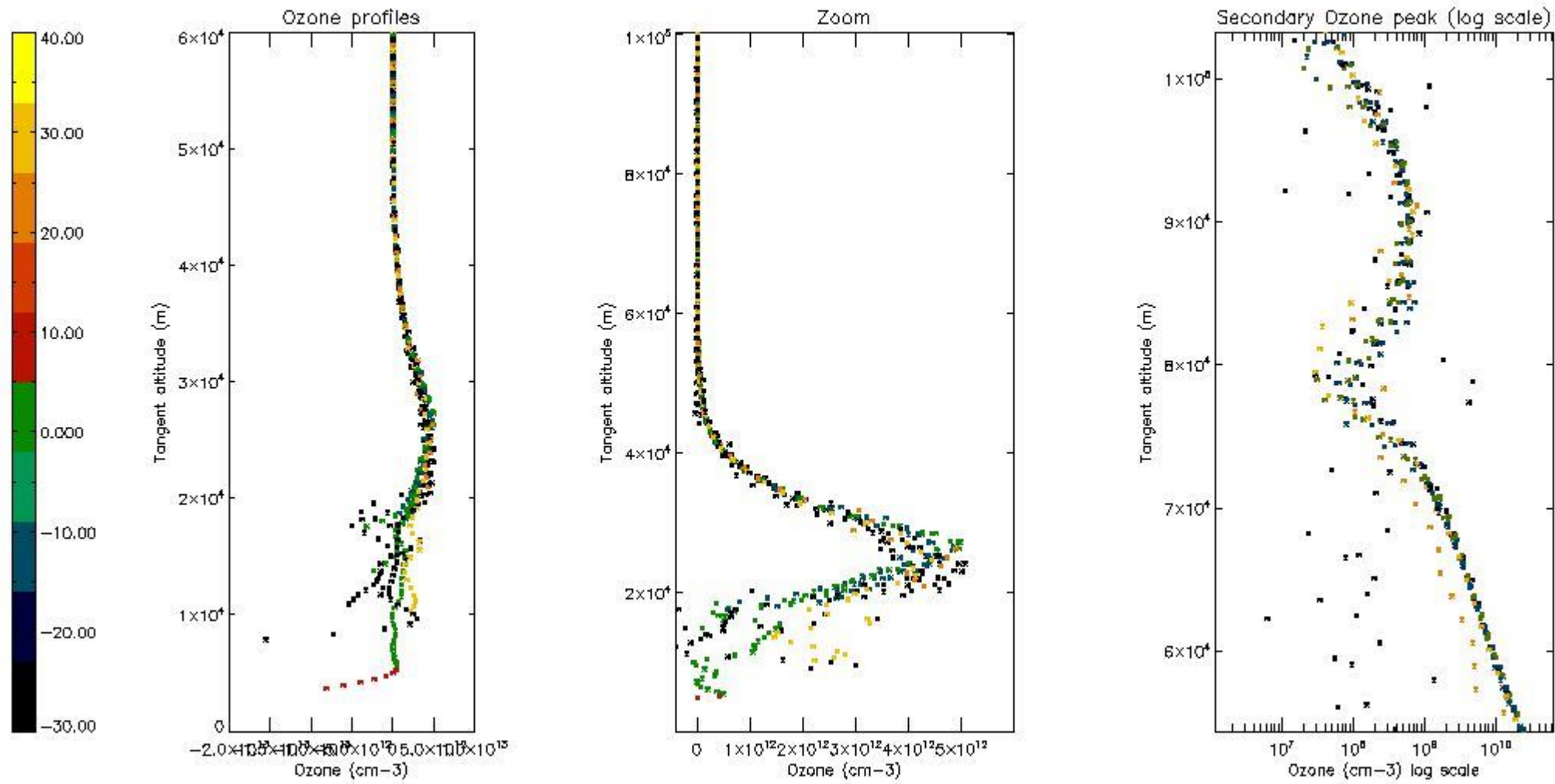
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	20

STD < 10	16
STD < 5	12

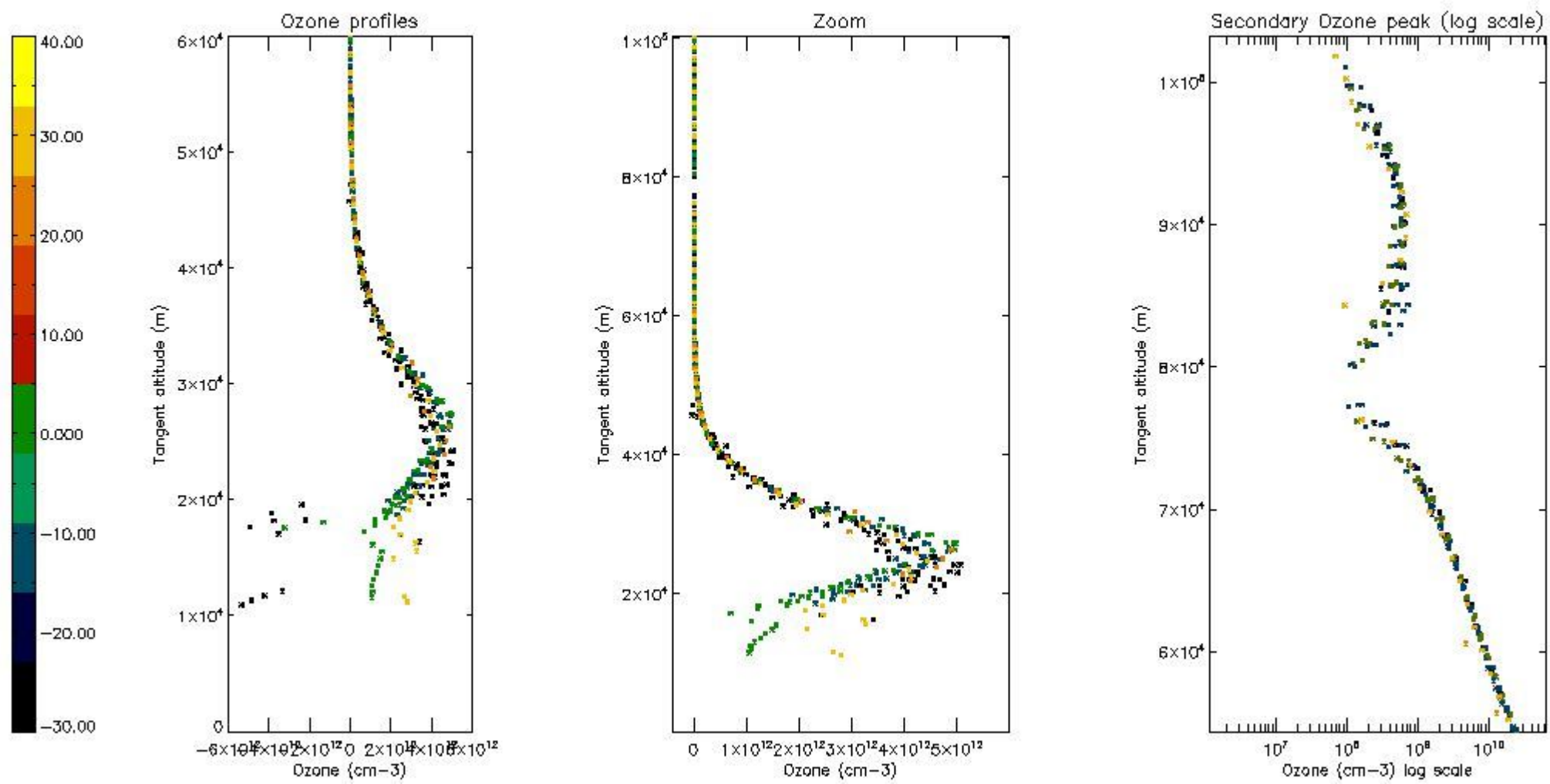
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



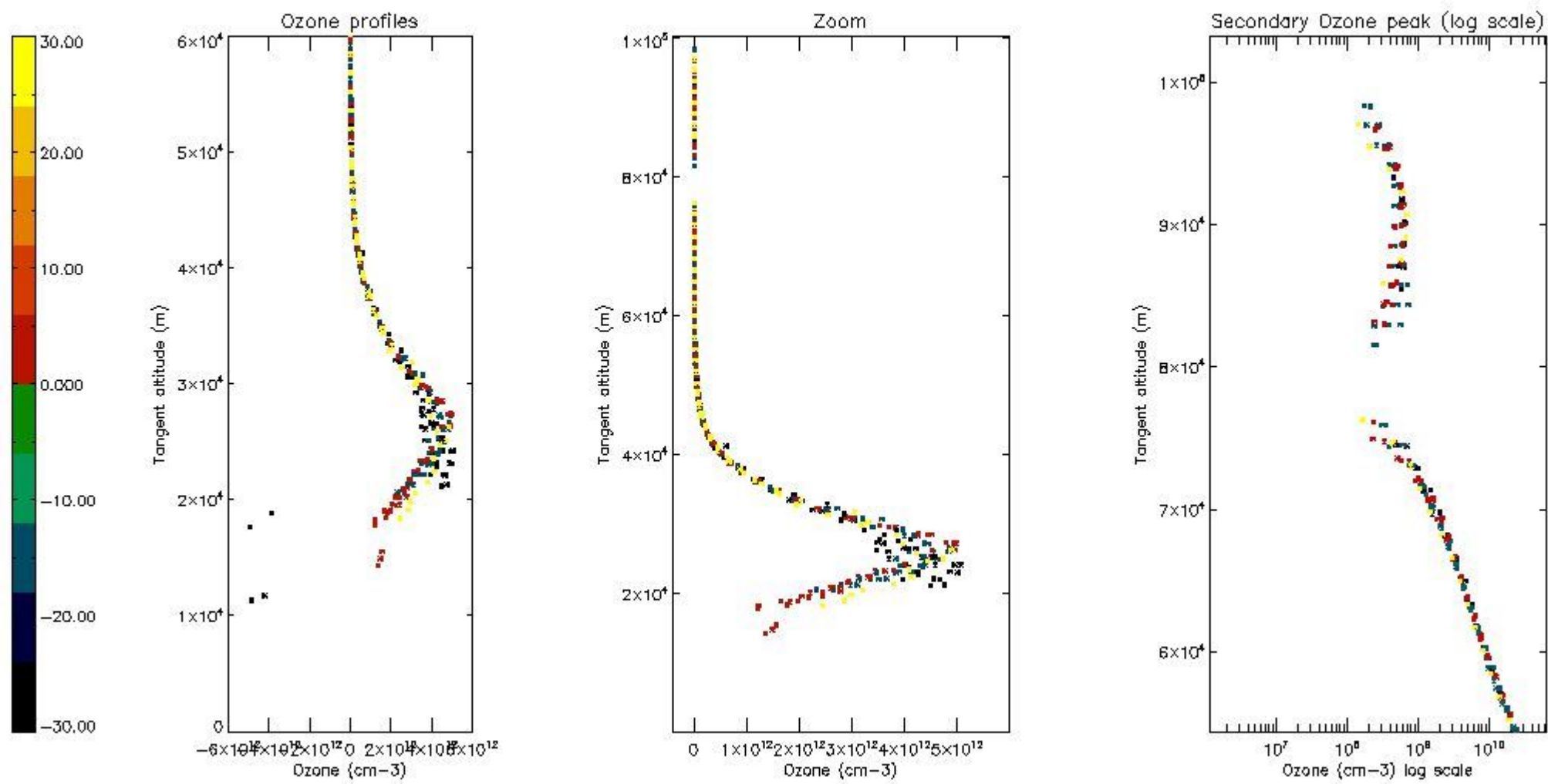
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



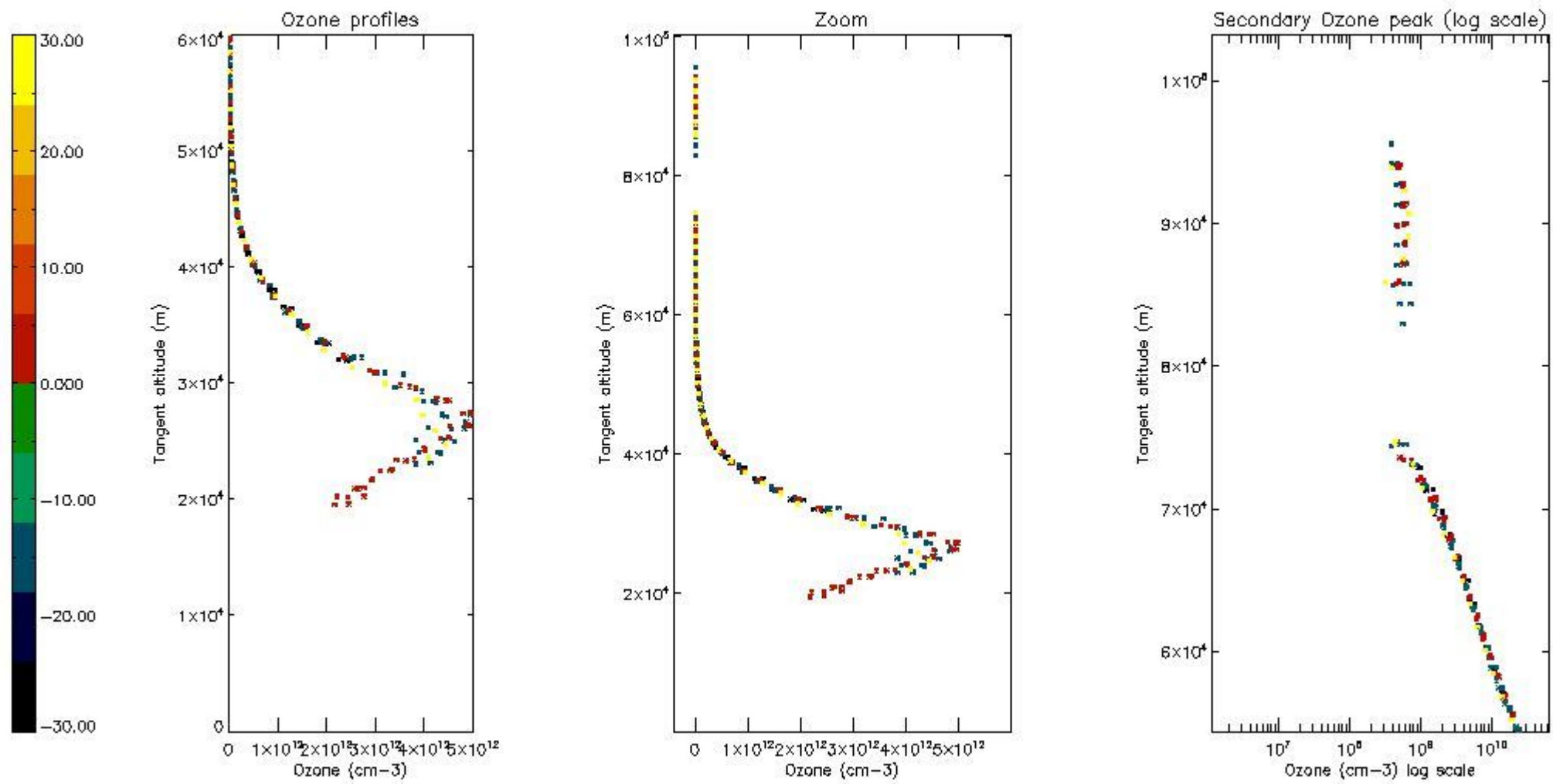
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



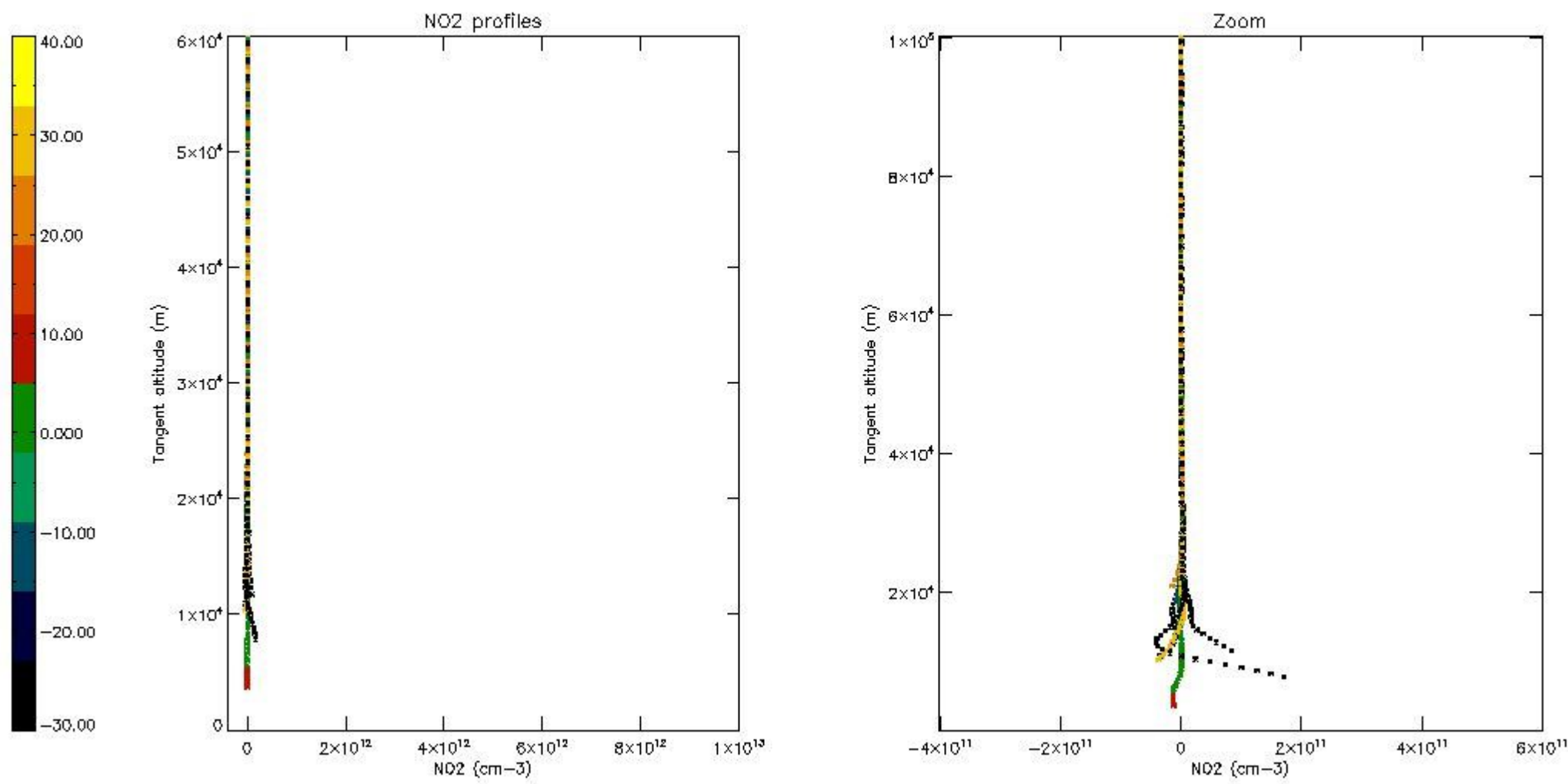
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



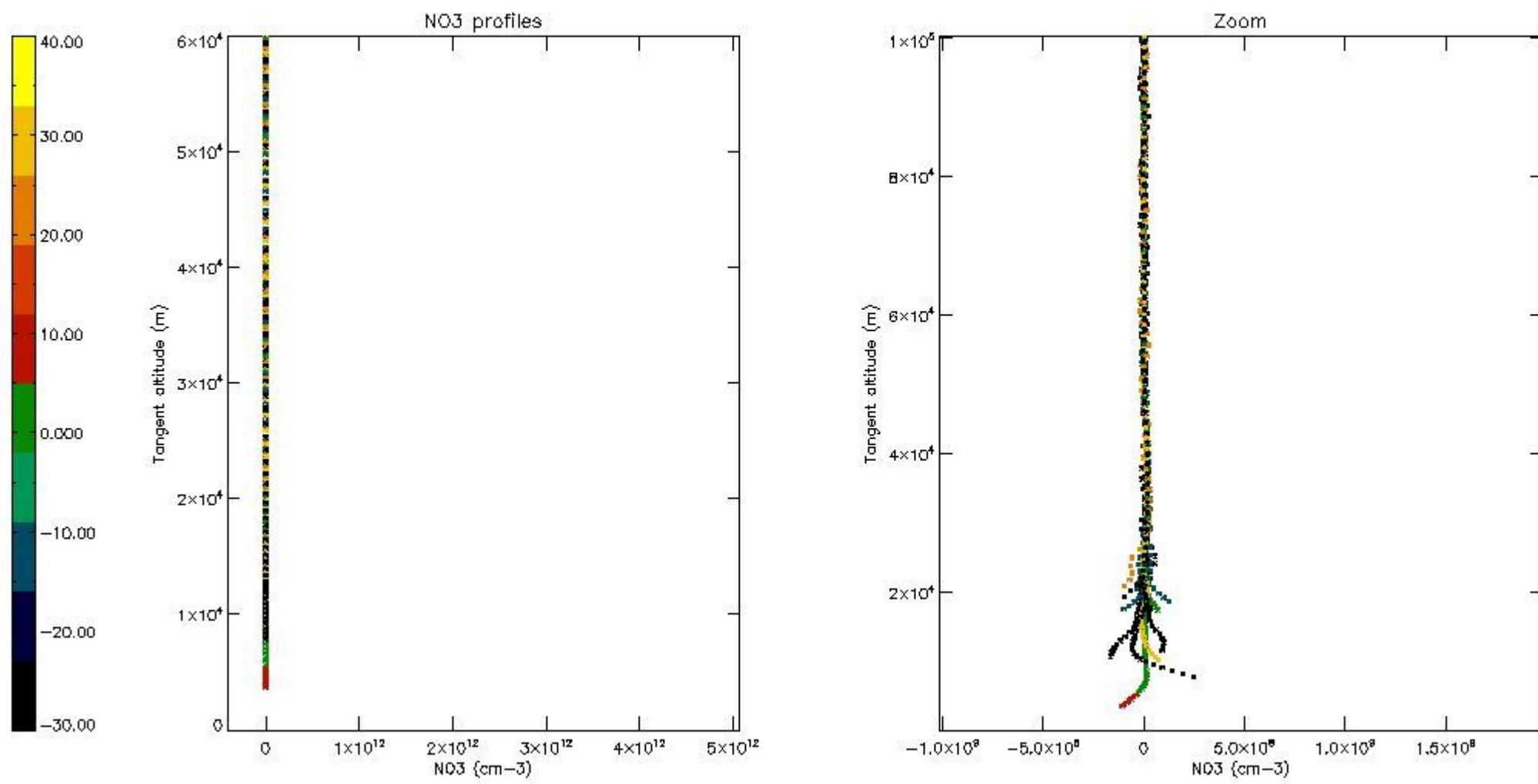
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



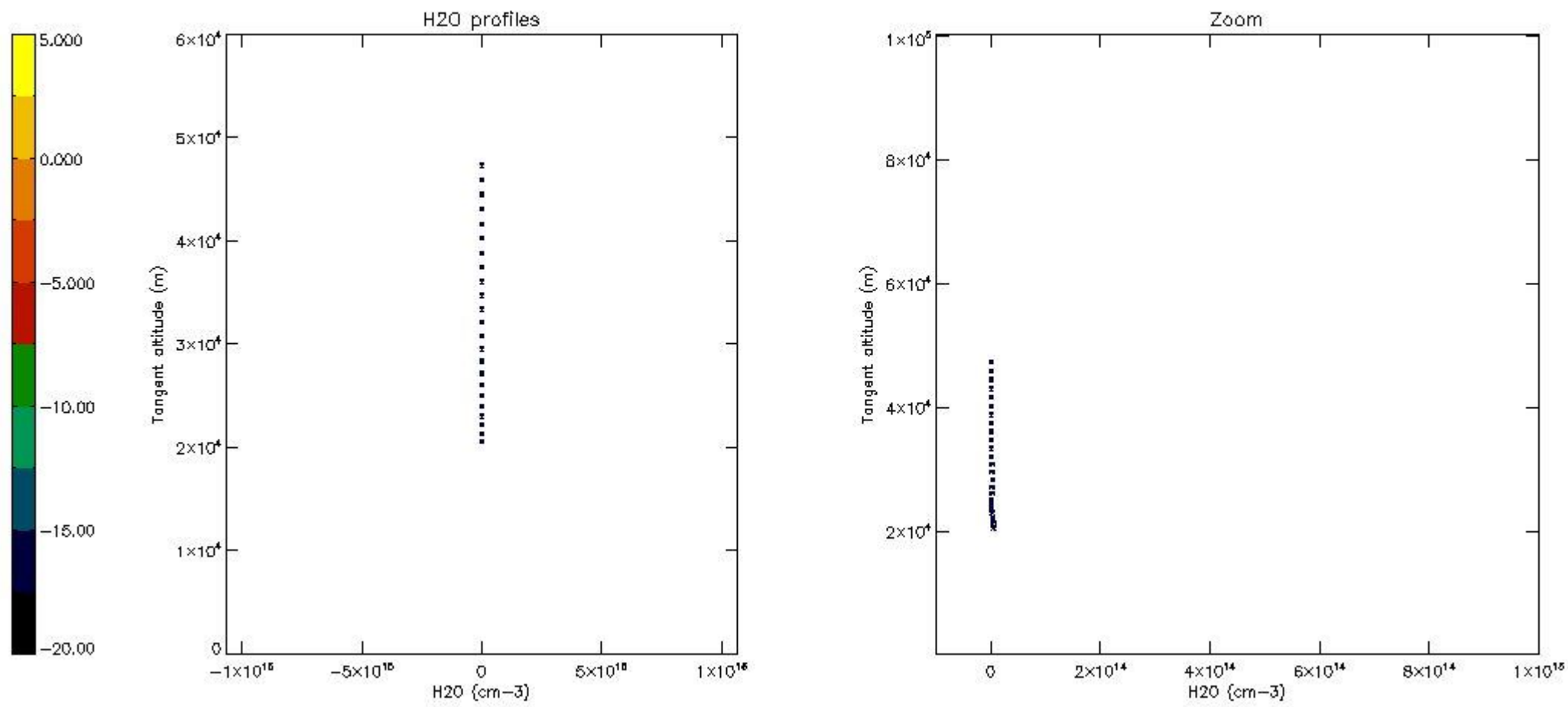
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

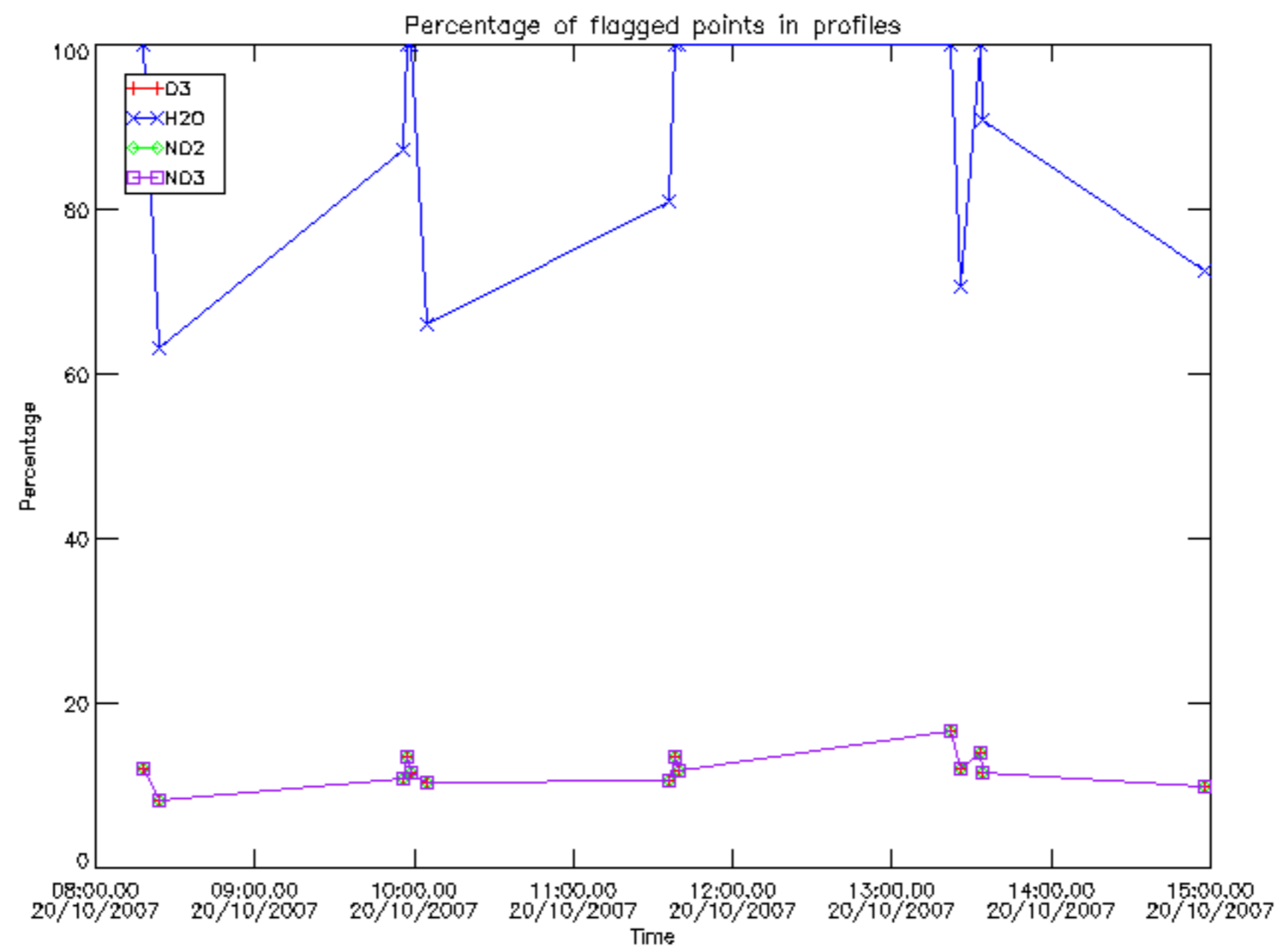
The colorbar represents the latitude.



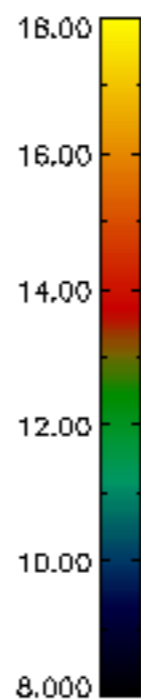
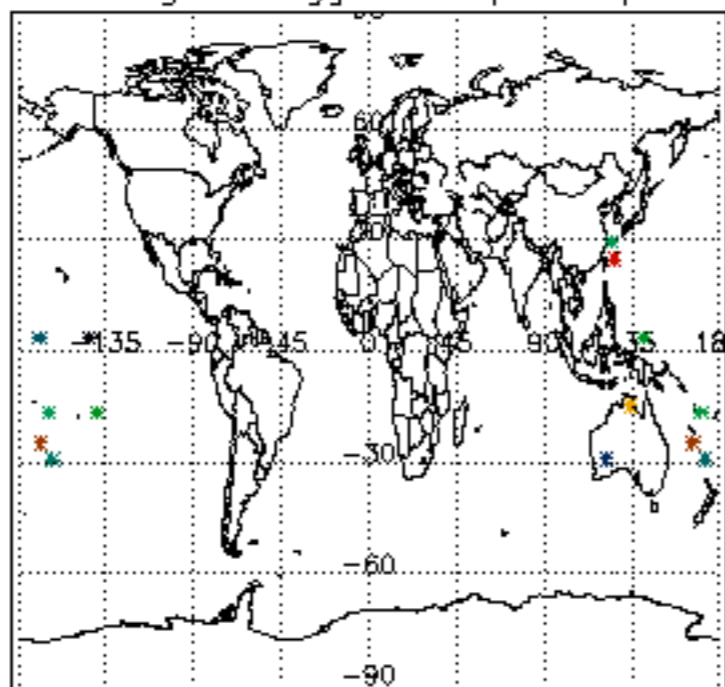
6. Auxiliary Data Files used for the production reported in section 2

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.

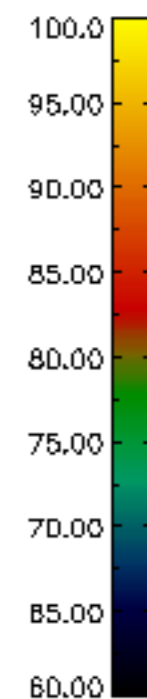
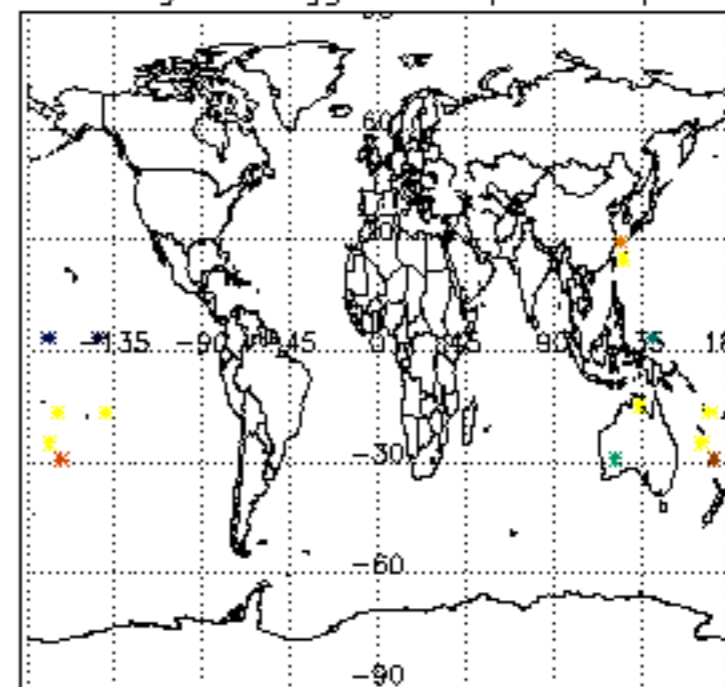
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	20-OCT-2007 08: 18: 17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-OCT-2007 08: 18: 17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-OCT-2007 08: 18: 17



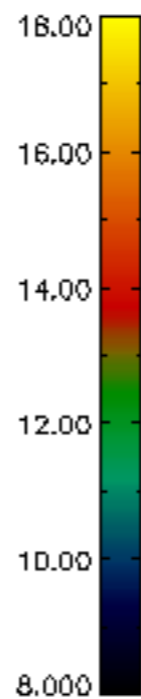
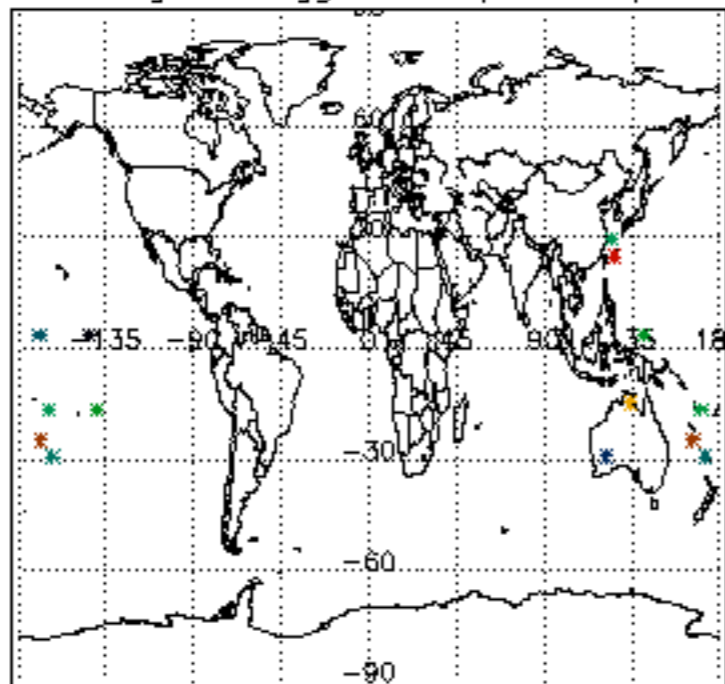
Percentage of flagged data per D3 profile



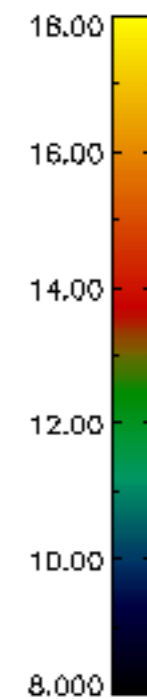
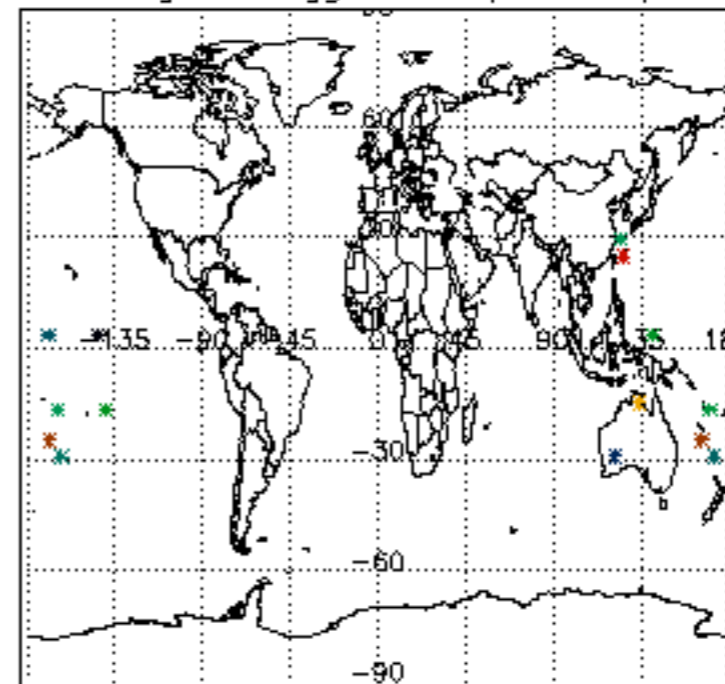
Percentage of flagged data per H2O profile

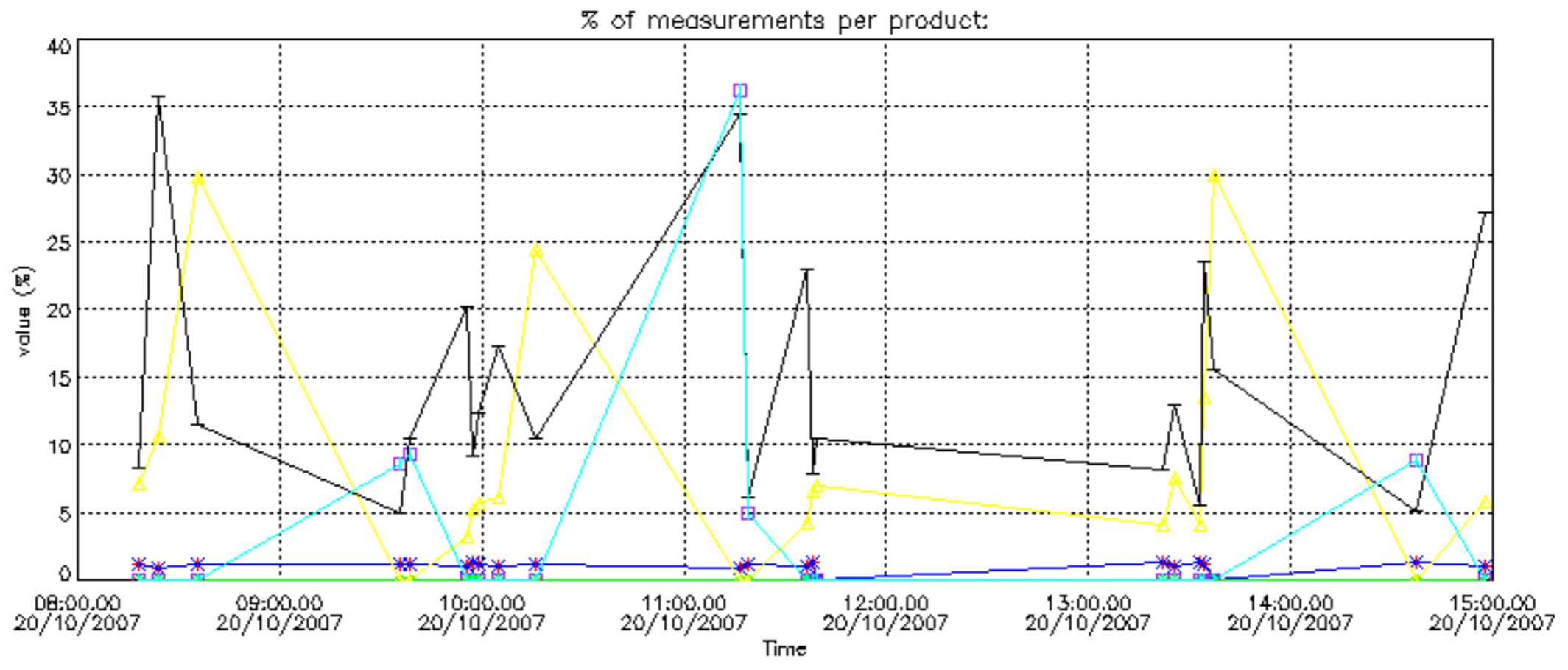


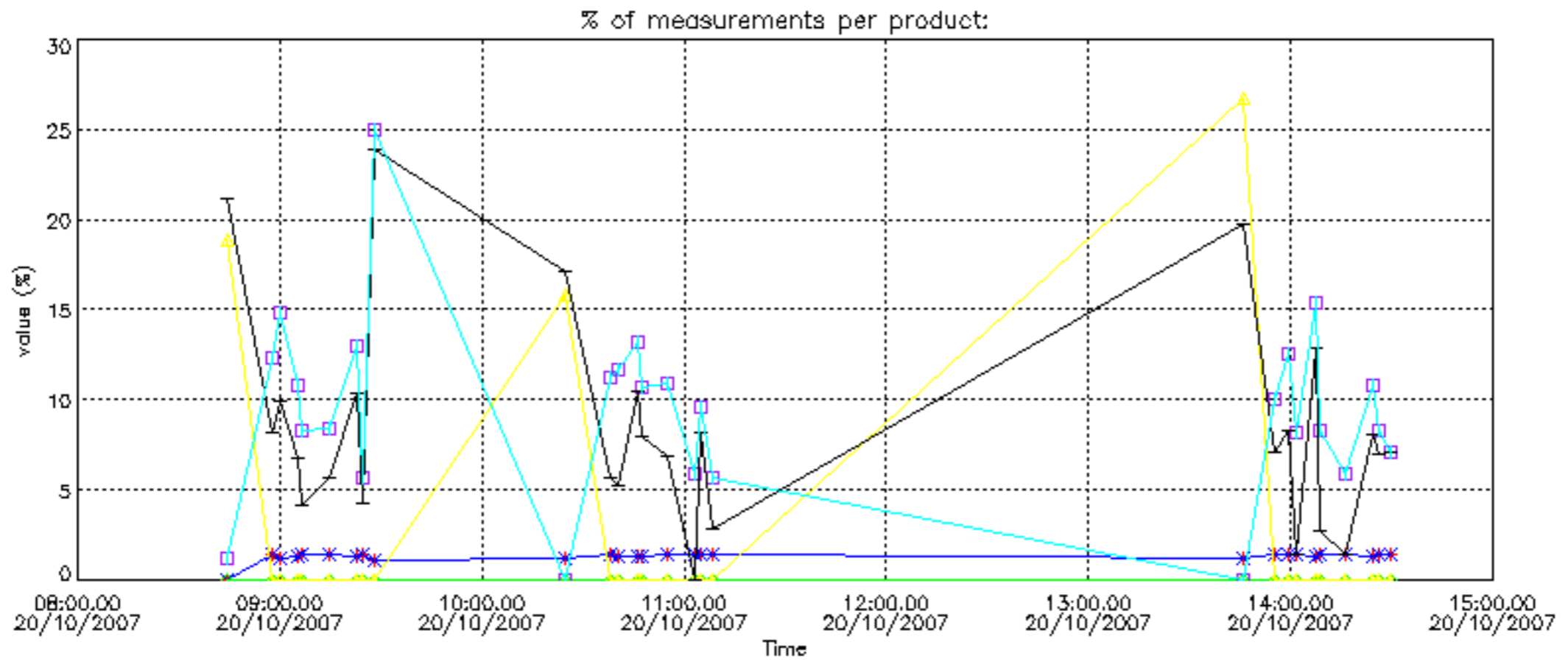
Percentage of flagged data per NO2 profile



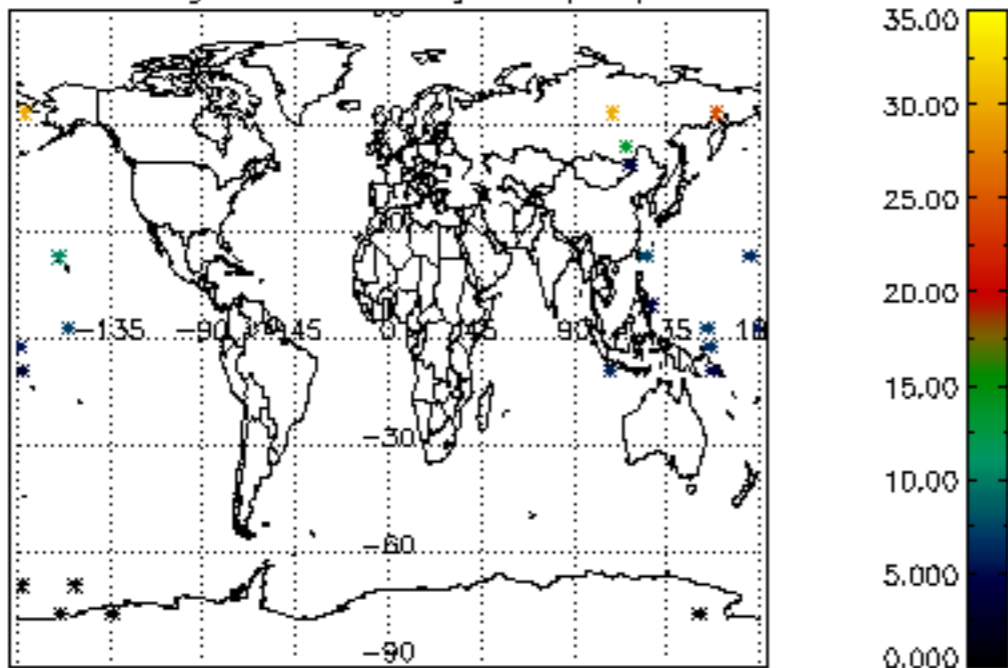
Percentage of flagged data per NO3 profile



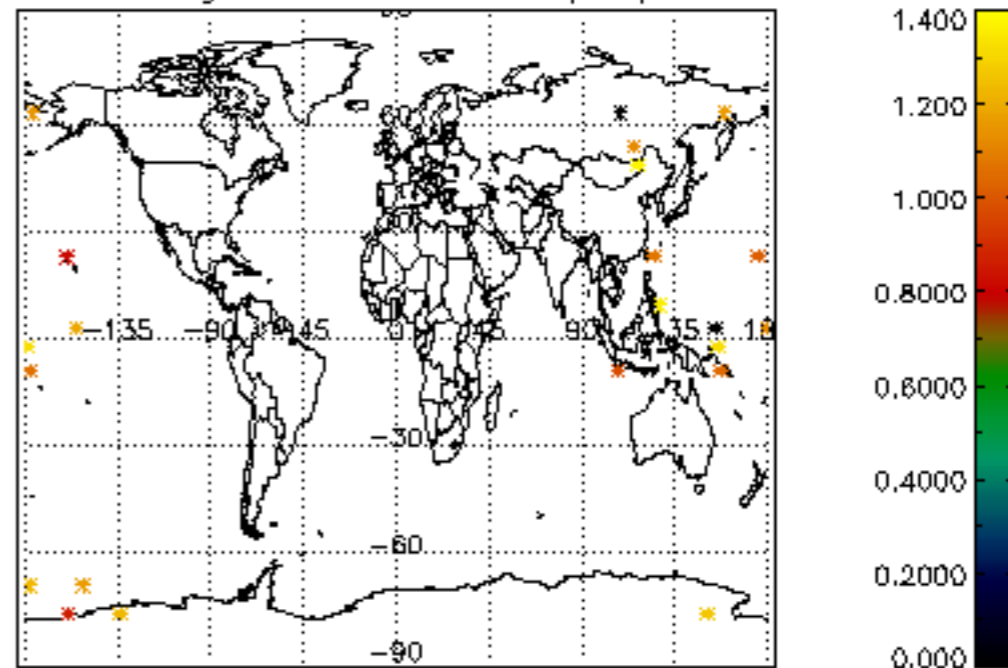




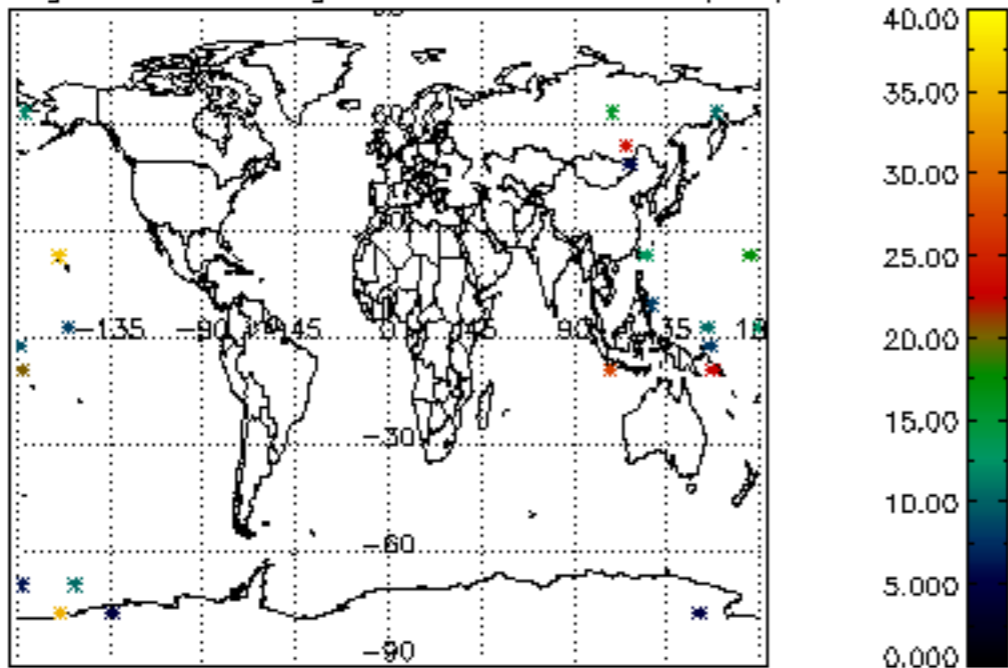
Percentage of cosmic ray hits per profile



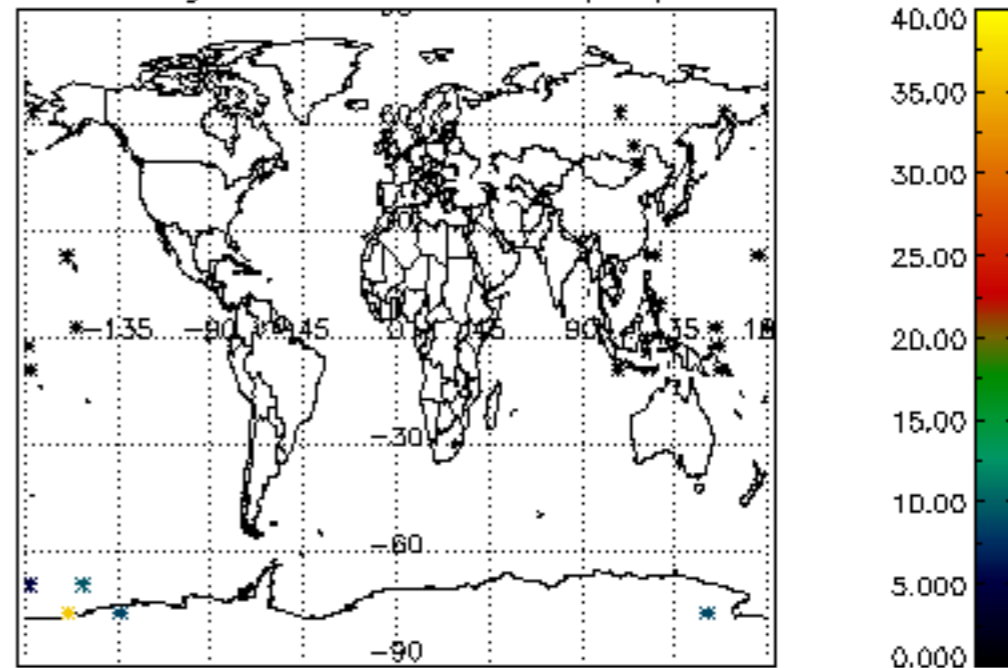
Percentage of datation errors per profile



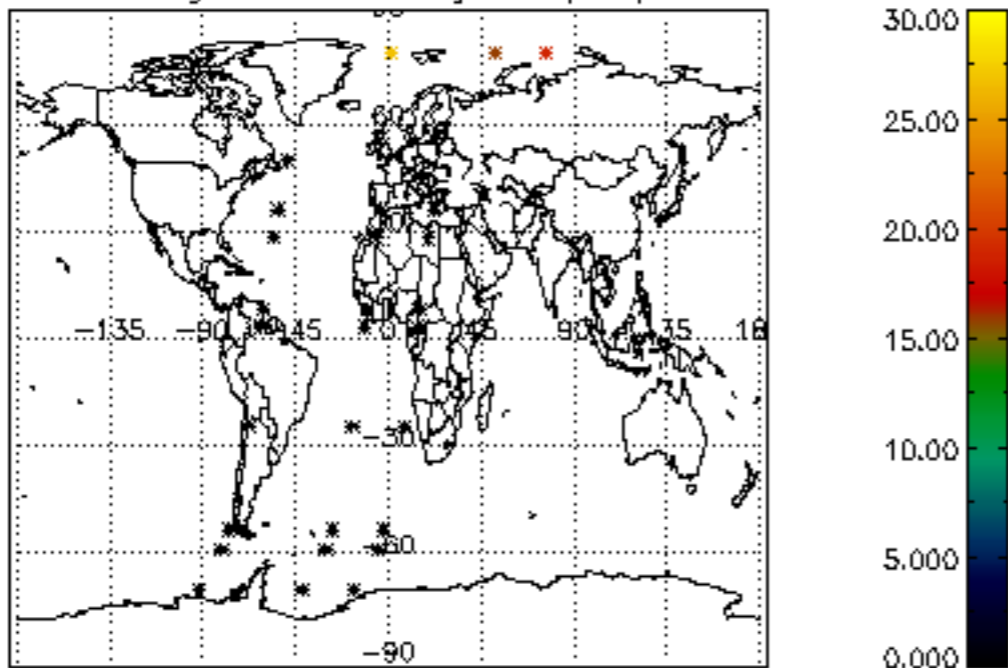
Percentage of star falling outside central band per profile



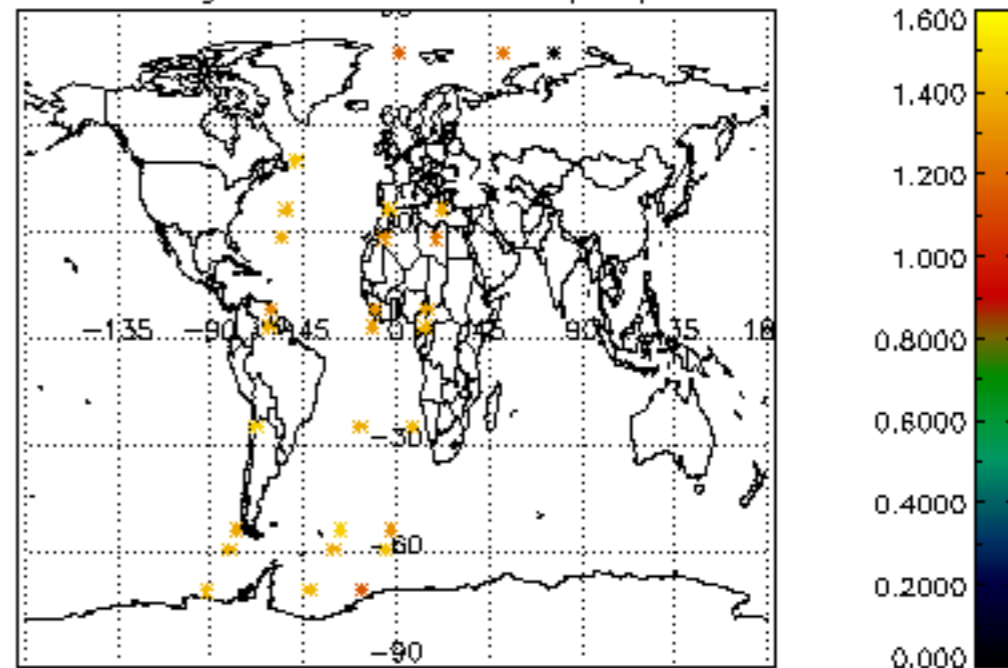
Percentage of saturation errors per profile



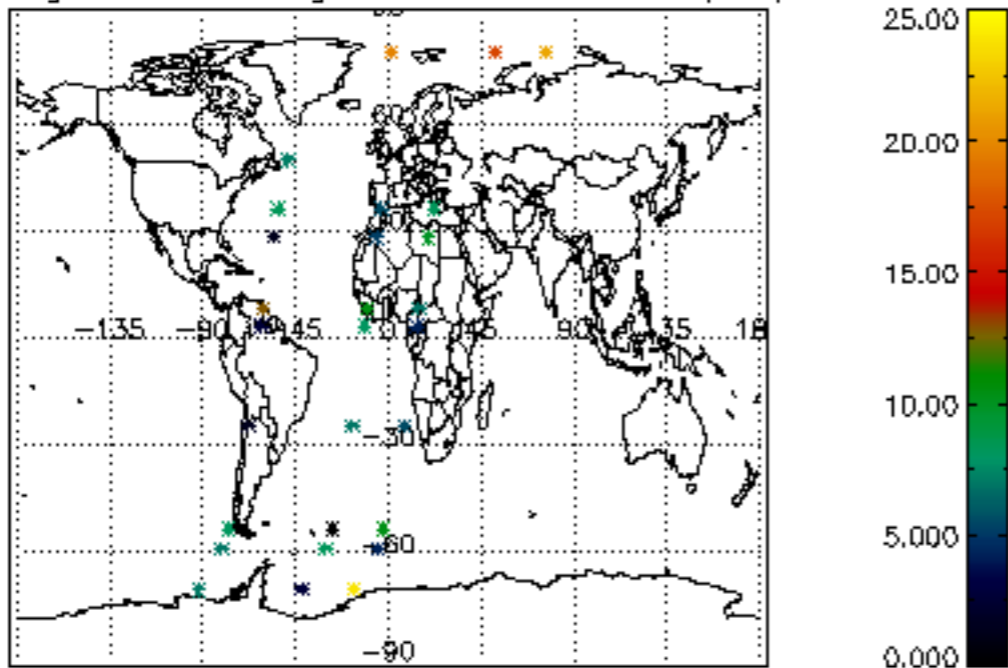
Percentage of cosmic ray hits per profile



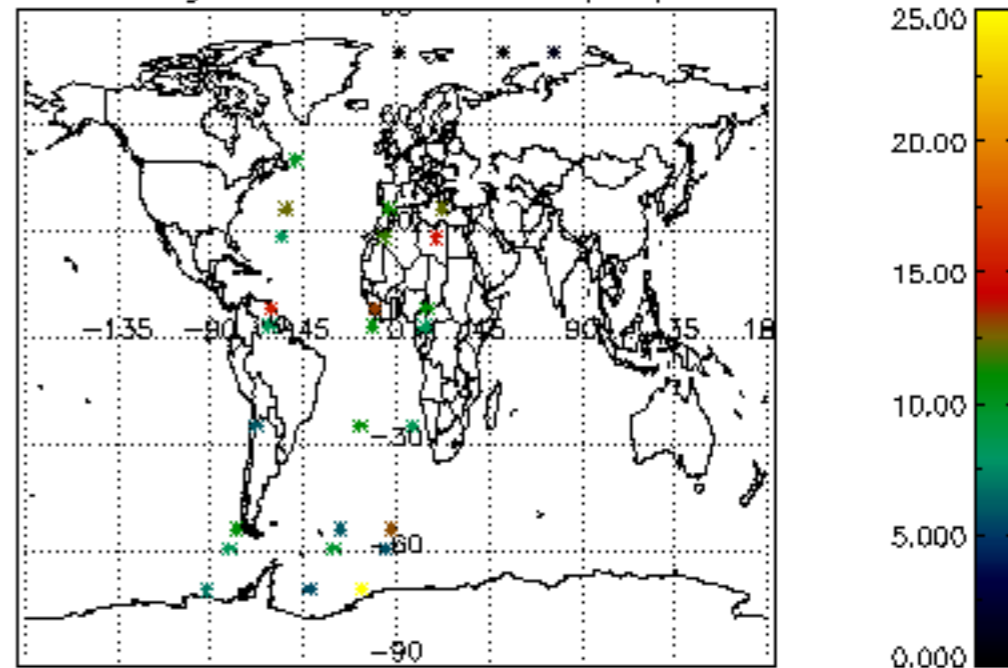
Percentage of datation errors per profile

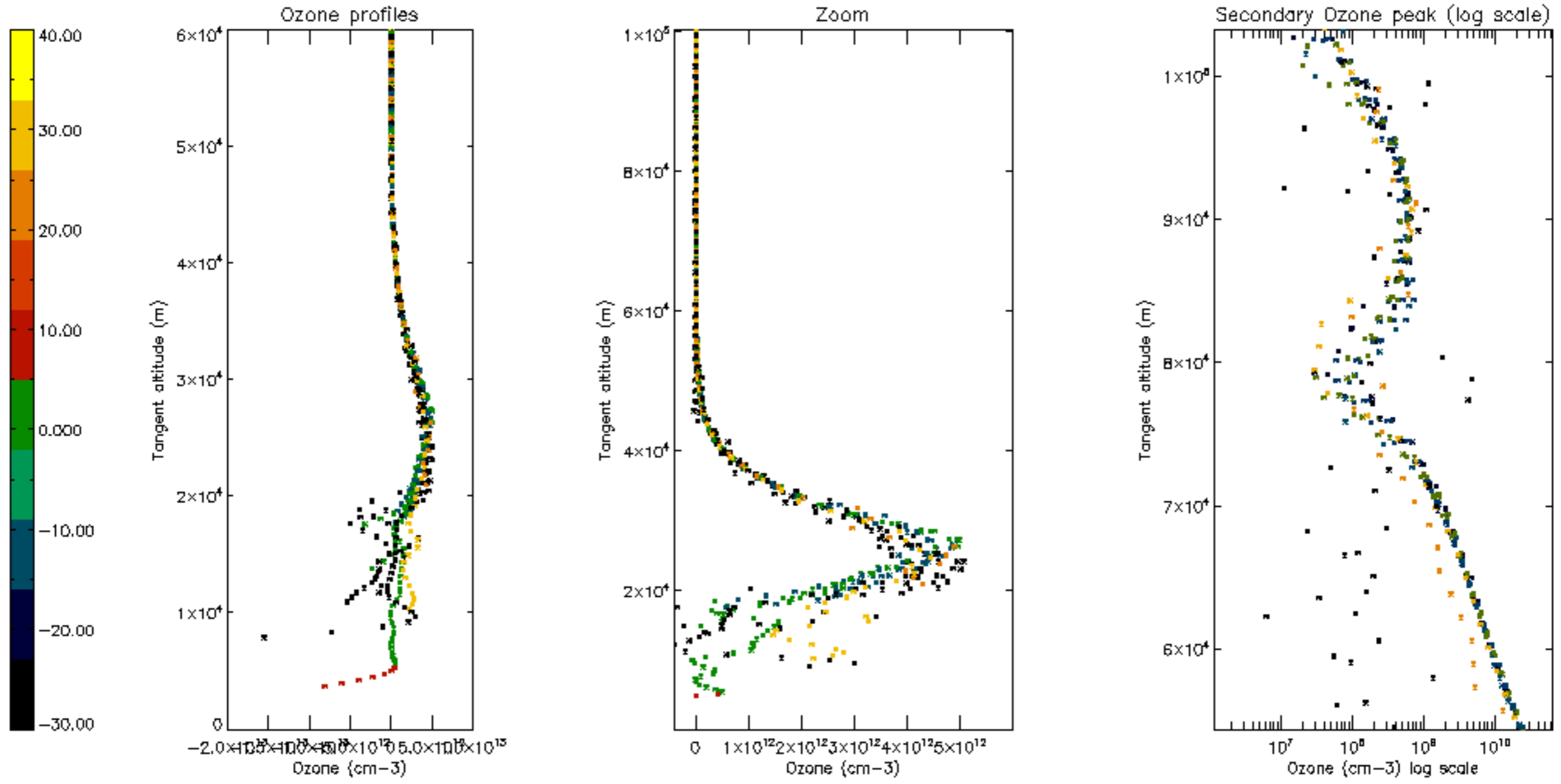


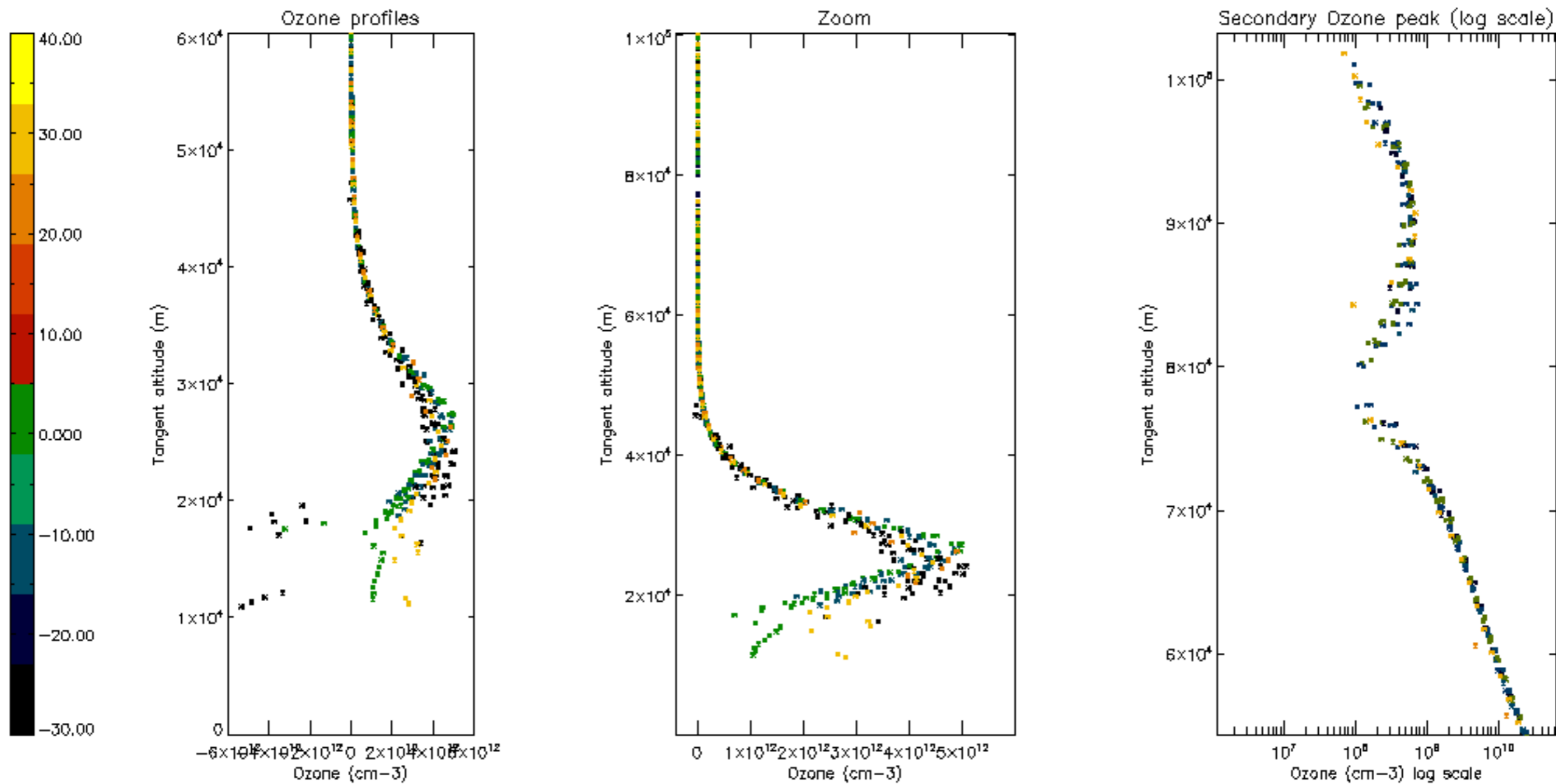
Percentage of star falling outside central band per profile

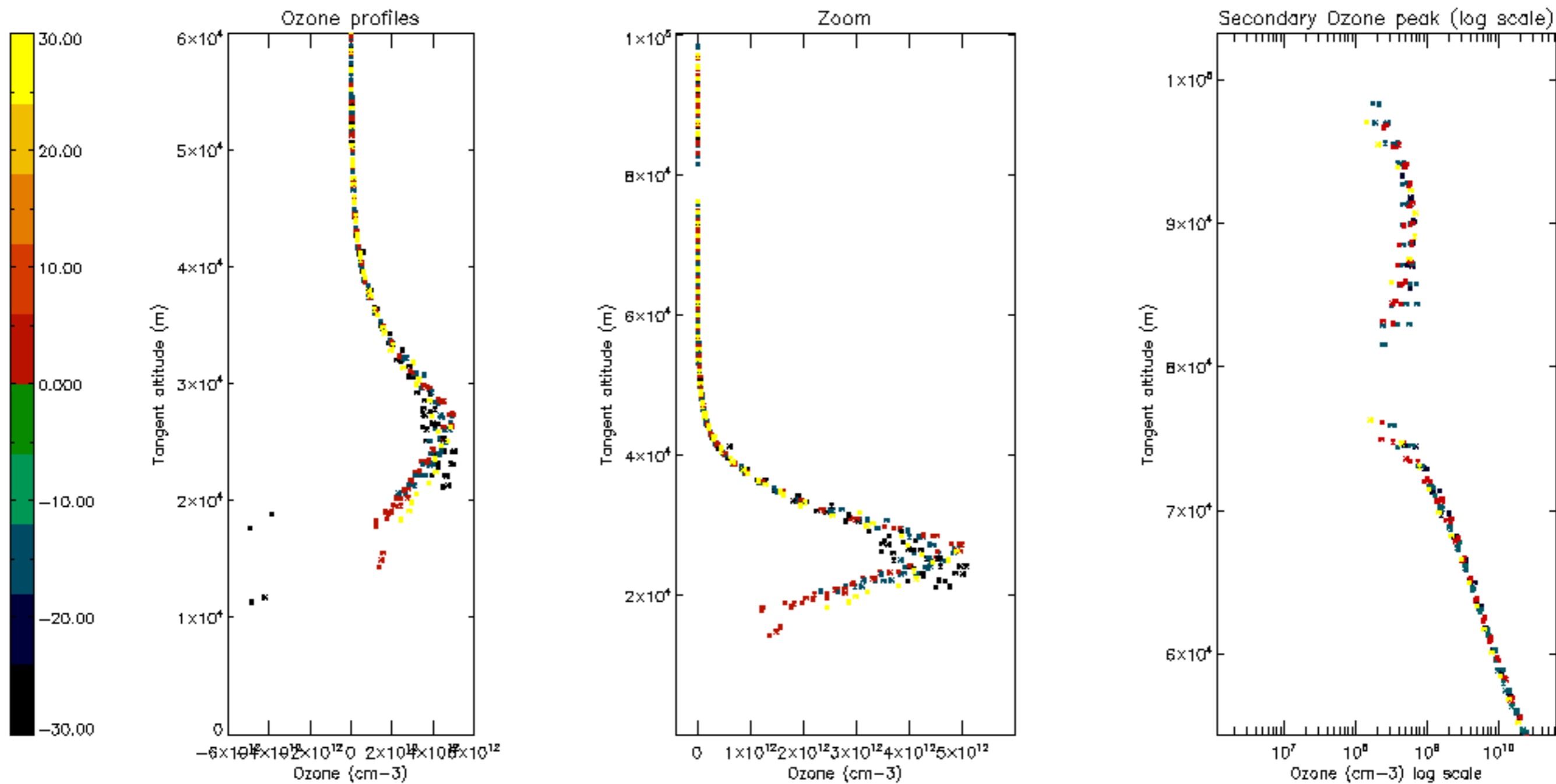


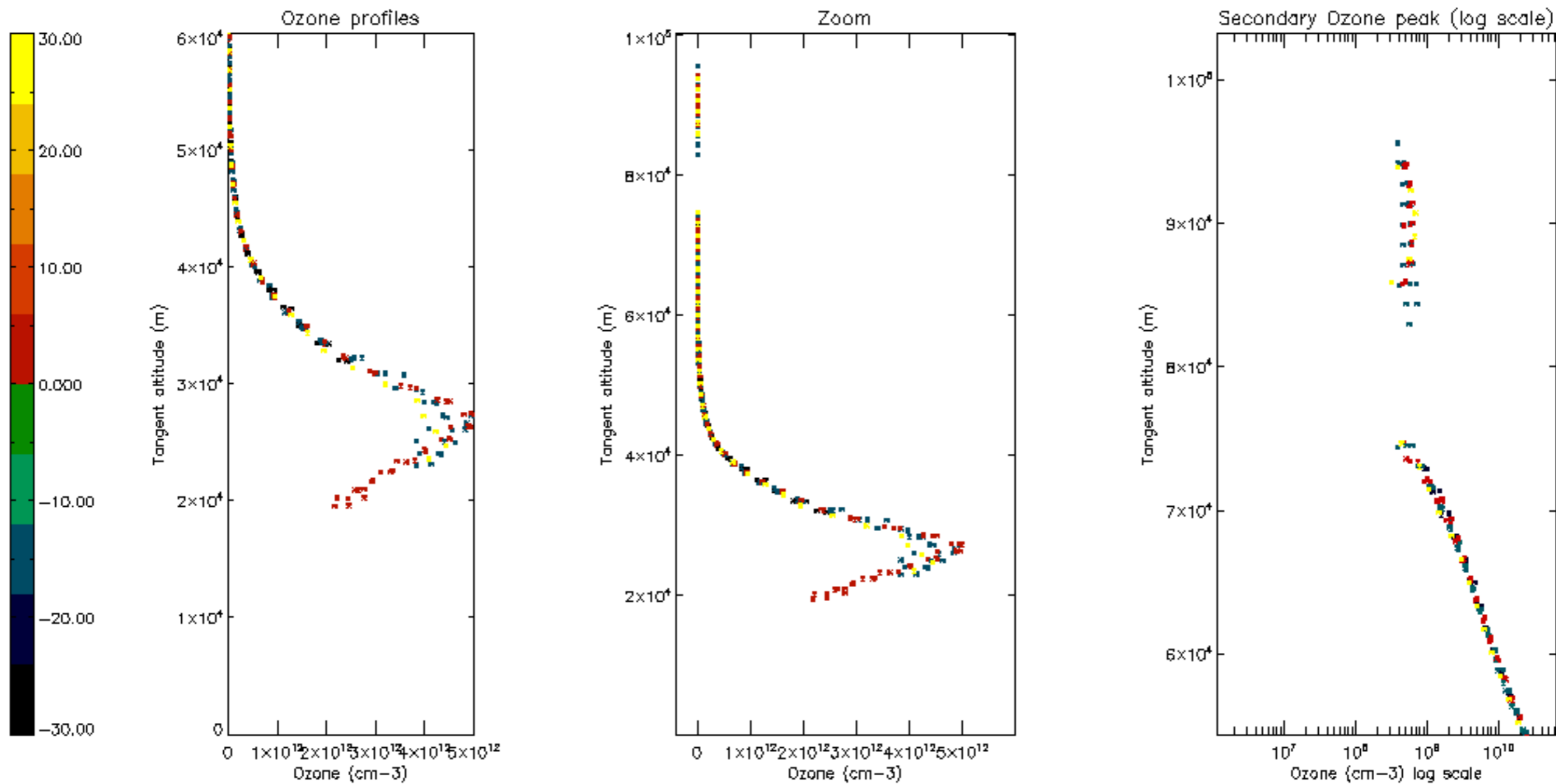
Percentage of saturation errors per profile

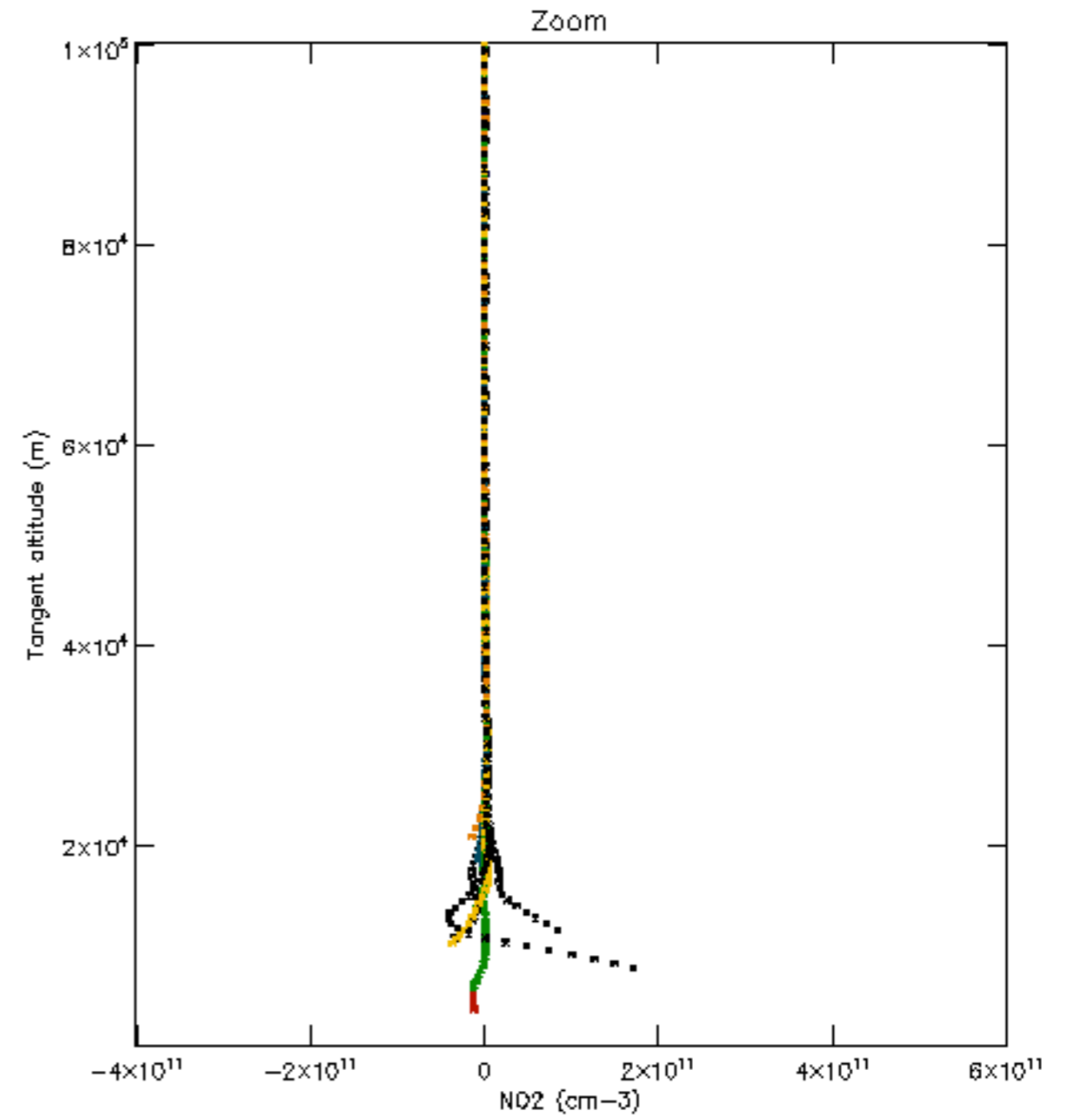
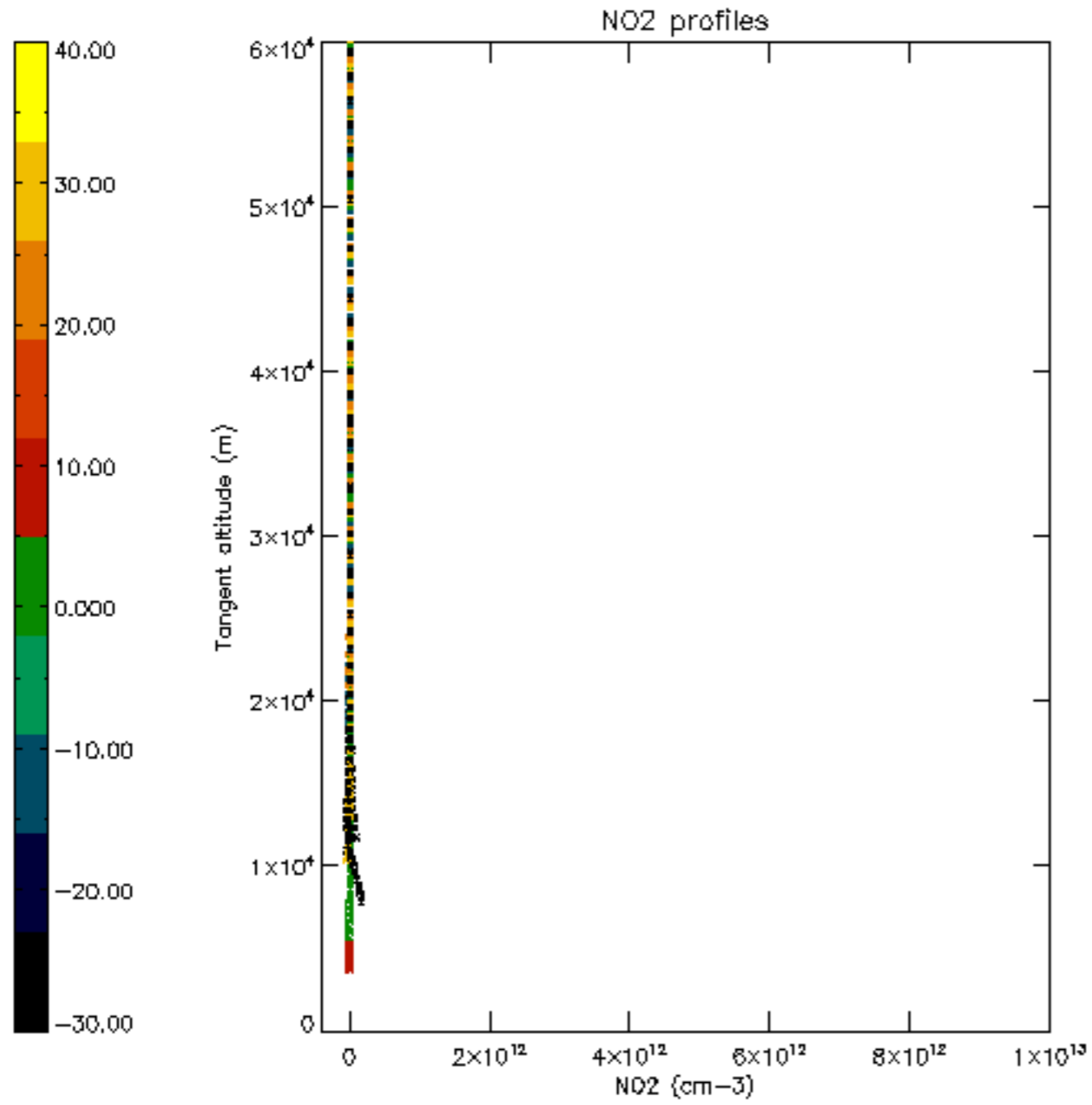


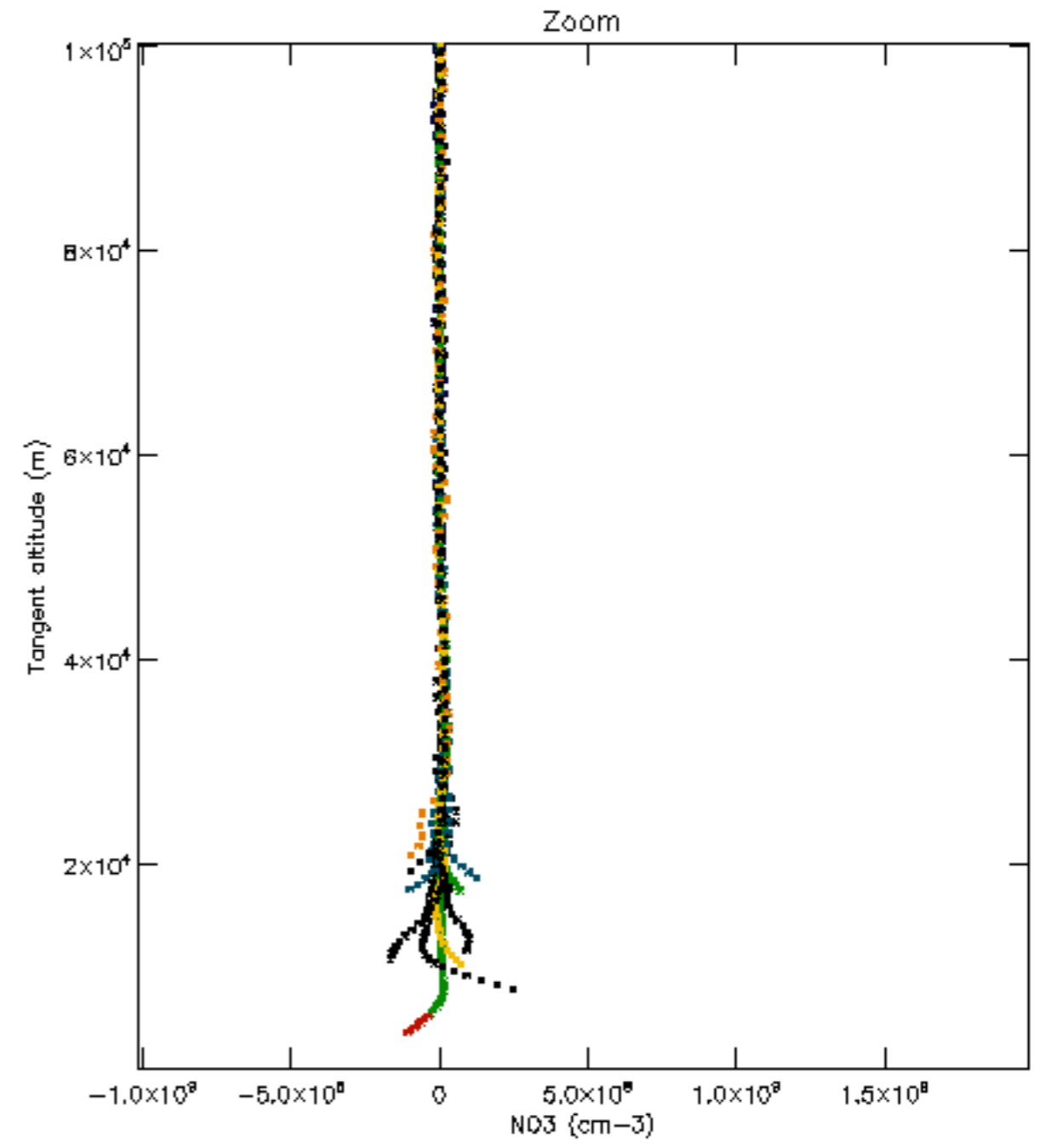
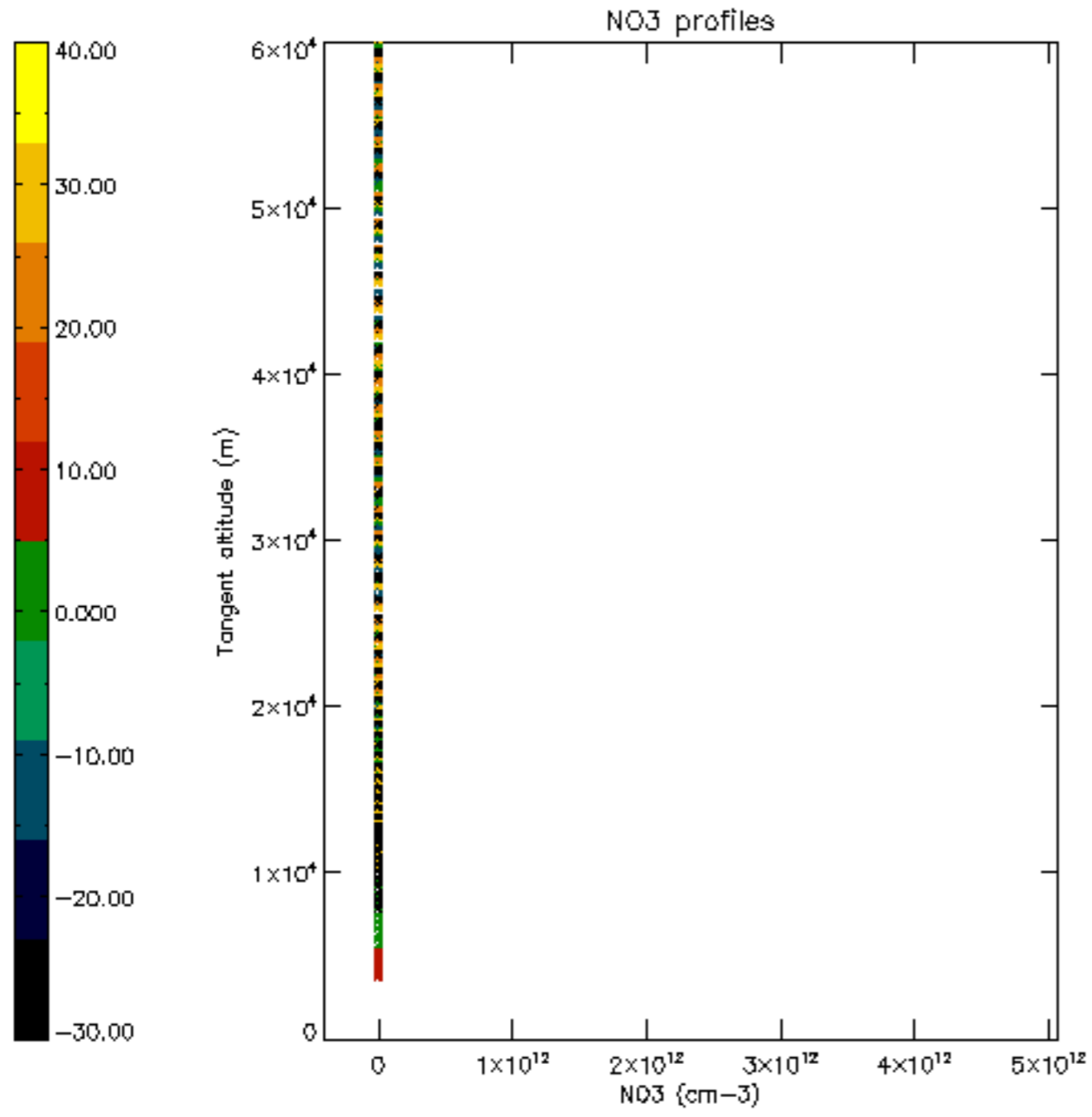


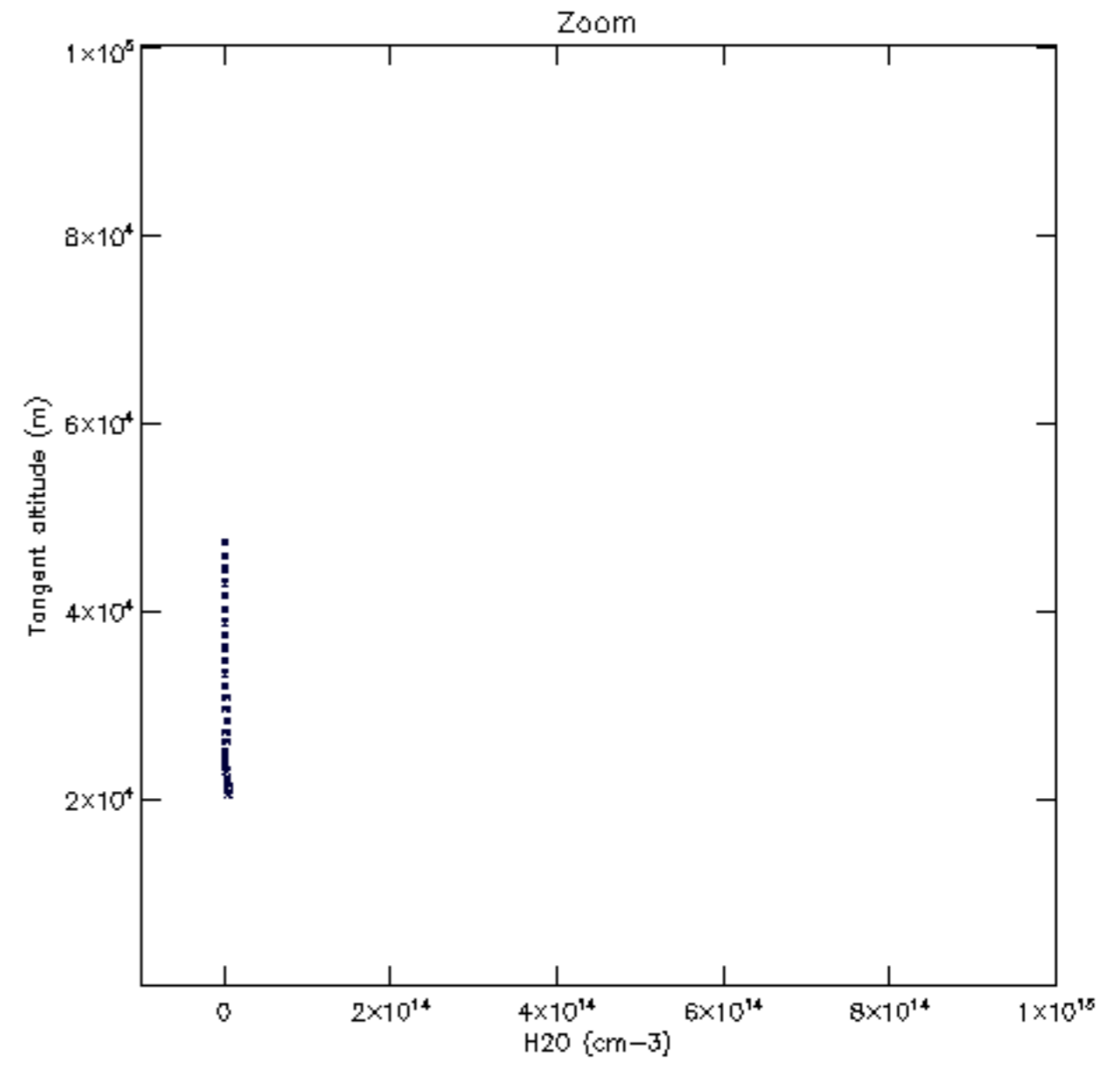
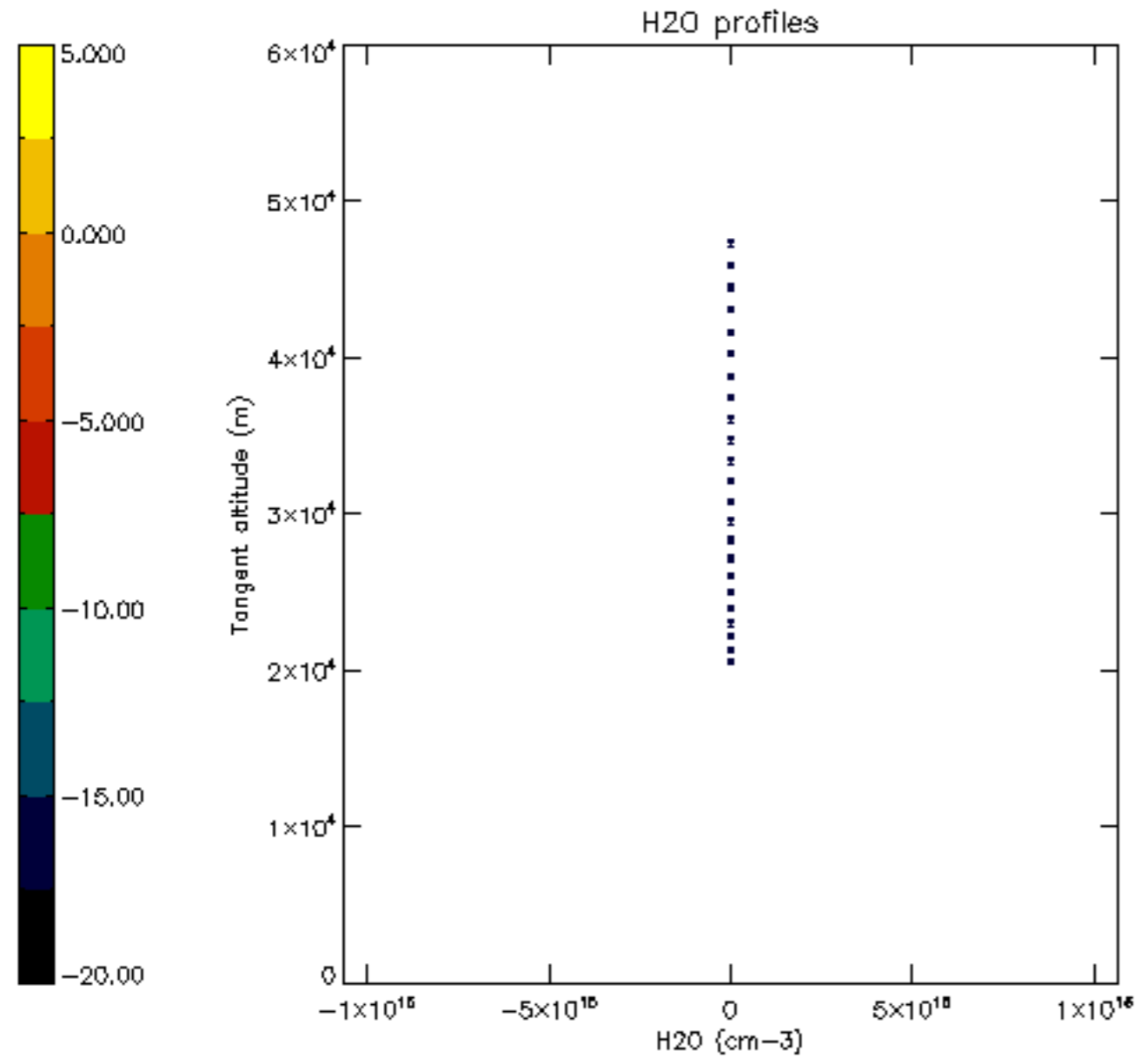


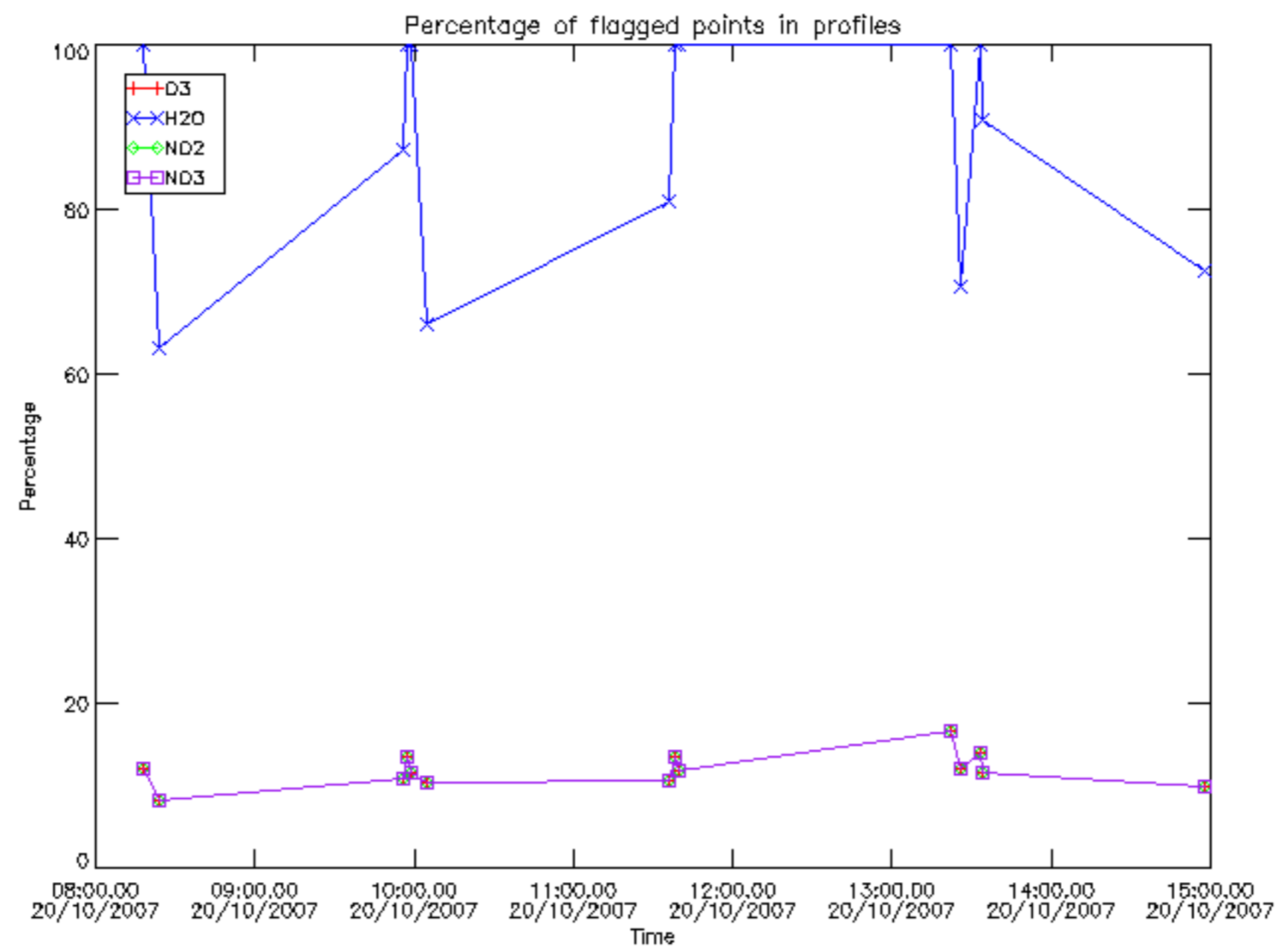




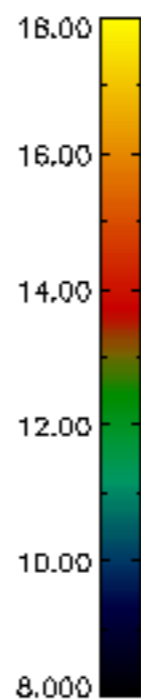
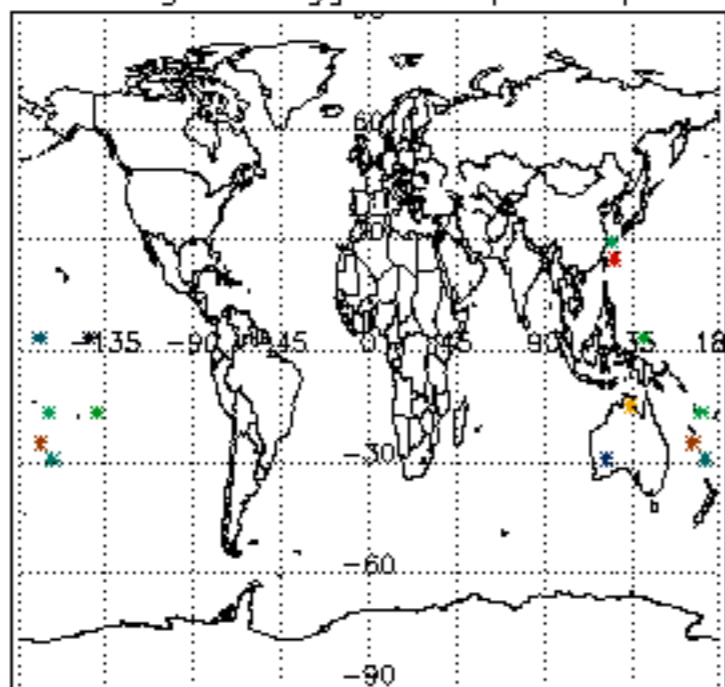




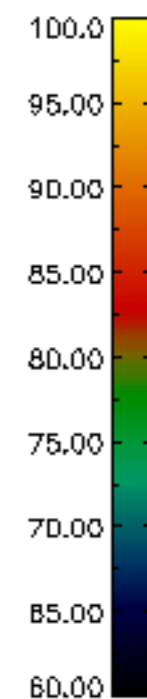
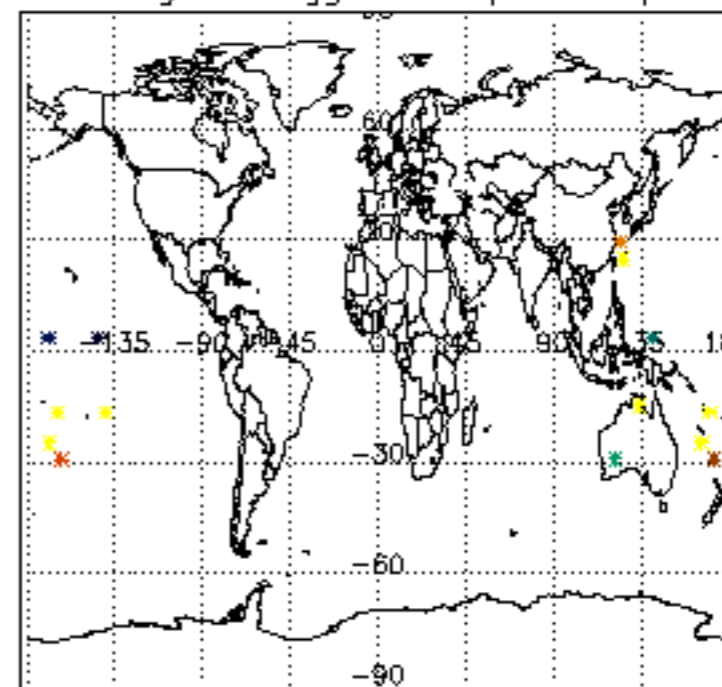




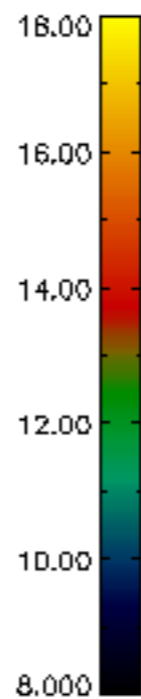
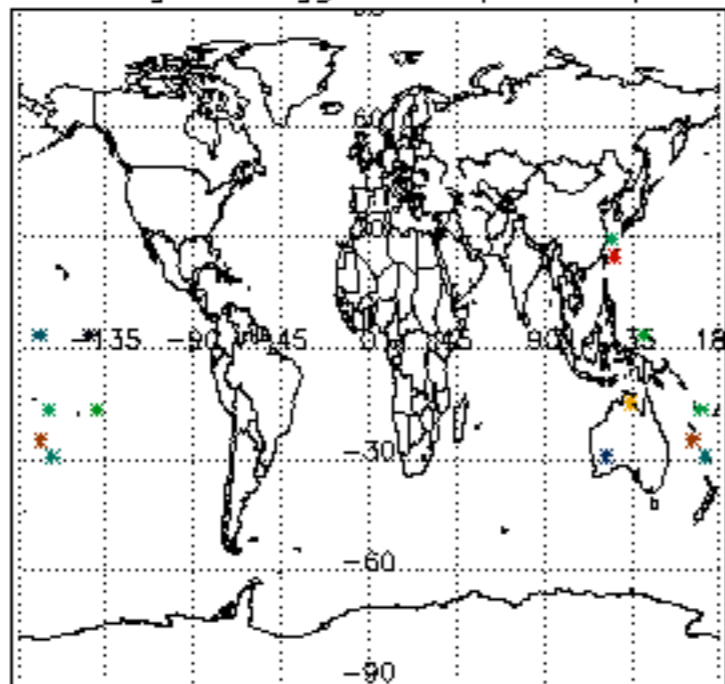
Percentage of flagged data per D3 profile



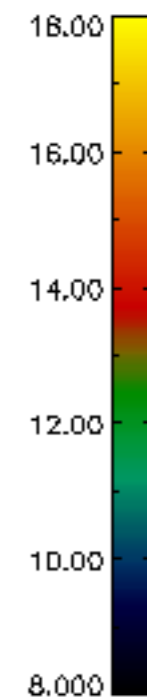
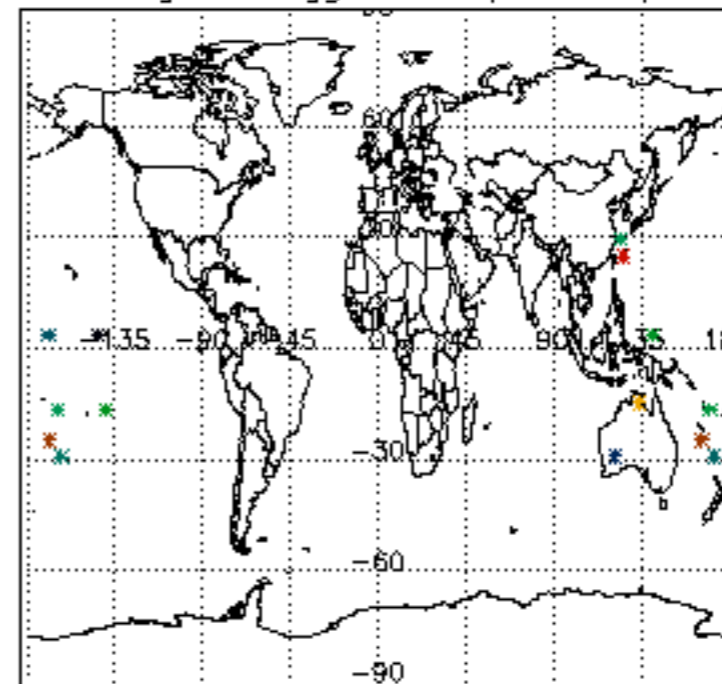
Percentage of flagged data per H2O profile

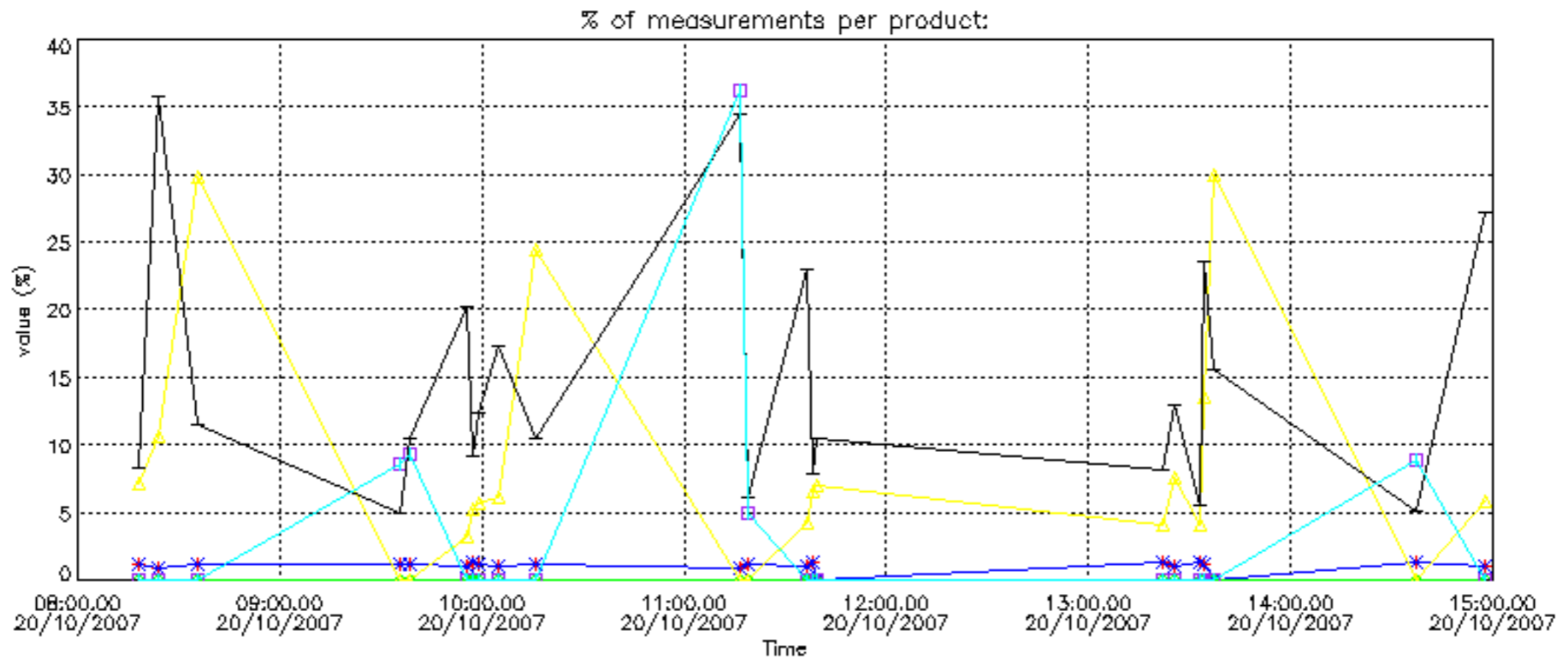


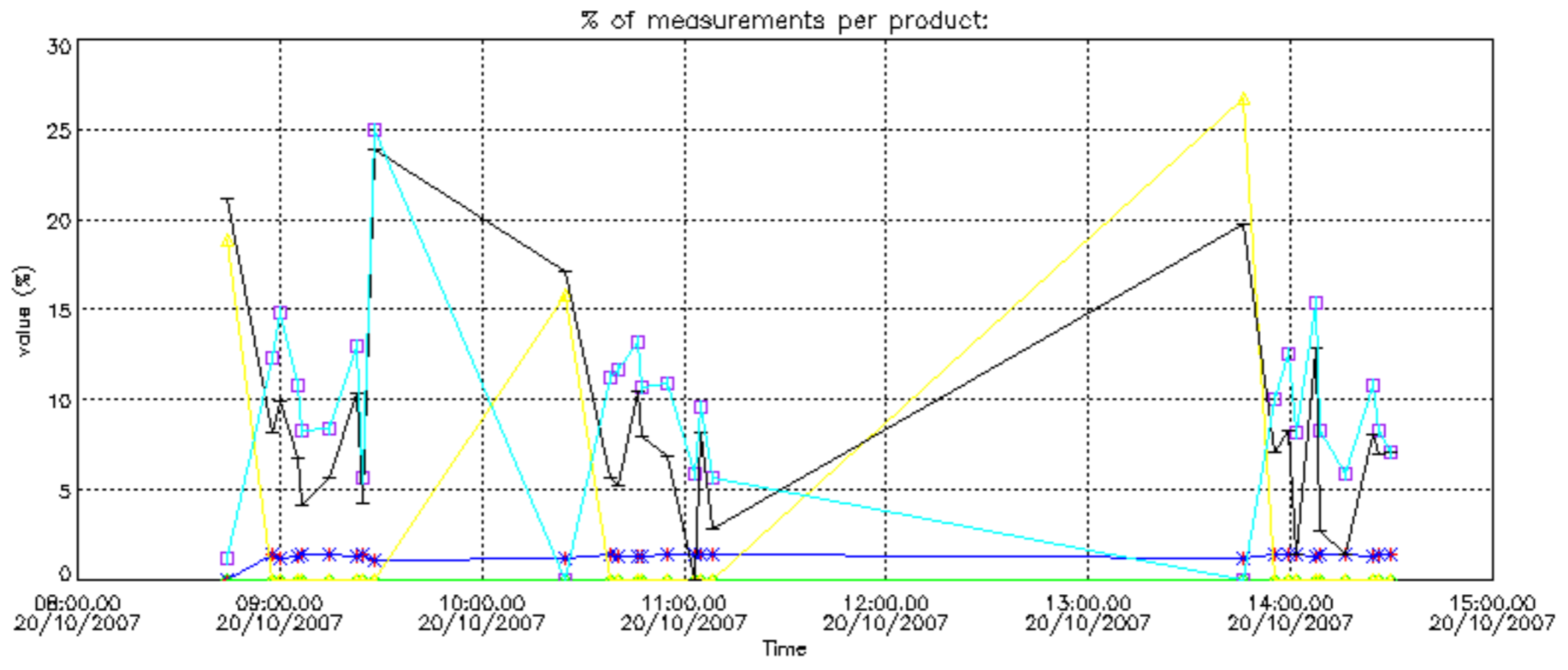
Percentage of flagged data per NO2 profile



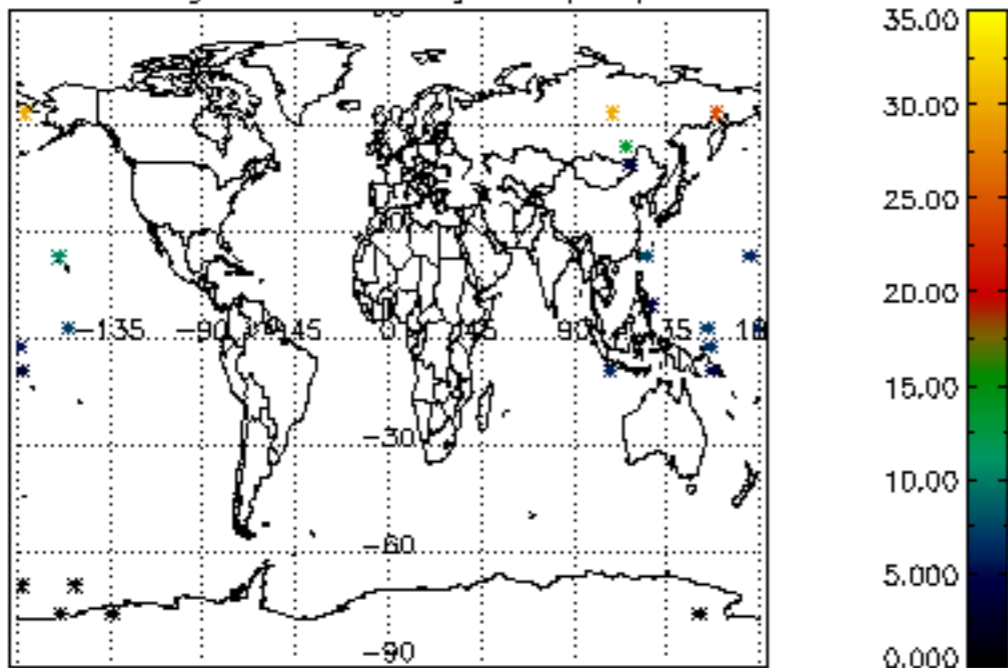
Percentage of flagged data per NO3 profile



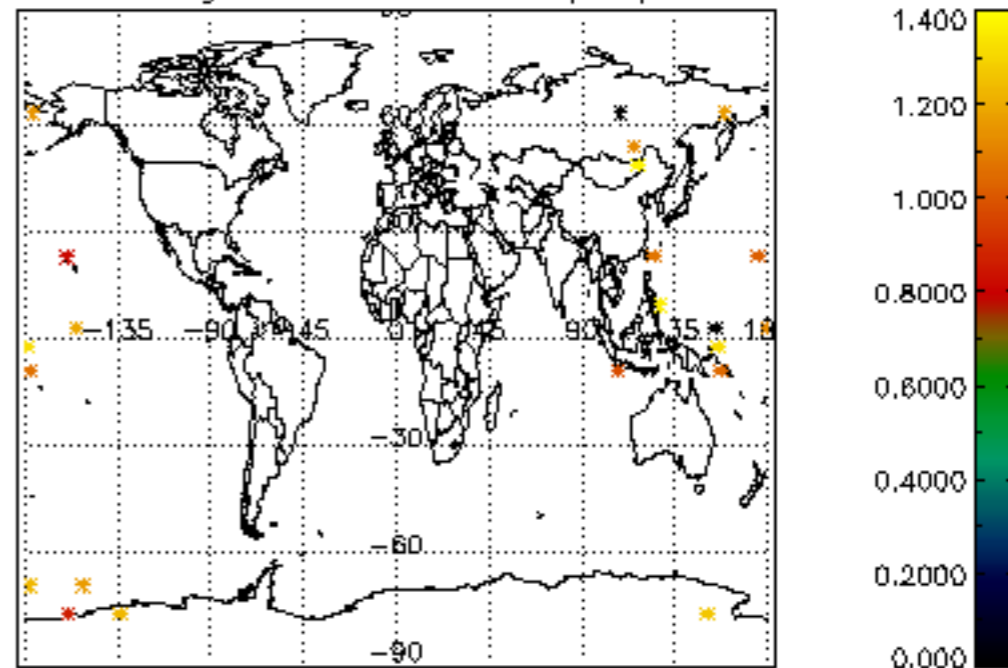




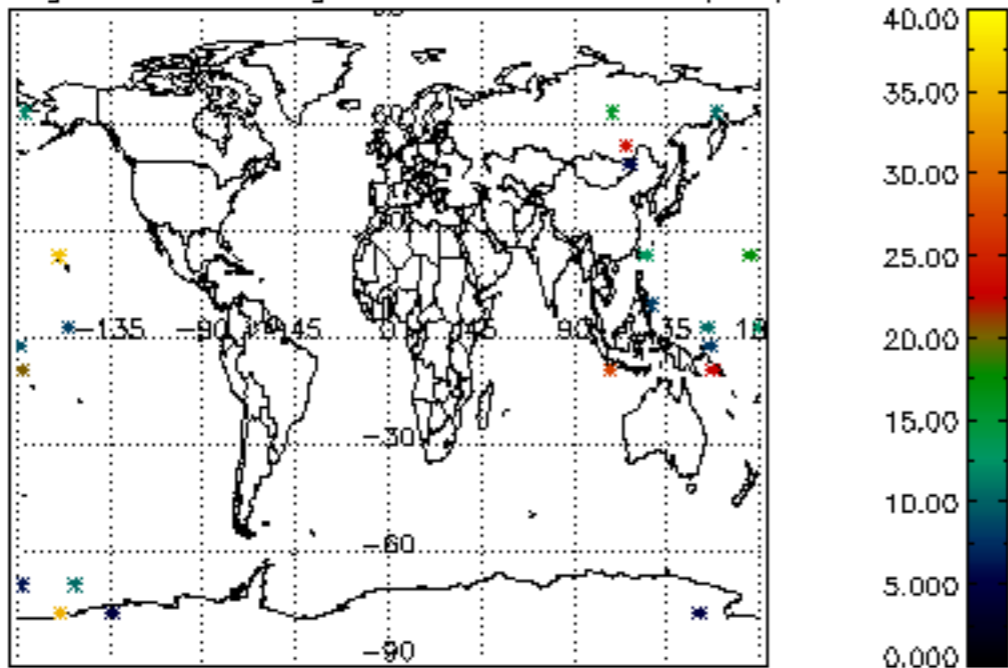
Percentage of cosmic ray hits per profile



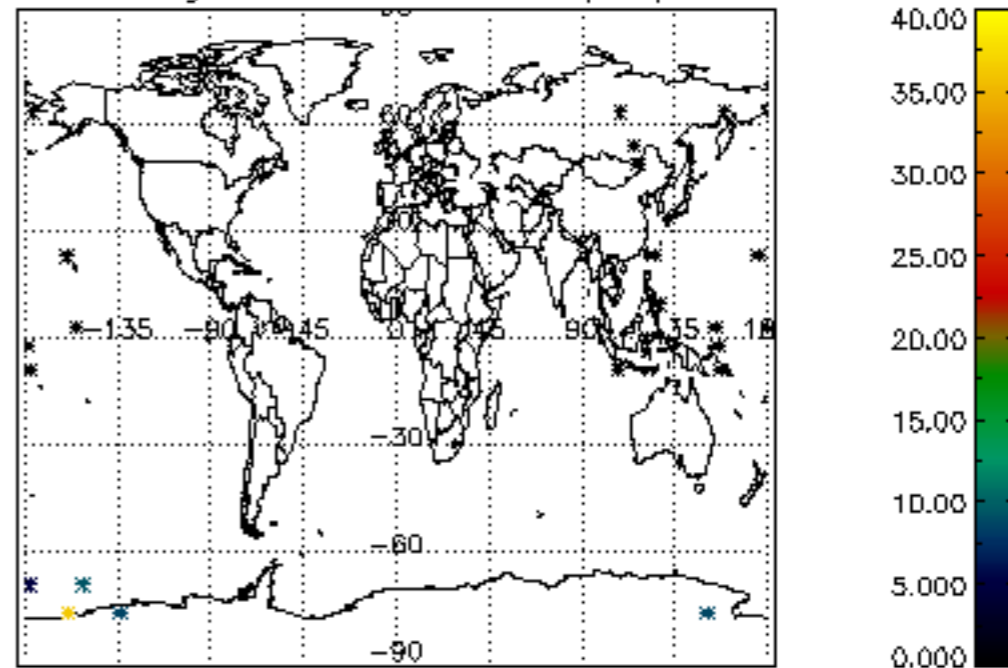
Percentage of datation errors per profile



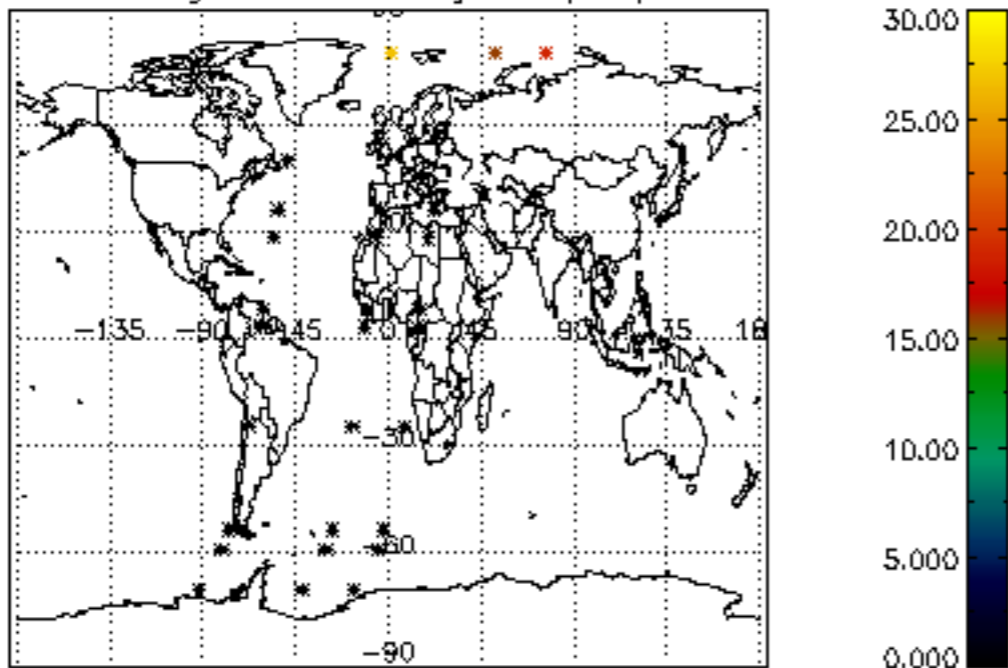
Percentage of star falling outside central band per profile



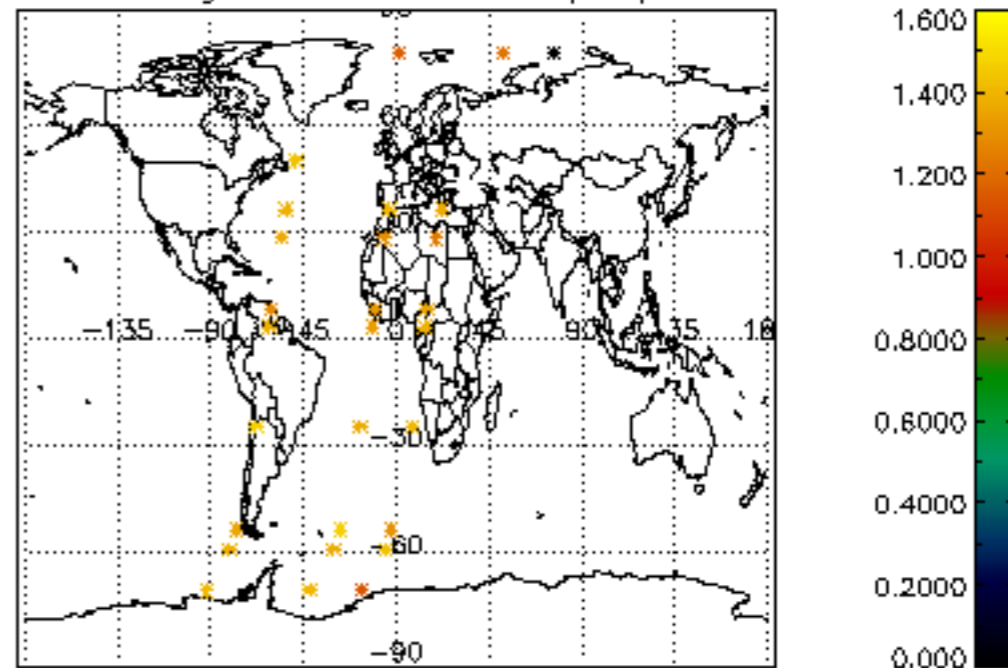
Percentage of saturation errors per profile



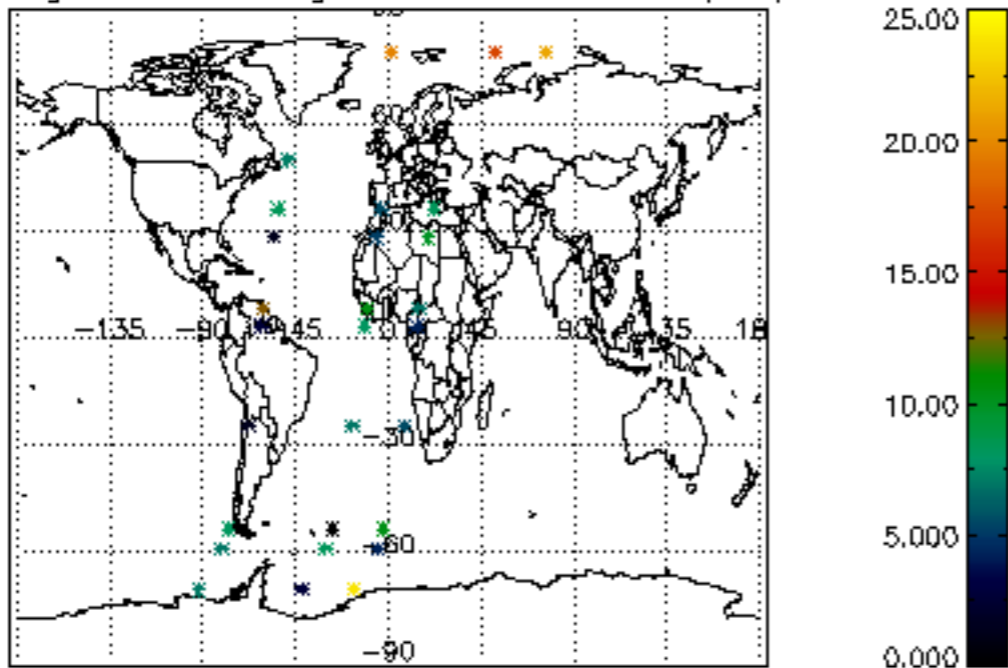
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

