

GOMOS Level 2 Daily Report

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

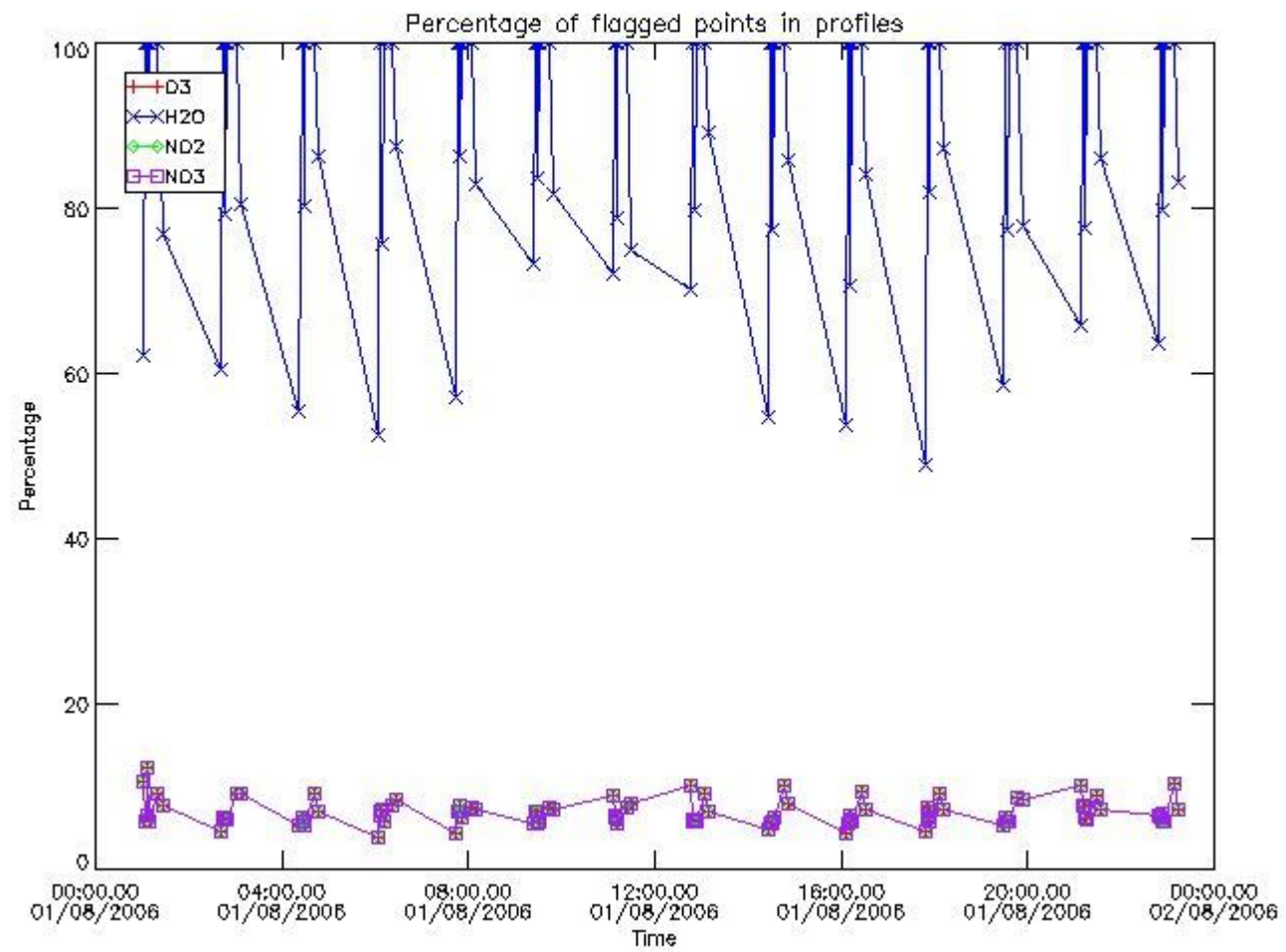
Item	Value
Time of report generation	24APR2013 02:50:15
Data source version	GOMOS/6.01
Start time of products	01-08-2006 (01AUG2006 00:00:00)
Stop time of products	02-08-2006 (02AUG2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	274
Nb of prods with errors	0

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__2PRFIN20060801_001443_000000312050_00002_23102_0805.N1	01-AUG-2006 00:14:43	Bright	31.000	11	53Alp Aql	0.76500	8000.0	62	23102	No
2	GOM_NL__2PRFIN20060801_001608_000000292050_00002_23102_0806.N1	01-AUG-2006 00:16:08	Bright	28.500	168	17Zet Aql	2.9860	11000.	57	23102	No
3	GOM_NL__2PRFIN20060801_002436_000000312050_00002_23102_0807.N1	01-AUG-2006 00:24:36	Bright	30.500	66	37Gam Cyg	2.2080	5900.0	61	23102	No
4	GOM_NL__2PRFIN20060801_003156_000000332050_00002_23102_0808.N1	01-AUG-2006 00:31:56	Bright	33.000	89	5Alp Cep	2.4510	8000.0	66	23102	No
5	GOM_NL__2PRFIN20060801_003744_000000282050_00002_23102_0809.N1	01-AUG-2006 00:37:44	Bright	27.500	49	1Alp UMi	1.9900	6300.0	55	23102	No
6	GOM_NL__2PRFIN20060801_005024_000000352050_00002_23102_0810.N1	01-AUG-2006 00:50:24	Bright	34.500	6	13Alp Aur	0.080000	3400.0	69	23102	No
7	GOM_NL__2PRFIN20060801_005249_000000292050_00002_23102_0811.N1	01-AUG-2006 00:52:49	Bright	28.500	107	37The Aur	2.6490	11000.	57	23102	No
8	GOM_NL__2PRFIN20060801_005537_000000372050_00002_23102_0812.N1	01-AUG-2006 00:55:37	Bright	37.000	28	12Bet Tau	1.6500	15200.	74	23102	No
9	GOM_NL__2PRFIN20060801_005742_000000342050_00002_23102_0813.N1	01-AUG-2006 00:57:42	Twilight	34.000	176	23Zet Tau	3.0200	22000.	68	23102	No
10	GOM_NL__2PRFIN20060801_010121_000000342050_00002_23102_0814.N1	01-AUG-2006 01:01:21	Dark	33.500	14	58Alp Ori	0.87000	3000.0	67	23102	No
11	GOM_NL__2PRFIN20060801_010406_000000352050_00002_23102_0815.N1	01-AUG-2006 01:04:06	Dark	35.000	30	46Eps Ori	1.6940	30000.	70	23102	No
12	GOM_NL__2PRFIN20060801_010526_000000322050_00002_23102_0816.N1	01-AUG-2006 01:05:26	Dark	32.000	125	44Iot Ori	2.7700	30000.	64	23102	No
13	GOM_NL__2PRFIN20060801_010634_000000422050_00002_23102_0817.N1	01-AUG-2006 01:06:34	Dark	41.500	7	19Bet Ori	0.10000	14000.	83	23102	No
14	GOM_NL__2PRFIN20060801_010845_000000362050_00002_23102_0818.N1	01-AUG-2006 01:08:45	Dark	35.500	101	11Alp Lep	2.5820	7000.0	71	23102	No
15	GOM_NL__2PRFIN20060801_012033_000000402050_00002_23102_0819.N1	01-AUG-2006 01:20:33	Dark	39.500	157	The1Eri	2.9060	9300.0	79	23102	No
16	GOM_NL__2PRFIN20060801_012604_000000402050_00003_23103_0342.N1	01-AUG-2006 01:26:04	Dark	39.500	9	Alp Eri	0.45300	24000.	79	23103	No
17	GOM_NL__2PRFIN20060801_013256_000000352050_00003_23103_0343.N1	01-AUG-2006 01:32:56	Straylight	35.000	148	Alp Tuc	2.8780	4100.0	70	23103	No
18	GOM_NL__2PRFIN20060801_013617_000000432050_00003_23103_0344.N1	01-AUG-2006 01:36:17	Straylight	43.000	31	Alp Gru	1.7340	15200.	86	23103	No
19	GOM_NL__2PRFIN20060801_013926_000000392050_00003_23103_0345.N1	01-AUG-2006 01:39:26	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	23103	No
20	GOM_NL__2PRFIN20060801_015519_000000312050_00003_23103_0346.N1	01-AUG-2006 01:55:19	Bright	30.500	11	53Alp Aql	0.76500	8000.0	61	23103	No
21	GOM_NL__2PRFIN20060801_015643_000000302050_00003_23103_0347.N1	01-AUG-2006 01:56:43	Bright	30.000	168	17Zet Aql	2.9860	11000.	60	23103	No
22	GOM_NL__2PRFIN20060801_020511_000000332050_00003_23103_0348.N1	01-AUG-2006 02:05:11	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	23103	No
23	GOM_NL__2PRFIN20060801_021231_000000332050_00003_23103_0349.N1	01-AUG-2006 02:12:31	Bright	32.500	89	5Alp Cep	2.4510	8000.0	65	23103	No
24	GOM_NL__2PRFIN20060801_021820_000000292050_00003_23103_0350.N1	01-AUG-2006 02:18:20	Bright	28.500	49	1Alp UMi	1.9900	6300.0	57	23103	No
25	GOM_NL__2PRFIN20060801_023100_000000352050_00003_23103_0351.N1	01-AUG-2006 02:31:00	Bright	34.500	6	13Alp Aur	0.080000	3400.0	69	23103	No
26	GOM_NL__2PRFIN20060801_023325_000000302050_00003_23103_0352.N1	01-AUG-2006 02:33:25	Bright	29.500	107	37The Aur	2.6490	11000.	59	23103	No
27	GOM_NL__2PRFIN20060801_023613_000000382050_00003_23103_0353.N1	01-AUG-2006 02:36:13	Bright	37.500	28	12Bet Tau	1.6500	15200.	75	23103	No
28	GOM_NL__2PRFIN20060801_023818_000000342050_00003_23103_0354.N1	01-AUG-2006 02:38:18	Twilight	33.500	176	23Zet Tau	3.0200	22000.	67	23103	No
29	GOM_NL__2PRFIN20060801_024157_000000462050_00003_23103_0355.N1	01-AUG-2006 02:41:57	Dark	46.000	14	58Alp Ori	0.87000	3000.0	92	23103	No
30	GOM_NL__2PRFIN20060801_024443_000000342050_00003_23103_0356.N1	01-AUG-2006 02:44:43	Dark	33.500	30	46Eps Ori	1.6940	30000.	67	23103	No
31	GOM_NL__2PRFIN20060801_024602_000000342050_00003_23103_0357.N1	01-AUG-2006 02:46:02	Dark	33.500	125	44Iot Ori	2.7700	30000.	67	23103	No
32	GOM_NL__2PRFIN20060801_024711_000000422050_00003_23103_0358.N1	01-AUG-2006 02:47:11	Dark	41.500	7	19Bet Ori	0.10000	14000.	83	23103	No
33	GOM_NL__2PRFIN20060801_024921_000000342050_00003_23103_0359.N1	01-AUG-2006 02:49:21	Dark	34.000	101	11Alp Lep	2.5820	7000.0	68	23103	No
34	GOM_NL__2PRFIN20060801_030110_000000392050_00003_23103_0360.N1	01-AUG-2006 03:01:10	Dark	39.000	157	The1Eri	2.9060	9300.0	78	23103	No
35	GOM_NL__2PRFIN20060801_030641_000000392050_00004_23104_0342.N1	01-AUG-2006 03:06:41	Dark	39.000	9	Alp Eri	0.45300	24000.	78	23104	No
36	GOM_NL__2PRFIN20060801_031332_000000362050_00004_23104_0343.N1	01-AUG-2006 03:13:32	Straylight	36.000	148	Alp Tuc	2.8780	4100.0	72	23104	No
37	GOM_NL__2PRFIN20060801_031654_000000392050_00004_23104_0344.N1	01-AUG-2006 03:16:54	Straylight	39.000	31	Alp Gru	1.7340	15200.	78	23104	No
38	GOM_NL__2PRFIN20060801_032003_000000382050_00004_23104_0345.N1	01-AUG-2006 03:20:03	Straylight	37.500	172	Gam Gru	3.0030	13100.	75	23104	No
39	GOM_NL__2PRFIN20060801_033554_000000332050_00004_23104_0346.N1	01-AUG-2006 03:35:54	Bright	32.500	11	53Alp Aql	0.76500	8000.0	65	23104	No
40	GOM_NL__2PRFIN20060801_033720_000000302050_00004_23104_0347.N1	01-AUG-2006 03:37:20	Bright	29.500	168	17Zet Aql	2.9860	11000.	59	23104	No
41	GOM_NL__2PRFIN20060801_034547_000000342050_00004_23104_0348.N1	01-AUG-2006 03:45:47	Bright	34.000	66	37Gam Cyg	2.2080	5900.0	68	23104	No
42	GOM_NL__2PRFIN20060801_035307_000000312050_00004_23104_0349.N1	01-AUG-2006 03:53:07	Bright	31.000	89	5Alp Cep	2.4510	8000.0	62	23104	No

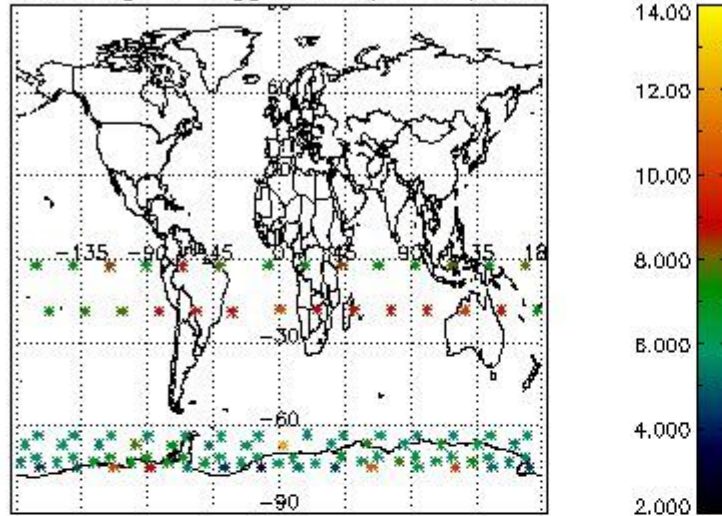
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

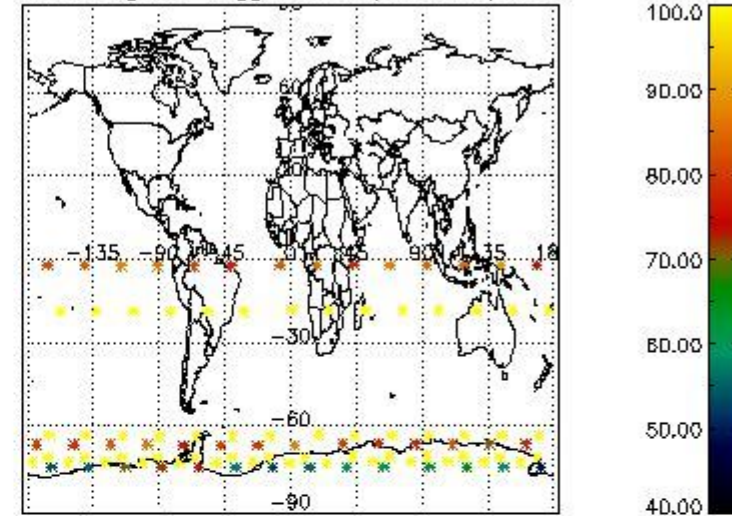


3.2 Plot quality information per product (world map)

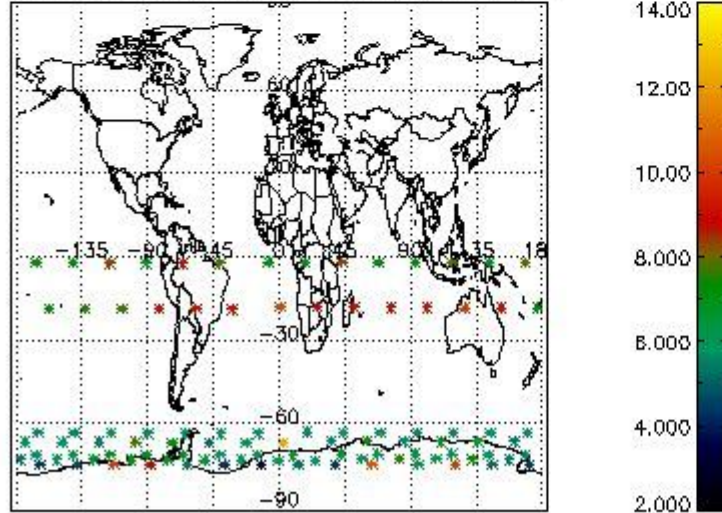
Percentage of flagged data per O3 profile



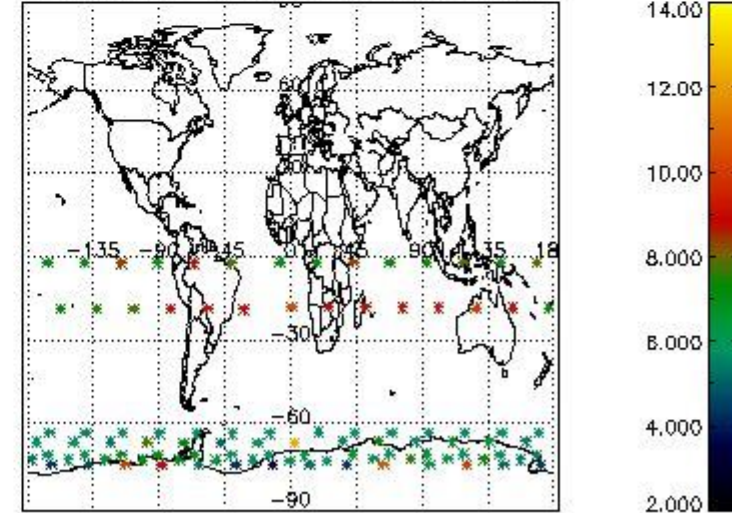
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

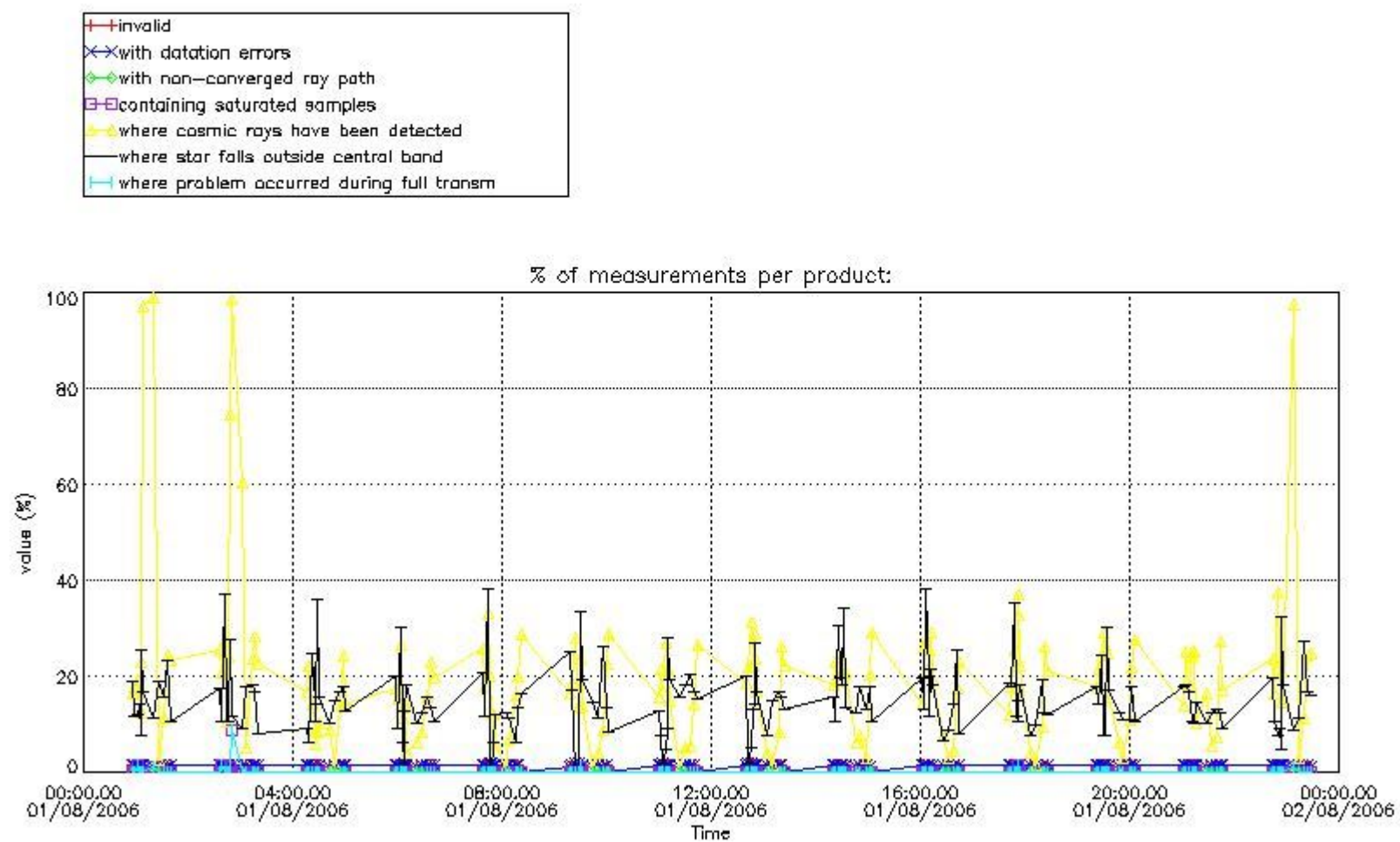


4. Level 1 quality information per product

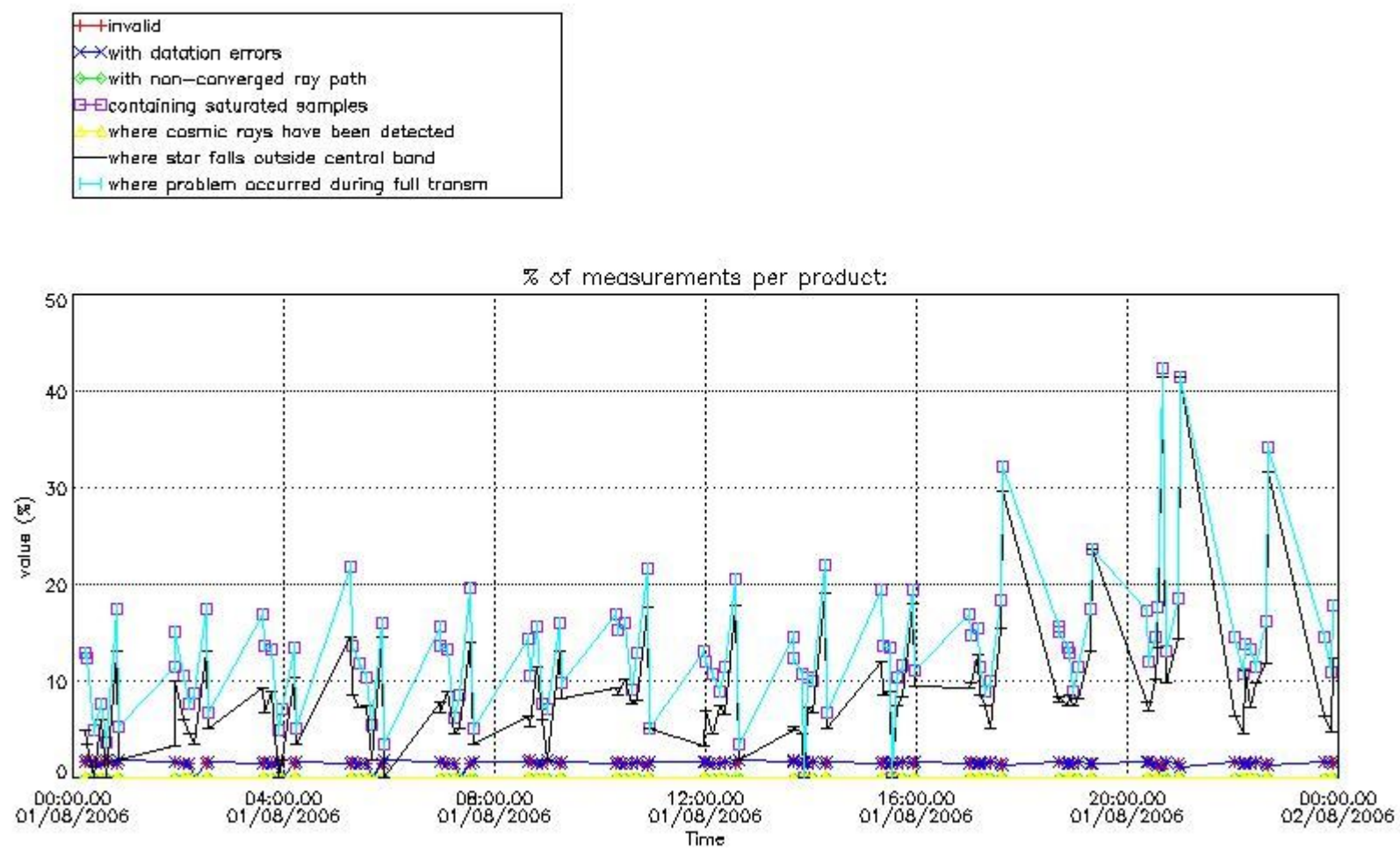
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

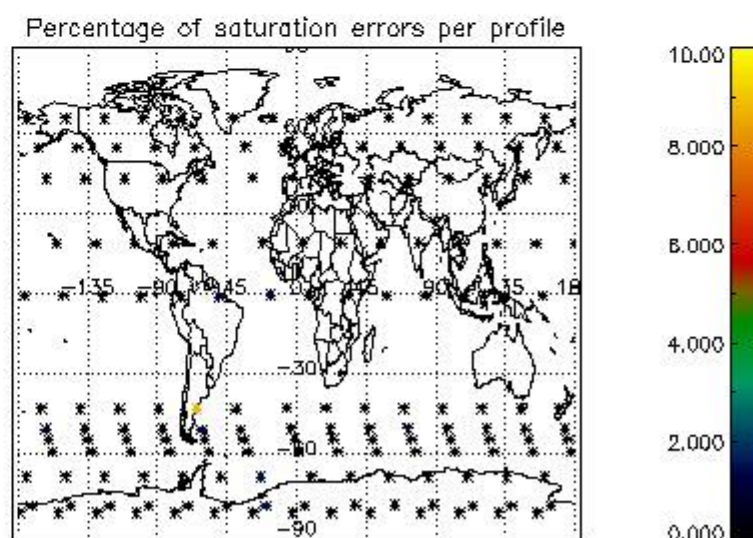
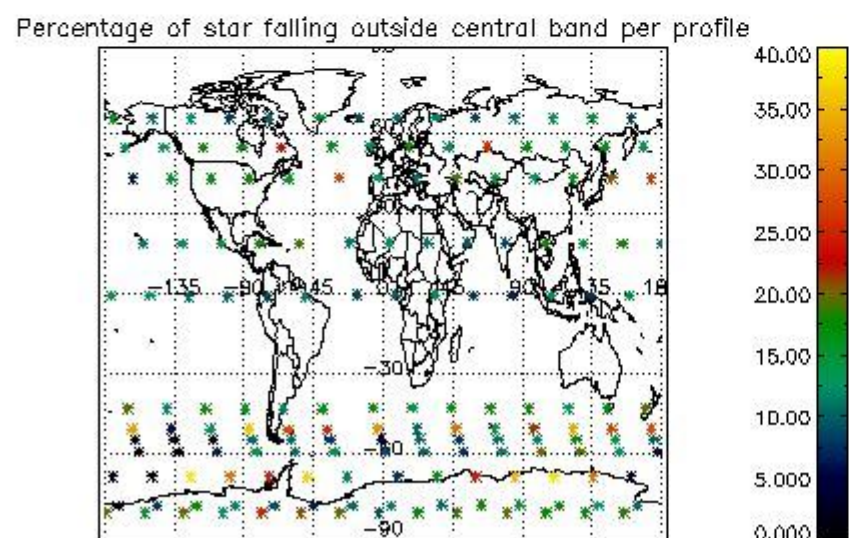
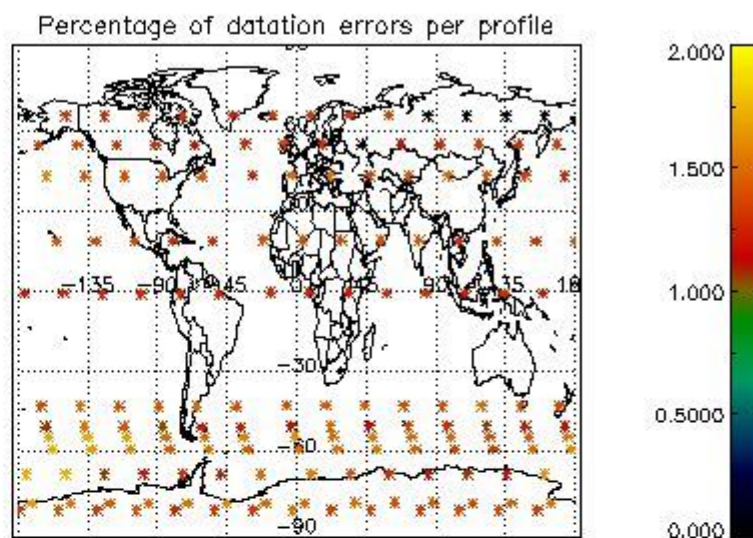
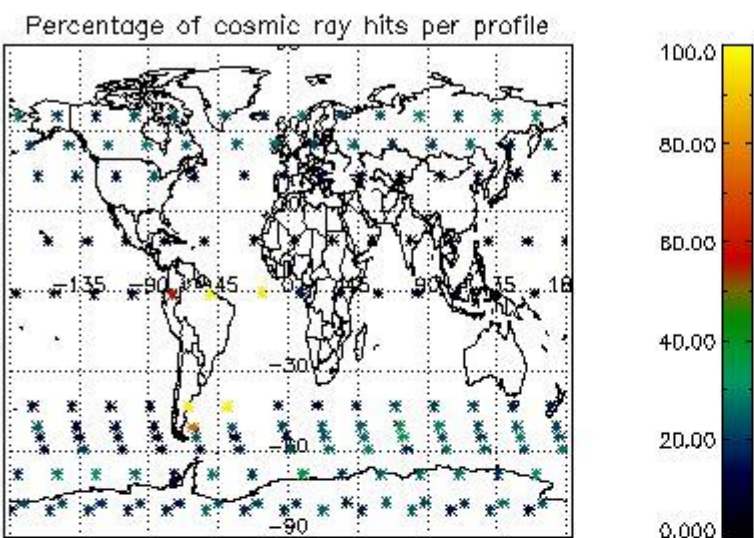


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

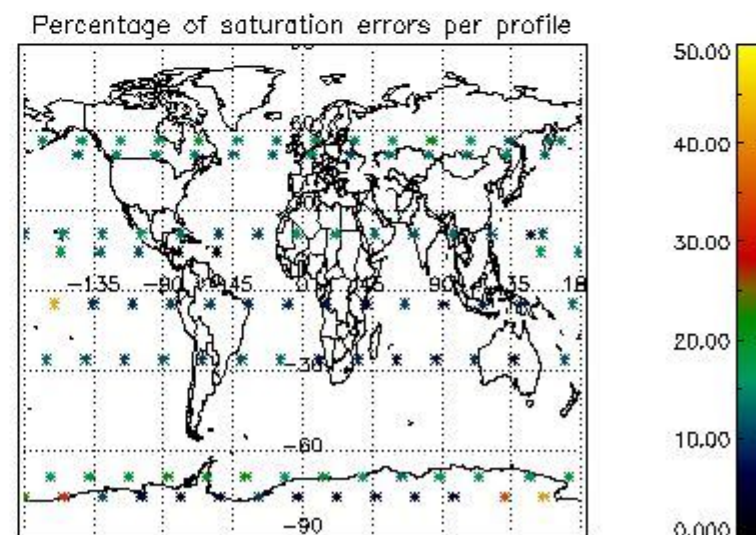
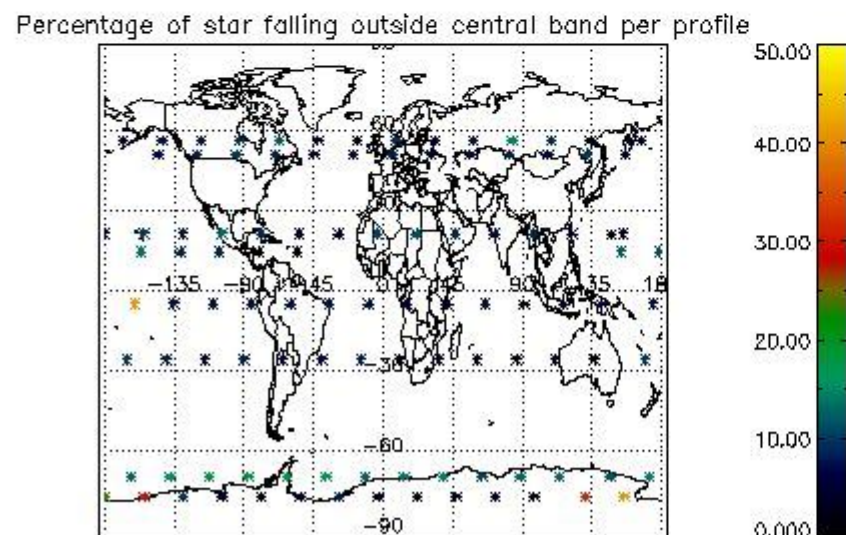
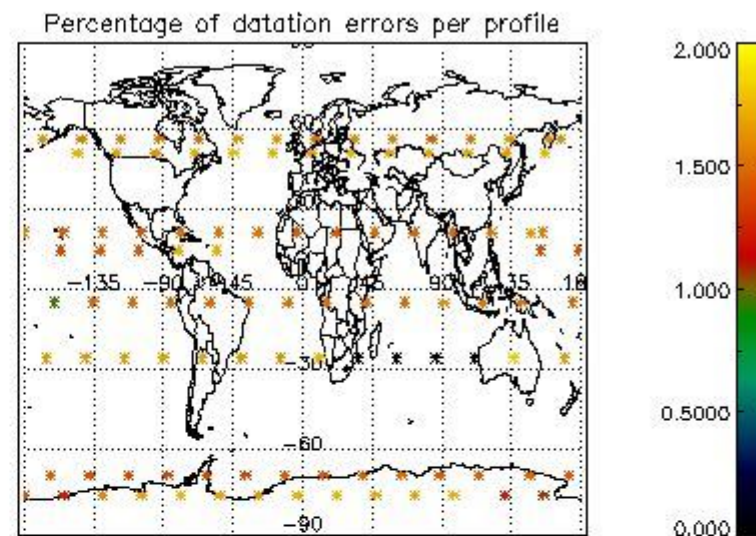
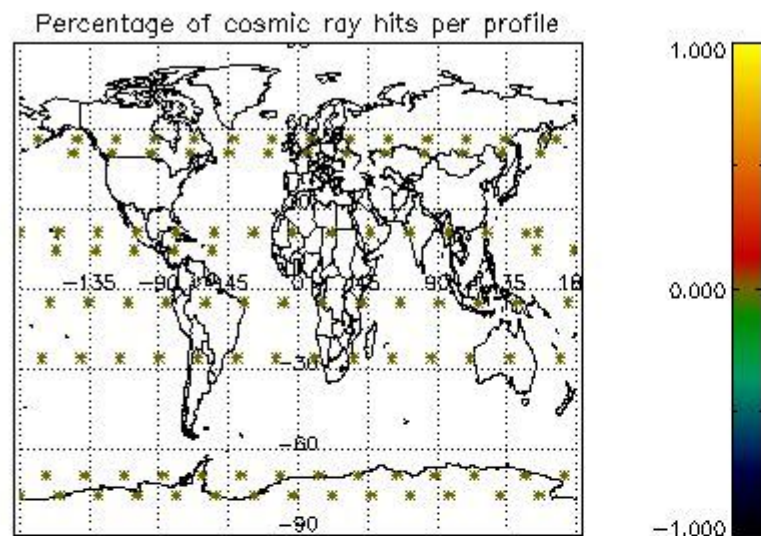


4.2 Plot quality information per product coming from level 1b processing (world map)

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

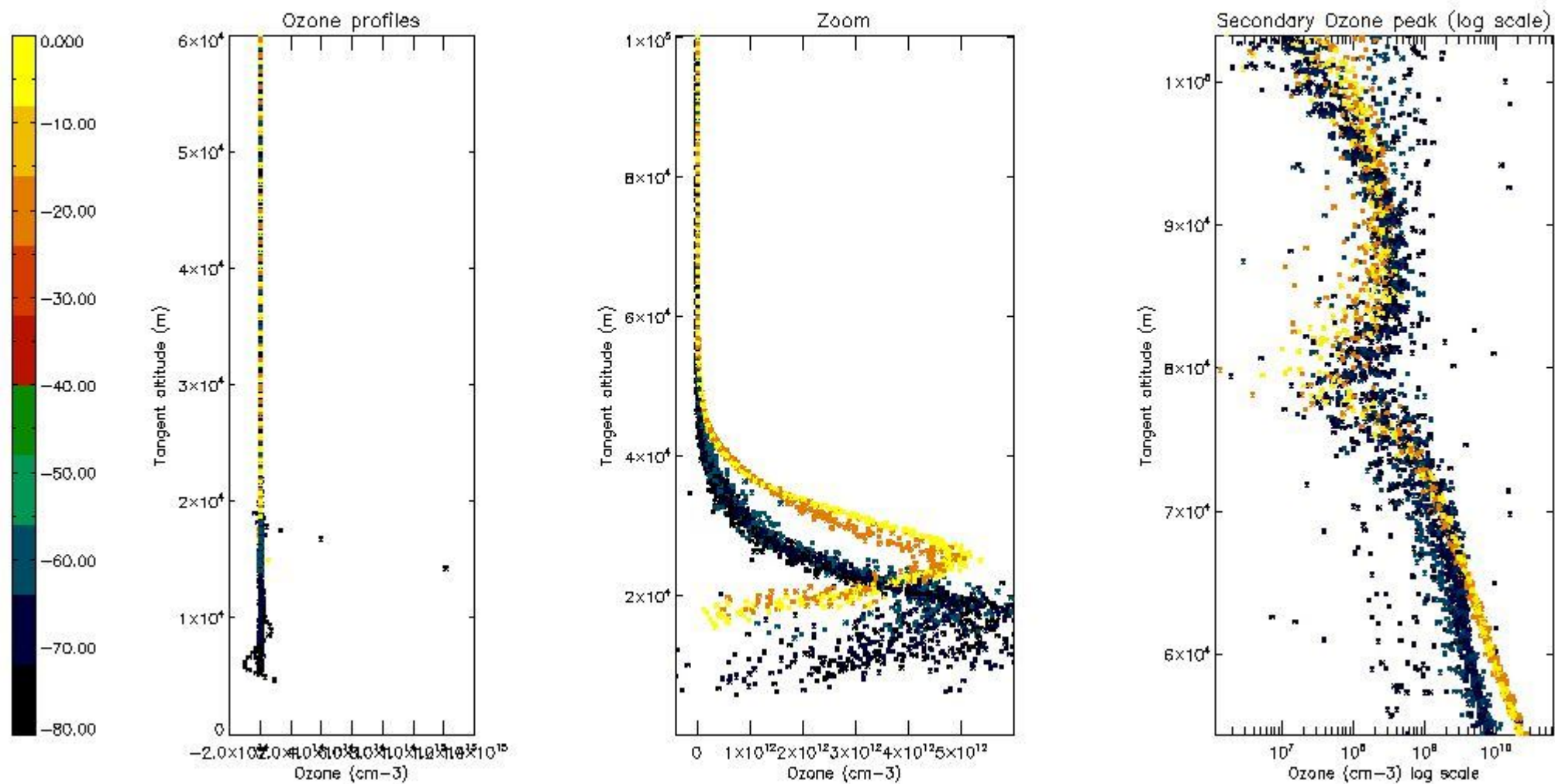
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	24

STD < 10	19
STD < 5	13

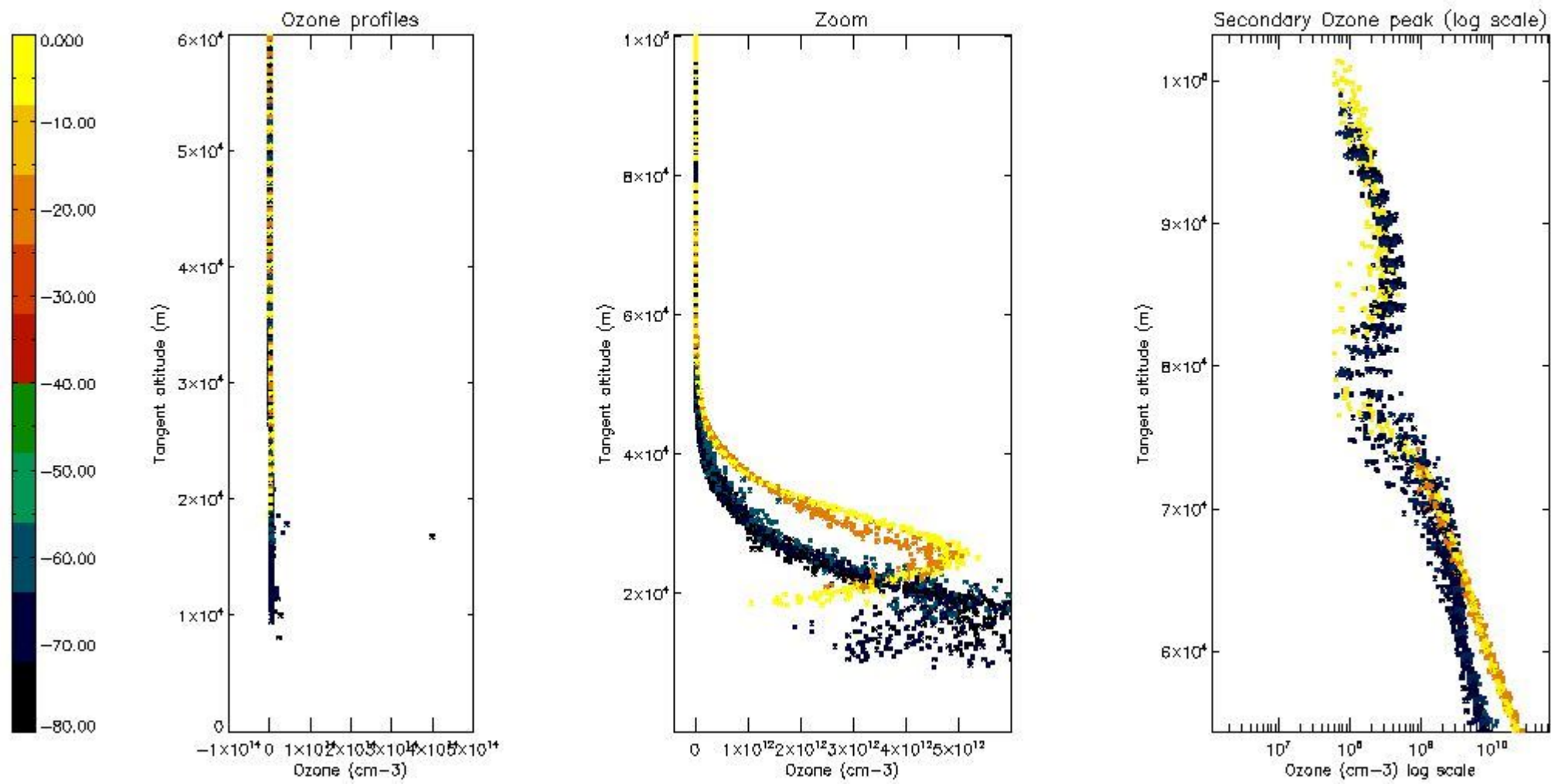
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



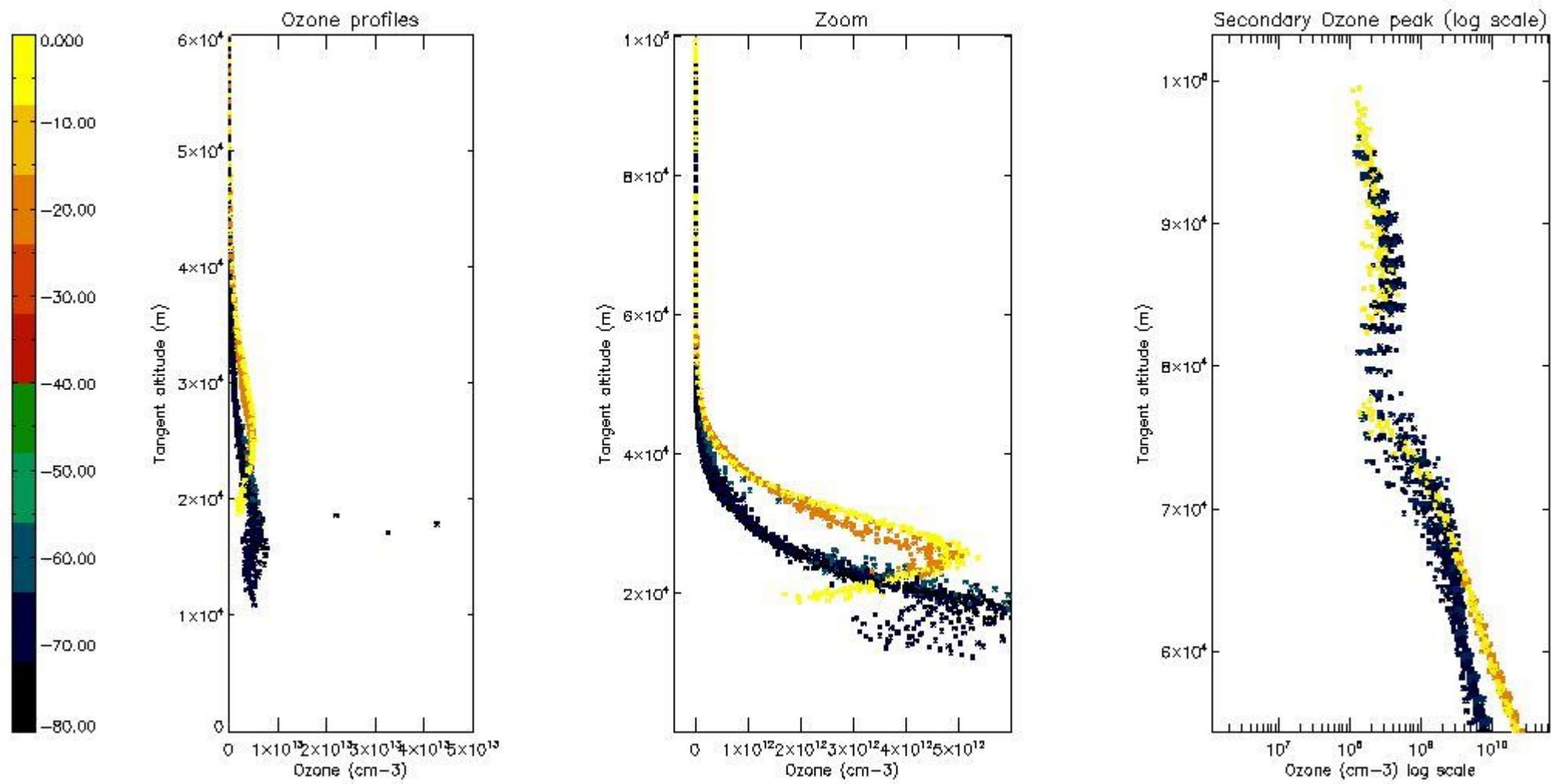
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



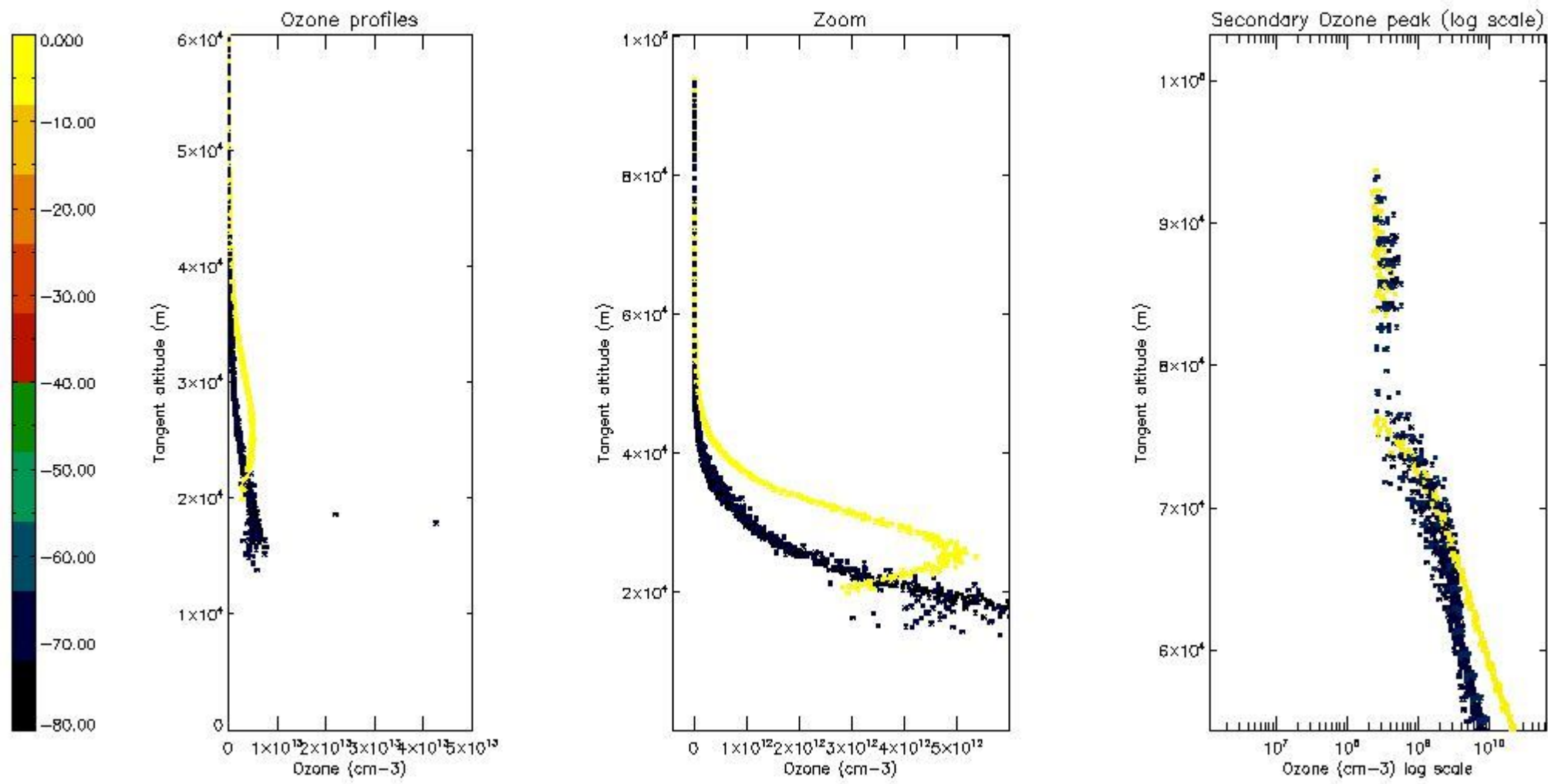
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



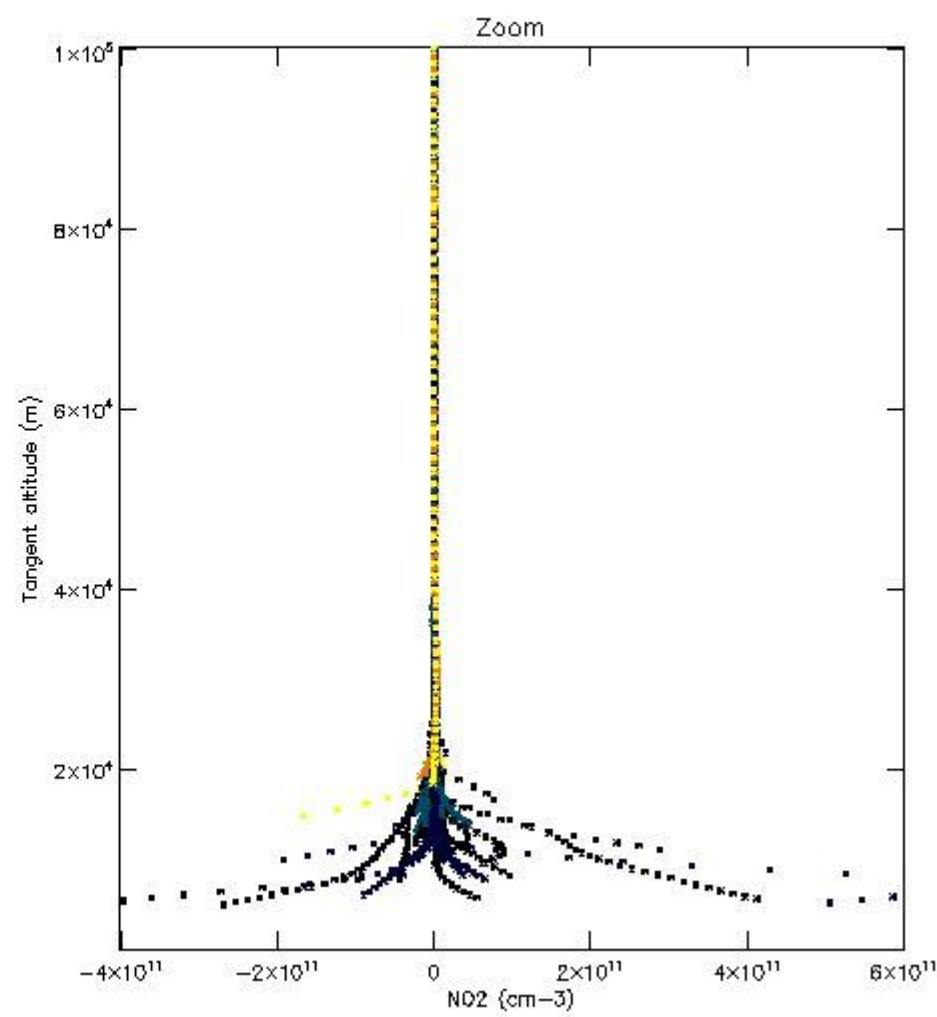
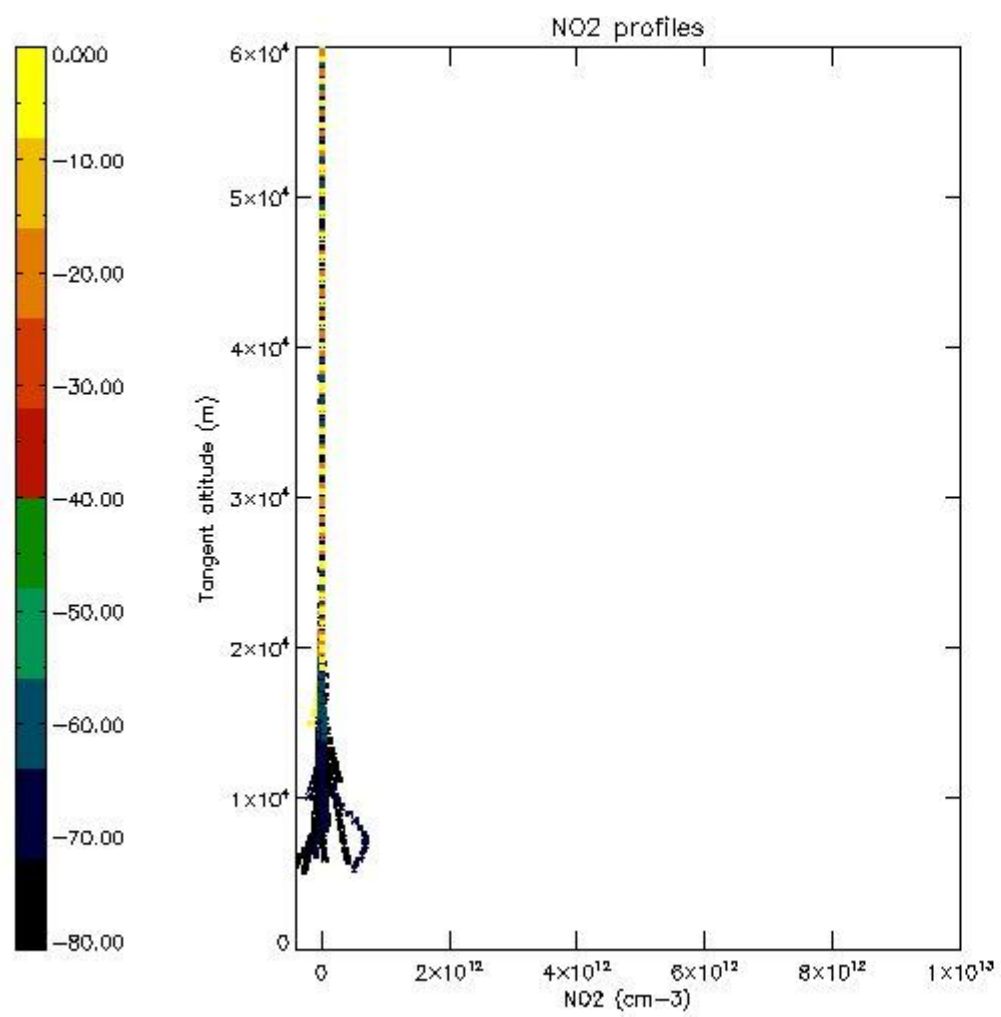
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



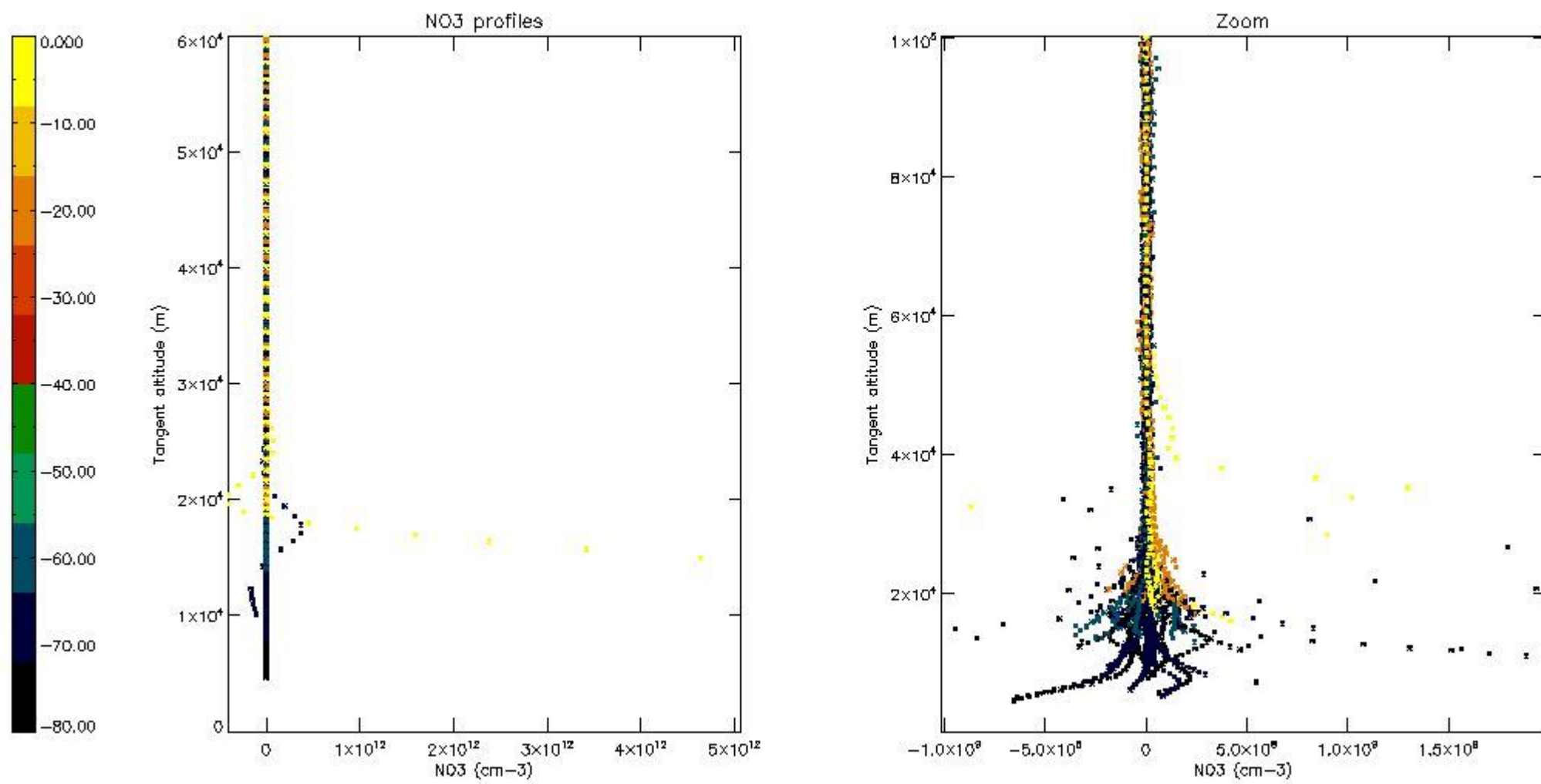
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



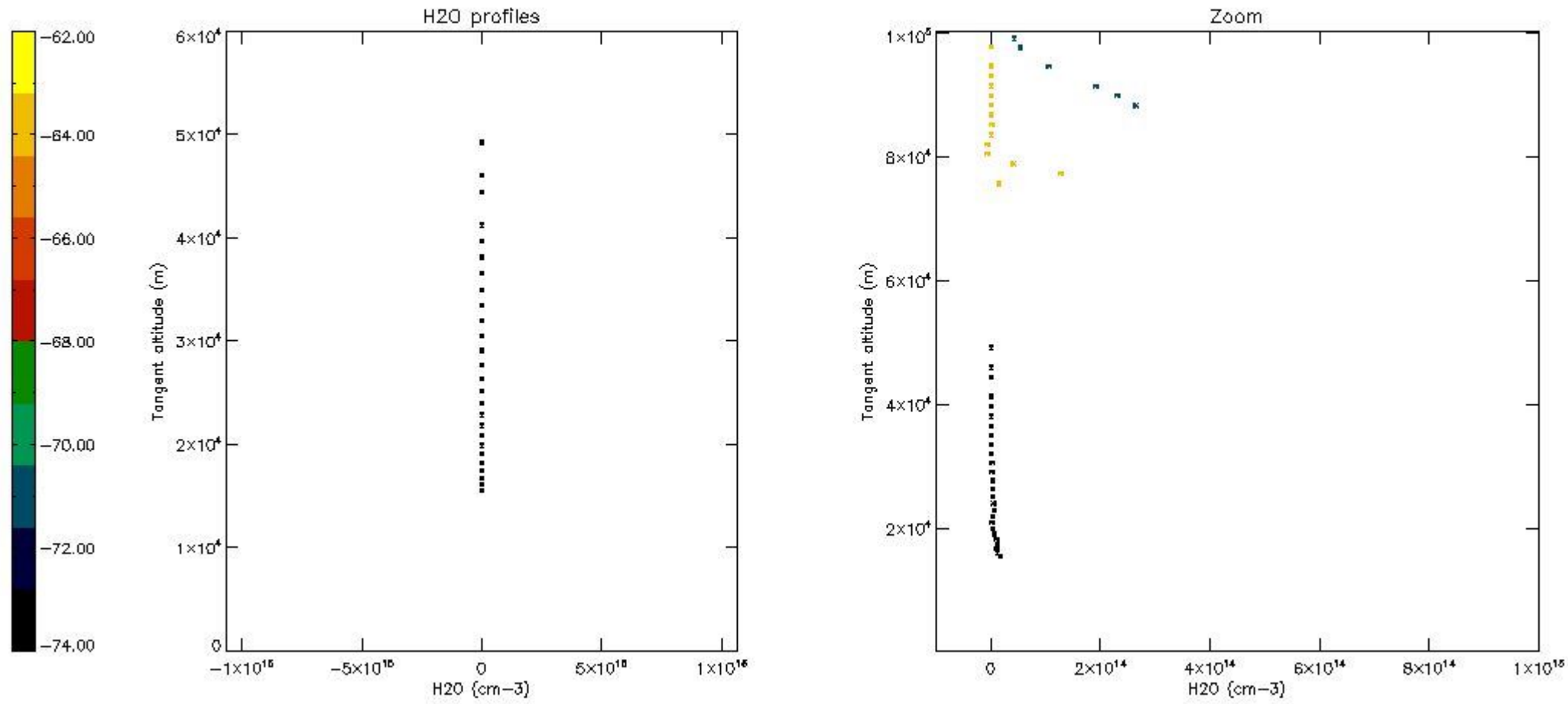
5.7 Plot NO3 profiles for all STD (dark without errors)

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	01-AUG-2006 00:14:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-AUG-2006 00:14:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-AUG-2006 00:14:43

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[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.

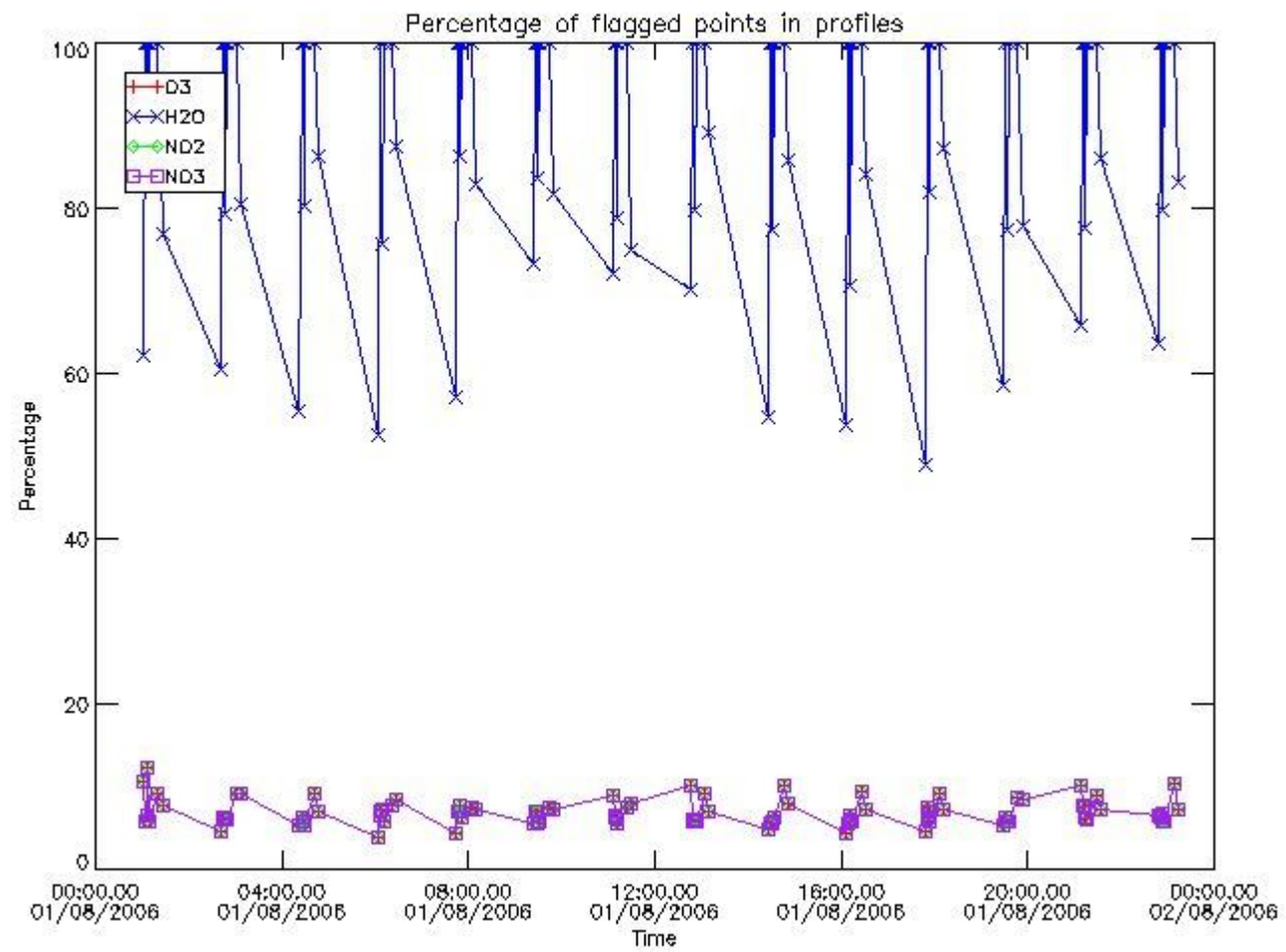
Item	Value
Time of report generation	24APR2013 02:50:15
Data source version	GOMOS/6.01
Start time of products	01-08-2006 (01AUG2006 00:00:00)
Stop time of products	02-08-2006 (02AUG2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	274
Nb of prods with errors	0

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__2PRFIN20060801_001443_000000312050_00002_23102_0805.N1	01-AUG-2006 00:14:43	Bright	31.000	11	53Alp Aql	0.76500	8000.0	62	23102	No
2	GOM_NL__2PRFIN20060801_001608_000000292050_00002_23102_0806.N1	01-AUG-2006 00:16:08	Bright	28.500	168	17Zet Aql	2.9860	11000.	57	23102	No
3	GOM_NL__2PRFIN20060801_002436_000000312050_00002_23102_0807.N1	01-AUG-2006 00:24:36	Bright	30.500	66	37Gam Cyg	2.2080	5900.0	61	23102	No
4	GOM_NL__2PRFIN20060801_003156_000000332050_00002_23102_0808.N1	01-AUG-2006 00:31:56	Bright	33.000	89	5Alp Cep	2.4510	8000.0	66	23102	No
5	GOM_NL__2PRFIN20060801_003744_000000282050_00002_23102_0809.N1	01-AUG-2006 00:37:44	Bright	27.500	49	1Alp UMi	1.9900	6300.0	55	23102	No
6	GOM_NL__2PRFIN20060801_005024_000000352050_00002_23102_0810.N1	01-AUG-2006 00:50:24	Bright	34.500	6	13Alp Aur	0.080000	3400.0	69	23102	No
7	GOM_NL__2PRFIN20060801_005249_000000292050_00002_23102_0811.N1	01-AUG-2006 00:52:49	Bright	28.500	107	37The Aur	2.6490	11000.	57	23102	No
8	GOM_NL__2PRFIN20060801_005537_000000372050_00002_23102_0812.N1	01-AUG-2006 00:55:37	Bright	37.000	28	12Bet Tau	1.6500	15200.	74	23102	No
9	GOM_NL__2PRFIN20060801_005742_000000342050_00002_23102_0813.N1	01-AUG-2006 00:57:42	Twilight	34.000	176	23Zet Tau	3.0200	22000.	68	23102	No
10	GOM_NL__2PRFIN20060801_010121_000000342050_00002_23102_0814.N1	01-AUG-2006 01:01:21	Dark	33.500	14	58Alp Ori	0.87000	3000.0	67	23102	No
11	GOM_NL__2PRFIN20060801_010406_000000352050_00002_23102_0815.N1	01-AUG-2006 01:04:06	Dark	35.000	30	46Eps Ori	1.6940	30000.	70	23102	No
12	GOM_NL__2PRFIN20060801_010526_000000322050_00002_23102_0816.N1	01-AUG-2006 01:05:26	Dark	32.000	125	44Iot Ori	2.7700	30000.	64	23102	No
13	GOM_NL__2PRFIN20060801_010634_000000422050_00002_23102_0817.N1	01-AUG-2006 01:06:34	Dark	41.500	7	19Bet Ori	0.10000	14000.	83	23102	No
14	GOM_NL__2PRFIN20060801_010845_000000362050_00002_23102_0818.N1	01-AUG-2006 01:08:45	Dark	35.500	101	11Alp Lep	2.5820	7000.0	71	23102	No
15	GOM_NL__2PRFIN20060801_012033_000000402050_00002_23102_0819.N1	01-AUG-2006 01:20:33	Dark	39.500	157	The1Eri	2.9060	9300.0	79	23102	No
16	GOM_NL__2PRFIN20060801_012604_000000402050_00003_23103_0342.N1	01-AUG-2006 01:26:04	Dark	39.500	9	Alp Eri	0.45300	24000.	79	23103	No
17	GOM_NL__2PRFIN20060801_013256_000000352050_00003_23103_0343.N1	01-AUG-2006 01:32:56	Straylight	35.000	148	Alp Tuc	2.8780	4100.0	70	23103	No
18	GOM_NL__2PRFIN20060801_013617_000000432050_00003_23103_0344.N1	01-AUG-2006 01:36:17	Straylight	43.000	31	Alp Gru	1.7340	15200.	86	23103	No
19	GOM_NL__2PRFIN20060801_013926_000000392050_00003_23103_0345.N1	01-AUG-2006 01:39:26	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	23103	No
20	GOM_NL__2PRFIN20060801_015519_000000312050_00003_23103_0346.N1	01-AUG-2006 01:55:19	Bright	30.500	11	53Alp Aql	0.76500	8000.0	61	23103	No
21	GOM_NL__2PRFIN20060801_015643_000000302050_00003_23103_0347.N1	01-AUG-2006 01:56:43	Bright	30.000	168	17Zet Aql	2.9860	11000.	60	23103	No
22	GOM_NL__2PRFIN20060801_020511_000000332050_00003_23103_0348.N1	01-AUG-2006 02:05:11	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	23103	No
23	GOM_NL__2PRFIN20060801_021231_000000332050_00003_23103_0349.N1	01-AUG-2006 02:12:31	Bright	32.500	89	5Alp Cep	2.4510	8000.0	65	23103	No
24	GOM_NL__2PRFIN20060801_021820_000000292050_00003_23103_0350.N1	01-AUG-2006 02:18:20	Bright	28.500	49	1Alp UMi	1.9900	6300.0	57	23103	No
25	GOM_NL__2PRFIN20060801_023100_000000352050_00003_23103_0351.N1	01-AUG-2006 02:31:00	Bright	34.500	6	13Alp Aur	0.080000	3400.0	69	23103	No
26	GOM_NL__2PRFIN20060801_023325_000000302050_00003_23103_0352.N1	01-AUG-2006 02:33:25	Bright	29.500	107	37The Aur	2.6490	11000.	59	23103	No
27	GOM_NL__2PRFIN20060801_023613_000000382050_00003_23103_0353.N1	01-AUG-2006 02:36:13	Bright	37.500	28	12Bet Tau	1.6500	15200.	75	23103	No
28	GOM_NL__2PRFIN20060801_023818_000000342050_00003_23103_0354.N1	01-AUG-2006 02:38:18	Twilight	33.500	176	23Zet Tau	3.0200	22000.	67	23103	No
29	GOM_NL__2PRFIN20060801_024157_000000462050_00003_23103_0355.N1	01-AUG-2006 02:41:57	Dark	46.000	14	58Alp Ori	0.87000	3000.0	92	23103	No
30	GOM_NL__2PRFIN20060801_024443_000000342050_00003_23103_0356.N1	01-AUG-2006 02:44:43	Dark	33.500	30	46Eps Ori	1.6940	30000.	67	23103	No
31	GOM_NL__2PRFIN20060801_024602_000000342050_00003_23103_0357.N1	01-AUG-2006 02:46:02	Dark	33.500	125	44Iot Ori	2.7700	30000.	67	23103	No
32	GOM_NL__2PRFIN20060801_024711_000000422050_00003_23103_0358.N1	01-AUG-2006 02:47:11	Dark	41.500	7	19Bet Ori	0.10000	14000.	83	23103	No
33	GOM_NL__2PRFIN20060801_024921_000000342050_00003_23103_0359.N1	01-AUG-2006 02:49:21	Dark	34.000	101	11Alp Lep	2.5820	7000.0	68	23103	No
34	GOM_NL__2PRFIN20060801_030110_000000392050_00003_23103_0360.N1	01-AUG-2006 03:01:10	Dark	39.000	157	The1Eri	2.9060	9300.0	78	23103	No
35	GOM_NL__2PRFIN20060801_030641_000000392050_00004_23104_0342.N1	01-AUG-2006 03:06:41	Dark	39.000	9	Alp Eri	0.45300	24000.	78	23104	No
36	GOM_NL__2PRFIN20060801_031332_000000362050_00004_23104_0343.N1	01-AUG-2006 03:13:32	Straylight	36.000	148	Alp Tuc	2.8780	4100.0	72	23104	No
37	GOM_NL__2PRFIN20060801_031654_000000392050_00004_23104_0344.N1	01-AUG-2006 03:16:54	Straylight	39.000	31	Alp Gru	1.7340	15200.	78	23104	No
38	GOM_NL__2PRFIN20060801_032003_000000382050_00004_23104_0345.N1	01-AUG-2006 03:20:03	Straylight	37.500	172	Gam Gru	3.0030	13100.	75	23104	No
39	GOM_NL__2PRFIN20060801_033554_000000332050_00004_23104_0346.N1	01-AUG-2006 03:35:54	Bright	32.500	11	53Alp Aql	0.76500	8000.0	65	23104	No
40	GOM_NL__2PRFIN20060801_033720_000000302050_00004_23104_0347.N1	01-AUG-2006 03:37:20	Bright	29.500	168	17Zet Aql	2.9860	11000.	59	23104	No
41	GOM_NL__2PRFIN20060801_034547_000000342050_00004_23104_0348.N1	01-AUG-2006 03:45:47	Bright	34.000	66	37Gam Cyg	2.2080	5900.0	68	23104	No
42	GOM_NL__2PRFIN20060801_035307_000000312050_00004_23104_0349.N1	01-AUG-2006 03:53:07	Bright	31.000	89	5Alp Cep	2.4510	8000.0	62	23104	No

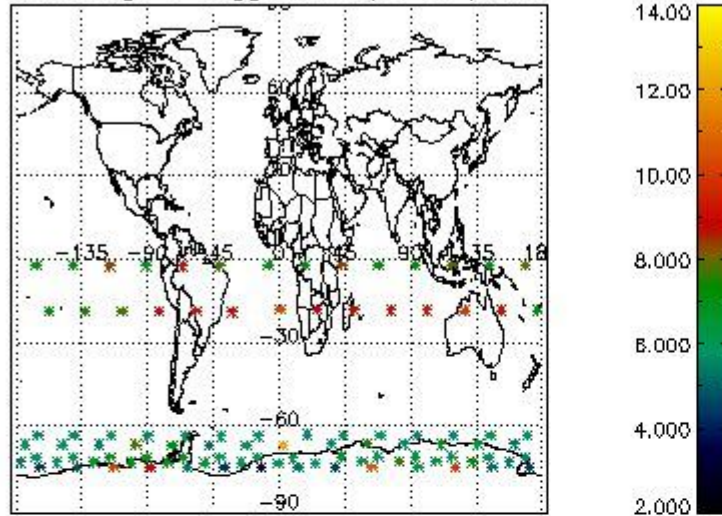
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

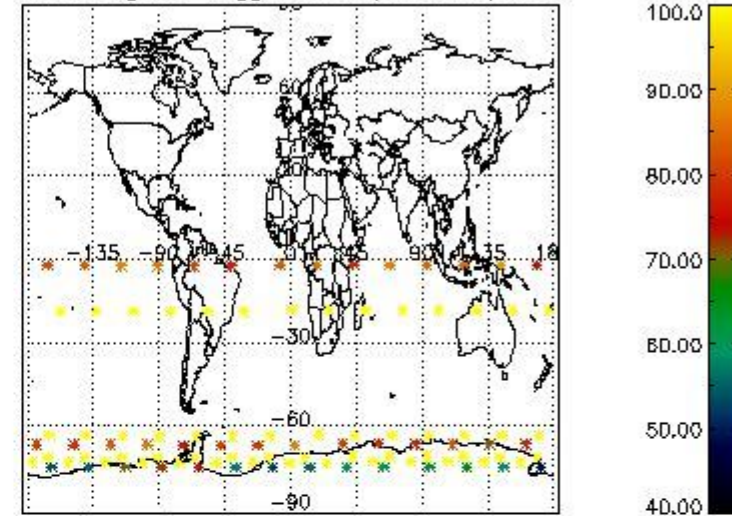


3.2 Plot quality information per product (world map)

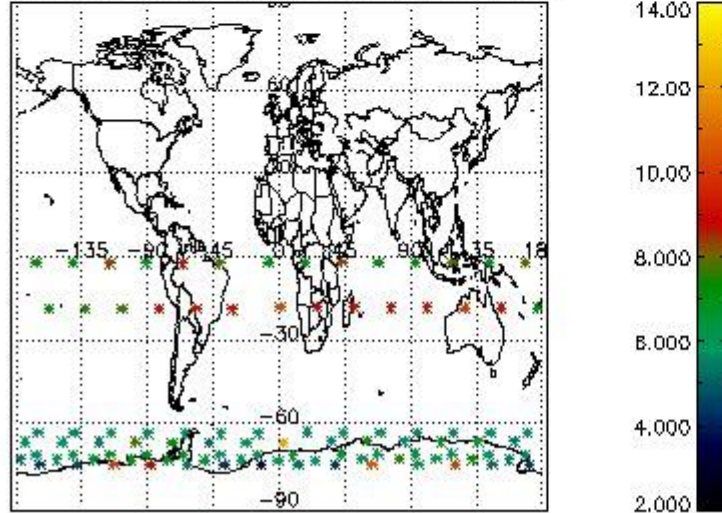
Percentage of flagged data per O3 profile



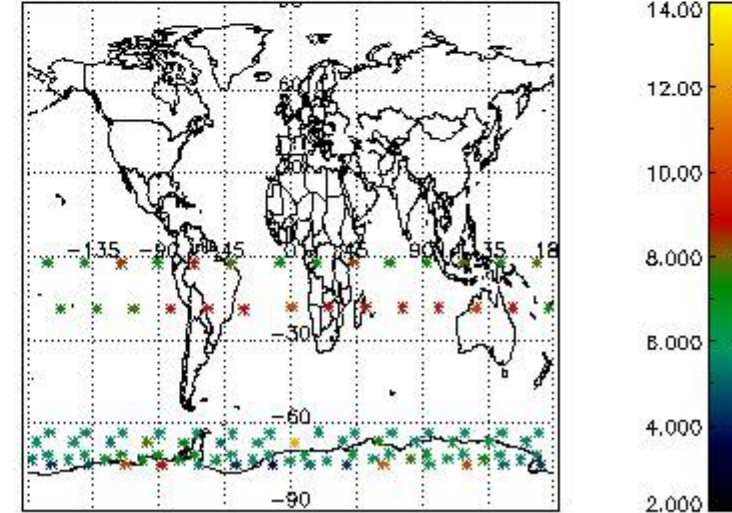
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

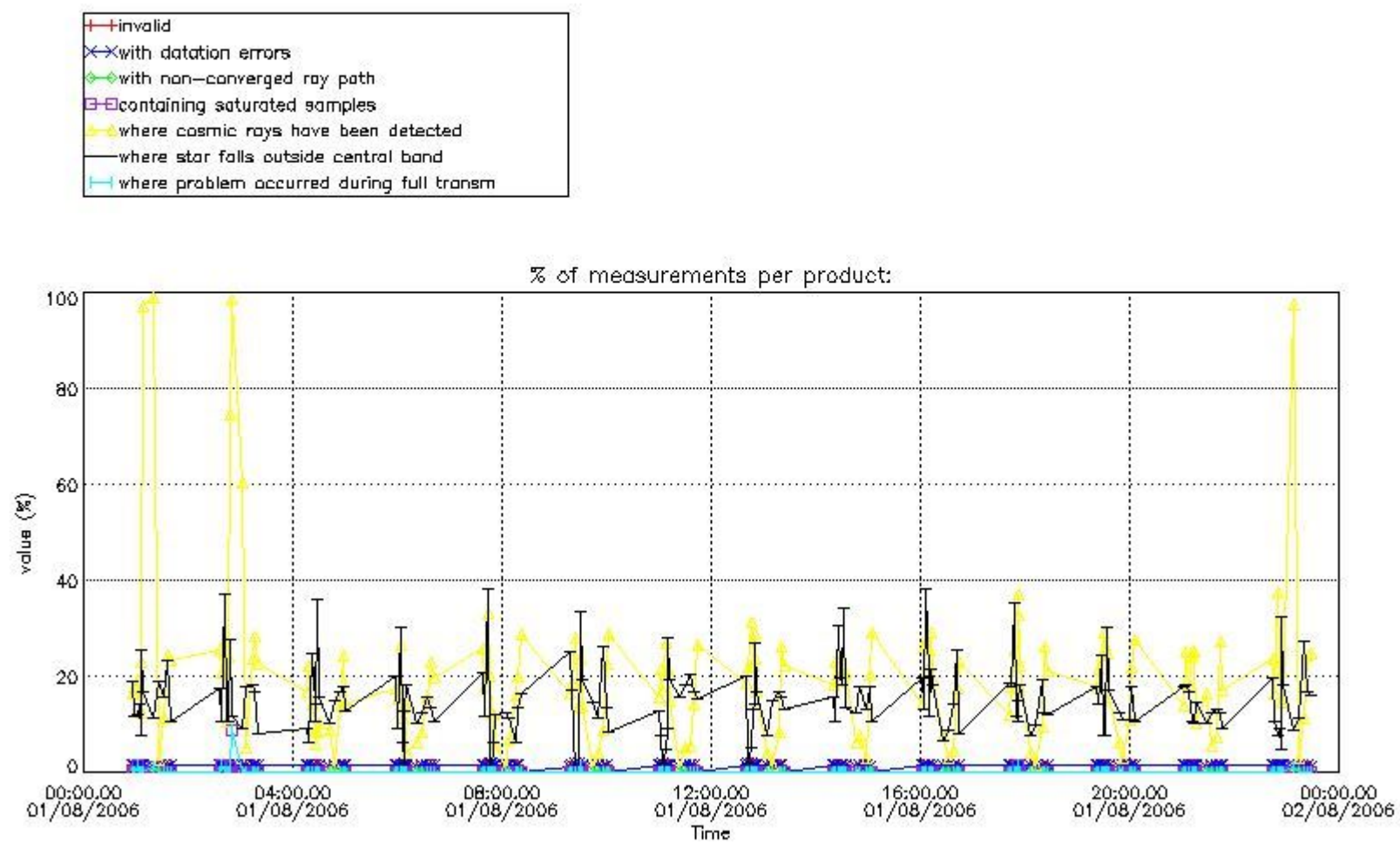


4. Level 1 quality information per product

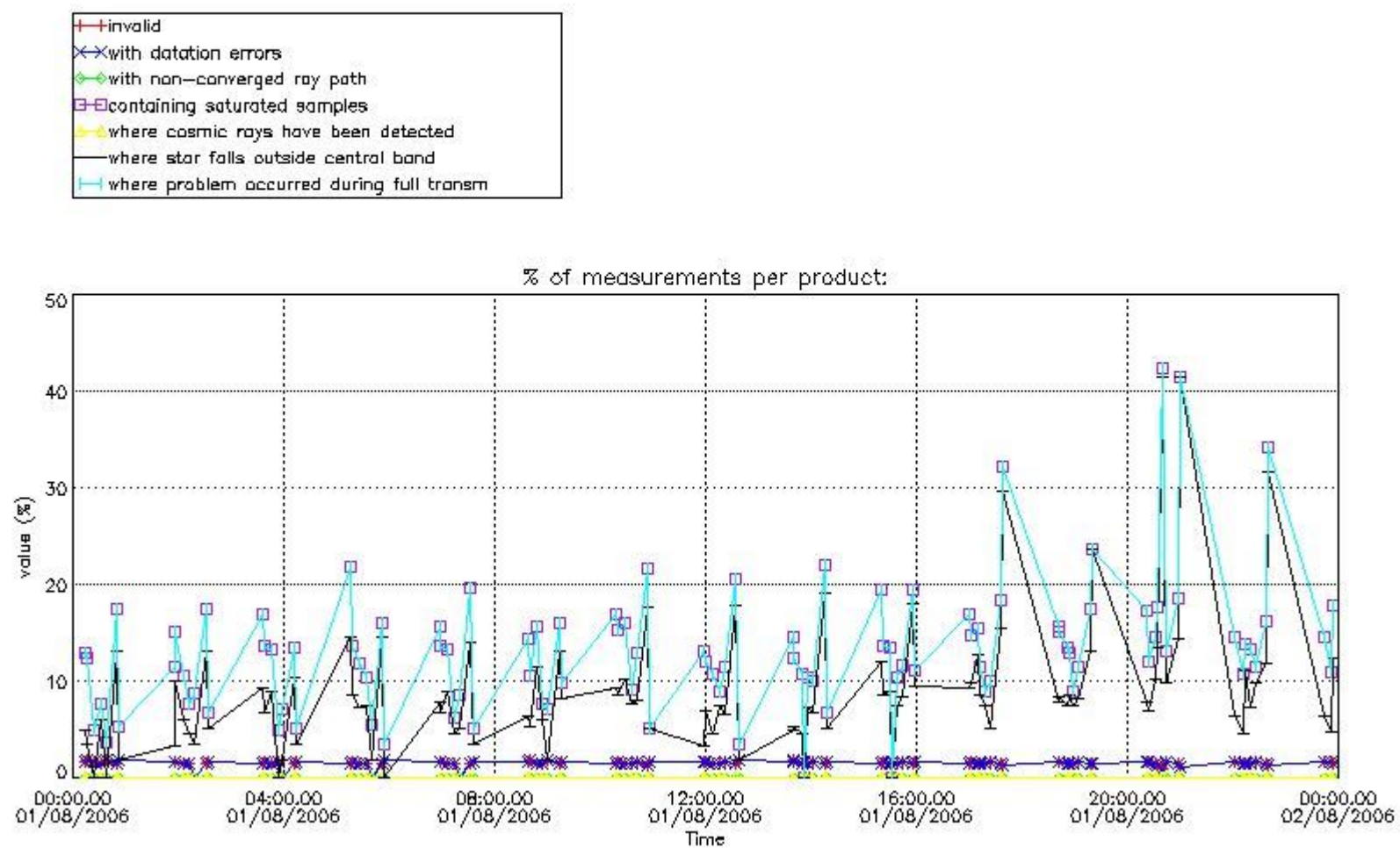
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



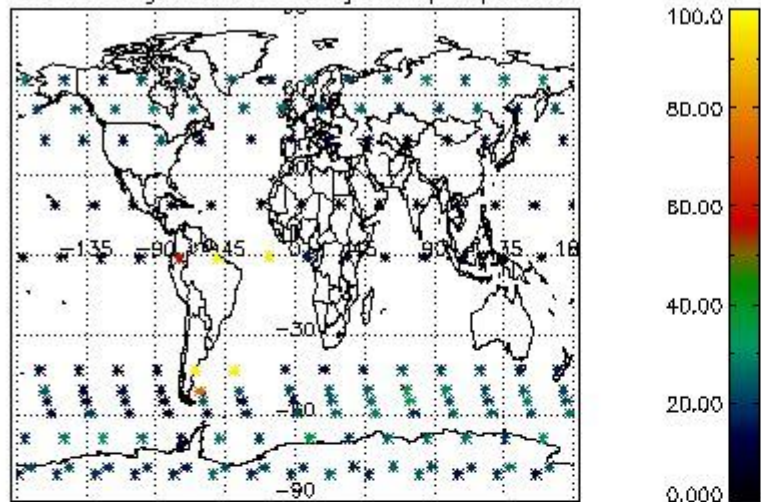
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



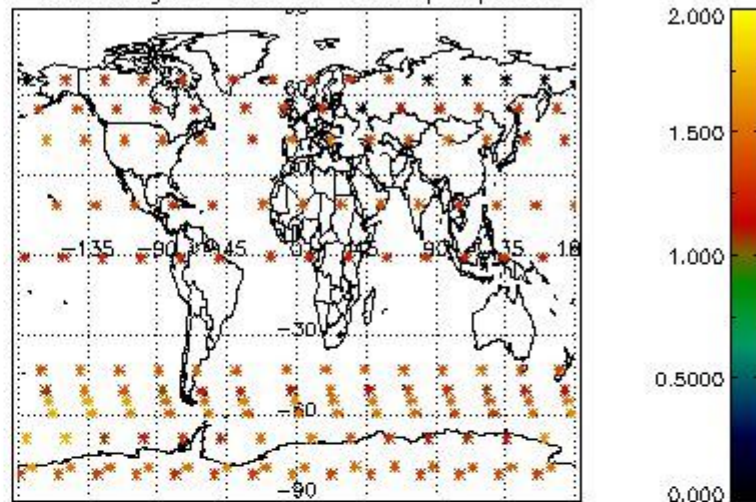
4.2 Plot quality information per product coming from level 1b processing (world map)

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

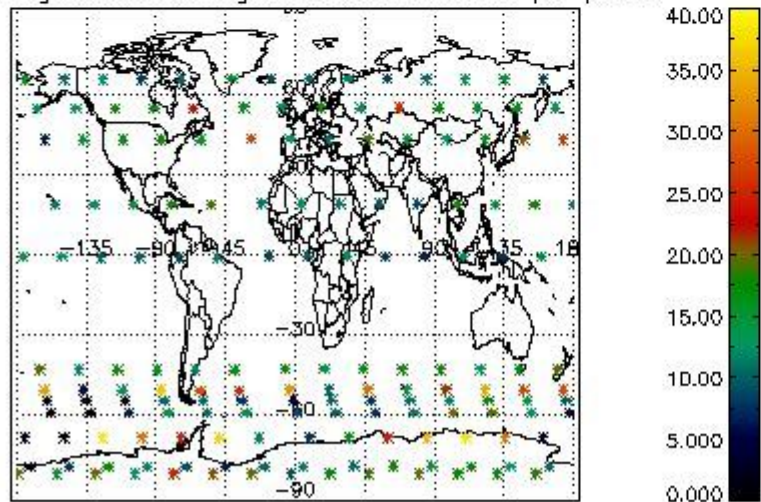
Percentage of cosmic ray hits per profile



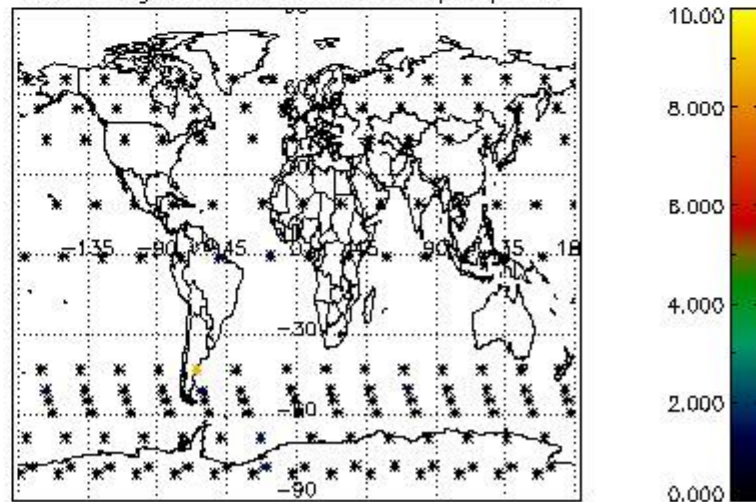
Percentage of datation errors per profile



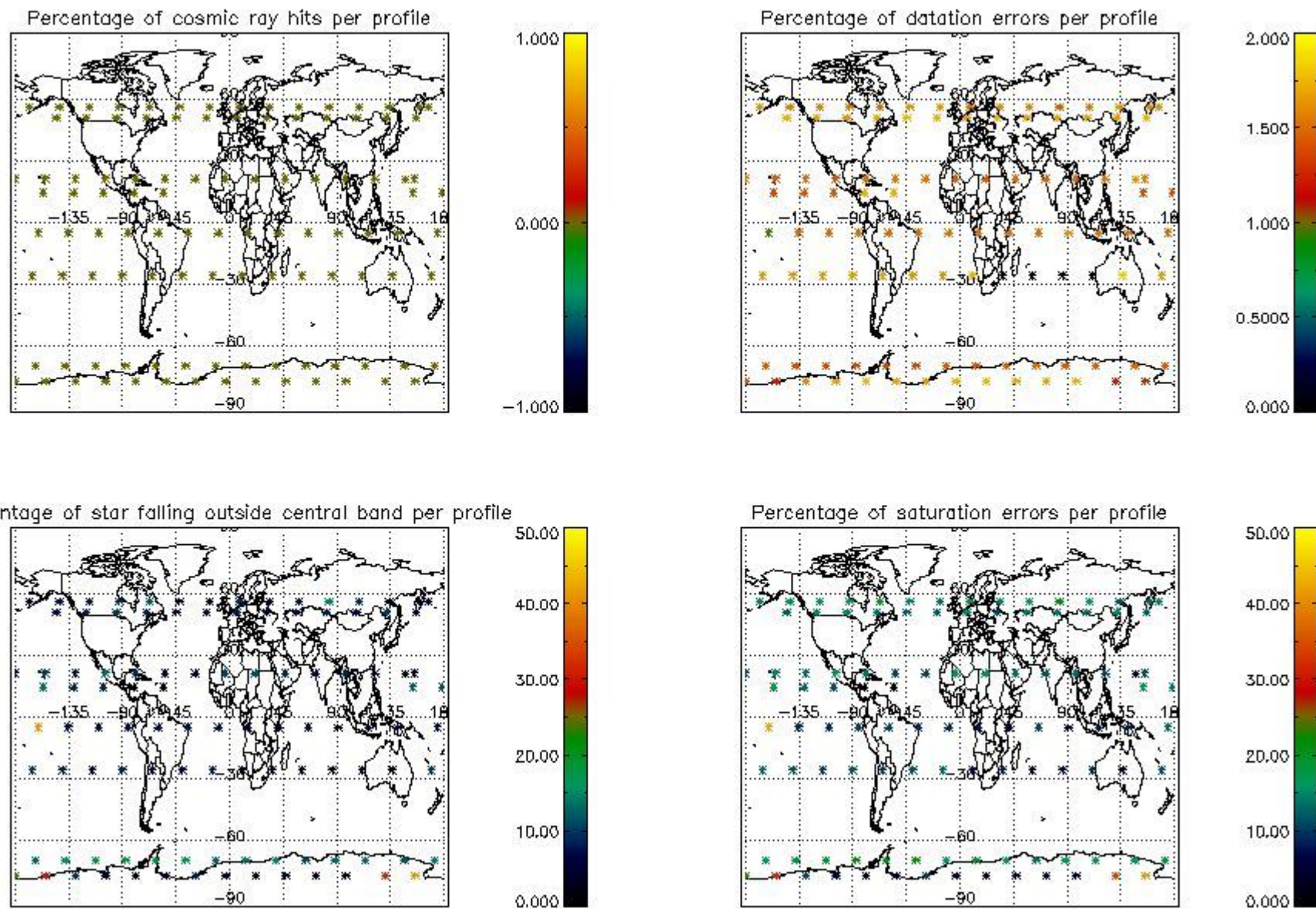
Percentage of star falling outside central band per profile



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

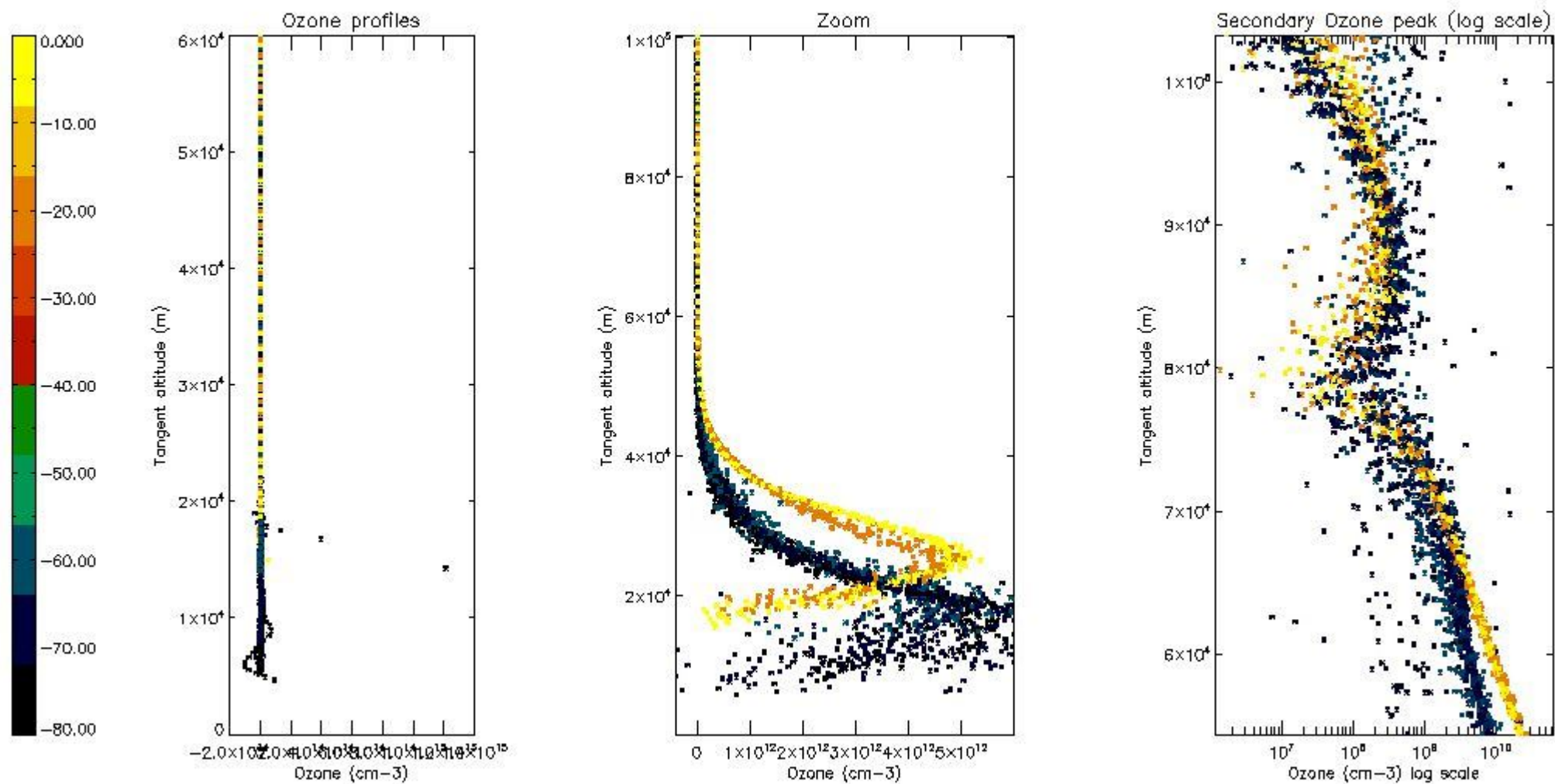
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	24

STD < 10	19
STD < 5	13

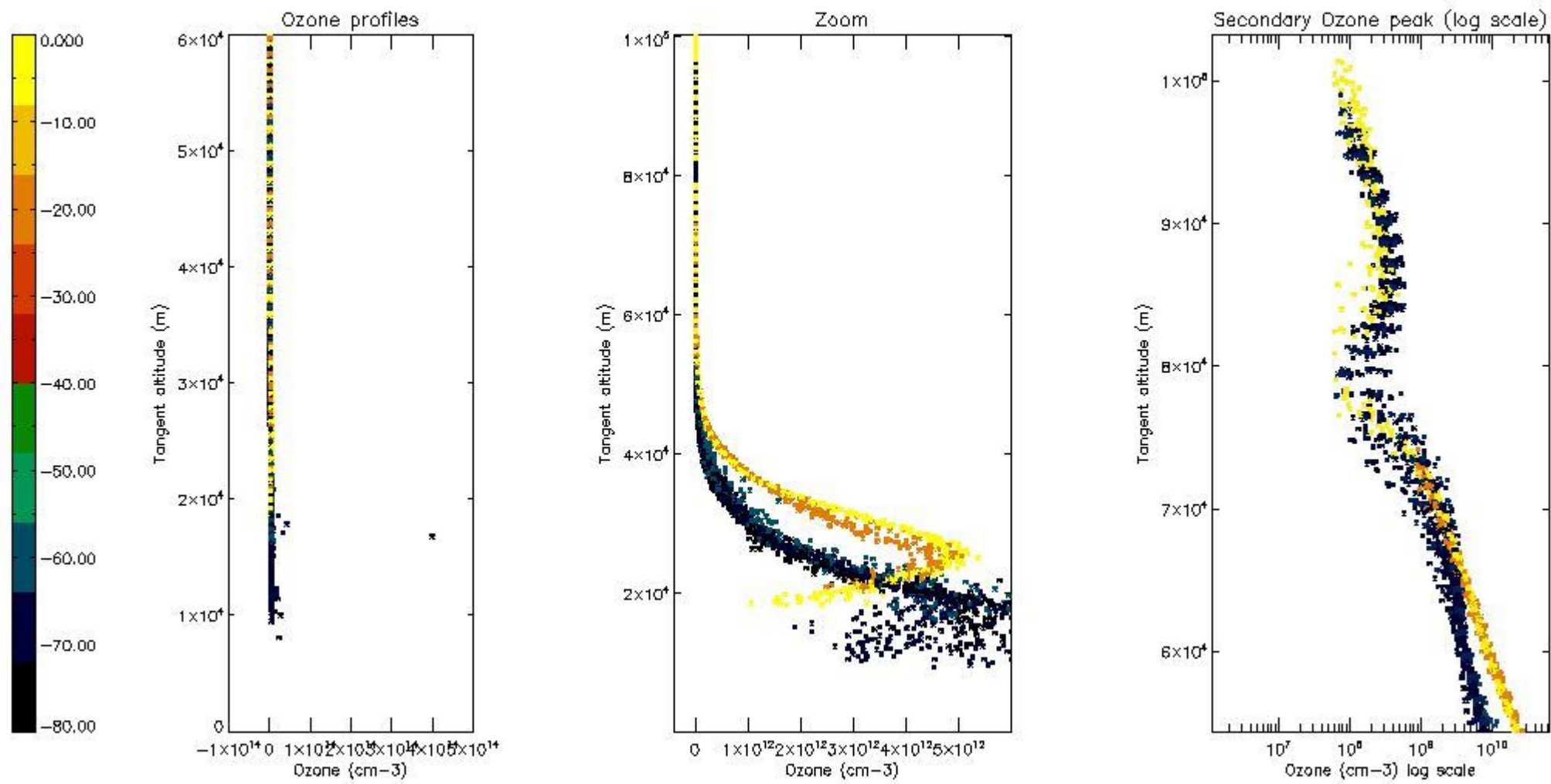
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



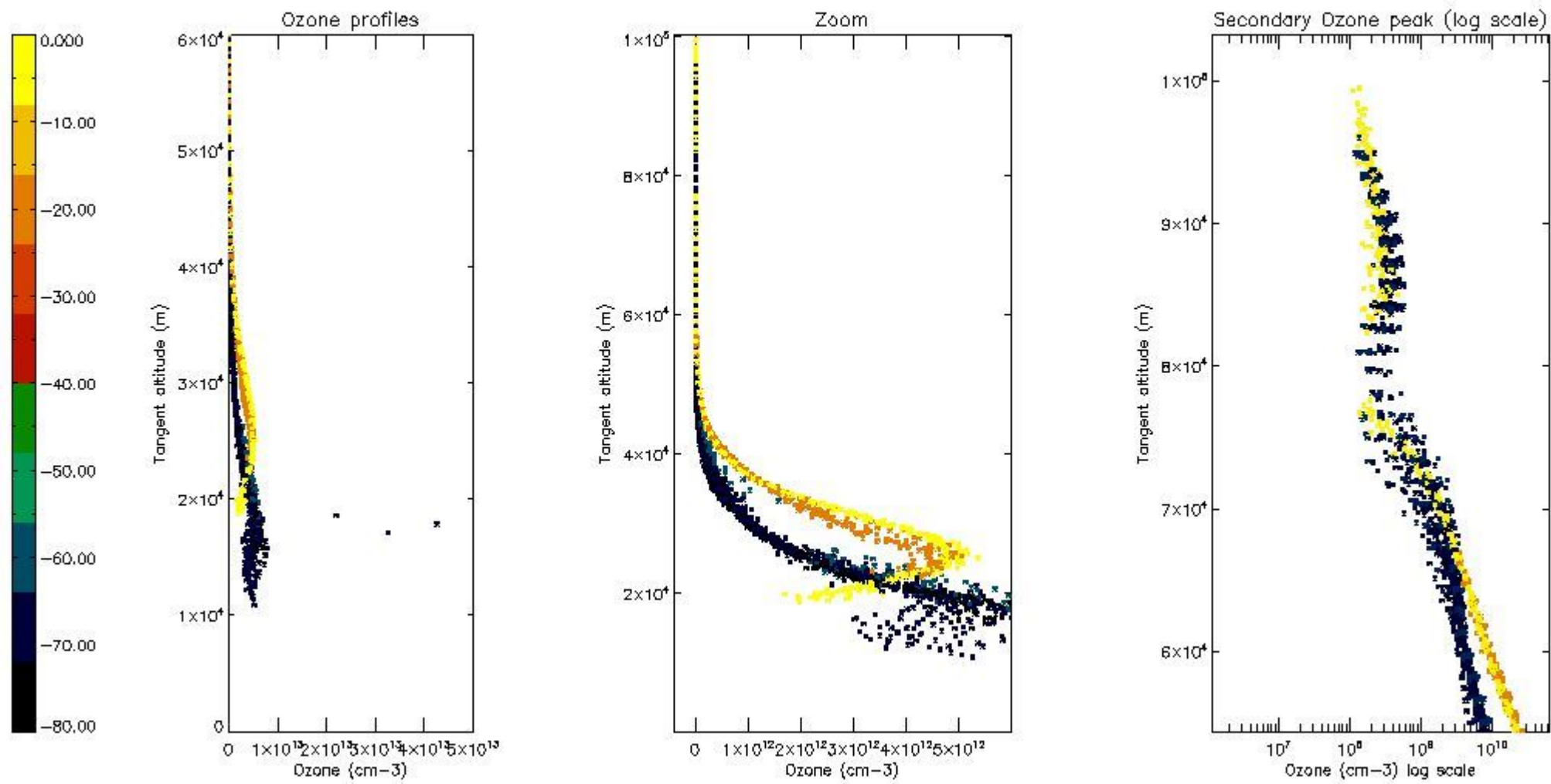
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



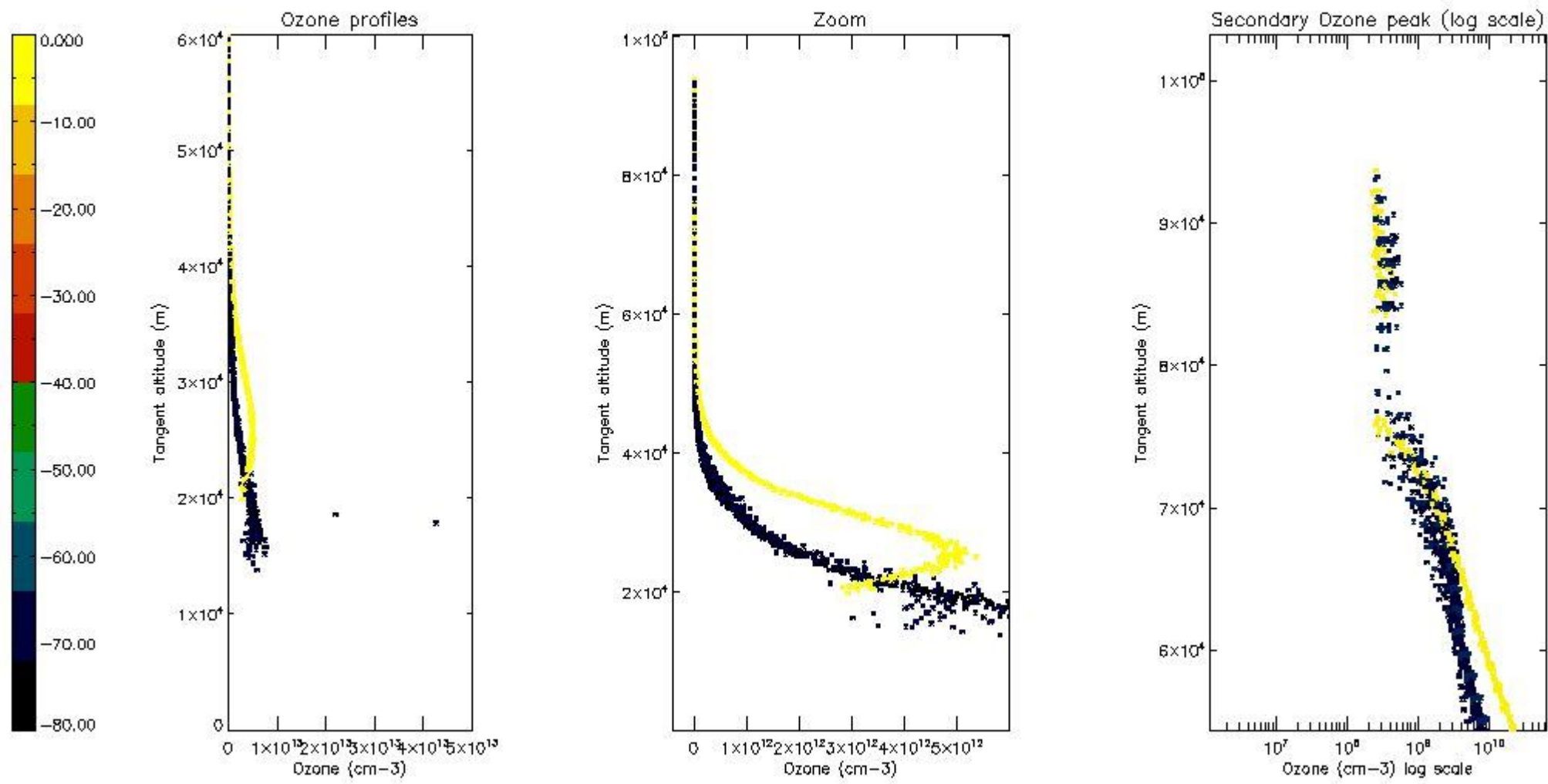
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



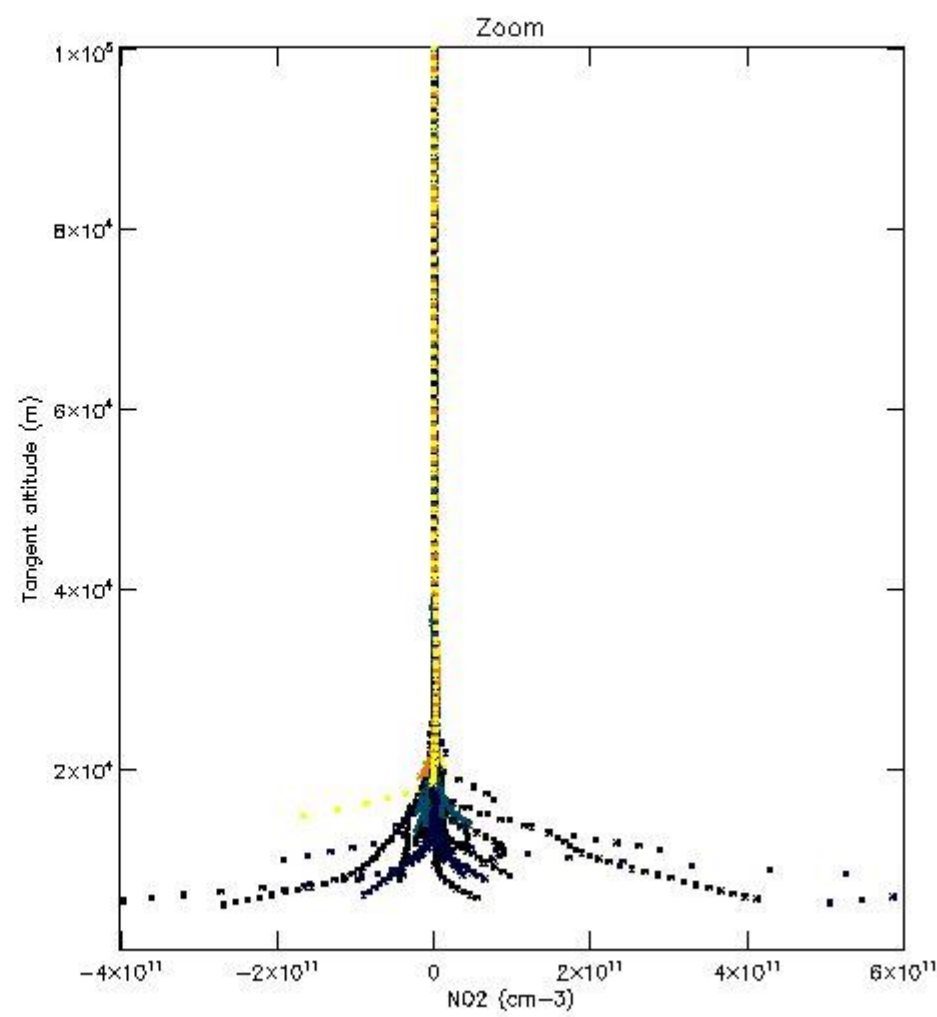
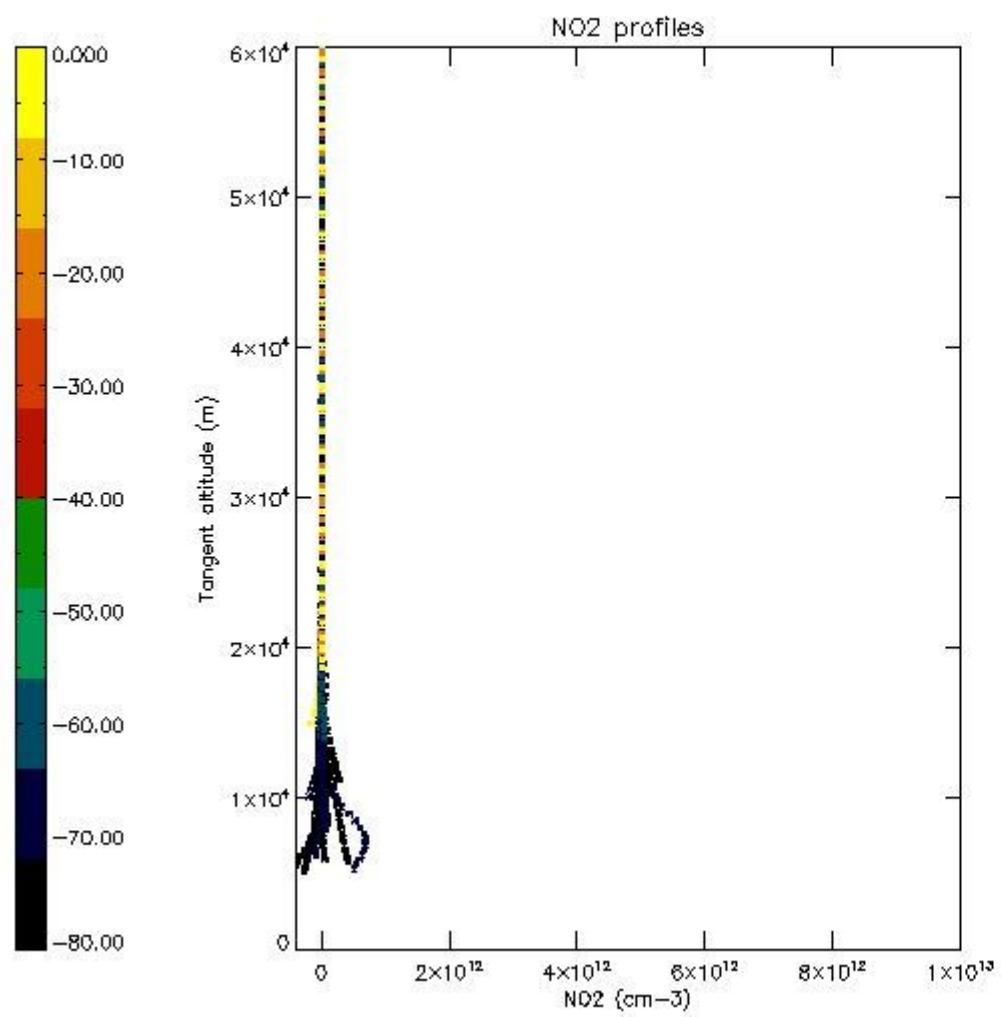
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



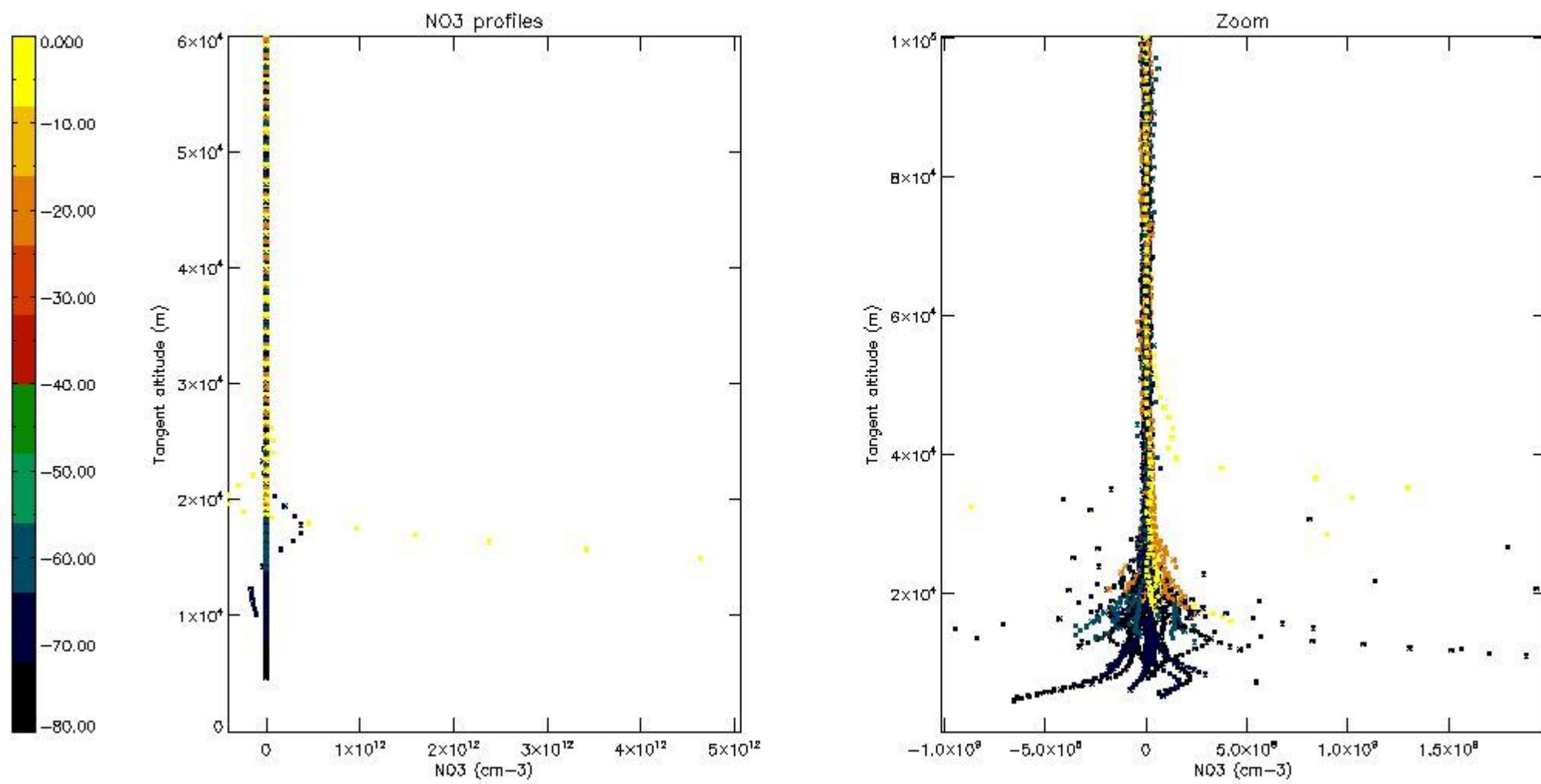
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



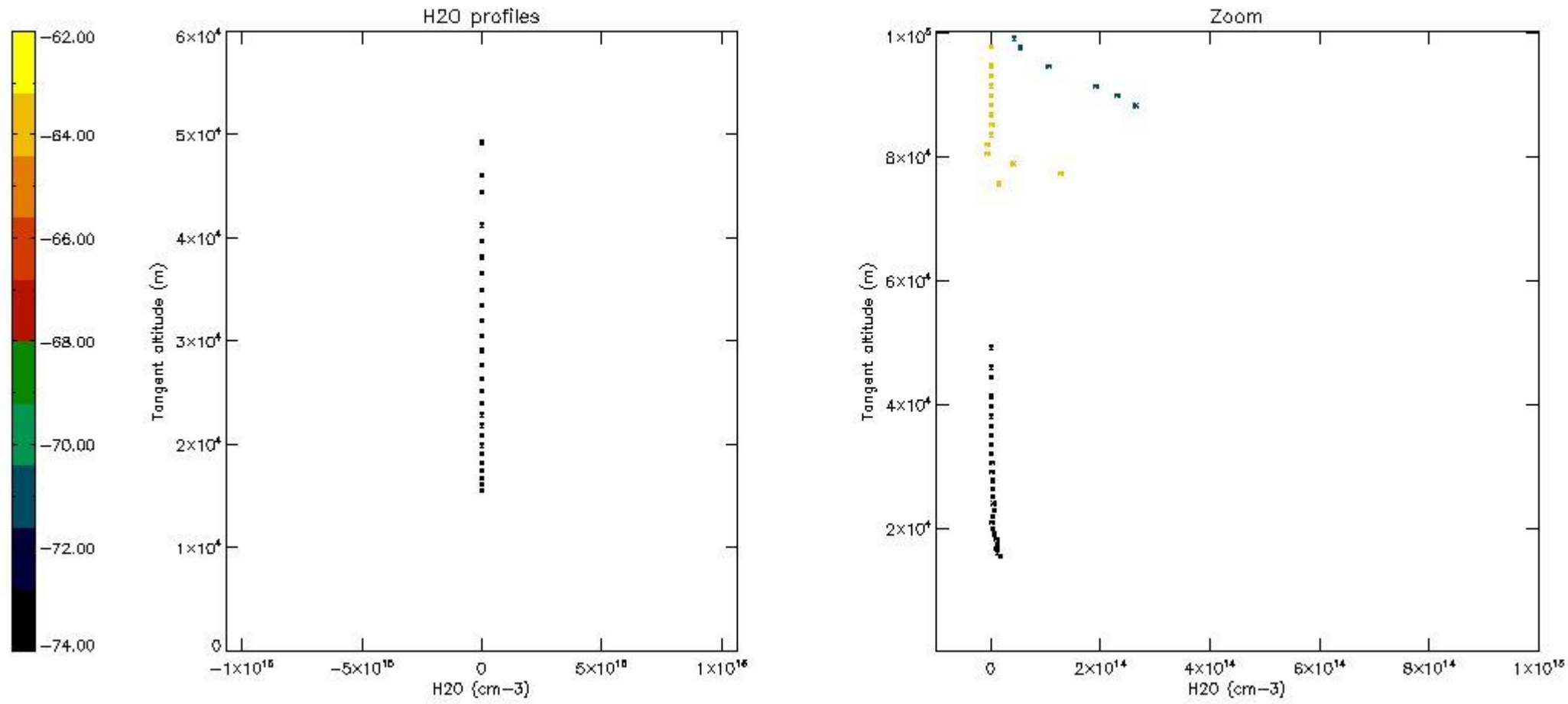
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

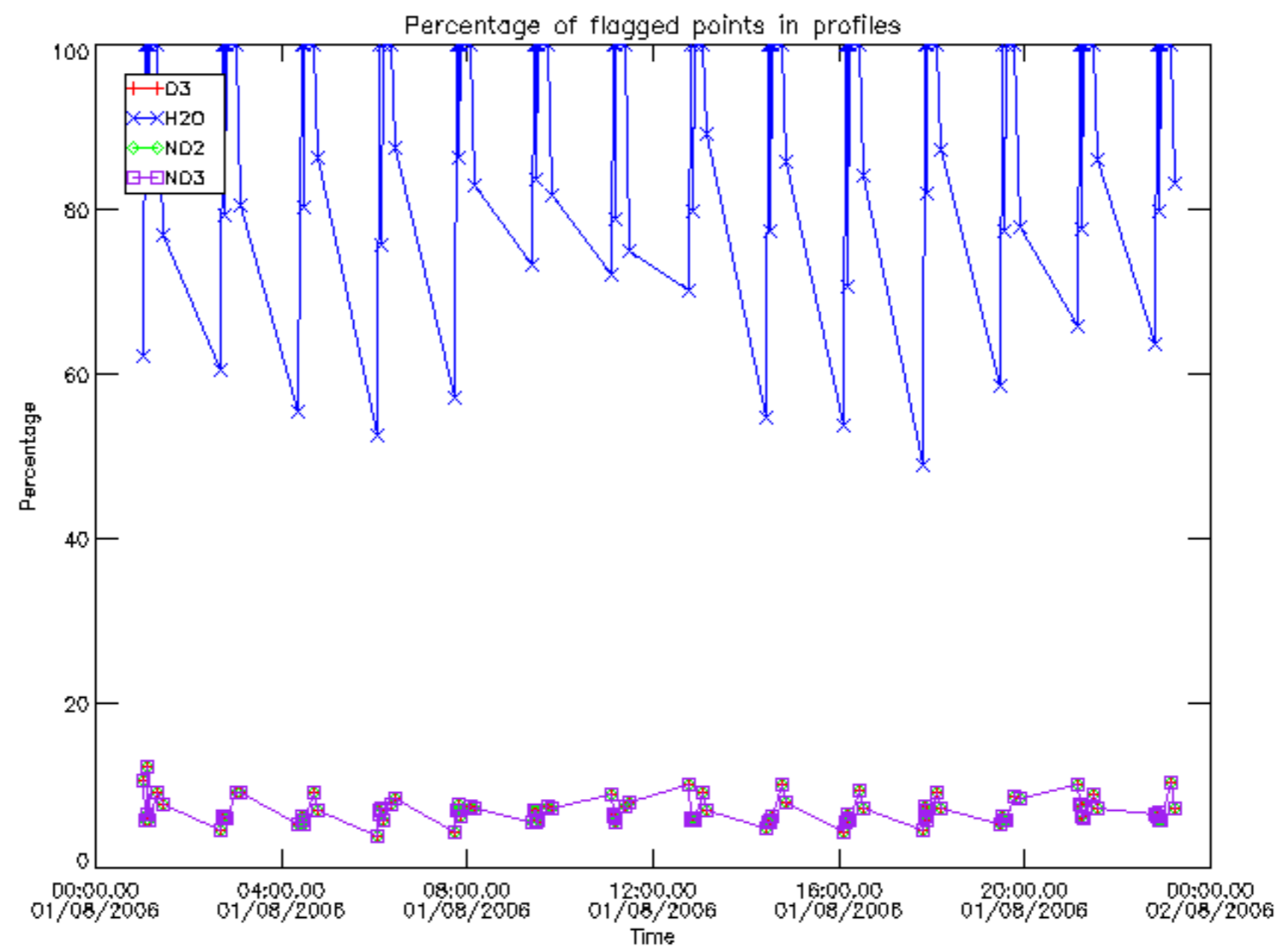
The colorbar represents the latitude.



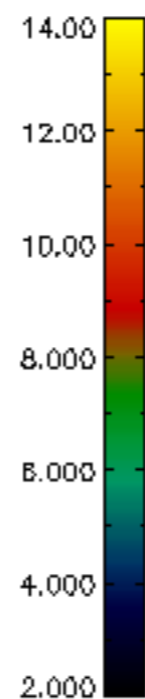
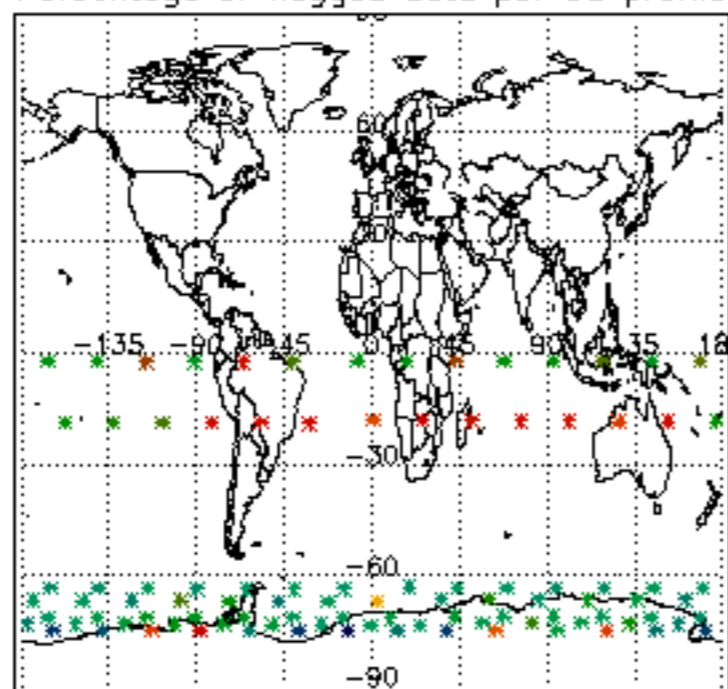
6. Auxiliary Data Files used for the production reported in section 2

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.

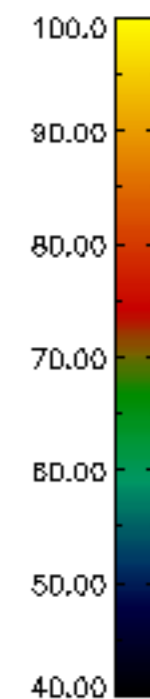
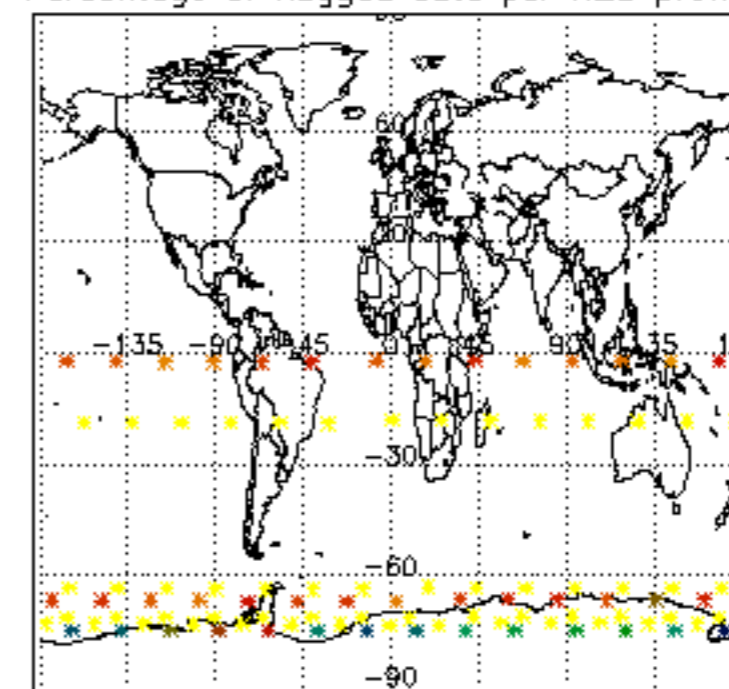
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-AUG-2006 00:14:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-AUG-2006 00:14:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-AUG-2006 00:14:43



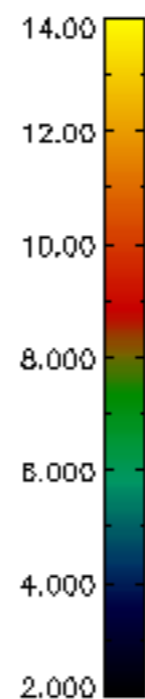
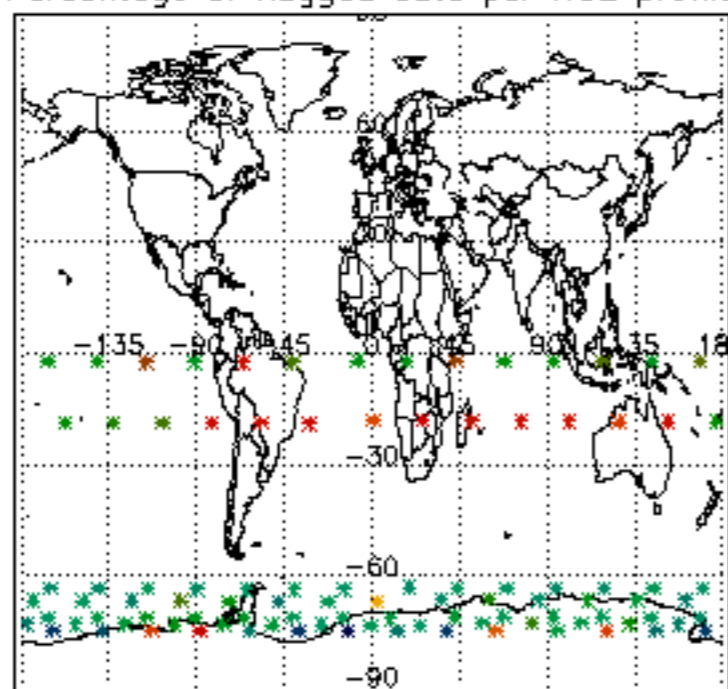
Percentage of flagged data per D3 profile



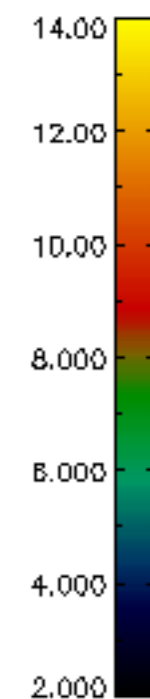
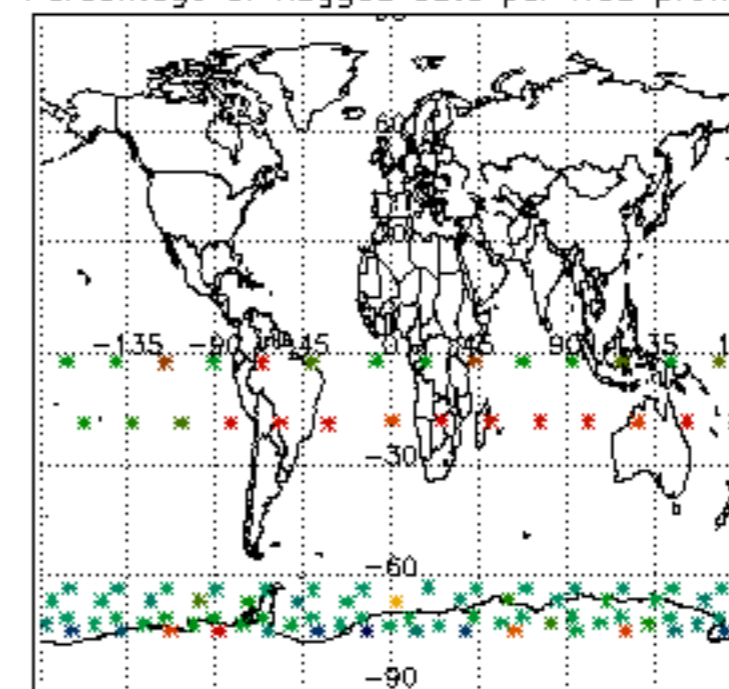
Percentage of flagged data per H2O profile

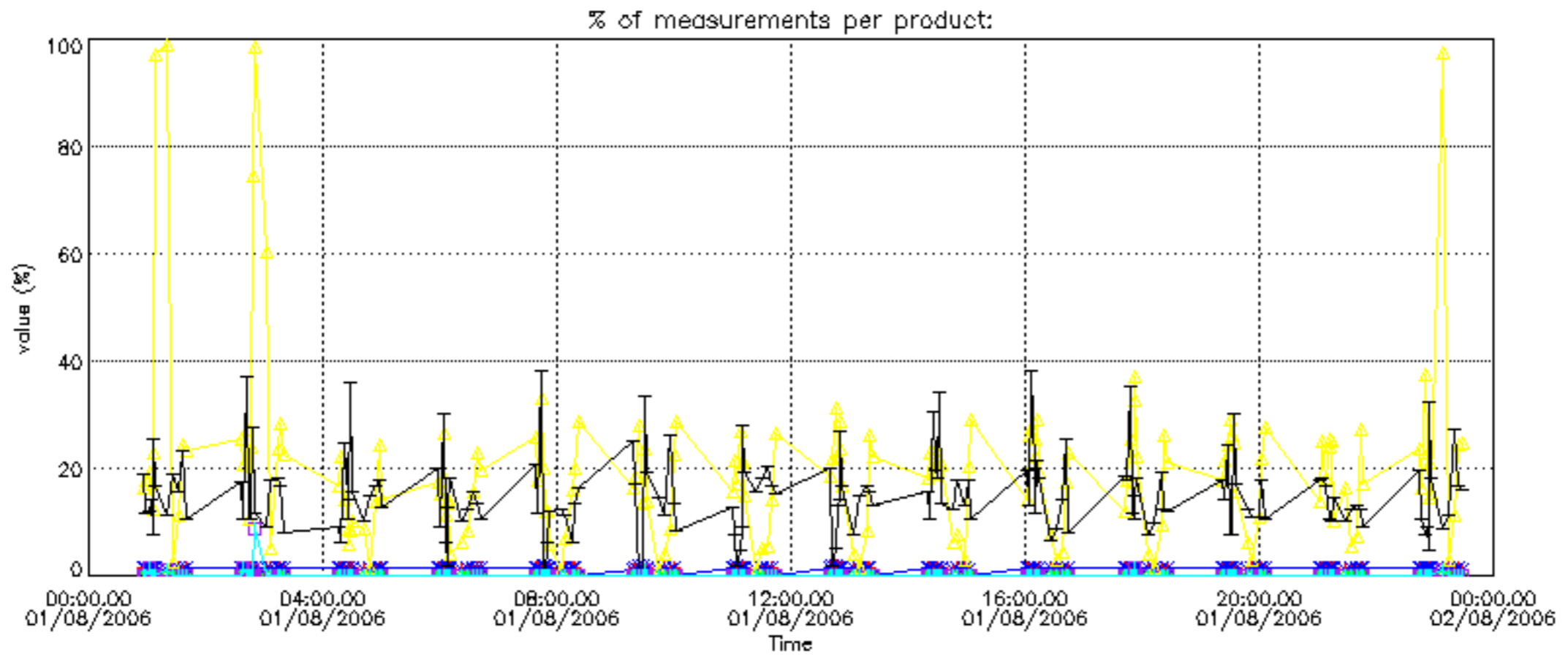


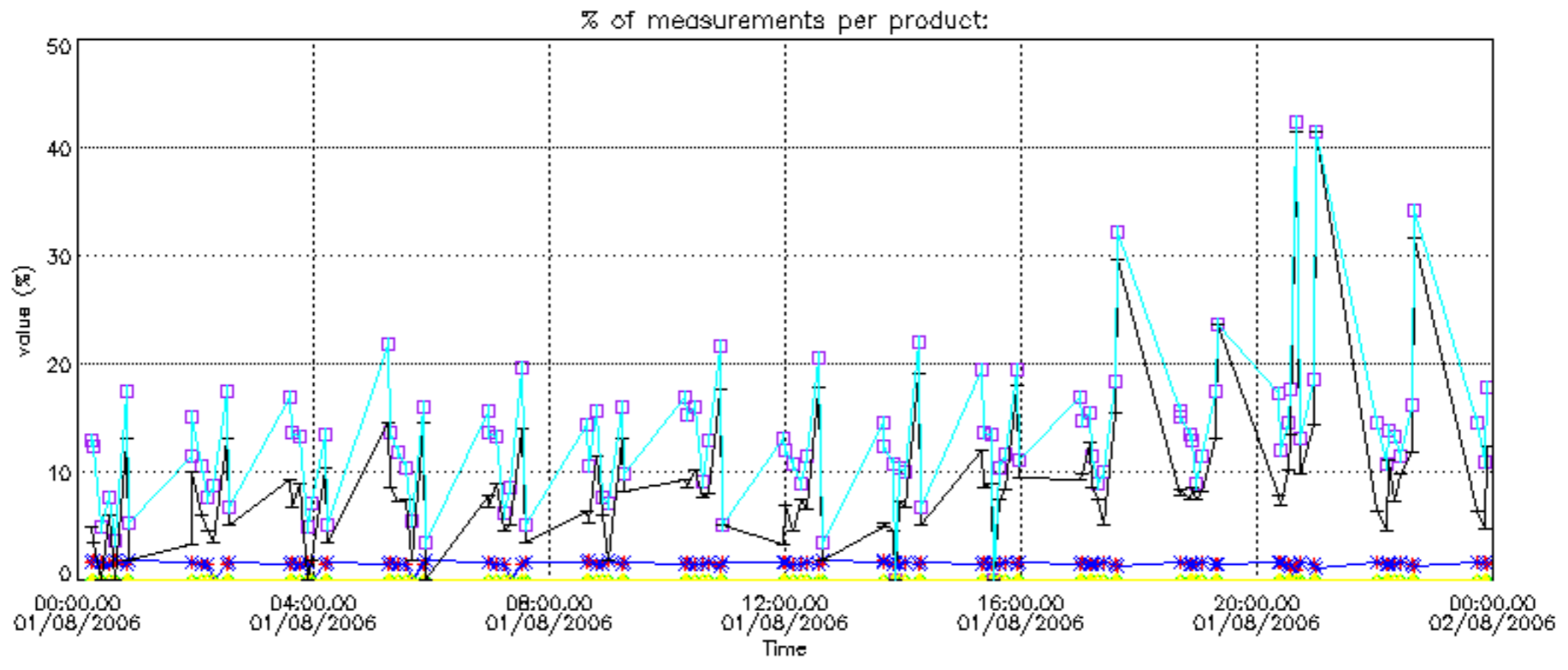
Percentage of flagged data per NO2 profile



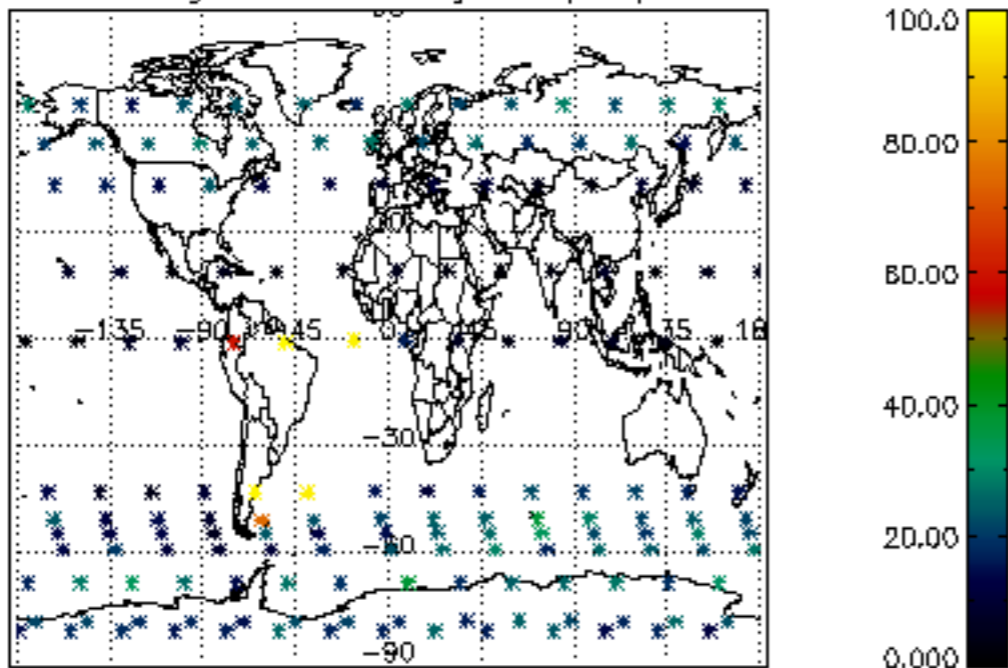
Percentage of flagged data per NO3 profile



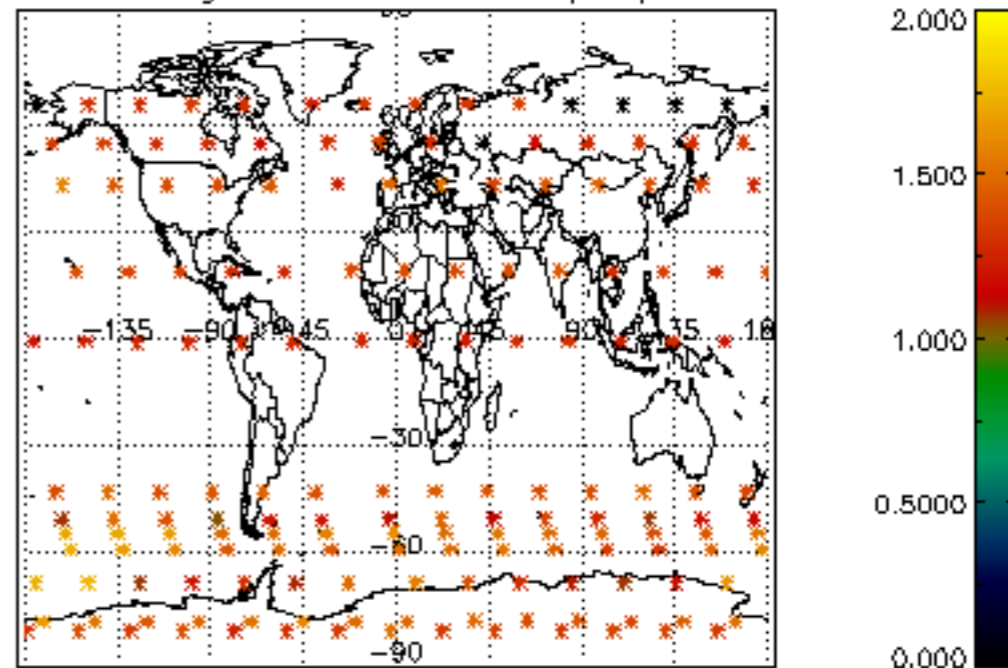




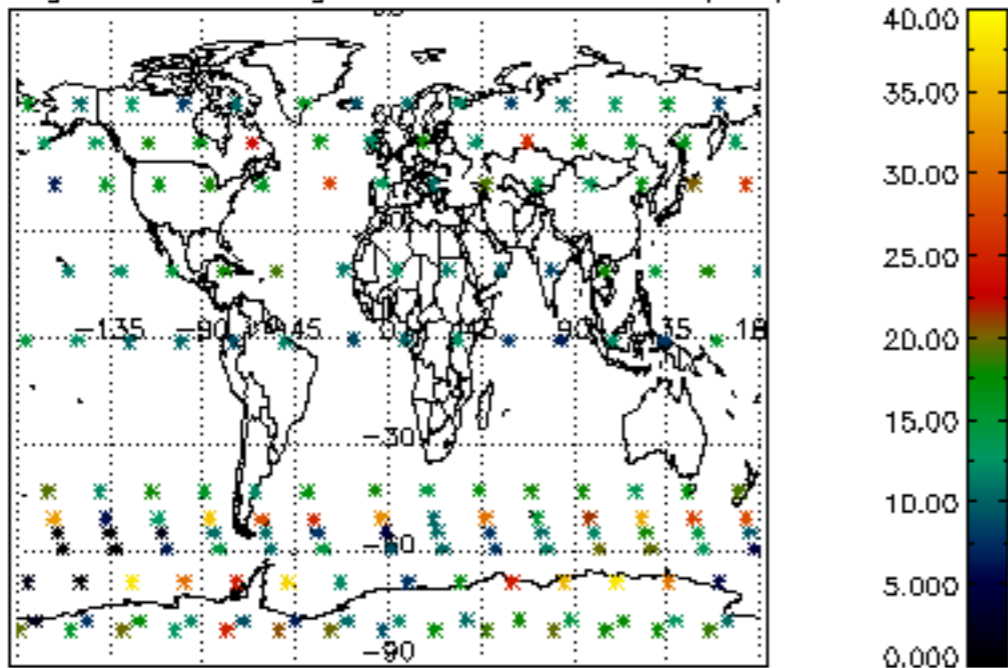
Percentage of cosmic ray hits per profile



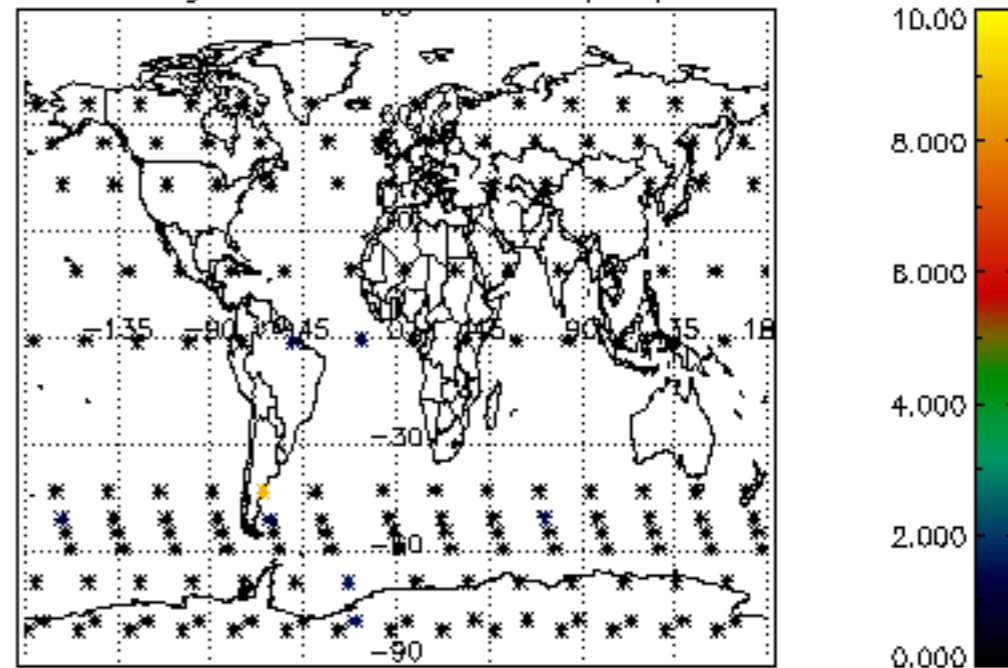
Percentage of datation errors per profile



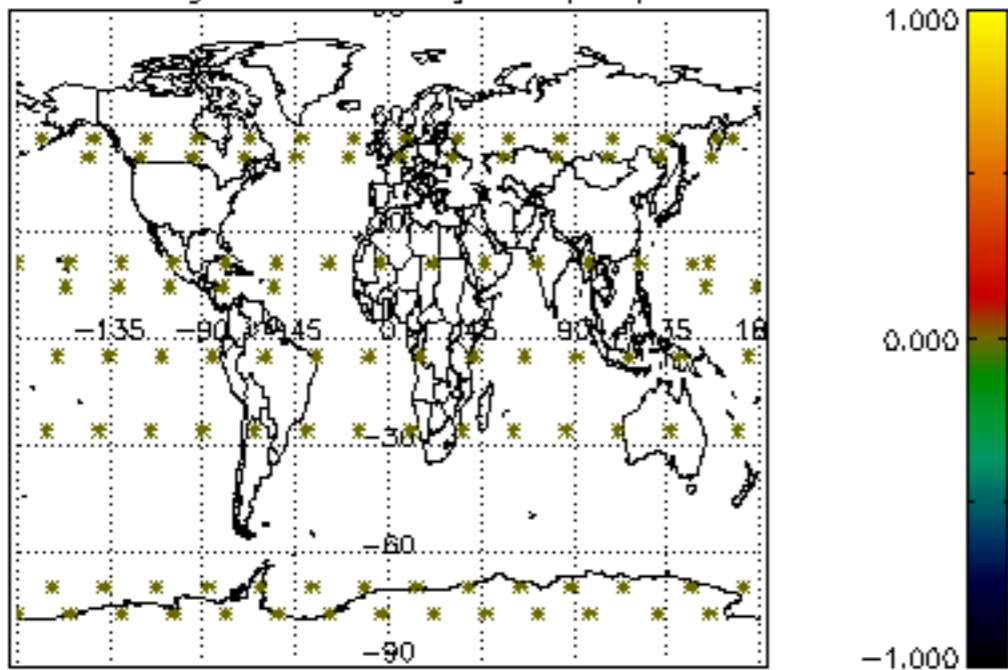
Percentage of star falling outside central band per profile



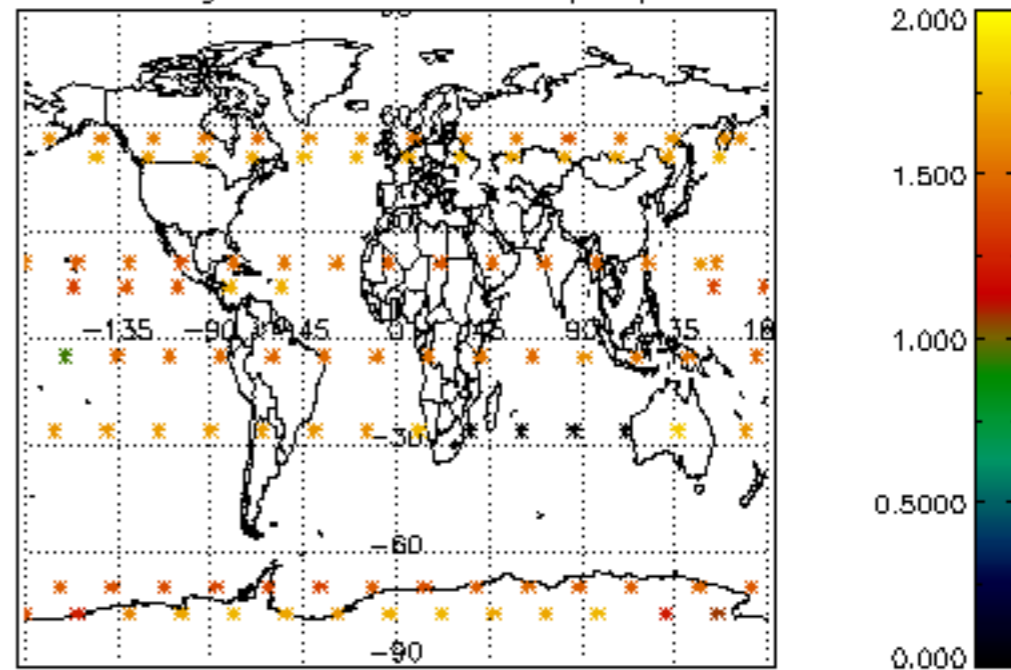
Percentage of saturation errors per profile



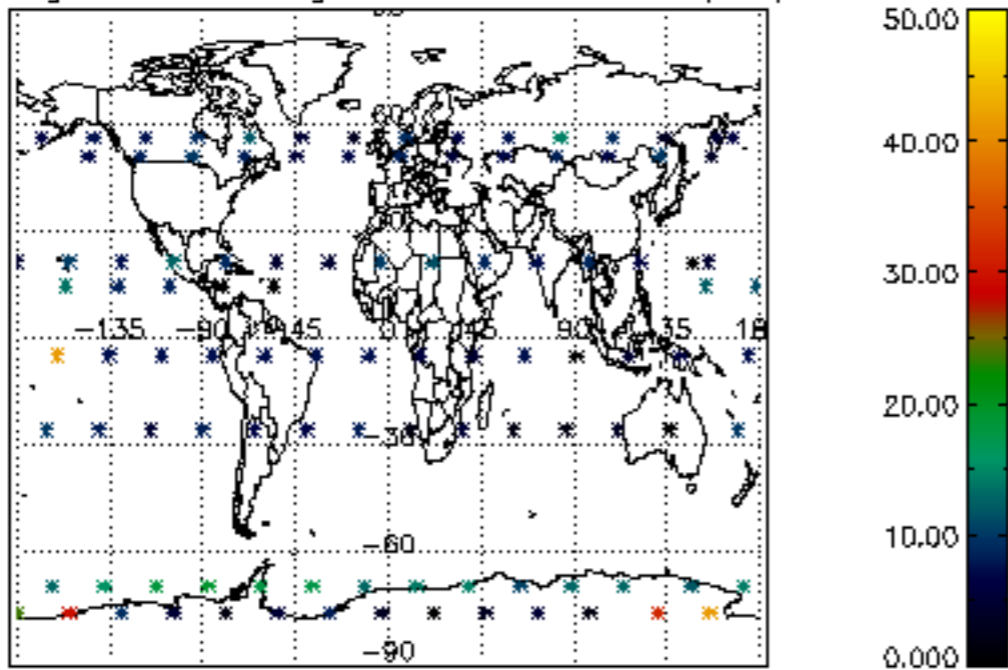
Percentage of cosmic ray hits per profile



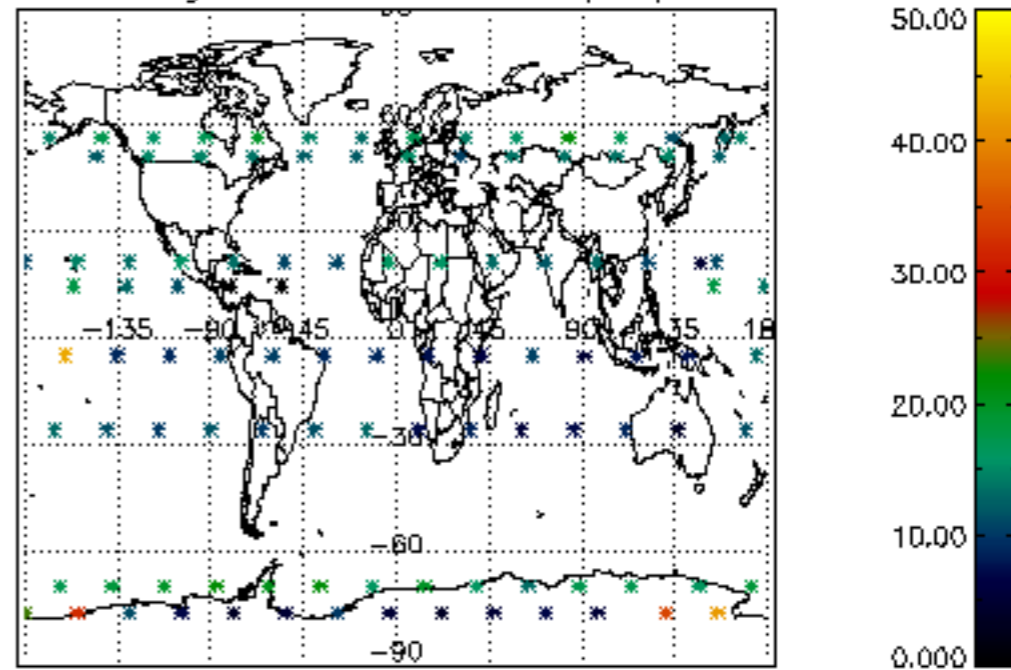
Percentage of datation errors per profile

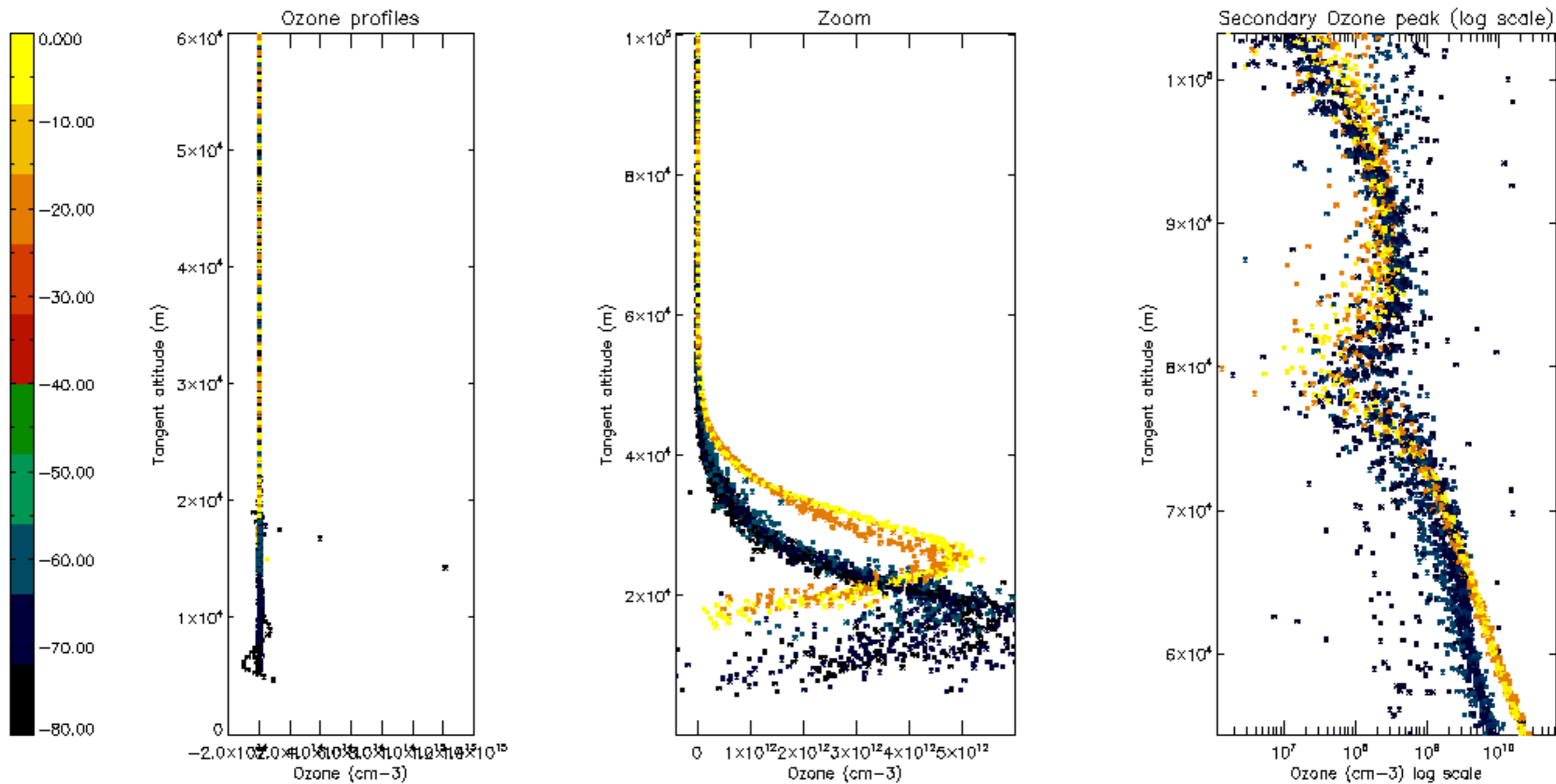


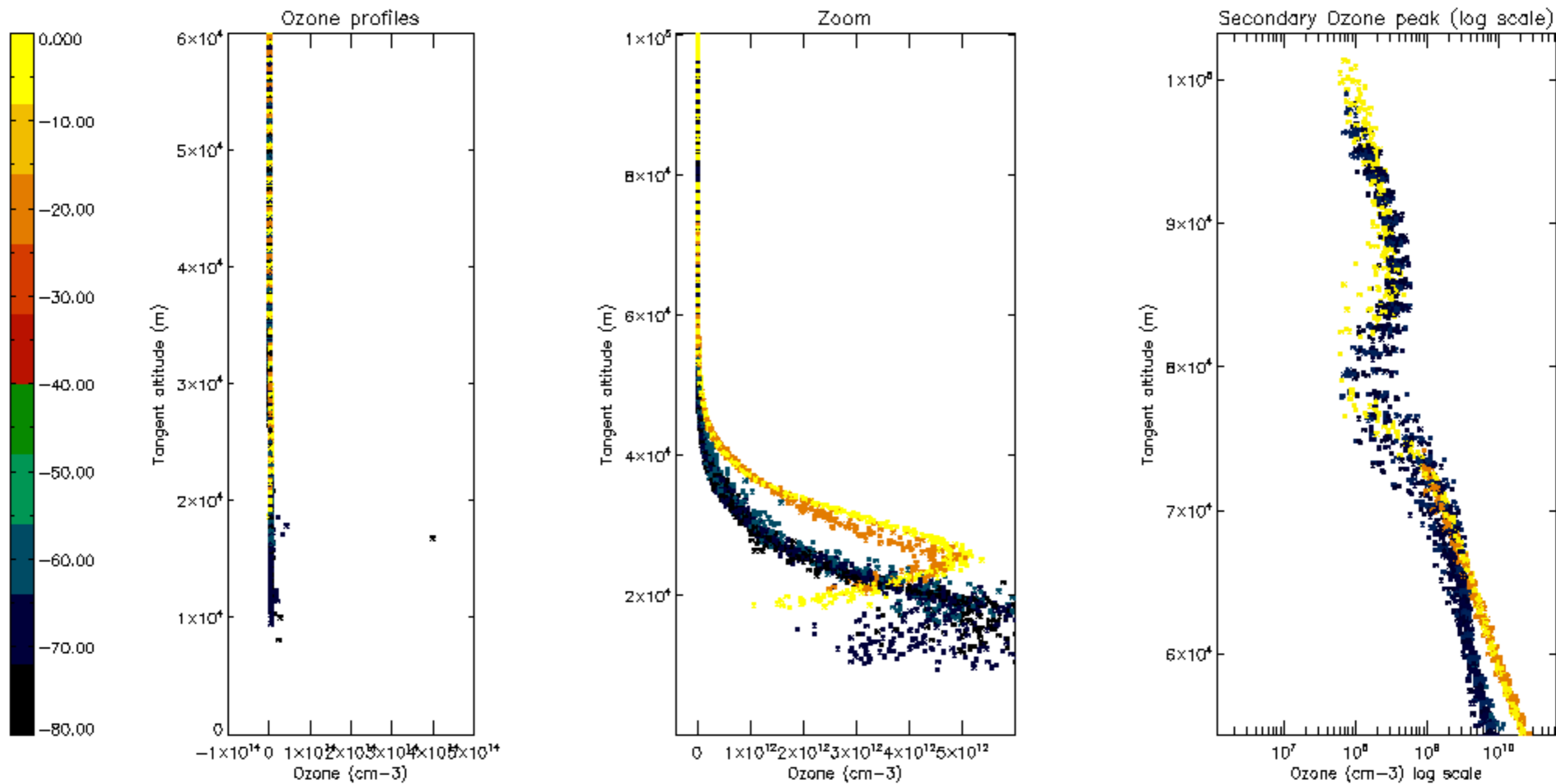
Percentage of star falling outside central band per profile

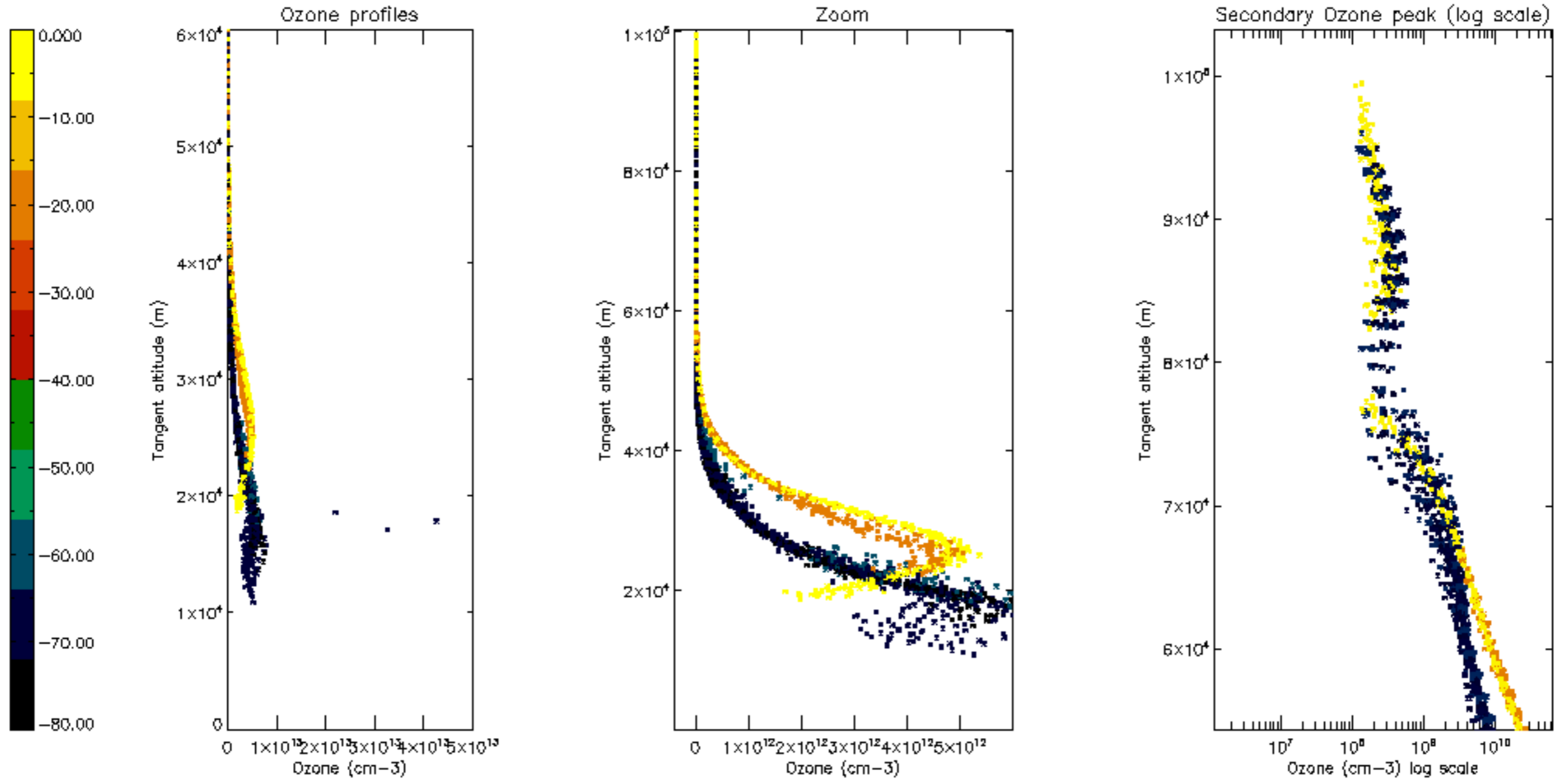


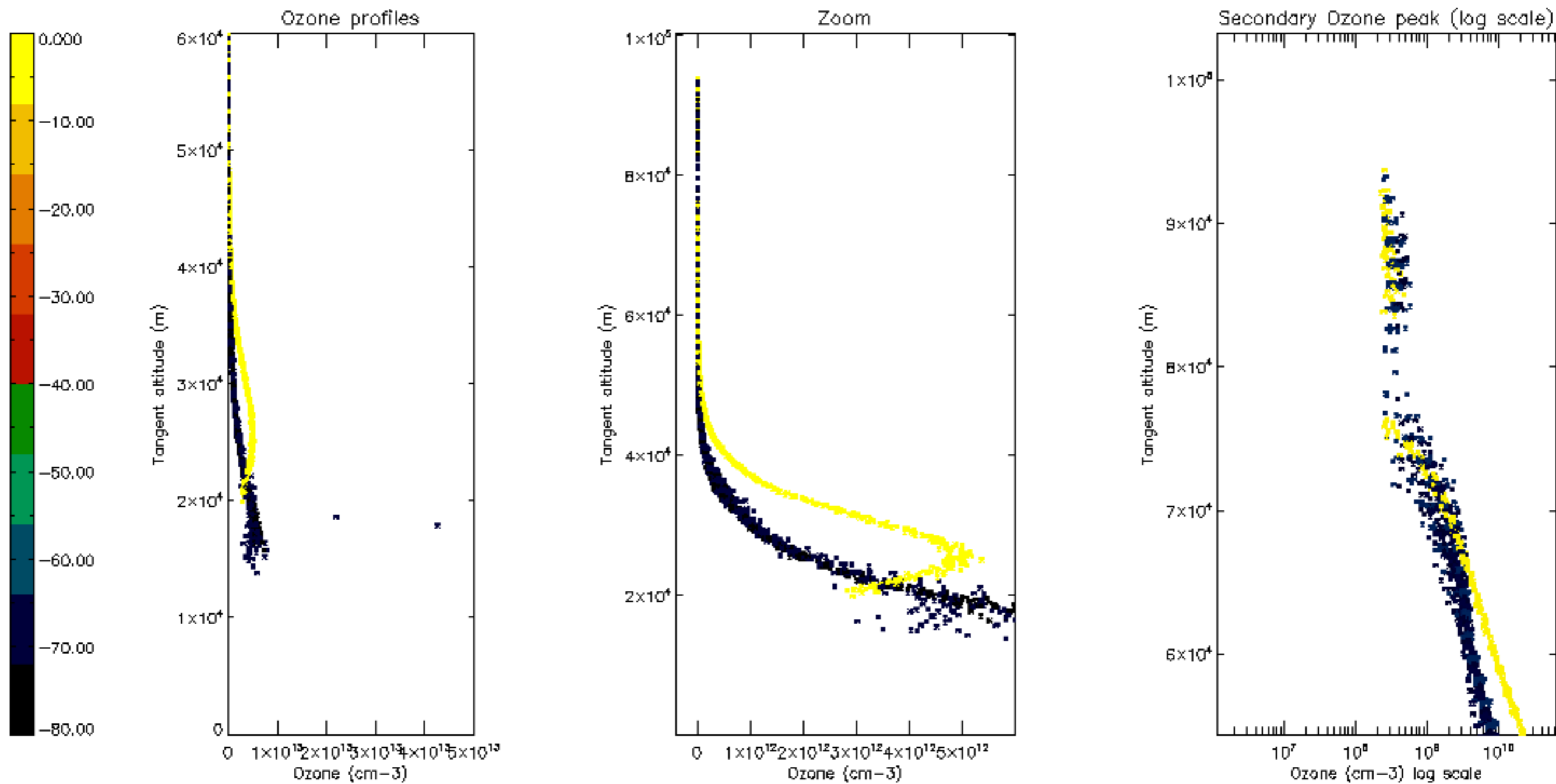
Percentage of saturation errors per profile

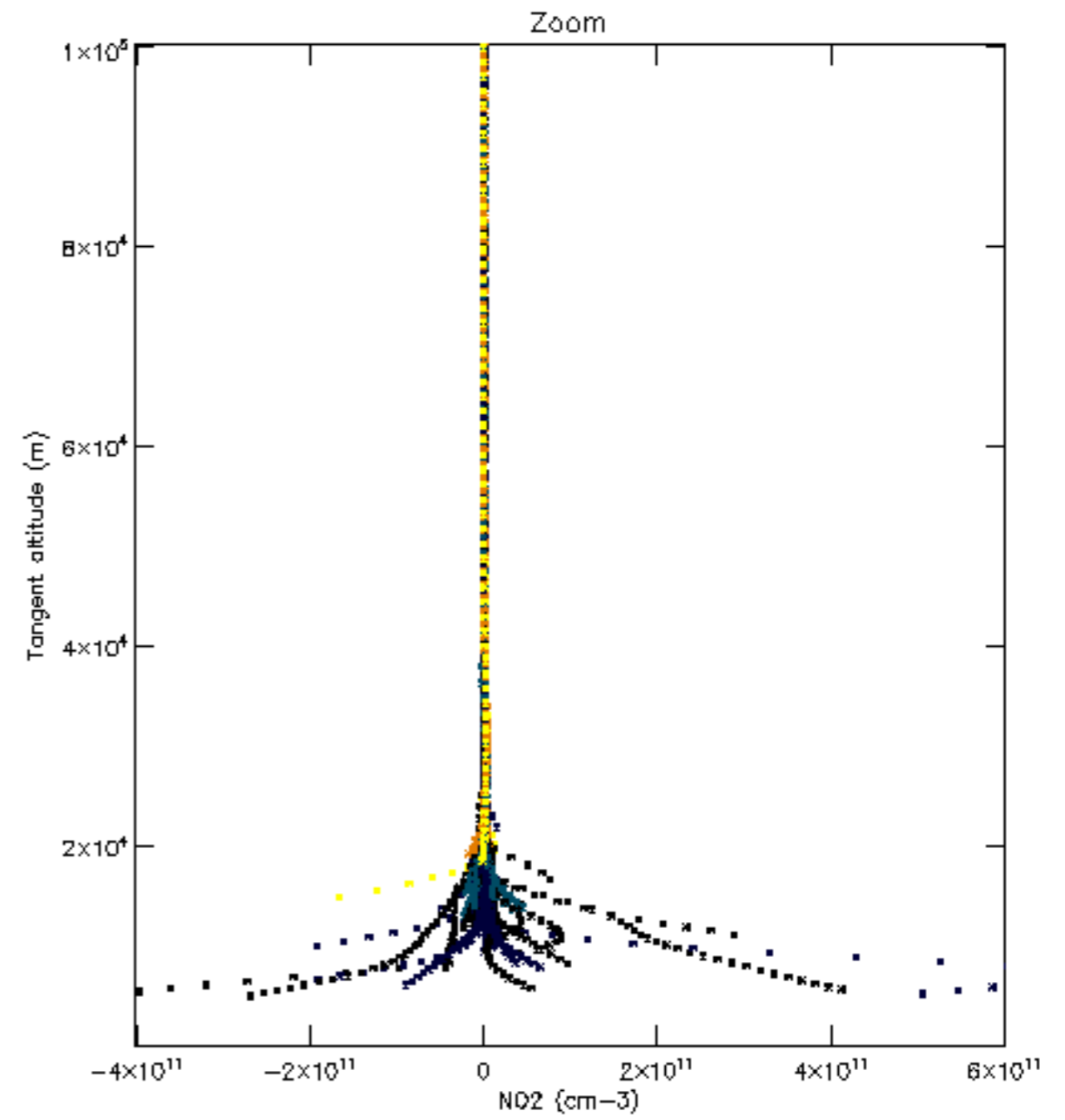
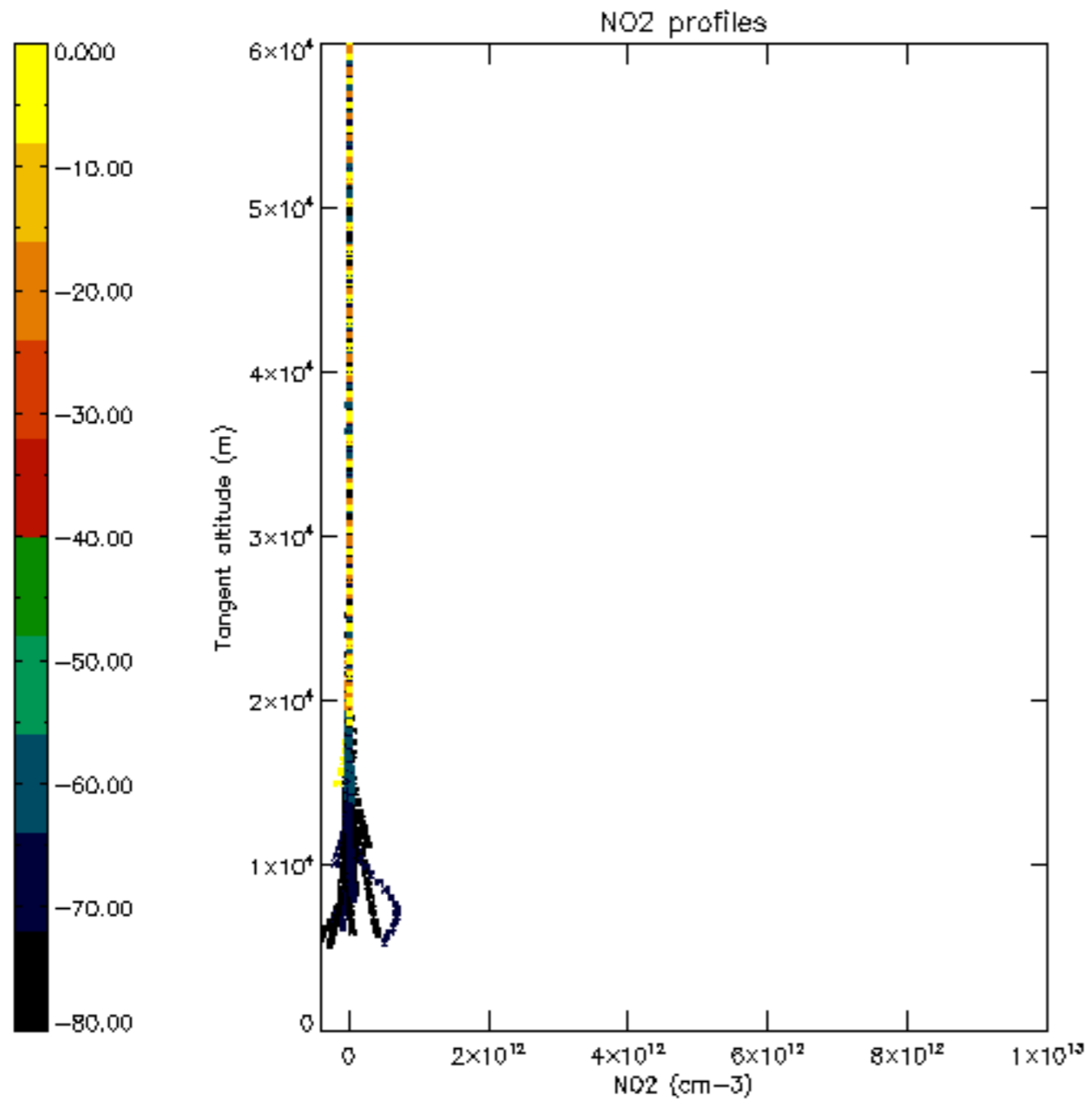


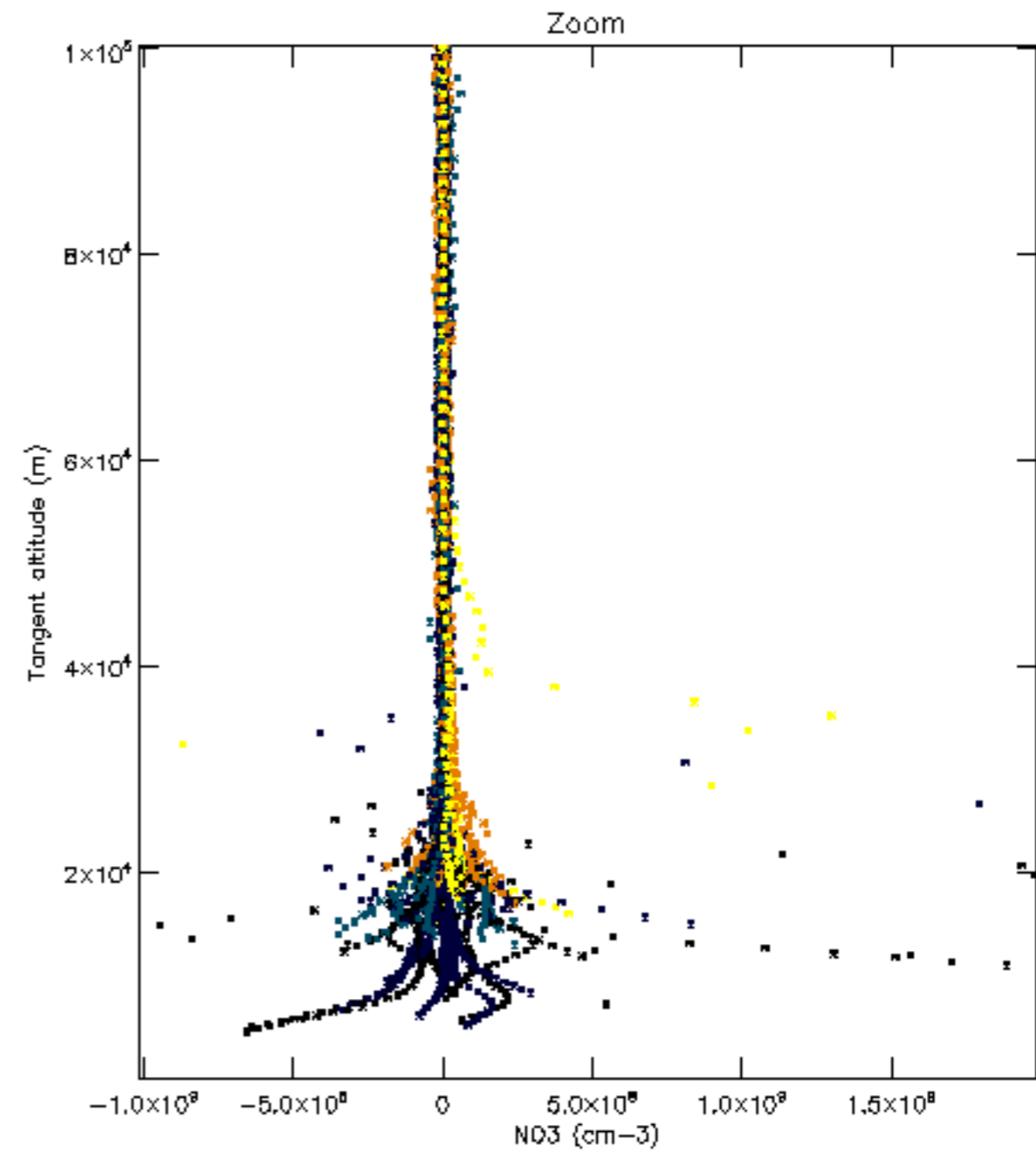
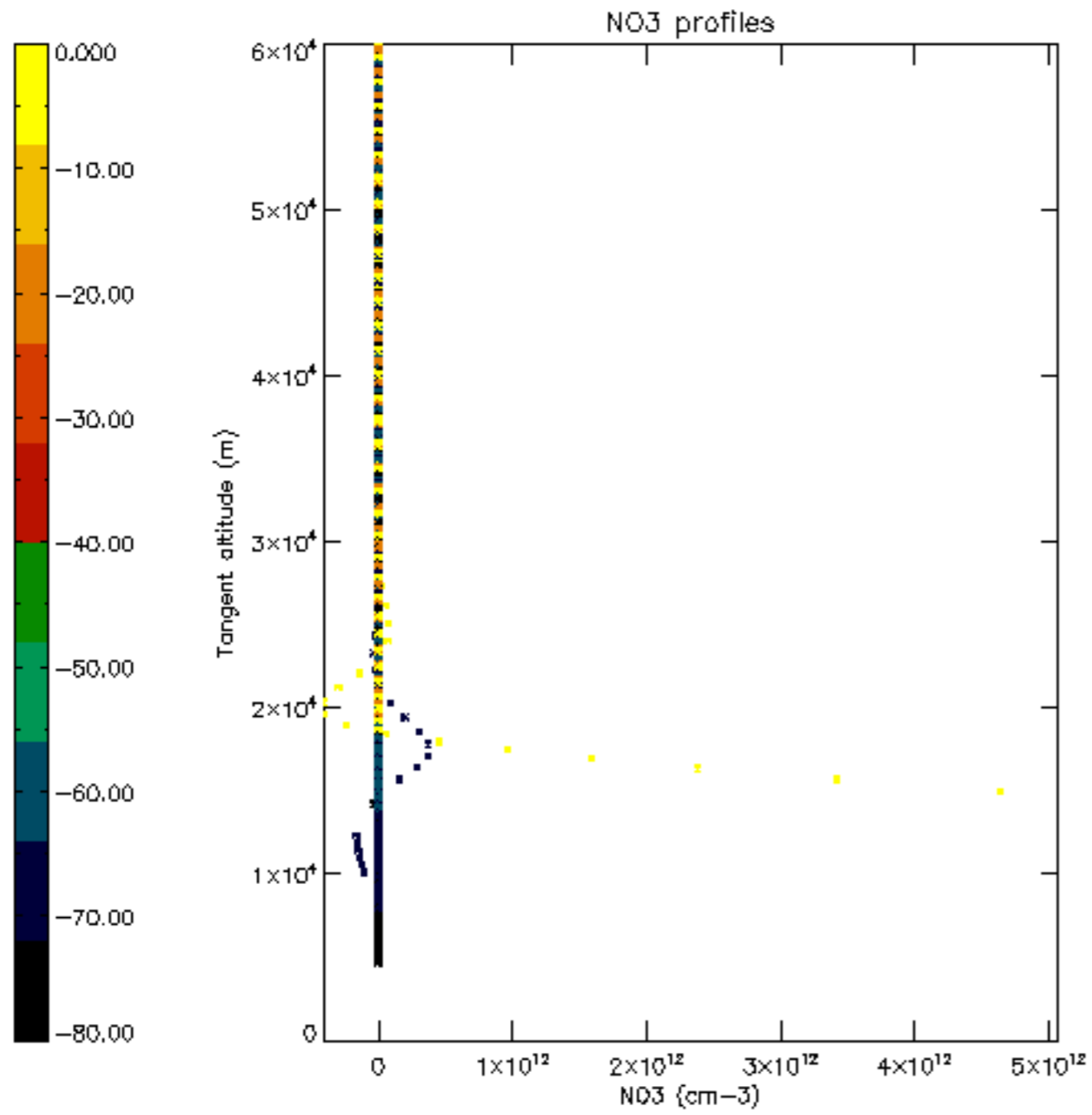


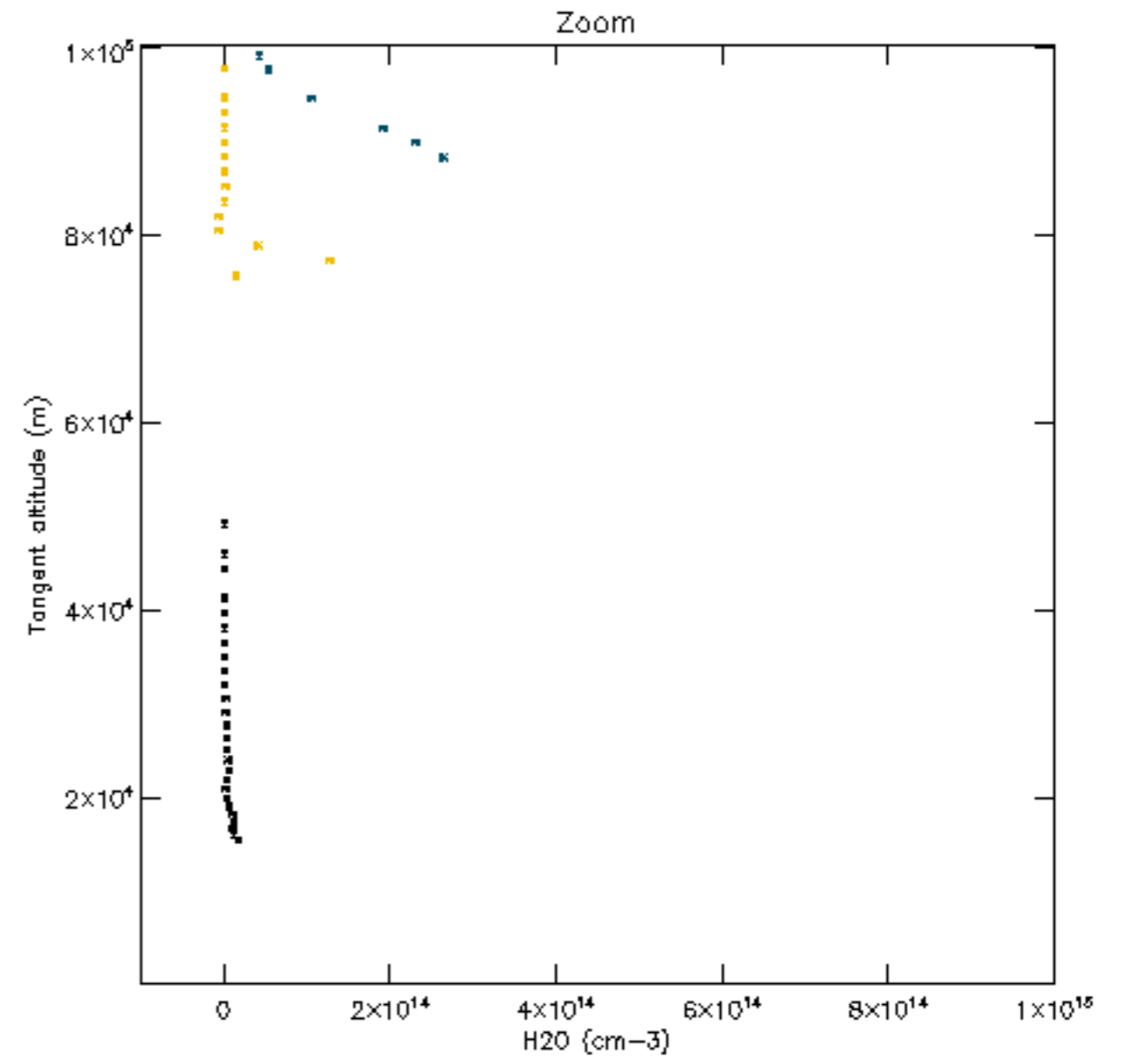
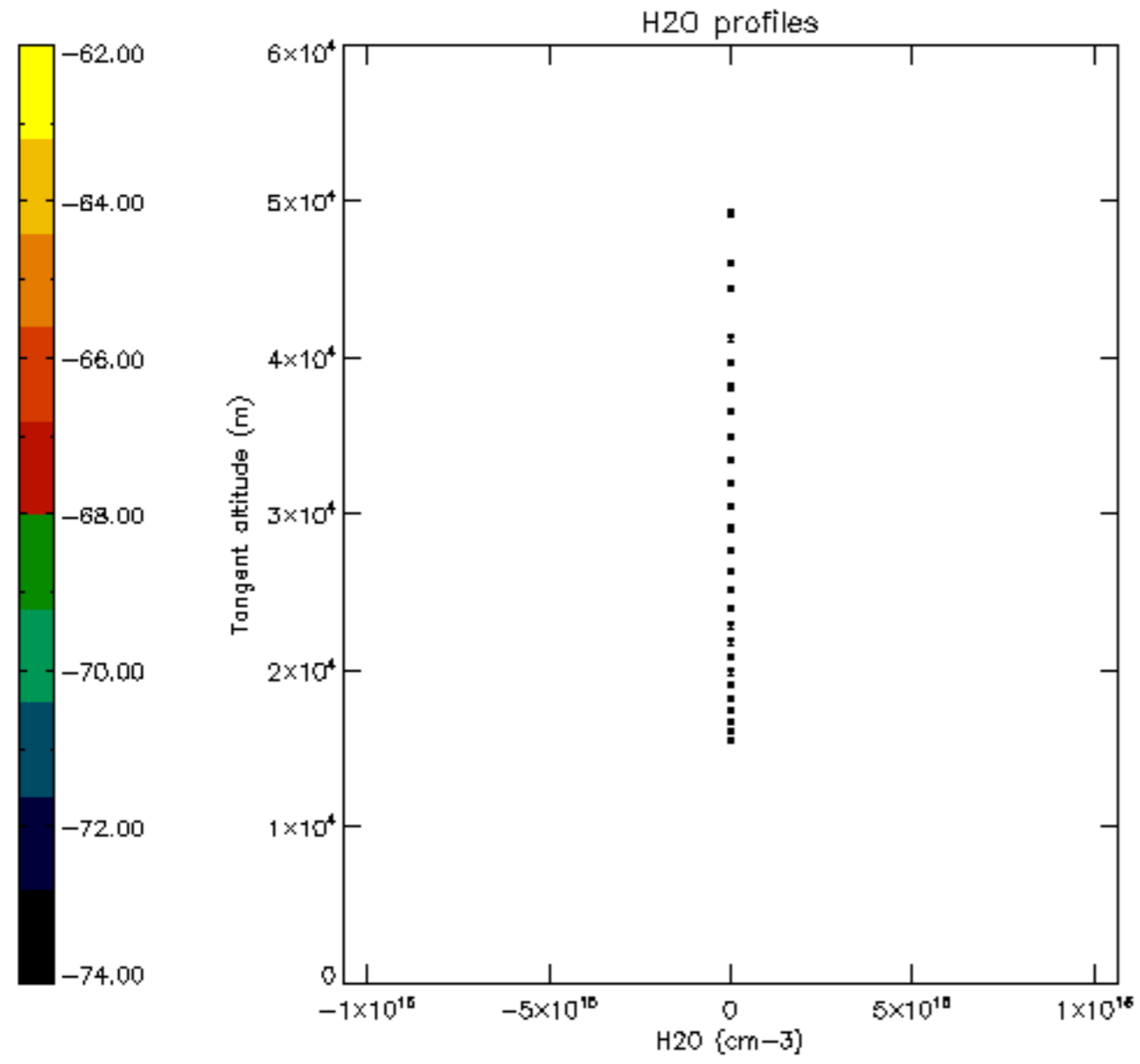


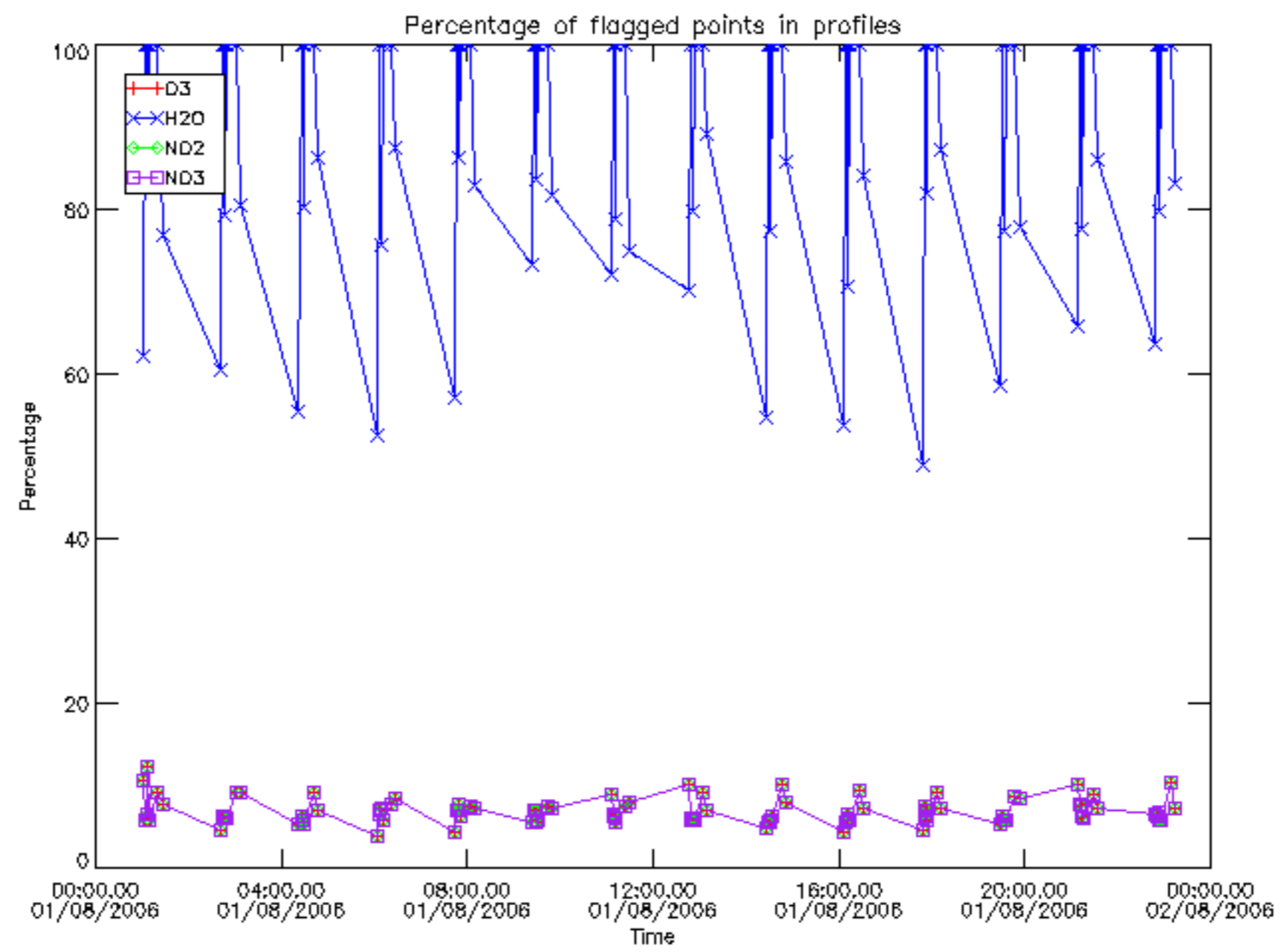




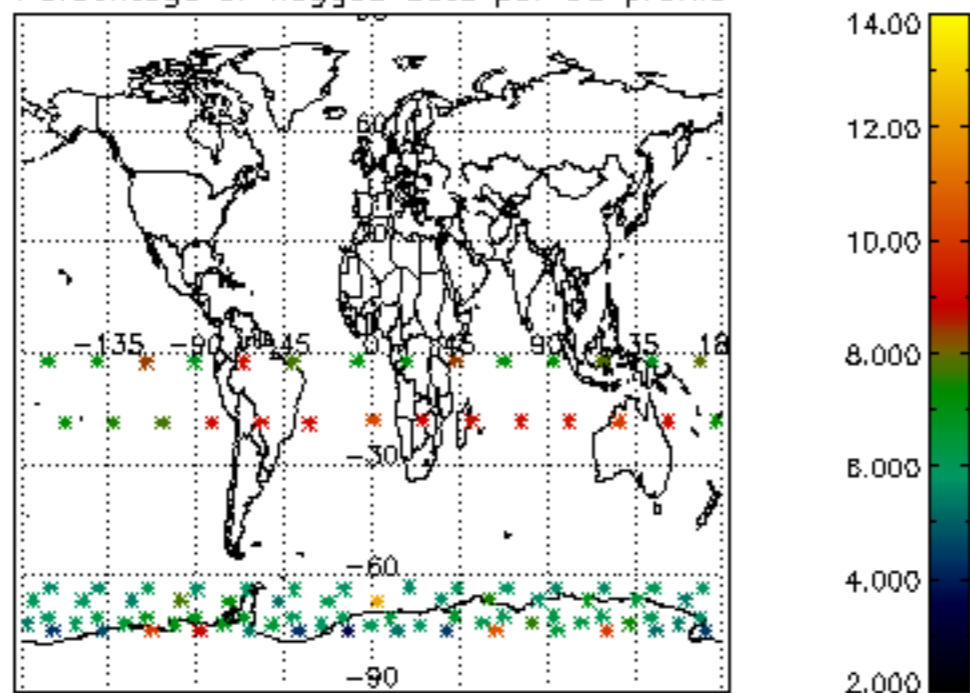




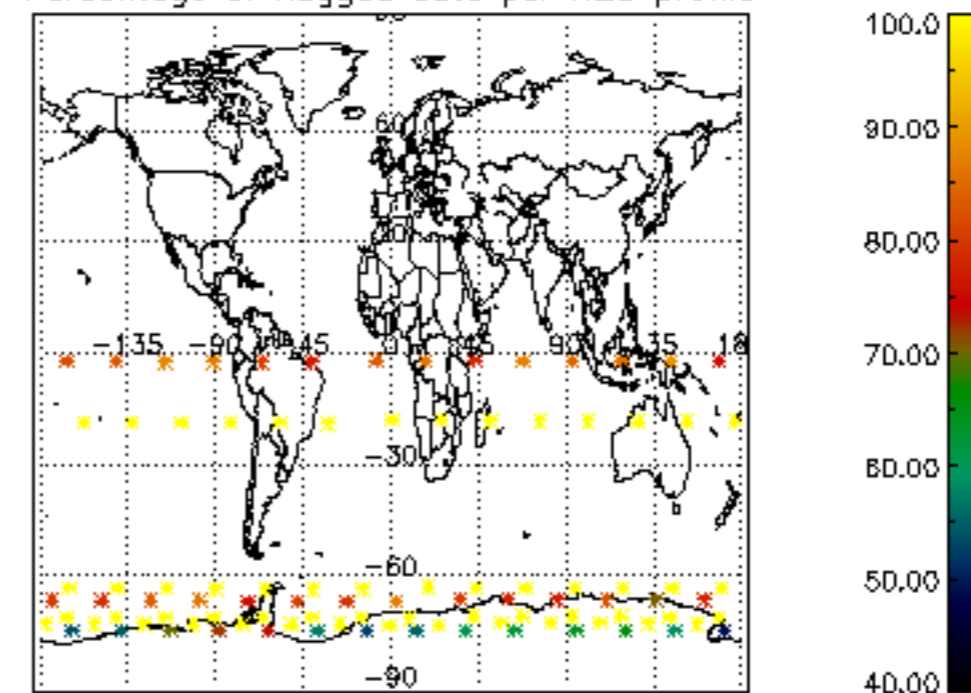




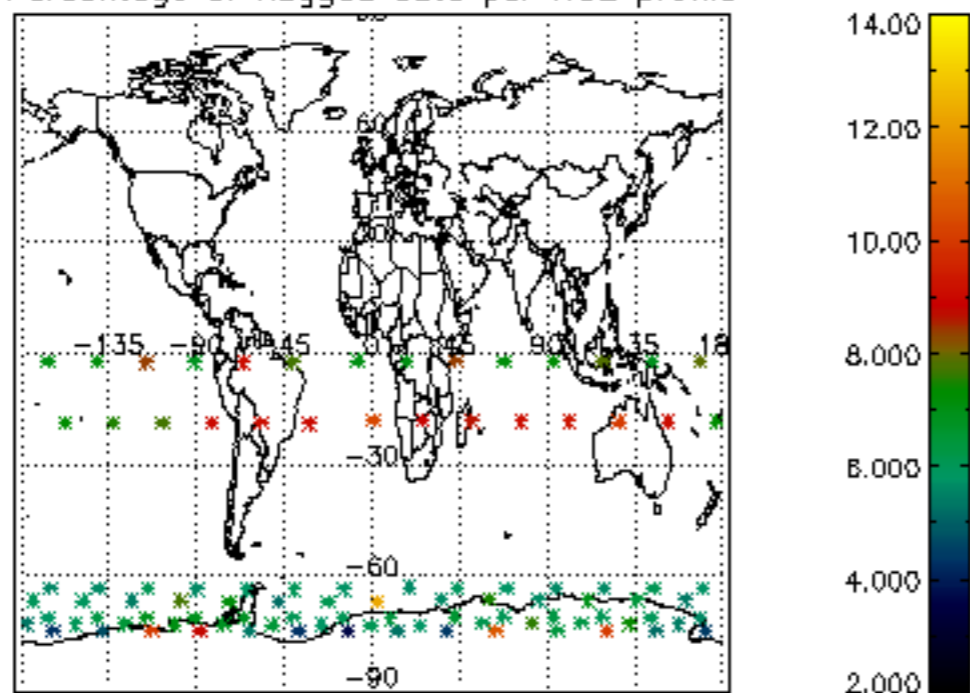
Percentage of flagged data per D3 profile



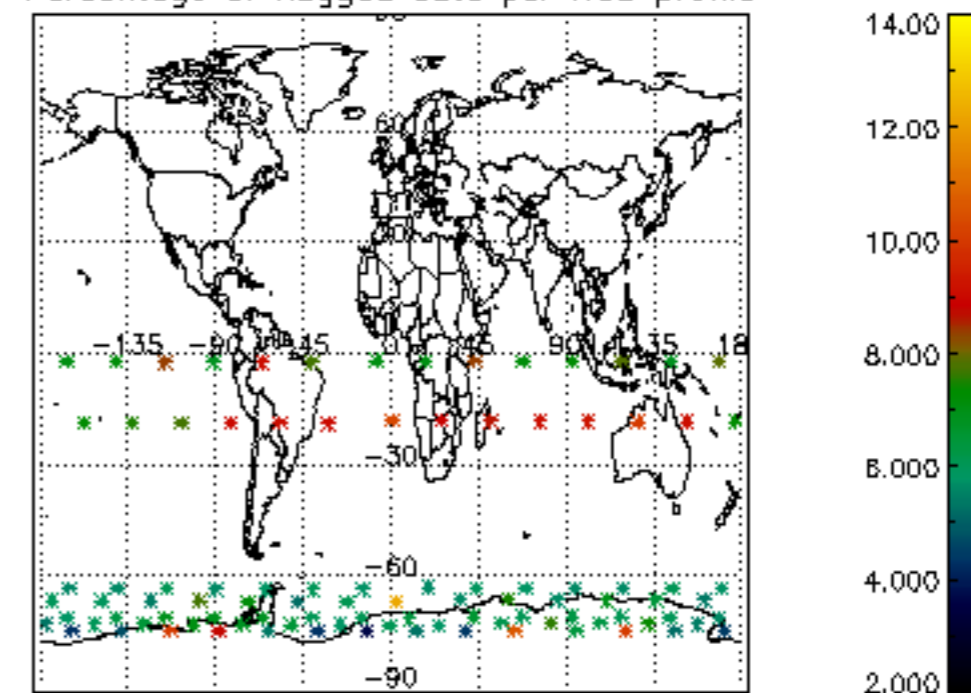
Percentage of flagged data per H2O profile

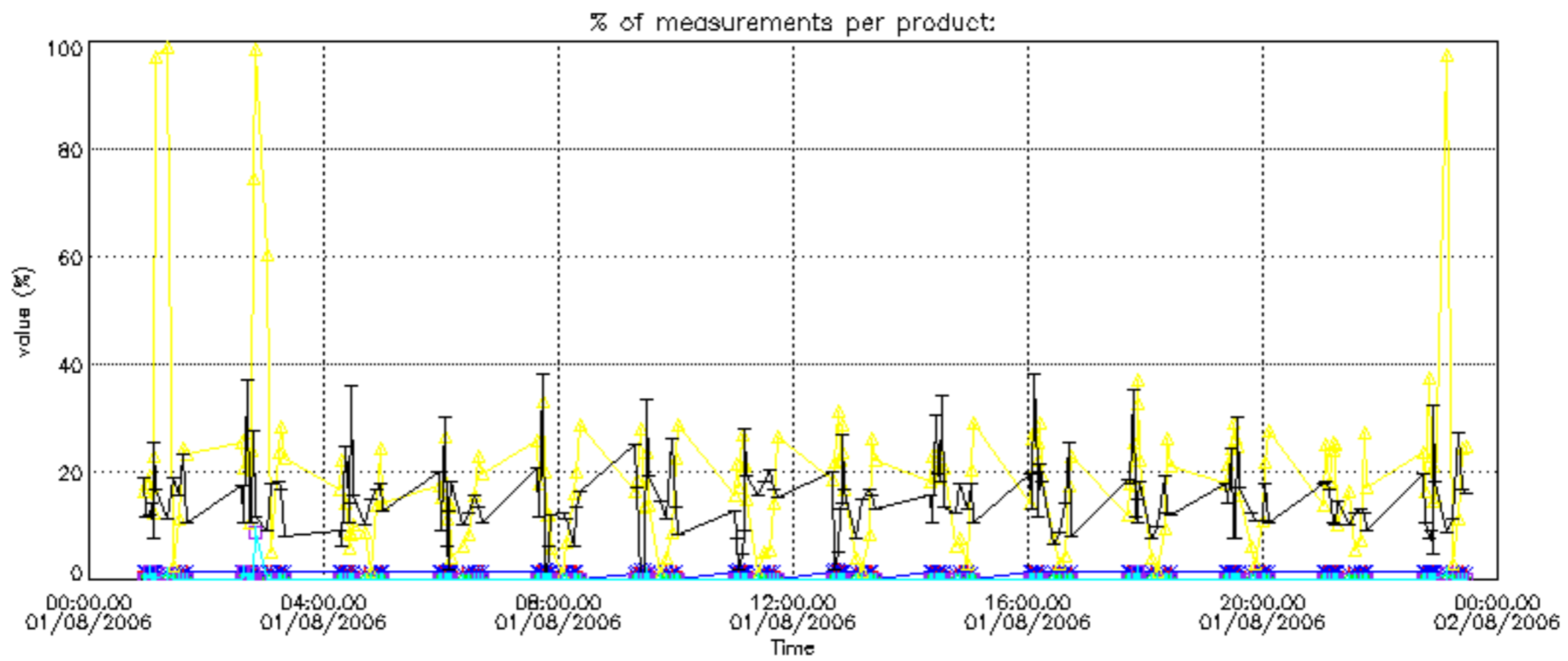


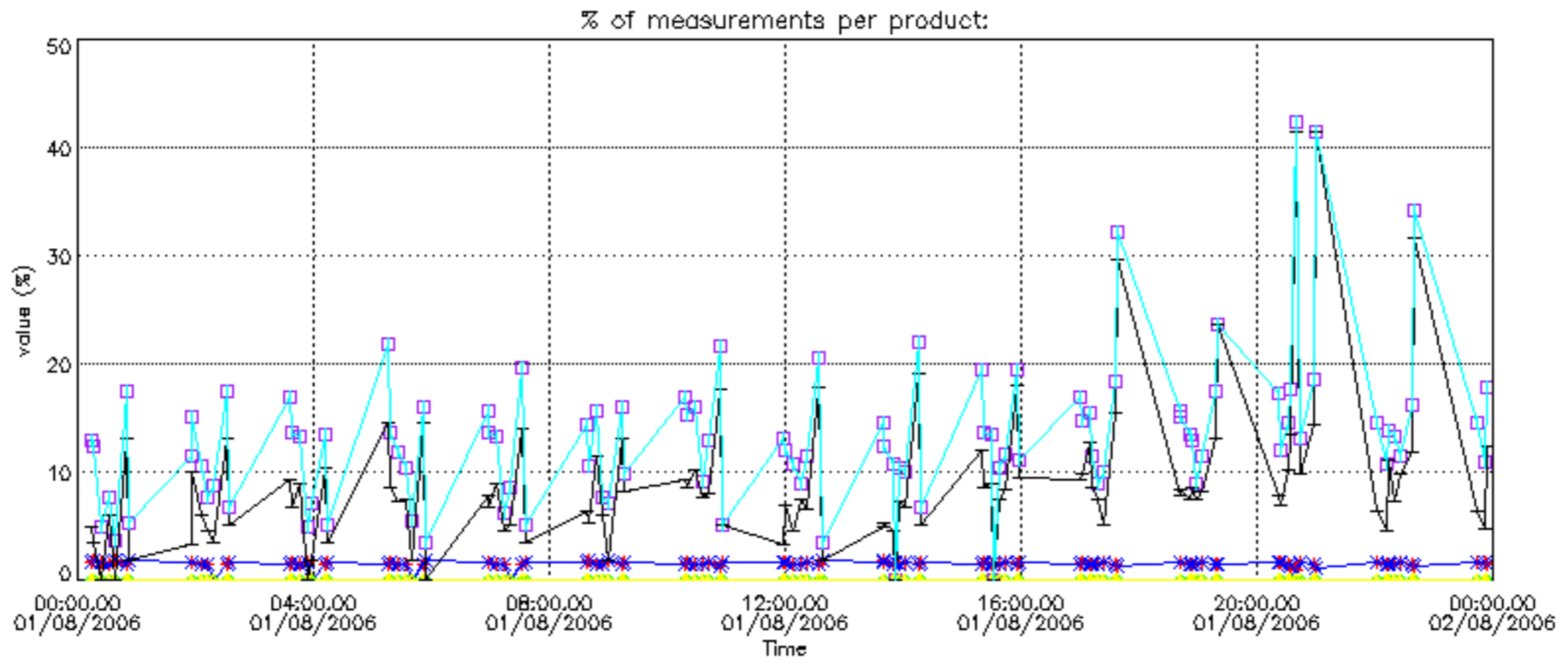
Percentage of flagged data per NO2 profile



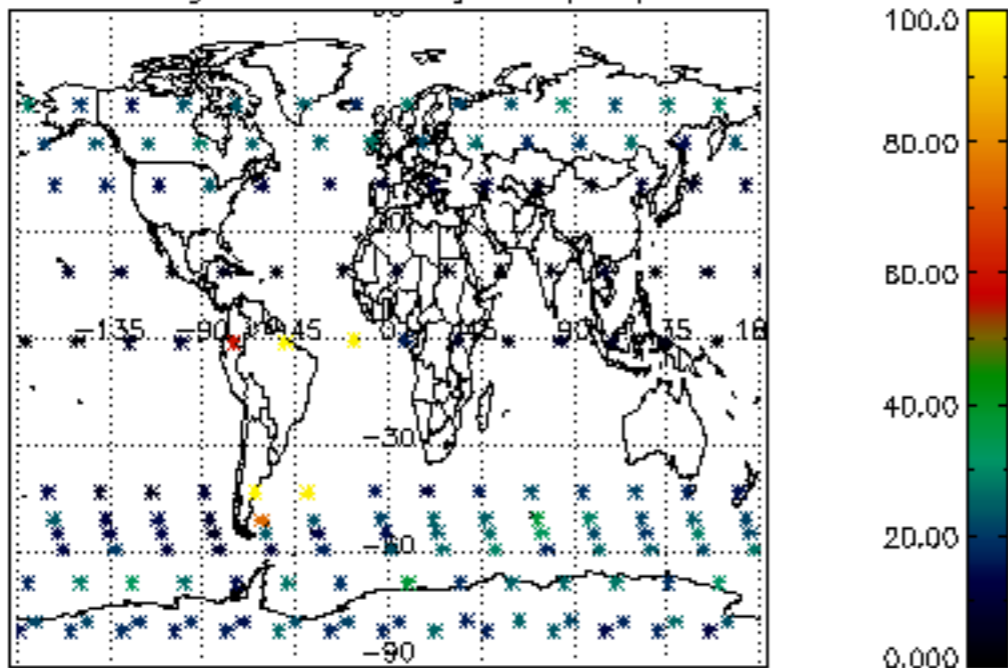
Percentage of flagged data per NO3 profile



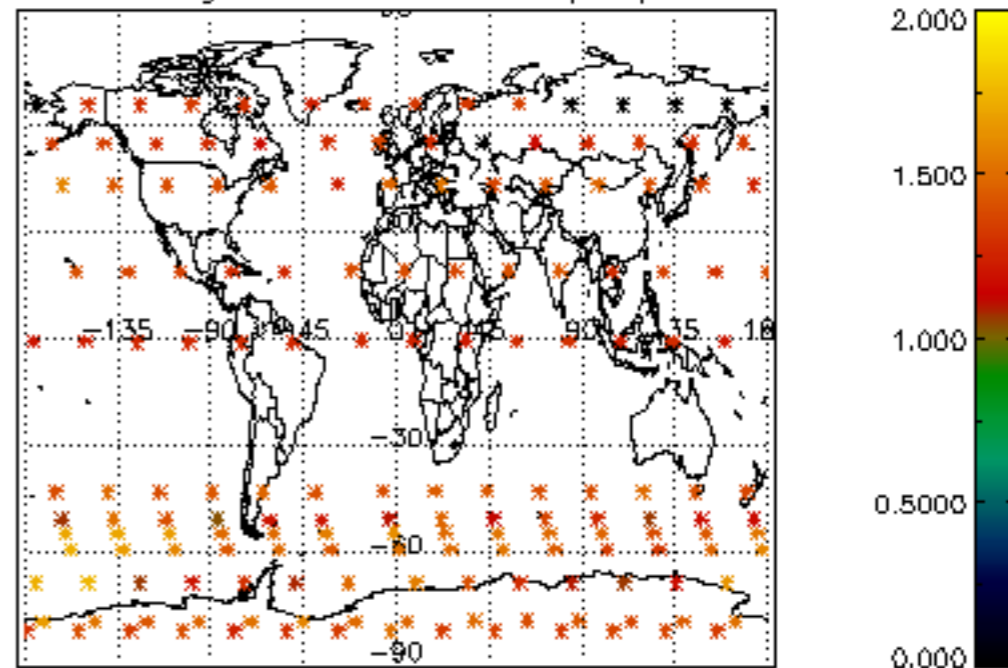




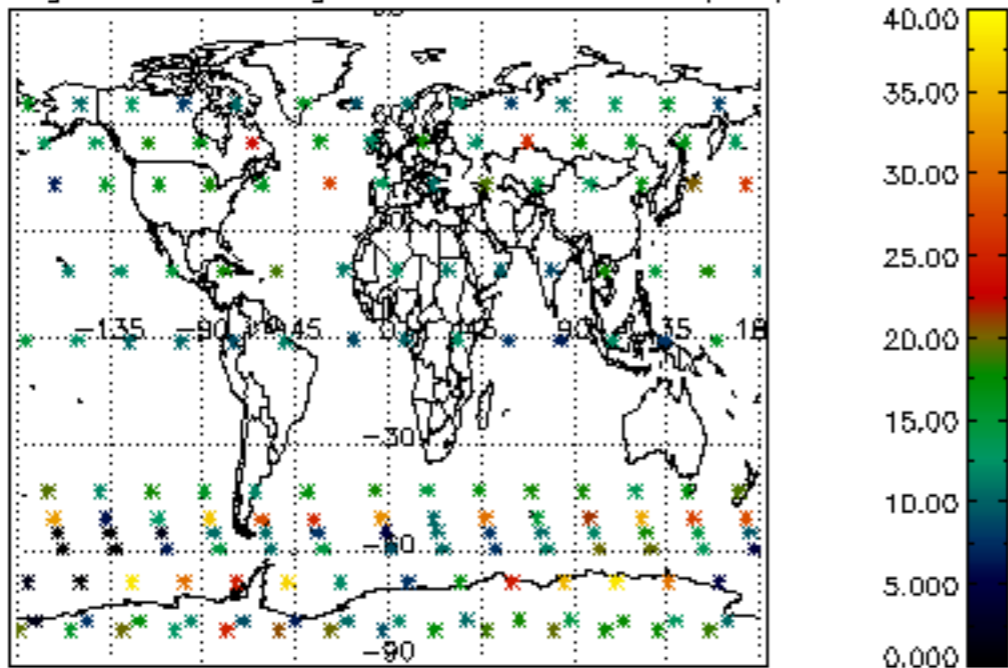
Percentage of cosmic ray hits per profile



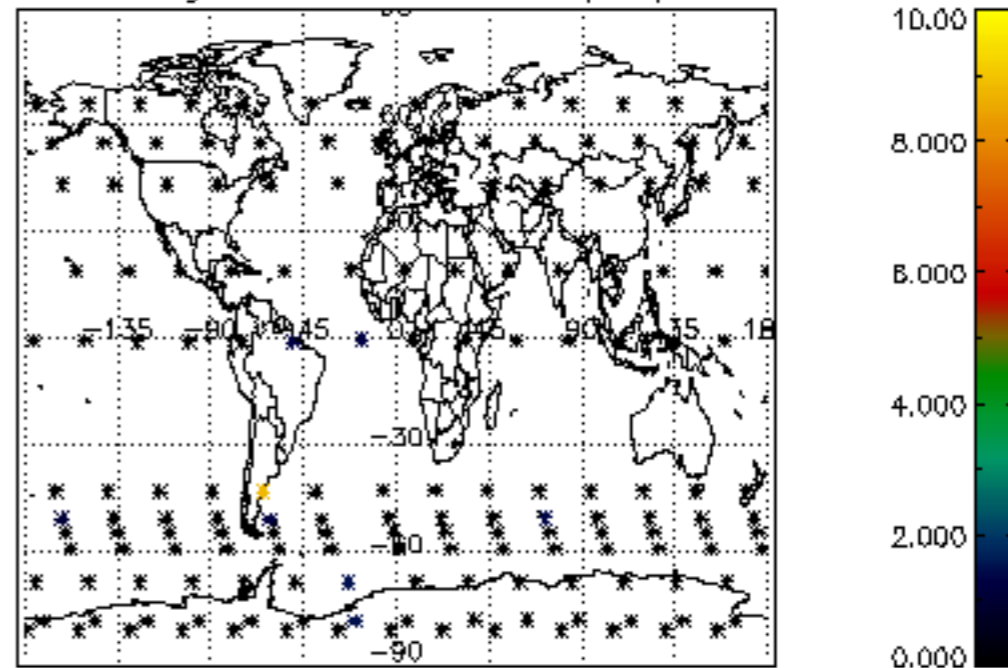
Percentage of datation errors per profile



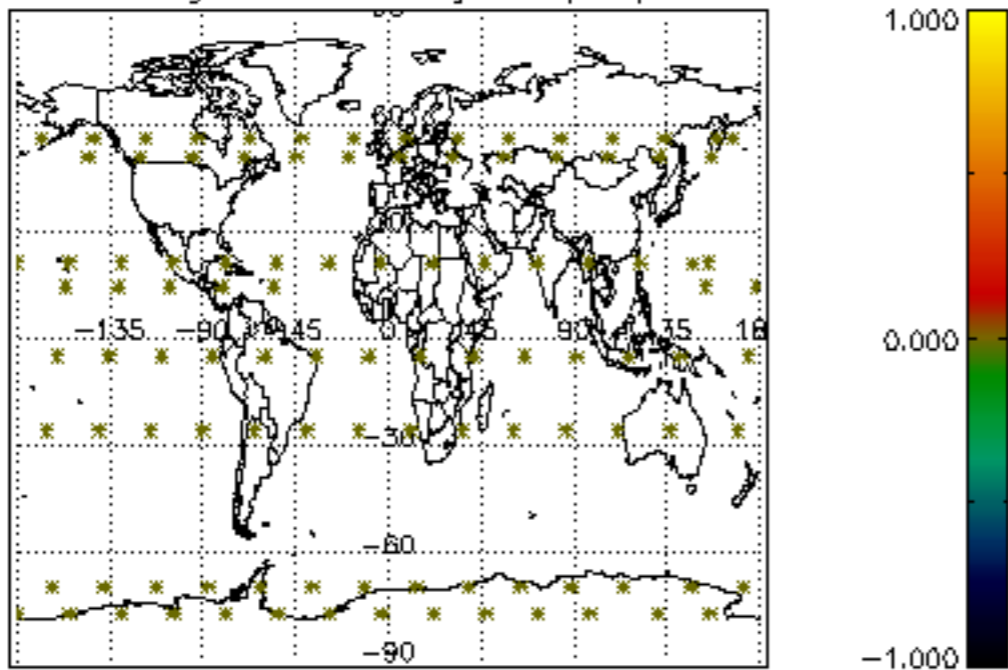
Percentage of star falling outside central band per profile



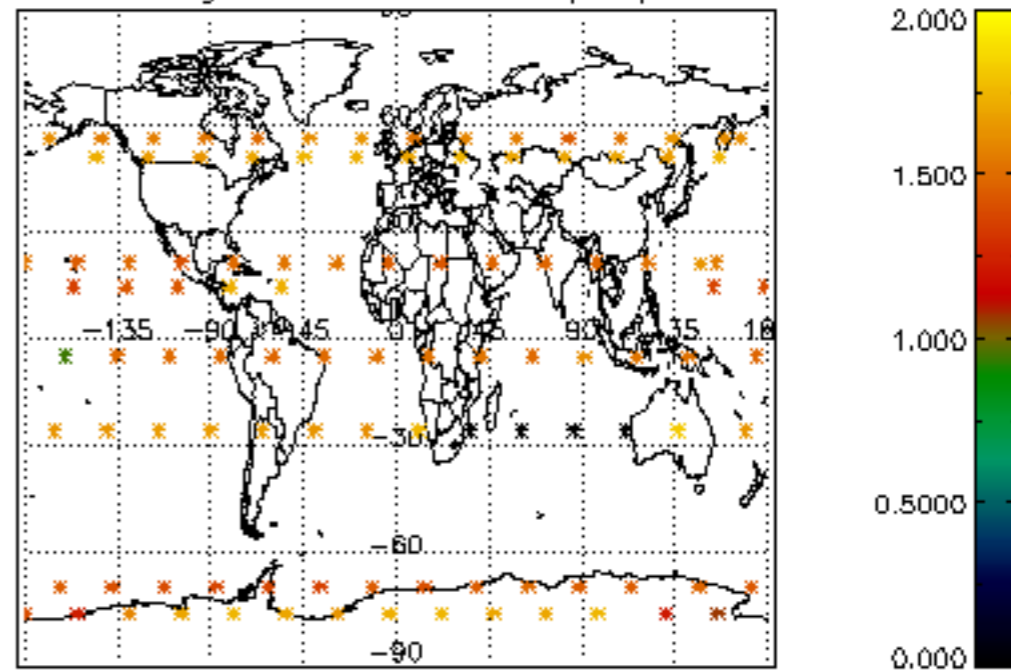
Percentage of saturation errors per profile



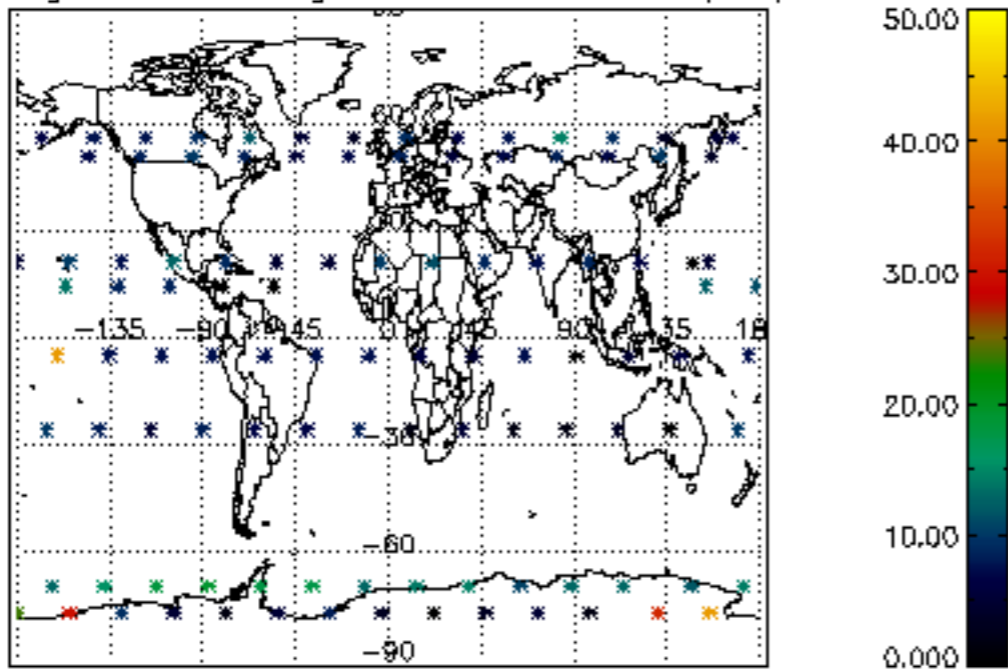
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

