

GOMOS Level 2 Daily Report

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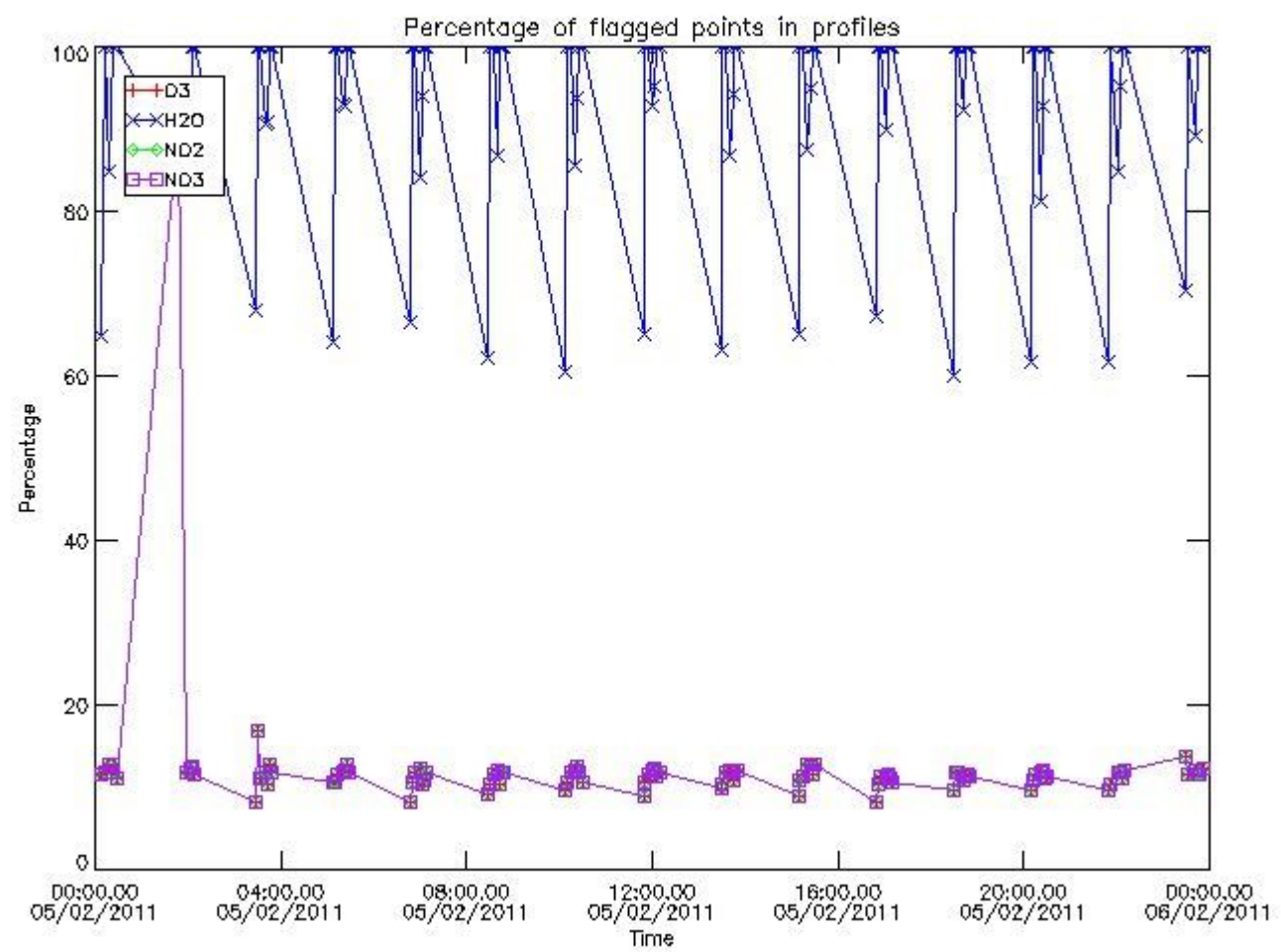
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220	GOM_NL__2PRFIN20110205_202716_000000463099_00158_46724_7080.N1	05-FEB-2011 20:27:16	Dark	45.500	99	Del Cen	2.5750	26000.	91	46724	No
221	GOM_NL__2PRFIN20110205_203044_000000493099_00158_46724_7081.N1	05-FEB-2011 20:30:44	Dark	48.500	113	Mu Vel	2.6920	5000.0	97	46724	No
222	GOM_NL__2PRFIN20110205_203452_000000433099_00158_46724_7082.N1	05-FEB-2011 20:34:52	Straylight	43.000	65	Lam Vel	2.2040	4400.0	86	46724	No
223	GOM_NL__2PRFIN20110205_204524_000000623099_00158_46724_7083.N1	05-FEB-2011 20:45:24	Straylight	61.500	48	30Alp Hya	1.9770	4100.0	123	46724	No
224	GOM_NL__2PRFIN20110205_205609_000000403099_00158_46724_7084.N1	05-FEB-2011 20:56:09	Bright	40.000	17	78Bet Gem	1.1610	4500.0	80	46724	No
225	GOM_NL__2PRFIN20110205_211015_000000463099_00158_46724_7085.N1	05-FEB-2011 21:10:15	Bright	46.000	36	50Alp UMa	1.8000	6300.0	92	46724	No
226	GOM_NL__2PRFIN20110205_211612_000000403099_00158_46724_7086.N1	05-FEB-2011 21:16:12	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	46724	No
227	GOM_NL__2PRFIN20110205_212059_000000423099_00158_46724_7087.N1	05-FEB-2011 21:20:59	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	46724	No
228	GOM_NL__2PRFIN20110205_212421_000000403099_00158_46724_7088.N1	05-FEB-2011 21:24:21	Bright	39.500	130	23Bet Dra	2.7990	5800.0	79	46724	No
229	GOM_NL__2PRFIN20110205_213111_000000673099_00158_46724_7089.N1	05-FEB-2011 21:31:11	Bright	67.000	133	40Zet Her	2.8070	6000.0	134	46724	No
230	GOM_NL__2PRFIN20110205_213504_000000533099_00158_46724_7090.N1	05-FEB-2011 21:35:04	Bright	52.500	127	27Bet Her	2.7810	4700.0	105	46724	No
231	GOM_NL__2PRFIN20110205_213844_000000573099_00158_46724_7091.N1	05-FEB-2011 21:38:44	Bright	56.500	126	60Bet Oph	2.7700	4250.0	113	46724	No
232	GOM_NL__2PRFIN20110205_214527_000000453099_00158_46724_7092.N1	05-FEB-2011 21:45:27	Tw_i_and_stray	44.500	86	35Eta Oph	2.4300	10200.	89	46724	No
233	GOM_NL__2PRFIN20110205_214959_000000583099_00158_46724_7093.N1	05-FEB-2011 21:49:59	Dark	58.000	16	21Alp Sco	1.0200	3000.0	116	46724	No
234	GOM_NL__2PRFIN20110205_215138_000000503099_00158_46724_7094.N1	05-FEB-2011 21:51:38	Dark	49.500	158	6Pi Sco	2.9060	28000.	99	46724	No
235	GOM_NL__2PRFIN20110205_220156_000000443099_00159_46725_7305.N1	05-FEB-2011 22:01:56	Dark	43.500	10	Bet Cen	0.61000	28000.	87	46725	No
236	GOM_NL__2PRFIN20110205_220513_000000433099_00159_46725_7306.N1	05-FEB-2011 22:05:13	Dark	43.000	12	Alp1Cru	0.77500	30000.	86	46725	No
237	GOM_NL__2PRFIN20110205_220731_000000463099_00159_46725_7307.N1	05-FEB-2011 22:07:31	Dark	45.500	99	Del Cen	2.5750	26000.	91	46725	No
238	GOM_NL__2PRFIN20110205_221059_000000423099_00159_46725_7308.N1	05-FEB-2011 22:10:59	Dark	42.000	113	Mu Vel	2.6920	5000.0	84	46725	No
239	GOM_NL__2PRFIN20110205_221508_000000433099_00159_46725_7309.N1	05-FEB-2011 22:15:08	Straylight	43.000	65	Lam Vel	2.2040	4400.0	86	46725	No
240	GOM_NL__2PRFIN20110205_222538_000000533099_00159_46725_7310.N1	05-FEB-2011 22:25:38	Straylight	53.000	48	30Alp Hya	1.9770	4100.0	106	46725	No
241	GOM_NL__2PRFIN20110205_223623_000000413099_00159_46725_7311.N1	05-FEB-2011 22:36:23	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	46725	No
242	GOM_NL__2PRFIN20110205_225029_000000463099_00159_46725_7312.N1	05-FEB-2011 22:50:29	Bright	45.500	36	50Alp UMa	1.8000	6300.0	91	46725	No
243	GOM_NL__2PRFIN20110205_225626_000000413099_00159_46725_7313.N1	05-FEB-2011 22:56:26	Bright	40.500	60	7Bet UMi	2.0810	3950.0	81	46725	No
244	GOM_NL__2PRFIN20110205_230112_000000423099_00159_46725_7314.N1	05-FEB-2011 23:01:12	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	46725	No
245	GOM_NL__2PRFIN20110205_230435_000000393099_00159_46725_7315.N1	05-FEB-2011 23:04:35	Bright	38.500	130	23Bet Dra	2.7990	5800.0	77	46725	No
246	GOM_NL__2PRFIN20110205_231125_000000473099_00159_46725_7316.N1	05-FEB-2011 23:11:25	Bright	47.000	133	40Zet Her	2.8070	6000.0	94	46725	No
247	GOM_NL__2PRFIN20110205_231518_000000733099_00159_46725_7317.N1	05-FEB-2011 23:15:18	Bright	73.000	127	27Bet Her	2.7810	4700.0	146	46725	No
248	GOM_NL__2PRFIN20110205_231858_000000573099_00159_46725_7318.N1	05-FEB-2011 23:18:58	Bright	57.000	126	60Bet Oph	2.7700	4250.0	114	46725	No
249	GOM_NL__2PRFIN20110205_232541_000000473099_00159_46725_7319.N1	05-FEB-2011 23:25:41	Tw_i_and_stray	46.500	86	35Eta Oph	2.4300	10200.	93	46725	No
250	GOM_NL__2PRFIN20110205_233014_000000633099_00159_46725_7320.N1	05-FEB-2011 23:30:14	Dark	63.000	16	21Alp Sco	1.0200	3000.0	126	46725	No
251	GOM_NL__2PRFIN20110205_233153_000000483099_00159_46725_7321.N1	05-FEB-2011 23:31:53	Dark	48.000	158	6Pi Sco	2.9060	28000.	96	46725	No
252	GOM_NL__2PRFIN20110205_234210_000000423099_00160_46726_7305.N1	05-FEB-2011 23:42:10	Dark	42.000	10	Bet Cen	0.61000	28000.	84	46726	No
253	GOM_NL__2PRFIN20110205_234528_000000443099_00160_46726_7306.N1	05-FEB-2011 23:45:28	Dark	44.000	12	Alp1Cru	0.77500	30000.	88	46726	No
254	GOM_NL__2PRFIN20110205_234746_000000453099_00160_46726_7307.N1	05-FEB-2011 23:47:46	Dark	44.500	99	Del Cen	2.5750	26000.	89	46726	No
255	GOM_NL__2PRFIN20110205_235113_000000463099_00160_46726_7308.N1	05-FEB-2011 23:51:13	Dark	46.000	113	Mu Vel	2.6920	5000.0	92	46726	No

3. Quality information per product

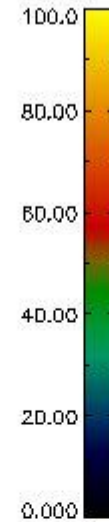
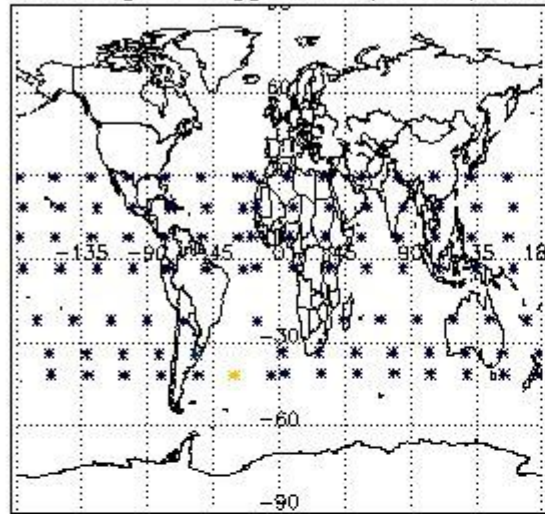
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

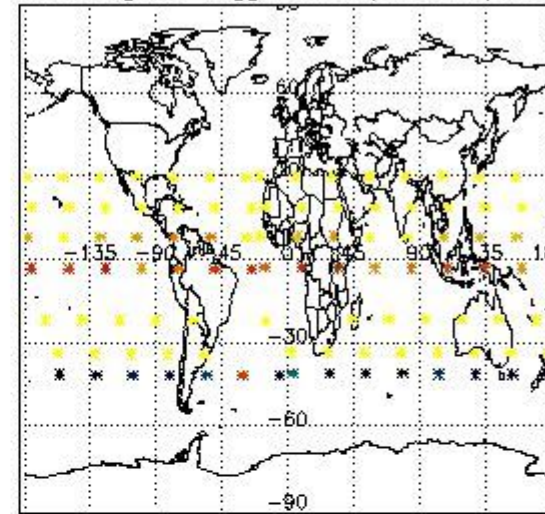


3.2 Plot quality information per product (world map)

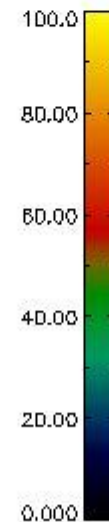
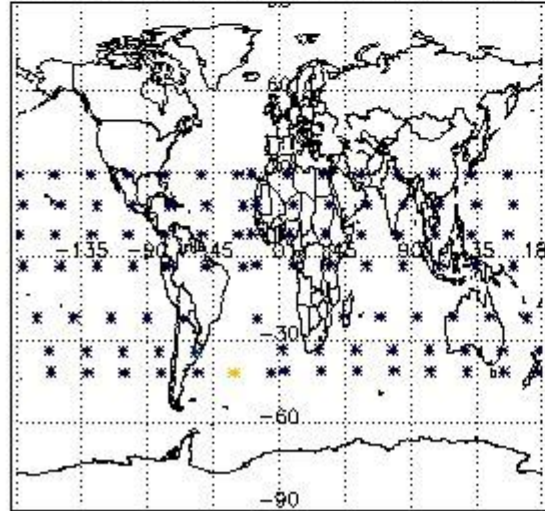
Percentage of flagged data per O3 profile



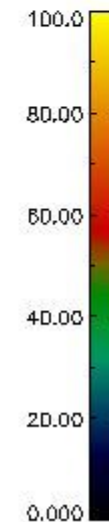
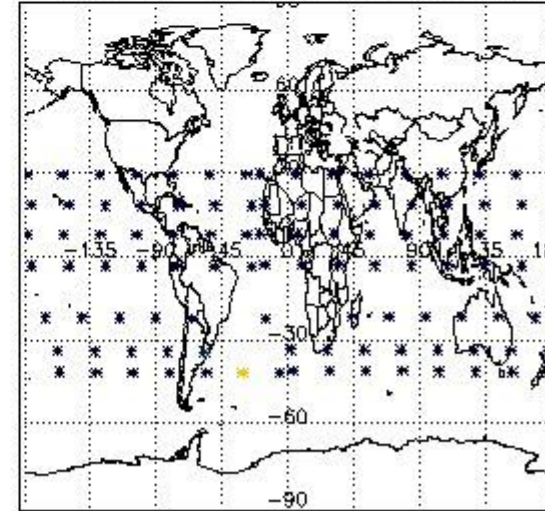
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

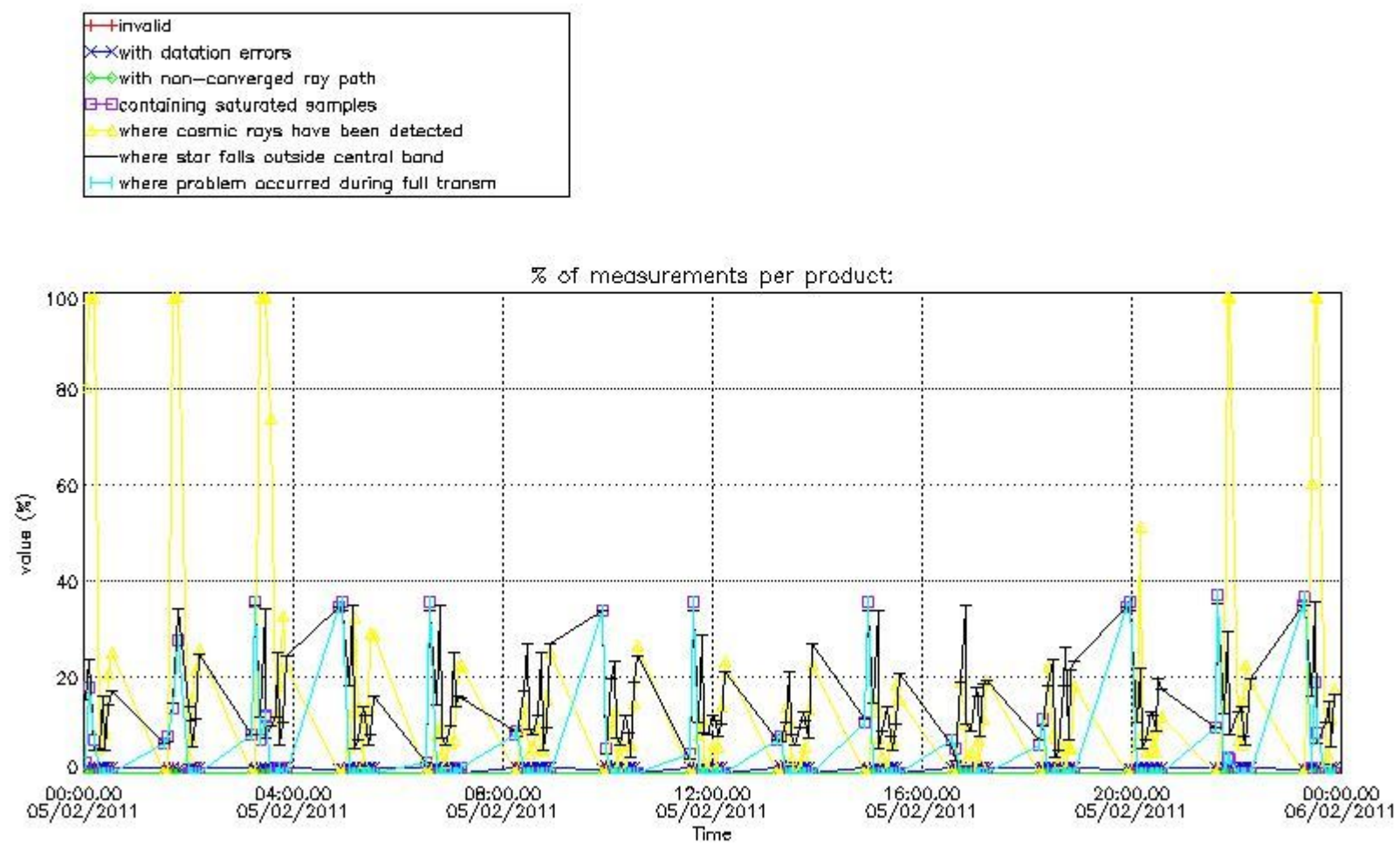


4. Level 1 quality information per product

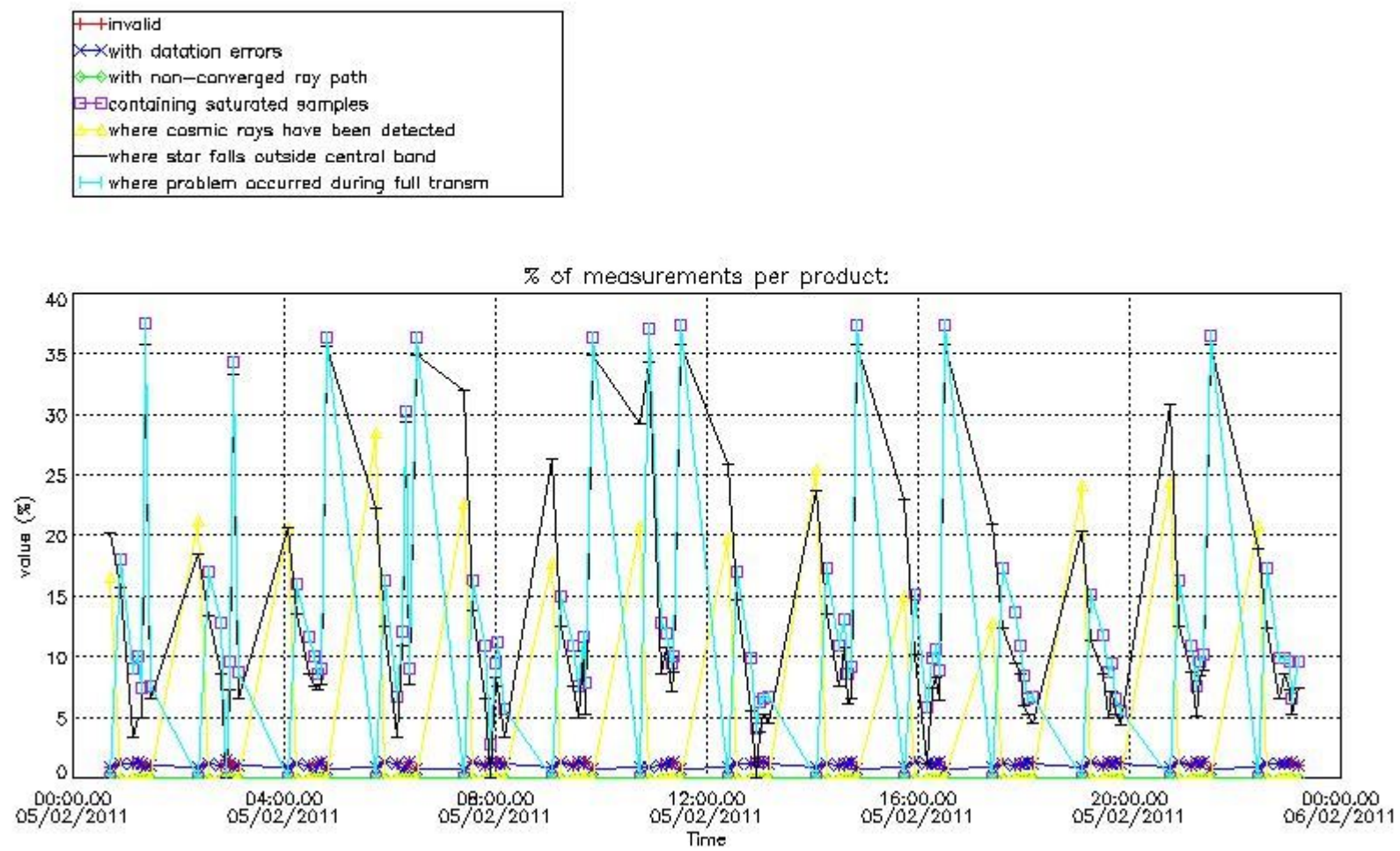
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

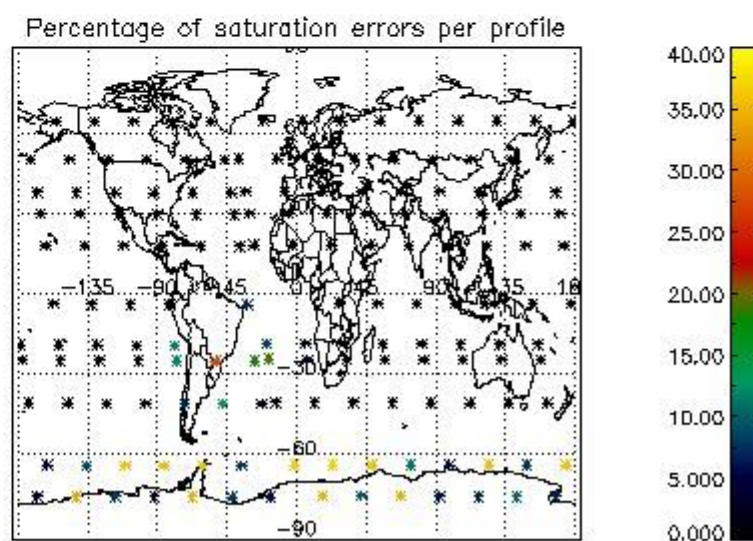
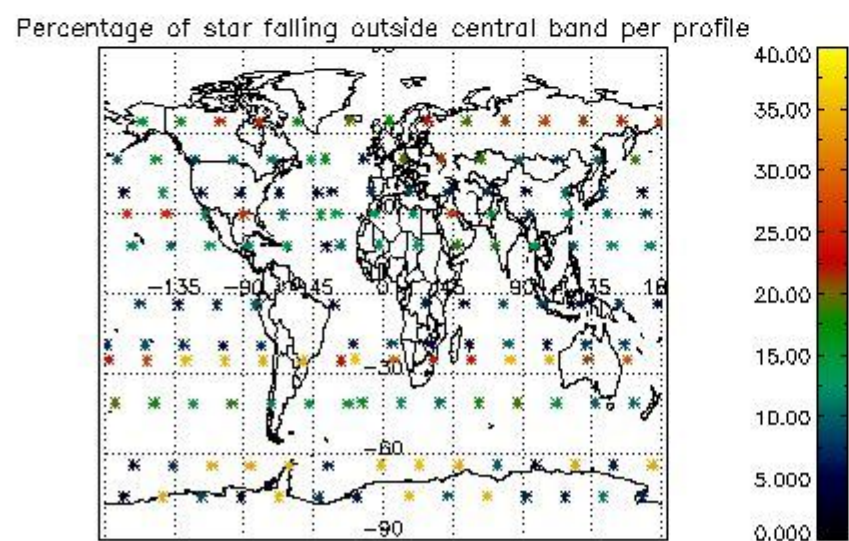
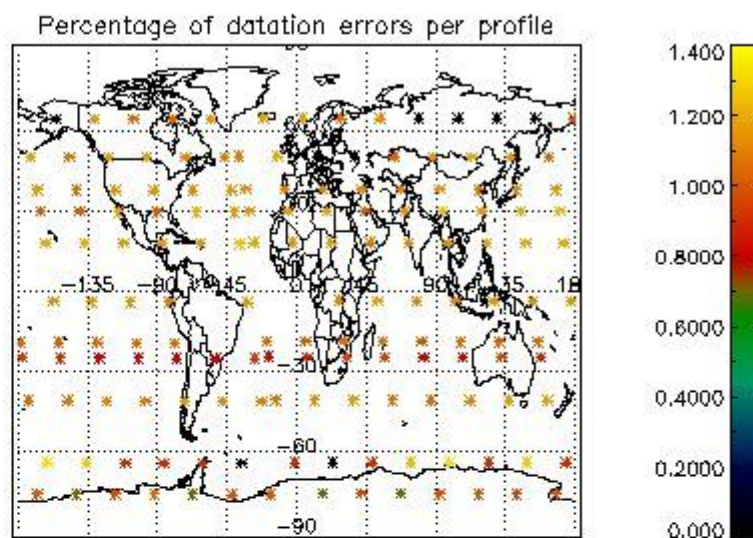
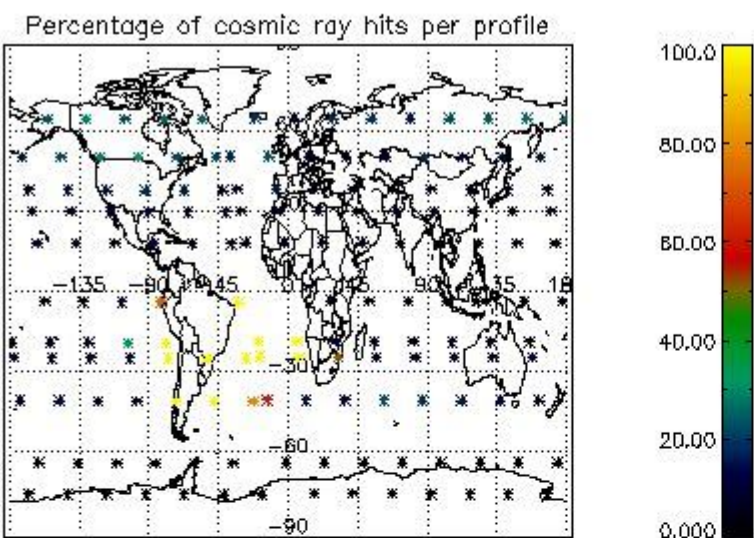


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

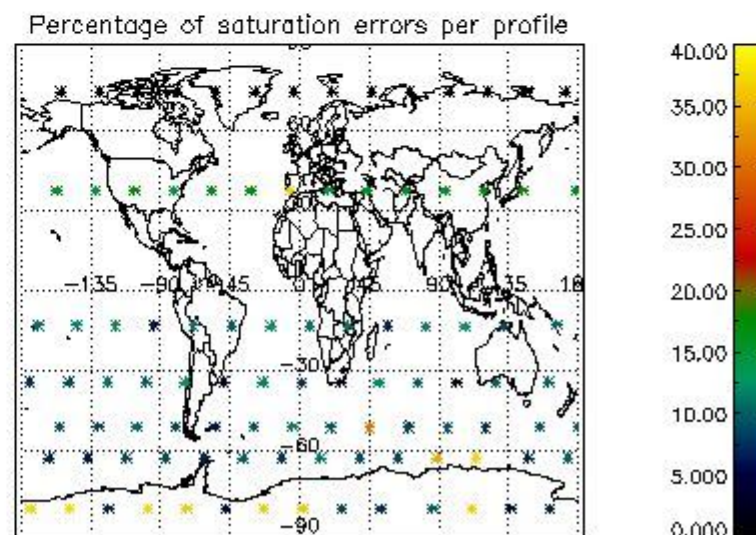
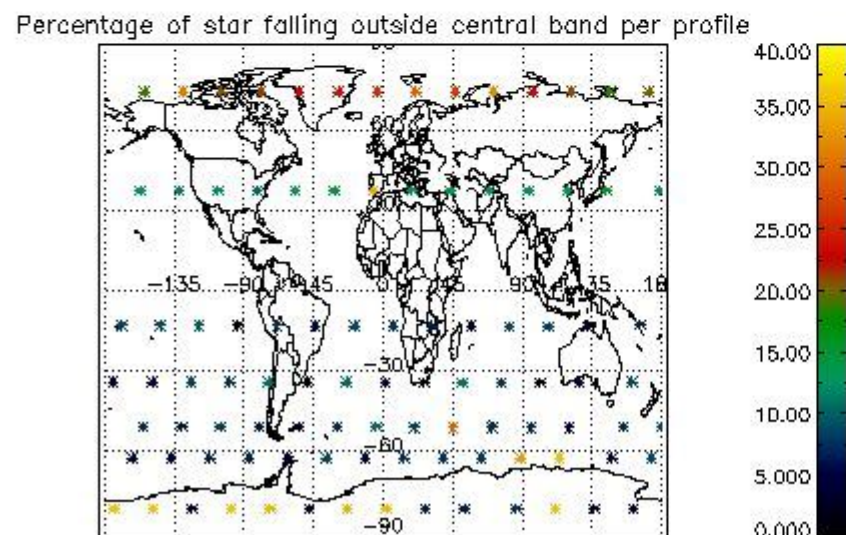
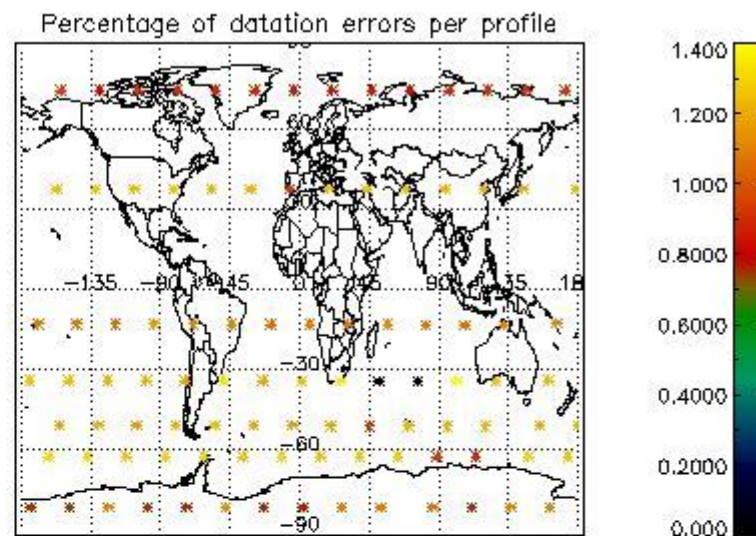
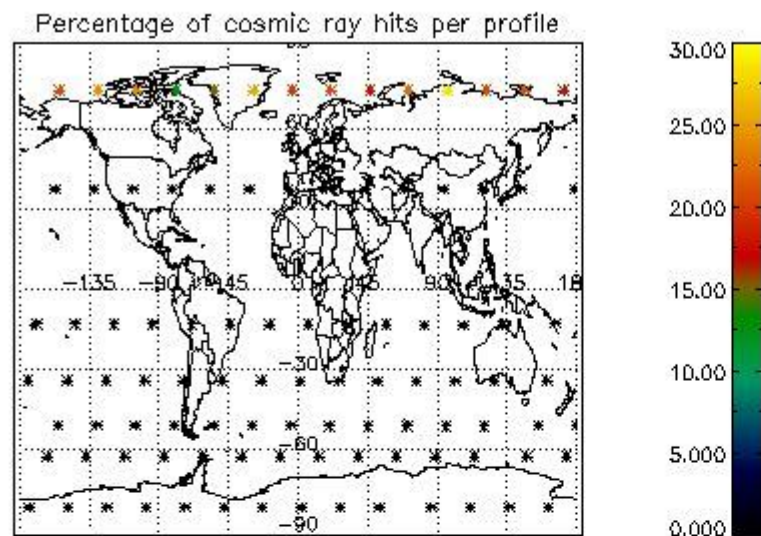


4.2 Plot quality information per product coming from level 1b processing (world map)

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

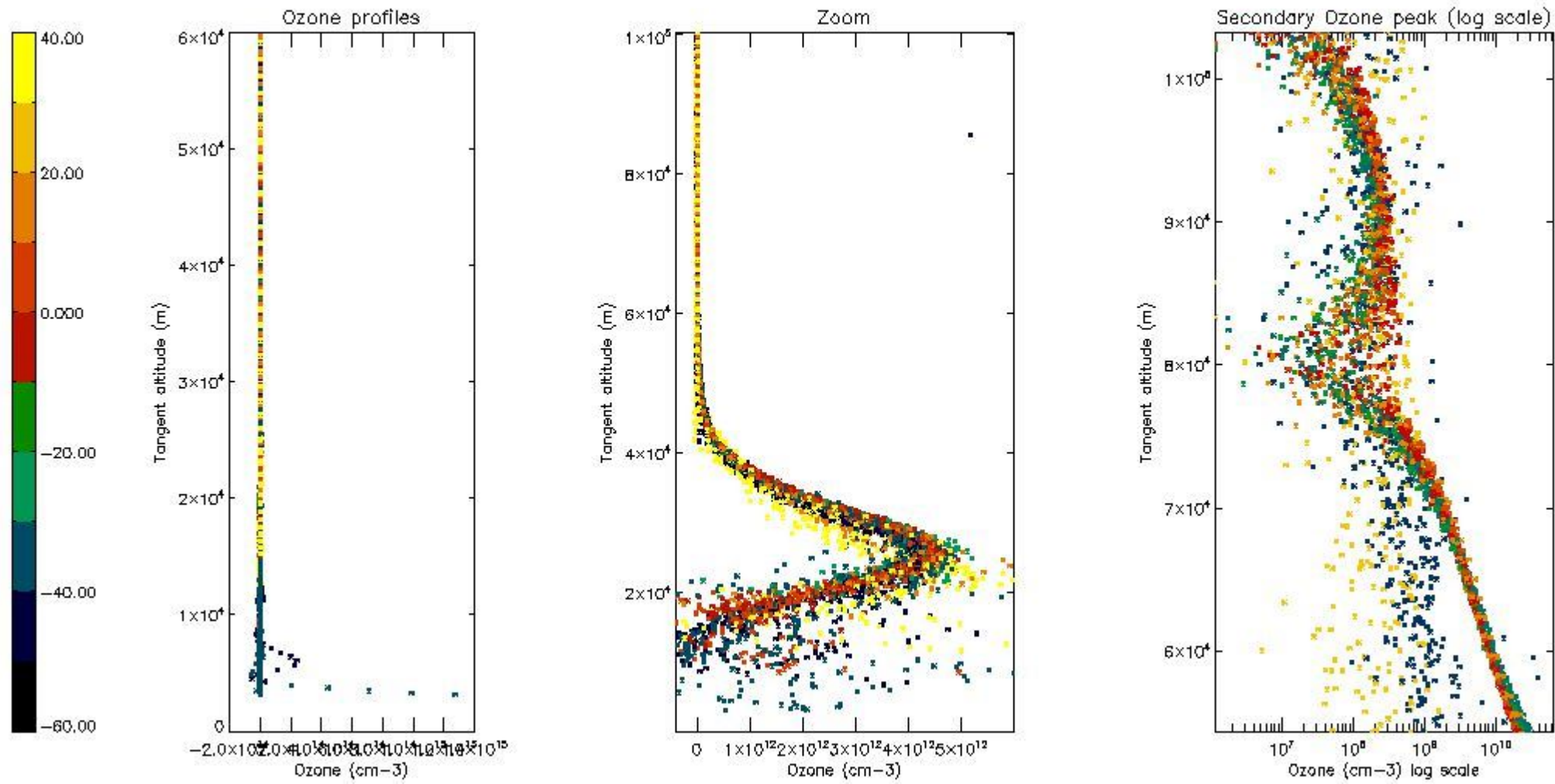
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	21

STD < 10	17
STD < 5	12

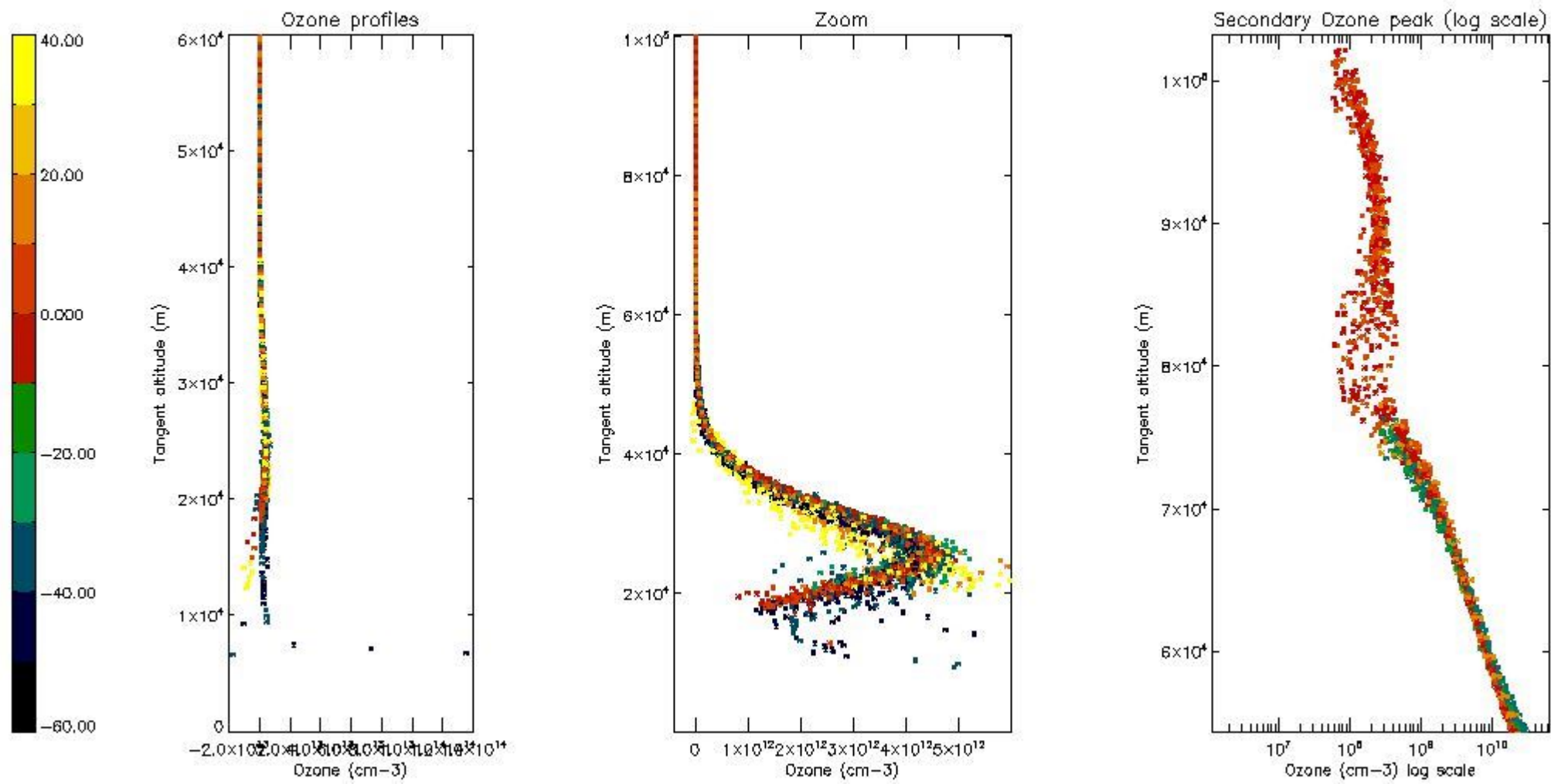
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



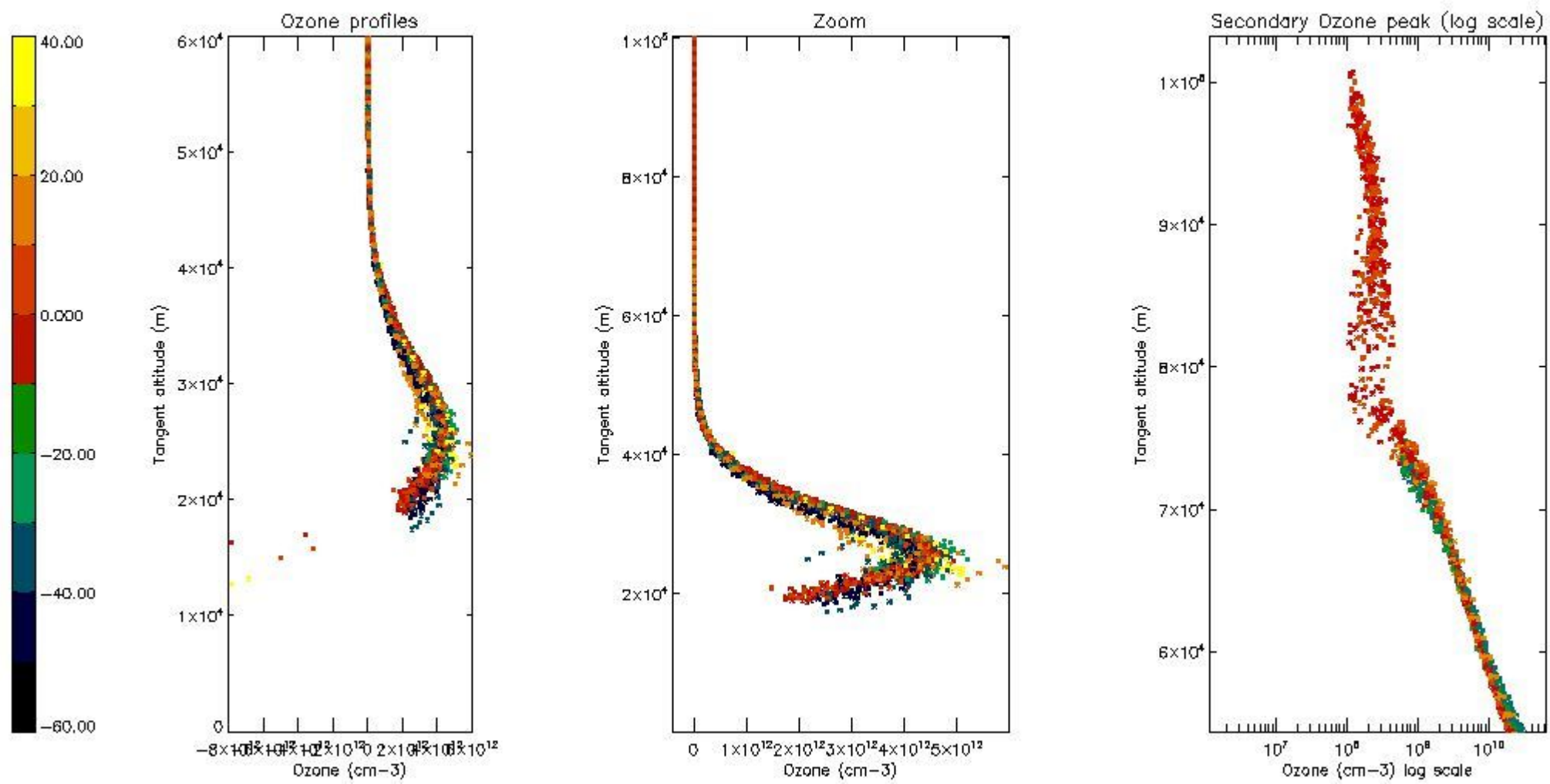
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



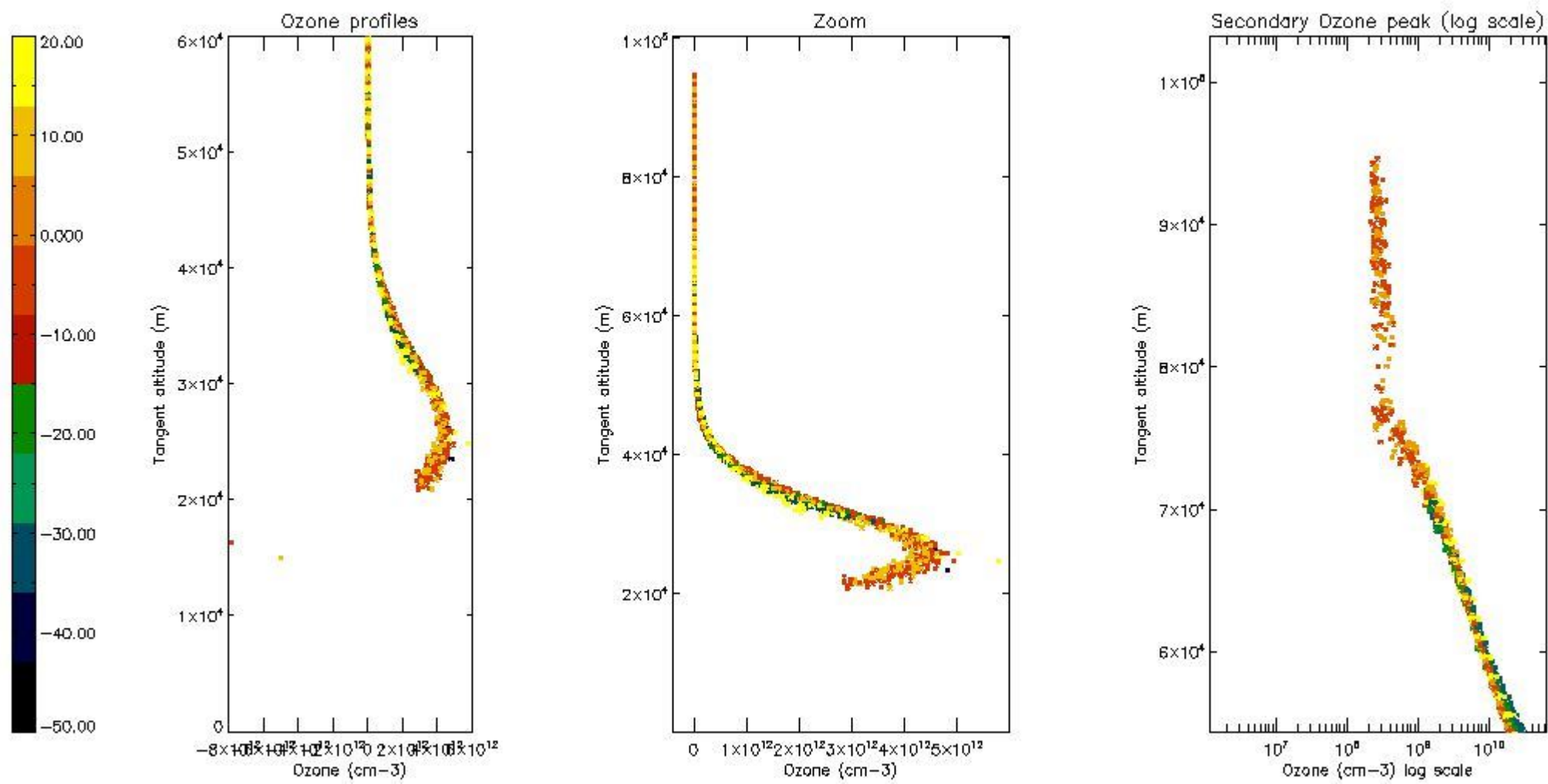
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



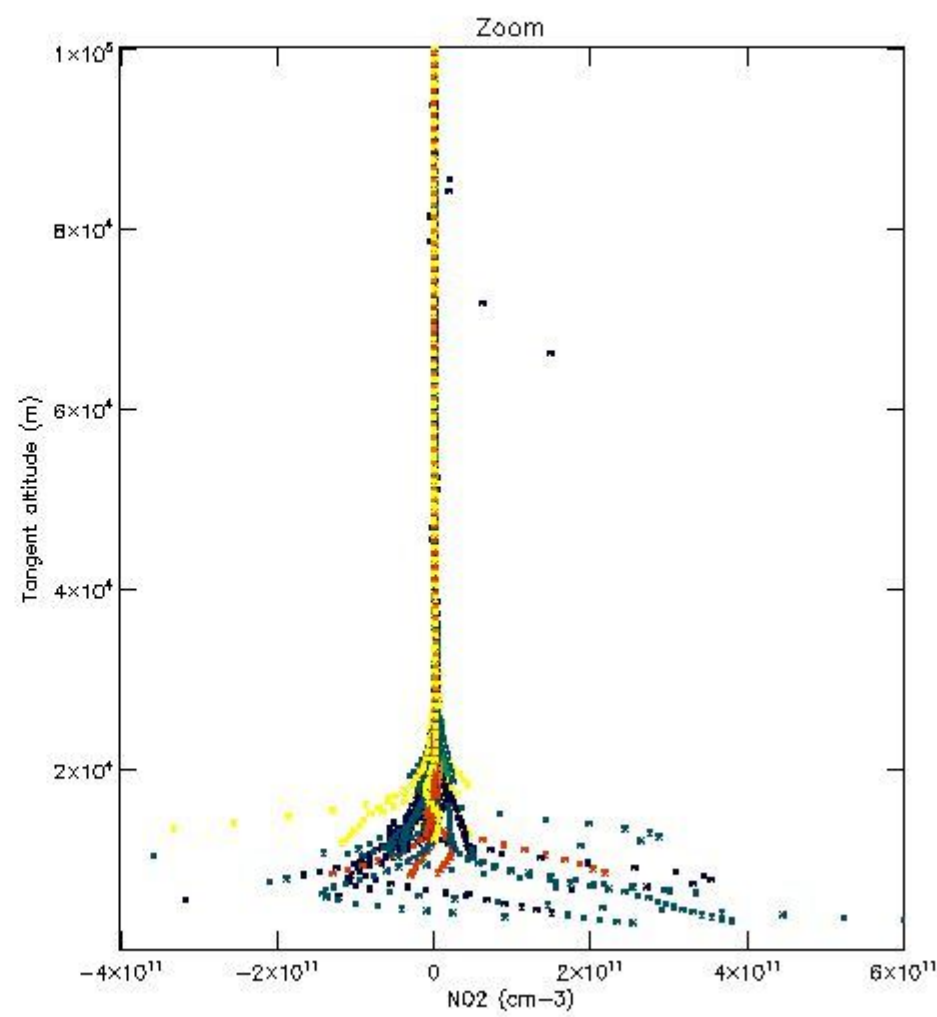
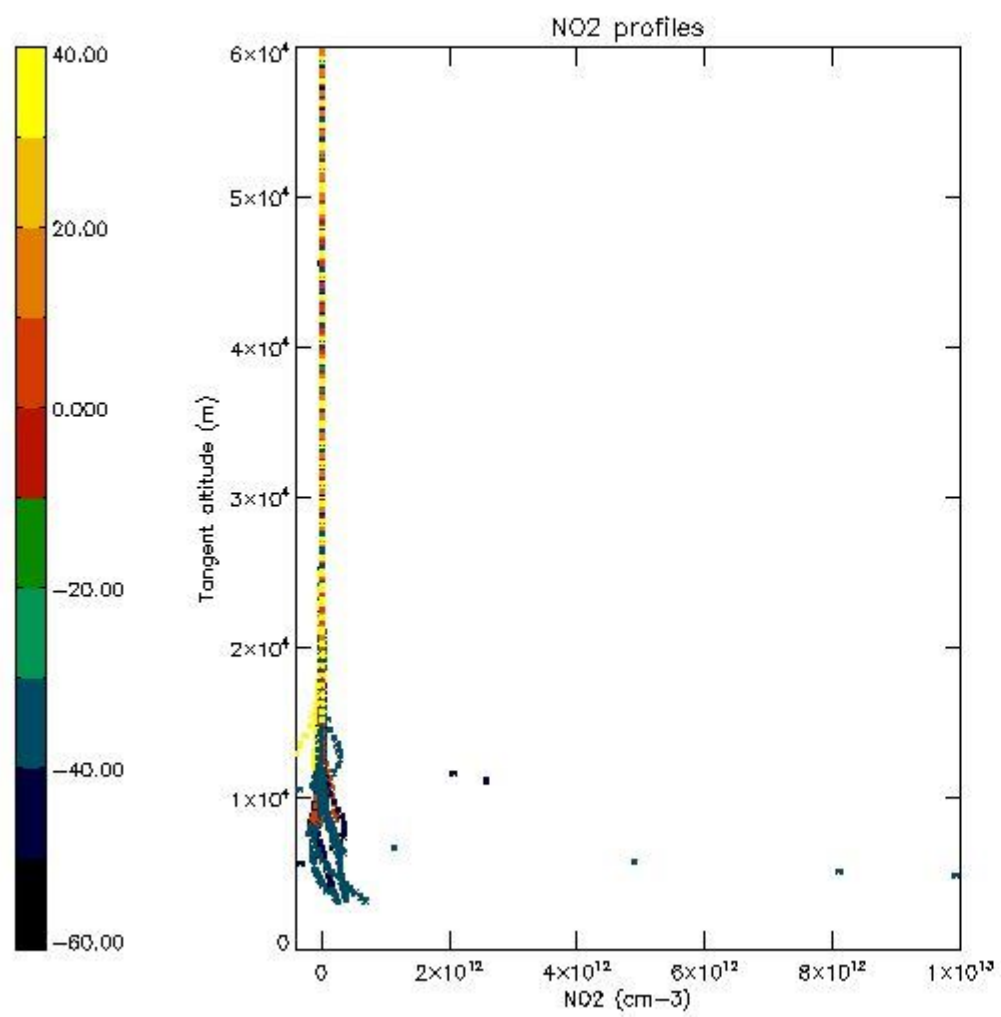
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



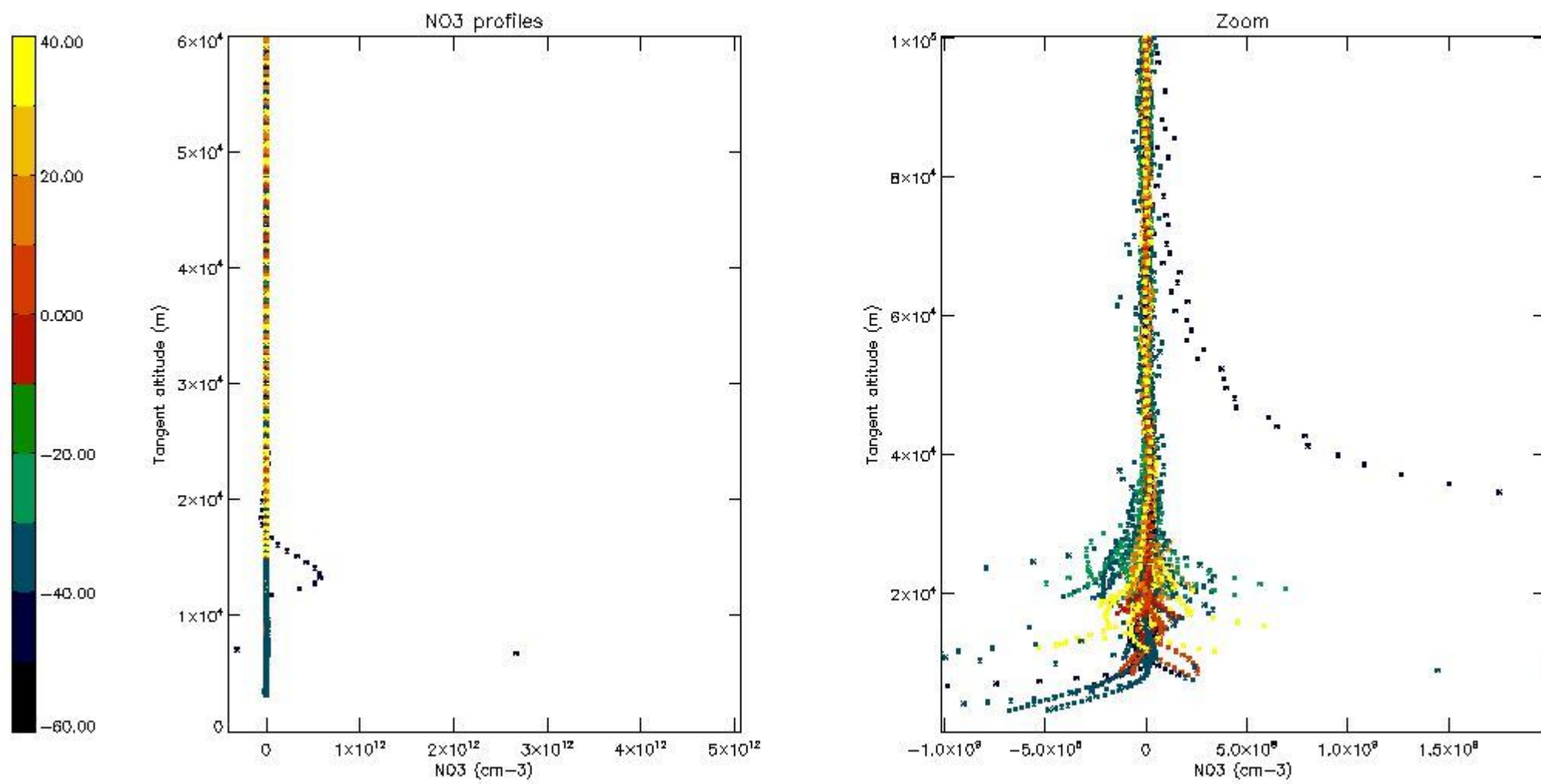
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



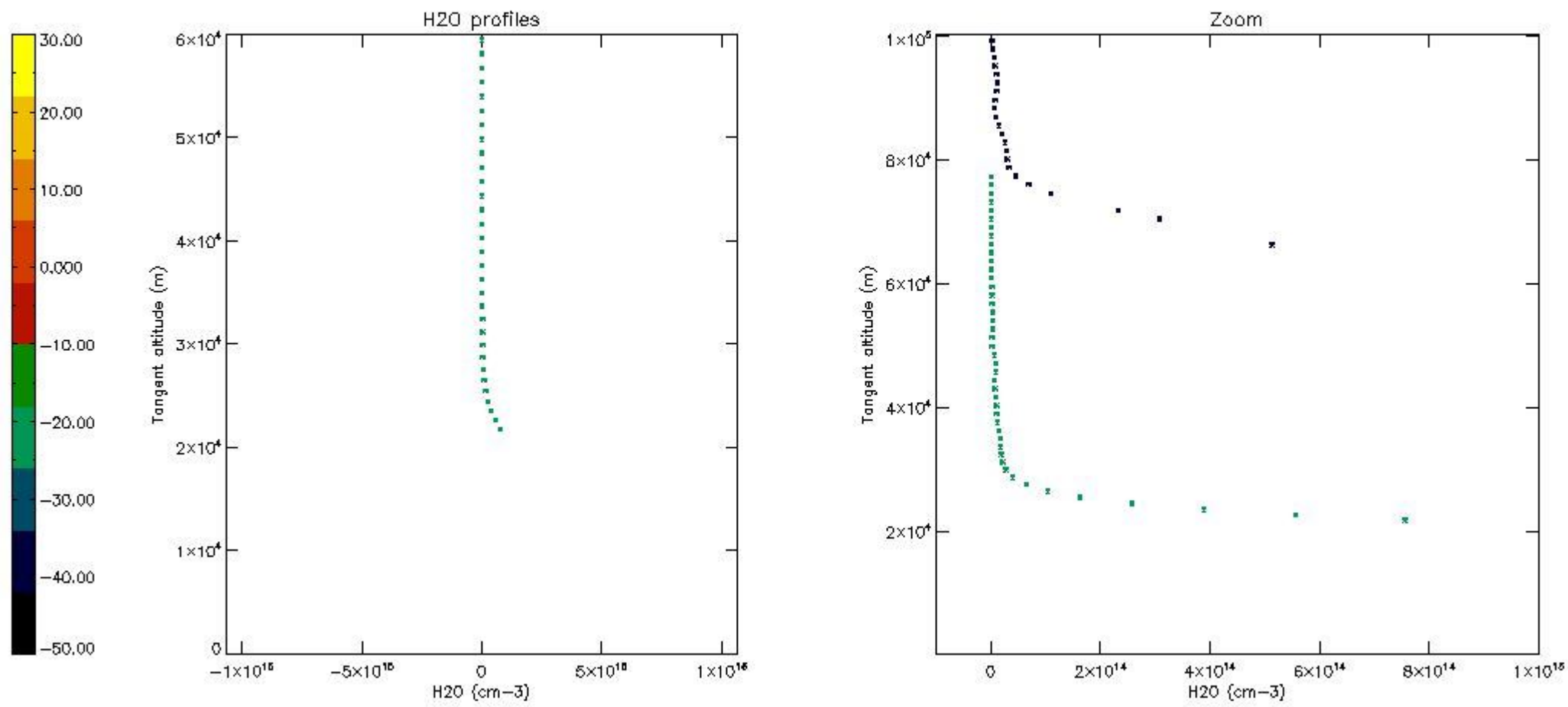
5.7 Plot NO3 profiles for all STD (dark without errors)

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	05-FEB-2011 00:02:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-FEB-2011 00:02:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-FEB-2011 00:02:17

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

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

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

[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% \(dark without errors\)](#)

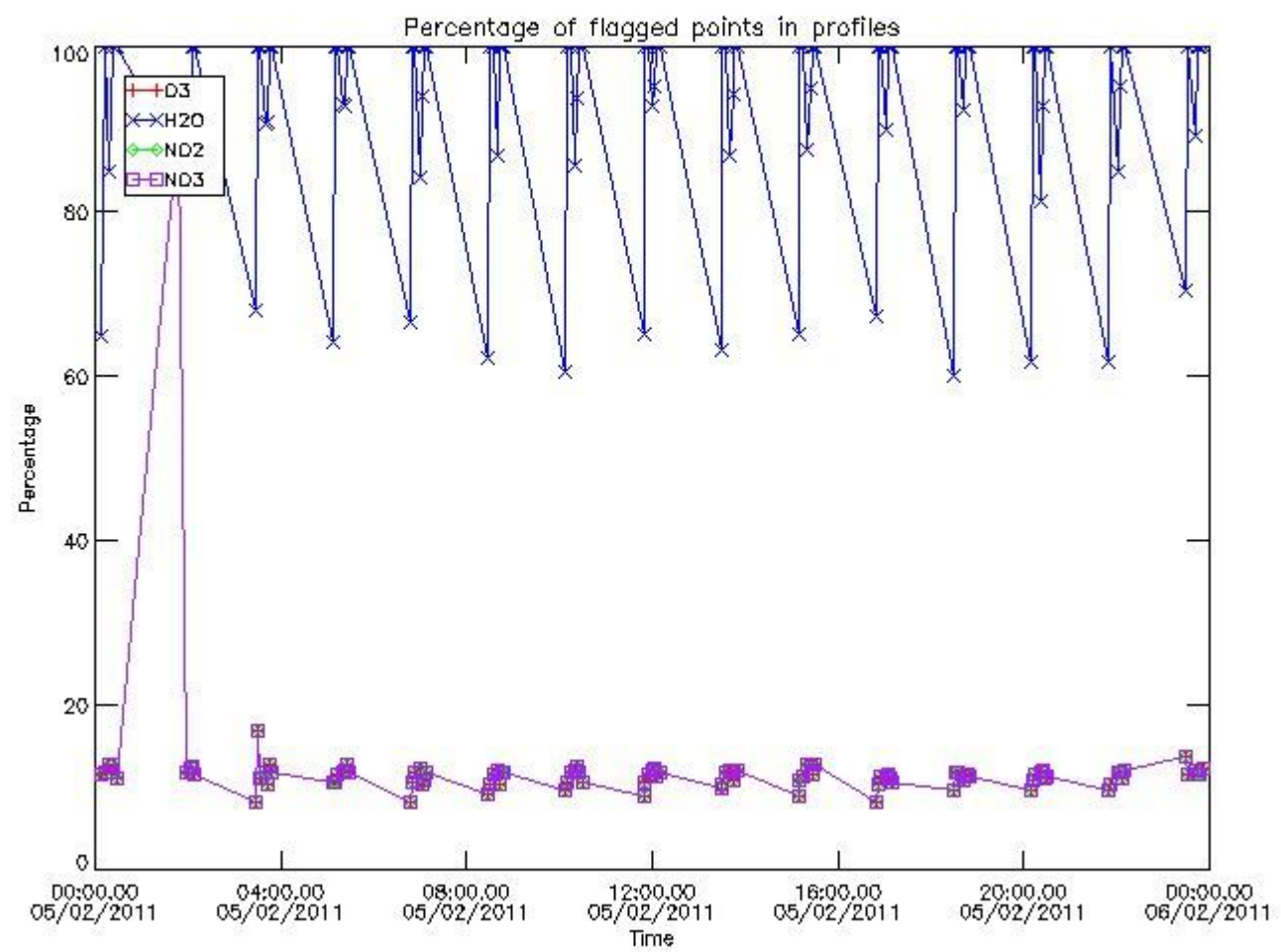
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

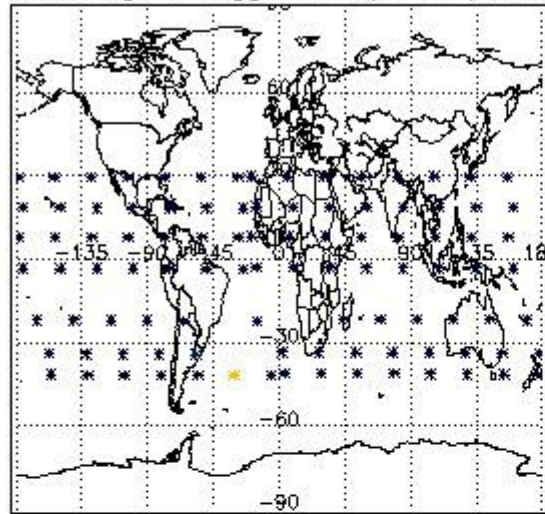
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

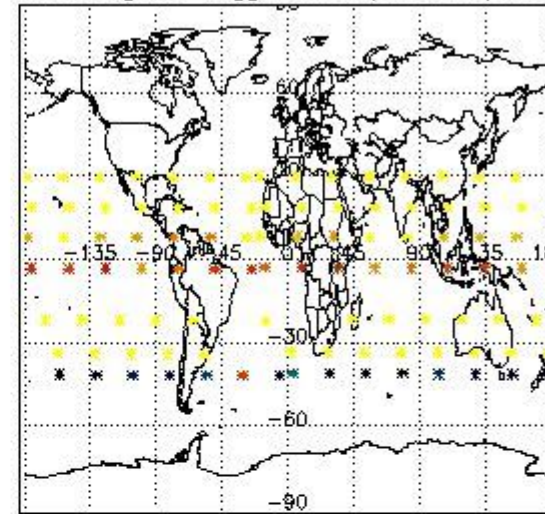


3.2 Plot quality information per product (world map)

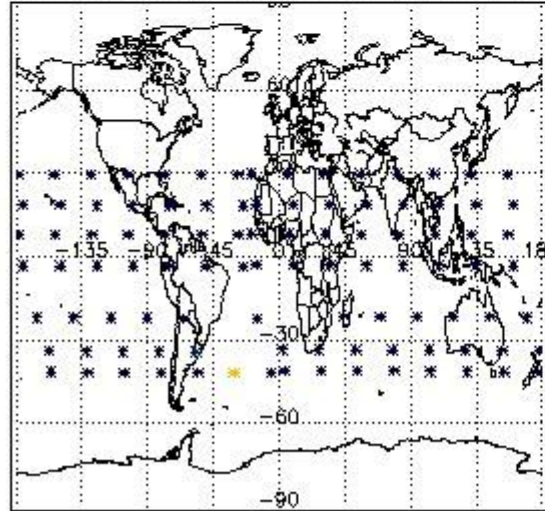
Percentage of flagged data per O3 profile



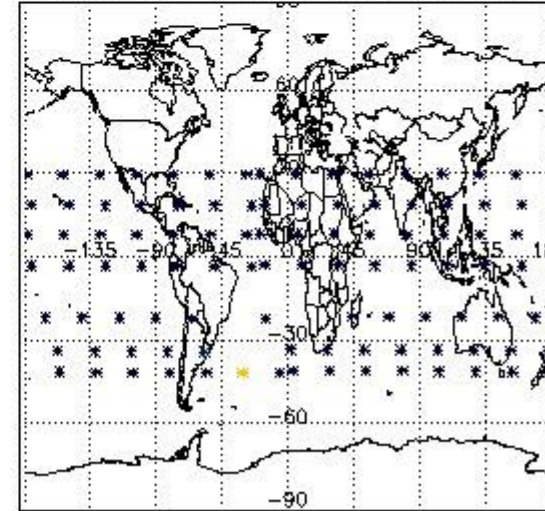
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

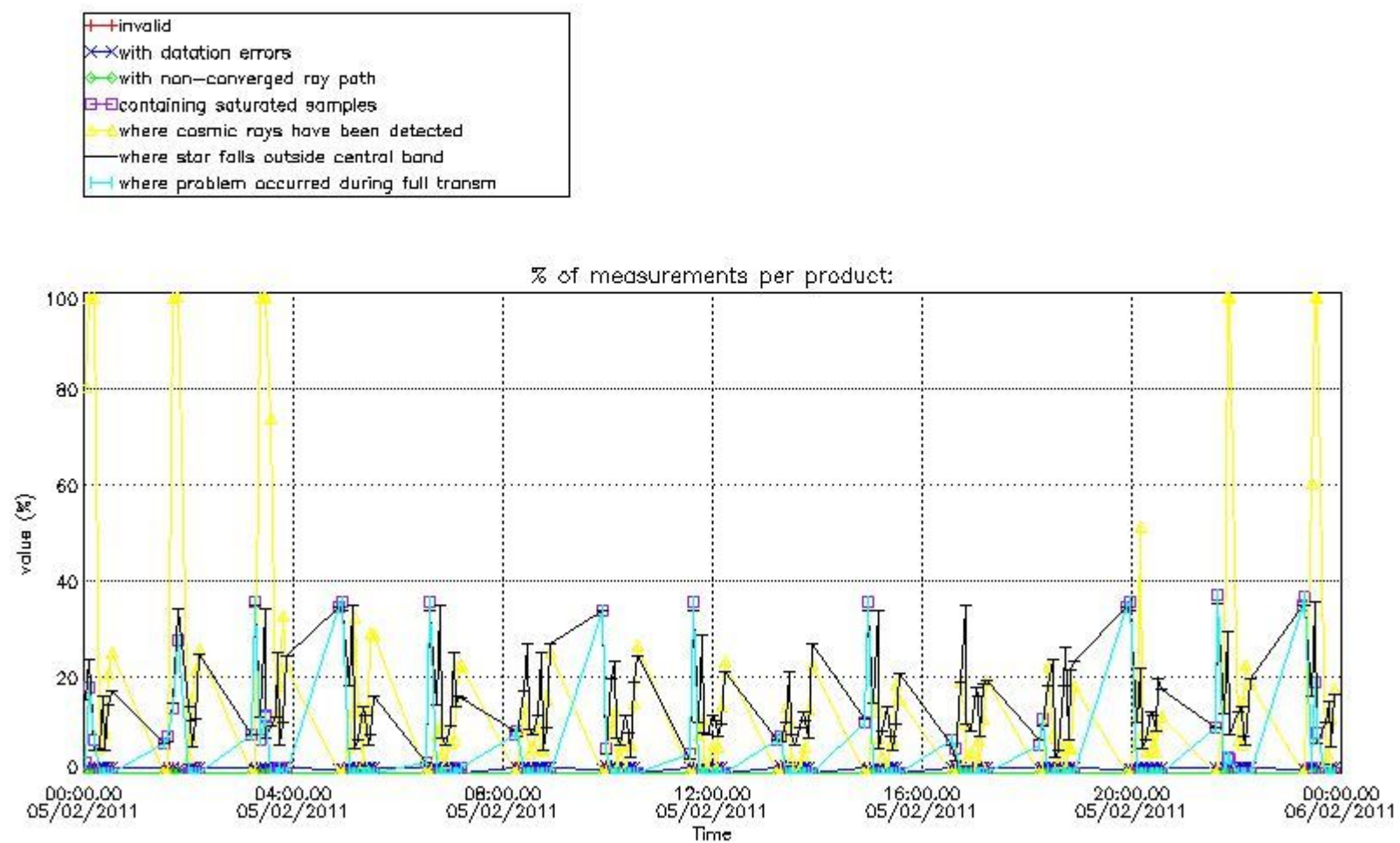


4. Level 1 quality information per product

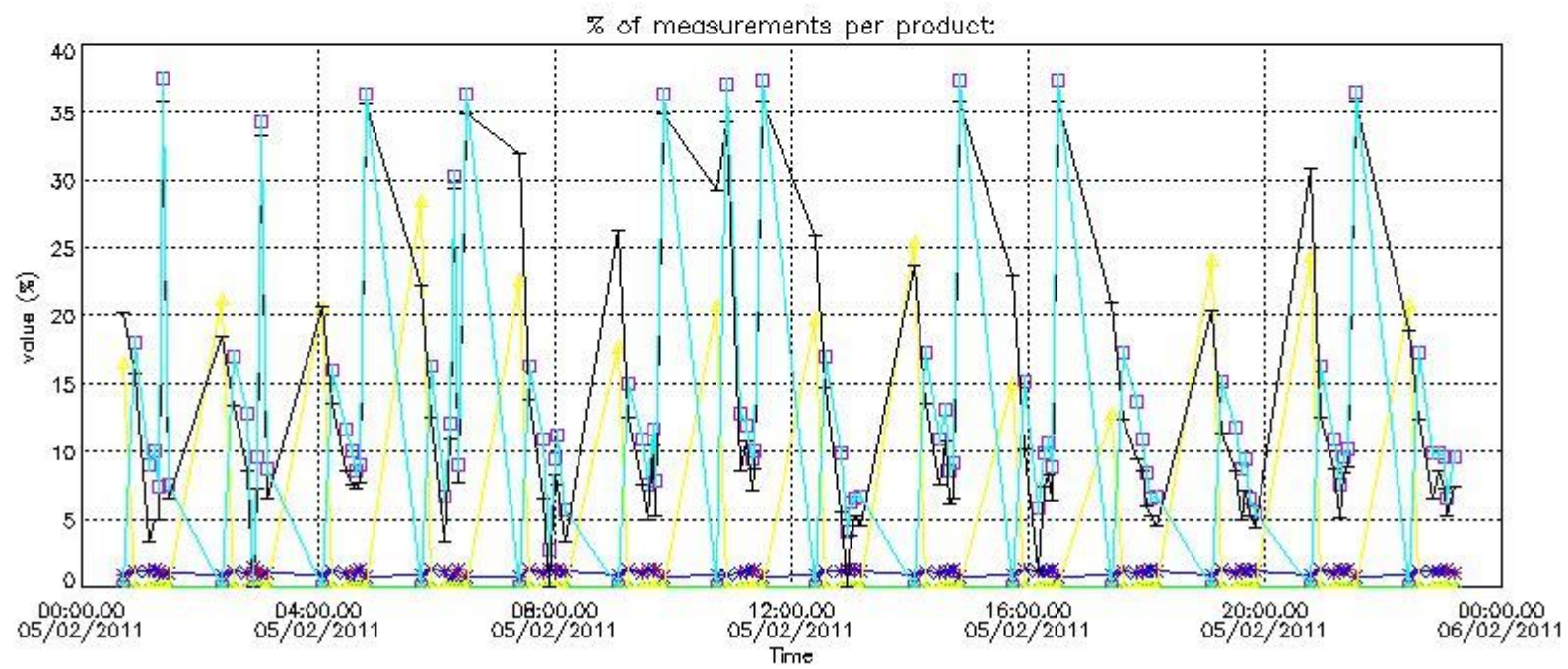
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

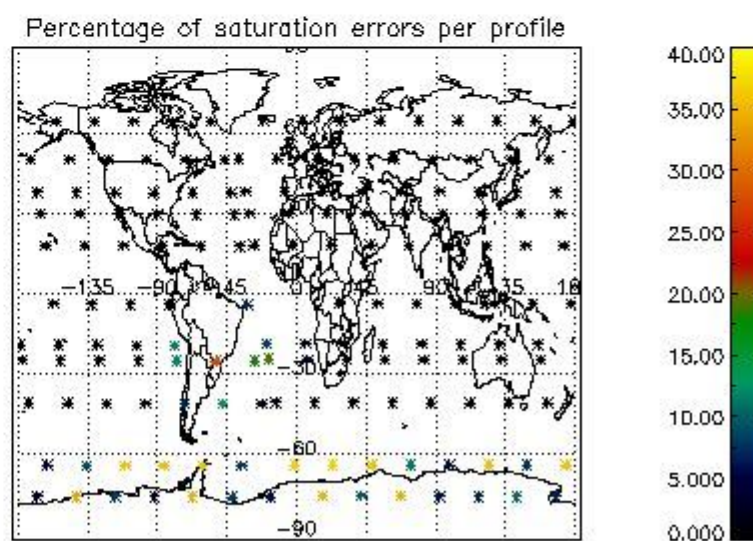
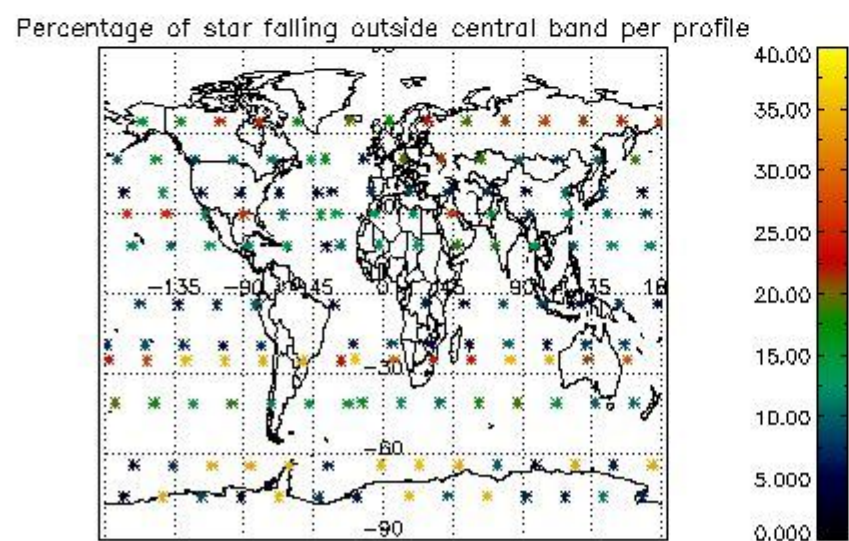
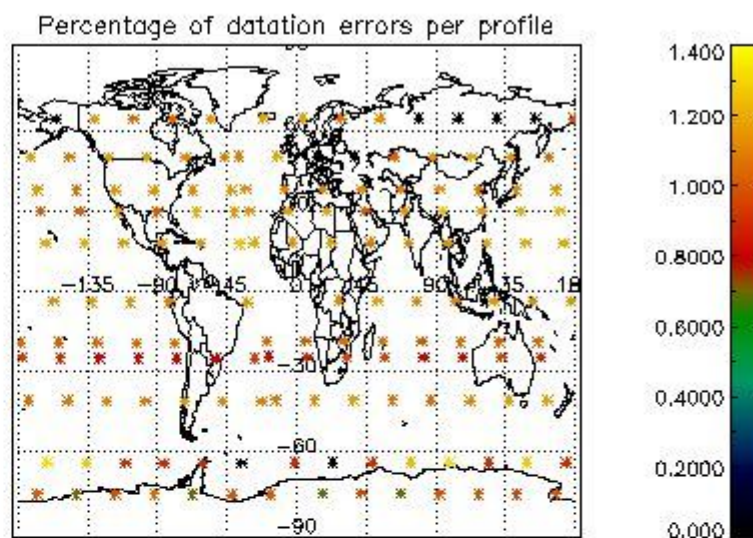
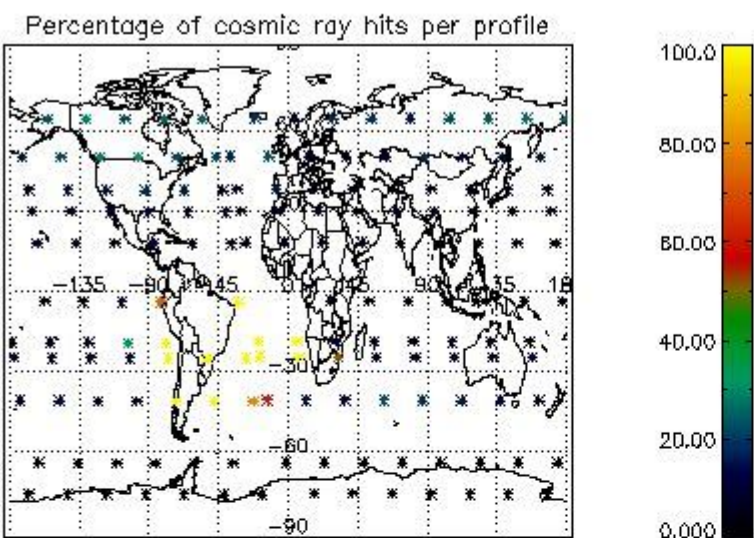


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

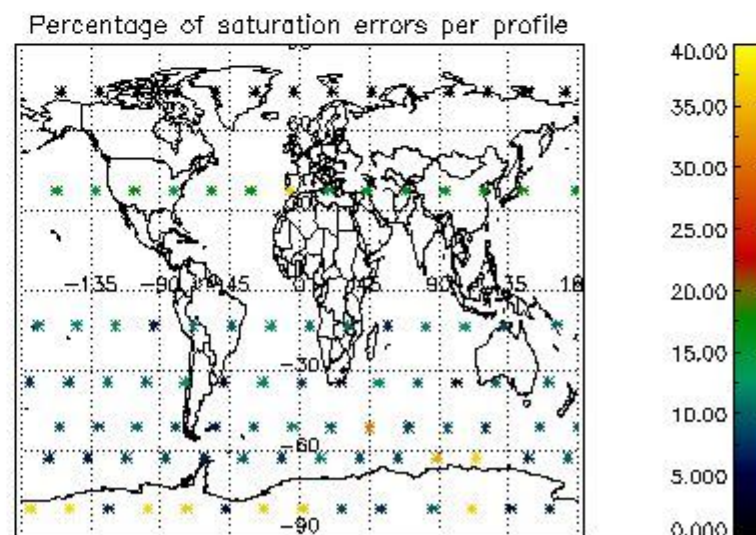
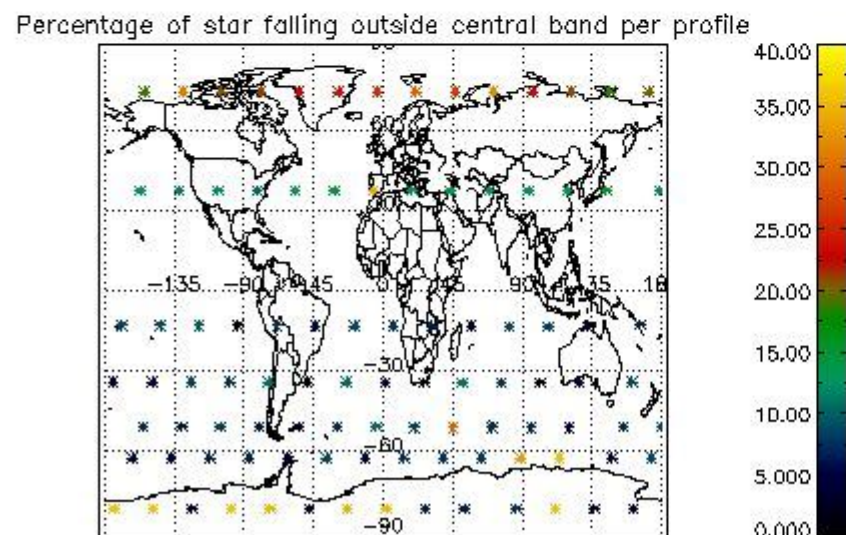
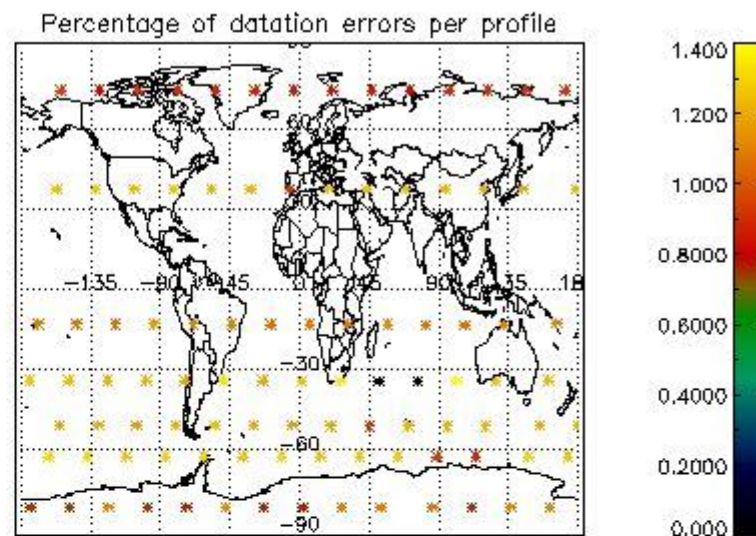
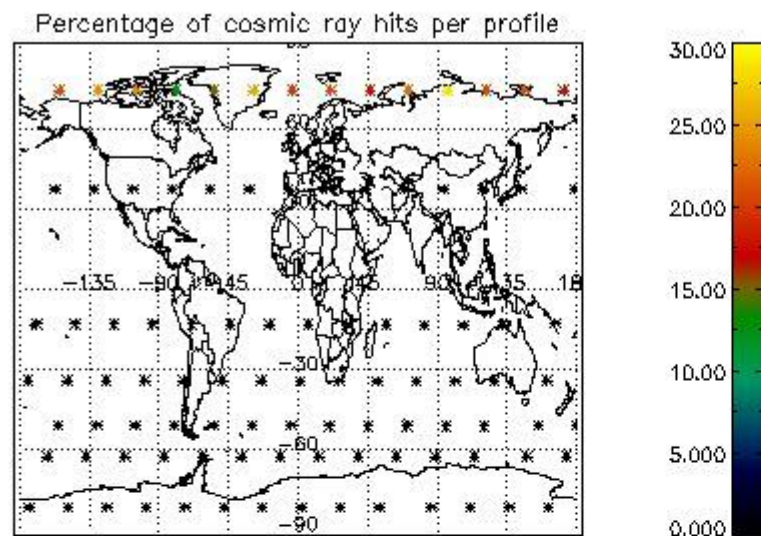


4.2 Plot quality information per product coming from level 1b processing (world map)

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

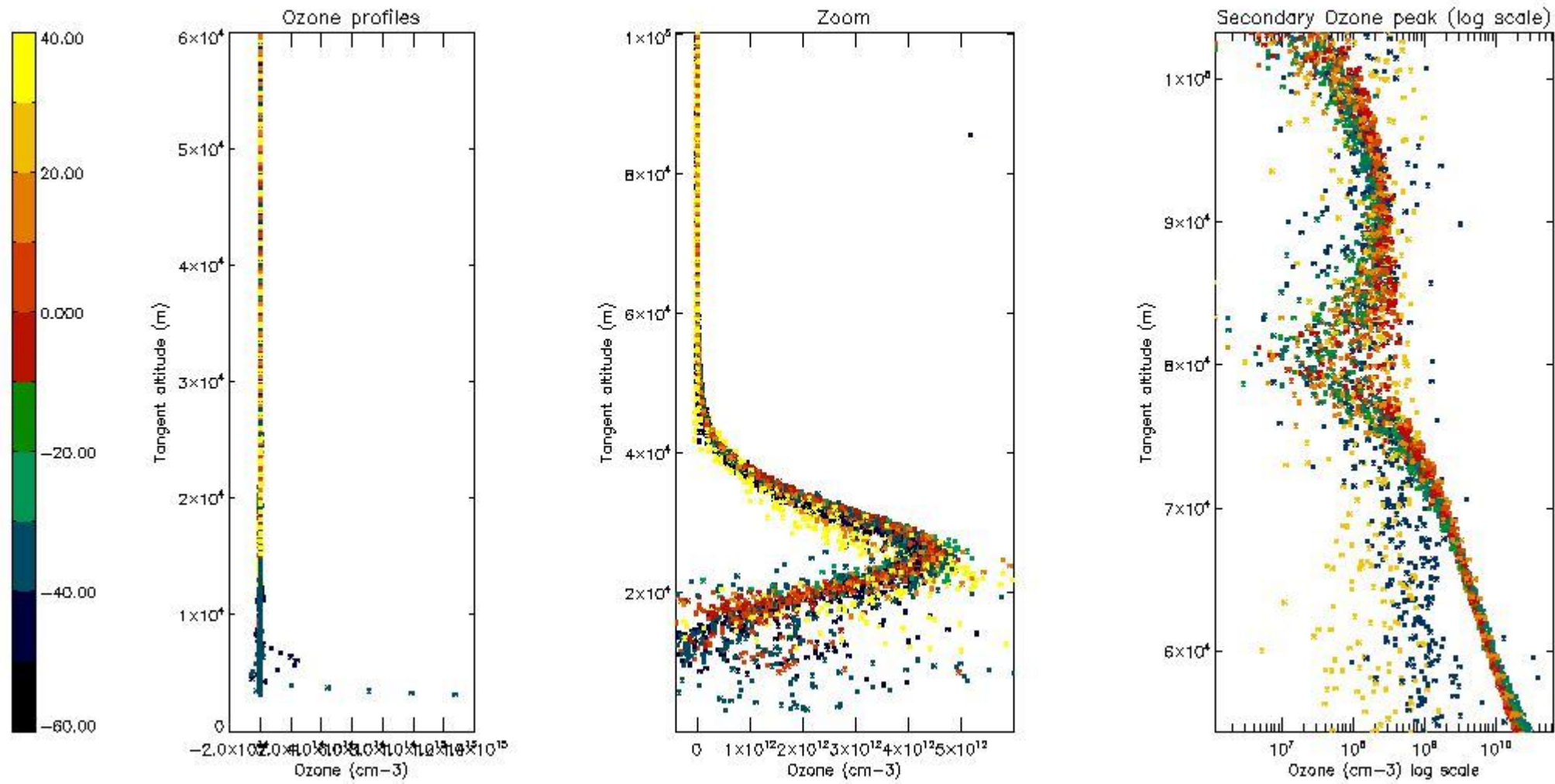
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	21

STD < 10	17
STD < 5	12

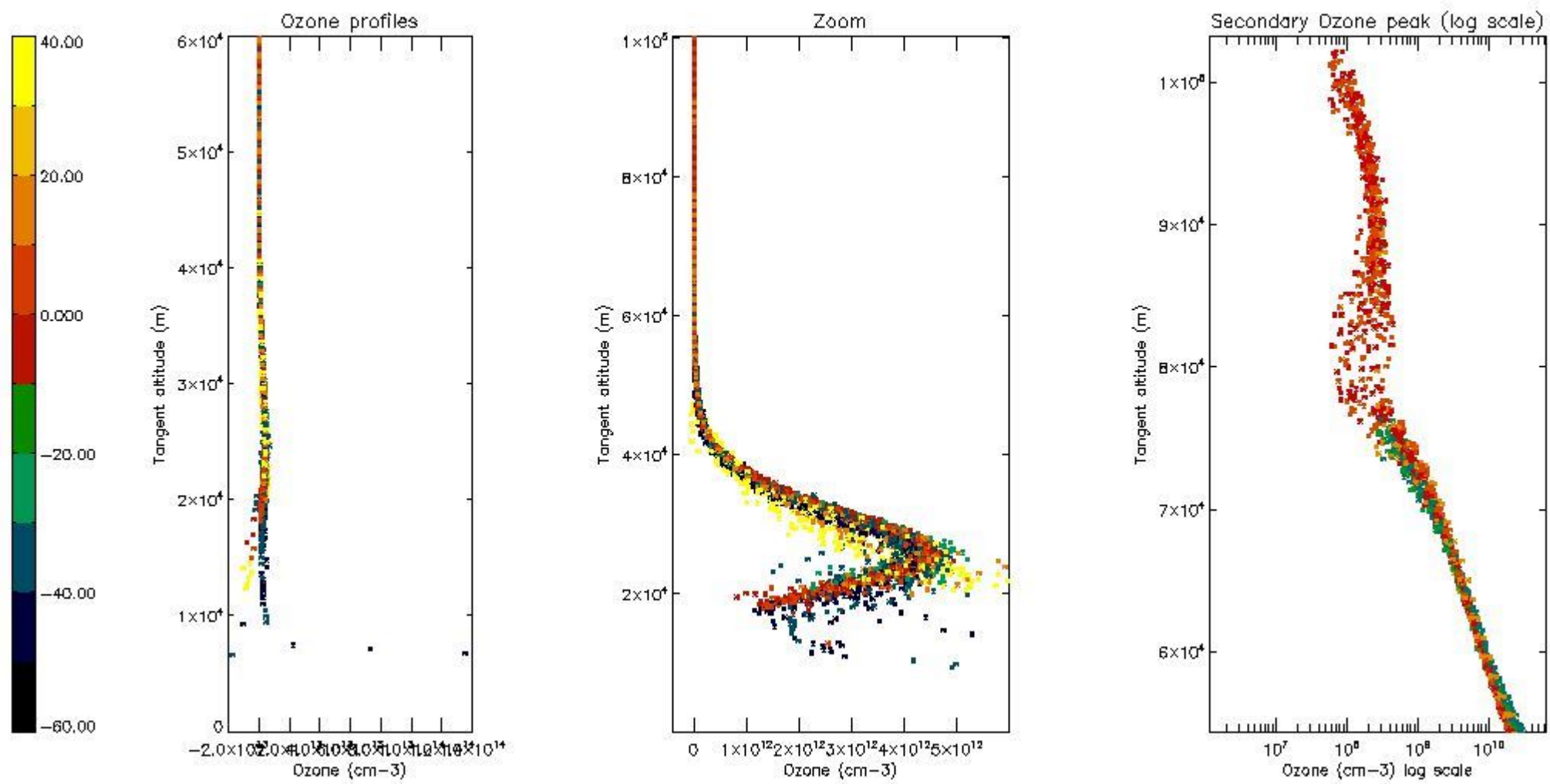
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



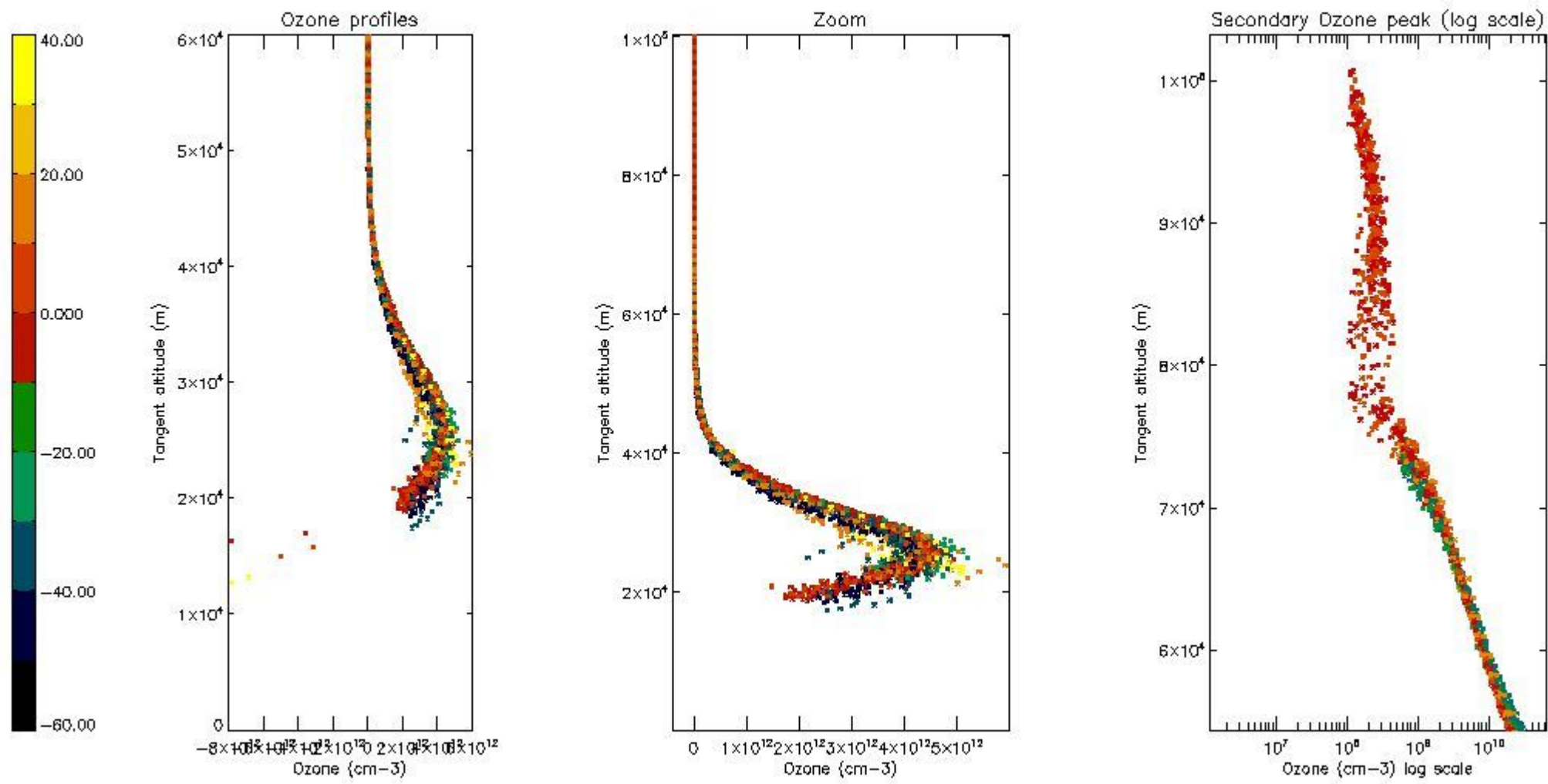
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



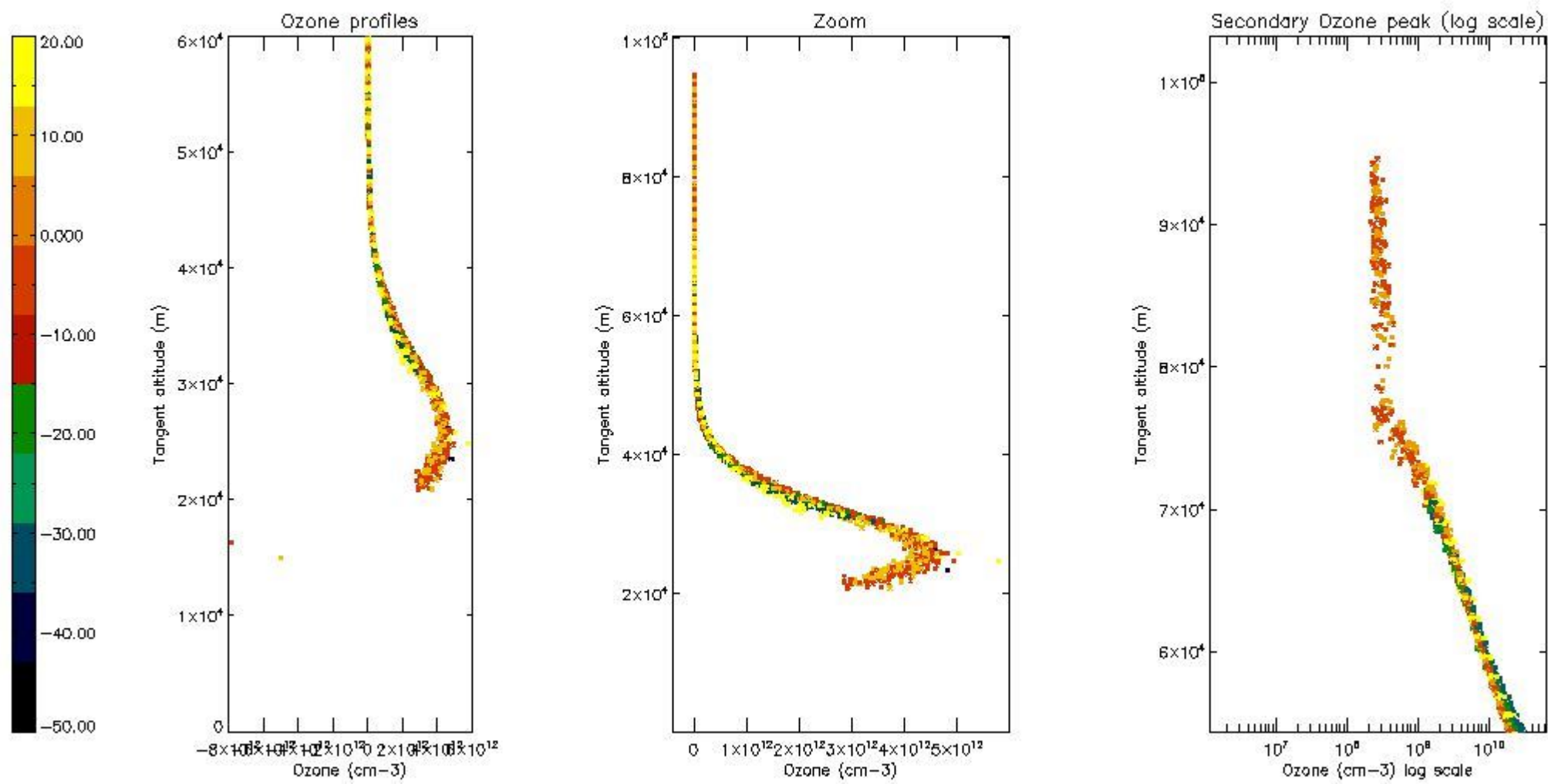
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



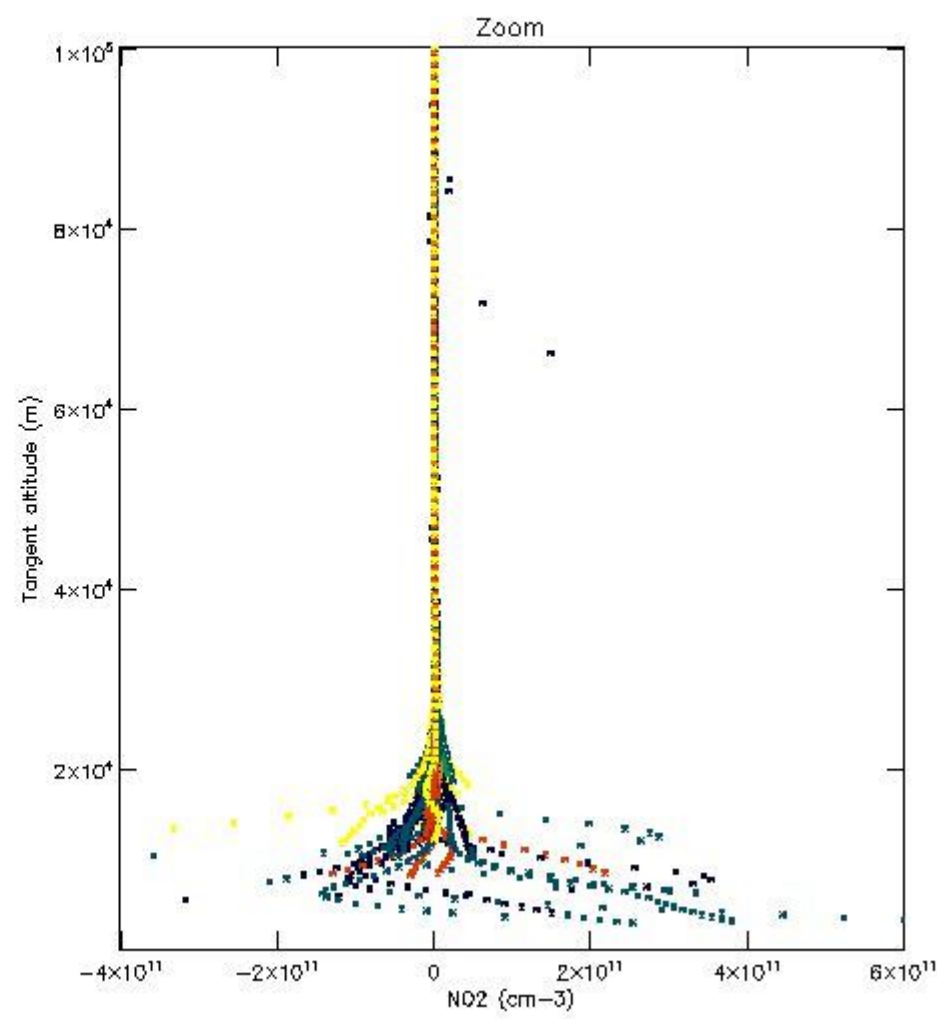
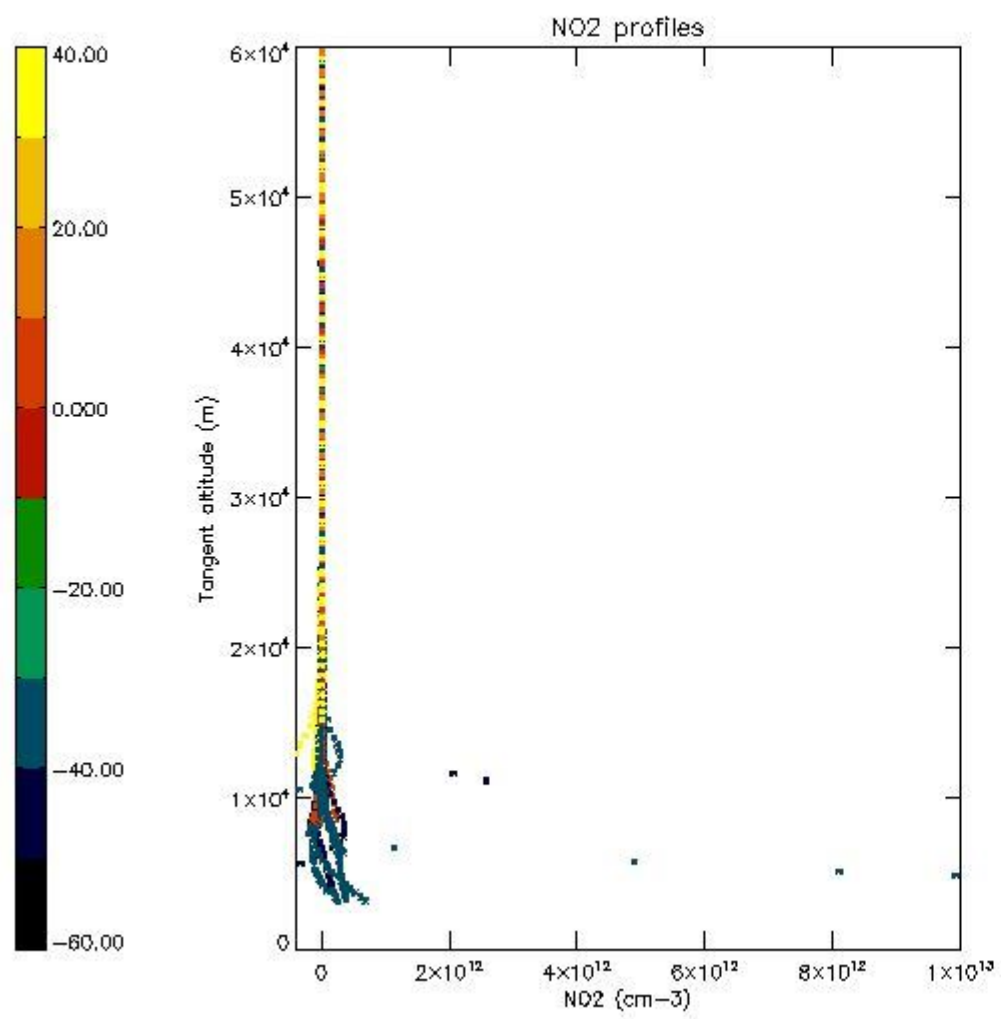
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



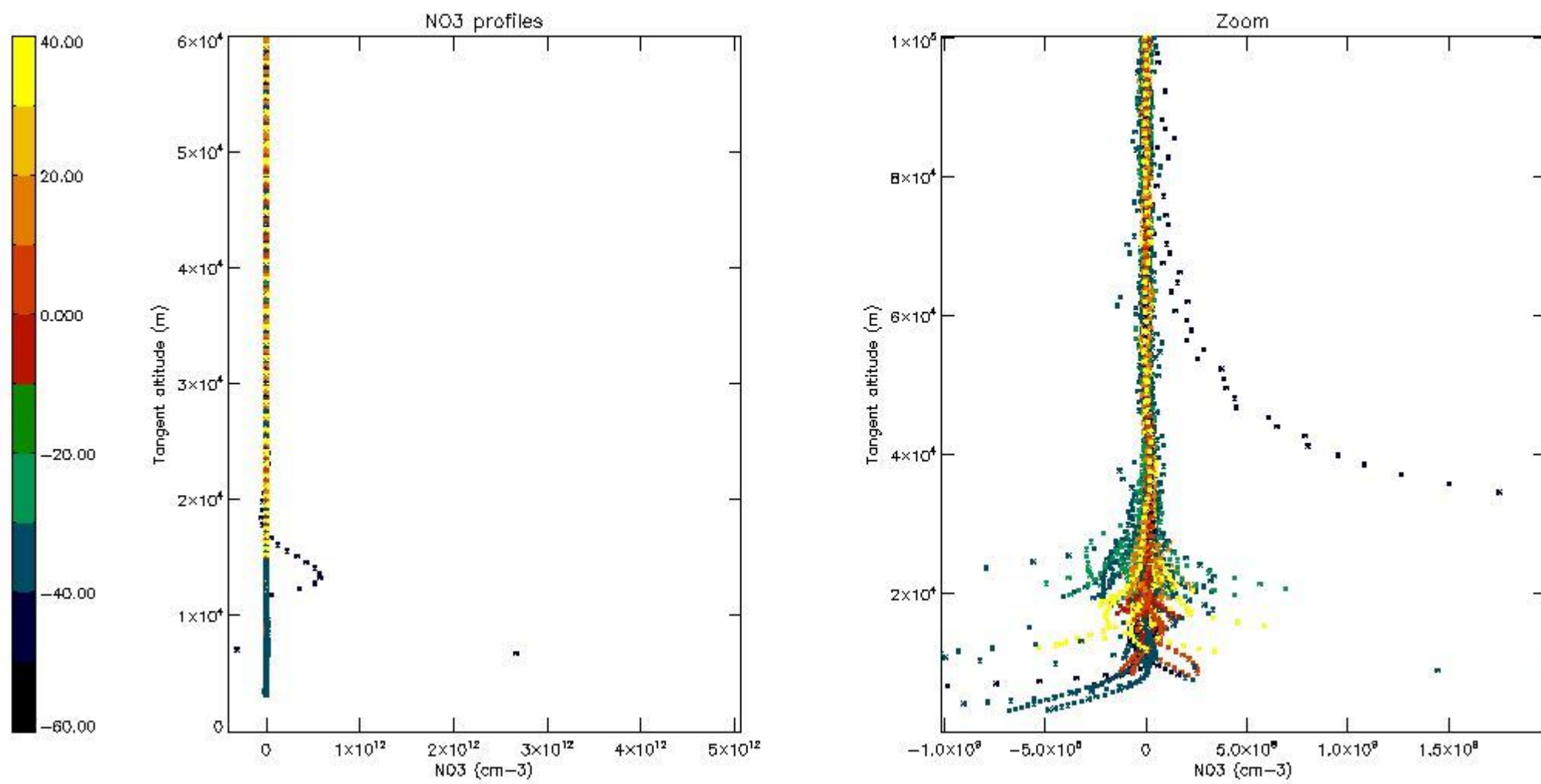
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



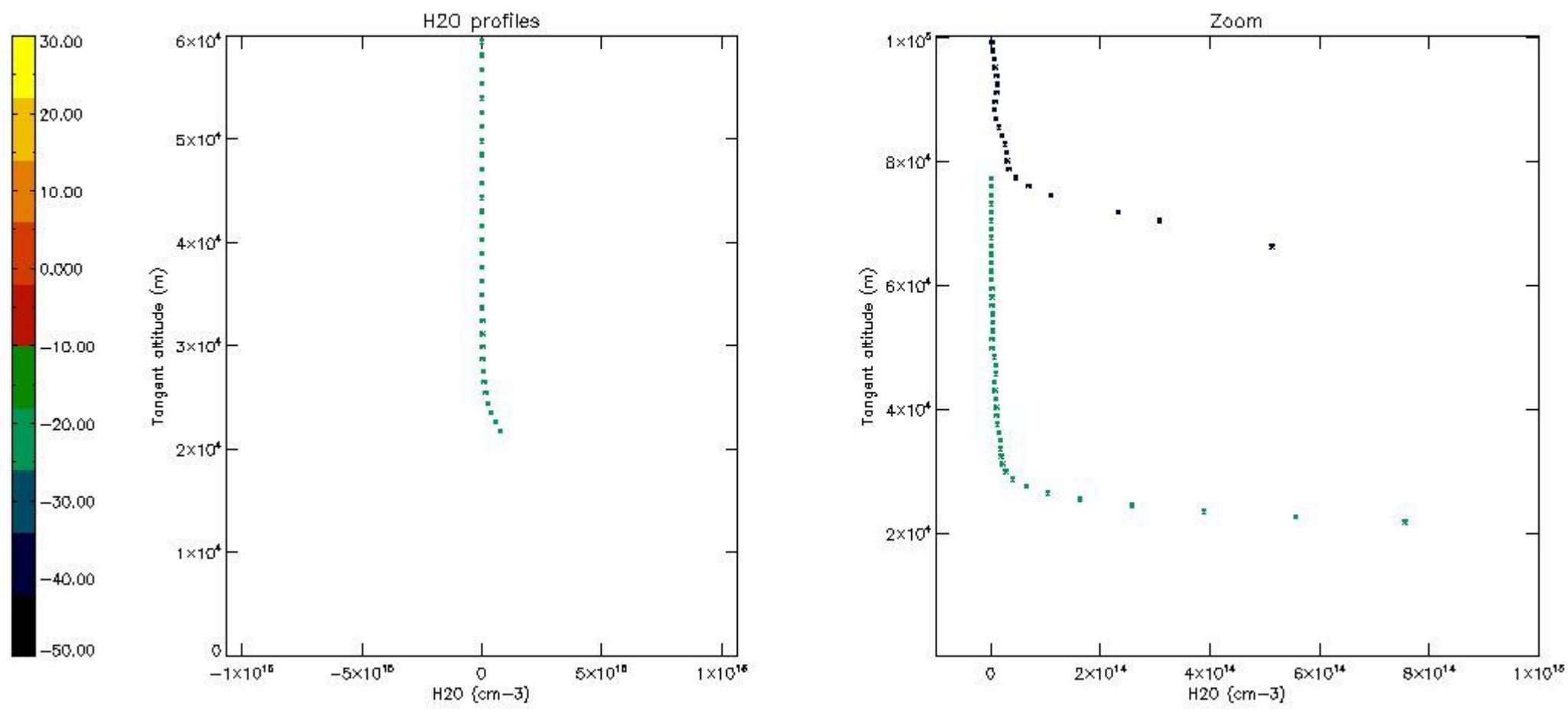
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

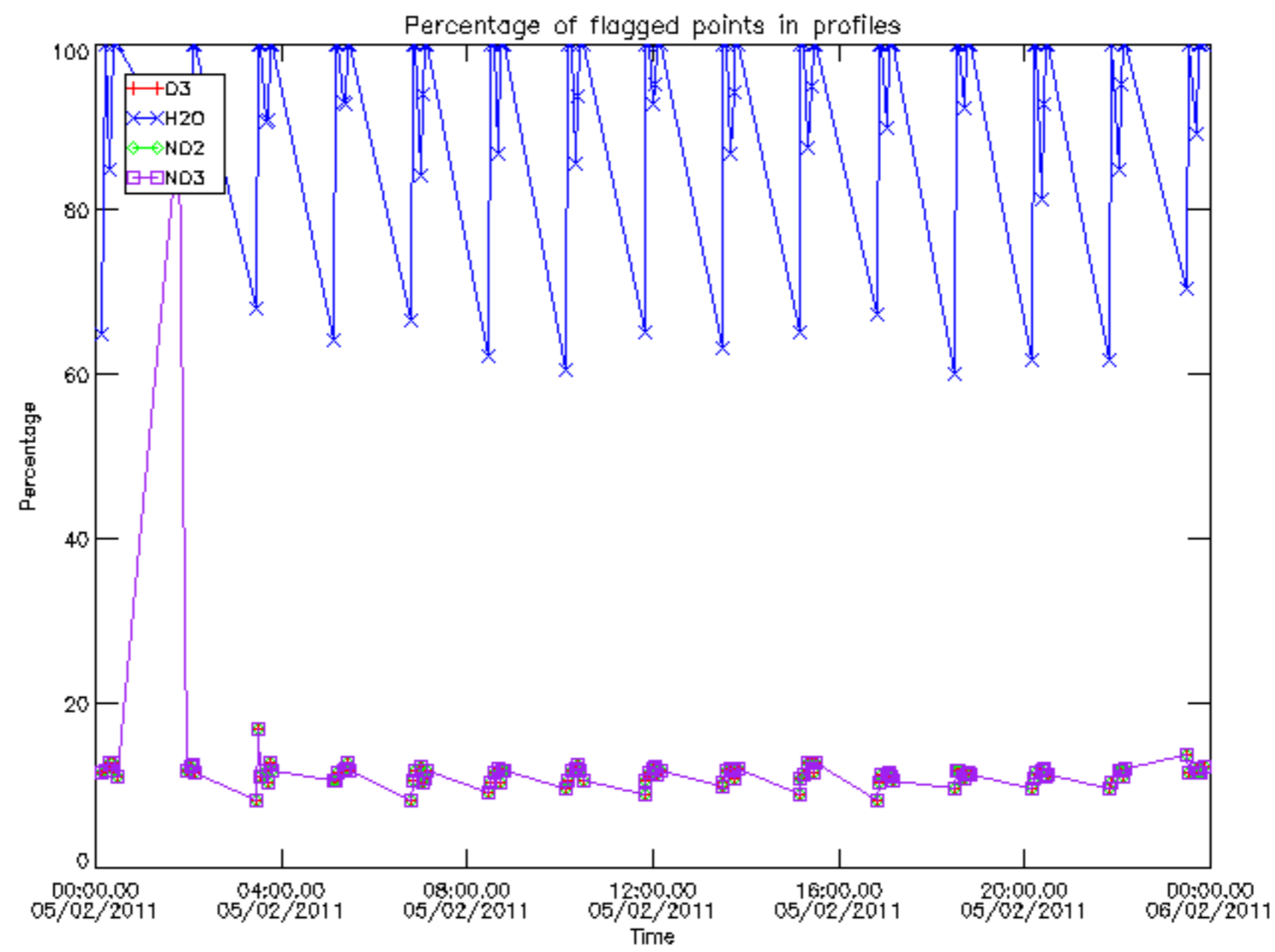
The colorbar represents the latitude.



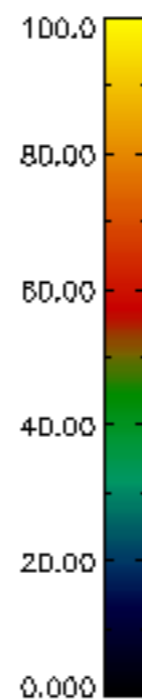
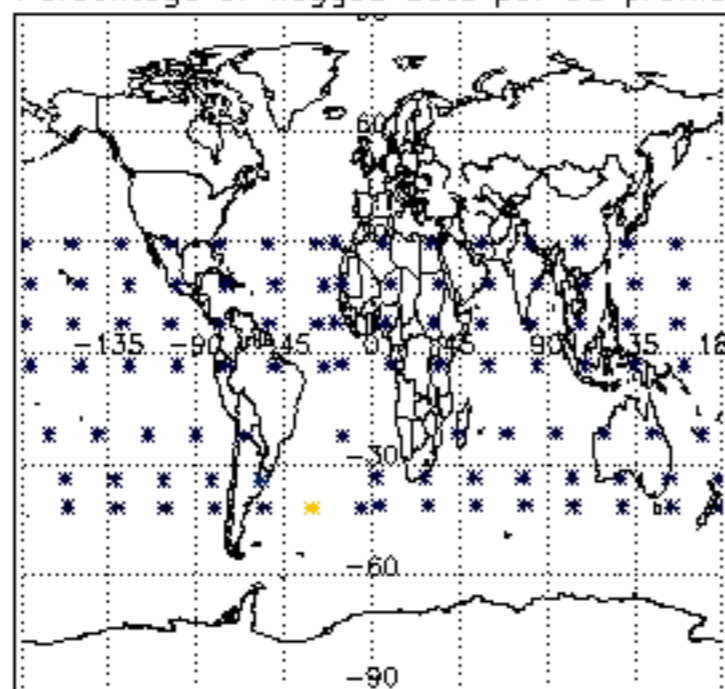
6. Auxiliary Data Files used for the production reported in section 2

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.

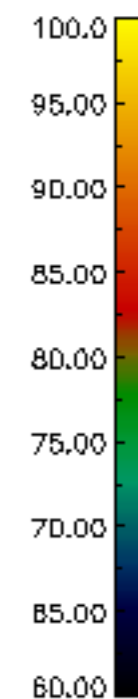
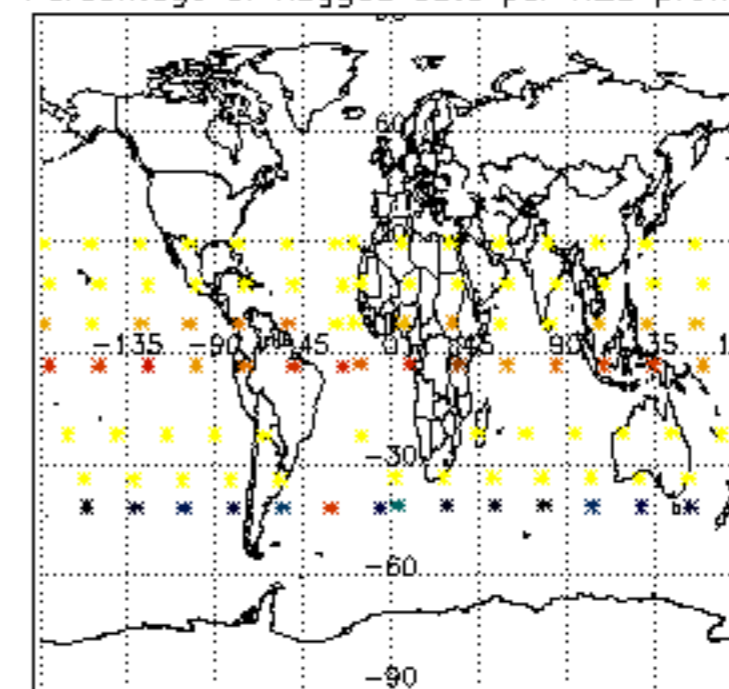
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	05-FEB-2011 00:02:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-FEB-2011 00:02:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-FEB-2011 00:02:17



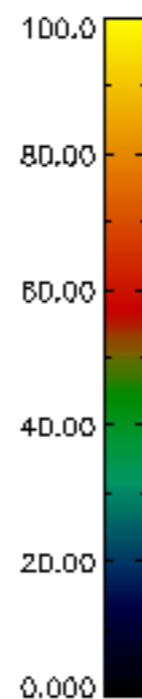
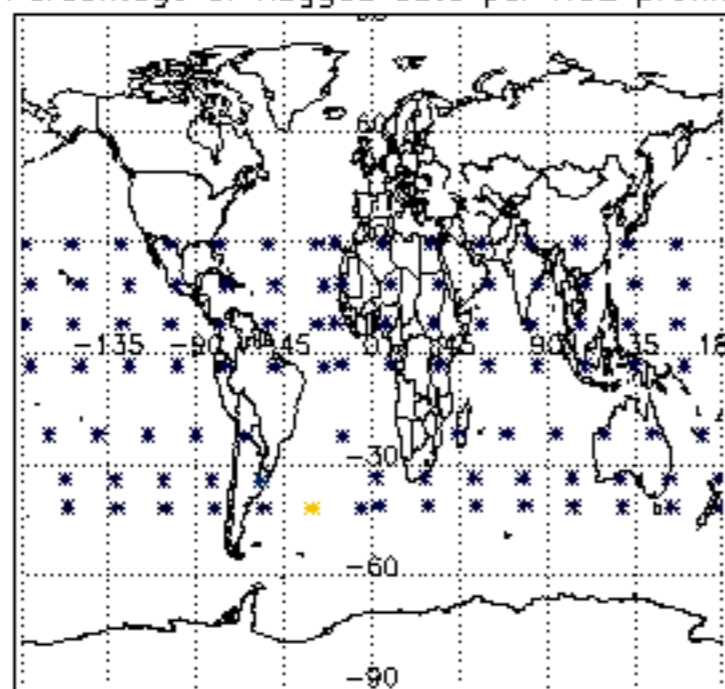
Percentage of flagged data per D3 profile



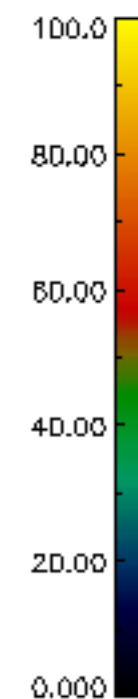
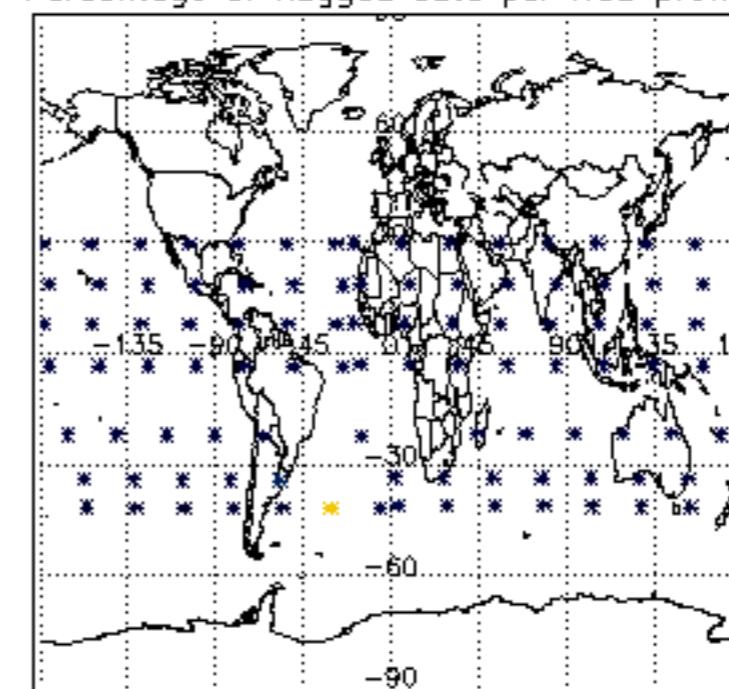
Percentage of flagged data per H2O profile

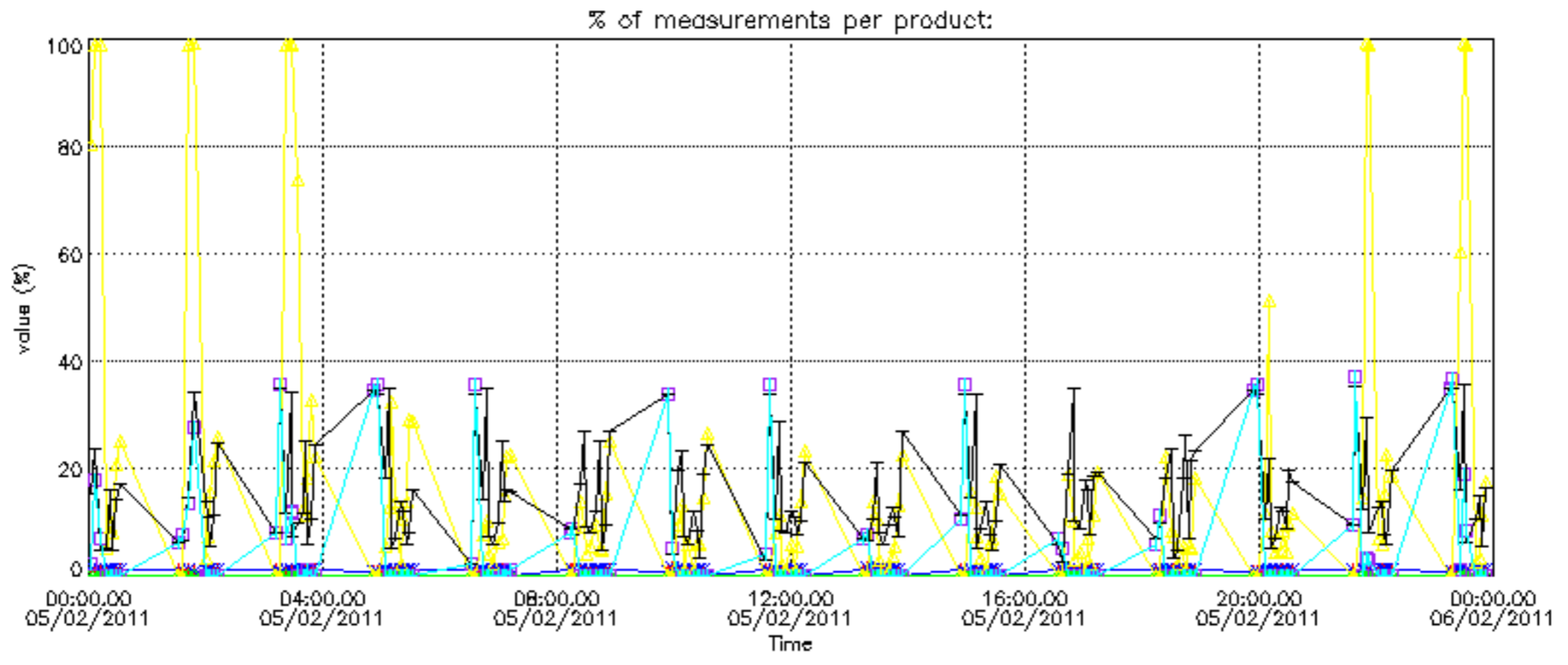


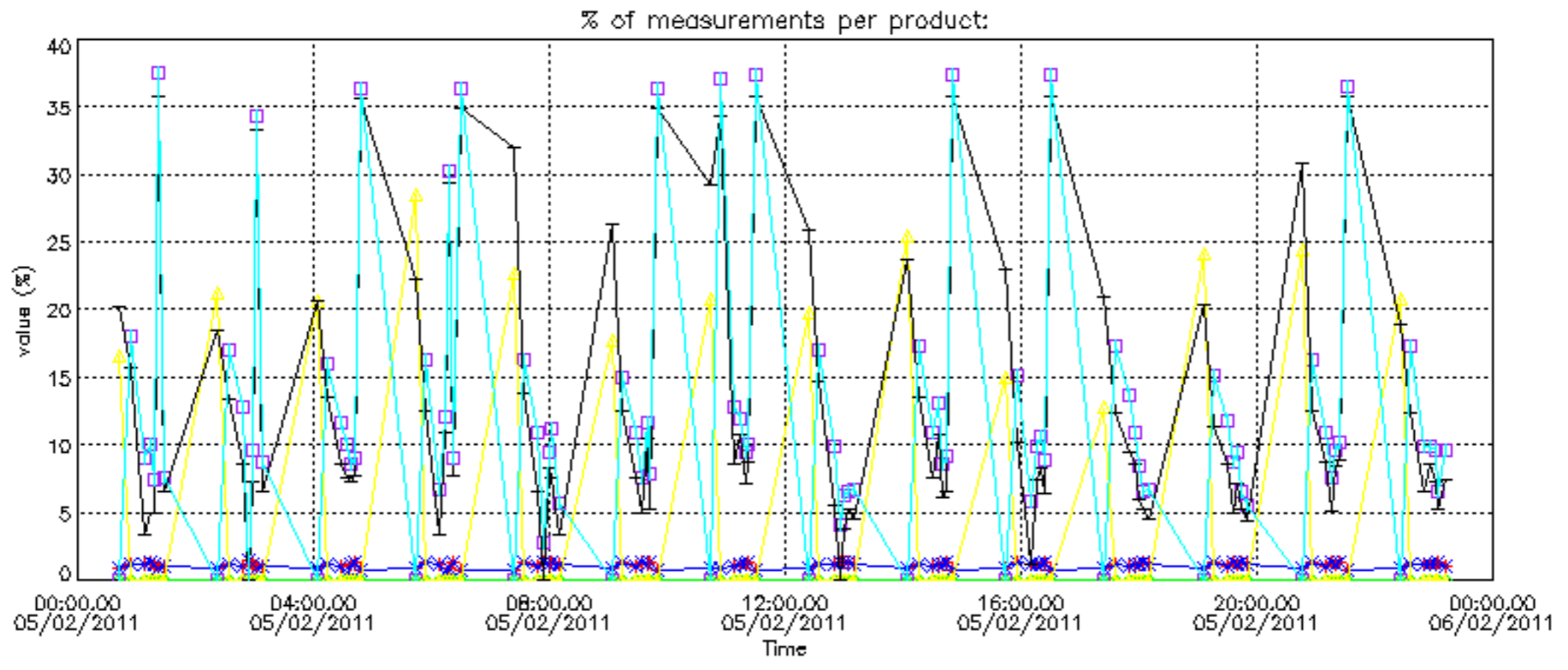
Percentage of flagged data per NO2 profile



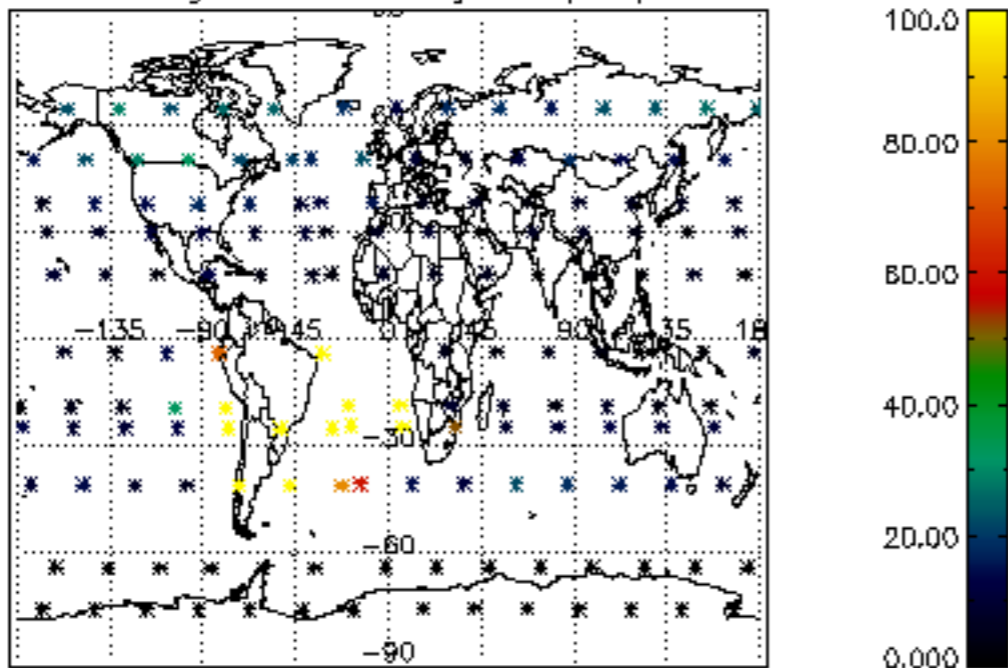
Percentage of flagged data per NO3 profile



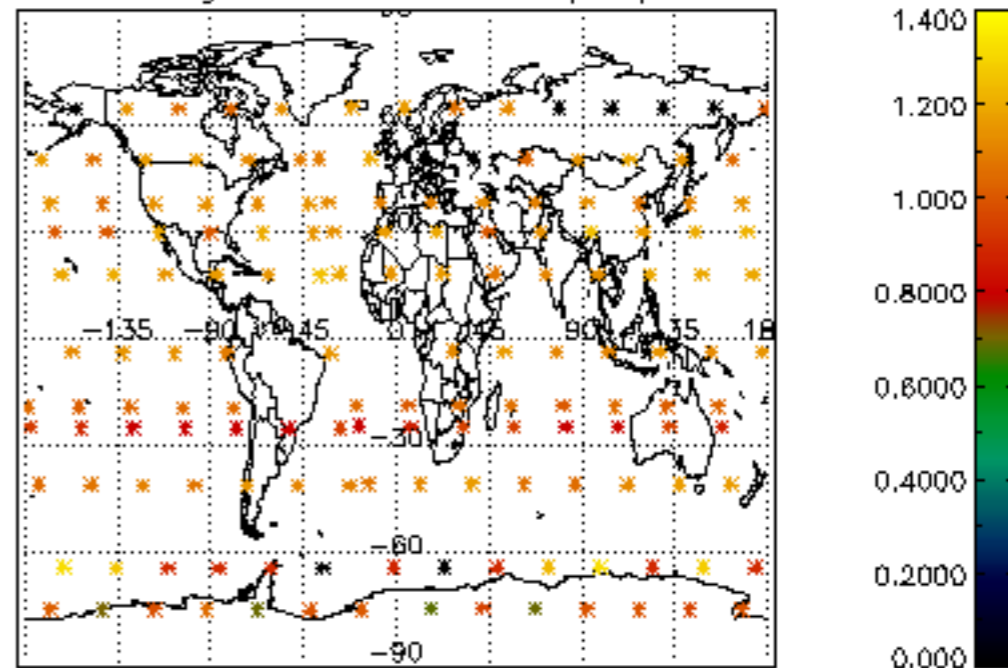




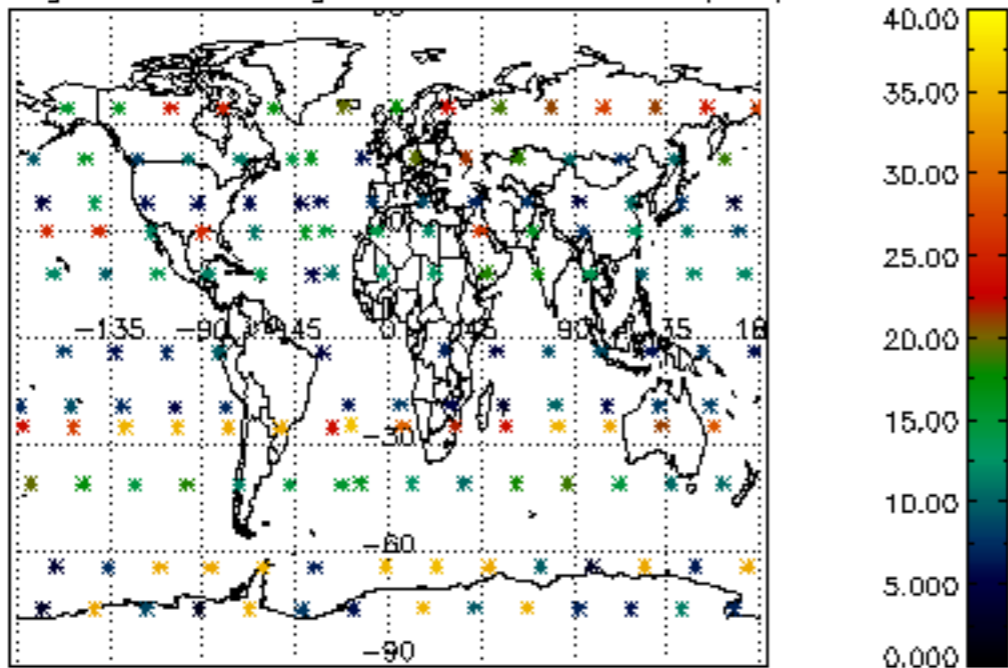
Percentage of cosmic ray hits per profile



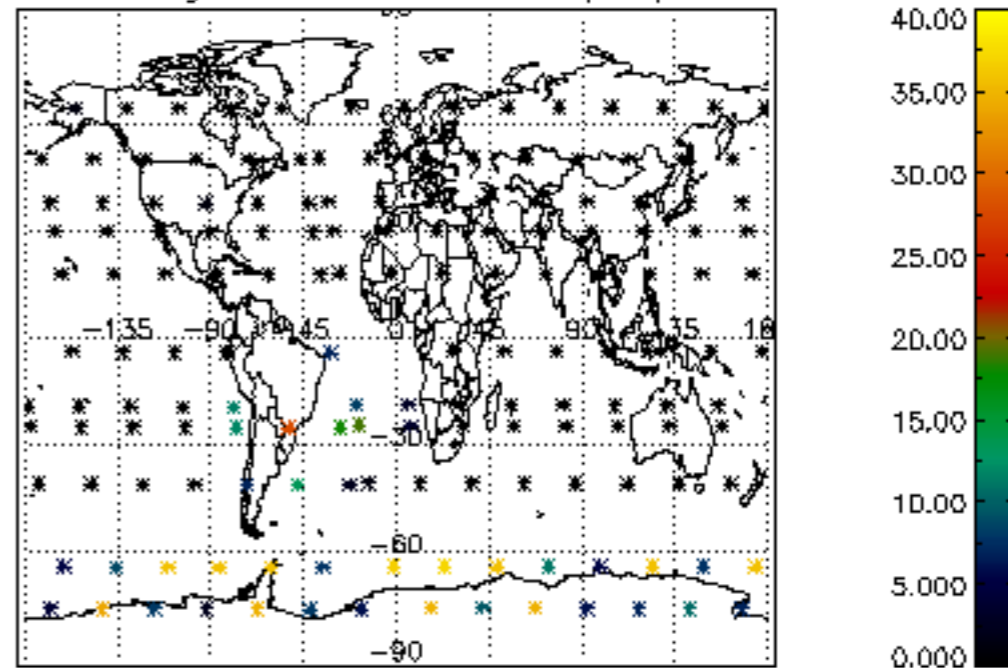
Percentage of datation errors per profile



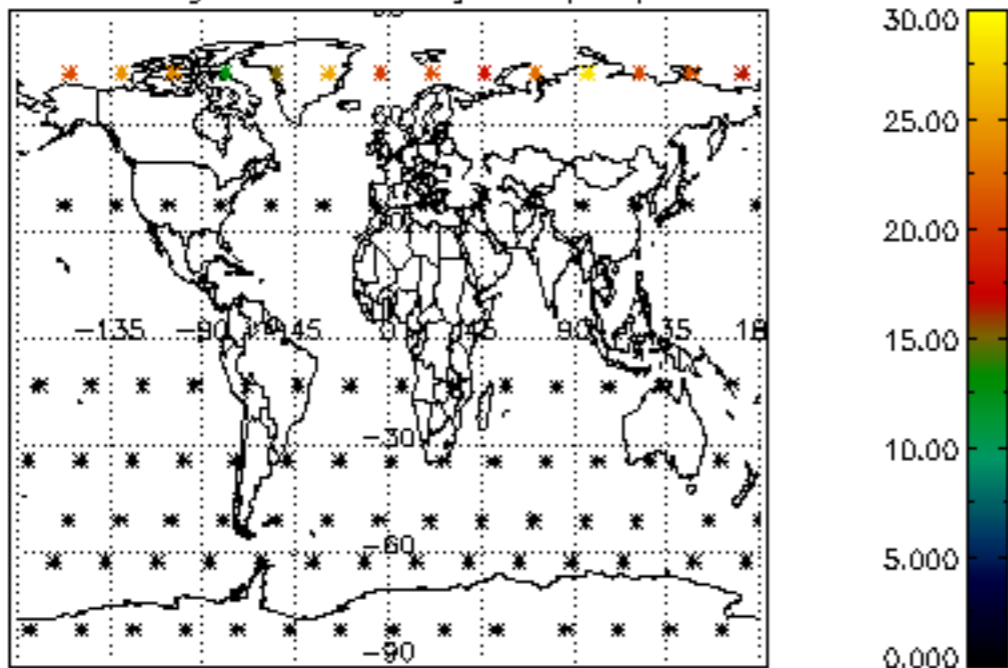
Percentage of star falling outside central band per profile



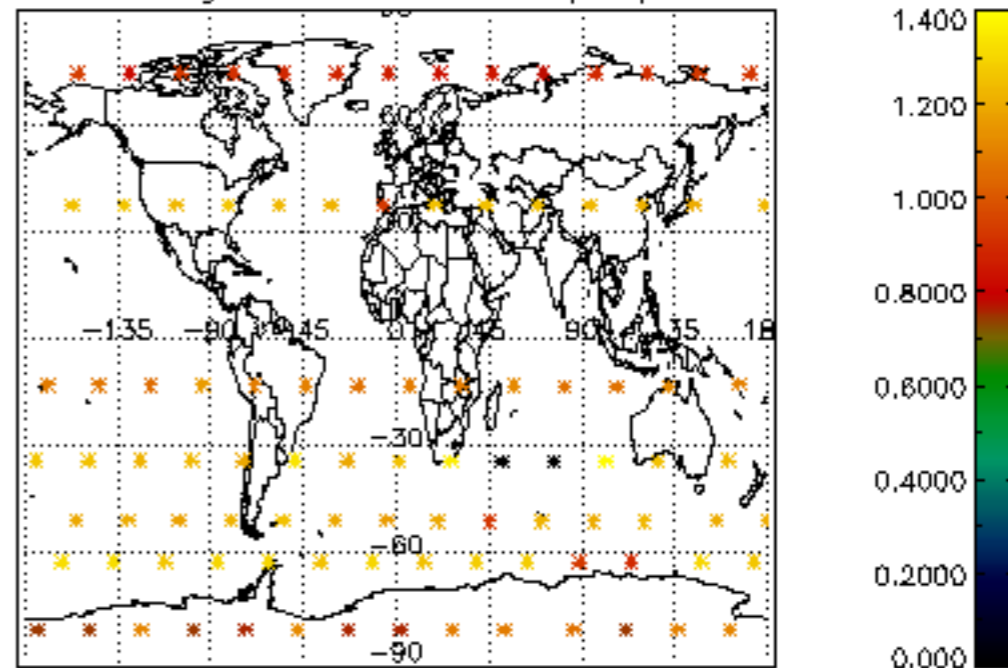
Percentage of saturation errors per profile



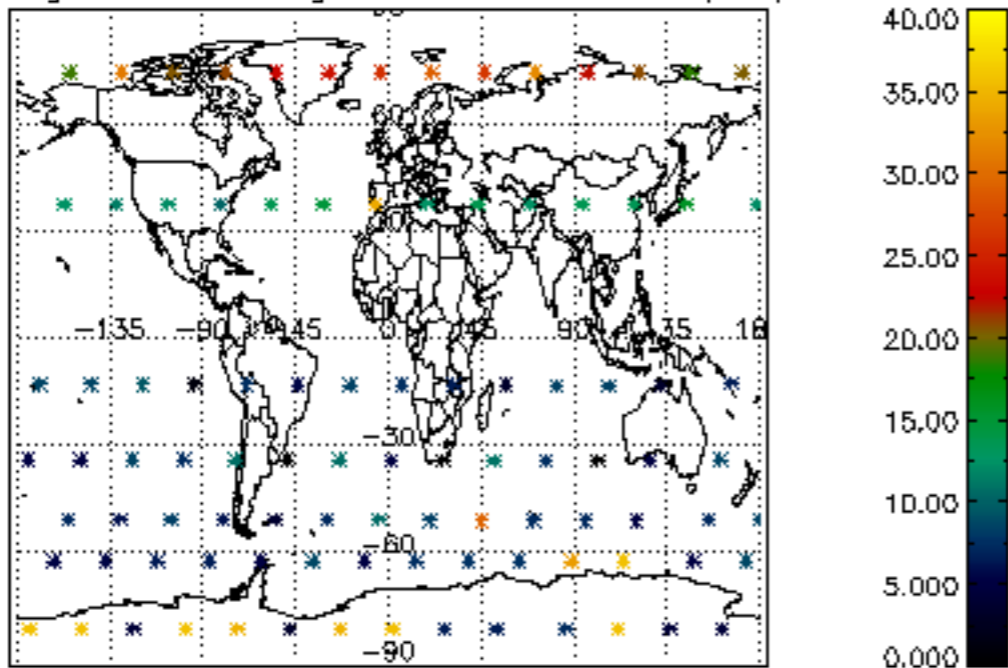
Percentage of cosmic ray hits per profile



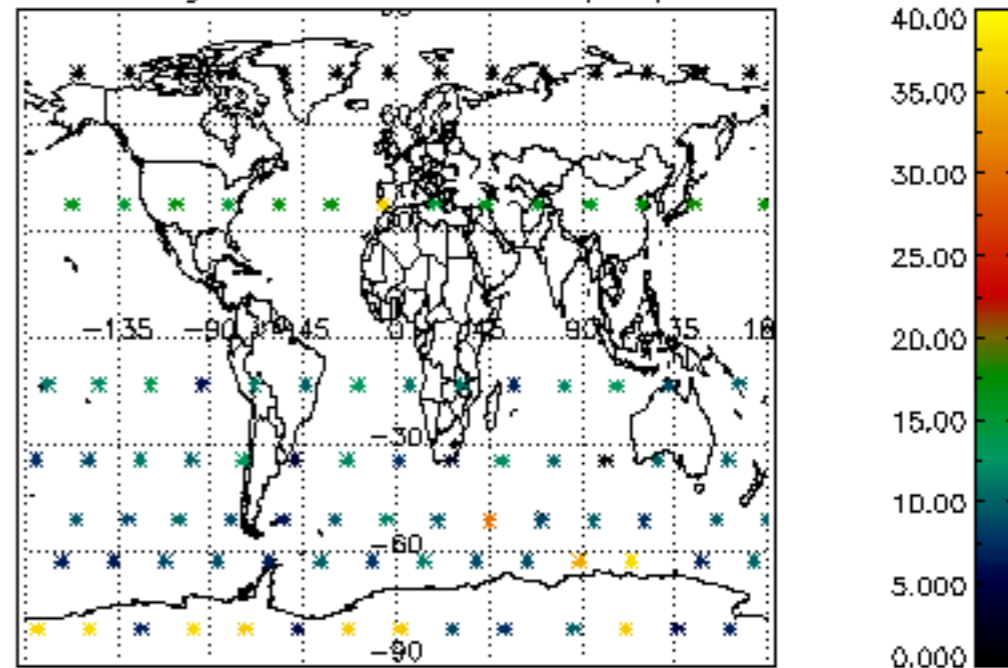
Percentage of datation errors per profile

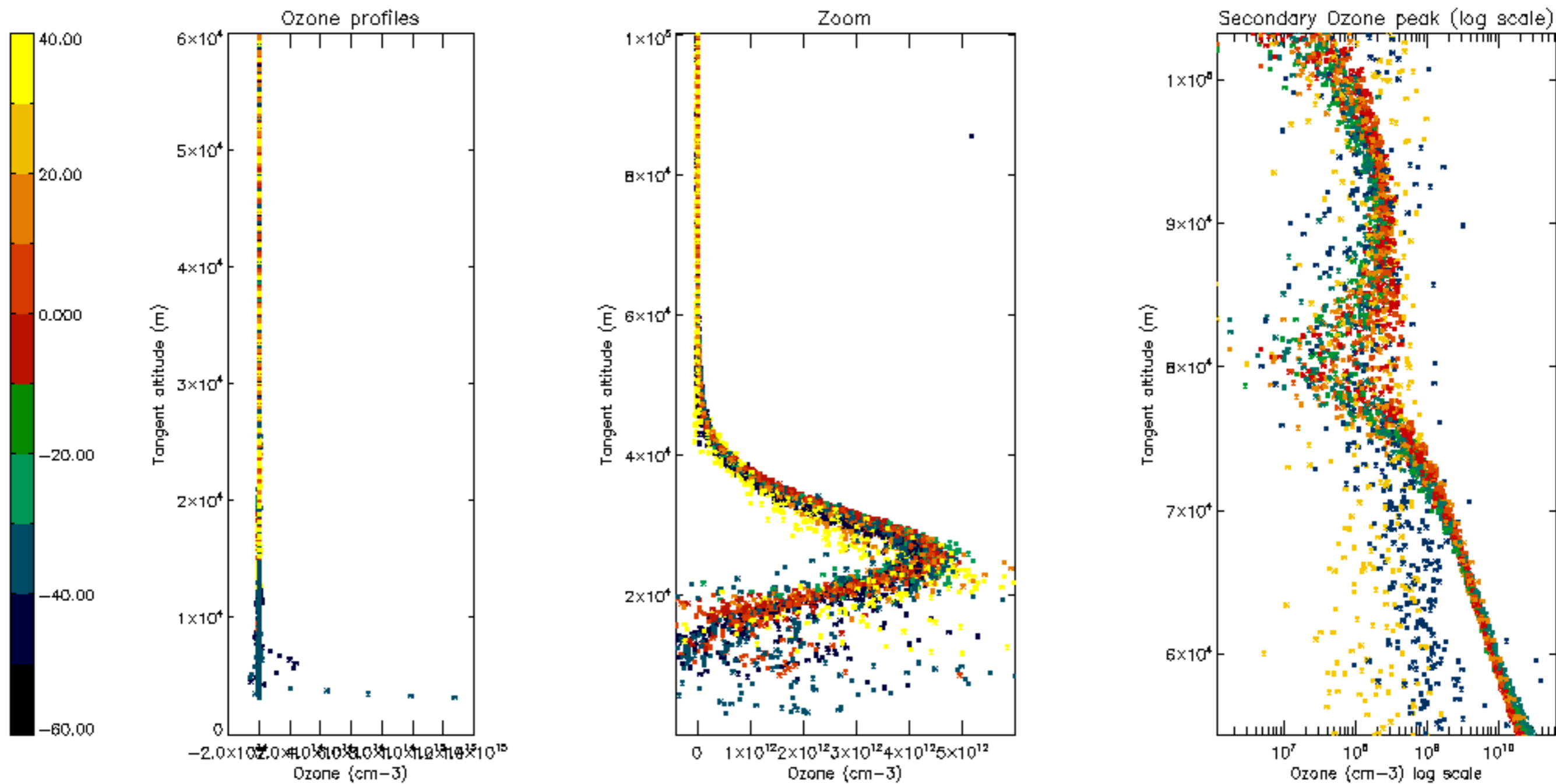


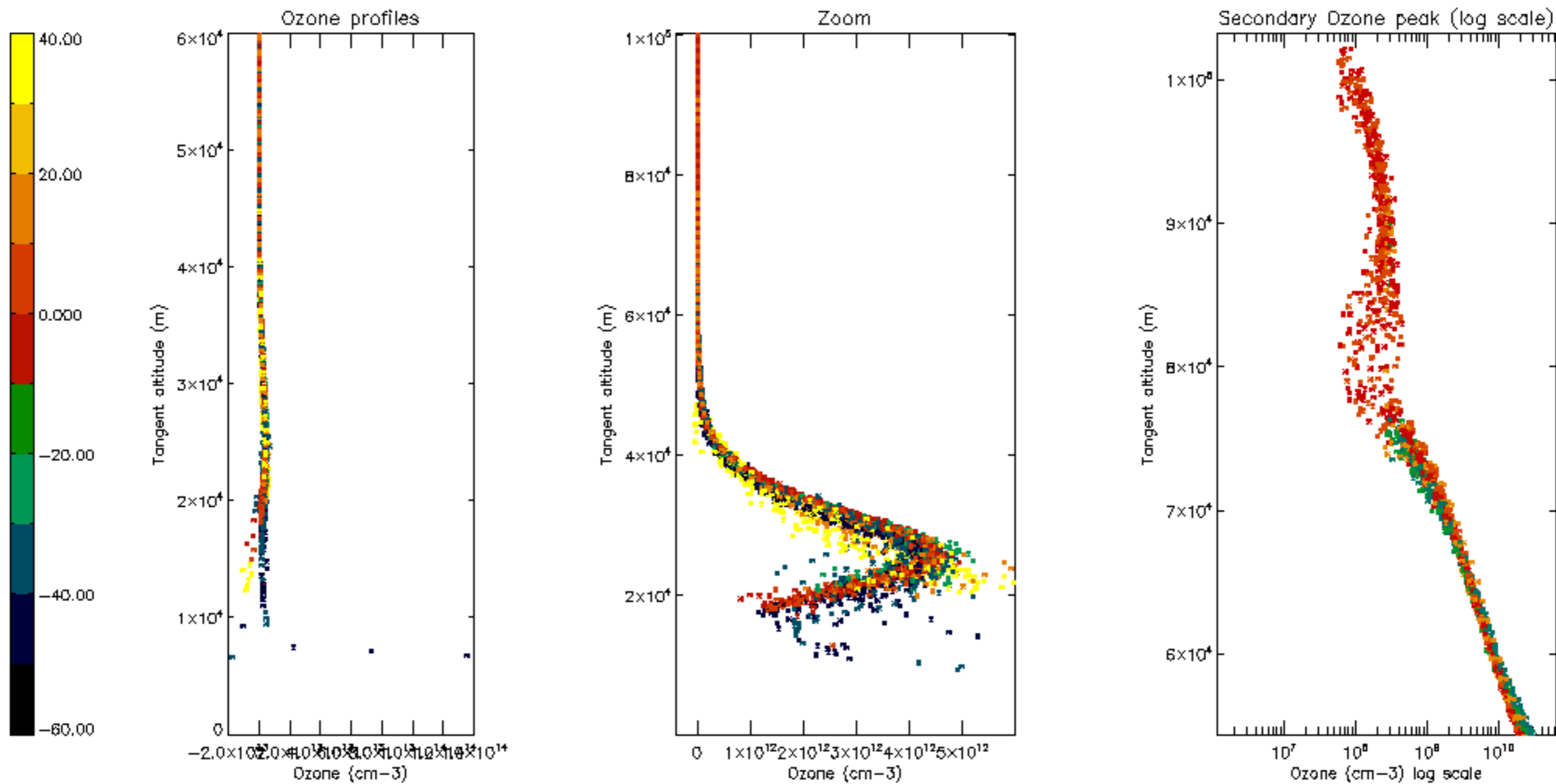
Percentage of star falling outside central band per profile

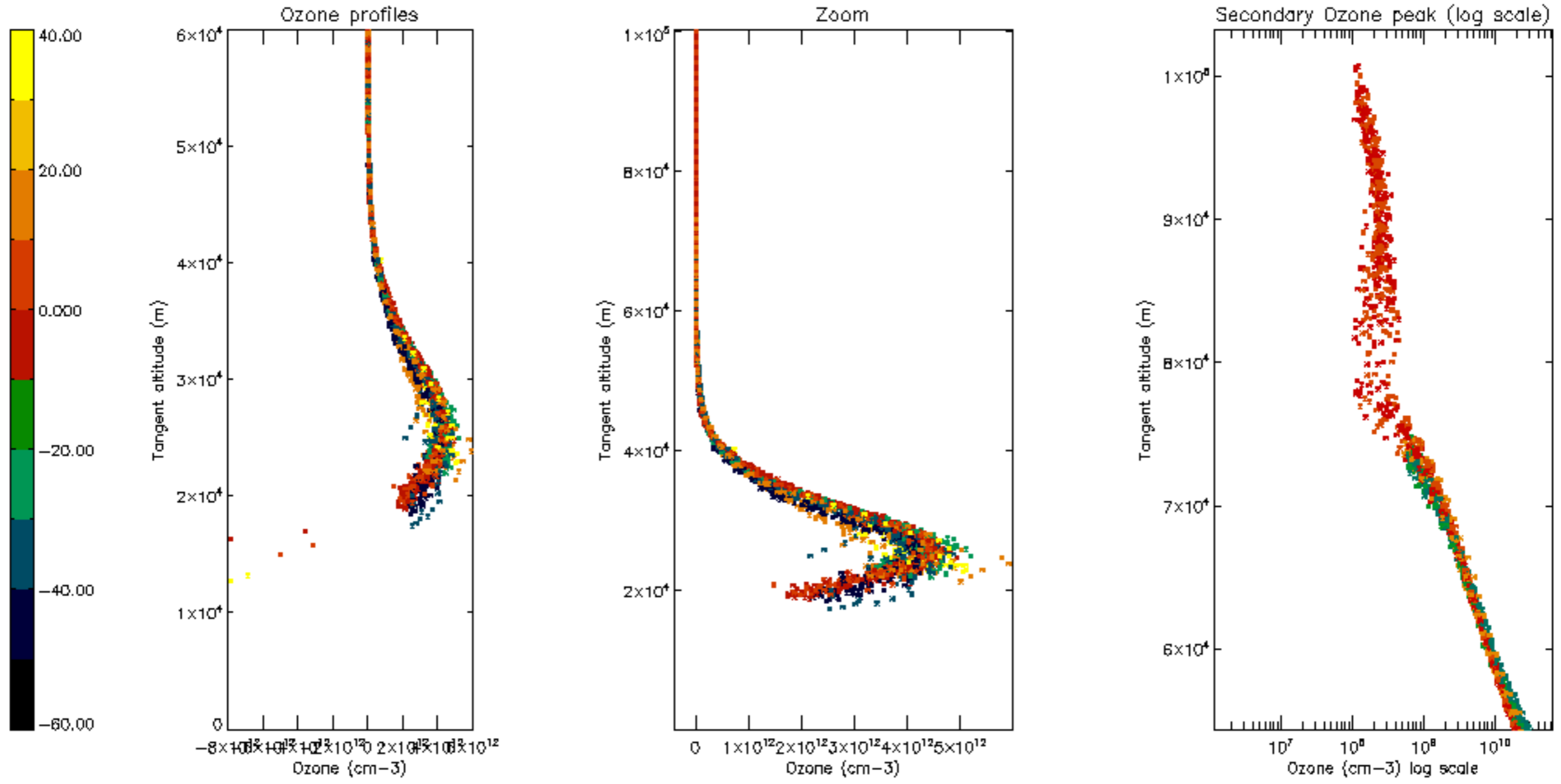


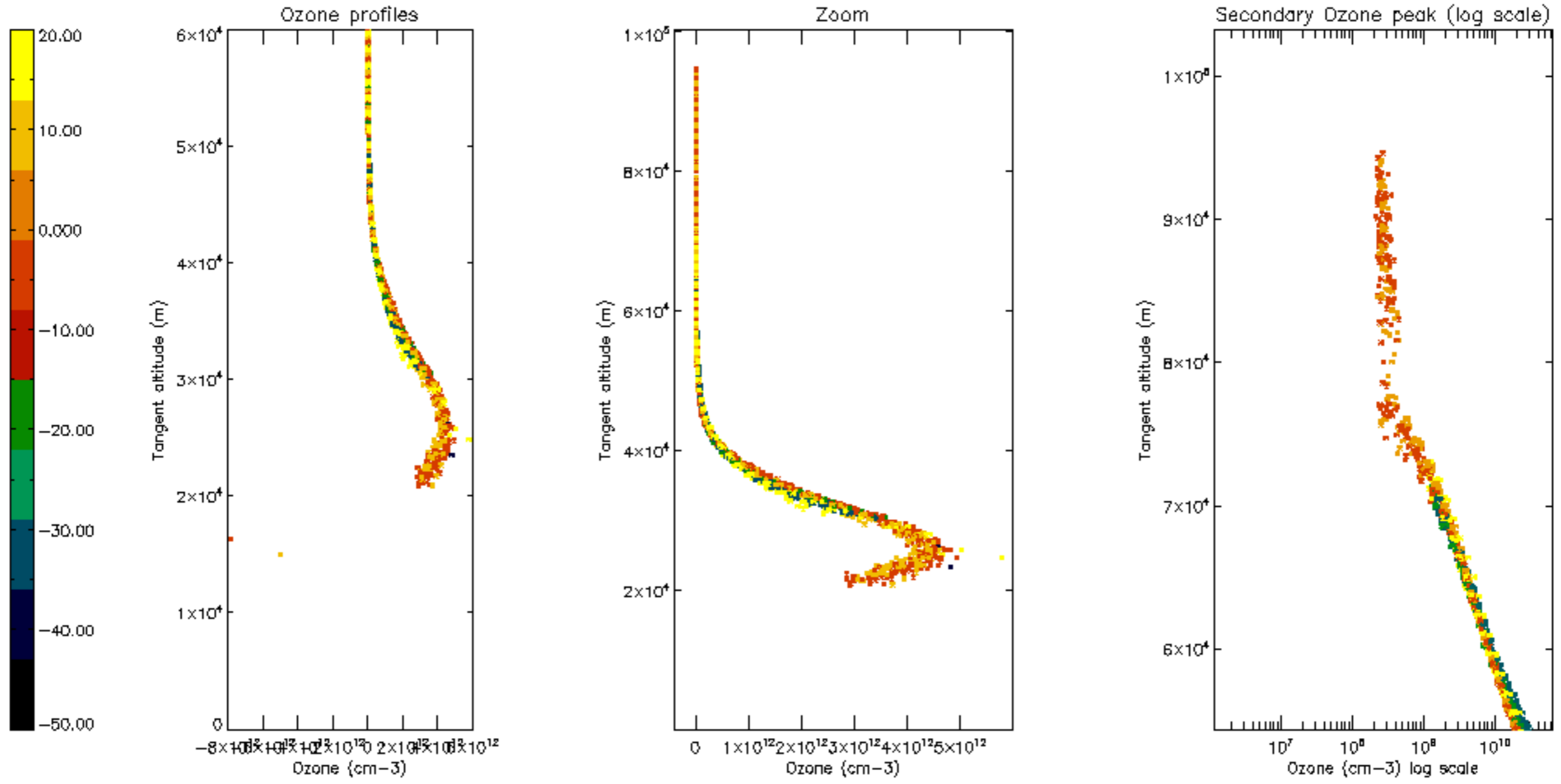
Percentage of saturation errors per profile

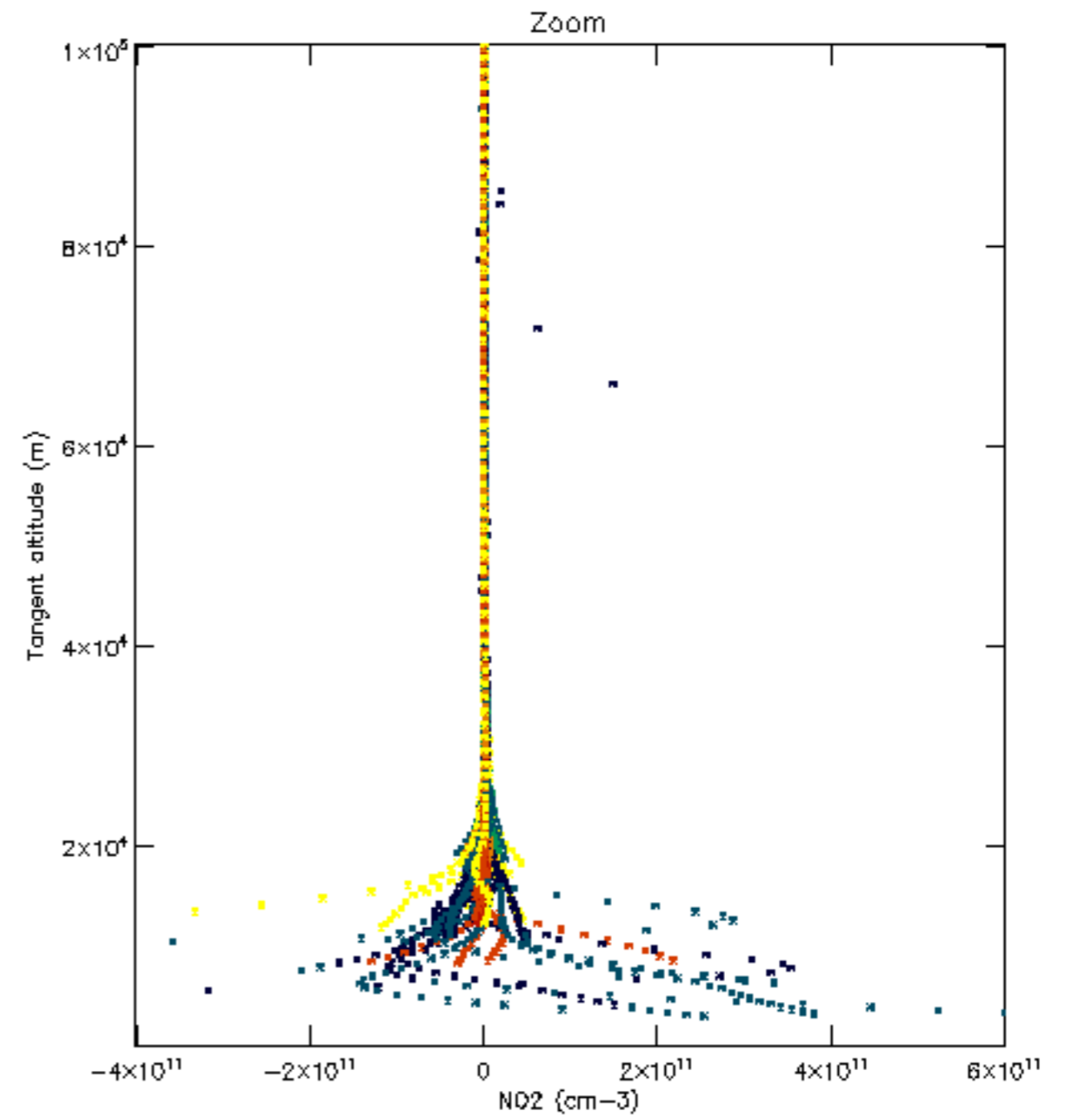
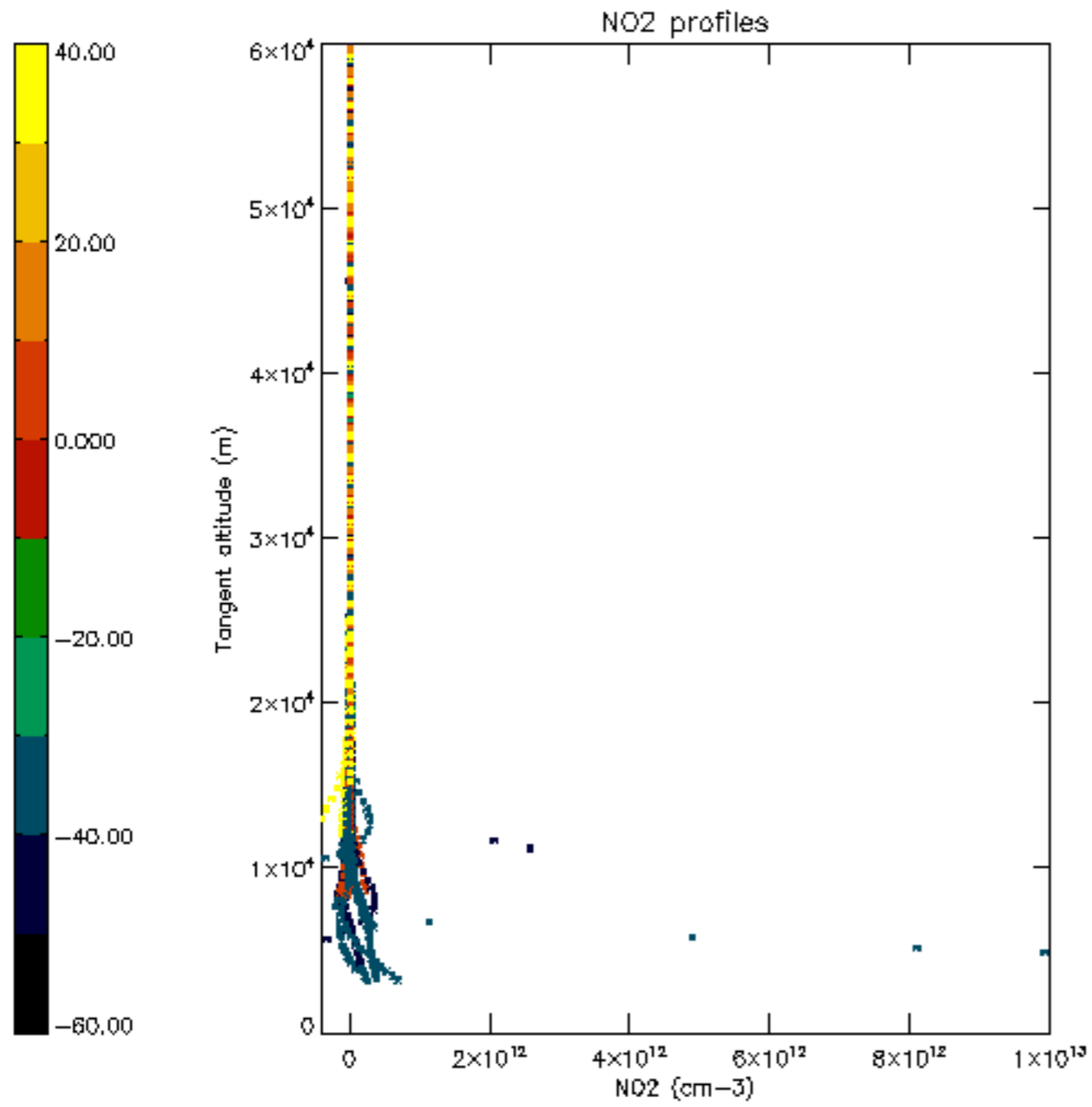


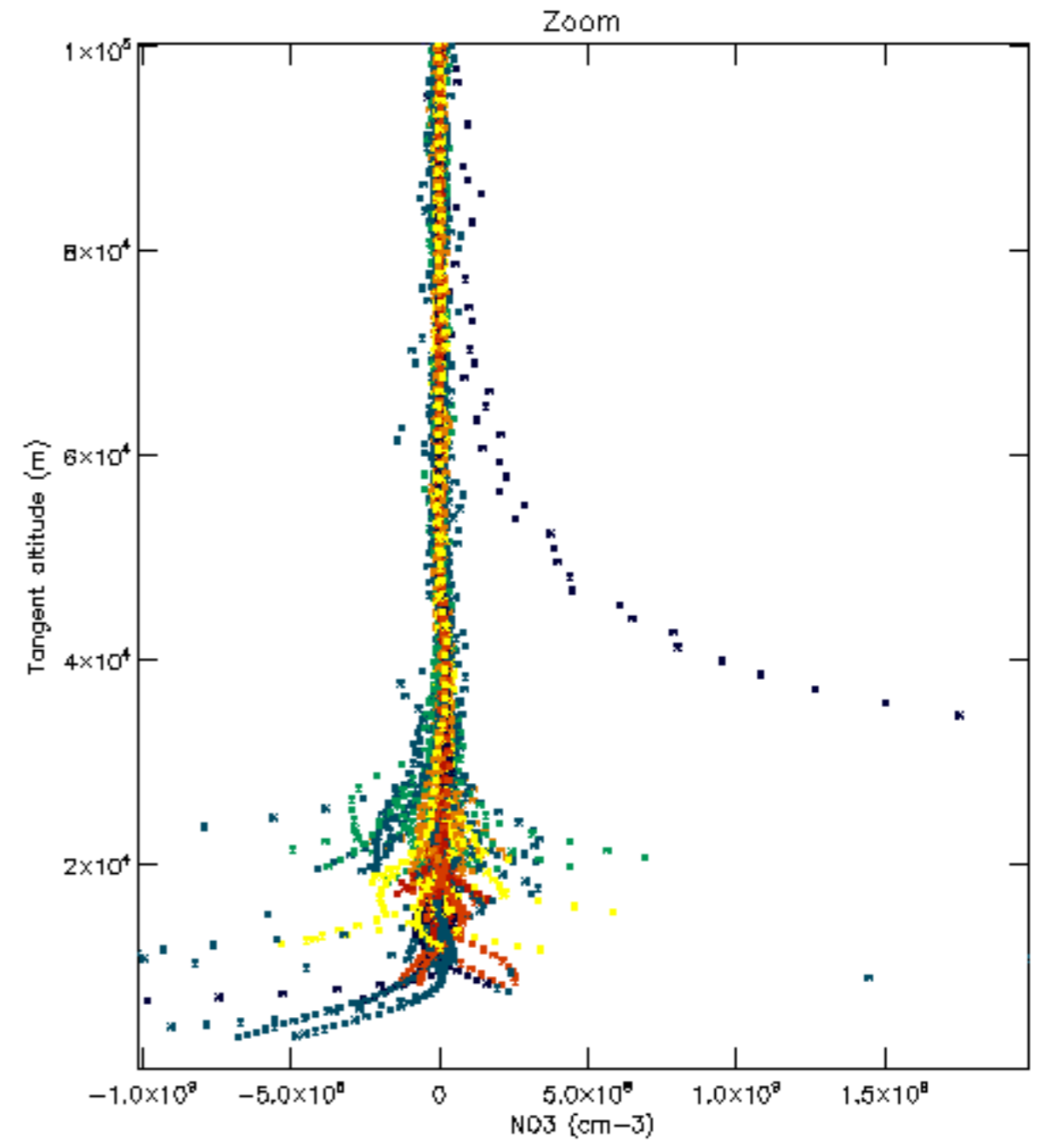
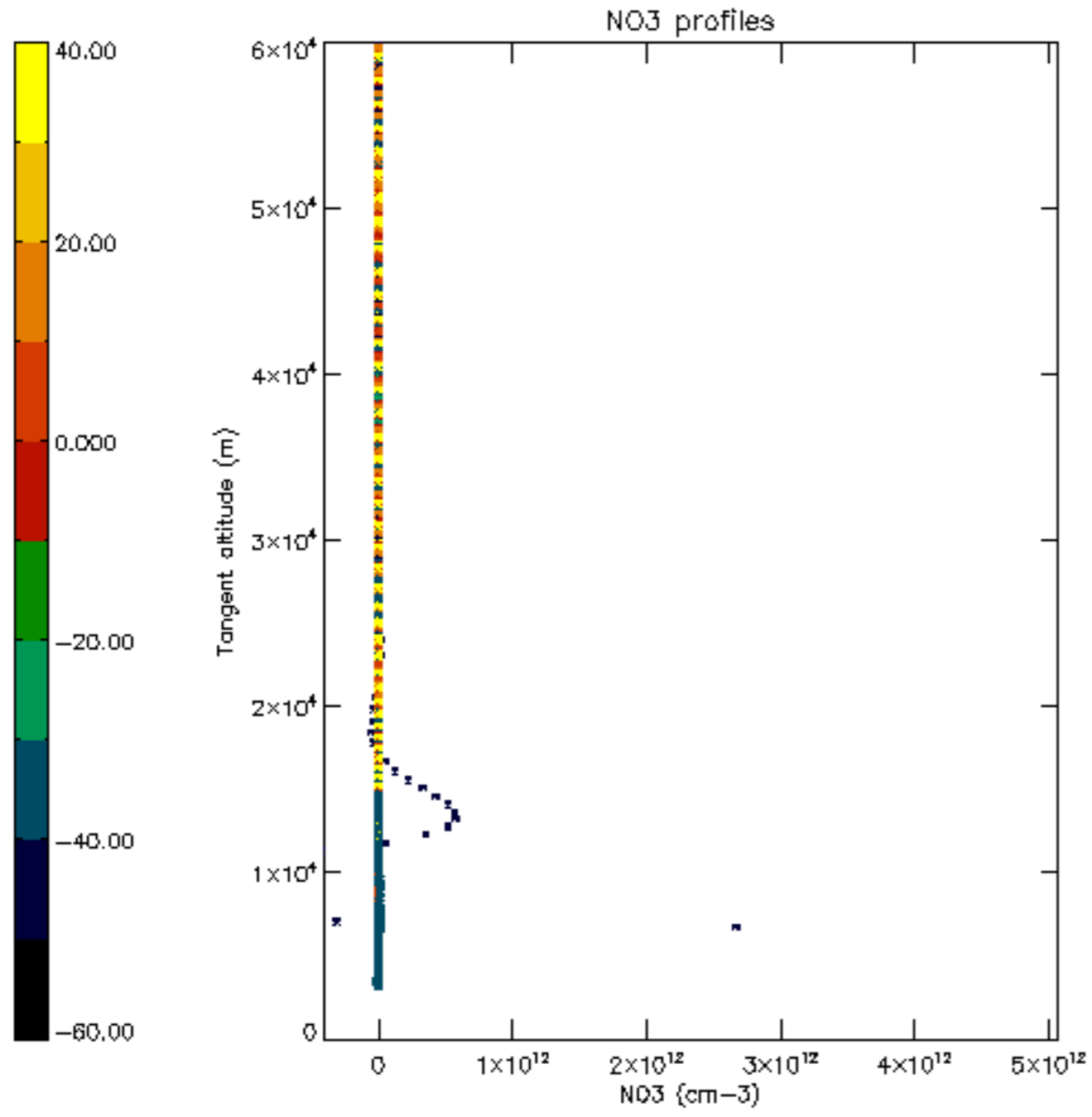


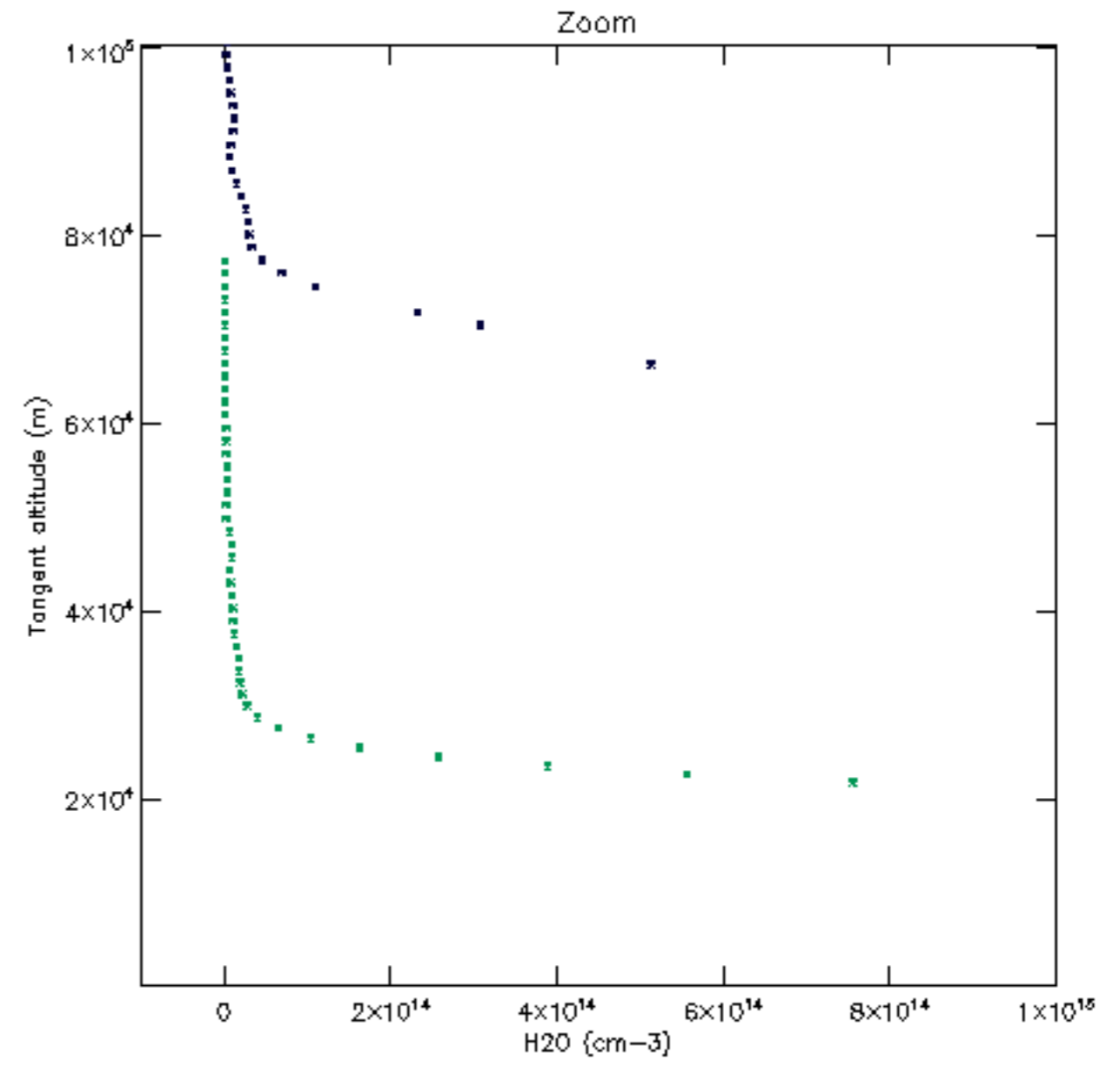
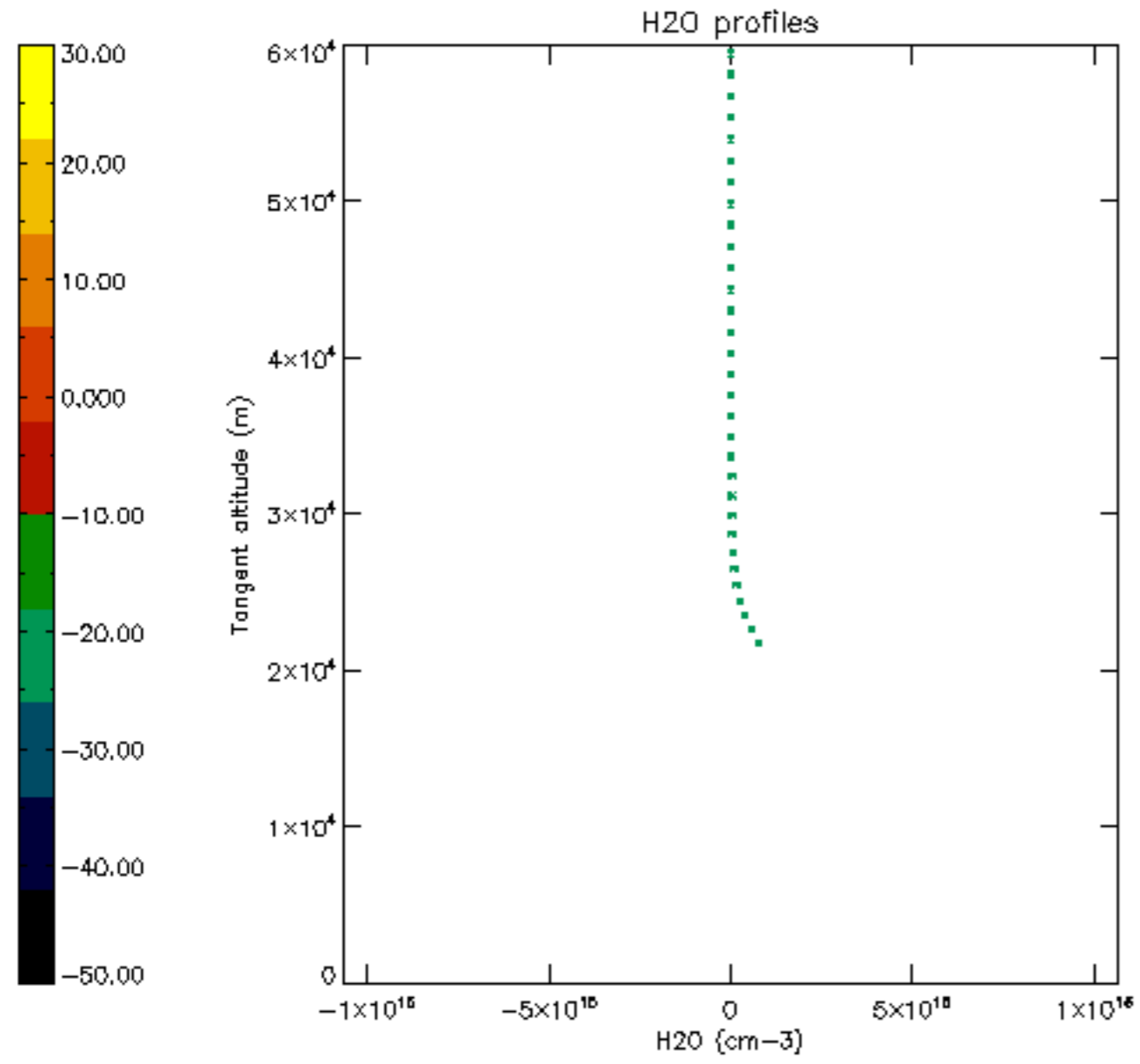


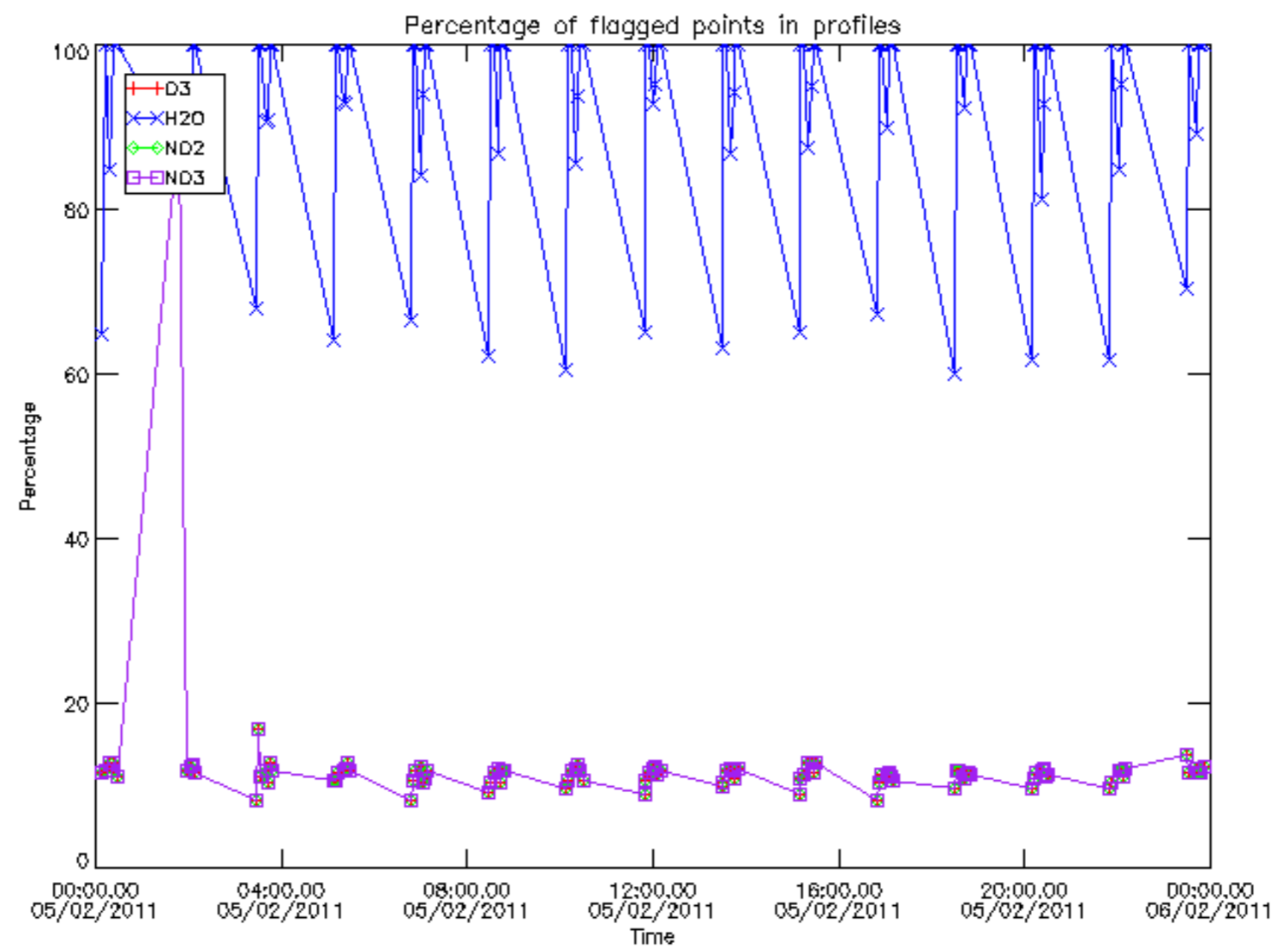




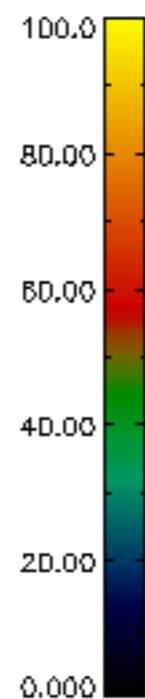
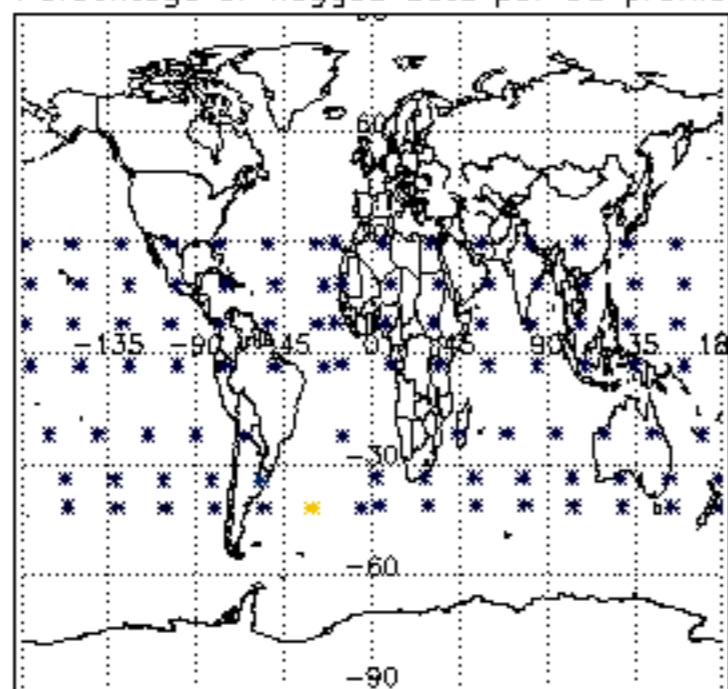




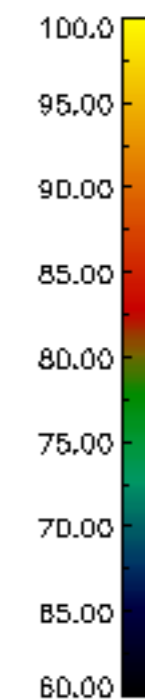
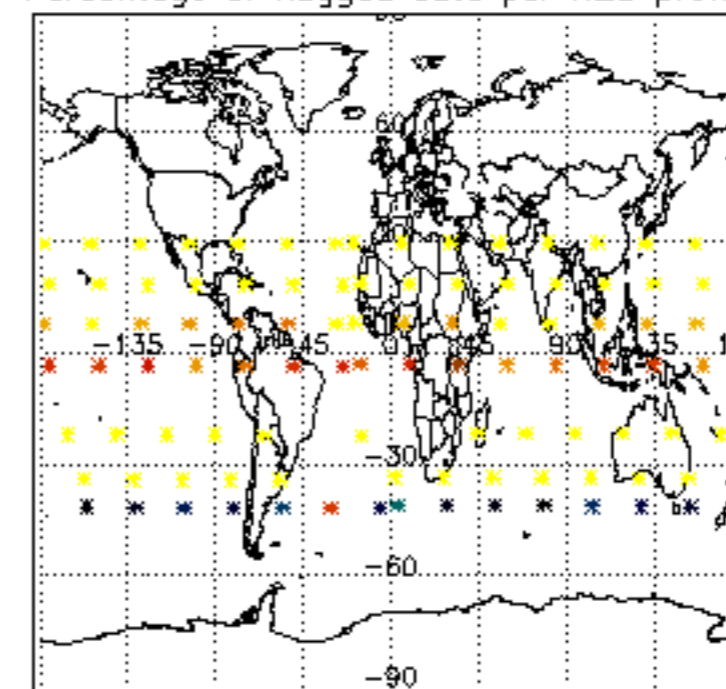




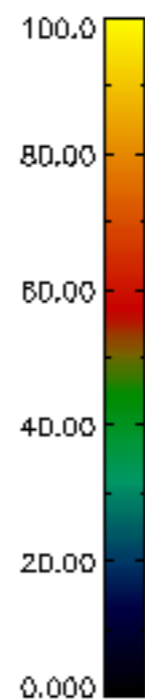
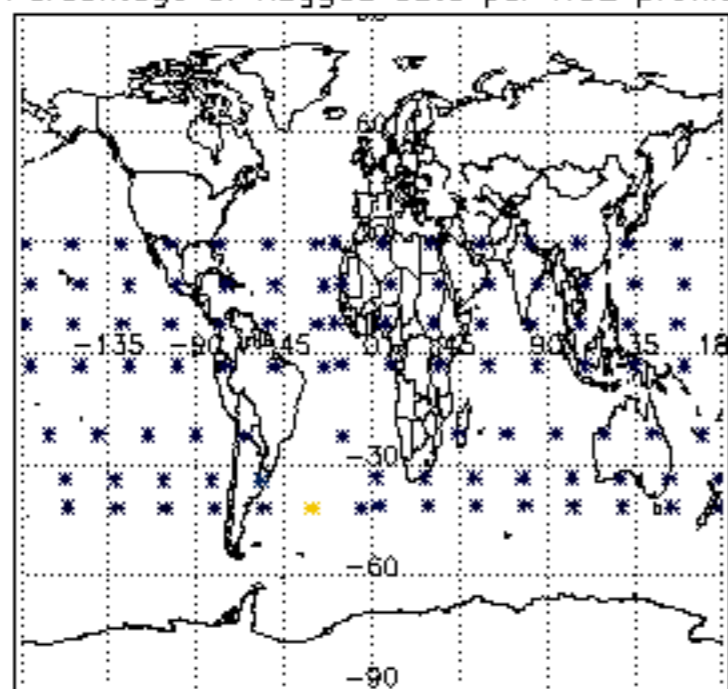
Percentage of flagged data per D3 profile



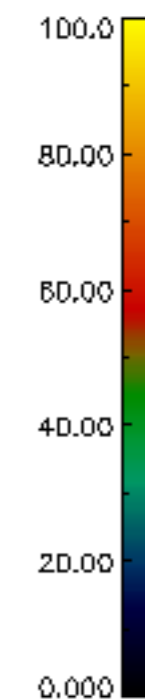
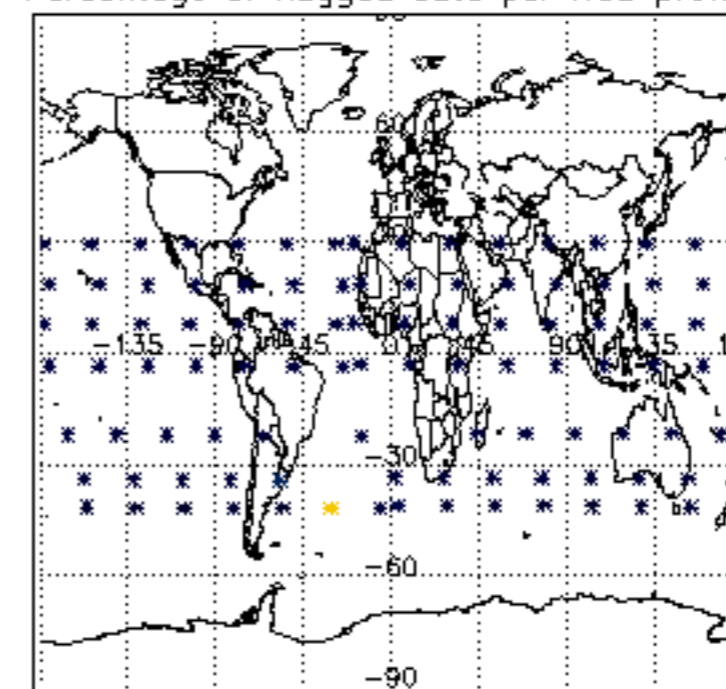
Percentage of flagged data per H2O profile

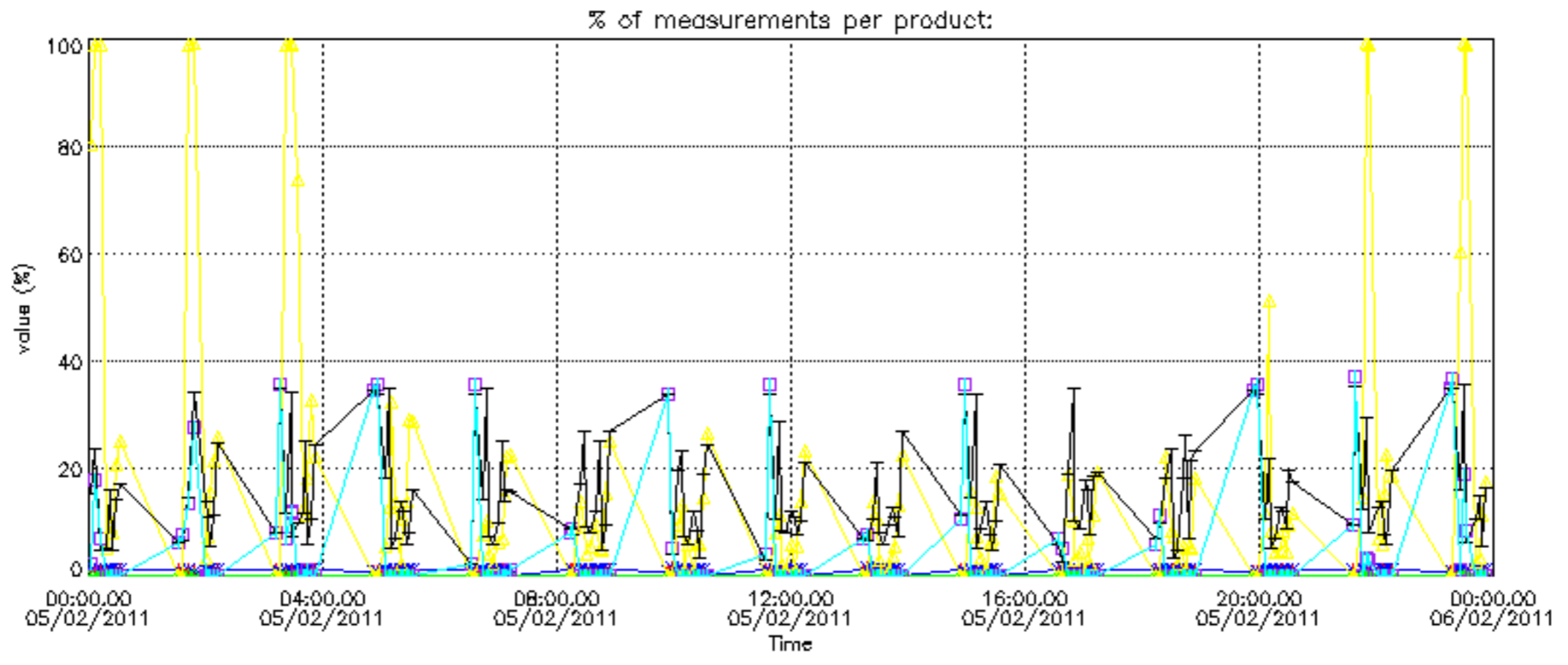


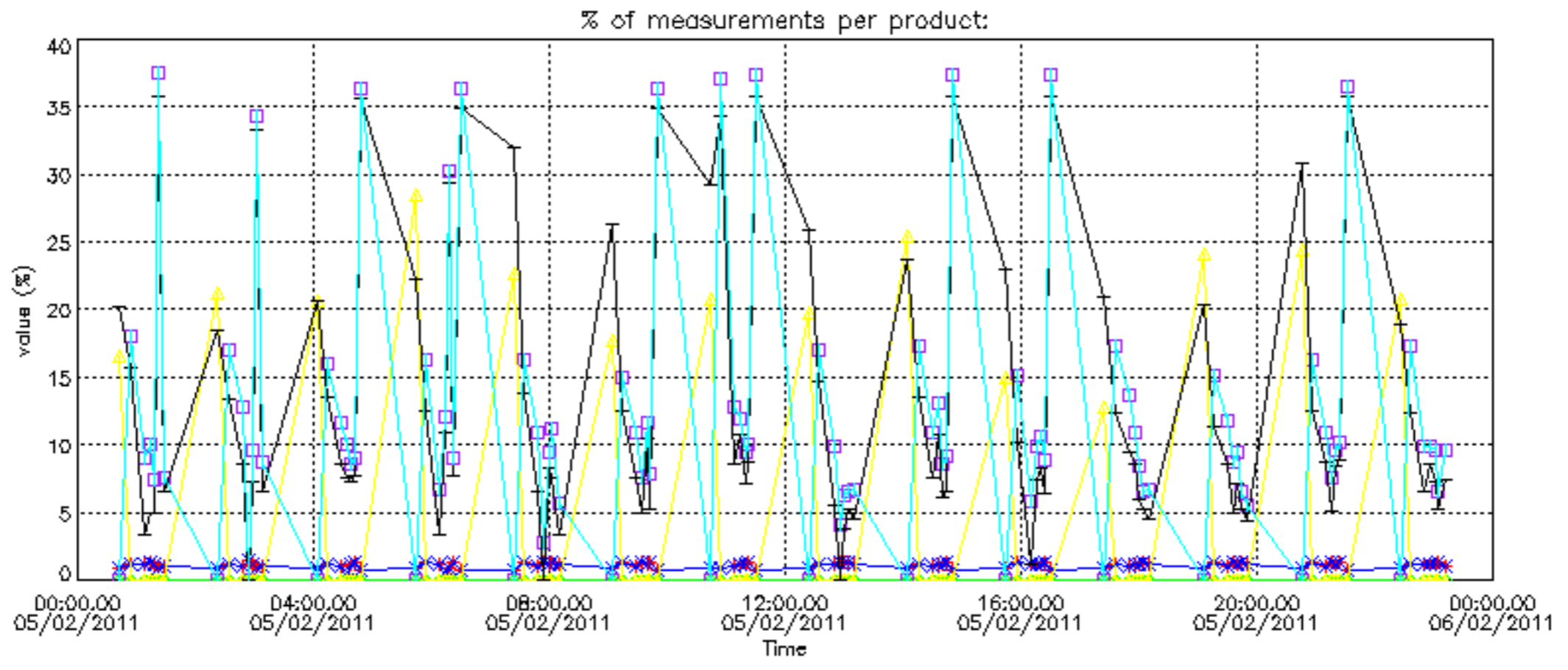
Percentage of flagged data per NO2 profile



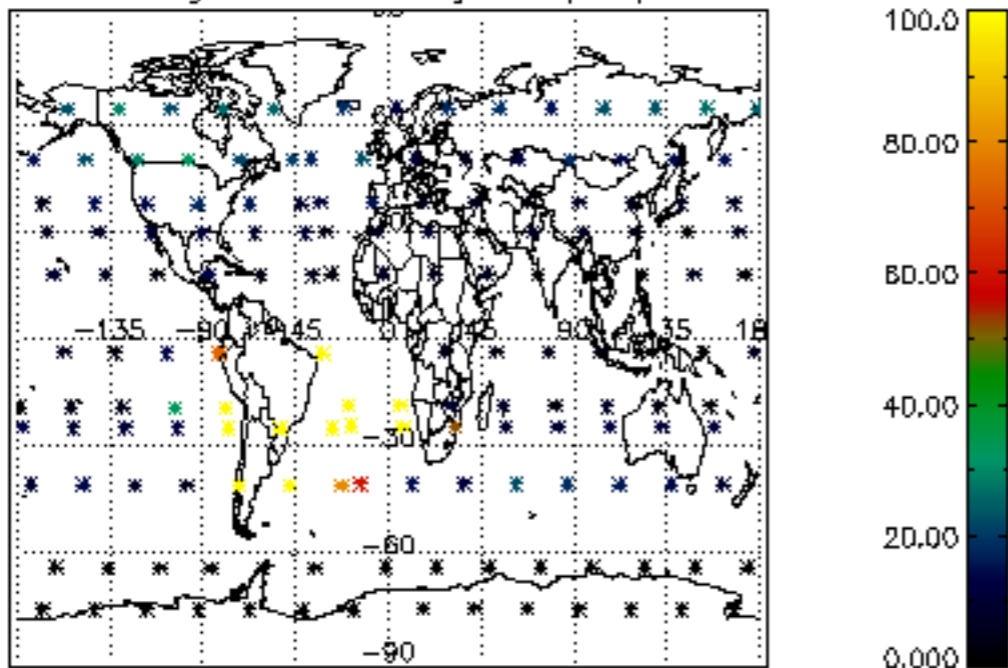
Percentage of flagged data per NO3 profile



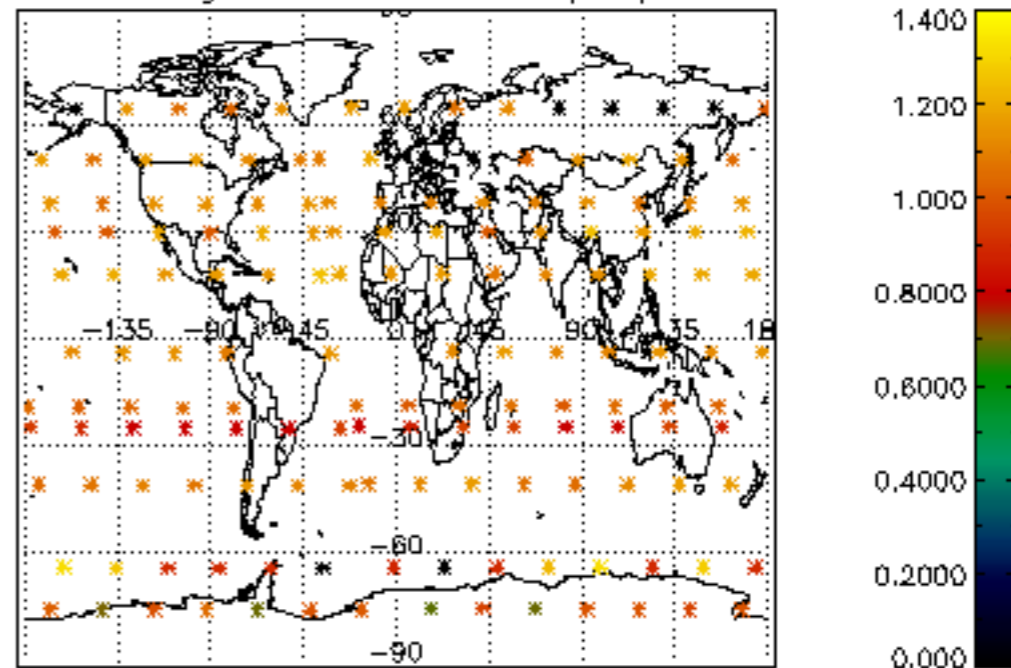




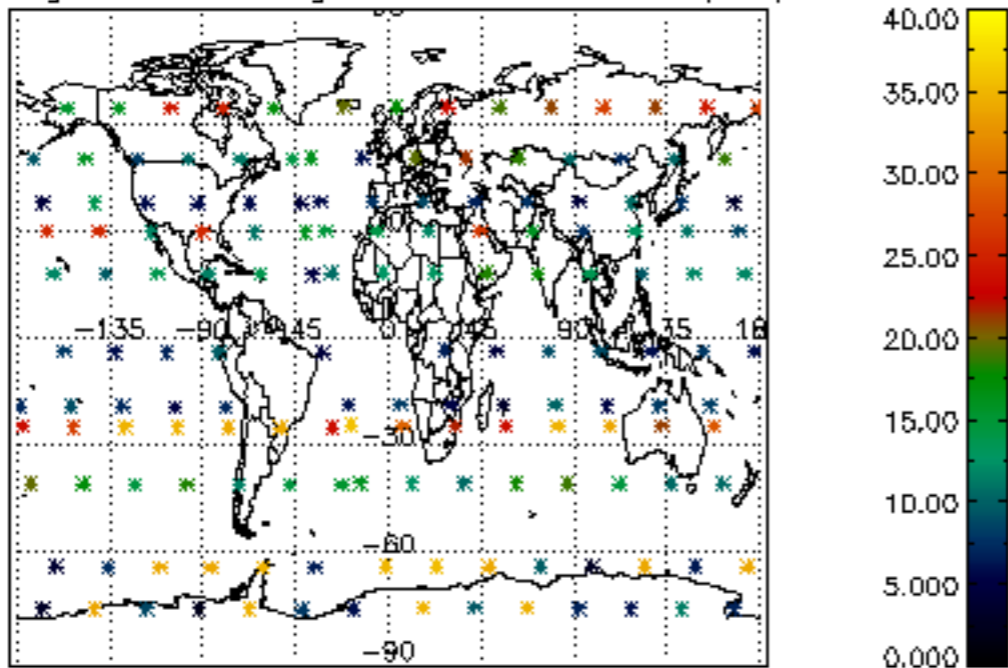
Percentage of cosmic ray hits per profile



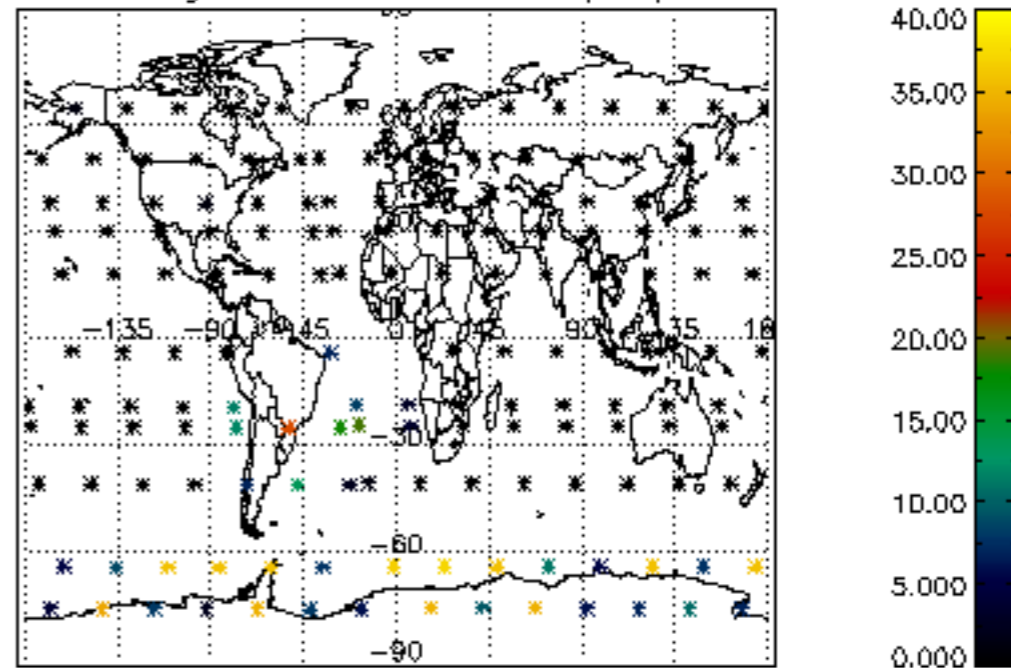
Percentage of datation errors per profile



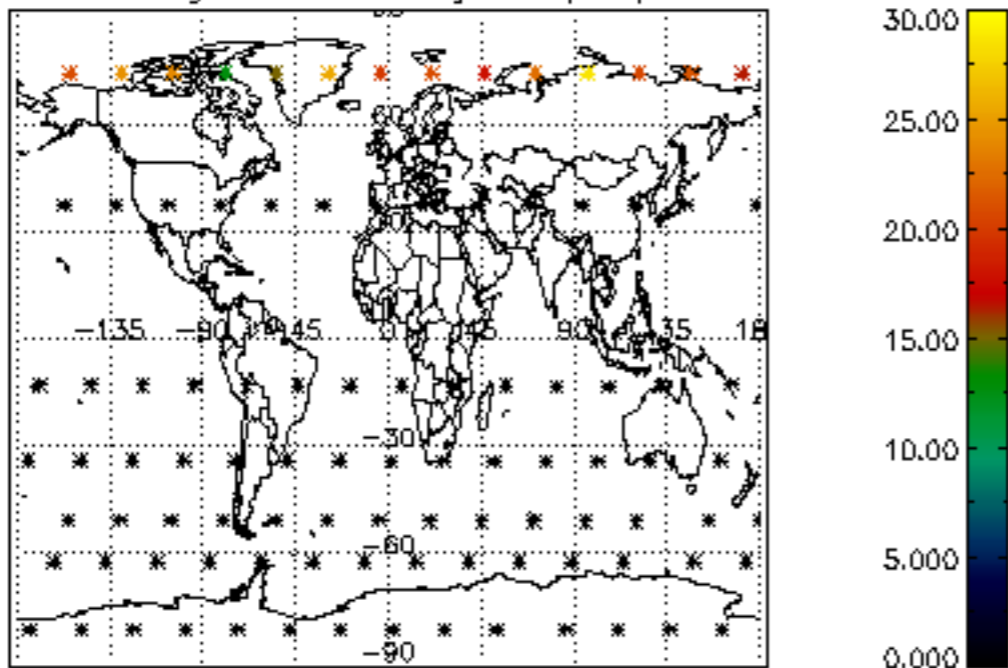
Percentage of star falling outside central band per profile



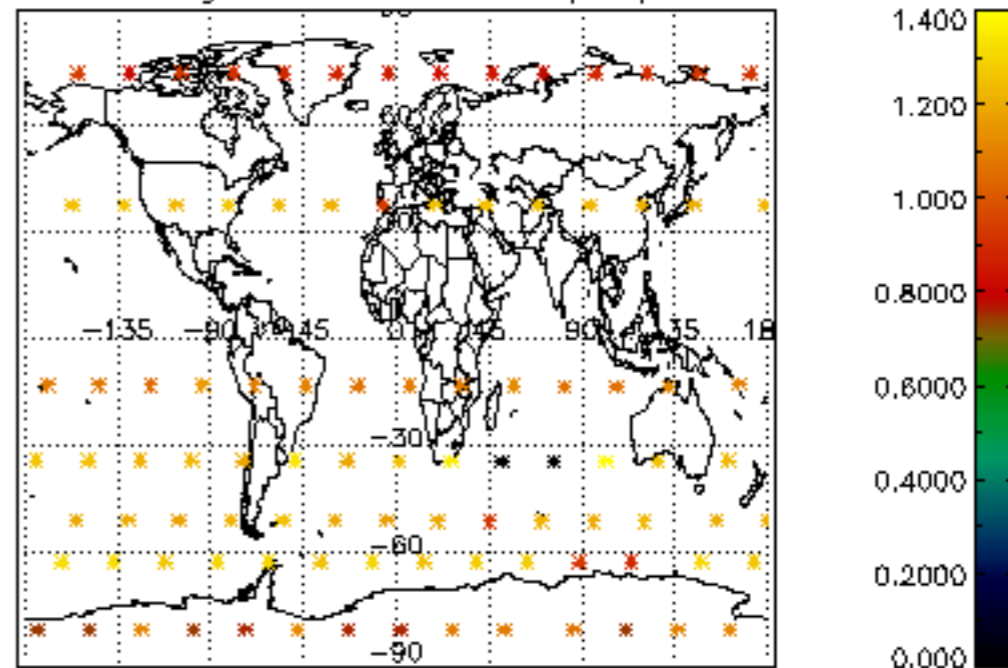
Percentage of saturation errors per profile



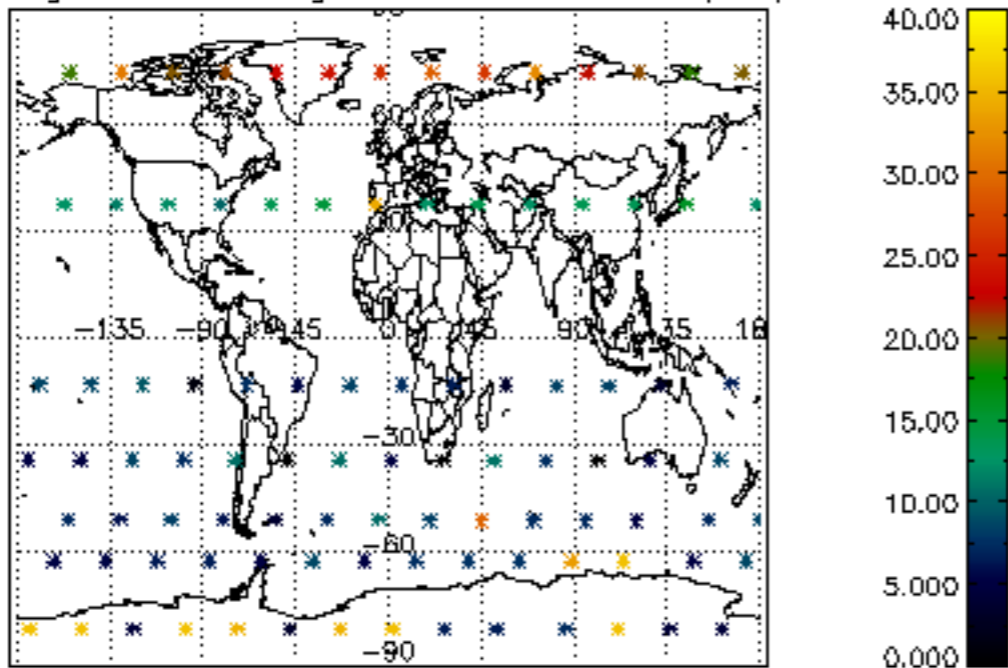
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

