

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 13:24:49
Data source version	GOMOS/6.01
Start time of products	18-10-2004 (18OCT2004 00:00:00)
Stop time of products	19-10-2004 (19OCT2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	334
Nb of prods with errors	0

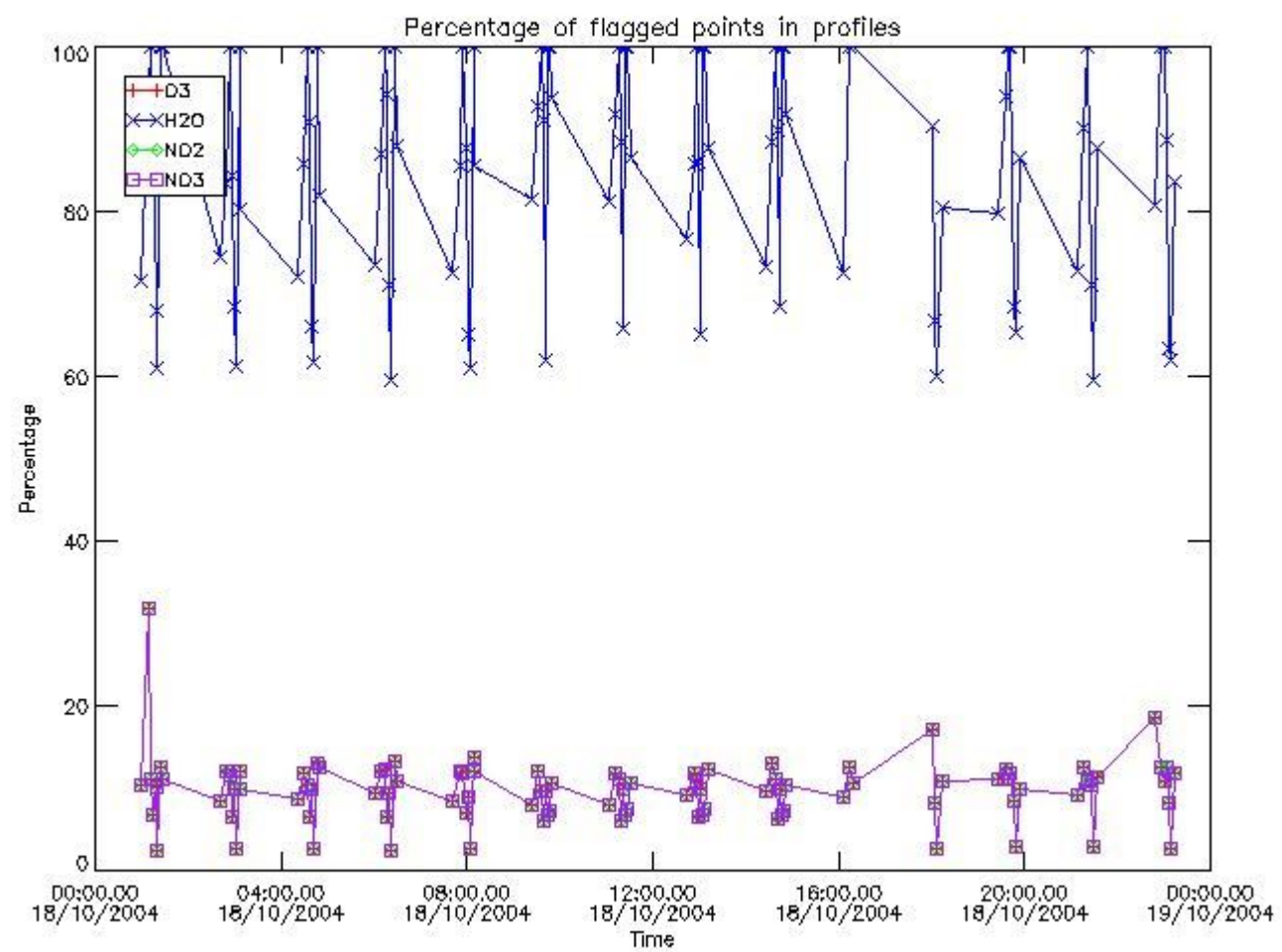
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20041018_000747_000000382031_00188_13769_5095.N1	18-OCT-2004 00:07:47	Bright	37.500	140	88Gam Peg	2.8340	26000.	75	13769	No
2	GOM_NL__2PRFIN20041018_001143_000000382031_00188_13769_5096.N1	18-OCT-2004 00:11:43	Bright	37.500	58	21Alp And	2.0730	11000.	75	13769	No
3	GOM_NL__2PRFIN20041018_001404_000000422031_00188_13769_5097.N1	18-OCT-2004 00:14:04	Bright	41.500	53	43Bet And	2.0480	3300.0	83	13769	No
4	GOM_NL__2PRFIN20041018_001529_000000462031_00188_13769_5098.N1	18-OCT-2004 00:15:29	Bright	45.500	173	4Bet Tri	3.0040	8900.0	91	13769	No
5	GOM_NL__2PRFIN20041018_001724_000000452031_00188_13769_5099.N1	18-OCT-2004 00:17:24	Bright	45.000	73	57Gam1And	2.2600	13100.	90	13769	No
6	GOM_NL__2PRFIN20041018_001940_000000392031_00188_13769_5100.N1	18-OCT-2004 00:19:40	Bright	39.000	68	18Alp Cas	2.2250	4500.0	78	13769	No
7	GOM_NL__2PRFIN20041018_002100_000000362031_00188_13769_5101.N1	18-OCT-2004 00:21:00	Bright	36.000	76	27Gam Cas	2.3000	30000.	72	13769	No
8	GOM_NL__2PRFIN20041018_002248_000000382031_00188_13769_5102.N1	18-OCT-2004 00:22:48	Bright	38.000	89	5Alp Cep	2.4510	8000.0	76	13769	No
9	GOM_NL__2PRFIN20041018_002846_000000372031_00188_13769_5103.N1	18-OCT-2004 00:28:46	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	13769	No
10	GOM_NL__2PRFIN20041018_003154_000000392031_00188_13769_5104.N1	18-OCT-2004 00:31:54	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	13769	No
11	GOM_NL__2PRFIN20041018_003700_000000392031_00188_13769_5105.N1	18-OCT-2004 00:37:00	Bright	39.000	36	50Alp UMa	1.8000	6300.0	78	13769	No
12	GOM_NL__2PRFIN20041018_003834_000000392031_00188_13769_5106.N1	18-OCT-2004 00:38:34	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	13769	No
13	GOM_NL__2PRFIN20041018_004159_000000382031_00188_13769_5107.N1	18-OCT-2004 00:41:59	Bright	37.500	174	52Psi UMa	3.0040	4400.0	75	13769	No
14	GOM_NL__2PRFIN20041018_005002_000001352031_00188_13769_5108.N1	18-OCT-2004 00:50:02	Twilight	135.00	17	78Bet Gem	1.1610	4500.0	270	13769	No
15	GOM_NL__2PRFIN20041018_010000_000000592031_00188_13769_5109.N1	18-OCT-2004 01:00:00	Dark	58.500	48	30Alp Hya	1.9770	4100.0	117	13769	No
16	GOM_NL__2PRFIN20041018_010820_000000402031_00188_13769_5110.N1	18-OCT-2004 01:08:20	Dark	40.000	113	Mu Vel	2.6920	5000.0	80	13769	No
17	GOM_NL__2PRFIN20041018_011244_000000462031_00189_13770_5086.N1	18-OCT-2004 01:12:44	Dark	45.500	34	Gam2Vel	1.7930	23000.	91	13770	No
18	GOM_NL__2PRFIN20041018_011528_000000752031_00189_13770_5087.N1	18-OCT-2004 01:15:28	Dark	74.500	37	25Del CMa	1.8300	5900.0	149	13770	No
19	GOM_NL__2PRFIN20041018_011823_000000512031_00189_13770_5088.N1	18-OCT-2004 01:18:23	Dark	50.500	2	Alp Car	-0.73600	7000.0	101	13770	No
20	GOM_NL__2PRFIN20041018_012033_000002232031_00189_13770_5089.N1	18-OCT-2004 01:20:33	Dark	223.00	1	9Alp CMa	-1.4400	11000.	446	13770	No
21	GOM_NL__2PRFIN20041018_012549_000000412031_00189_13770_5090.N1	18-OCT-2004 01:25:49	Dark	40.500	143	Alp Hyi	2.8570	7200.0	81	13770	No
22	GOM_NL__2PRFIN20041018_012716_000000462031_00189_13770_5091.N1	18-OCT-2004 01:27:16	Dark	46.000	9	Alp Eri	0.45300	24000.	92	13770	No
23	GOM_NL__2PRFIN20041018_012958_000000462031_00189_13770_5092.N1	18-OCT-2004 01:29:58	Straylight	45.500	157	The1Eri	2.9060	9300.0	91	13770	No
24	GOM_NL__2PRFIN20041018_013214_000000472031_00189_13770_5093.N1	18-OCT-2004 01:32:14	Straylight	46.500	84	Alp Phe	2.3970	4500.0	93	13770	No
25	GOM_NL__2PRFIN20041018_013848_000000442031_00189_13770_5094.N1	18-OCT-2004 01:38:48	Straylight	44.000	52	16Bet Cet	2.0370	4500.0	88	13770	No
26	GOM_NL__2PRFIN20041018_014823_000000372031_00189_13770_5095.N1	18-OCT-2004 01:48:23	Bright	37.000	140	88Gam Peg	2.8340	26000.	74	13770	No
27	GOM_NL__2PRFIN20041018_015219_000000382031_00189_13770_5096.N1	18-OCT-2004 01:52:19	Bright	38.000	58	21Alp And	2.0730	11000.	76	13770	No
28	GOM_NL__2PRFIN20041018_015439_000000422031_00189_13770_5097.N1	18-OCT-2004 01:54:39	Bright	42.000	53	43Bet And	2.0480	3300.0	84	13770	No
29	GOM_NL__2PRFIN20041018_015604_000000472031_00189_13770_5098.N1	18-OCT-2004 01:56:04	Bright	46.500	173	4Bet Tri	3.0040	8900.0	93	13770	No
30	GOM_NL__2PRFIN20041018_015759_000000452031_00189_13770_5099.N1	18-OCT-2004 01:57:59	Bright	45.000	73	57Gam1And	2.2600	13100.	90	13770	No
31	GOM_NL__2PRFIN20041018_020016_000000402031_00189_13770_5100.N1	18-OCT-2004 02:00:16	Bright	39.500	68	18Alp Cas	2.2250	4500.0	79	13770	No
32	GOM_NL__2PRFIN20041018_020136_000000402031_00189_13770_5101.N1	18-OCT-2004 02:01:36	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	13770	No
33	GOM_NL__2PRFIN20041018_020324_000000352031_00189_13770_5102.N1	18-OCT-2004 02:03:24	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	13770	No
34	GOM_NL__2PRFIN20041018_020920_000000372031_00189_13770_5103.N1	18-OCT-2004 02:09:20	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	13770	No
35	GOM_NL__2PRFIN20041018_021230_000000422031_00189_13770_5104.N1	18-OCT-2004 02:12:30	Bright	42.000	60	7Bet UMi	2.0810	3950.0	84	13770	No
36	GOM_NL__2PRFIN20041018_021736_000000402031_00189_13770_5105.N1	18-OCT-2004 02:17:36	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	13770	No
37	GOM_NL__2PRFIN20041018_021910_000000362031_00189_13770_5106.N1	18-OCT-2004 02:19:10	Bright	36.000	82	48Bet UMa	2.3650	10600.	72	13770	No
38	GOM_NL__2PRFIN20041018_022236_000000382031_00189_13770_5107.N1	18-OCT-2004 02:22:36	Bright	38.000	174	52Psi UMa	3.0040	4400.0	76	13770	No
39	GOM_NL__2PRFIN20041018_023039_000001212031_00189_13770_5108.N1	18-OCT-2004 02:30:39	Twilight	121.00	17	78Bet Gem	1.1610	4500.0	242	13770	No
40	GOM_NL__2PRFIN20041018_024037_000000612031_00189_13770_5109.N1	18-OCT-2004 02:40:37	Dark	61.000	48	30Alp Hya	1.9770	4100.0	122	13770	No
41	GOM_NL__2PRFIN20041018_024857_000000432031_00189_13770_5110.N1	18-OCT-2004 02:48:57	Dark	42.500	113	Mu Vel	2.6920	5000.0	85	13770	No
42	GOM_NL__2PRFIN20041018_025321_000000452031_00190_13771_5086.N1	18-OCT-2004 02:53:21	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	13771	No

3. Quality information per product

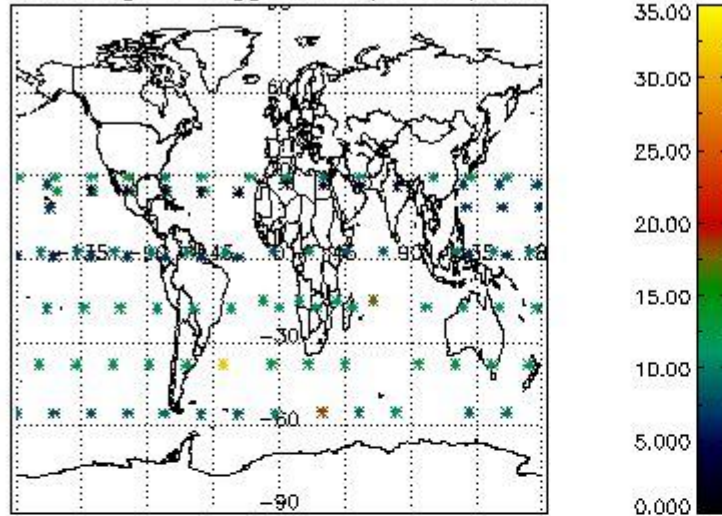
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

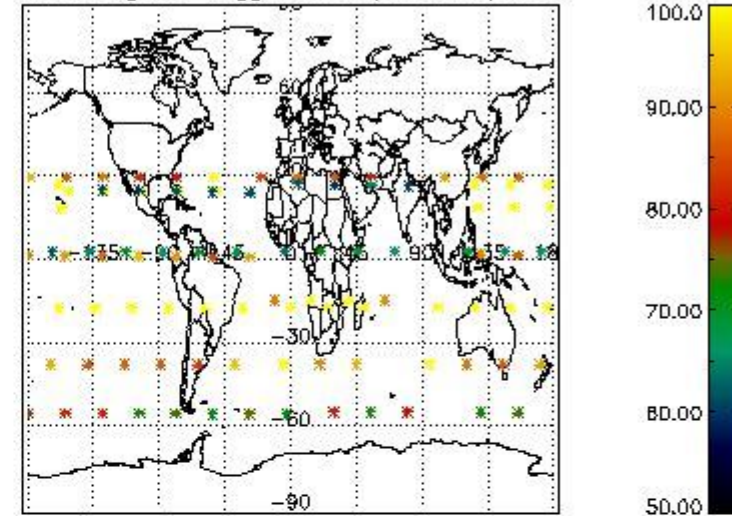


3.2 Plot quality information per product (world map)

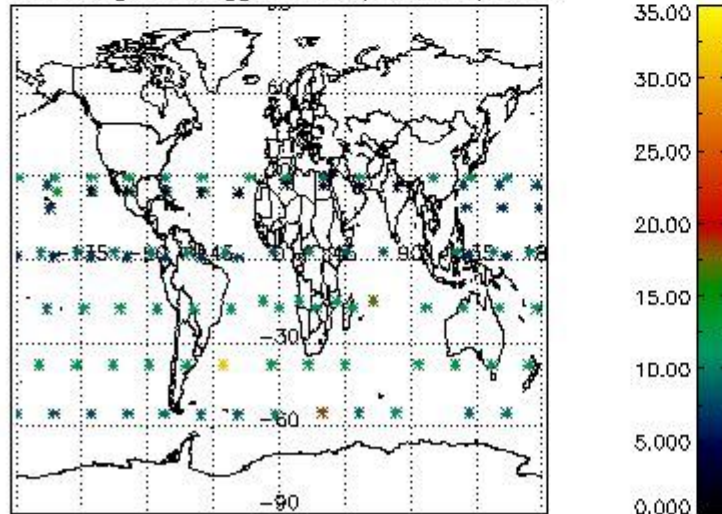
Percentage of flagged data per O3 profile



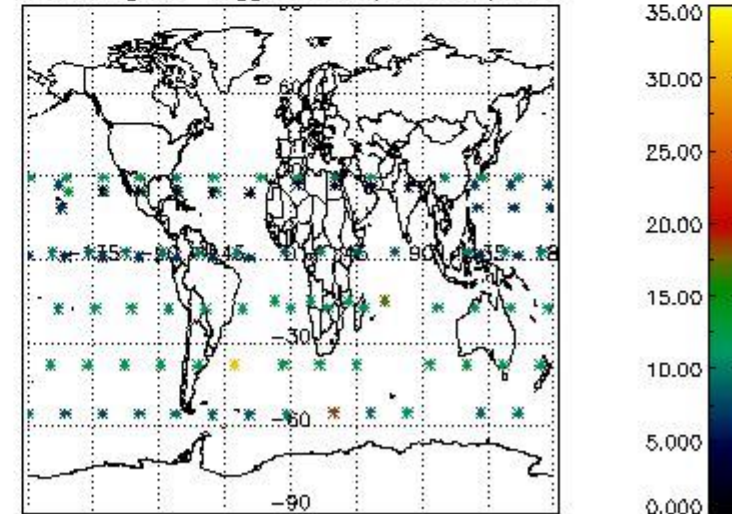
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

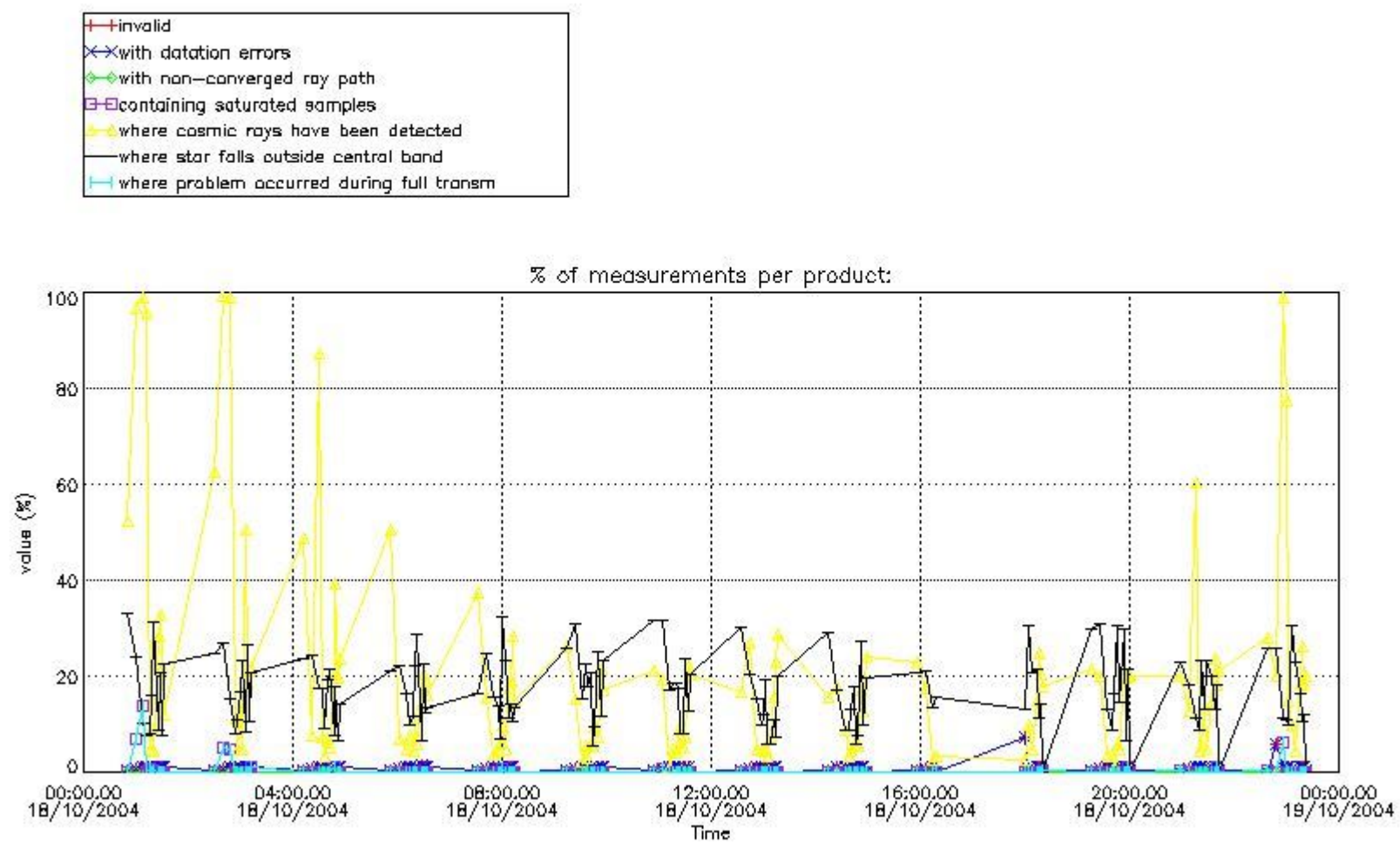


4. Level 1 quality information per product

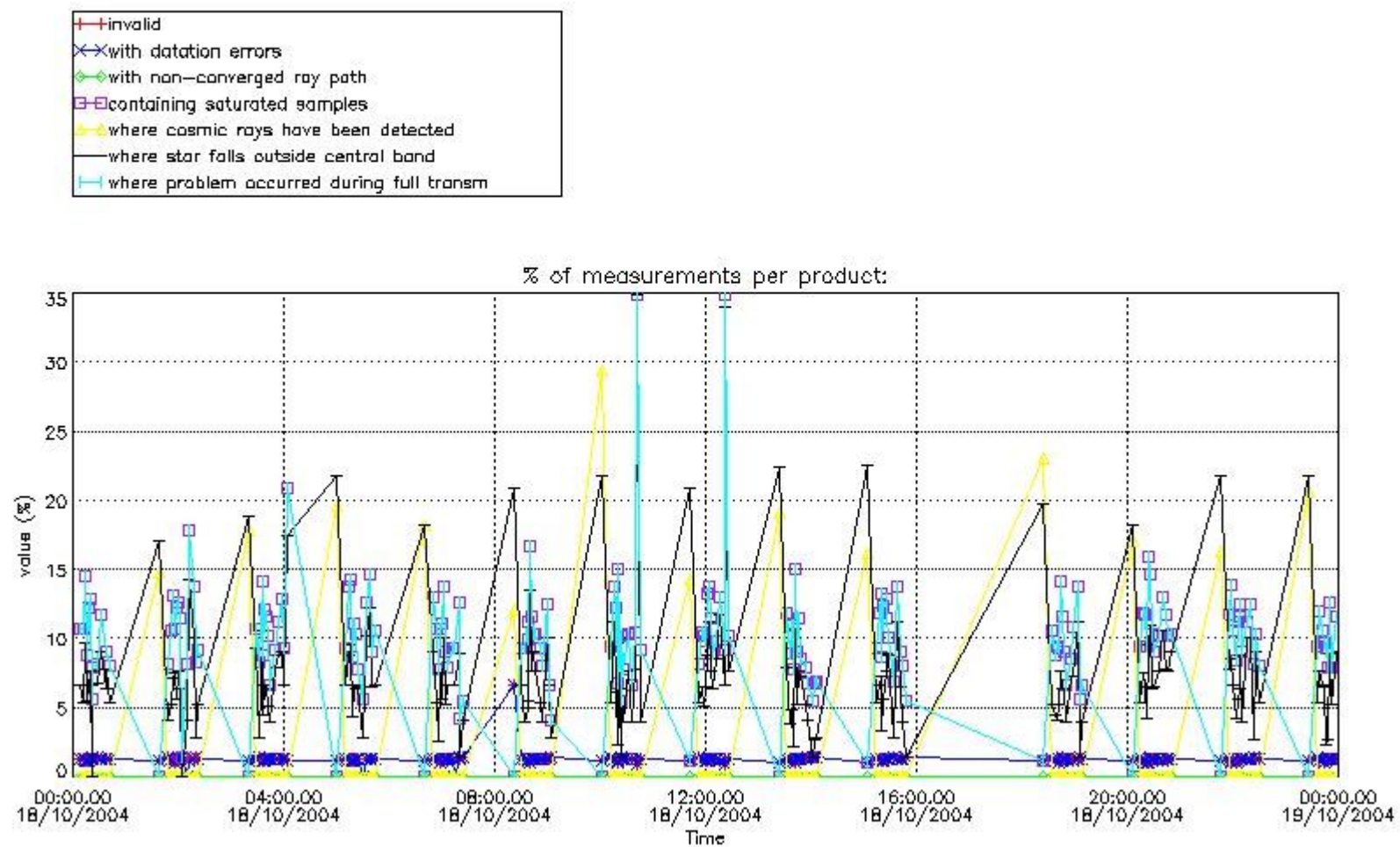
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

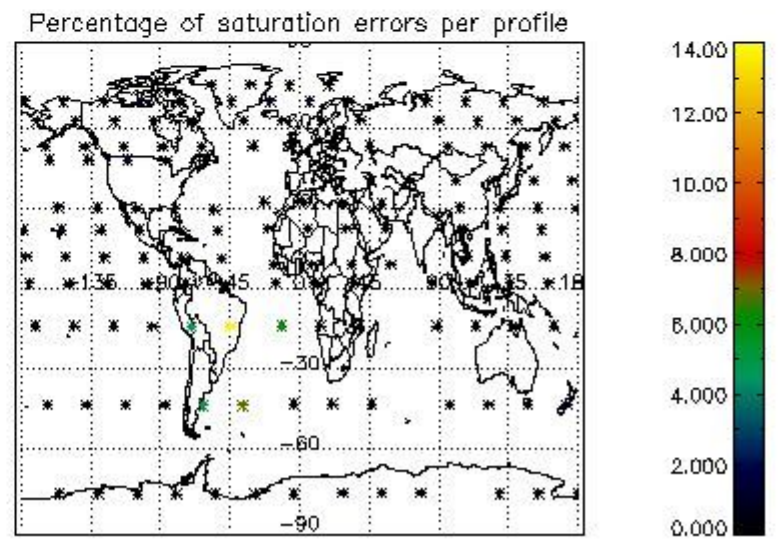
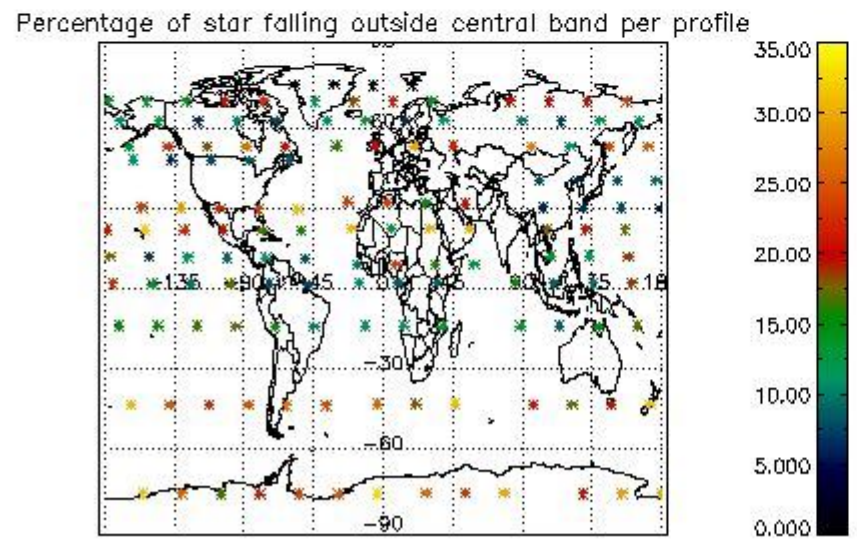
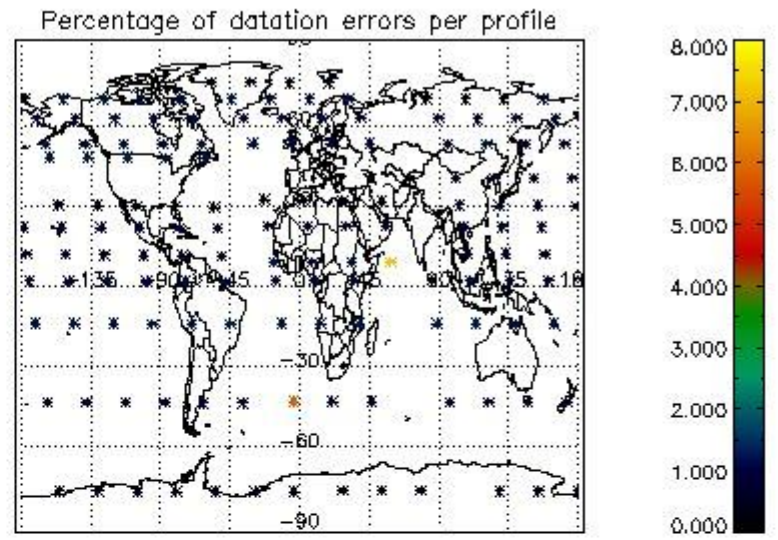
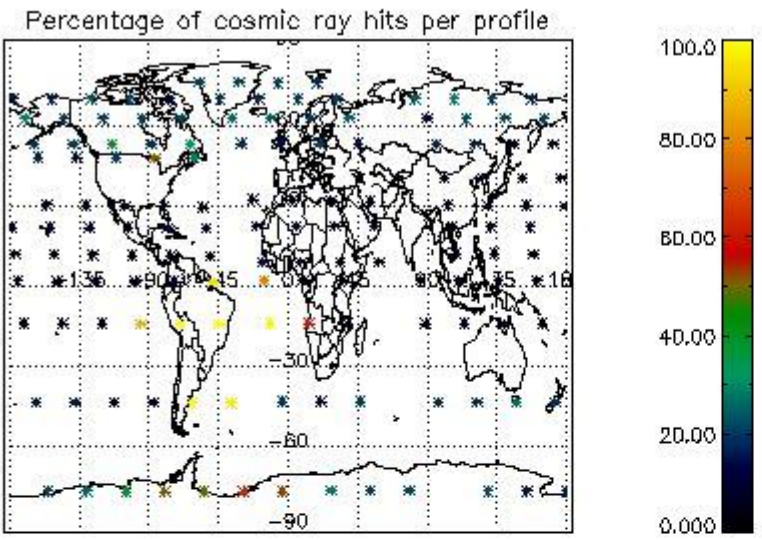


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

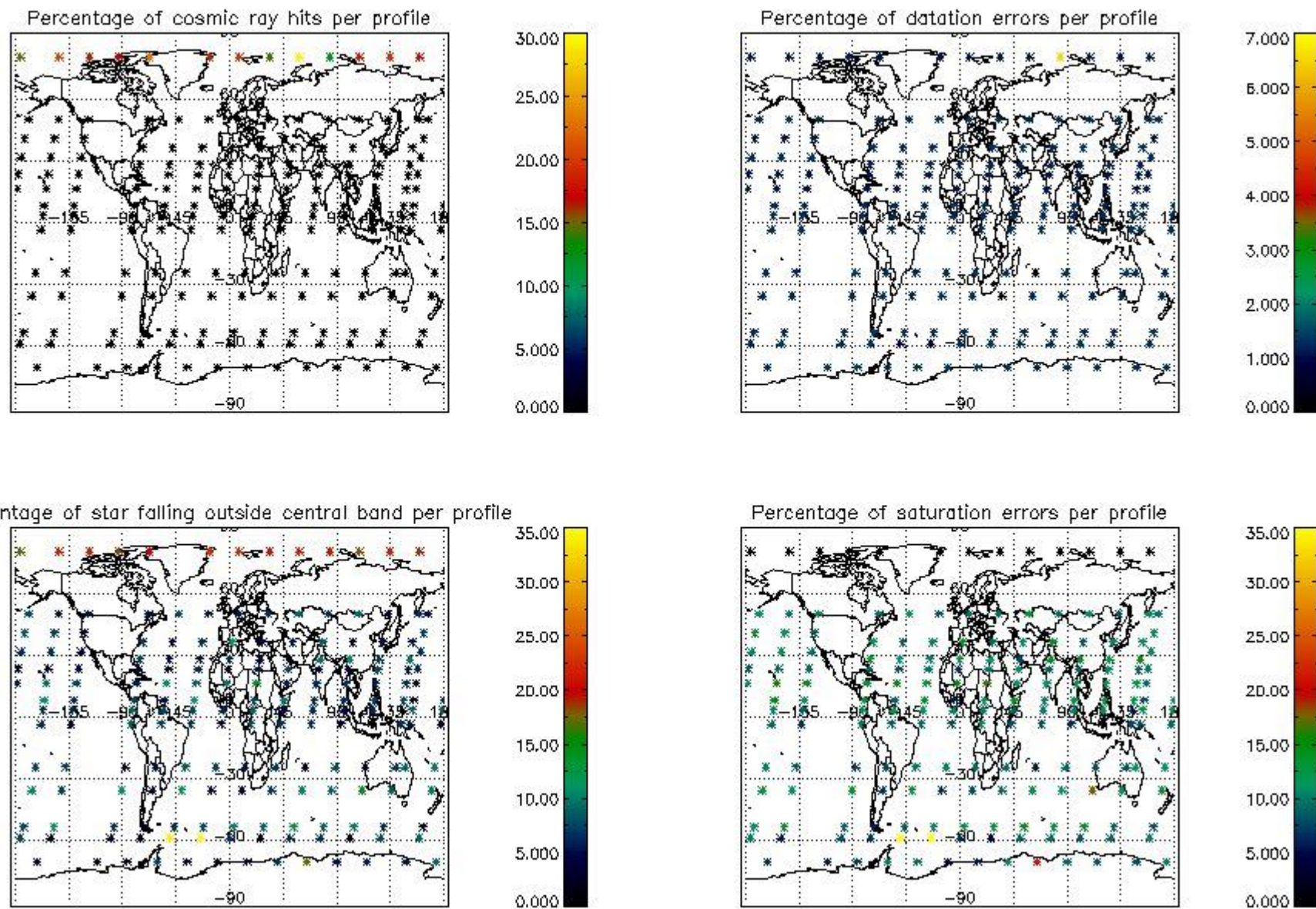


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

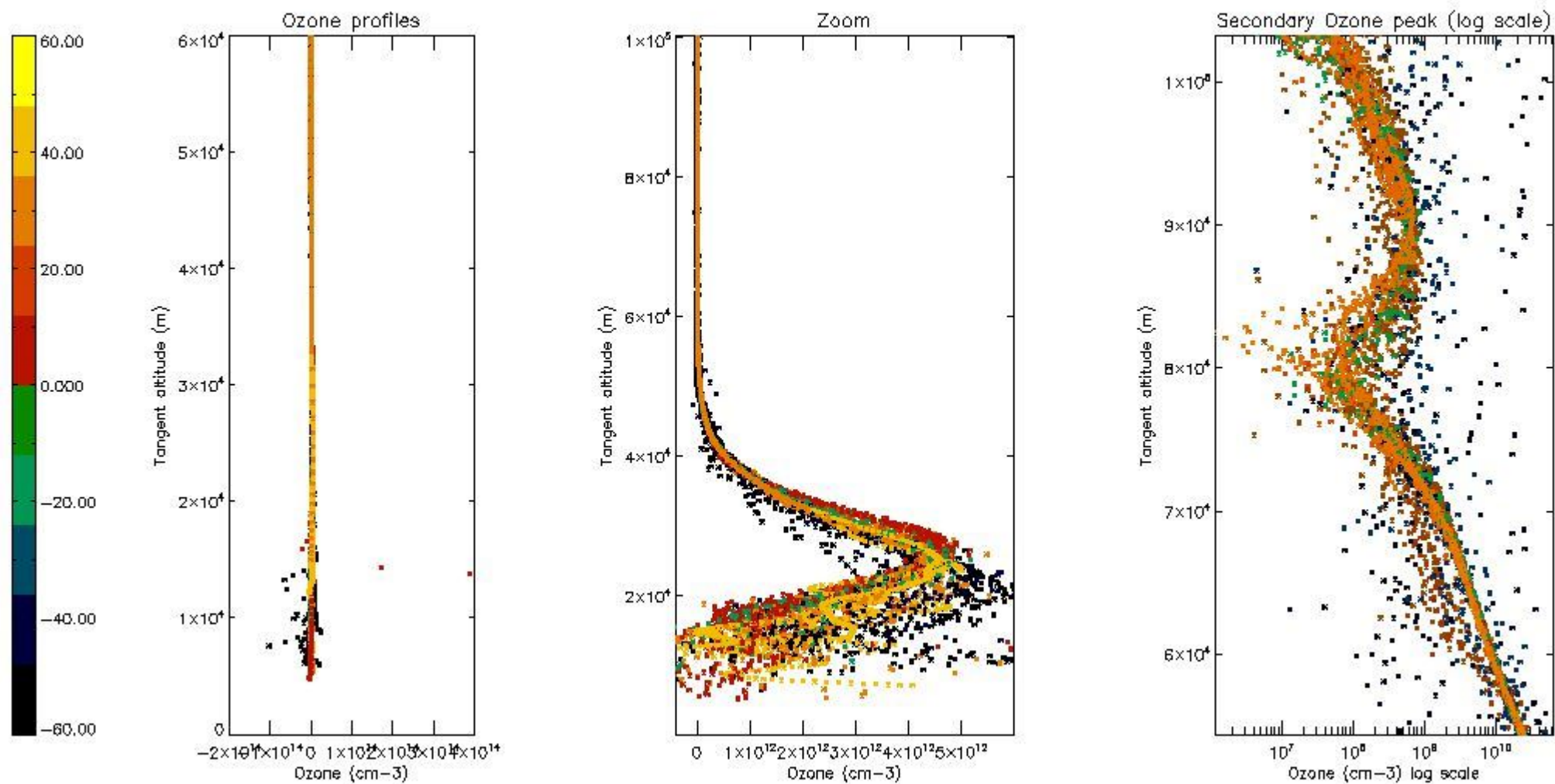
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	39
STD < 20	24

STD < 10	22
STD < 5	18

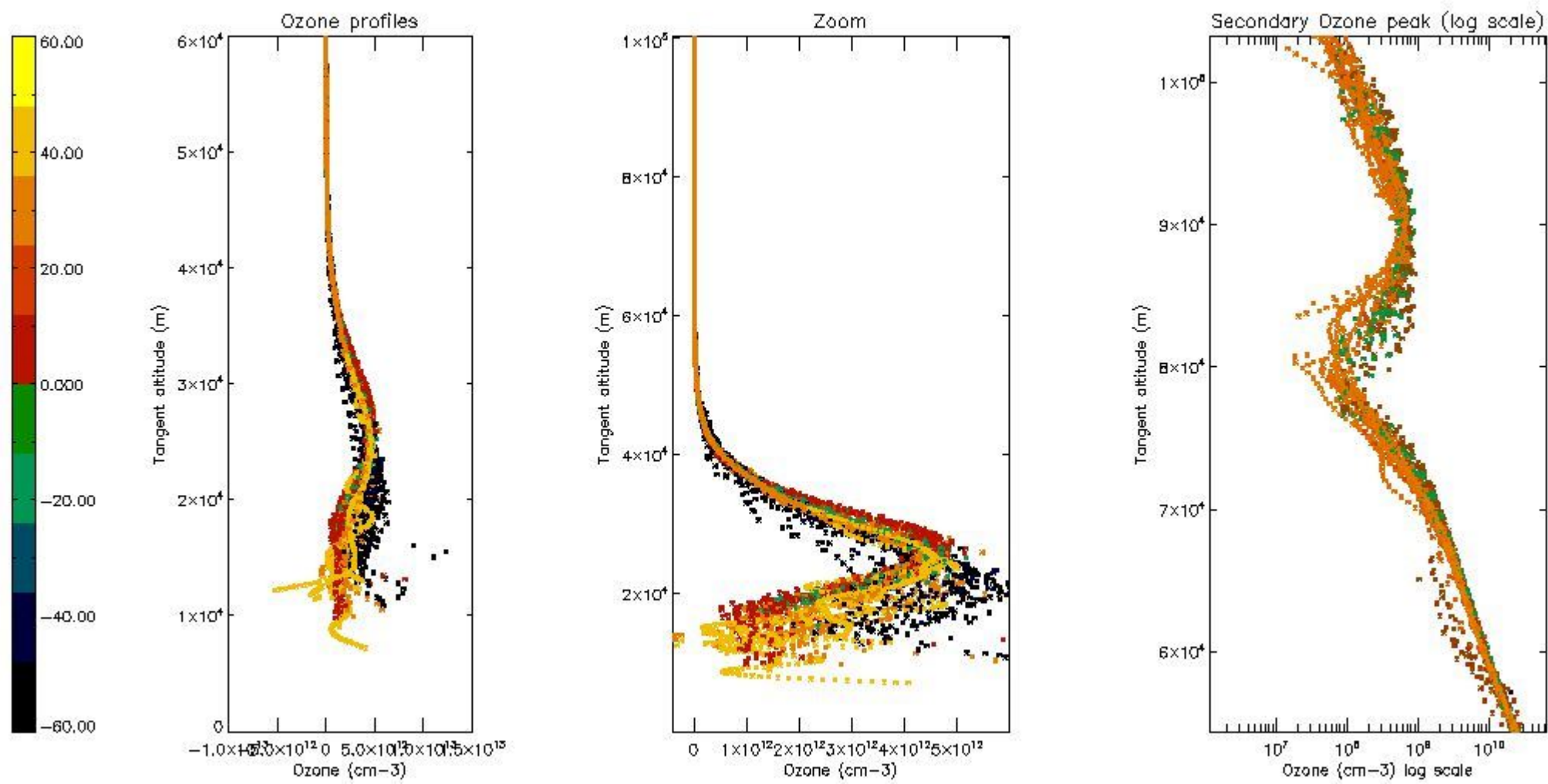
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



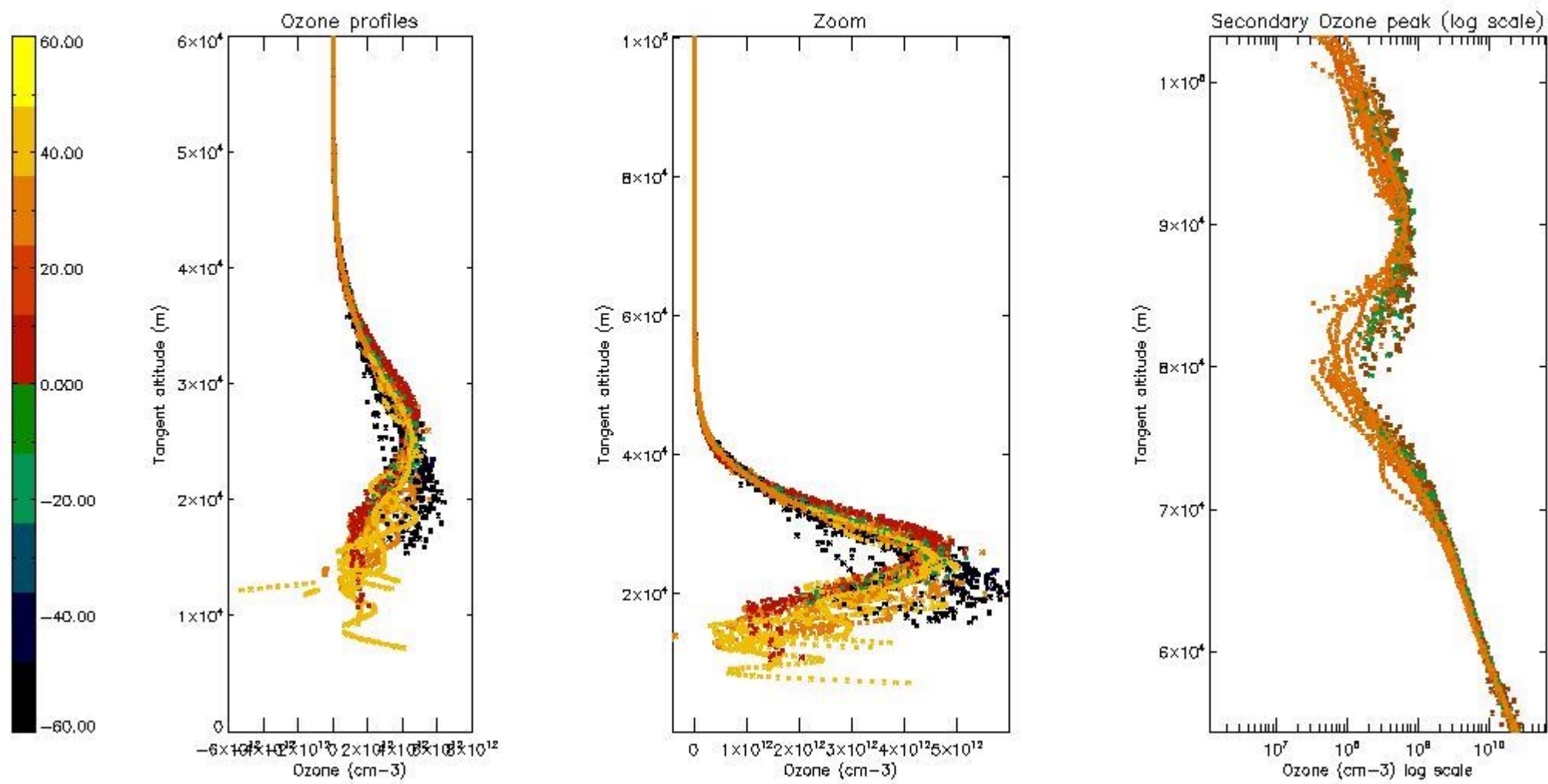
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



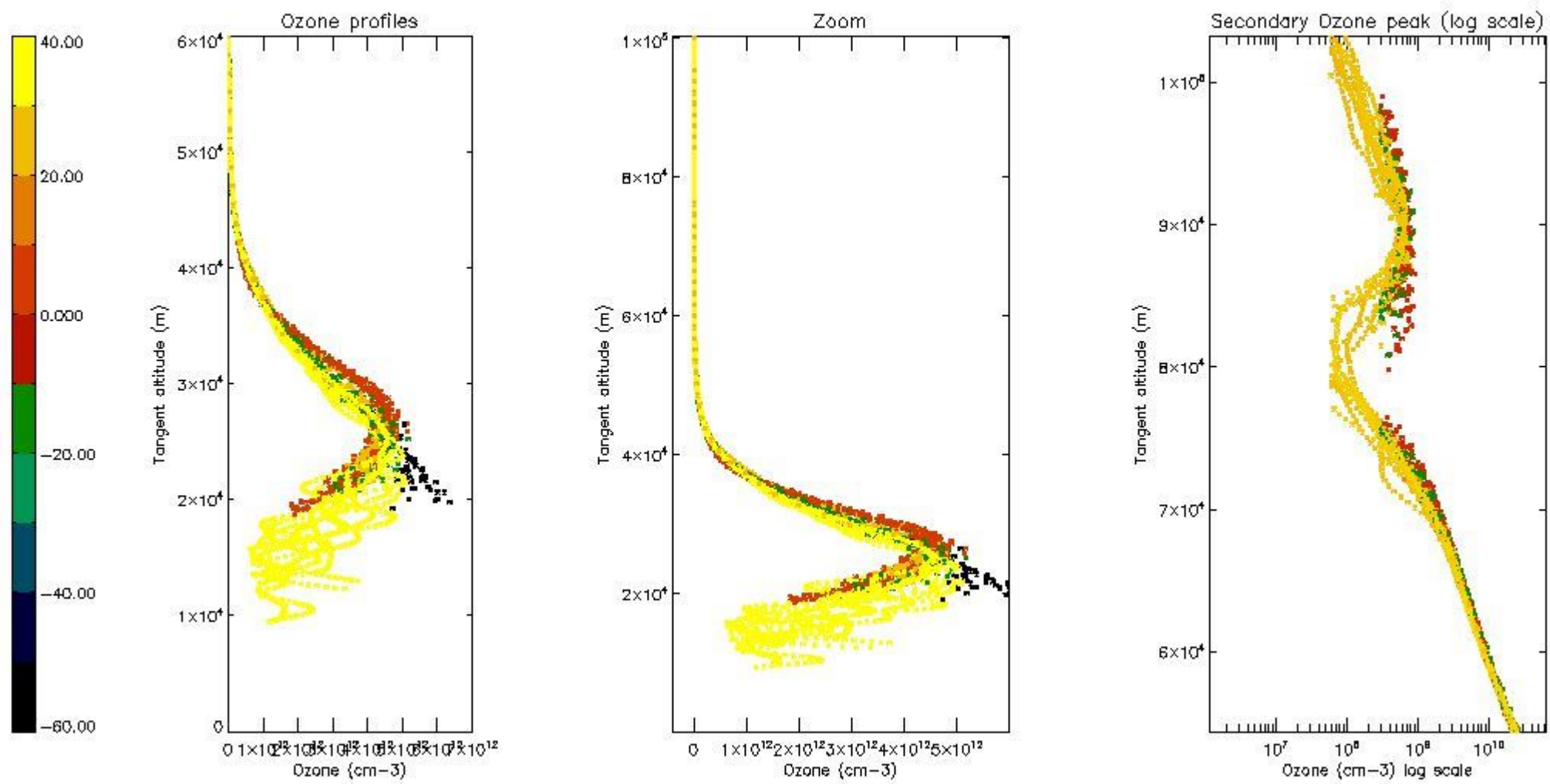
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



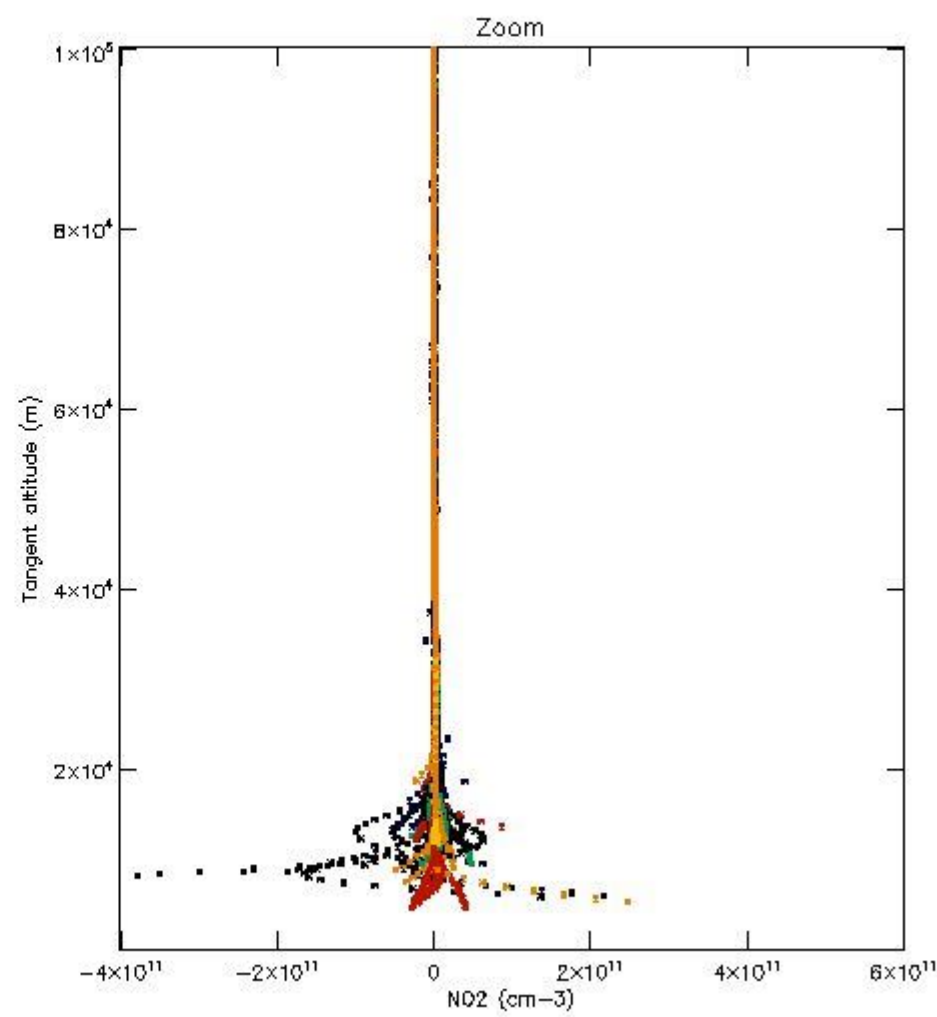
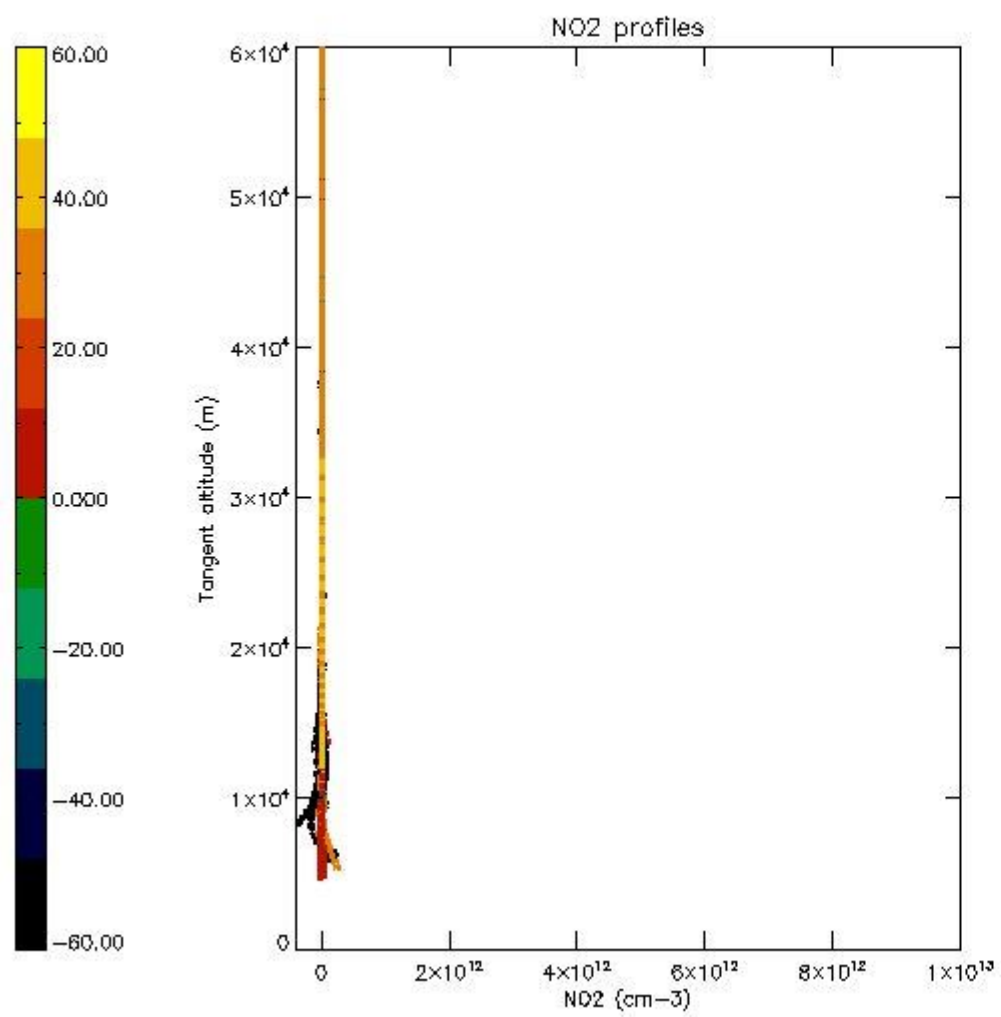
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



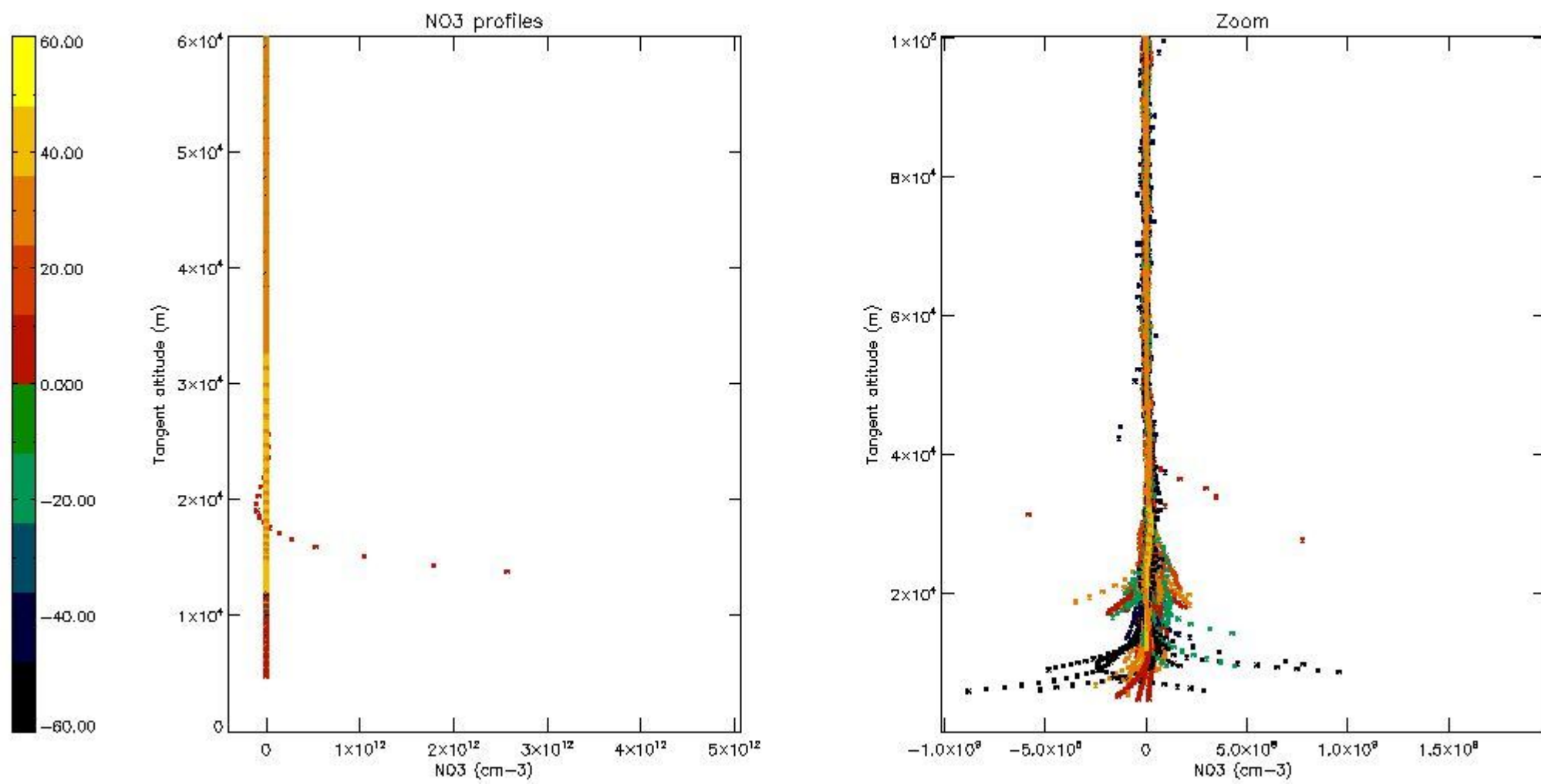
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



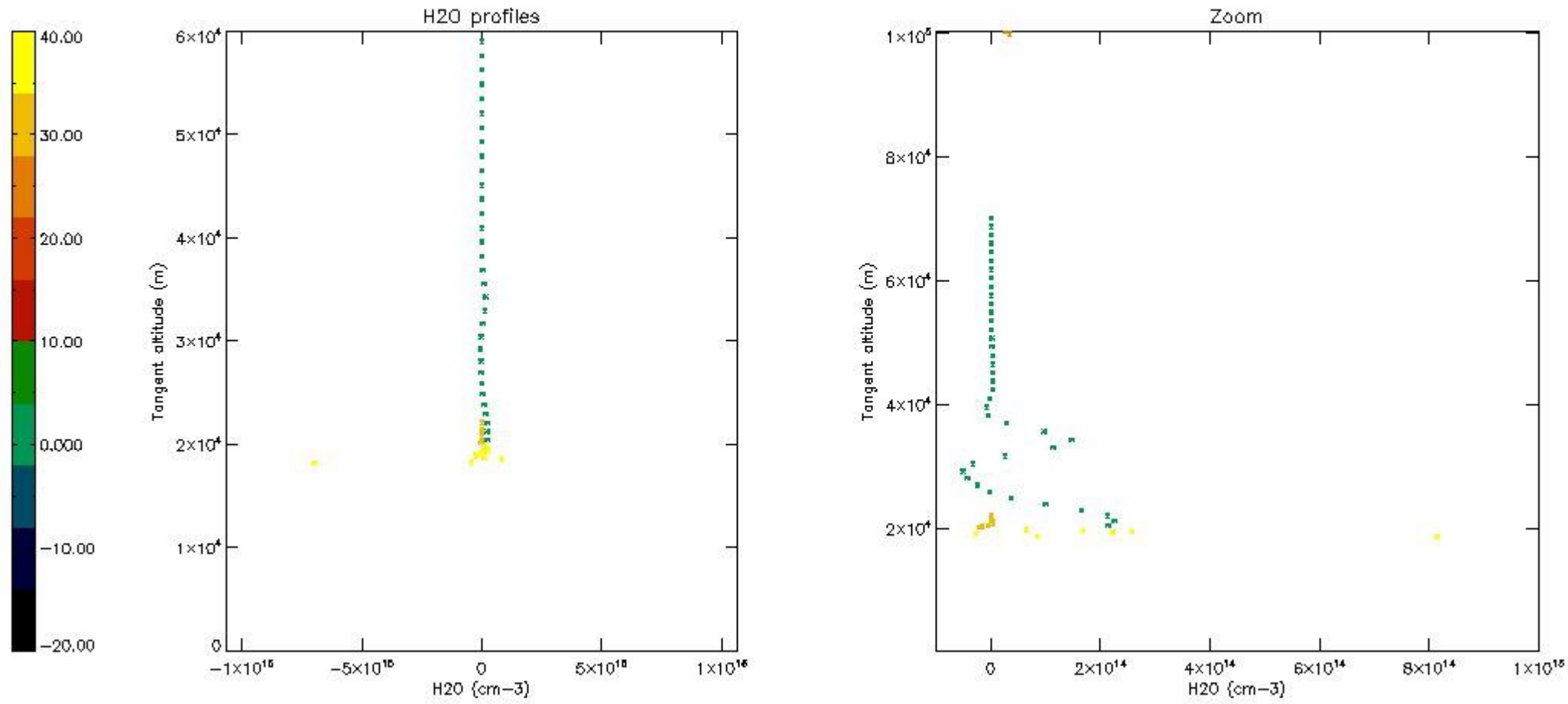
5.7 Plot NO3 profiles for all STD (dark without errors)

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	18-OCT-2004 00:07:47
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-OCT-2004 00:07:47
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-OCT-2004 00:07:47

GOMOS Level 2 Daily Report

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

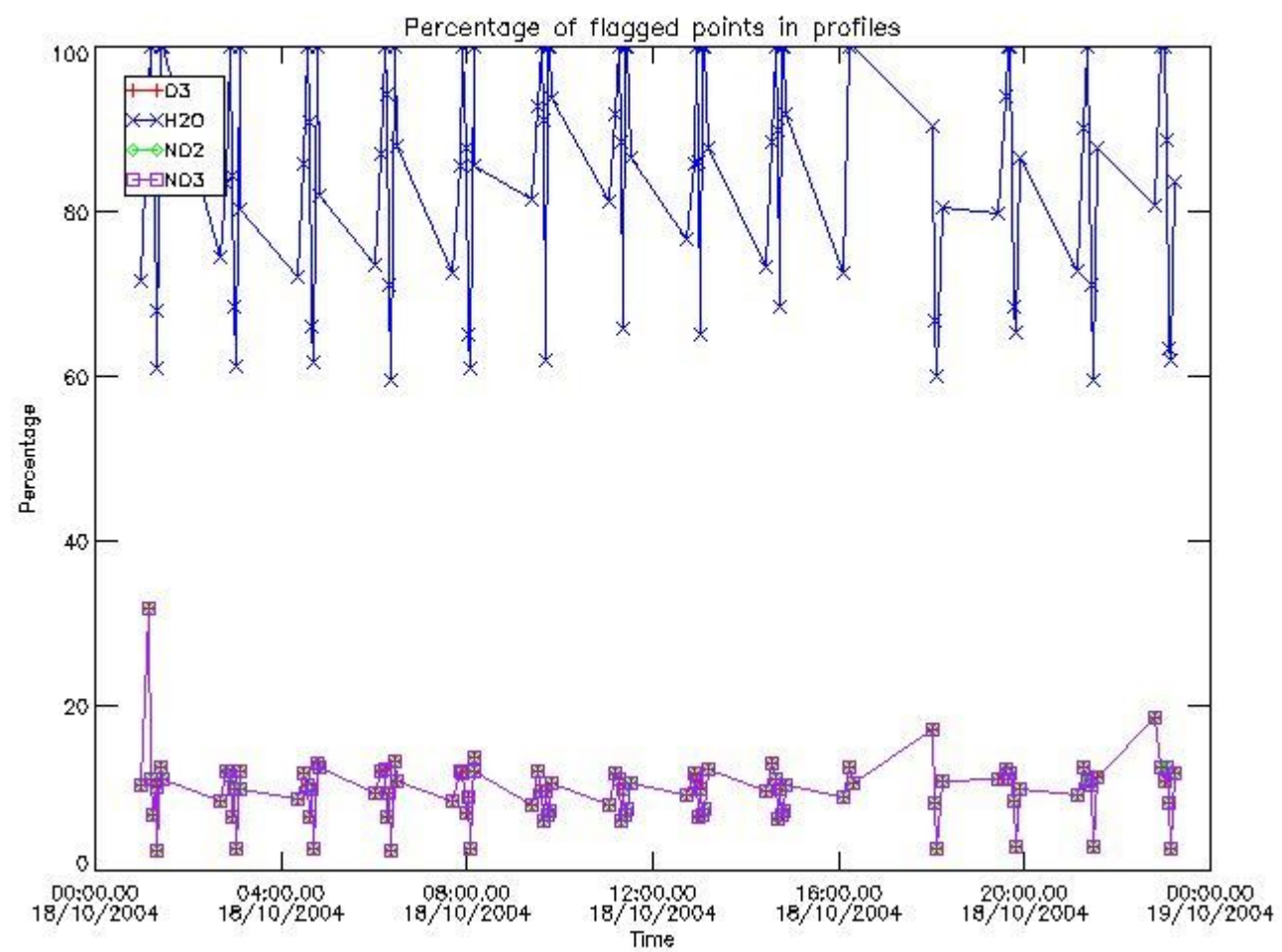
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

[6. Auxiliary Data Files used for the production reported in section 2](#)

3. Quality information per product

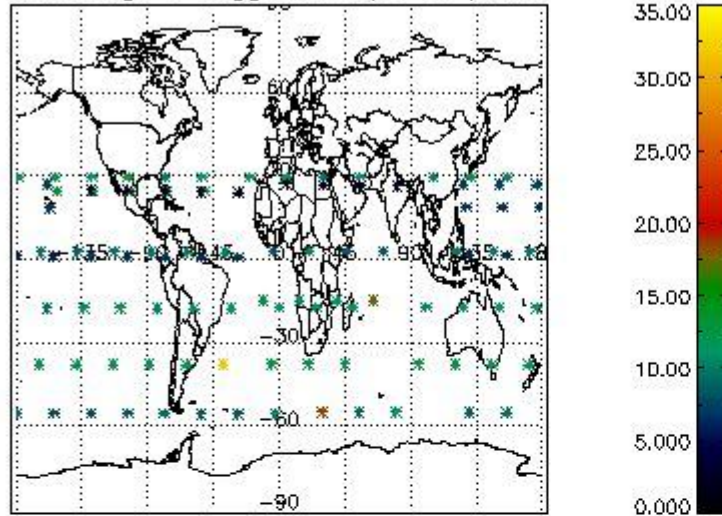
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

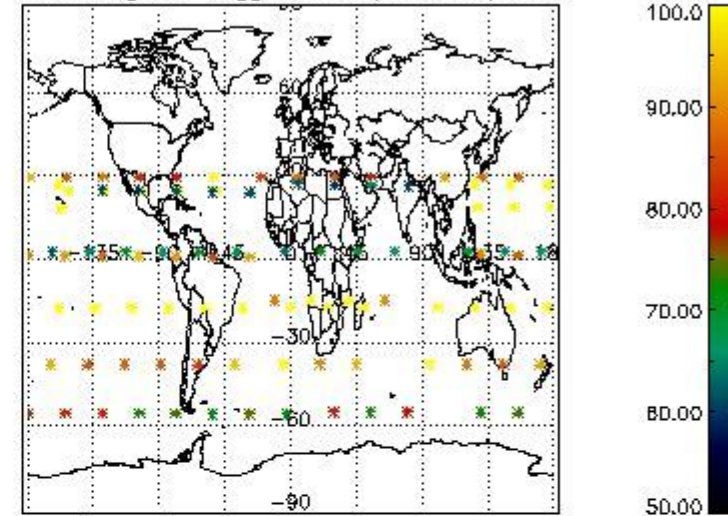


3.2 Plot quality information per product (world map)

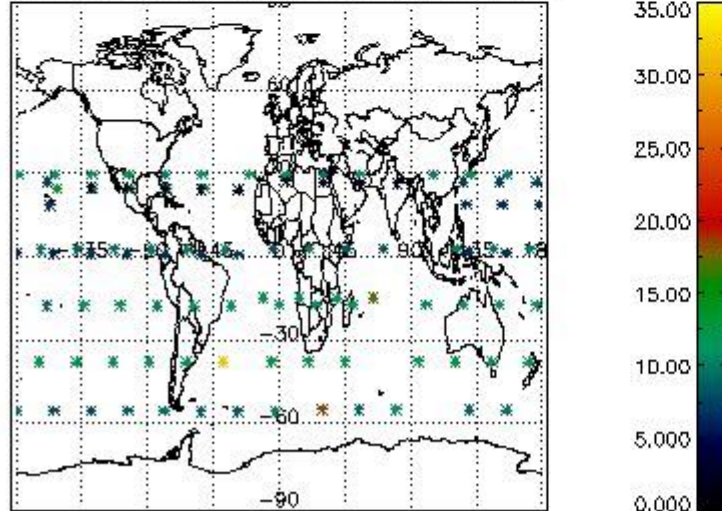
Percentage of flagged data per O3 profile



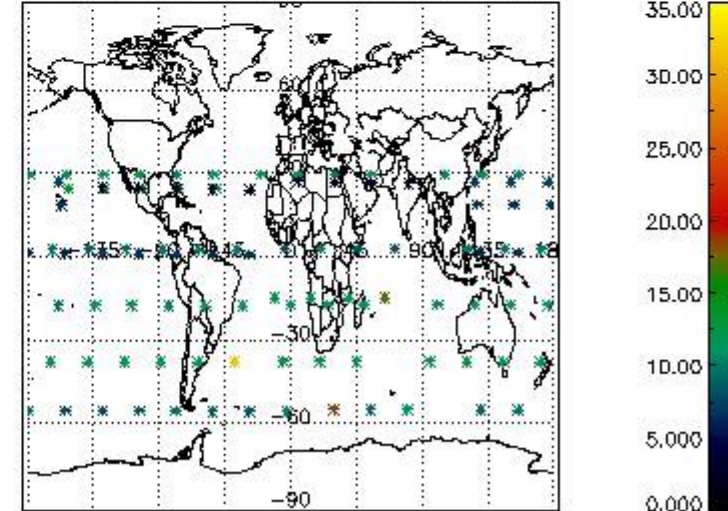
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

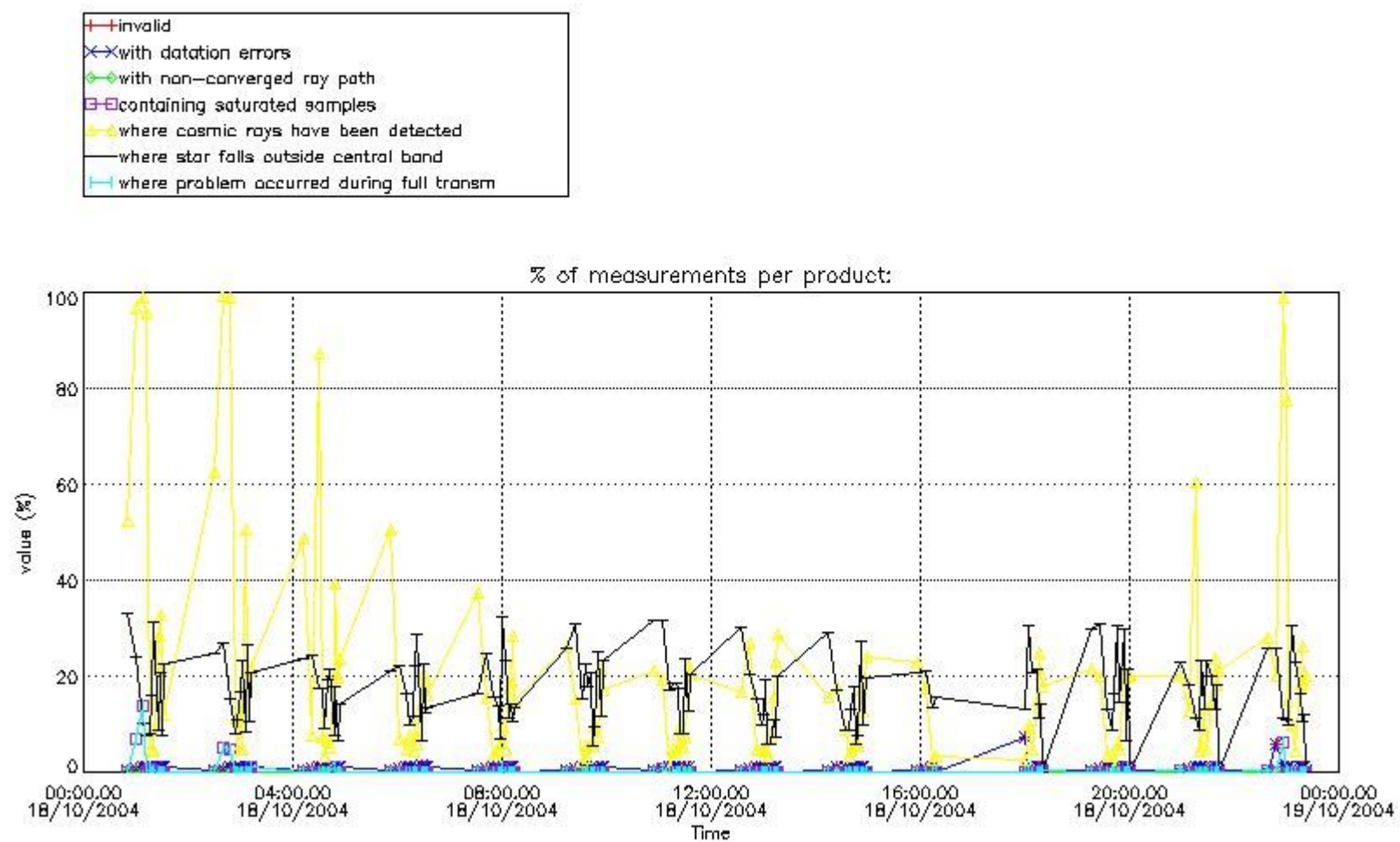


4. Level 1 quality information per product

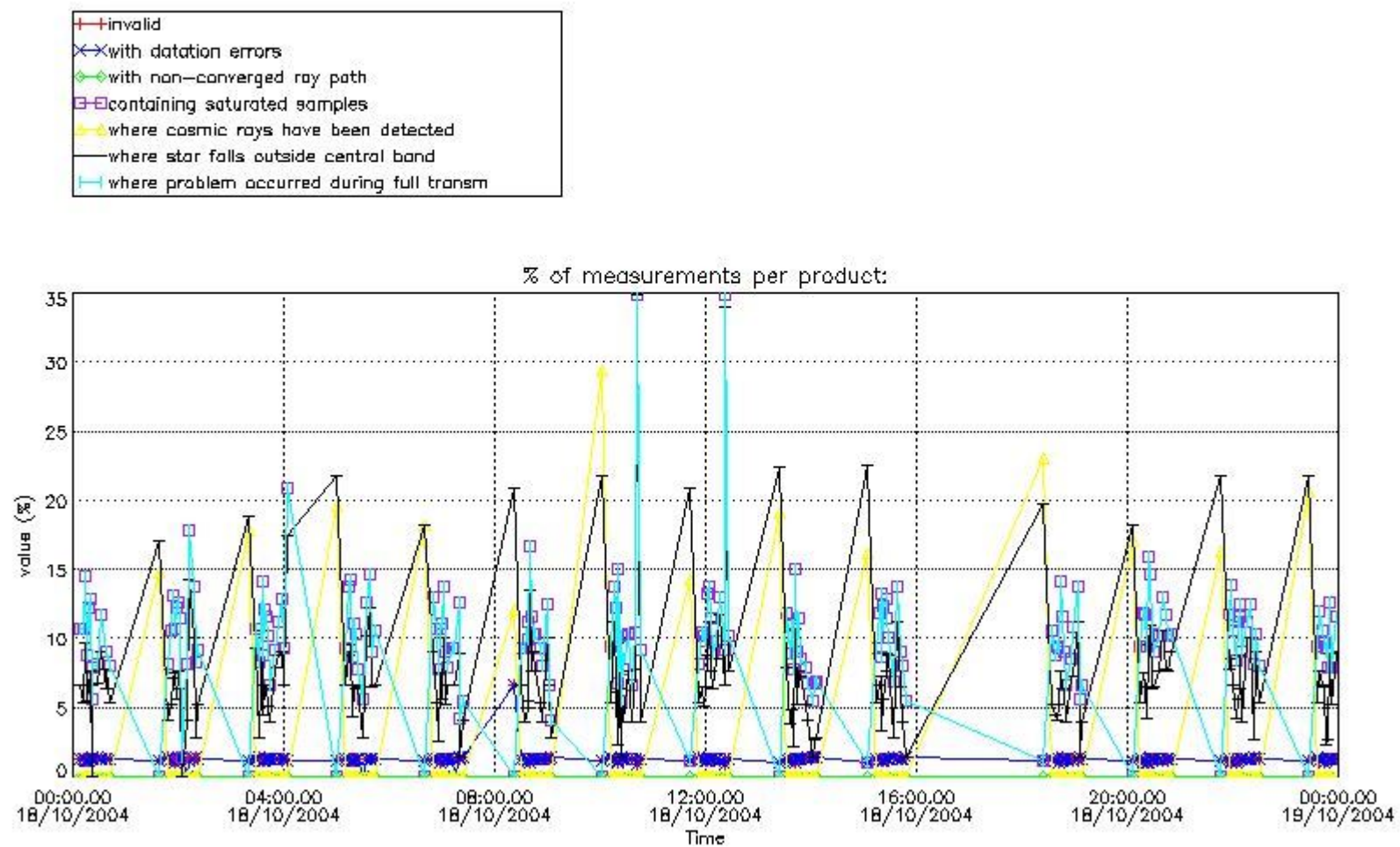
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

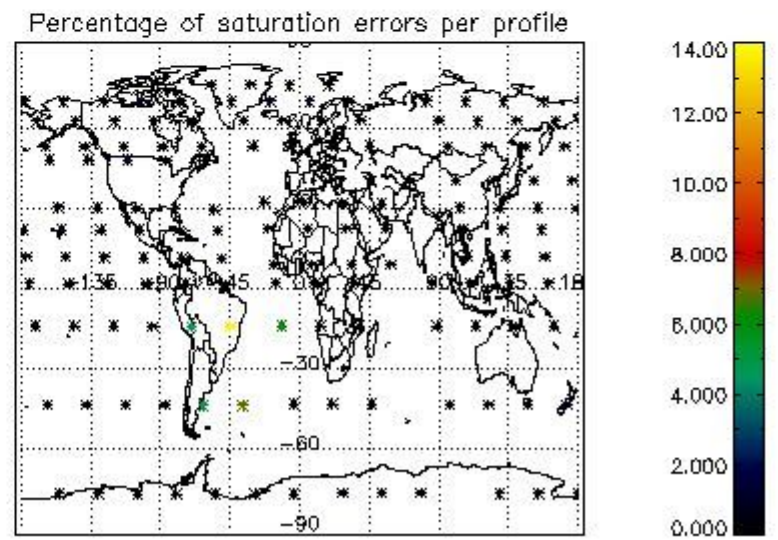
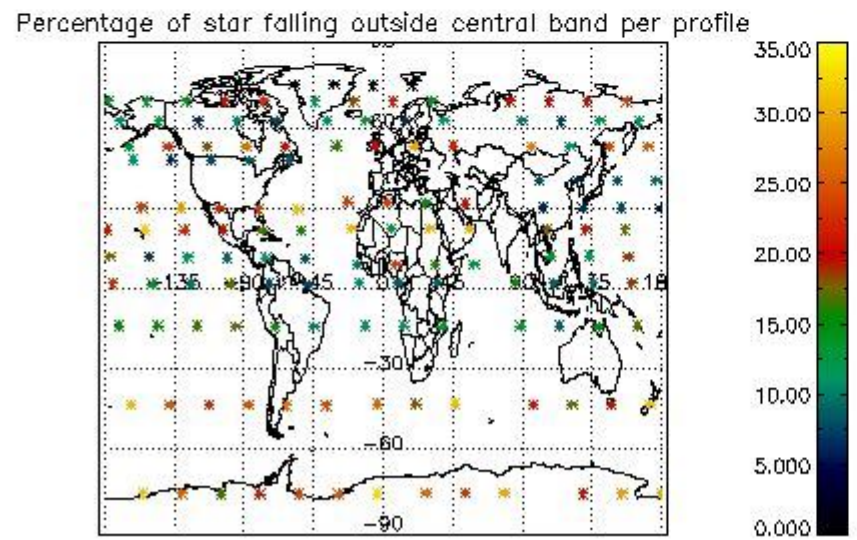
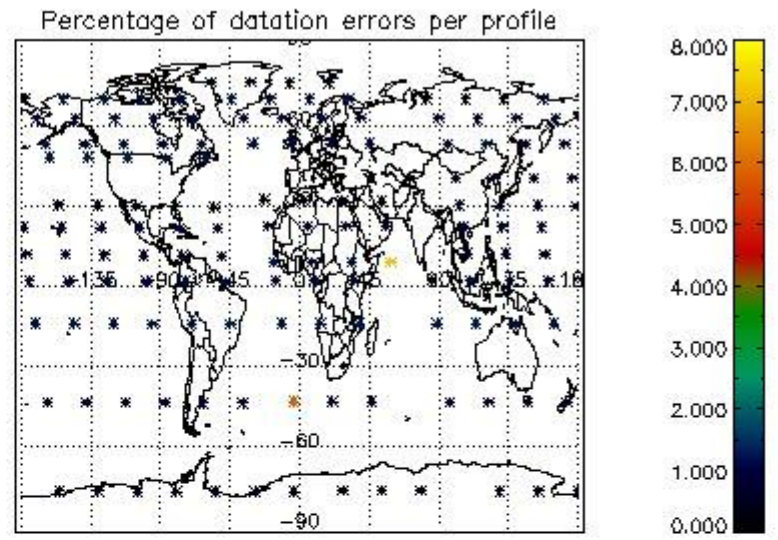
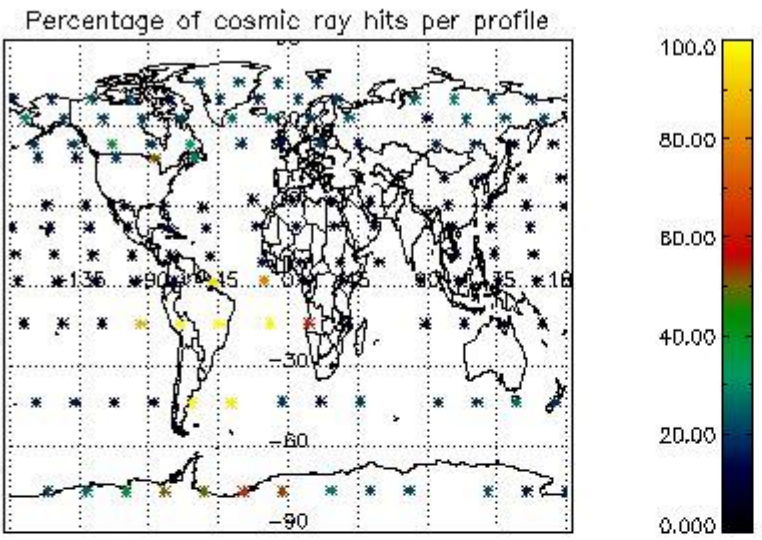
4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



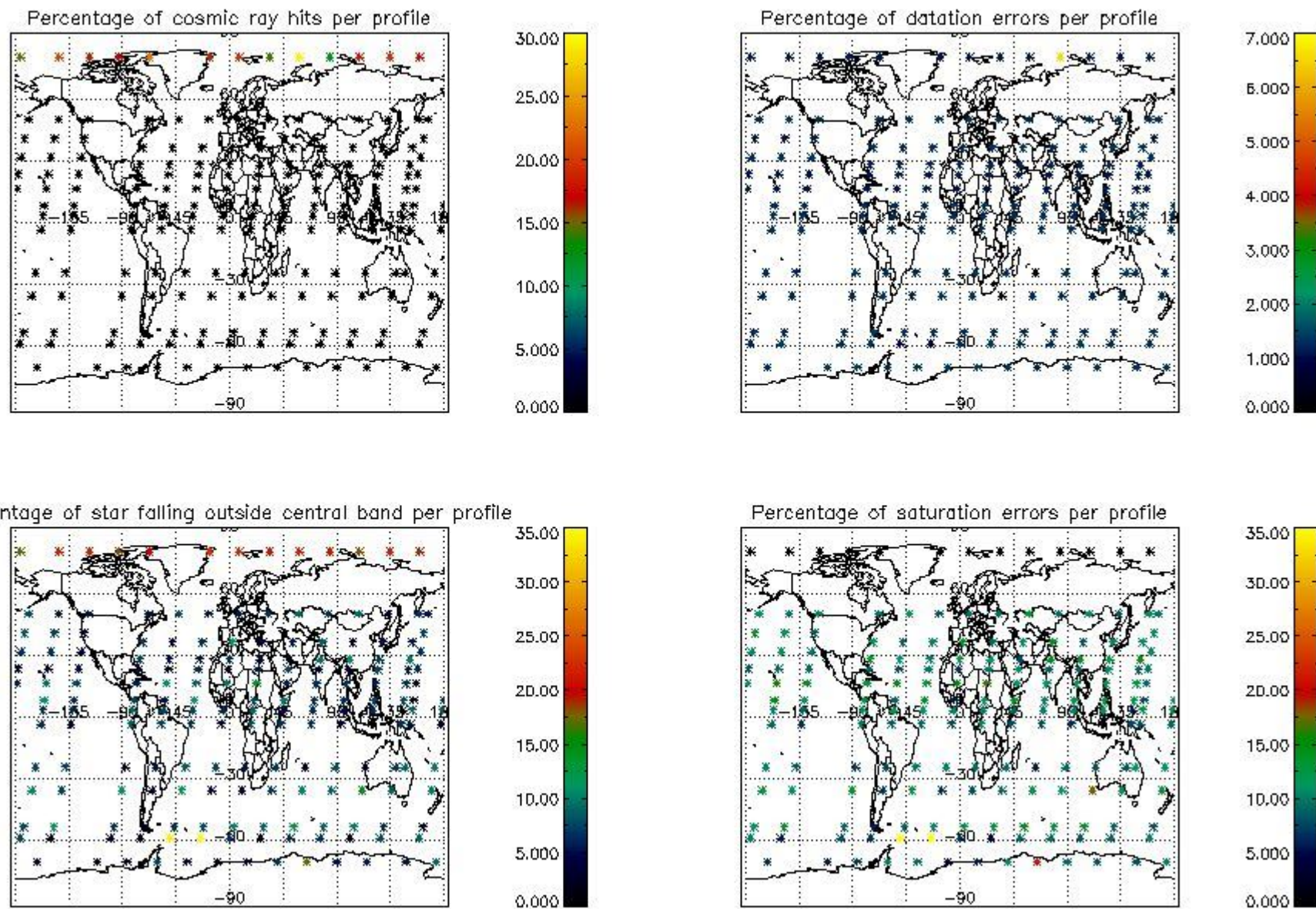
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



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



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

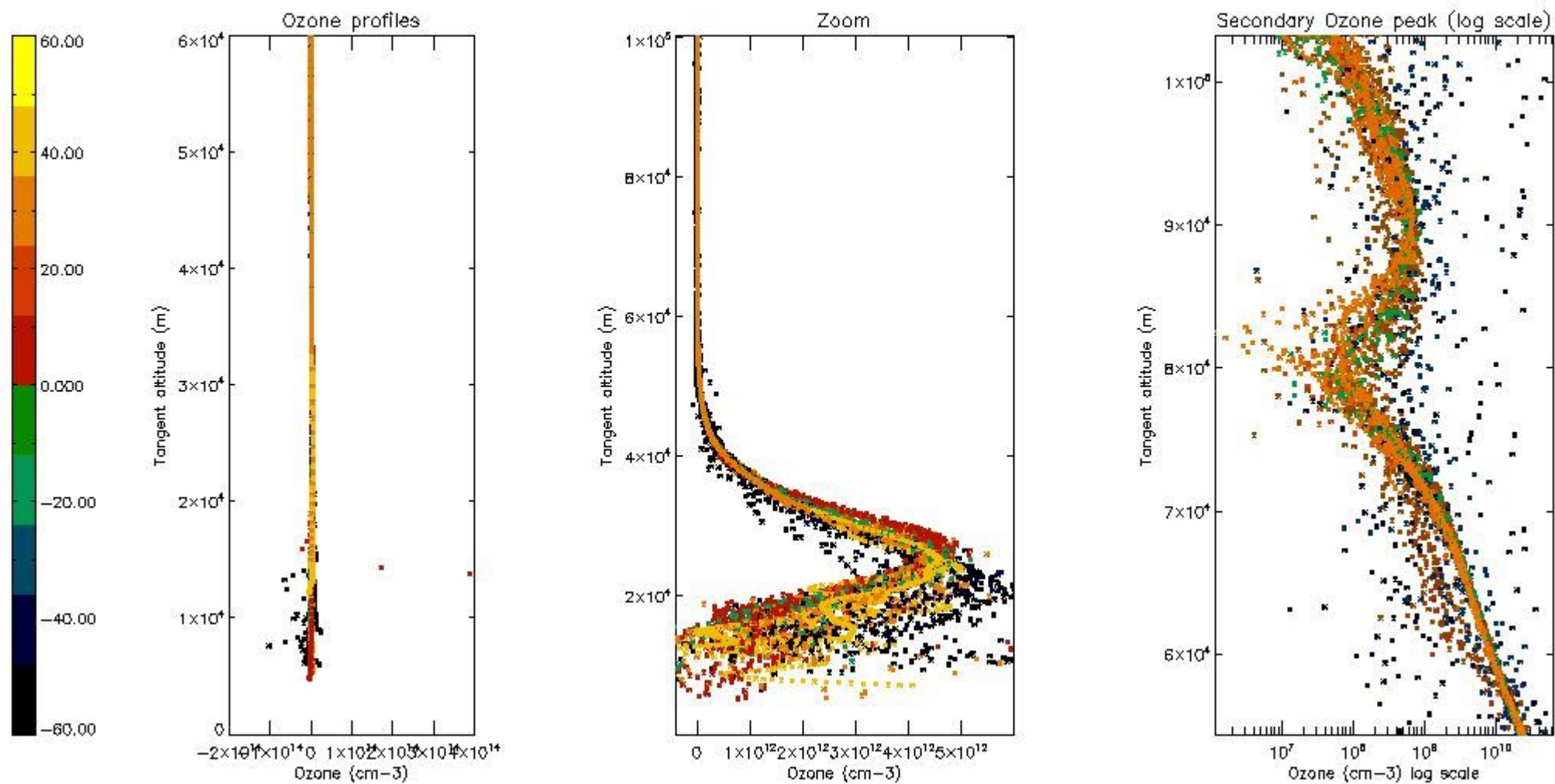
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	39
STD < 20	24

STD < 10	22
STD < 5	18

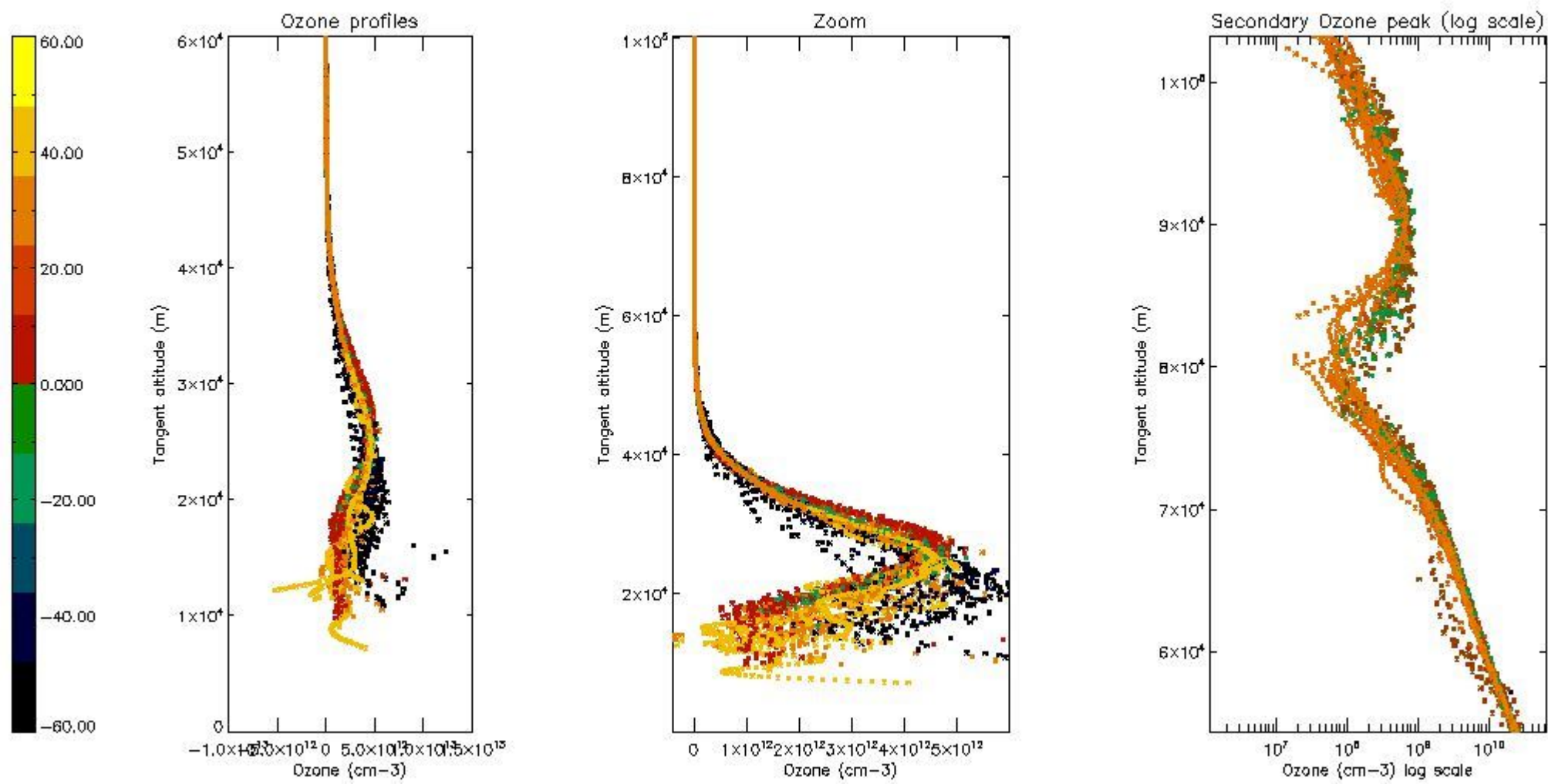
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



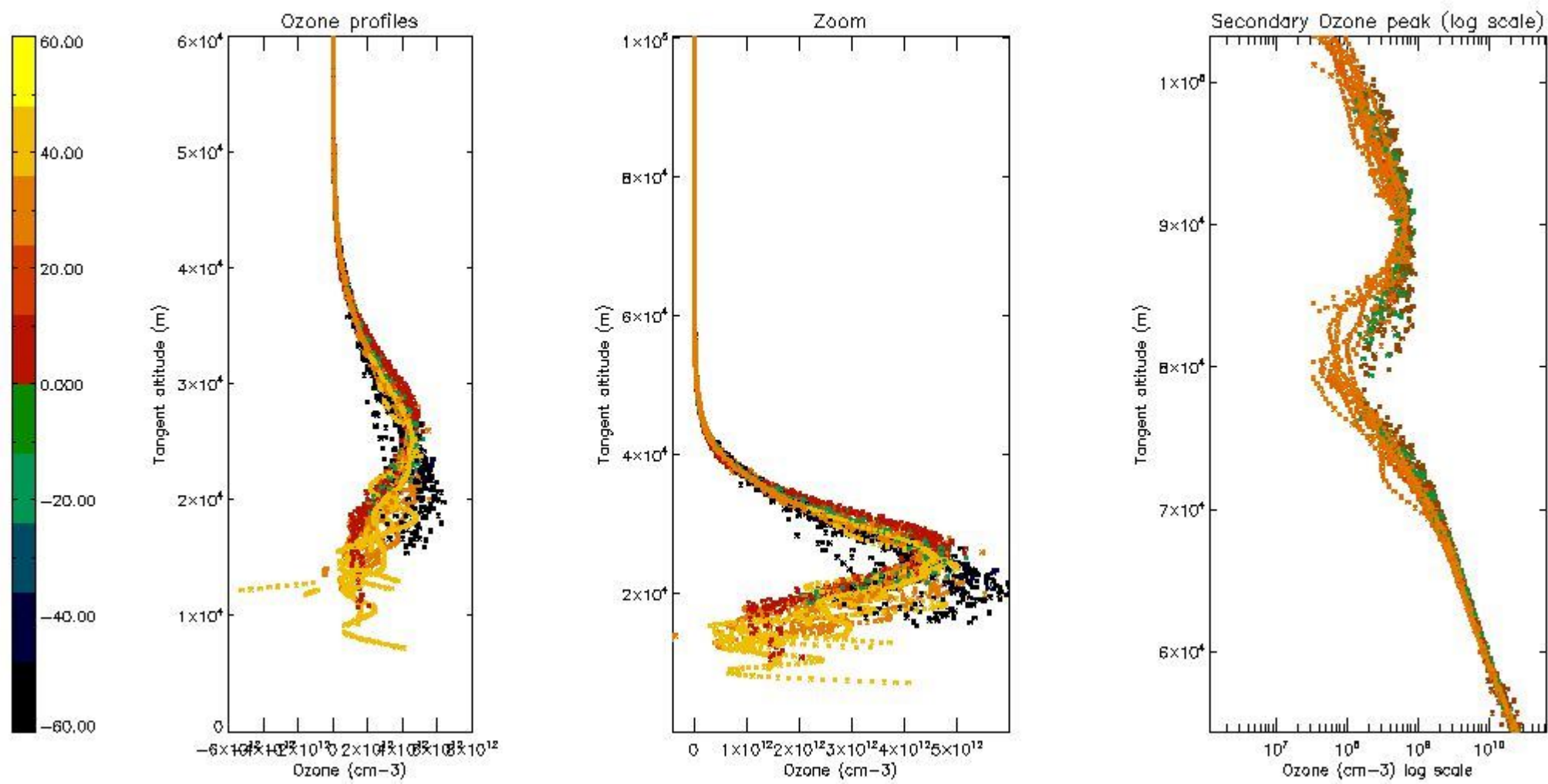
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



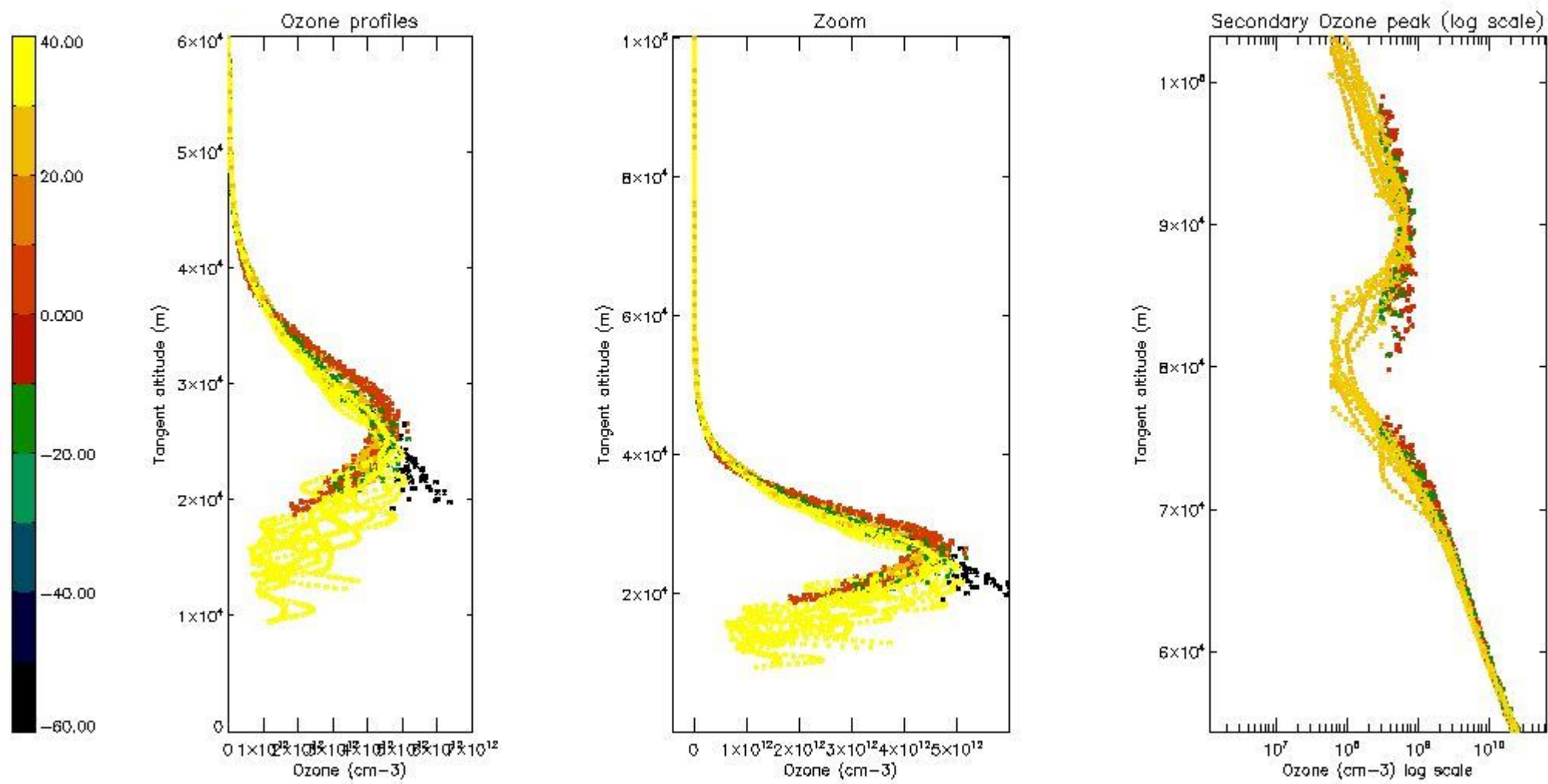
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



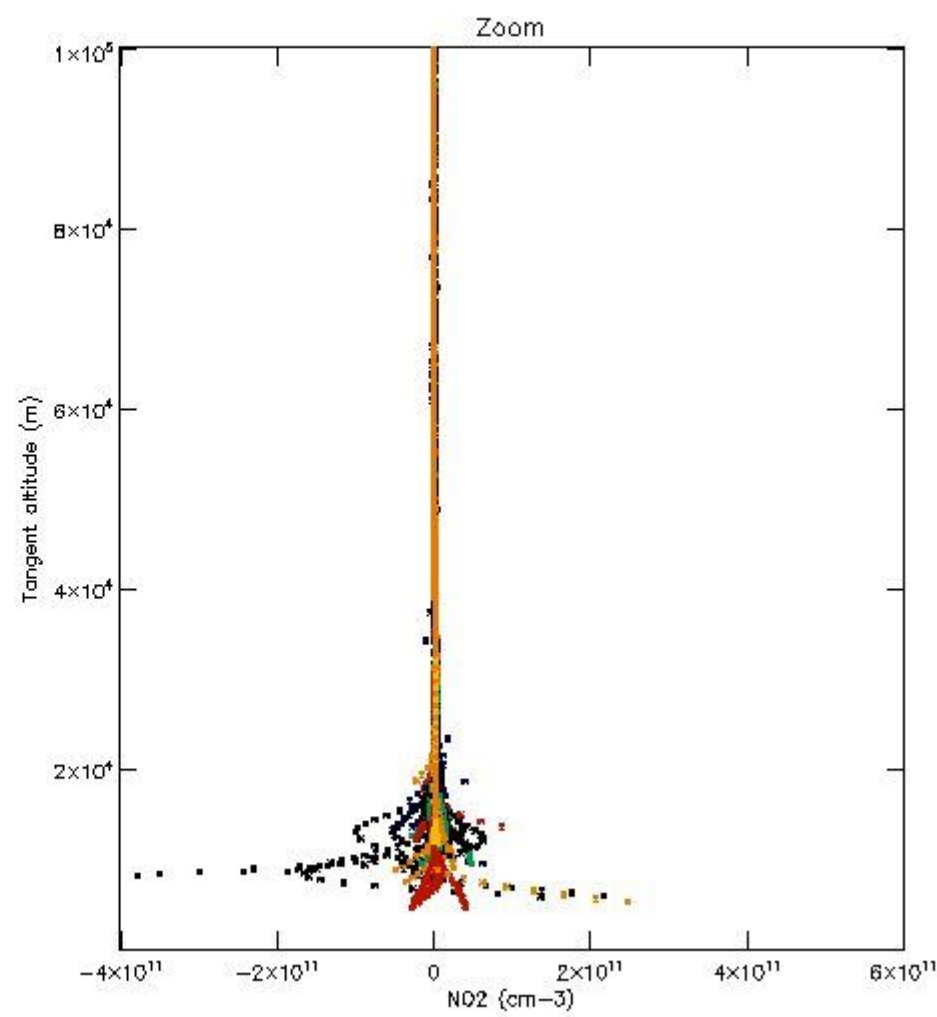
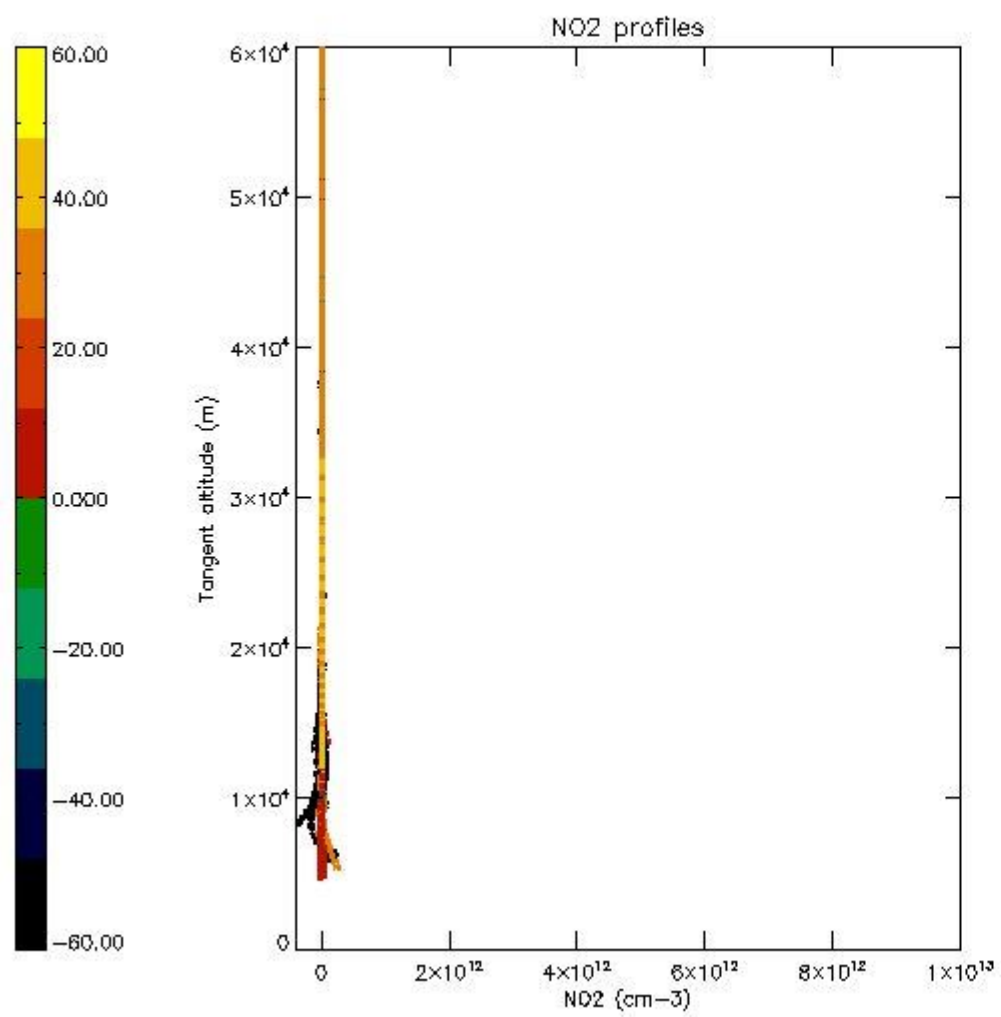
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



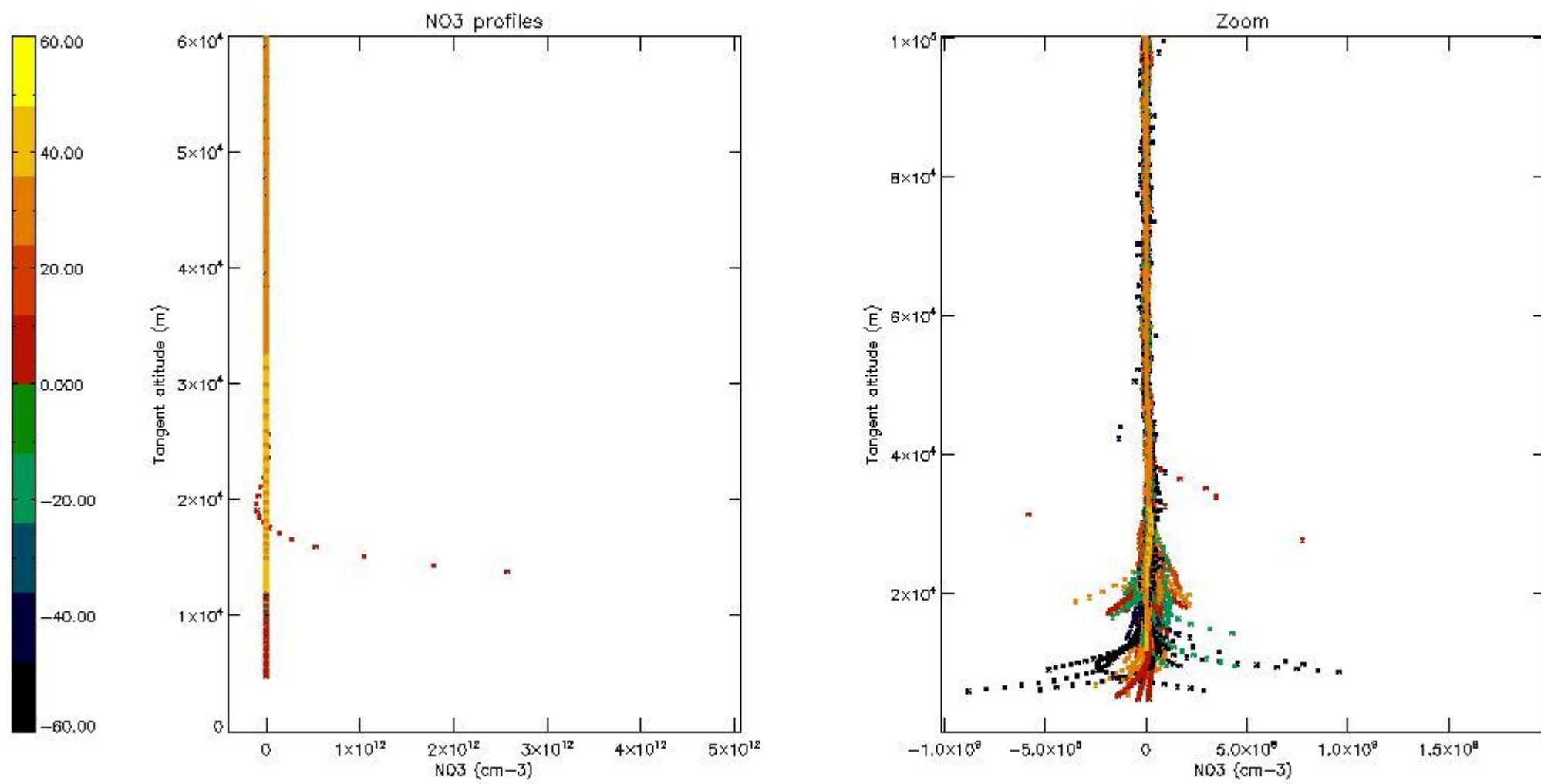
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



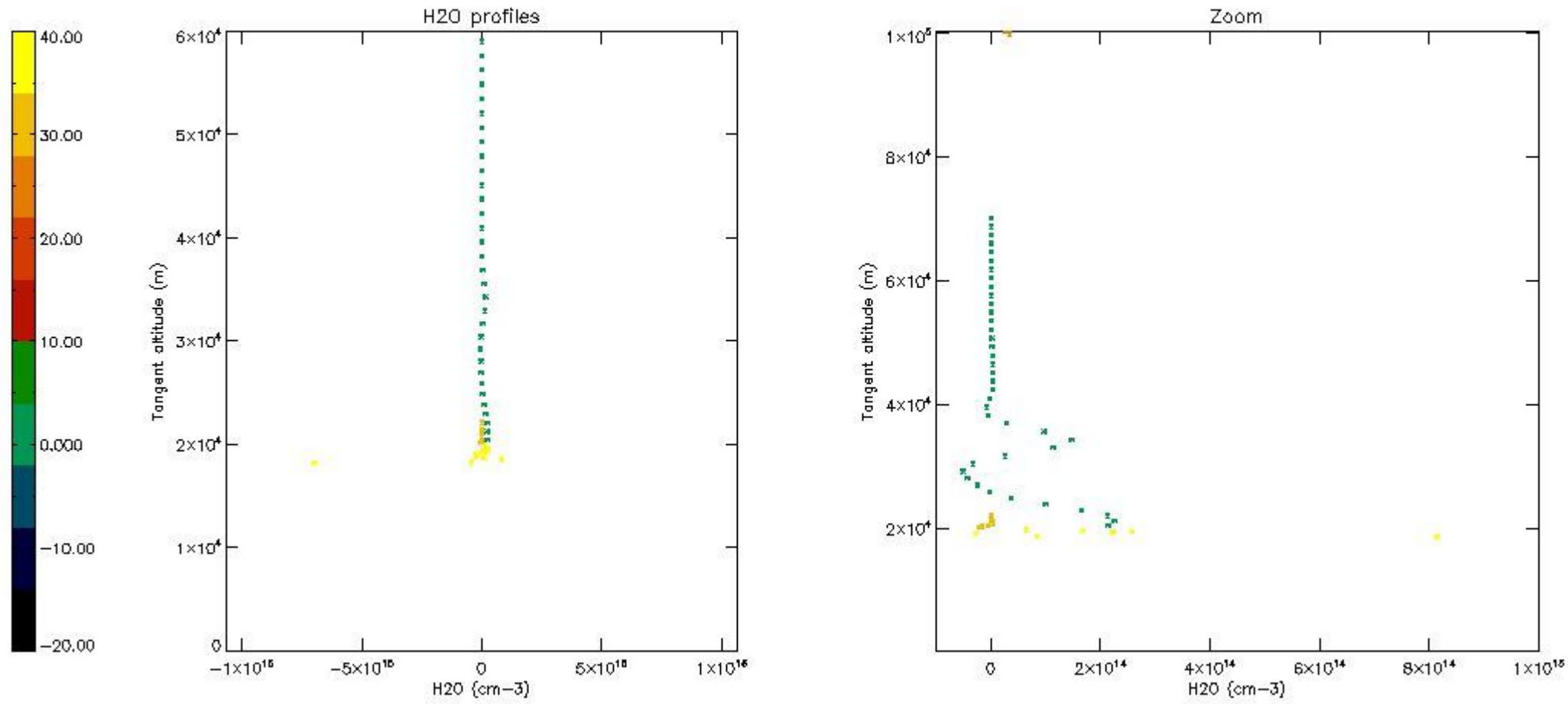
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

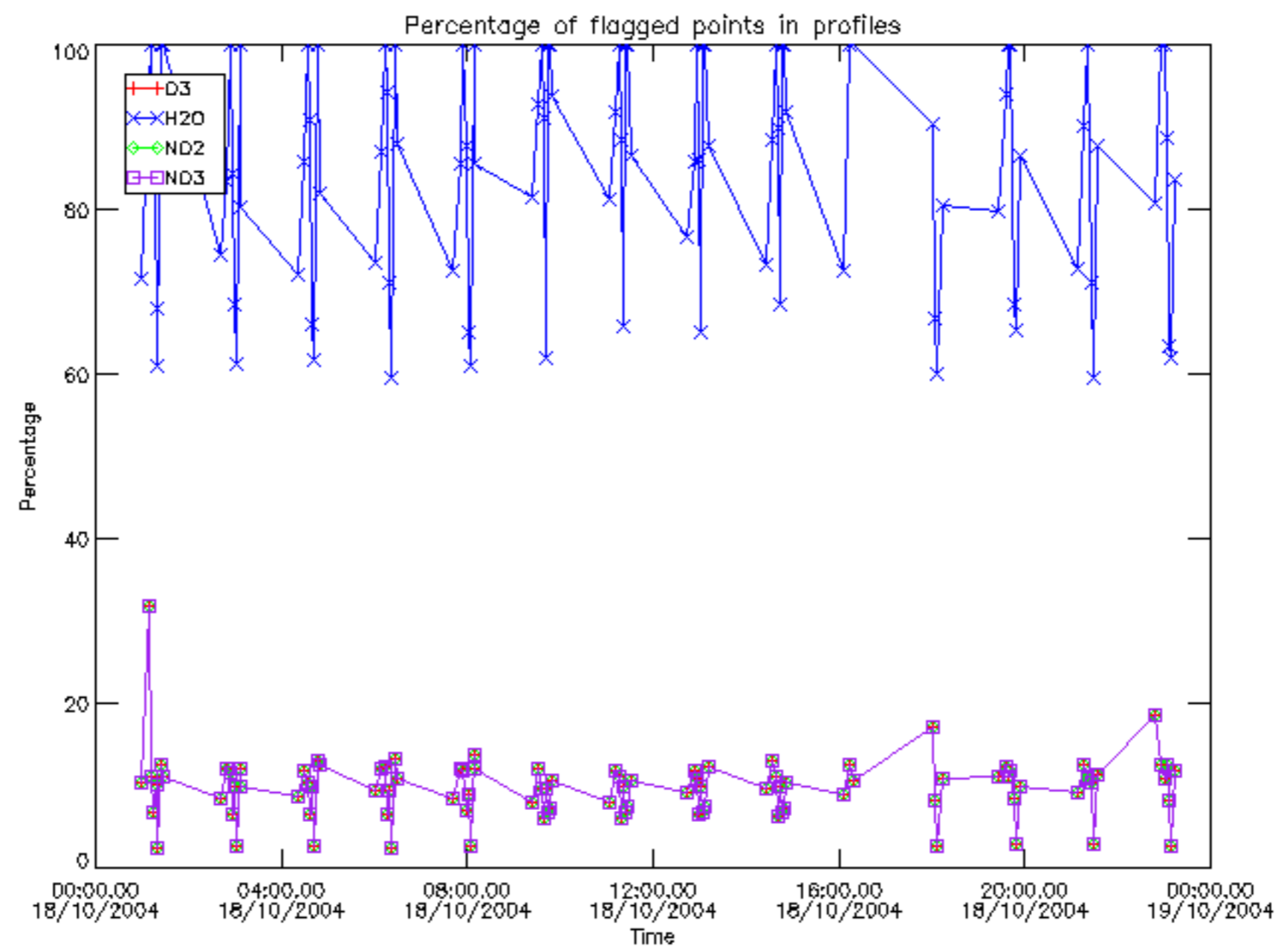
The colorbar represents the latitude.



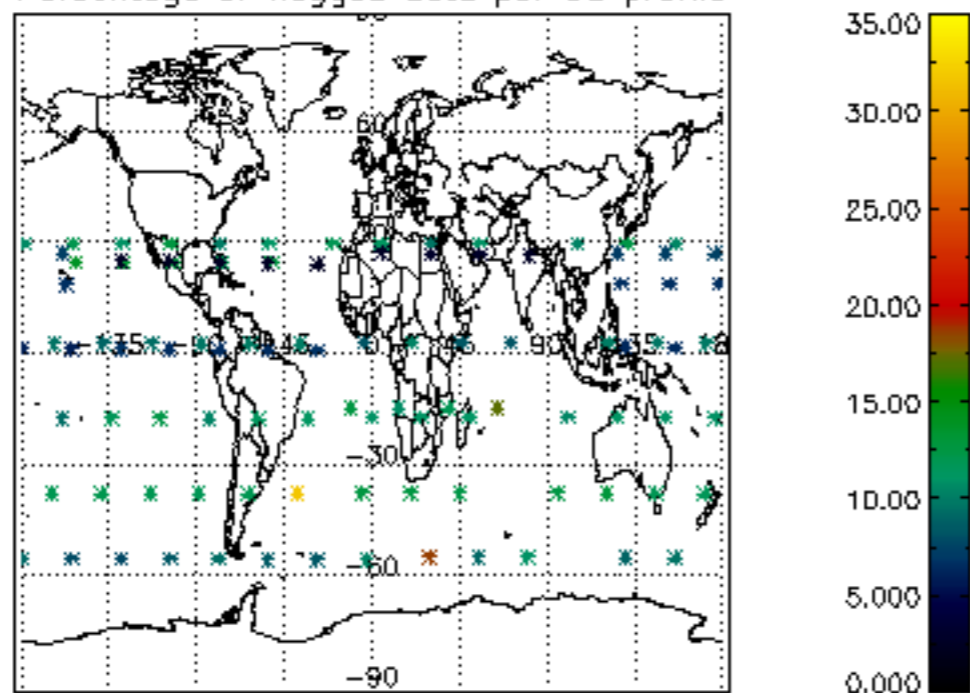
6. Auxiliary Data Files used for the production reported in section 2

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.

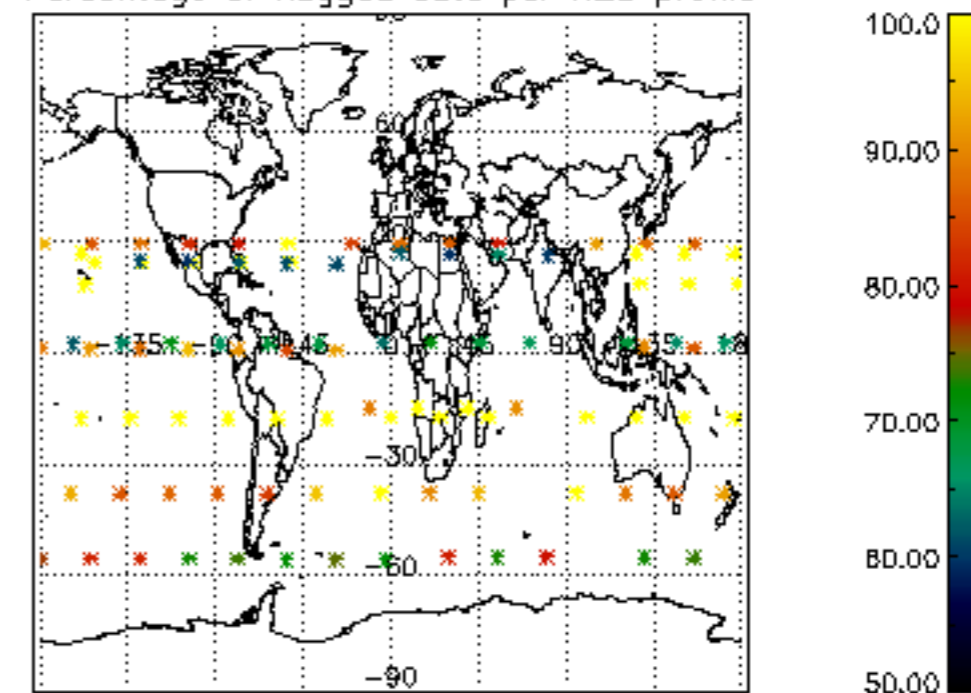
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	18-OCT-2004 00:07:47
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-OCT-2004 00:07:47
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-OCT-2004 00:07:47



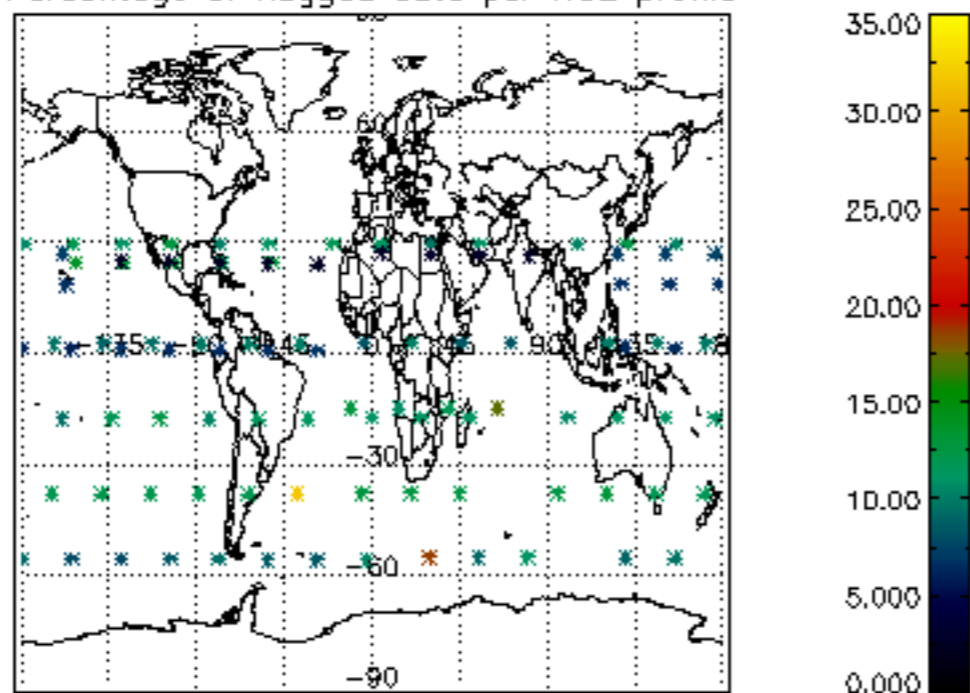
Percentage of flagged data per D3 profile



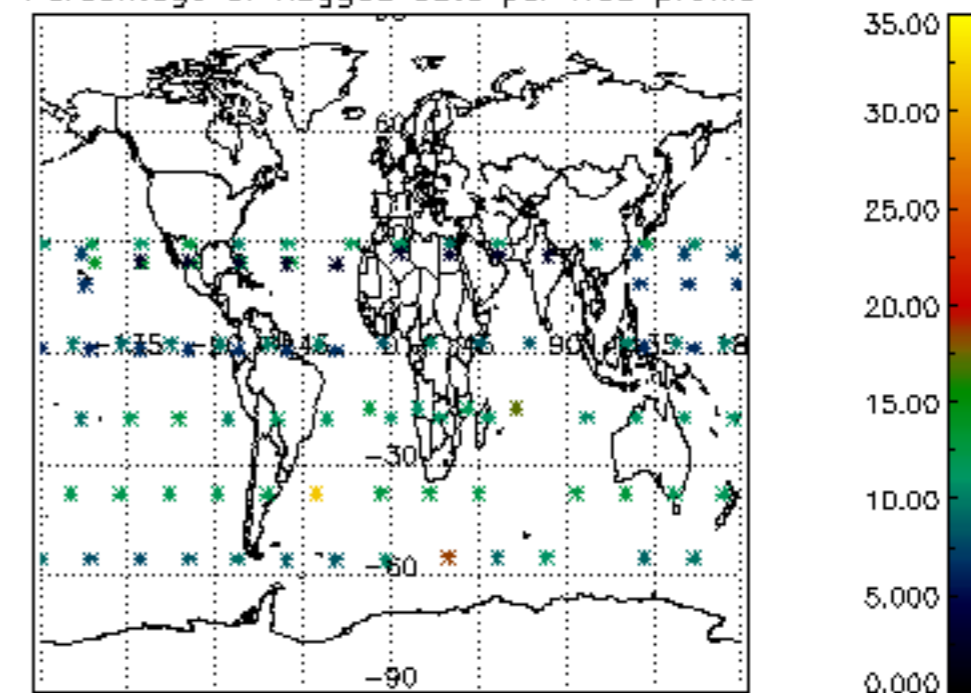
Percentage of flagged data per H2O profile

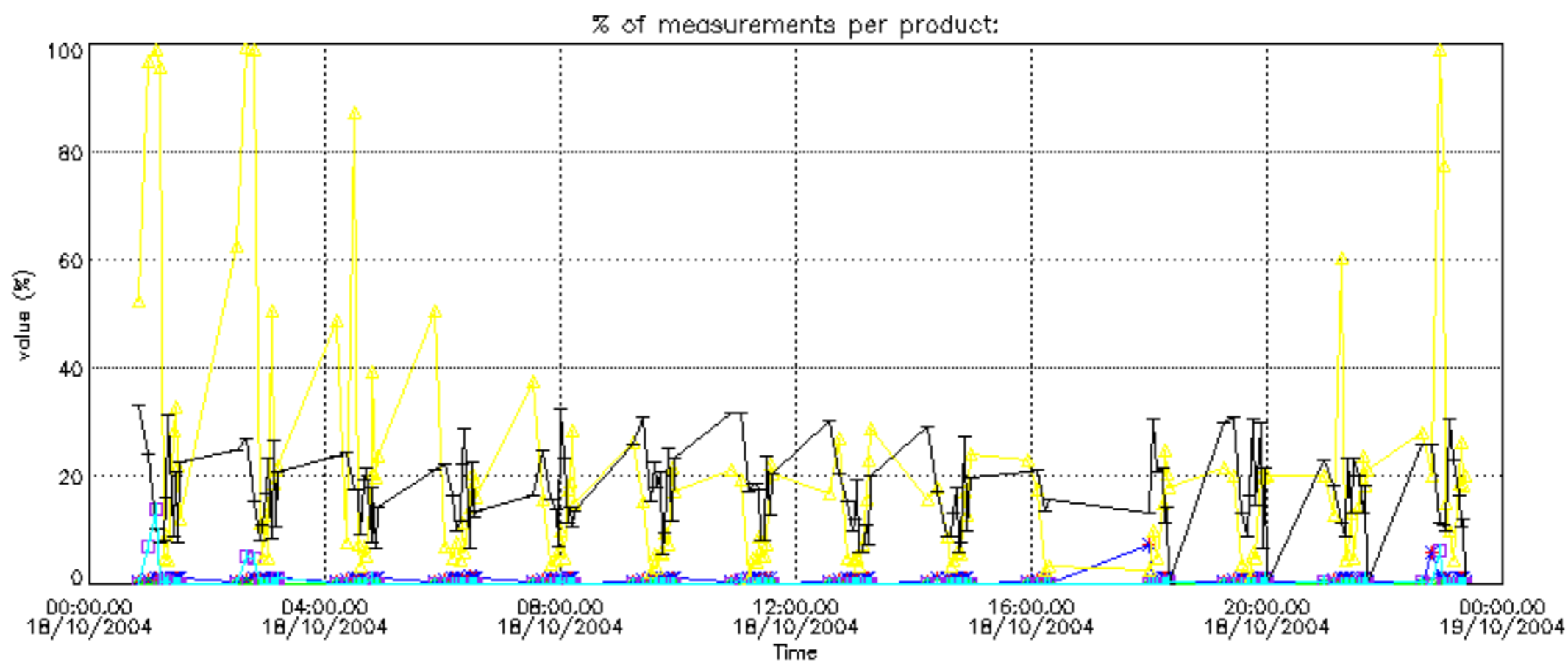


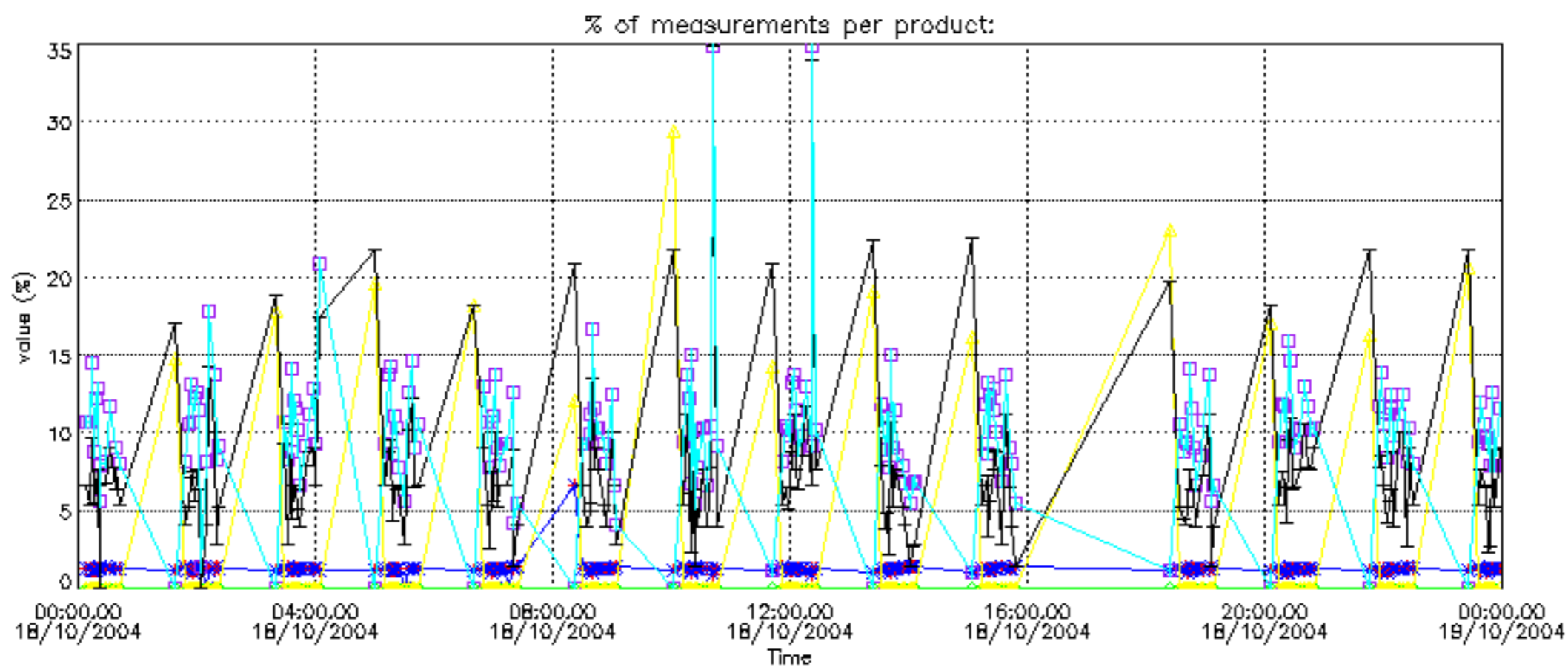
Percentage of flagged data per NO2 profile



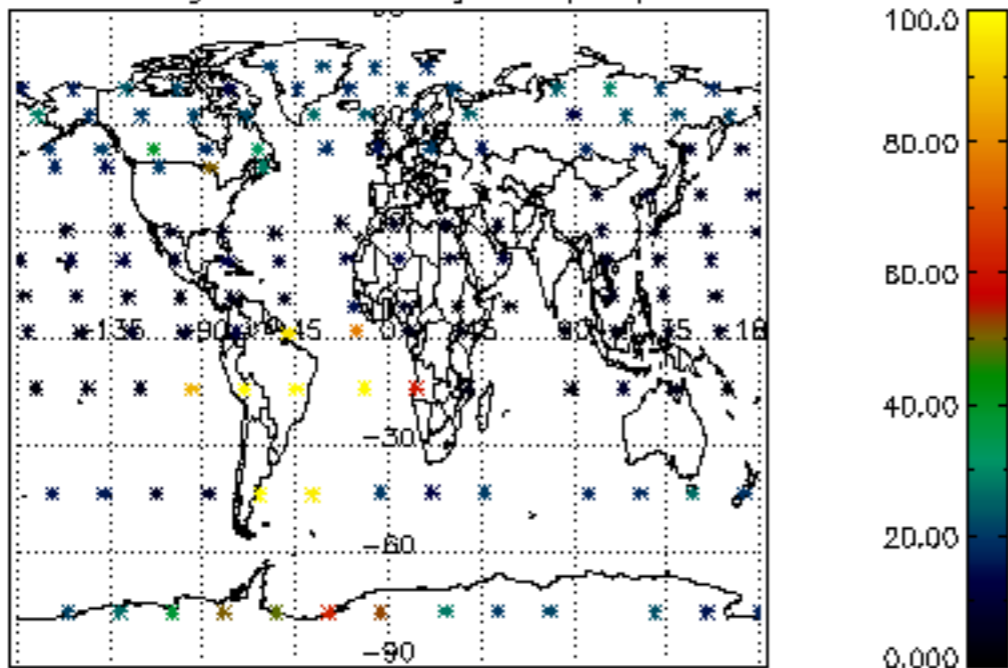
Percentage of flagged data per NO3 profile



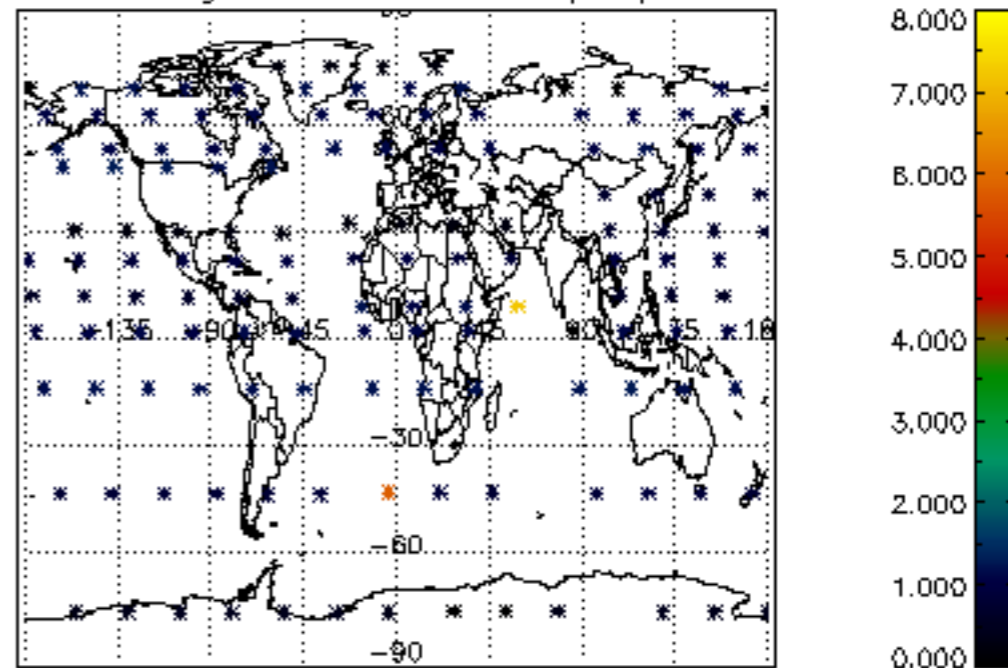




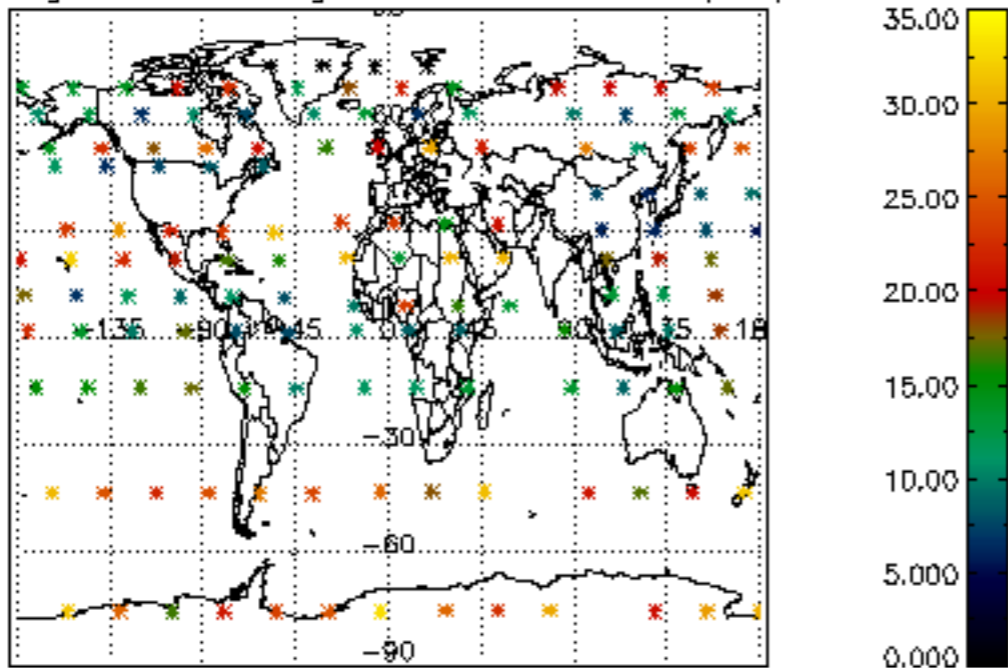
Percentage of cosmic ray hits per profile



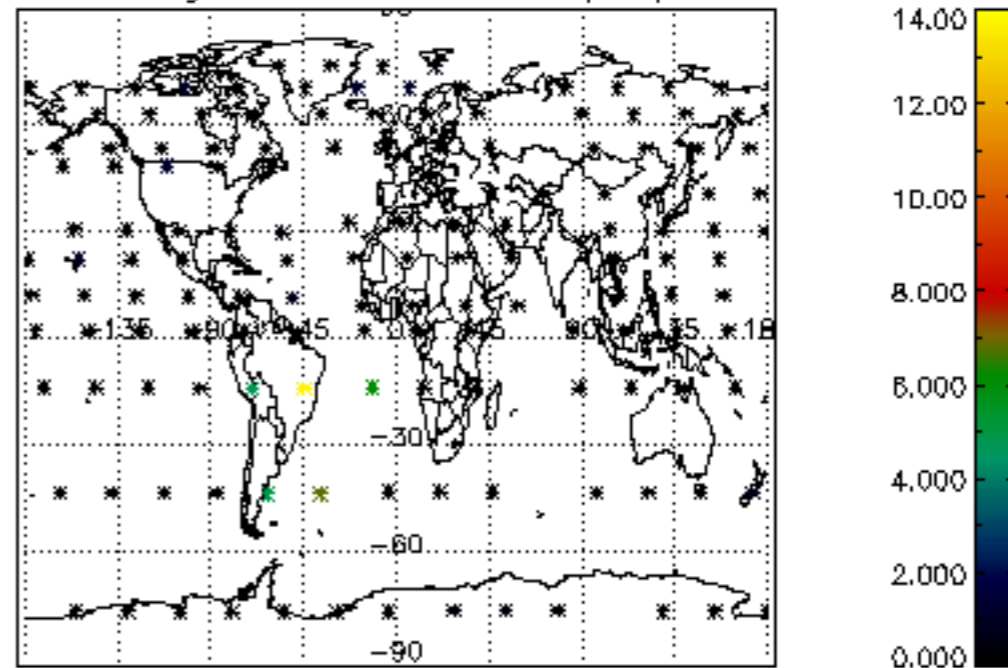
Percentage of datation errors per profile



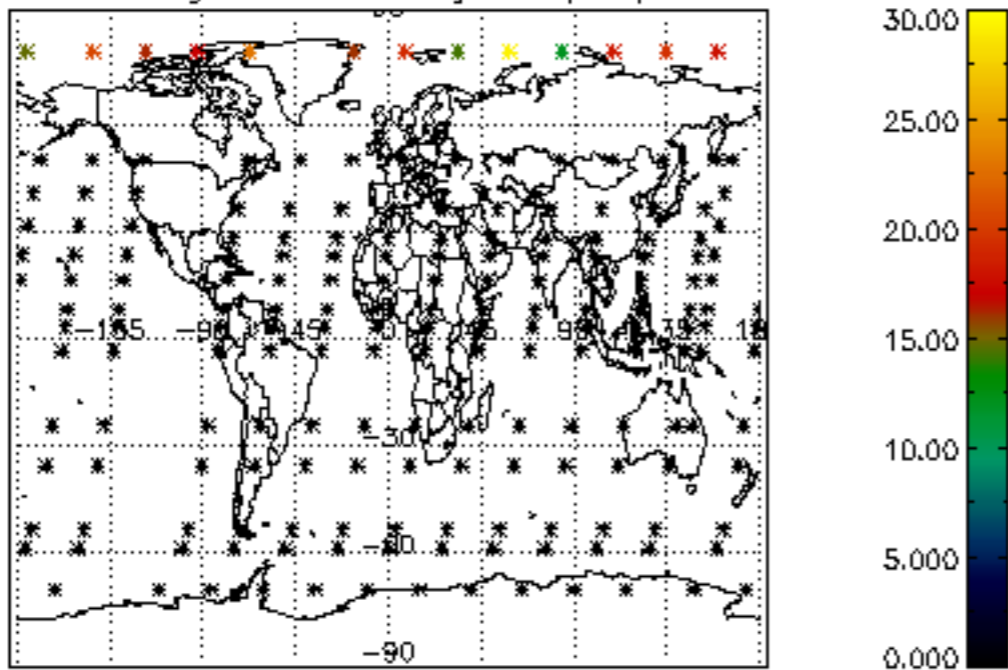
Percentage of star falling outside central band per profile



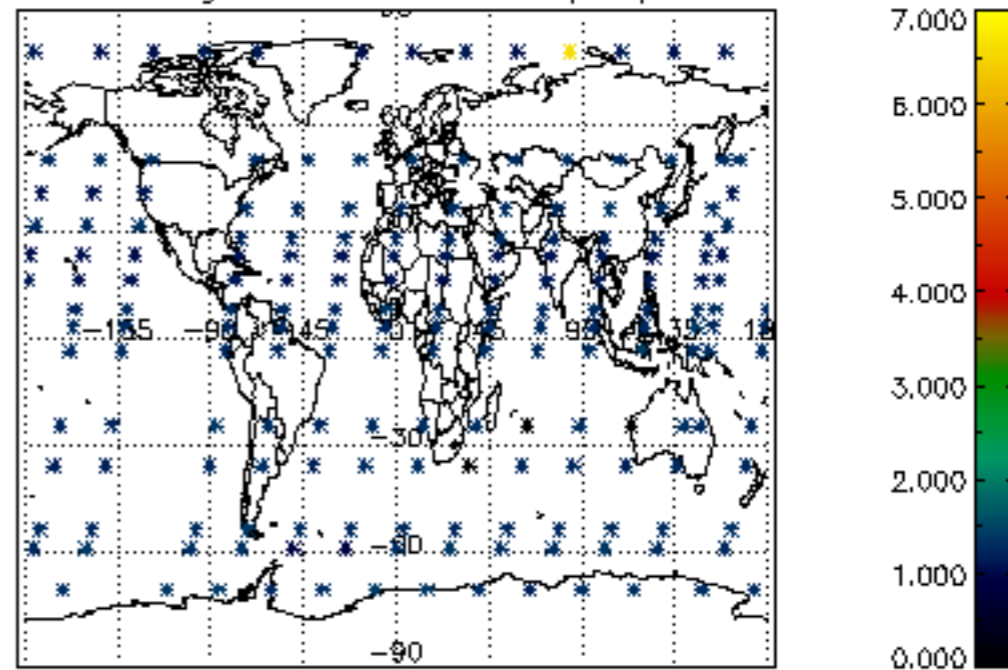
Percentage of saturation errors per profile



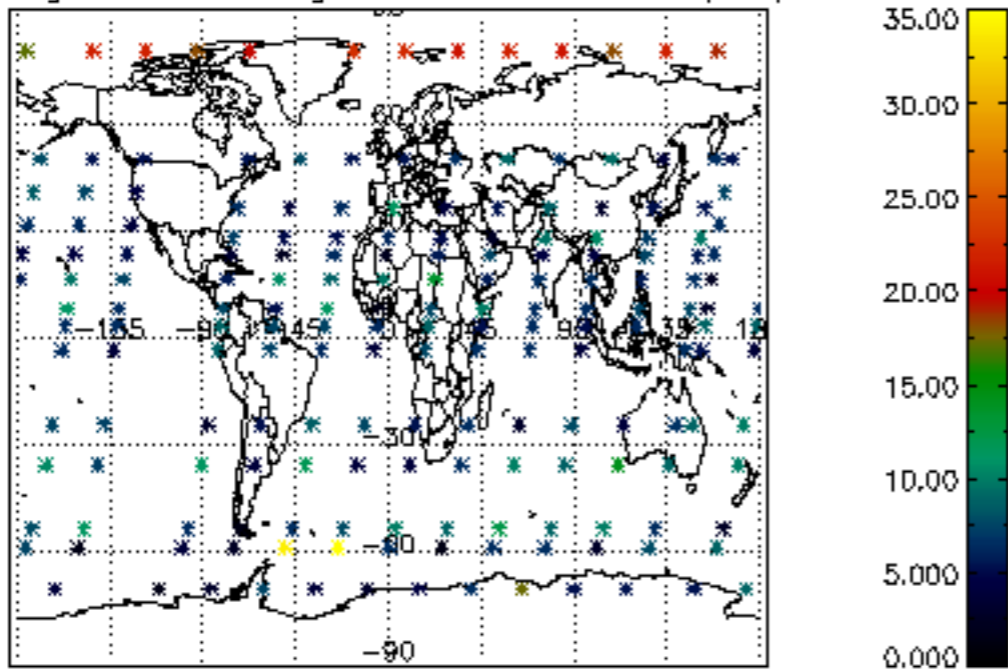
Percentage of cosmic ray hits per profile



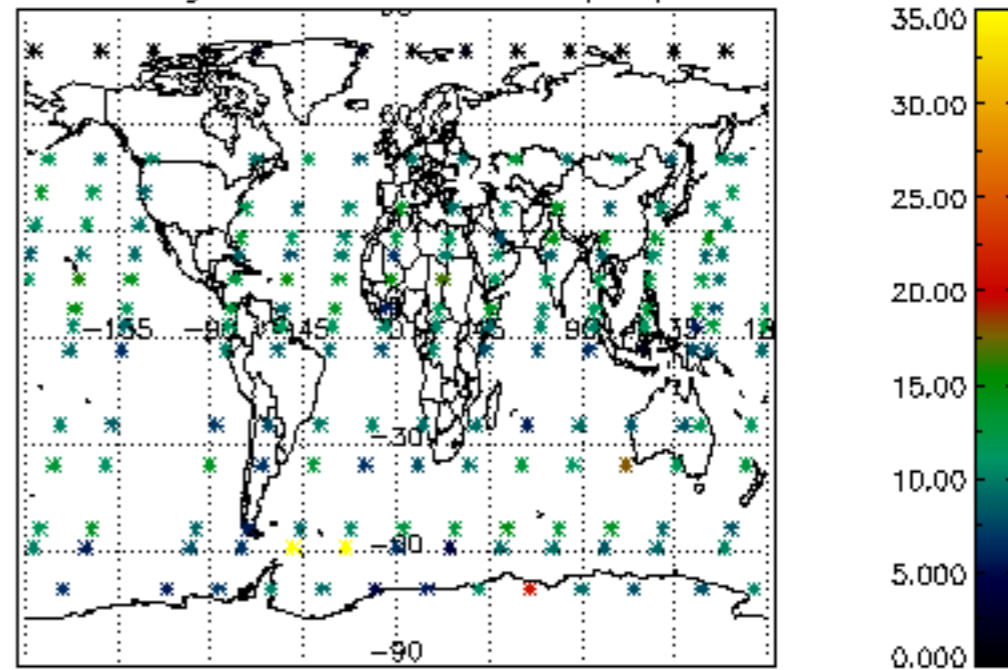
Percentage of datation errors per profile

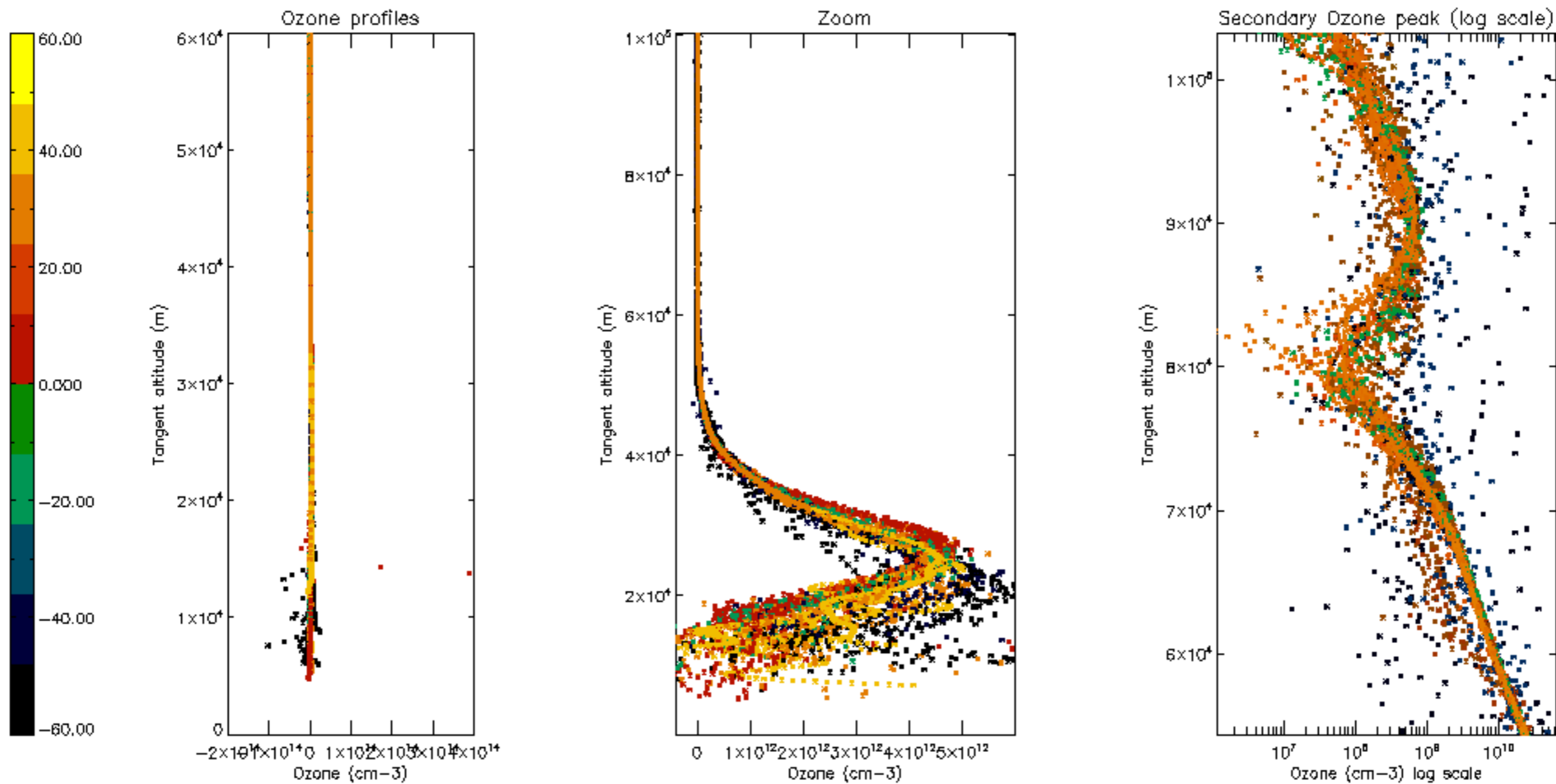


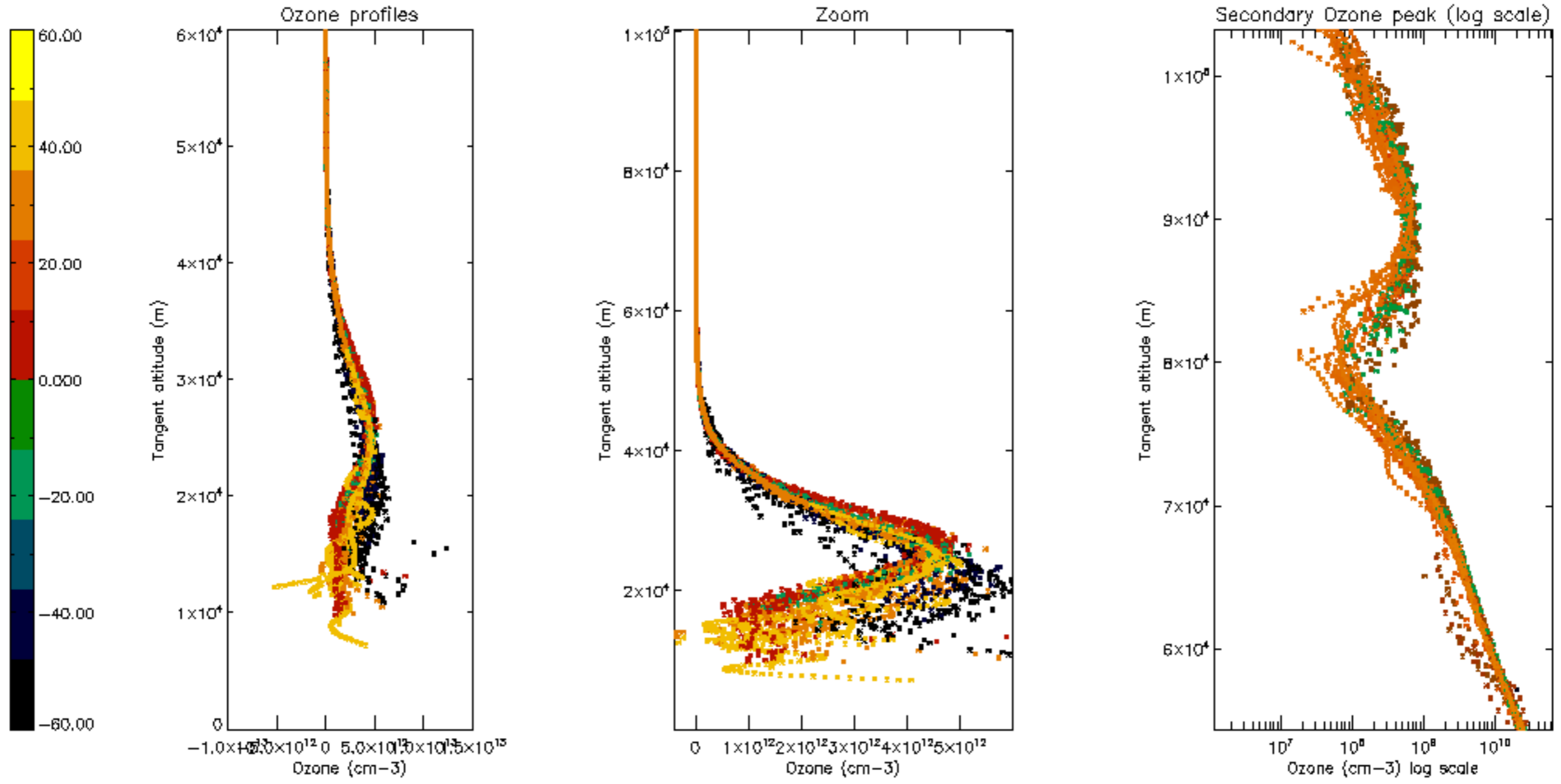
Percentage of star falling outside central band per profile

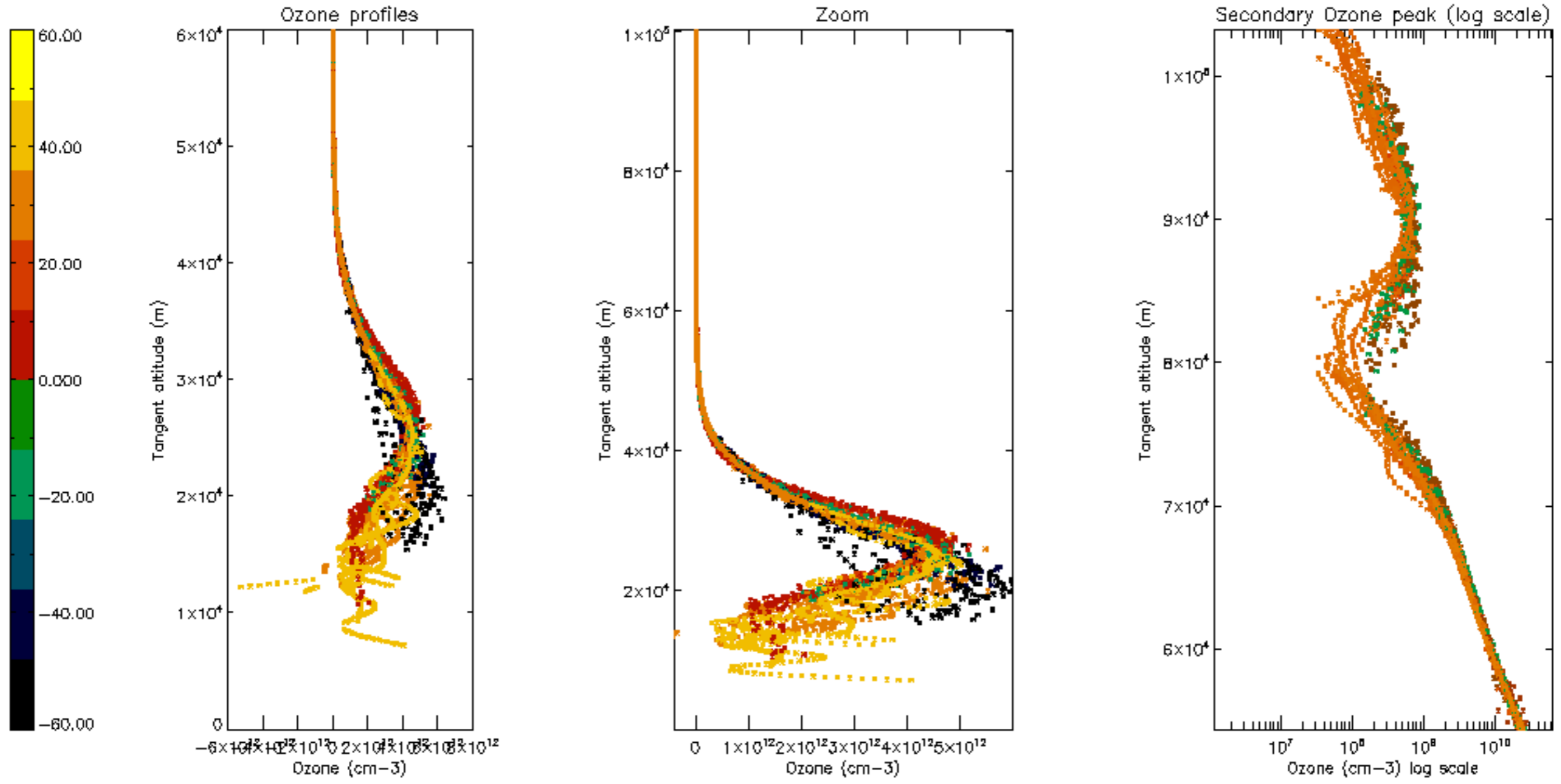


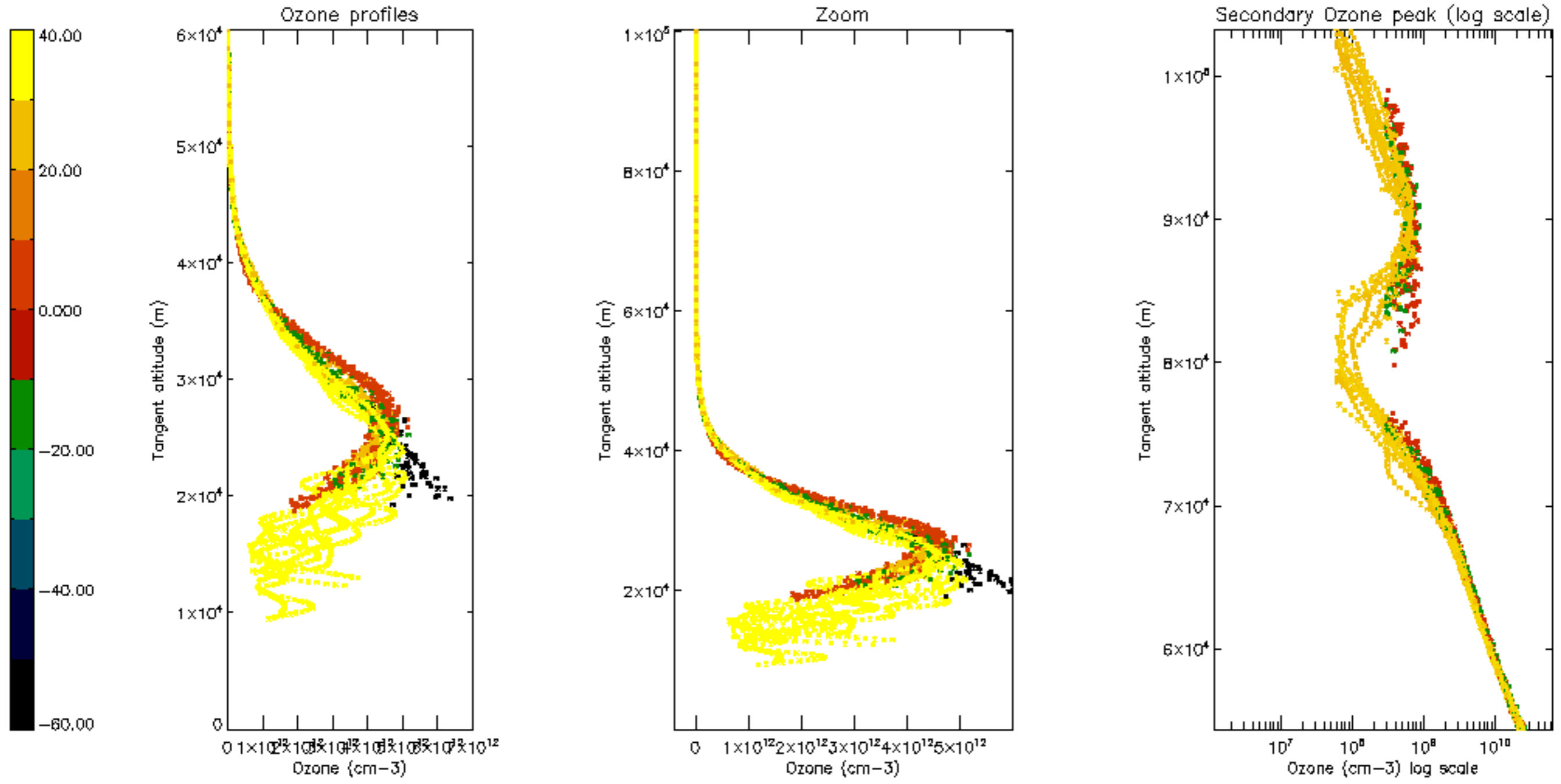
Percentage of saturation errors per profile

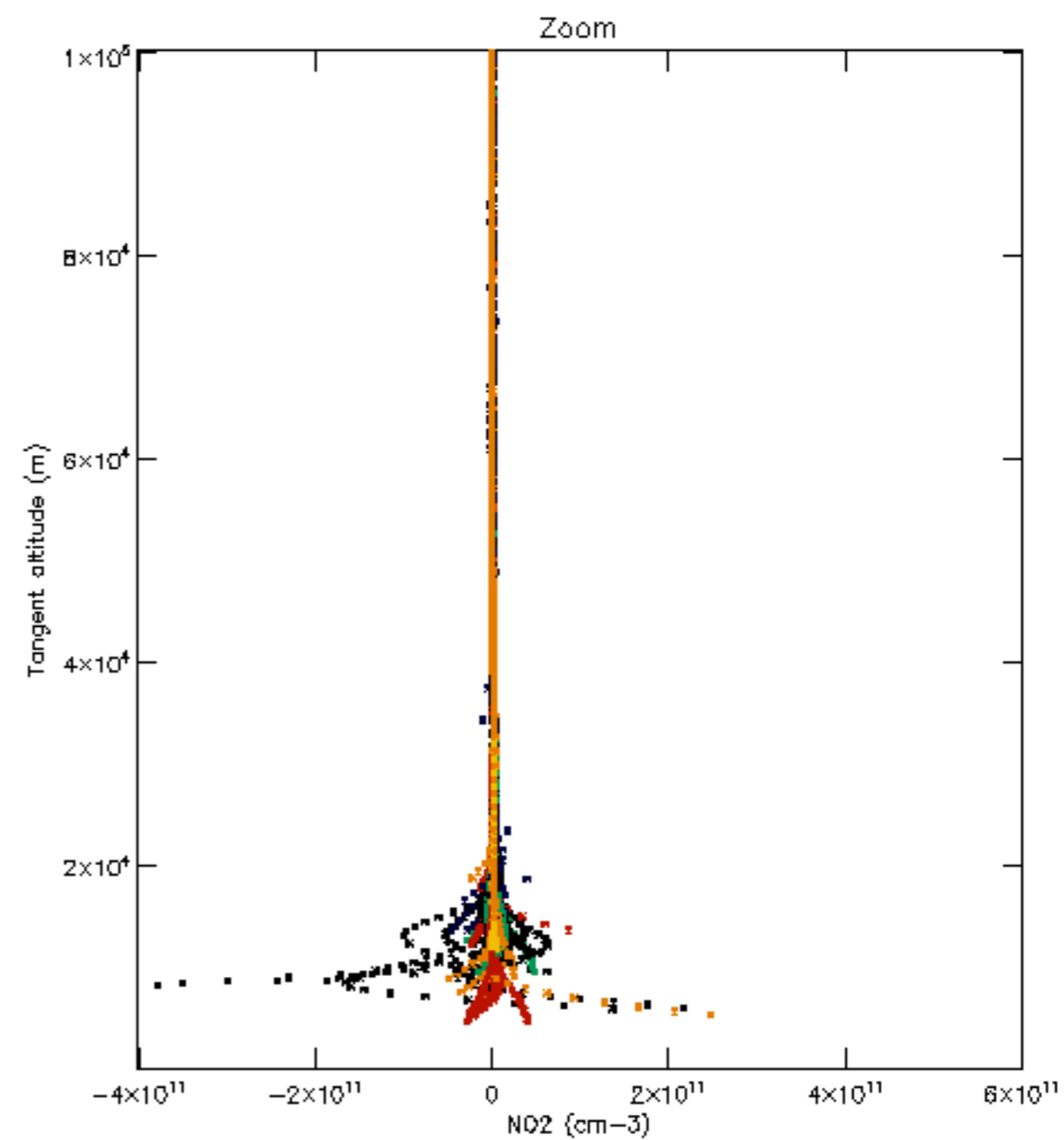
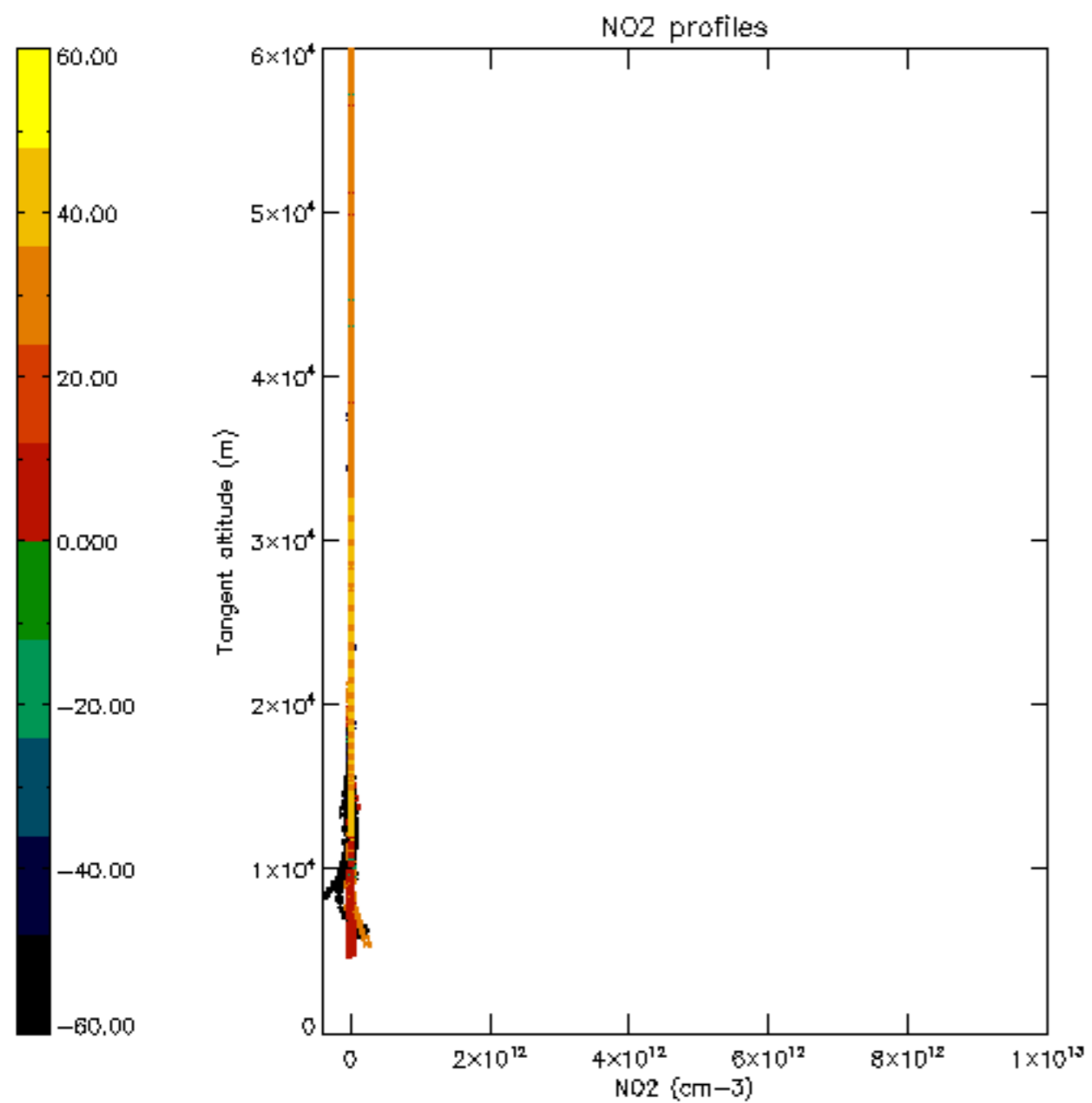


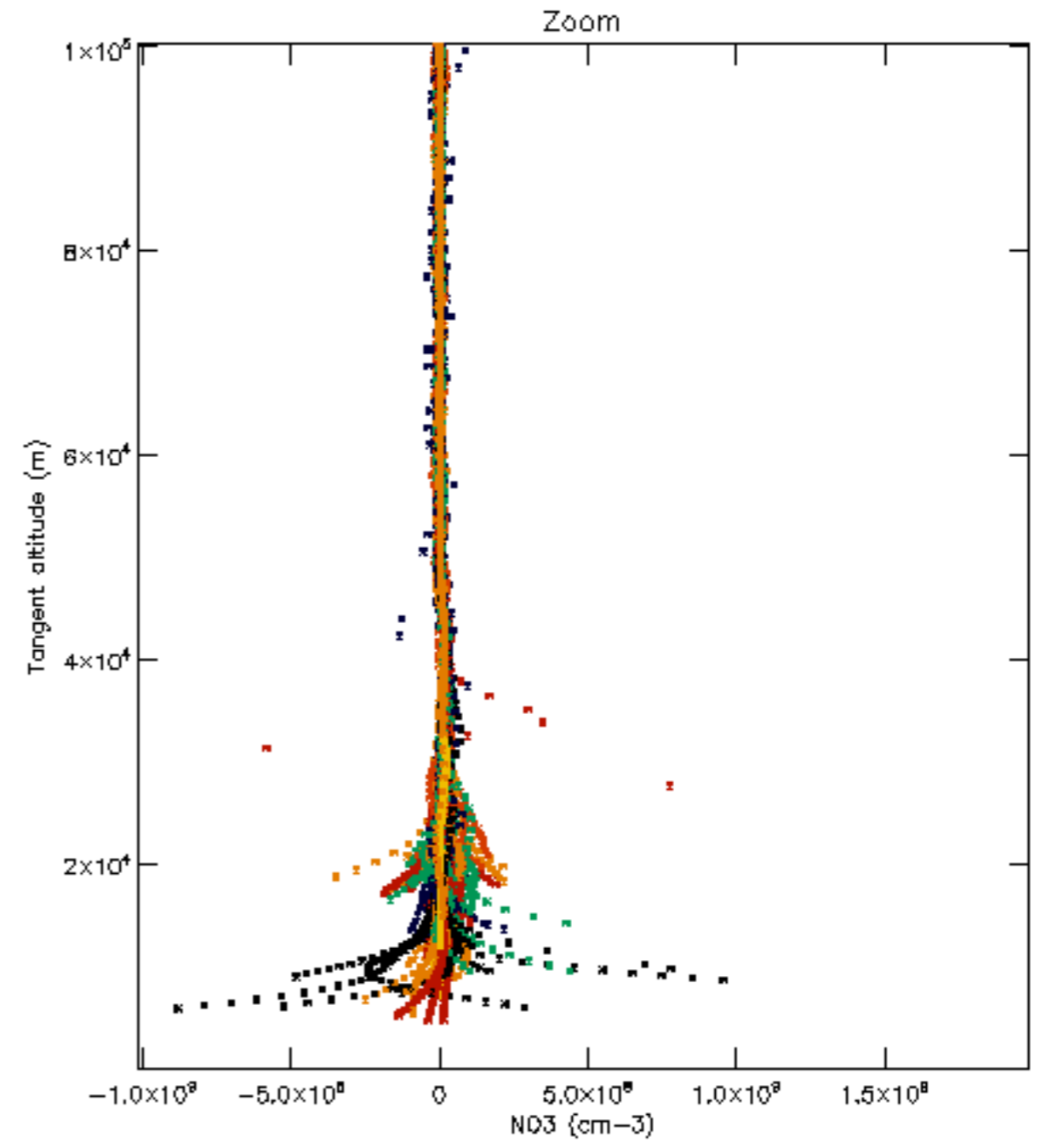
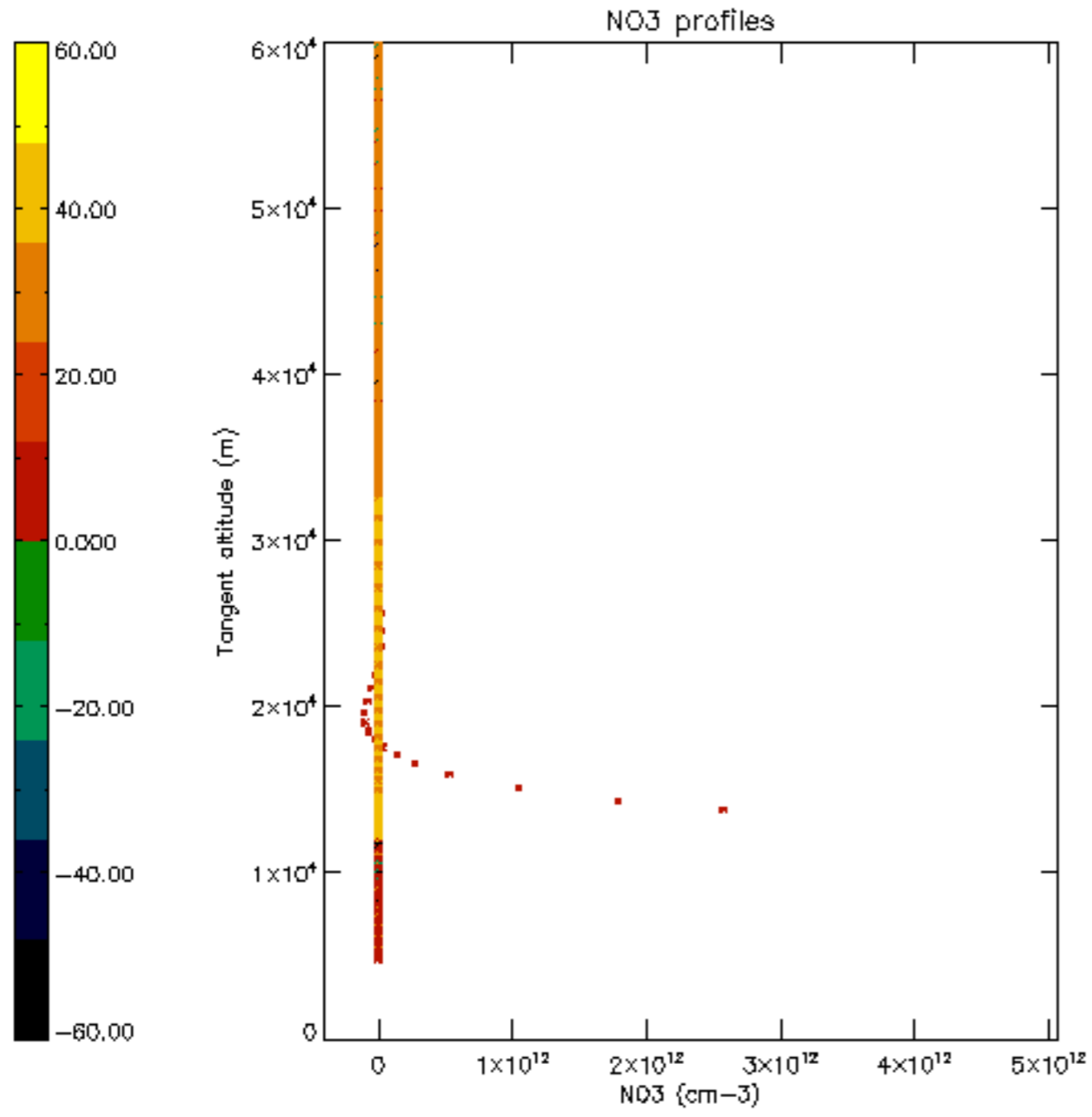


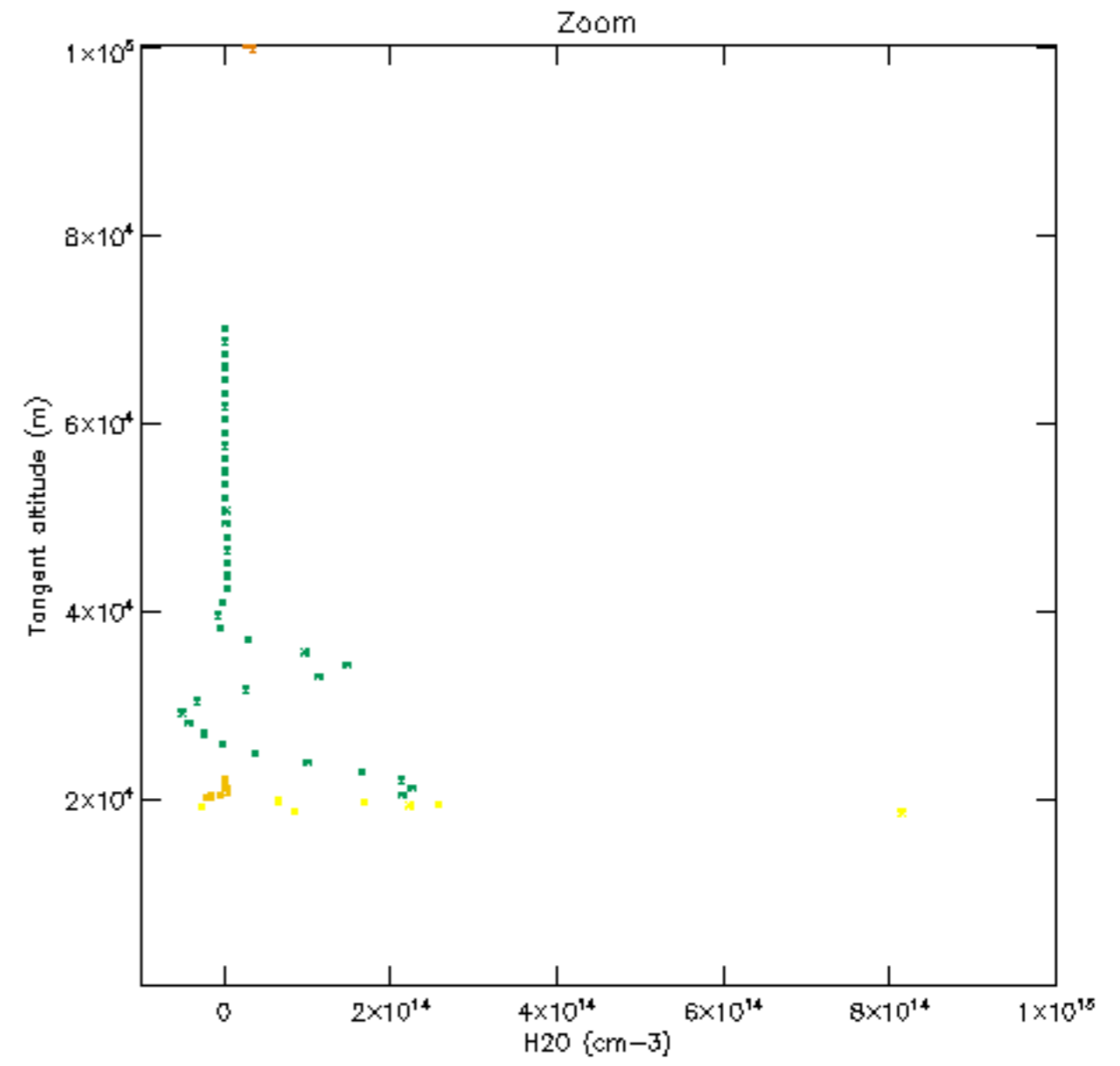
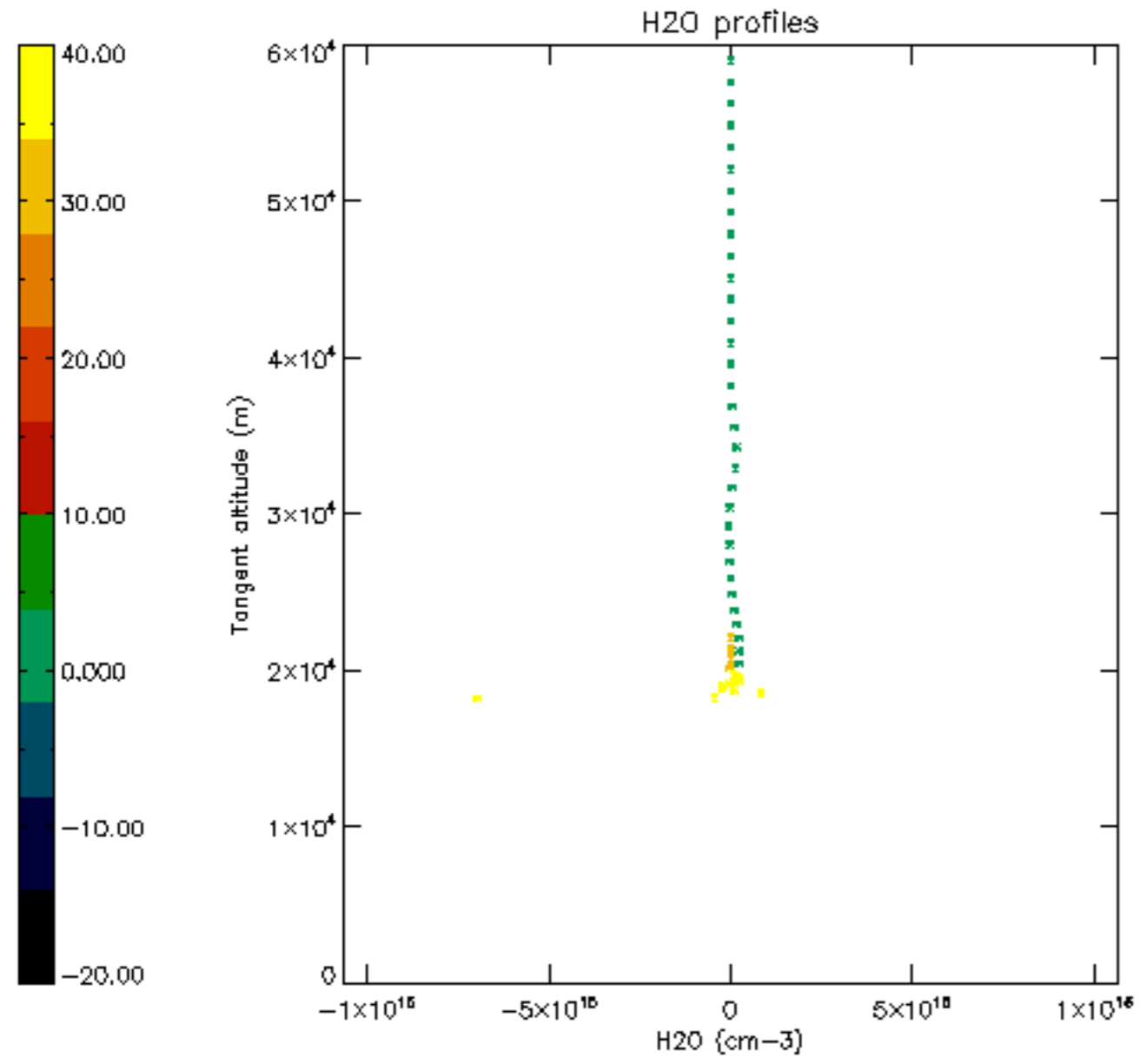


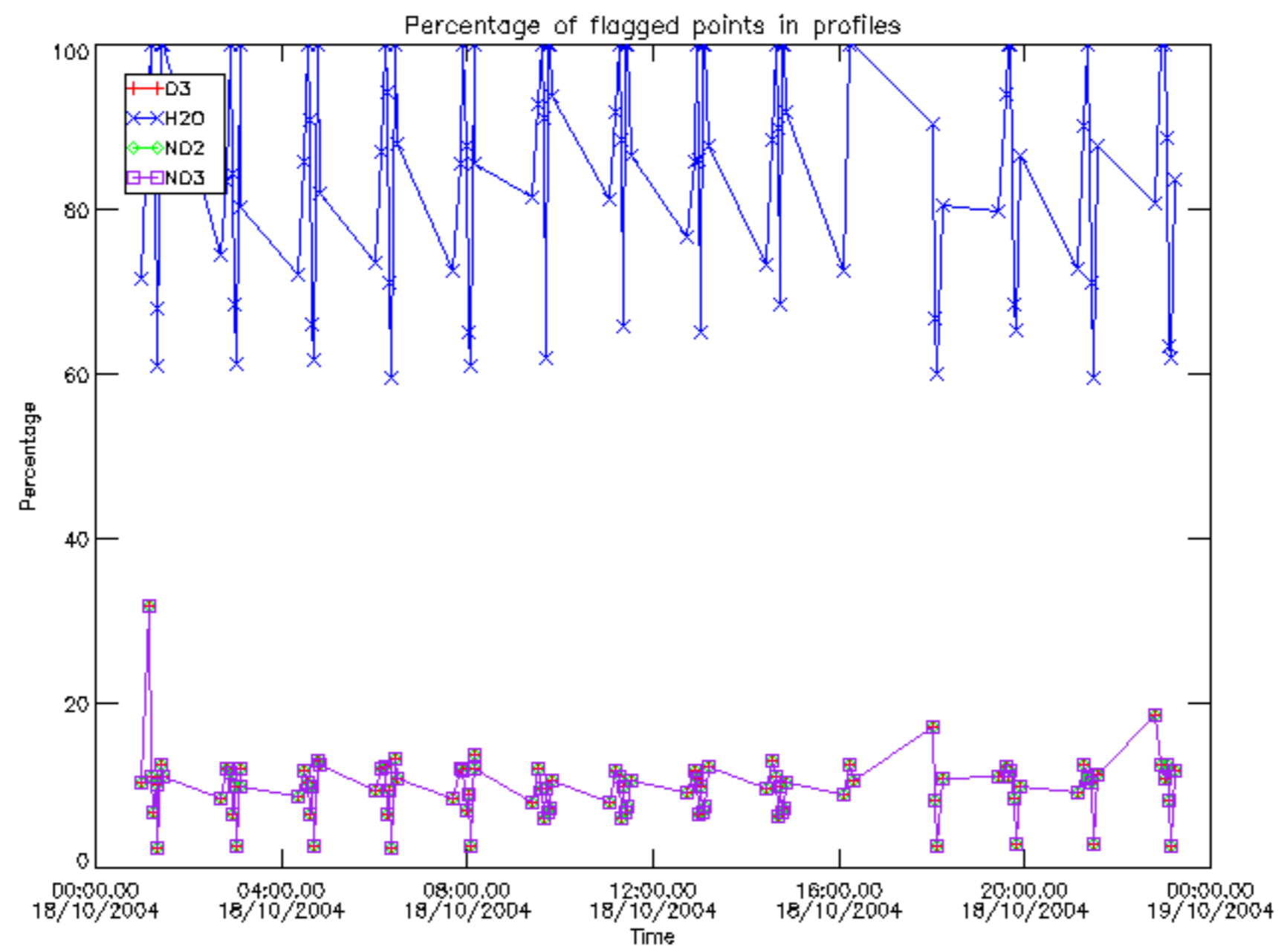




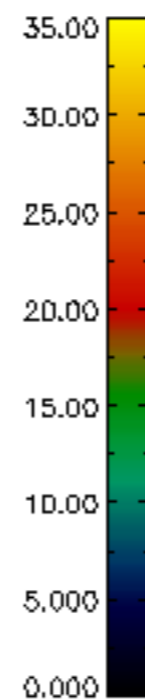
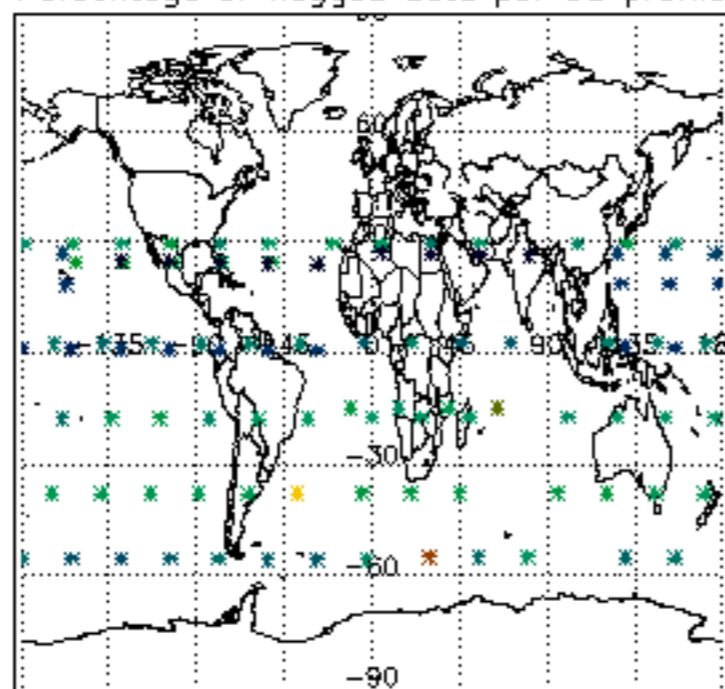




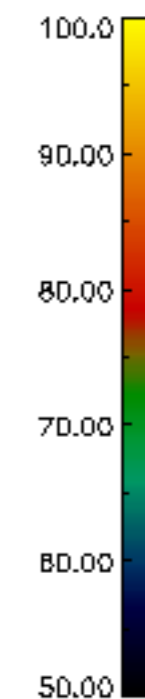
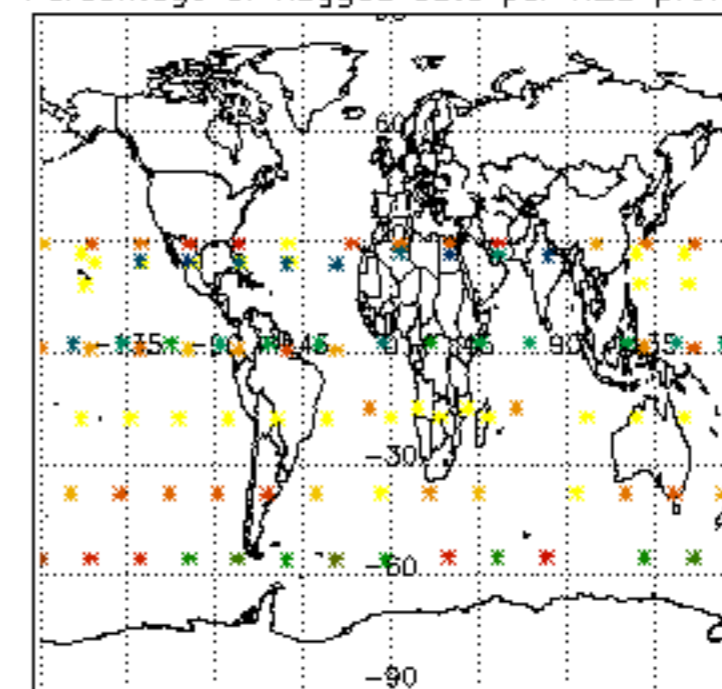




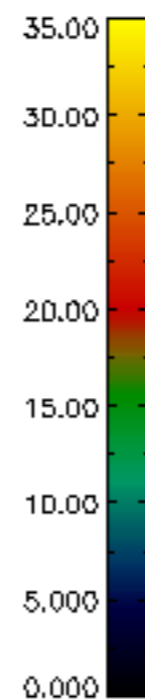
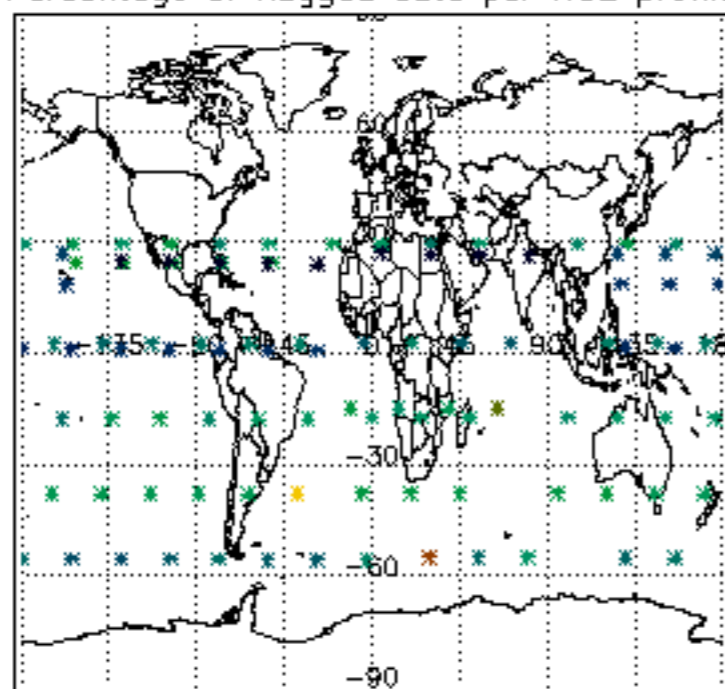
Percentage of flagged data per D3 profile



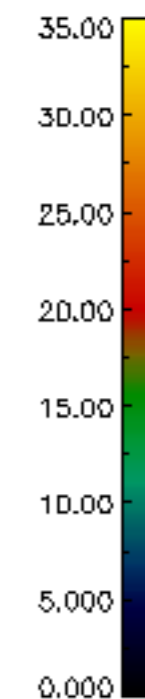
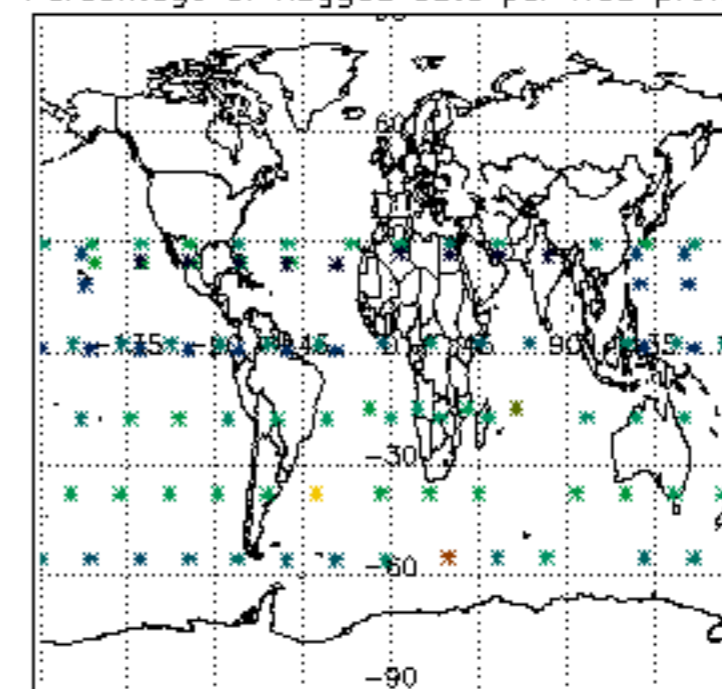
Percentage of flagged data per H2O profile

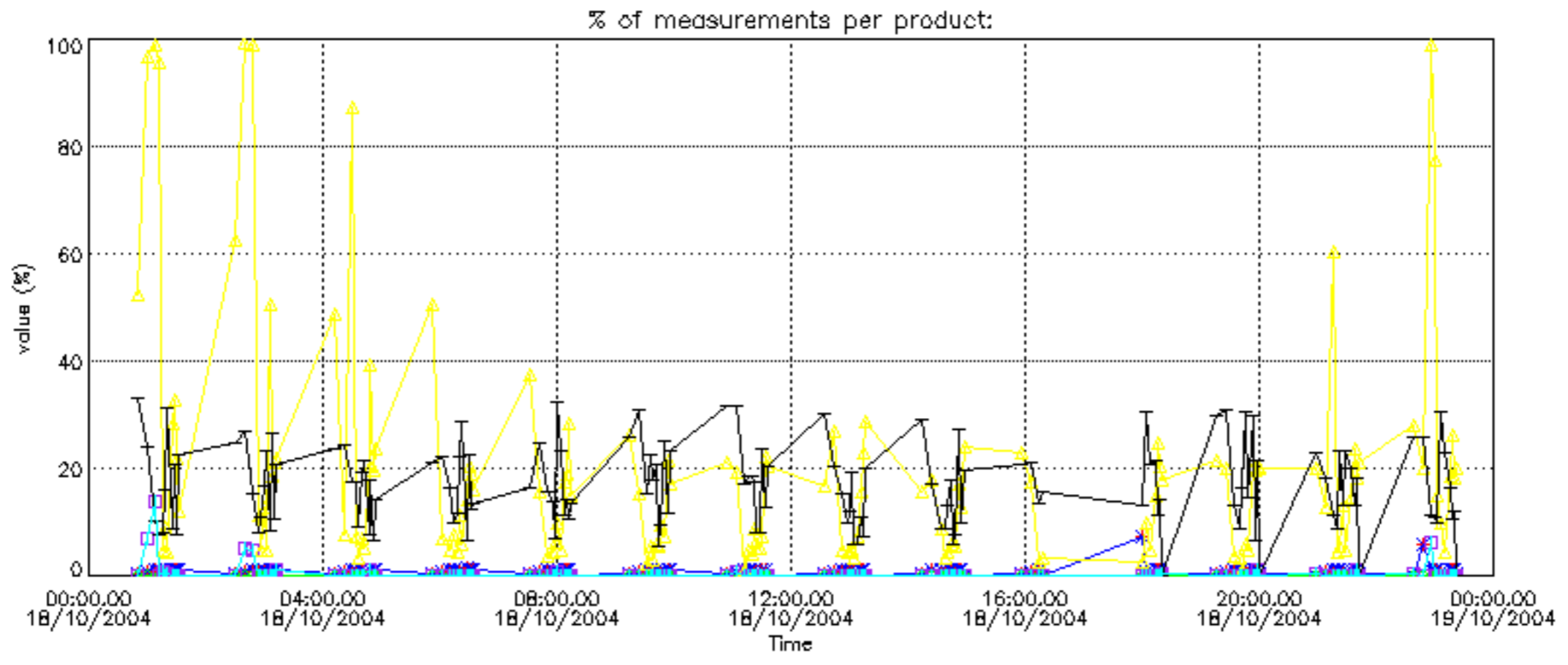


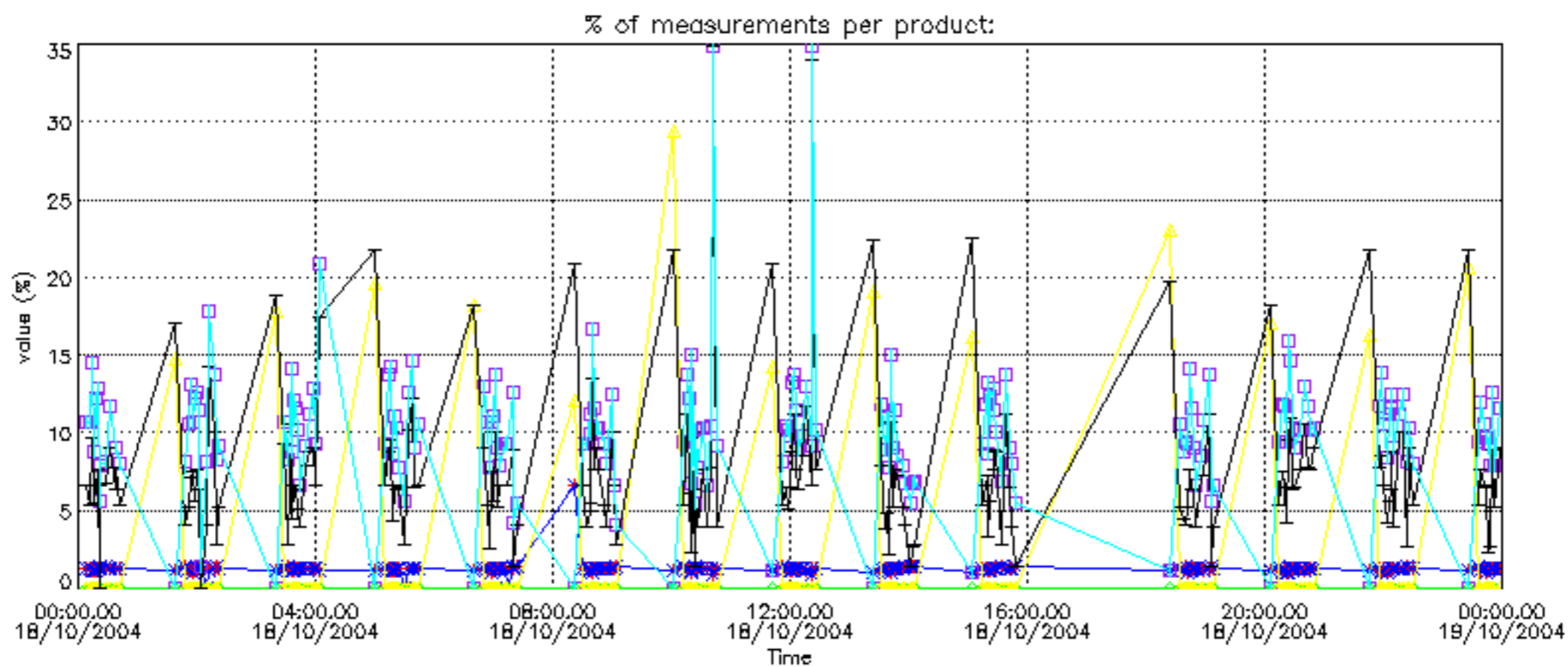
Percentage of flagged data per NO2 profile



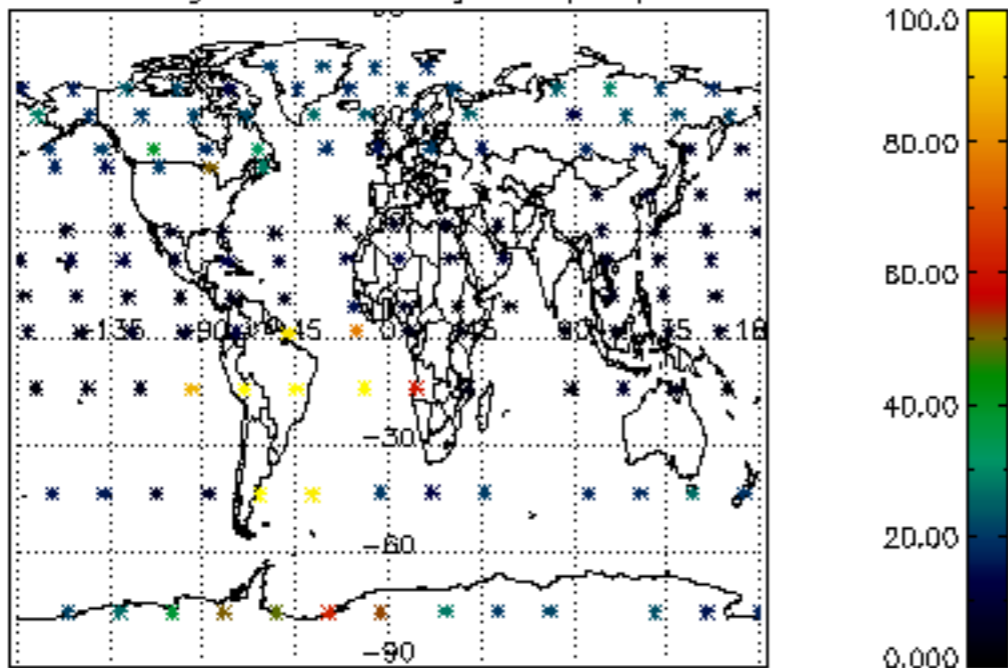
Percentage of flagged data per NO3 profile



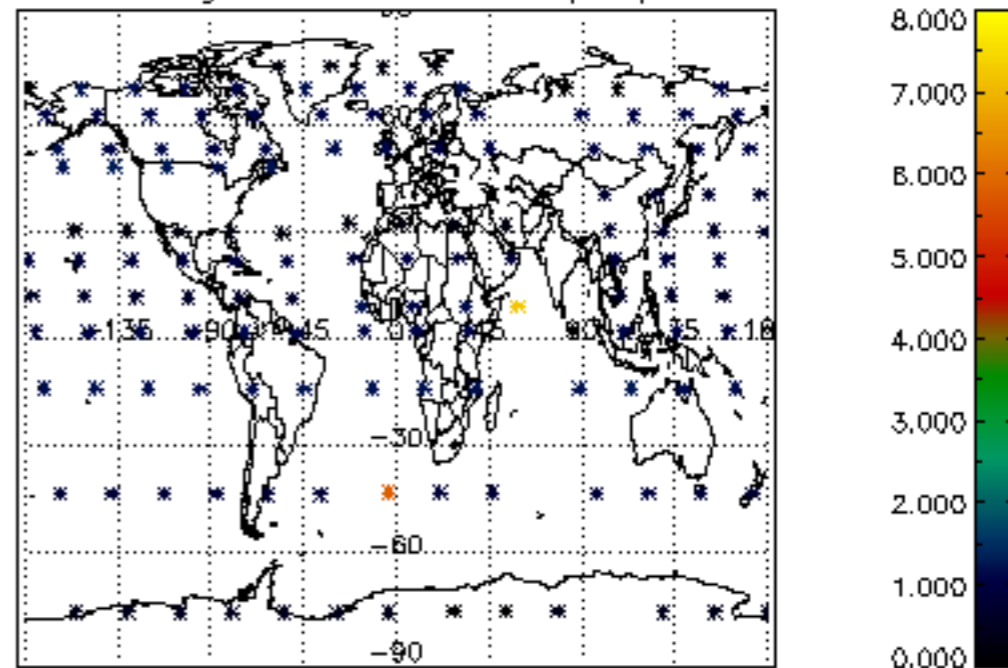




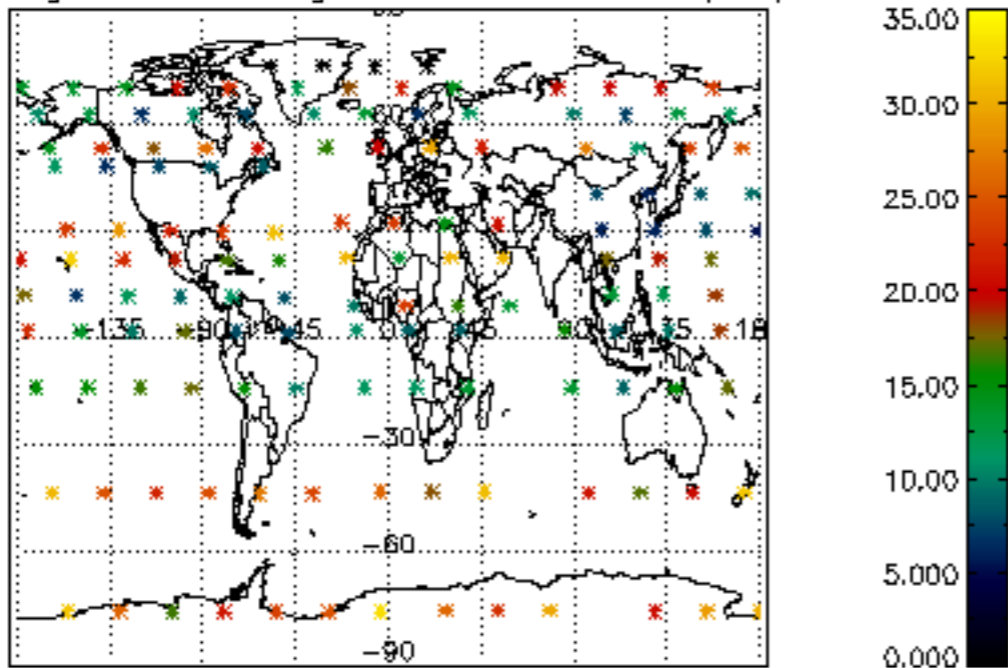
Percentage of cosmic ray hits per profile



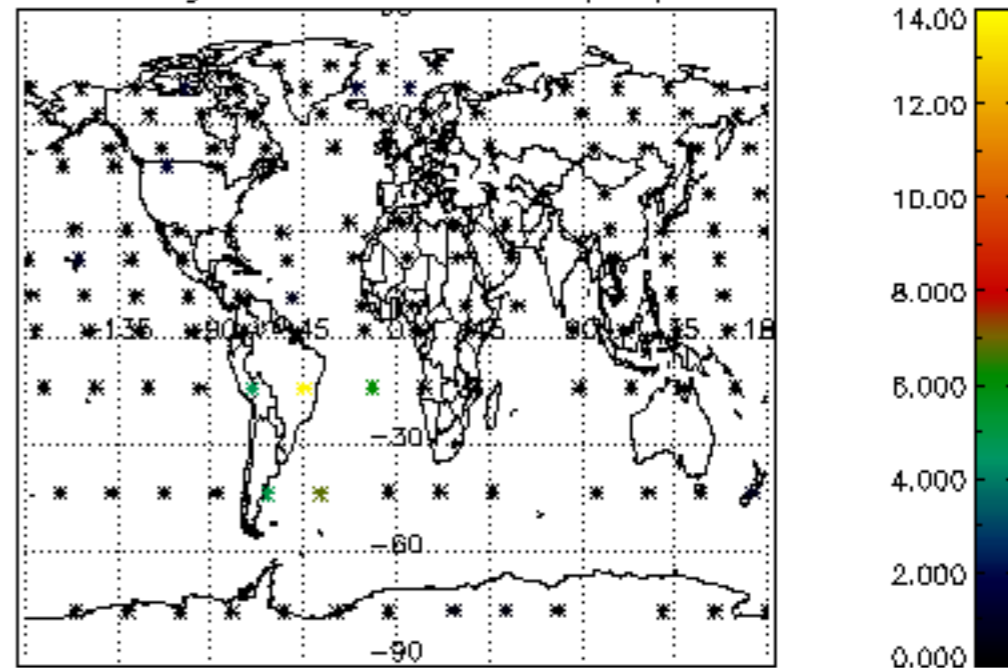
Percentage of datation errors per profile



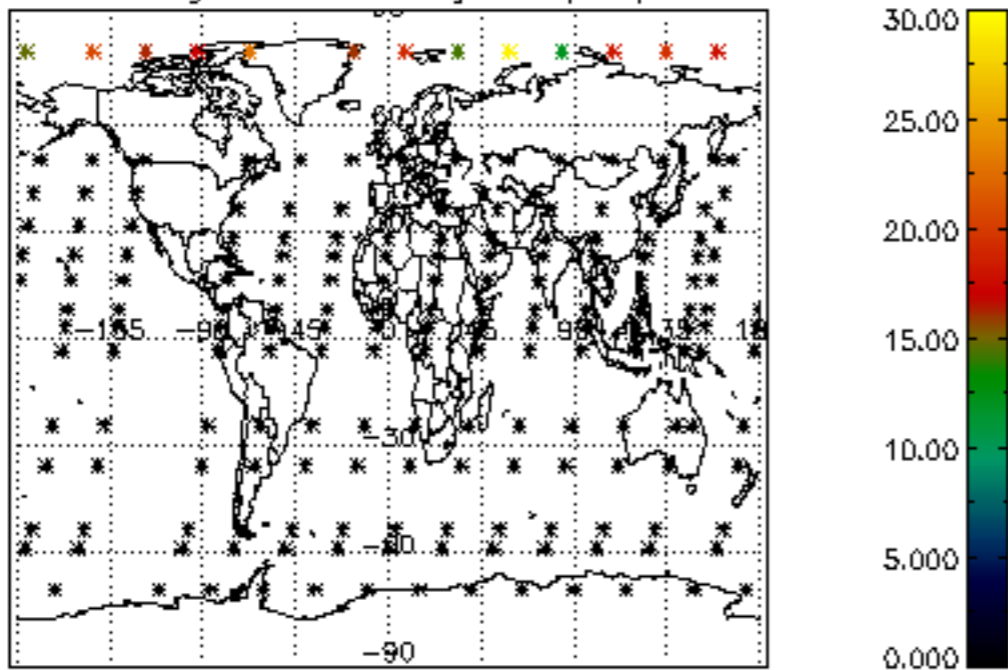
Percentage of star falling outside central band per profile



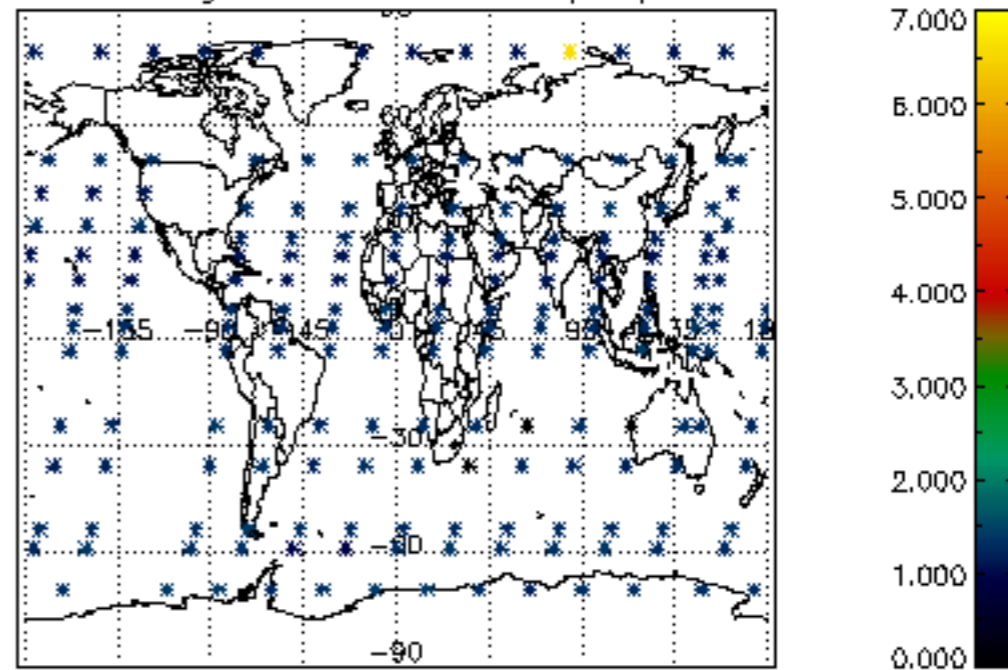
Percentage of saturation errors per profile



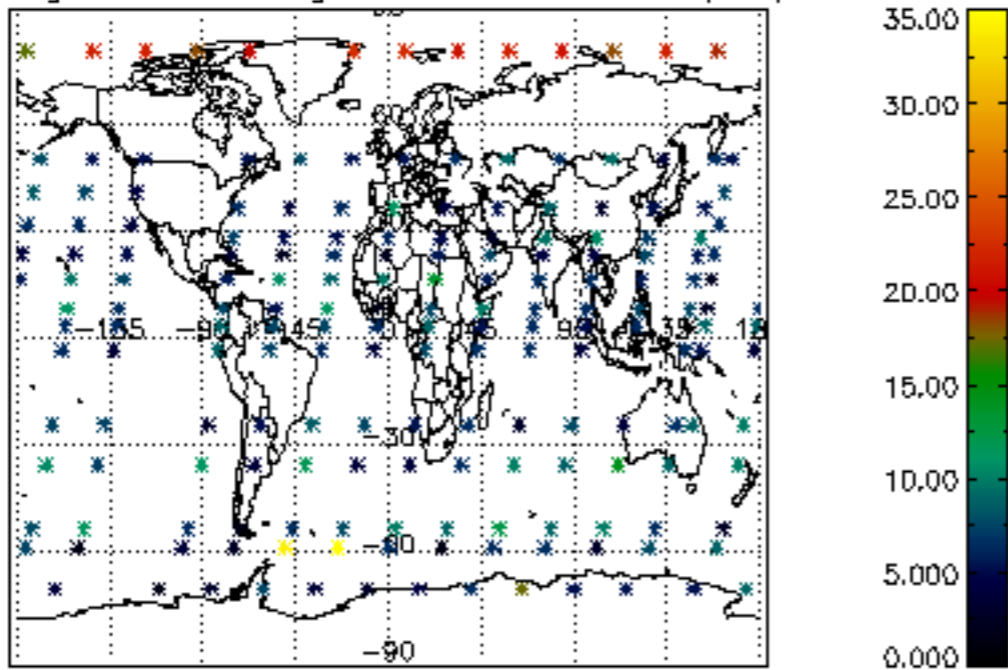
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

