

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](#)

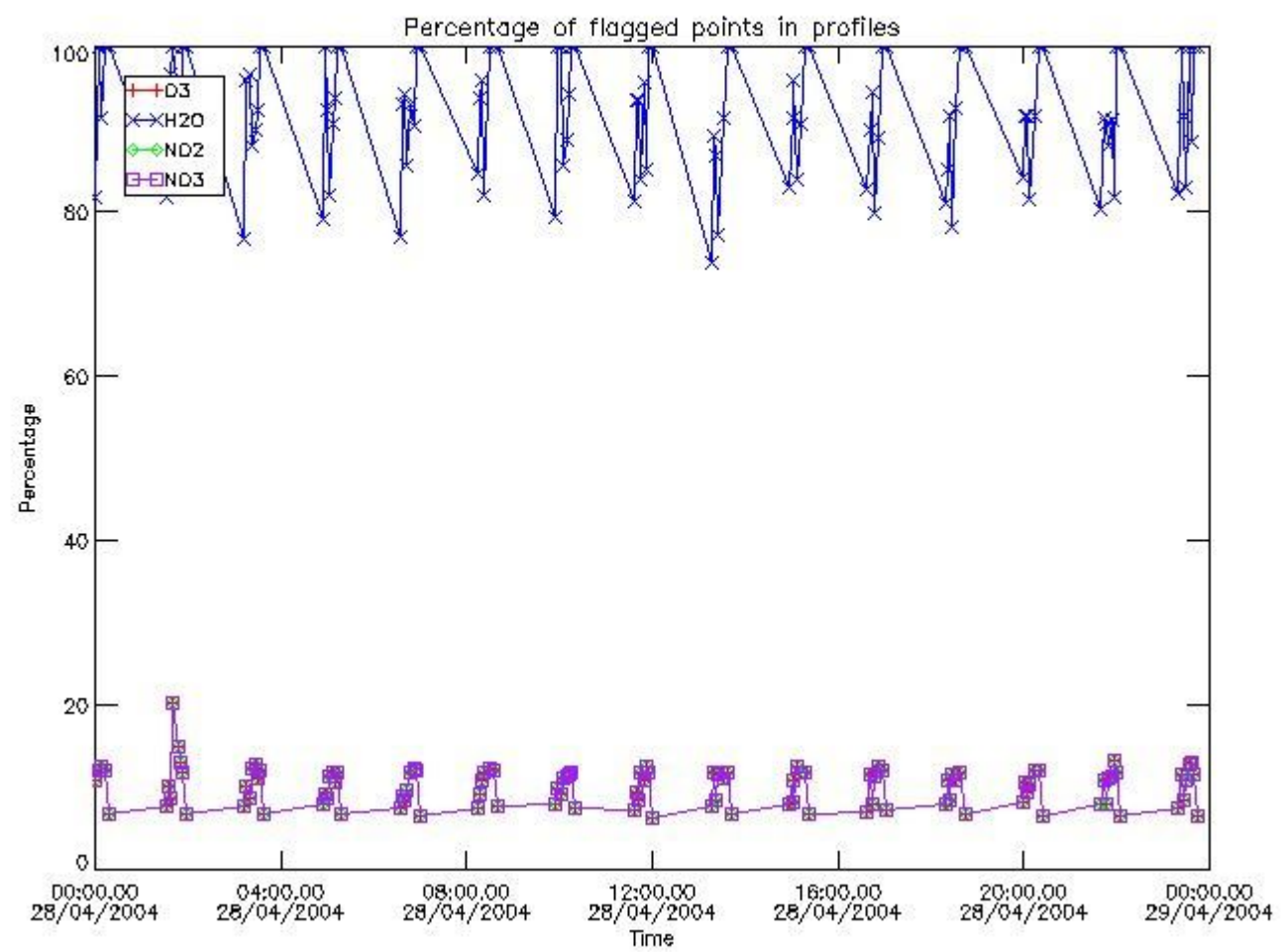
[6. Auxiliary Data Files used for the production reported in section 2](#)

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 00:50:32
Data source version	GOMOS/6.01
Start time of products	28-04-2004 (28APR2004 00:00:00)
Stop time of products	29-04-2004 (29APR2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	437
Nb of prods with errors	0

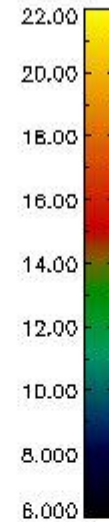
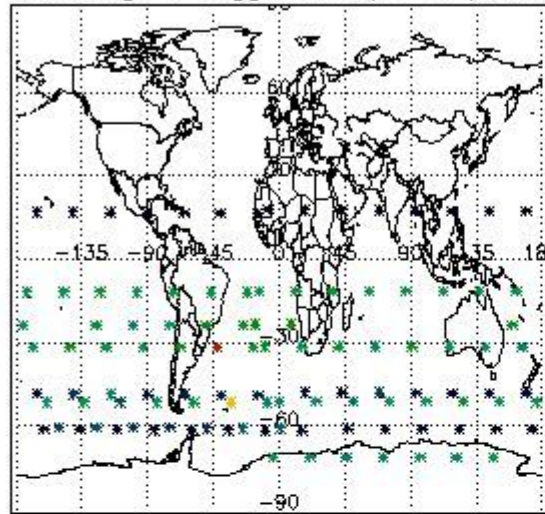
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040428_000024_000000472026_00216_11292_1752.N1	28-APR-2004 00:00:24	Dark	47.000	18	24Alp PsA	1.1660	9700.0	94	11292	No
2	GOM_NL__2PRFIN20040428_000607_000000422026_00216_11292_1753.N1	28-APR-2004 00:06:07	Dark	42.000	31	Alp Gru	1.7340	15200.	84	11292	No
3	GOM_NL__2PRFIN20040428_000852_000000412026_00217_11293_1747.N1	28-APR-2004 00:08:52	Dark	41.000	148	Alp Tuc	2.8780	4100.0	82	11293	No
4	GOM_NL__2PRFIN20040428_001132_000000422026_00217_11293_1748.N1	28-APR-2004 00:11:32	Dark	42.000	45	Alp Pav	1.9400	26000.	84	11293	No
5	GOM_NL__2PRFIN20040428_001646_000000762026_00217_11293_1749.N1	28-APR-2004 00:16:46	Dark	75.500	103	38Zet Sgr	2.6000	9700.0	151	11293	No
6	GOM_NL__2PRFIN20040428_001907_000000562026_00217_11293_1750.N1	28-APR-2004 00:19:07	Straylight	55.500	141	Bet Ara	2.8400	4600.0	111	11293	No
7	GOM_NL__2PRFIN20040428_002048_000000552026_00217_11293_1751.N1	28-APR-2004 00:20:48	Straylight	54.500	40	The Sco	1.8590	7100.0	109	11293	No
8	GOM_NL__2PRFIN20040428_002238_000000532026_00217_11293_1752.N1	28-APR-2004 00:22:38	Straylight	53.000	4	Alp1Cen	-0.010000	5800.0	106	11293	No
9	GOM_NL__2PRFIN20040428_002417_000000432026_00217_11293_1753.N1	28-APR-2004 00:24:17	Straylight	42.500	20	Bet Cru	1.2530	30000.	85	11293	No
10	GOM_NL__2PRFIN20040428_002718_000000422026_00217_11293_1754.N1	28-APR-2004 00:27:18	Straylight	41.500	64	Gam Cen	2.2000	10600.	83	11293	No
11	GOM_NL__2PRFIN20040428_002940_000000852026_00217_11293_1755.N1	28-APR-2004 00:29:40	Twilight	85.000	16	21Alp Sco	1.0200	3000.0	170	11293	No
12	GOM_NL__2PRFIN20040428_003204_000000672026_00217_11293_1756.N1	28-APR-2004 00:32:04	Twilight	66.500	80	7Del Sco	2.3160	30000.	133	11293	No
13	GOM_NL__2PRFIN20040428_003401_000000432026_00217_11293_1757.N1	28-APR-2004 00:34:01	Bright	43.000	169	46Gam Hya	2.9910	4700.0	86	11293	No
14	GOM_NL__2PRFIN20040428_003748_000000532026_00217_11293_1758.N1	28-APR-2004 00:37:48	Bright	52.500	104	27Bet Lib	2.6140	13100.	105	11293	No
15	GOM_NL__2PRFIN20040428_004024_000000402026_00217_11293_1759.N1	28-APR-2004 00:40:24	Bright	40.000	121	29Gam Vir	2.7400	7200.0	80	11293	No
16	GOM_NL__2PRFIN20040428_004347_000000402026_00217_11293_1760.N1	28-APR-2004 00:43:47	Bright	40.000	138	47Eps Vir	2.8280	4700.0	80	11293	No
17	GOM_NL__2PRFIN20040428_004528_000000382026_00217_11293_1761.N1	28-APR-2004 00:45:28	Bright	37.500	62	94Bet Leo	2.1360	9700.0	75	11293	No
18	GOM_NL__2PRFIN20040428_005137_000000362026_00217_11293_1762.N1	28-APR-2004 00:51:37	Bright	36.000	152	12Alp2CVn	2.8900	11000.	72	11293	No
19	GOM_NL__2PRFIN20040428_005311_000000442026_00217_11293_1763.N1	28-APR-2004 00:53:11	Bright	43.500	180	27Gam Boo	3.0400	8000.0	87	11293	No
20	GOM_NL__2PRFIN20040428_005515_000000422026_00217_11293_1764.N1	28-APR-2004 00:55:15	Bright	41.500	39	85Eta UMa	1.8540	24000.	83	11293	No
21	GOM_NL__2PRFIN20040428_005637_000000382026_00217_11293_1765.N1	28-APR-2004 00:56:37	Bright	37.500	32	77Eps UMa	1.7630	11000.	75	11293	No
22	GOM_NL__2PRFIN20040428_005842_000000402026_00217_11293_1766.N1	28-APR-2004 00:58:42	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	11293	No
23	GOM_NL__2PRFIN20040428_010243_000000402026_00217_11293_1767.N1	28-APR-2004 01:02:43	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	11293	No
24	GOM_NL__2PRFIN20040428_011255_000000432026_00217_11293_1768.N1	28-APR-2004 01:12:55	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	11293	No
25	GOM_NL__2PRFIN20040428_011618_000001422026_00217_11293_1769.N1	28-APR-2004 01:16:18	Bright	142.00	5	3Alp Lyr	0.033000	11000.	284	11293	No
26	GOM_NL__2PRFIN20040428_012327_000000782026_00217_11293_1770.N1	28-APR-2004 01:23:27	Twilight	78.000	92	53Eps Cyg	2.5000	4500.0	156	11293	No
27	GOM_NL__2PRFIN20040428_012818_000000492026_00217_11293_1771.N1	28-APR-2004 01:28:18	Twilight	48.500	90	54Alp Peg	2.4870	11000.	97	11293	No
28	GOM_NL__2PRFIN20040428_013219_000000662026_00217_11293_1772.N1	28-APR-2004 01:32:19	Dark	66.000	61	8Eps Peg	2.1000	3900.0	132	11293	No
29	GOM_NL__2PRFIN20040428_013445_000000562026_00217_11293_1773.N1	28-APR-2004 01:34:45	Dark	55.500	162	34Alp Aqr	2.9440	5350.0	111	11293	No
30	GOM_NL__2PRFIN20040428_013814_000000592026_00217_11293_1774.N1	28-APR-2004 01:38:14	Dark	58.500	154	22Bet Aqr	2.8990	5700.0	117	11293	No
31	GOM_NL__2PRFIN20040428_014101_000000482026_00217_11293_1775.N1	28-APR-2004 01:41:01	Dark	47.500	18	24Alp PsA	1.1660	9700.0	95	11293	No
32	GOM_NL__2PRFIN20040428_014644_000000452026_00217_11293_1776.N1	28-APR-2004 01:46:44	Dark	44.500	31	Alp Gru	1.7340	15200.	89	11293	No
33	GOM_NL__2PRFIN20040428_014929_000000402026_00218_11294_1738.N1	28-APR-2004 01:49:29	Dark	39.500	148	Alp Tuc	2.8780	4100.0	79	11294	No
34	GOM_NL__2PRFIN20040428_015209_000000442026_00218_11294_1739.N1	28-APR-2004 01:52:09	Dark	43.500	45	Alp Pav	1.9400	26000.	87	11294	No
35	GOM_NL__2PRFIN20040428_015724_000000752026_00218_11294_1740.N1	28-APR-2004 01:57:24	Dark	74.500	103	38Zet Sgr	2.6000	9700.0	149	11294	No
36	GOM_NL__2PRFIN20040428_015944_000000452026_00218_11294_1741.N1	28-APR-2004 01:59:44	Straylight	45.000	141	Bet Ara	2.8400	4600.0	90	11294	No
37	GOM_NL__2PRFIN20040428_020125_000000542026_00218_11294_1742.N1	28-APR-2004 02:01:25	Straylight	54.000	40	The Sco	1.8590	7100.0	108	11294	No
38	GOM_NL__2PRFIN20040428_020314_000000472026_00218_11294_1743.N1	28-APR-2004 02:03:14	Straylight	47.000	4	Alp1Cen	-0.010000	5800.0	94	11294	No
39	GOM_NL__2PRFIN20040428_020452_000000442026_00218_11294_1744.N1	28-APR-2004 02:04:52	Straylight	44.000	20	Bet Cru	1.2530	30000.	88	11294	No
40	GOM_NL__2PRFIN20040428_020754_000000402026_00218_11294_1745.N1	28-APR-2004 02:07:54	Straylight	40.000	64	Gam Cen	2.2000	10600.	80	11294	No
41	GOM_NL__2PRFIN20040428_021017_000000772026_00218_11294_1746.N1	28-APR-2004 02:10:17	Twilight	77.000	16	21Alp Sco	1.0200	3000.0	154	11294	No
42	GOM_NL__2PRFIN20040428_021240_000000642026_00218_11294_1747.N1	28-APR-2004 02:12:40	Twilight	63.500	80	7Del Sco	2.3160	30000.	127	11294	No

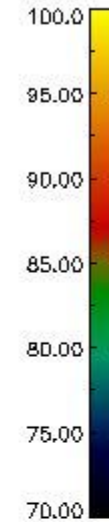
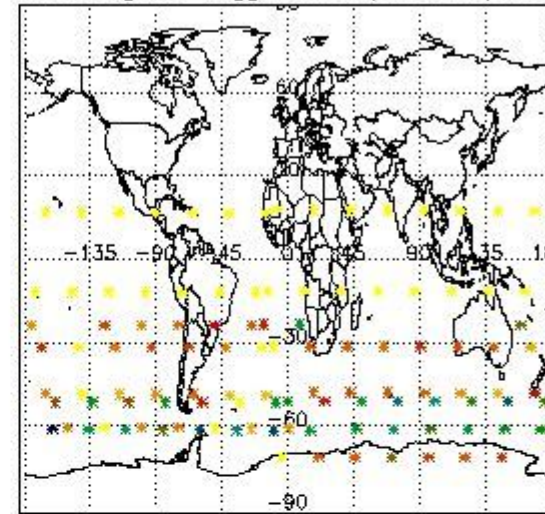


3.2 Plot quality information per product (world map)

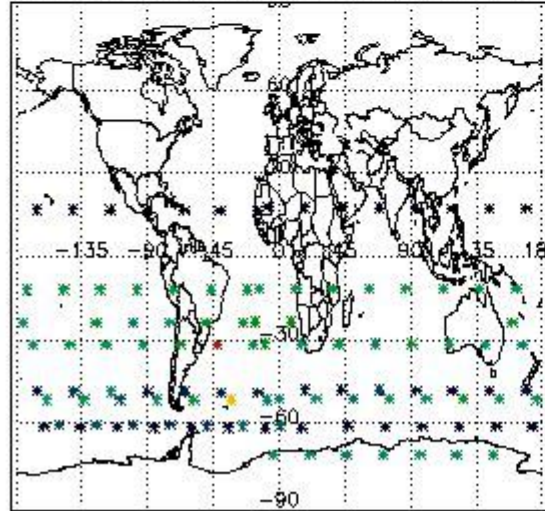
Percentage of flagged data per O3 profile



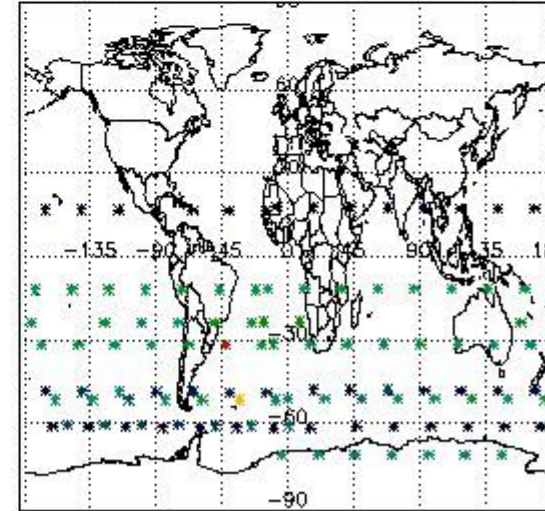
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

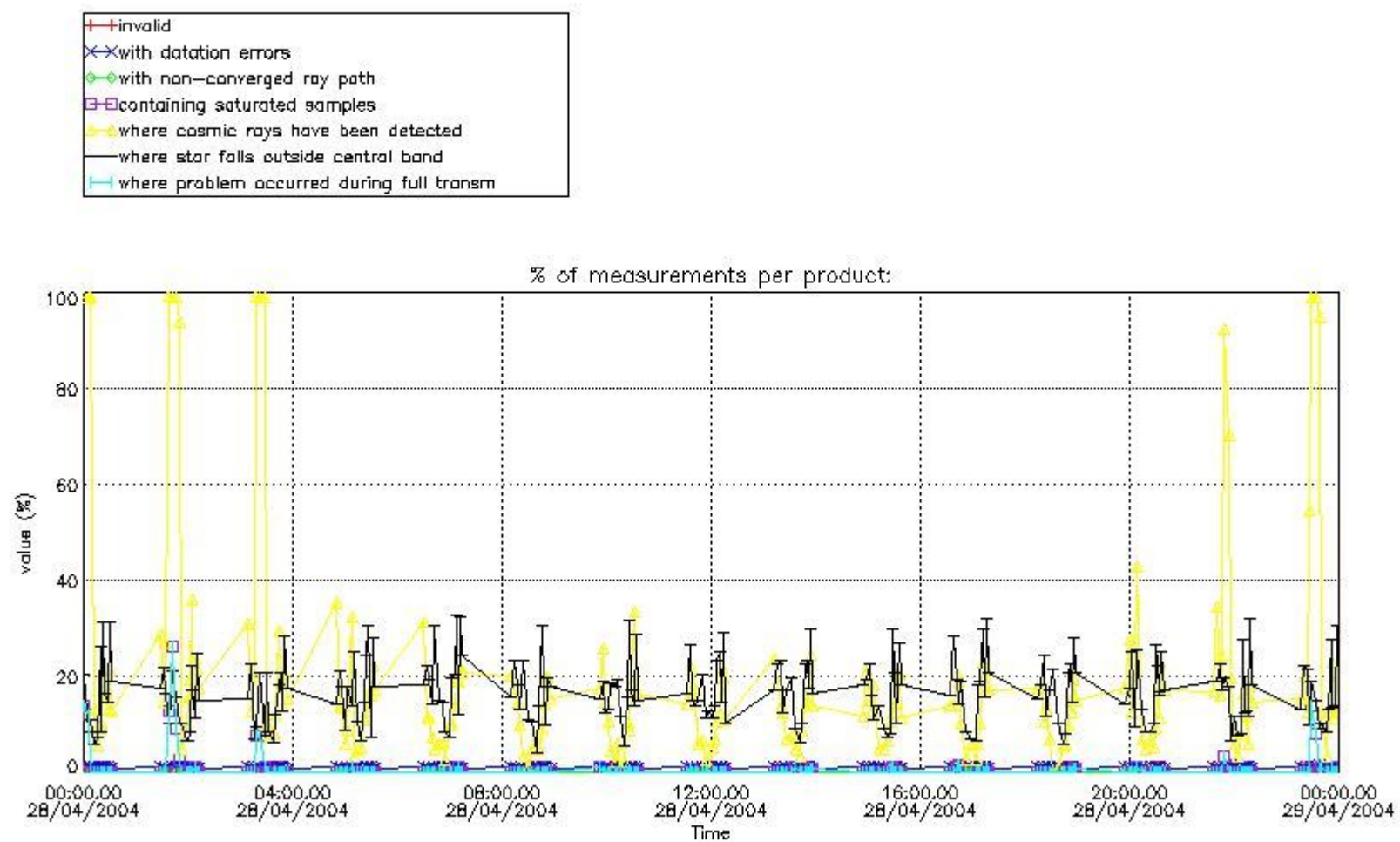


4. Level 1 quality information per product

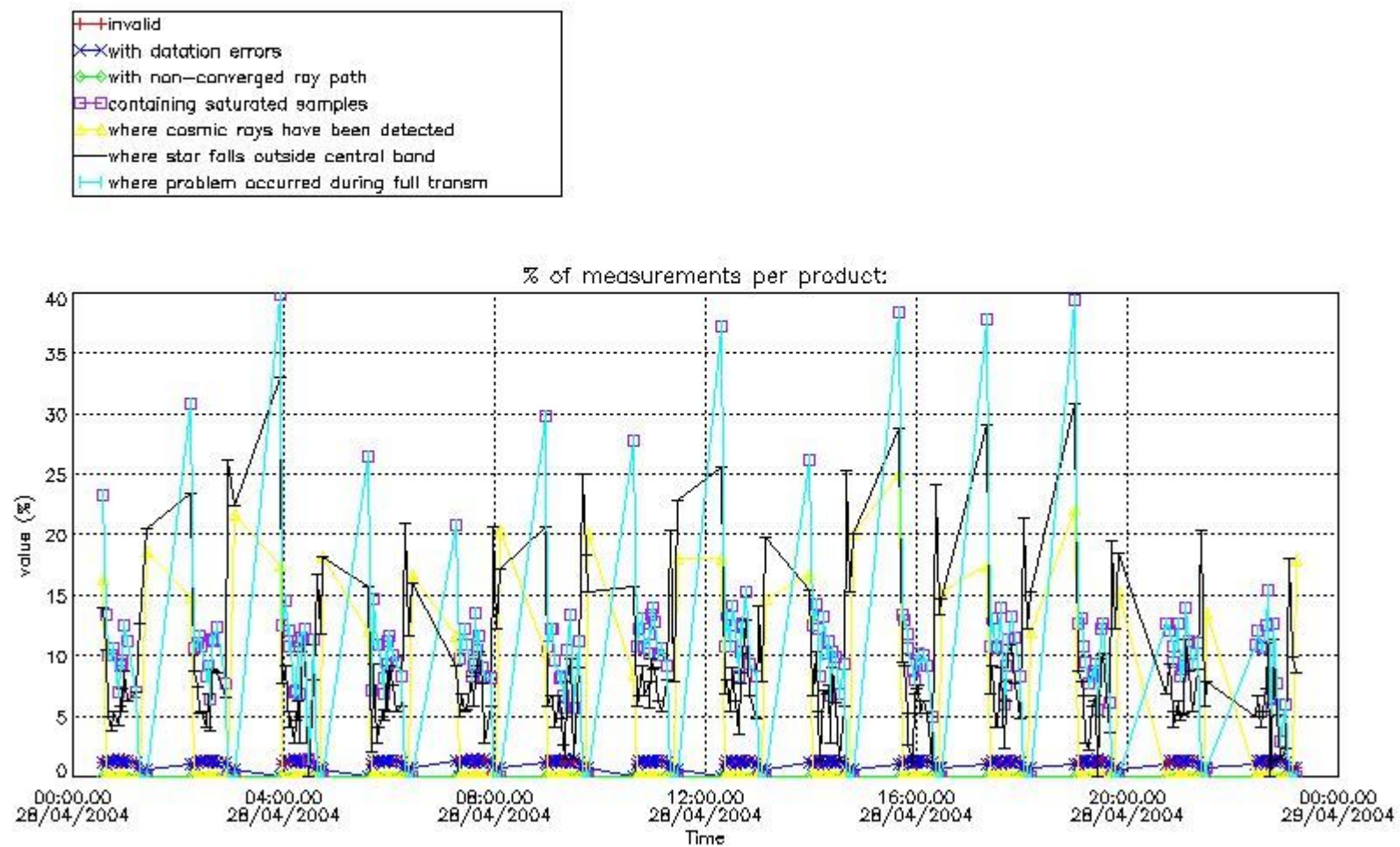
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



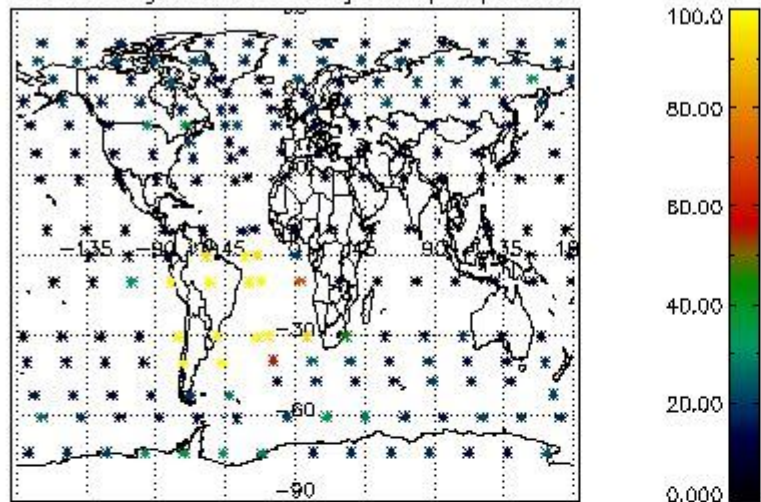
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



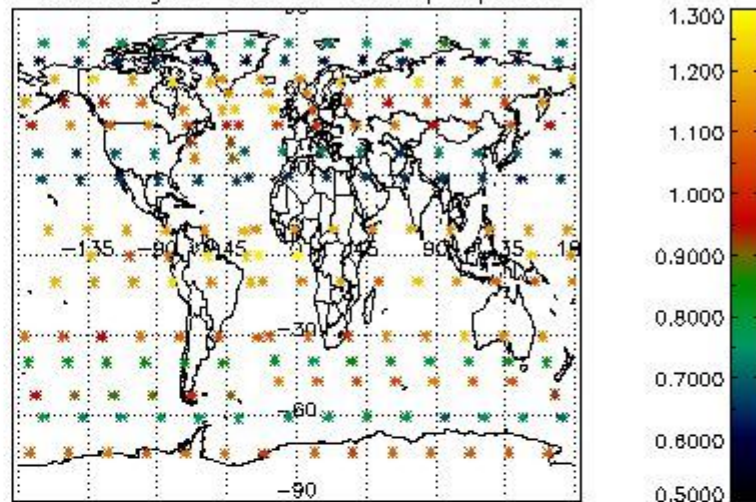
4.2 Plot quality information per product coming from level 1b processing (world map)

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

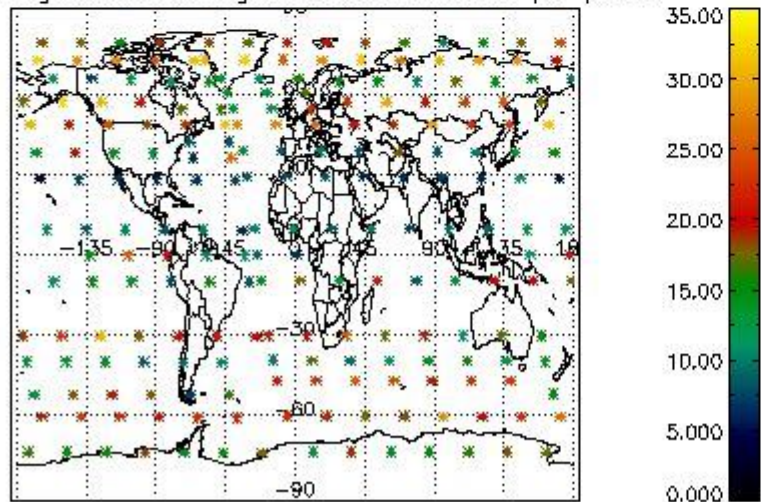
Percentage of cosmic ray hits per profile



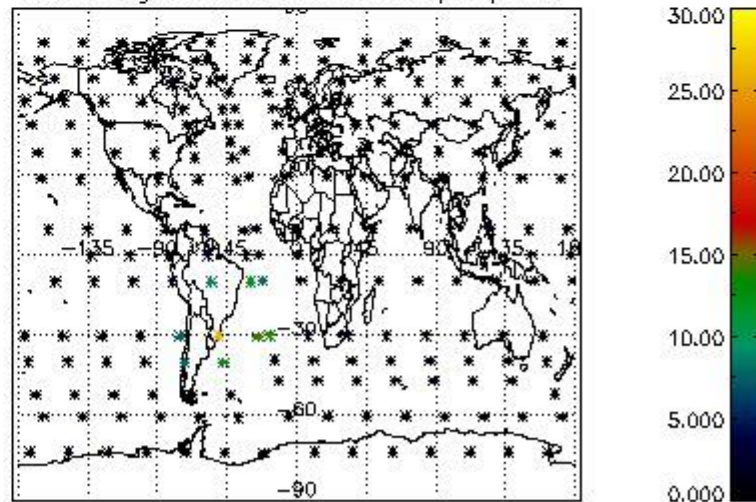
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

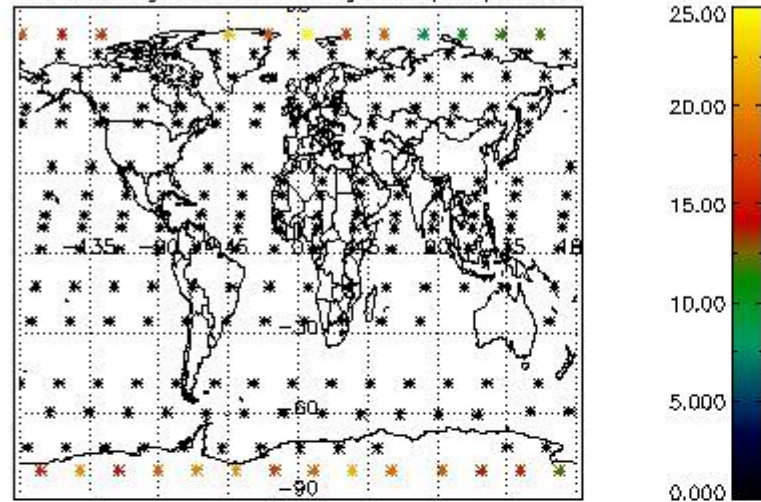


Percentage of saturation errors per profile

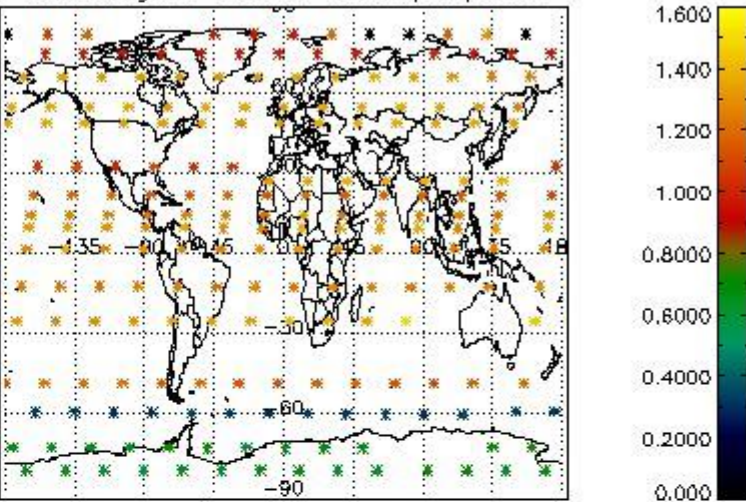


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

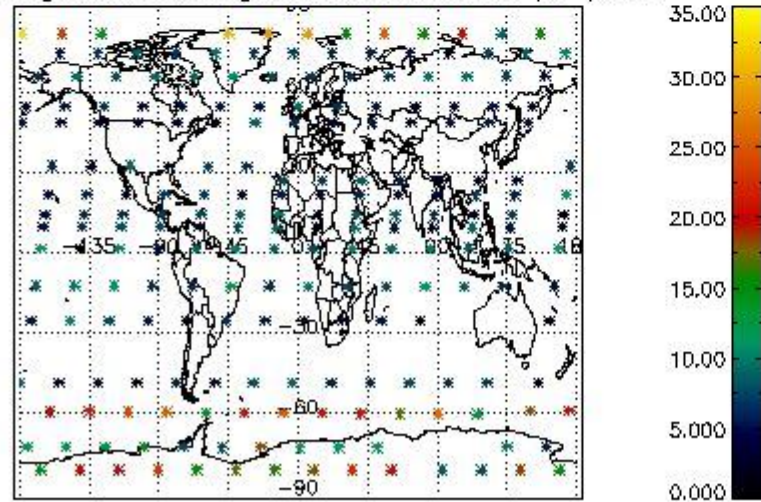
Percentage of cosmic ray hits per profile



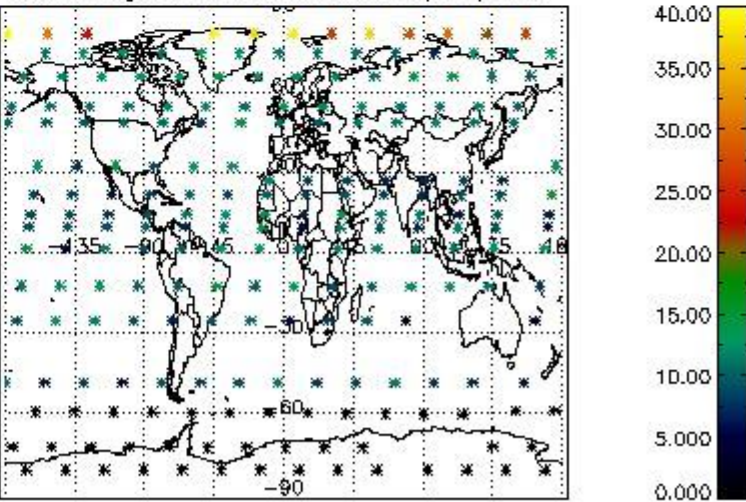
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

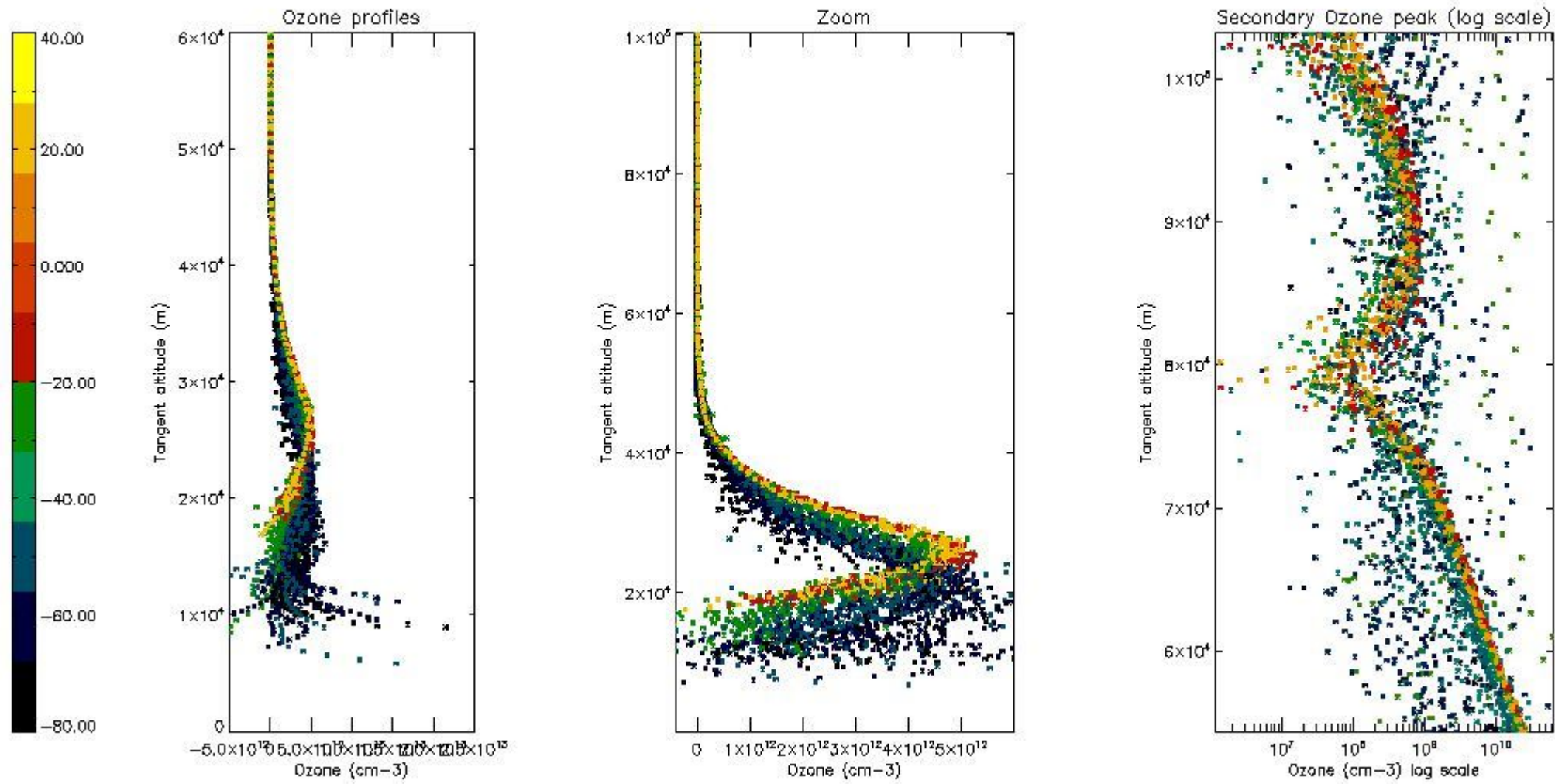
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	13

STD < 10	10
STD < 5	7

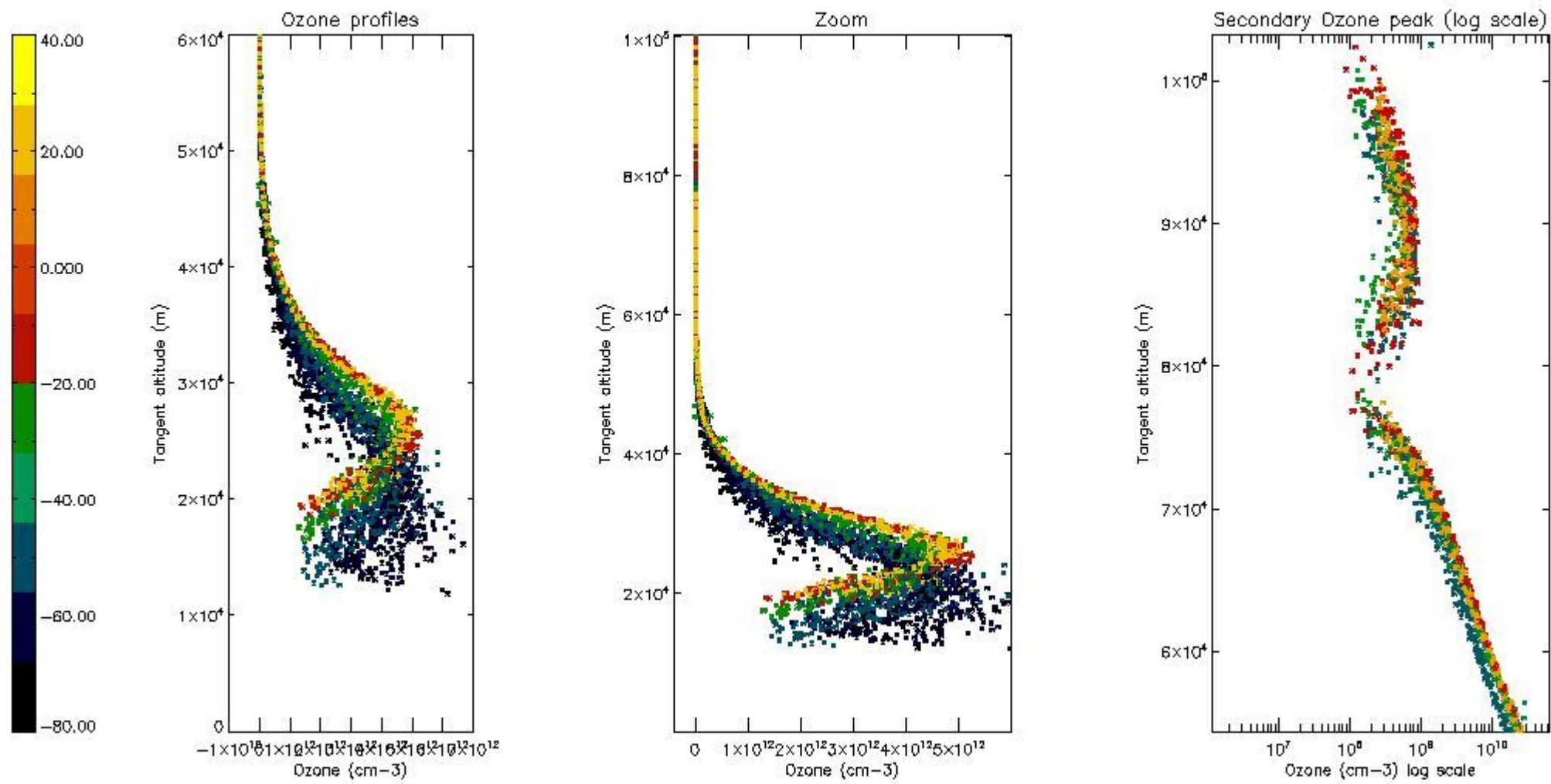
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



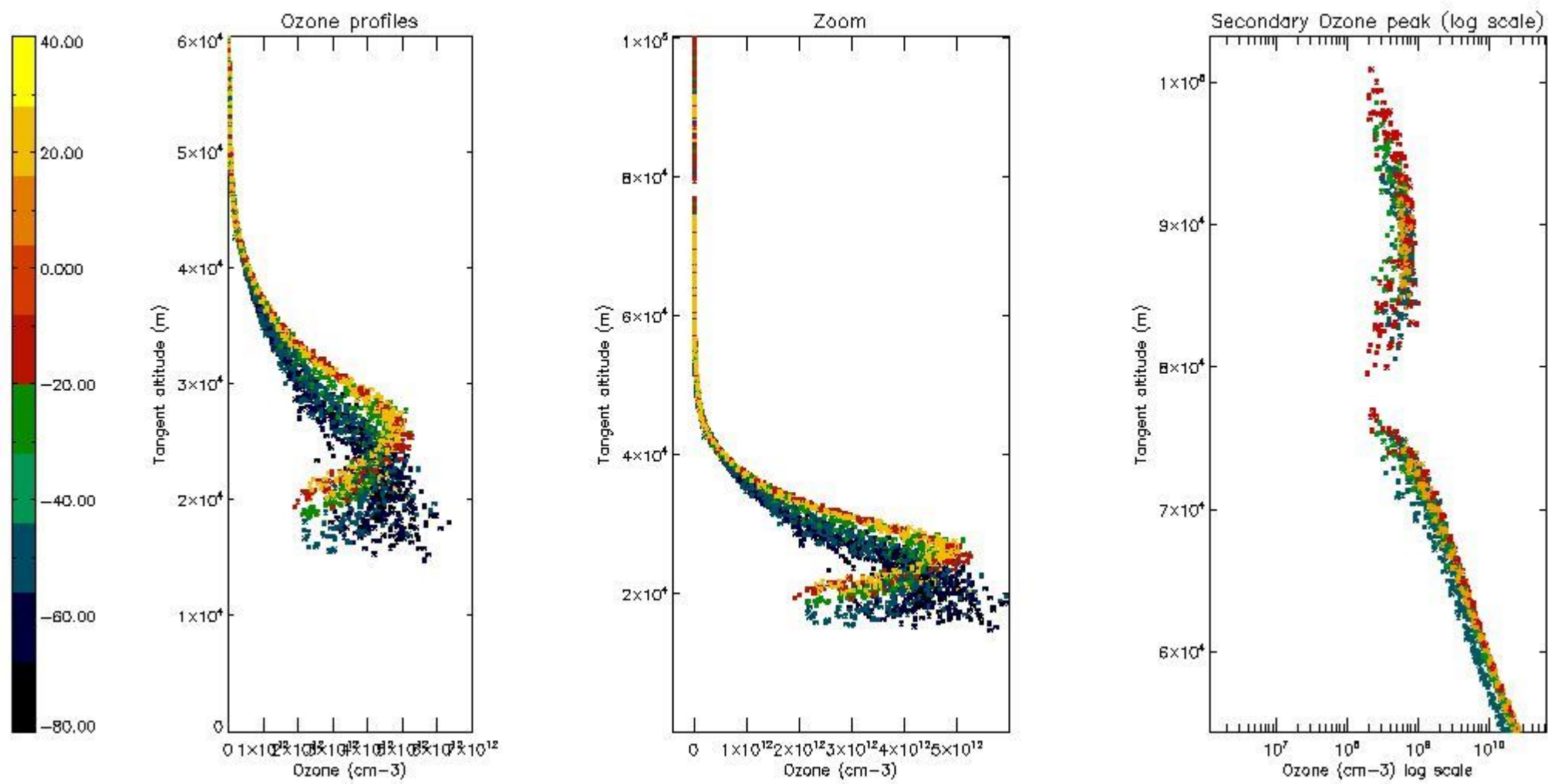
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



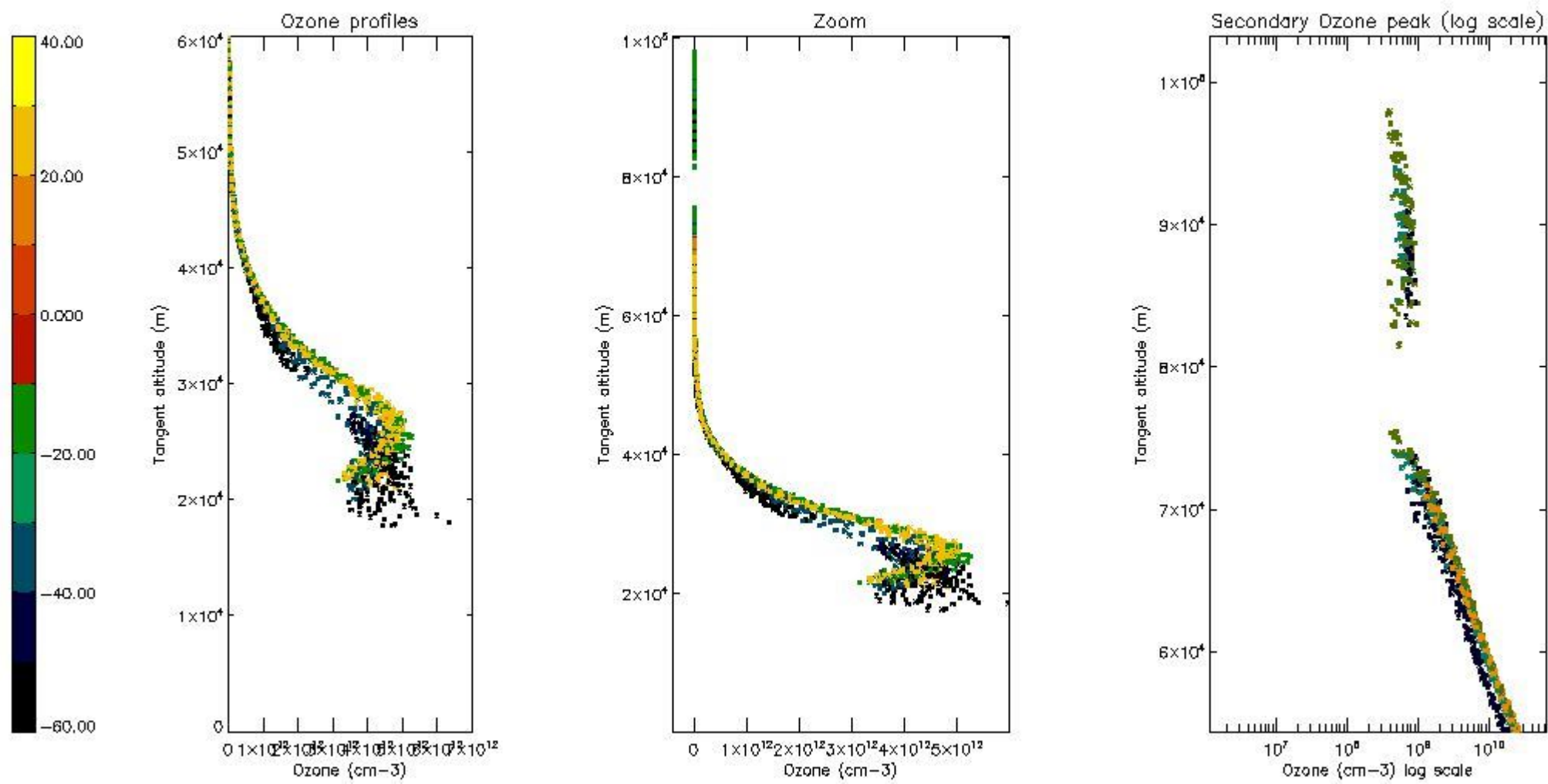
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



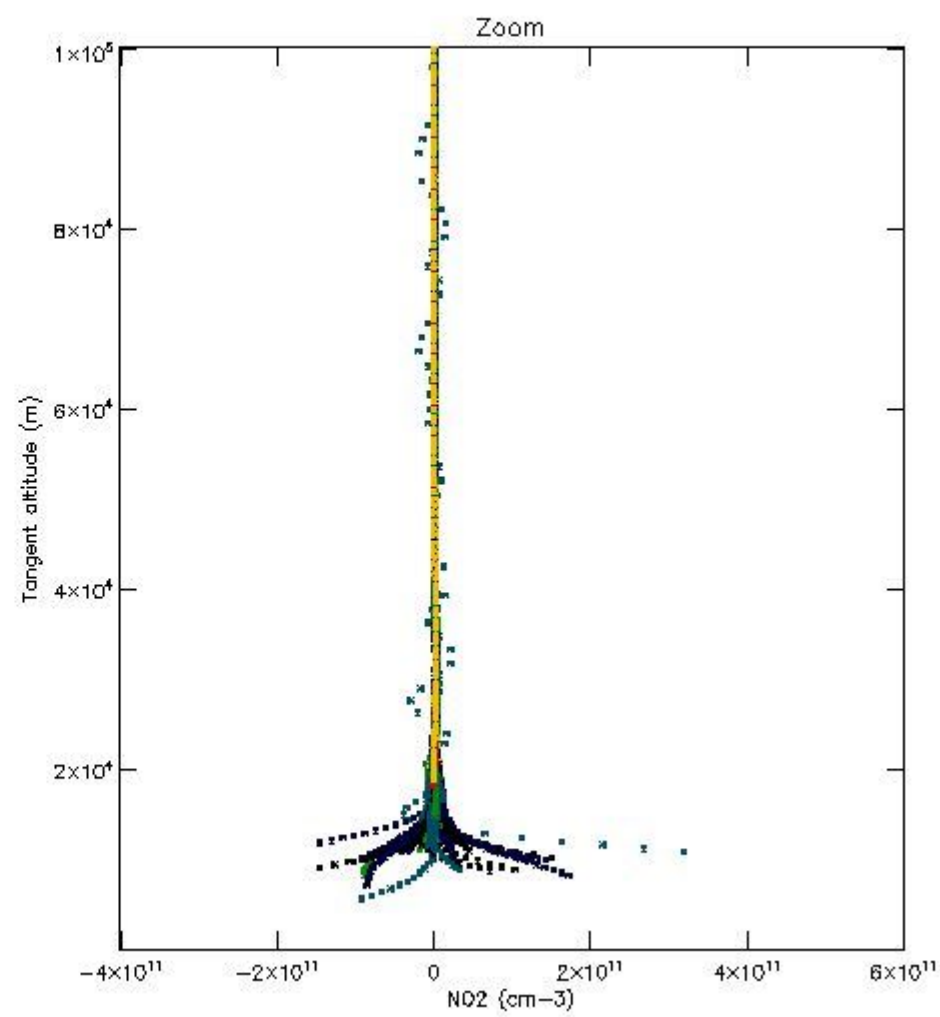
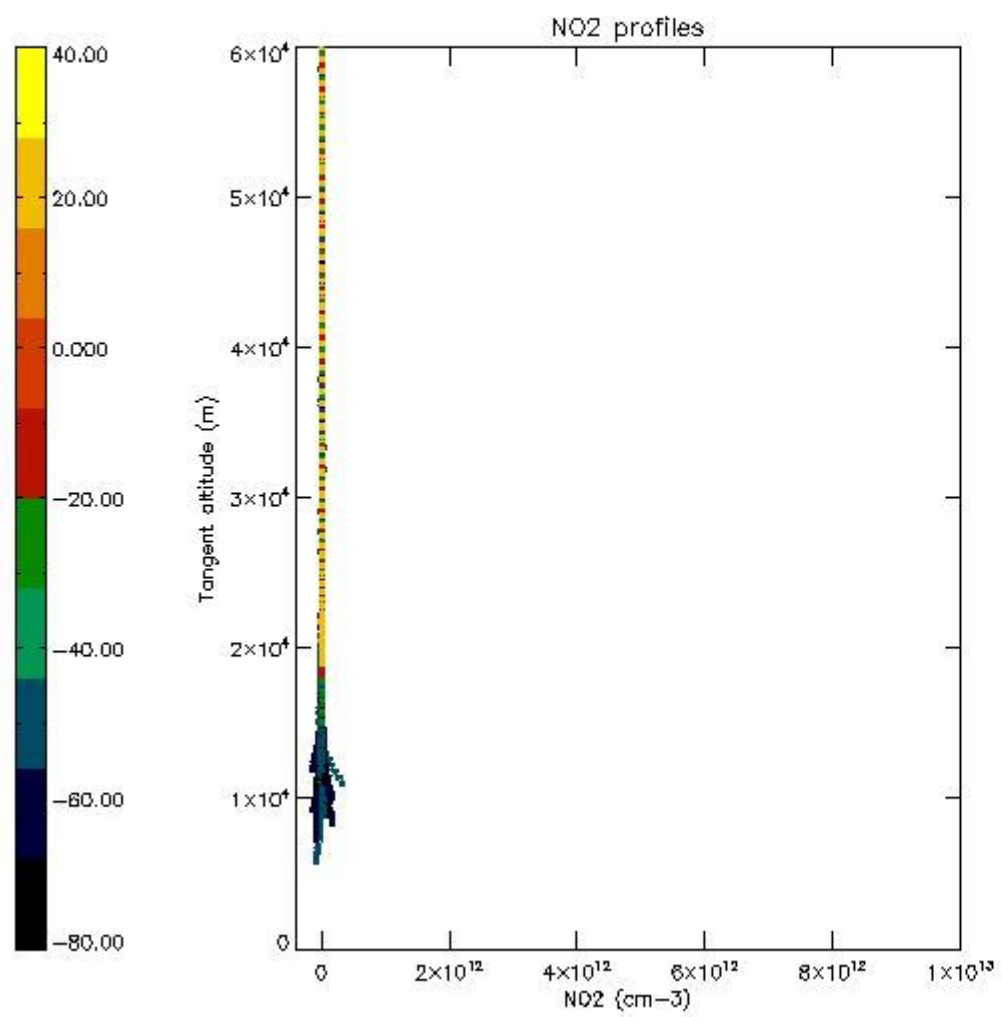
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



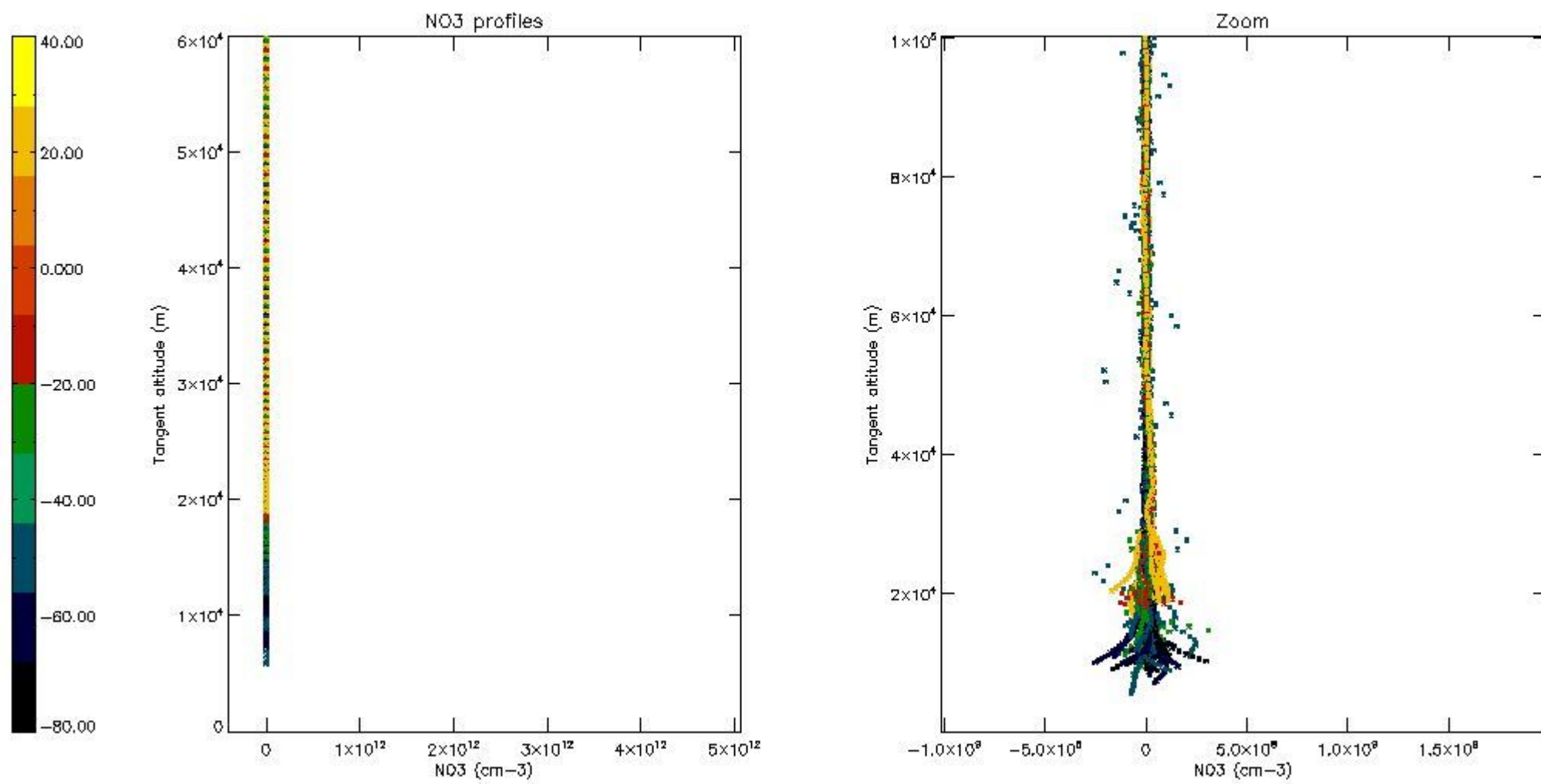
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



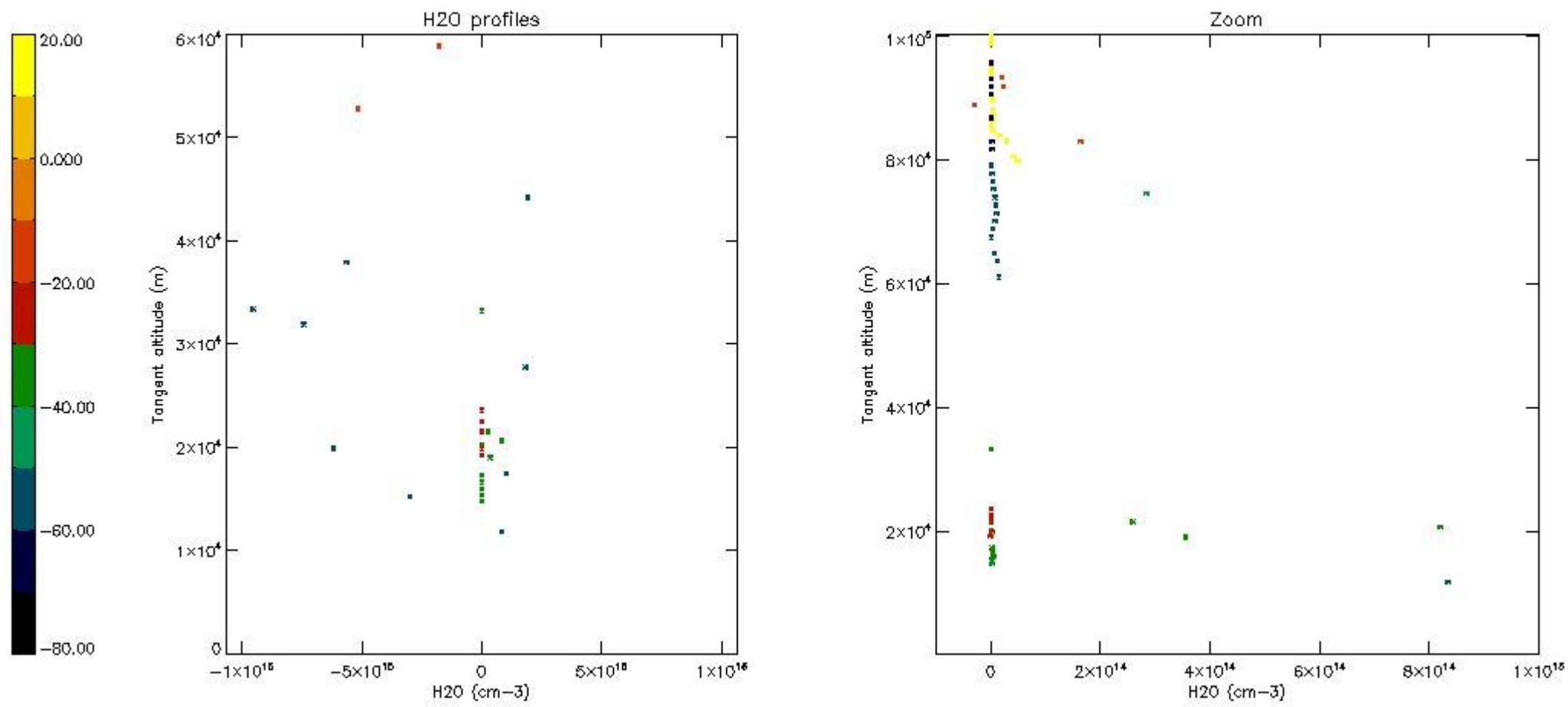
5.7 Plot NO3 profiles for all STD (dark without errors)

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	28-APR-2004 00:00:24
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-APR-2004 00:00:24
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-APR-2004 00:00:24

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[3.2 Plot of level 2 quality information per product \(world map\)](#)

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[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](#)

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[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

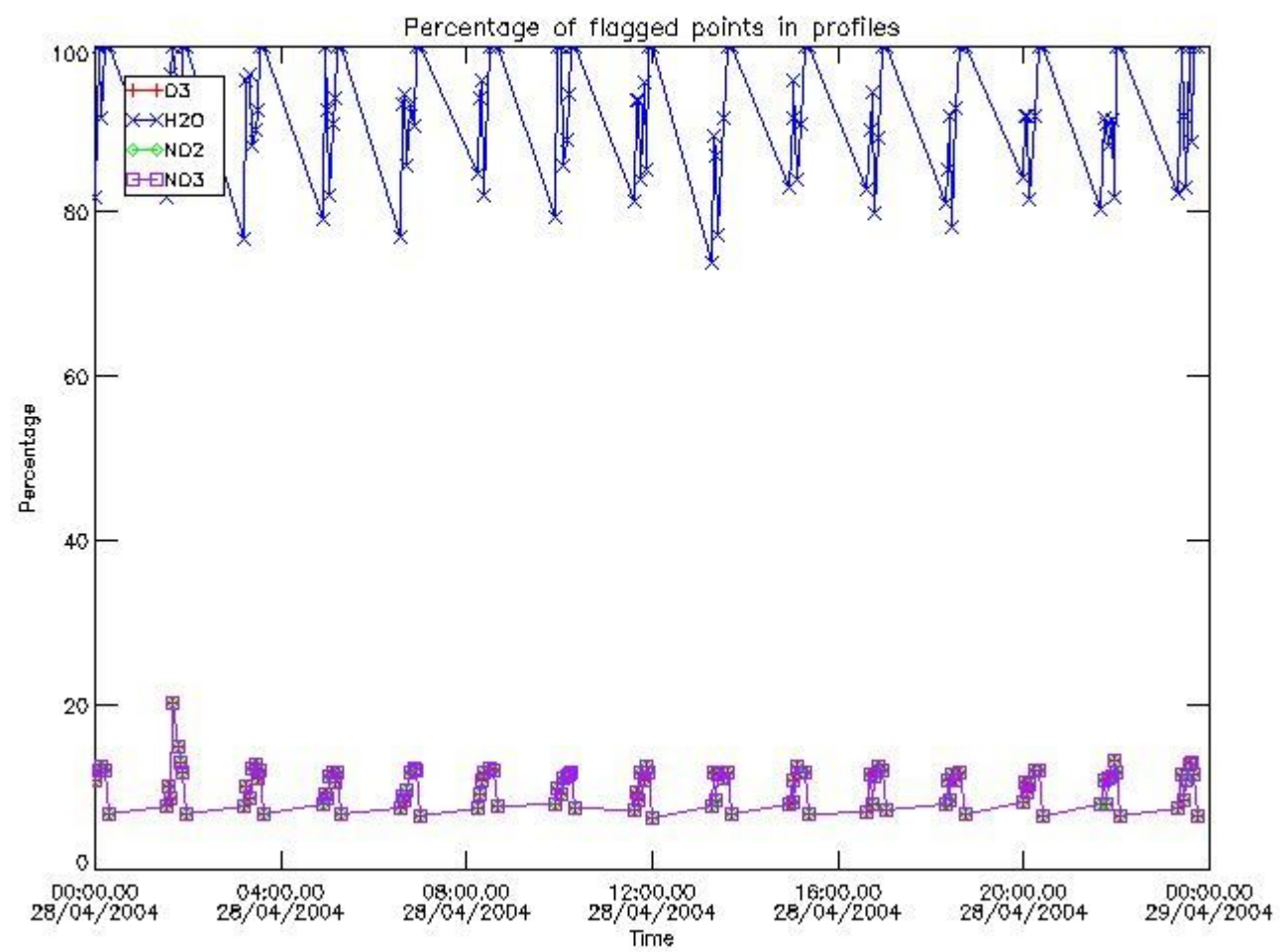
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

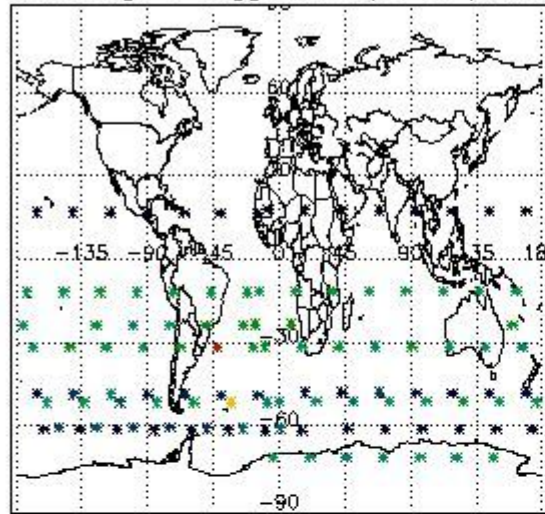
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

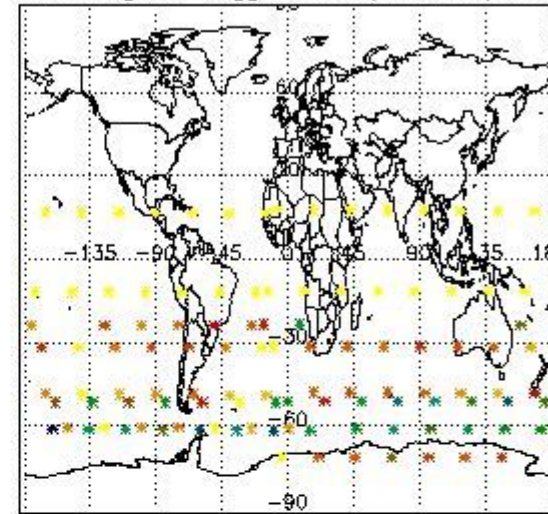


3.2 Plot quality information per product (world map)

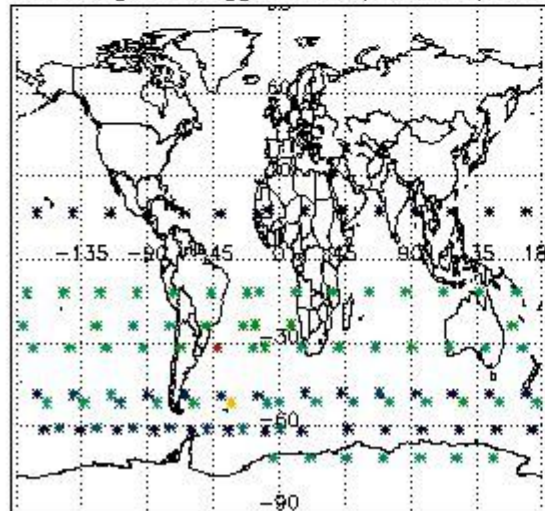
Percentage of flagged data per O3 profile



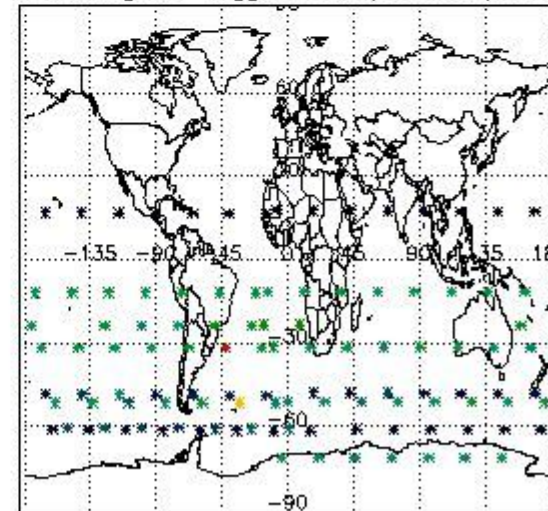
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

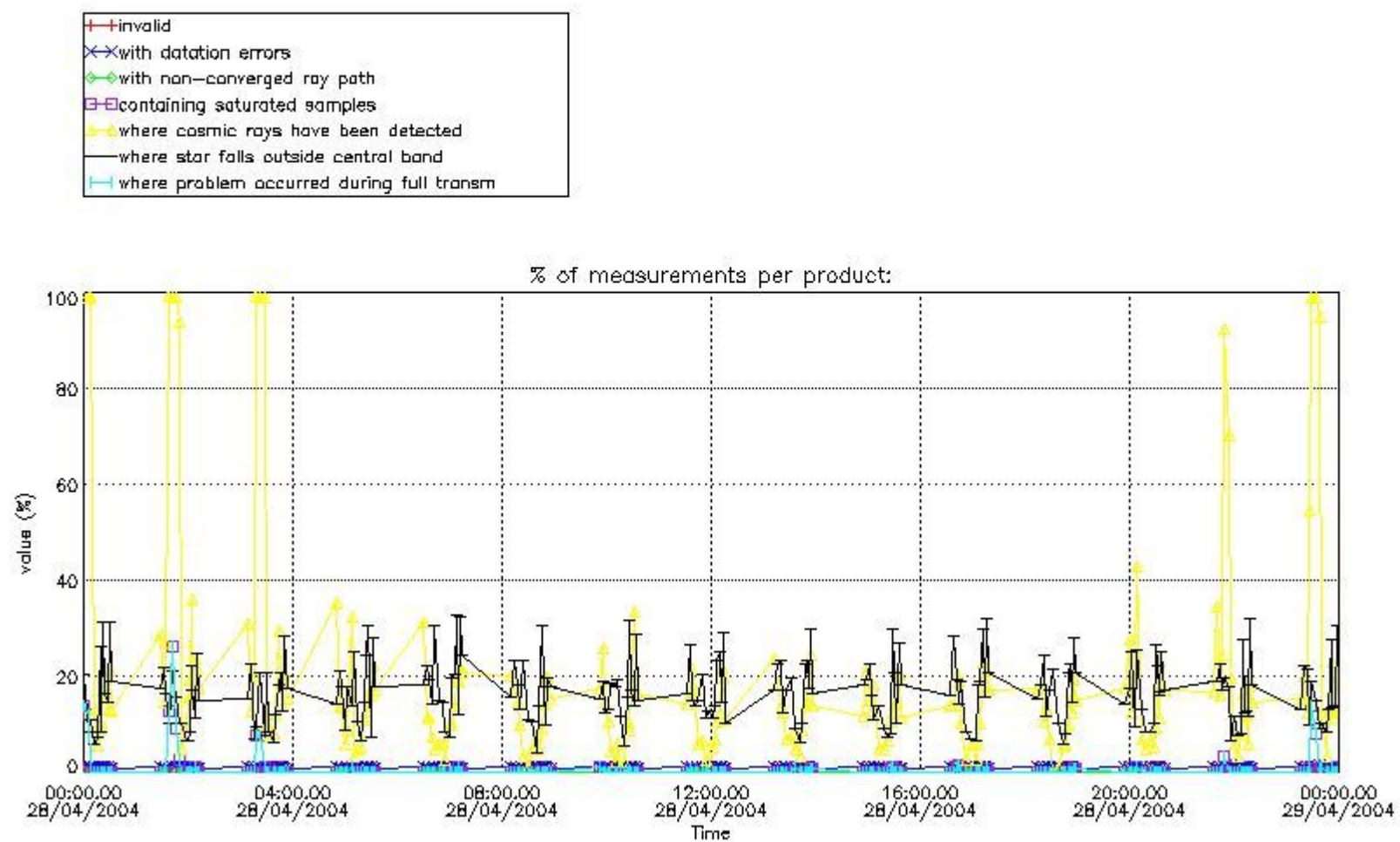


4. Level 1 quality information per product

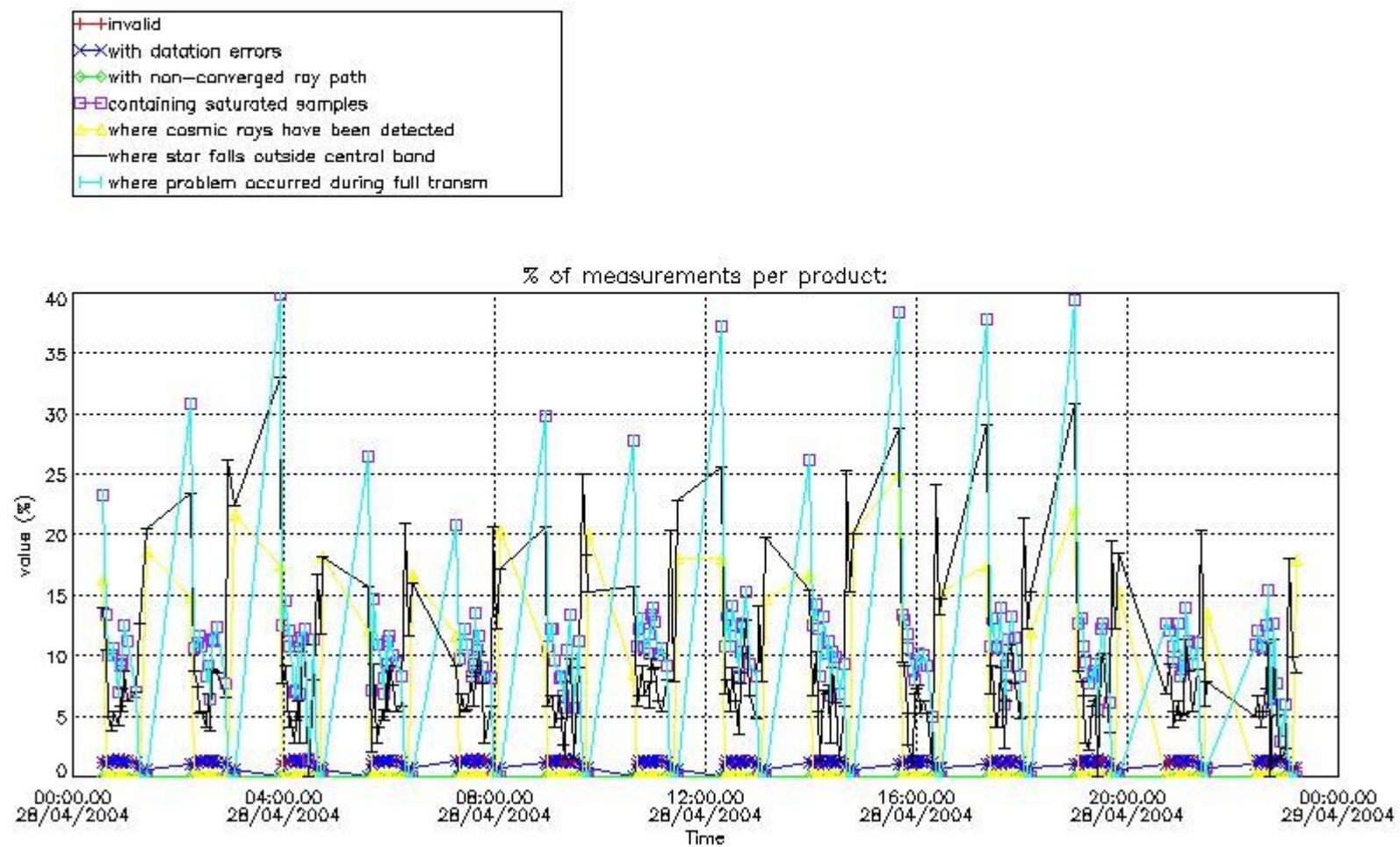
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



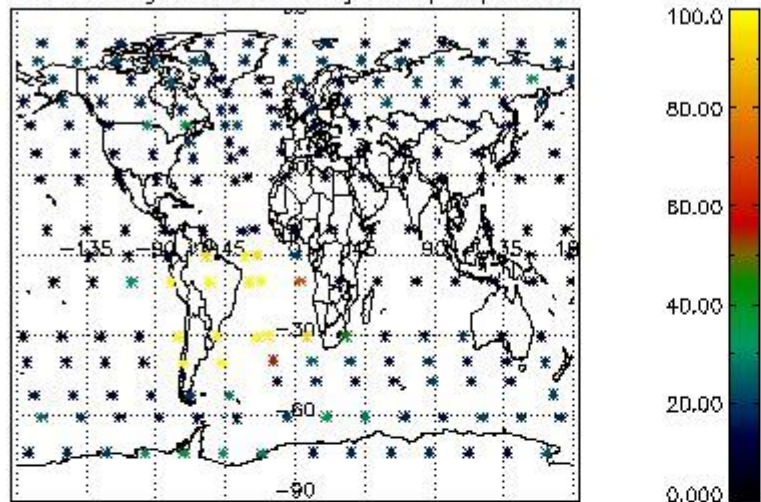
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



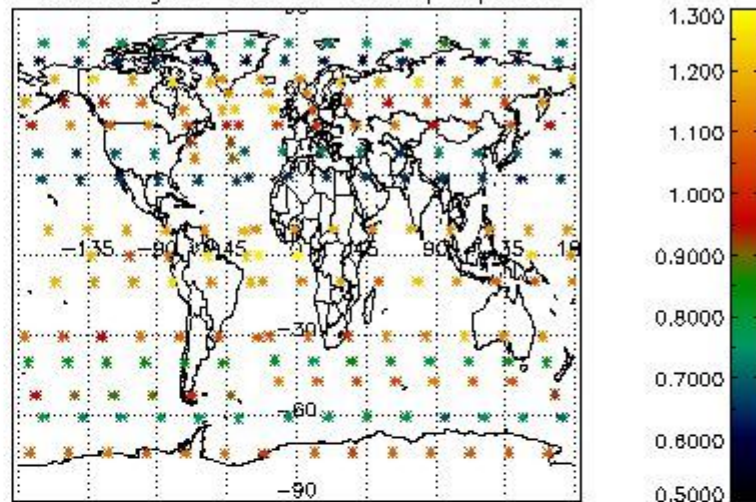
4.2 Plot quality information per product coming from level 1b processing (world map)

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

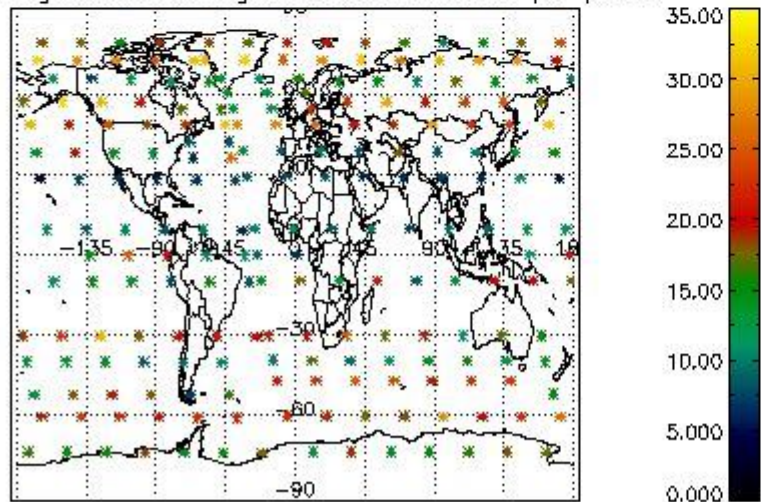
Percentage of cosmic ray hits per profile



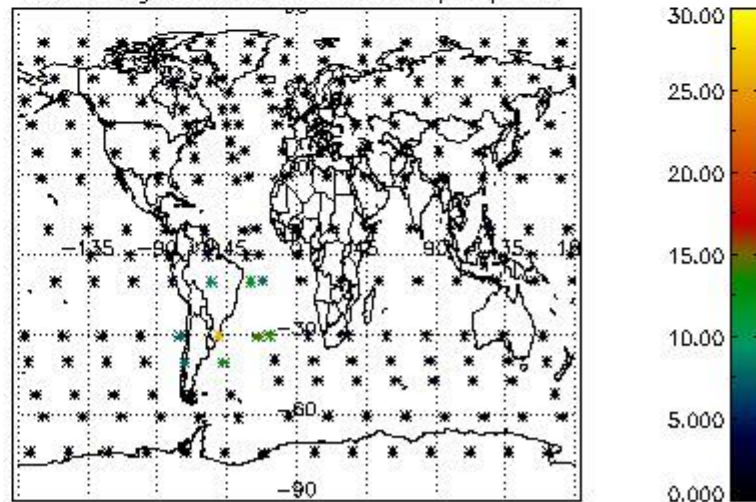
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

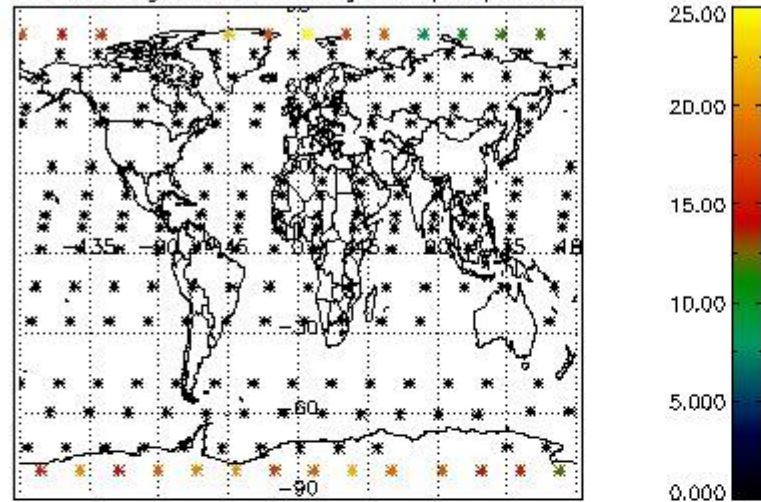


Percentage of saturation errors per profile

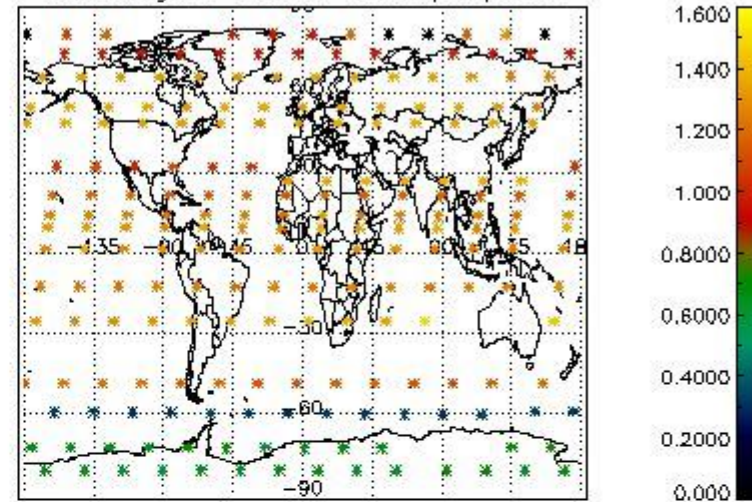


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

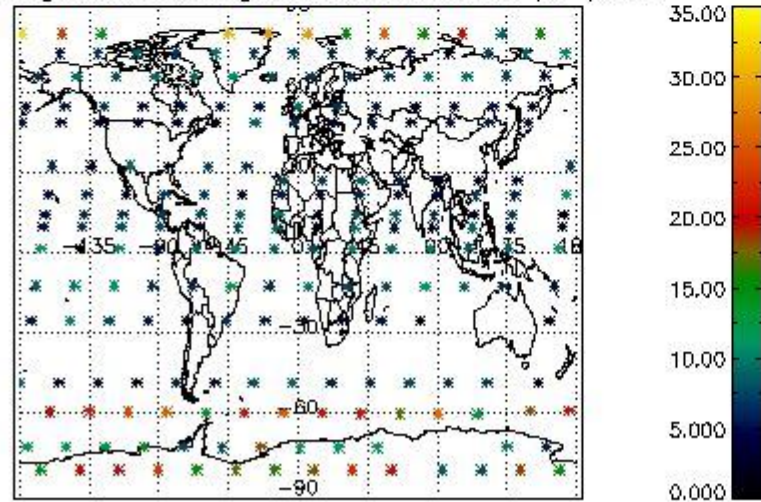
Percentage of cosmic ray hits per profile



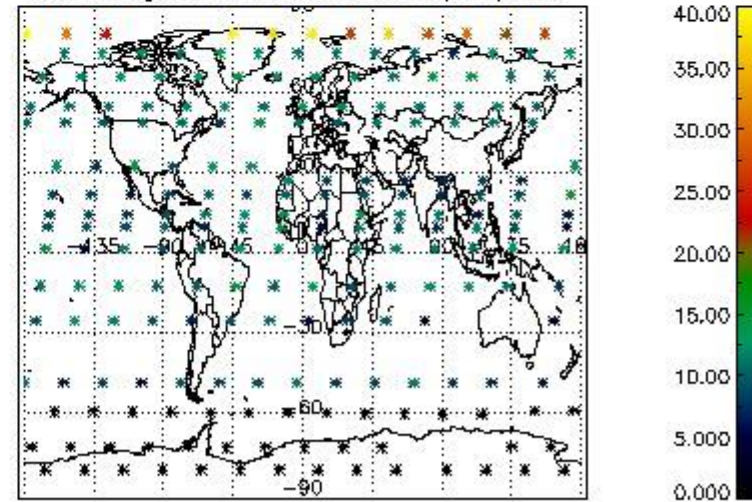
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

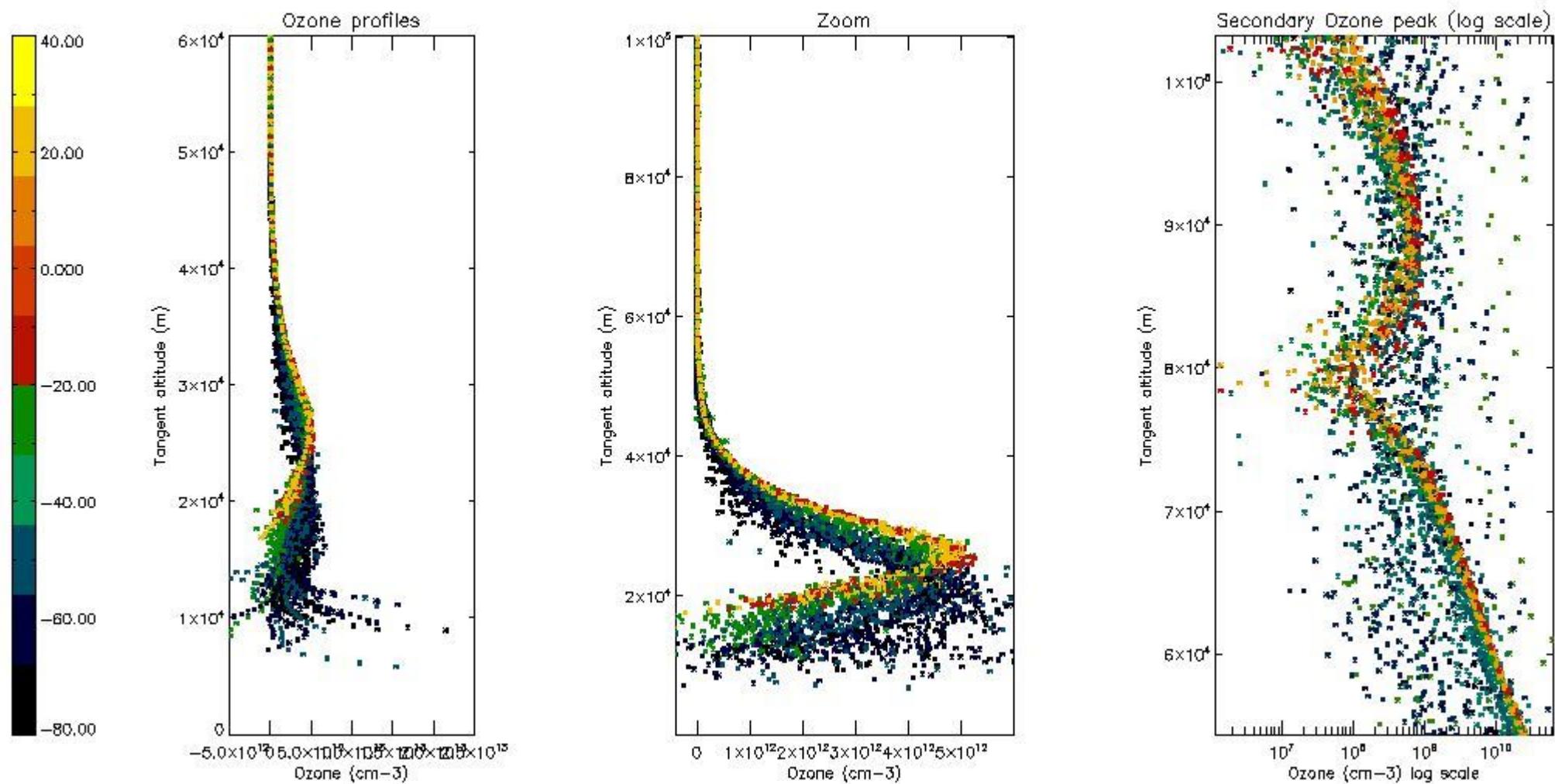
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	13

STD < 10	10
STD < 5	7

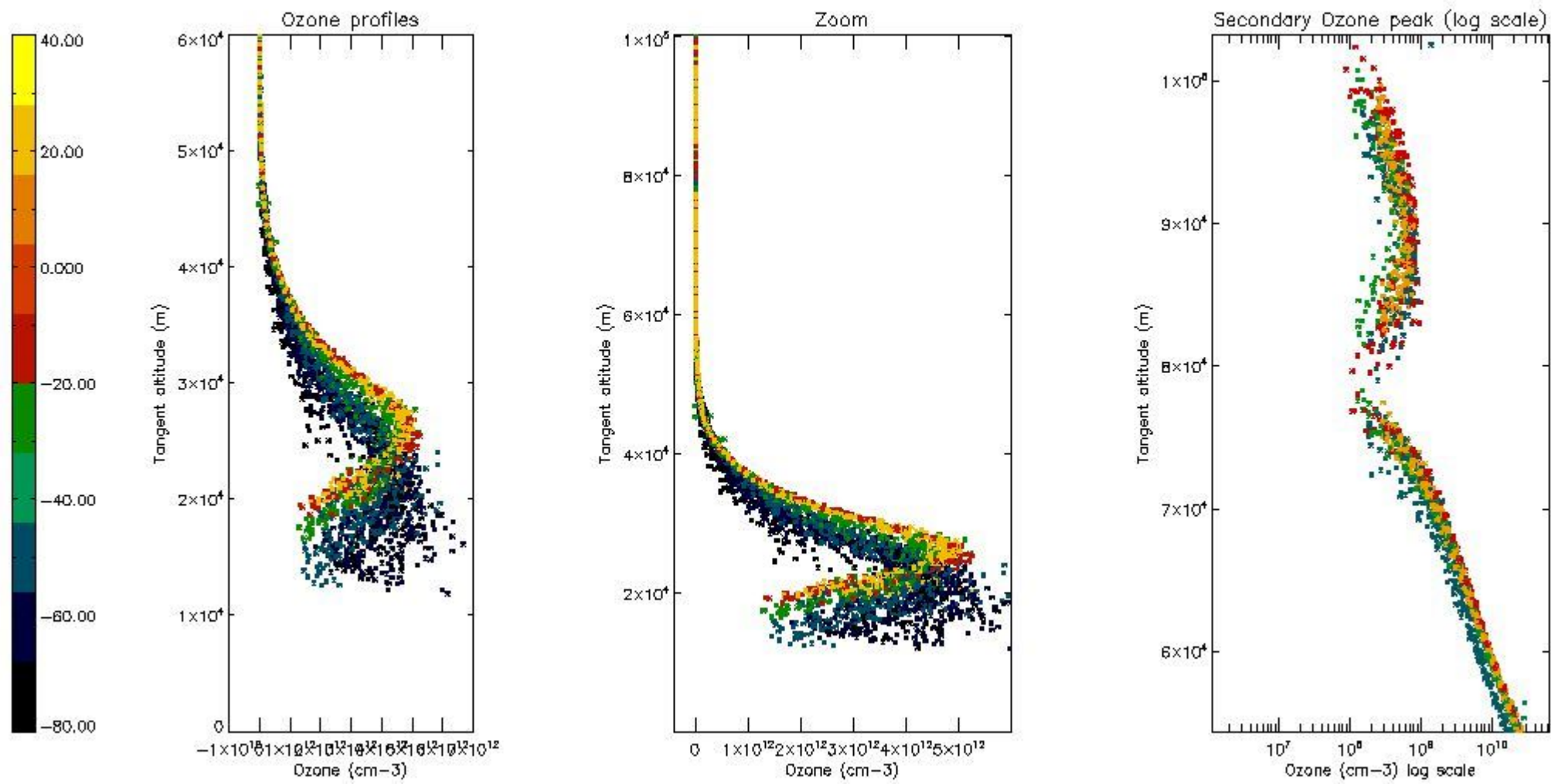
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



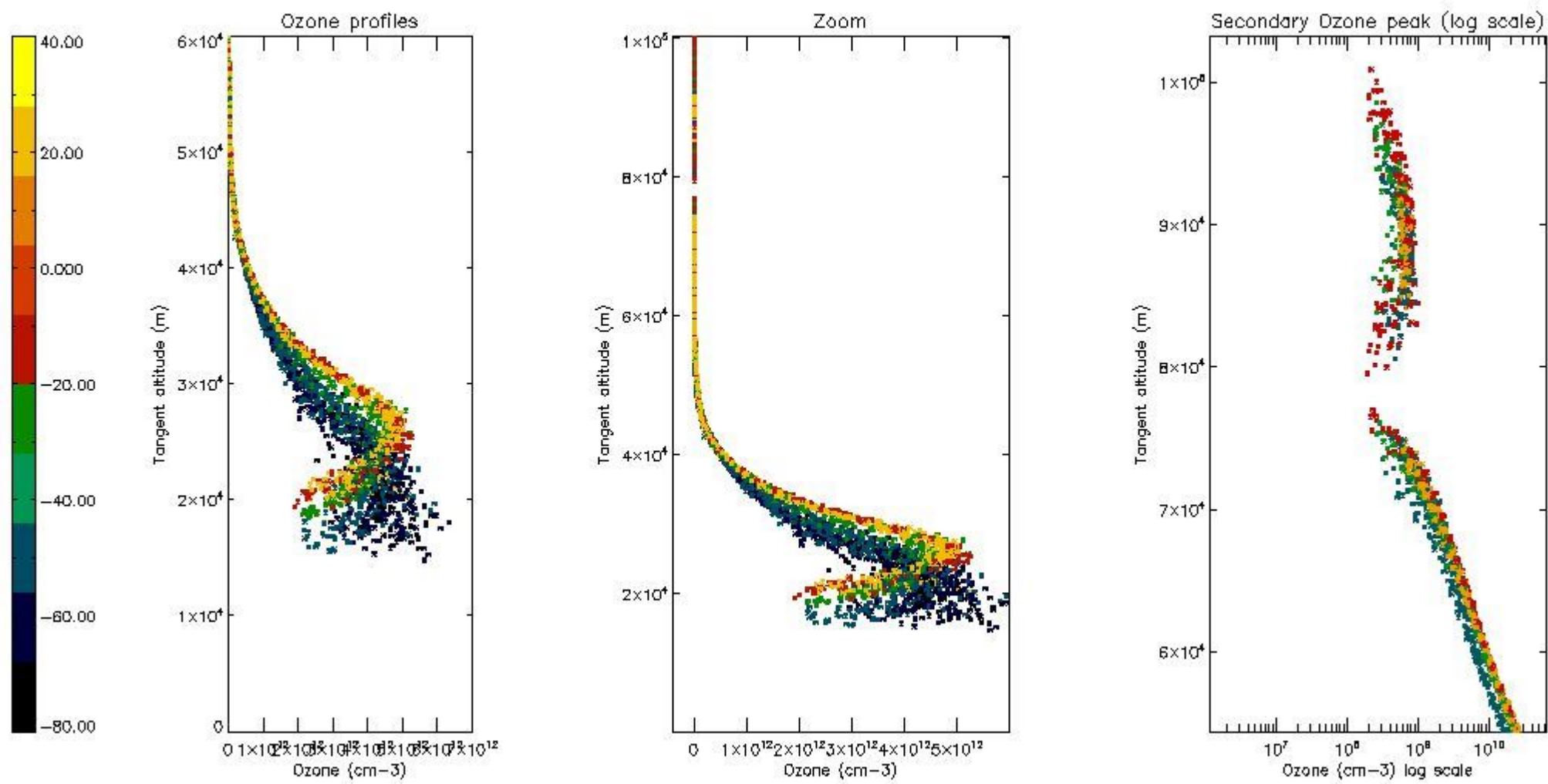
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



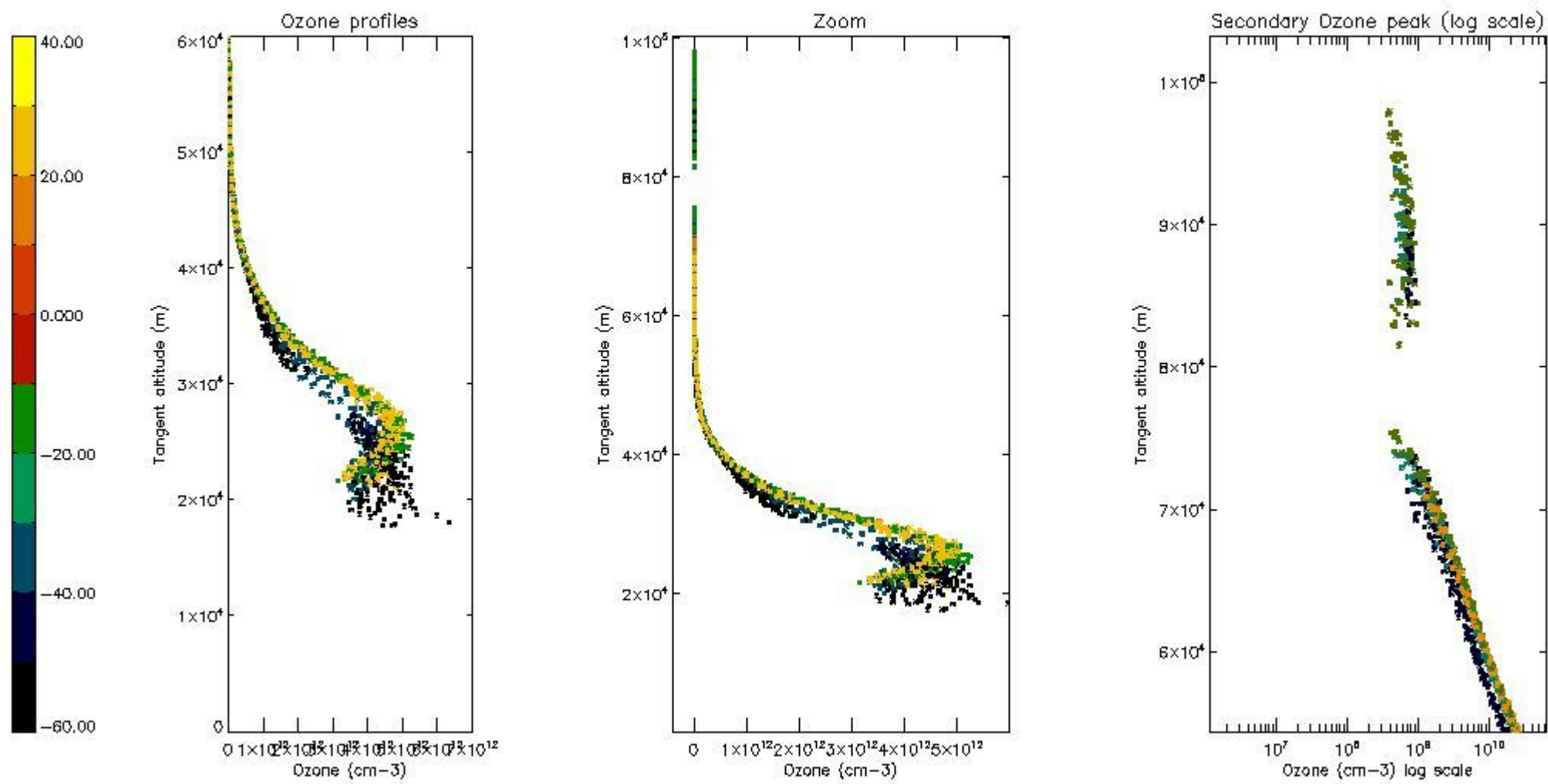
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



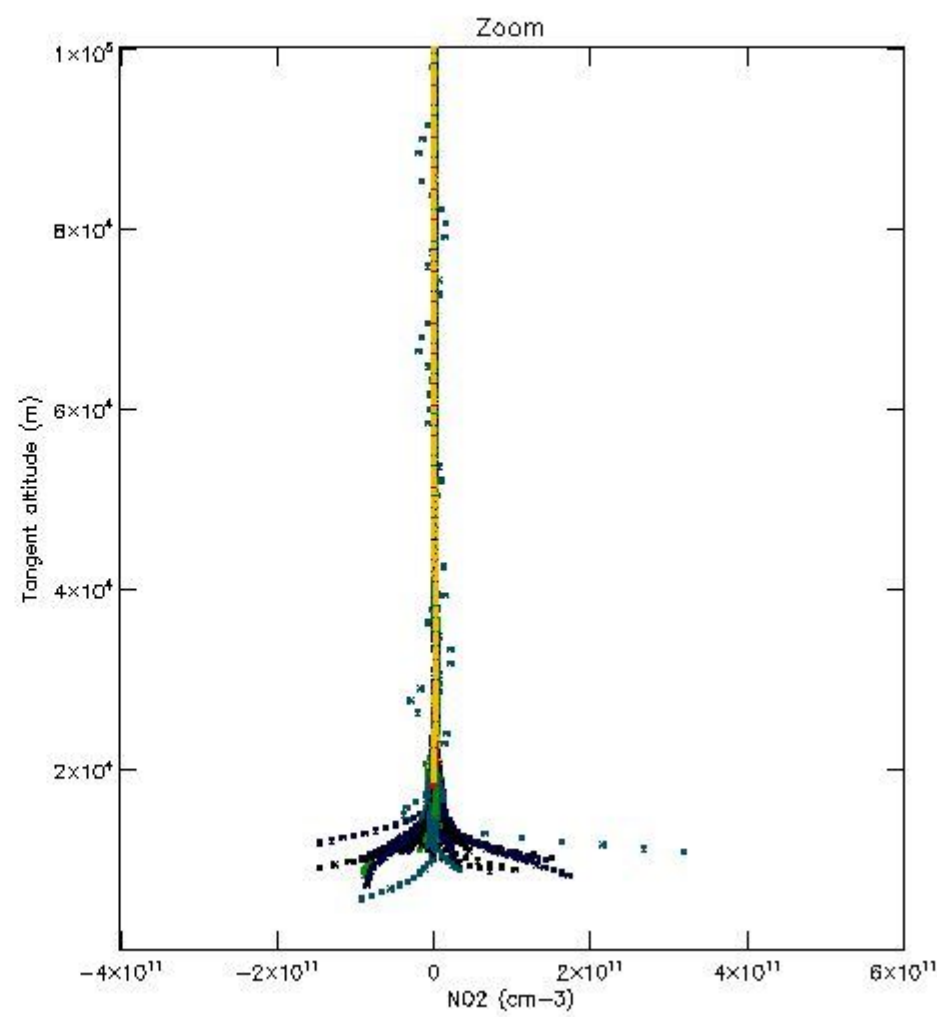
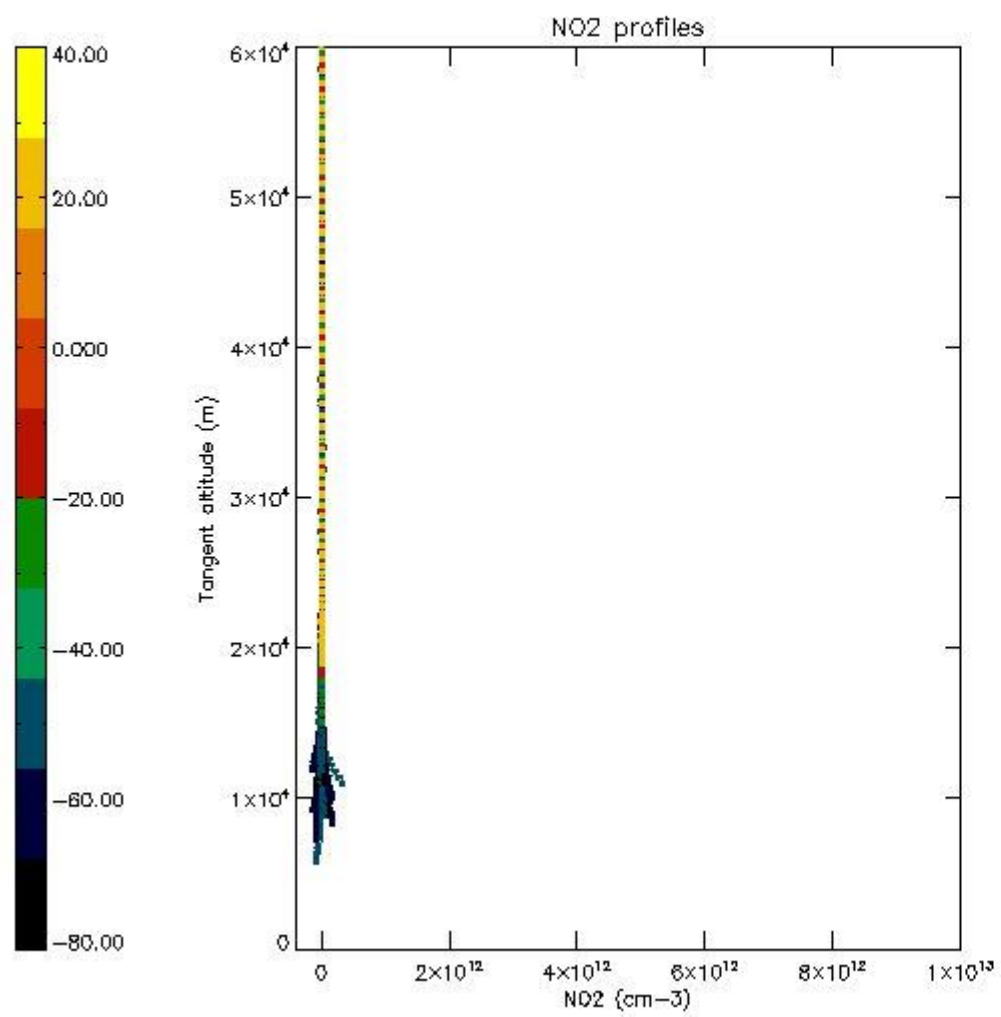
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



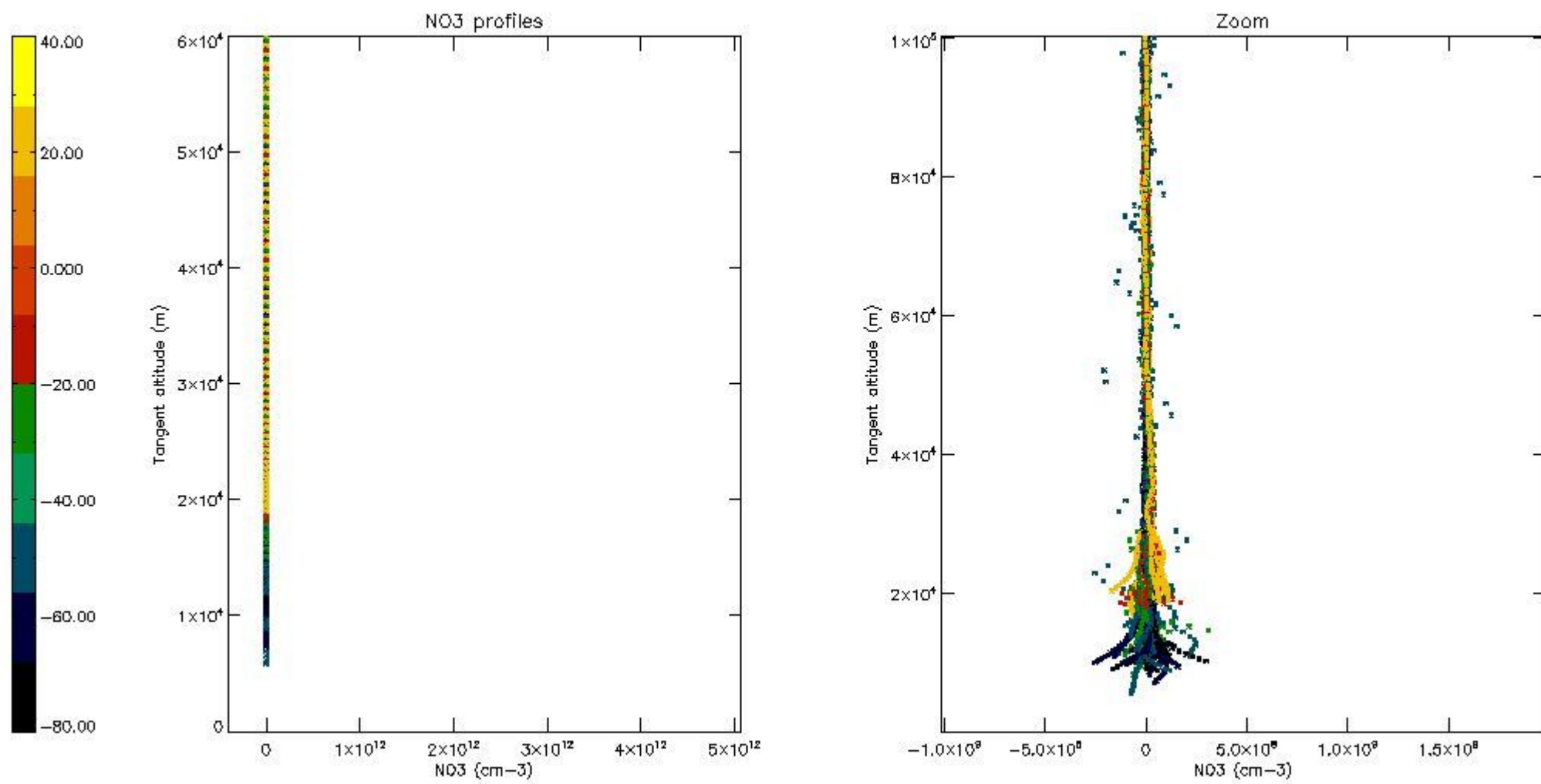
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



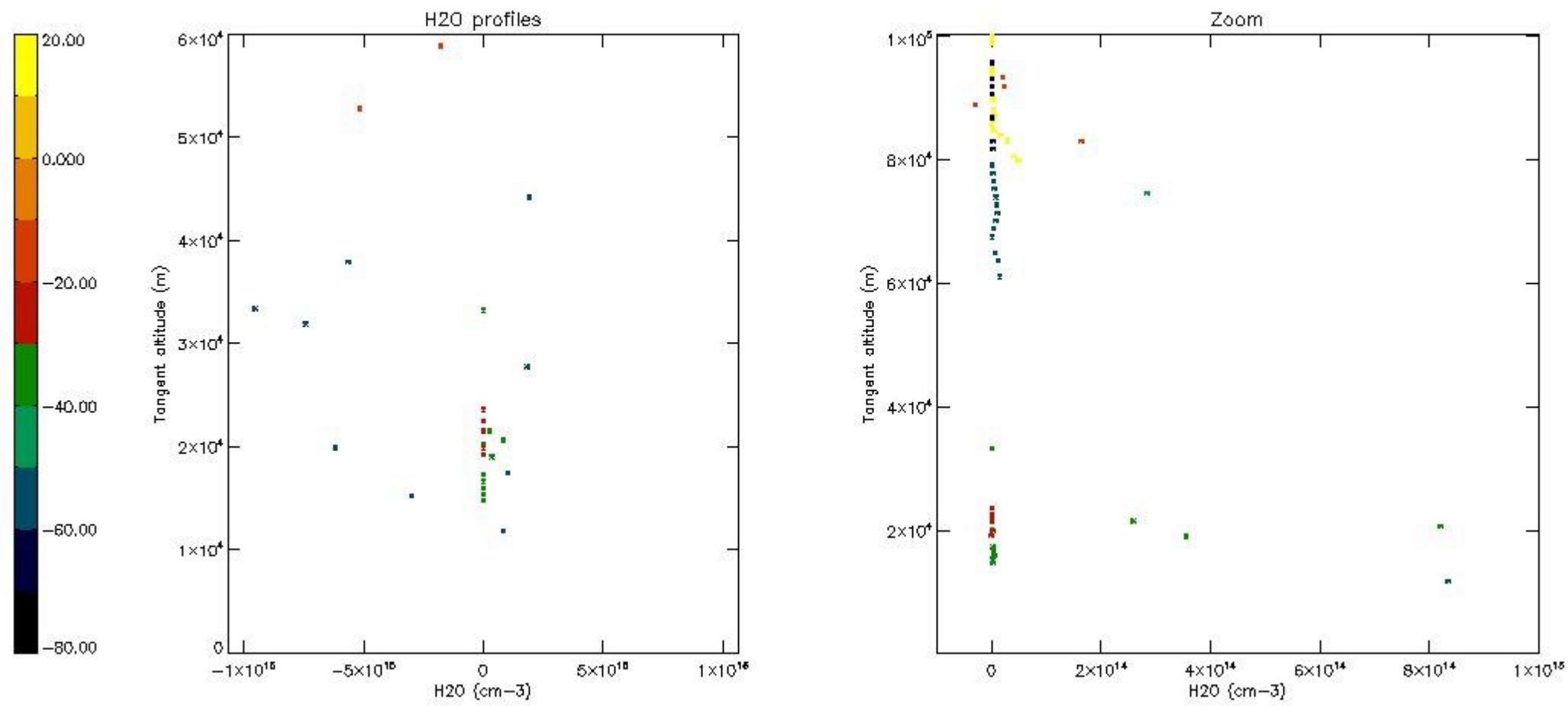
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

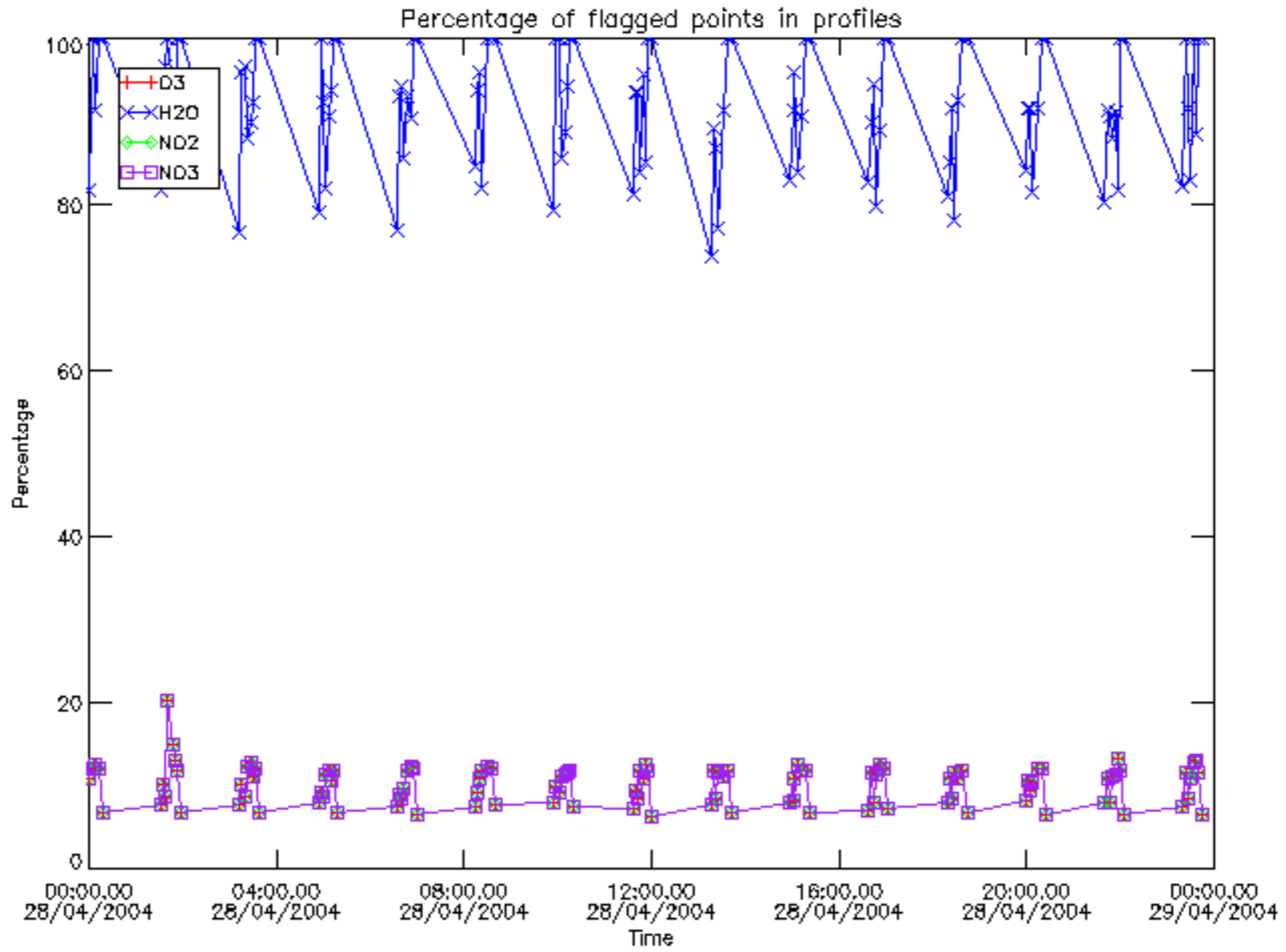
The colorbar represents the latitude.



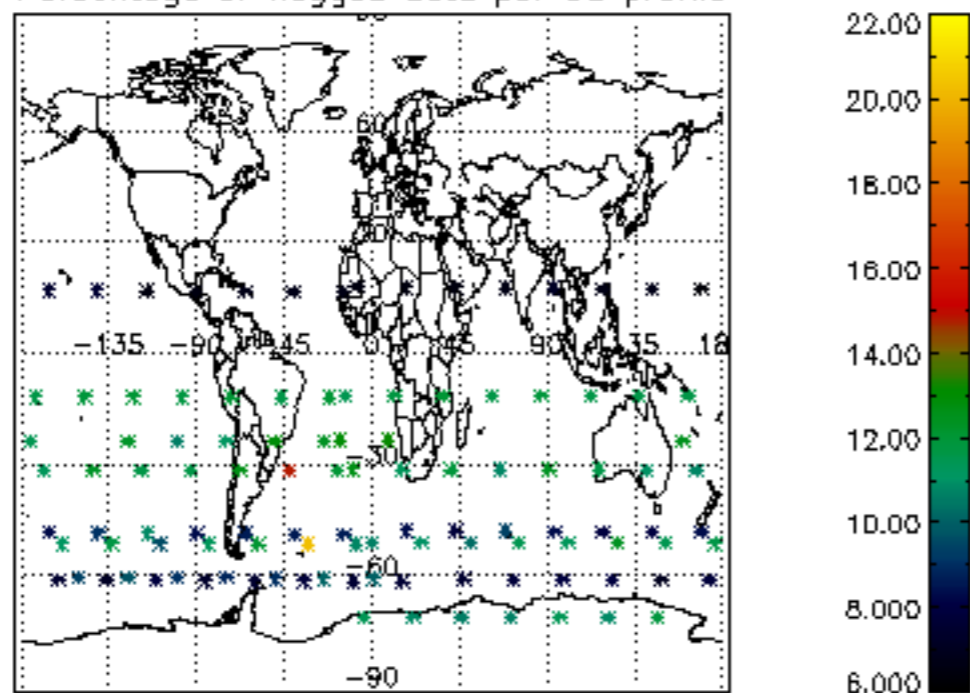
6. Auxiliary Data Files used for the production reported in section 2

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.

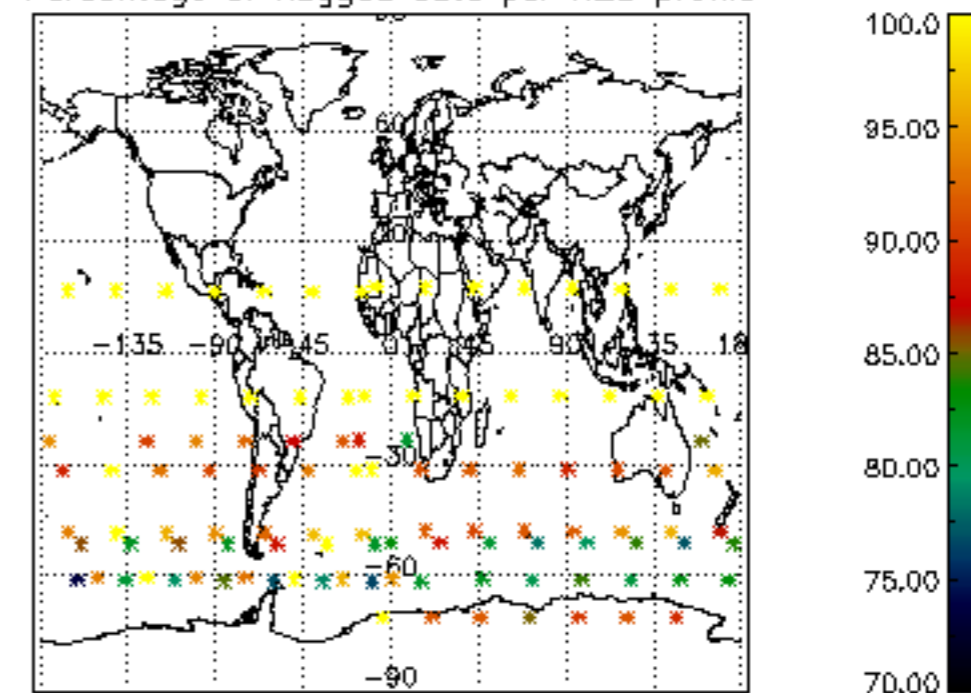
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	28-APR-2004 00:00:24
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-APR-2004 00:00:24
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-APR-2004 00:00:24



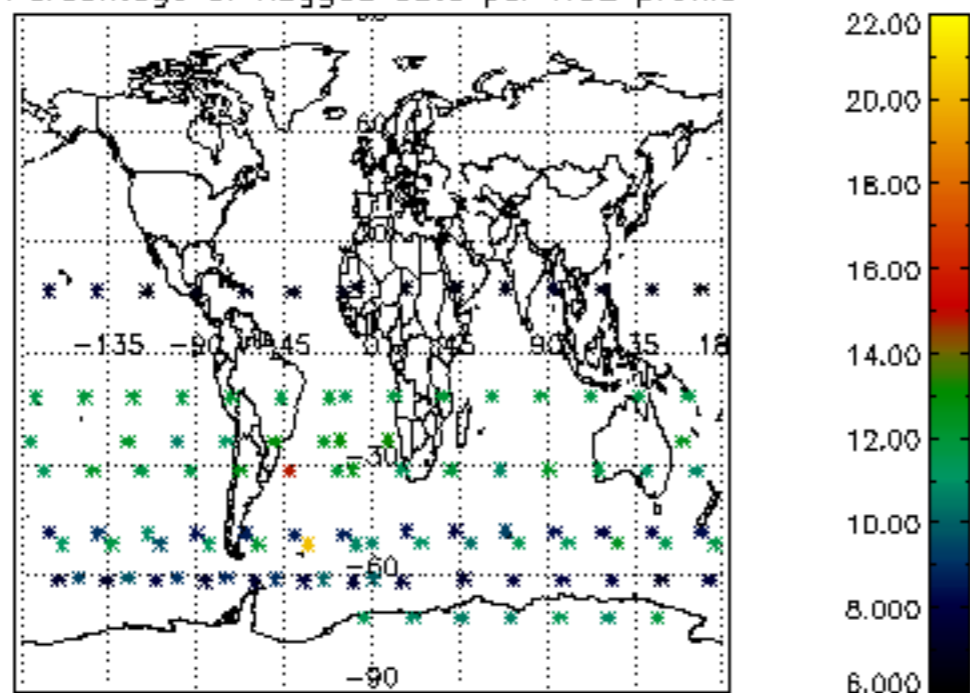
Percentage of flagged data per D3 profile



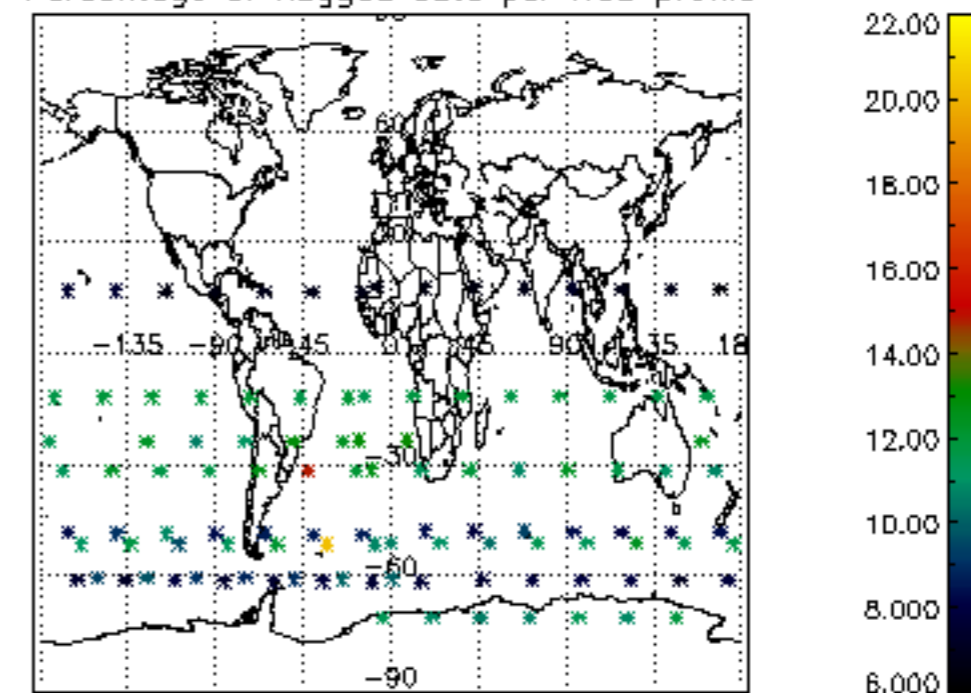
Percentage of flagged data per H2O profile

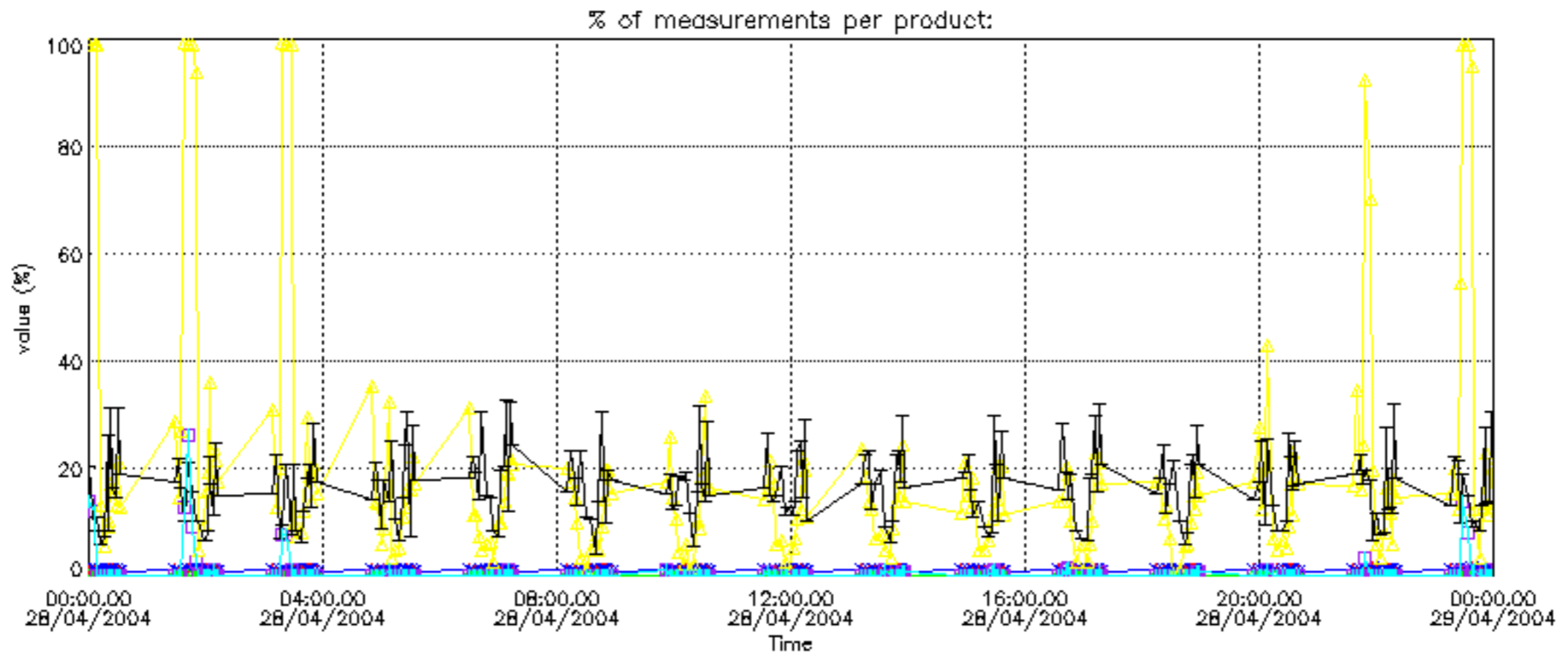


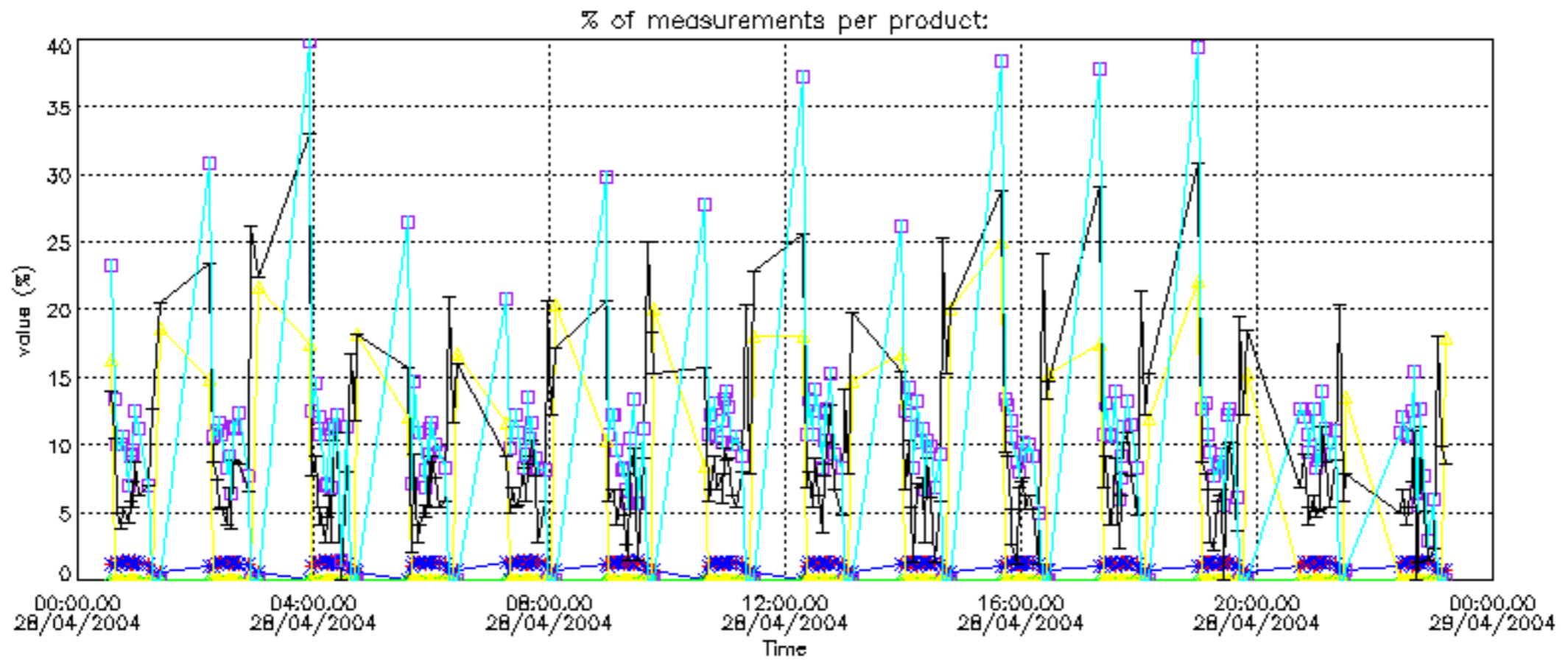
Percentage of flagged data per NO2 profile



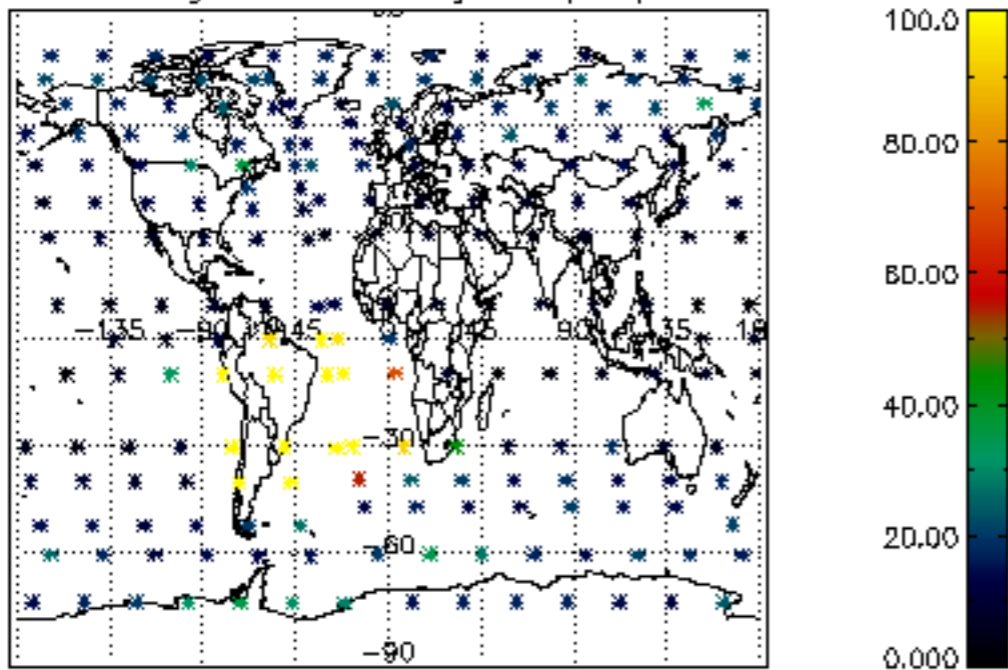
Percentage of flagged data per NO3 profile



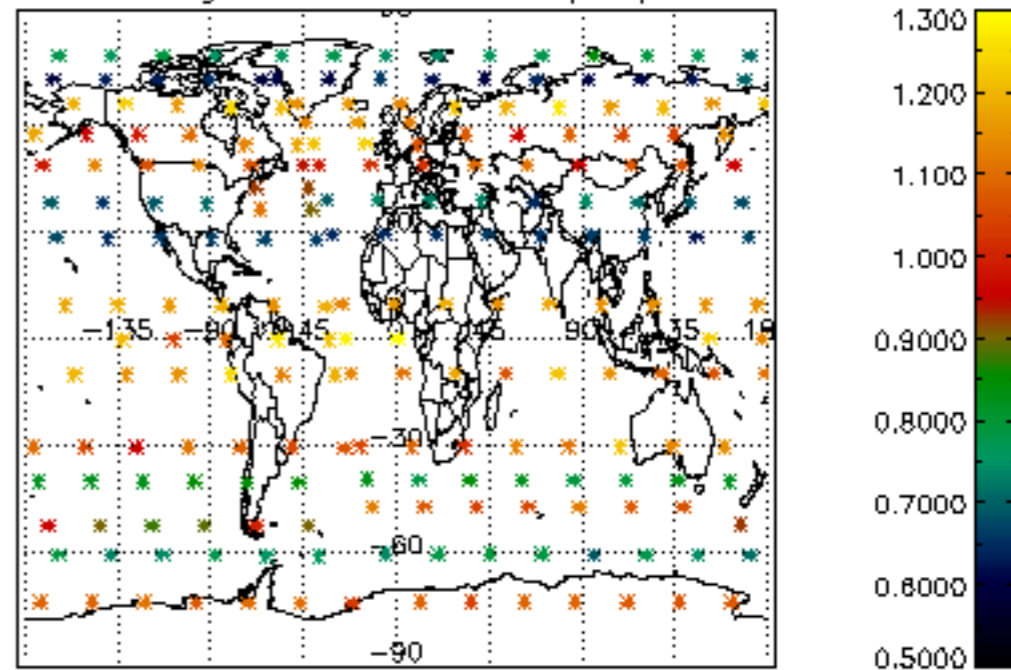




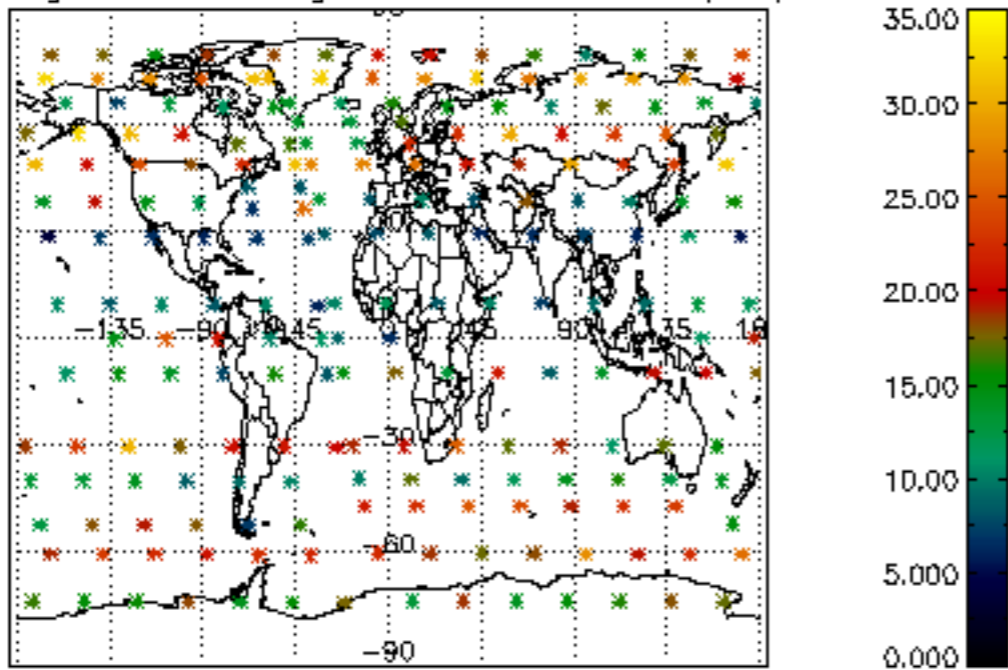
Percentage of cosmic ray hits per profile



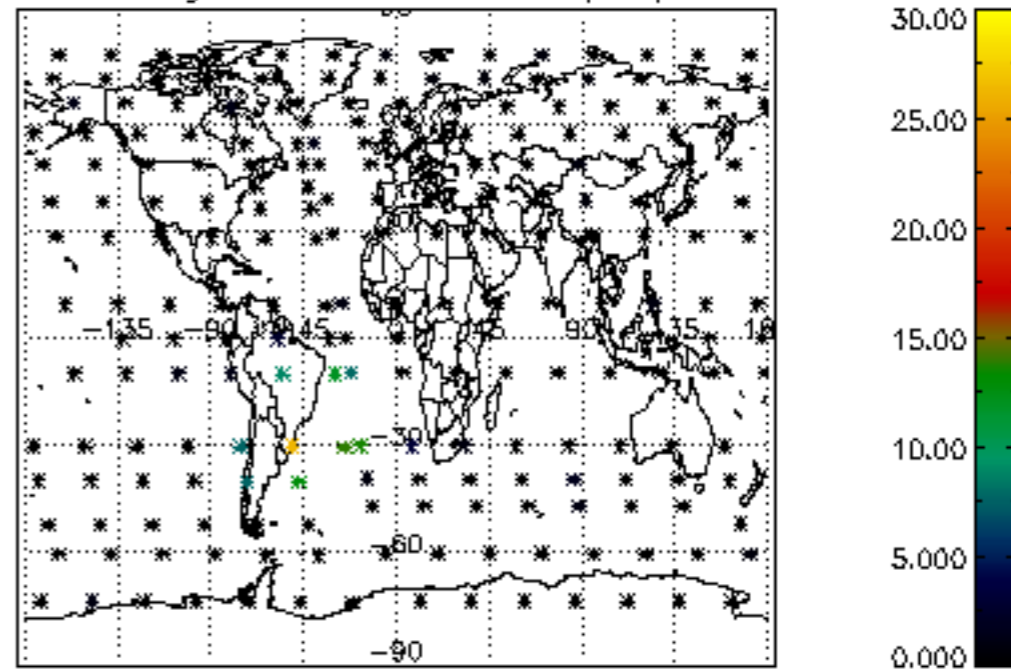
Percentage of datation errors per profile



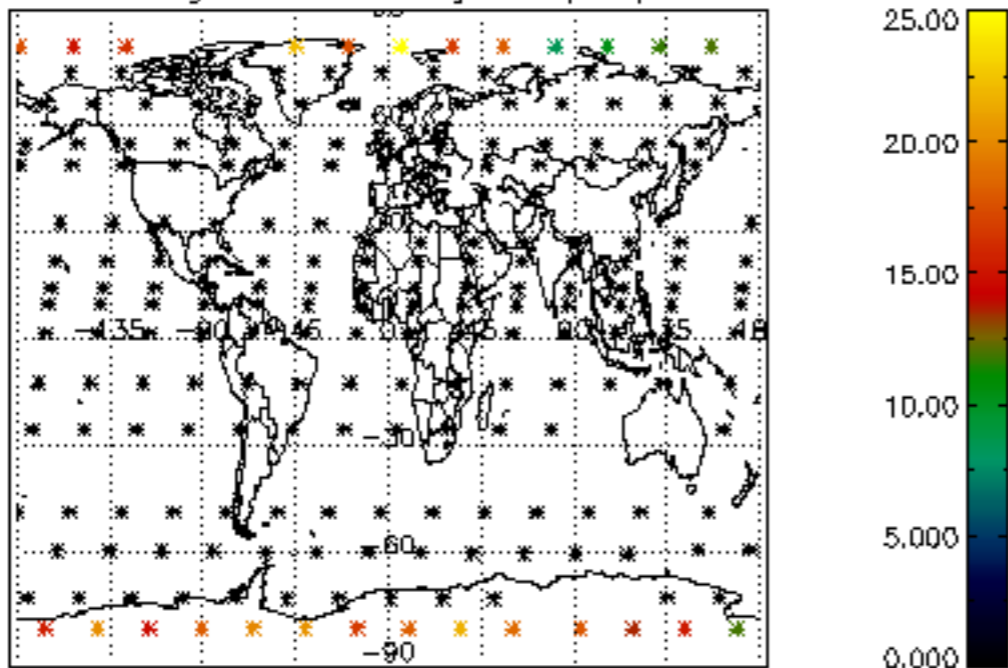
Percentage of star falling outside central band per profile



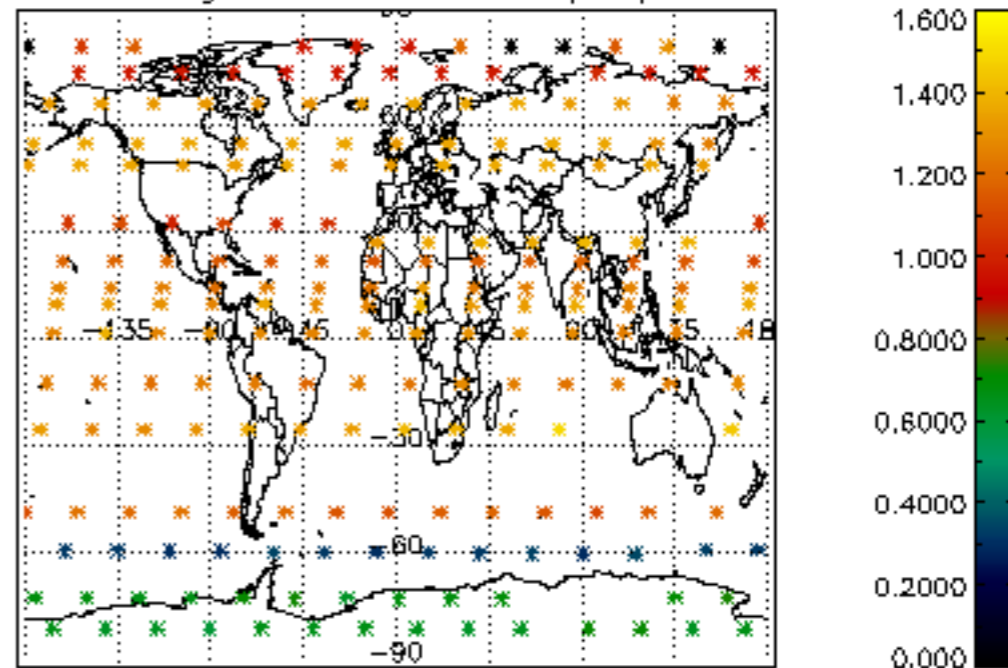
Percentage of saturation errors per profile



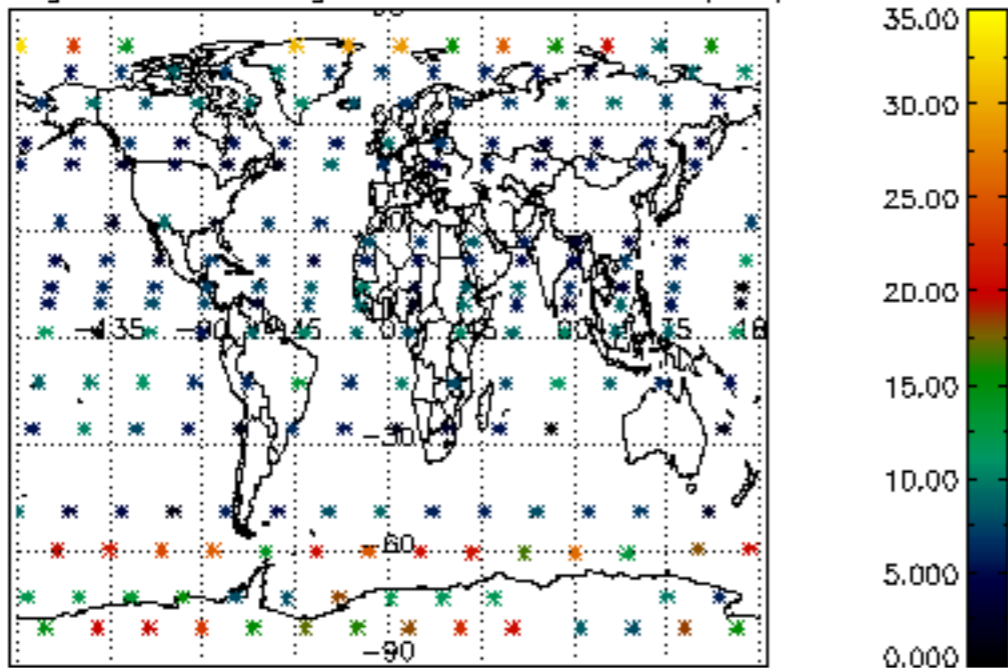
Percentage of cosmic ray hits per profile



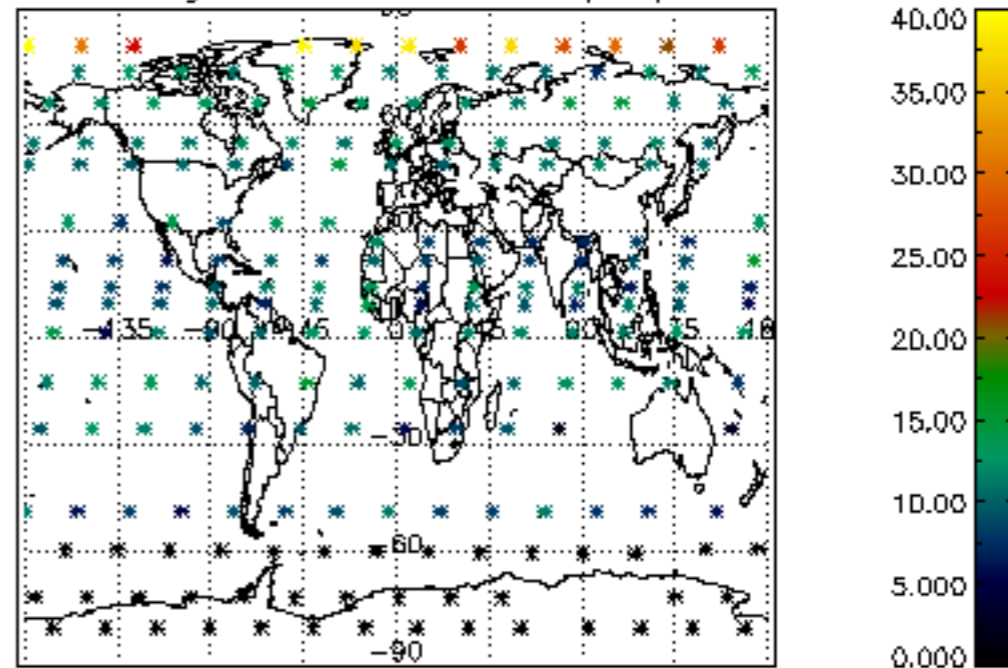
Percentage of datation errors per profile

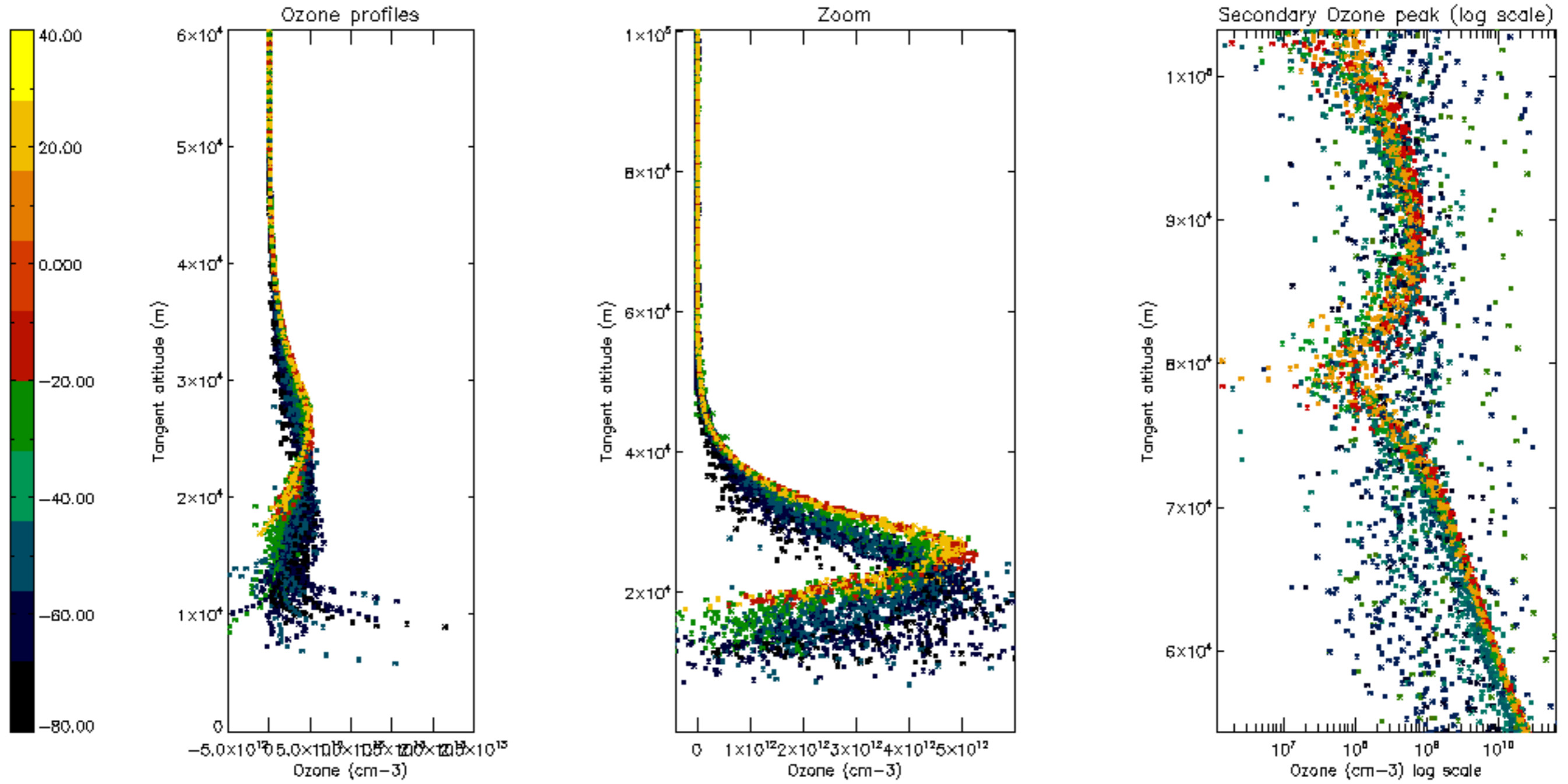


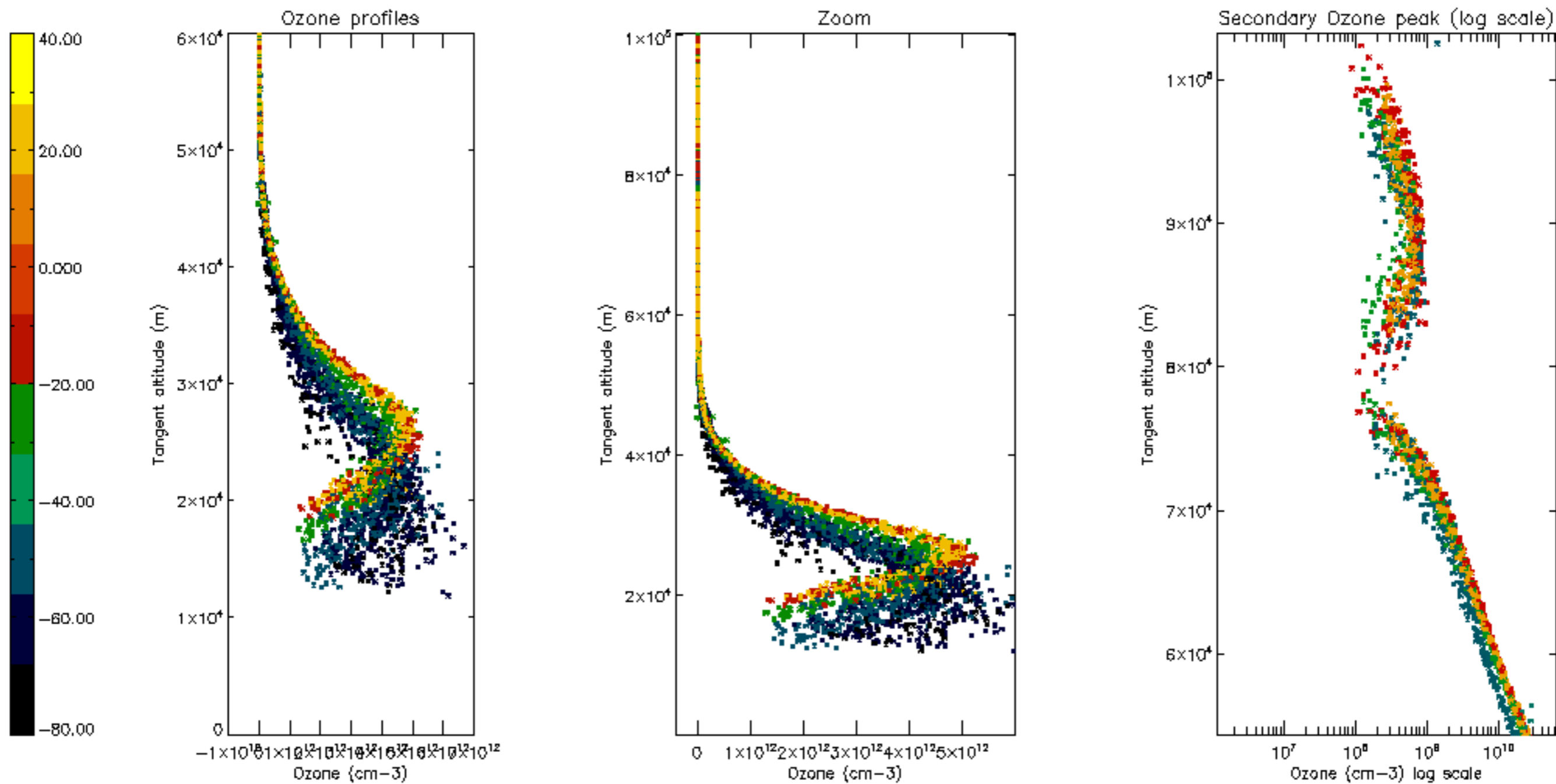
Percentage of star falling outside central band per profile

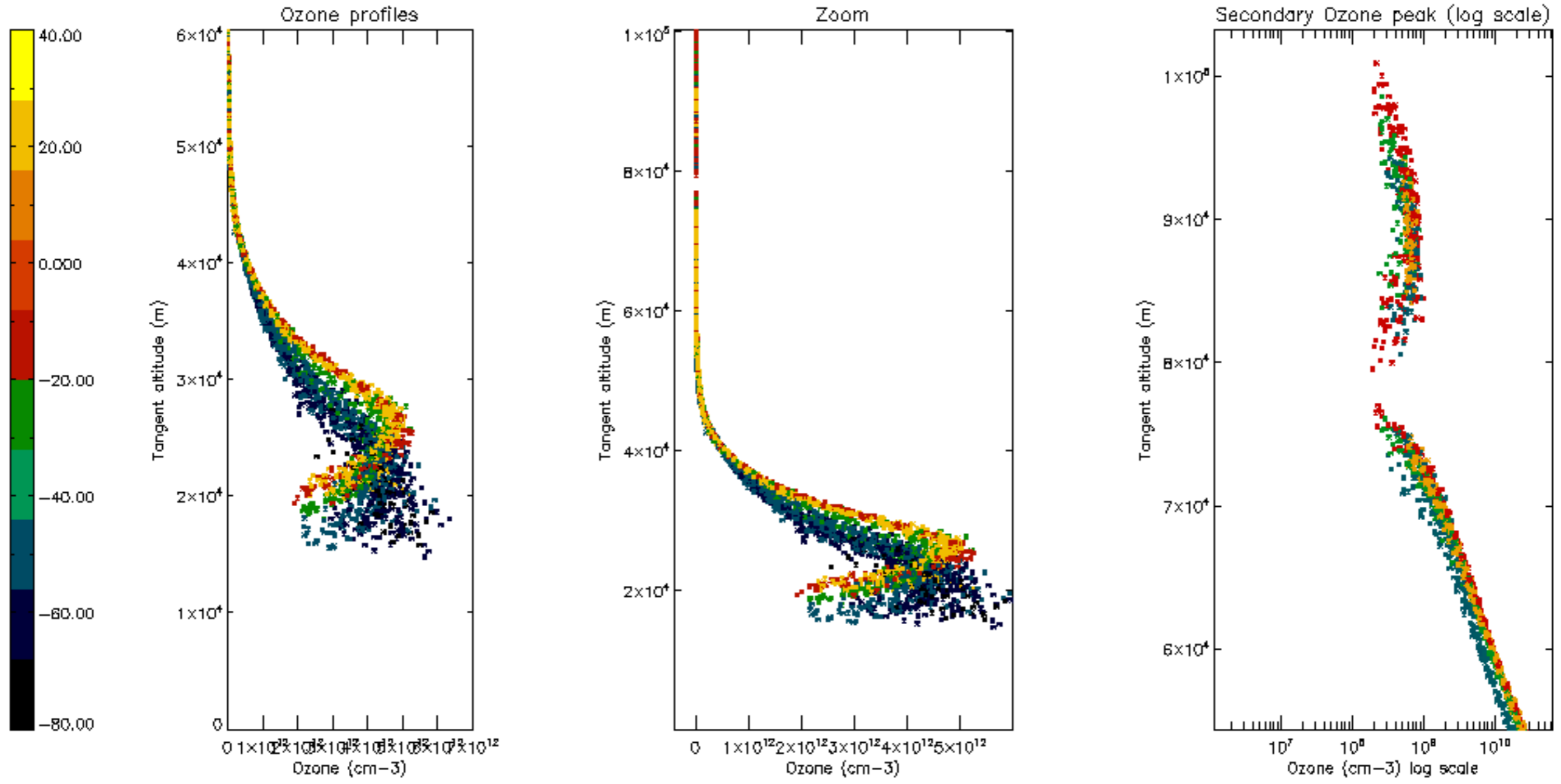


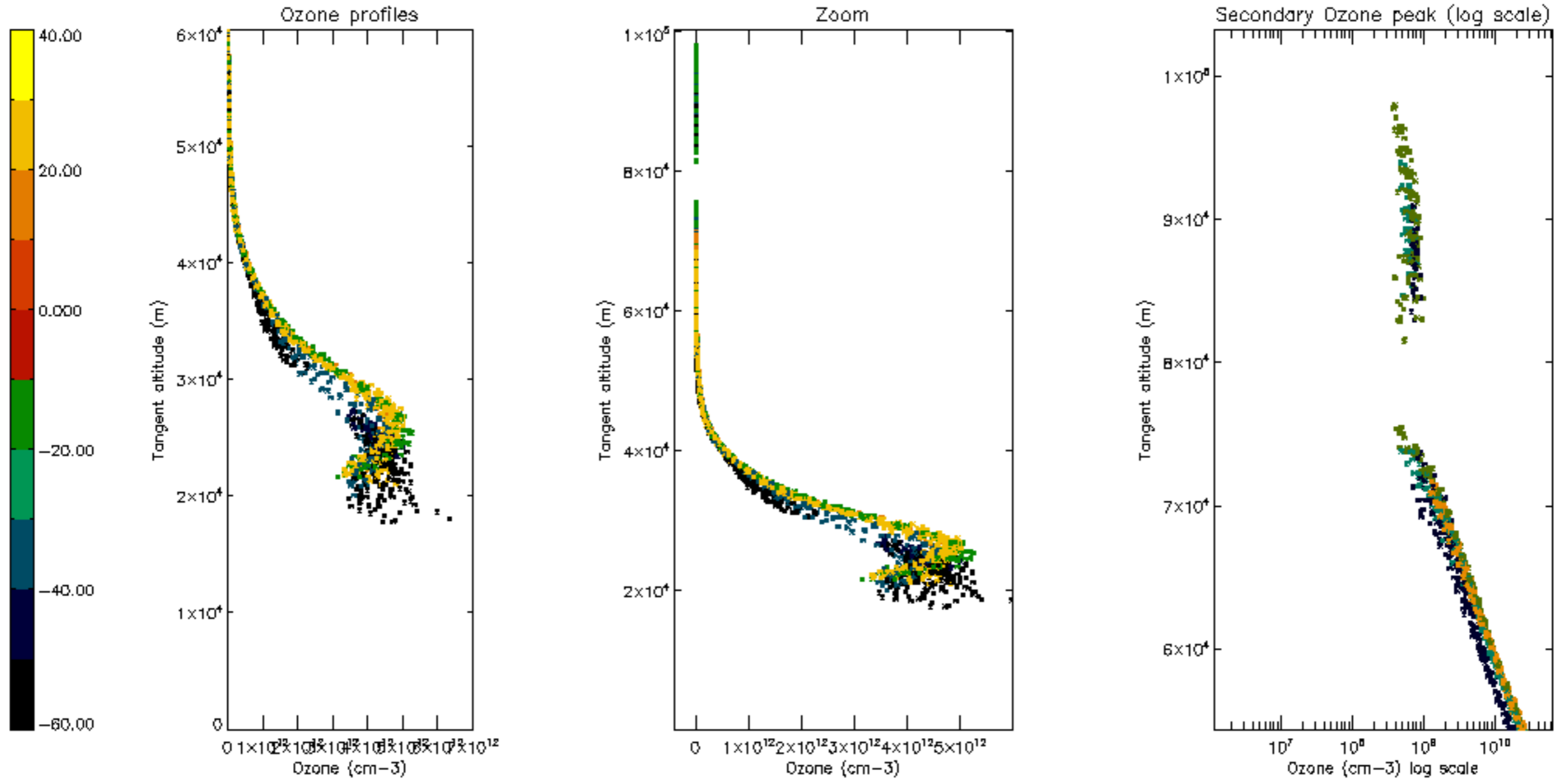
Percentage of saturation errors per profile

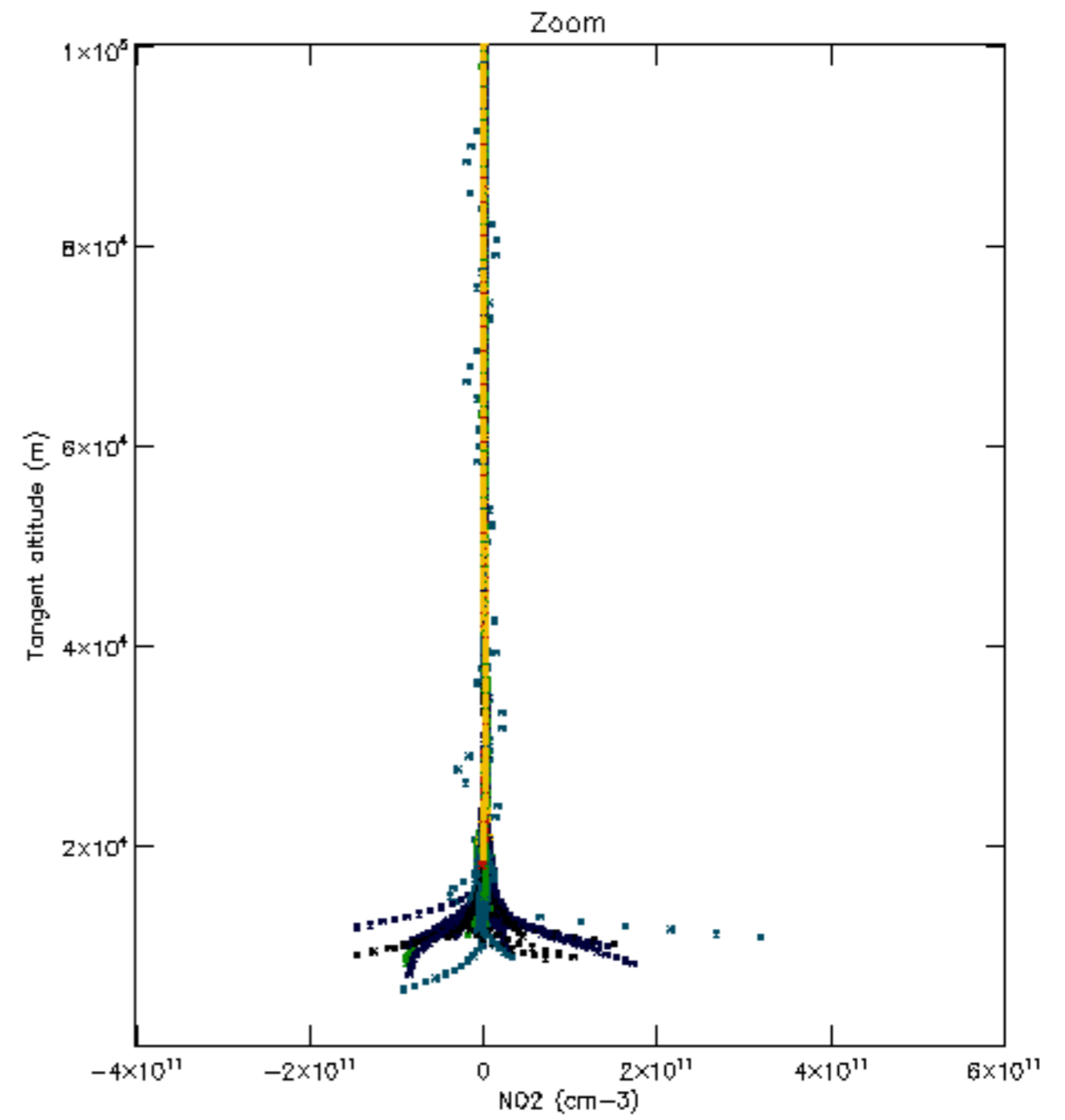
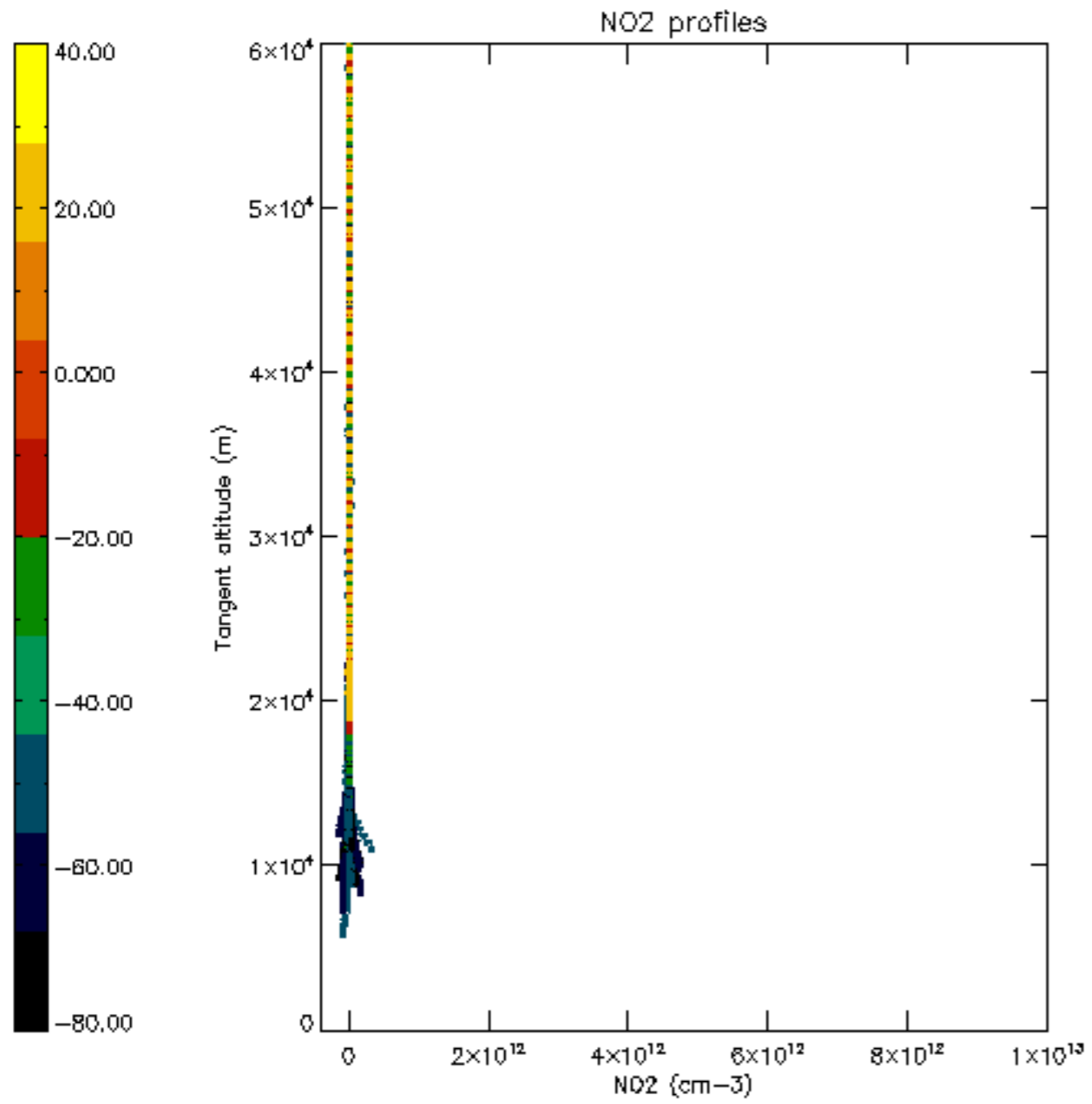


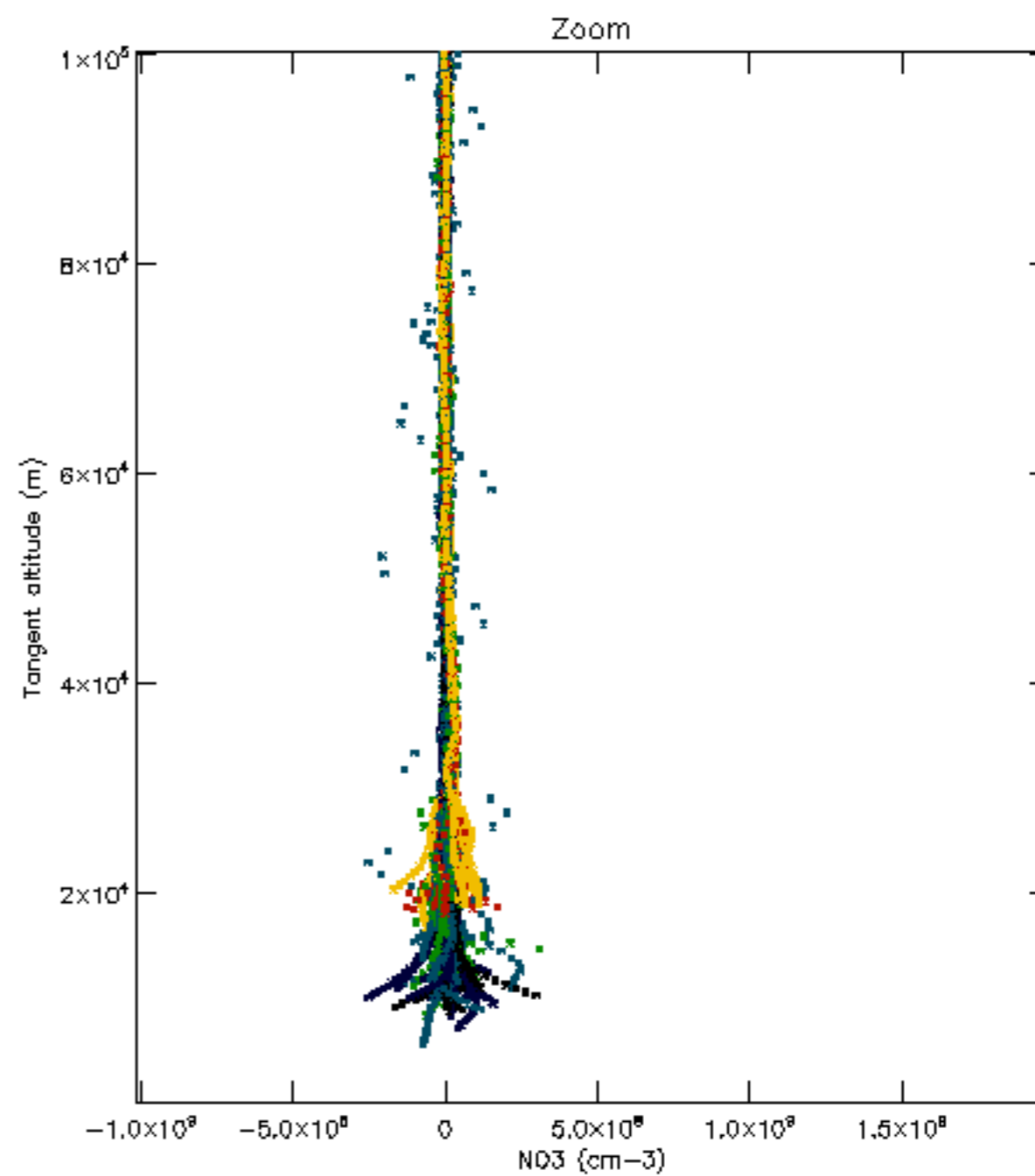
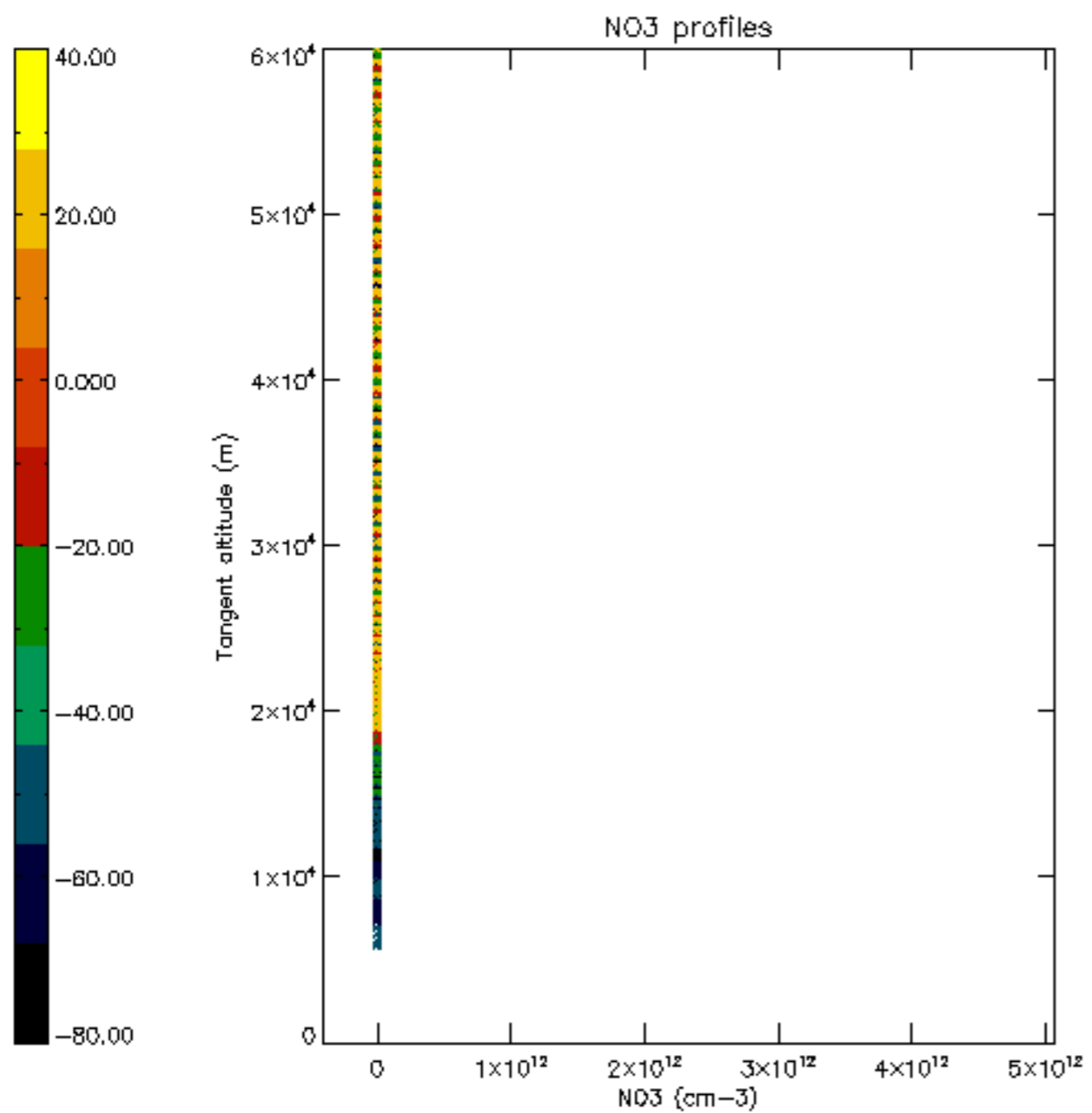


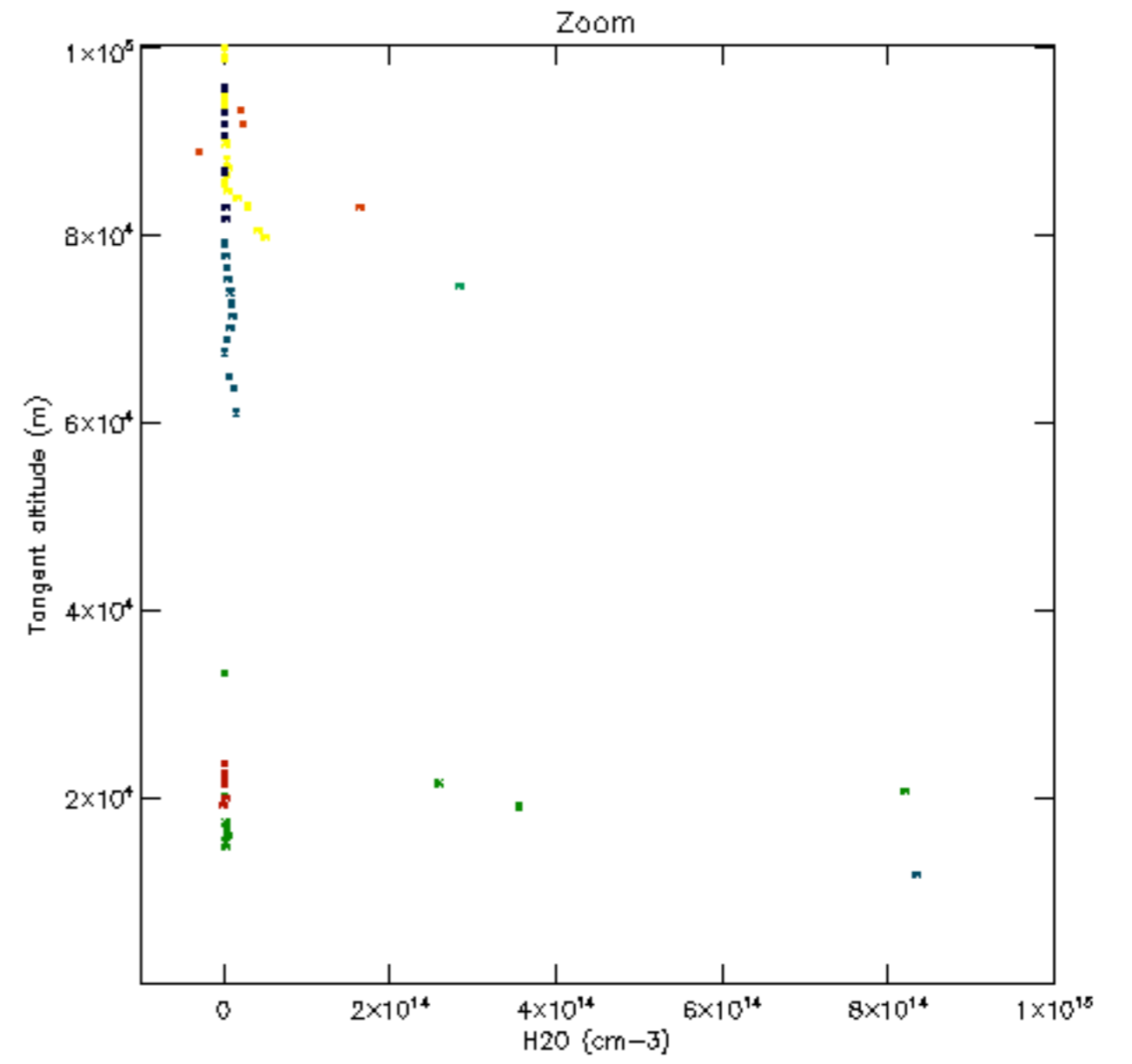
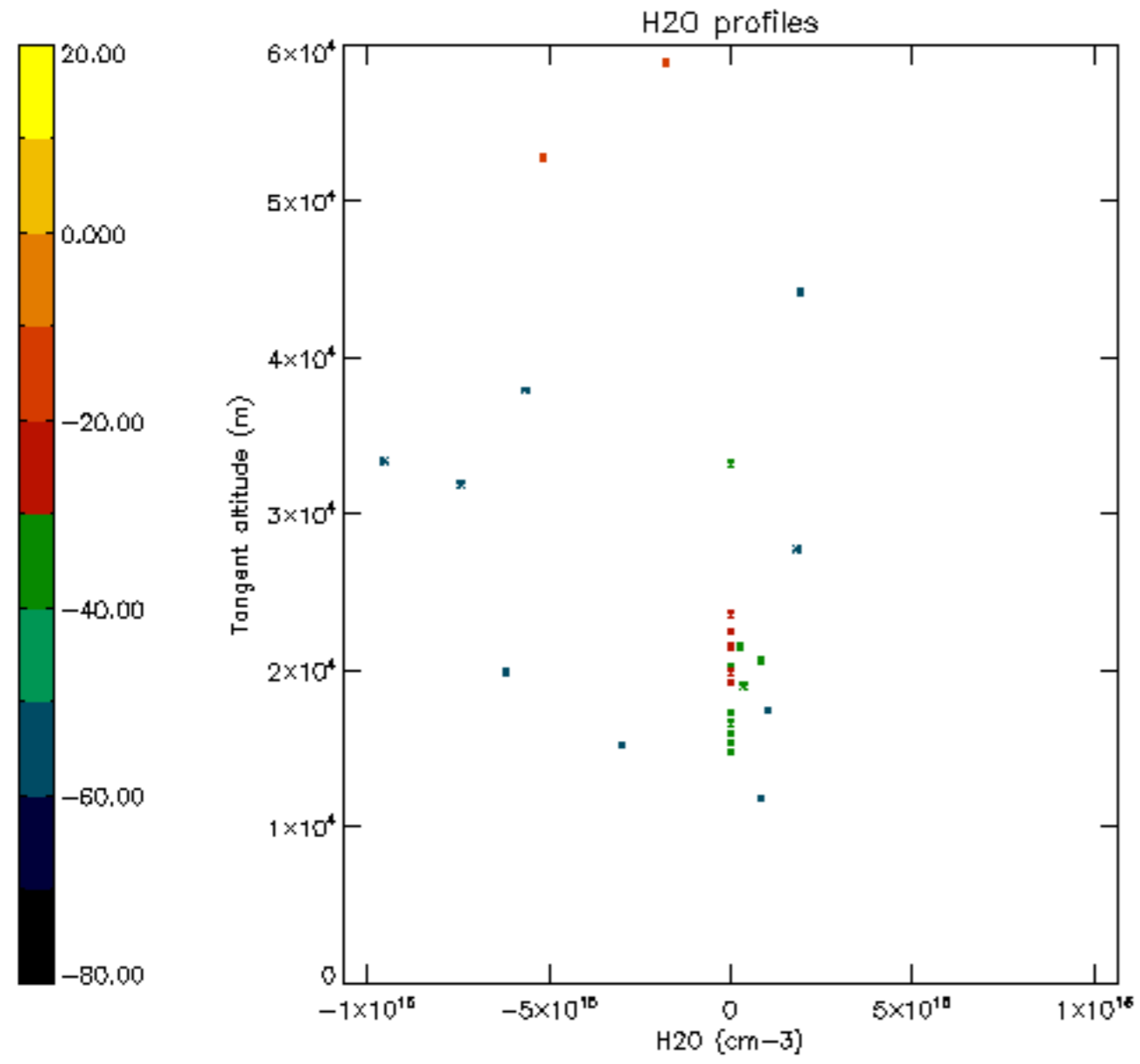


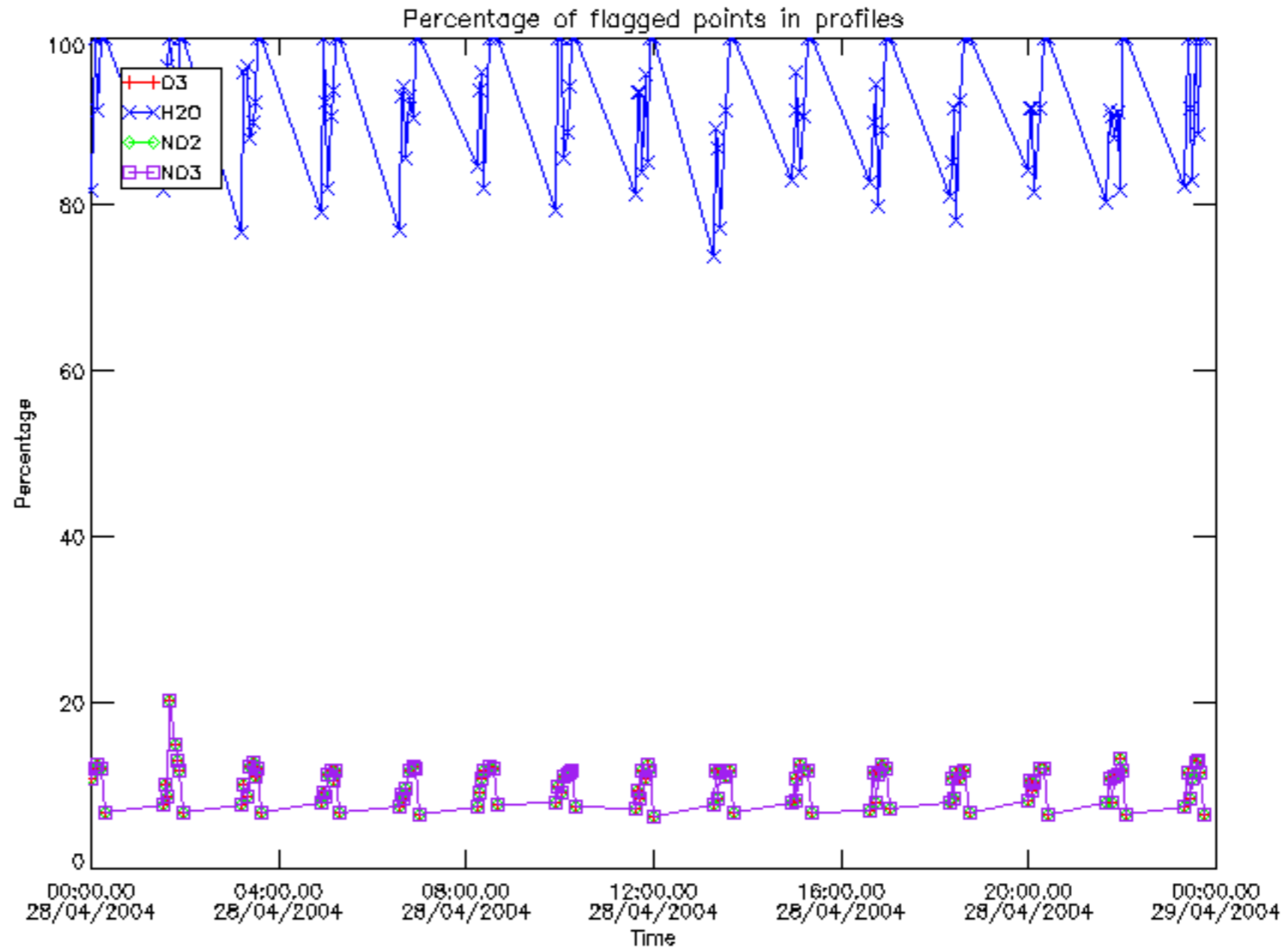




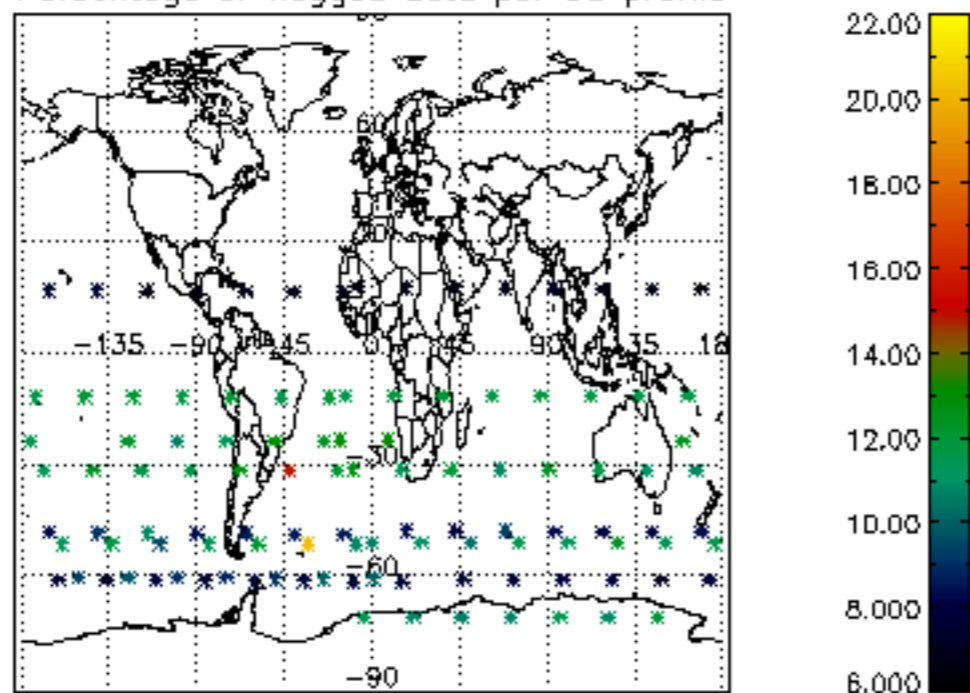




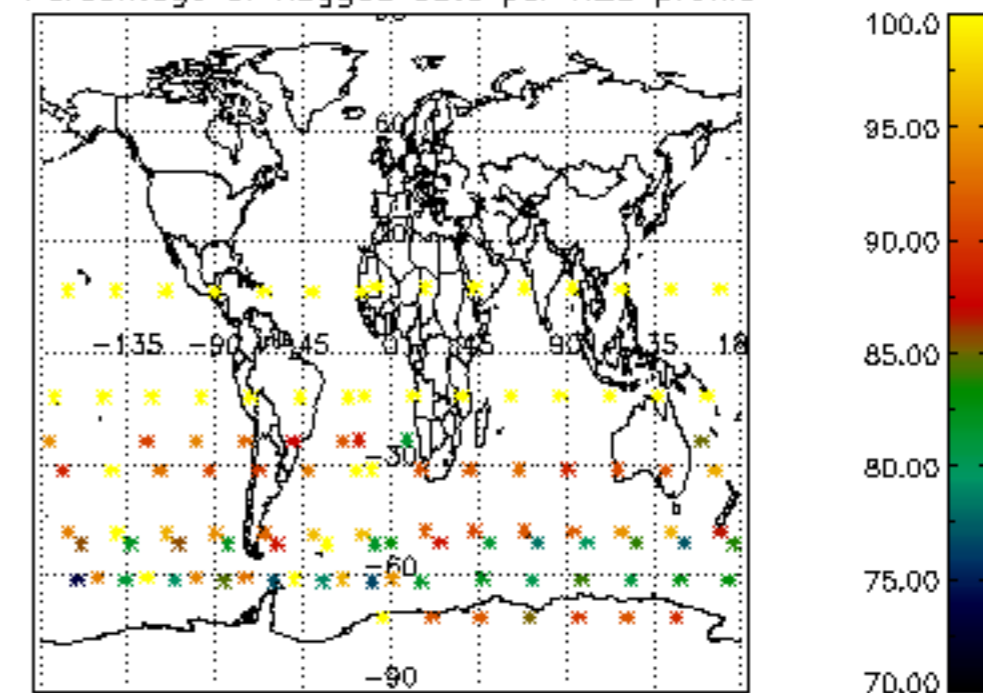




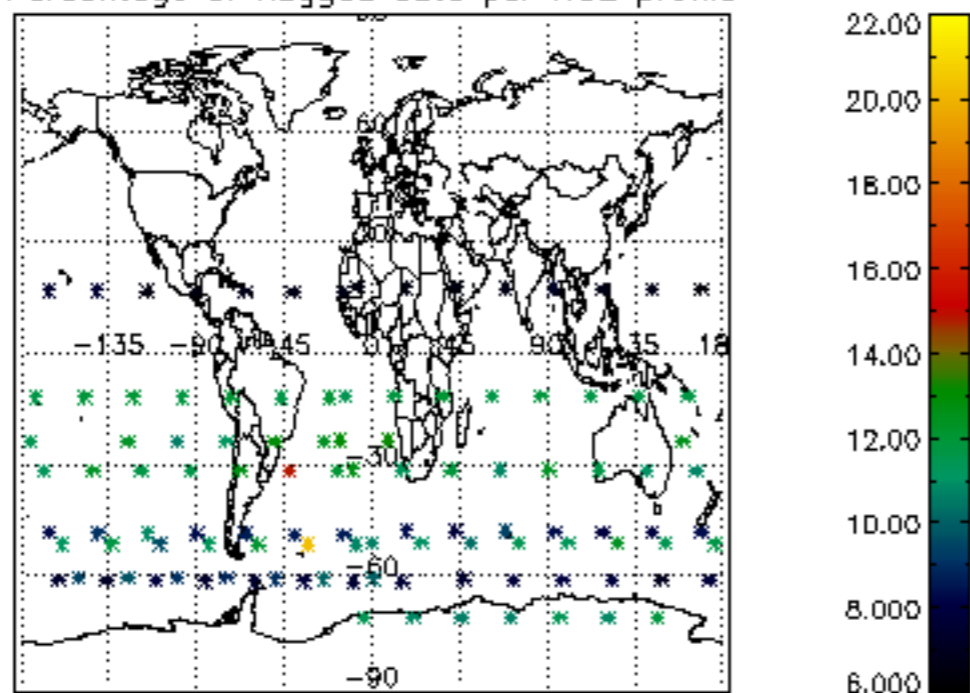
Percentage of flagged data per D3 profile



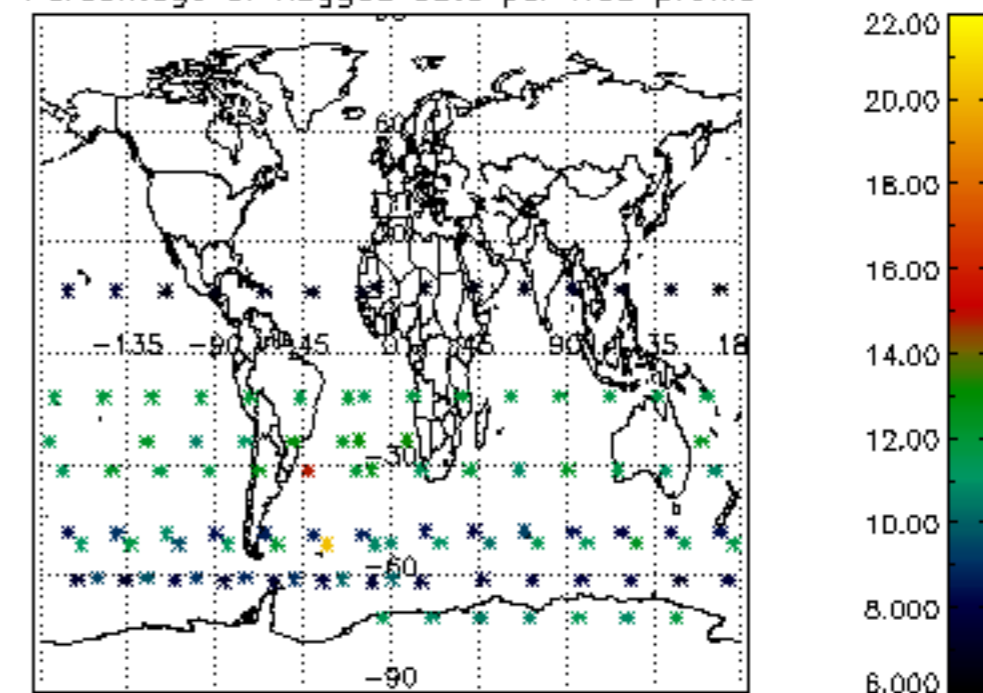
Percentage of flagged data per H2O profile

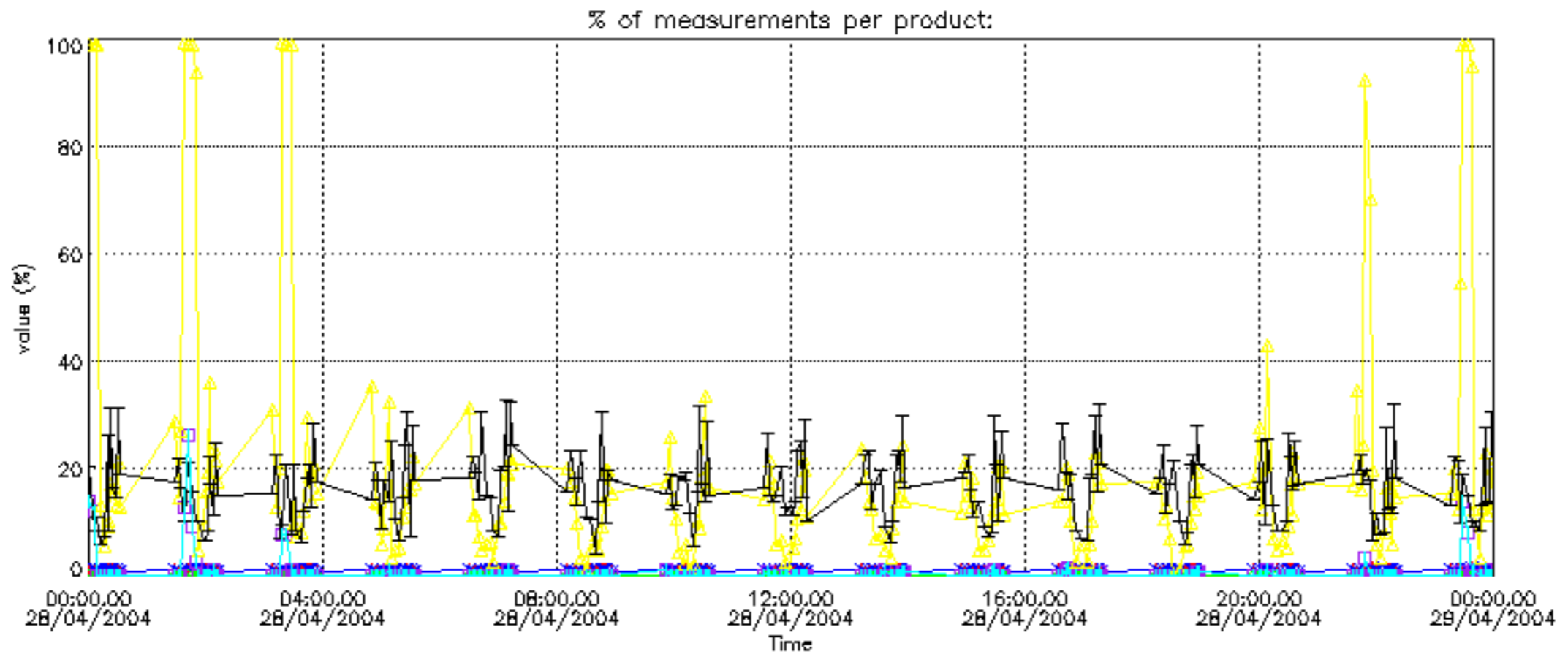


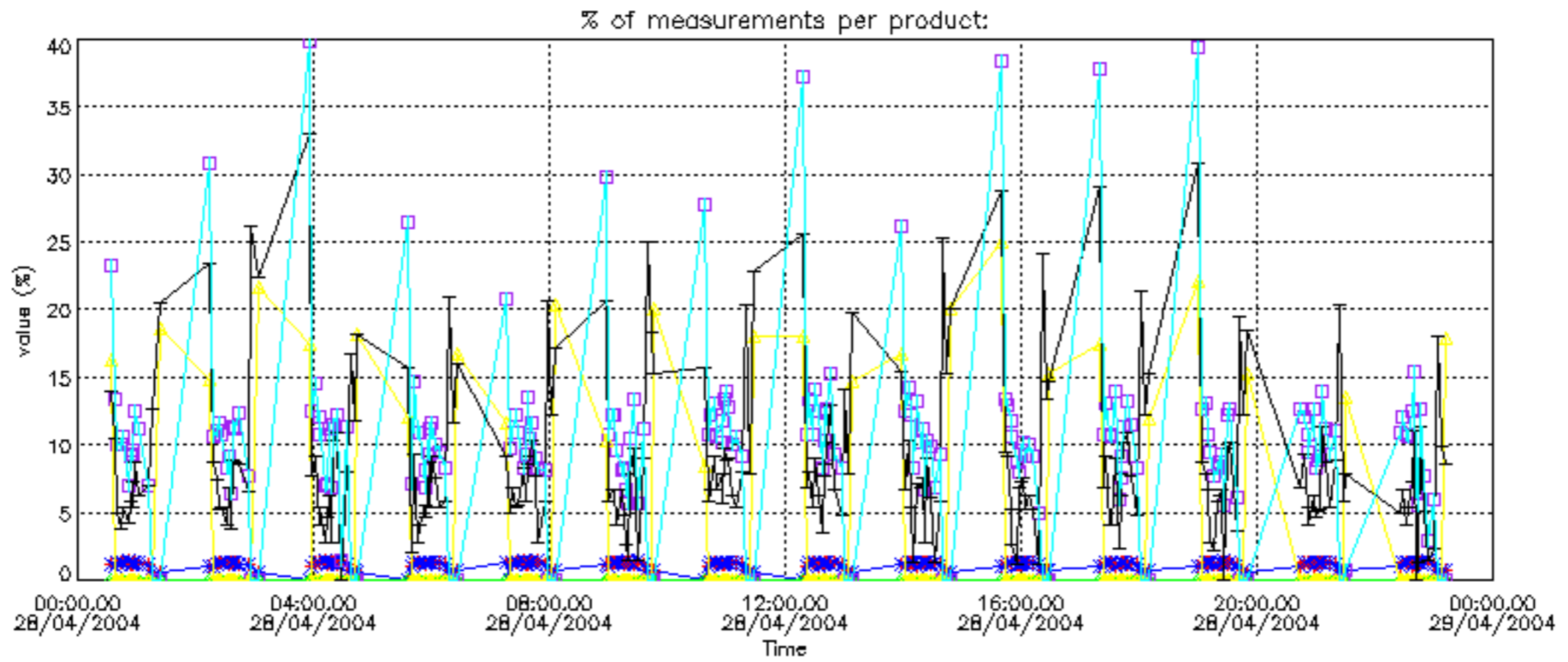
Percentage of flagged data per NO2 profile



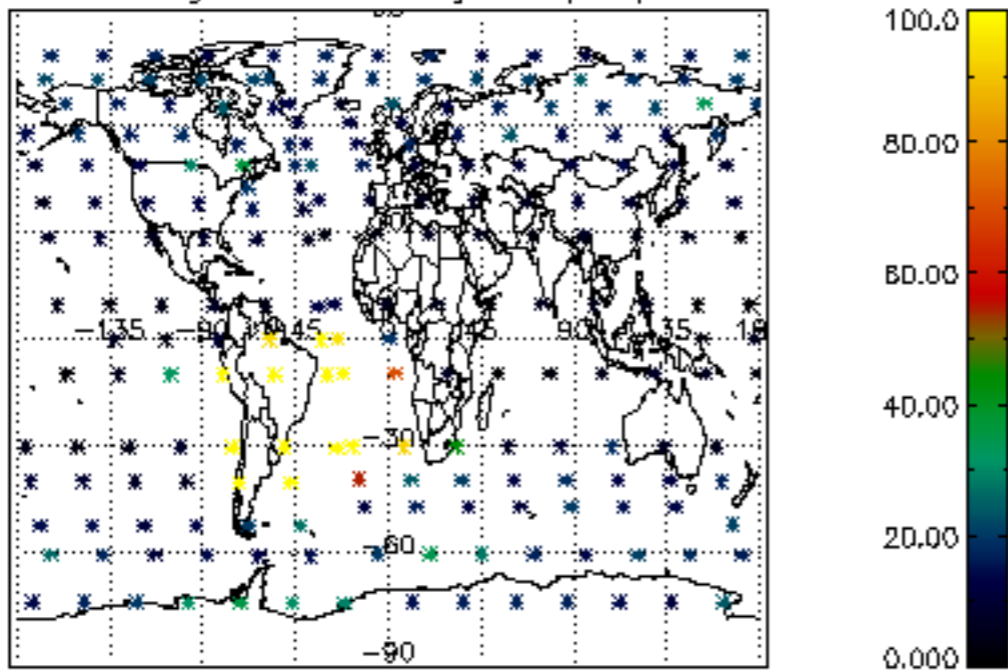
Percentage of flagged data per NO3 profile



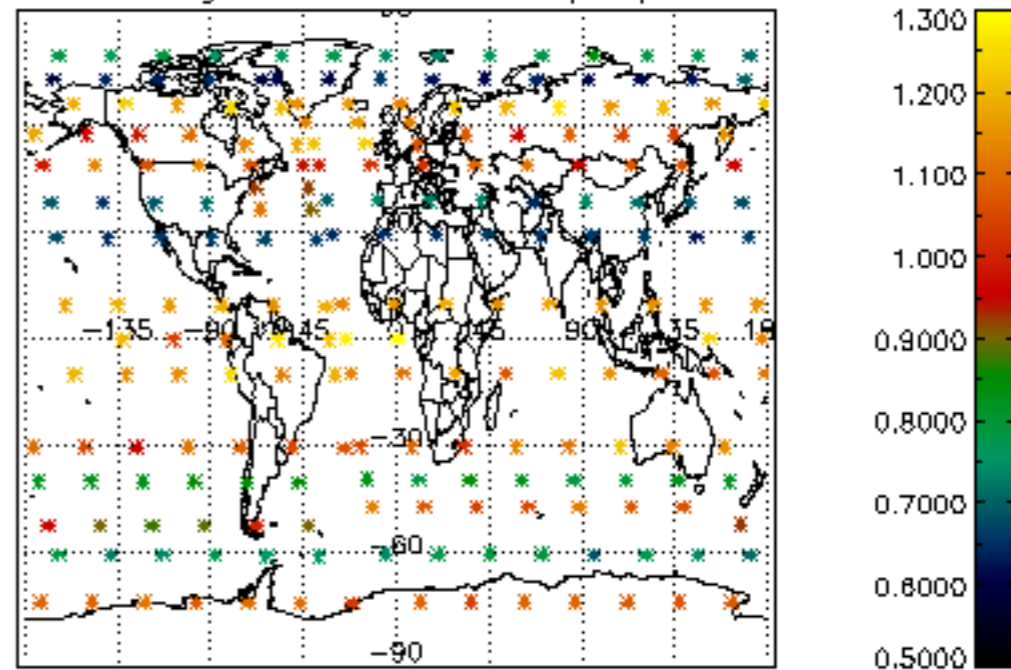




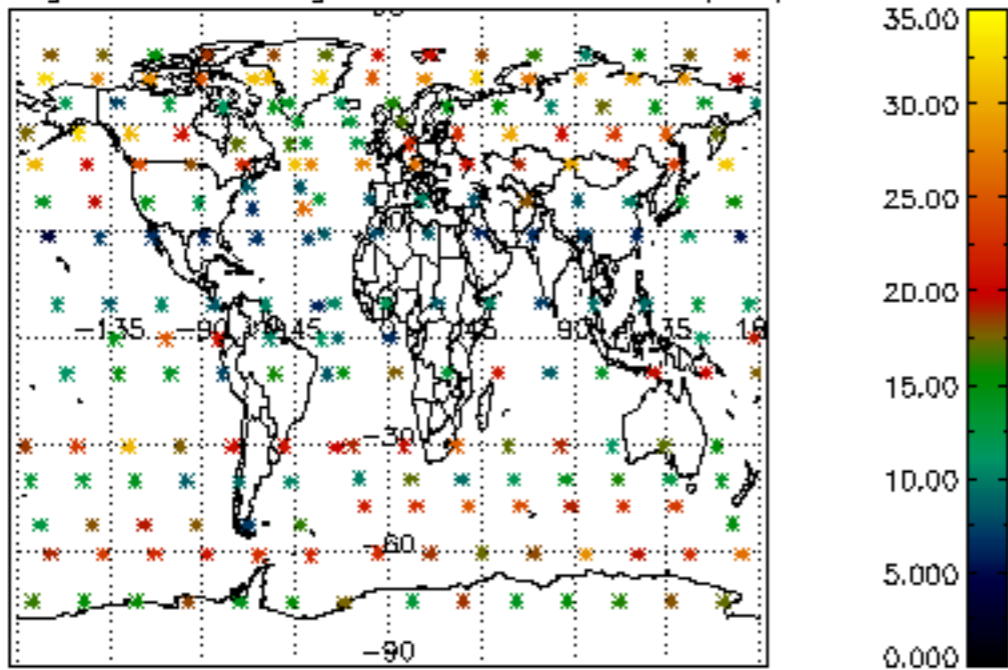
Percentage of cosmic ray hits per profile



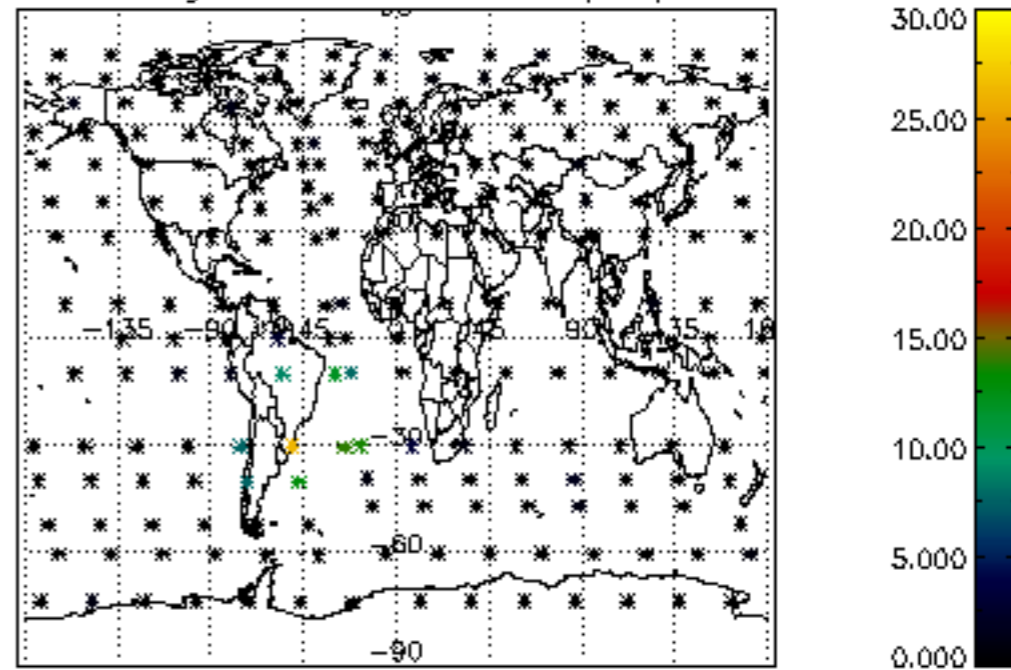
Percentage of datation errors per profile



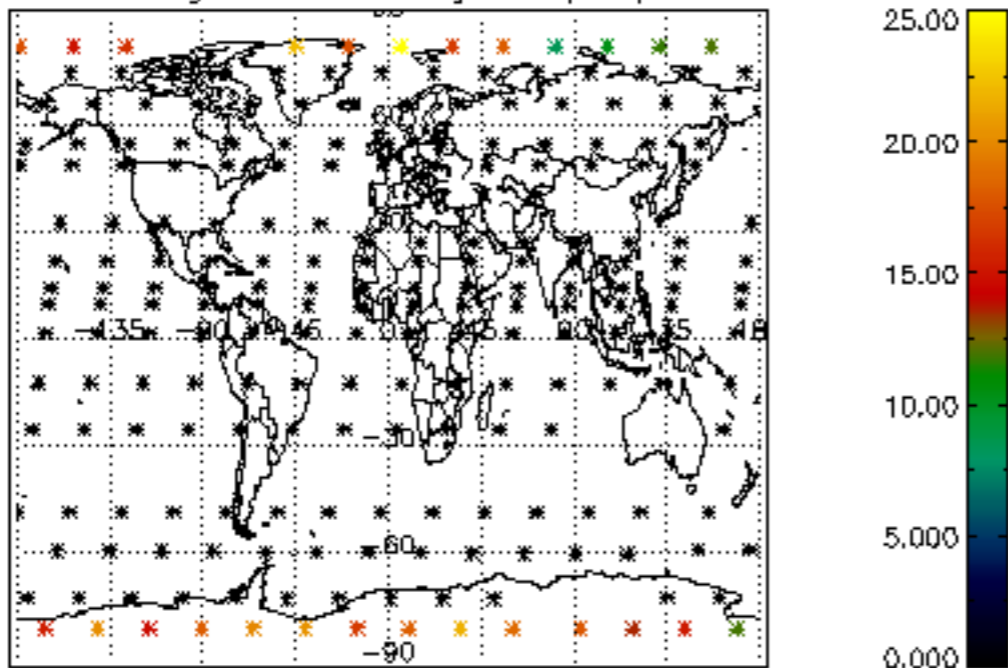
Percentage of star falling outside central band per profile



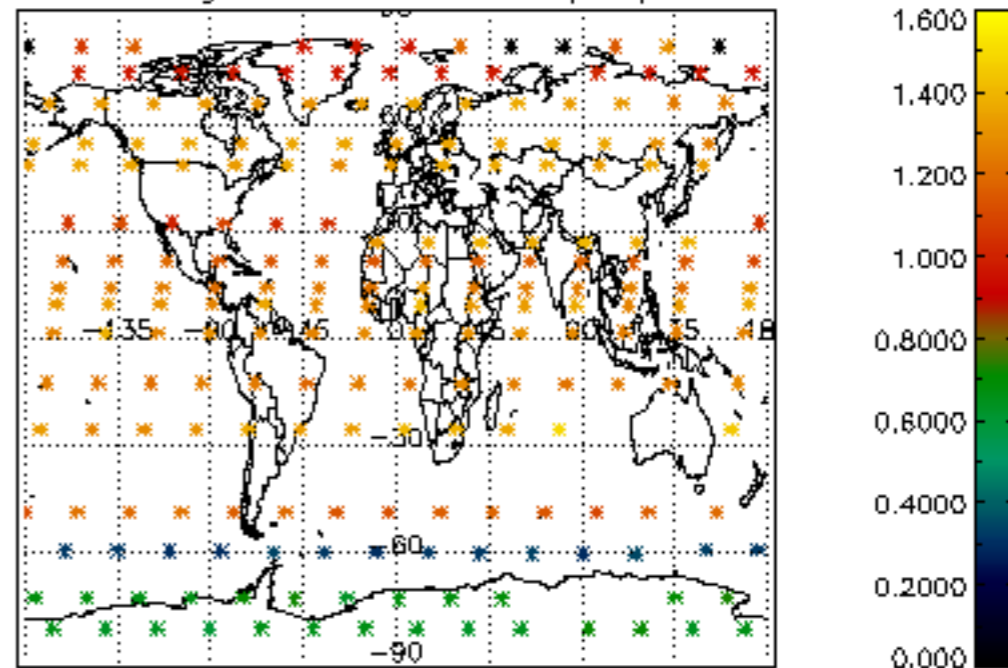
Percentage of saturation errors per profile



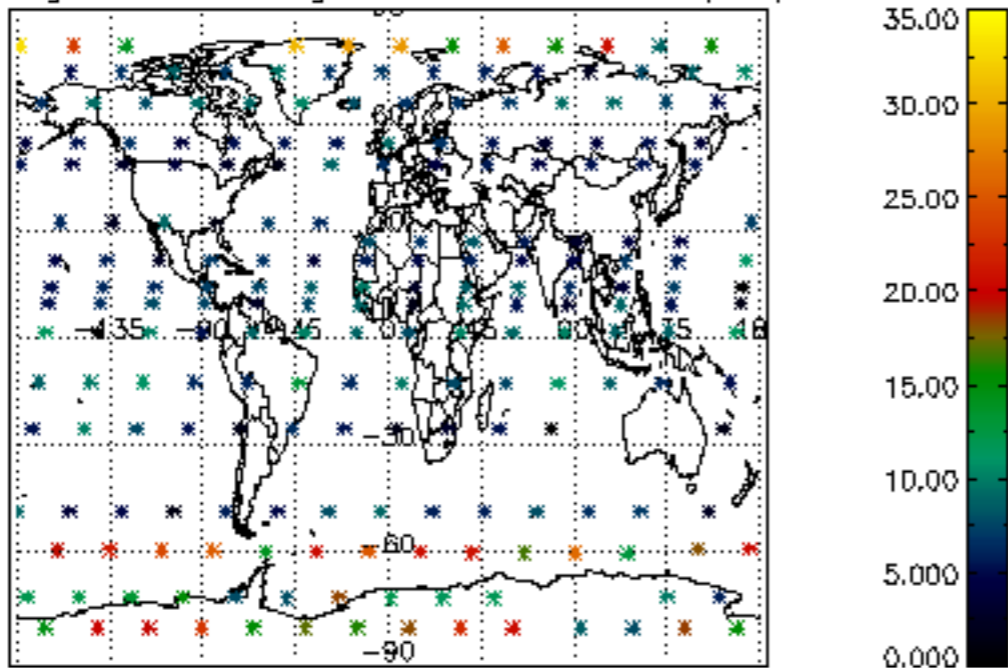
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

