

GOMOS Level 2 Daily Report

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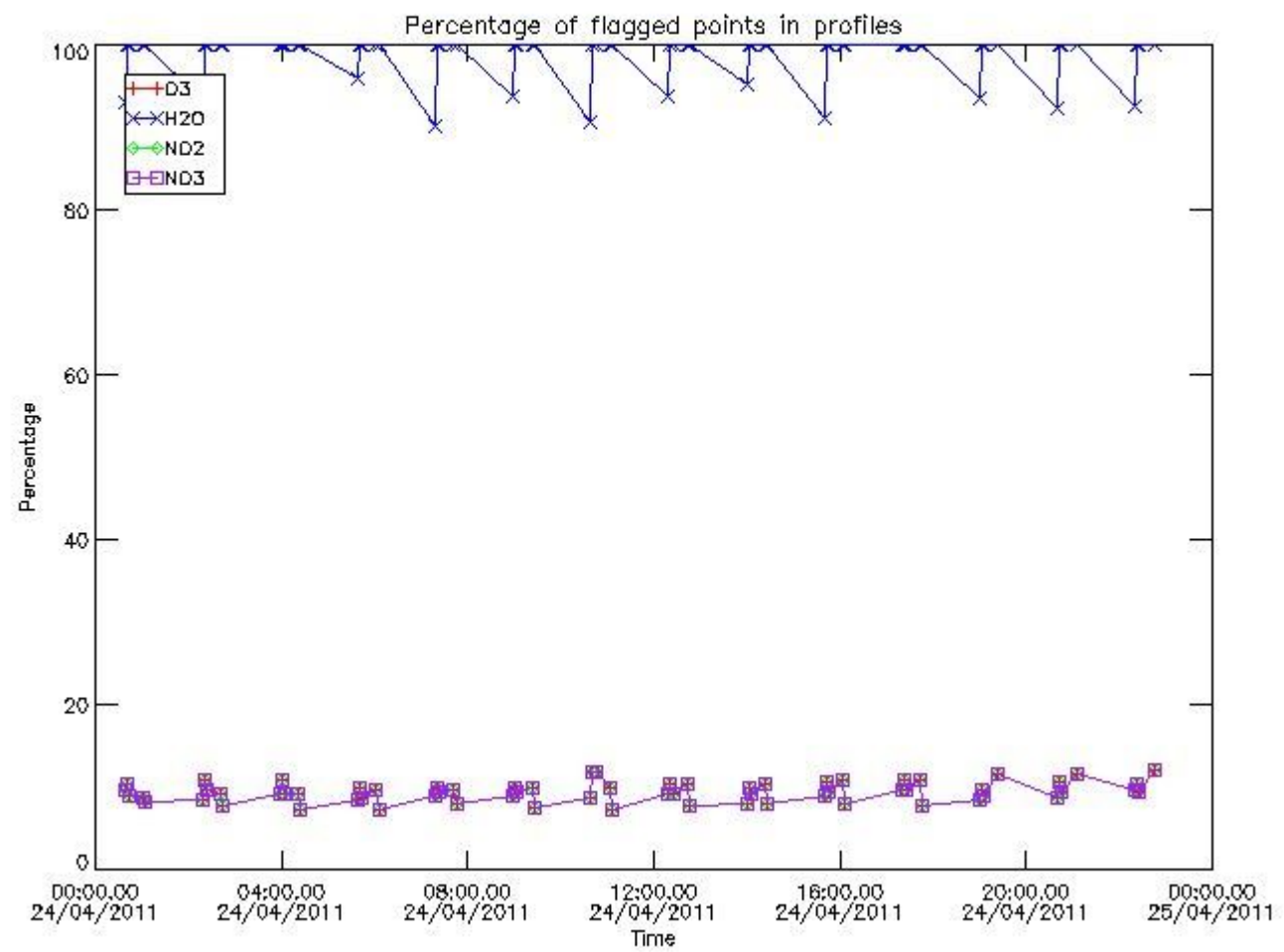
This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also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

Item	Value
Time of report generation	24APR2013 12:48:27
Data source version	GOMOS/6.01
Start time of products	24-04-2011 (24APR2011 00:00:00)
Stop time of products	25-04-2011 (25APR2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	271
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

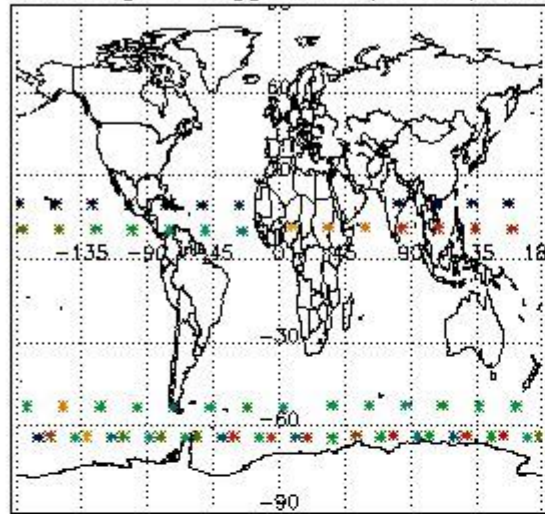
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110424_000127_000000393101_00404_47832_7387.N1	24-APR-2011 00:01:27	Bright	39.000	39	85Eta UMa	1.8540	24000.	78	47832	No
2	GOM_NL__2PRFIN20110424_000918_000000433101_00404_47832_7388.N1	24-APR-2011 00:09:18	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	47832	No
3	GOM_NL__2PRFIN20110424_001900_000000423101_00404_47832_7389.N1	24-APR-2011 00:19:00	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	47832	No
4	GOM_NL__2PRFIN20110424_002412_000000553101_00404_47832_7390.N1	24-APR-2011 00:24:12	Bright	54.500	19	50Alp Cyg	1.2460	10500.	109	47832	No
5	GOM_NL__2PRFIN20110424_002907_000000663101_00404_47832_7391.N1	24-APR-2011 00:29:07	Twilight	66.000	92	53Eps Cyg	2.5000	4500.0	132	47832	No
6	GOM_NL__2PRFIN20110424_003727_000000593101_00404_47832_7392.N1	24-APR-2011 00:37:27	Dark	58.500	61	8Eps Peg	2.1000	3900.0	117	47832	No
7	GOM_NL__2PRFIN20110424_003955_000000493101_00404_47832_7393.N1	24-APR-2011 00:39:55	Dark	49.000	162	34Alp Aqr	2.9440	5350.0	98	47832	No
8	GOM_NL__2PRFIN20110424_004303_000000573101_00404_47832_7394.N1	24-APR-2011 00:43:03	Dark	57.000	154	22Bet Aqr	2.8990	5700.0	114	47832	No
9	GOM_NL__2PRFIN20110424_010124_000000583101_00405_47833_7400.N1	24-APR-2011 01:01:24	Dark	58.000	103	38Zet Sgr	2.6000	9700.0	116	47833	No
10	GOM_NL__2PRFIN20110424_010429_000000633101_00405_47833_7401.N1	24-APR-2011 01:04:29	Dark	63.000	38	20Eps Sgr	1.8360	11000.	126	47833	No
11	GOM_NL__2PRFIN20110424_010747_000000613101_00405_47833_7402.N1	24-APR-2011 01:07:47	Straylight	61.000	25	35Lam Sco	1.6200	28000.	122	47833	No
12	GOM_NL__2PRFIN20110424_011117_000000663101_00405_47833_7403.N1	24-APR-2011 01:11:17	Straylight	65.500	75	26Eps Sco	2.2910	4250.0	131	47833	No
13	GOM_NL__2PRFIN20110424_011521_000000643101_00405_47833_7404.N1	24-APR-2011 01:15:21	Twilight	64.000	16	21Alp Sco	1.0200	3000.0	128	47833	No
14	GOM_NL__2PRFIN20110424_011757_000000703101_00405_47833_7405.N1	24-APR-2011 01:17:57	Twilight	69.500	80	7Del Sco	2.3160	30000.	139	47833	No
15	GOM_NL__2PRFIN20110424_012129_000000513101_00405_47833_7406.N1	24-APR-2011 01:21:29	Bright	51.000	122	9Alp2Lib	2.7470	9700.0	102	47833	No
16	GOM_NL__2PRFIN20110424_012404_000000563101_00405_47833_7407.N1	24-APR-2011 01:24:04	Bright	55.500	104	27Bet Lib	2.6140	13100.	111	47833	No
17	GOM_NL__2PRFIN20110424_013241_000000423101_00405_47833_7408.N1	24-APR-2011 01:32:41	Bright	42.000	111	8Eta Boo	2.6800	6000.0	84	47833	No
18	GOM_NL__2PRFIN20110424_013657_000000733101_00405_47833_7409.N1	24-APR-2011 01:36:57	Bright	73.000	83		2.3780	11000.	146	47833	No
19	GOM_NL__2PRFIN20110424_013950_000000443101_00405_47833_7410.N1	24-APR-2011 01:39:50	Bright	43.500	180	27Gam Boo	3.0400	8000.0	87	47833	No
20	GOM_NL__2PRFIN20110424_014140_000000403101_00405_47833_7411.N1	24-APR-2011 01:41:40	Bright	39.500	39	85Eta UMa	1.8540	24000.	79	47833	No
21	GOM_NL__2PRFIN20110424_014931_000000473101_00405_47833_7412.N1	24-APR-2011 01:49:31	Bright	47.000	119	14Eta Dra	2.7270	4700.0	94	47833	No
22	GOM_NL__2PRFIN20110424_015913_000000413101_00405_47833_7413.N1	24-APR-2011 01:59:13	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	47833	No
23	GOM_NL__2PRFIN20110424_020426_000000563101_00405_47833_7414.N1	24-APR-2011 02:04:26	Bright	55.500	19	50Alp Cyg	1.2460	10500.	111	47833	No
24	GOM_NL__2PRFIN20110424_020921_000000683101_00405_47833_7415.N1	24-APR-2011 02:09:21	Twilight	68.000	92	53Eps Cyg	2.5000	4500.0	136	47833	No
25	GOM_NL__2PRFIN20110424_021742_000000603101_00405_47833_7416.N1	24-APR-2011 02:17:42	Dark	60.000	61	8Eps Peg	2.1000	3900.0	120	47833	No
26	GOM_NL__2PRFIN20110424_022010_000000473101_00405_47833_7417.N1	24-APR-2011 02:20:10	Dark	47.000	162	34Alp Aqr	2.9440	5350.0	94	47833	No
27	GOM_NL__2PRFIN20110424_022318_000000533101_00405_47833_7418.N1	24-APR-2011 02:23:18	Dark	52.500	154	22Bet Aqr	2.8990	5700.0	105	47833	No
28	GOM_NL__2PRFIN20110424_024140_000000563101_00406_47834_7418.N1	24-APR-2011 02:41:40	Dark	56.000	103	38Zet Sgr	2.6000	9700.0	112	47834	No
29	GOM_NL__2PRFIN20110424_024445_000000673101_00406_47834_7419.N1	24-APR-2011 02:44:45	Dark	66.500	38	20Eps Sgr	1.8360	11000.	133	47834	No
30	GOM_NL__2PRFIN20110424_024803_000000623101_00406_47834_7420.N1	24-APR-2011 02:48:03	Straylight	62.000	25	35Lam Sco	1.6200	28000.	124	47834	No
31	GOM_NL__2PRFIN20110424_025132_000000653101_00406_47834_7421.N1	24-APR-2011 02:51:32	Straylight	65.000	75	26Eps Sco	2.2910	4250.0	130	47834	No
32	GOM_NL__2PRFIN20110424_025535_000000673101_00406_47834_7422.N1	24-APR-2011 02:55:35	Twilight	67.000	16	21Alp Sco	1.0200	3000.0	134	47834	No
33	GOM_NL__2PRFIN20110424_025811_000000703101_00406_47834_7423.N1	24-APR-2011 02:58:11	Twilight	70.000	80	7Del Sco	2.3160	30000.	140	47834	No
34	GOM_NL__2PRFIN20110424_030143_000000483101_00406_47834_7424.N1	24-APR-2011 03:01:43	Bright	48.000	122	9Alp2Lib	2.7470	9700.0	96	47834	No
35	GOM_NL__2PRFIN20110424_030418_000000543101_00406_47834_7425.N1	24-APR-2011 03:04:18	Bright	54.000	104	27Bet Lib	2.6140	13100.	108	47834	No
36	GOM_NL__2PRFIN20110424_031254_000000423101_00406_47834_7426.N1	24-APR-2011 03:12:54	Bright	41.500	111	8Eta Boo	2.6800	6000.0	83	47834	No
37	GOM_NL__2PRFIN20110424_031711_000000503101_00406_47834_7427.N1	24-APR-2011 03:17:11	Bright	49.500	83		2.3780	11000.	99	47834	No
38	GOM_NL__2PRFIN20110424_032003_000000453101_00406_47834_7428.N1	24-APR-2011 03:20:03	Bright	44.500	180	27Gam Boo	3.0400	8000.0	89	47834	No
39	GOM_NL__2PRFIN20110424_032154_000000403101_00406_47834_7429.N1	24-APR-2011 03:21:54	Bright	39.500	39	85Eta UMa	1.8540	24000.	79	47834	No
40	GOM_NL__2PRFIN20110424_032944_000000453101_00406_47834_7430.N1	24-APR-2011 03:29:44	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	47834	No
41	GOM_NL__2PRFIN20110424_033927_000000423101_00406_47834_7431.N1	24-APR-2011 03:39:27	Bright	42.000	89	5Alp Cep	2.4510	8000.0	84	47834	No
42	GOM_NL__2PRFIN20110424_034440_000000603101_00406_47834_7432.N1	24-APR-2011 03:44:40	Bright	60.000	19	50Alp Cyg	1.2460	10500.	120	47834	No

3.1 Plot quality information per product (time dependant)

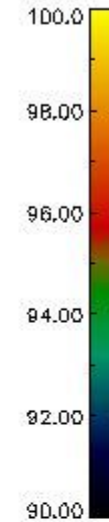
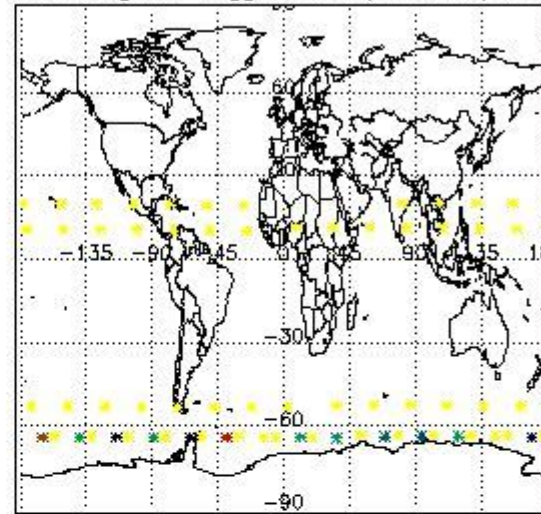


3.2 Plot quality information per product (world map)

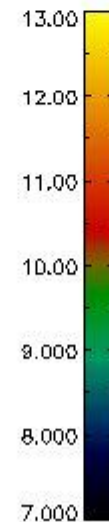
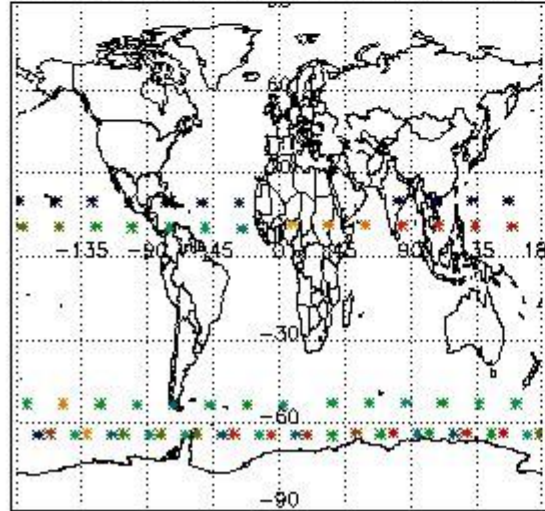
Percentage of flagged data per O3 profile



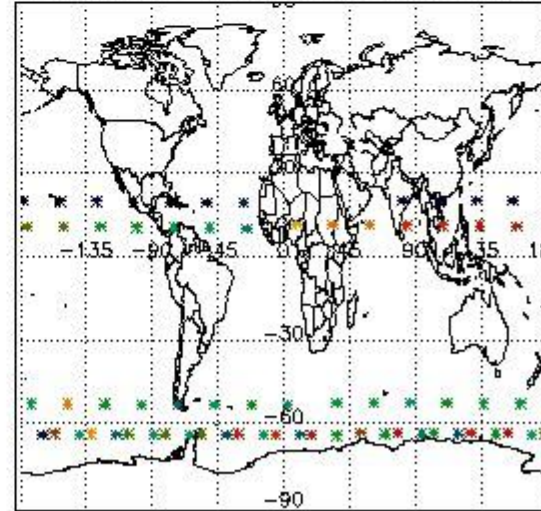
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

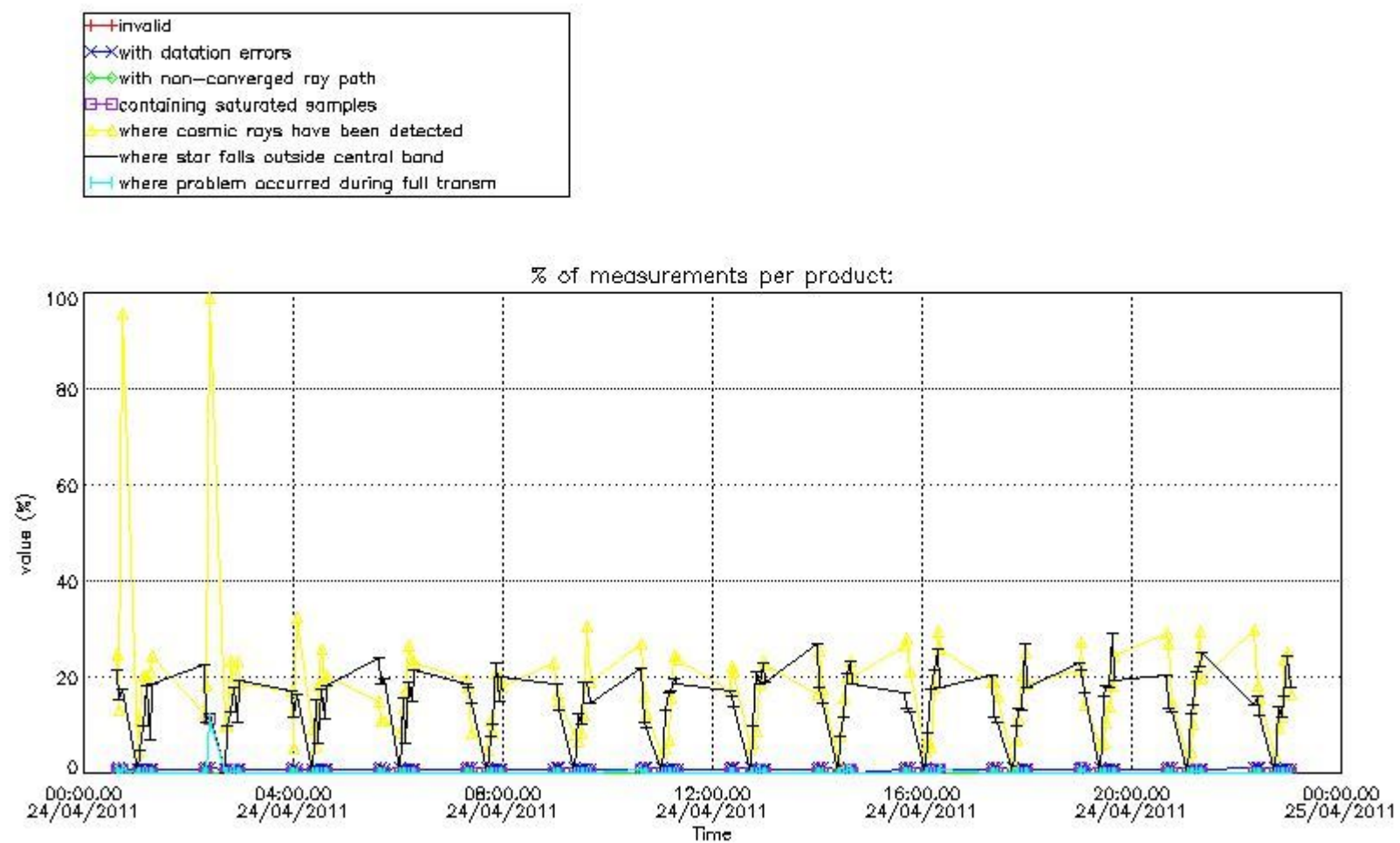


4. Level 1 quality information per product

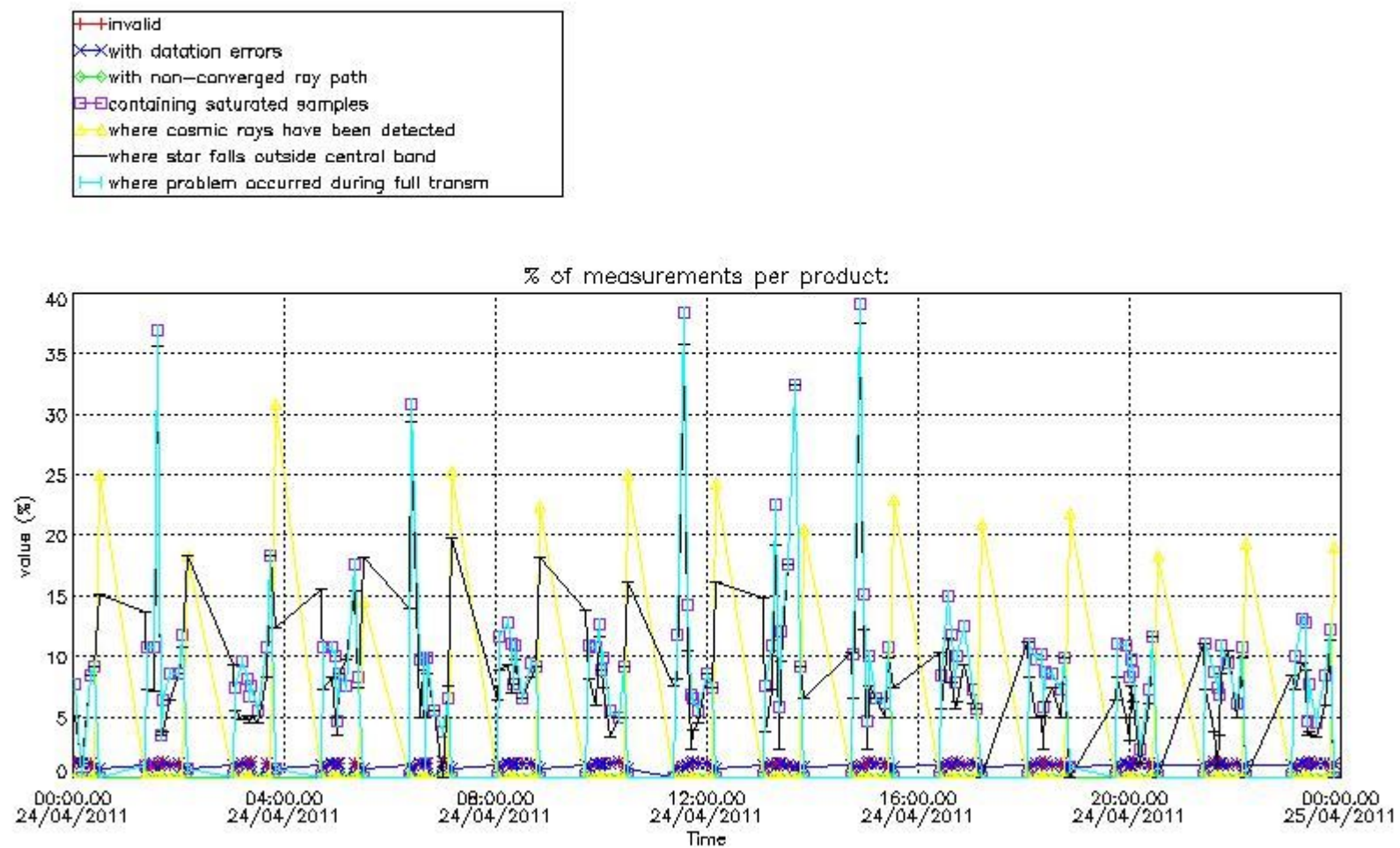
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

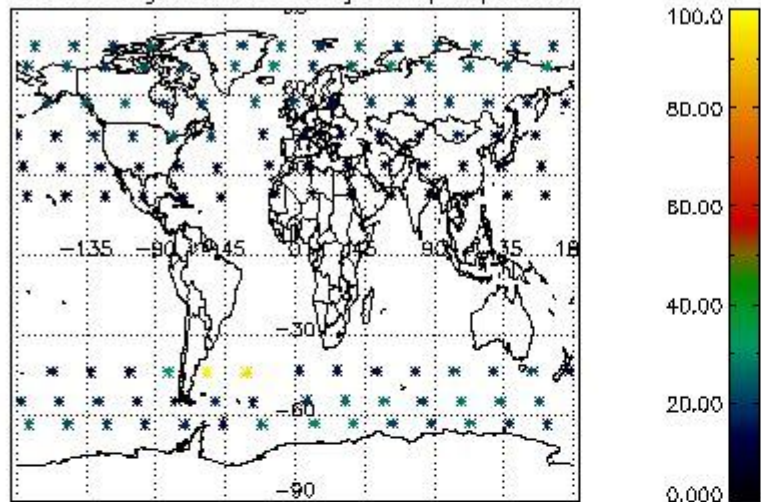


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

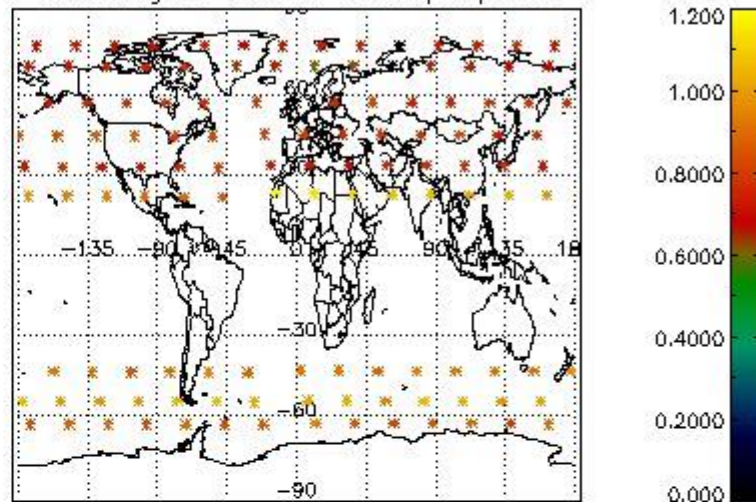


4.2 Plot quality information per product coming from level 1b processing (world map)
 4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

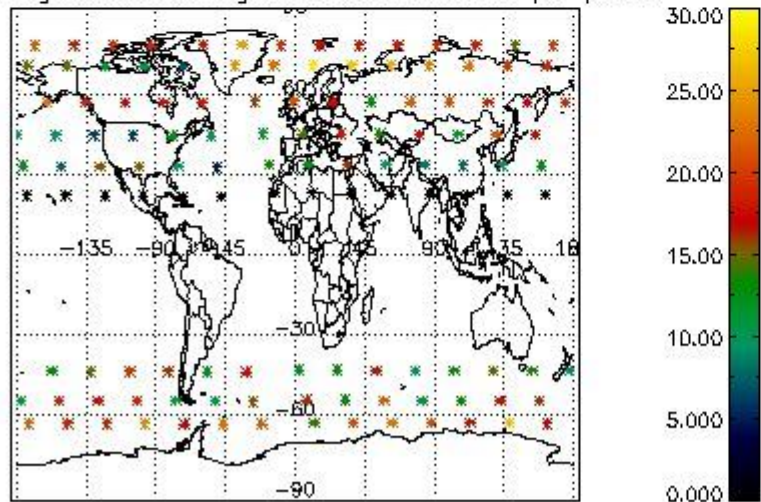
Percentage of cosmic ray hits per profile



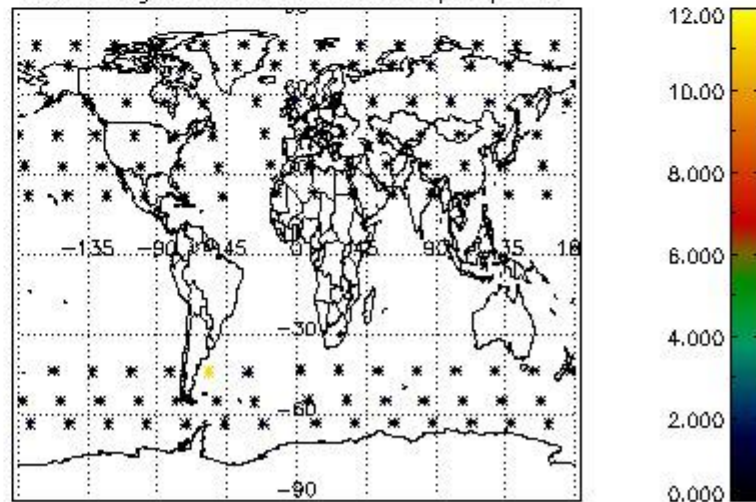
Percentage of datation errors per profile



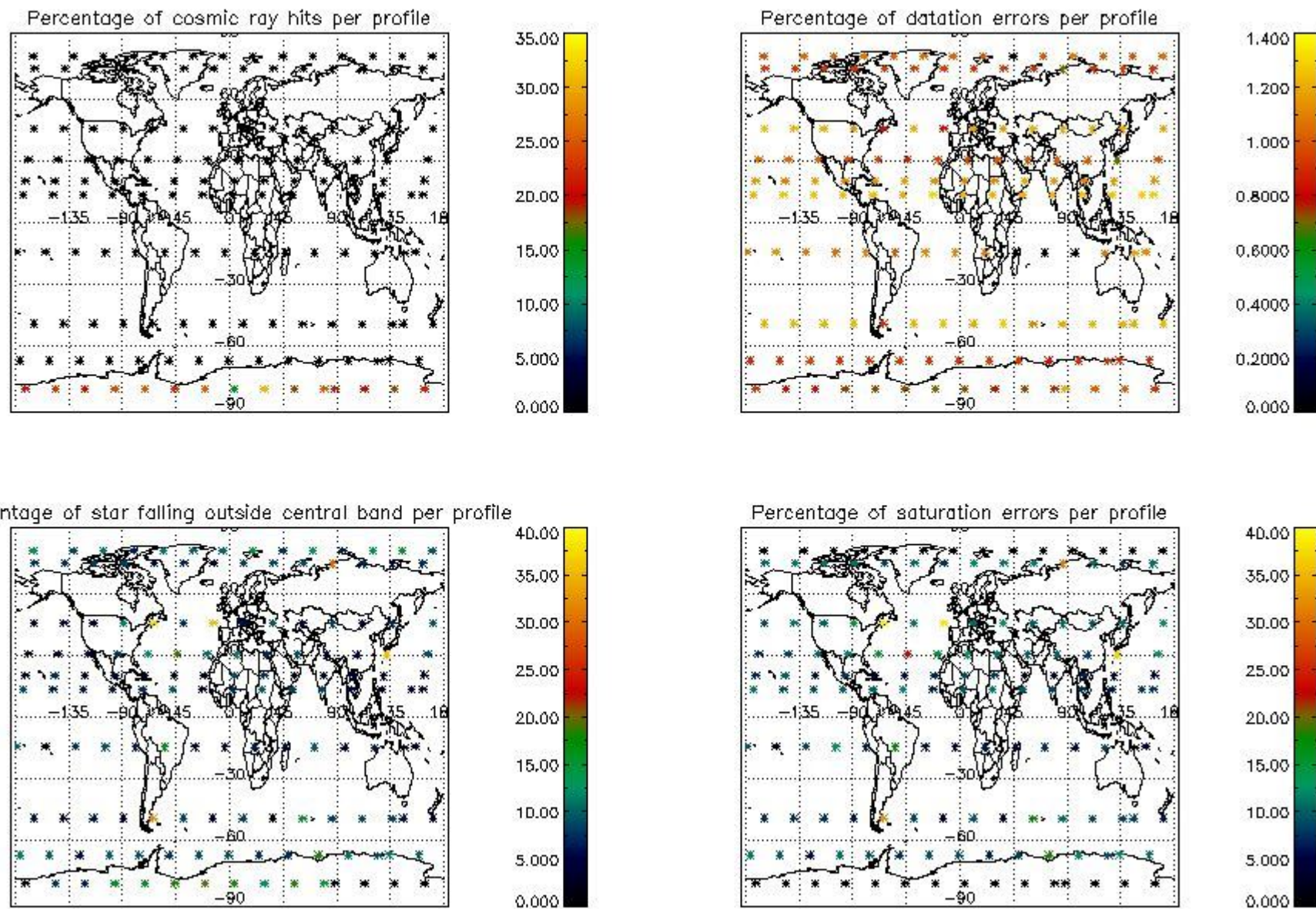
Percentage of star falling outside central band per profile



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

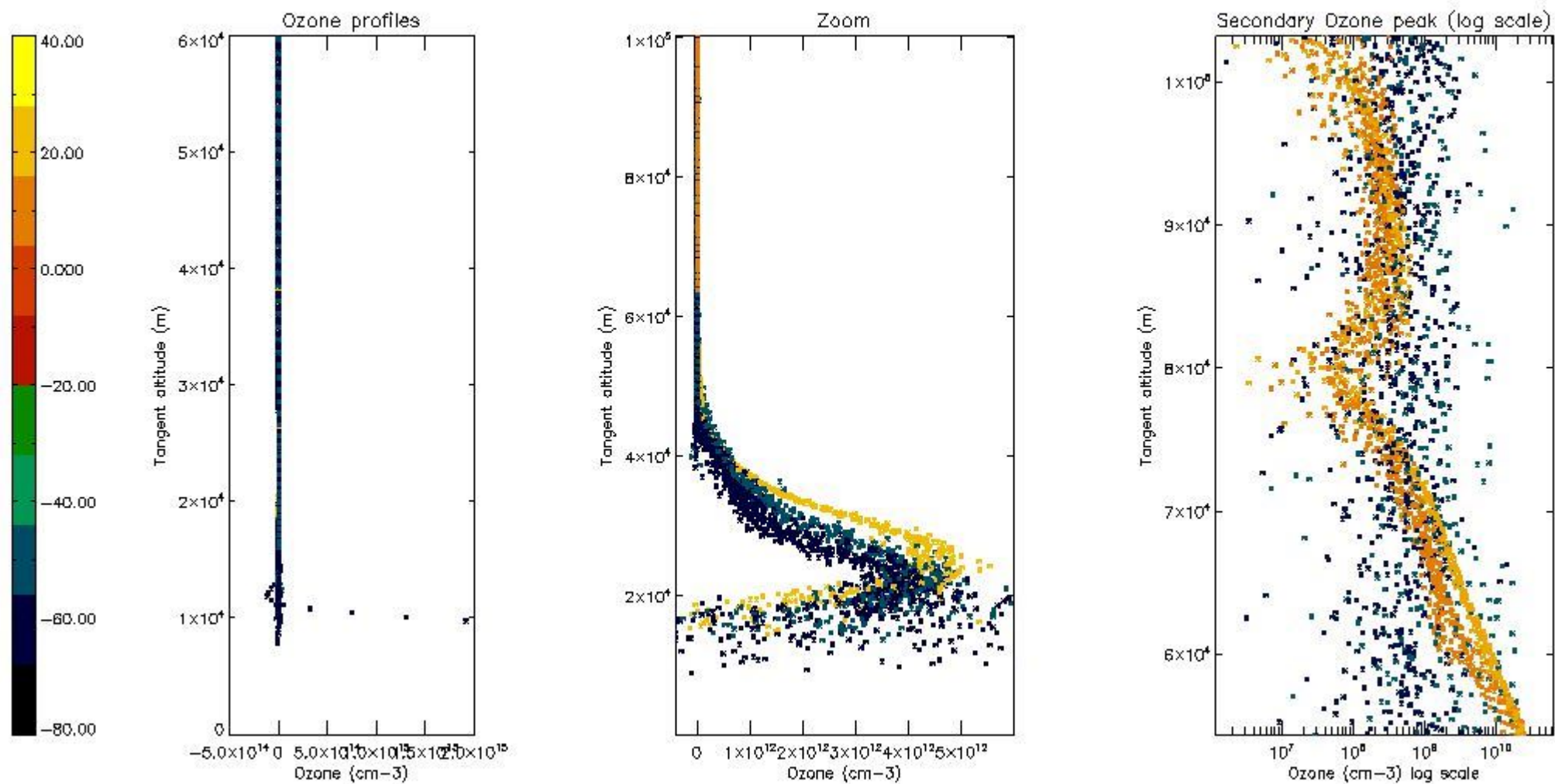
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	7

STD < 10	4
STD < 5	2

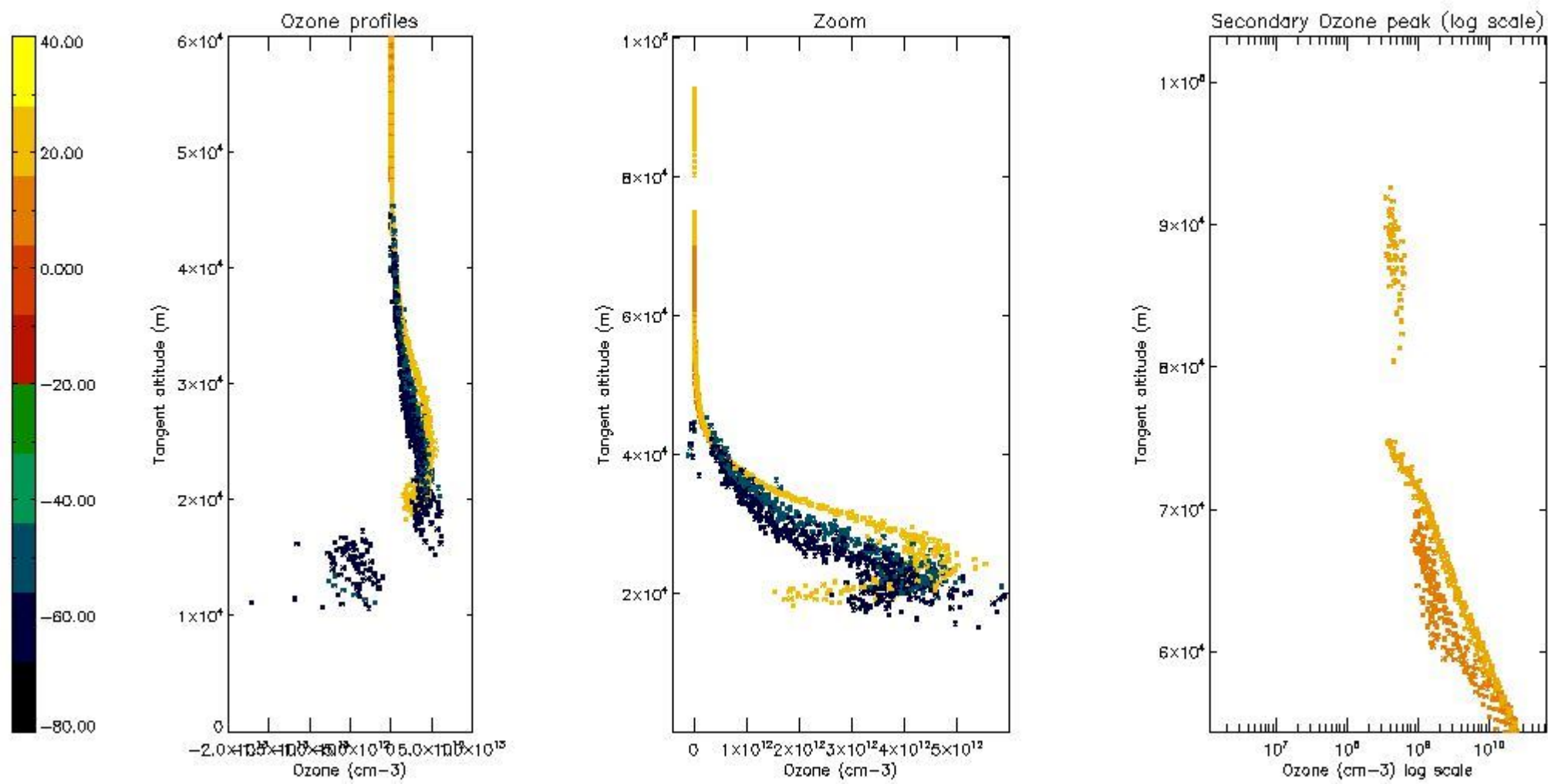
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



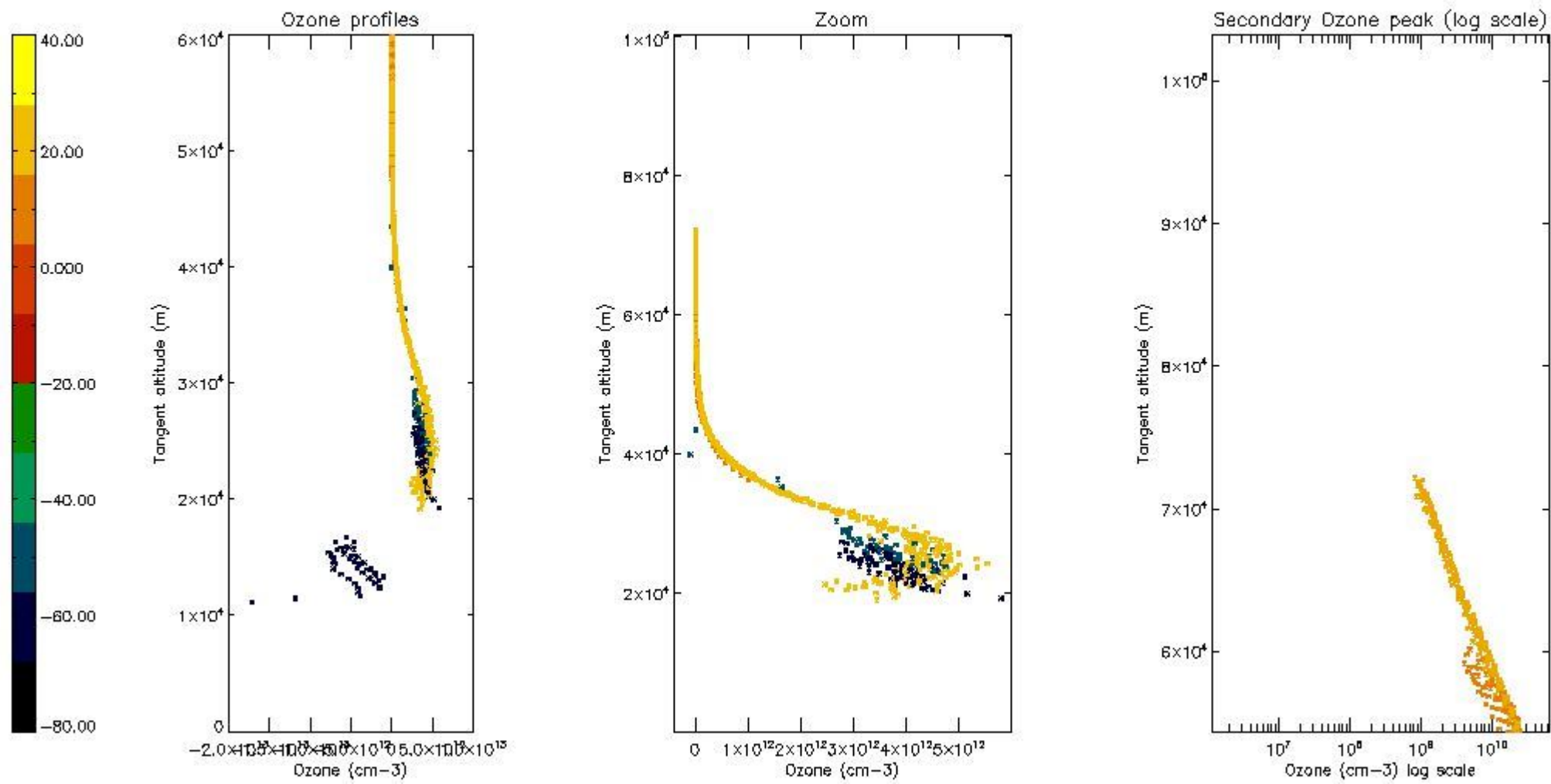
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



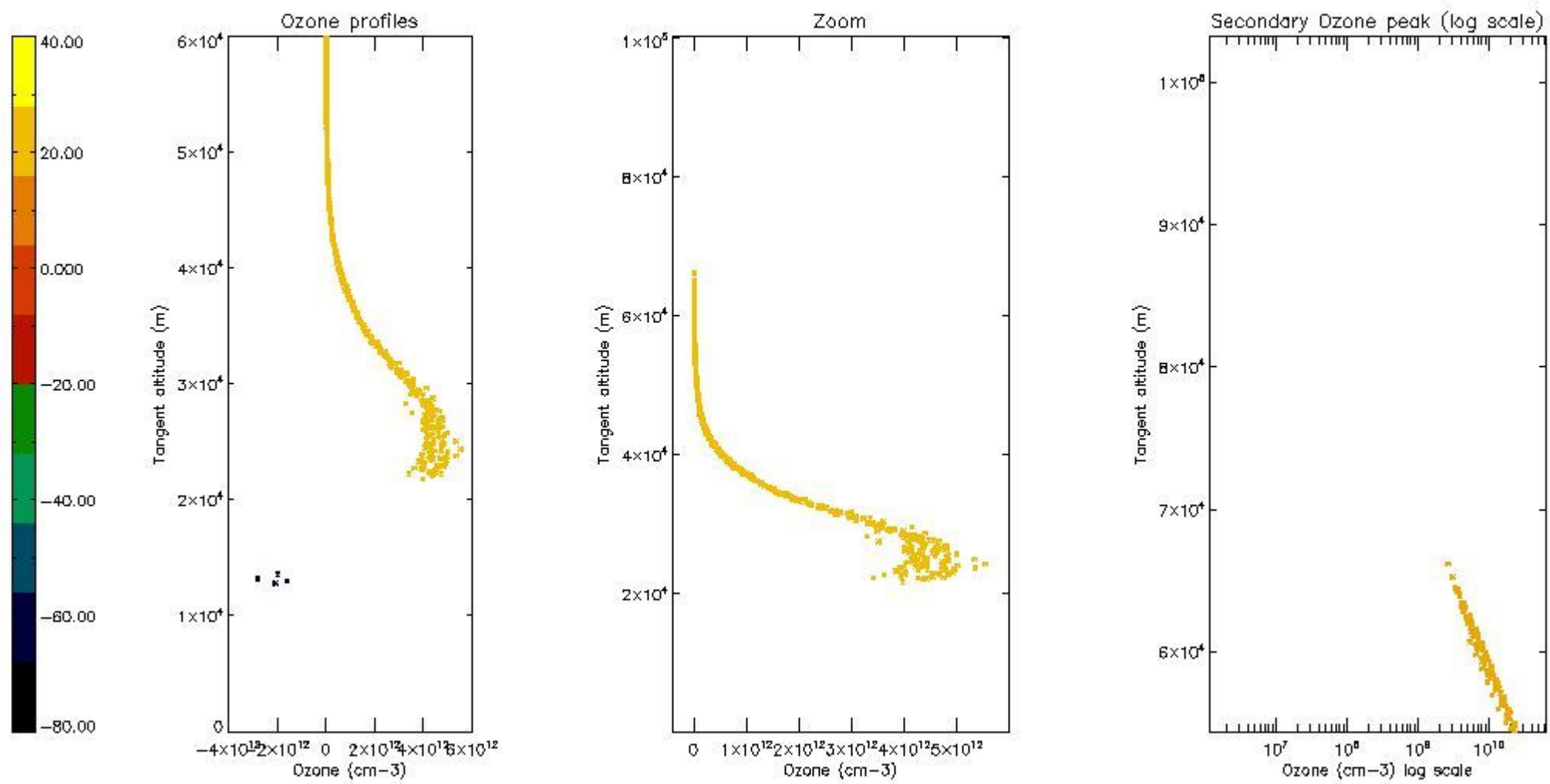
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



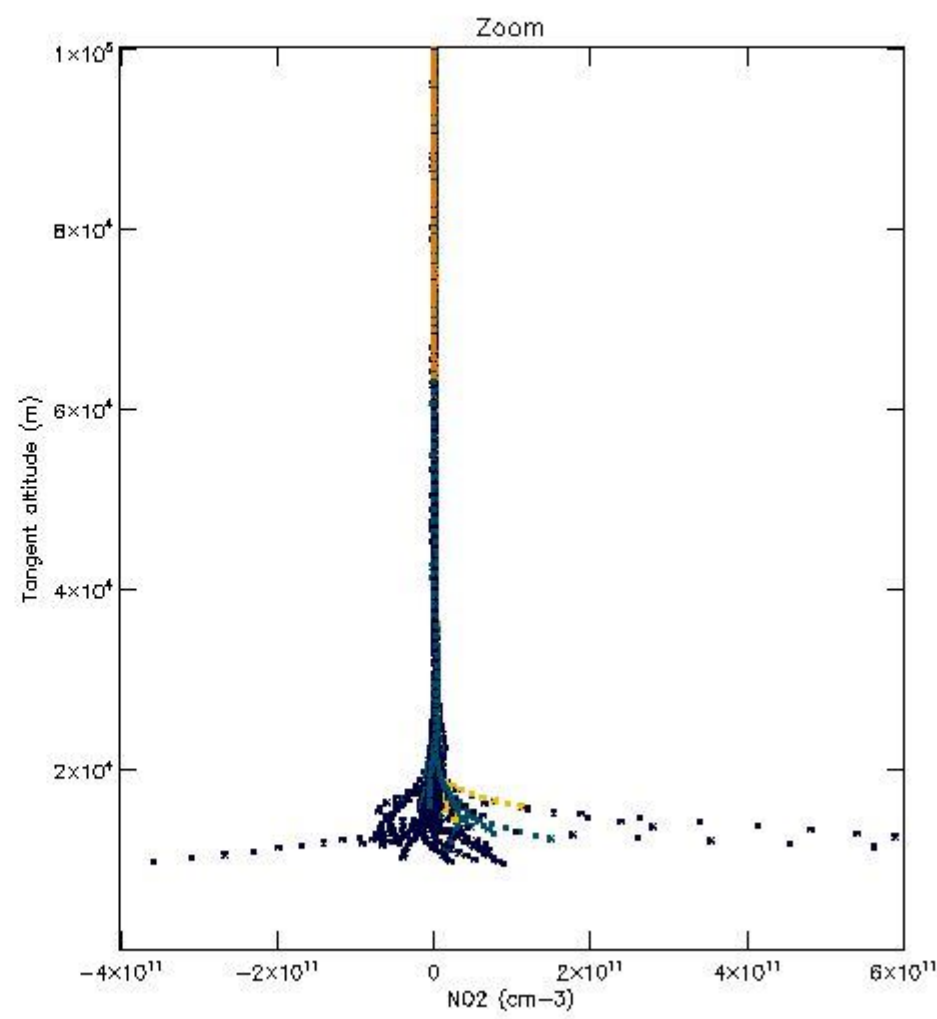
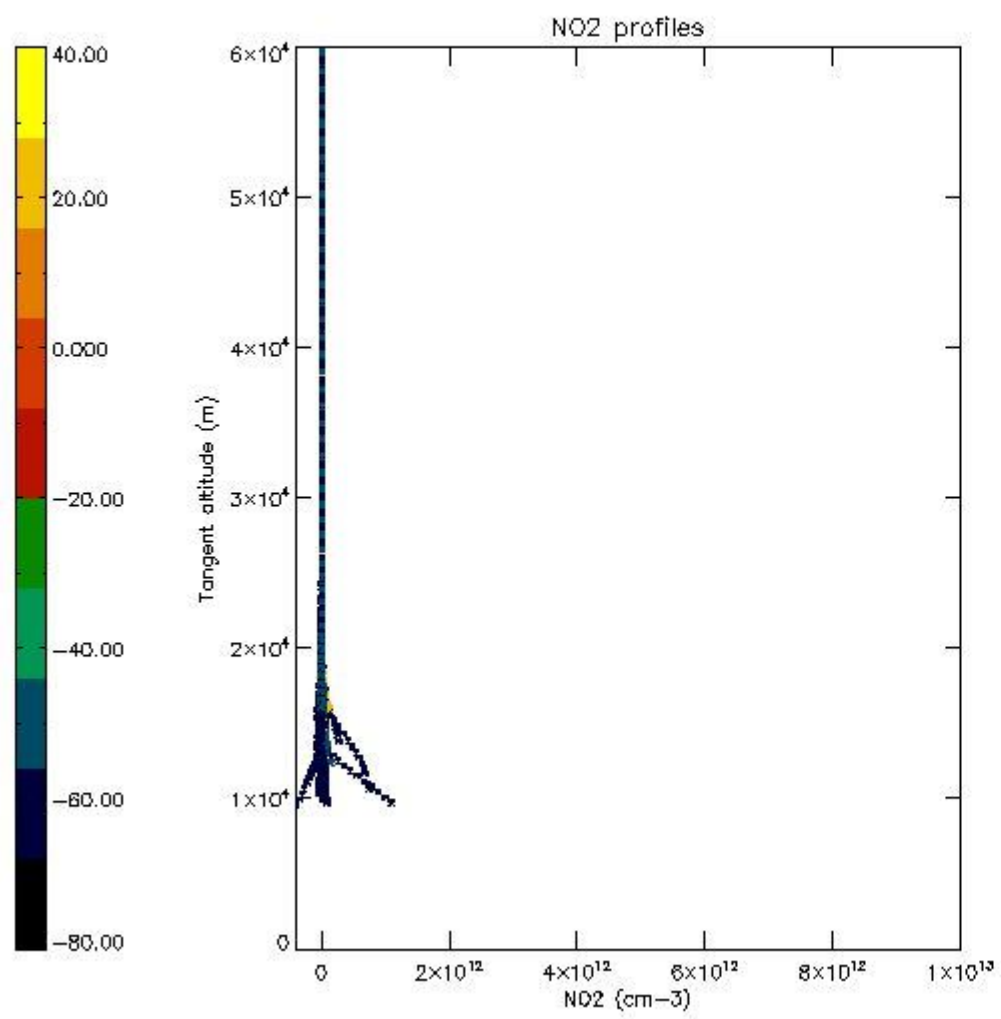
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



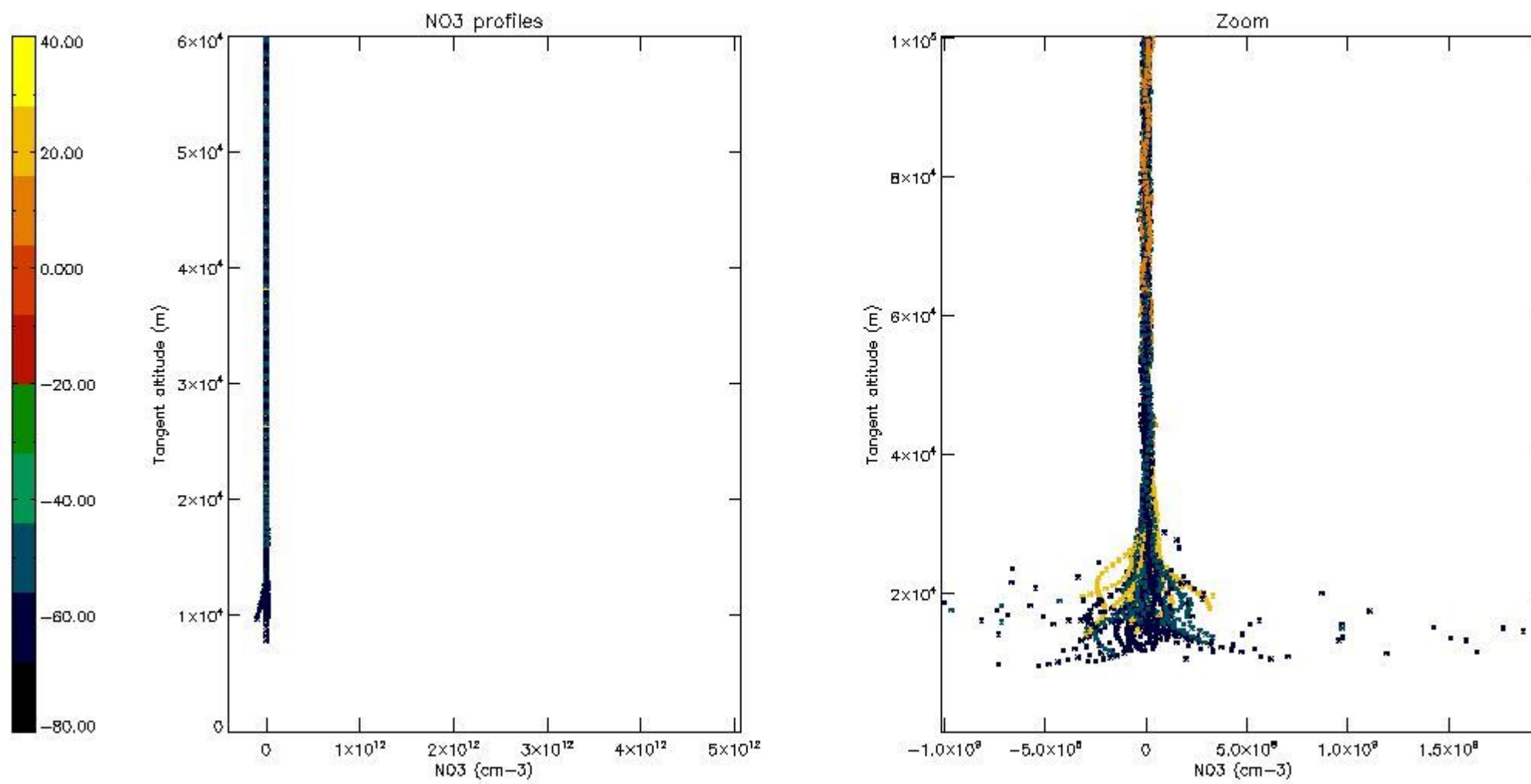
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	24-APR-2011 00:01:27
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	24-APR-2011 00:01:27
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	24-APR-2011 00:01:27

GOMOS Level 2 Daily Report

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[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](#)

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

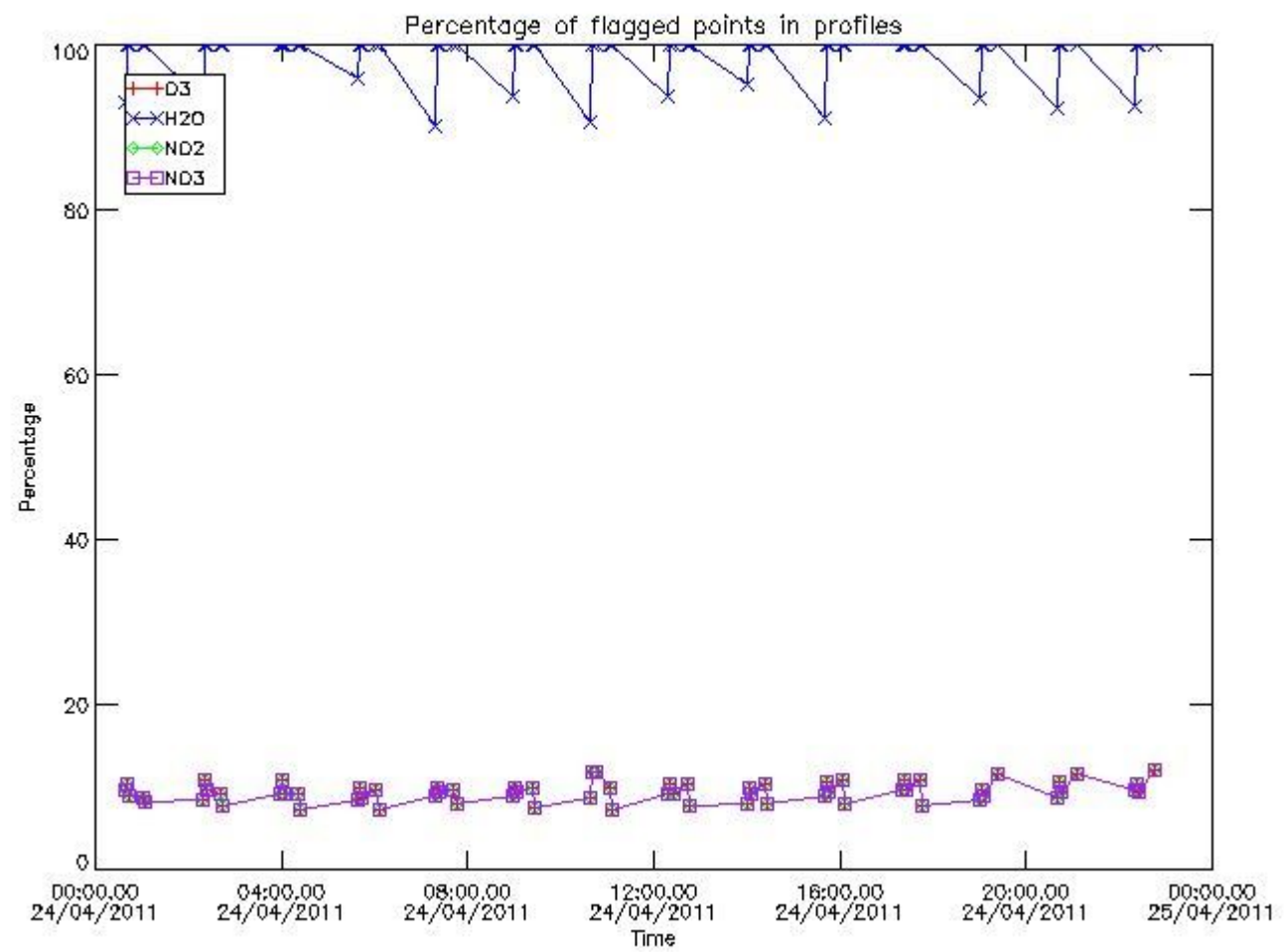
[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[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](#)

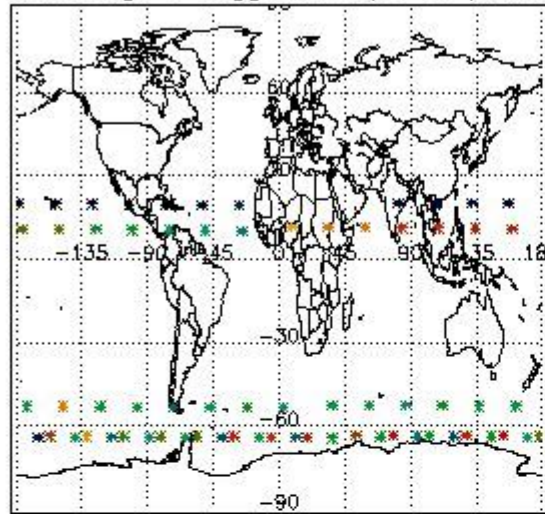
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3.1 Plot quality information per product (time dependant)

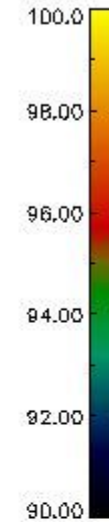
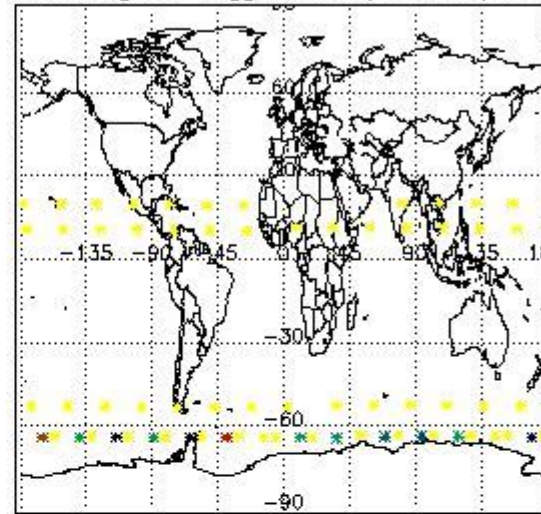


3.2 Plot quality information per product (world map)

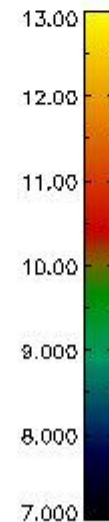
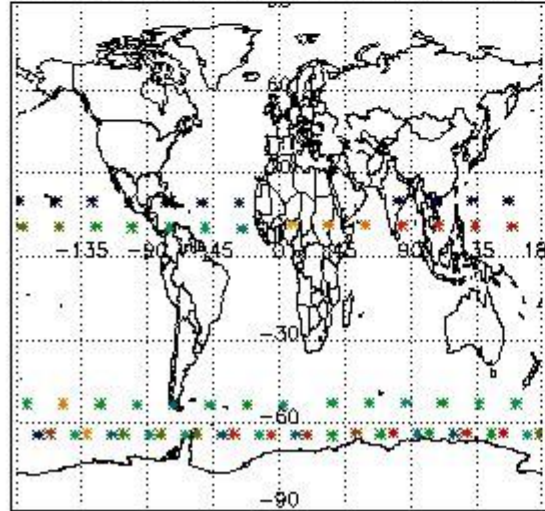
Percentage of flagged data per O3 profile



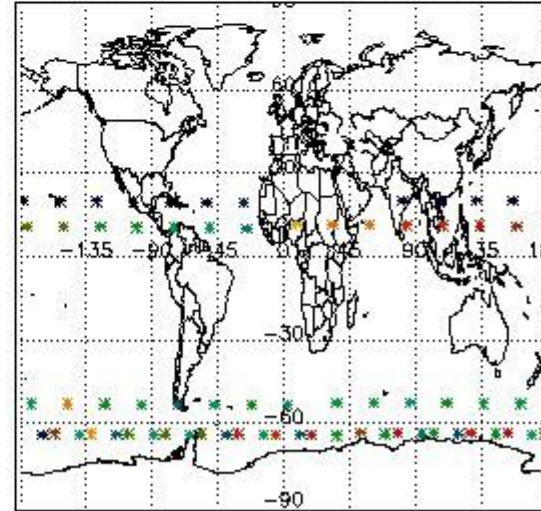
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

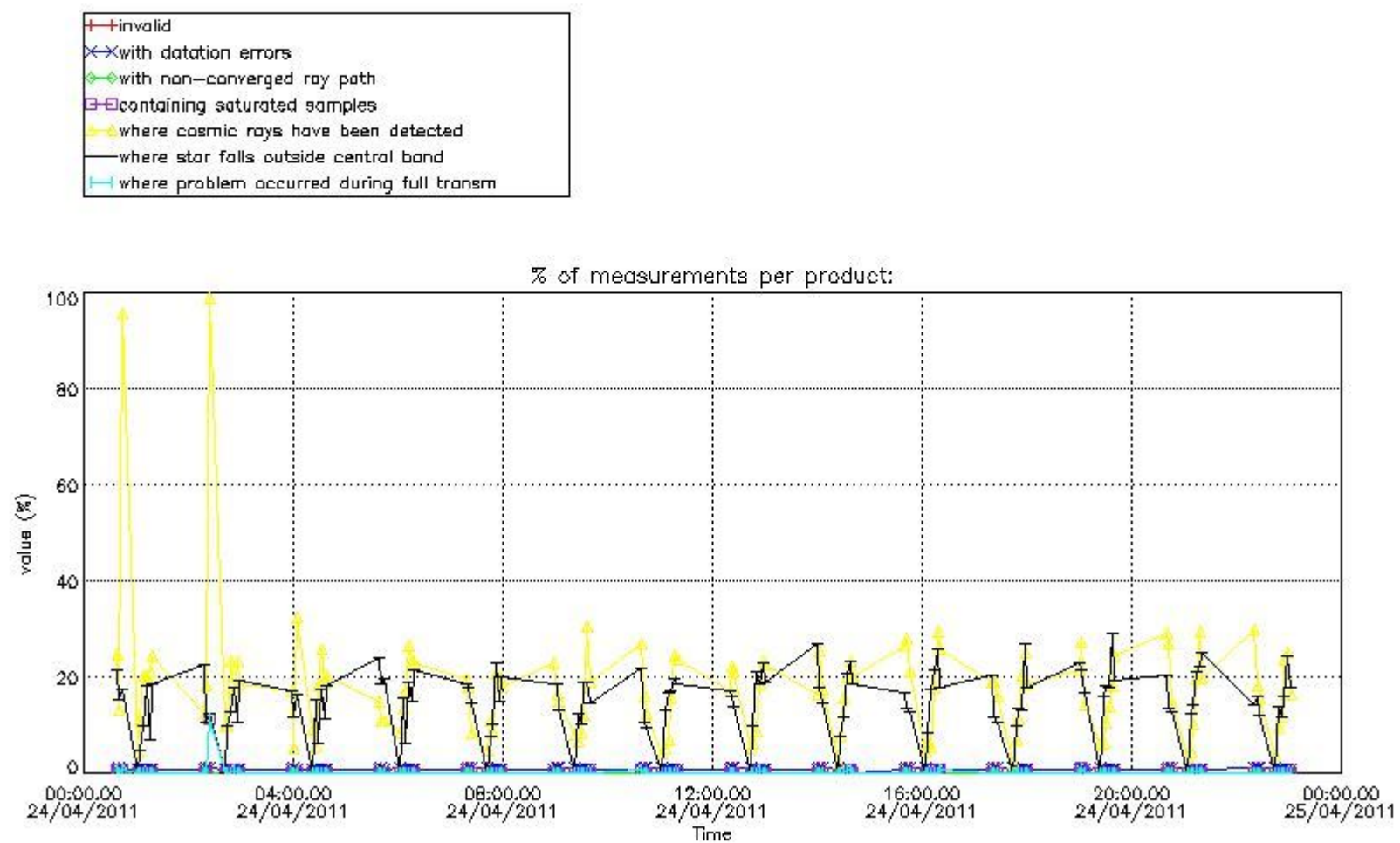


4. Level 1 quality information per product

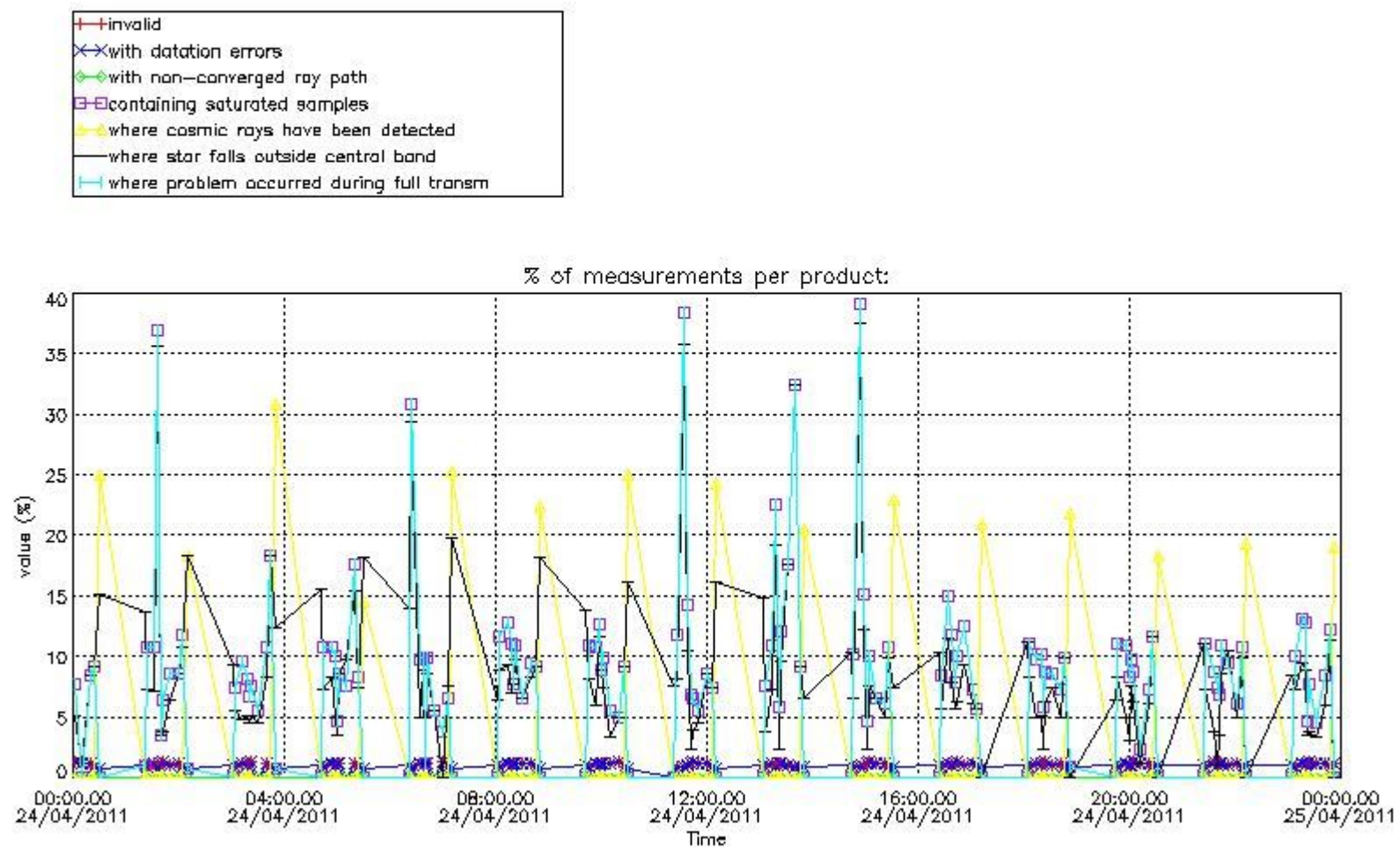
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

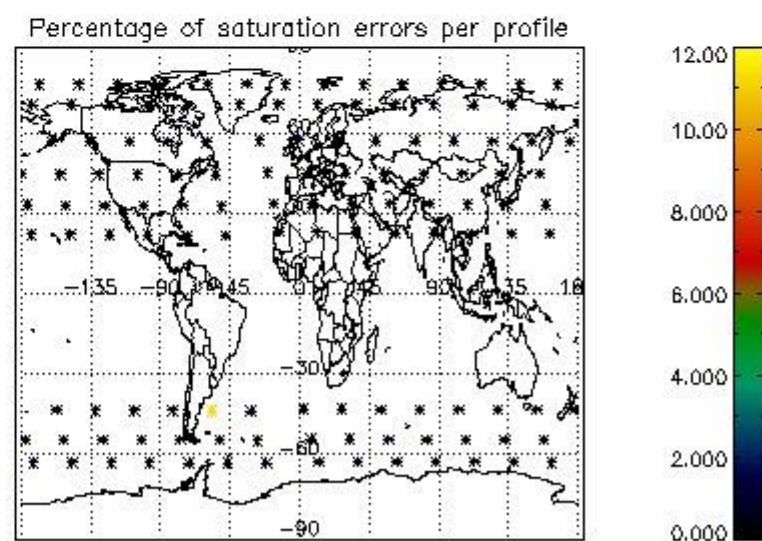
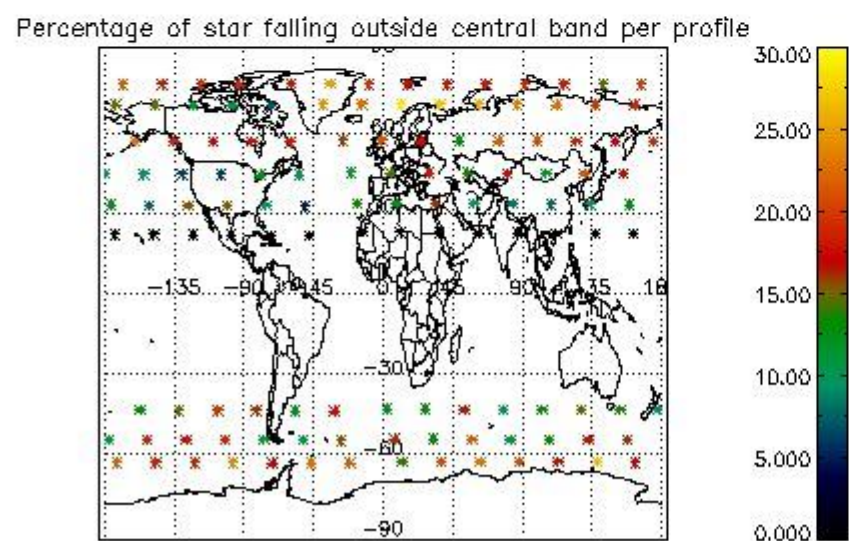
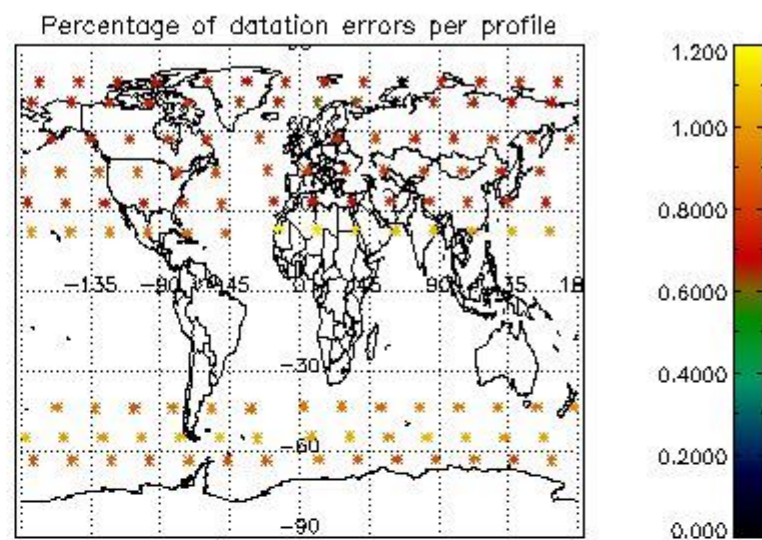
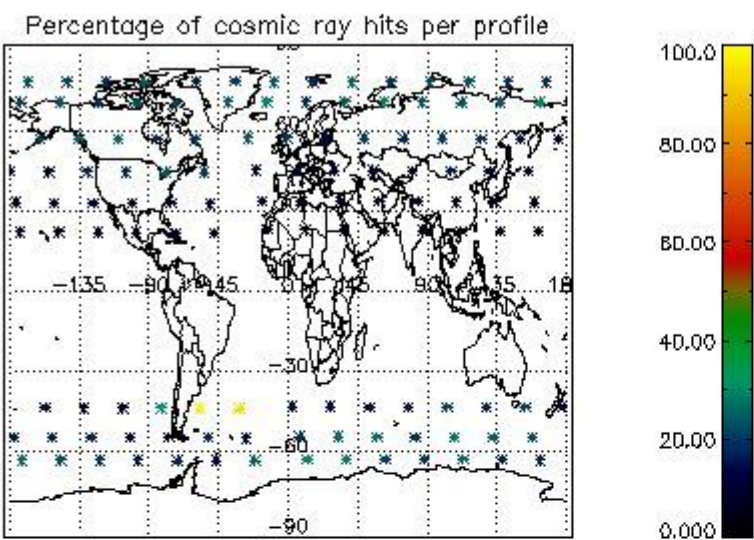


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

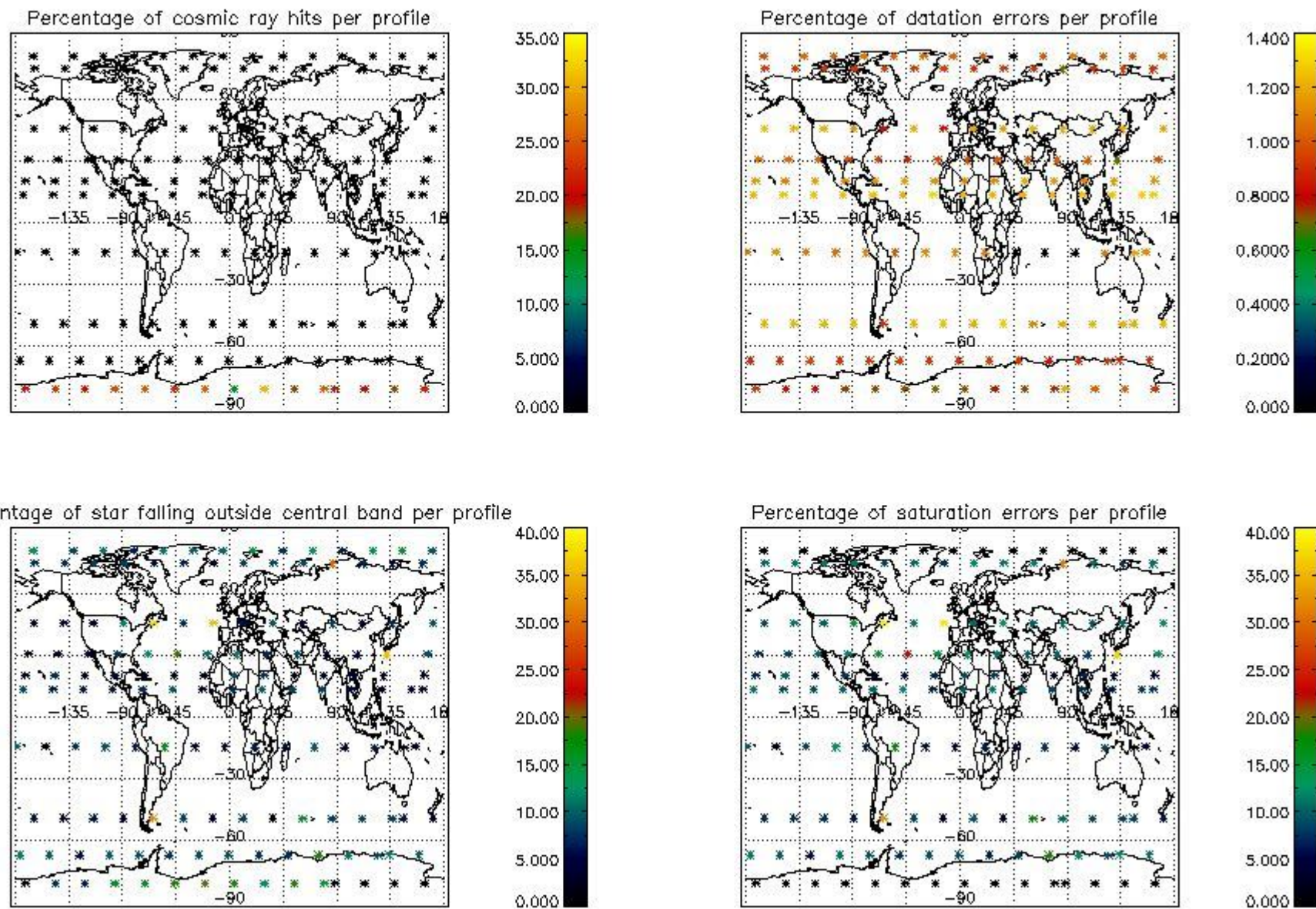


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

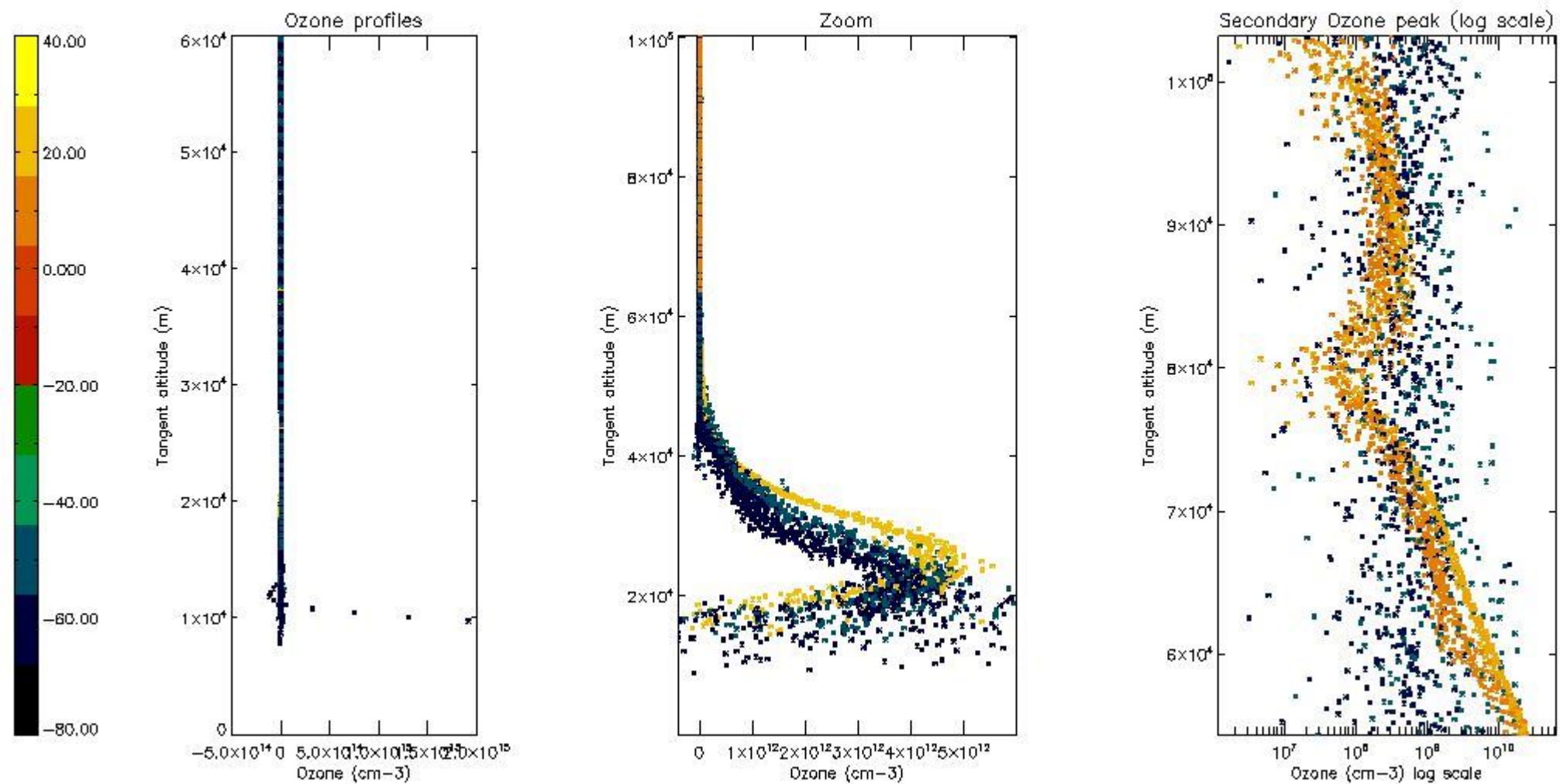
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	7

STD < 10	4
STD < 5	2

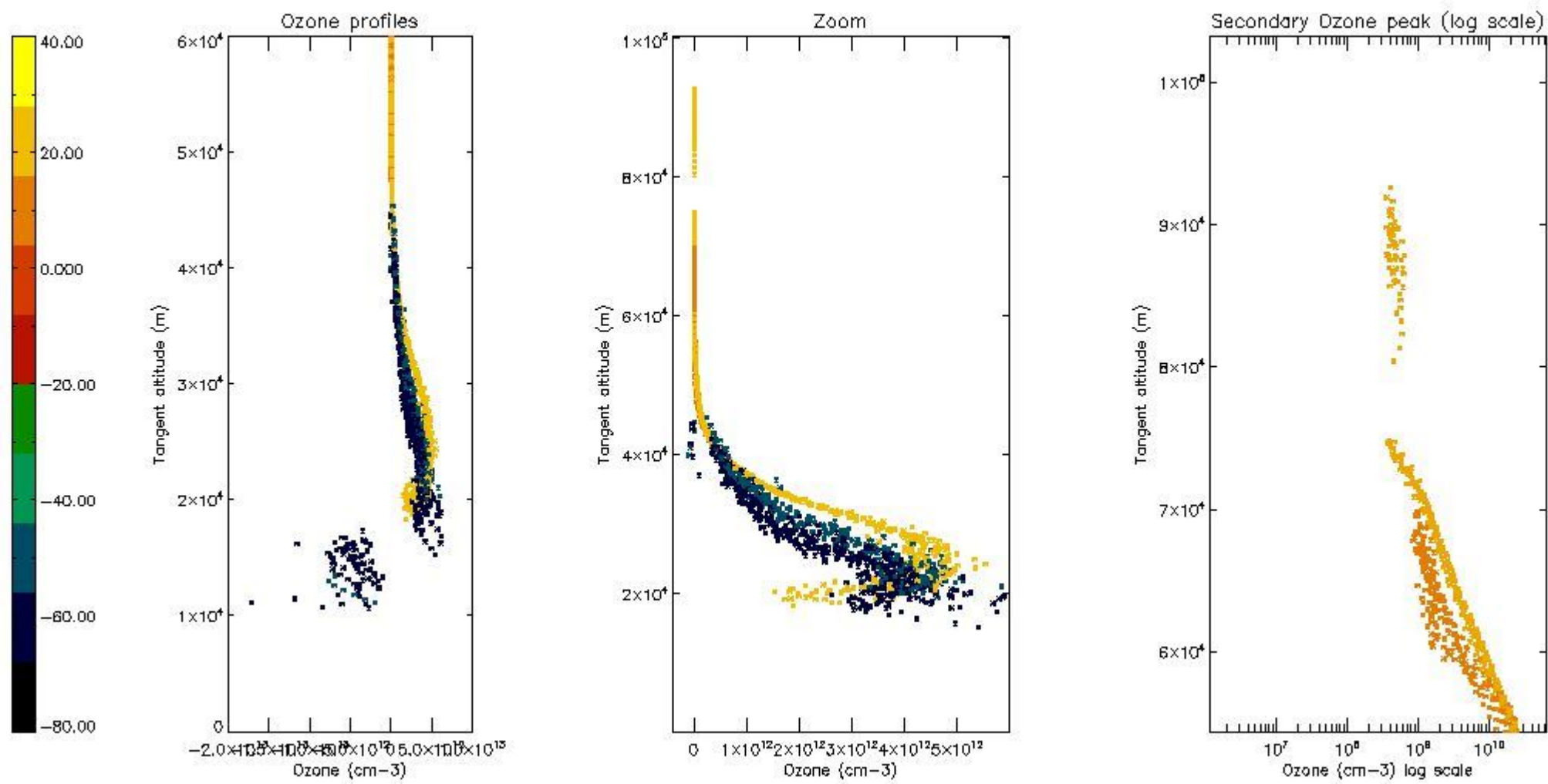
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



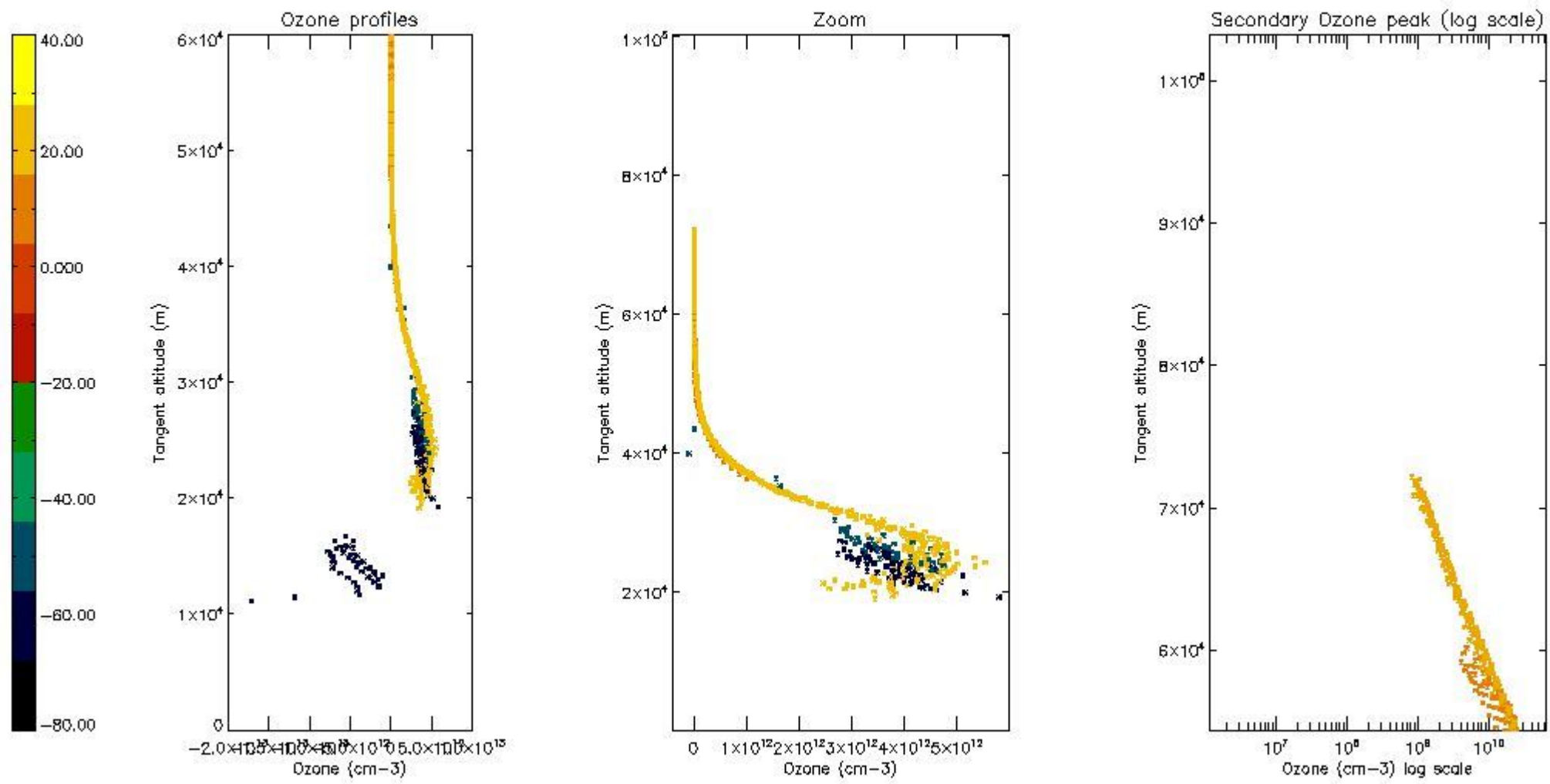
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



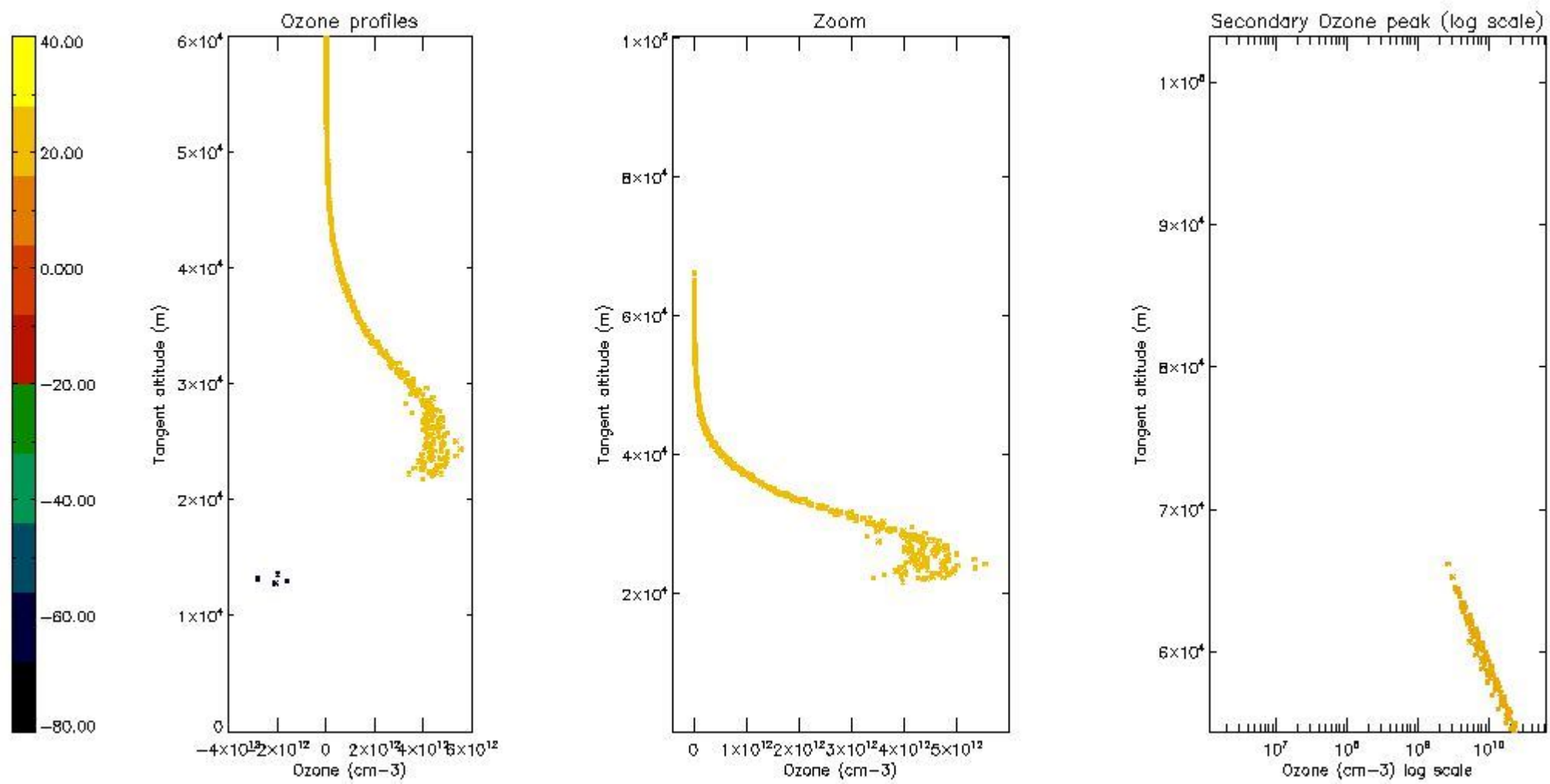
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



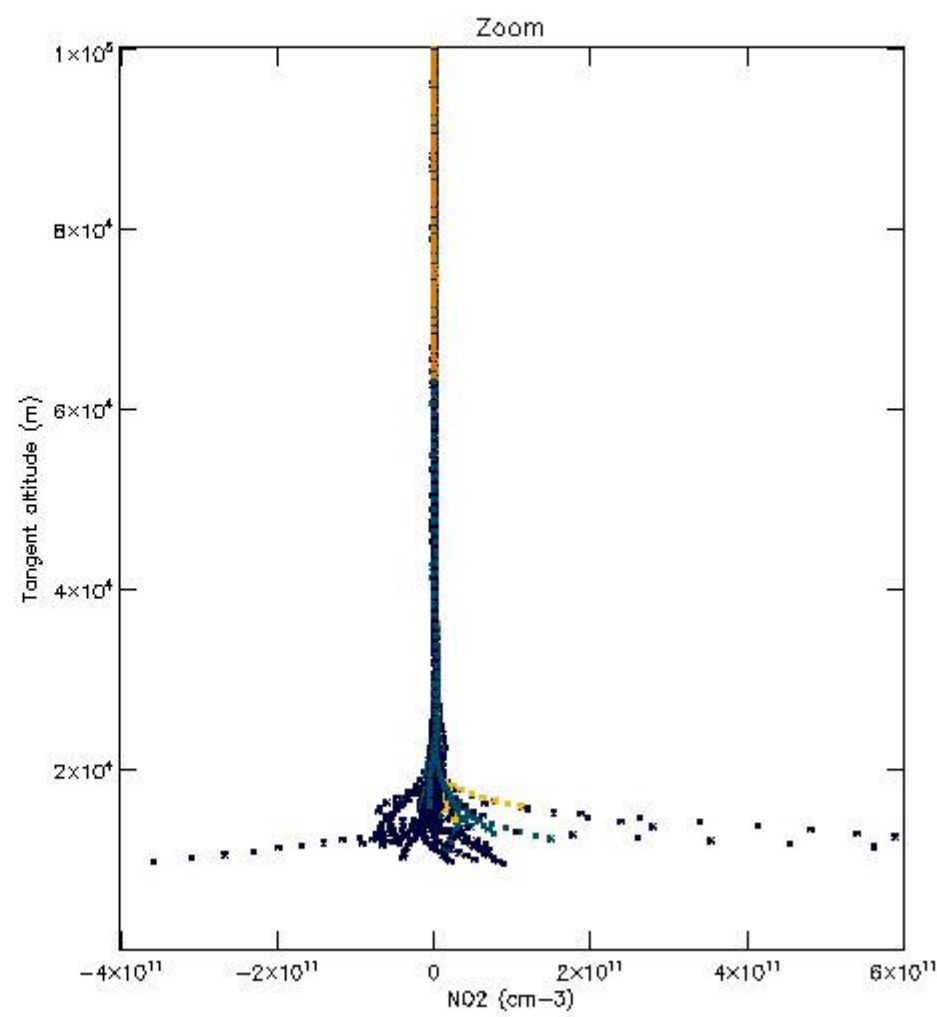
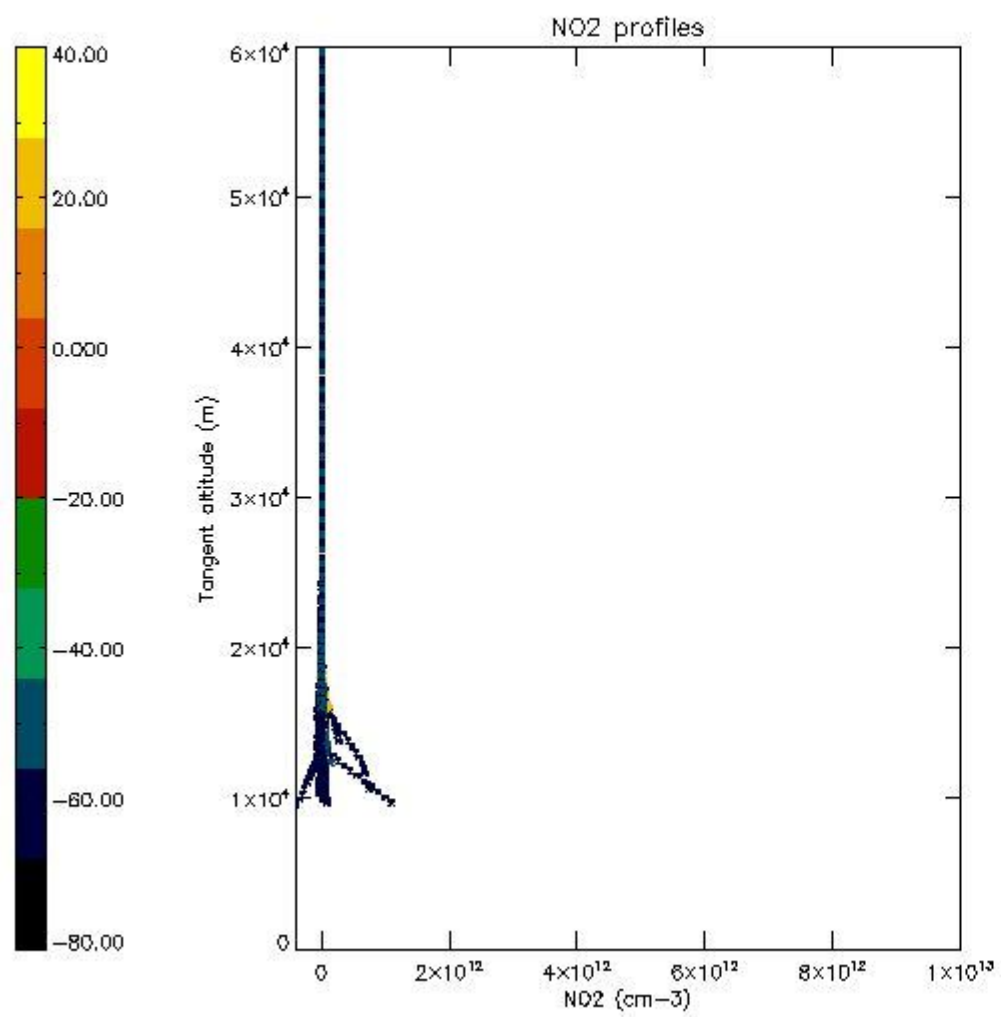
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



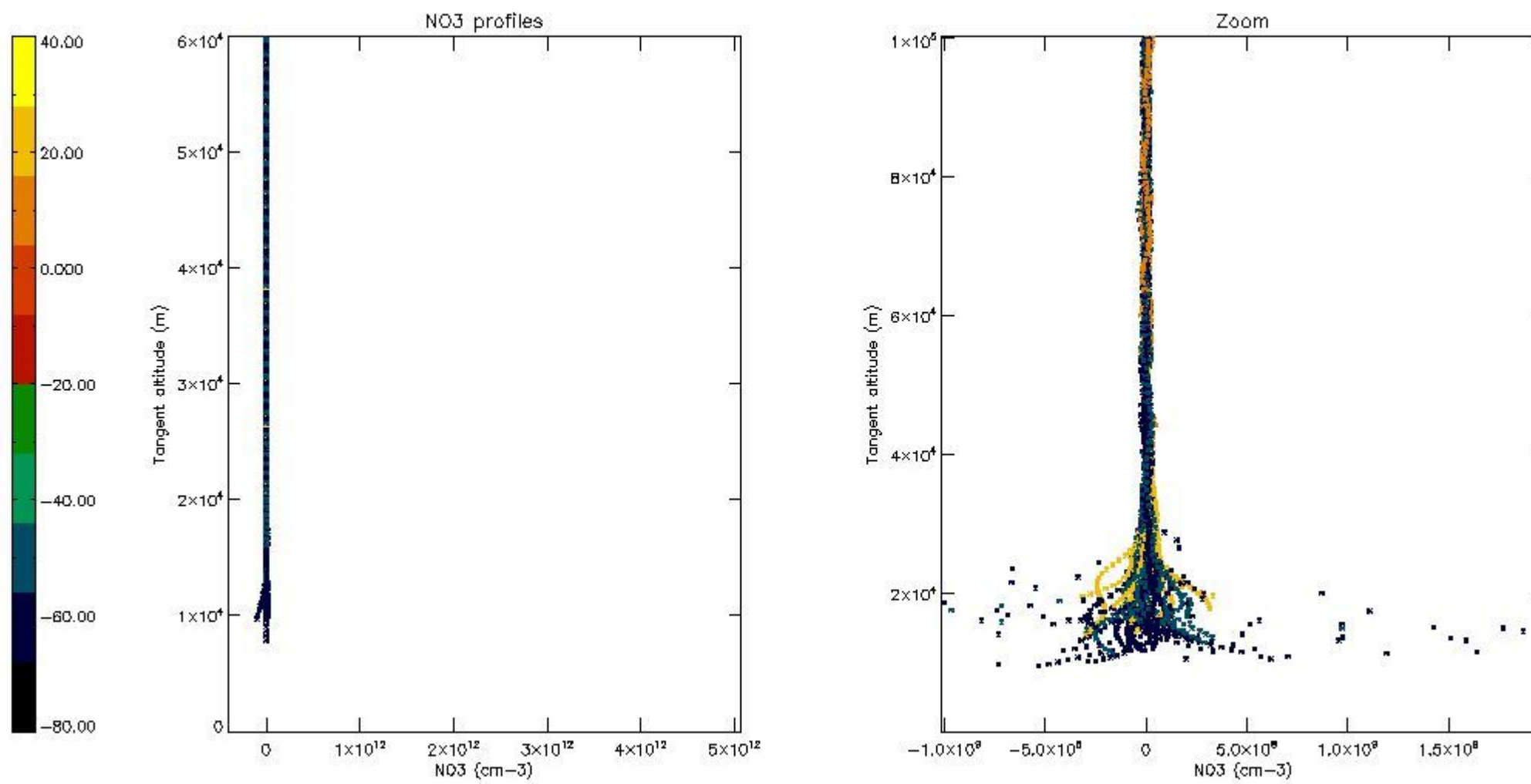
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

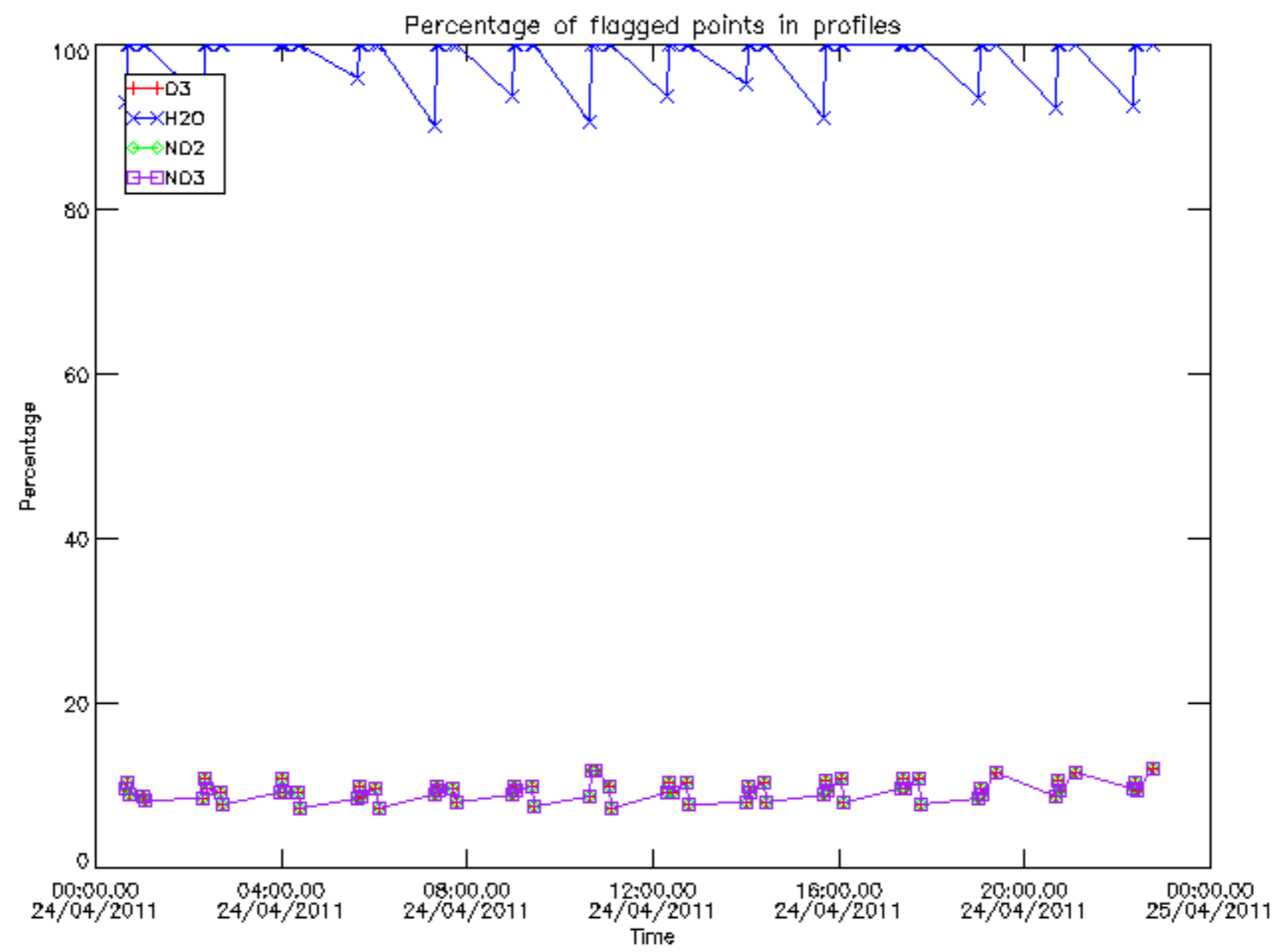
The colorbar represents the latitude.



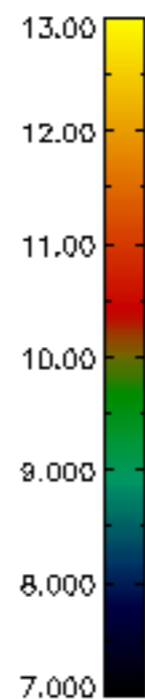
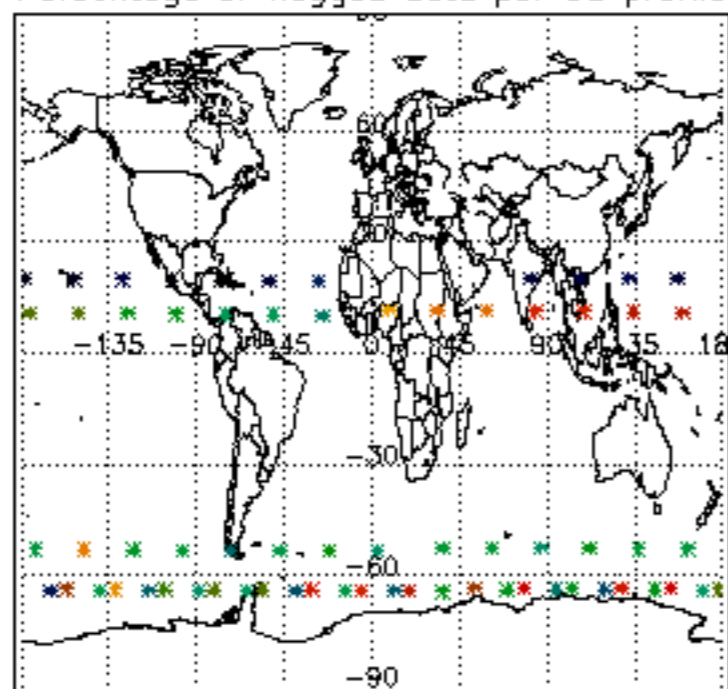
6. Auxiliary Data Files used for the production reported in section 2

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.

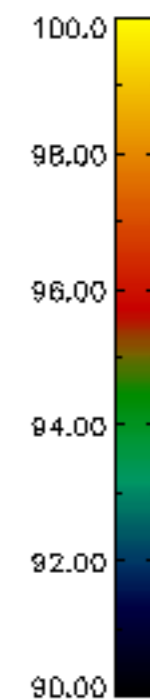
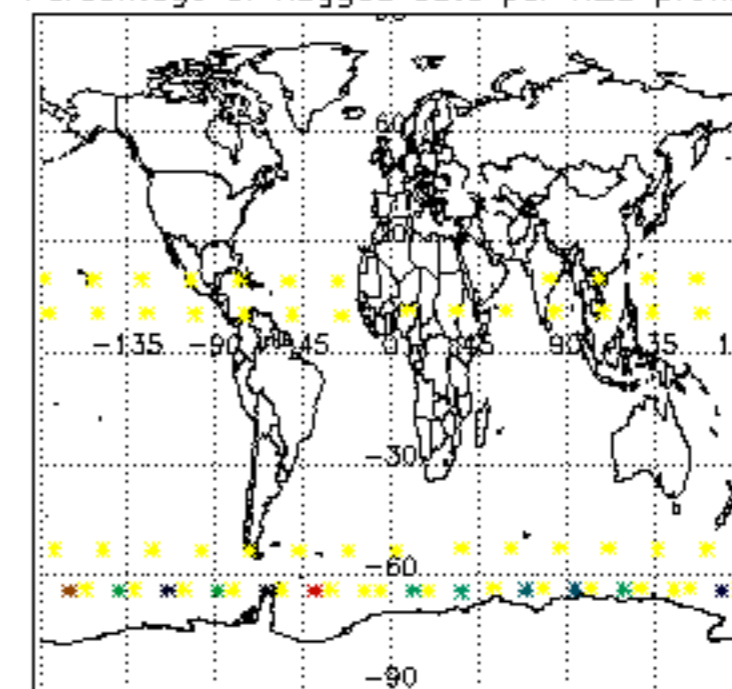
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	24-APR-2011 00:01:27
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	24-APR-2011 00:01:27
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	24-APR-2011 00:01:27



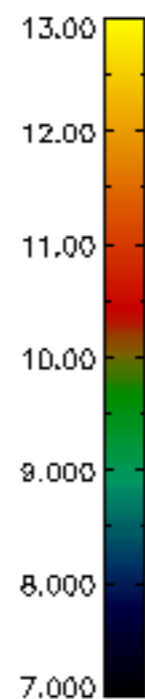
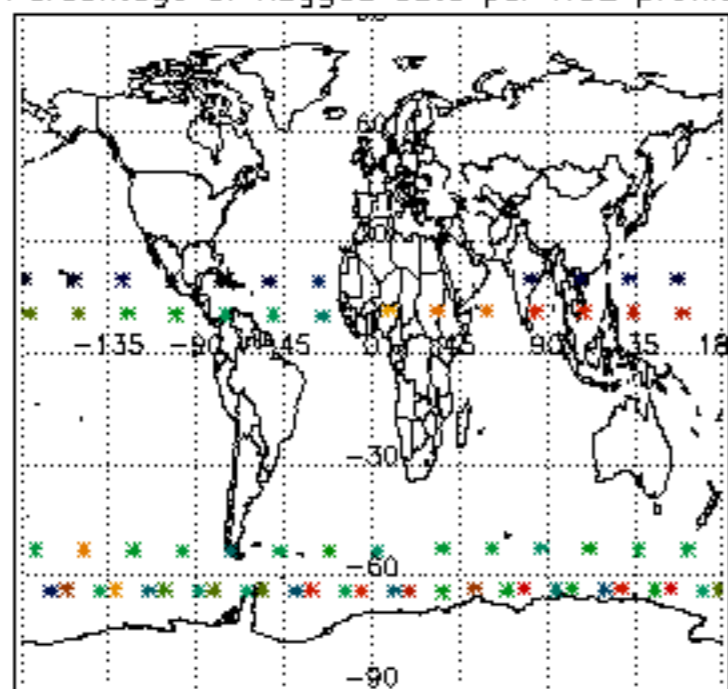
Percentage of flagged data per D3 profile



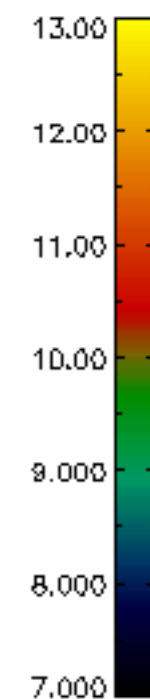
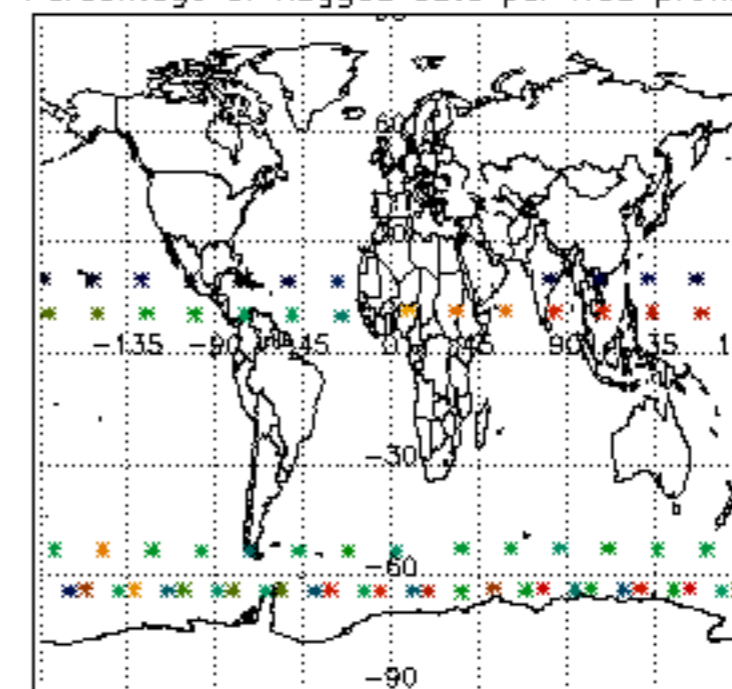
Percentage of flagged data per H2O profile

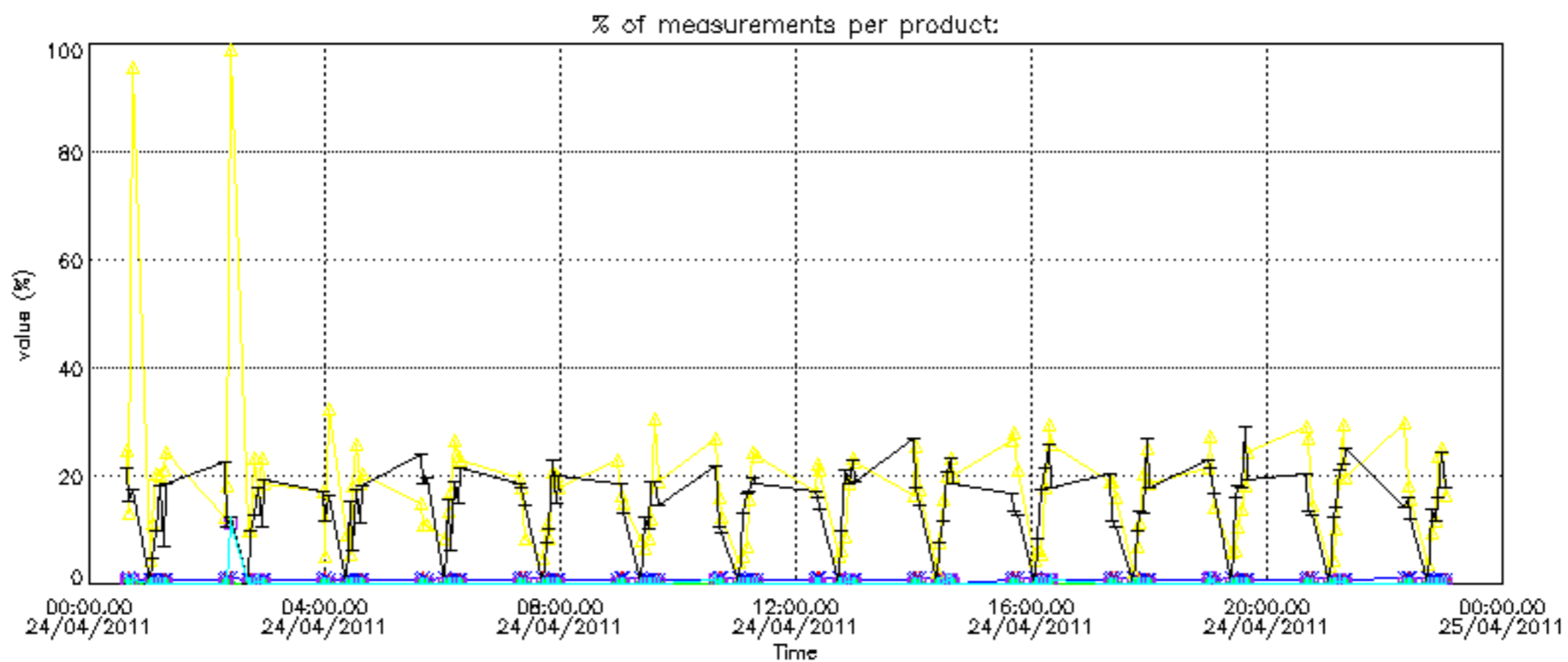


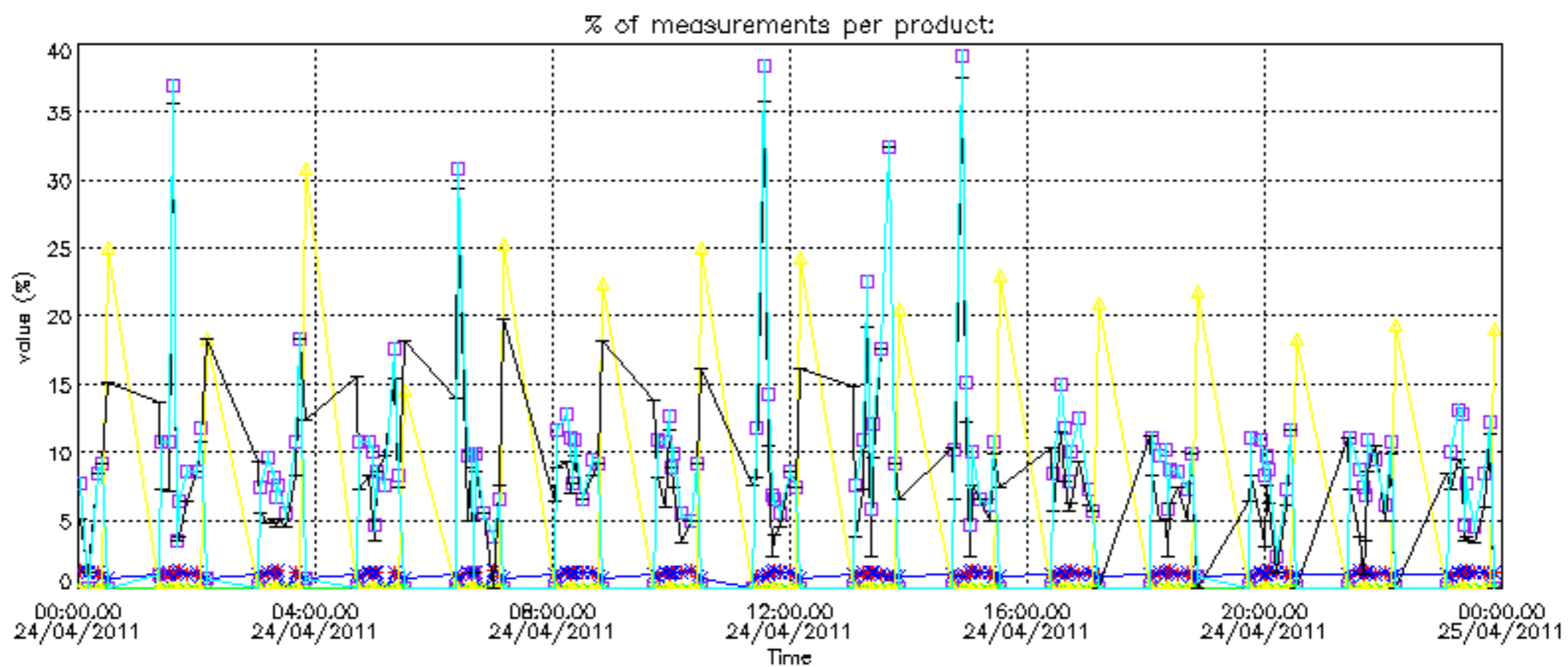
Percentage of flagged data per NO2 profile



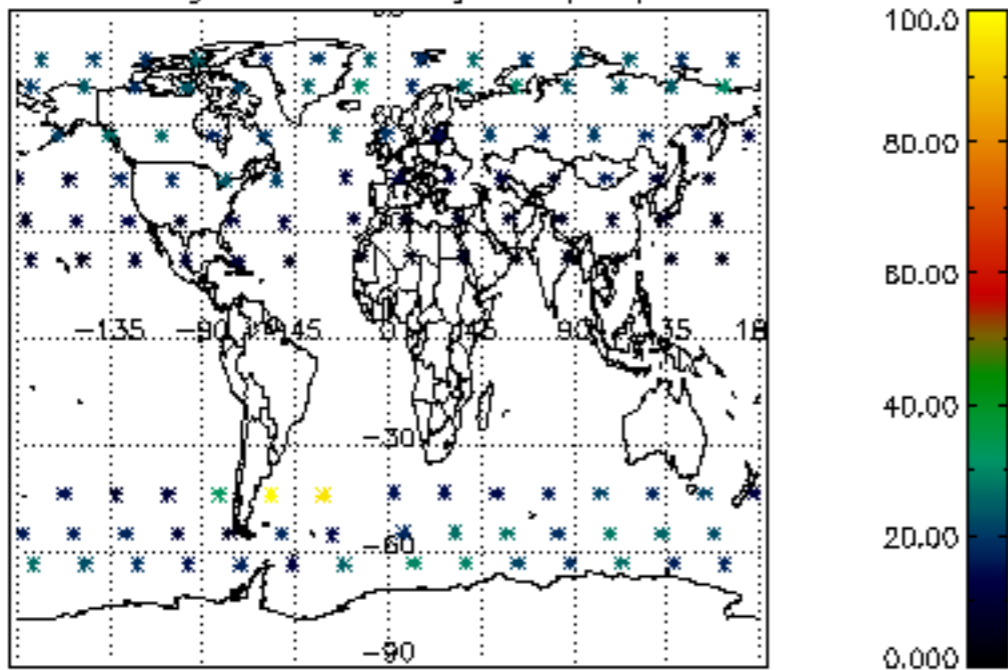
Percentage of flagged data per NO3 profile



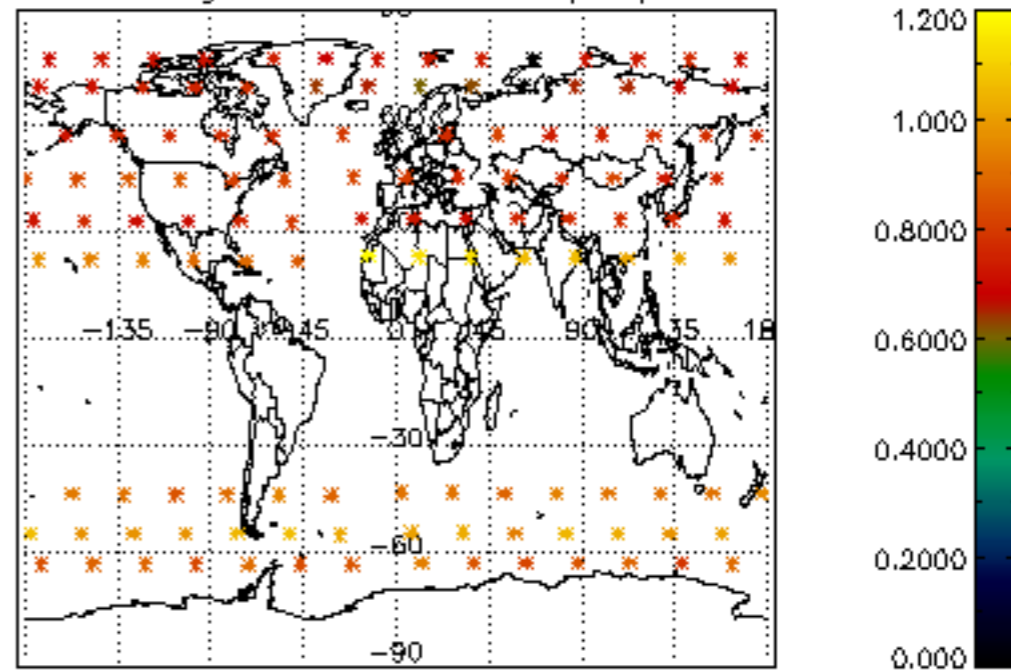




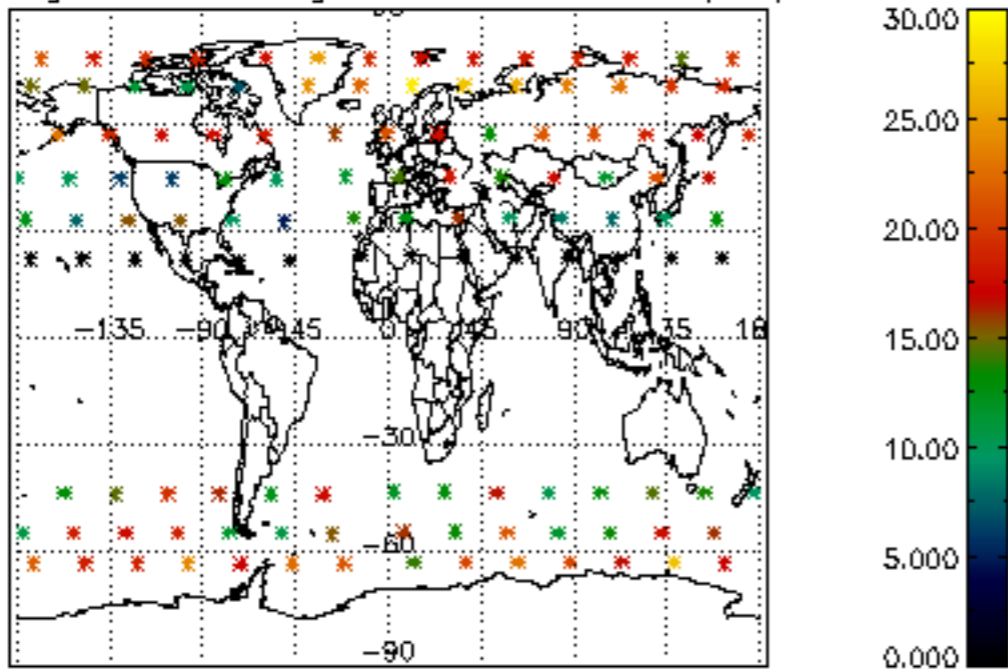
Percentage of cosmic ray hits per profile



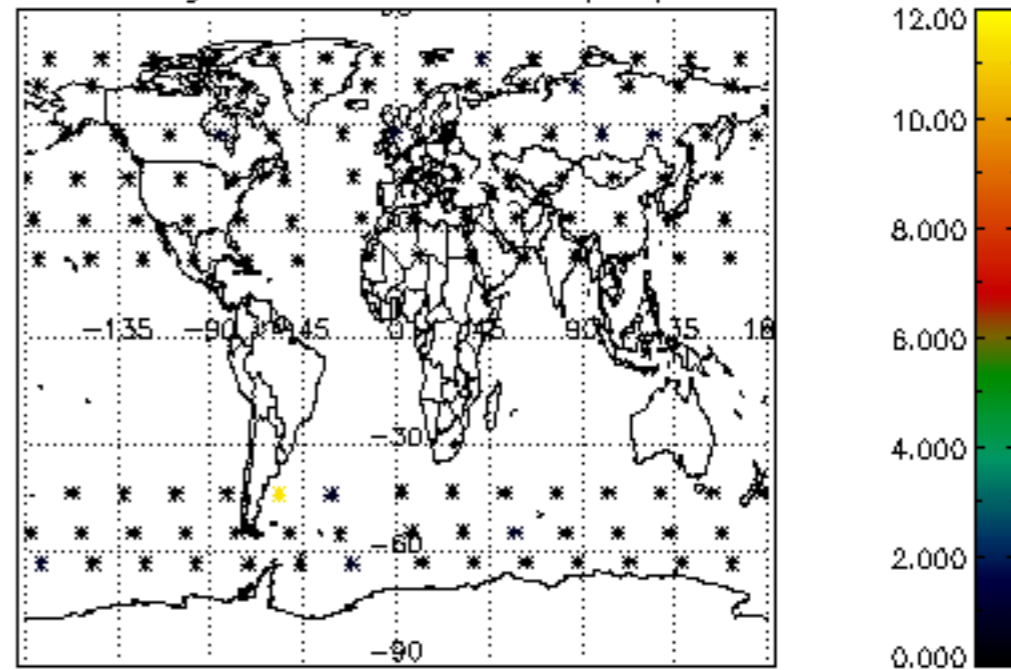
Percentage of datation errors per profile



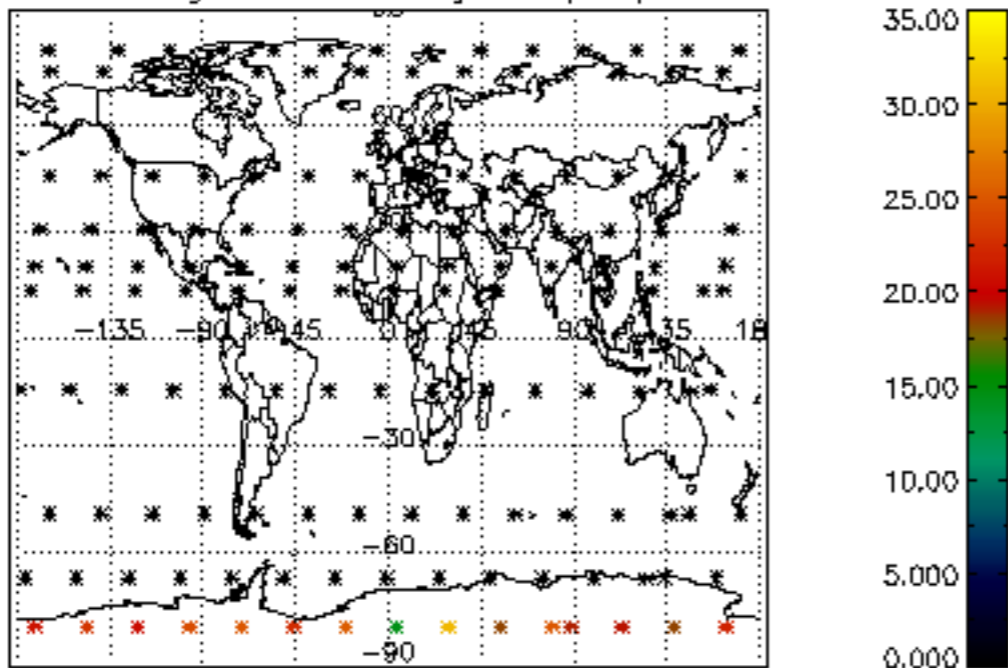
Percentage of star falling outside central band per profile



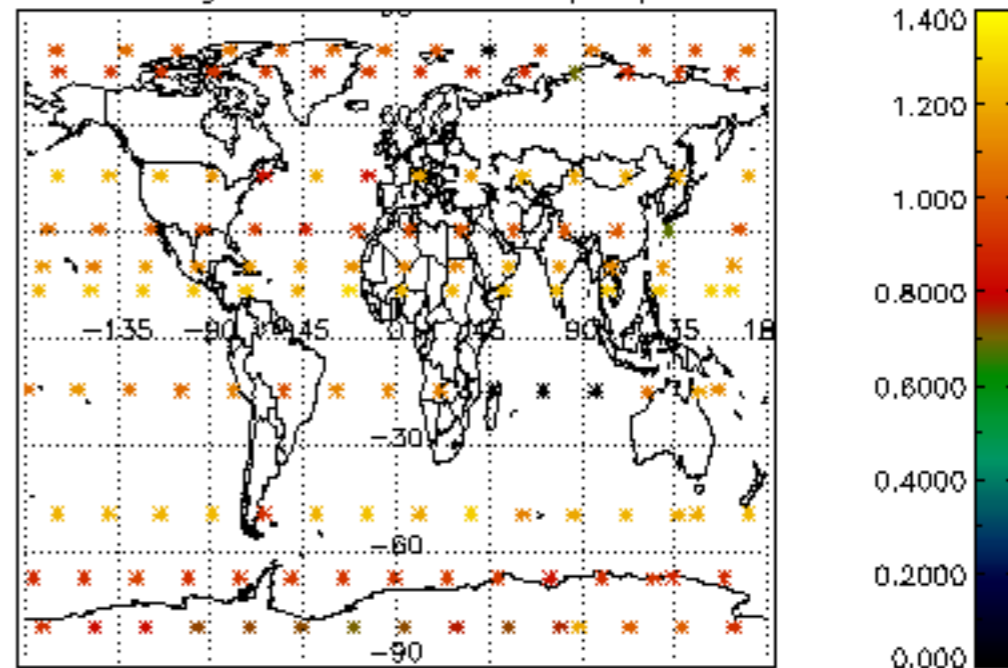
Percentage of saturation errors per profile



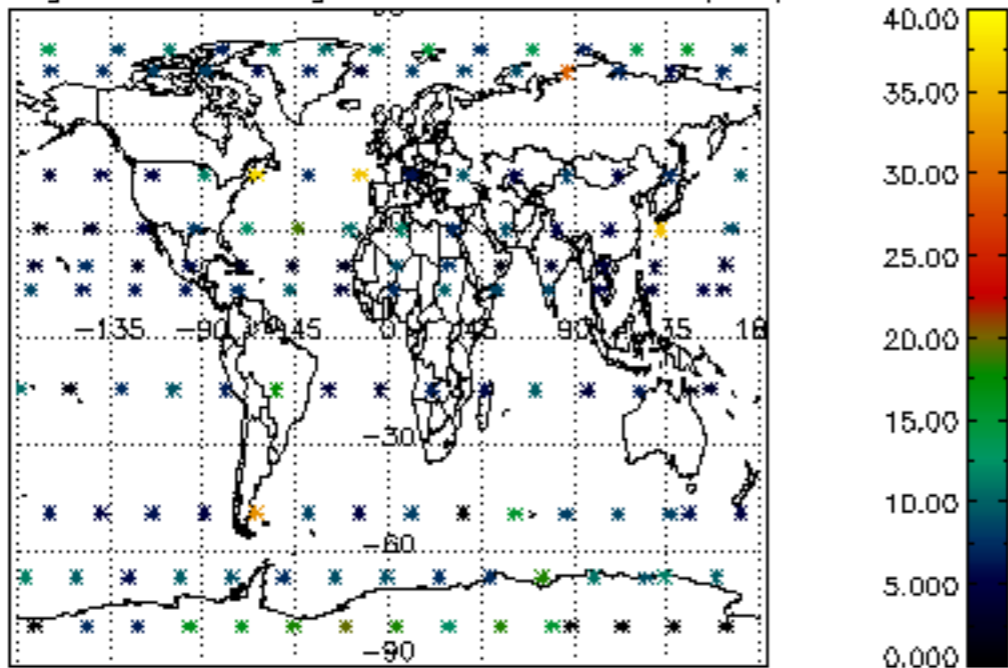
Percentage of cosmic ray hits per profile



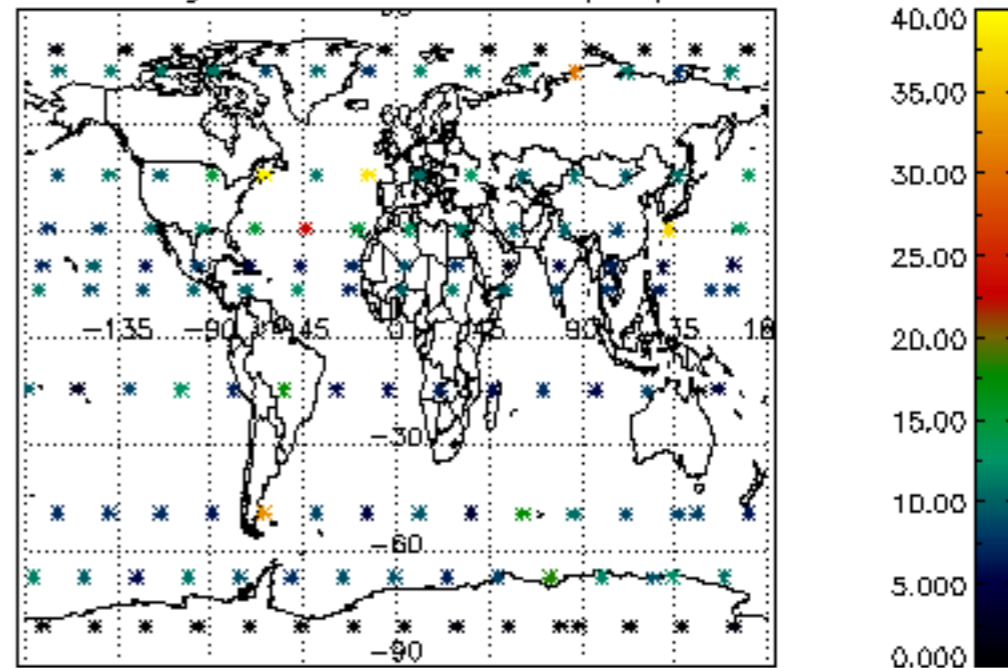
Percentage of datation errors per profile

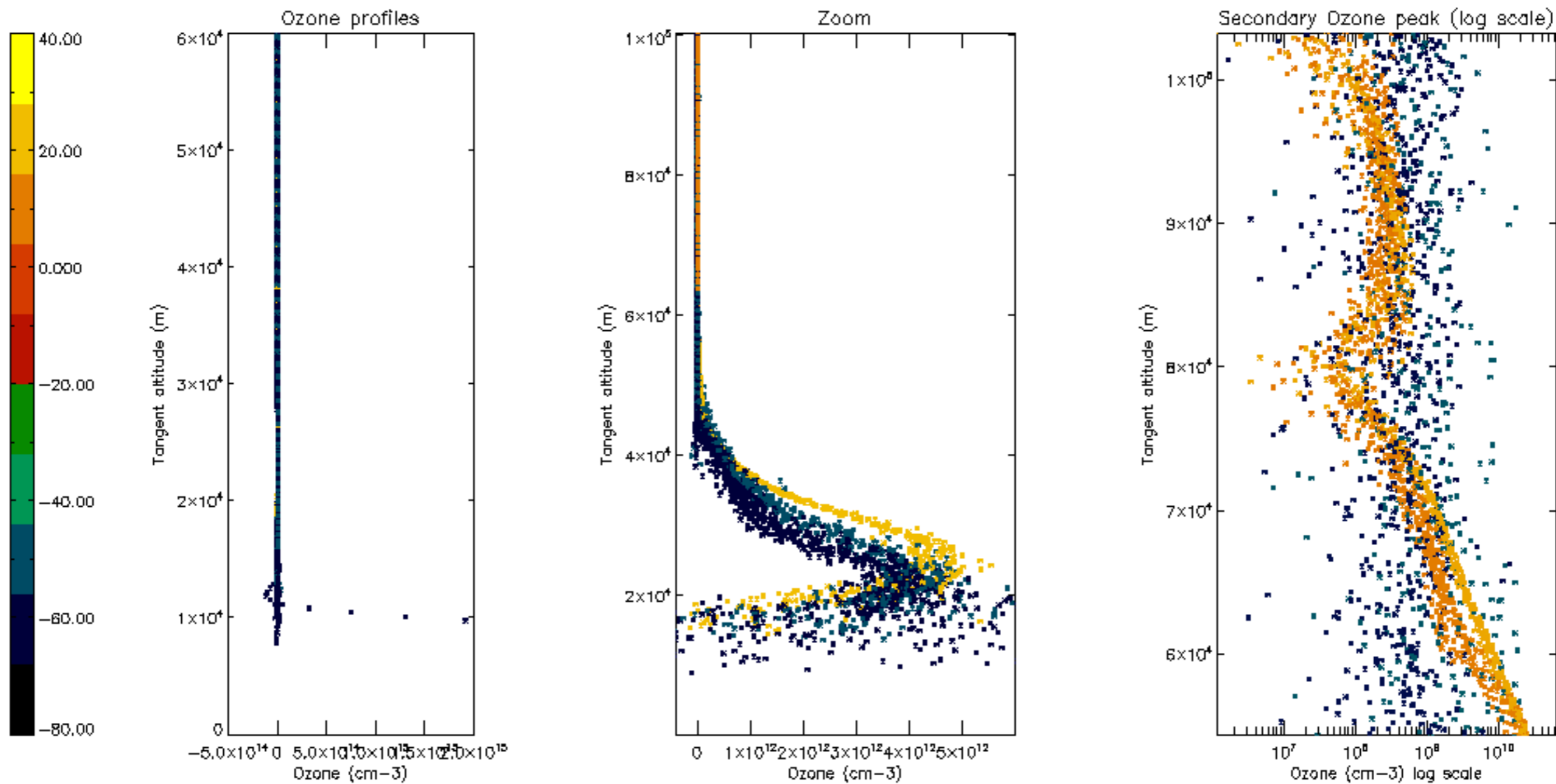


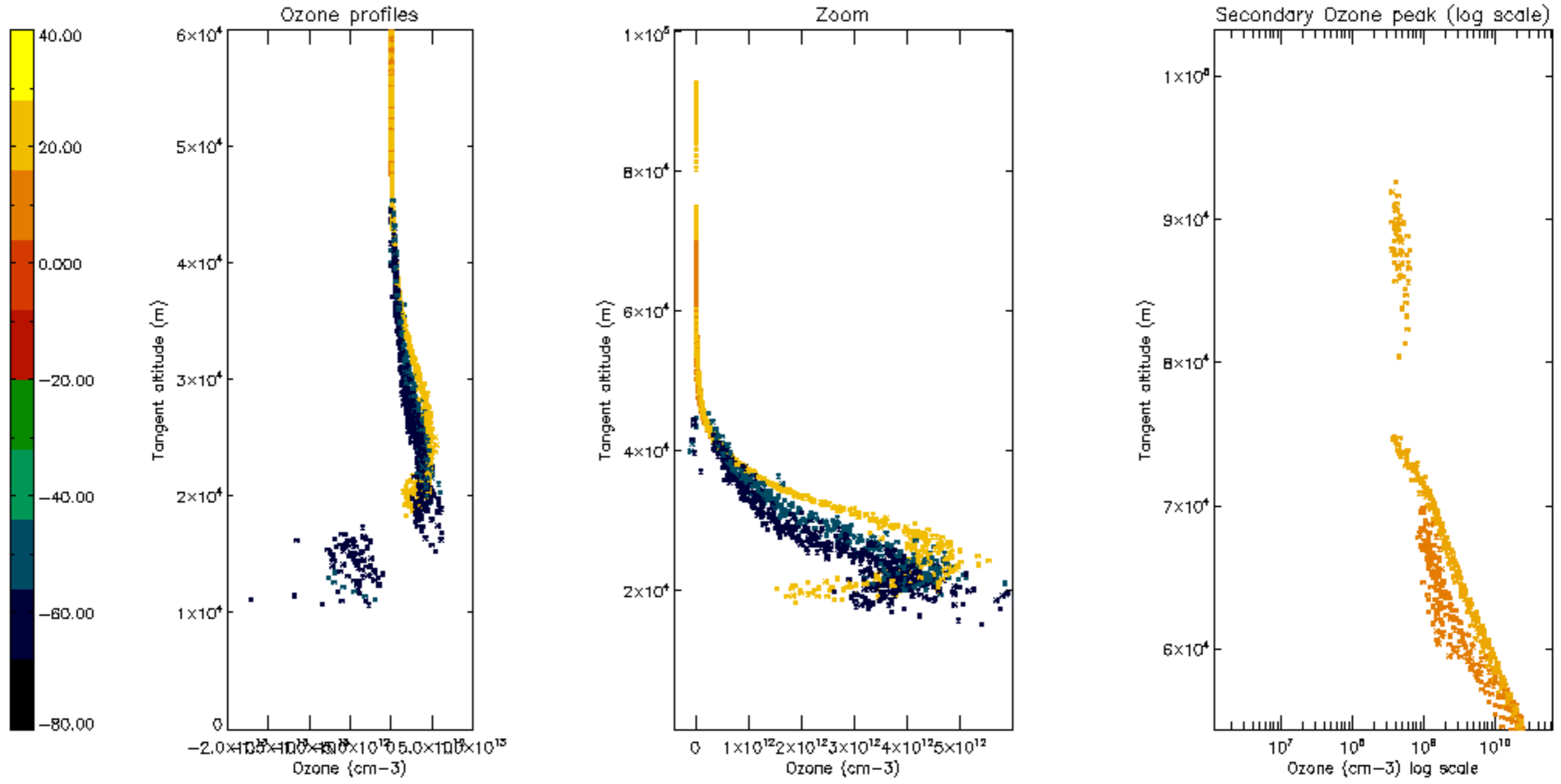
Percentage of star falling outside central band per profile

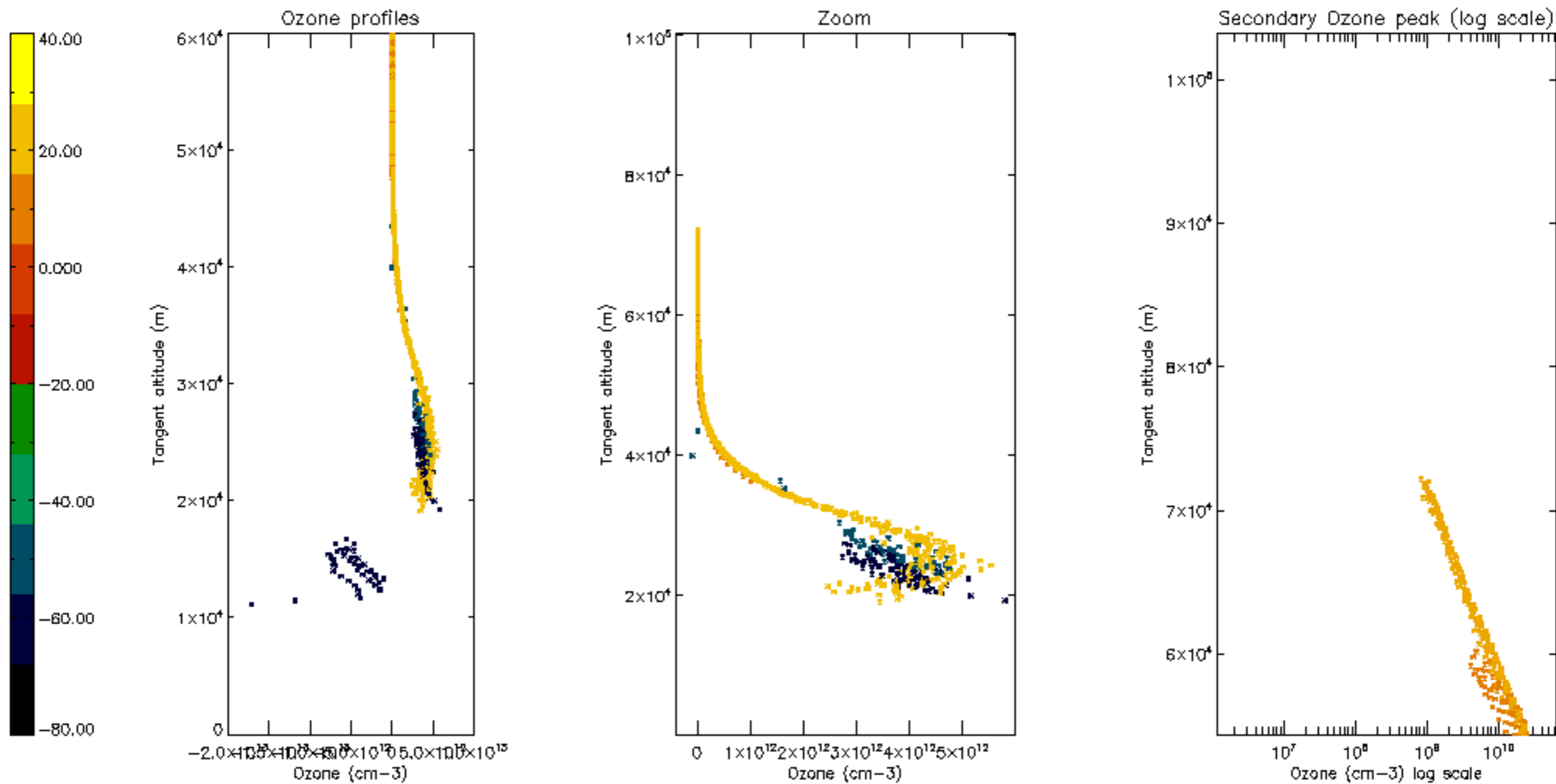


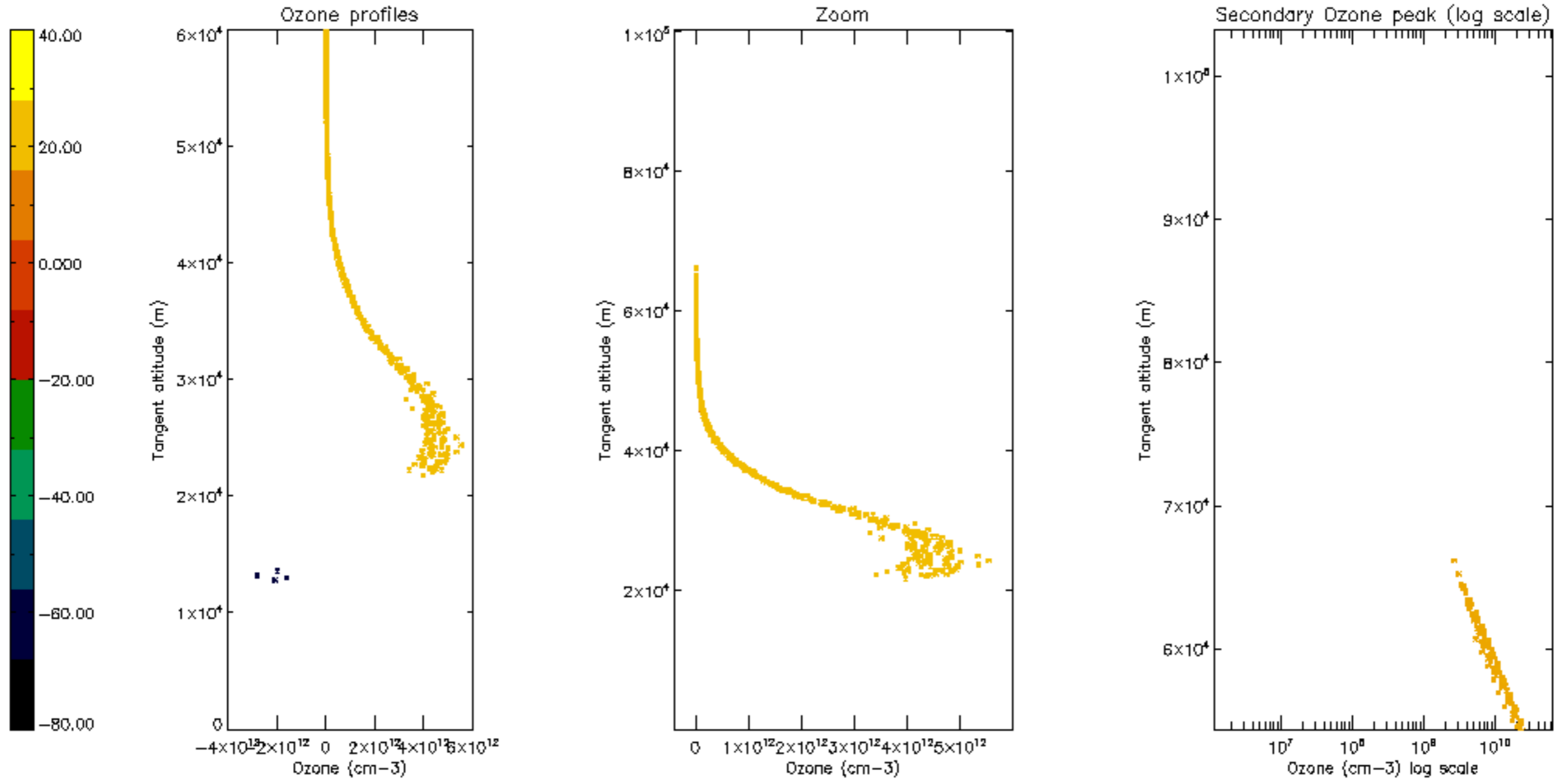
Percentage of saturation errors per profile

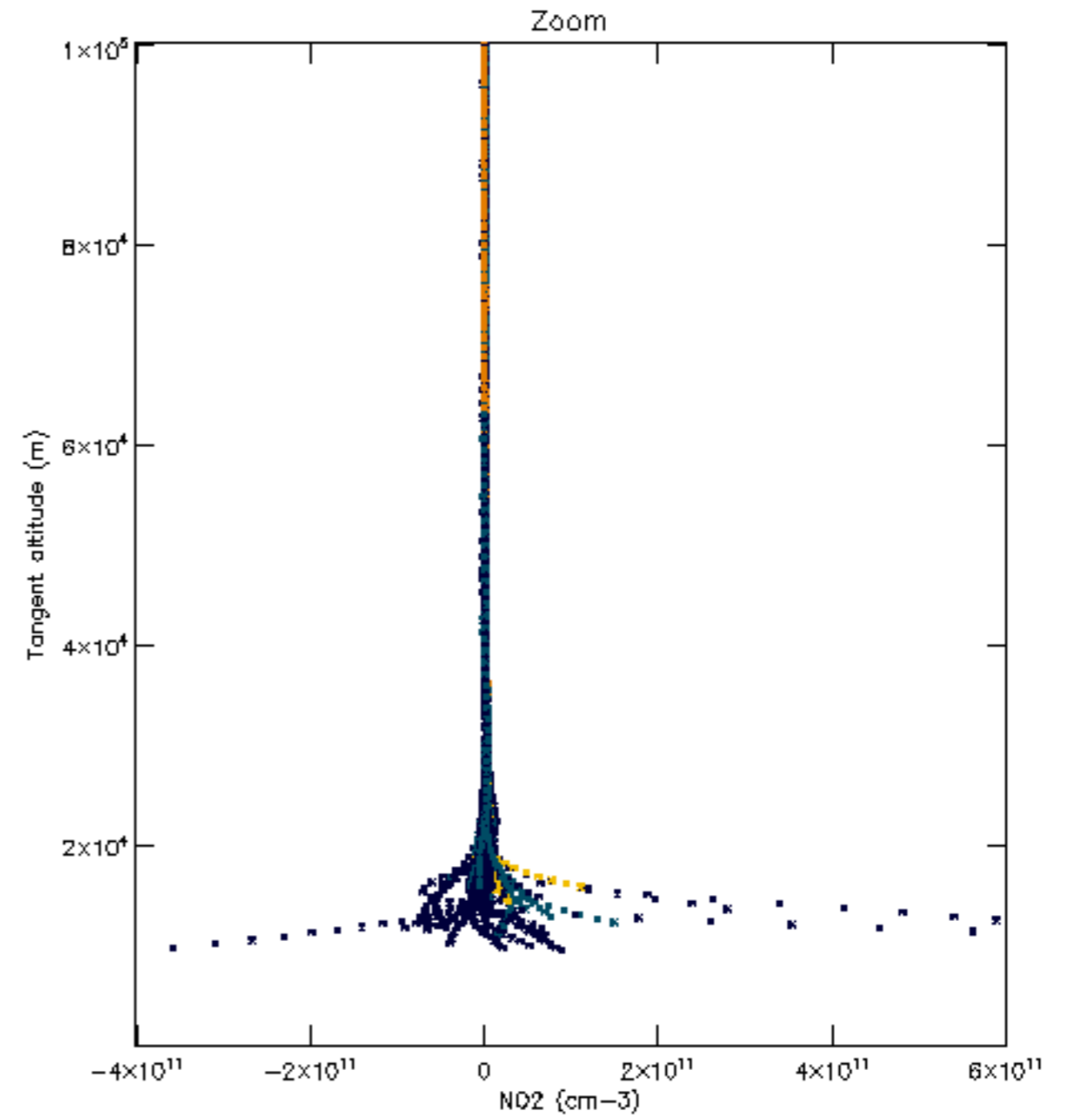
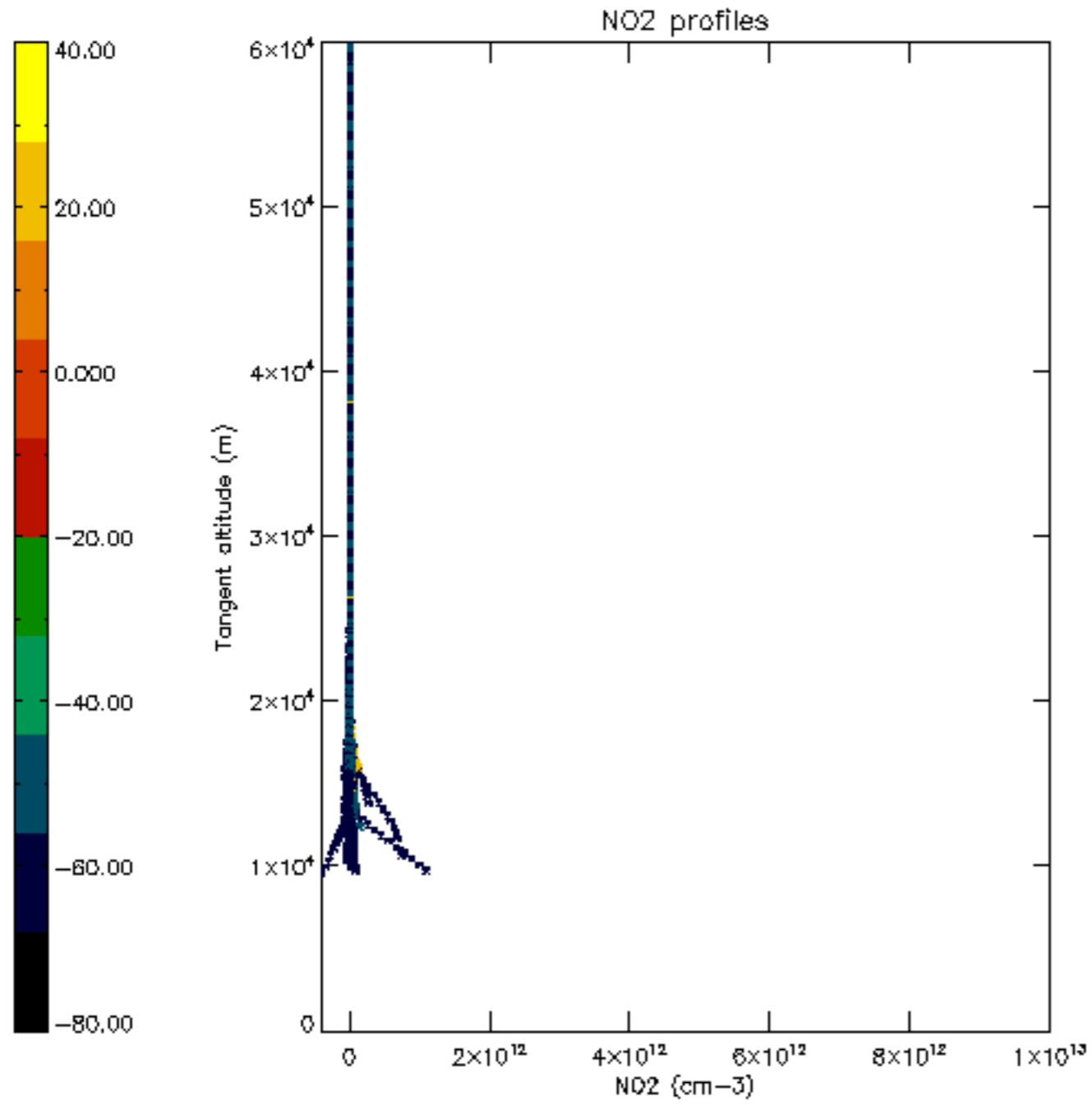


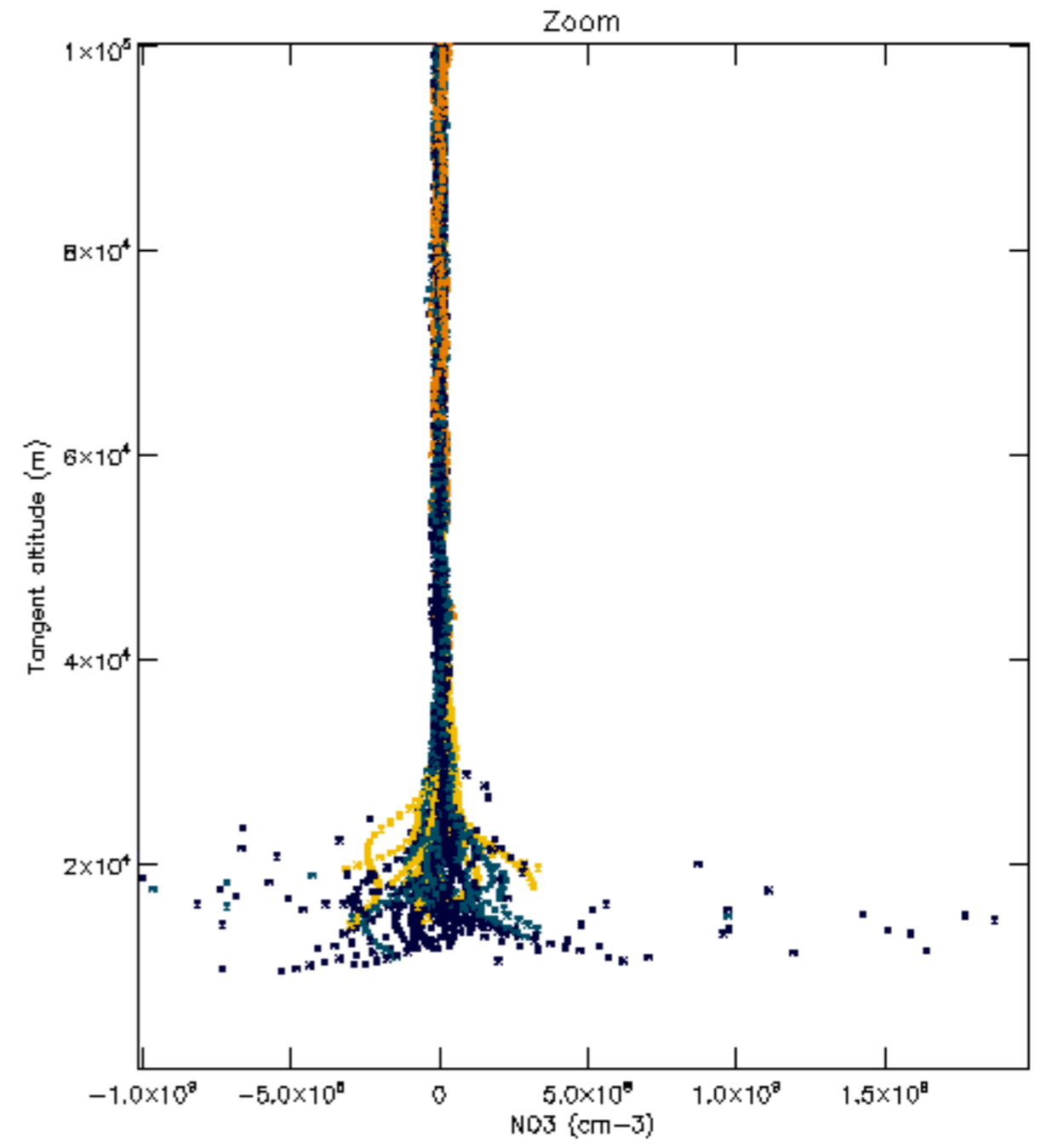
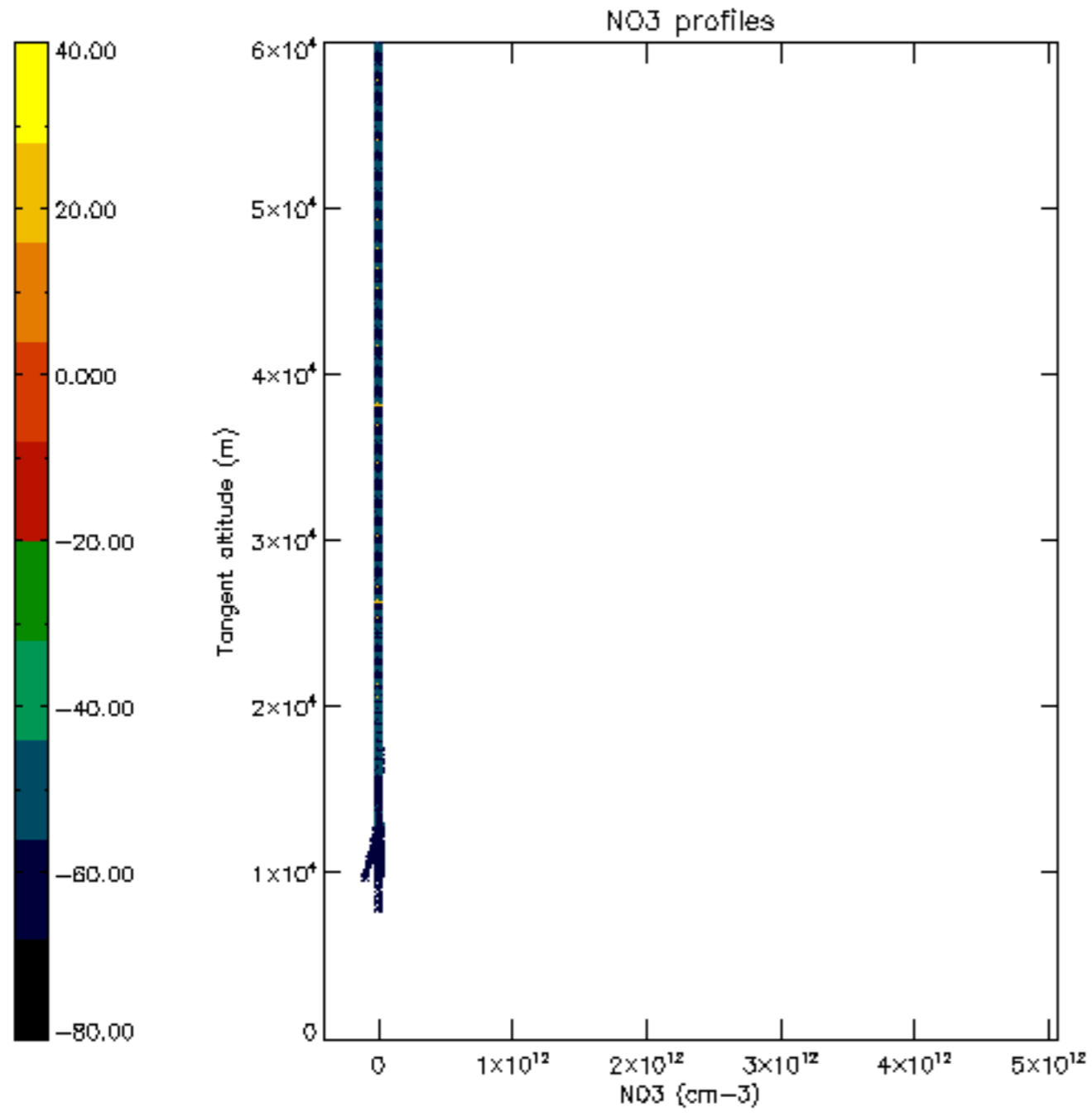


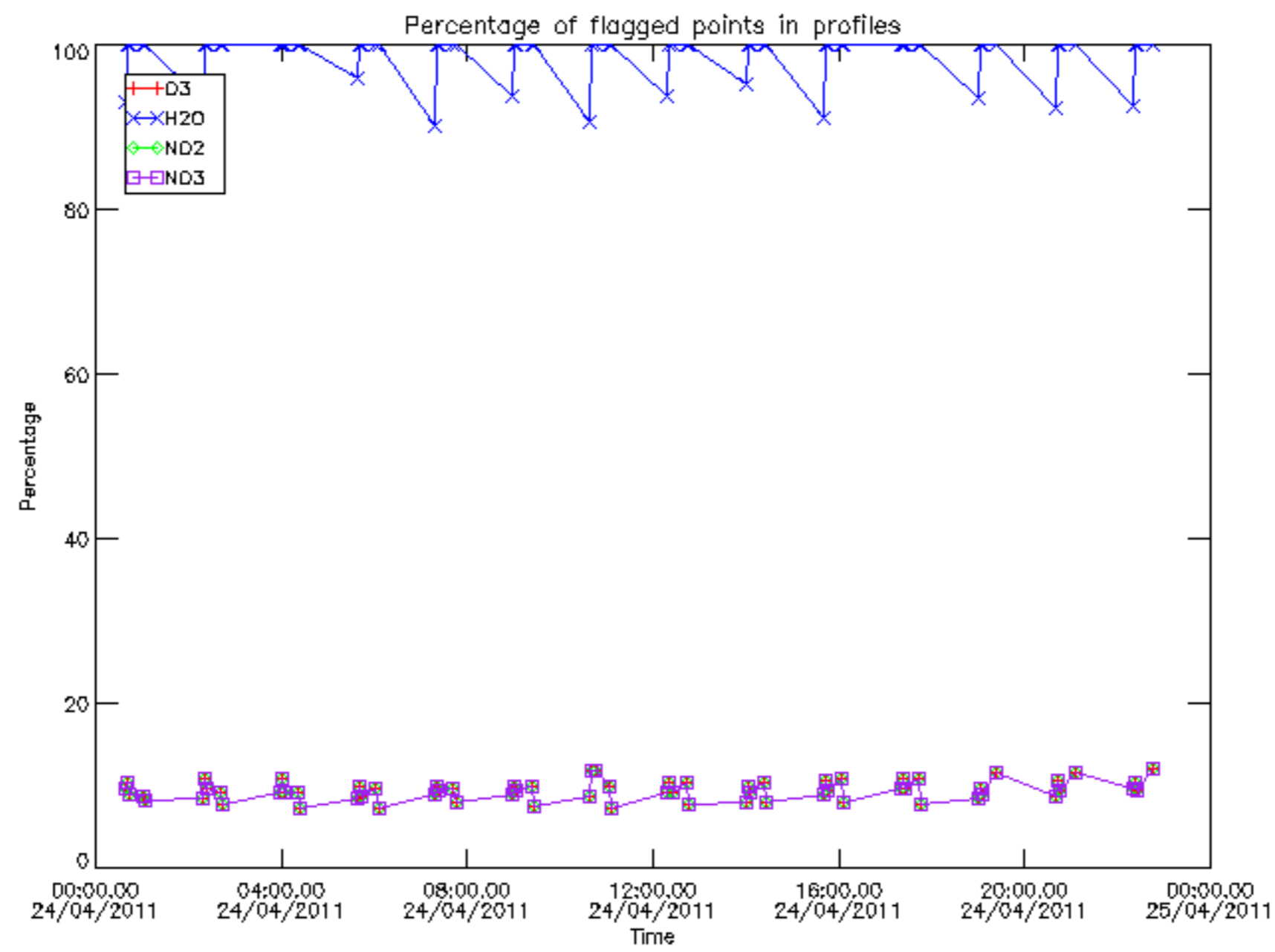




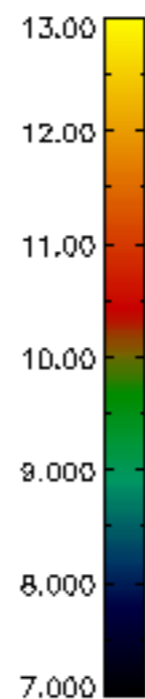
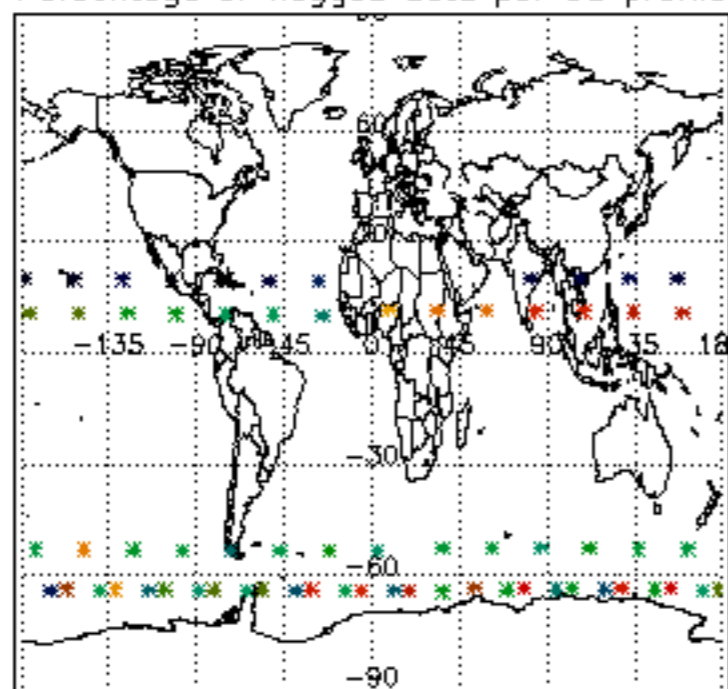




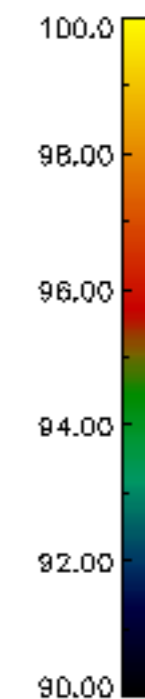
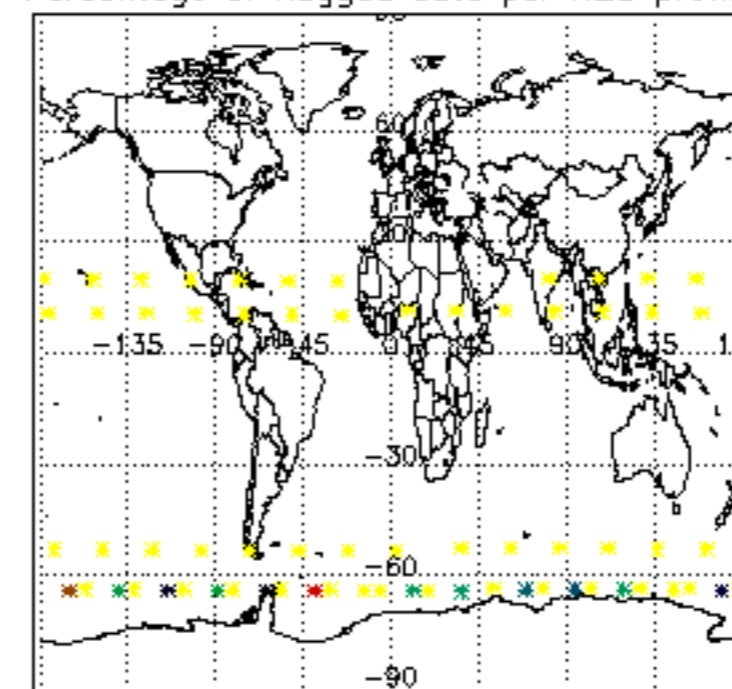




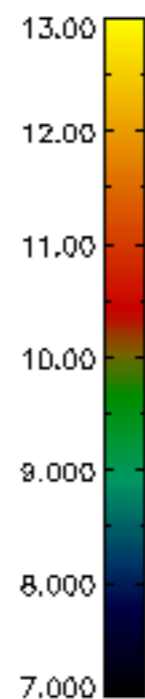
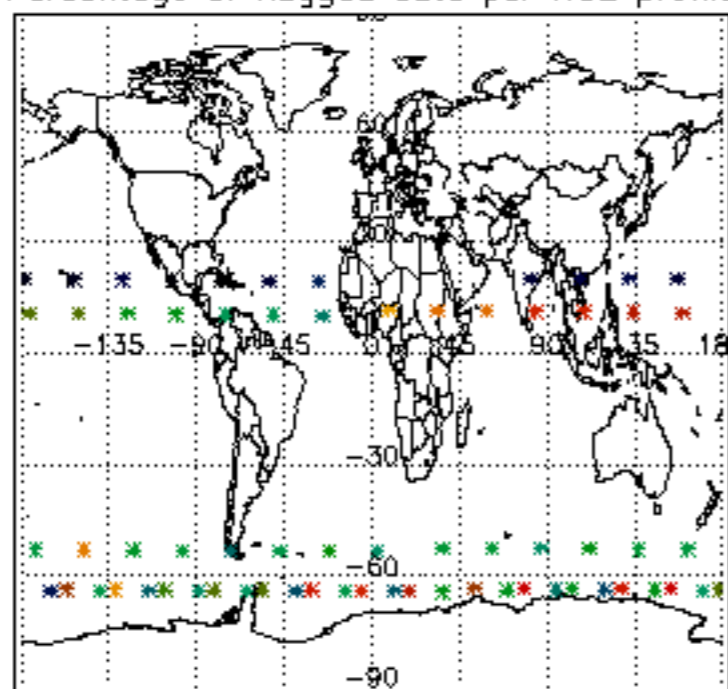
Percentage of flagged data per D3 profile



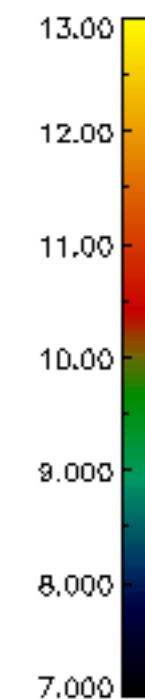
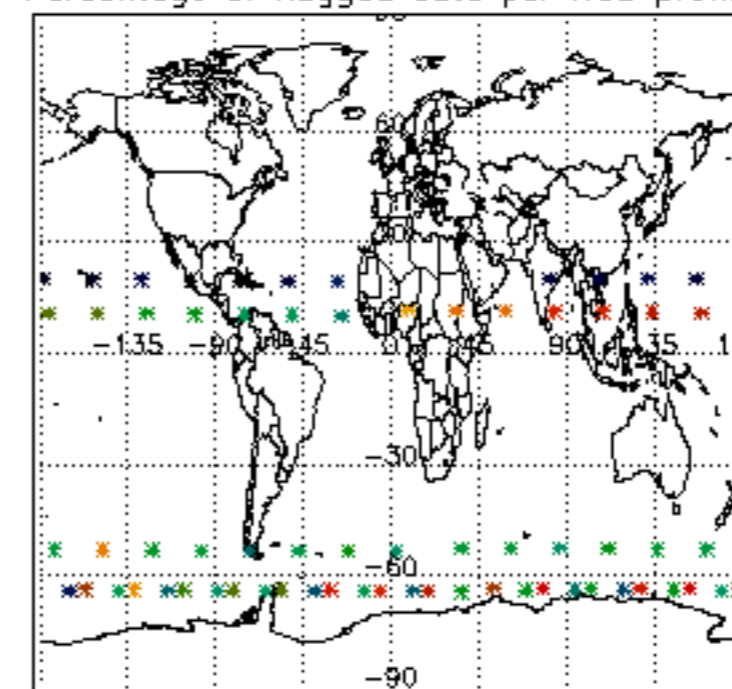
Percentage of flagged data per H2O profile

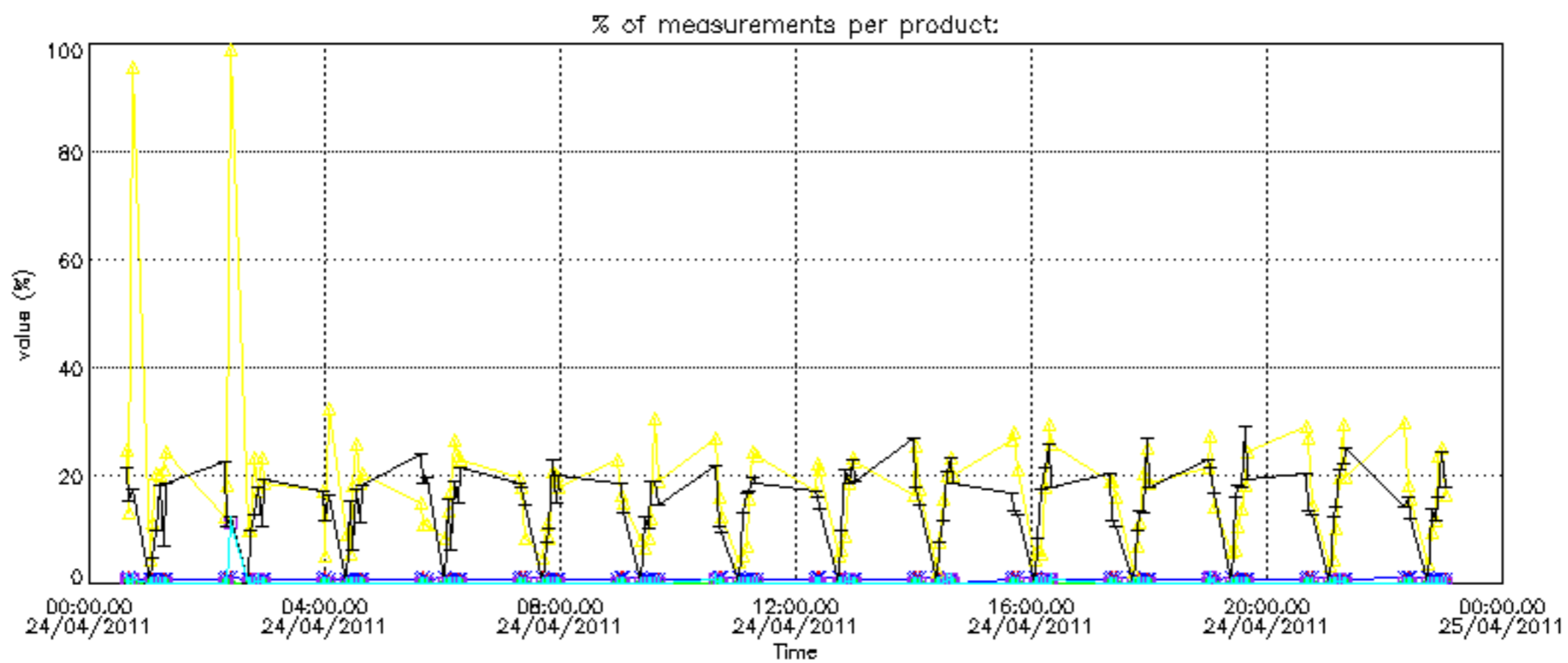


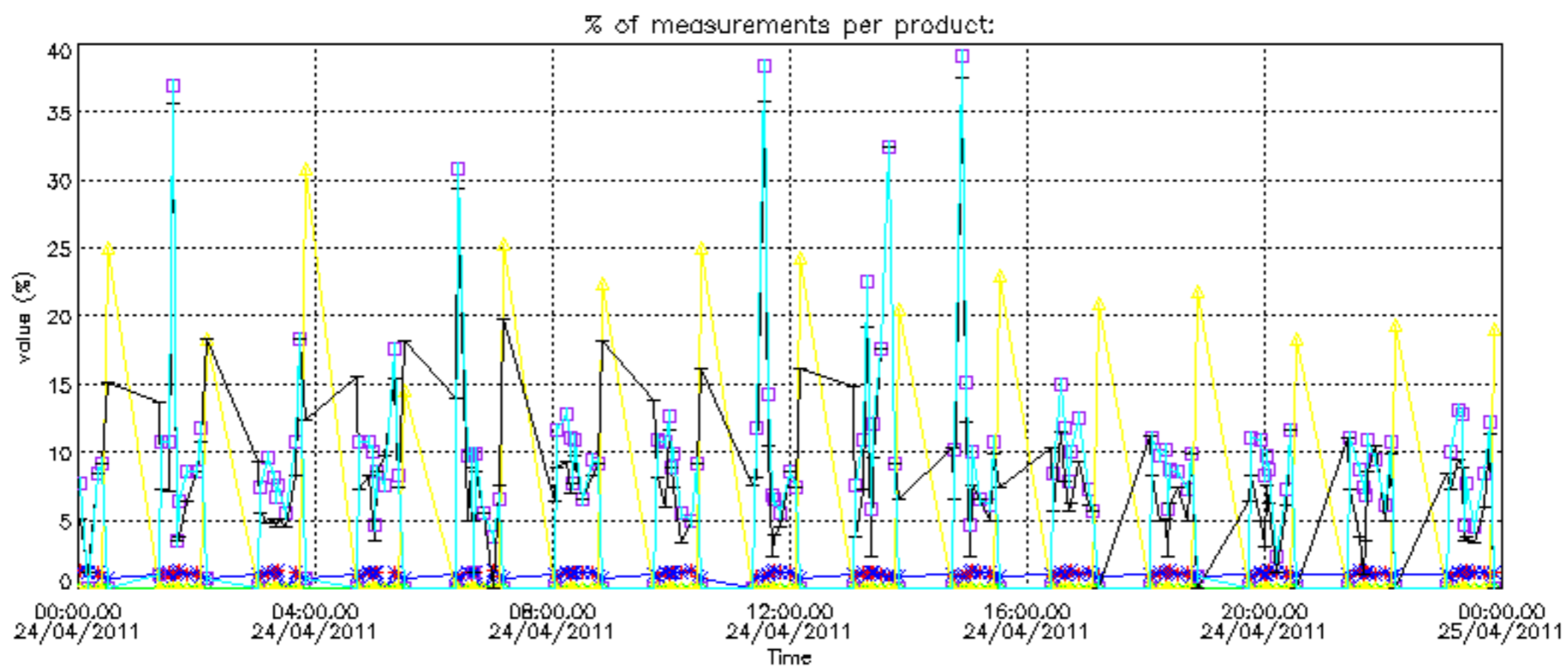
Percentage of flagged data per NO2 profile



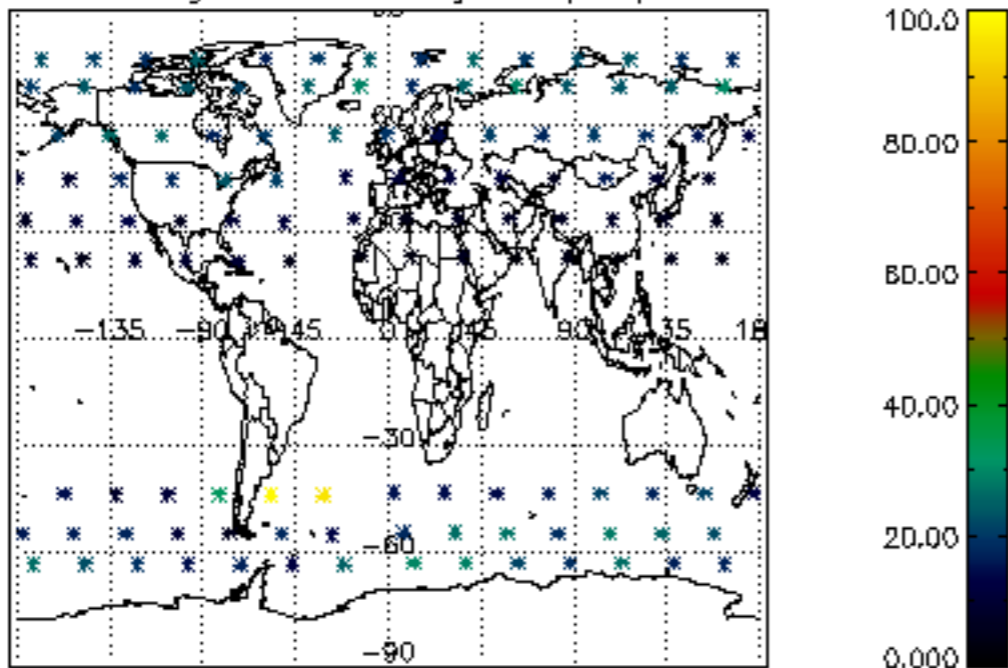
Percentage of flagged data per NO3 profile



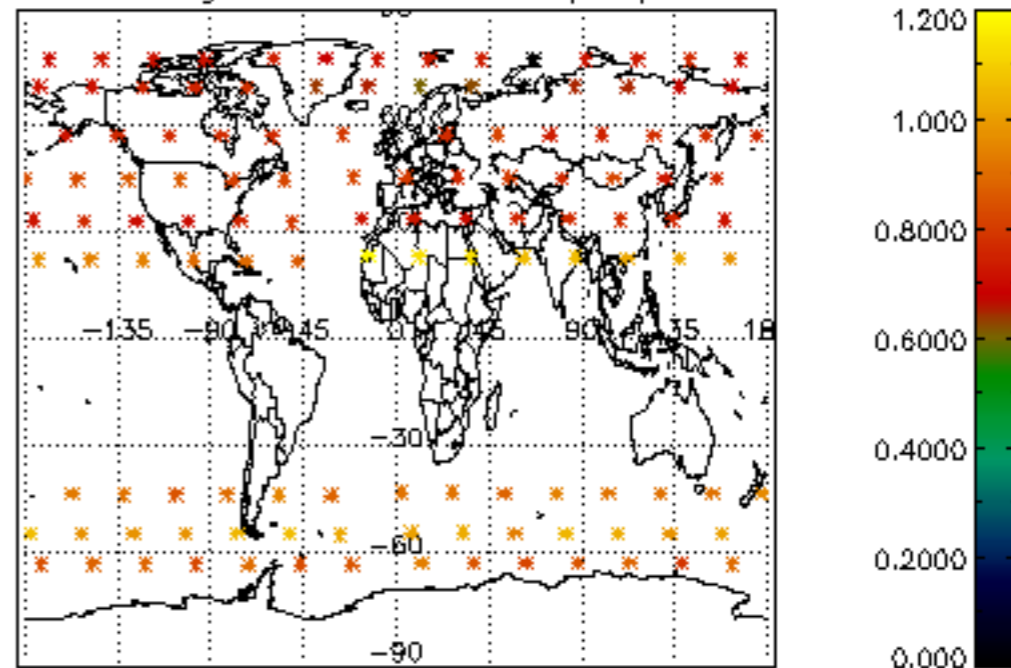




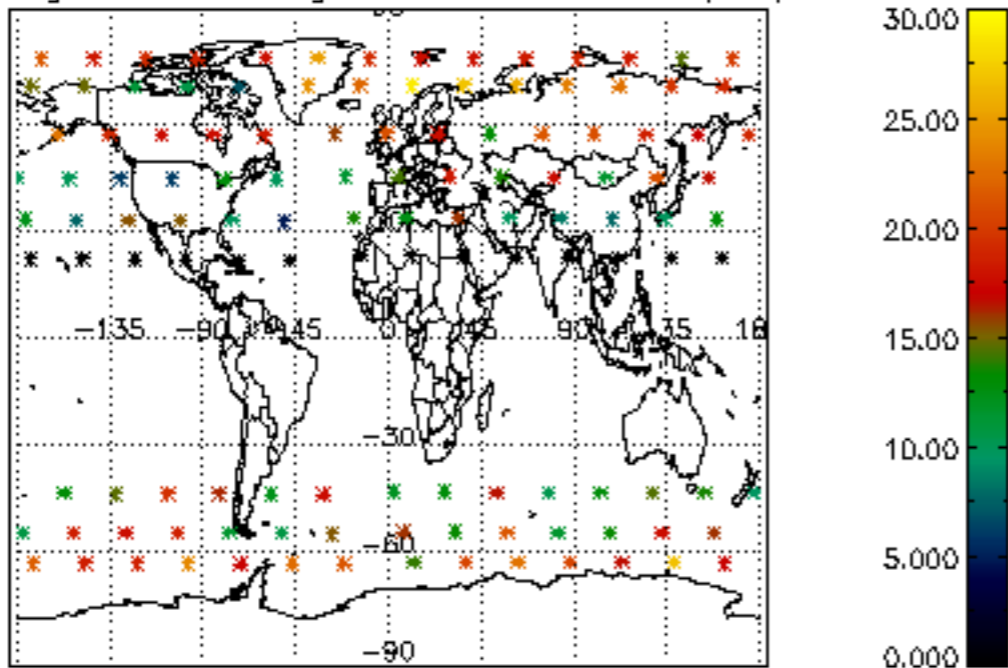
Percentage of cosmic ray hits per profile



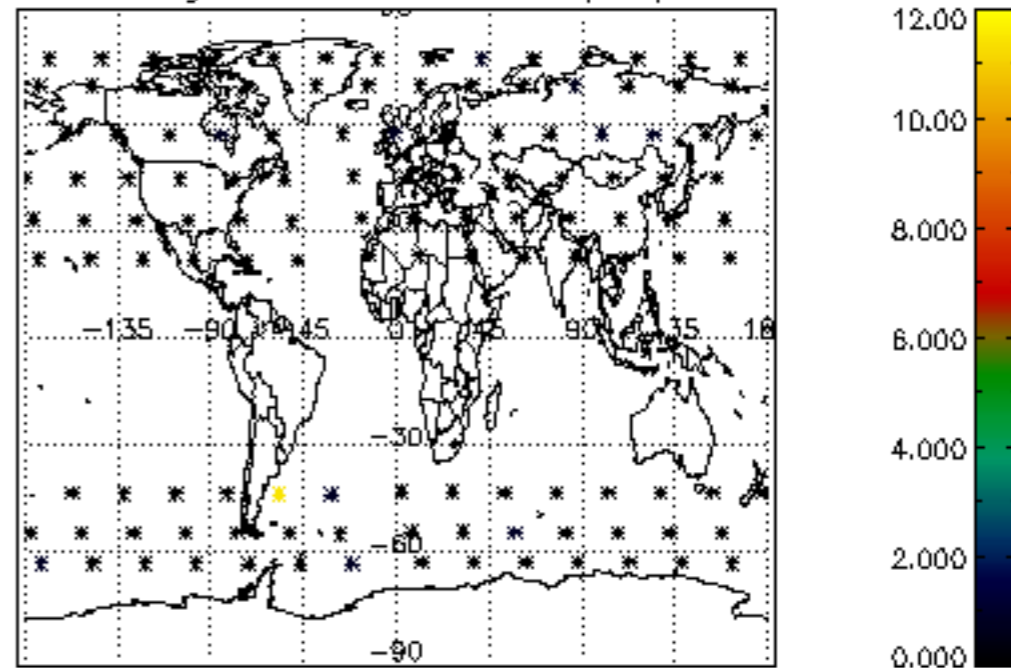
Percentage of datation errors per profile



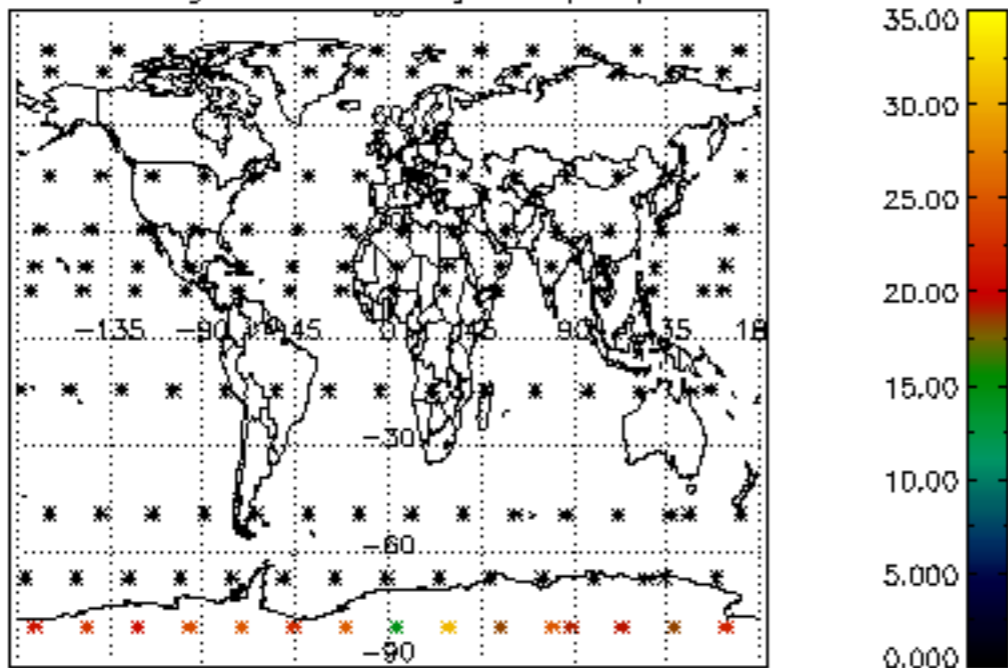
Percentage of star falling outside central band per profile



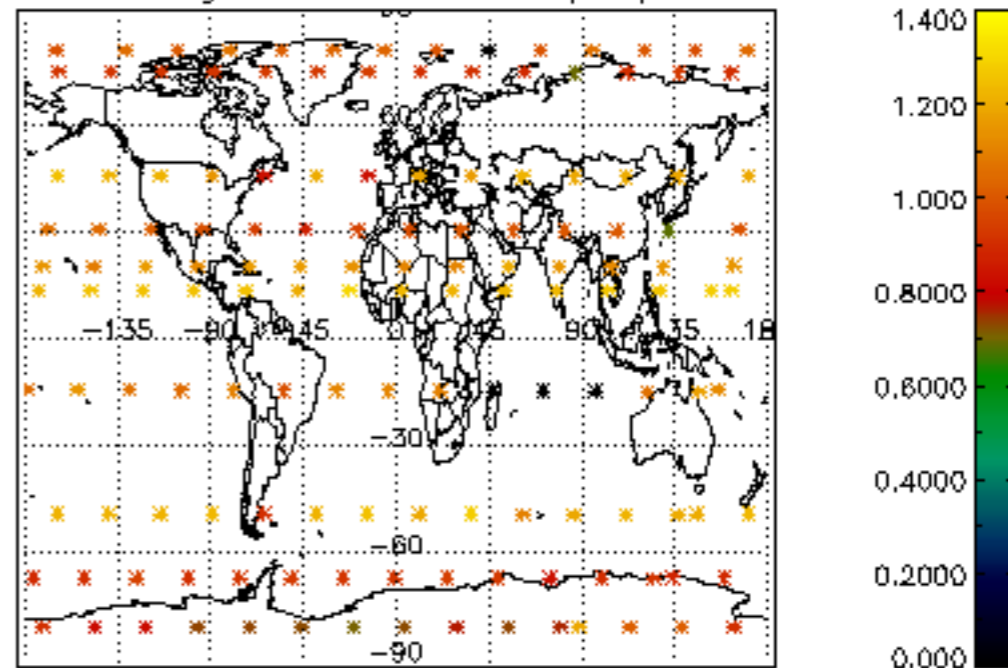
Percentage of saturation errors per profile



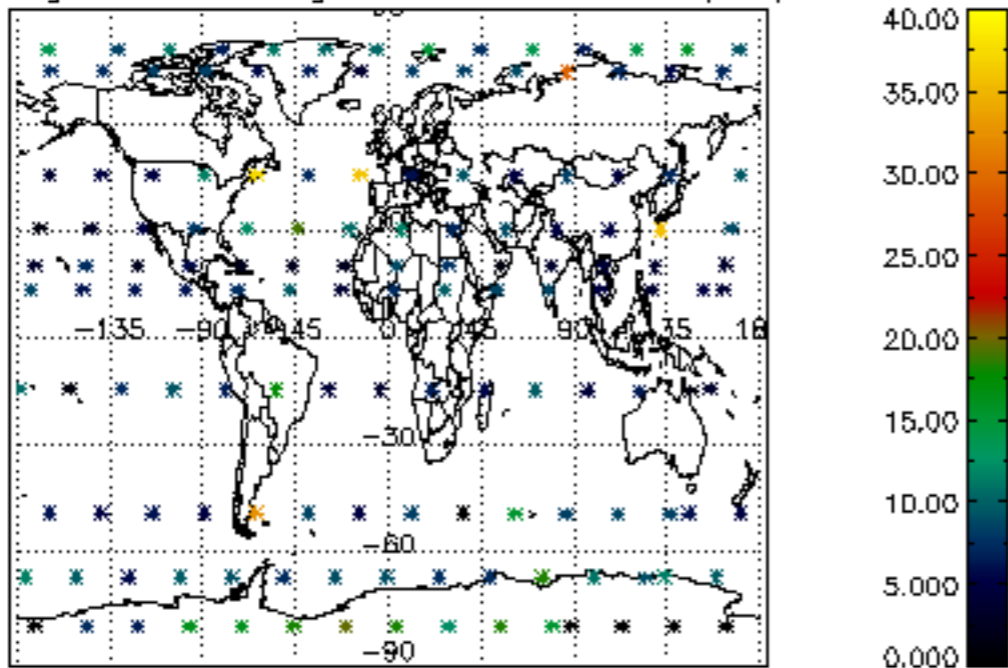
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

