

GOMOS Level 2 Daily Report

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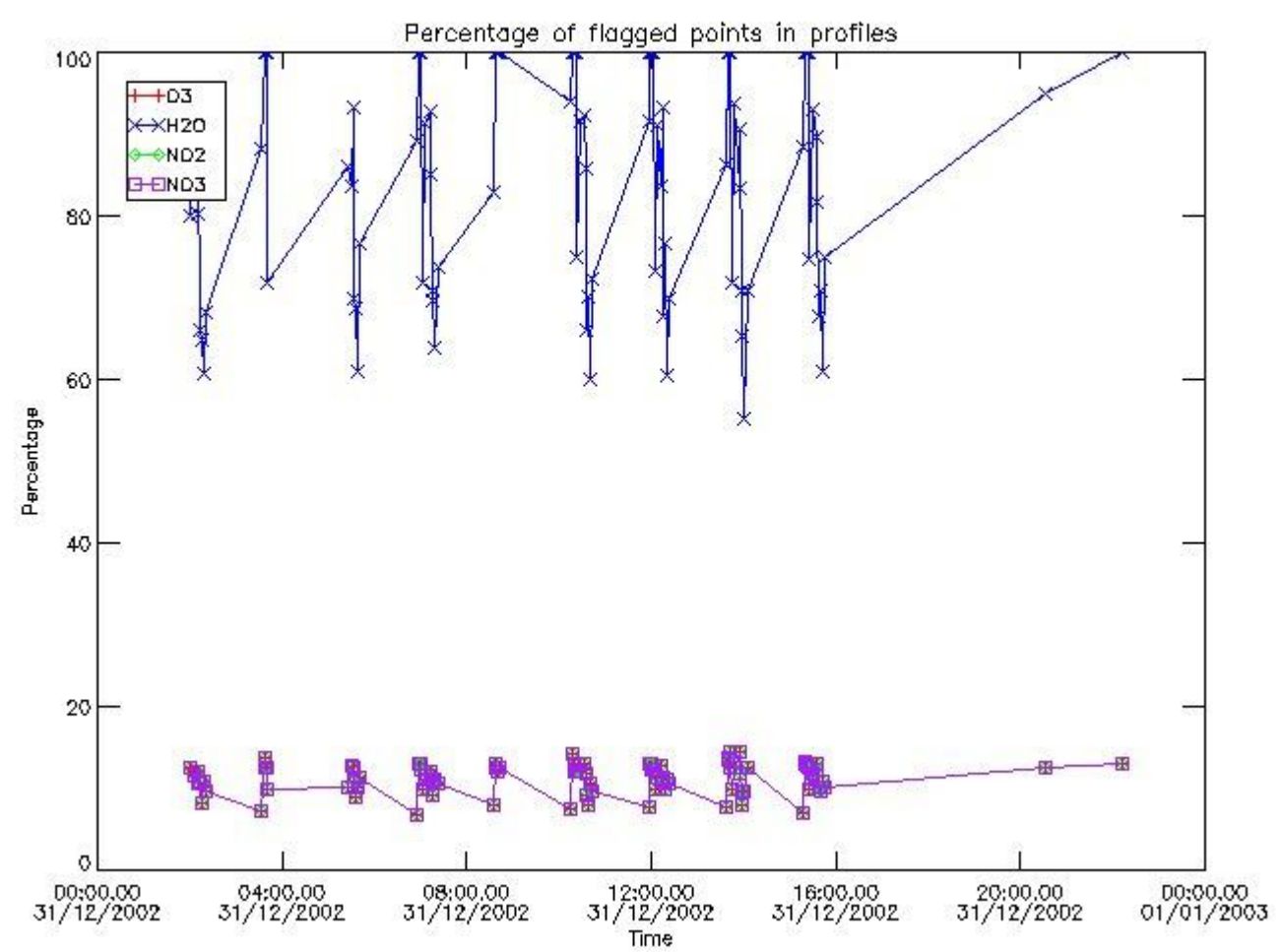
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220	GOM_NL__2PRFIN20021231_142148_000000462012_00311_04373_2336.N1	31-DEC-2002 14:21:48	Bright	46.000	13	87Alp Tau	0.86700	3800.0	92	4373	No
221	GOM_NL__2PRFIN20021231_142358_000000482012_00311_04373_2337.N1	31-DEC-2002 14:23:58	Bright	48.000	151	13Mu Gem	2.8900	3000.0	96	4373	No
222	GOM_NL__2PRFIN20021231_142620_000000402012_00311_04373_2338.N1	31-DEC-2002 14:26:20	Bright	40.000	114	3Iot Aur	2.6930	4600.0	80	4373	No
223	GOM_NL__2PRFIN20021231_142758_000000402012_00311_04373_2339.N1	31-DEC-2002 14:27:58	Bright	40.000	107	37The Aur	2.6490	11000.	80	4373	No
224	GOM_NL__2PRFIN20021231_143001_000000422012_00311_04373_2340.N1	31-DEC-2002 14:30:01	Bright	41.500	6	13Alp Aur	0.080000	3400.0	83	4373	No
225	GOM_NL__2PRFIN20021231_143146_000000402012_00311_04373_2341.N1	31-DEC-2002 14:31:46	Bright	39.500	35	33Alp Per	1.7950	6250.0	79	4373	No
226	GOM_NL__2PRFIN20021231_143303_000000372012_00311_04373_2342.N1	31-DEC-2002 14:33:03	Bright	37.000	160	23Gam Per	2.9300	4700.0	74	4373	No
227	GOM_NL__2PRFIN20021231_144211_000000362012_00311_04373_2343.N1	31-DEC-2002 14:42:11	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	4373	No
228	GOM_NL__2PRFIN20021231_144509_000000502012_00311_04373_2344.N1	31-DEC-2002 14:45:09	Bright	50.000	36	50Alp UMa	1.8000	6300.0	100	4373	No
229	GOM_NL__2PRFIN20021231_144914_000000562012_00311_04373_2345.N1	31-DEC-2002 14:49:14	Bright	56.000	87	64Gam UMa	2.4330	11000.	112	4373	No
230	GOM_NL__2PRFIN20021231_145121_000000472012_00311_04373_2346.N1	31-DEC-2002 14:51:21	Bright	46.500	55	79Zet UMa	2.0600	10200.	93	4373	No
231	GOM_NL__2PRFIN20021231_145338_000000652012_00311_04373_2347.N1	31-DEC-2002 14:53:38	Bright	65.000	39	85Eta UMa	1.8540	24000.	130	4373	No
232	GOM_NL__2PRFIN20021231_145740_000000442012_00311_04373_2348.N1	31-DEC-2002 14:57:40	Bright	43.500	180	27Gam Boo	3.0400	8000.0	87	4373	No
233	GOM_NL__2PRFIN20021231_150120_000000442012_00311_04373_2349.N1	31-DEC-2002 15:01:20	Bright	43.500	83		2.3780	11000.	87	4373	No
234	GOM_NL__2PRFIN20021231_150527_000000572012_00311_04373_2350.N1	31-DEC-2002 15:05:27	Bright	57.000	111	8Eta Boo	2.6800	6000.0	114	4373	No
235	GOM_NL__2PRFIN20021231_150856_000000362012_00311_04373_2351.N1	31-DEC-2002 15:08:56	Bright	35.500	120	1Del Oph	2.7340	3200.0	71	4373	No
236	GOM_NL__2PRFIN20021231_151138_000000402012_00311_04373_2352.N1	31-DEC-2002 15:11:38	Bright	40.000	104	27Bet Lib	2.6140	13100.	80	4373	No
237	GOM_NL__2PRFIN20021231_151416_000000472012_00311_04373_2353.N1	31-DEC-2002 15:14:16	Tw_i_and_stray	46.500	122	9Alp2Lib	2.7470	9700.0	93	4373	No
238	GOM_NL__2PRFIN20021231_151732_000000742012_00311_04373_2354.N1	31-DEC-2002 15:17:32	Dark	74.000	15	67Alp Vir	0.97600	28000.	148	4373	No
239	GOM_NL__2PRFIN20021231_151942_000000402012_00311_04373_2355.N1	31-DEC-2002 15:19:42	Dark	39.500	131	Gam Lup	2.8000	26000.	79	4373	No
240	GOM_NL__2PRFIN20021231_152100_000000392012_00311_04373_2356.N1	31-DEC-2002 15:21:00	Dark	38.500	109	Bet Lup	2.6770	26000.	77	4373	No
241	GOM_NL__2PRFIN20021231_152228_000000402012_00311_04373_2357.N1	31-DEC-2002 15:22:28	Dark	40.000	78	Alp Lup	2.3040	28000.	80	4373	No
242	GOM_NL__2PRFIN20021231_152355_000000412012_00311_04373_2358.N1	31-DEC-2002 15:23:55	Dark	40.500	95	Zet Cen	2.5450	26000.	81	4373	No
243	GOM_NL__2PRFIN20021231_152541_000000522012_00311_04373_2359.N1	31-DEC-2002 15:25:41	Dark	52.000	4	Alp1Cen	-0.010000	5800.0	104	4373	No
244	GOM_NL__2PRFIN20021231_152929_000000442012_00312_04374_0870.N1	31-DEC-2002 15:29:29	Dark	43.500	12	Alp1Cru	0.77500	30000.	87	4374	No
245	GOM_NL__2PRFIN20021231_153448_000000392012_00312_04374_0871.N1	31-DEC-2002 15:34:48	Dark	39.000	29	Bet Car	1.6720	10200.	78	4374	No
246	GOM_NL__2PRFIN20021231_153610_000000422012_00312_04374_0872.N1	31-DEC-2002 15:36:10	Dark	41.500	71	Iot Car	2.2460	7700.0	83	4374	No
247	GOM_NL__2PRFIN20021231_153746_000000502012_00312_04374_0873.N1	31-DEC-2002 15:37:46	Dark	50.000	41	Eps Car	1.8600	4100.0	100	4374	No
248	GOM_NL__2PRFIN20021231_153943_000000542012_00312_04374_0874.N1	31-DEC-2002 15:39:43	Dark	53.500	65	Lam Vel	2.2040	4400.0	107	4374	No
249	GOM_NL__2PRFIN20021231_154200_000000472012_00312_04374_0875.N1	31-DEC-2002 15:42:00	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	4374	No
250	GOM_NL__2PRFIN20021231_154513_000000512012_00312_04374_0876.N1	31-DEC-2002 15:45:13	Dark	50.500	117	Pi Pup	2.7060	3800.0	101	4374	No
251	GOM_NL__2PRFIN20021231_154802_000000522012_00312_04374_0877.N1	31-DEC-2002 15:48:02	Straylight	51.500	23	21Eps CMa	1.5020	26000.	103	4374	No
252	GOM_NL__2PRFIN20021231_154935_000000472012_00312_04374_0878.N1	31-DEC-2002 15:49:35	Straylight	47.000	179	24Omi2CMa	3.0320	24000.	94	4374	No
253	GOM_NL__2PRFIN20021231_155205_000000602012_00312_04374_0879.N1	31-DEC-2002 15:52:05	Straylight	60.000	1	9Alp CMa	-1.4400	11000.	120	4374	No
254	GOM_NL__2PRFIN20021231_155512_000000512012_00312_04374_0880.N1	31-DEC-2002 15:55:12	Straylight	51.000	7	19Bet Ori	0.10000	14000.	102	4374	No
255	GOM_NL__2PRFIN20021231_155705_000000452012_00312_04374_0881.N1	31-DEC-2002 15:57:05	Straylight	44.500	30	46Eps Ori	1.6940	30000.	89	4374	No
256	GOM_NL__2PRFIN20021231_155917_000000442012_00312_04374_0882.N1	31-DEC-2002 15:59:17	Tw_i_and_stray	44.000	27	24Gam Ori	1.6360	26000.	88	4374	No
257	GOM_NL__2PRFIN20021231_203118_000000412012_00315_04377_0881.N1	31-DEC-2002 20:31:18	Dark	40.500	12	Alp1Cru	0.77500	30000.	81	4377	No
258	GOM_NL__2PRFIN20021231_221155_000000402012_00316_04378_0892.N1	31-DEC-2002 22:11:55	Dark	39.500	12	Alp1Cru	0.77500	30000.	79	4378	No

3. Quality information per product

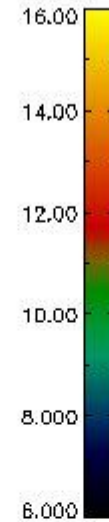
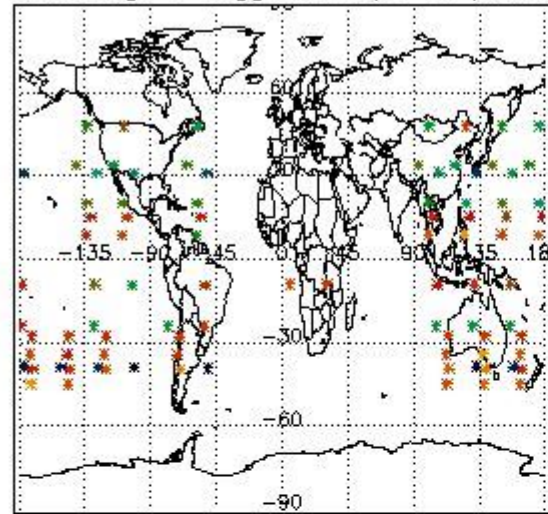
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

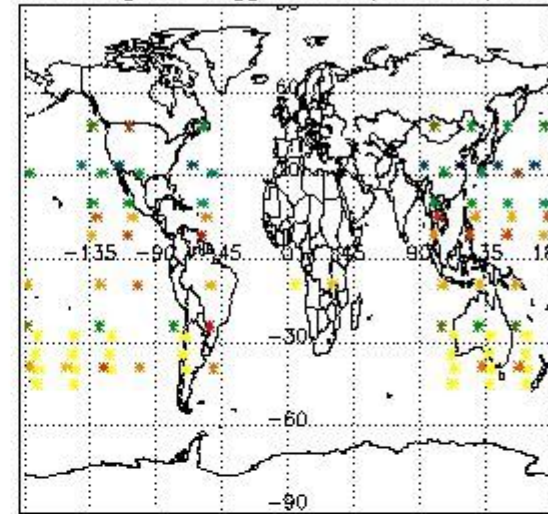


3.2 Plot quality information per product (world map)

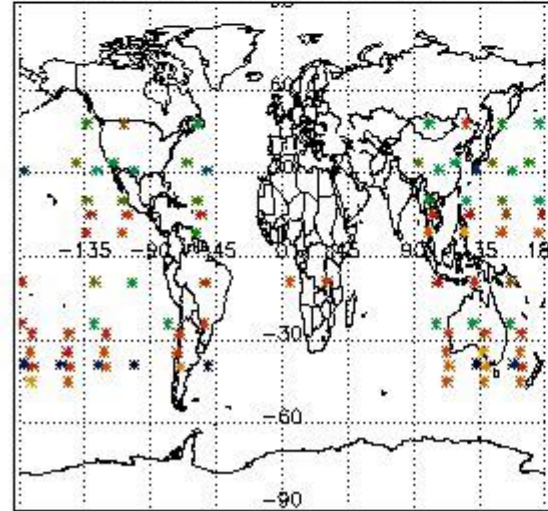
Percentage of flagged data per O3 profile



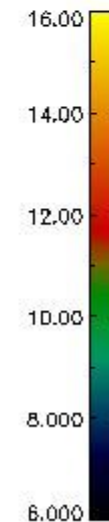
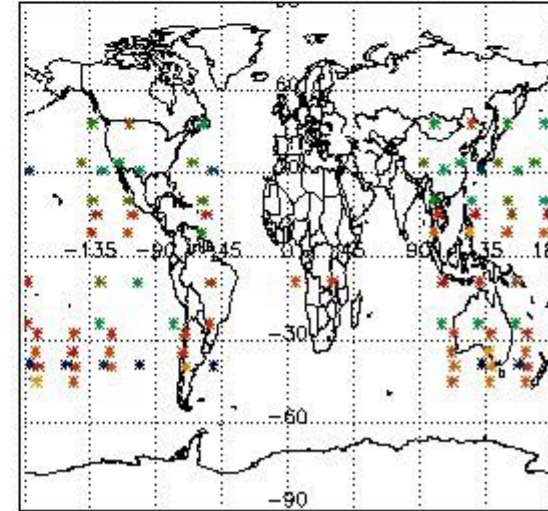
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

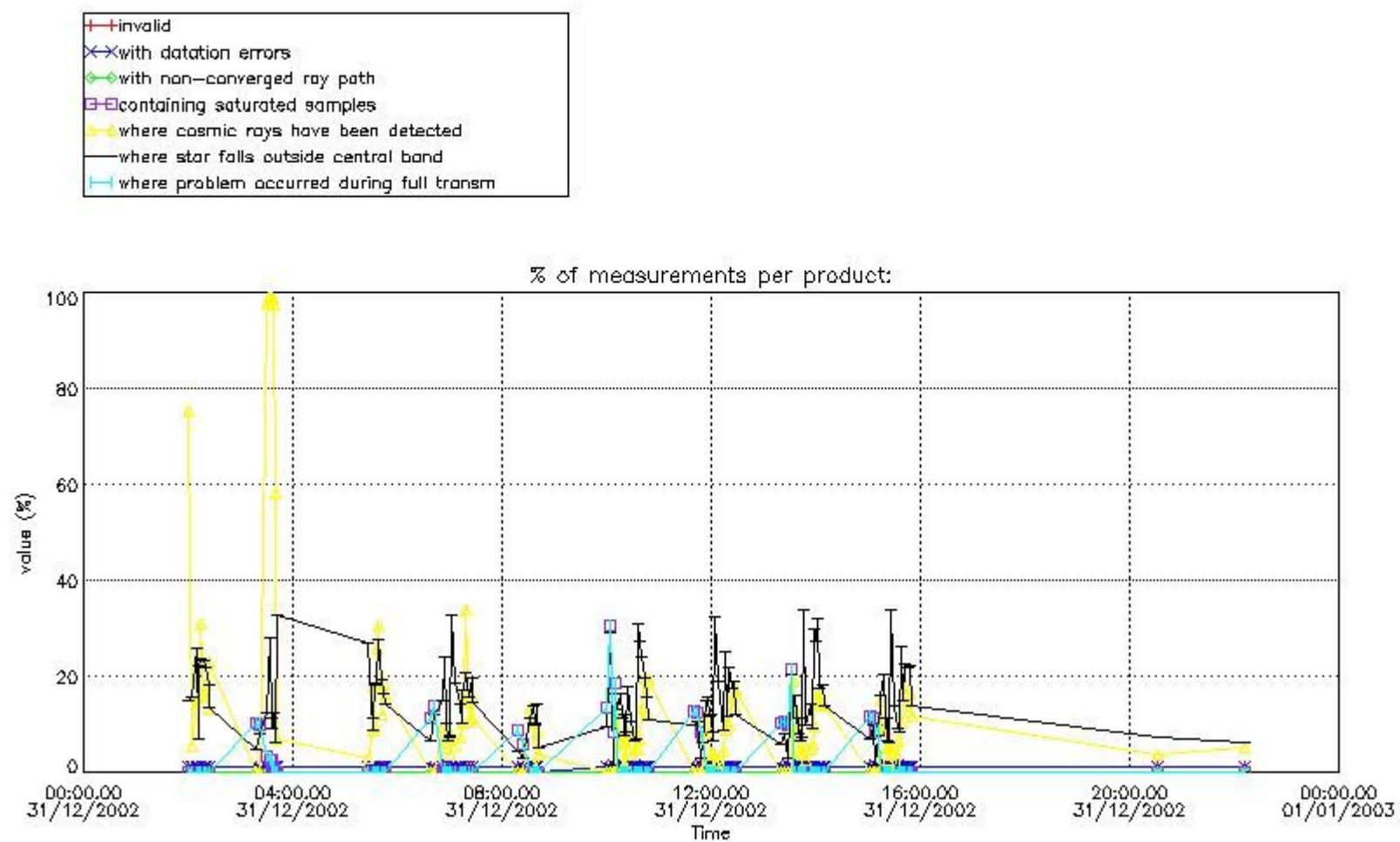


4. Level 1 quality information per product

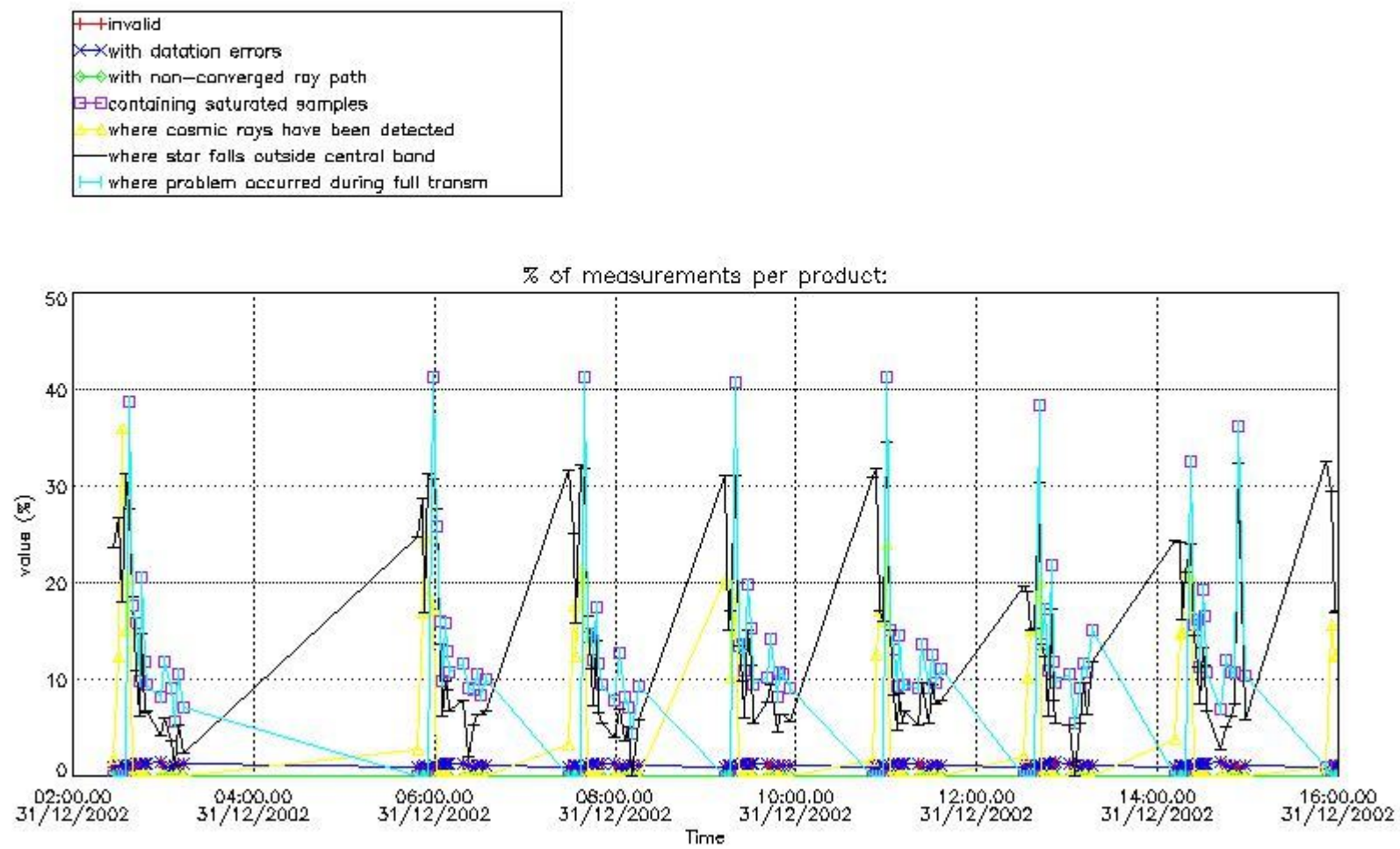
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



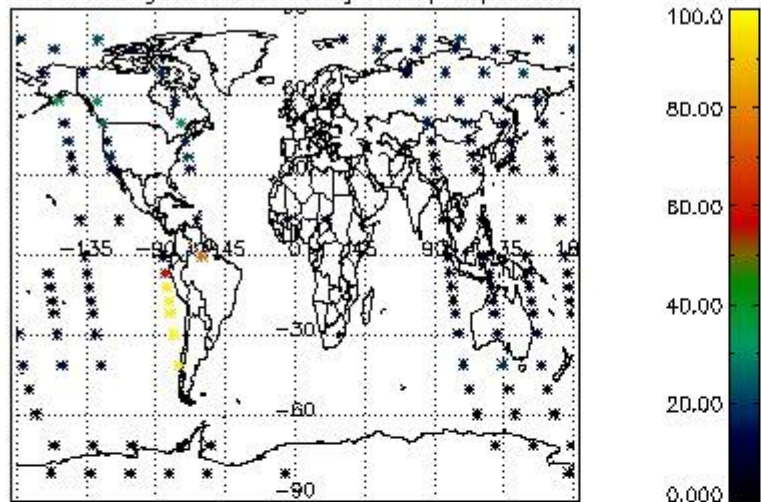
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



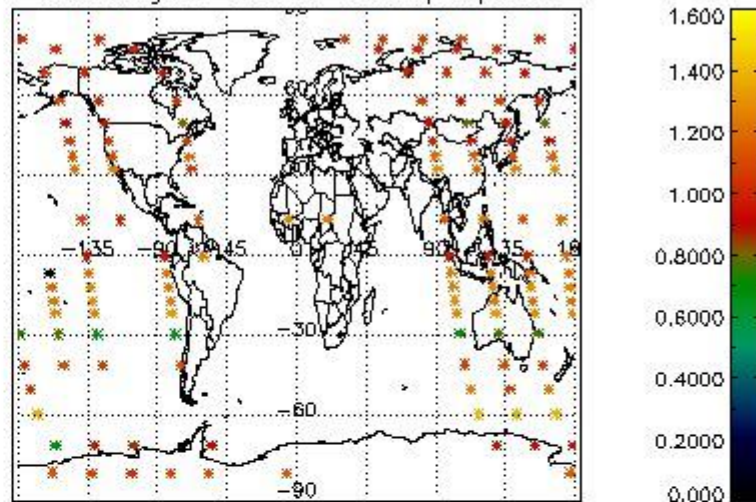
4.2 Plot quality information per product coming from level 1b processing (world map)

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

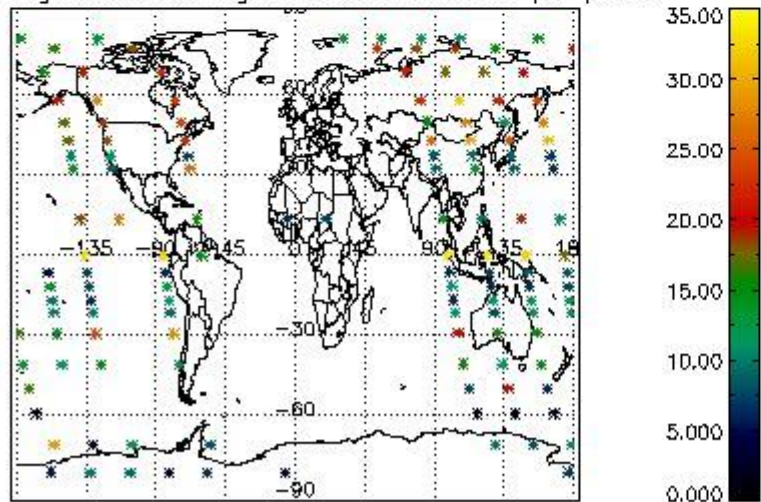
Percentage of cosmic ray hits per profile



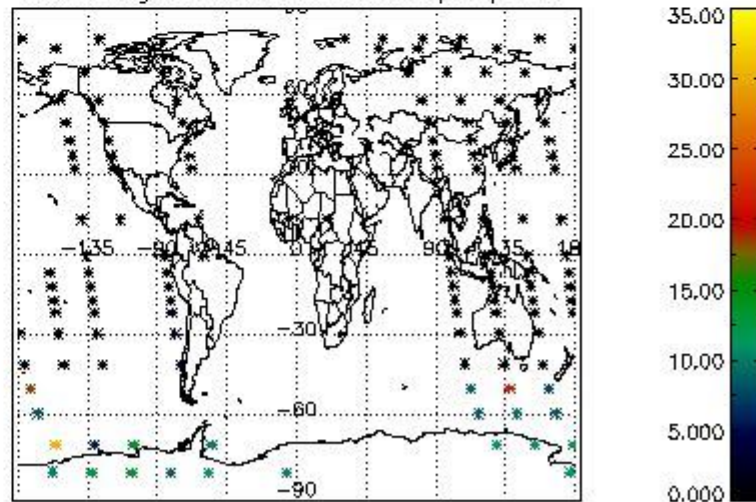
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

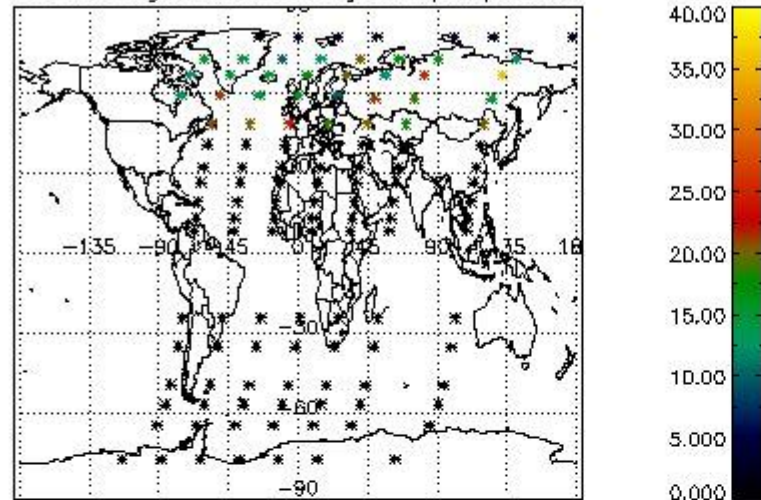


Percentage of saturation errors per profile

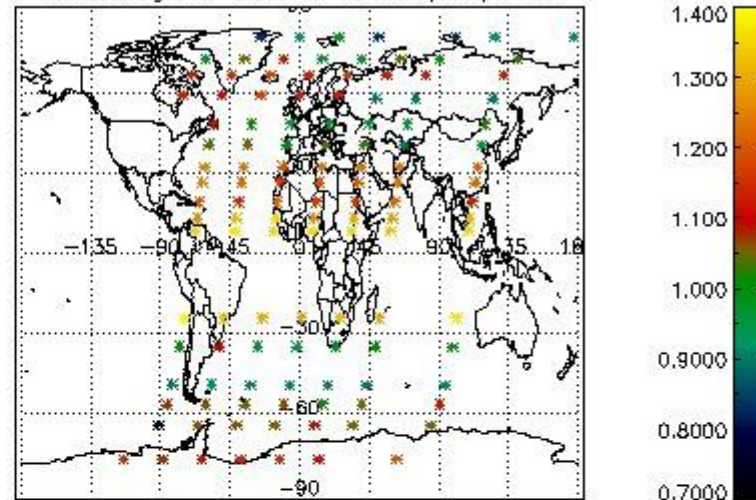


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

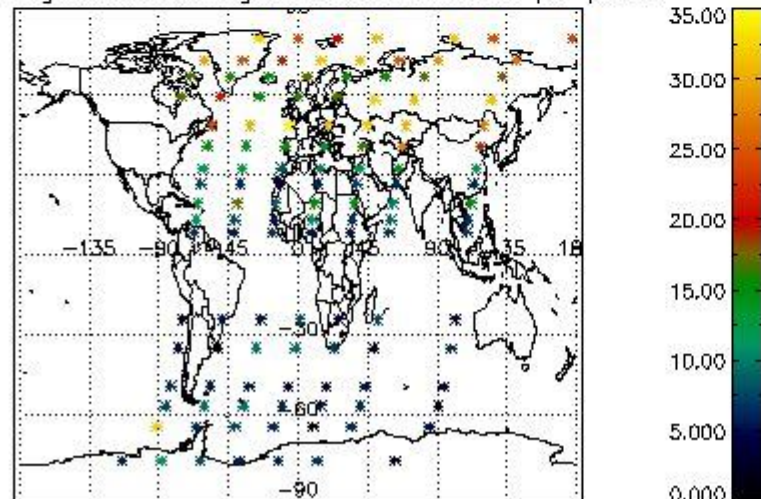
Percentage of cosmic ray hits per profile



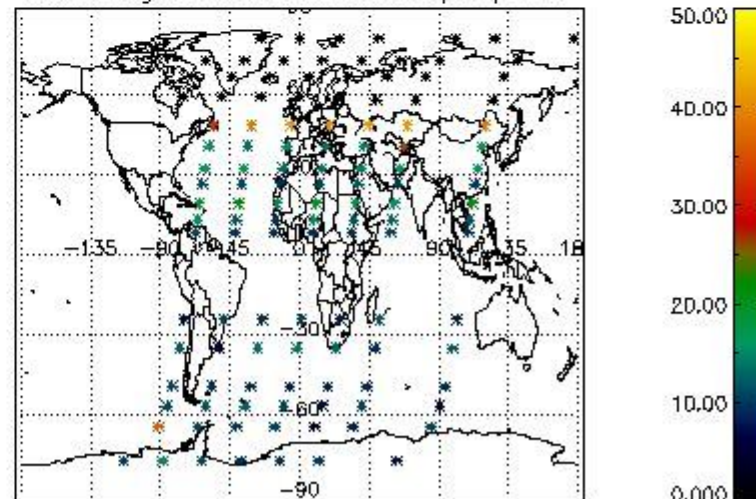
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

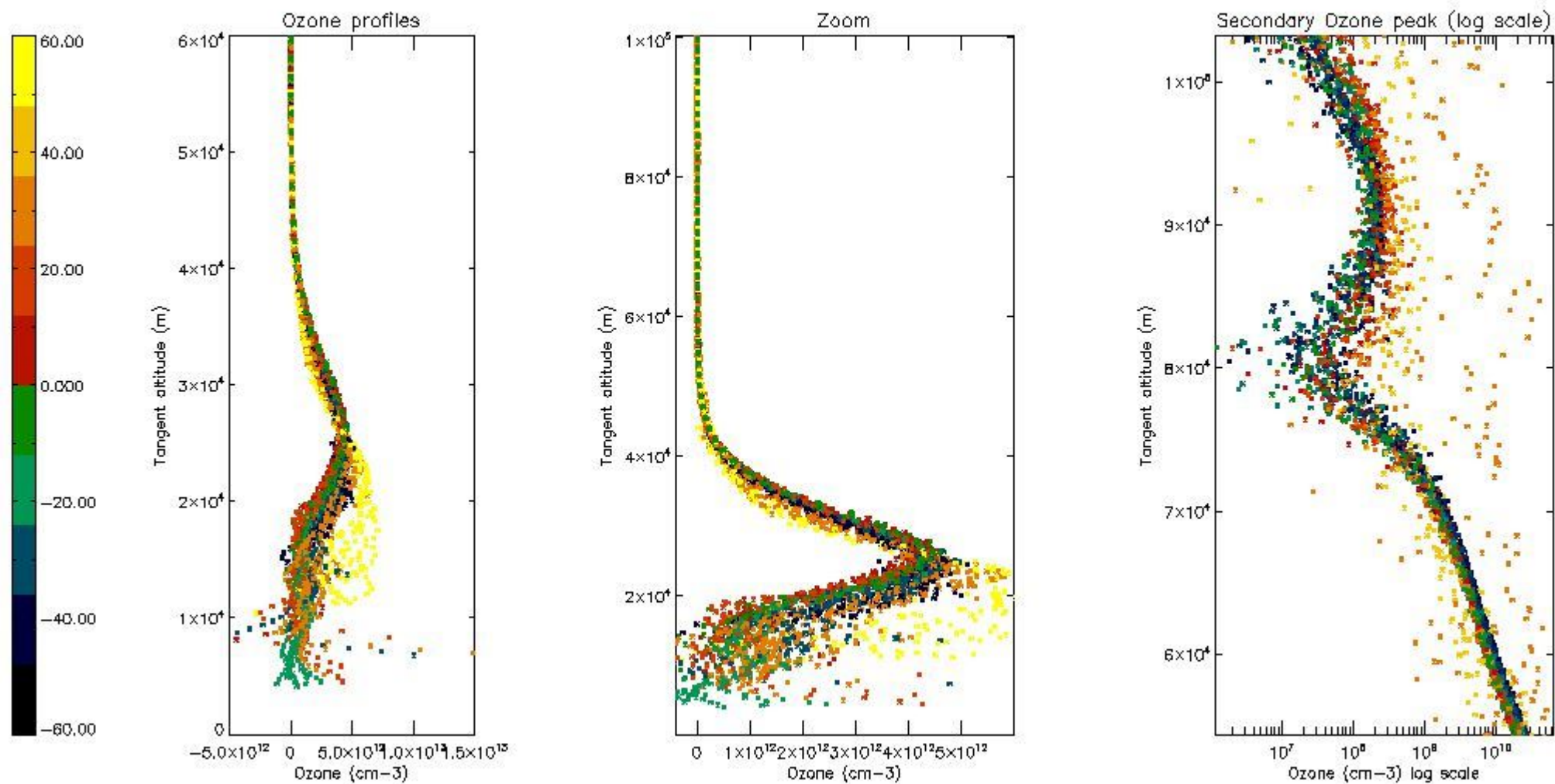
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	22

STD < 10	18
STD < 5	13

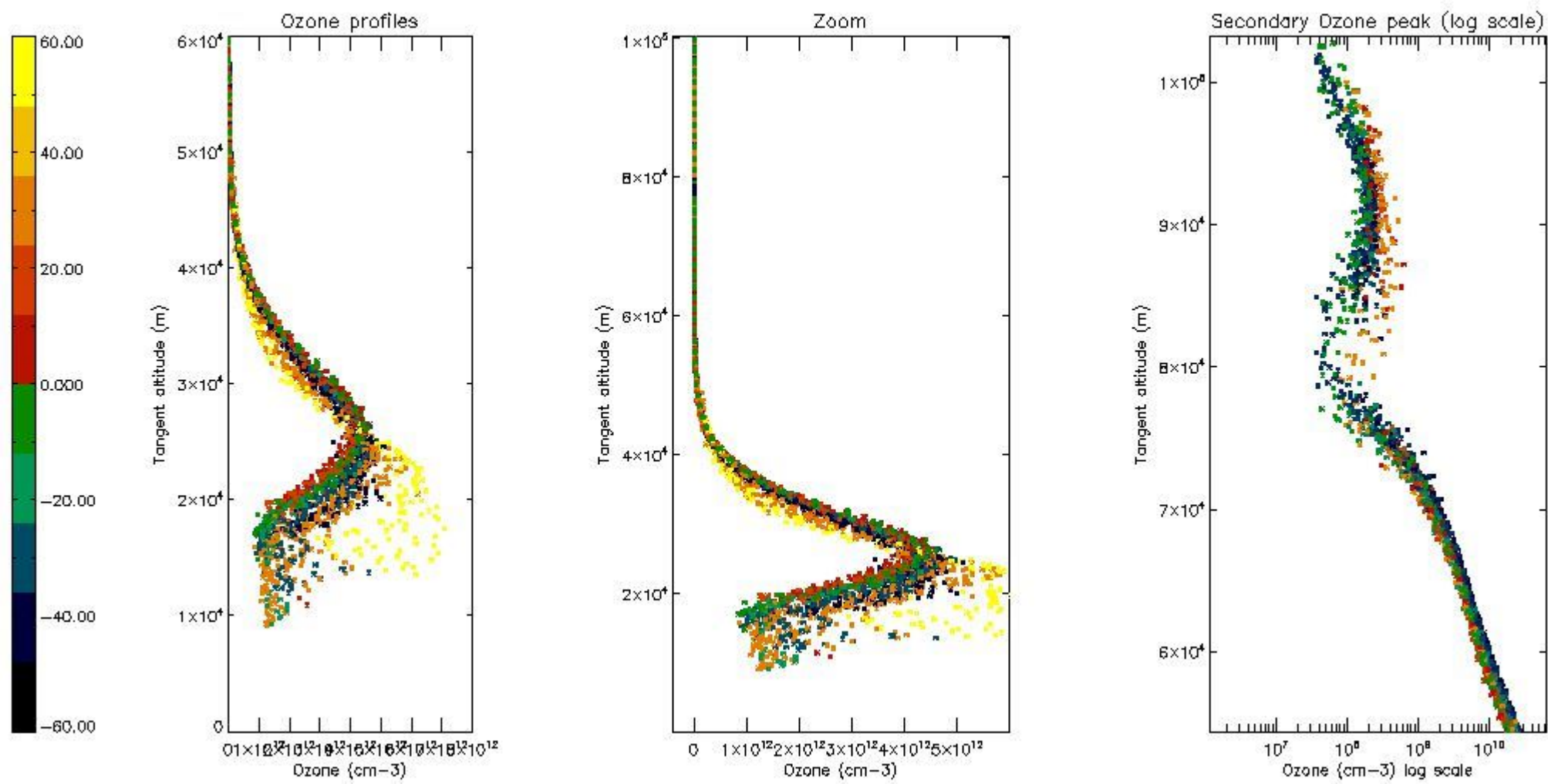
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



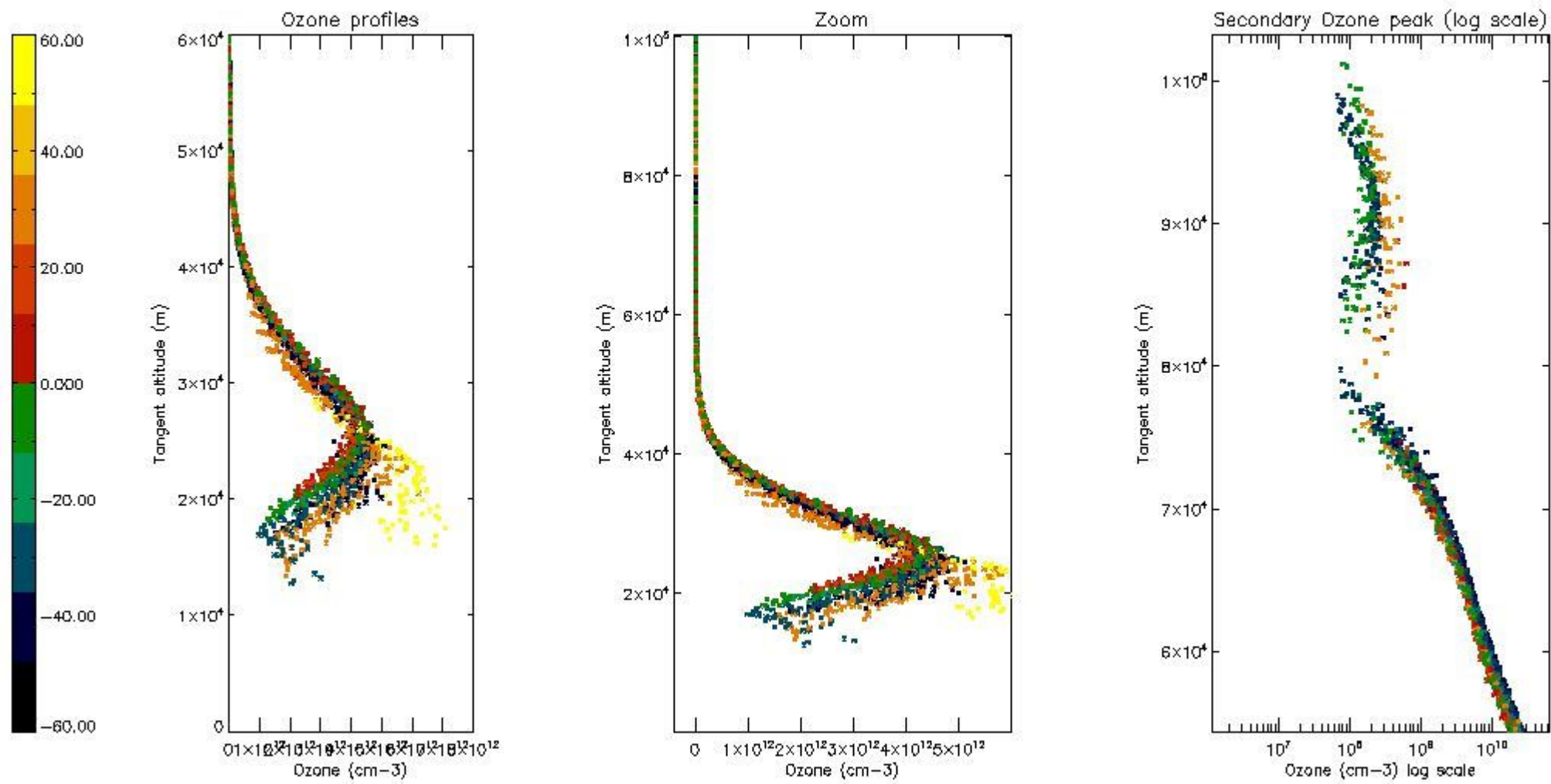
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



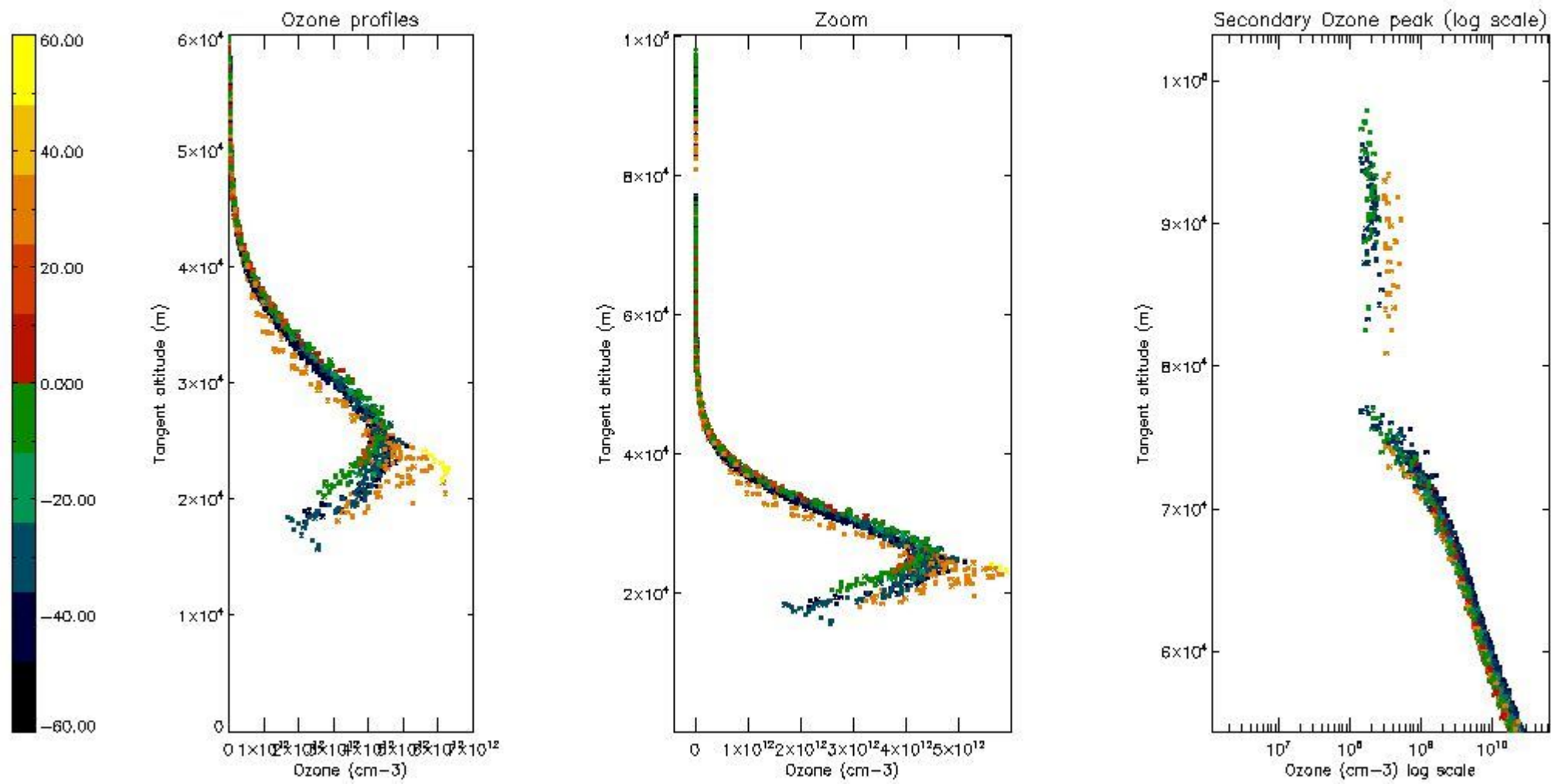
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



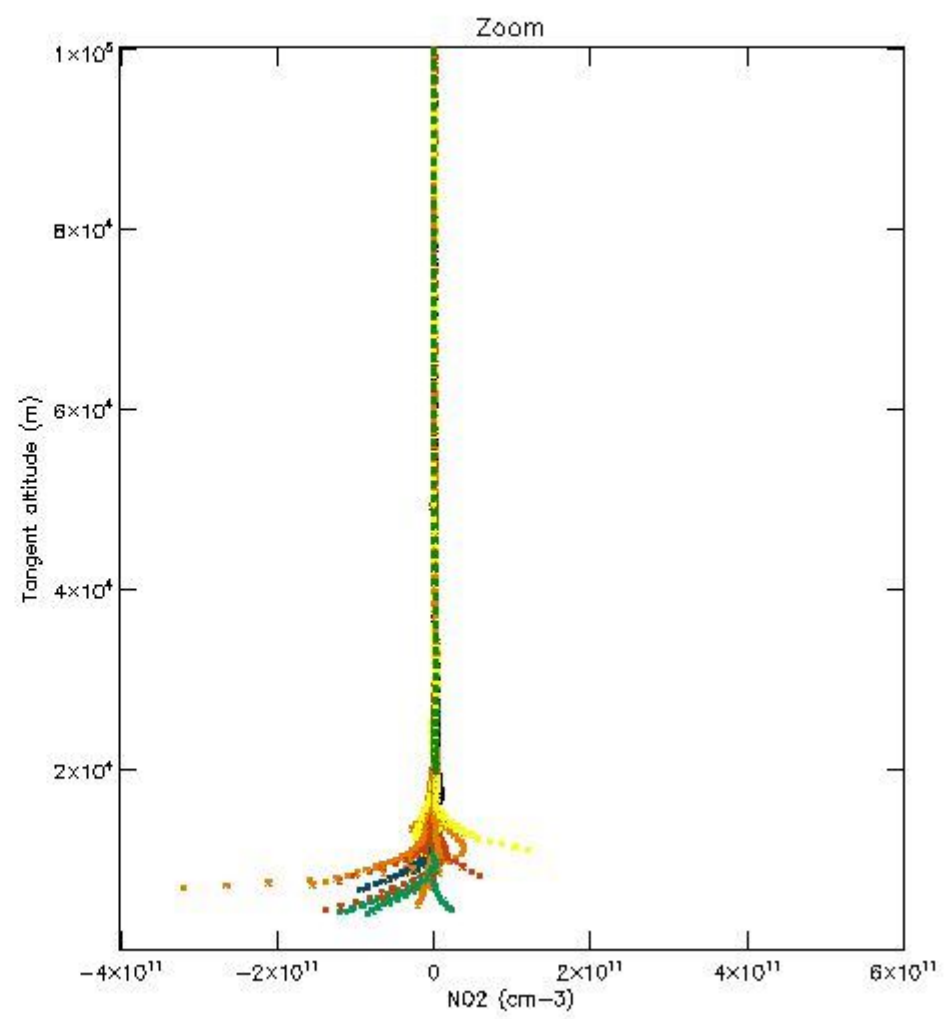
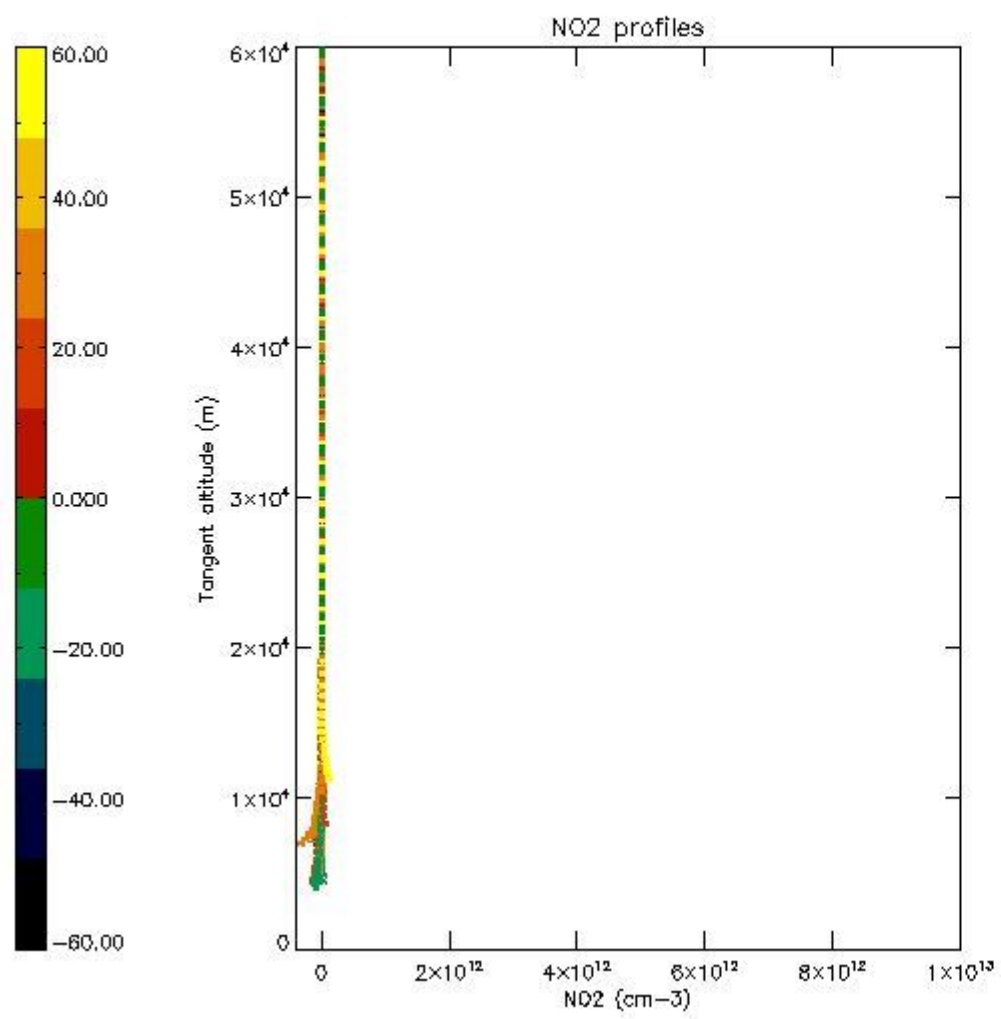
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



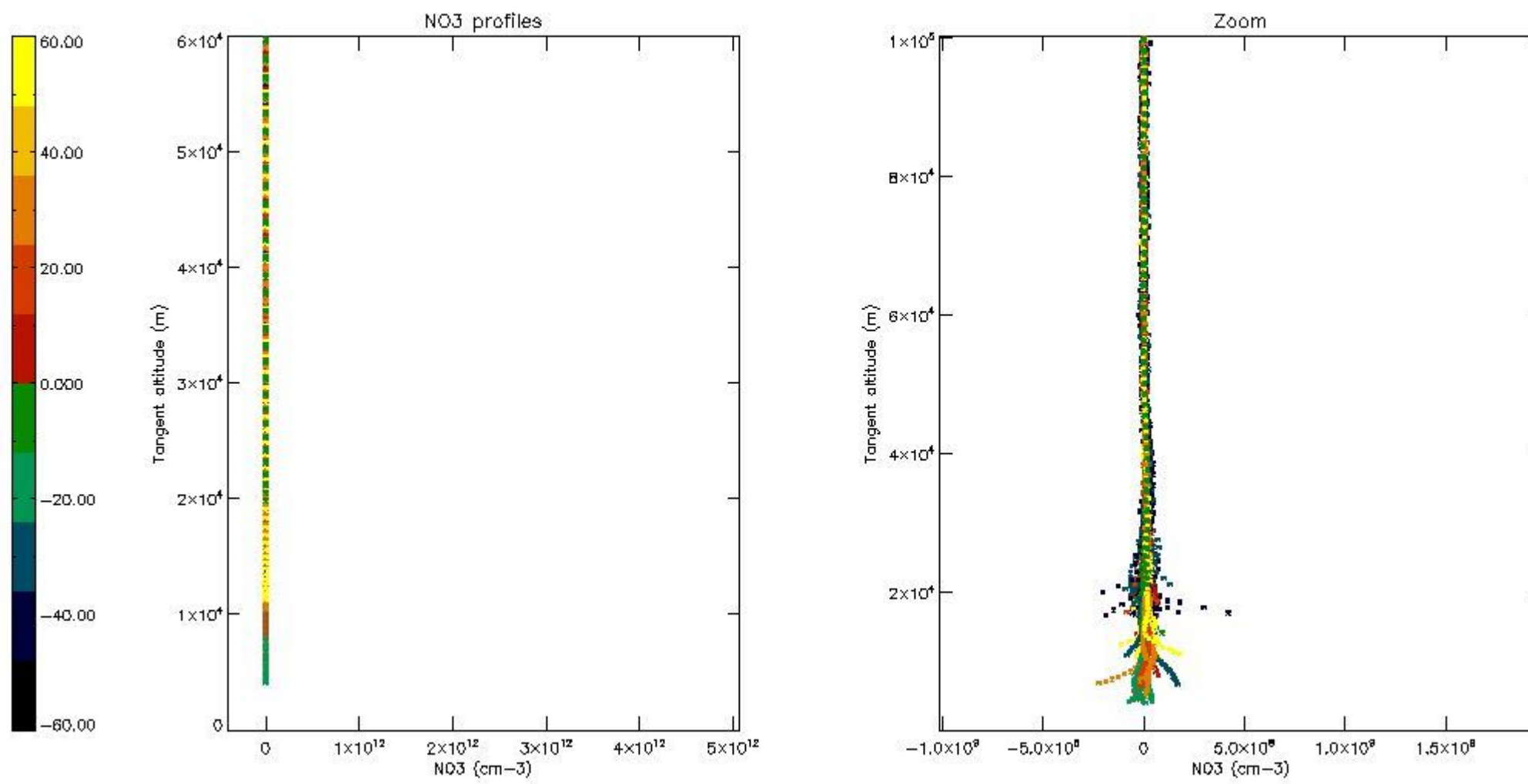
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



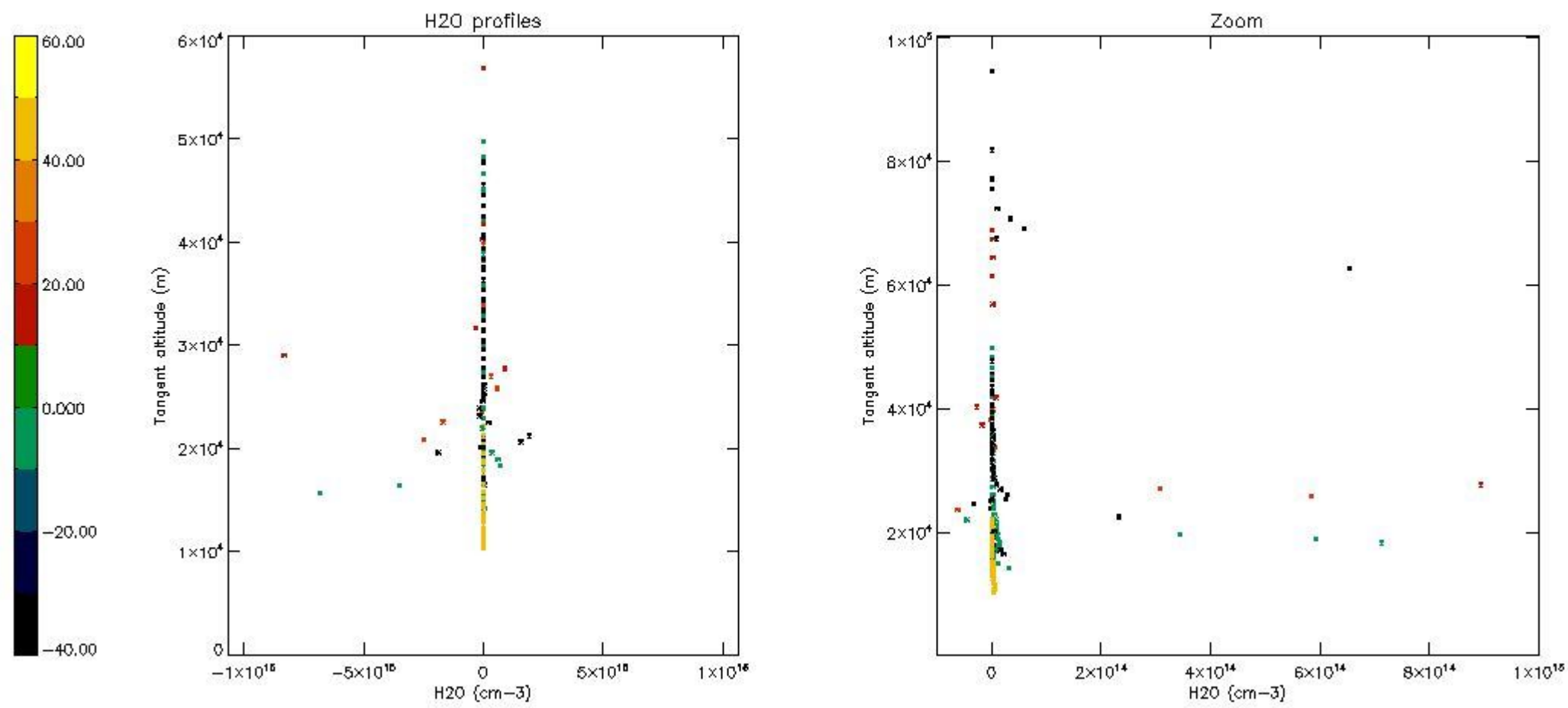
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	31-DEC-2002 02:00:51
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-DEC-2002 02:00:51
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-DEC-2002 02:00:51

GOMOS Level 2 Daily Report

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

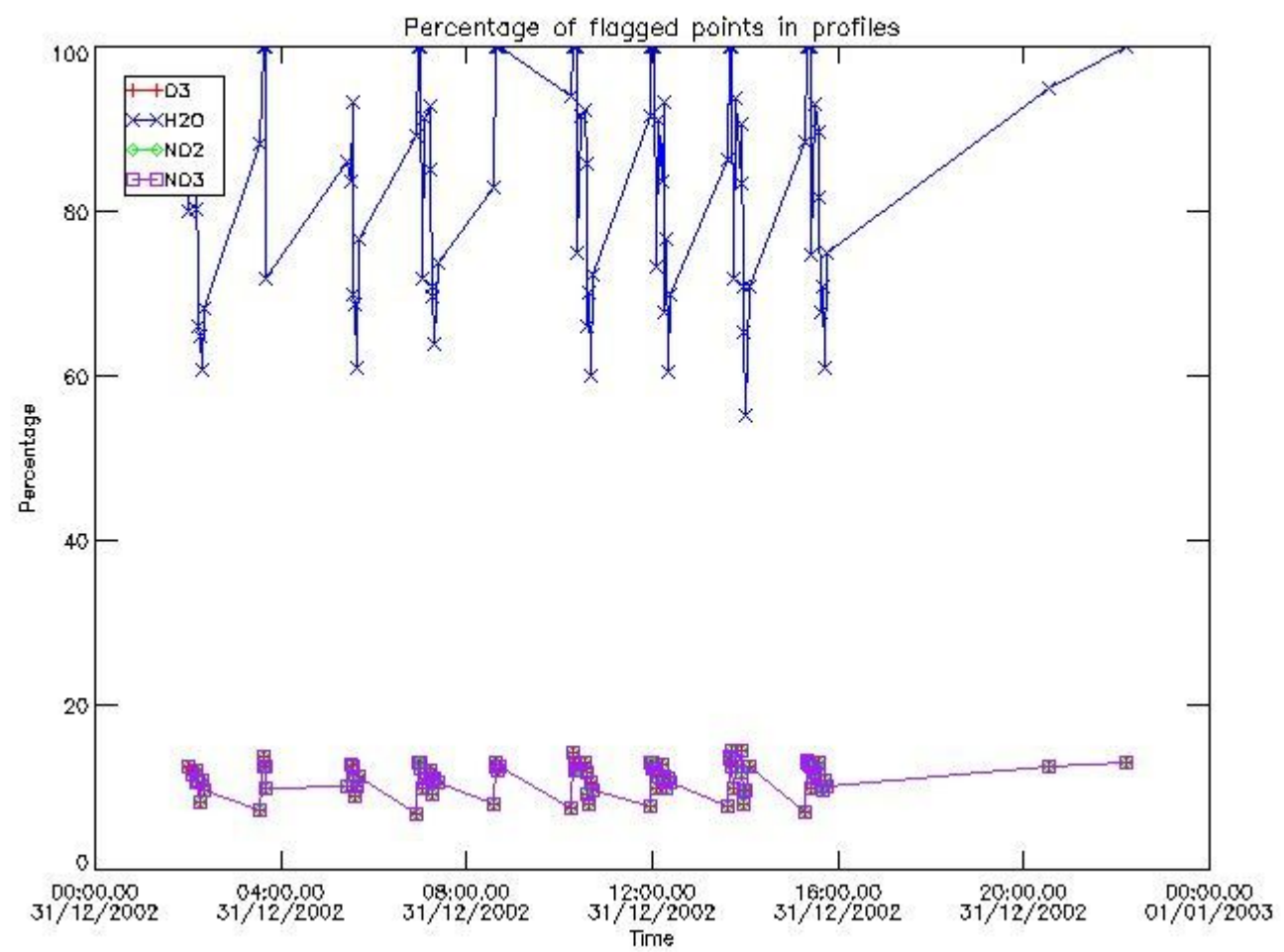
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

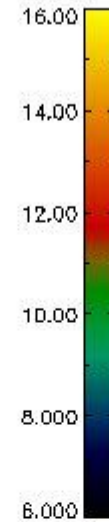
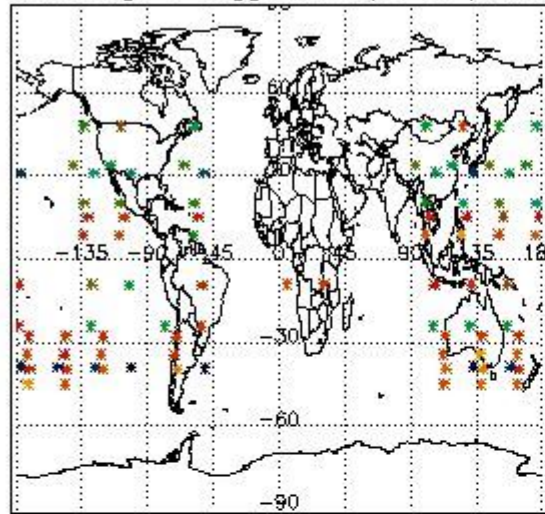
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

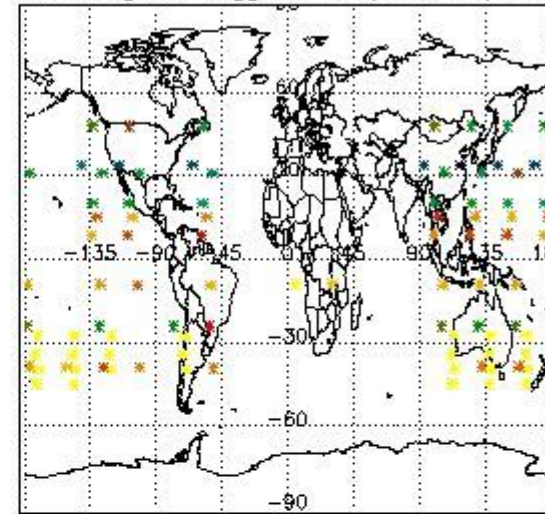


3.2 Plot quality information per product (world map)

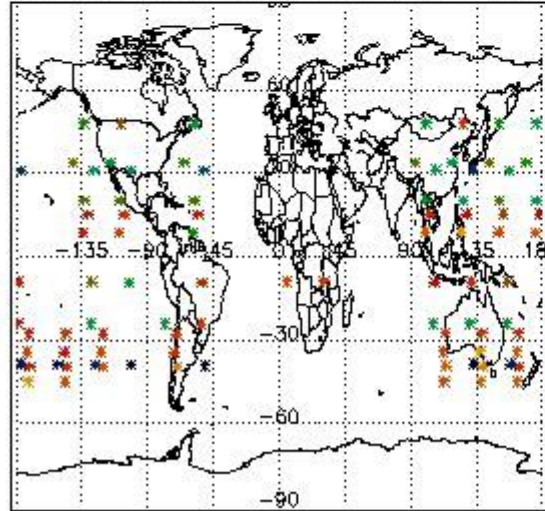
Percentage of flagged data per O3 profile



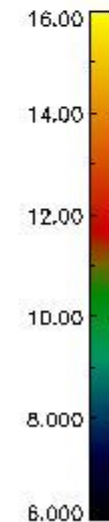
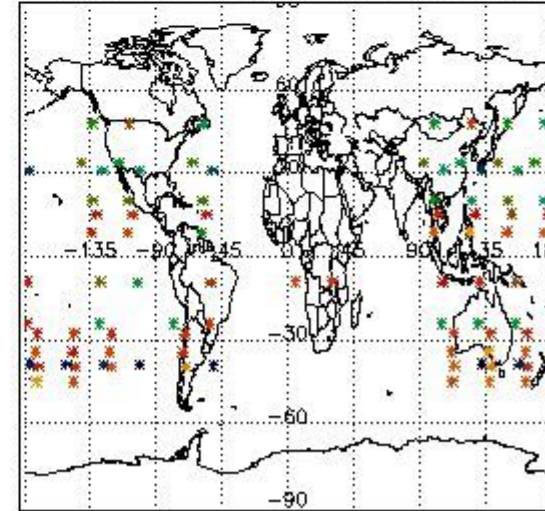
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

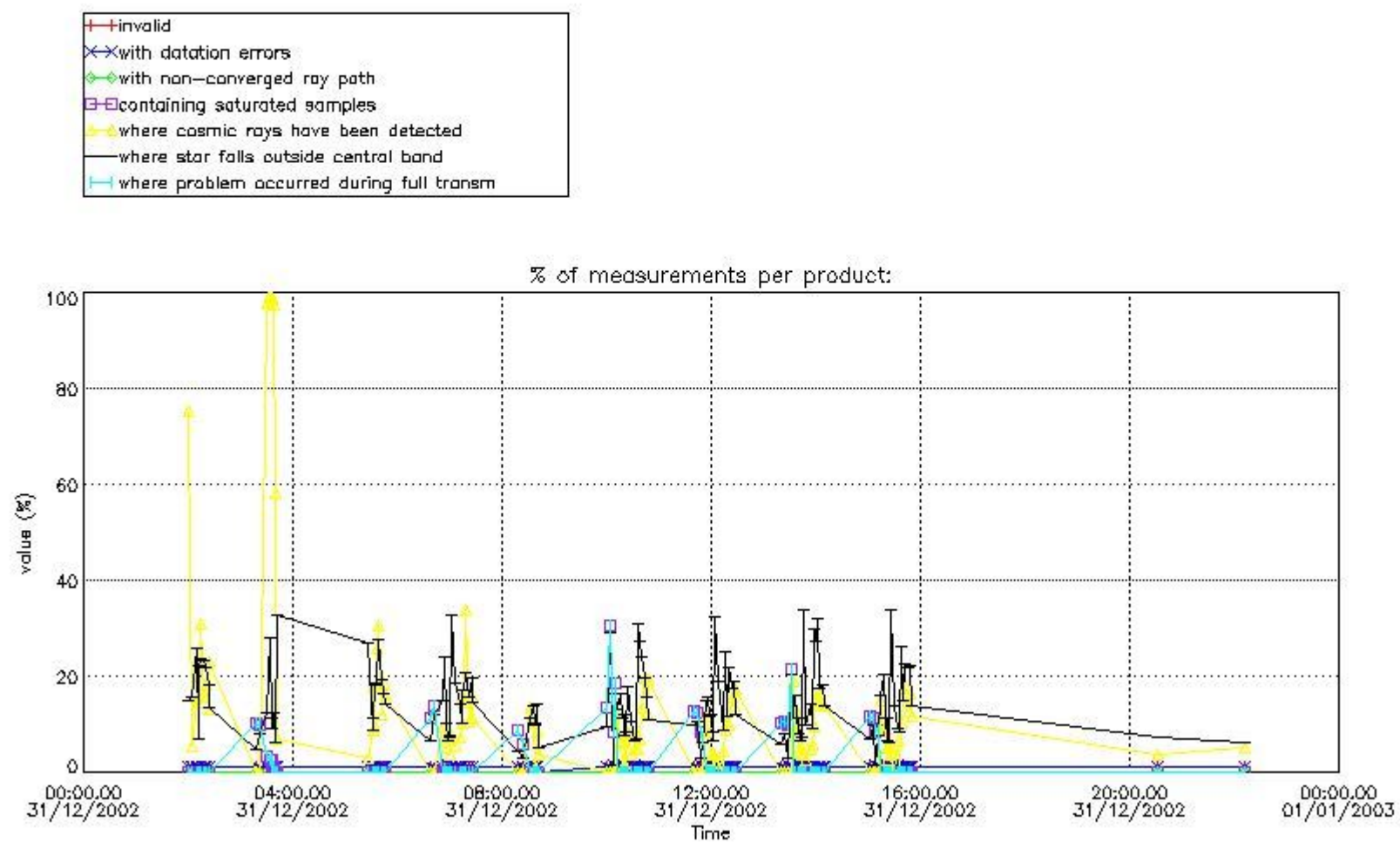


4. Level 1 quality information per product

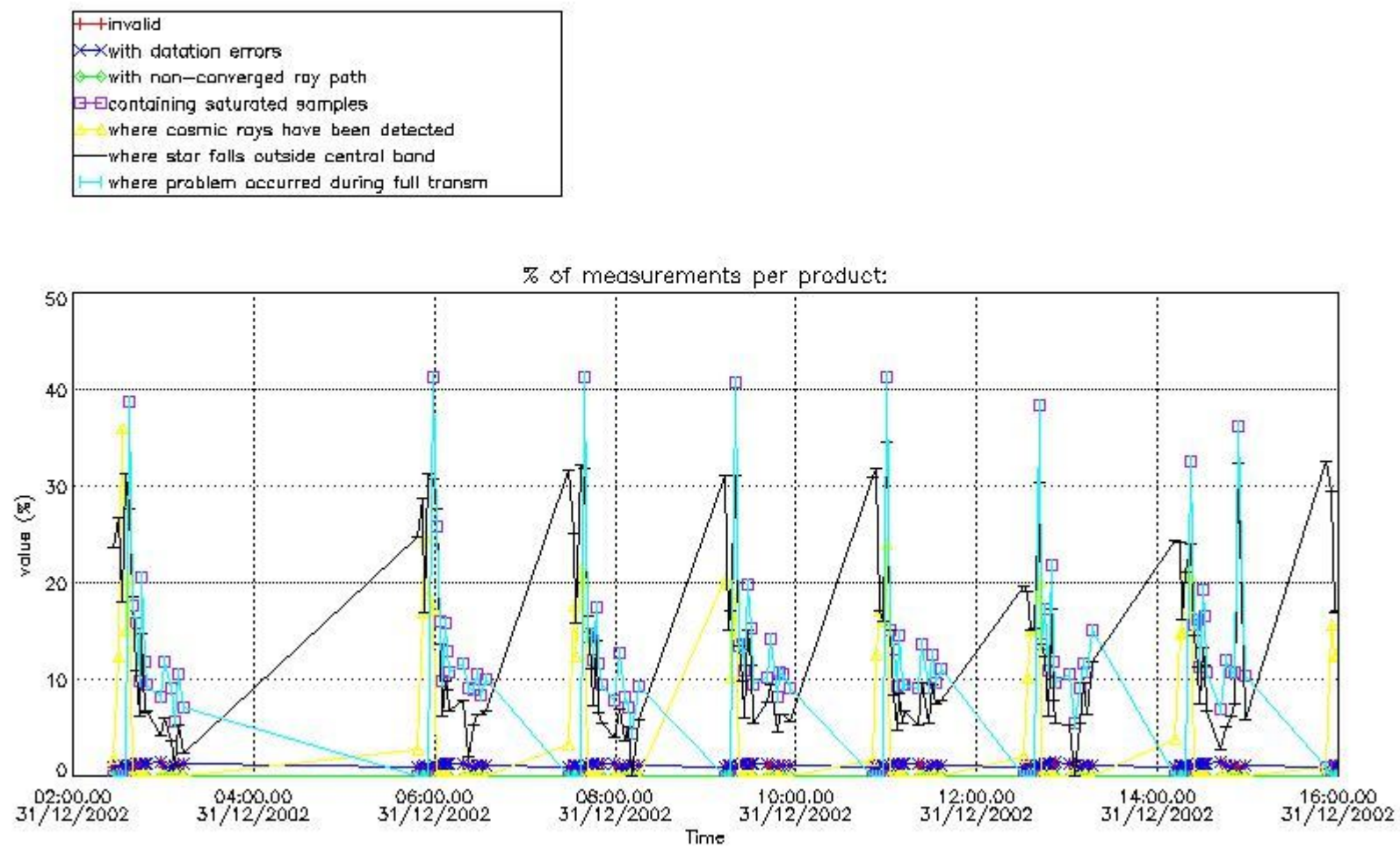
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



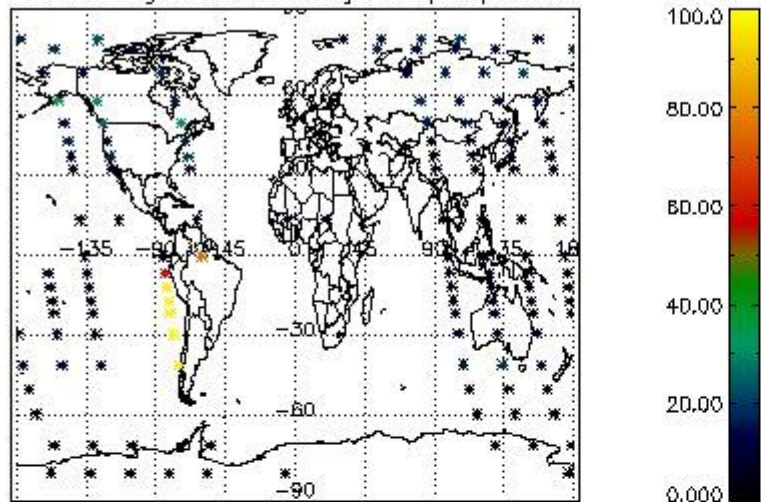
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



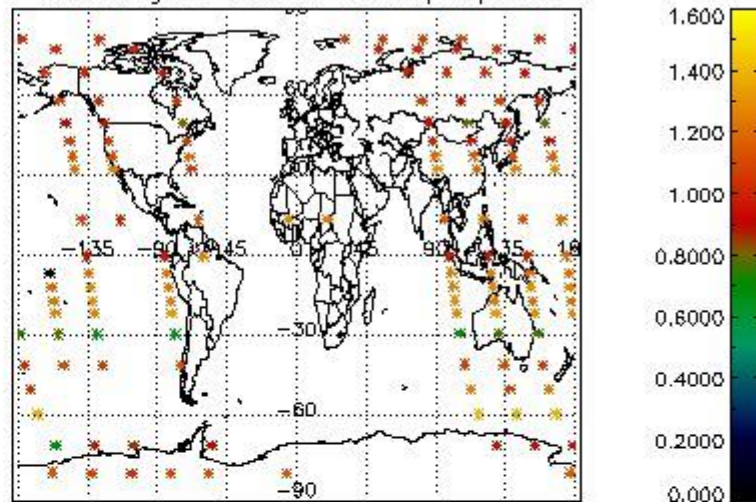
4.2 Plot quality information per product coming from level 1b processing (world map)

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

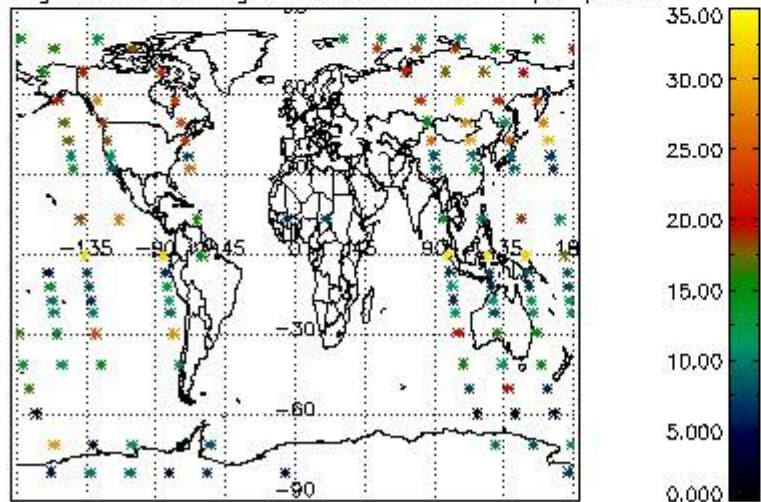
Percentage of cosmic ray hits per profile



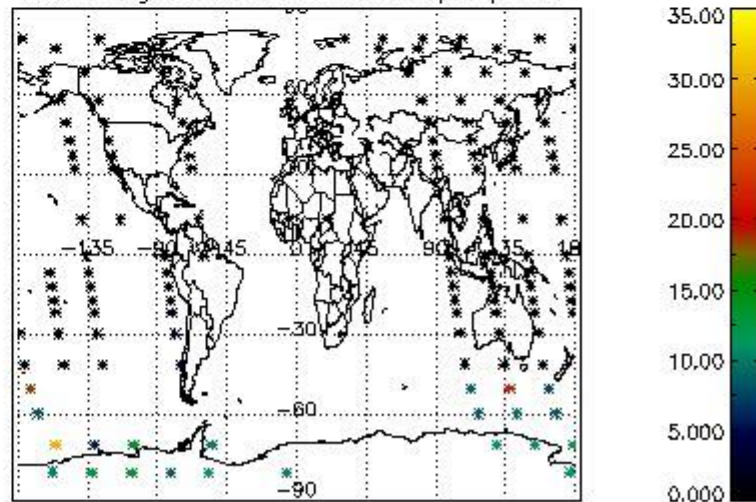
Percentage of datation errors per profile



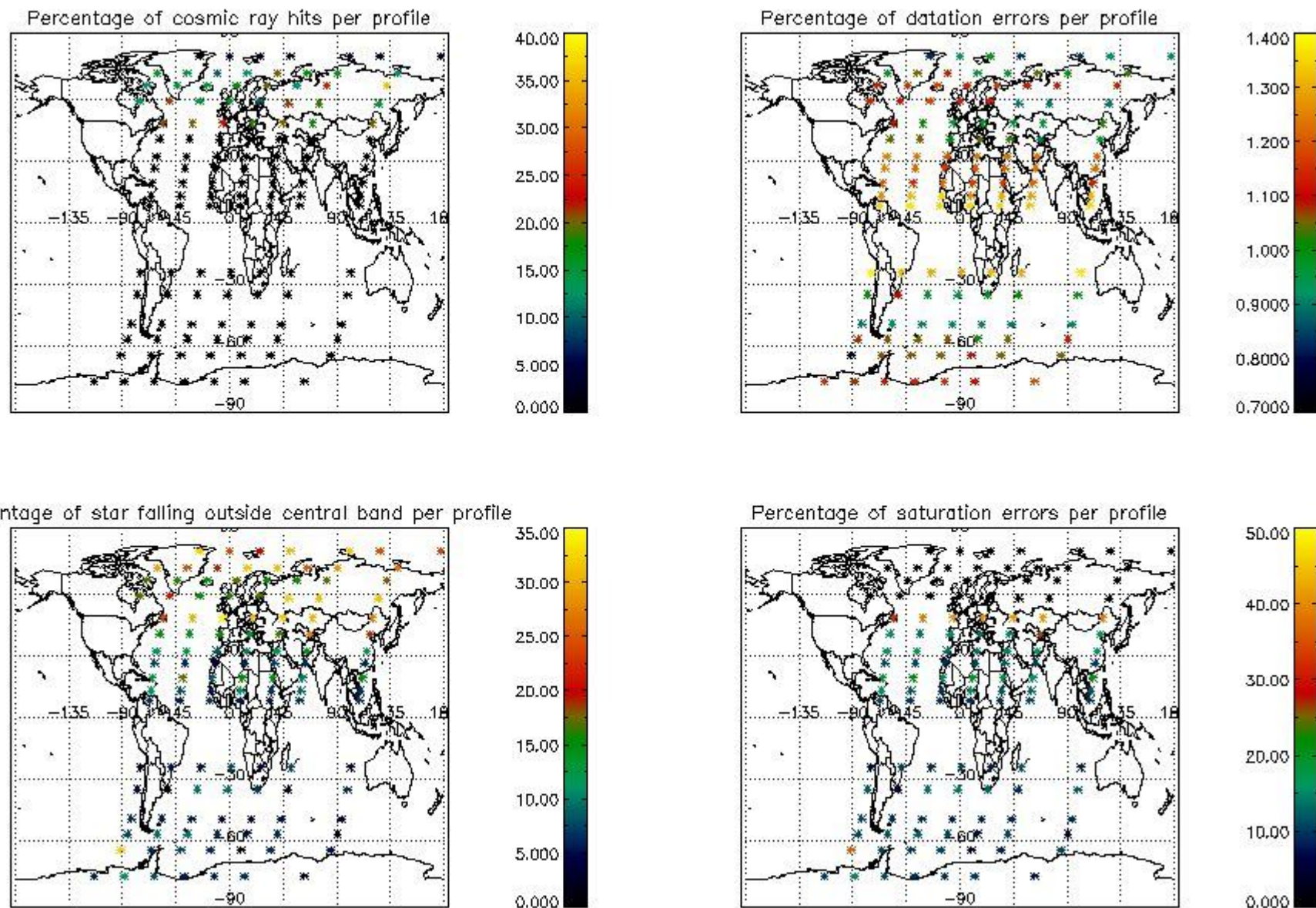
Percentage of star falling outside central band per profile



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

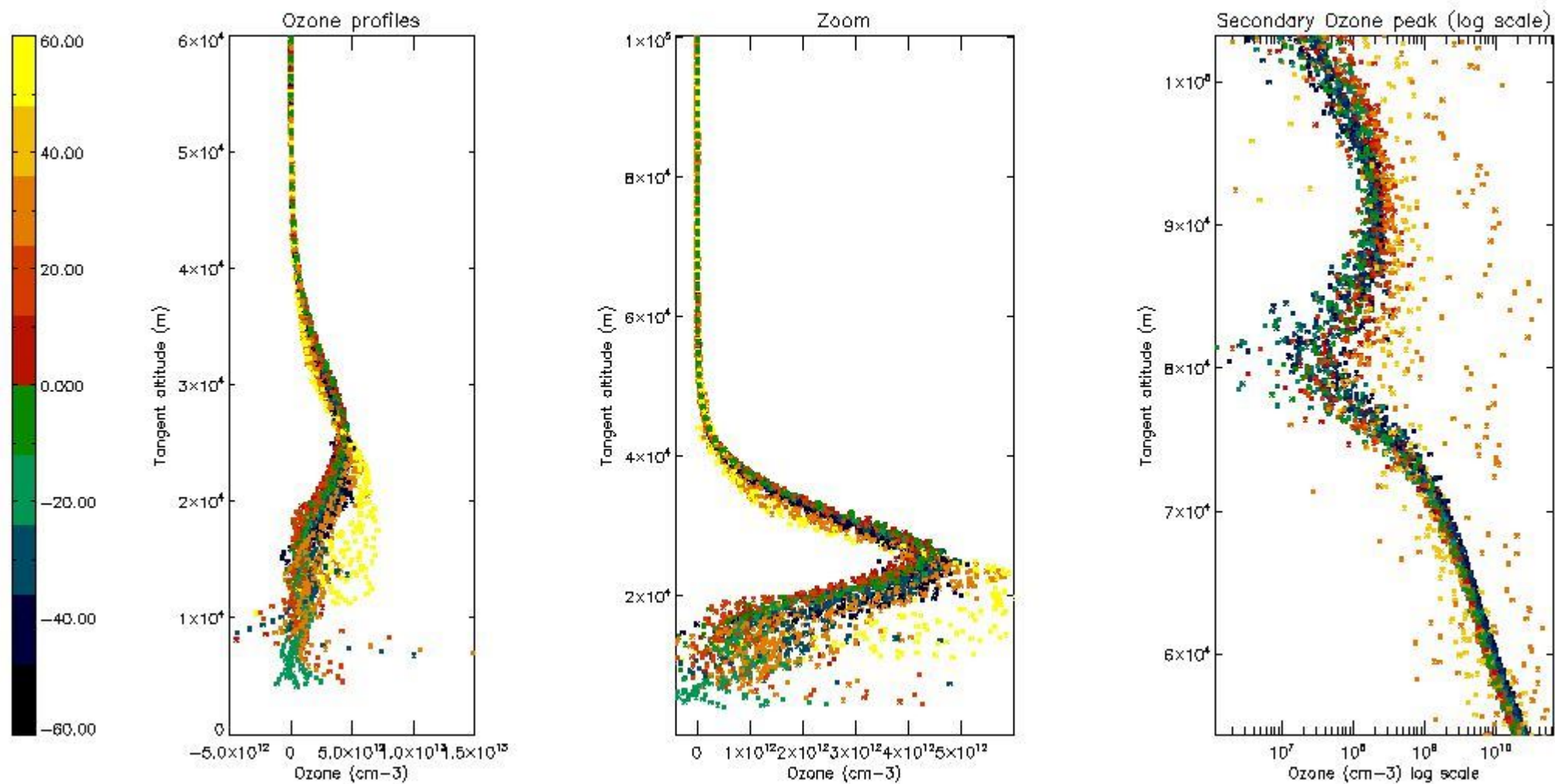
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	22

STD < 10	18
STD < 5	13

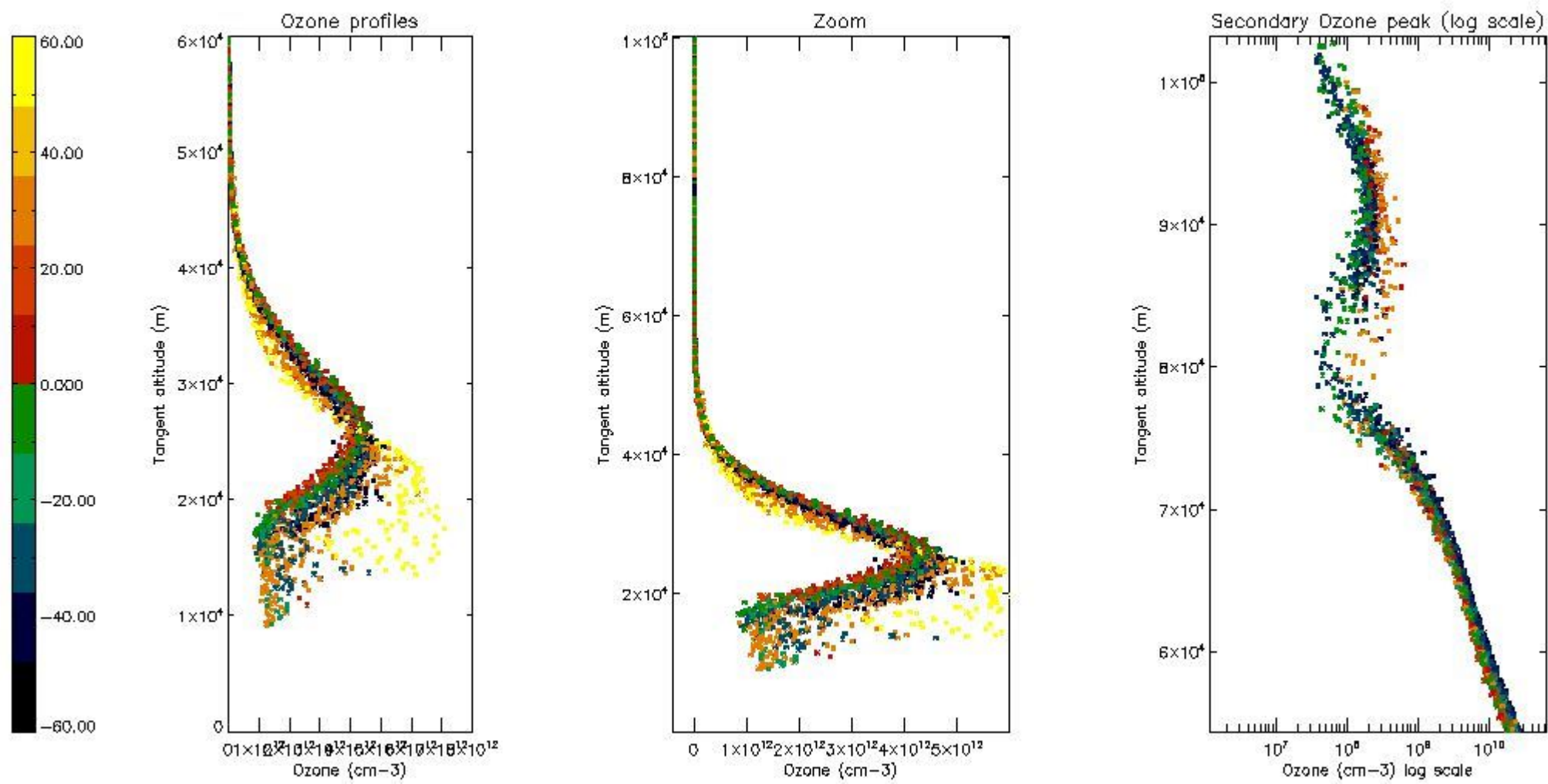
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



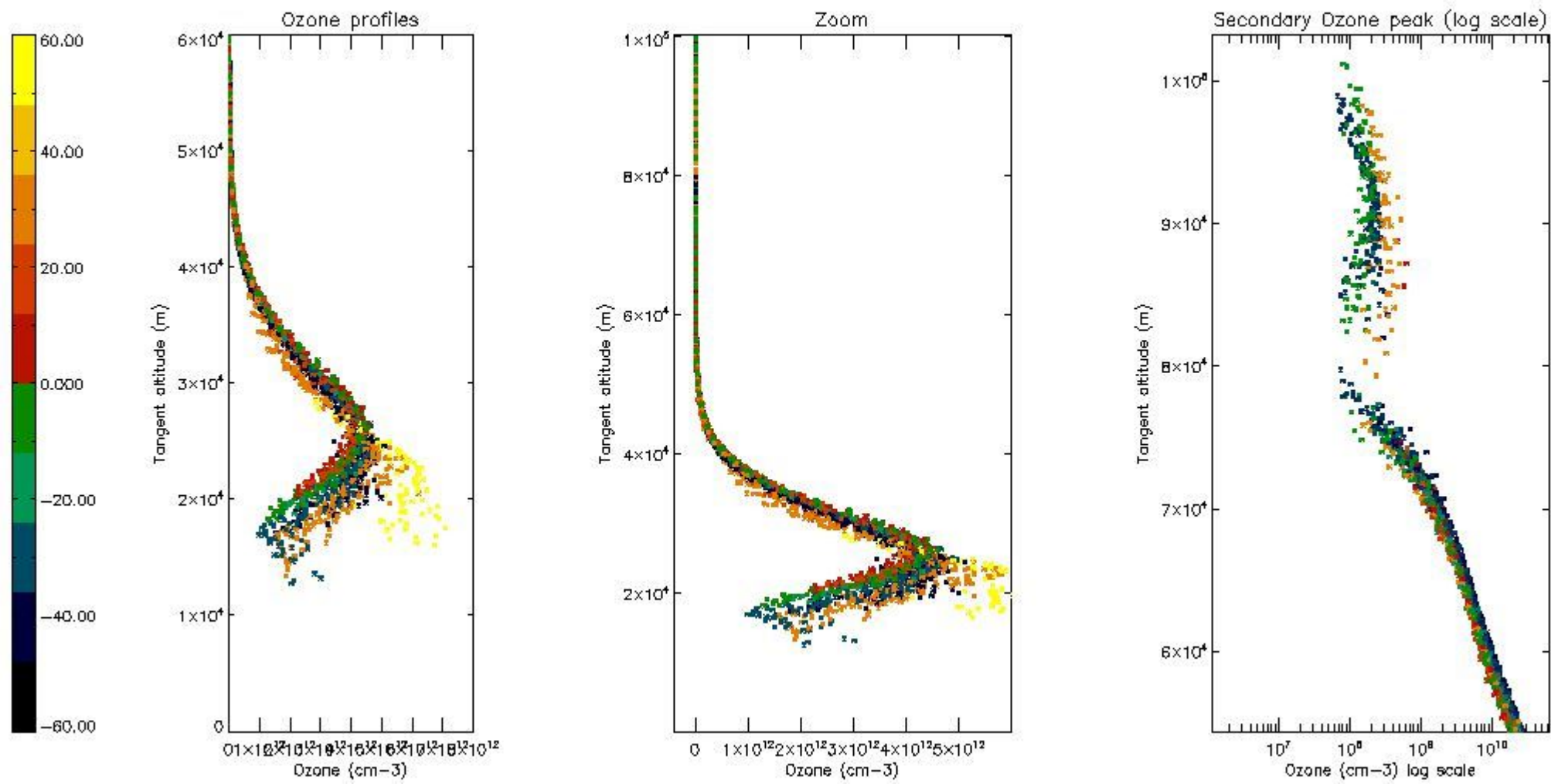
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



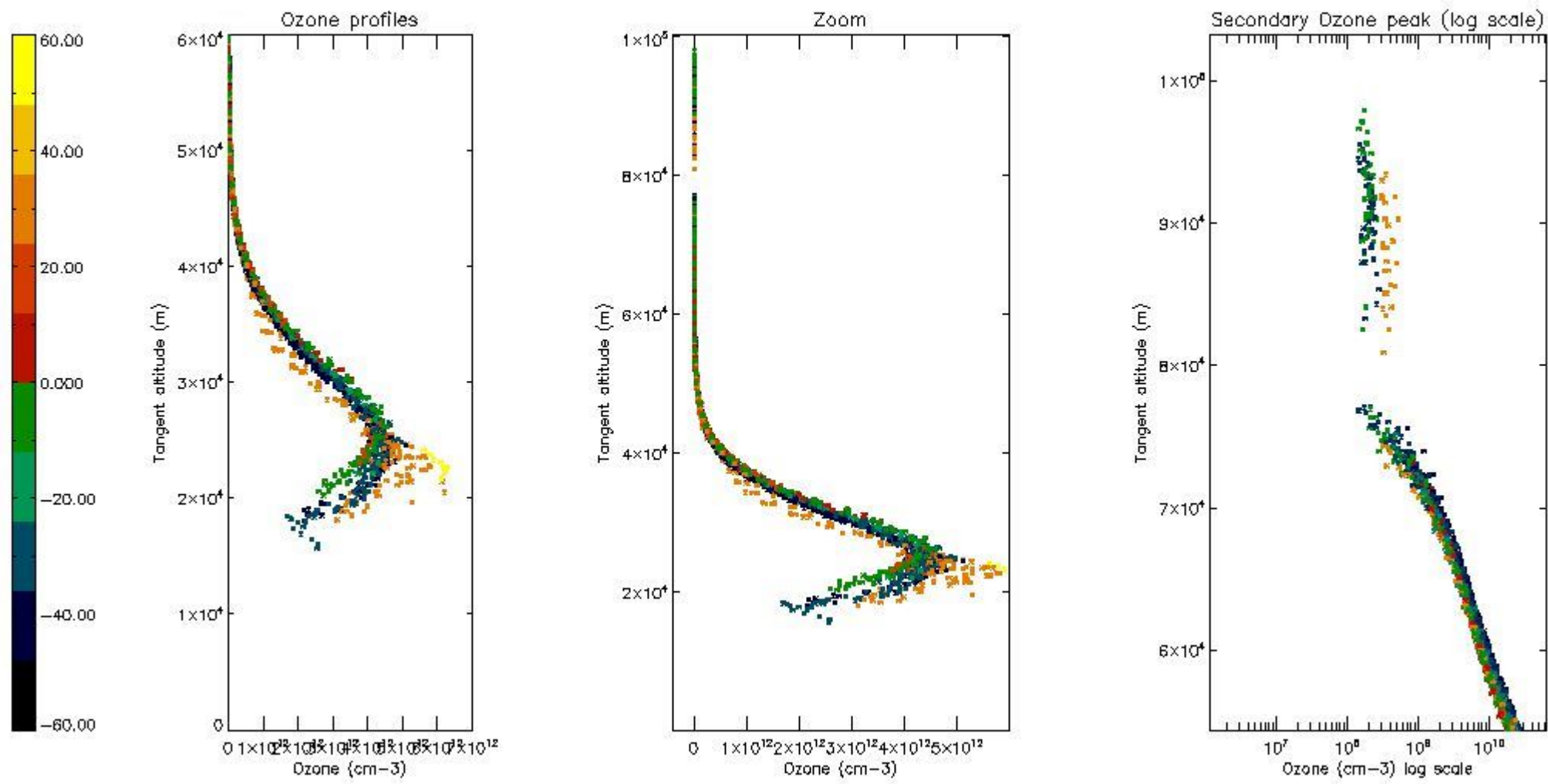
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



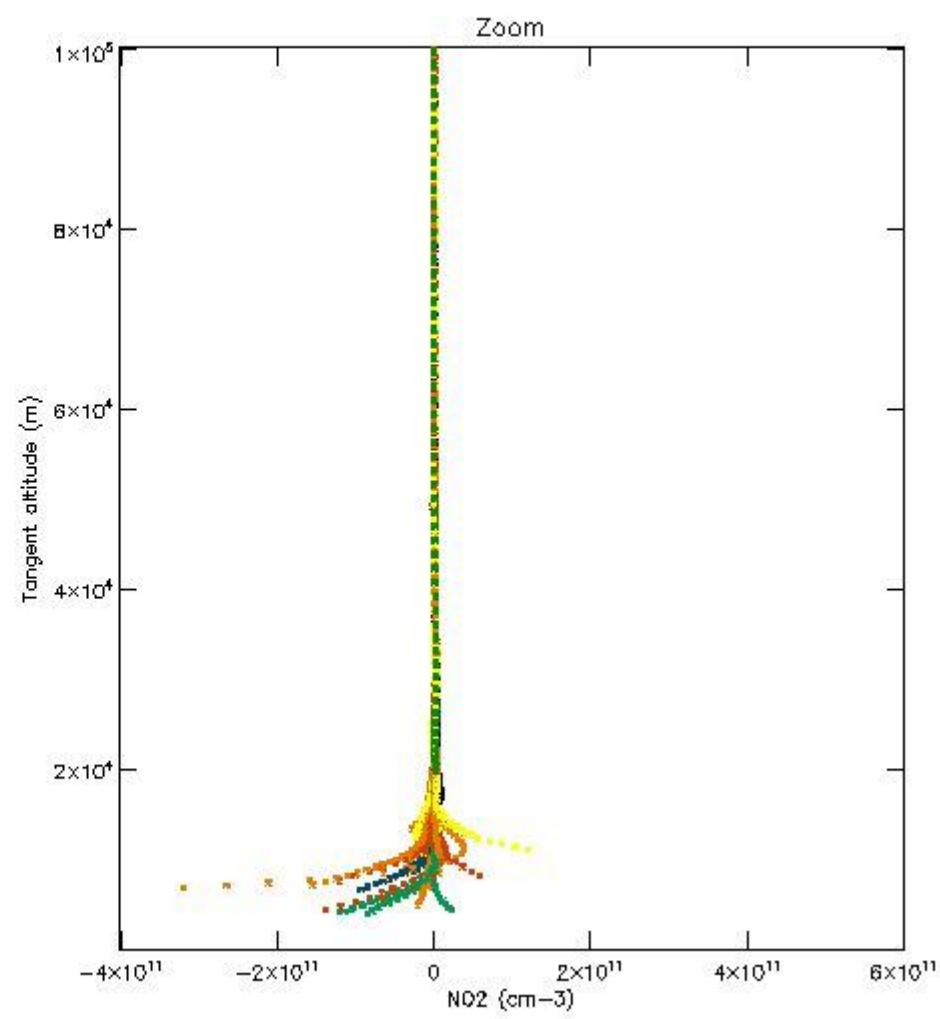
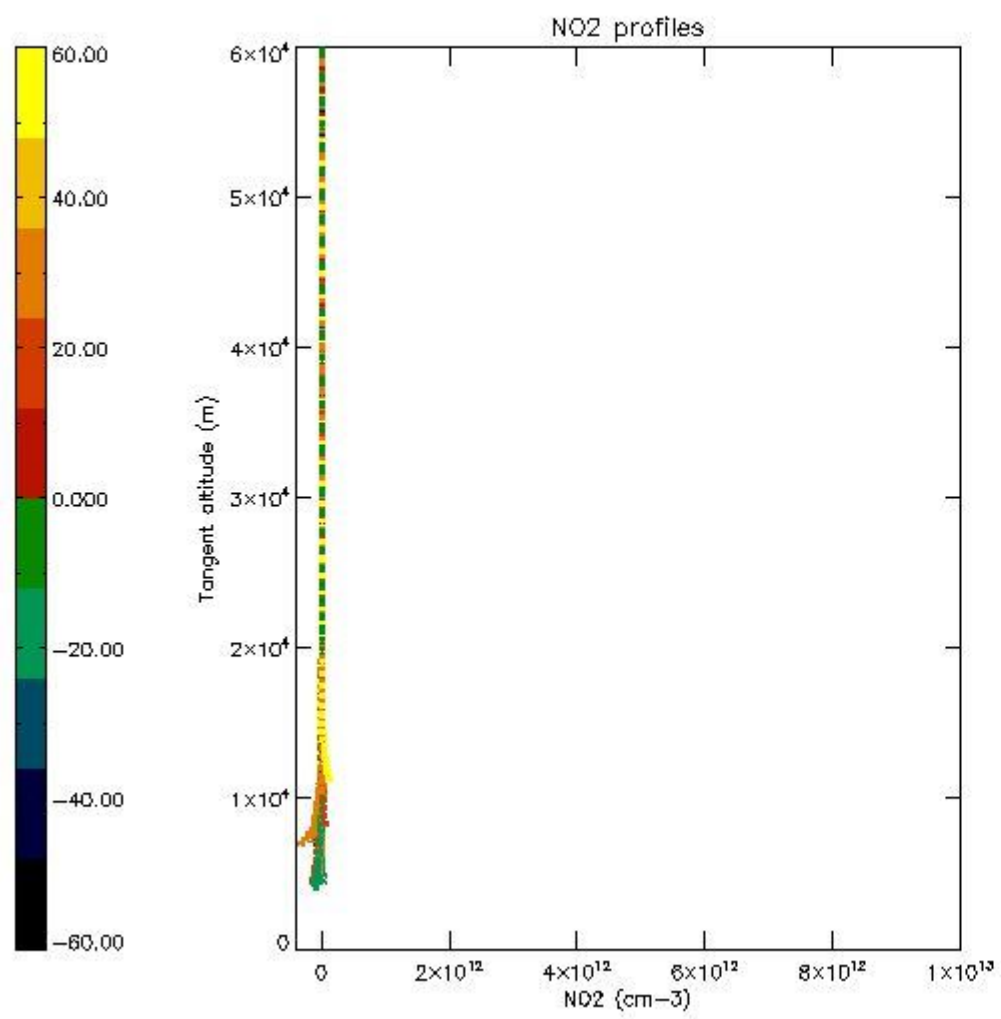
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



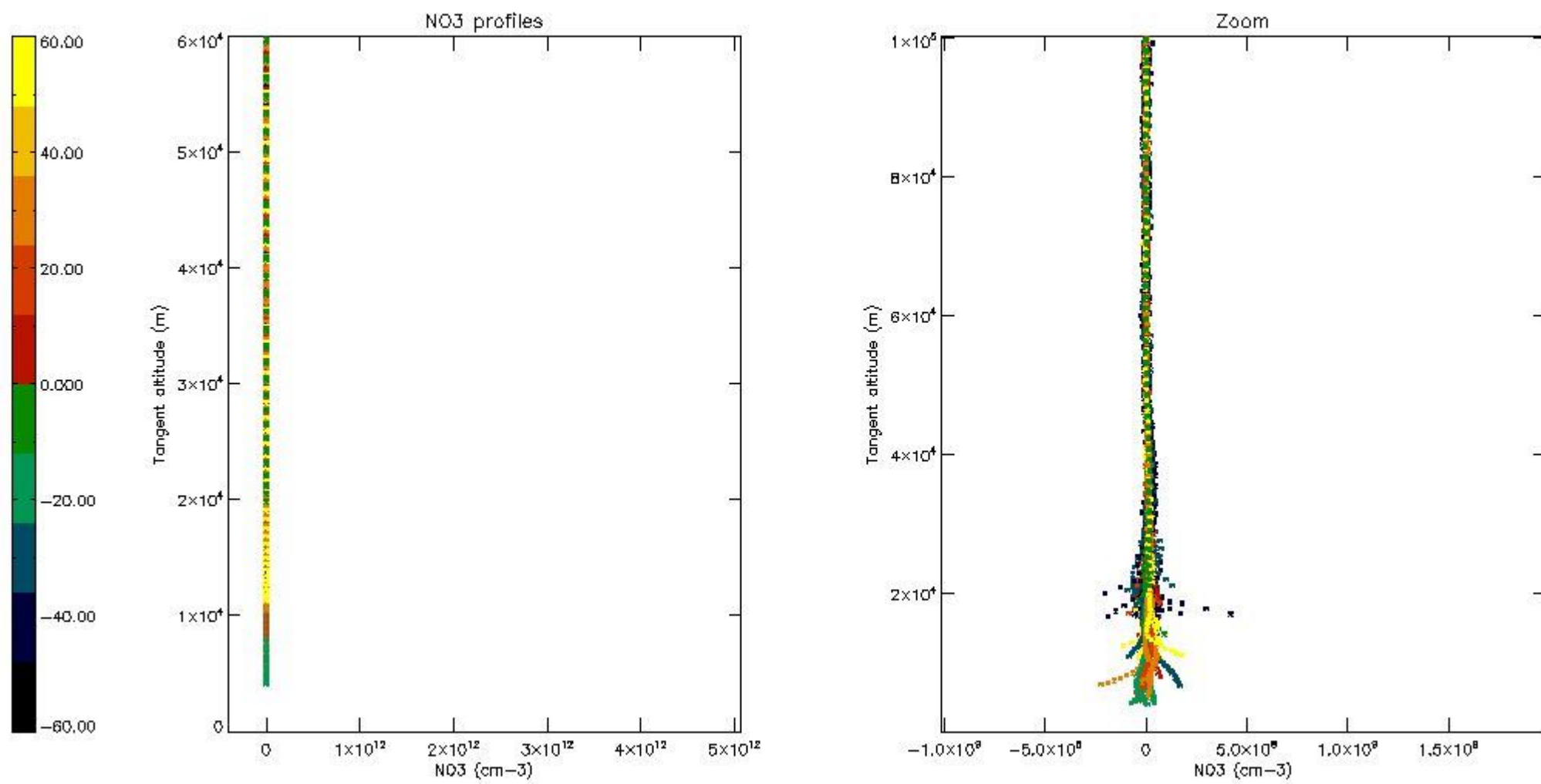
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



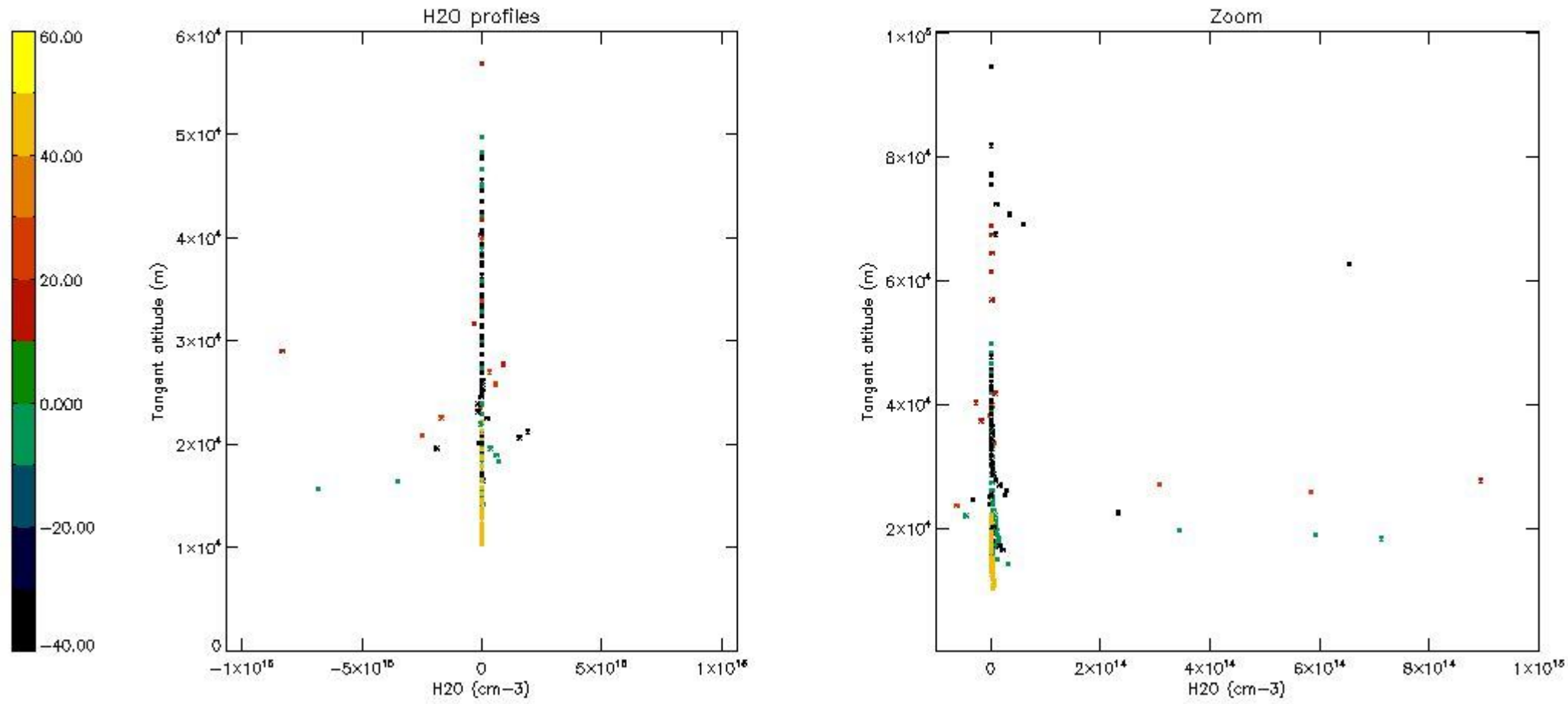
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

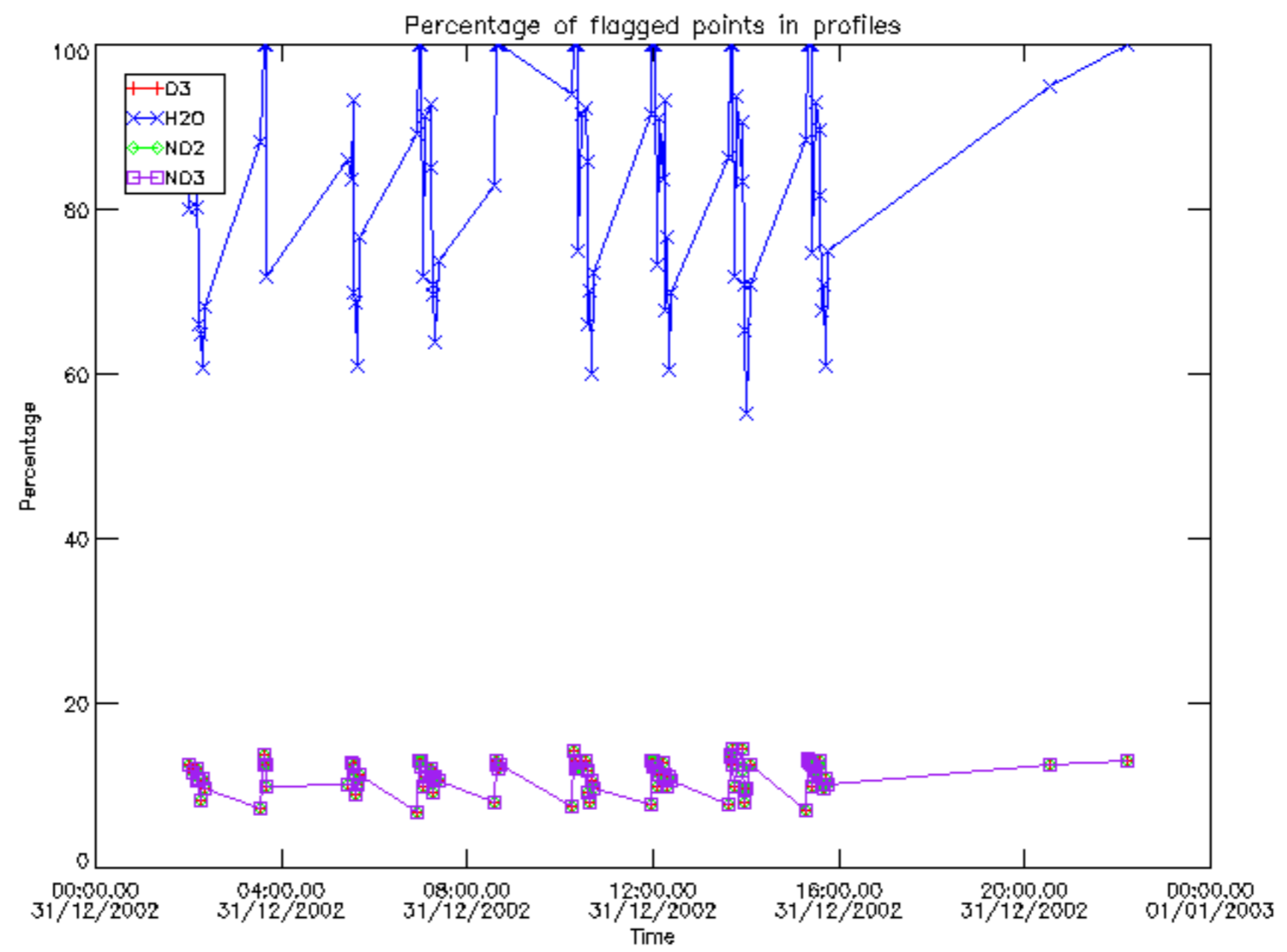
The colorbar represents the latitude.



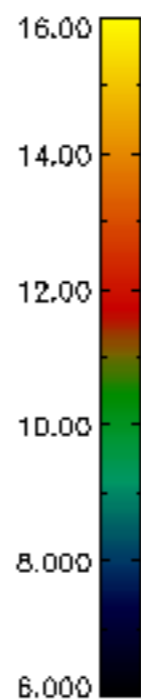
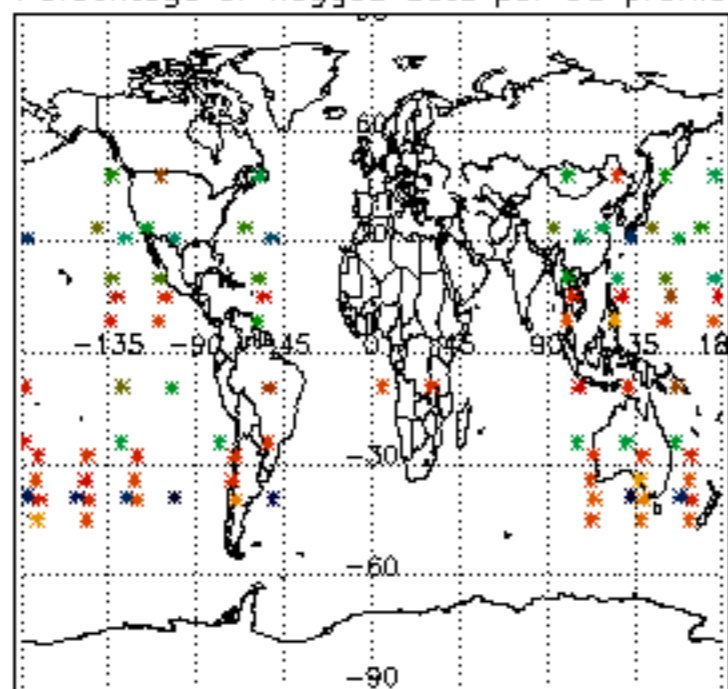
6. Auxiliary Data Files used for the production reported in section 2

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.

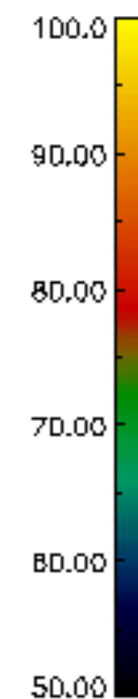
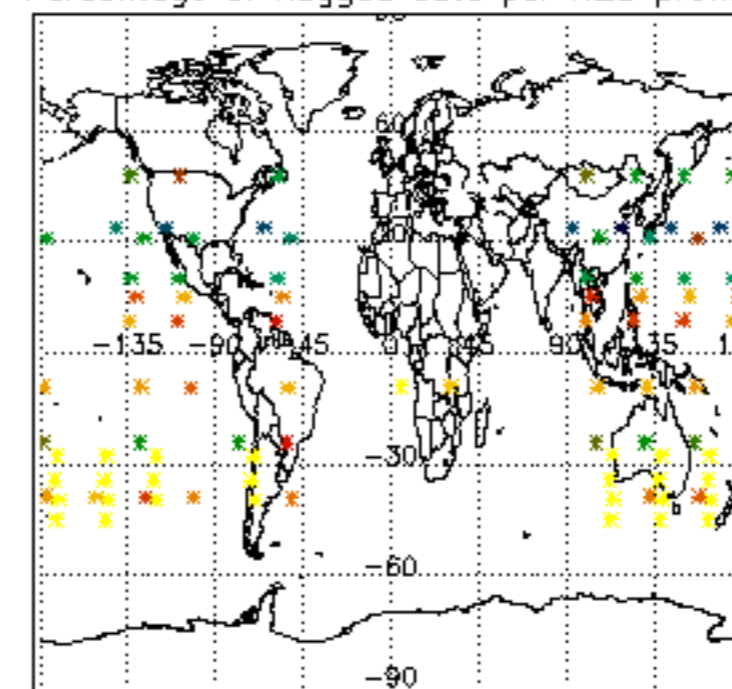
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	31-DEC-2002 02:00:51
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-DEC-2002 02:00:51
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-DEC-2002 02:00:51



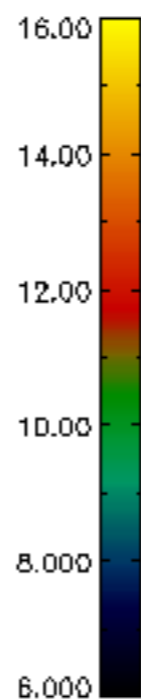
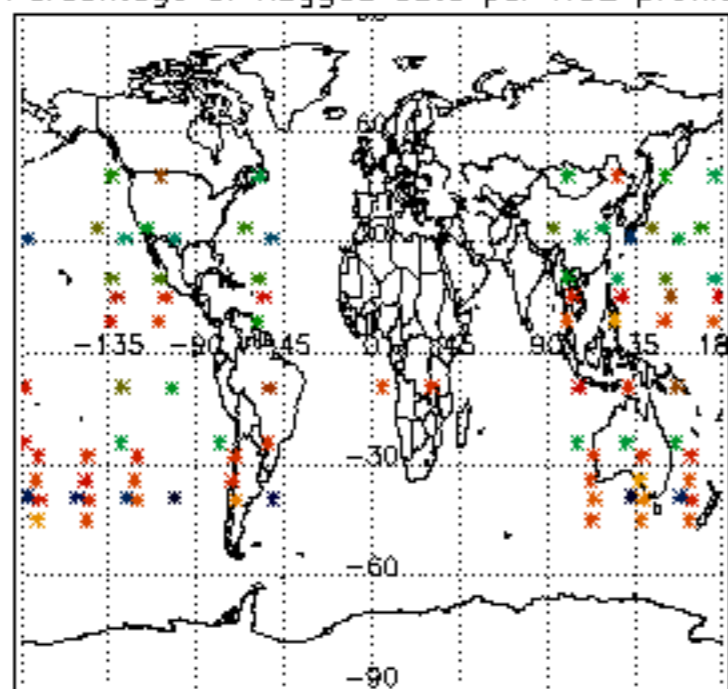
Percentage of flagged data per D3 profile



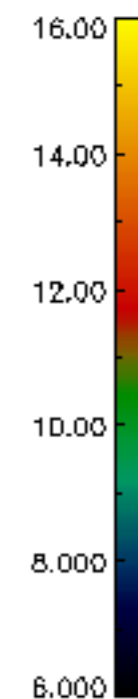
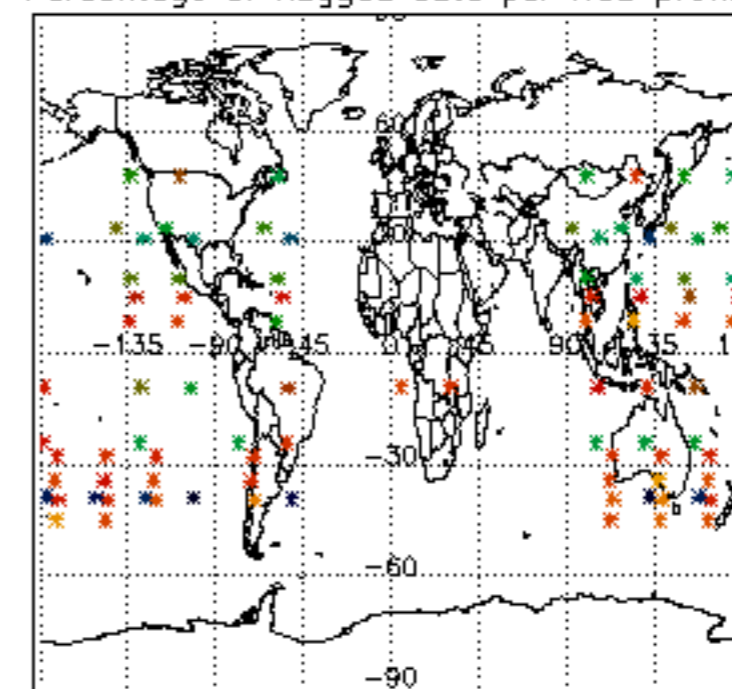
Percentage of flagged data per H2O profile

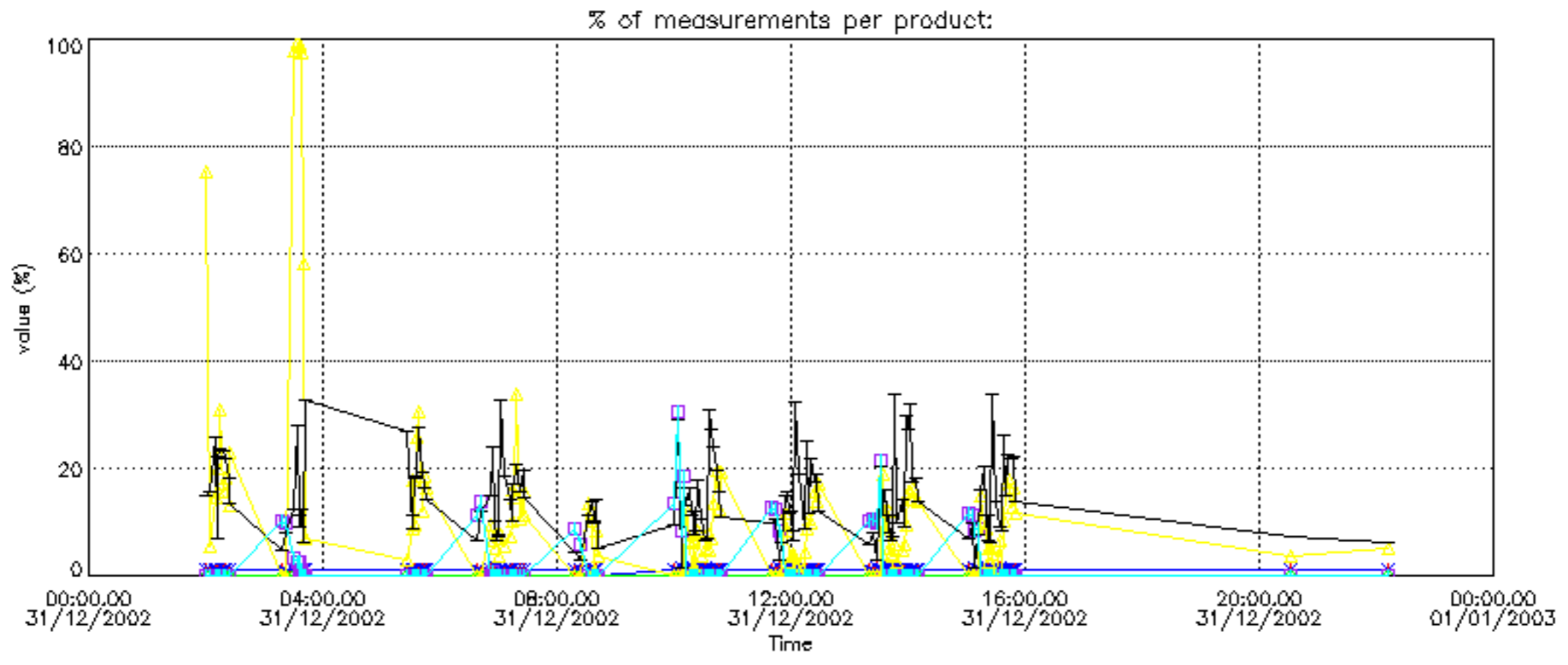


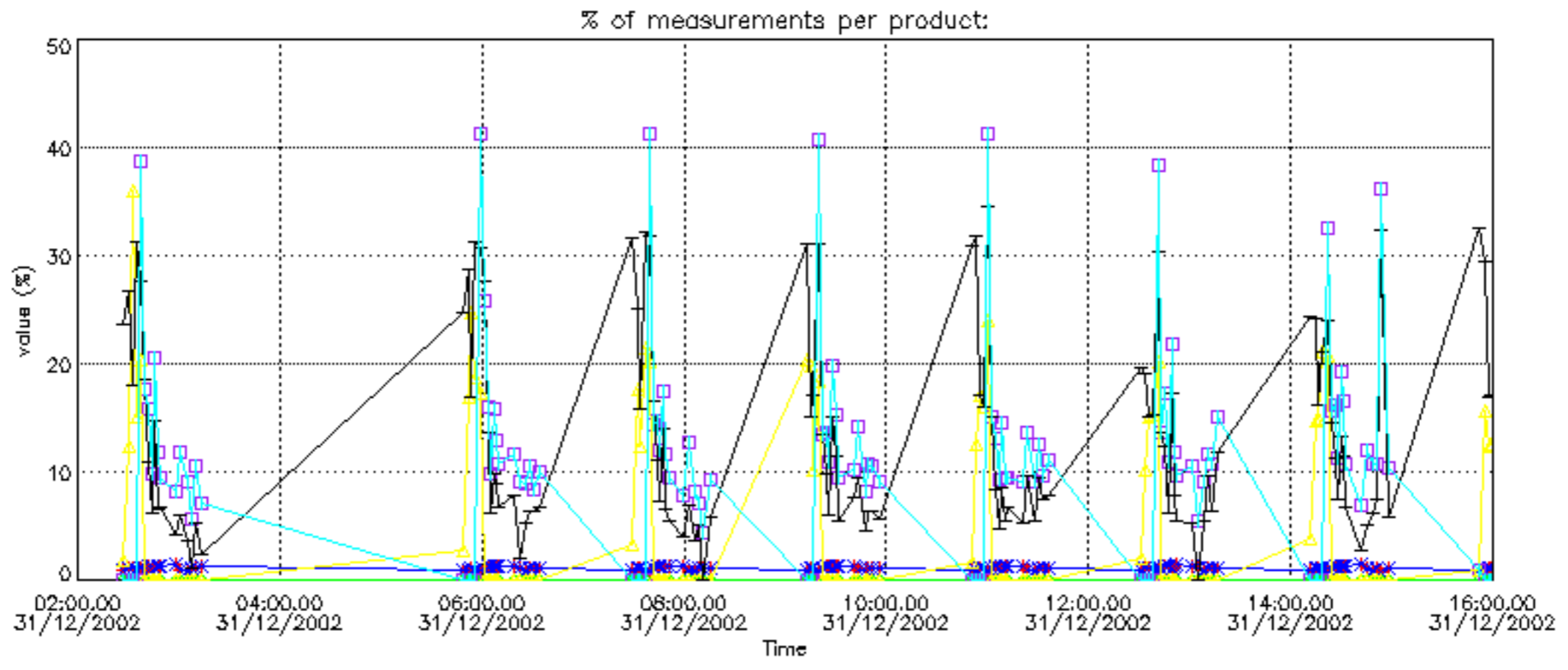
Percentage of flagged data per NO2 profile



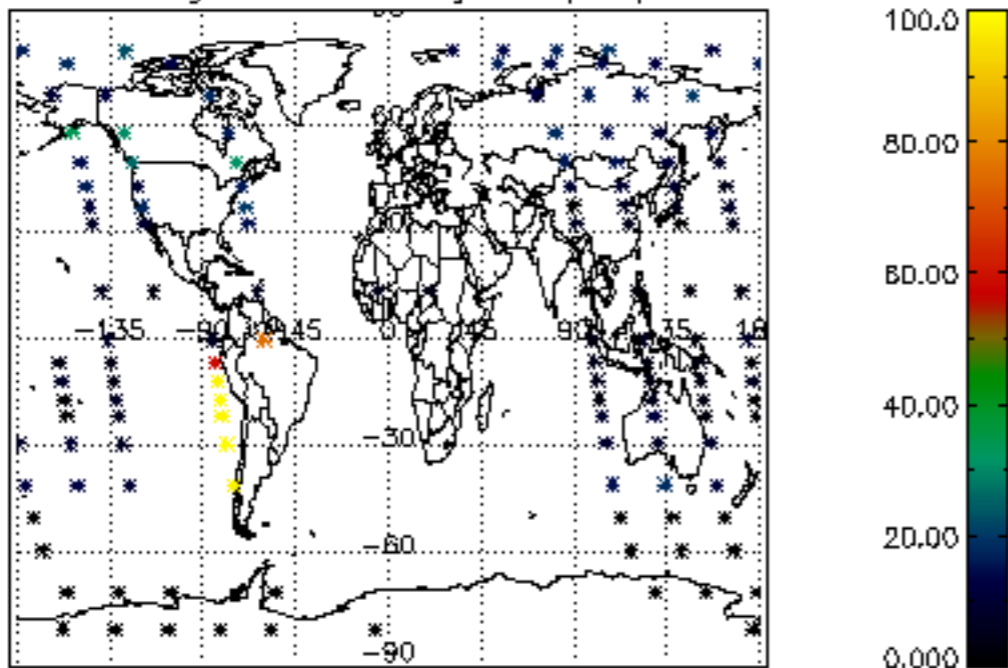
Percentage of flagged data per NO3 profile



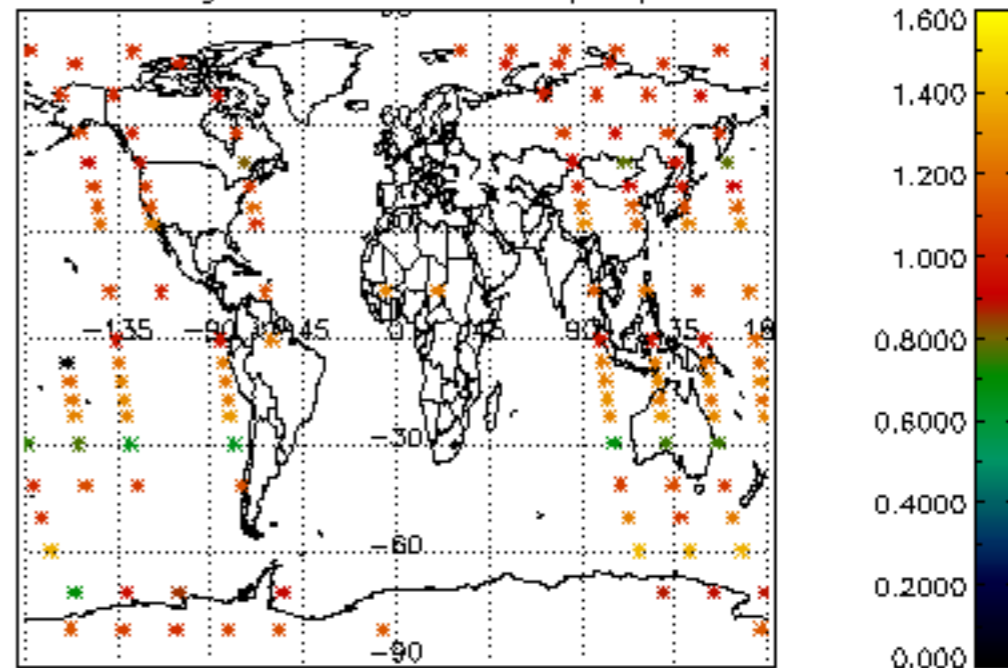




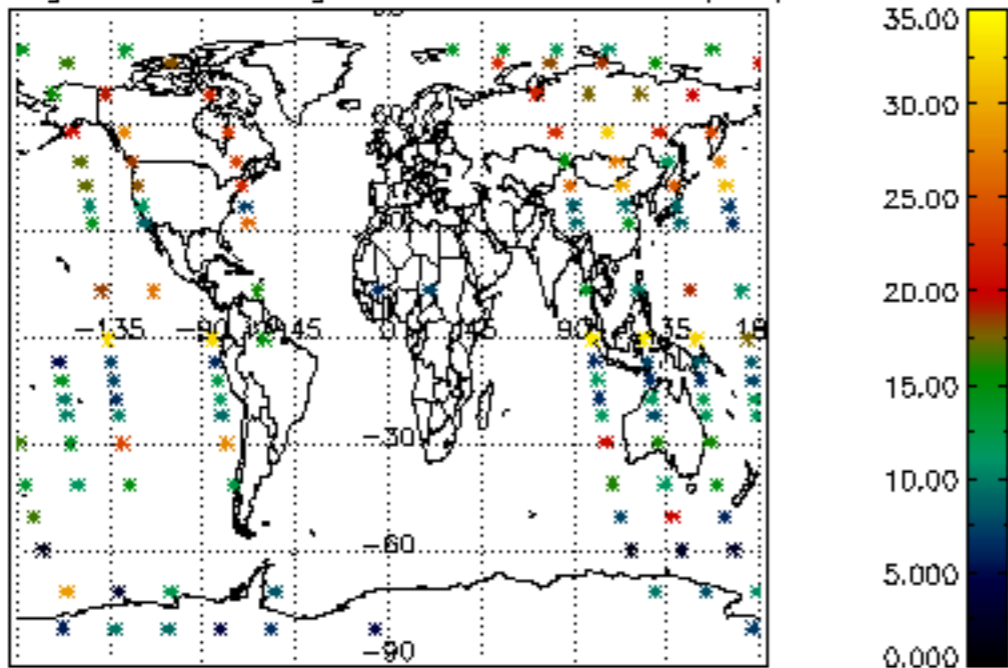
Percentage of cosmic ray hits per profile



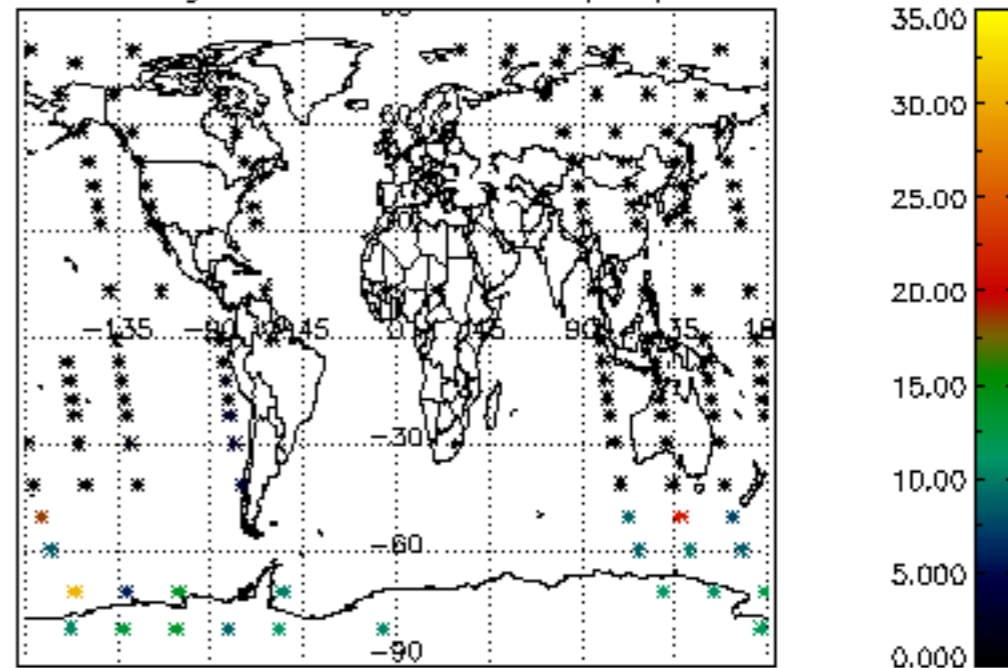
Percentage of datation errors per profile



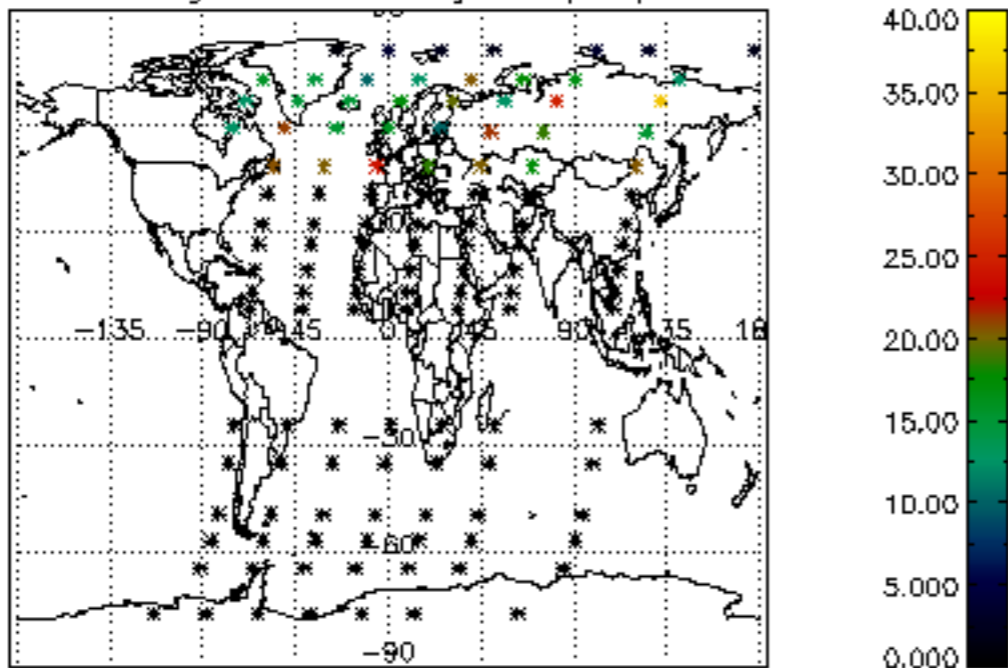
Percentage of star falling outside central band per profile



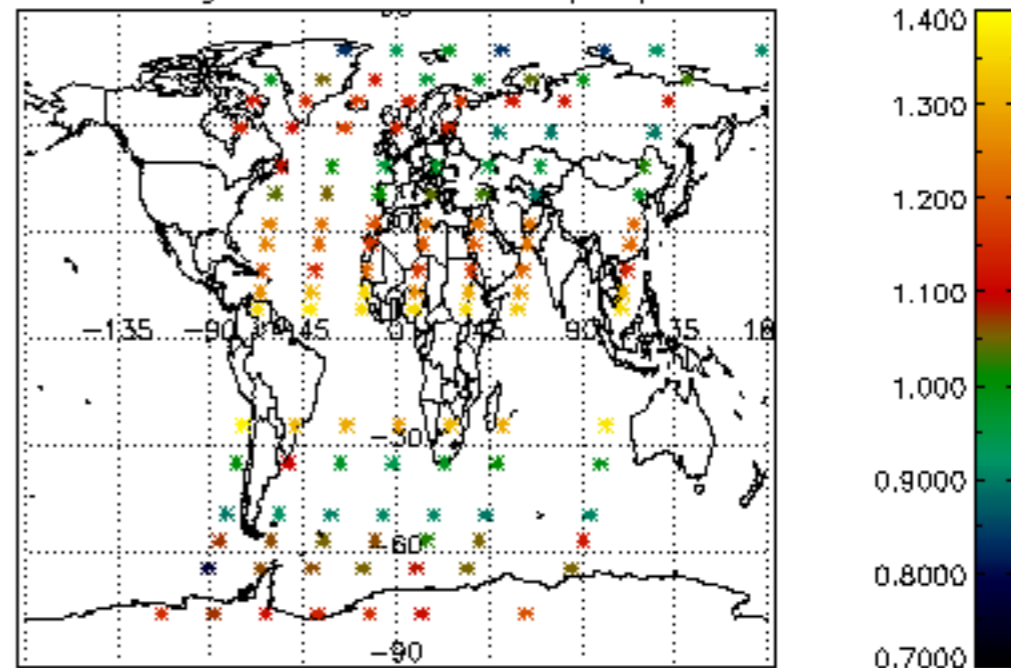
Percentage of saturation errors per profile



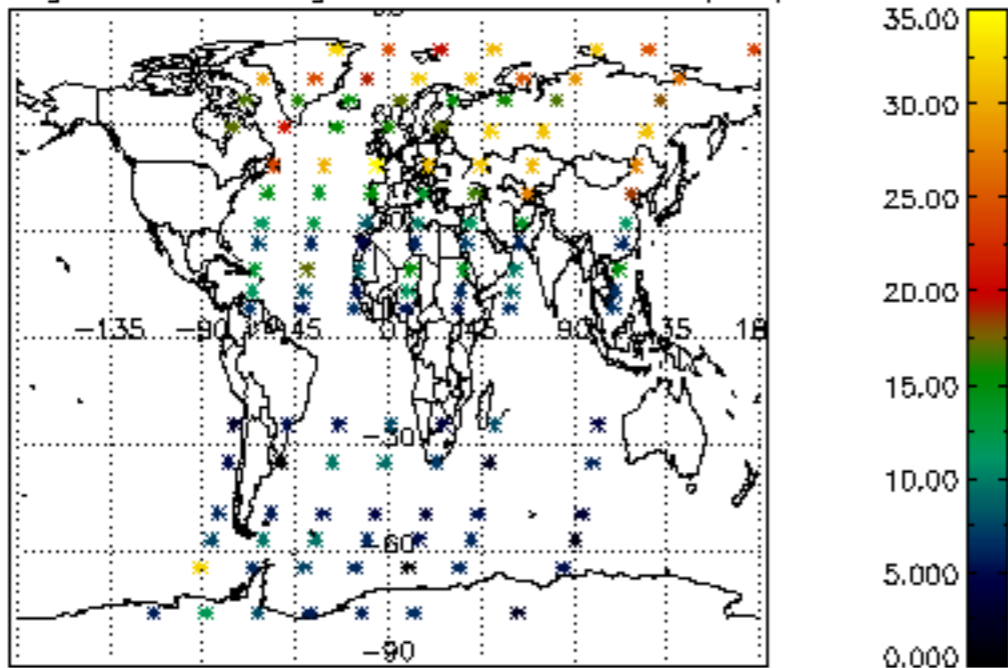
Percentage of cosmic ray hits per profile



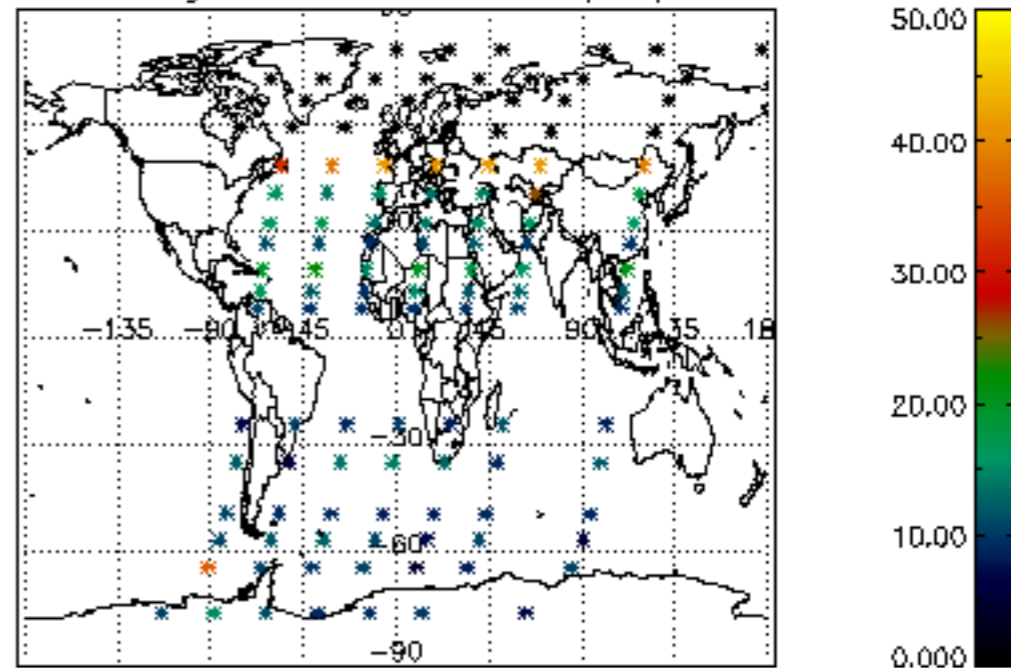
Percentage of datation errors per profile

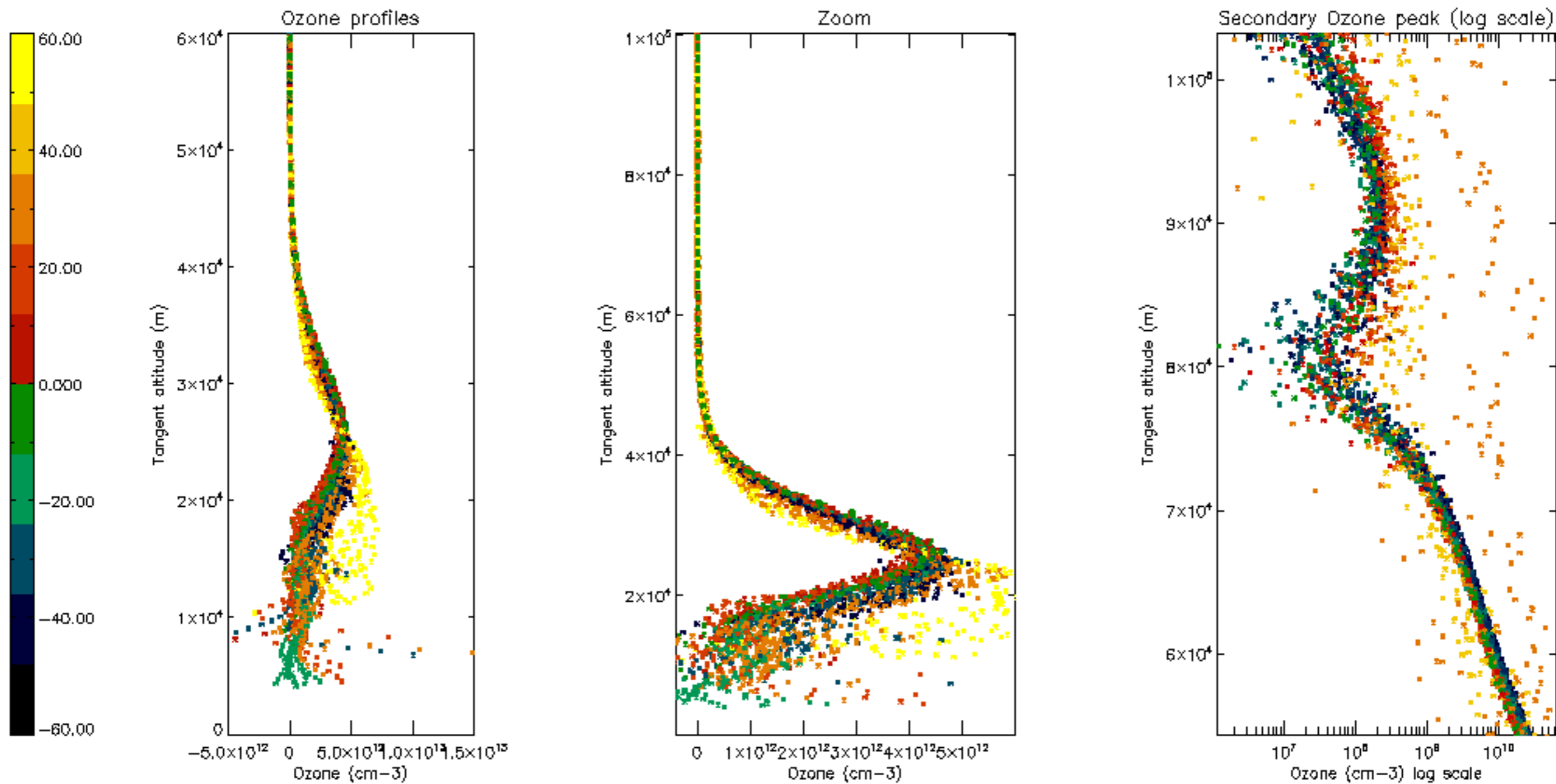


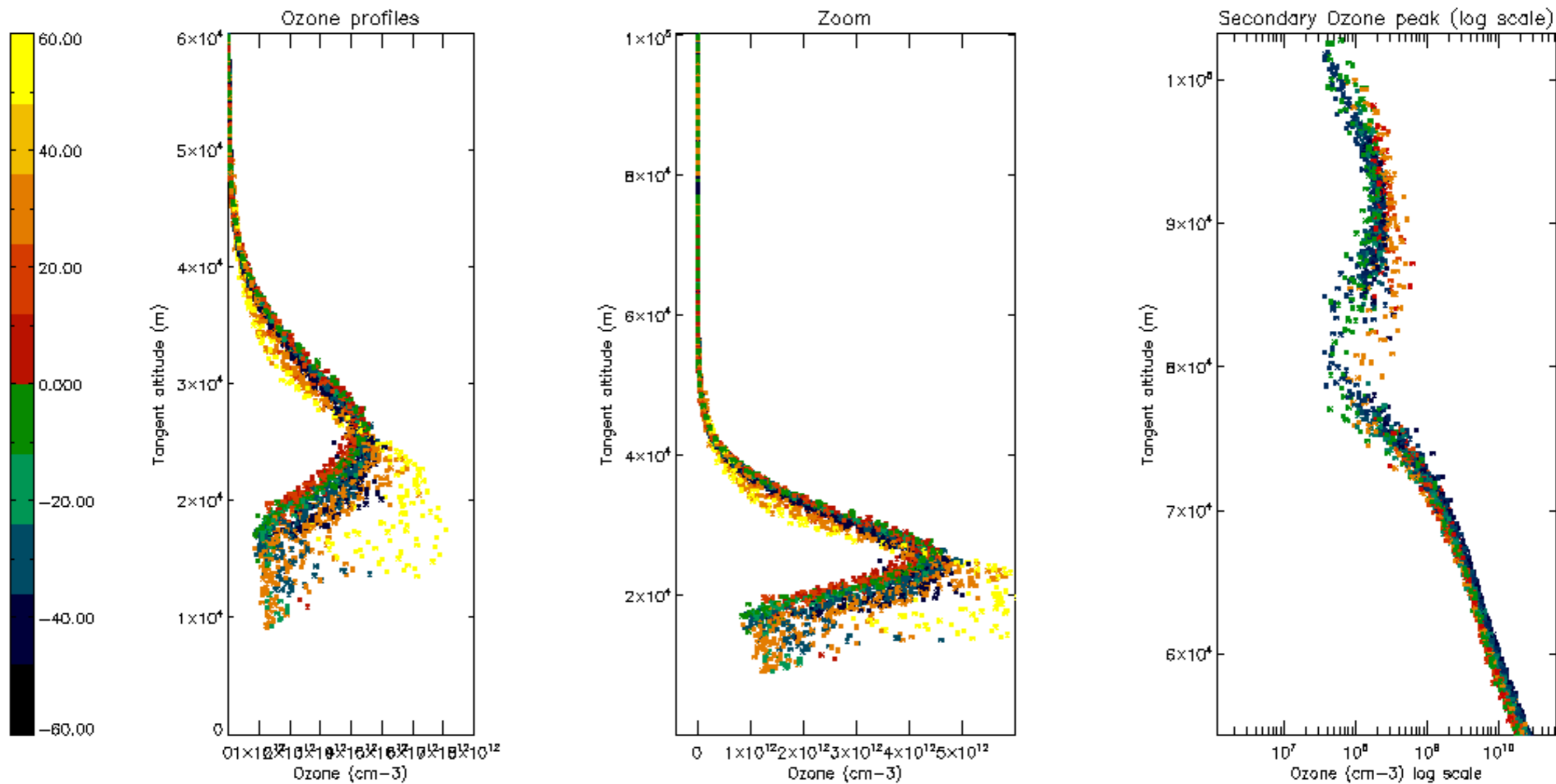
Percentage of star falling outside central band per profile

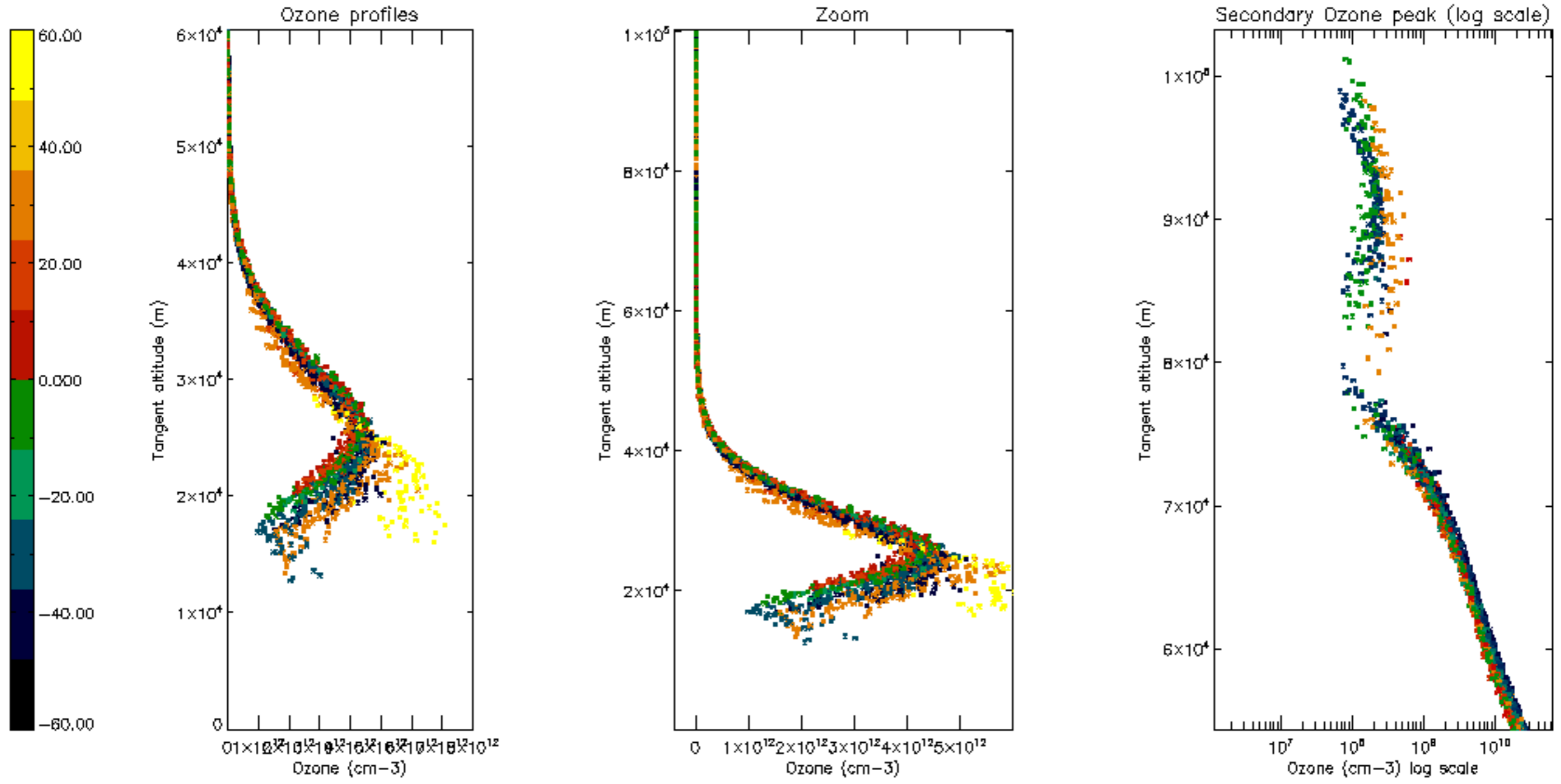


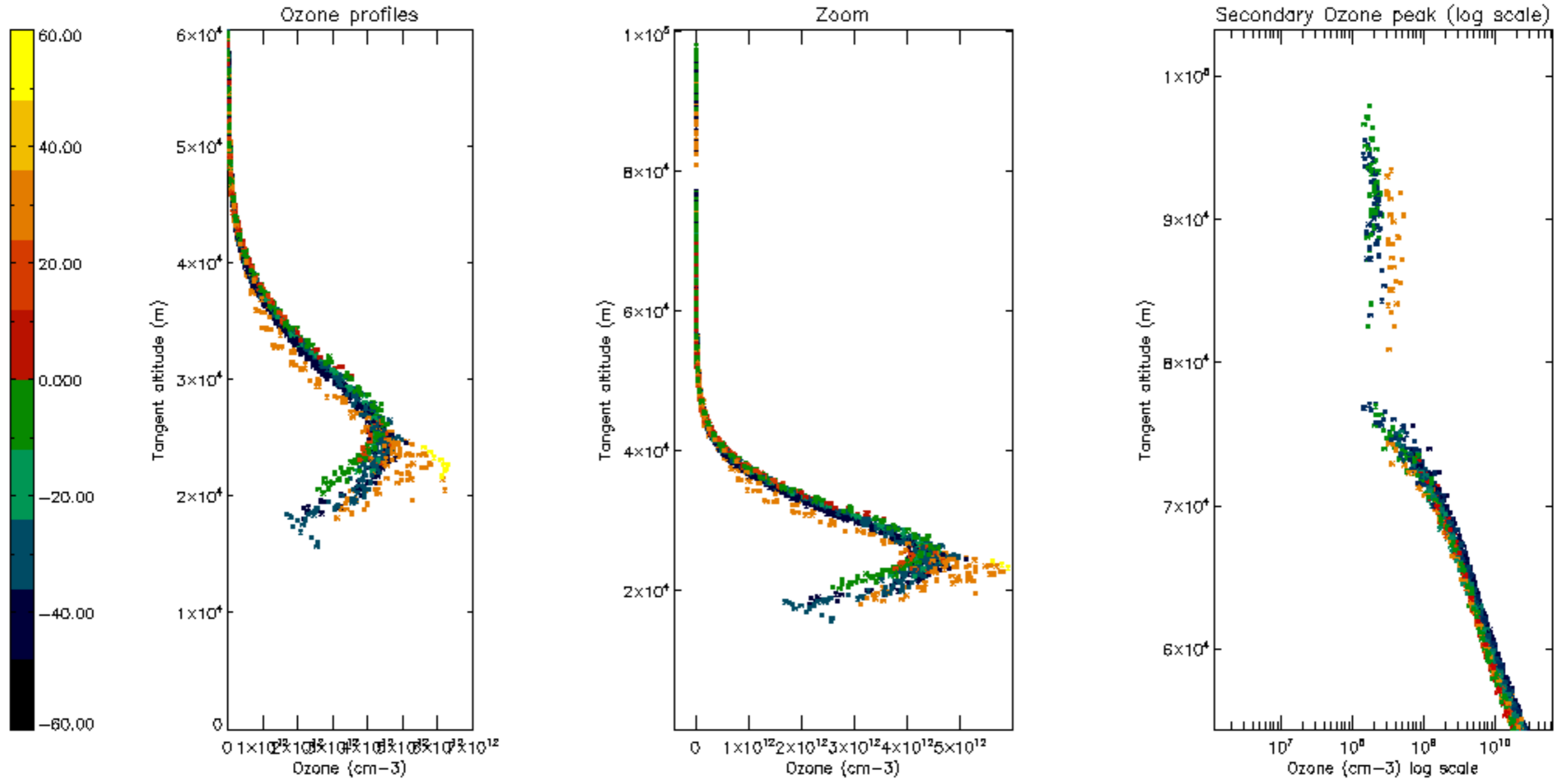
Percentage of saturation errors per profile

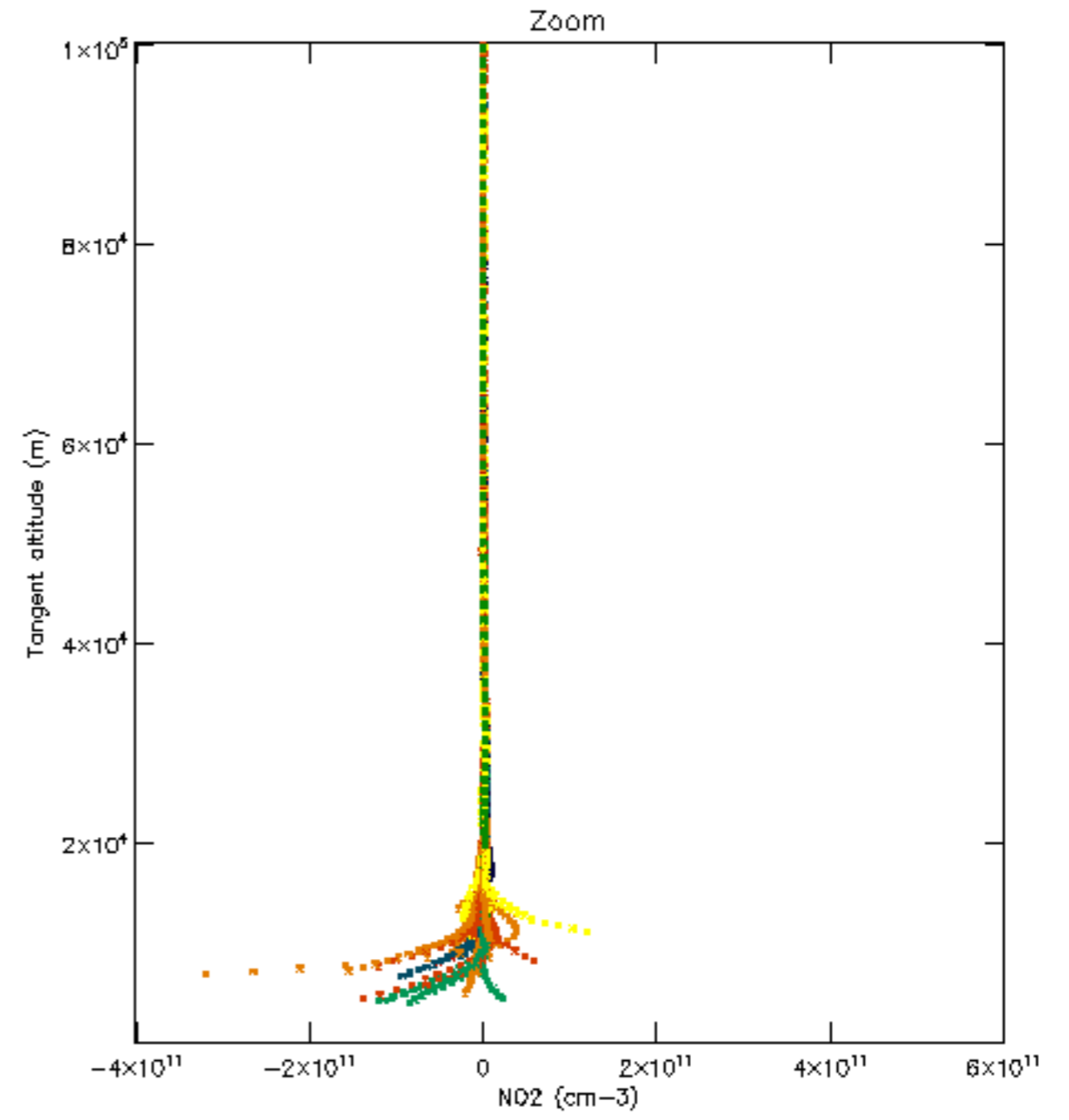
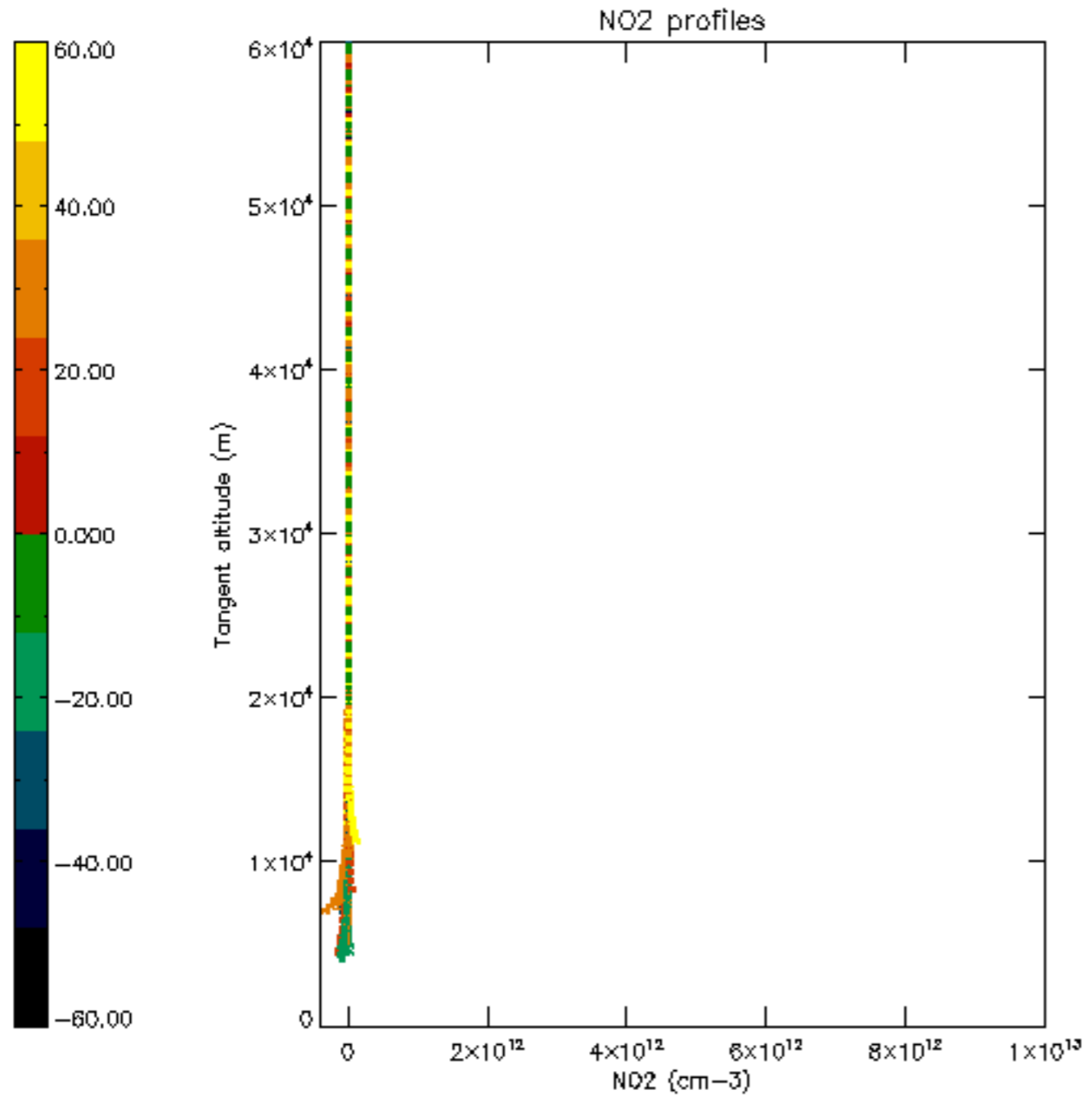


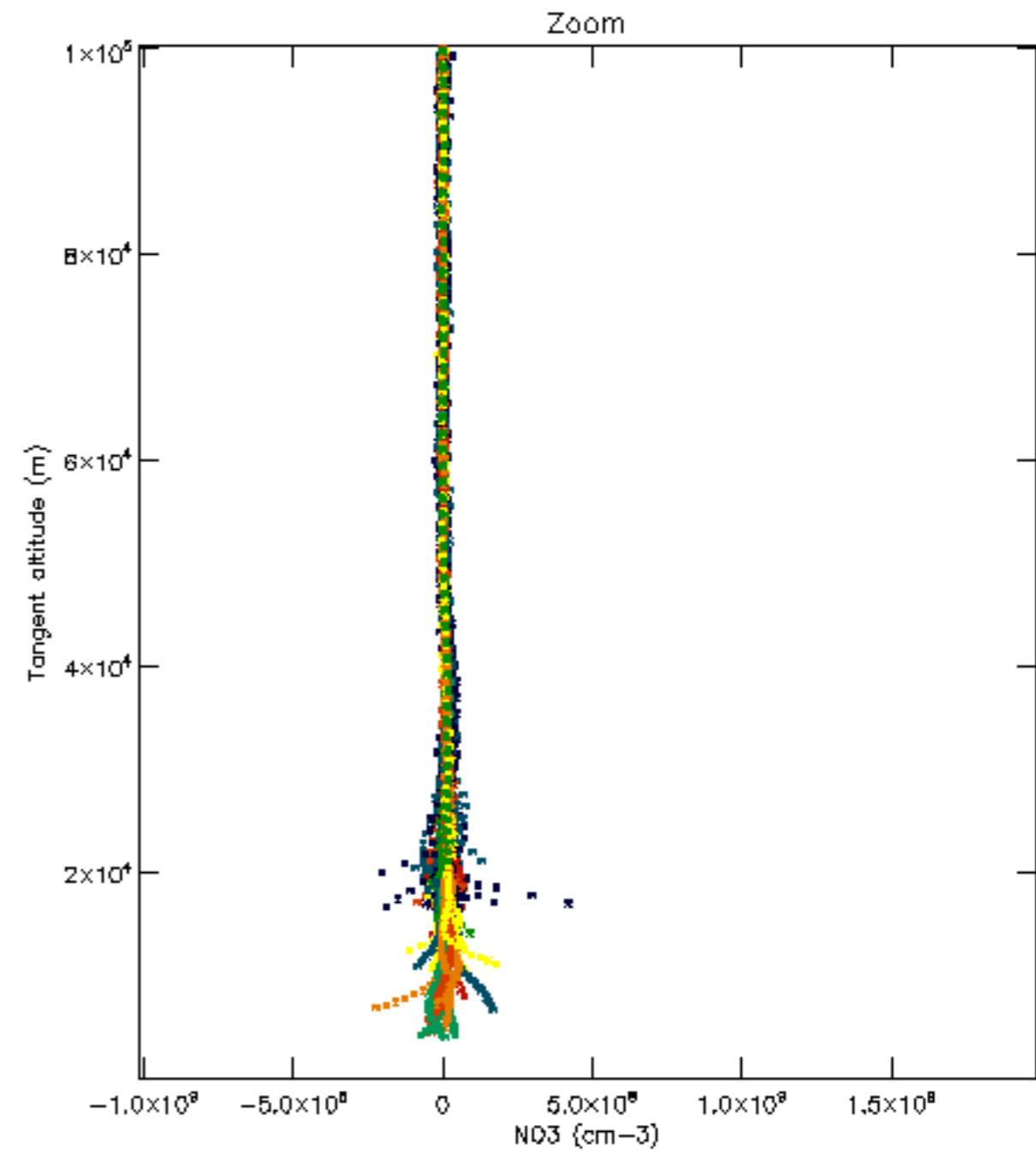
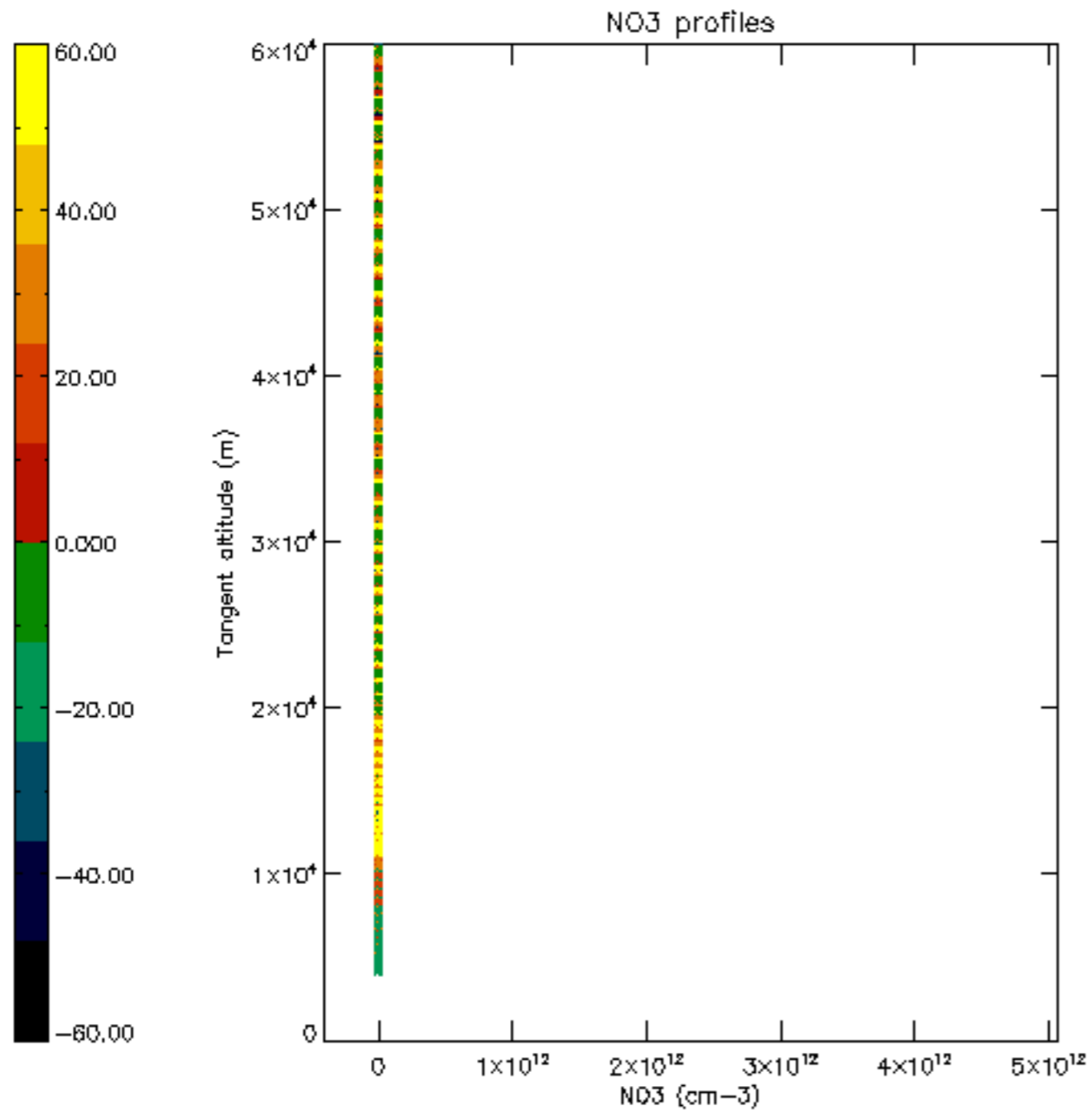


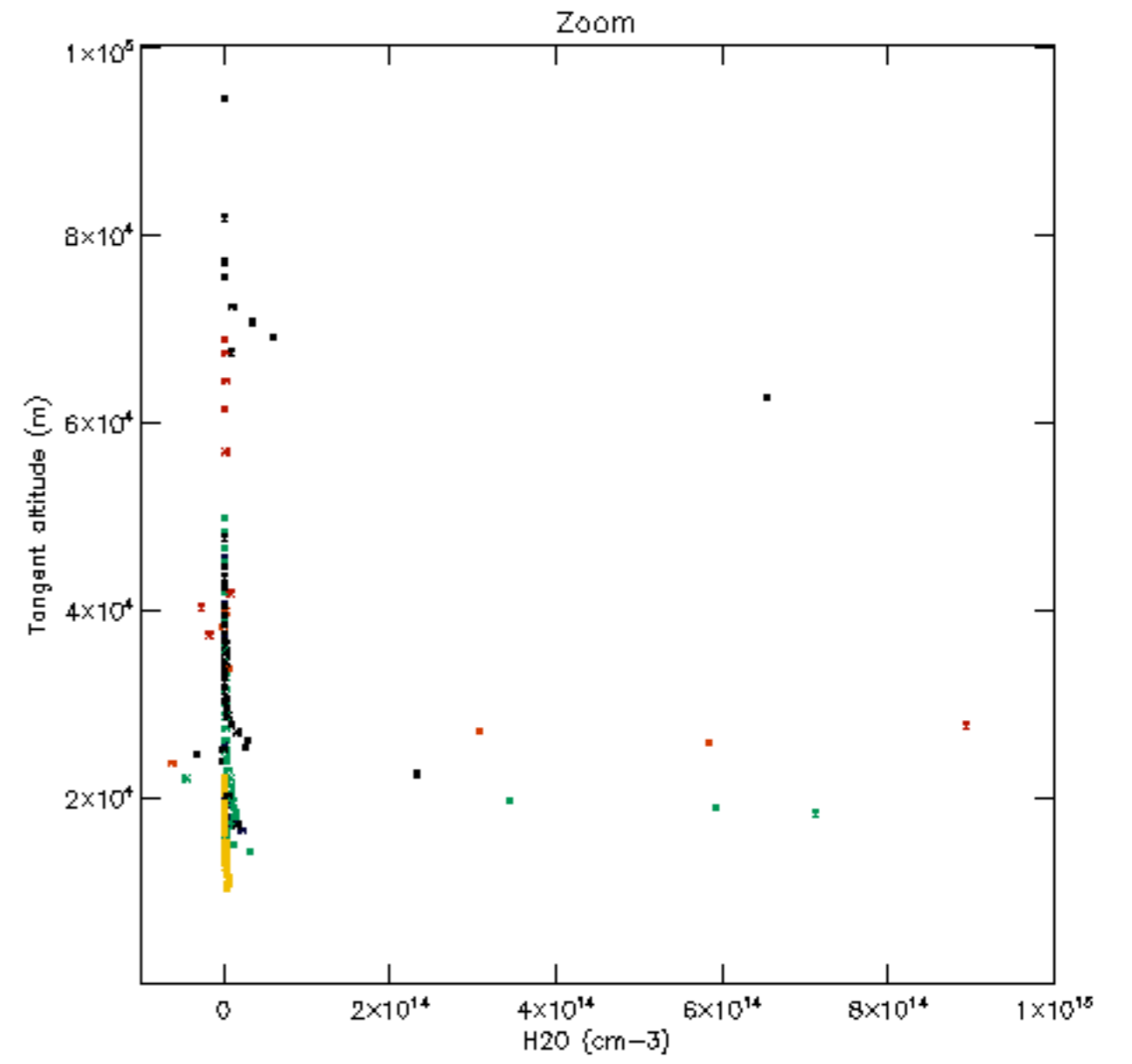
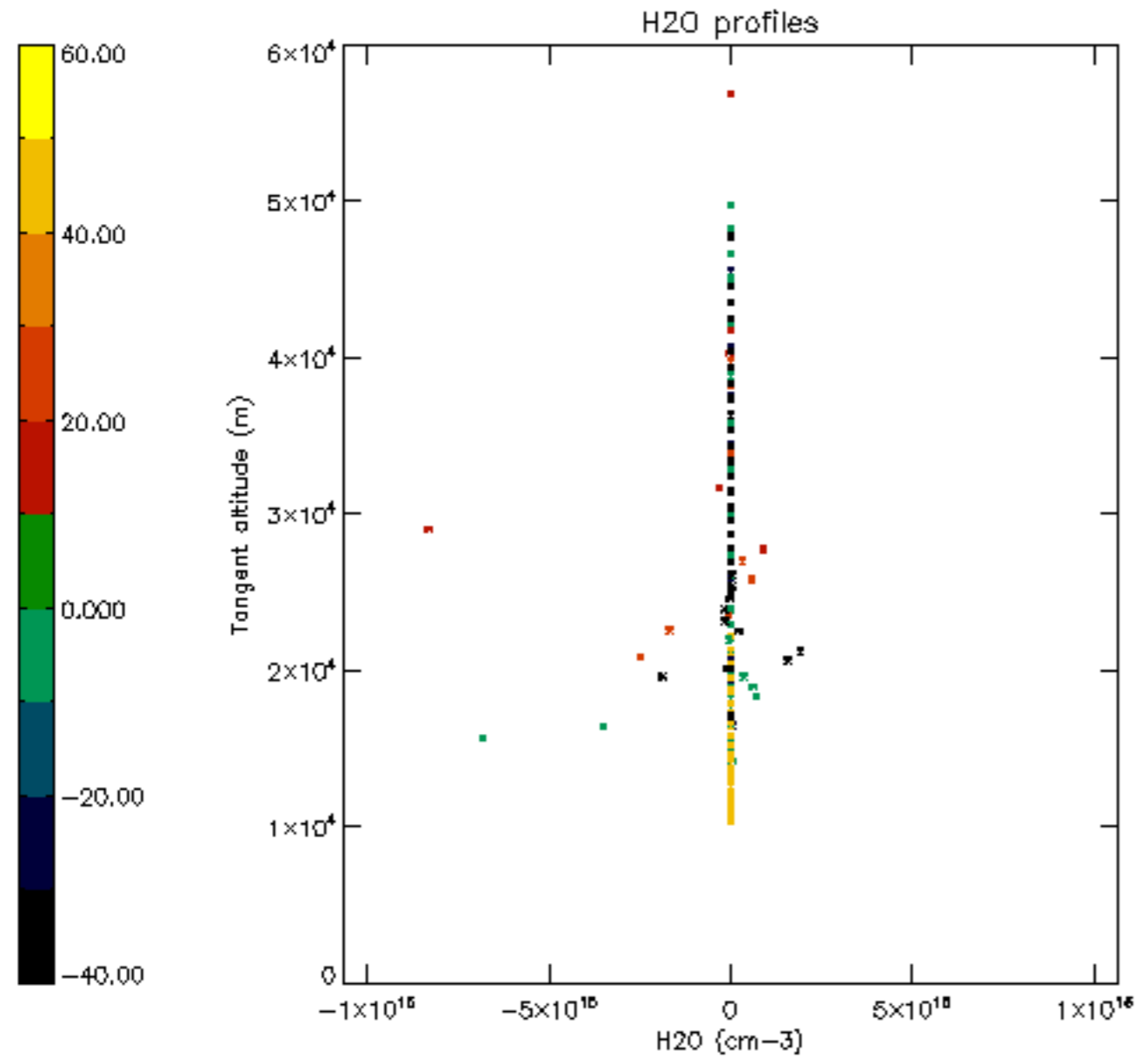


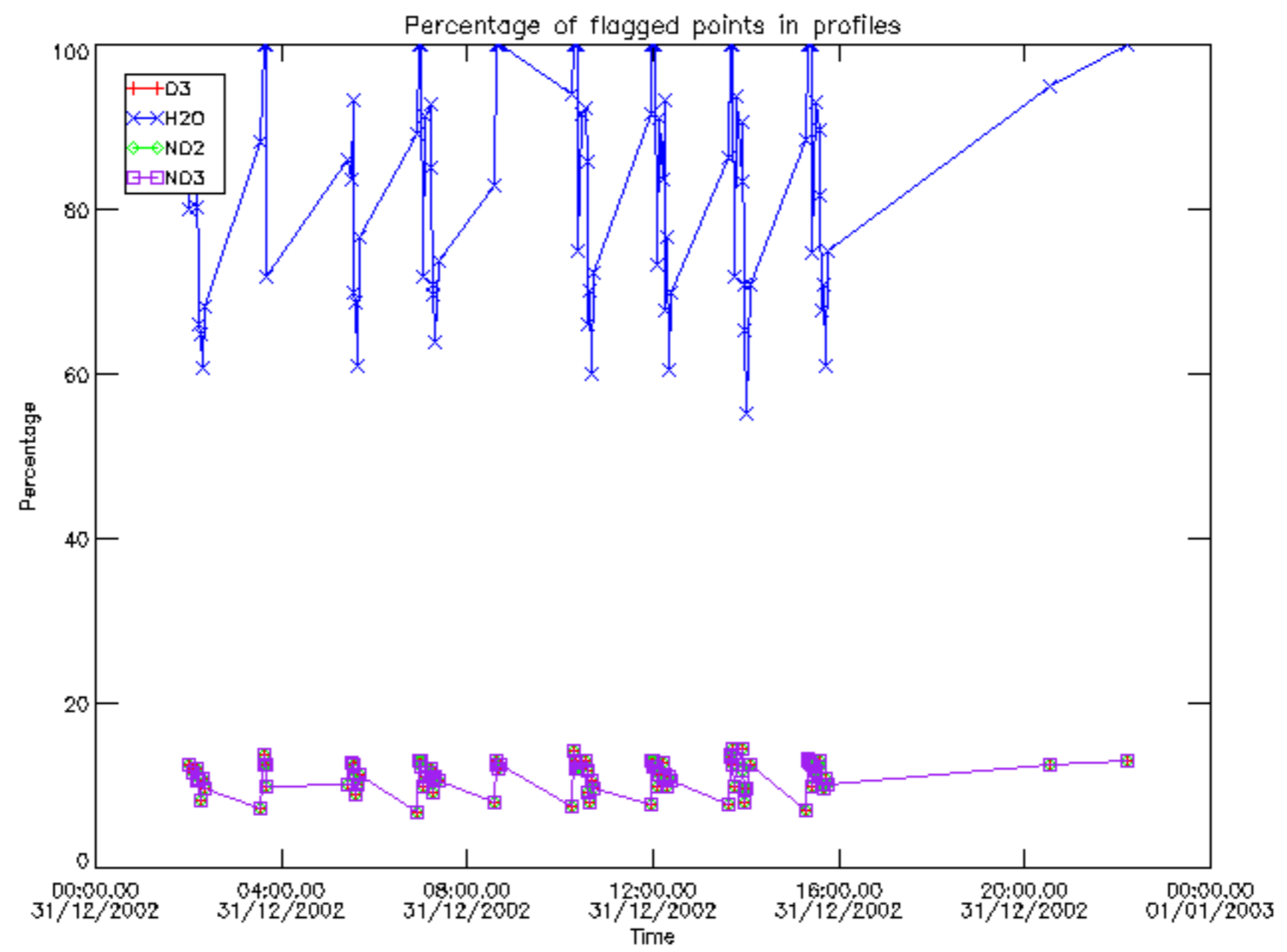




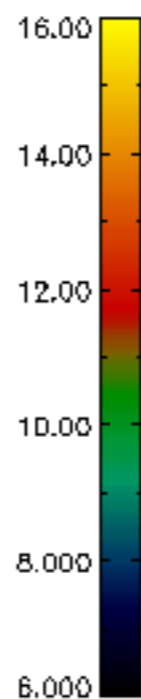
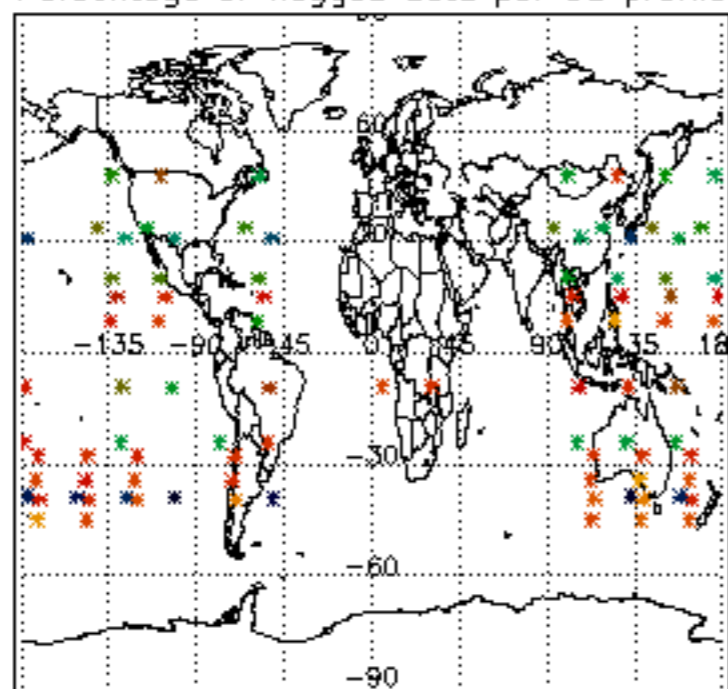




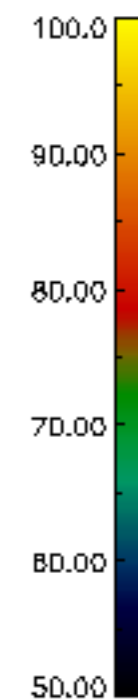
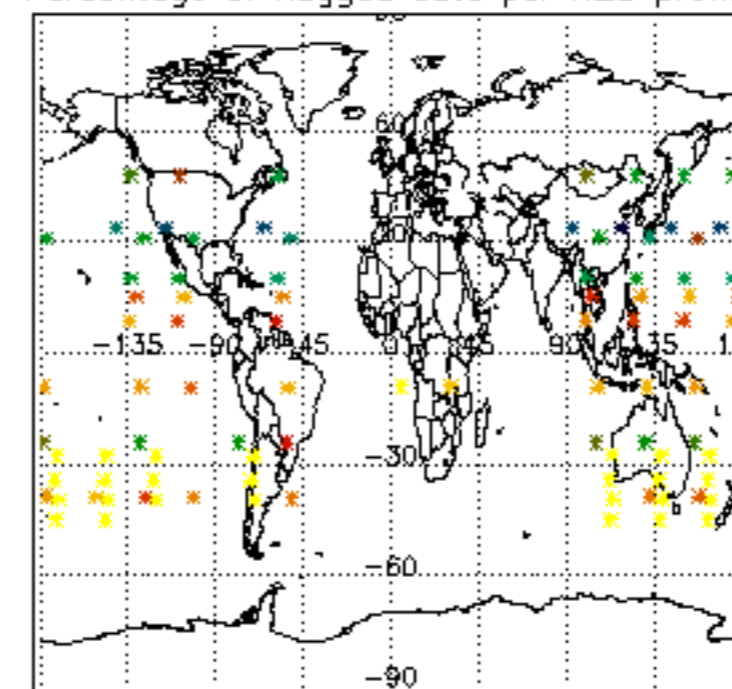




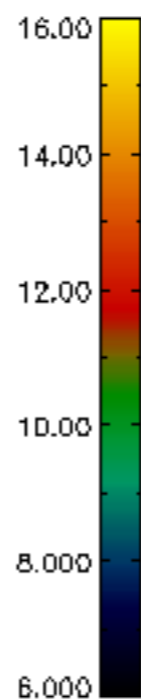
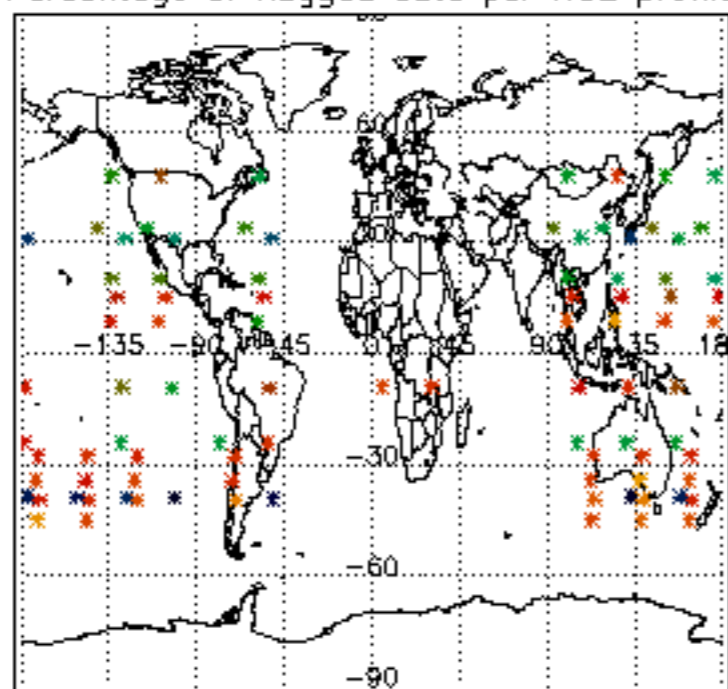
Percentage of flagged data per D3 profile



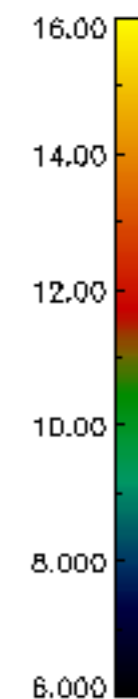
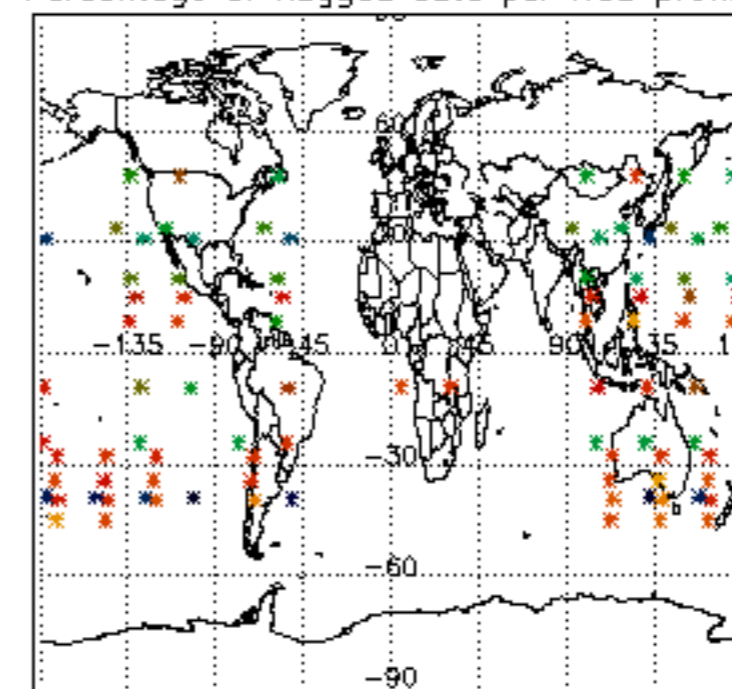
Percentage of flagged data per H2O profile

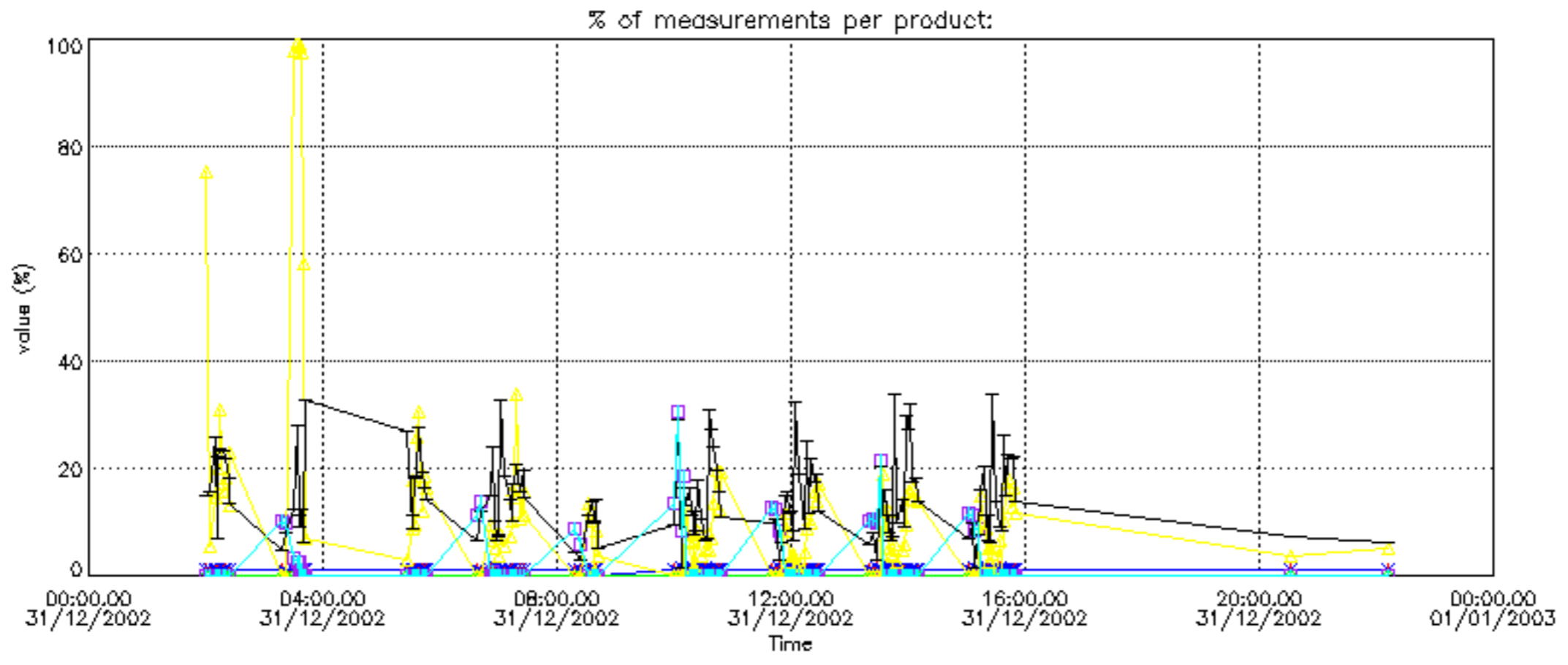


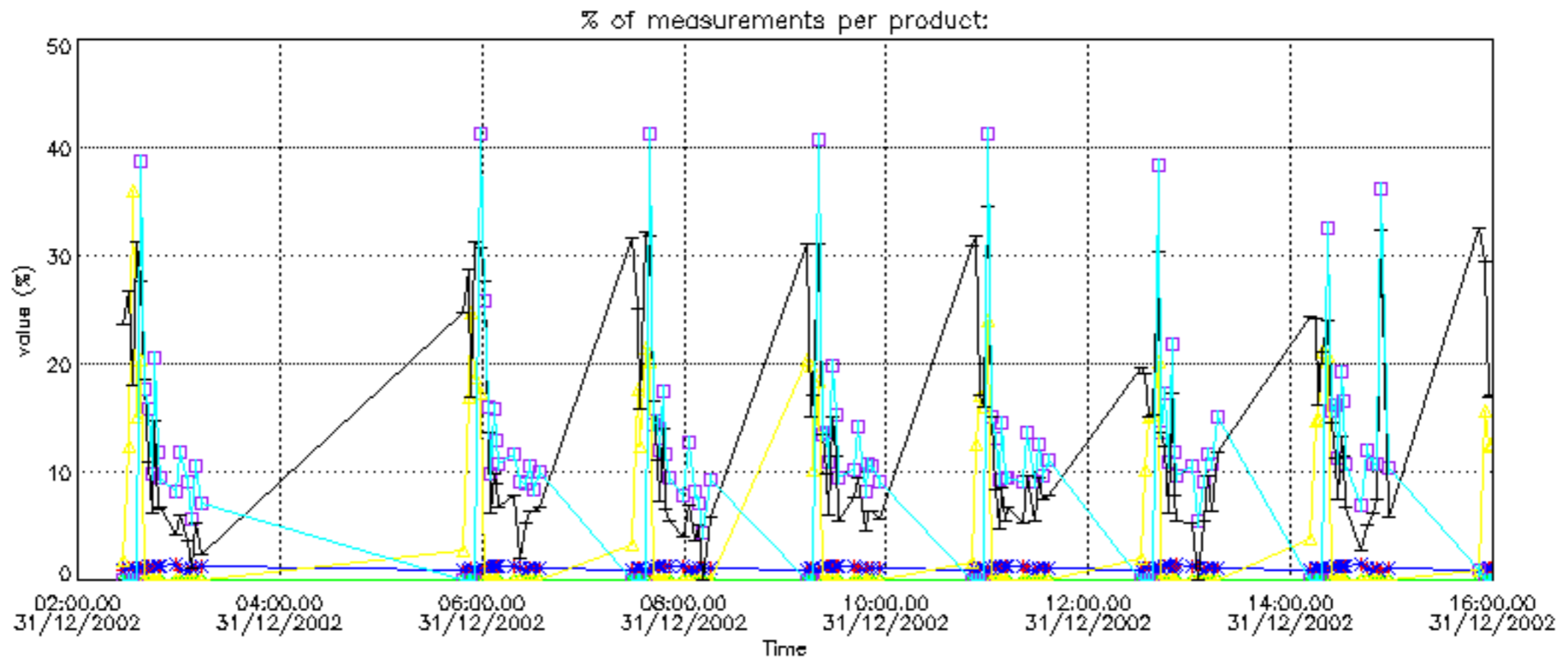
Percentage of flagged data per NO2 profile



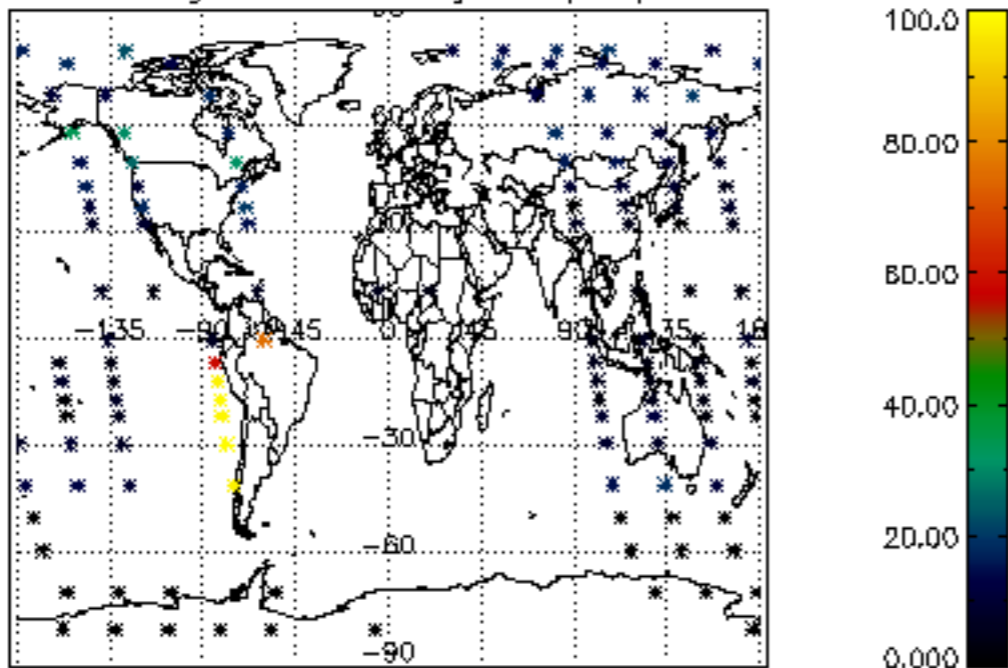
Percentage of flagged data per NO3 profile



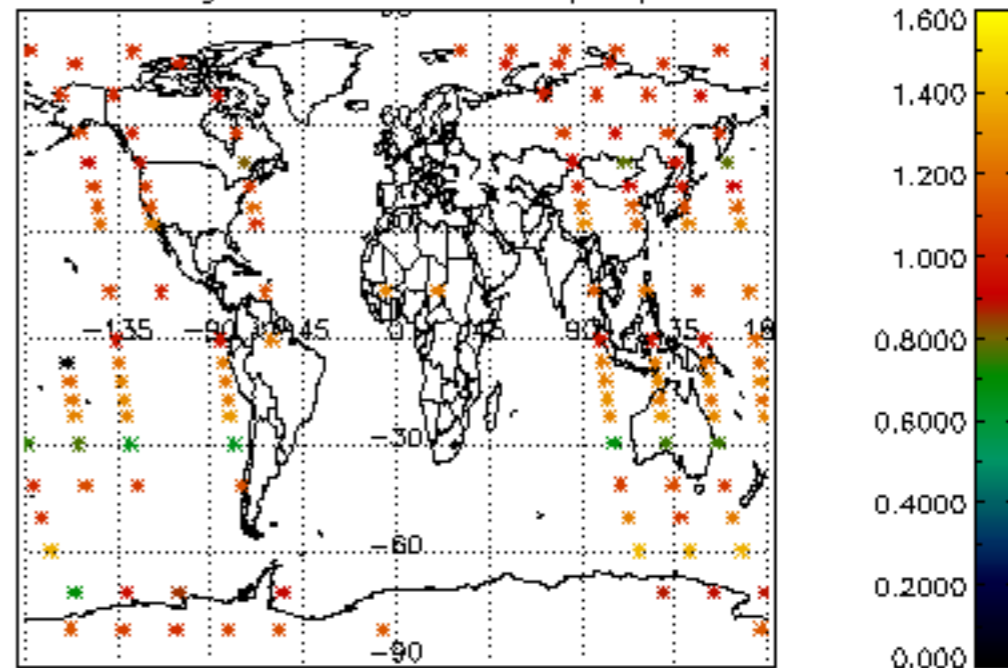




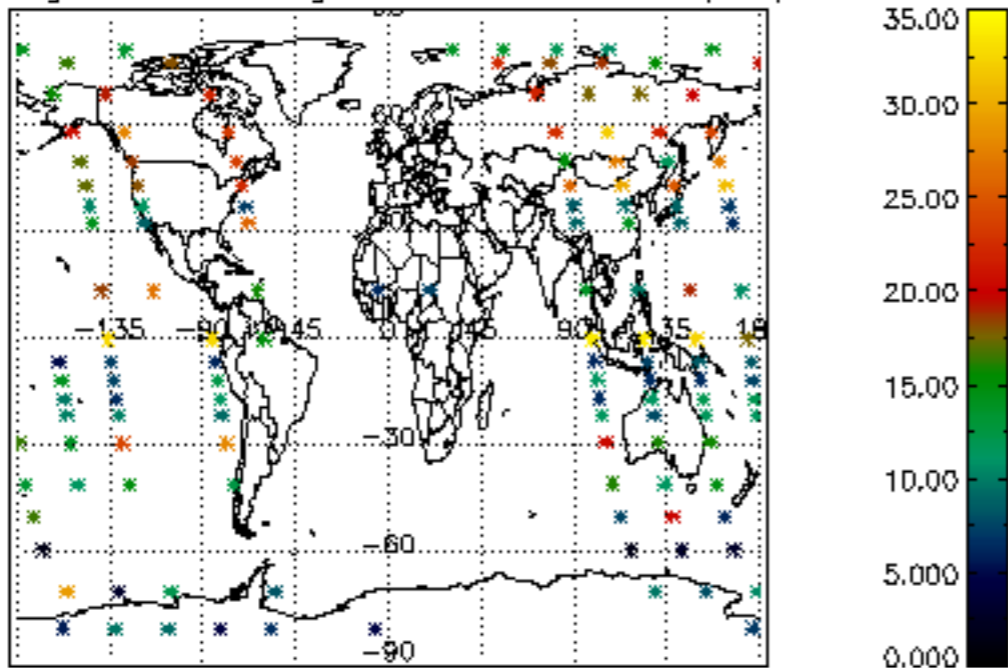
Percentage of cosmic ray hits per profile



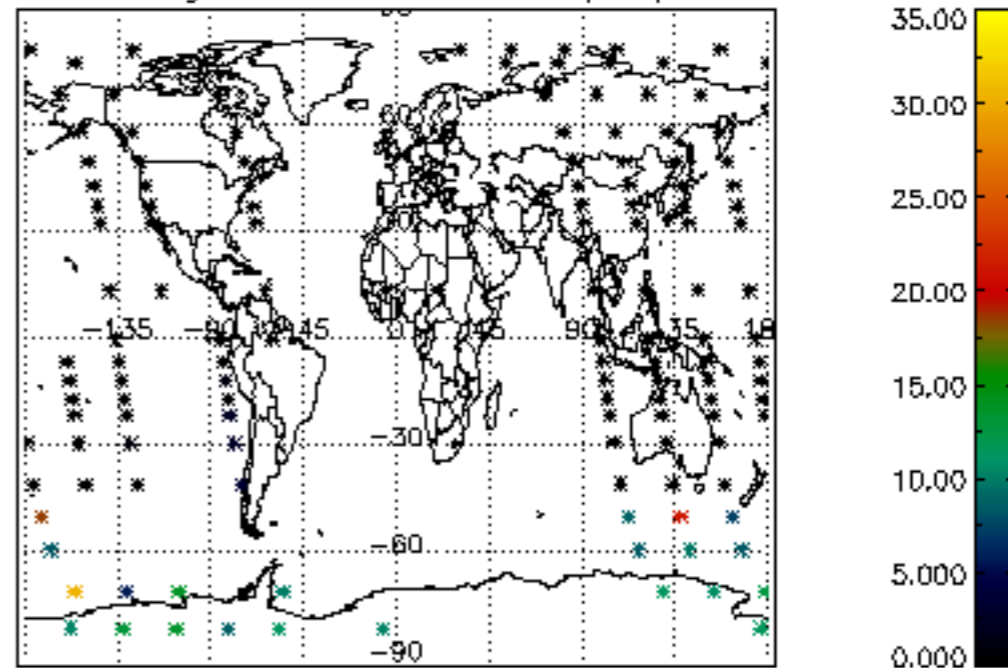
Percentage of datation errors per profile



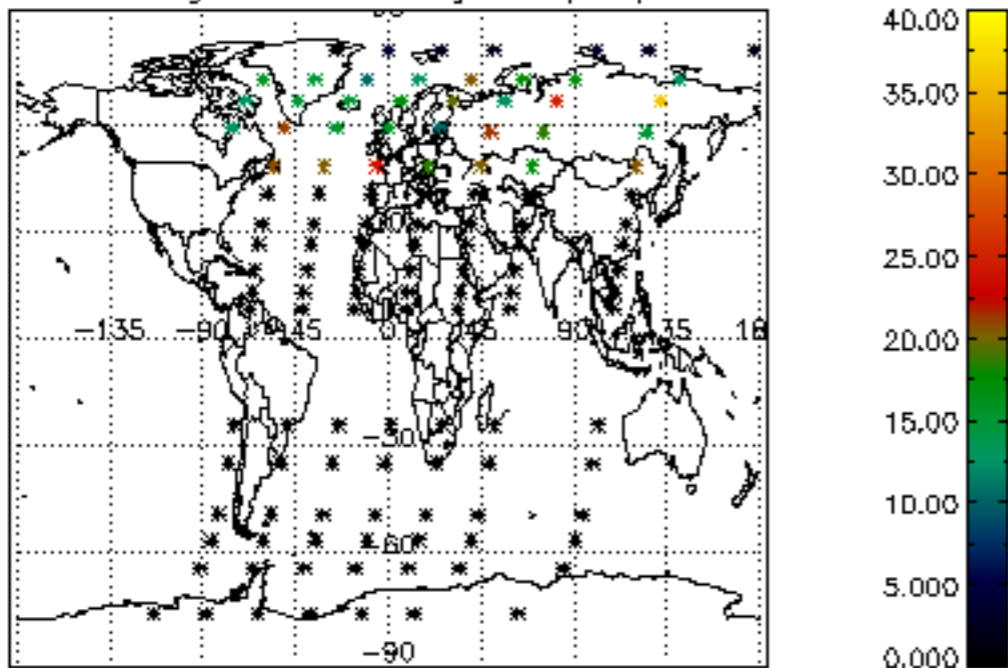
Percentage of star falling outside central band per profile



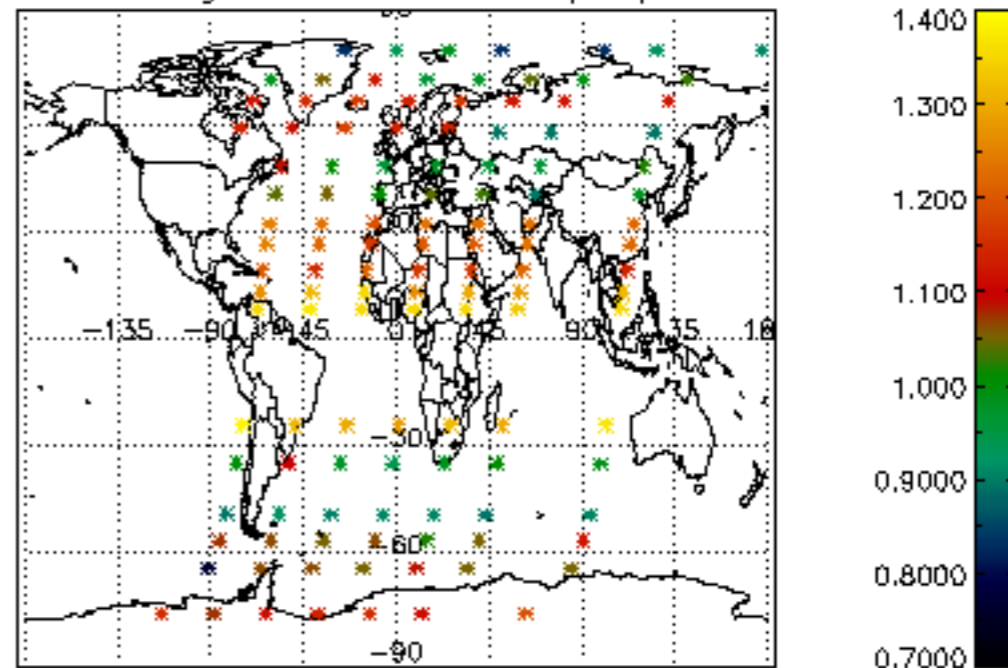
Percentage of saturation errors per profile



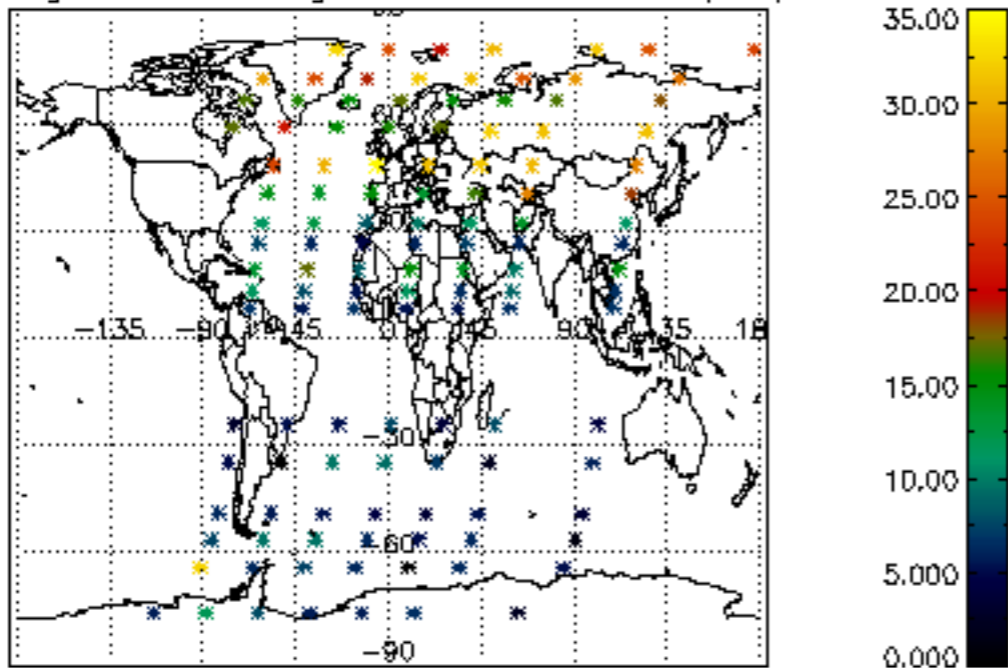
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

