

GOMOS Level 2 Daily Report

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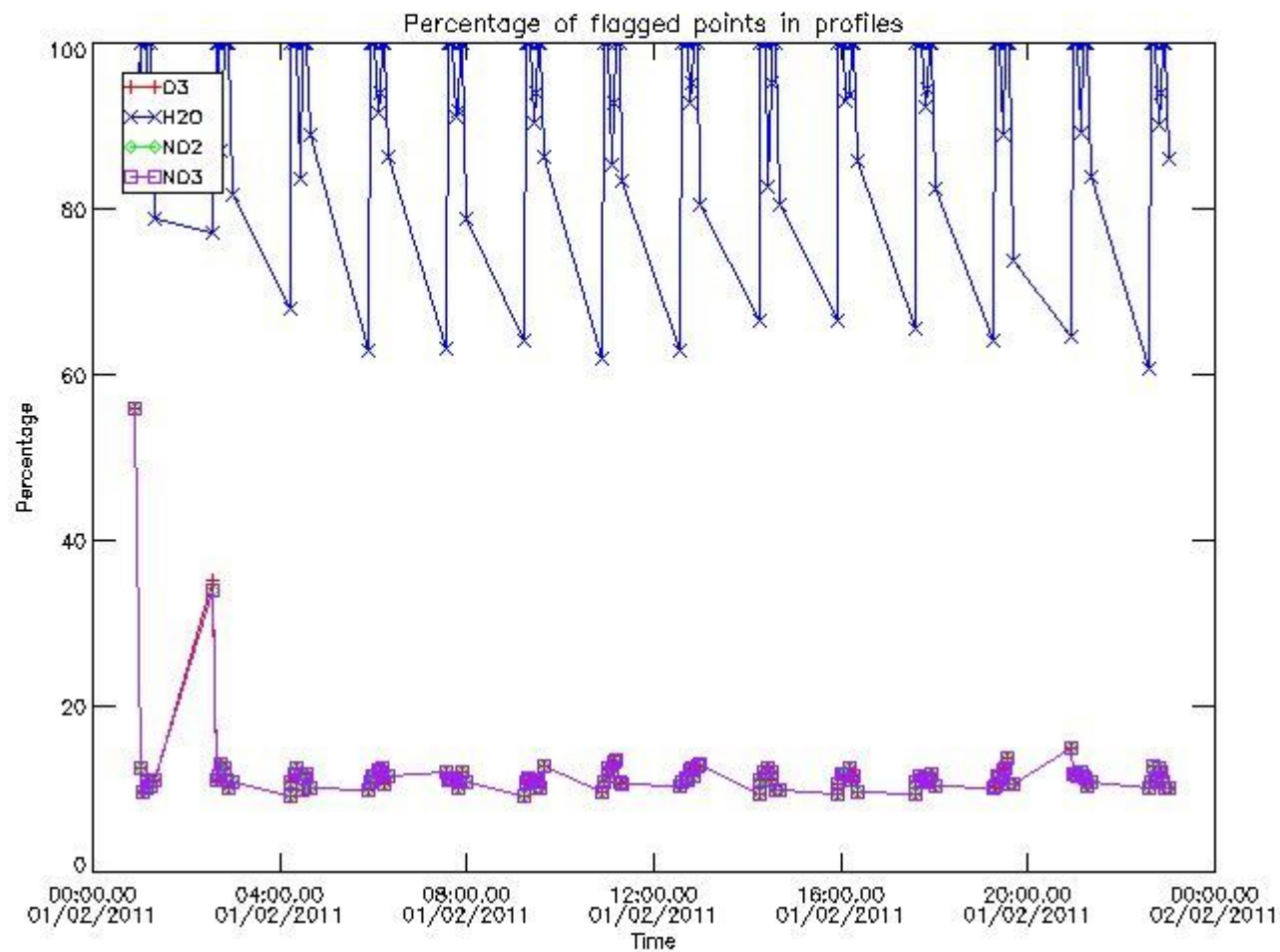
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279	GOM_NL__2PRFIN20110201_224144_000000443099_00101_46667_4662.N1	01-FEB-2011 22:41:44	Dark	44.000	131	Gam Lup	2.8000	26000.	88	46667	No
280	GOM_NL__2PRFIN20110201_224359_000000463099_00102_46668_4662.N1	01-FEB-2011 22:43:59	Dark	46.000	109	Bet Lup	2.6770	26000.	92	46668	No
281	GOM_NL__2PRFIN20110201_224803_000000413099_00102_46668_4663.N1	01-FEB-2011 22:48:03	Dark	41.000	10	Bet Cen	0.61000	28000.	82	46668	No
282	GOM_NL__2PRFIN20110201_225124_000000423099_00102_46668_4664.N1	01-FEB-2011 22:51:24	Dark	42.000	12	Alp1Cru	0.77500	30000.	84	46668	No
283	GOM_NL__2PRFIN20110201_225329_000000473099_00102_46668_4665.N1	01-FEB-2011 22:53:29	Dark	46.500	99	Del Cen	2.5750	26000.	93	46668	No
284	GOM_NL__2PRFIN20110201_225708_000000503099_00102_46668_4666.N1	01-FEB-2011 22:57:08	Dark	50.000	113	Mu Vel	2.6920	5000.0	100	46668	No
285	GOM_NL__2PRFIN20110201_230128_000000513099_00102_46668_4667.N1	01-FEB-2011 23:01:28	Dark	50.500	65	Lam Vel	2.2040	4400.0	101	46668	No
286	GOM_NL__2PRFIN20110201_231222_000000643099_00102_46668_4668.N1	01-FEB-2011 23:12:22	Straylight	63.500	48	30Alp Hya	1.9770	4100.0	127	46668	No
287	GOM_NL__2PRFIN20110201_231632_000000503099_00102_46668_4669.N1	01-FEB-2011 23:16:32	Twilight	50.000	8	10Alp CMi	0.40000	6500.0	100	46668	No
288	GOM_NL__2PRFIN20110201_232309_000000413099_00102_46668_4670.N1	01-FEB-2011 23:23:09	Bright	41.000	17	78Bet Gem	1.1610	4500.0	82	46668	No
289	GOM_NL__2PRFIN20110201_233747_000000483099_00102_46668_4671.N1	01-FEB-2011 23:37:47	Bright	47.500	36	50Alp UMa	1.8000	6300.0	95	46668	No
290	GOM_NL__2PRFIN20110201_234322_000000413099_00102_46668_4672.N1	01-FEB-2011 23:43:22	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	46668	No
291	GOM_NL__2PRFIN20110201_234805_000000393099_00102_46668_4673.N1	01-FEB-2011 23:48:05	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	46668	No
292	GOM_NL__2PRFIN20110201_235118_000000373099_00102_46668_4674.N1	01-FEB-2011 23:51:18	Bright	36.500	130	23Bet Dra	2.7990	5800.0	73	46668	No
293	GOM_NL__2PRFIN20110201_235759_000000643099_00102_46668_4675.N1	01-FEB-2011 23:57:59	Bright	64.000	133	40Zet Her	2.8070	6000.0	128	46668	No

3. Quality information per product

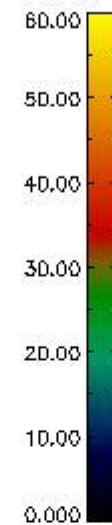
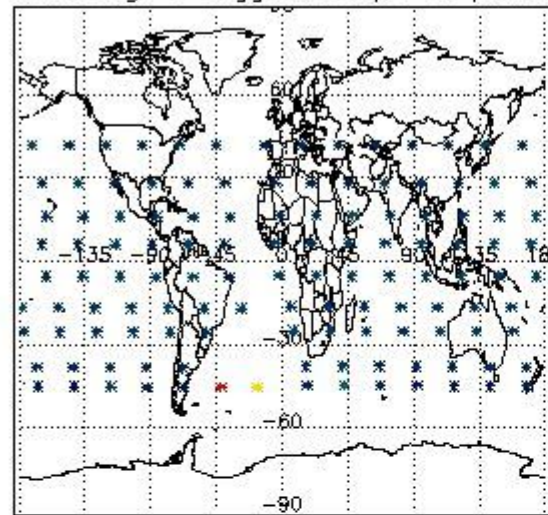
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

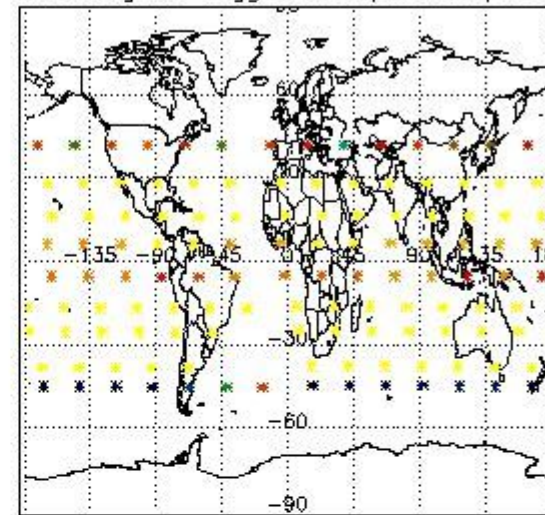


3.2 Plot quality information per product (world map)

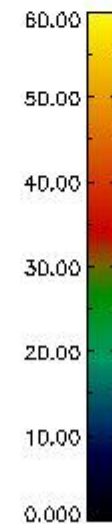
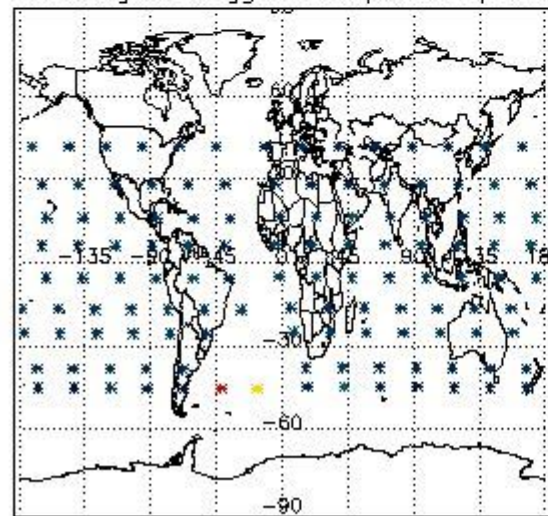
Percentage of flagged data per O3 profile



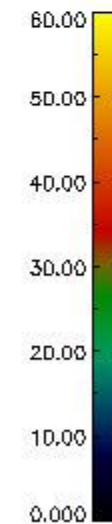
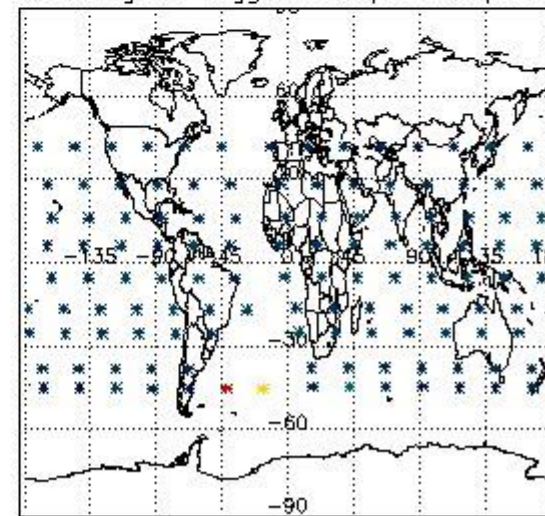
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

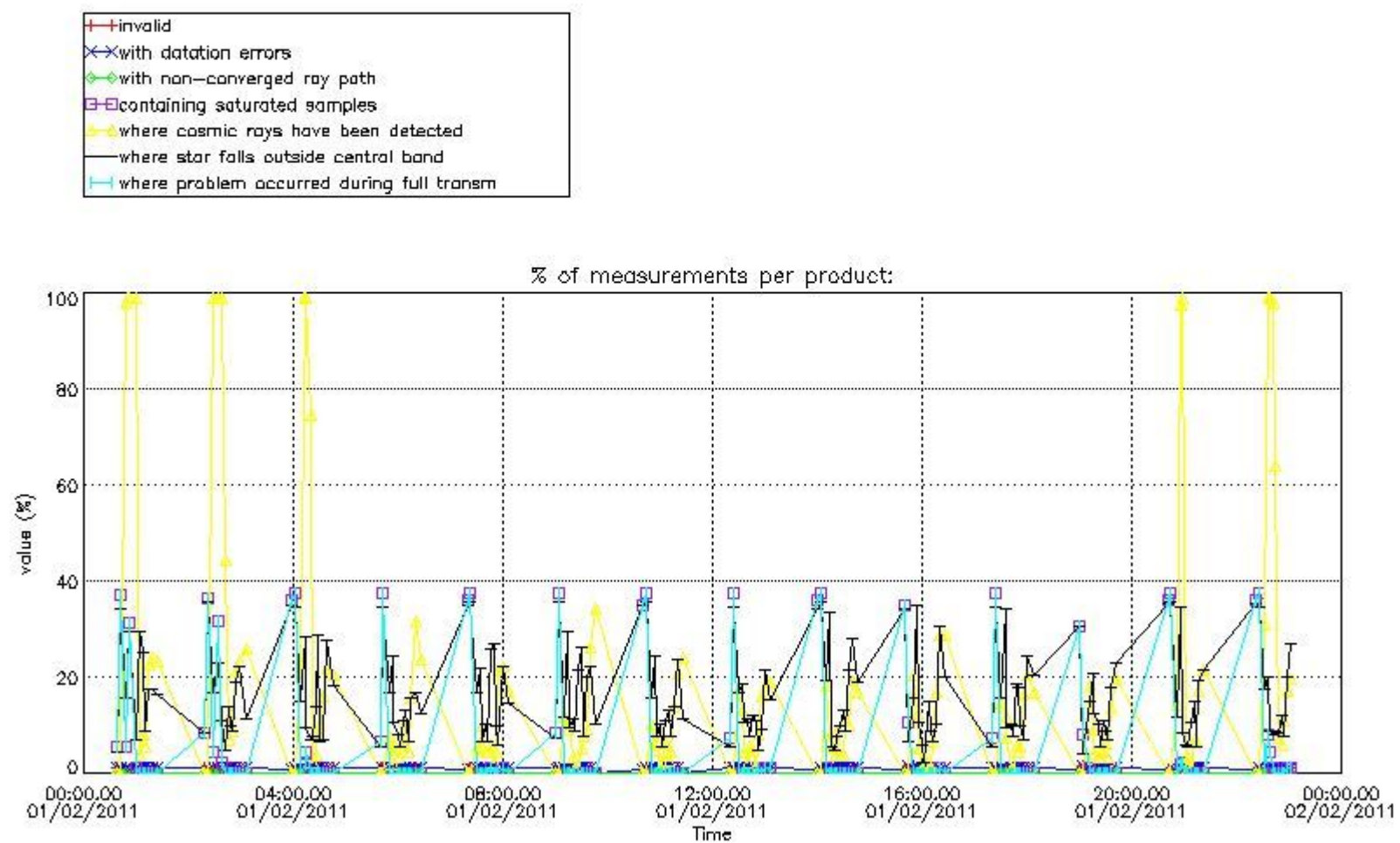


4. Level 1 quality information per product

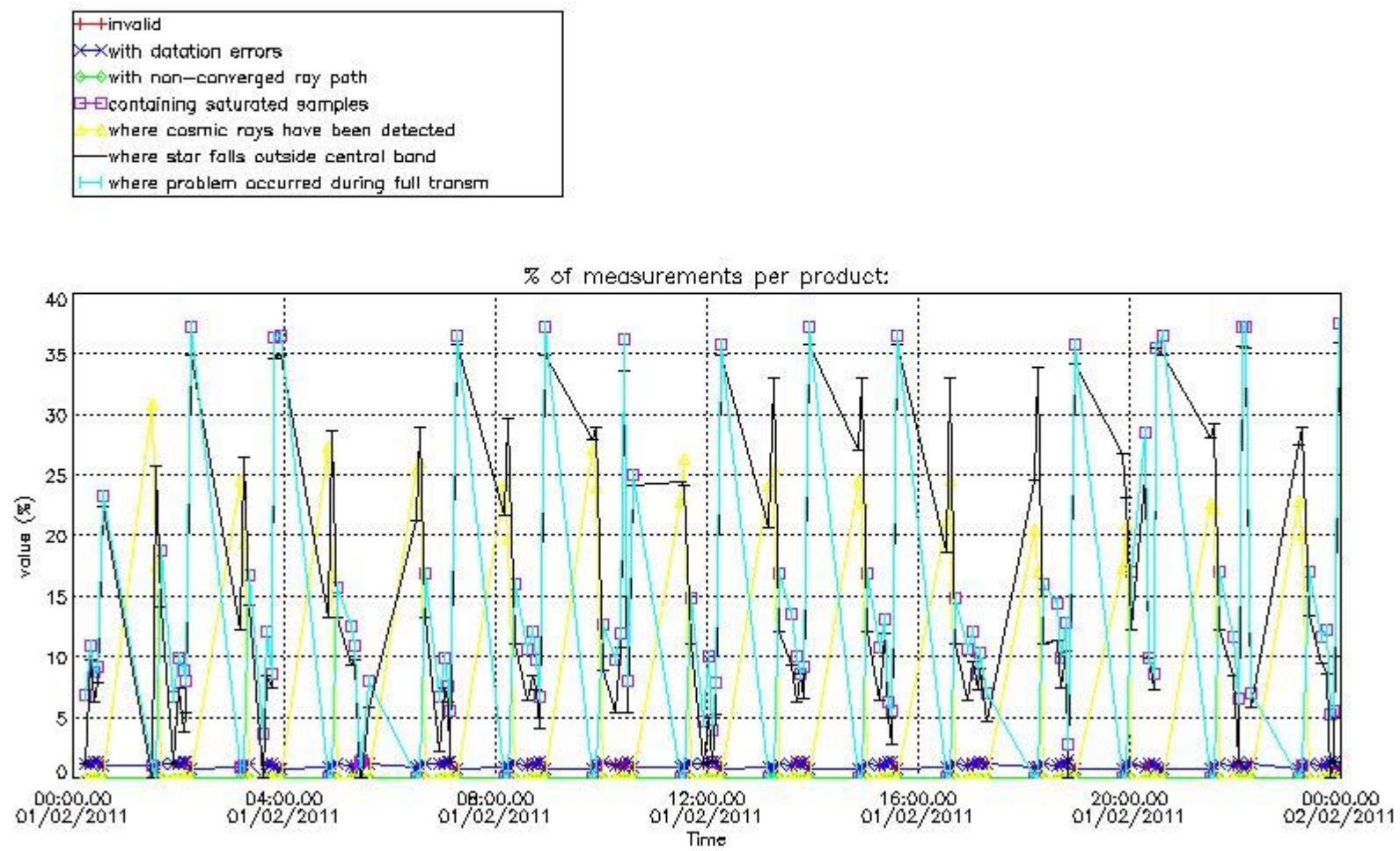
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

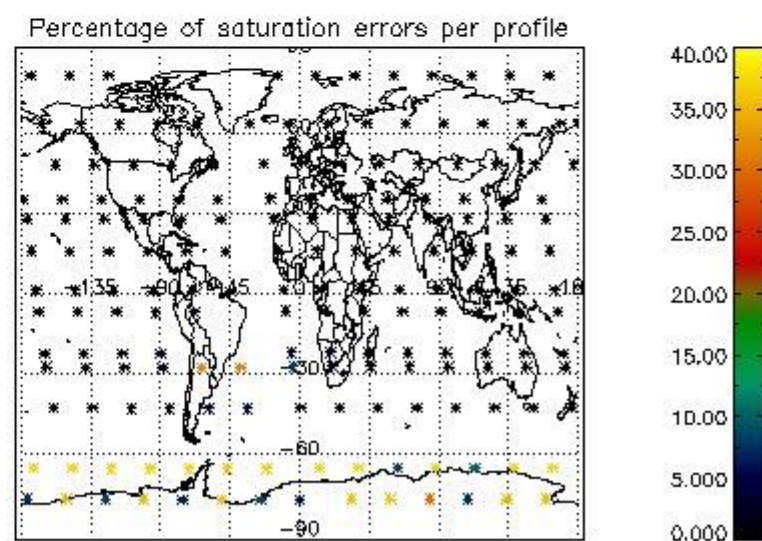
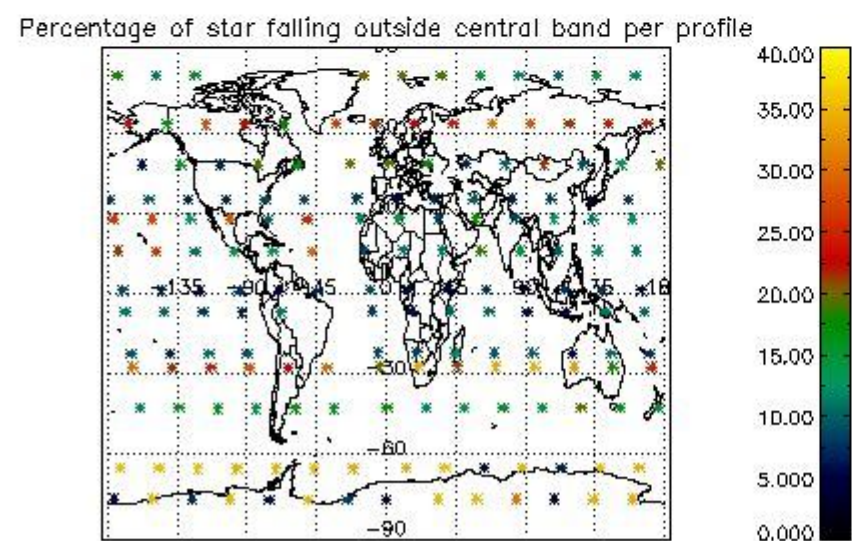
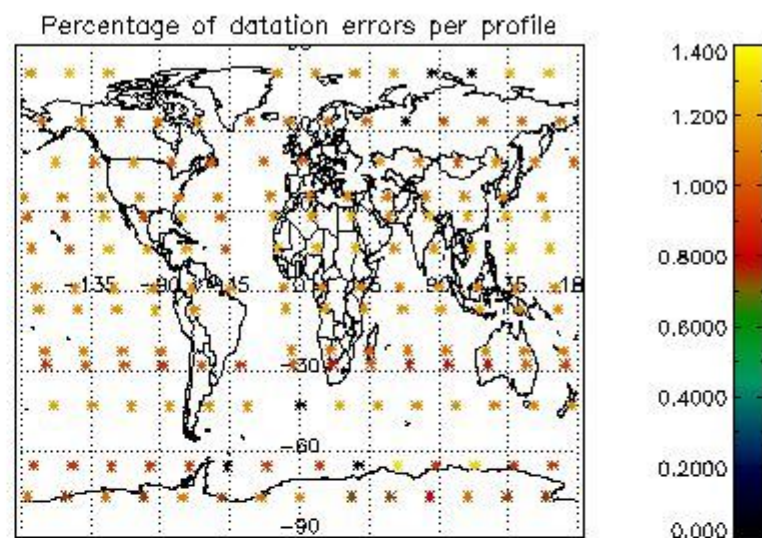
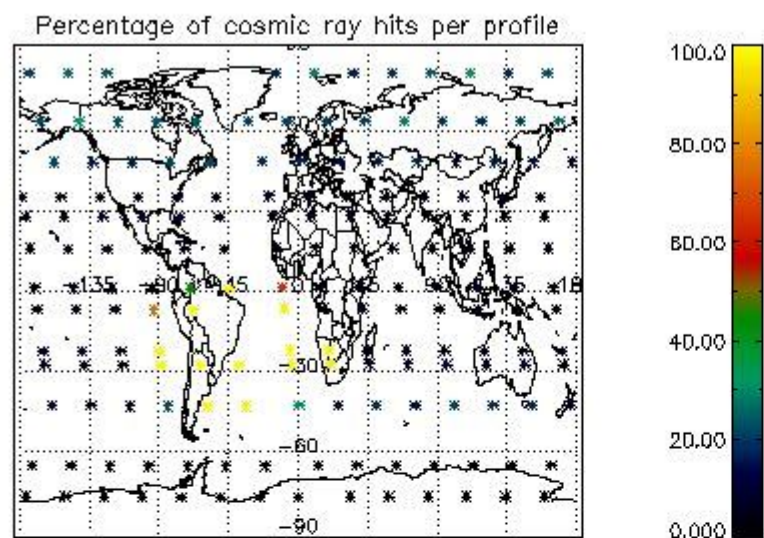


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

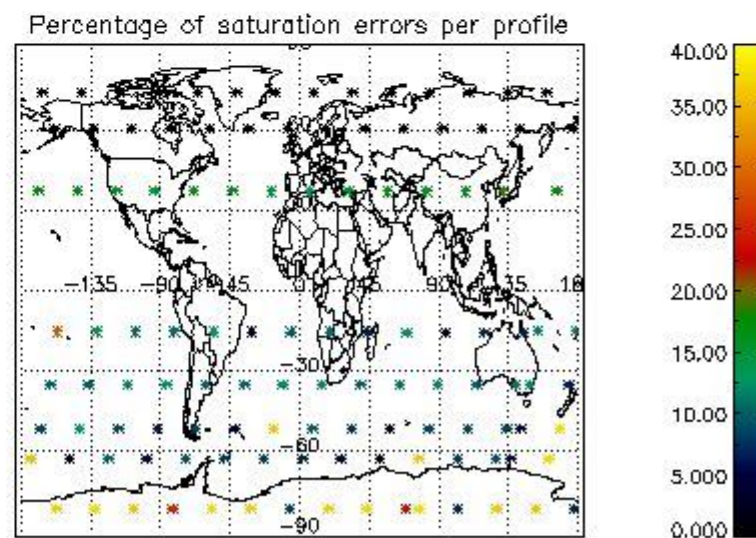
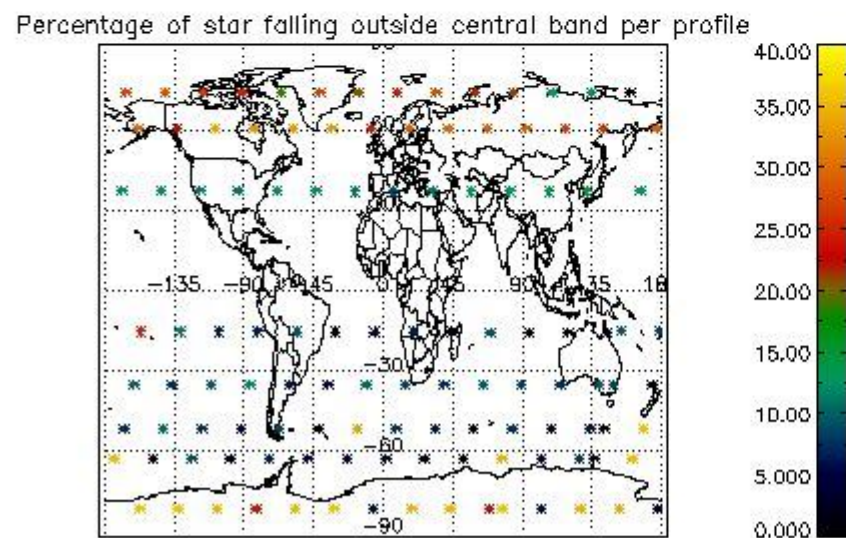
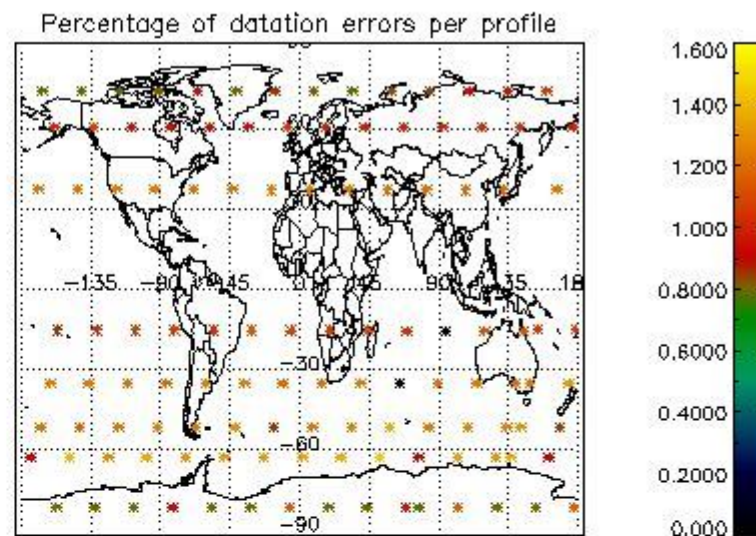
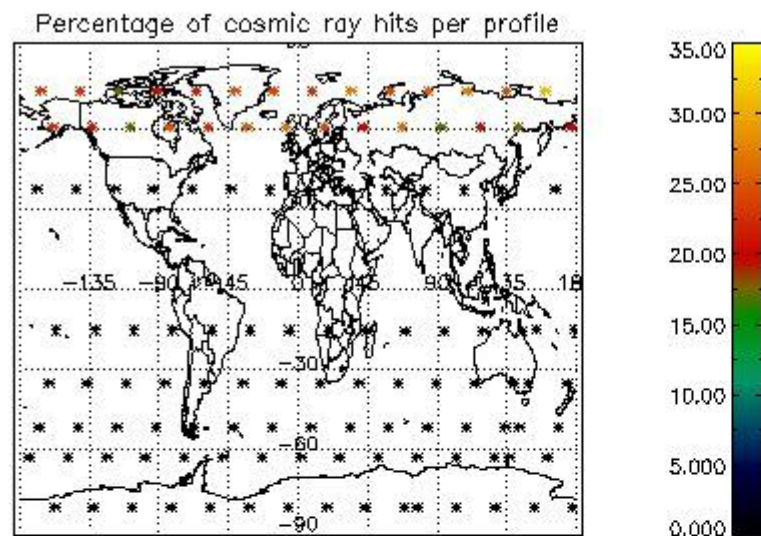


4.2 Plot quality information per product coming from level 1b processing (world map)

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

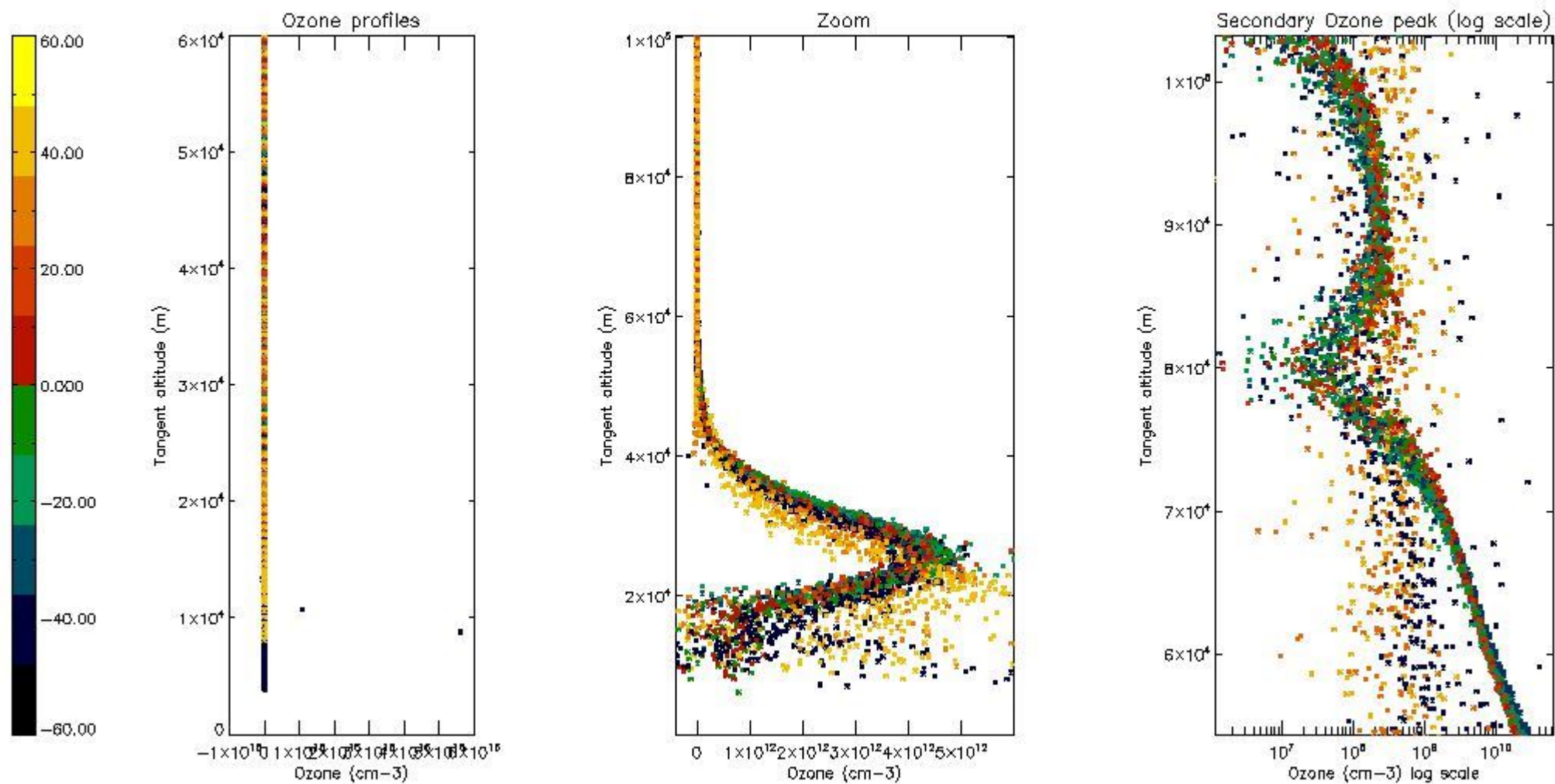
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	21

STD < 10	17
STD < 5	12

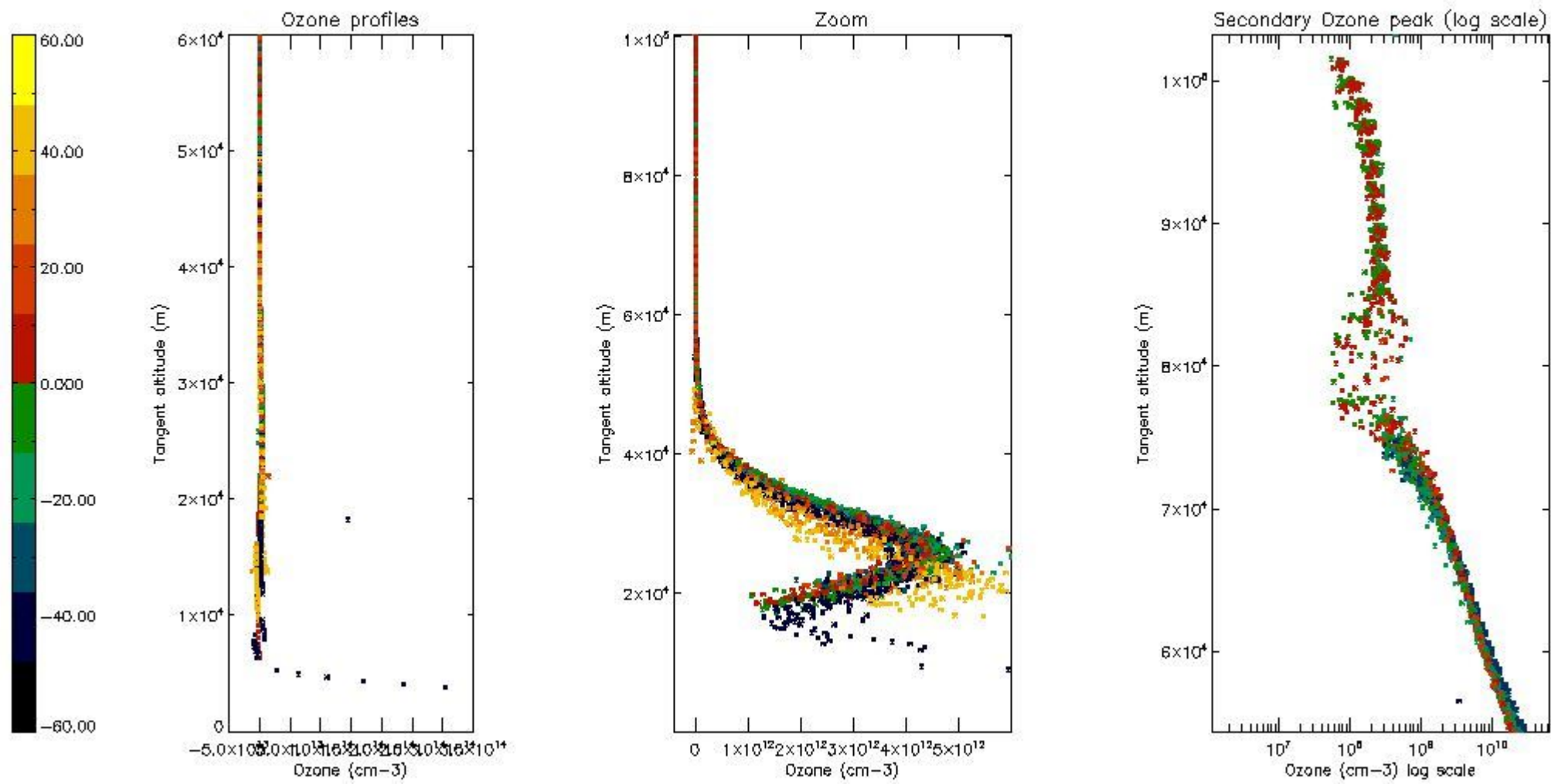
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



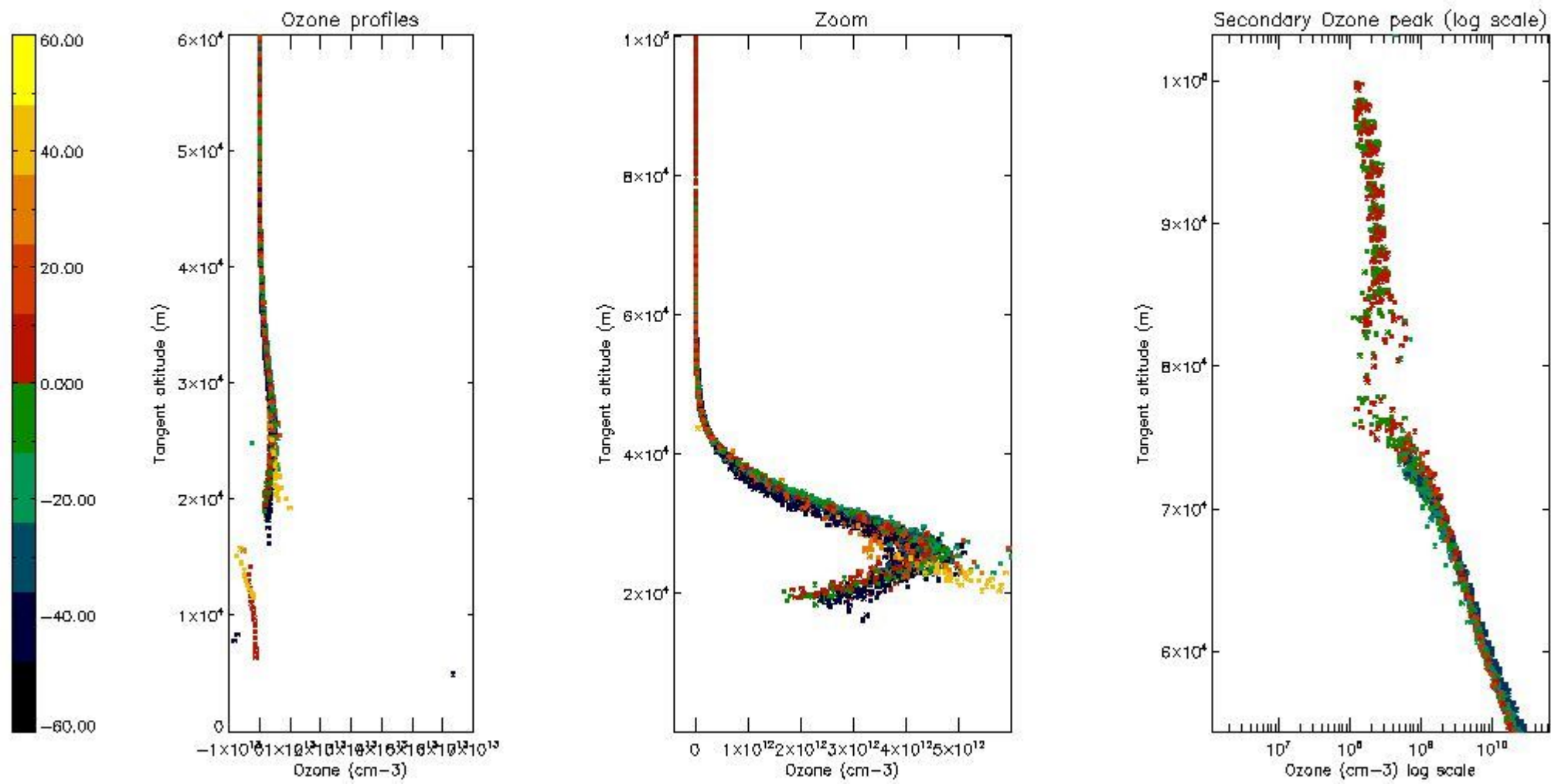
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



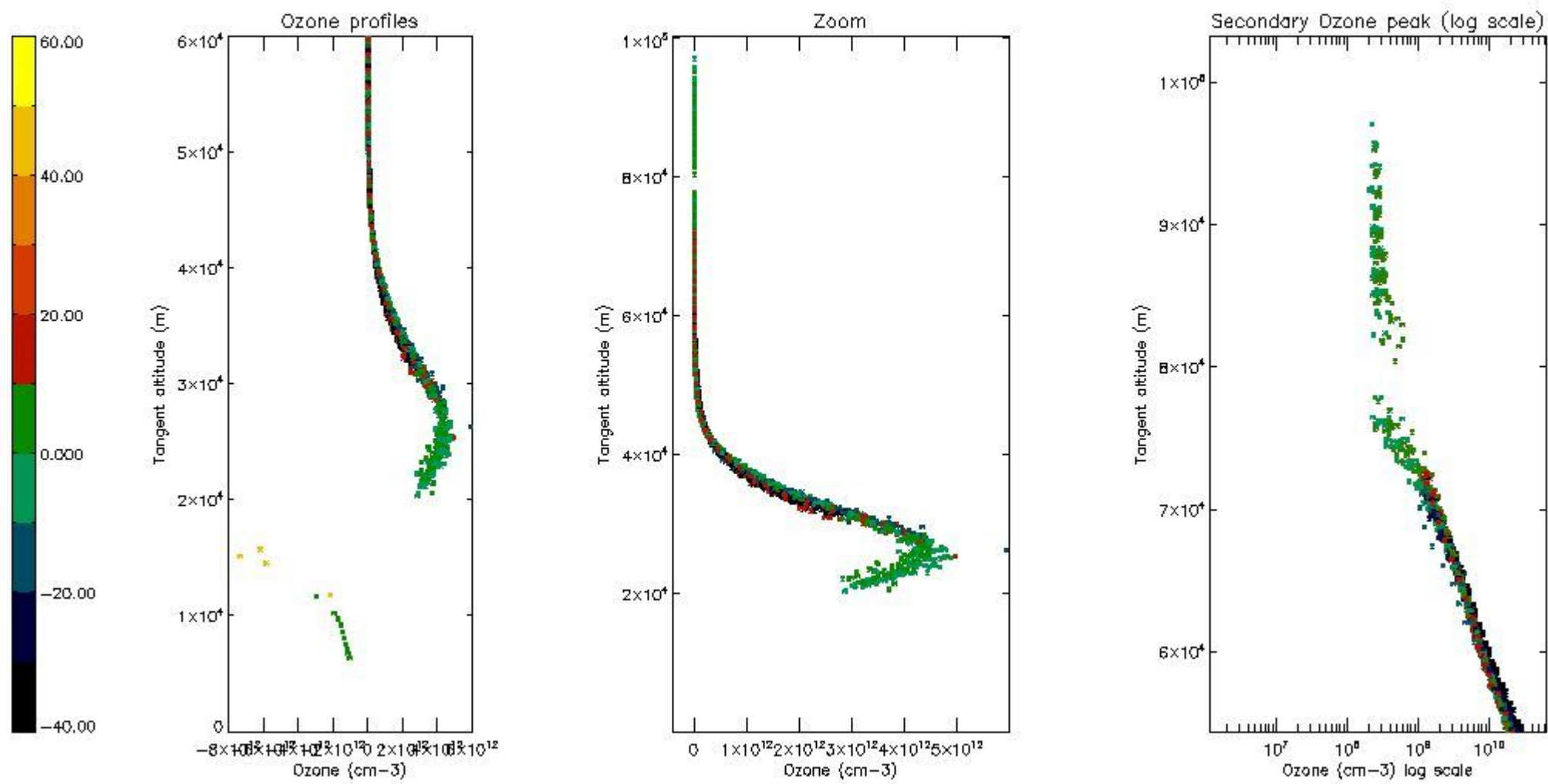
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



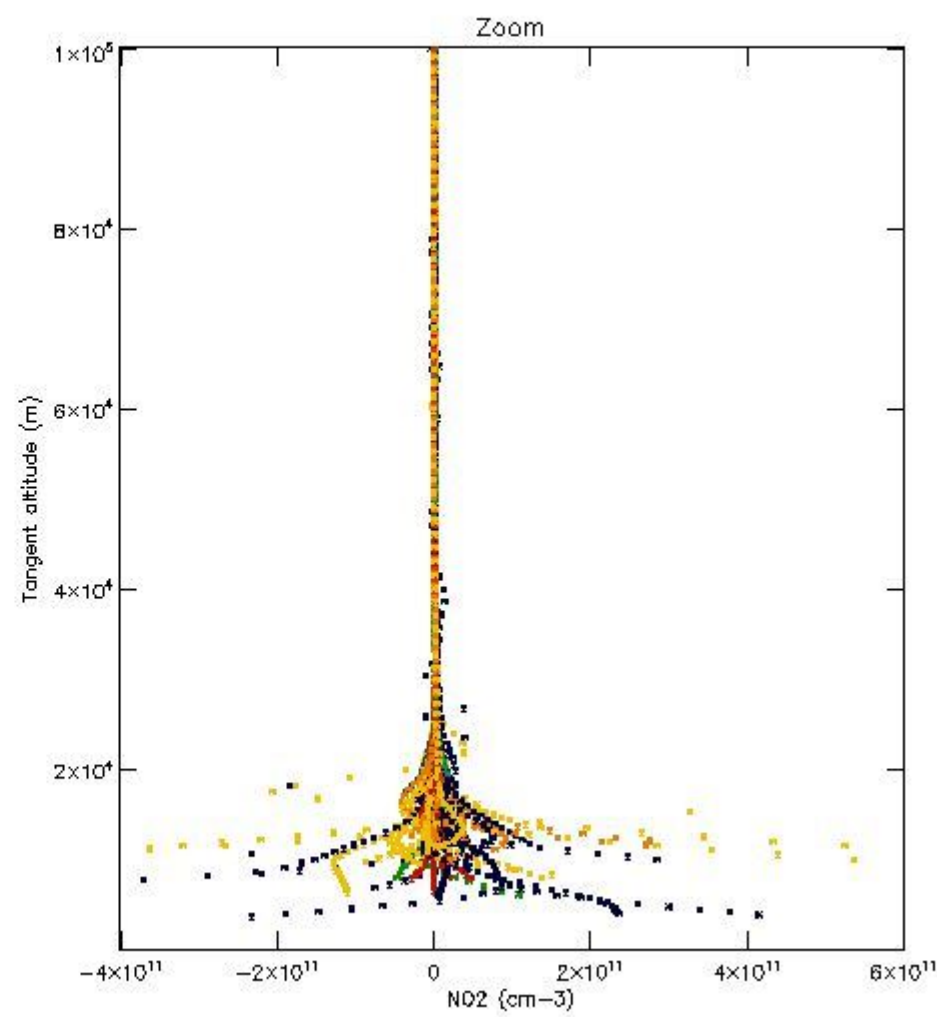
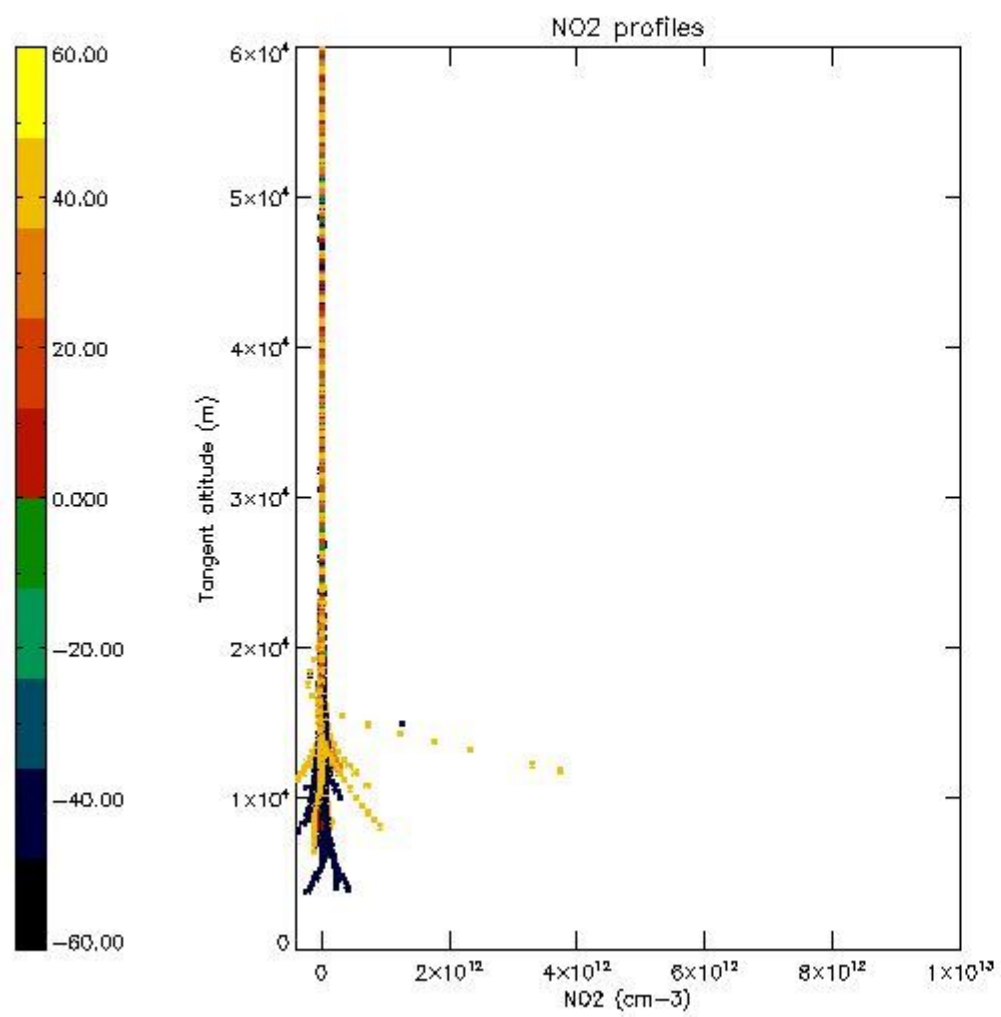
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



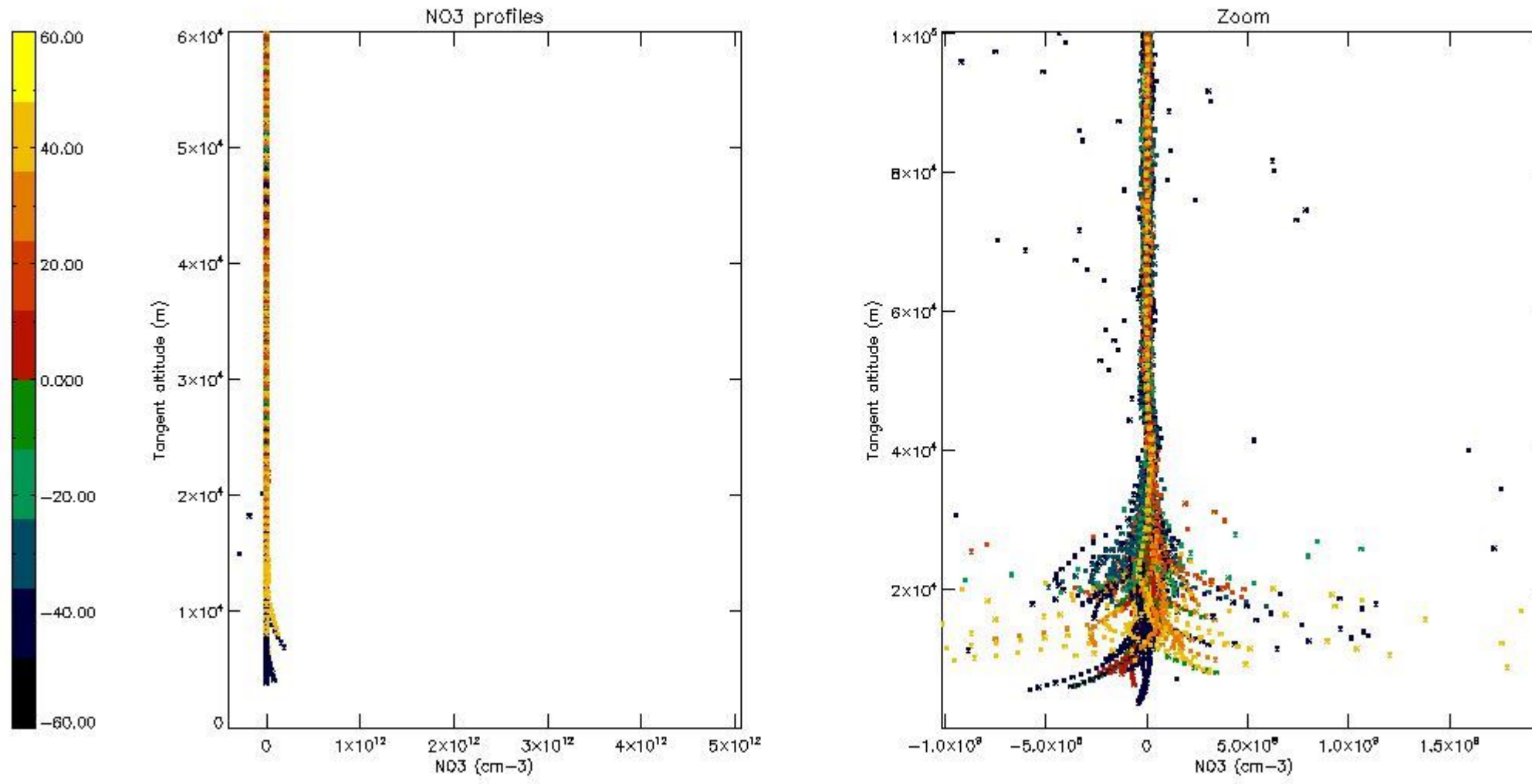
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



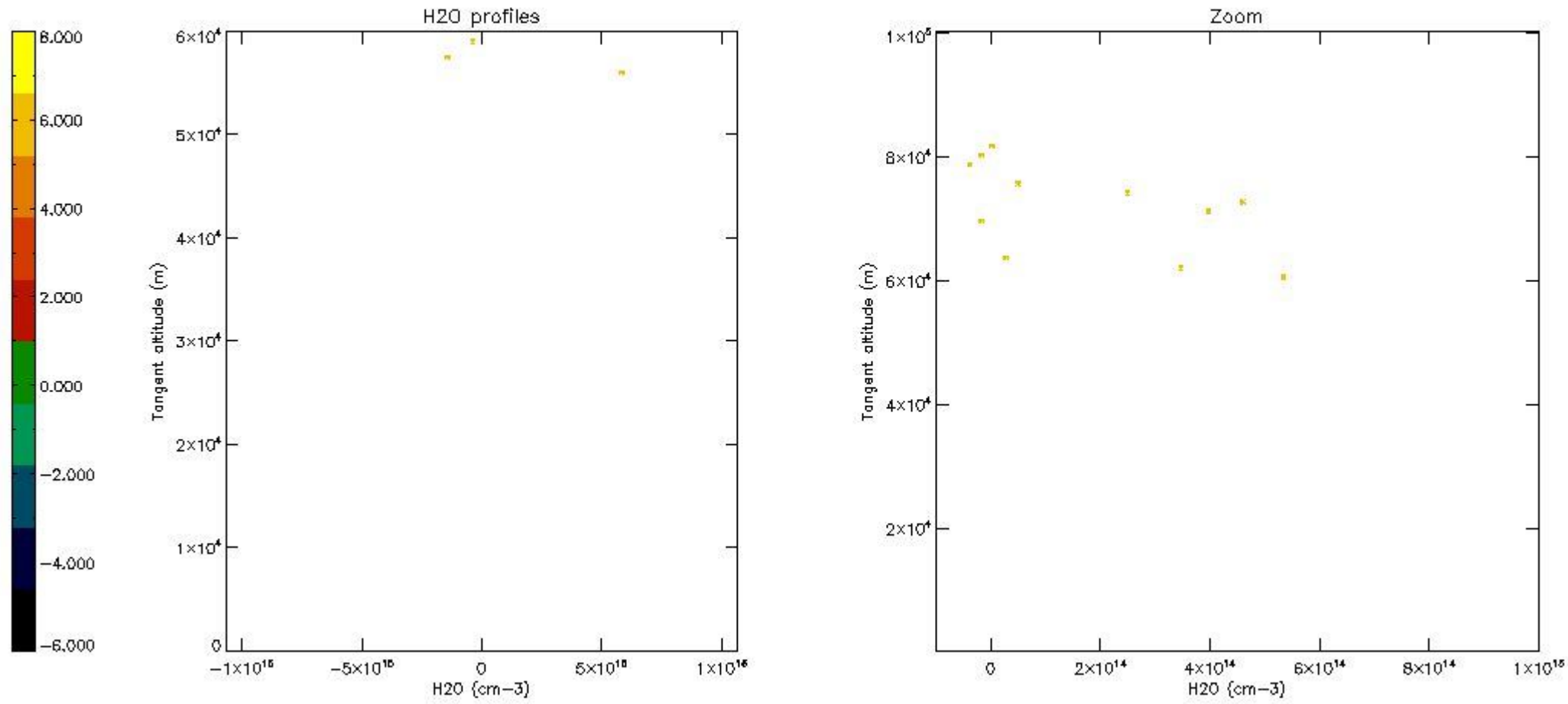
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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	01-FEB-2011 00:14:40
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-FEB-2011 00:14:40
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-FEB-2011 00:14:40

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

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[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](#)

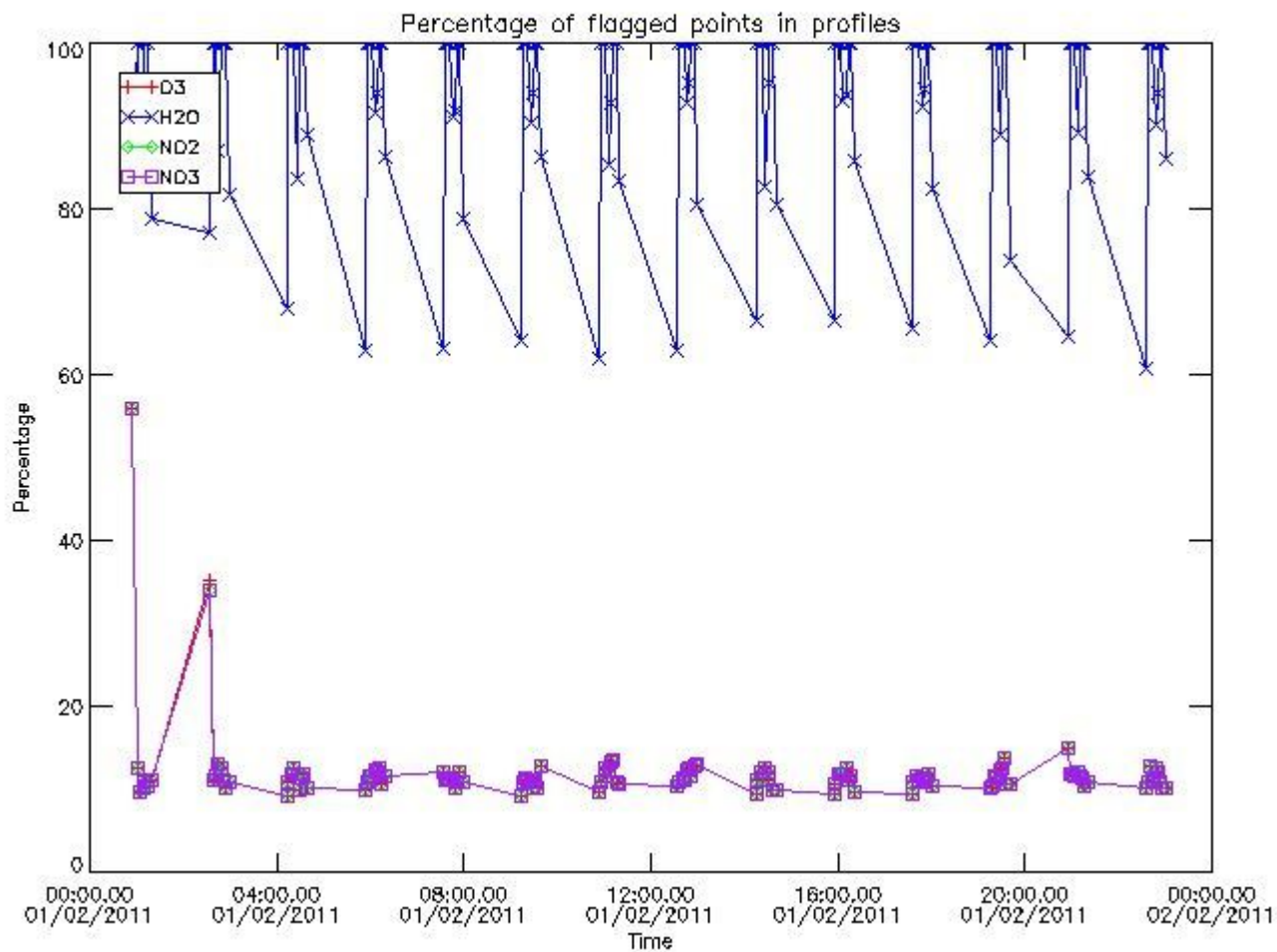
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289	GOM_NL__2PRFIN20110201_233747_000000483099_00102_46668_4671.N1	01-FEB-2011 23:37:47	Bright	47.500	36	50Alp UMa	1.8000	6300.0	95	46668	No
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3. Quality information per product

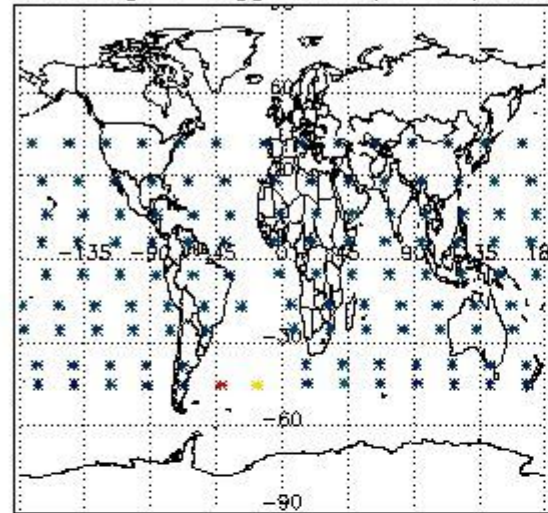
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3.1 Plot quality information per product (time dependant)

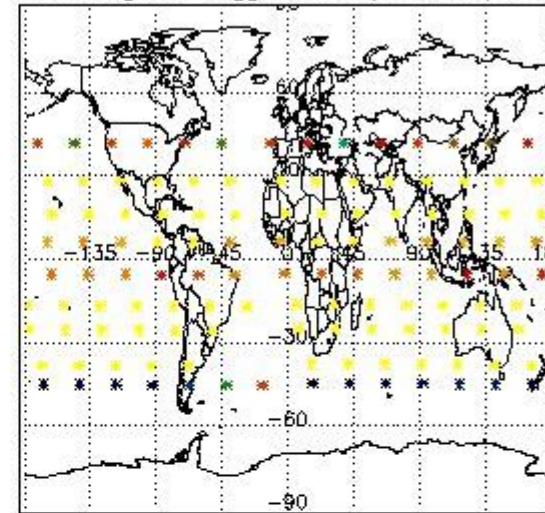


3.2 Plot quality information per product (world map)

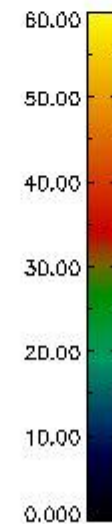
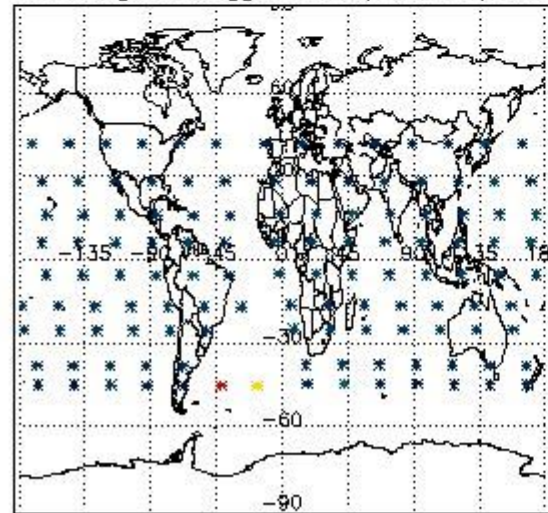
Percentage of flagged data per O3 profile



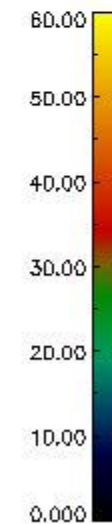
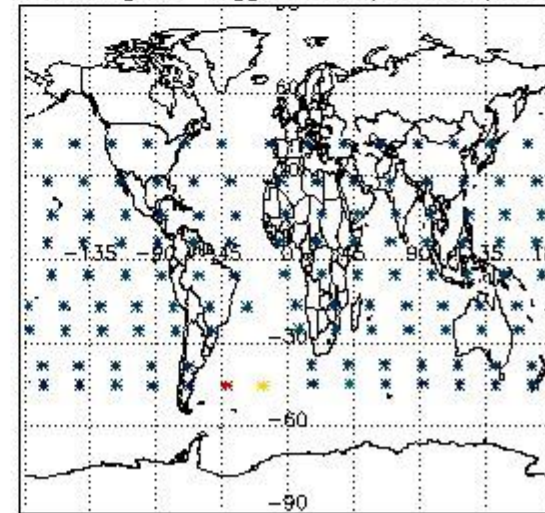
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

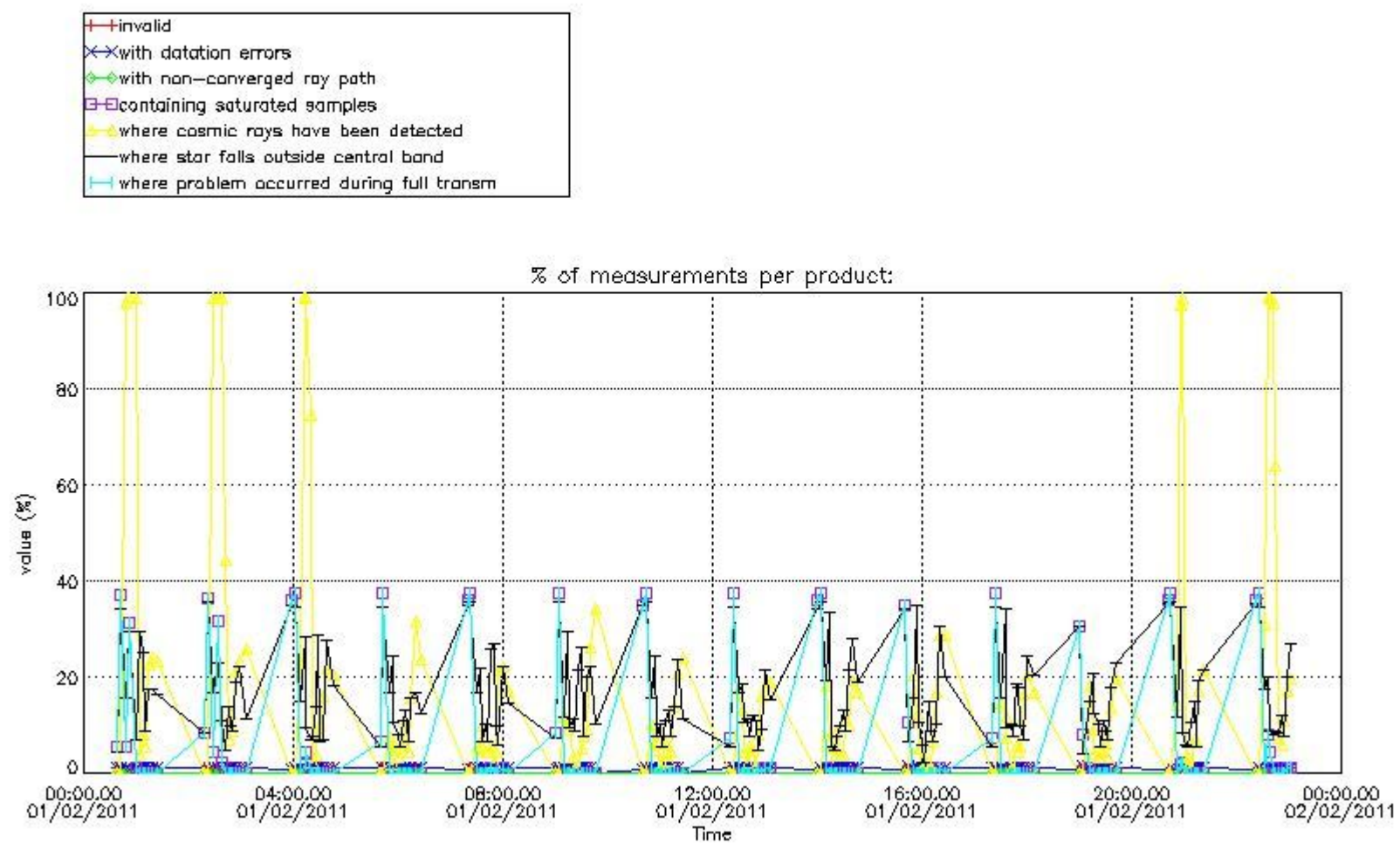


4. Level 1 quality information per product

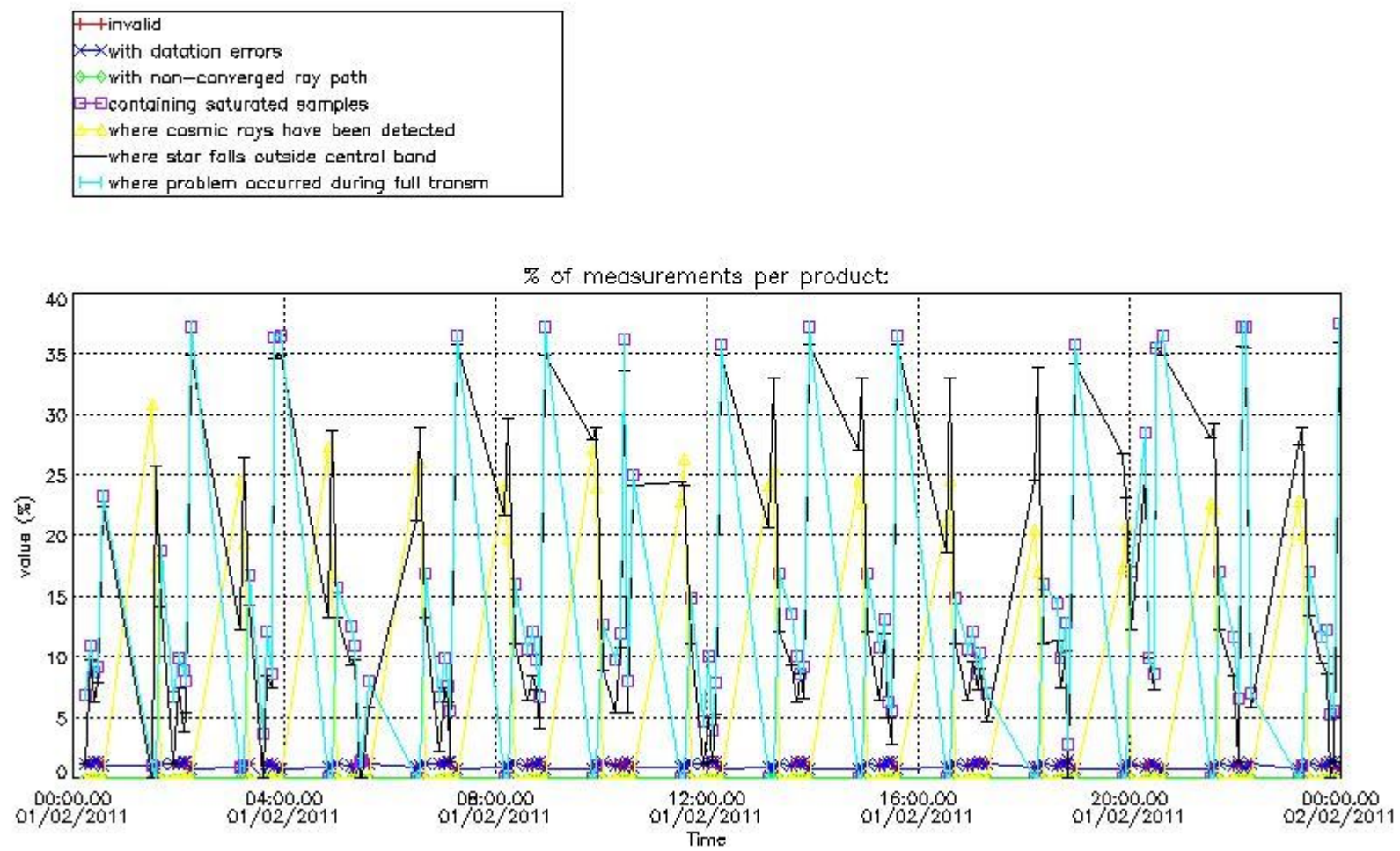
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4.1 Plot quality information per product (time dependant) coming from level 1b processing

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

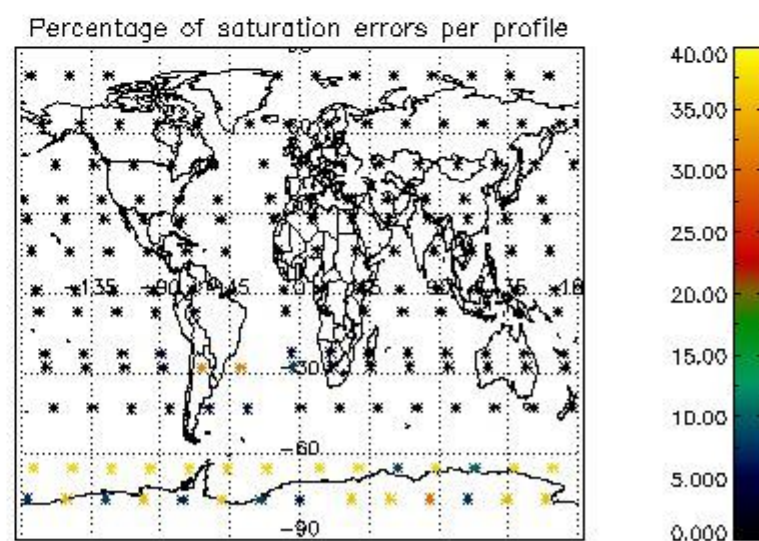
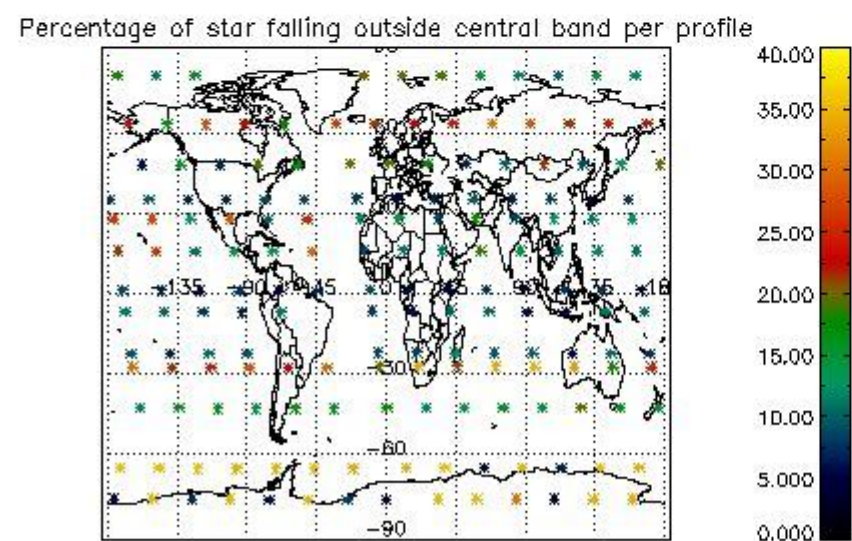
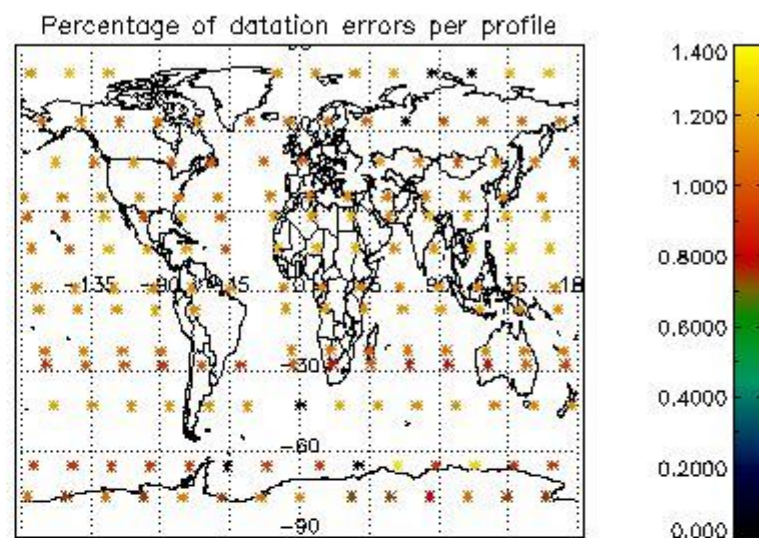
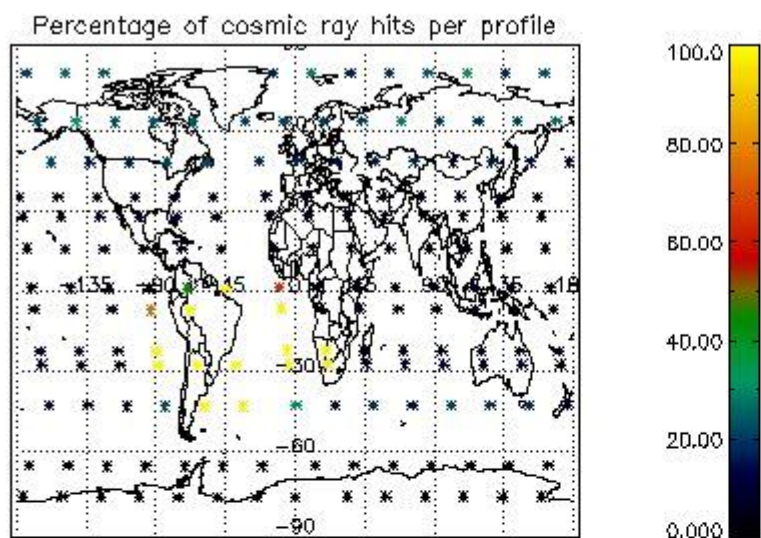


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

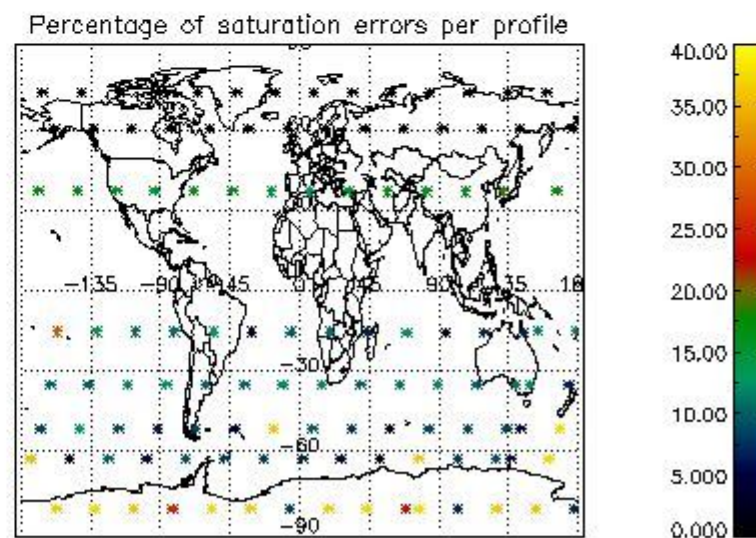
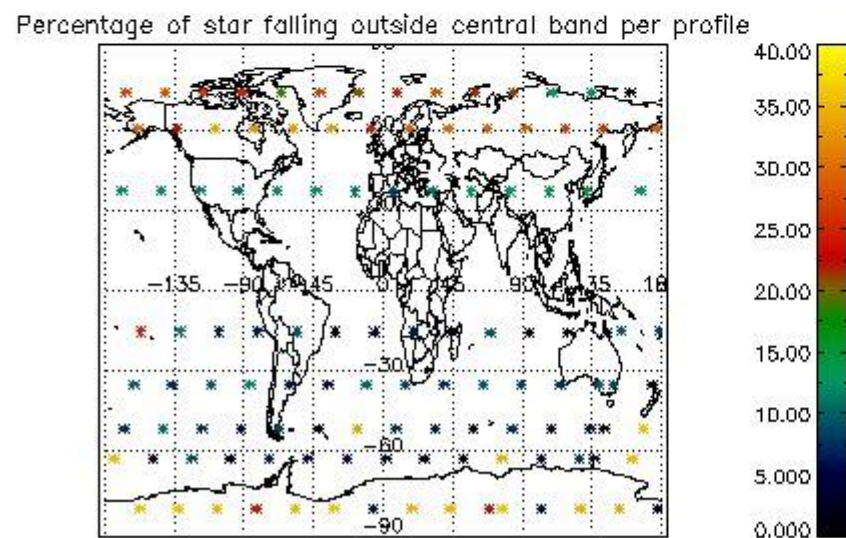
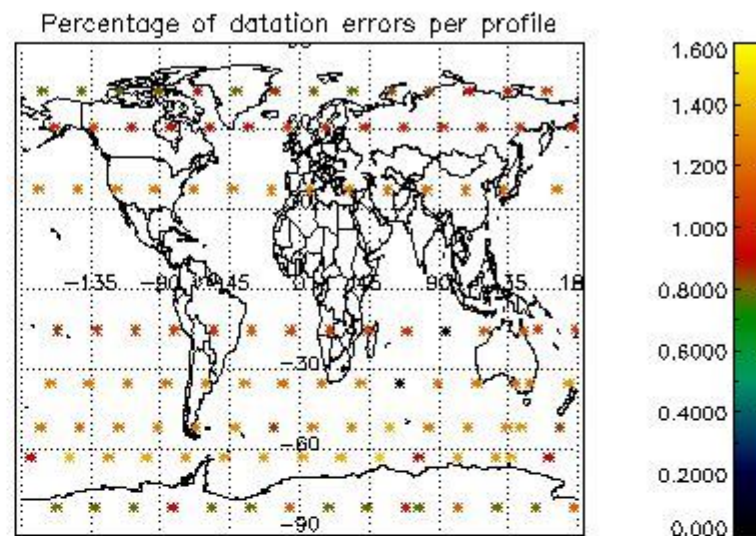
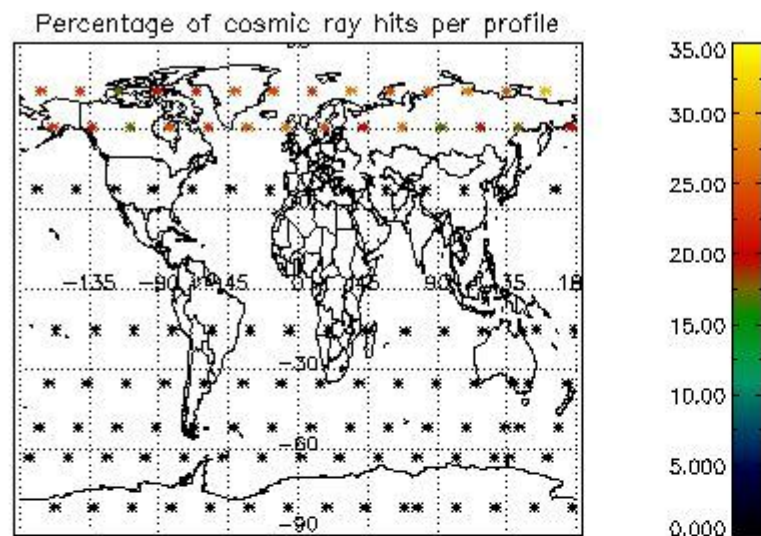


4.2 Plot quality information per product coming from level 1b processing (world map)

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

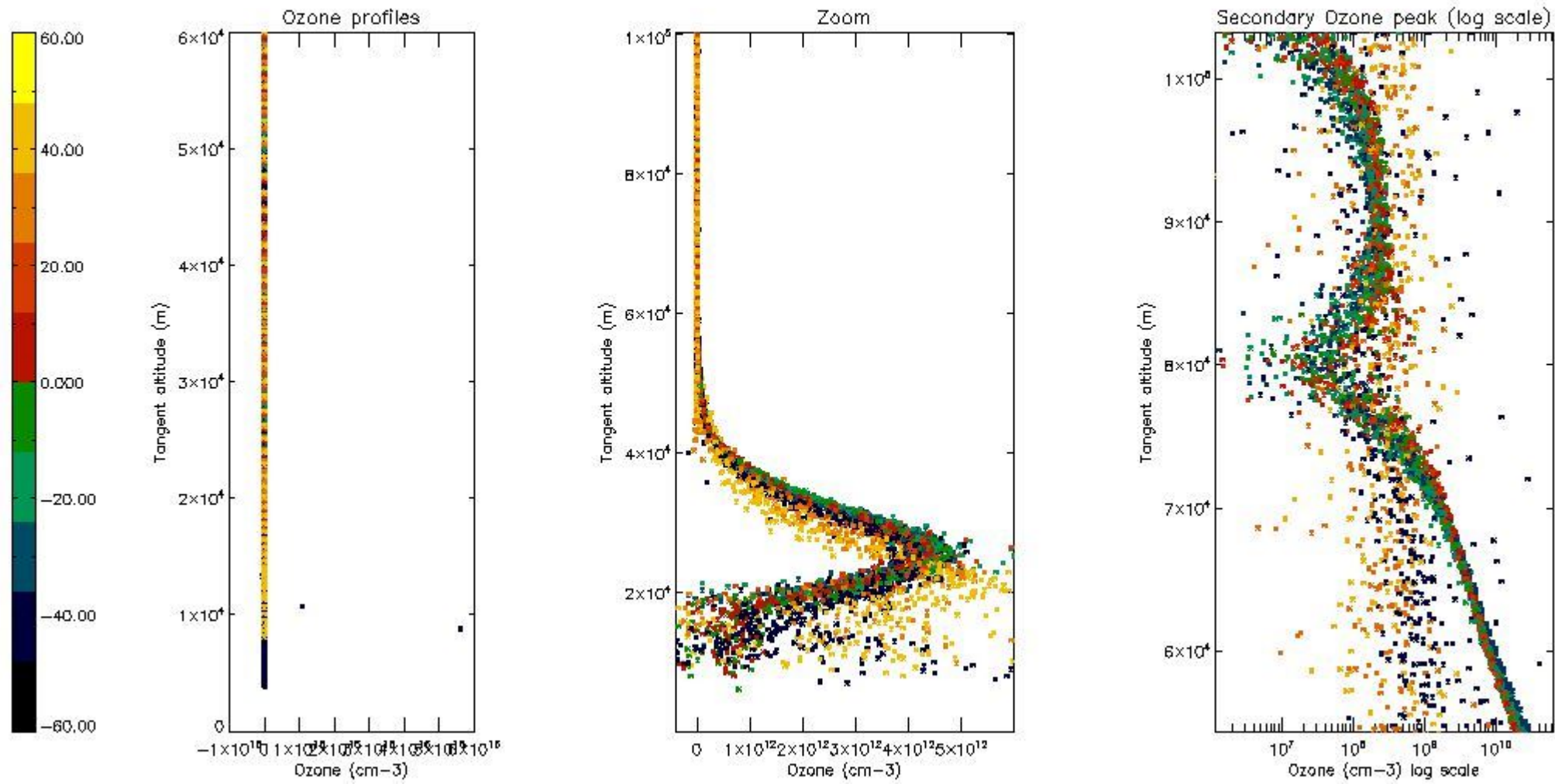
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	21

STD < 10	17
STD < 5	12

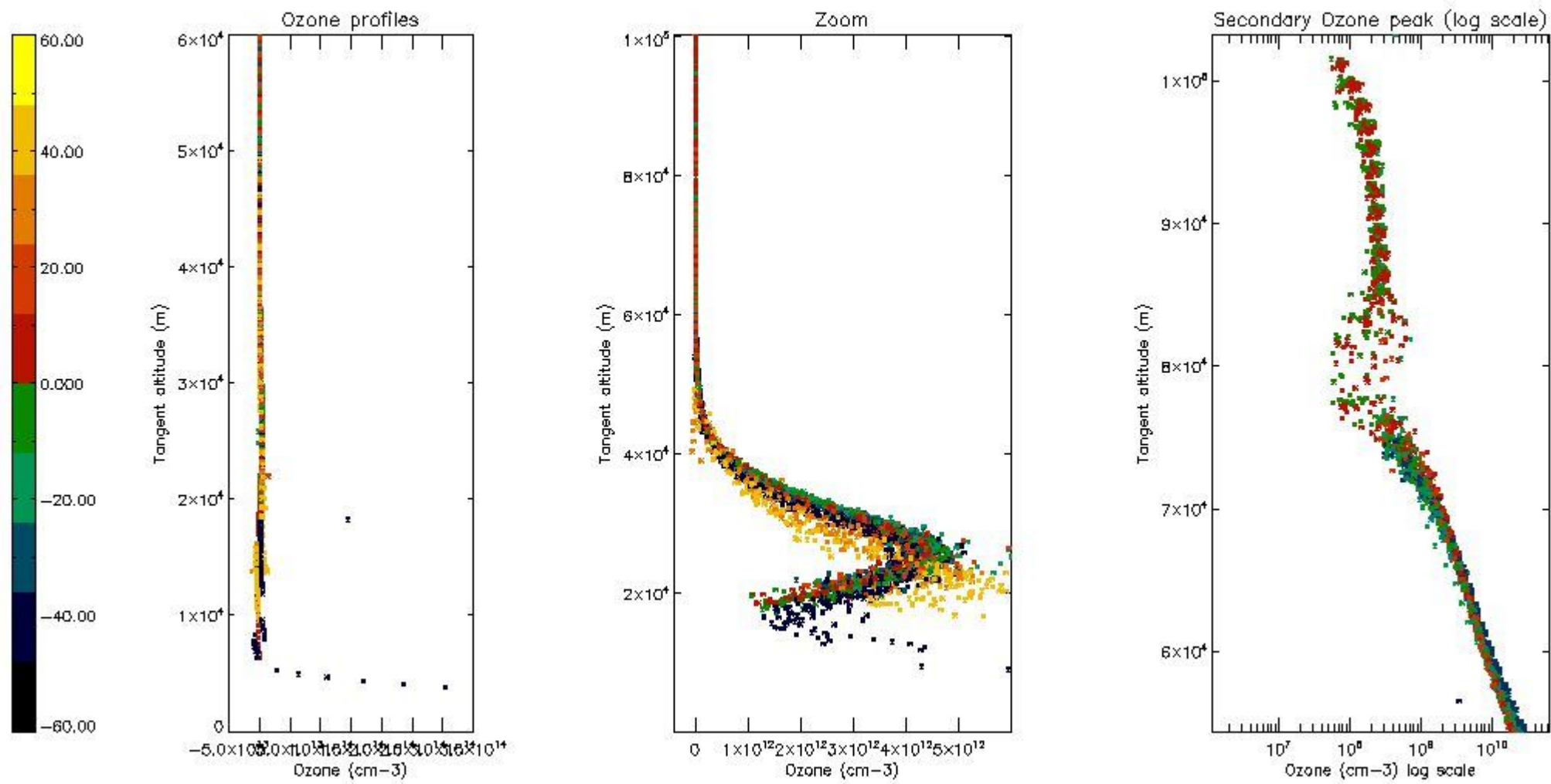
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



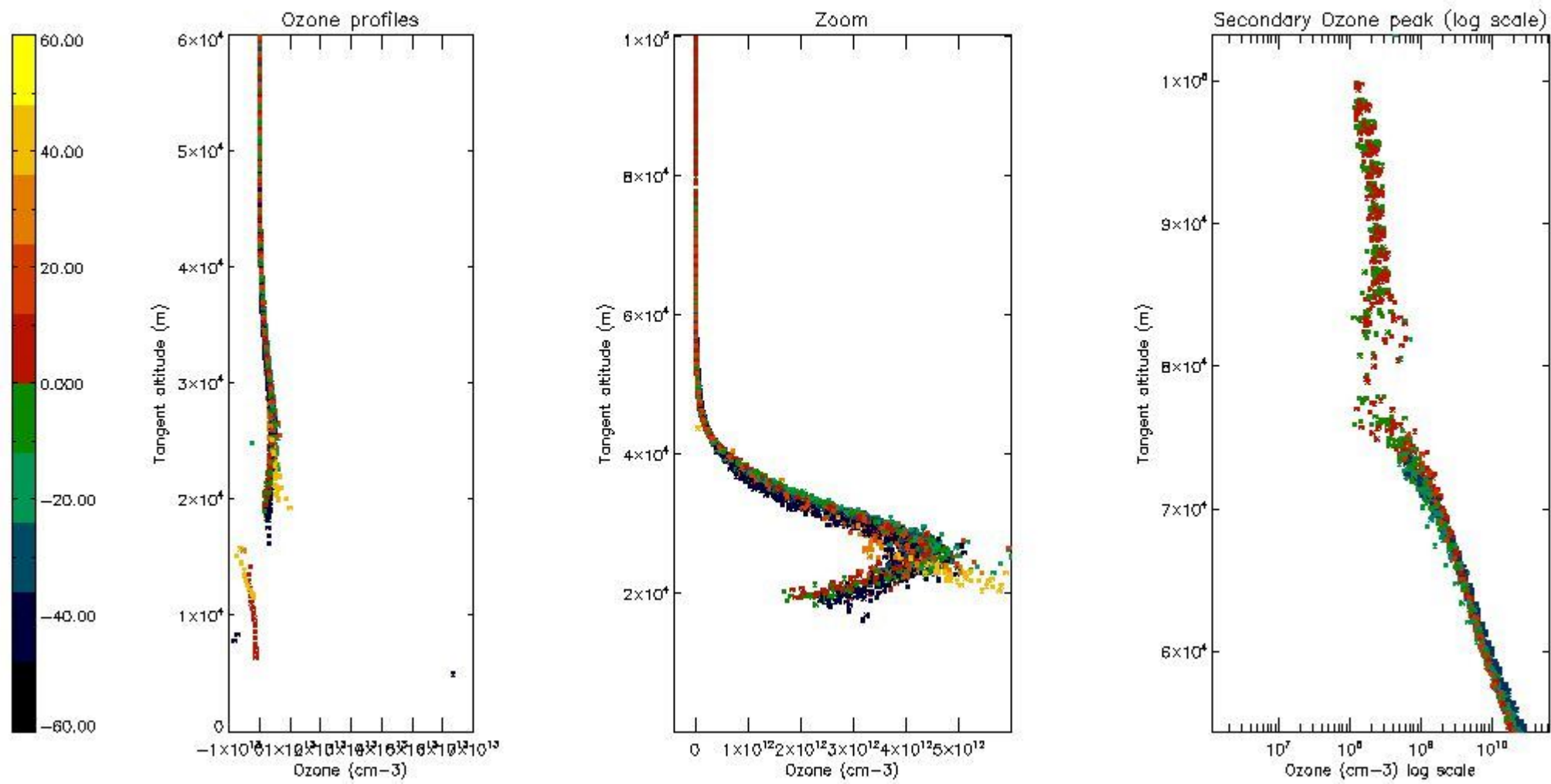
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



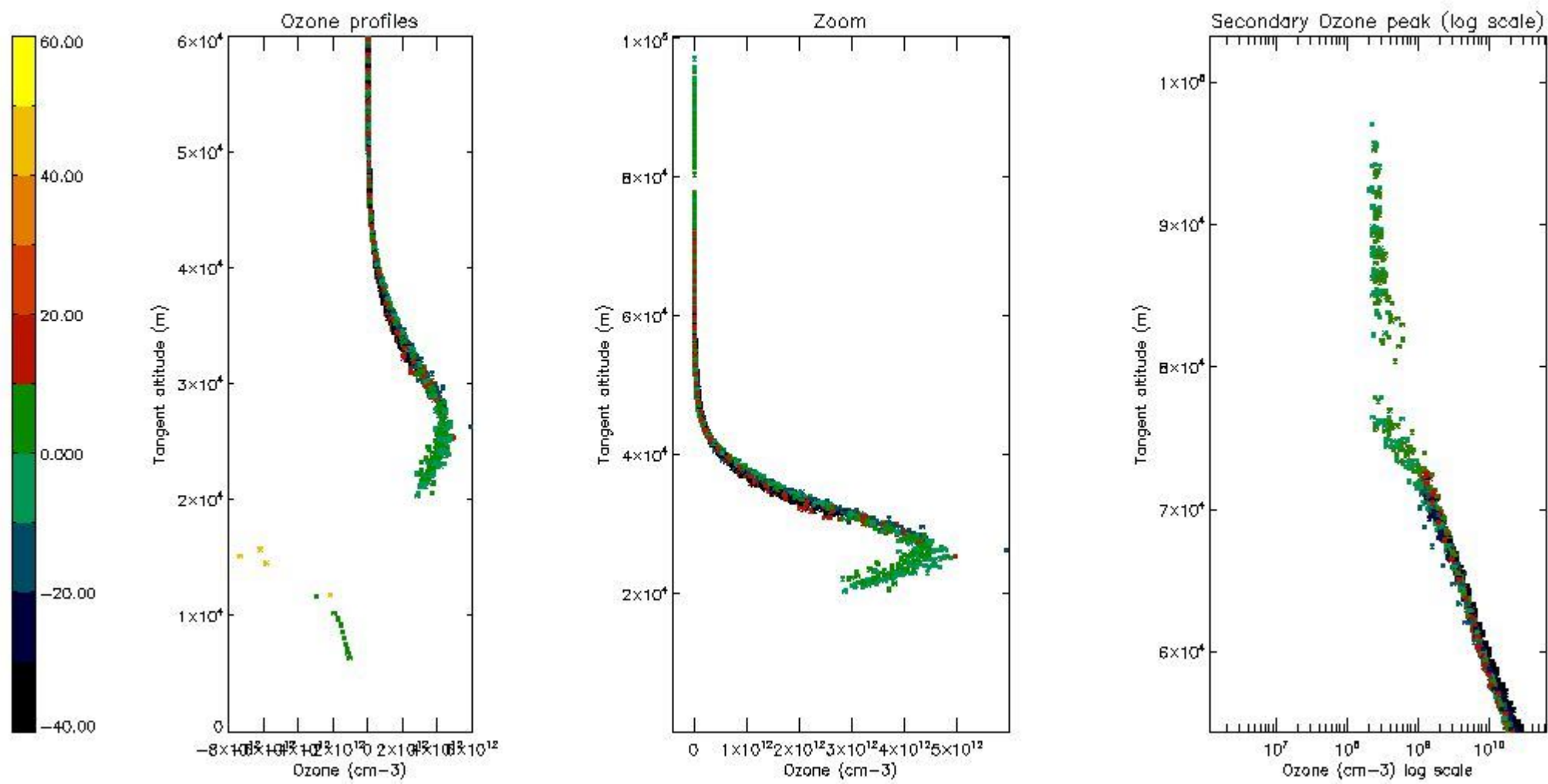
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



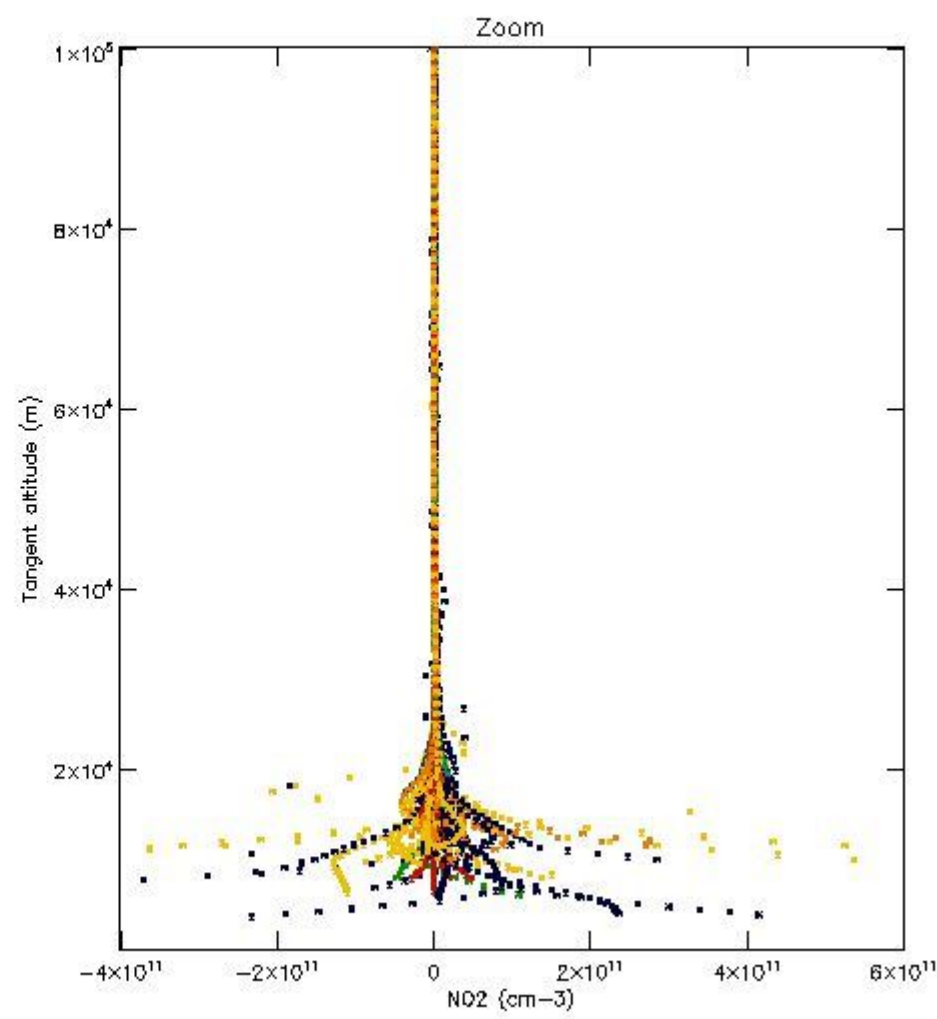
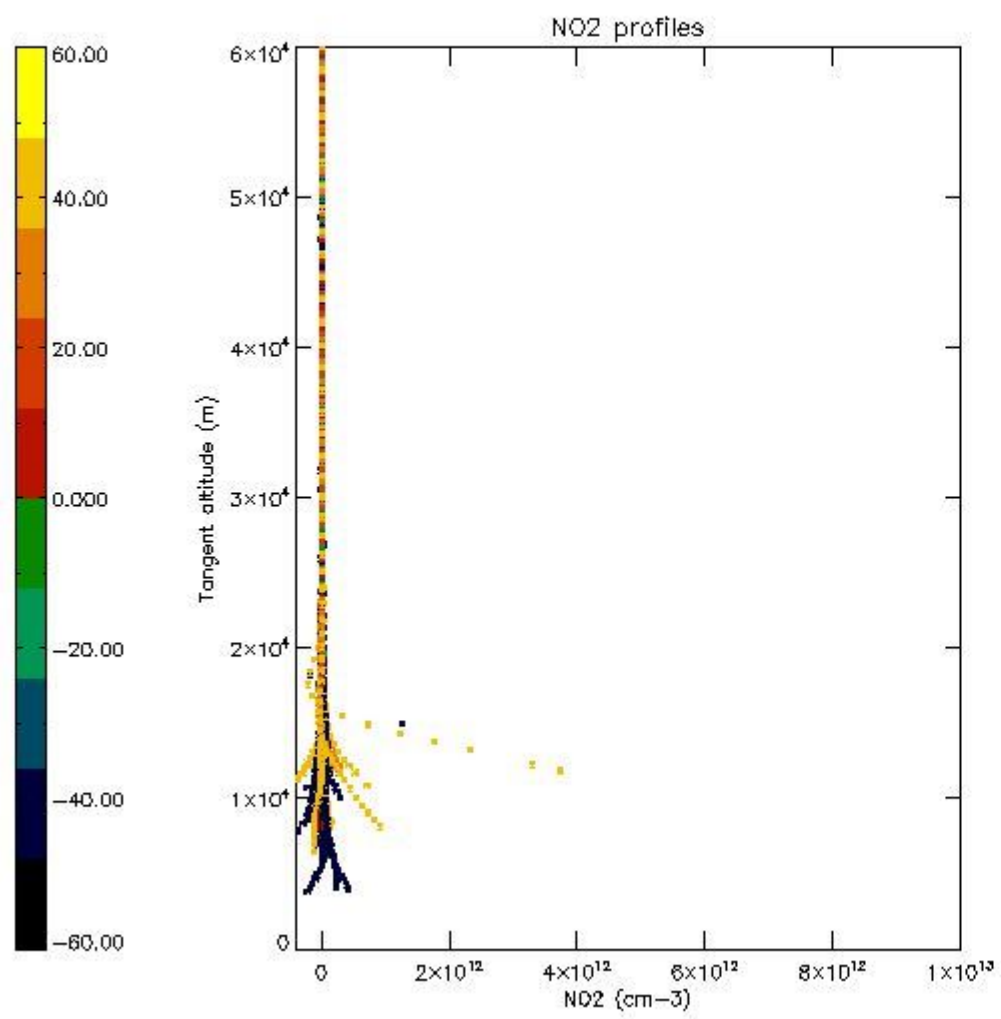
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



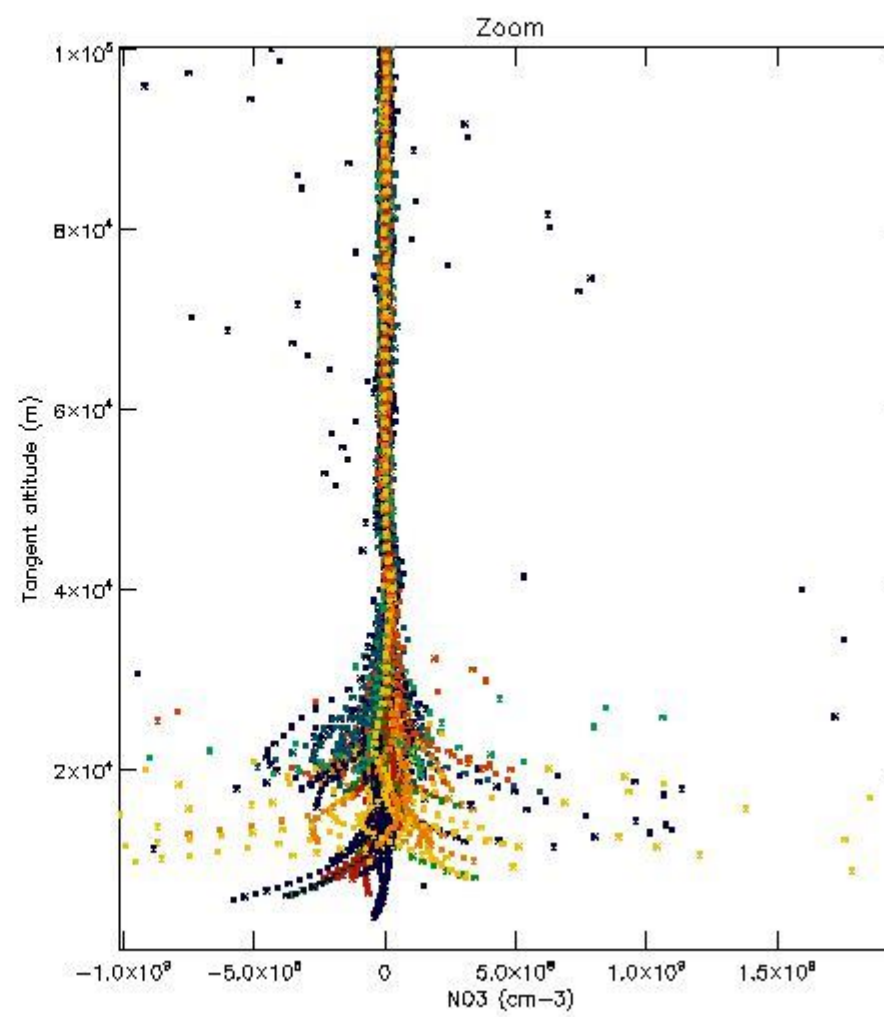
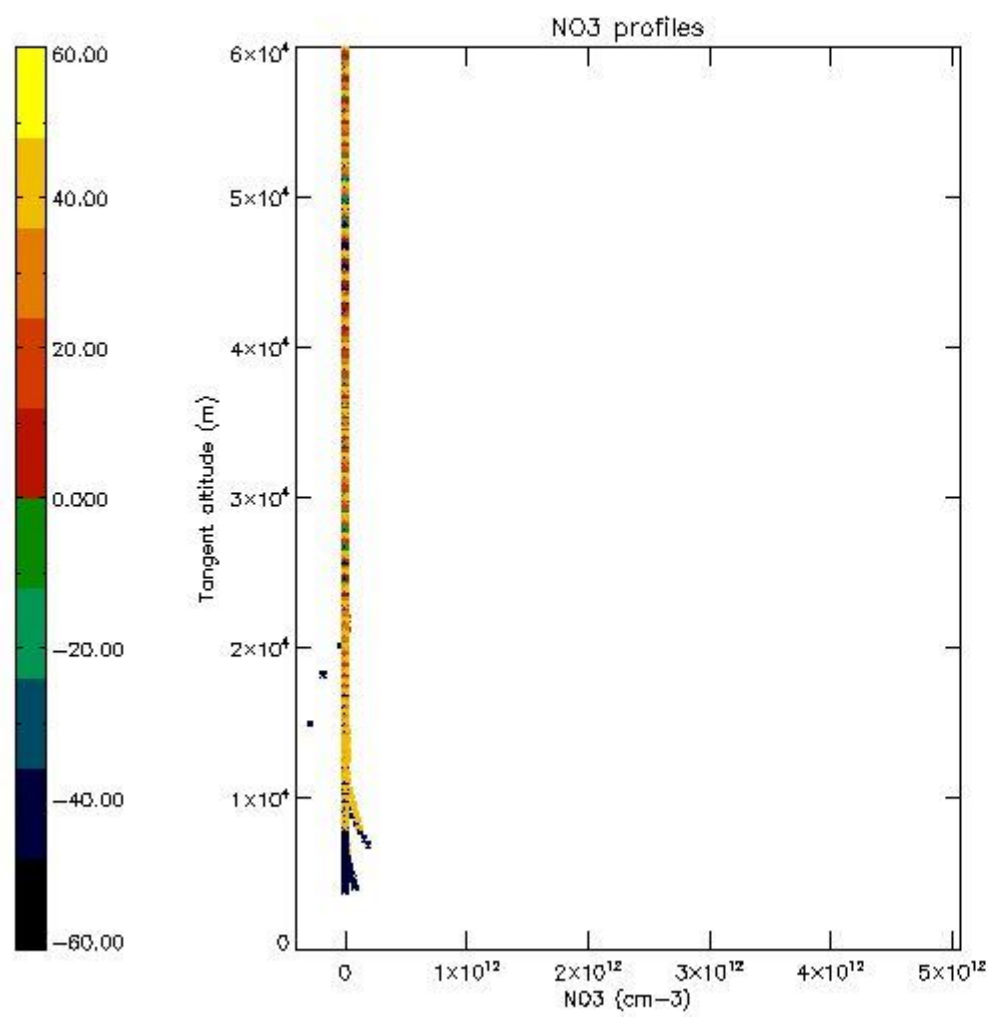
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



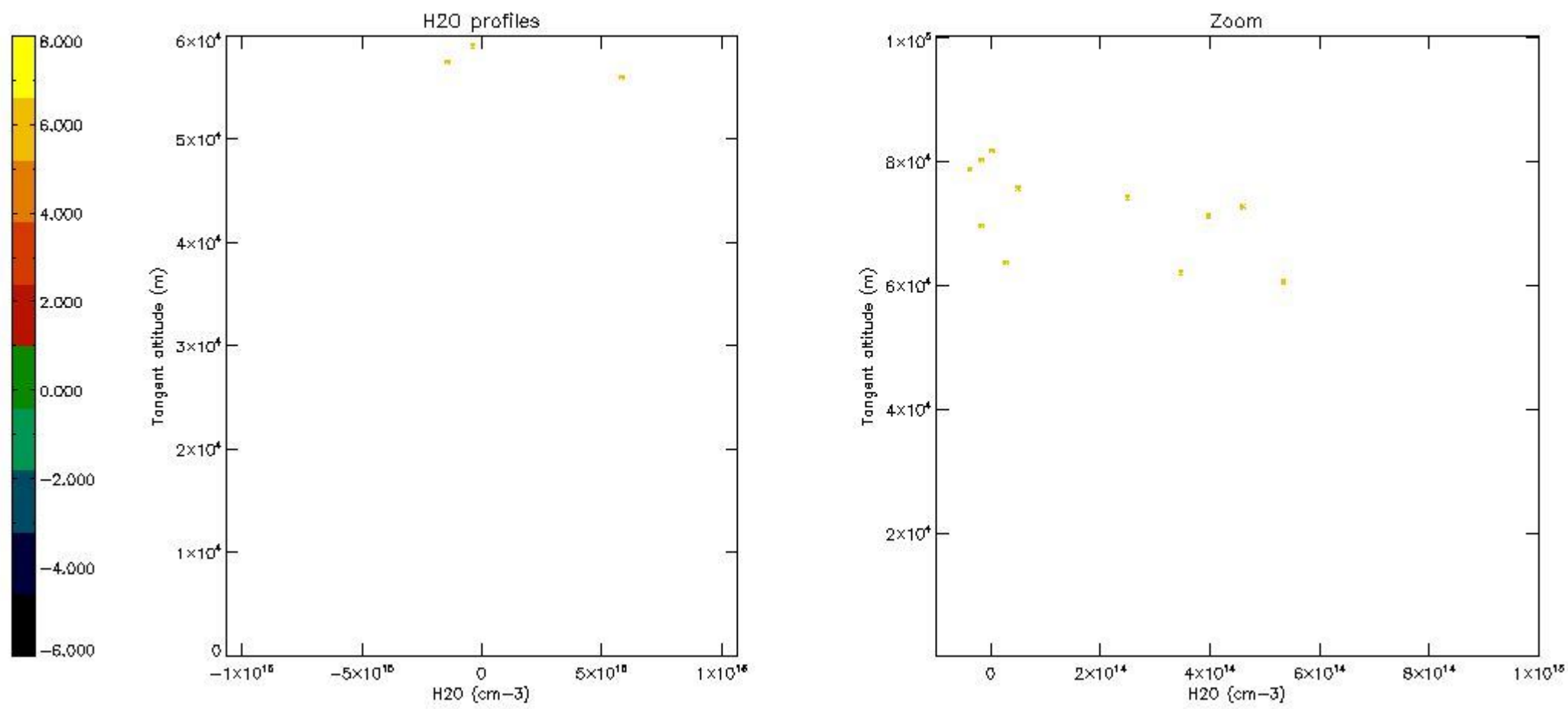
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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)

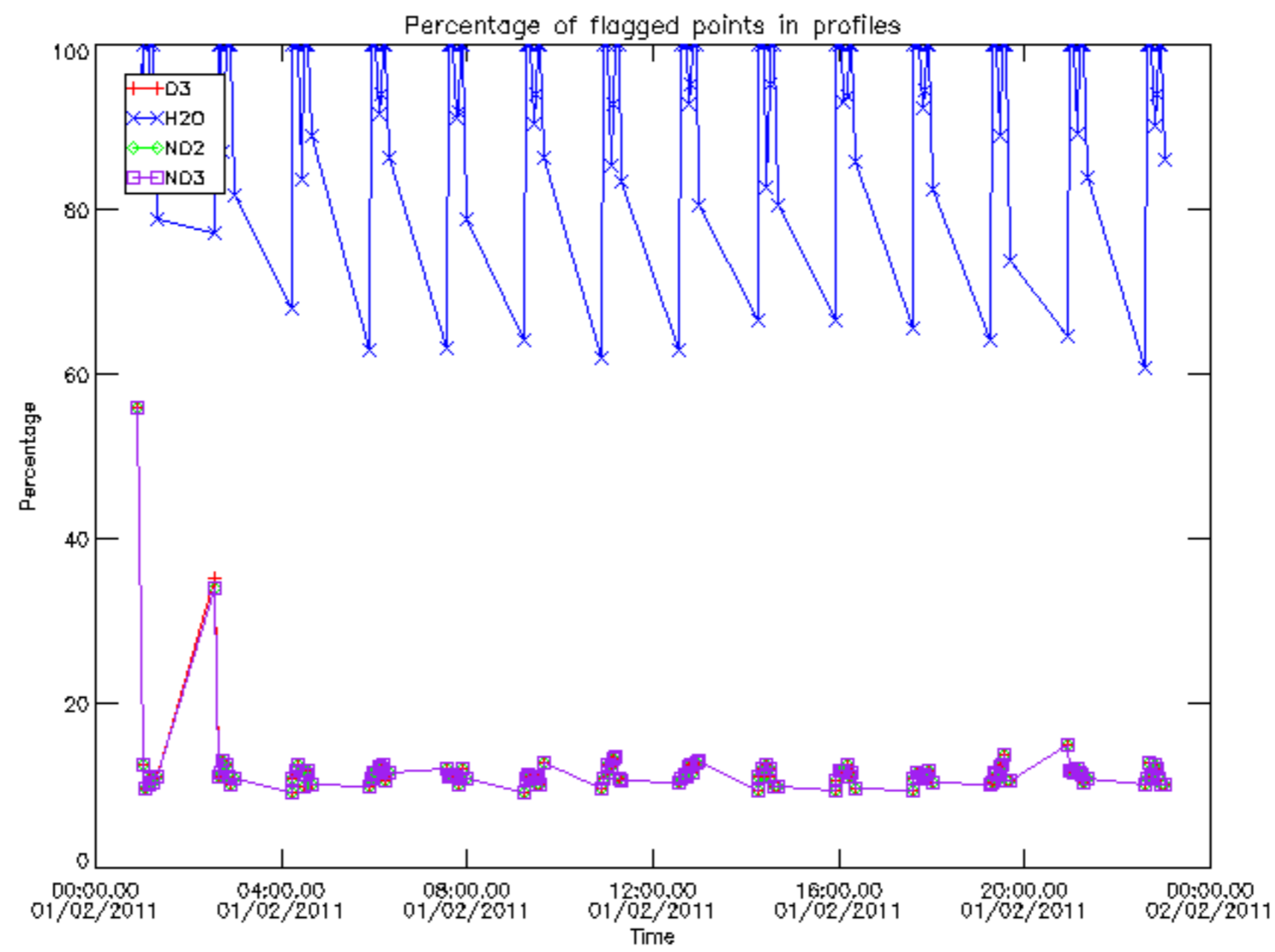
The colorbar represents the latitude.



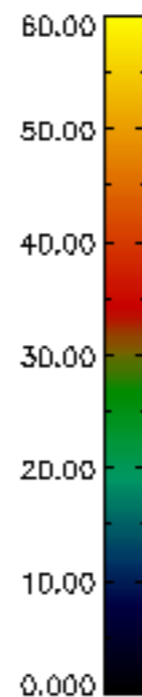
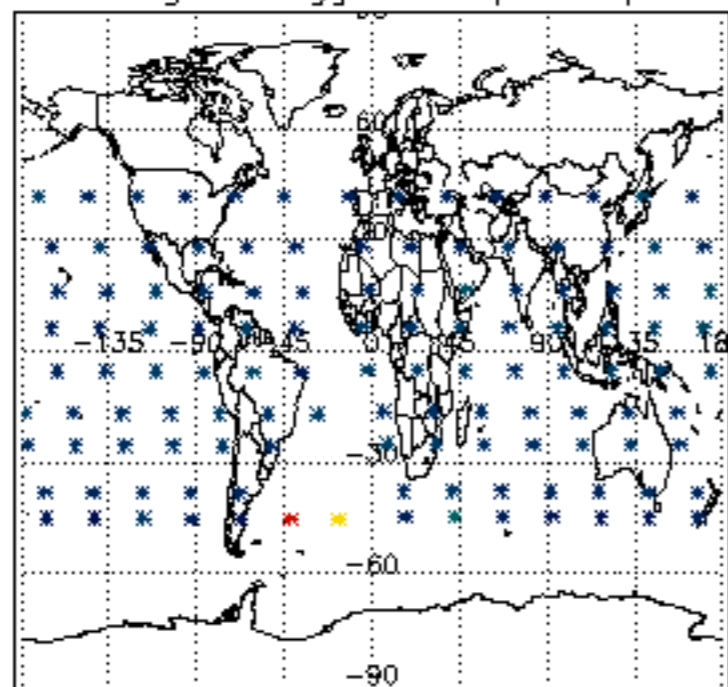
6. Auxiliary Data Files used for the production reported in section 2

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.

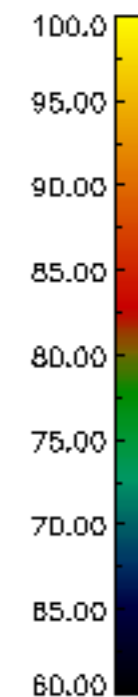
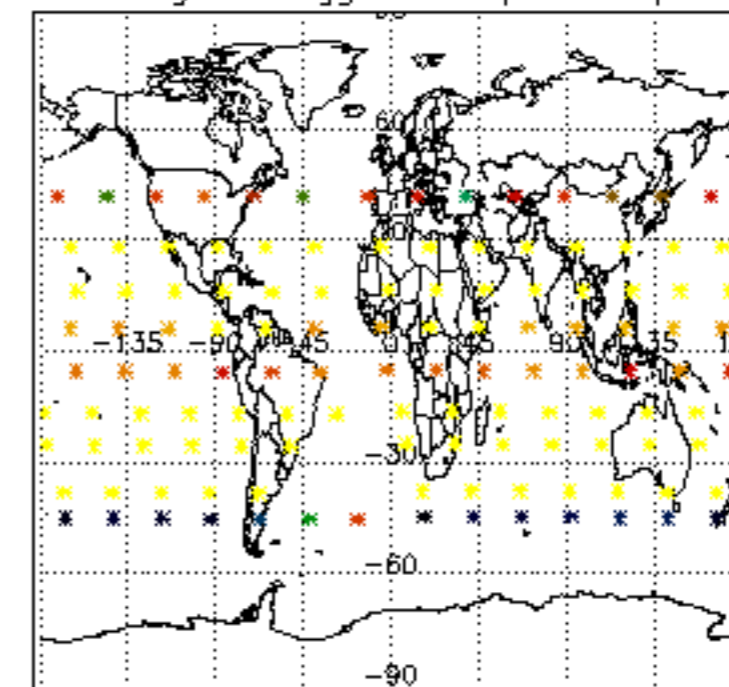
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-FEB-2011 00:14:40
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-FEB-2011 00:14:40
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-FEB-2011 00:14:40



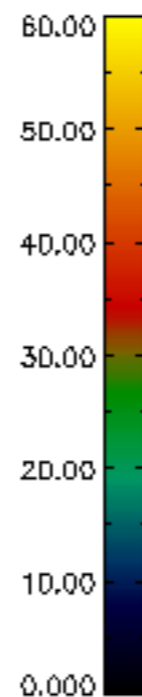
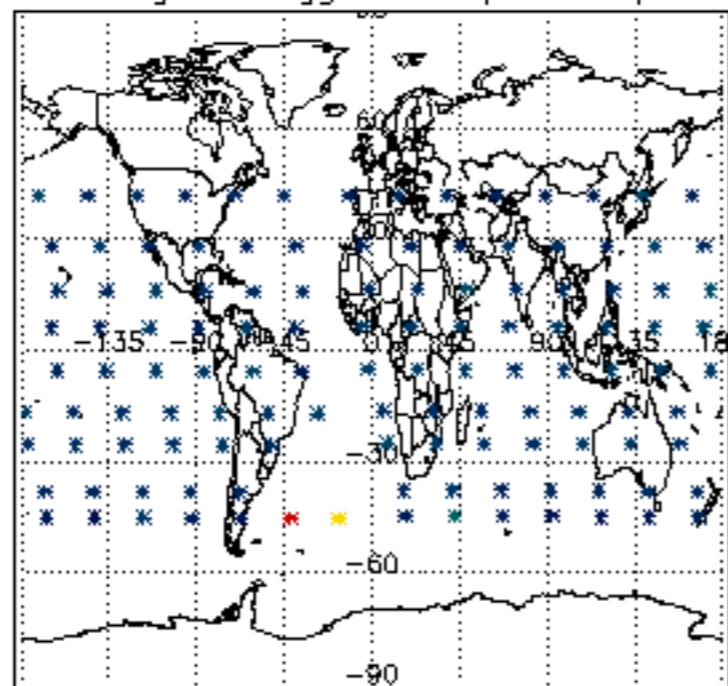
Percentage of flagged data per D3 profile



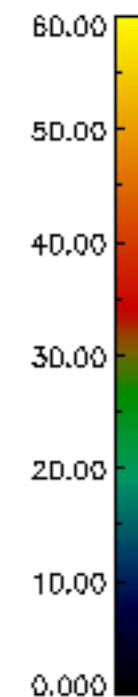
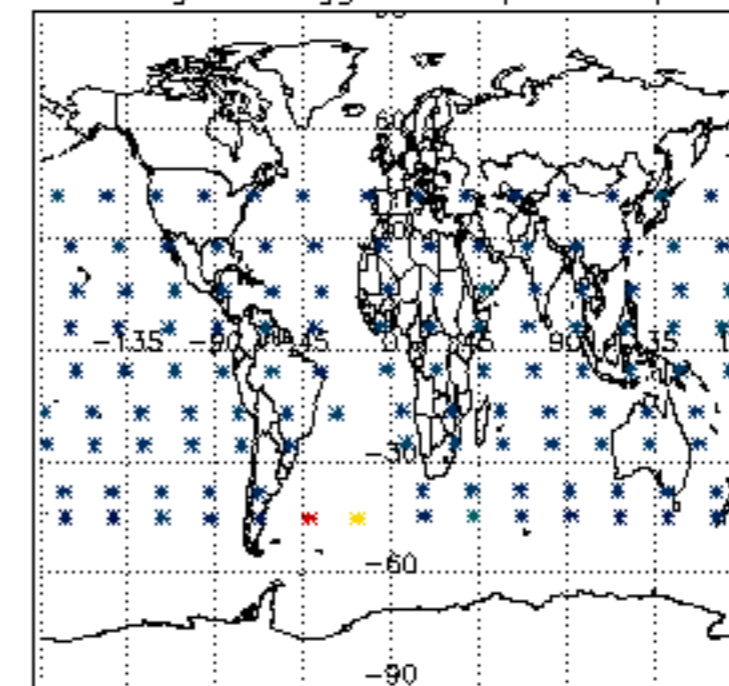
Percentage of flagged data per H2O profile

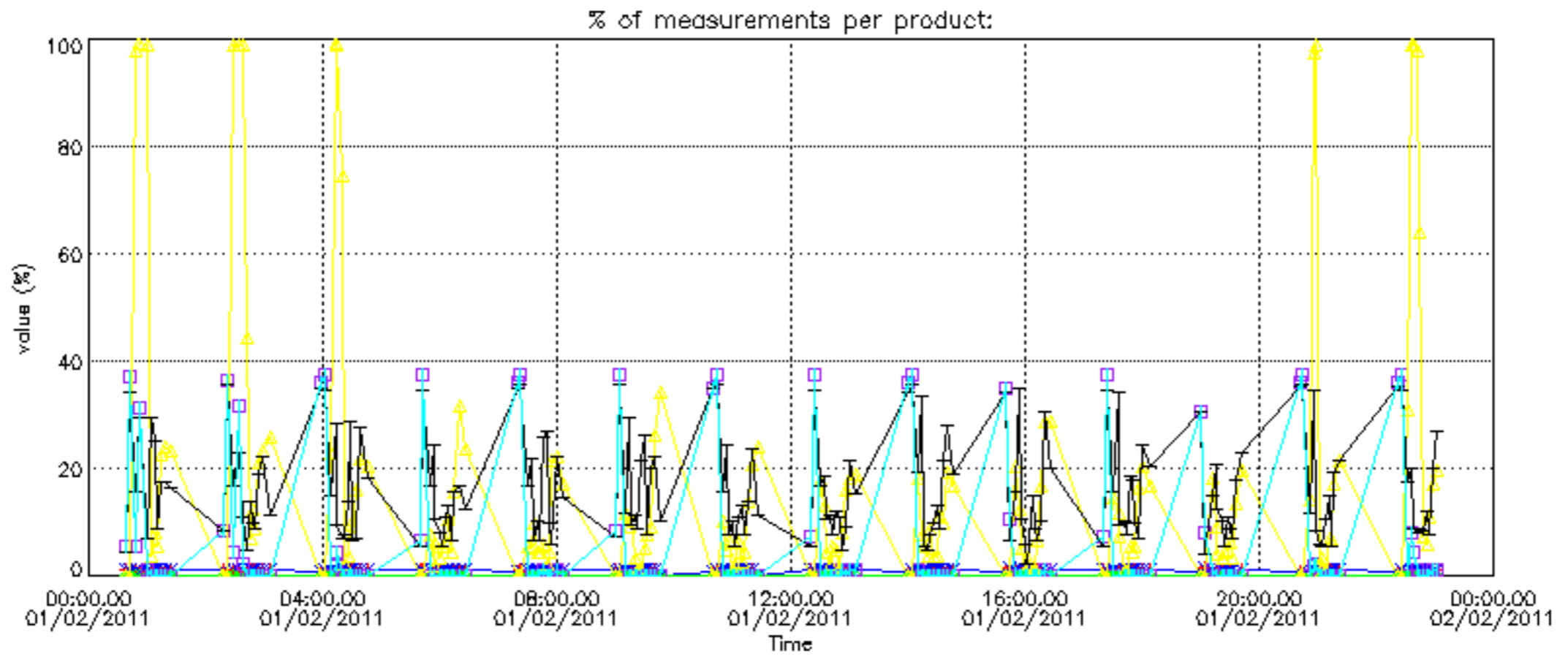


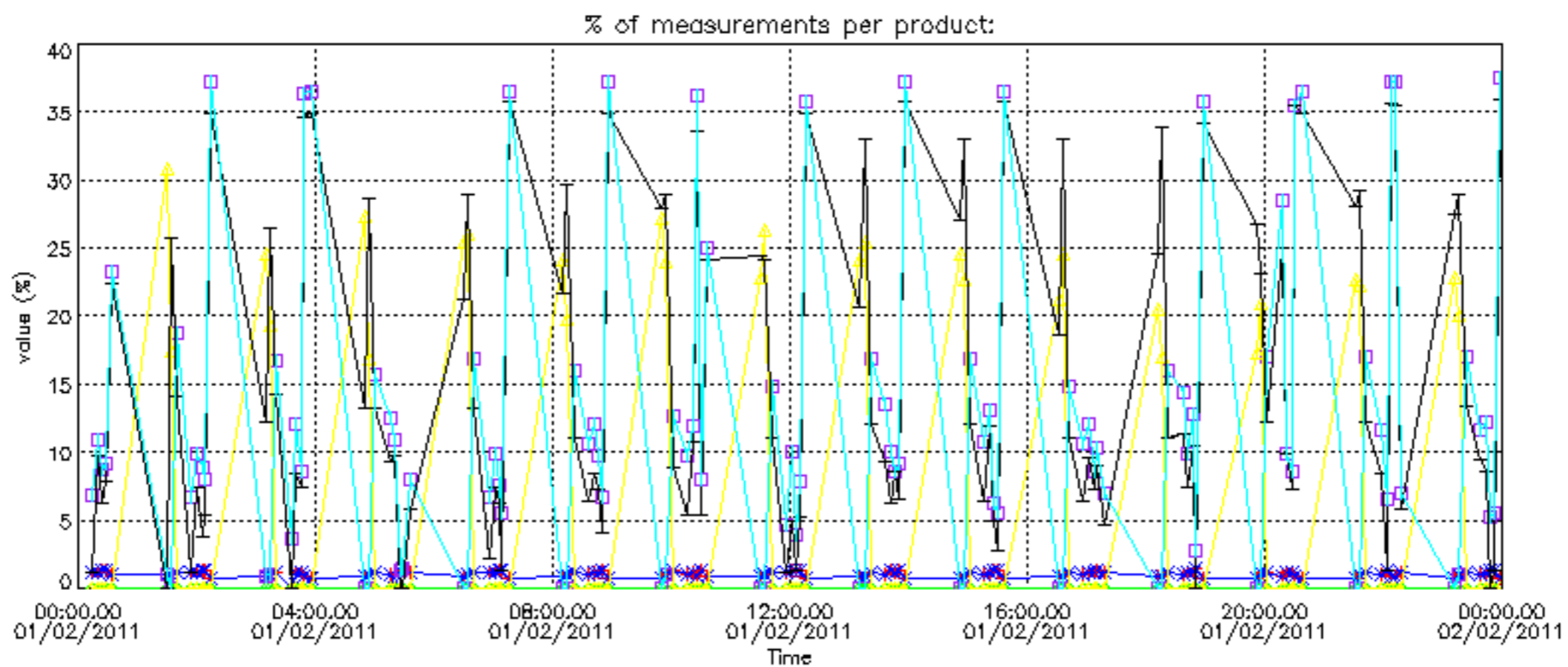
Percentage of flagged data per NO2 profile



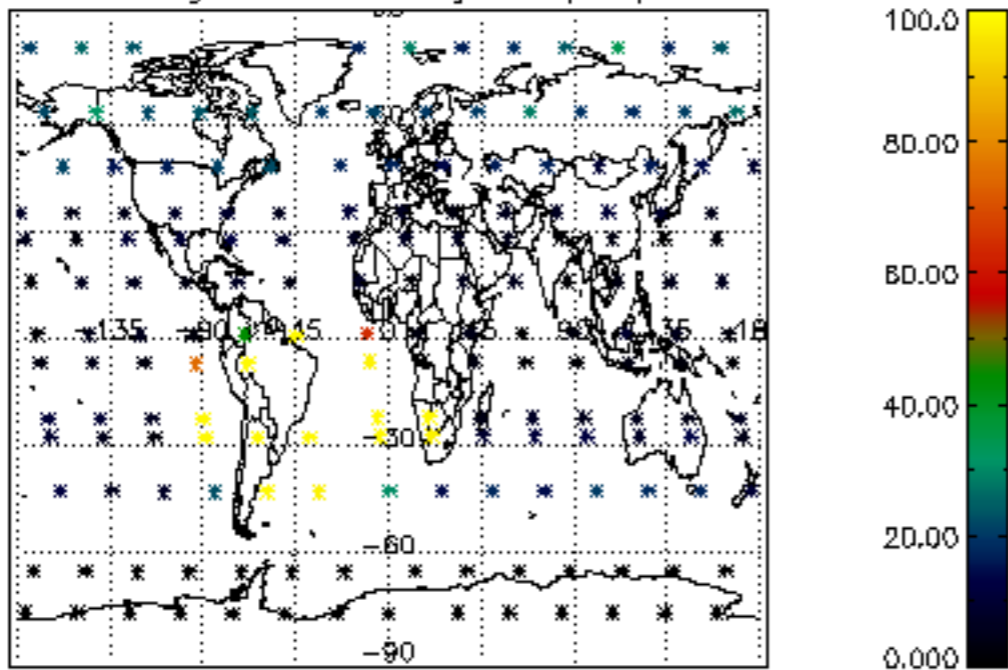
Percentage of flagged data per NO3 profile



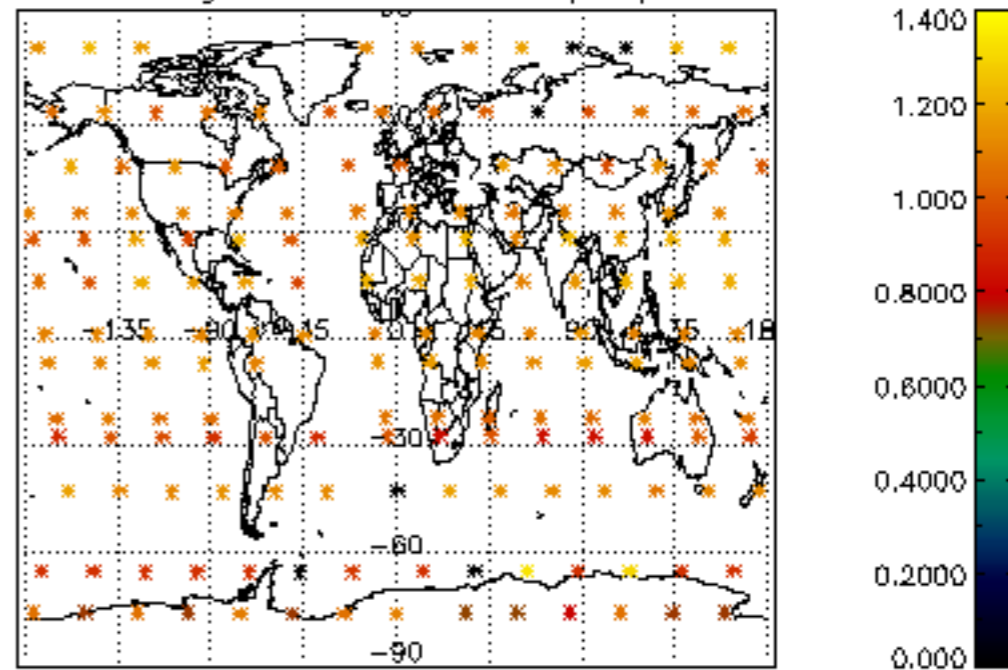




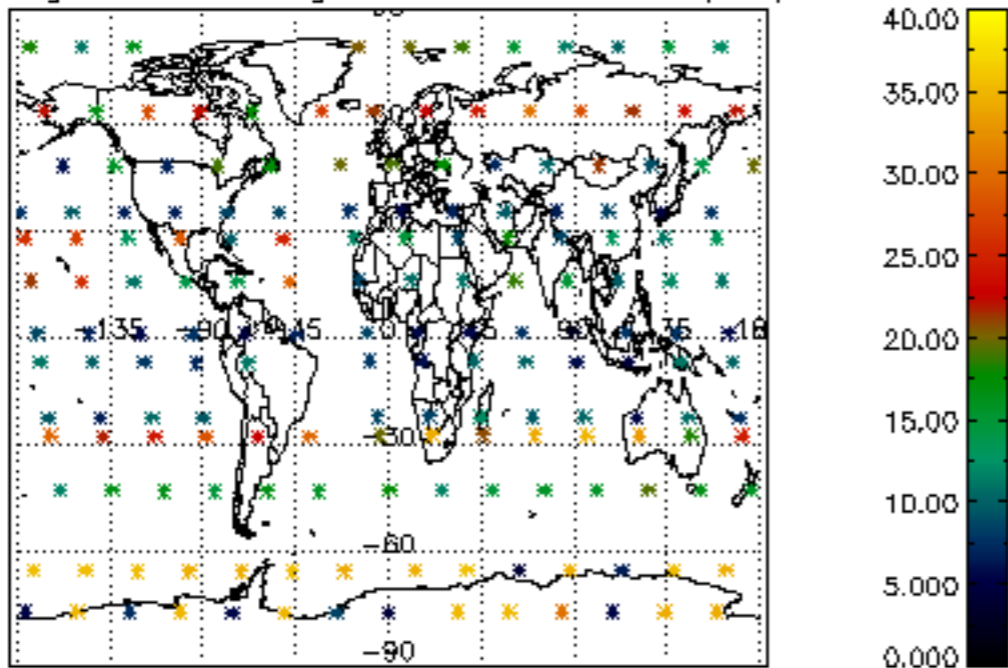
Percentage of cosmic ray hits per profile



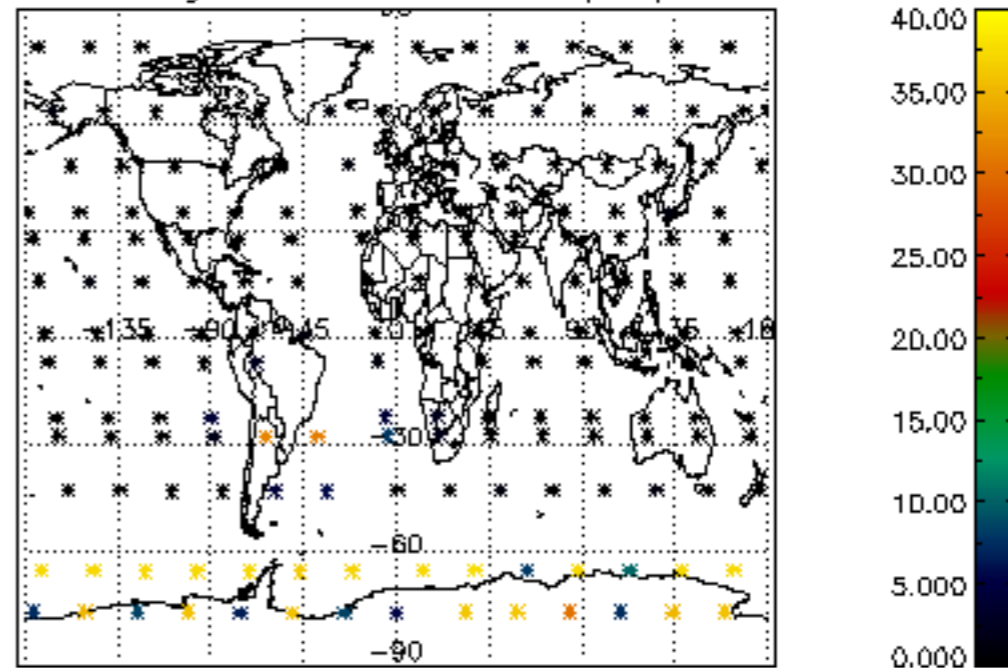
Percentage of datation errors per profile



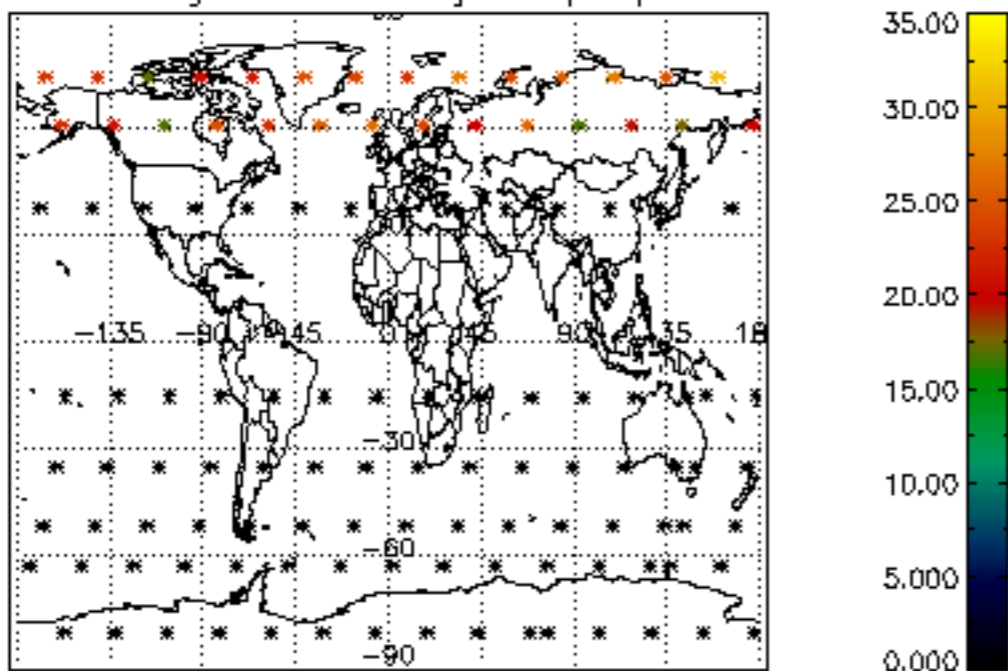
Percentage of star falling outside central band per profile



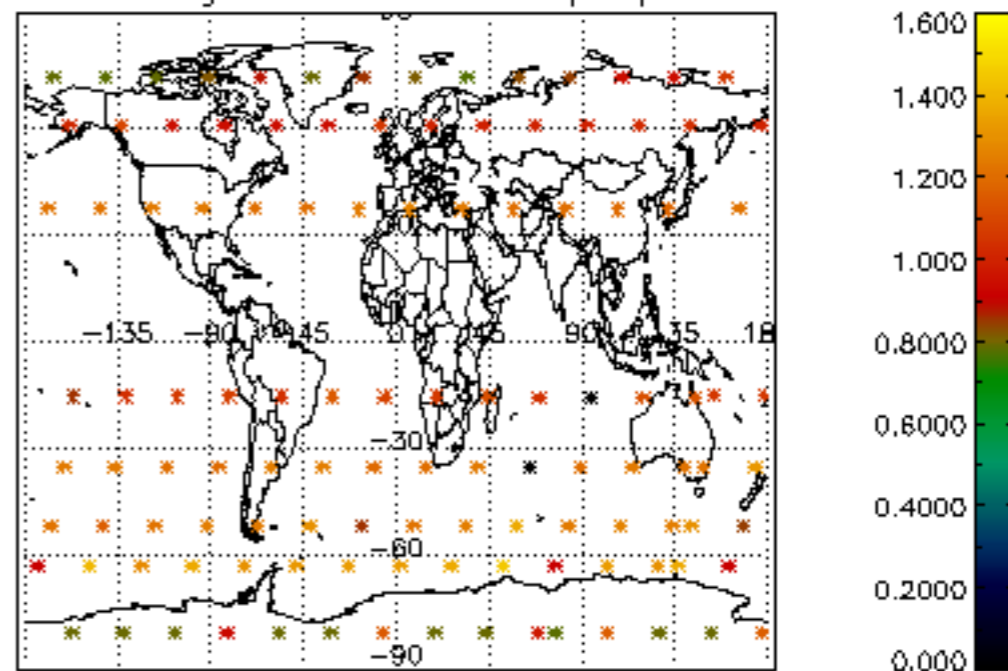
Percentage of saturation errors per profile



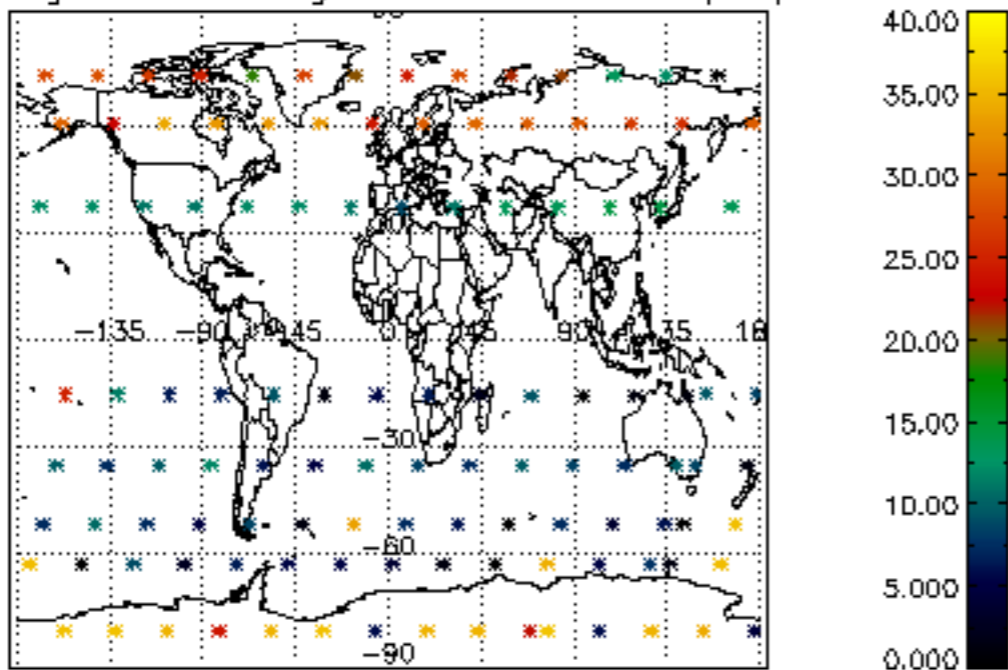
Percentage of cosmic ray hits per profile



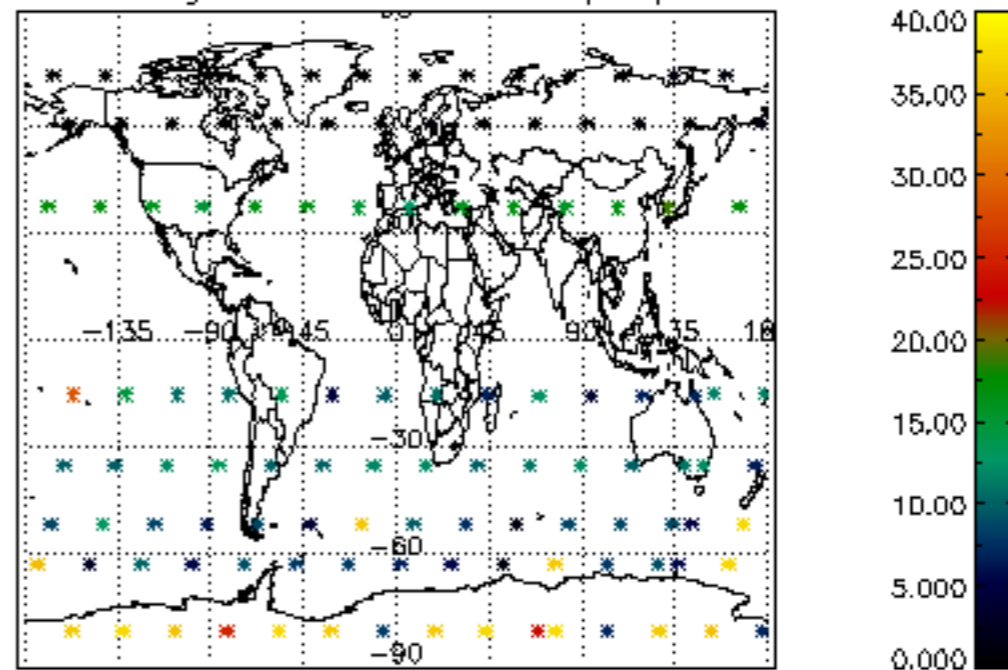
Percentage of datation errors per profile

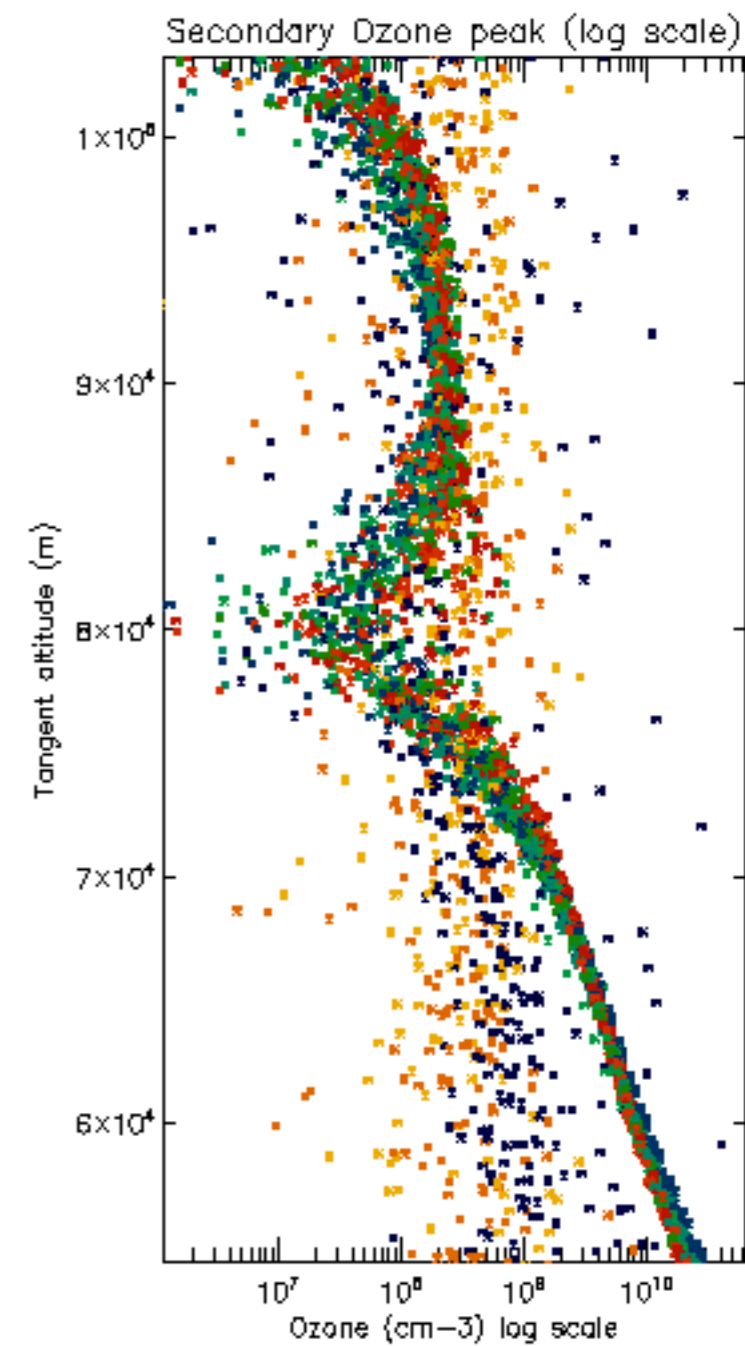
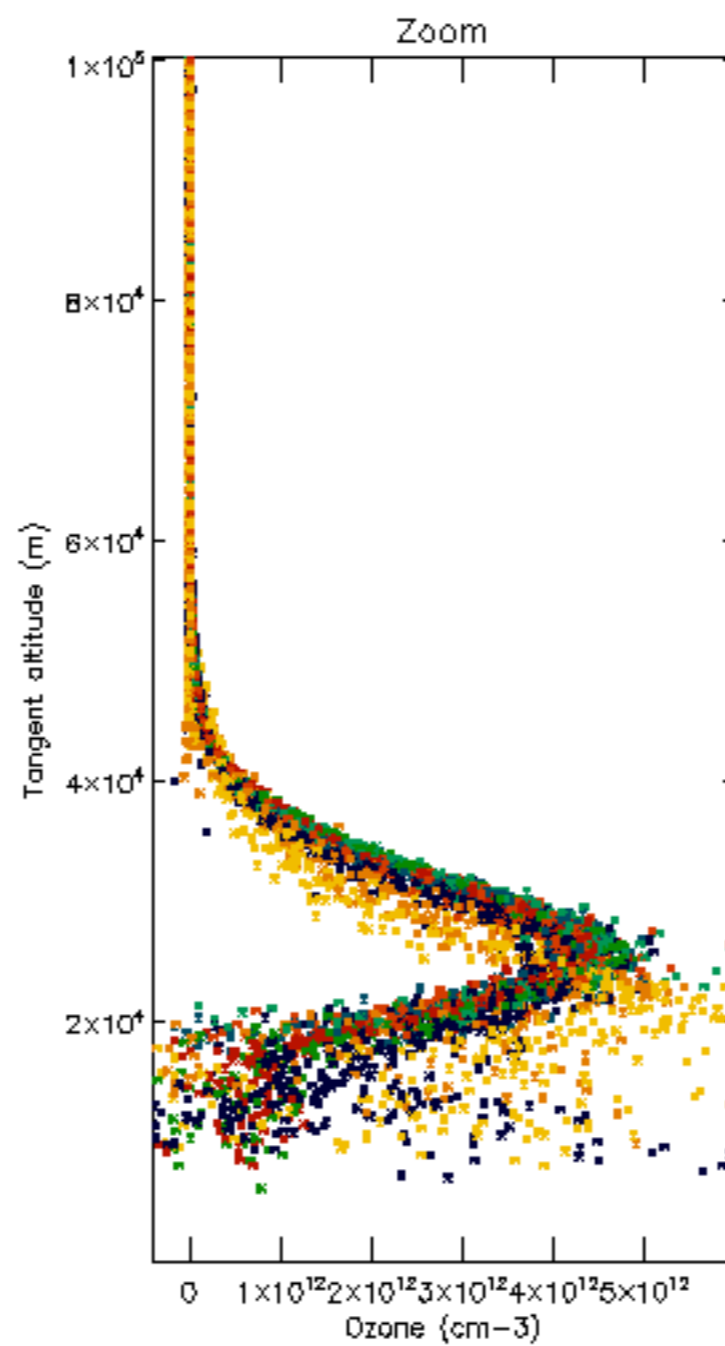
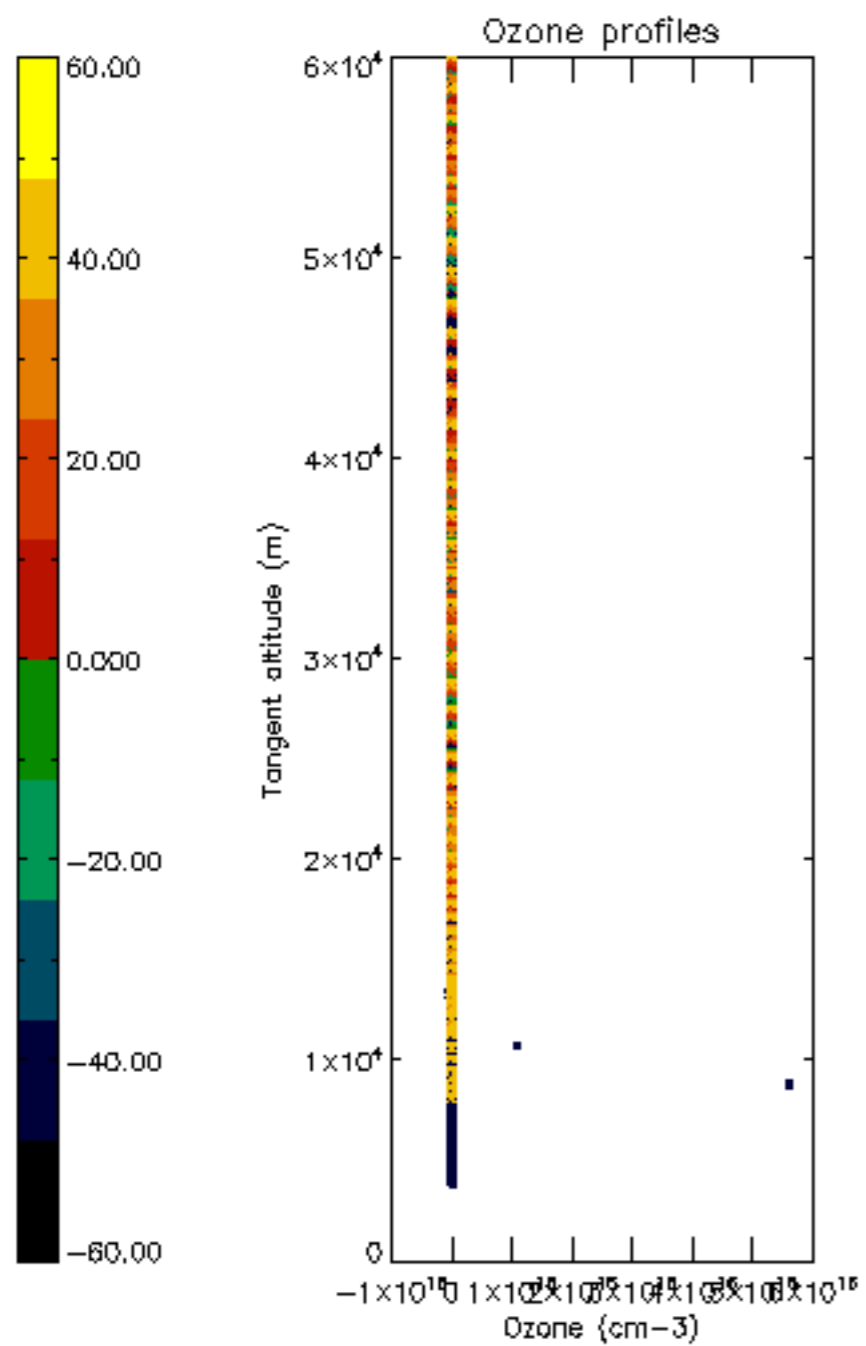


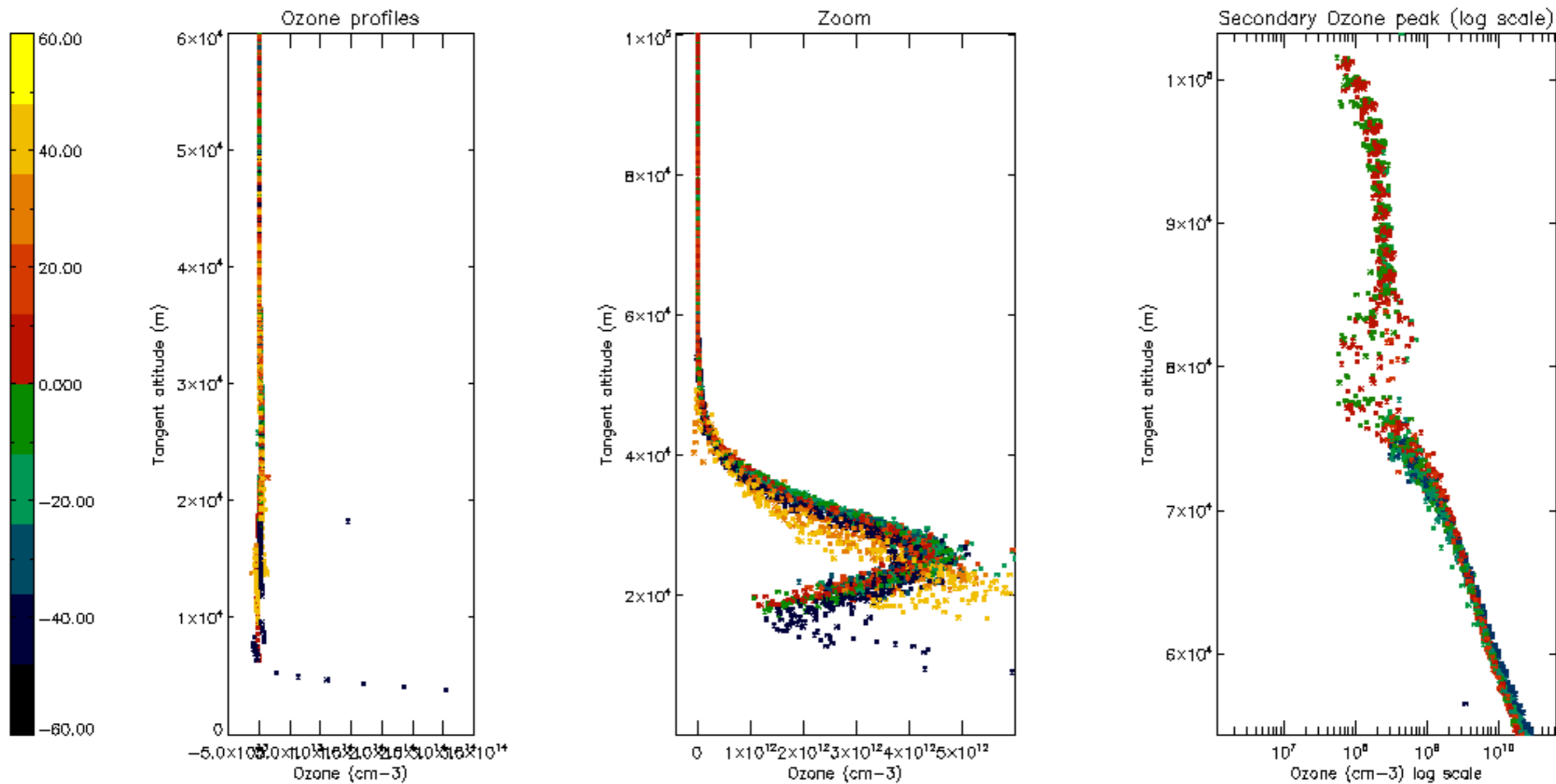
Percentage of star falling outside central band per profile

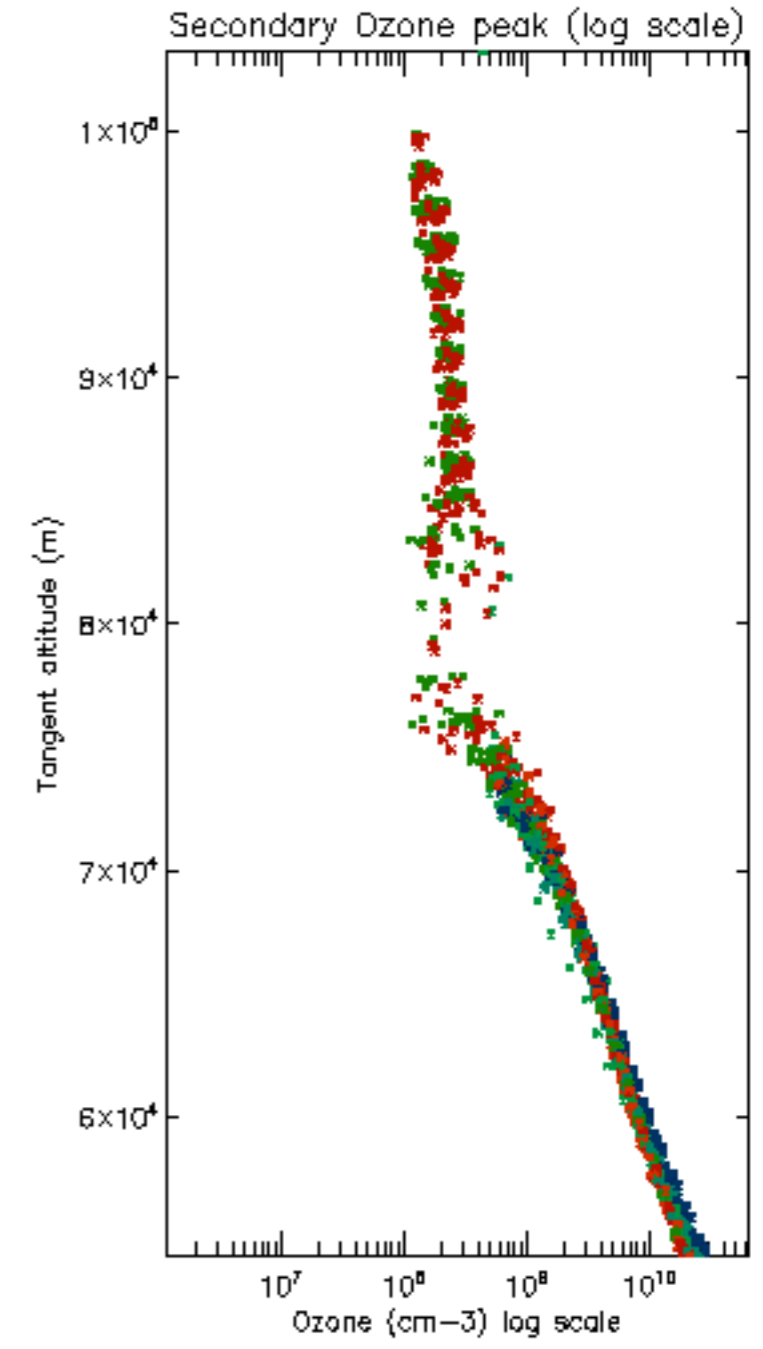
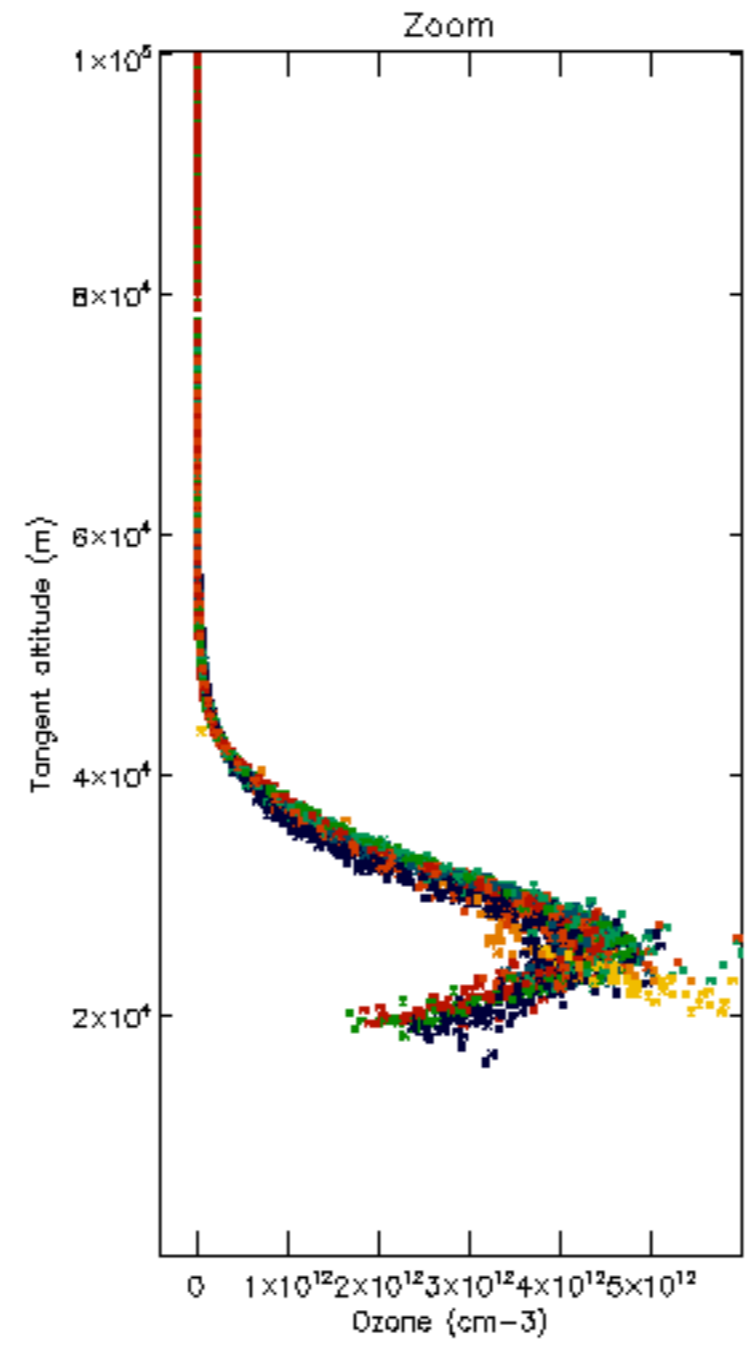
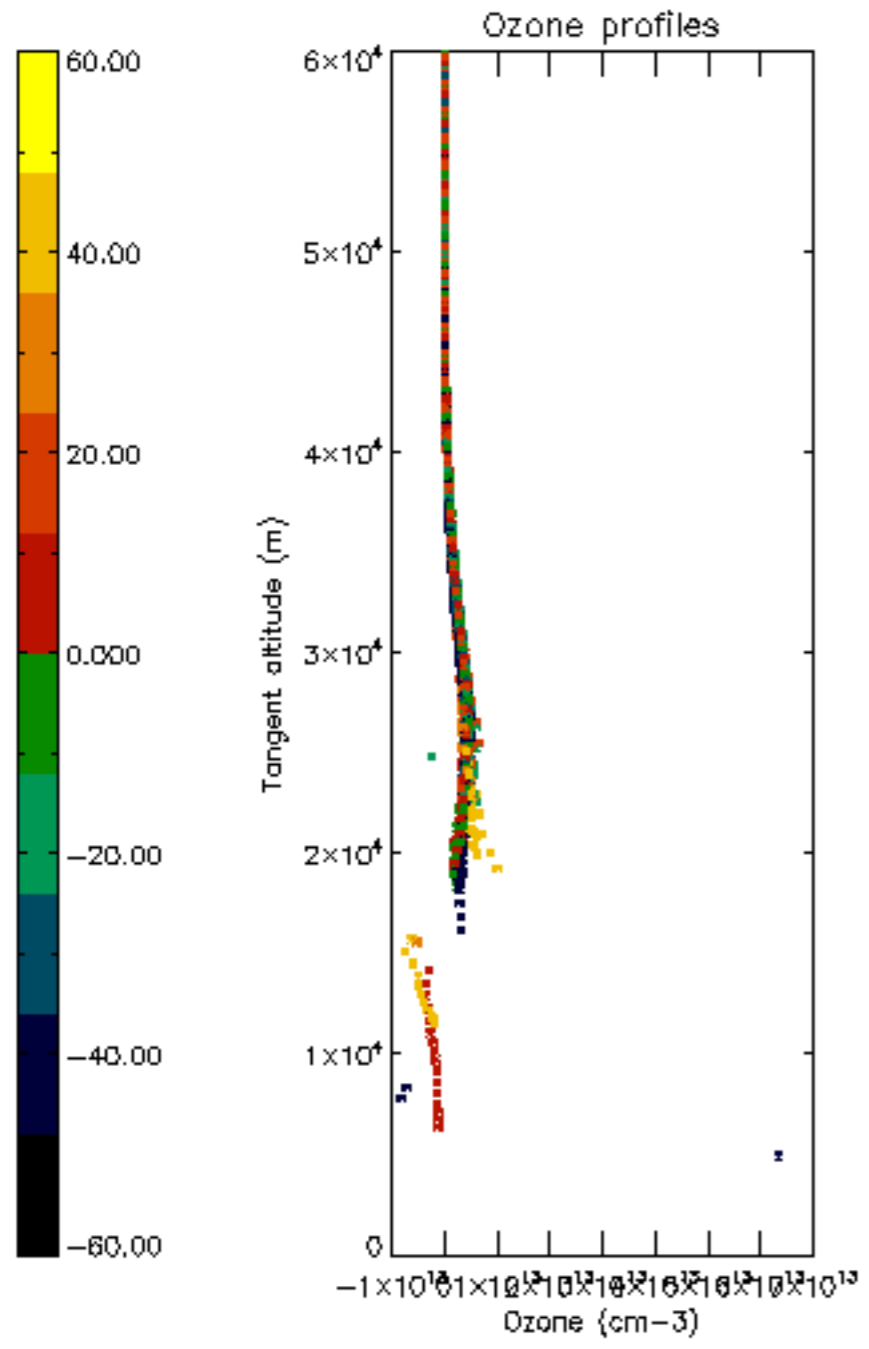


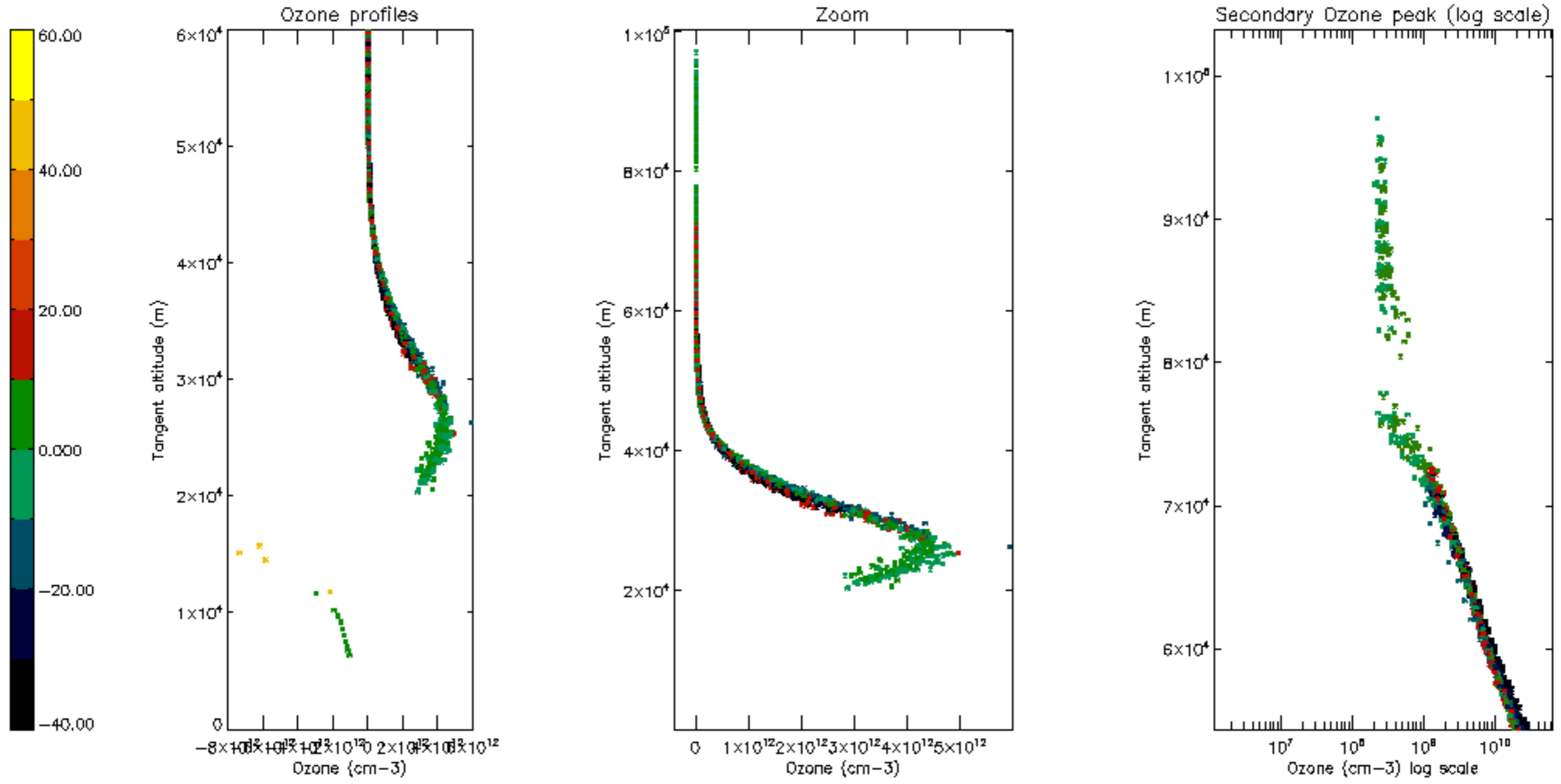
Percentage of saturation errors per profile

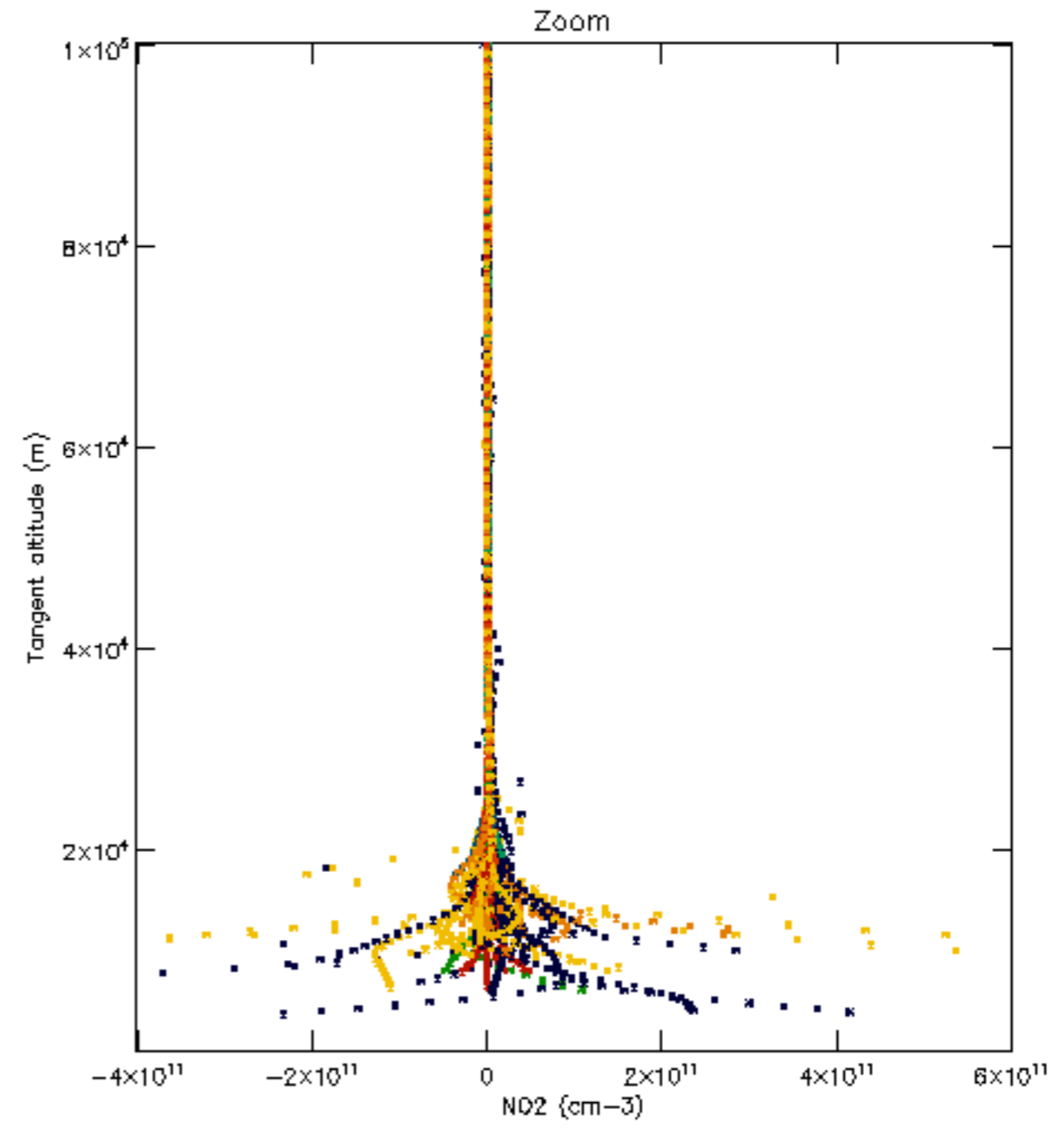
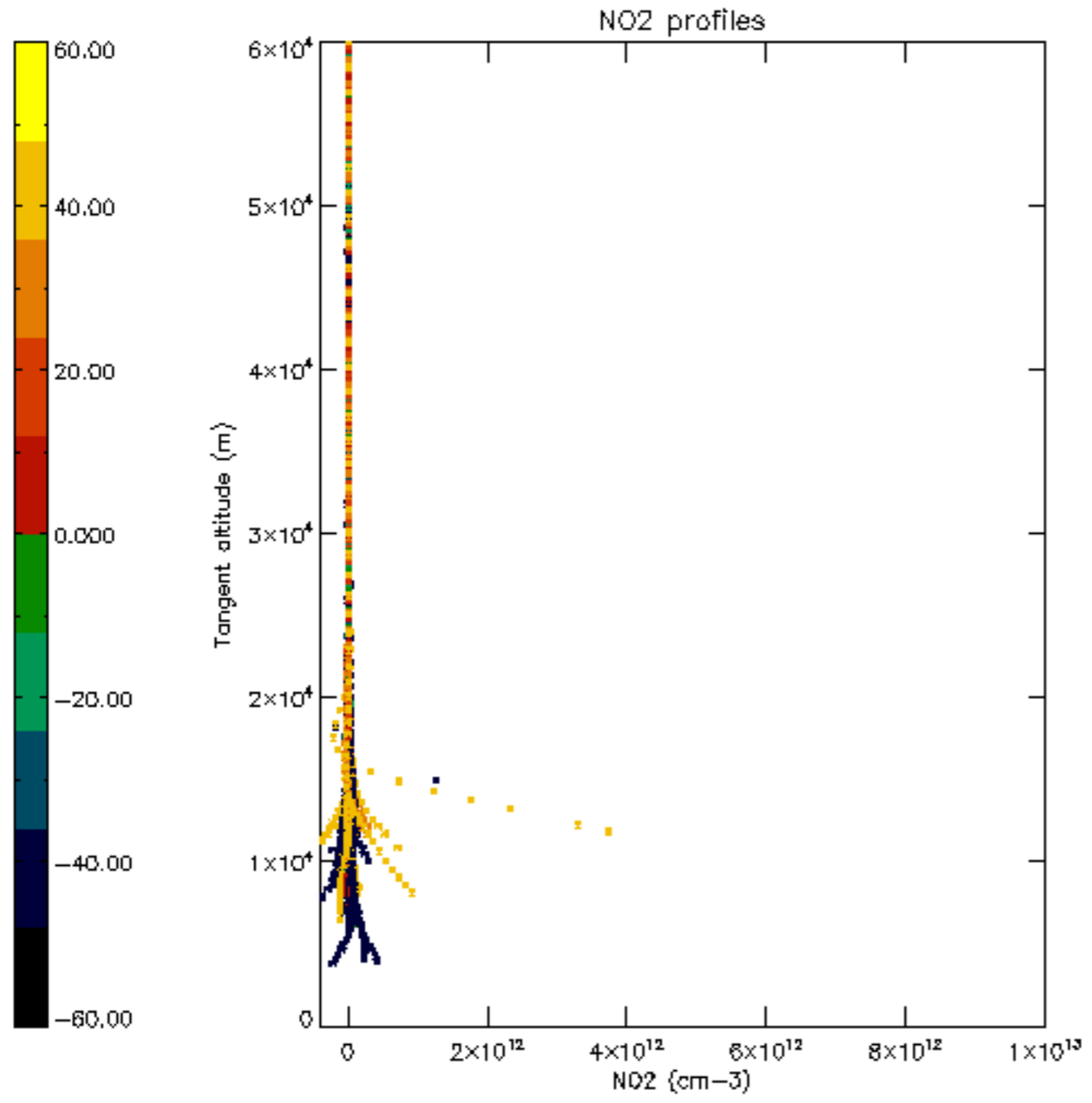


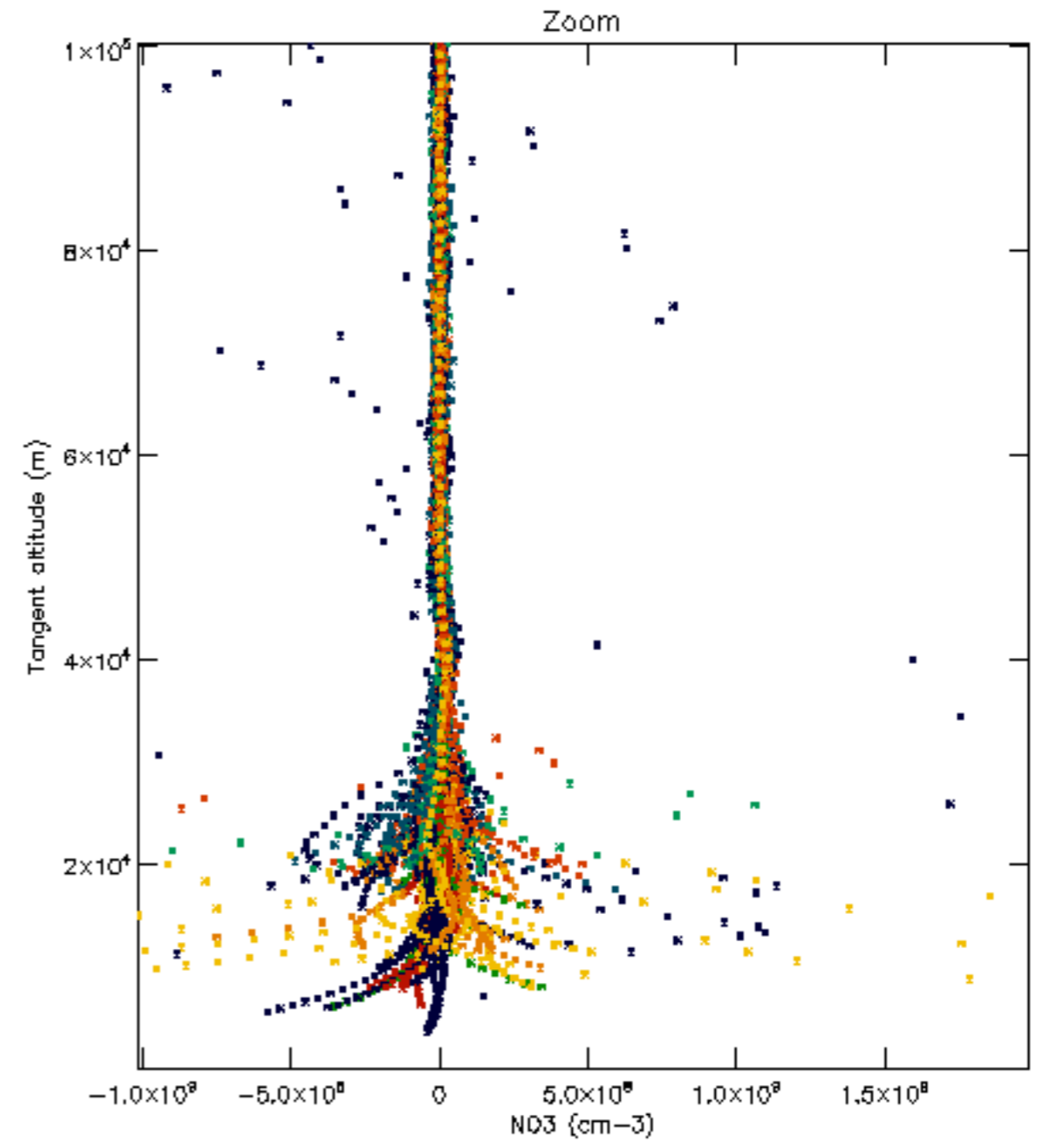
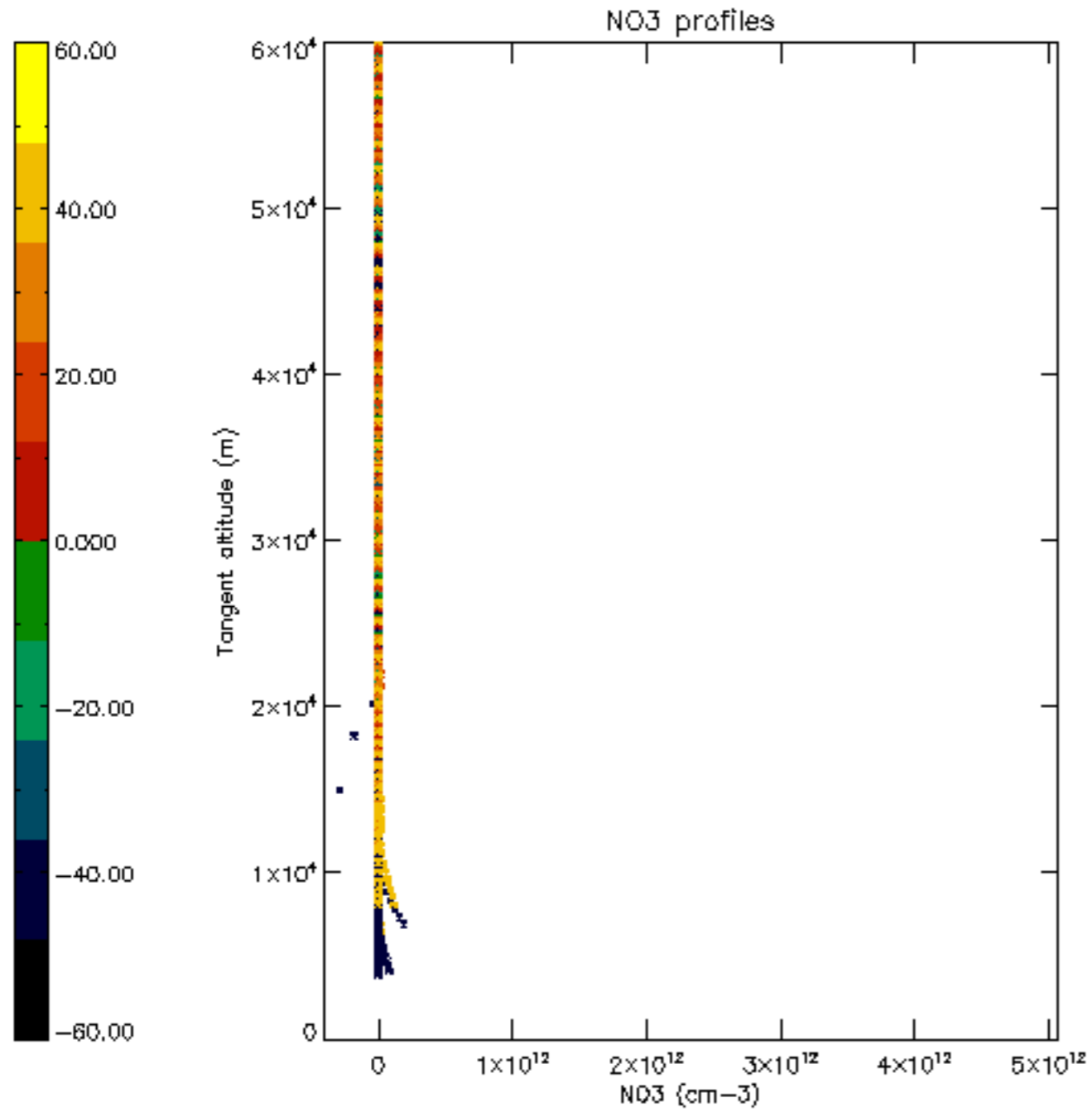


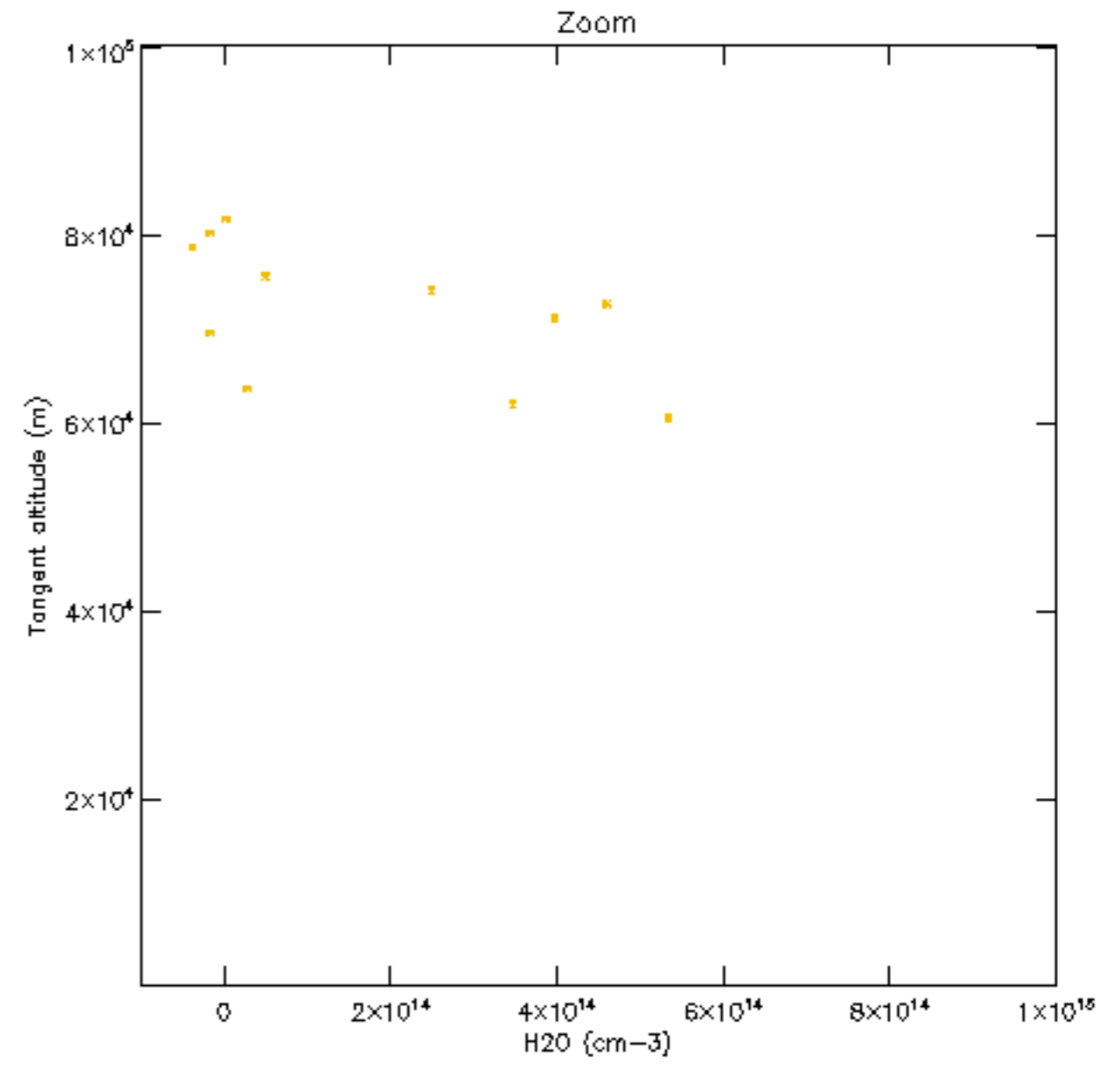
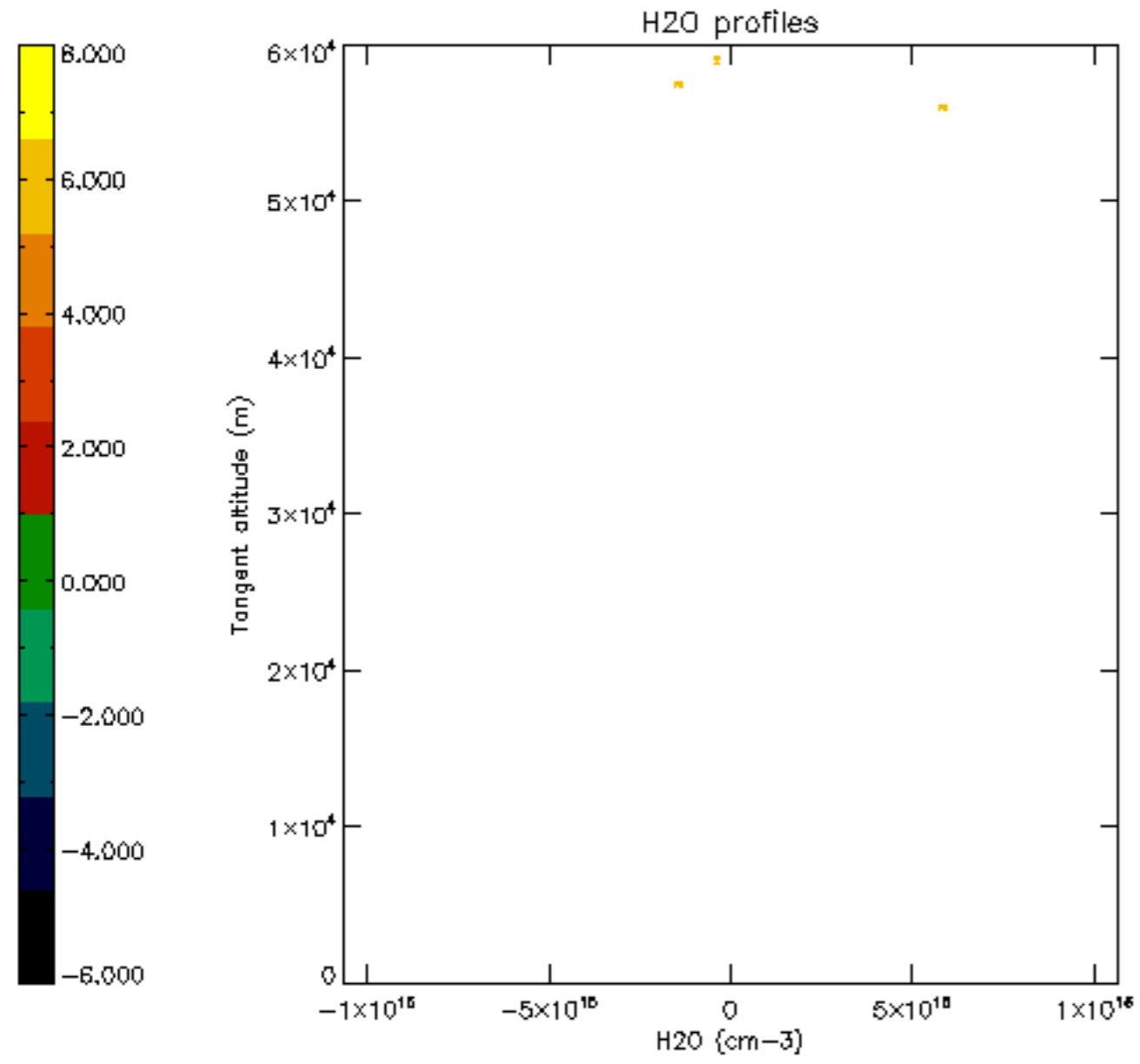


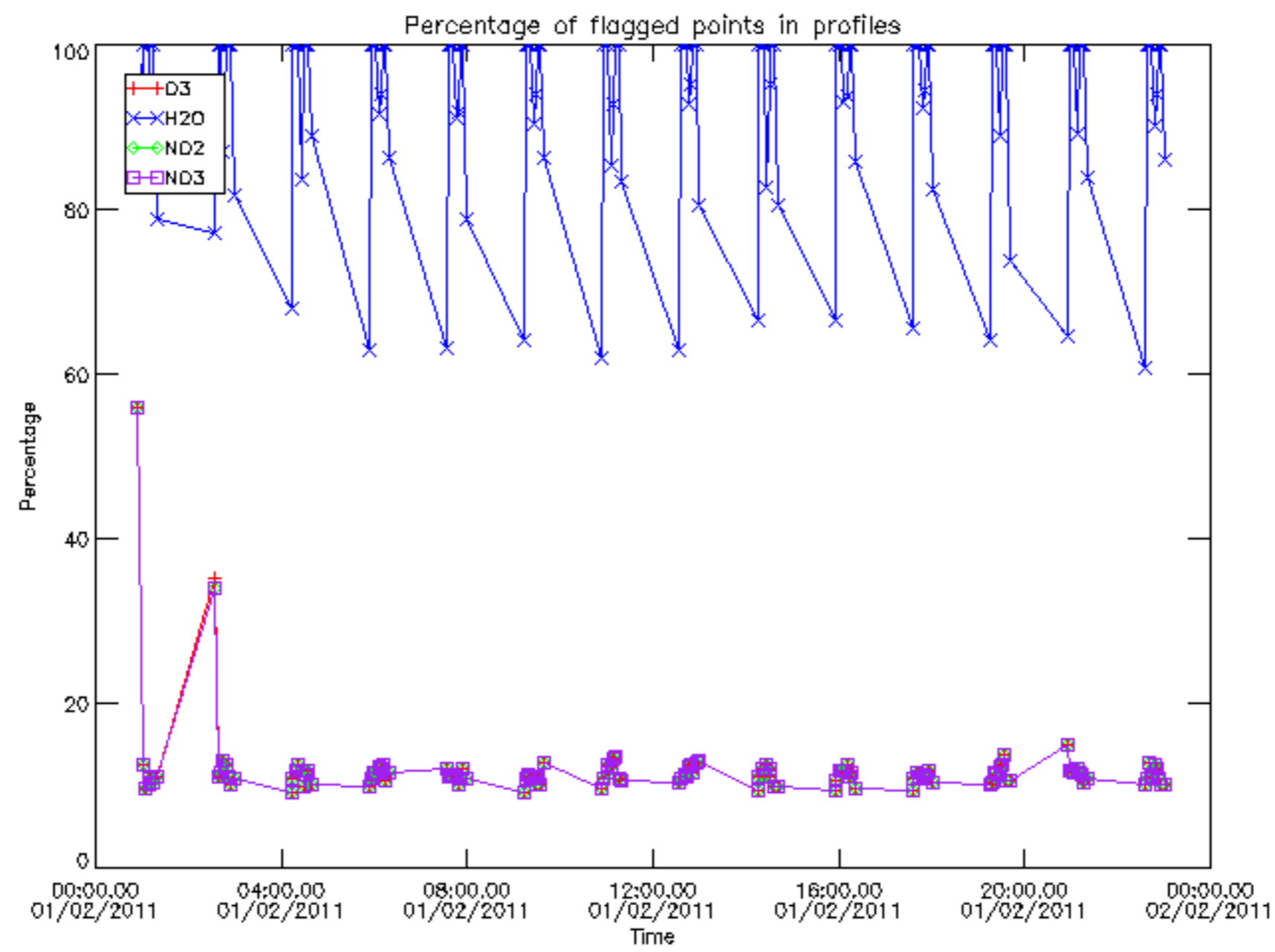




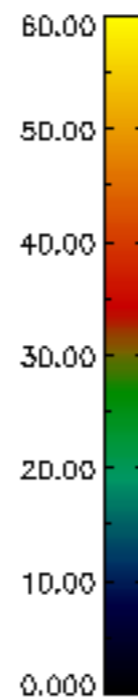
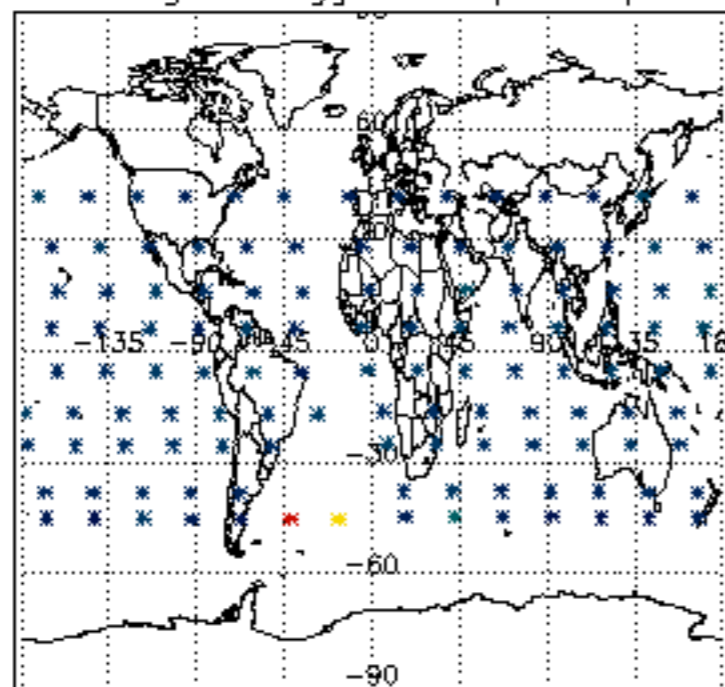




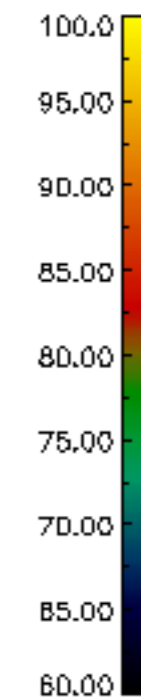
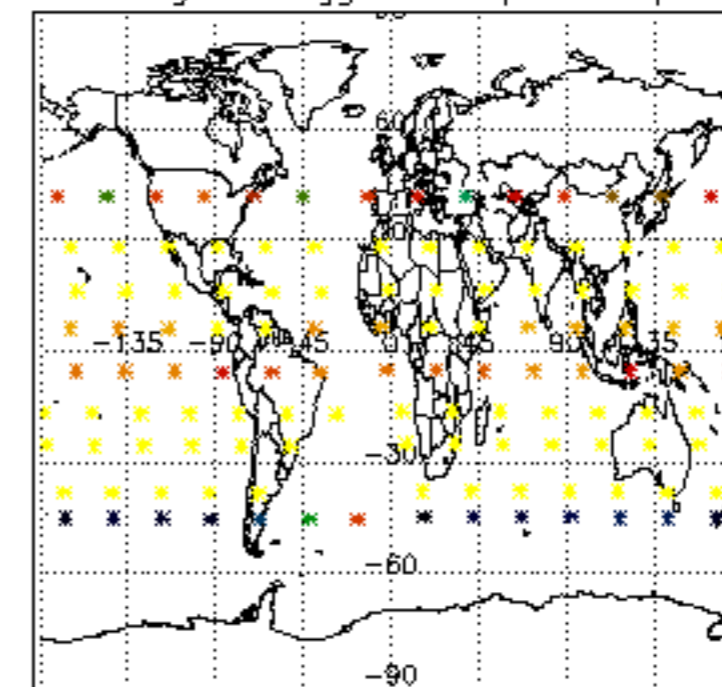




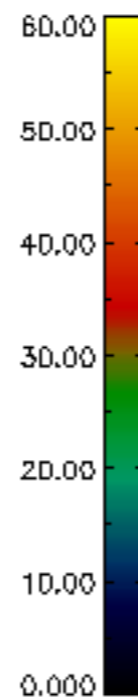
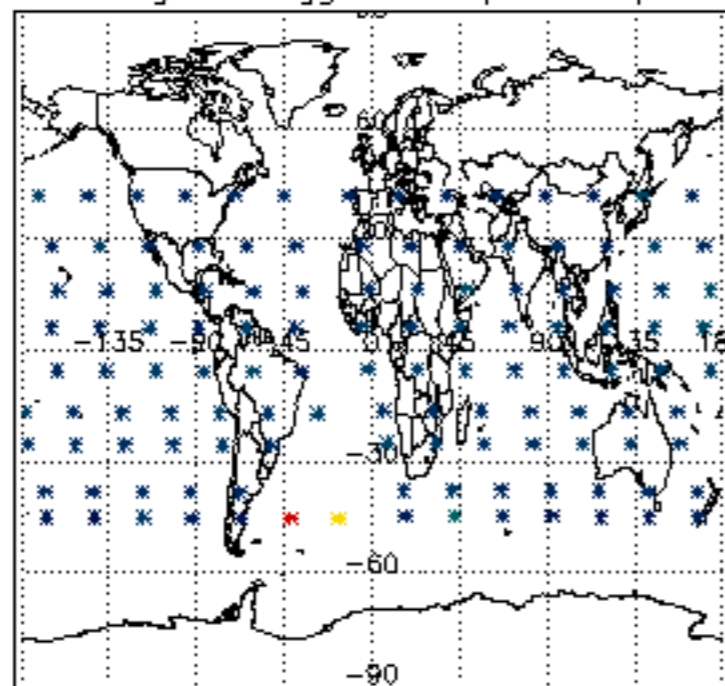
Percentage of flagged data per D3 profile



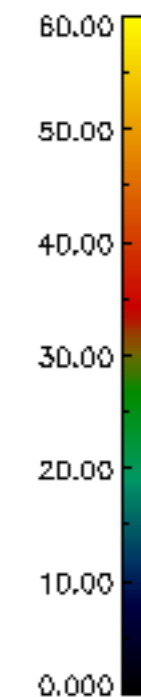
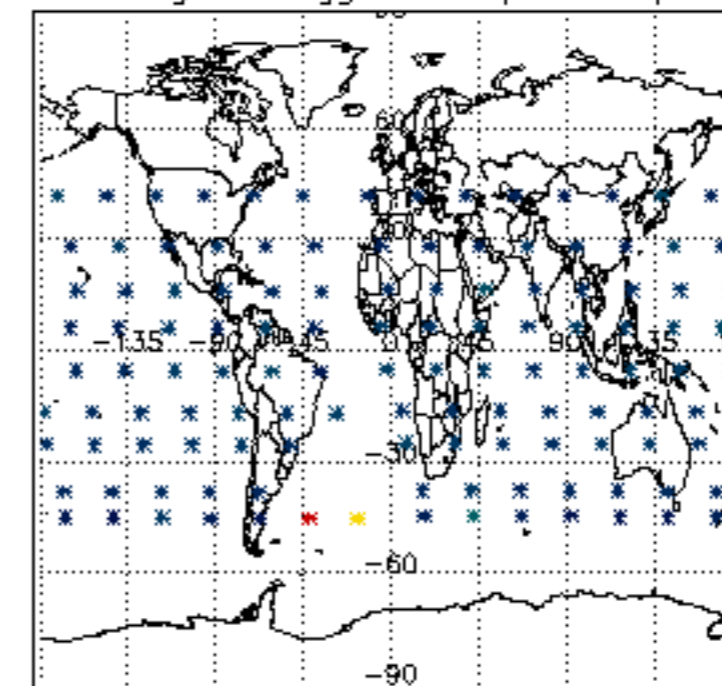
Percentage of flagged data per H2O profile

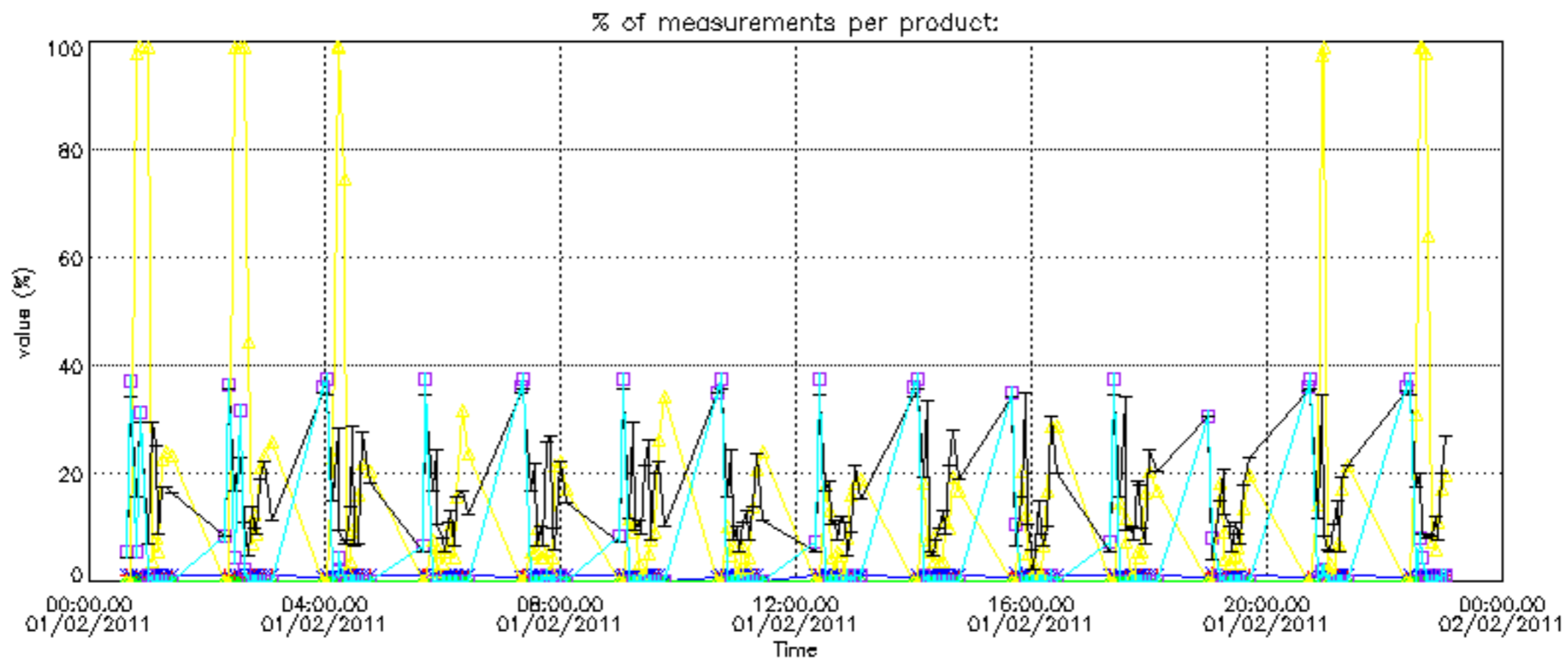


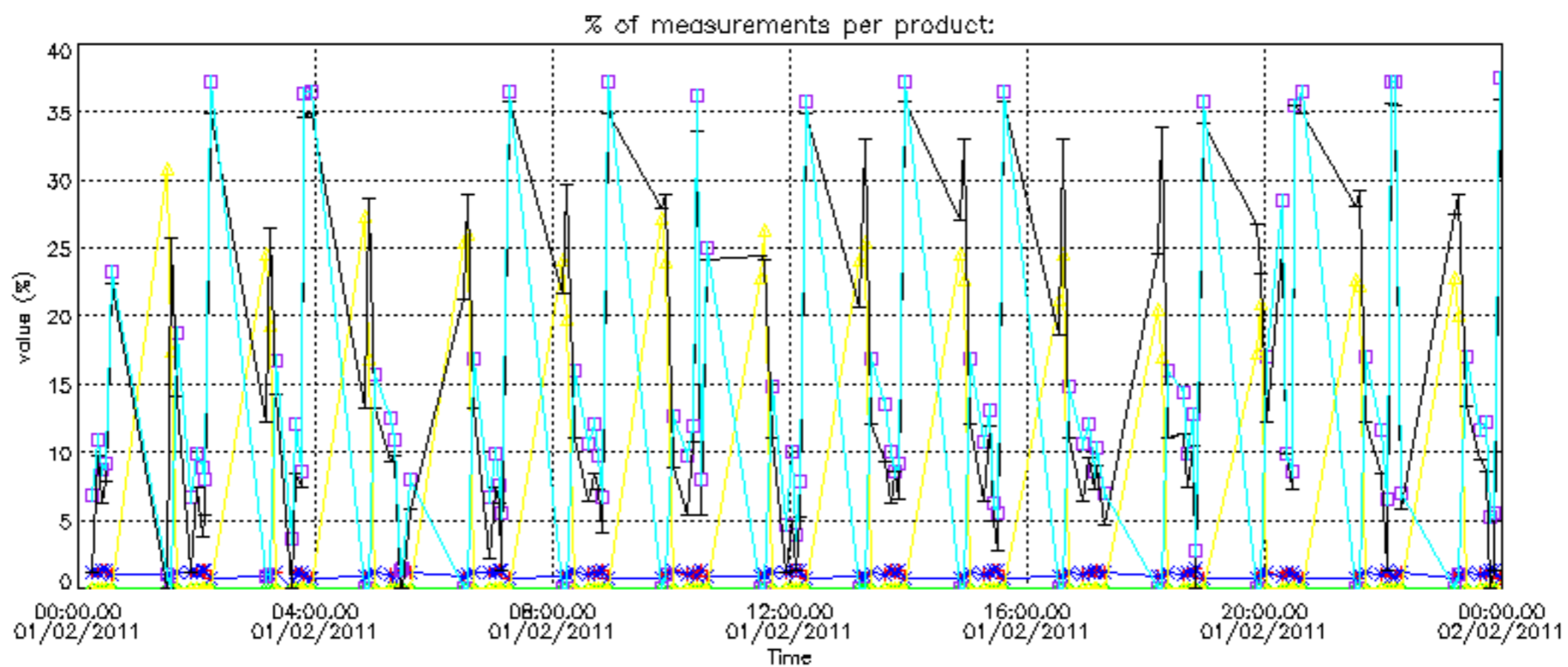
Percentage of flagged data per NO2 profile



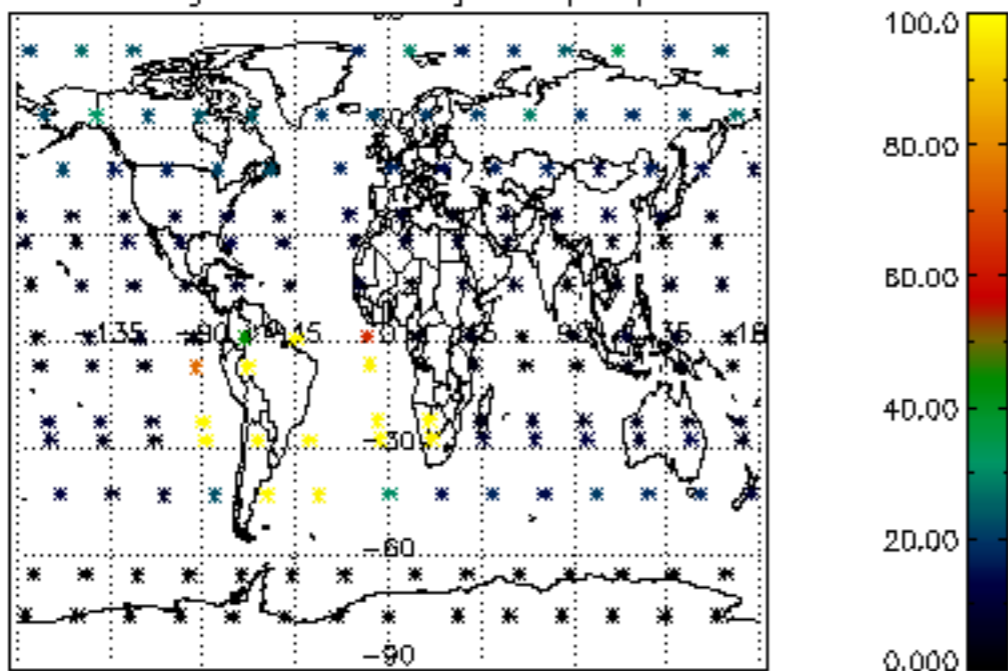
Percentage of flagged data per NO3 profile



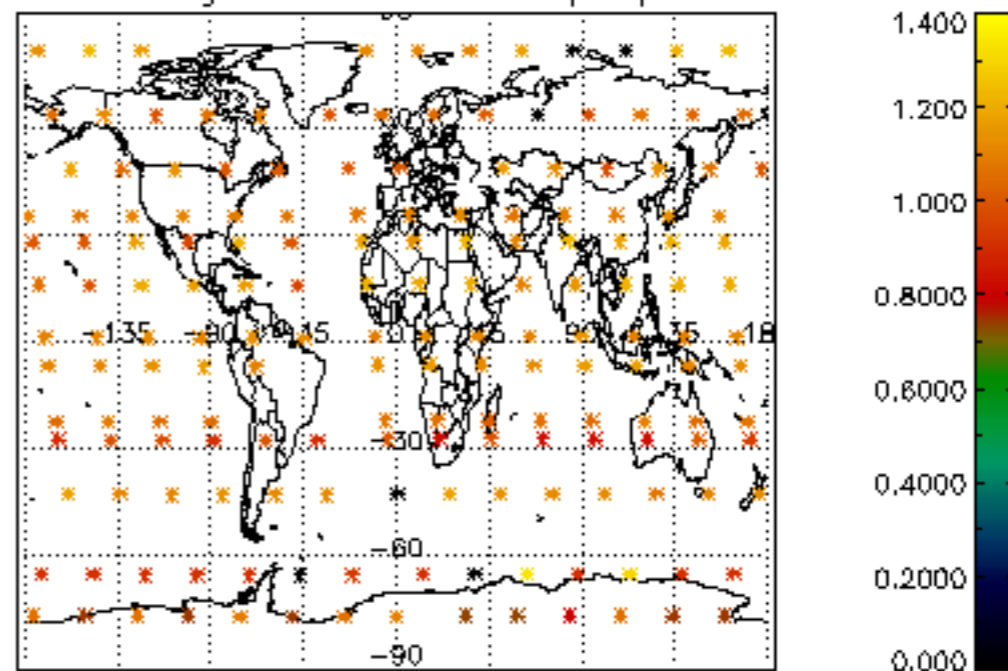




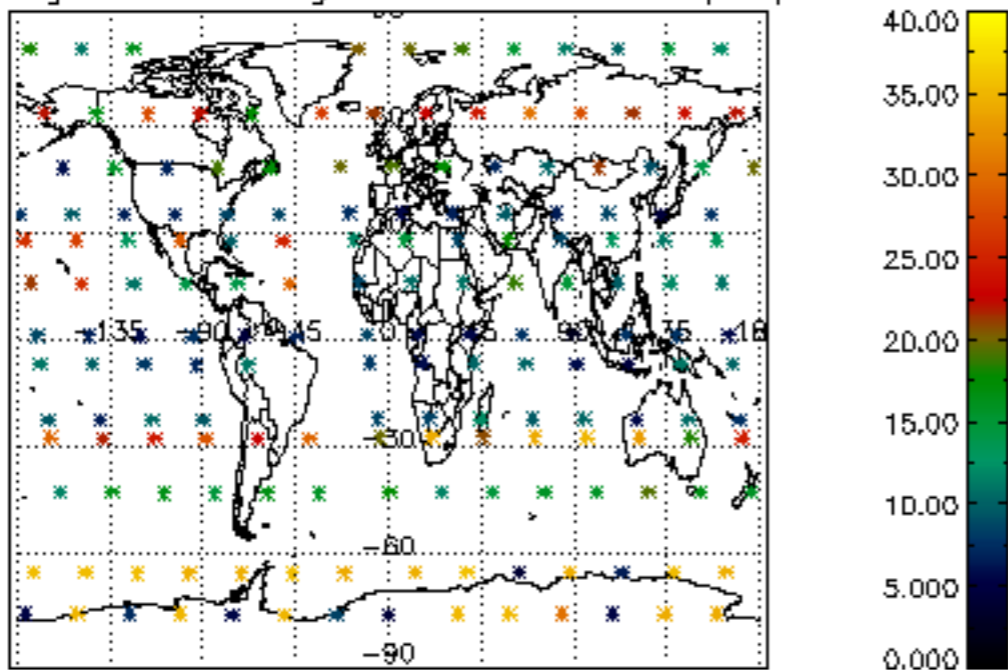
Percentage of cosmic ray hits per profile



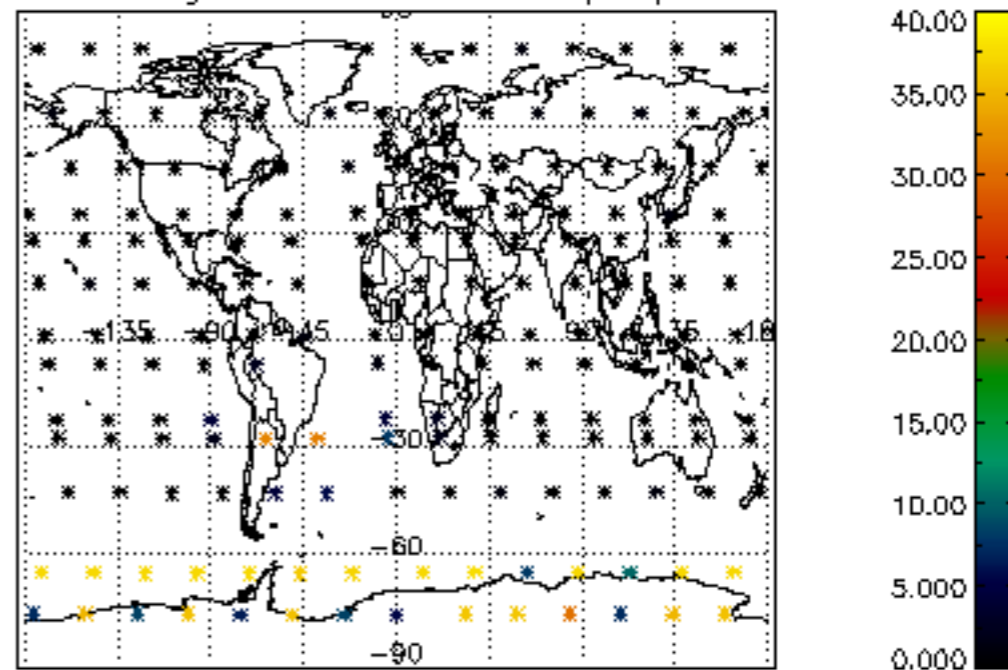
Percentage of datation errors per profile



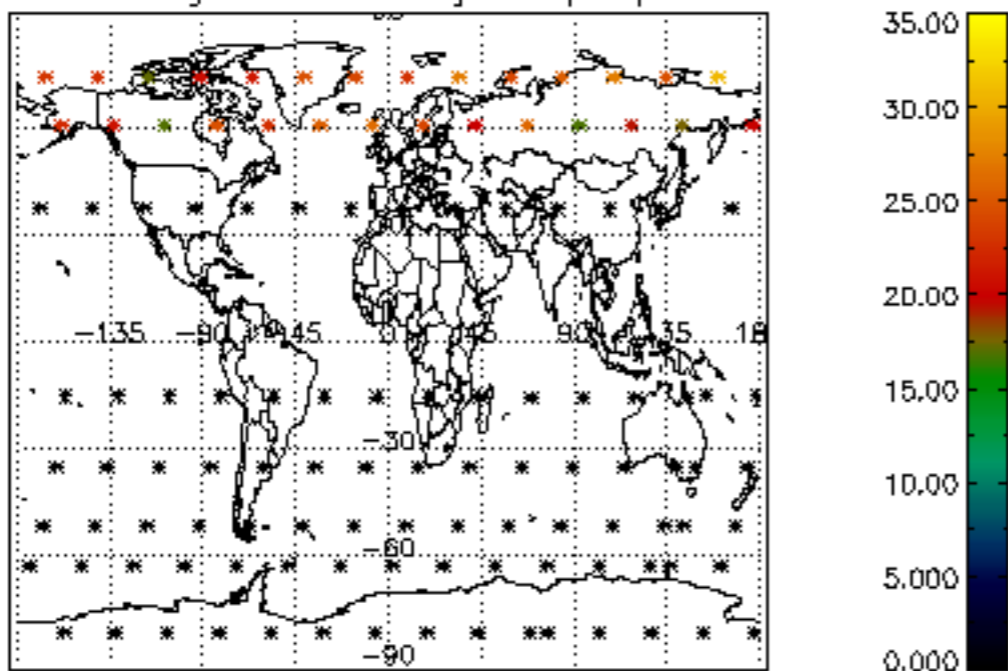
Percentage of star falling outside central band per profile



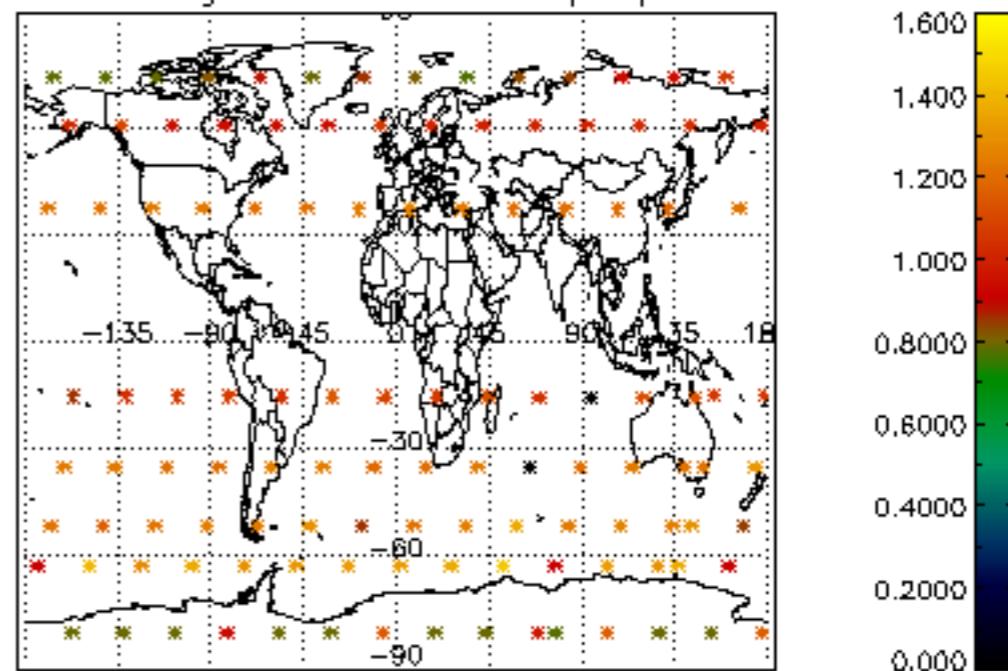
Percentage of saturation errors per profile



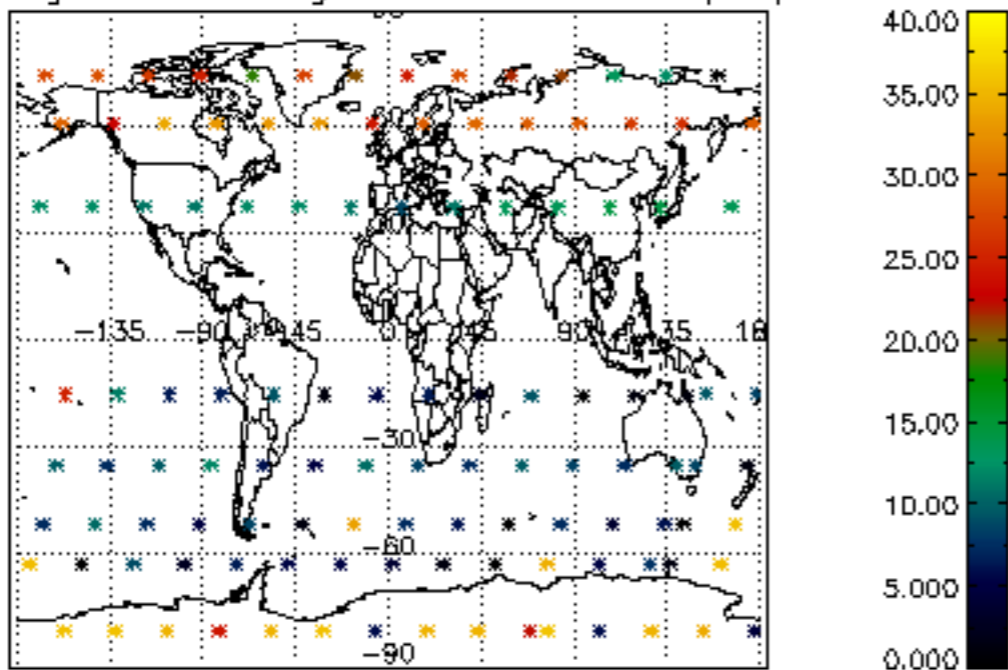
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

