

GOMOS Level 2 Daily Report

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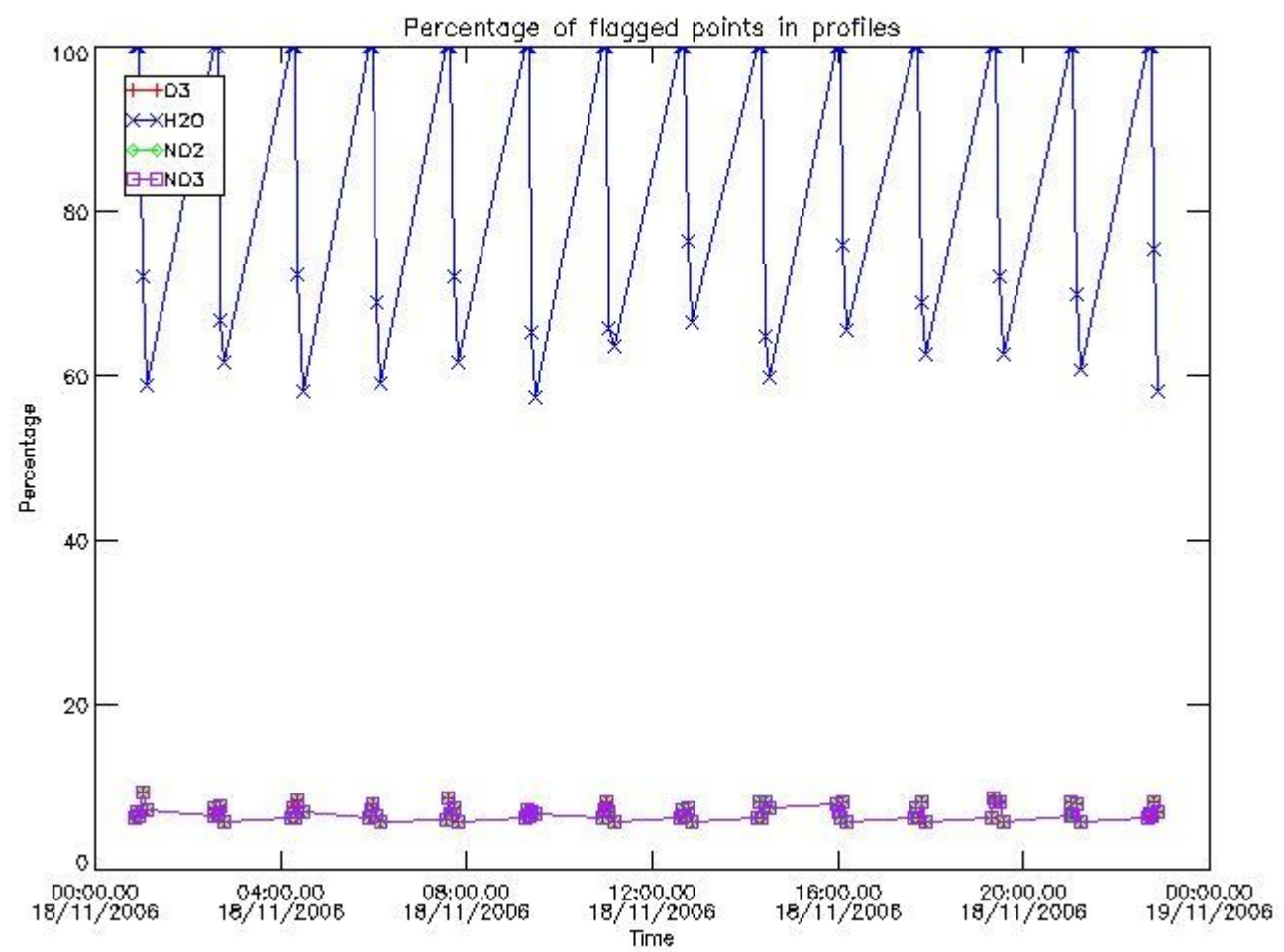
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279	GOM_NL__2PRFIN20061118_221101_000000312053_00072_24675_4086.N1	18-NOV-2006 22:11:01	Bright	30.500	39	85Eta UMa	1.8540	24000.	61	24675	No
280	GOM_NL__2PRFIN20061118_221429_000000302053_00072_24675_4087.N1	18-NOV-2006 22:14:29	Bright	29.500	152	12Alp2CVn	2.8900	11000.	59	24675	No
281	GOM_NL__2PRFIN20061118_222220_000000292053_00072_24675_4088.N1	18-NOV-2006 22:22:20	Bright	28.500	138	47Eps Vir	2.8280	4700.0	57	24675	No
282	GOM_NL__2PRFIN20061118_222614_000000422053_00072_24675_4089.N1	18-NOV-2006 22:26:14	Bright	41.500	121	29Gam Vir	2.7400	7200.0	83	24675	No
283	GOM_NL__2PRFIN20061118_223122_000000372053_00072_24675_4090.N1	18-NOV-2006 22:31:22	Twilight	37.000	100	4Gam Crv	2.5800	13100.	74	24675	No
284	GOM_NL__2PRFIN20061118_223254_000000392053_00072_24675_4091.N1	18-NOV-2006 22:32:54	Twilight	38.500	171	2Eps Crv	3.0010	4250.0	77	24675	No
285	GOM_NL__2PRFIN20061118_224002_000000332053_00072_24675_4092.N1	18-NOV-2006 22:40:02	Dark	32.500	99	Del Cen	2.5750	26000.	65	24675	No
286	GOM_NL__2PRFIN20061118_224214_000000392053_00072_24675_4093.N1	18-NOV-2006 22:42:14	Dark	38.500	113	Mu Vel	2.6920	5000.0	77	24675	No
287	GOM_NL__2PRFIN20061118_224501_000000322053_00073_24676_4072.N1	18-NOV-2006 22:45:01	Dark	32.000	124	The Car	2.7640	30000.	64	24676	No
288	GOM_NL__2PRFIN20061118_224906_000000372053_00073_24676_4073.N1	18-NOV-2006 22:49:06	Dark	37.000	41	Eps Car	1.8600	4100.0	74	24676	No
289	GOM_NL__2PRFIN20061118_225437_000000452053_00073_24676_4074.N1	18-NOV-2006 22:54:37	Dark	44.500	2	Alp Car	-0.73600	7000.0	89	24676	No
290	GOM_NL__2PRFIN20061118_230302_000000322053_00073_24676_4075.N1	18-NOV-2006 23:03:02	Straylight	31.500	157	The1Eri	2.9060	9300.0	63	24676	No
291	GOM_NL__2PRFIN20061118_231545_000000402053_00073_24676_4076.N1	18-NOV-2006 23:15:45	Twilight	40.000	94	92Alp Cet	2.5260	3100.0	80	24676	No
292	GOM_NL__2PRFIN20061118_232039_000000322053_00073_24676_4077.N1	18-NOV-2006 23:20:39	Bright	32.000	105	6Bet Ari	2.6450	8900.0	64	24676	No
293	GOM_NL__2PRFIN20061118_232434_000000302053_00073_24676_4078.N1	18-NOV-2006 23:24:34	Bright	29.500	173	4Bet Tri	3.0040	8900.0	59	24676	No
294	GOM_NL__2PRFIN20061118_232639_000000302053_00073_24676_4079.N1	18-NOV-2006 23:26:39	Bright	29.500	73	57Gam1And	2.2600	13100.	59	24676	No
295	GOM_NL__2PRFIN20061118_232933_000000332053_00073_24676_4080.N1	18-NOV-2006 23:29:33	Bright	33.000	35	33Alp Per	1.7950	6250.0	66	24676	No
296	GOM_NL__2PRFIN20061118_233145_000000292053_00073_24676_4081.N1	18-NOV-2006 23:31:45	Bright	28.500	110	37Del Cas	2.6780	8900.0	57	24676	No
297	GOM_NL__2PRFIN20061118_233953_000000312053_00073_24676_4082.N1	18-NOV-2006 23:39:53	Bright	31.000	49	1Alp UMi	1.9900	6300.0	62	24676	No
298	GOM_NL__2PRFIN20061118_234420_000000302053_00073_24676_4083.N1	18-NOV-2006 23:44:20	Bright	29.500	60	7Bet UMi	2.0810	3950.0	59	24676	No
299	GOM_NL__2PRFIN20061118_234953_000000292053_00073_24676_4084.N1	18-NOV-2006 23:49:53	Bright	29.000	32	77Eps UMa	1.7630	11000.	58	24676	No
300	GOM_NL__2PRFIN20061118_235137_000000302053_00073_24676_4085.N1	18-NOV-2006 23:51:37	Bright	30.000	39	85Eta UMa	1.8540	24000.	60	24676	No
301	GOM_NL__2PRFIN20061118_235505_000000312053_00073_24676_4086.N1	18-NOV-2006 23:55:05	Bright	31.000	152	12Alp2CVn	2.8900	11000.	62	24676	No

3. Quality information per product

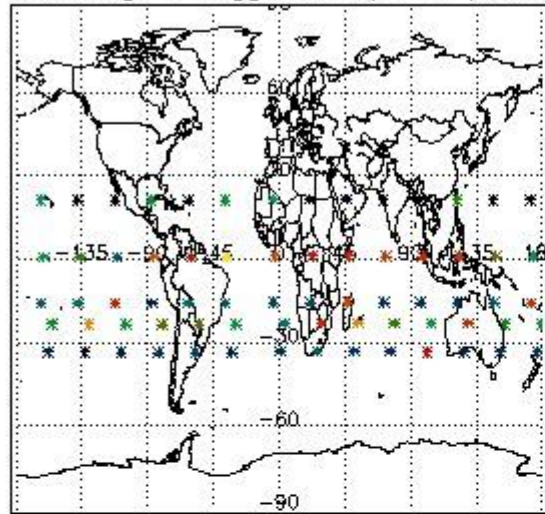
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

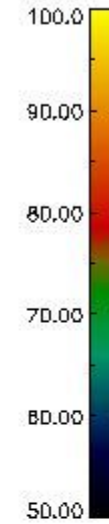
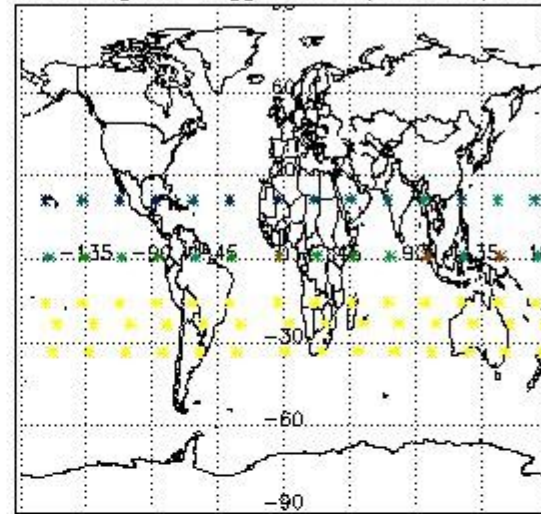


3.2 Plot quality information per product (world map)

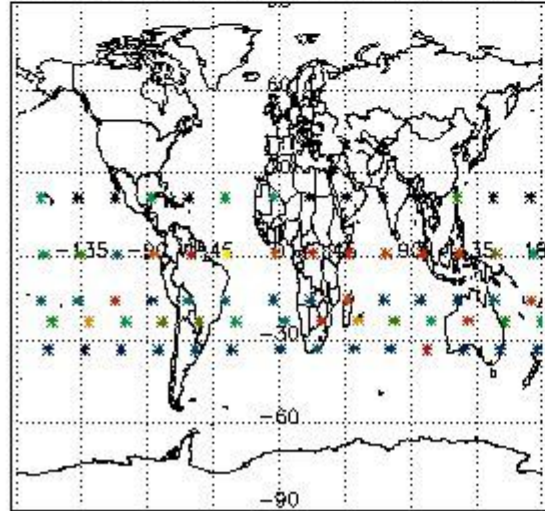
Percentage of flagged data per O3 profile



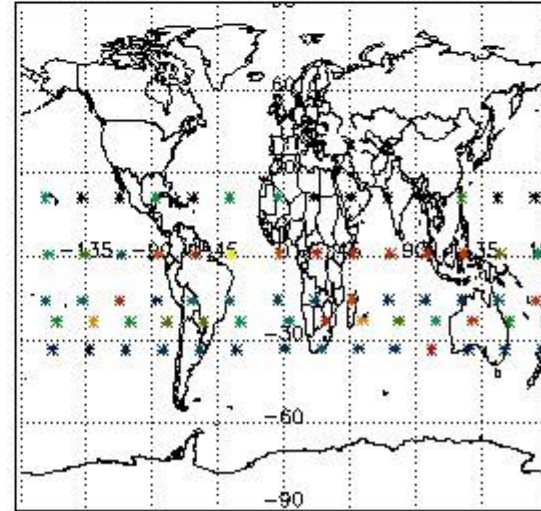
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

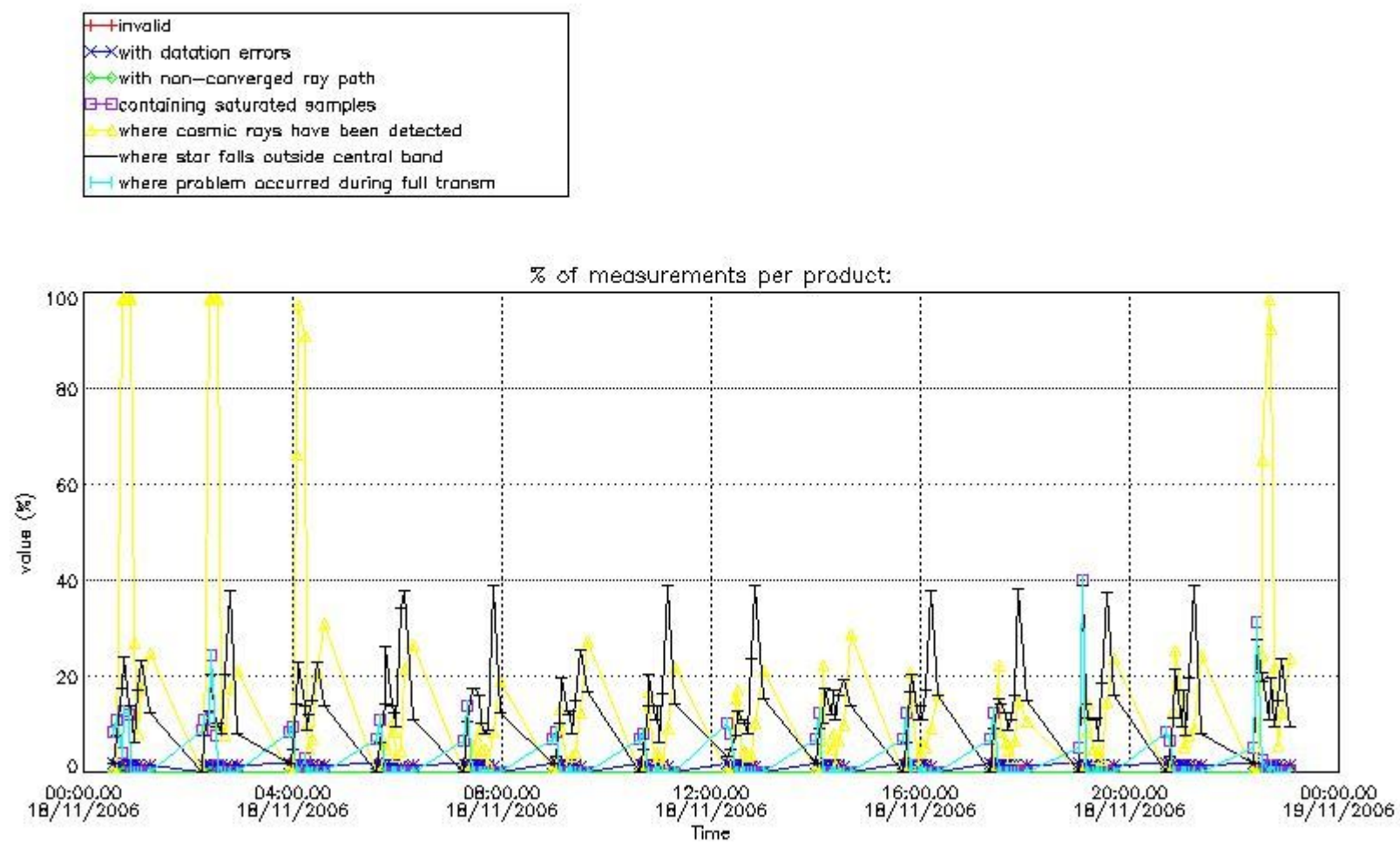


4. Level 1 quality information per product

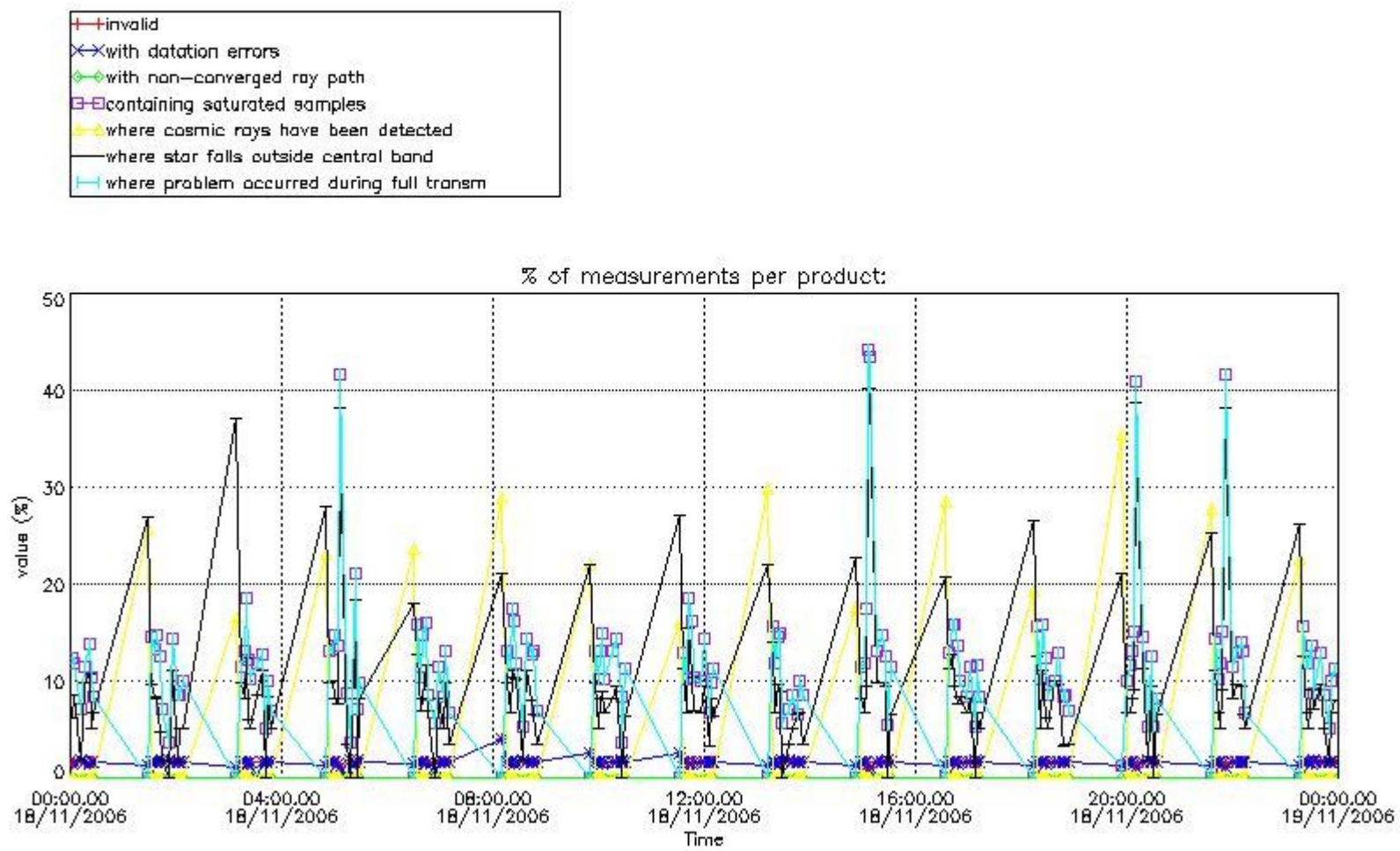
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



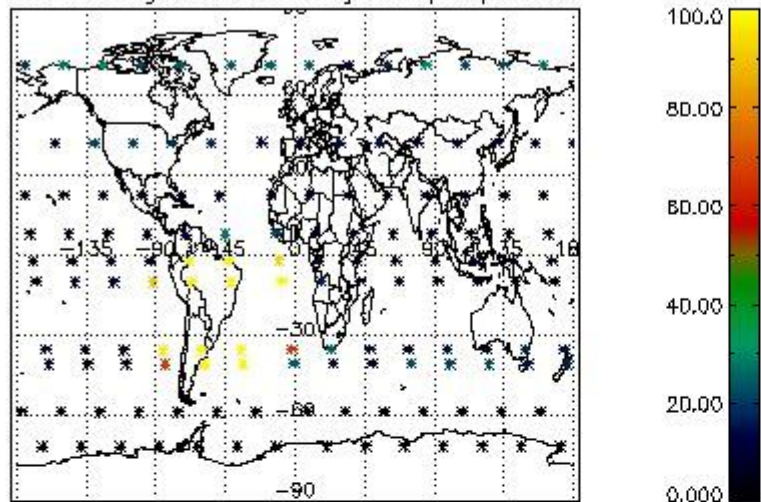
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



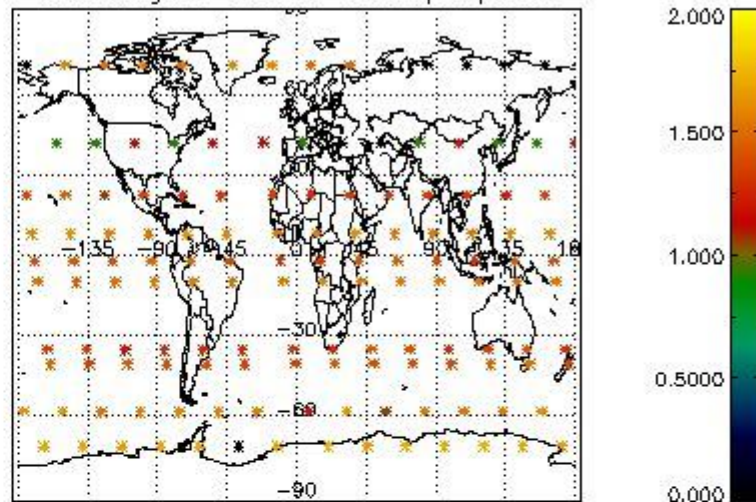
4.2 Plot quality information per product coming from level 1b processing (world map)

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

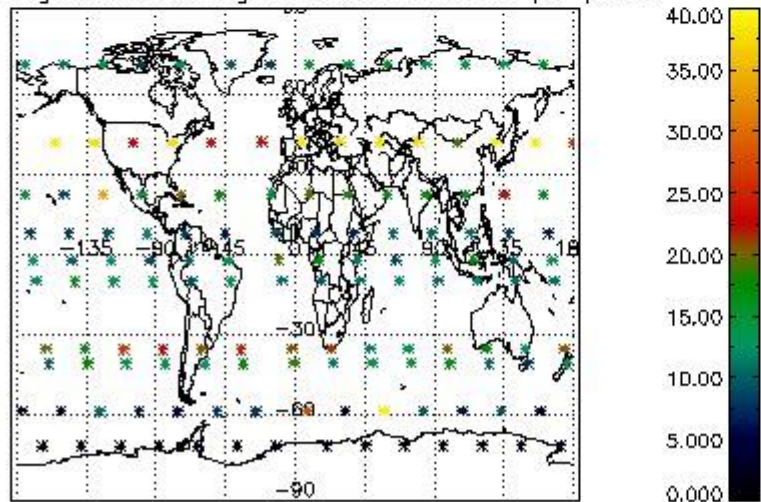
Percentage of cosmic ray hits per profile



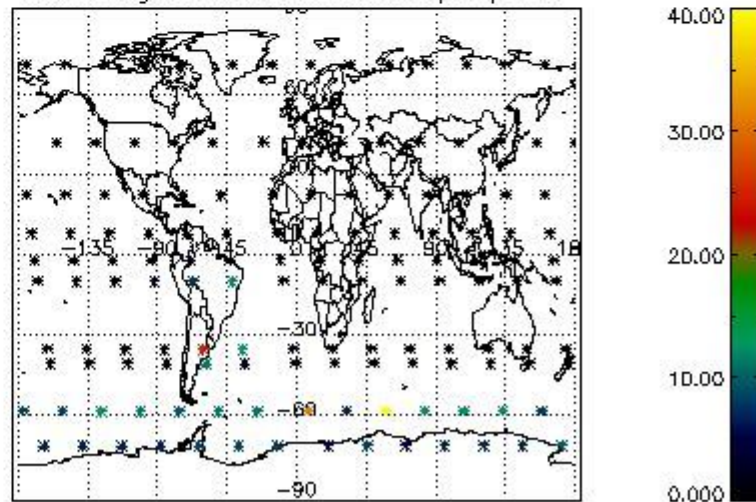
Percentage of datation errors per profile



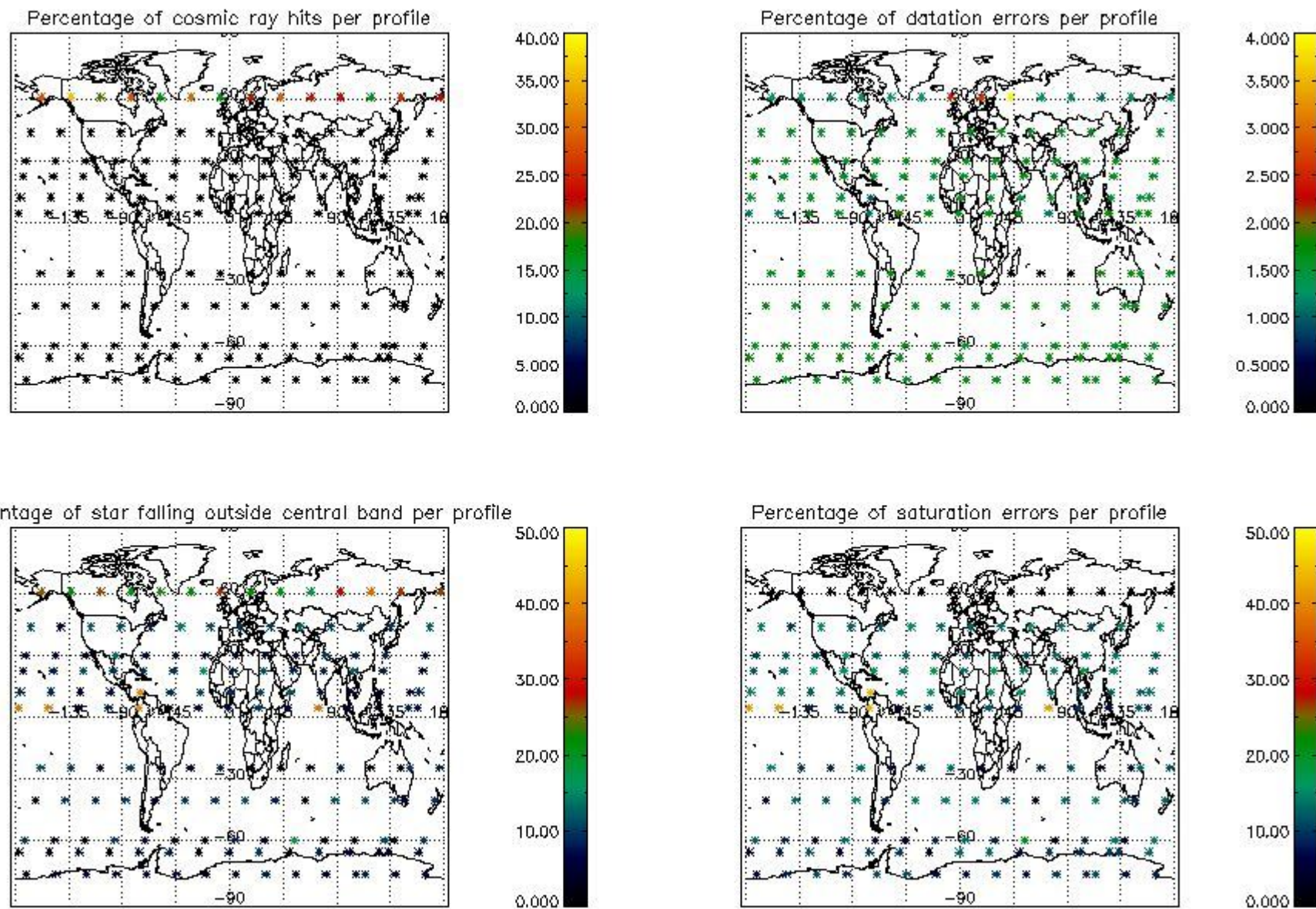
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



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

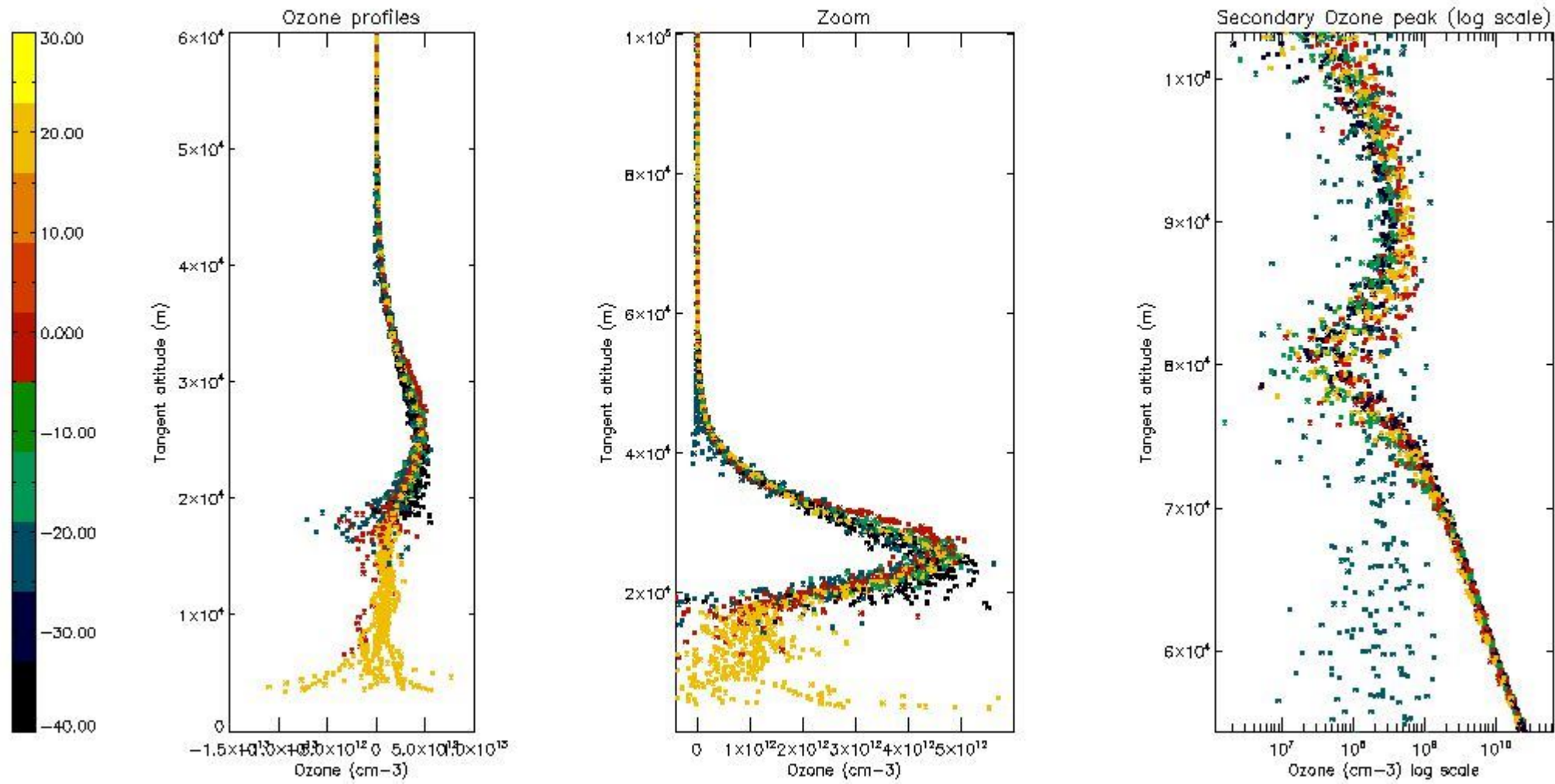
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	17

STD < 10	13
STD < 5	8

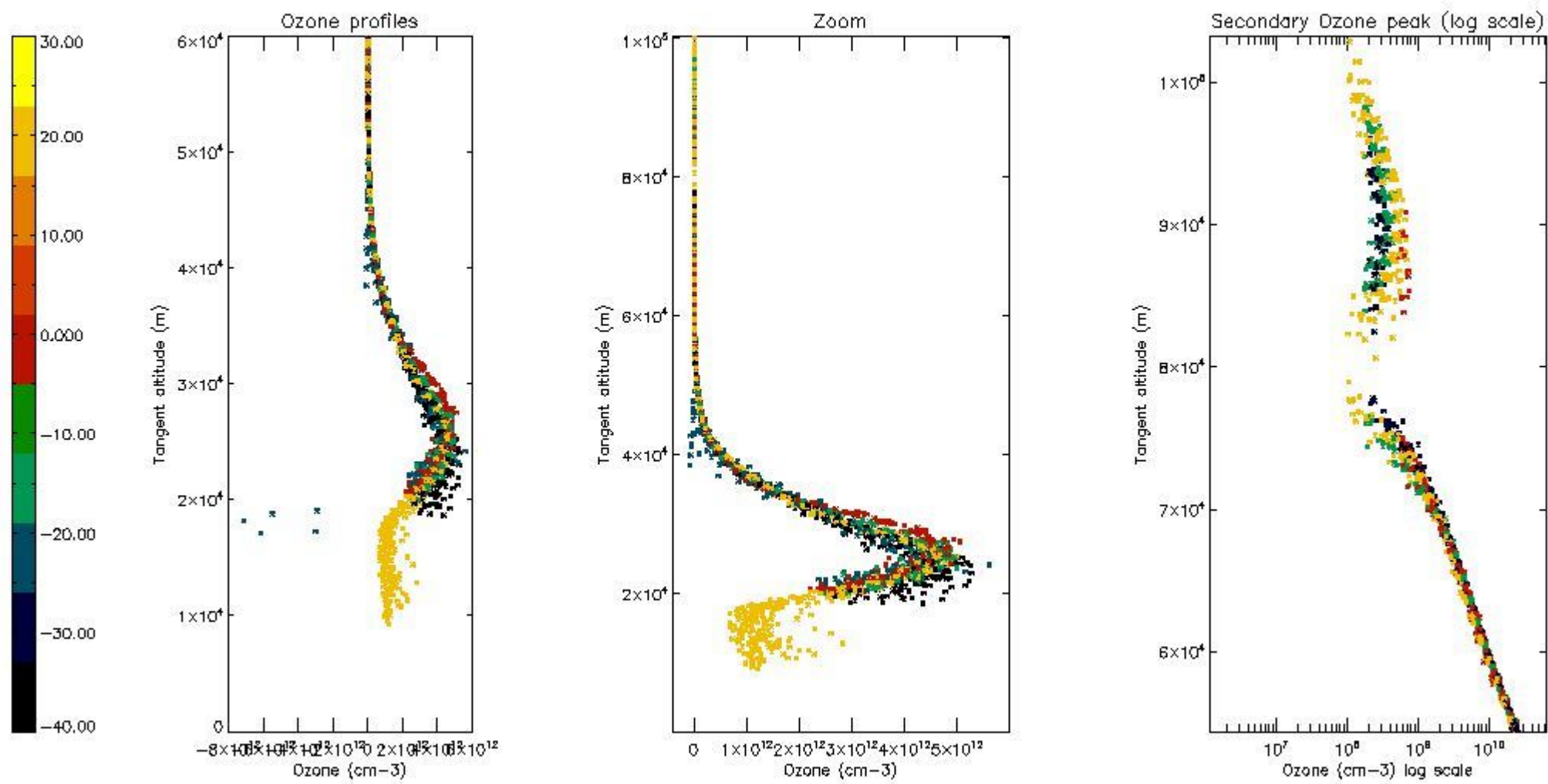
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



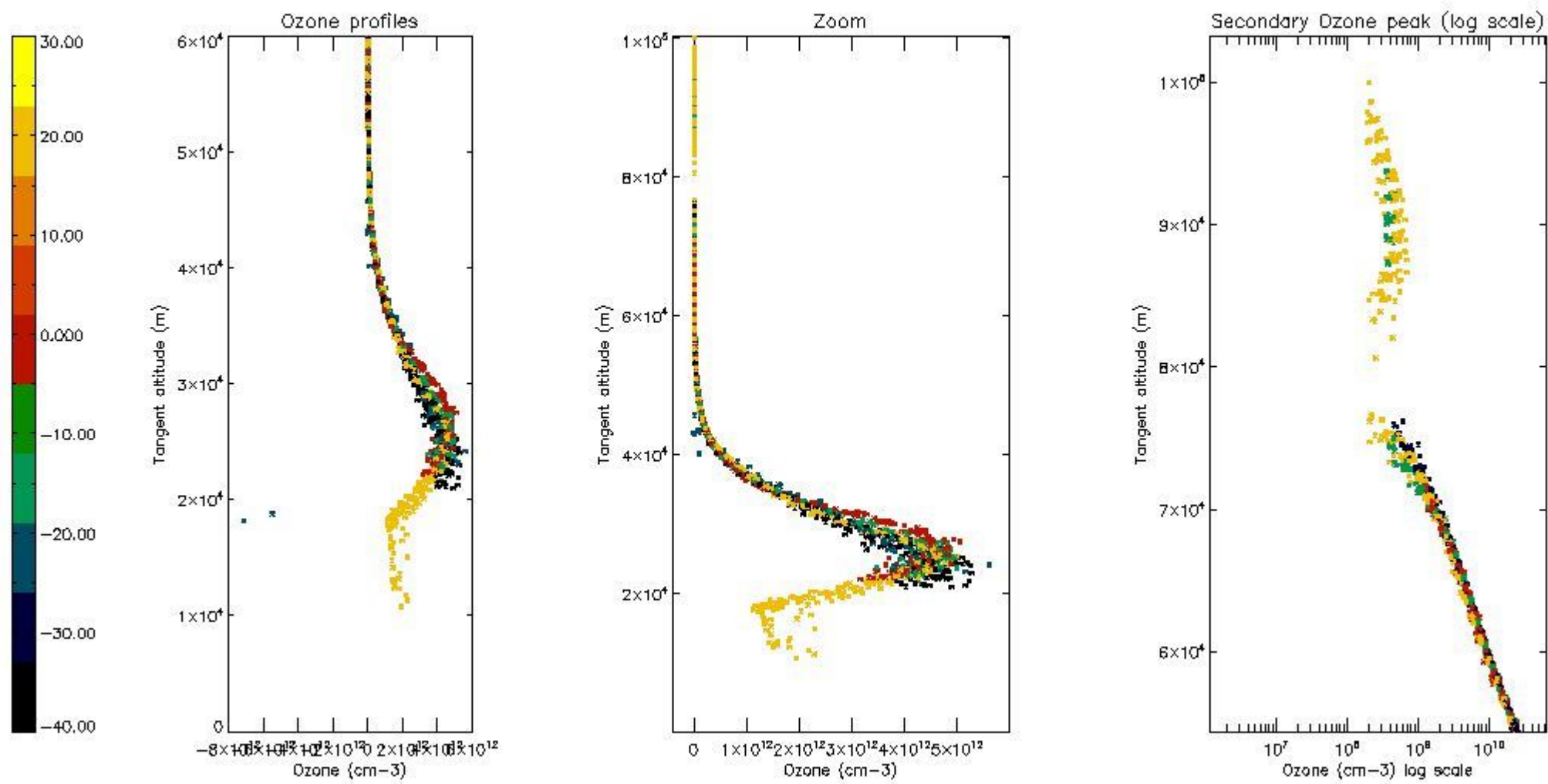
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



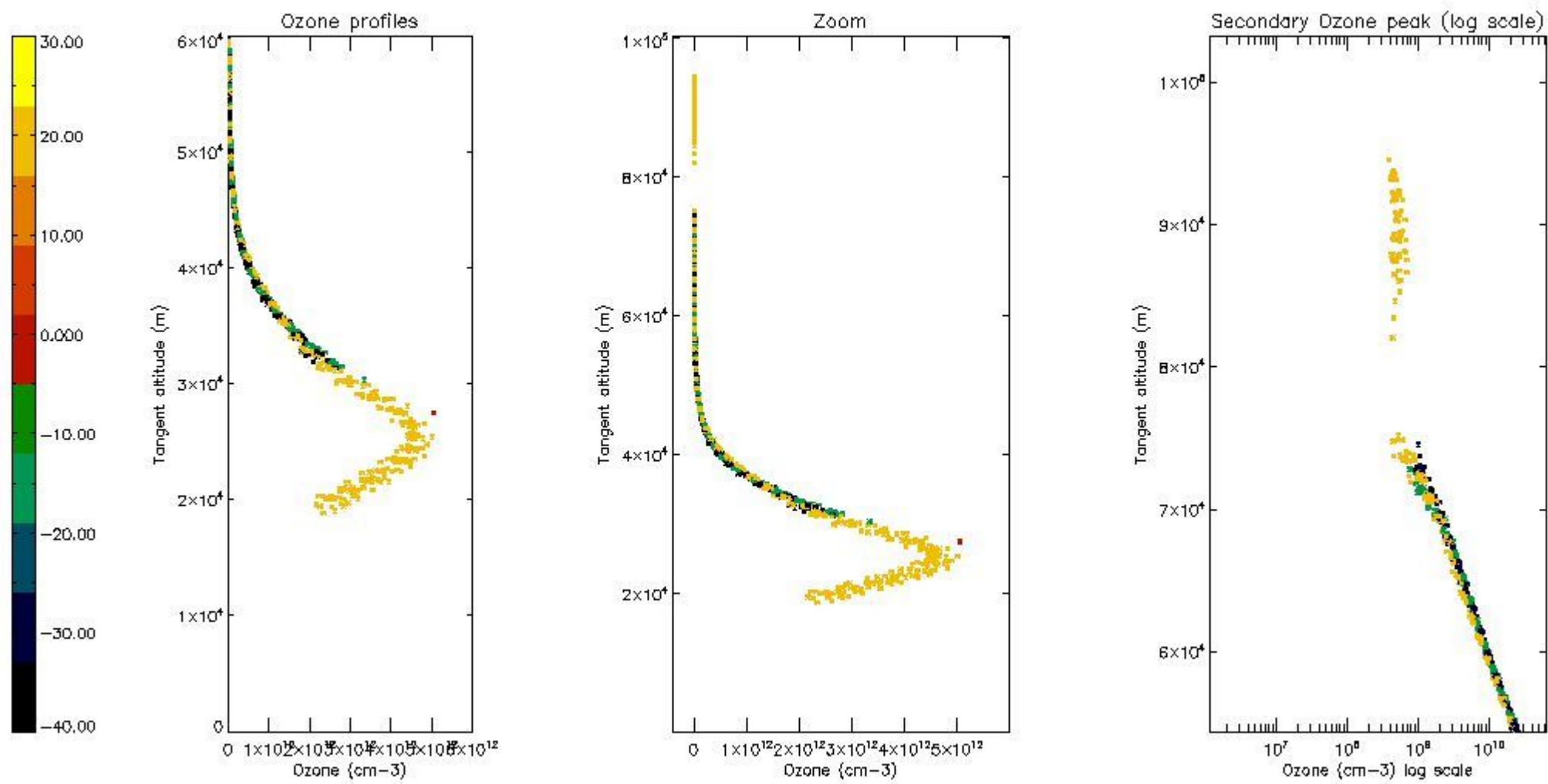
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



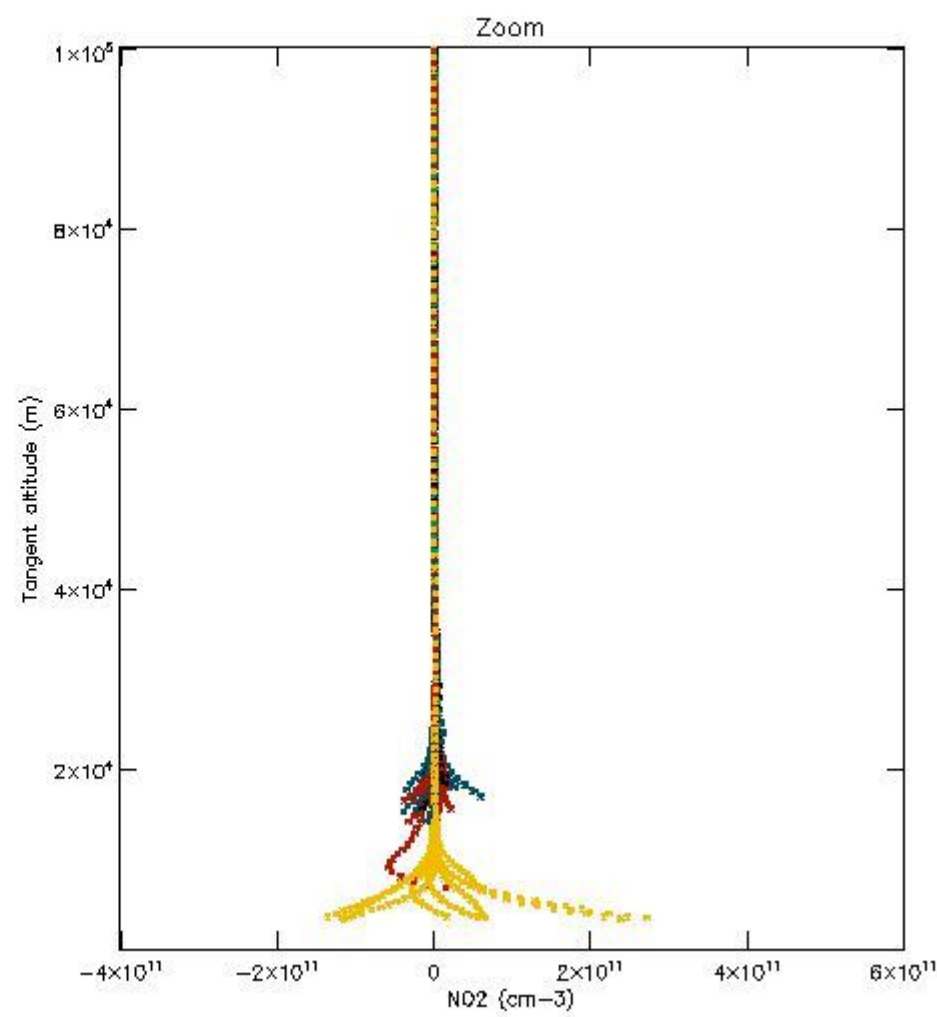
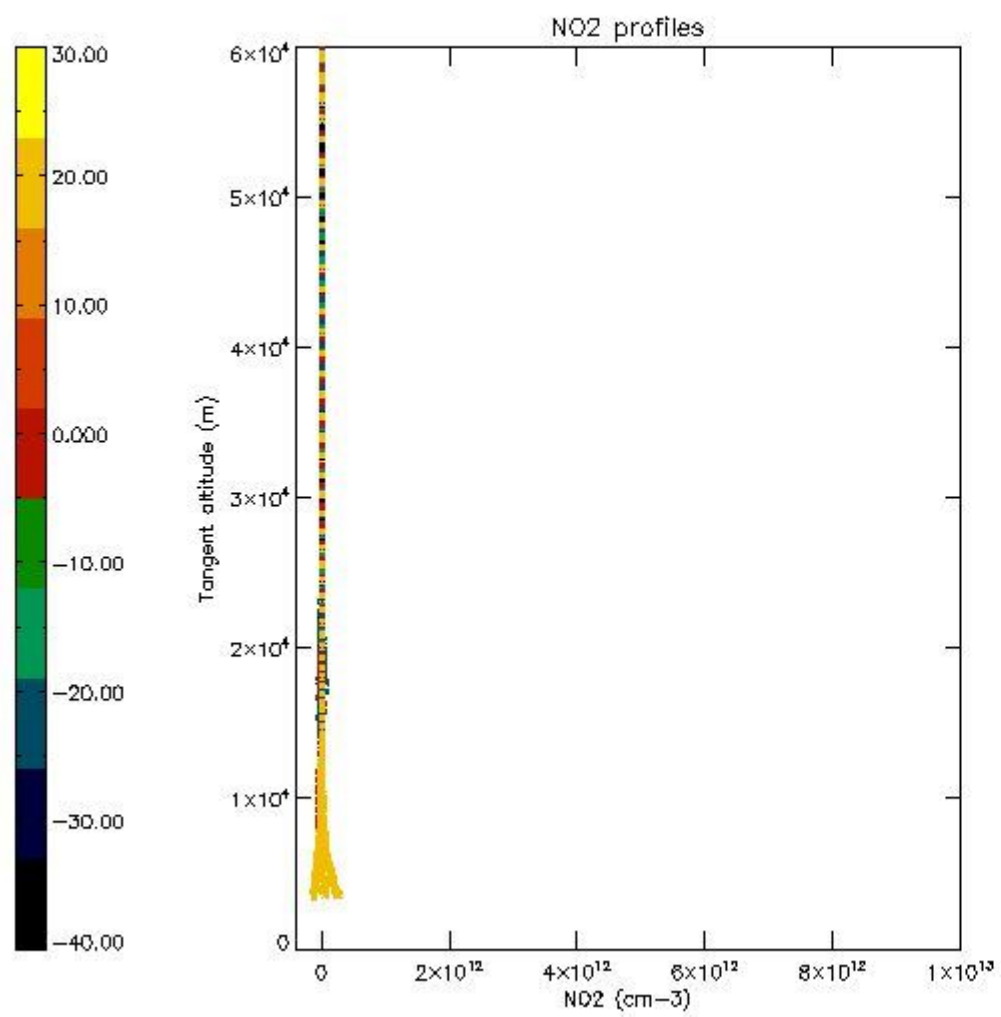
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



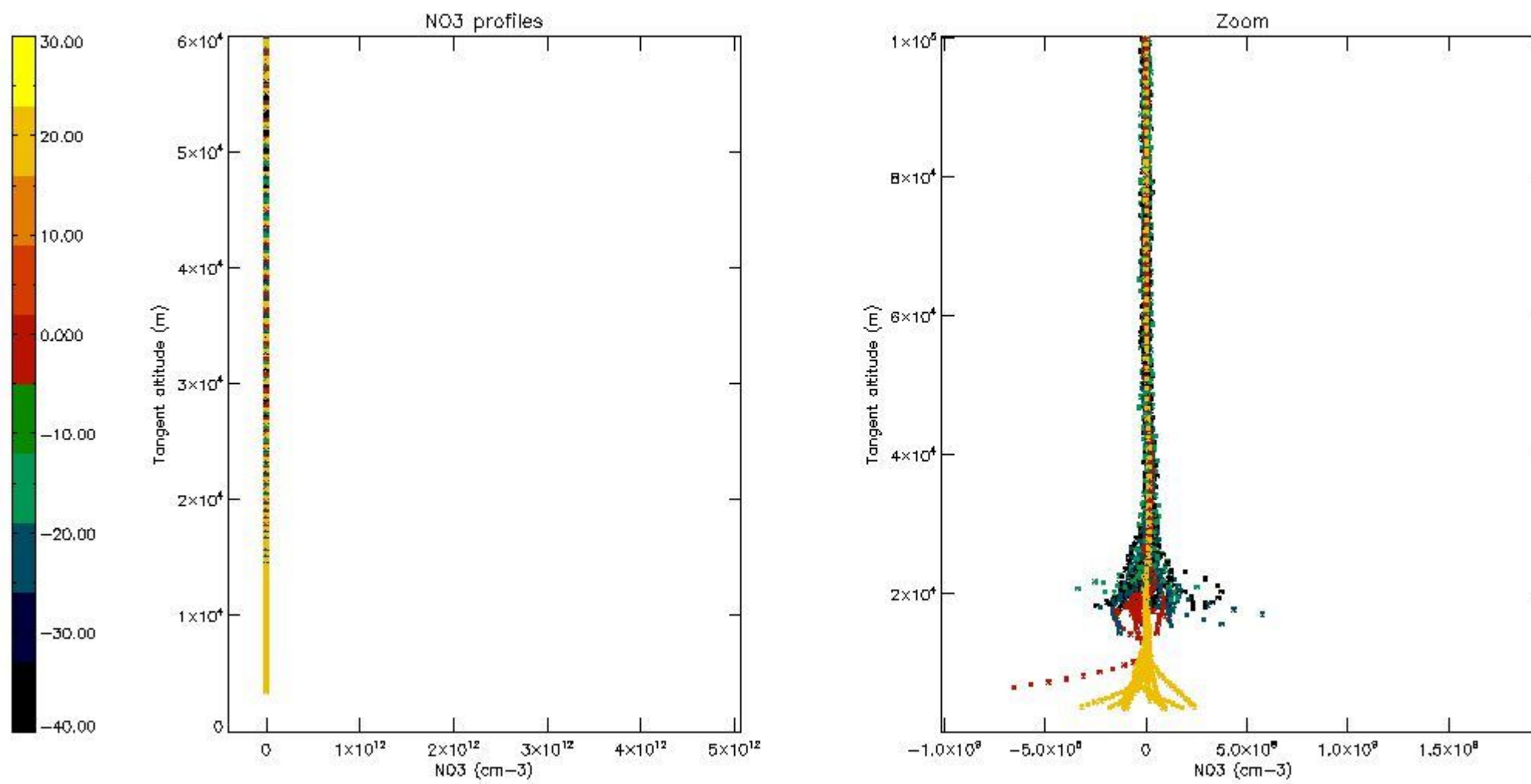
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	18-NOV-2006 00:01:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-NOV-2006 00:01:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-NOV-2006 00:01:14

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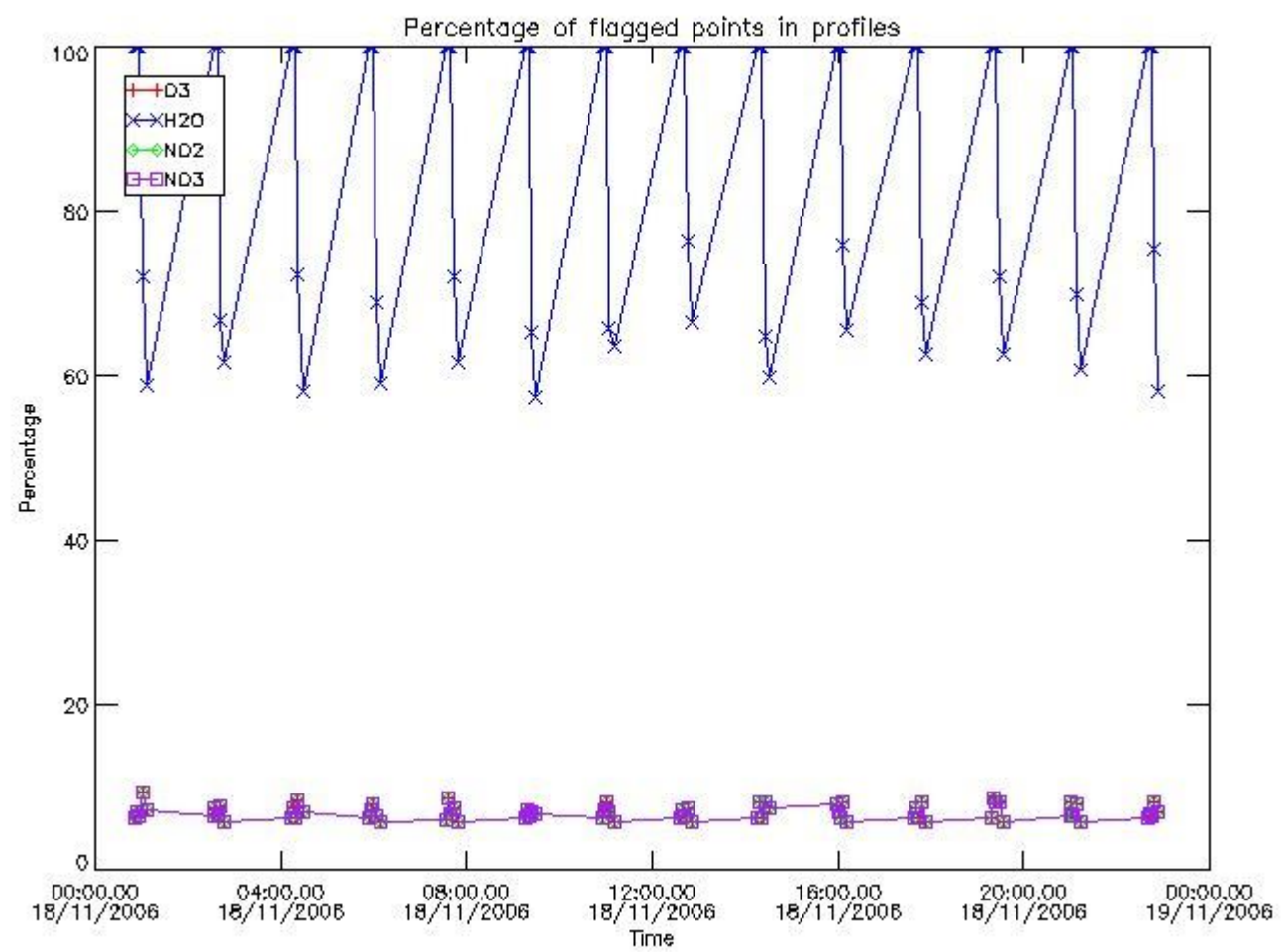
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3. Quality information per product

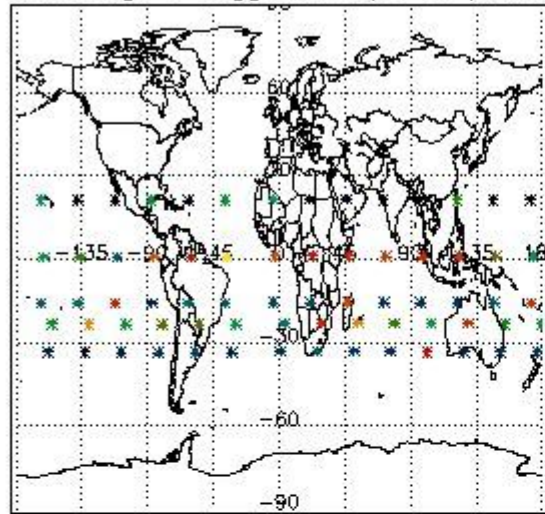
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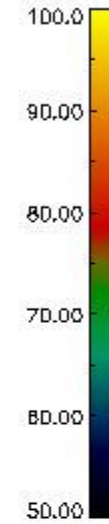
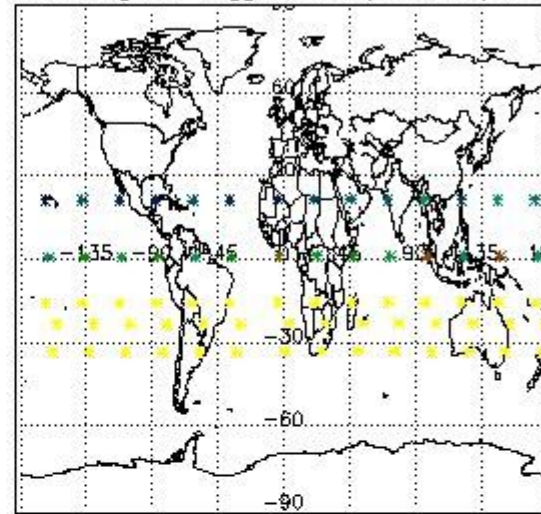


3.2 Plot quality information per product (world map)

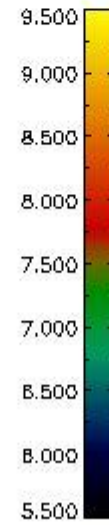
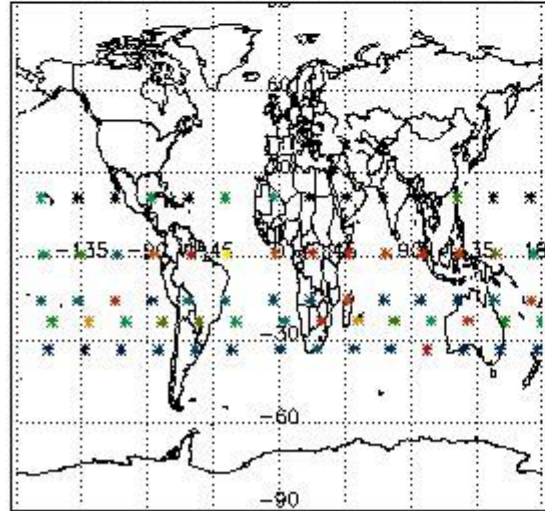
Percentage of flagged data per O3 profile



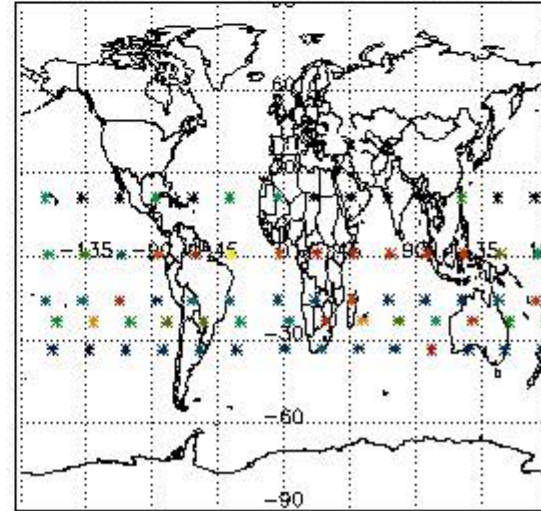
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

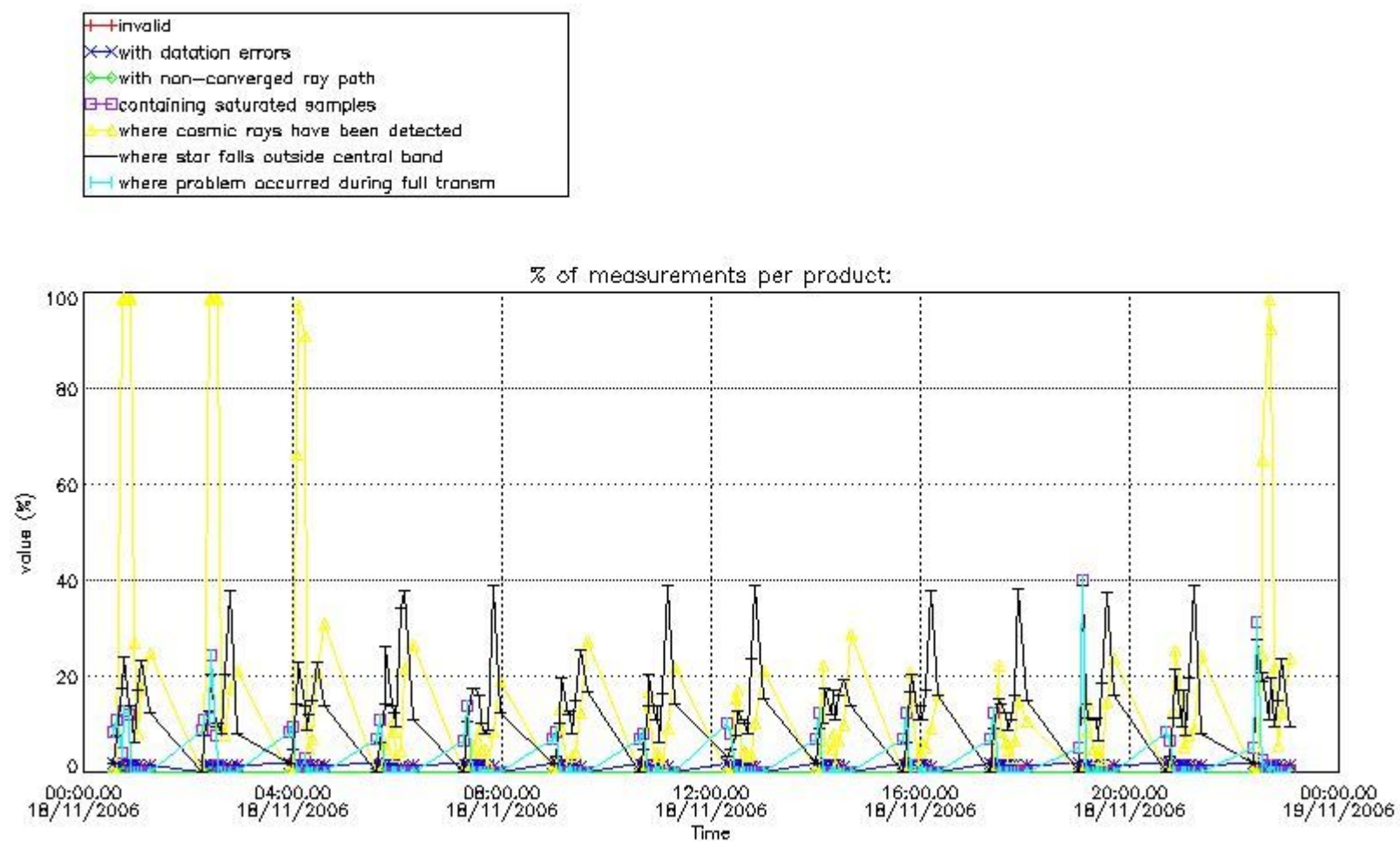


4. Level 1 quality information per product

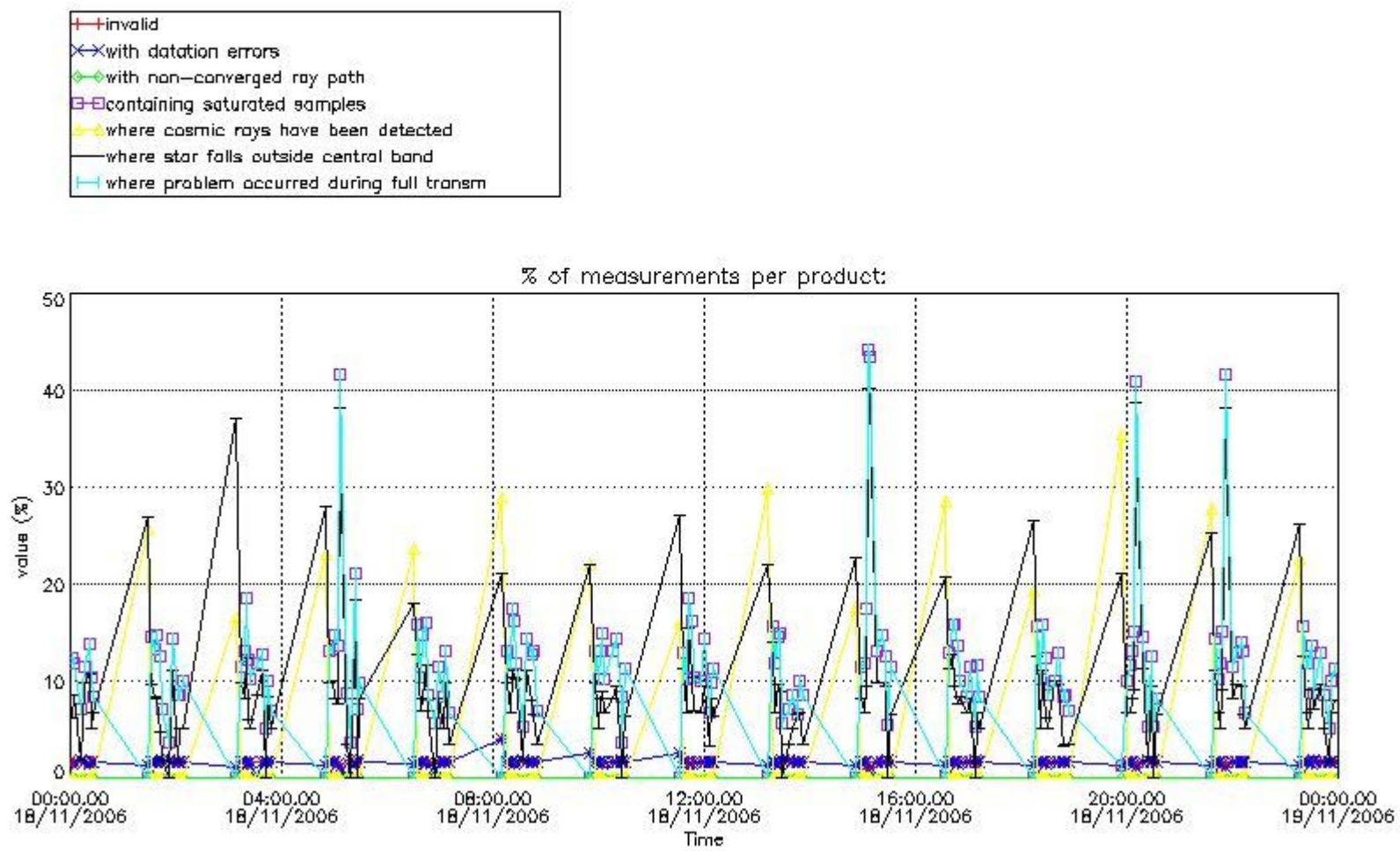
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



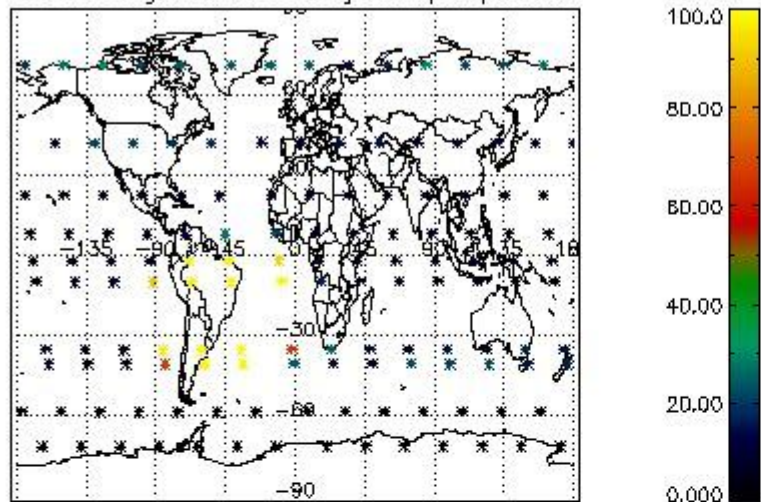
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



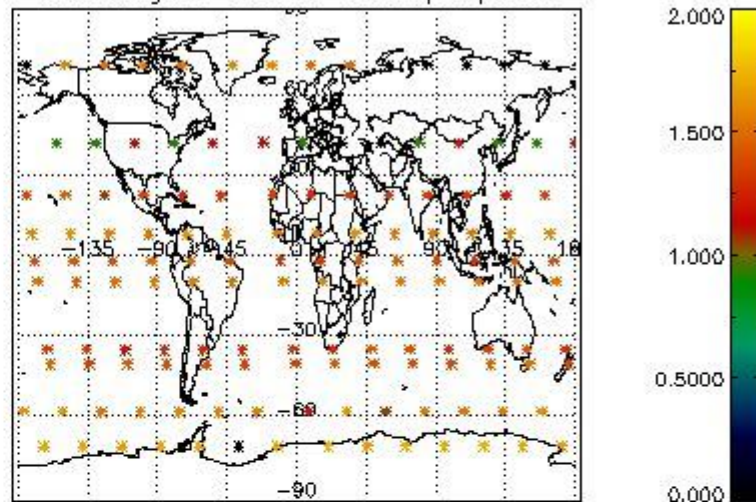
4.2 Plot quality information per product coming from level 1b processing (world map)

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

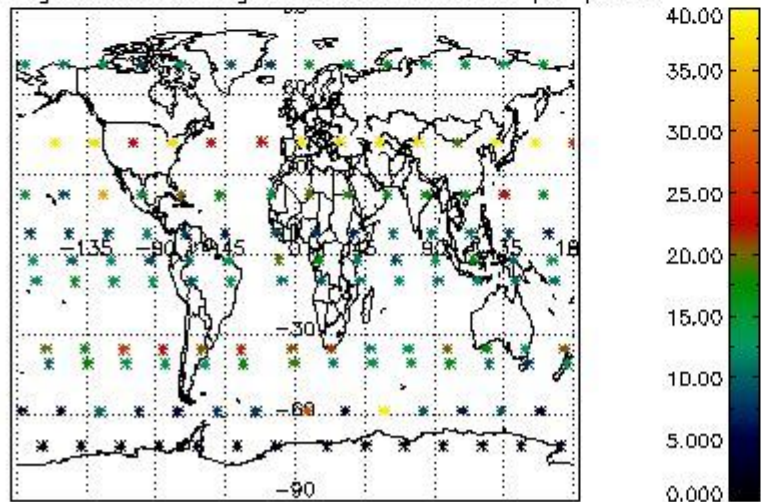
Percentage of cosmic ray hits per profile



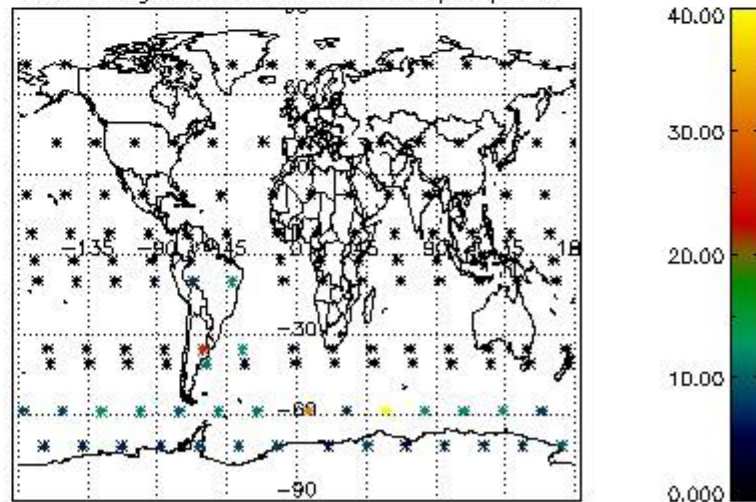
Percentage of datation errors per profile



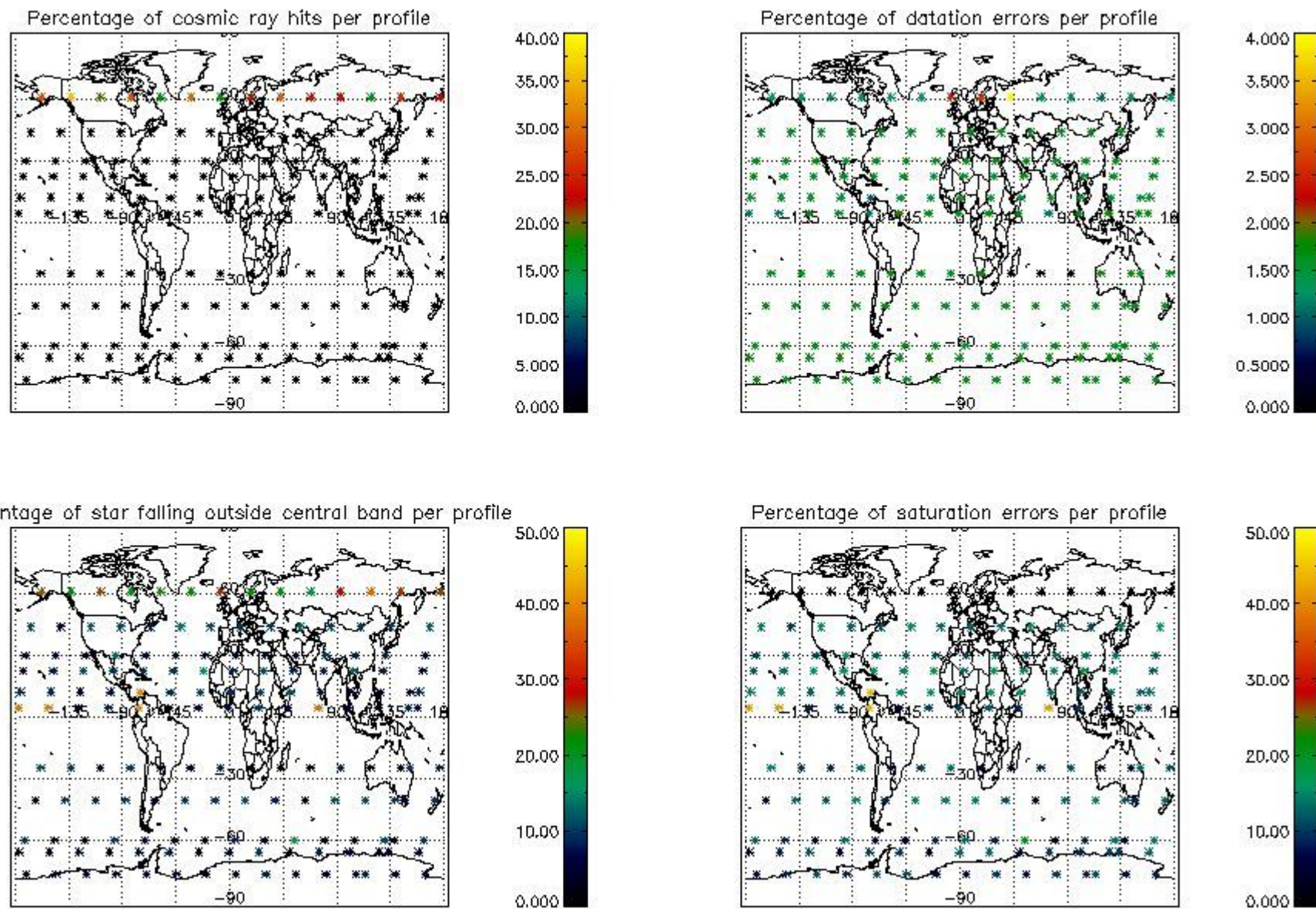
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



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

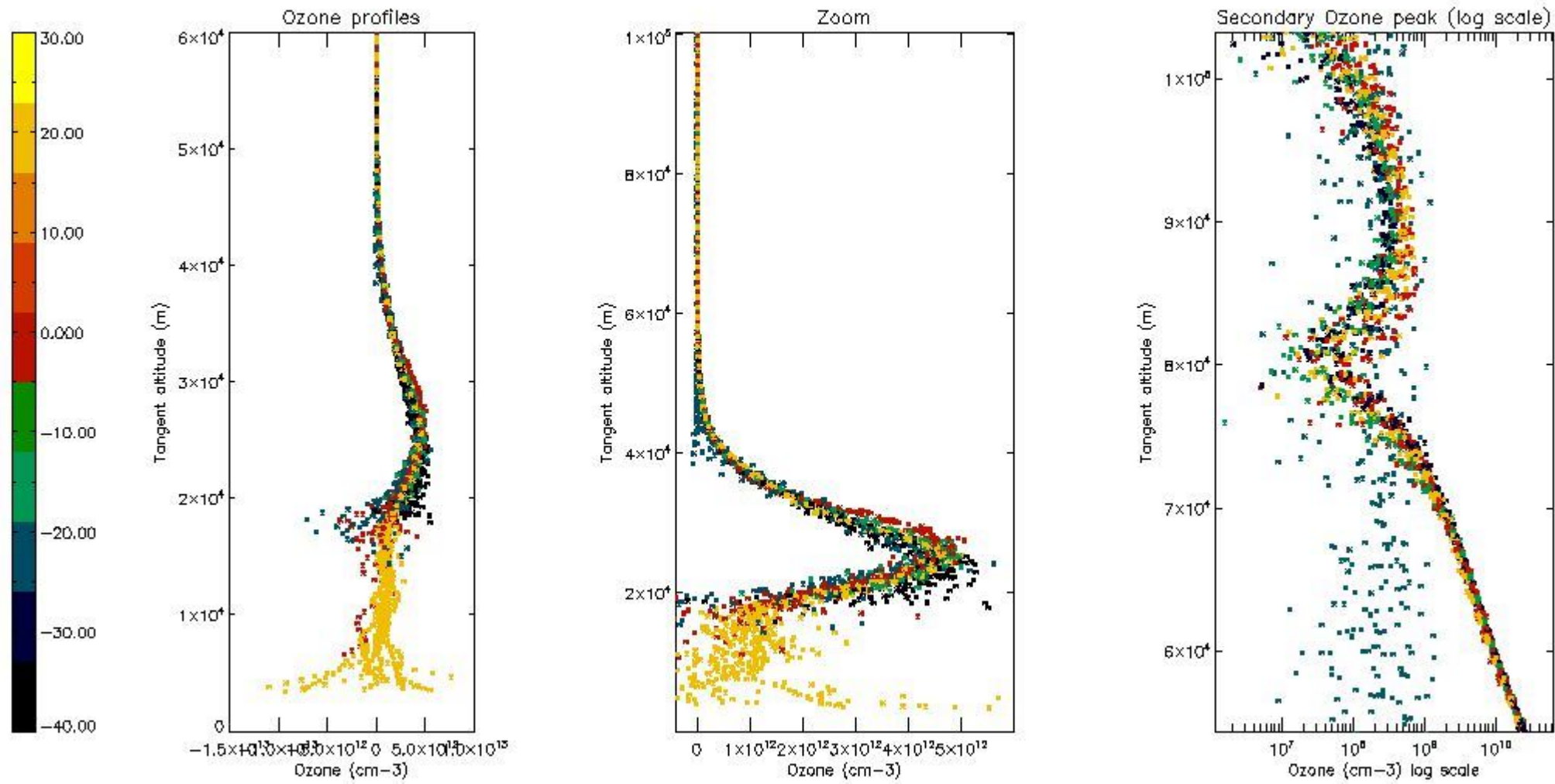
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	17

STD < 10	13
STD < 5	8

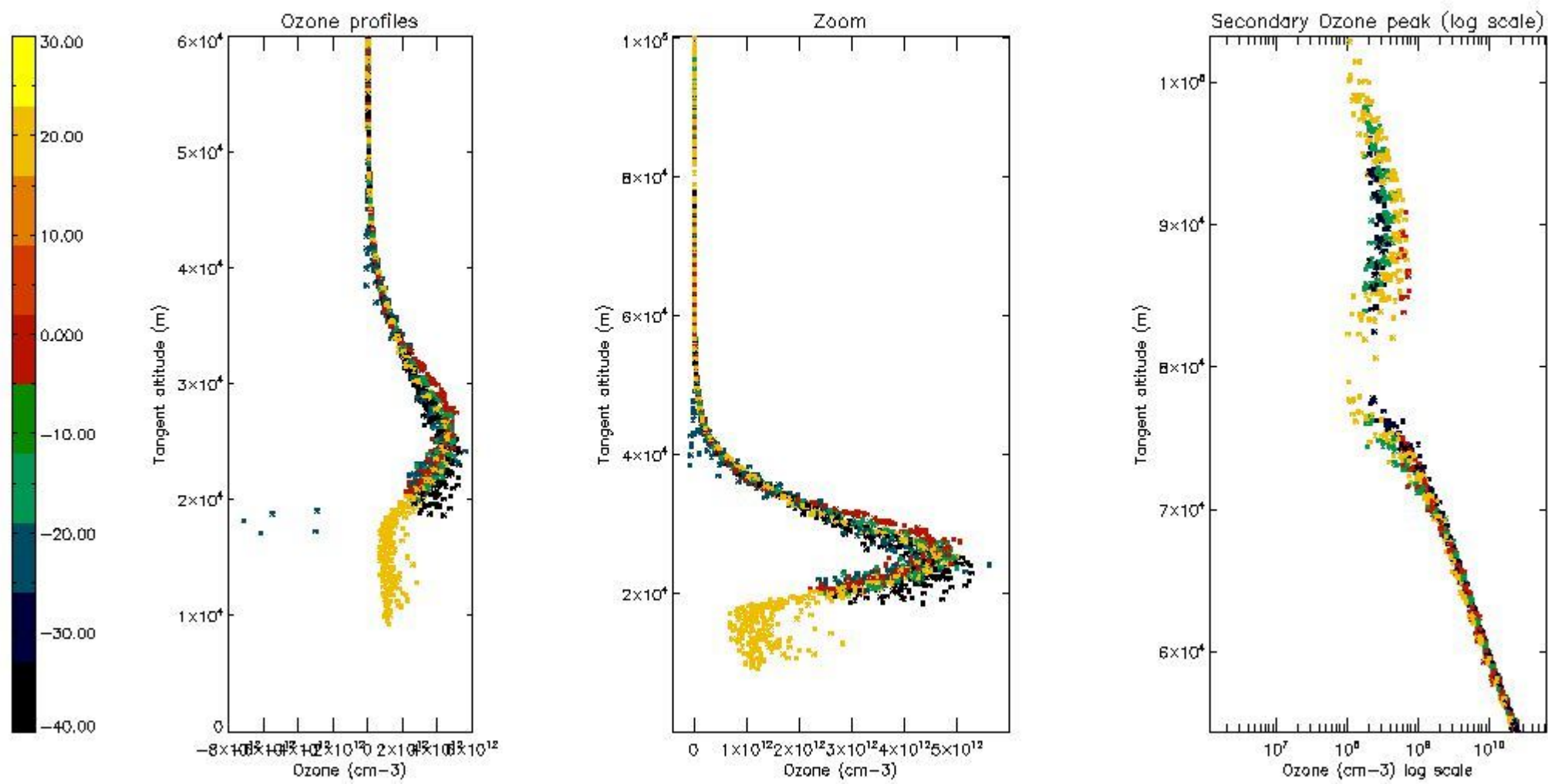
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



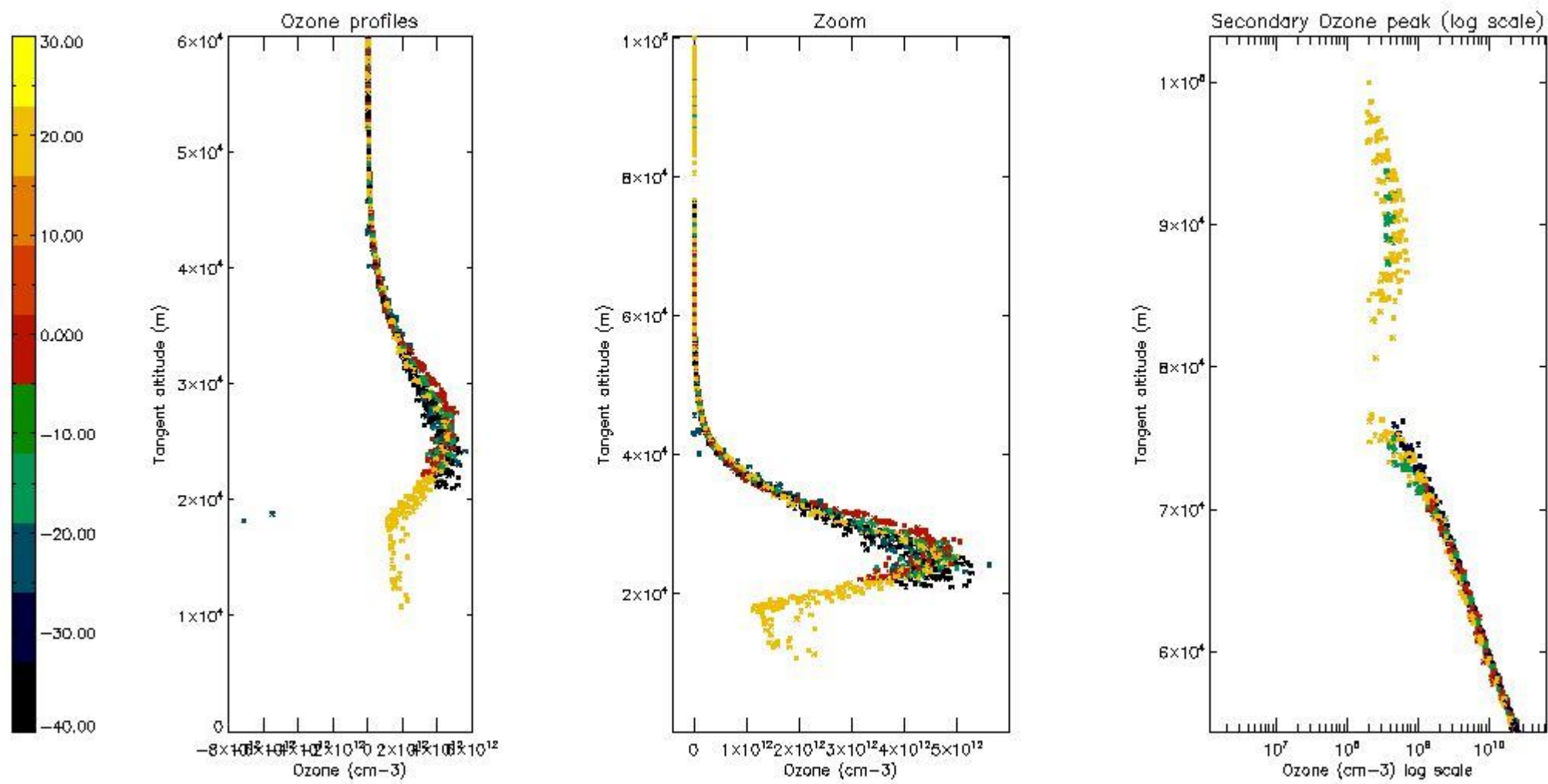
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



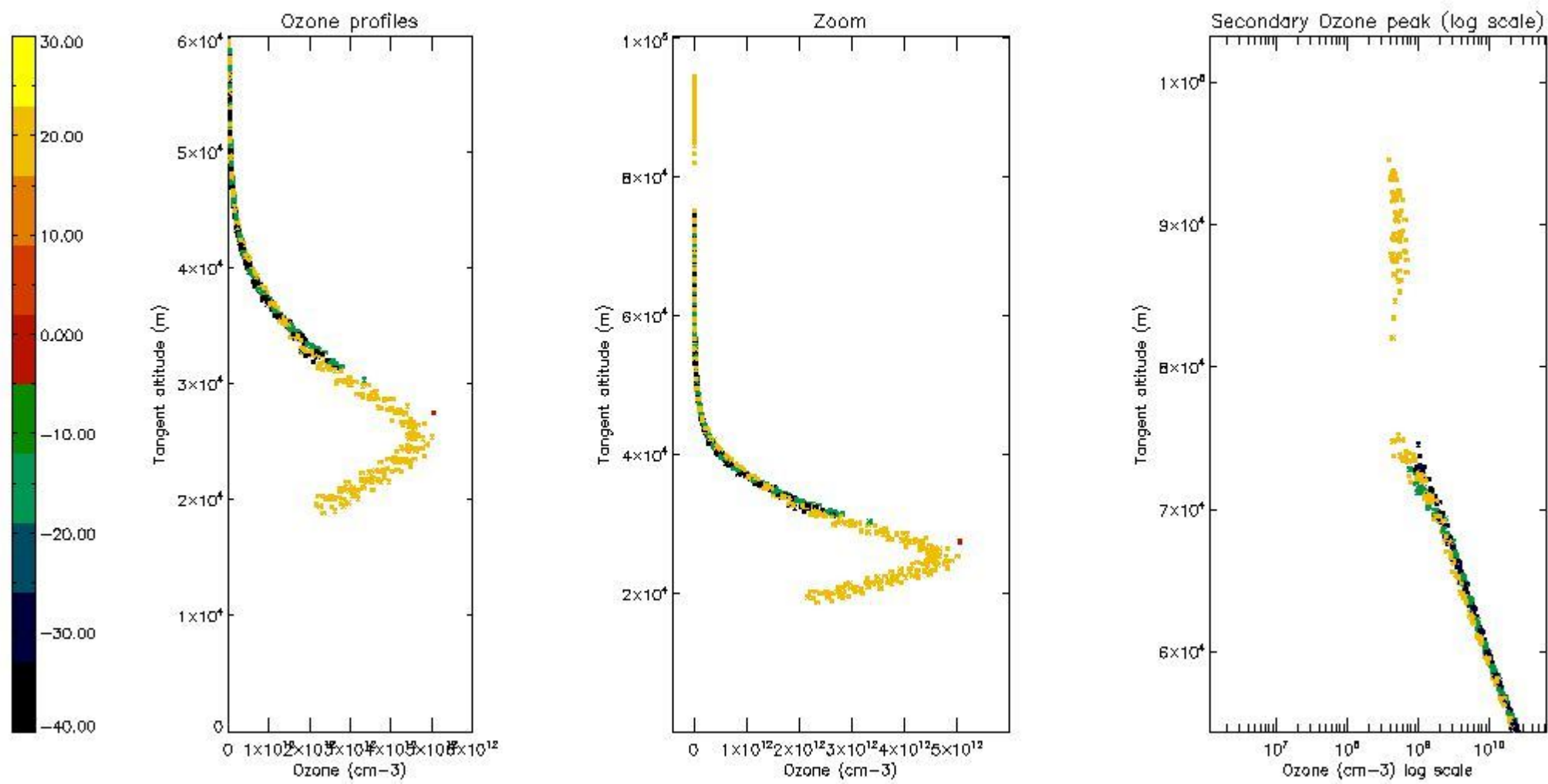
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



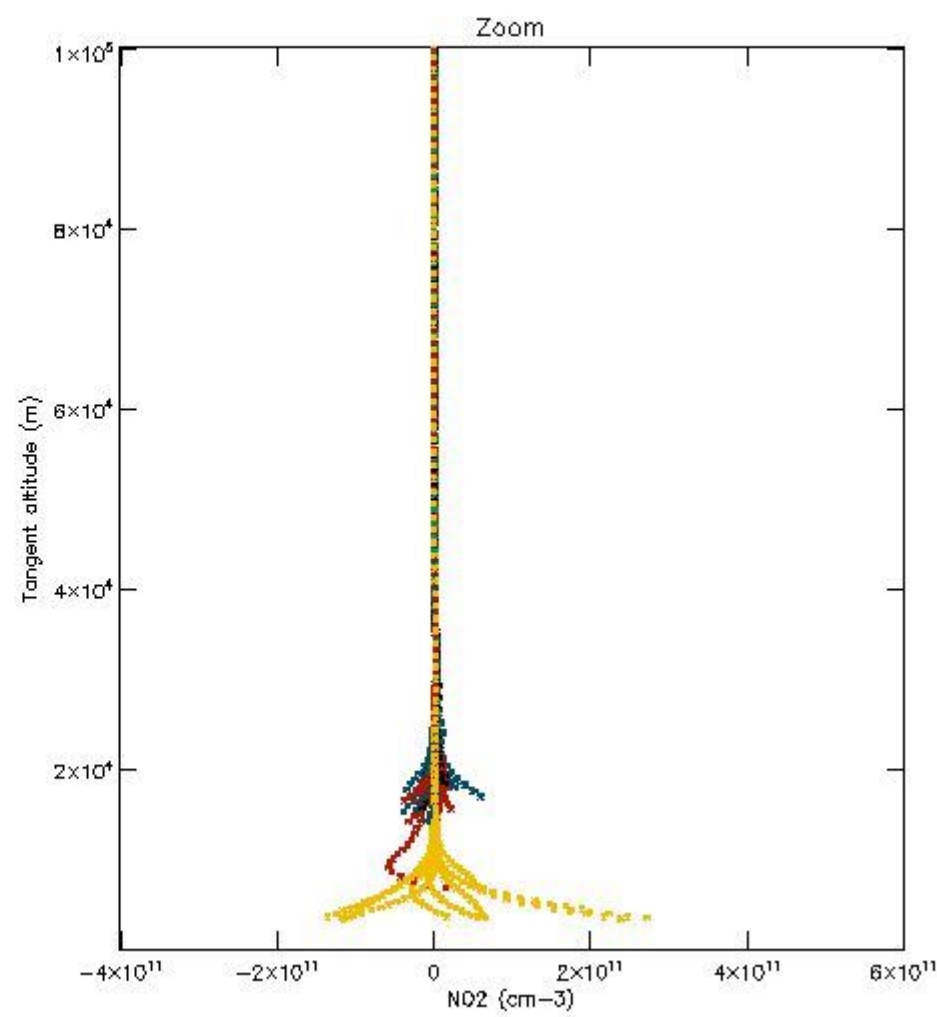
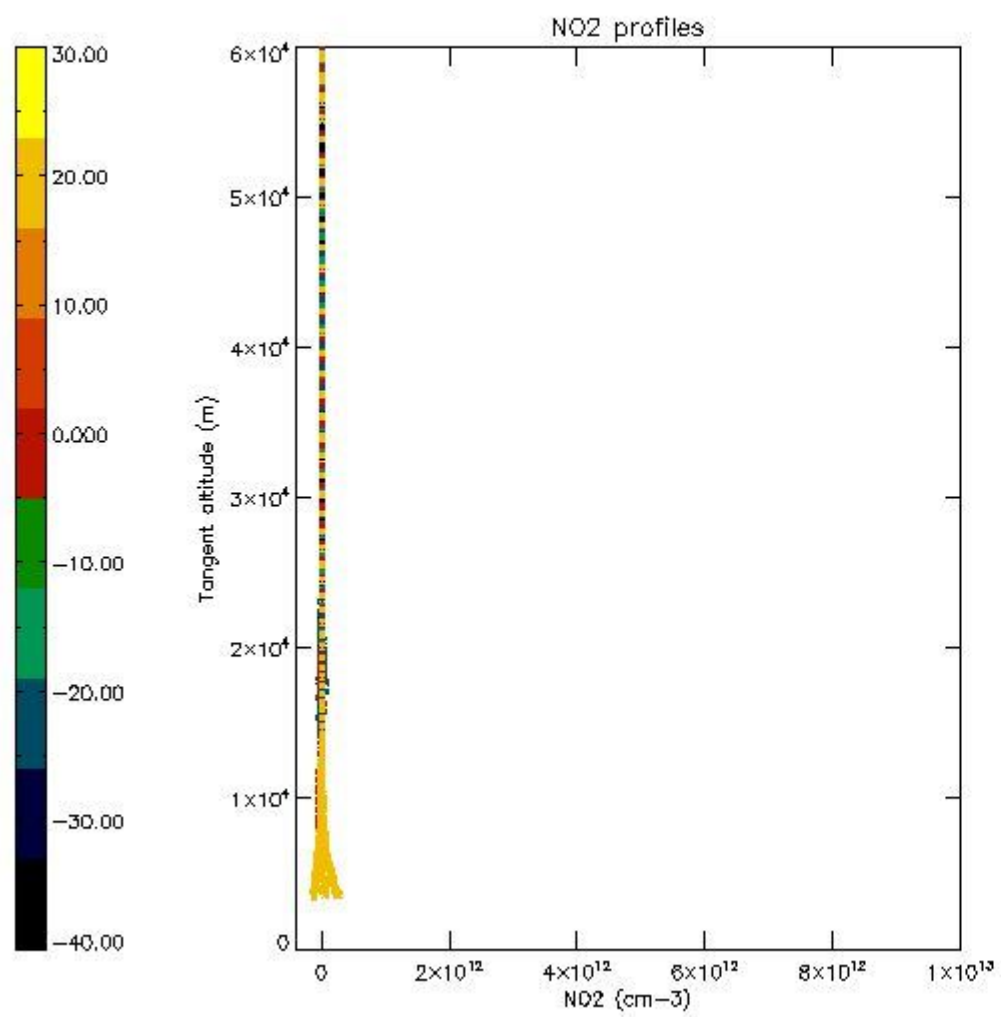
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



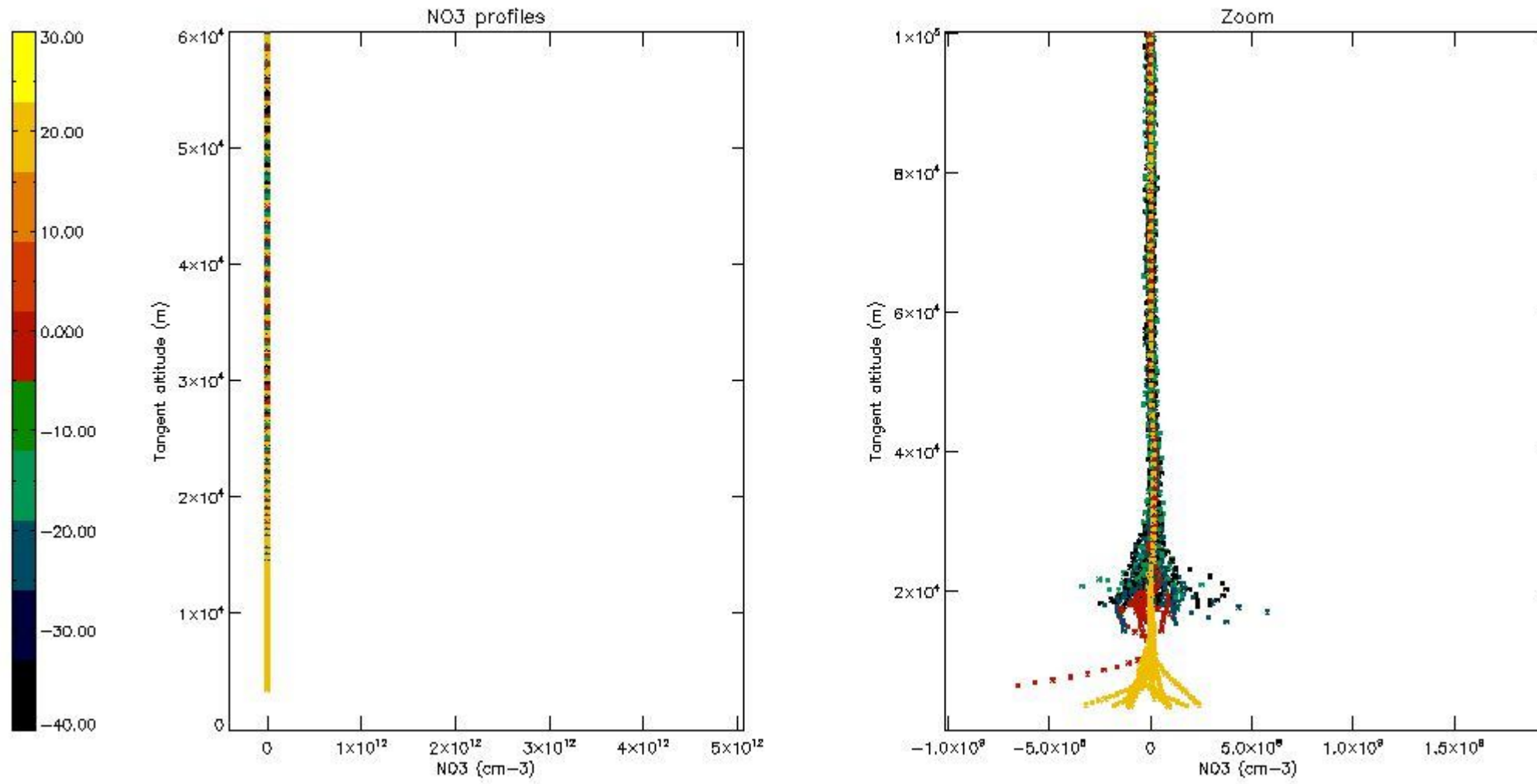
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

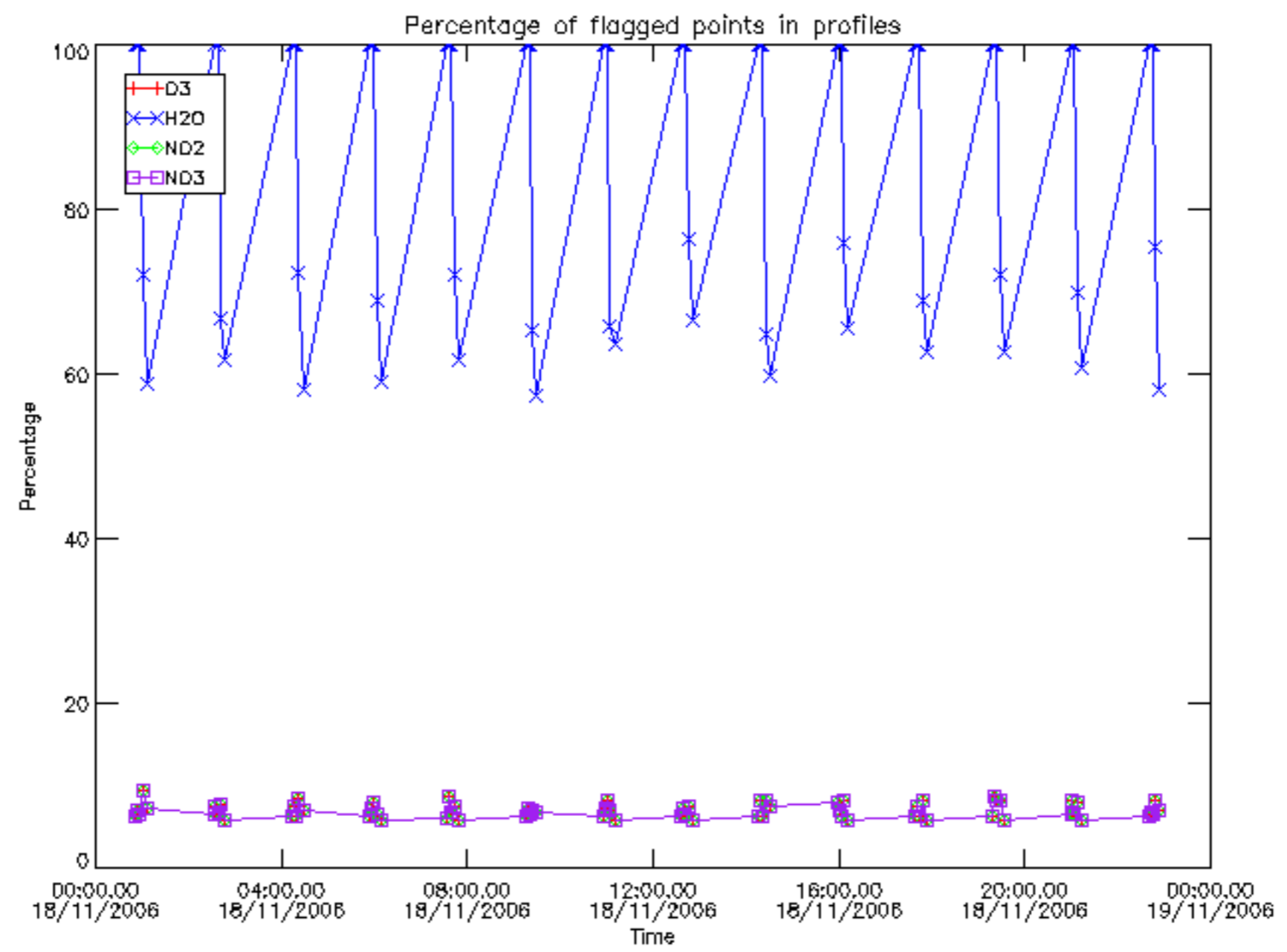
The colorbar represents the latitude.



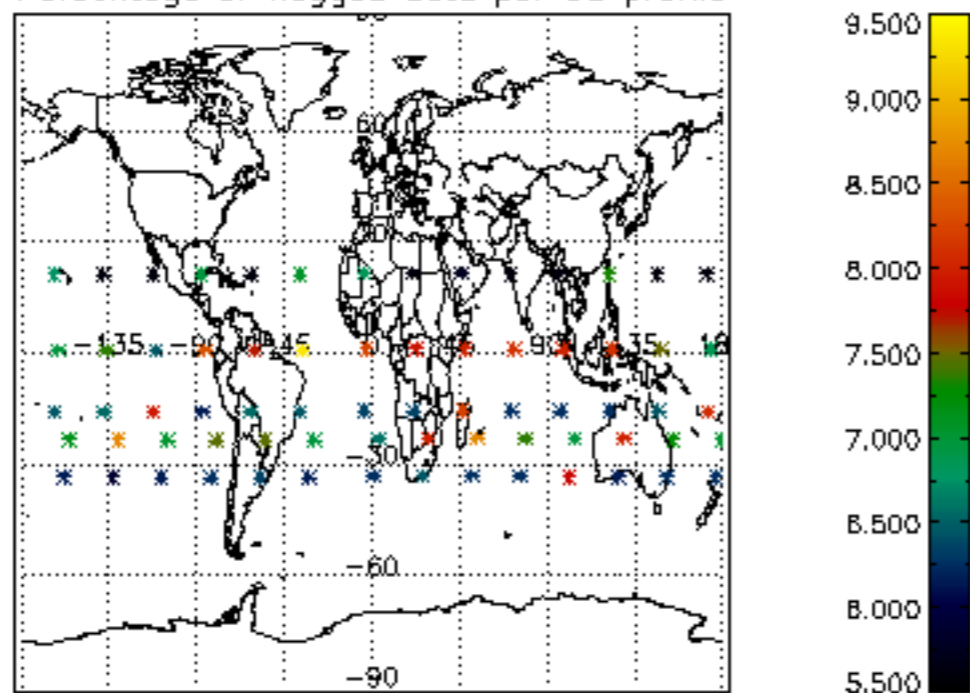
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

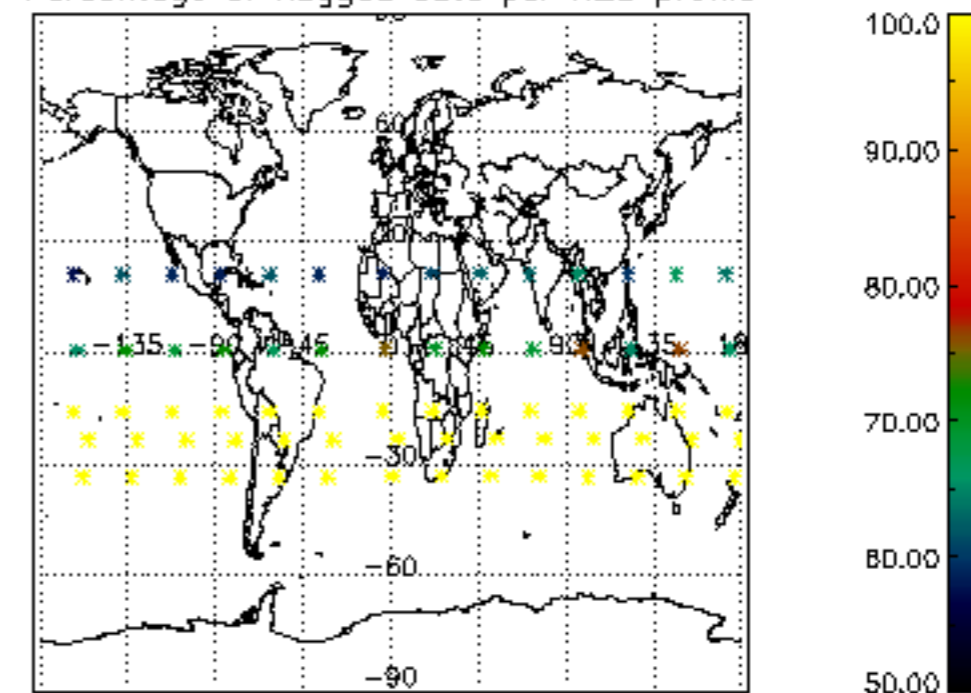
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	18-NOV-2006 00:01:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-NOV-2006 00:01:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-NOV-2006 00:01:14



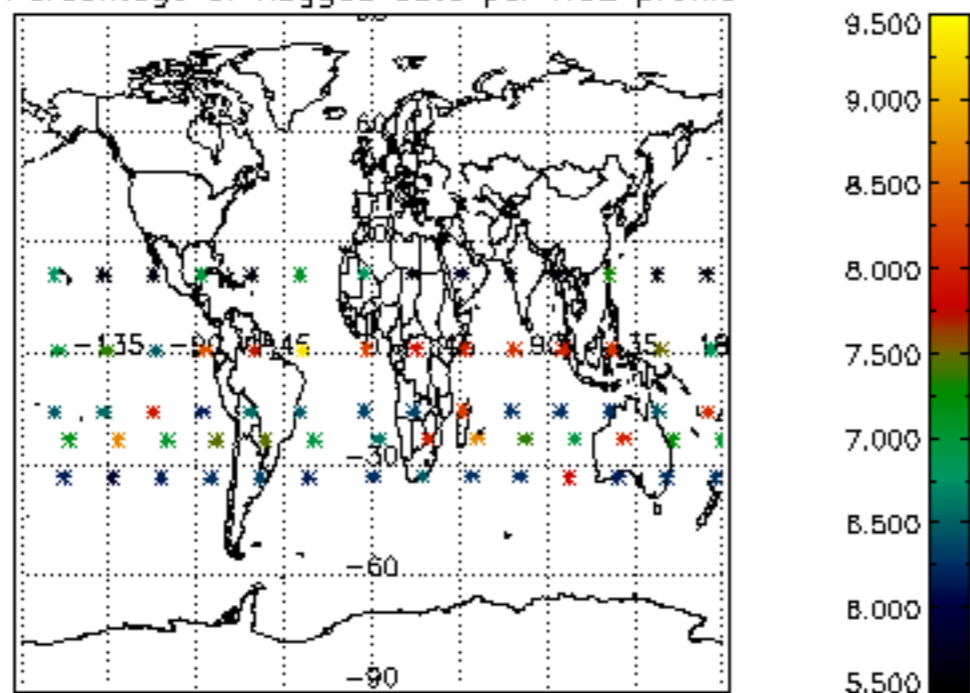
Percentage of flagged data per D3 profile



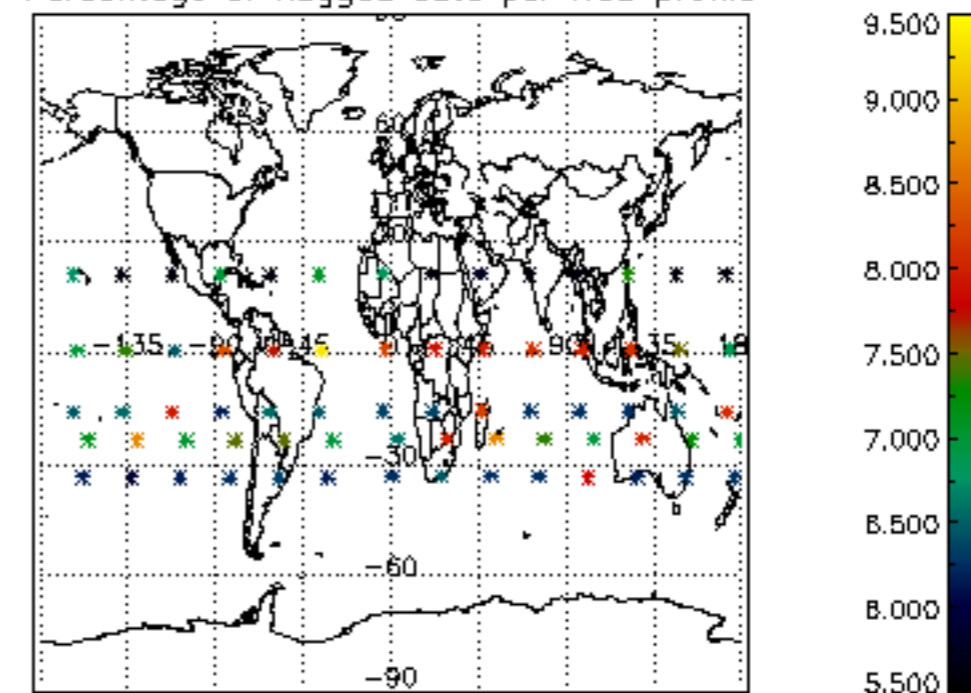
Percentage of flagged data per H2O profile

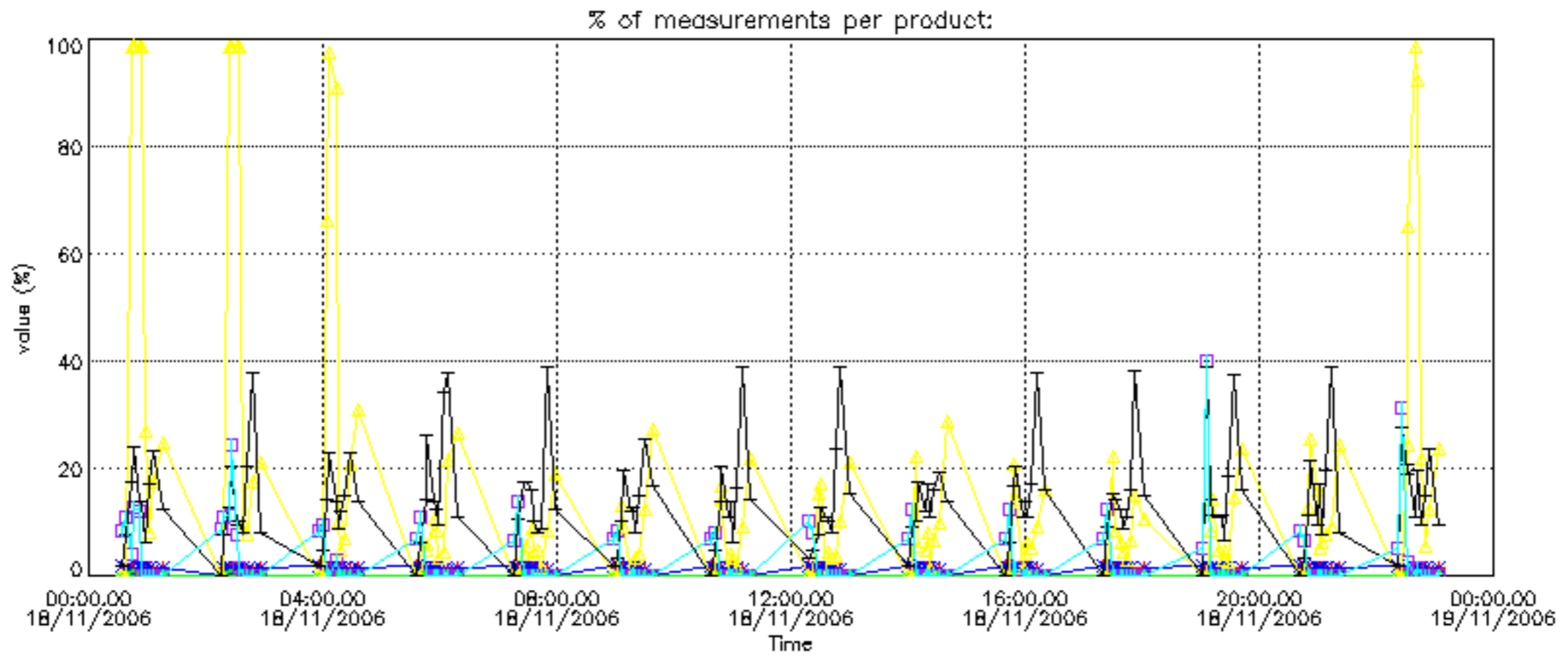


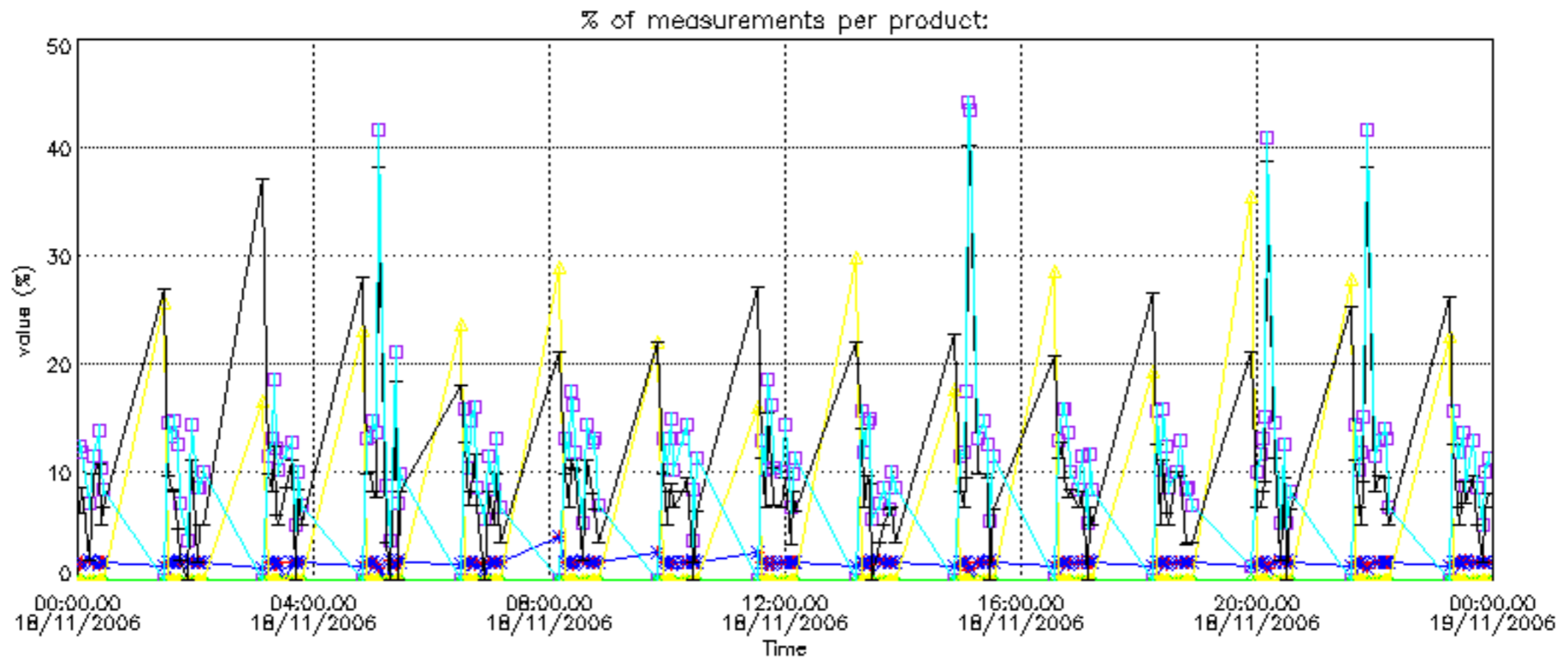
Percentage of flagged data per NO2 profile



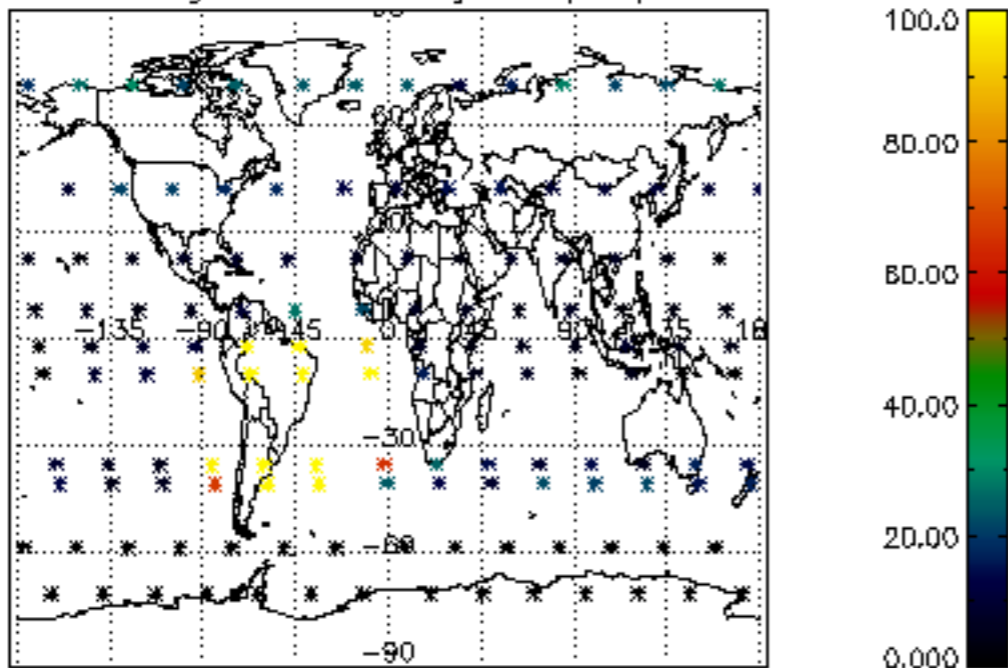
Percentage of flagged data per NO3 profile



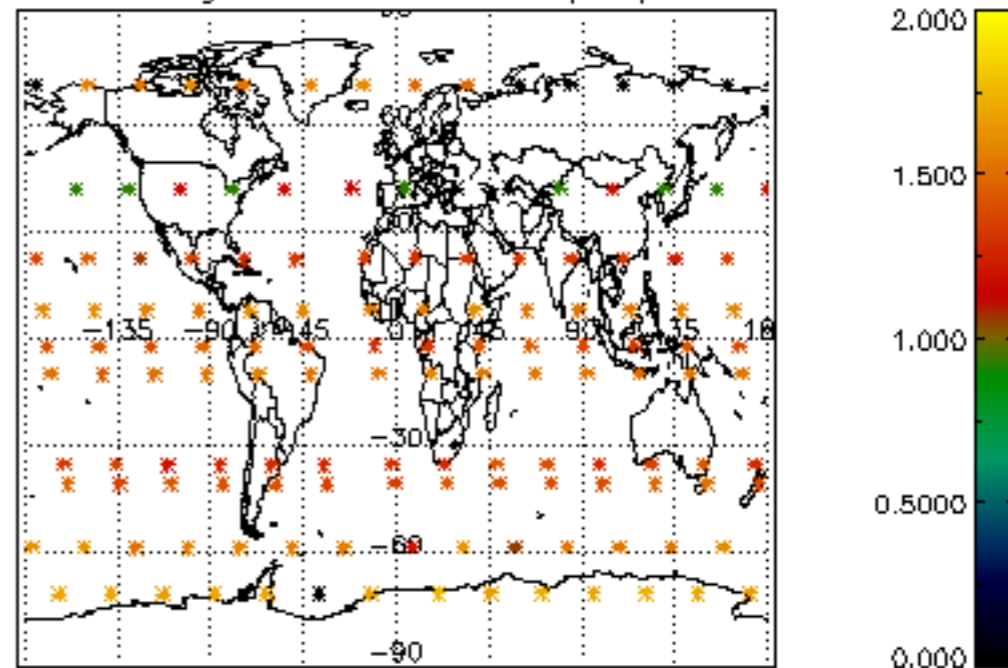




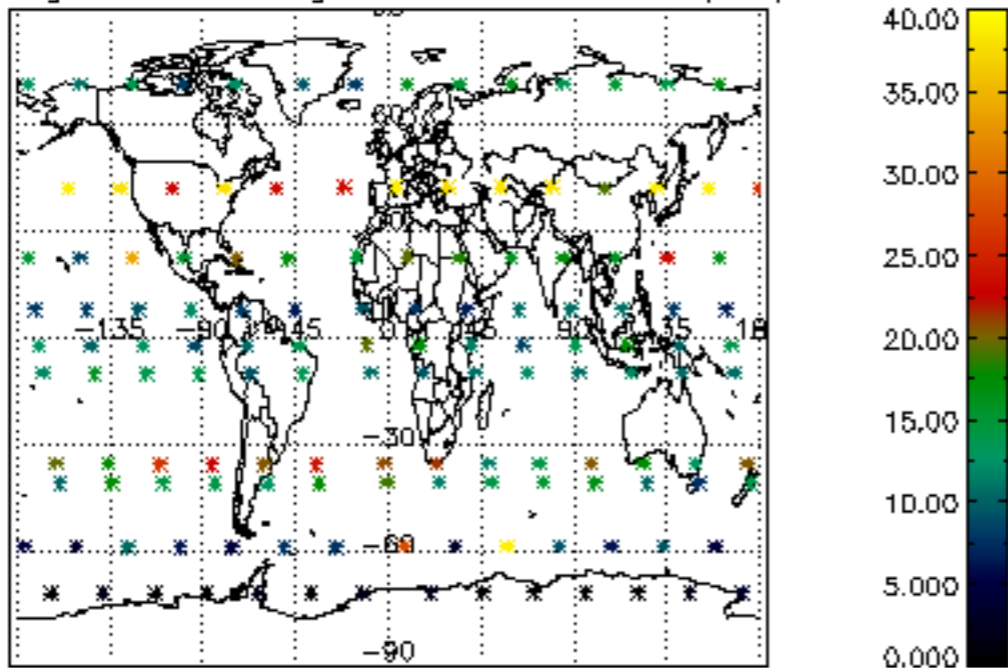
Percentage of cosmic ray hits per profile



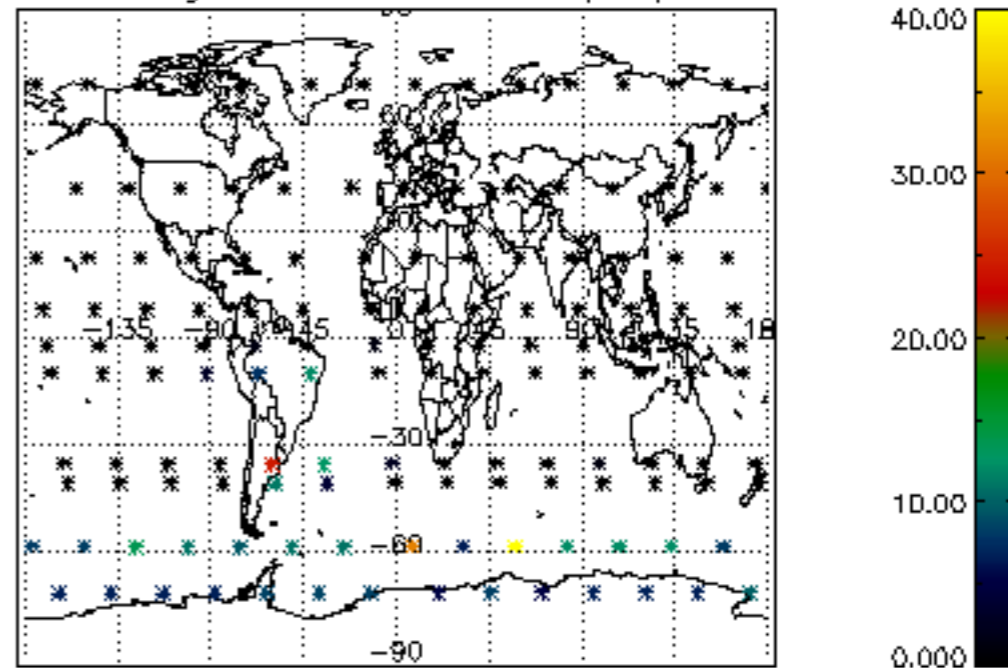
Percentage of datation errors per profile



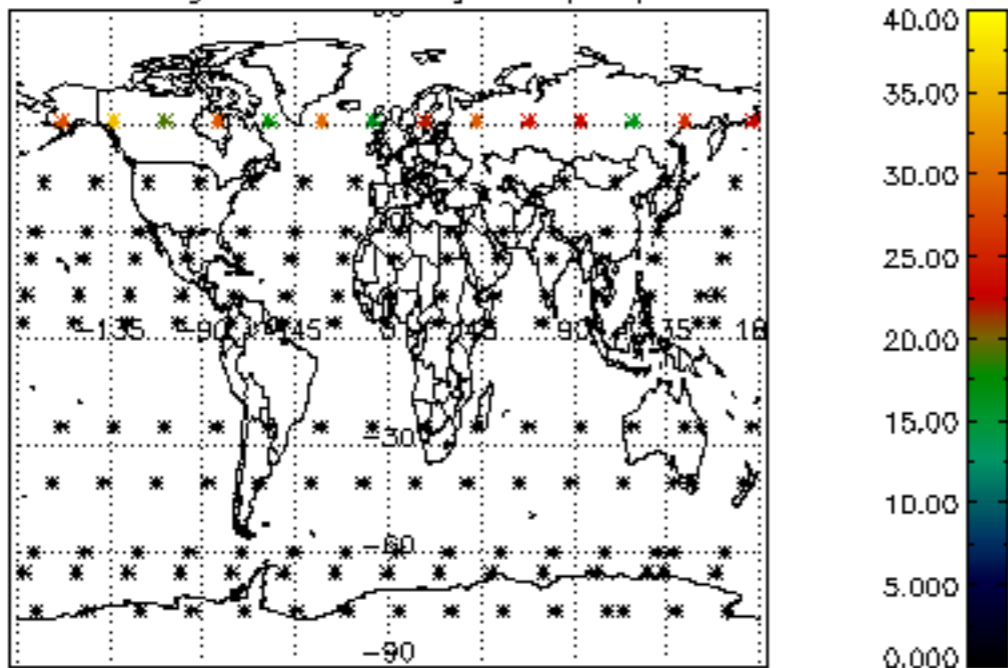
Percentage of star falling outside central band per profile



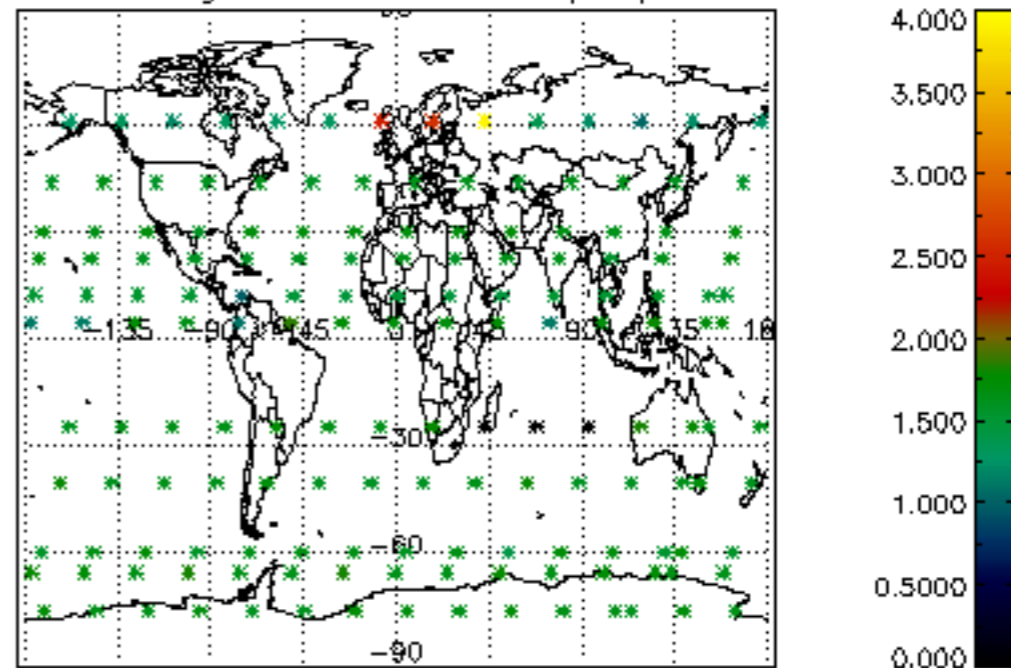
Percentage of saturation errors per profile



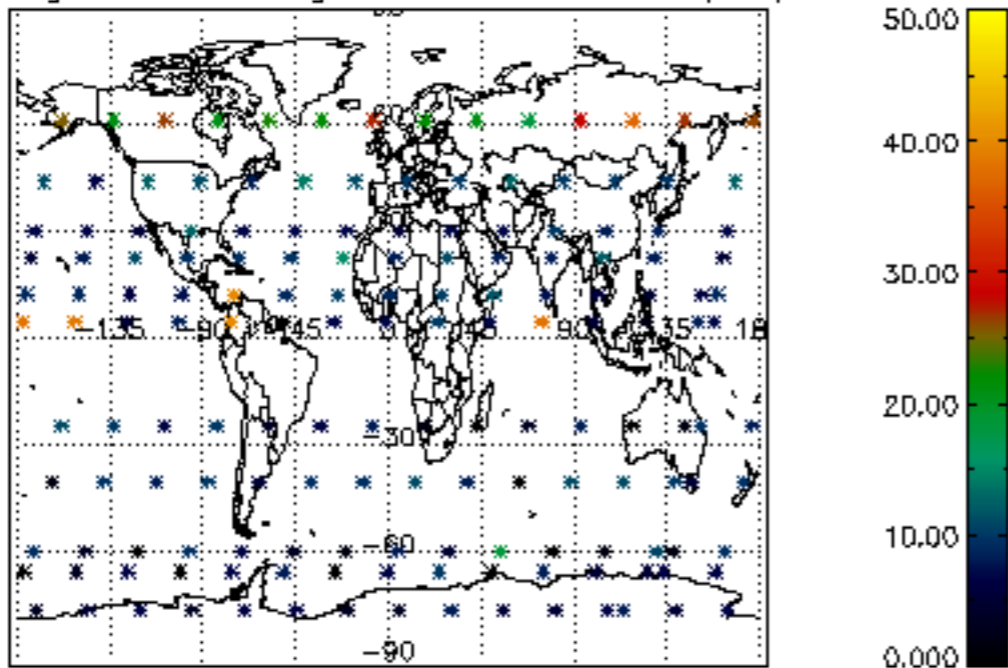
Percentage of cosmic ray hits per profile



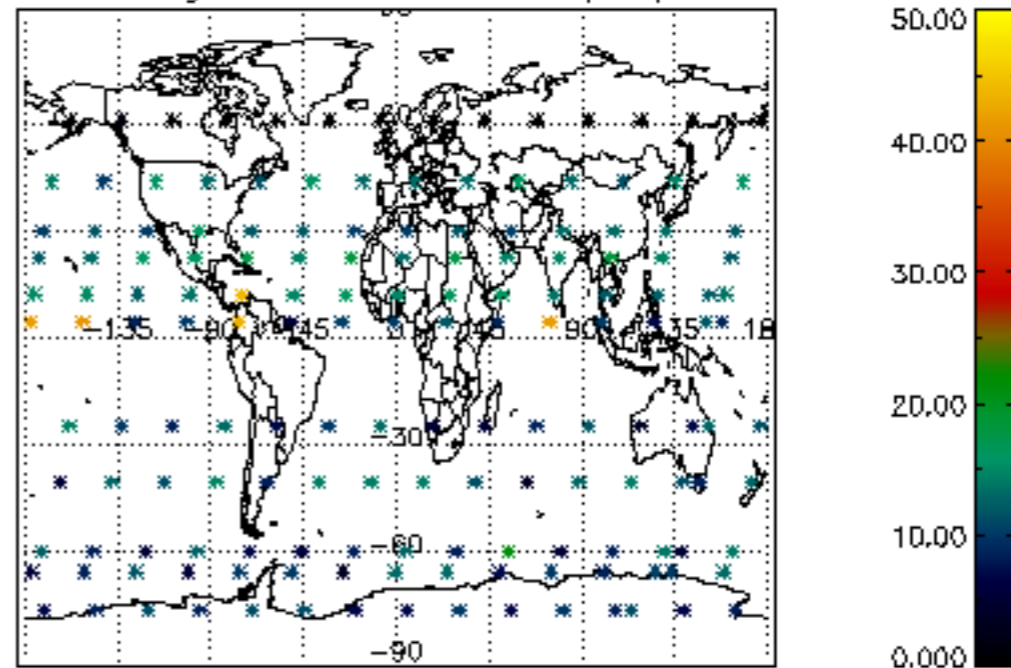
Percentage of datation errors per profile

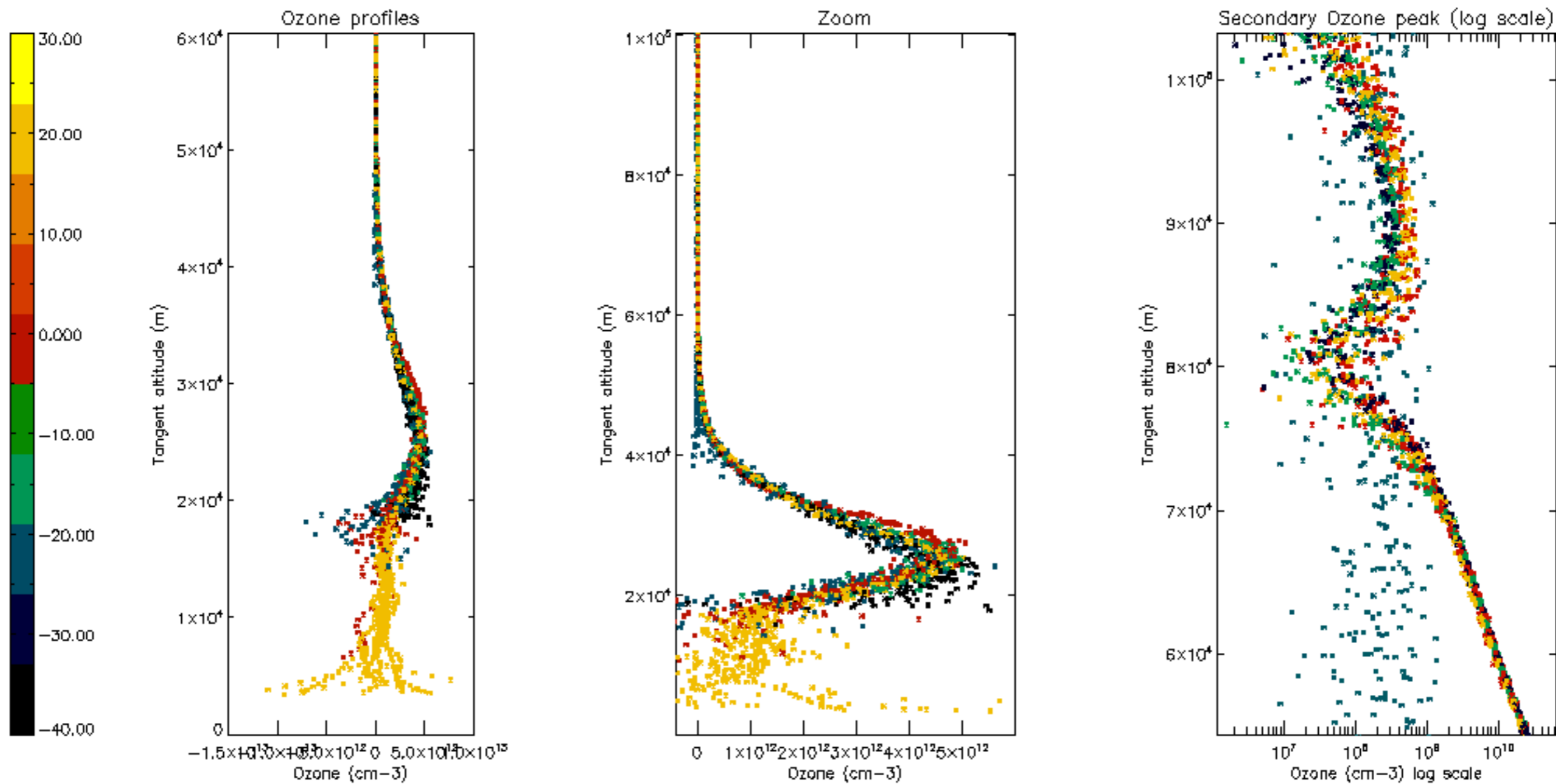


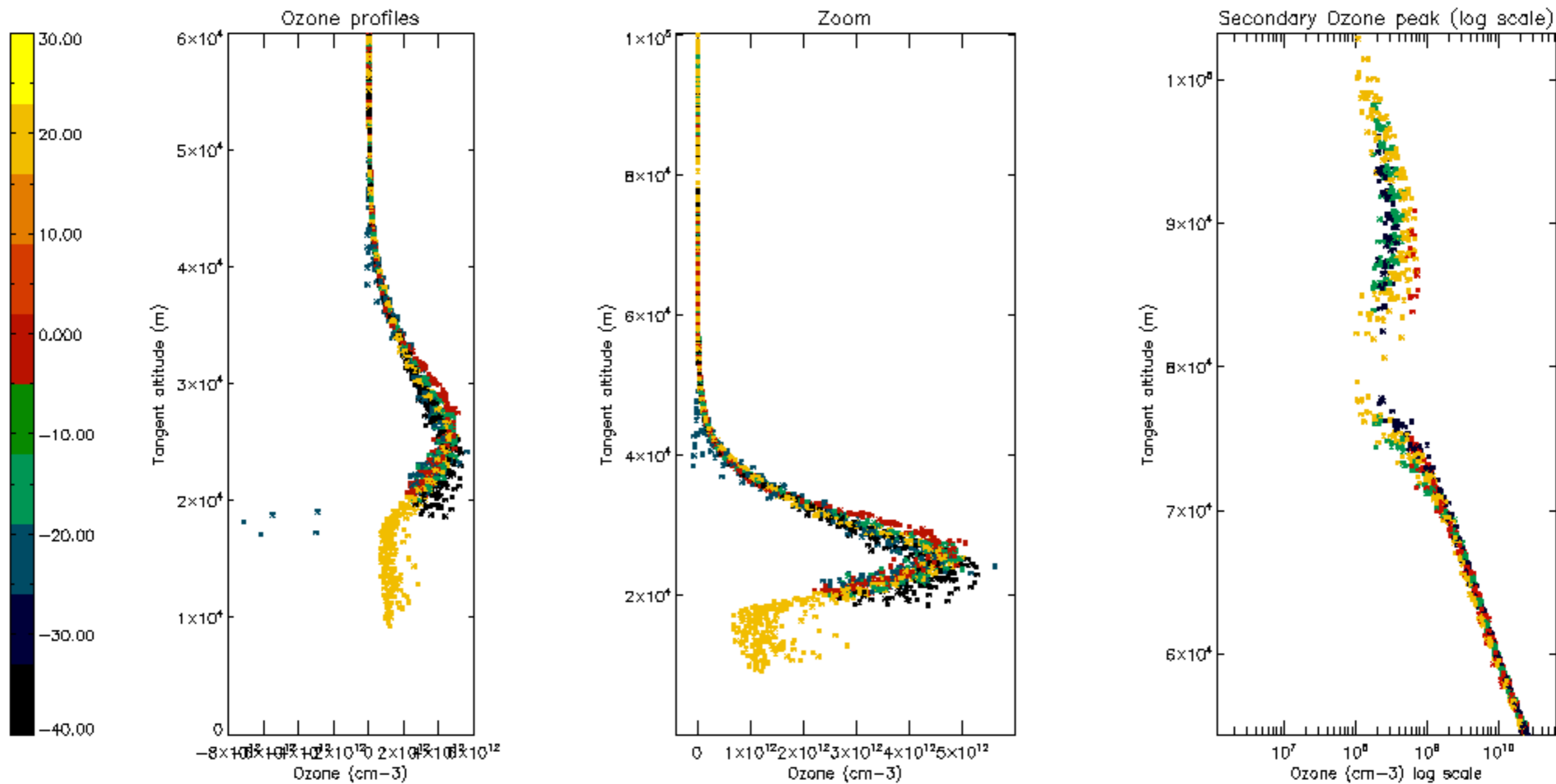
Percentage of star falling outside central band per profile

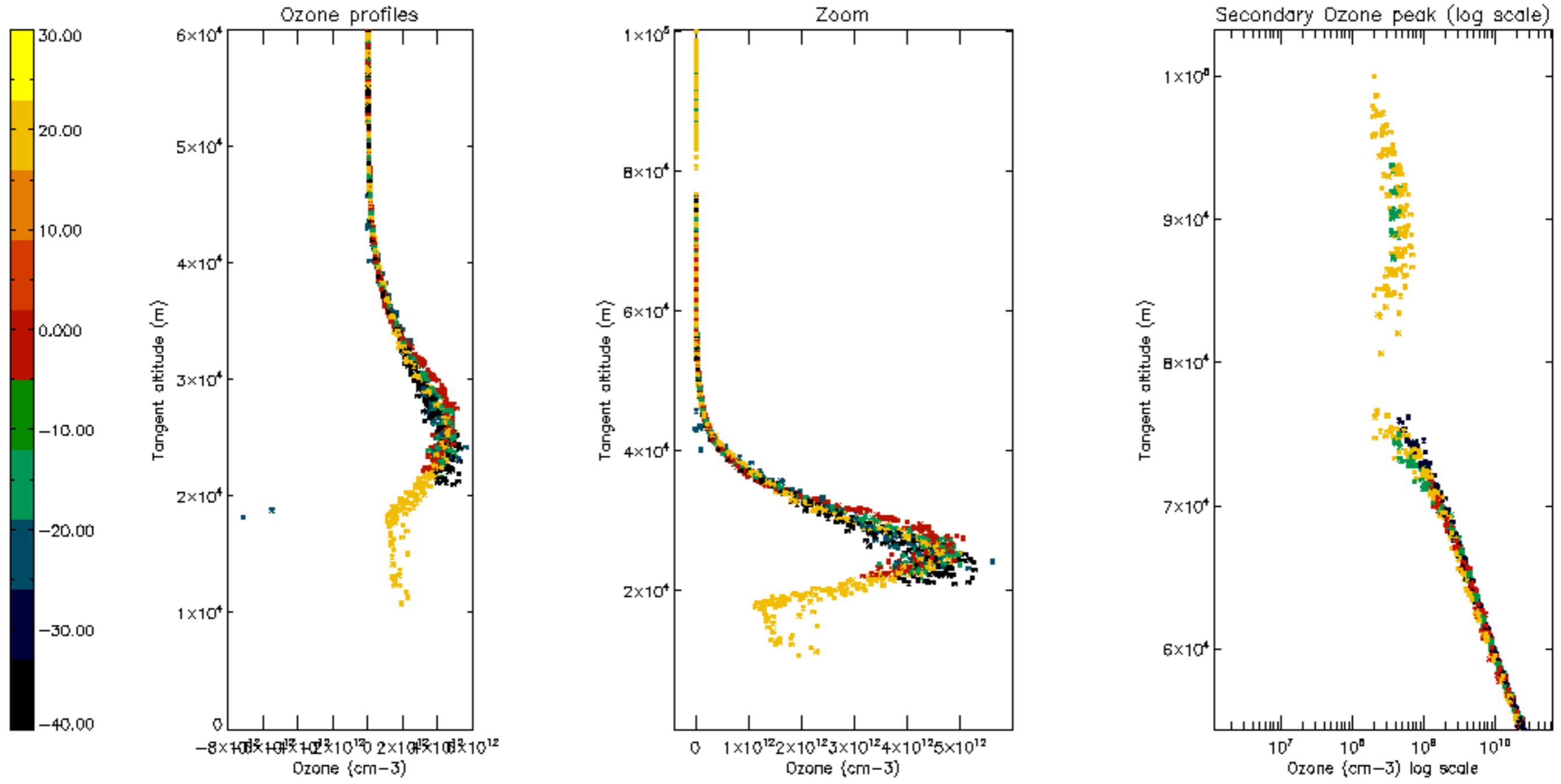


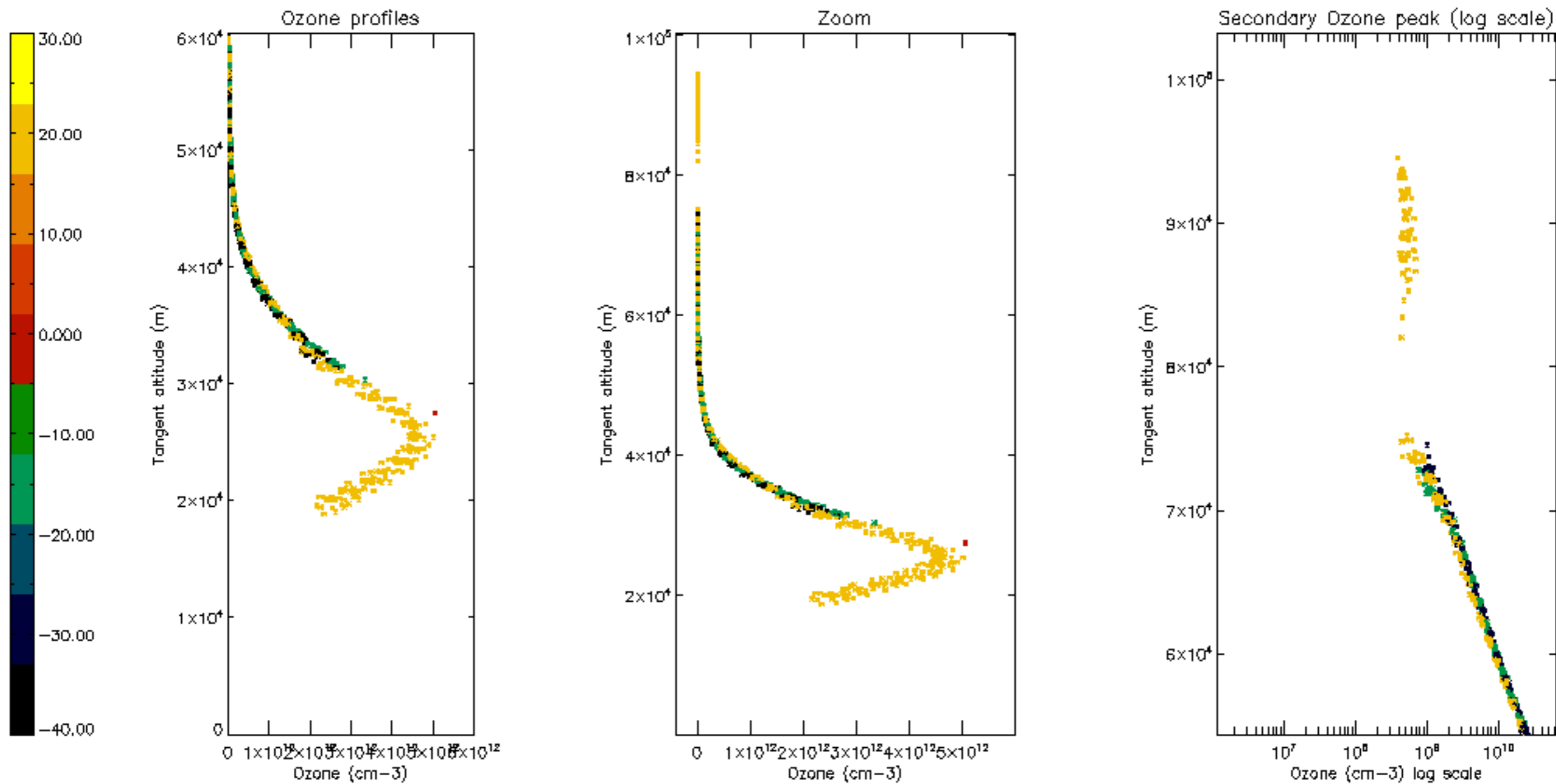
Percentage of saturation errors per profile

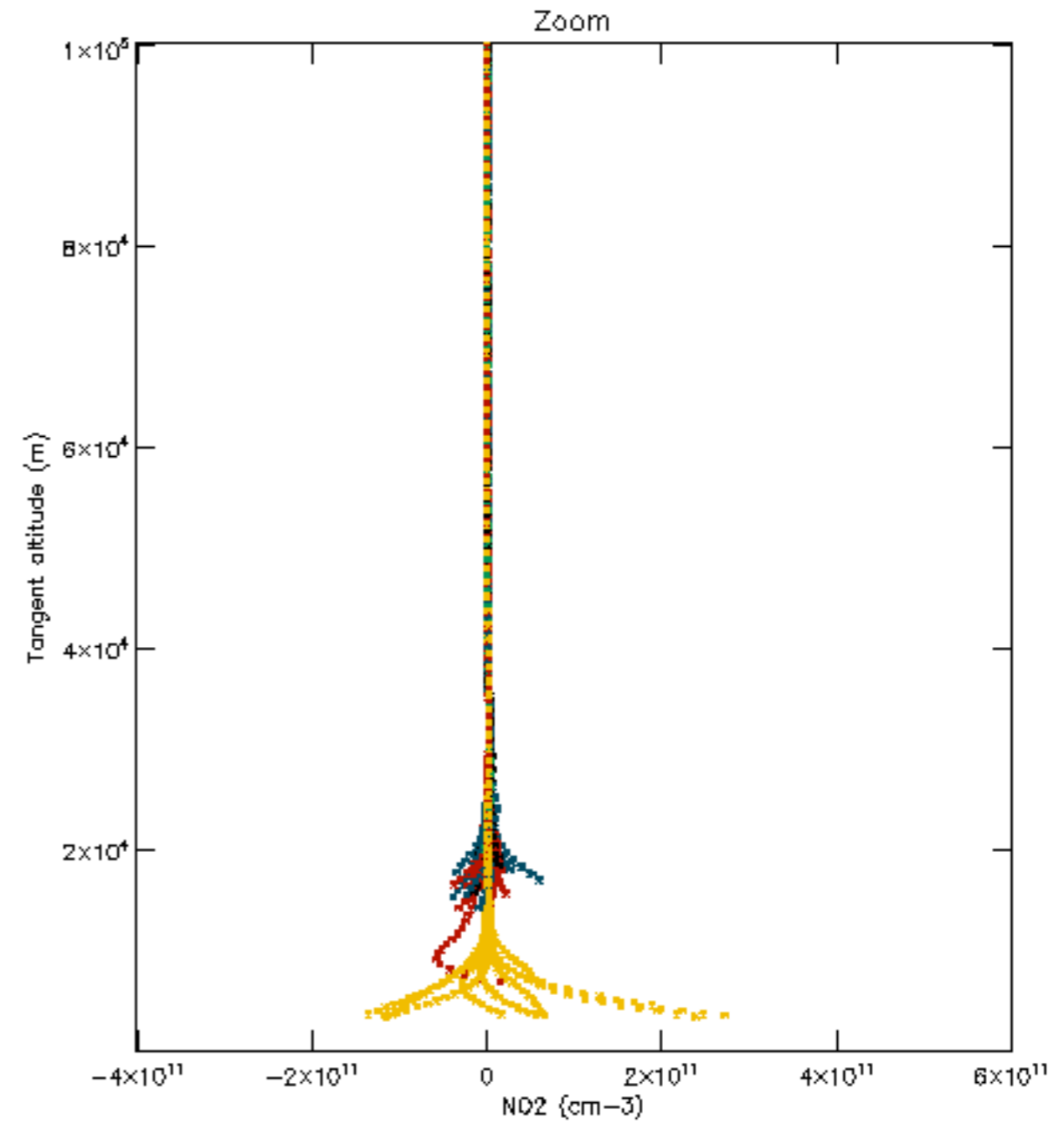
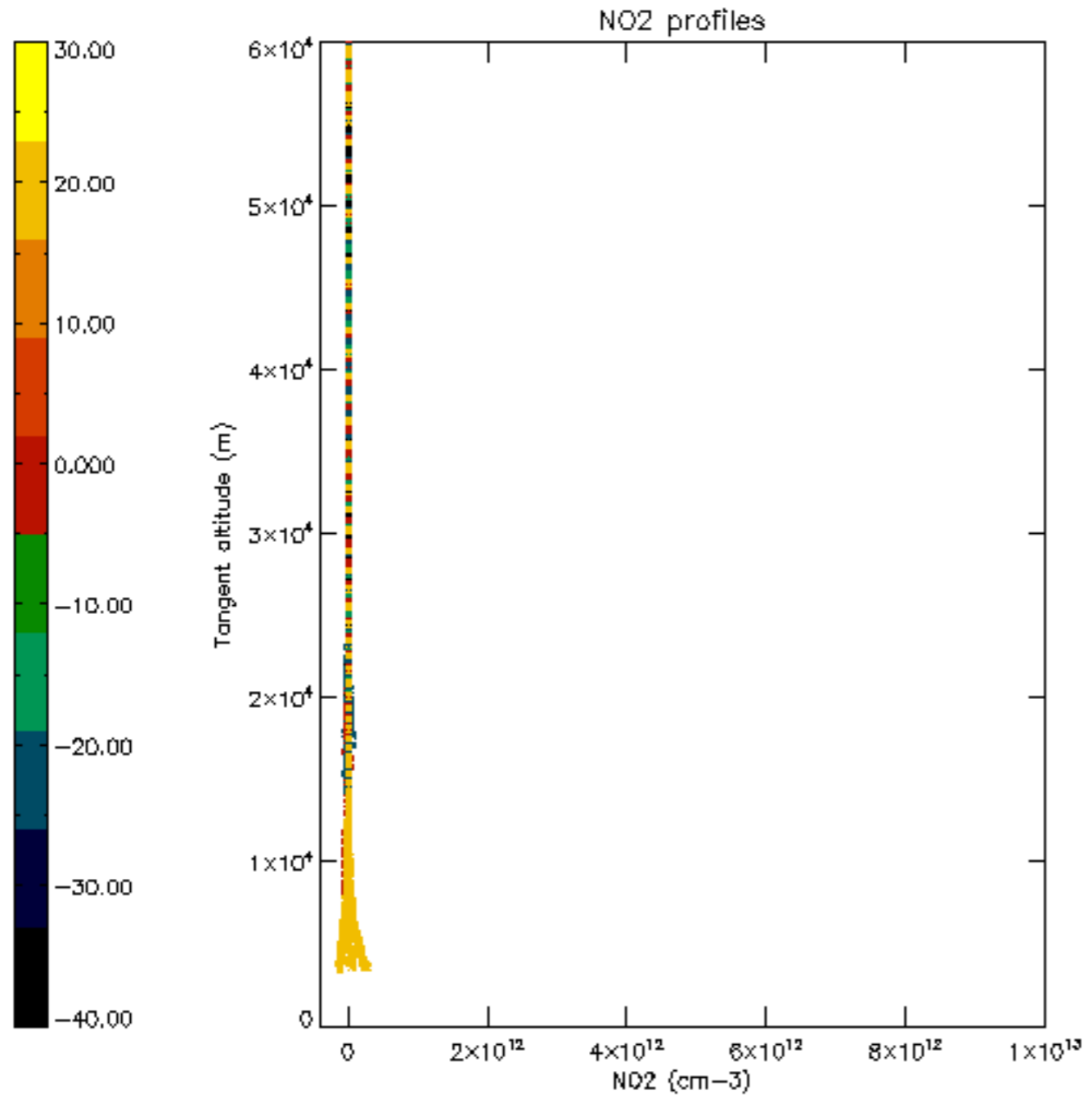


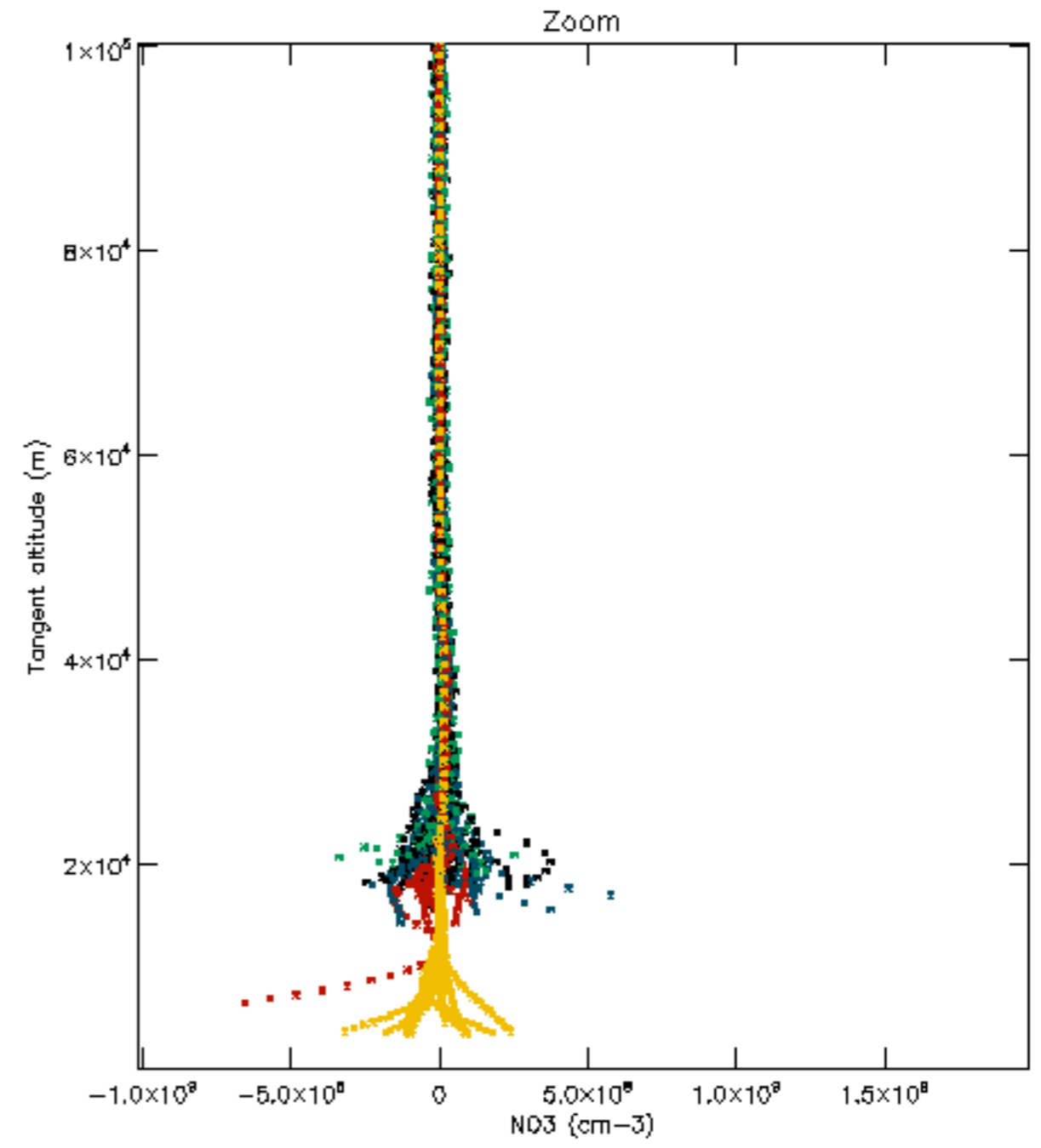
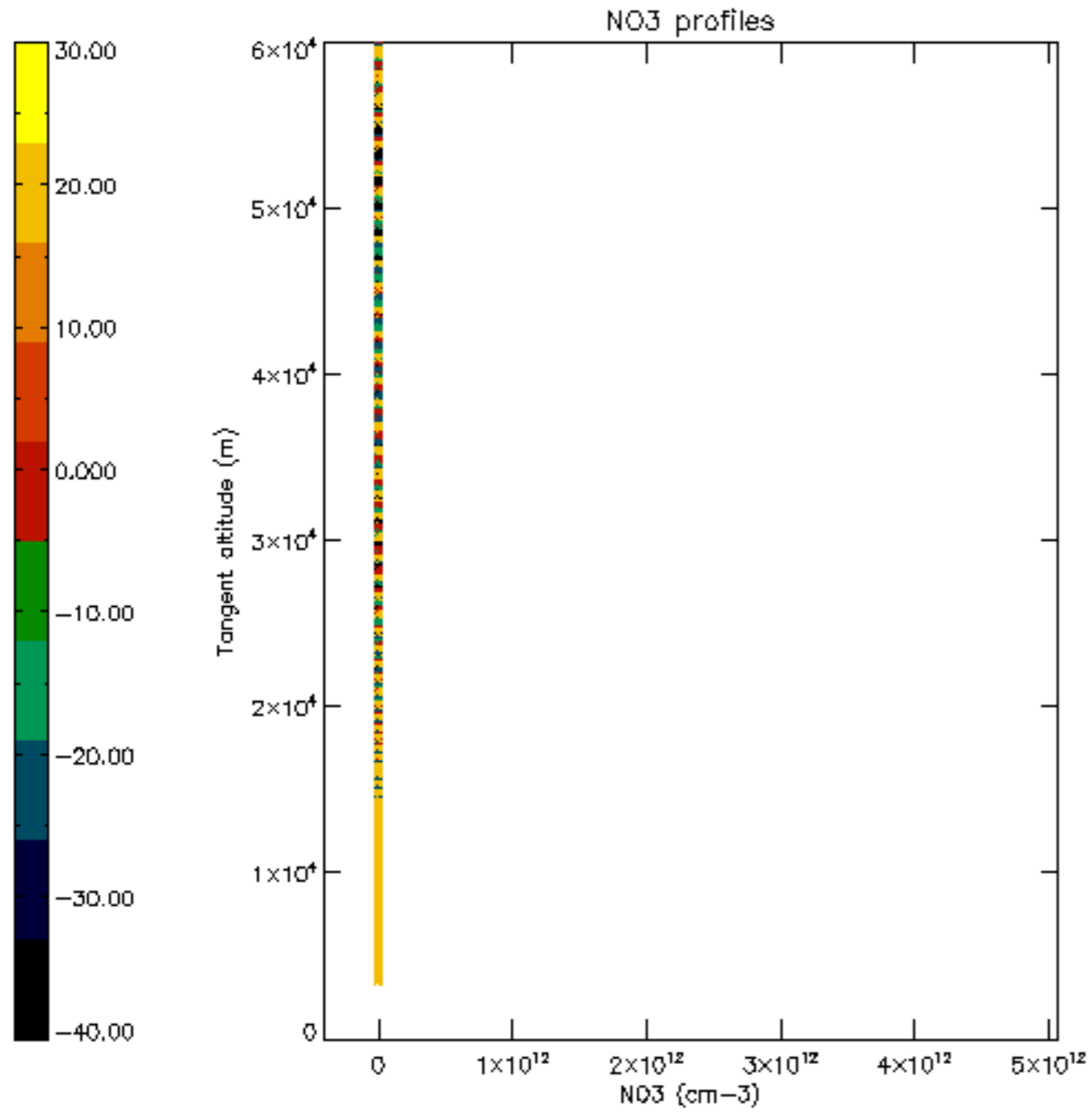


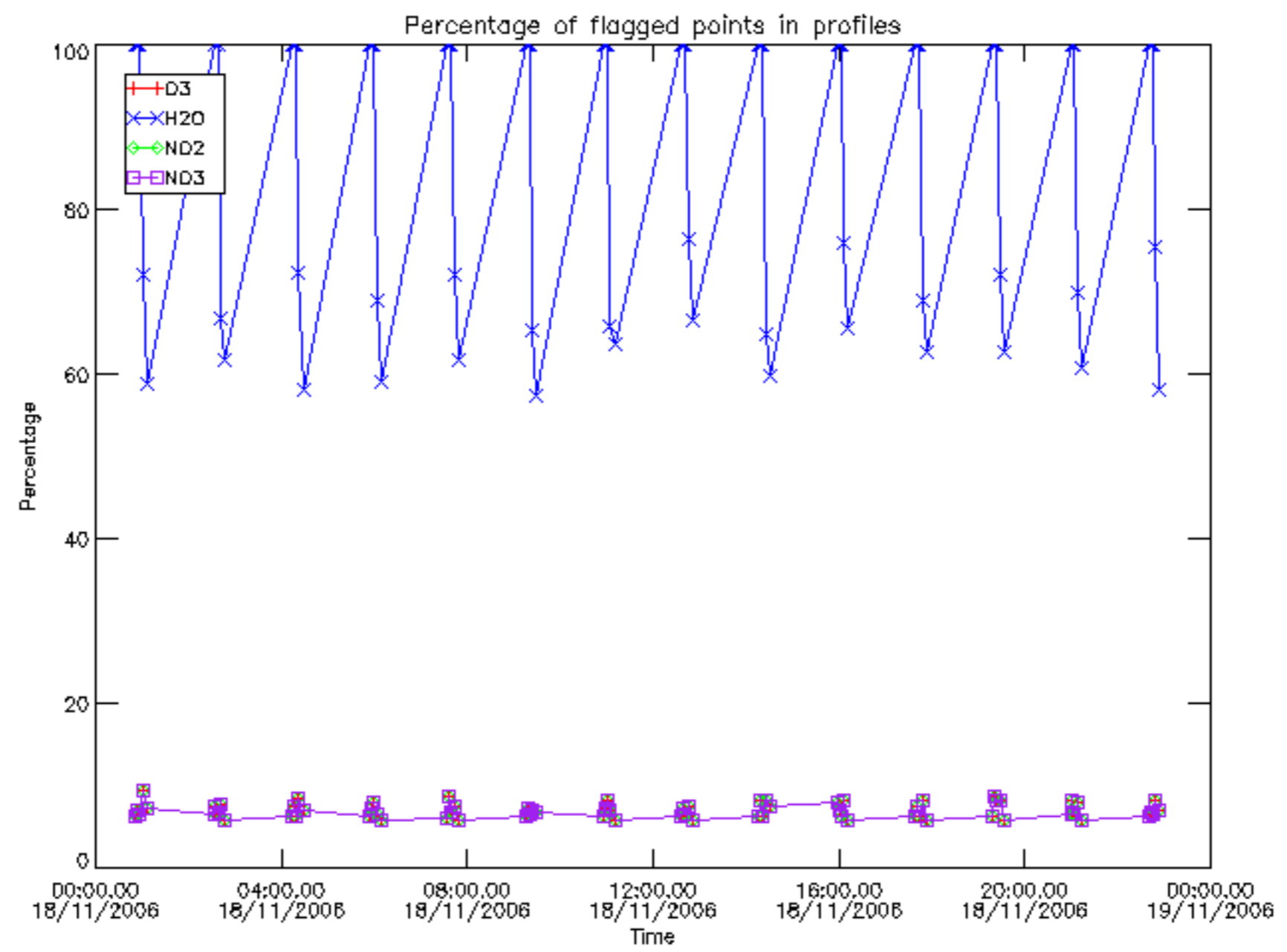




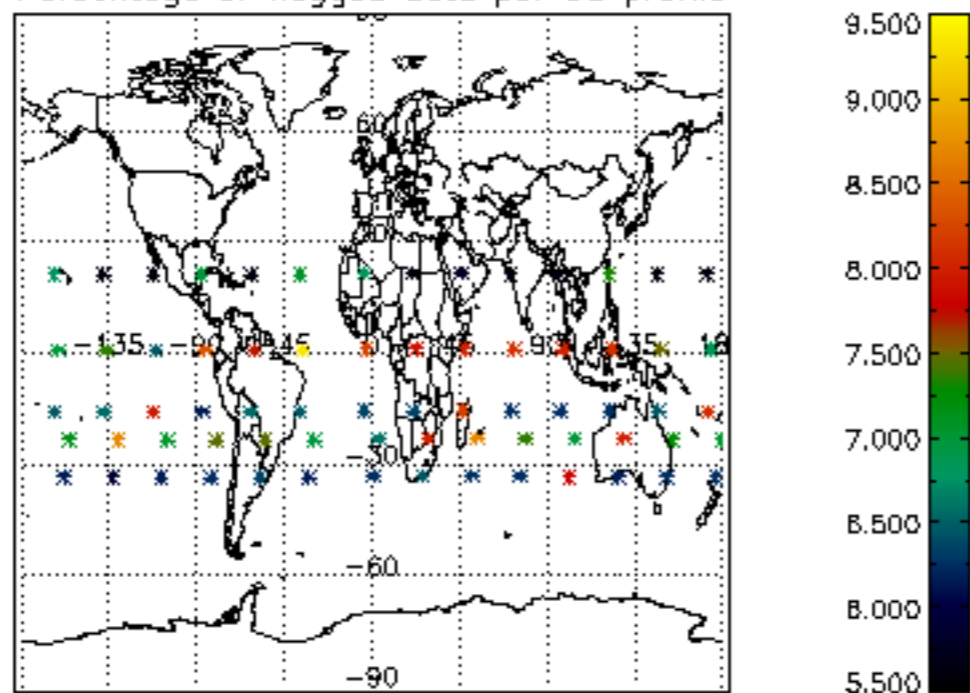




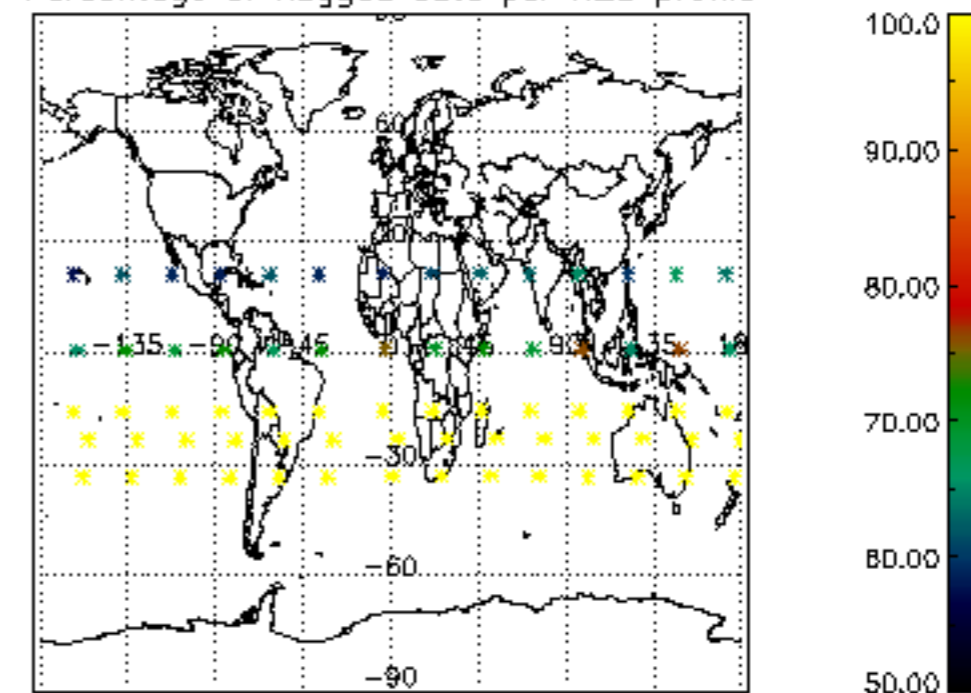




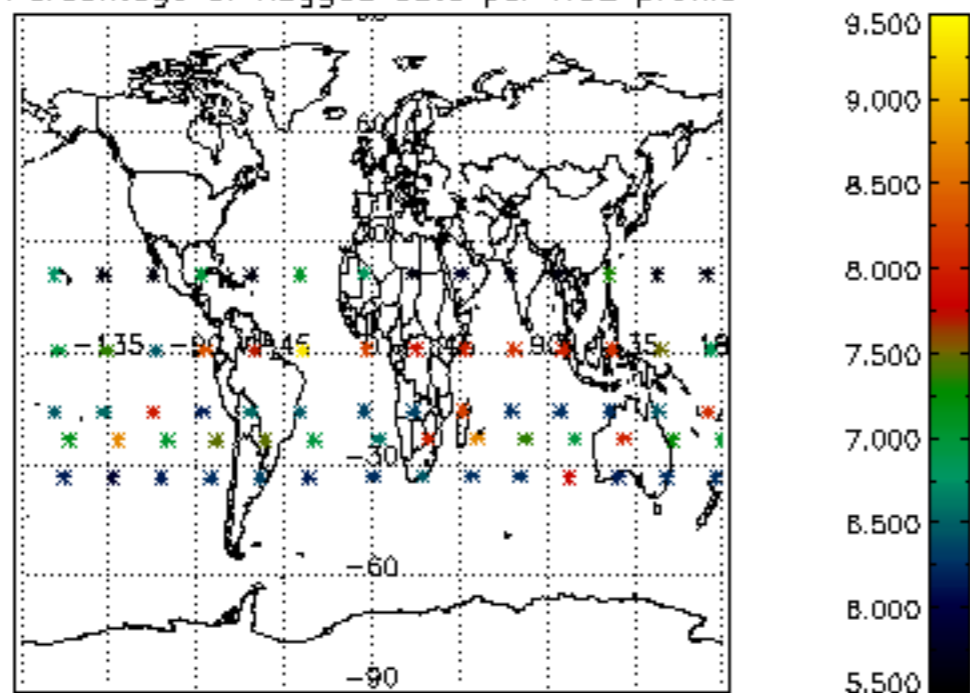
Percentage of flagged data per D3 profile



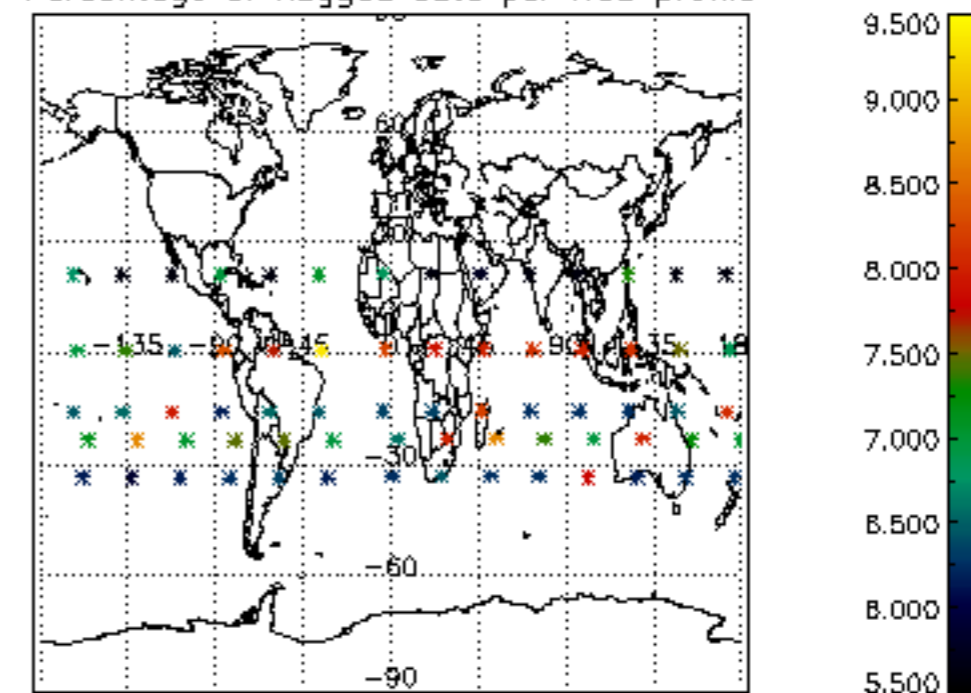
Percentage of flagged data per H2O profile

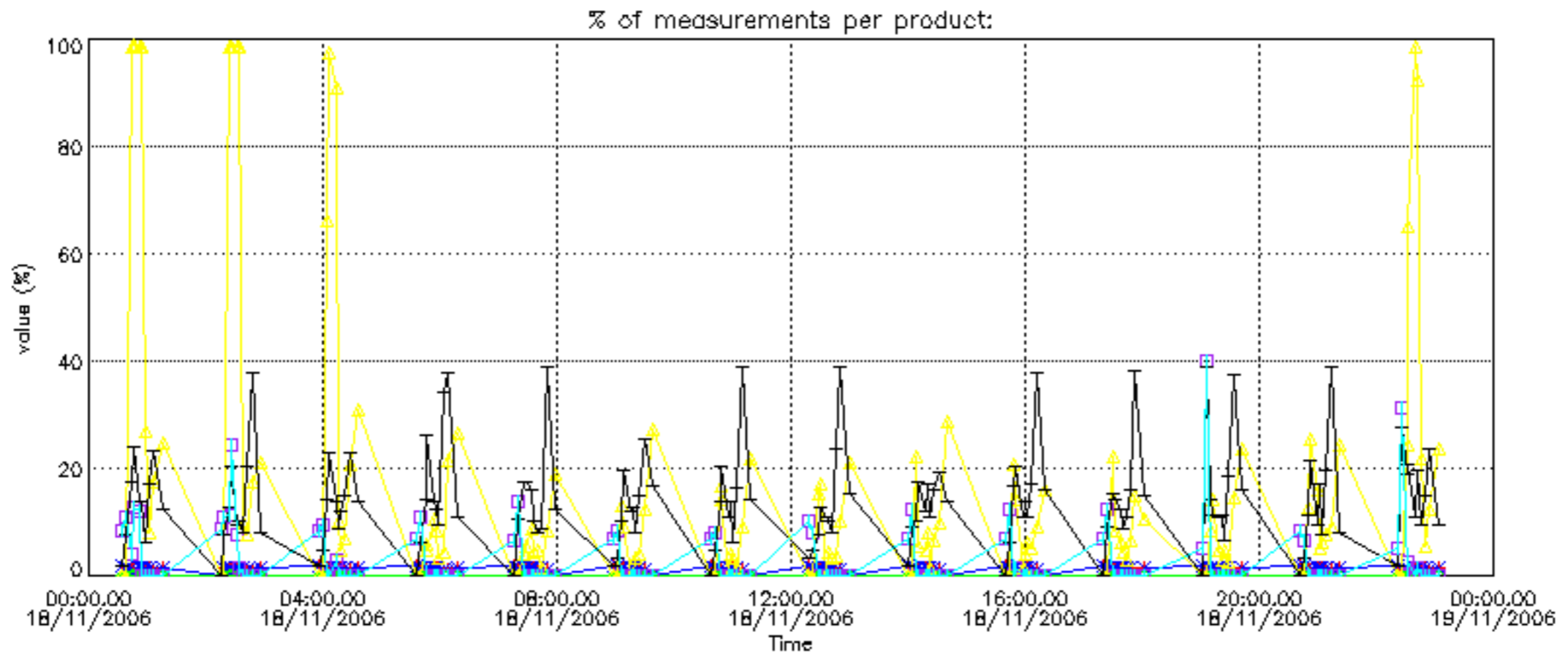


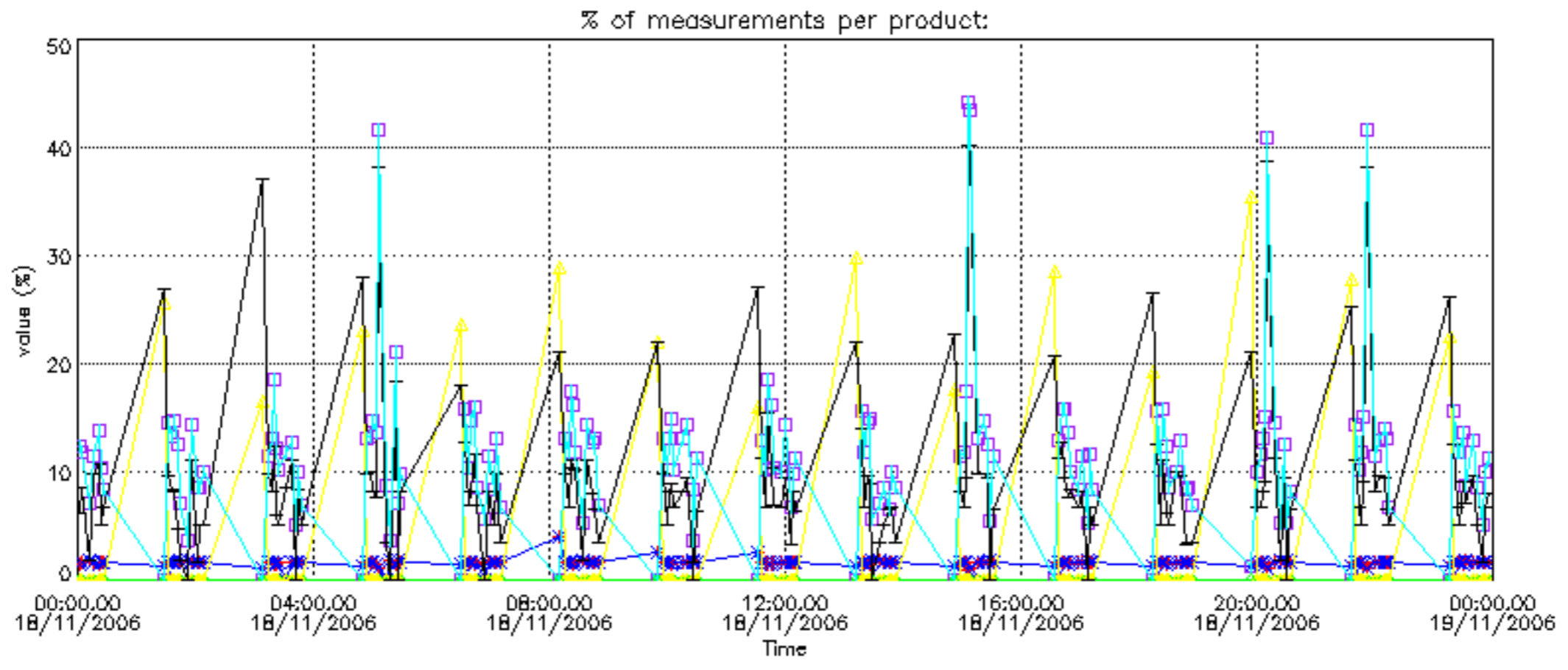
Percentage of flagged data per NO2 profile



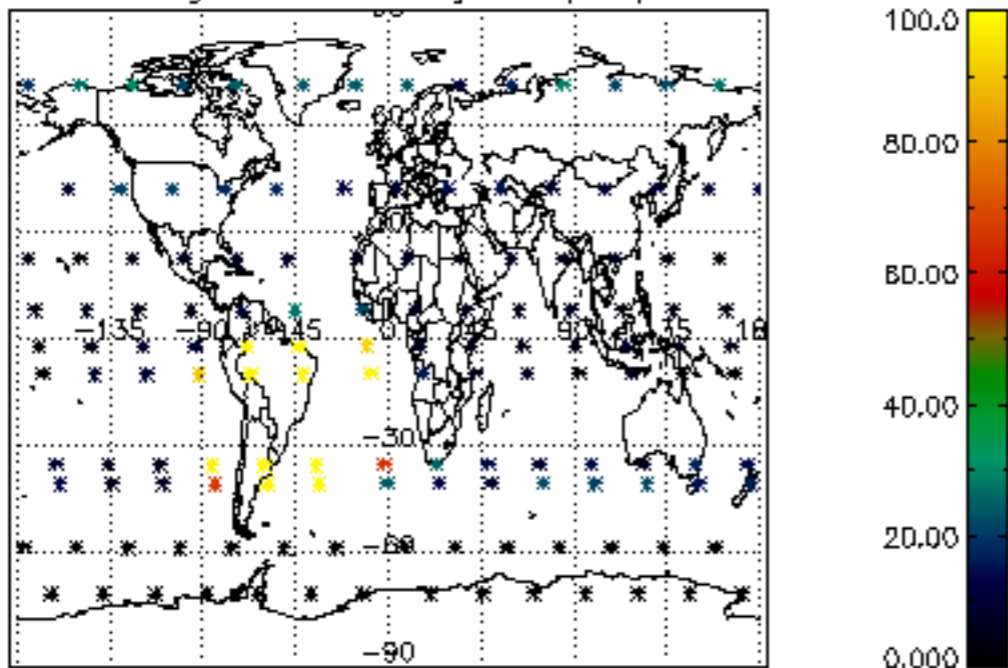
Percentage of flagged data per NO3 profile



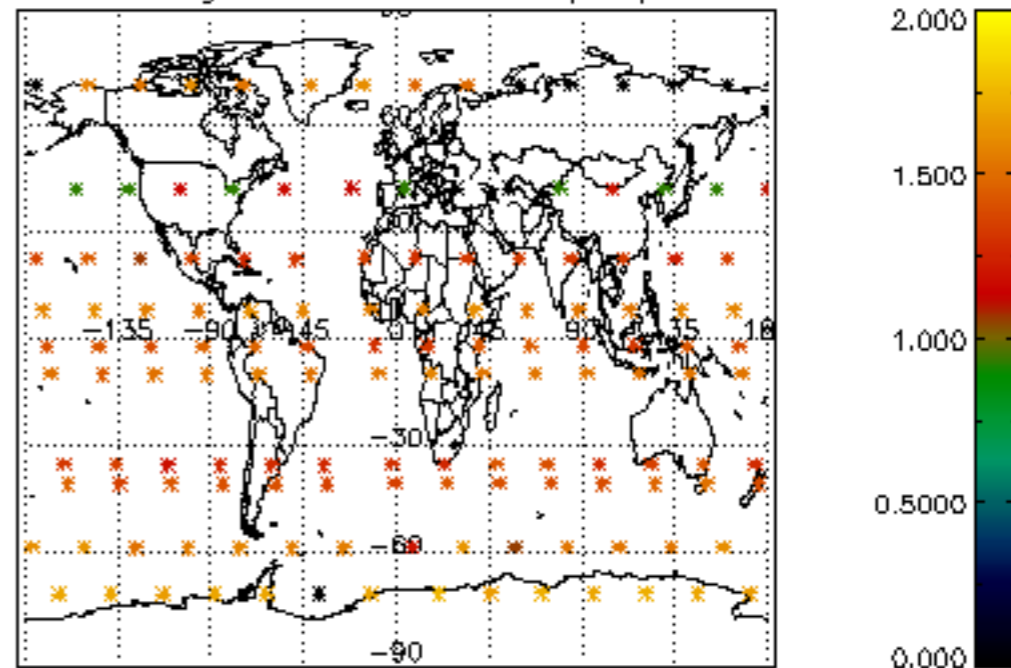




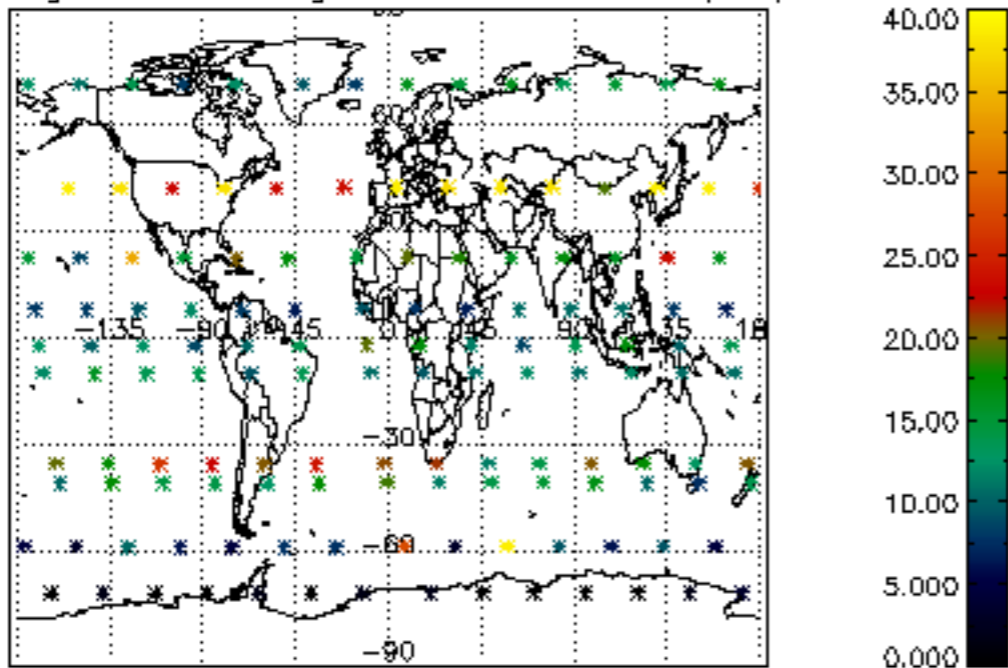
Percentage of cosmic ray hits per profile



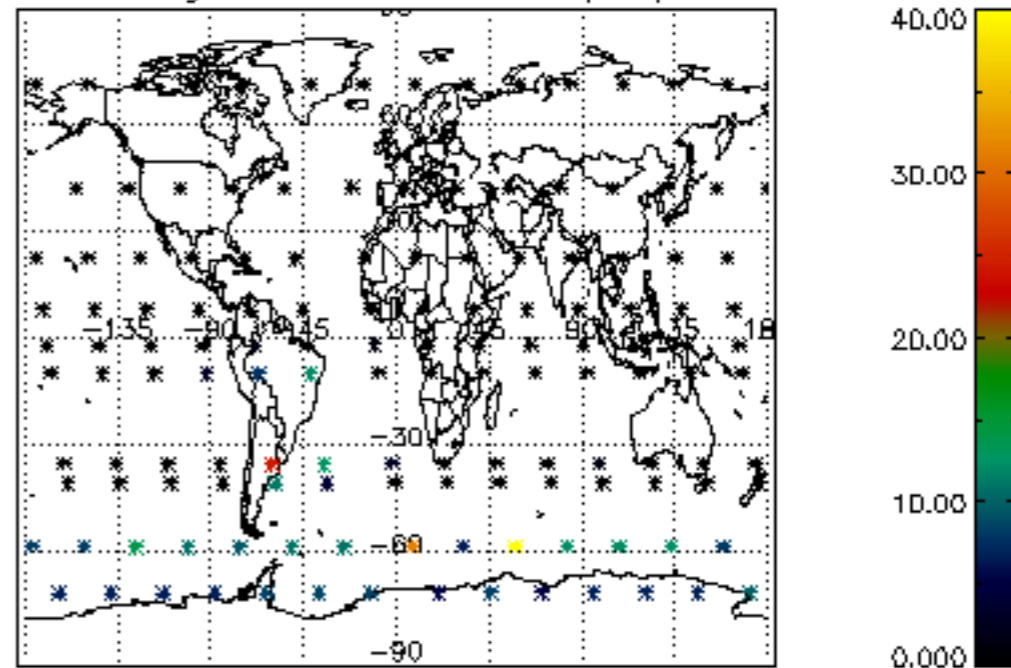
Percentage of datation errors per profile



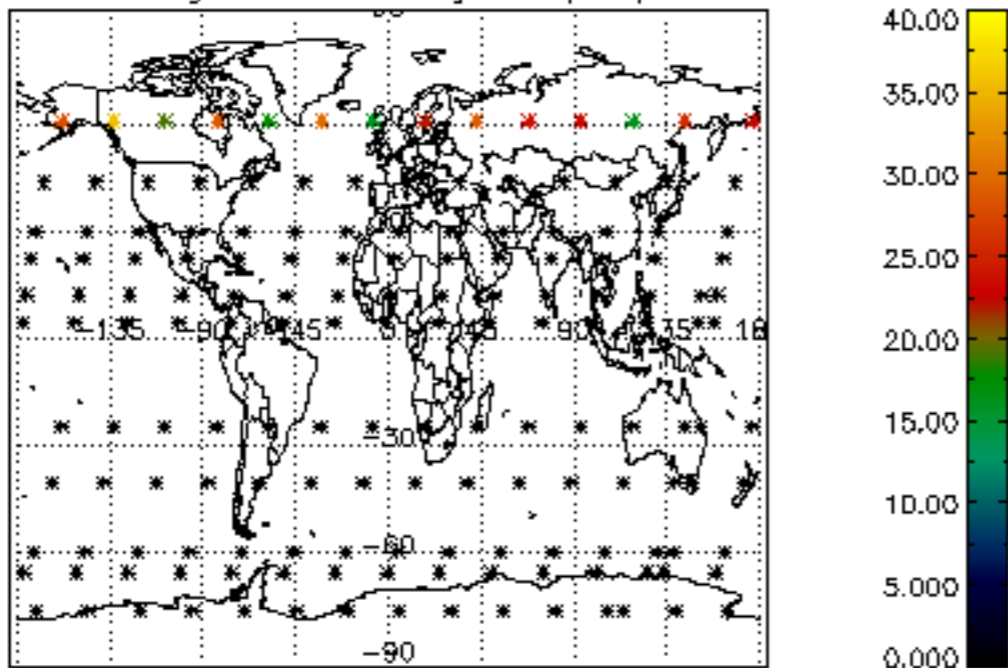
Percentage of star falling outside central band per profile



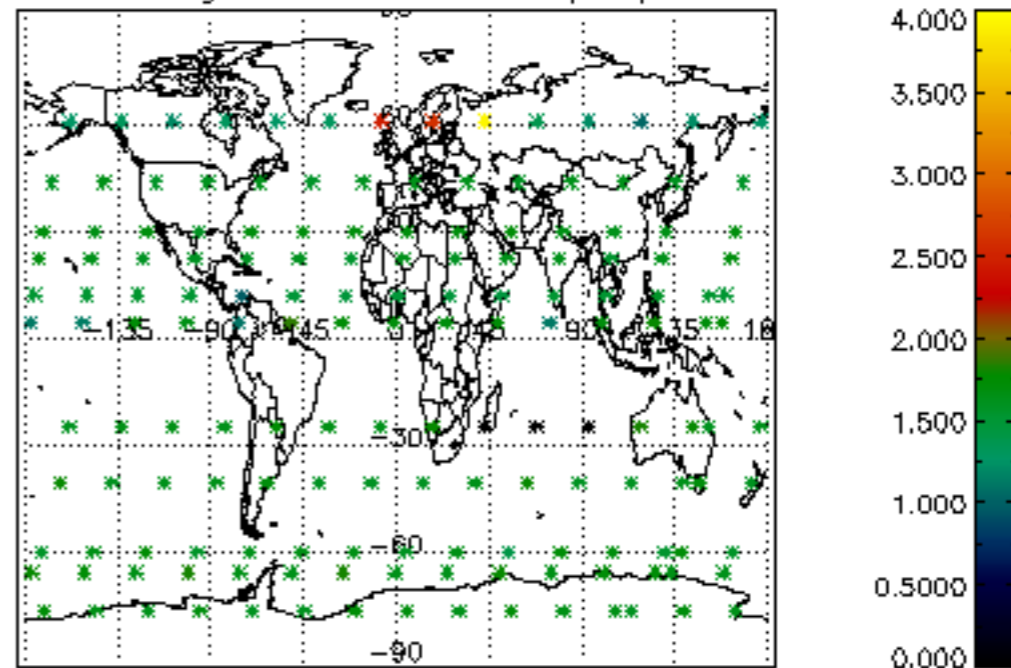
Percentage of saturation errors per profile



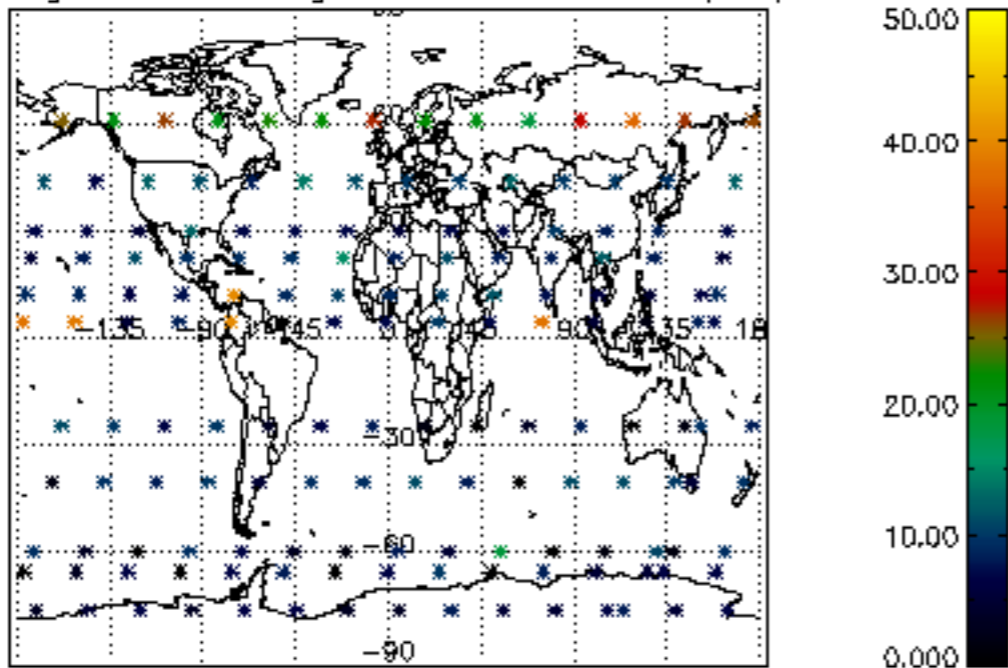
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

