

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	19APR2013 15:08:56
Data source version	GOMOS/6.01
Start time of products	12-11-2004 (12NOV2004 00:00:00)
Stop time of products	13-11-2004 (13NOV2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	405
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

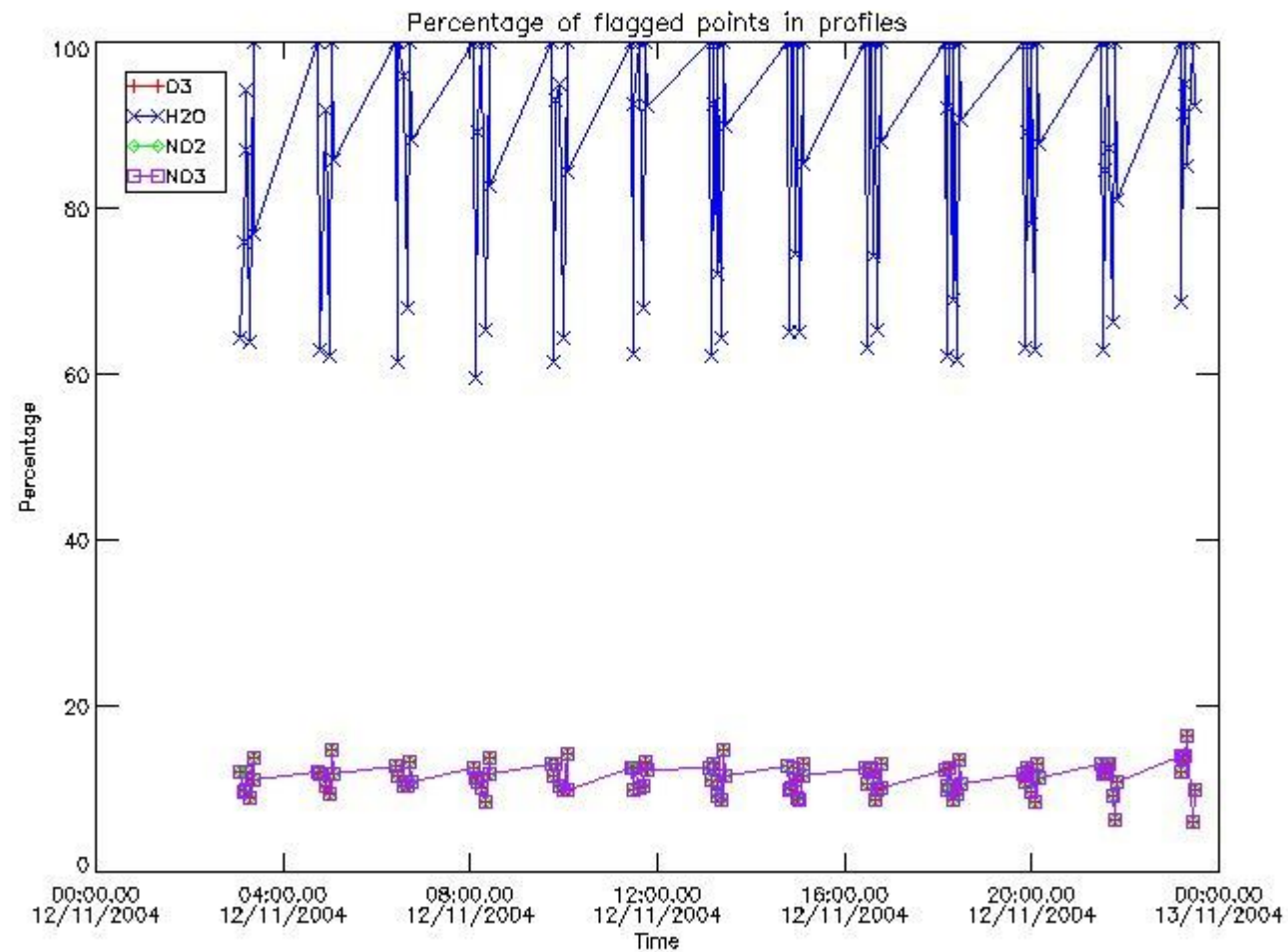
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20041112_022752_000000392032_00046_14128_6089.N1	12-NOV-2004 02:27:52	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	14128	No
2	GOM_NL__2PRFIN20041112_023125_000000432032_00046_14128_6090.N1	12-NOV-2004 02:31:25	Bright	42.500	36	50Alp UMa	1.8000	6300.0	85	14128	No
3	GOM_NL__2PRFIN20041112_023304_000000432032_00046_14128_6091.N1	12-NOV-2004 02:33:04	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	14128	No
4	GOM_NL__2PRFIN20041112_023508_000000392032_00046_14128_6092.N1	12-NOV-2004 02:35:08	Bright	38.500	39	85Eta UMa	1.8540	24000.	77	14128	No
5	GOM_NL__2PRFIN20041112_023701_000000442032_00046_14128_6093.N1	12-NOV-2004 02:37:01	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	14128	No
6	GOM_NL__2PRFIN20041112_023837_000000372032_00046_14128_6094.N1	12-NOV-2004 02:38:37	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	14128	No
7	GOM_NL__2PRFIN20041112_024637_000000832032_00046_14128_6095.N1	12-NOV-2004 02:46:37	Bright	82.500	166	17Eps Leo	2.9800	6000.0	165	14128	No
8	GOM_NL__2PRFIN20041112_025110_000000822032_00046_14128_6096.N1	12-NOV-2004 02:51:10	Twilight	82.000	22	32Alp Leo	1.3600	15200.	164	14128	No
9	GOM_NL__2PRFIN20041112_025630_000000442032_00046_14128_6097.N1	12-NOV-2004 02:56:30	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	14128	No
10	GOM_NL__2PRFIN20041112_030514_000000432032_00046_14128_6098.N1	12-NOV-2004 03:05:14	Dark	42.500	26	Gam Cru	1.6240	2900.0	85	14128	No
11	GOM_NL__2PRFIN20041112_030922_000000532032_00047_14129_6089.N1	12-NOV-2004 03:09:22	Dark	52.500	65	Lam Vel	2.2040	4400.0	105	14129	No
12	GOM_NL__2PRFIN20041112_031136_000000432032_00047_14129_6090.N1	12-NOV-2004 03:11:36	Dark	42.500	29	Bet Car	1.6720	10200.	85	14129	No
13	GOM_NL__2PRFIN20041112_031303_000000522032_00047_14129_6091.N1	12-NOV-2004 03:13:03	Dark	51.500	34	Gam2Vel	1.7930	23000.	103	14129	No
14	GOM_NL__2PRFIN20041112_031754_000000572032_00047_14129_6092.N1	12-NOV-2004 03:17:54	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	14129	No
15	GOM_NL__2PRFIN20041112_032157_000000372032_00047_14129_6093.N1	12-NOV-2004 03:21:57	Dark	37.000	143	Alp Hyi	2.8570	7200.0	74	14129	No
16	GOM_NL__2PRFIN20041112_032317_000000462032_00047_14129_6094.N1	12-NOV-2004 03:23:17	Dark	46.000	9	Alp Eri	0.45300	24000.	92	14129	No
17	GOM_NL__2PRFIN20041112_032659_000000422032_00047_14129_6095.N1	12-NOV-2004 03:26:59	Straylight	42.000	157	The1Eri	2.9060	9300.0	84	14129	No
18	GOM_NL__2PRFIN20041112_033204_000000842032_00047_14129_6096.N1	12-NOV-2004 03:32:04	Straylight	84.000	101	11Alp Lep	2.5820	7000.0	168	14129	No
19	GOM_NL__2PRFIN20041112_033428_000000562032_00047_14129_6097.N1	12-NOV-2004 03:34:28	Straylight	56.000	165	34Gam Eri	2.9500	3200.0	112	14129	No
20	GOM_NL__2PRFIN20041112_033726_000001012032_00047_14129_6098.N1	12-NOV-2004 03:37:26	Twilight	101.00	7	19Bet Ori	0.10000	14000.	202	14129	No
21	GOM_NL__2PRFIN20041112_034009_000000512032_00047_14129_6099.N1	12-NOV-2004 03:40:09	Twilight	50.500	94	92Alp Cet	2.5260	3100.0	101	14129	No
22	GOM_NL__2PRFIN20041112_034450_000000402032_00047_14129_6100.N1	12-NOV-2004 03:44:50	Bright	40.000	105	6Bet Ari	2.6450	8900.0	80	14129	No
23	GOM_NL__2PRFIN20041112_034855_000000402032_00047_14129_6101.N1	12-NOV-2004 03:48:55	Bright	40.000	173	4Bet Tri	3.0040	8900.0	80	14129	No
24	GOM_NL__2PRFIN20041112_035101_000000402032_00047_14129_6102.N1	12-NOV-2004 03:51:01	Bright	39.500	73	57Gam1And	2.2600	13100.	79	14129	No
25	GOM_NL__2PRFIN20041112_035248_000000472032_00047_14129_6103.N1	12-NOV-2004 03:52:48	Bright	46.500	149	45Eps Per	2.8880	30000.	93	14129	No
26	GOM_NL__2PRFIN20041112_035424_000000432032_00047_14129_6104.N1	12-NOV-2004 03:54:24	Bright	42.500	35	33Alp Per	1.7950	6250.0	85	14129	No
27	GOM_NL__2PRFIN20041112_035600_000000372032_00047_14129_6105.N1	12-NOV-2004 03:56:00	Bright	37.000	110	37Del Cas	2.6780	8900.0	74	14129	No
28	GOM_NL__2PRFIN20041112_035837_000000592032_00047_14129_6106.N1	12-NOV-2004 03:58:37	Bright	59.000	6	13Alp Aur	0.080000	3400.0	118	14129	No
29	GOM_NL__2PRFIN20041112_040412_000000352032_00047_14129_6107.N1	12-NOV-2004 04:04:12	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	14129	No
30	GOM_NL__2PRFIN20041112_040828_000000392032_00047_14129_6108.N1	12-NOV-2004 04:08:28	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	14129	No
31	GOM_NL__2PRFIN20041112_041200_000000452032_00047_14129_6109.N1	12-NOV-2004 04:12:00	Bright	45.000	36	50Alp UMa	1.8000	6300.0	90	14129	No
32	GOM_NL__2PRFIN20041112_041340_000000402032_00047_14129_6110.N1	12-NOV-2004 04:13:40	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	14129	No
33	GOM_NL__2PRFIN20041112_041543_000000372032_00047_14129_6111.N1	12-NOV-2004 04:15:43	Bright	37.000	39	85Eta UMa	1.8540	24000.	74	14129	No
34	GOM_NL__2PRFIN20041112_041737_000000622032_00047_14129_6112.N1	12-NOV-2004 04:17:37	Bright	62.000	174	52Psi UMa	3.0040	4400.0	124	14129	No
35	GOM_NL__2PRFIN20041112_041914_000000372032_00047_14129_6113.N1	12-NOV-2004 04:19:14	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	14129	No
36	GOM_NL__2PRFIN20041112_042714_000000812032_00047_14129_6114.N1	12-NOV-2004 04:27:14	Bright	81.000	166	17Eps Leo	2.9800	6000.0	162	14129	No
37	GOM_NL__2PRFIN20041112_043147_000000832032_00047_14129_6115.N1	12-NOV-2004 04:31:47	Twilight	83.000	22	32Alp Leo	1.3600	15200.	166	14129	No
38	GOM_NL__2PRFIN20041112_043534_000000472032_00047_14129_6116.N1	12-NOV-2004 04:35:34	Twilight	46.500	100	4Gam Crv	2.5800	13100.	93	14129	No
39	GOM_NL__2PRFIN20041112_043704_000000492032_00047_14129_6117.N1	12-NOV-2004 04:37:04	Twilight	48.500	171	2Eps Crv	3.0010	4250.0	97	14129	No
40	GOM_NL__2PRFIN20041112_044332_000000422032_00047_14129_6118.N1	12-NOV-2004 04:43:32	Dark	42.000	64	Gam Cen	2.2000	10600.	84	14129	No
41	GOM_NL__2PRFIN20041112_044550_000000442032_00047_14129_6119.N1	12-NOV-2004 04:45:50	Dark	43.500	26	Gam Cru	1.6240	2900.0	87	14129	No
42	GOM_NL__2PRFIN20041112_045341_000000502032_00048_14130_6089.N1	12-NOV-2004 04:53:41	Dark	49.500	34	Gam2Vel	1.7930	23000.	99	14130	No

397	GOM_NL__2PRFIN20041112_233751_000000732032_00059_14141_6145.N1	12-NOV-2004 23:37:51	Straylight	73.000	139	9Bet Lep	2.8330	5600.0	146	14141	No
398	GOM_NL__2PRFIN20041112_234140_000000552032_00059_14141_6146.N1	12-NOV-2004 23:41:40	Straylight	55.000	165	34Gam Eri	2.9500	3200.0	110	14141	No
399	GOM_NL__2PRFIN20041112_234431_000000982032_00059_14141_6147.N1	12-NOV-2004 23:44:31	Twilight_stray	98.000	7	19Bet Ori	0.10000	14000.	196	14141	No
400	GOM_NL__2PRFIN20041112_234717_000000552032_00059_14141_6148.N1	12-NOV-2004 23:47:17	Twilight_stray	54.500	94	92Alp Cet	2.5260	3100.0	109	14141	No
401	GOM_NL__2PRFIN20041112_235204_000000402032_00059_14141_6149.N1	12-NOV-2004 23:52:04	Bright	39.500	105	6Bet Ari	2.6450	8900.0	79	14141	No
402	GOM_NL__2PRFIN20041112_235438_000000482032_00059_14141_6150.N1	12-NOV-2004 23:54:38	Bright	47.500	146	25Eta Tau	2.8730	15200.	95	14141	No
403	GOM_NL__2PRFIN20041112_235626_000000392032_00059_14141_6151.N1	12-NOV-2004 23:56:26	Bright	39.000	53	43Bet And	2.0480	3300.0	78	14141	No
404	GOM_NL__2PRFIN20041112_235812_000000382032_00059_14141_6152.N1	12-NOV-2004 23:58:12	Bright	38.000	73	57Gam1And	2.2600	13100.	76	14141	No
405	GOM_NL__2PRFIN20041112_235951_000000462032_00059_14141_6153.N1	12-NOV-2004 23:59:51	Bright	45.500	149	45Eps Per	2.8880	30000.	91	14141	No

3. Quality information per product

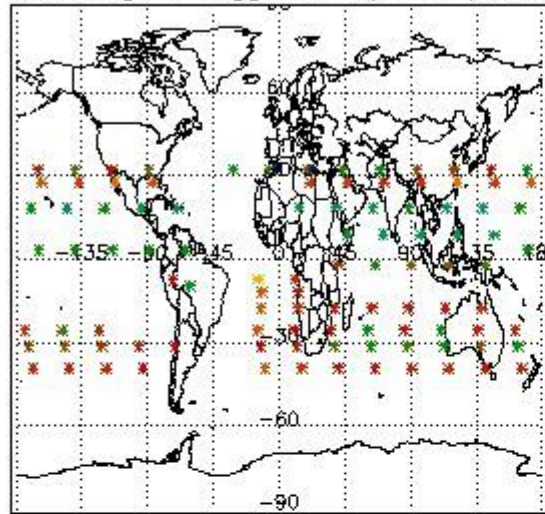
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

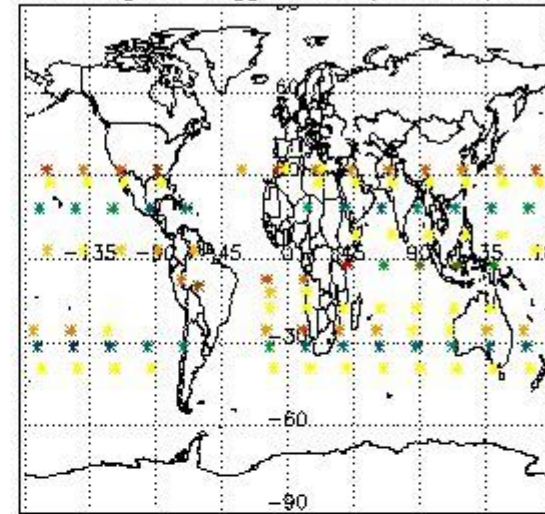


3.2 Plot quality information per product (world map)

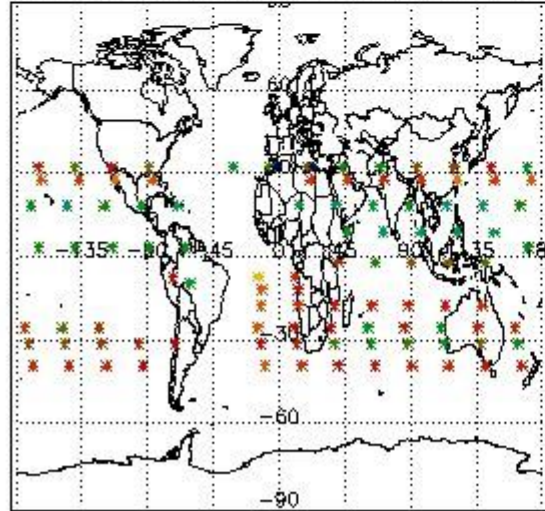
Percentage of flagged data per O3 profile



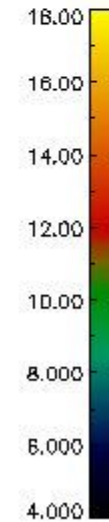
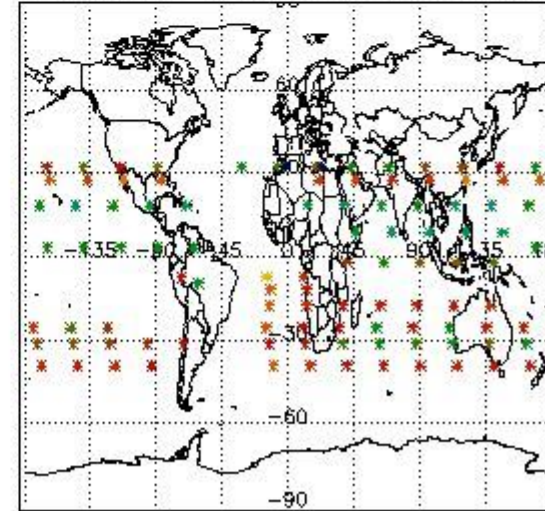
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

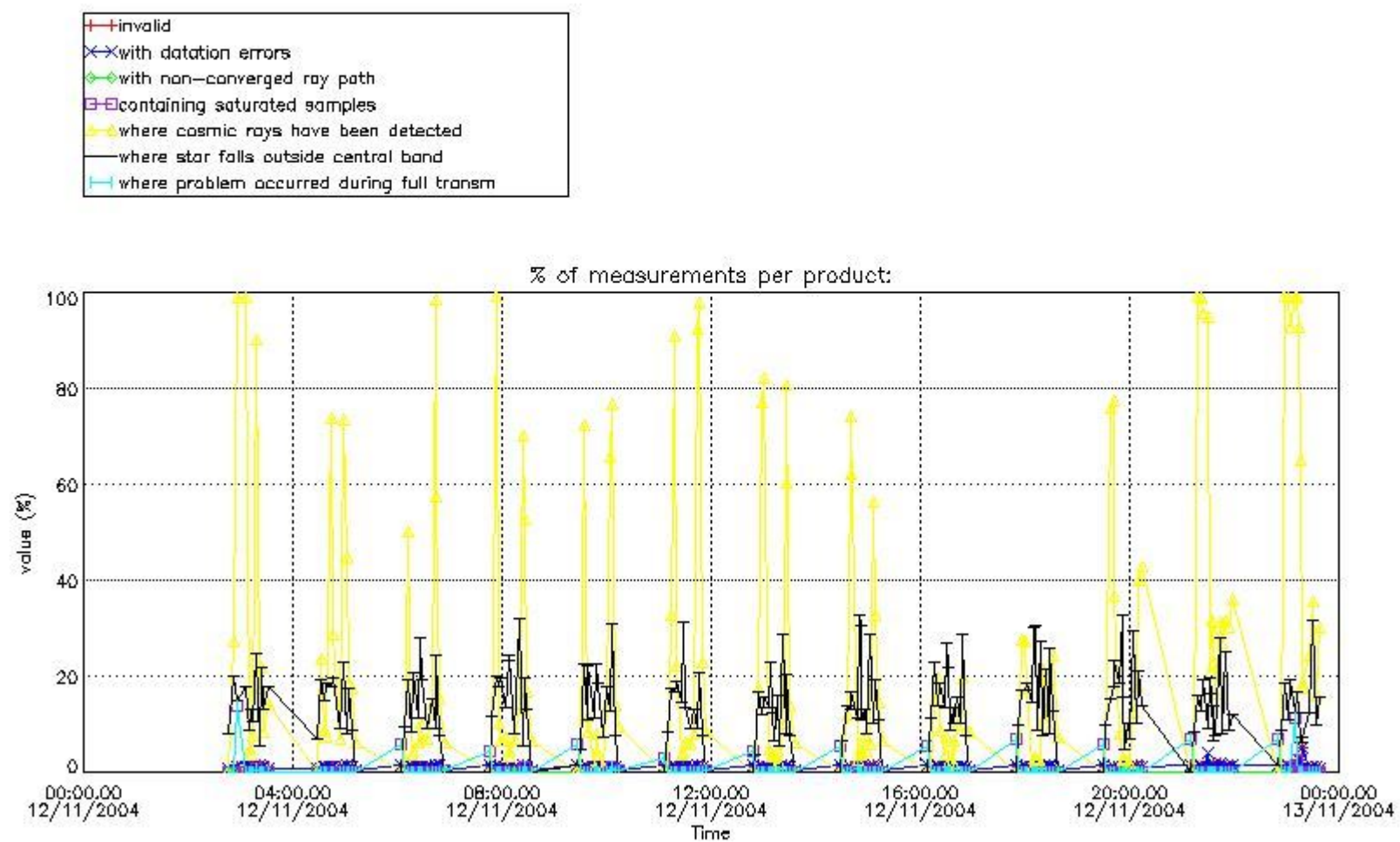


4. Level 1 quality information per product

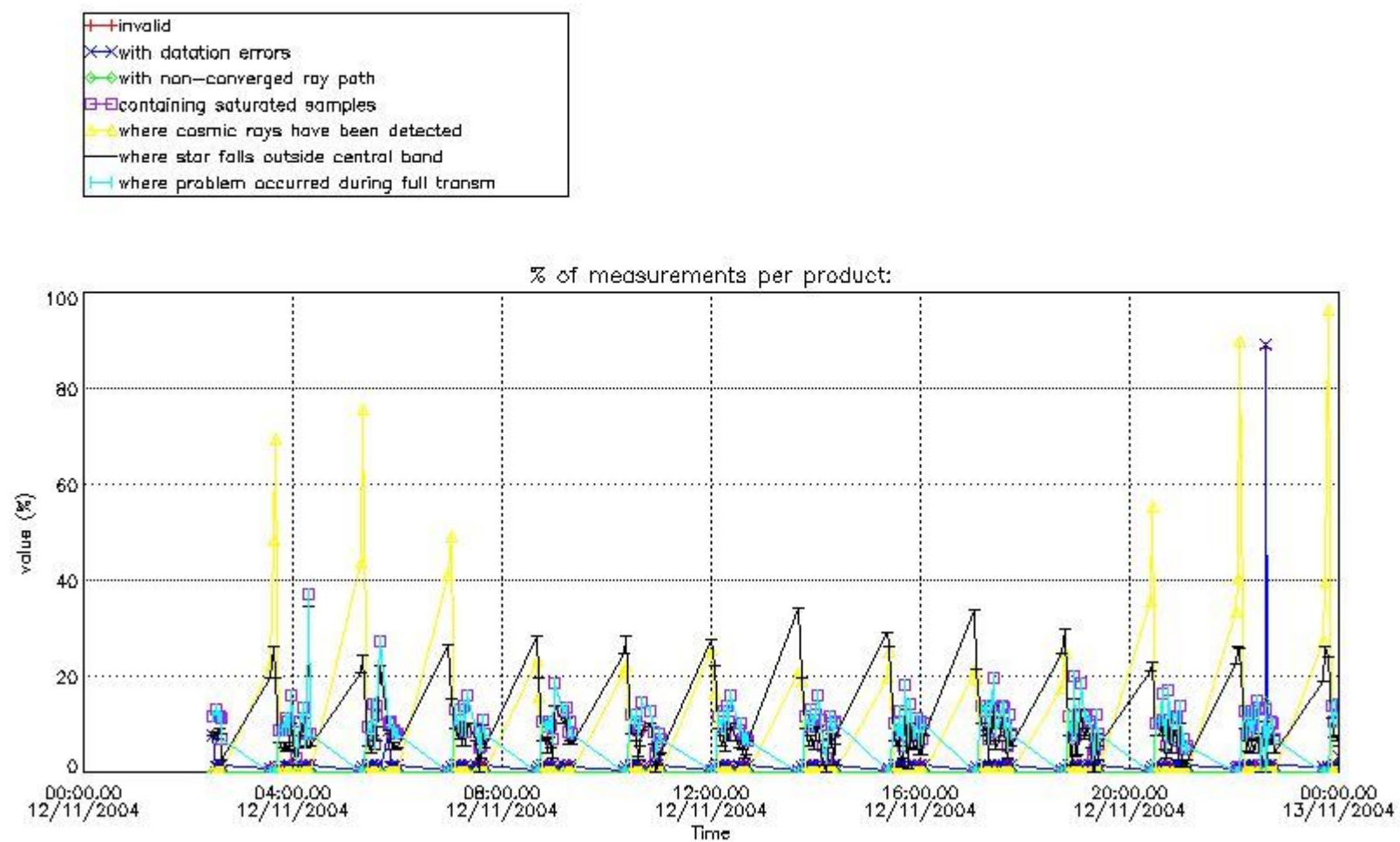
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

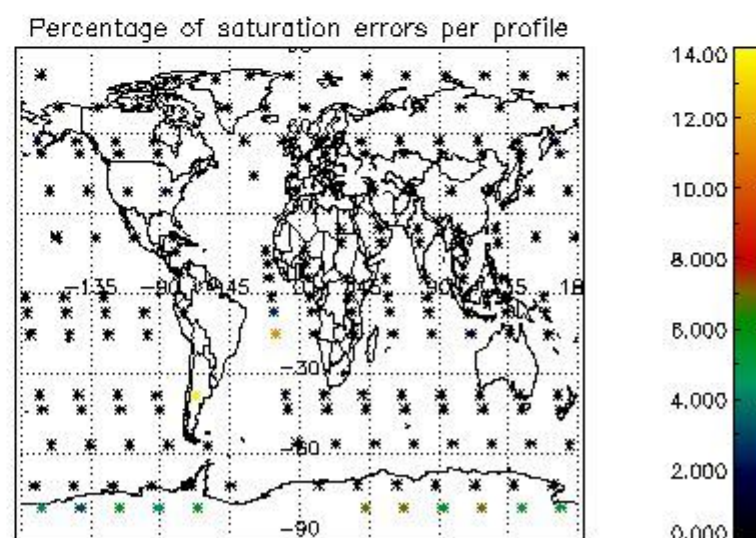
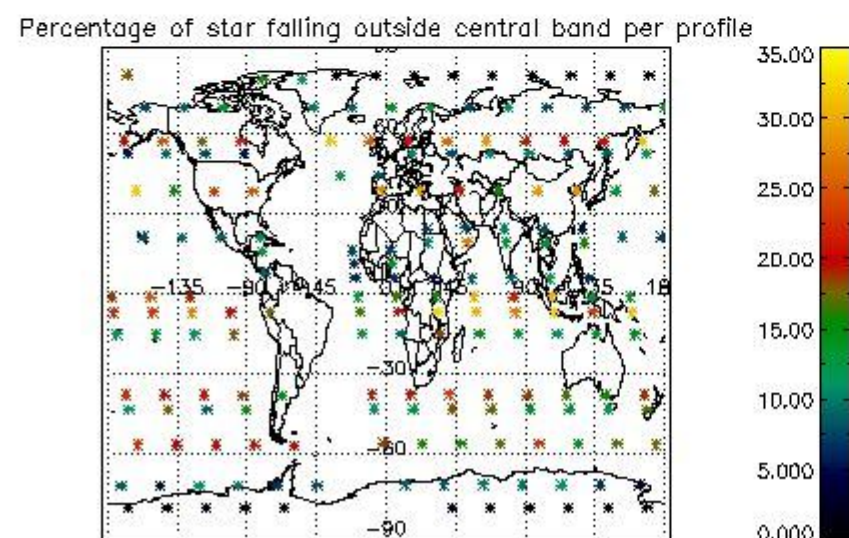
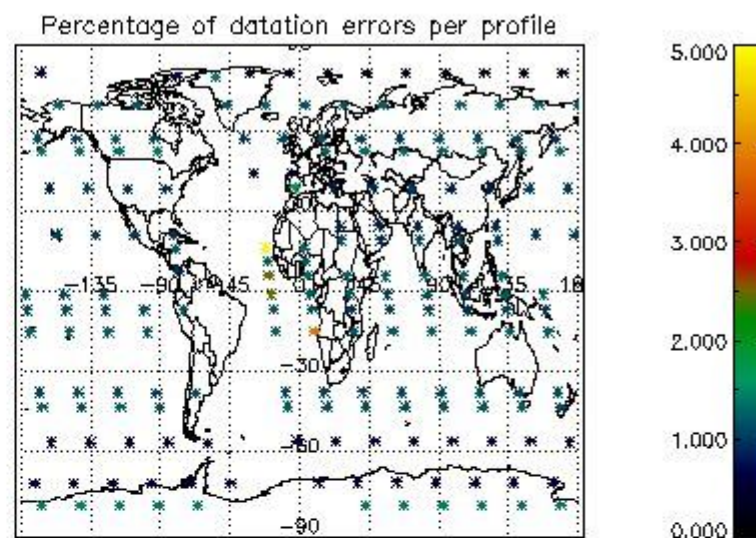
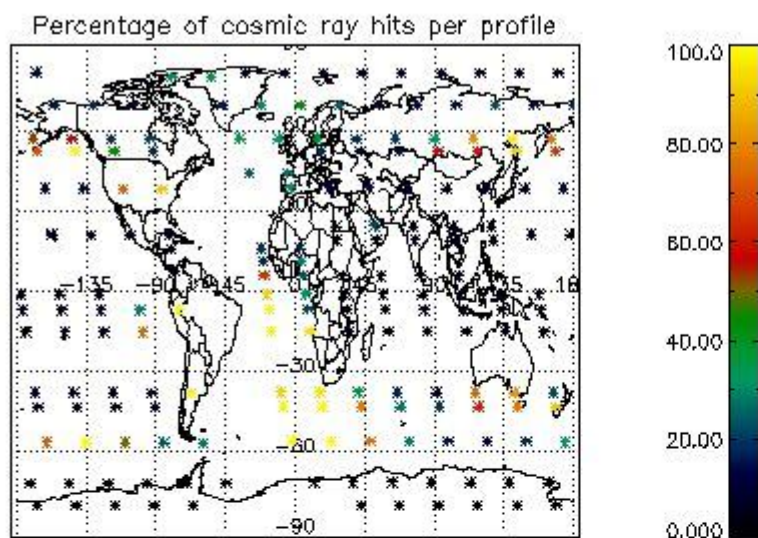


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



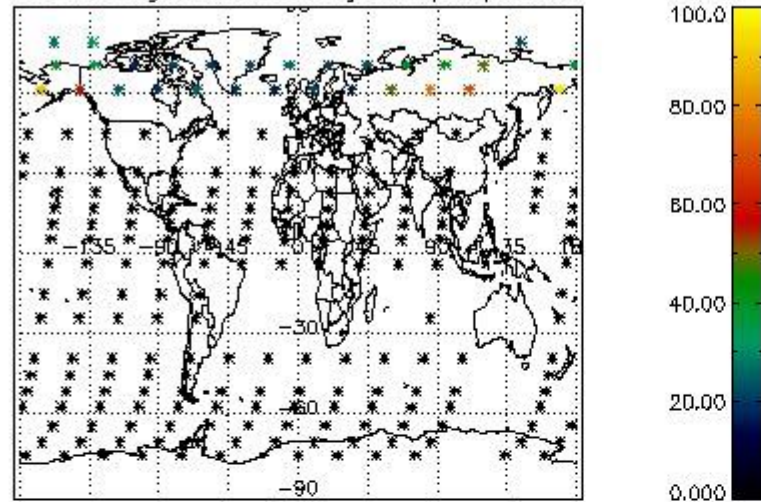
4.2 Plot quality information per product coming from level 1b processing (world map)

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

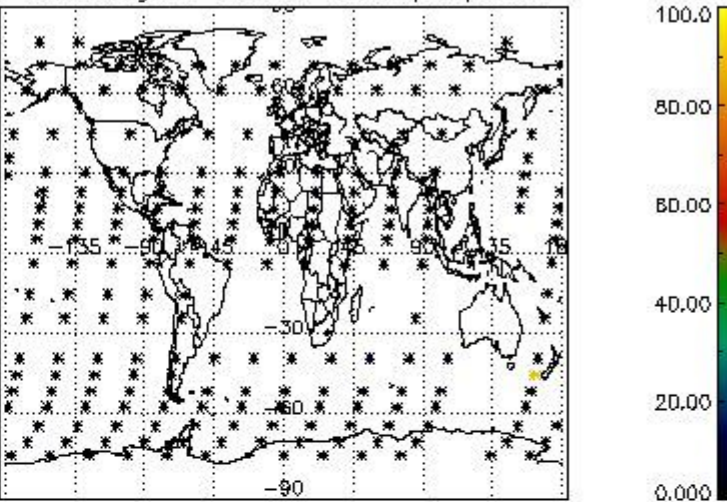


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

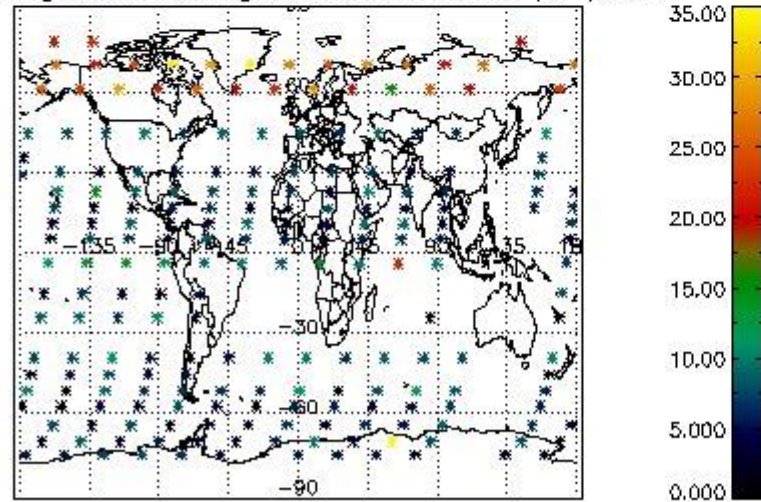
Percentage of cosmic ray hits per profile



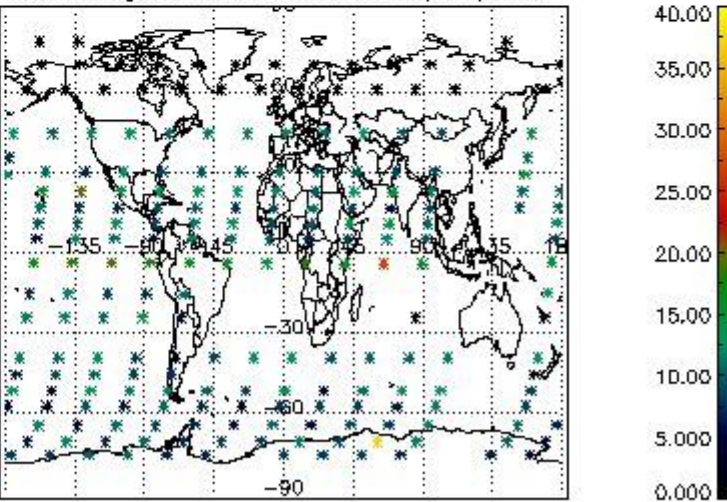
Percentage of datation errors per profile



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

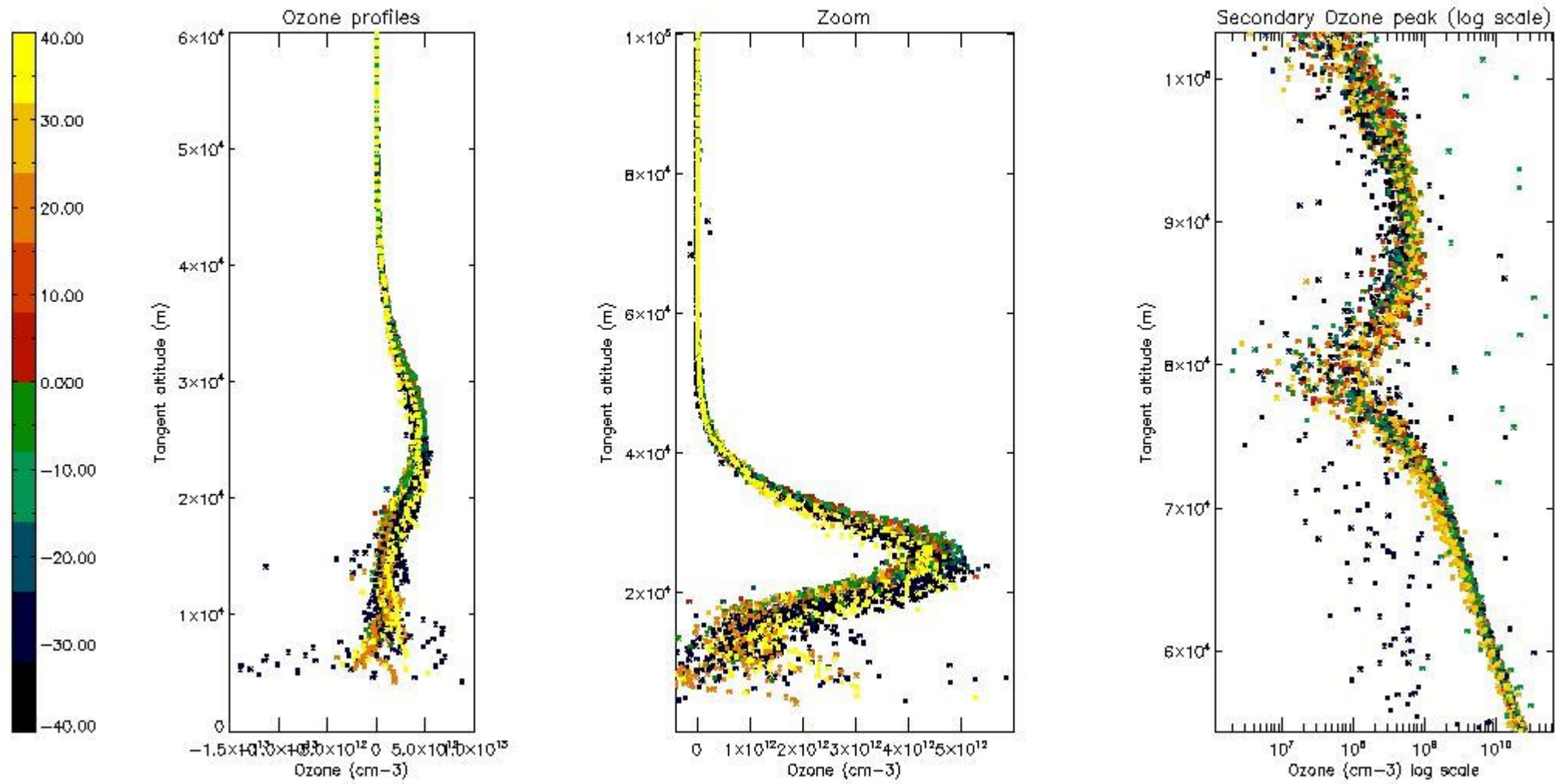
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	14

STD < 10	12
STD < 5	9

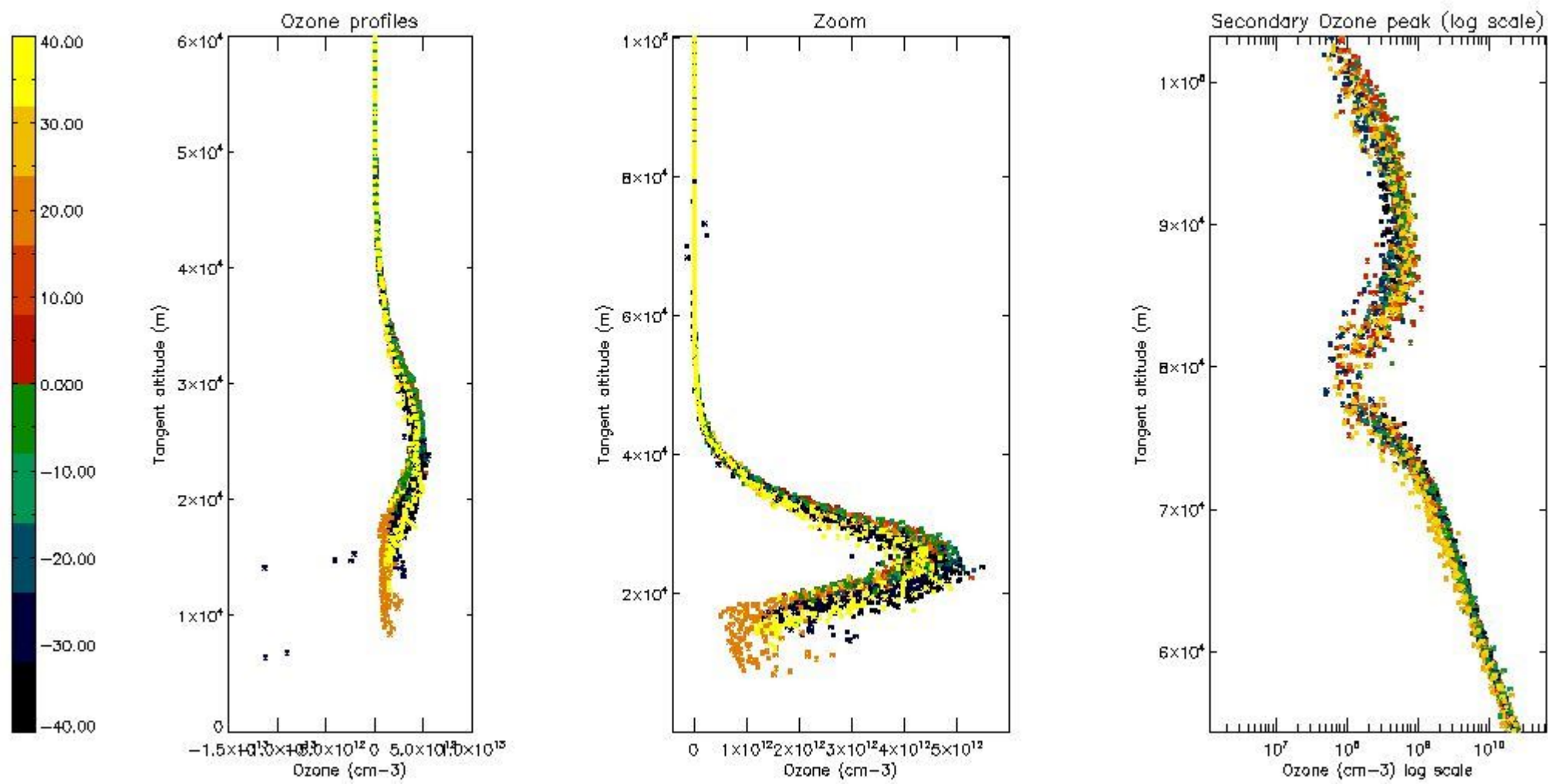
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



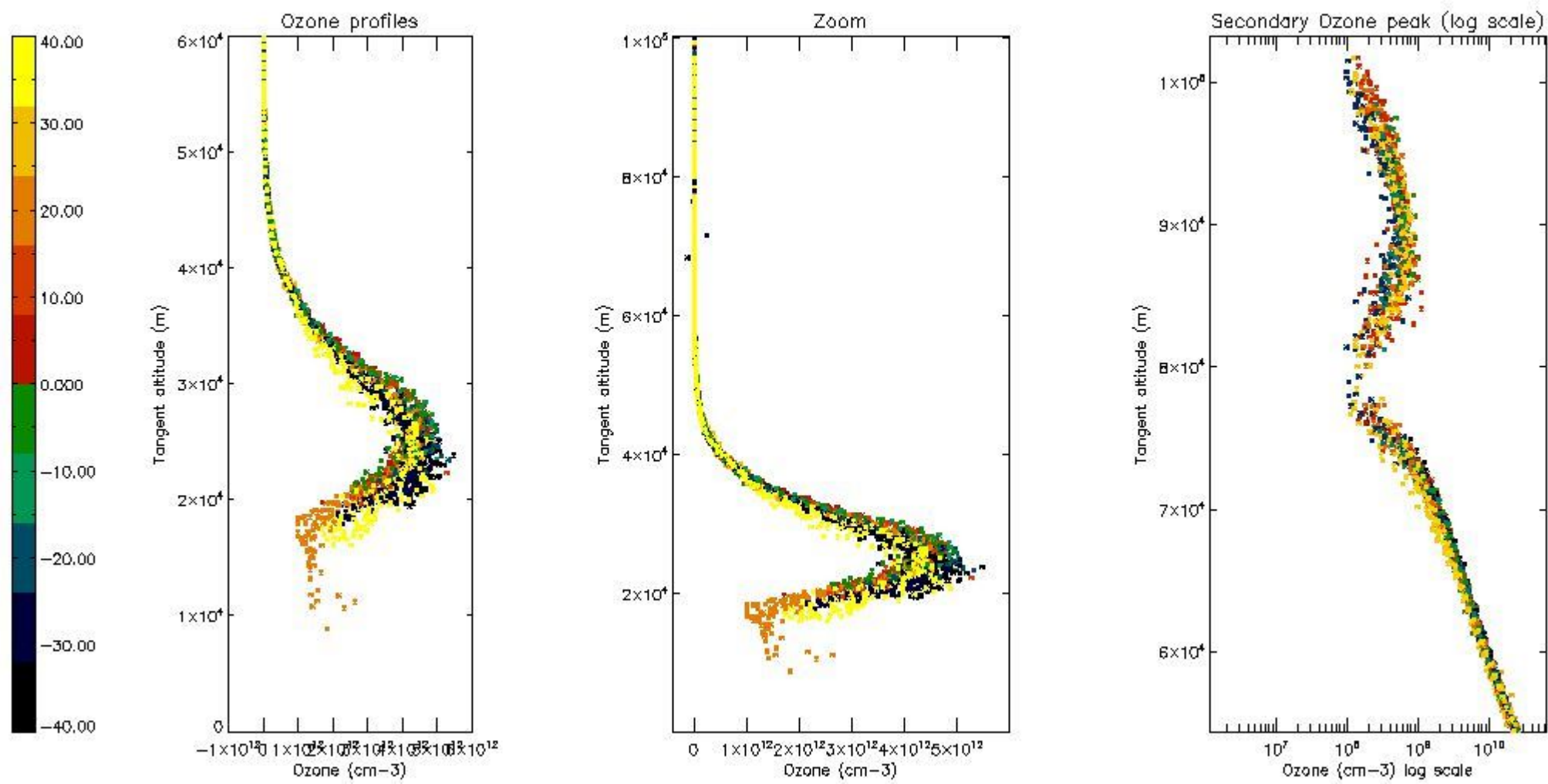
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



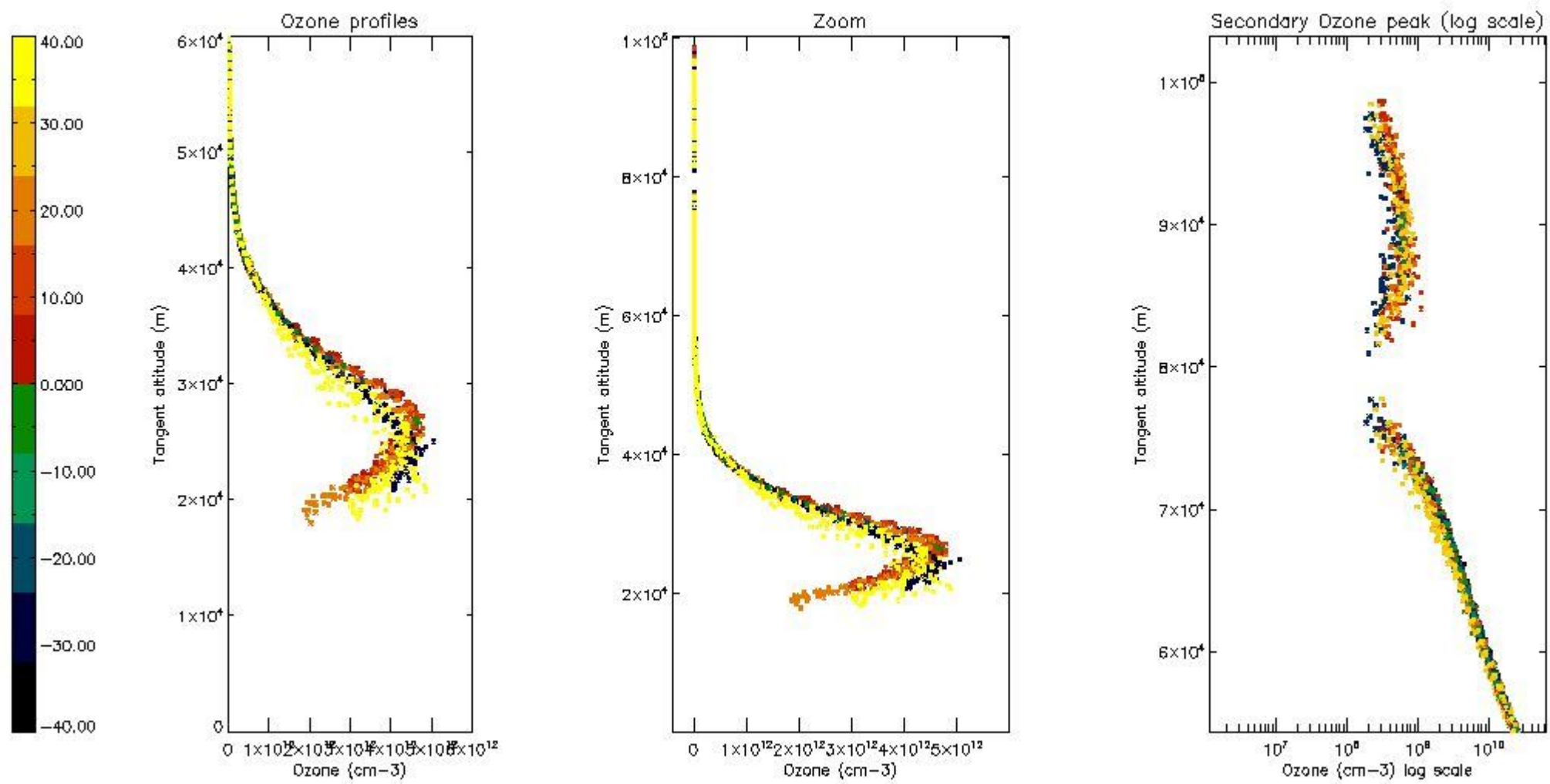
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



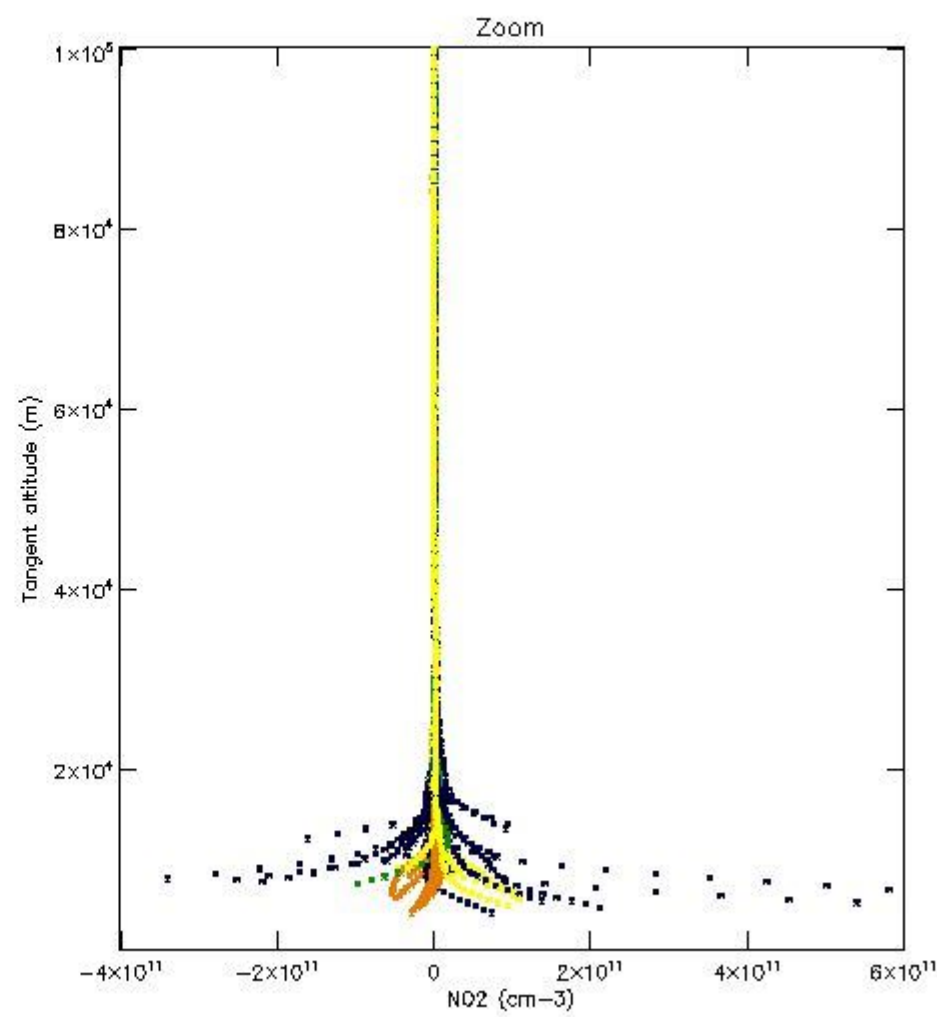
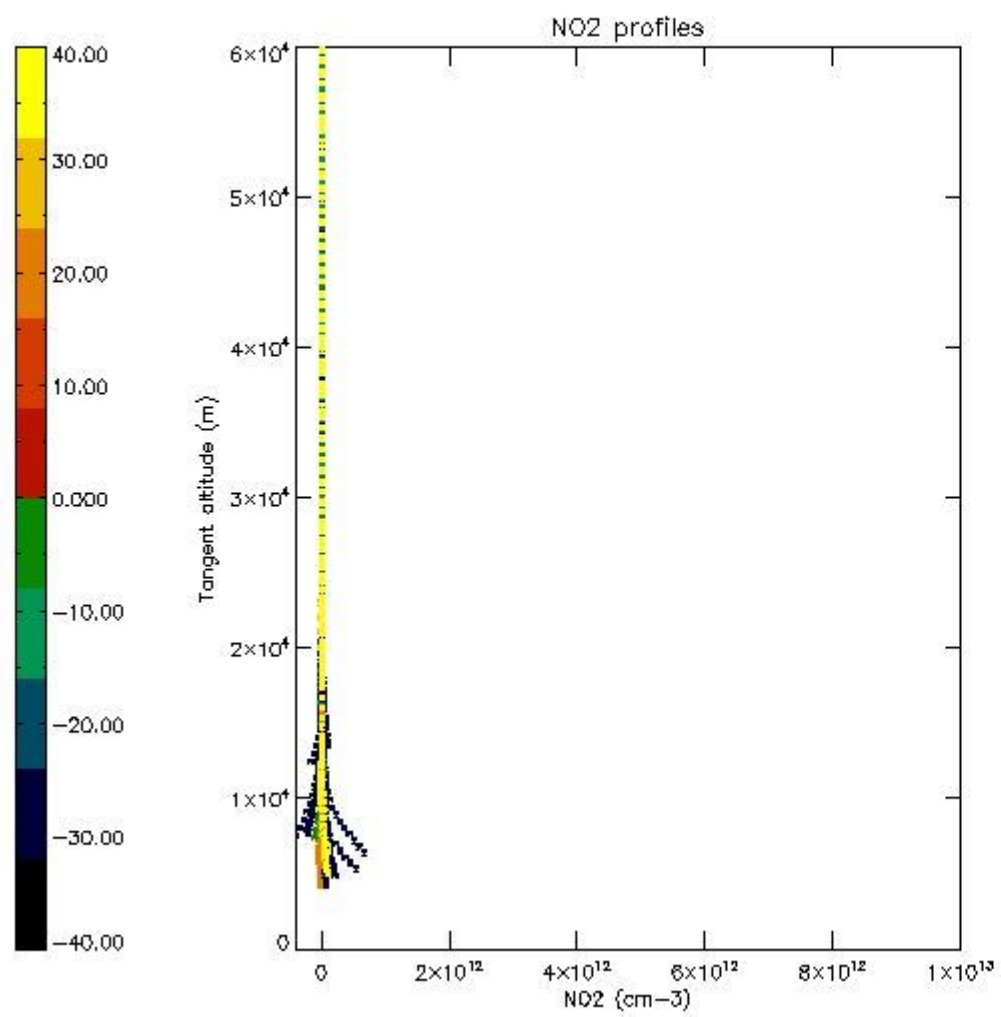
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



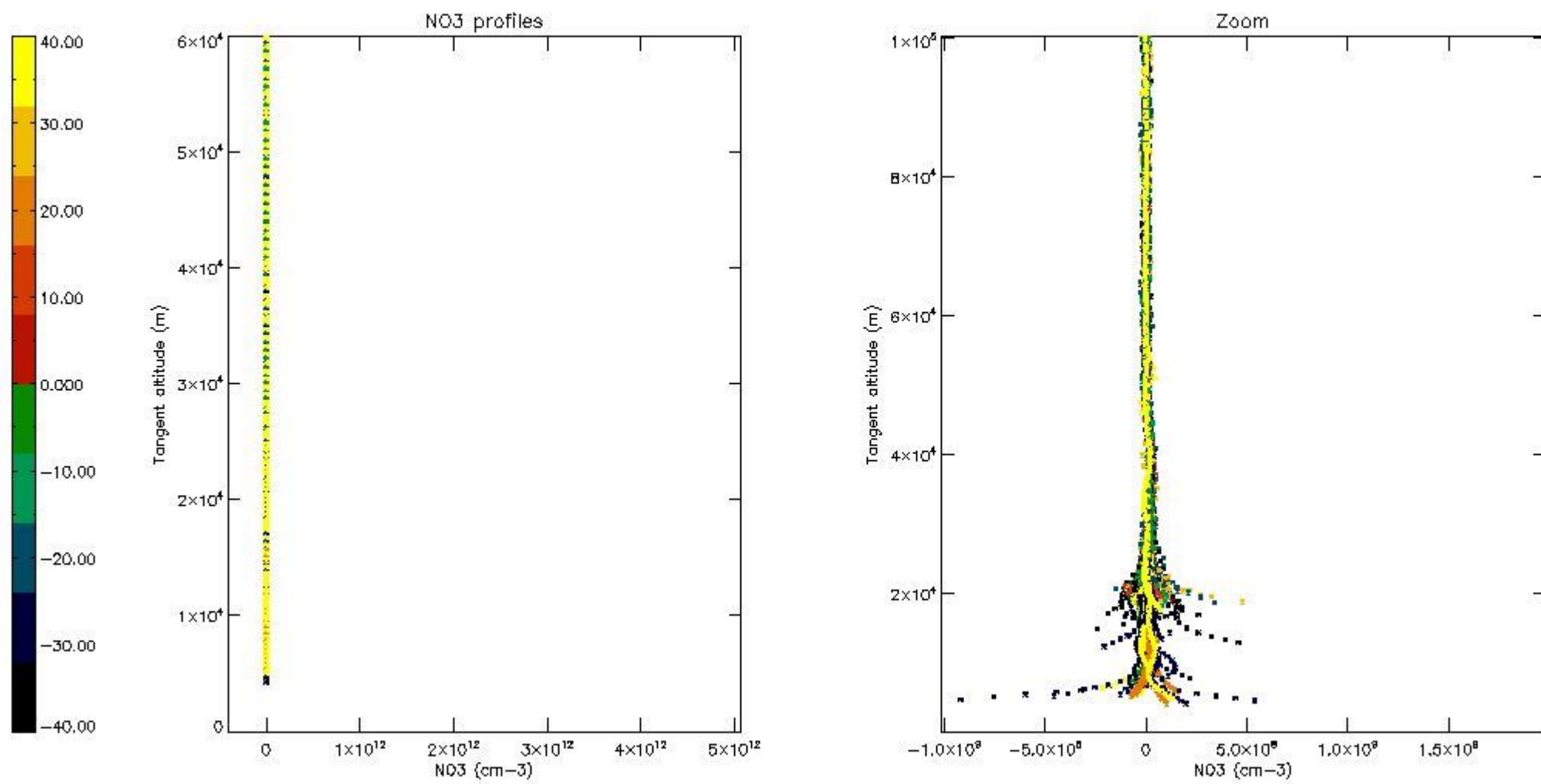
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



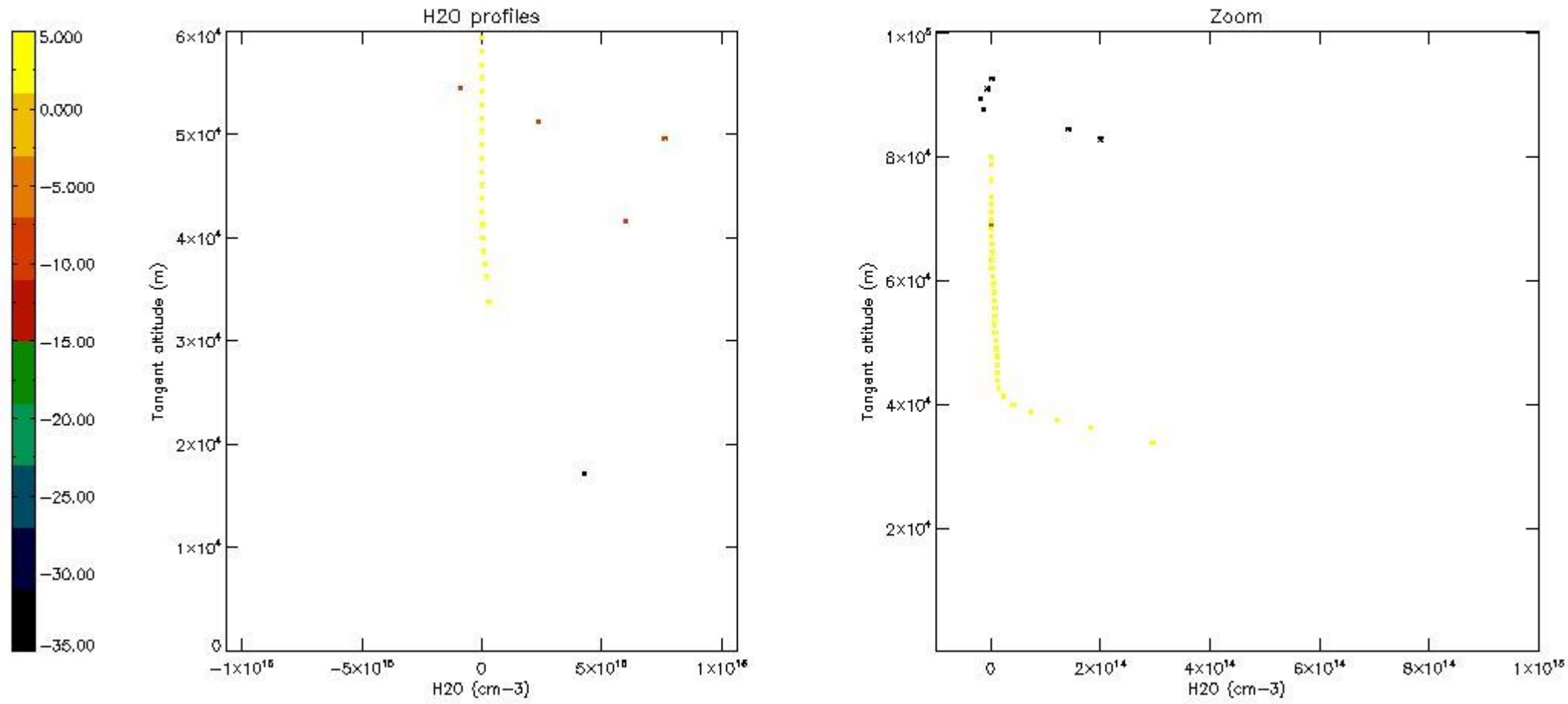
5.7 Plot NO3 profiles for all STD (dark without errors)

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	12-NOV-2004 02:27:52
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-NOV-2004 02:27:52
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-NOV-2004 02:27:52

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	19APR2013 15:08:56
Data source version	GOMOS/6.01
Start time of products	12-11-2004 (12NOV2004 00:00:00)
Stop time of products	13-11-2004 (13NOV2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	405
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

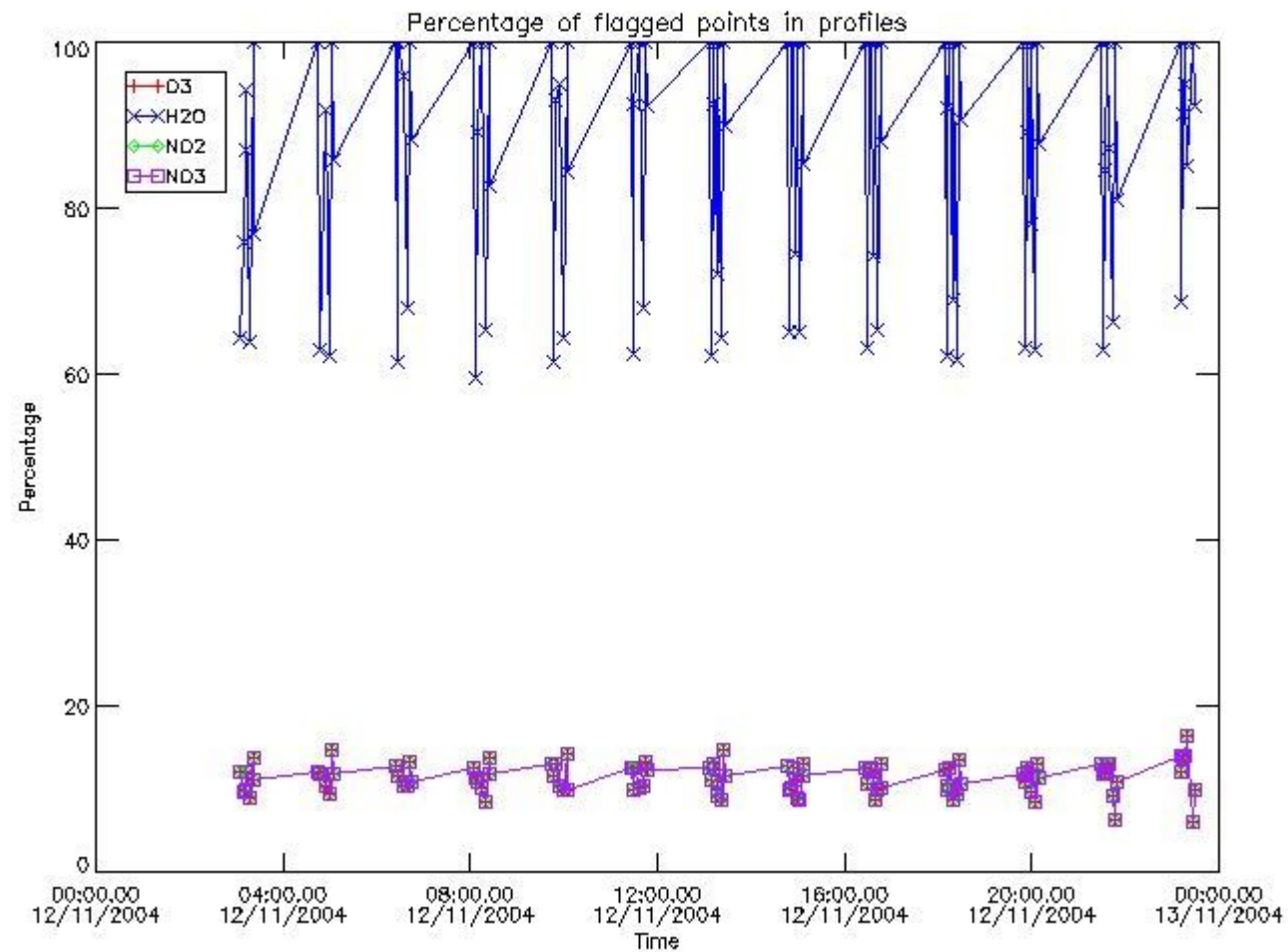
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20041112_022752_000000392032_00046_14128_6089.N1	12-NOV-2004 02:27:52	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	14128	No
2	GOM_NL__2PRFIN20041112_023125_000000432032_00046_14128_6090.N1	12-NOV-2004 02:31:25	Bright	42.500	36	50Alp UMa	1.8000	6300.0	85	14128	No
3	GOM_NL__2PRFIN20041112_023304_000000432032_00046_14128_6091.N1	12-NOV-2004 02:33:04	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	14128	No
4	GOM_NL__2PRFIN20041112_023508_000000392032_00046_14128_6092.N1	12-NOV-2004 02:35:08	Bright	38.500	39	85Eta UMa	1.8540	24000.	77	14128	No
5	GOM_NL__2PRFIN20041112_023701_000000442032_00046_14128_6093.N1	12-NOV-2004 02:37:01	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	14128	No
6	GOM_NL__2PRFIN20041112_023837_000000372032_00046_14128_6094.N1	12-NOV-2004 02:38:37	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	14128	No
7	GOM_NL__2PRFIN20041112_024637_000000832032_00046_14128_6095.N1	12-NOV-2004 02:46:37	Bright	82.500	166	17Eps Leo	2.9800	6000.0	165	14128	No
8	GOM_NL__2PRFIN20041112_025110_000000822032_00046_14128_6096.N1	12-NOV-2004 02:51:10	Twilight	82.000	22	32Alp Leo	1.3600	15200.	164	14128	No
9	GOM_NL__2PRFIN20041112_025630_000000442032_00046_14128_6097.N1	12-NOV-2004 02:56:30	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	14128	No
10	GOM_NL__2PRFIN20041112_030514_000000432032_00046_14128_6098.N1	12-NOV-2004 03:05:14	Dark	42.500	26	Gam Cru	1.6240	2900.0	85	14128	No
11	GOM_NL__2PRFIN20041112_030922_000000532032_00047_14129_6089.N1	12-NOV-2004 03:09:22	Dark	52.500	65	Lam Vel	2.2040	4400.0	105	14129	No
12	GOM_NL__2PRFIN20041112_031136_000000432032_00047_14129_6090.N1	12-NOV-2004 03:11:36	Dark	42.500	29	Bet Car	1.6720	10200.	85	14129	No
13	GOM_NL__2PRFIN20041112_031303_000000522032_00047_14129_6091.N1	12-NOV-2004 03:13:03	Dark	51.500	34	Gam2Vel	1.7930	23000.	103	14129	No
14	GOM_NL__2PRFIN20041112_031754_000000572032_00047_14129_6092.N1	12-NOV-2004 03:17:54	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	14129	No
15	GOM_NL__2PRFIN20041112_032157_000000372032_00047_14129_6093.N1	12-NOV-2004 03:21:57	Dark	37.000	143	Alp Hyi	2.8570	7200.0	74	14129	No
16	GOM_NL__2PRFIN20041112_032317_000000462032_00047_14129_6094.N1	12-NOV-2004 03:23:17	Dark	46.000	9	Alp Eri	0.45300	24000.	92	14129	No
17	GOM_NL__2PRFIN20041112_032659_000000422032_00047_14129_6095.N1	12-NOV-2004 03:26:59	Straylight	42.000	157	The1Eri	2.9060	9300.0	84	14129	No
18	GOM_NL__2PRFIN20041112_033204_000000842032_00047_14129_6096.N1	12-NOV-2004 03:32:04	Straylight	84.000	101	11Alp Lep	2.5820	7000.0	168	14129	No
19	GOM_NL__2PRFIN20041112_033428_000000562032_00047_14129_6097.N1	12-NOV-2004 03:34:28	Straylight	56.000	165	34Gam Eri	2.9500	3200.0	112	14129	No
20	GOM_NL__2PRFIN20041112_033726_000001012032_00047_14129_6098.N1	12-NOV-2004 03:37:26	Twilight	101.00	7	19Bet Ori	0.10000	14000.	202	14129	No
21	GOM_NL__2PRFIN20041112_034009_000000512032_00047_14129_6099.N1	12-NOV-2004 03:40:09	Twilight	50.500	94	92Alp Cet	2.5260	3100.0	101	14129	No
22	GOM_NL__2PRFIN20041112_034450_000000402032_00047_14129_6100.N1	12-NOV-2004 03:44:50	Bright	40.000	105	6Bet Ari	2.6450	8900.0	80	14129	No
23	GOM_NL__2PRFIN20041112_034855_000000402032_00047_14129_6101.N1	12-NOV-2004 03:48:55	Bright	40.000	173	4Bet Tri	3.0040	8900.0	80	14129	No
24	GOM_NL__2PRFIN20041112_035101_000000402032_00047_14129_6102.N1	12-NOV-2004 03:51:01	Bright	39.500	73	57Gam1And	2.2600	13100.	79	14129	No
25	GOM_NL__2PRFIN20041112_035248_000000472032_00047_14129_6103.N1	12-NOV-2004 03:52:48	Bright	46.500	149	45Eps Per	2.8880	30000.	93	14129	No
26	GOM_NL__2PRFIN20041112_035424_000000432032_00047_14129_6104.N1	12-NOV-2004 03:54:24	Bright	42.500	35	33Alp Per	1.7950	6250.0	85	14129	No
27	GOM_NL__2PRFIN20041112_035600_000000372032_00047_14129_6105.N1	12-NOV-2004 03:56:00	Bright	37.000	110	37Del Cas	2.6780	8900.0	74	14129	No
28	GOM_NL__2PRFIN20041112_035837_000000592032_00047_14129_6106.N1	12-NOV-2004 03:58:37	Bright	59.000	6	13Alp Aur	0.080000	3400.0	118	14129	No
29	GOM_NL__2PRFIN20041112_040412_000000352032_00047_14129_6107.N1	12-NOV-2004 04:04:12	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	14129	No
30	GOM_NL__2PRFIN20041112_040828_000000392032_00047_14129_6108.N1	12-NOV-2004 04:08:28	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	14129	No
31	GOM_NL__2PRFIN20041112_041200_000000452032_00047_14129_6109.N1	12-NOV-2004 04:12:00	Bright	45.000	36	50Alp UMa	1.8000	6300.0	90	14129	No
32	GOM_NL__2PRFIN20041112_041340_000000402032_00047_14129_6110.N1	12-NOV-2004 04:13:40	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	14129	No
33	GOM_NL__2PRFIN20041112_041543_000000372032_00047_14129_6111.N1	12-NOV-2004 04:15:43	Bright	37.000	39	85Eta UMa	1.8540	24000.	74	14129	No
34	GOM_NL__2PRFIN20041112_041737_000000622032_00047_14129_6112.N1	12-NOV-2004 04:17:37	Bright	62.000	174	52Psi UMa	3.0040	4400.0	124	14129	No
35	GOM_NL__2PRFIN20041112_041914_000000372032_00047_14129_6113.N1	12-NOV-2004 04:19:14	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	14129	No
36	GOM_NL__2PRFIN20041112_042714_000000812032_00047_14129_6114.N1	12-NOV-2004 04:27:14	Bright	81.000	166	17Eps Leo	2.9800	6000.0	162	14129	No
37	GOM_NL__2PRFIN20041112_043147_000000832032_00047_14129_6115.N1	12-NOV-2004 04:31:47	Twilight	83.000	22	32Alp Leo	1.3600	15200.	166	14129	No
38	GOM_NL__2PRFIN20041112_043534_000000472032_00047_14129_6116.N1	12-NOV-2004 04:35:34	Twilight	46.500	100	4Gam Crv	2.5800	13100.	93	14129	No
39	GOM_NL__2PRFIN20041112_043704_000000492032_00047_14129_6117.N1	12-NOV-2004 04:37:04	Twilight	48.500	171	2Eps Crv	3.0010	4250.0	97	14129	No
40	GOM_NL__2PRFIN20041112_044332_000000422032_00047_14129_6118.N1	12-NOV-2004 04:43:32	Dark	42.000	64	Gam Cen	2.2000	10600.	84	14129	No
41	GOM_NL__2PRFIN20041112_044550_000000442032_00047_14129_6119.N1	12-NOV-2004 04:45:50	Dark	43.500	26	Gam Cru	1.6240	2900.0	87	14129	No
42	GOM_NL__2PRFIN20041112_045341_000000502032_00048_14130_6089.N1	12-NOV-2004 04:53:41	Dark	49.500	34	Gam2Vel	1.7930	23000.	99	14130	No

397	GOM_NL__2PRFIN20041112_233751_000000732032_00059_14141_6145.N1	12-NOV-2004 23:37:51	Straylight	73.000	139	9Bet Lep	2.8330	5600.0	146	14141	No
398	GOM_NL__2PRFIN20041112_234140_000000552032_00059_14141_6146.N1	12-NOV-2004 23:41:40	Straylight	55.000	165	34Gam Eri	2.9500	3200.0	110	14141	No
399	GOM_NL__2PRFIN20041112_234431_000000982032_00059_14141_6147.N1	12-NOV-2004 23:44:31	Twilight_stray	98.000	7	19Bet Ori	0.10000	14000.	196	14141	No
400	GOM_NL__2PRFIN20041112_234717_000000552032_00059_14141_6148.N1	12-NOV-2004 23:47:17	Twilight_stray	54.500	94	92Alp Cet	2.5260	3100.0	109	14141	No
401	GOM_NL__2PRFIN20041112_235204_000000402032_00059_14141_6149.N1	12-NOV-2004 23:52:04	Bright	39.500	105	6Bet Ari	2.6450	8900.0	79	14141	No
402	GOM_NL__2PRFIN20041112_235438_000000482032_00059_14141_6150.N1	12-NOV-2004 23:54:38	Bright	47.500	146	25Eta Tau	2.8730	15200.	95	14141	No
403	GOM_NL__2PRFIN20041112_235626_000000392032_00059_14141_6151.N1	12-NOV-2004 23:56:26	Bright	39.000	53	43Bet And	2.0480	3300.0	78	14141	No
404	GOM_NL__2PRFIN20041112_235812_000000382032_00059_14141_6152.N1	12-NOV-2004 23:58:12	Bright	38.000	73	57Gam1And	2.2600	13100.	76	14141	No
405	GOM_NL__2PRFIN20041112_235951_000000462032_00059_14141_6153.N1	12-NOV-2004 23:59:51	Bright	45.500	149	45Eps Per	2.8880	30000.	91	14141	No

3. Quality information per product

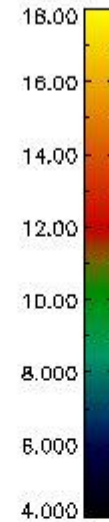
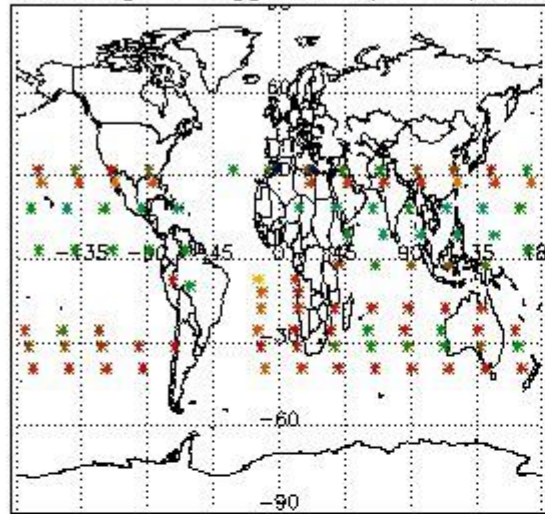
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

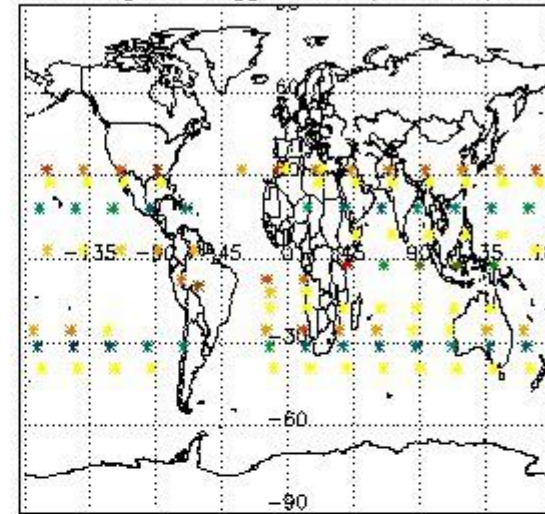


3.2 Plot quality information per product (world map)

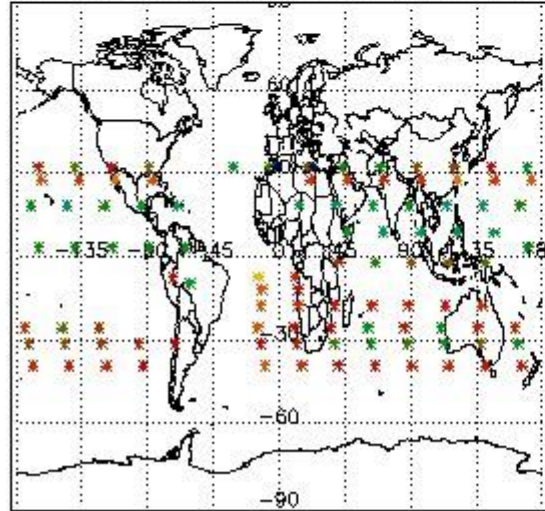
Percentage of flagged data per O3 profile



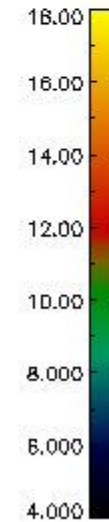
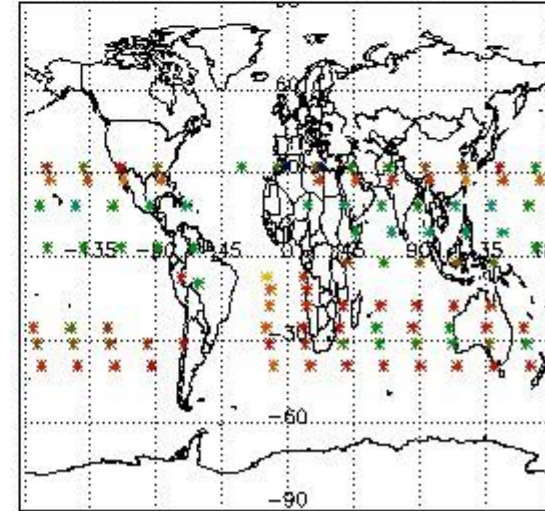
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

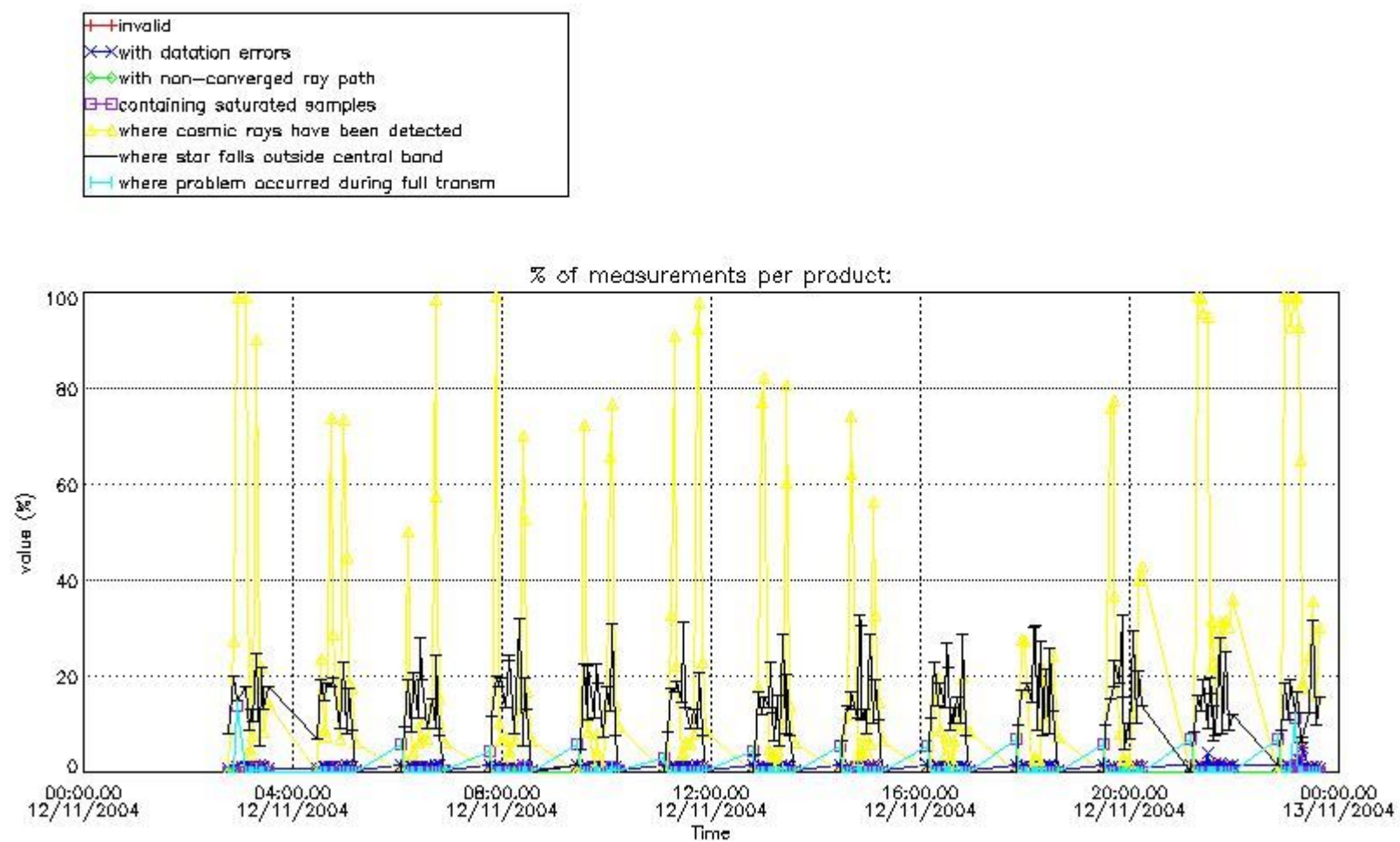


4. Level 1 quality information per product

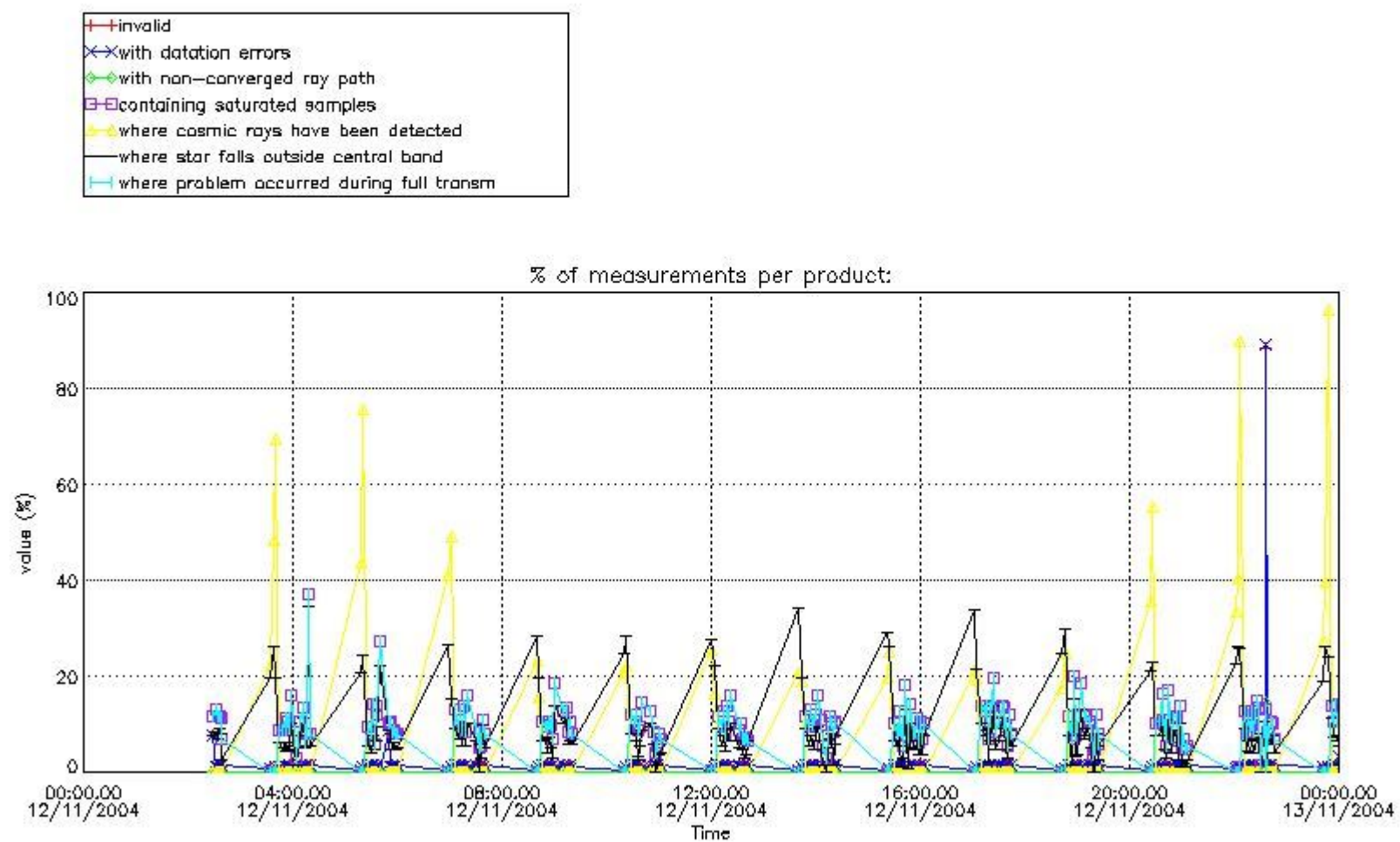
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

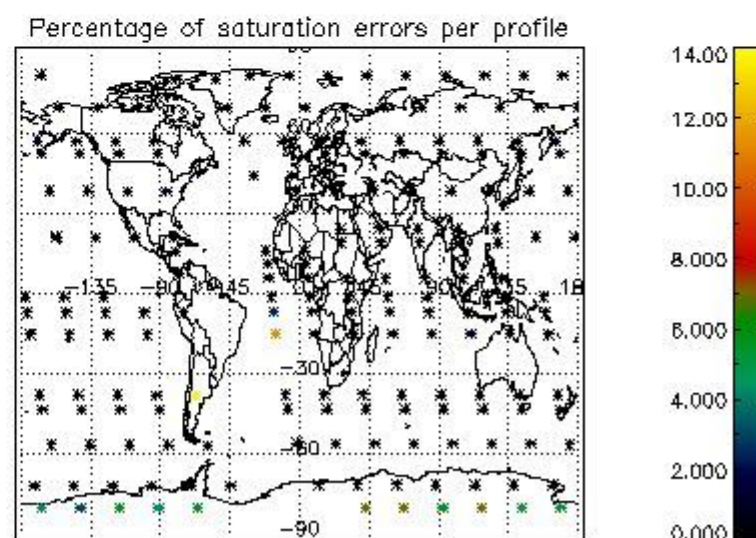
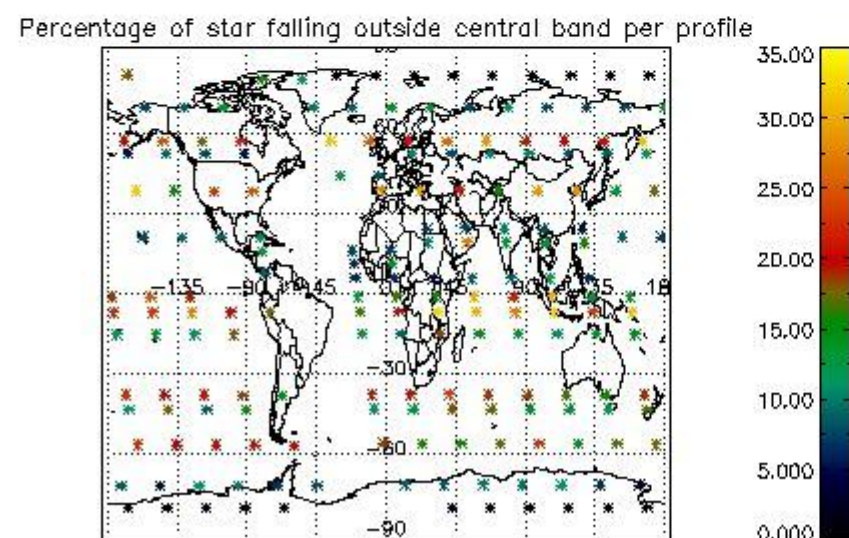
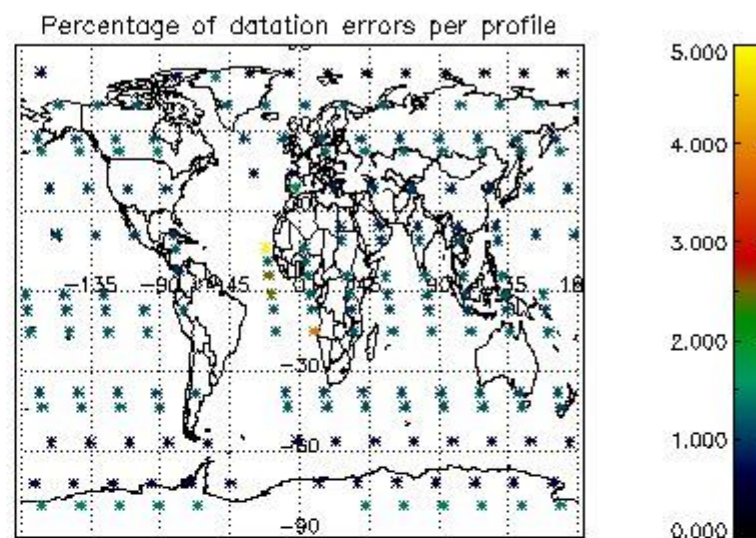
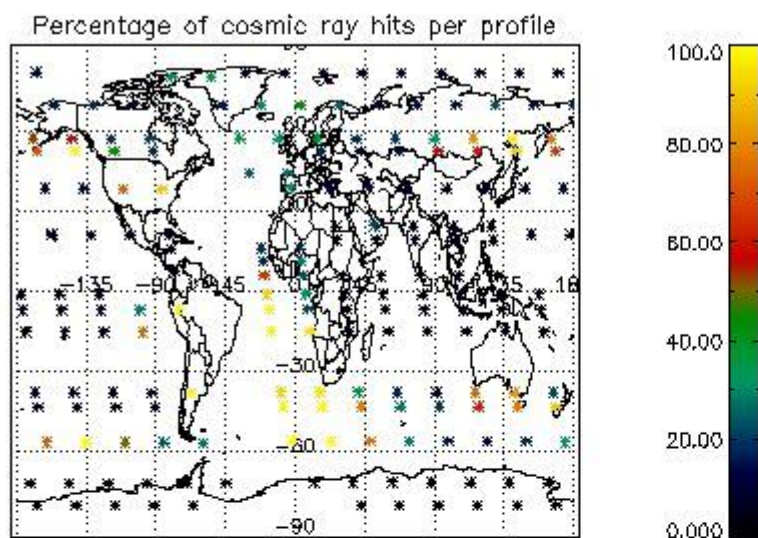


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



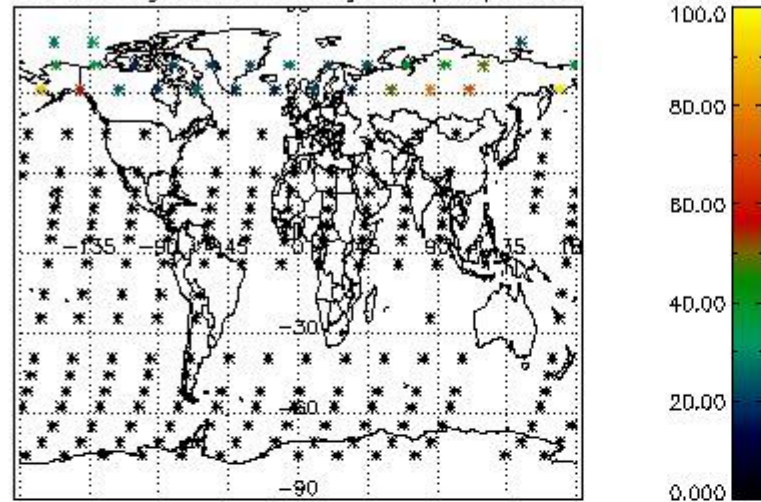
4.2 Plot quality information per product coming from level 1b processing (world map)

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

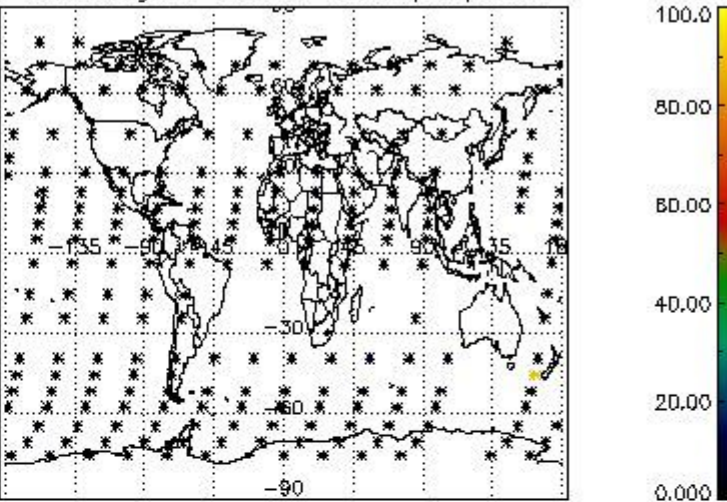


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

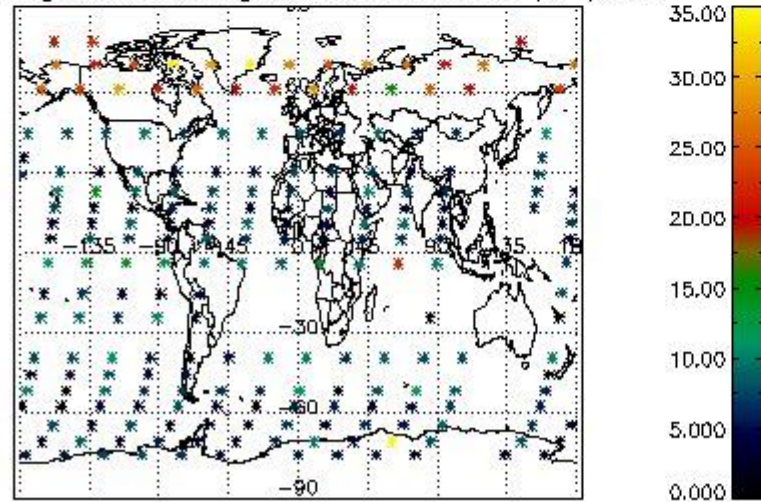
Percentage of cosmic ray hits per profile



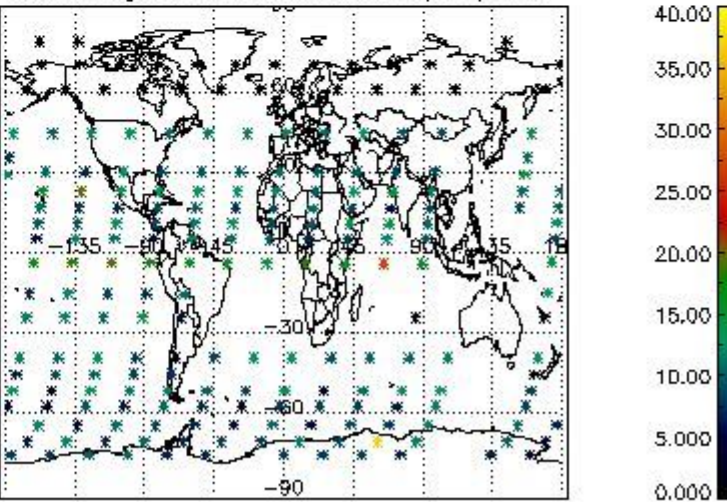
Percentage of datation errors per profile



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

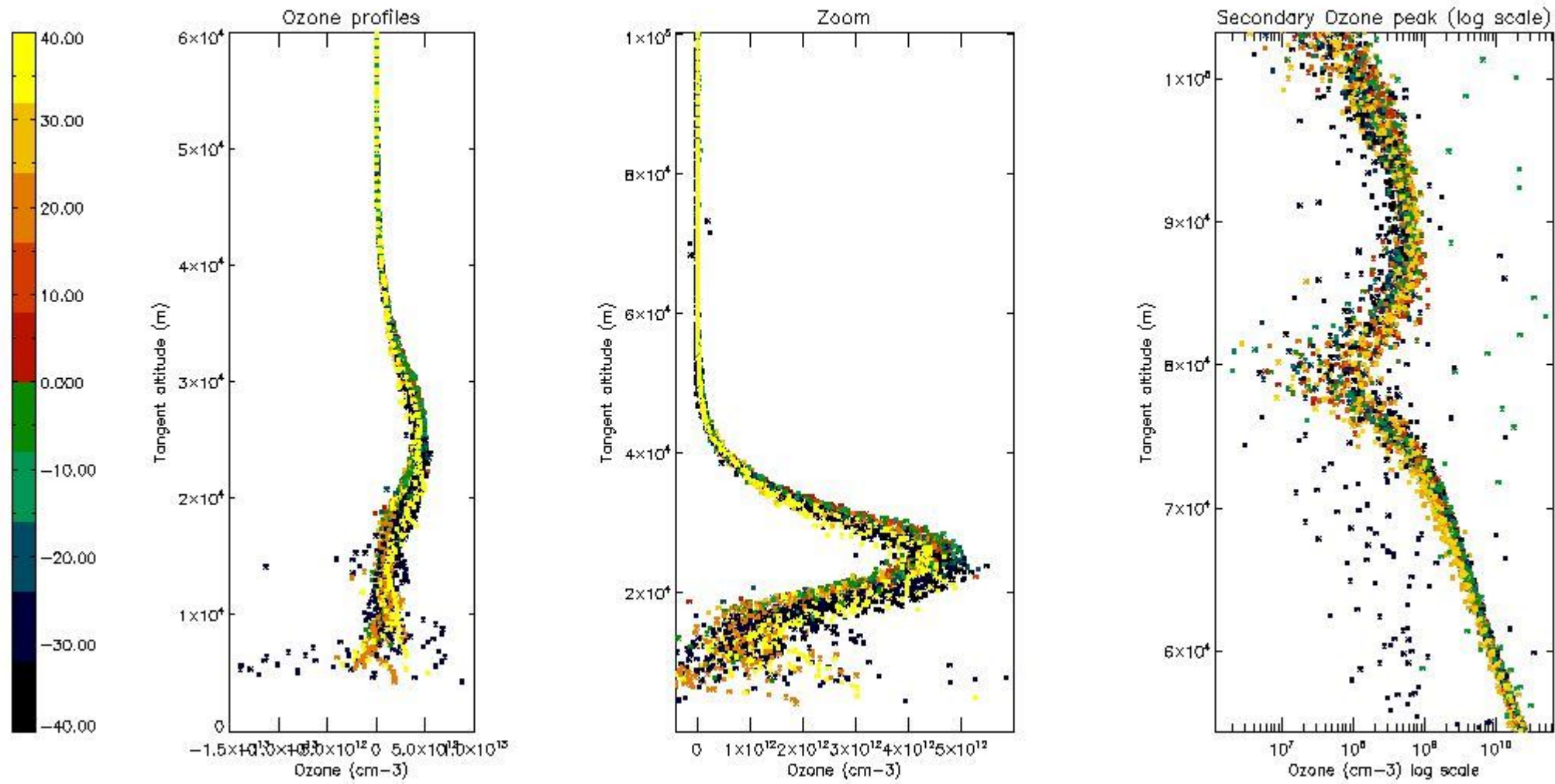
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	14

STD < 10	12
STD < 5	9

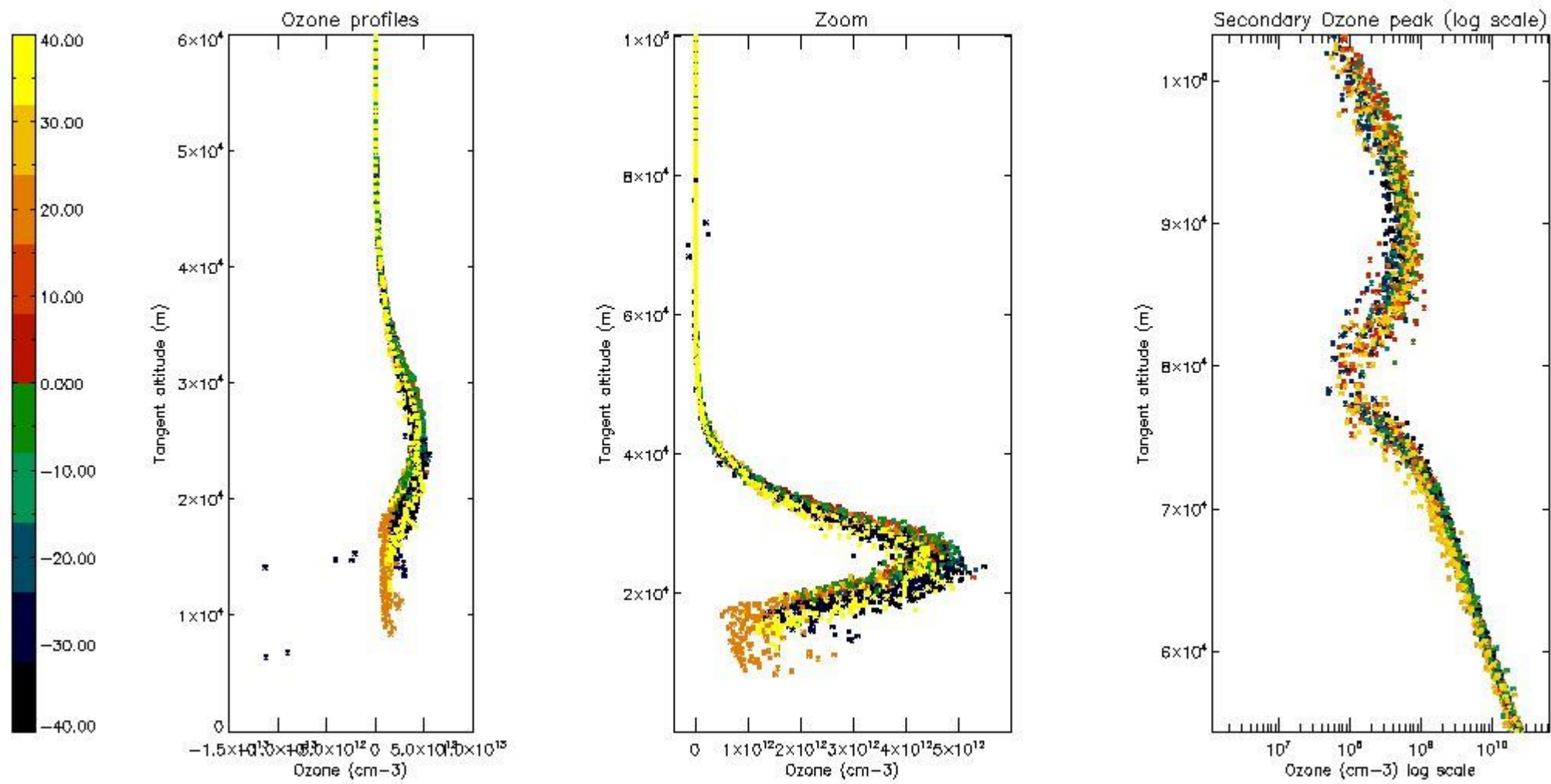
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



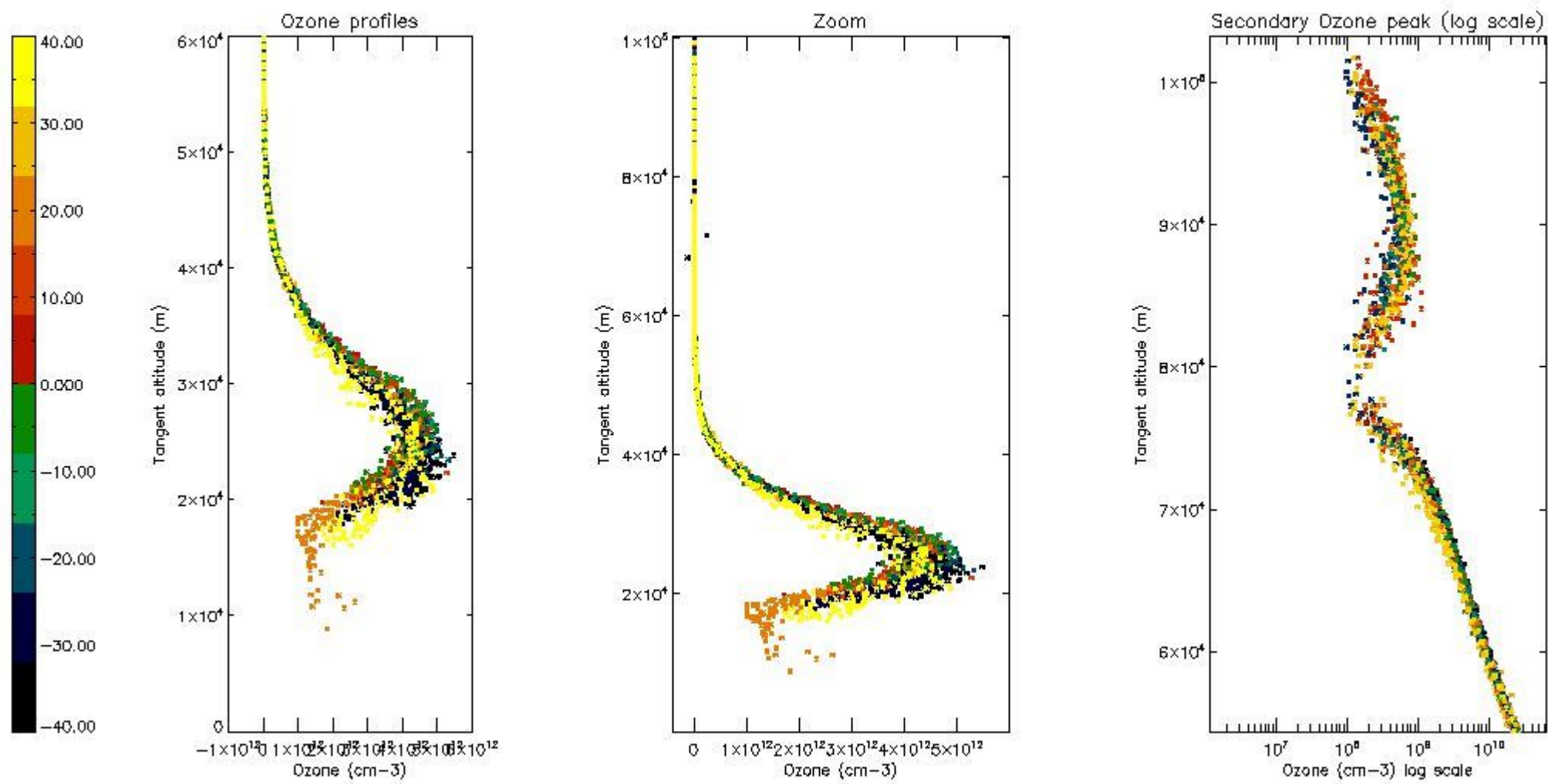
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



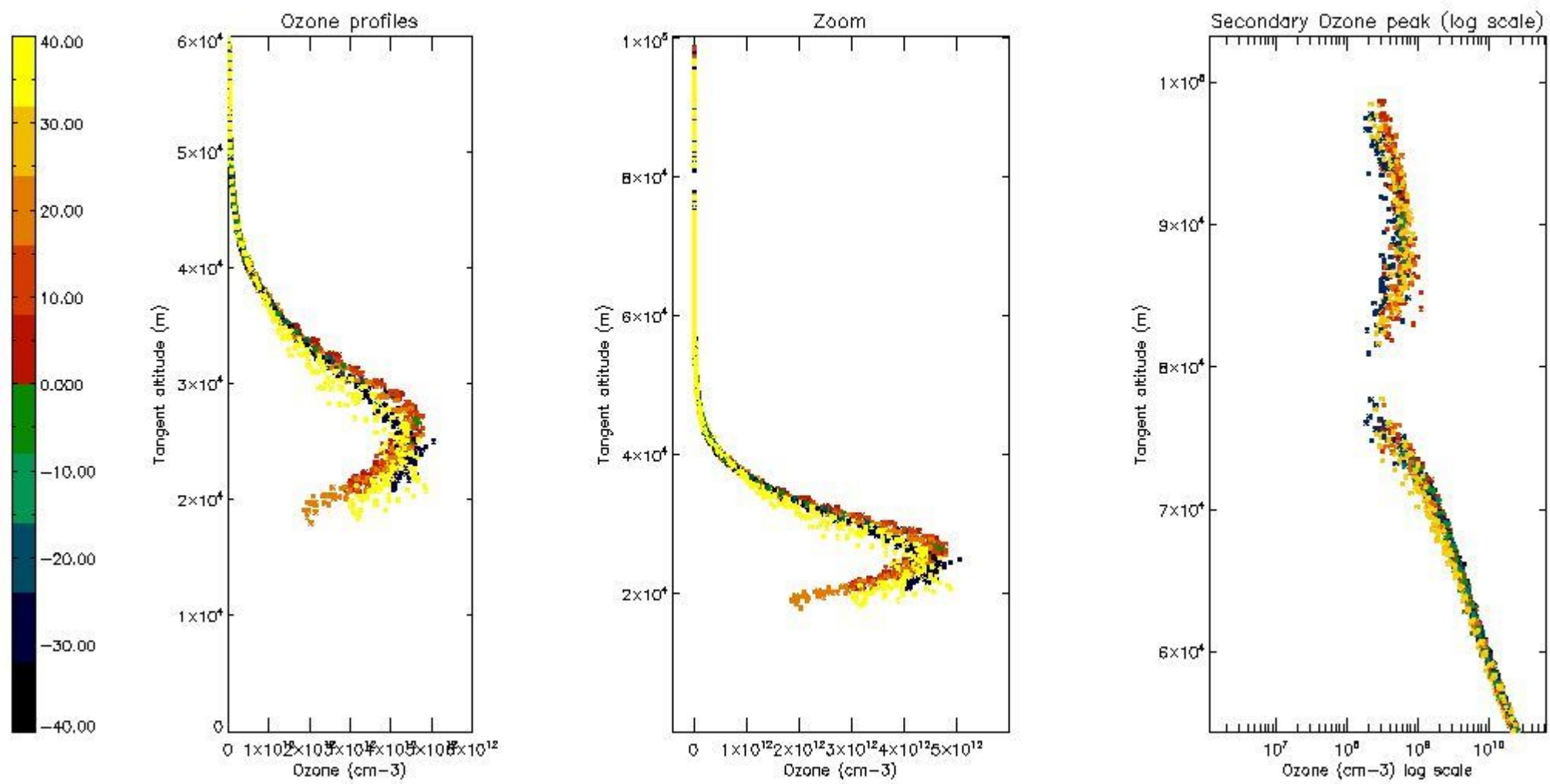
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



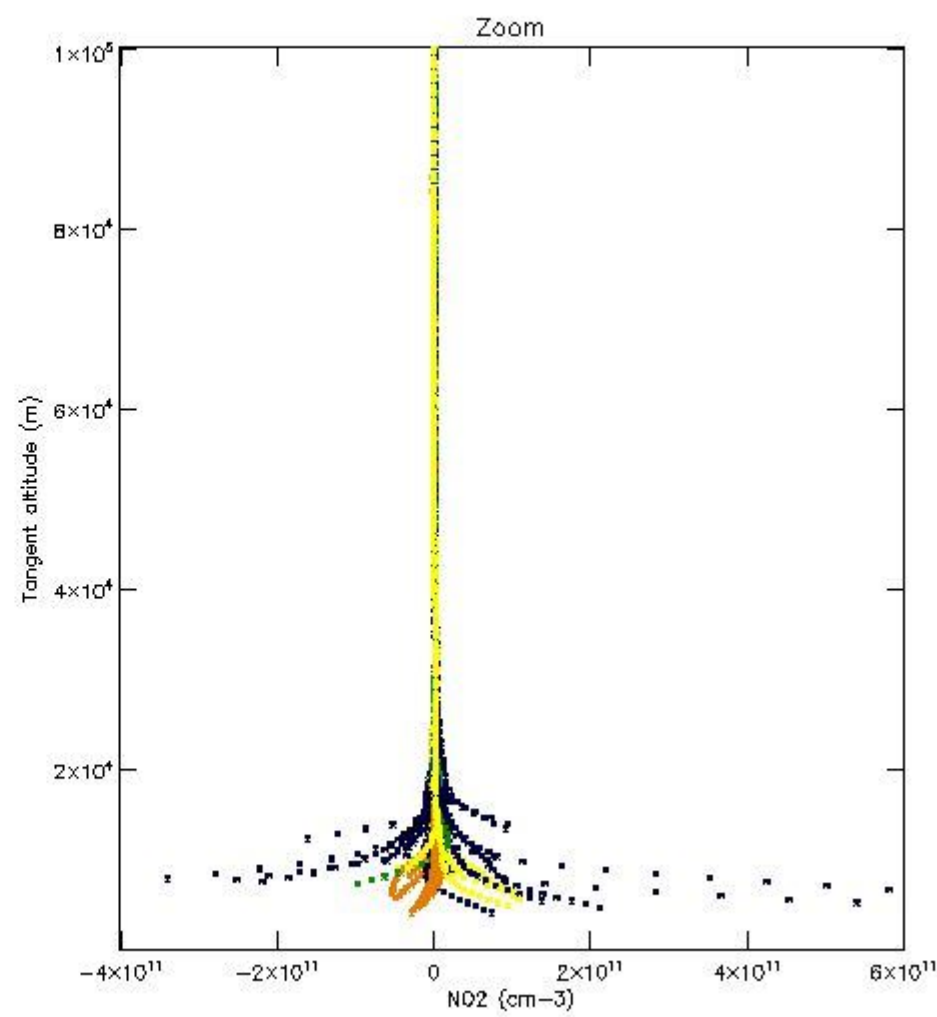
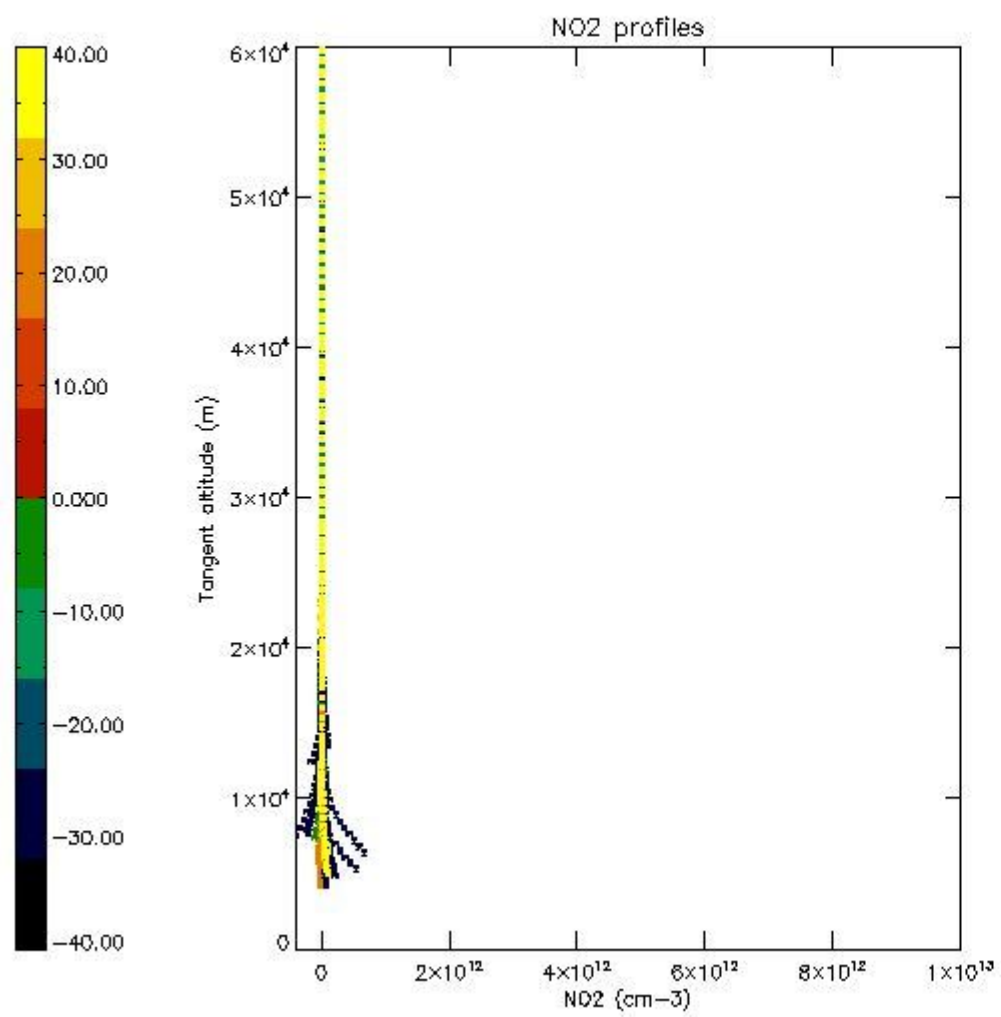
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



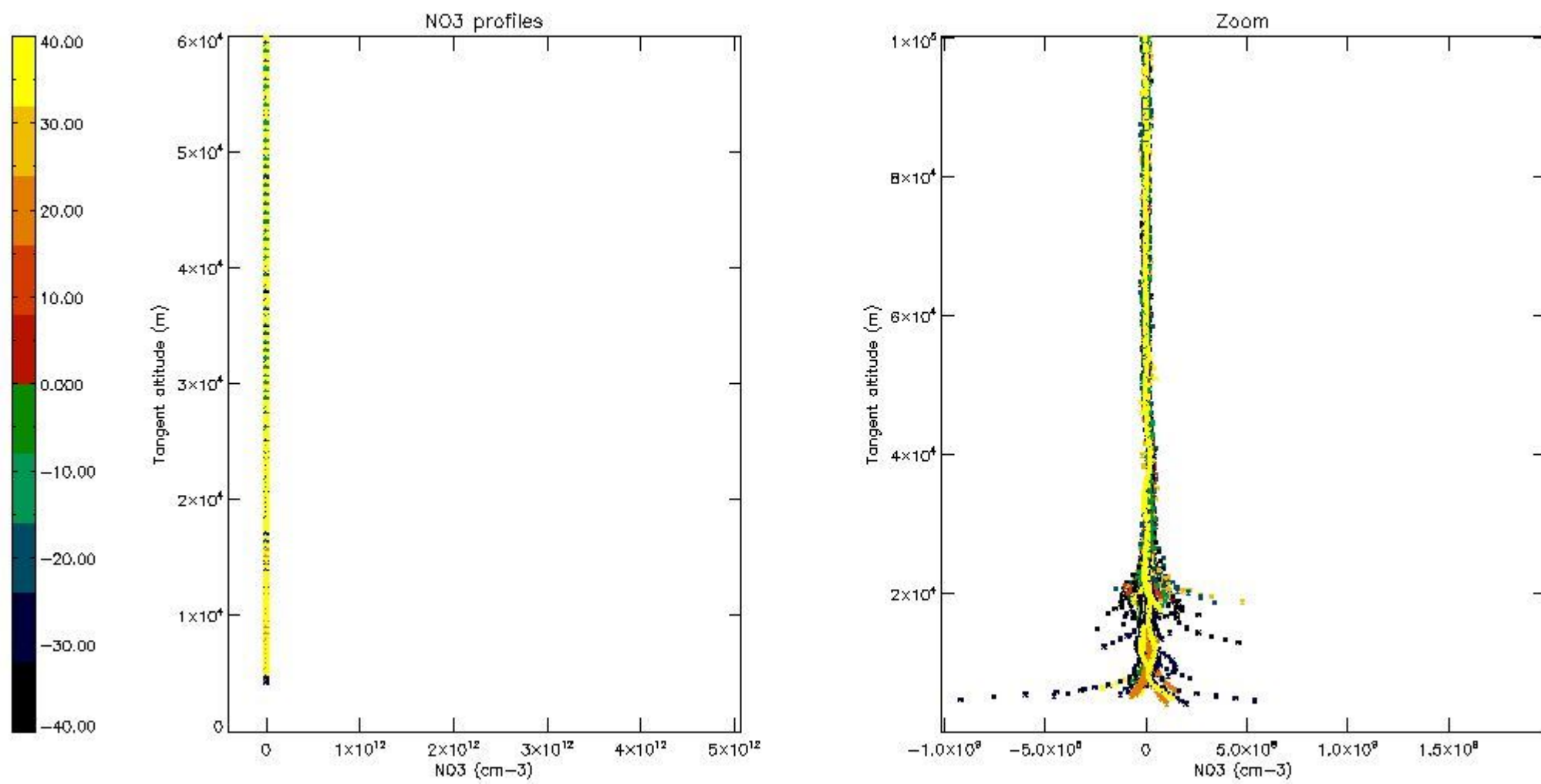
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



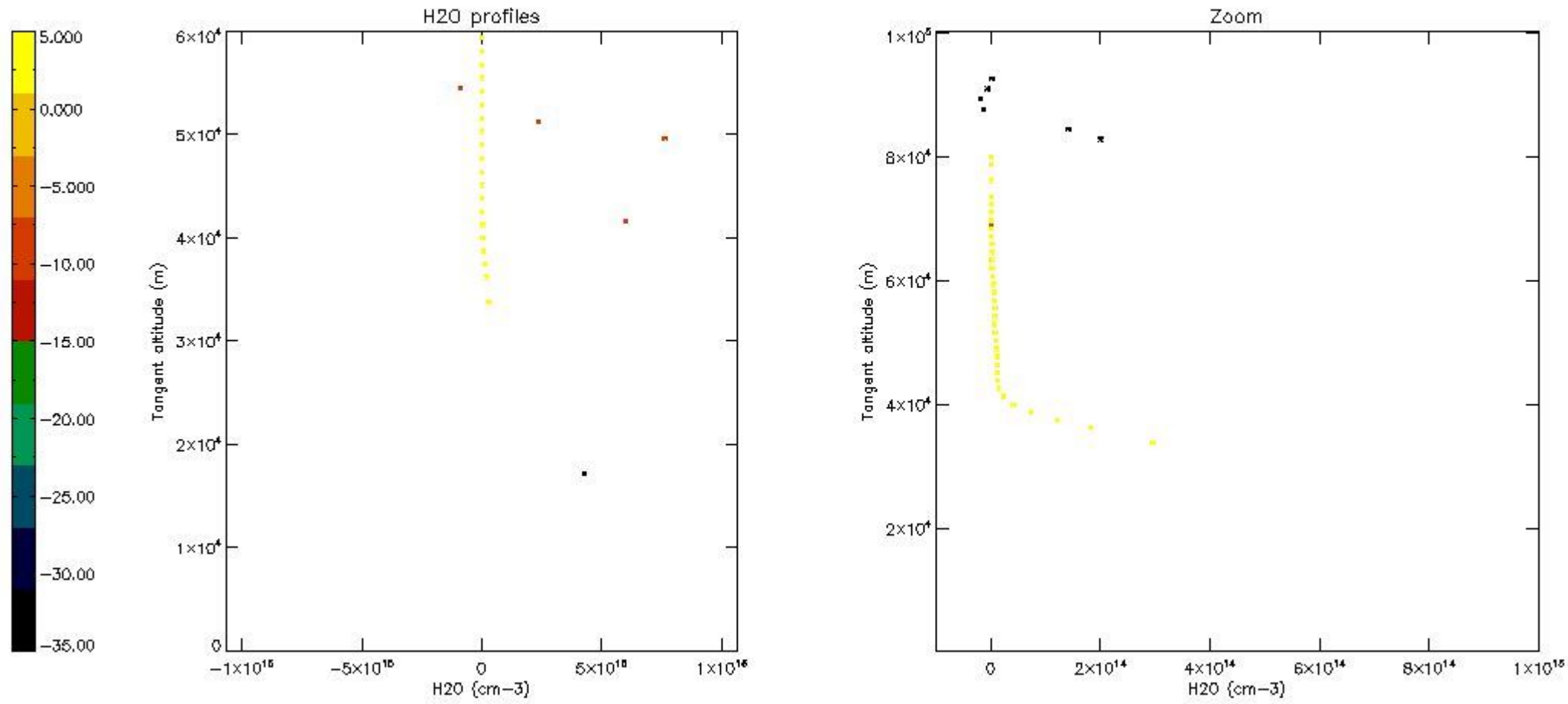
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

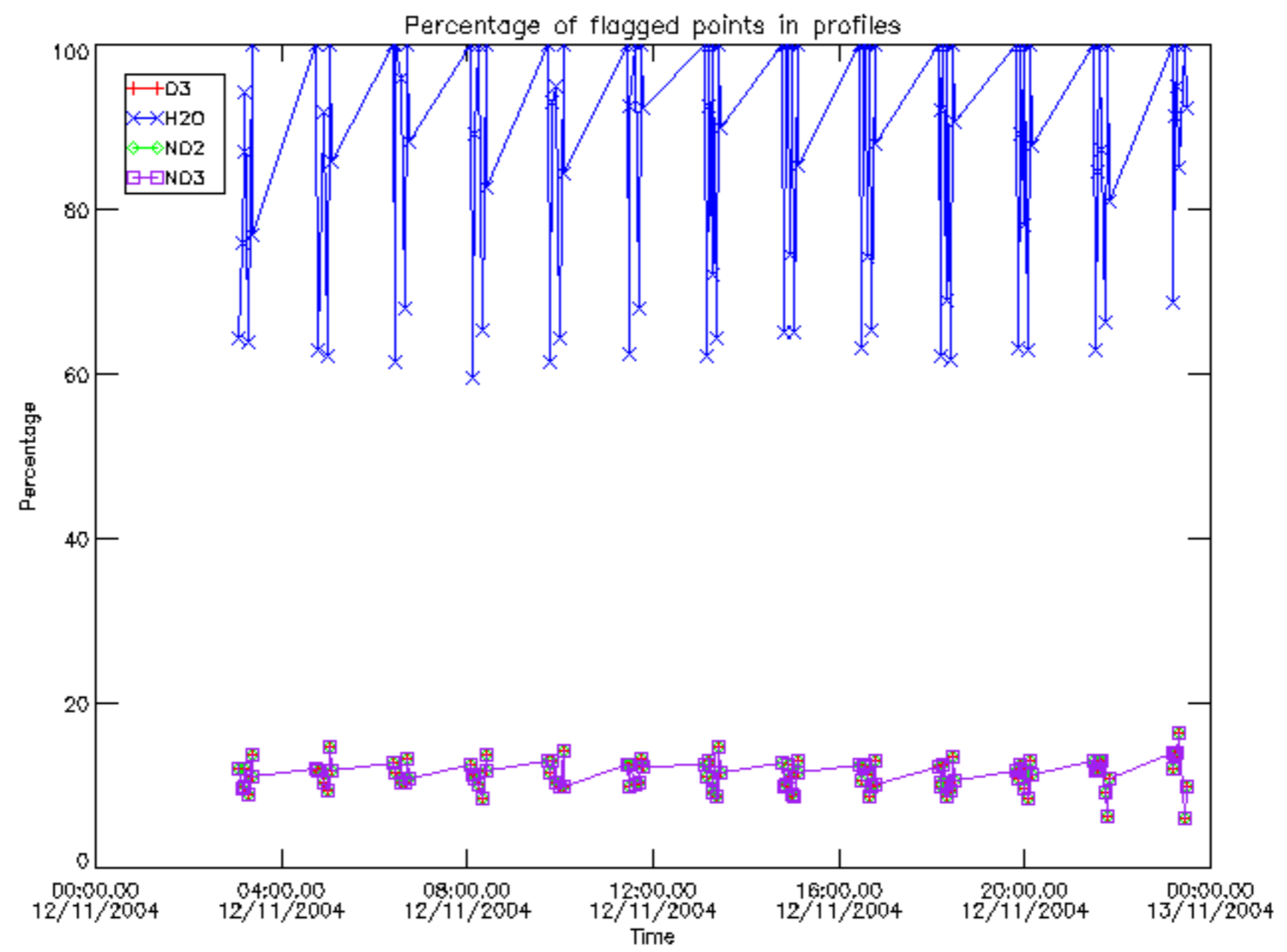
The colorbar represents the latitude.



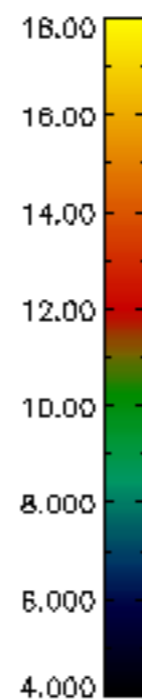
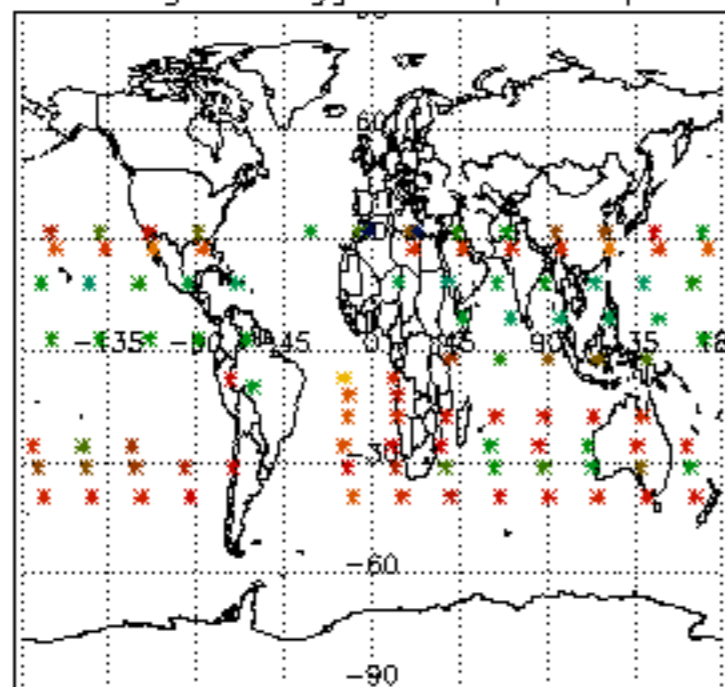
6. Auxiliary Data Files used for the production reported in section 2

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.

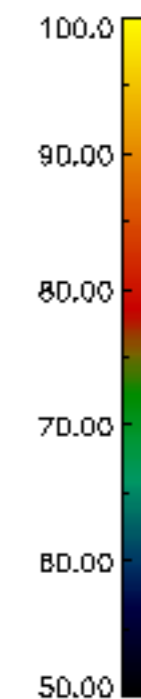
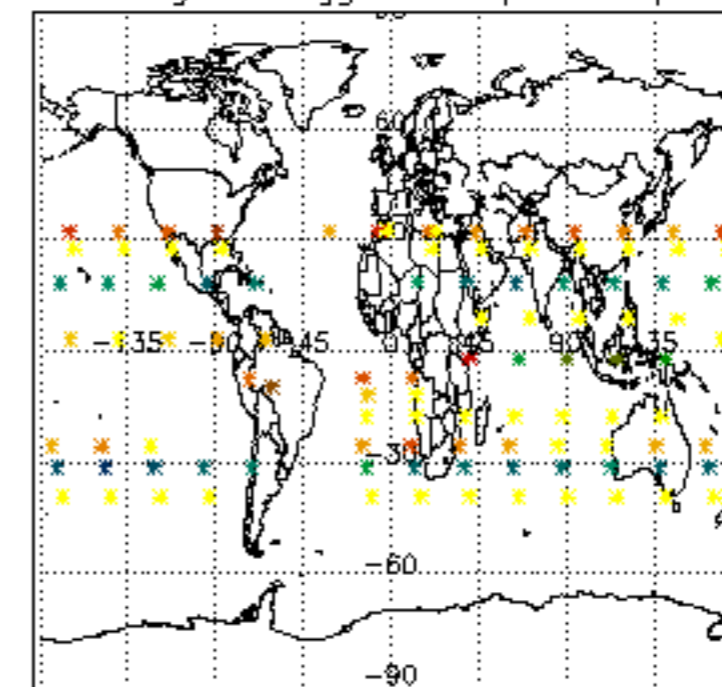
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-NOV-2004 02:27:52
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-NOV-2004 02:27:52
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-NOV-2004 02:27:52



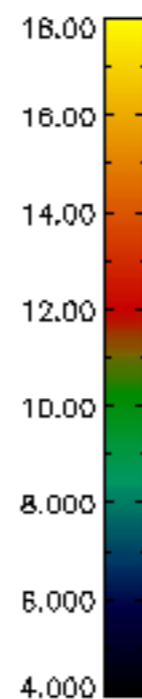
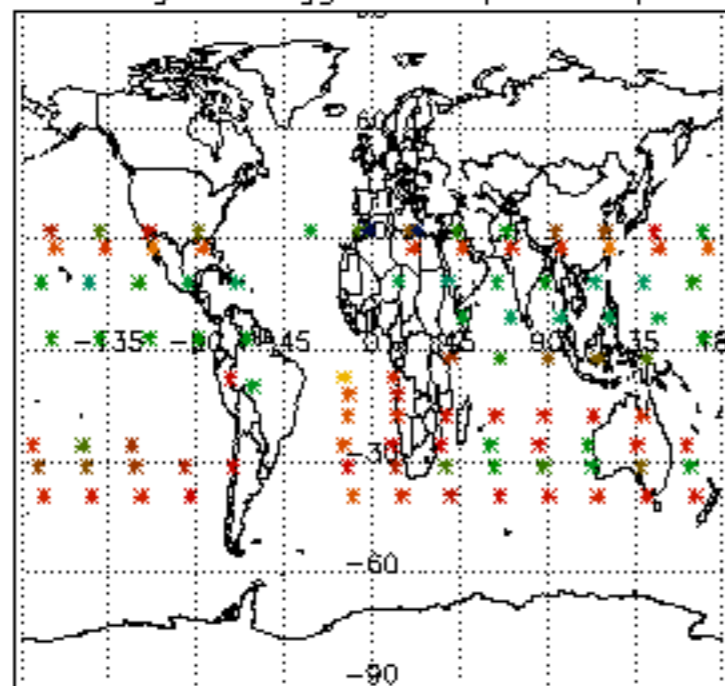
Percentage of flagged data per D3 profile



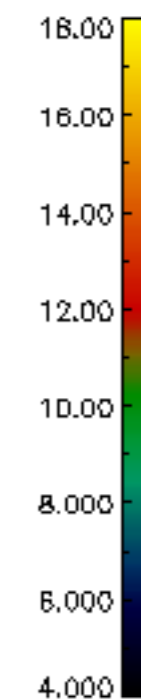
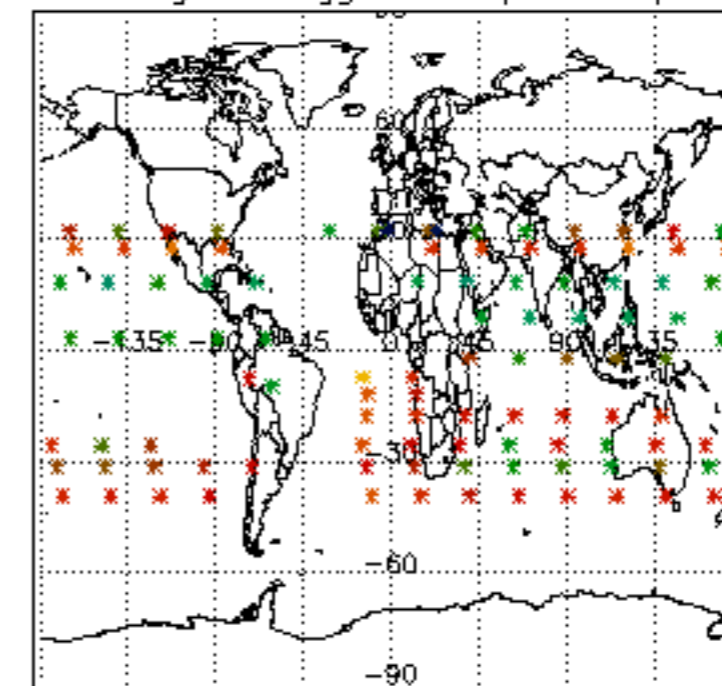
Percentage of flagged data per H2O profile

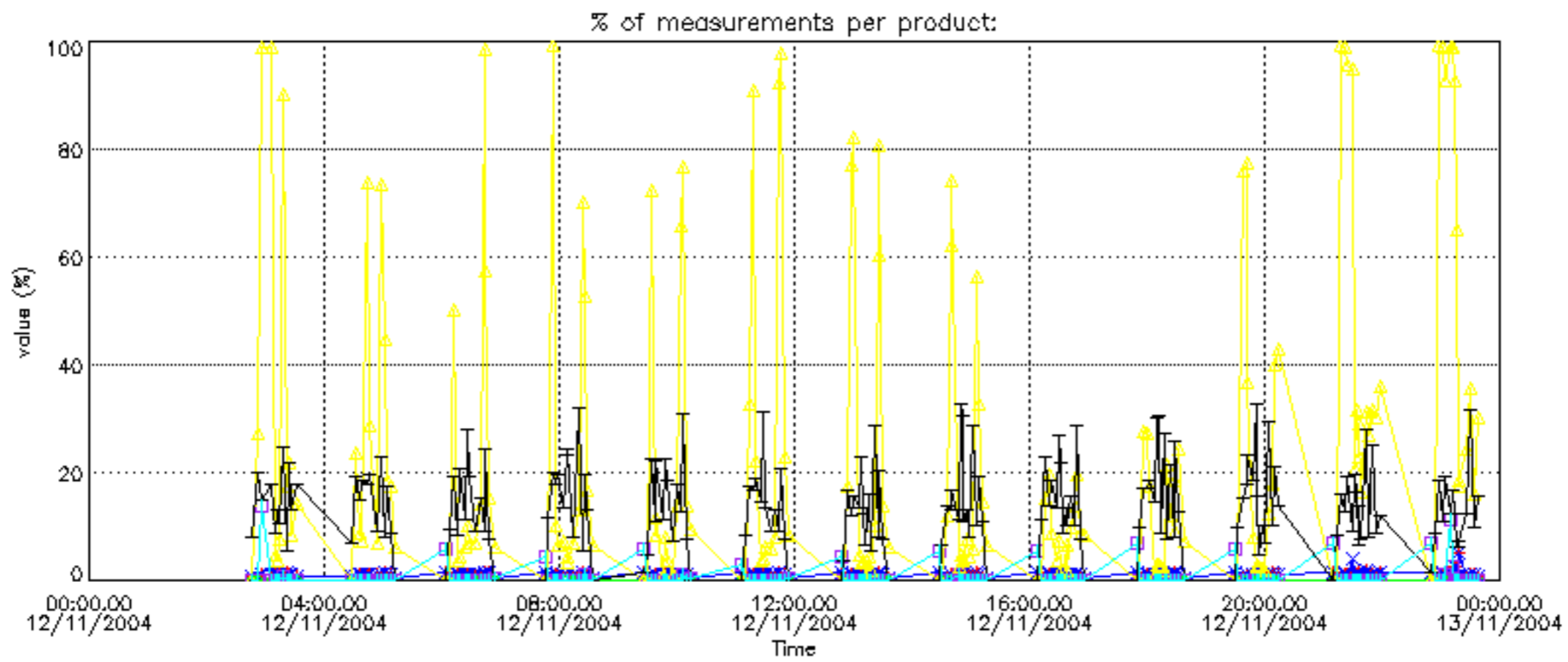


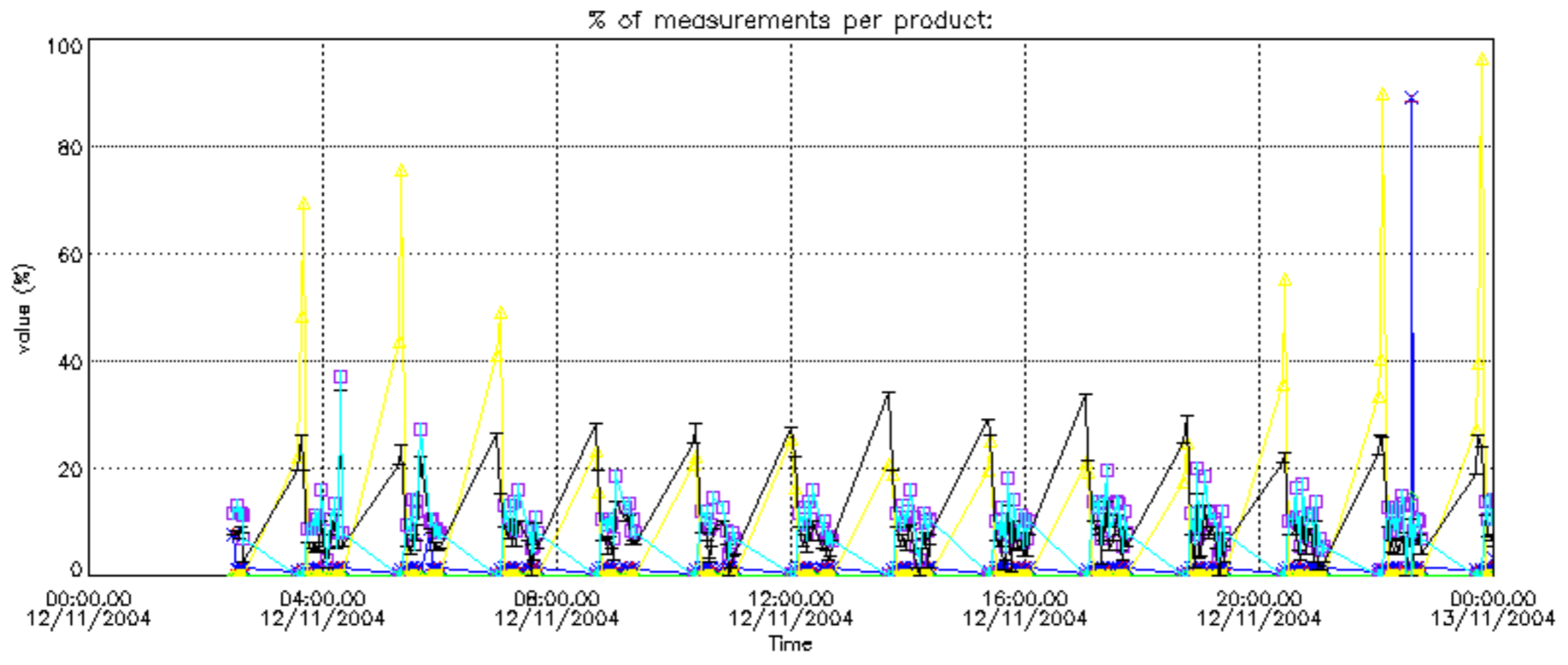
Percentage of flagged data per NO2 profile



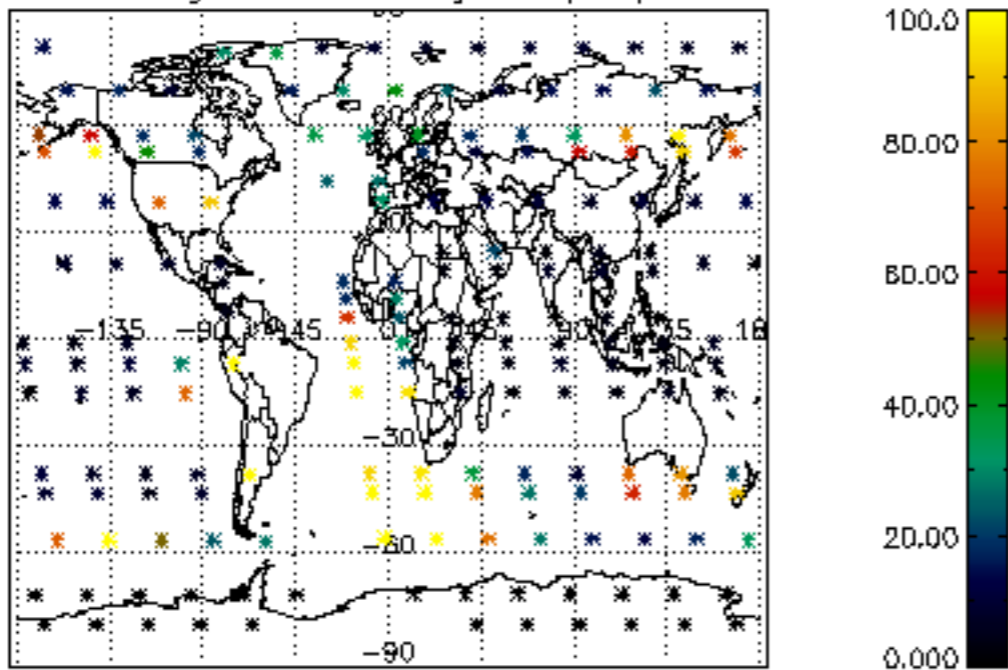
Percentage of flagged data per NO3 profile



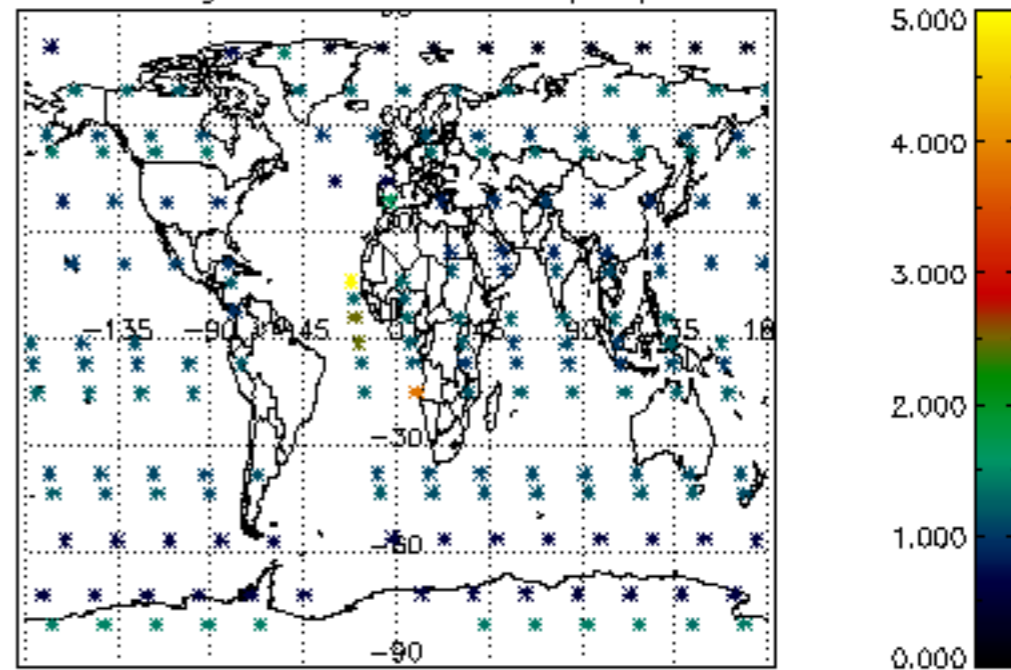




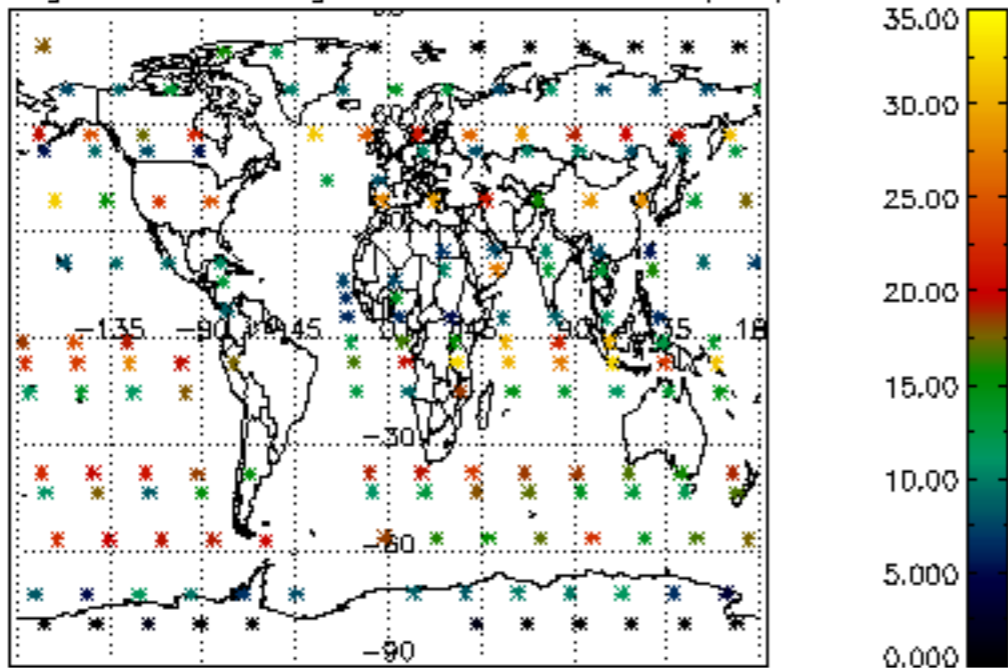
Percentage of cosmic ray hits per profile



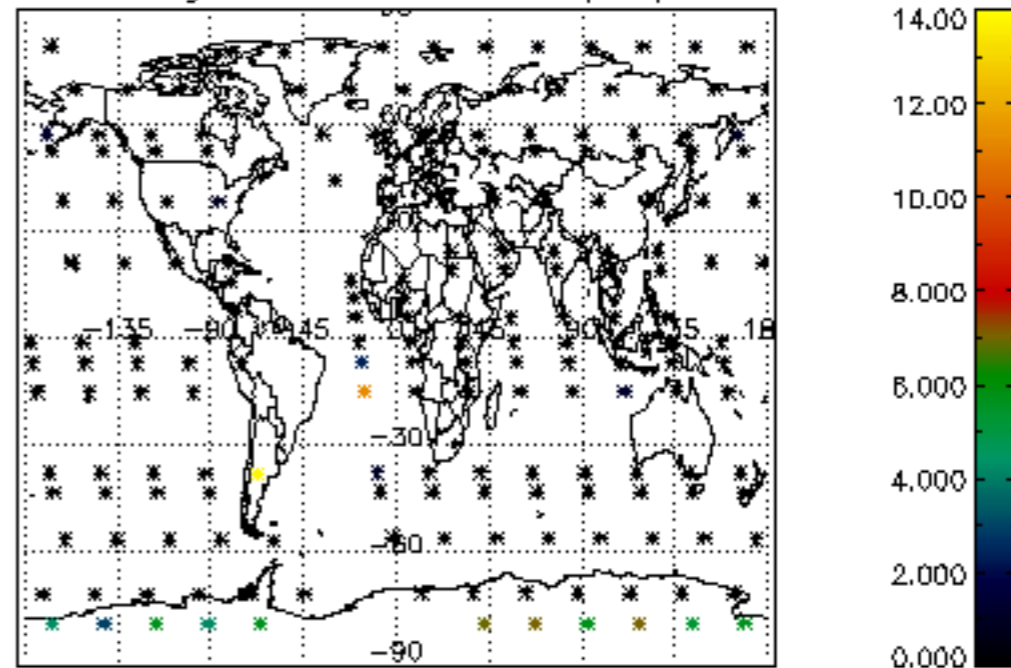
Percentage of datation errors per profile



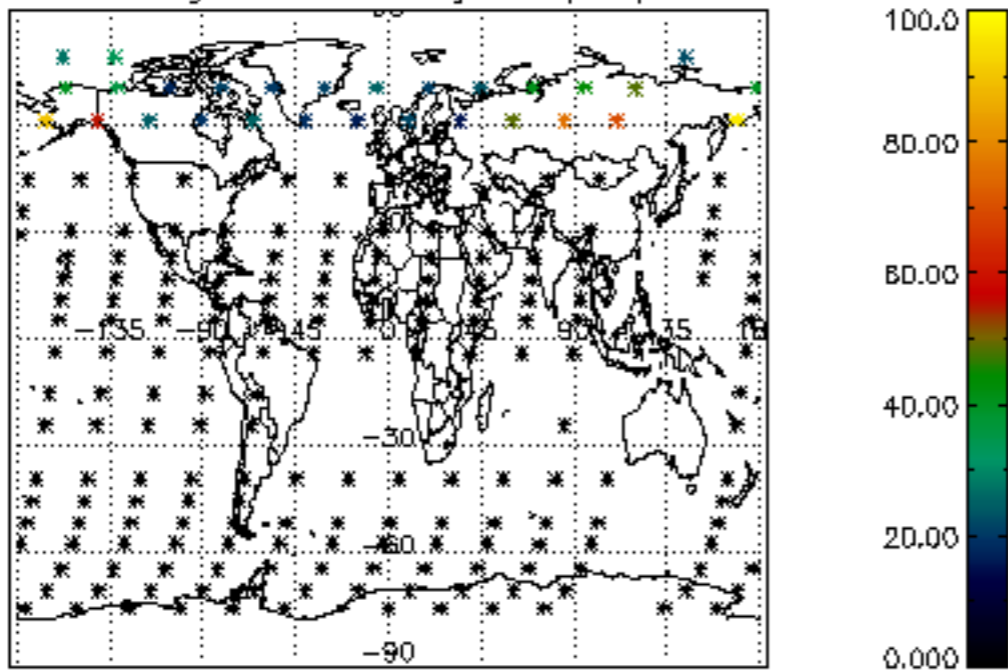
Percentage of star falling outside central band per profile



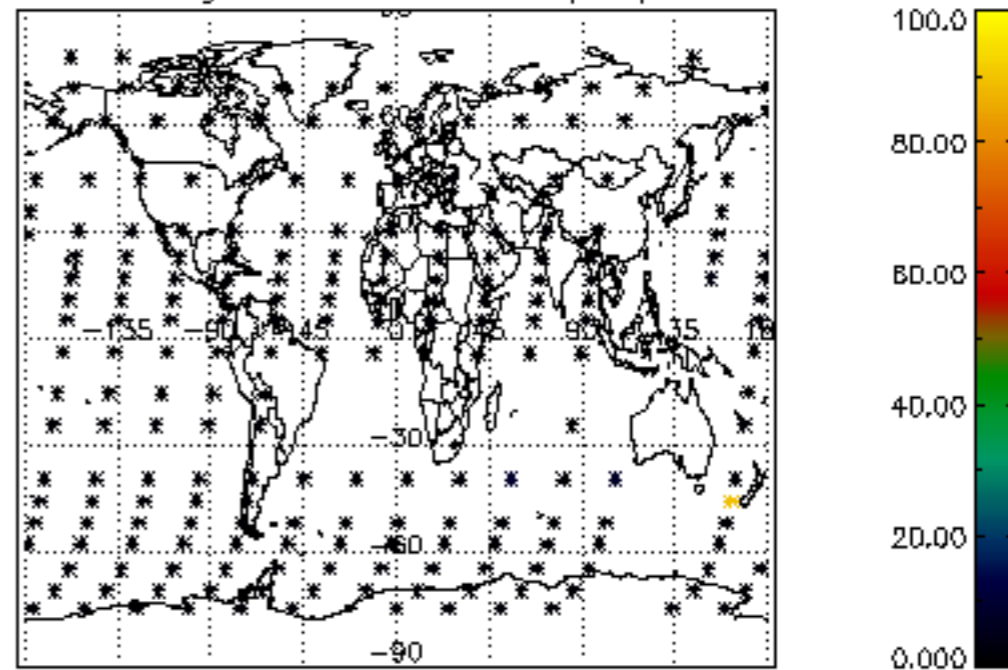
Percentage of saturation errors per profile



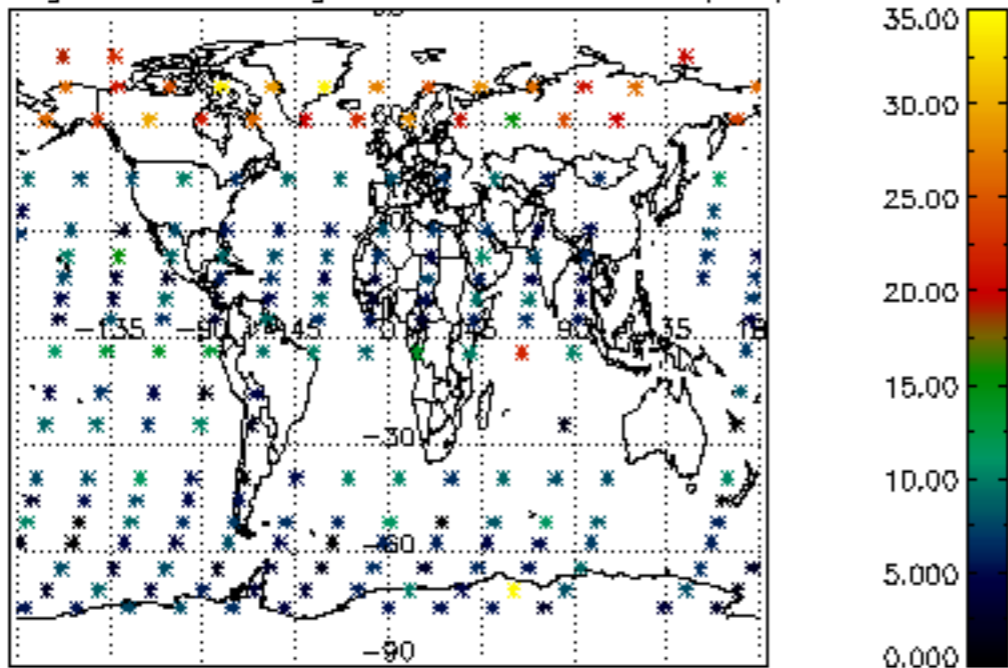
Percentage of cosmic ray hits per profile



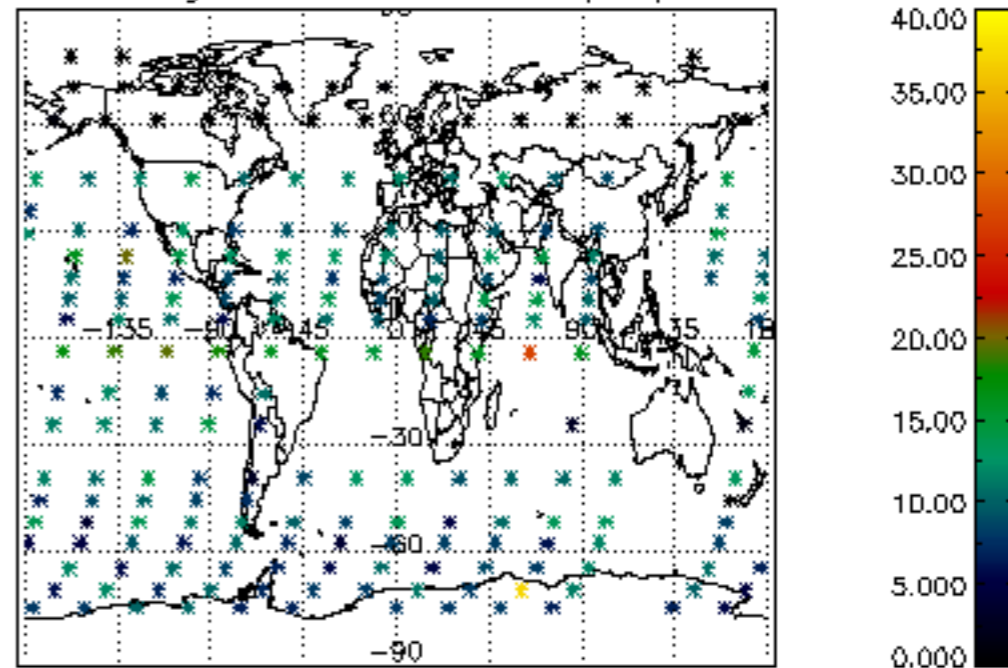
Percentage of datation errors per profile

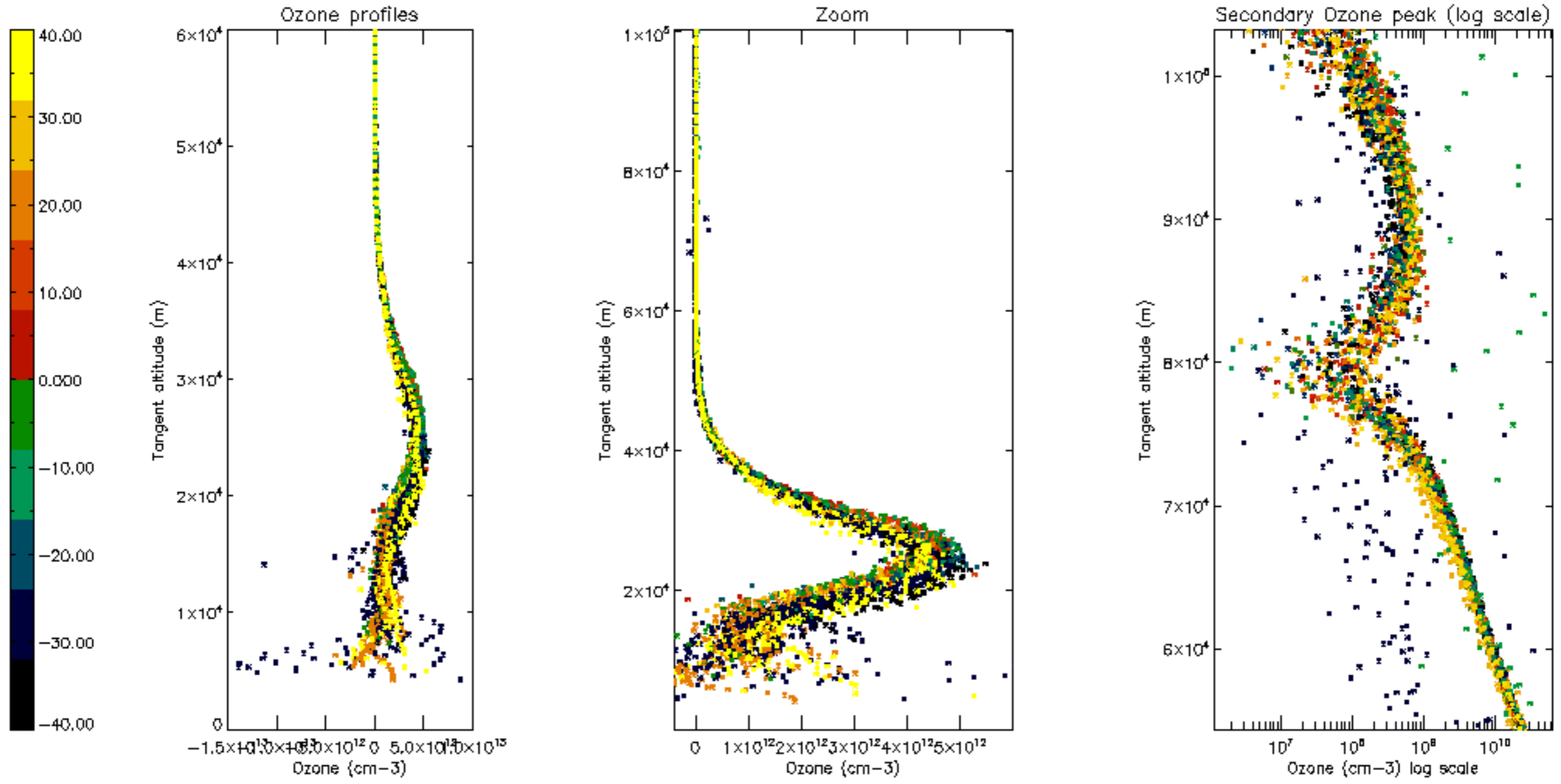


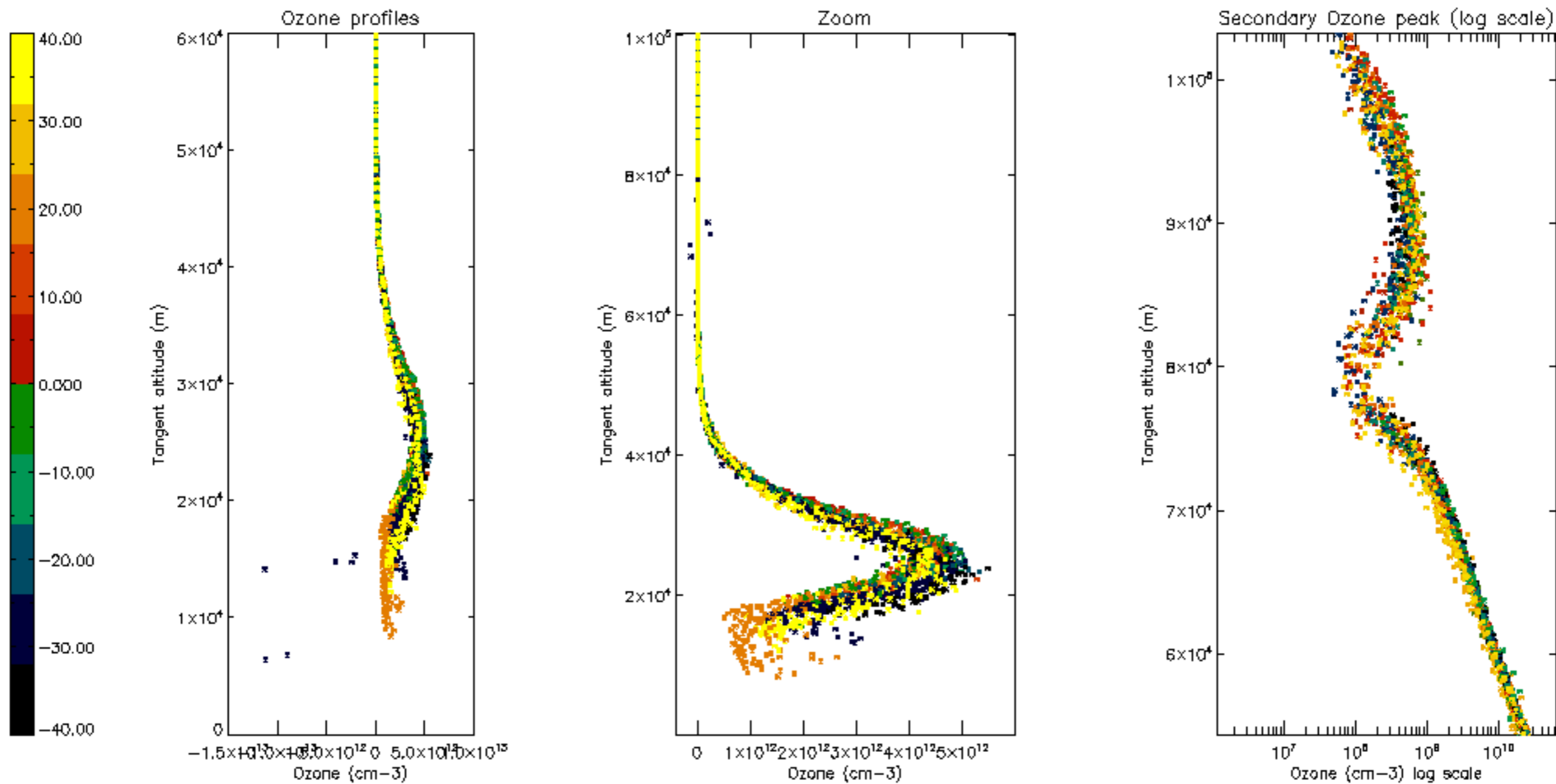
Percentage of star falling outside central band per profile

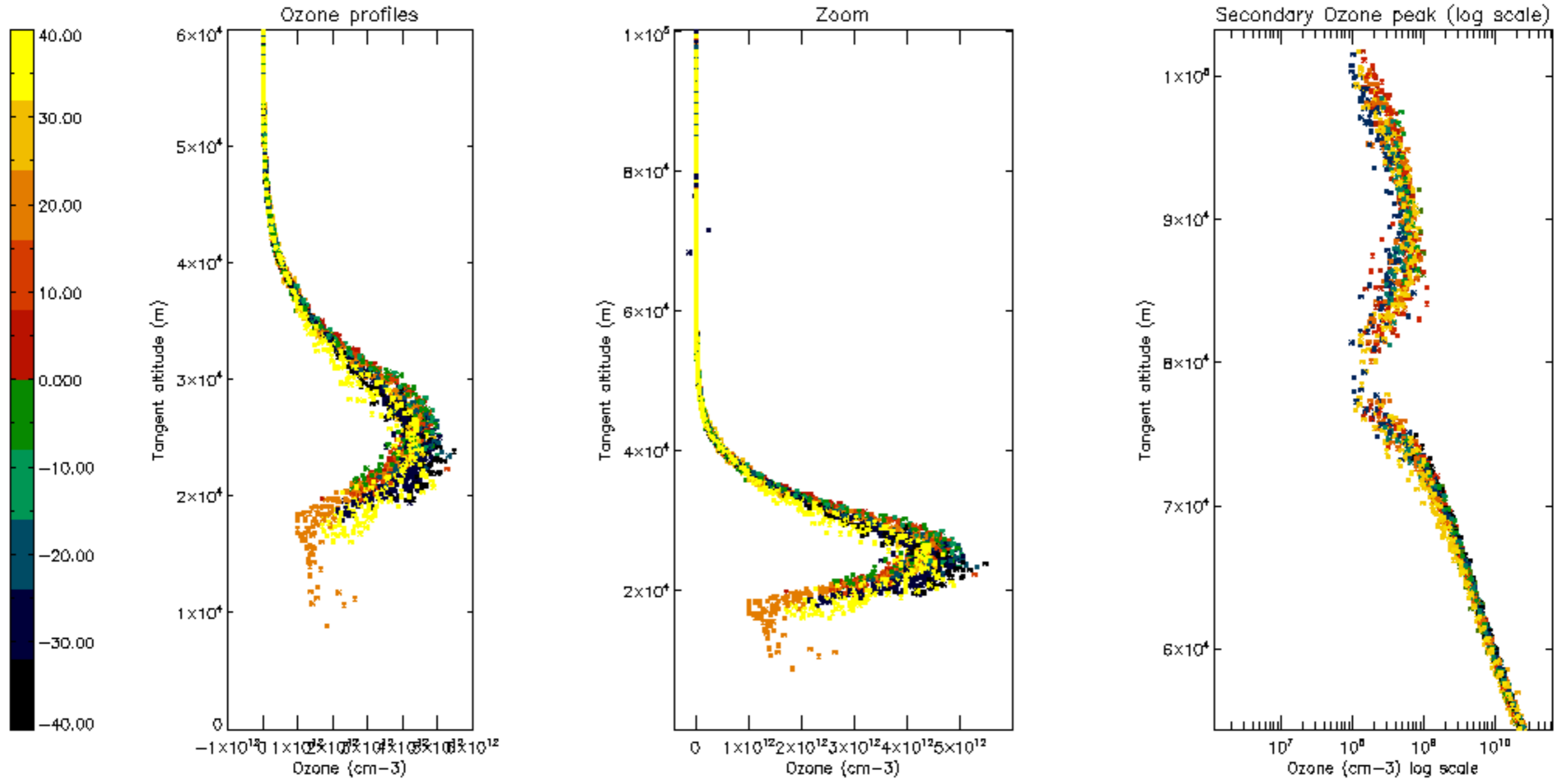


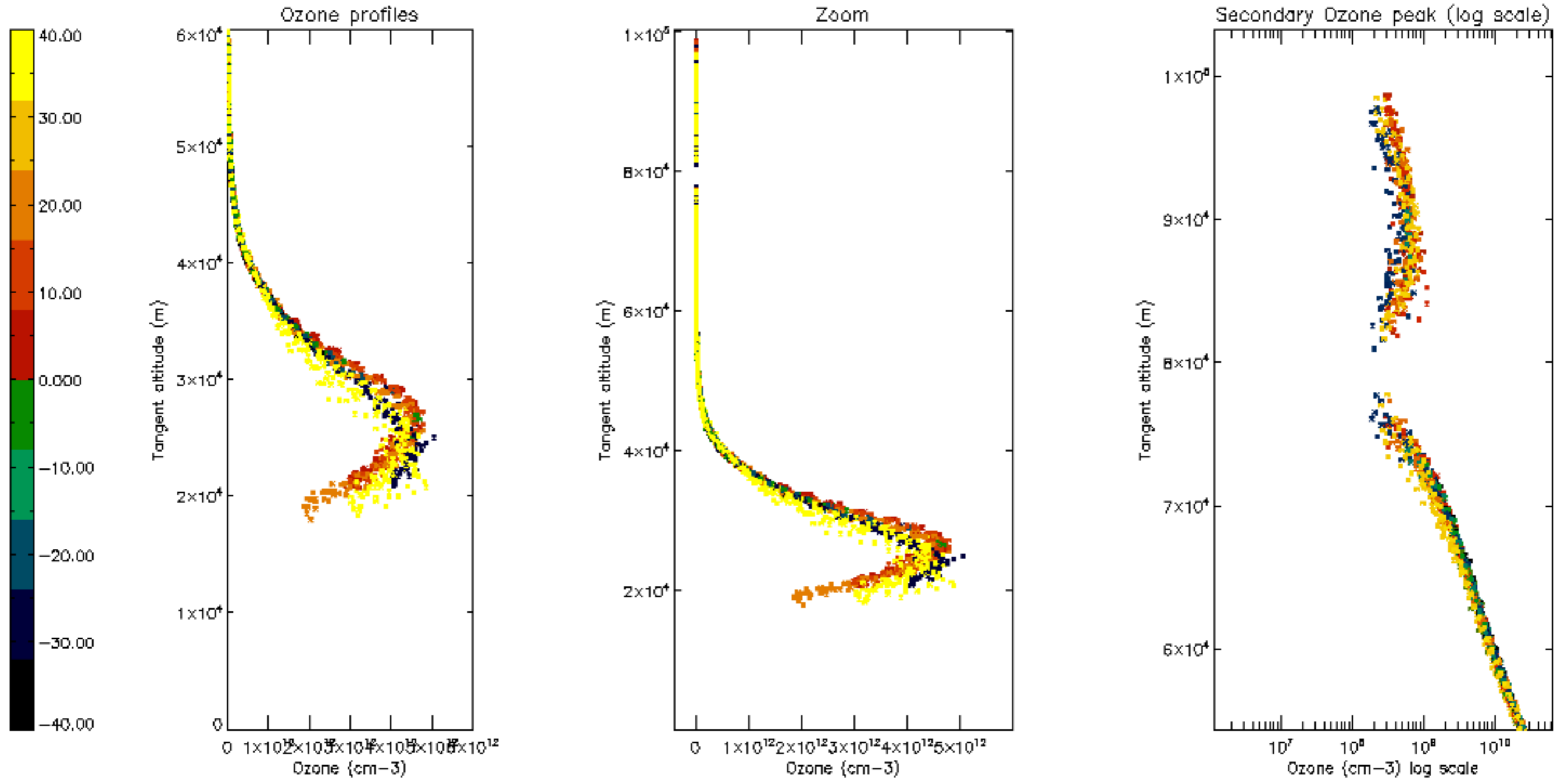
Percentage of saturation errors per profile

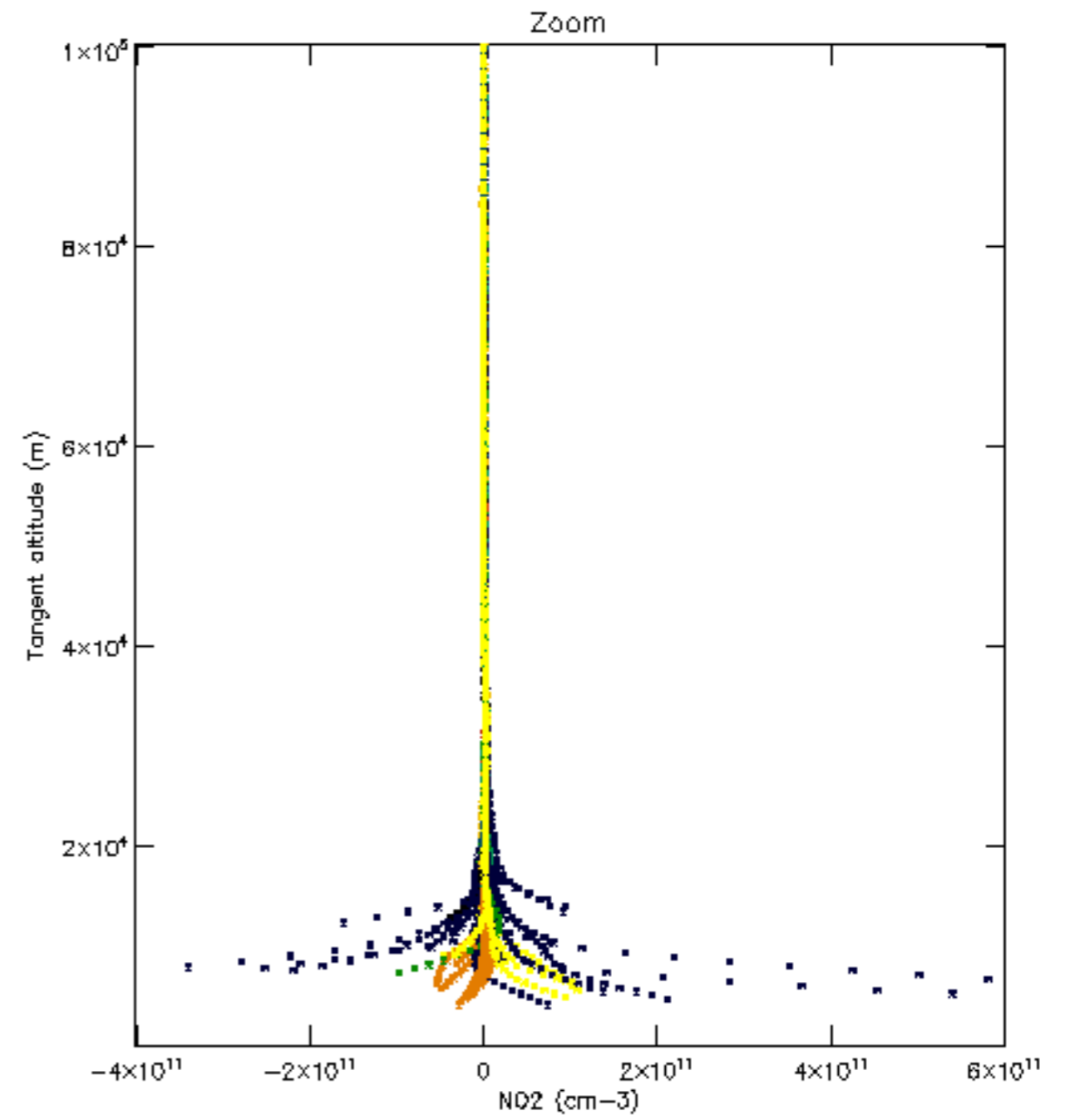
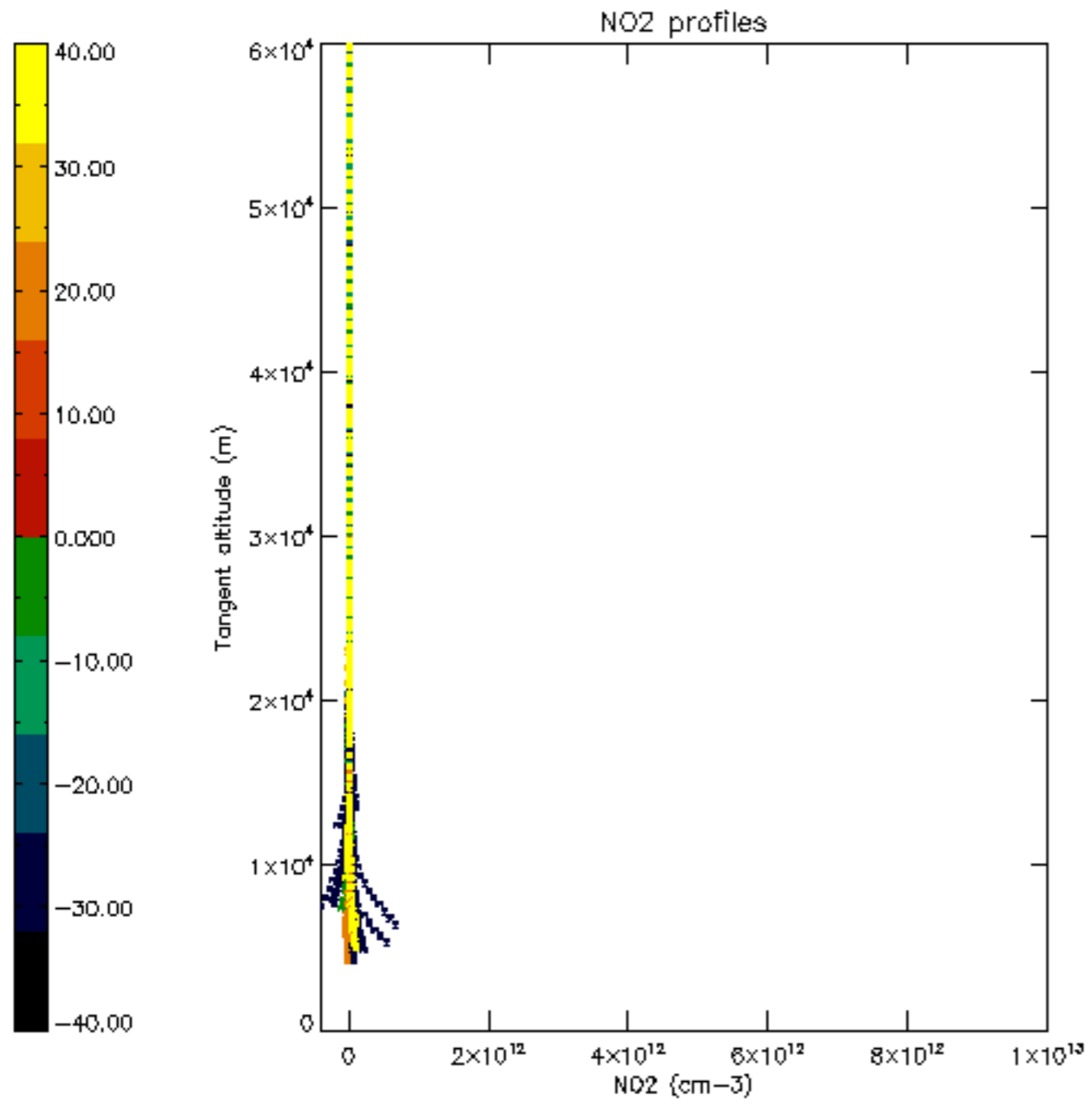


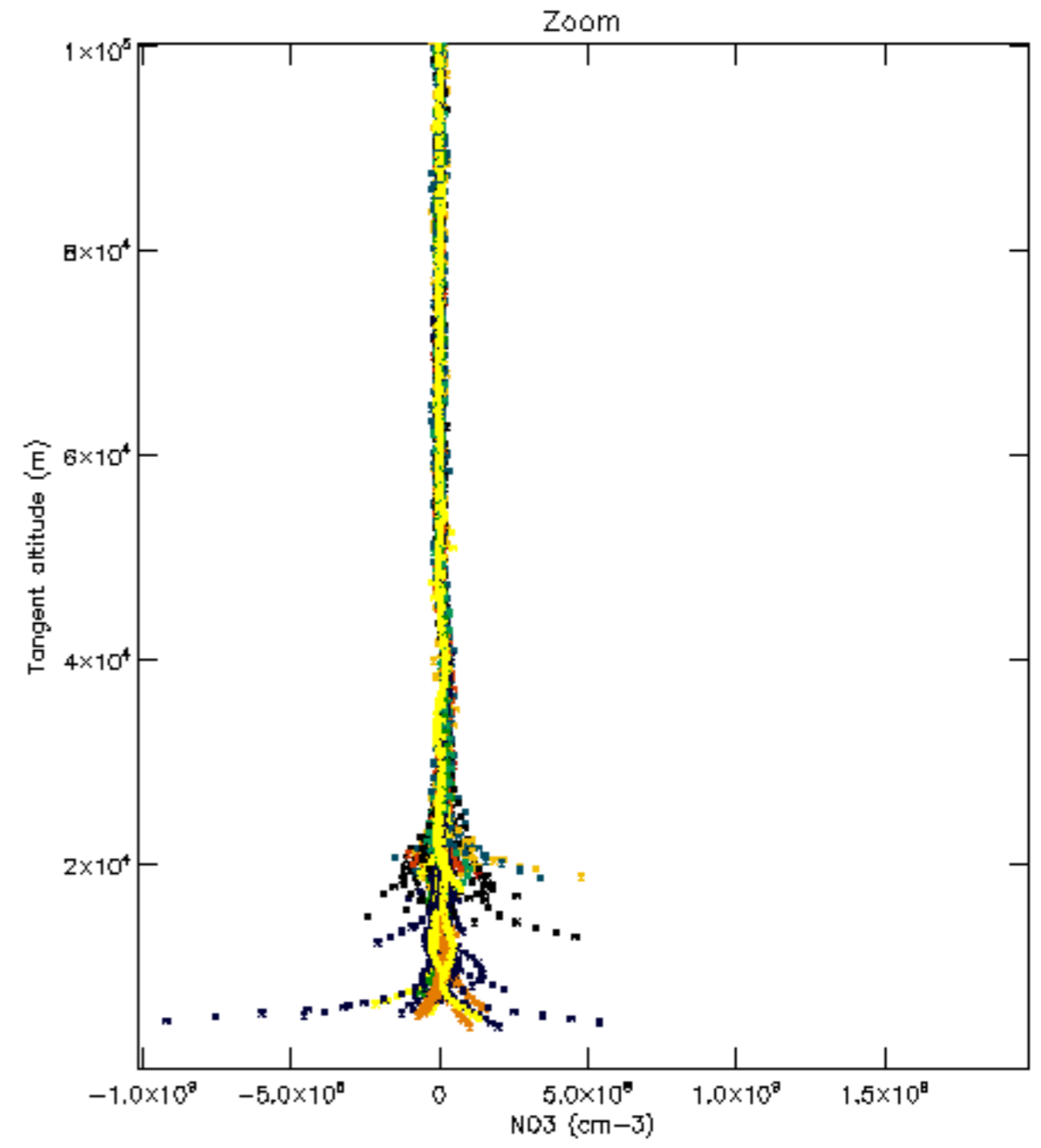
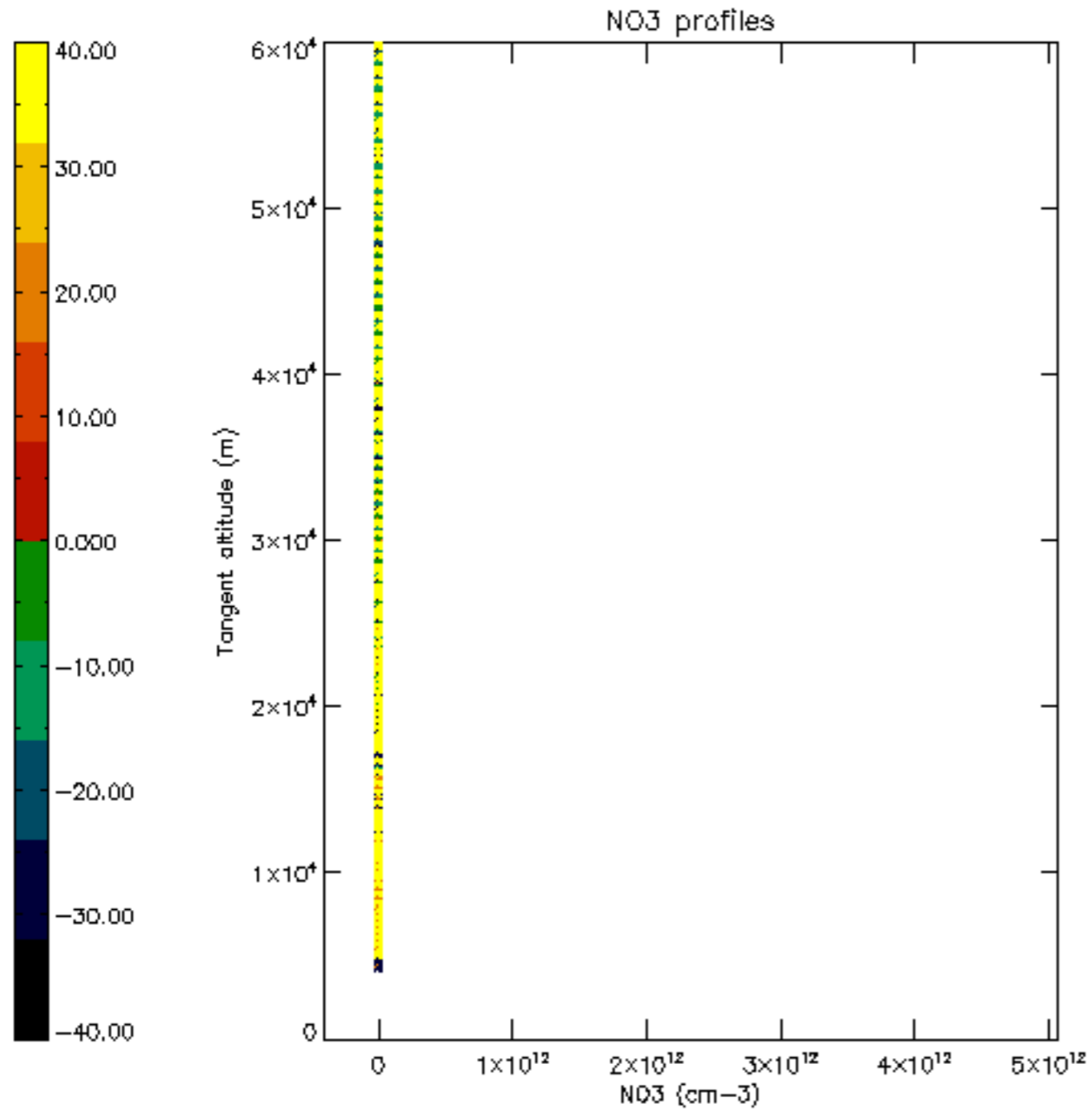


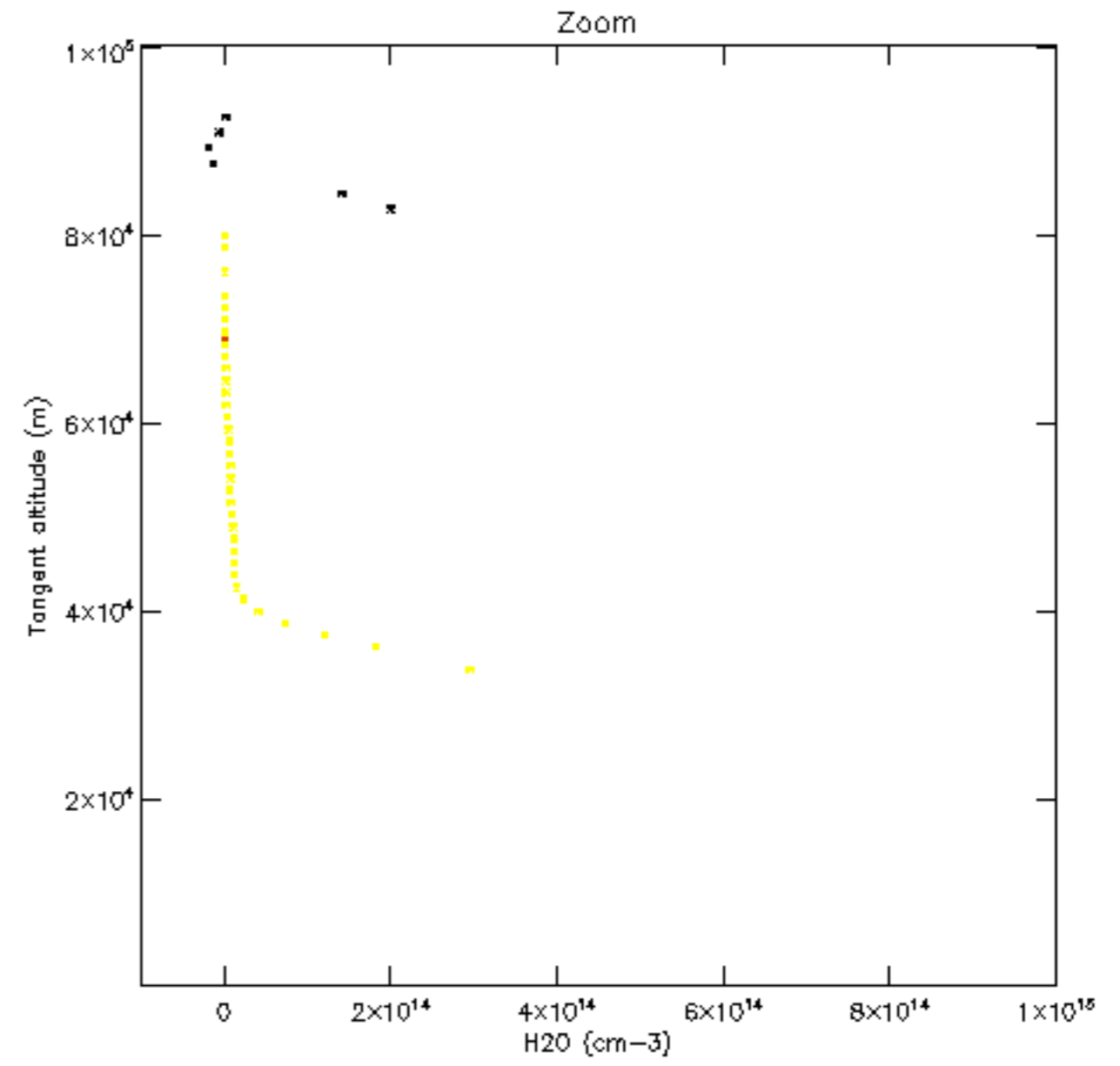
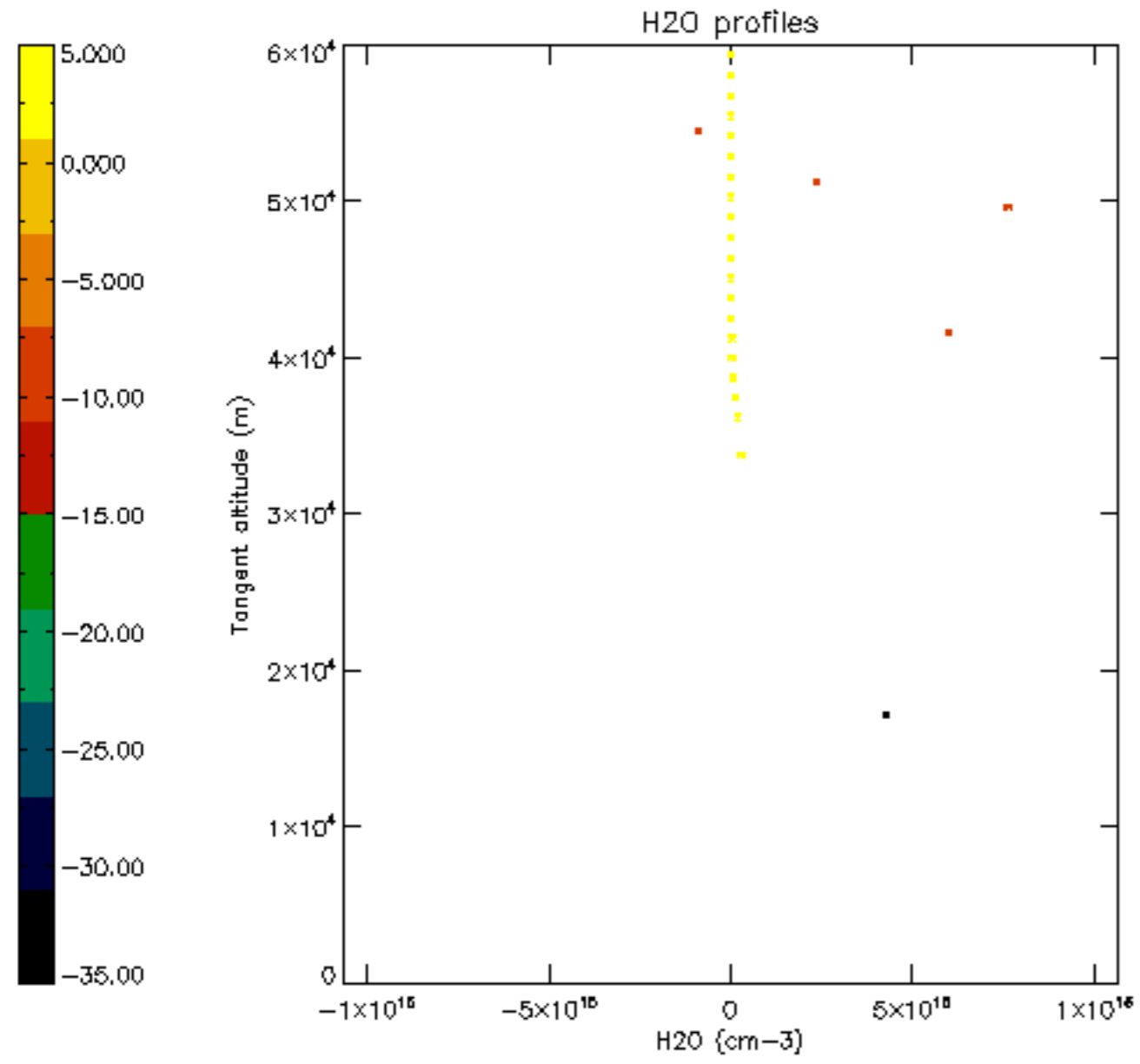


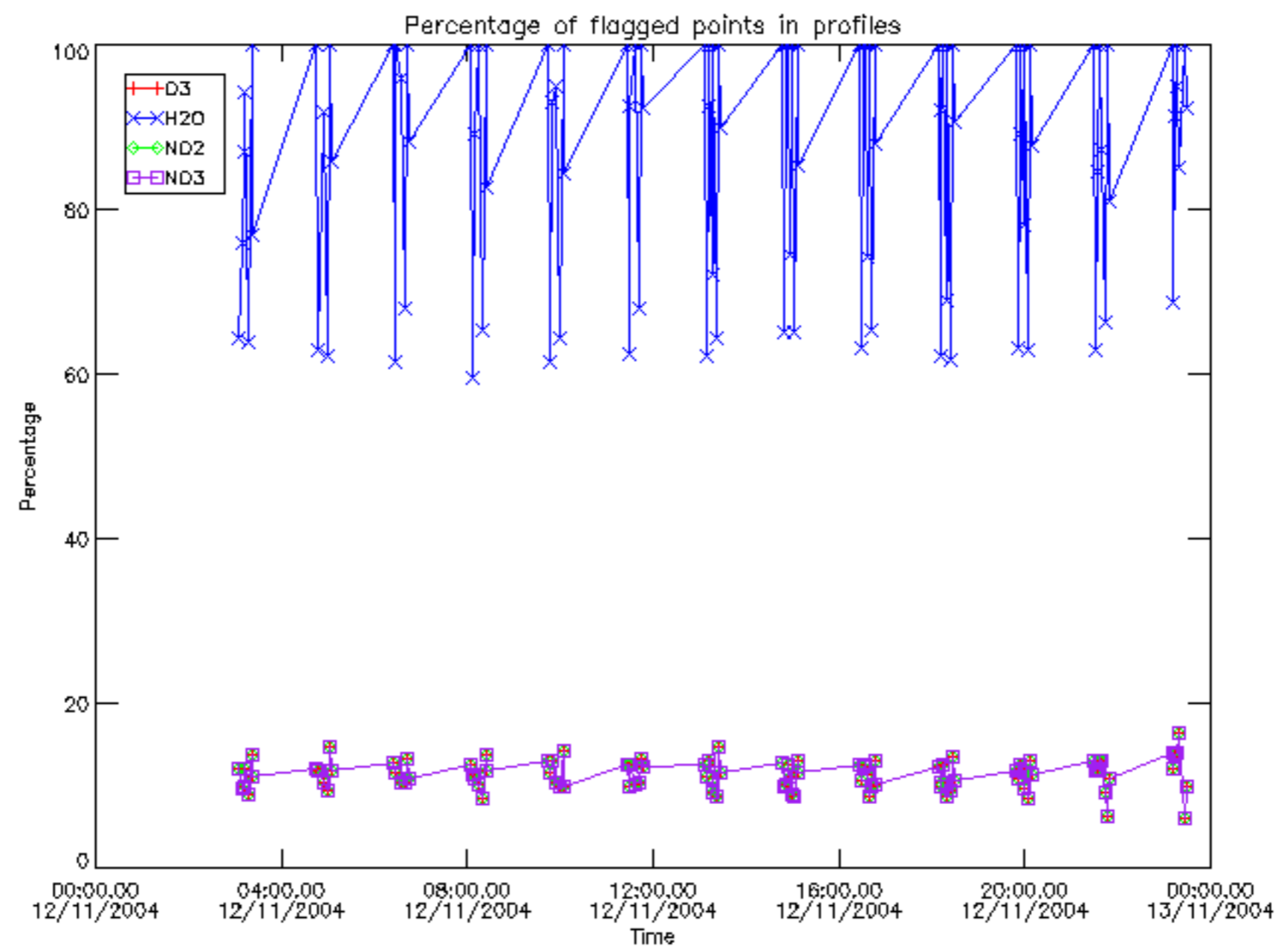




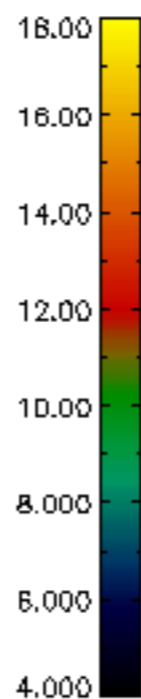
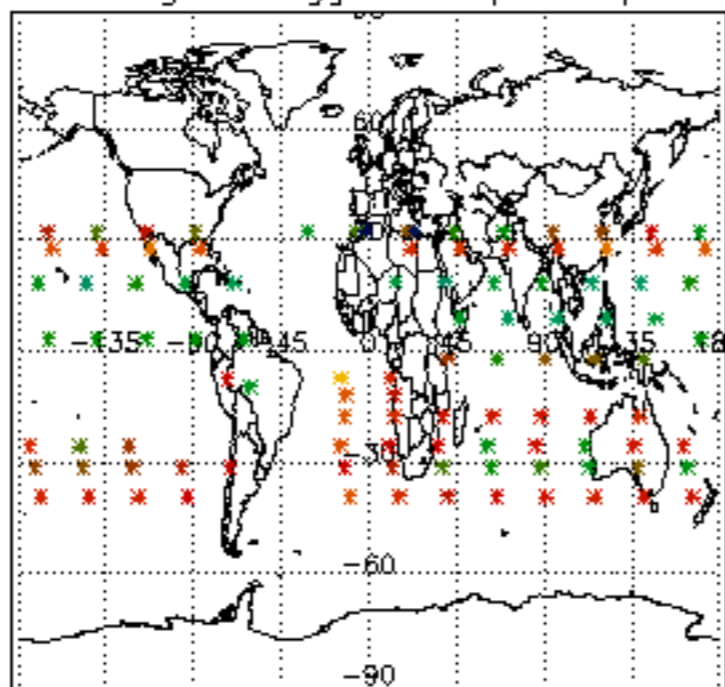




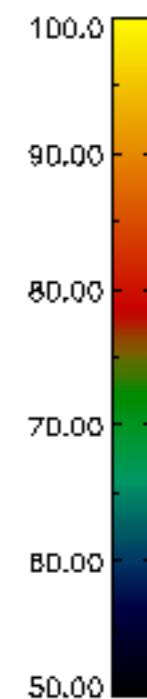
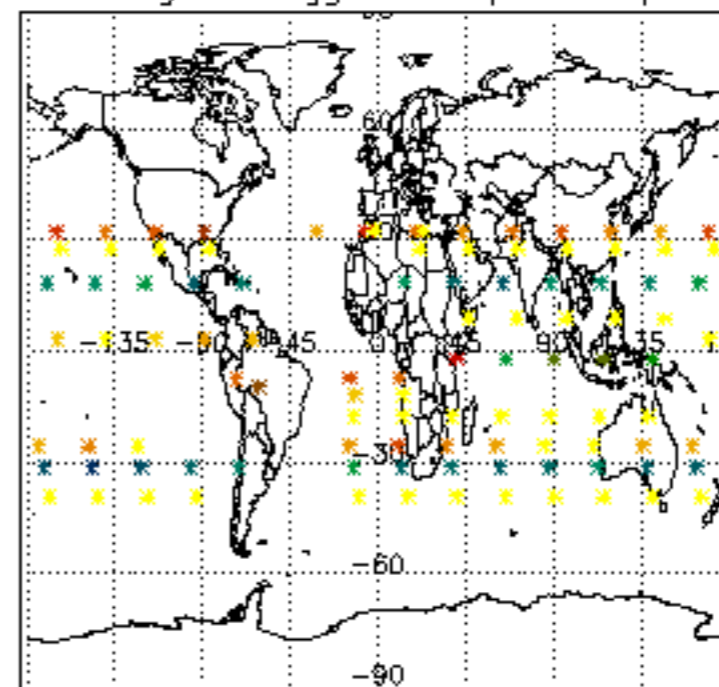




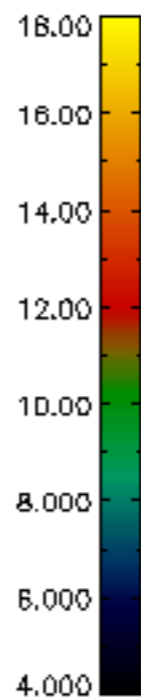
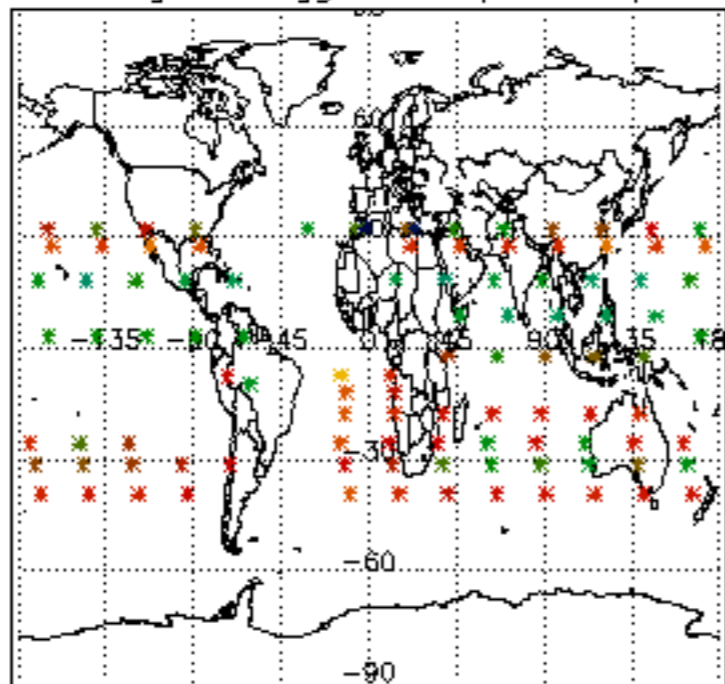
Percentage of flagged data per D3 profile



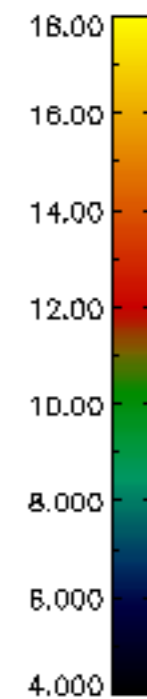
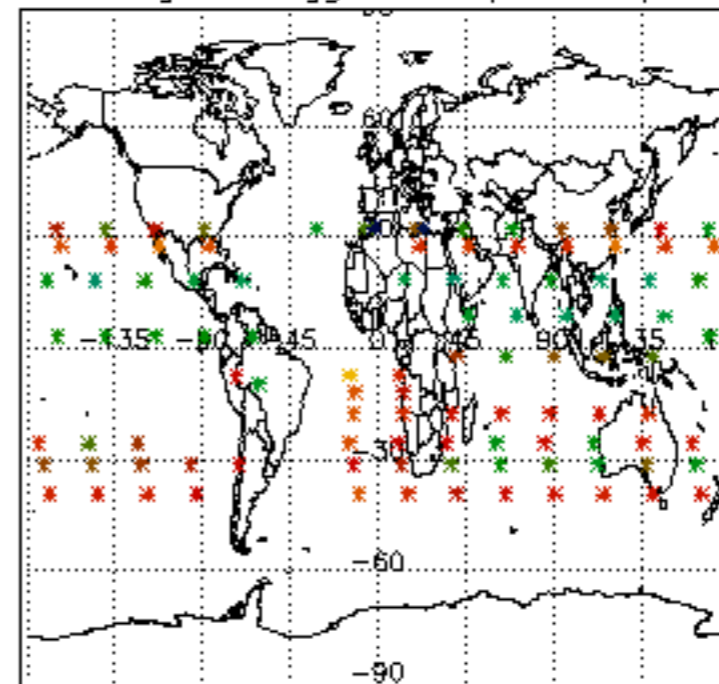
Percentage of flagged data per H2O profile

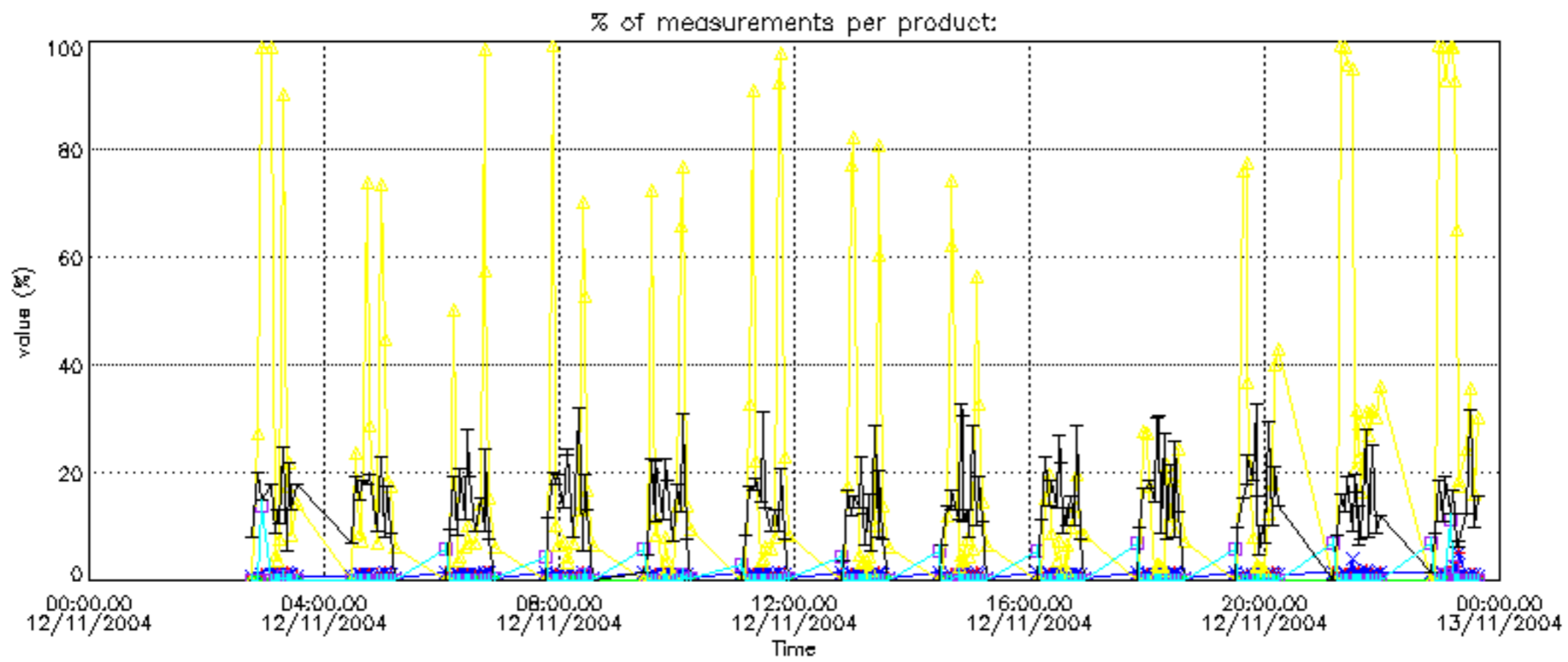


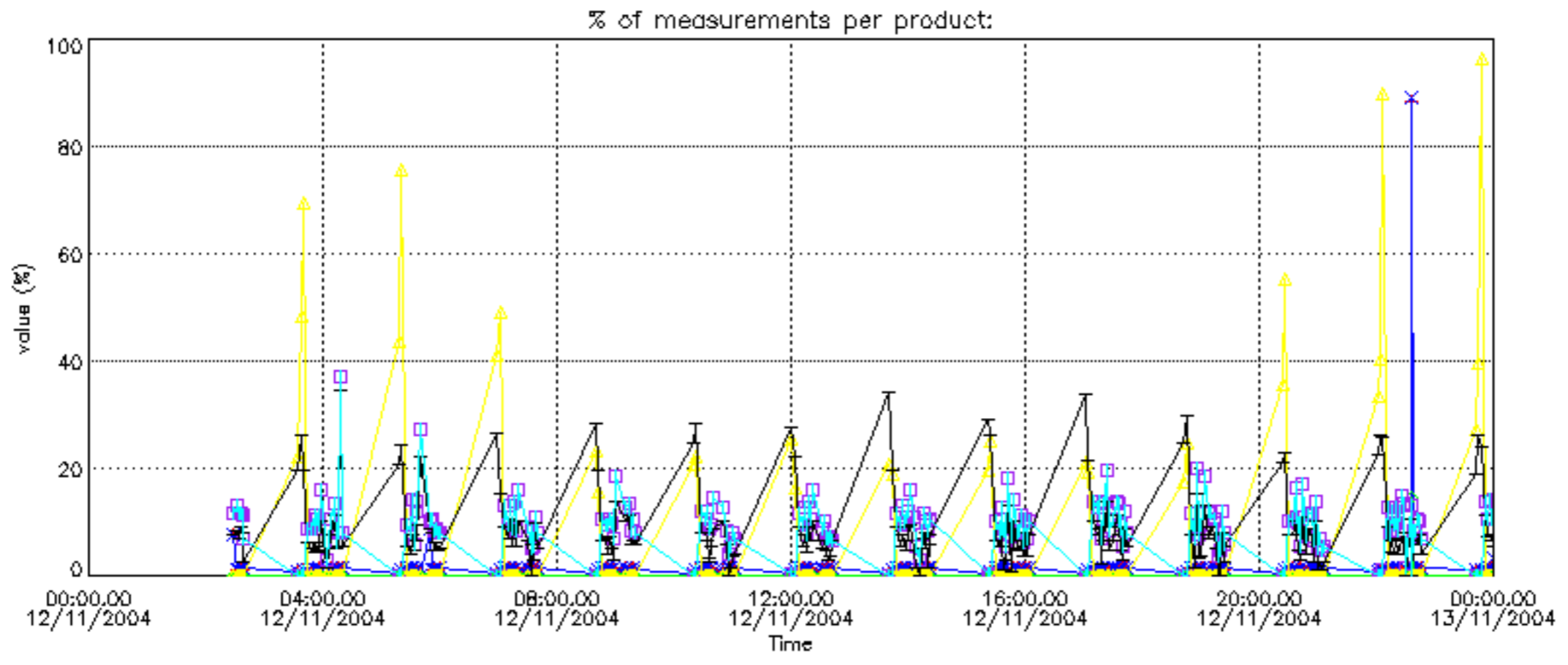
Percentage of flagged data per NO2 profile



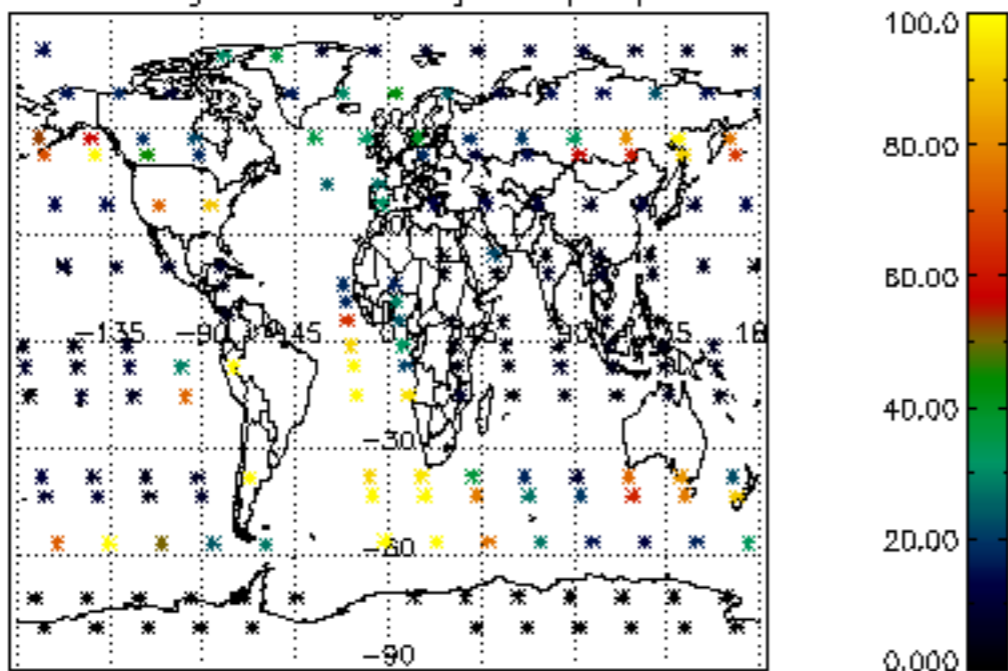
Percentage of flagged data per NO3 profile



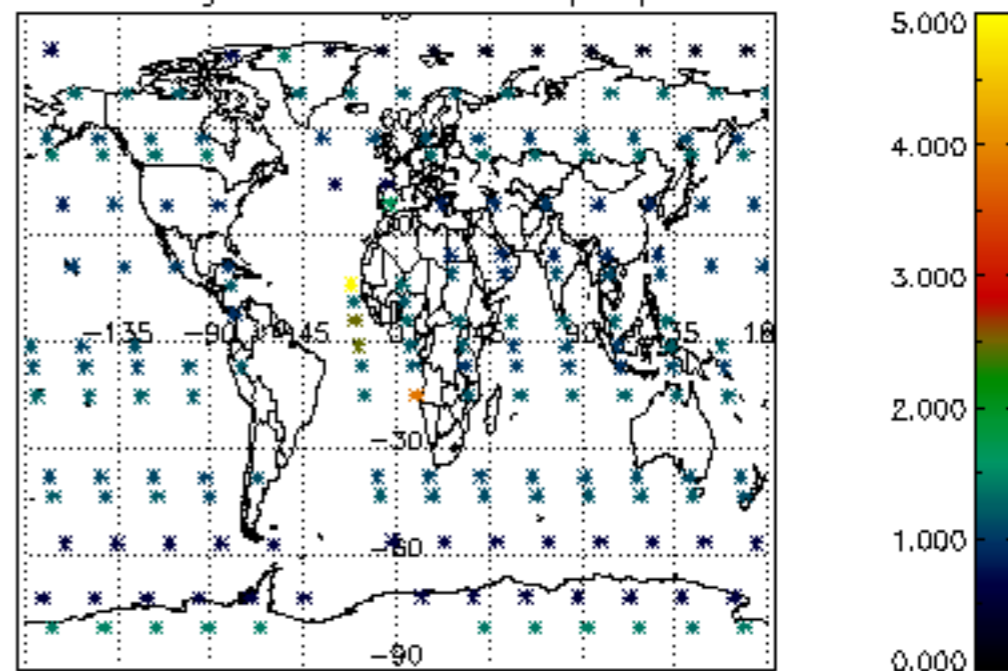




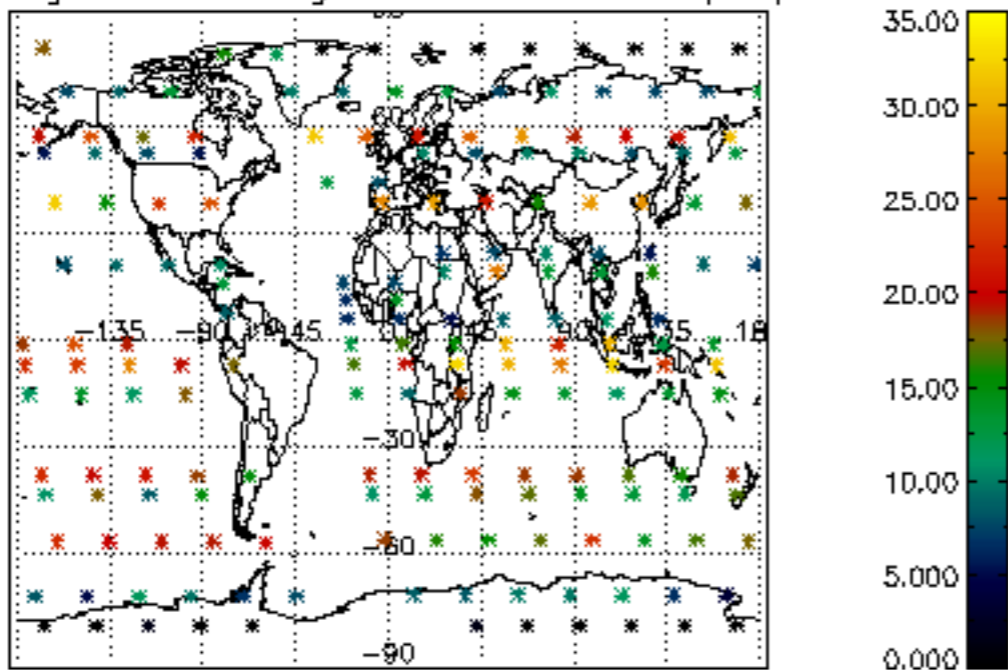
Percentage of cosmic ray hits per profile



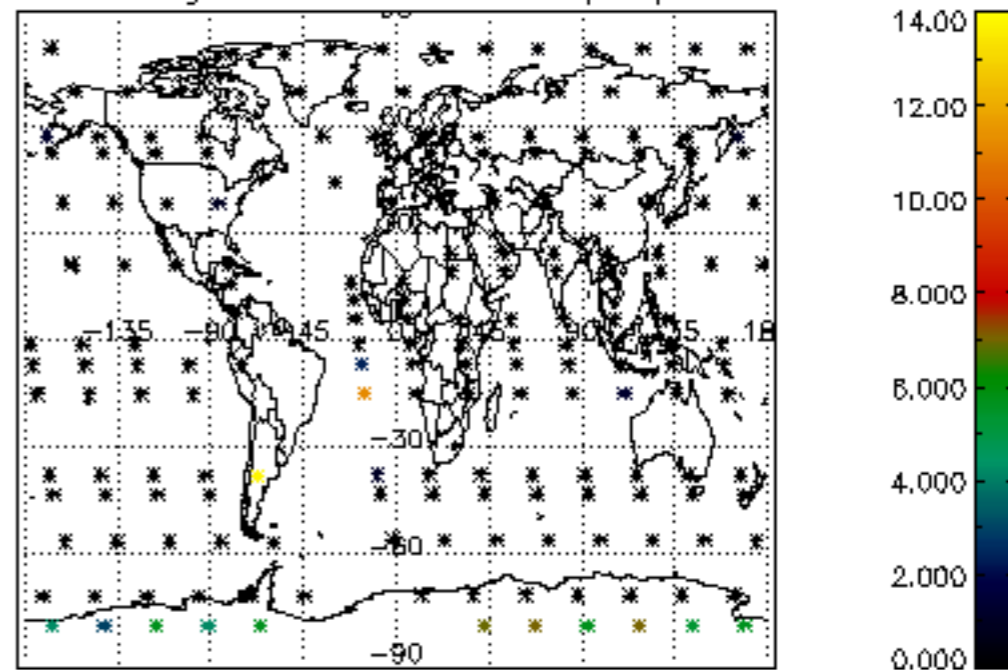
Percentage of datation errors per profile



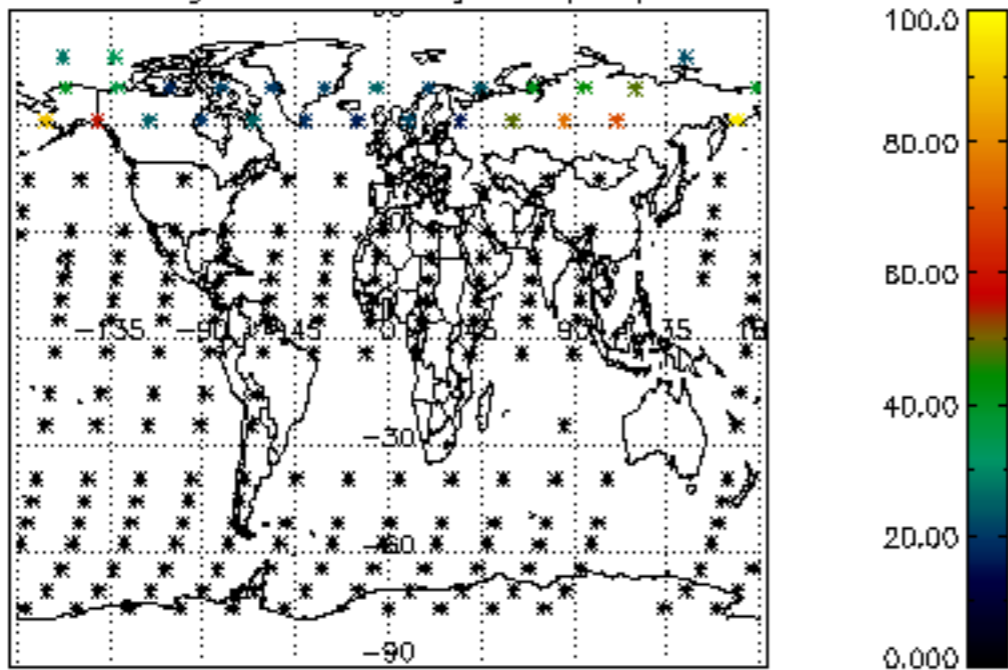
Percentage of star falling outside central band per profile



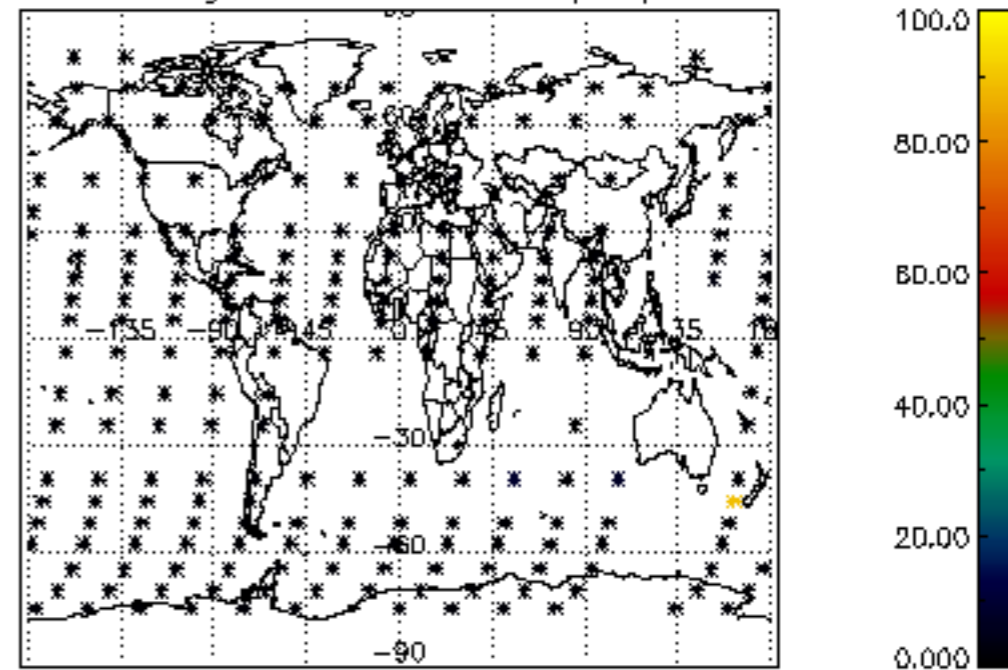
Percentage of saturation errors per profile



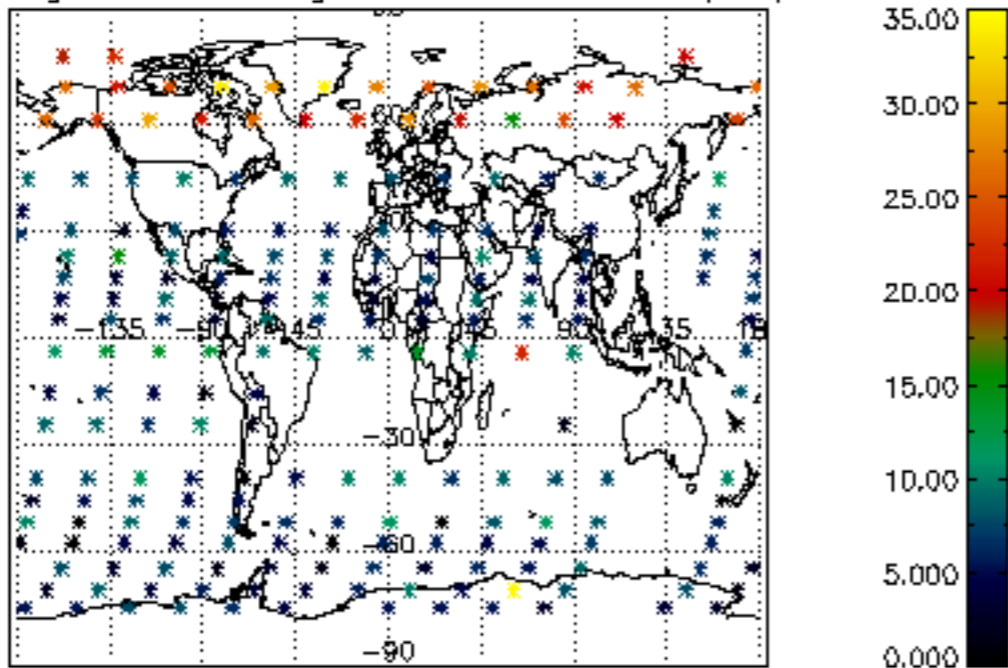
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

