

GOMOS Level 2 Daily Report

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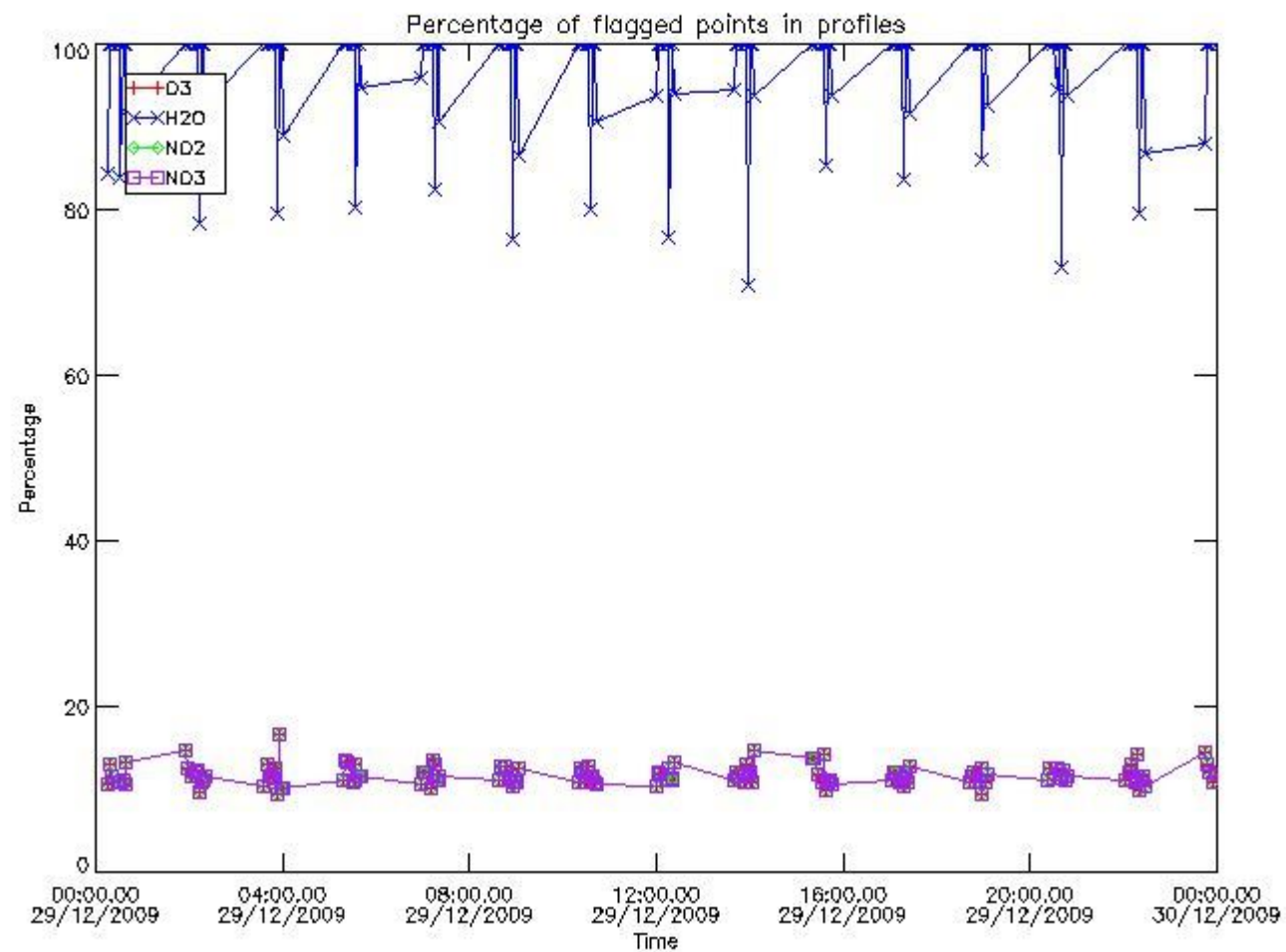
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397	GOM_NL__2PRFIN20091229_230935_000000402085_00316_40951_9770.N1	29-DEC-2009 23:09:35	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	40951	No
398	GOM_NL__2PRFIN20091229_231324_000000502085_00316_40951_9771.N1	29-DEC-2009 23:13:24	Bright	49.500	32	77Eps UMa	1.7630	11000.	99	40951	No
399	GOM_NL__2PRFIN20091229_231635_000000442085_00316_40951_9772.N1	29-DEC-2009 23:16:35	Bright	43.500	39	85Eta UMa	1.8540	24000.	87	40951	No
400	GOM_NL__2PRFIN20091229_232033_000000612085_00316_40951_9773.N1	29-DEC-2009 23:20:33	Bright	61.000	180	27Gam Boo	3.0400	8000.0	122	40951	No
401	GOM_NL__2PRFIN20091229_232409_000000602085_00316_40951_9774.N1	29-DEC-2009 23:24:09	Bright	60.000	83		2.3780	11000.	120	40951	No
402	GOM_NL__2PRFIN20091229_232719_000000512085_00316_40951_9775.N1	29-DEC-2009 23:27:19	Bright	51.000	3	16Alp Boo	-0.050000	4250.0	102	40951	No
403	GOM_NL__2PRFIN20091229_233422_000000552085_00316_40951_9776.N1	29-DEC-2009 23:34:22	Bright	55.000	104	27Bet Lib	2.6140	13100.	110	40951	No
404	GOM_NL__2PRFIN20091229_233658_000000442085_00316_40951_9777.N1	29-DEC-2009 23:36:58	Twilight	44.000	122	9Alp2Lib	2.7470	9700.0	88	40951	No
405	GOM_NL__2PRFIN20091229_234347_000000462085_00316_40951_9778.N1	29-DEC-2009 23:43:47	Dark	46.000	54	5The Cen	2.0550	4500.0	92	40951	No
406	GOM_NL__2PRFIN20091229_234636_000000402085_00316_40951_9779.N1	29-DEC-2009 23:46:36	Dark	39.500	95	Zet Cen	2.5450	26000.	79	40951	No
407	GOM_NL__2PRFIN20091229_235000_000000422085_00317_40952_9631.N1	29-DEC-2009 23:50:00	Dark	42.000	64	Gam Cen	2.2000	10600.	84	40952	No
408	GOM_NL__2PRFIN20091229_235607_000000482085_00317_40952_9632.N1	29-DEC-2009 23:56:07	Dark	47.500	113	Mu Vel	2.6920	5000.0	95	40952	No
409	GOM_NL__2PRFIN20091229_235851_000000442085_00317_40952_9633.N1	29-DEC-2009 23:58:51	Dark	43.500	71	lot Car	2.2460	7700.0	87	40952	No

3. Quality information per product

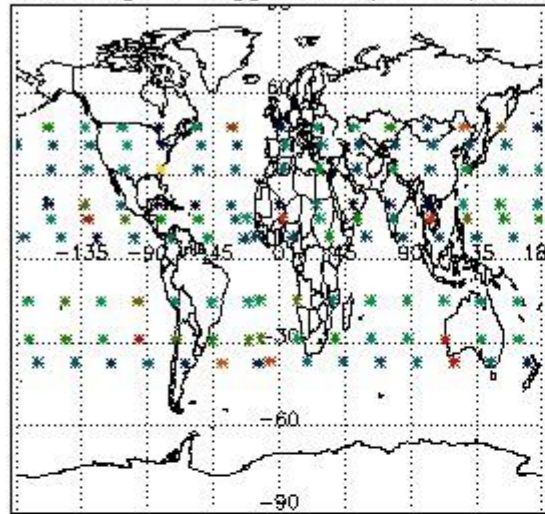
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

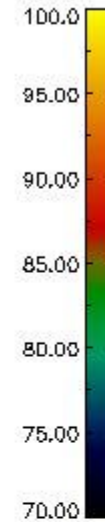
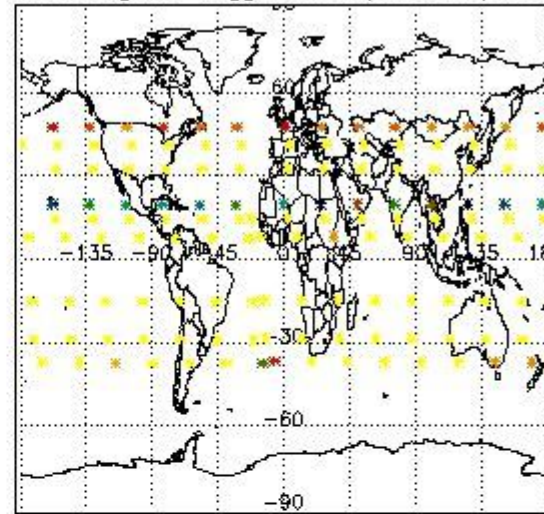


3.2 Plot quality information per product (world map)

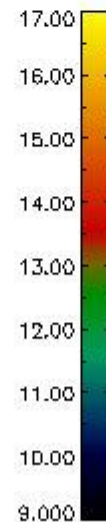
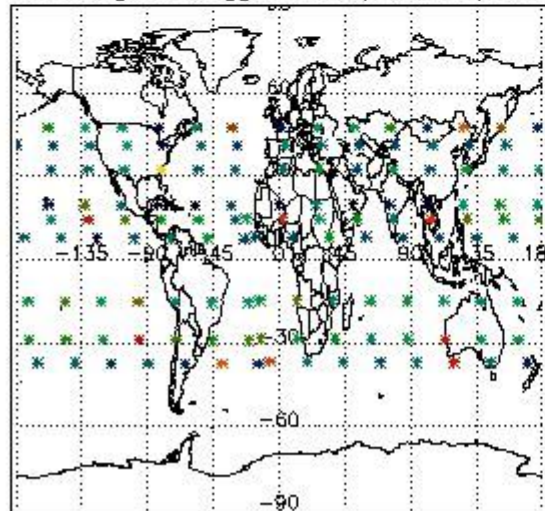
Percentage of flagged data per O3 profile



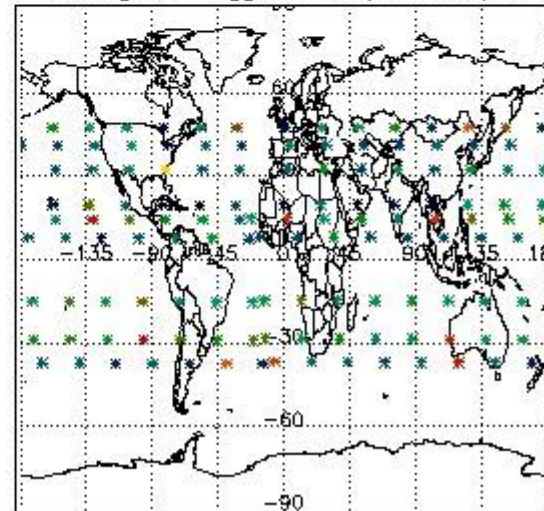
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

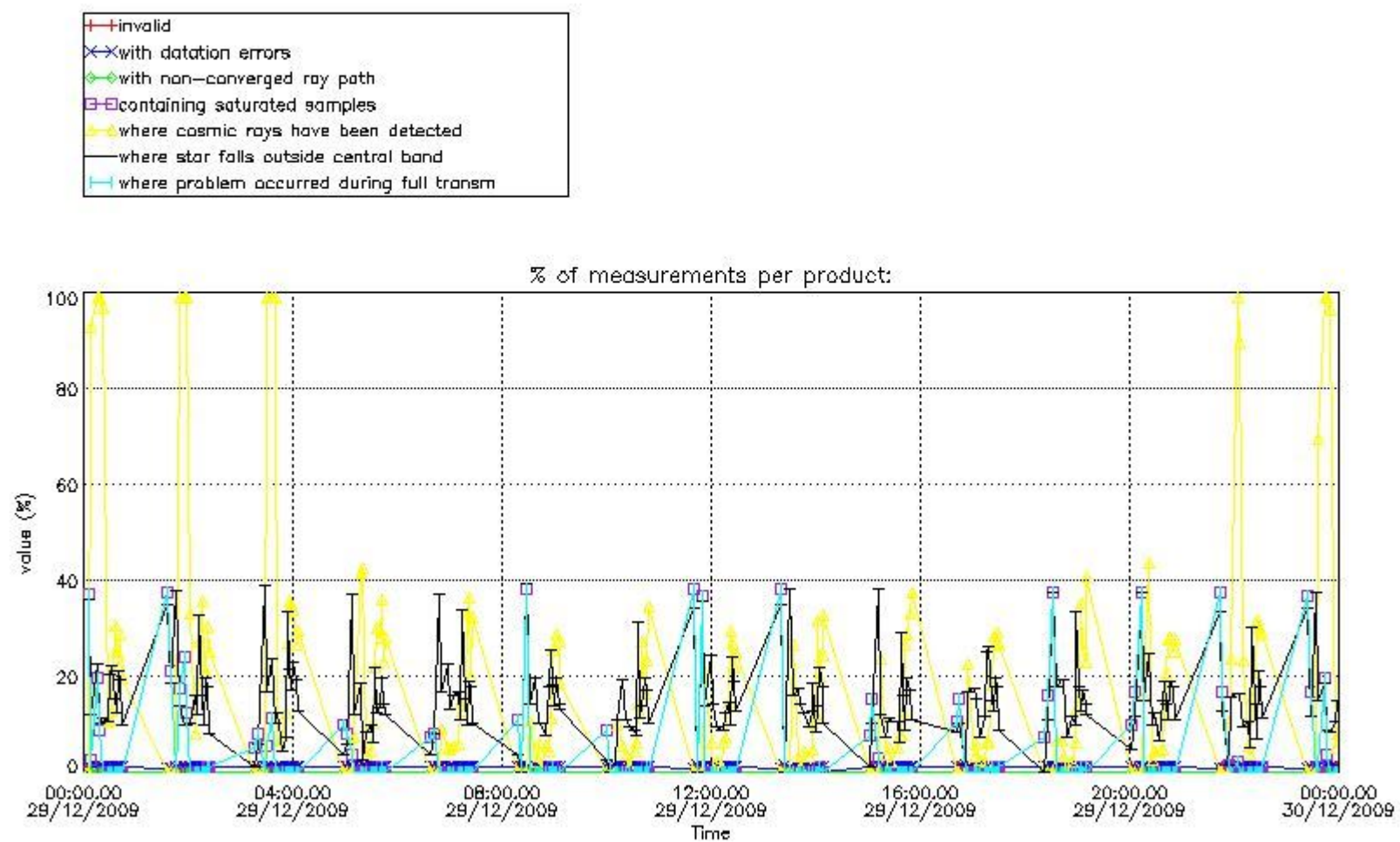


4. Level 1 quality information per product

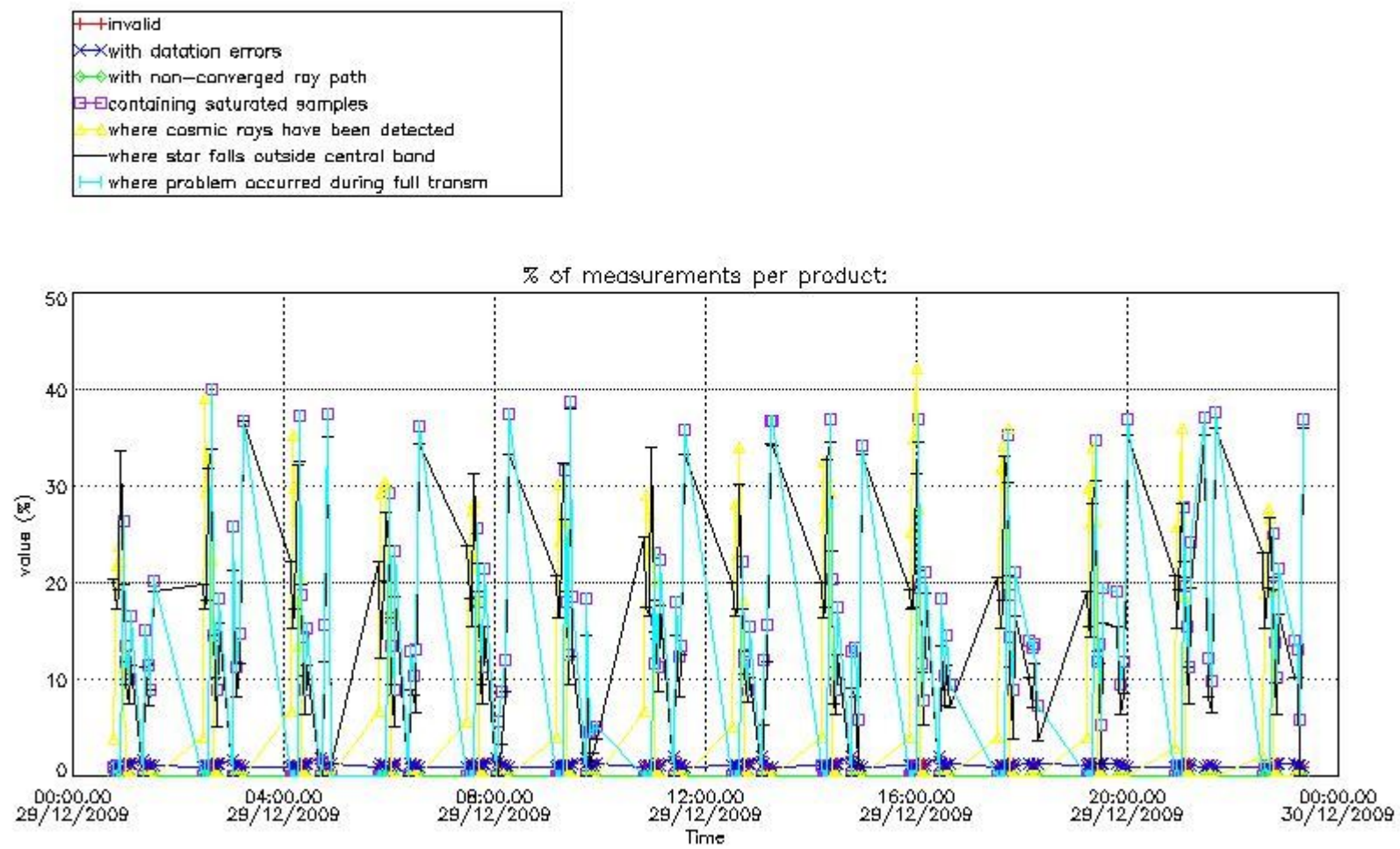
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

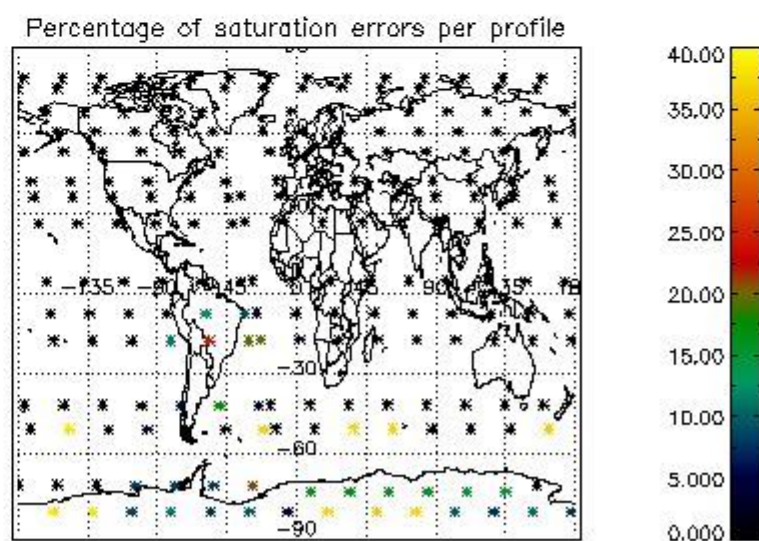
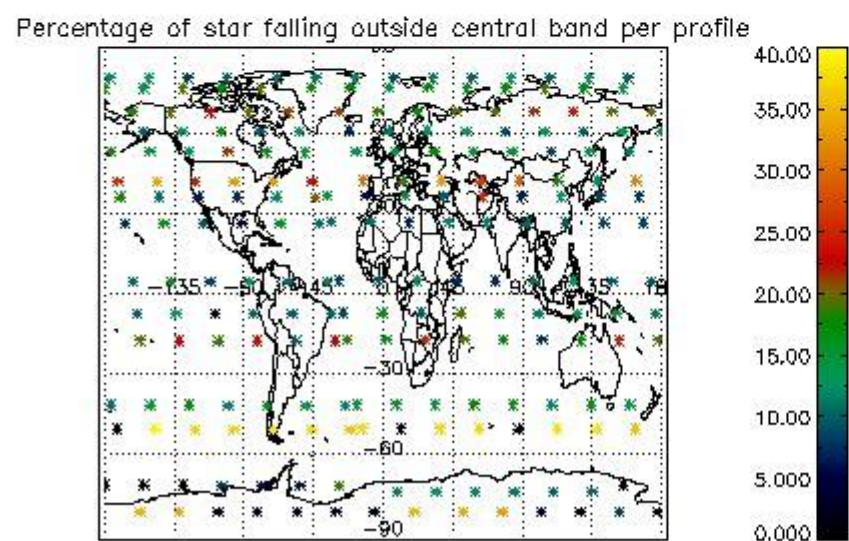
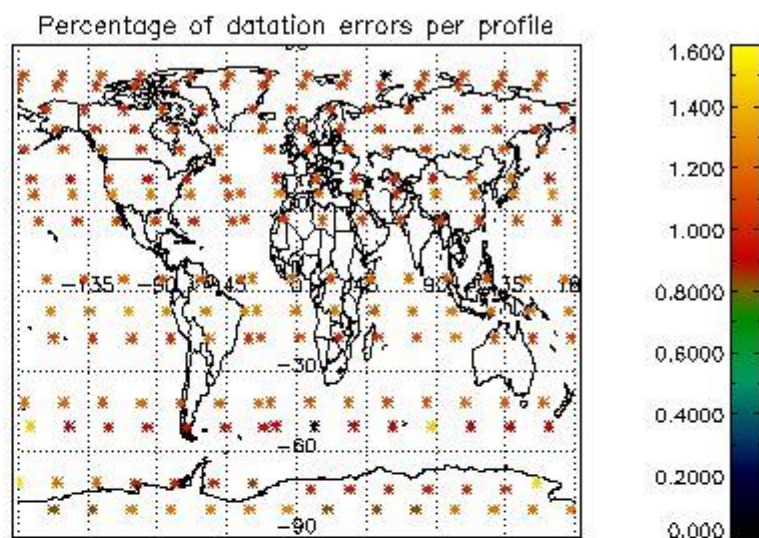
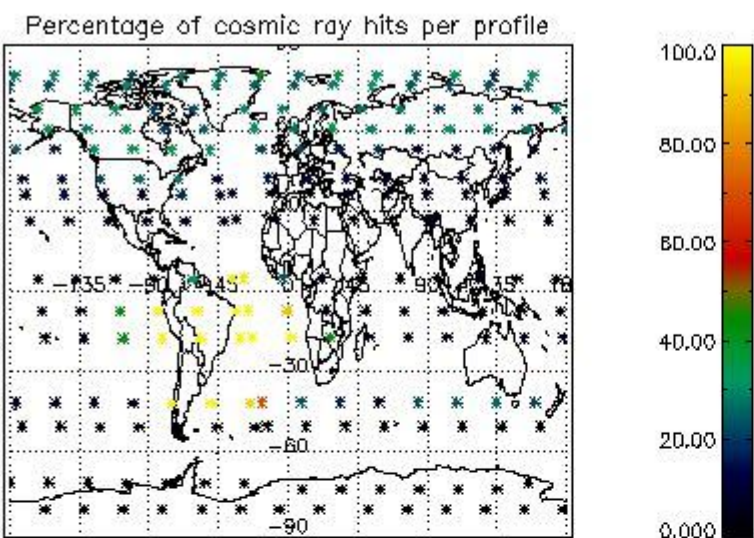


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

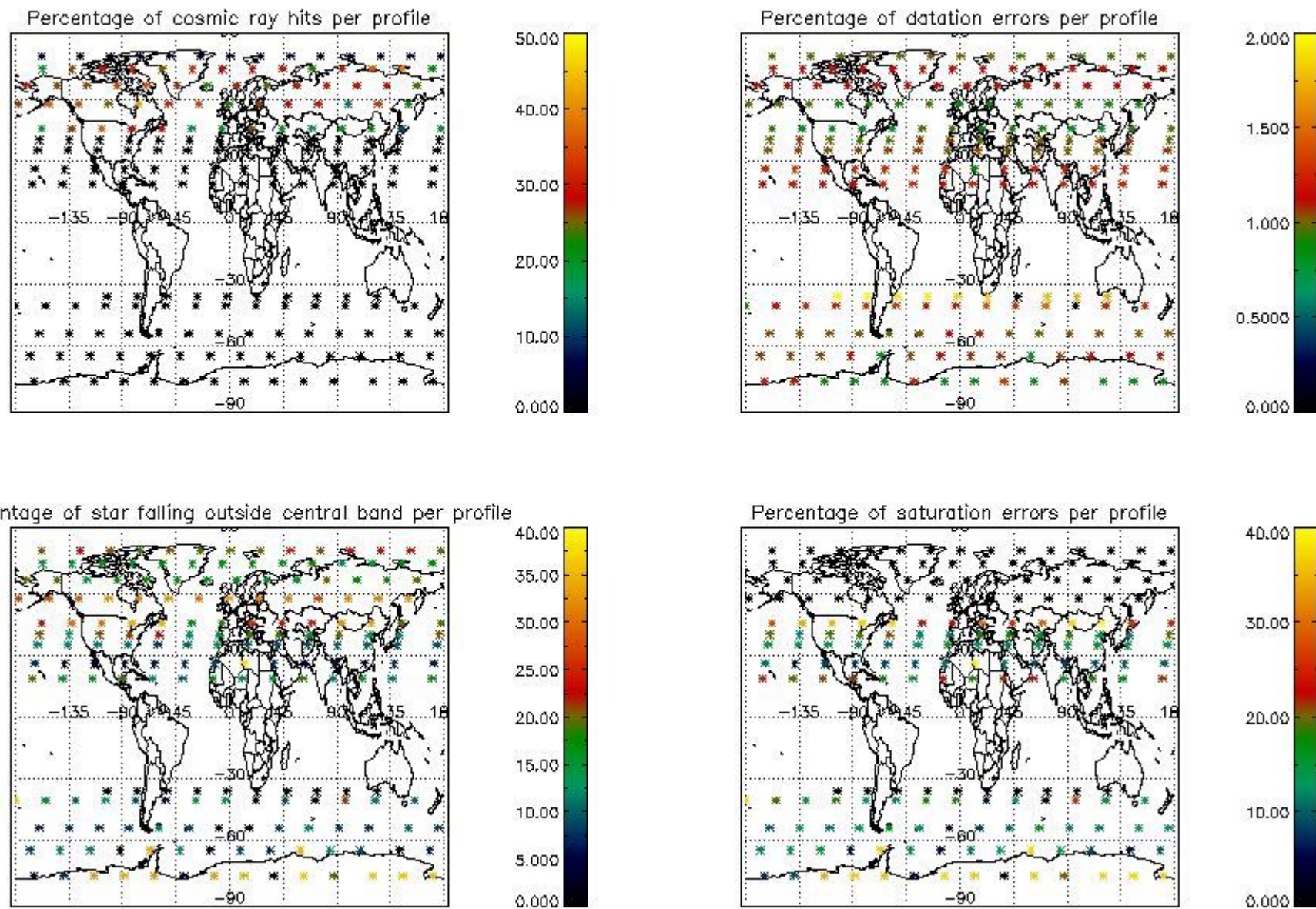


4.2 Plot quality information per product coming from level 1b processing (world map)

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

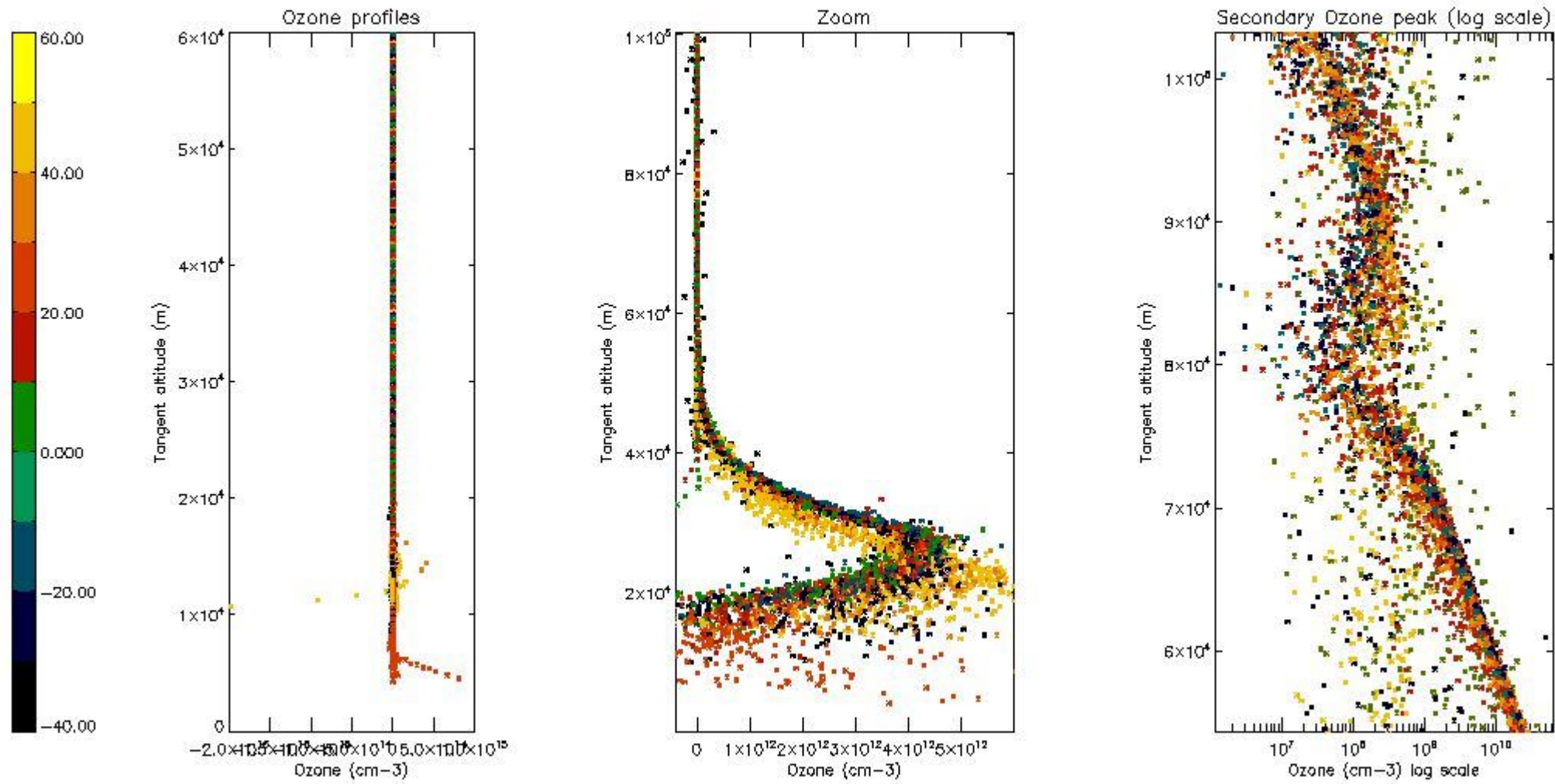
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	14

STD < 10	11
STD < 5	5

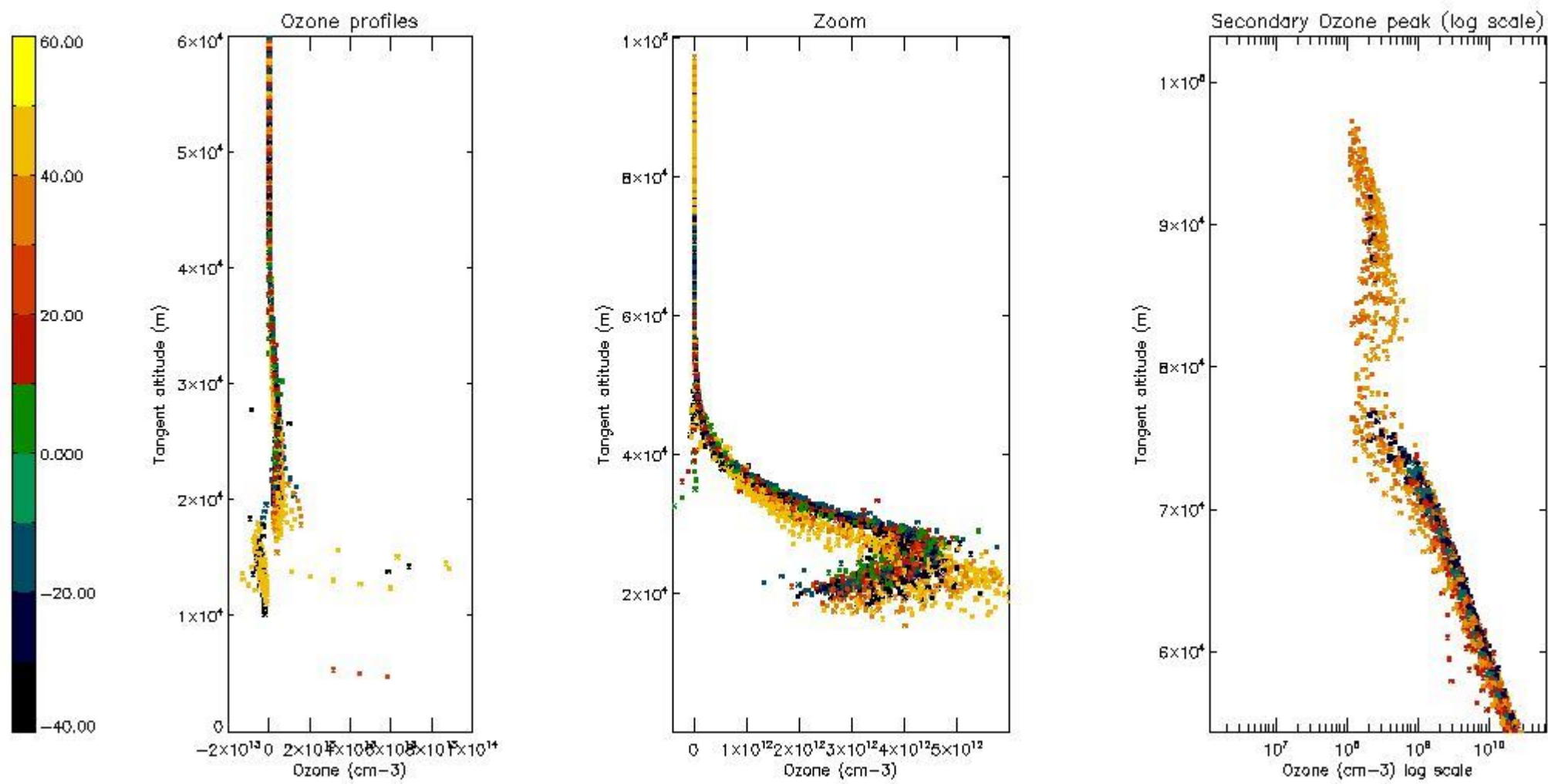
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



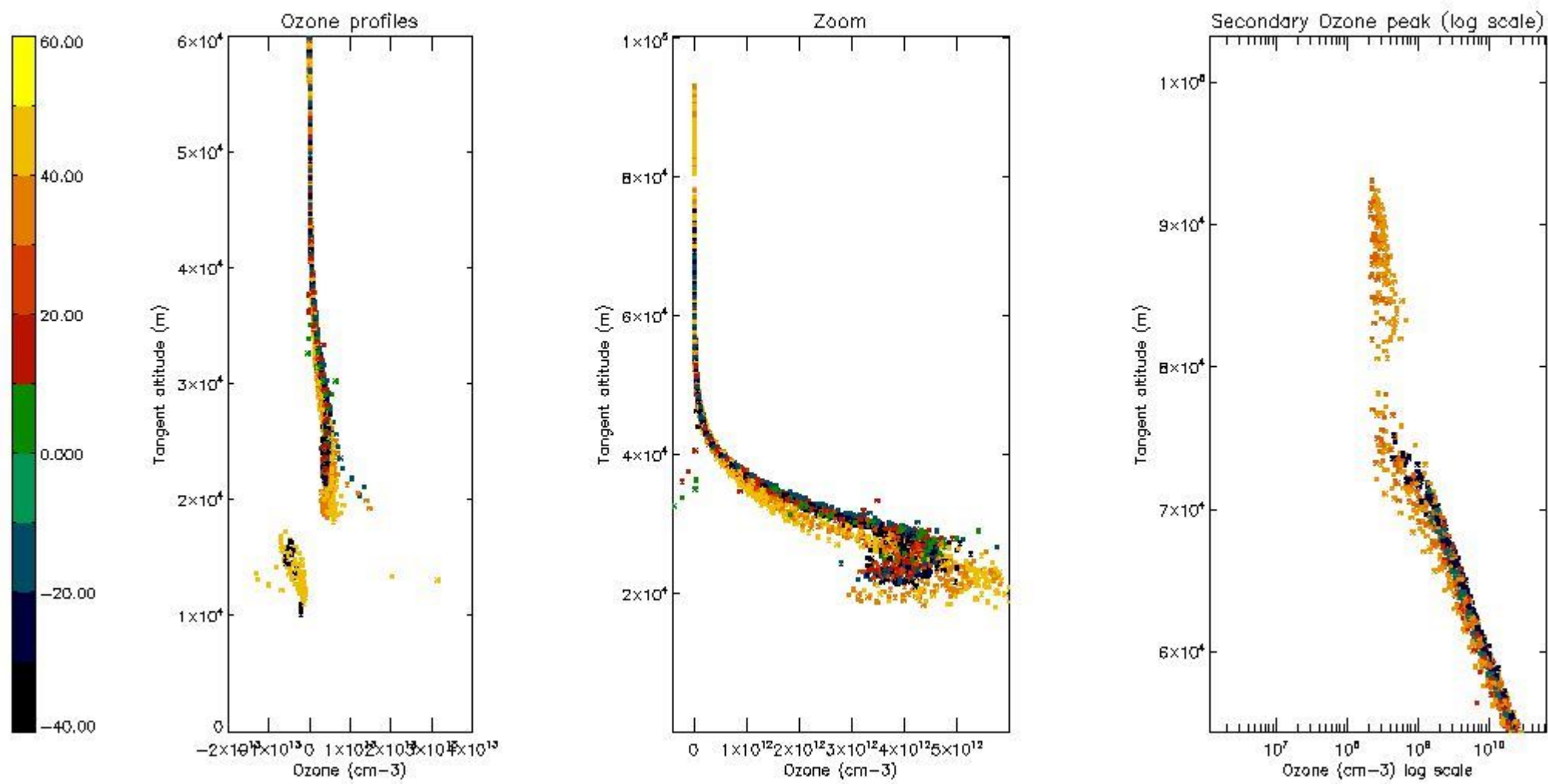
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



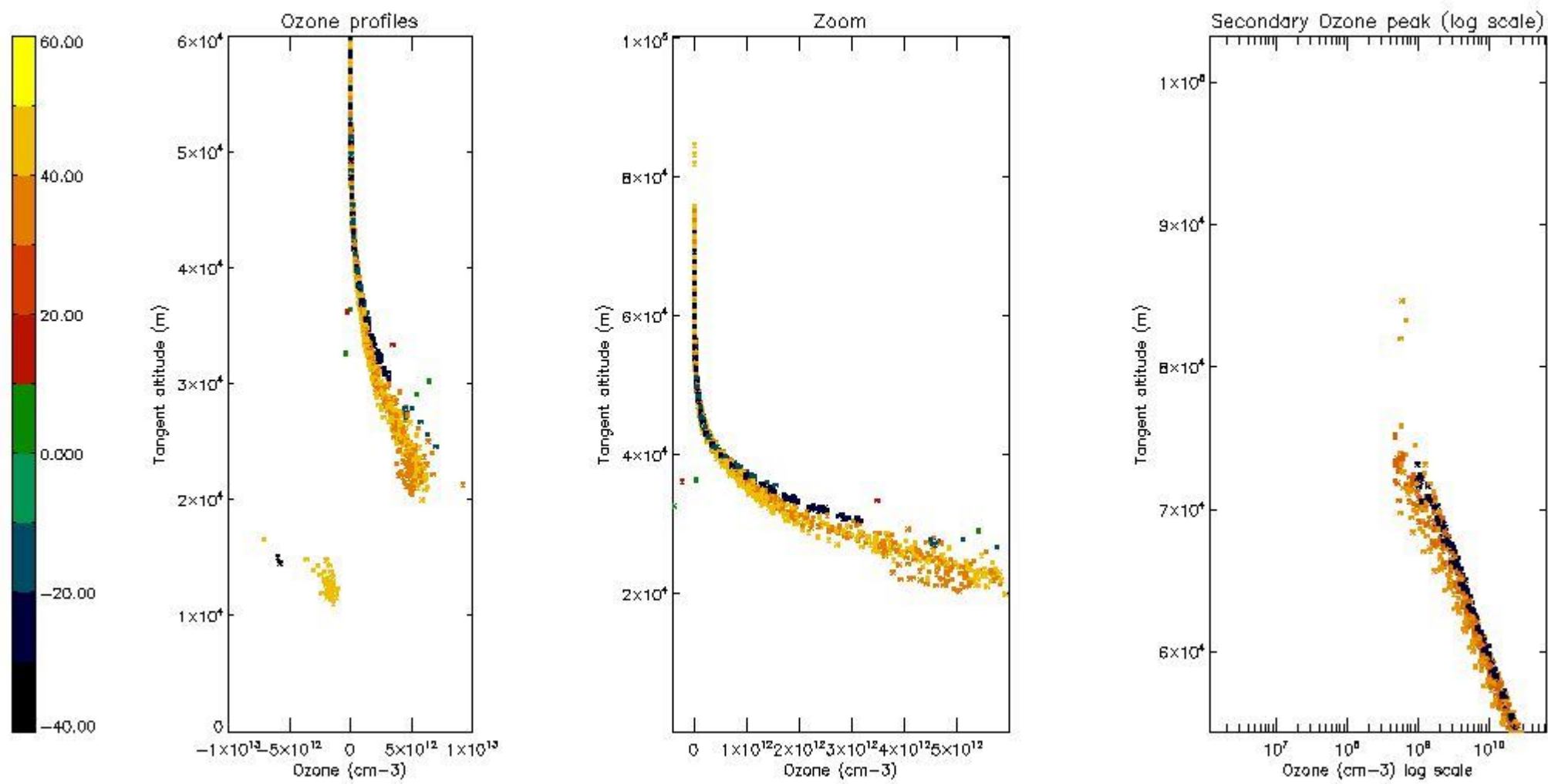
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



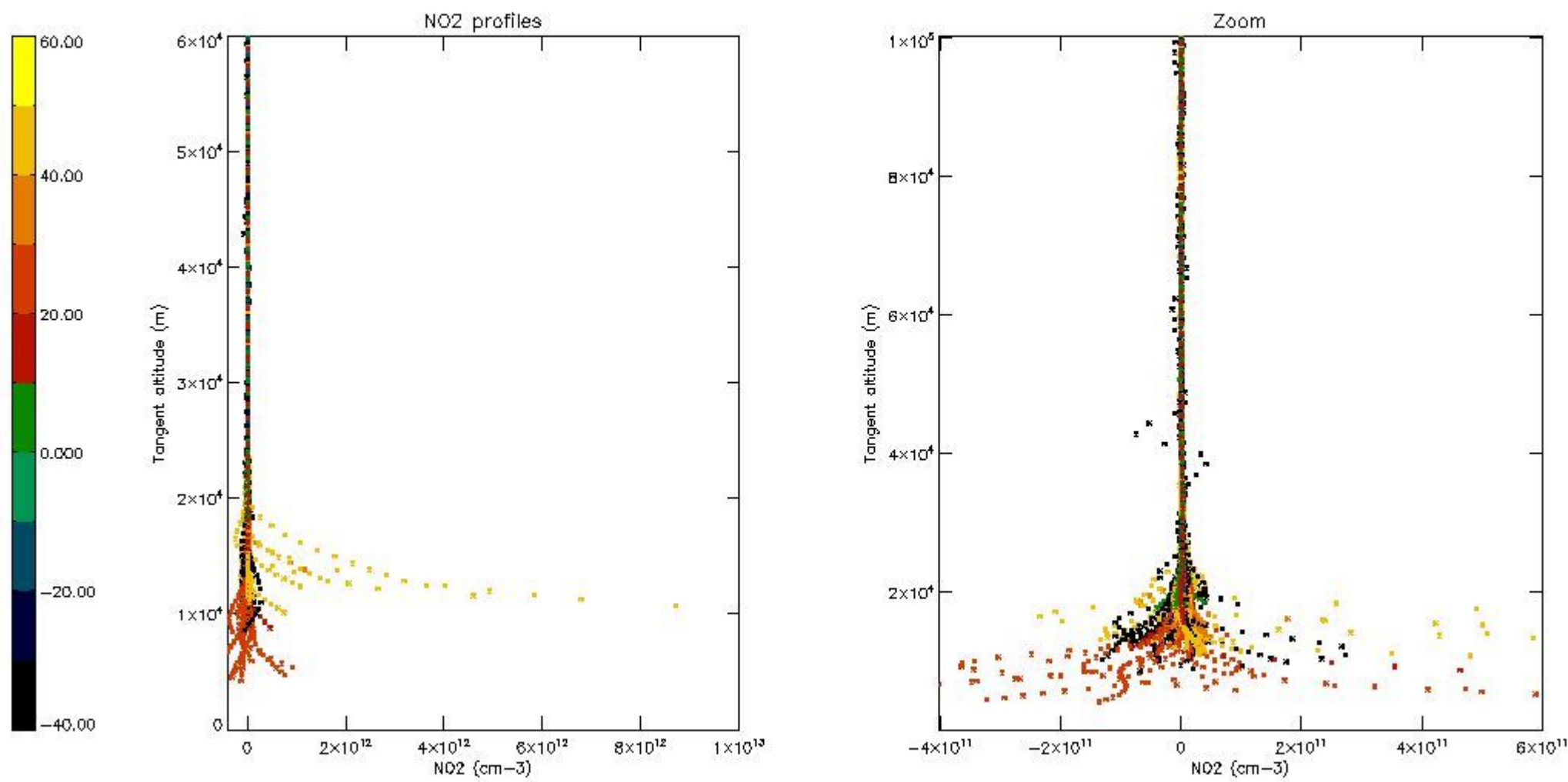
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



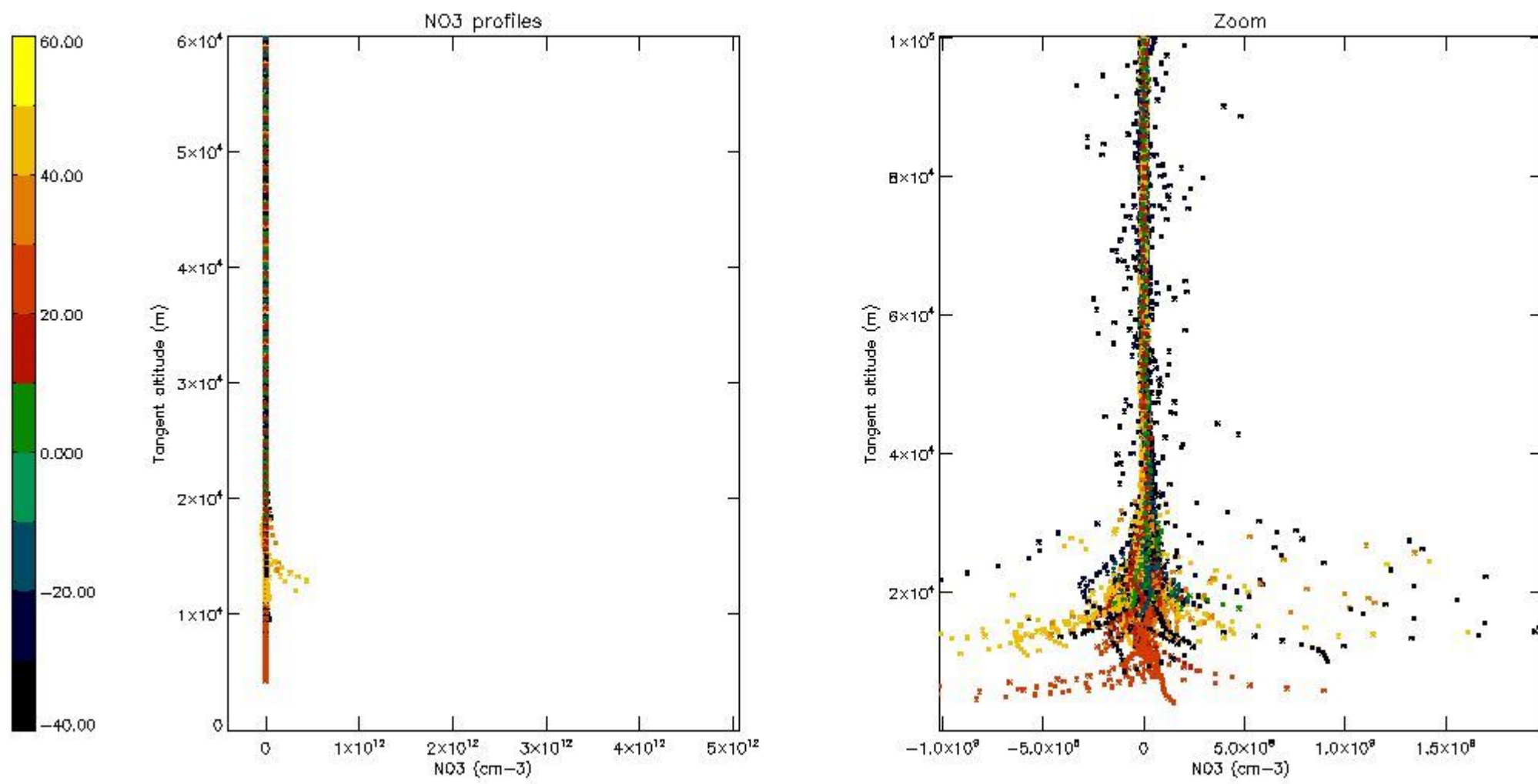
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



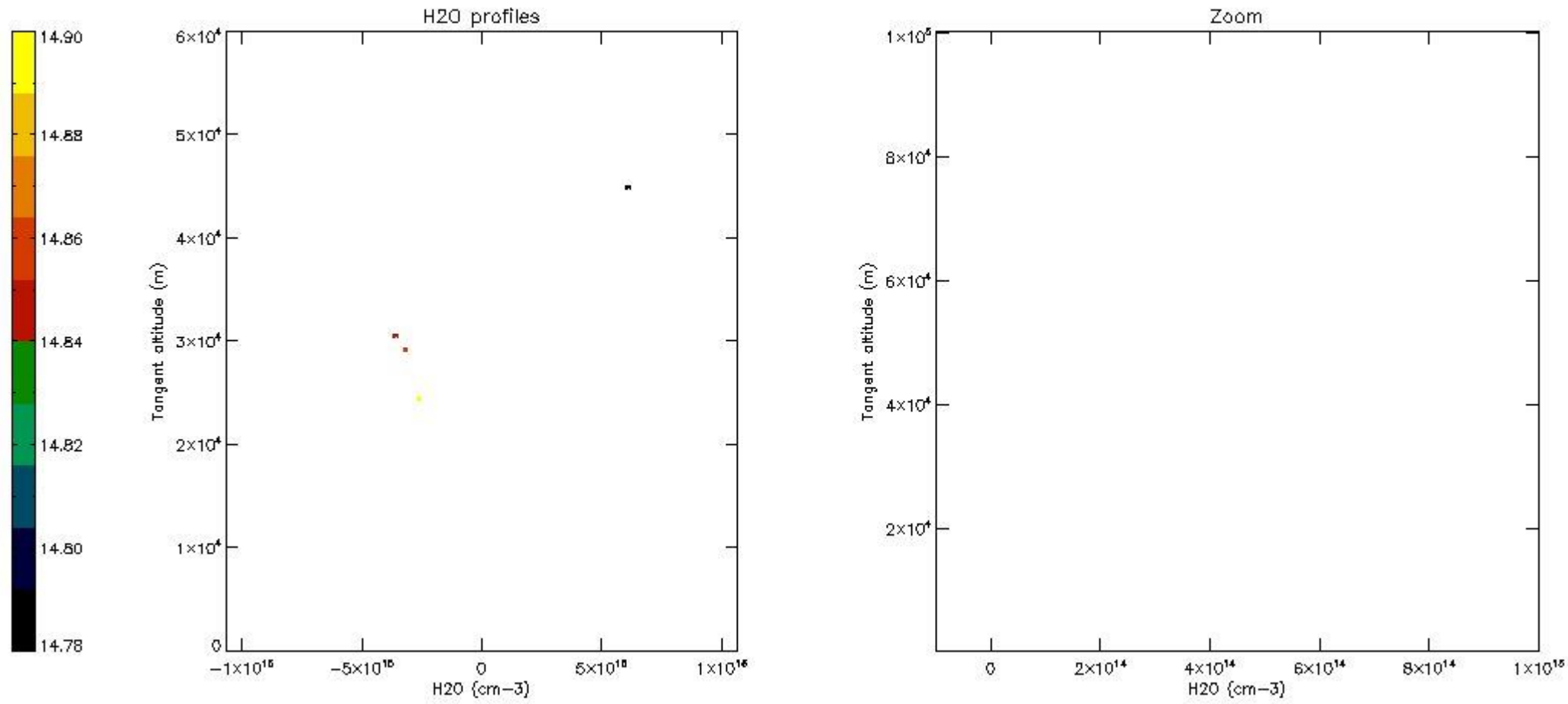
5.7 Plot NO3 profiles for all STD (dark without errors)

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	29-DEC-2009 00:05:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	29-DEC-2009 00:05:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	29-DEC-2009 00:05:53

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

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[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](#)

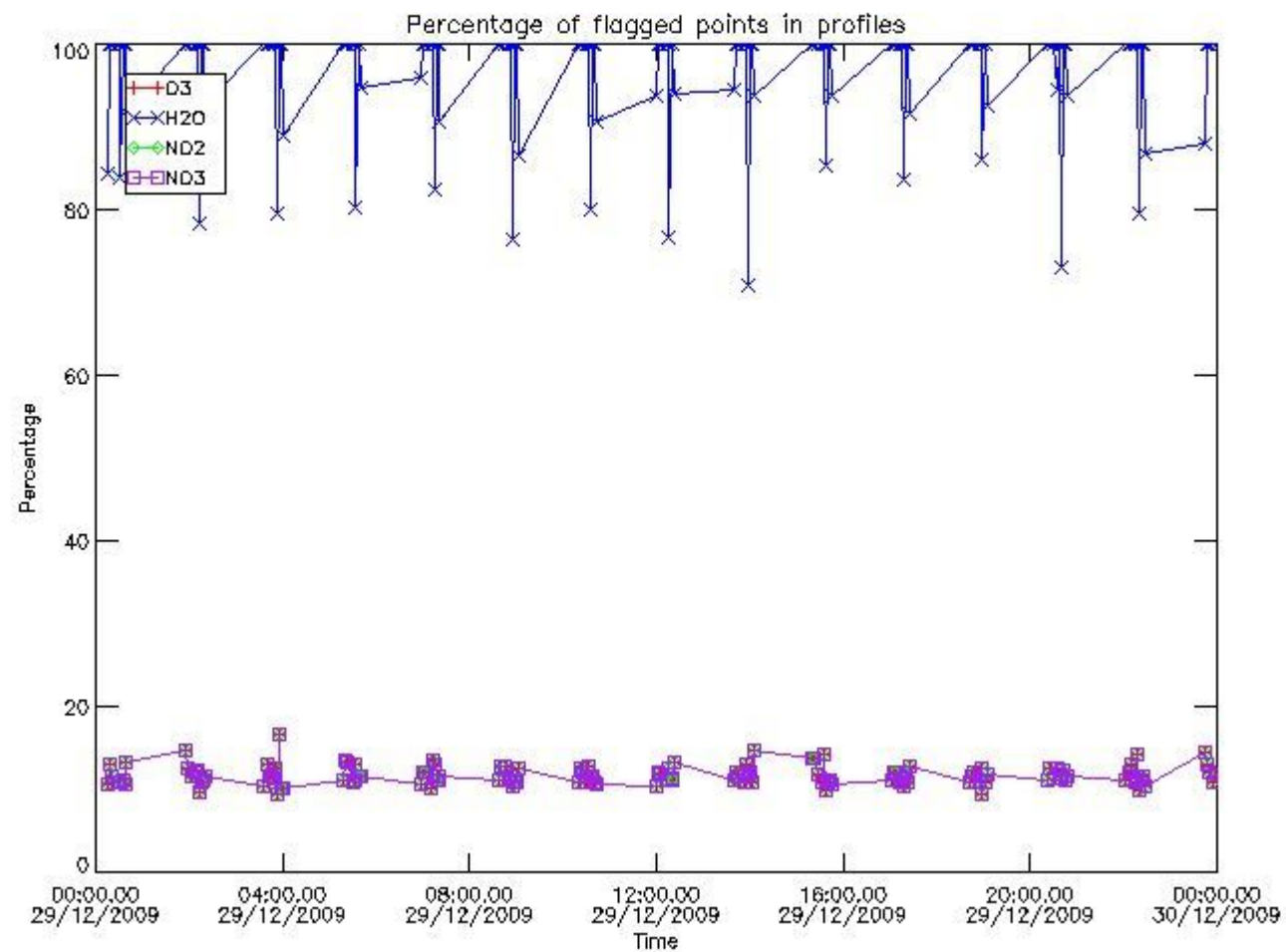
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397	GOM_NL__2PRFIN20091229_230935_000000402085_00316_40951_9770.N1	29-DEC-2009 23:09:35	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	40951	No
398	GOM_NL__2PRFIN20091229_231324_000000502085_00316_40951_9771.N1	29-DEC-2009 23:13:24	Bright	49.500	32	77Eps UMa	1.7630	11000.	99	40951	No
399	GOM_NL__2PRFIN20091229_231635_000000442085_00316_40951_9772.N1	29-DEC-2009 23:16:35	Bright	43.500	39	85Eta UMa	1.8540	24000.	87	40951	No
400	GOM_NL__2PRFIN20091229_232033_000000612085_00316_40951_9773.N1	29-DEC-2009 23:20:33	Bright	61.000	180	27Gam Boo	3.0400	8000.0	122	40951	No
401	GOM_NL__2PRFIN20091229_232409_000000602085_00316_40951_9774.N1	29-DEC-2009 23:24:09	Bright	60.000	83		2.3780	11000.	120	40951	No
402	GOM_NL__2PRFIN20091229_232719_000000512085_00316_40951_9775.N1	29-DEC-2009 23:27:19	Bright	51.000	3	16Alp Boo	-0.050000	4250.0	102	40951	No
403	GOM_NL__2PRFIN20091229_233422_000000552085_00316_40951_9776.N1	29-DEC-2009 23:34:22	Bright	55.000	104	27Bet Lib	2.6140	13100.	110	40951	No
404	GOM_NL__2PRFIN20091229_233658_000000442085_00316_40951_9777.N1	29-DEC-2009 23:36:58	Twilight	44.000	122	9Alp2Lib	2.7470	9700.0	88	40951	No
405	GOM_NL__2PRFIN20091229_234347_000000462085_00316_40951_9778.N1	29-DEC-2009 23:43:47	Dark	46.000	54	5The Cen	2.0550	4500.0	92	40951	No
406	GOM_NL__2PRFIN20091229_234636_000000402085_00316_40951_9779.N1	29-DEC-2009 23:46:36	Dark	39.500	95	Zet Cen	2.5450	26000.	79	40951	No
407	GOM_NL__2PRFIN20091229_235000_000000422085_00317_40952_9631.N1	29-DEC-2009 23:50:00	Dark	42.000	64	Gam Cen	2.2000	10600.	84	40952	No
408	GOM_NL__2PRFIN20091229_235607_000000482085_00317_40952_9632.N1	29-DEC-2009 23:56:07	Dark	47.500	113	Mu Vel	2.6920	5000.0	95	40952	No
409	GOM_NL__2PRFIN20091229_235851_000000442085_00317_40952_9633.N1	29-DEC-2009 23:58:51	Dark	43.500	71	lot Car	2.2460	7700.0	87	40952	No

3. Quality information per product

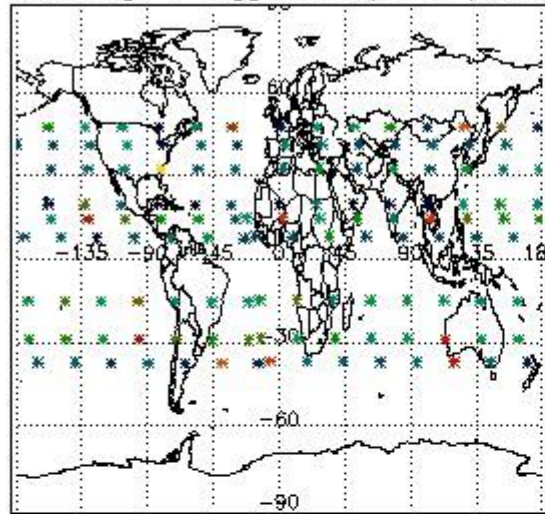
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

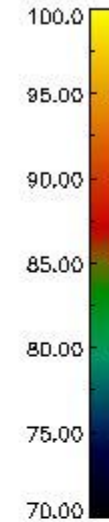
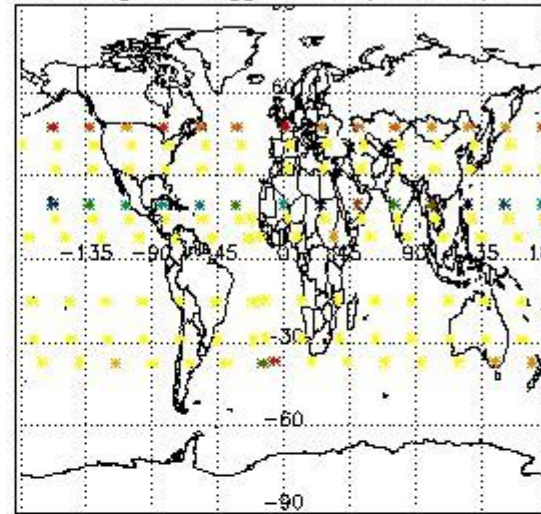


3.2 Plot quality information per product (world map)

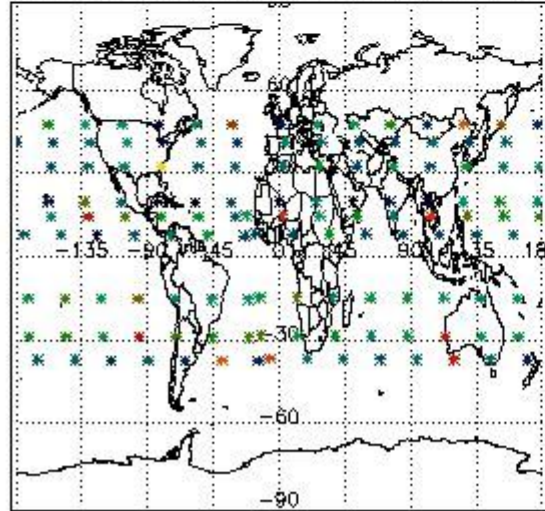
Percentage of flagged data per O3 profile



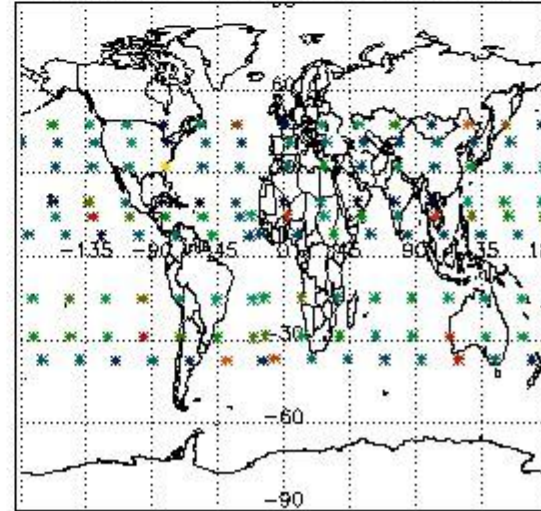
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

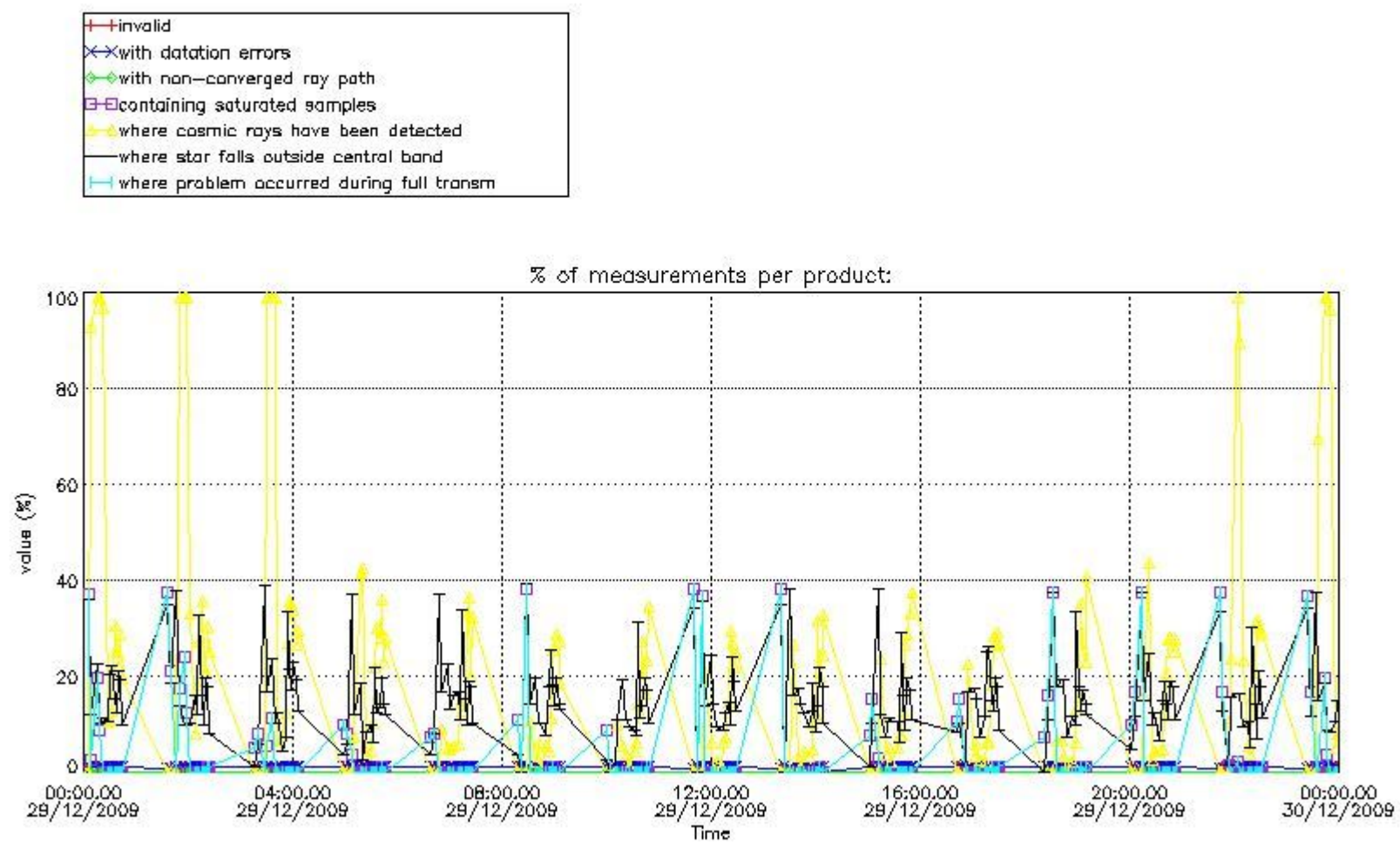


4. Level 1 quality information per product

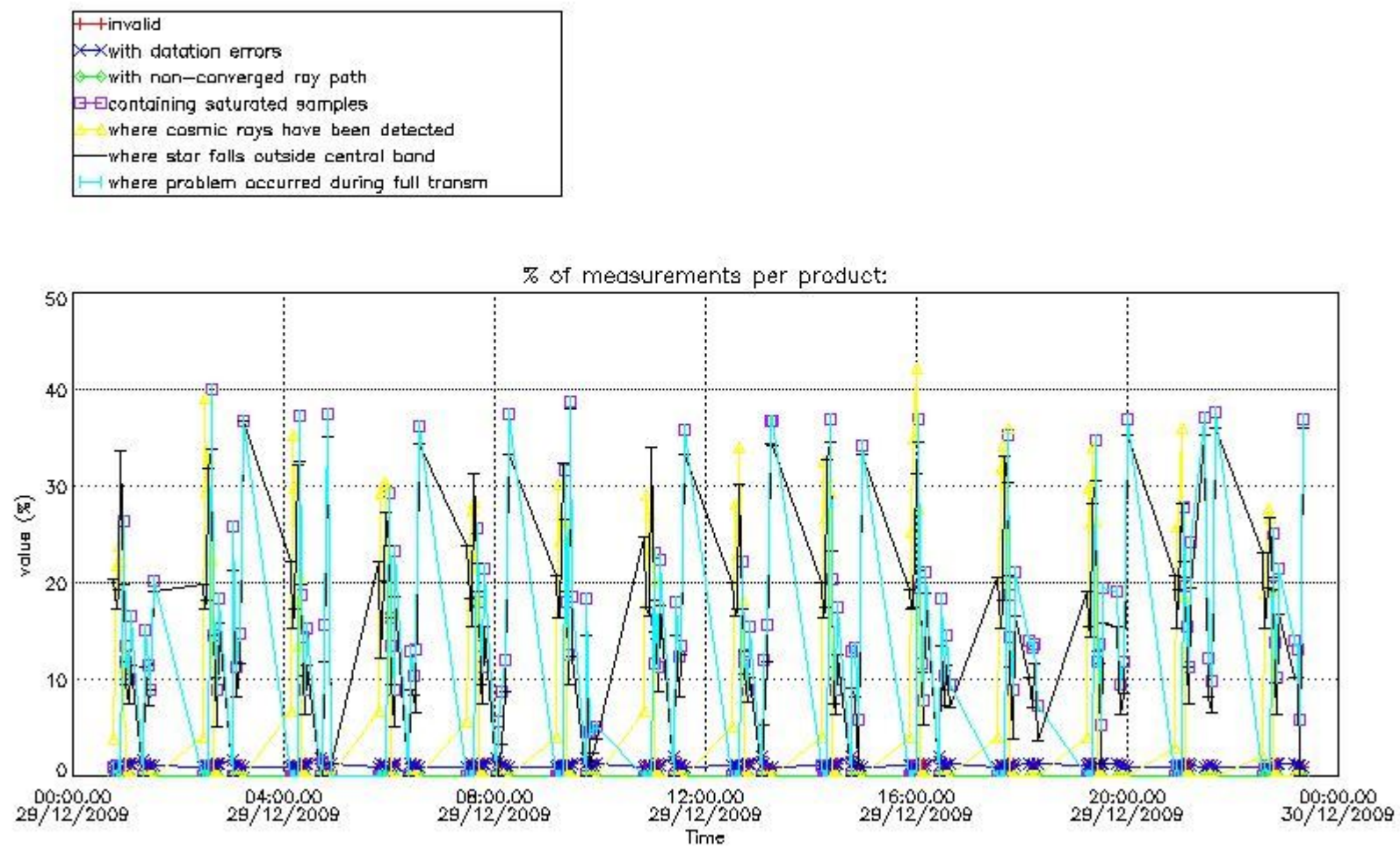
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

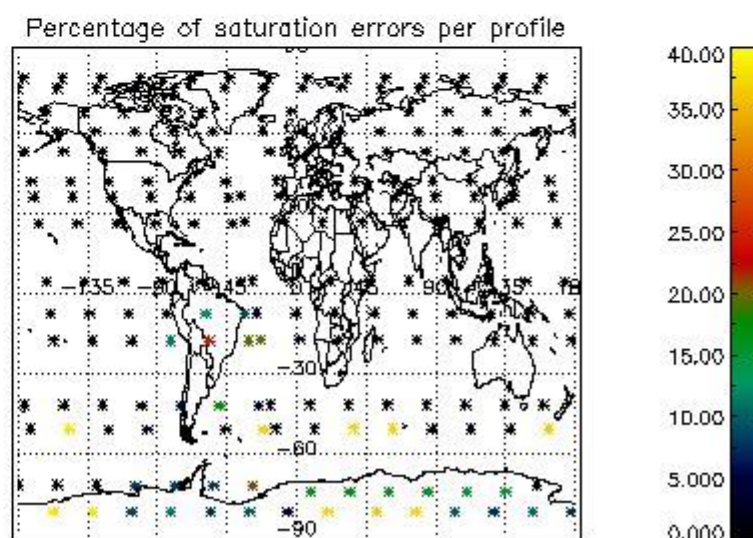
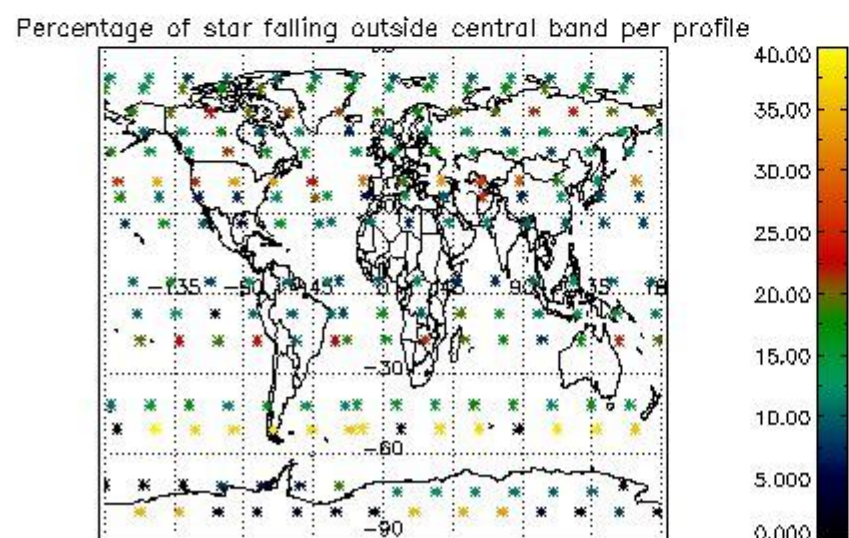
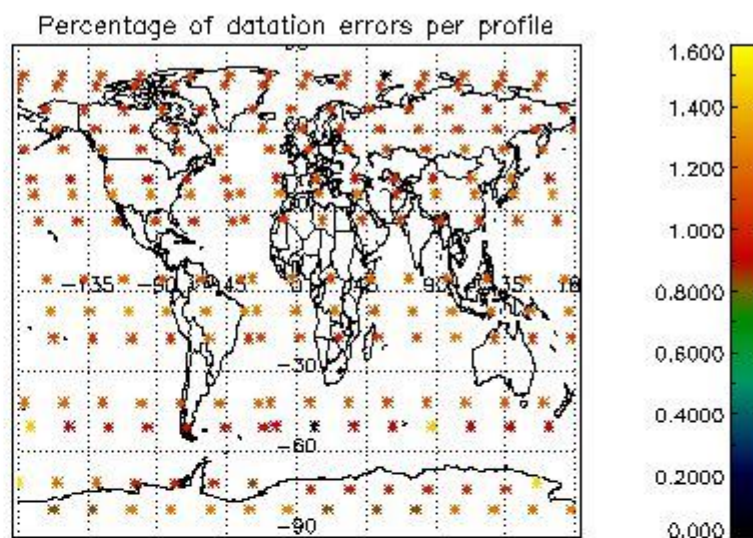
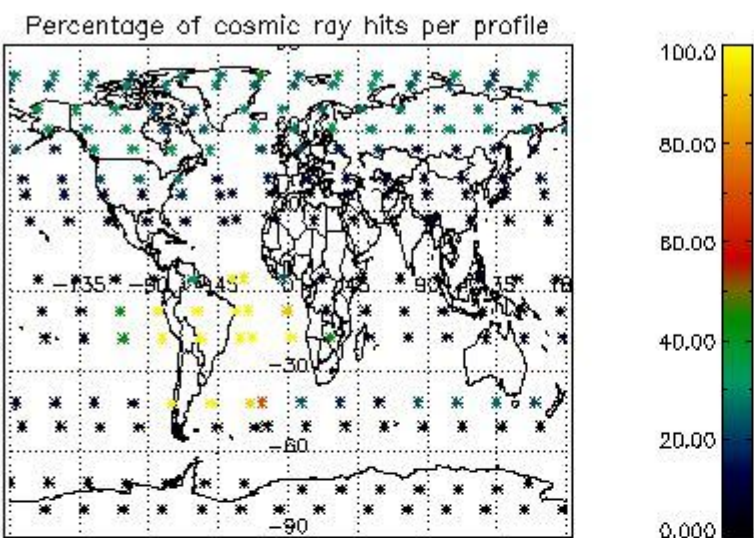


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

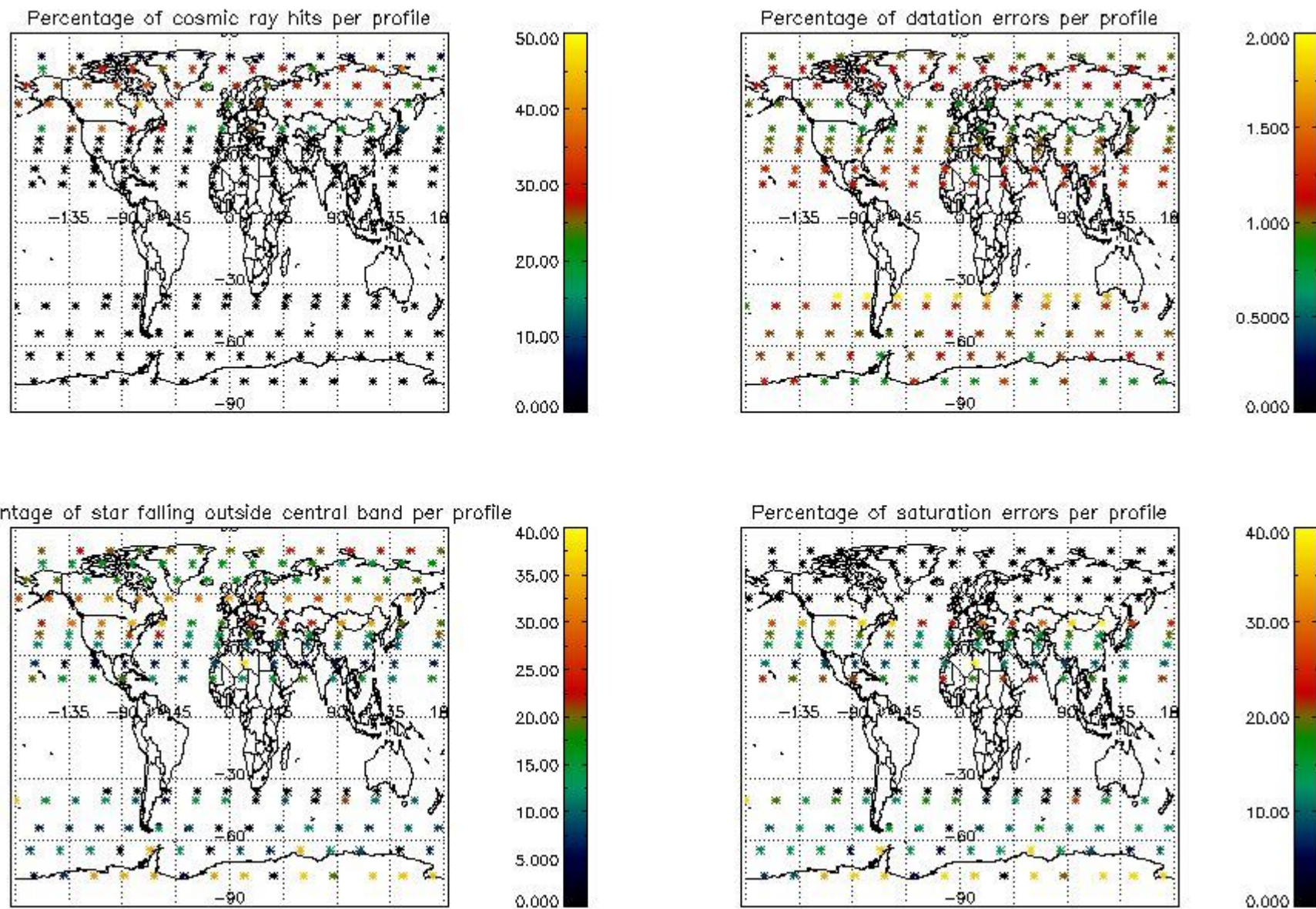


4.2 Plot quality information per product coming from level 1b processing (world map)

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

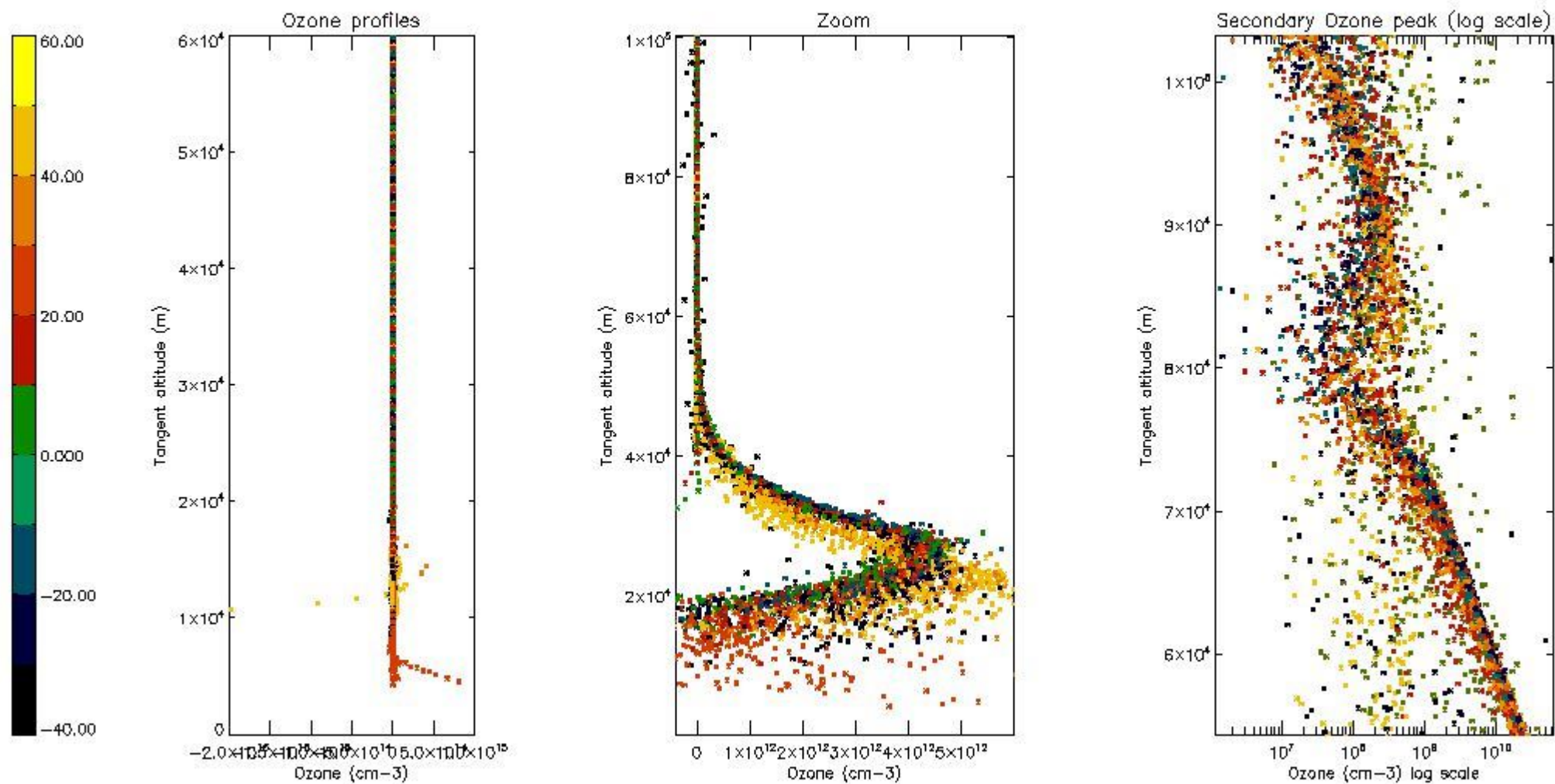
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	14

STD < 10	11
STD < 5	5

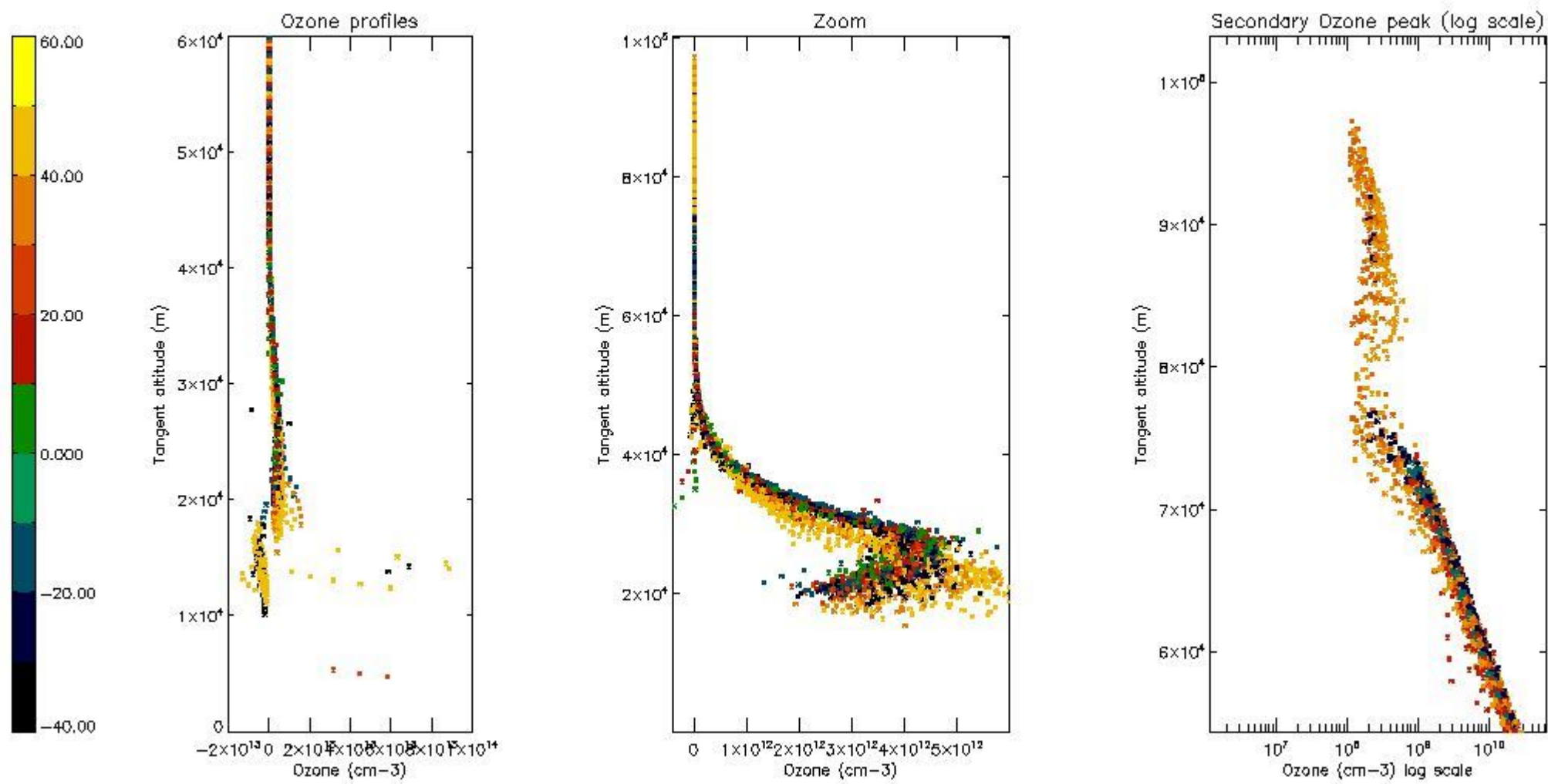
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



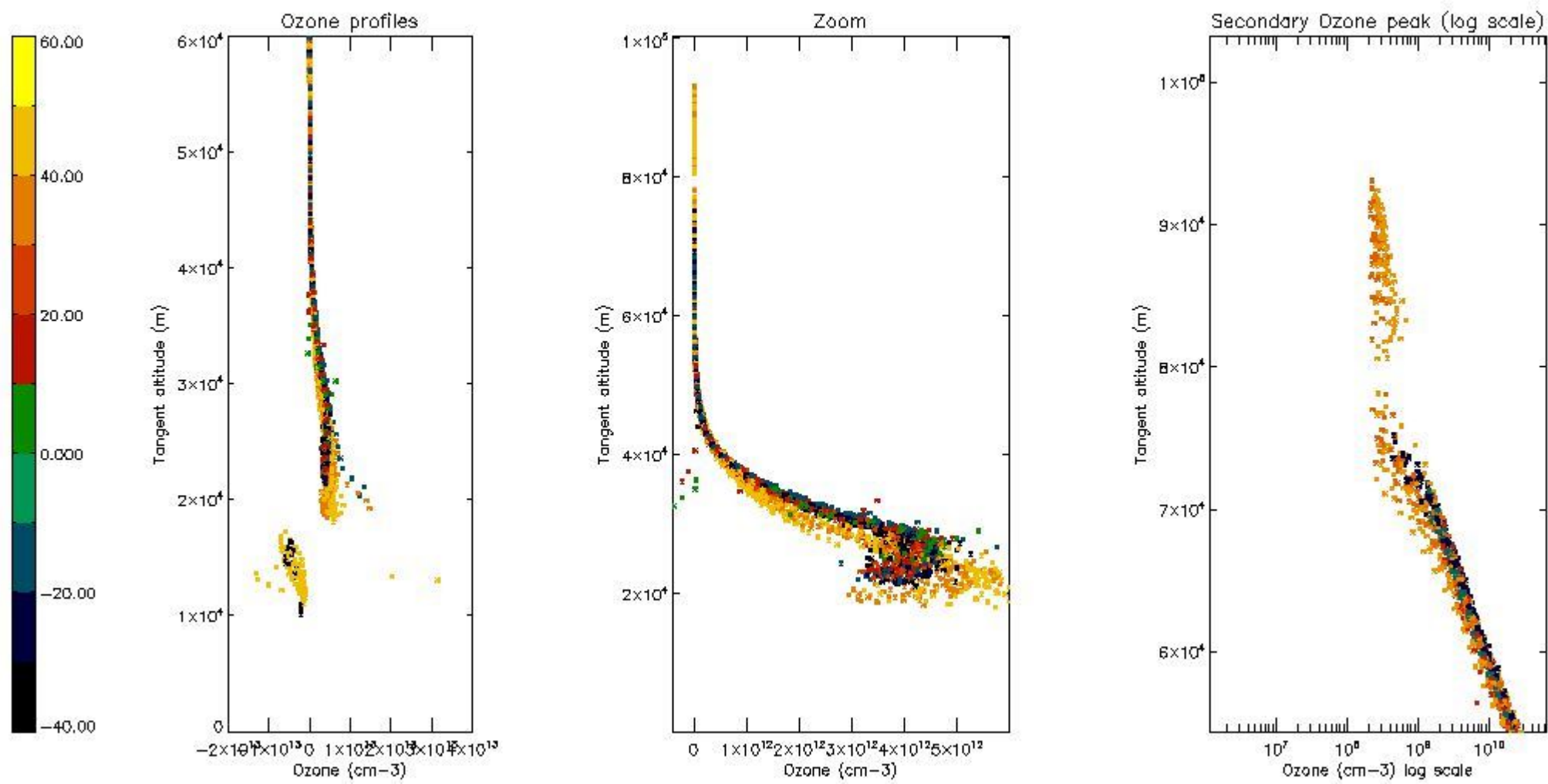
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



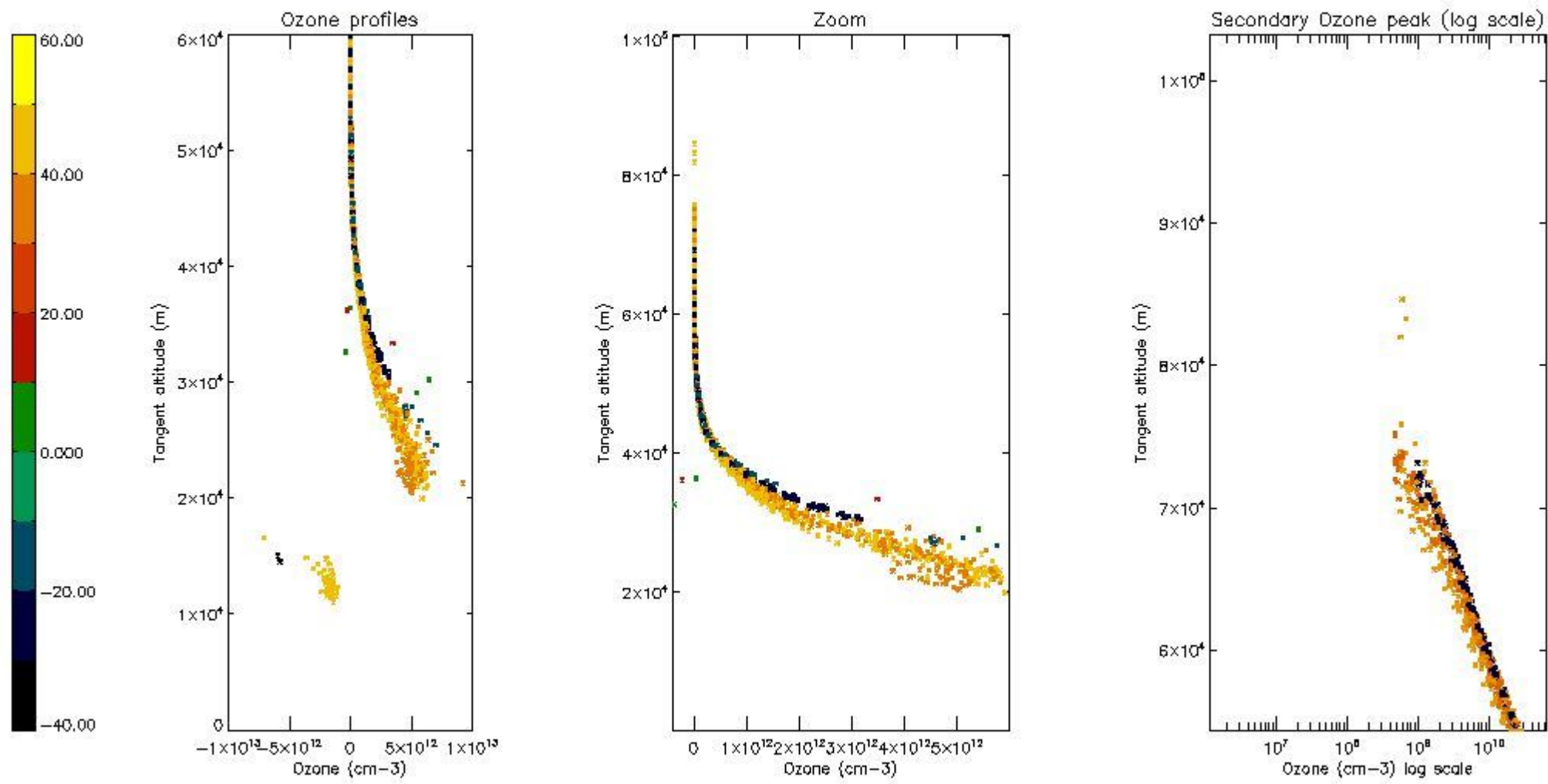
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



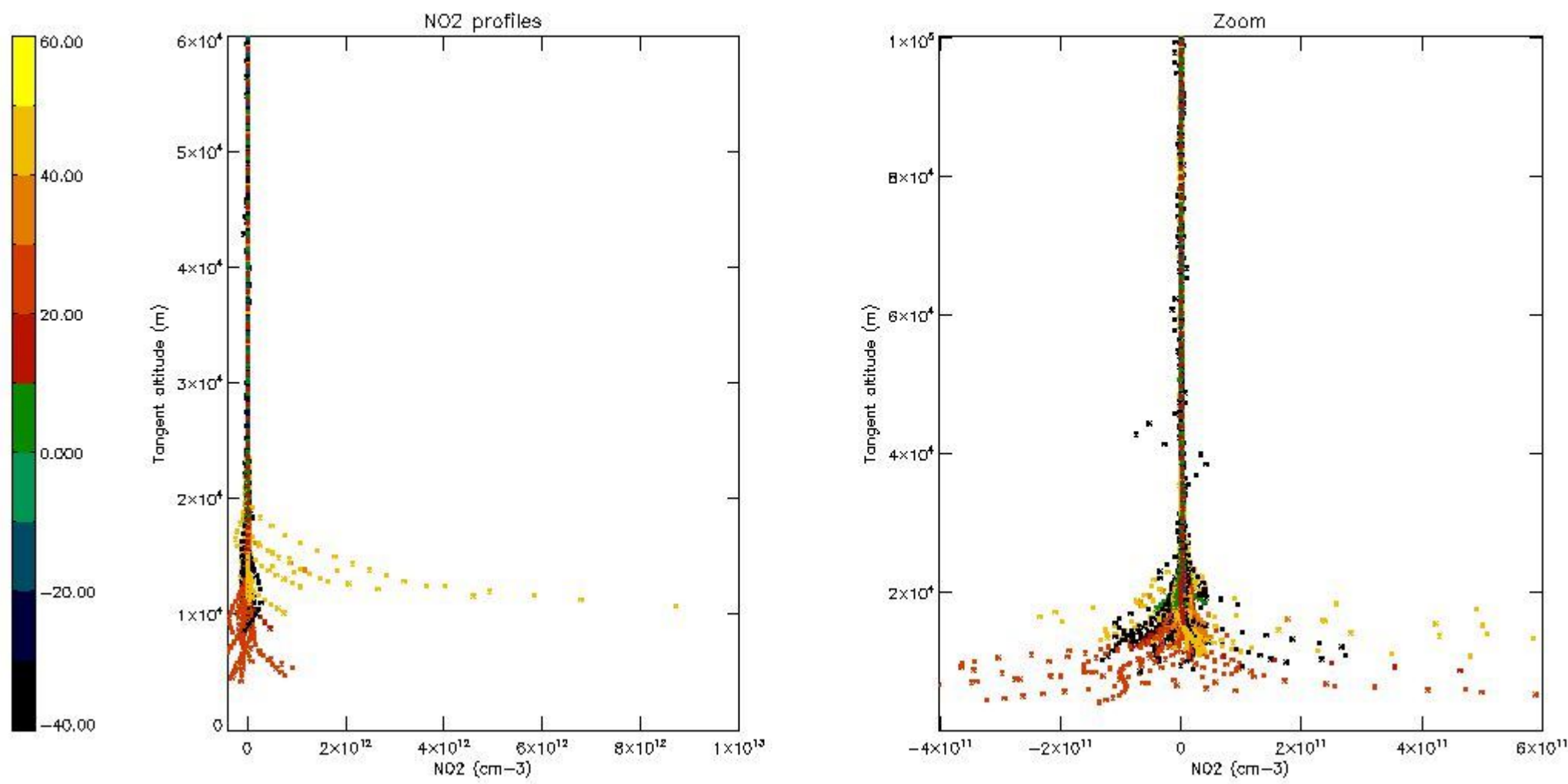
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



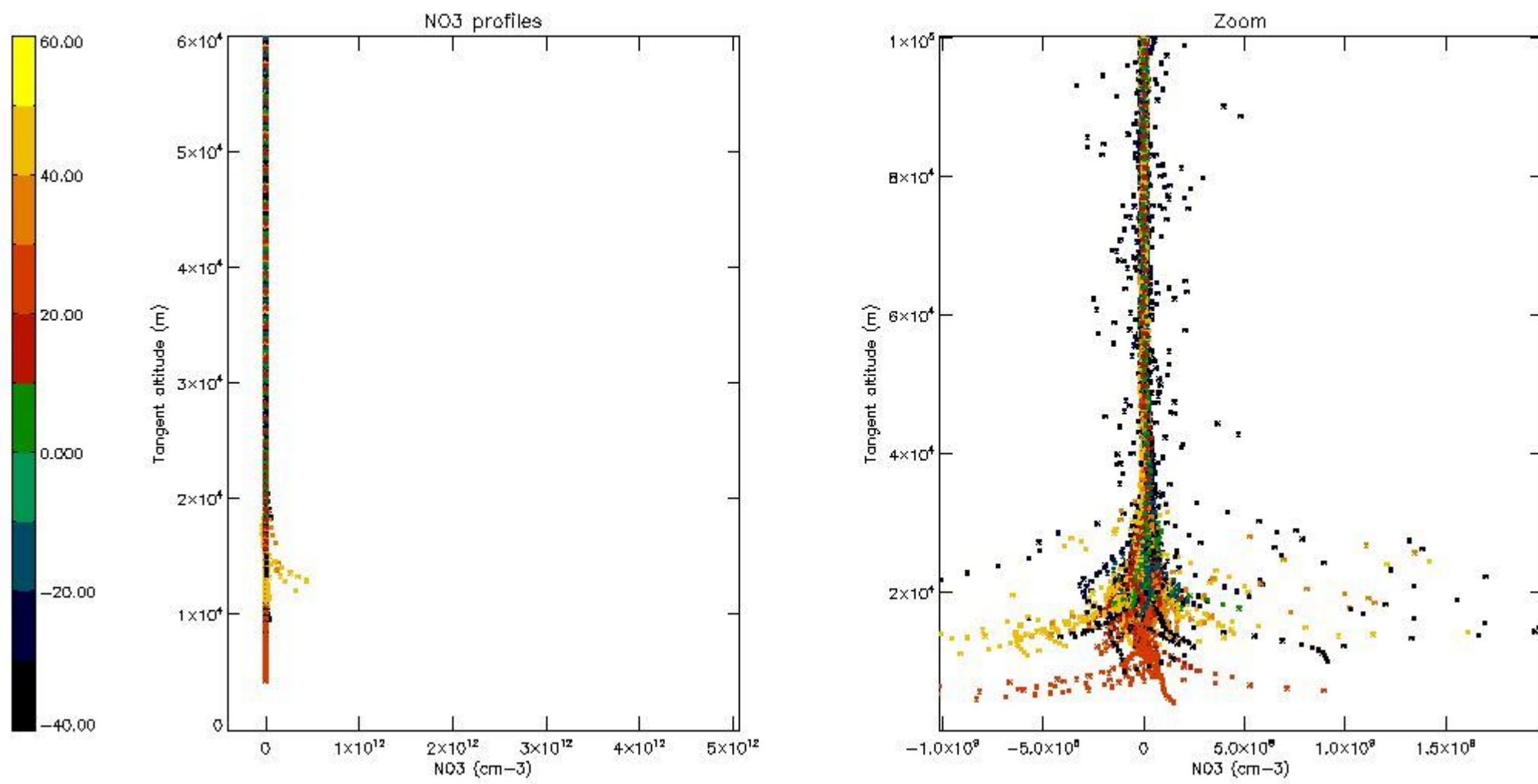
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



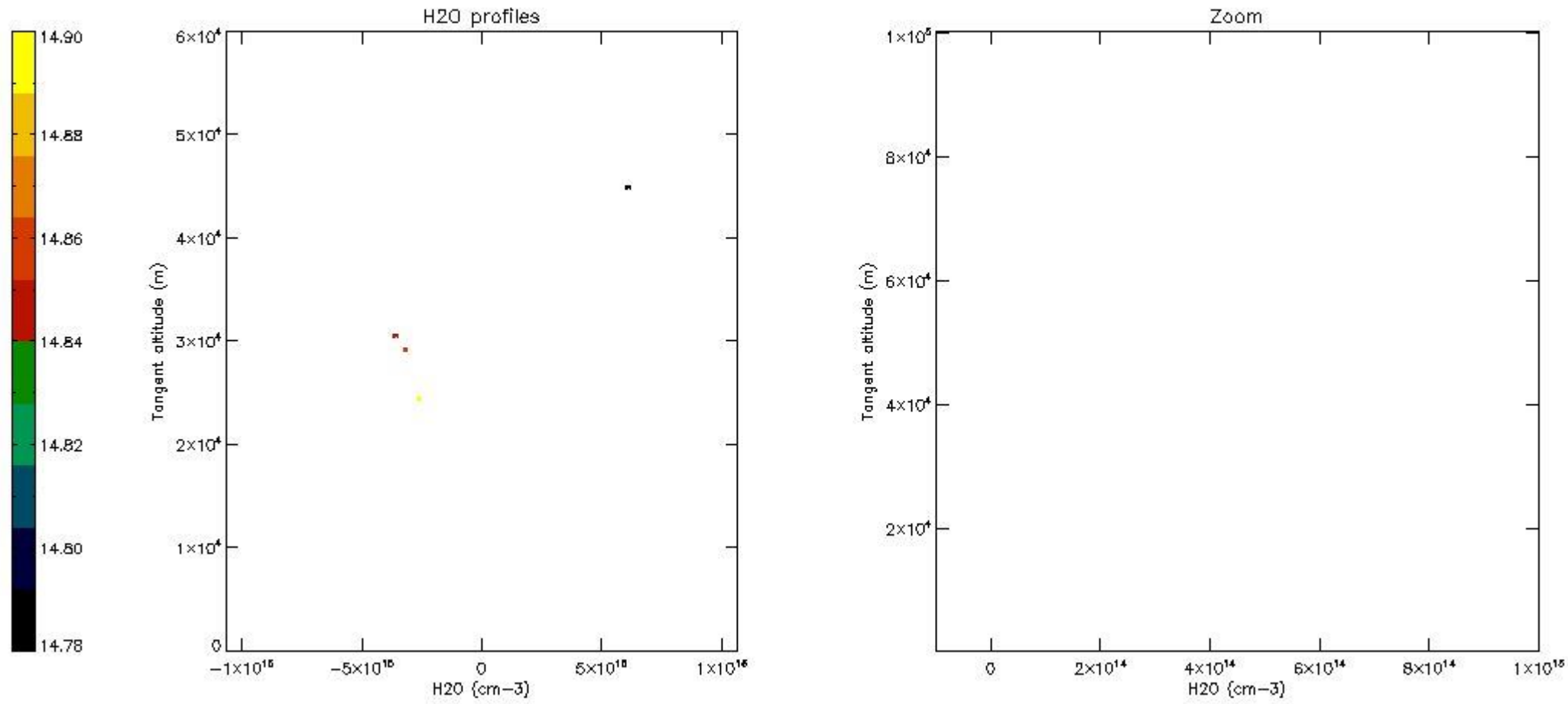
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

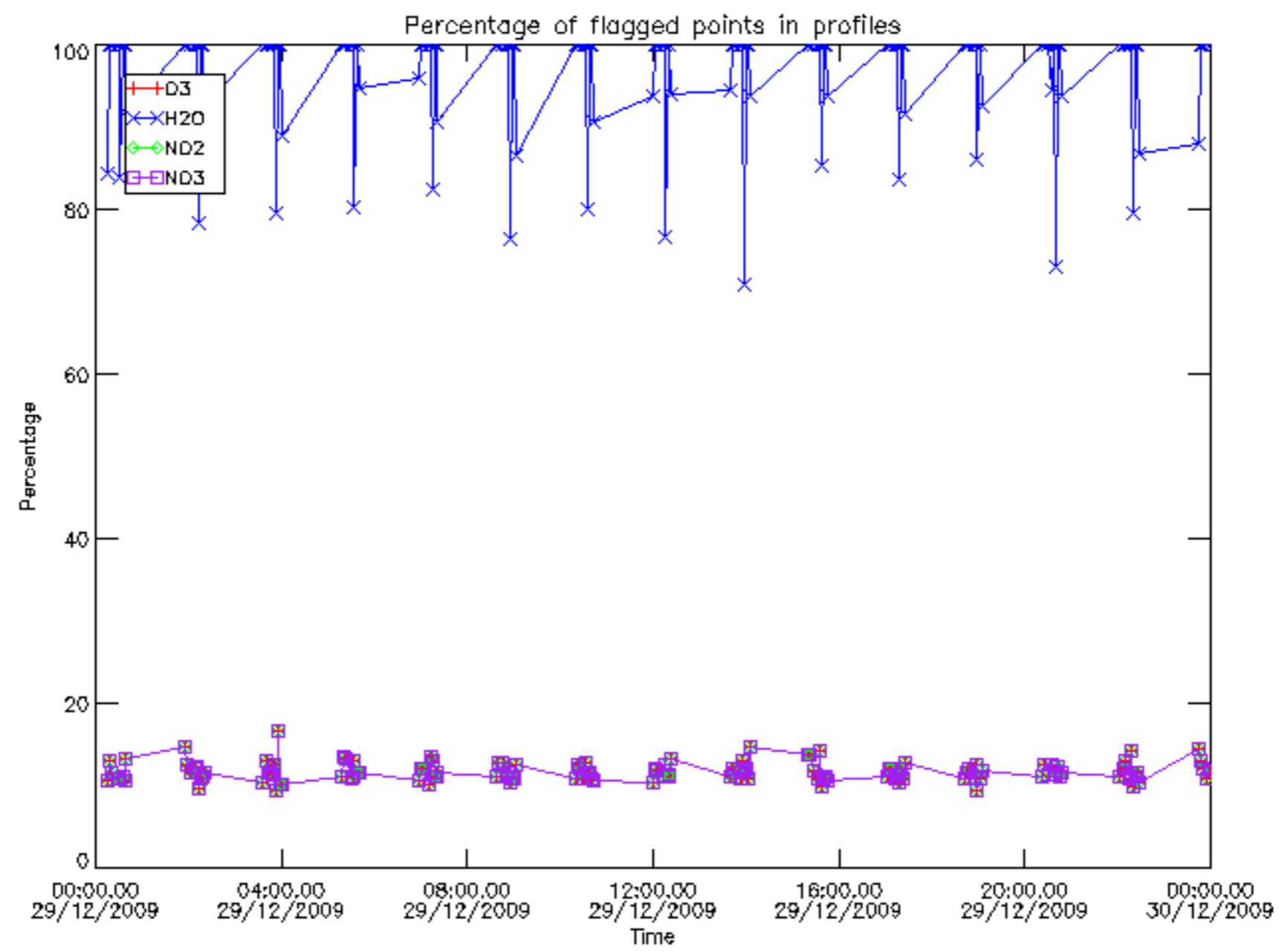
The colorbar represents the latitude.



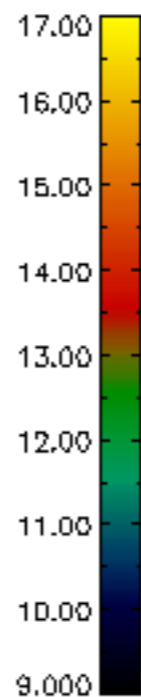
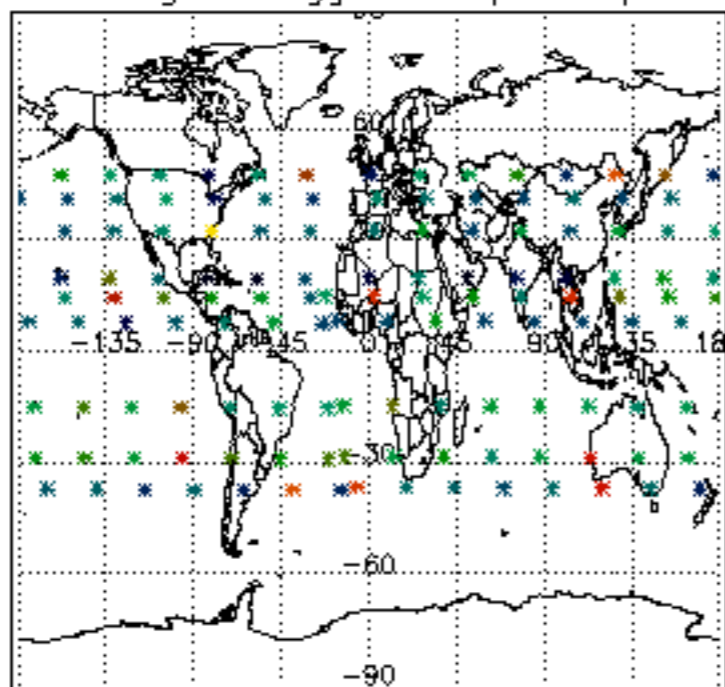
6. Auxiliary Data Files used for the production reported in section 2

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.

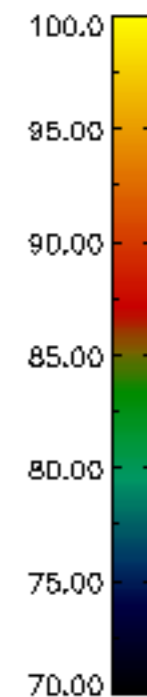
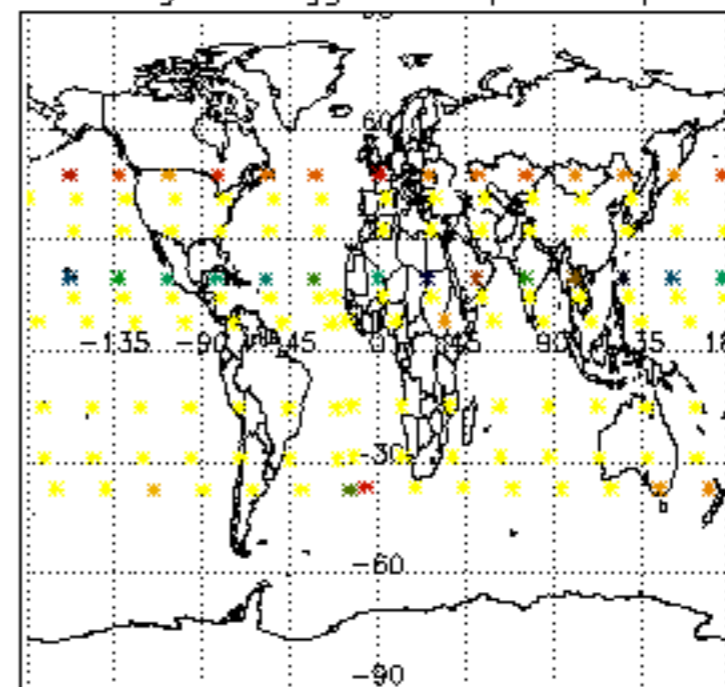
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	29-DEC-2009 00:05:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	29-DEC-2009 00:05:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	29-DEC-2009 00:05:53



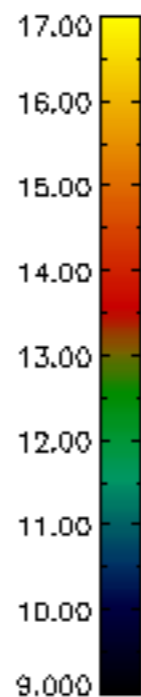
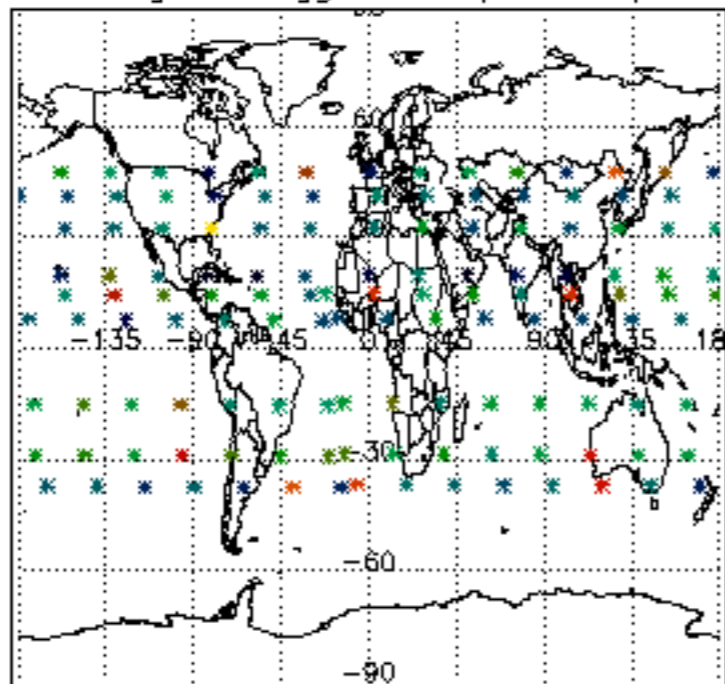
Percentage of flagged data per D3 profile



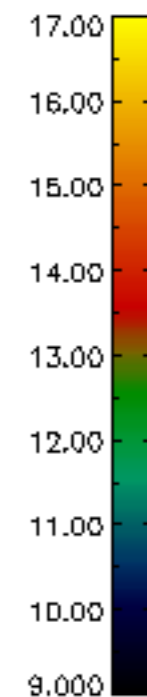
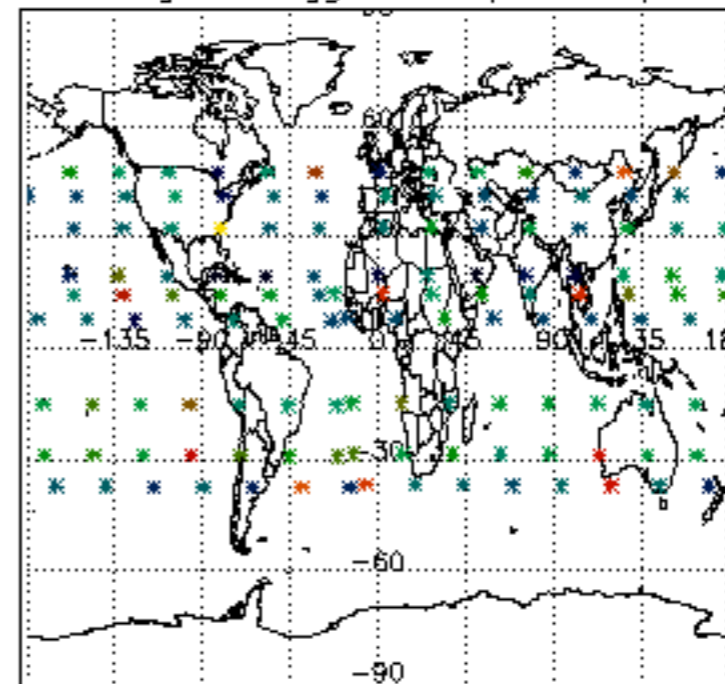
Percentage of flagged data per H2O profile

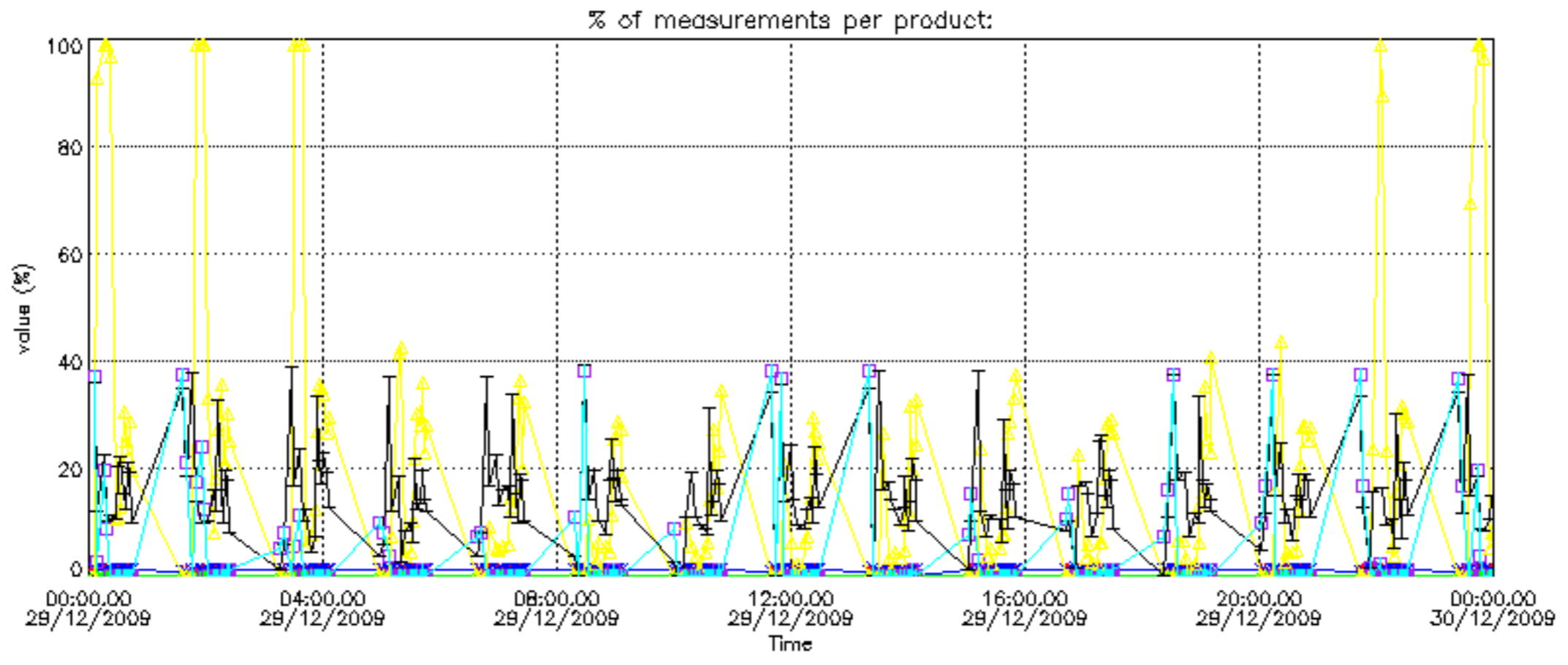


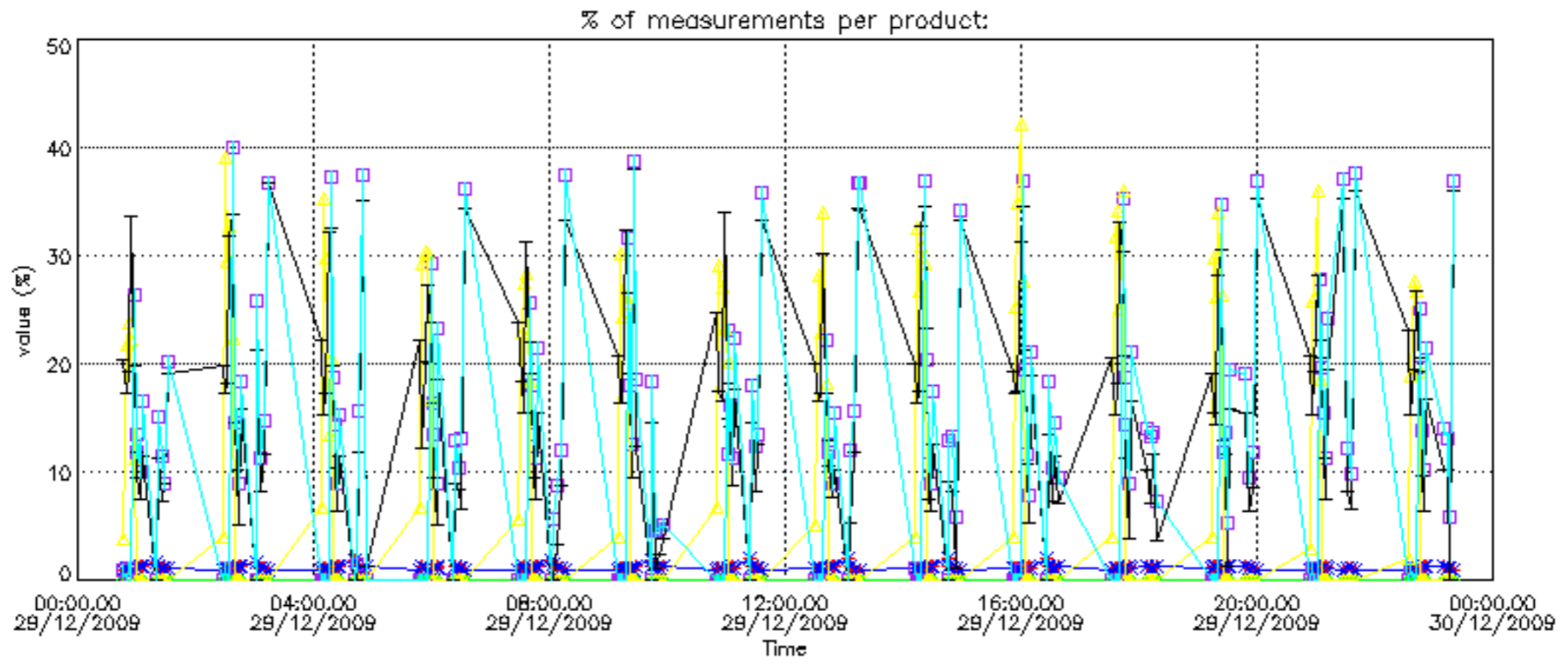
Percentage of flagged data per NO2 profile



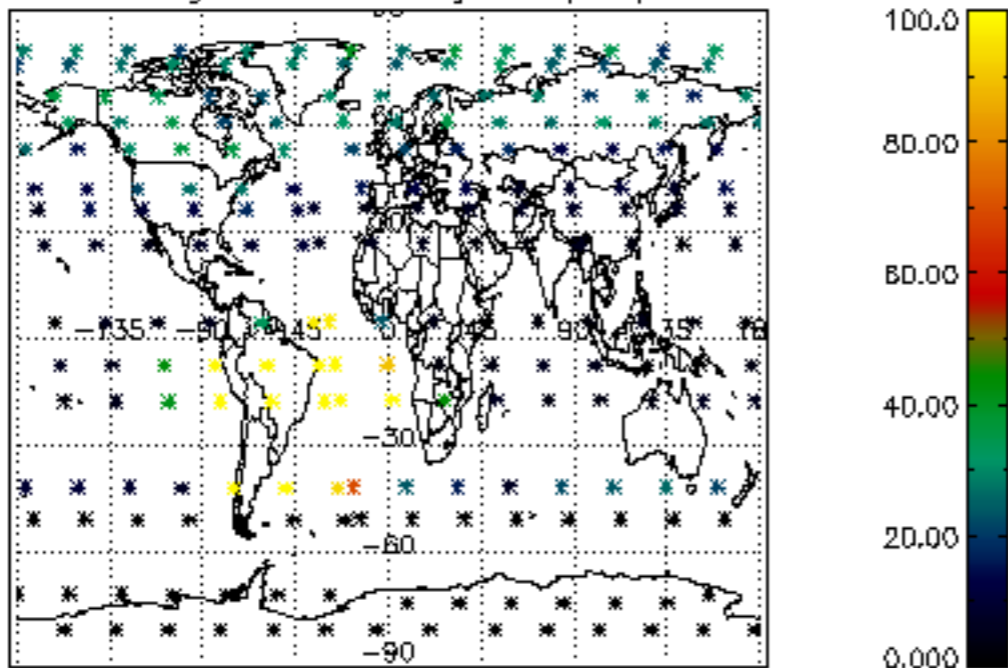
Percentage of flagged data per NO3 profile



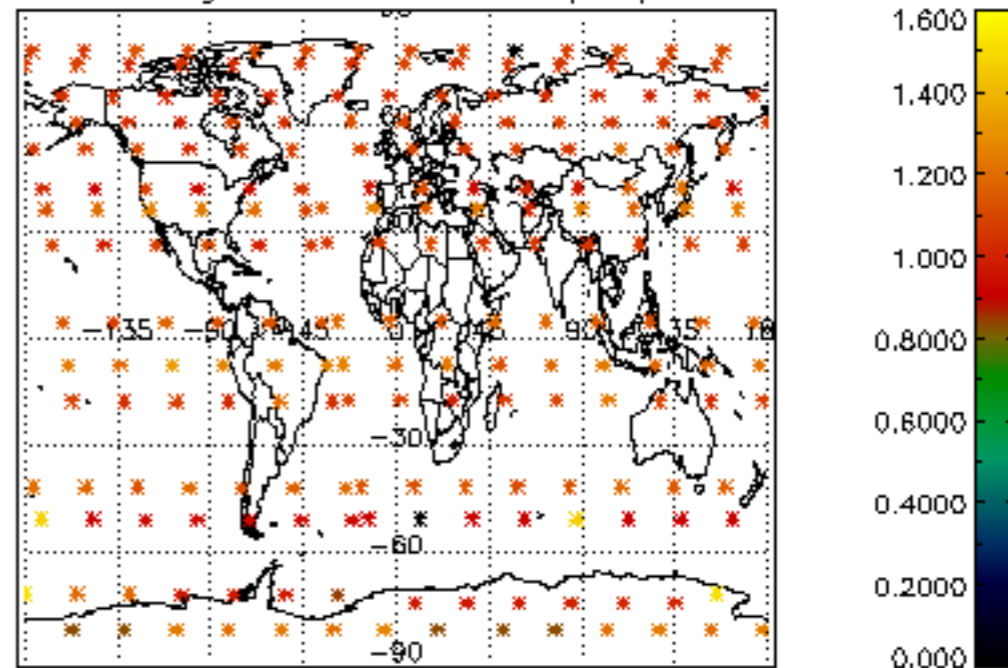




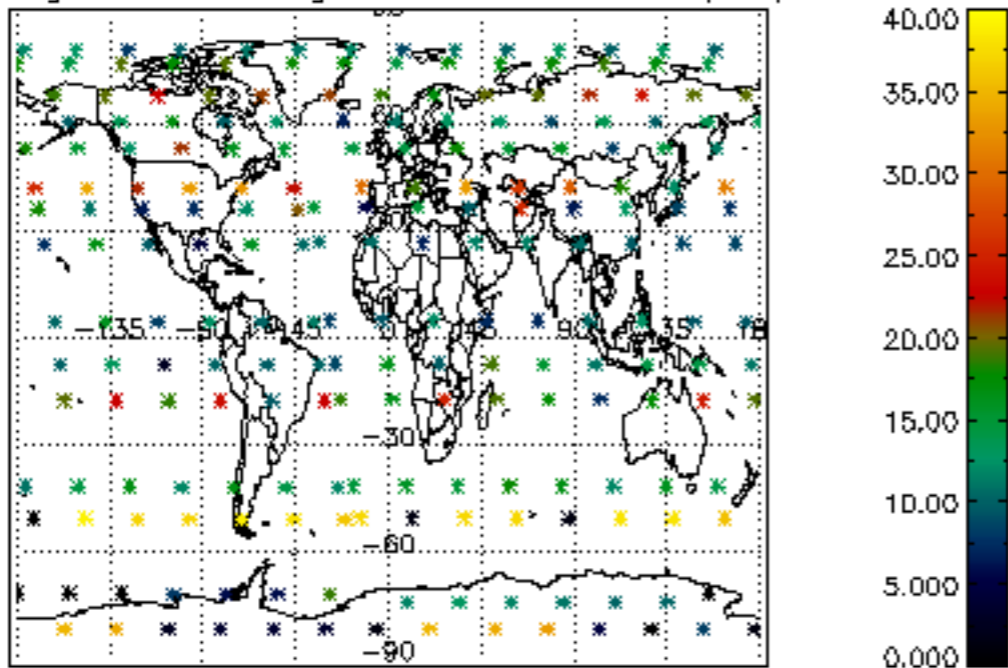
Percentage of cosmic ray hits per profile



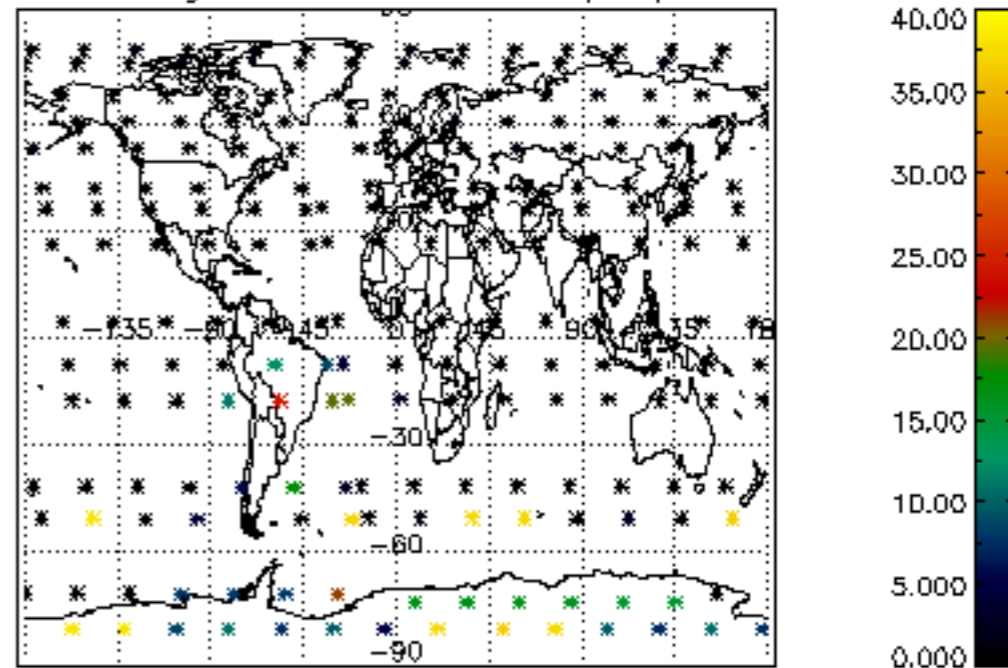
Percentage of datation errors per profile



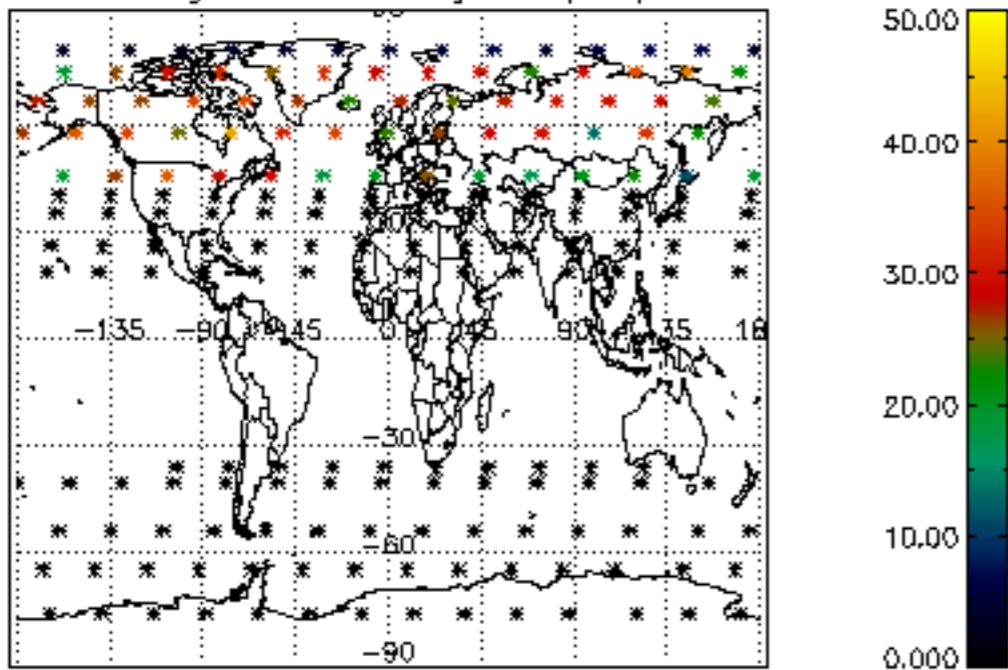
Percentage of star falling outside central band per profile



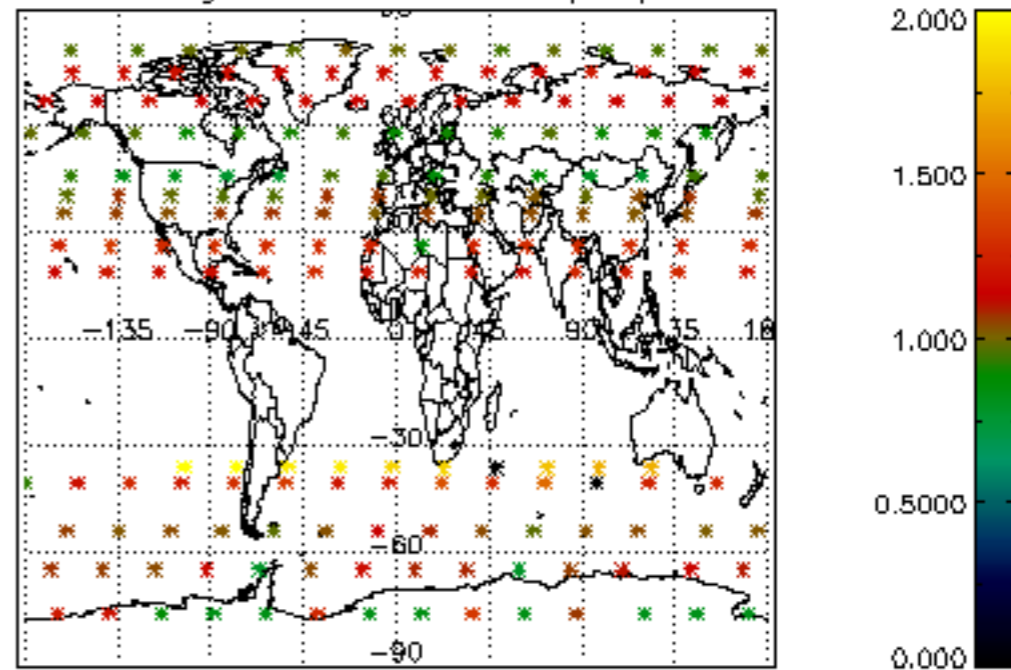
Percentage of saturation errors per profile



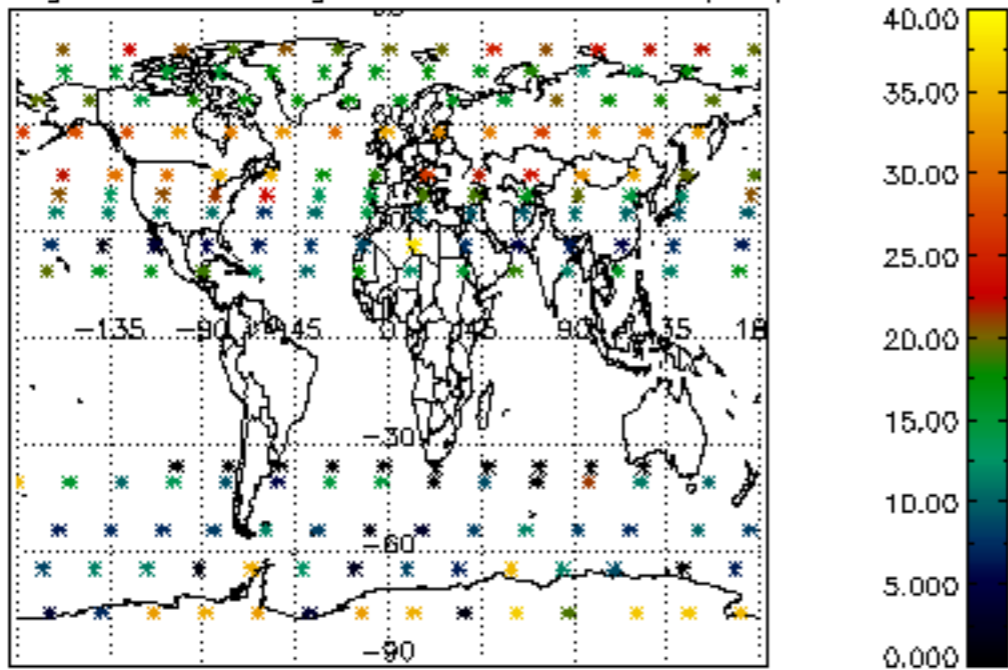
Percentage of cosmic ray hits per profile



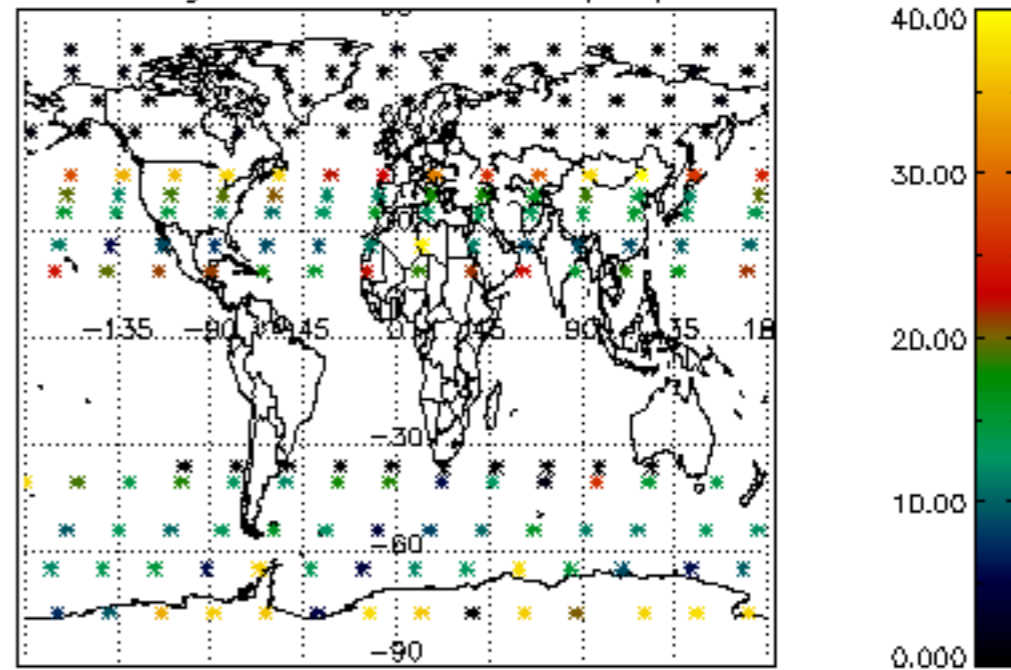
Percentage of datation errors per profile

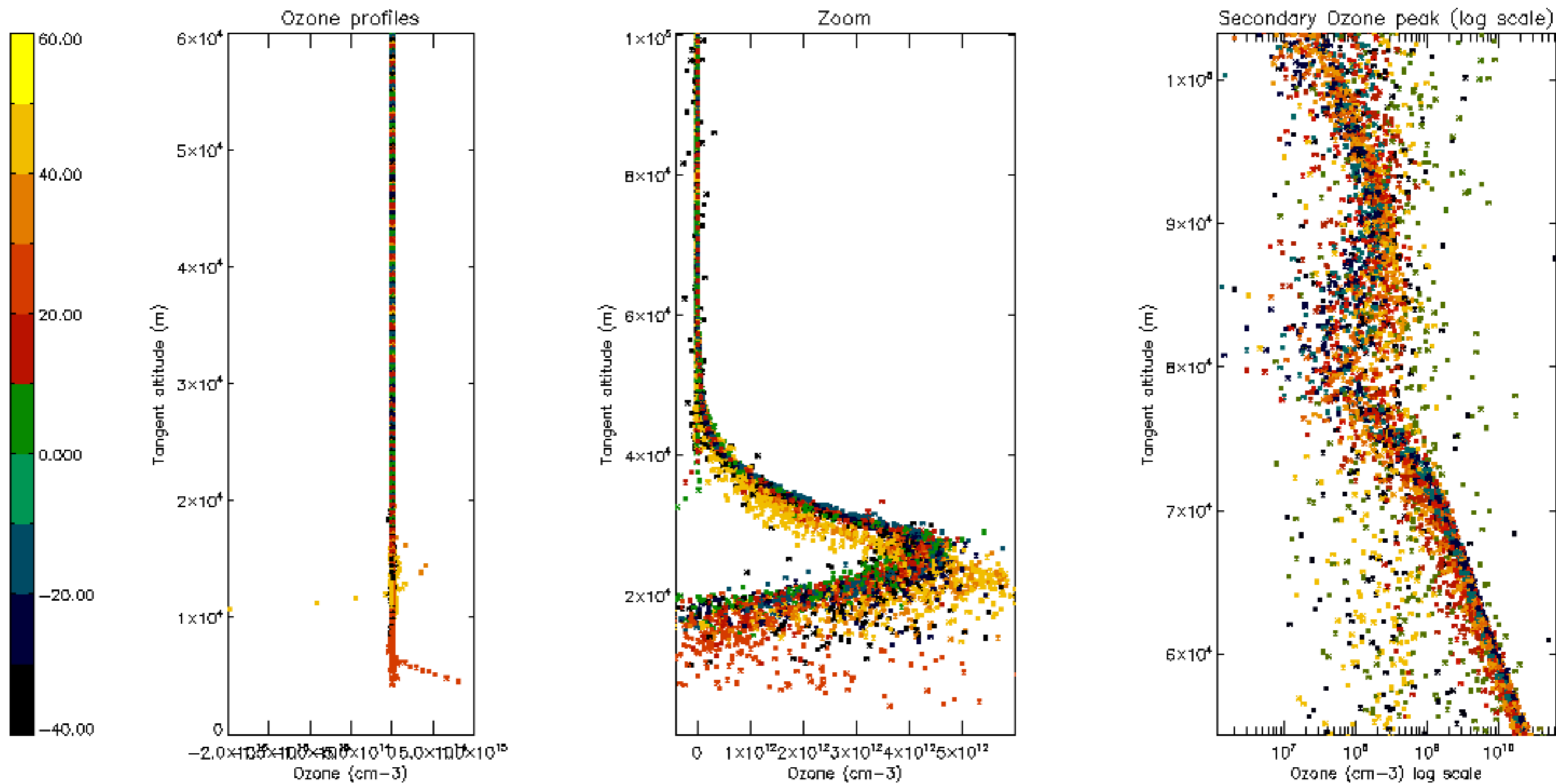


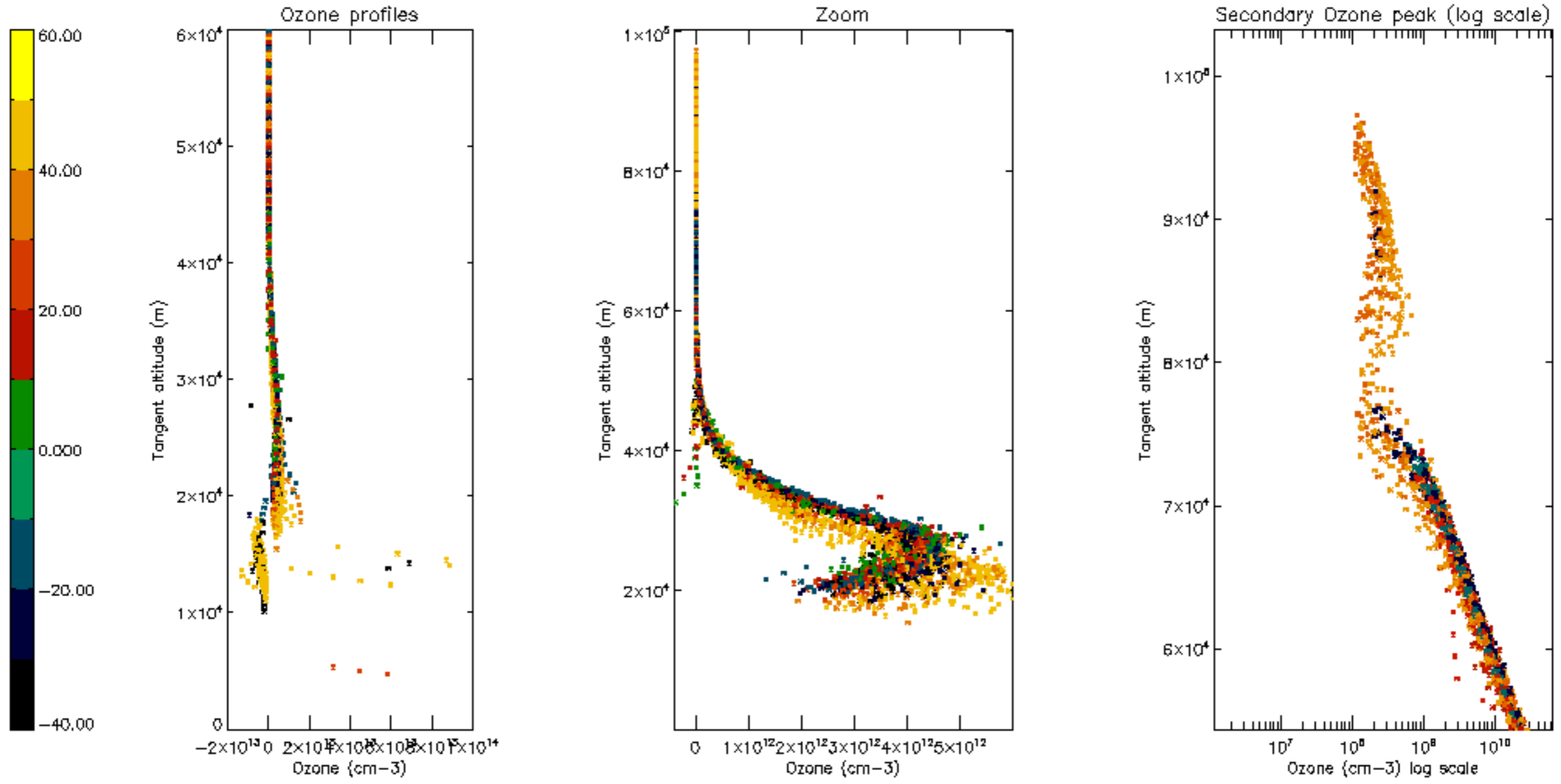
Percentage of star falling outside central band per profile

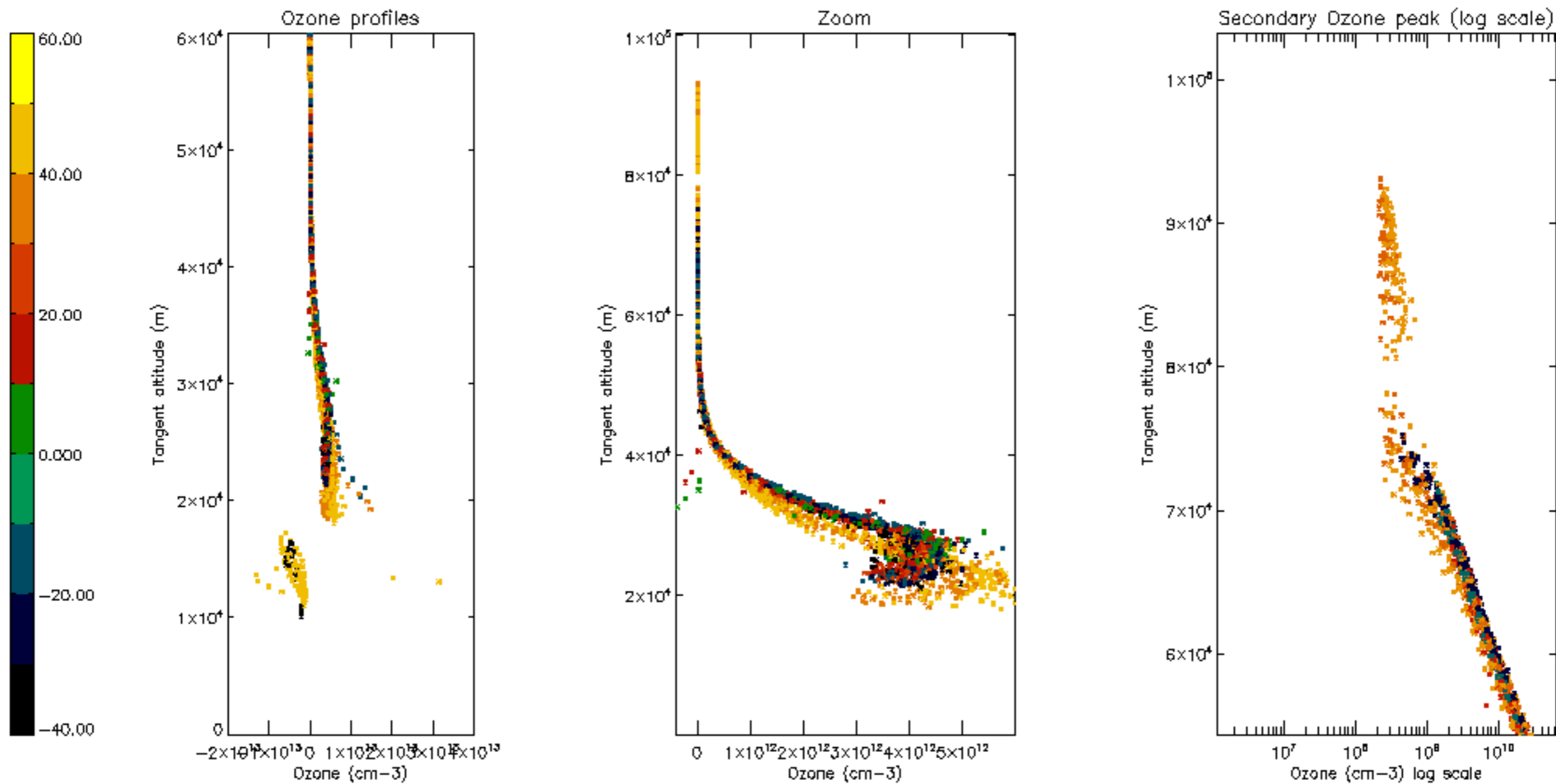


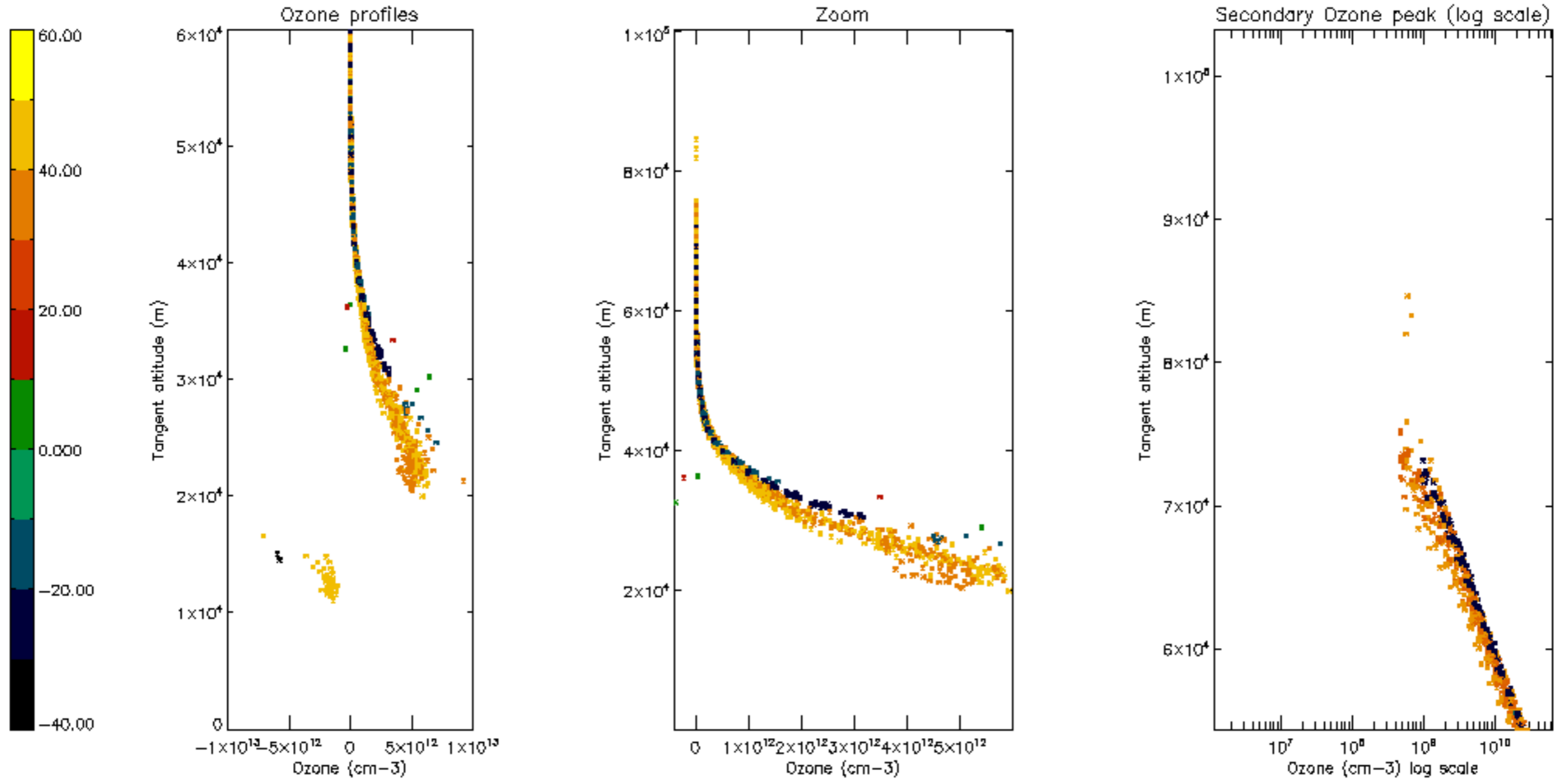
Percentage of saturation errors per profile

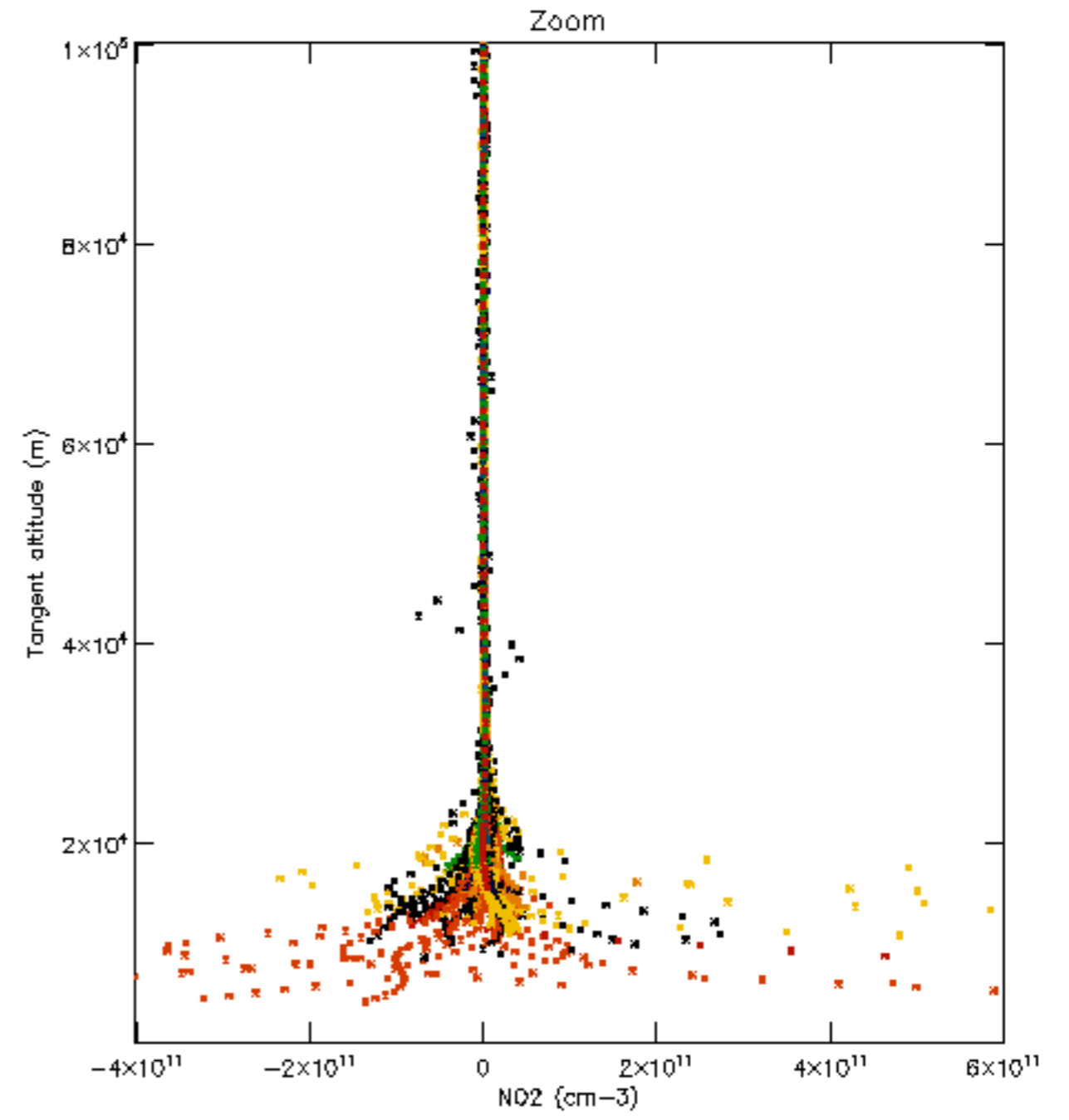
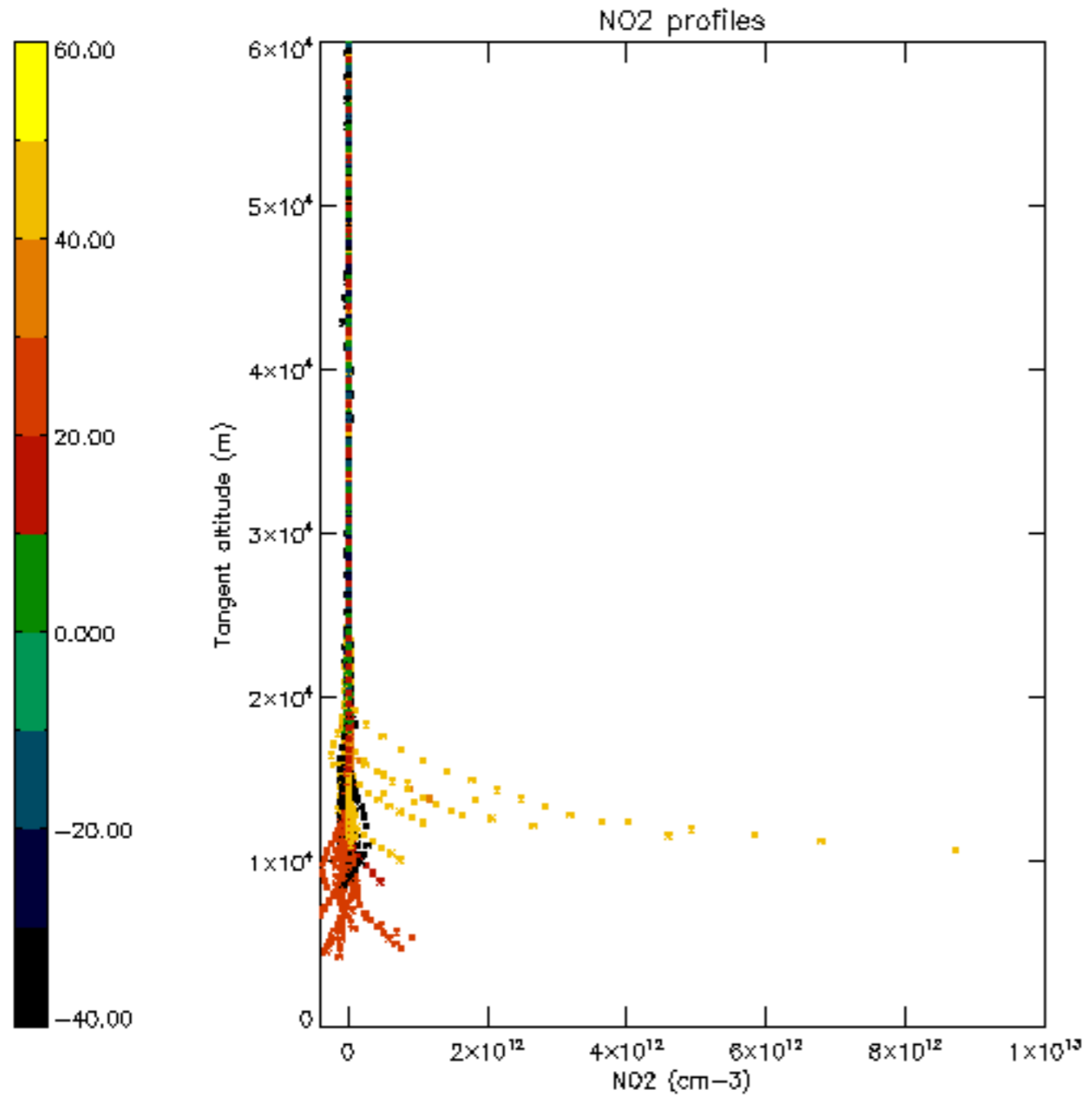


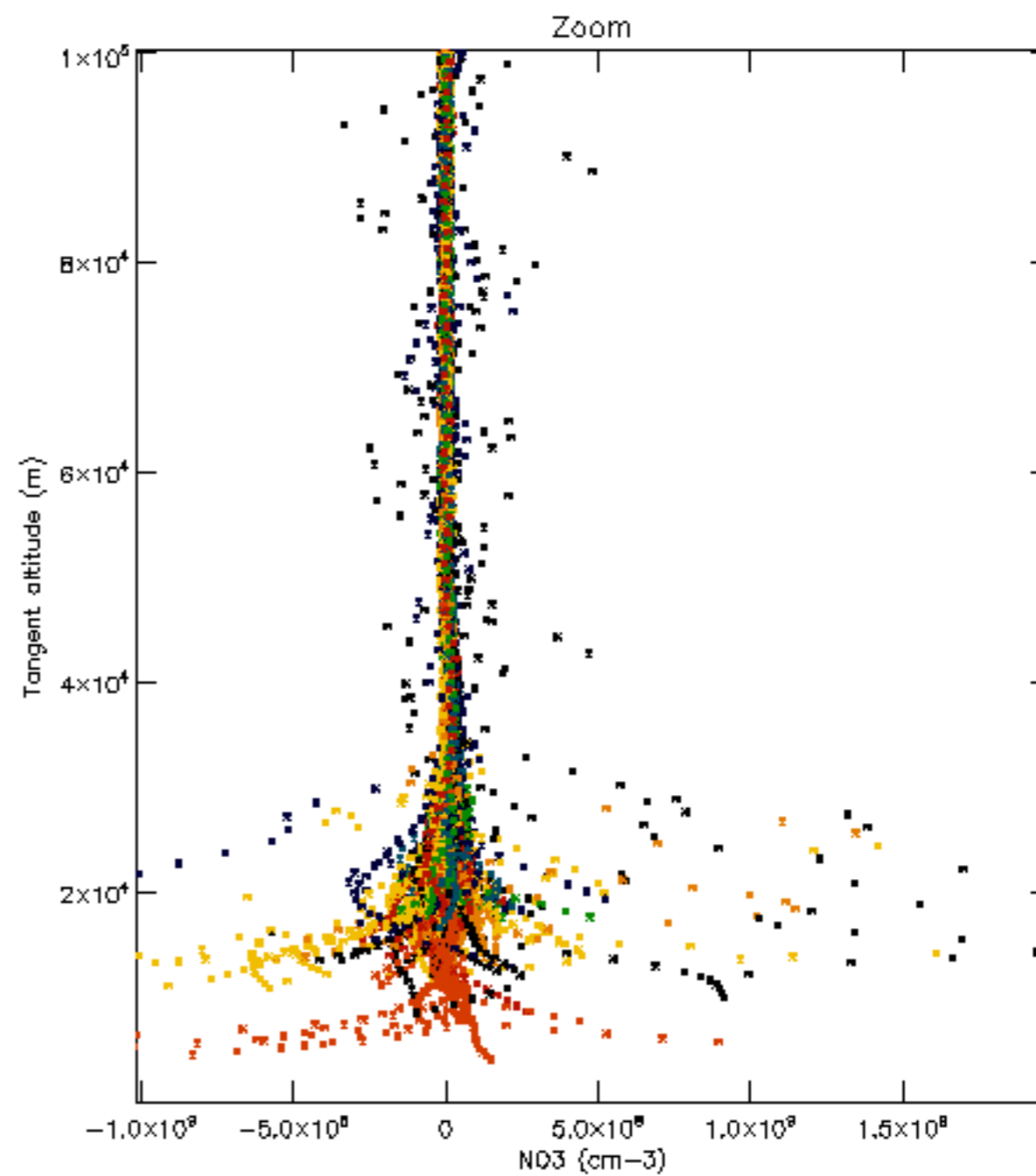
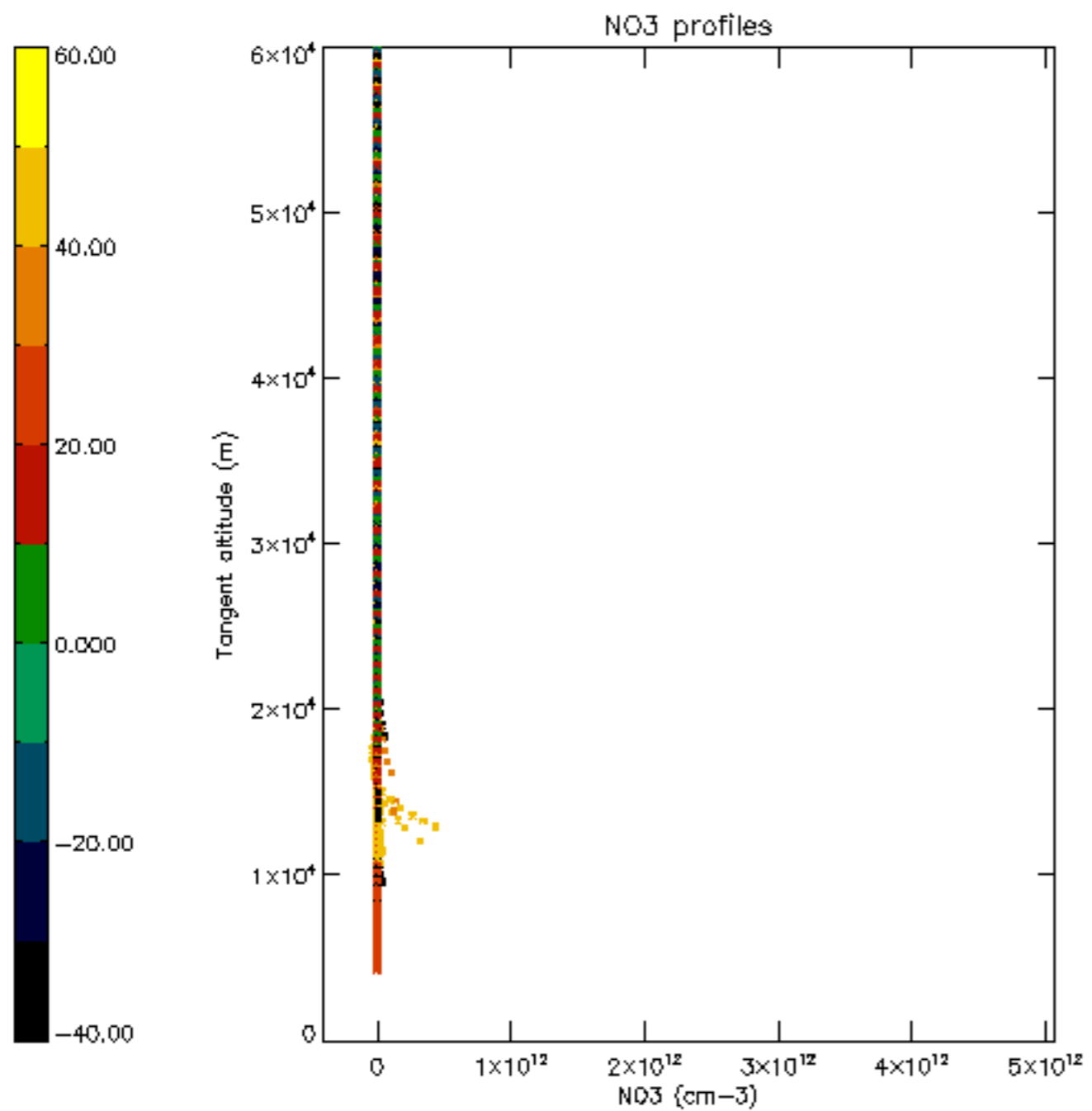


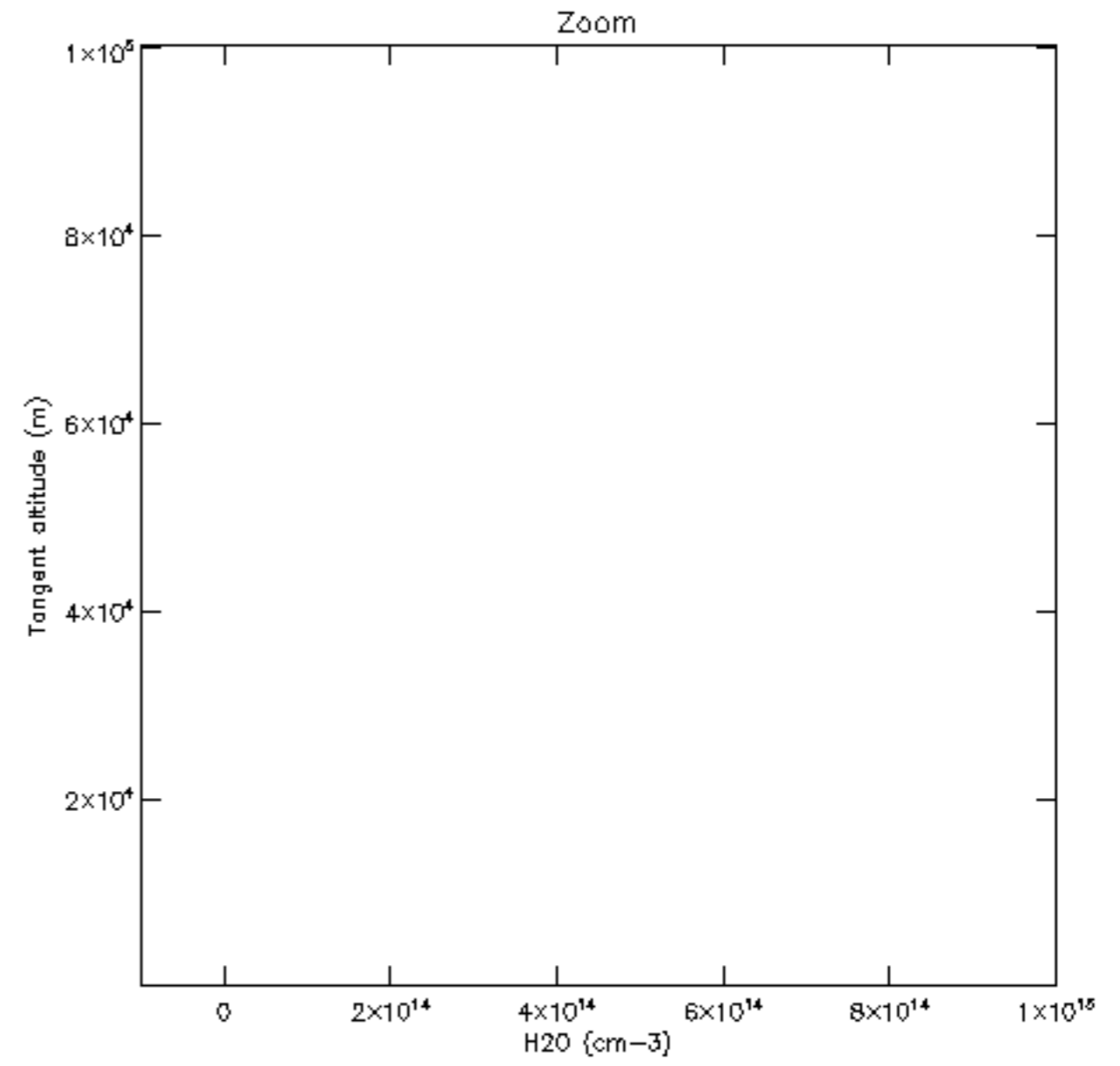
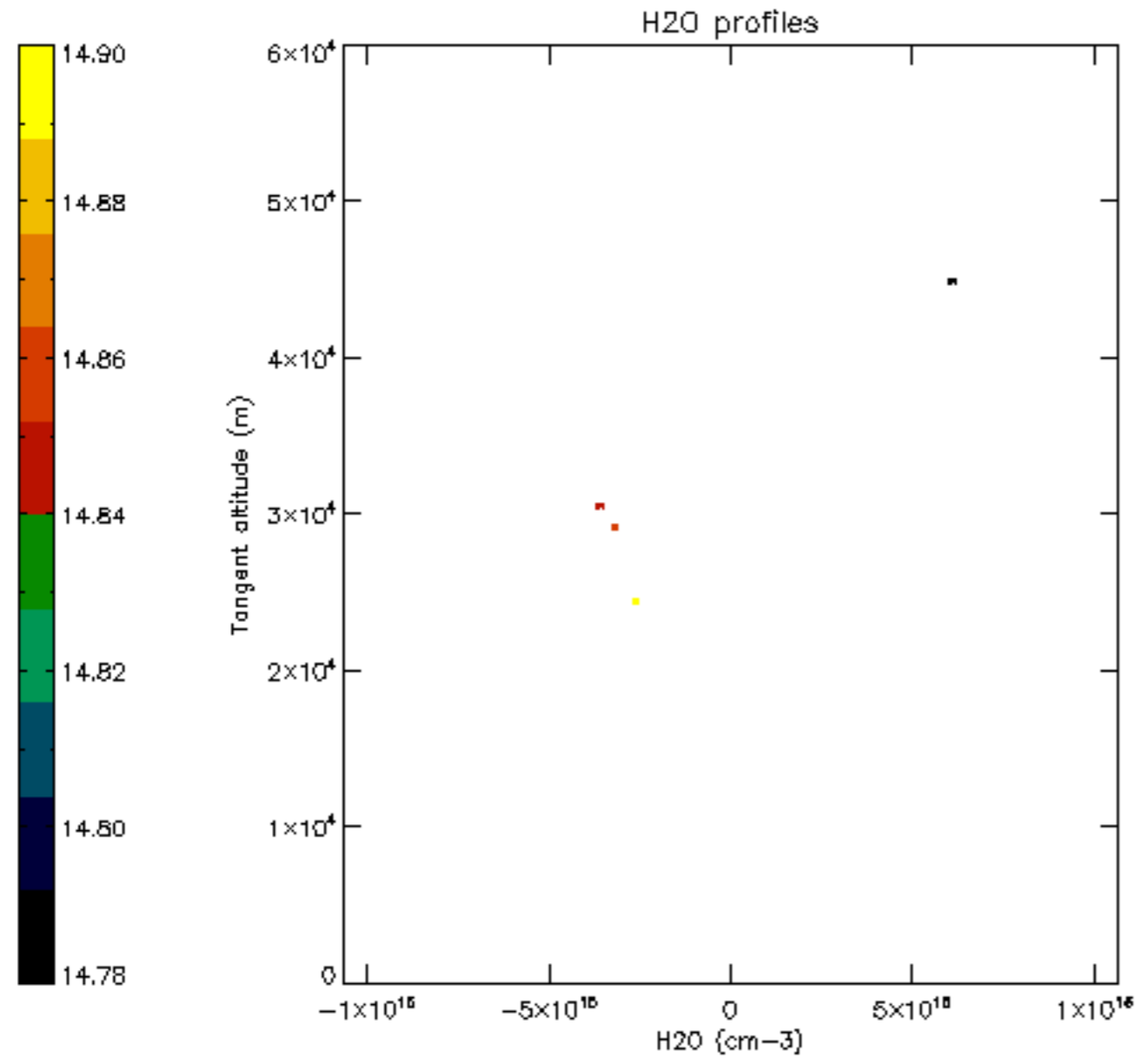


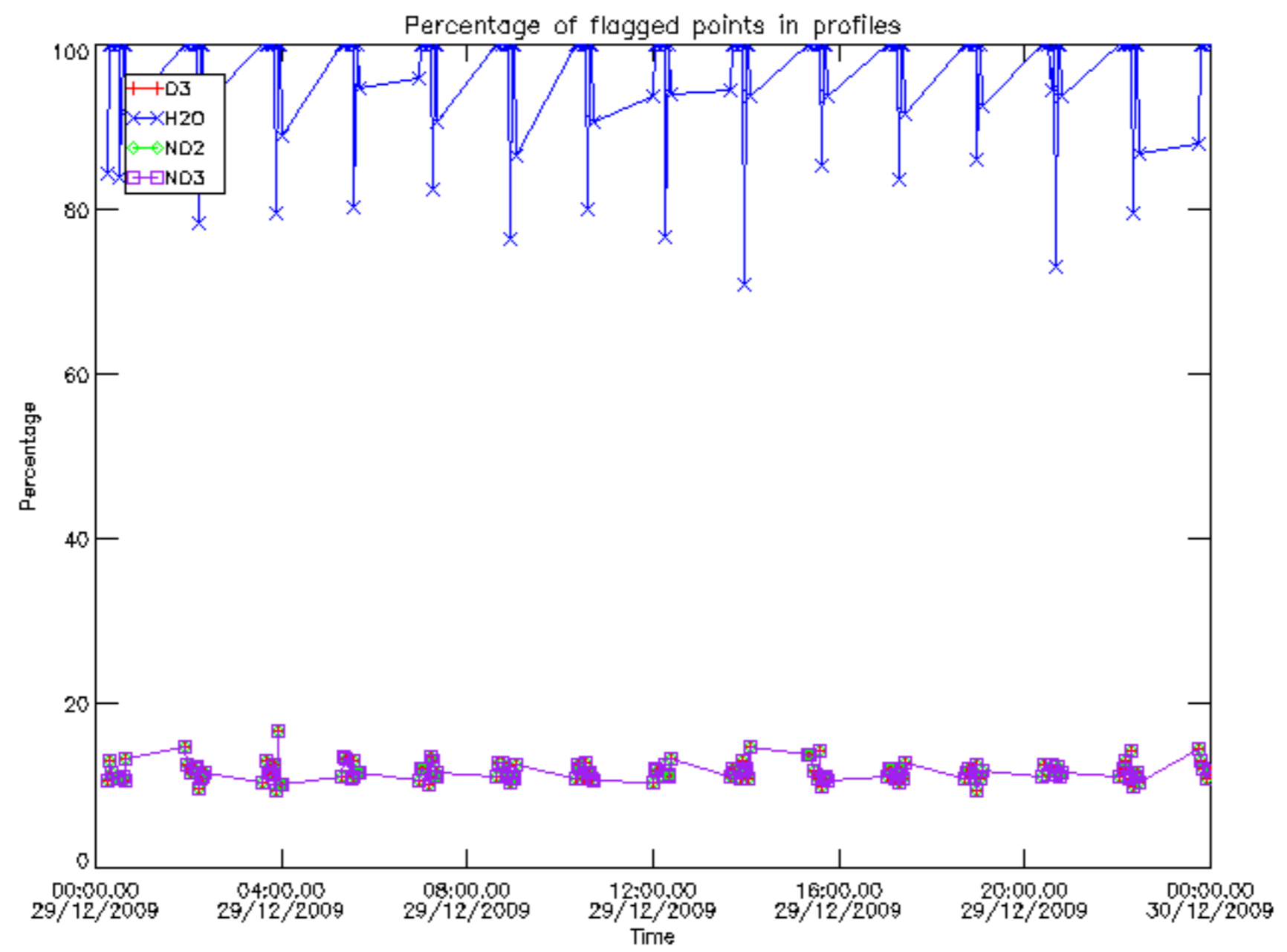




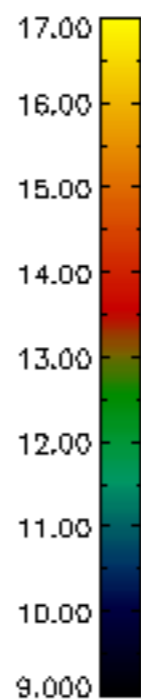
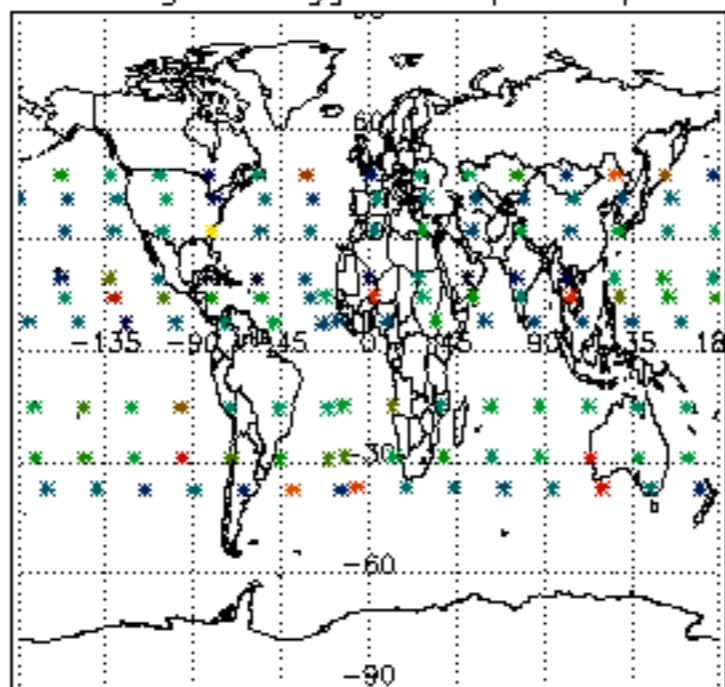




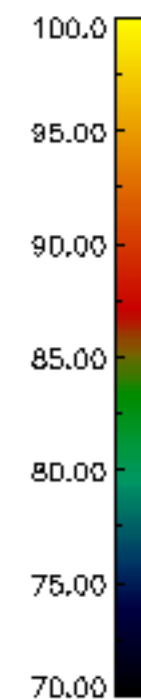
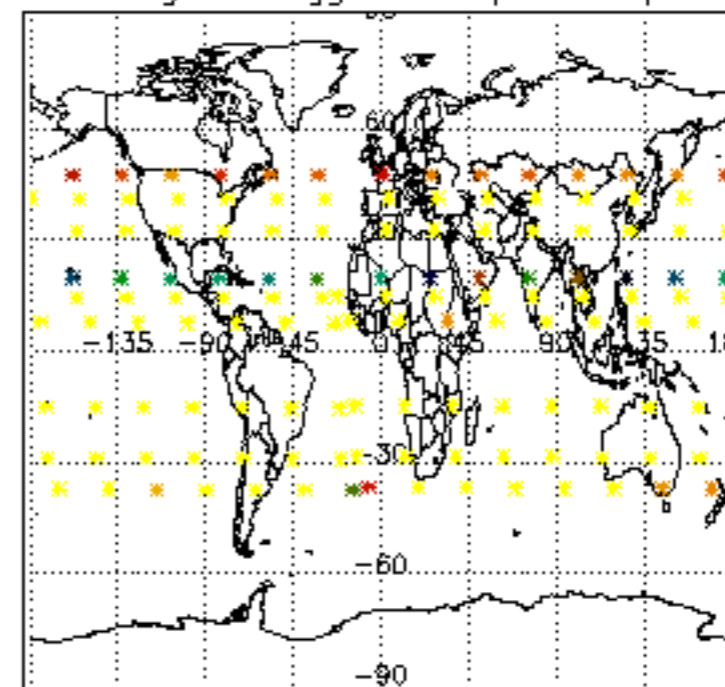




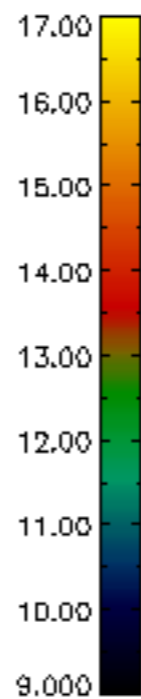
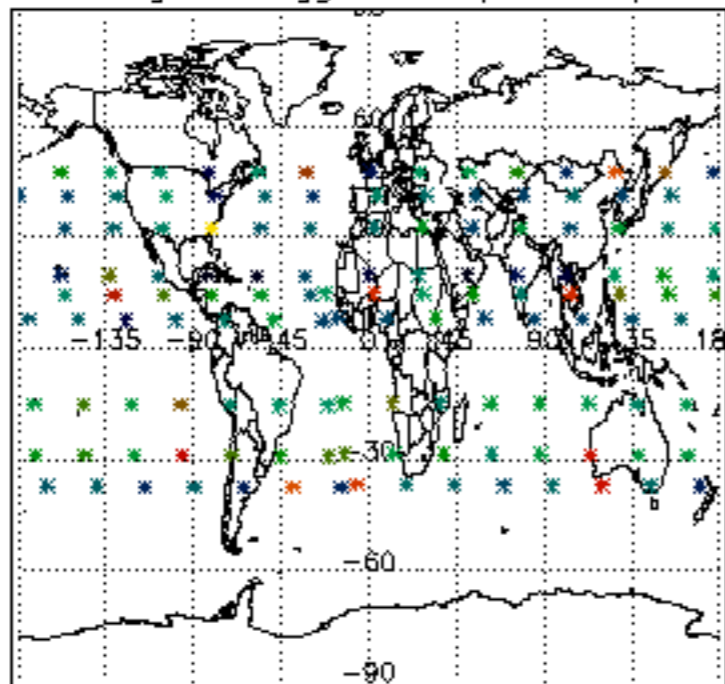
Percentage of flagged data per D3 profile



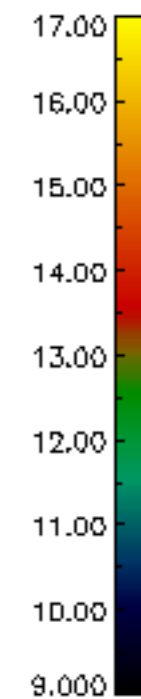
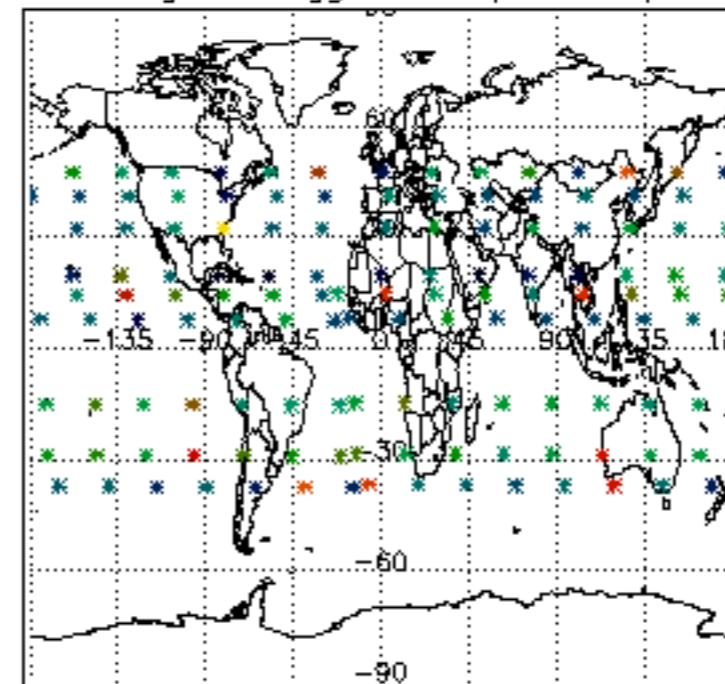
Percentage of flagged data per H2O profile

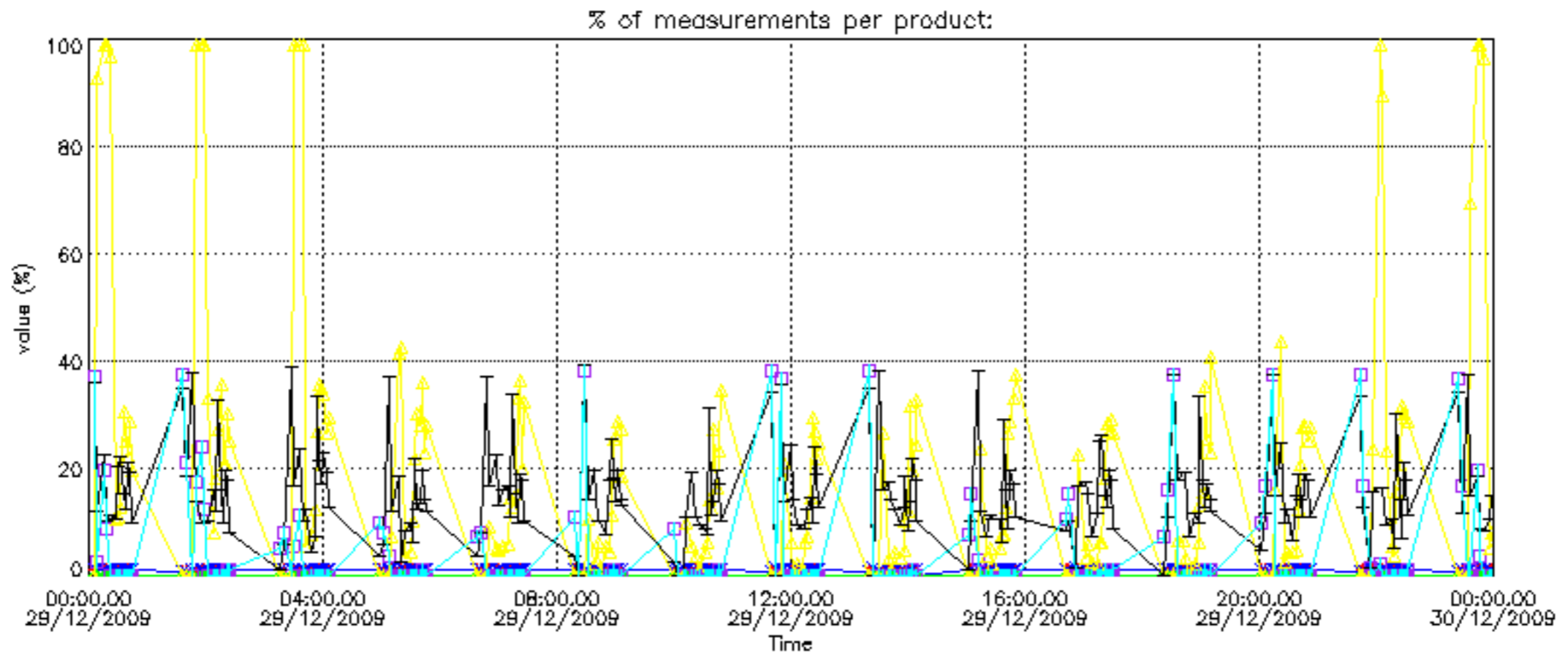


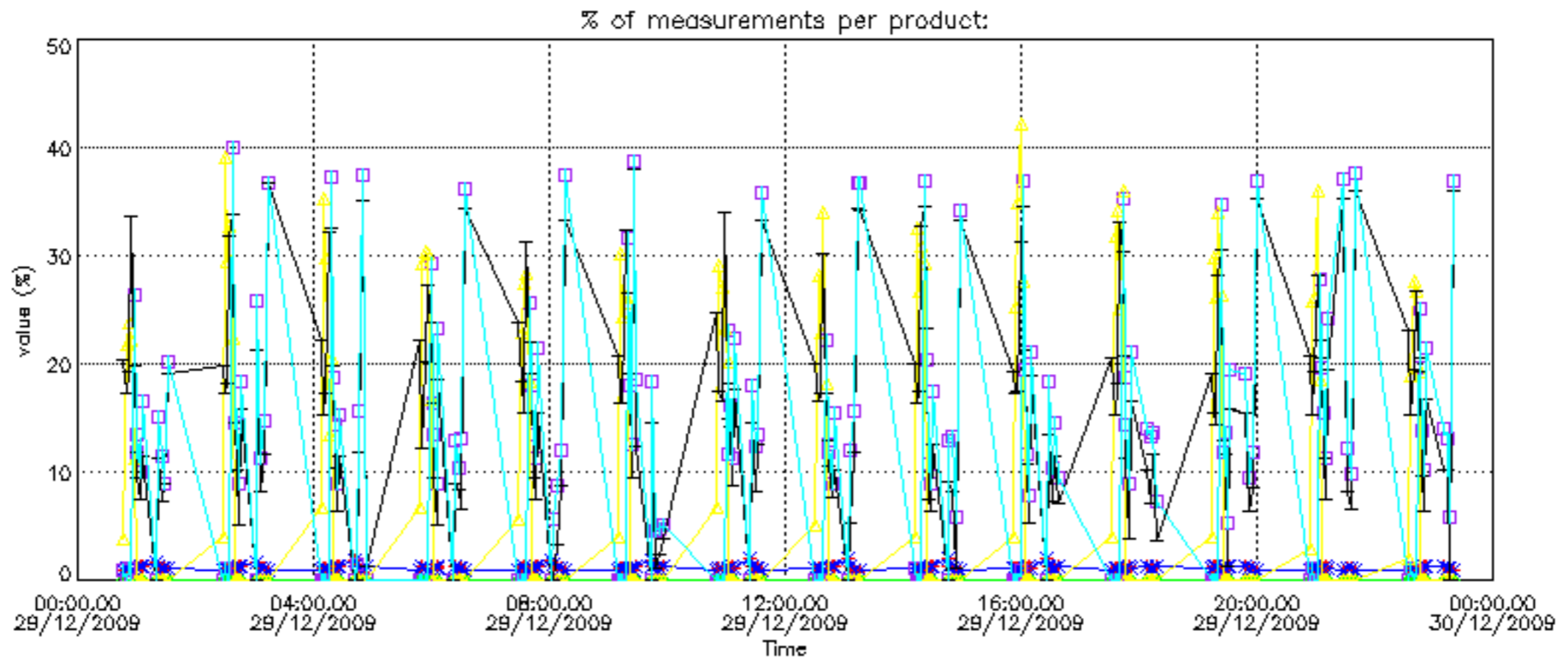
Percentage of flagged data per NO2 profile



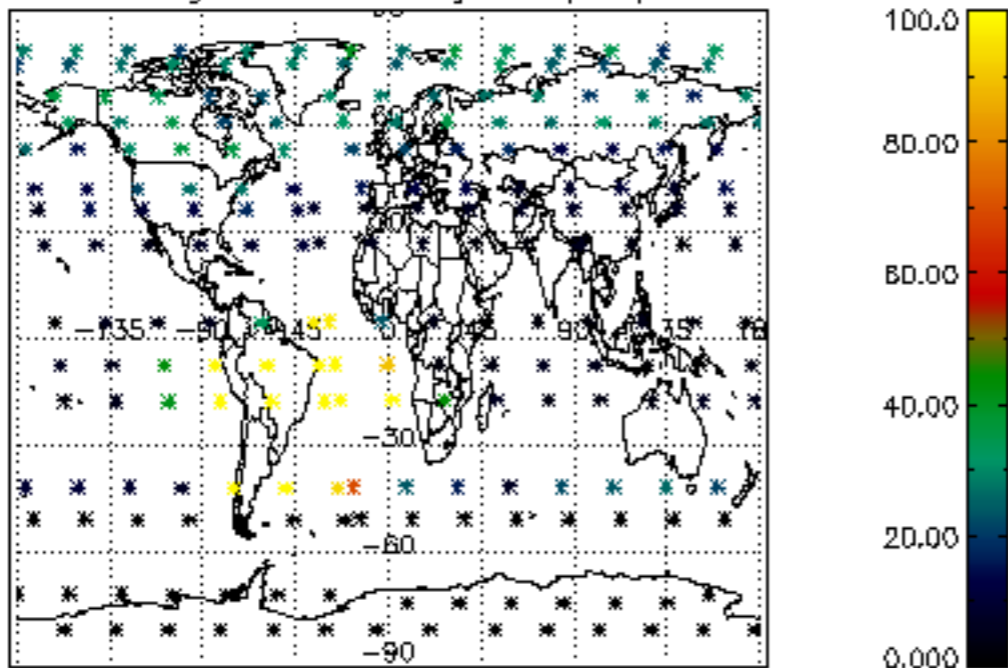
Percentage of flagged data per NO3 profile



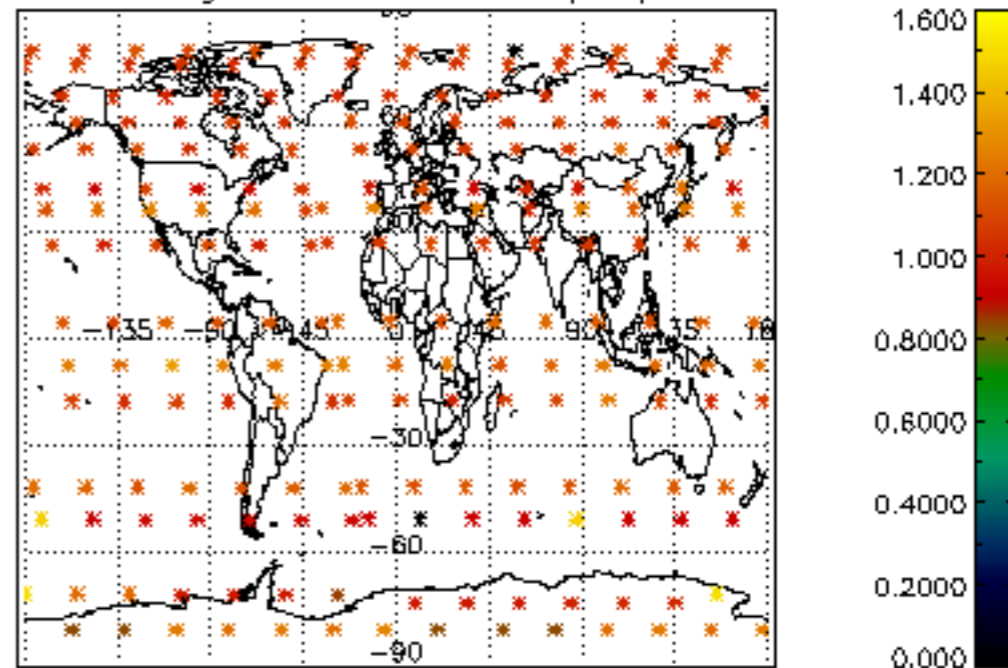




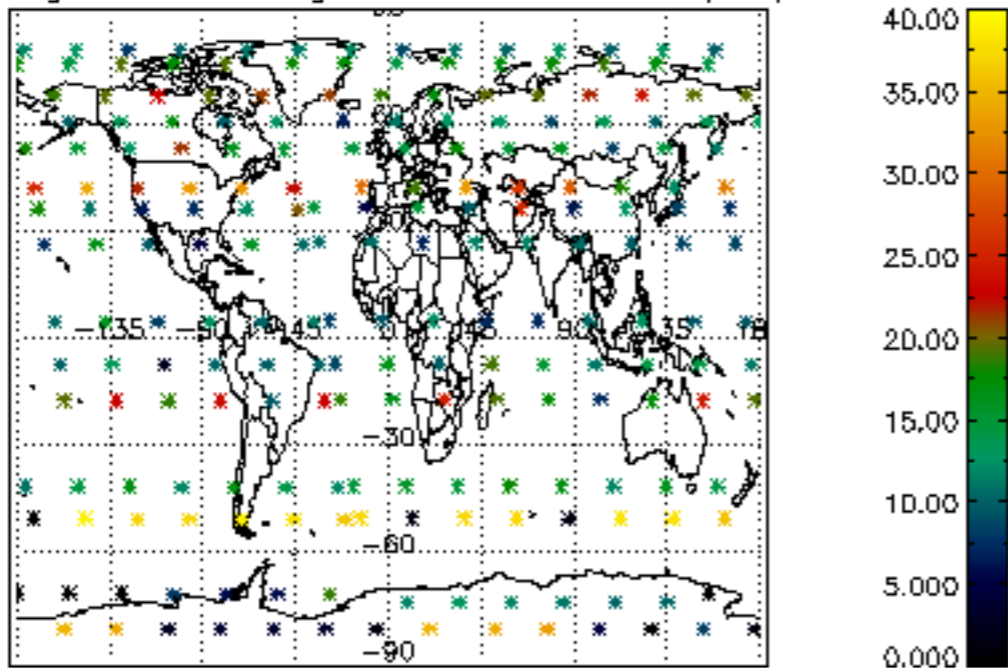
Percentage of cosmic ray hits per profile



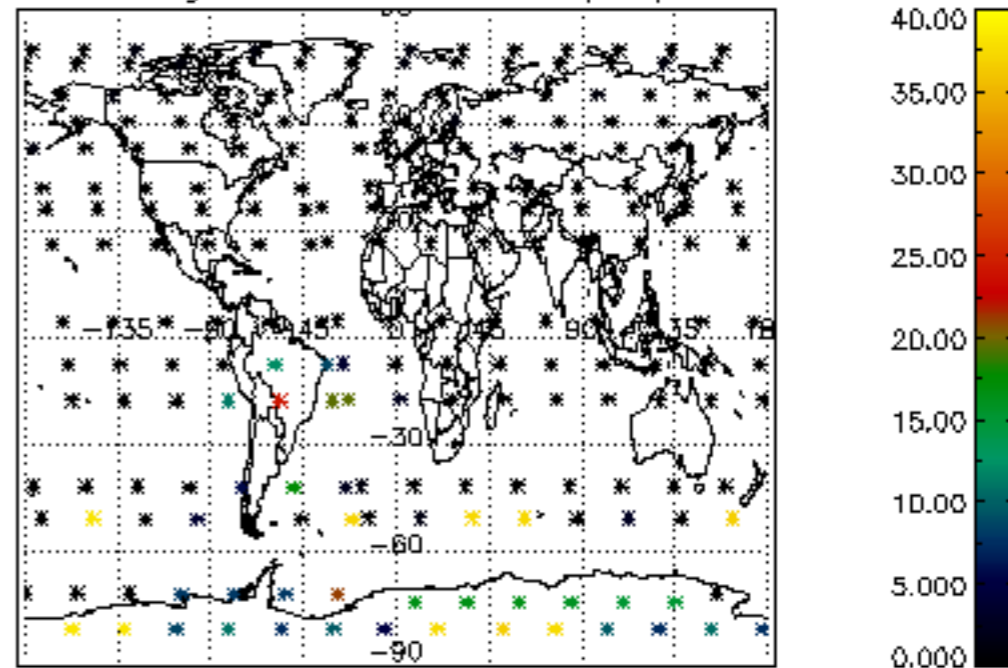
Percentage of datation errors per profile



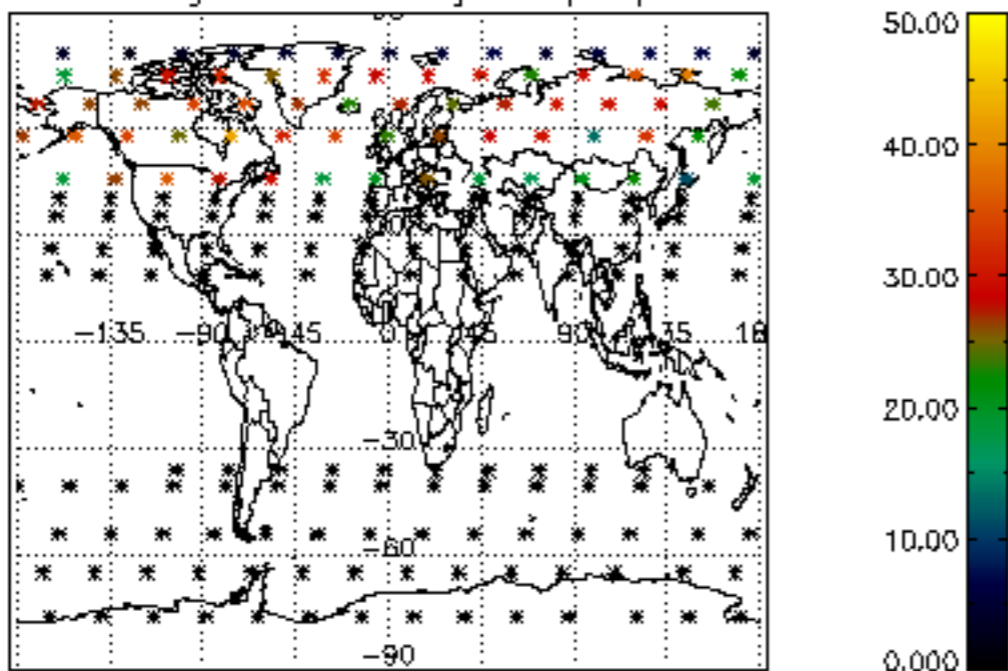
Percentage of star falling outside central band per profile



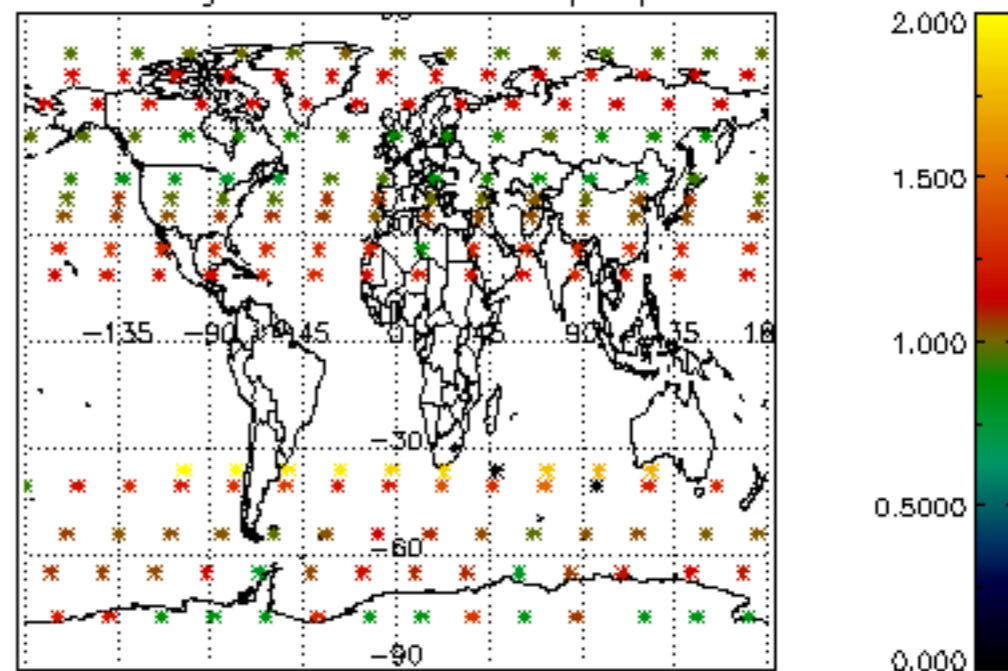
Percentage of saturation errors per profile



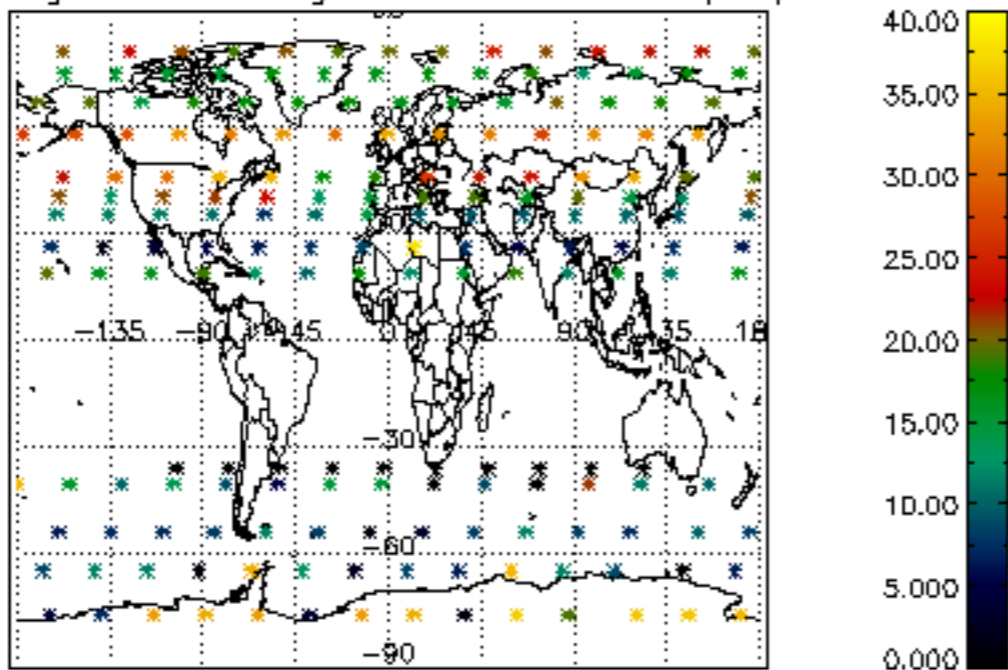
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

