

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 05:43:11
Data source version	GOMOS/6.01
Start time of products	10-11-2006 (10NOV2006 00:00:00)
Stop time of products	11-11-2006 (11NOV2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	219
Nb of prods with errors	0

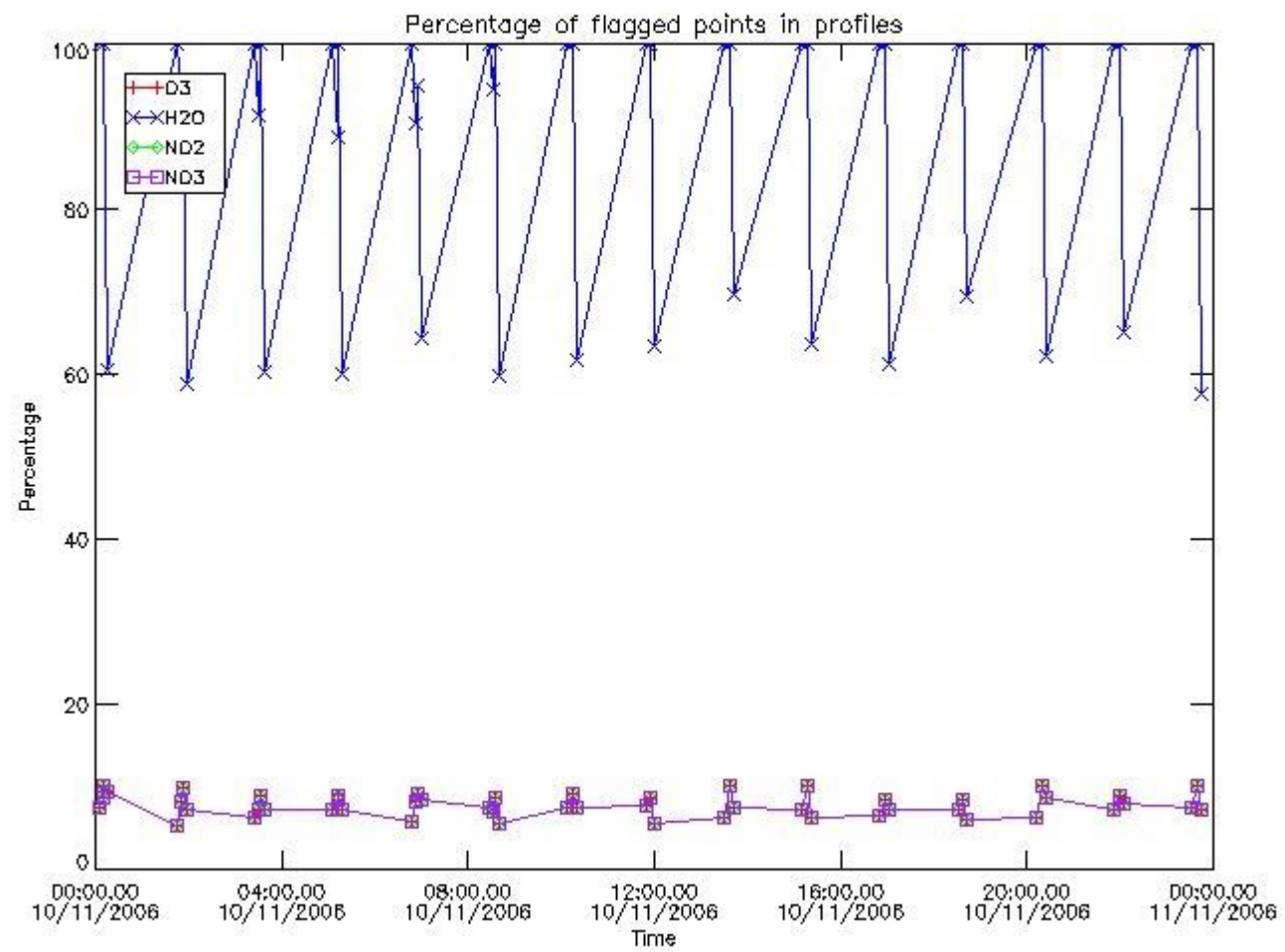
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20061110_000420_000000342052_00445_24547_3540.N1	10-NOV-2006 00:04:20	Dark	34.000	113	Mu Vel	2.6920	5000.0	68	24547	No
2	GOM_NL__2PRFIN20061110_000957_000000352052_00446_24548_3524.N1	10-NOV-2006 00:09:57	Dark	35.000	46	Del Vel	1.9540	10600.	70	24548	No
3	GOM_NL__2PRFIN20061110_001131_000000402052_00446_24548_3525.N1	10-NOV-2006 00:11:31	Dark	40.000	34	Gam2Vel	1.7930	23000.	80	24548	No
4	GOM_NL__2PRFIN20061110_001632_000000442052_00446_24548_3526.N1	10-NOV-2006 00:16:32	Dark	43.500	2	Alp Car	-0.73600	7000.0	87	24548	No
5	GOM_NL__2PRFIN20061110_002552_000000332052_00446_24548_3527.N1	10-NOV-2006 00:25:52	Straylight	33.000	157	The1Eri	2.9060	9300.0	66	24548	No
6	GOM_NL__2PRFIN20061110_003917_000000452052_00446_24548_3528.N1	10-NOV-2006 00:39:17	Twilight_stray	45.000	94	92Alp Cet	2.5260	3100.0	90	24548	No
7	GOM_NL__2PRFIN20061110_004355_000000322052_00446_24548_3529.N1	10-NOV-2006 00:43:55	Bright	31.500	105	6Bet Ari	2.6450	8900.0	63	24548	No
8	GOM_NL__2PRFIN20061110_004805_000000302052_00446_24548_3530.N1	10-NOV-2006 00:48:05	Bright	30.000	173	4Bet Tri	3.0040	8900.0	60	24548	No
9	GOM_NL__2PRFIN20061110_005008_000000312052_00446_24548_3531.N1	10-NOV-2006 00:50:08	Bright	31.000	73	57Gam1And	2.2600	13100.	62	24548	No
10	GOM_NL__2PRFIN20061110_005345_000000342052_00446_24548_3532.N1	10-NOV-2006 00:53:45	Bright	34.000	35	33Alp Per	1.7950	6250.0	68	24548	No
11	GOM_NL__2PRFIN20061110_005503_000000302052_00446_24548_3533.N1	10-NOV-2006 00:55:03	Bright	30.000	110	37Del Cas	2.6780	8900.0	60	24548	No
12	GOM_NL__2PRFIN20061110_010316_000000312052_00446_24548_3534.N1	10-NOV-2006 01:03:16	Bright	30.500	49	1Alp UMi	1.9900	6300.0	61	24548	No
13	GOM_NL__2PRFIN20061110_011110_000000342052_00446_24548_3535.N1	10-NOV-2006 01:11:10	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	24548	No
14	GOM_NL__2PRFIN20061110_011248_000000362052_00446_24548_3536.N1	10-NOV-2006 01:12:48	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	24548	No
15	GOM_NL__2PRFIN20061110_011641_000000352052_00446_24548_3537.N1	10-NOV-2006 01:16:41	Bright	34.500	174	52Psi UMa	3.0040	4400.0	69	24548	No
16	GOM_NL__2PRFIN20061110_011812_000000282052_00446_24548_3538.N1	10-NOV-2006 01:18:12	Bright	28.000	152	12Alp2CVn	2.8900	11000.	56	24548	No
17	GOM_NL__2PRFIN20061110_012554_000000322052_00446_24548_3539.N1	10-NOV-2006 01:25:54	Bright	31.500	62	94Bet Leo	2.1360	9700.0	63	24548	No
18	GOM_NL__2PRFIN20061110_014457_000000392052_00446_24548_3540.N1	10-NOV-2006 01:44:57	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	24548	No
19	GOM_NL__2PRFIN20061110_015033_000000372052_00447_24549_3524.N1	10-NOV-2006 01:50:33	Dark	37.000	46	Del Vel	1.9540	10600.	74	24549	No
20	GOM_NL__2PRFIN20061110_015208_000000422052_00447_24549_3525.N1	10-NOV-2006 01:52:08	Dark	41.500	34	Gam2Vel	1.7930	23000.	83	24549	No
21	GOM_NL__2PRFIN20061110_015708_000000492052_00447_24549_3526.N1	10-NOV-2006 01:57:08	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	24549	No
22	GOM_NL__2PRFIN20061110_020628_000000342052_00447_24549_3527.N1	10-NOV-2006 02:06:28	Straylight	33.500	157	The1Eri	2.9060	9300.0	67	24549	No
23	GOM_NL__2PRFIN20061110_021953_000000442052_00447_24549_3528.N1	10-NOV-2006 02:19:53	Twilight_stray	44.000	94	92Alp Cet	2.5260	3100.0	88	24549	No
24	GOM_NL__2PRFIN20061110_022431_000000322052_00447_24549_3529.N1	10-NOV-2006 02:24:31	Bright	31.500	105	6Bet Ari	2.6450	8900.0	63	24549	No
25	GOM_NL__2PRFIN20061110_022840_000000312052_00447_24549_3530.N1	10-NOV-2006 02:28:40	Bright	30.500	173	4Bet Tri	3.0040	8900.0	61	24549	No
26	GOM_NL__2PRFIN20061110_023044_000000342052_00447_24549_3531.N1	10-NOV-2006 02:30:44	Bright	33.500	73	57Gam1And	2.2600	13100.	67	24549	No
27	GOM_NL__2PRFIN20061110_023420_000000352052_00447_24549_3532.N1	10-NOV-2006 02:34:20	Bright	35.000	35	33Alp Per	1.7950	6250.0	70	24549	No
28	GOM_NL__2PRFIN20061110_023539_000000292052_00447_24549_3533.N1	10-NOV-2006 02:35:39	Bright	28.500	110	37Del Cas	2.6780	8900.0	57	24549	No
29	GOM_NL__2PRFIN20061110_024351_000000302052_00447_24549_3534.N1	10-NOV-2006 02:43:51	Bright	30.000	49	1Alp UMi	1.9900	6300.0	60	24549	No
30	GOM_NL__2PRFIN20061110_025146_000000342052_00447_24549_3535.N1	10-NOV-2006 02:51:46	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	24549	No
31	GOM_NL__2PRFIN20061110_025324_000000522052_00447_24549_3536.N1	10-NOV-2006 02:53:24	Bright	52.000	82	48Bet UMa	2.3650	10600.	104	24549	No
32	GOM_NL__2PRFIN20061110_025717_000000362052_00447_24549_3537.N1	10-NOV-2006 02:57:17	Bright	36.000	174	52Psi UMa	3.0040	4400.0	72	24549	No
33	GOM_NL__2PRFIN20061110_025848_000000292052_00447_24549_3538.N1	10-NOV-2006 02:58:48	Bright	28.500	152	12Alp2CVn	2.8900	11000.	57	24549	No
34	GOM_NL__2PRFIN20061110_030631_000000322052_00447_24549_3539.N1	10-NOV-2006 03:06:31	Bright	32.000	62	94Bet Leo	2.1360	9700.0	64	24549	No
35	GOM_NL__2PRFIN20061110_032533_000000332052_00447_24549_3540.N1	10-NOV-2006 03:25:33	Dark	33.000	113	Mu Vel	2.6920	5000.0	66	24549	No
36	GOM_NL__2PRFIN20061110_033110_000000352052_00448_24550_3524.N1	10-NOV-2006 03:31:10	Dark	35.000	46	Del Vel	1.9540	10600.	70	24550	No
37	GOM_NL__2PRFIN20061110_033245_000000402052_00448_24550_3525.N1	10-NOV-2006 03:32:45	Dark	40.000	34	Gam2Vel	1.7930	23000.	80	24550	No
38	GOM_NL__2PRFIN20061110_033745_000000422052_00448_24550_3526.N1	10-NOV-2006 03:37:45	Dark	42.000	2	Alp Car	-0.73600	7000.0	84	24550	No
39	GOM_NL__2PRFIN20061110_034705_000000312052_00448_24550_3527.N1	10-NOV-2006 03:47:05	Straylight	30.500	157	The1Eri	2.9060	9300.0	61	24550	No
40	GOM_NL__2PRFIN20061110_040029_000000492052_00448_24550_3528.N1	10-NOV-2006 04:00:29	Twilight_stray	48.500	94	92Alp Cet	2.5260	3100.0	97	24550	No
41	GOM_NL__2PRFIN20061110_040507_000000322052_00448_24550_3529.N1	10-NOV-2006 04:05:07	Bright	31.500	105	6Bet Ari	2.6450	8900.0	63	24550	No
42	GOM_NL__2PRFIN20061110_040916_000000302052_00448_24550_3530.N1	10-NOV-2006 04:09:16	Bright	30.000	173	4Bet Tri	3.0040	8900.0	60	24550	No

3. Quality information per product

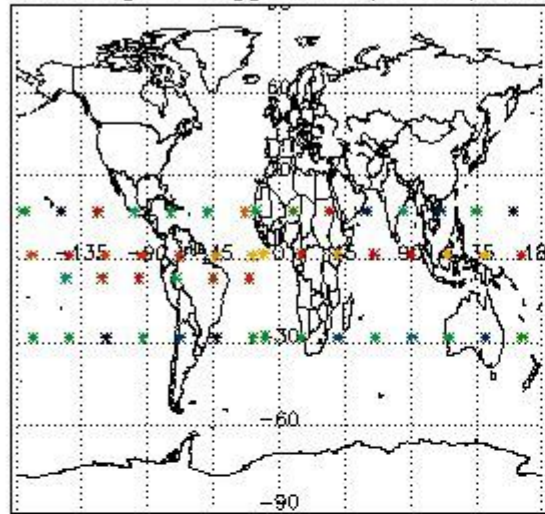
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

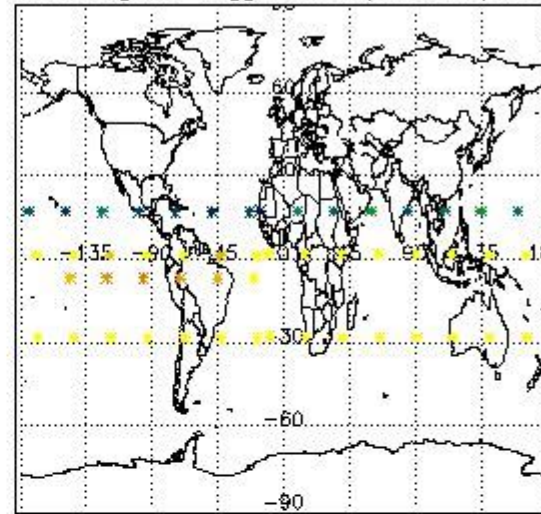


3.2 Plot quality information per product (world map)

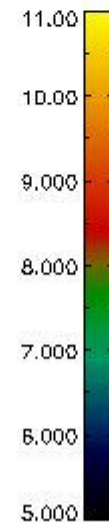
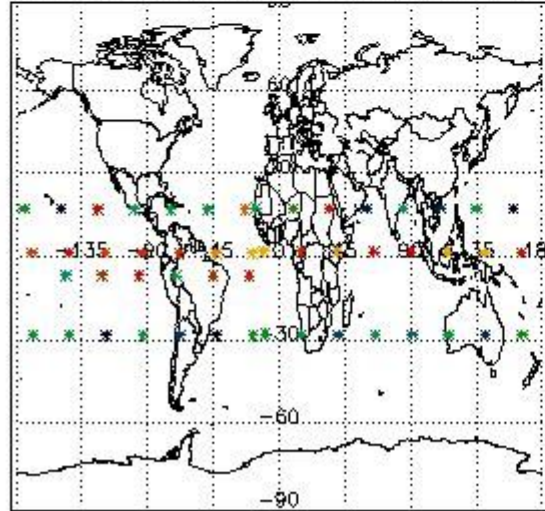
Percentage of flagged data per O3 profile



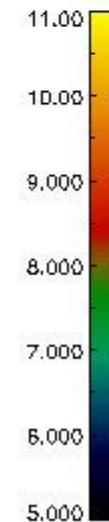
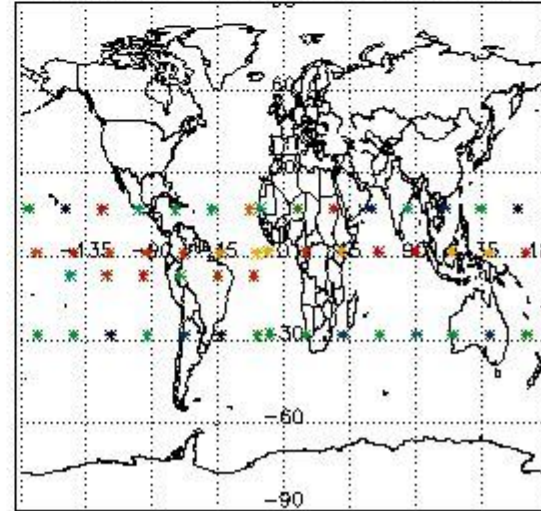
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

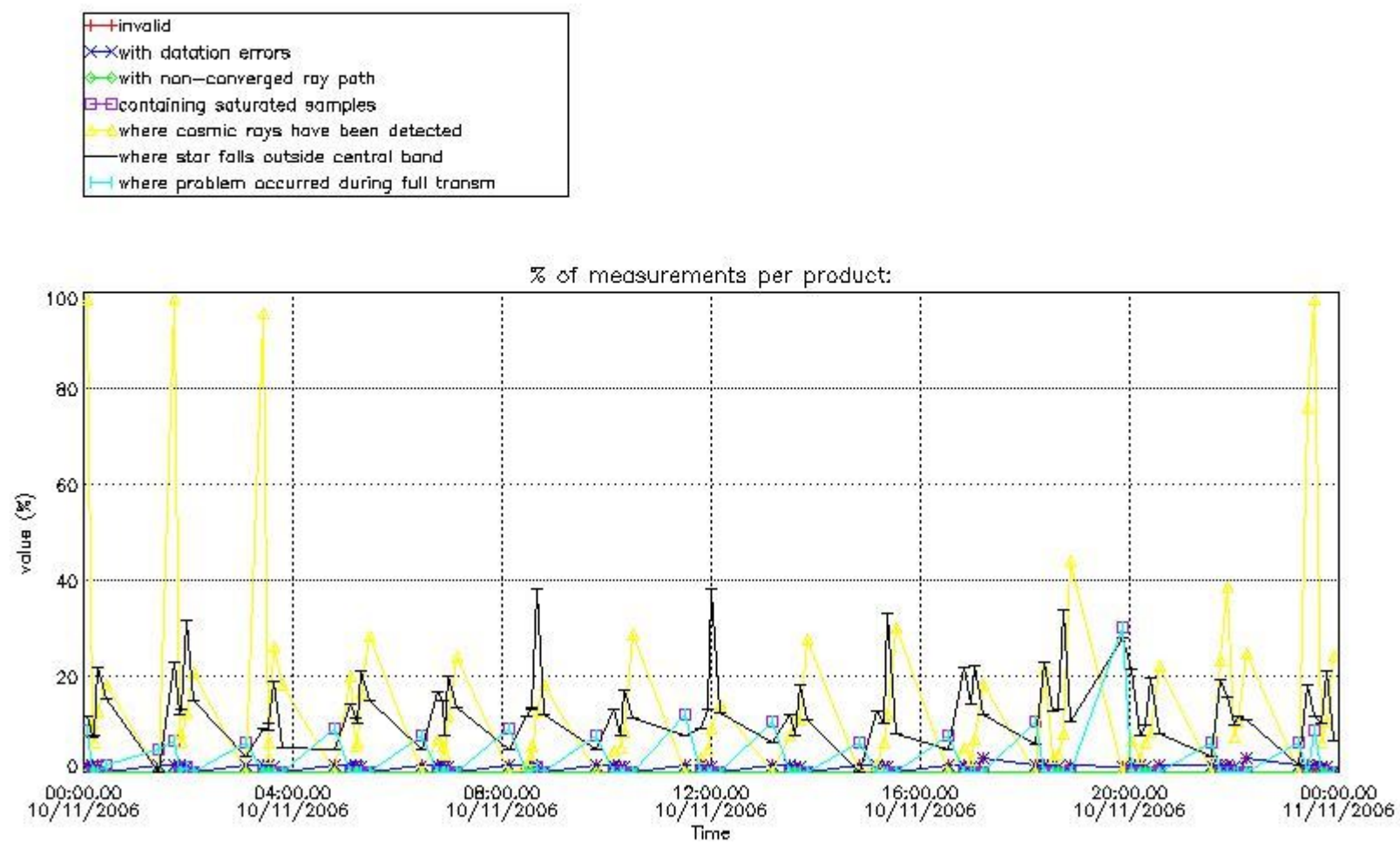


4. Level 1 quality information per product

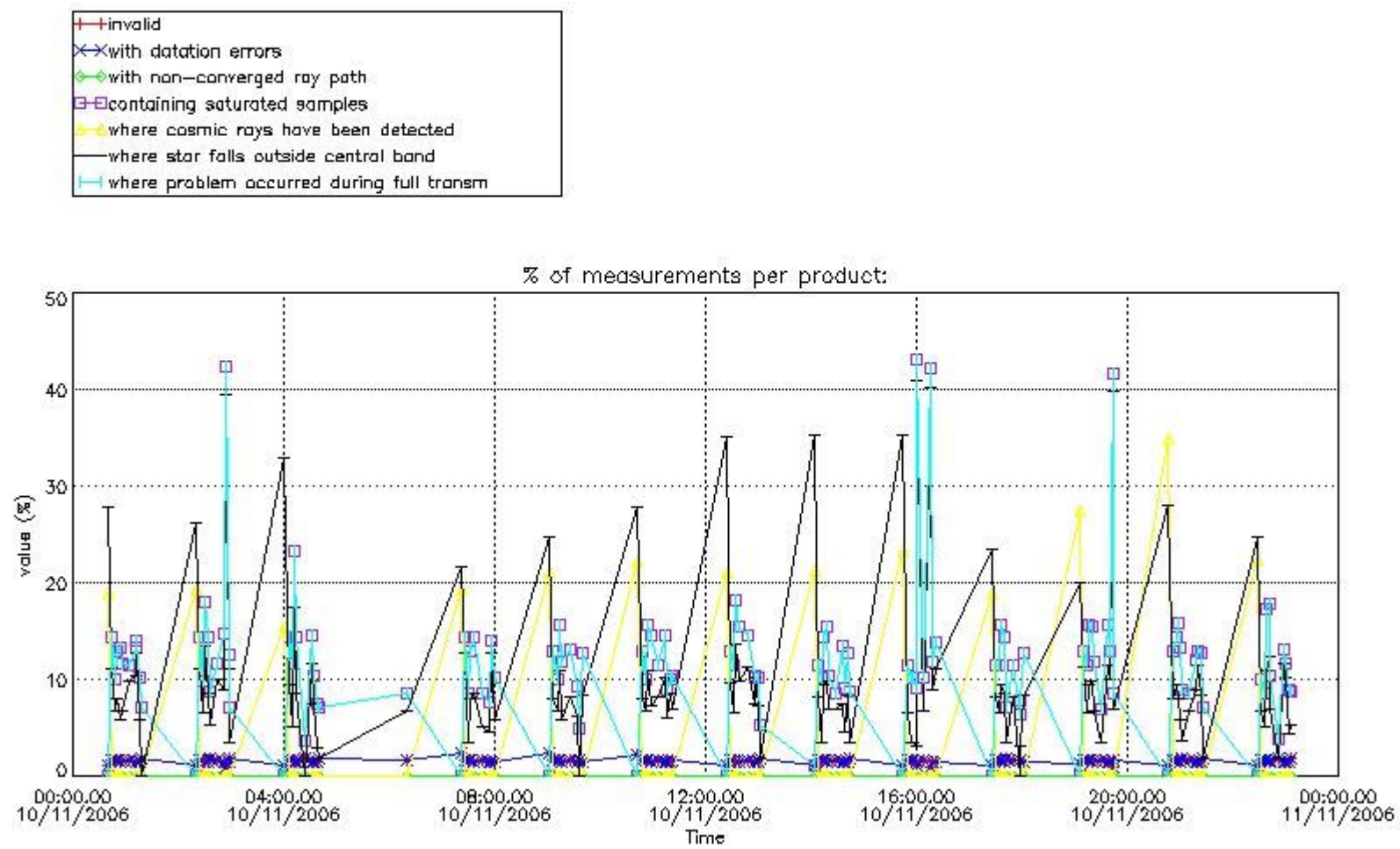
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



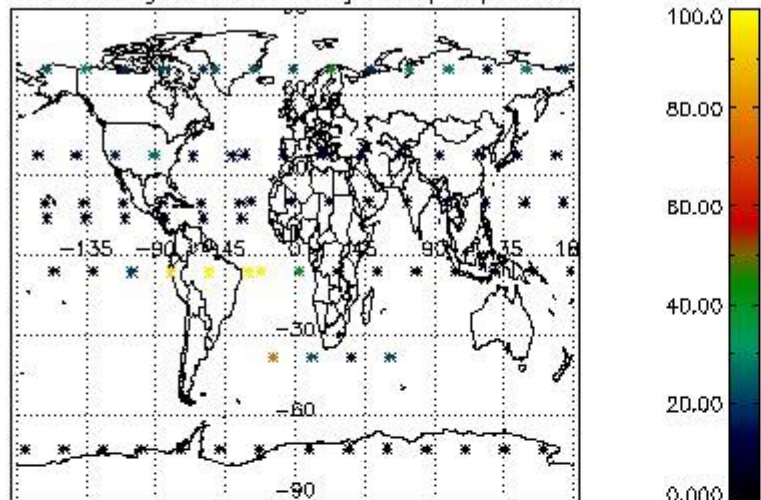
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



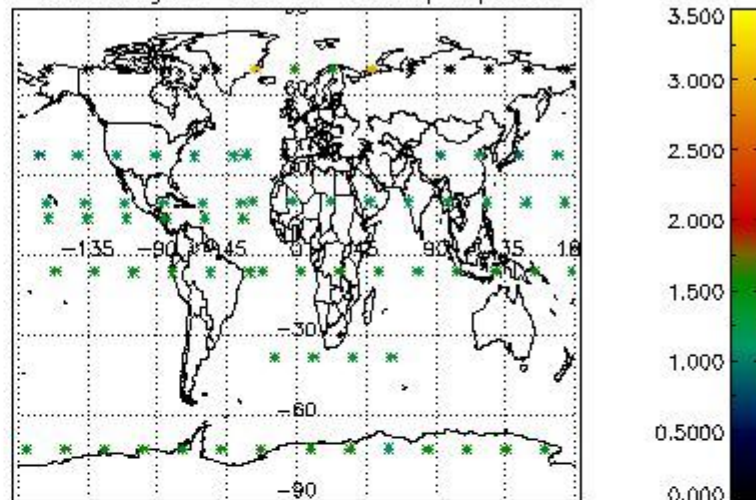
4.2 Plot quality information per product coming from level 1b processing (world map)

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

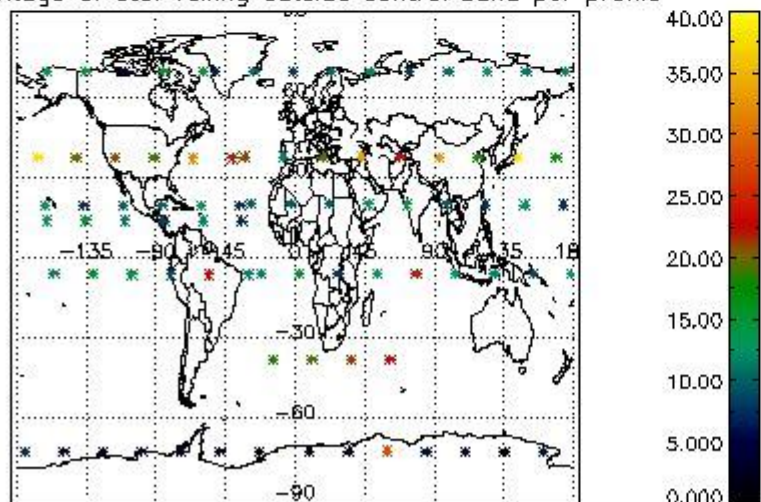
Percentage of cosmic ray hits per profile



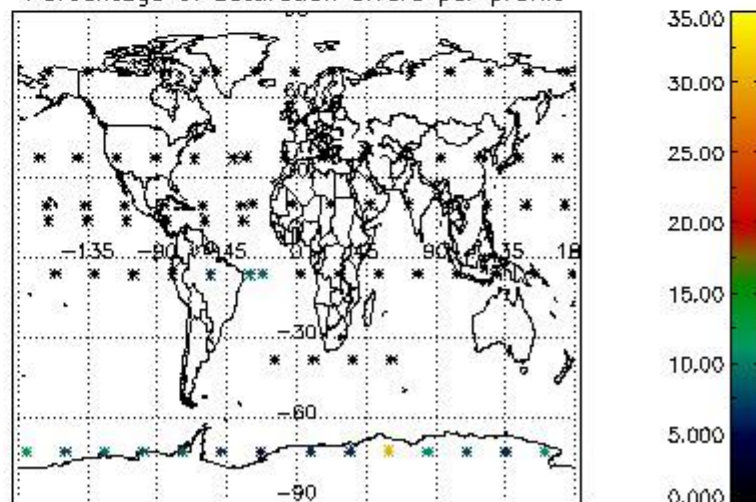
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

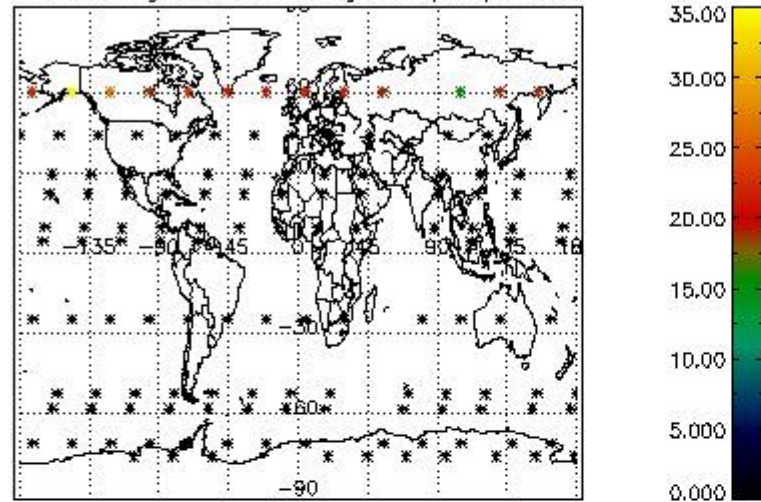


Percentage of saturation errors per profile

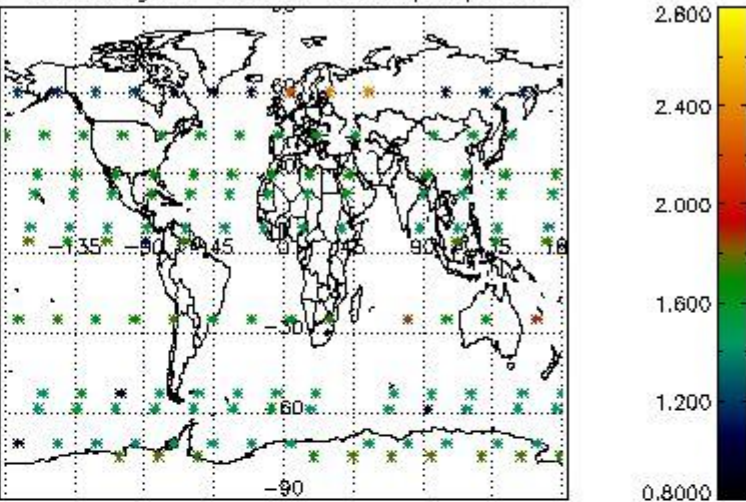


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

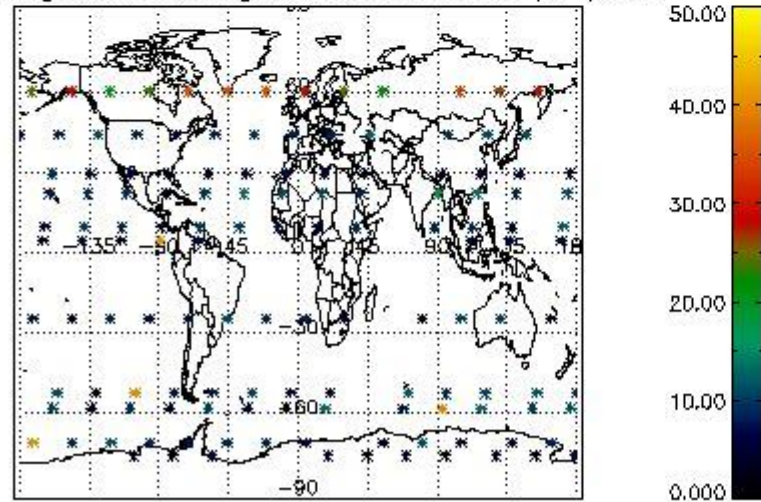
Percentage of cosmic ray hits per profile



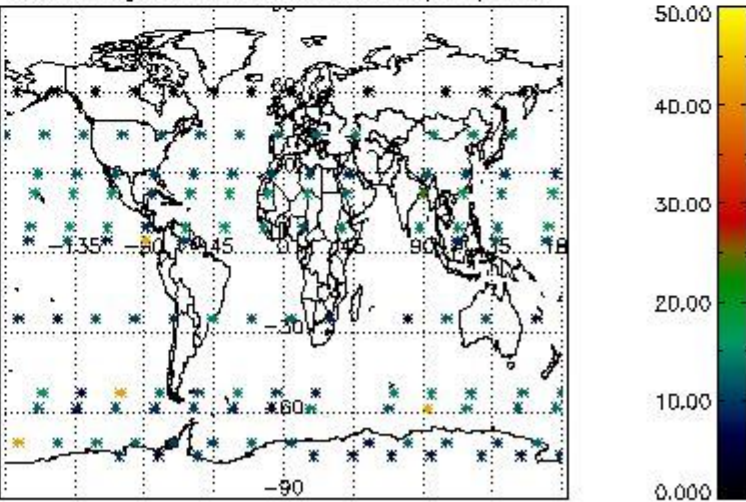
Percentage of datation errors per profile



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

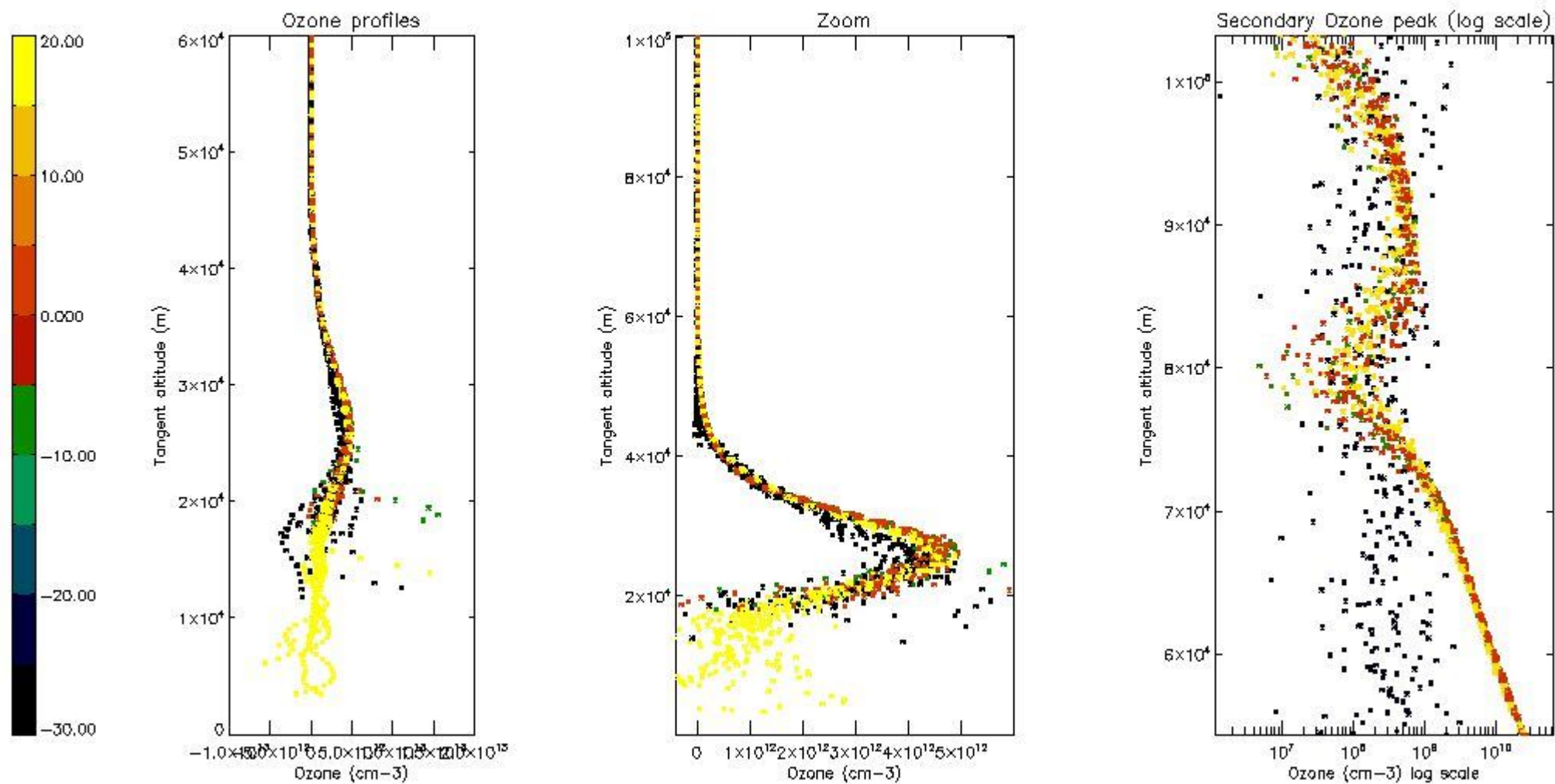
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	18

STD < 10	15
STD < 5	12

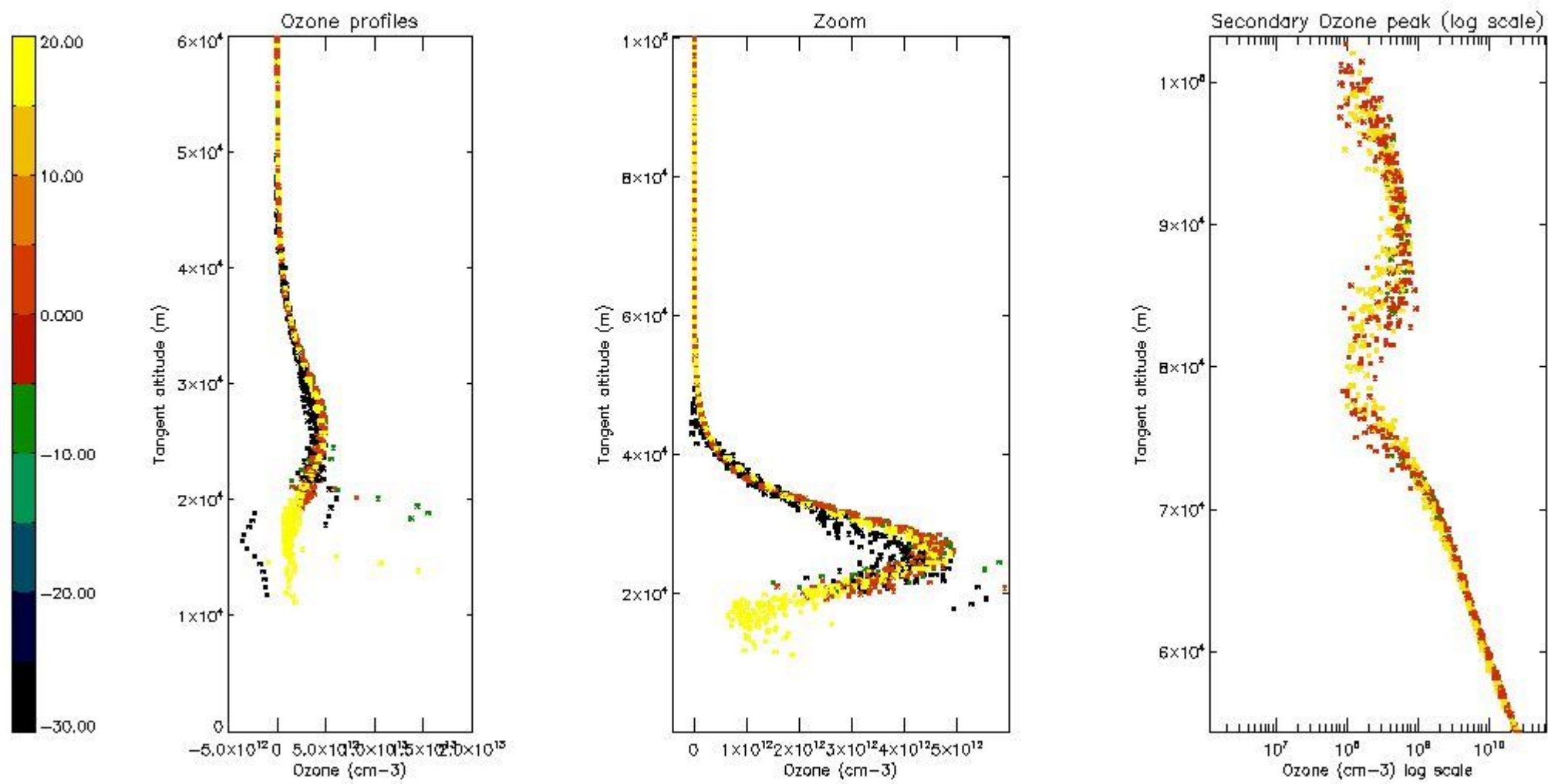
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



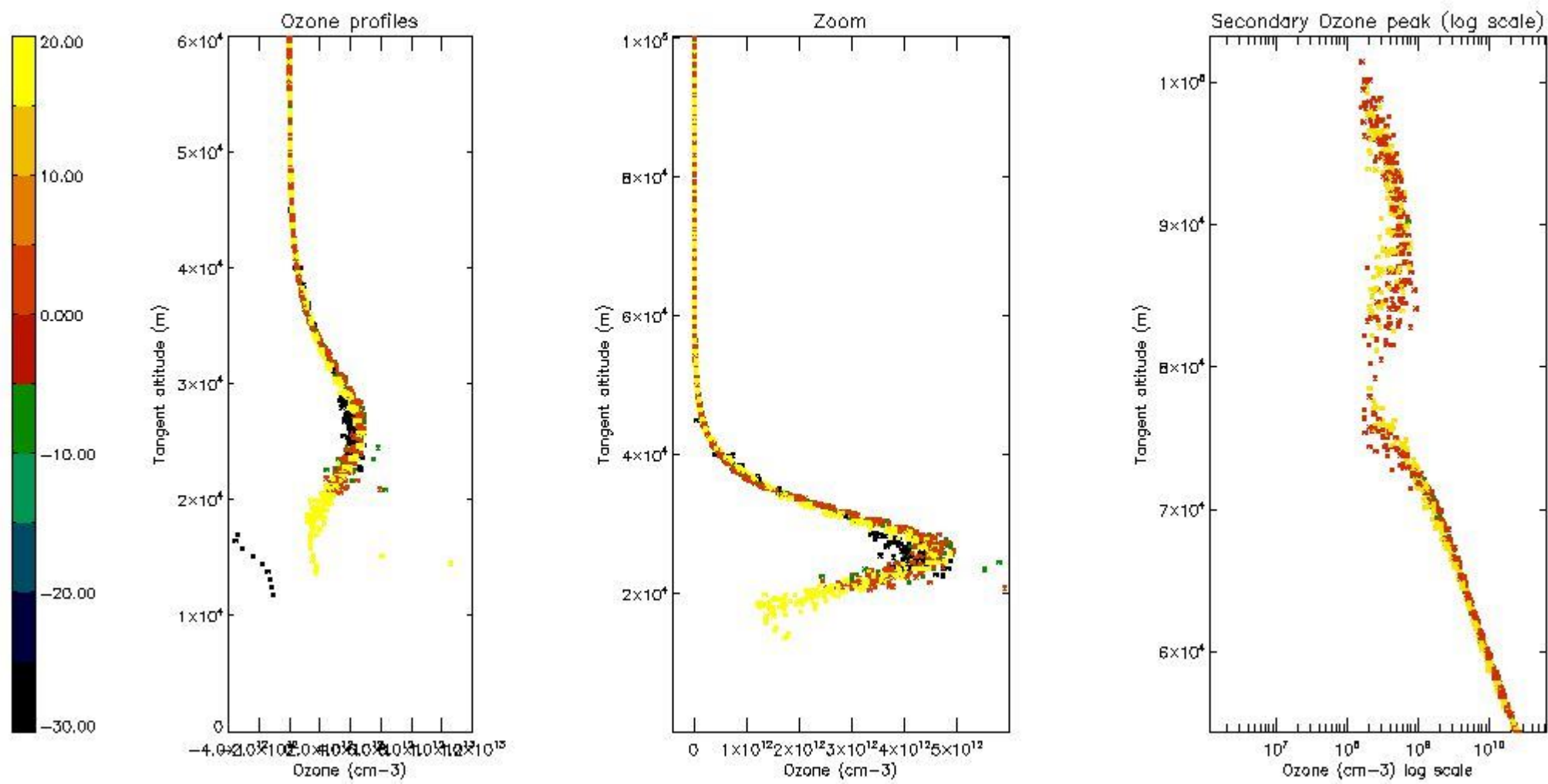
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



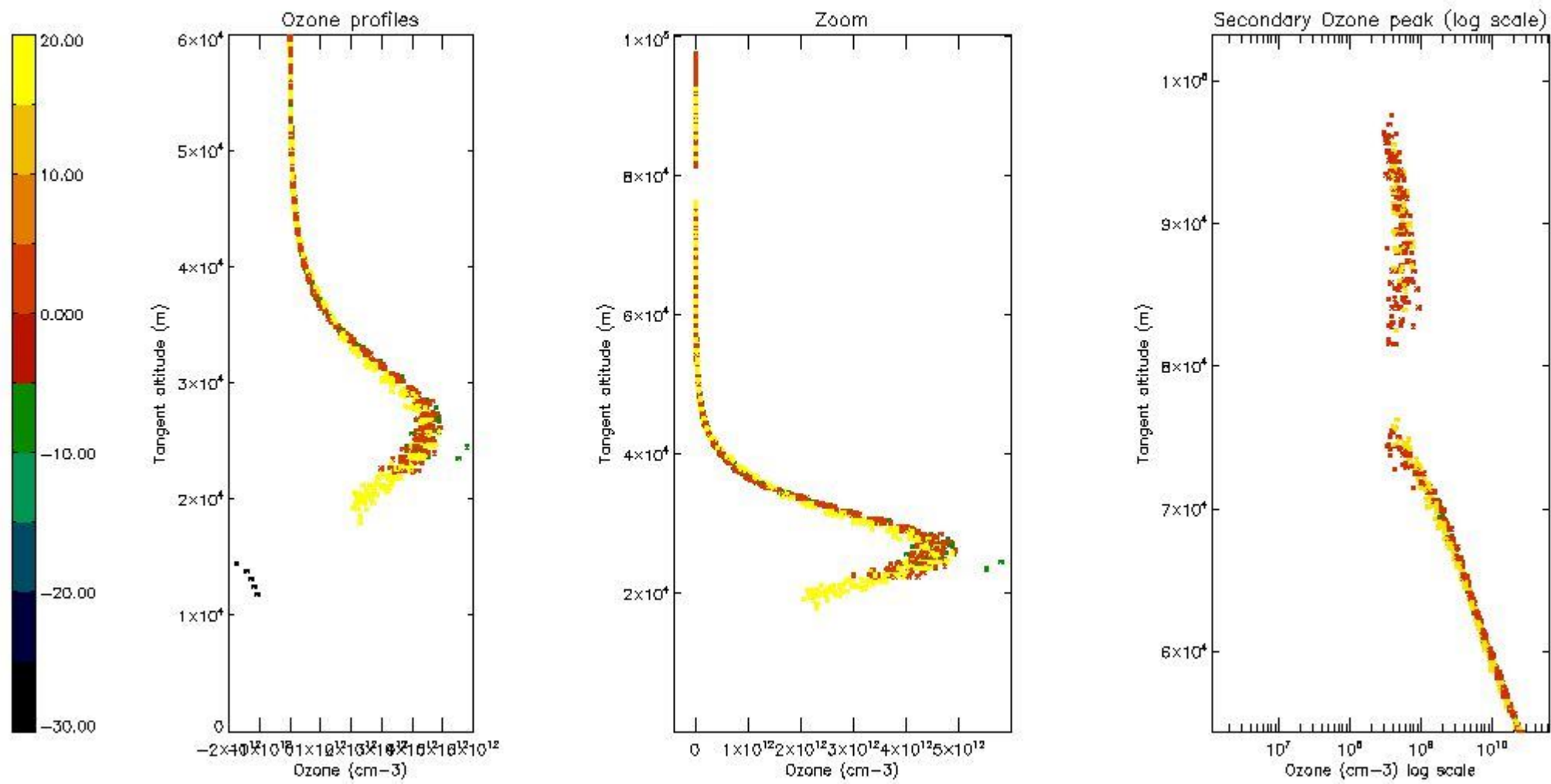
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



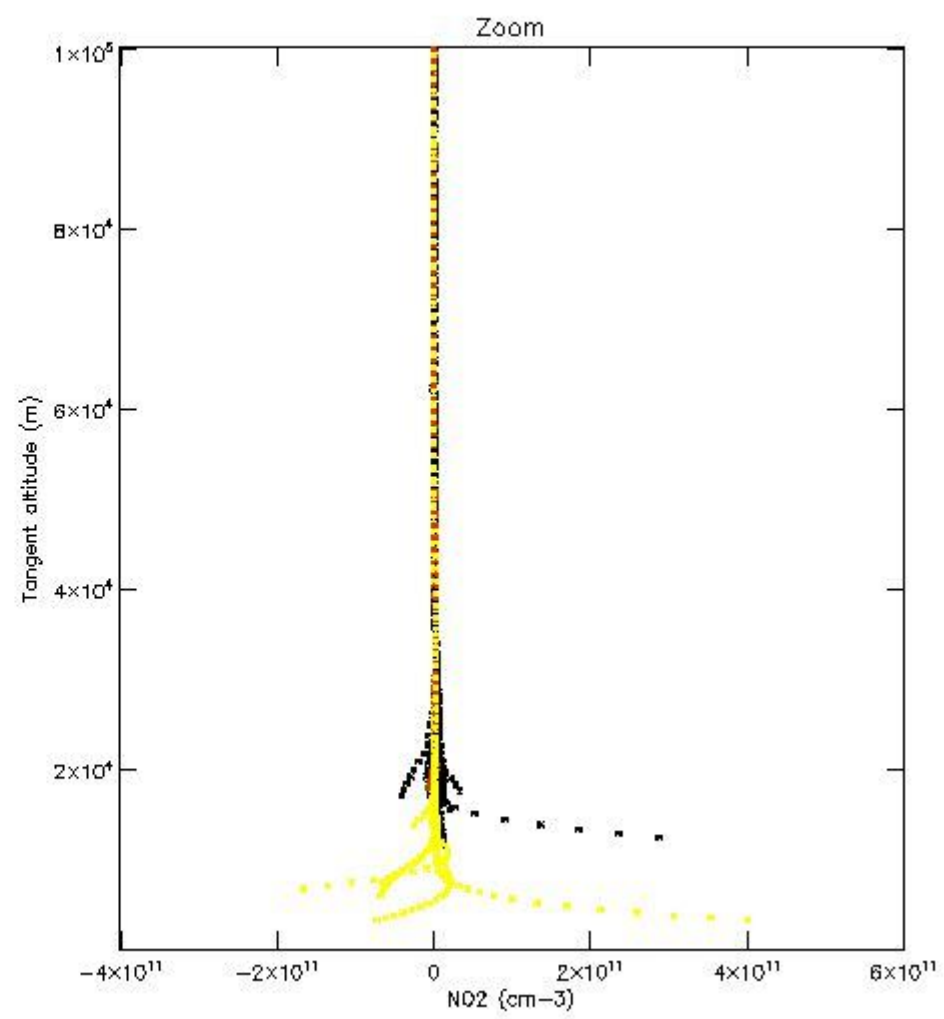
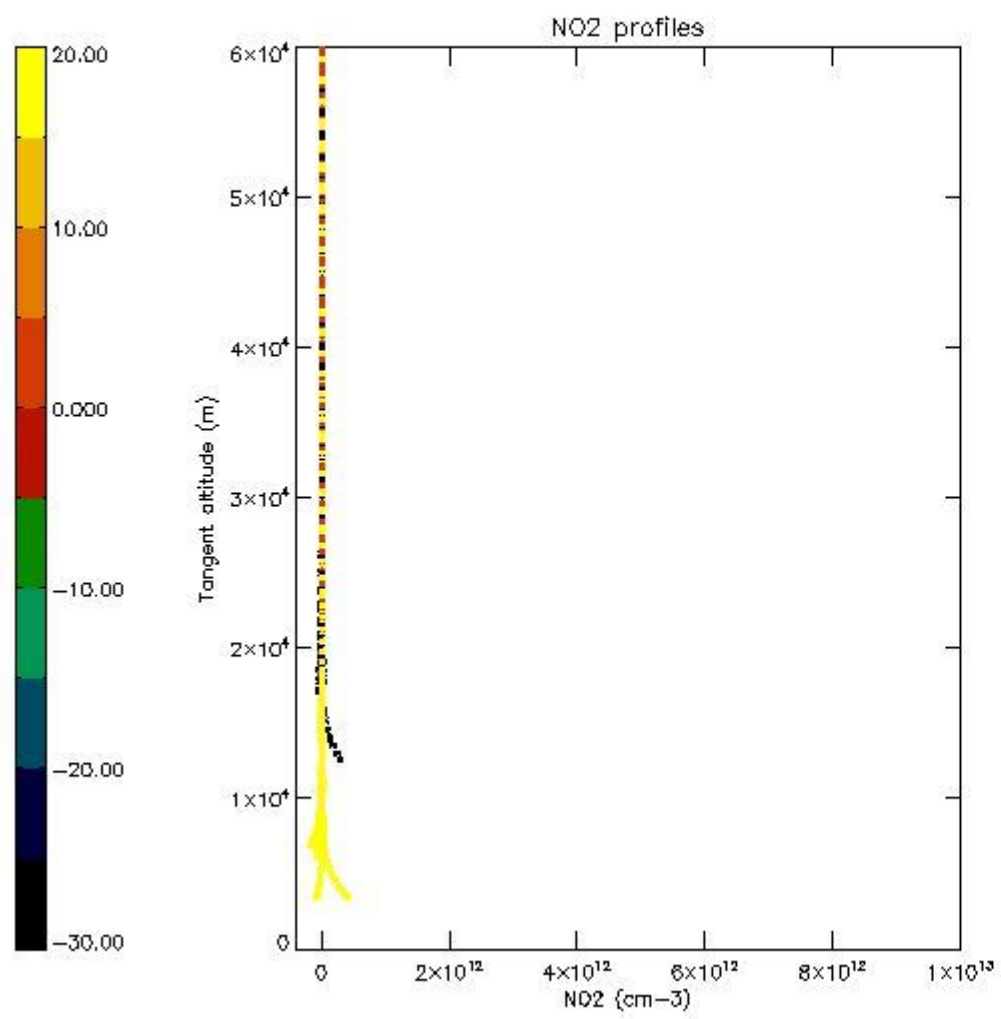
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



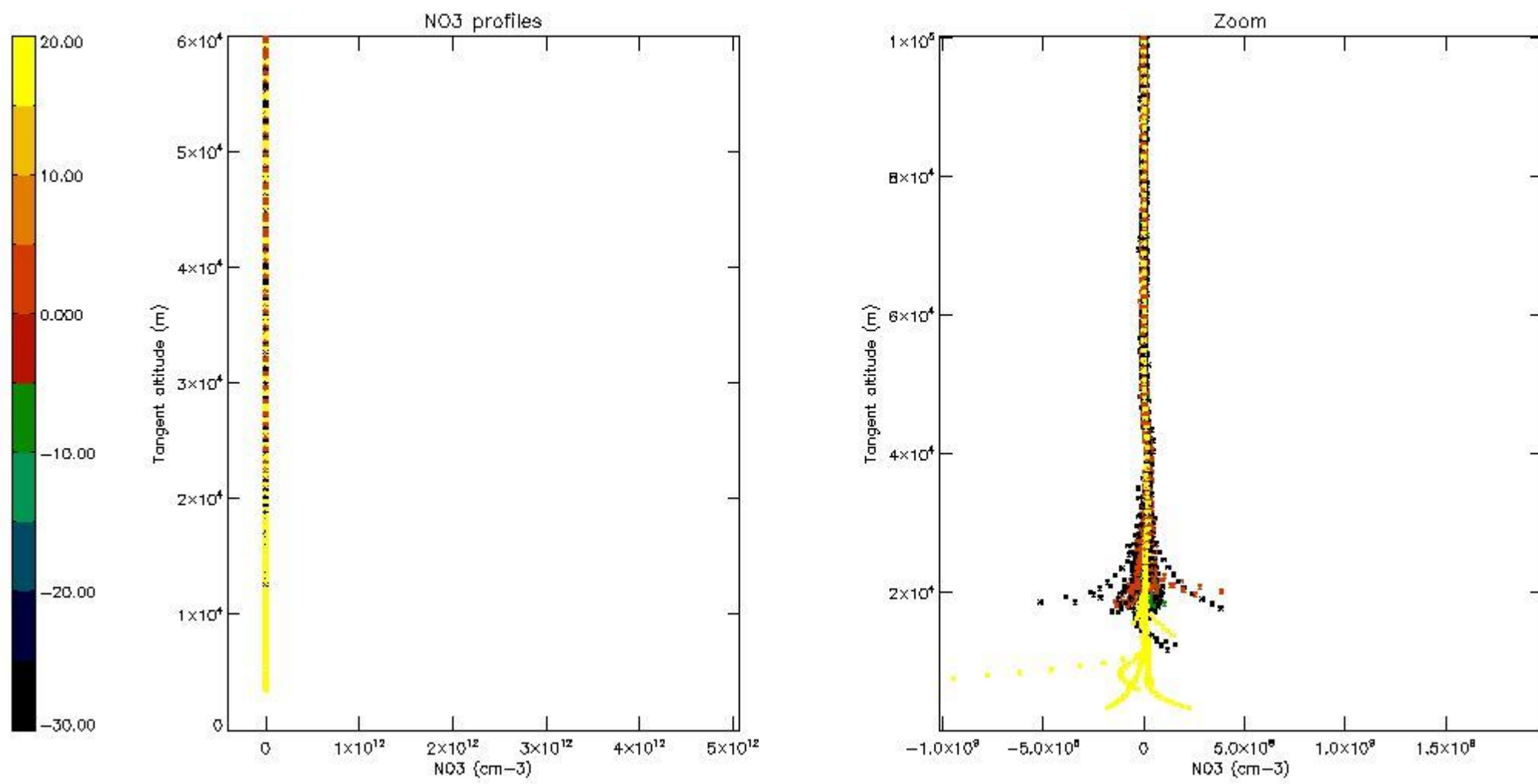
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



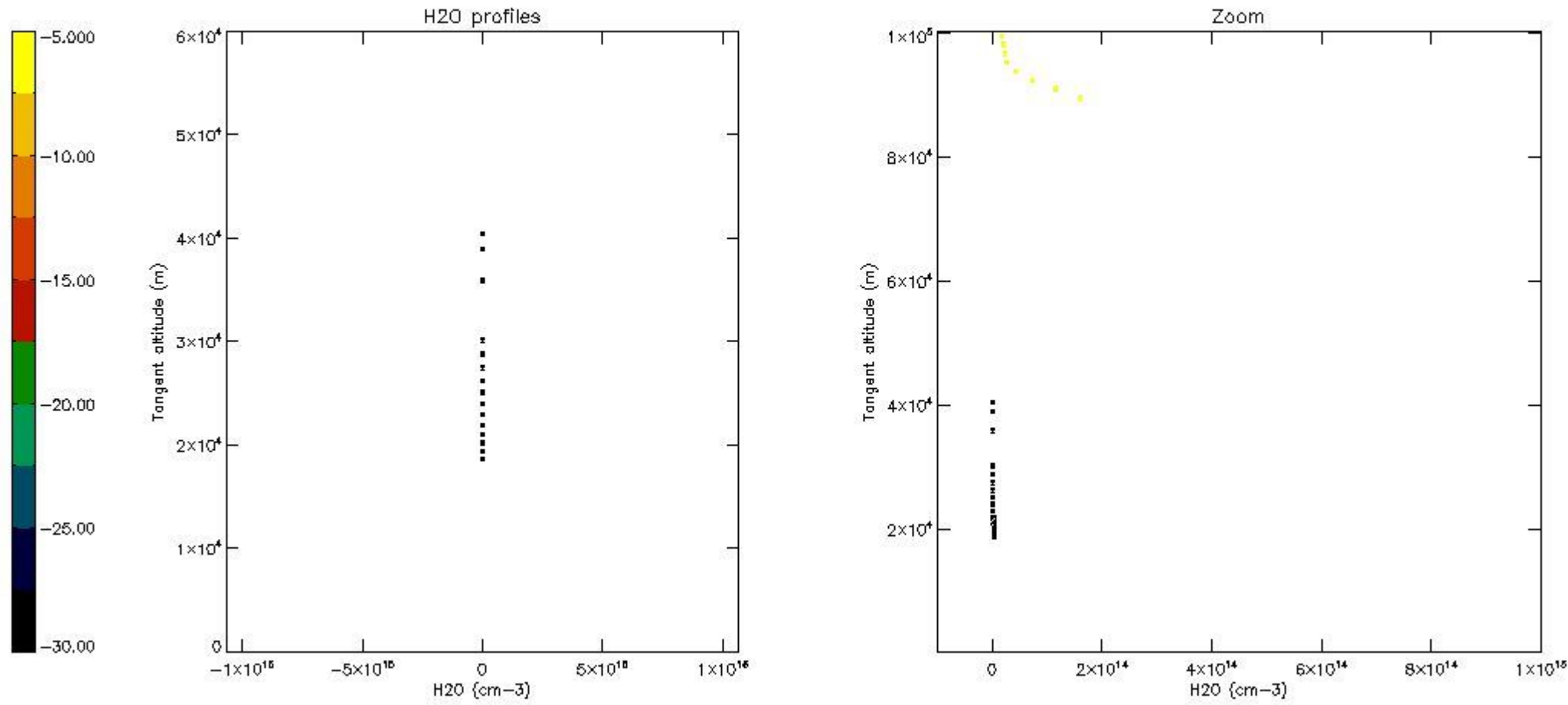
5.7 Plot NO3 profiles for all STD (dark without errors)

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	10-NOV-2006 00:04:20
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-NOV-2006 00:04:20
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-NOV-2006 00:04:20

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

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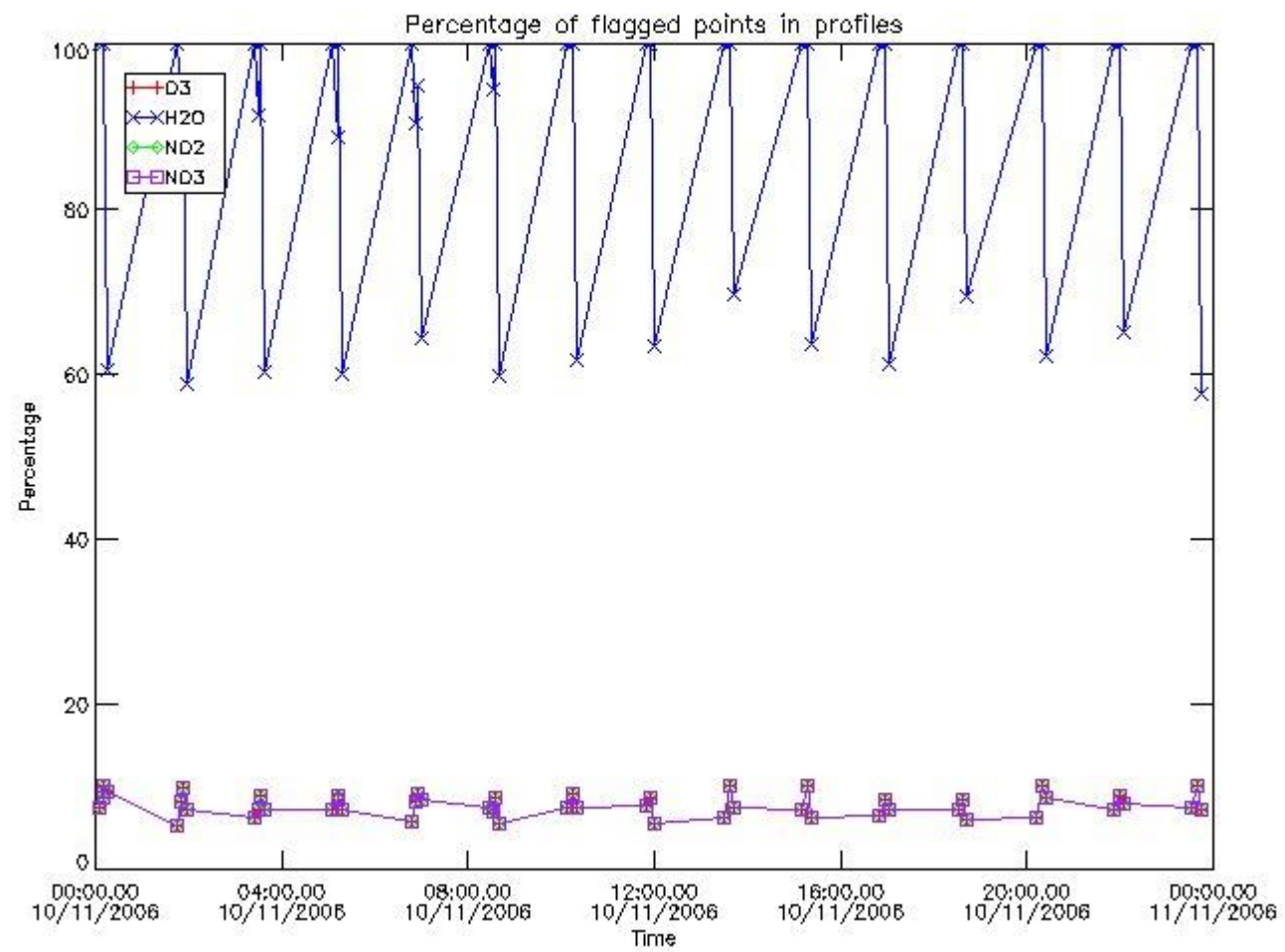
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20061110_000420_000000342052_00445_24547_3540.N1	10-NOV-2006 00:04:20	Dark	34.000	113	Mu Vel	2.6920	5000.0	68	24547	No
2	GOM_NL__2PRFIN20061110_000957_000000352052_00446_24548_3524.N1	10-NOV-2006 00:09:57	Dark	35.000	46	Del Vel	1.9540	10600.	70	24548	No
3	GOM_NL__2PRFIN20061110_001131_000000402052_00446_24548_3525.N1	10-NOV-2006 00:11:31	Dark	40.000	34	Gam2Vel	1.7930	23000.	80	24548	No
4	GOM_NL__2PRFIN20061110_001632_000000442052_00446_24548_3526.N1	10-NOV-2006 00:16:32	Dark	43.500	2	Alp Car	-0.73600	7000.0	87	24548	No
5	GOM_NL__2PRFIN20061110_002552_000000332052_00446_24548_3527.N1	10-NOV-2006 00:25:52	Straylight	33.000	157	The1Eri	2.9060	9300.0	66	24548	No
6	GOM_NL__2PRFIN20061110_003917_000000452052_00446_24548_3528.N1	10-NOV-2006 00:39:17	Twilight_stray	45.000	94	92Alp Cet	2.5260	3100.0	90	24548	No
7	GOM_NL__2PRFIN20061110_004355_000000322052_00446_24548_3529.N1	10-NOV-2006 00:43:55	Bright	31.500	105	6Bet Ari	2.6450	8900.0	63	24548	No
8	GOM_NL__2PRFIN20061110_004805_000000302052_00446_24548_3530.N1	10-NOV-2006 00:48:05	Bright	30.000	173	4Bet Tri	3.0040	8900.0	60	24548	No
9	GOM_NL__2PRFIN20061110_005008_000000312052_00446_24548_3531.N1	10-NOV-2006 00:50:08	Bright	31.000	73	57Gam1And	2.2600	13100.	62	24548	No
10	GOM_NL__2PRFIN20061110_005345_000000342052_00446_24548_3532.N1	10-NOV-2006 00:53:45	Bright	34.000	35	33Alp Per	1.7950	6250.0	68	24548	No
11	GOM_NL__2PRFIN20061110_005503_000000302052_00446_24548_3533.N1	10-NOV-2006 00:55:03	Bright	30.000	110	37Del Cas	2.6780	8900.0	60	24548	No
12	GOM_NL__2PRFIN20061110_010316_000000312052_00446_24548_3534.N1	10-NOV-2006 01:03:16	Bright	30.500	49	1Alp UMi	1.9900	6300.0	61	24548	No
13	GOM_NL__2PRFIN20061110_011110_000000342052_00446_24548_3535.N1	10-NOV-2006 01:11:10	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	24548	No
14	GOM_NL__2PRFIN20061110_011248_000000362052_00446_24548_3536.N1	10-NOV-2006 01:12:48	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	24548	No
15	GOM_NL__2PRFIN20061110_011641_000000352052_00446_24548_3537.N1	10-NOV-2006 01:16:41	Bright	34.500	174	52Psi UMa	3.0040	4400.0	69	24548	No
16	GOM_NL__2PRFIN20061110_011812_000000282052_00446_24548_3538.N1	10-NOV-2006 01:18:12	Bright	28.000	152	12Alp2CVn	2.8900	11000.	56	24548	No
17	GOM_NL__2PRFIN20061110_012554_000000322052_00446_24548_3539.N1	10-NOV-2006 01:25:54	Bright	31.500	62	94Bet Leo	2.1360	9700.0	63	24548	No
18	GOM_NL__2PRFIN20061110_014457_000000392052_00446_24548_3540.N1	10-NOV-2006 01:44:57	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	24548	No
19	GOM_NL__2PRFIN20061110_015033_000000372052_00447_24549_3524.N1	10-NOV-2006 01:50:33	Dark	37.000	46	Del Vel	1.9540	10600.	74	24549	No
20	GOM_NL__2PRFIN20061110_015208_000000422052_00447_24549_3525.N1	10-NOV-2006 01:52:08	Dark	41.500	34	Gam2Vel	1.7930	23000.	83	24549	No
21	GOM_NL__2PRFIN20061110_015708_000000492052_00447_24549_3526.N1	10-NOV-2006 01:57:08	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	24549	No
22	GOM_NL__2PRFIN20061110_020628_000000342052_00447_24549_3527.N1	10-NOV-2006 02:06:28	Straylight	33.500	157	The1Eri	2.9060	9300.0	67	24549	No
23	GOM_NL__2PRFIN20061110_021953_000000442052_00447_24549_3528.N1	10-NOV-2006 02:19:53	Twilight_stray	44.000	94	92Alp Cet	2.5260	3100.0	88	24549	No
24	GOM_NL__2PRFIN20061110_022431_000000322052_00447_24549_3529.N1	10-NOV-2006 02:24:31	Bright	31.500	105	6Bet Ari	2.6450	8900.0	63	24549	No
25	GOM_NL__2PRFIN20061110_022840_000000312052_00447_24549_3530.N1	10-NOV-2006 02:28:40	Bright	30.500	173	4Bet Tri	3.0040	8900.0	61	24549	No
26	GOM_NL__2PRFIN20061110_023044_000000342052_00447_24549_3531.N1	10-NOV-2006 02:30:44	Bright	33.500	73	57Gam1And	2.2600	13100.	67	24549	No
27	GOM_NL__2PRFIN20061110_023420_000000352052_00447_24549_3532.N1	10-NOV-2006 02:34:20	Bright	35.000	35	33Alp Per	1.7950	6250.0	70	24549	No
28	GOM_NL__2PRFIN20061110_023539_000000292052_00447_24549_3533.N1	10-NOV-2006 02:35:39	Bright	28.500	110	37Del Cas	2.6780	8900.0	57	24549	No
29	GOM_NL__2PRFIN20061110_024351_000000302052_00447_24549_3534.N1	10-NOV-2006 02:43:51	Bright	30.000	49	1Alp UMi	1.9900	6300.0	60	24549	No
30	GOM_NL__2PRFIN20061110_025146_000000342052_00447_24549_3535.N1	10-NOV-2006 02:51:46	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	24549	No
31	GOM_NL__2PRFIN20061110_025324_000000522052_00447_24549_3536.N1	10-NOV-2006 02:53:24	Bright	52.000	82	48Bet UMa	2.3650	10600.	104	24549	No
32	GOM_NL__2PRFIN20061110_025717_000000362052_00447_24549_3537.N1	10-NOV-2006 02:57:17	Bright	36.000	174	52Psi UMa	3.0040	4400.0	72	24549	No
33	GOM_NL__2PRFIN20061110_025848_000000292052_00447_24549_3538.N1	10-NOV-2006 02:58:48	Bright	28.500	152	12Alp2CVn	2.8900	11000.	57	24549	No
34	GOM_NL__2PRFIN20061110_030631_000000322052_00447_24549_3539.N1	10-NOV-2006 03:06:31	Bright	32.000	62	94Bet Leo	2.1360	9700.0	64	24549	No
35	GOM_NL__2PRFIN20061110_032533_000000332052_00447_24549_3540.N1	10-NOV-2006 03:25:33	Dark	33.000	113	Mu Vel	2.6920	5000.0	66	24549	No
36	GOM_NL__2PRFIN20061110_033110_000000352052_00448_24550_3524.N1	10-NOV-2006 03:31:10	Dark	35.000	46	Del Vel	1.9540	10600.	70	24550	No
37	GOM_NL__2PRFIN20061110_033245_000000402052_00448_24550_3525.N1	10-NOV-2006 03:32:45	Dark	40.000	34	Gam2Vel	1.7930	23000.	80	24550	No
38	GOM_NL__2PRFIN20061110_033745_000000422052_00448_24550_3526.N1	10-NOV-2006 03:37:45	Dark	42.000	2	Alp Car	-0.73600	7000.0	84	24550	No
39	GOM_NL__2PRFIN20061110_034705_000000312052_00448_24550_3527.N1	10-NOV-2006 03:47:05	Straylight	30.500	157	The1Eri	2.9060	9300.0	61	24550	No
40	GOM_NL__2PRFIN20061110_040029_000000492052_00448_24550_3528.N1	10-NOV-2006 04:00:29	Twilight_stray	48.500	94	92Alp Cet	2.5260	3100.0	97	24550	No
41	GOM_NL__2PRFIN20061110_040507_000000322052_00448_24550_3529.N1	10-NOV-2006 04:05:07	Bright	31.500	105	6Bet Ari	2.6450	8900.0	63	24550	No
42	GOM_NL__2PRFIN20061110_040916_000000302052_00448_24550_3530.N1	10-NOV-2006 04:09:16	Bright	30.000	173	4Bet Tri	3.0040	8900.0	60	24550	No

3. Quality information per product

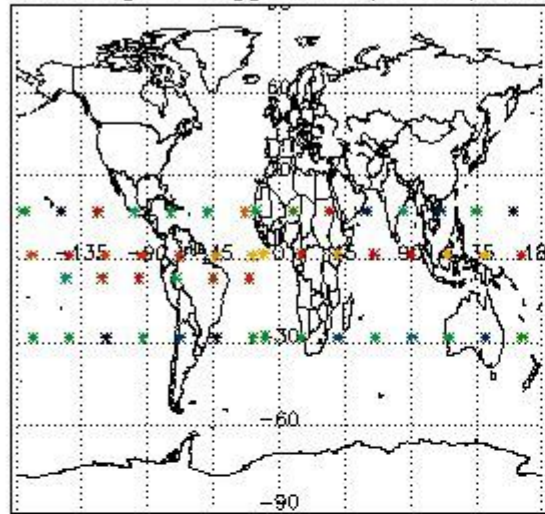
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

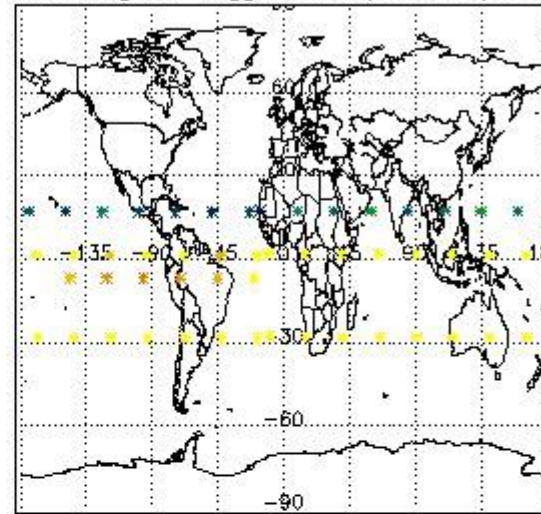


3.2 Plot quality information per product (world map)

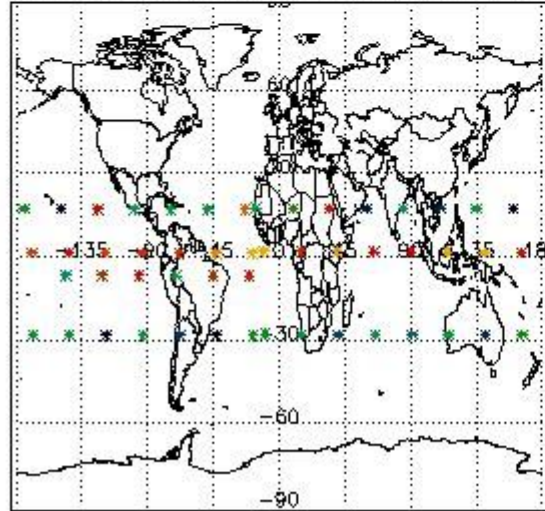
Percentage of flagged data per O3 profile



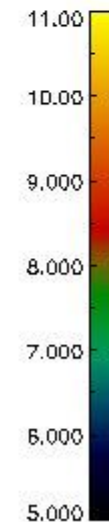
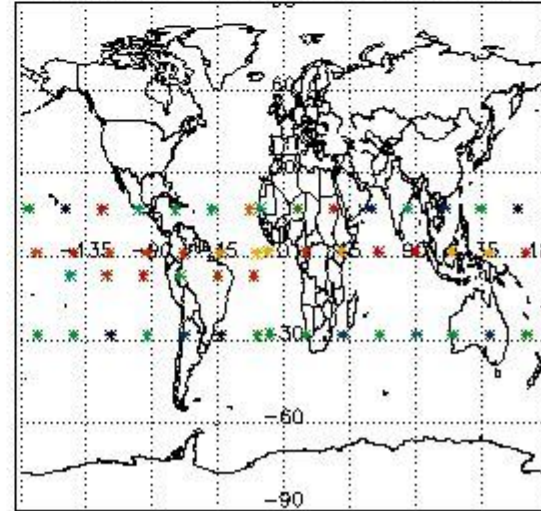
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

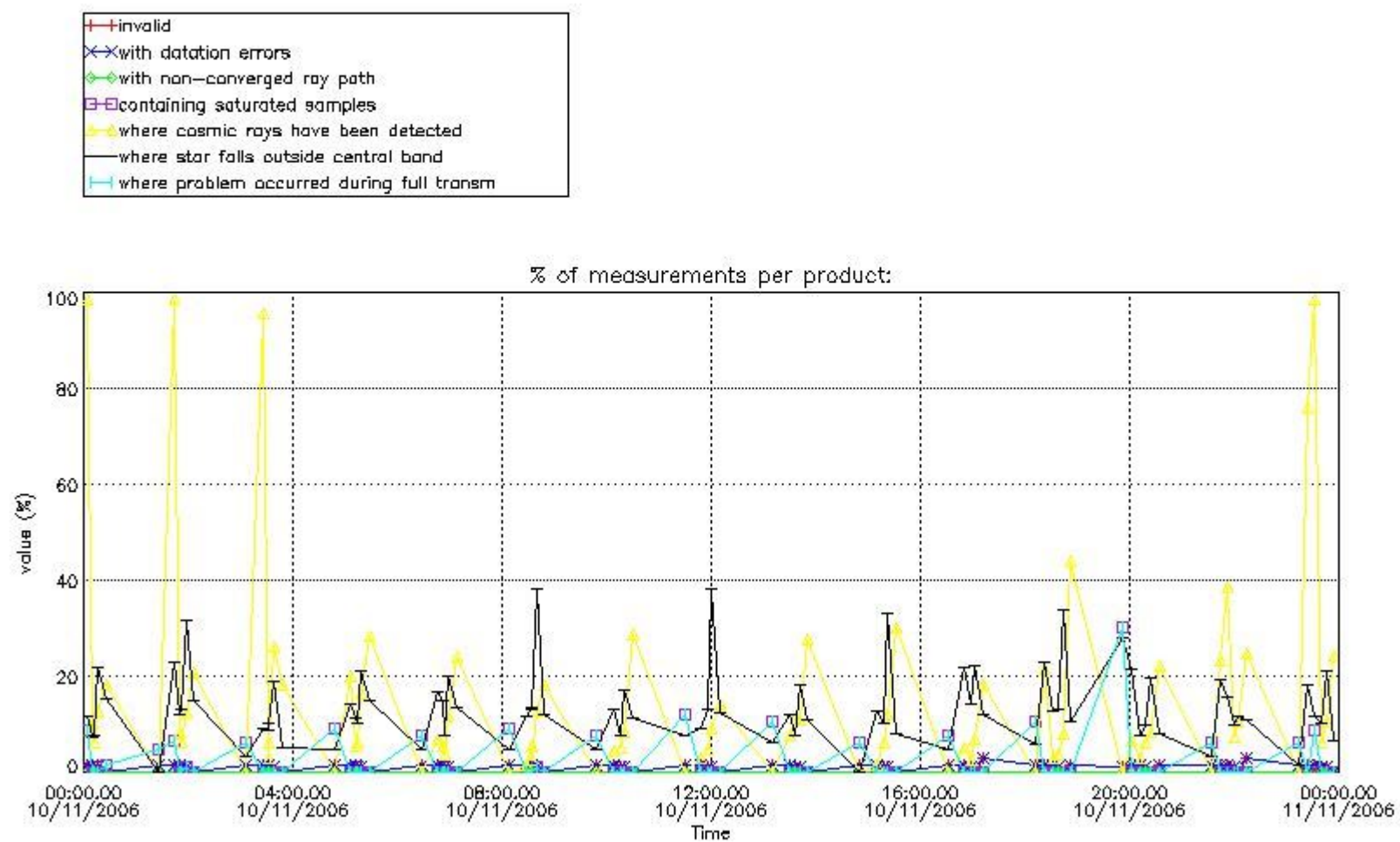


4. Level 1 quality information per product

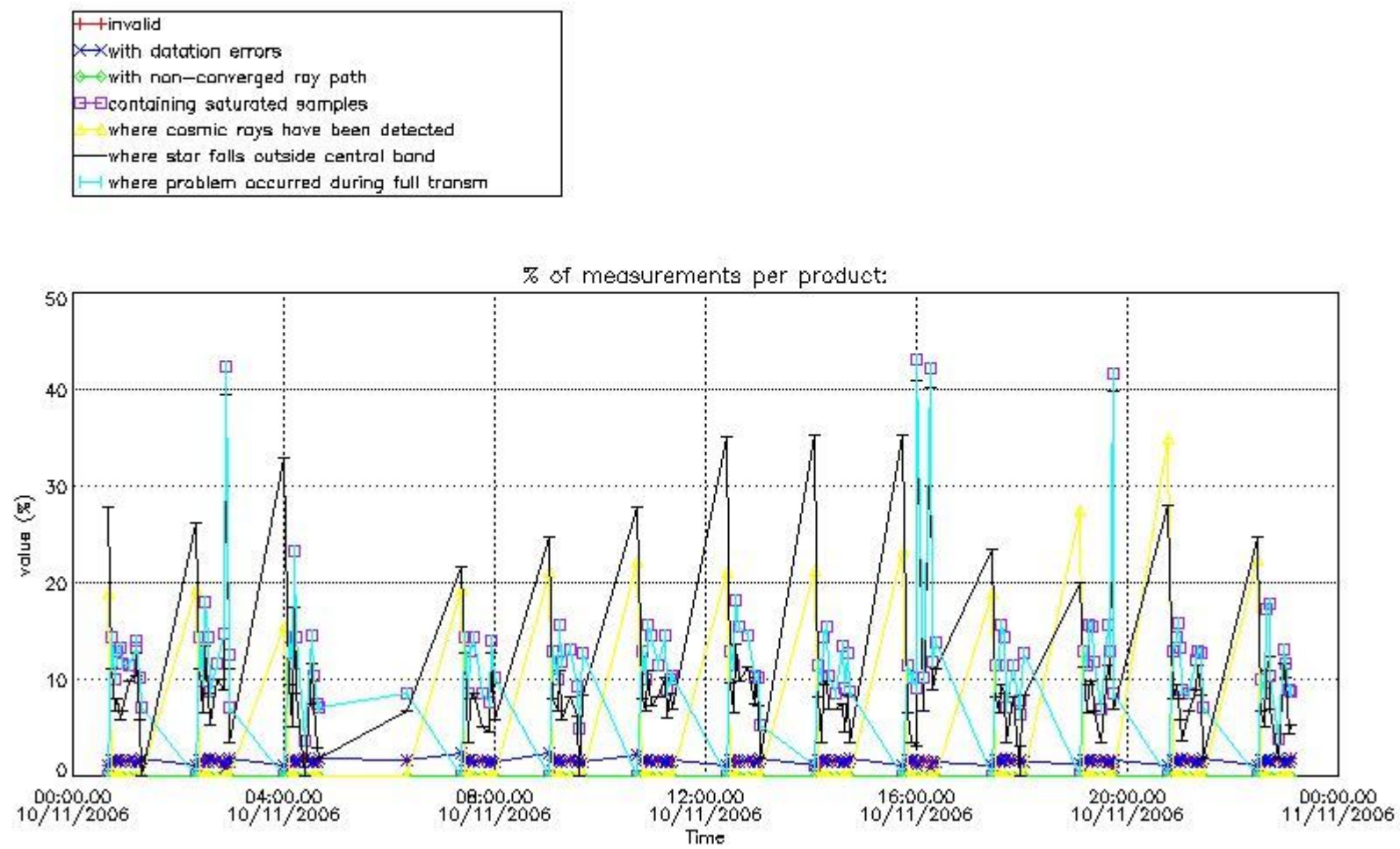
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



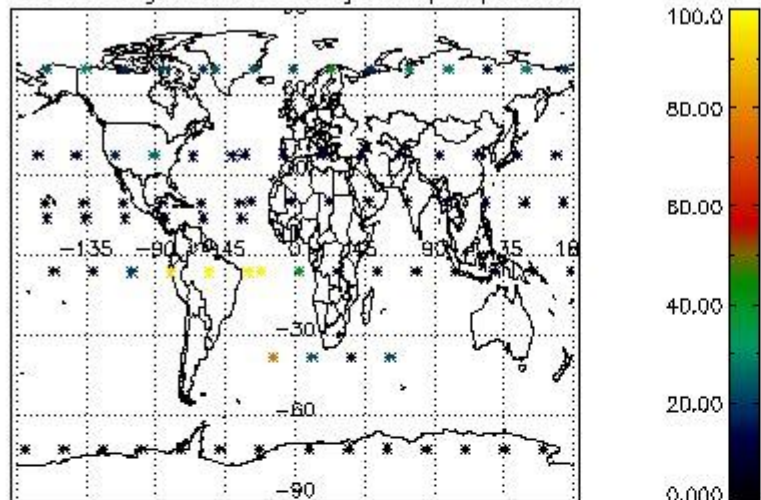
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



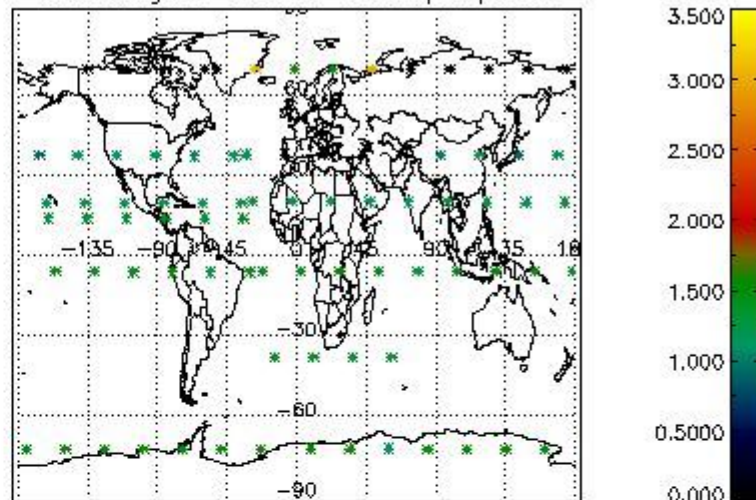
4.2 Plot quality information per product coming from level 1b processing (world map)

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

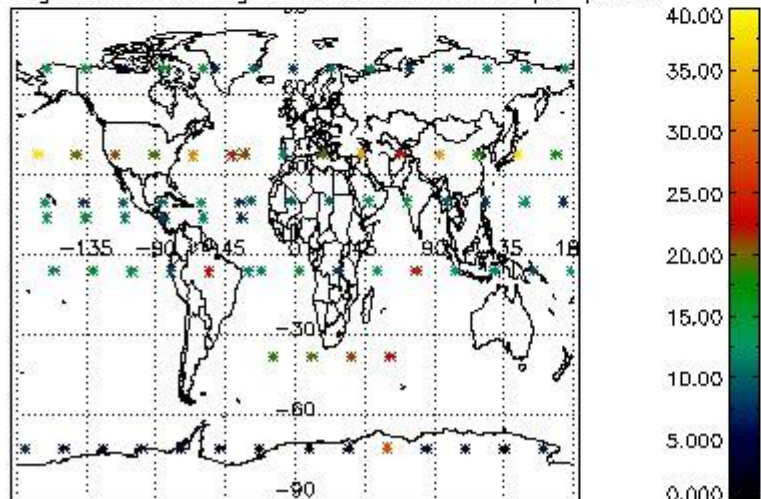
Percentage of cosmic ray hits per profile



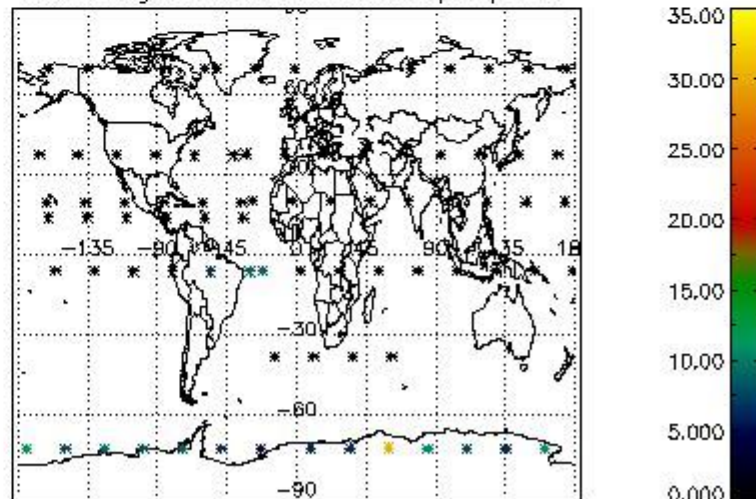
Percentage of datation errors per profile



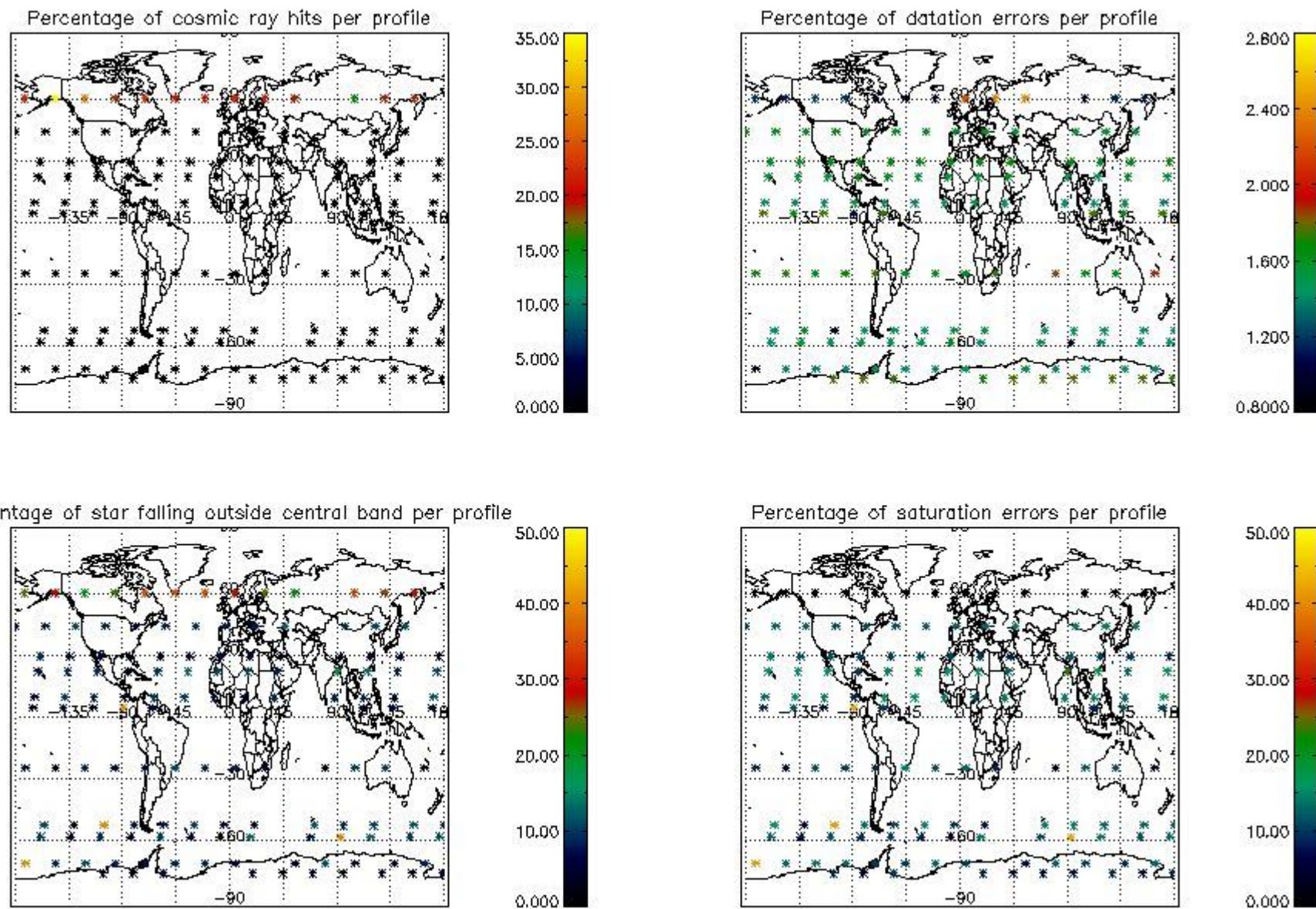
Percentage of star falling outside central band per profile



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

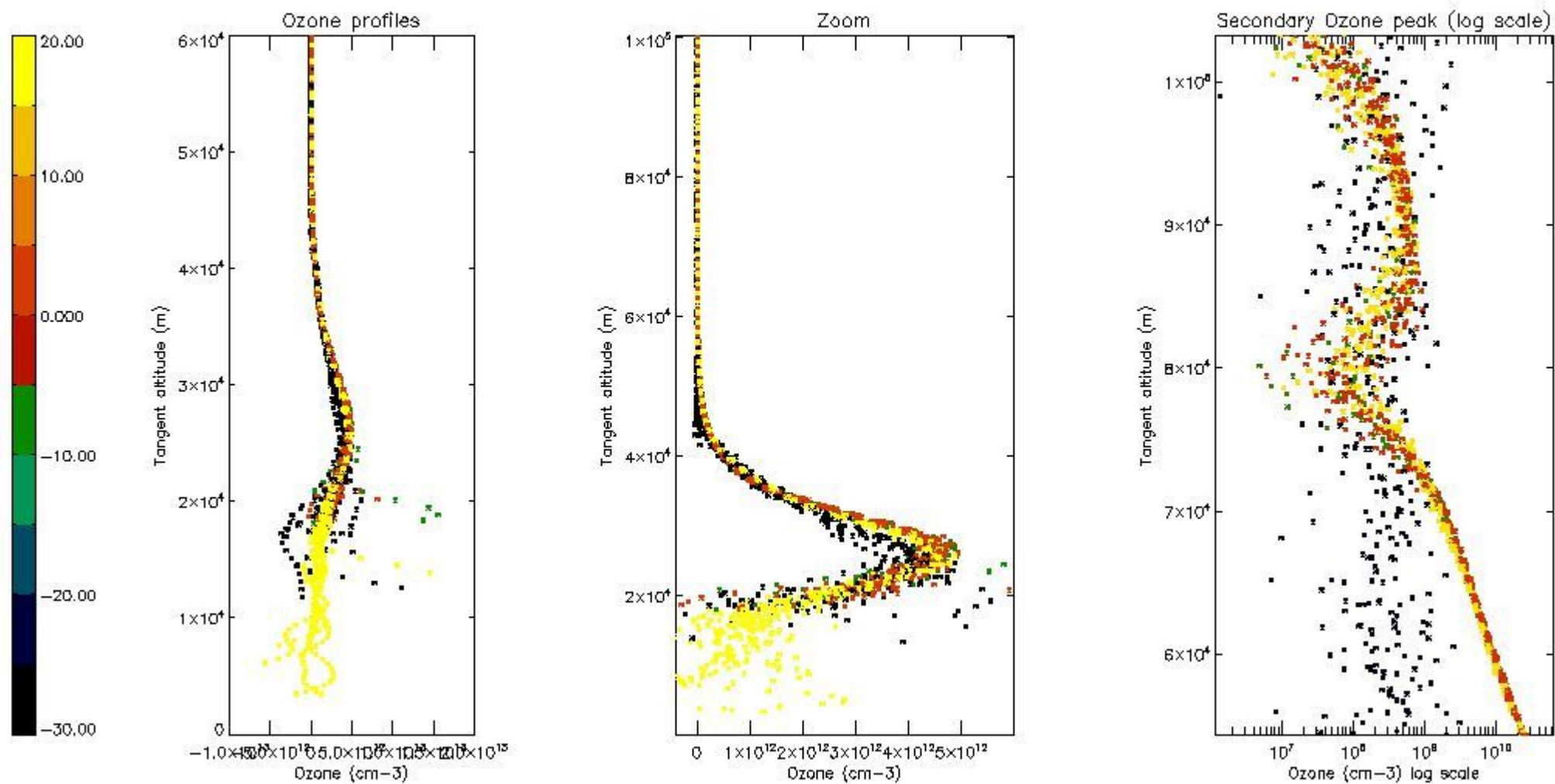
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	18

STD < 10	15
STD < 5	12

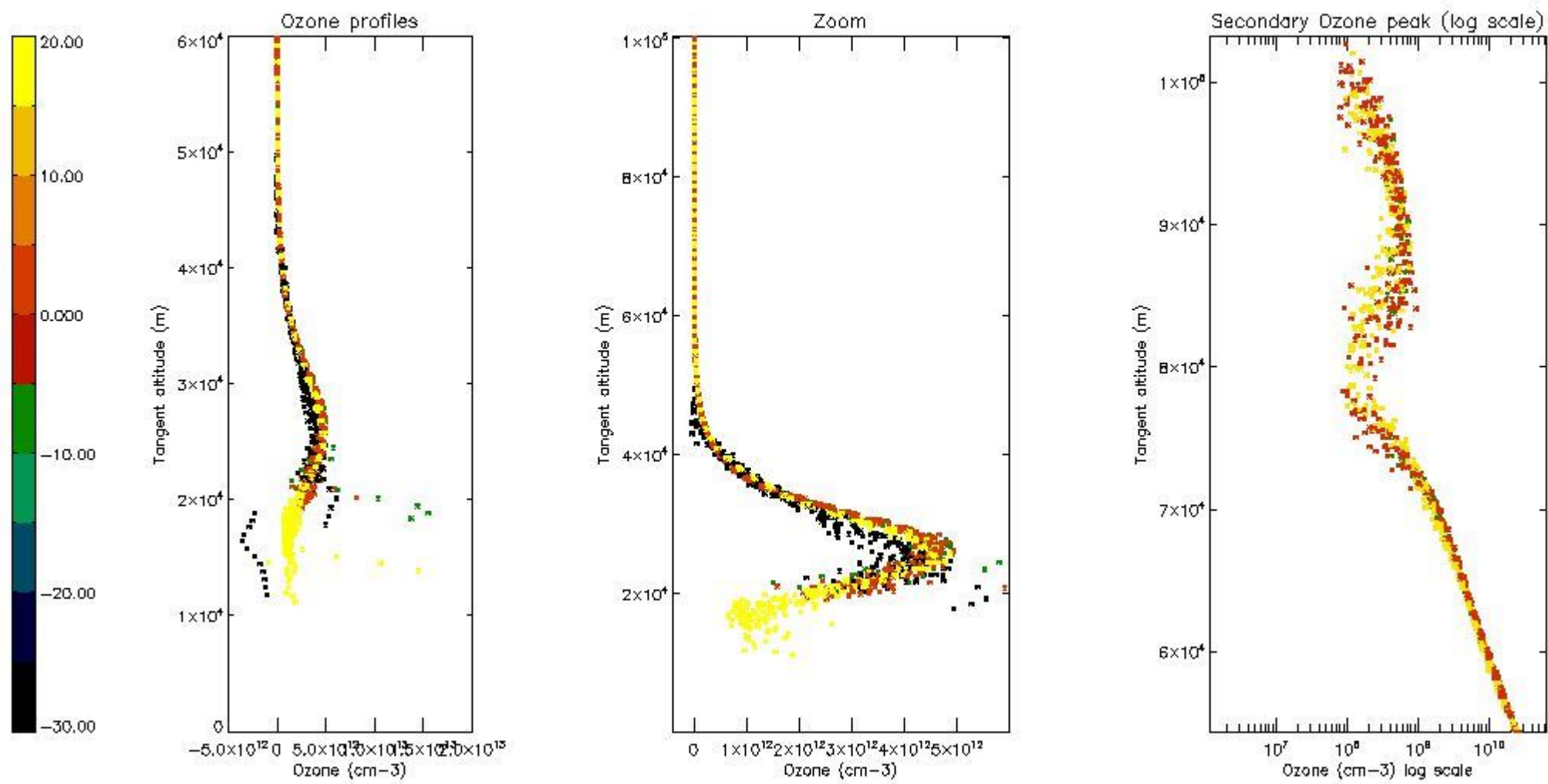
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



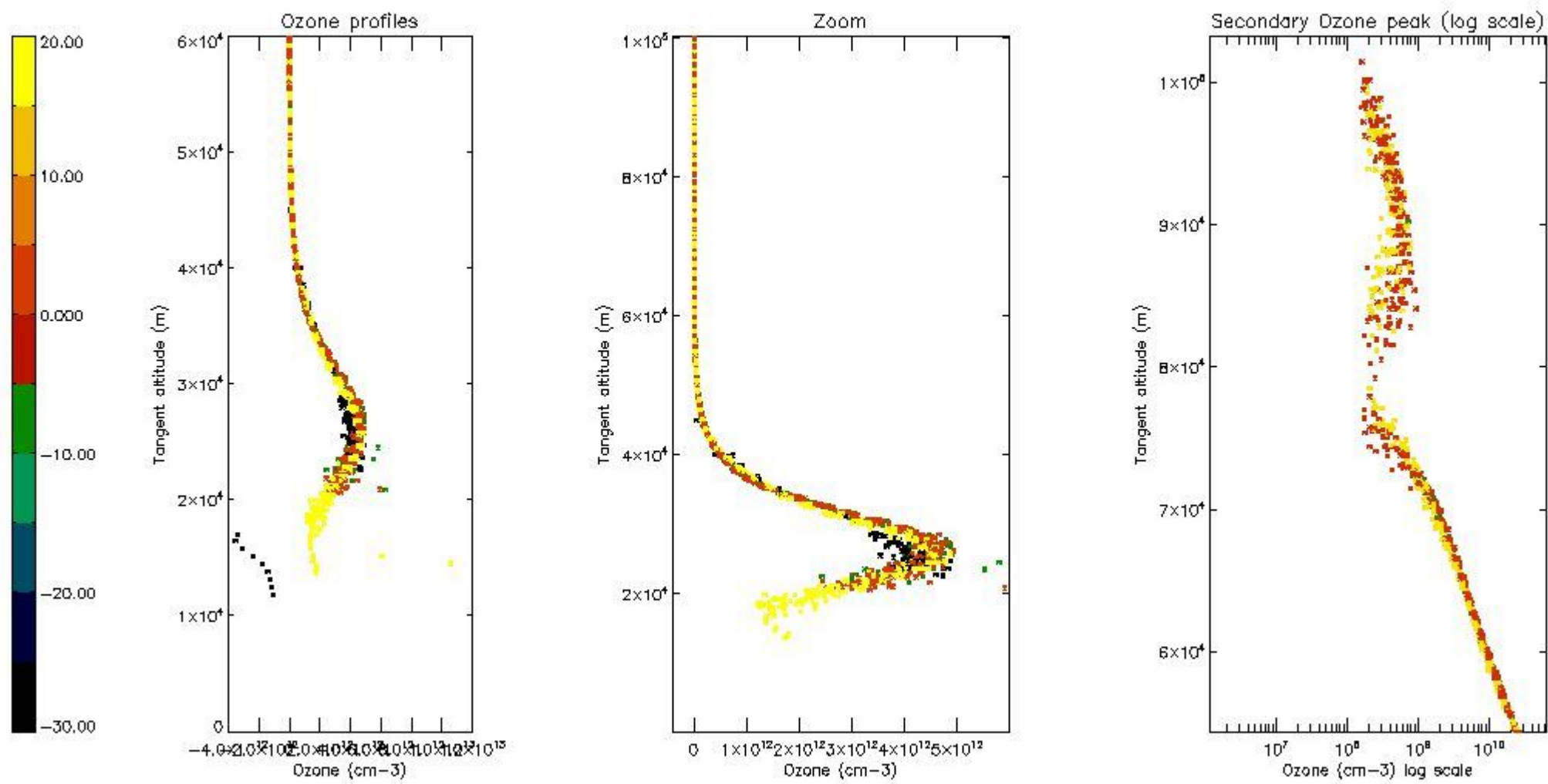
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



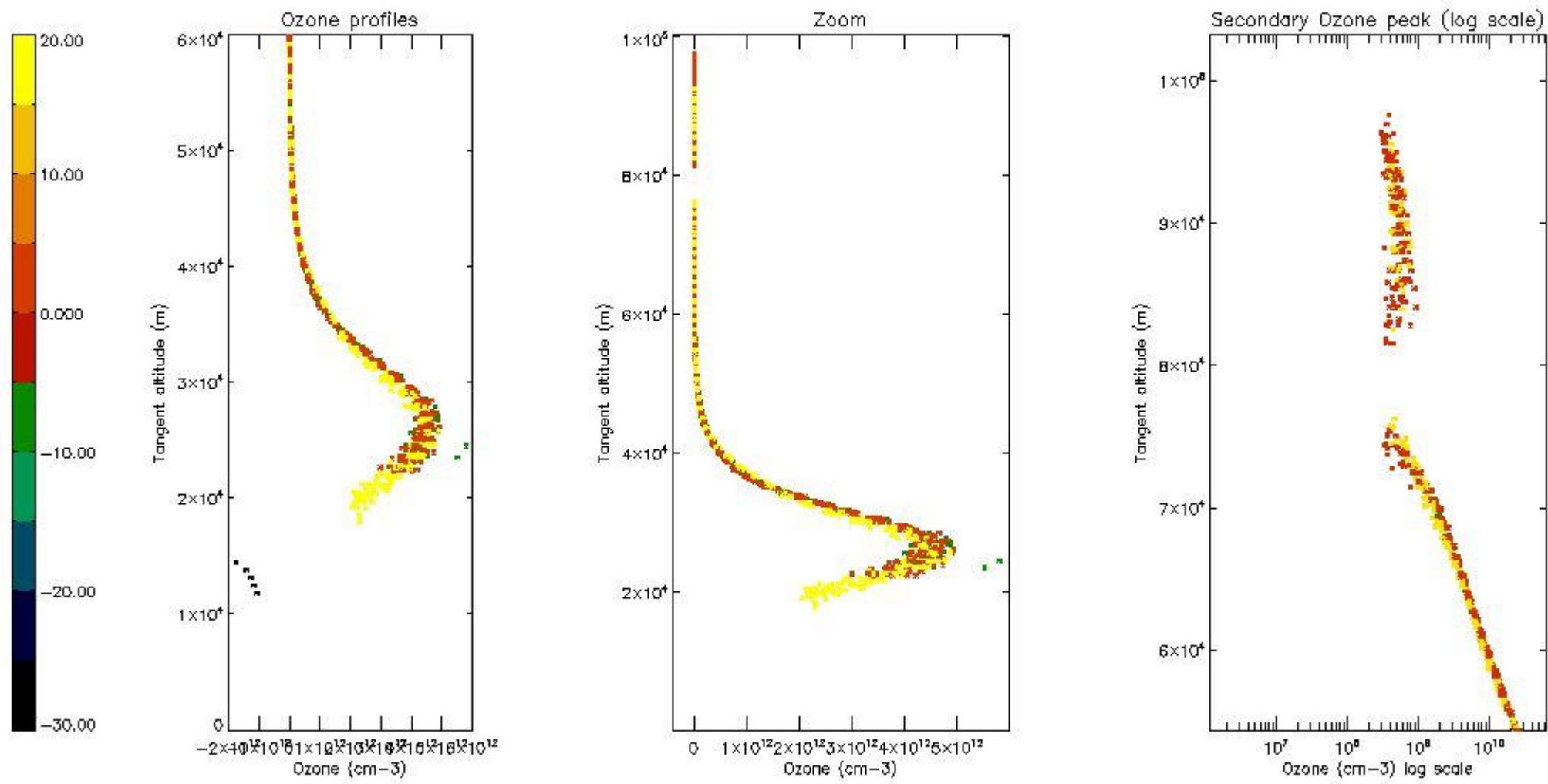
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



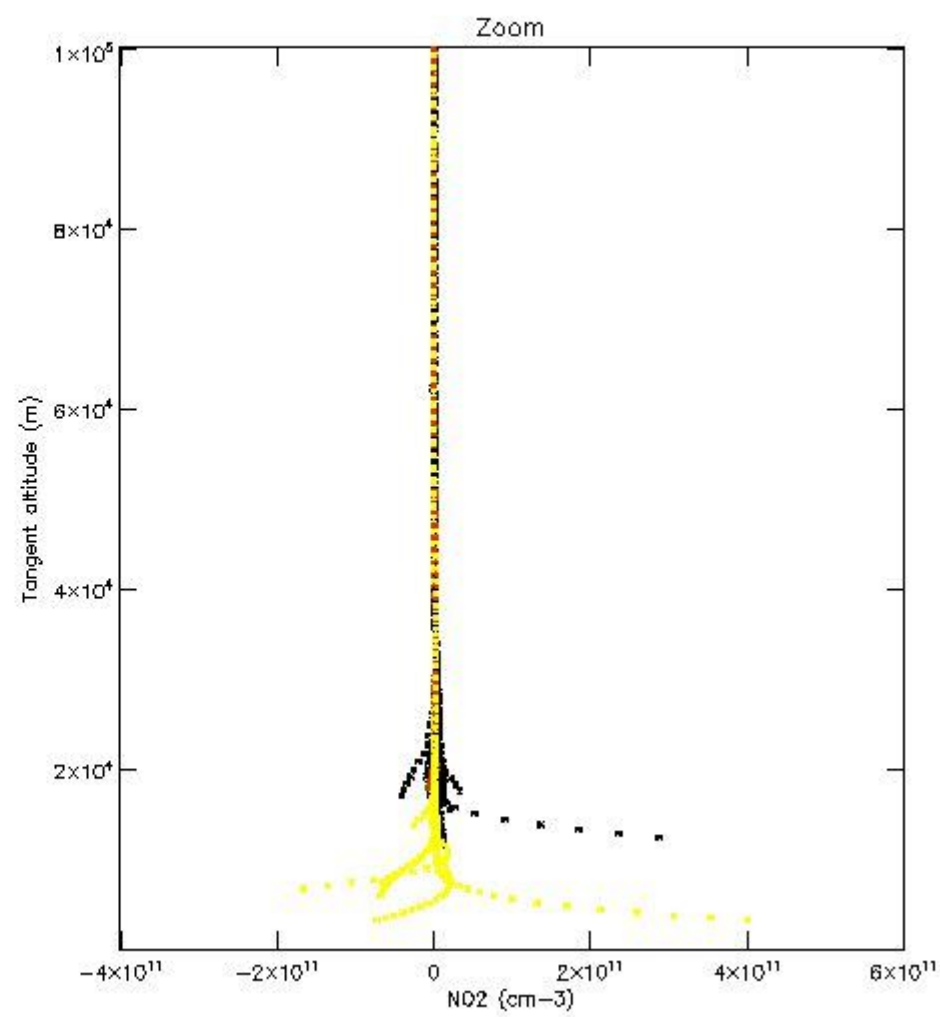
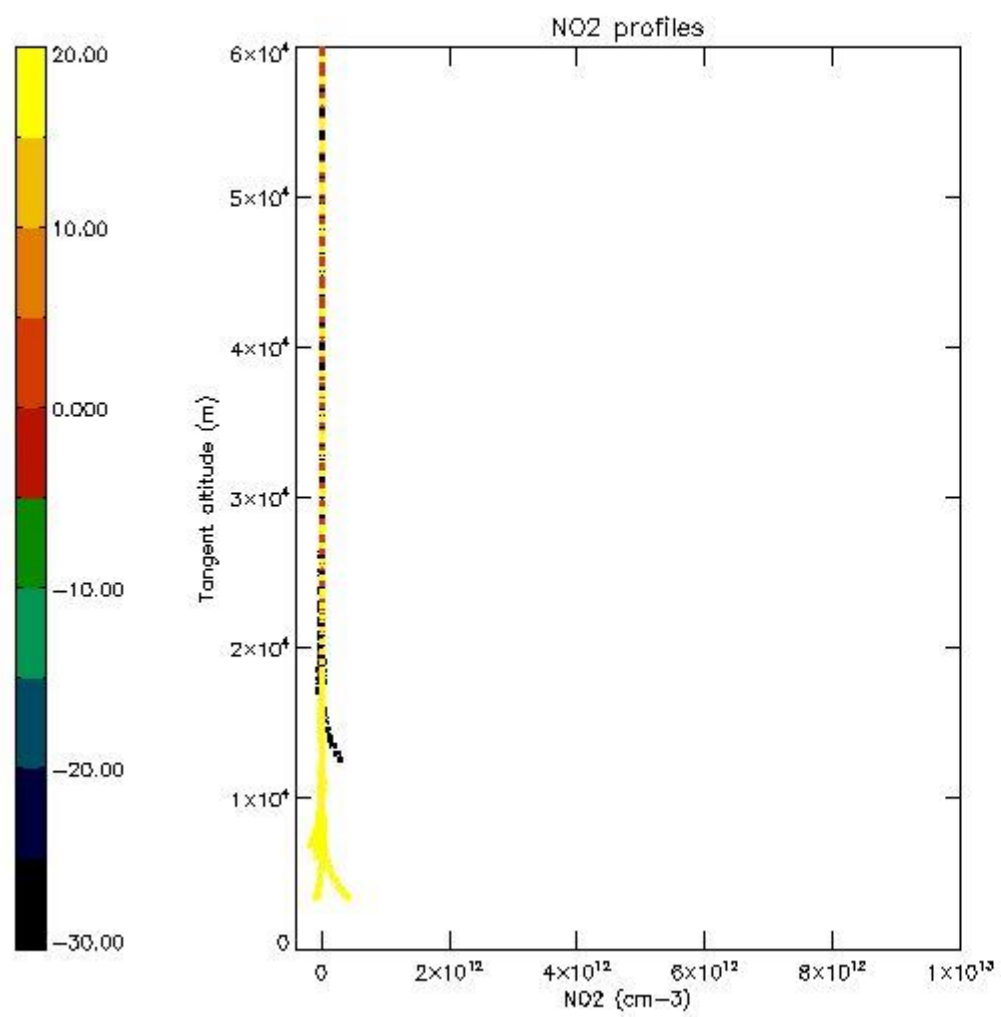
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



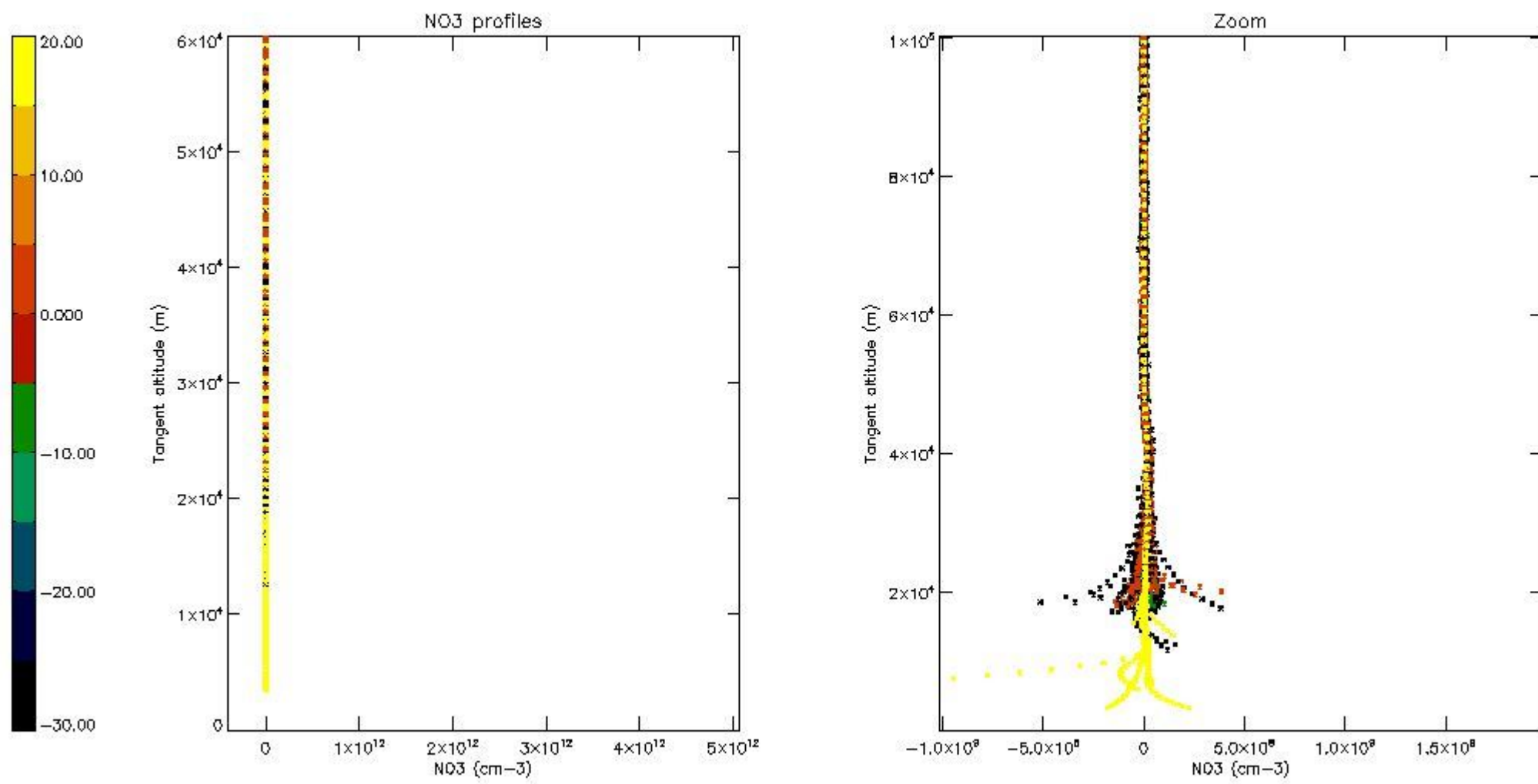
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



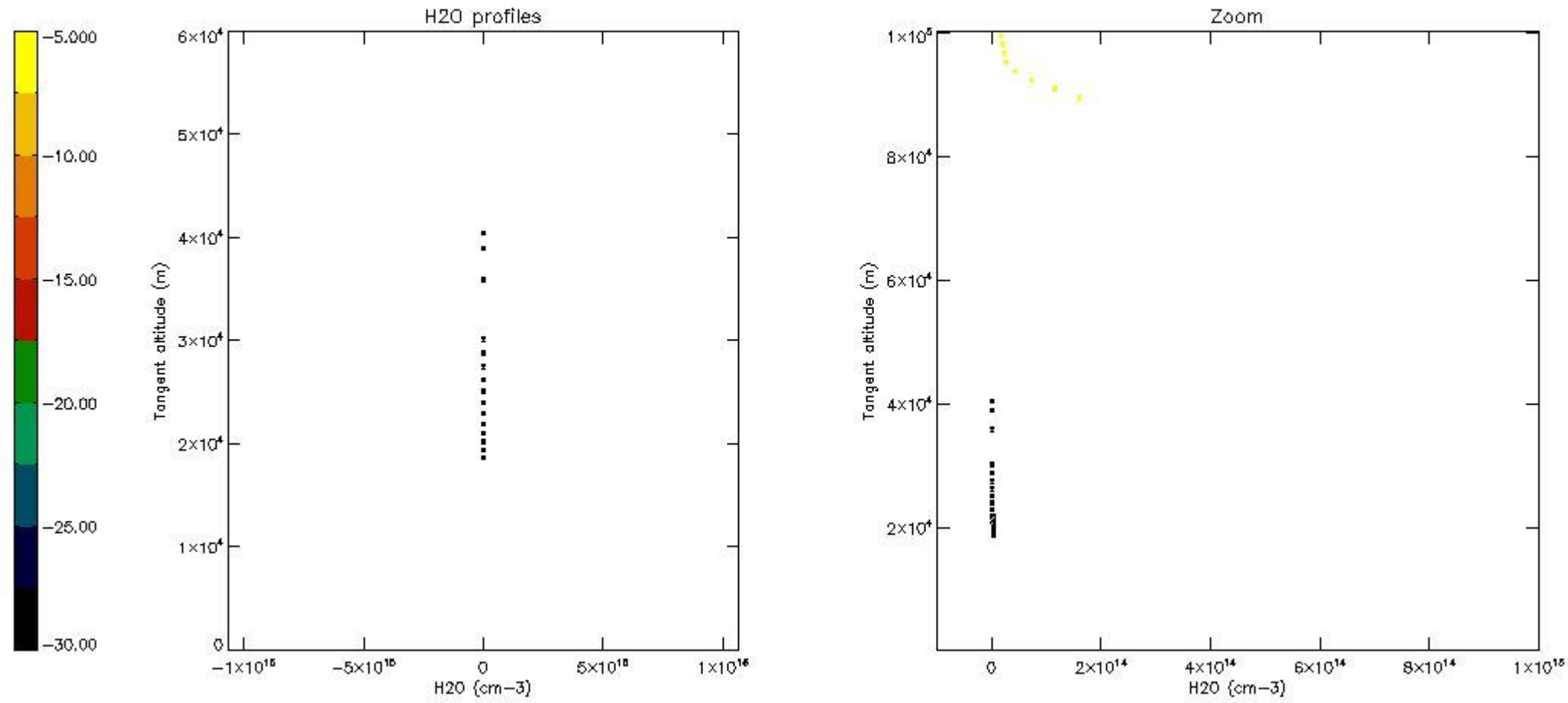
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

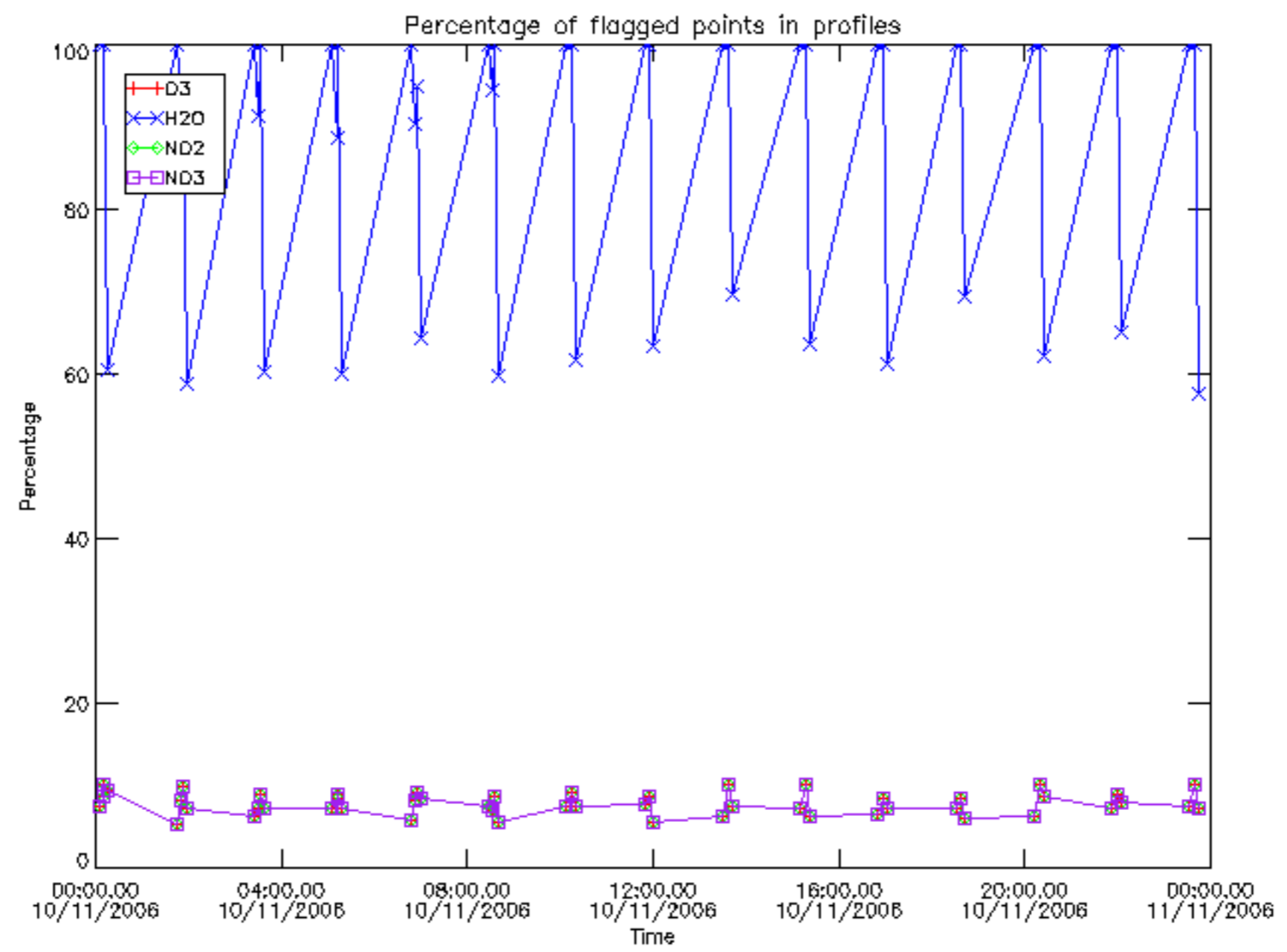
The colorbar represents the latitude.



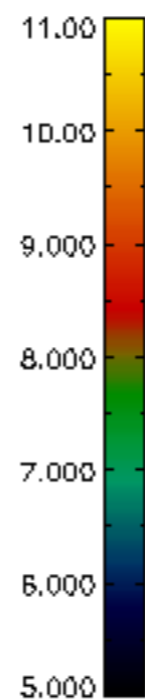
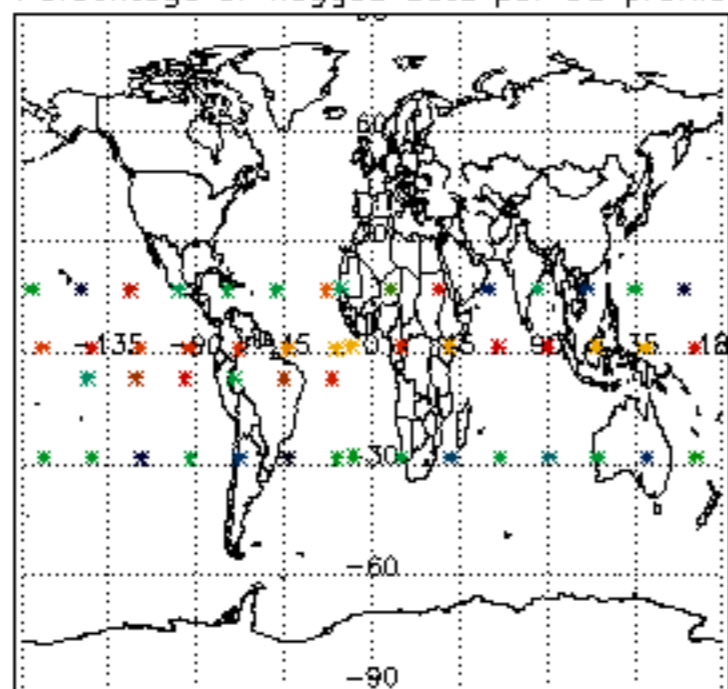
6. Auxiliary Data Files used for the production reported in section 2

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.

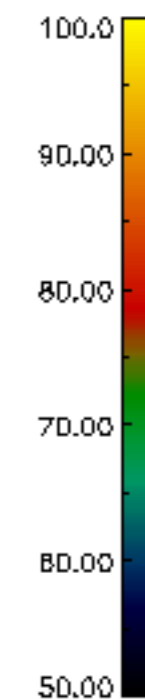
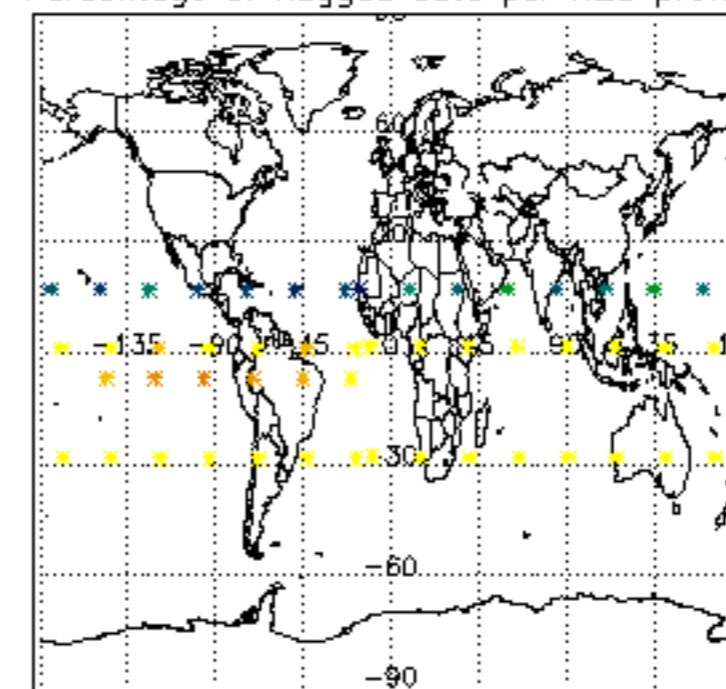
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-NOV-2006 00:04:20
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-NOV-2006 00:04:20
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-NOV-2006 00:04:20



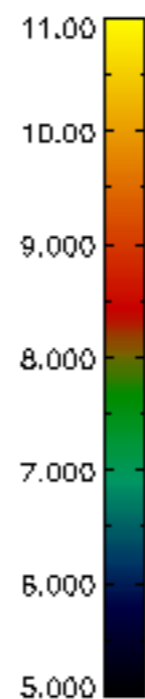
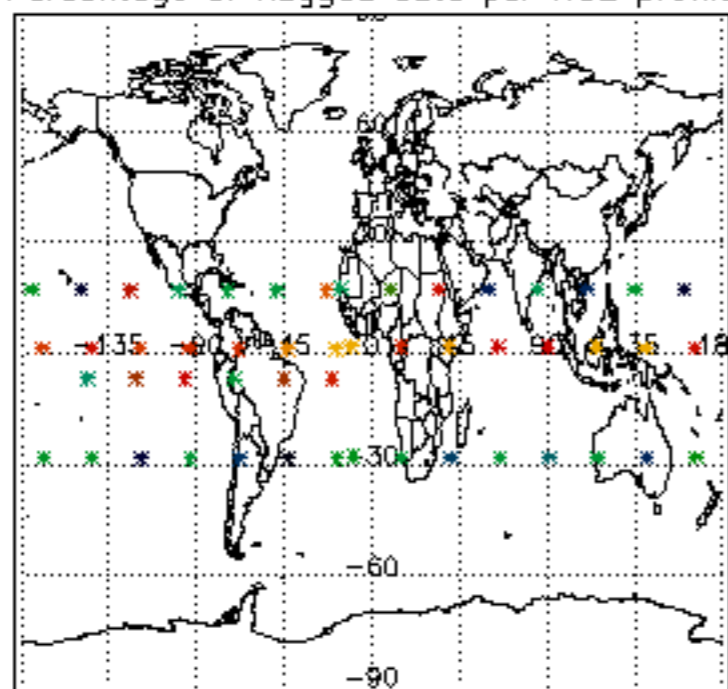
Percentage of flagged data per D3 profile



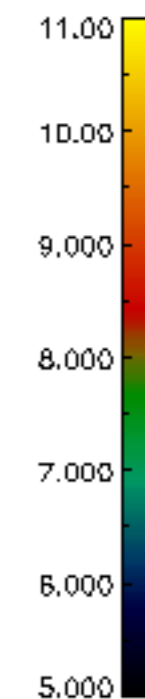
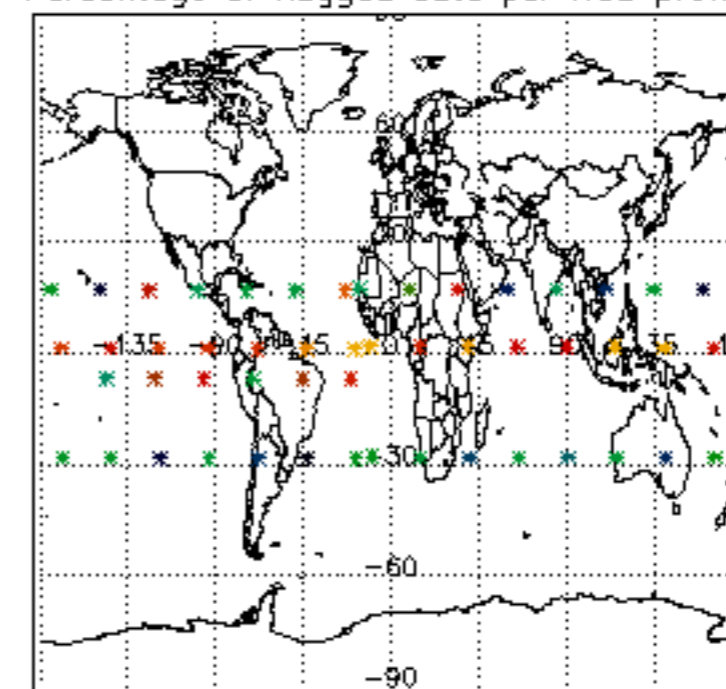
Percentage of flagged data per H2O profile

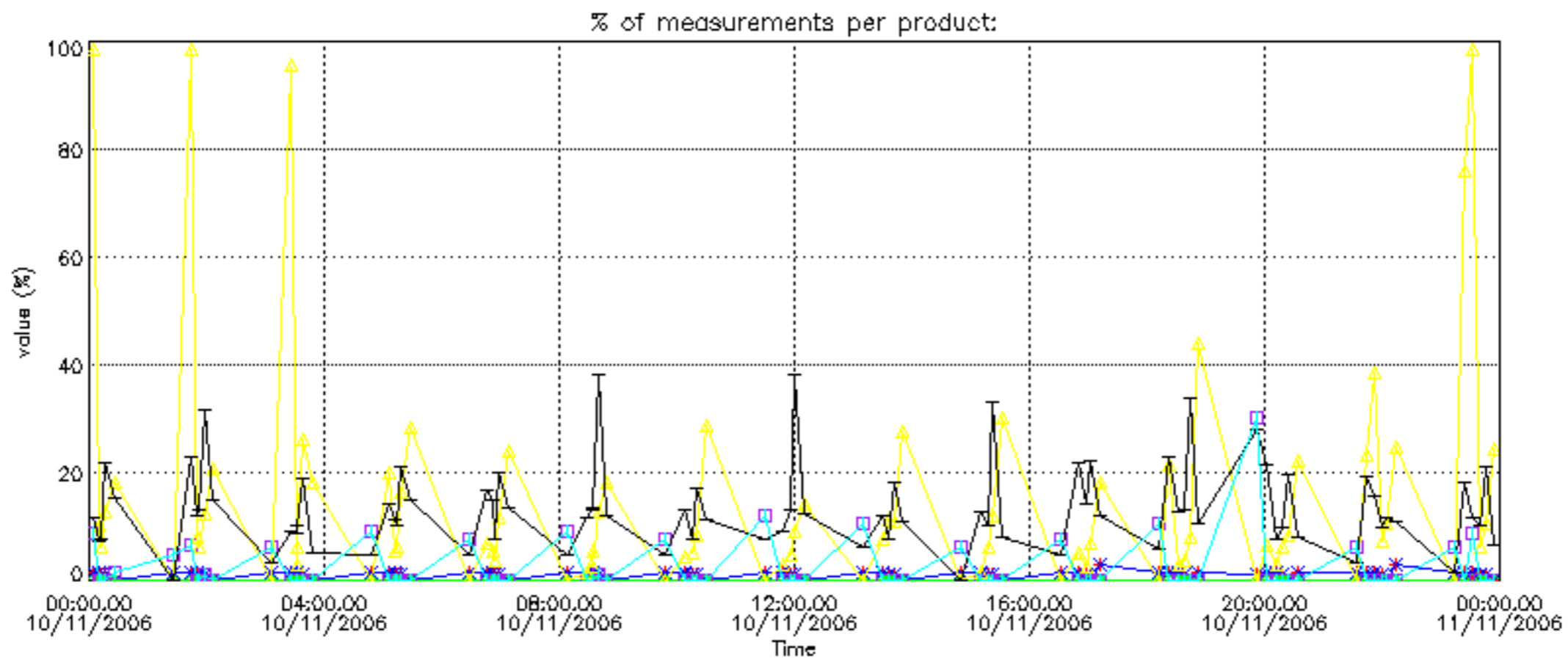


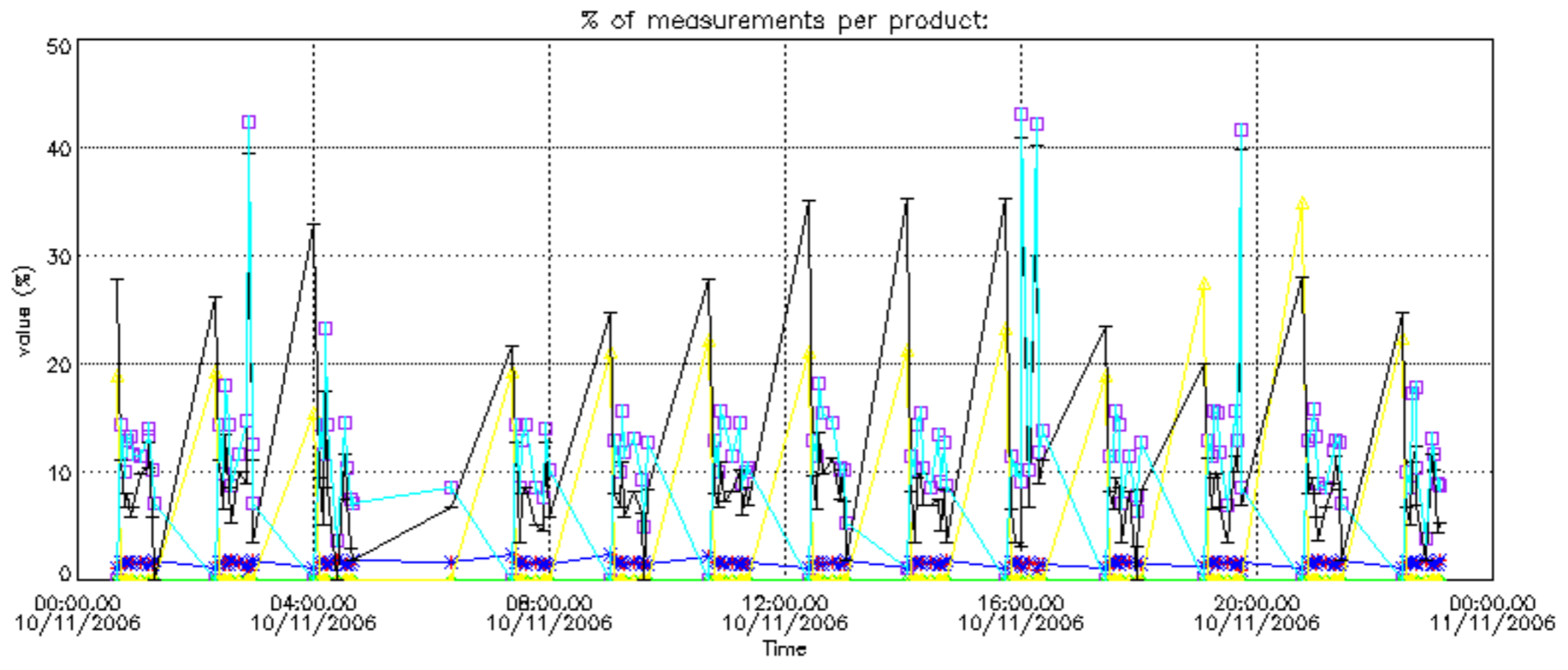
Percentage of flagged data per NO2 profile



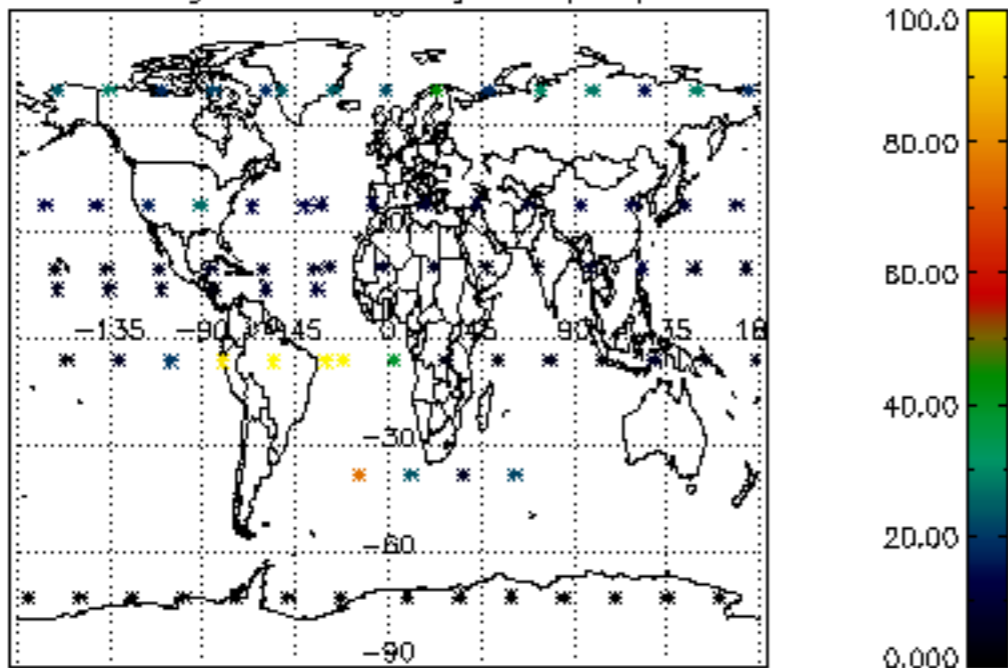
Percentage of flagged data per NO3 profile



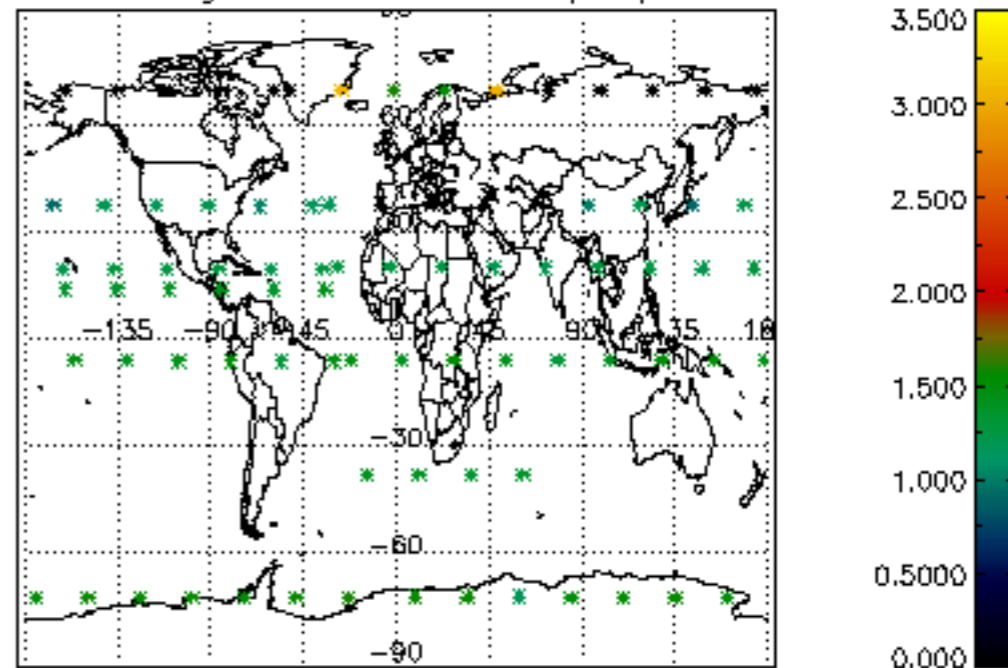




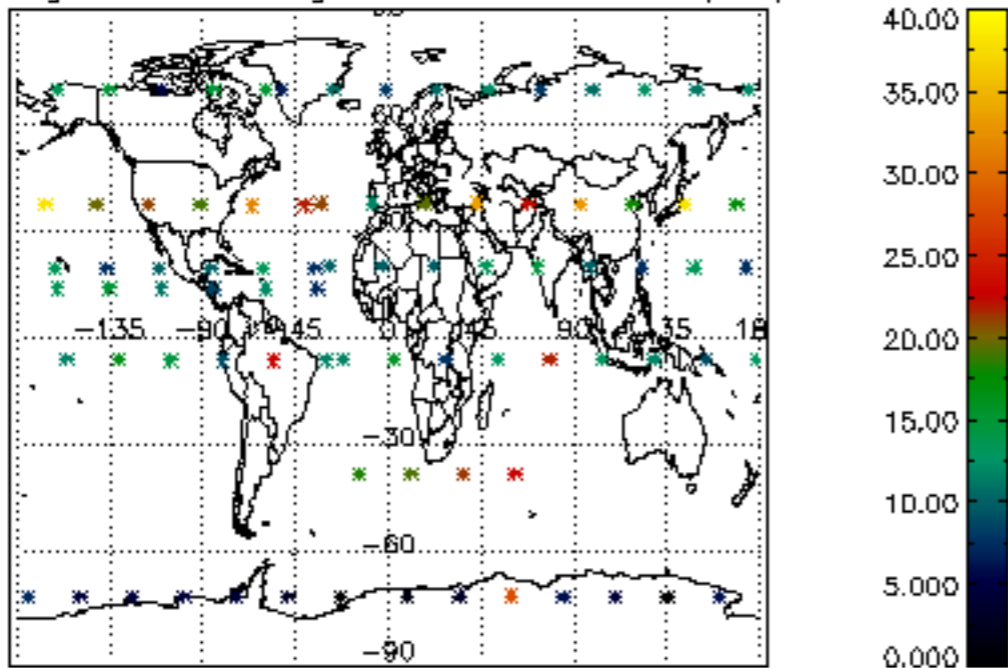
Percentage of cosmic ray hits per profile



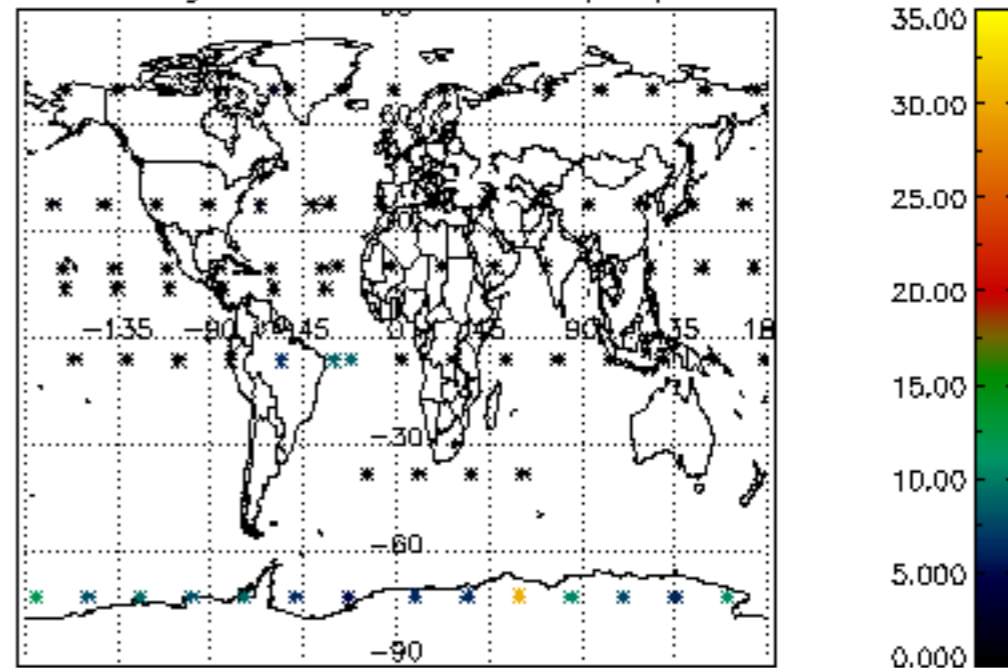
Percentage of datation errors per profile



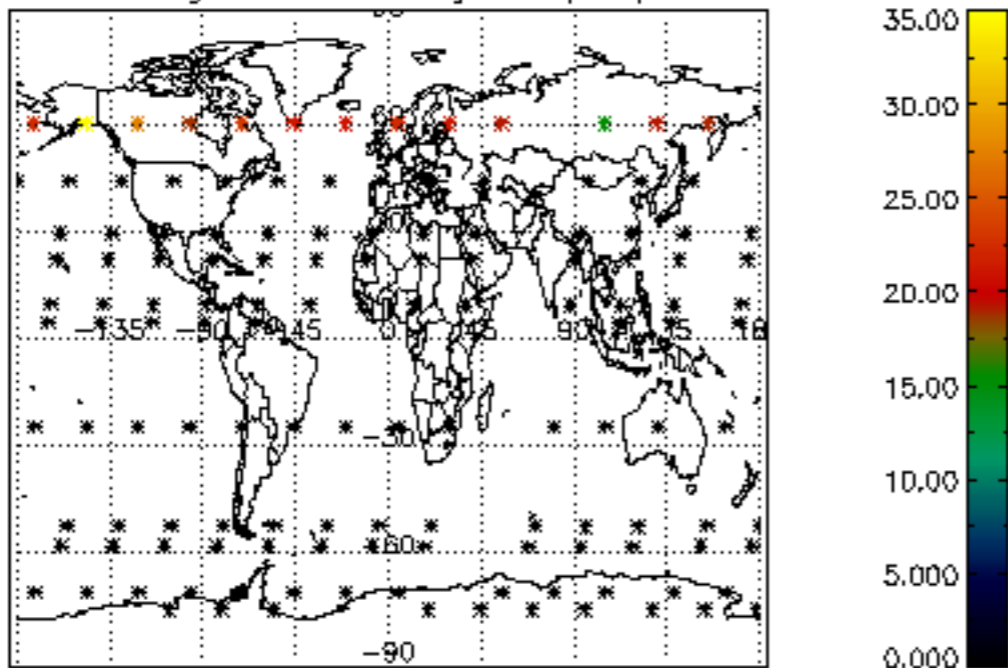
Percentage of star falling outside central band per profile



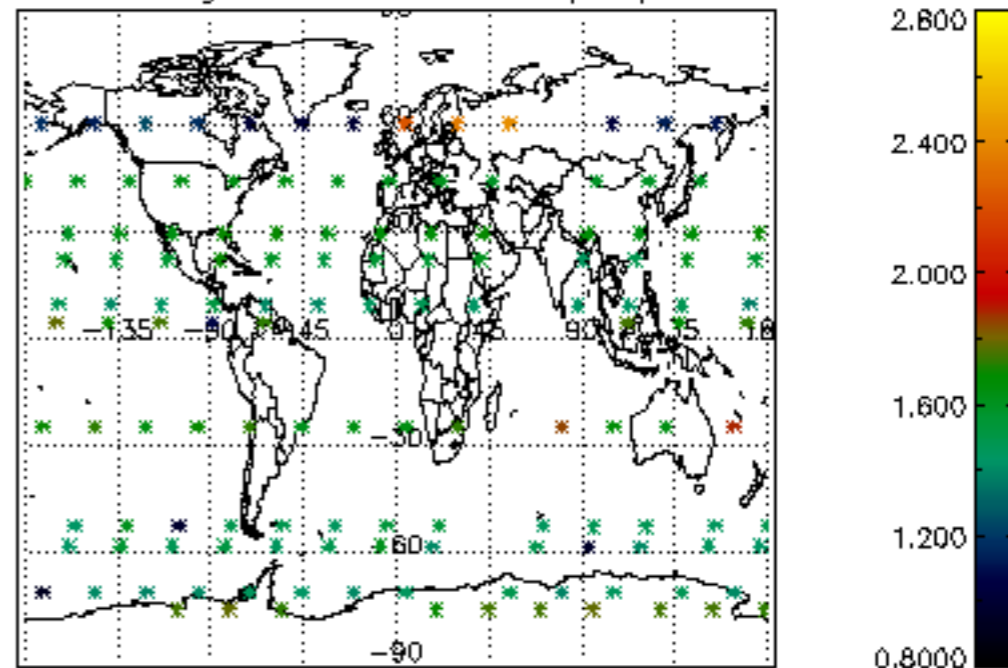
Percentage of saturation errors per profile



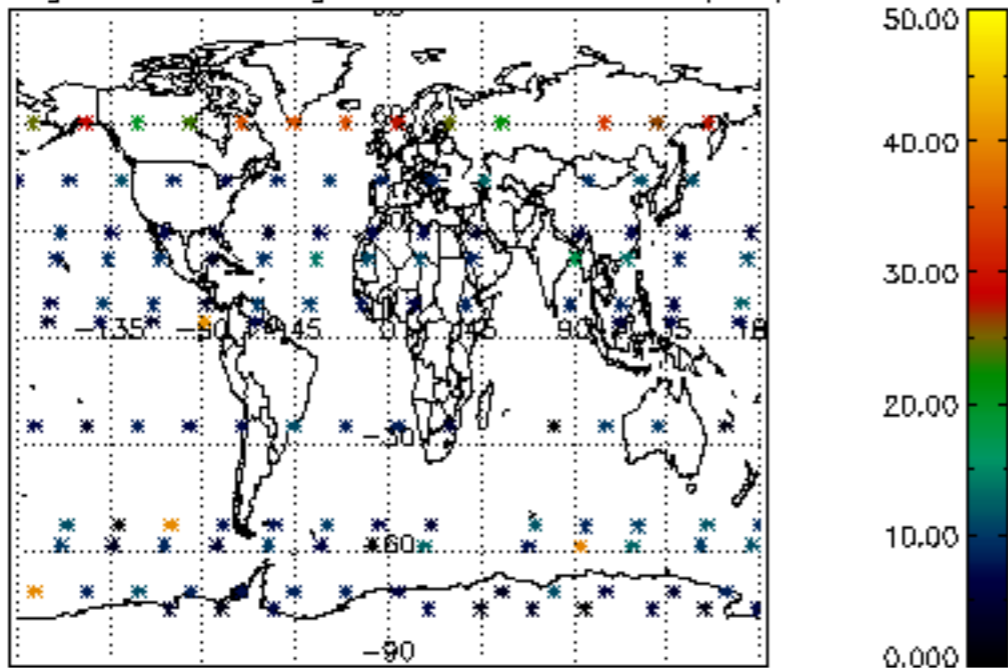
Percentage of cosmic ray hits per profile



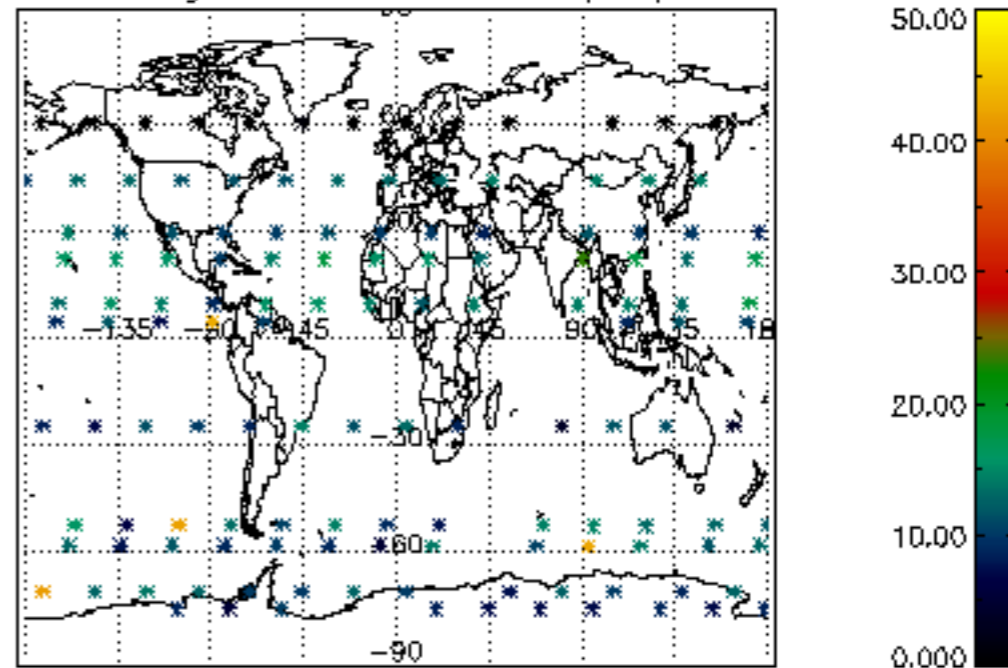
Percentage of datation errors per profile

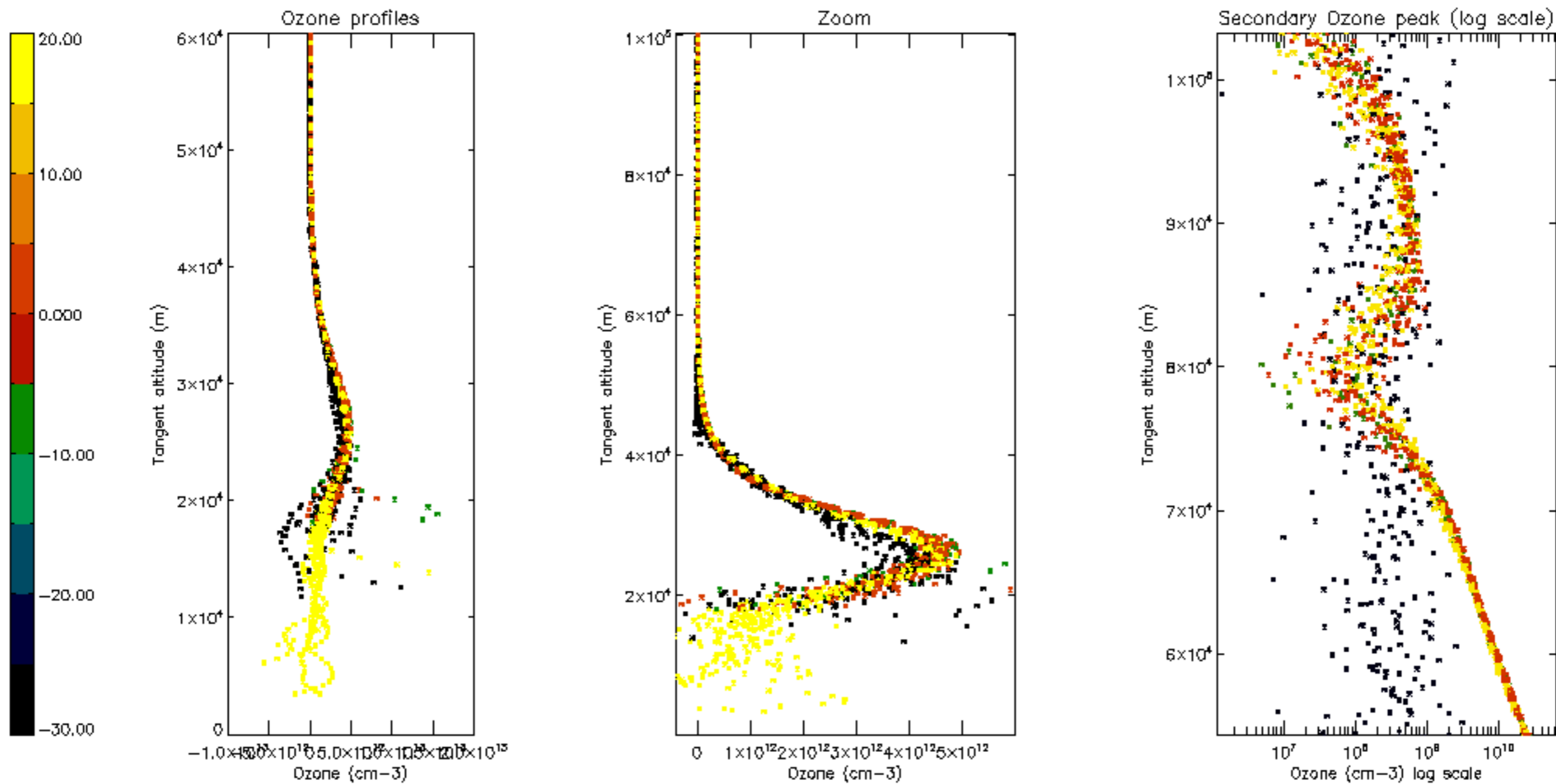


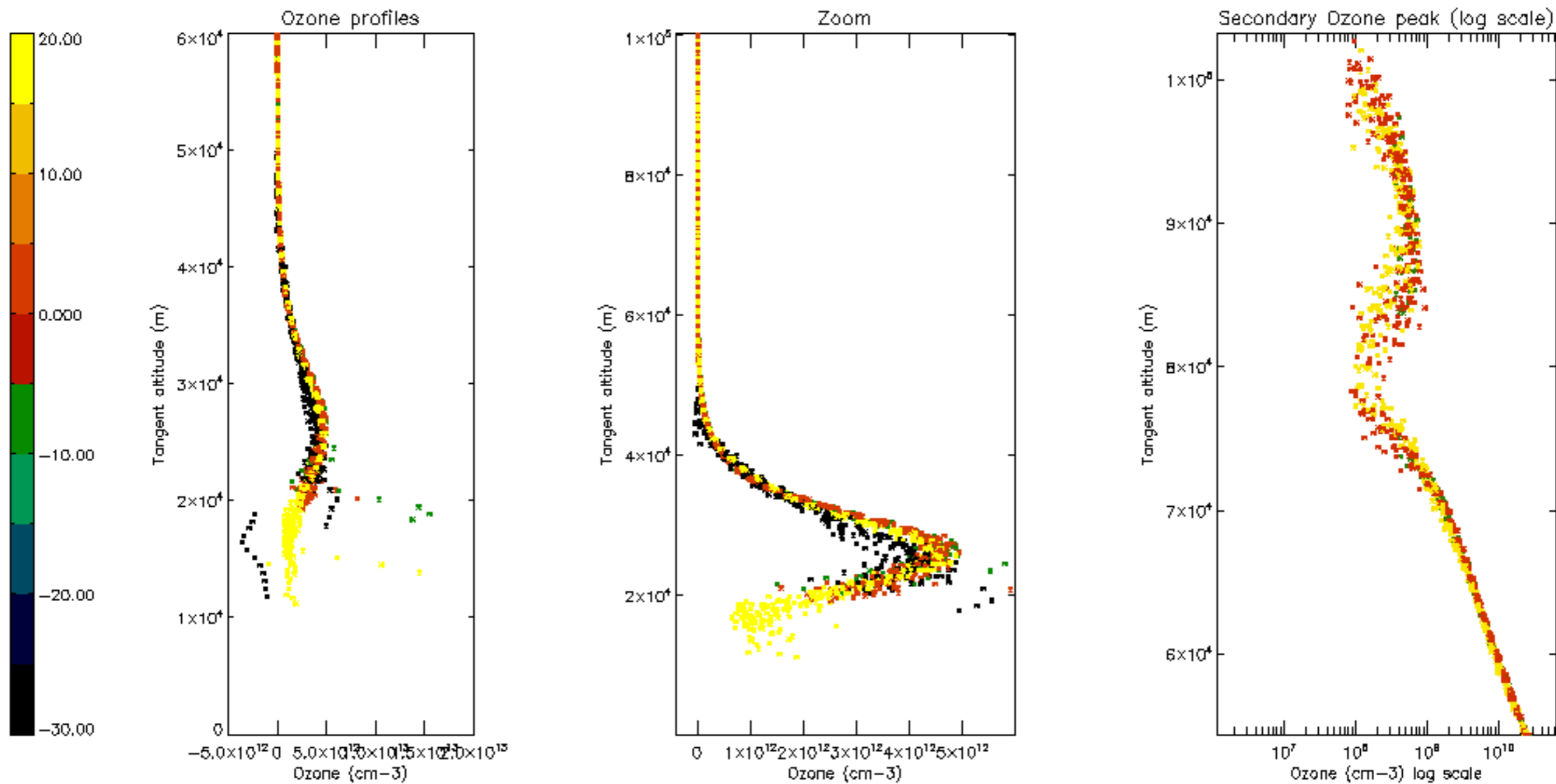
Percentage of star falling outside central band per profile

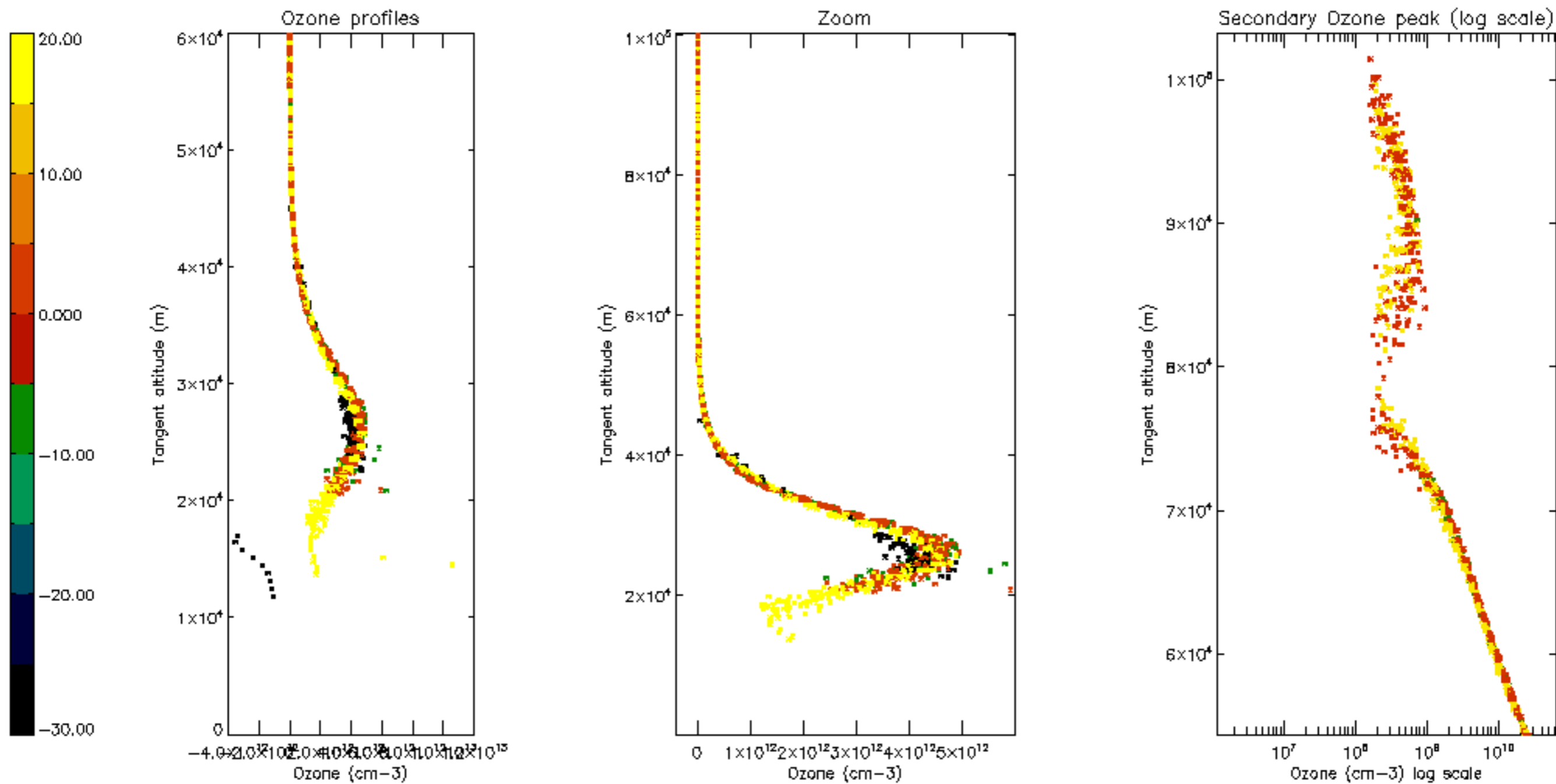


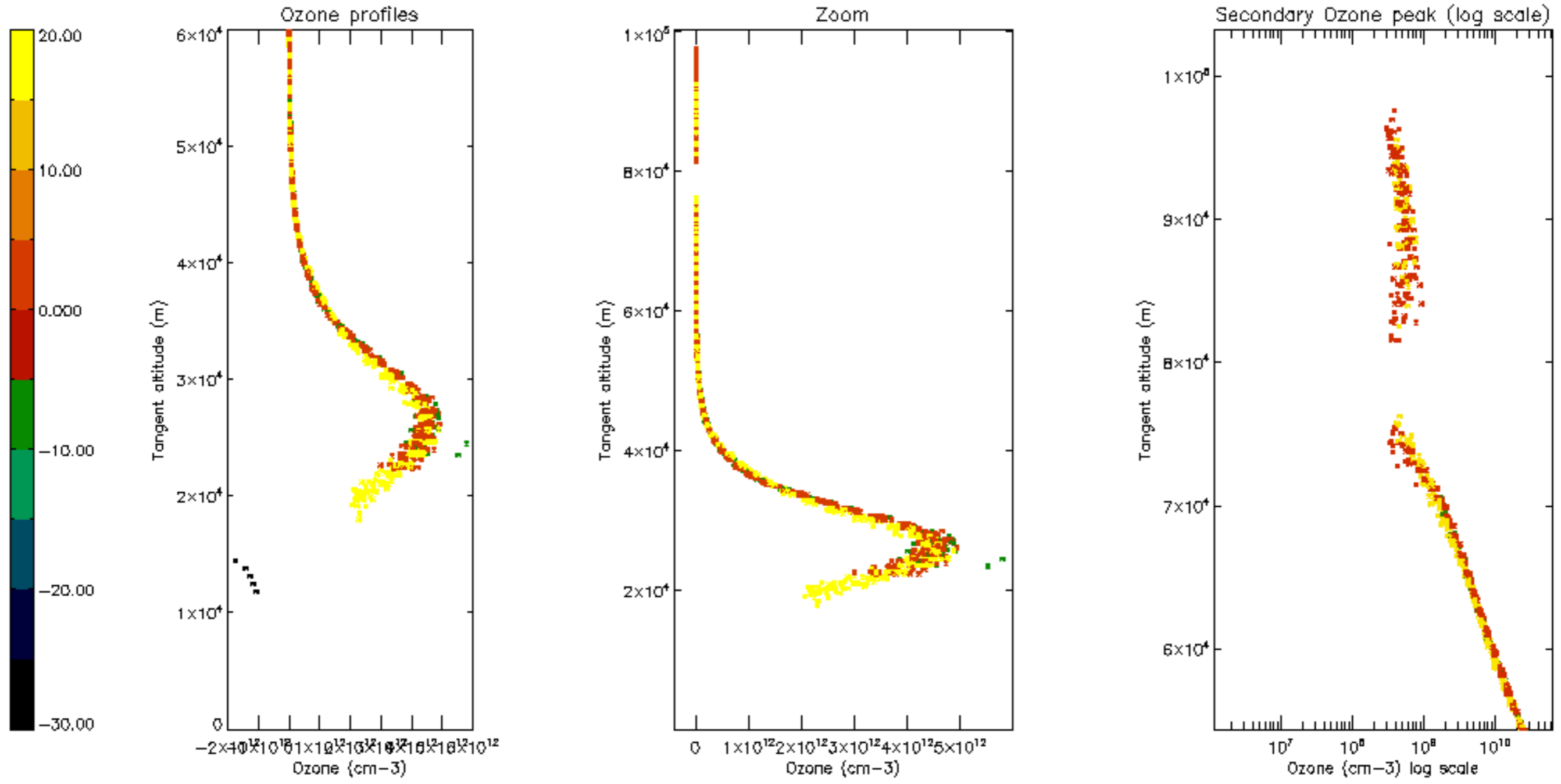
Percentage of saturation errors per profile

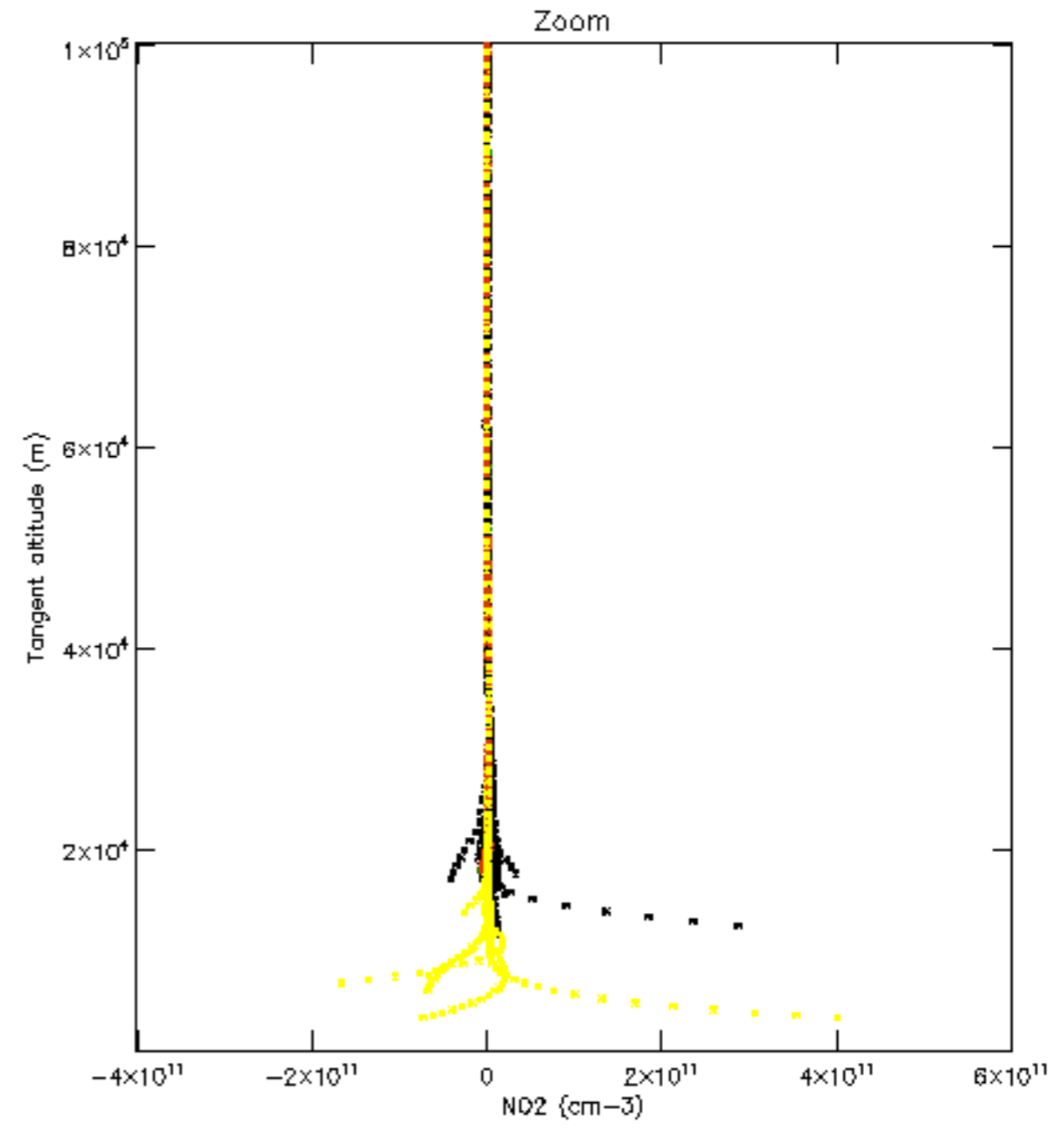
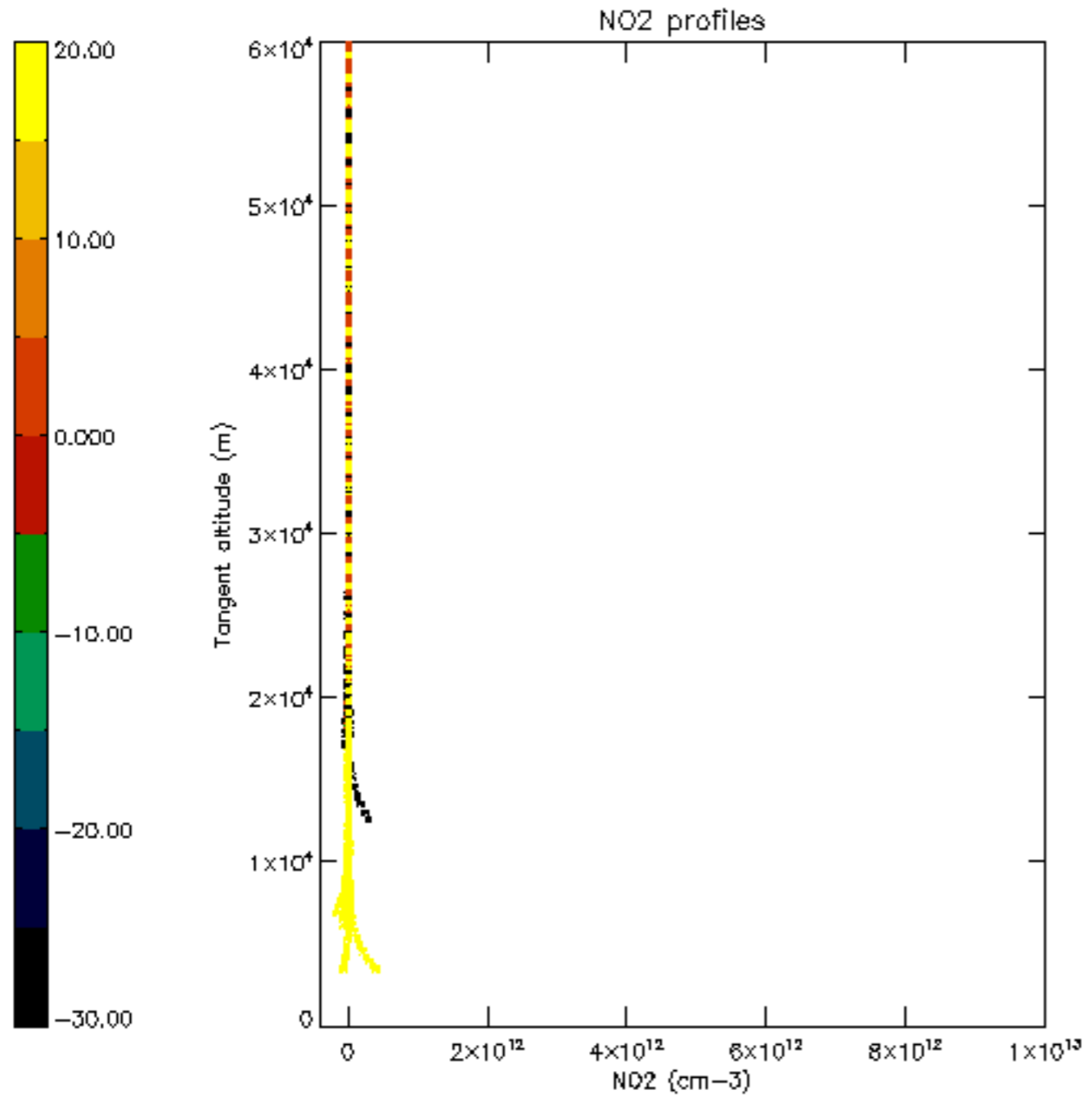


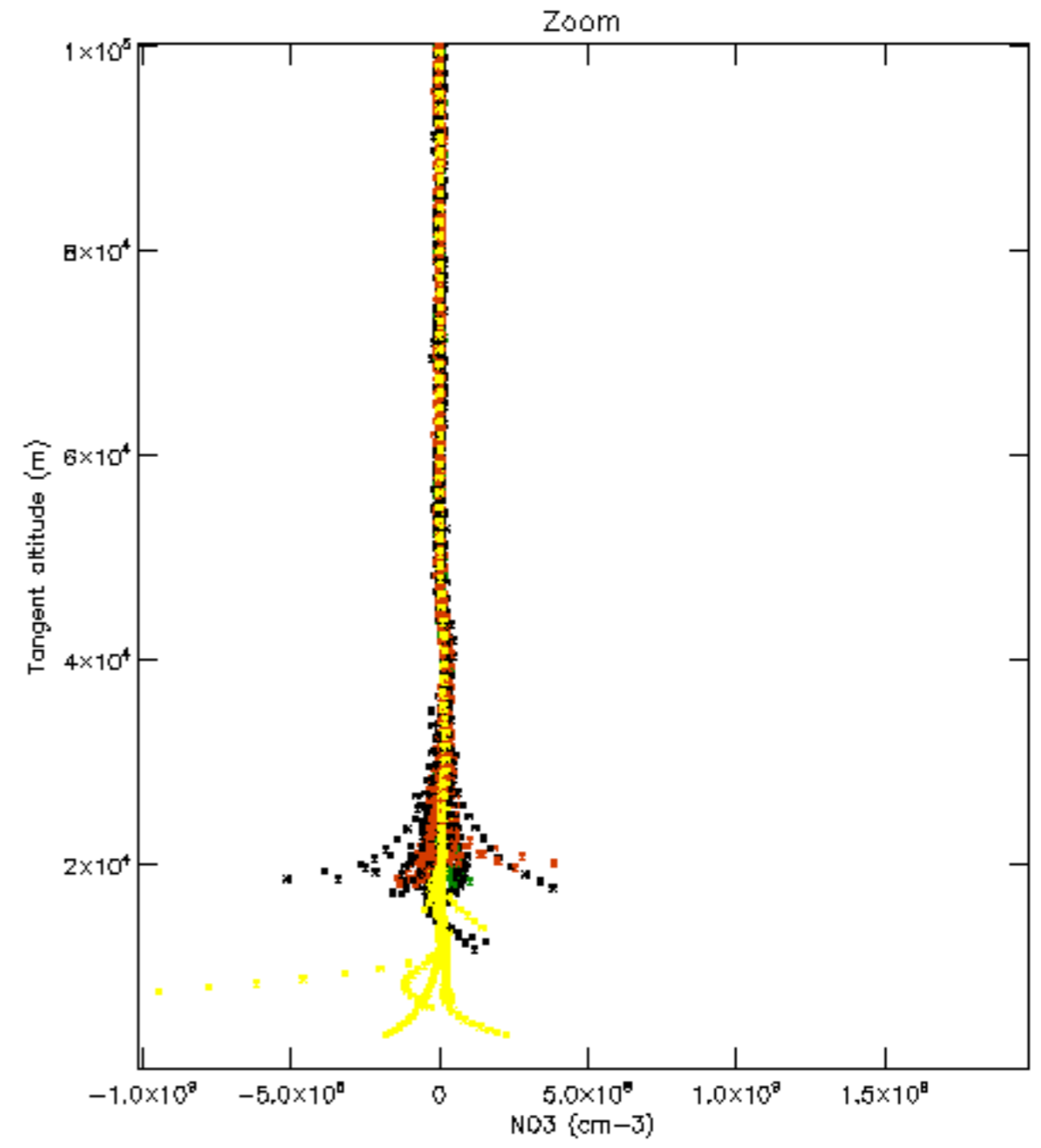
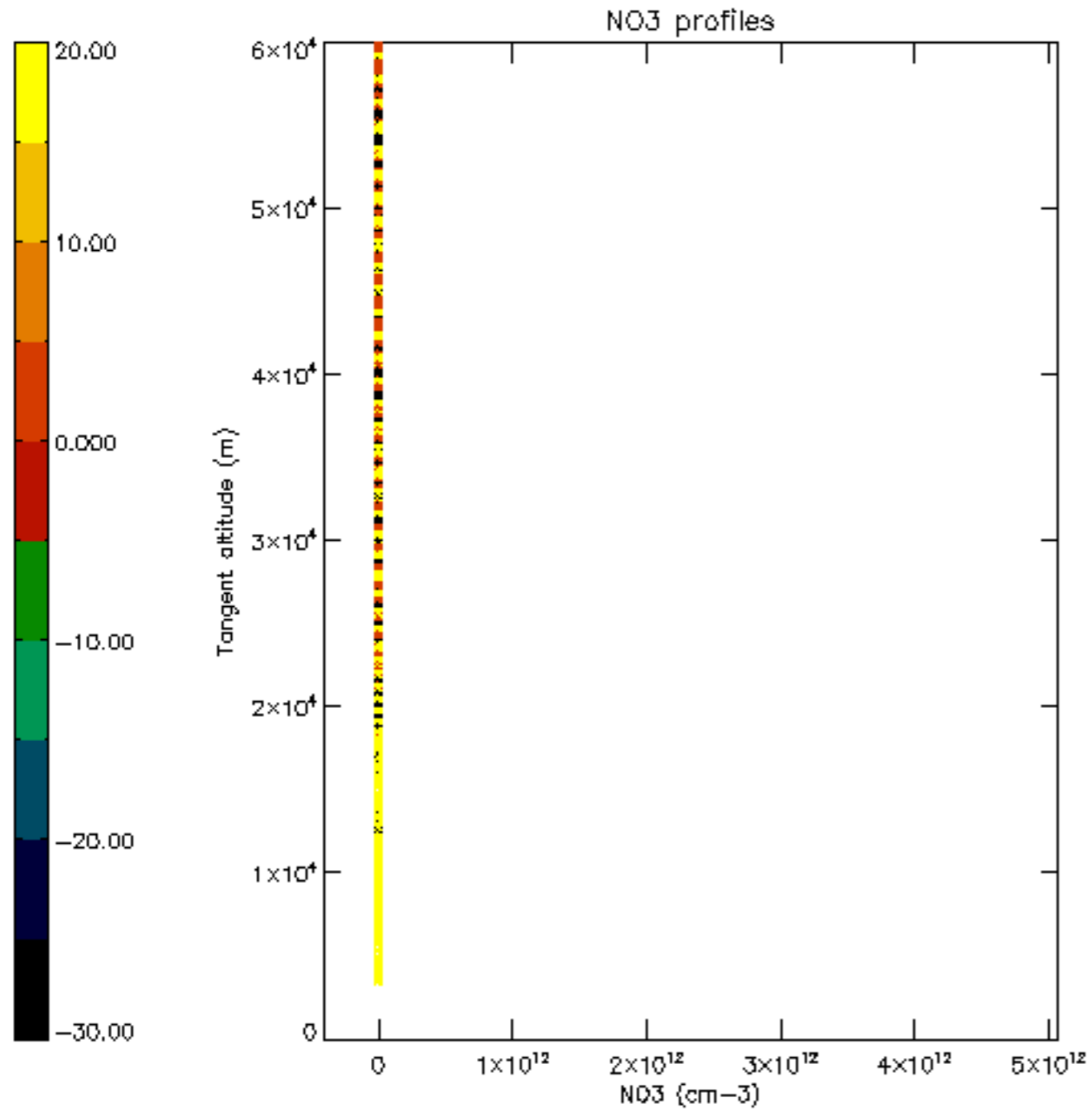


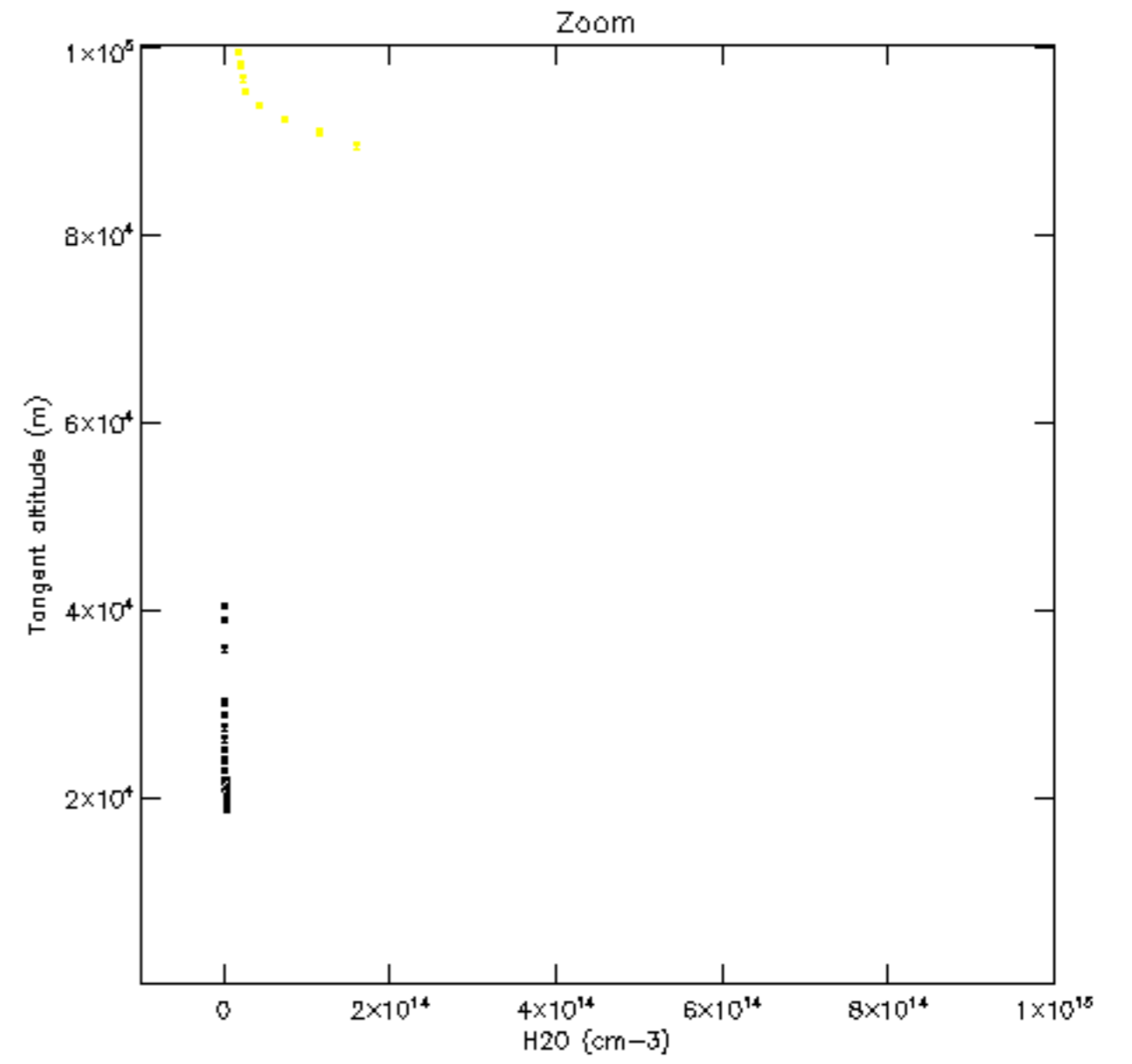
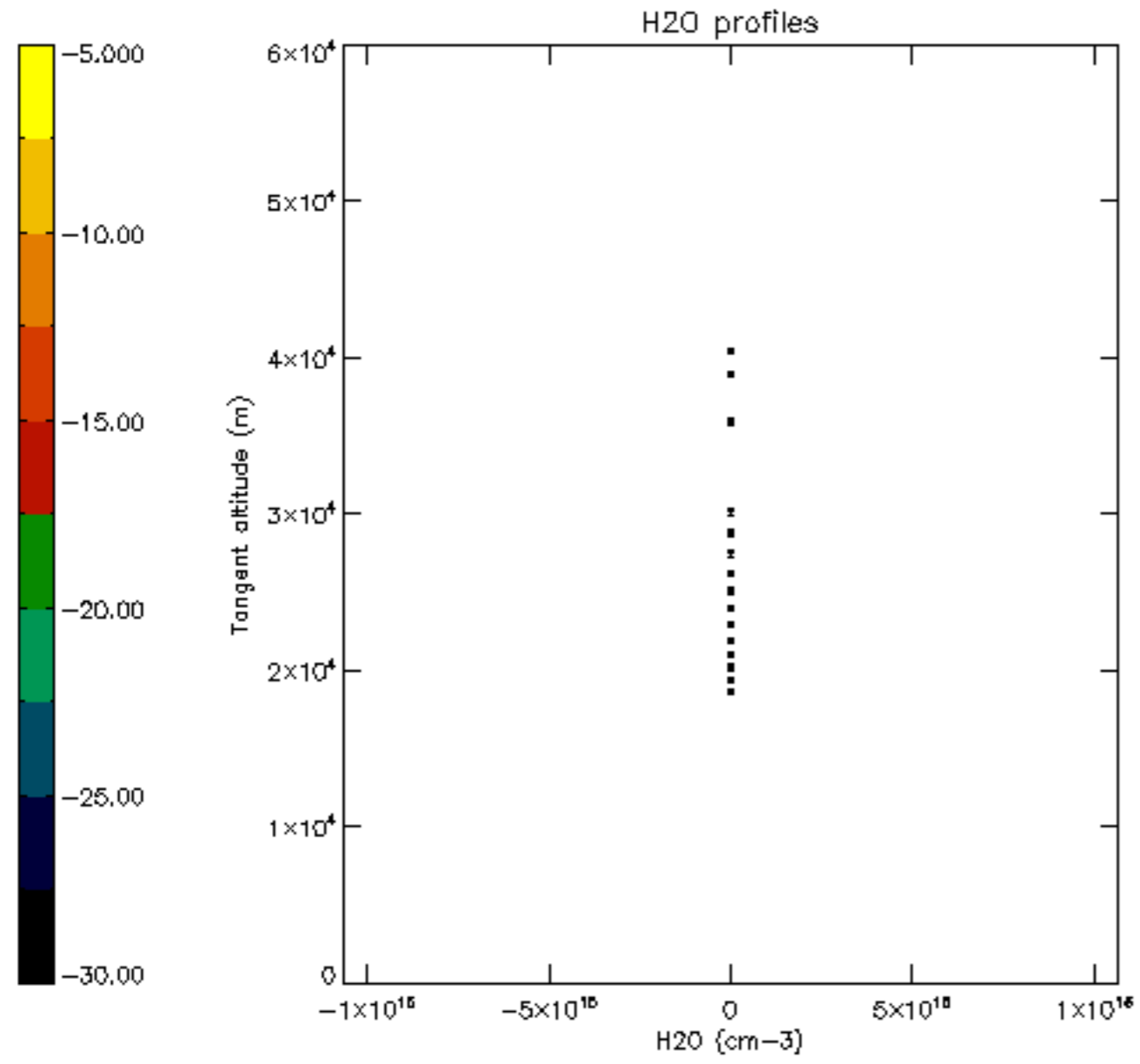


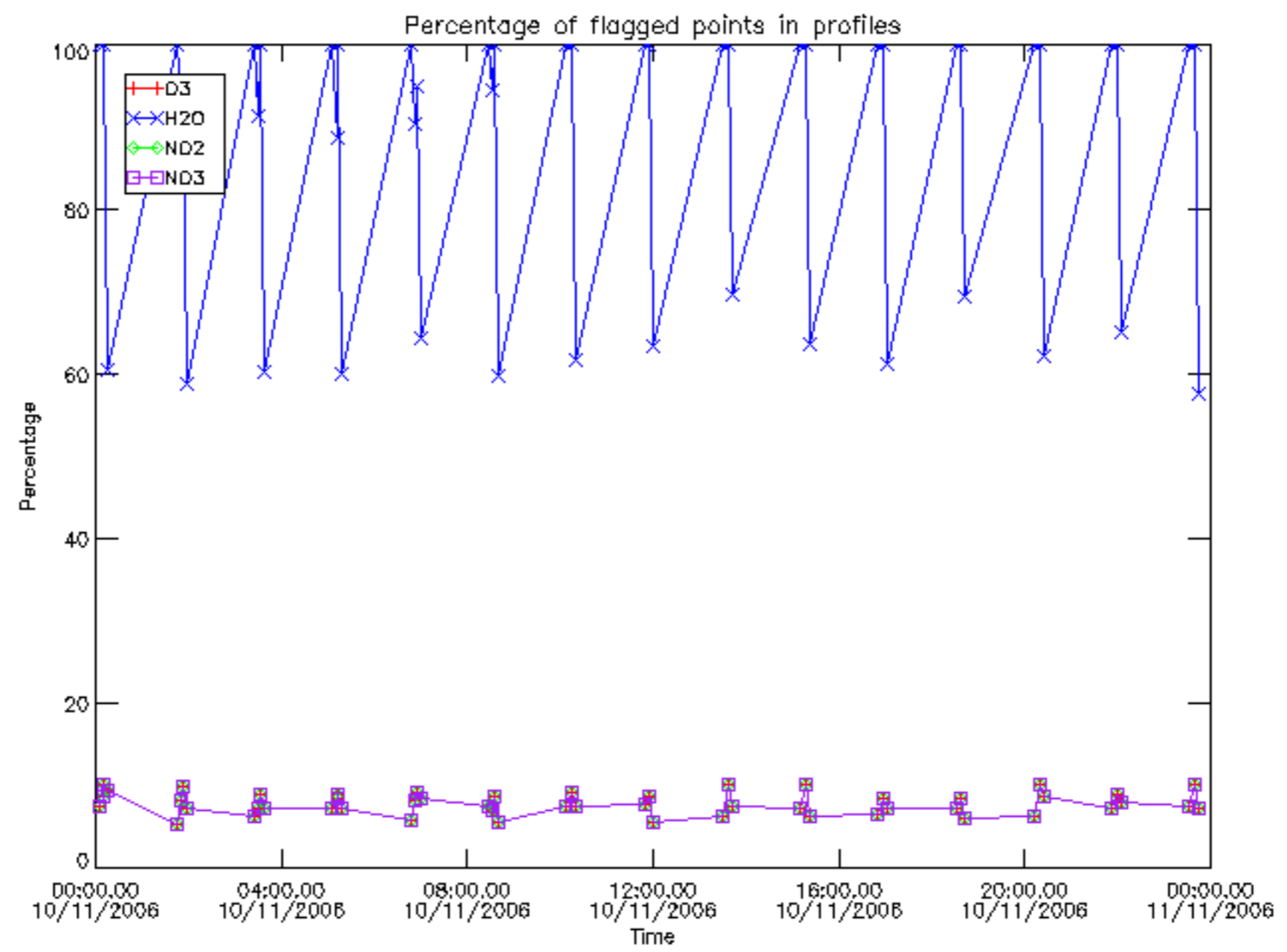




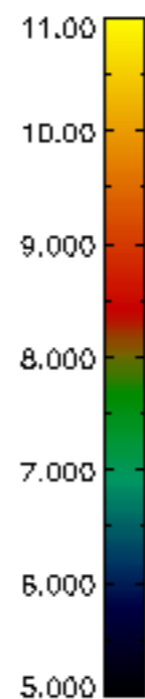
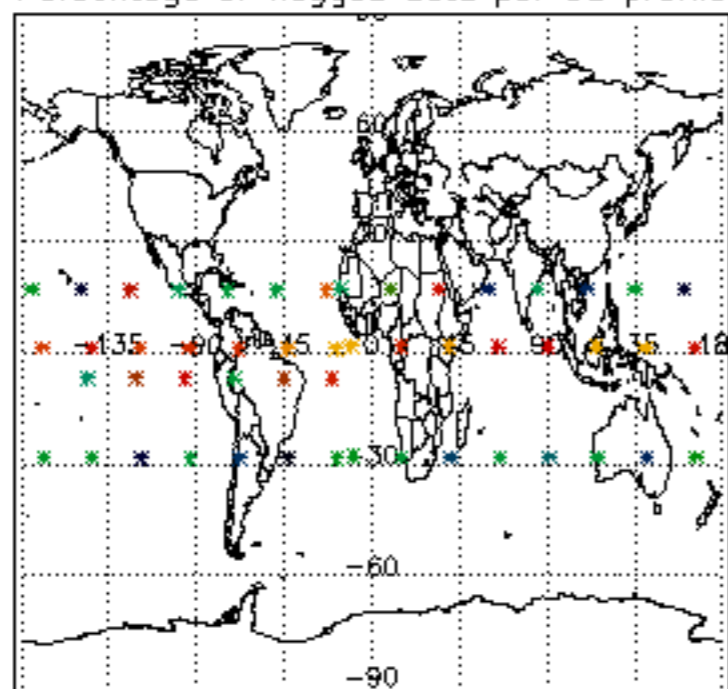




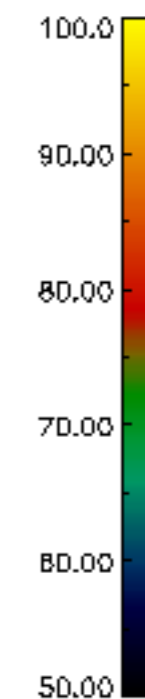
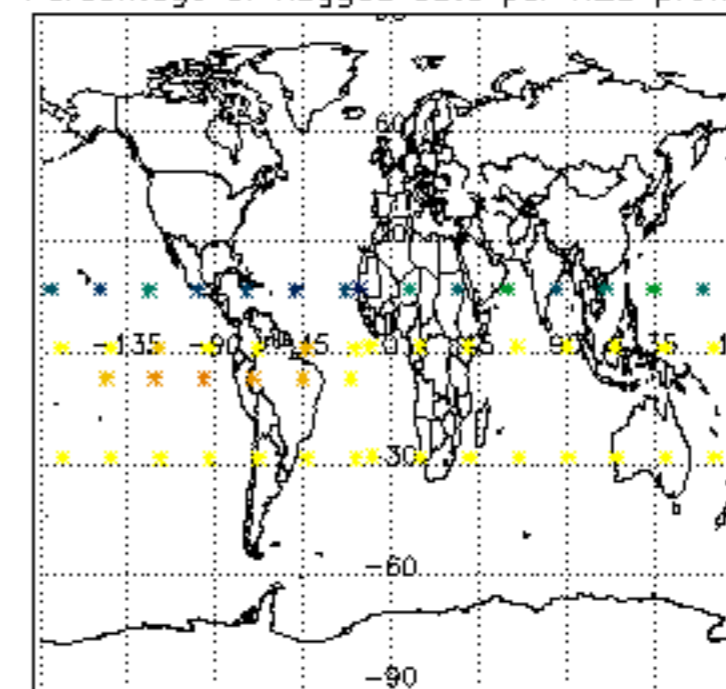




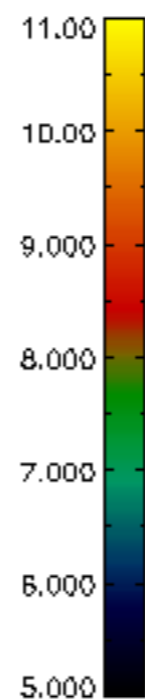
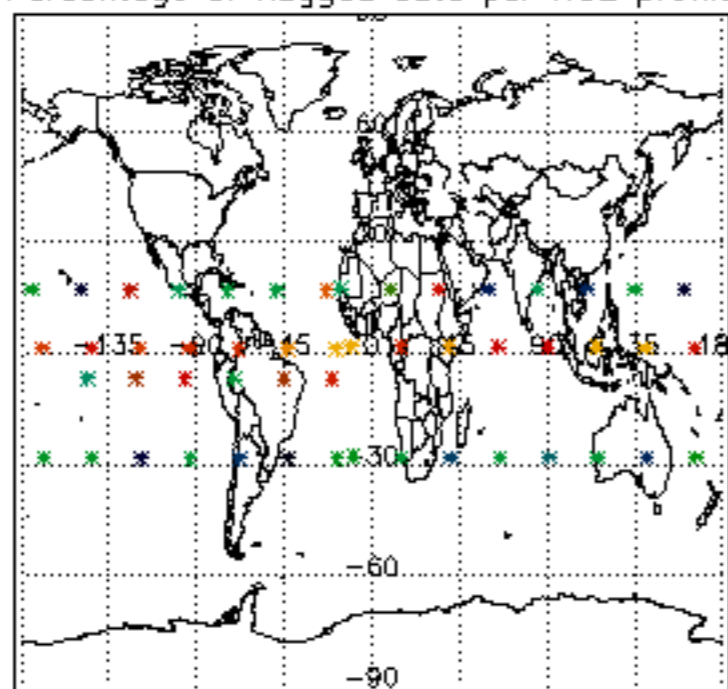
Percentage of flagged data per D3 profile



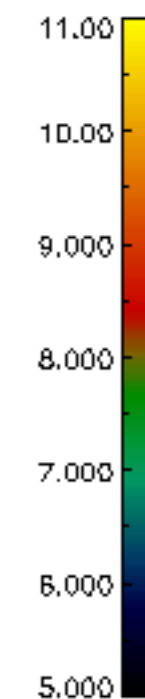
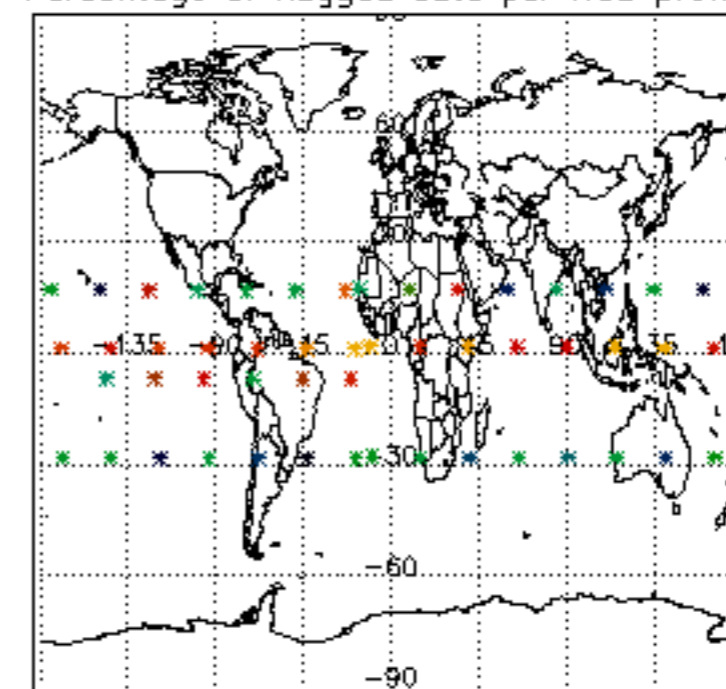
Percentage of flagged data per H2O profile

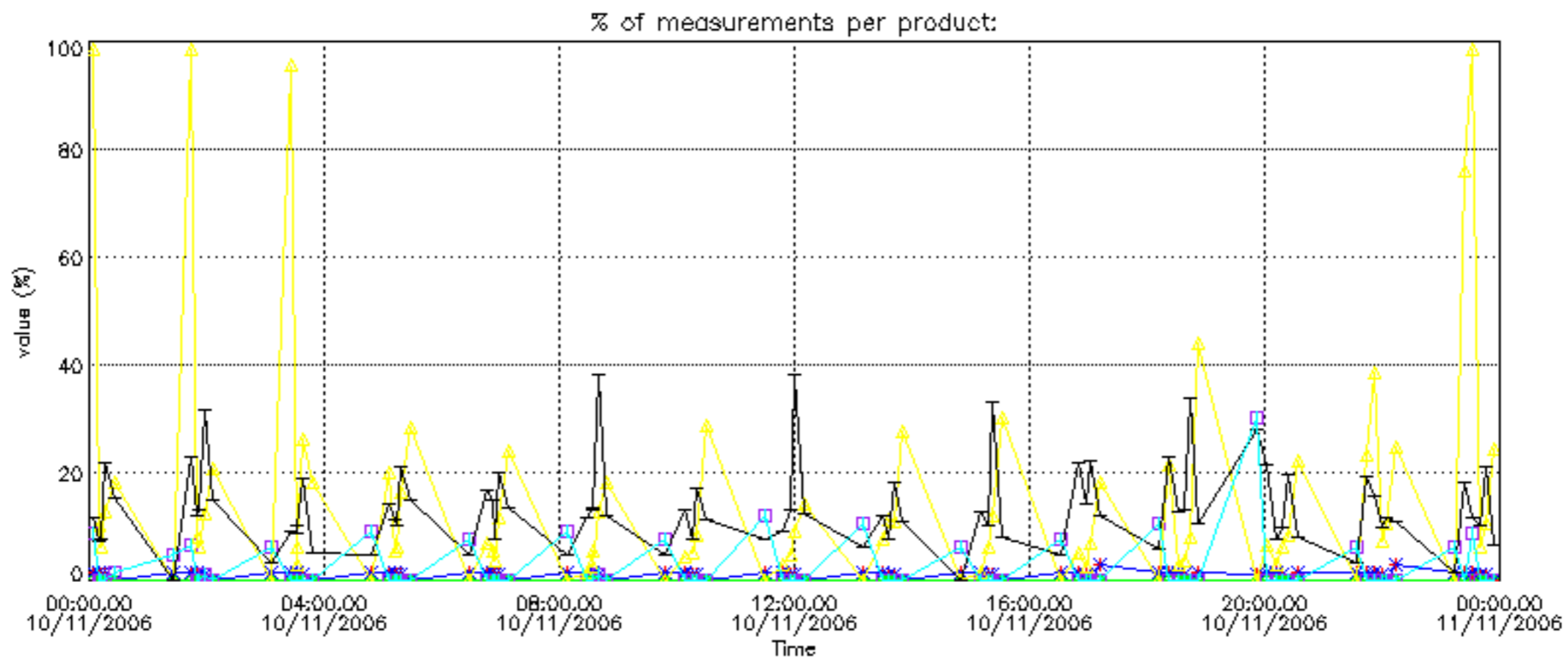


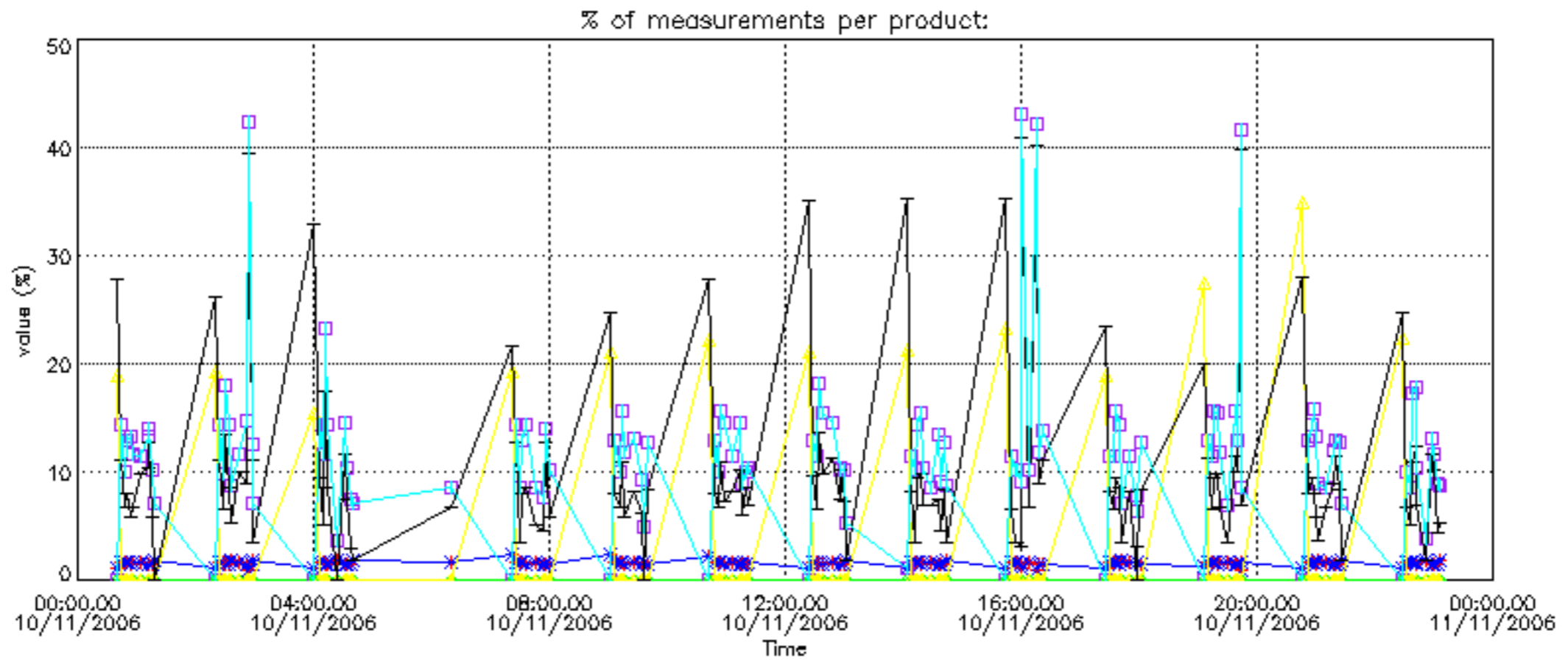
Percentage of flagged data per NO2 profile



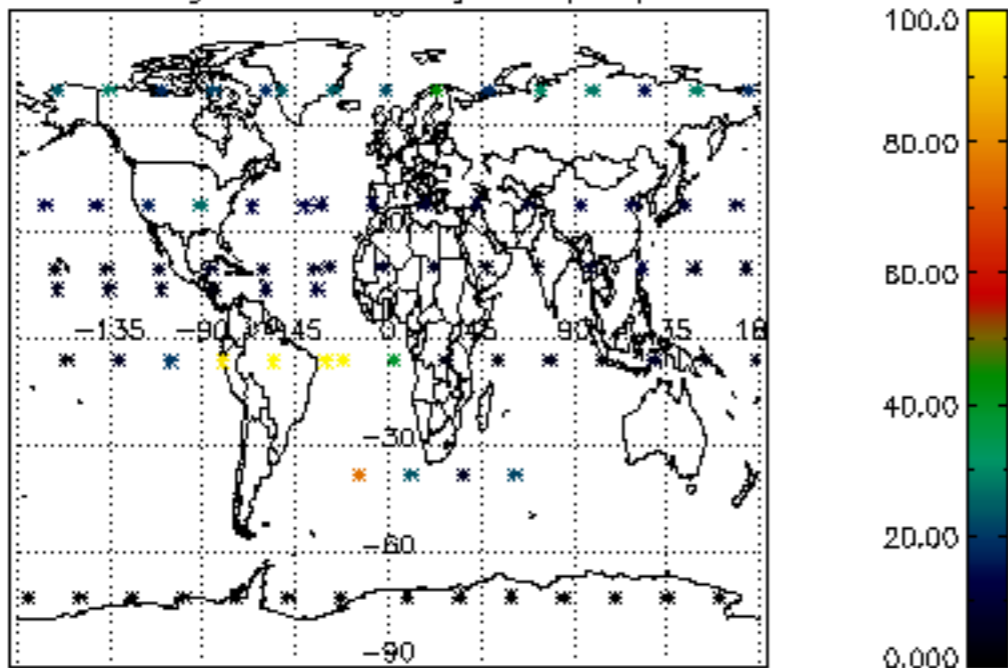
Percentage of flagged data per NO3 profile



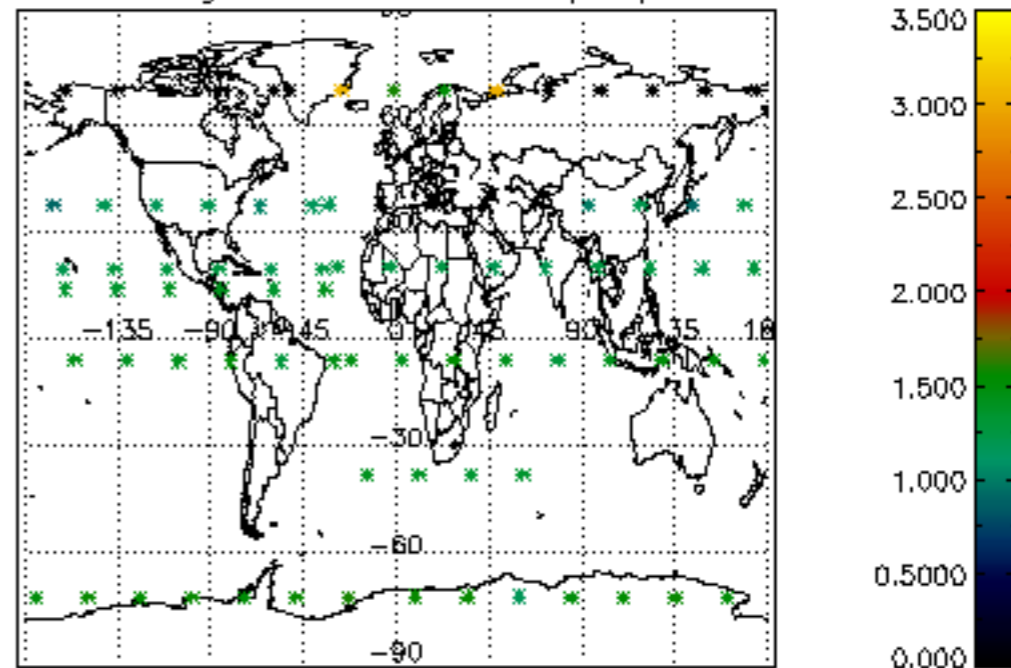




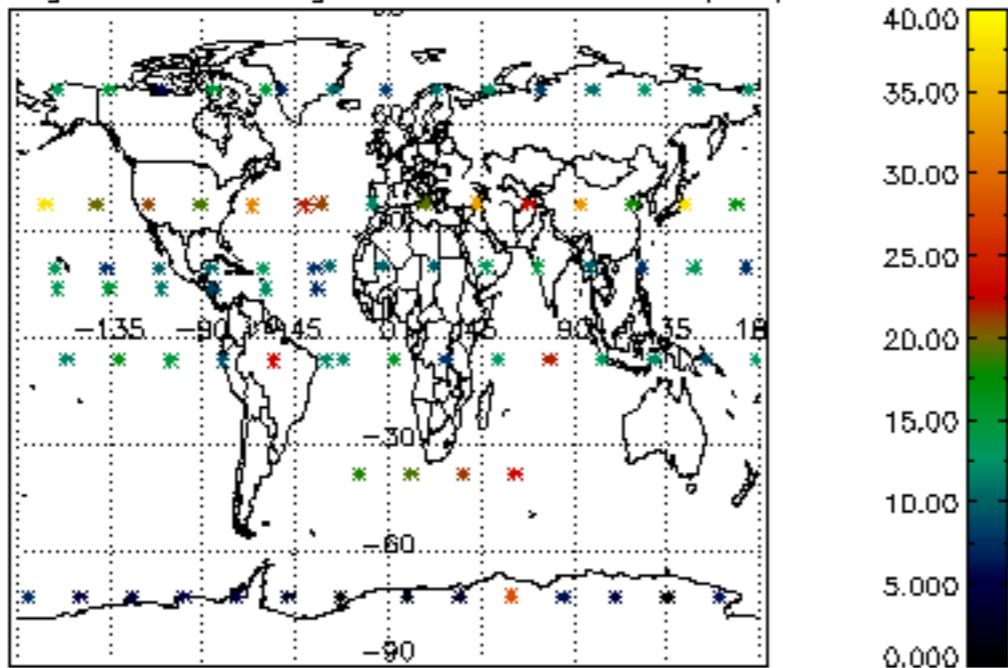
Percentage of cosmic ray hits per profile



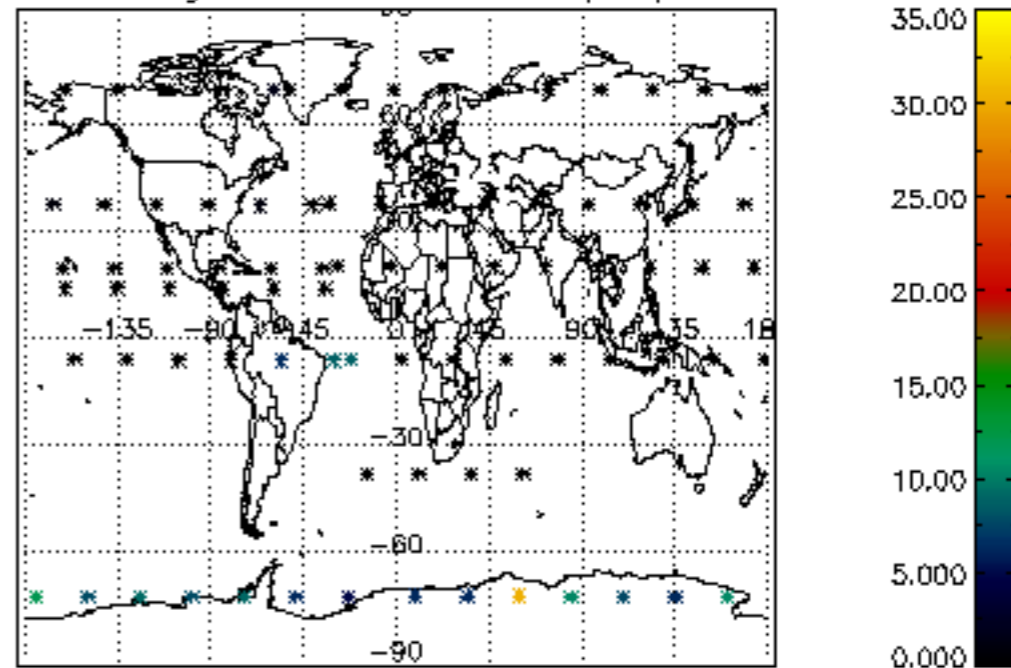
Percentage of datation errors per profile



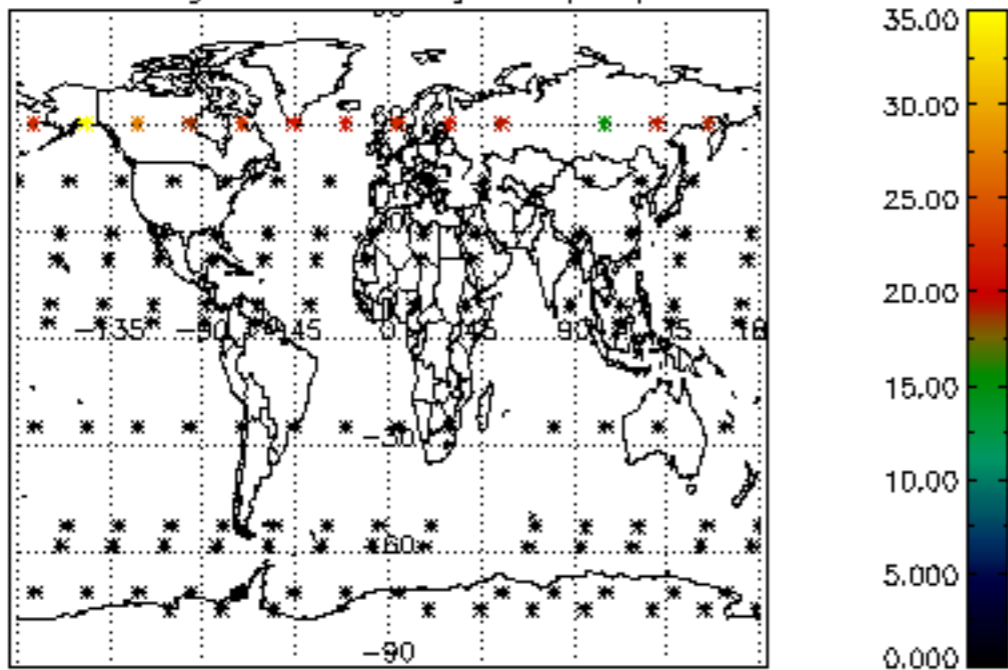
Percentage of star falling outside central band per profile



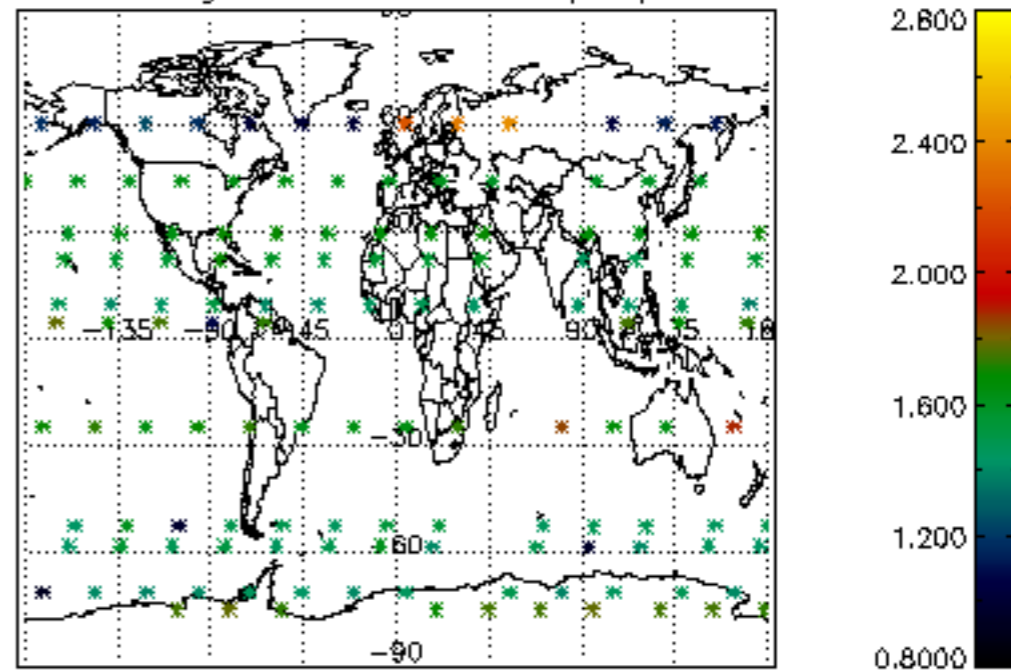
Percentage of saturation errors per profile



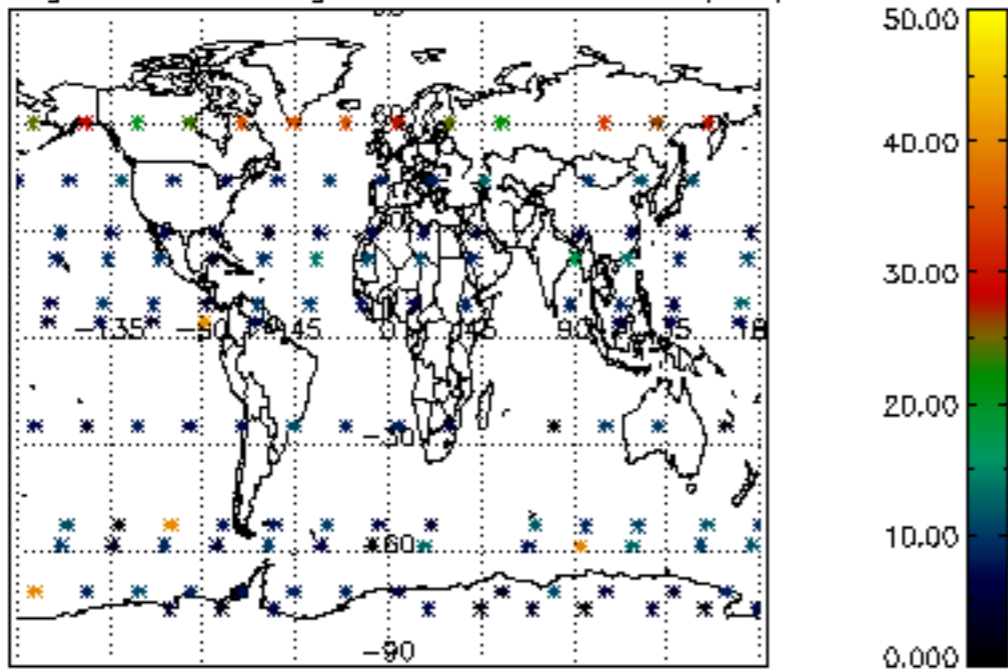
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

