

GOMOS Level 2 Daily Report

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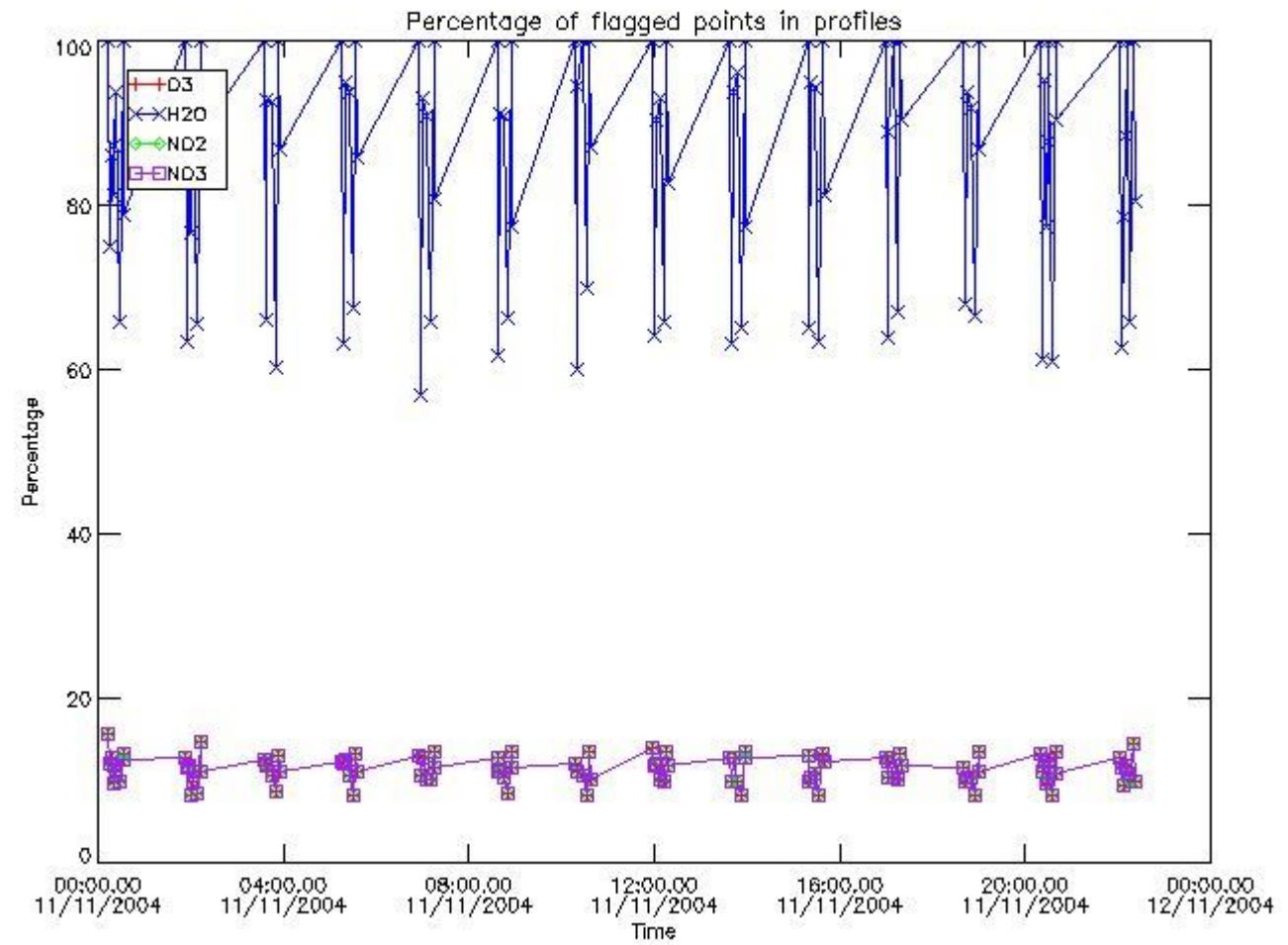
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397	GOM_NL__2PRFIN20041111_223540_000001062032_00044_14126_6098.N1	11-NOV-2004 22:35:40	Twilight	106.00	7	19Bet Ori	0.10000	14000.	212	14126	No
398	GOM_NL__2PRFIN20041111_223821_000000532032_00044_14126_6099.N1	11-NOV-2004 22:38:21	Twilight	52.500	94	92Alp Cet	2.5260	3100.0	105	14126	No
399	GOM_NL__2PRFIN20041111_224304_000000402032_00044_14126_6100.N1	11-NOV-2004 22:43:04	Bright	40.000	105	6Bet Ari	2.6450	8900.0	80	14126	No
400	GOM_NL__2PRFIN20041111_224707_000000402032_00044_14126_6101.N1	11-NOV-2004 22:47:07	Bright	40.000	173	4Bet Tri	3.0040	8900.0	80	14126	No
401	GOM_NL__2PRFIN20041111_224914_000000392032_00044_14126_6102.N1	11-NOV-2004 22:49:14	Bright	38.500	73	57Gam1And	2.2600	13100.	77	14126	No
402	GOM_NL__2PRFIN20041111_225103_000000452032_00044_14126_6103.N1	11-NOV-2004 22:51:03	Bright	45.000	149	45Eps Per	2.8880	30000.	90	14126	No
403	GOM_NL__2PRFIN20041111_225238_000000442032_00044_14126_6104.N1	11-NOV-2004 22:52:38	Bright	44.000	35	33Alp Per	1.7950	6250.0	88	14126	No
404	GOM_NL__2PRFIN20041111_225410_000000392032_00044_14126_6105.N1	11-NOV-2004 22:54:10	Bright	39.000	110	37Del Cas	2.6780	8900.0	78	14126	No
405	GOM_NL__2PRFIN20041111_225653_000000592032_00044_14126_6106.N1	11-NOV-2004 22:56:53	Bright	58.500	6	13Alp Aur	0.080000	3400.0	117	14126	No
406	GOM_NL__2PRFIN20041111_230224_000000352032_00044_14126_6107.N1	11-NOV-2004 23:02:24	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	14126	No
407	GOM_NL__2PRFIN20041111_230640_000000392032_00044_14126_6108.N1	11-NOV-2004 23:06:40	Bright	39.000	60	7Bet UMi	2.0810	3950.0	78	14126	No
408	GOM_NL__2PRFIN20041111_231014_000000432032_00044_14126_6109.N1	11-NOV-2004 23:10:14	Bright	43.000	36	50Alp UMa	1.8000	6300.0	86	14126	No
409	GOM_NL__2PRFIN20041111_231152_000000432032_00044_14126_6110.N1	11-NOV-2004 23:11:52	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	14126	No
410	GOM_NL__2PRFIN20041111_231355_000000372032_00044_14126_6111.N1	11-NOV-2004 23:13:55	Bright	37.000	39	85Eta UMa	1.8540	24000.	74	14126	No
411	GOM_NL__2PRFIN20041111_231550_000000452032_00044_14126_6112.N1	11-NOV-2004 23:15:50	Bright	44.500	174	52Psi UMa	3.0040	4400.0	89	14126	No
412	GOM_NL__2PRFIN20041111_231726_000000372032_00044_14126_6113.N1	11-NOV-2004 23:17:26	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	14126	No
413	GOM_NL__2PRFIN20041111_232524_000000822032_00044_14126_6114.N1	11-NOV-2004 23:25:24	Bright	82.000	166	17Eps Leo	2.9800	6000.0	164	14126	No
414	GOM_NL__2PRFIN20041111_232956_000000812032_00044_14126_6115.N1	11-NOV-2004 23:29:56	Twilight	81.000	22	32Alp Leo	1.3600	15200.	162	14126	No
415	GOM_NL__2PRFIN20041111_233347_000000432032_00044_14126_6116.N1	11-NOV-2004 23:33:47	Twilight	43.000	100	4Gam Crv	2.5800	13100.	86	14126	No
416	GOM_NL__2PRFIN20041111_233515_000000472032_00044_14126_6117.N1	11-NOV-2004 23:35:15	Twilight	47.000	171	2Eps Crv	3.0010	4250.0	94	14126	No

3. Quality information per product

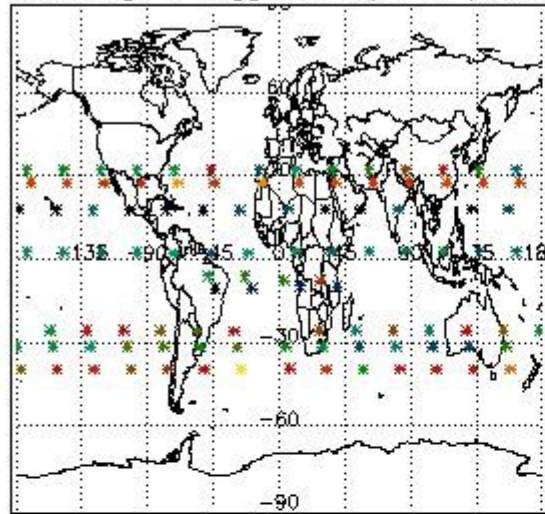
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

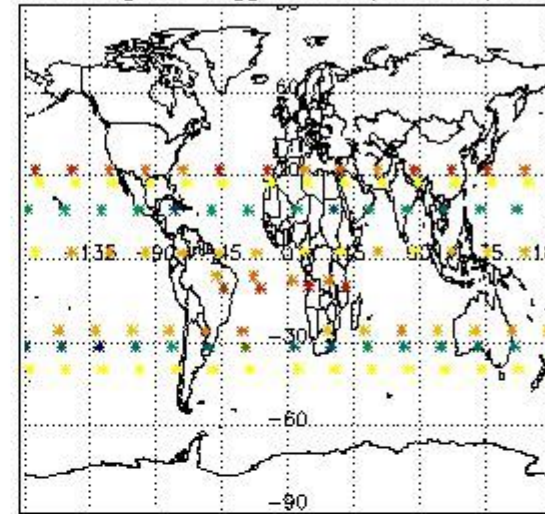


3.2 Plot quality information per product (world map)

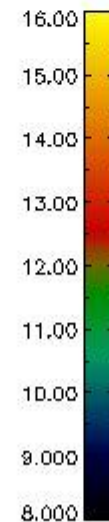
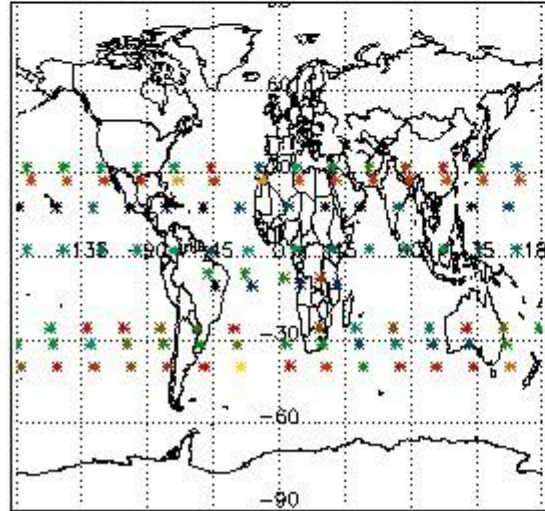
Percentage of flagged data per O3 profile



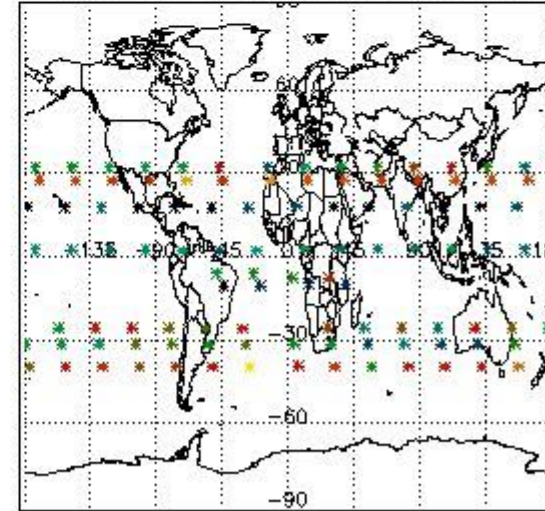
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

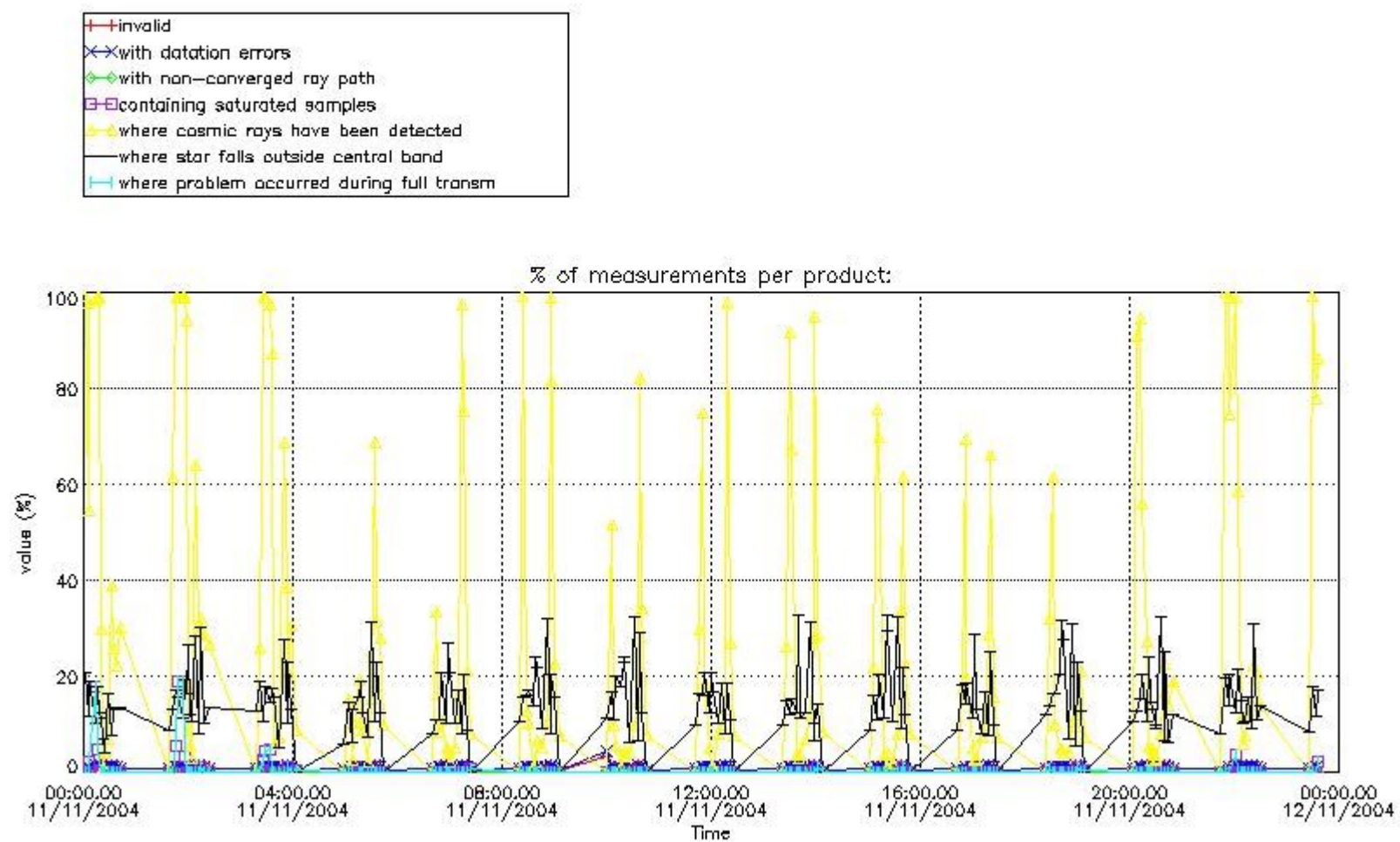


4. Level 1 quality information per product

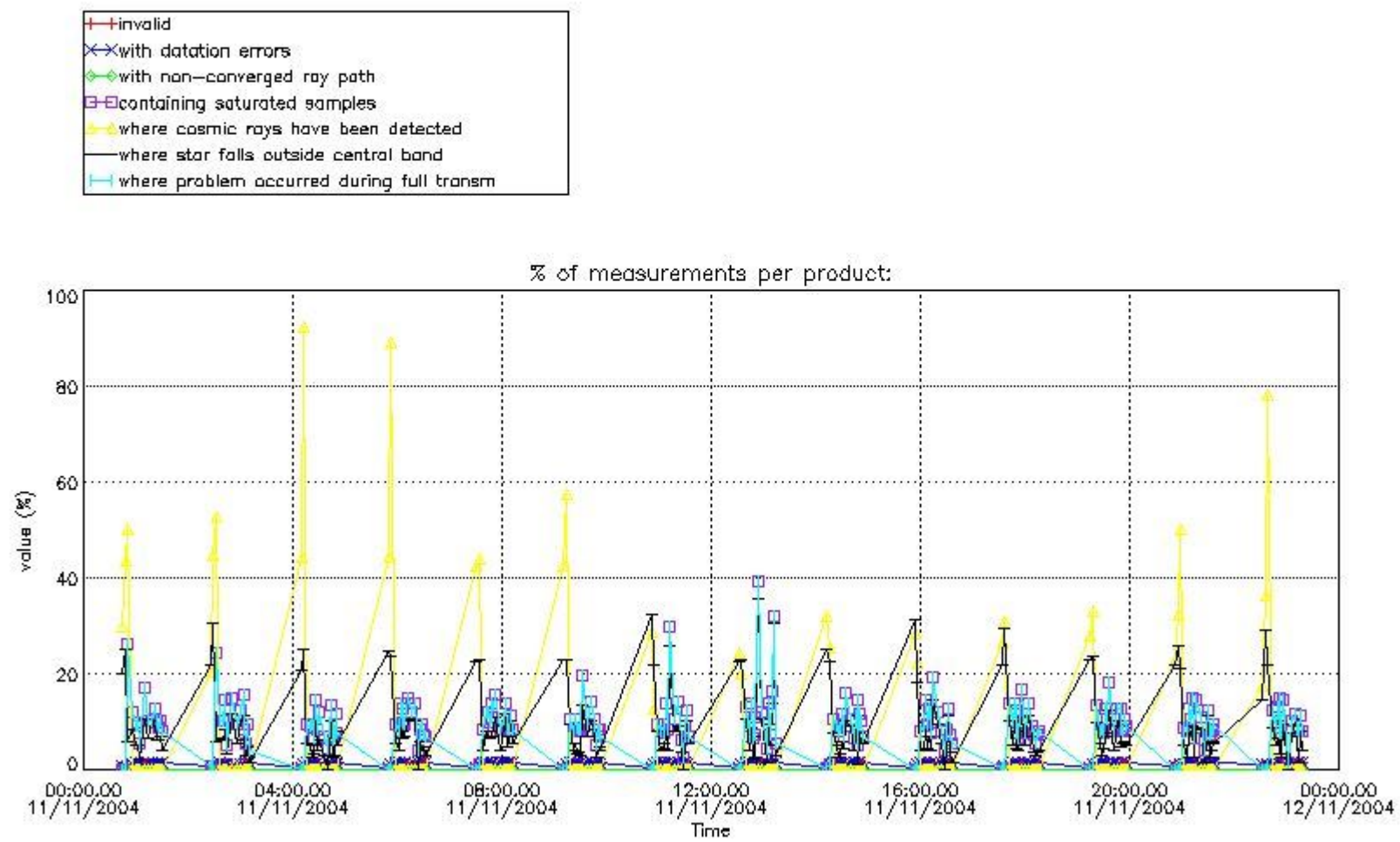
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

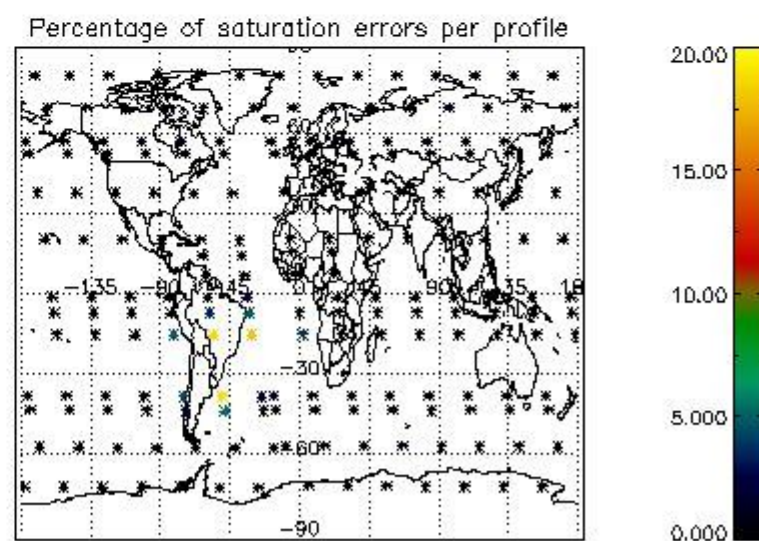
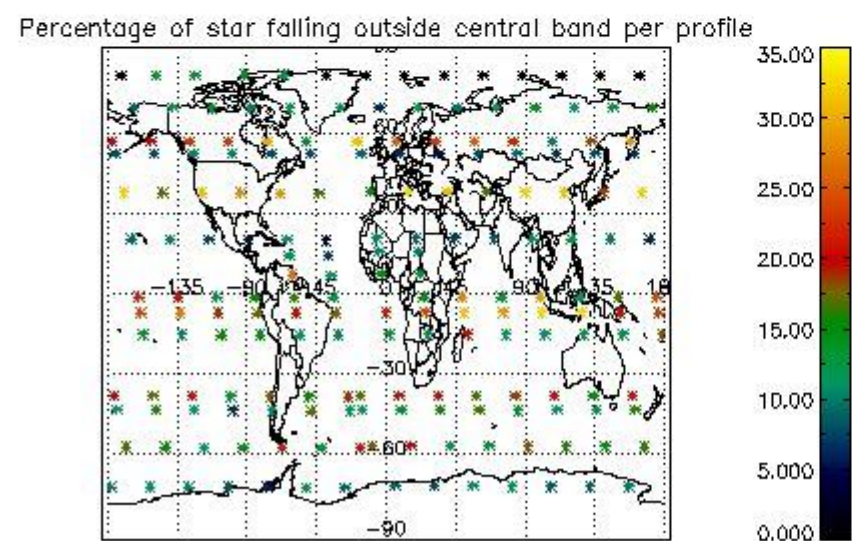
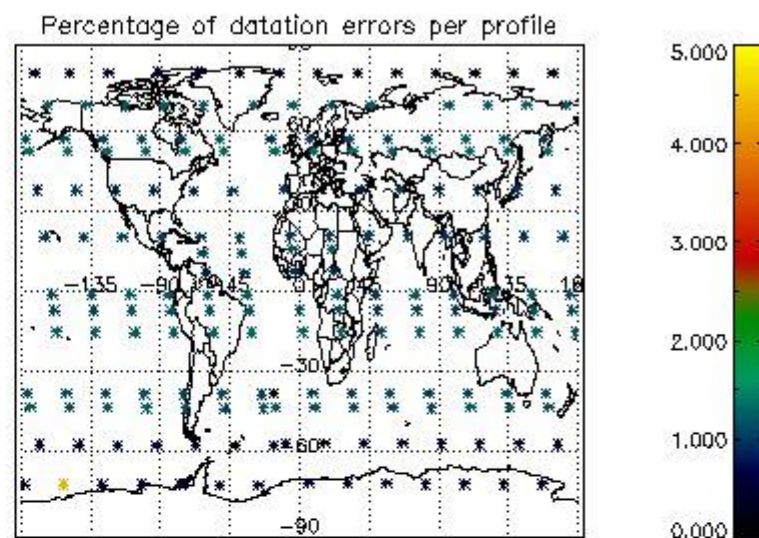
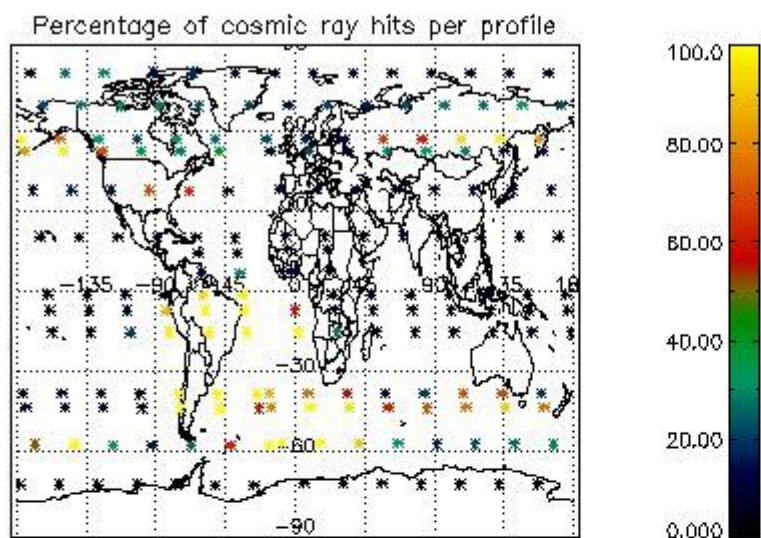


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

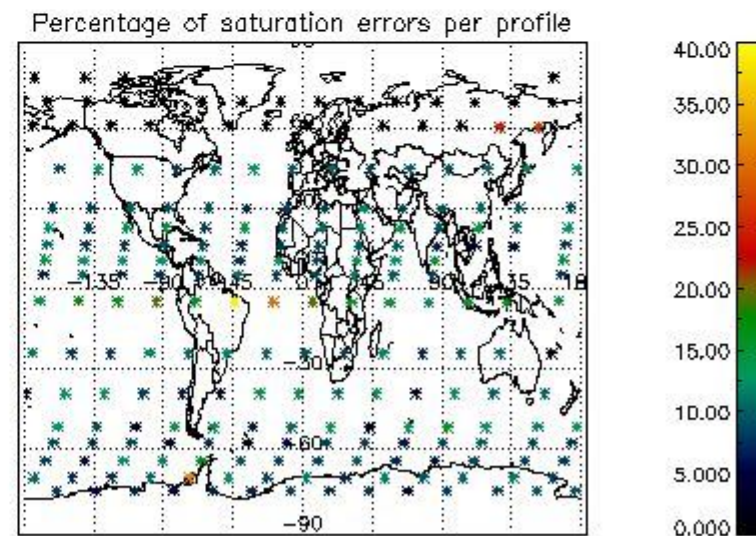
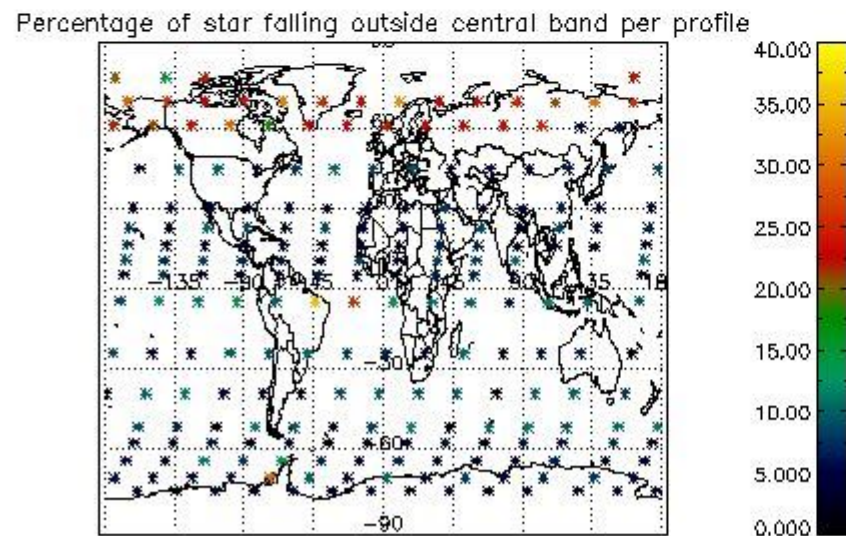
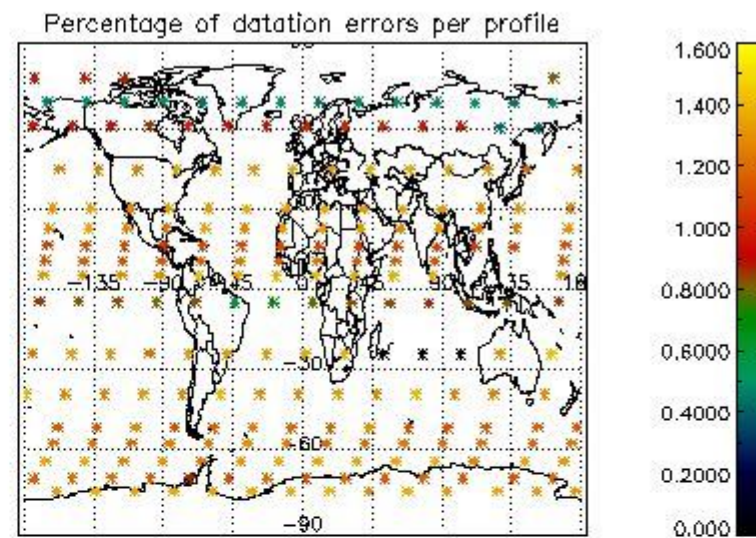
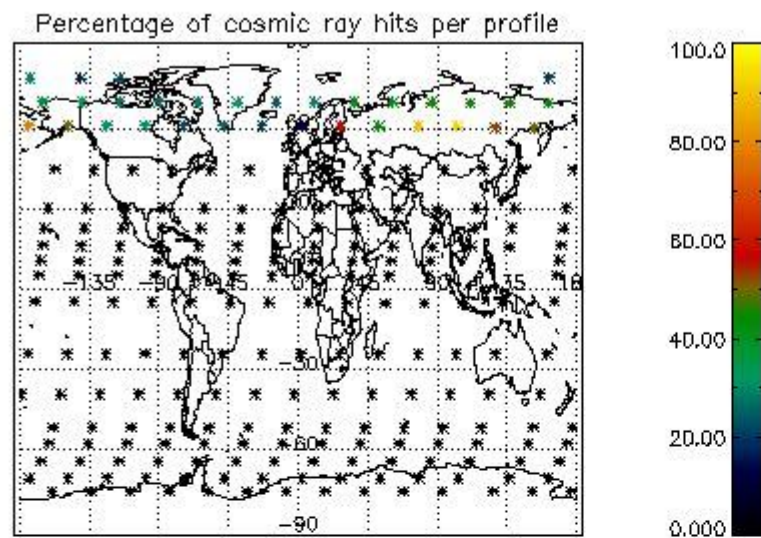


4.2 Plot quality information per product coming from level 1b processing (world map)

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

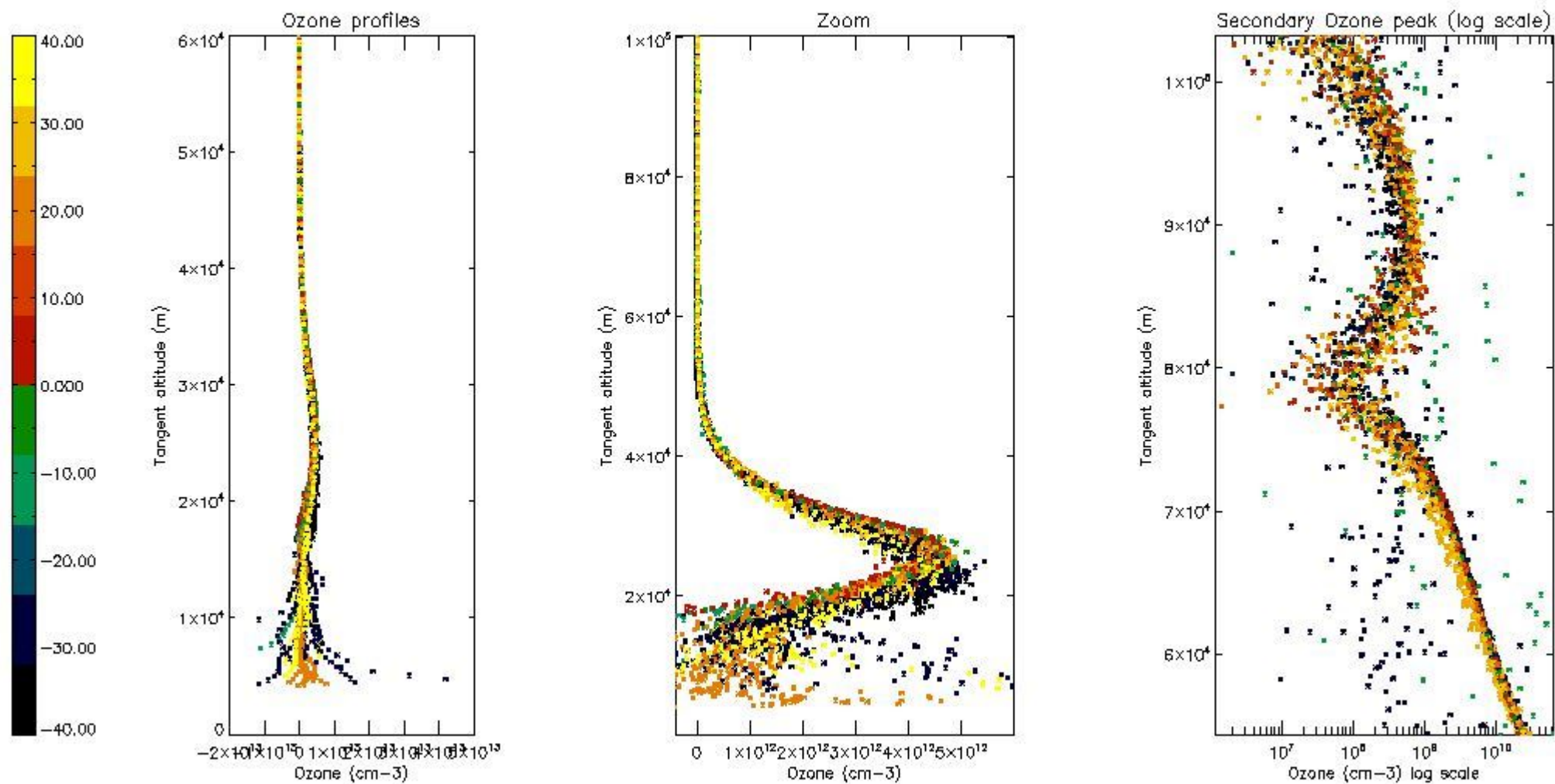
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	13

STD < 10	11
STD < 5	8

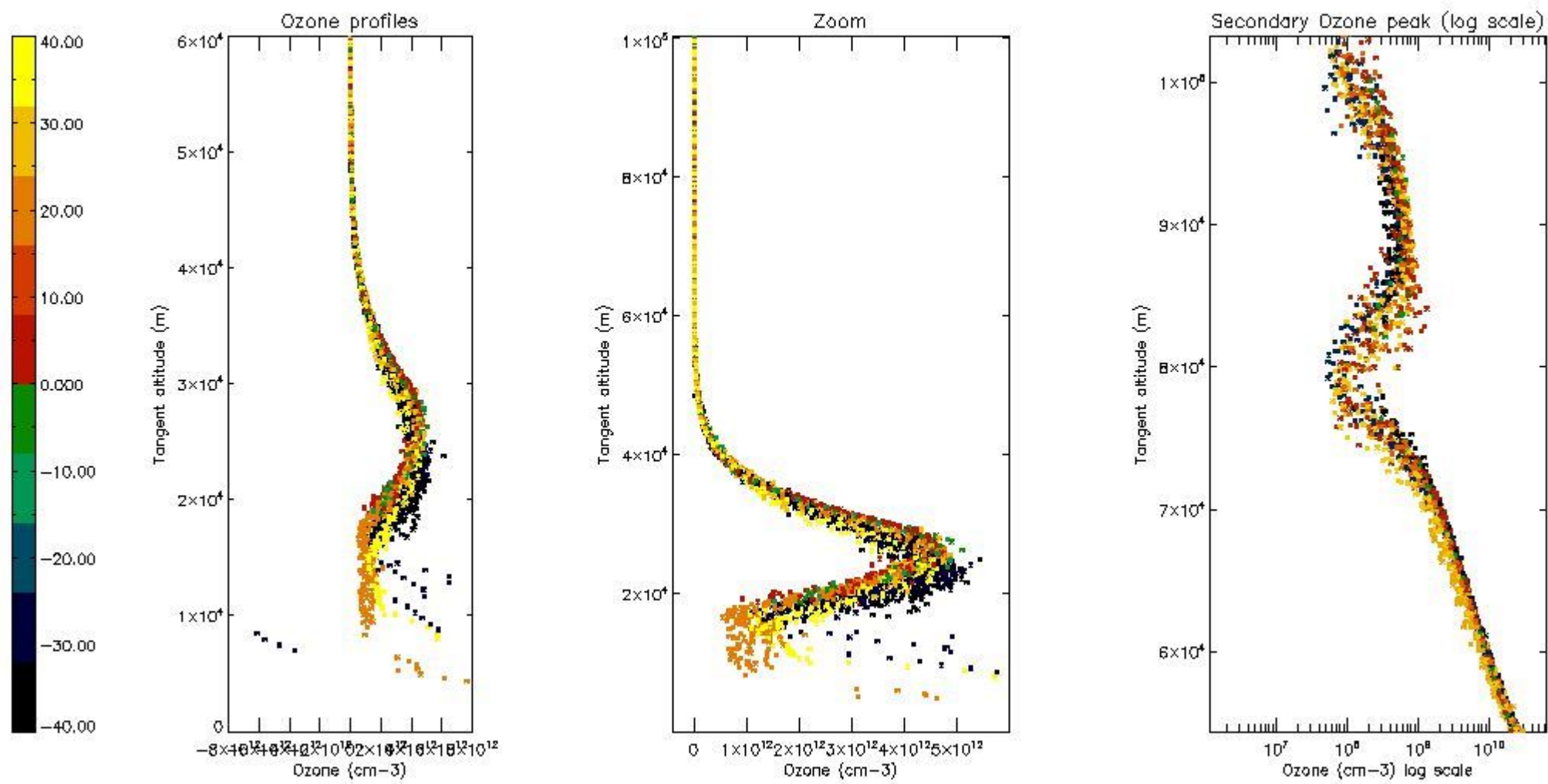
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



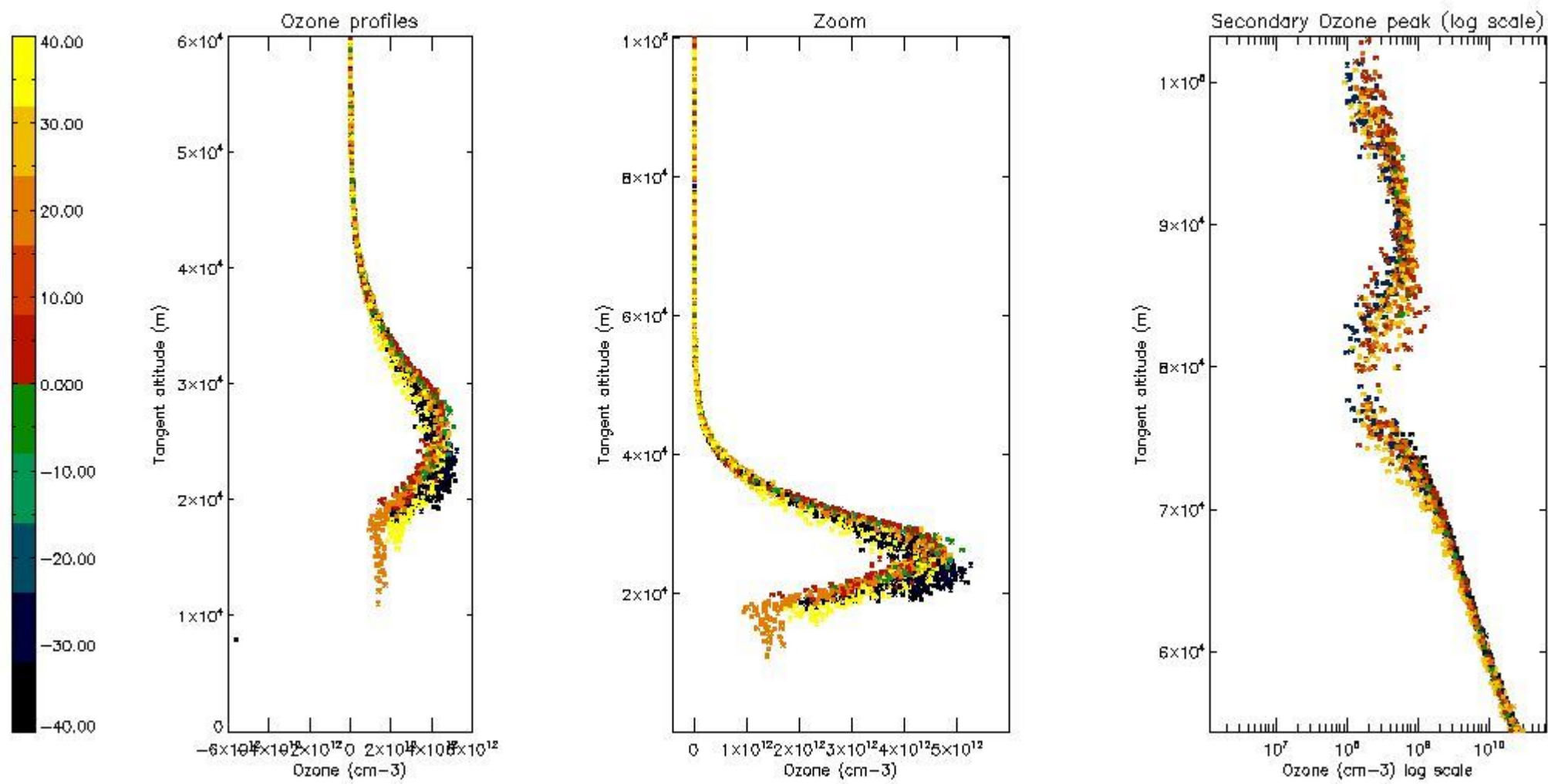
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



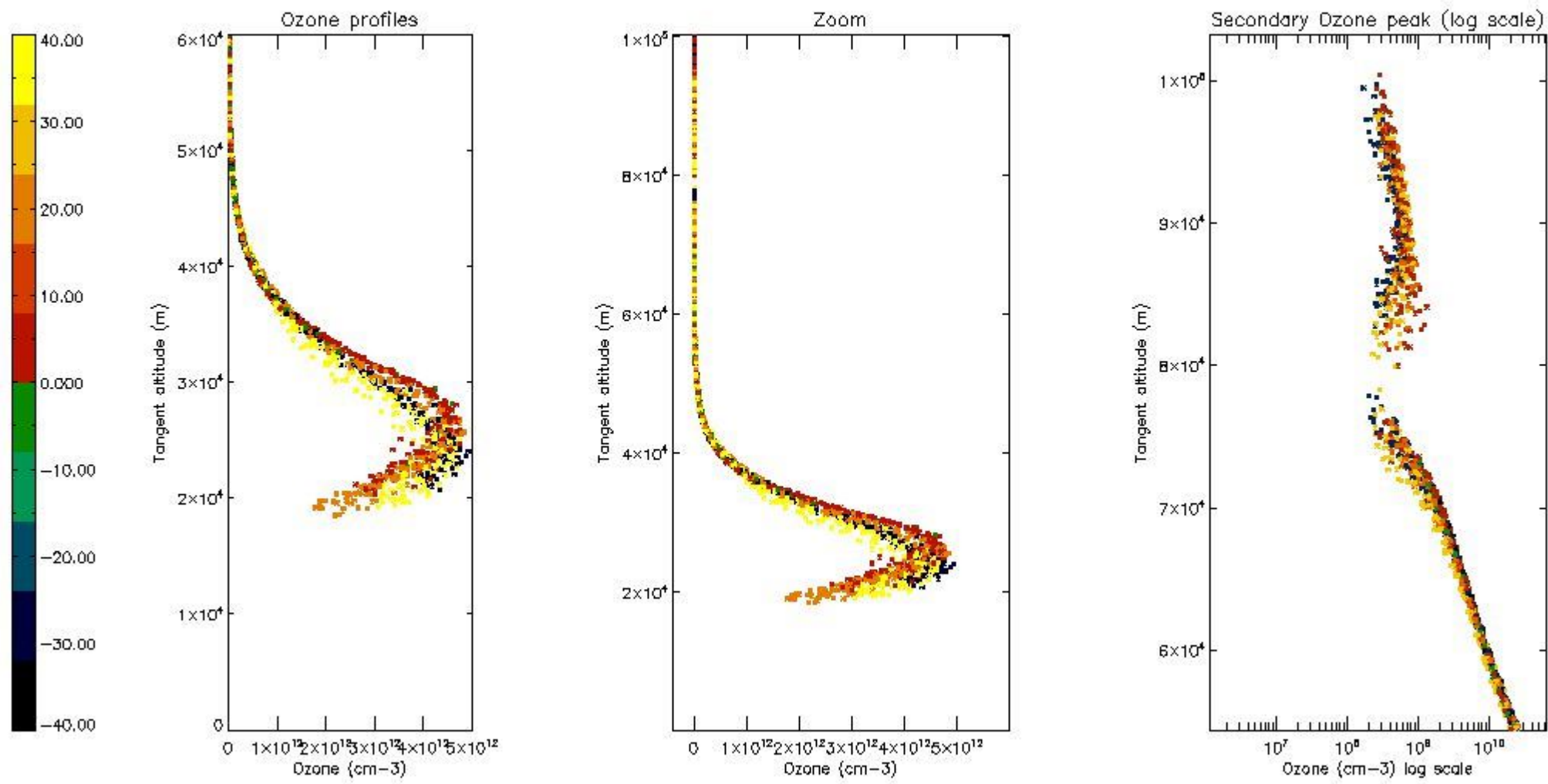
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



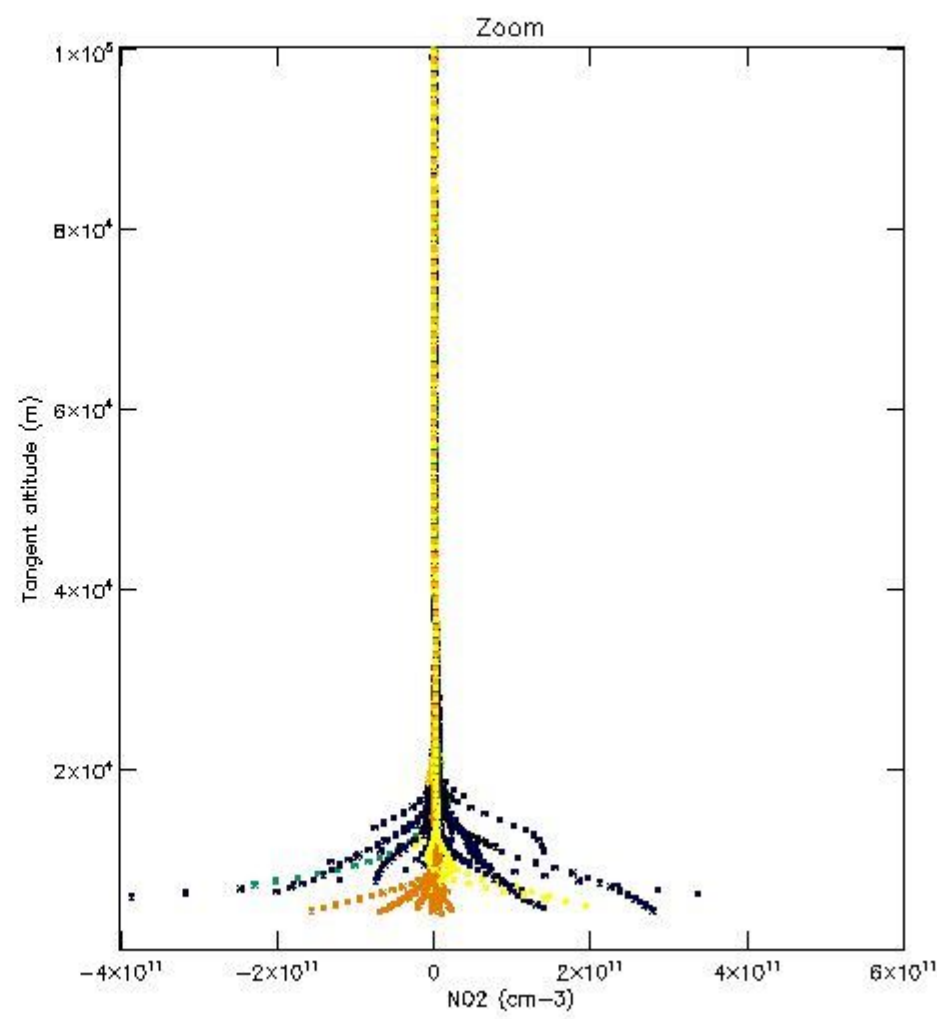
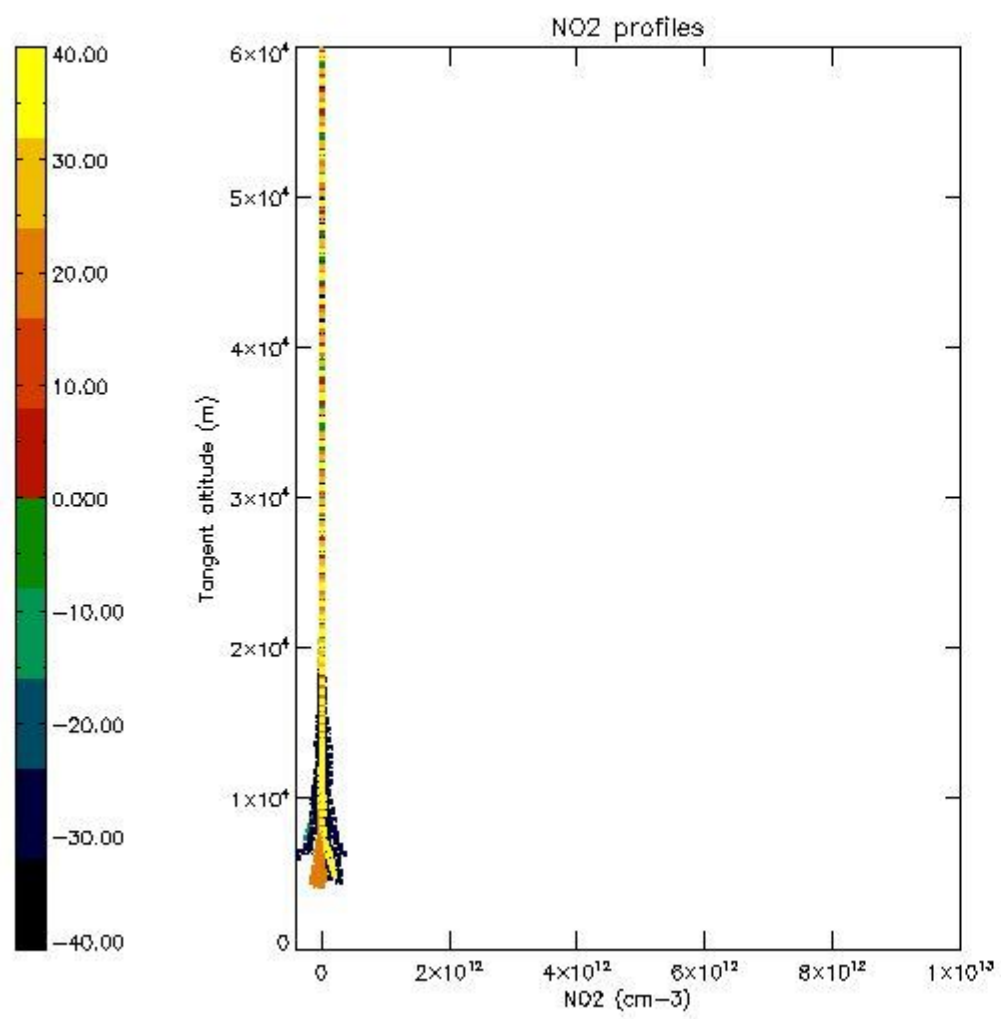
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



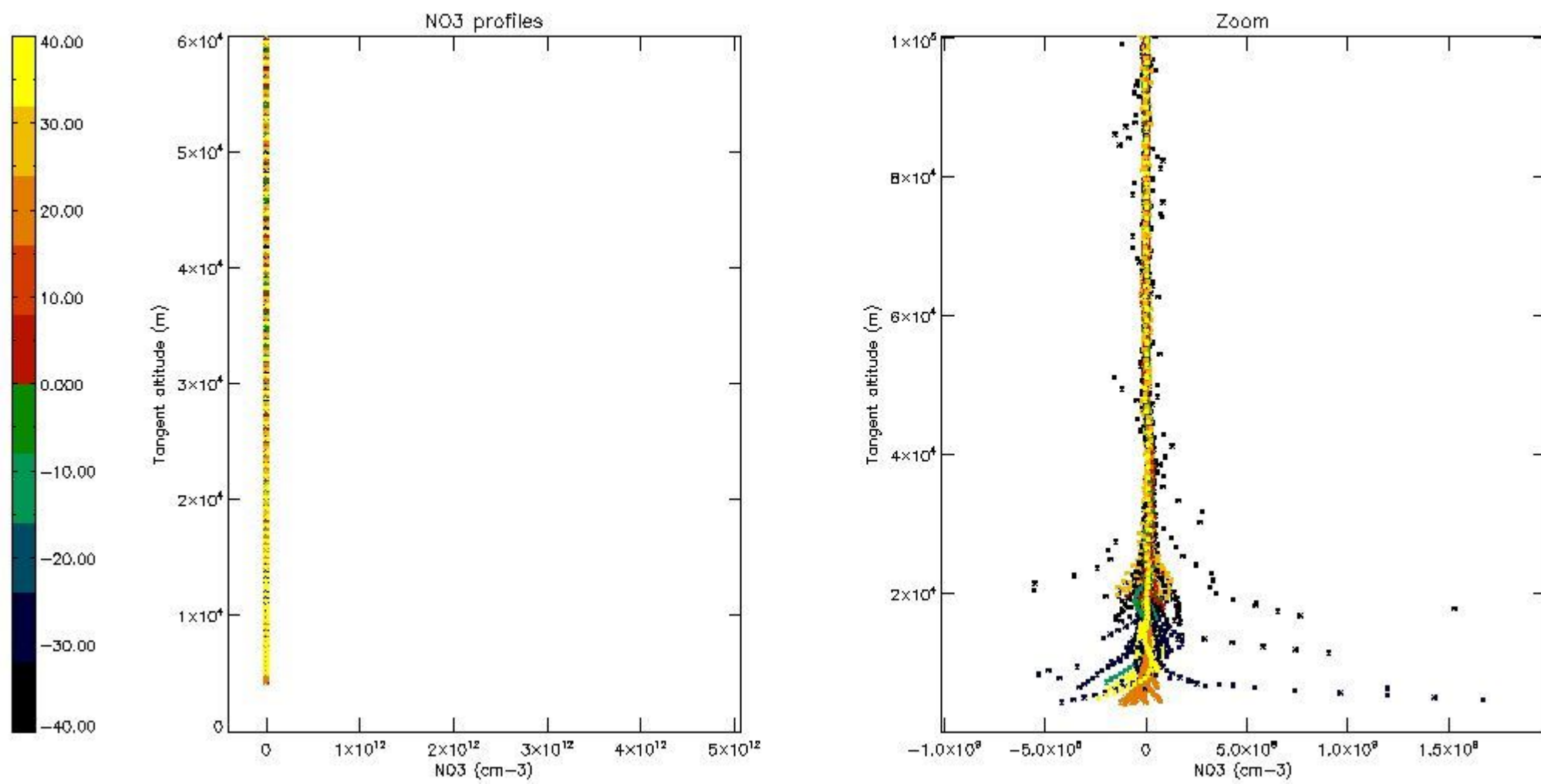
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



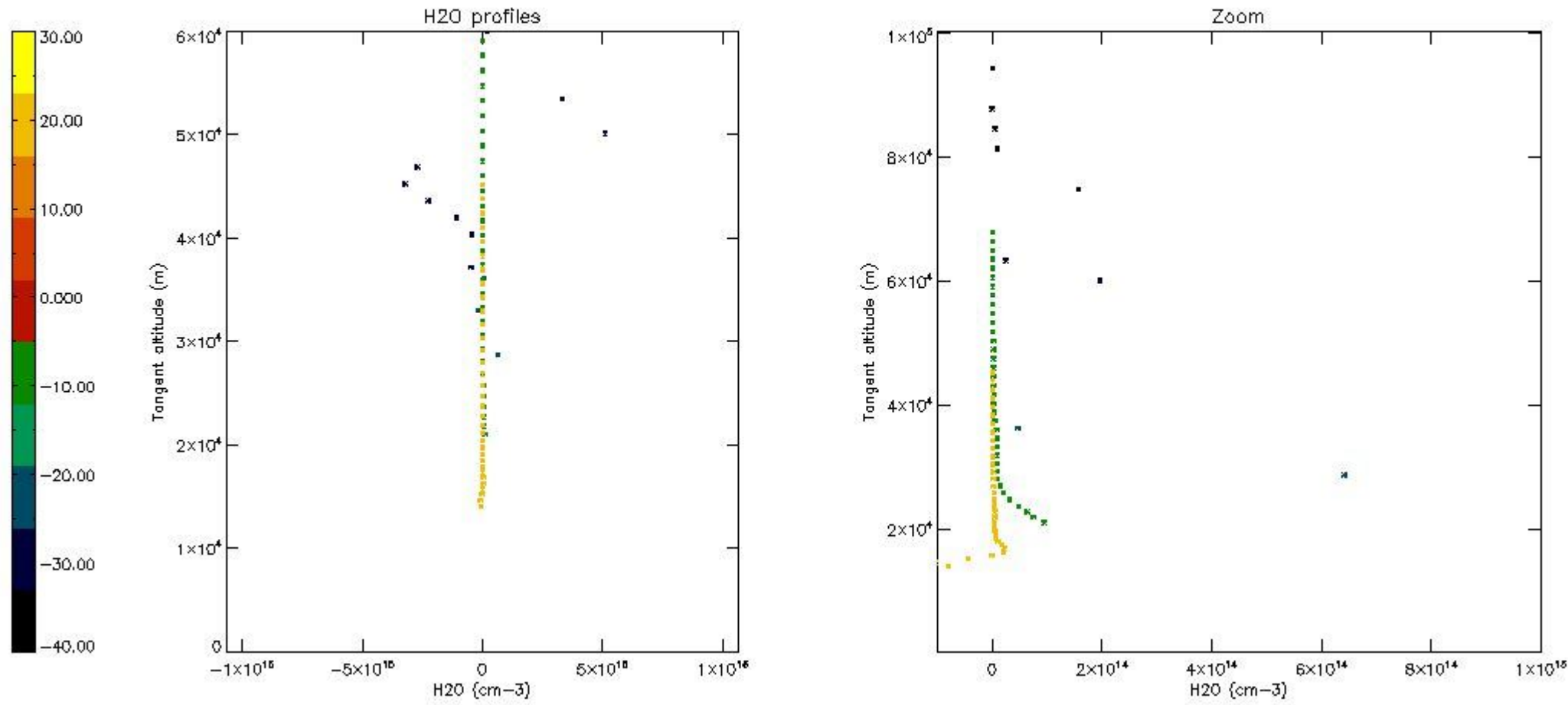
5.7 Plot NO3 profiles for all STD (dark without errors)

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	11-NOV-2004 00:01:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-NOV-2004 00:01:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-NOV-2004 00:01:17

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[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

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

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

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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](#)

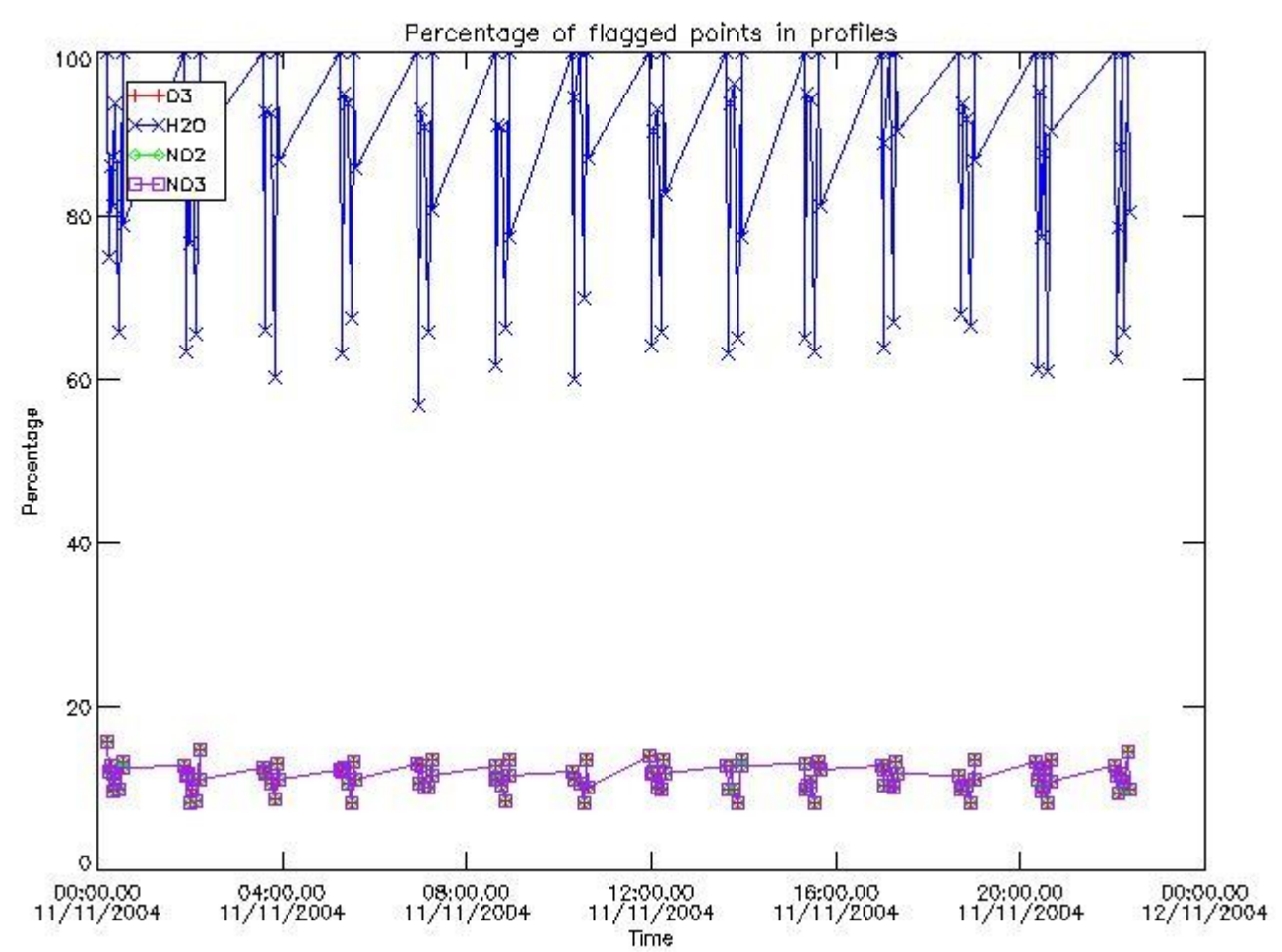
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3. Quality information per product

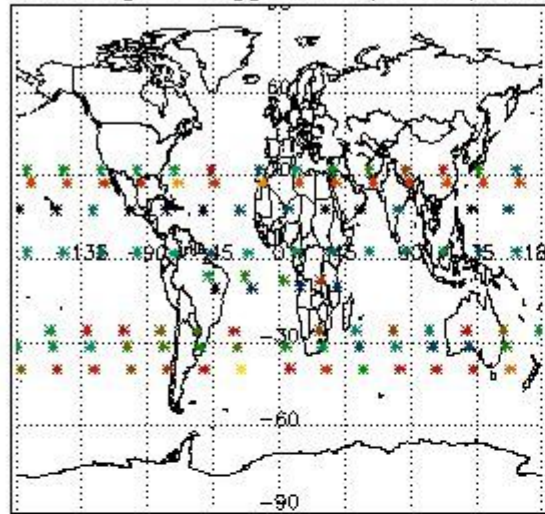
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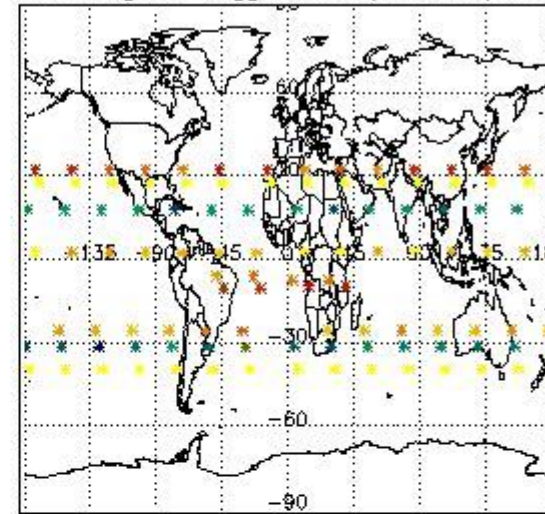


3.2 Plot quality information per product (world map)

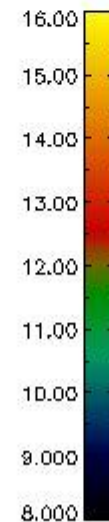
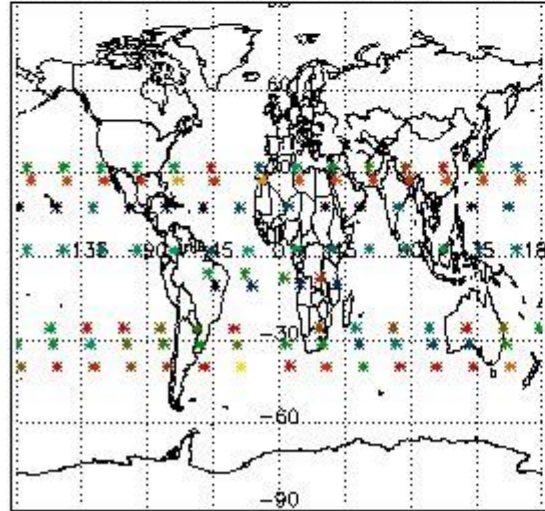
Percentage of flagged data per O3 profile



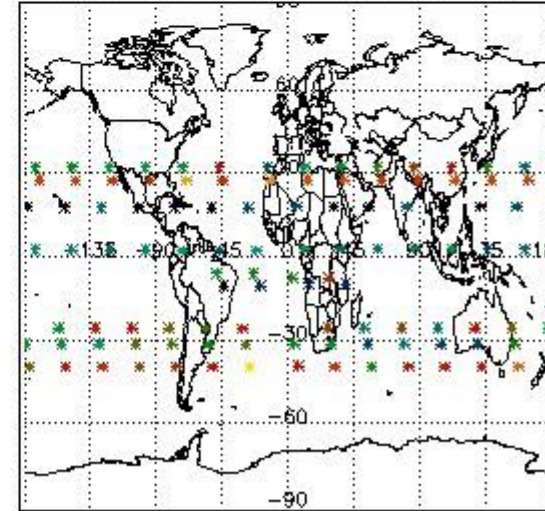
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

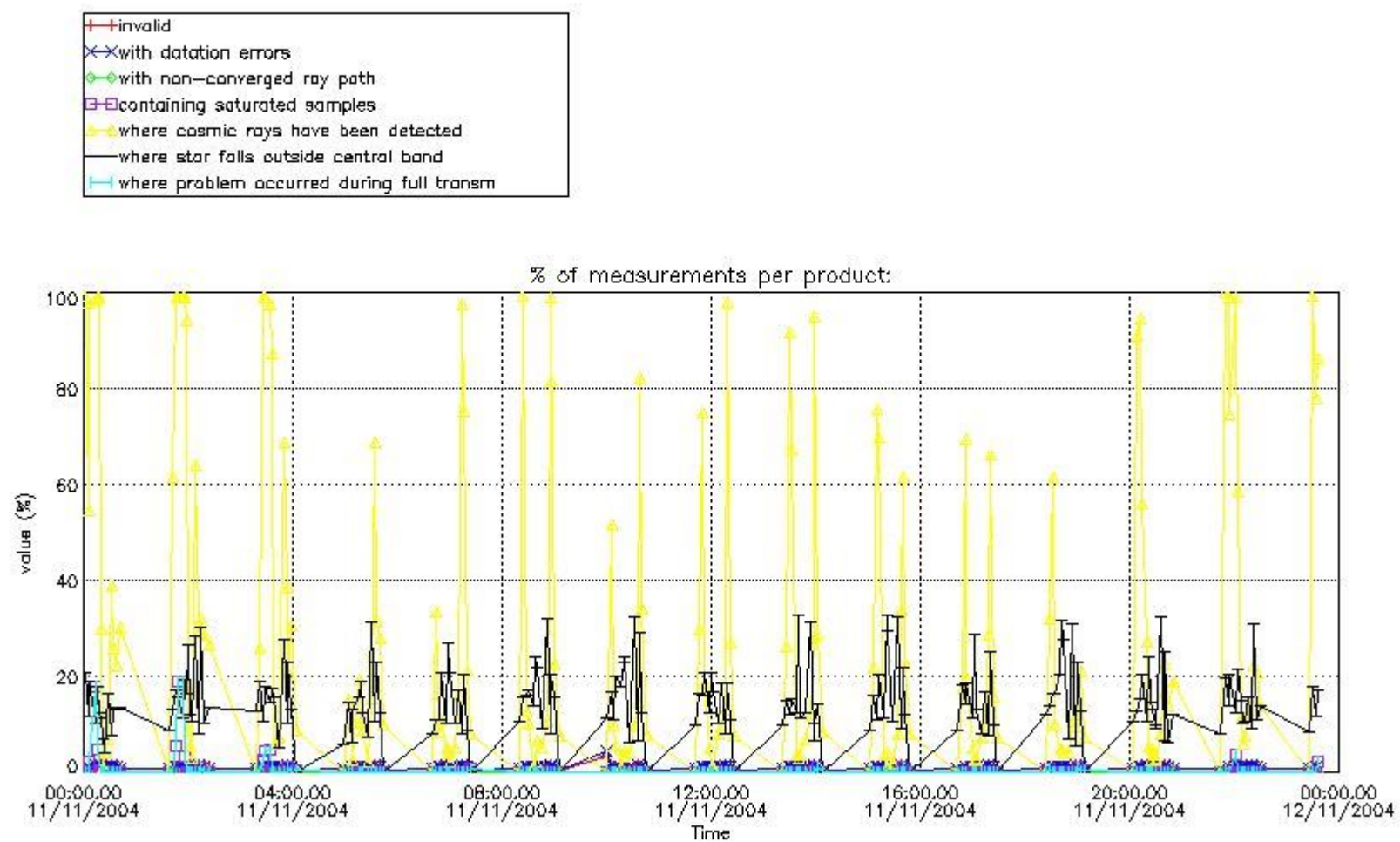


4. Level 1 quality information per product

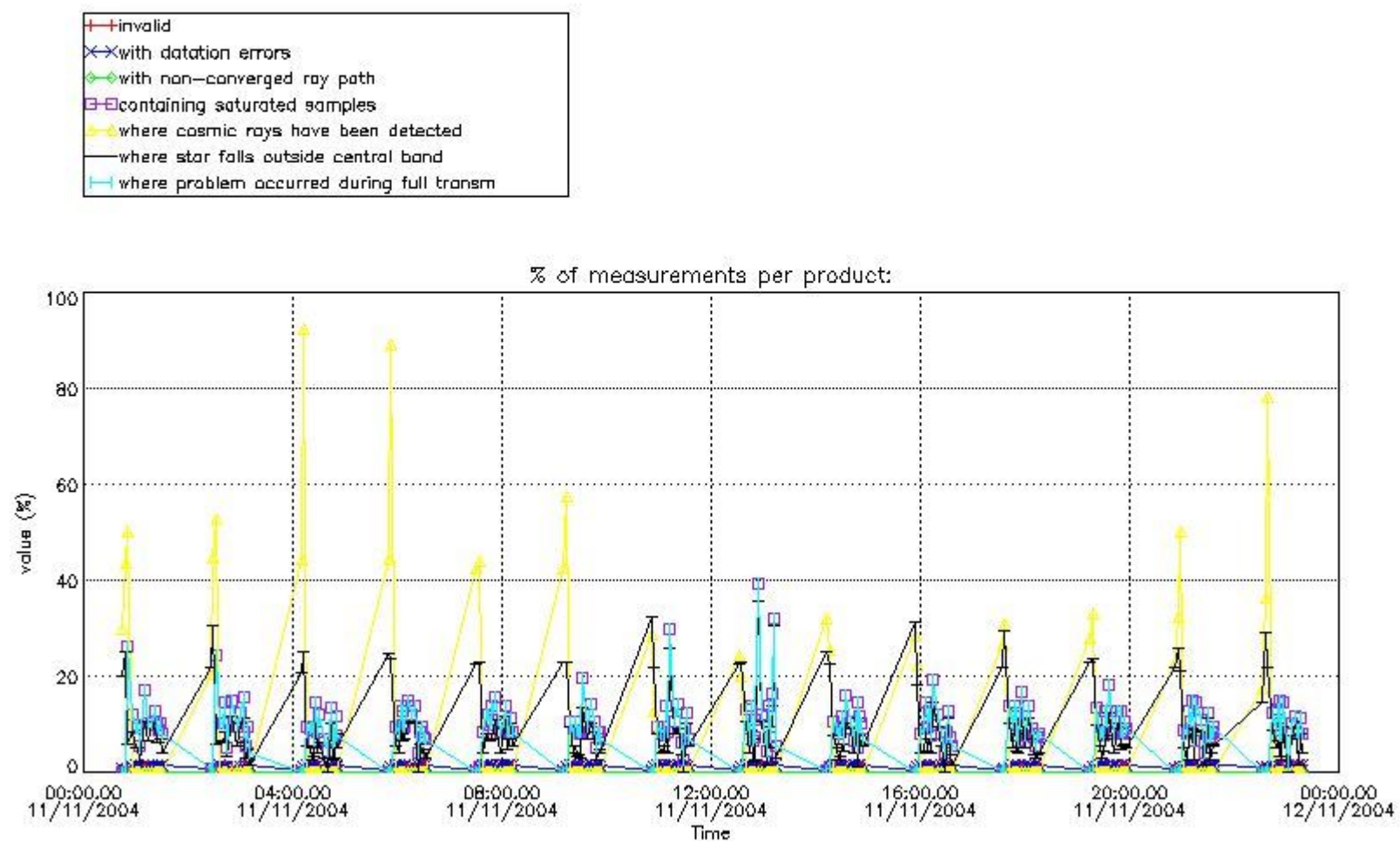
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

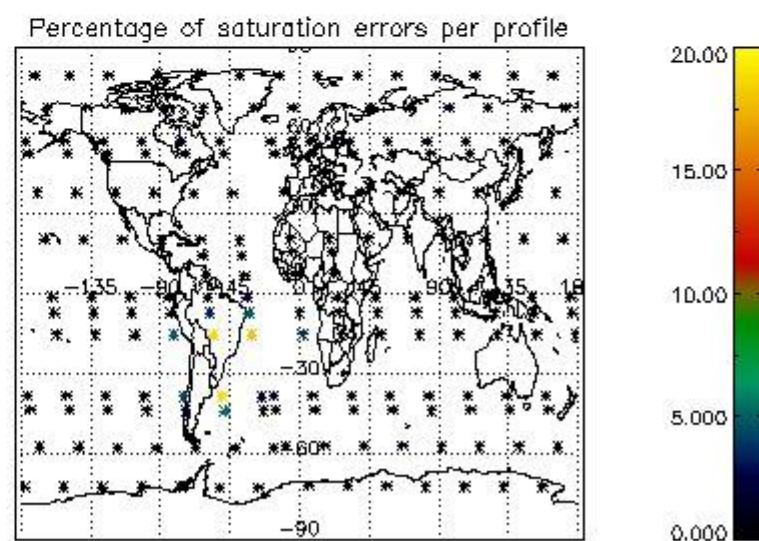
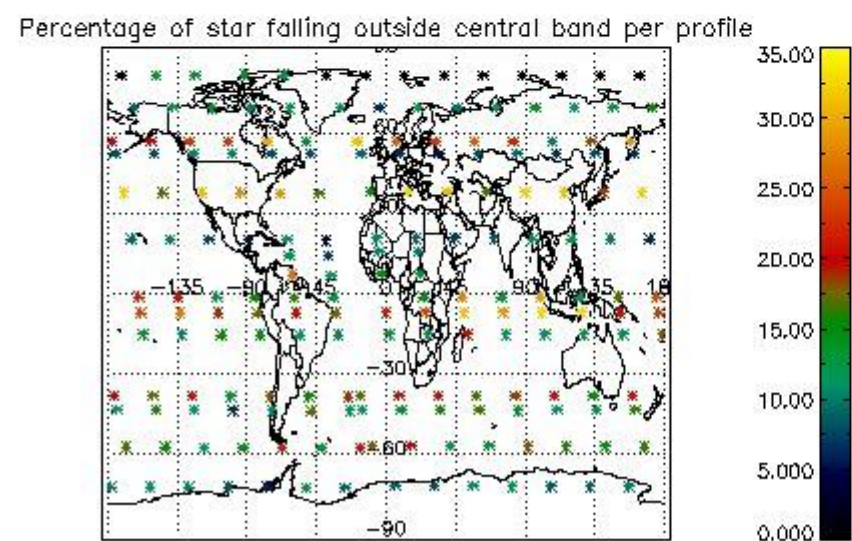
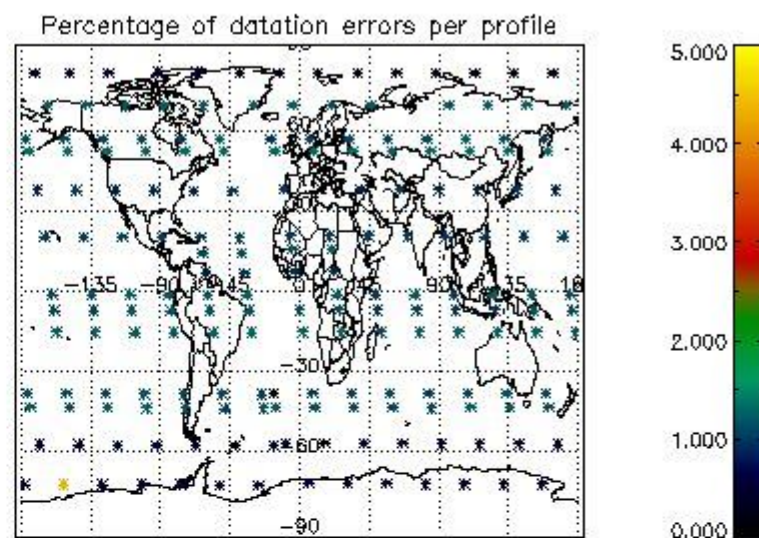
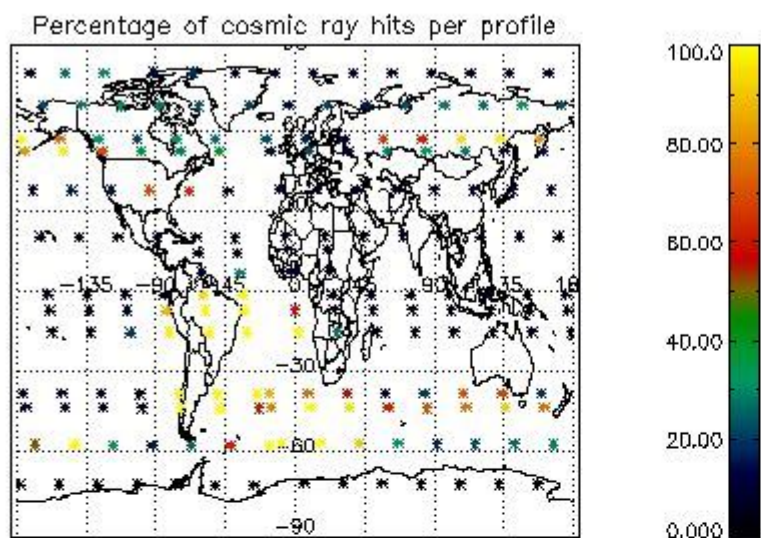
4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



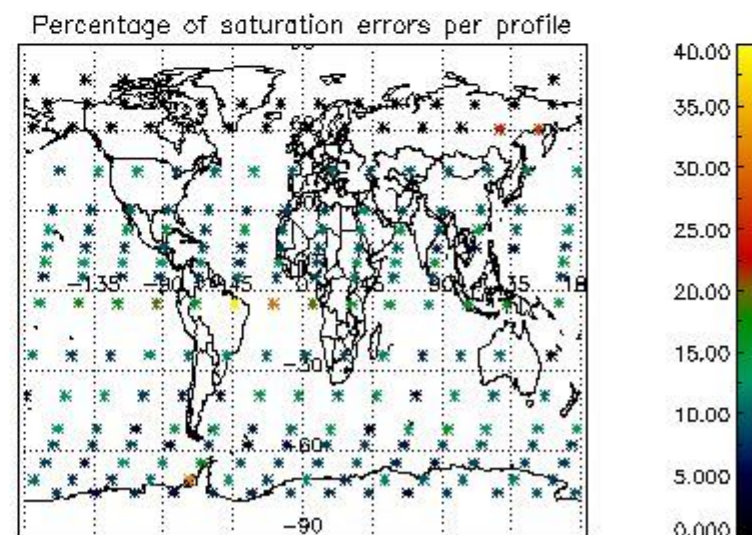
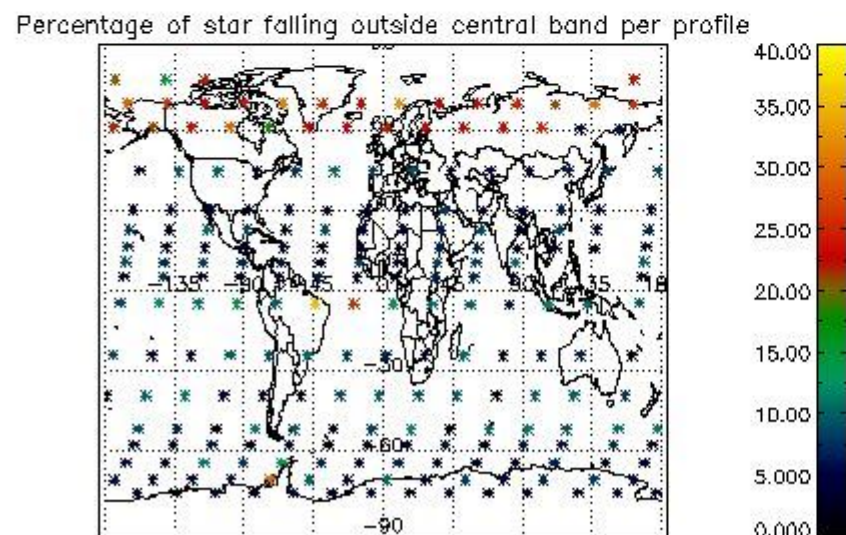
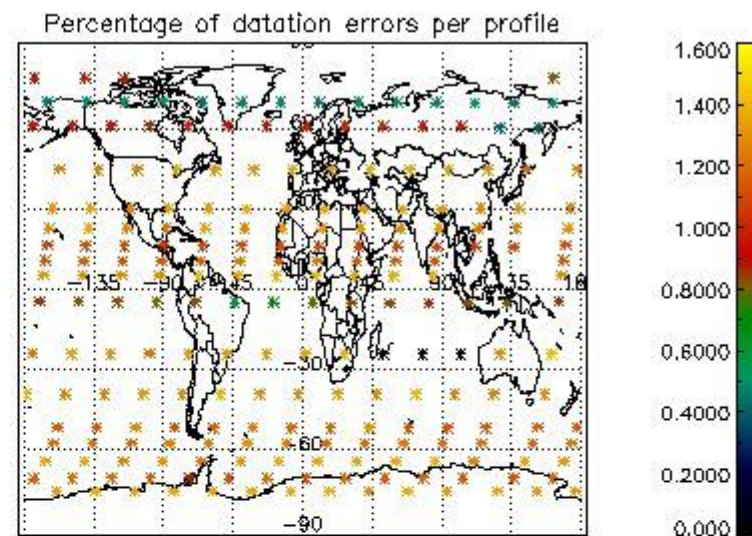
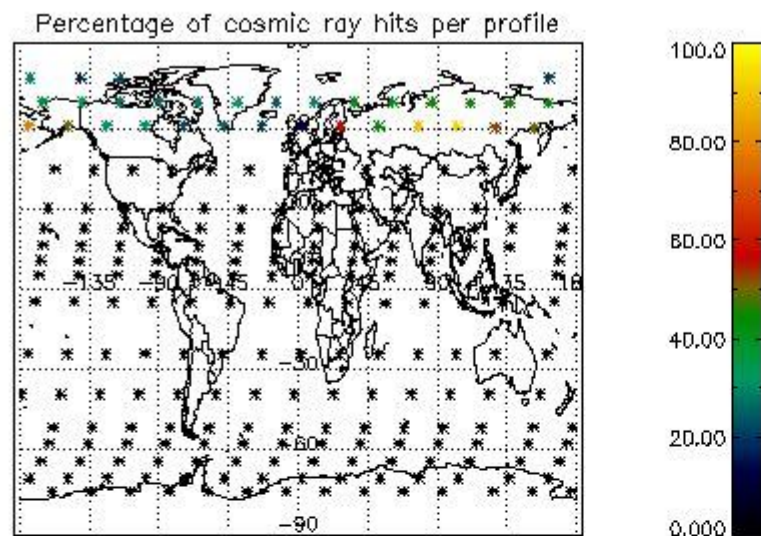
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



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

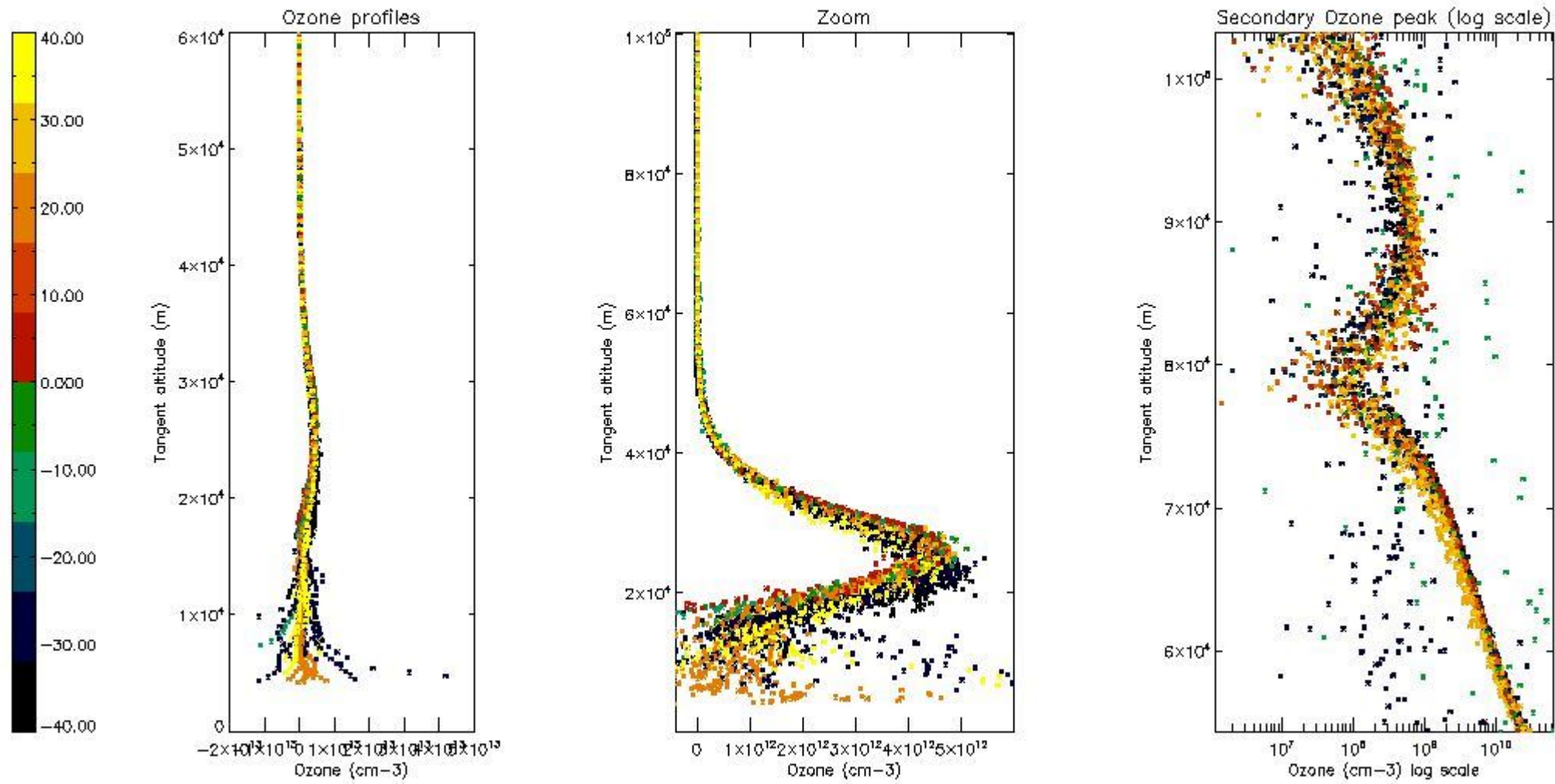
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	13

STD < 10	11
STD < 5	8

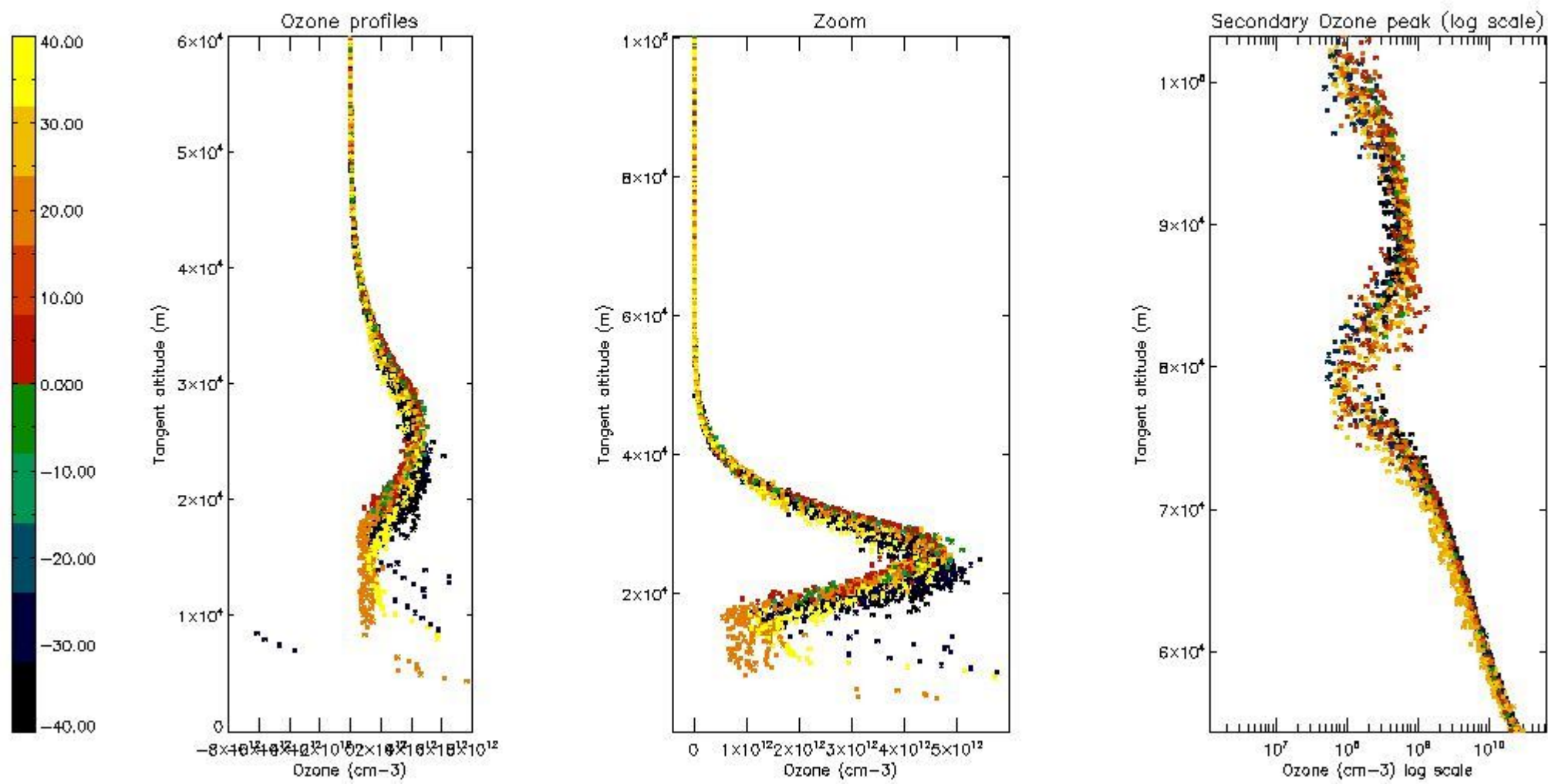
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



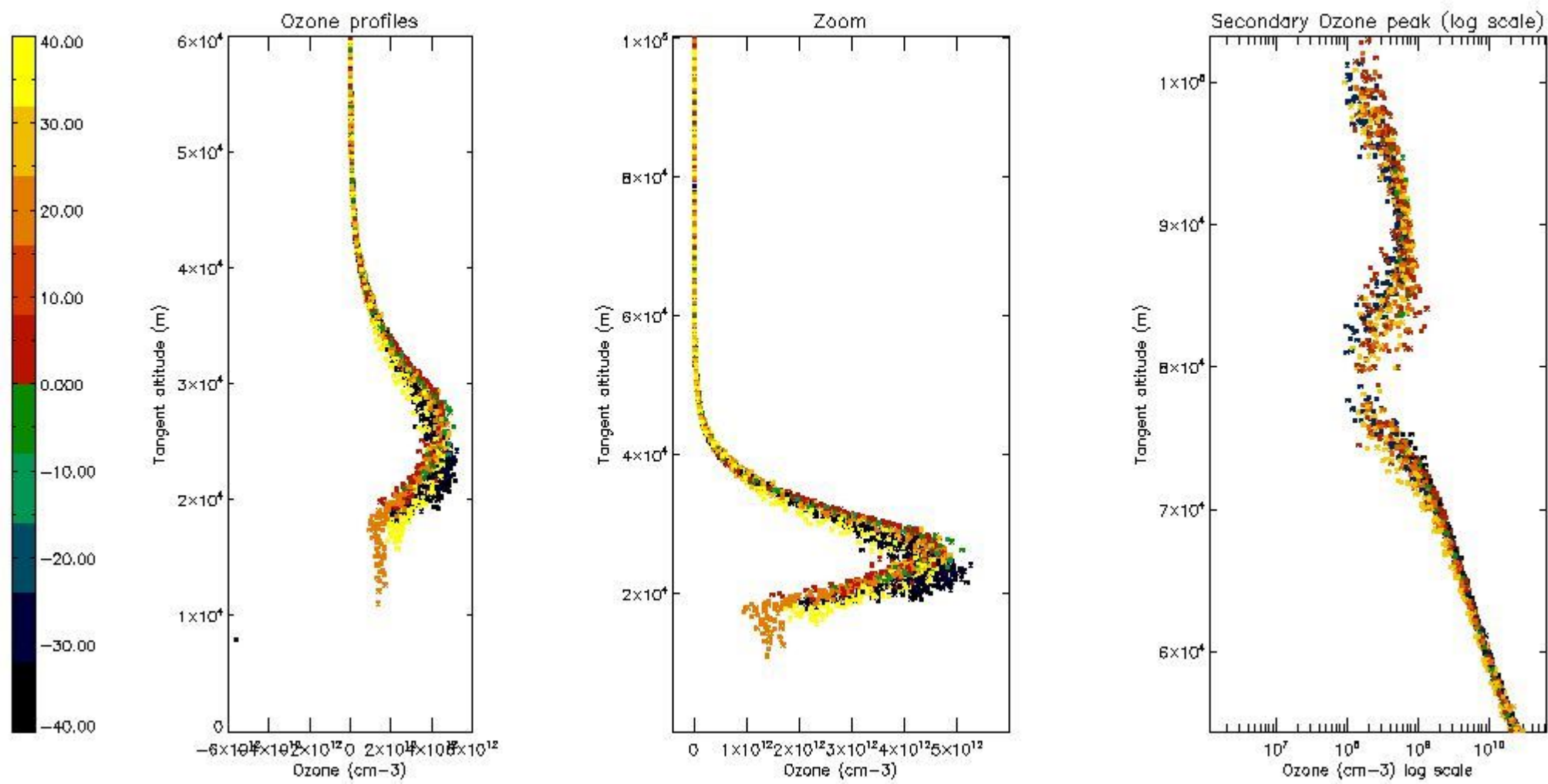
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



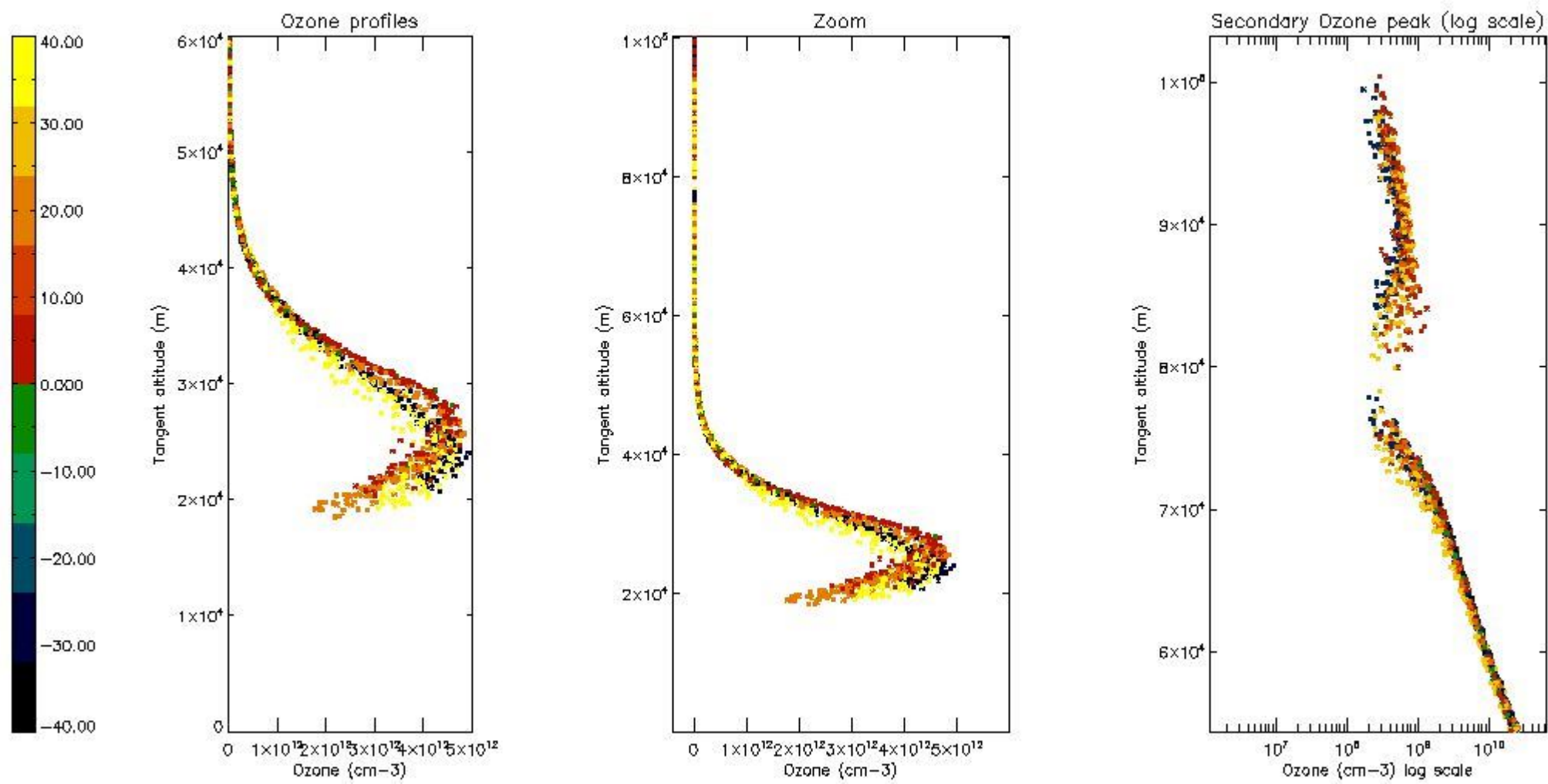
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



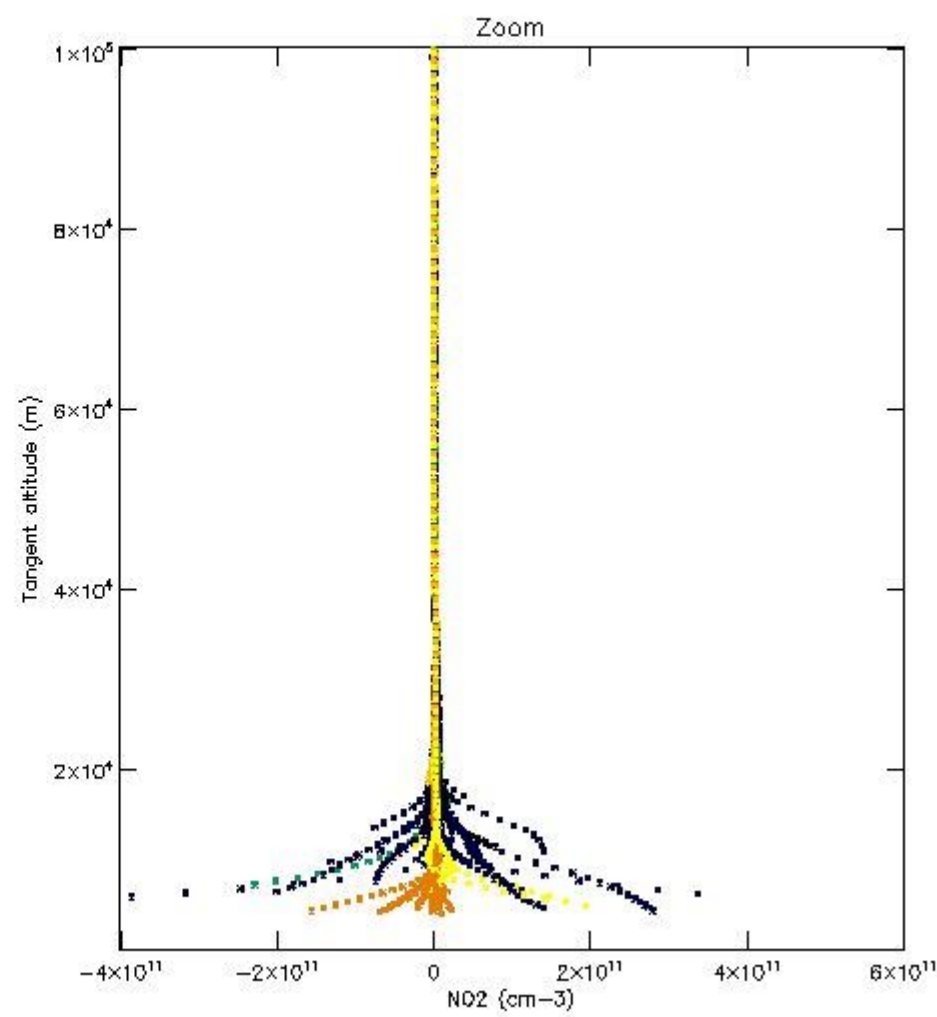
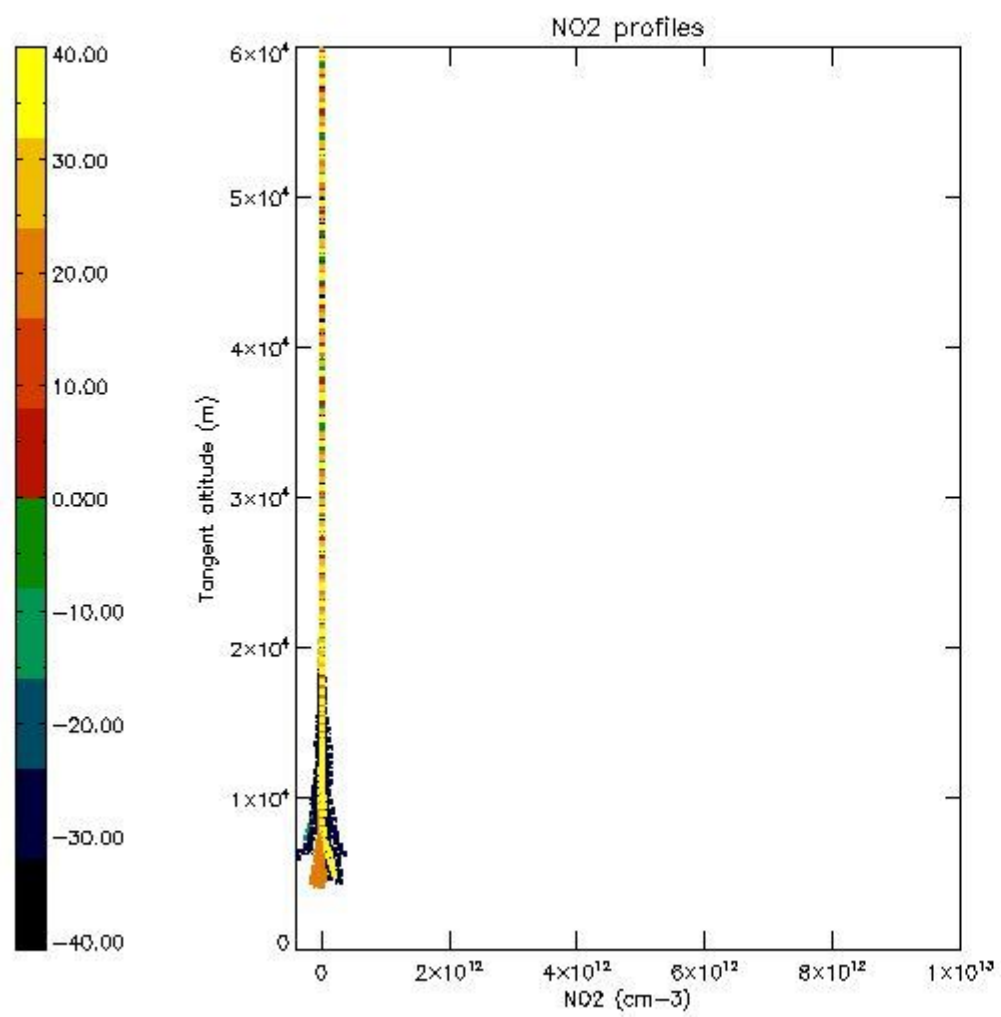
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



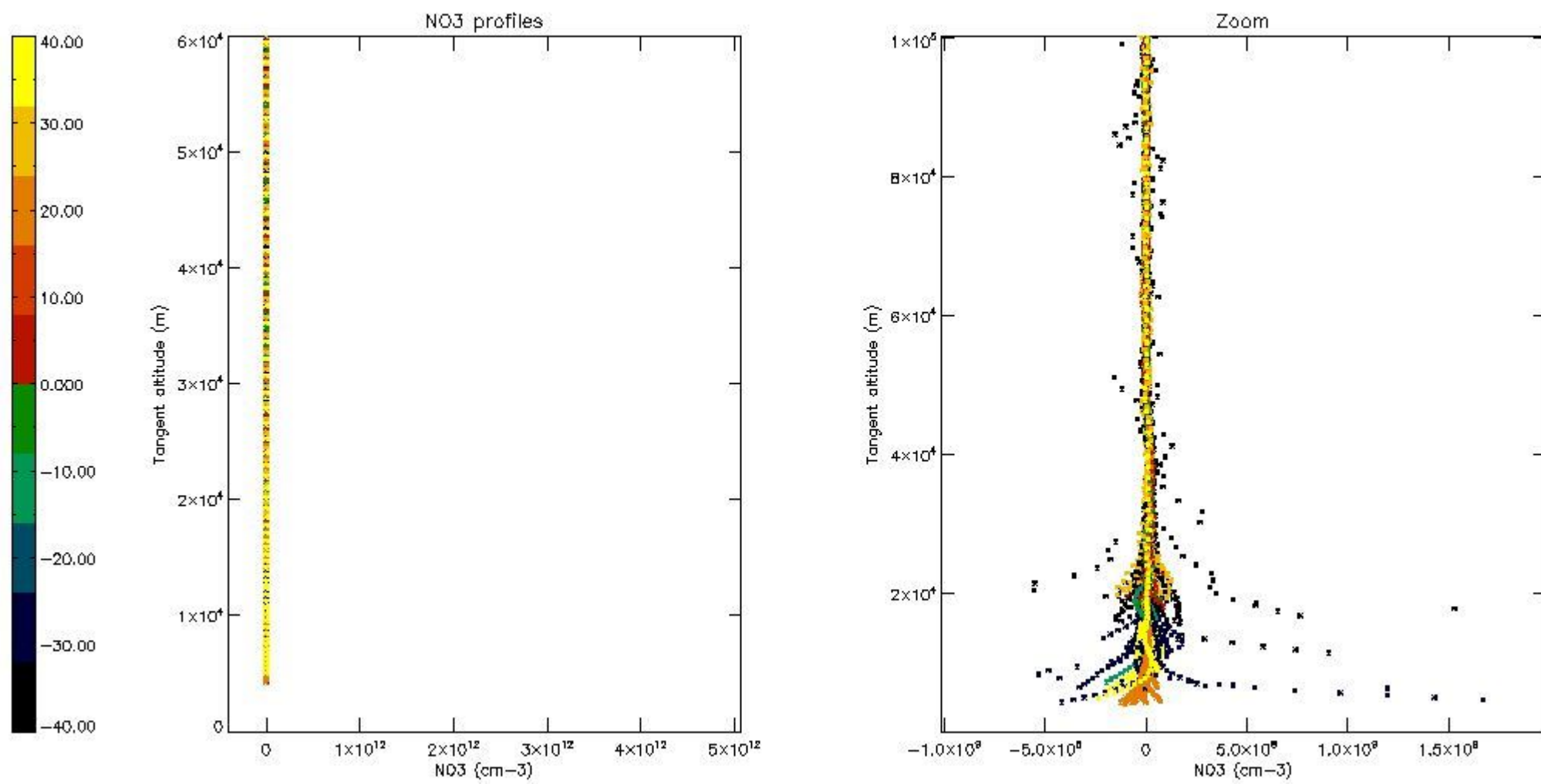
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



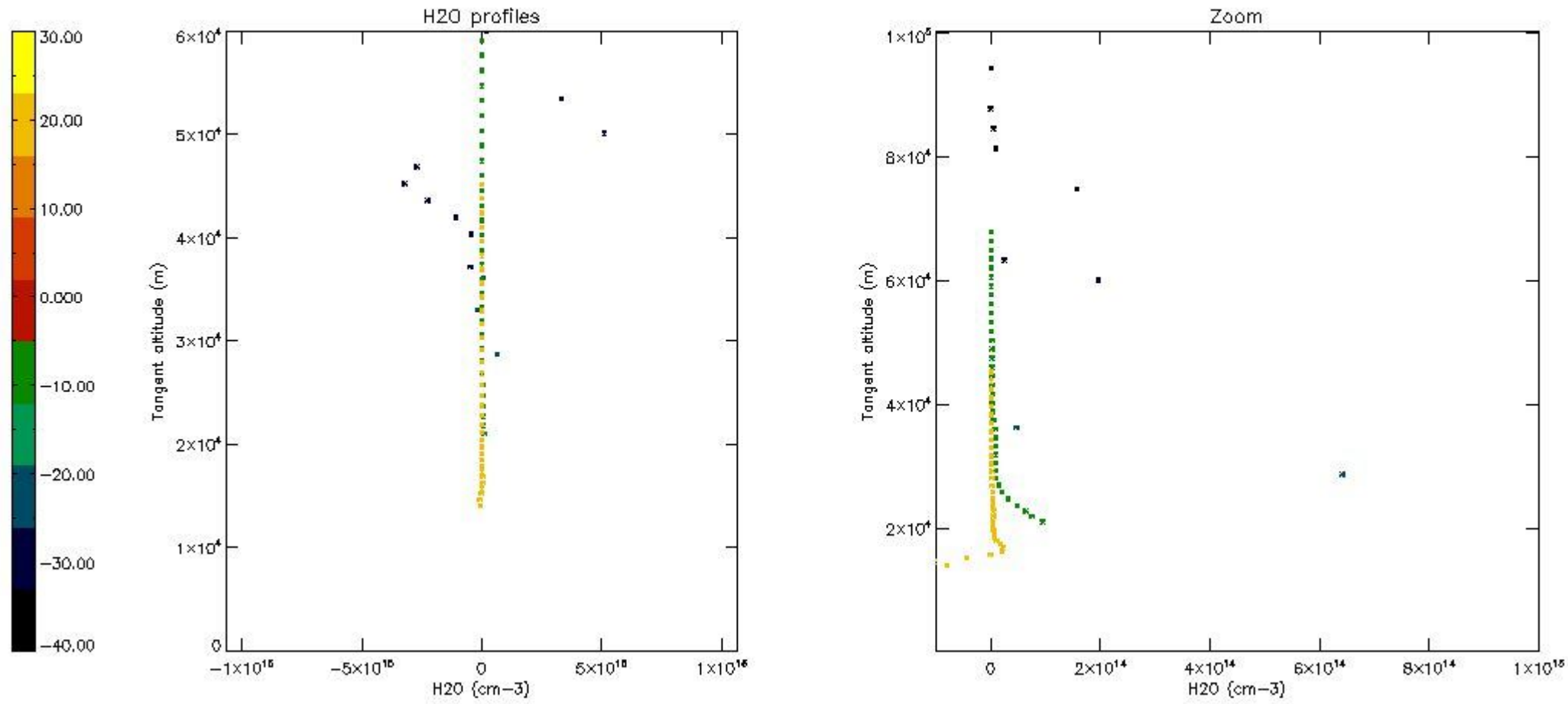
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

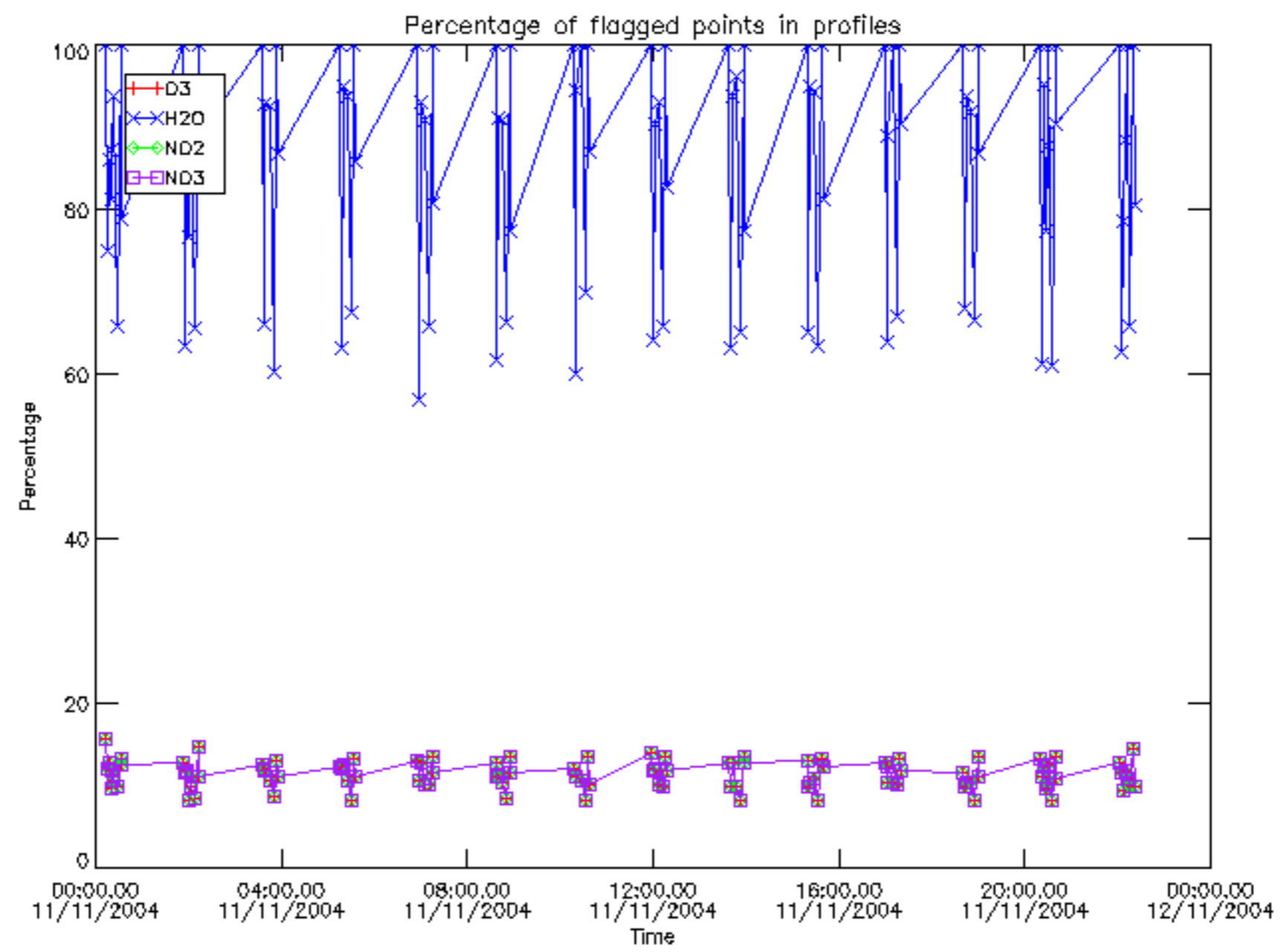
The colorbar represents the latitude.



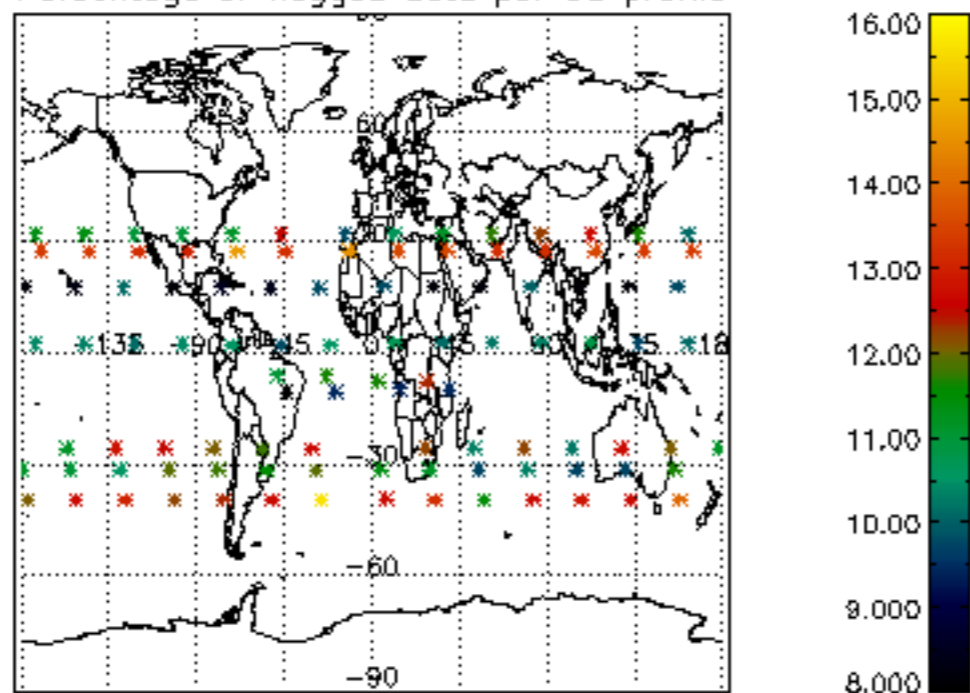
6. Auxiliary Data Files used for the production reported in section 2

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.

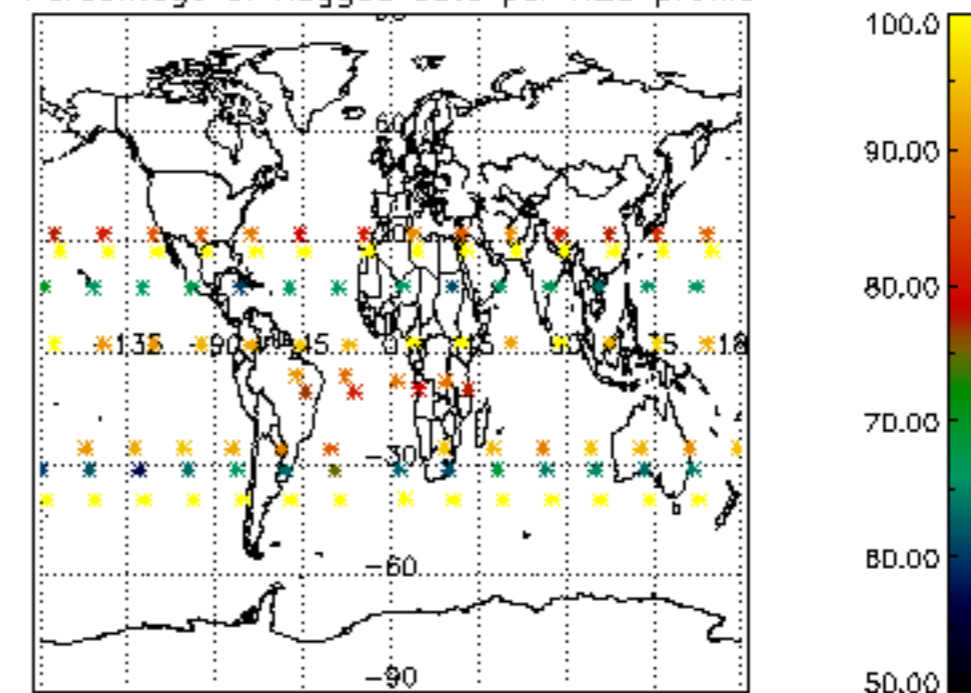
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	11-NOV-2004 00:01:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-NOV-2004 00:01:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-NOV-2004 00:01:17



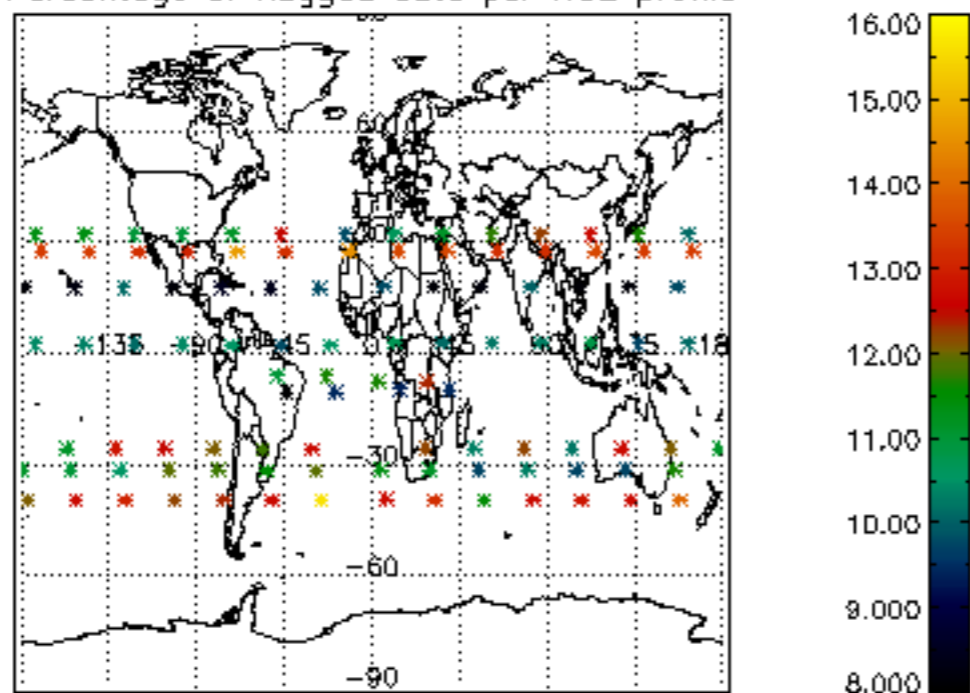
Percentage of flagged data per D3 profile



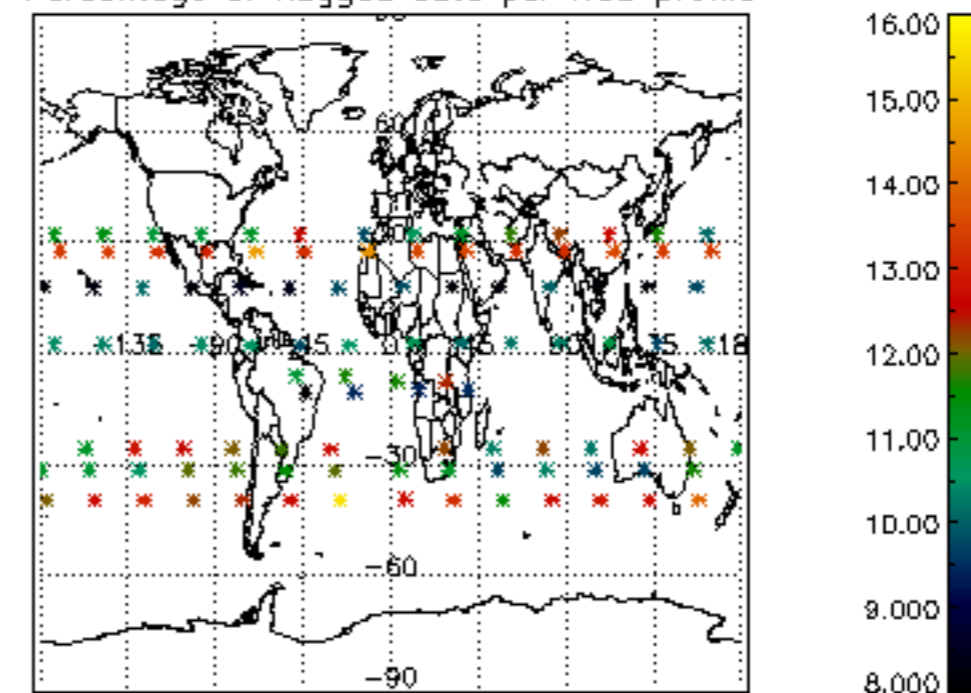
Percentage of flagged data per H2O profile

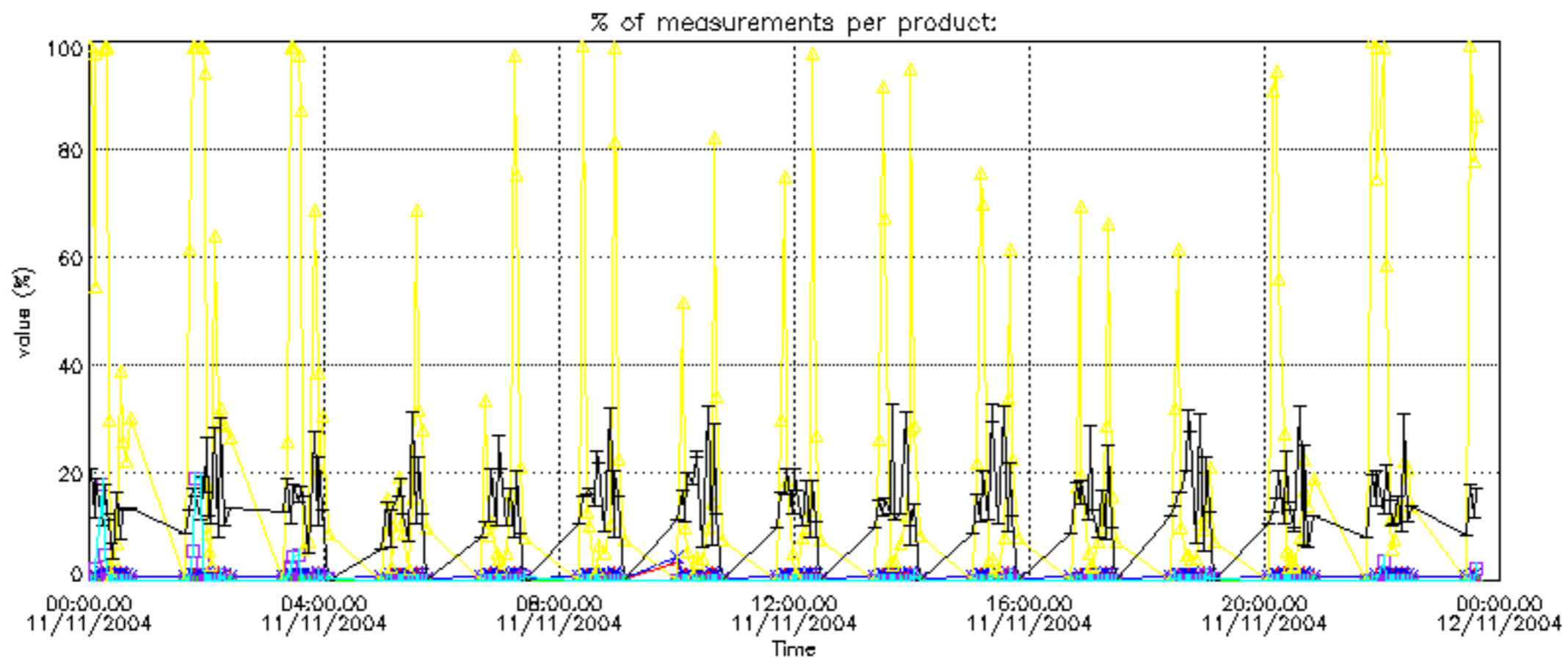


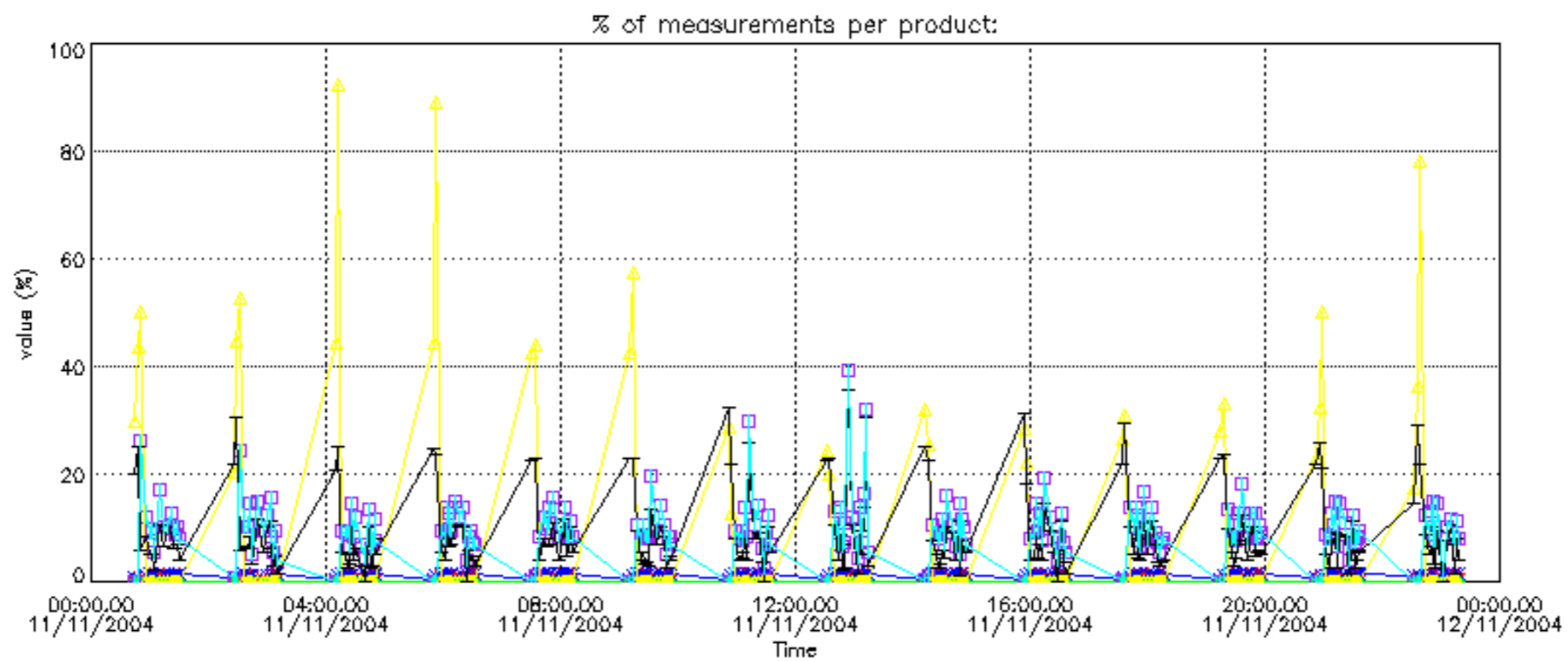
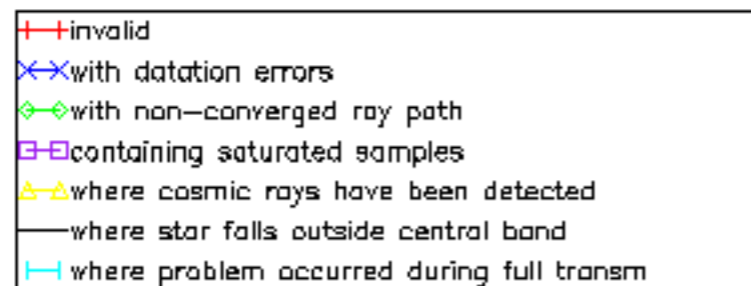
Percentage of flagged data per NO2 profile



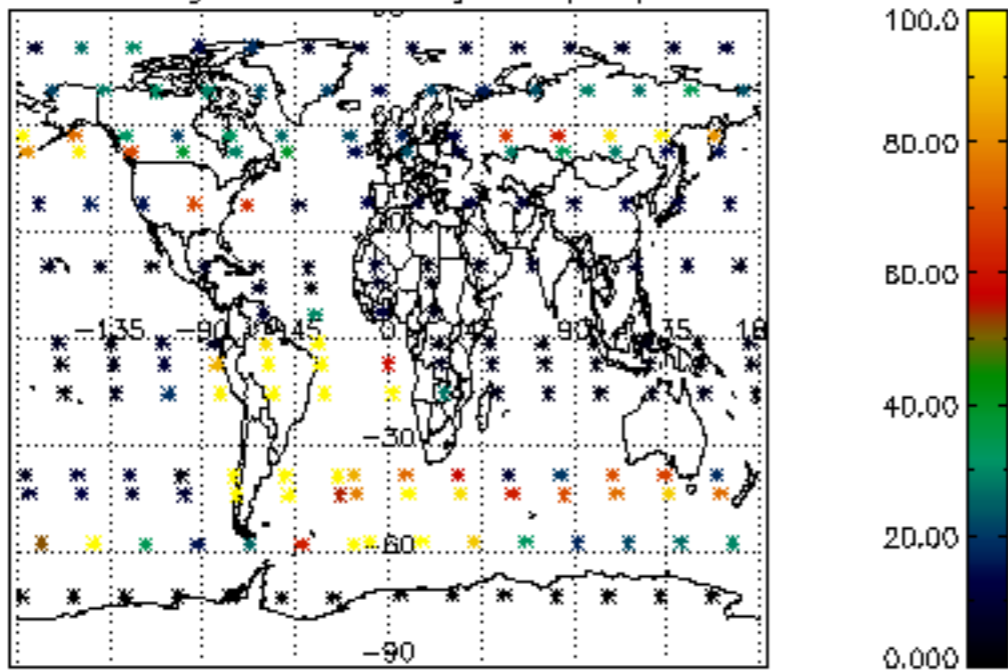
Percentage of flagged data per NO3 profile



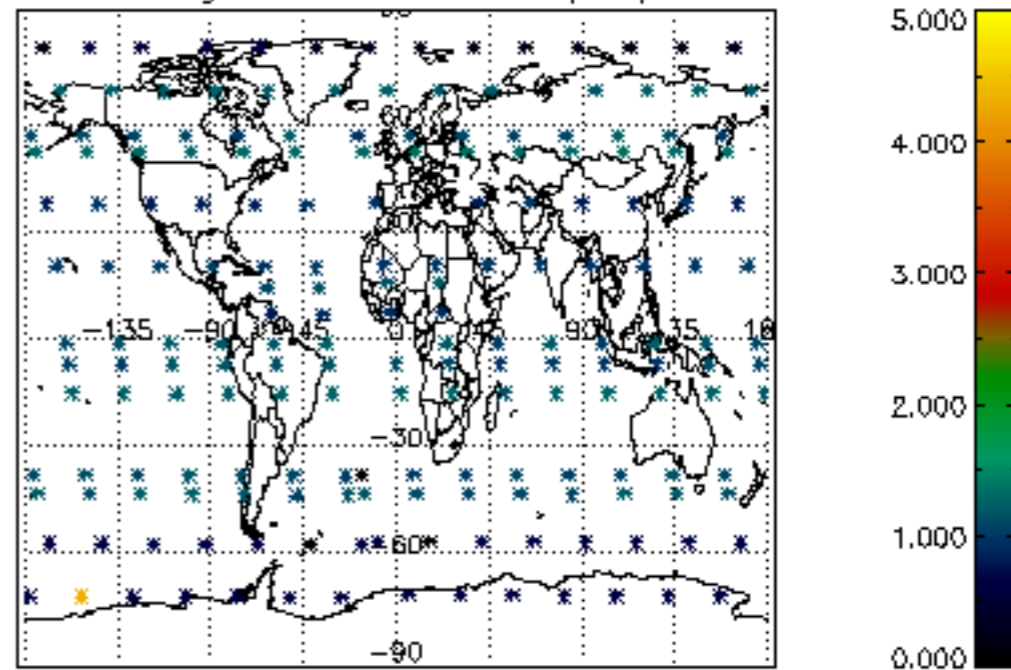




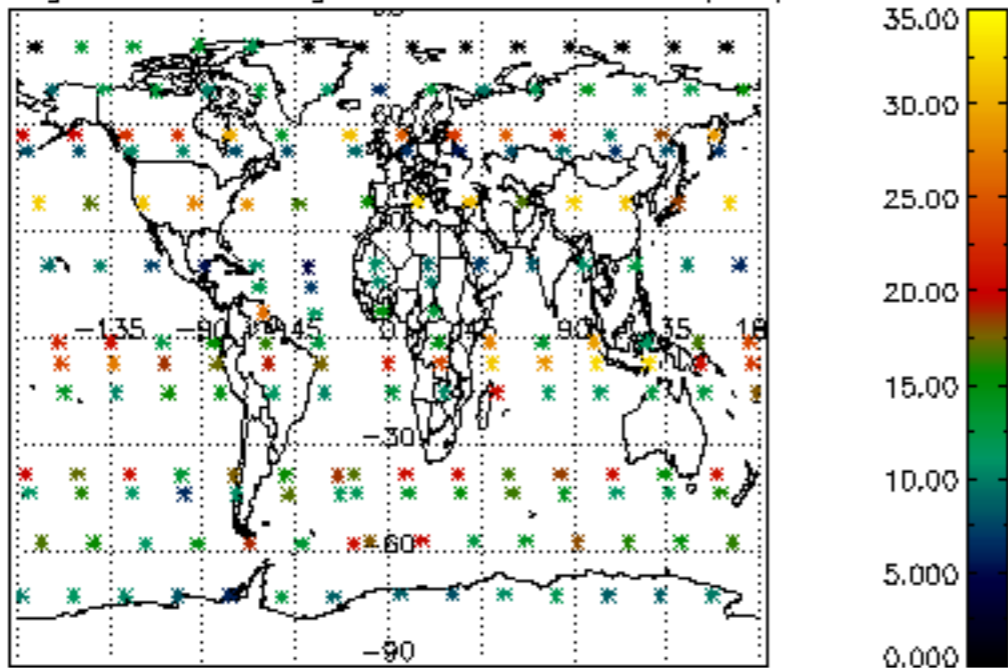
Percentage of cosmic ray hits per profile



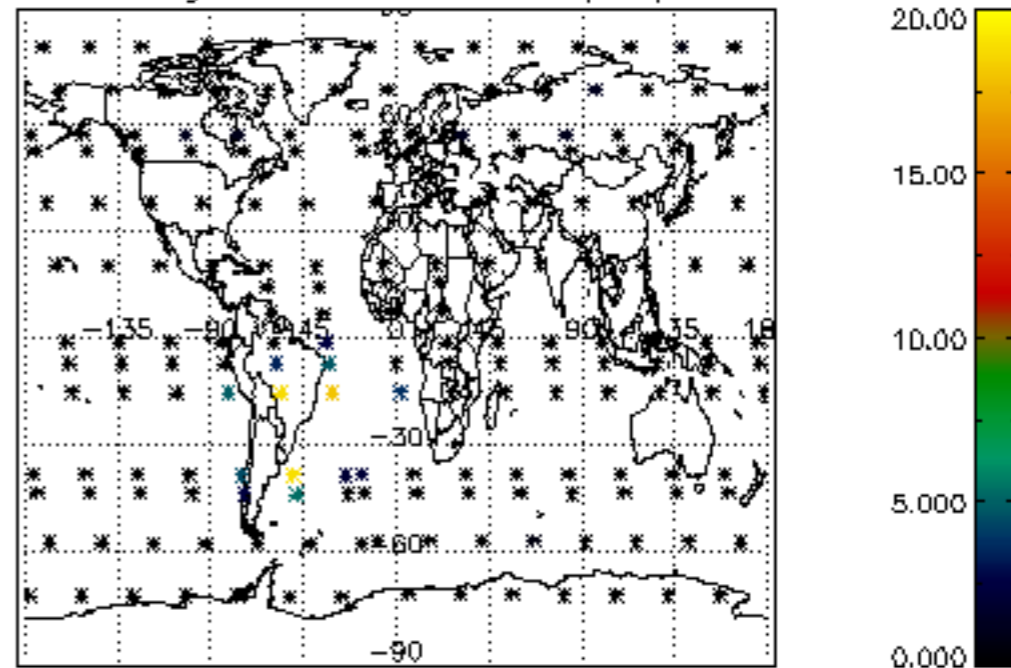
Percentage of datation errors per profile



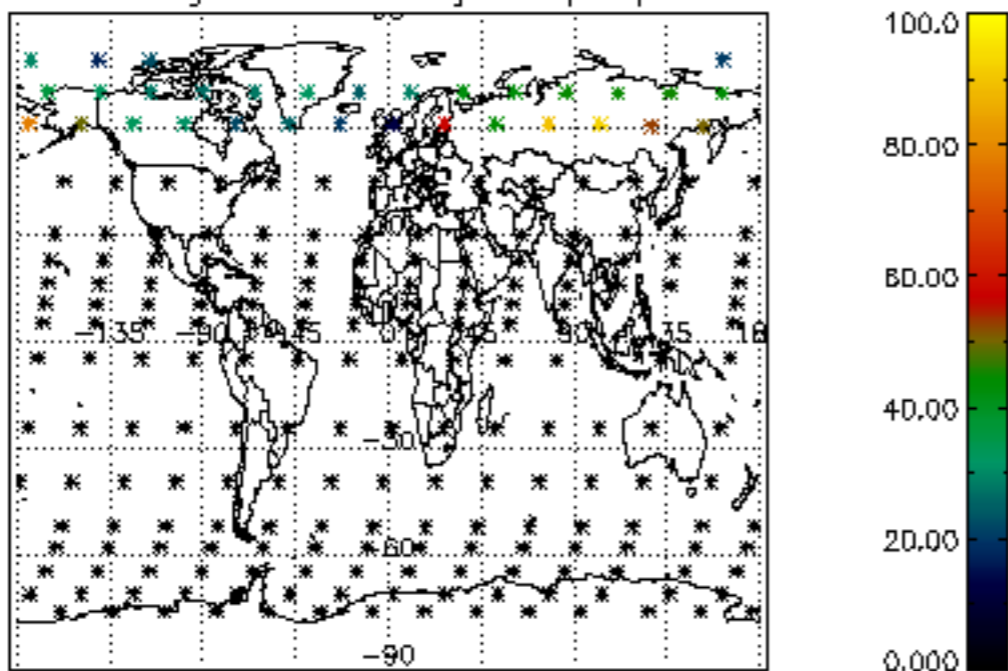
Percentage of star falling outside central band per profile



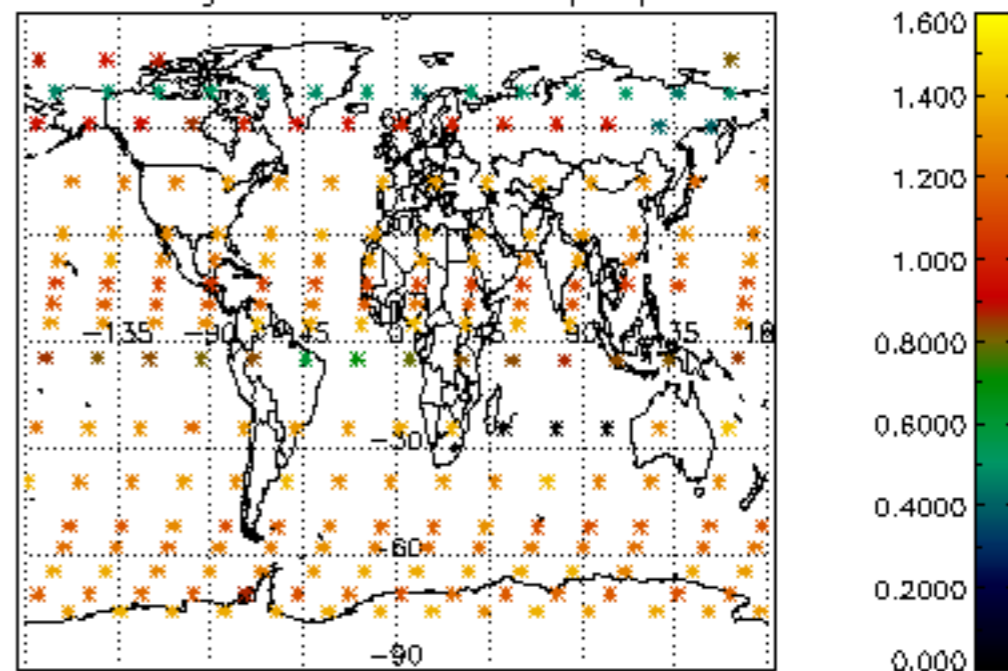
Percentage of saturation errors per profile



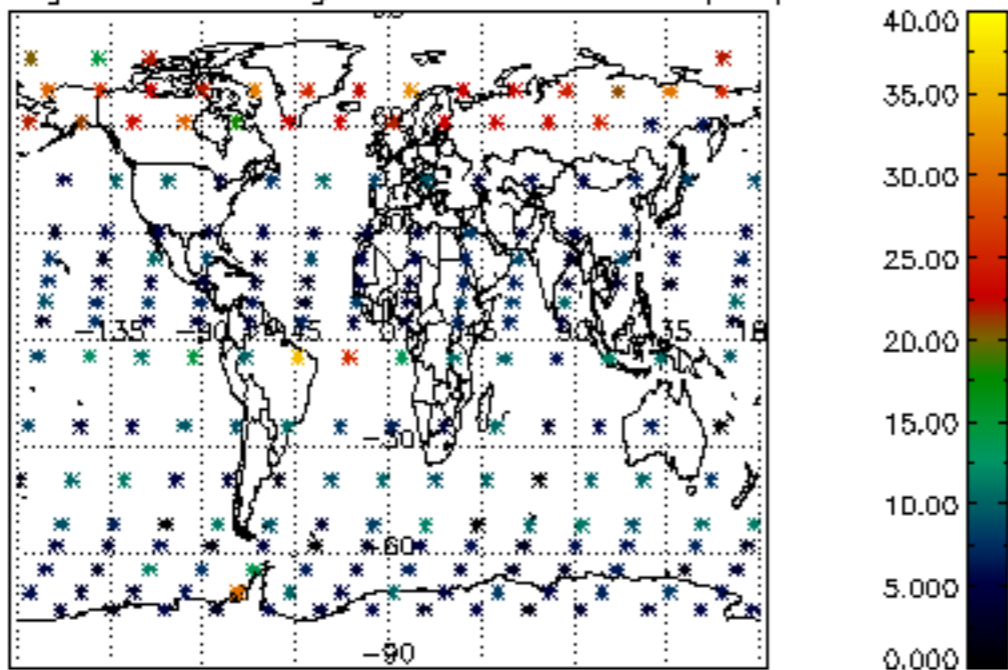
Percentage of cosmic ray hits per profile



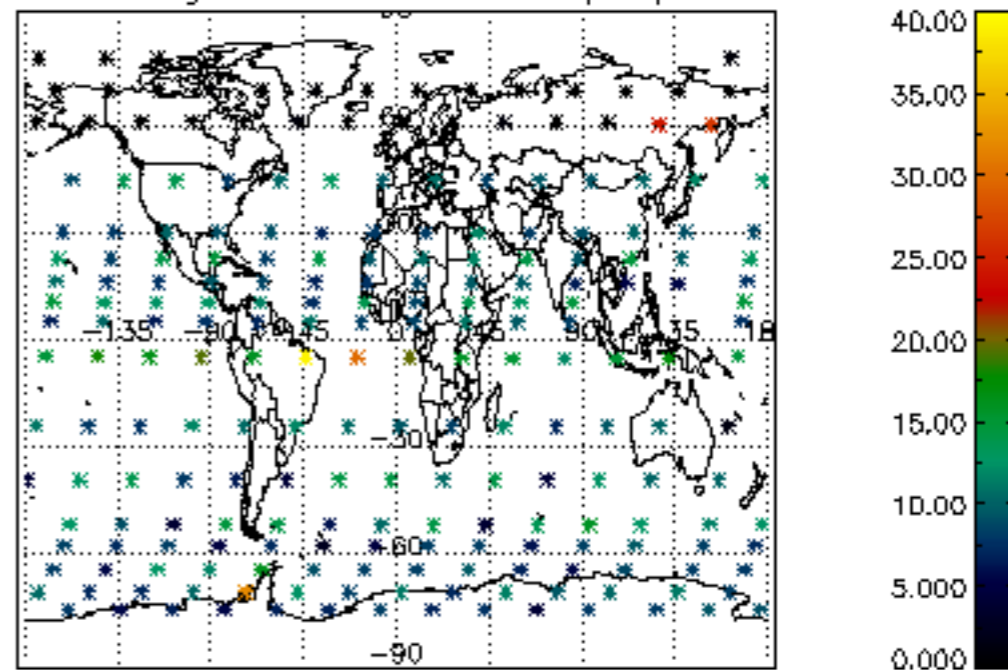
Percentage of datation errors per profile

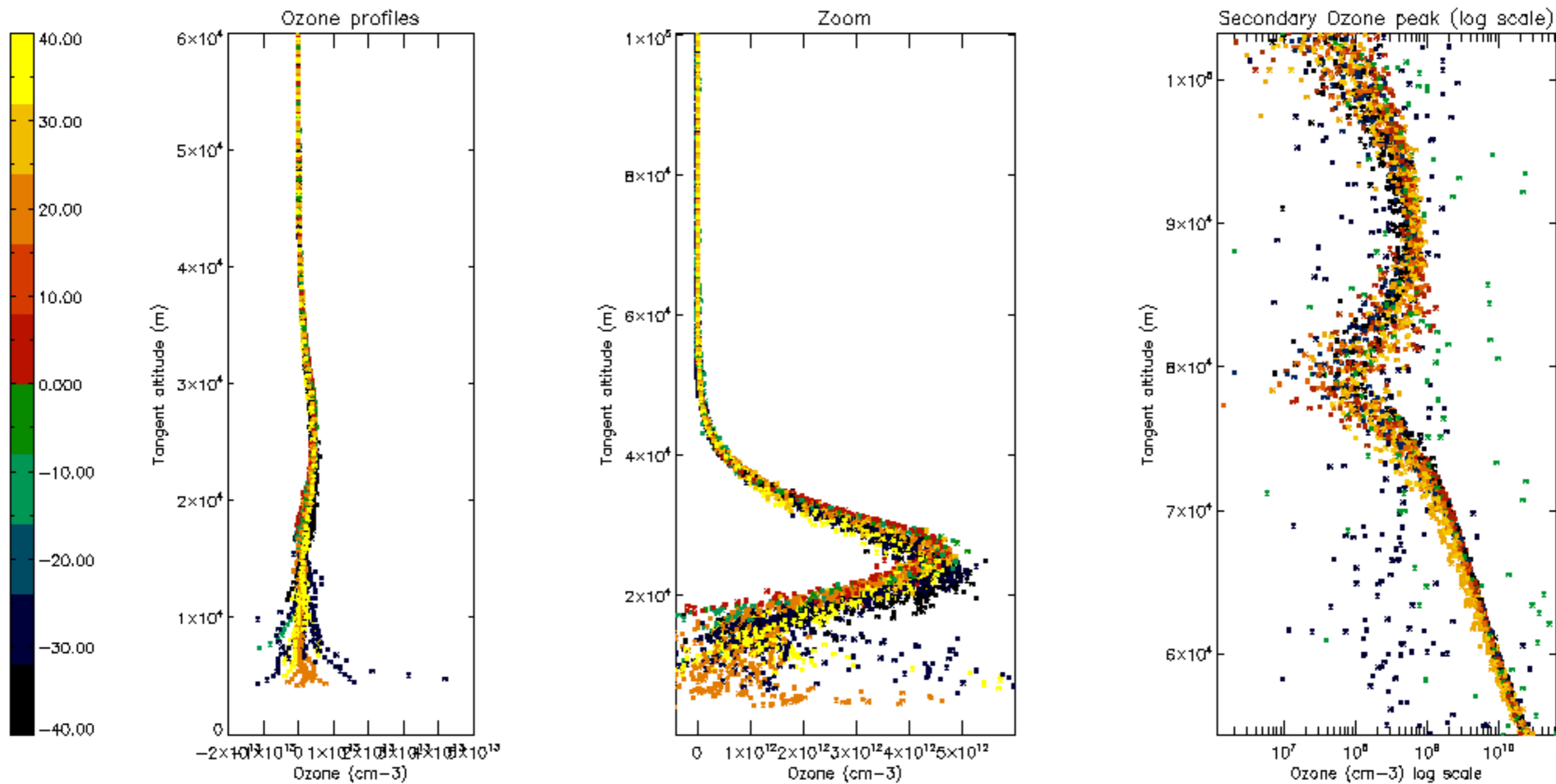


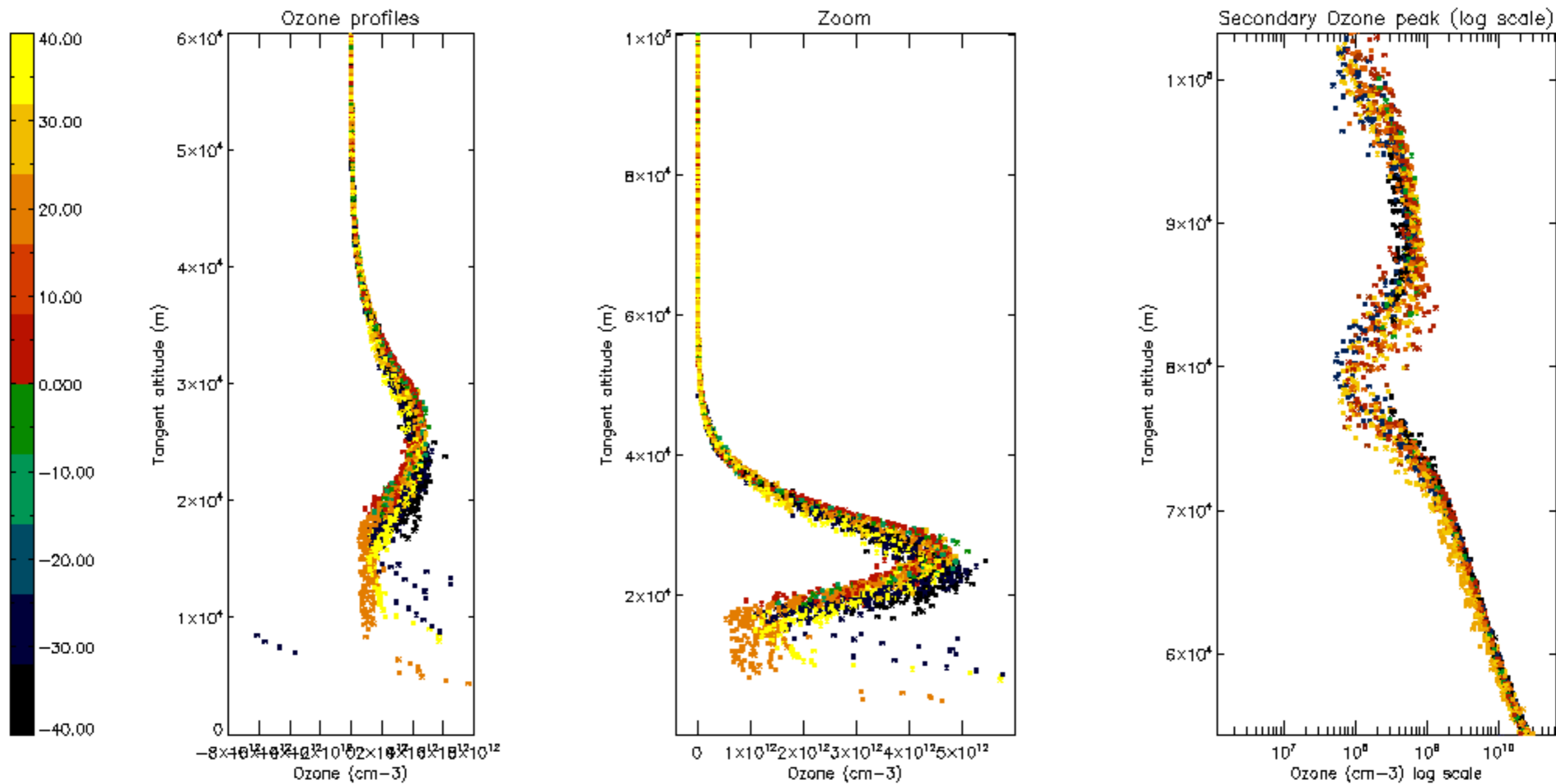
Percentage of star falling outside central band per profile

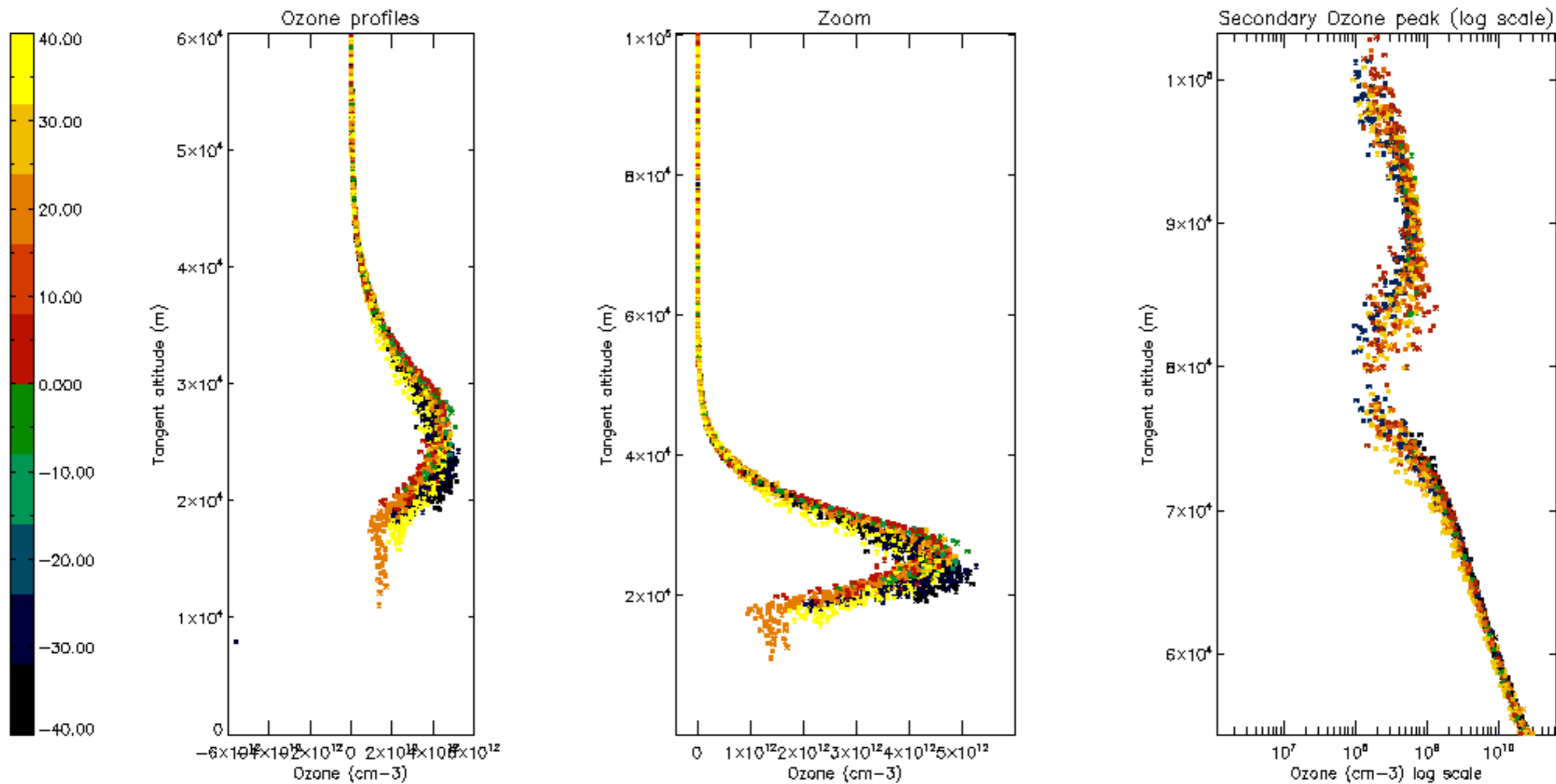


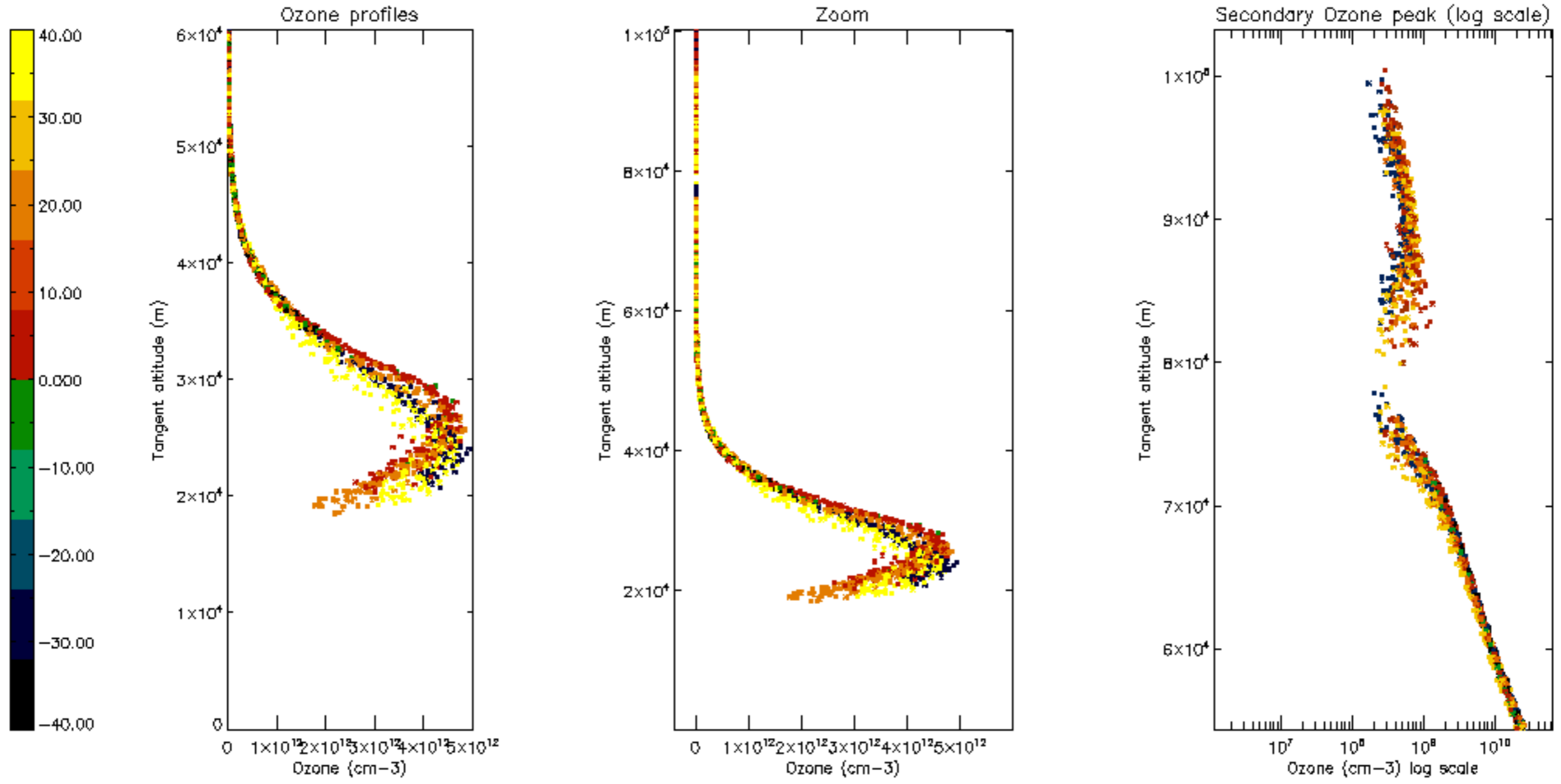
Percentage of saturation errors per profile

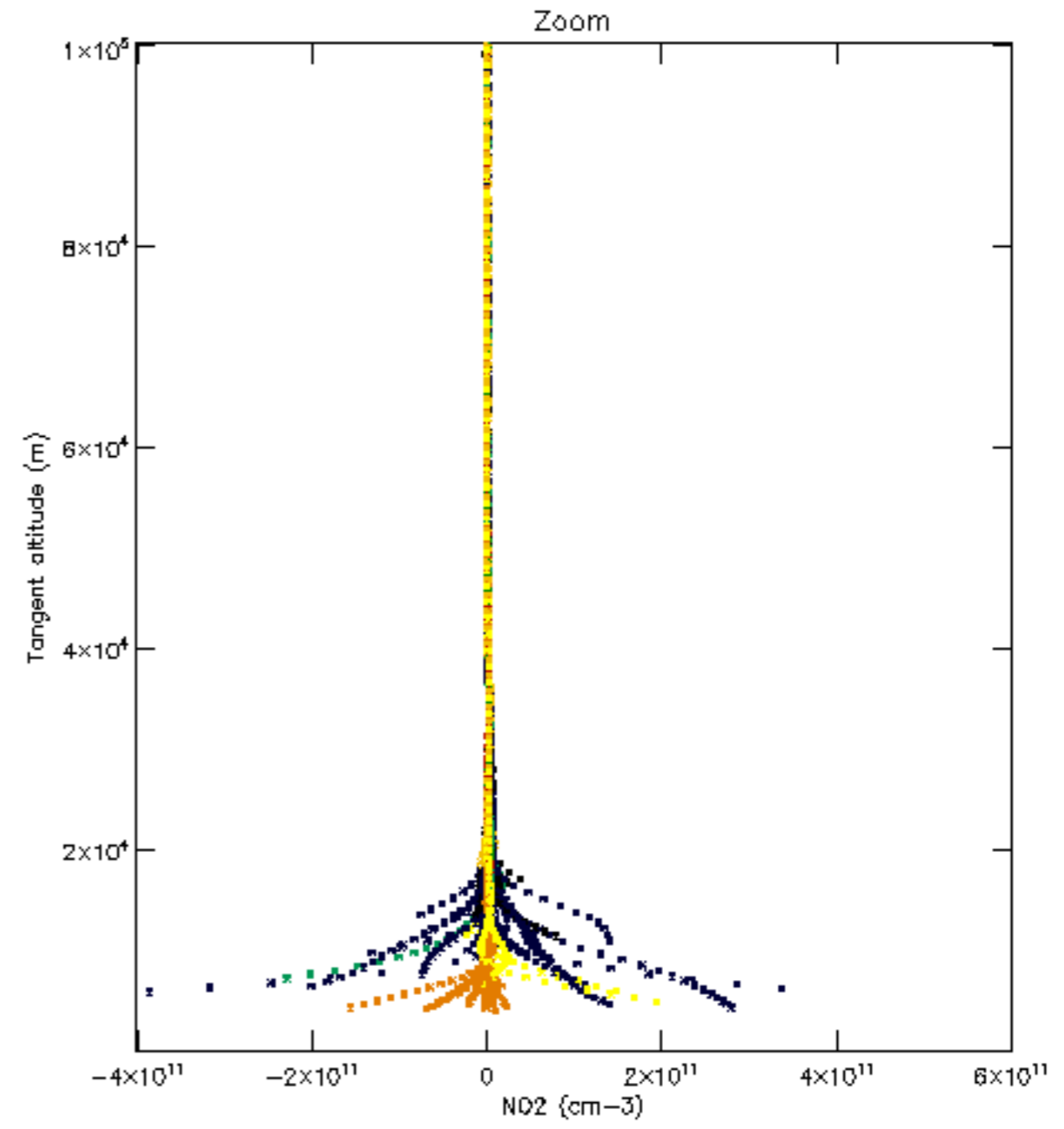
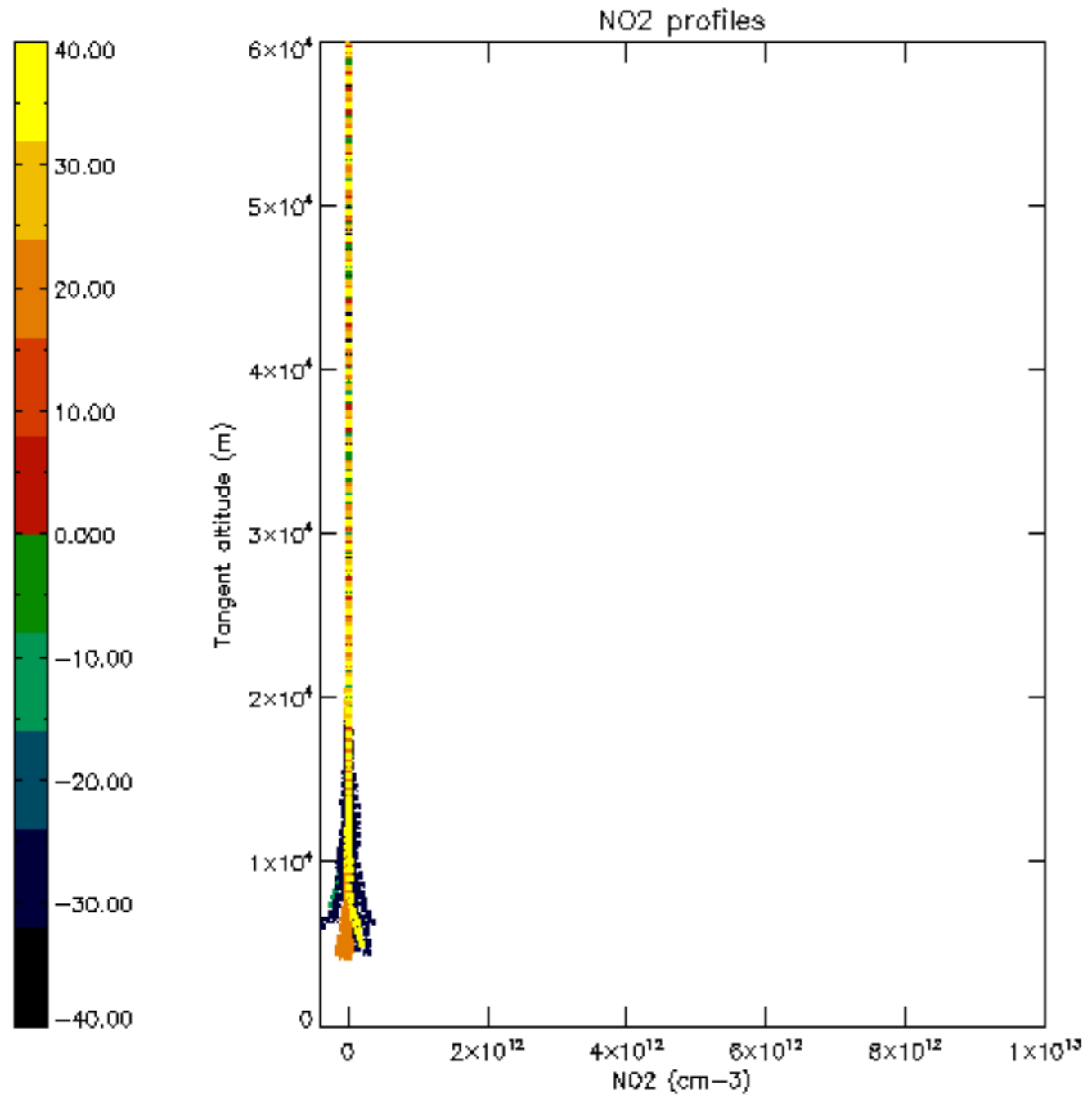


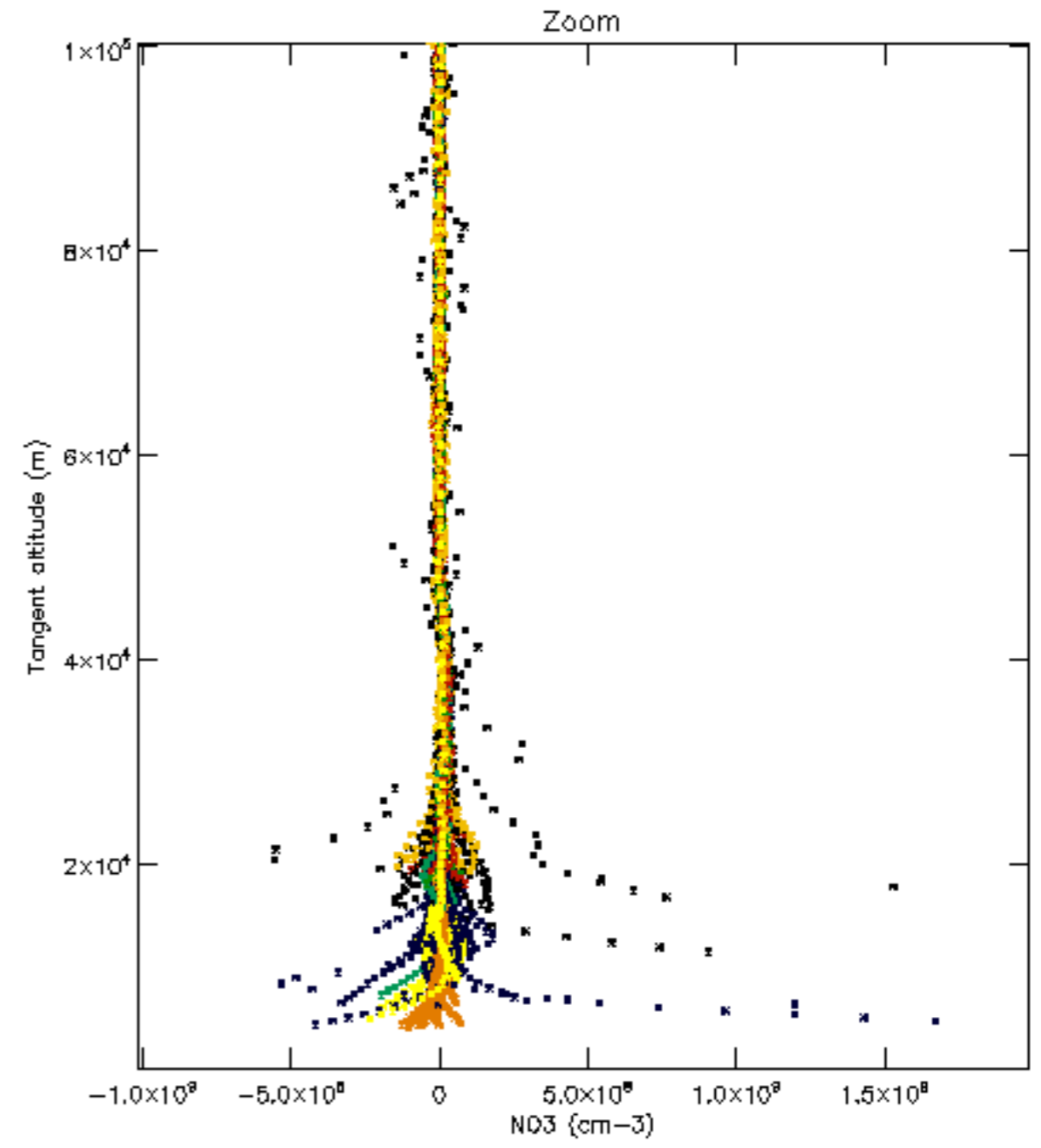
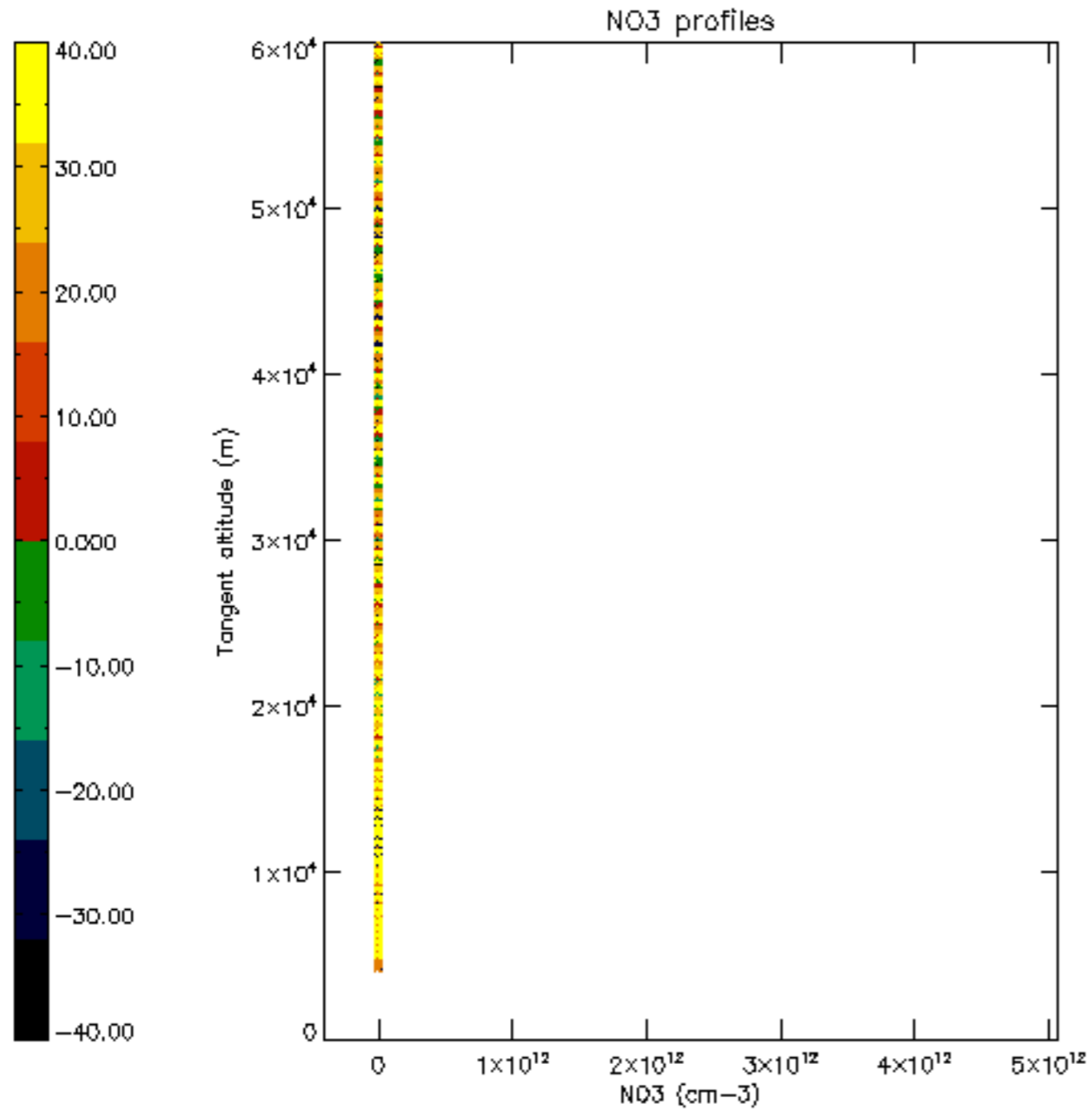


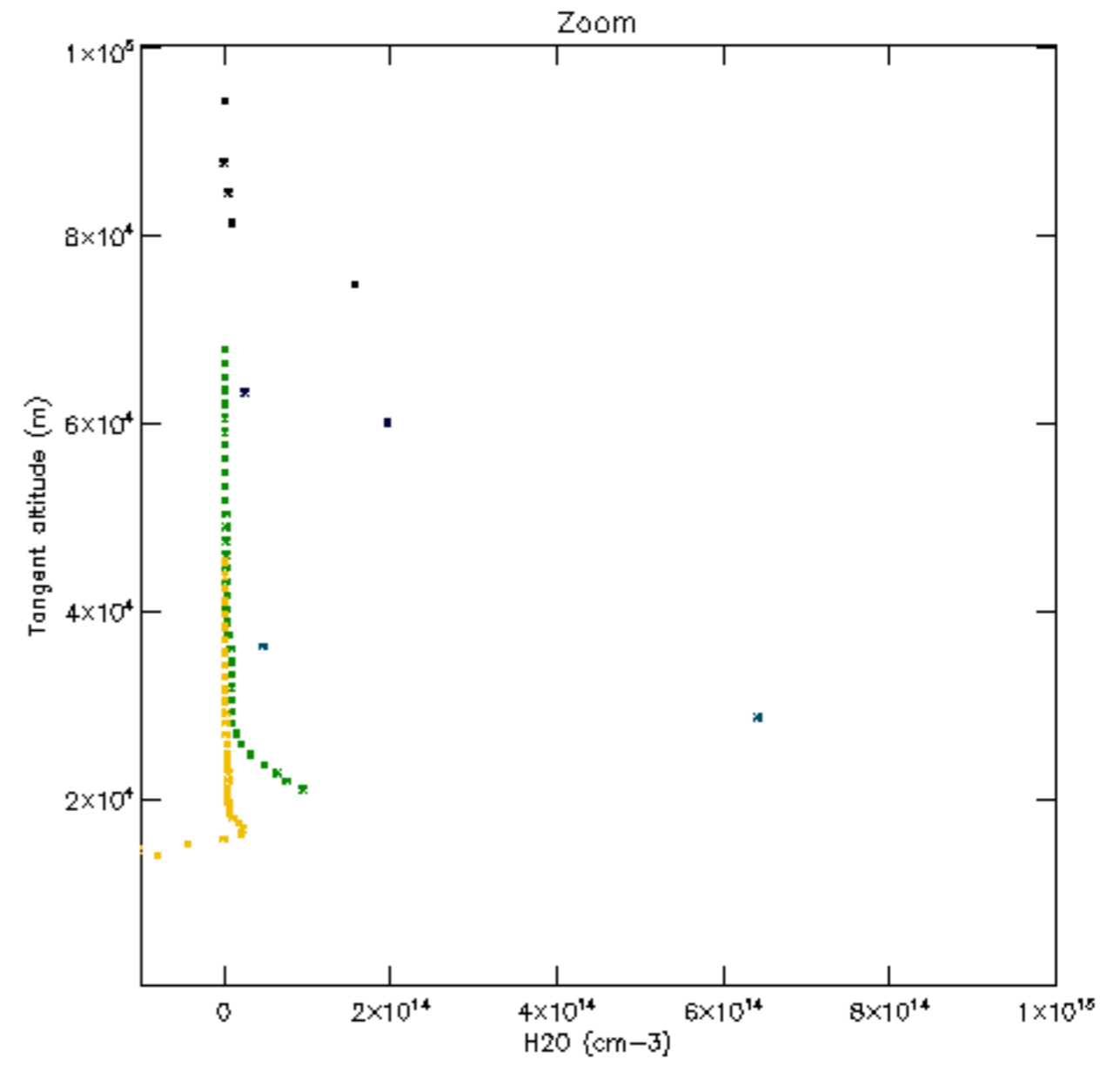
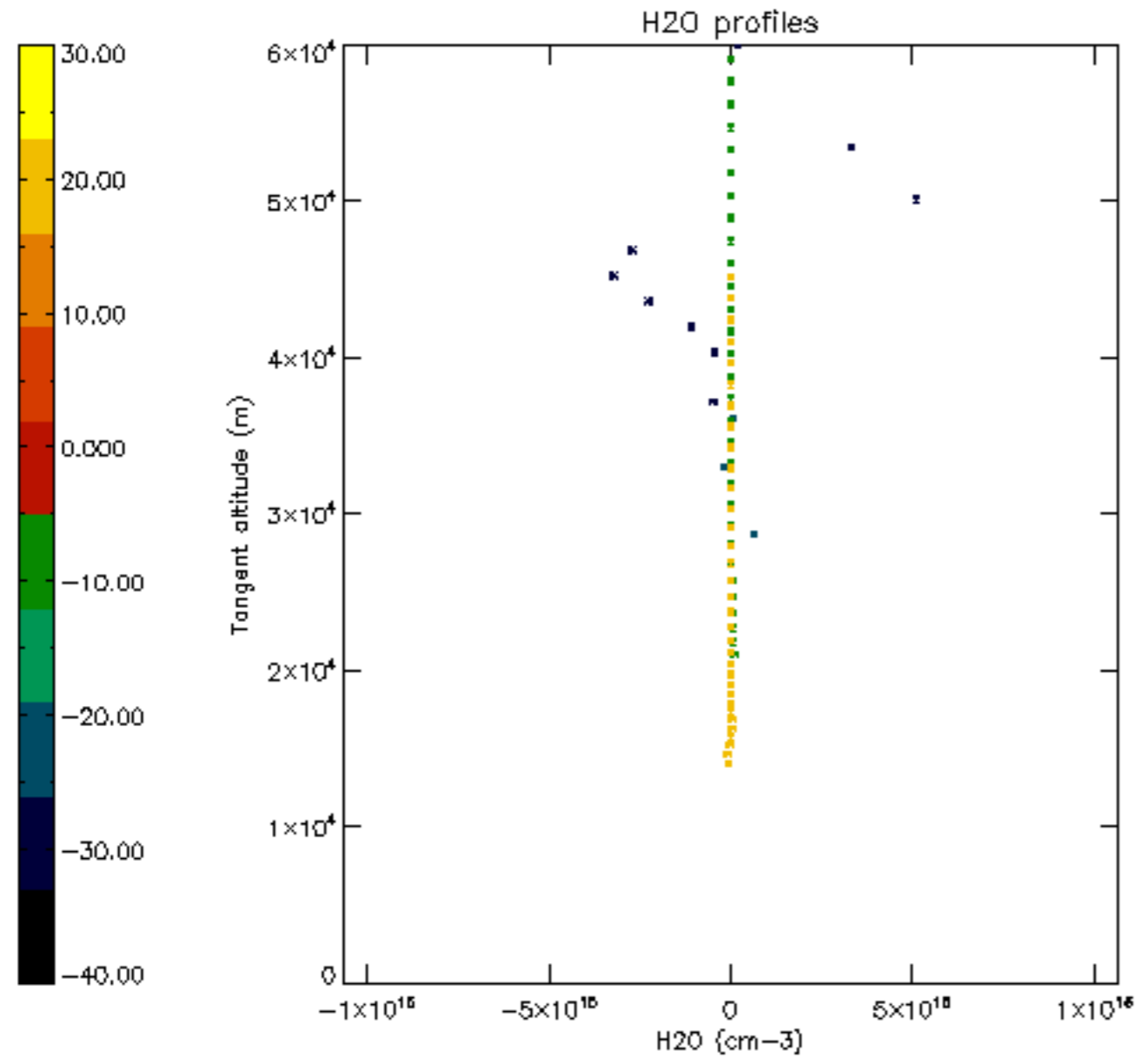


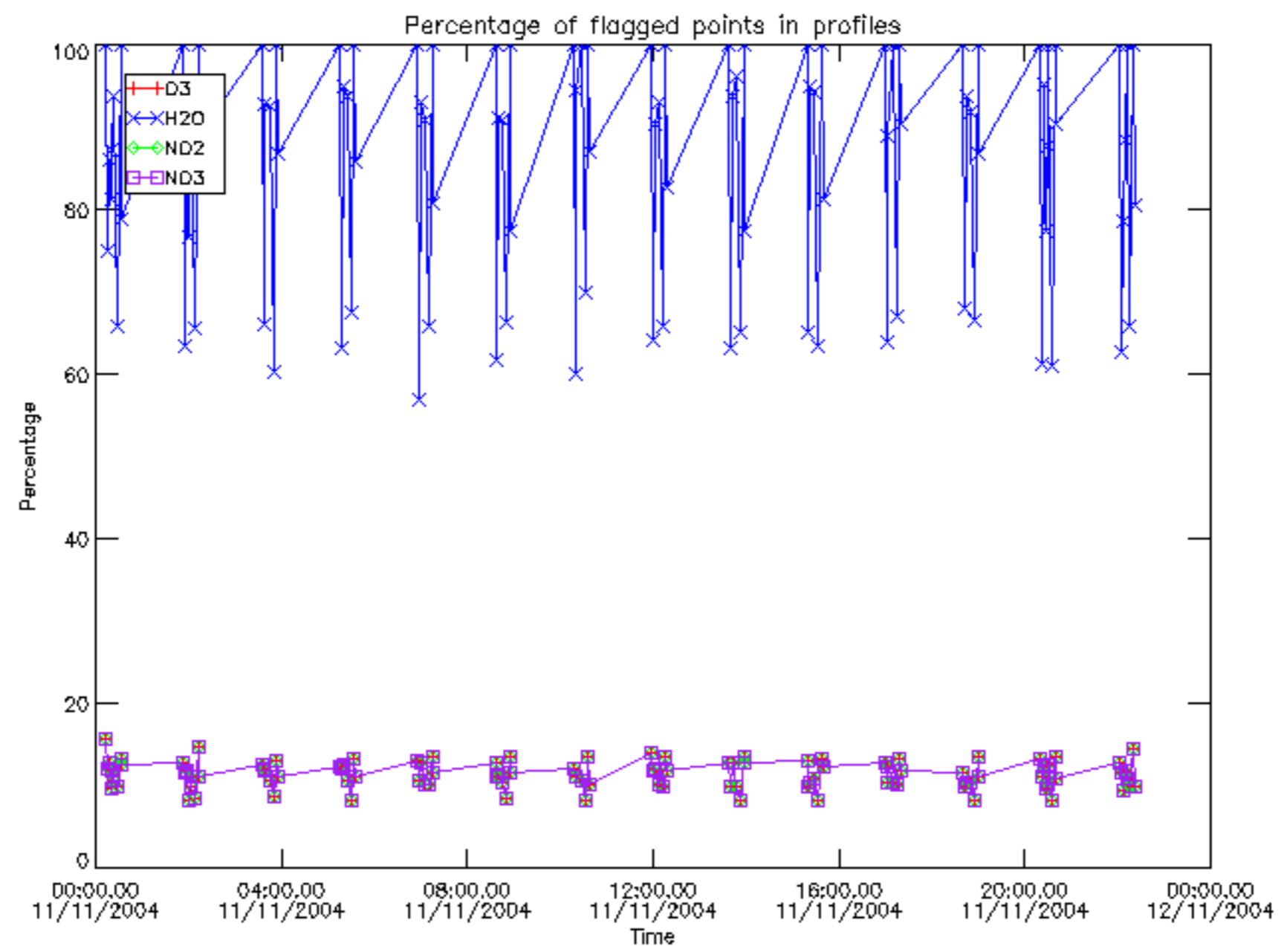




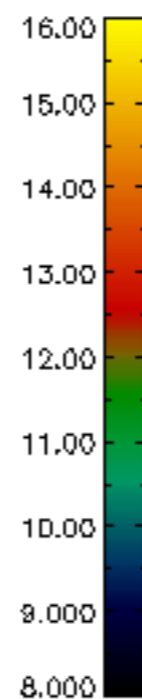
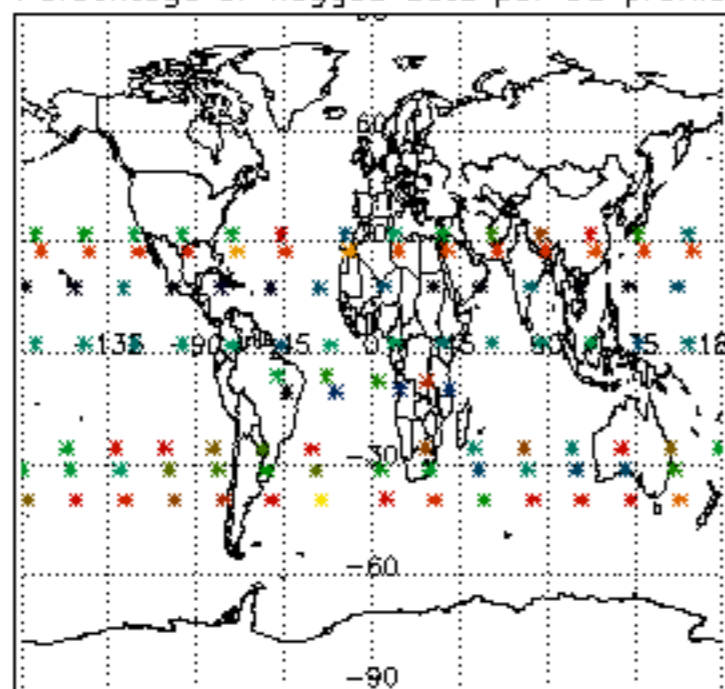




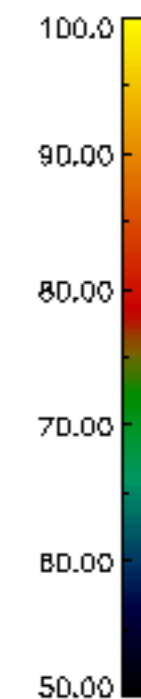
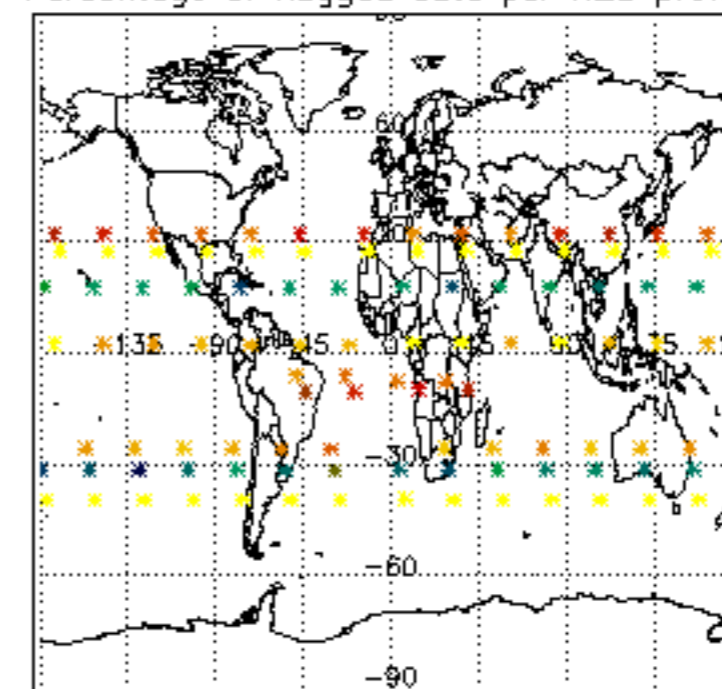




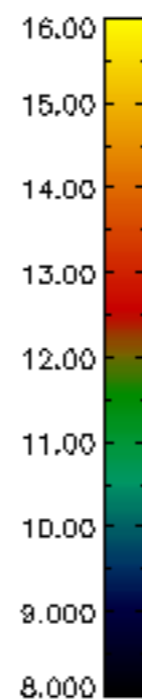
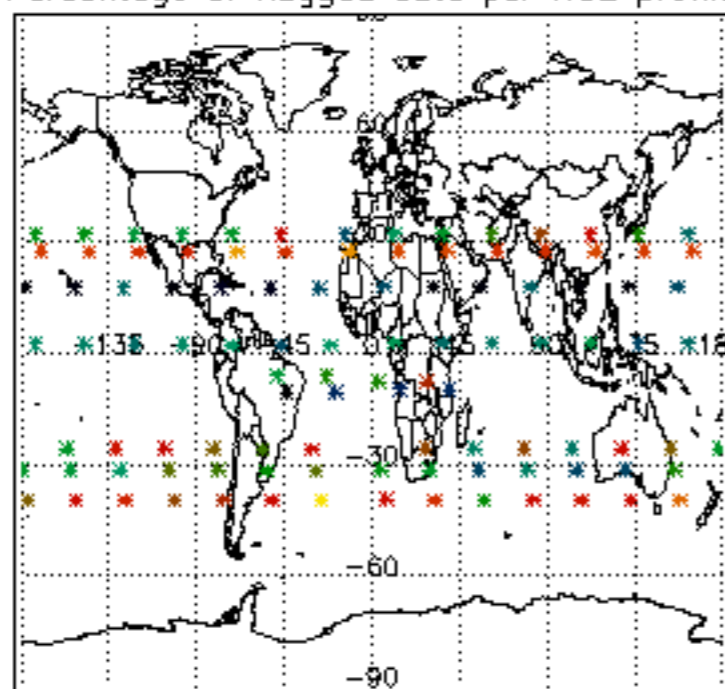
Percentage of flagged data per D3 profile



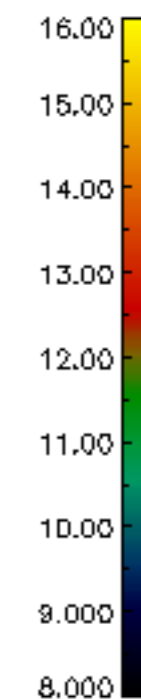
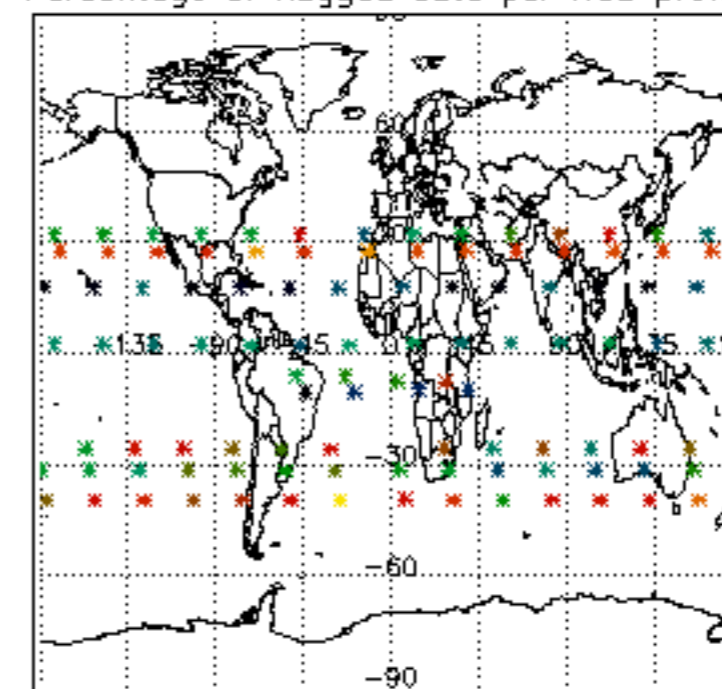
Percentage of flagged data per H2O profile

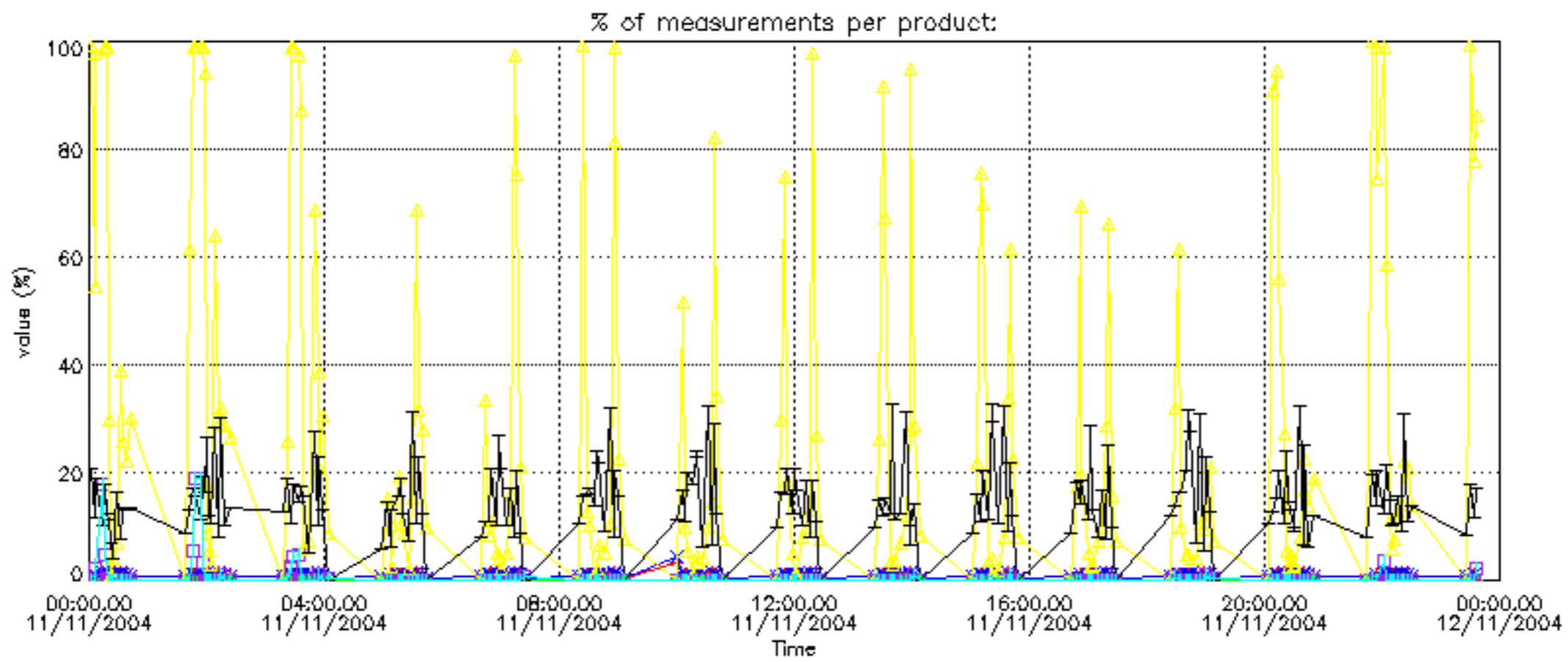


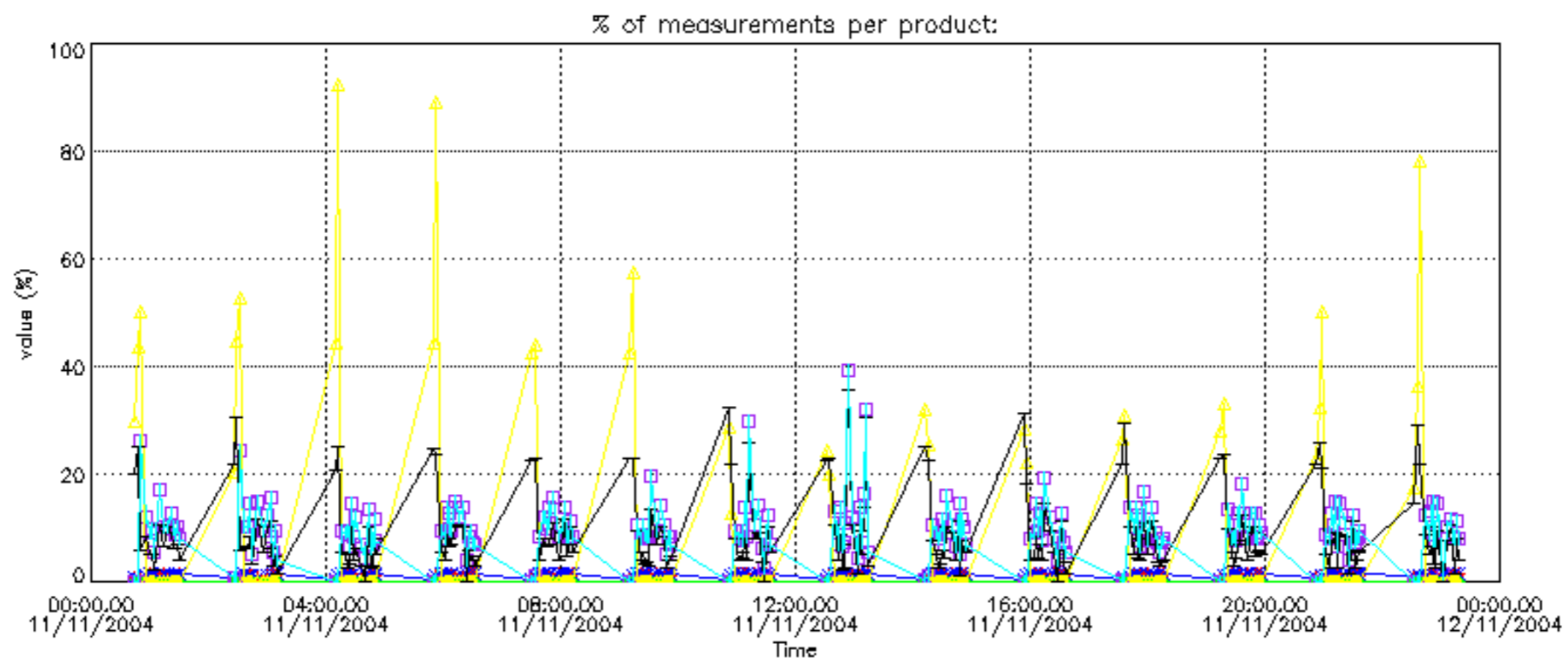
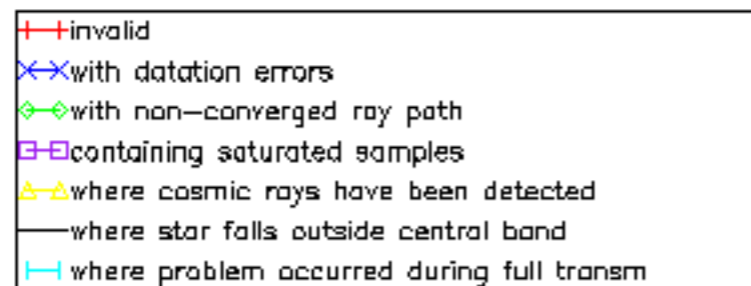
Percentage of flagged data per NO2 profile



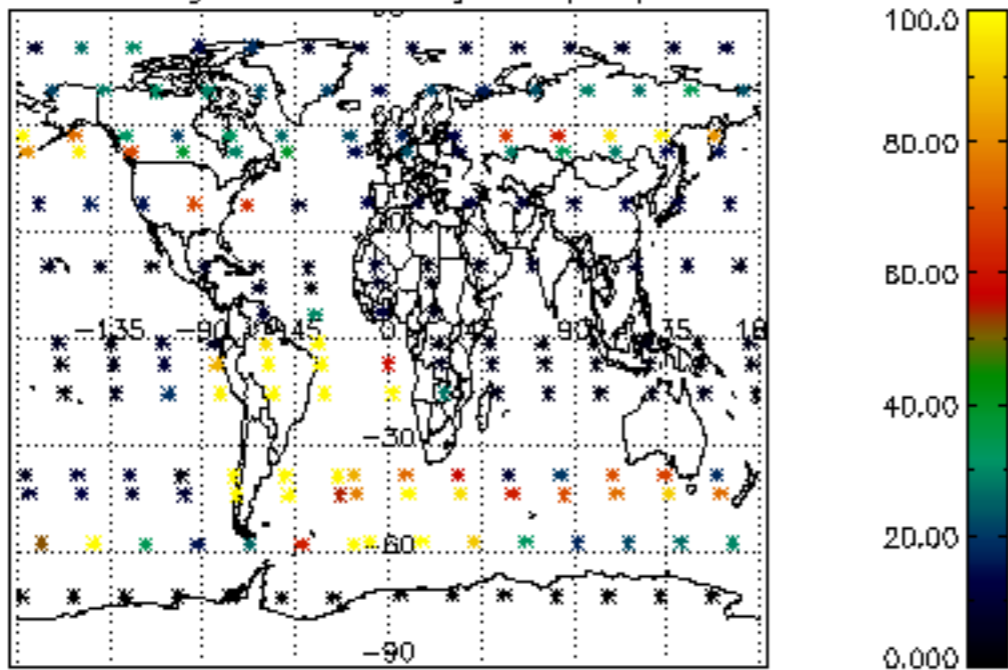
Percentage of flagged data per NO3 profile



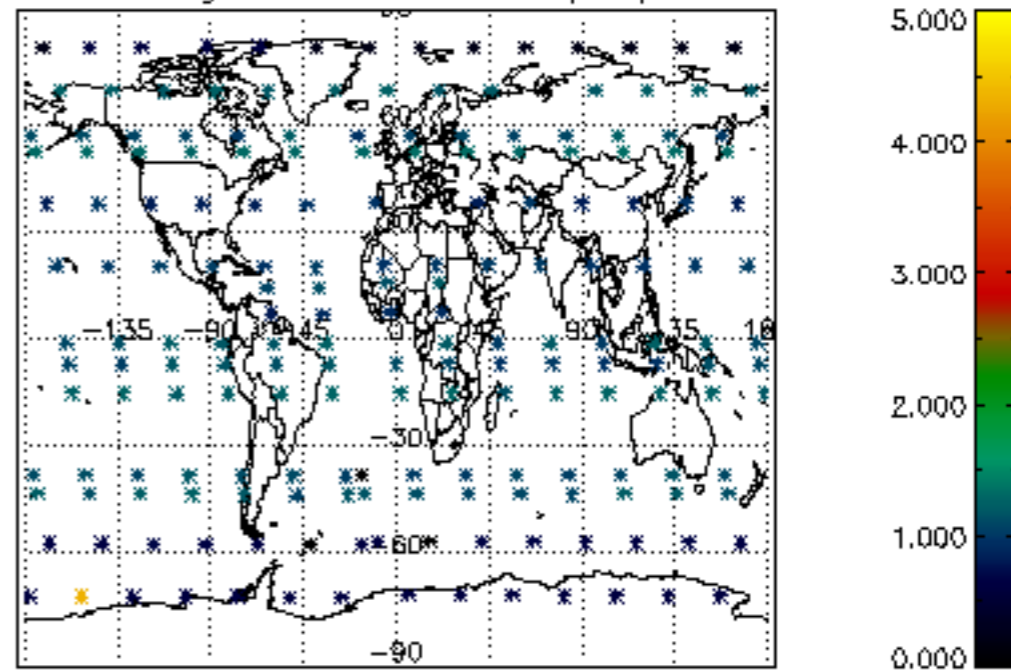




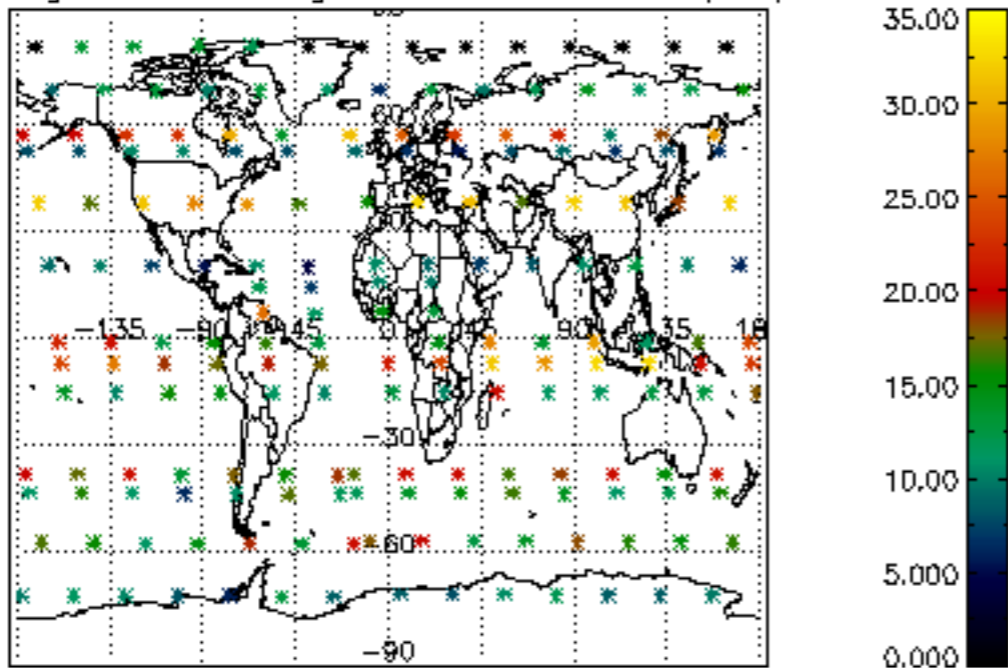
Percentage of cosmic ray hits per profile



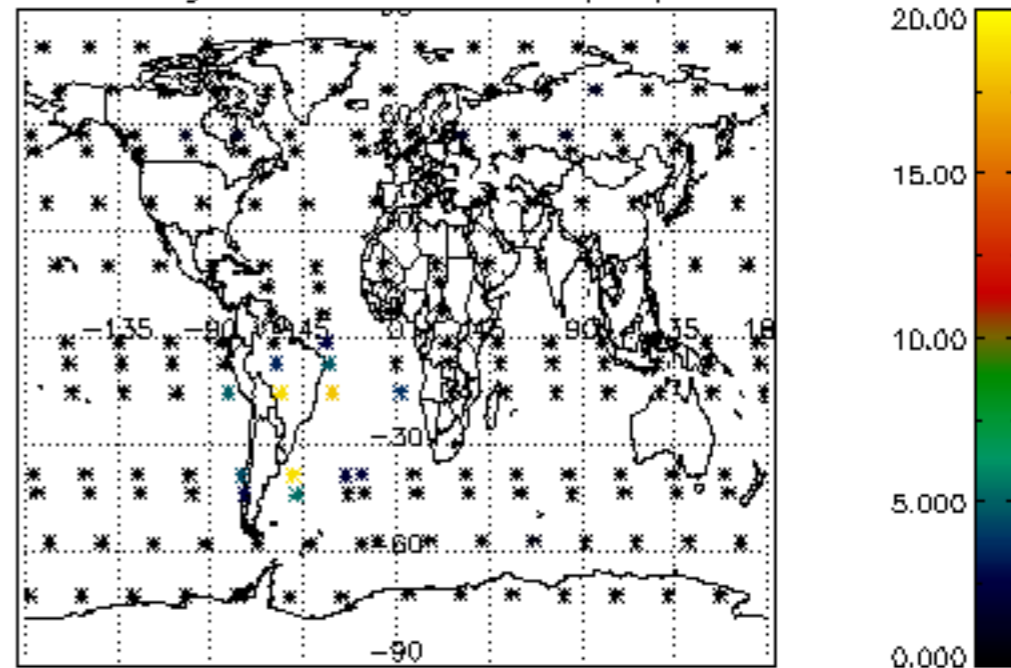
Percentage of datation errors per profile



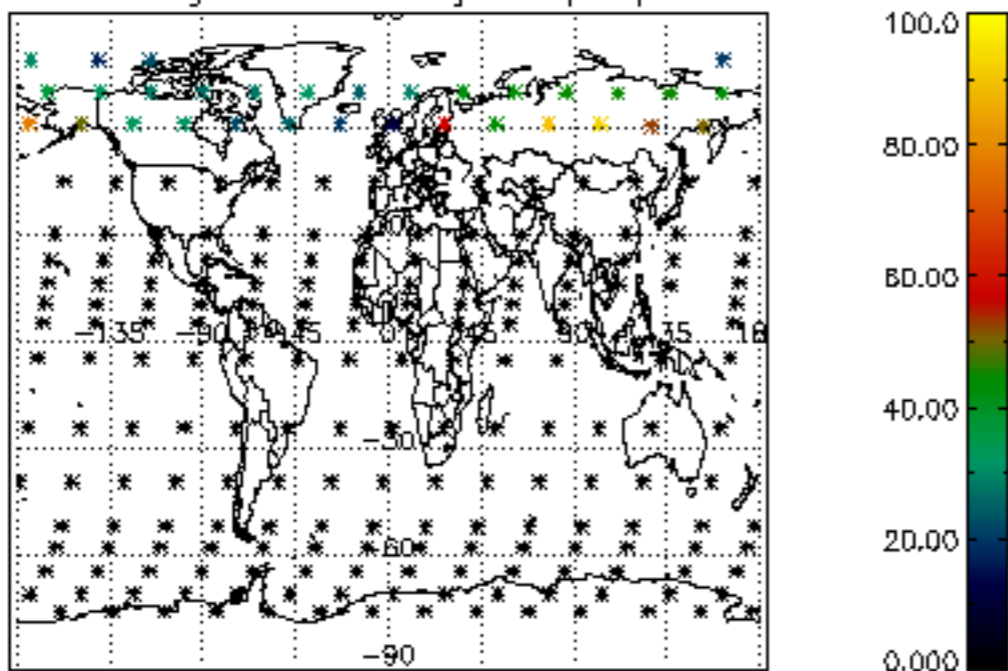
Percentage of star falling outside central band per profile



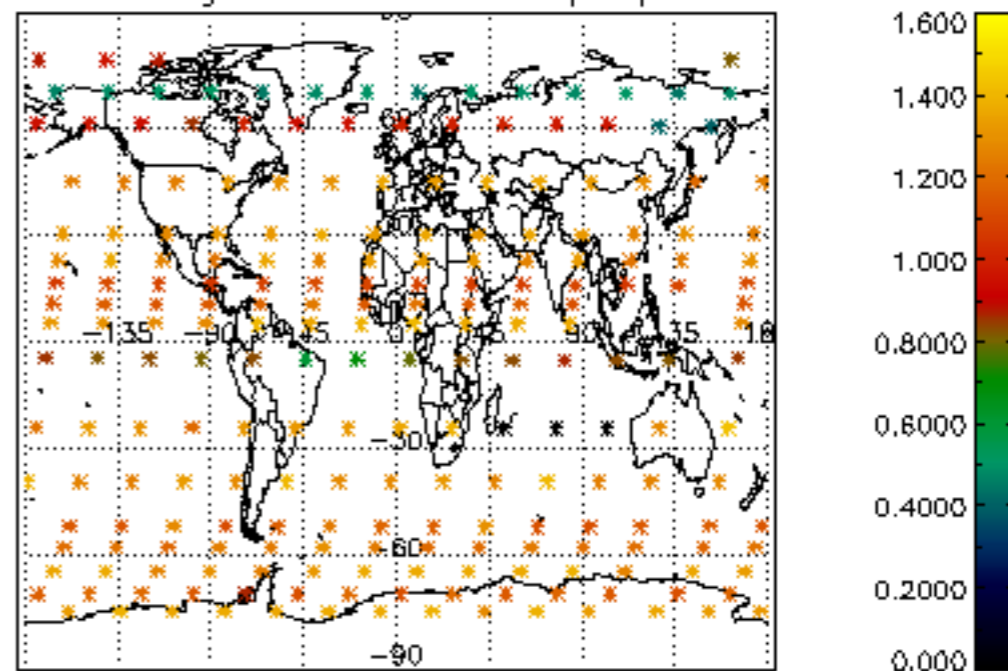
Percentage of saturation errors per profile



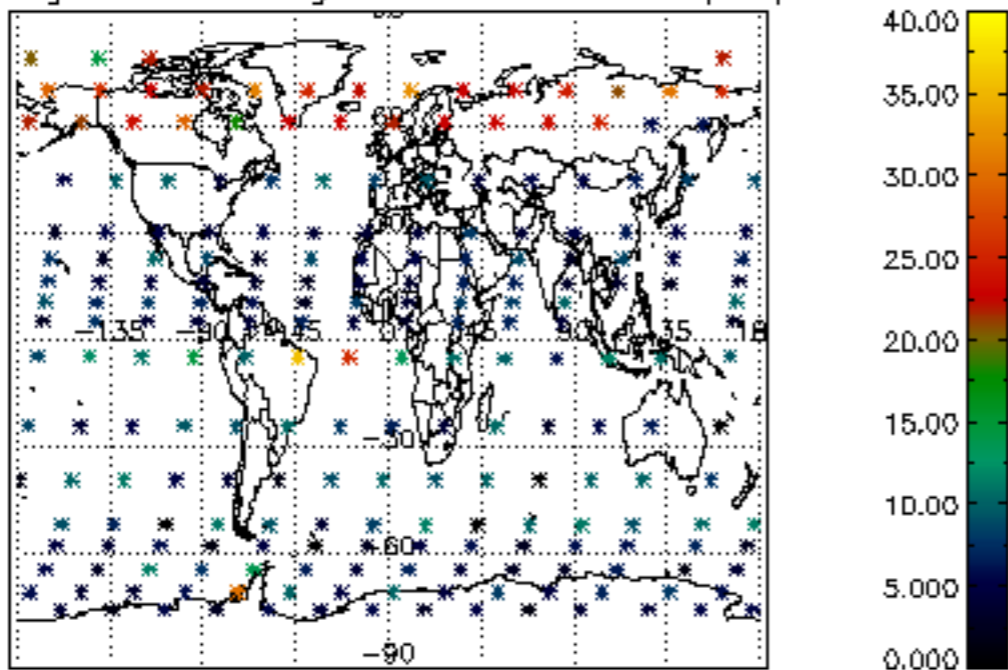
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

