

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	25APR2013 18:25:33
Data source version	GOMOS/6.01
Start time of products	04-08-2008 (04AUG2008 00:00:00)
Stop time of products	05-08-2008 (05AUG2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	284
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

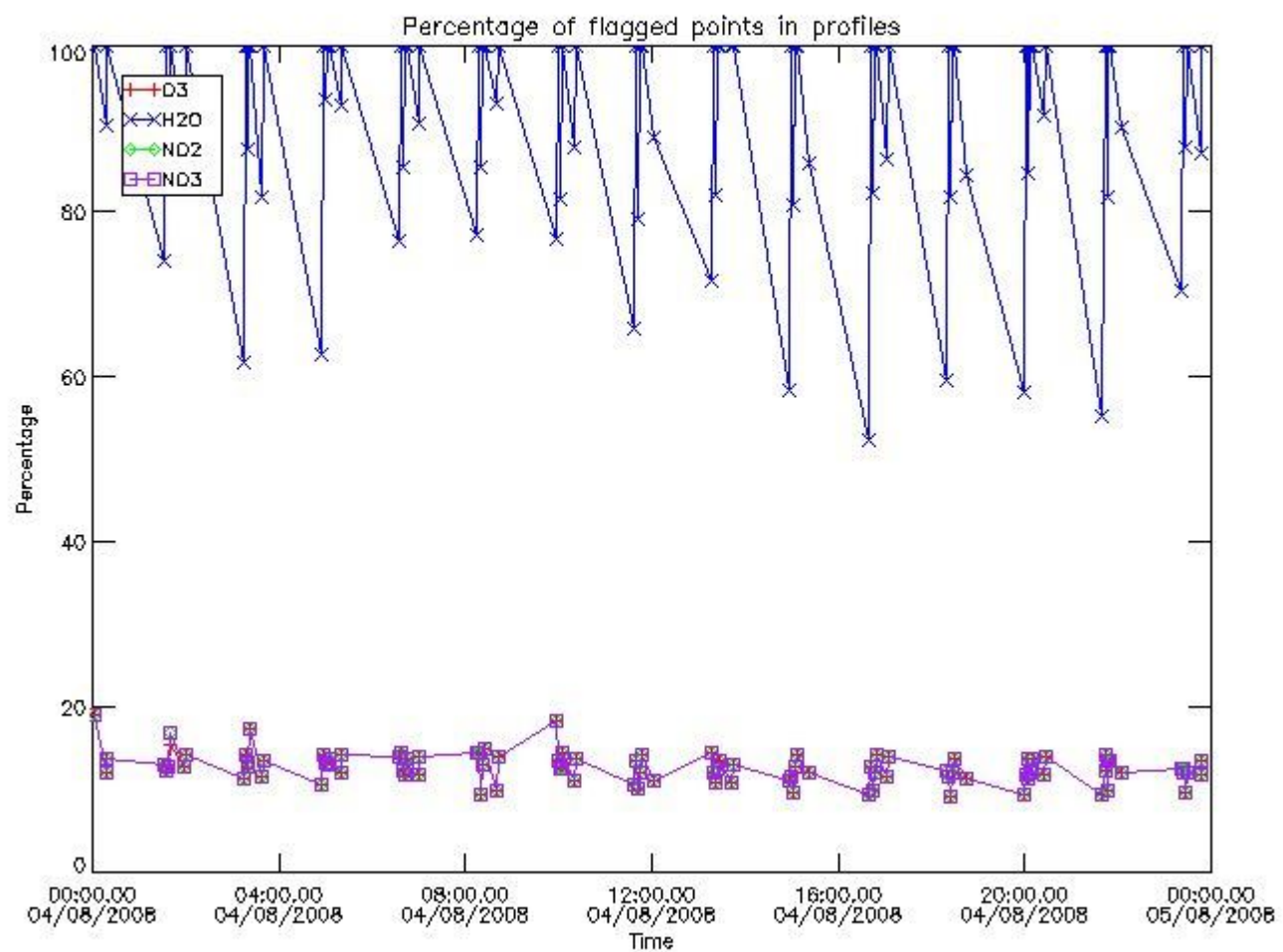
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080804_000214_000000272070_00488_33608_2954.N1	04-AUG-2008 00:02:14	Dark	27.000	177	1Zet CMa	3.0220	26000.	54	33608	No
2	GOM_NL__2PRFIN20080804_001723_000000422070_00489_33609_2962.N1	04-AUG-2008 00:17:23	Dark	42.000	9	Alp Eri	0.45300	24000.	84	33609	No
3	GOM_NL__2PRFIN20080804_001902_000000372070_00489_33609_2963.N1	04-AUG-2008 00:19:02	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	33609	No
4	GOM_NL__2PRFIN20080804_002402_000000492070_00489_33609_2964.N1	04-AUG-2008 00:24:02	Straylight	48.500	148	Alp Tuc	2.8780	4100.0	97	33609	No
5	GOM_NL__2PRFIN20080804_002727_000000422070_00489_33609_2965.N1	04-AUG-2008 00:27:27	Straylight	42.000	31	Alp Gru	1.7340	15200.	84	33609	No
6	GOM_NL__2PRFIN20080804_003748_000000362070_00489_33609_2966.N1	04-AUG-2008 00:37:48	Bright	36.000	155	41Pi Sgr	2.9000	6600.0	72	33609	No
7	GOM_NL__2PRFIN20080804_004602_000000372070_00489_33609_2967.N1	04-AUG-2008 00:46:02	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	33609	No
8	GOM_NL__2PRFIN20080804_004733_000000352070_00489_33609_2968.N1	04-AUG-2008 00:47:33	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	33609	No
9	GOM_NL__2PRFIN20080804_005439_000000382070_00489_33609_2969.N1	04-AUG-2008 00:54:39	Bright	38.000	5	3Alp Lyr	0.033000	11000.	76	33609	No
10	GOM_NL__2PRFIN20080804_005631_000000372070_00489_33609_2970.N1	04-AUG-2008 00:56:31	Bright	36.500	144	18Del Cyg	2.8600	11000.	73	33609	No
11	GOM_NL__2PRFIN20080804_005830_000000372070_00489_33609_2971.N1	04-AUG-2008 00:58:30	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	33609	No
12	GOM_NL__2PRFIN20080804_010905_000000332070_00489_33609_2972.N1	04-AUG-2008 01:09:05	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	33609	No
13	GOM_NL__2PRFIN20080804_012146_000000442070_00489_33609_2973.N1	04-AUG-2008 01:21:46	Bright	43.500	6	13Alp Aur	0.080000	3400.0	87	33609	No
14	GOM_NL__2PRFIN20080804_012416_000000352070_00489_33609_2974.N1	04-AUG-2008 01:24:16	Bright	34.500	107	37The Aur	2.6490	11000.	69	33609	No
15	GOM_NL__2PRFIN20080804_012707_000000442070_00489_33609_2975.N1	04-AUG-2008 01:27:07	Bright	43.500	28	12Bet Tau	1.6500	15200.	87	33609	No
16	GOM_NL__2PRFIN20080804_012914_000000422070_00489_33609_2976.N1	04-AUG-2008 01:29:14	Twilight	41.500	176	23Zet Tau	3.0200	22000.	83	33609	No
17	GOM_NL__2PRFIN20080804_013256_000000392070_00489_33609_2977.N1	04-AUG-2008 01:32:56	Dark	39.000	14	58Alp Ori	0.87000	3000.0	78	33609	No
18	GOM_NL__2PRFIN20080804_013546_000000422070_00489_33609_2978.N1	04-AUG-2008 01:35:46	Dark	41.500	30	46Eps Ori	1.6940	30000.	83	33609	No
19	GOM_NL__2PRFIN20080804_013819_000000442070_00489_33609_2979.N1	04-AUG-2008 01:38:19	Dark	43.500	7	19Bet Ori	0.10000	14000.	87	33609	No
20	GOM_NL__2PRFIN20080804_014027_000000402070_00489_33609_2980.N1	04-AUG-2008 01:40:27	Dark	39.500	101	11Alp Lep	2.5820	7000.0	79	33609	No
21	GOM_NL__2PRFIN20080804_015800_000000482070_00490_33610_2970.N1	04-AUG-2008 01:58:00	Dark	48.000	9	Alp Eri	0.45300	24000.	96	33610	No
22	GOM_NL__2PRFIN20080804_015938_000000362070_00490_33610_2971.N1	04-AUG-2008 01:59:38	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	33610	No
23	GOM_NL__2PRFIN20080804_020439_000000432070_00490_33610_2972.N1	04-AUG-2008 02:04:39	Straylight	43.000	148	Alp Tuc	2.8780	4100.0	86	33610	No
24	GOM_NL__2PRFIN20080804_020804_000000462070_00490_33610_2973.N1	04-AUG-2008 02:08:04	Straylight	45.500	31	Alp Gru	1.7340	15200.	91	33610	No
25	GOM_NL__2PRFIN20080804_021824_000000372070_00490_33610_2974.N1	04-AUG-2008 02:18:24	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	33610	No
26	GOM_NL__2PRFIN20080804_022638_000000372070_00490_33610_2975.N1	04-AUG-2008 02:26:38	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	33610	No
27	GOM_NL__2PRFIN20080804_022809_000000352070_00490_33610_2976.N1	04-AUG-2008 02:28:09	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	33610	No
28	GOM_NL__2PRFIN20080804_023515_000000382070_00490_33610_2977.N1	04-AUG-2008 02:35:15	Bright	37.500	5	3Alp Lyr	0.033000	11000.	75	33610	No
29	GOM_NL__2PRFIN20080804_023707_000000372070_00490_33610_2978.N1	04-AUG-2008 02:37:07	Bright	36.500	144	18Del Cyg	2.8600	11000.	73	33610	No
30	GOM_NL__2PRFIN20080804_023906_000000362070_00490_33610_2979.N1	04-AUG-2008 02:39:06	Bright	36.000	69	33Gam Dra	2.2310	3800.0	72	33610	No
31	GOM_NL__2PRFIN20080804_024941_000000342070_00490_33610_2980.N1	04-AUG-2008 02:49:41	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	33610	No
32	GOM_NL__2PRFIN20080804_030221_000000442070_00490_33610_2981.N1	04-AUG-2008 03:02:21	Bright	43.500	6	13Alp Aur	0.080000	3400.0	87	33610	No
33	GOM_NL__2PRFIN20080804_030452_000000372070_00490_33610_2982.N1	04-AUG-2008 03:04:52	Bright	36.500	107	37The Aur	2.6490	11000.	73	33610	No
34	GOM_NL__2PRFIN20080804_030743_000000442070_00490_33610_2983.N1	04-AUG-2008 03:07:43	Bright	43.500	28	12Bet Tau	1.6500	15200.	87	33610	No
35	GOM_NL__2PRFIN20080804_030950_000000402070_00490_33610_2984.N1	04-AUG-2008 03:09:50	Twilight	39.500	176	23Zet Tau	3.0200	22000.	79	33610	No
36	GOM_NL__2PRFIN20080804_031333_000000542070_00490_33610_2985.N1	04-AUG-2008 03:13:33	Dark	54.000	14	58Alp Ori	0.87000	3000.0	108	33610	No
37	GOM_NL__2PRFIN20080804_031622_000000402070_00490_33610_2986.N1	04-AUG-2008 03:16:22	Dark	39.500	30	46Eps Ori	1.6940	30000.	79	33610	No
38	GOM_NL__2PRFIN20080804_031856_000000402070_00490_33610_2987.N1	04-AUG-2008 03:18:56	Dark	40.000	7	19Bet Ori	0.10000	14000.	80	33610	No
39	GOM_NL__2PRFIN20080804_032103_000000392070_00490_33610_2988.N1	04-AUG-2008 03:21:03	Dark	38.500	101	11Alp Lep	2.5820	7000.0	77	33610	No
40	GOM_NL__2PRFIN20080804_032326_000000382070_00490_33610_2989.N1	04-AUG-2008 03:23:26	Dark	38.000	177	1Zet CMa	3.0220	26000.	76	33610	No
41	GOM_NL__2PRFIN20080804_033837_000000442070_00491_33611_2976.N1	04-AUG-2008 03:38:37	Dark	44.000	9	Alp Eri	0.45300	24000.	88	33611	No
42	GOM_NL__2PRFIN20080804_034014_000000382070_00491_33611_2977.N1	04-AUG-2008 03:40:14	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	33611	No

279	GOM_NL__2PRFIN20080804_232820_000000422071_00001_33622_3279.N1	04-AUG-2008 23:28:20	Dark	42.000	101	11Alp Lep	2.5820	7000.0	84	33622	No
280	GOM_NL__2PRFIN20080804_234556_000000432071_00002_33623_3299.N1	04-AUG-2008 23:45:56	Dark	43.000	9	Alp Eri	0.45300	24000.	86	33623	No
281	GOM_NL__2PRFIN20080804_234729_000000382071_00002_33623_3300.N1	04-AUG-2008 23:47:29	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	33623	No
282	GOM_NL__2PRFIN20080804_235231_000000422071_00002_33623_3301.N1	04-AUG-2008 23:52:31	Straylight	41.500	148	Alp Tuc	2.8780	4100.0	83	33623	No
283	GOM_NL__2PRFIN20080804_235453_000000322071_00002_33623_3302.N1	04-AUG-2008 23:54:53	Straylight	32.000	63	Bet Gru	2.1500	2800.0	64	33623	No
284	GOM_NL__2PRFIN20080804_235557_000000472071_00002_33623_3303.N1	04-AUG-2008 23:55:57	Straylight	47.000	31	Alp Gru	1.7340	15200.	94	33623	No

3. Quality information per product

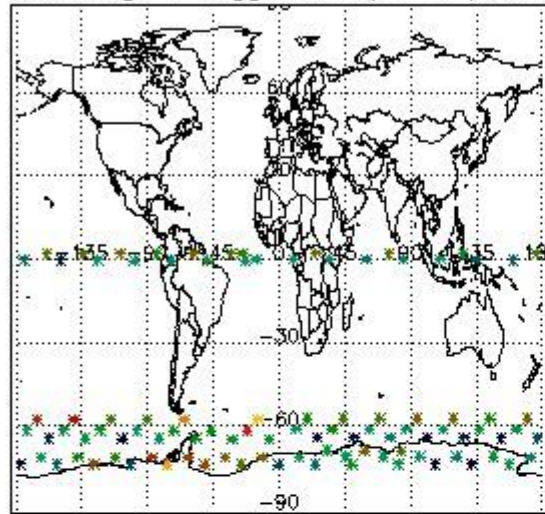
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

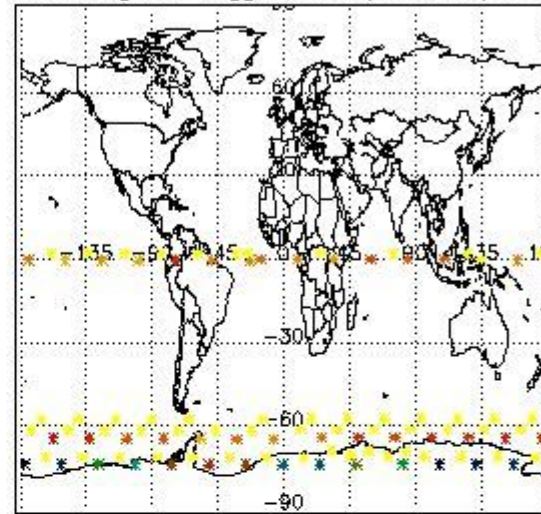


3.2 Plot quality information per product (world map)

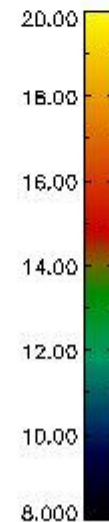
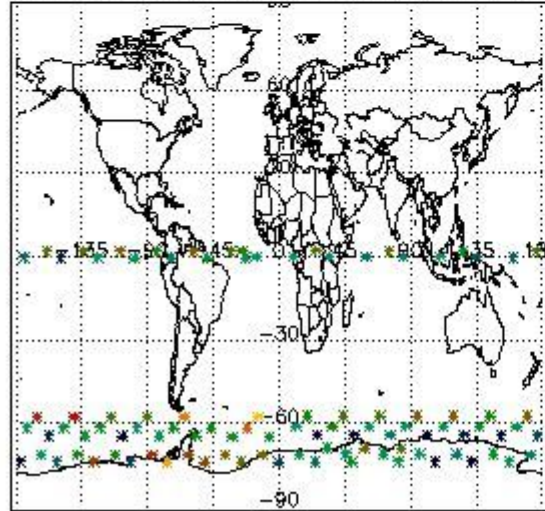
Percentage of flagged data per O3 profile



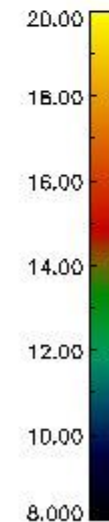
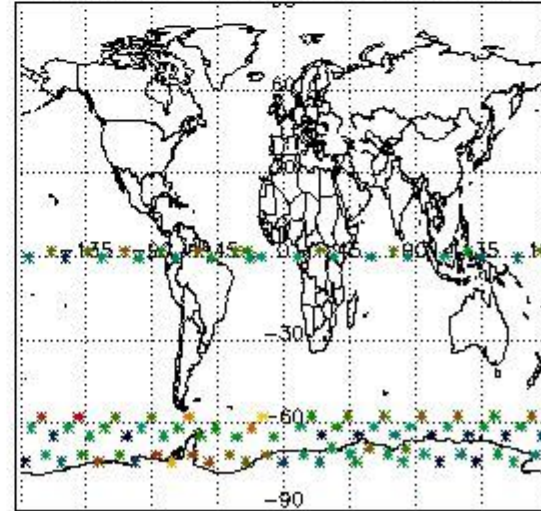
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

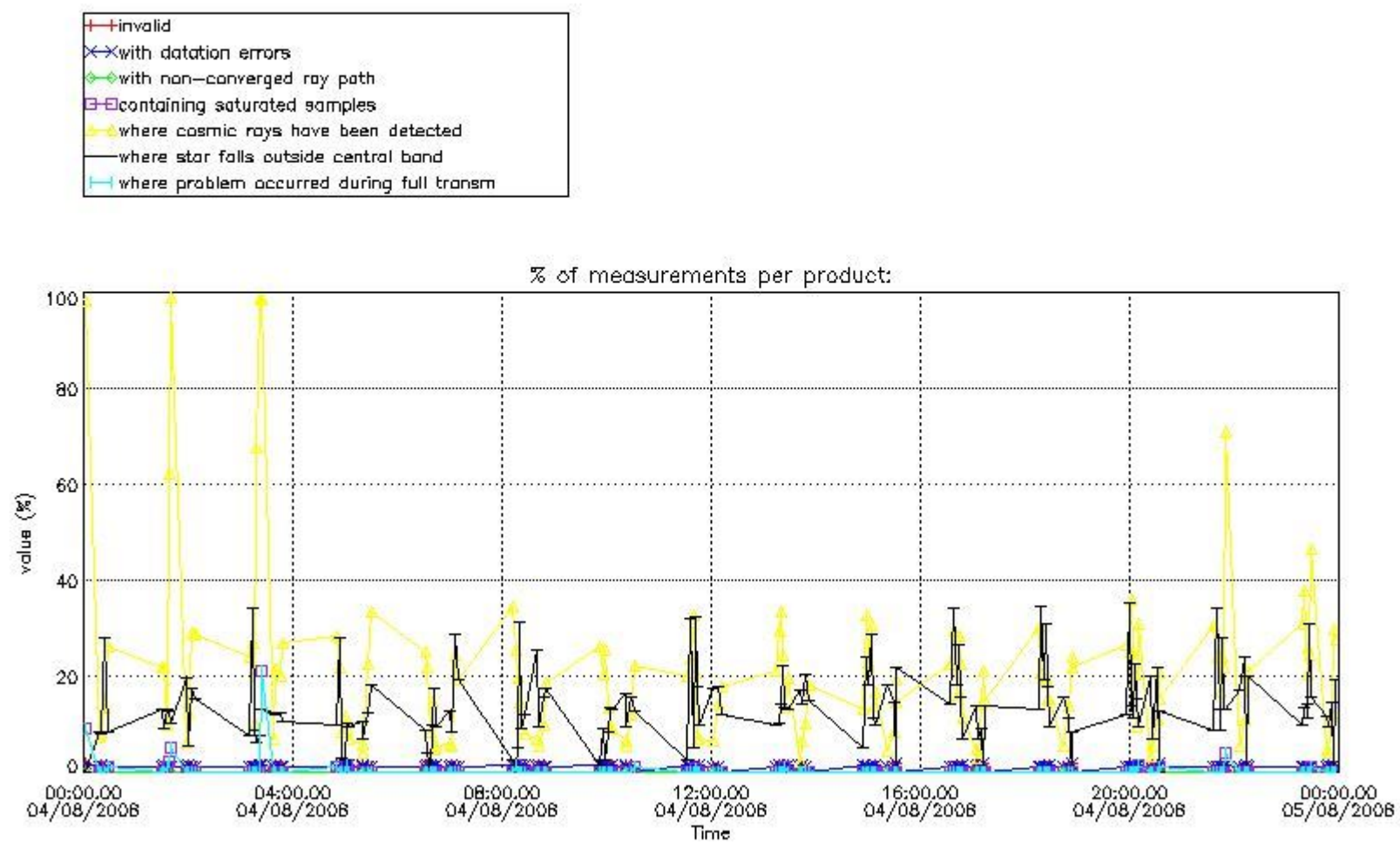


4. Level 1 quality information per product

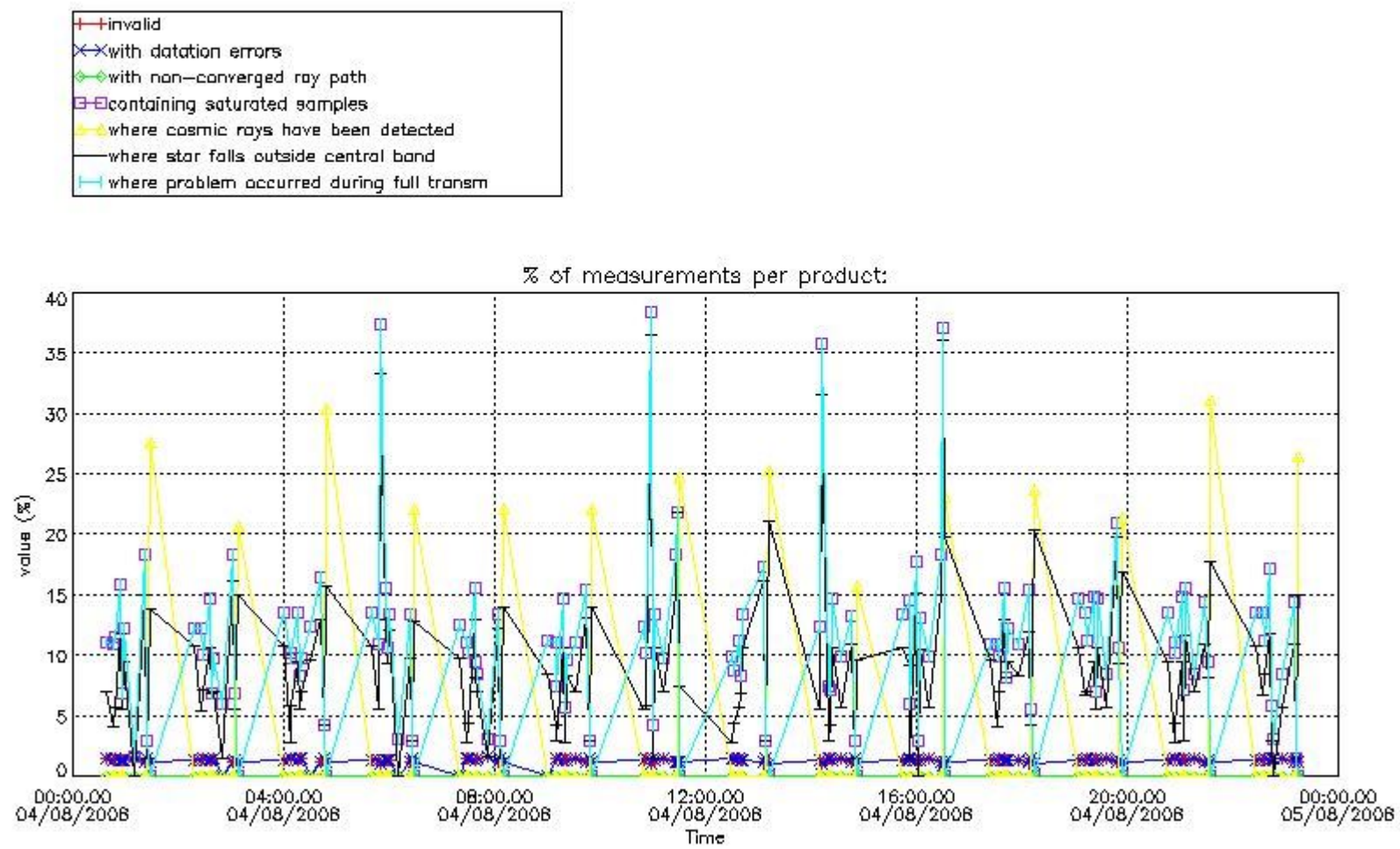
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



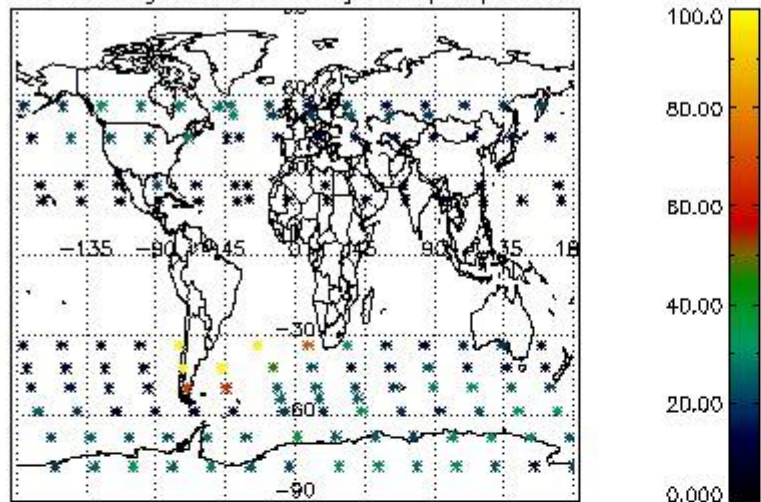
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



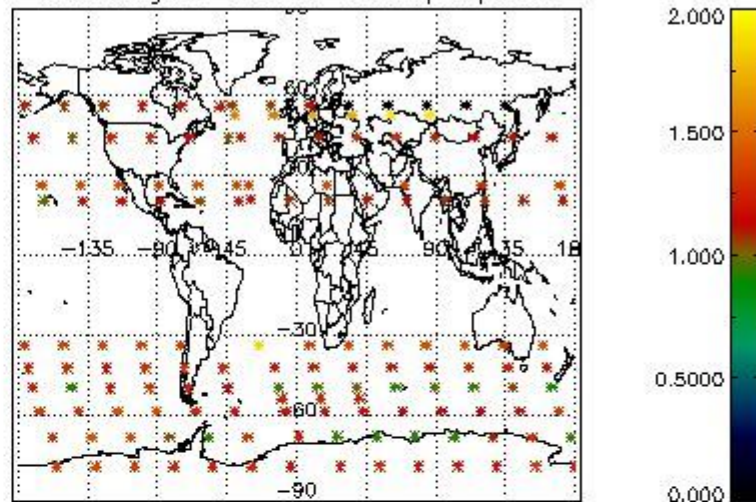
4.2 Plot quality information per product coming from level 1b processing (world map)

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

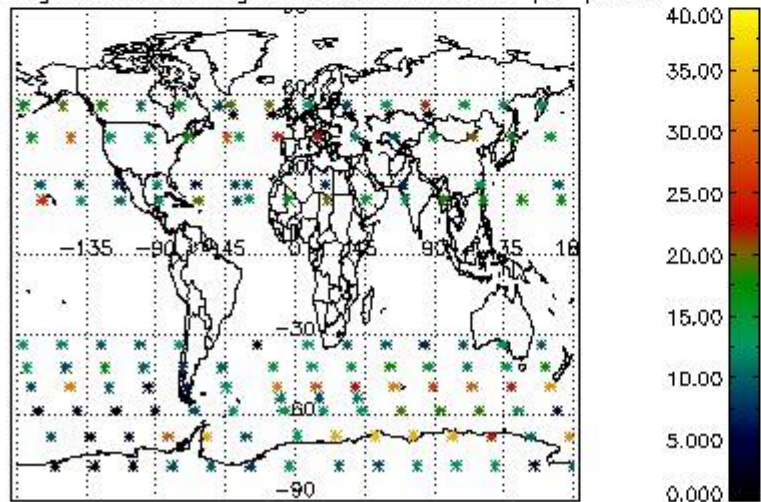
Percentage of cosmic ray hits per profile



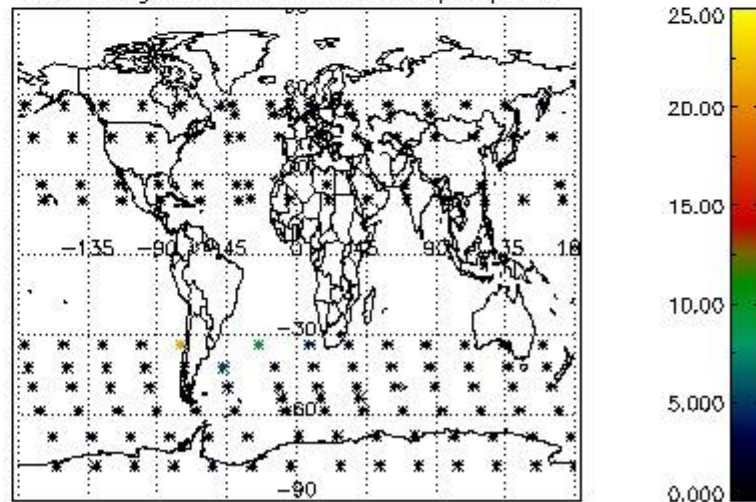
Percentage of datation errors per profile



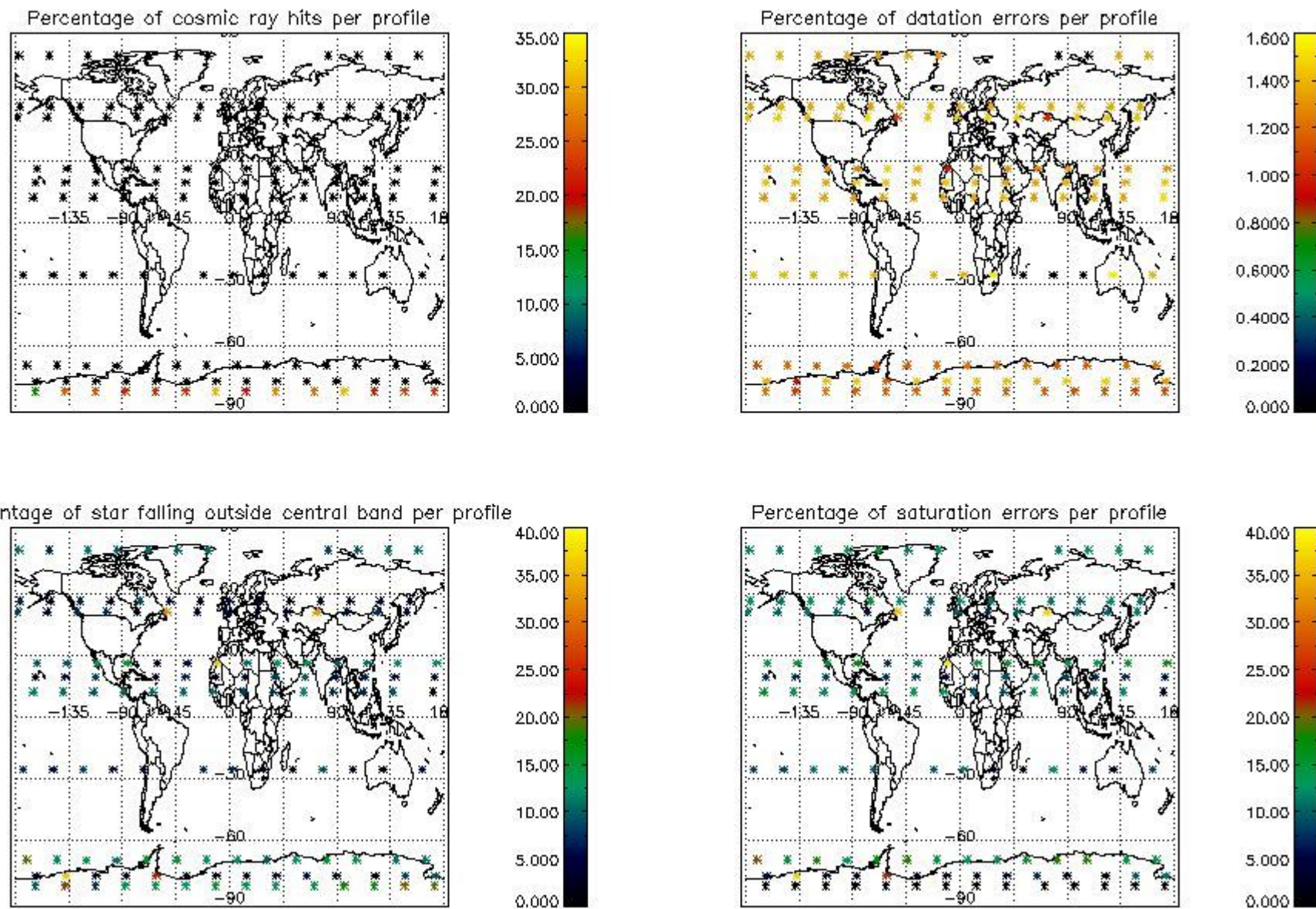
Percentage of star falling outside central band per profile



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

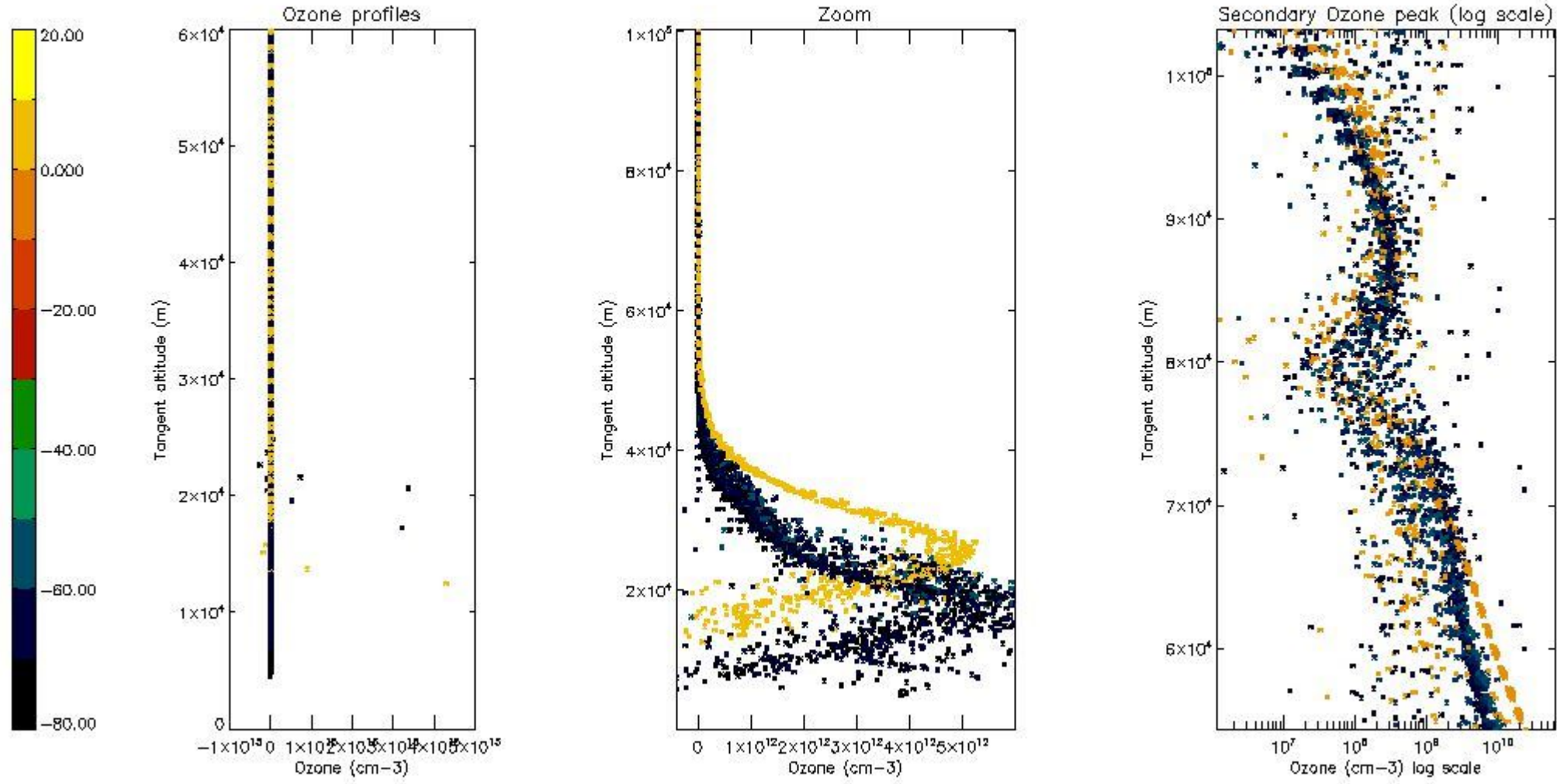
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	20

STD < 10	16
STD < 5	12

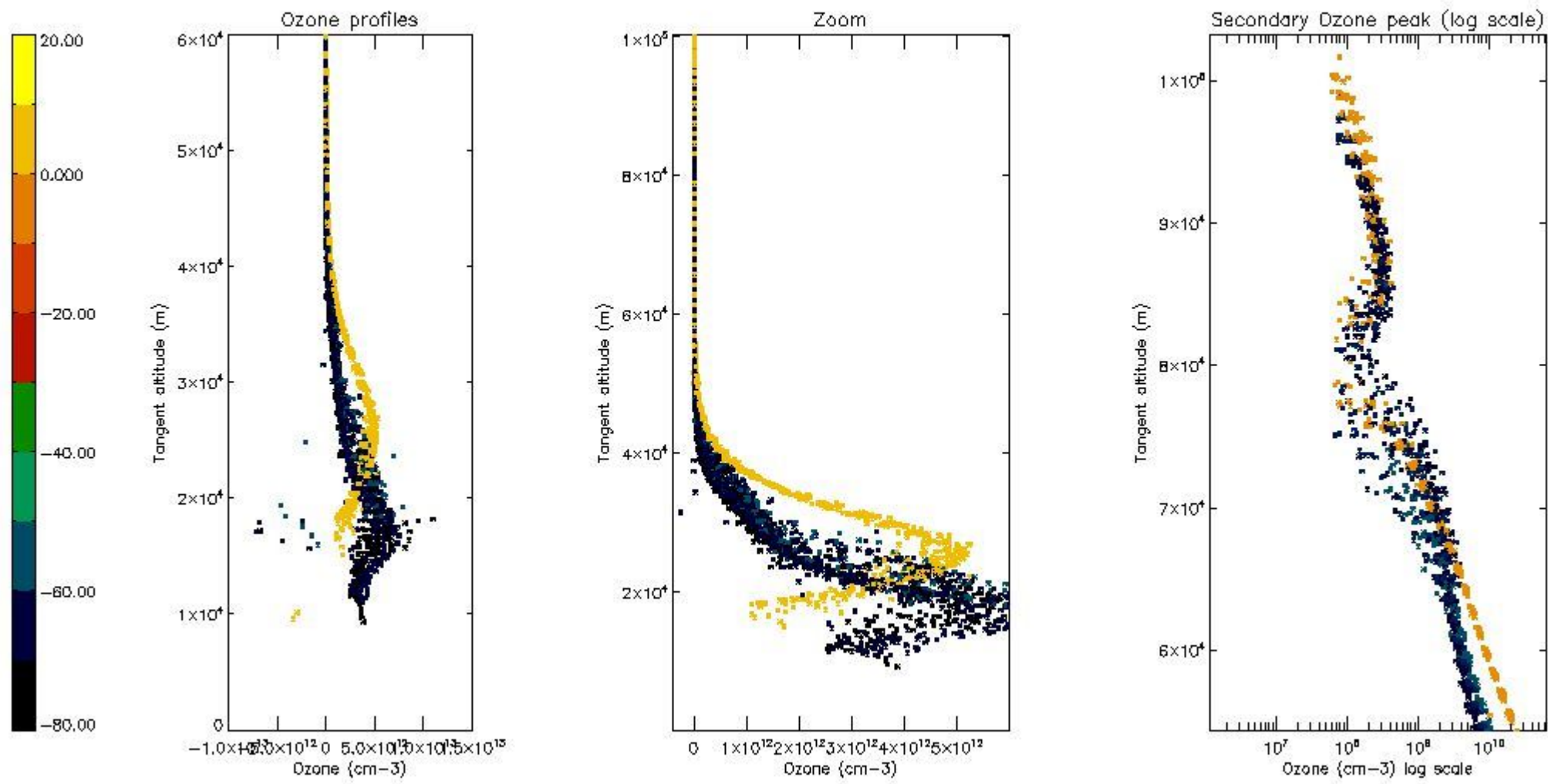
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



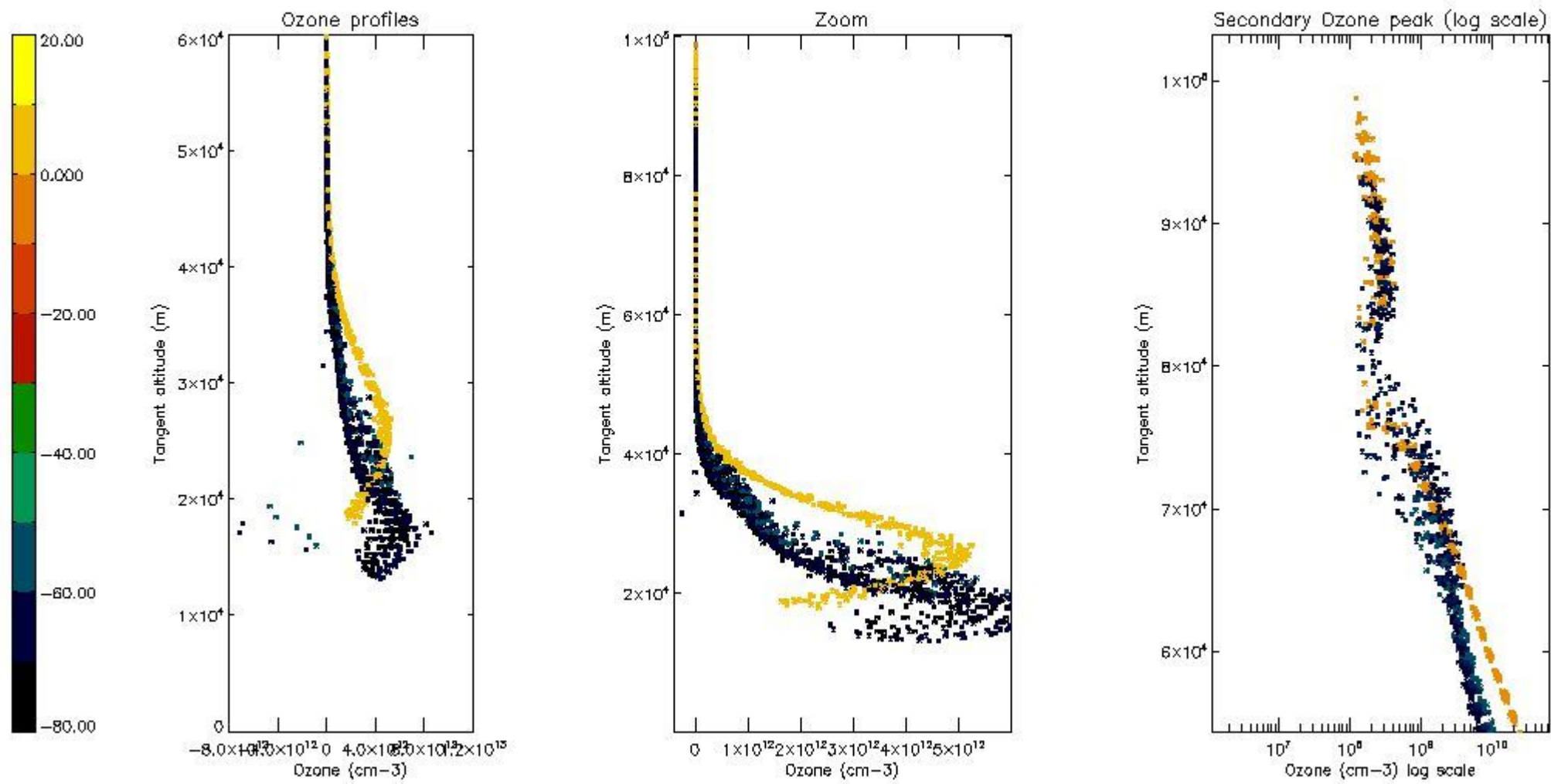
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



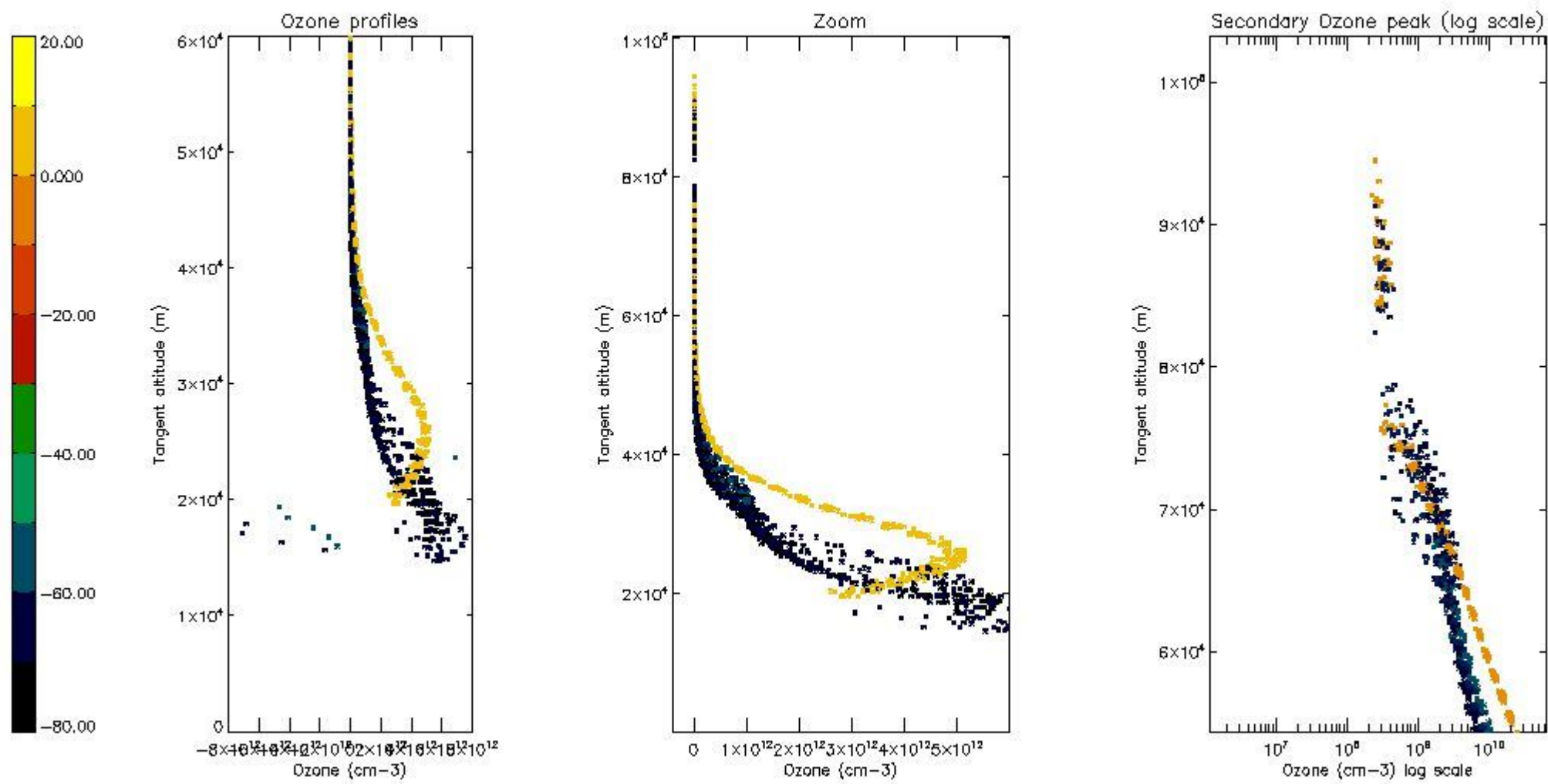
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



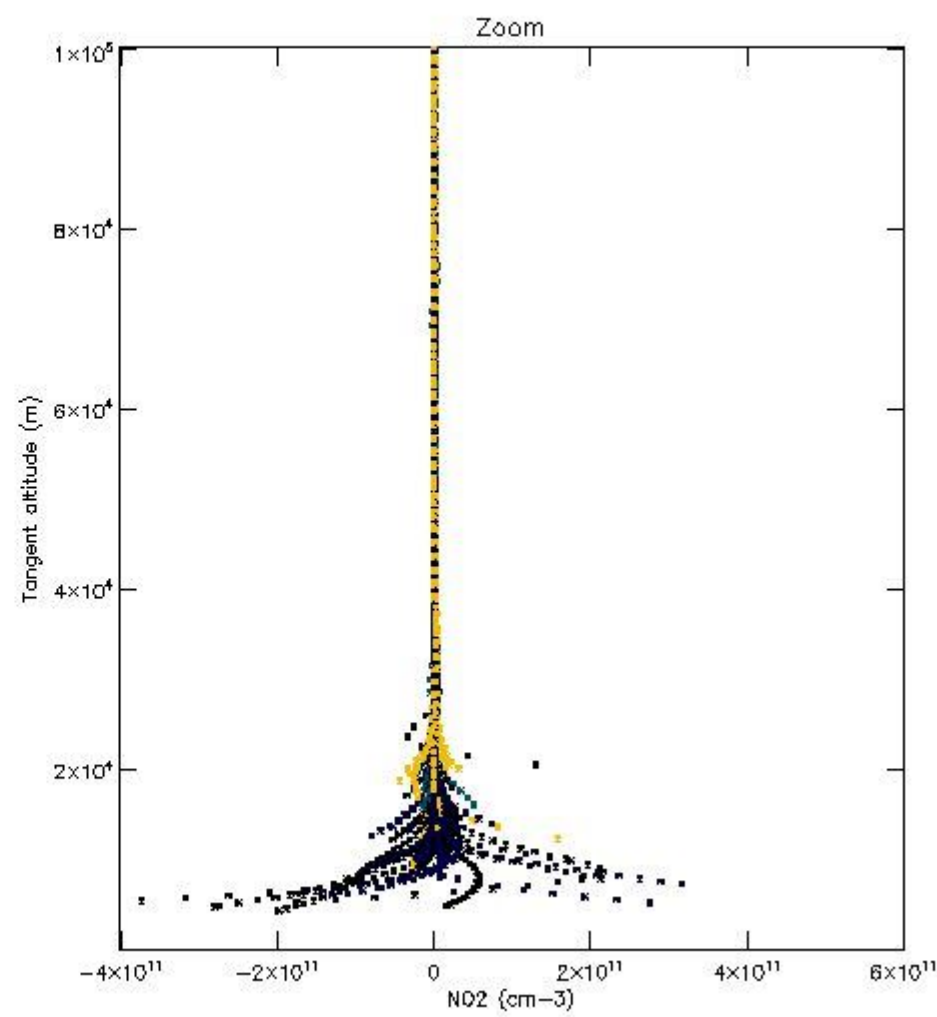
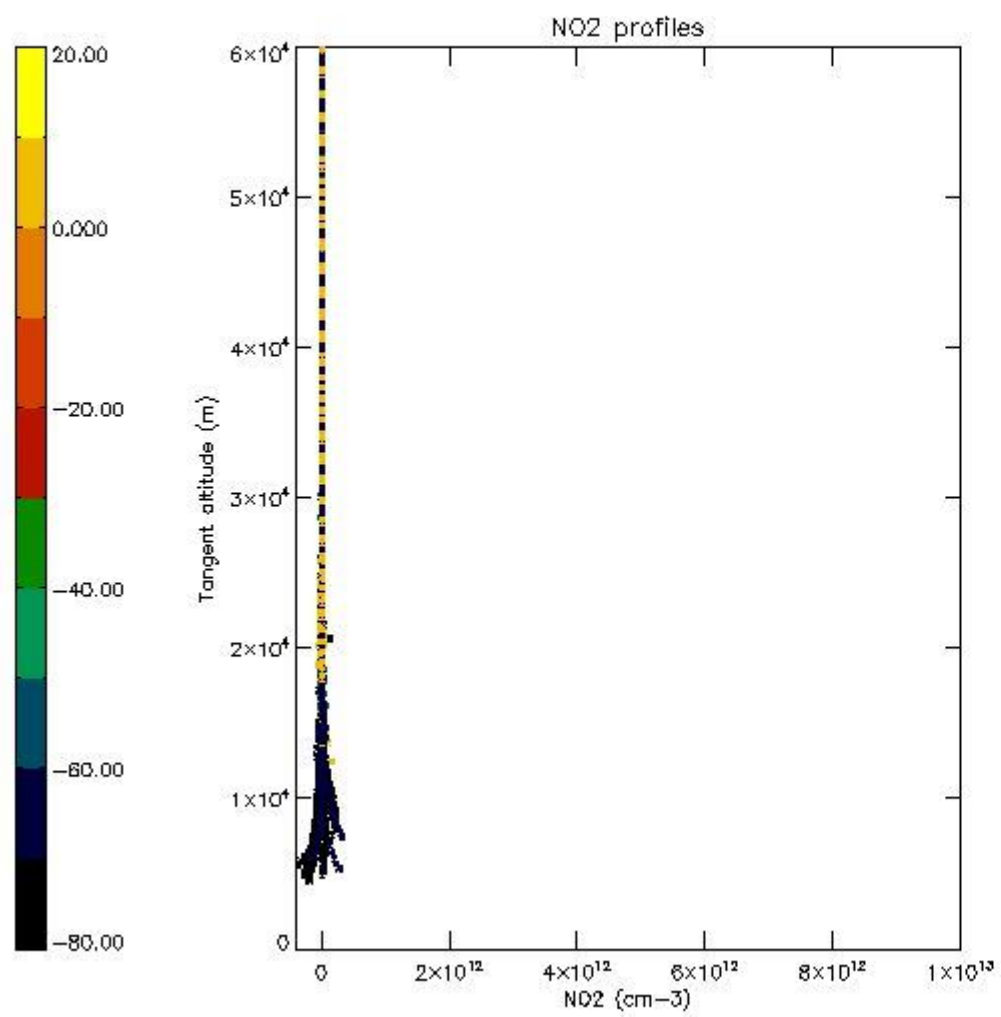
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



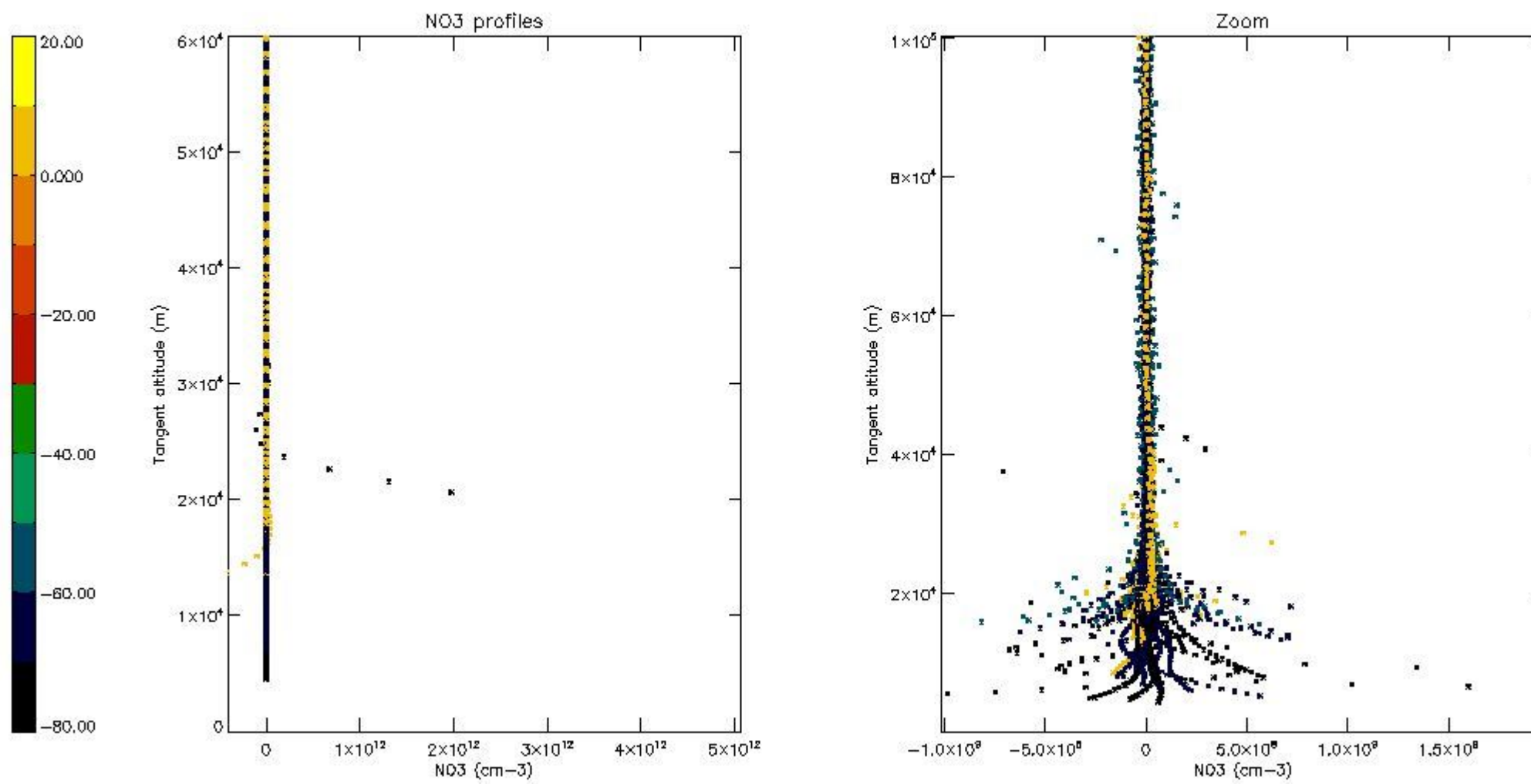
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



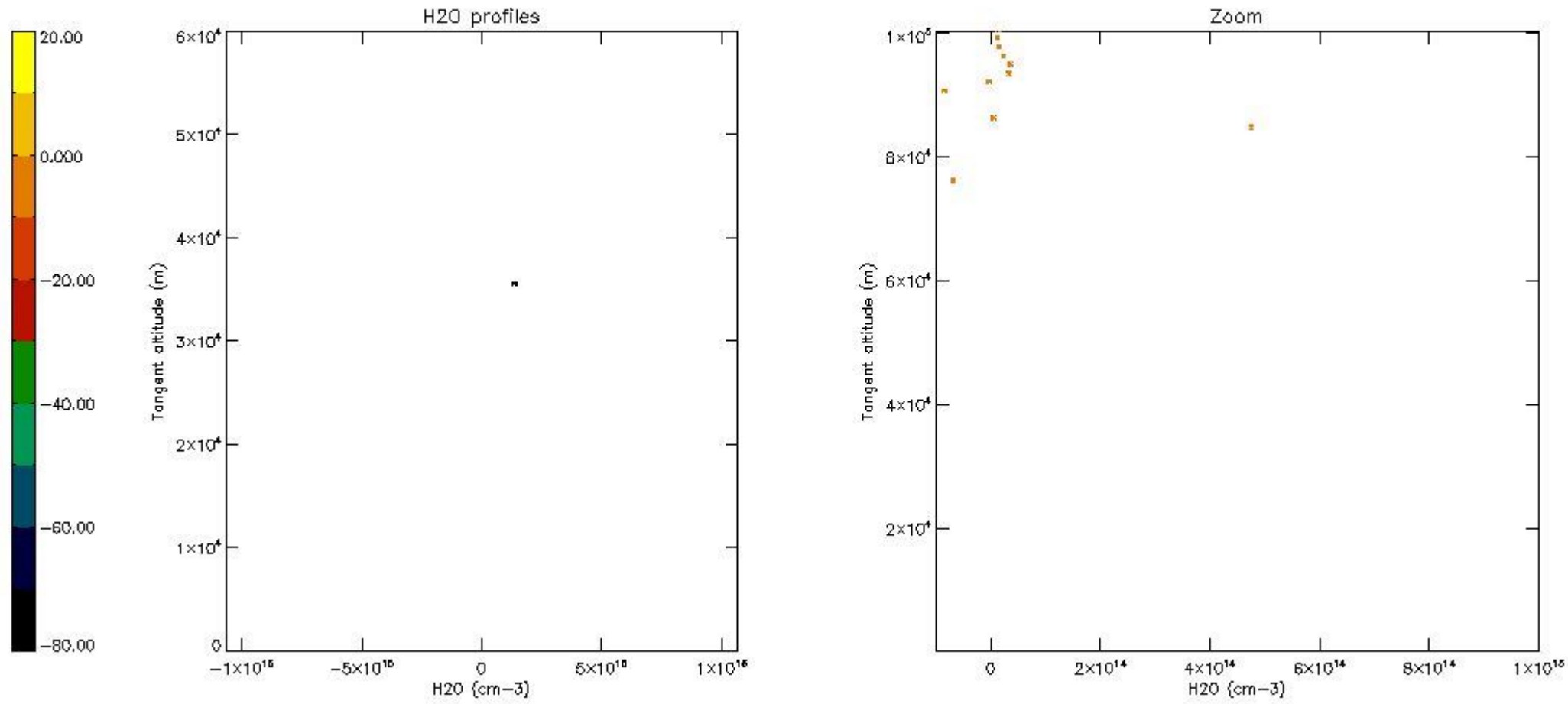
5.7 Plot NO3 profiles for all STD (dark without errors)

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	04-AUG-2008 00:02:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-AUG-2008 00:02:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-AUG-2008 00:02:14

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

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

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

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.

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Store outputs in DB	Yes
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Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

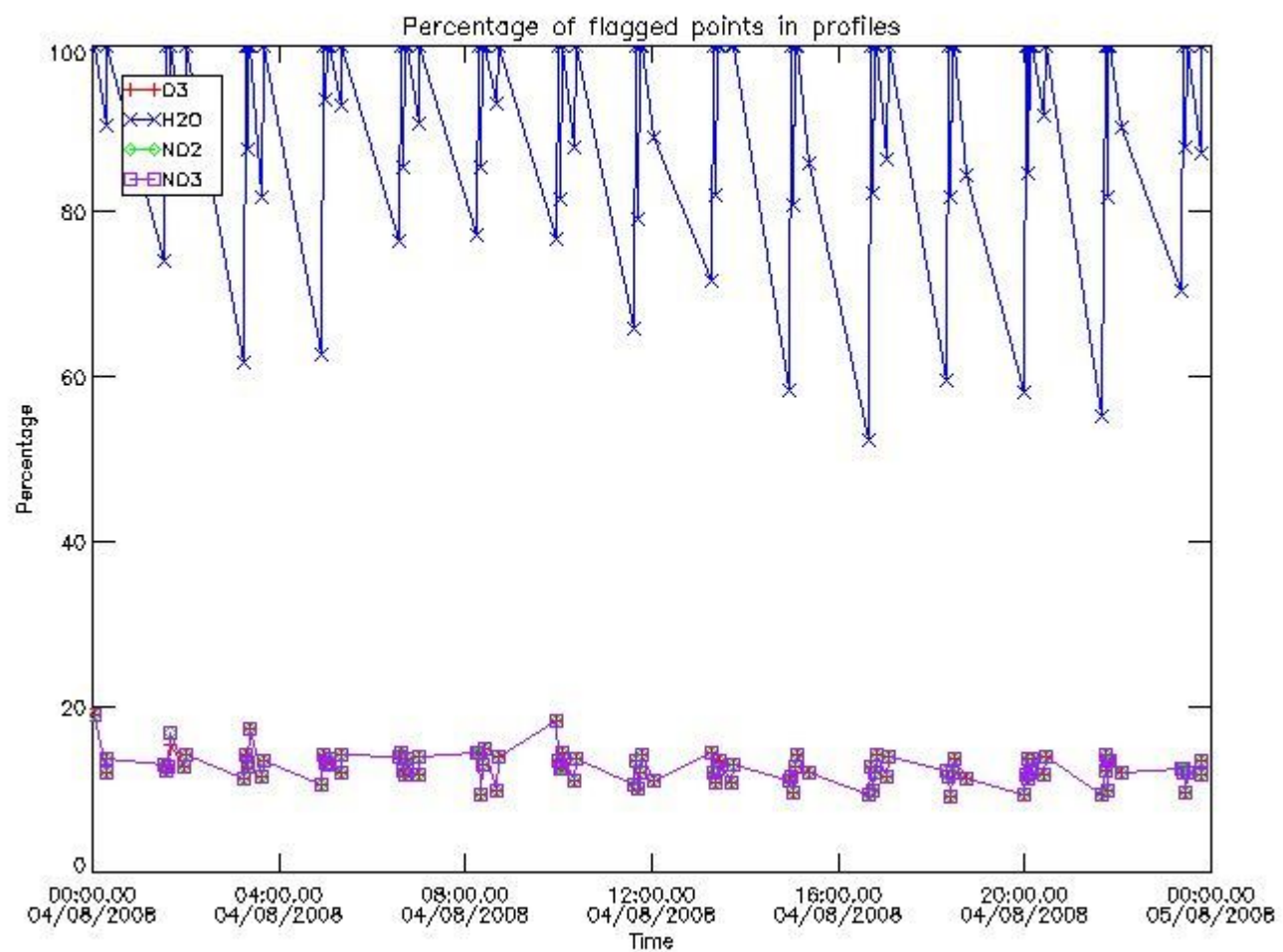
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080804_000214_000000272070_00488_33608_2954.N1	04-AUG-2008 00:02:14	Dark	27.000	177	1Zet CMa	3.0220	26000.	54	33608	No
2	GOM_NL__2PRFIN20080804_001723_000000422070_00489_33609_2962.N1	04-AUG-2008 00:17:23	Dark	42.000	9	Alp Eri	0.45300	24000.	84	33609	No
3	GOM_NL__2PRFIN20080804_001902_000000372070_00489_33609_2963.N1	04-AUG-2008 00:19:02	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	33609	No
4	GOM_NL__2PRFIN20080804_002402_000000492070_00489_33609_2964.N1	04-AUG-2008 00:24:02	Straylight	48.500	148	Alp Tuc	2.8780	4100.0	97	33609	No
5	GOM_NL__2PRFIN20080804_002727_000000422070_00489_33609_2965.N1	04-AUG-2008 00:27:27	Straylight	42.000	31	Alp Gru	1.7340	15200.	84	33609	No
6	GOM_NL__2PRFIN20080804_003748_000000362070_00489_33609_2966.N1	04-AUG-2008 00:37:48	Bright	36.000	155	41Pi Sgr	2.9000	6600.0	72	33609	No
7	GOM_NL__2PRFIN20080804_004602_000000372070_00489_33609_2967.N1	04-AUG-2008 00:46:02	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	33609	No
8	GOM_NL__2PRFIN20080804_004733_000000352070_00489_33609_2968.N1	04-AUG-2008 00:47:33	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	33609	No
9	GOM_NL__2PRFIN20080804_005439_000000382070_00489_33609_2969.N1	04-AUG-2008 00:54:39	Bright	38.000	5	3Alp Lyr	0.033000	11000.	76	33609	No
10	GOM_NL__2PRFIN20080804_005631_000000372070_00489_33609_2970.N1	04-AUG-2008 00:56:31	Bright	36.500	144	18Del Cyg	2.8600	11000.	73	33609	No
11	GOM_NL__2PRFIN20080804_005830_000000372070_00489_33609_2971.N1	04-AUG-2008 00:58:30	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	33609	No
12	GOM_NL__2PRFIN20080804_010905_000000332070_00489_33609_2972.N1	04-AUG-2008 01:09:05	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	33609	No
13	GOM_NL__2PRFIN20080804_012146_000000442070_00489_33609_2973.N1	04-AUG-2008 01:21:46	Bright	43.500	6	13Alp Aur	0.080000	3400.0	87	33609	No
14	GOM_NL__2PRFIN20080804_012416_000000352070_00489_33609_2974.N1	04-AUG-2008 01:24:16	Bright	34.500	107	37The Aur	2.6490	11000.	69	33609	No
15	GOM_NL__2PRFIN20080804_012707_000000442070_00489_33609_2975.N1	04-AUG-2008 01:27:07	Bright	43.500	28	12Bet Tau	1.6500	15200.	87	33609	No
16	GOM_NL__2PRFIN20080804_012914_000000422070_00489_33609_2976.N1	04-AUG-2008 01:29:14	Tw_i_and_stray	41.500	176	23Zet Tau	3.0200	22000.	83	33609	No
17	GOM_NL__2PRFIN20080804_013256_000000392070_00489_33609_2977.N1	04-AUG-2008 01:32:56	Dark	39.000	14	58Alp Ori	0.87000	3000.0	78	33609	No
18	GOM_NL__2PRFIN20080804_013546_000000422070_00489_33609_2978.N1	04-AUG-2008 01:35:46	Dark	41.500	30	46Eps Ori	1.6940	30000.	83	33609	No
19	GOM_NL__2PRFIN20080804_013819_000000442070_00489_33609_2979.N1	04-AUG-2008 01:38:19	Dark	43.500	7	19Bet Ori	0.10000	14000.	87	33609	No
20	GOM_NL__2PRFIN20080804_014027_000000402070_00489_33609_2980.N1	04-AUG-2008 01:40:27	Dark	39.500	101	11Alp Lep	2.5820	7000.0	79	33609	No
21	GOM_NL__2PRFIN20080804_015800_000000482070_00490_33610_2970.N1	04-AUG-2008 01:58:00	Dark	48.000	9	Alp Eri	0.45300	24000.	96	33610	No
22	GOM_NL__2PRFIN20080804_015938_000000362070_00490_33610_2971.N1	04-AUG-2008 01:59:38	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	33610	No
23	GOM_NL__2PRFIN20080804_020439_000000432070_00490_33610_2972.N1	04-AUG-2008 02:04:39	Straylight	43.000	148	Alp Tuc	2.8780	4100.0	86	33610	No
24	GOM_NL__2PRFIN20080804_020804_000000462070_00490_33610_2973.N1	04-AUG-2008 02:08:04	Straylight	45.500	31	Alp Gru	1.7340	15200.	91	33610	No
25	GOM_NL__2PRFIN20080804_021824_000000372070_00490_33610_2974.N1	04-AUG-2008 02:18:24	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	33610	No
26	GOM_NL__2PRFIN20080804_022638_000000372070_00490_33610_2975.N1	04-AUG-2008 02:26:38	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	33610	No
27	GOM_NL__2PRFIN20080804_022809_000000352070_00490_33610_2976.N1	04-AUG-2008 02:28:09	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	33610	No
28	GOM_NL__2PRFIN20080804_023515_000000382070_00490_33610_2977.N1	04-AUG-2008 02:35:15	Bright	37.500	5	3Alp Lyr	0.033000	11000.	75	33610	No
29	GOM_NL__2PRFIN20080804_023707_000000372070_00490_33610_2978.N1	04-AUG-2008 02:37:07	Bright	36.500	144	18Del Cyg	2.8600	11000.	73	33610	No
30	GOM_NL__2PRFIN20080804_023906_000000362070_00490_33610_2979.N1	04-AUG-2008 02:39:06	Bright	36.000	69	33Gam Dra	2.2310	3800.0	72	33610	No
31	GOM_NL__2PRFIN20080804_024941_000000342070_00490_33610_2980.N1	04-AUG-2008 02:49:41	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	33610	No
32	GOM_NL__2PRFIN20080804_030221_000000442070_00490_33610_2981.N1	04-AUG-2008 03:02:21	Bright	43.500	6	13Alp Aur	0.080000	3400.0	87	33610	No
33	GOM_NL__2PRFIN20080804_030452_000000372070_00490_33610_2982.N1	04-AUG-2008 03:04:52	Bright	36.500	107	37The Aur	2.6490	11000.	73	33610	No
34	GOM_NL__2PRFIN20080804_030743_000000442070_00490_33610_2983.N1	04-AUG-2008 03:07:43	Bright	43.500	28	12Bet Tau	1.6500	15200.	87	33610	No
35	GOM_NL__2PRFIN20080804_030950_000000402070_00490_33610_2984.N1	04-AUG-2008 03:09:50	Tw_i_and_stray	39.500	176	23Zet Tau	3.0200	22000.	79	33610	No
36	GOM_NL__2PRFIN20080804_031333_000000542070_00490_33610_2985.N1	04-AUG-2008 03:13:33	Dark	54.000	14	58Alp Ori	0.87000	3000.0	108	33610	No
37	GOM_NL__2PRFIN20080804_031622_000000402070_00490_33610_2986.N1	04-AUG-2008 03:16:22	Dark	39.500	30	46Eps Ori	1.6940	30000.	79	33610	No
38	GOM_NL__2PRFIN20080804_031856_000000402070_00490_33610_2987.N1	04-AUG-2008 03:18:56	Dark	40.000	7	19Bet Ori	0.10000	14000.	80	33610	No
39	GOM_NL__2PRFIN20080804_032103_000000392070_00490_33610_2988.N1	04-AUG-2008 03:21:03	Dark	38.500	101	11Alp Lep	2.5820	7000.0	77	33610	No
40	GOM_NL__2PRFIN20080804_032326_000000382070_00490_33610_2989.N1	04-AUG-2008 03:23:26	Dark	38.000	177	1Zet CMa	3.0220	26000.	76	33610	No
41	GOM_NL__2PRFIN20080804_033837_000000442070_00491_33611_2976.N1	04-AUG-2008 03:38:37	Dark	44.000	9	Alp Eri	0.45300	24000.	88	33611	No
42	GOM_NL__2PRFIN20080804_034014_000000382070_00491_33611_2977.N1	04-AUG-2008 03:40:14	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	33611	No

279	GOM_NL__2PRFIN20080804_232820_000000422071_00001_33622_3279.N1	04-AUG-2008 23:28:20	Dark	42.000	101	11Alp Lep	2.5820	7000.0	84	33622	No
280	GOM_NL__2PRFIN20080804_234556_000000432071_00002_33623_3299.N1	04-AUG-2008 23:45:56	Dark	43.000	9	Alp Eri	0.45300	24000.	86	33623	No
281	GOM_NL__2PRFIN20080804_234729_000000382071_00002_33623_3300.N1	04-AUG-2008 23:47:29	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	33623	No
282	GOM_NL__2PRFIN20080804_235231_000000422071_00002_33623_3301.N1	04-AUG-2008 23:52:31	Straylight	41.500	148	Alp Tuc	2.8780	4100.0	83	33623	No
283	GOM_NL__2PRFIN20080804_235453_000000322071_00002_33623_3302.N1	04-AUG-2008 23:54:53	Straylight	32.000	63	Bet Gru	2.1500	2800.0	64	33623	No
284	GOM_NL__2PRFIN20080804_235557_000000472071_00002_33623_3303.N1	04-AUG-2008 23:55:57	Straylight	47.000	31	Alp Gru	1.7340	15200.	94	33623	No

3. Quality information per product

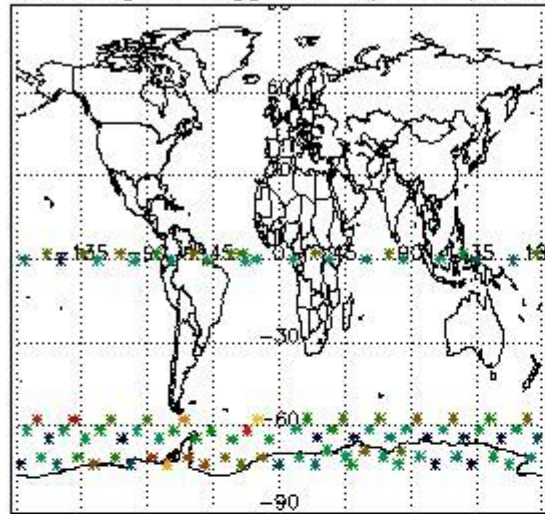
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

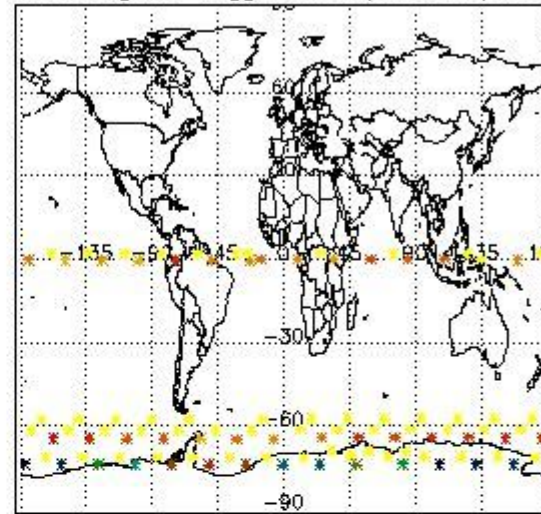


3.2 Plot quality information per product (world map)

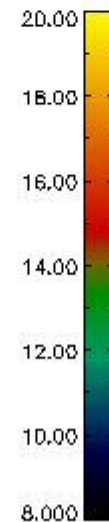
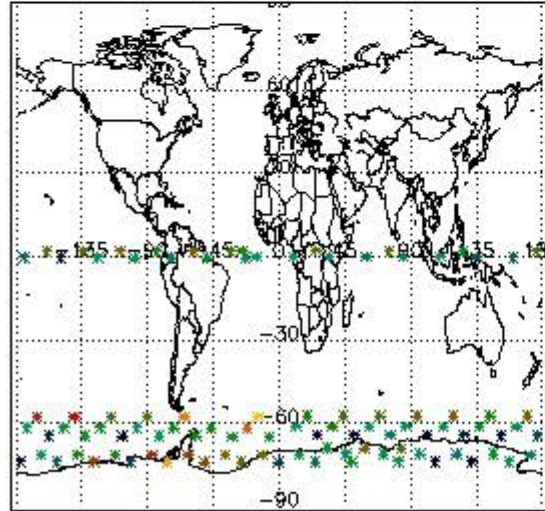
Percentage of flagged data per O3 profile



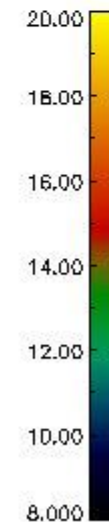
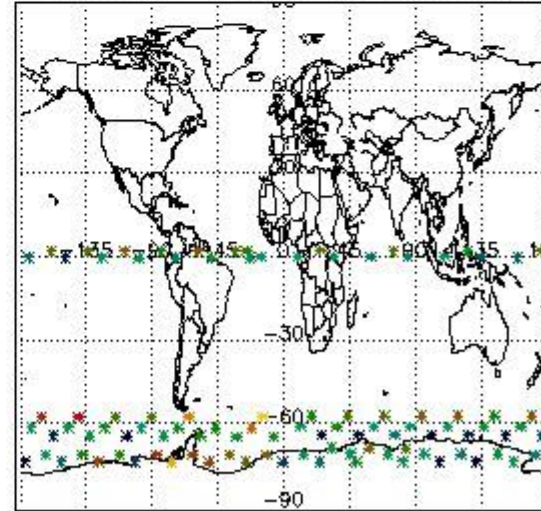
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

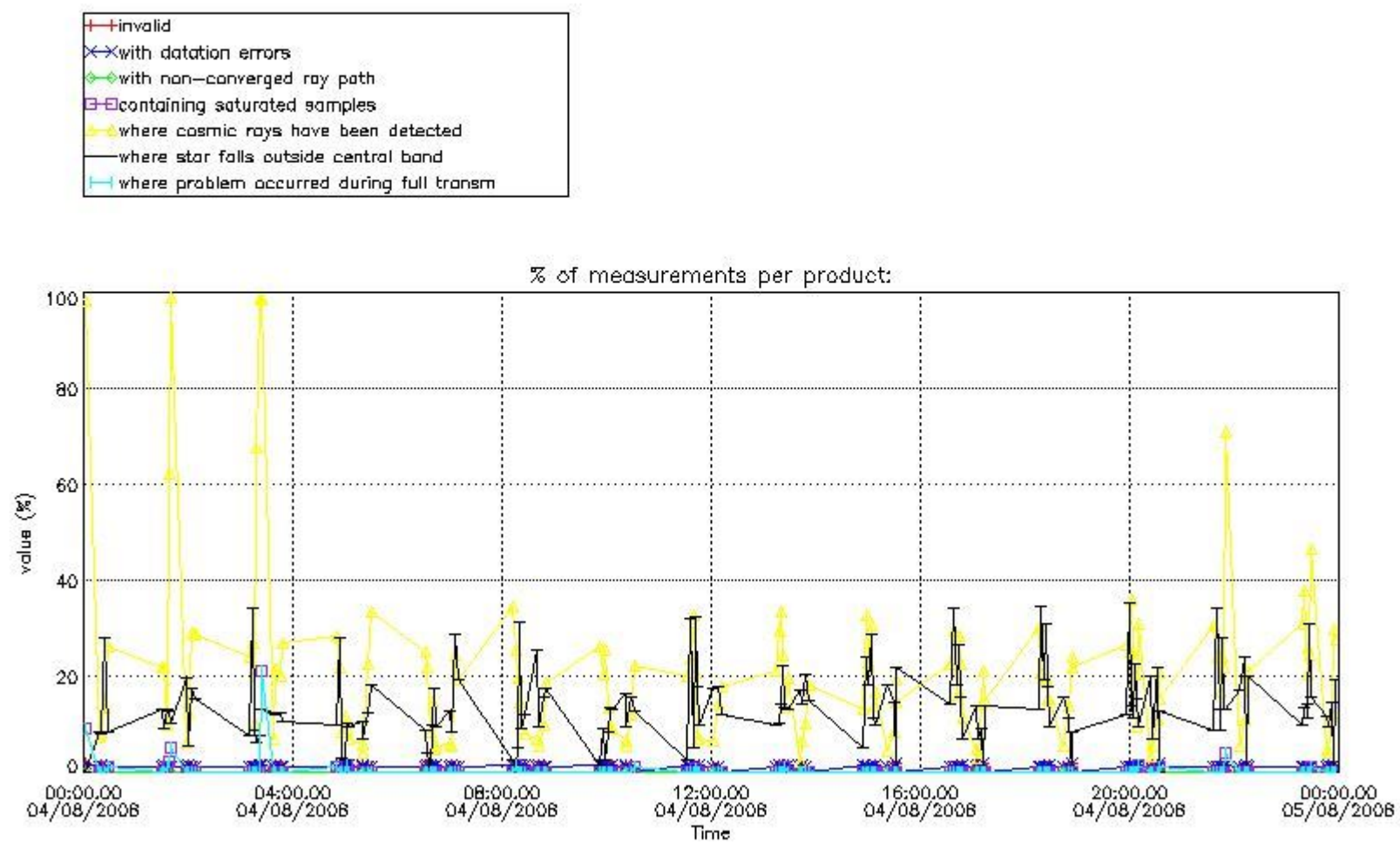


4. Level 1 quality information per product

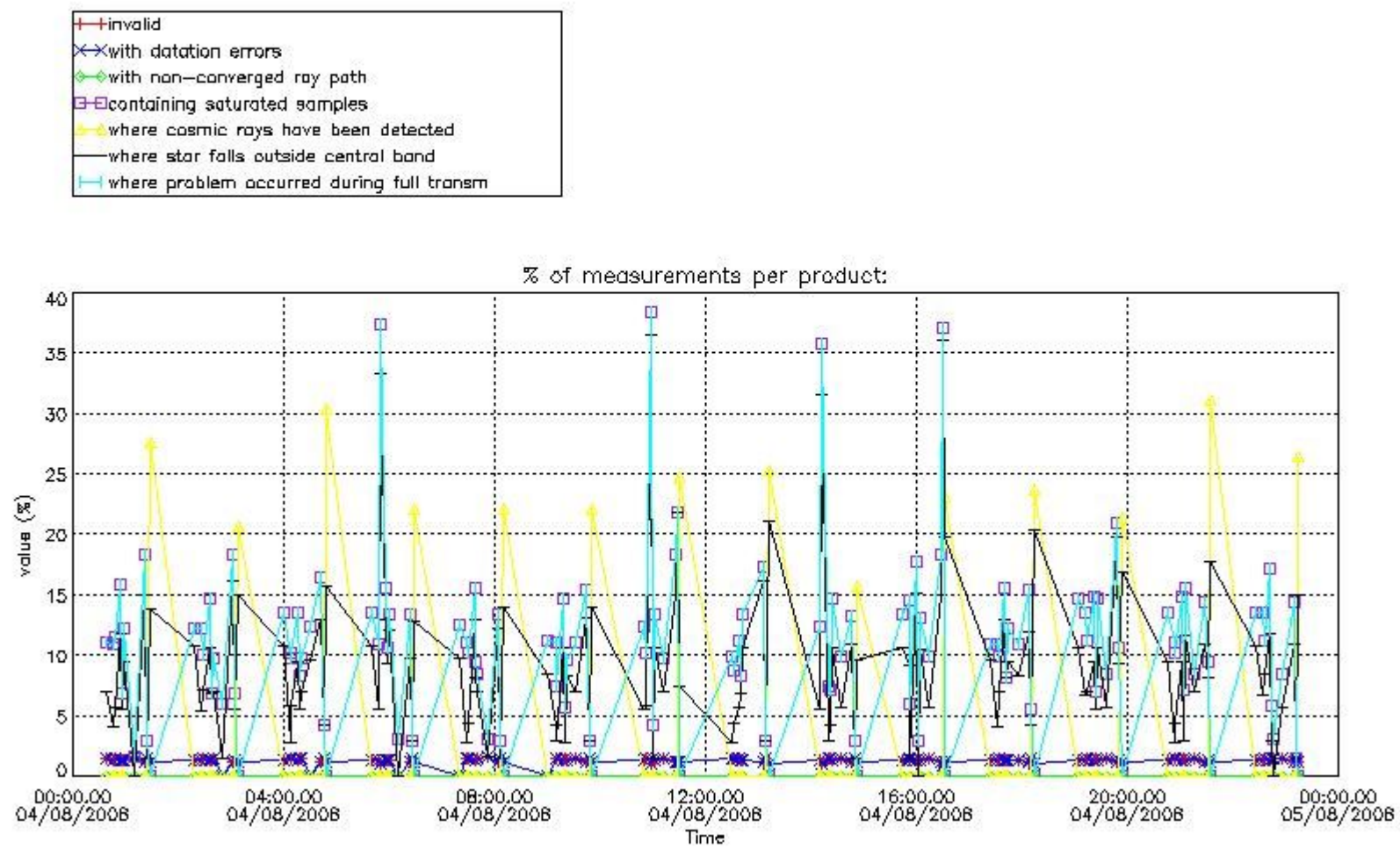
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

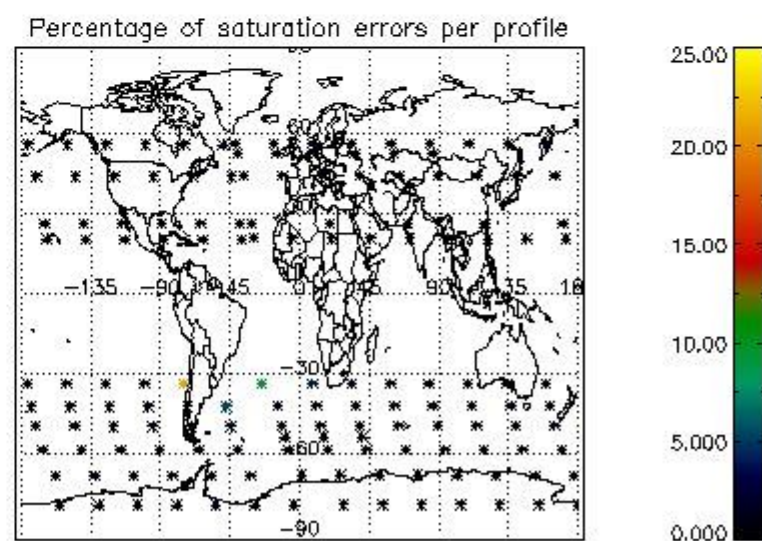
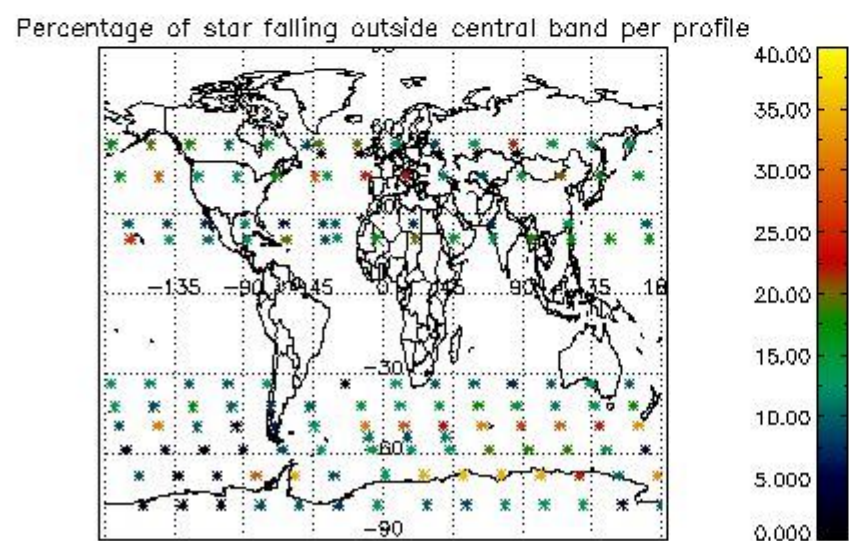
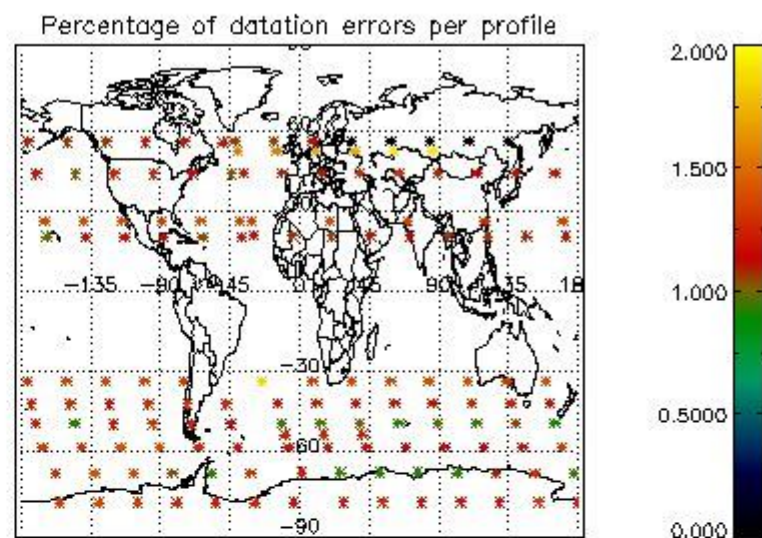
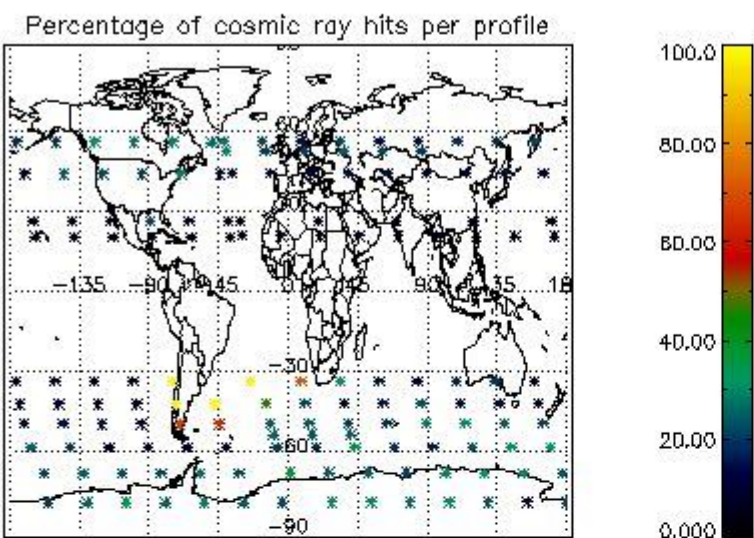


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

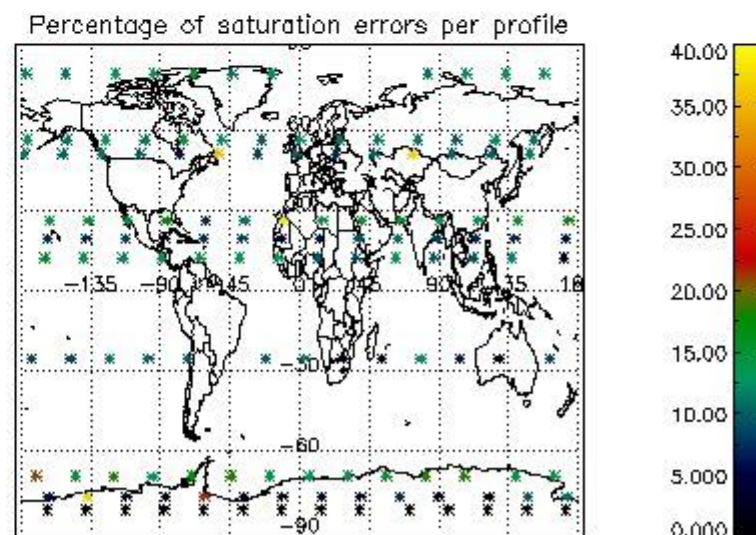
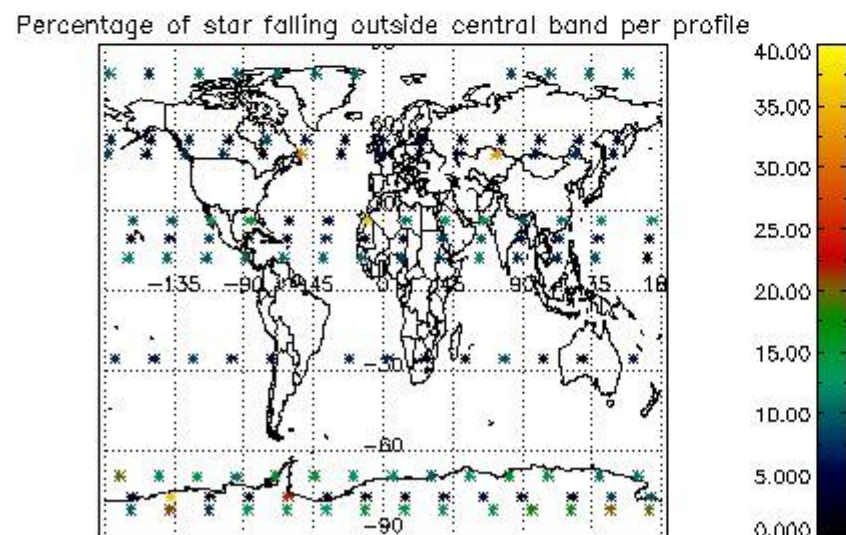
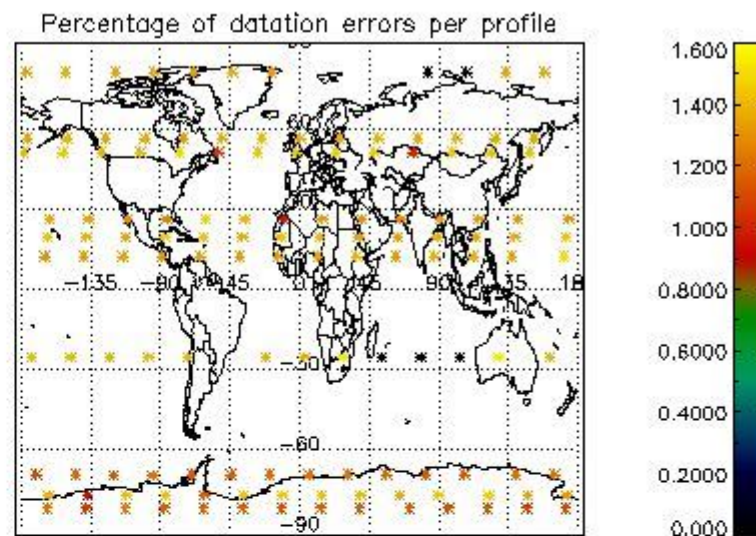
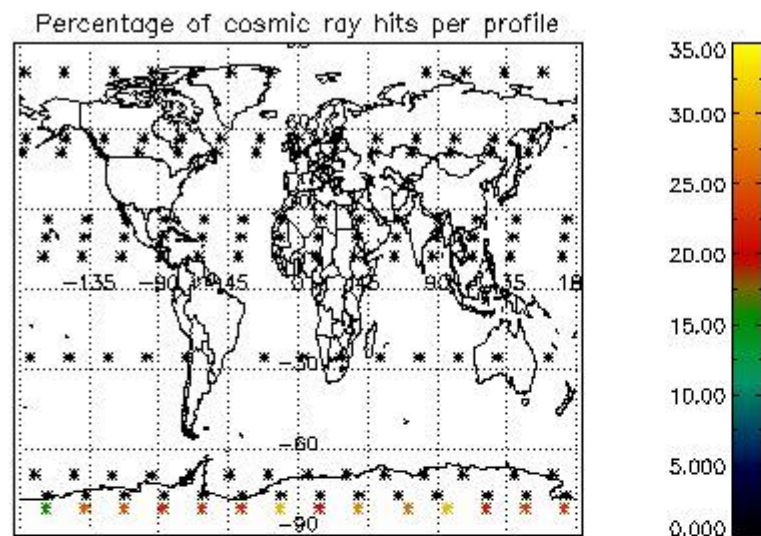


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



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

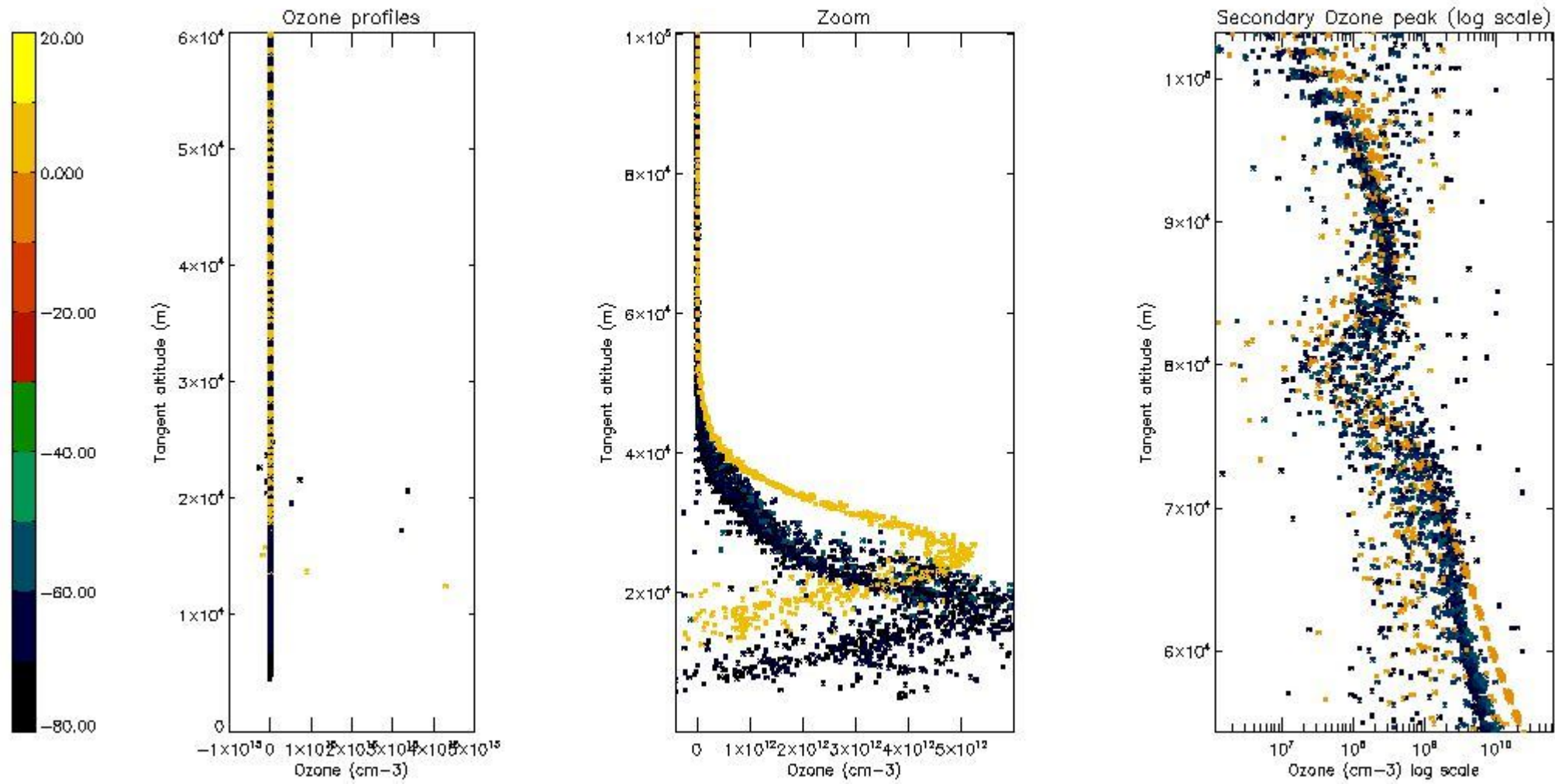
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	20

STD < 10	16
STD < 5	12

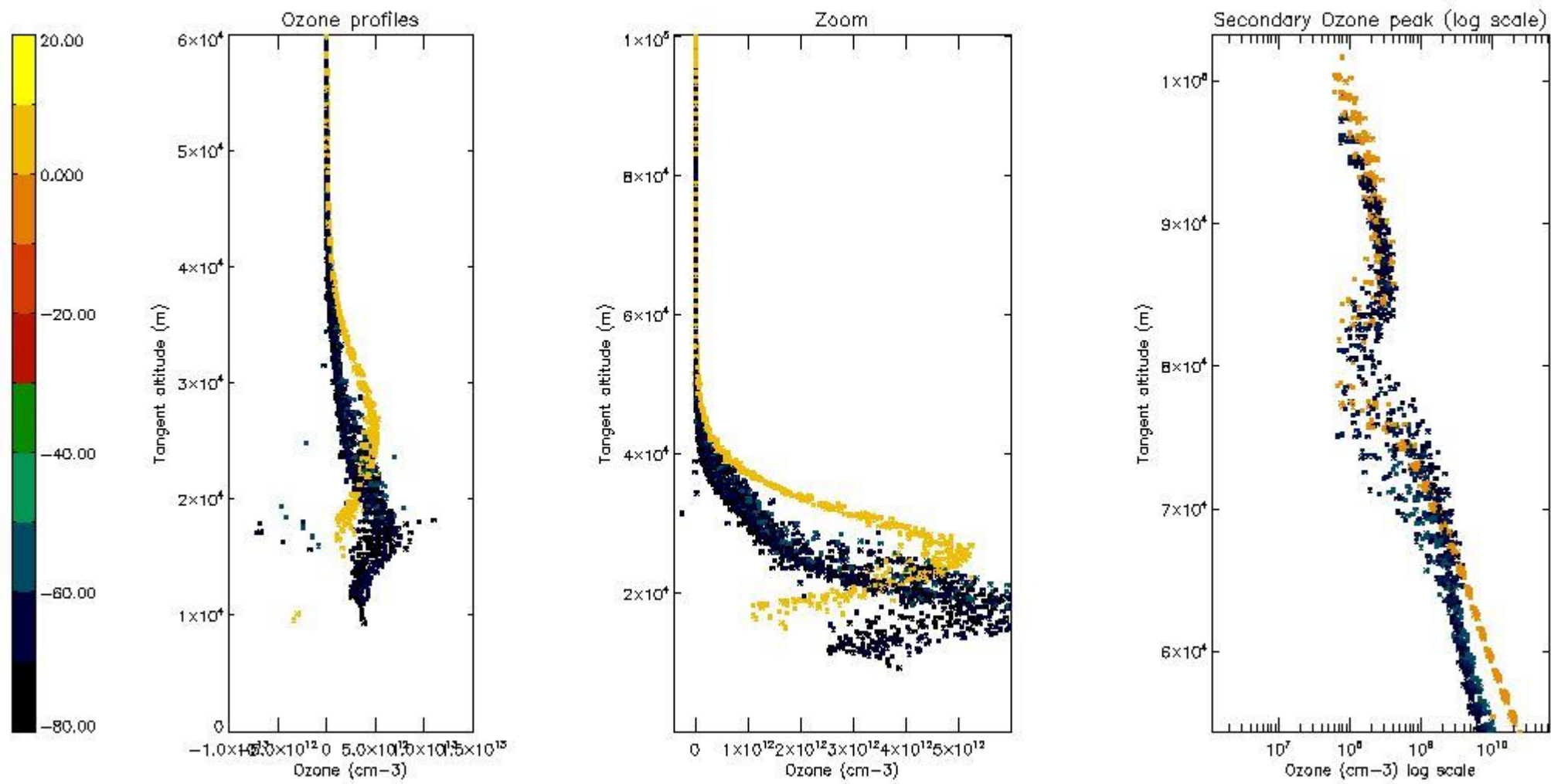
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



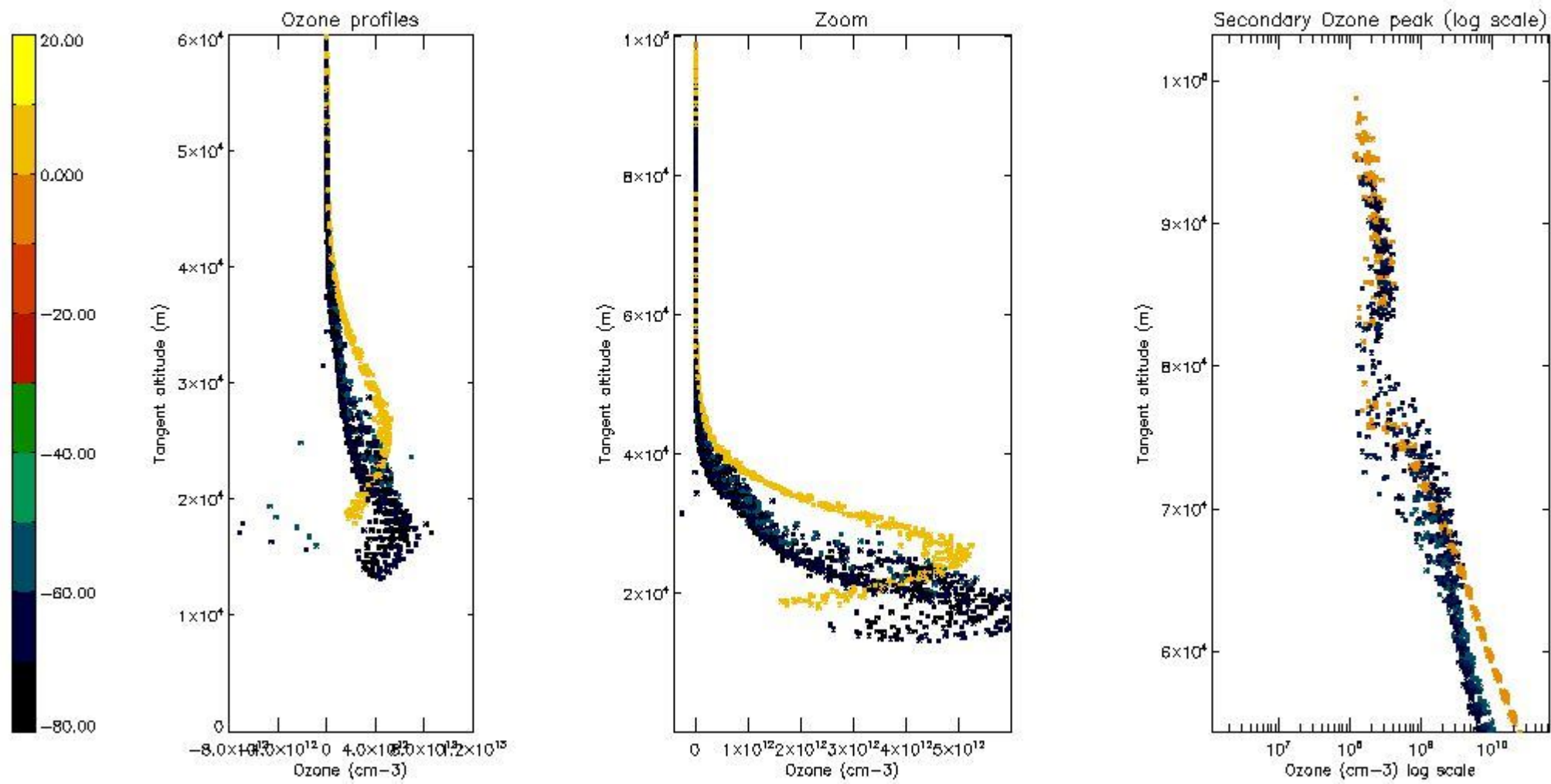
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



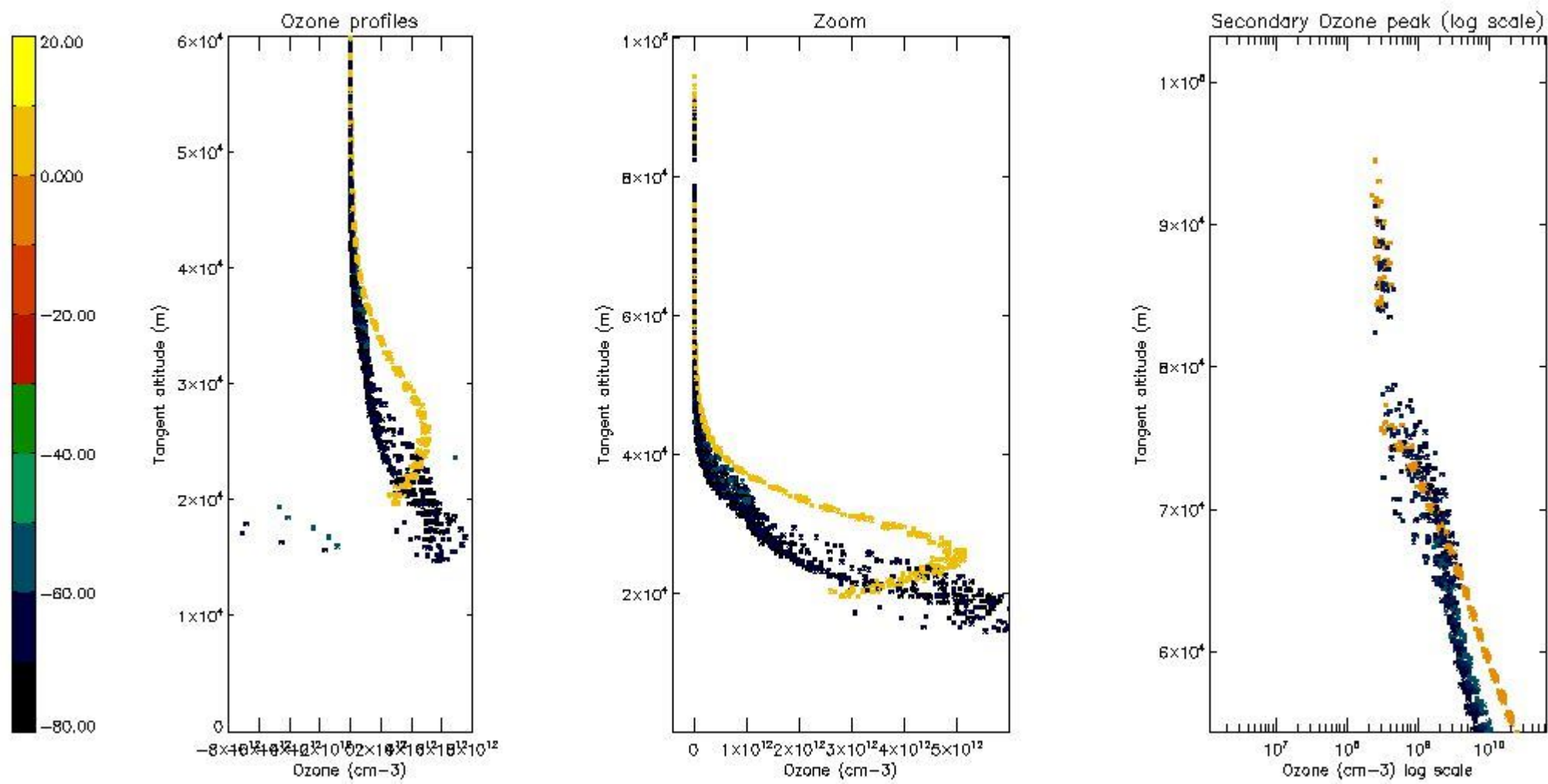
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



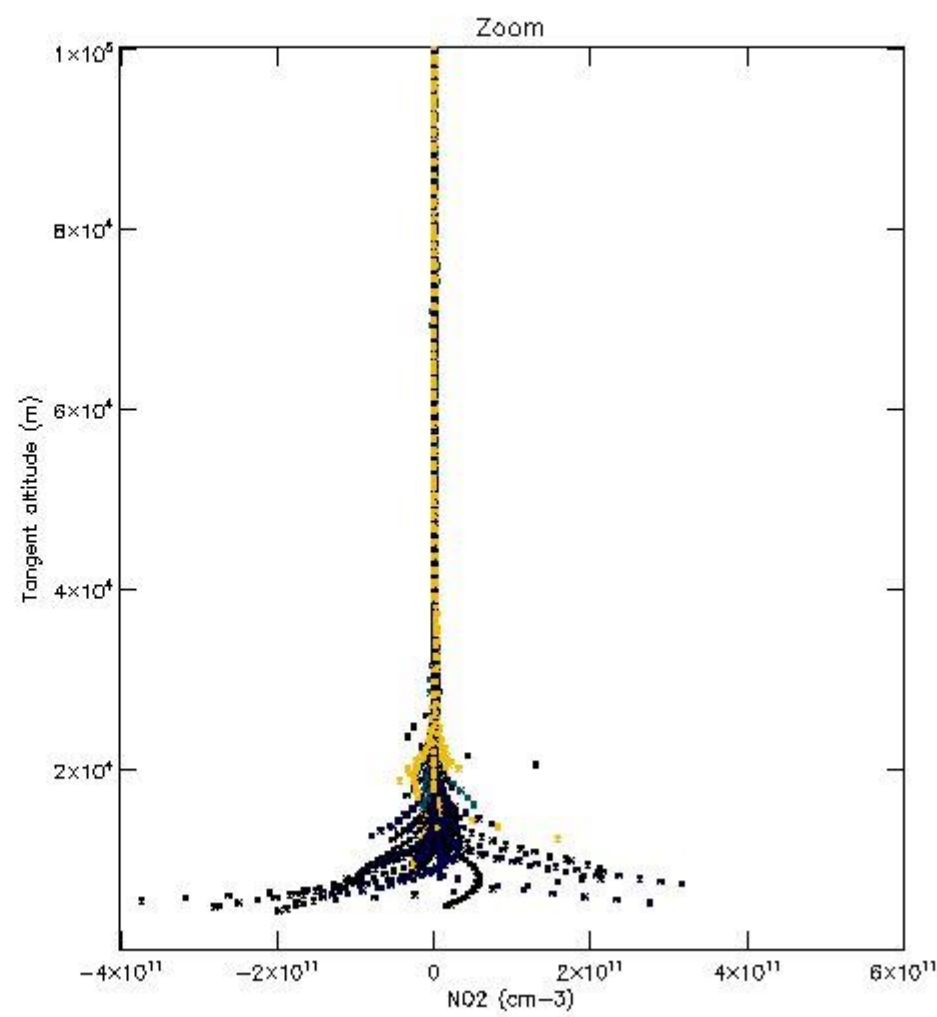
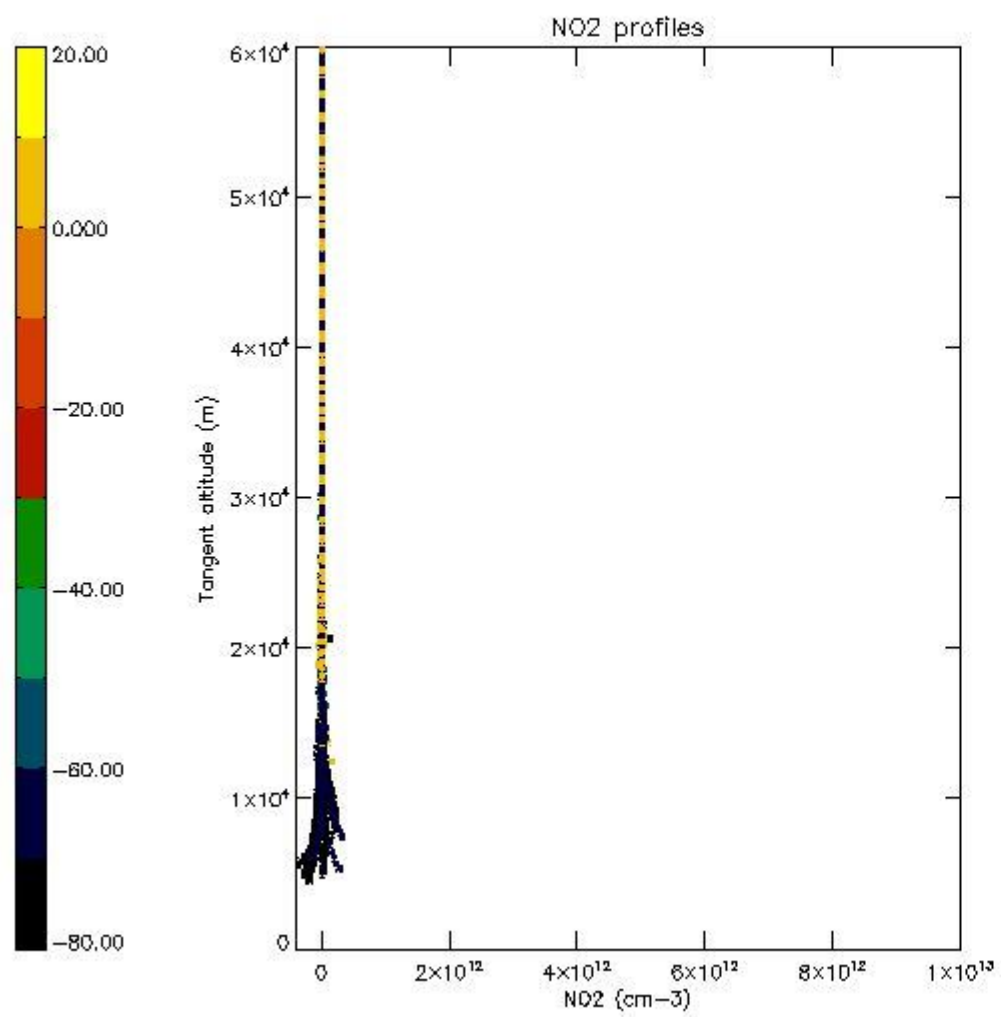
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



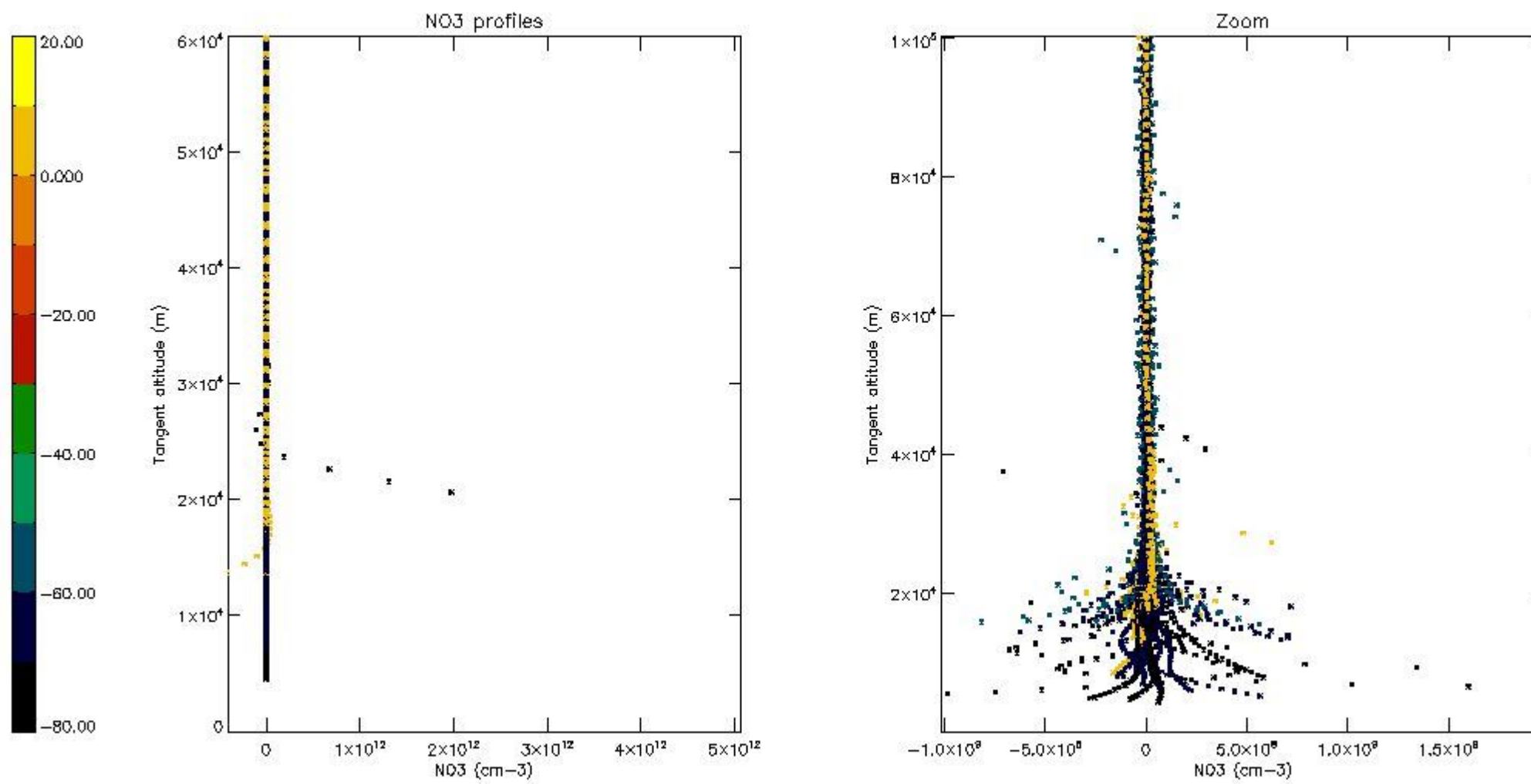
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



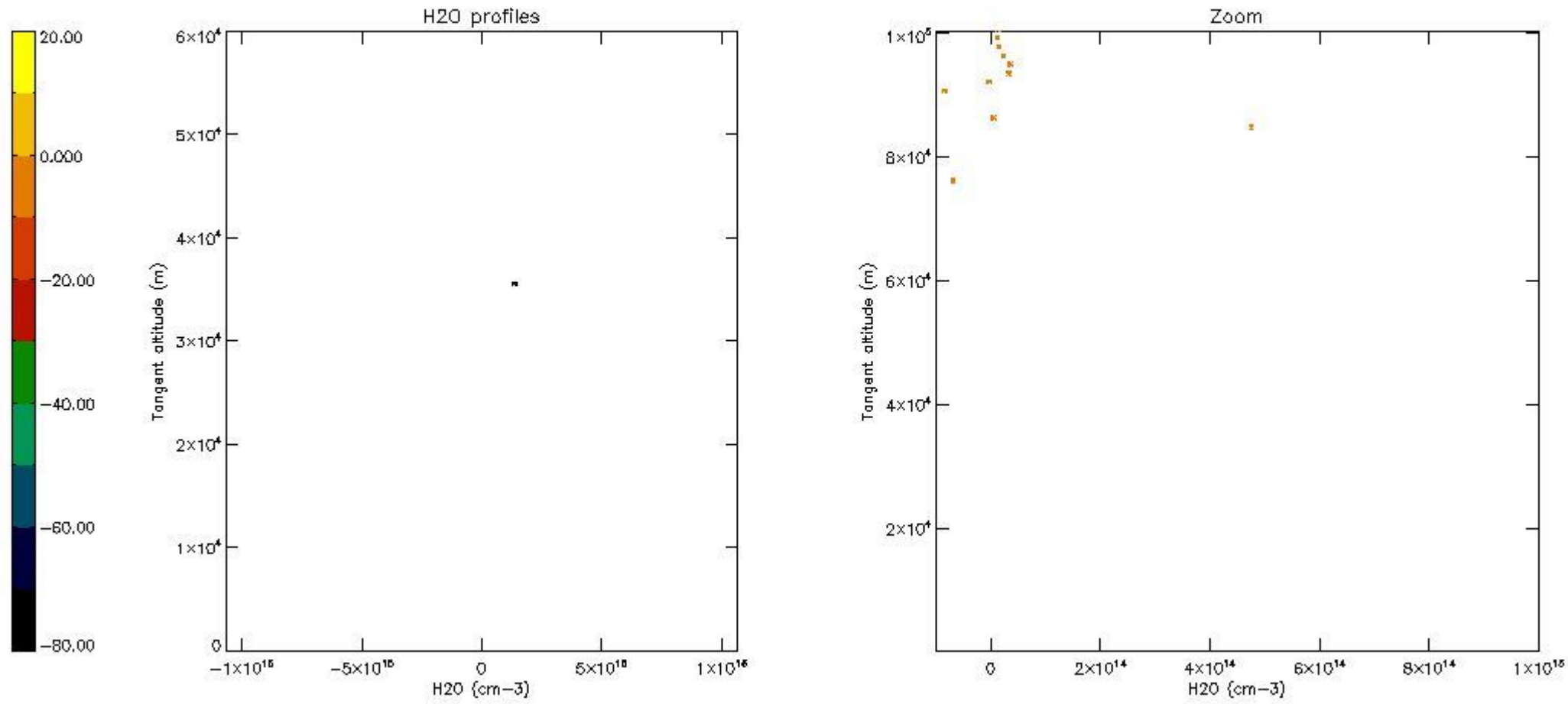
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

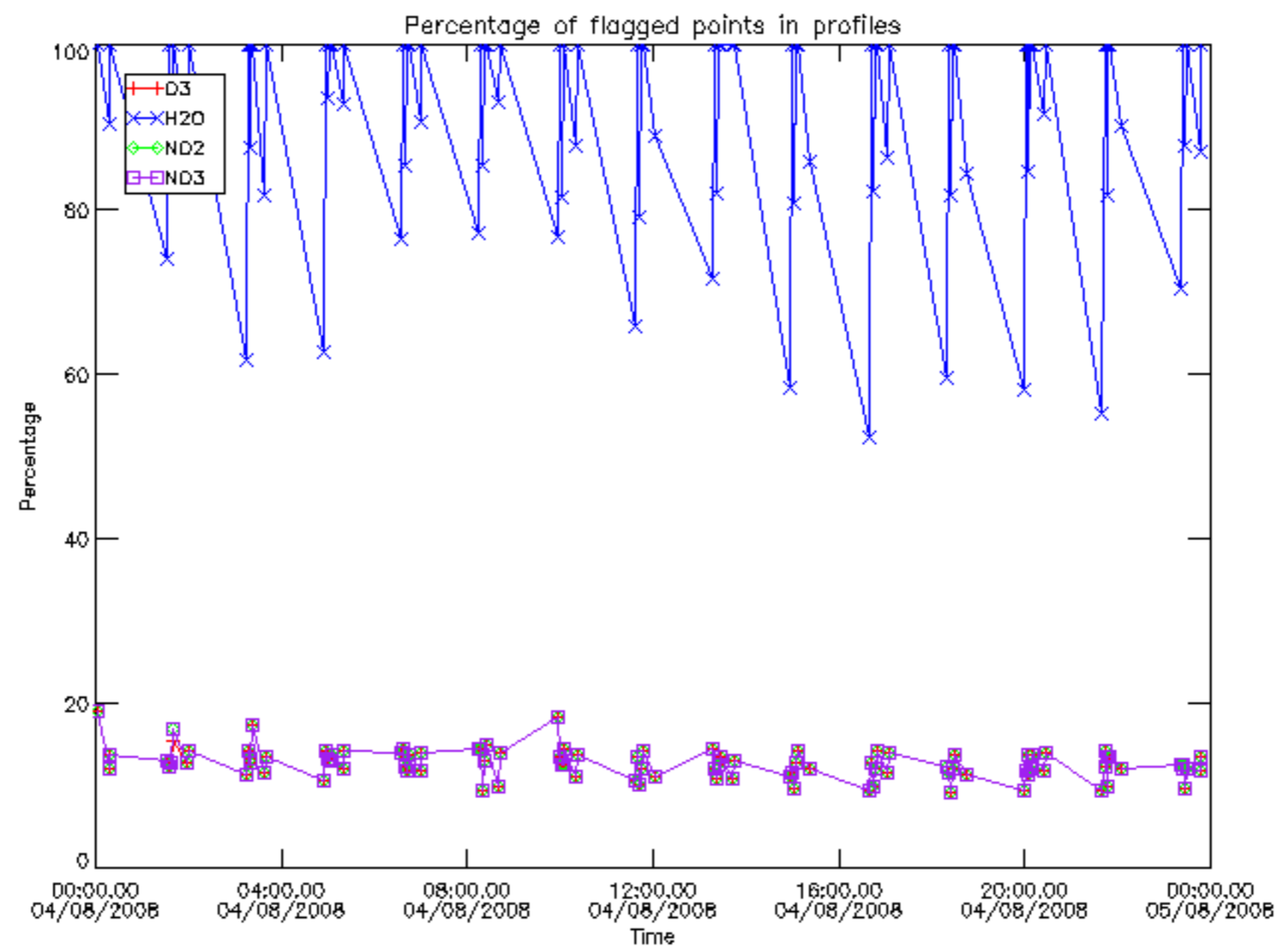
The colorbar represents the latitude.



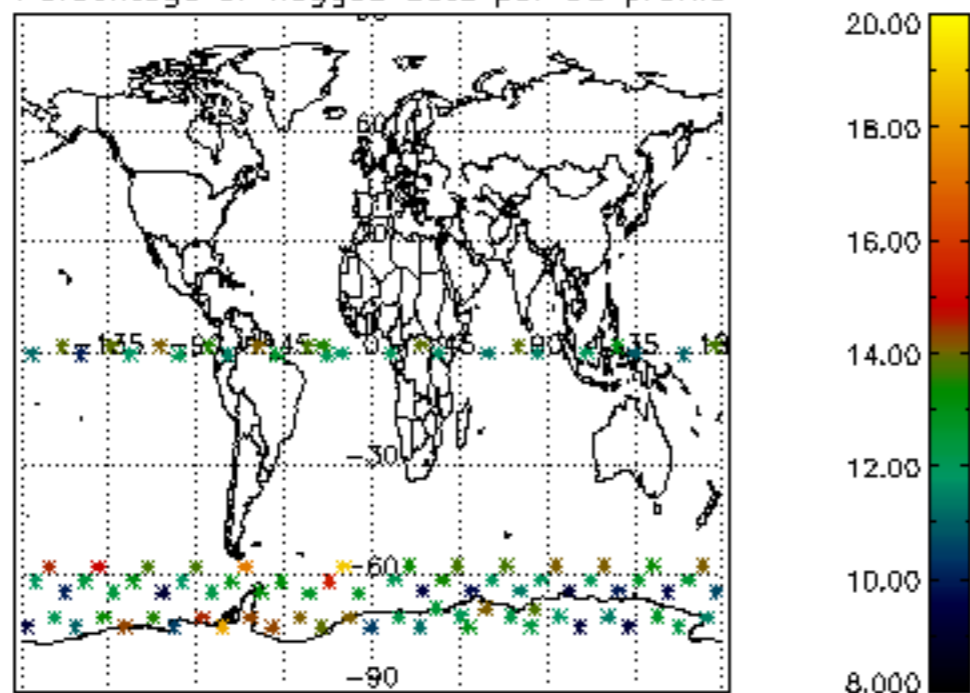
6. Auxiliary Data Files used for the production reported in section 2

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.

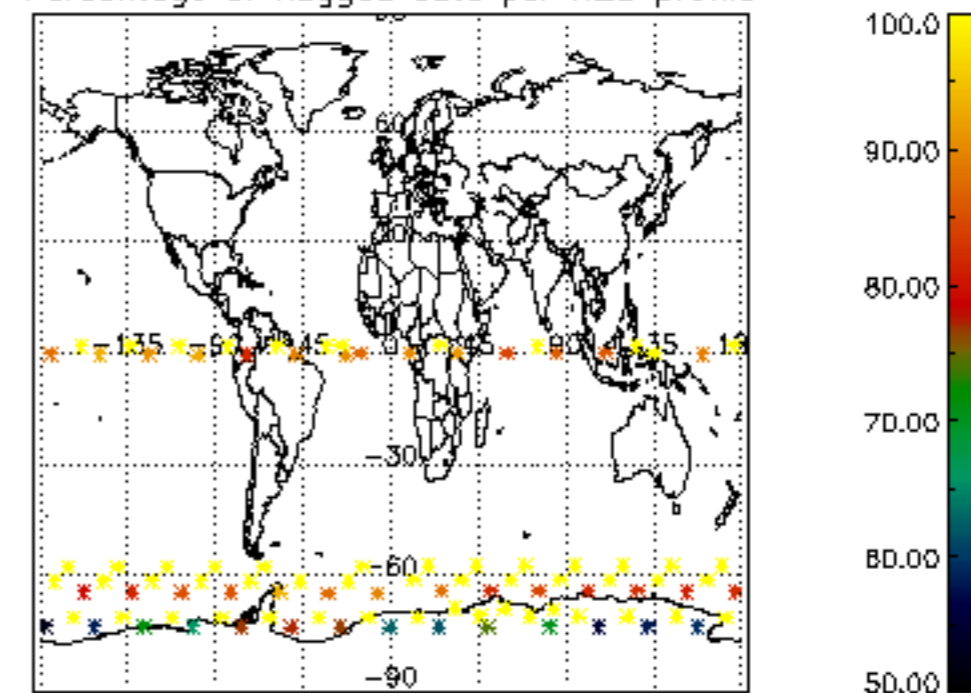
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	04-AUG-2008 00:02:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-AUG-2008 00:02:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-AUG-2008 00:02:14



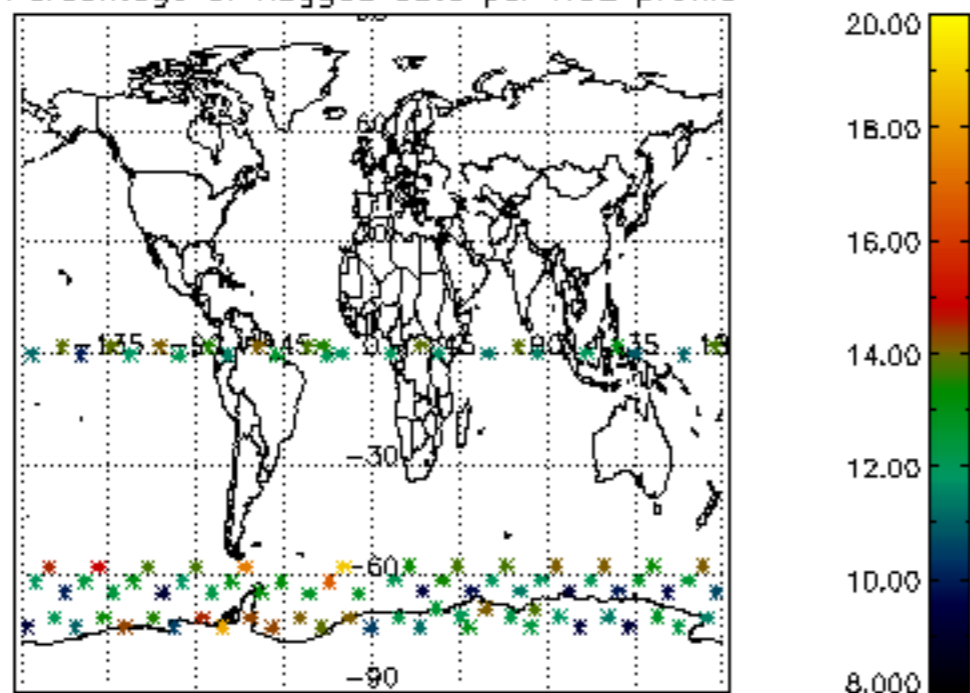
Percentage of flagged data per D3 profile



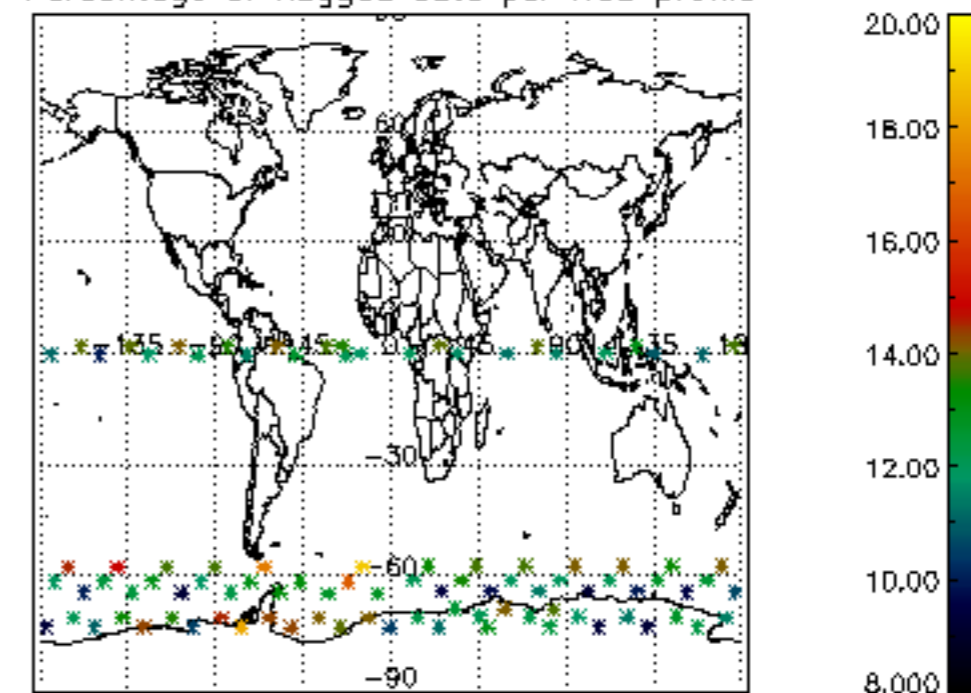
Percentage of flagged data per H2O profile

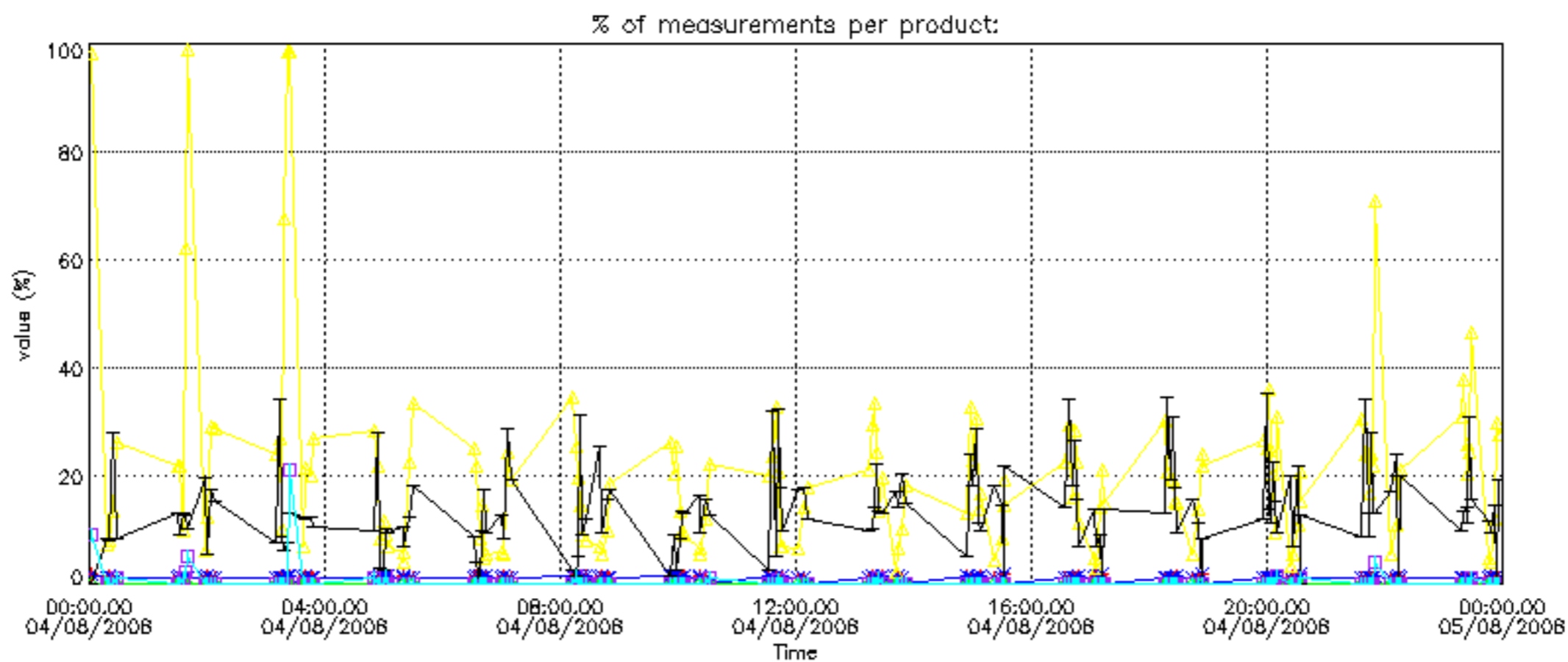


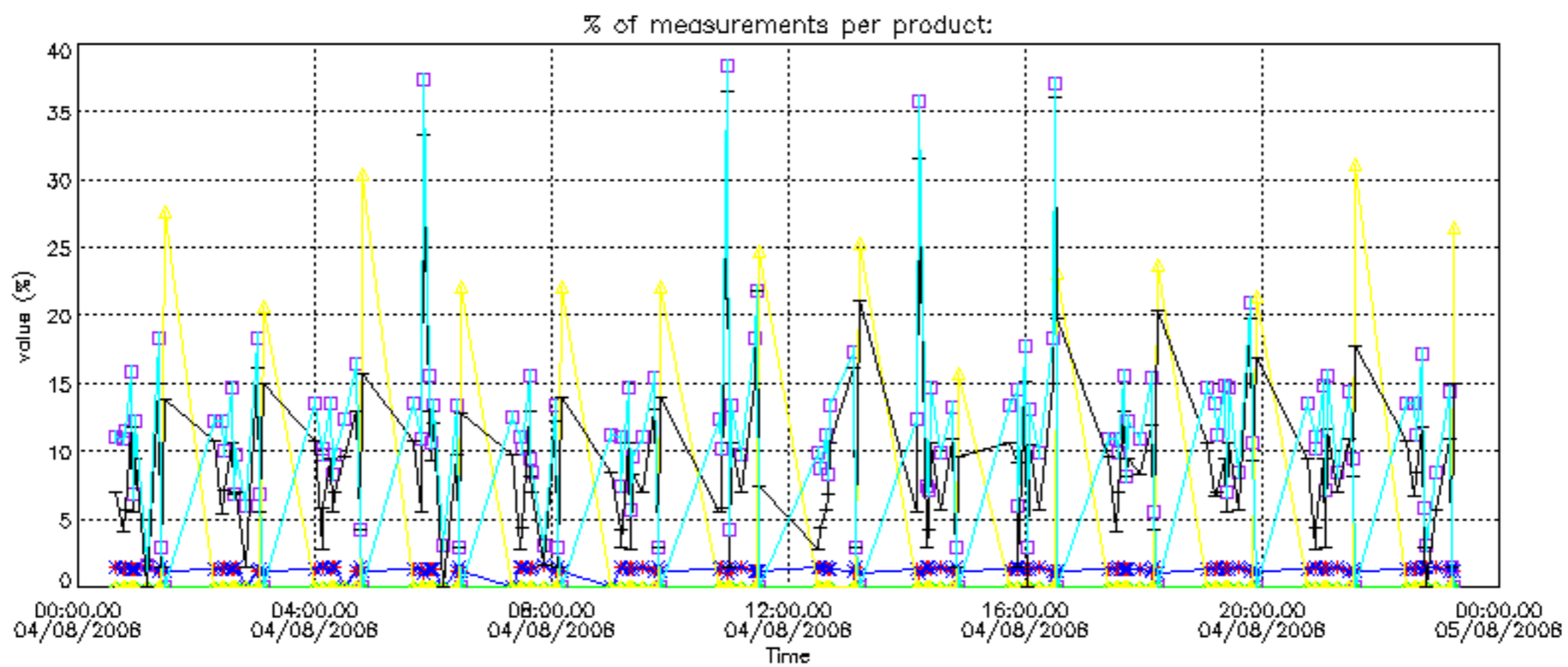
Percentage of flagged data per NO2 profile



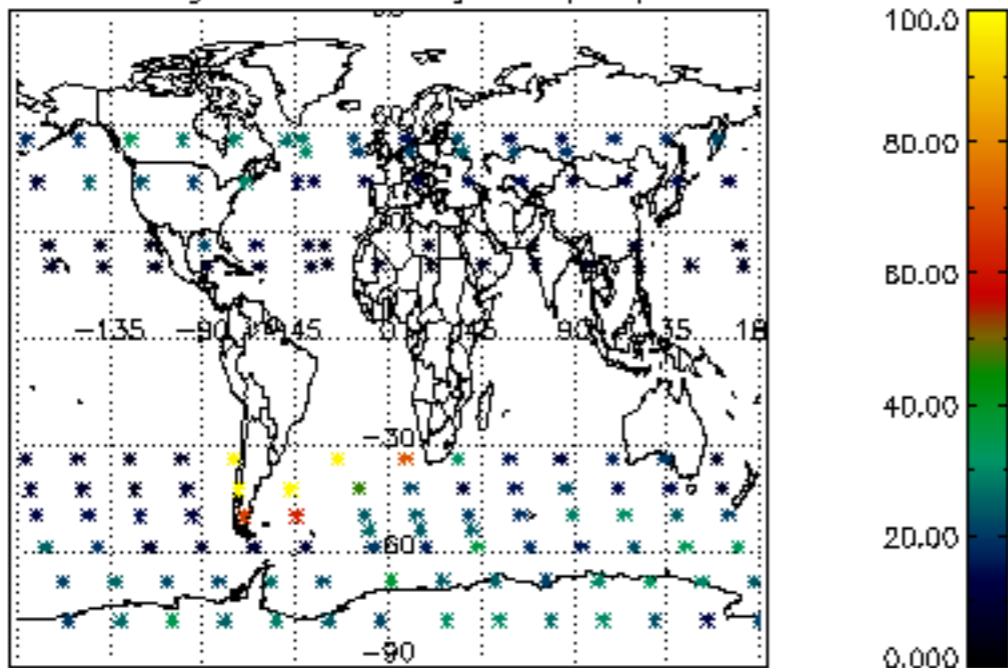
Percentage of flagged data per NO3 profile



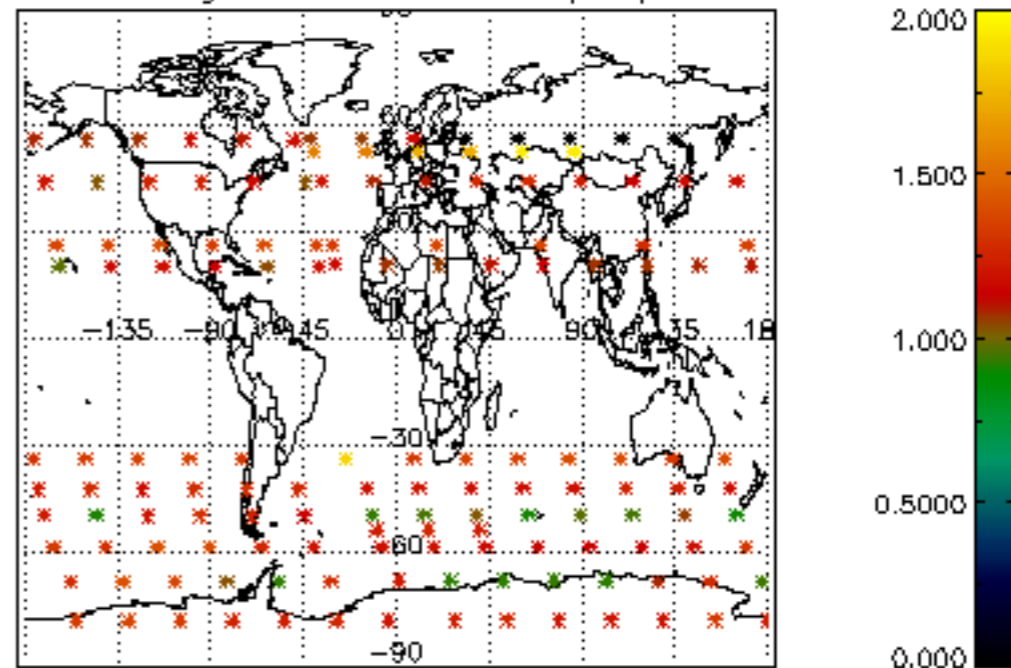




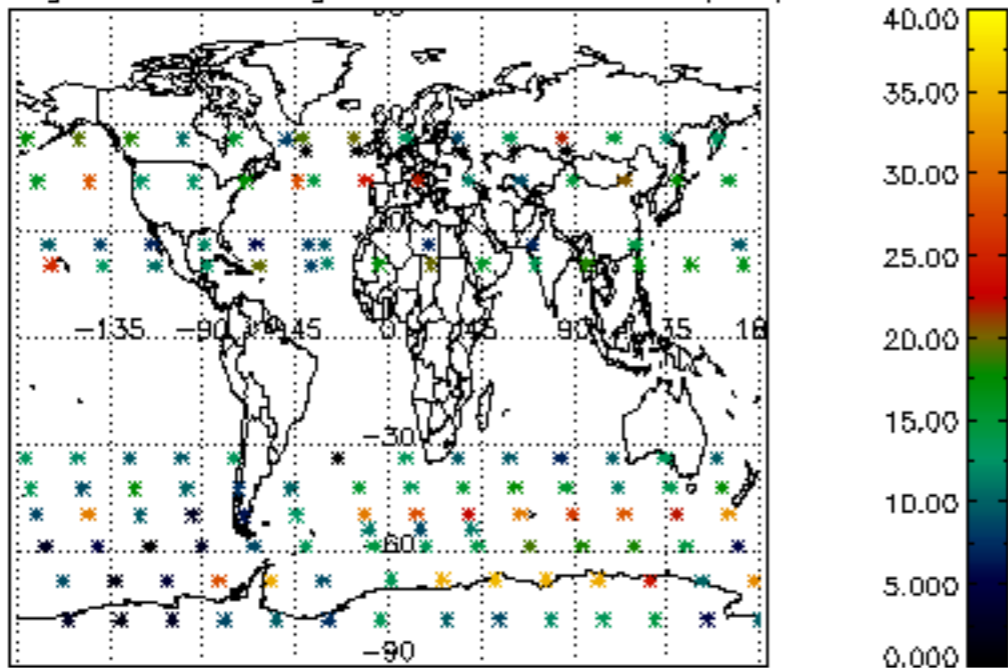
Percentage of cosmic ray hits per profile



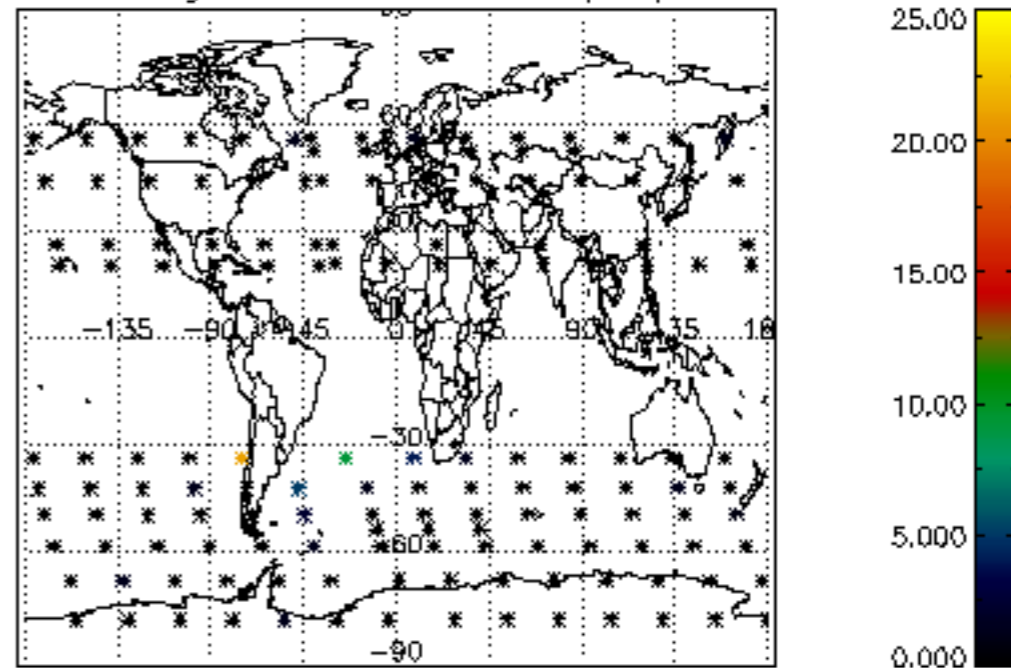
Percentage of datation errors per profile



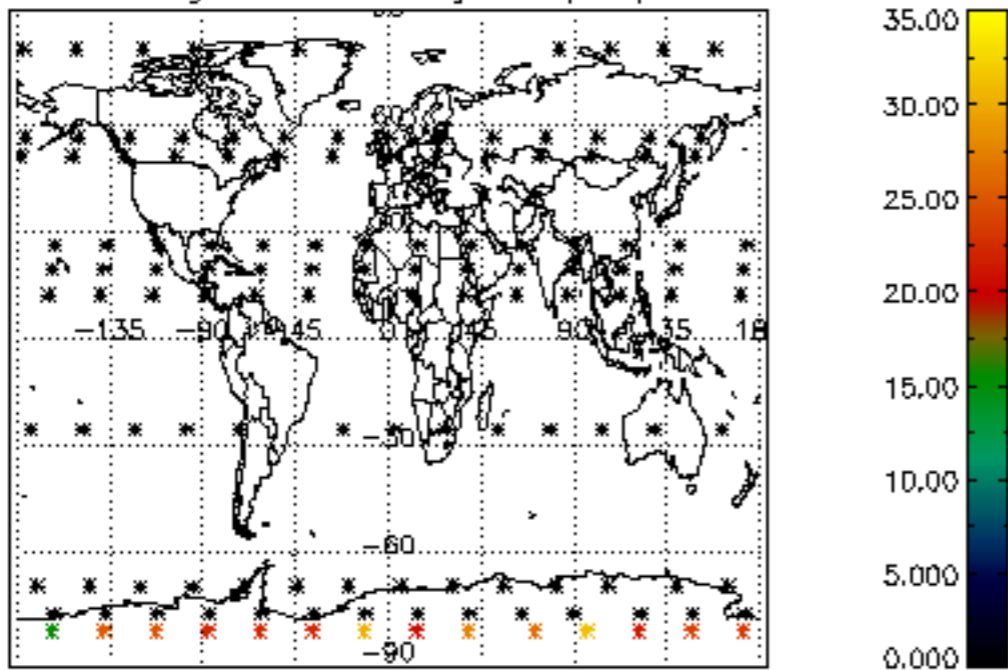
Percentage of star falling outside central band per profile



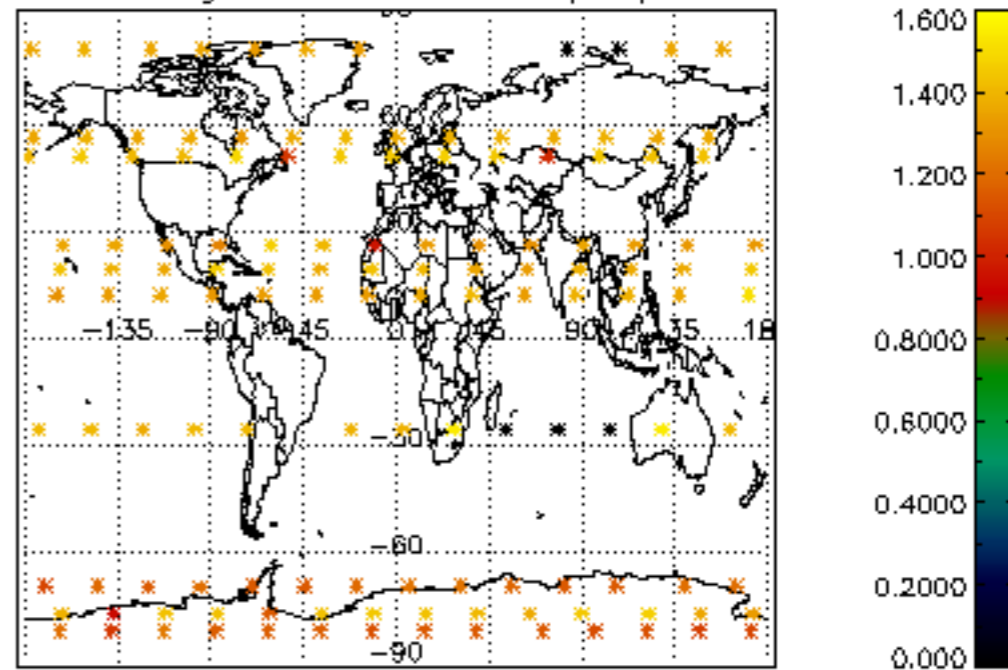
Percentage of saturation errors per profile



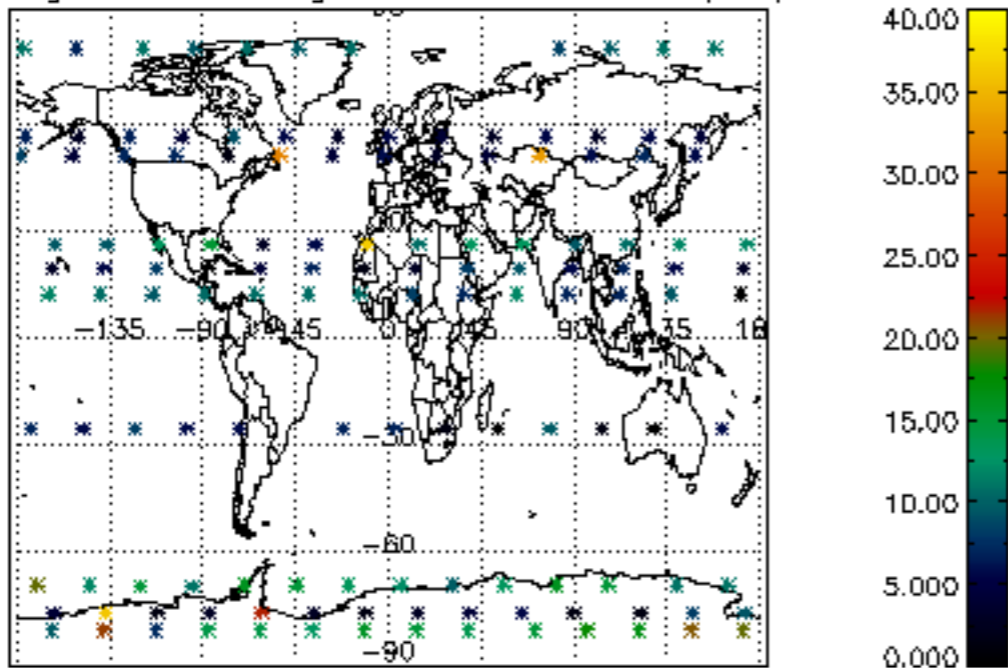
Percentage of cosmic ray hits per profile



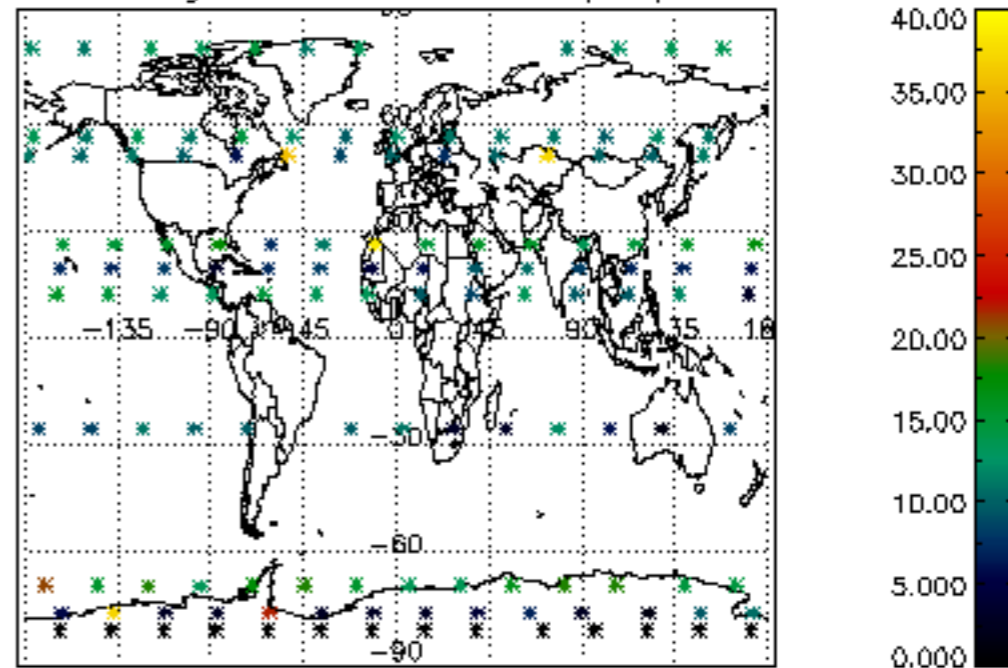
Percentage of datation errors per profile

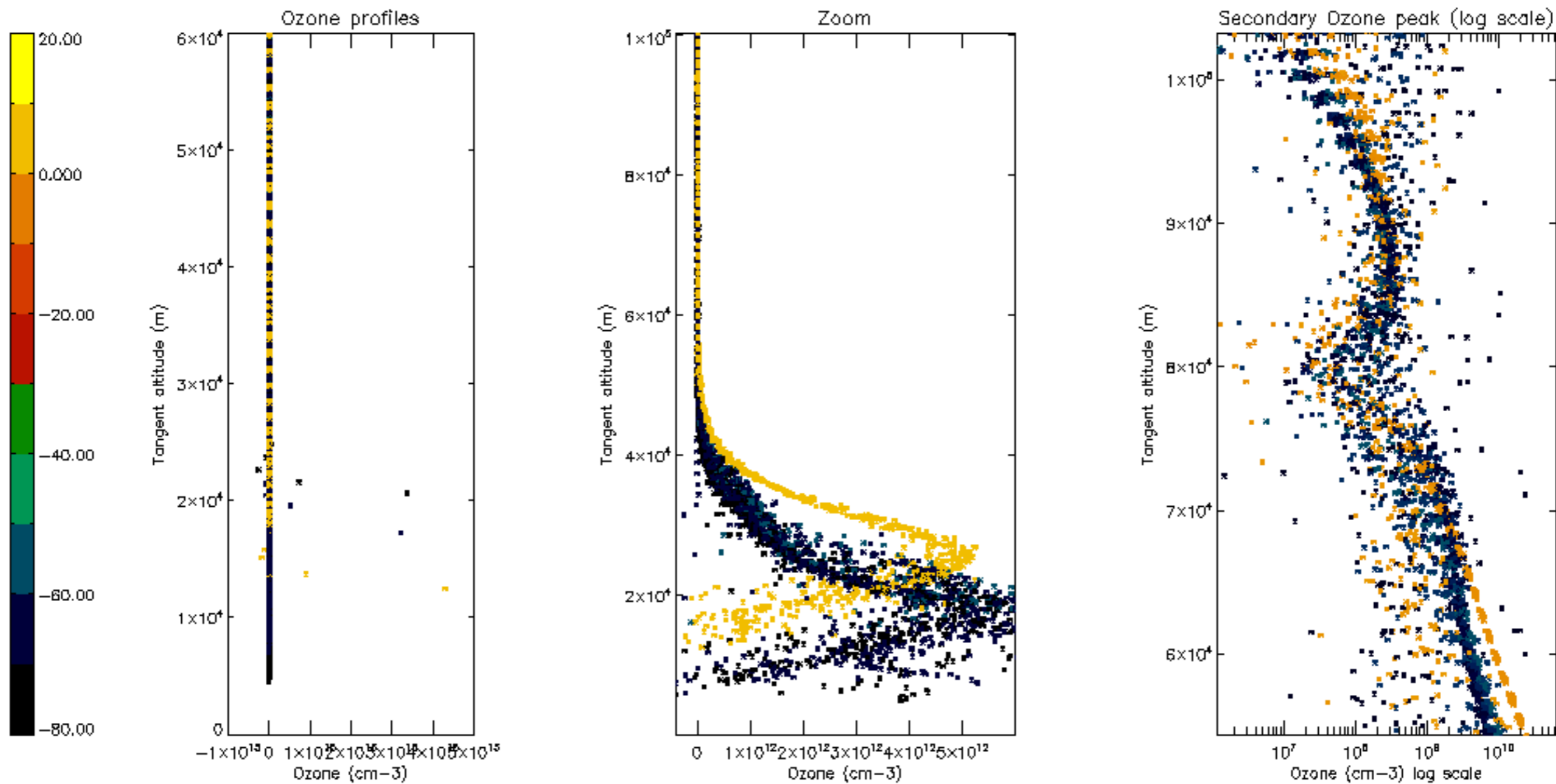


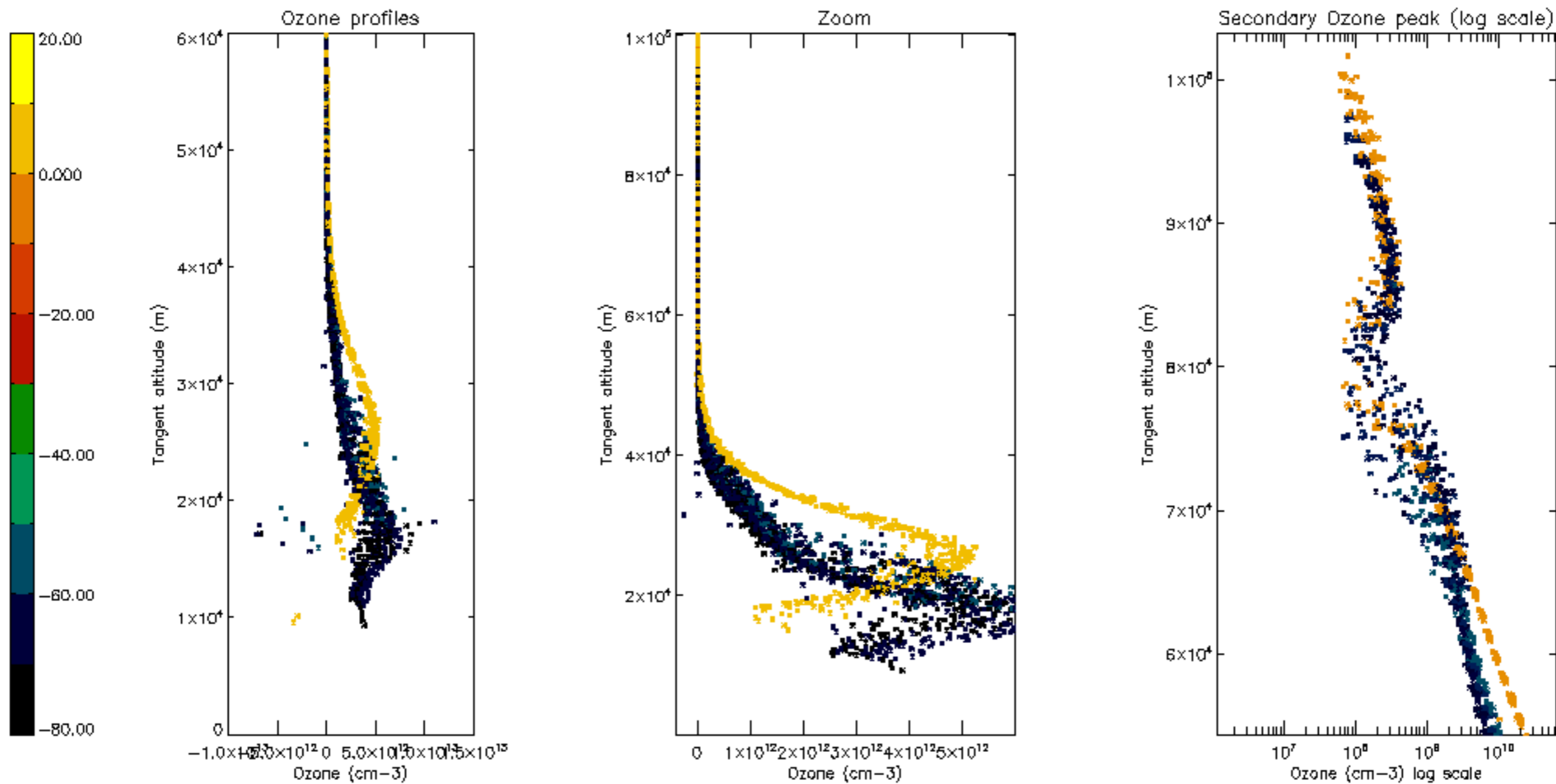
Percentage of star falling outside central band per profile

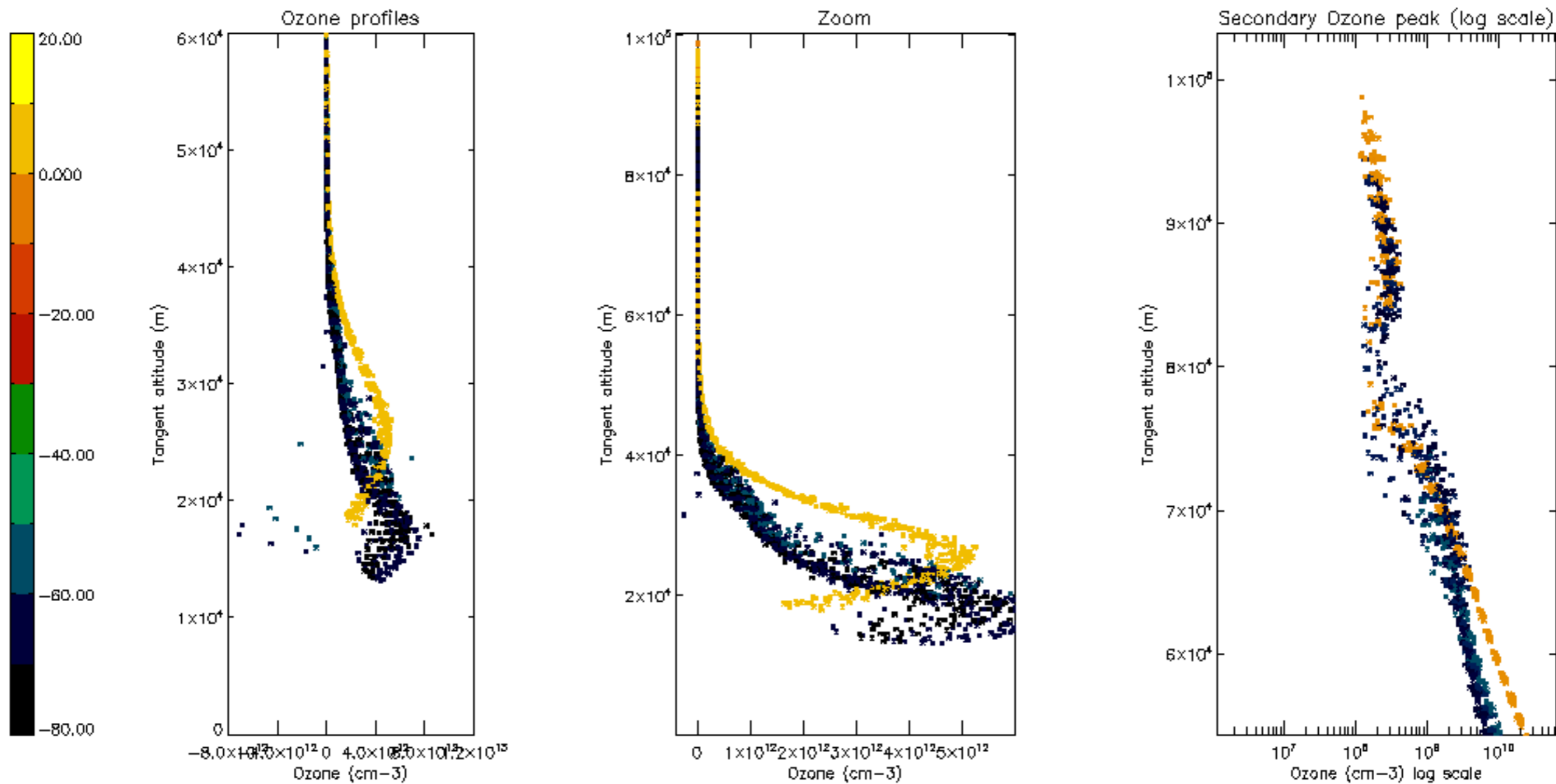


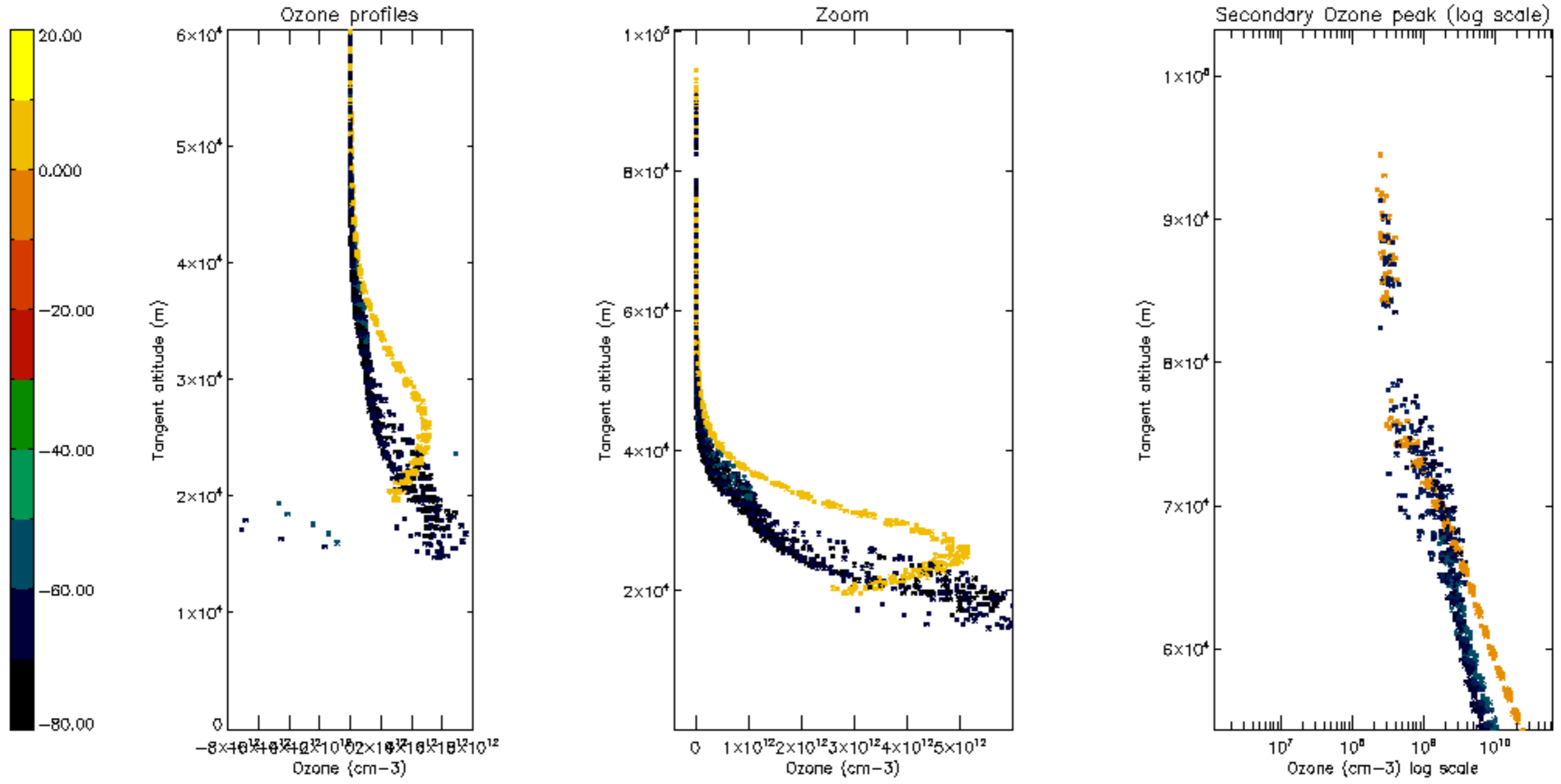
Percentage of saturation errors per profile

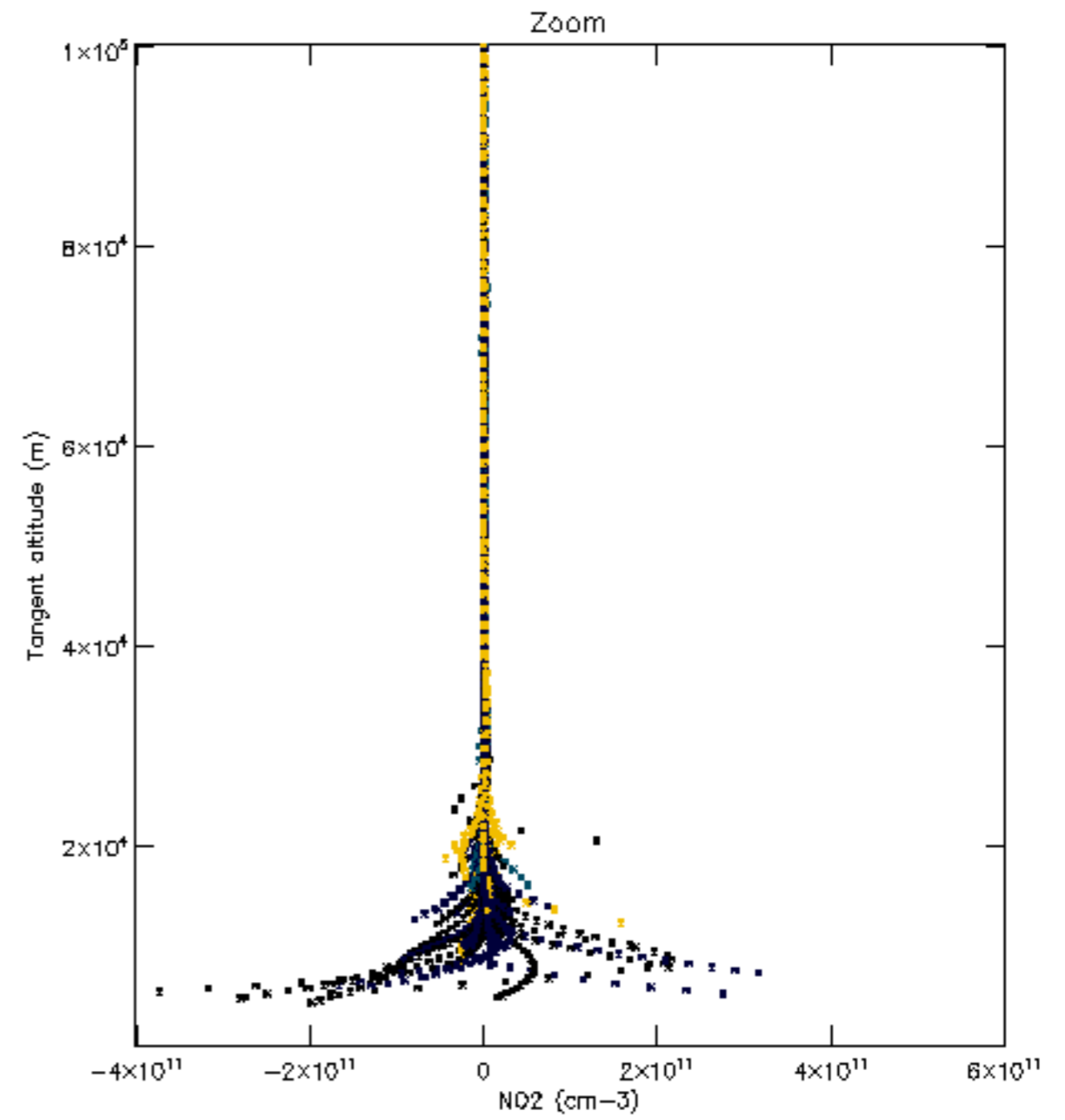
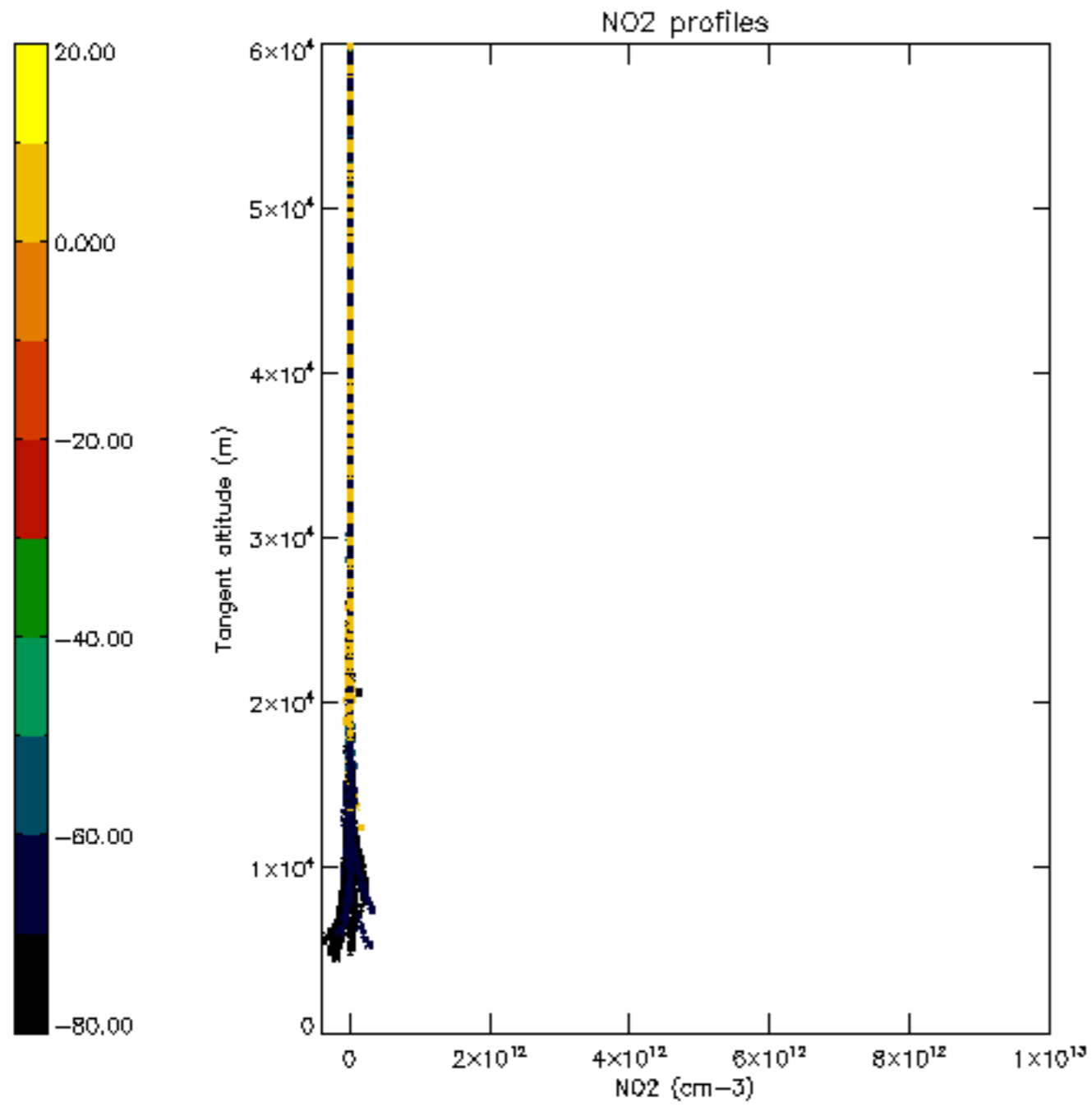


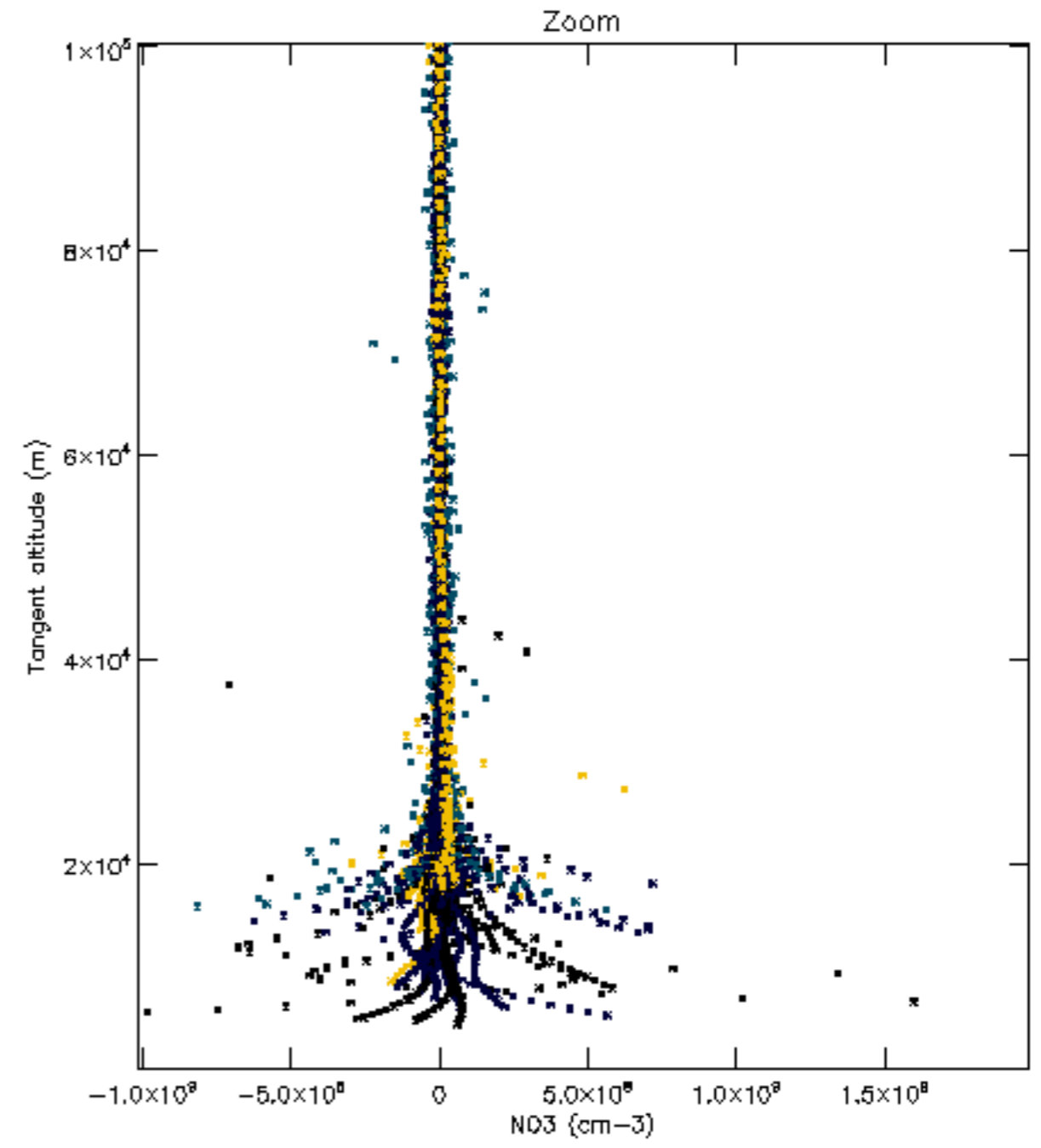
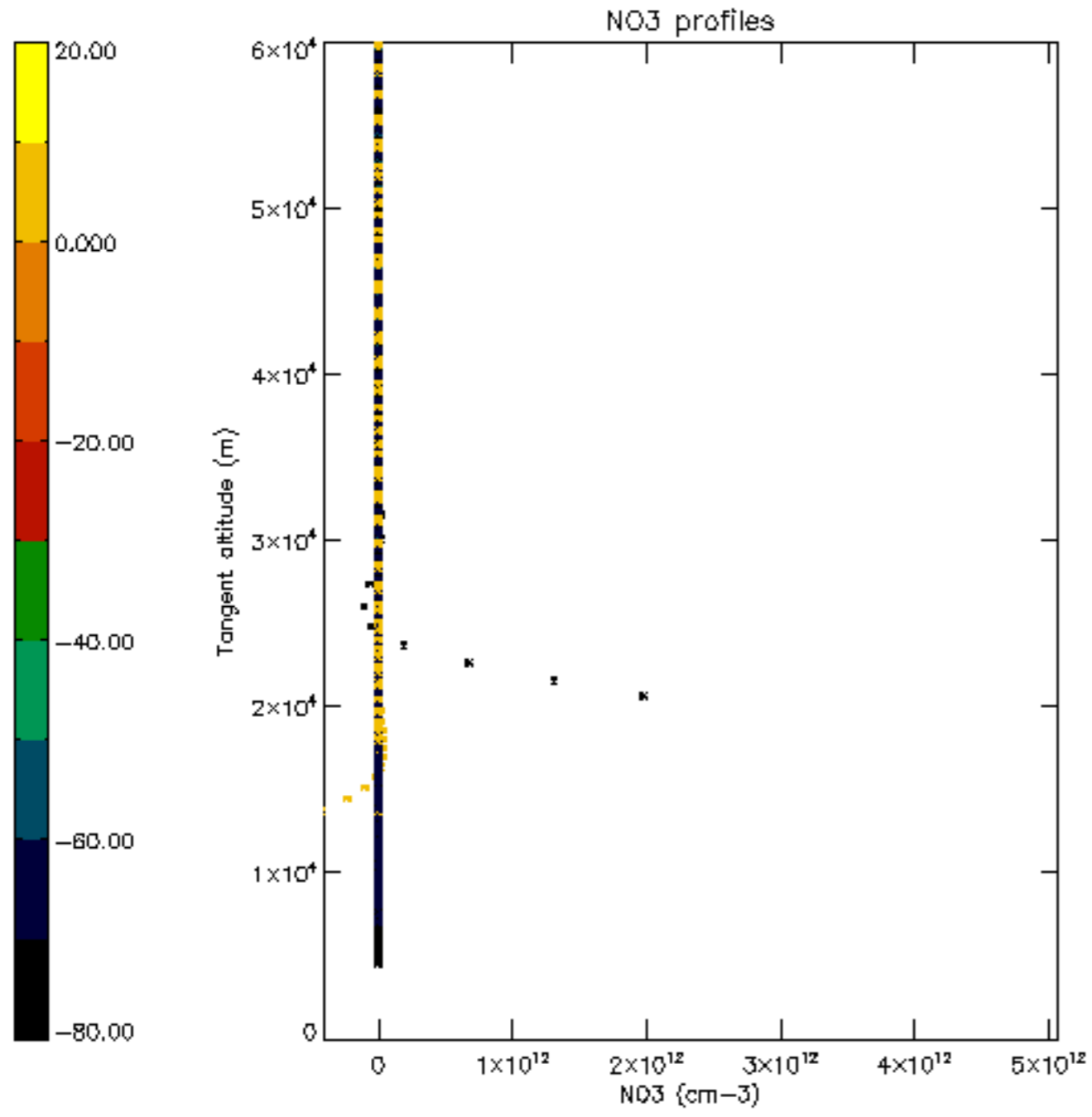


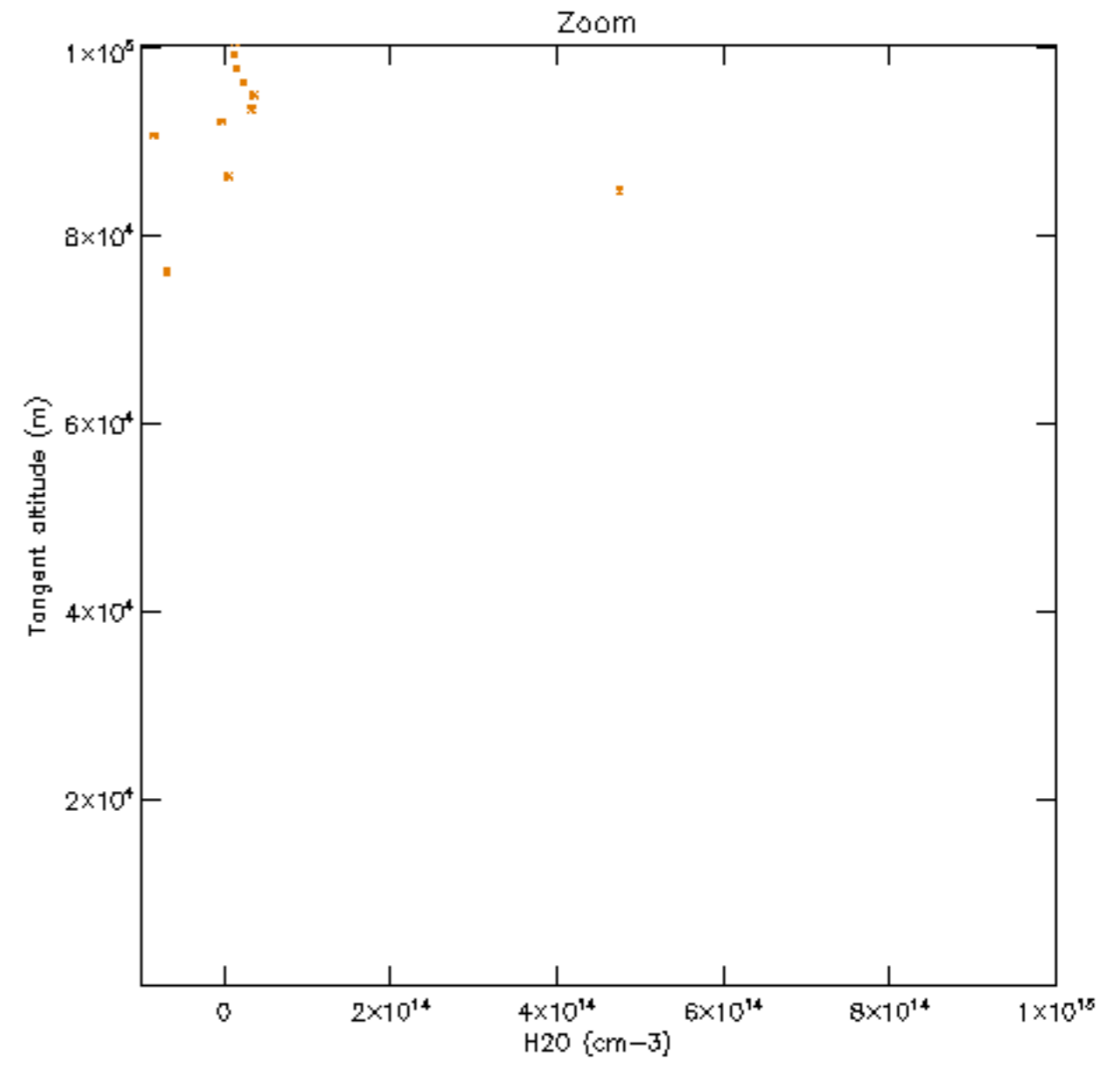
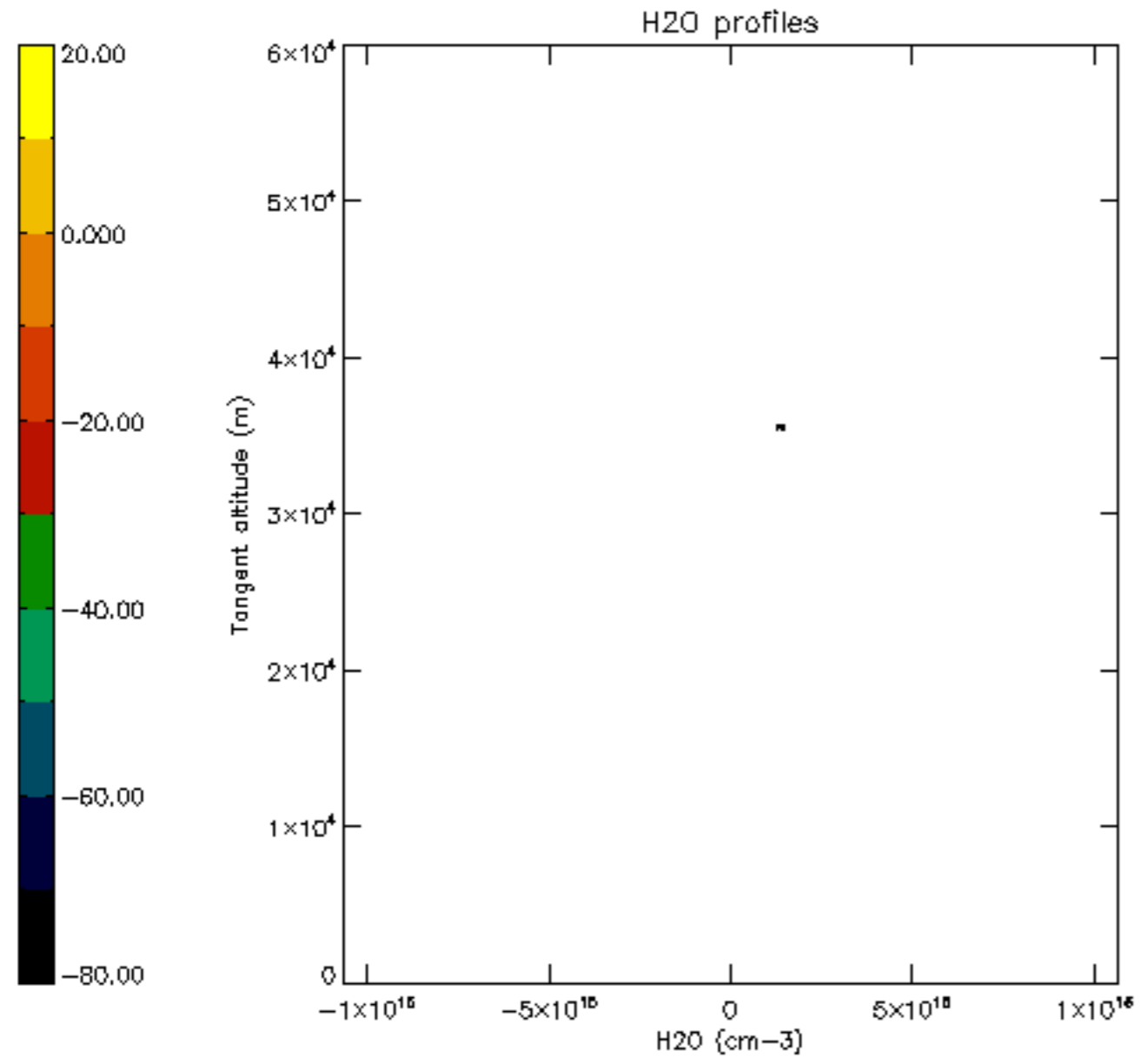


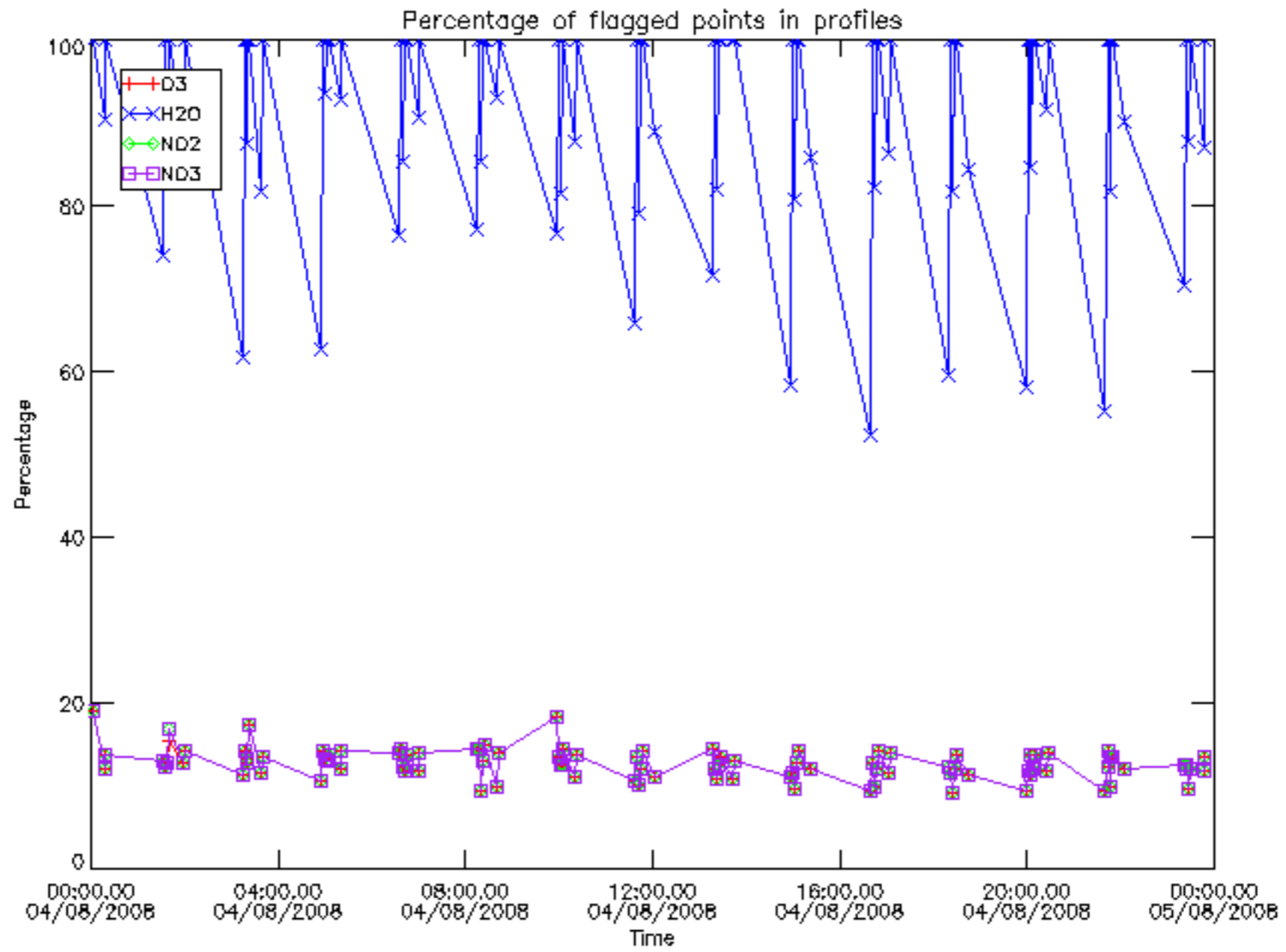




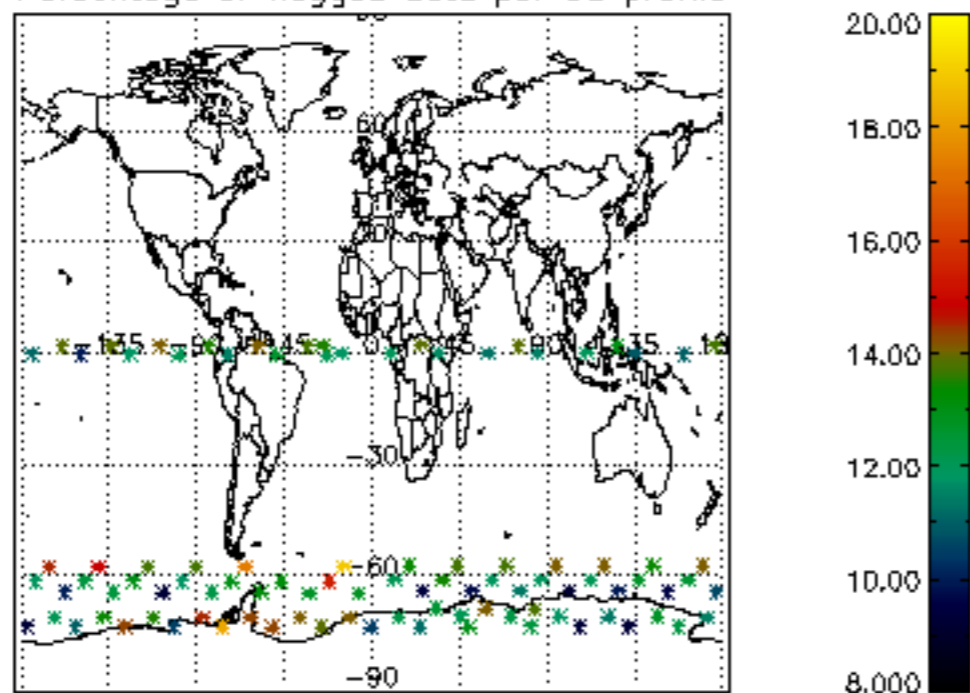




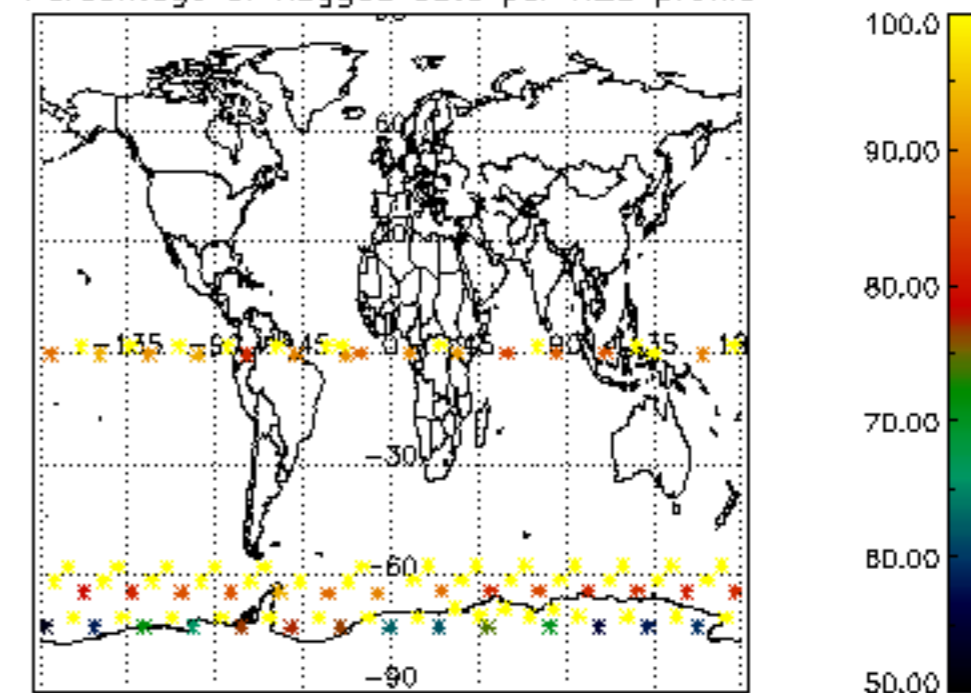




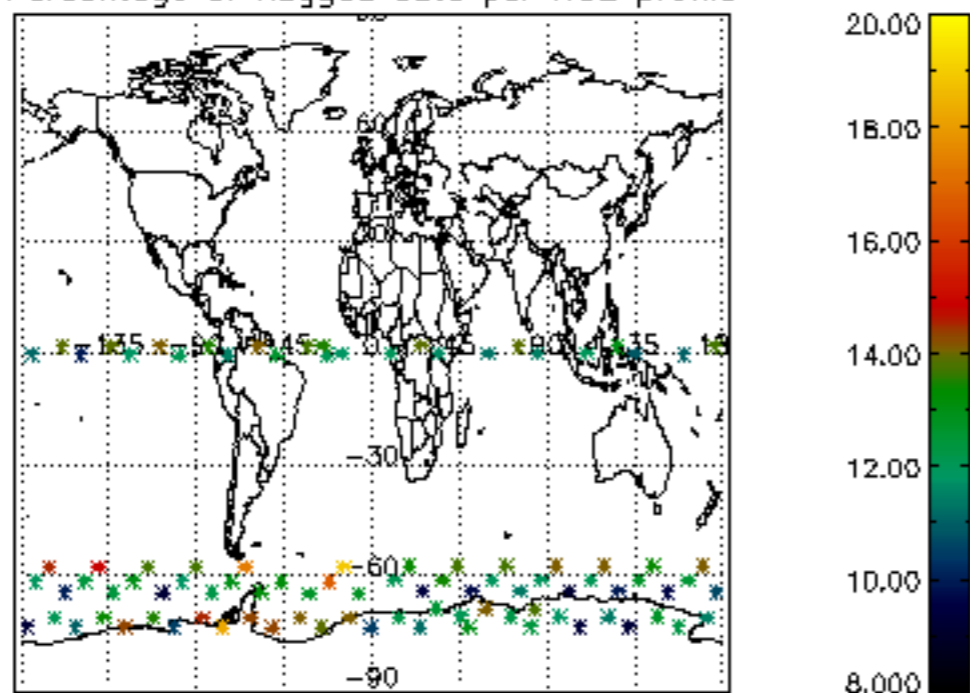
Percentage of flagged data per D3 profile



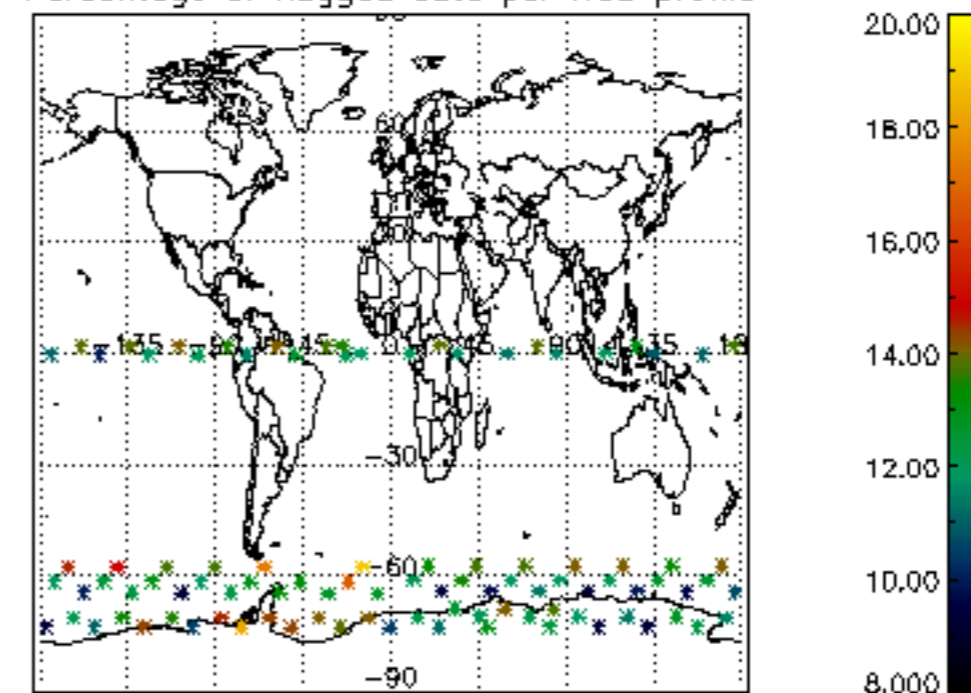
Percentage of flagged data per H2O profile

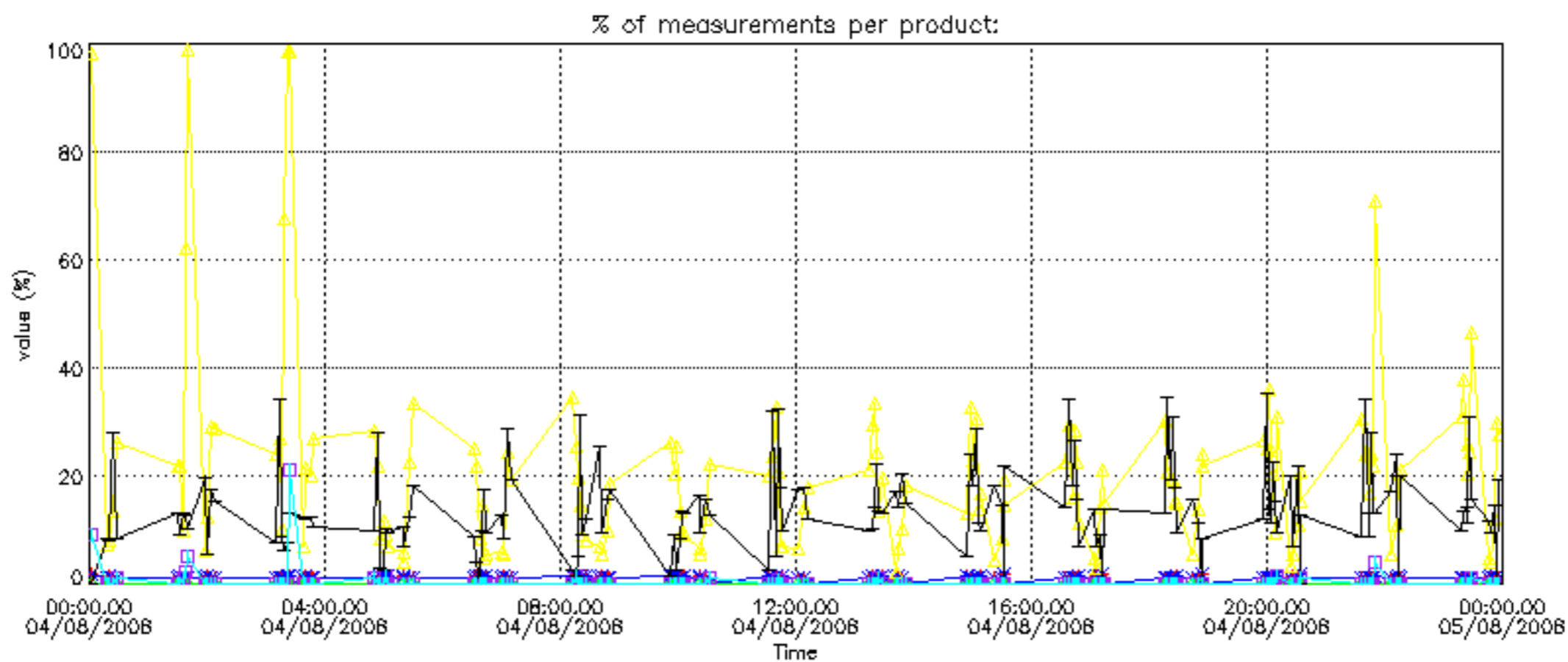


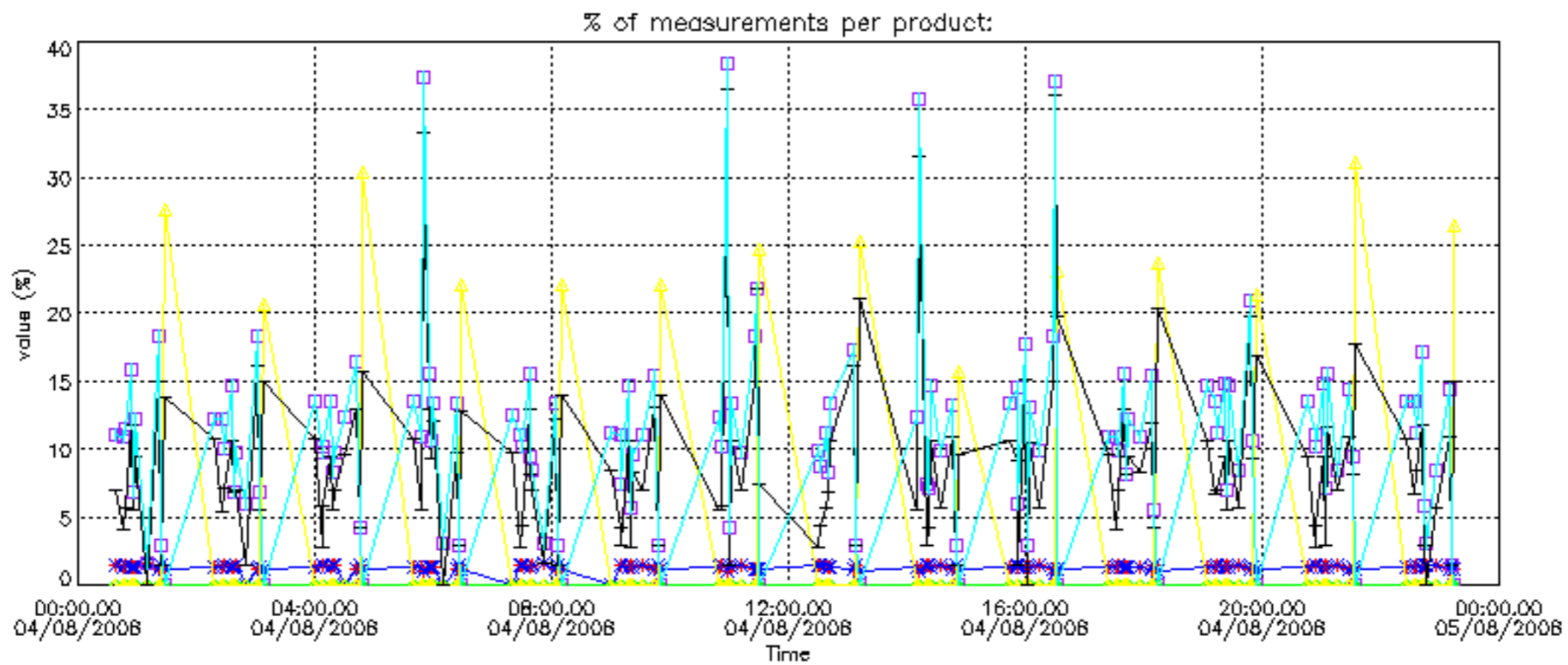
Percentage of flagged data per NO2 profile



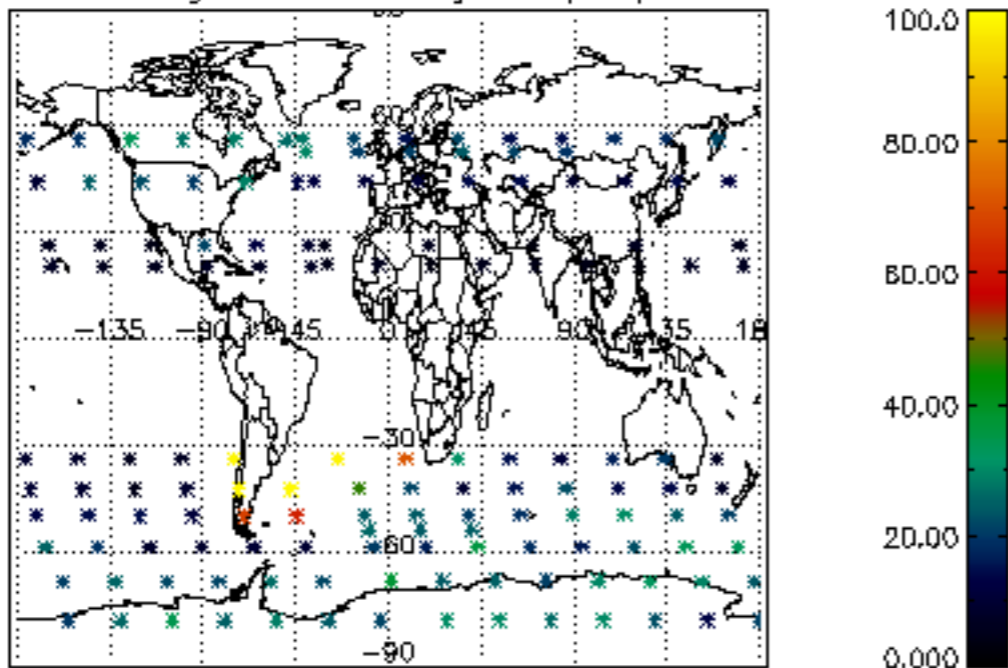
Percentage of flagged data per NO3 profile



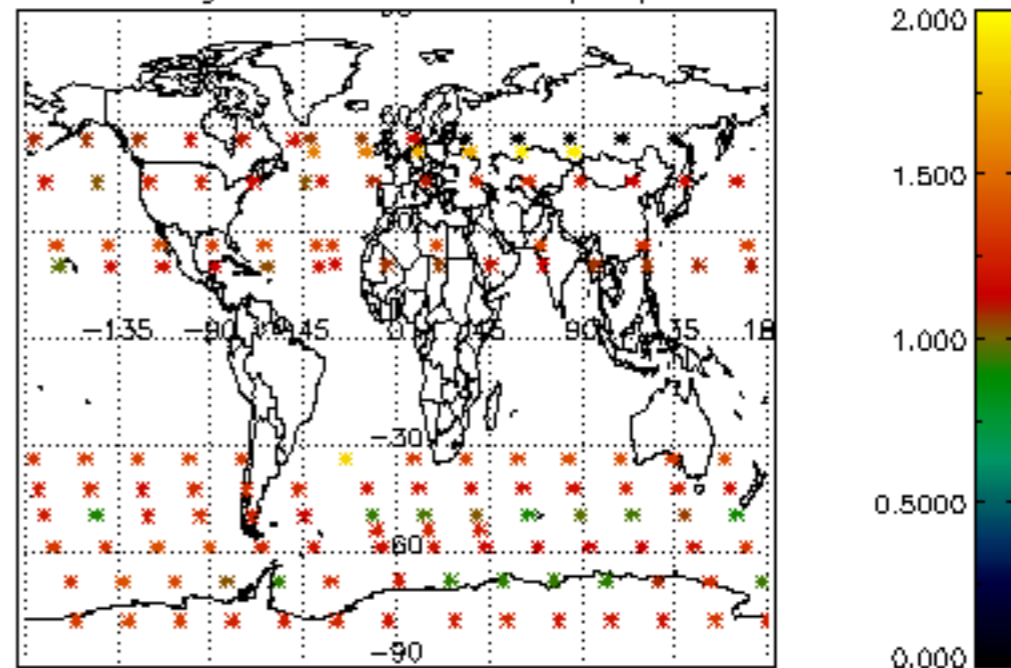




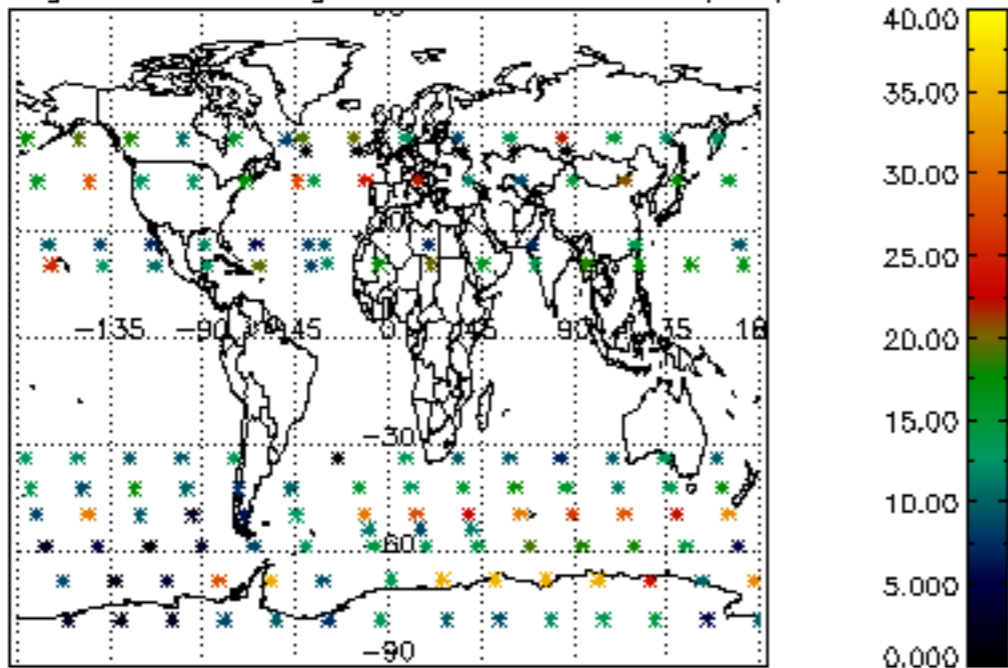
Percentage of cosmic ray hits per profile



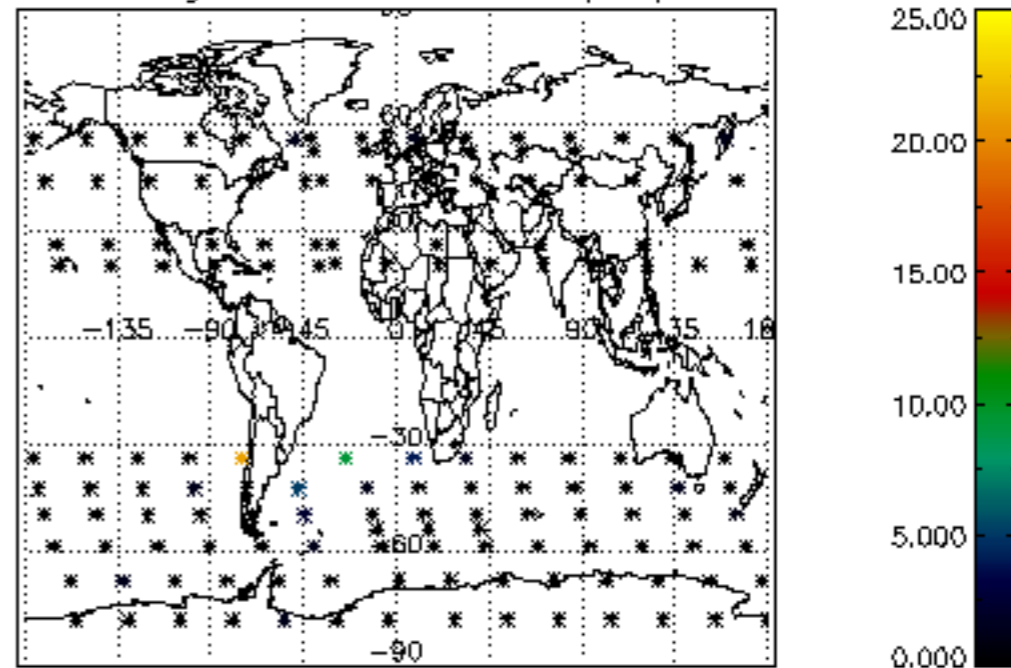
Percentage of datation errors per profile



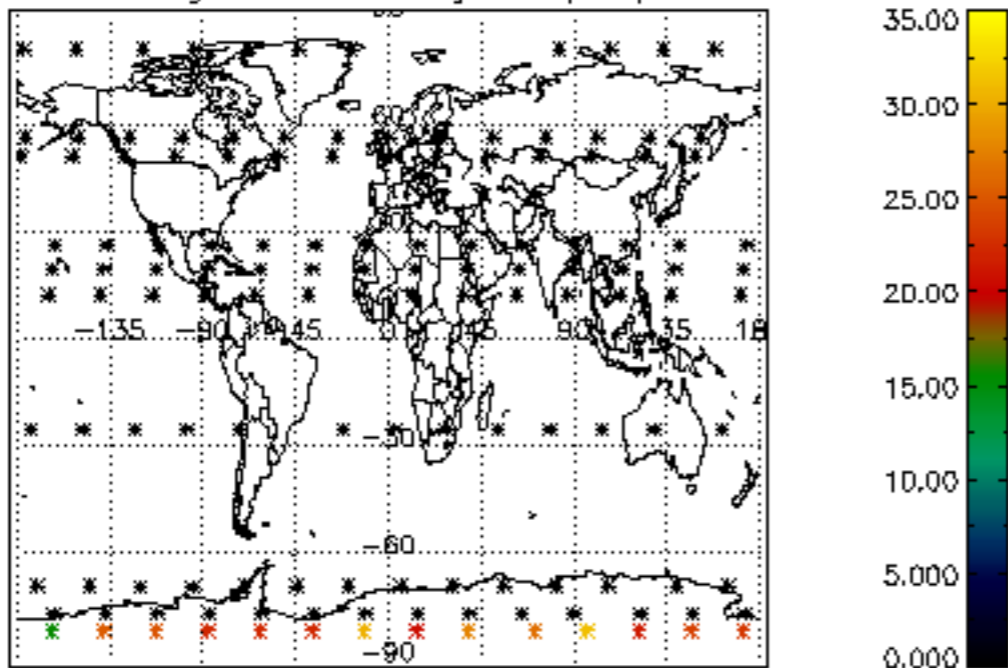
Percentage of star falling outside central band per profile



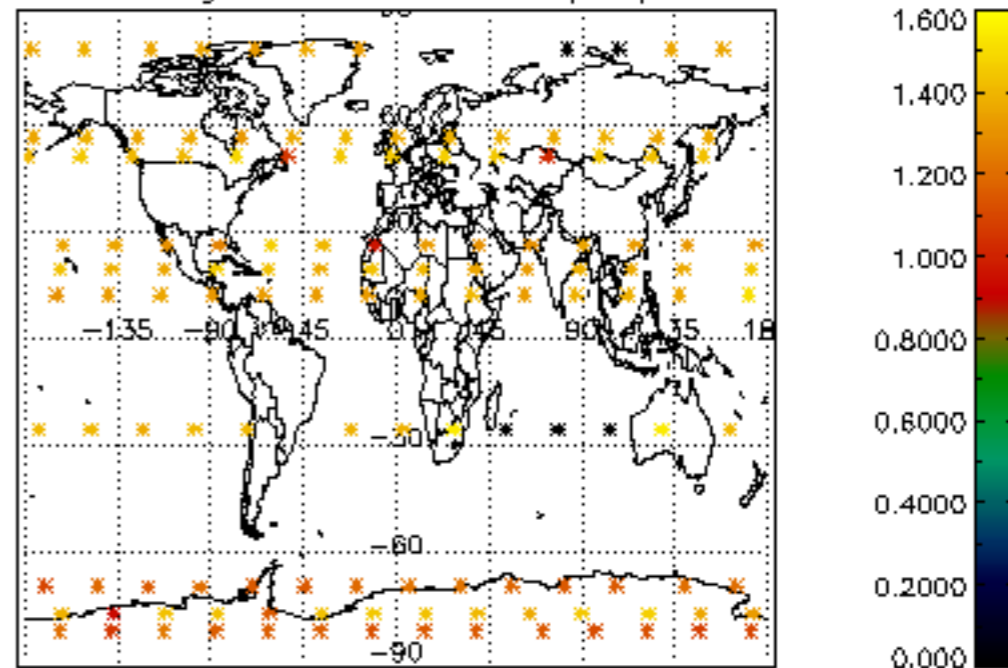
Percentage of saturation errors per profile



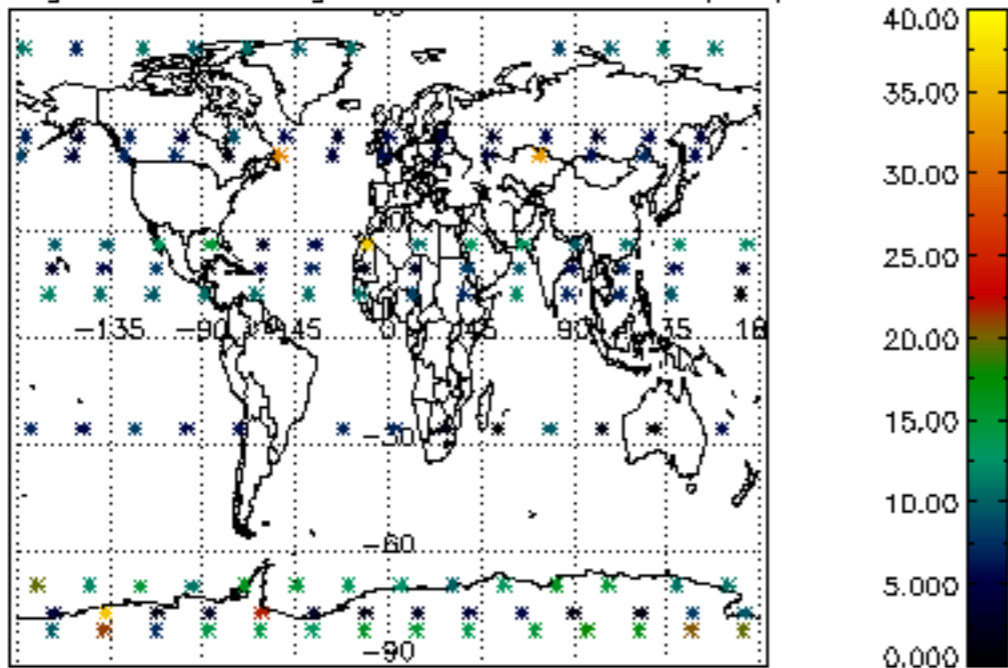
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

