

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	18APR2013 12:35:03
Data source version	GOMOS/6.01
Start time of products	19-11-2005 (19NOV2005 00:00:00)
Stop time of products	20-11-2005 (20NOV2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	279
Nb of prods with errors	0

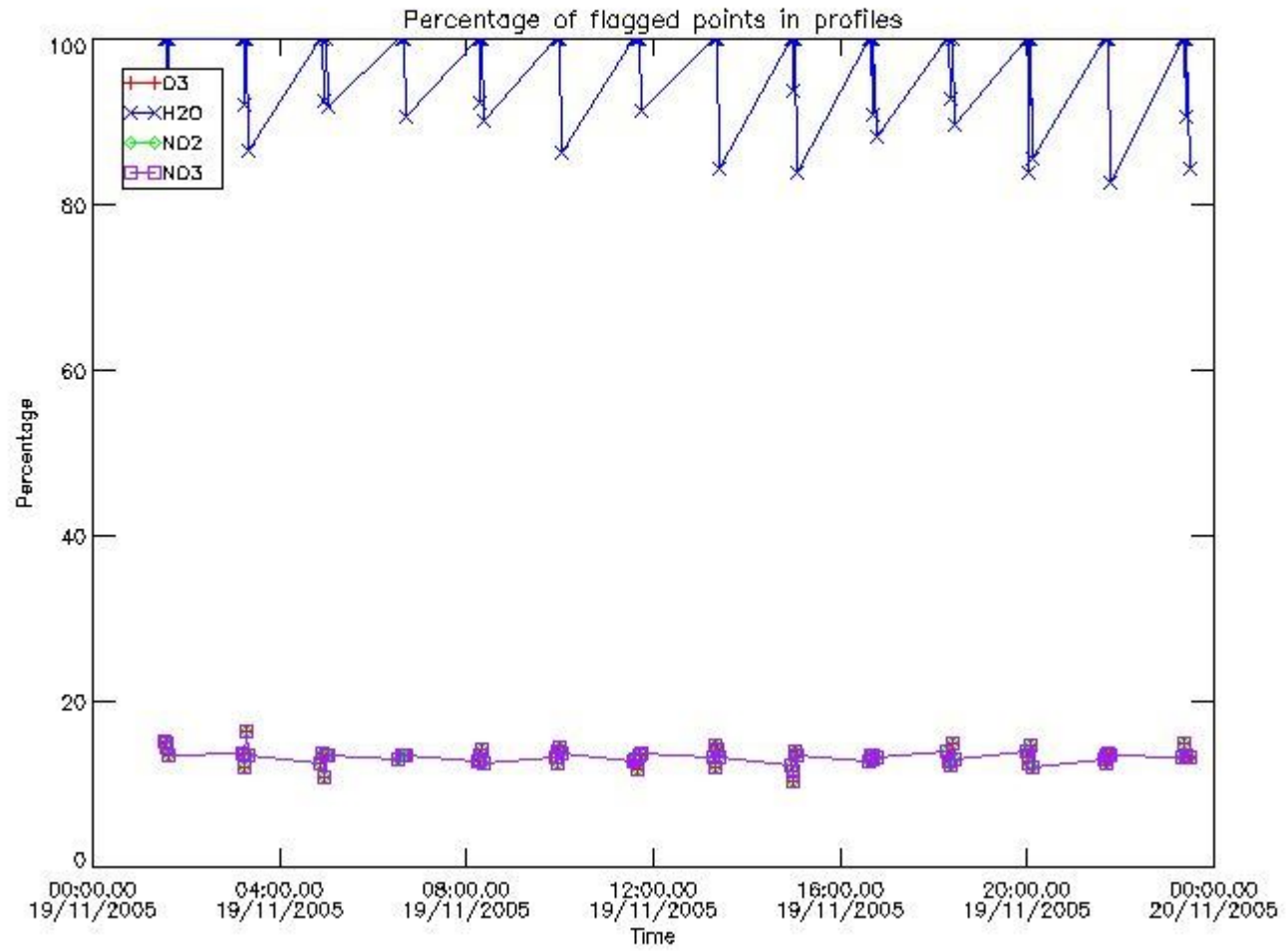
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20051119_001450_000000372042_00360_19452_8598.N1	19-NOV-2005 00:14:50	Straylight	37.000	157	The1Eri	2.9060	9300.0	74	19452	No
2	GOM_NL__2PRFIN20051119_003227_000000372042_00360_19452_8599.N1	19-NOV-2005 00:32:27	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	19452	No
3	GOM_NL__2PRFIN20051119_003622_000000352042_00360_19452_8600.N1	19-NOV-2005 00:36:22	Bright	35.000	173	4Bet Tri	3.0040	8900.0	70	19452	No
4	GOM_NL__2PRFIN20051119_003826_000000362042_00360_19452_8601.N1	19-NOV-2005 00:38:26	Bright	36.000	73	57Gam1And	2.2600	13100.	72	19452	No
5	GOM_NL__2PRFIN20051119_004258_000000362042_00360_19452_8602.N1	19-NOV-2005 00:42:58	Bright	35.500	68	18Alp Cas	2.2250	4500.0	71	19452	No
6	GOM_NL__2PRFIN20051119_005141_000000362042_00360_19452_8603.N1	19-NOV-2005 00:51:41	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	19452	No
7	GOM_NL__2PRFIN20051119_005608_000000362042_00360_19452_8604.N1	19-NOV-2005 00:56:08	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	19452	No
8	GOM_NL__2PRFIN20051119_010140_000000362042_00360_19452_8605.N1	19-NOV-2005 01:01:40	Bright	36.000	32	77Eps UMa	1.7630	11000.	72	19452	No
9	GOM_NL__2PRFIN20051119_010325_000000522042_00360_19452_8606.N1	19-NOV-2005 01:03:25	Bright	52.000	39	85Eta UMa	1.8540	24000.	104	19452	No
10	GOM_NL__2PRFIN20051119_010604_000000352042_00360_19452_8607.N1	19-NOV-2005 01:06:04	Bright	35.000	180	27Gam Boo	3.0400	8000.0	70	19452	No
11	GOM_NL__2PRFIN20051119_011133_000000332042_00360_19452_8608.N1	19-NOV-2005 01:11:33	Bright	33.000	3	16Alp Boo	-0.050000	4250.0	66	19452	No
12	GOM_NL__2PRFIN20051119_011444_000000352042_00360_19452_8609.N1	19-NOV-2005 01:14:44	Bright	35.000	138	47Eps Vir	2.8280	4700.0	70	19452	No
13	GOM_NL__2PRFIN20051119_011839_000000552042_00360_19452_8610.N1	19-NOV-2005 01:18:39	Bright	55.000	121	29Gam Vir	2.7400	7200.0	110	19452	No
14	GOM_NL__2PRFIN20051119_012348_000000432042_00360_19452_8611.N1	19-NOV-2005 01:23:48	Twilight	43.000	100	4Gam Crv	2.5800	13100.	86	19452	No
15	GOM_NL__2PRFIN20051119_012520_000000442042_00360_19452_8612.N1	19-NOV-2005 01:25:20	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	19452	No
16	GOM_NL__2PRFIN20051119_013122_000000372042_00360_19452_8613.N1	19-NOV-2005 01:31:22	Dark	37.000	64	Gam Cen	2.2000	10600.	74	19452	No
17	GOM_NL__2PRFIN20051119_013404_000000392042_00360_19452_8614.N1	19-NOV-2005 01:34:04	Dark	38.500	20	Bet Cru	1.2530	30000.	77	19452	No
18	GOM_NL__2PRFIN20051119_013512_000000382042_00361_19453_8615.N1	19-NOV-2005 01:35:12	Dark	37.500	12	Alp1Cru	0.77500	30000.	75	19453	No
19	GOM_NL__2PRFIN20051119_013726_000000382042_00361_19453_8047.N1	19-NOV-2005 01:37:26	Dark	38.000	124	The Car	2.7640	30000.	76	19453	No
20	GOM_NL__2PRFIN20051119_015526_000000382042_00361_19453_8048.N1	19-NOV-2005 01:55:26	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	19453	No
21	GOM_NL__2PRFIN20051119_021303_000000372042_00361_19453_8049.N1	19-NOV-2005 02:13:03	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	19453	No
22	GOM_NL__2PRFIN20051119_021658_000000362042_00361_19453_8050.N1	19-NOV-2005 02:16:58	Bright	35.500	173	4Bet Tri	3.0040	8900.0	71	19453	No
23	GOM_NL__2PRFIN20051119_021902_000000382042_00361_19453_8051.N1	19-NOV-2005 02:19:02	Bright	37.500	73	57Gam1And	2.2600	13100.	75	19453	No
24	GOM_NL__2PRFIN20051119_022334_000000352042_00361_19453_8052.N1	19-NOV-2005 02:23:34	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	19453	No
25	GOM_NL__2PRFIN20051119_023217_000000352042_00361_19453_8053.N1	19-NOV-2005 02:32:17	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	19453	No
26	GOM_NL__2PRFIN20051119_023644_000000382042_00361_19453_8054.N1	19-NOV-2005 02:36:44	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	19453	No
27	GOM_NL__2PRFIN20051119_024216_000000352042_00361_19453_8055.N1	19-NOV-2005 02:42:16	Bright	35.000	32	77Eps UMa	1.7630	11000.	70	19453	No
28	GOM_NL__2PRFIN20051119_024401_000000362042_00361_19453_8056.N1	19-NOV-2005 02:44:01	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	19453	No
29	GOM_NL__2PRFIN20051119_024640_000000332042_00361_19453_8057.N1	19-NOV-2005 02:46:40	Bright	33.000	180	27Gam Boo	3.0400	8000.0	66	19453	No
30	GOM_NL__2PRFIN20051119_025209_000000332042_00361_19453_8058.N1	19-NOV-2005 02:52:09	Bright	33.000	3	16Alp Boo	-0.050000	4250.0	66	19453	No
31	GOM_NL__2PRFIN20051119_025521_000000532042_00361_19453_8059.N1	19-NOV-2005 02:55:21	Bright	53.000	138	47Eps Vir	2.8280	4700.0	106	19453	No
32	GOM_NL__2PRFIN20051119_025915_000000372042_00361_19453_8060.N1	19-NOV-2005 02:59:15	Bright	37.000	121	29Gam Vir	2.7400	7200.0	74	19453	No
33	GOM_NL__2PRFIN20051119_030424_000000412042_00361_19453_8061.N1	19-NOV-2005 03:04:24	Twilight	41.000	100	4Gam Crv	2.5800	13100.	82	19453	No
34	GOM_NL__2PRFIN20051119_030556_000000442042_00361_19453_8062.N1	19-NOV-2005 03:05:56	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	19453	No
35	GOM_NL__2PRFIN20051119_031158_000000372042_00361_19453_8063.N1	19-NOV-2005 03:11:58	Dark	37.000	64	Gam Cen	2.2000	10600.	74	19453	No
36	GOM_NL__2PRFIN20051119_031441_000000422042_00361_19453_8064.N1	19-NOV-2005 03:14:41	Dark	42.000	20	Bet Cru	1.2530	30000.	84	19453	No
37	GOM_NL__2PRFIN20051119_031549_000000382042_00362_19454_8065.N1	19-NOV-2005 03:15:49	Dark	38.000	12	Alp1Cru	0.77500	30000.	76	19454	No
38	GOM_NL__2PRFIN20051119_031802_000000382042_00362_19454_8060.N1	19-NOV-2005 03:18:02	Dark	37.500	124	The Car	2.7640	30000.	75	19454	No
39	GOM_NL__2PRFIN20051119_032054_000000382042_00362_19454_8061.N1	19-NOV-2005 03:20:54	Dark	37.500	29	Bet Car	1.6720	10200.	75	19454	No
40	GOM_NL__2PRFIN20051119_033603_000000402042_00362_19454_8062.N1	19-NOV-2005 03:36:03	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	19454	No
41	GOM_NL__2PRFIN20051119_035339_000000372042_00362_19454_8063.N1	19-NOV-2005 03:53:39	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	19454	No
42	GOM_NL__2PRFIN20051119_035734_000000362042_00362_19454_8064.N1	19-NOV-2005 03:57:34	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	19454	No

3. Quality information per product

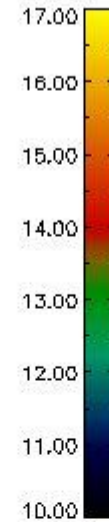
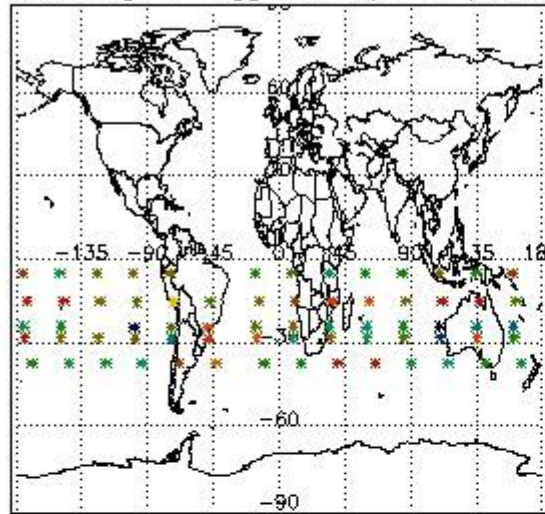
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

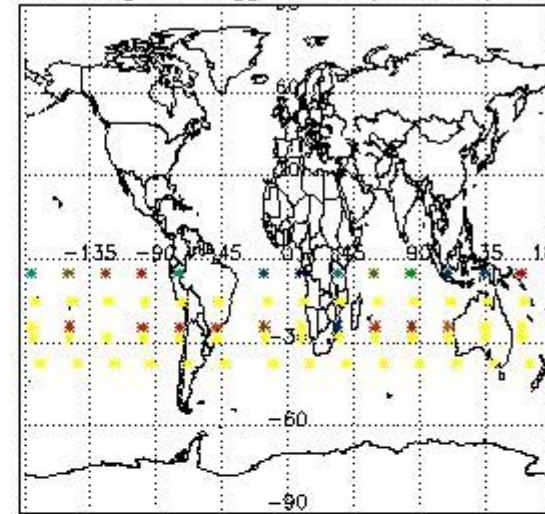


3.2 Plot quality information per product (world map)

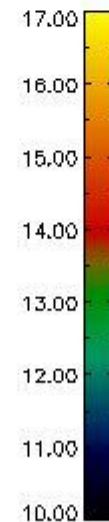
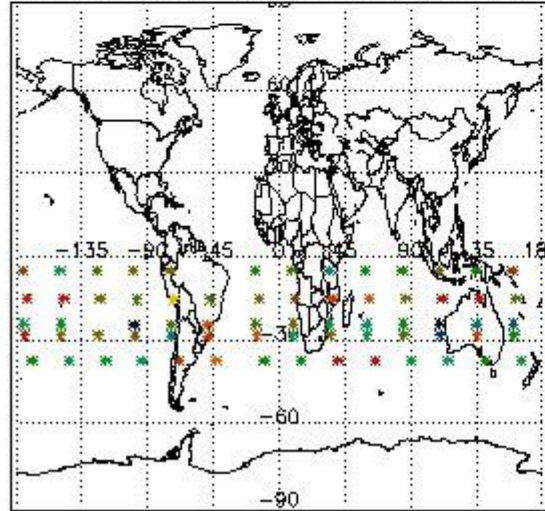
Percentage of flagged data per O3 profile



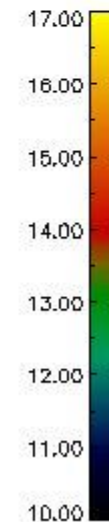
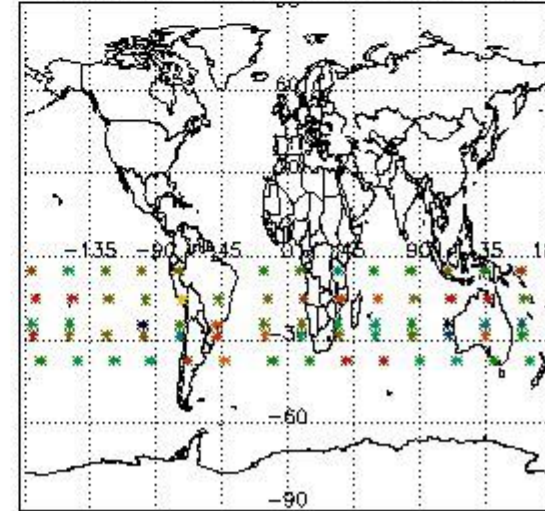
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

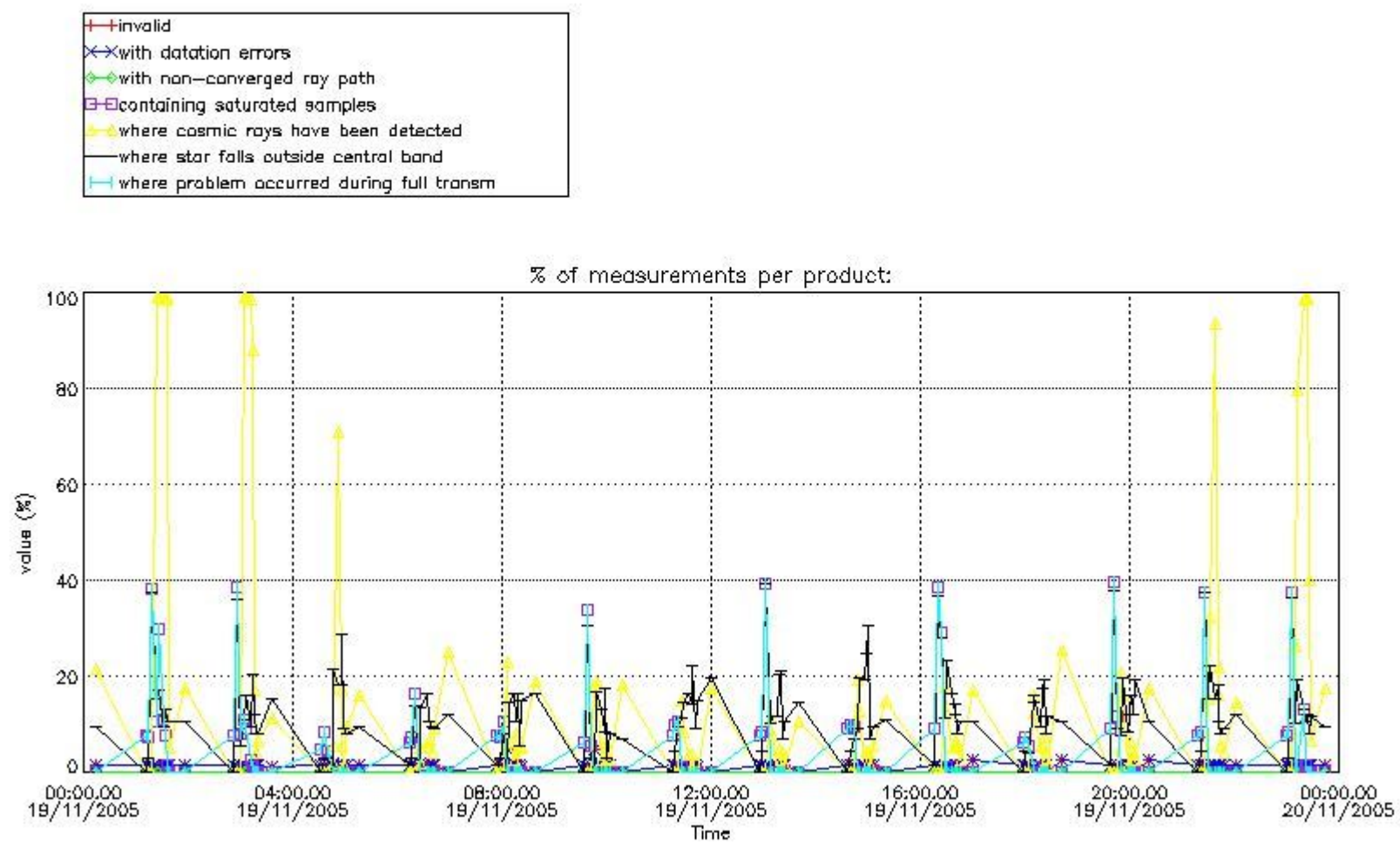


4. Level 1 quality information per product

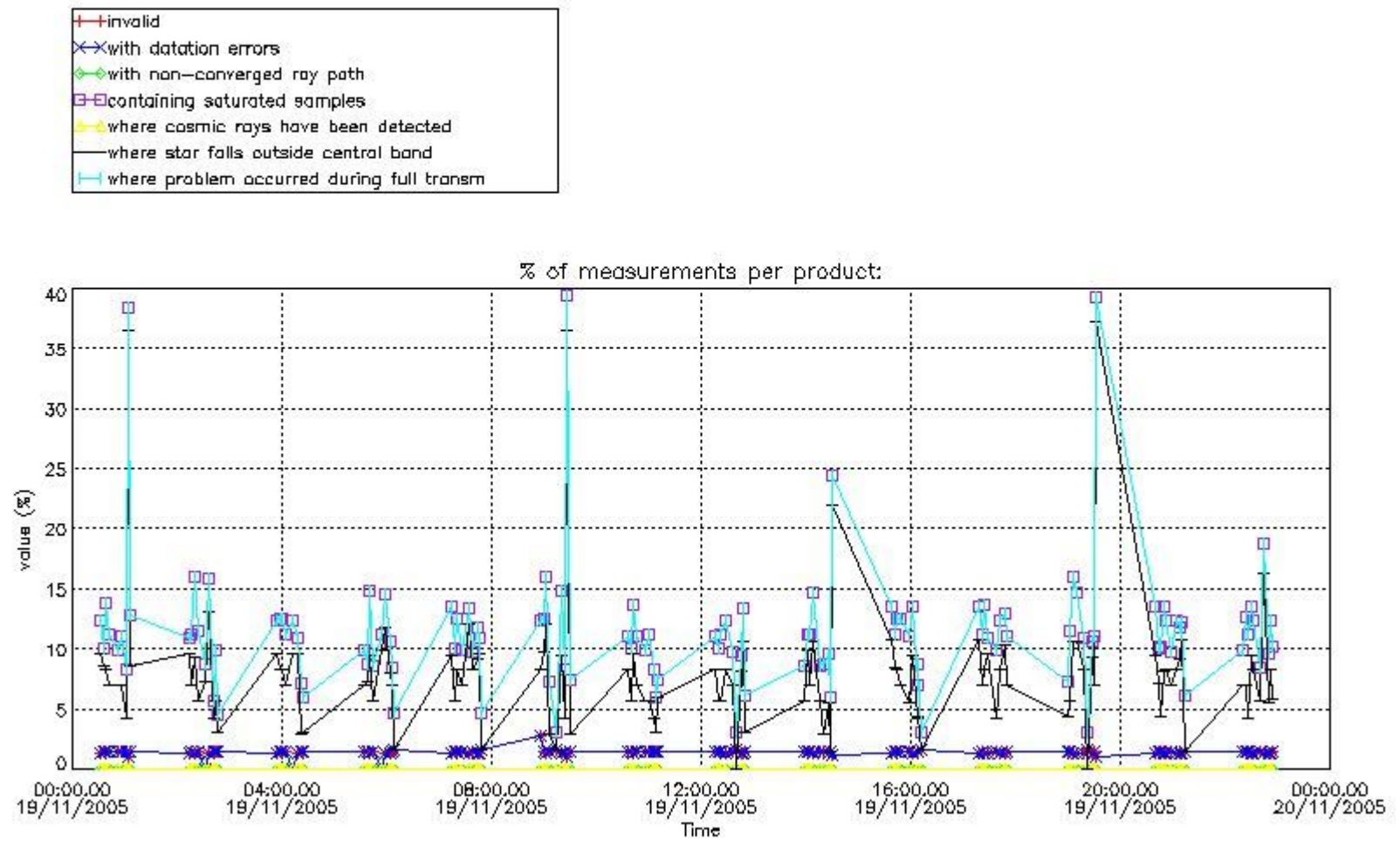
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

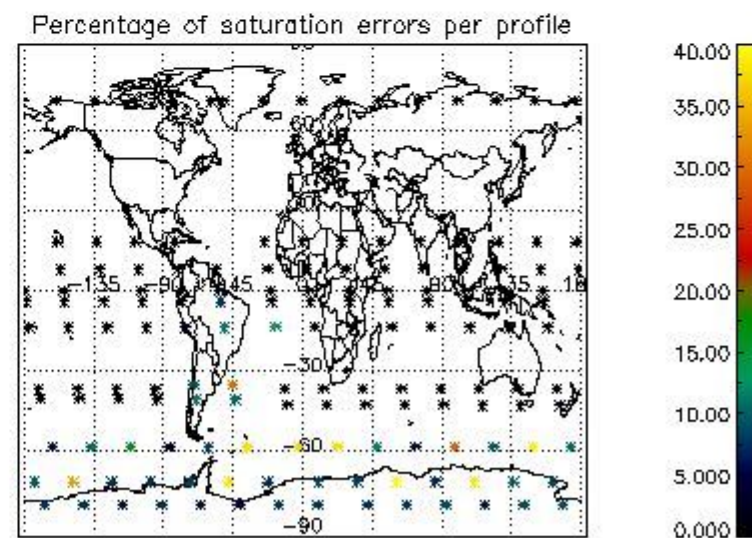
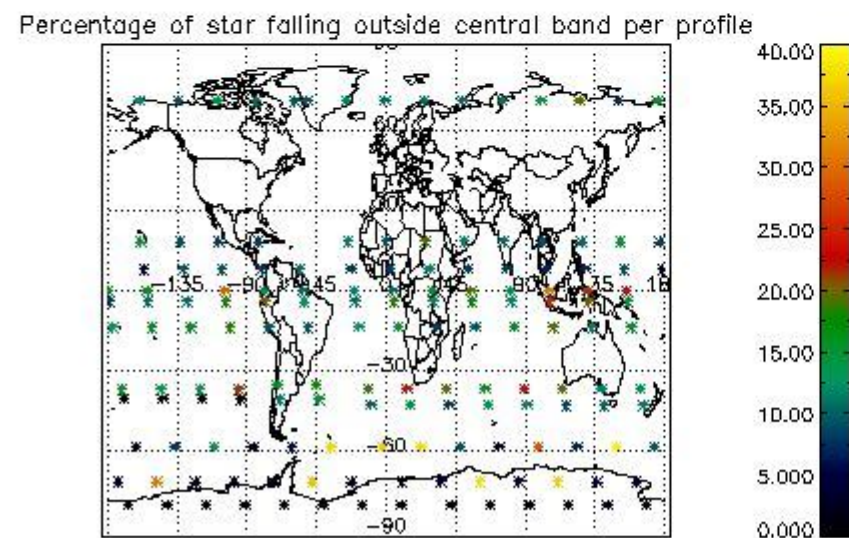
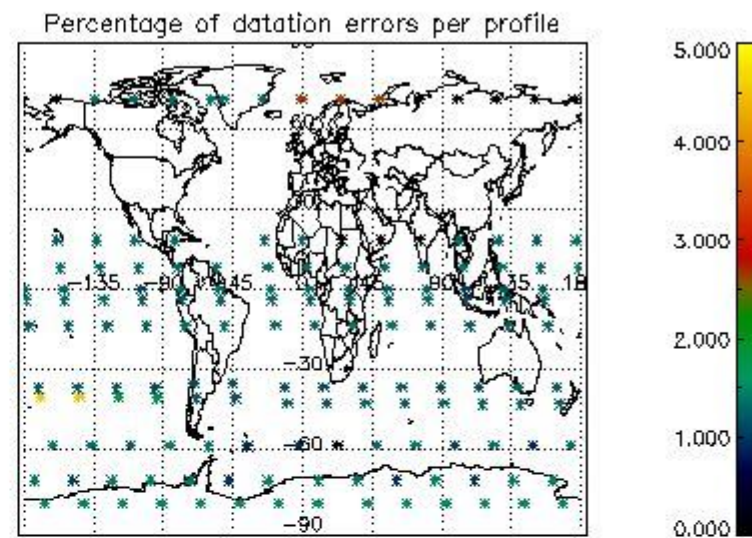
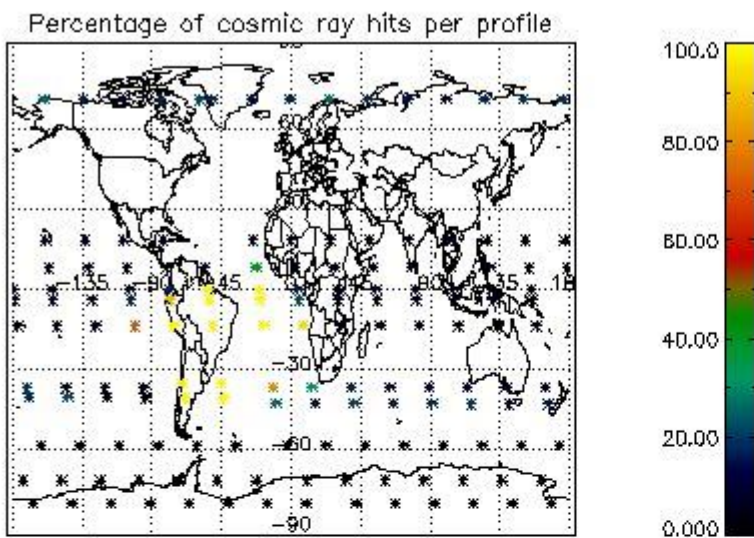


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

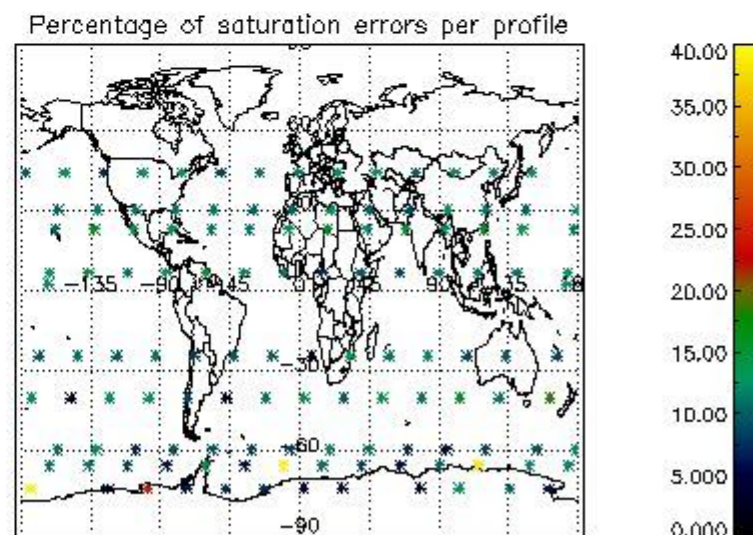
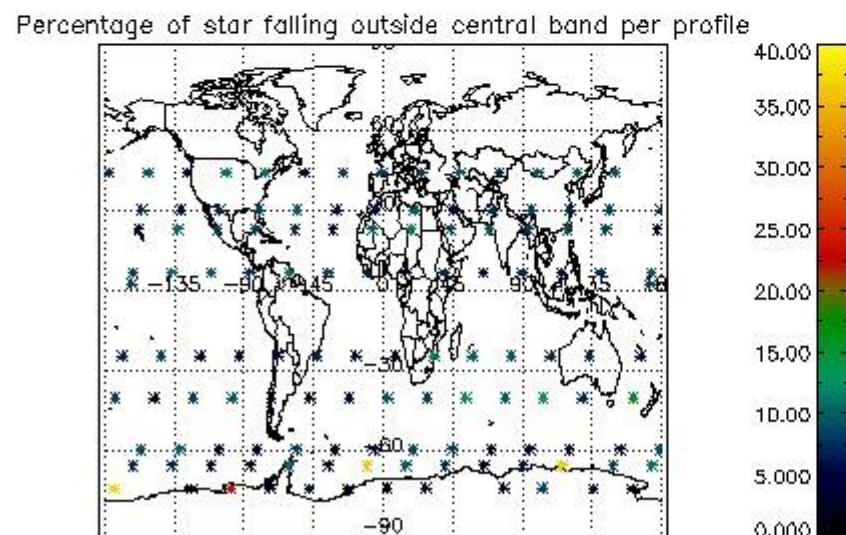
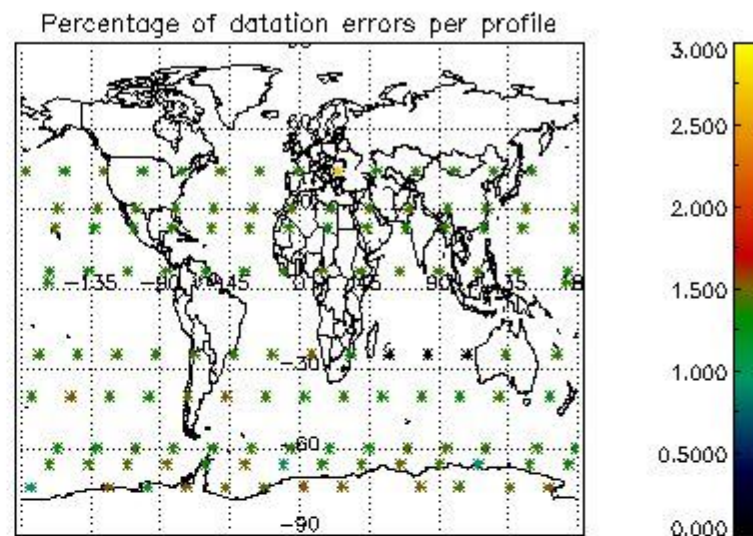
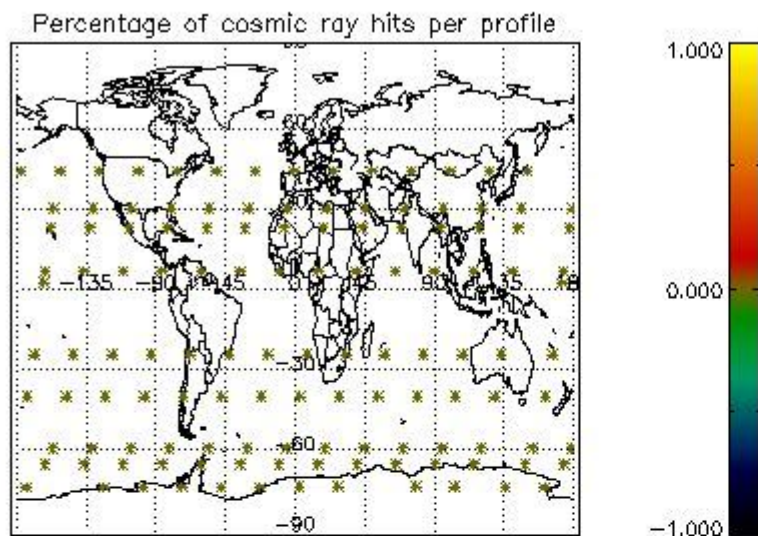


4.2 Plot quality information per product coming from level 1b processing (world map)

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

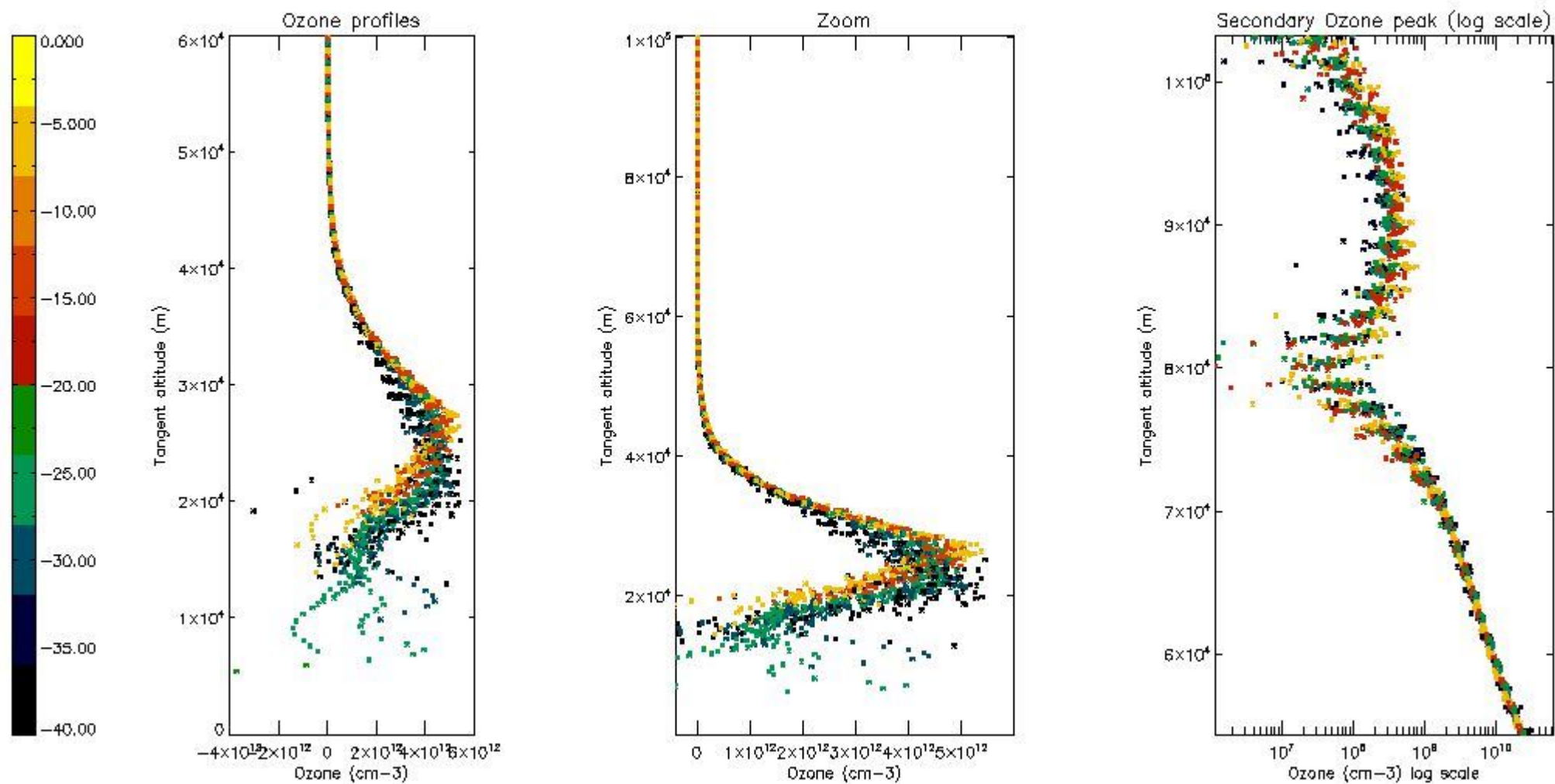
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	19

STD < 10	16
STD < 5	12

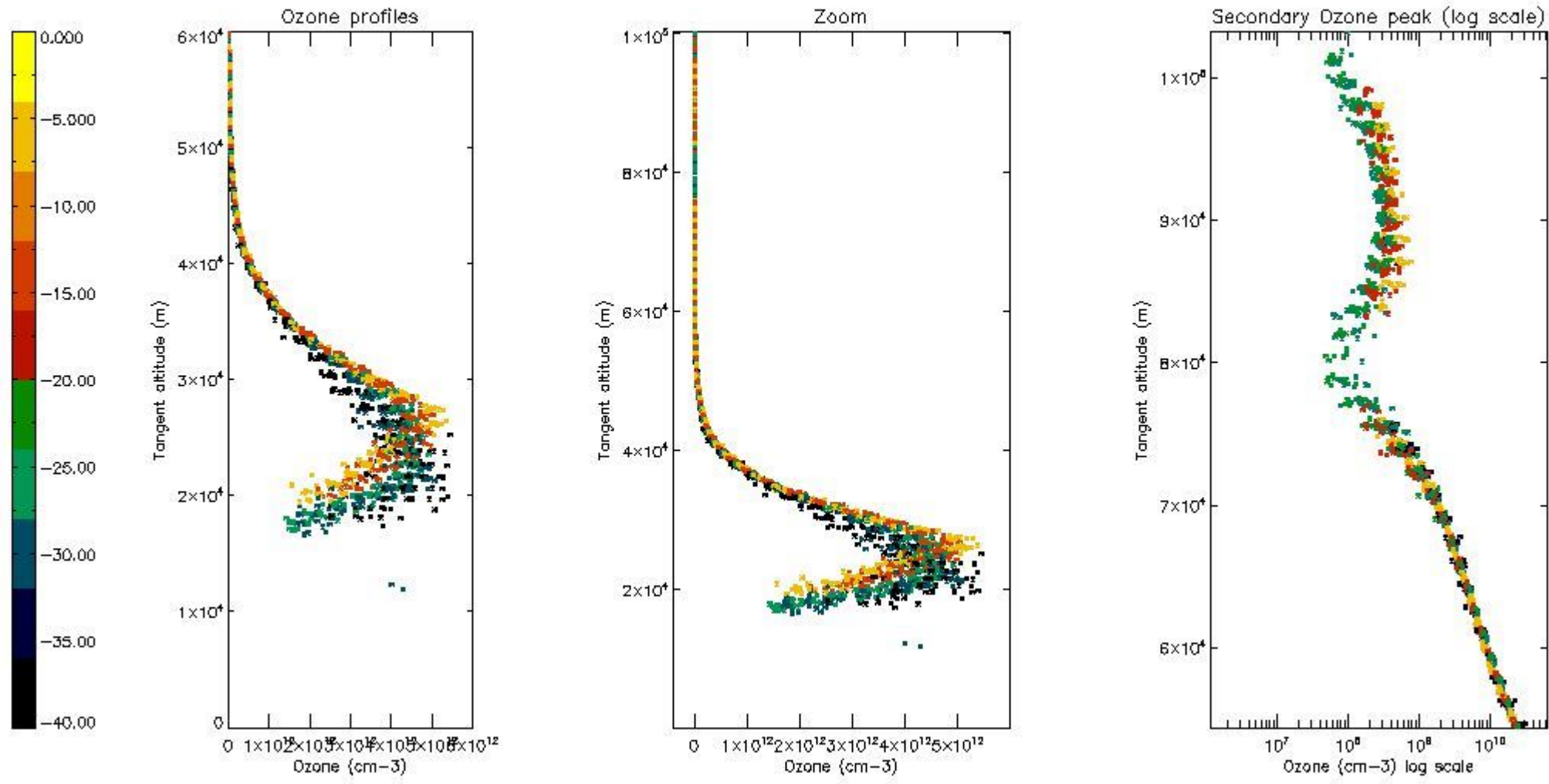
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



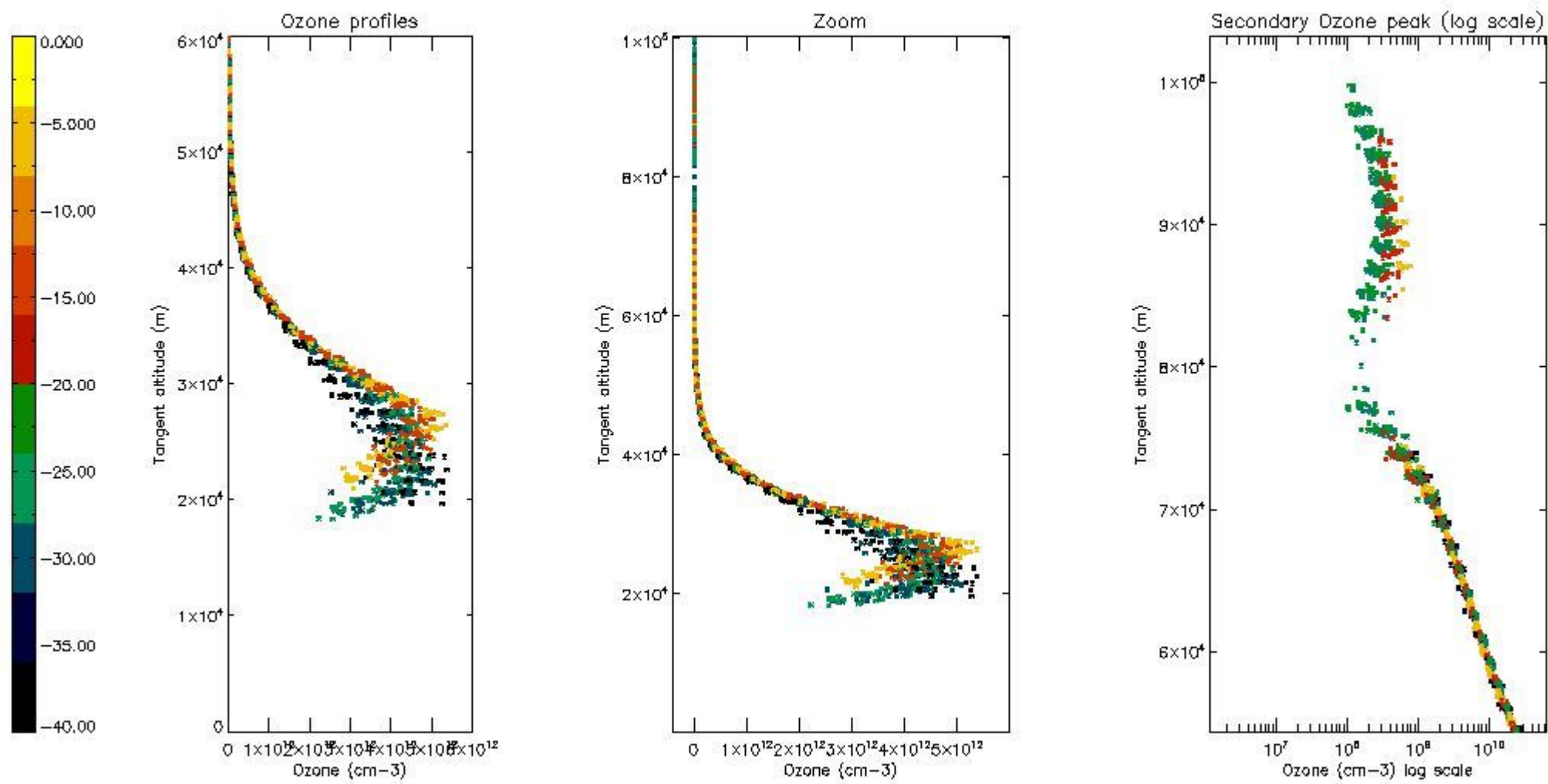
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



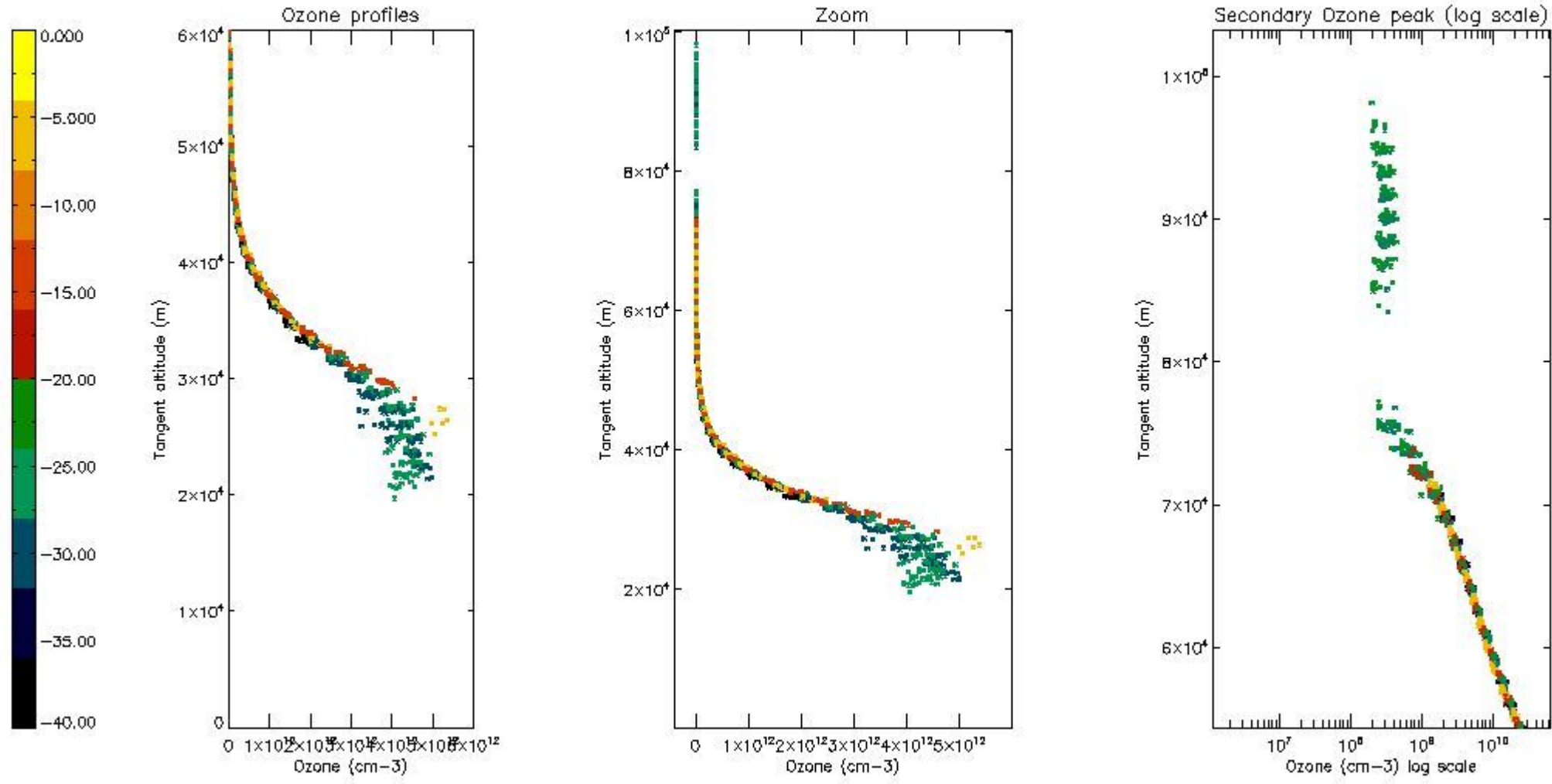
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



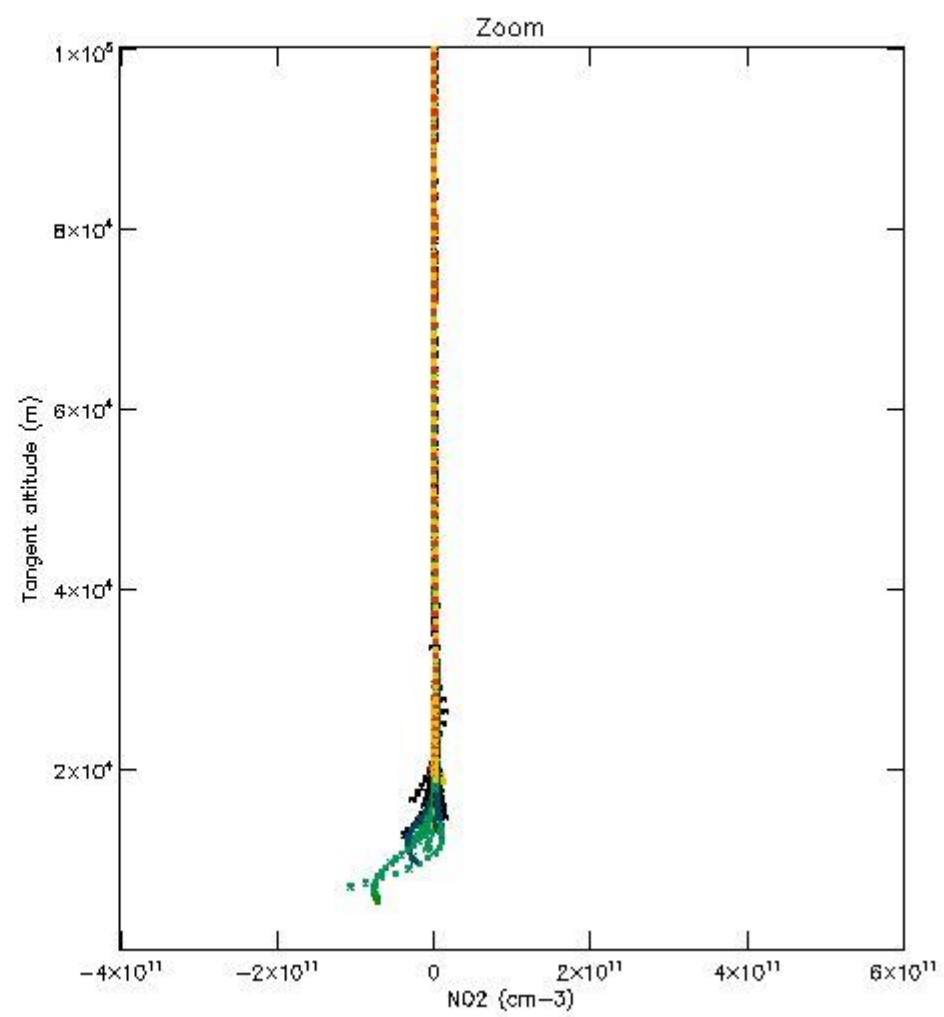
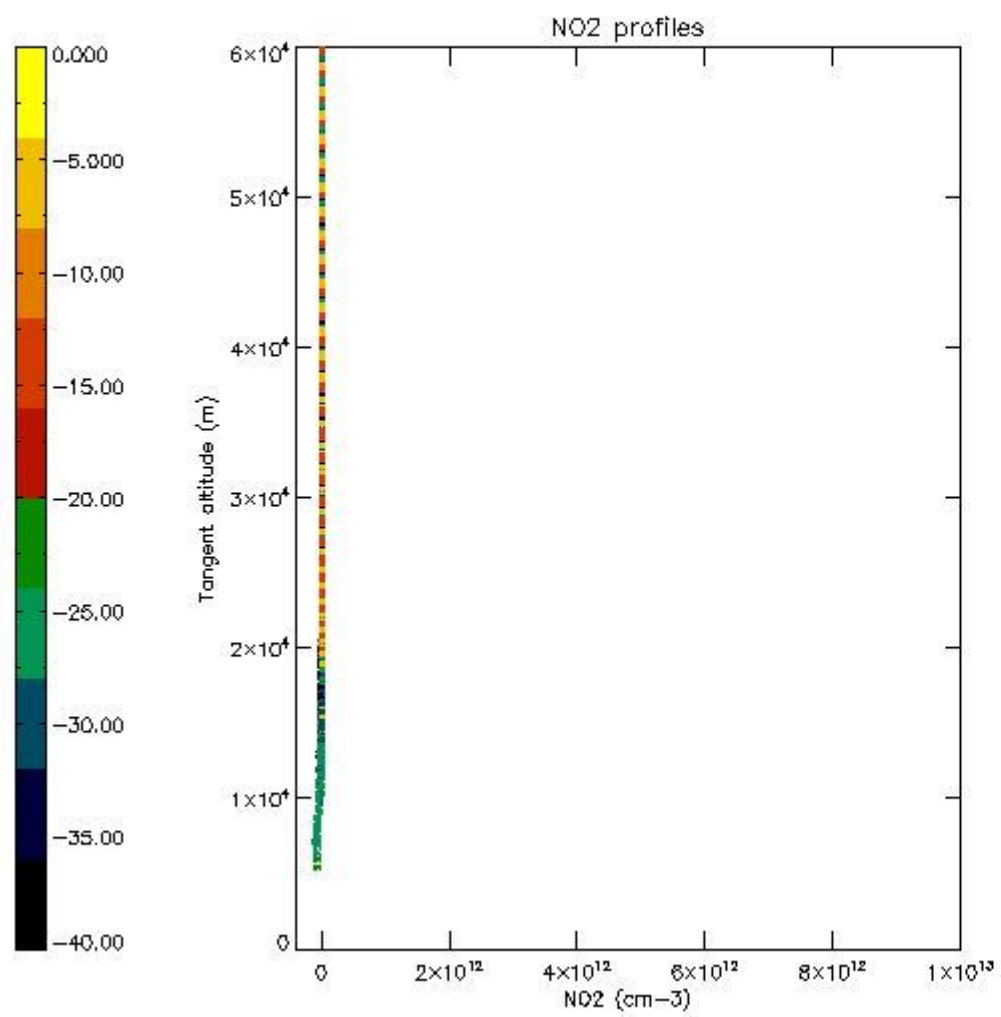
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



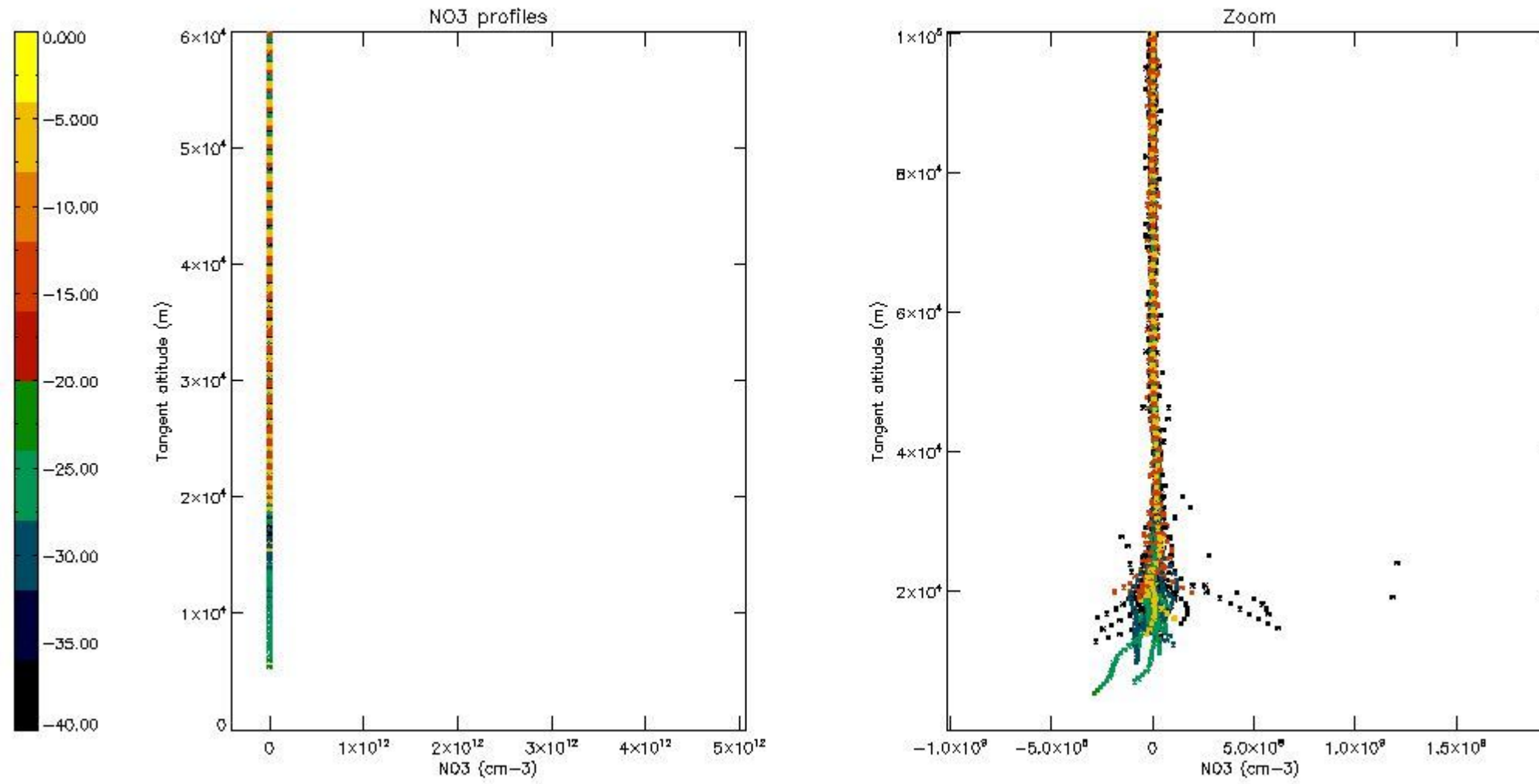
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	19-NOV-2005 00:14:50
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-NOV-2005 00:14:50
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-NOV-2005 00:14:50

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

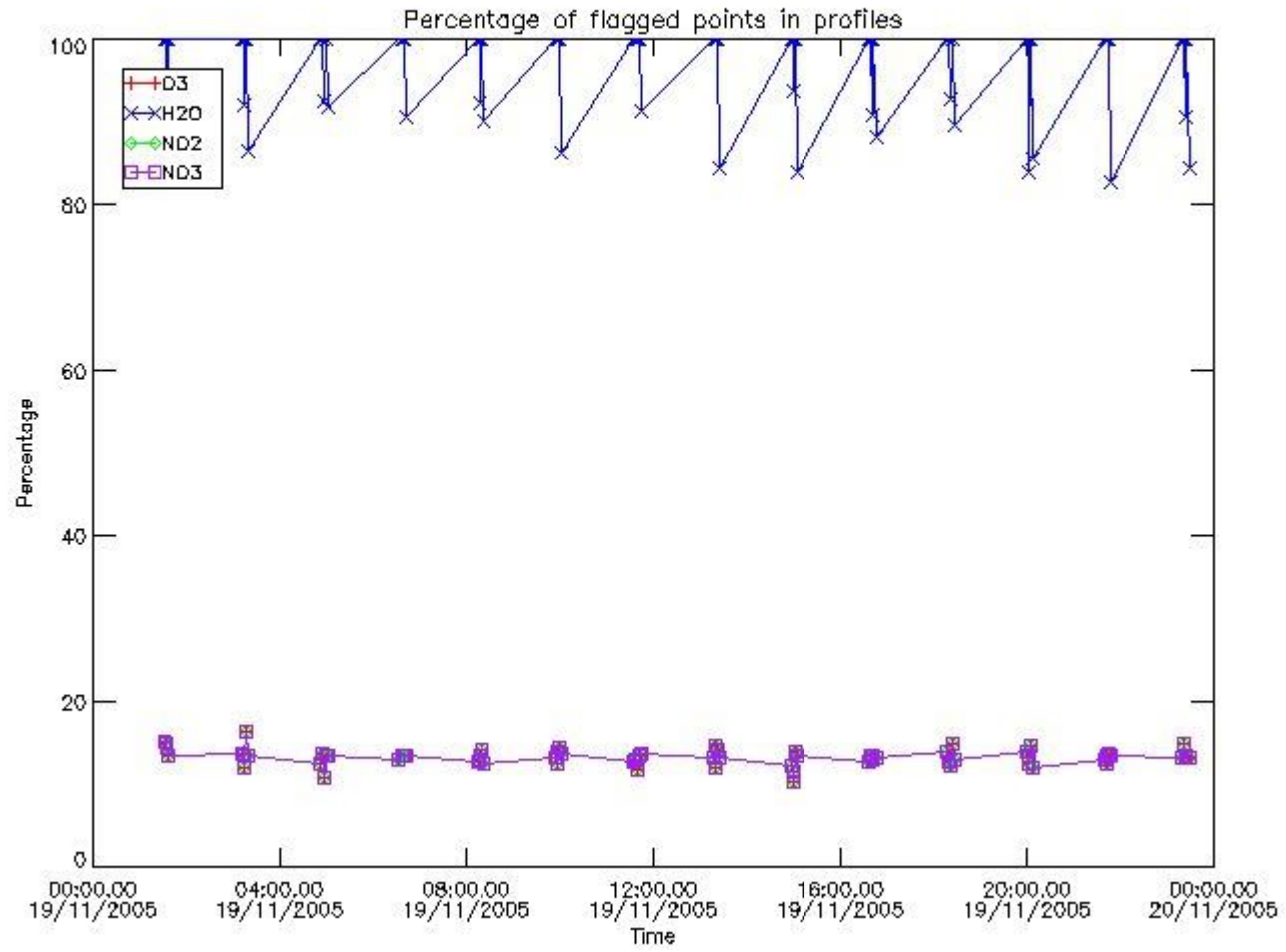
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

3. Quality information per product

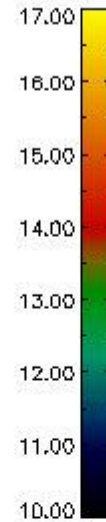
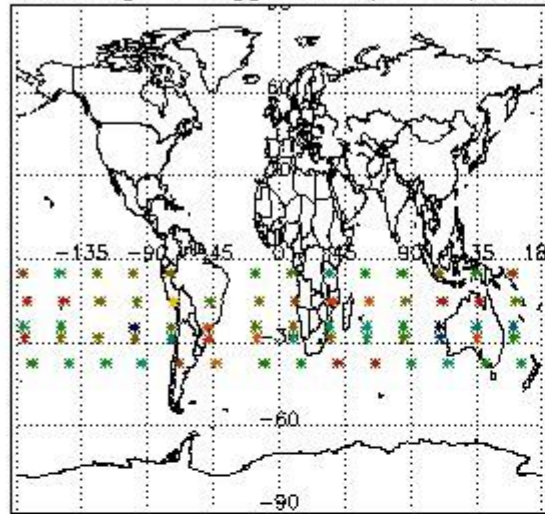
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

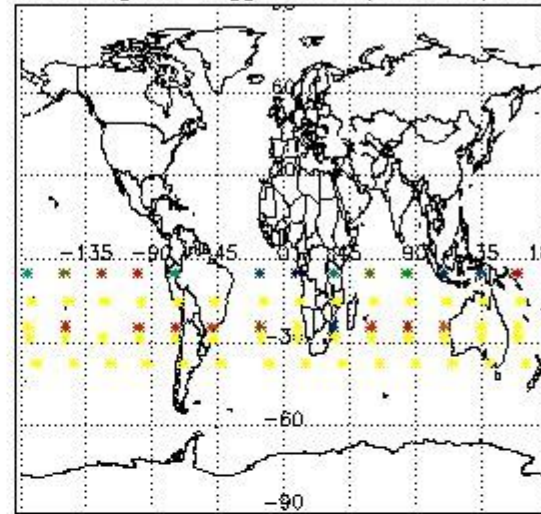


3.2 Plot quality information per product (world map)

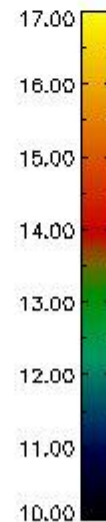
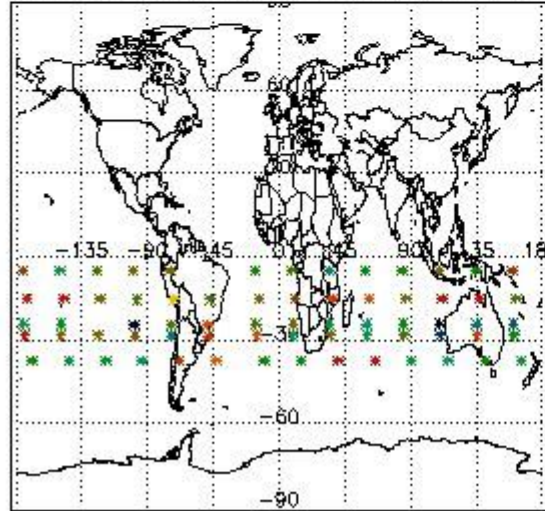
Percentage of flagged data per O3 profile



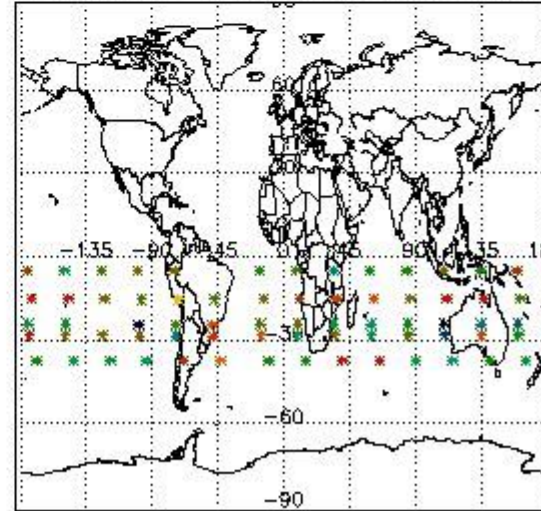
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

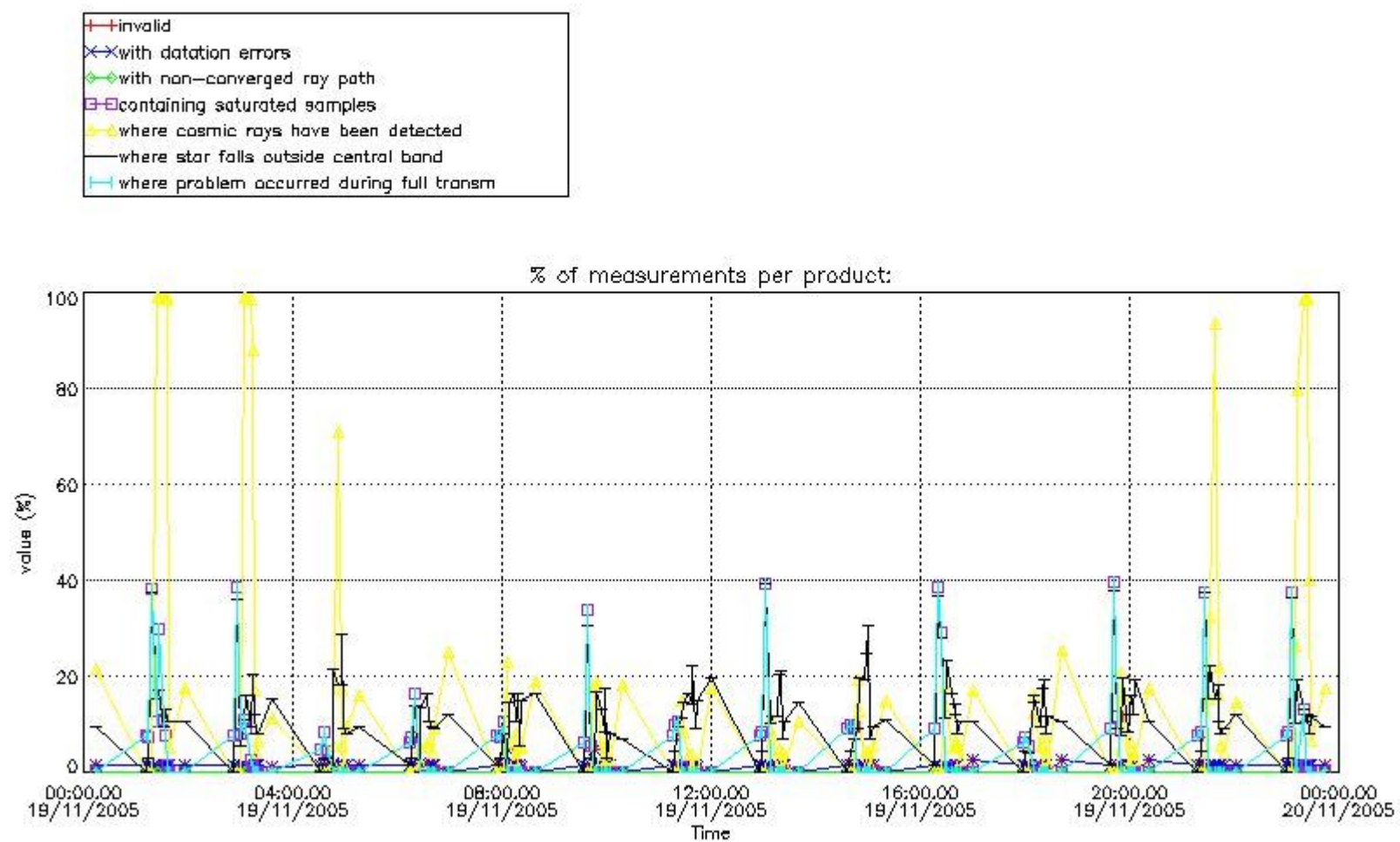


4. Level 1 quality information per product

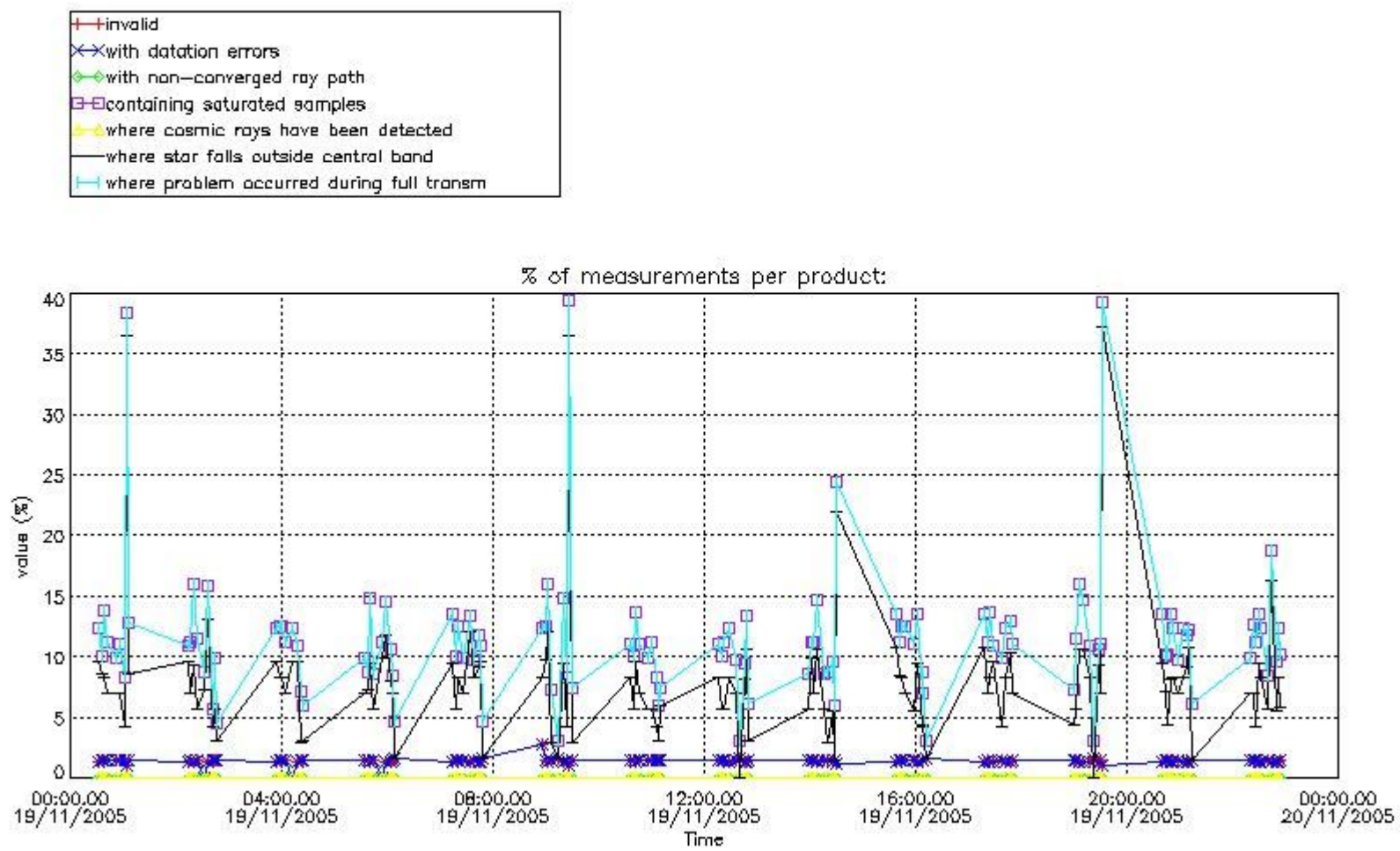
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

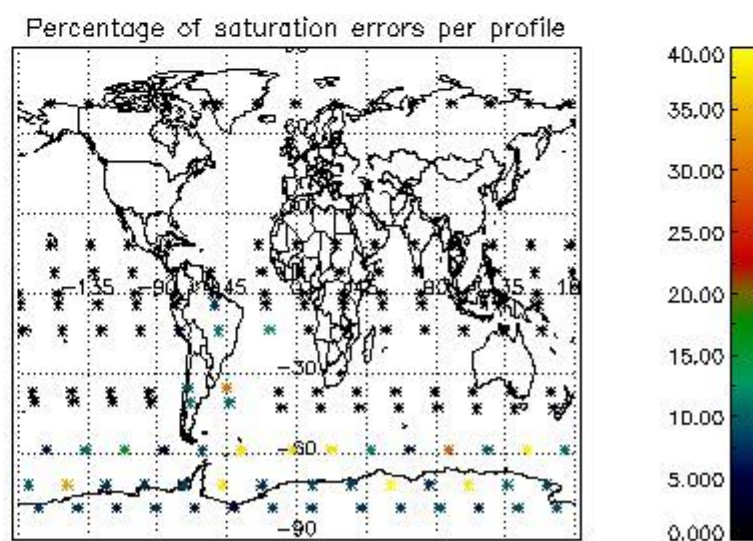
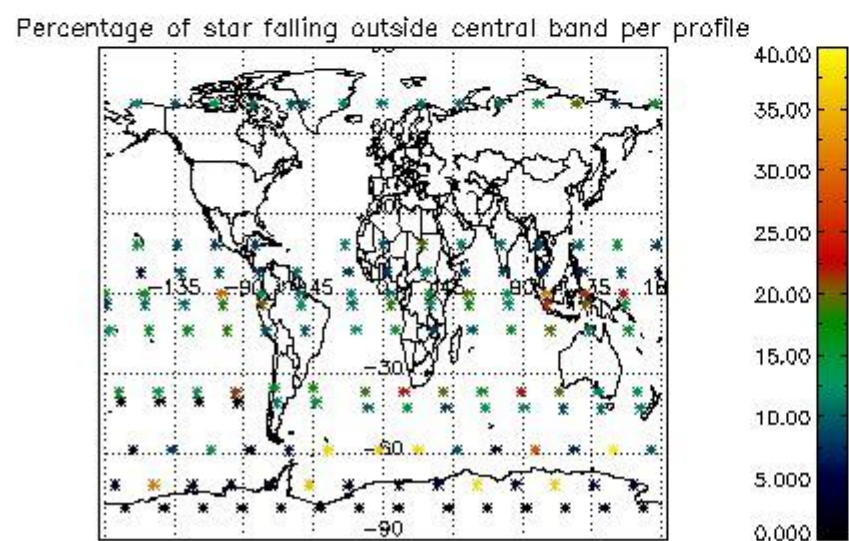
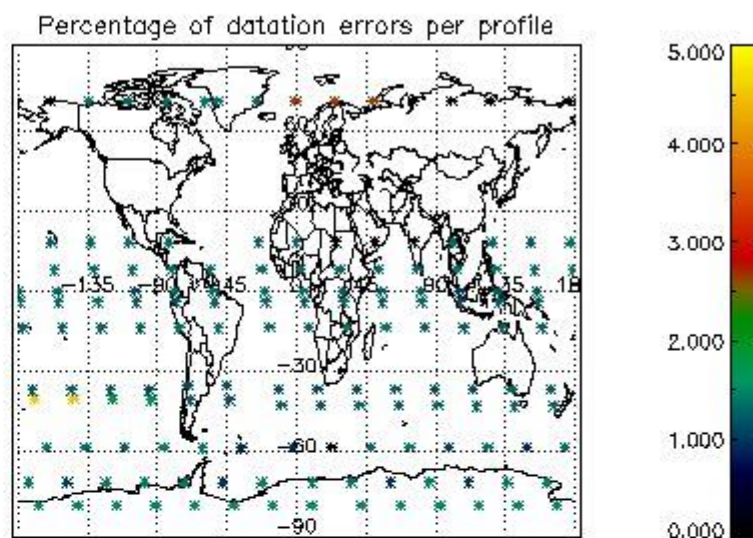
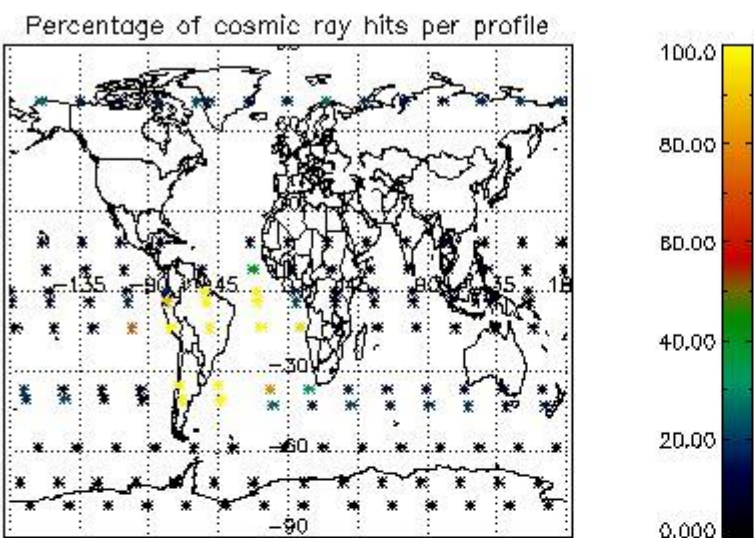


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

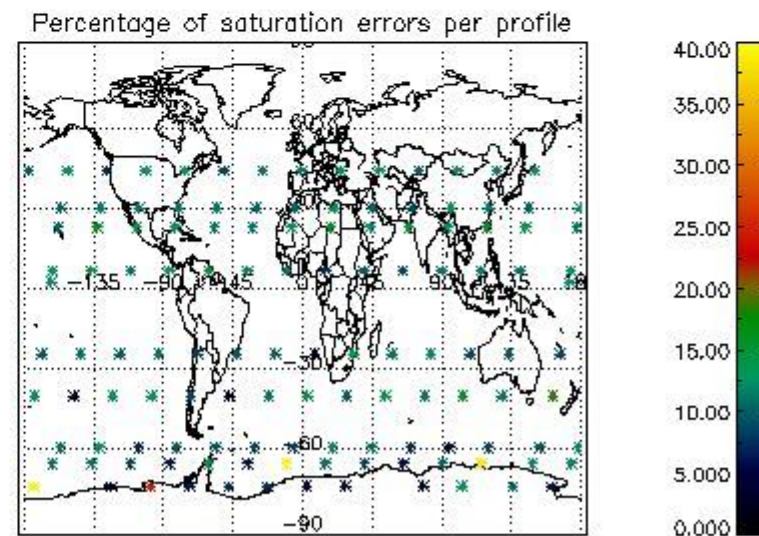
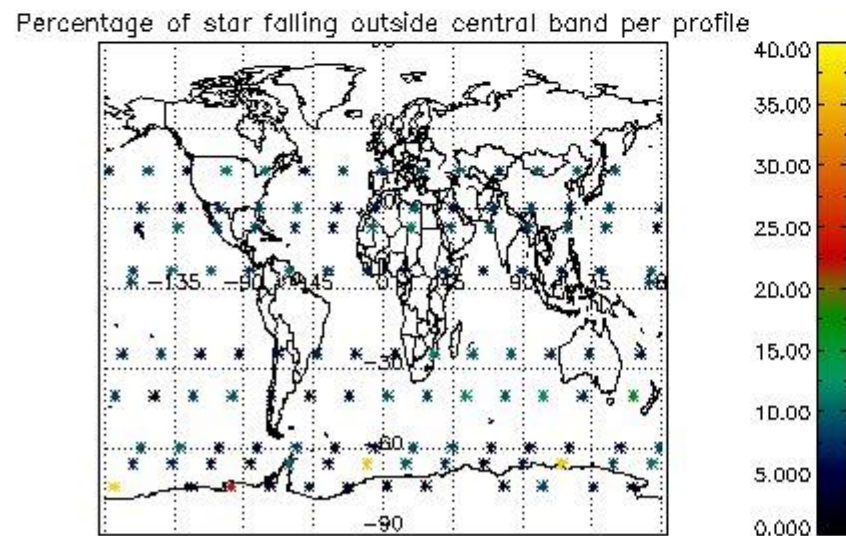
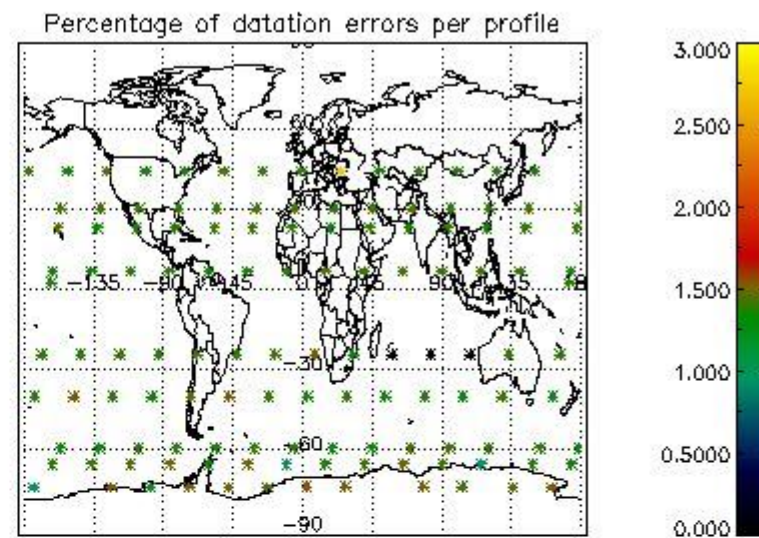
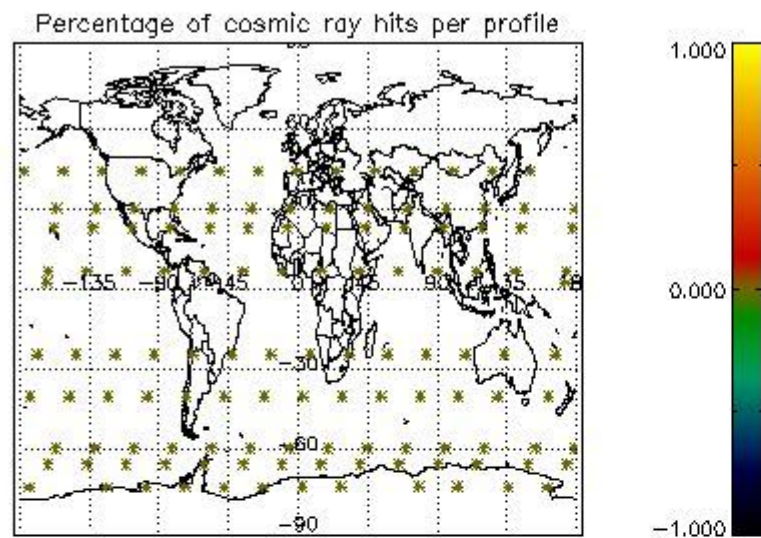


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

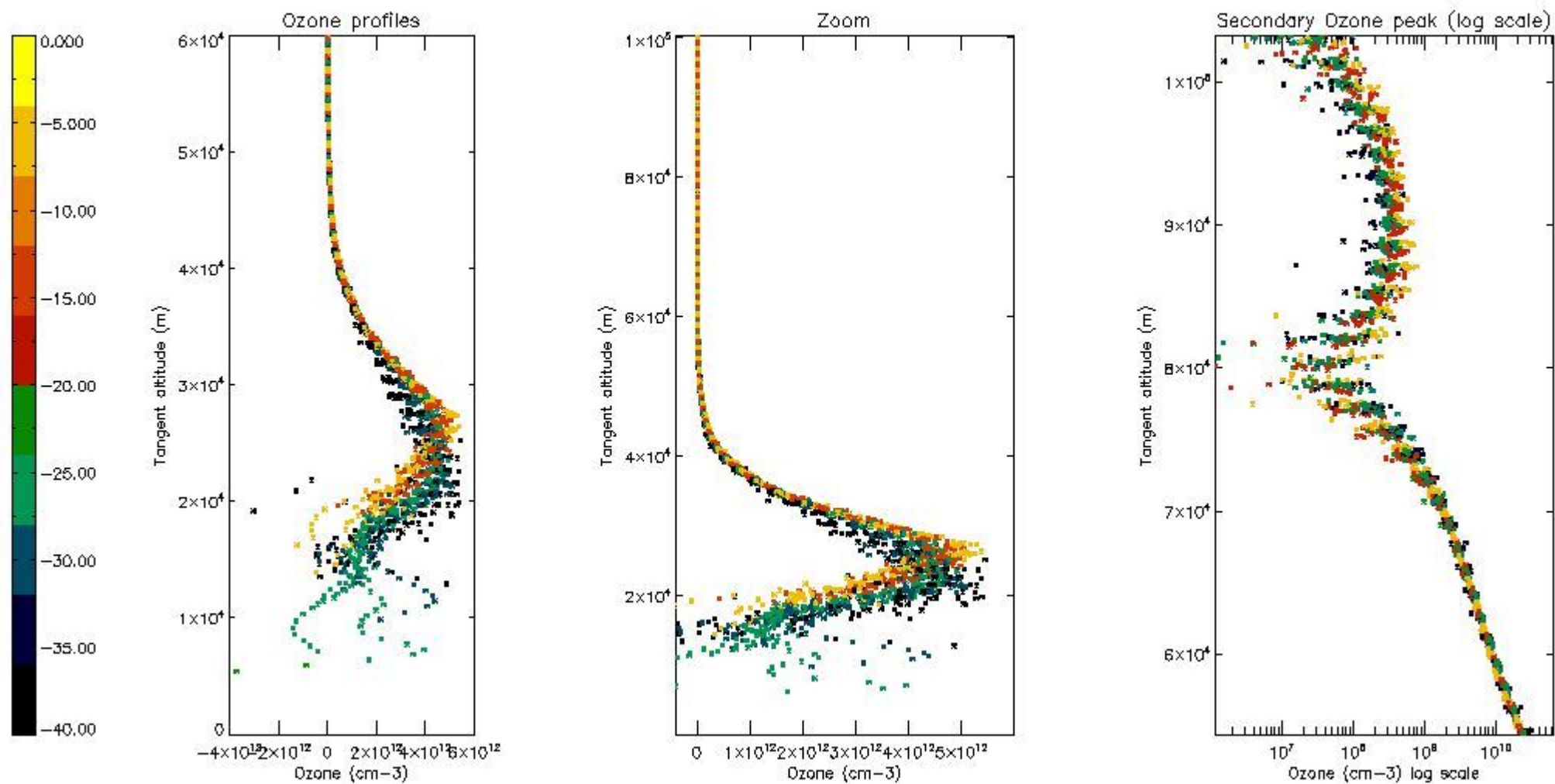
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	19

STD < 10	16
STD < 5	12

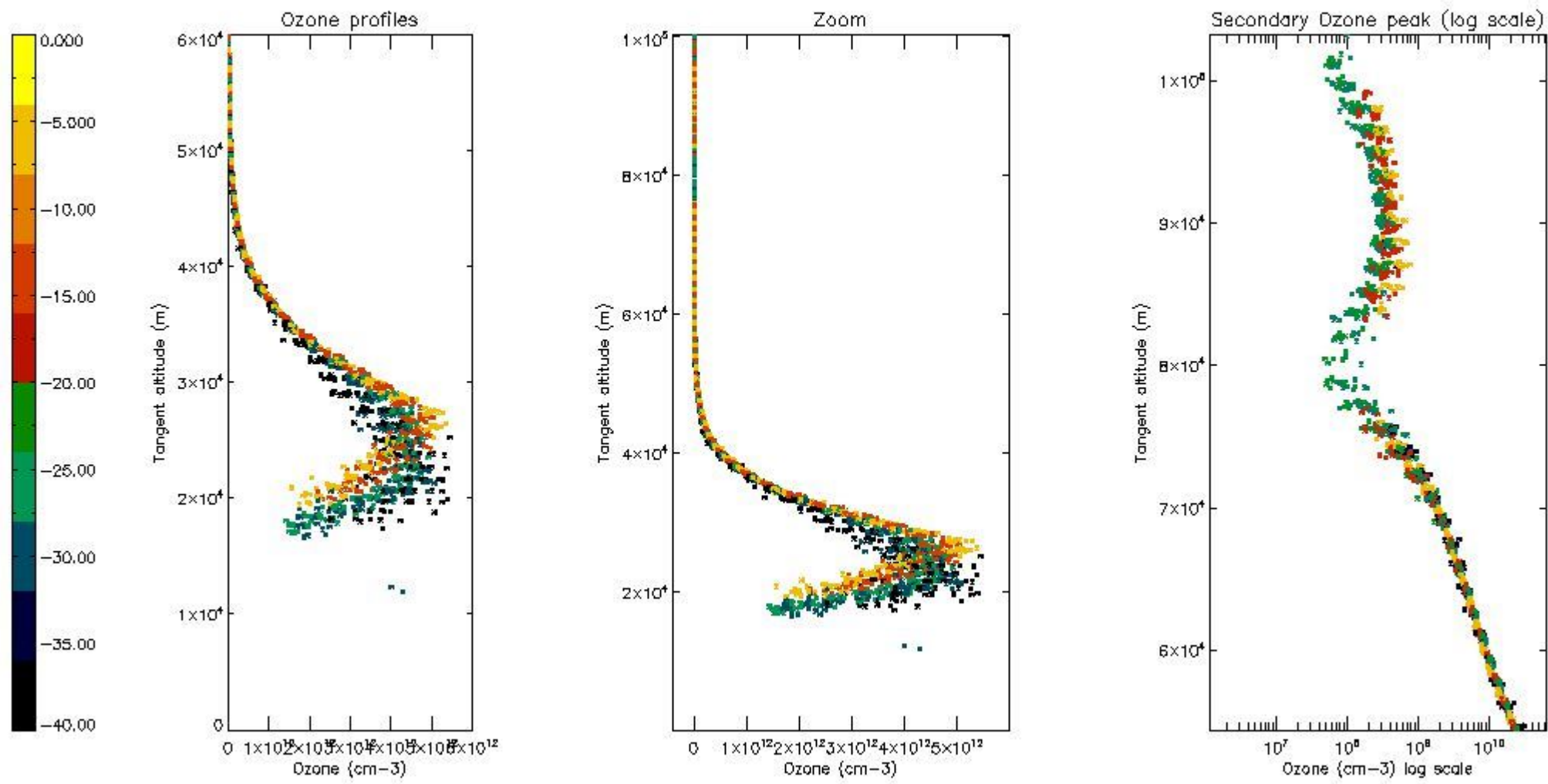
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



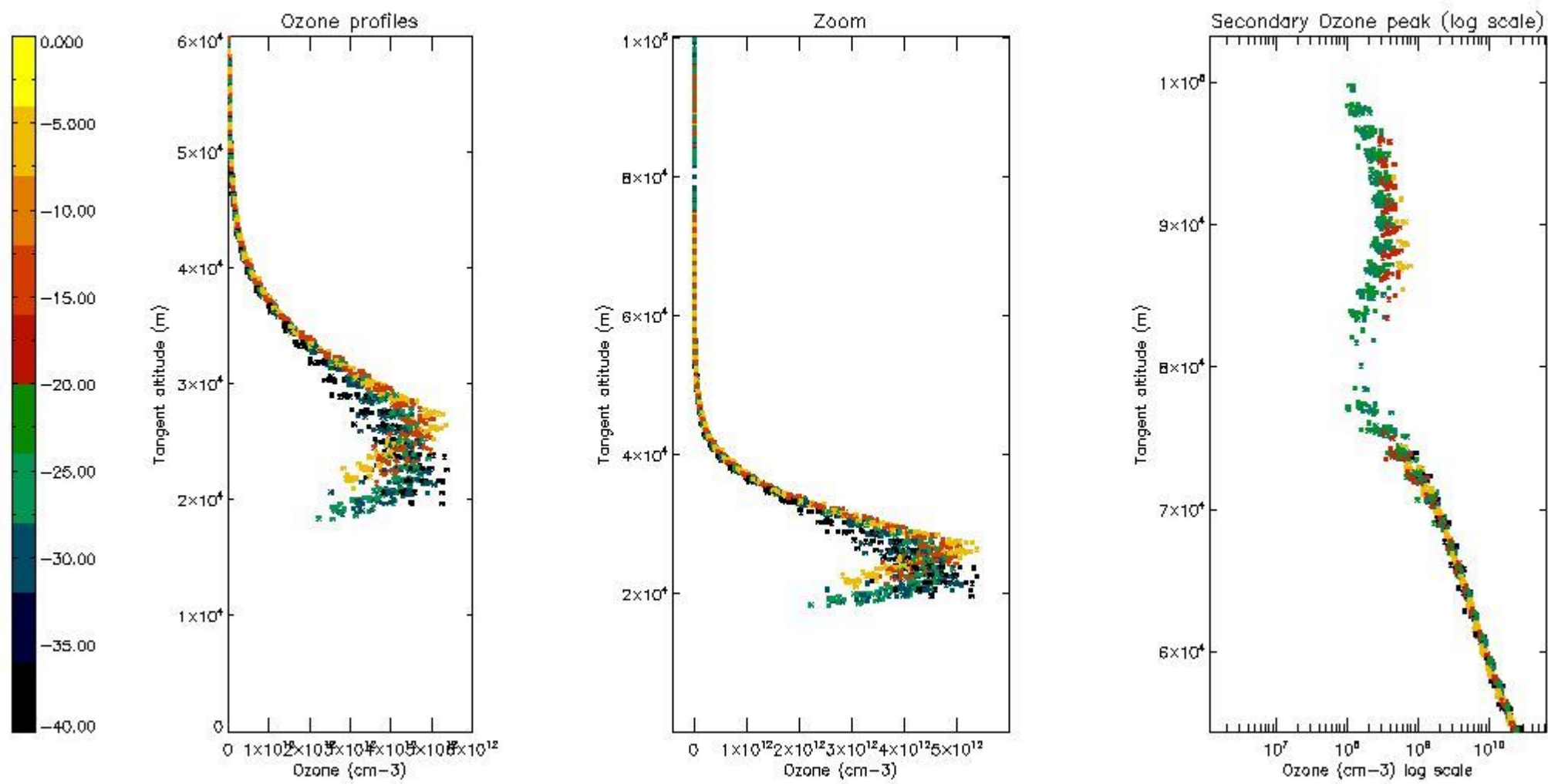
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



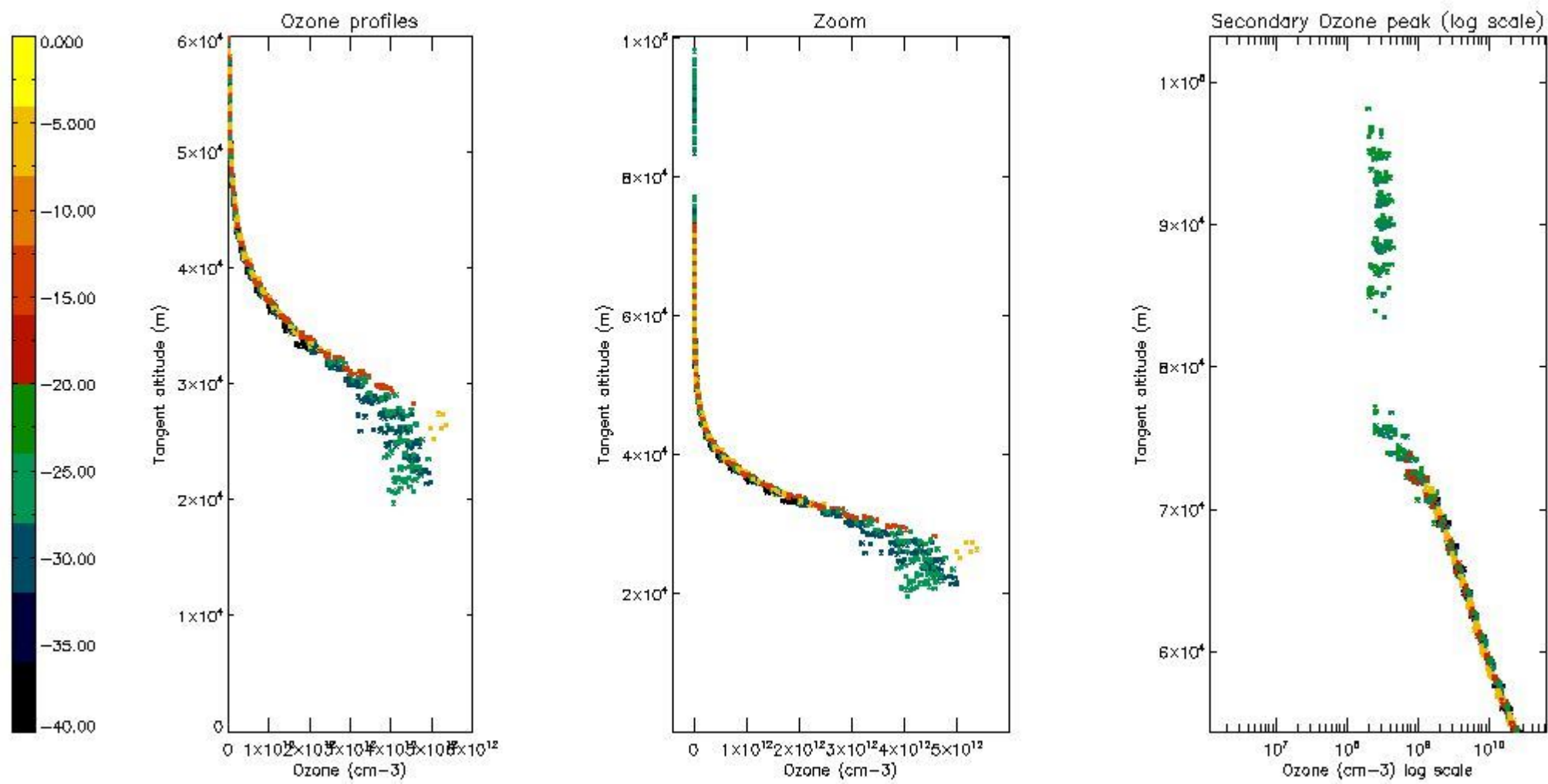
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



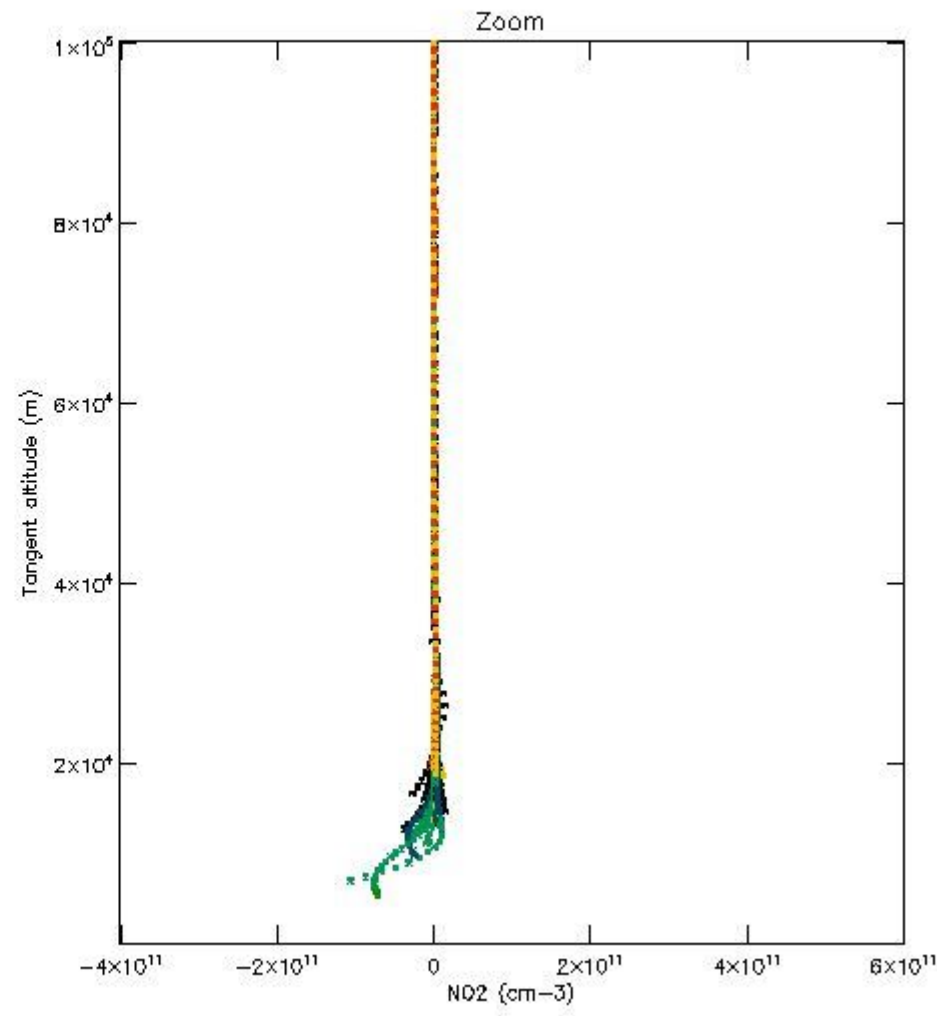
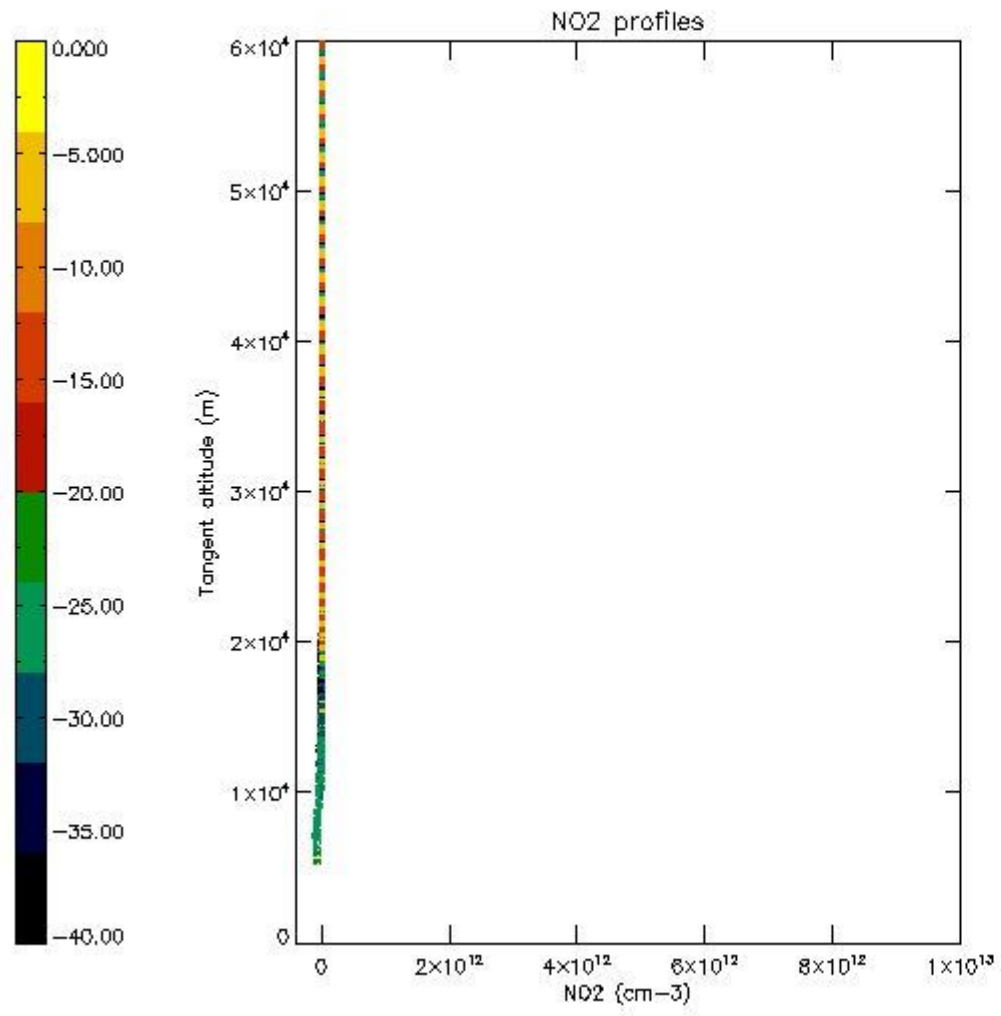
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



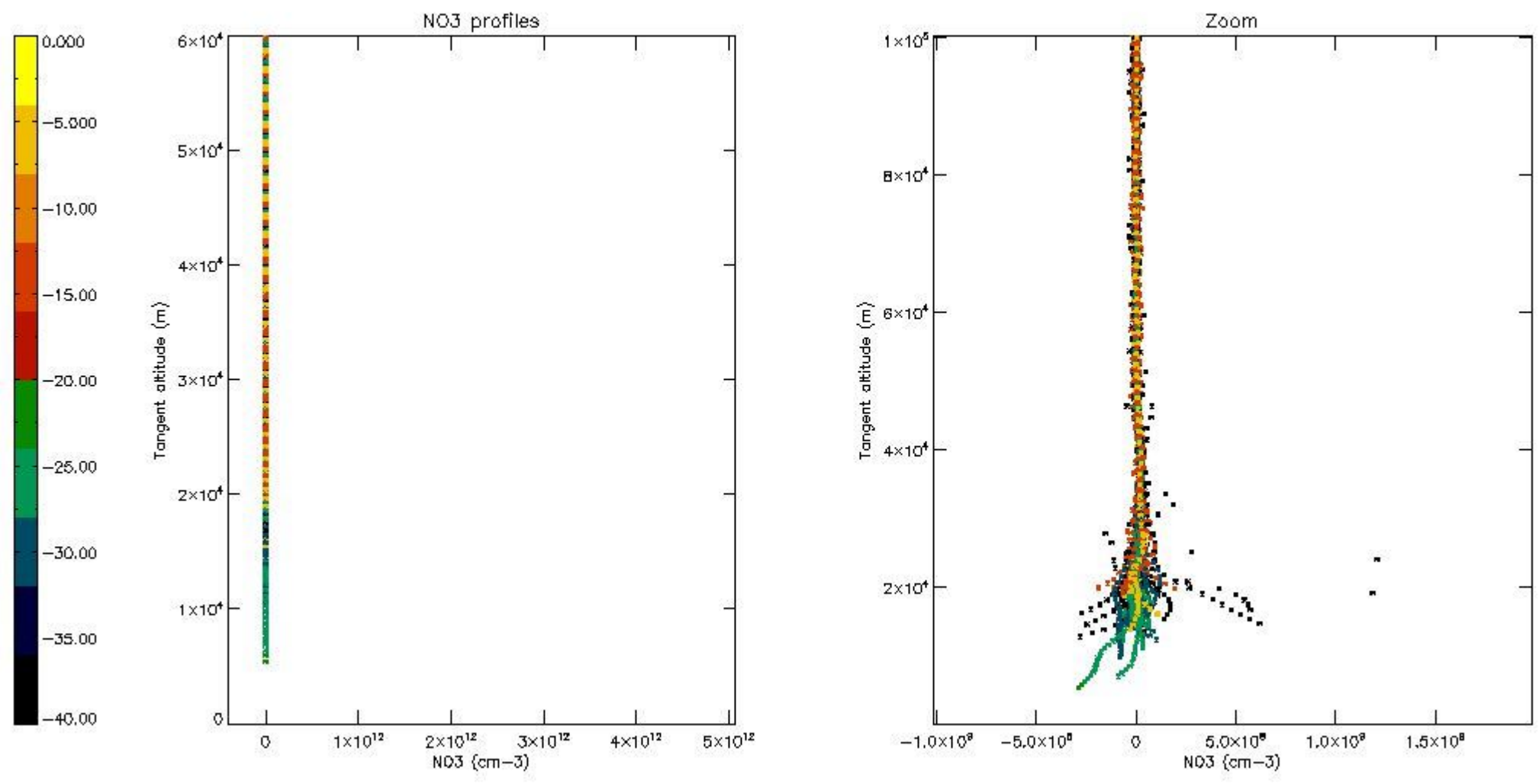
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

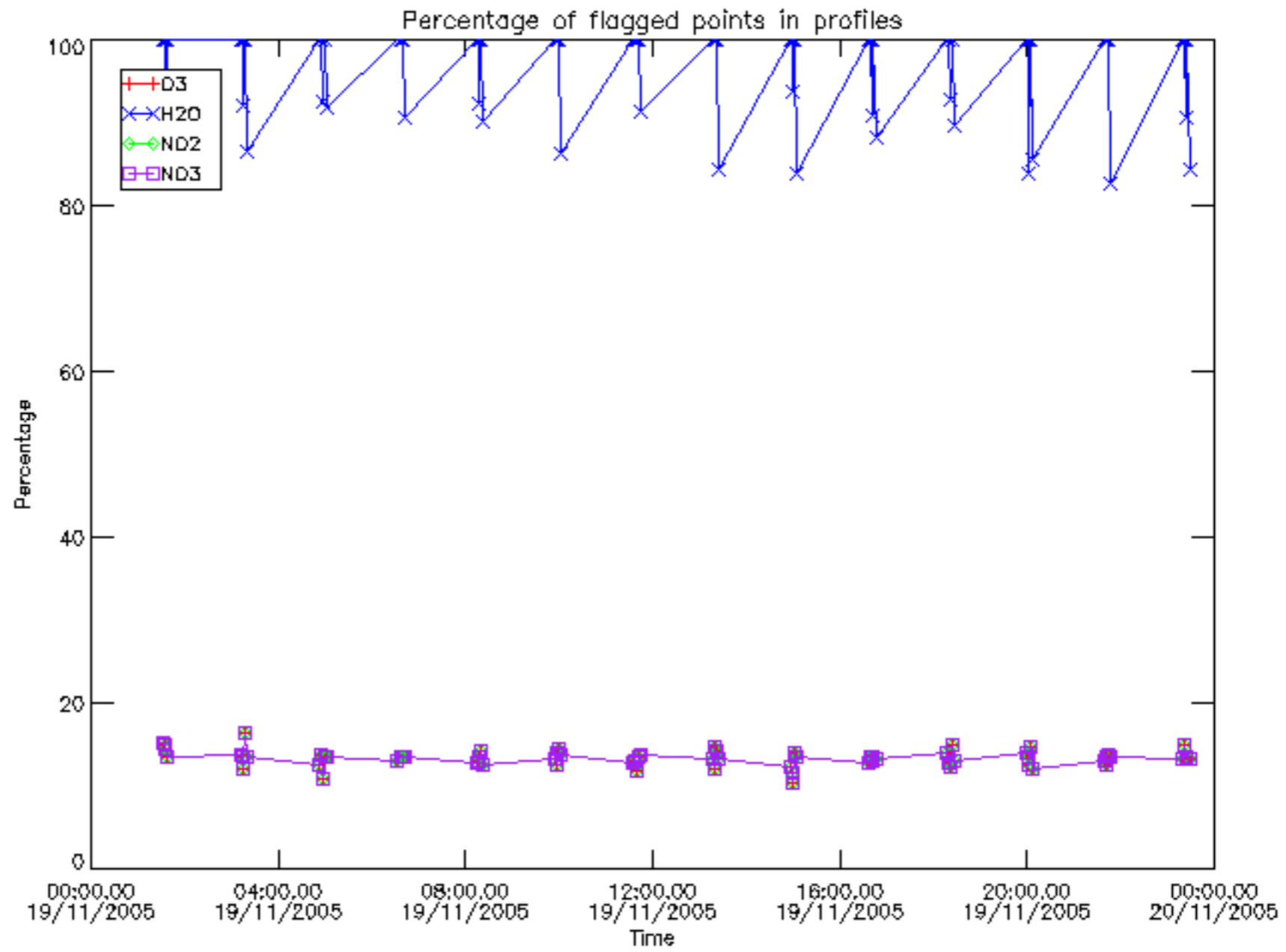
The colorbar represents the latitude.



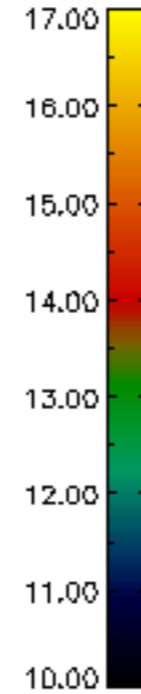
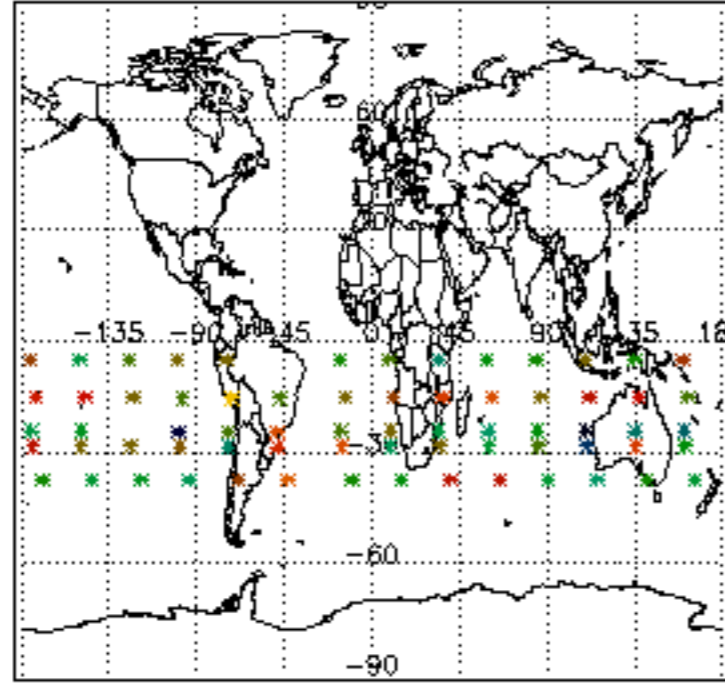
6. Auxiliary Data Files used for the production reported in section 2

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.

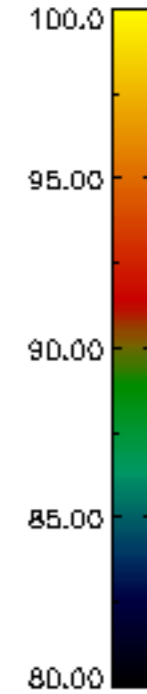
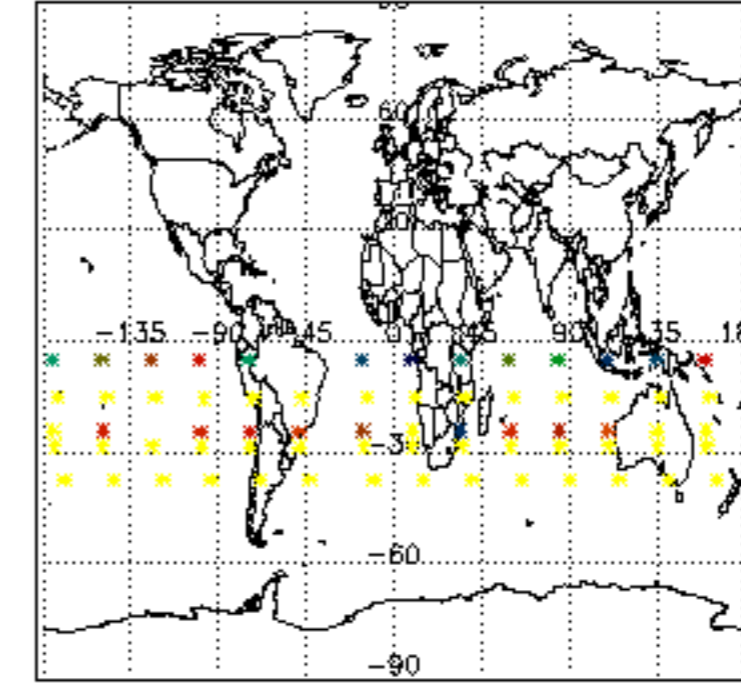
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	19-NOV-2005 00:14:50
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-NOV-2005 00:14:50
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-NOV-2005 00:14:50



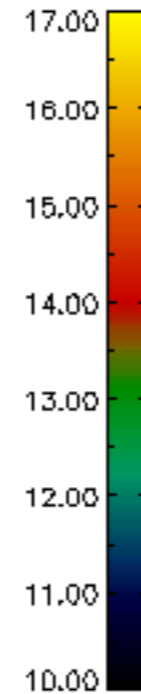
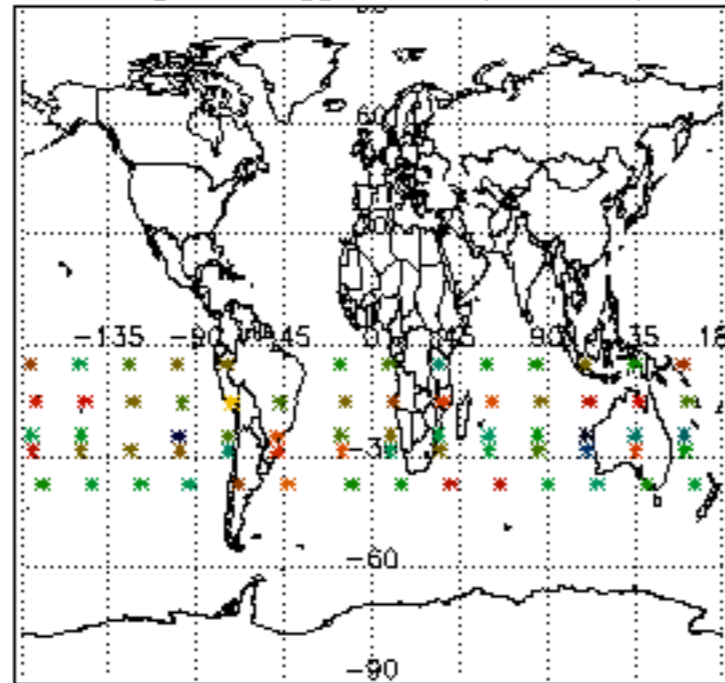
Percentage of flagged data per D3 profile



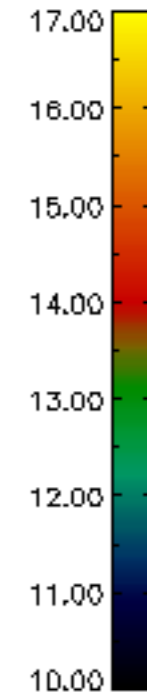
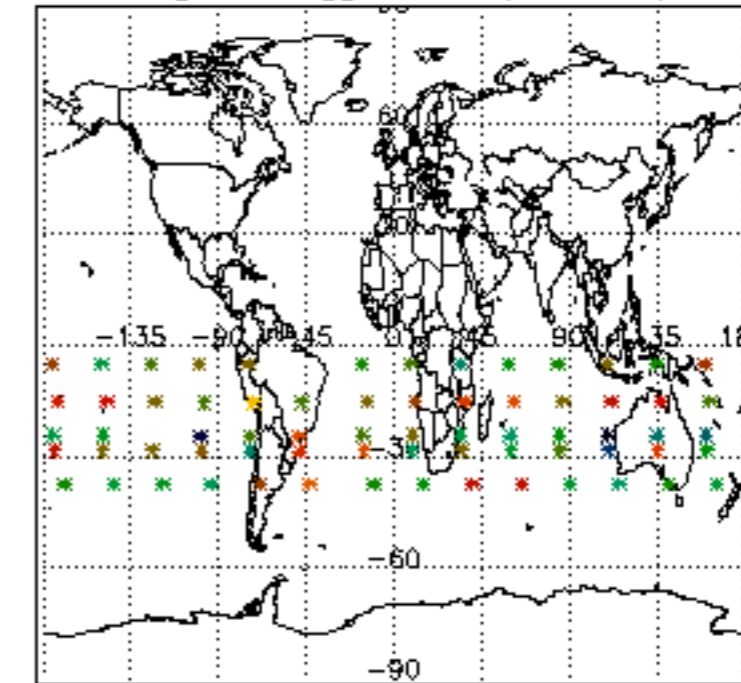
Percentage of flagged data per H2O profile

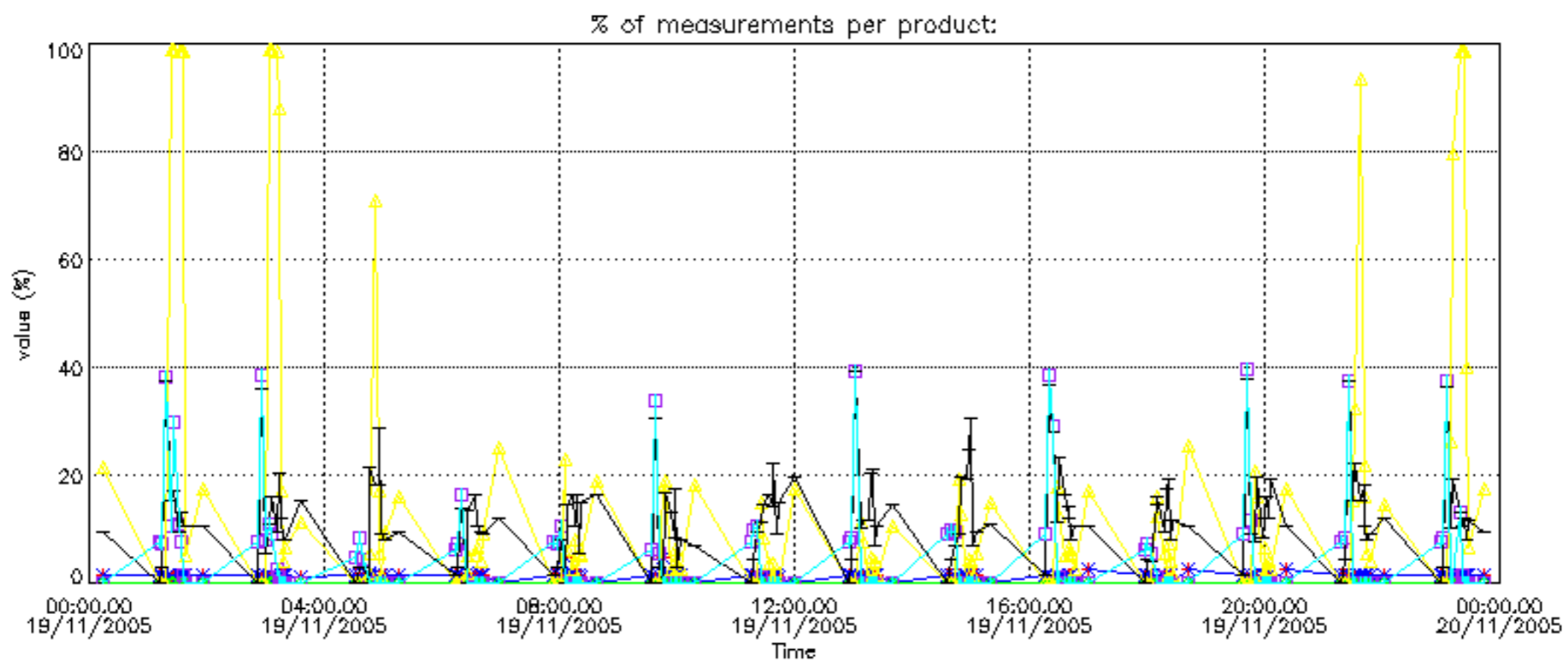


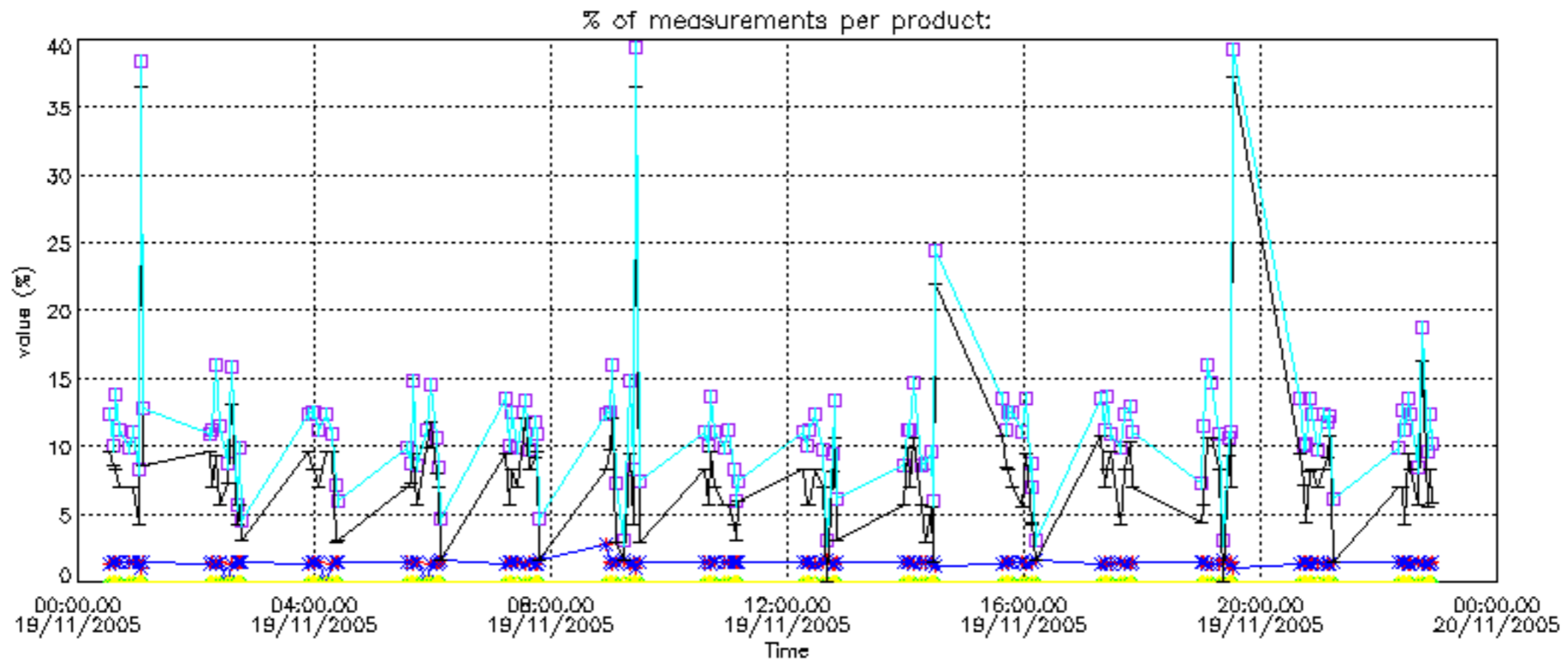
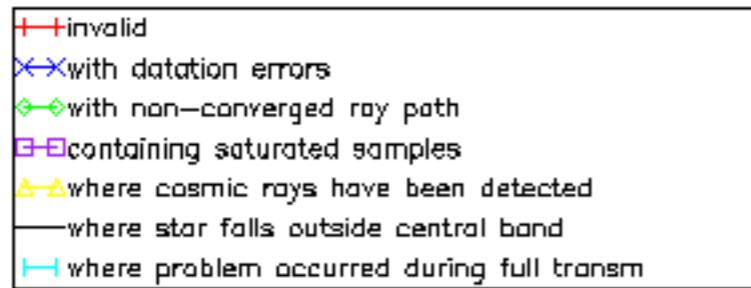
Percentage of flagged data per NO2 profile



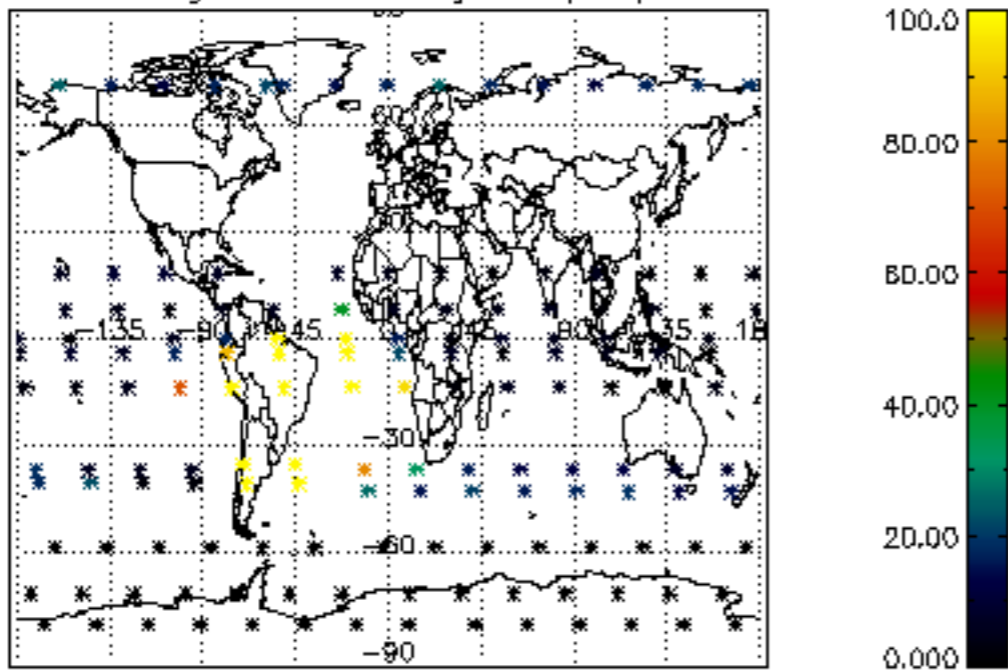
Percentage of flagged data per NO3 profile



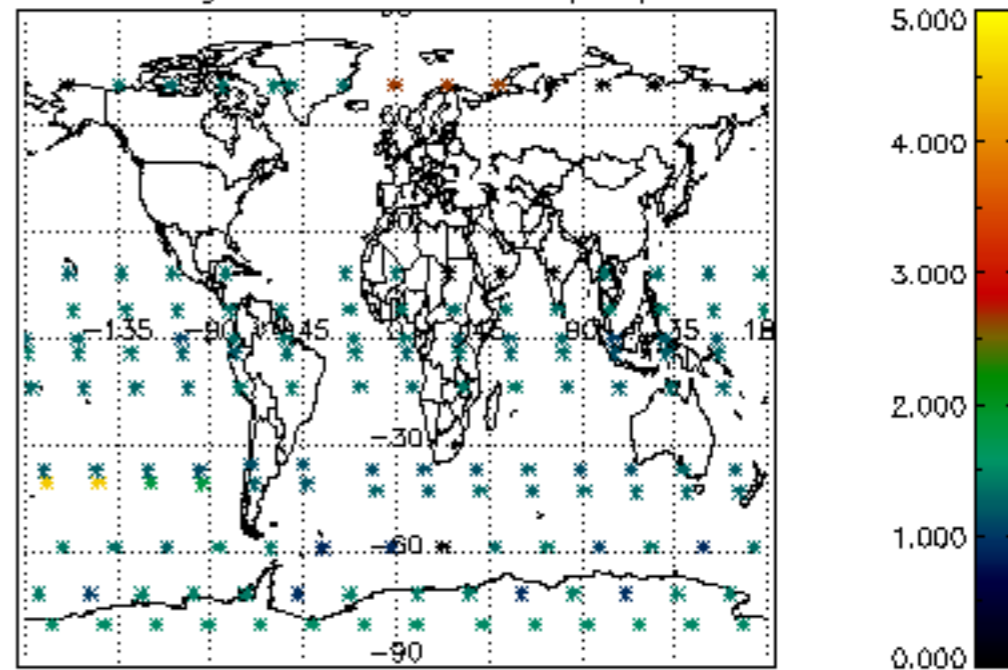




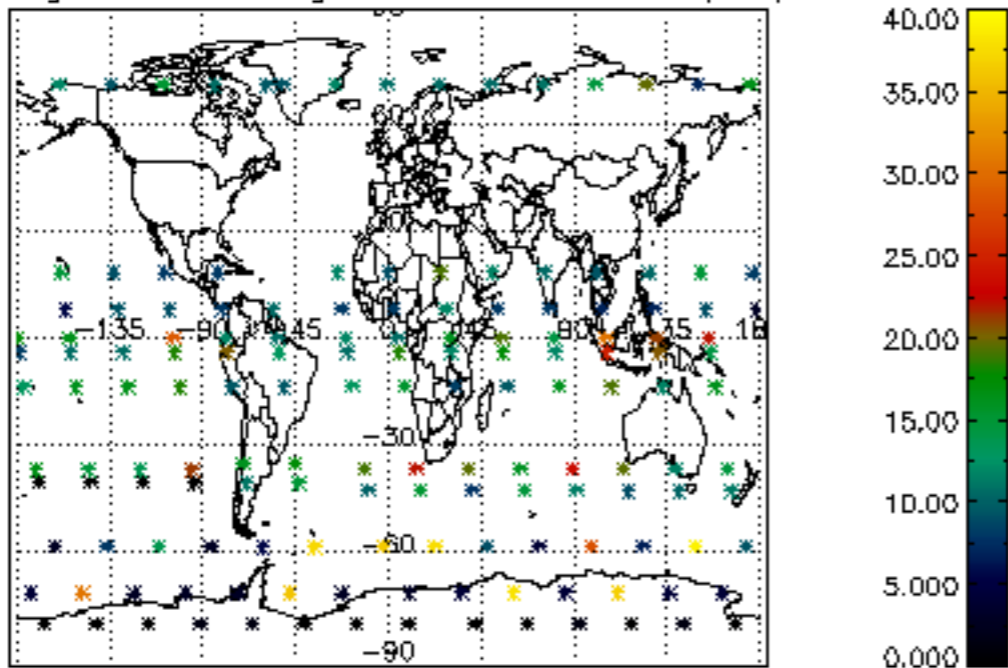
Percentage of cosmic ray hits per profile



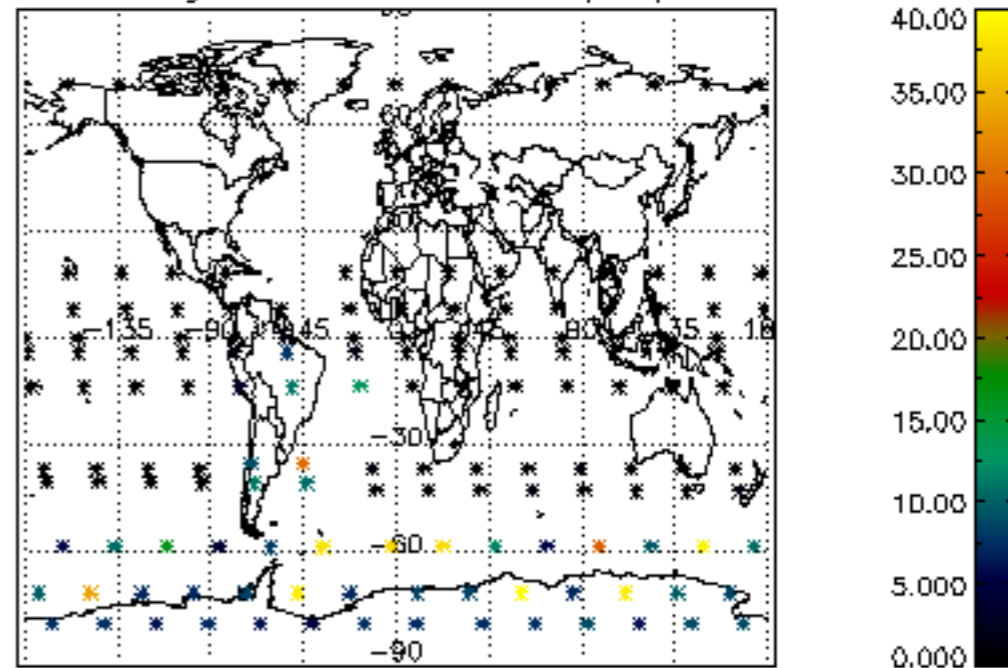
Percentage of datation errors per profile



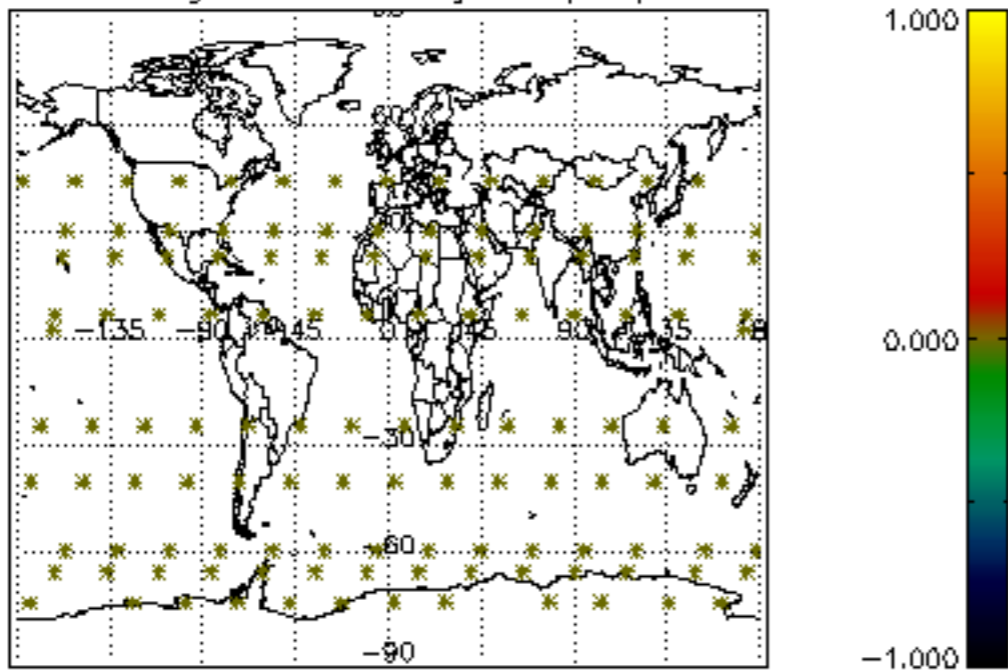
Percentage of star falling outside central band per profile



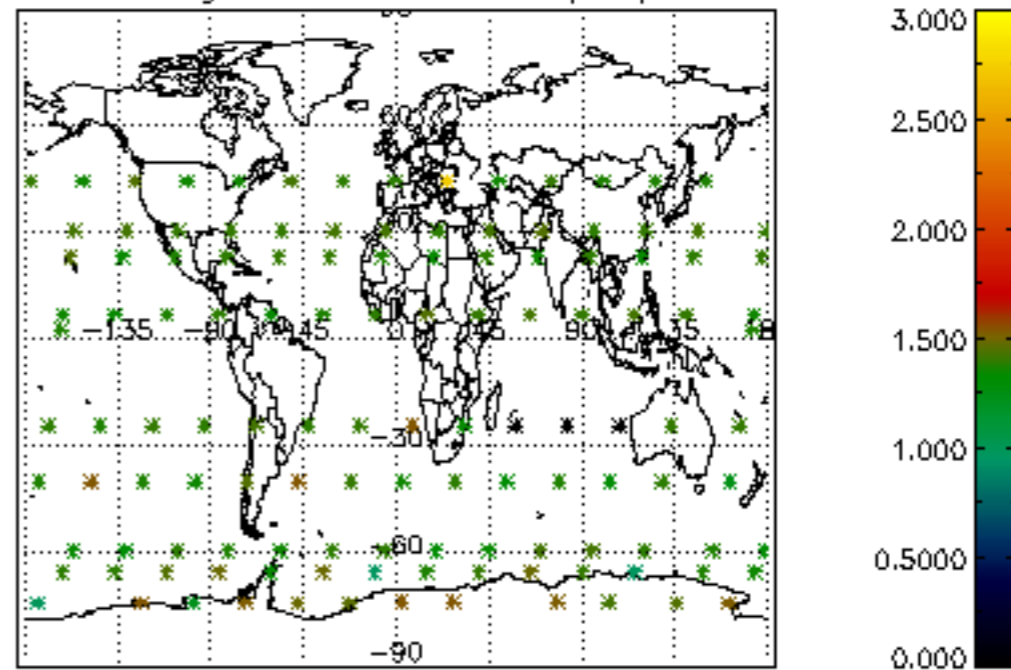
Percentage of saturation errors per profile



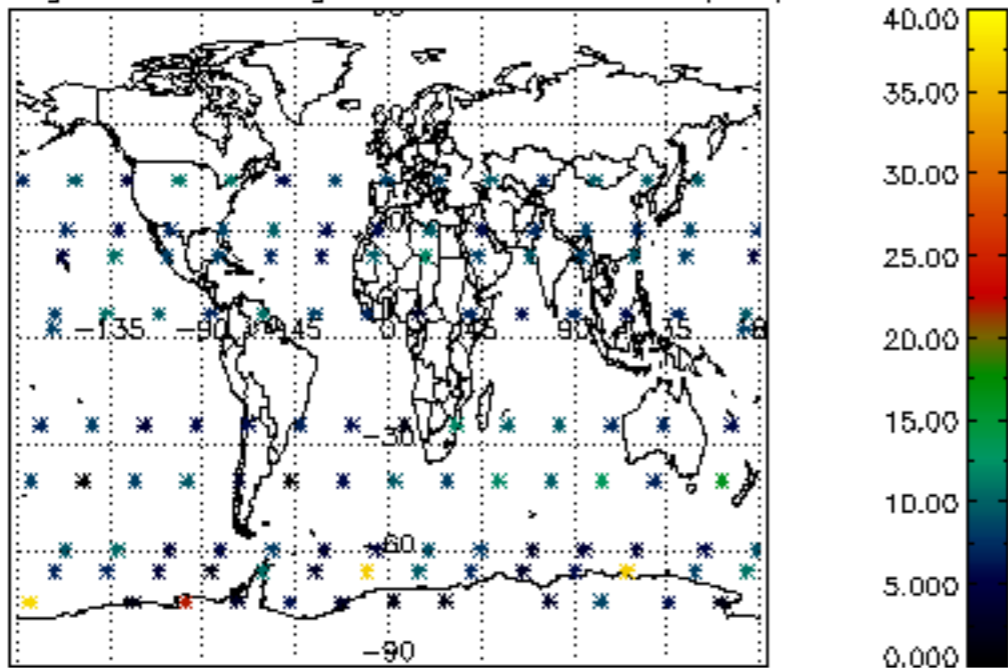
Percentage of cosmic ray hits per profile



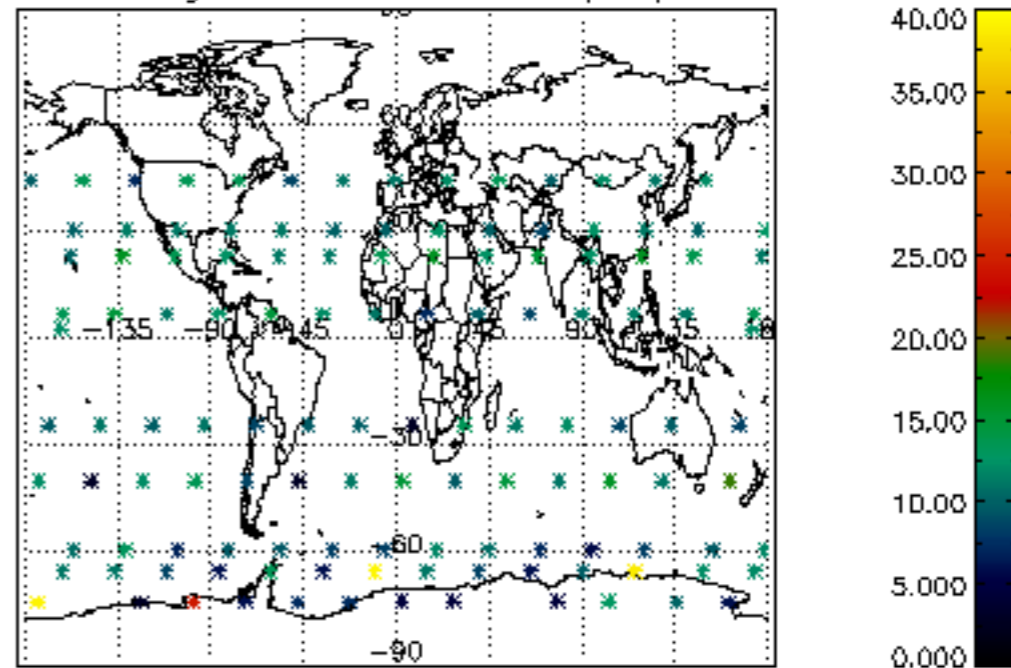
Percentage of datation errors per profile

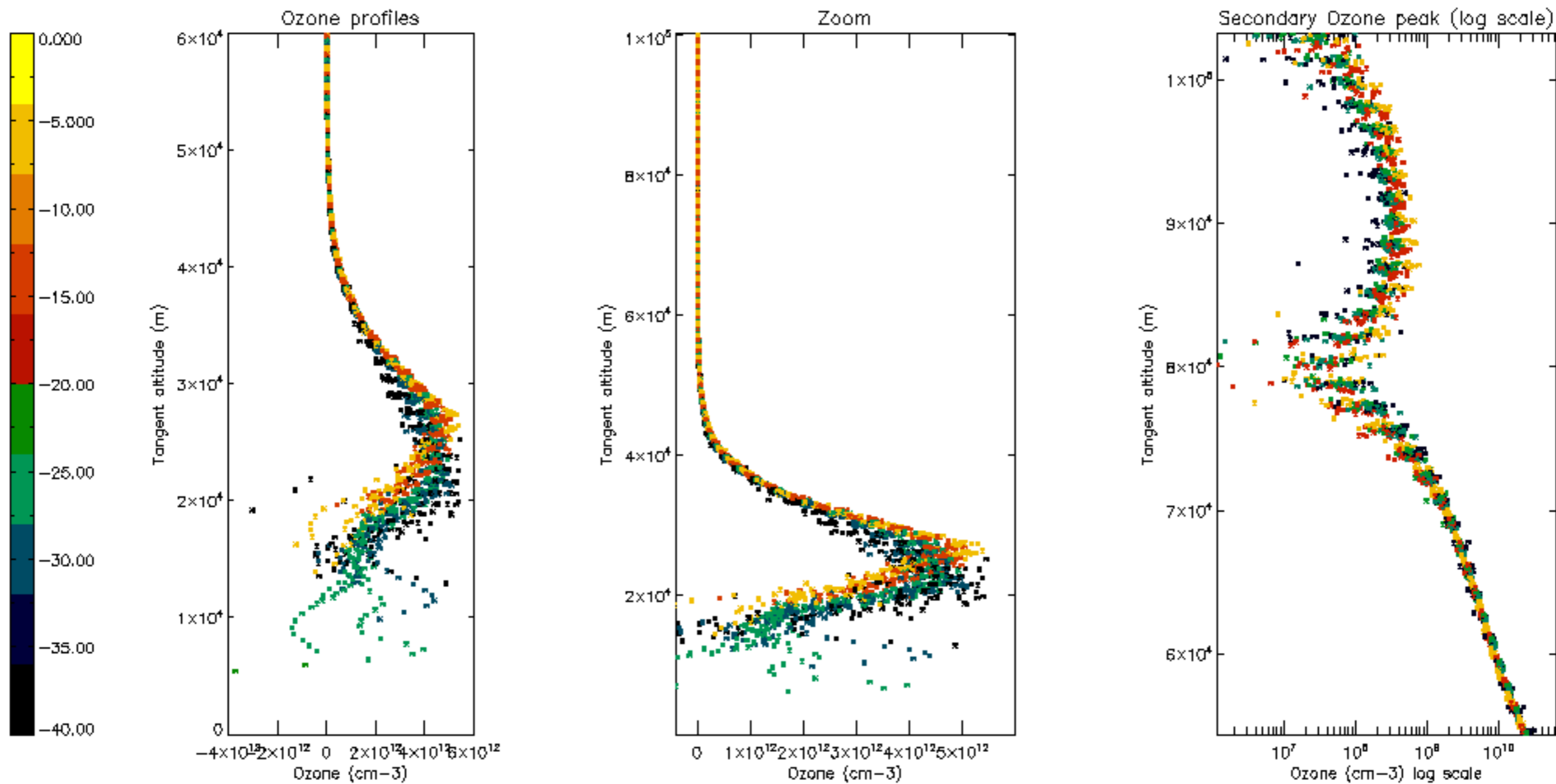


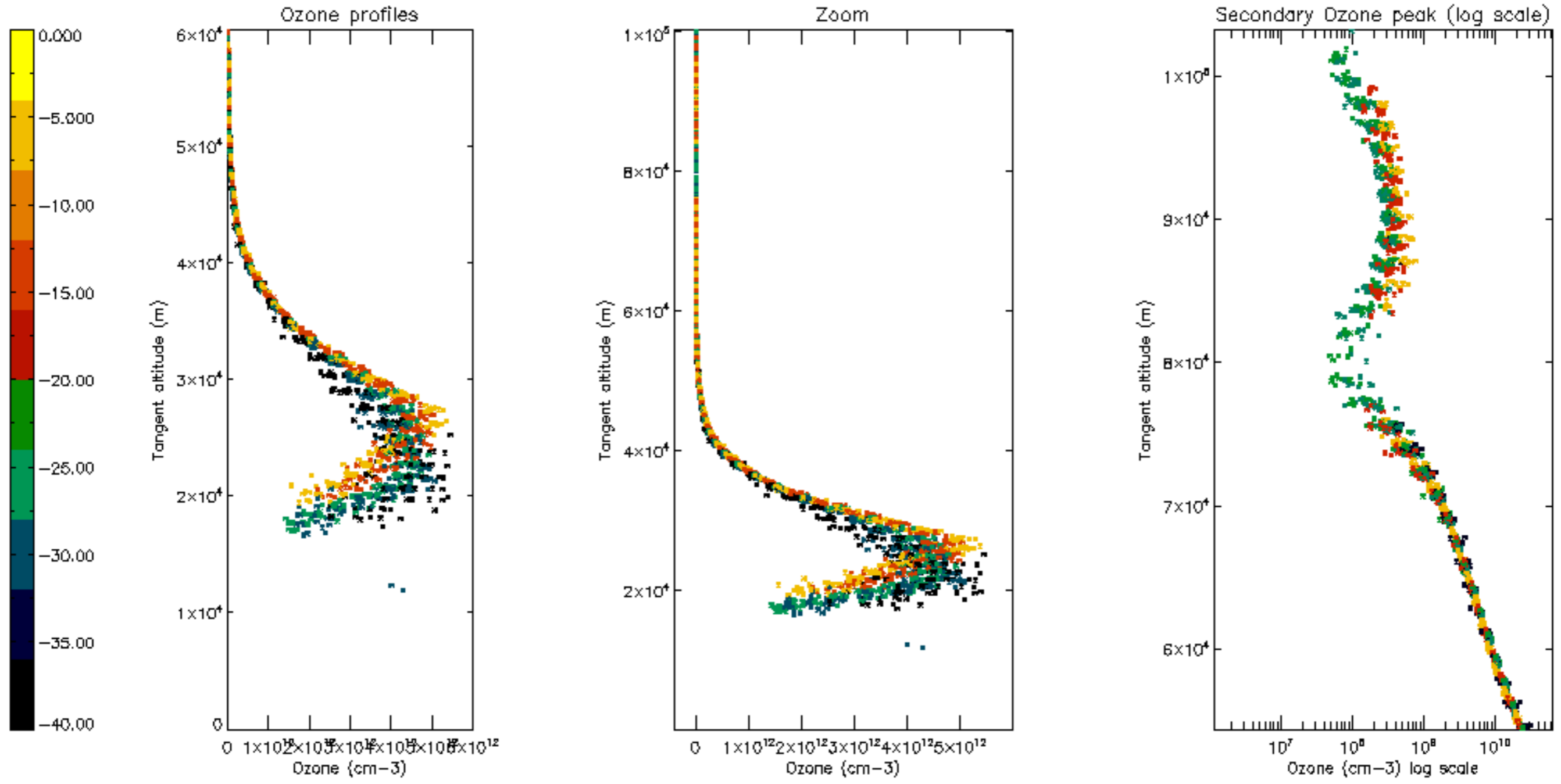
Percentage of star falling outside central band per profile

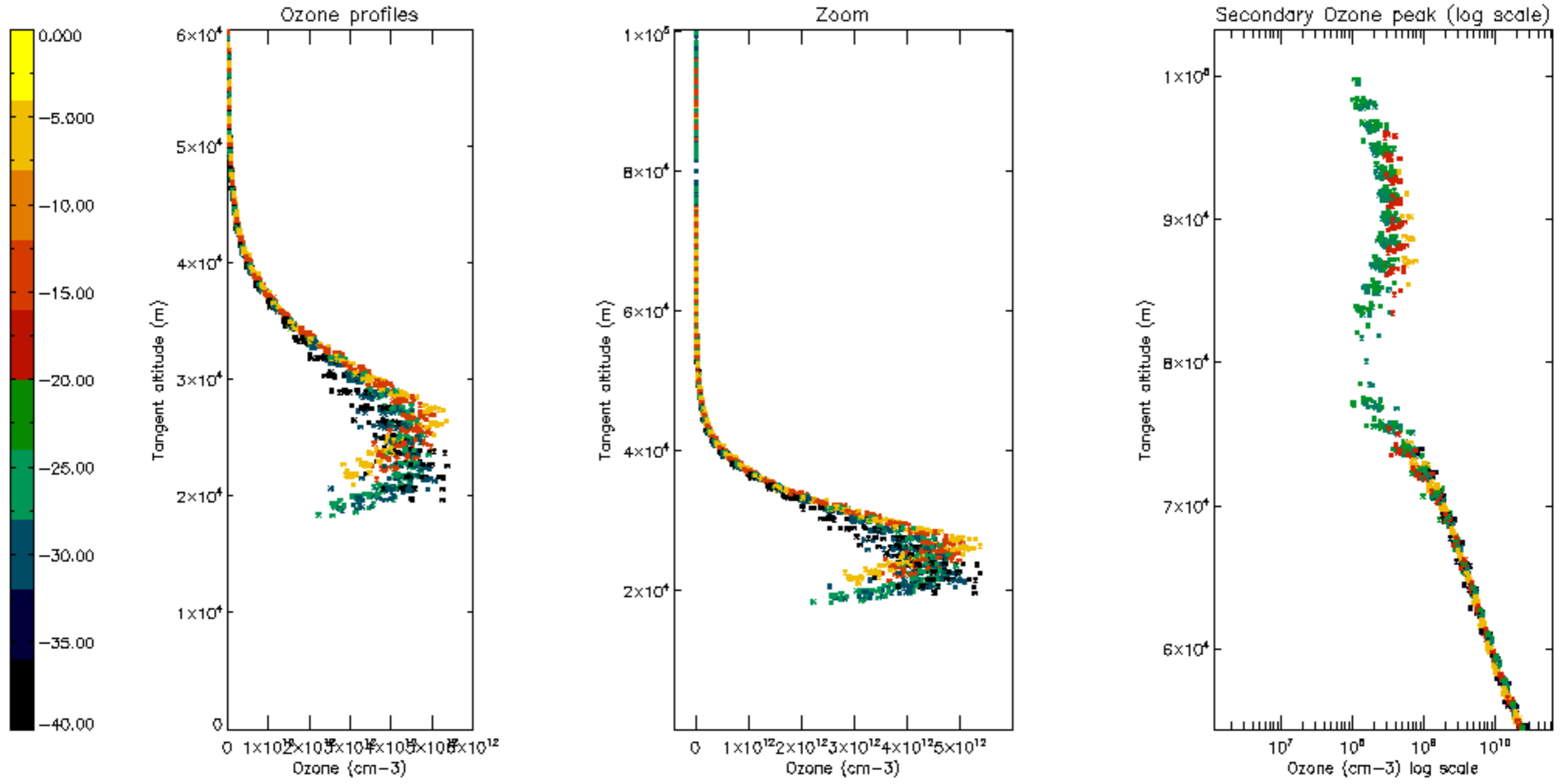


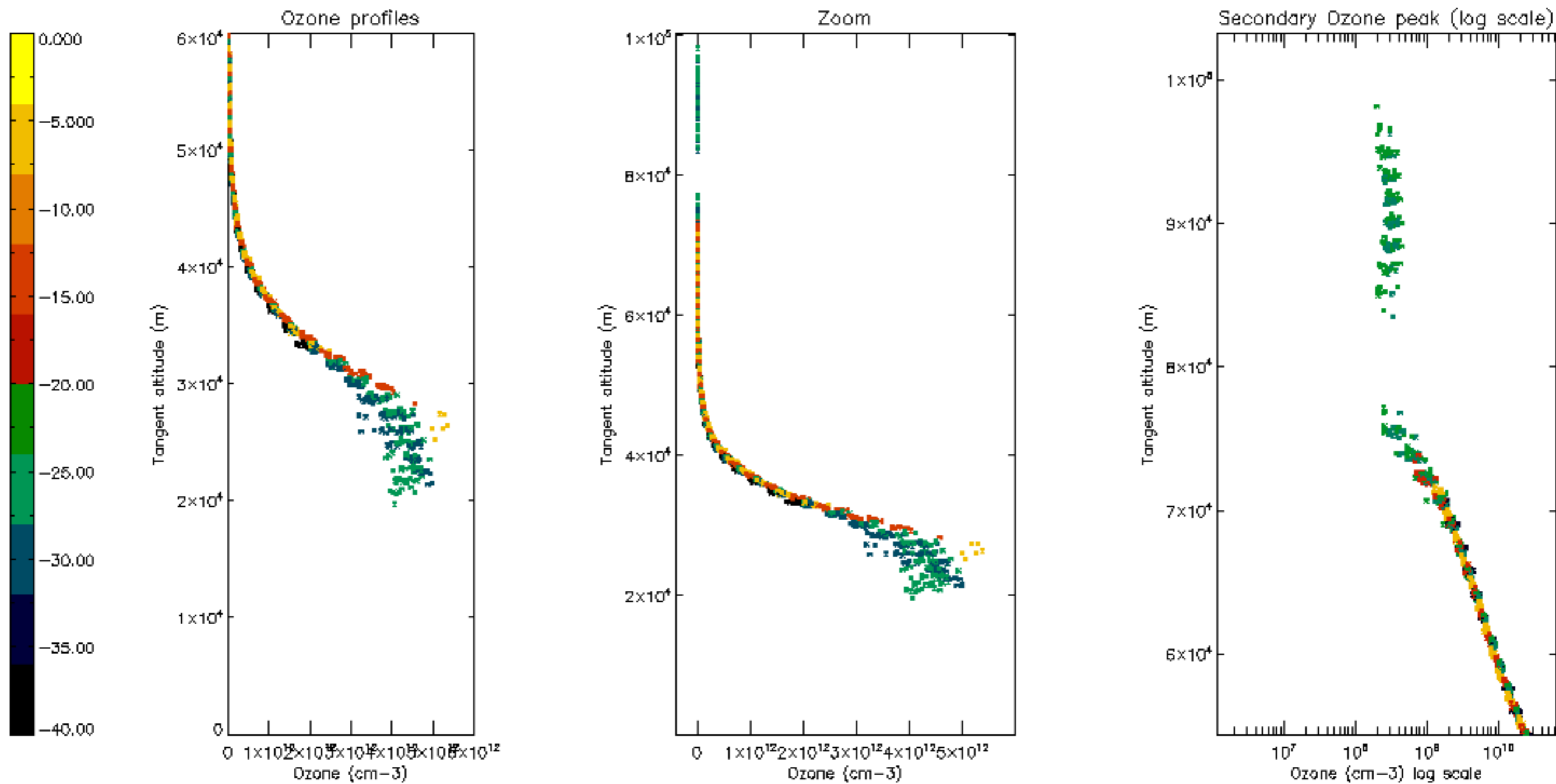
Percentage of saturation errors per profile

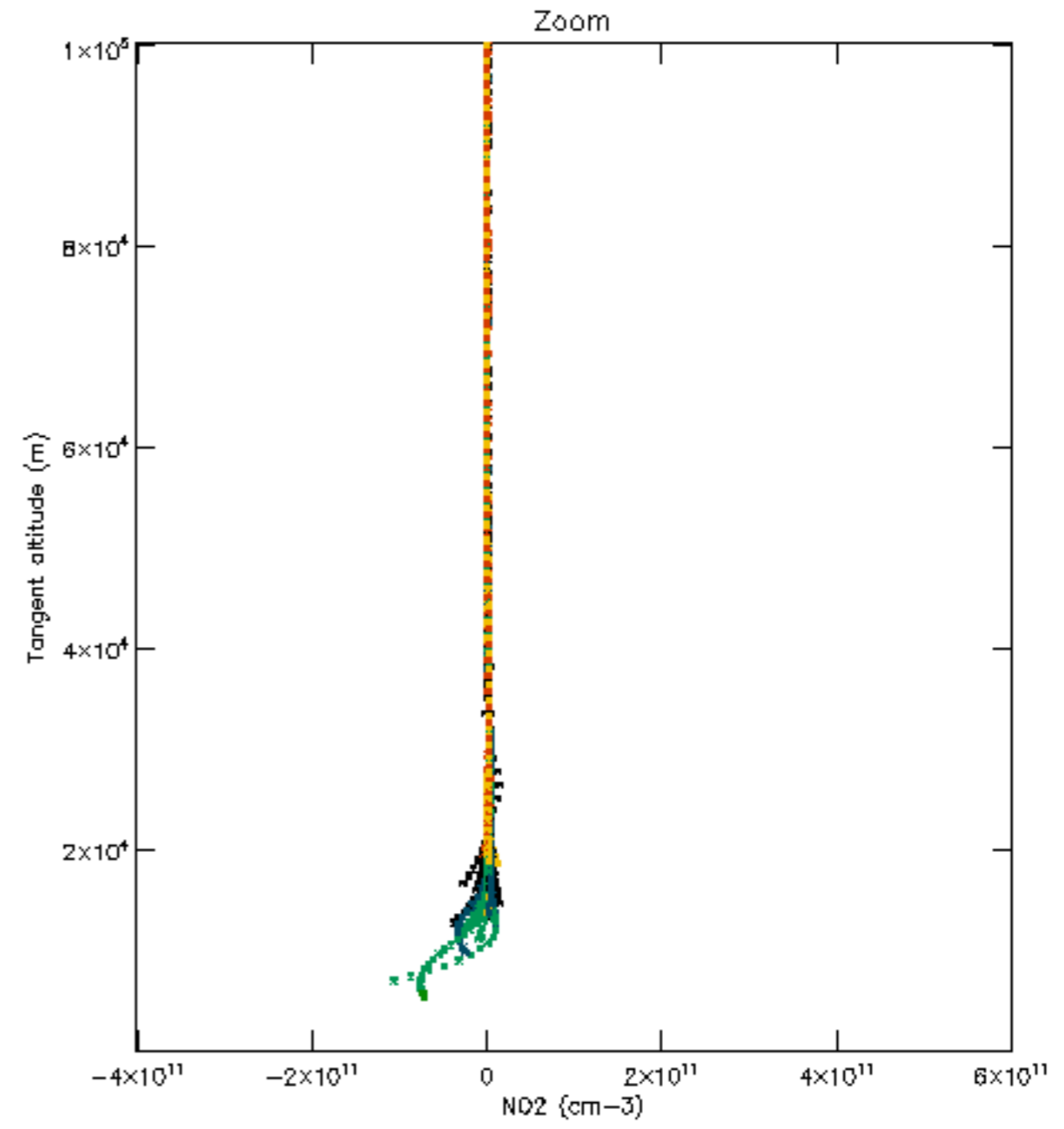
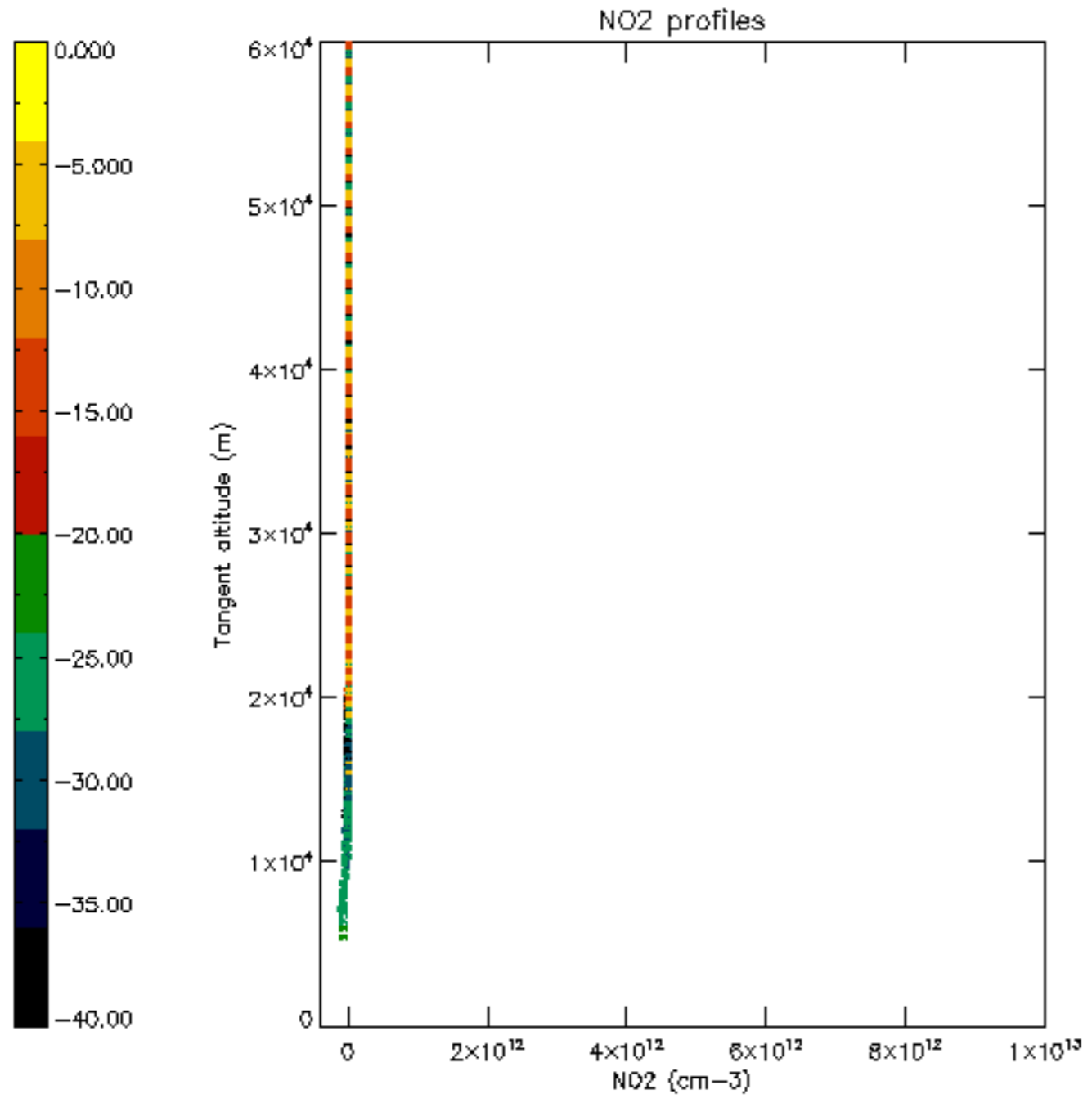


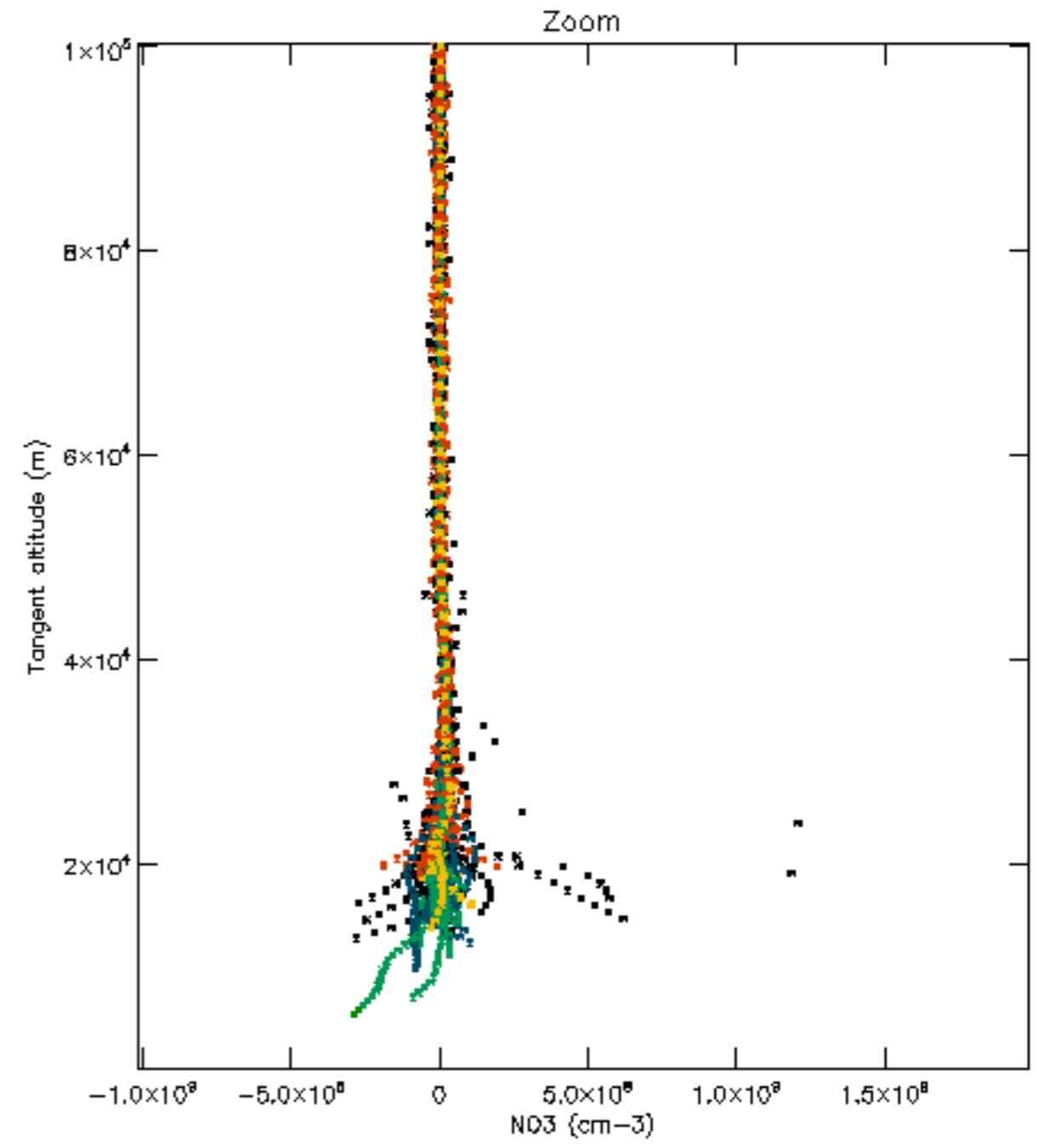
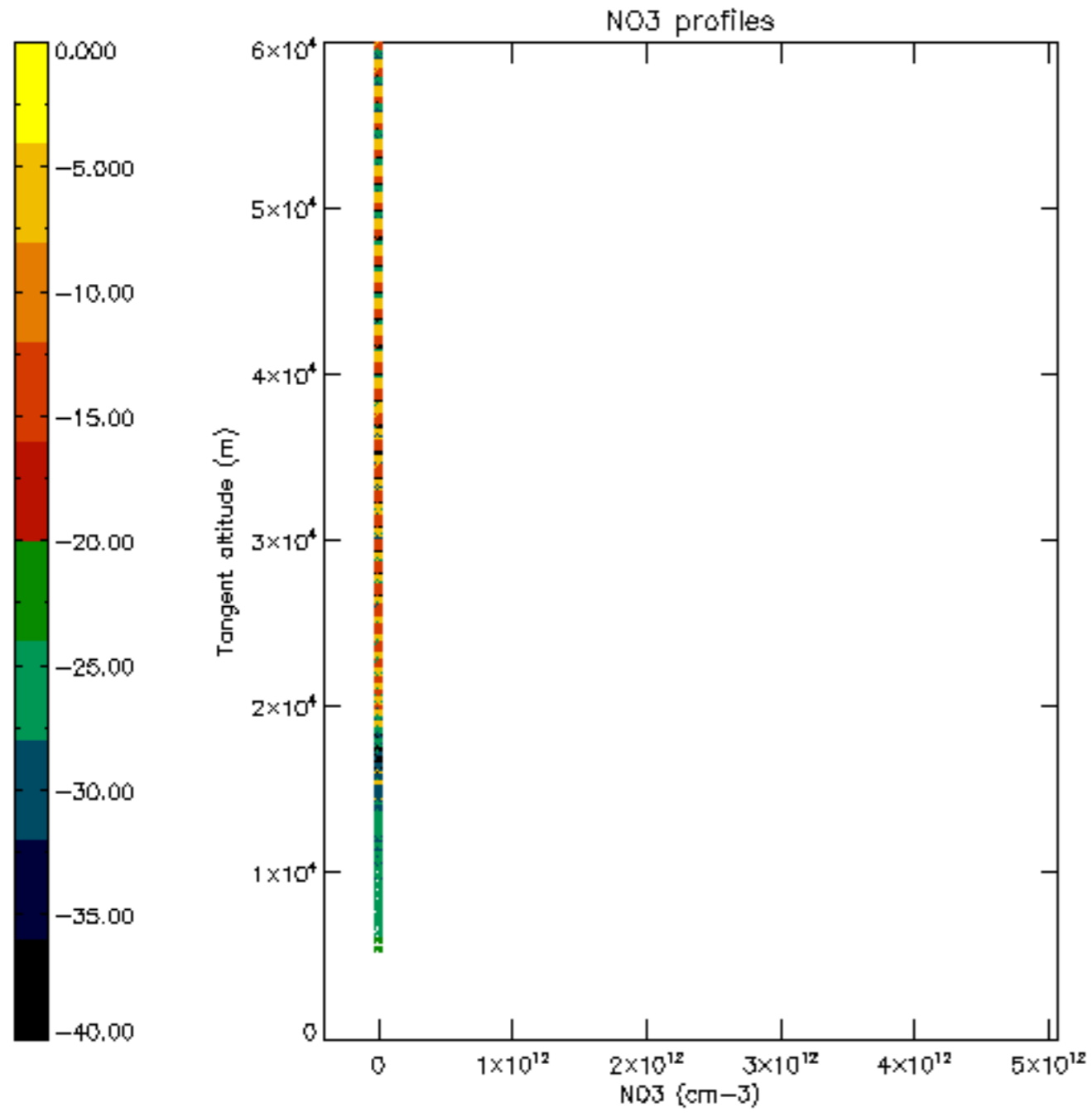


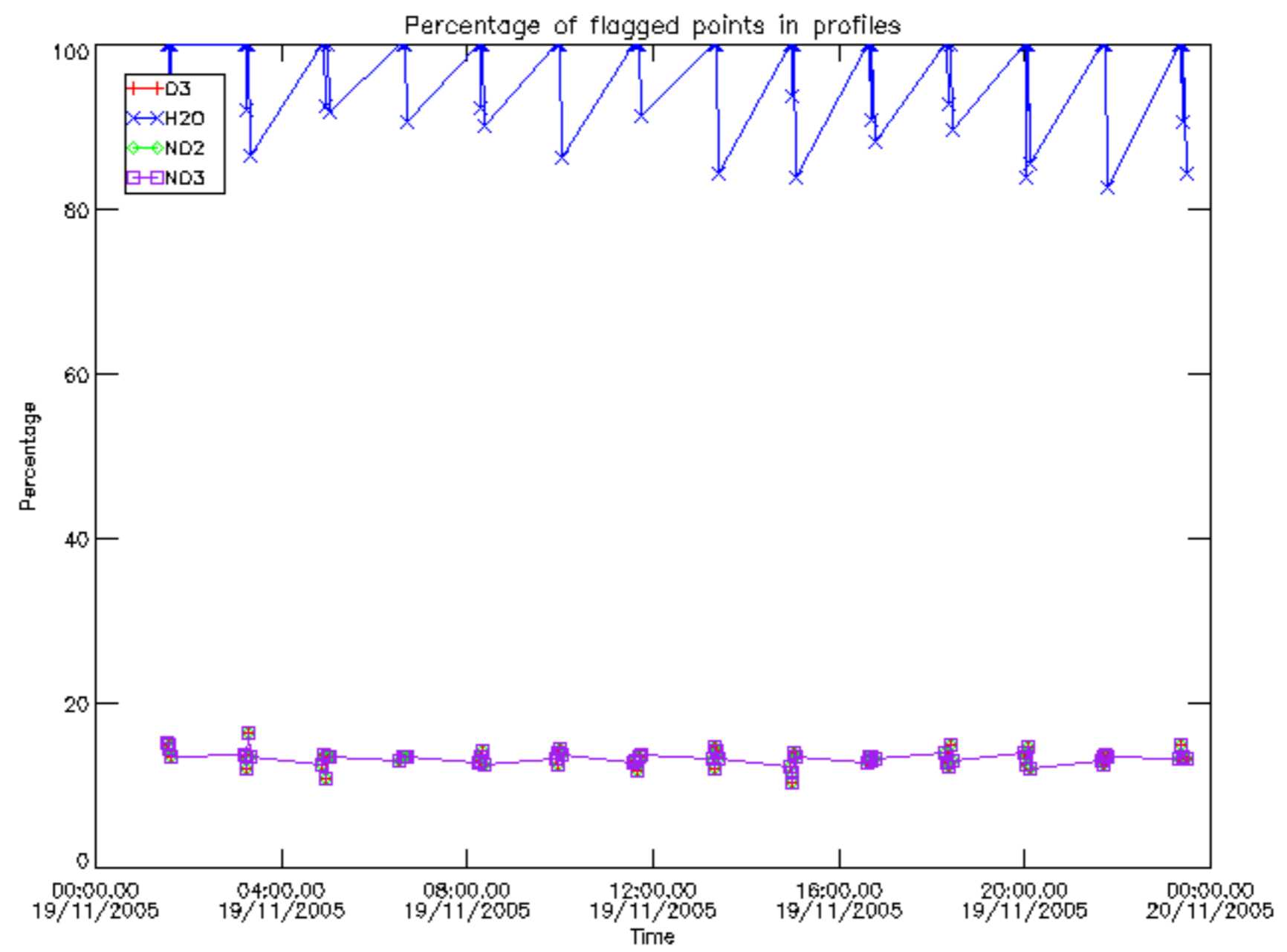




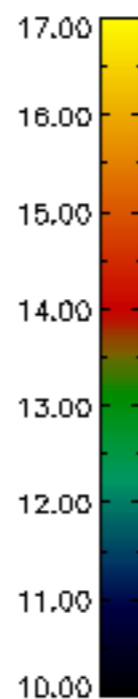
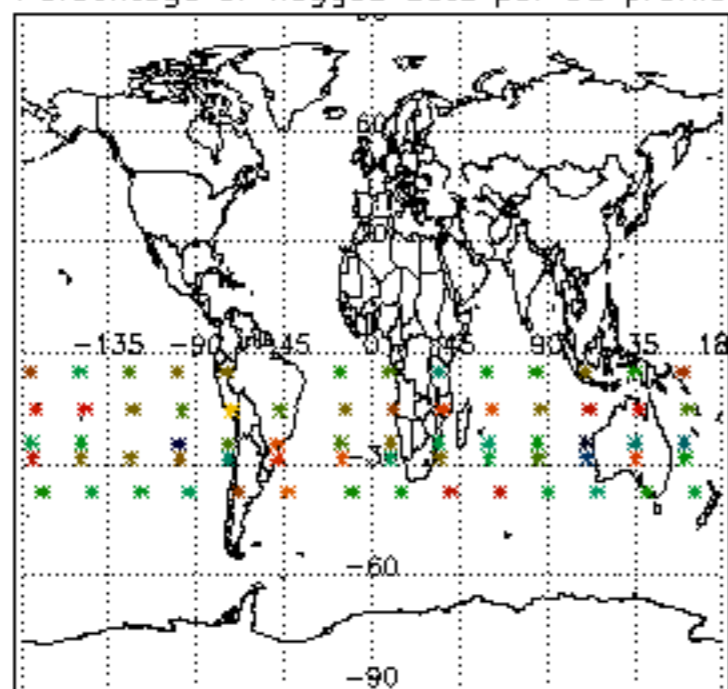




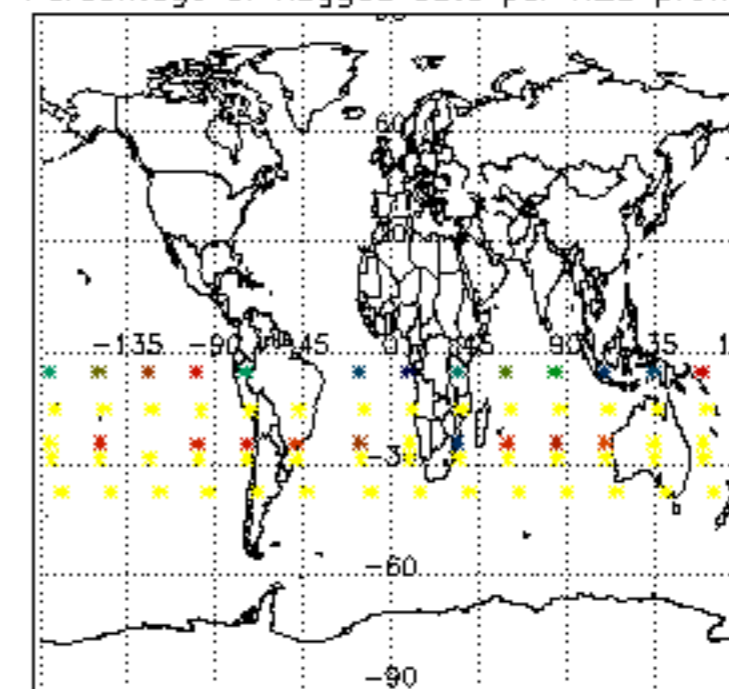




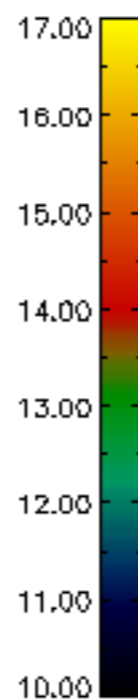
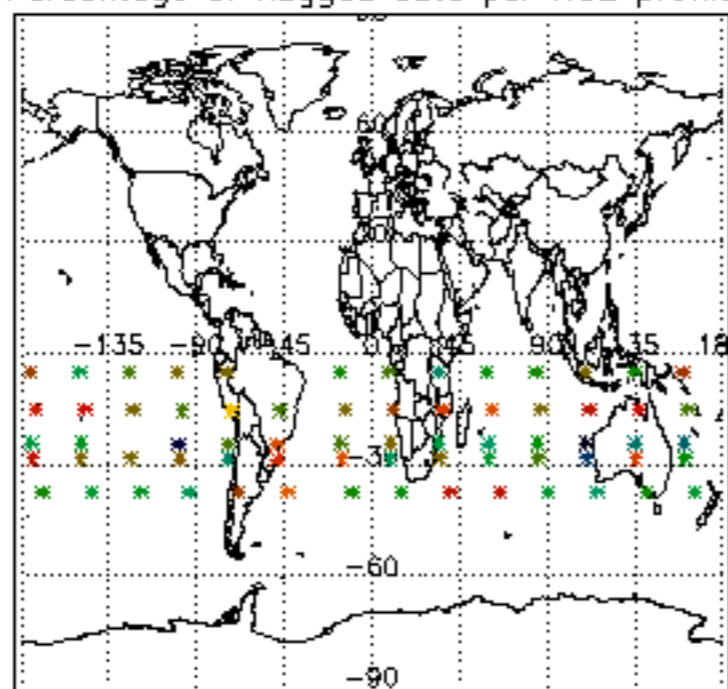
Percentage of flagged data per D3 profile



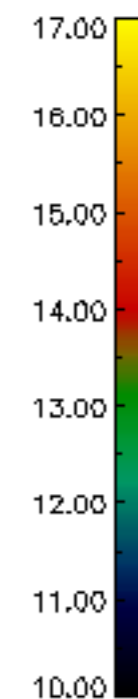
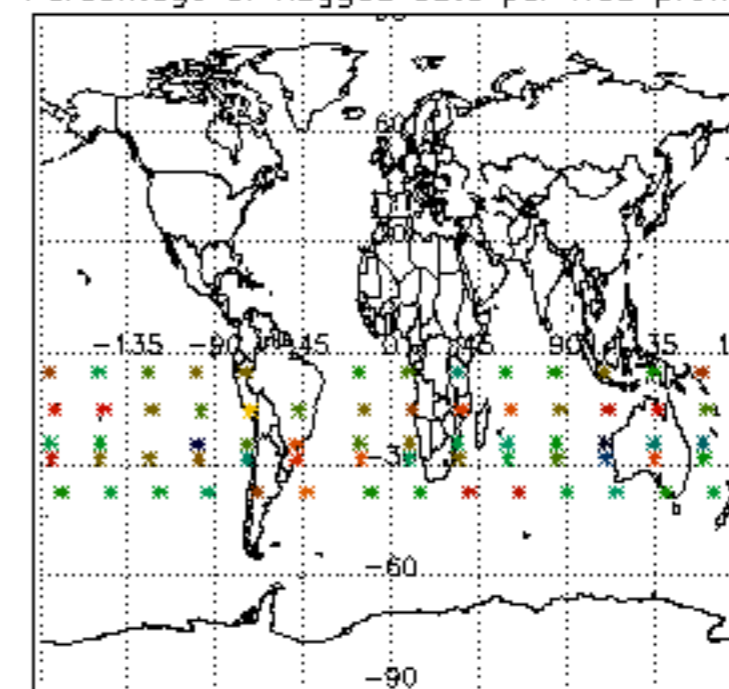
Percentage of flagged data per H2O profile

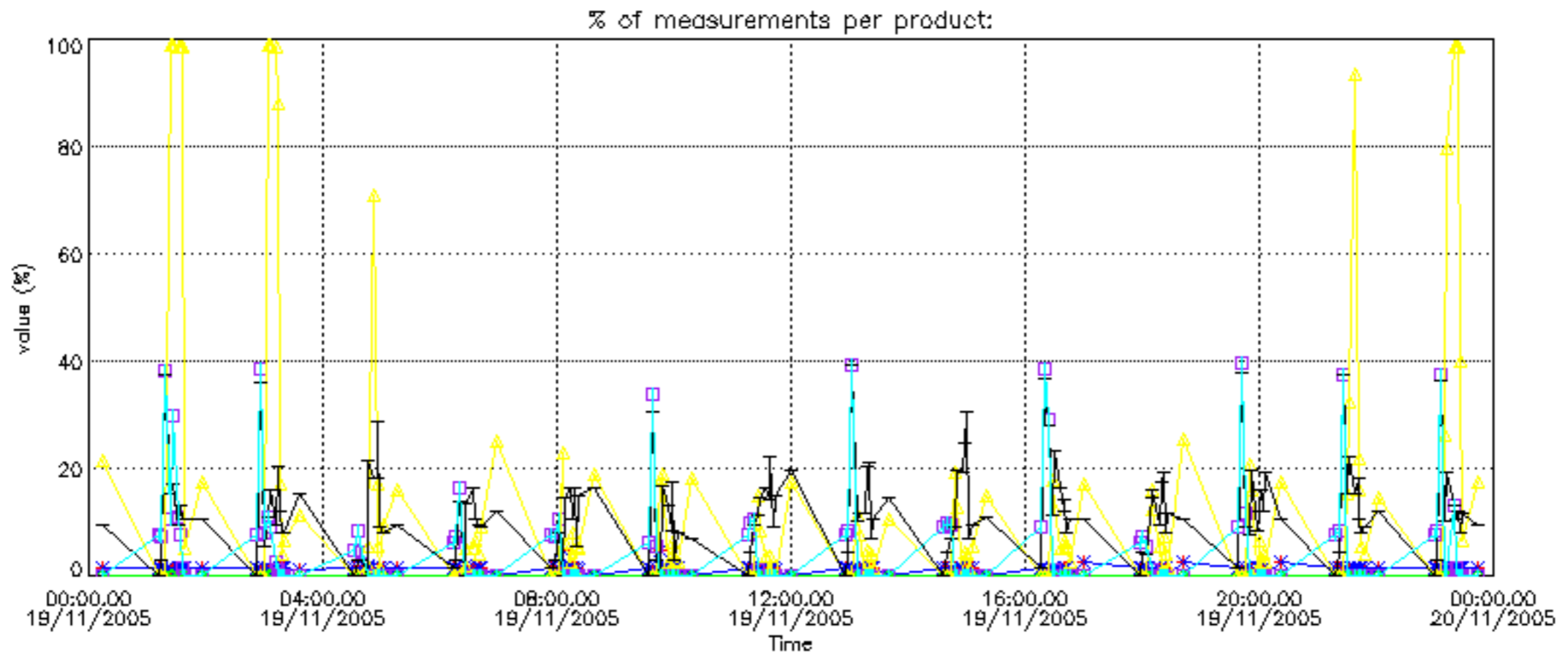


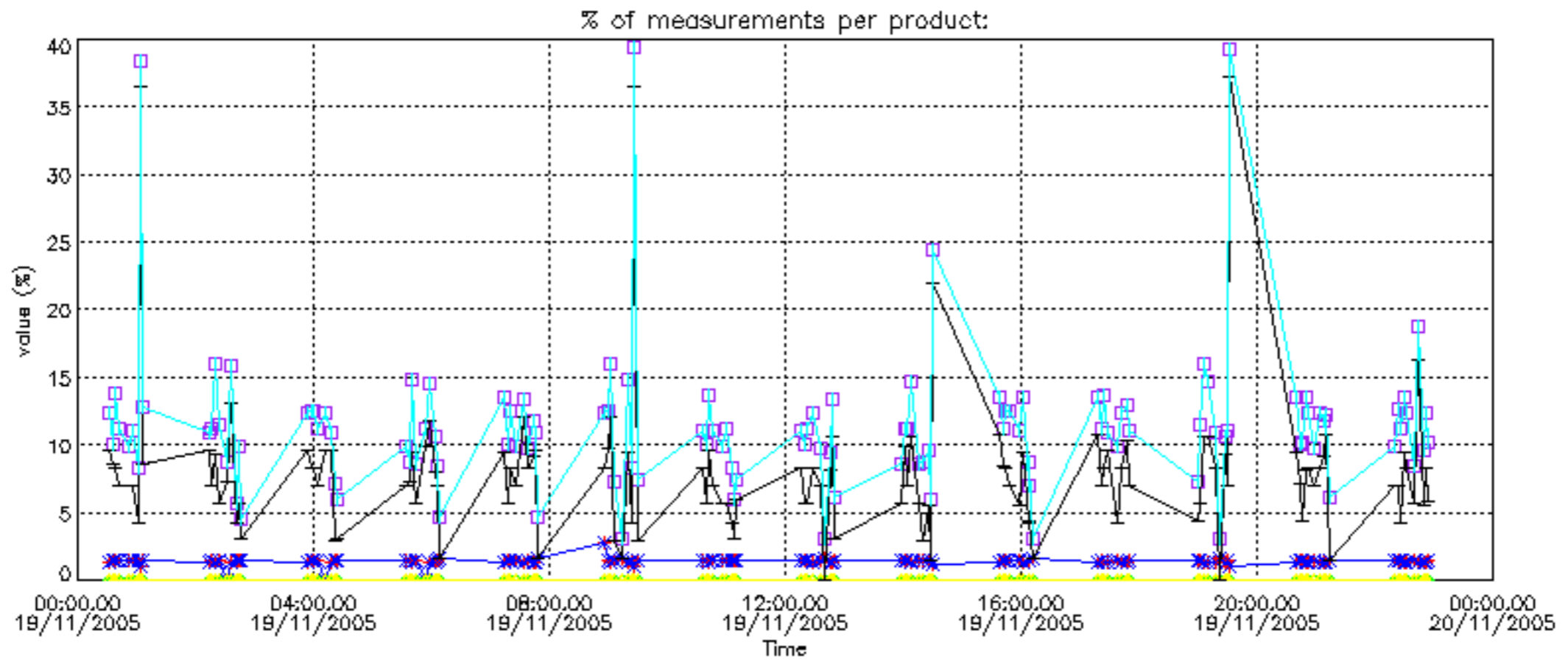
Percentage of flagged data per NO2 profile



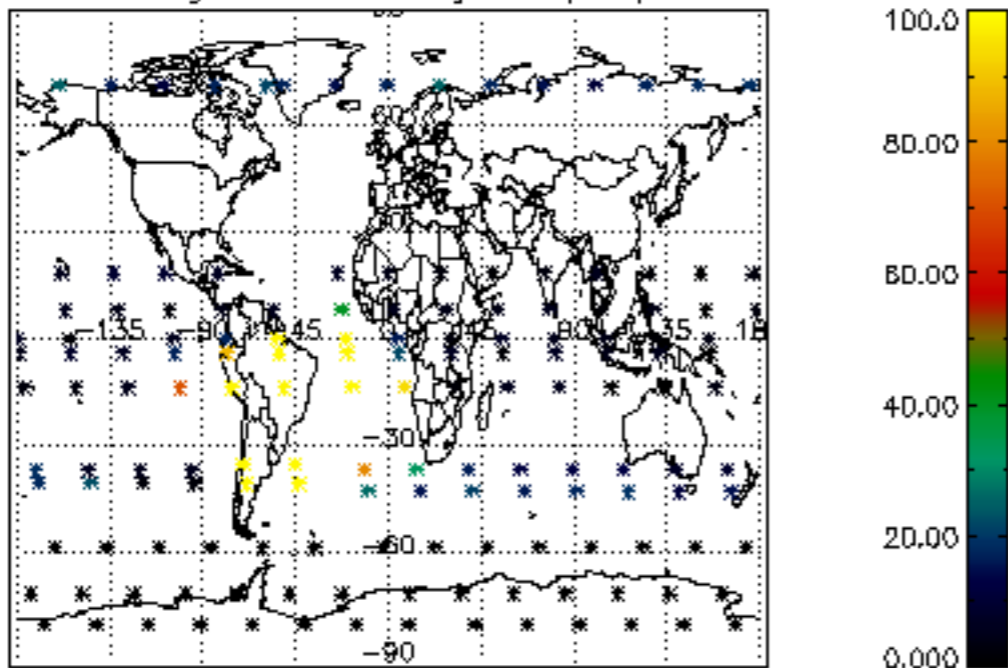
Percentage of flagged data per NO3 profile



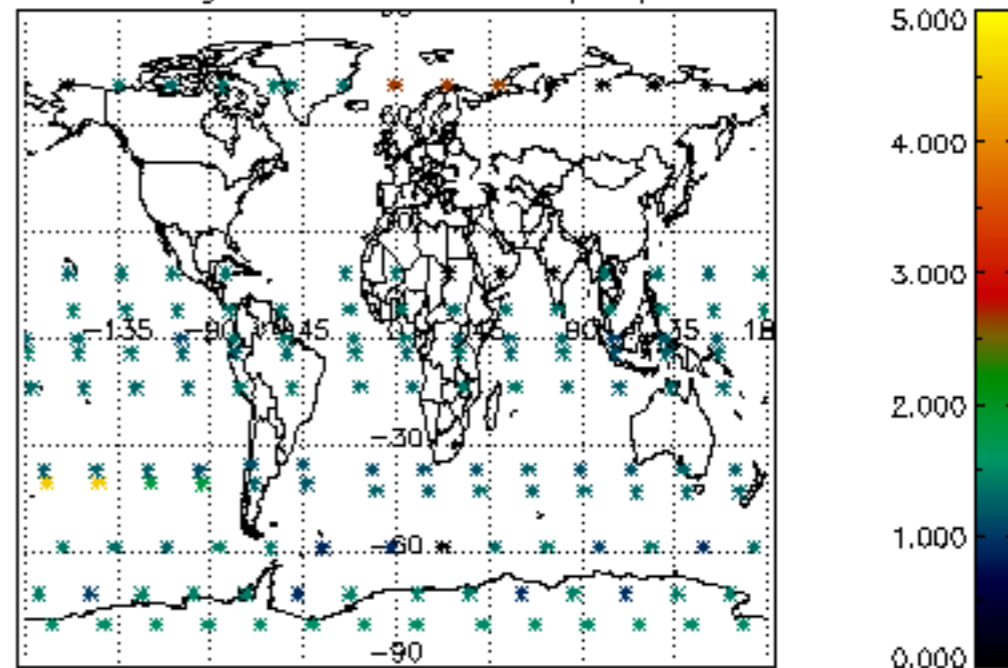




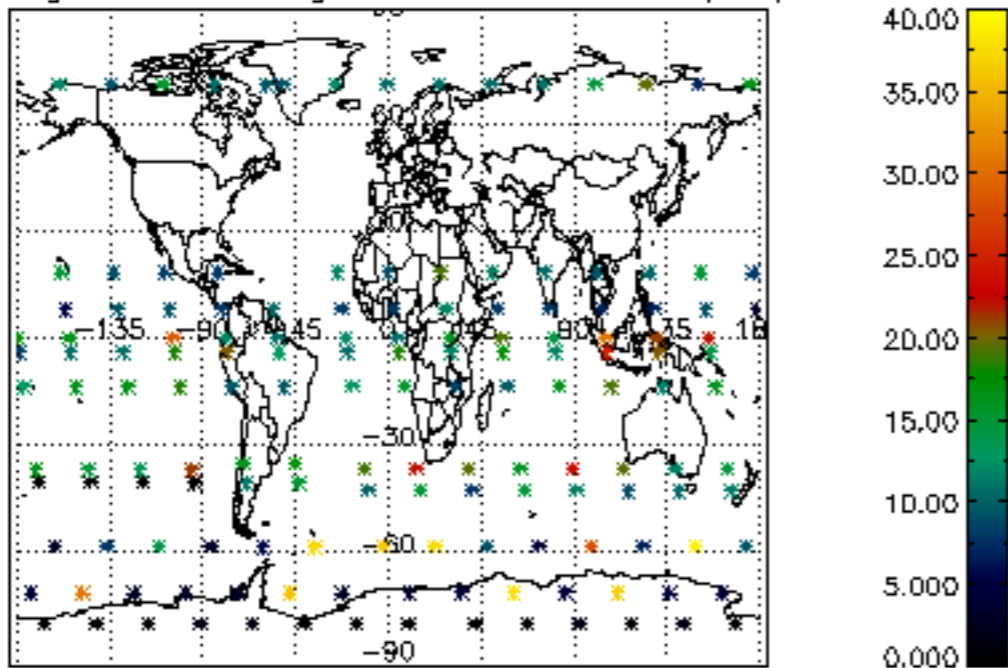
Percentage of cosmic ray hits per profile



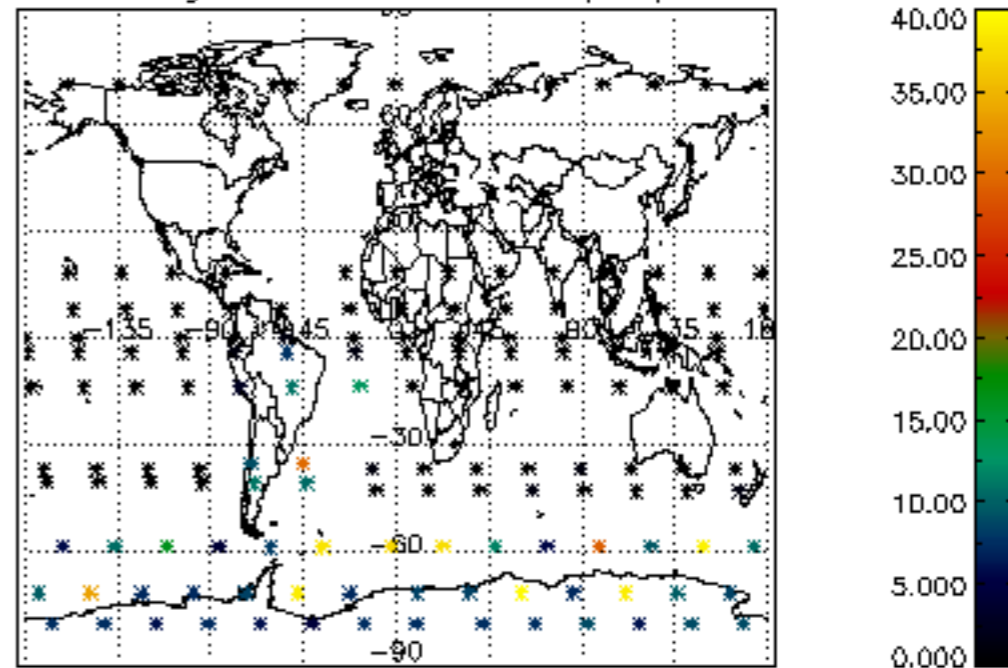
Percentage of datation errors per profile



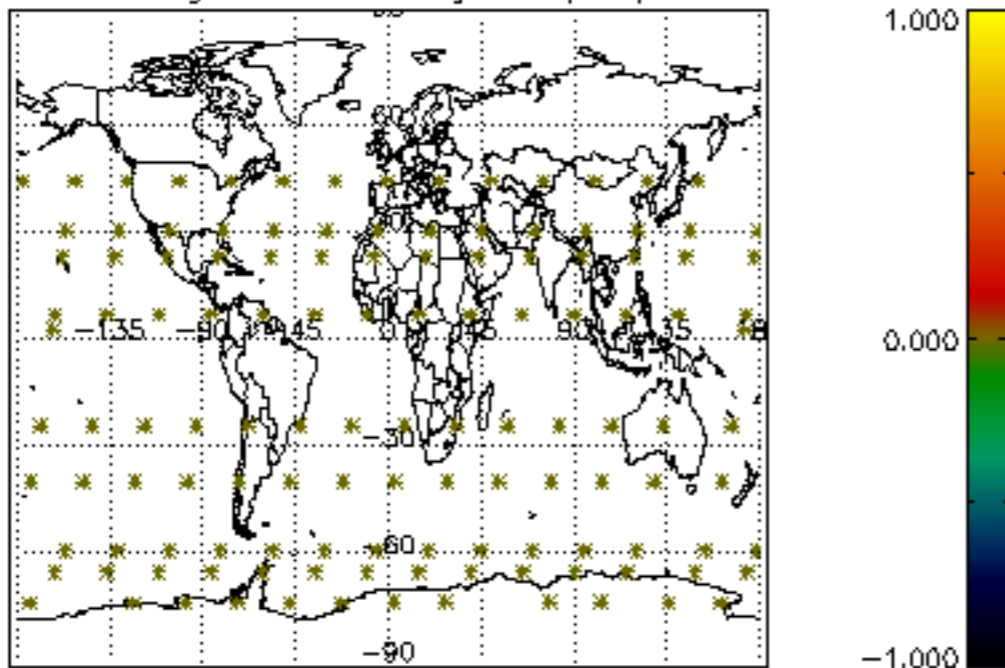
Percentage of star falling outside central band per profile



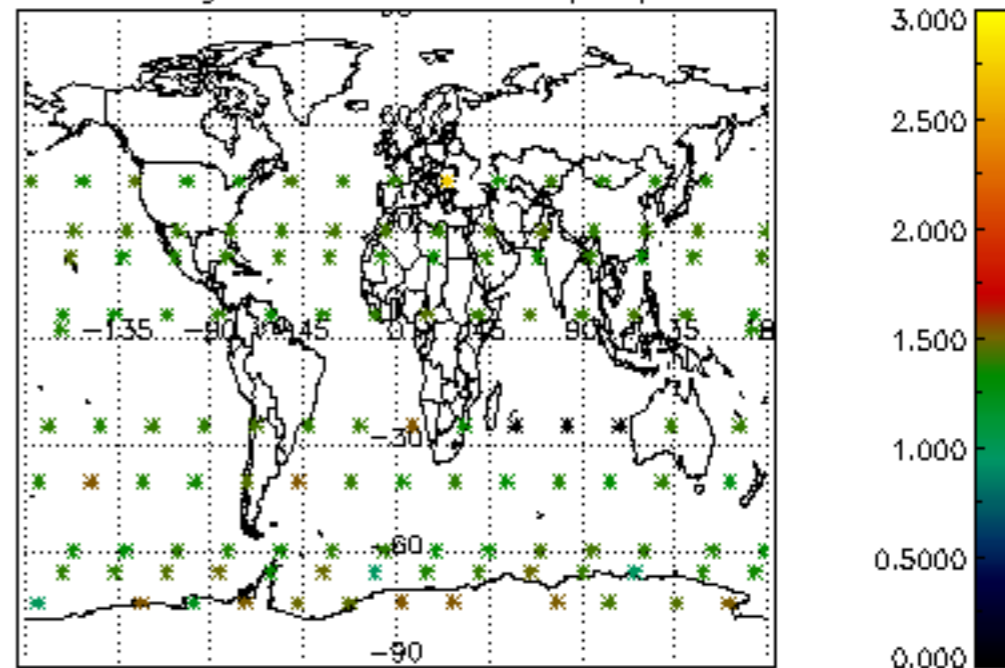
Percentage of saturation errors per profile



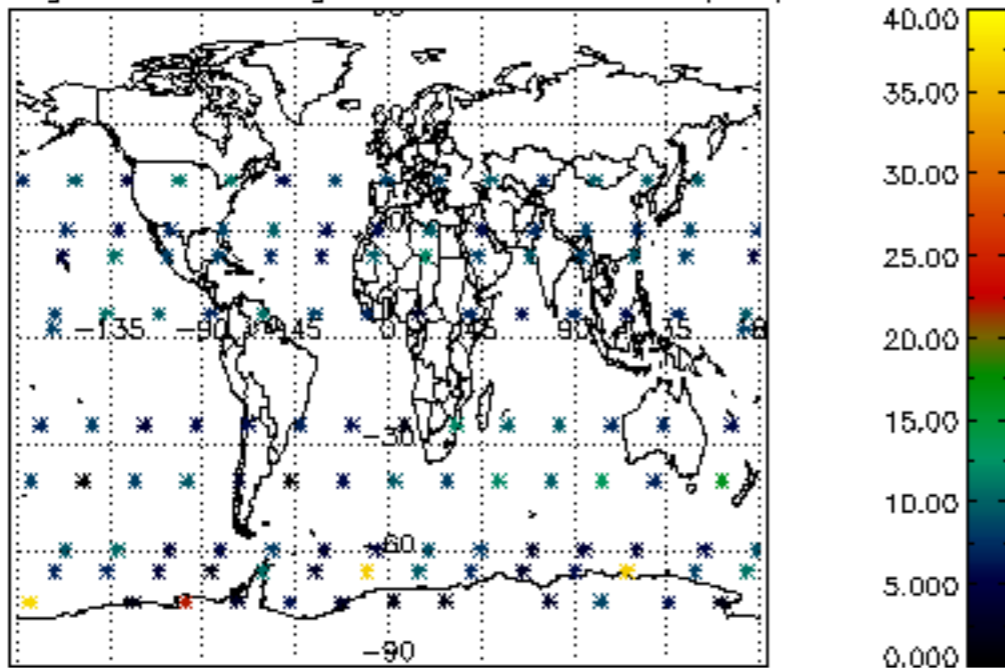
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

