

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.

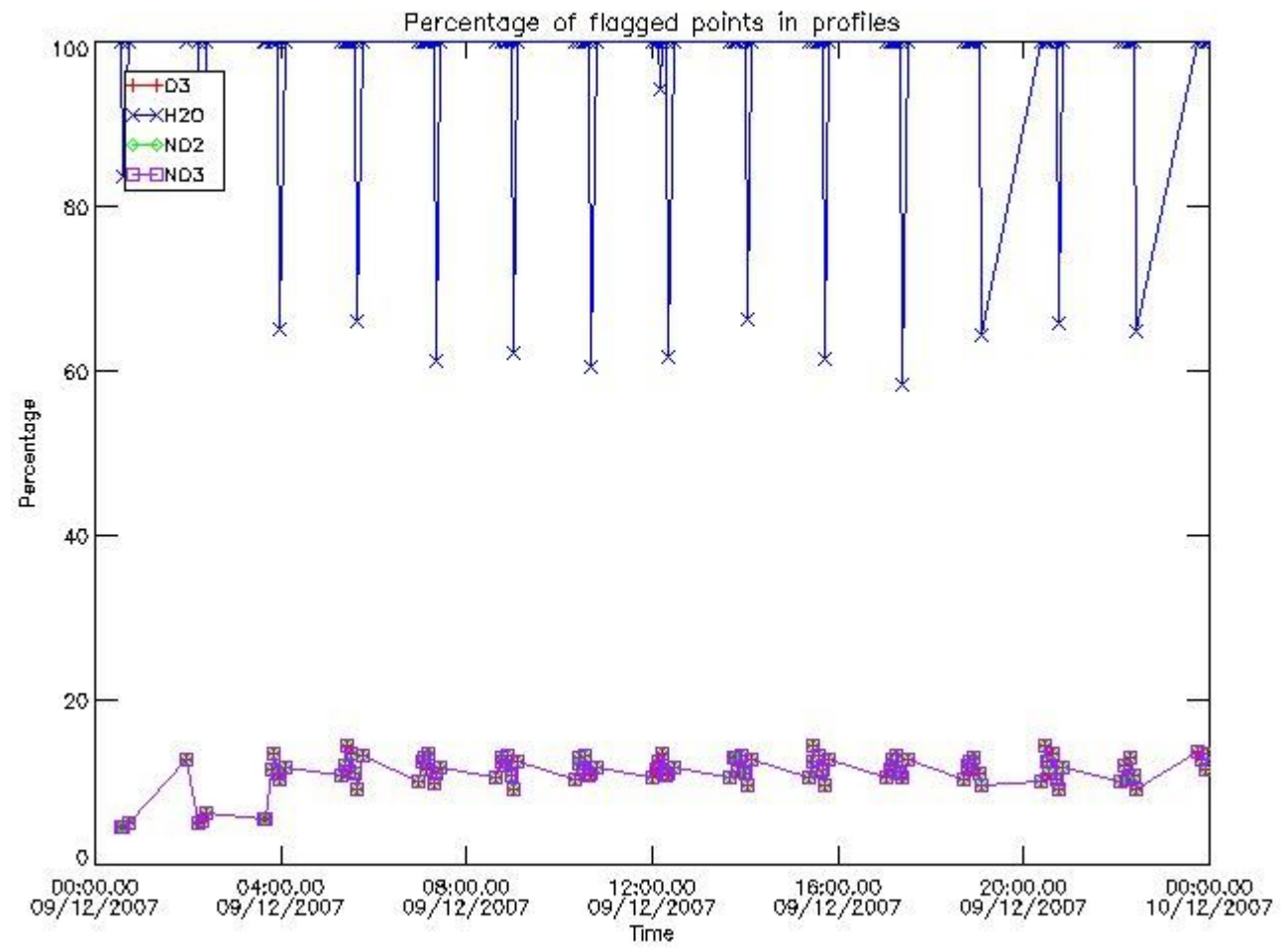
Item	Value
Time of report generation	23APR2013 13:29:41
Data source version	GOMOS/6.01
Start time of products	09-12-2007 (09DEC2007 00:00:00)
Stop time of products	10-12-2007 (10DEC2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	331
Nb of prods with errors	1

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__2PRFIN20071209_003345_000001102064_00074_30188_7358.N1	09-DEC-2007 00:33:45	Dark	109.50	34	Gam2Vel	1.7930	23000.	219	30188	No
2	GOM_NL__2PRFIN20071209_003637_000001102064_00074_30188_7359.N1	09-DEC-2007 00:36:37	Dark	110.00	2	Alp Car	-0.73600	7000.0	220	30188	No
3	GOM_NL__2PRFIN20071209_004247_000001022064_00074_30188_7360.N1	09-DEC-2007 00:42:47	Dark	101.50	108	Alp Col	2.6520	15200.	203	30188	No
4	GOM_NL__2PRFIN20071209_004801_000000822064_00074_30188_7361.N1	09-DEC-2007 00:48:01	Straylight	82.000	101	11Alp Lep	2.5820	7000.0	164	30188	No
5	GOM_NL__2PRFIN20071209_005119_000001112064_00074_30188_7362.N1	09-DEC-2007 00:51:19	Straylight	111.00	7	19Bet Ori	0.10000	14000.	222	30188	No
6	GOM_NL__2PRFIN20071209_005859_000001132064_00074_30188_7363.N1	09-DEC-2007 00:58:59	Bright	113.00	13	87Alp Tau	0.86700	3800.0	226	30188	No
7	GOM_NL__2PRFIN20071209_010315_000000862064_00074_30188_7364.N1	09-DEC-2007 01:03:15	Bright	85.500	150	44Zet Per	2.8900	28000.	171	30188	No
8	GOM_NL__2PRFIN20071209_010918_000000852064_00074_30188_7365.N1	09-DEC-2007 01:09:18	Bright	84.500	160	23Gam Per	2.9300	4700.0	169	30188	No
9	GOM_NL__2PRFIN20071209_011922_000000882064_00074_30188_7366.N1	09-DEC-2007 01:19:22	Bright	87.500	49	1Alp UMi	1.9900	6300.0	175	30188	No
10	GOM_NL__2PRFIN20071209_012405_000000882064_00074_30188_7367.N1	09-DEC-2007 01:24:05	Bright	88.000	60	7Bet UMi	2.0810	3950.0	176	30188	No
11	GOM_NL__2PRFIN20071209_012856_000000982064_00074_30188_7368.N1	09-DEC-2007 01:28:56	Bright	98.000	32	77Eps UMa	1.7630	11000.	196	30188	No
12	GOM_NL__2PRFIN20071209_013118_000000962064_00074_30188_7369.N1	09-DEC-2007 01:31:18	Bright	96.000	39	85Eta UMa	1.8540	24000.	192	30188	No
13	GOM_NL__2PRFIN20071209_013427_000000862064_00074_30188_7370.N1	09-DEC-2007 01:34:27	Bright	86.000	180	27Gam Boo	3.0400	8000.0	172	30188	No
14	GOM_NL__2PRFIN20071209_014007_000000872064_00074_30188_7371.N1	09-DEC-2007 01:40:07	Bright	86.500	3	16Alp Boo	-0.050000	4250.0	173	30188	No
15	GOM_NL__2PRFIN20071209_014955_000001022064_00074_30188_7372.N1	09-DEC-2007 01:49:55	Bright	101.50	15	67Alp Vir	0.97600	28000.	203	30188	No
16	GOM_NL__2PRFIN20071209_015323_000000992064_00074_30188_7373.N1	09-DEC-2007 01:53:23	Tw_i_and_stray	98.500	169	46Gam Hya	2.9910	4700.0	197	30188	No
17	GOM_NL__2PRFIN20071209_015648_000000922064_00074_30188_7374.N1	09-DEC-2007 01:56:48	Dark	92.000	123	Iot Cen	2.7500	10200.	184	30188	No
18	GOM_NL__2PRFIN20071209_021422_000001122064_00075_30189_7373.N1	09-DEC-2007 02:14:22	Dark	111.50	34	Gam2Vel	1.7930	23000.	223	30189	No
19	GOM_NL__2PRFIN20071209_021713_000000992064_00075_30189_7374.N1	09-DEC-2007 02:17:13	Dark	98.500	2	Alp Car	-0.73600	7000.0	197	30189	No
20	GOM_NL__2PRFIN20071209_022323_000001002064_00075_30189_7375.N1	09-DEC-2007 02:23:23	Dark	99.500	108	Alp Col	2.6520	15200.	199	30189	No
21	GOM_NL__2PRFIN20071209_022837_000000822064_00075_30189_7376.N1	09-DEC-2007 02:28:37	Straylight	82.000	101	11Alp Lep	2.5820	7000.0	164	30189	No
22	GOM_NL__2PRFIN20071209_023155_000001112064_00075_30189_7377.N1	09-DEC-2007 02:31:55	Straylight	111.00	7	19Bet Ori	0.10000	14000.	222	30189	No
23	GOM_NL__2PRFIN20071209_023935_000001112064_00075_30189_7378.N1	09-DEC-2007 02:39:35	Bright	111.00	13	87Alp Tau	0.86700	3800.0	222	30189	No
24	GOM_NL__2PRFIN20071209_024350_000000882064_00075_30189_7379.N1	09-DEC-2007 02:43:50	Bright	87.500	150	44Zet Per	2.8900	28000.	175	30189	No
25	GOM_NL__2PRFIN20071209_024954_000000842064_00075_30189_7380.N1	09-DEC-2007 02:49:54	Bright	84.000	160	23Gam Per	2.9300	4700.0	168	30189	No
26	GOM_NL__2PRFIN20071209_025957_000000872064_00075_30189_7381.N1	09-DEC-2007 02:59:57	Bright	86.500	49	1Alp UMi	1.9900	6300.0	173	30189	No
27	GOM_NL__2PRFIN20071209_030441_000000892064_00075_30189_7382.N1	09-DEC-2007 03:04:41	Bright	88.500	60	7Bet UMi	2.0810	3950.0	177	30189	No
28	GOM_NL__2PRFIN20071209_030932_000000982064_00075_30189_7383.N1	09-DEC-2007 03:09:32	Bright	98.000	32	77Eps UMa	1.7630	11000.	196	30189	No
29	GOM_NL__2PRFIN20071209_031154_000000942064_00075_30189_7384.N1	09-DEC-2007 03:11:54	Bright	94.000	39	85Eta UMa	1.8540	24000.	188	30189	No
30	GOM_NL__2PRFIN20071209_031502_000000872064_00075_30189_7385.N1	09-DEC-2007 03:15:02	Bright	86.500	180	27Gam Boo	3.0400	8000.0	173	30189	No
31	GOM_NL__2PRFIN20071209_032043_000000882064_00075_30189_7386.N1	09-DEC-2007 03:20:43	Bright	87.500	3	16Alp Boo	-0.050000	4250.0	175	30189	No
32	GOM_NL__2PRFIN20071209_033031_000001012064_00075_30189_7387.N1	09-DEC-2007 03:30:31	Bright	101.00	15	67Alp Vir	0.97600	28000.	202	30189	No
33	GOM_NL__2PRFIN20071209_033400_000000972064_00075_30189_7388.N1	09-DEC-2007 03:34:00	Tw_i_and_stray	96.500	169	46Gam Hya	2.9910	4700.0	193	30189	No
34	GOM_NL__2PRFIN20071209_033725_000000912064_00075_30189_7389.N1	09-DEC-2007 03:37:25	Dark	91.000	123	Iot Cen	2.7500	10200.	182	30189	No
35	GOM_NL__2PRFIN20071209_034131_000000932064_00075_30189_7390.N1	09-DEC-2007 03:41:31	Dark	93.000	64	Gam Cen	2.2000	10600.	186	30189	No
36	GOM_NL__2PRFIN20071209_034721_000000452064_00076_30190_7383.N1	09-DEC-2007 03:47:21	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	30190	No
37	GOM_NL__2PRFIN20071209_035025_000000382064_00076_30190_7384.N1	09-DEC-2007 03:50:25	Dark	38.000	159	Ups Car	2.9200	7200.0	76	30190	No
38	GOM_NL__2PRFIN20071209_035601_000000512064_00076_30190_7385.N1	09-DEC-2007 03:56:01	Dark	51.000	34	Gam2Vel	1.7930	23000.	102	30190	No
39	GOM_NL__2PRFIN20071209_035844_000000492064_00076_30190_7386.N1	09-DEC-2007 03:58:44	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	30190	No
40	GOM_NL__2PRFIN20071209_040457_000000432064_00076_30190_7387.N1	09-DEC-2007 04:04:57	Dark	43.000	108	Alp Col	2.6520	15200.	86	30190	No
41	GOM_NL__2PRFIN20071209_041014_000000282064_00076_30190_7388.N1	09-DEC-2007 04:10:14	Straylight	28.000	101	11Alp Lep	2.5820	7000.0	56	30190	No
42	GOM_NL__2PRFIN20071209_041331_000000542064_00076_30190_7389.N1	09-DEC-2007 04:13:31	Straylight	54.000	7	19Bet Ori	0.10000	14000.	108	30190	No

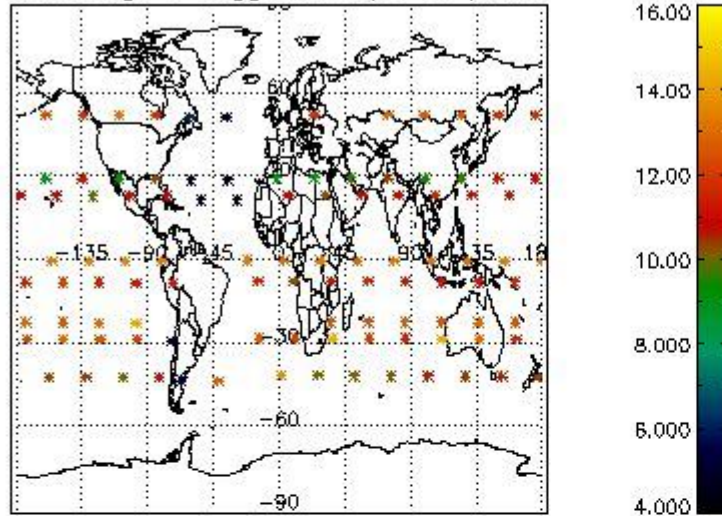
the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

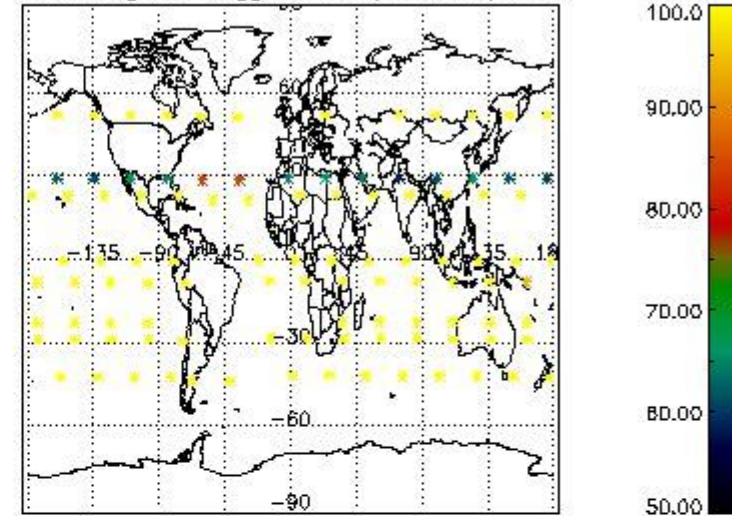


3.2 Plot quality information per product (world map)

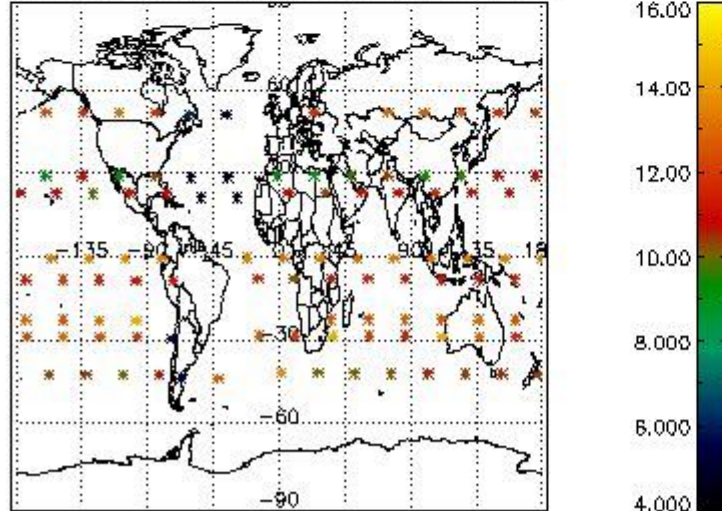
Percentage of flagged data per O3 profile



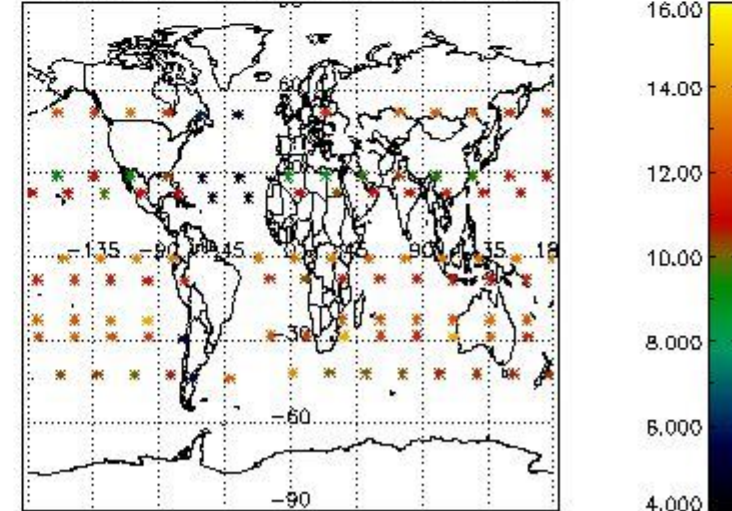
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

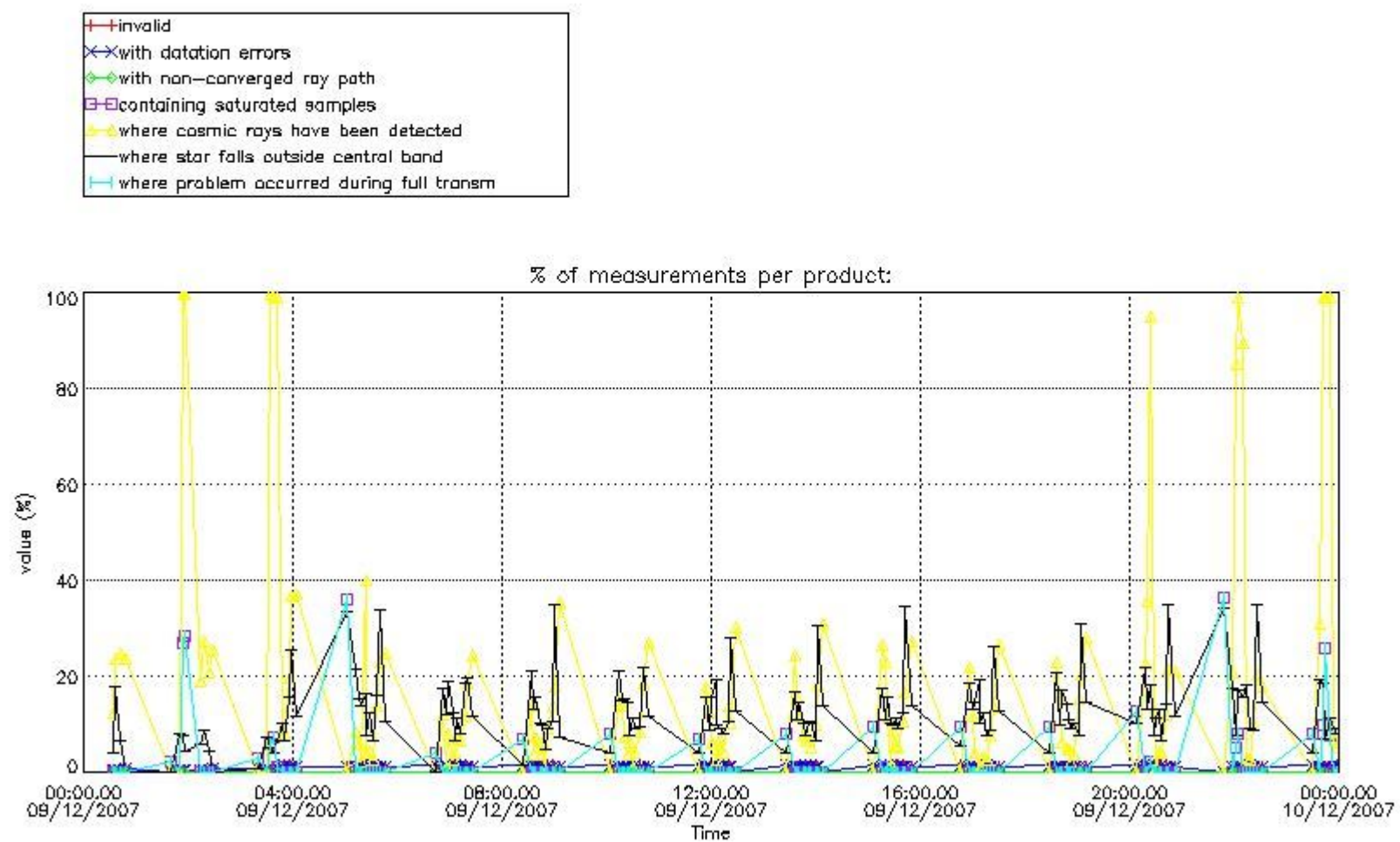


4. Level 1 quality information per product

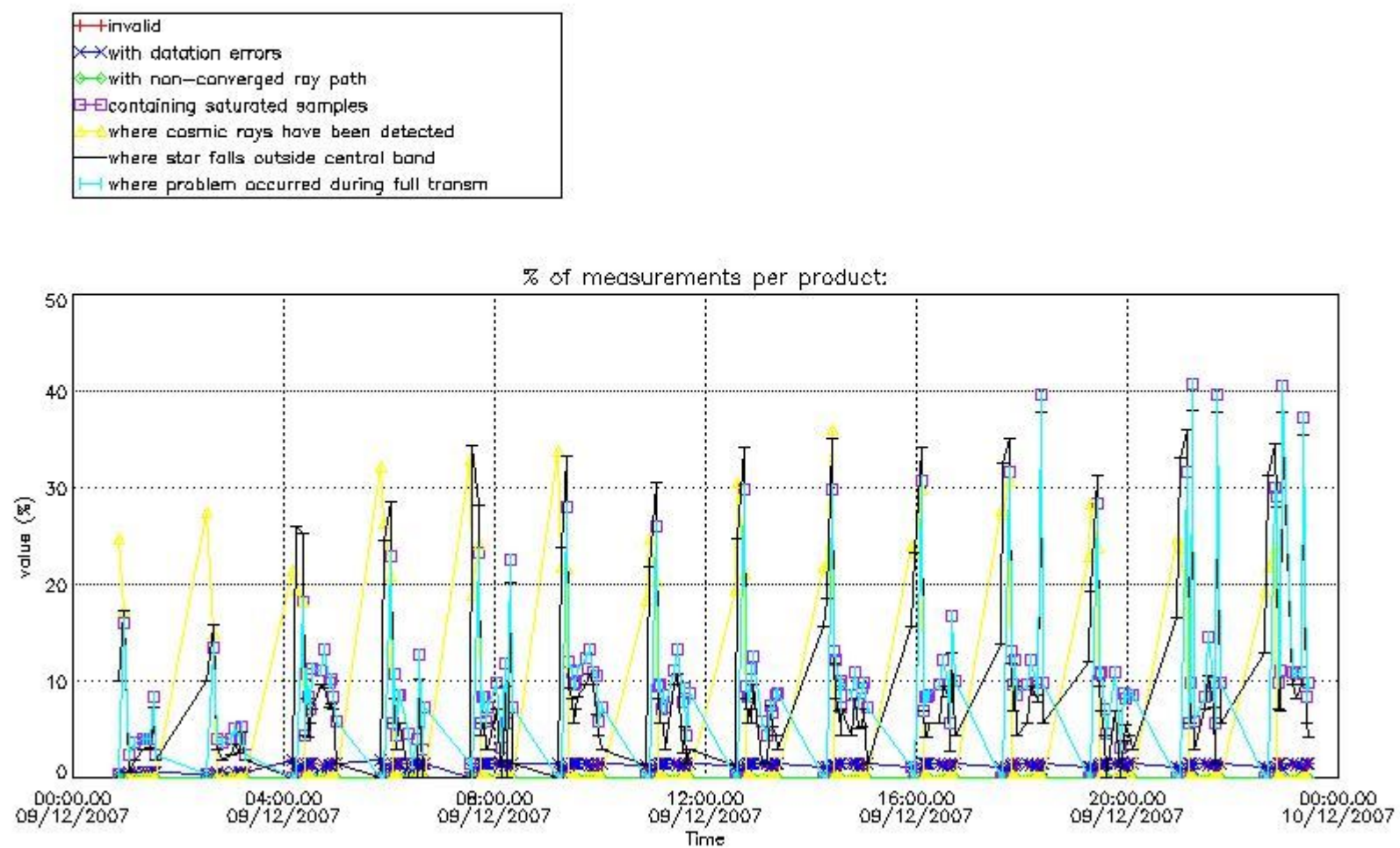
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

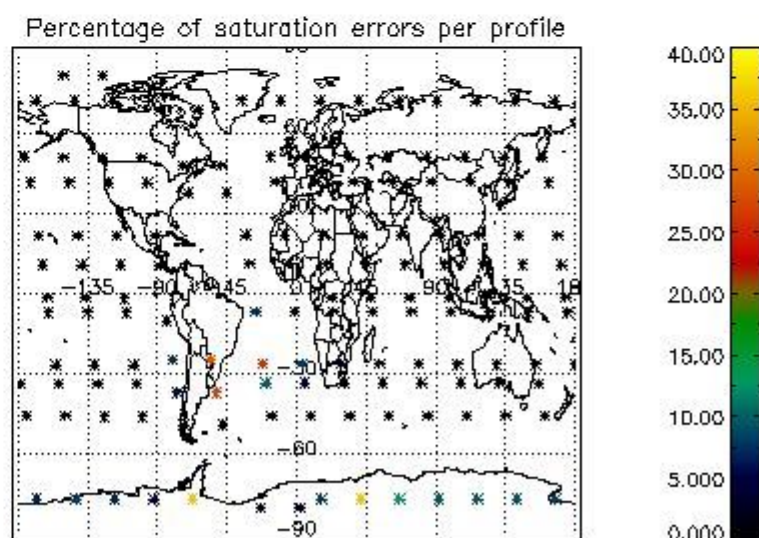
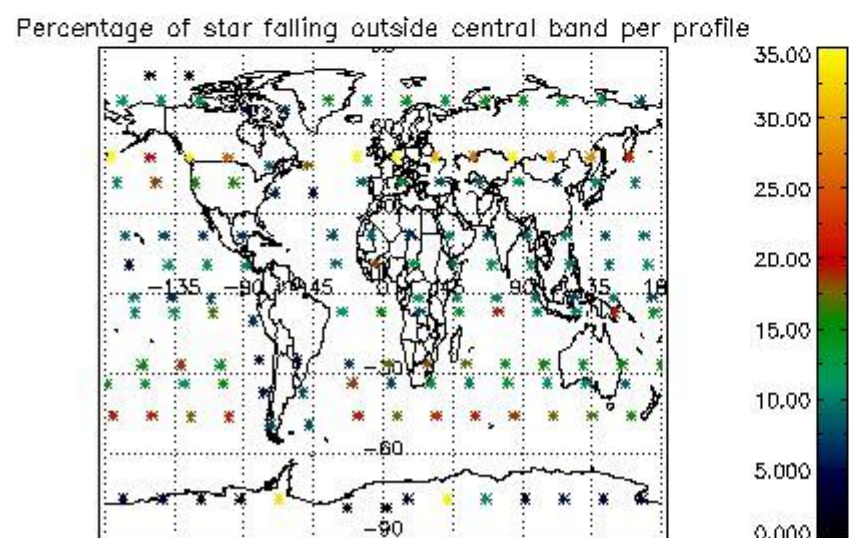
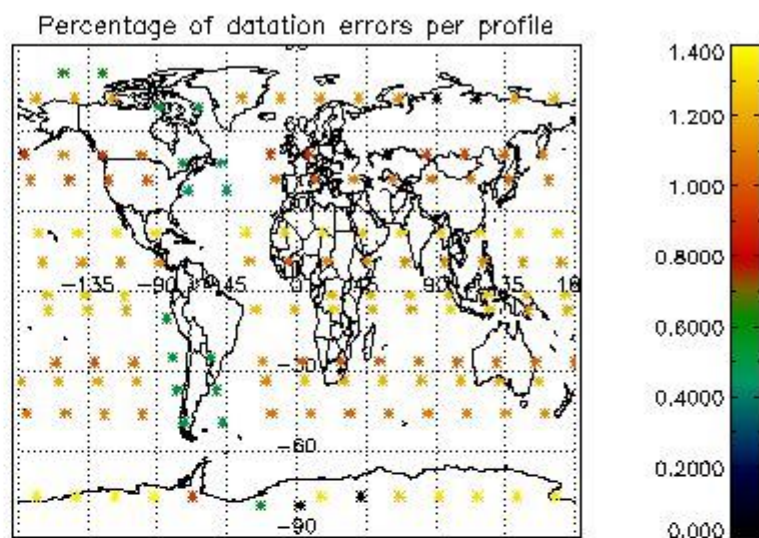
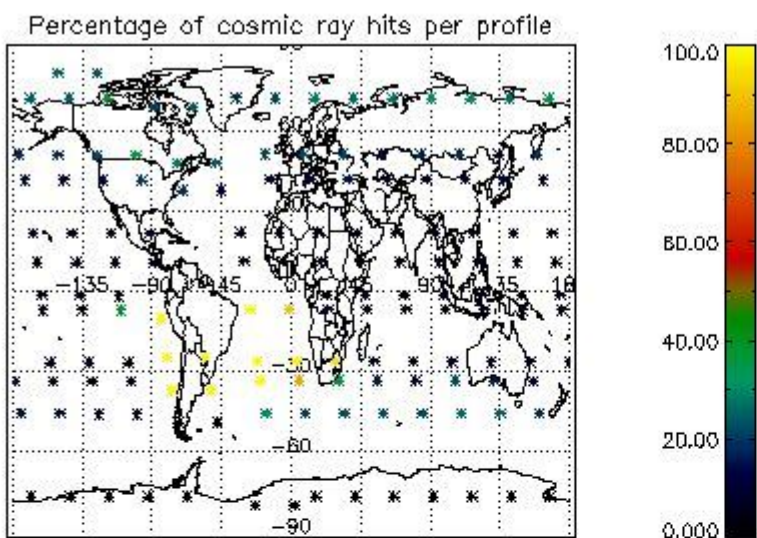


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

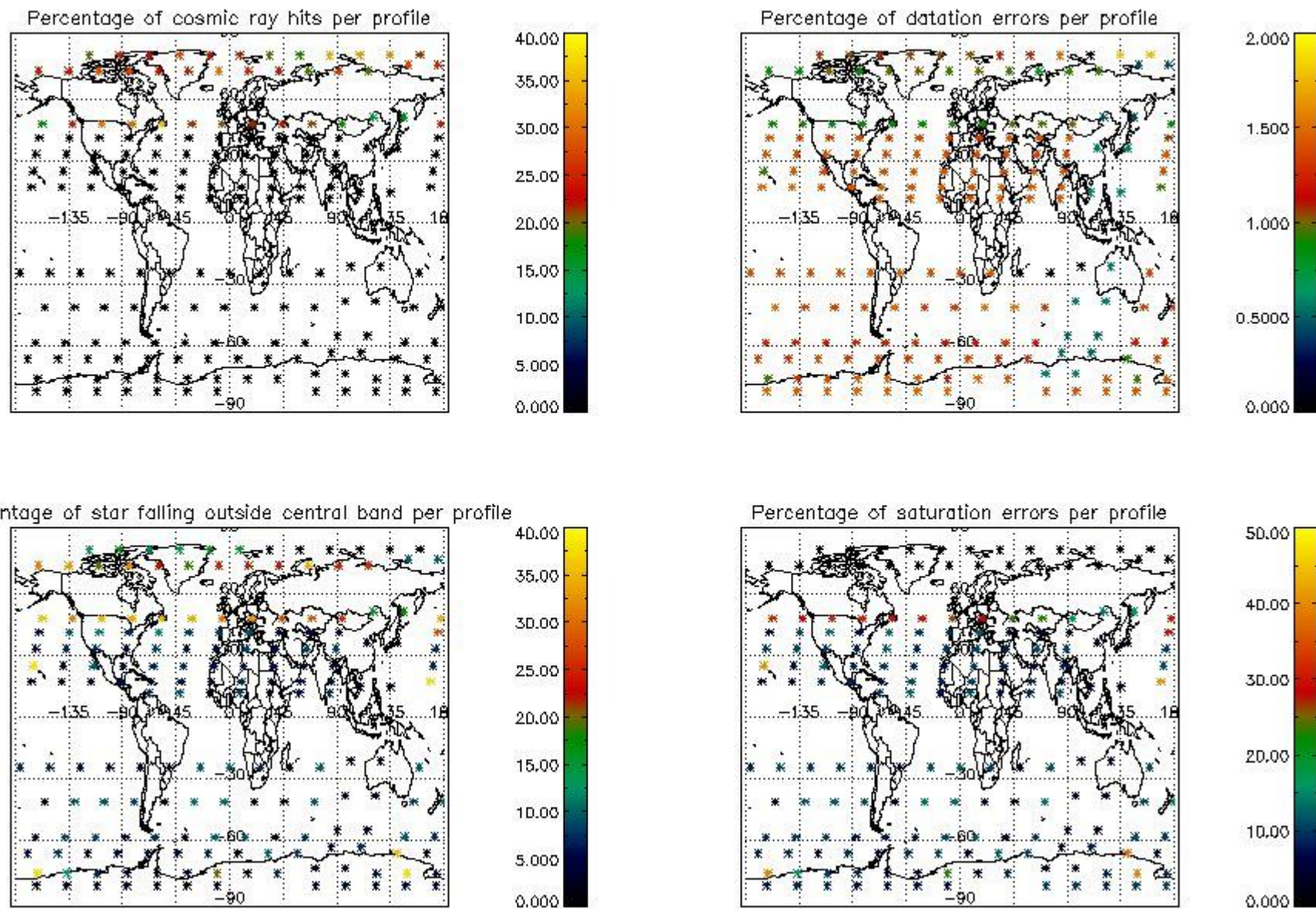


4.2 Plot quality information per product coming from level 1b processing (world map)

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

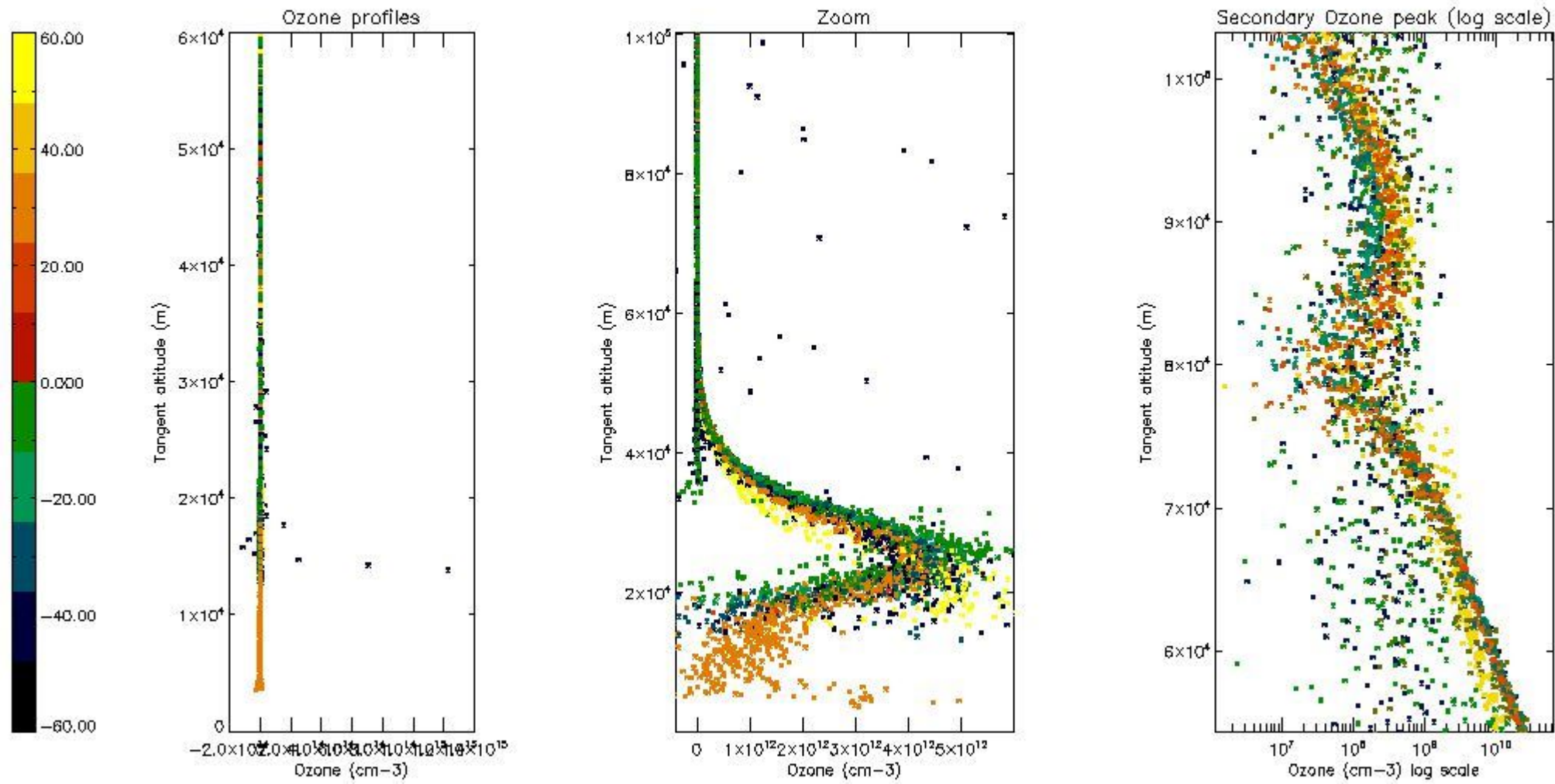
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	15

STD < 10	12
STD < 5	7

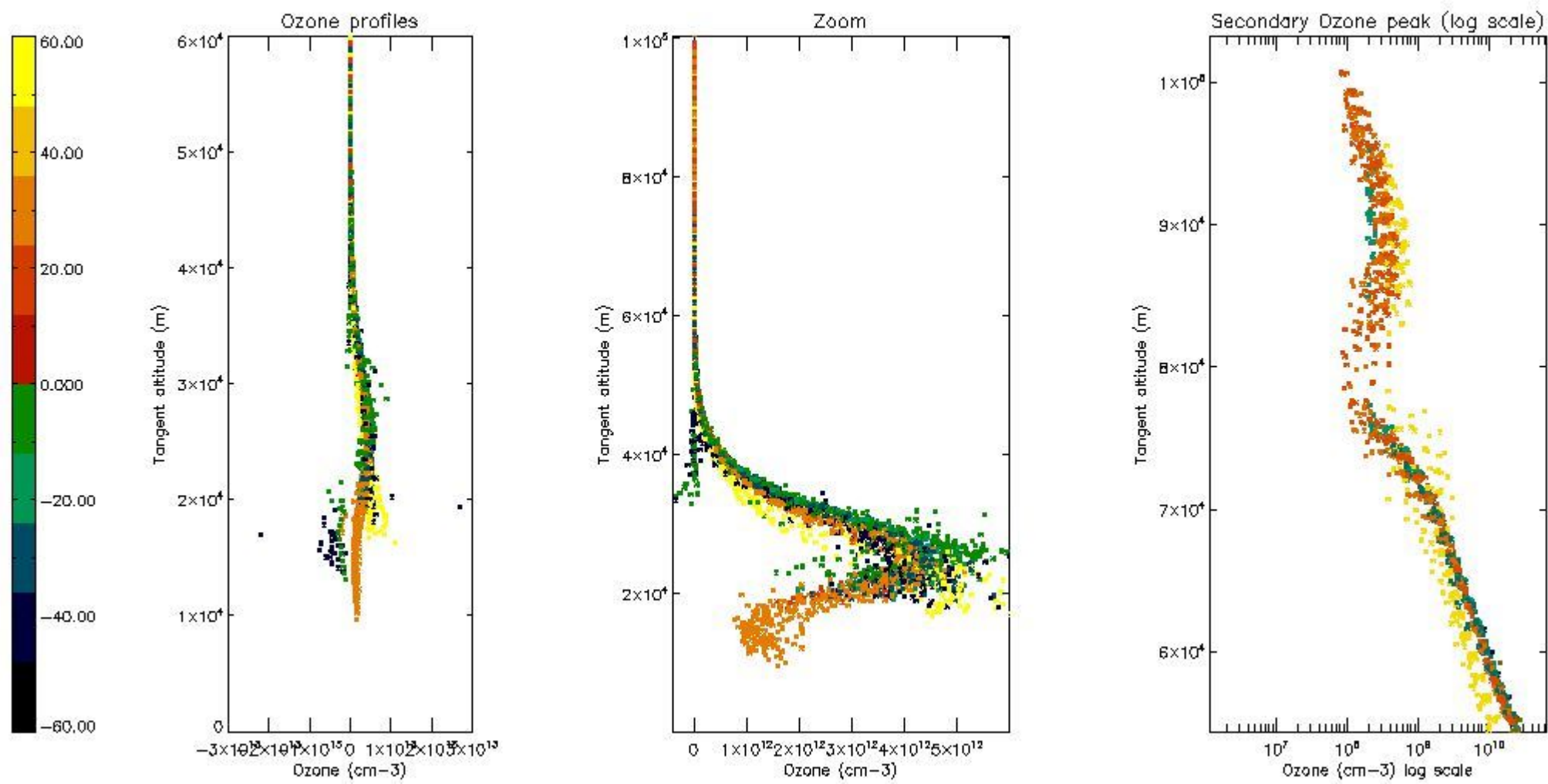
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



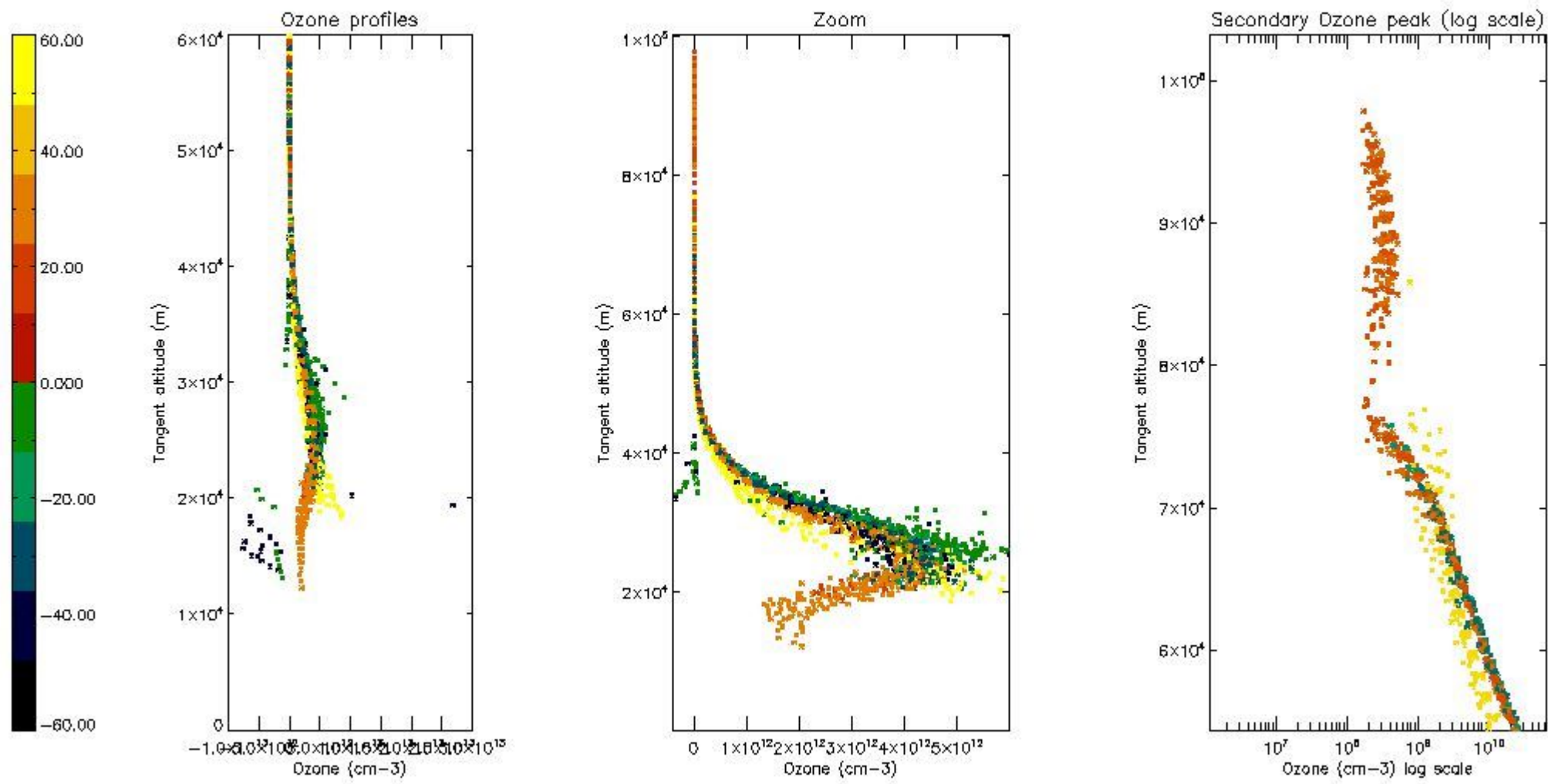
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



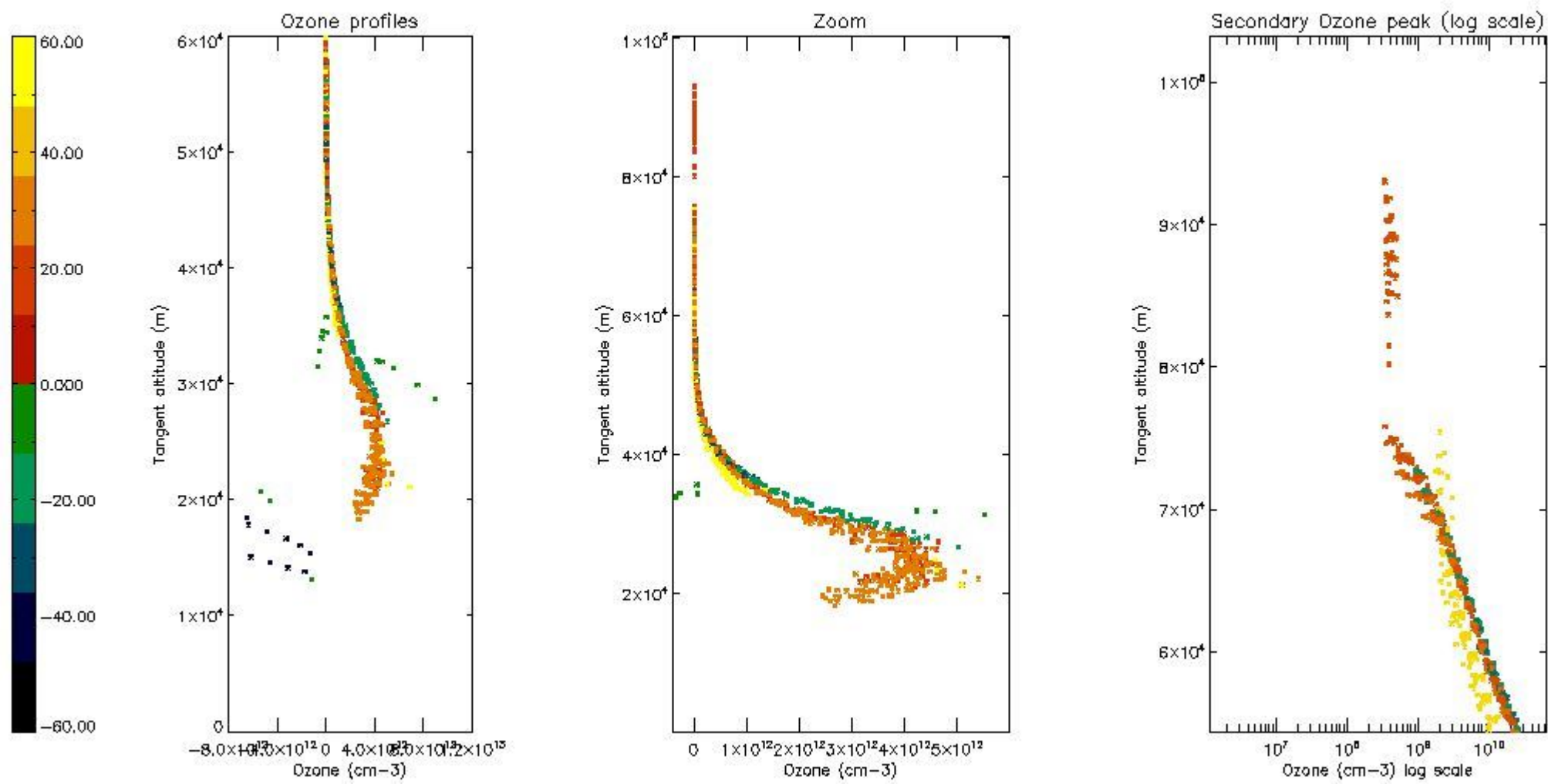
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



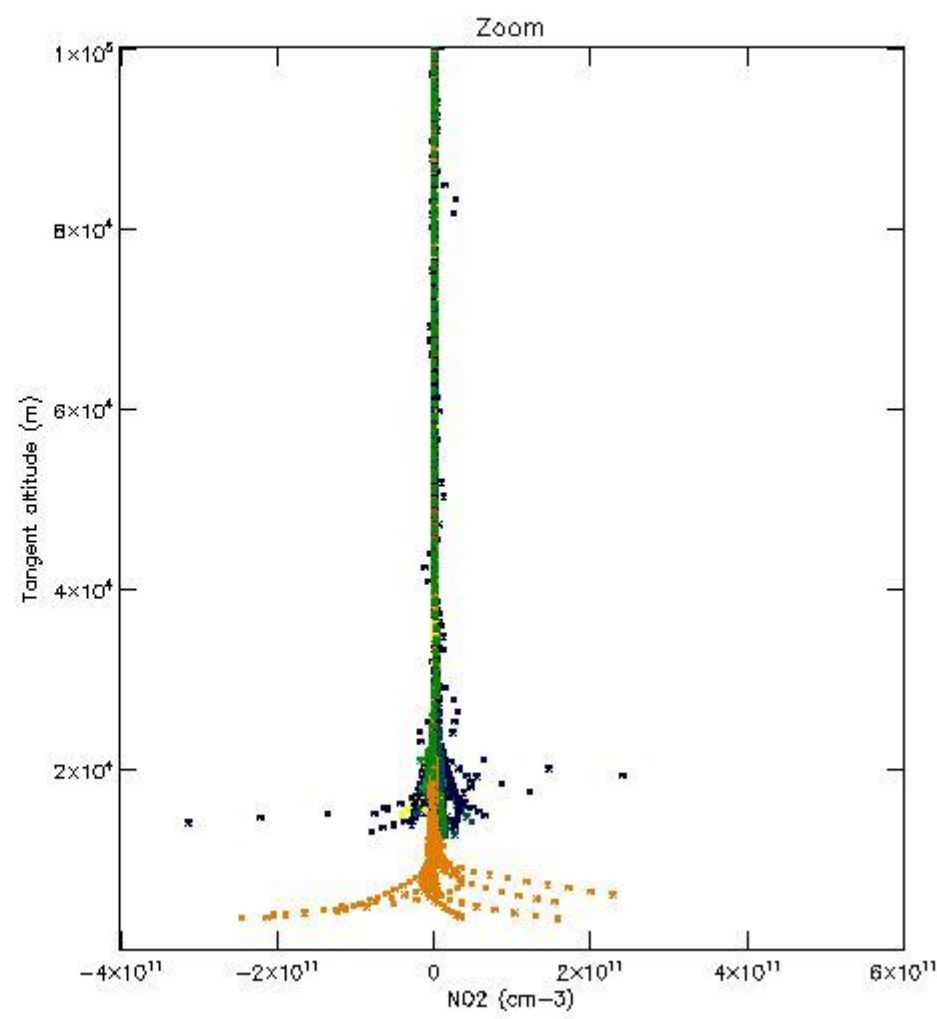
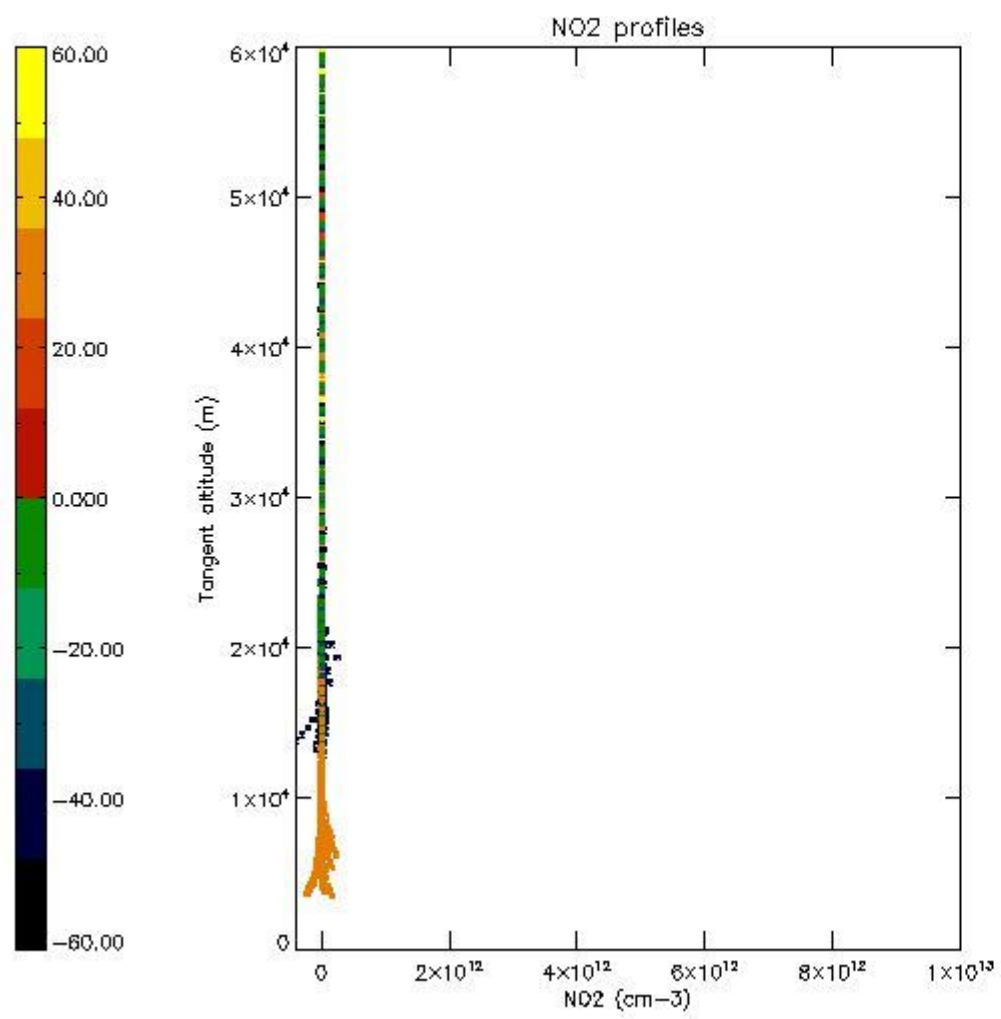
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



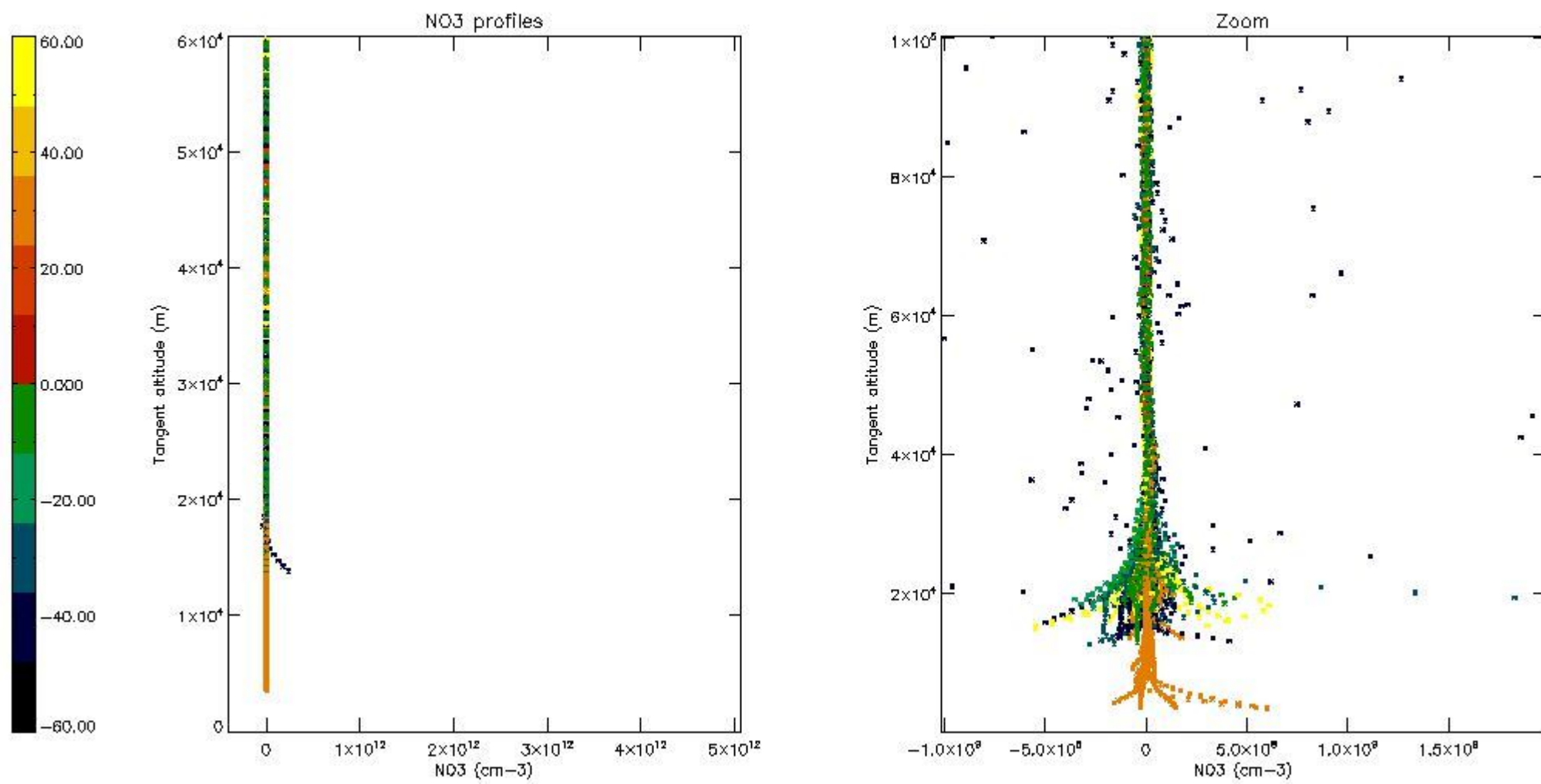
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



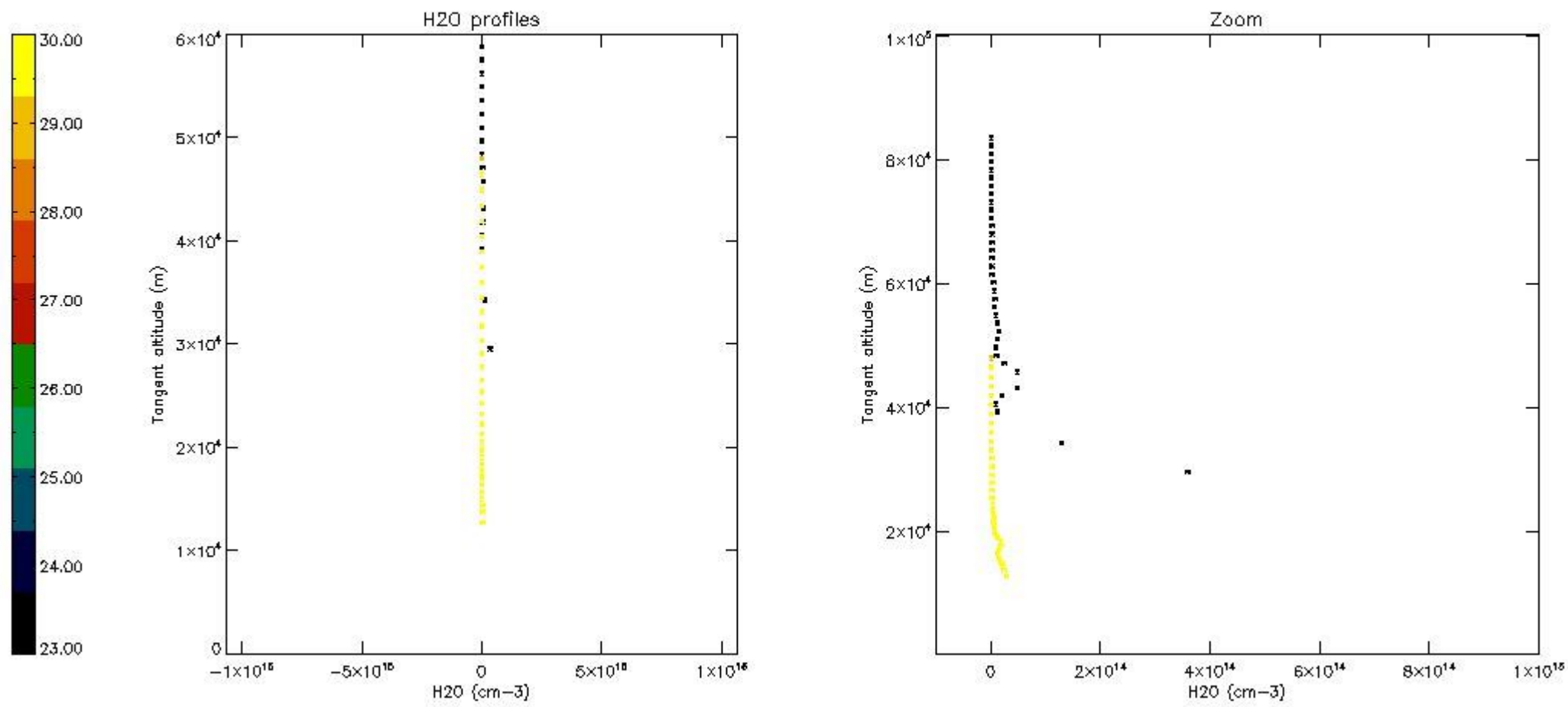
5.7 Plot NO3 profiles for all STD (dark without errors)

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	09-DEC-2007 00:33:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-DEC-2007 00:33:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-DEC-2007 00:33:45

GOMOS Level 2 Daily Report

SUMMARY

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[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 \(dark without errors\)](#)

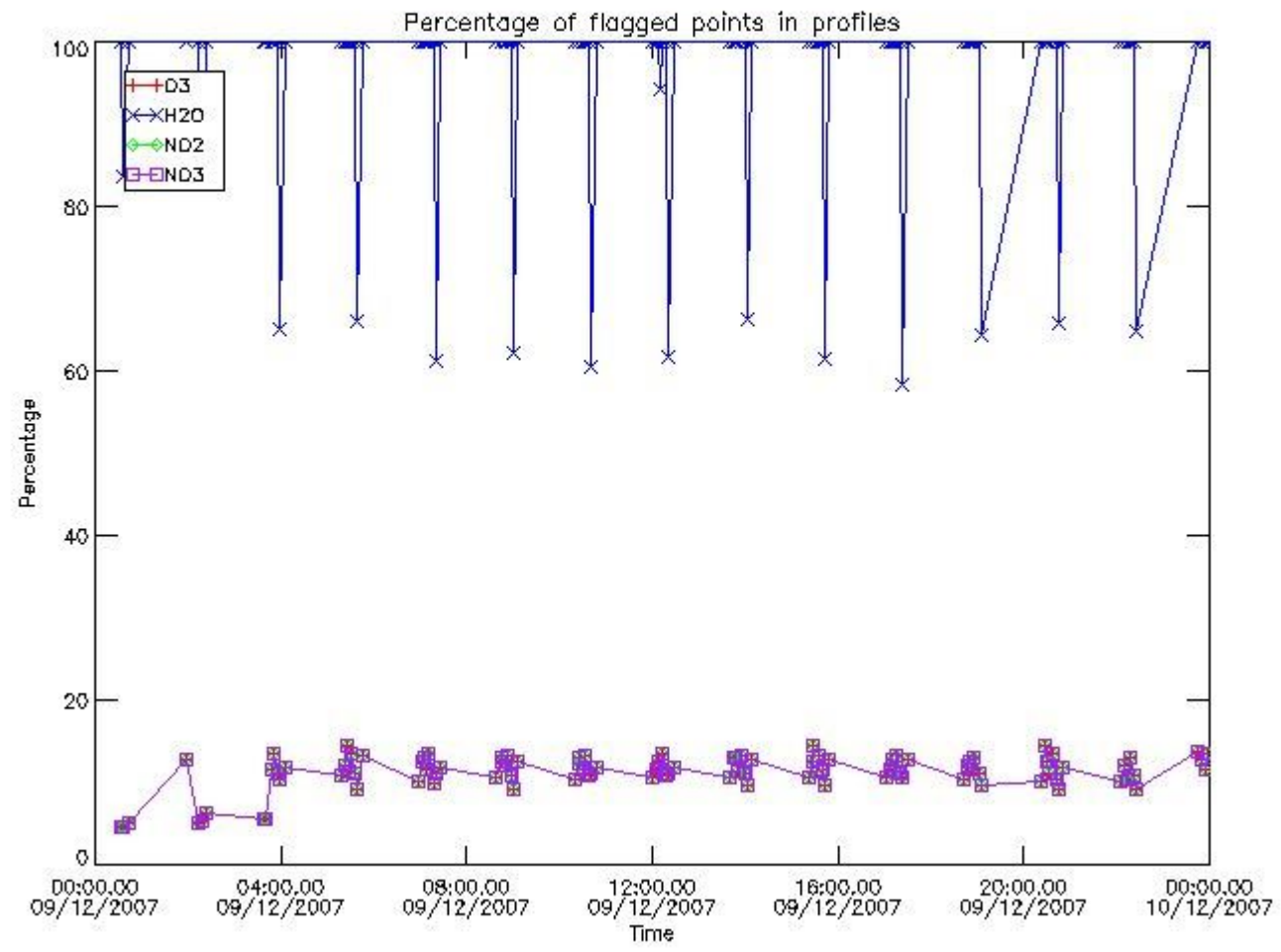
[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

[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](#)

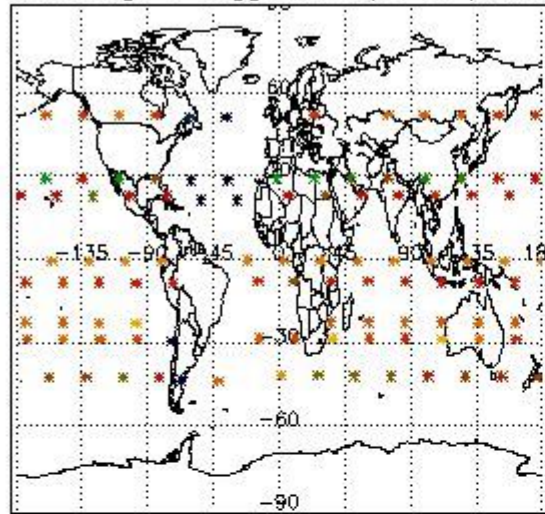
the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

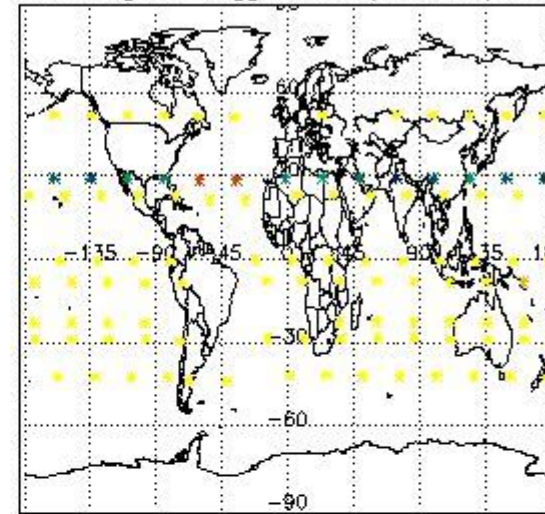


3.2 Plot quality information per product (world map)

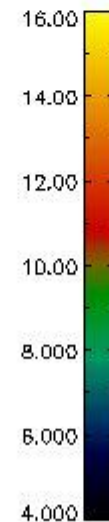
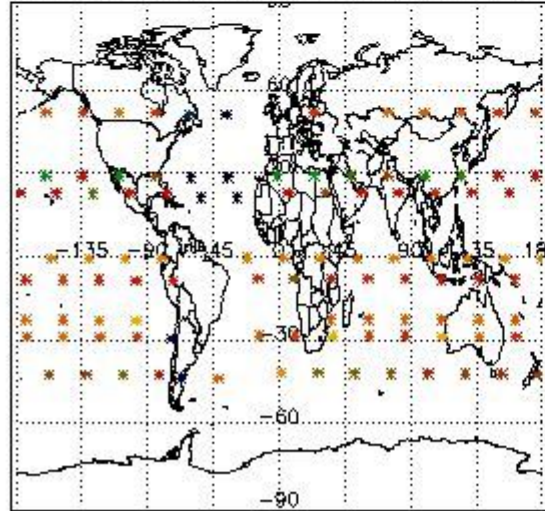
Percentage of flagged data per O3 profile



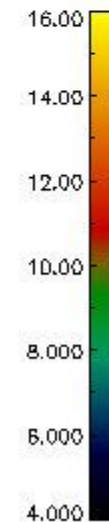
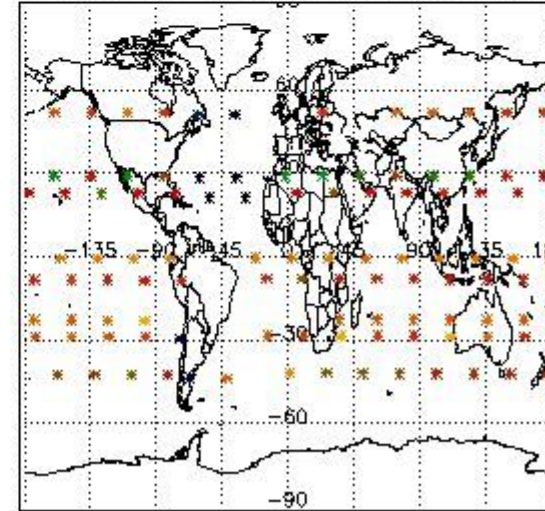
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

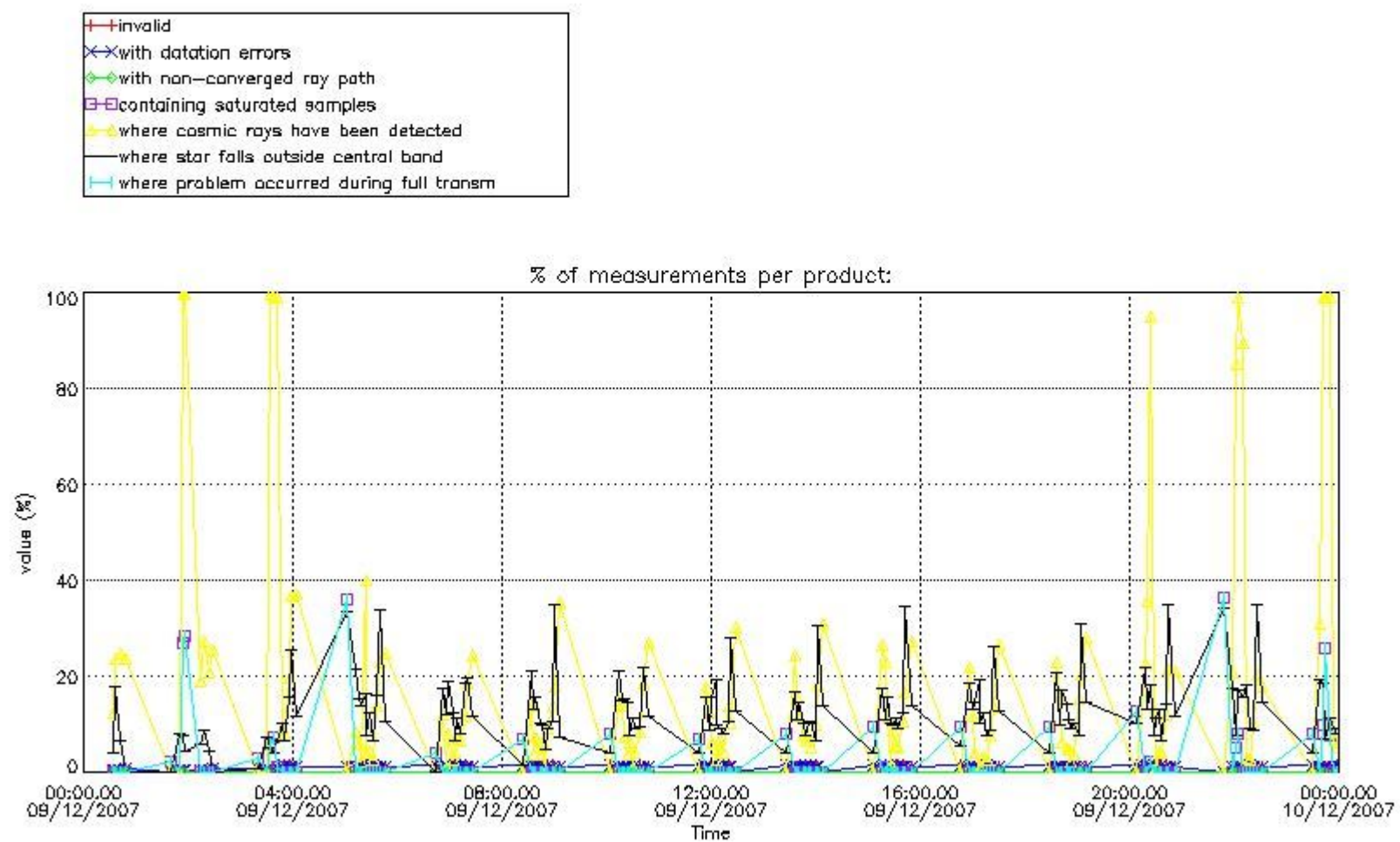


4. Level 1 quality information per product

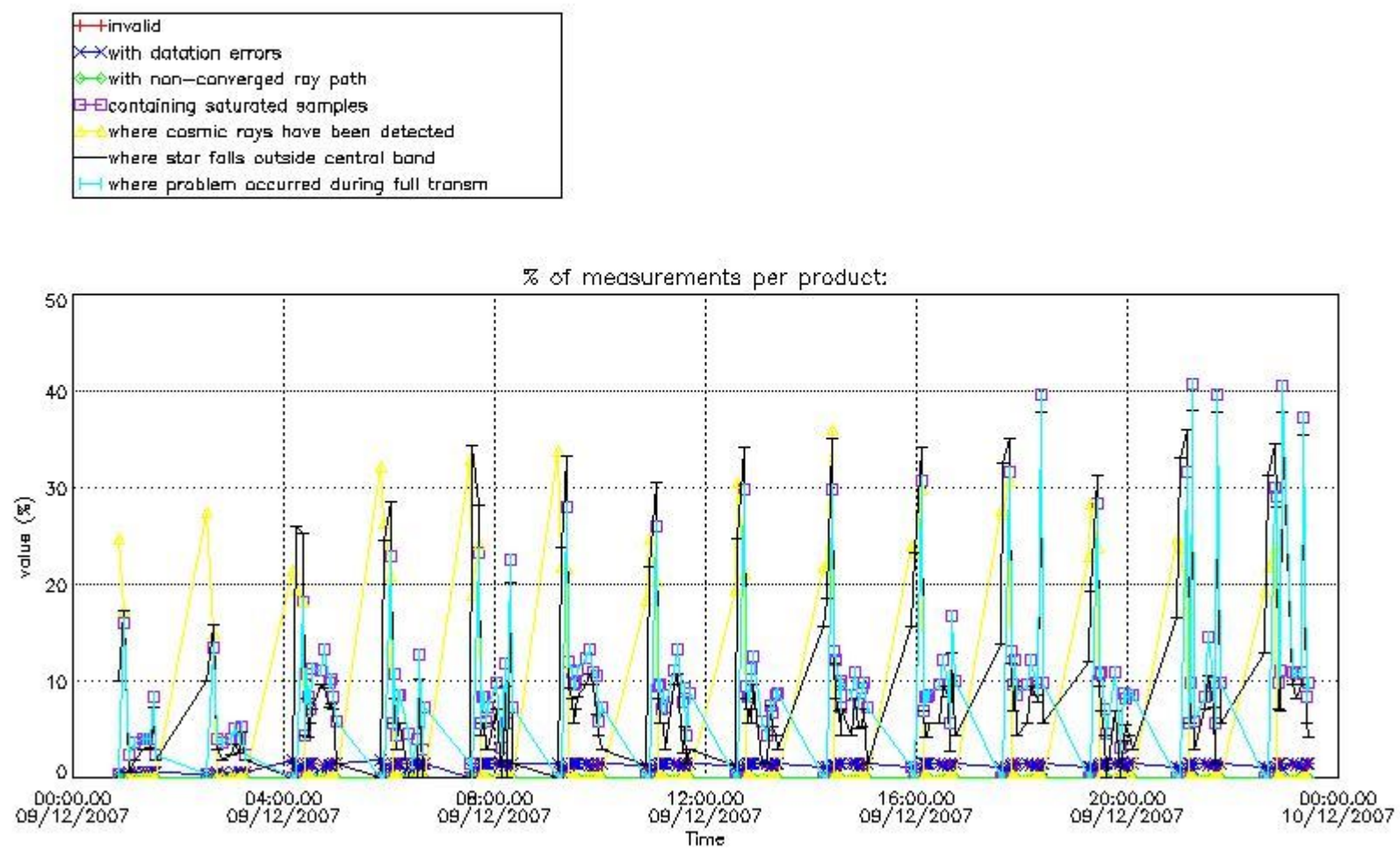
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

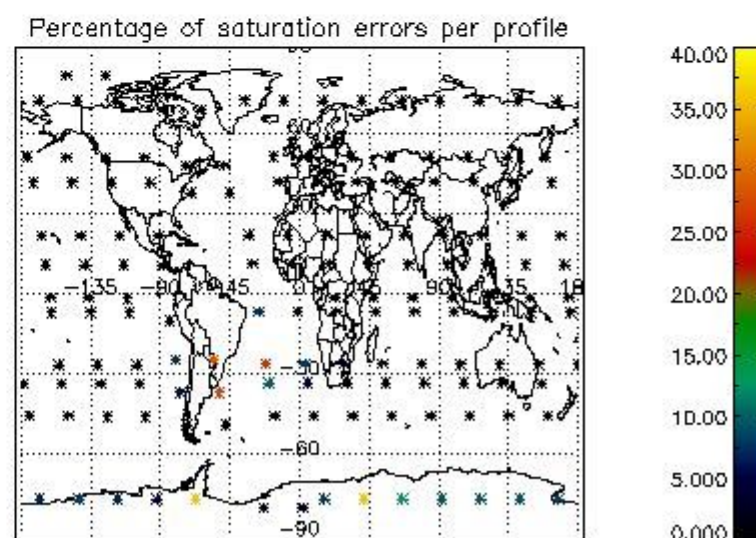
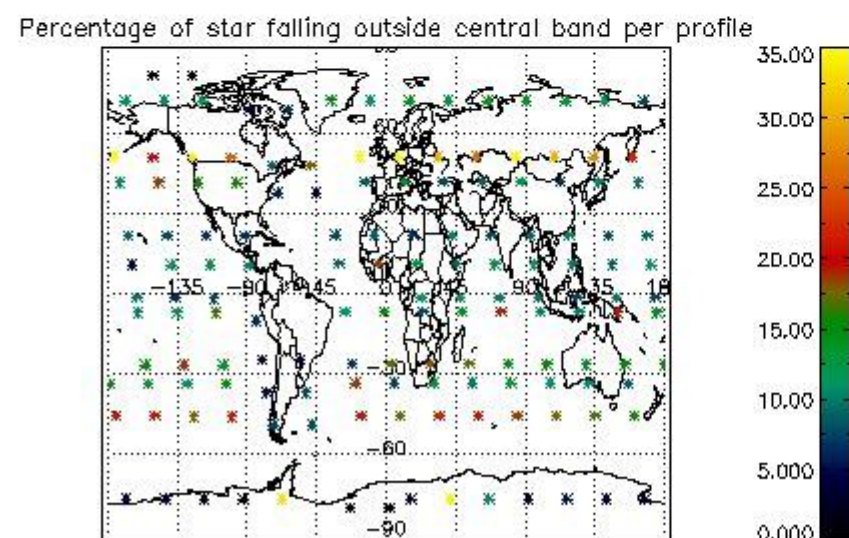
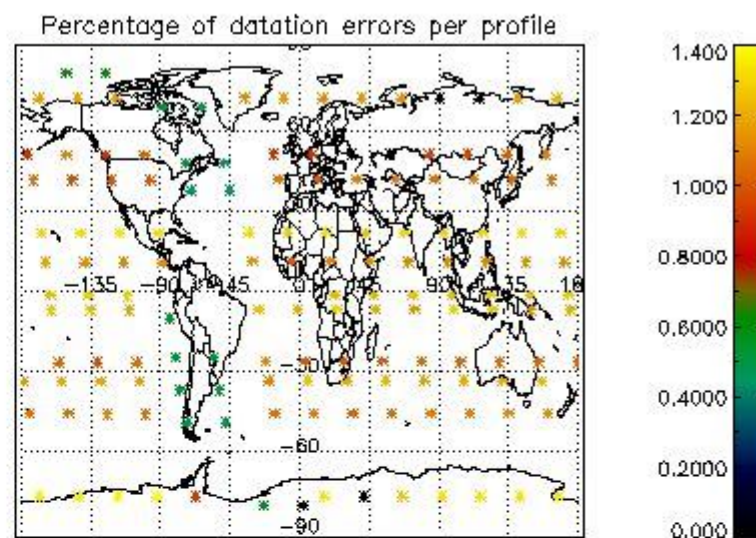
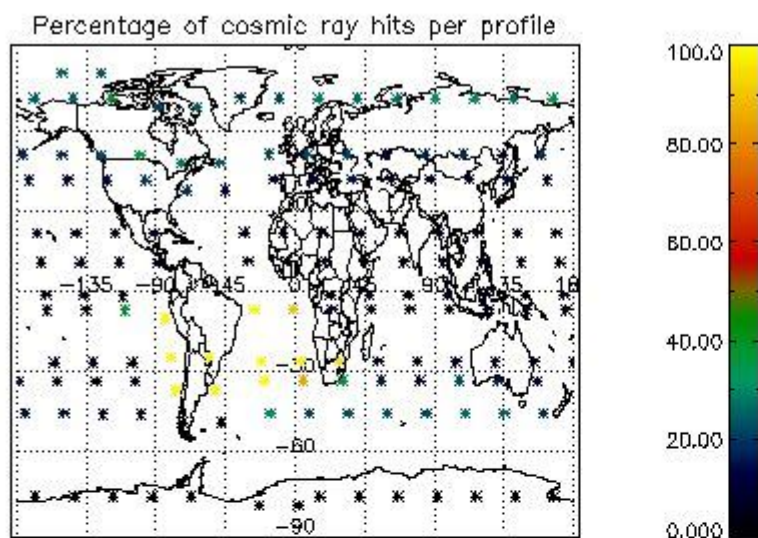
4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



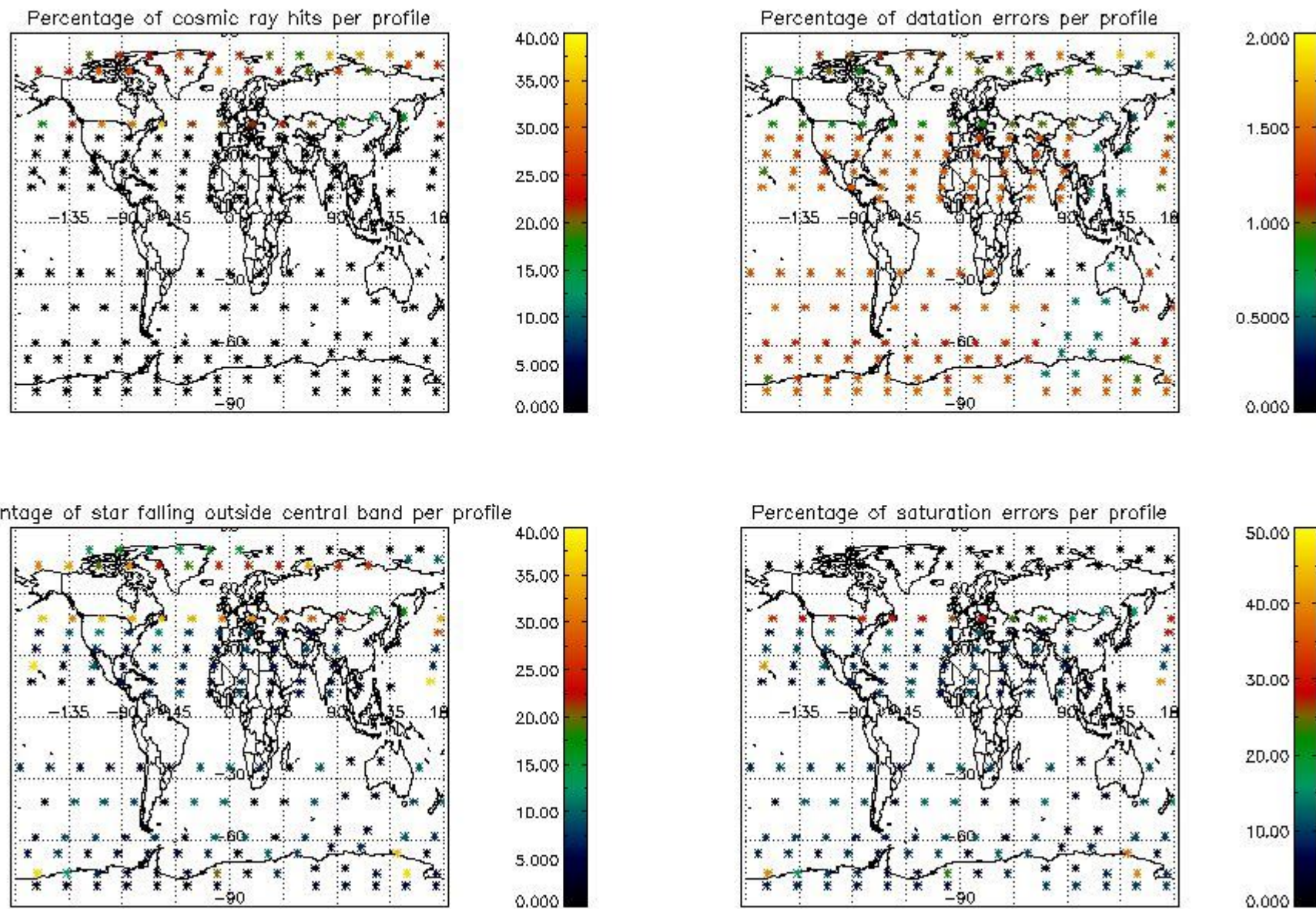
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



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

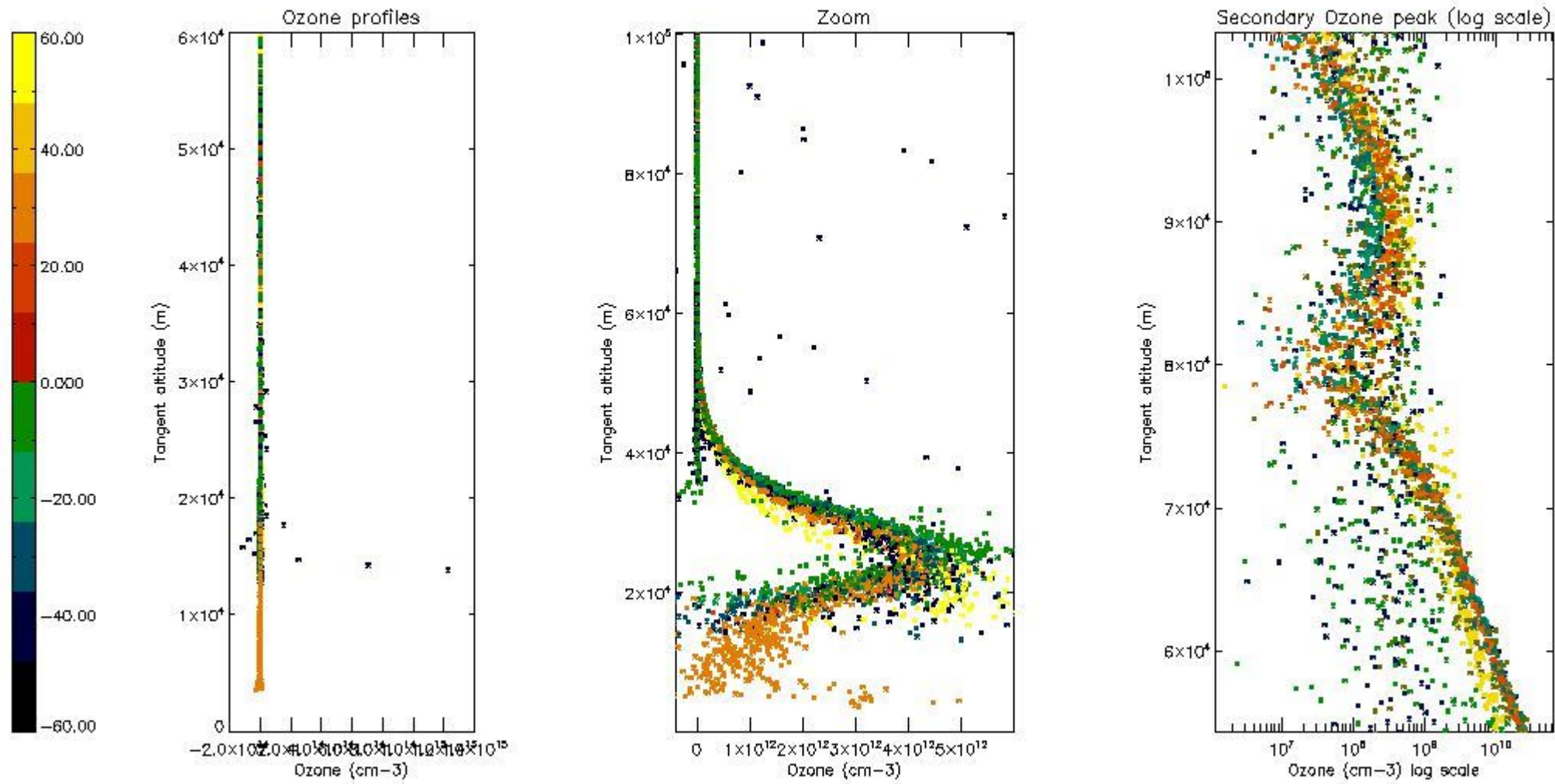
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	15

STD < 10	12
STD < 5	7

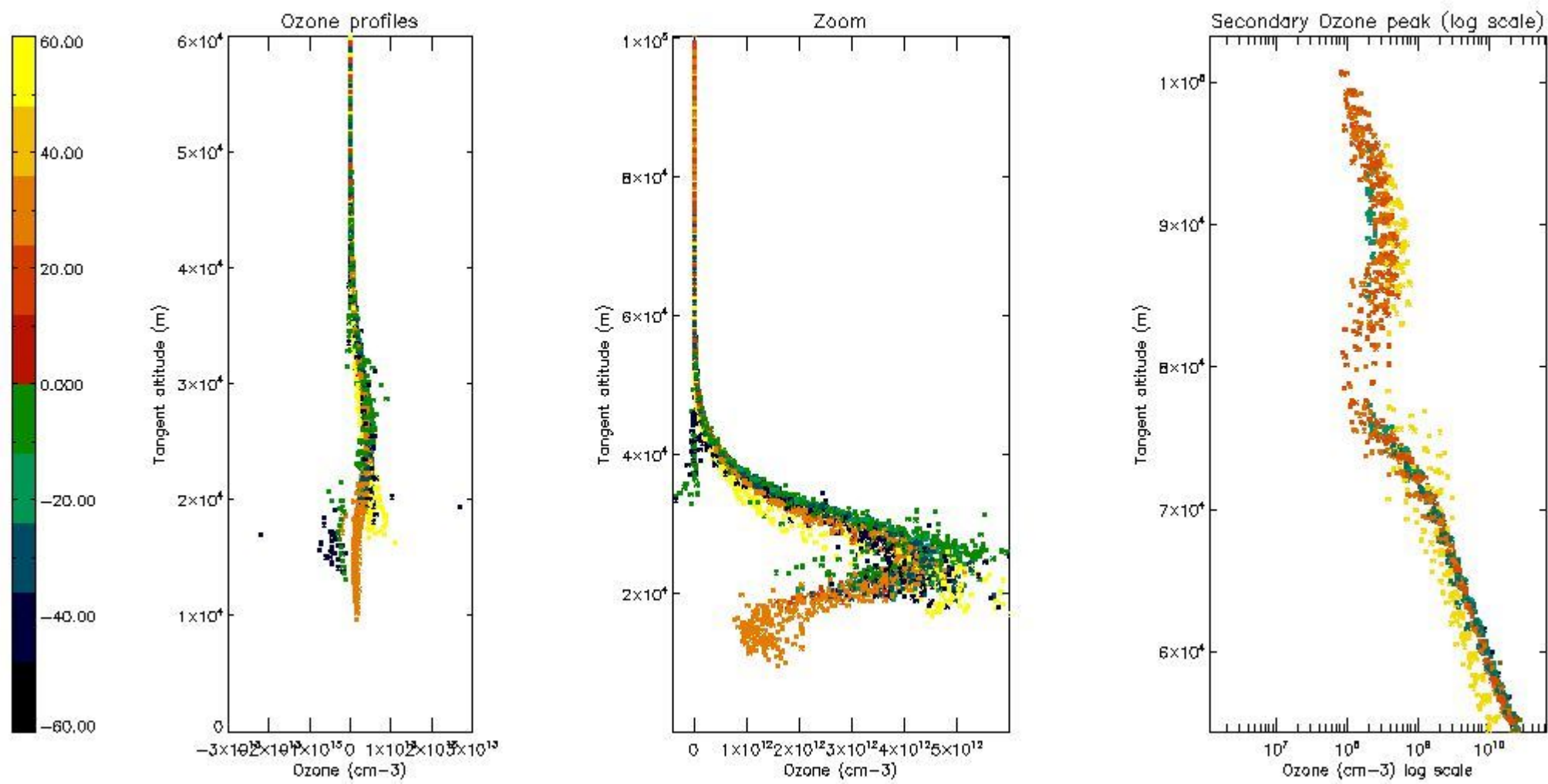
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



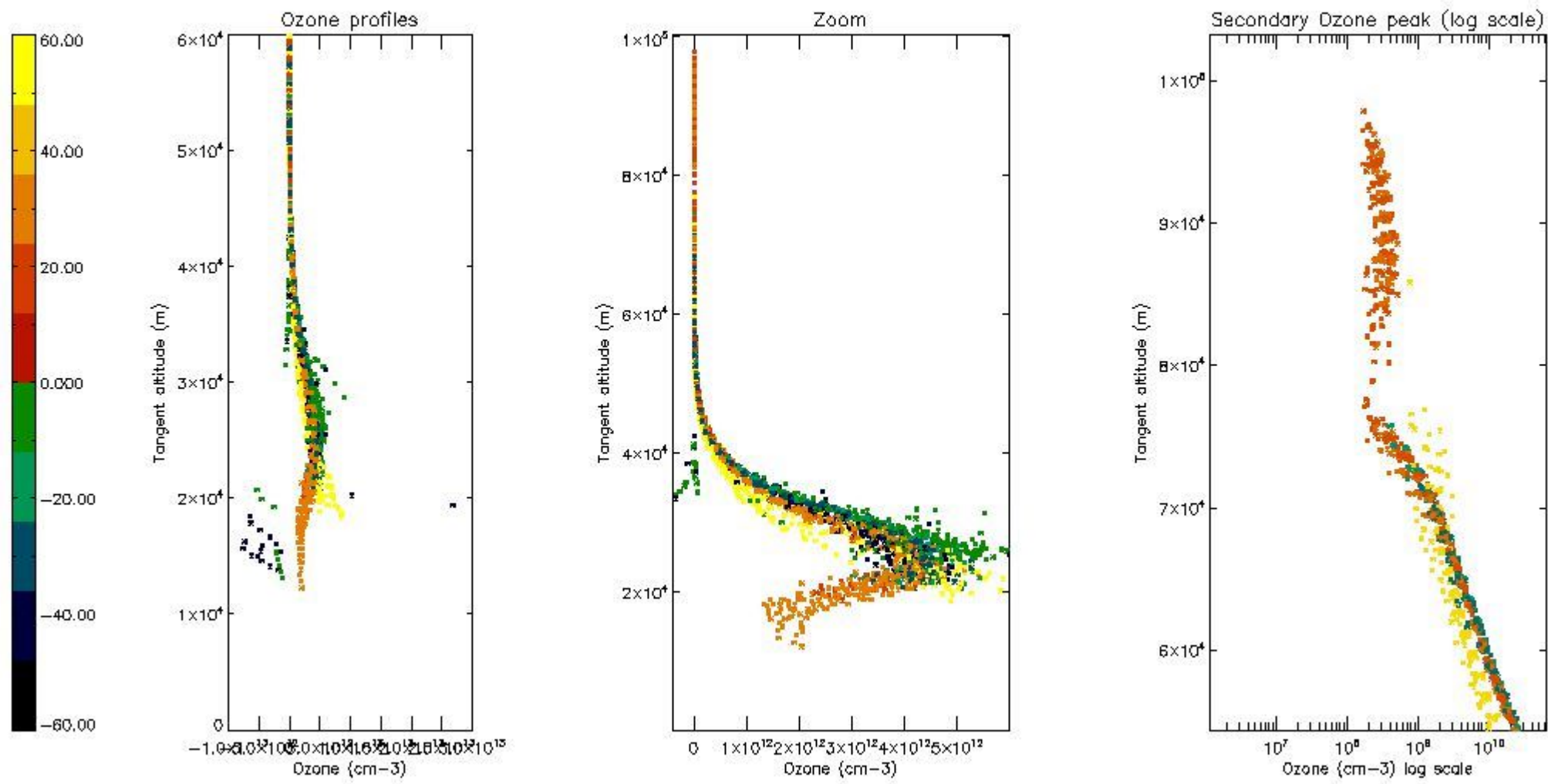
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



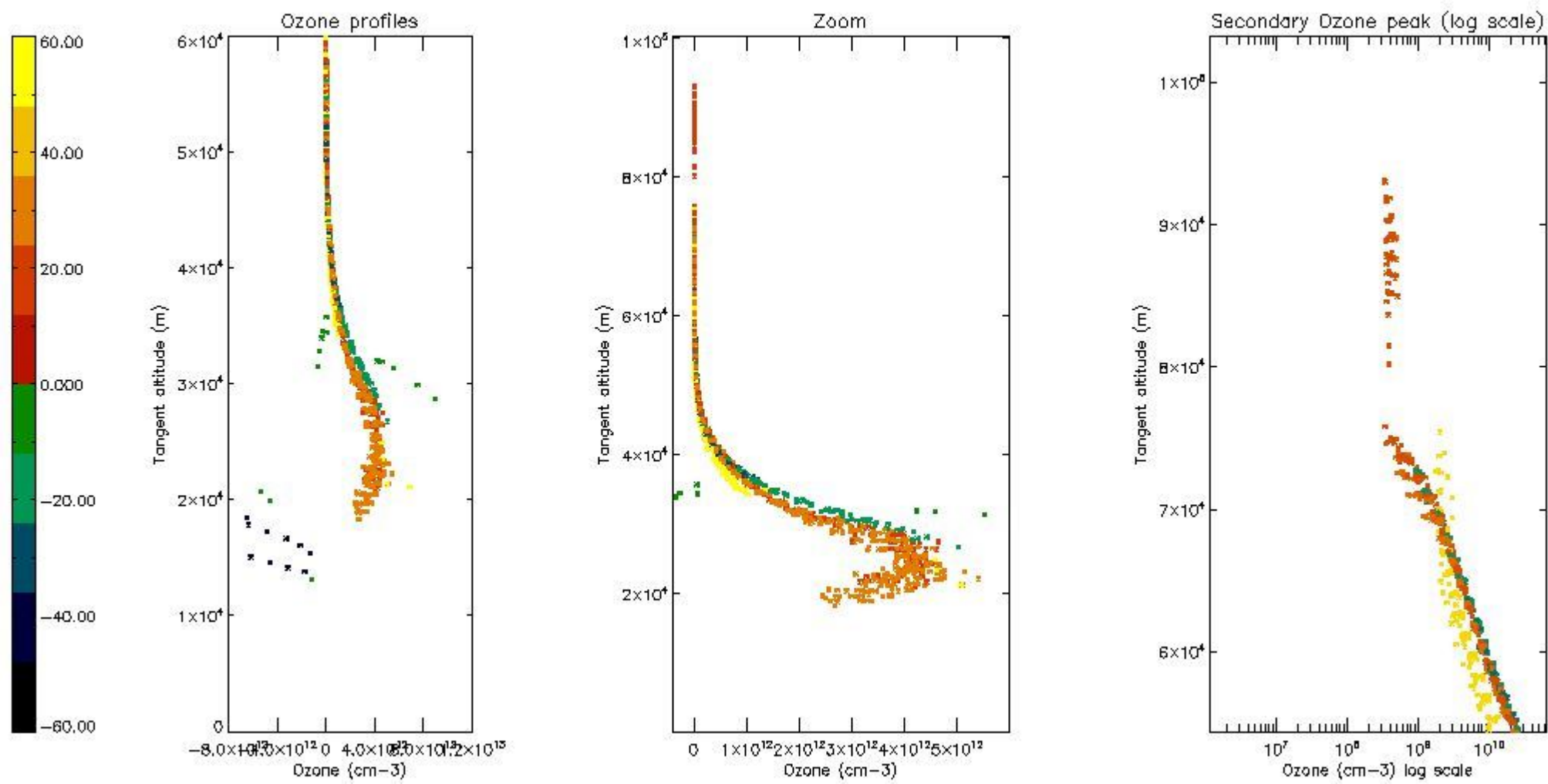
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



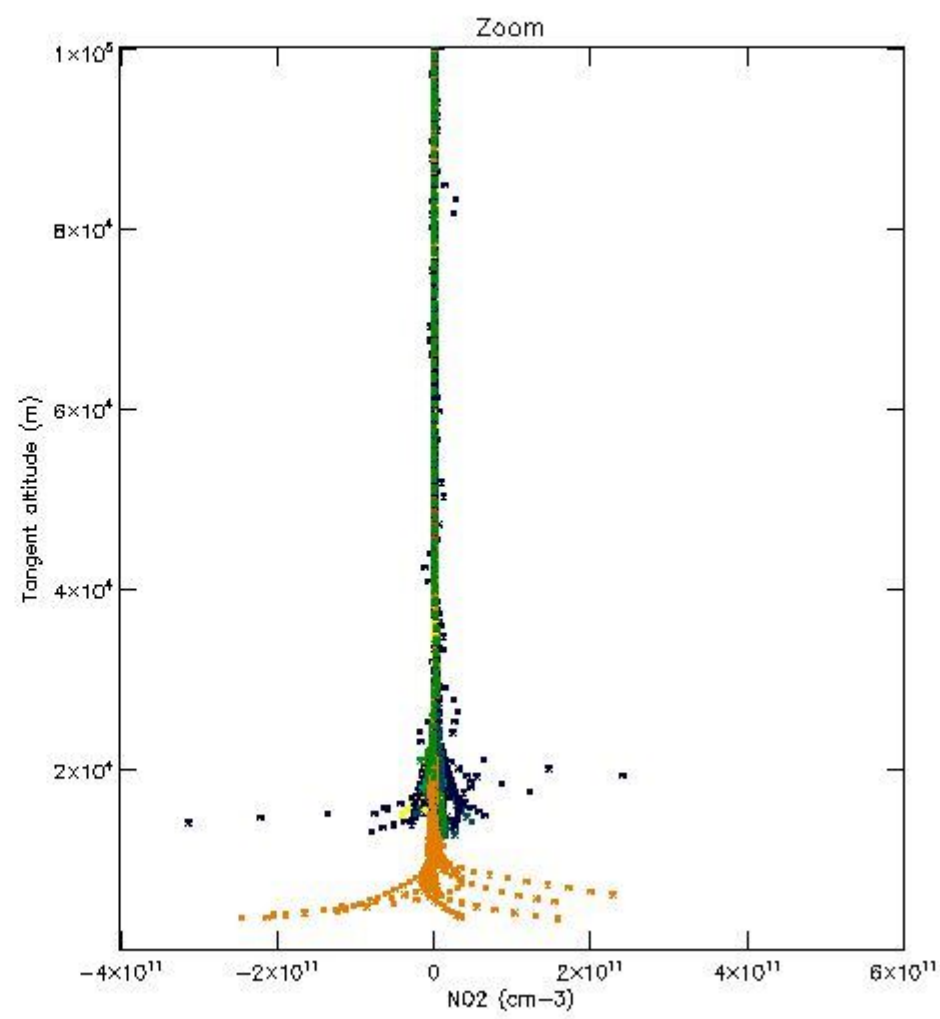
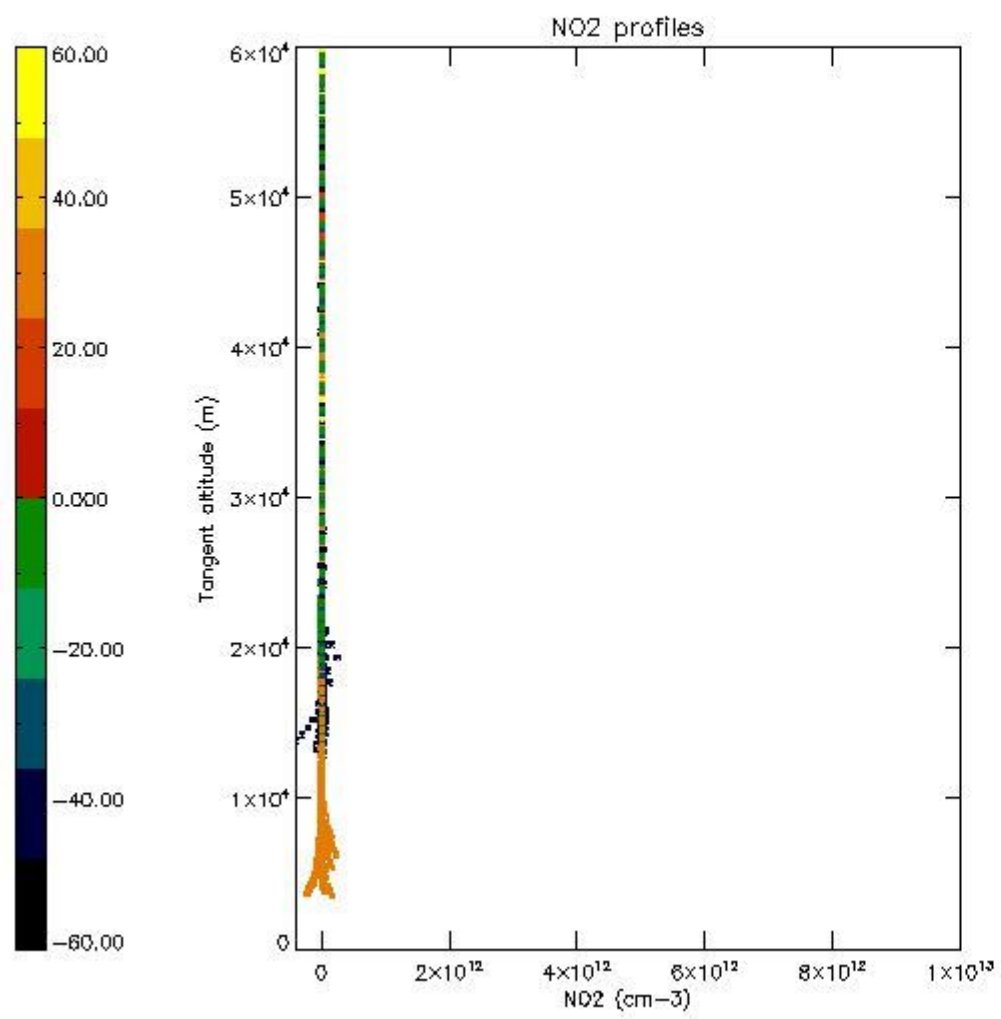
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



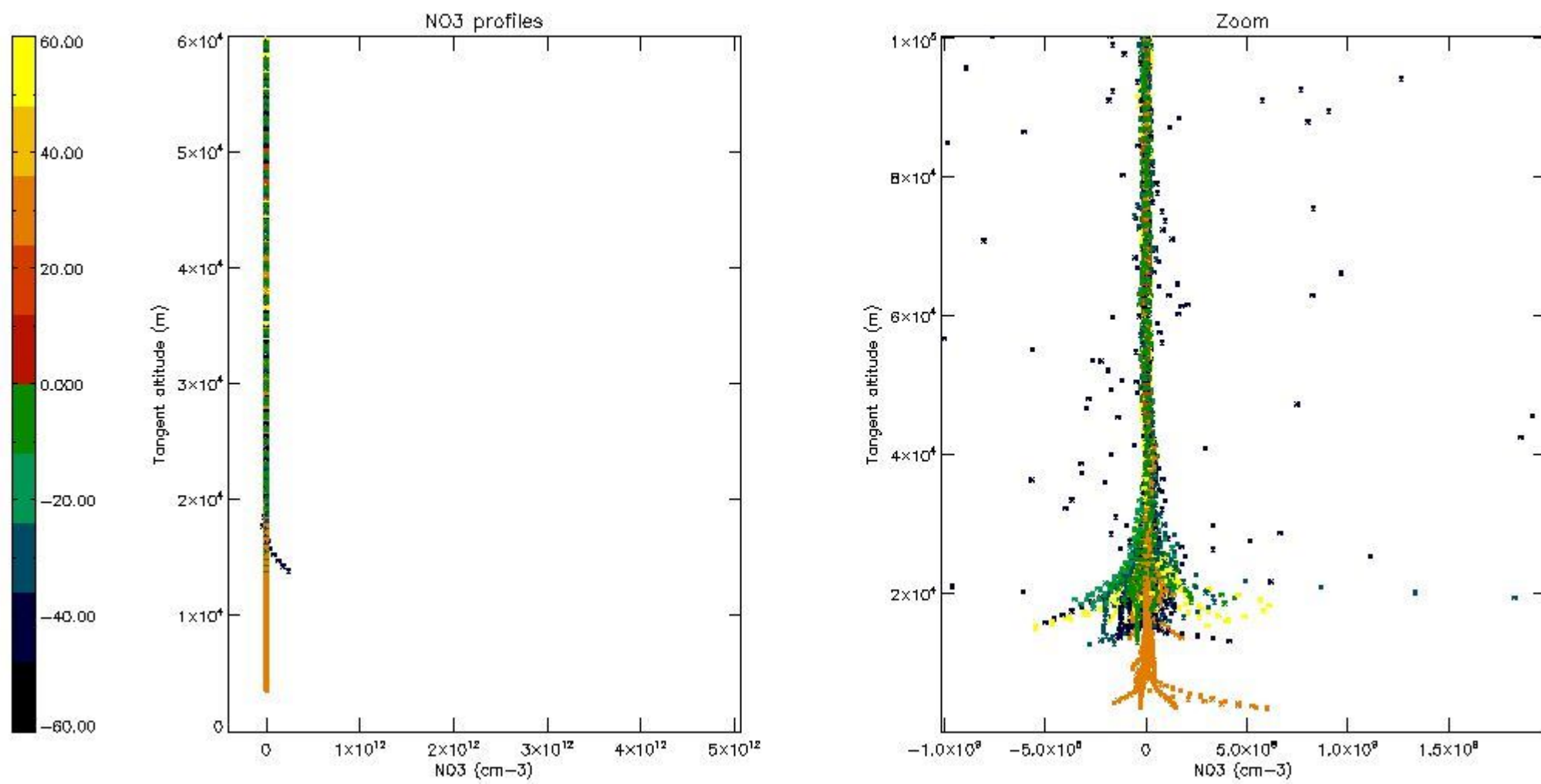
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



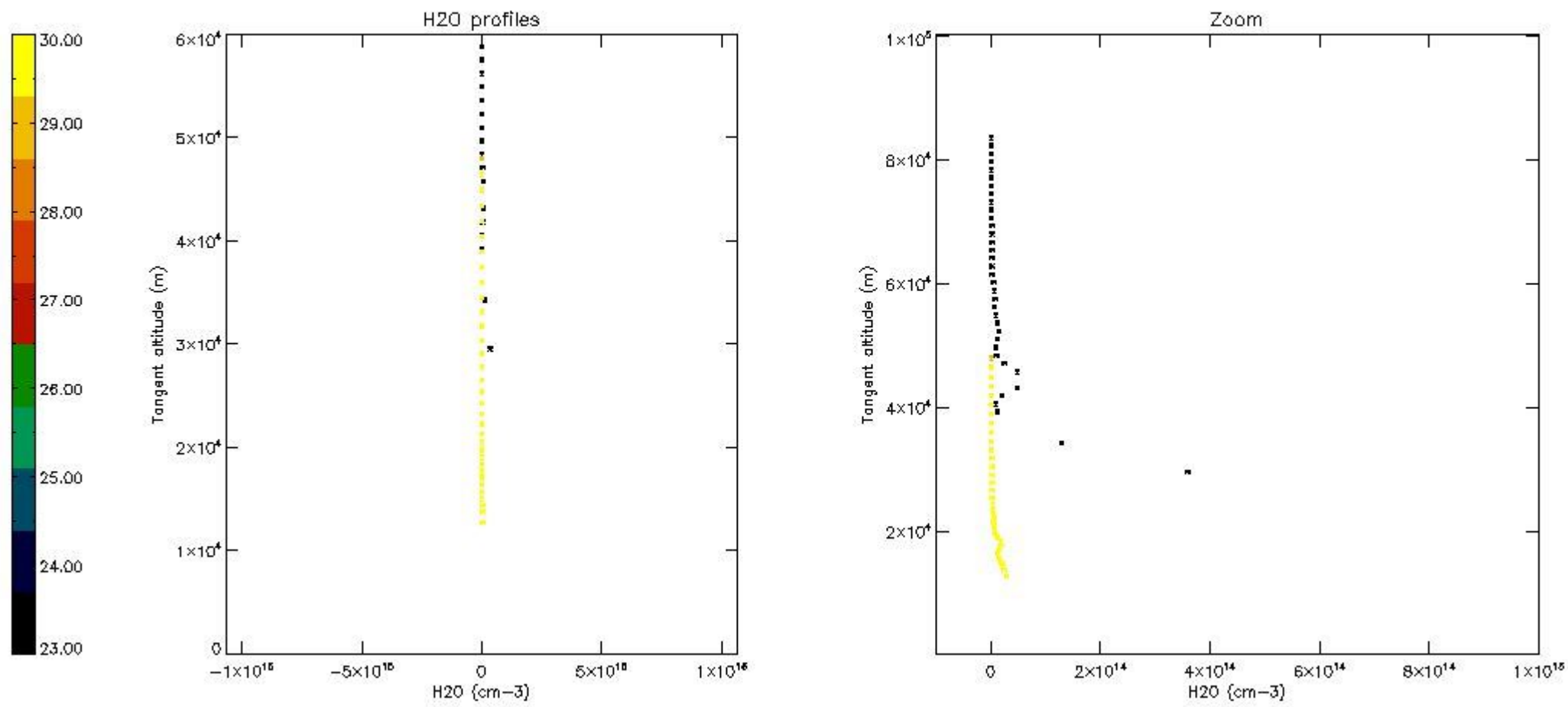
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

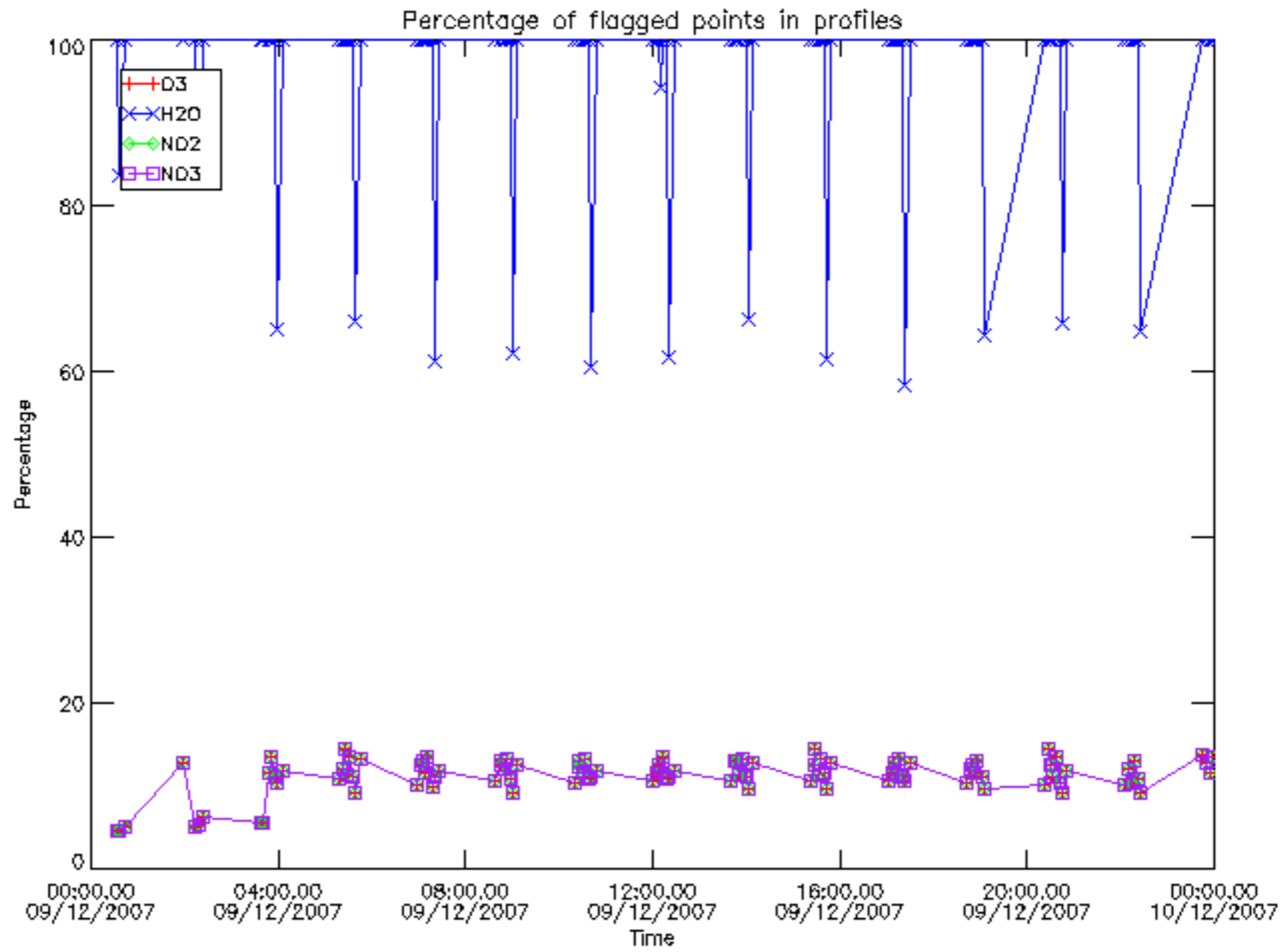
The colorbar represents the latitude.



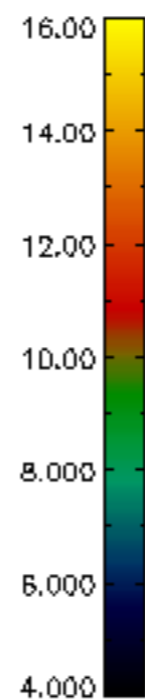
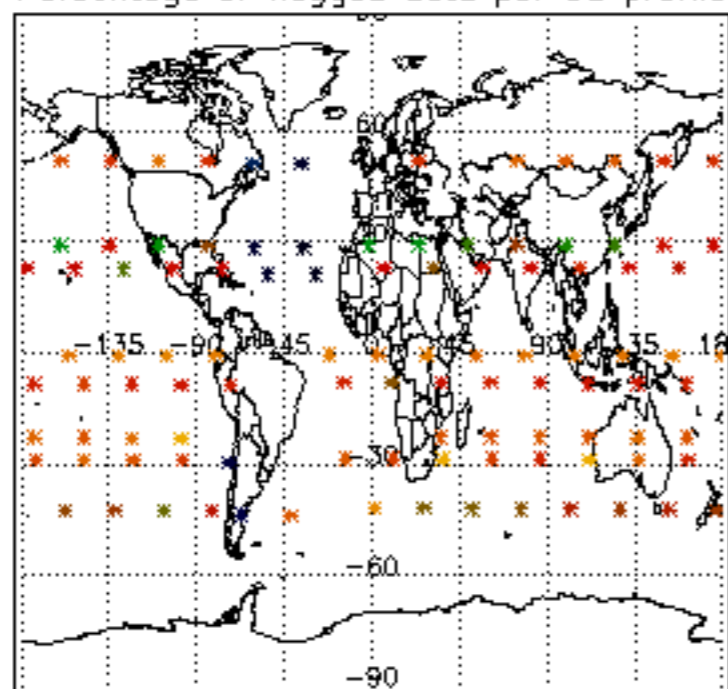
6. Auxiliary Data Files used for the production reported in section 2

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.

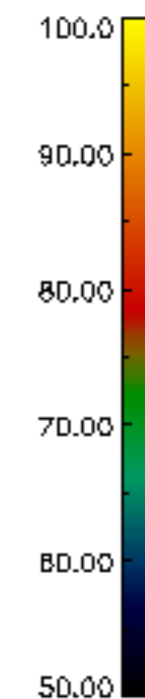
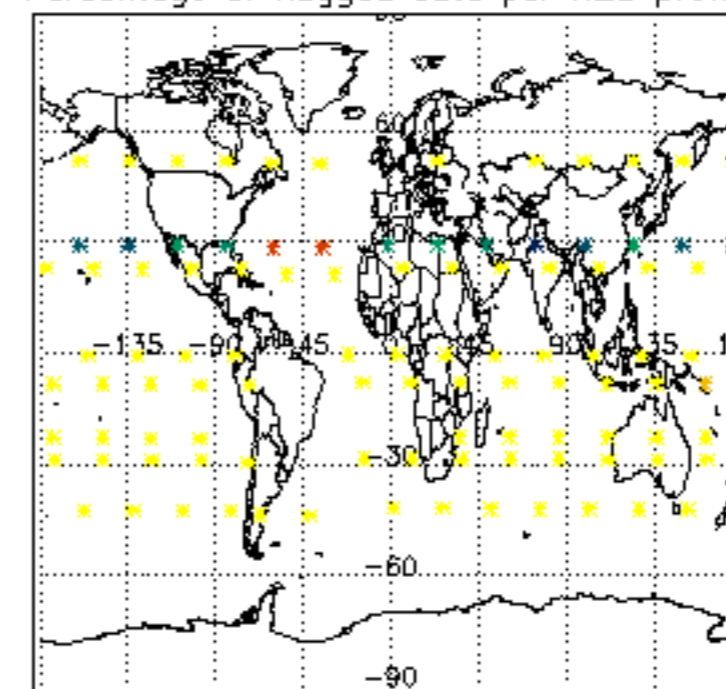
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	09-DEC-2007 00:33:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-DEC-2007 00:33:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-DEC-2007 00:33:45



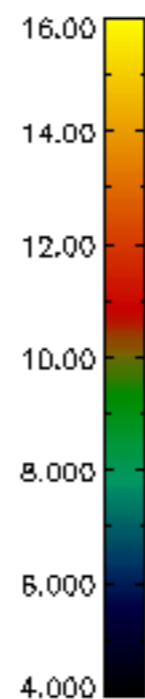
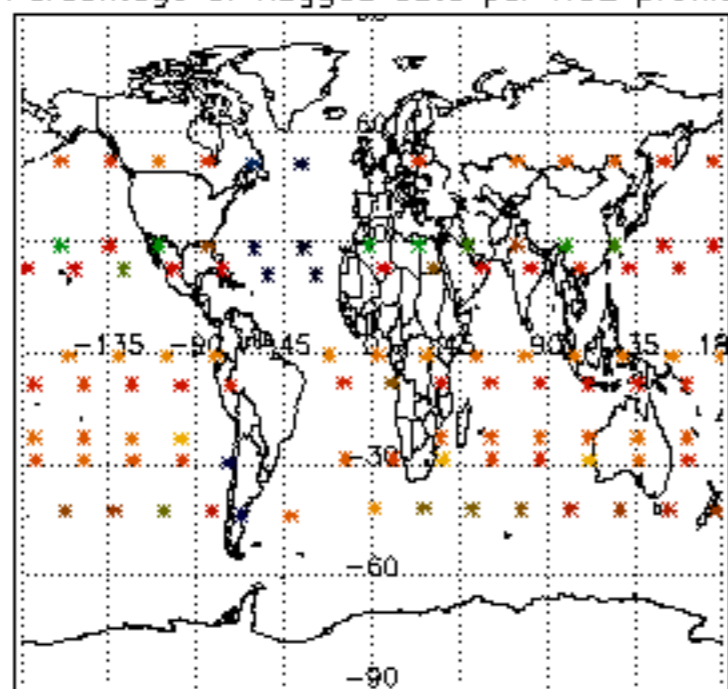
Percentage of flagged data per D3 profile



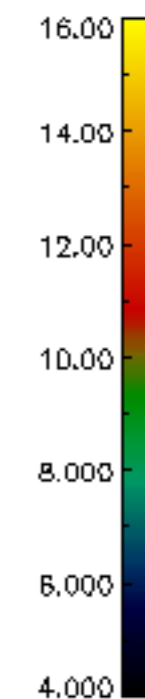
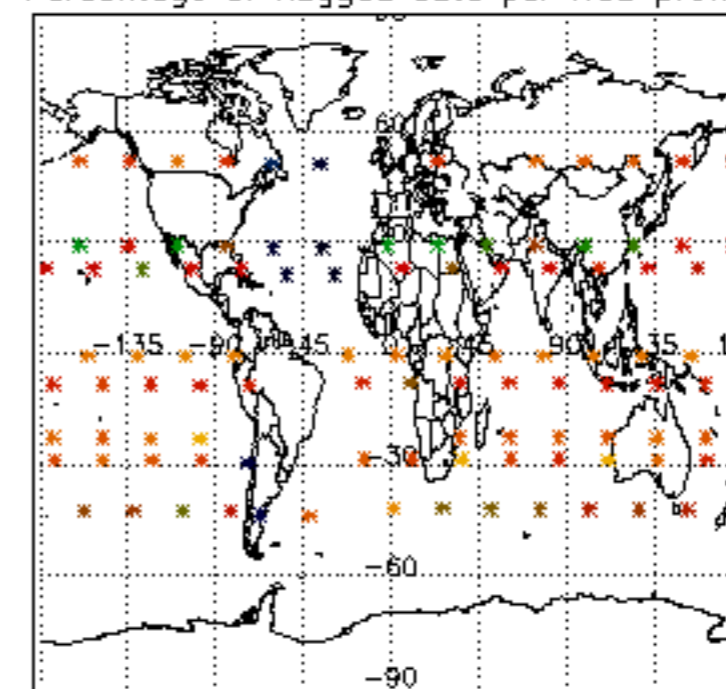
Percentage of flagged data per H2O profile

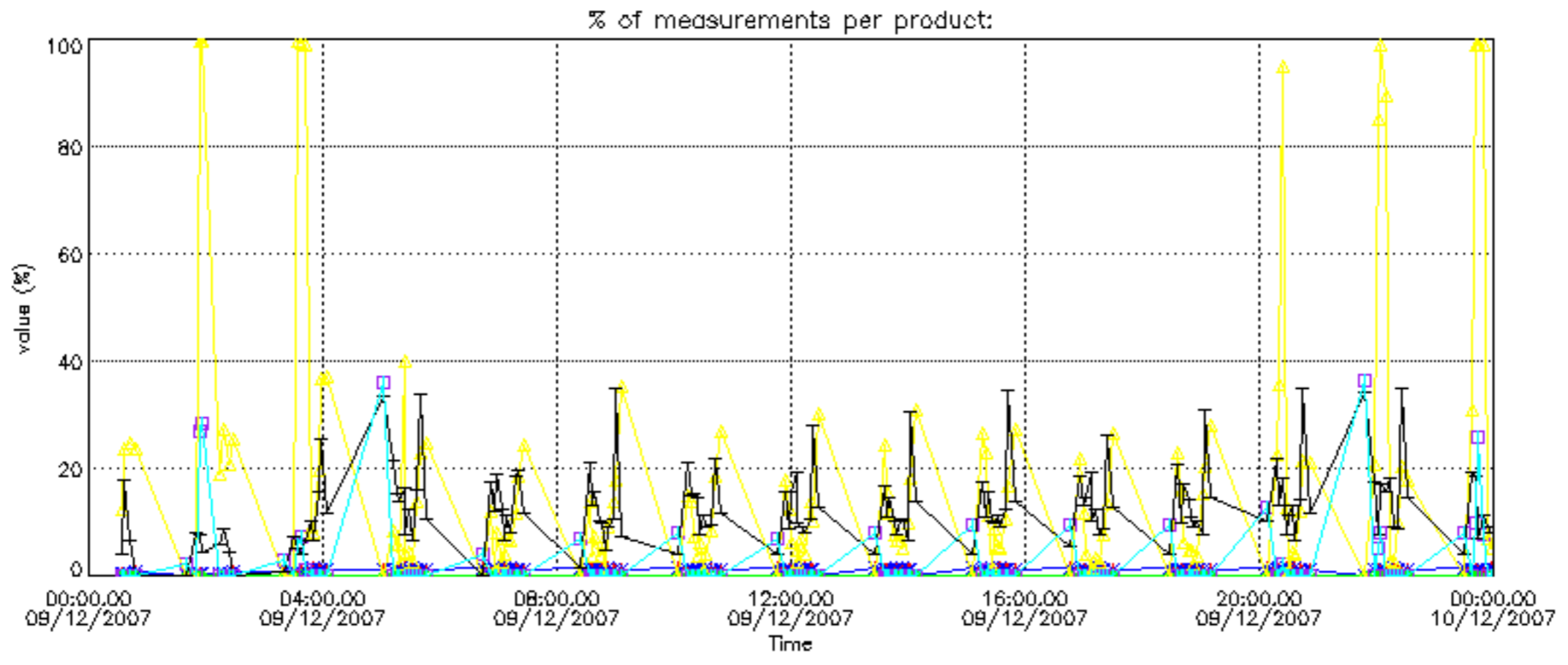


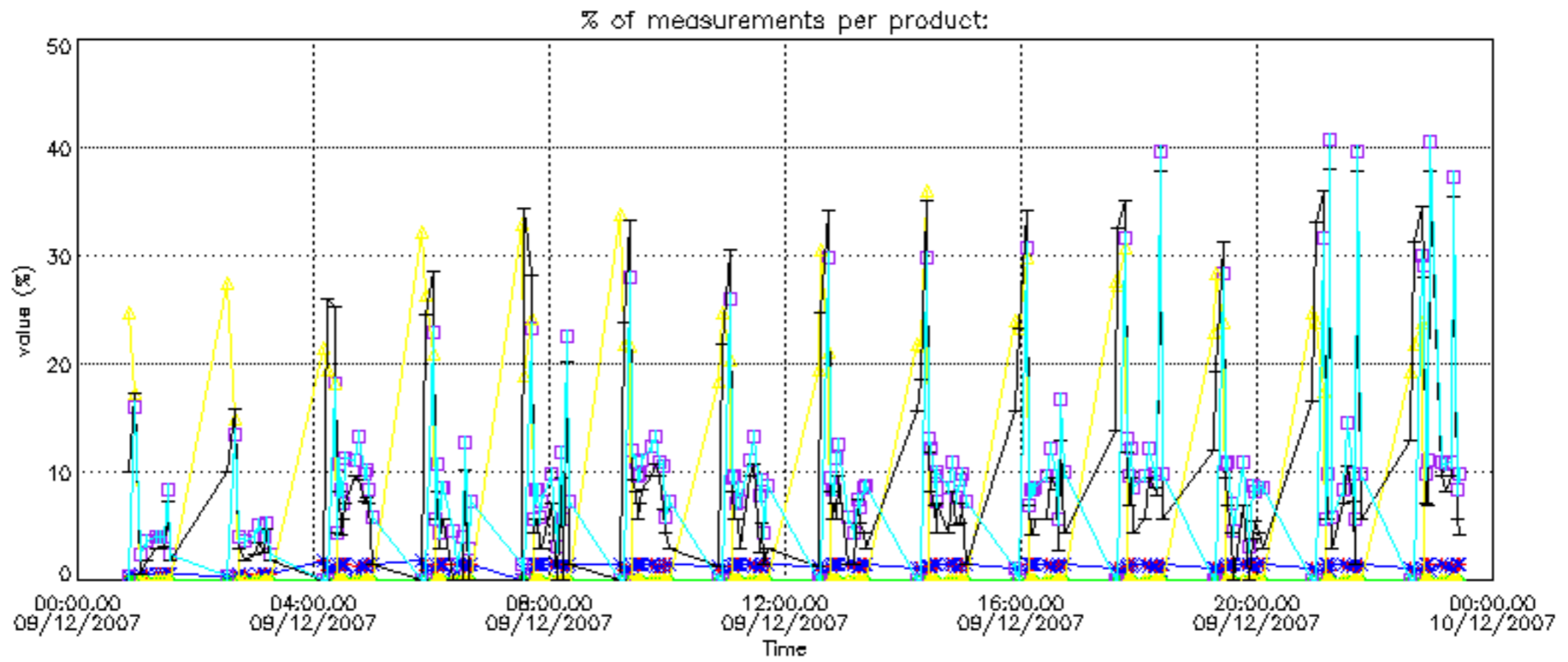
Percentage of flagged data per NO2 profile



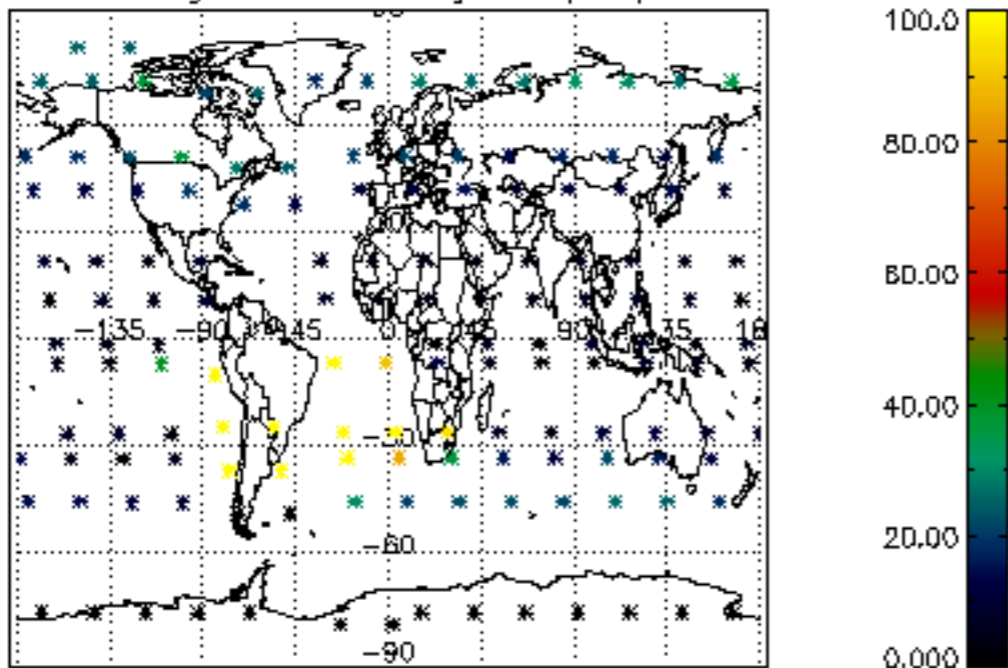
Percentage of flagged data per NO3 profile



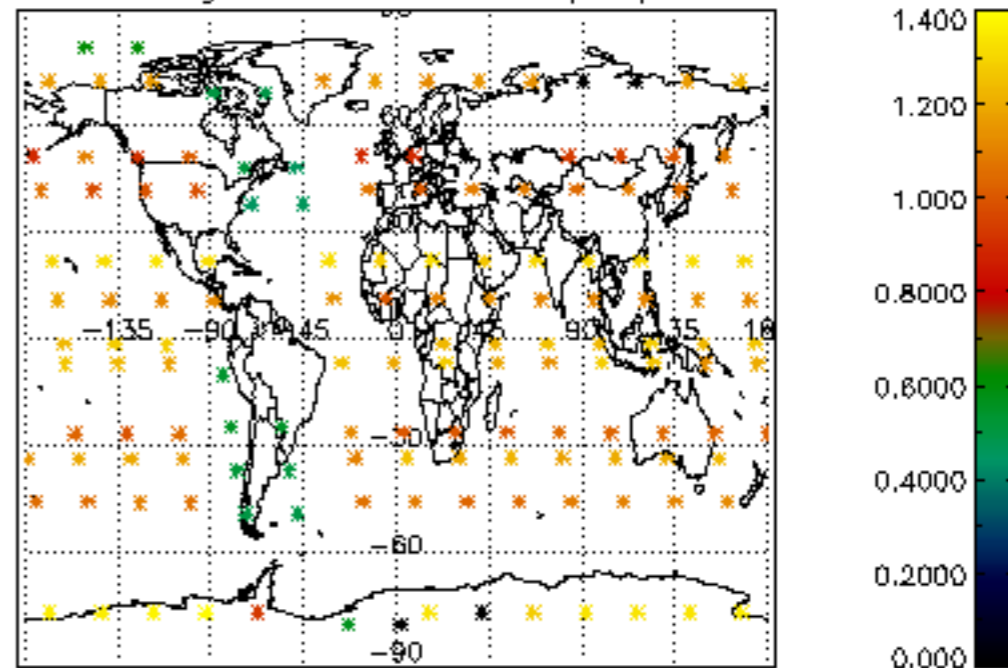




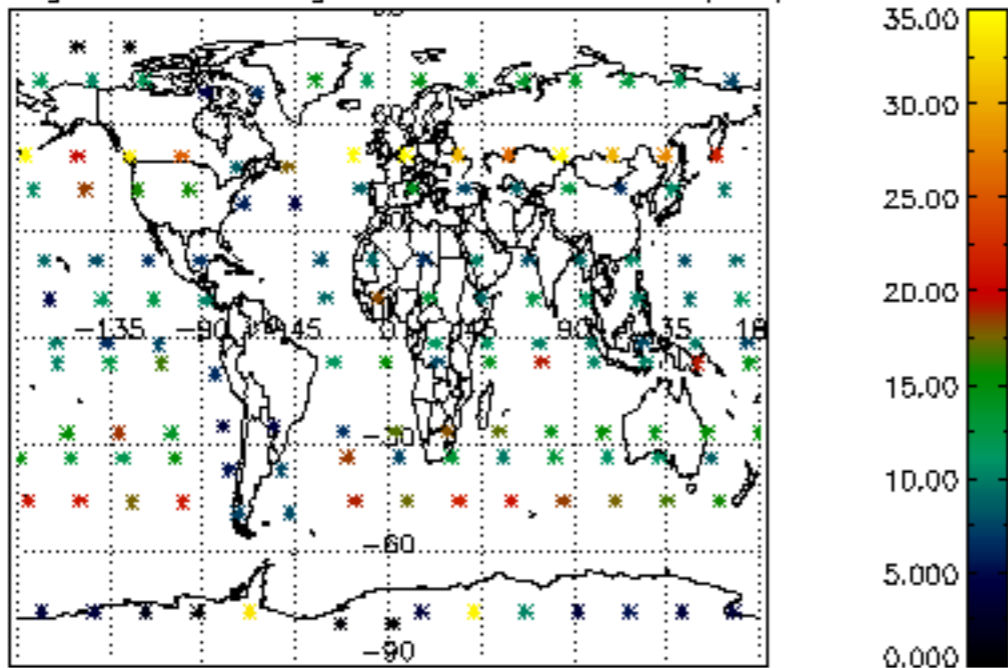
Percentage of cosmic ray hits per profile



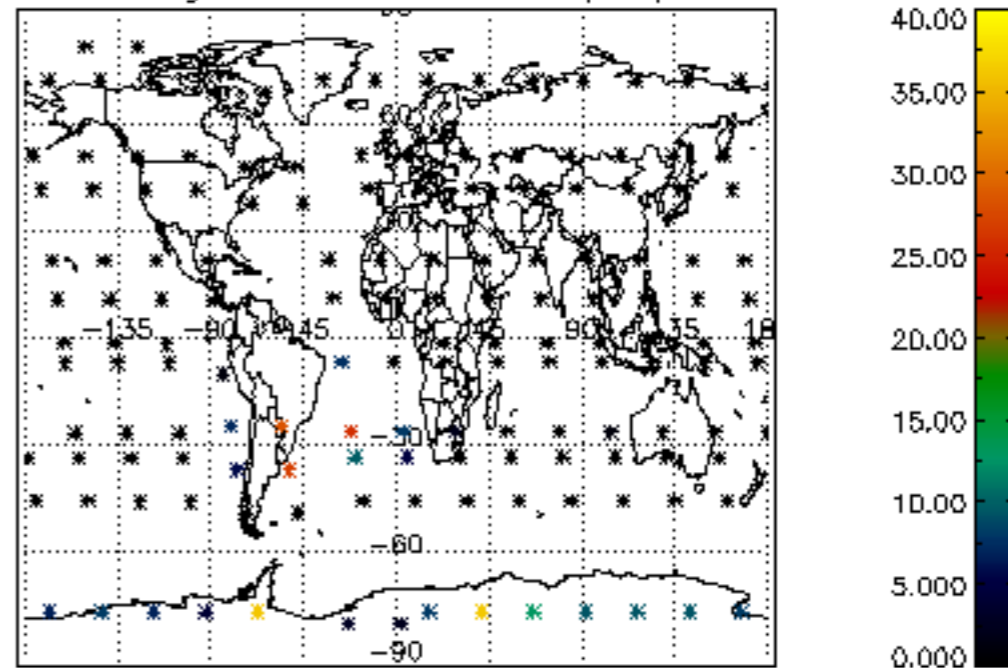
Percentage of datation errors per profile



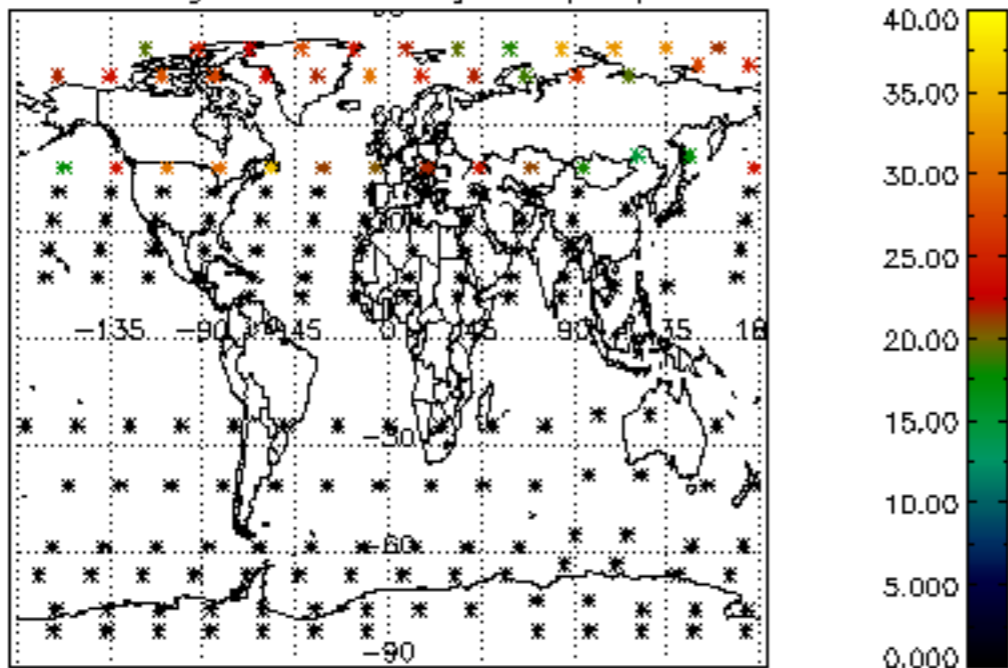
Percentage of star falling outside central band per profile



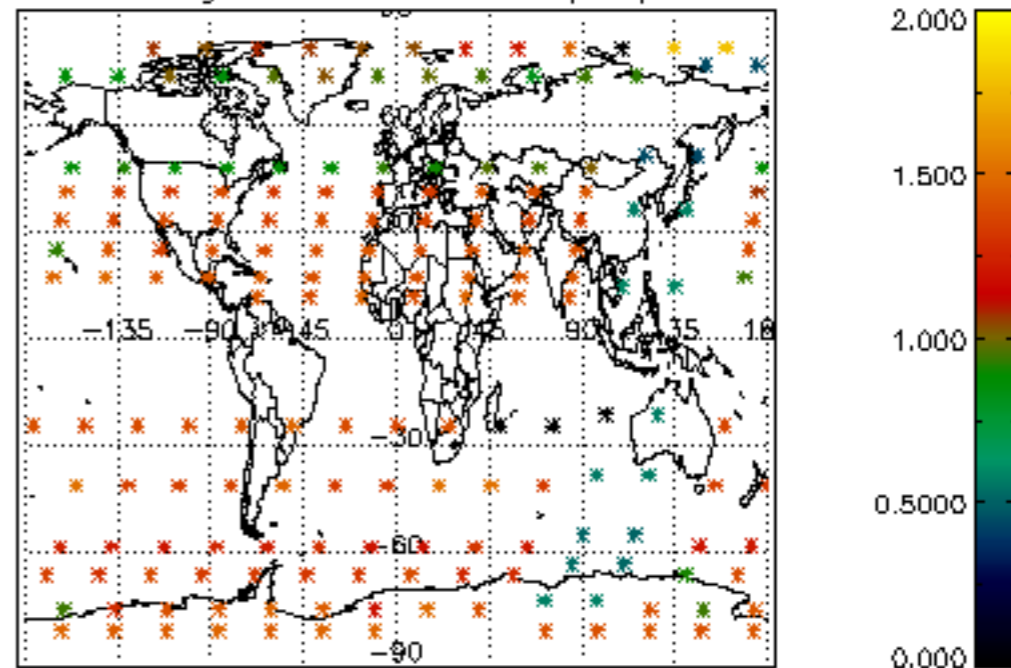
Percentage of saturation errors per profile



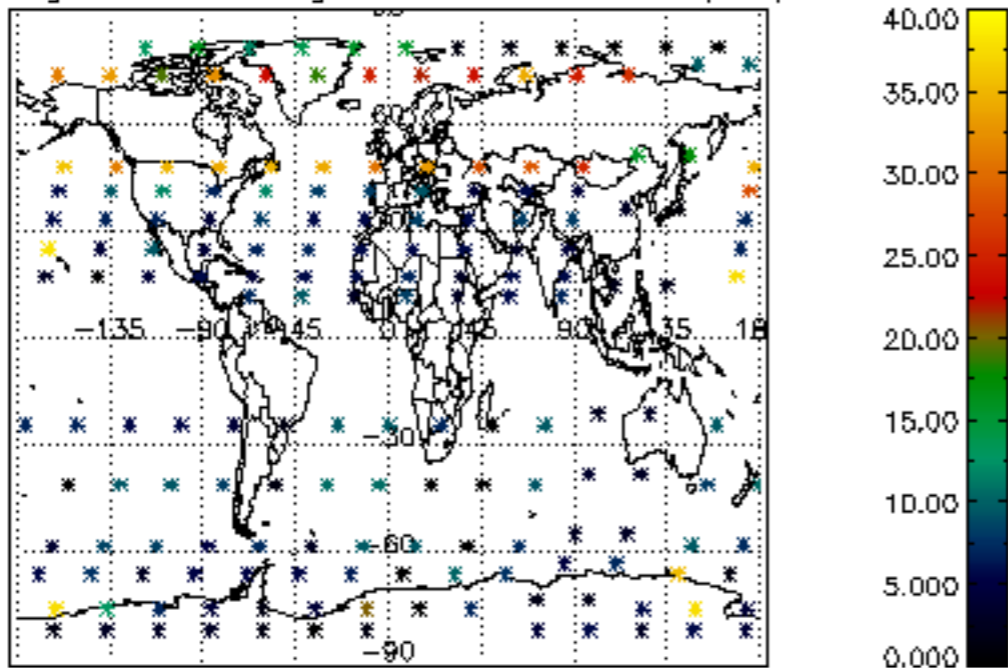
Percentage of cosmic ray hits per profile



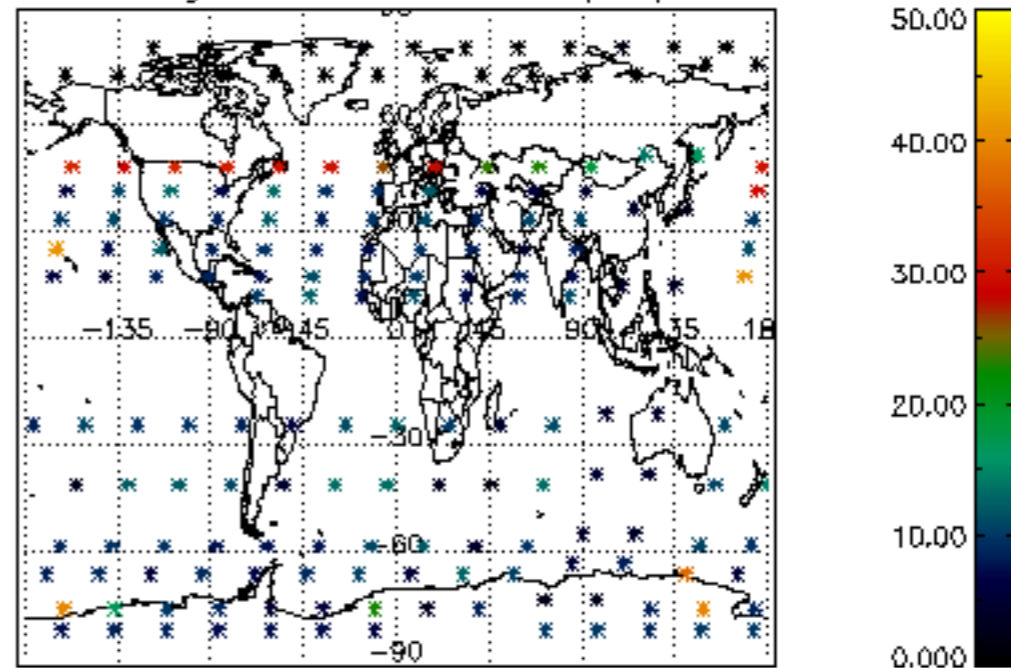
Percentage of datation errors per profile

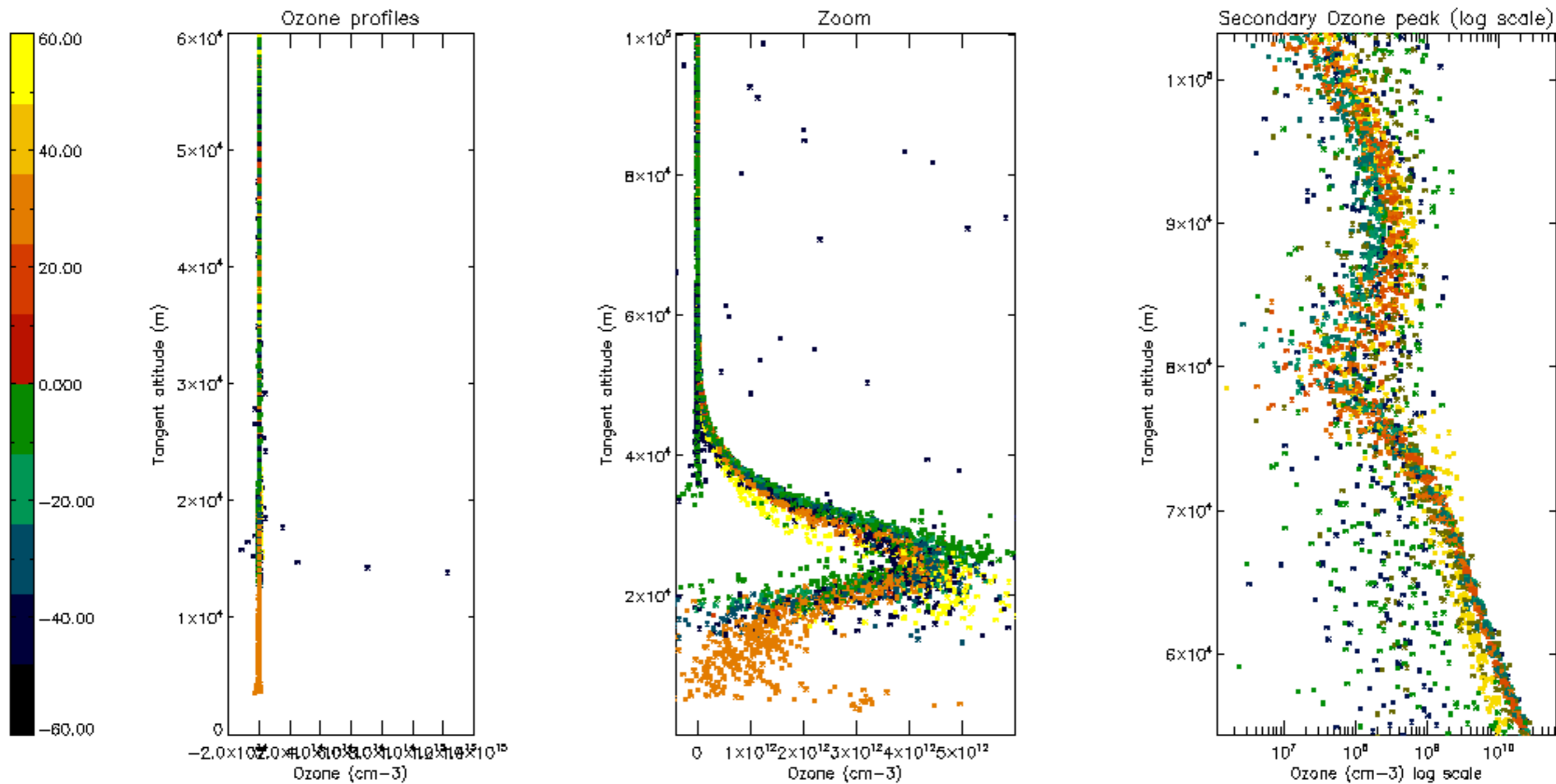


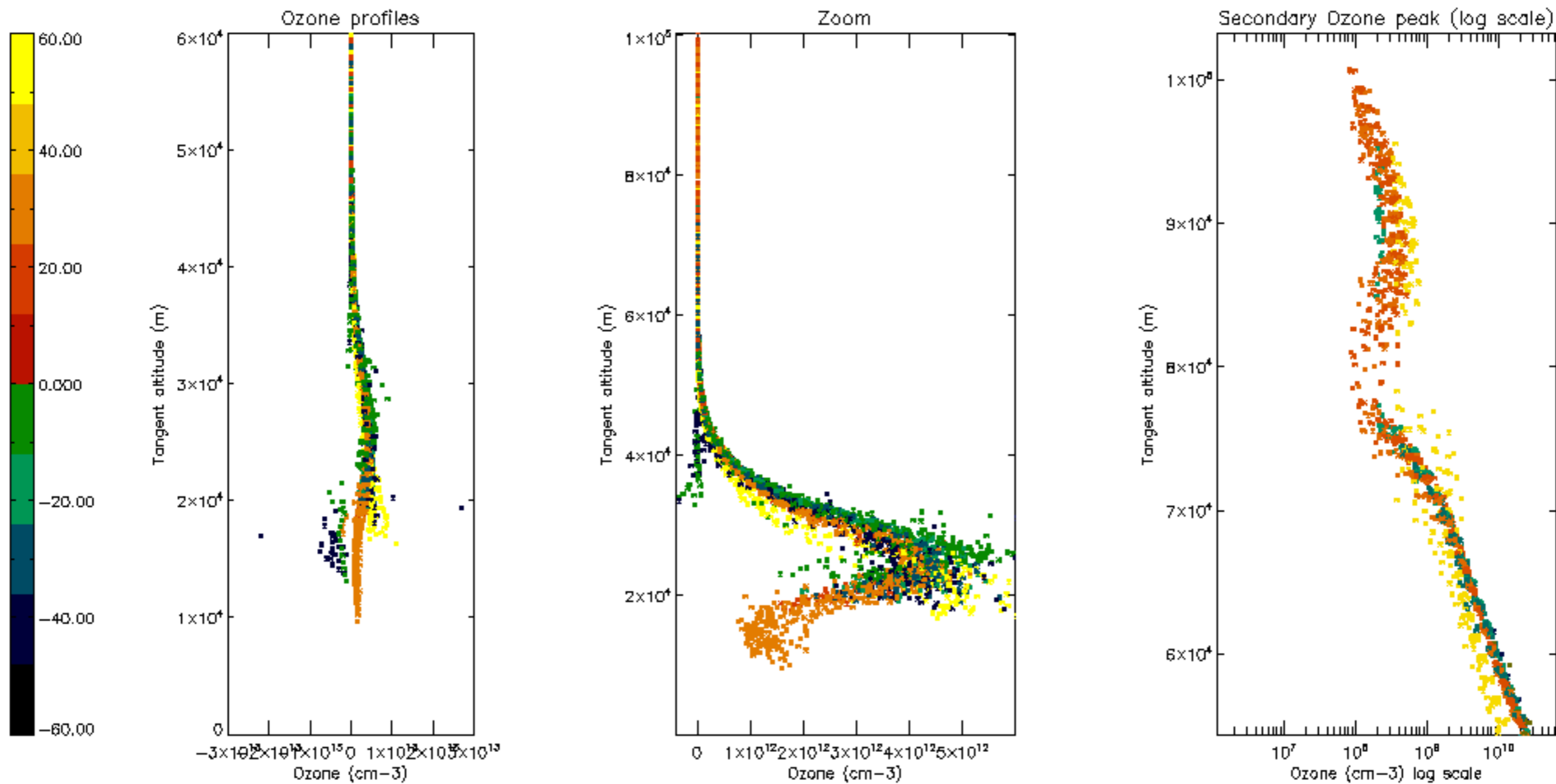
Percentage of star falling outside central band per profile

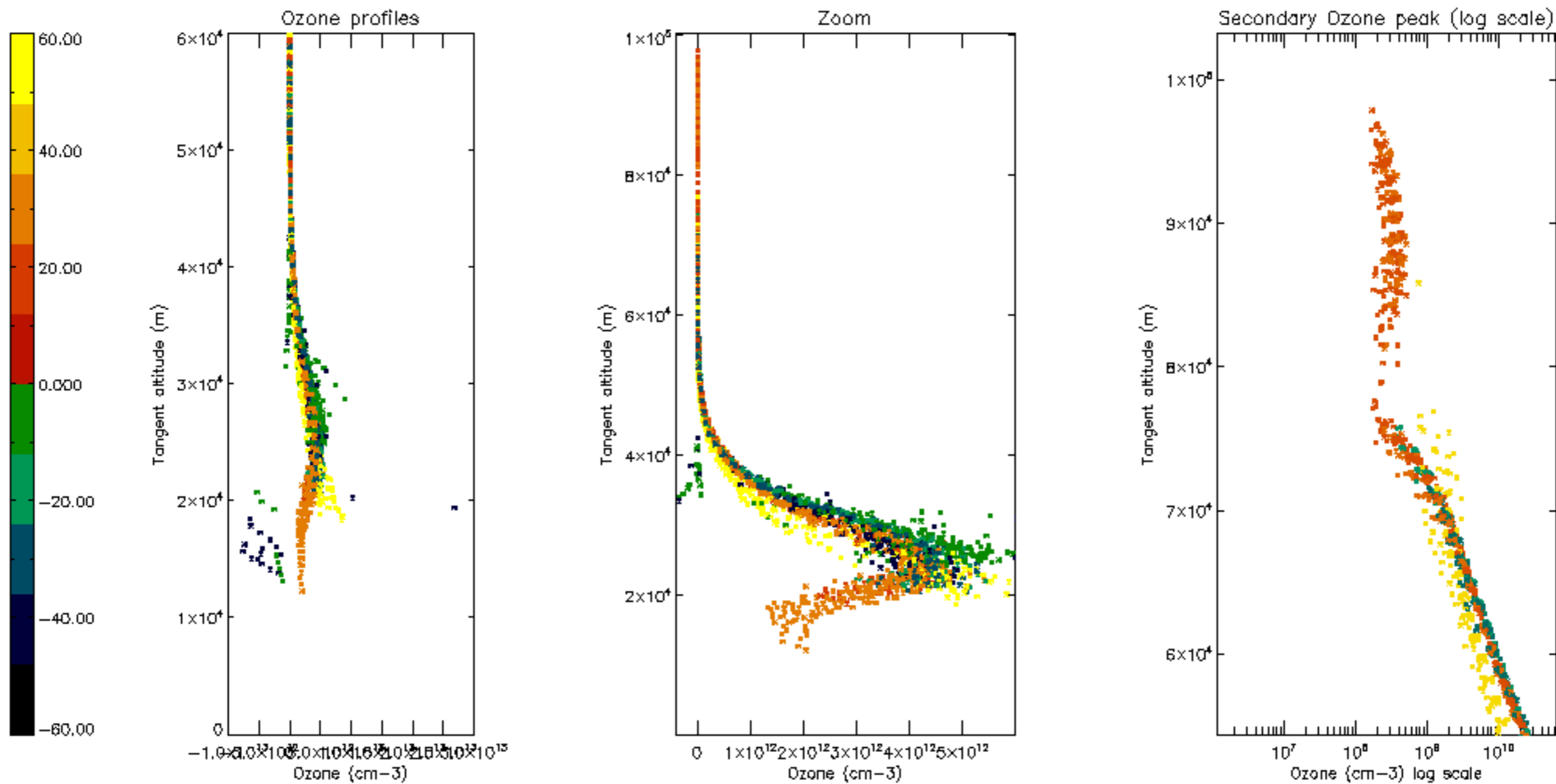


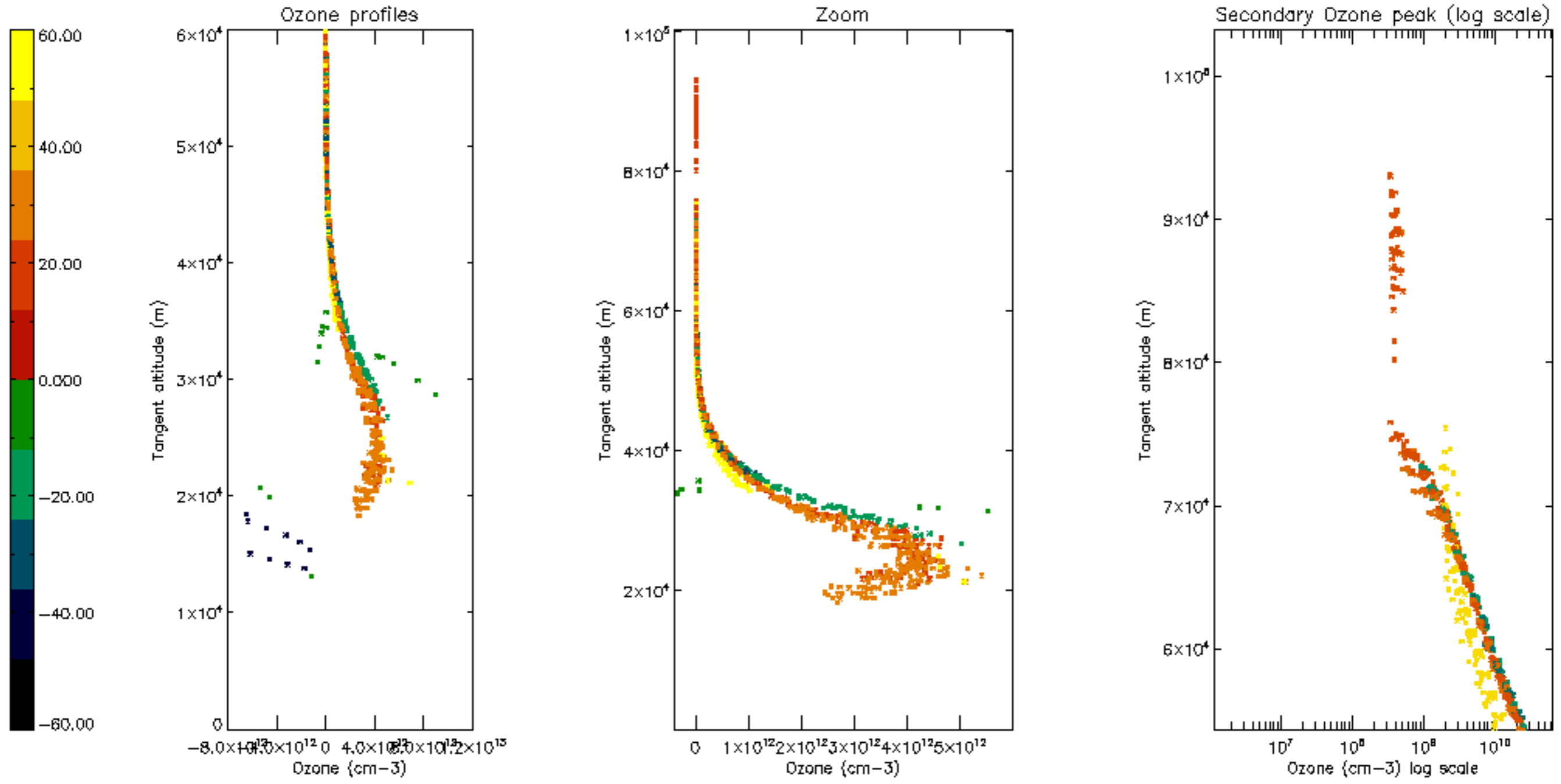
Percentage of saturation errors per profile

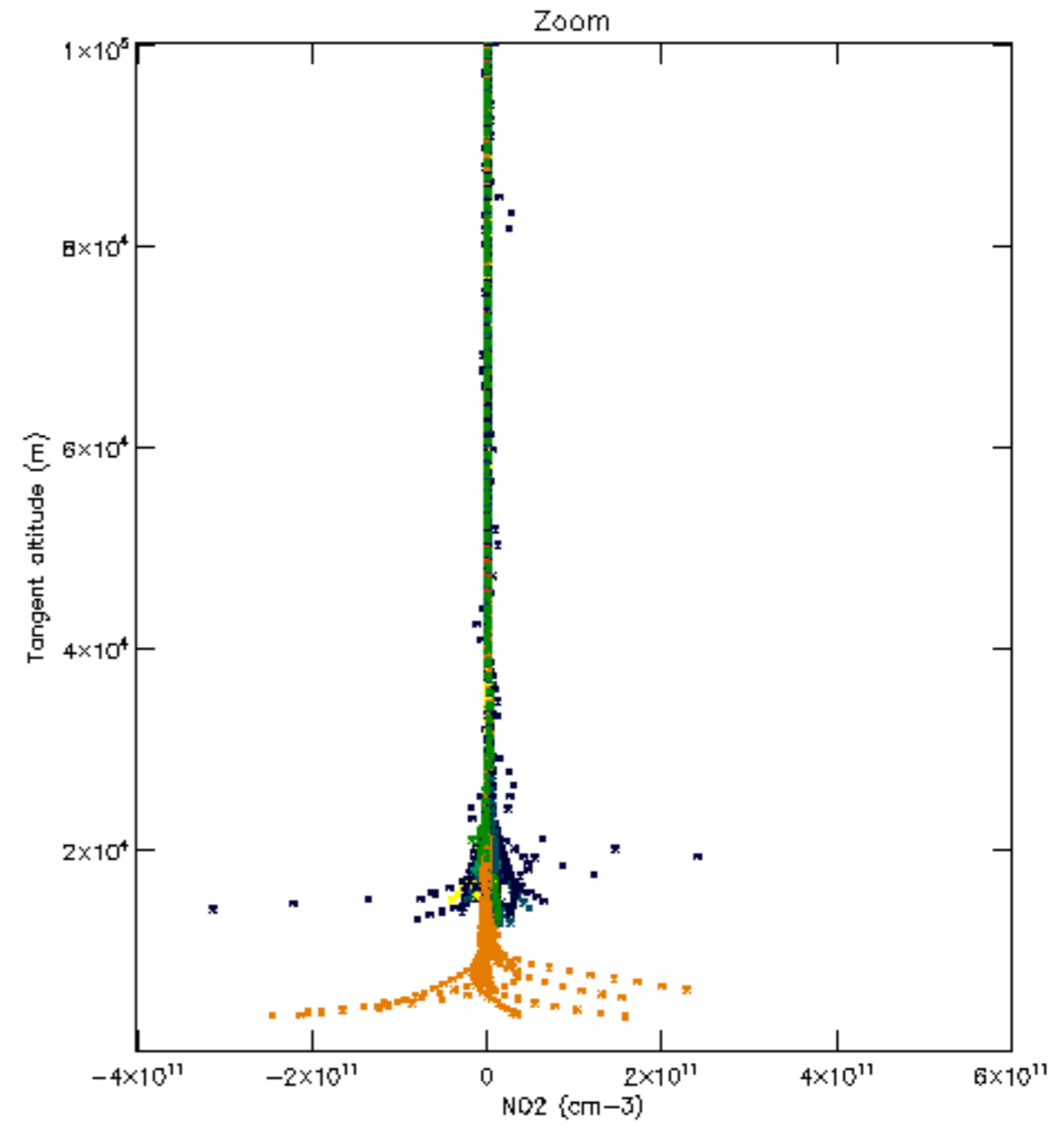
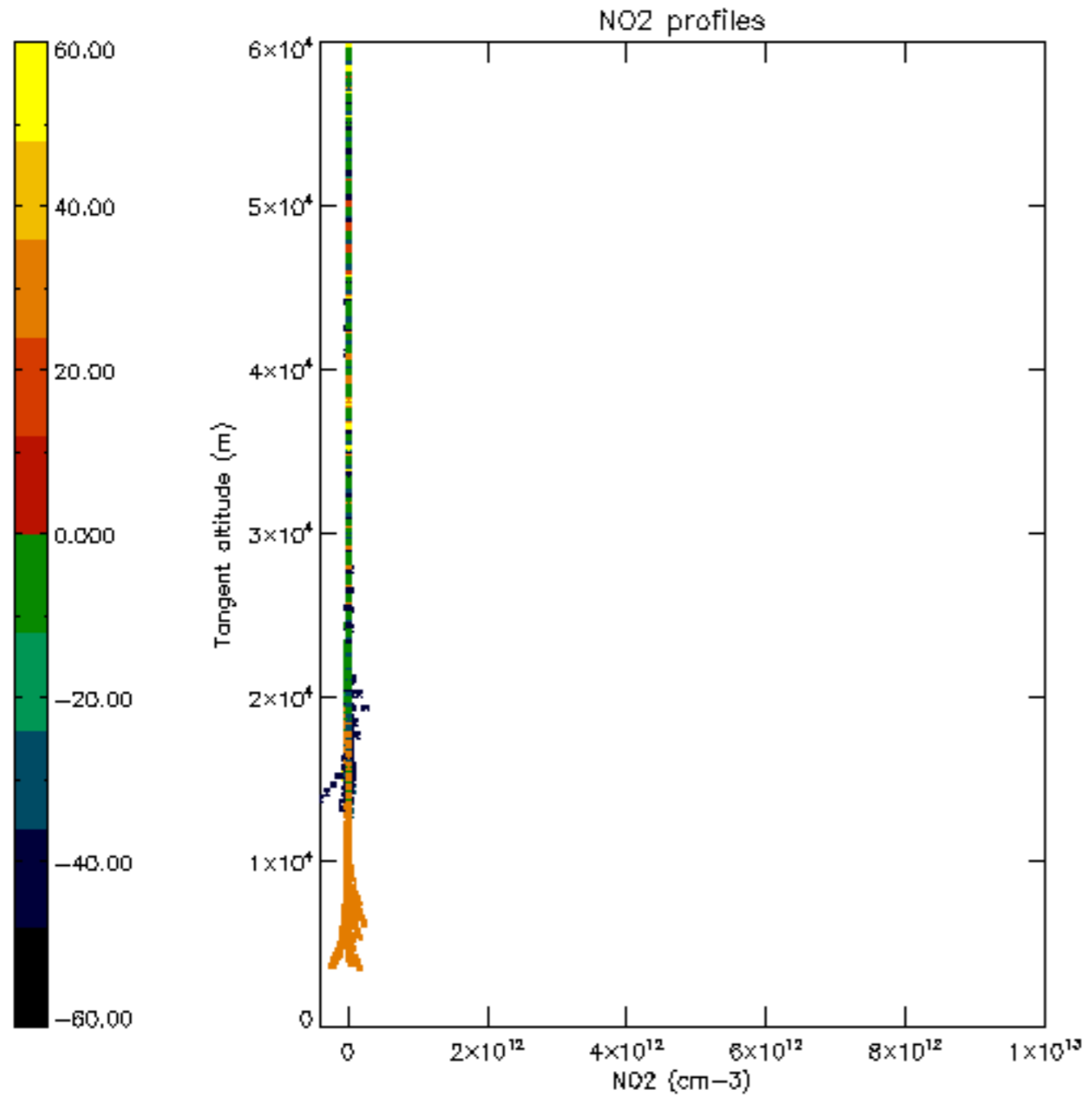


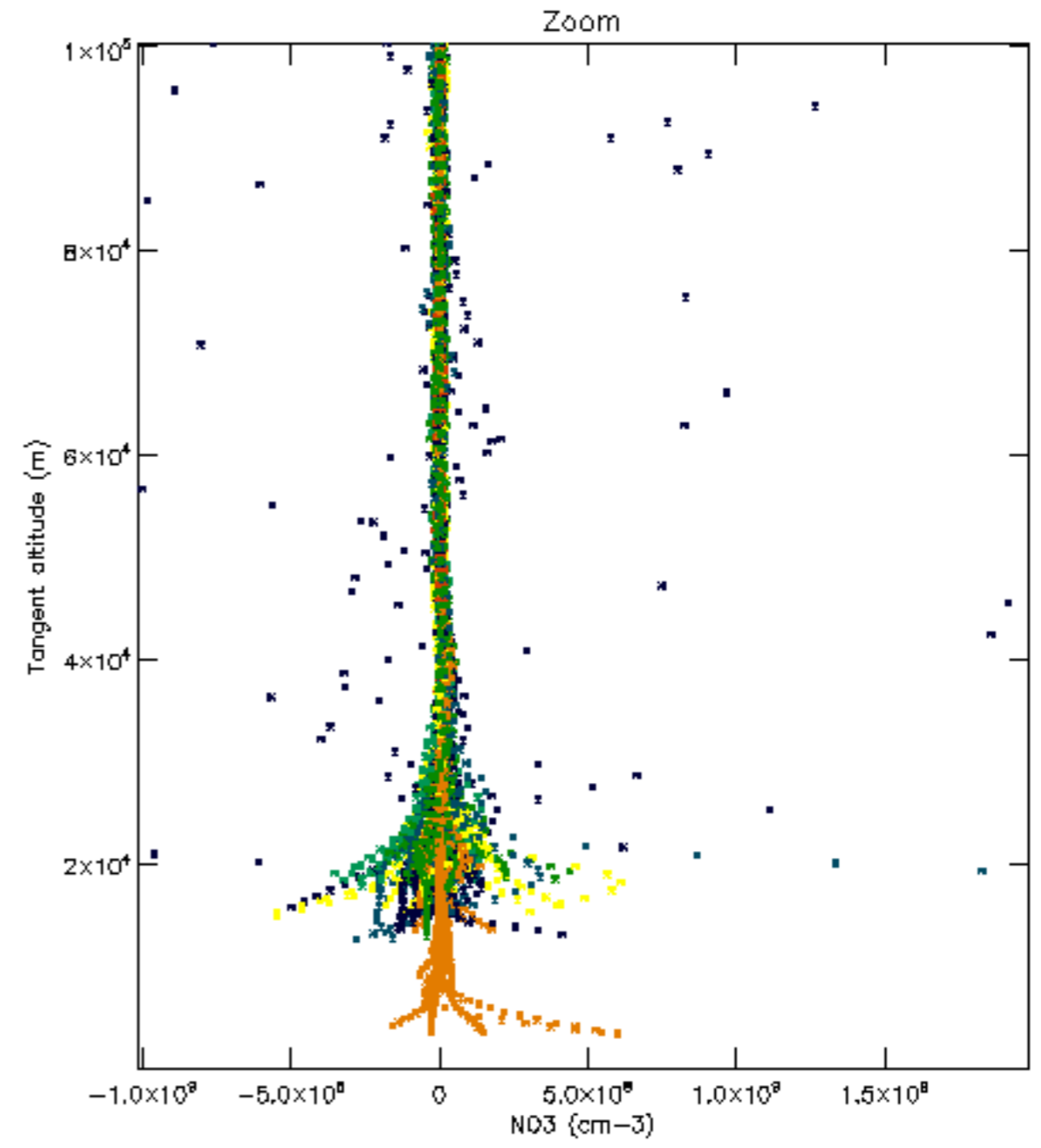
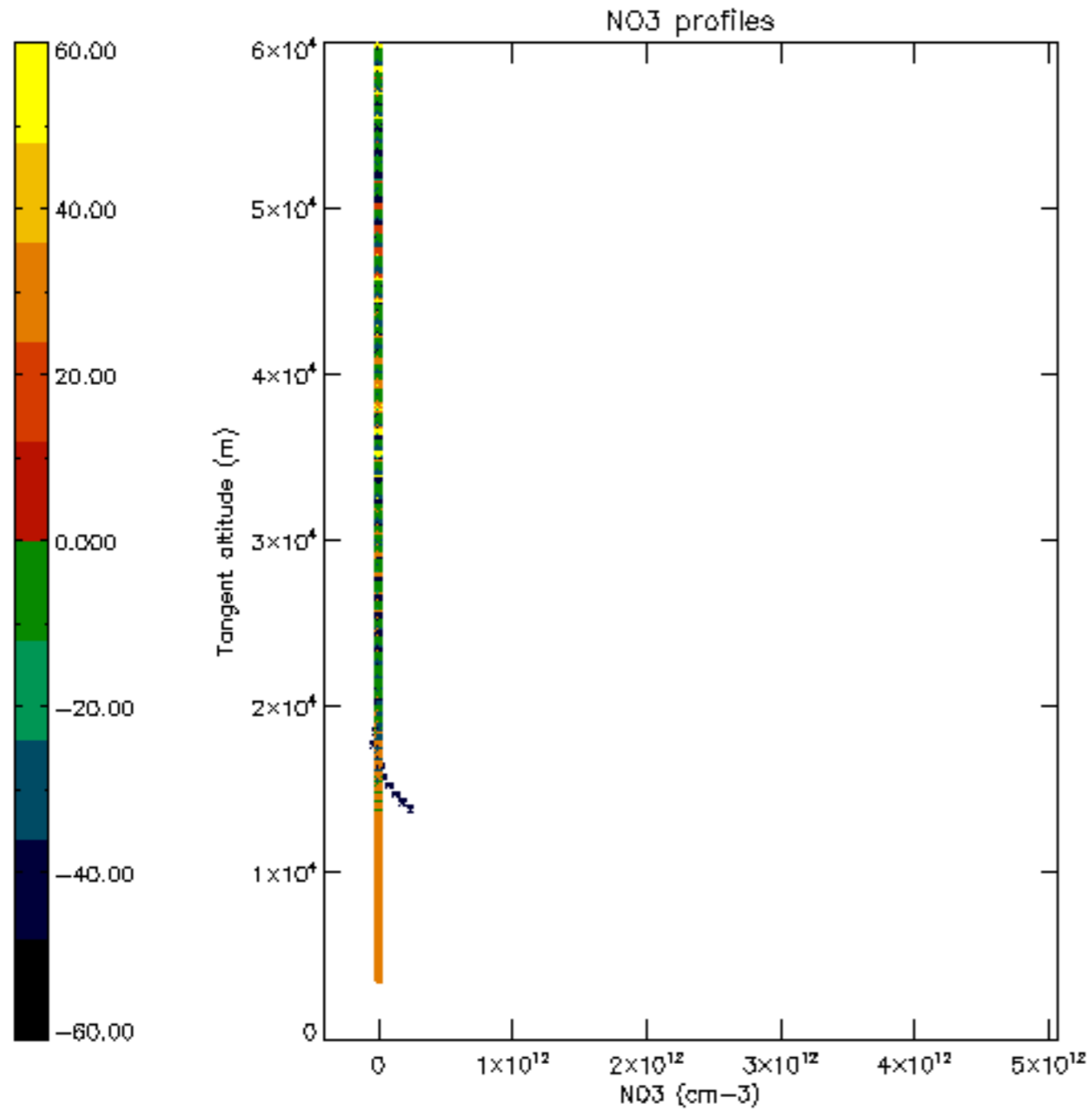


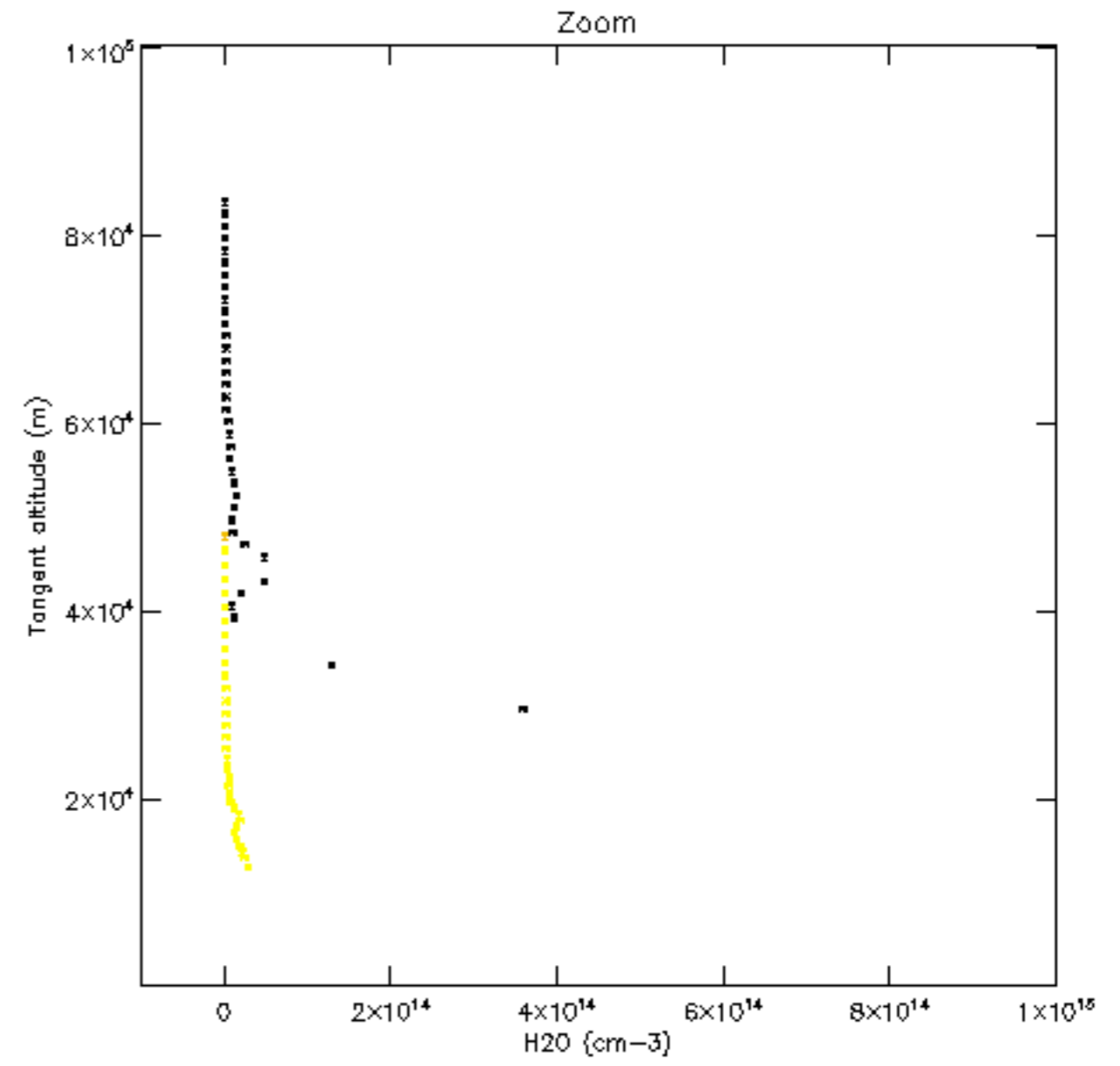
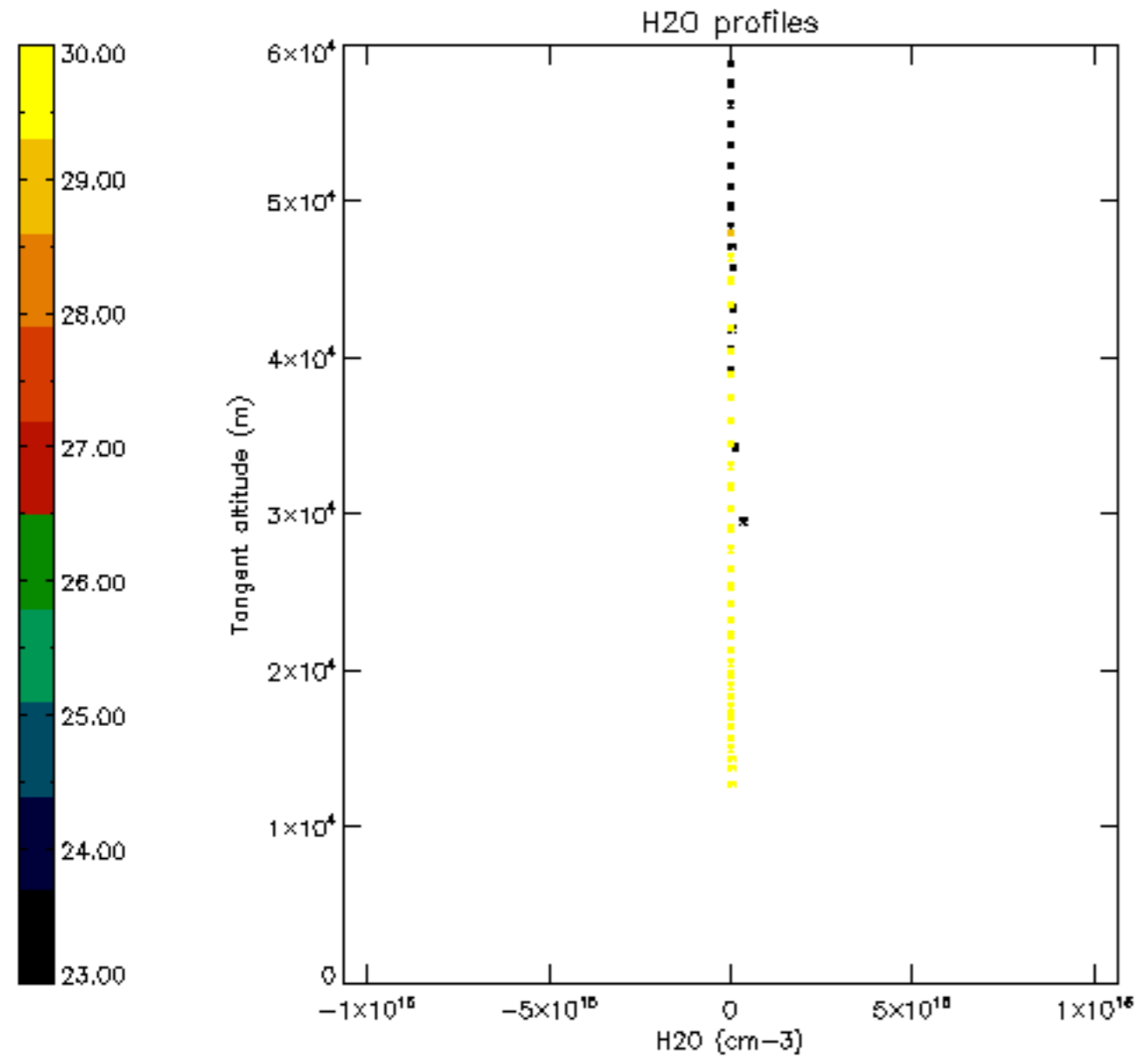


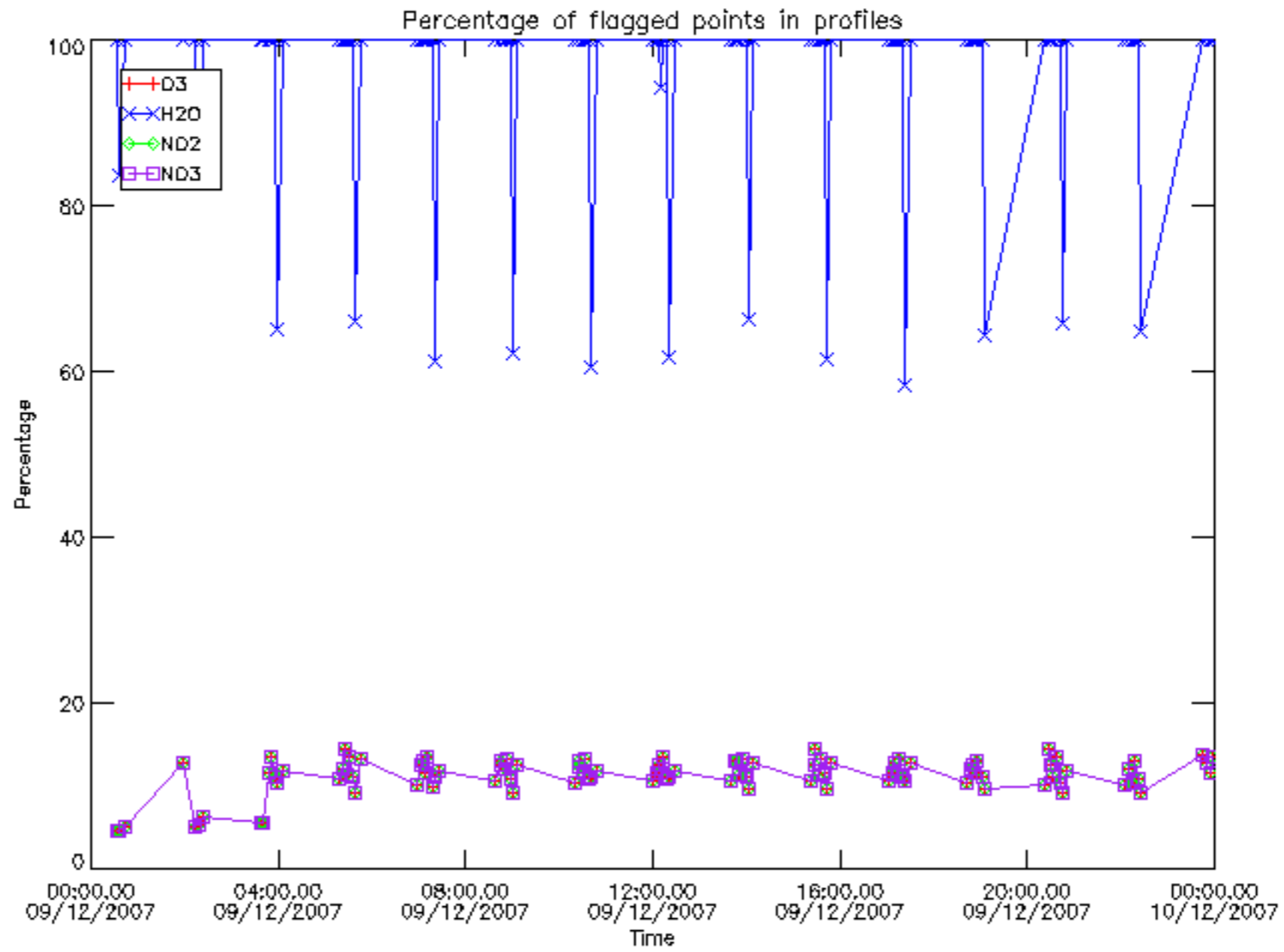




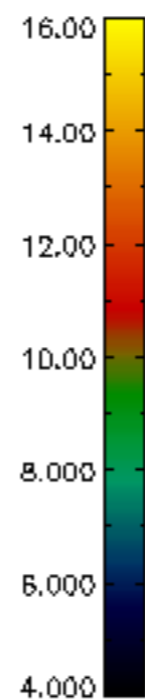
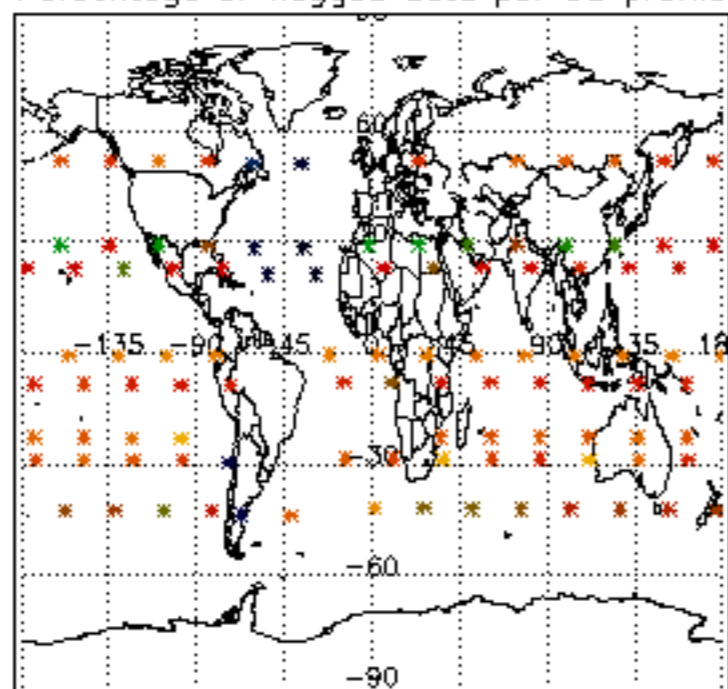




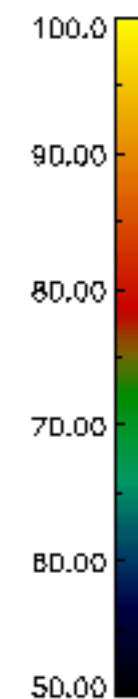
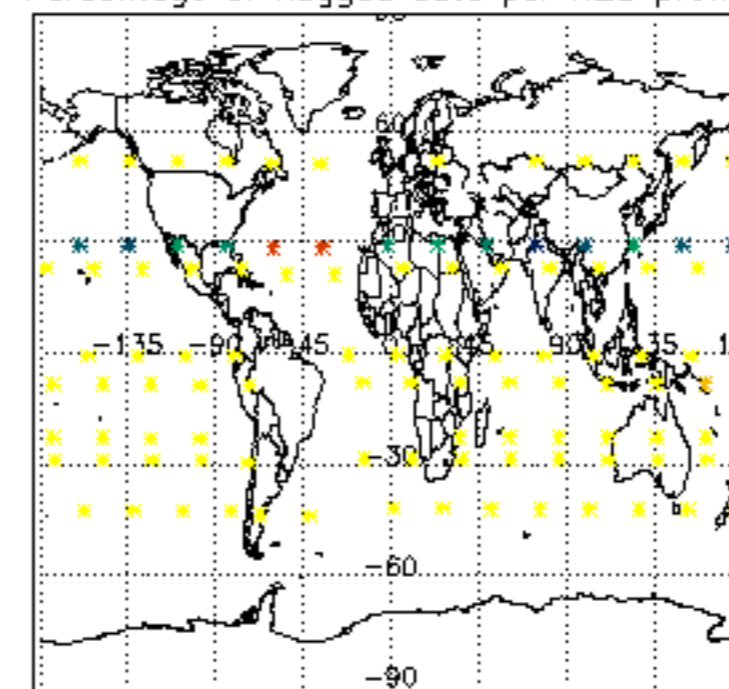




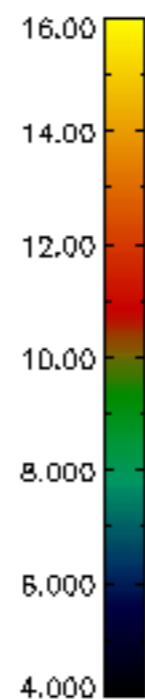
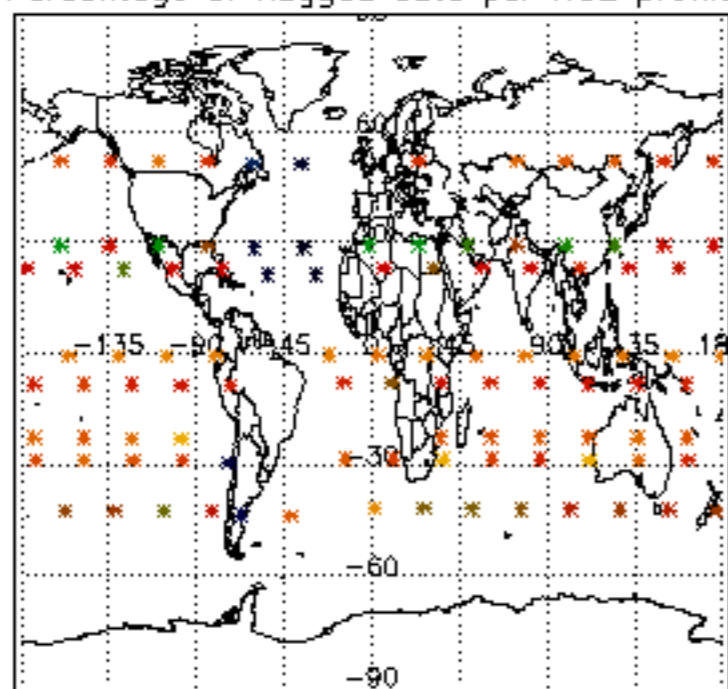
Percentage of flagged data per D3 profile



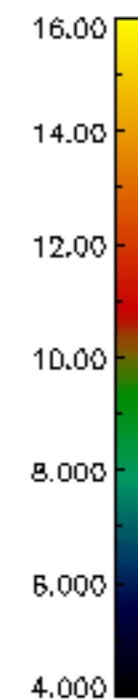
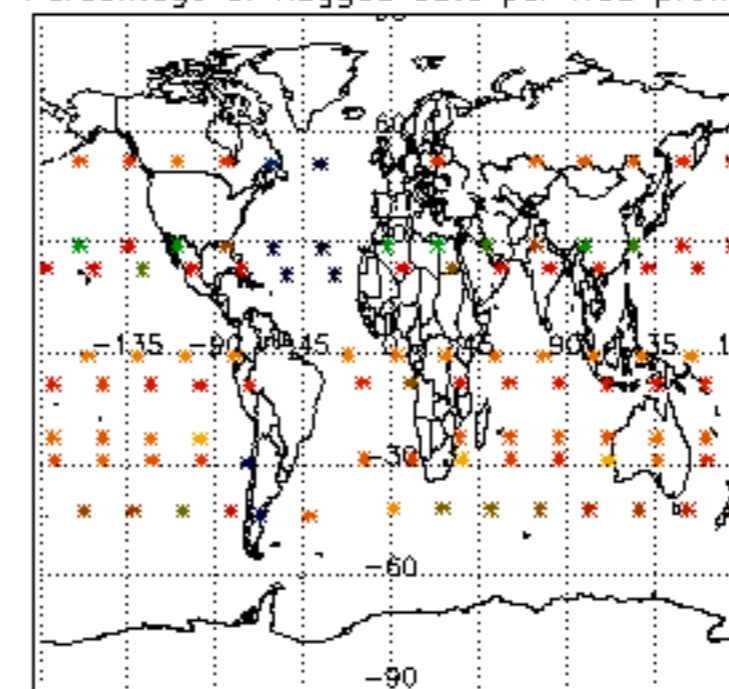
Percentage of flagged data per H2O profile

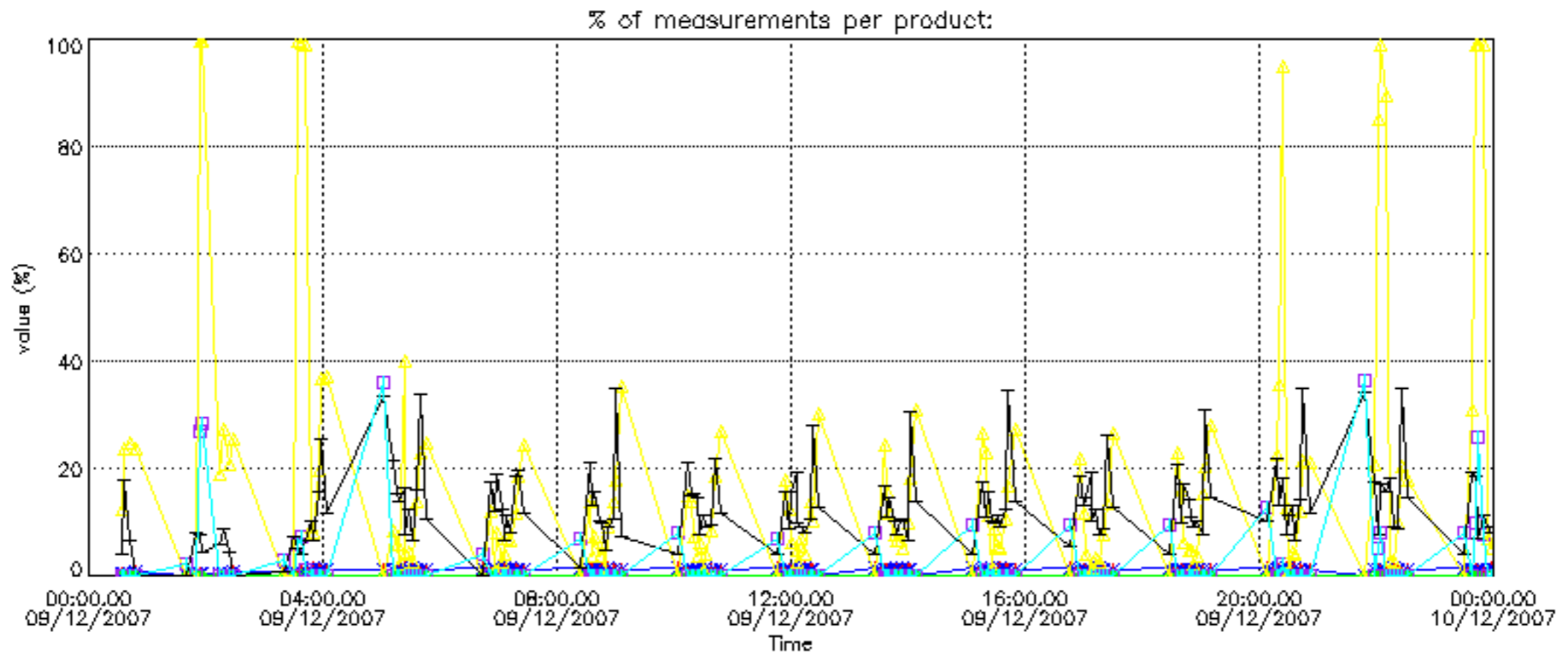


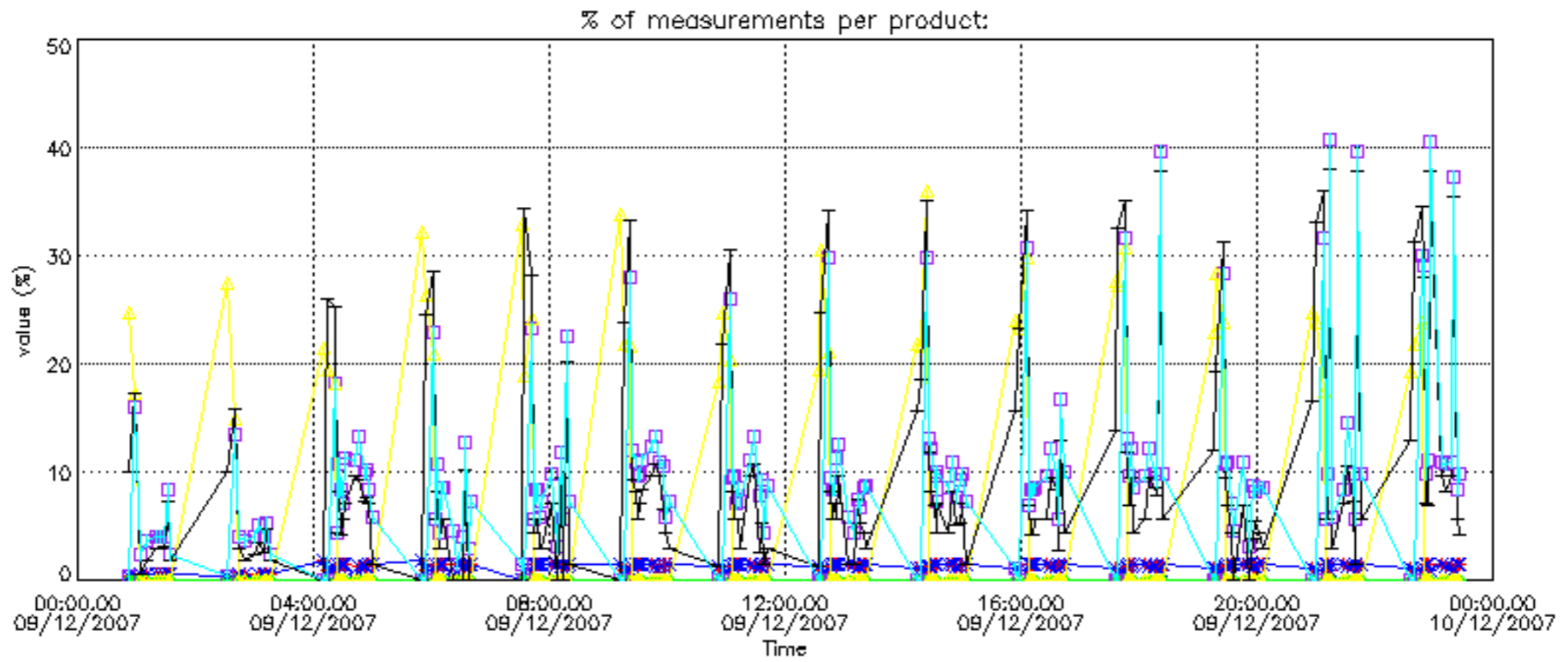
Percentage of flagged data per NO2 profile



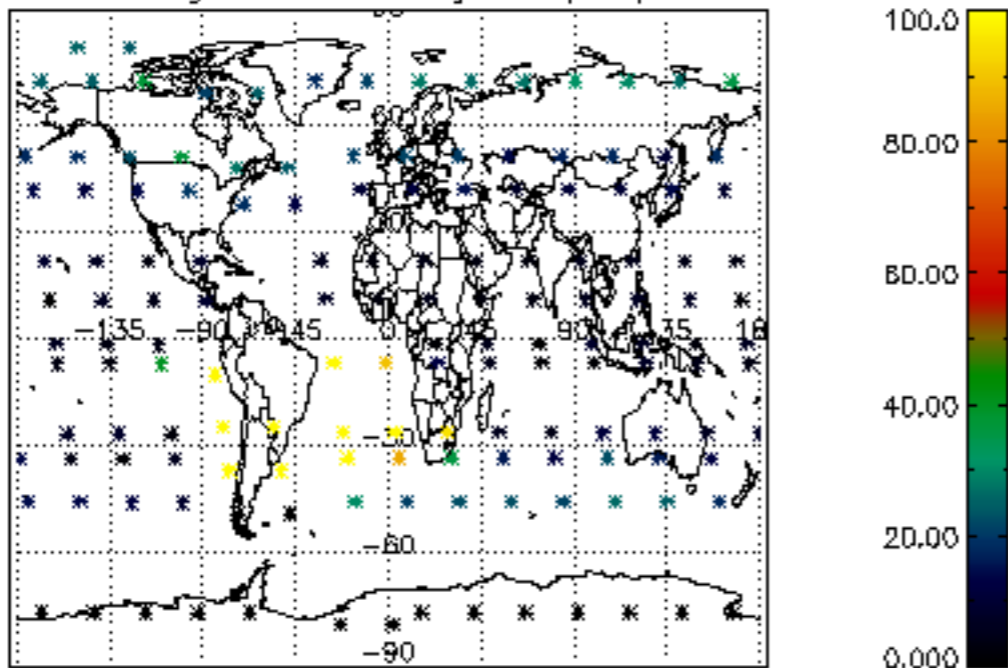
Percentage of flagged data per NO3 profile



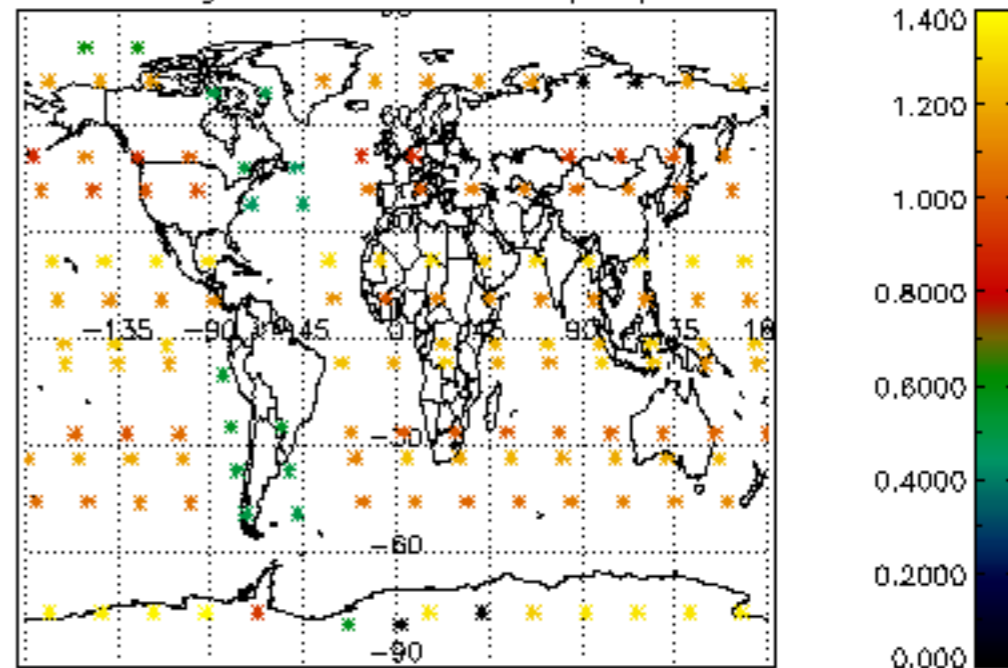




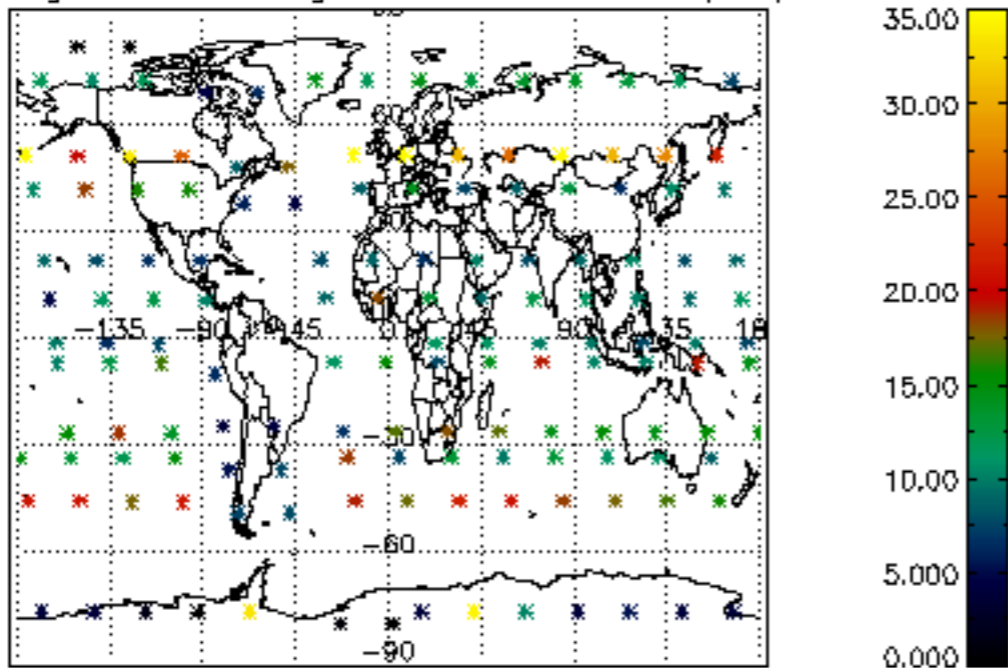
Percentage of cosmic ray hits per profile



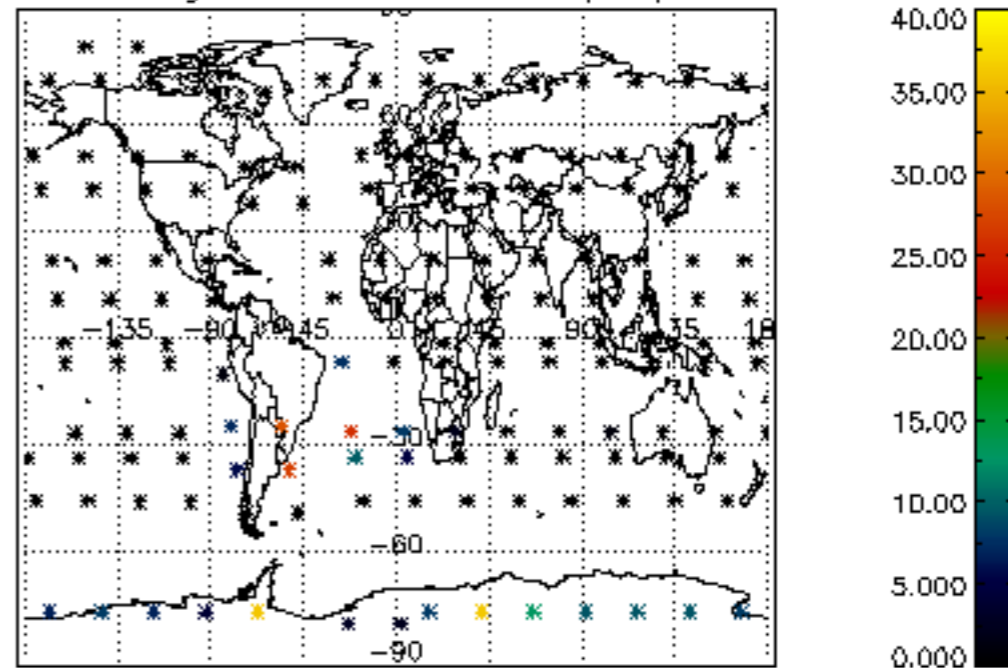
Percentage of datation errors per profile



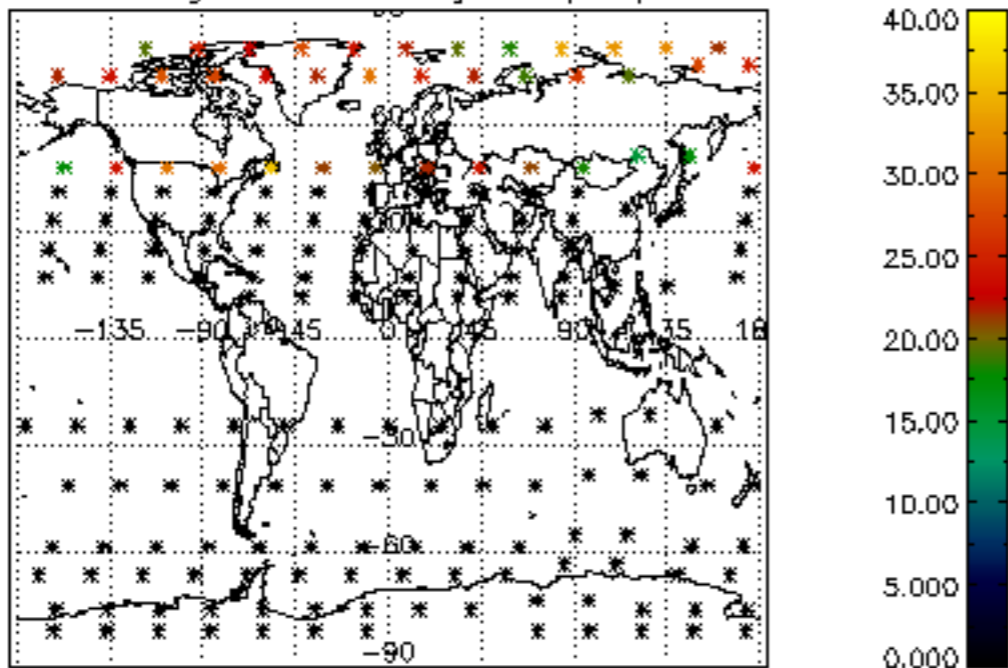
Percentage of star falling outside central band per profile



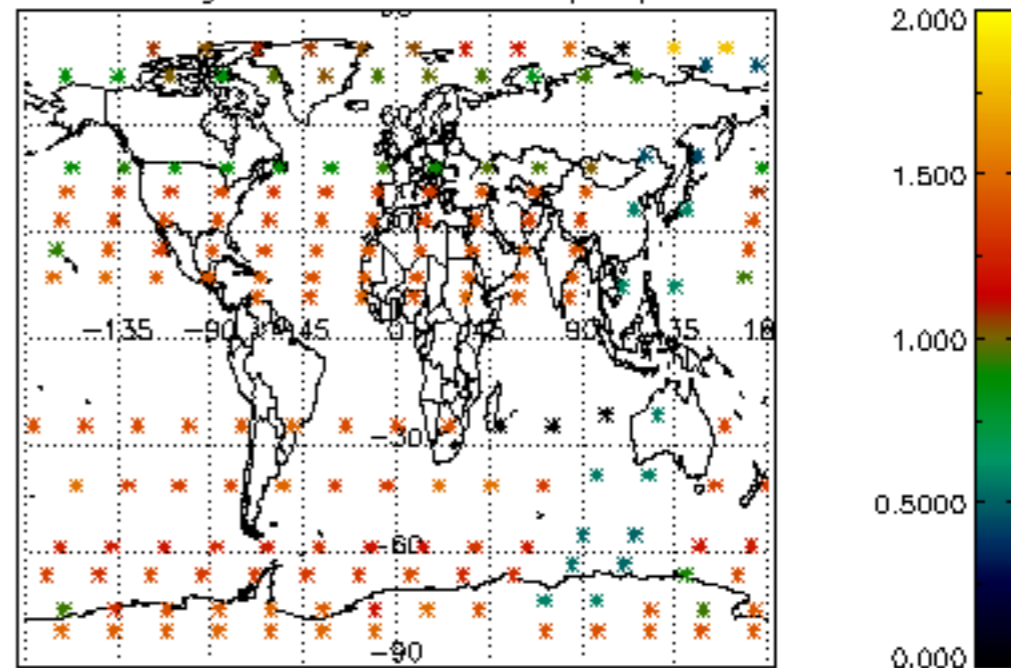
Percentage of saturation errors per profile



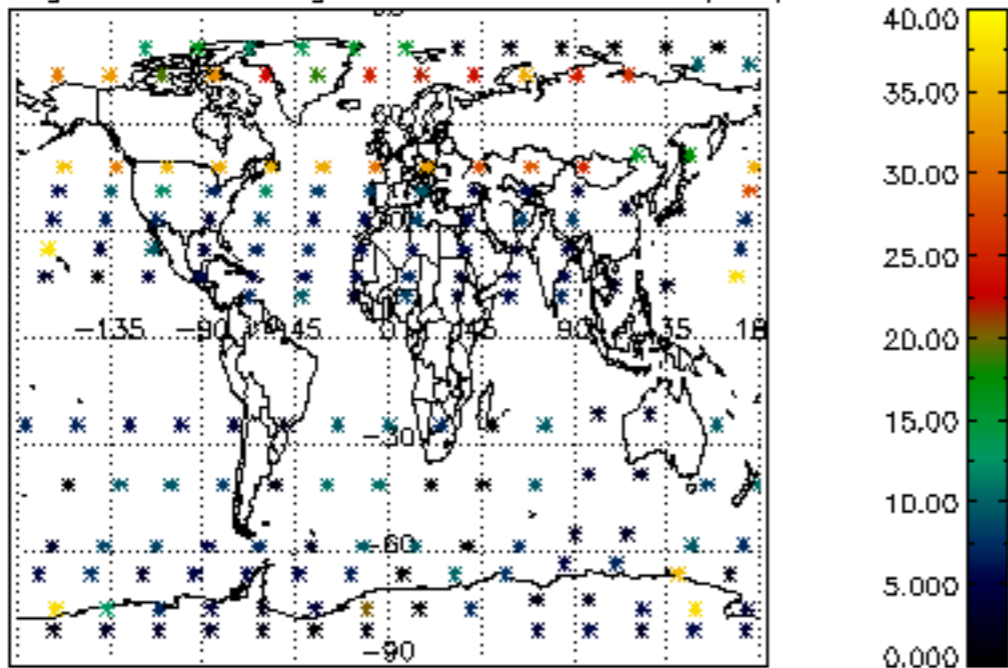
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

