

GOMOS Level 2 Daily Report

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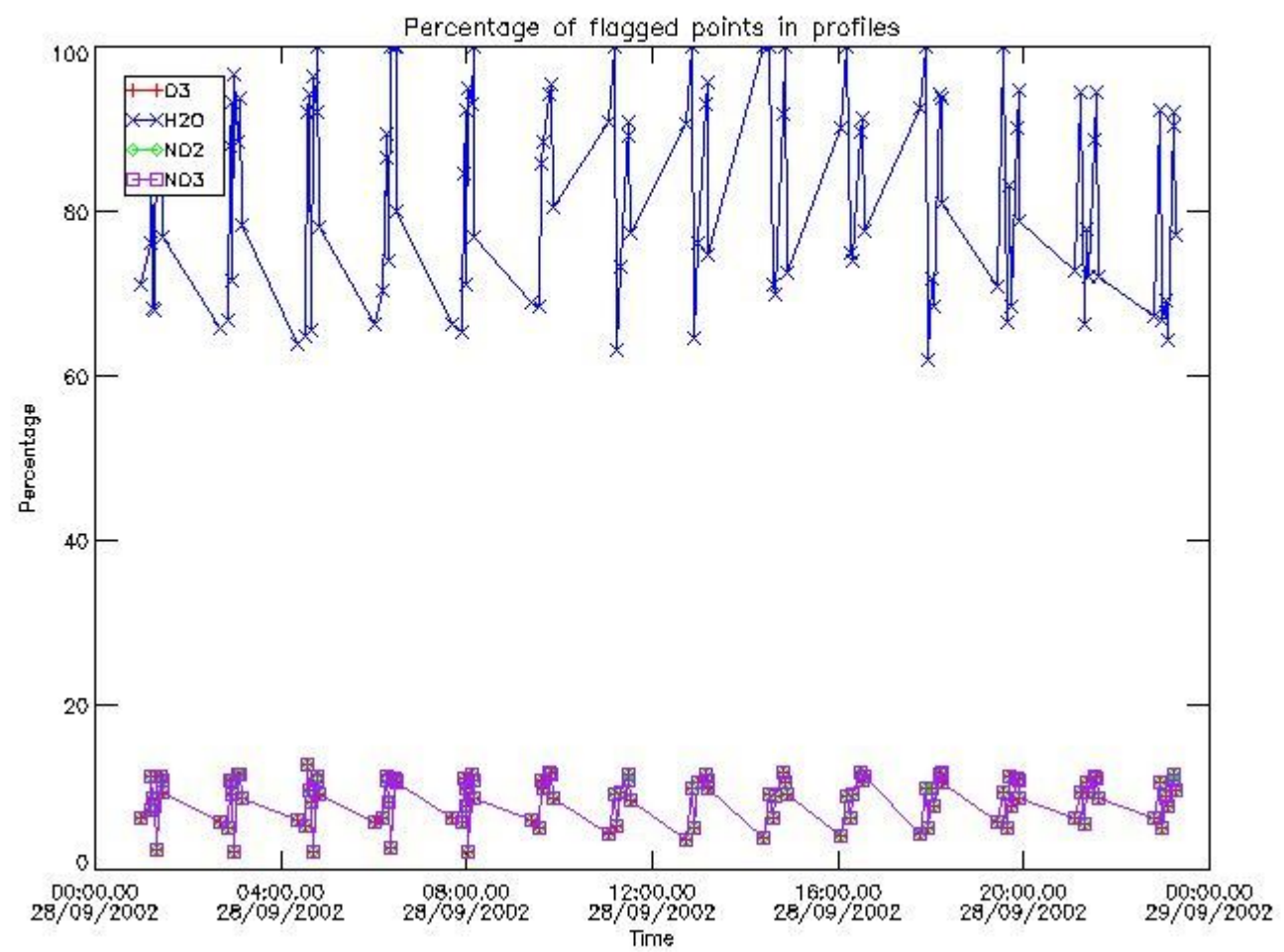
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338	GOM_NL__2PRFIN20020928_223834_000000802009_00473_03032_3219.N1	28-SEP-2002 22:38:34	Bright	79.500	17	78Bet Gem	1.1610	4500.0	159	3032	No
339	GOM_NL__2PRFIN20020928_224127_000001102009_00473_03032_3220.N1	28-SEP-2002 22:41:27	Twilight_stray	109.50	170	27Eps Gem	3.0000	9700.0	219	3032	No
340	GOM_NL__2PRFIN20020928_224731_000000822009_00473_03032_3221.N1	28-SEP-2002 22:47:31	Dark	81.500	8	10Alp CMi	0.40000	6500.0	163	3032	No
341	GOM_NL__2PRFIN20020928_225442_000000532009_00473_03032_3222.N1	28-SEP-2002 22:54:42	Dark	52.500	132	15Rho Pup	2.8030	6900.0	105	3032	No
342	GOM_NL__2PRFIN20020928_225839_000001032009_00473_03032_3223.N1	28-SEP-2002 22:58:39	Dark	102.50	1	9Alp CMa	-1.4400	11000.	205	3032	No
343	GOM_NL__2PRFIN20020928_230226_000000572009_00473_03032_3224.N1	28-SEP-2002 23:02:26	Dark	57.000	41	Eps Car	1.8600	4100.0	114	3032	No
344	GOM_NL__2PRFIN20020928_230504_000000672009_00474_03033_3199.N1	28-SEP-2002 23:05:04	Dark	66.500	2	Alp Car	-0.73600	7000.0	133	3033	No
345	GOM_NL__2PRFIN20020928_231239_000000442009_00474_03033_3200.N1	28-SEP-2002 23:12:39	Dark	44.000	135	Bet Hyi	2.8200	5800.0	88	3033	No
346	GOM_NL__2PRFIN20020928_231438_000000472009_00474_03033_3201.N1	28-SEP-2002 23:14:38	Dark	47.000	143	Alp Hyi	2.8570	7200.0	94	3033	No
347	GOM_NL__2PRFIN20020928_231606_000000532009_00474_03033_3202.N1	28-SEP-2002 23:16:06	Dark	53.000	9	Alp Eri	0.45300	24000.	106	3033	No
348	GOM_NL__2PRFIN20020928_232131_000000522009_00474_03033_3203.N1	28-SEP-2002 23:21:31	Straylight	52.000	84	Alp Phe	2.3970	4500.0	104	3033	No
349	GOM_NL__2PRFIN20020928_232615_000000522009_00474_03033_3204.N1	28-SEP-2002 23:26:15	Straylight	51.500	18	24Alp PsA	1.1660	9700.0	103	3033	No
350	GOM_NL__2PRFIN20020928_232831_000000612009_00474_03033_3205.N1	28-SEP-2002 23:28:31	Straylight	61.000	52	16Bet Cet	2.0370	4500.0	122	3033	No
351	GOM_NL__2PRFIN20020928_233456_000000462009_00474_03033_3206.N1	28-SEP-2002 23:34:56	Bright	45.500	162	34Alp Aqr	2.9440	5350.0	91	3033	No
352	GOM_NL__2PRFIN20020928_233846_000000452009_00474_03033_3207.N1	28-SEP-2002 23:38:46	Bright	44.500	90	54Alp Peg	2.4870	11000.	89	3033	No
353	GOM_NL__2PRFIN20020928_234225_000000482009_00474_03033_3208.N1	28-SEP-2002 23:42:25	Bright	47.500	93	53Bet Peg	2.5200	3100.0	95	3033	No
354	GOM_NL__2PRFIN20020928_234720_000000592009_00474_03033_3209.N1	28-SEP-2002 23:47:20	Bright	59.000	53	43Bet And	2.0480	3300.0	118	3033	No
355	GOM_NL__2PRFIN20020928_235158_000000482009_00474_03033_3210.N1	28-SEP-2002 23:51:58	Bright	47.500	74	11Bet Cas	2.2680	6600.0	95	3033	No
356	GOM_NL__2PRFIN20020928_235323_000000462009_00474_03033_3211.N1	28-SEP-2002 23:53:23	Bright	46.000	76	27Gam Cas	2.3000	30000.	92	3033	No
357	GOM_NL__2PRFIN20020928_235739_000000632009_00474_03033_3212.N1	28-SEP-2002 23:57:39	Bright	63.000	160	23Gam Per	2.9300	4700.0	126	3033	No
358	GOM_NL__2PRFIN20020928_235947_000000452009_00474_03033_3213.N1	28-SEP-2002 23:59:47	Bright	44.500	49	1Alp UMi	1.9900	6300.0	89	3033	No

3. Quality information per product

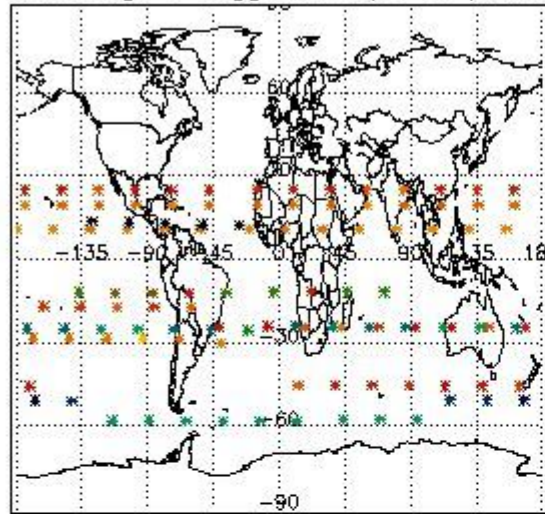
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

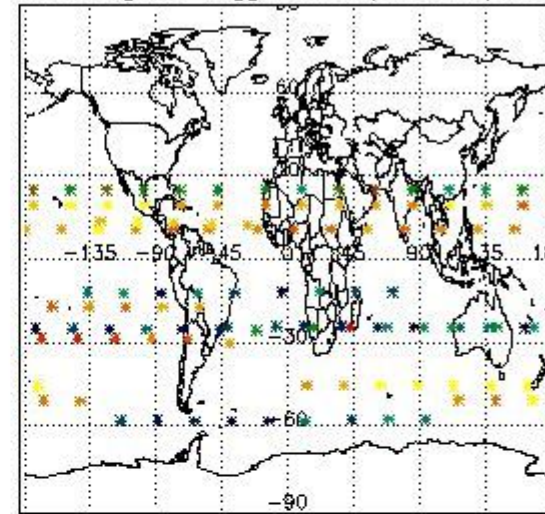


3.2 Plot quality information per product (world map)

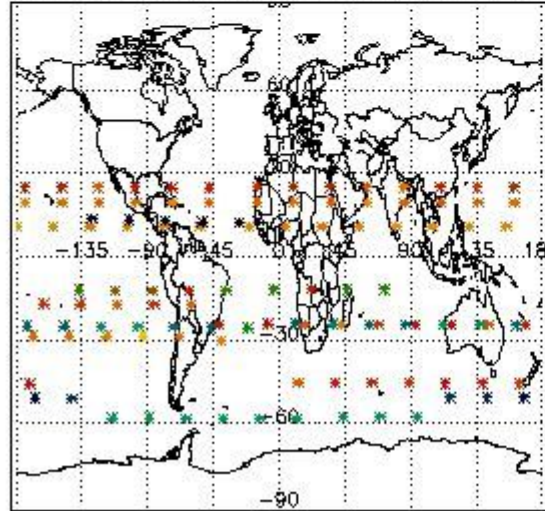
Percentage of flagged data per O3 profile



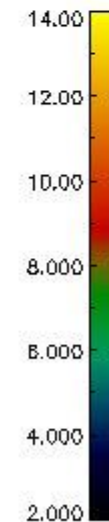
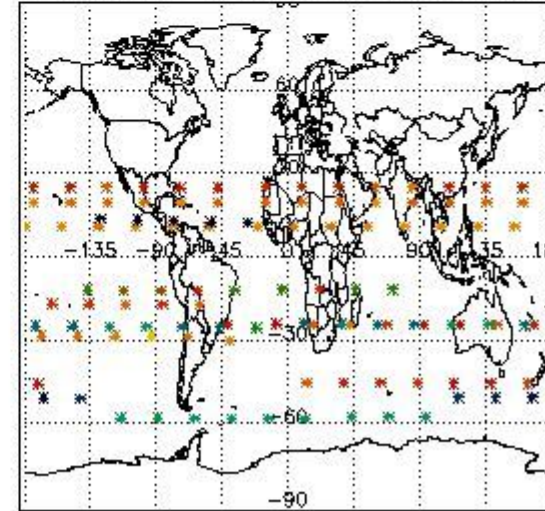
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

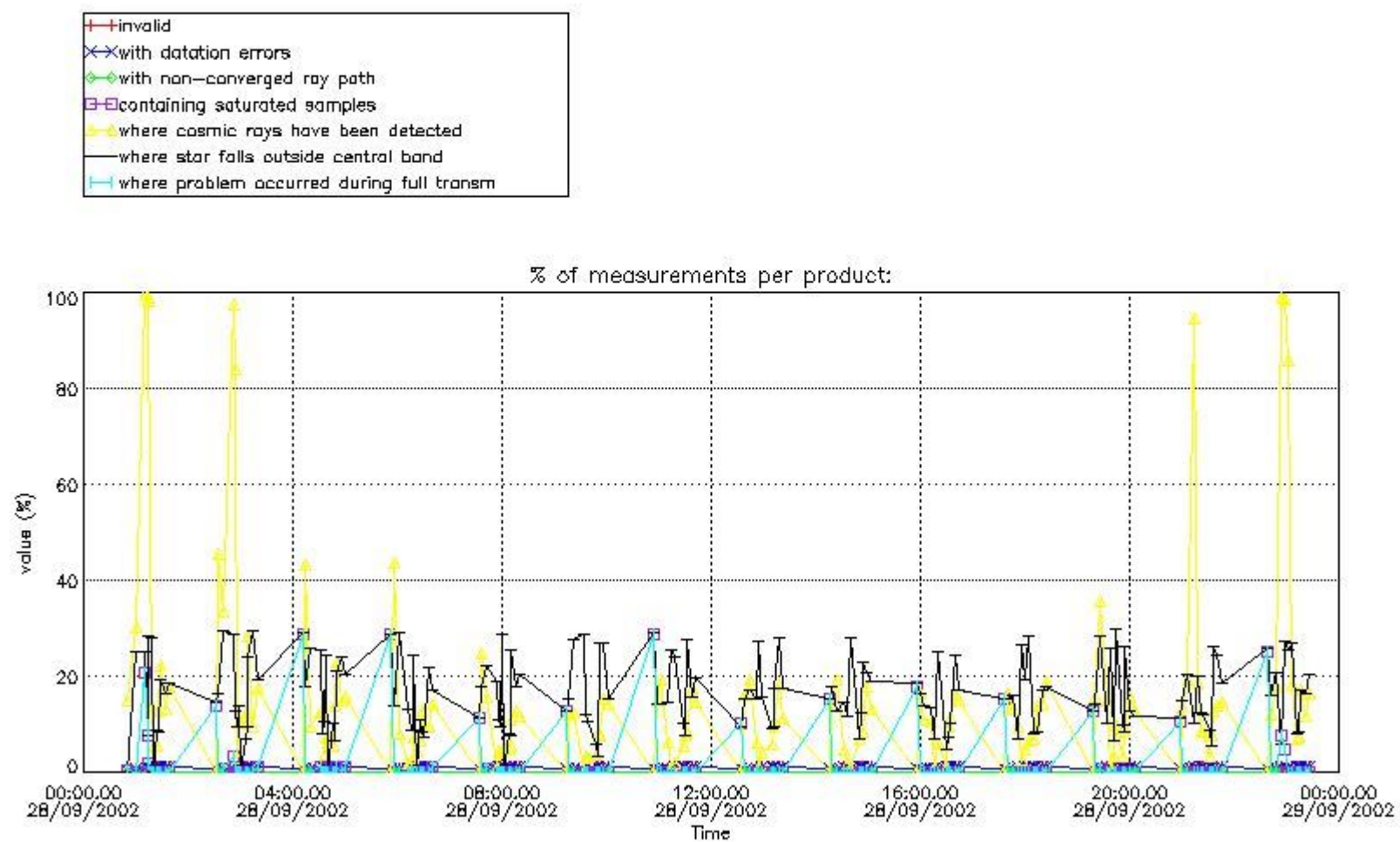


4. Level 1 quality information per product

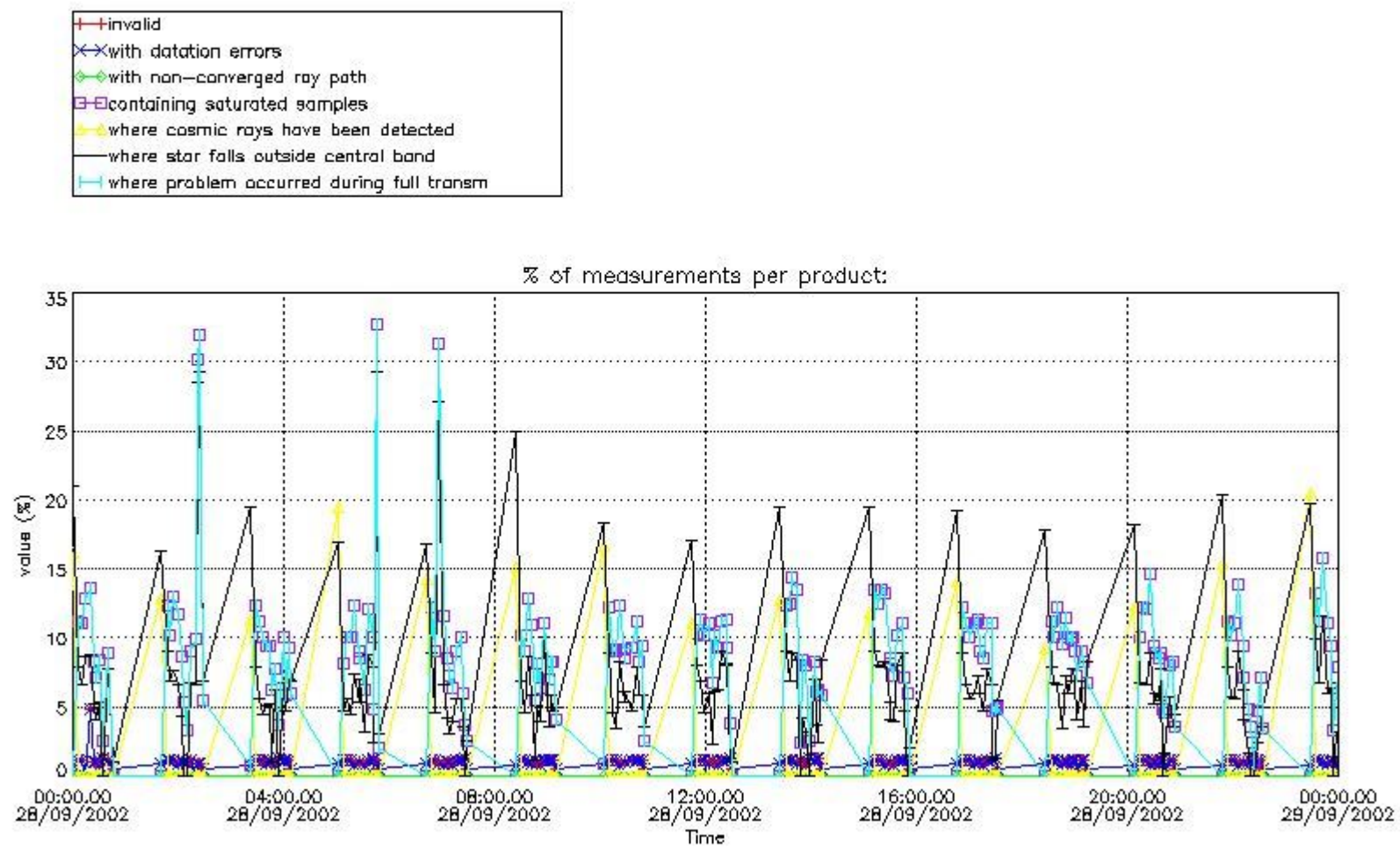
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

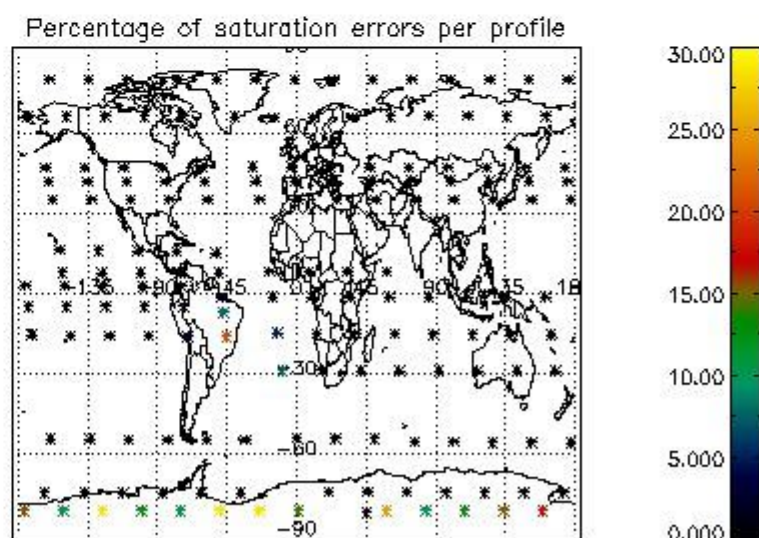
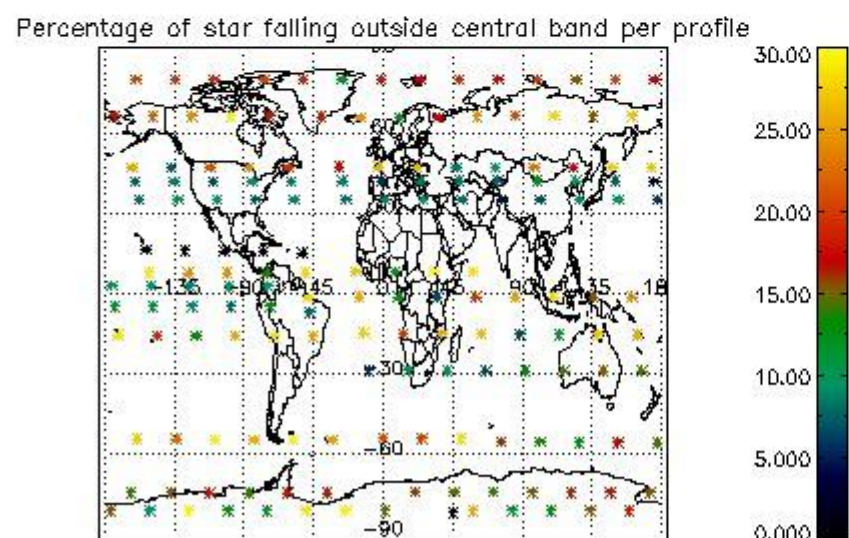
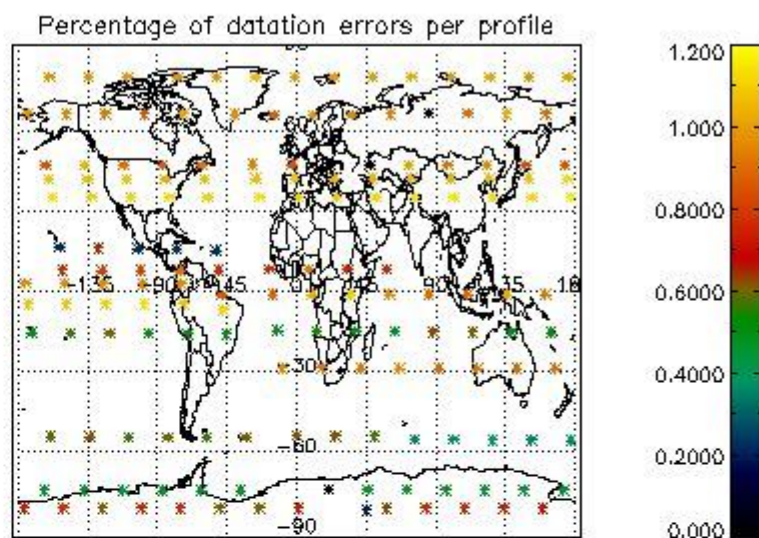
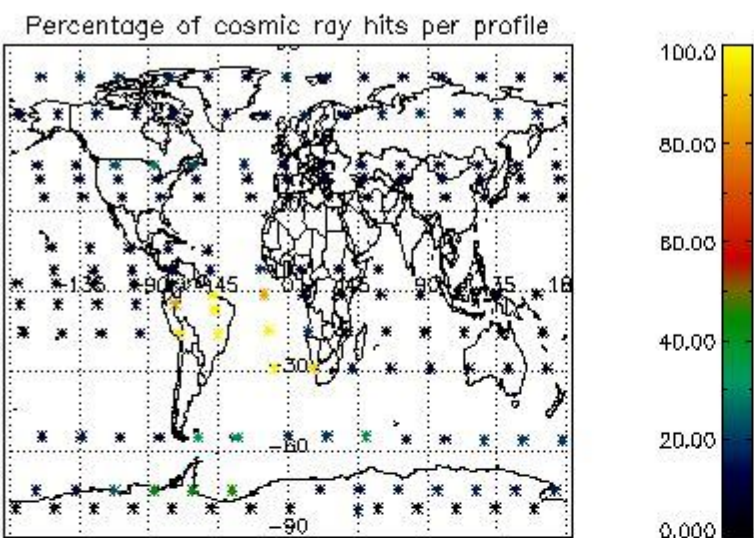


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

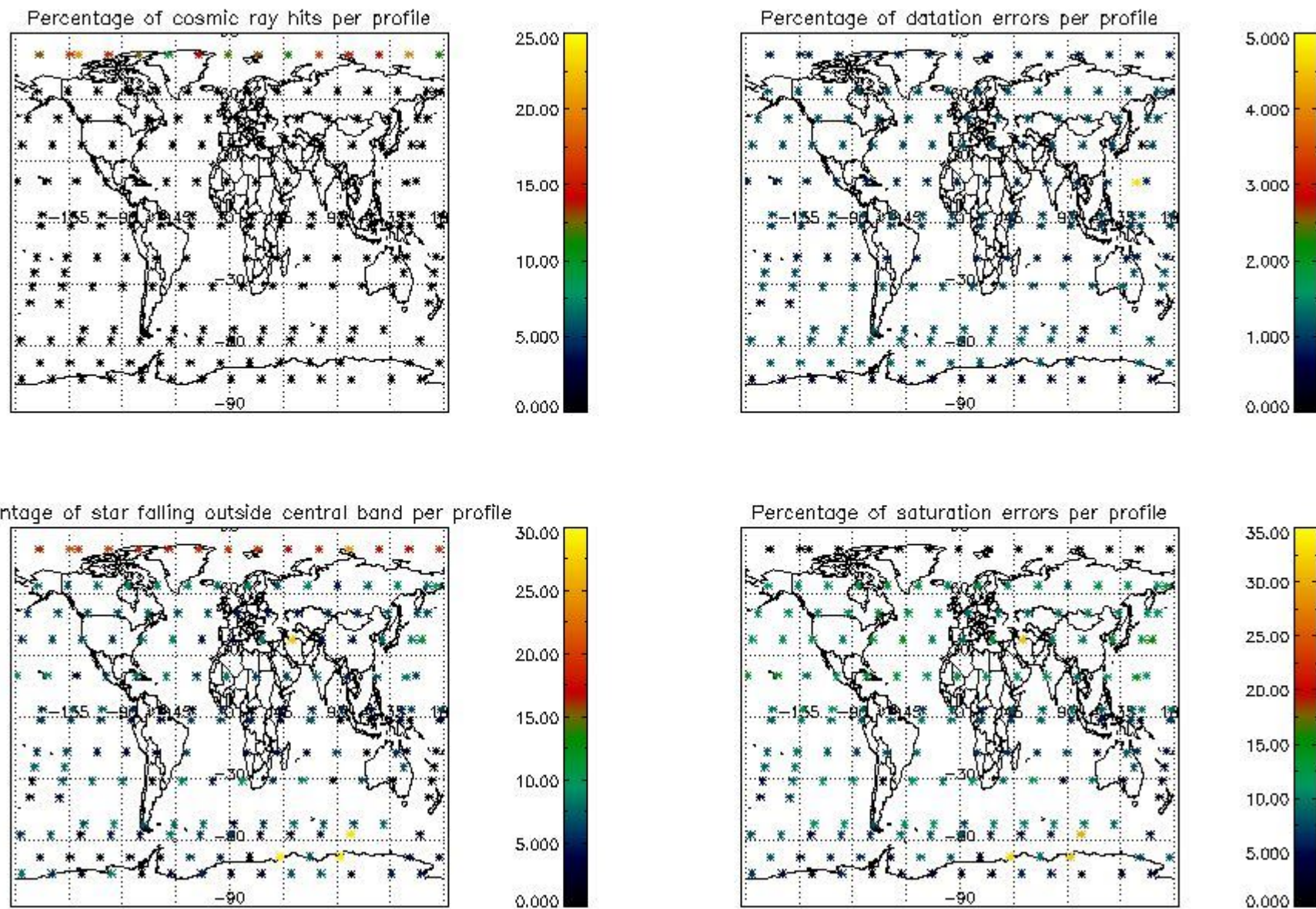


4.2 Plot quality information per product coming from level 1b processing (world map)

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

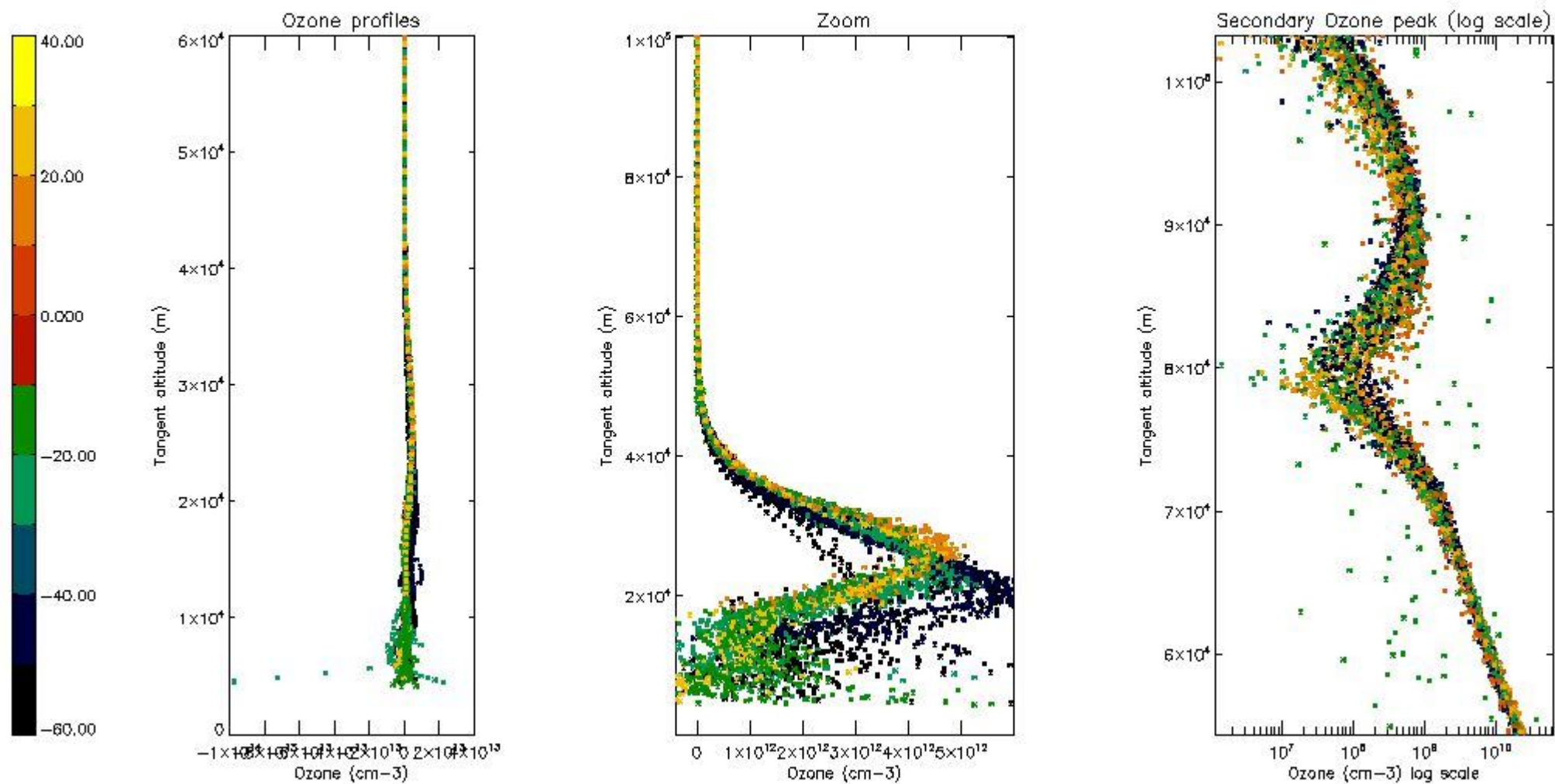
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	21

STD < 10	19
STD < 5	14

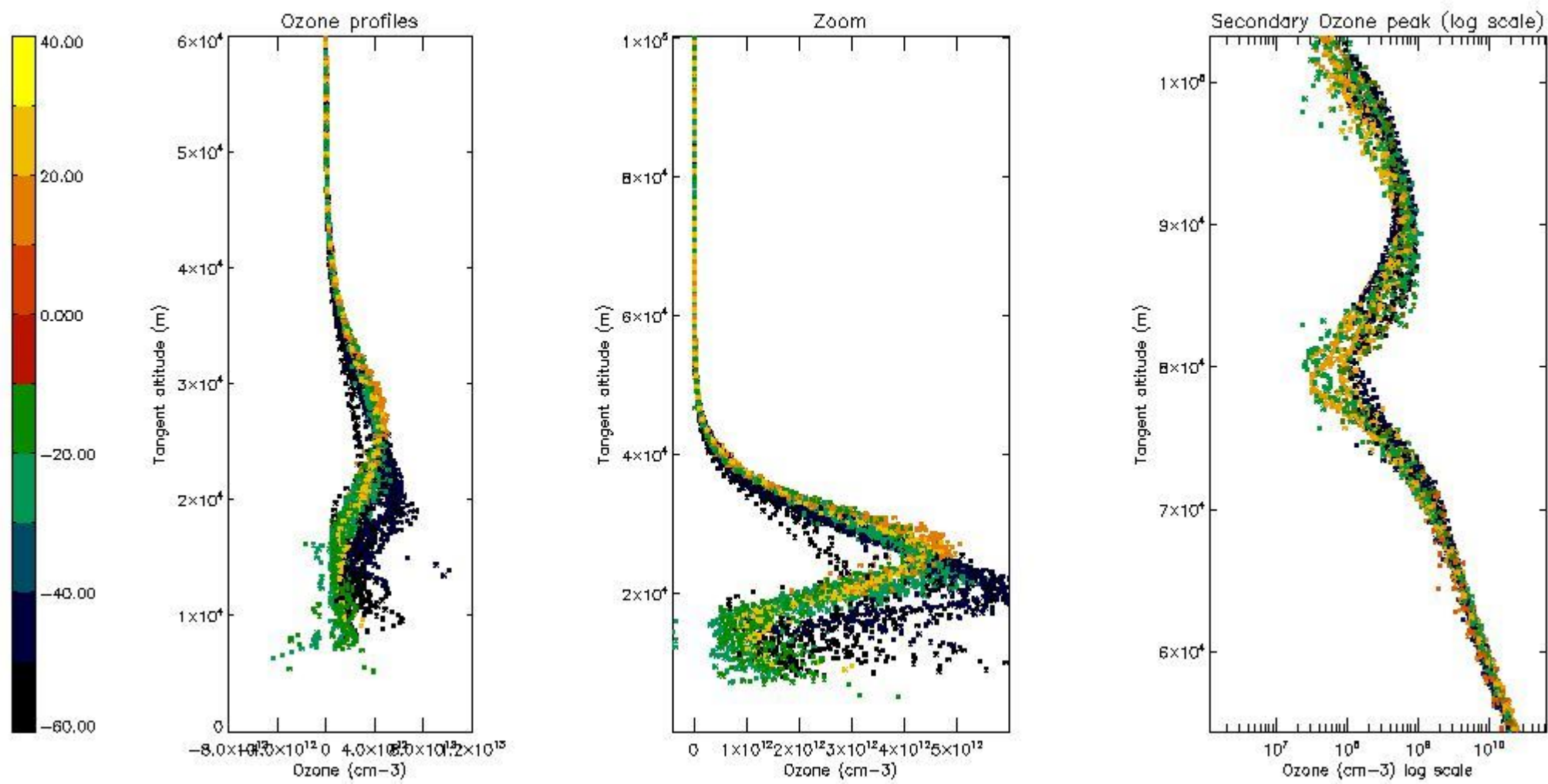
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



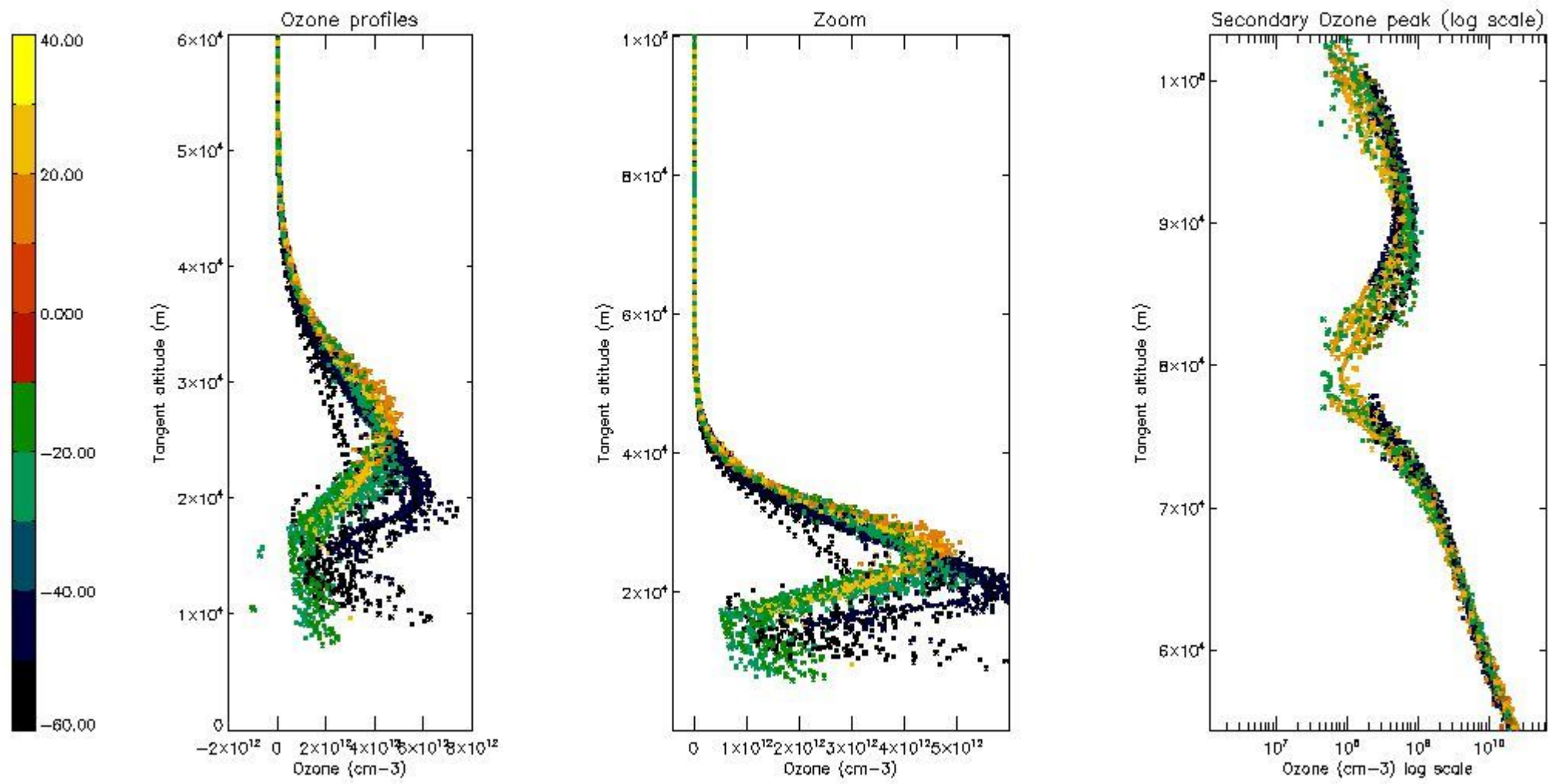
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



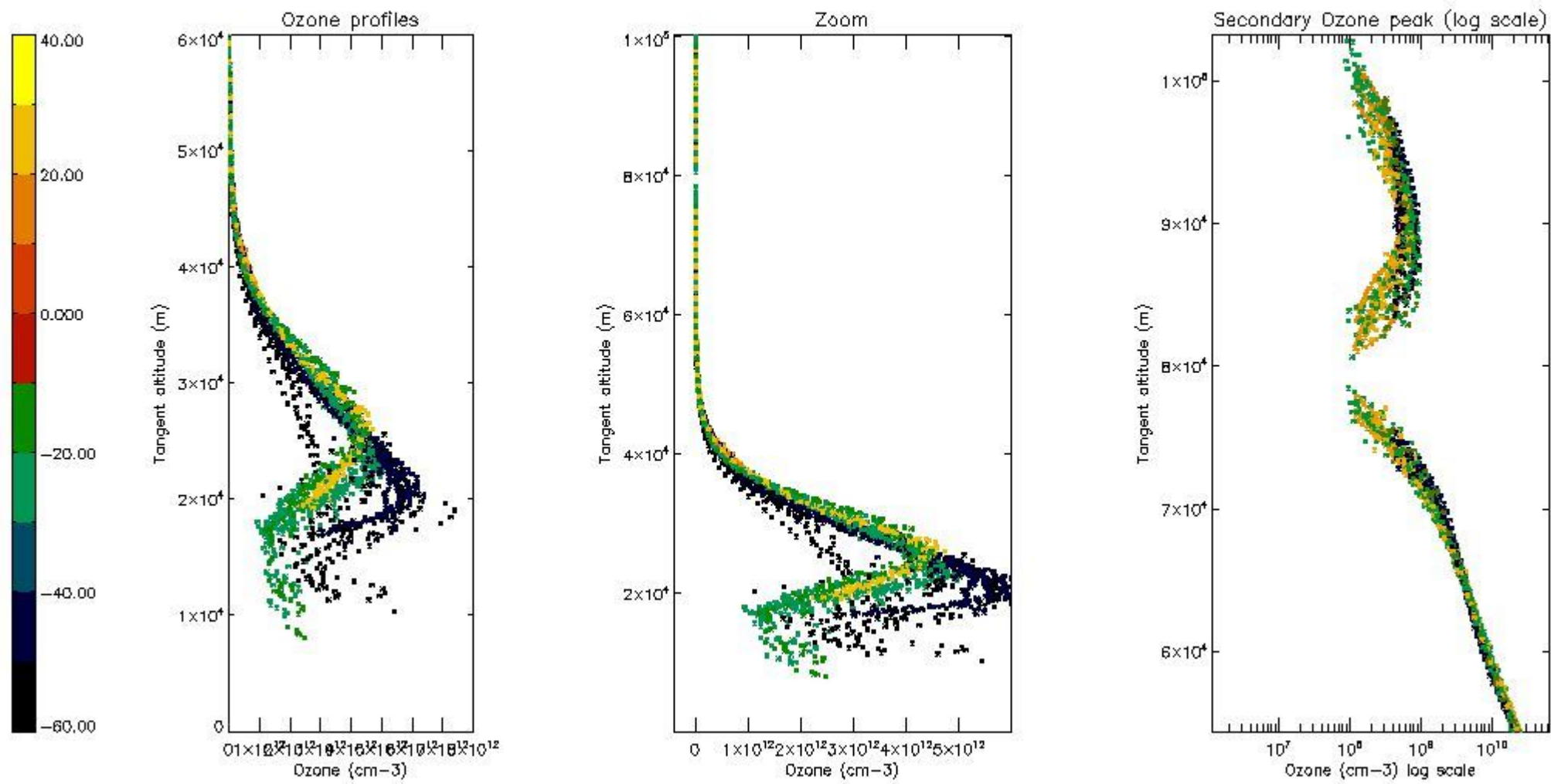
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



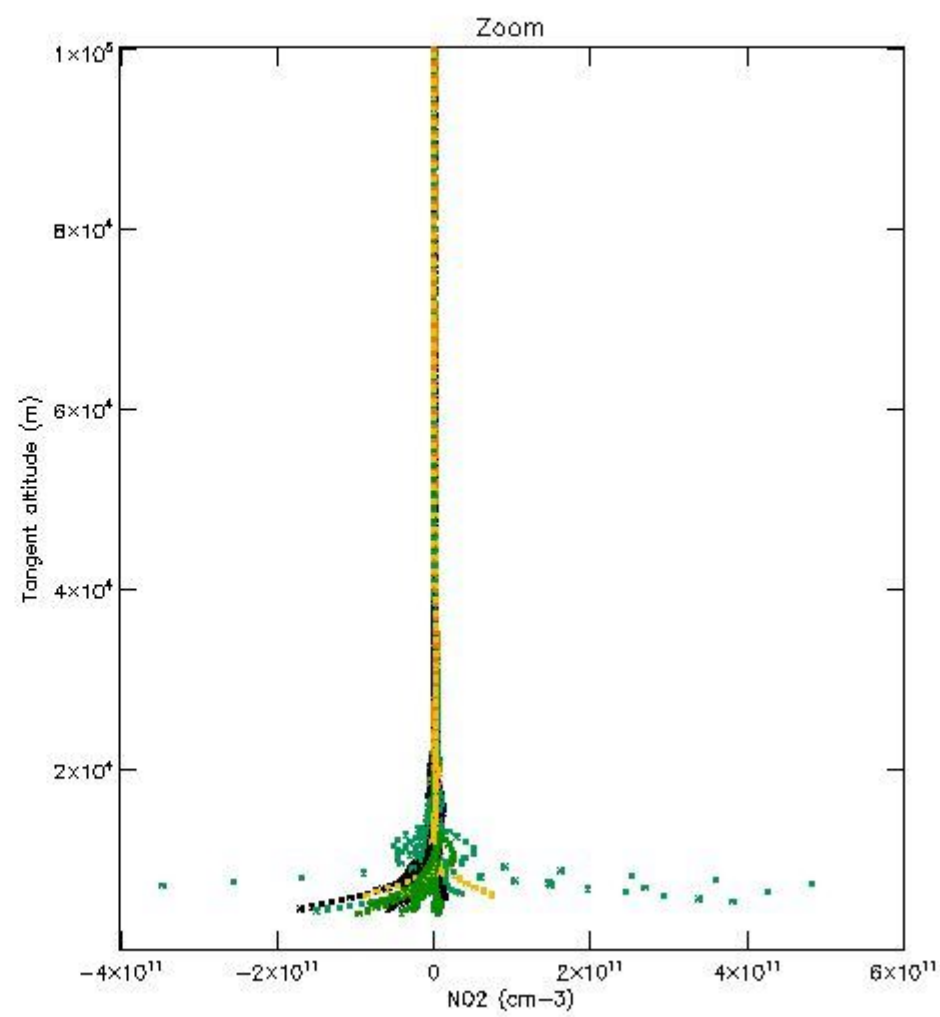
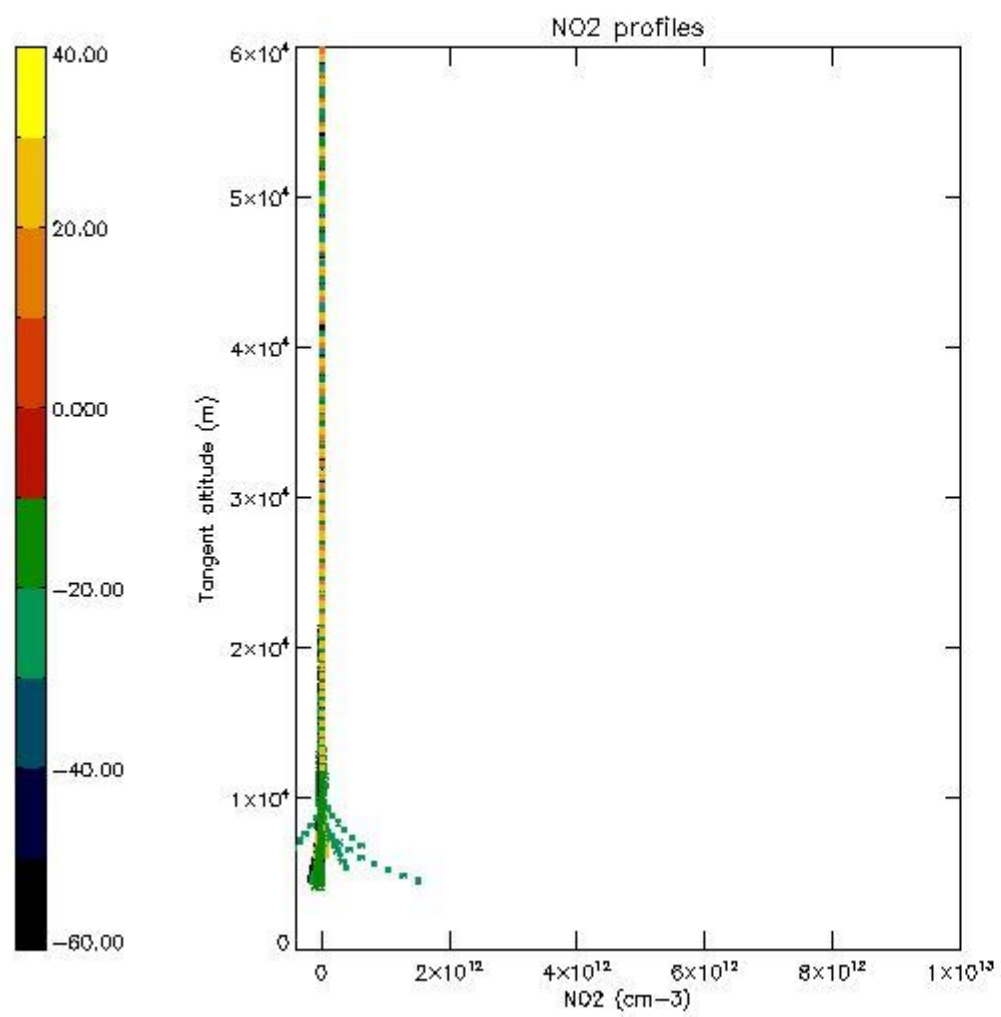
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



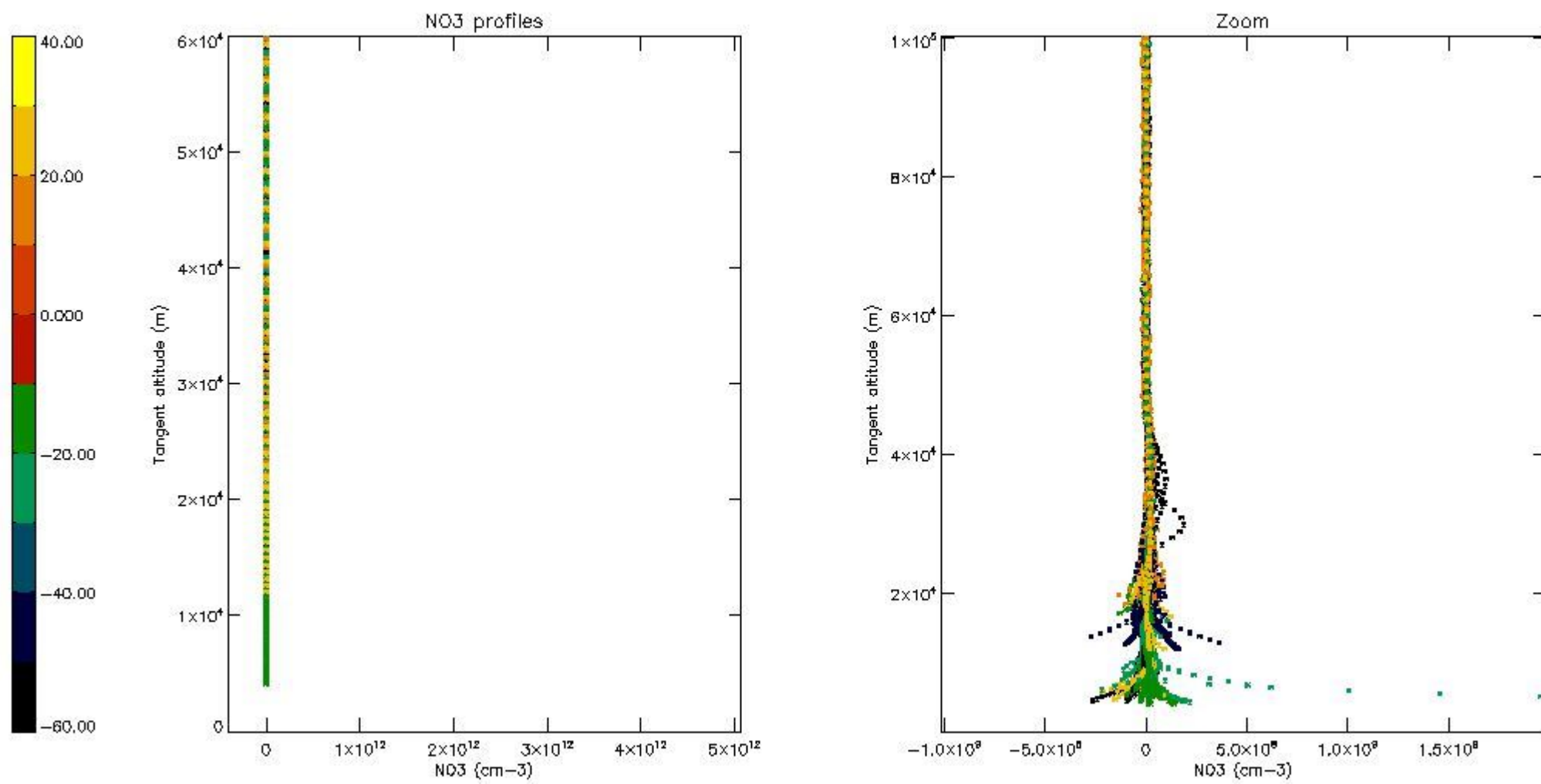
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



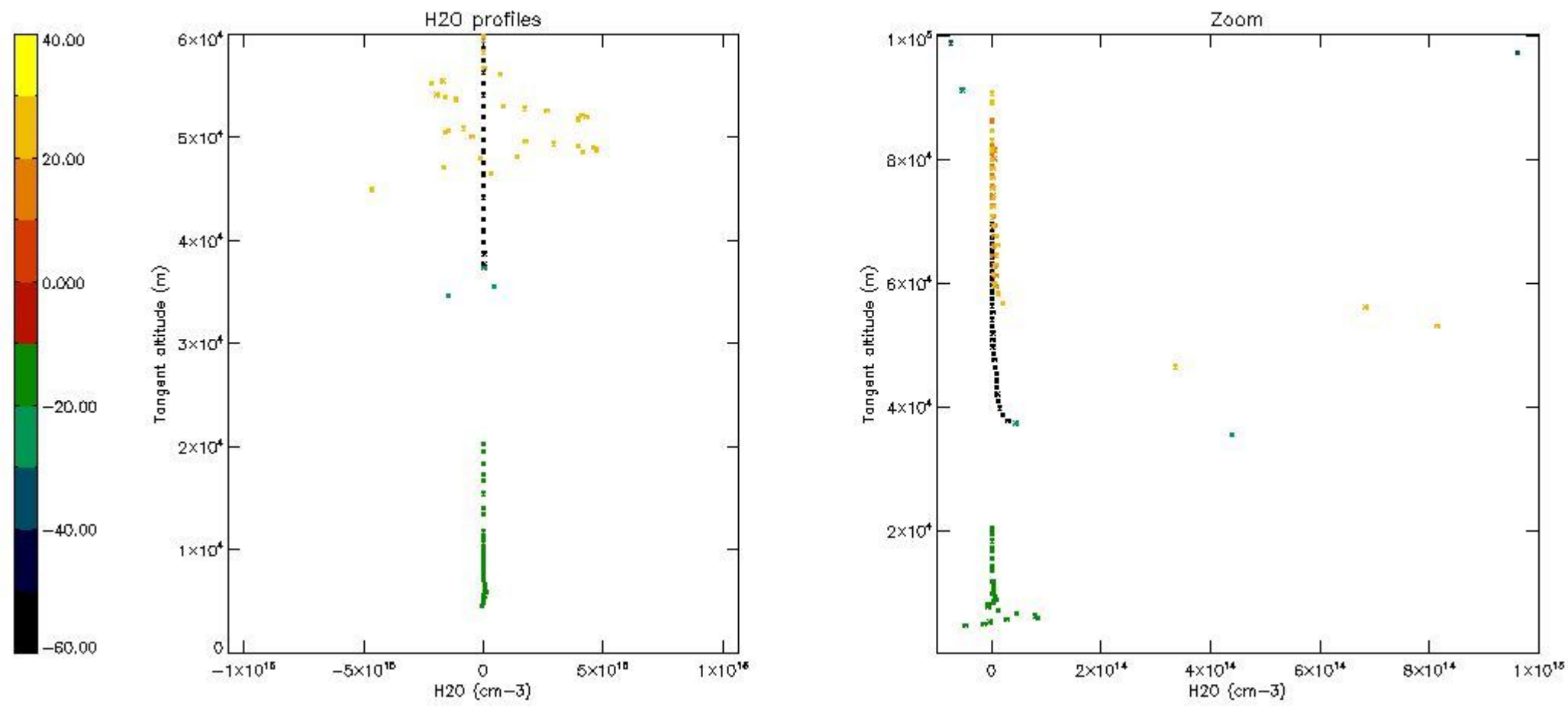
5.7 Plot NO3 profiles for all STD (dark without errors)

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	28-SEP-2002 00:00:05
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-SEP-2002 00:00:05
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-SEP-2002 00:00:05

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

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[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](#)

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

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

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

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

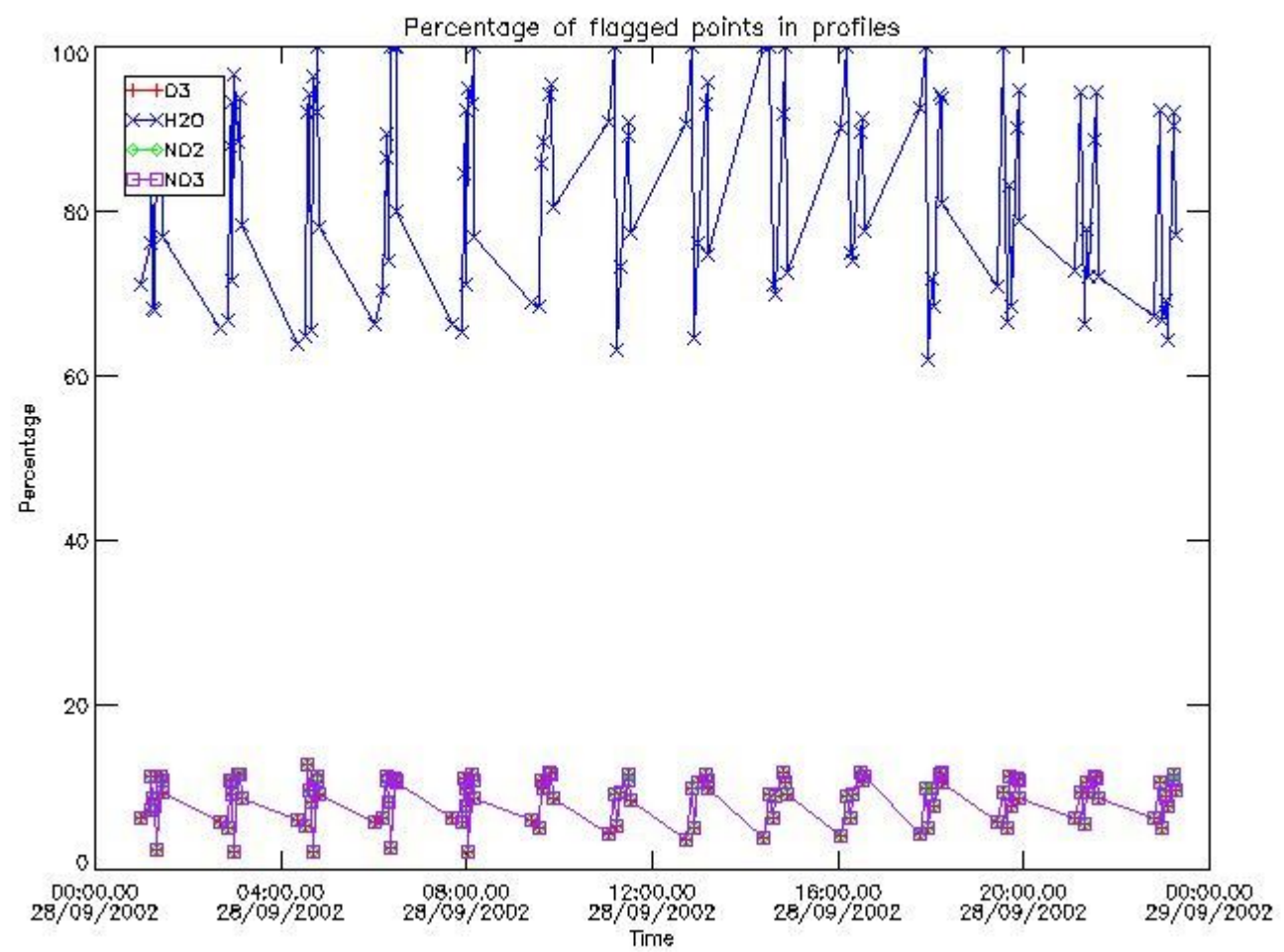
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3. Quality information per product

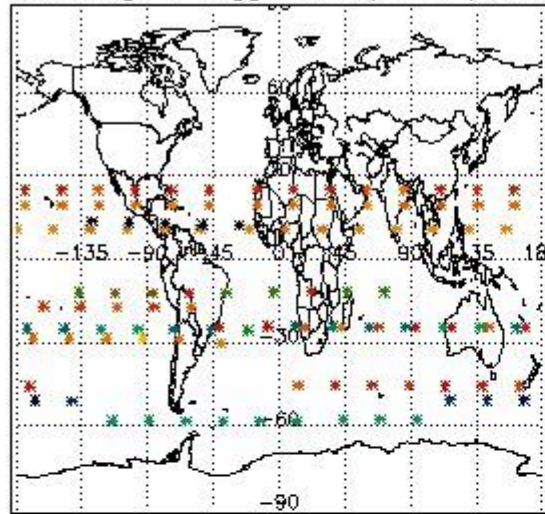
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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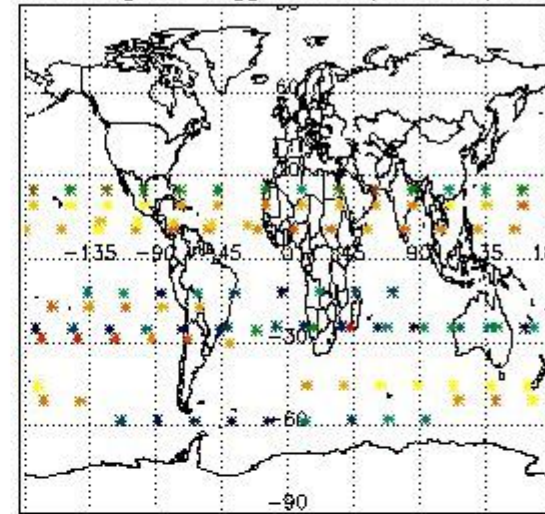


3.2 Plot quality information per product (world map)

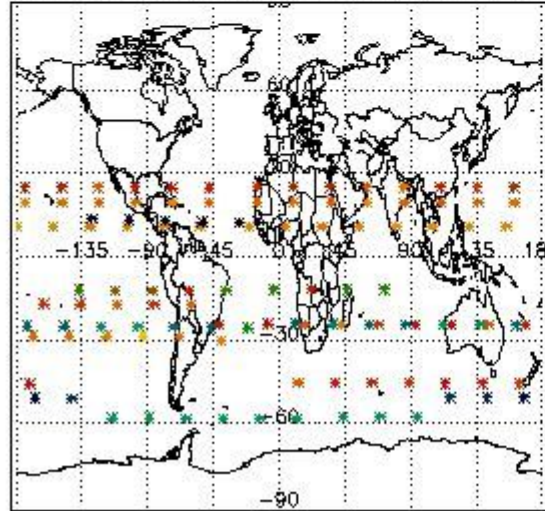
Percentage of flagged data per O3 profile



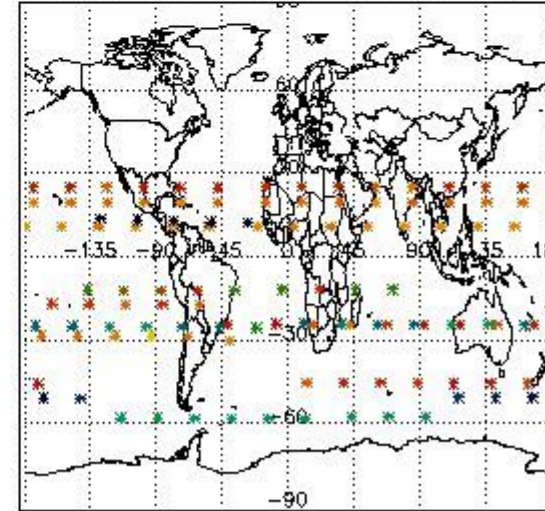
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

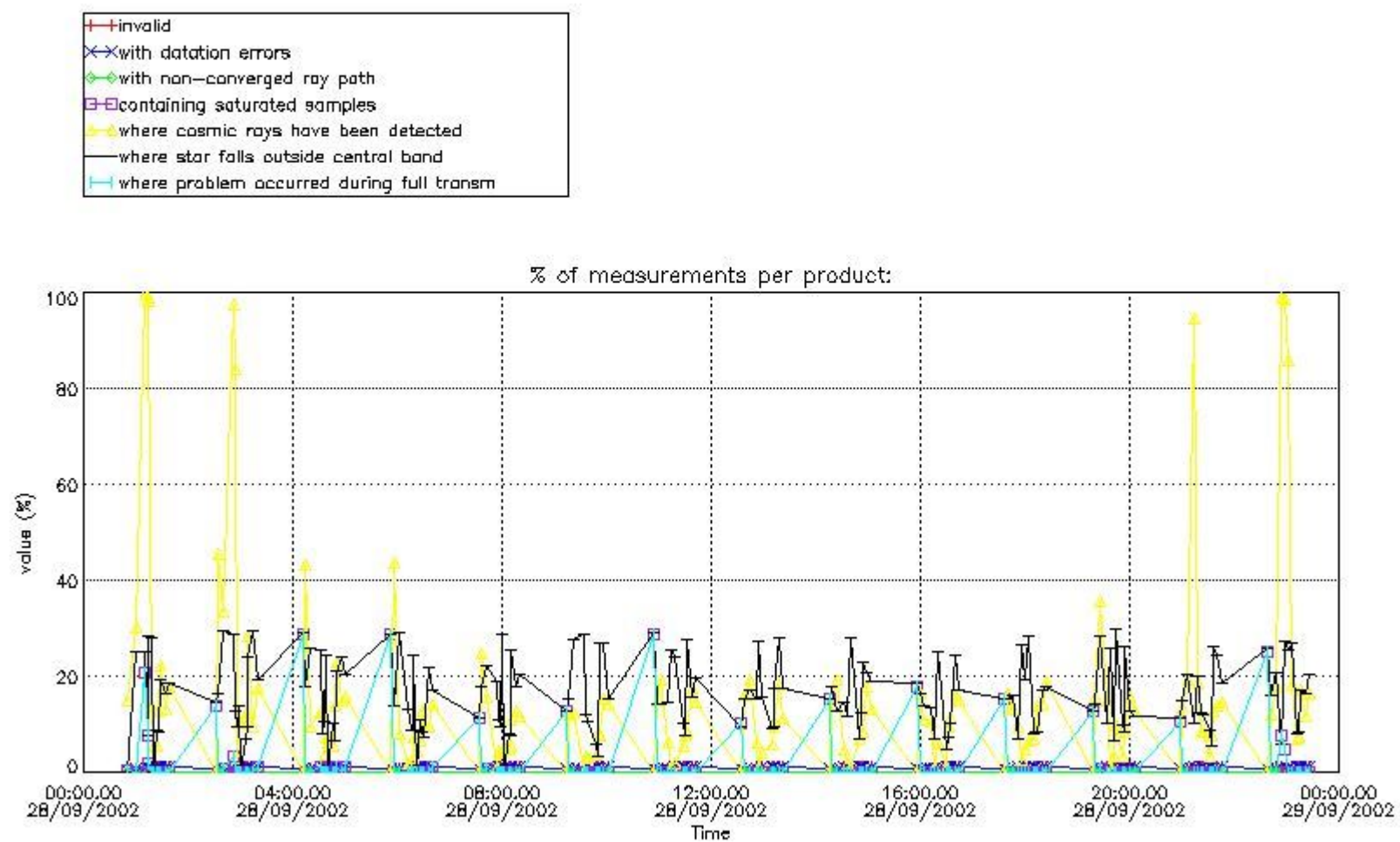


4. Level 1 quality information per product

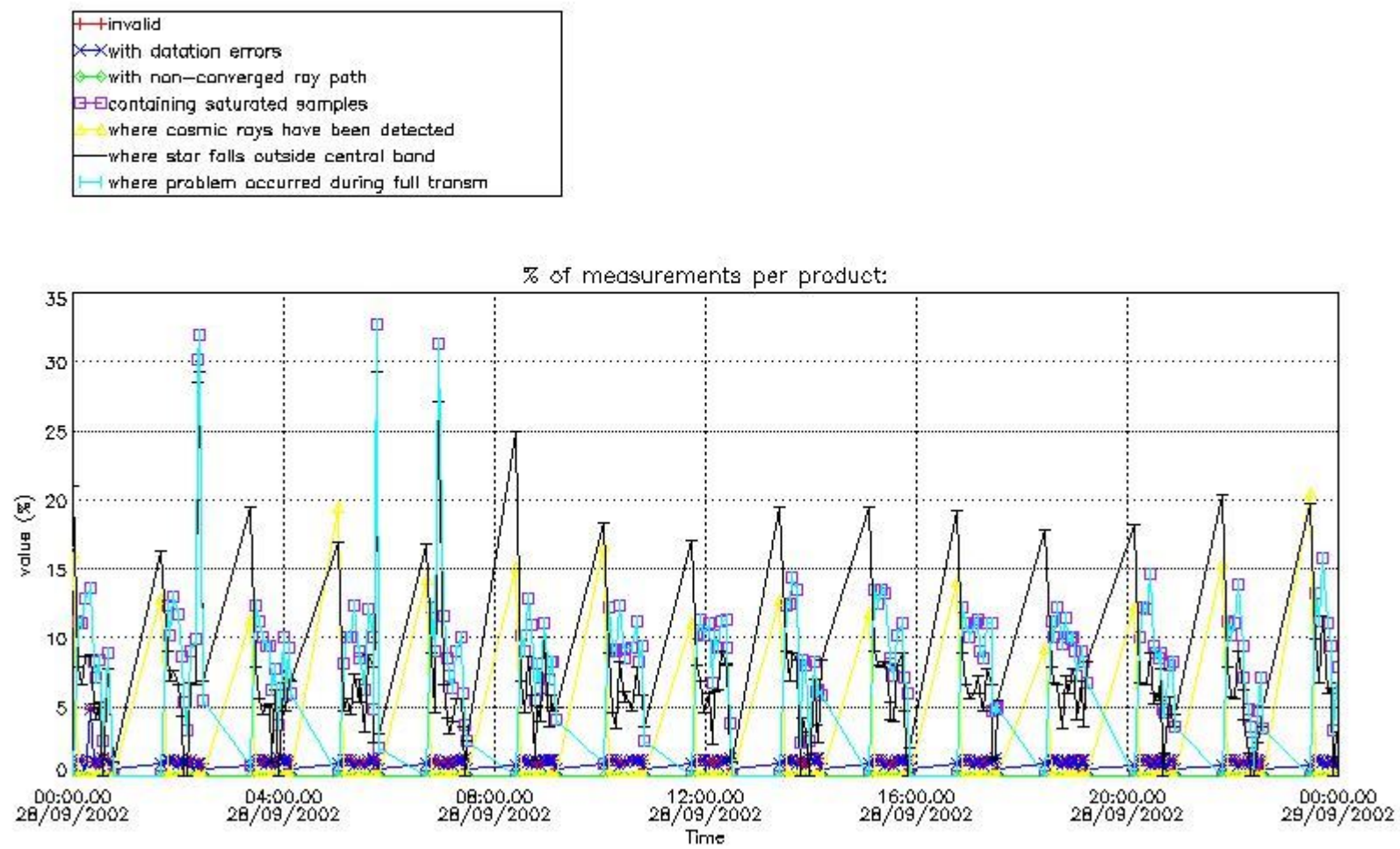
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

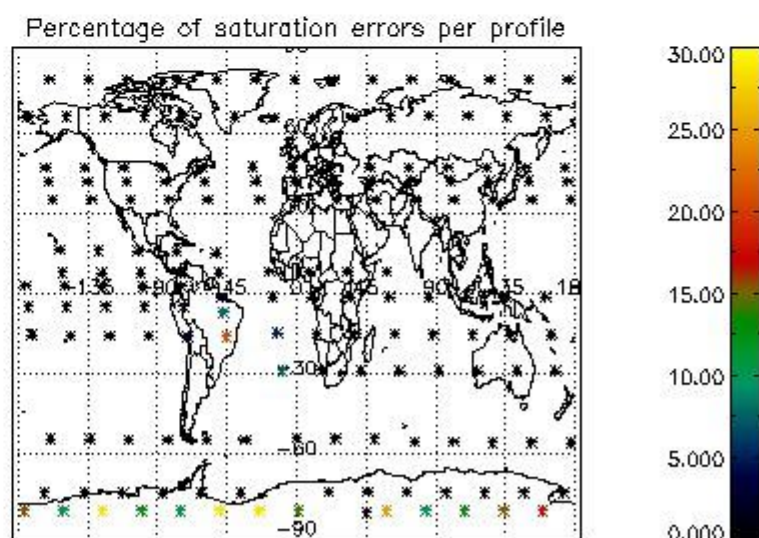
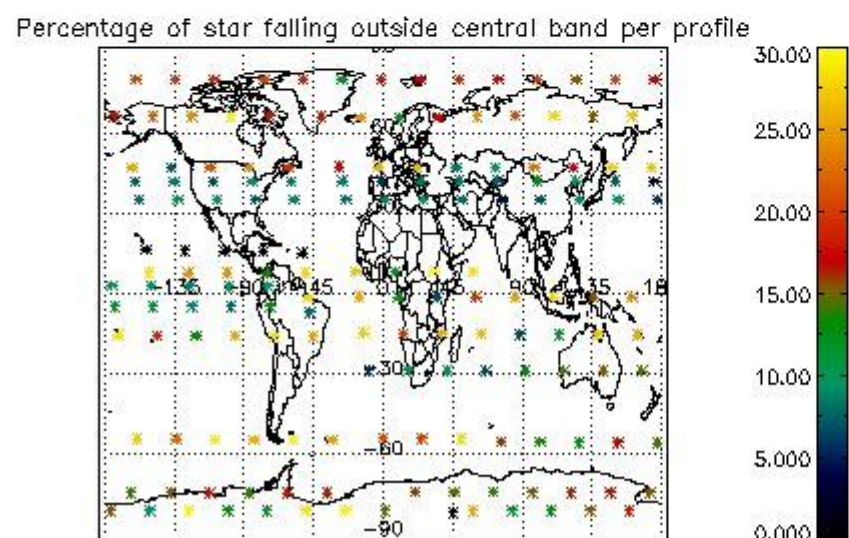
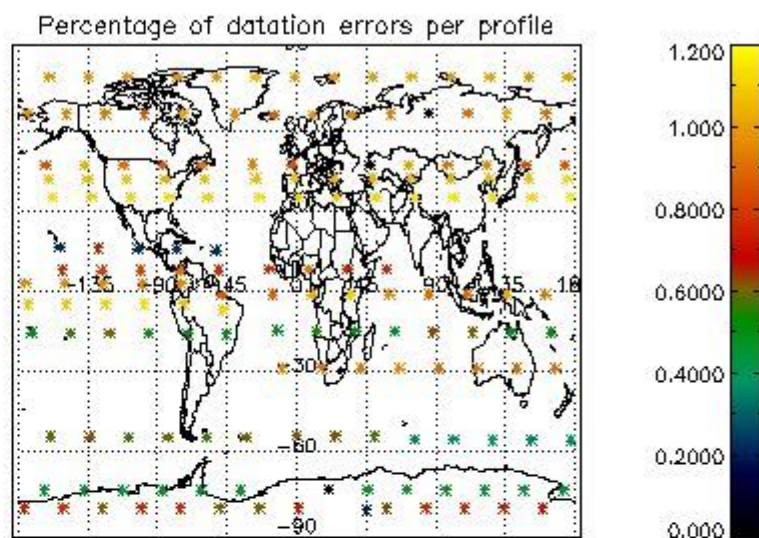
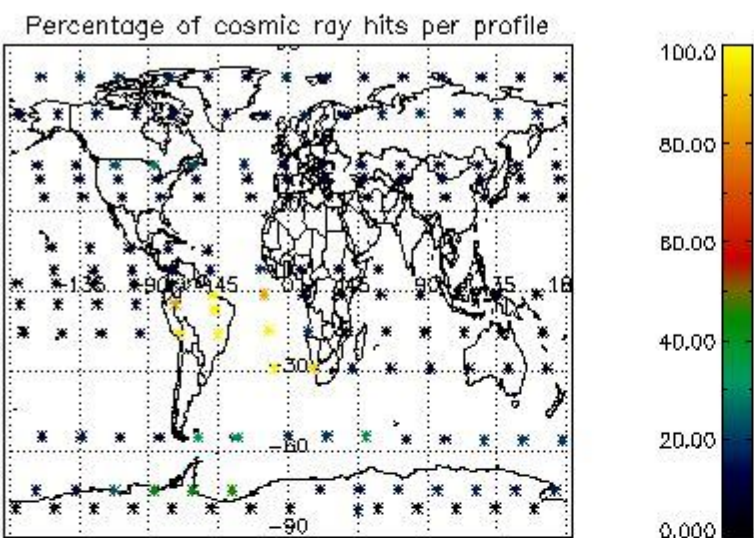


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

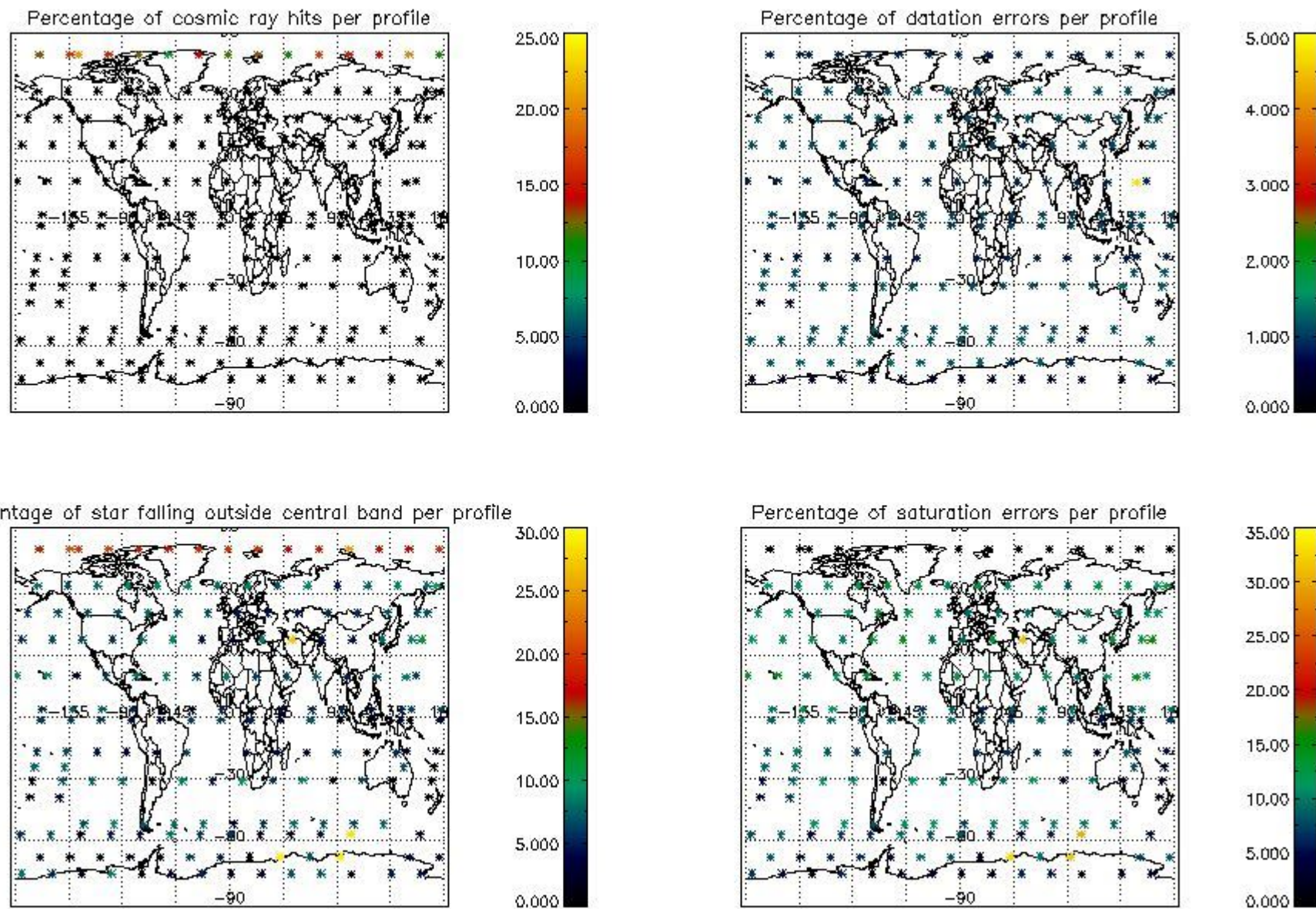


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

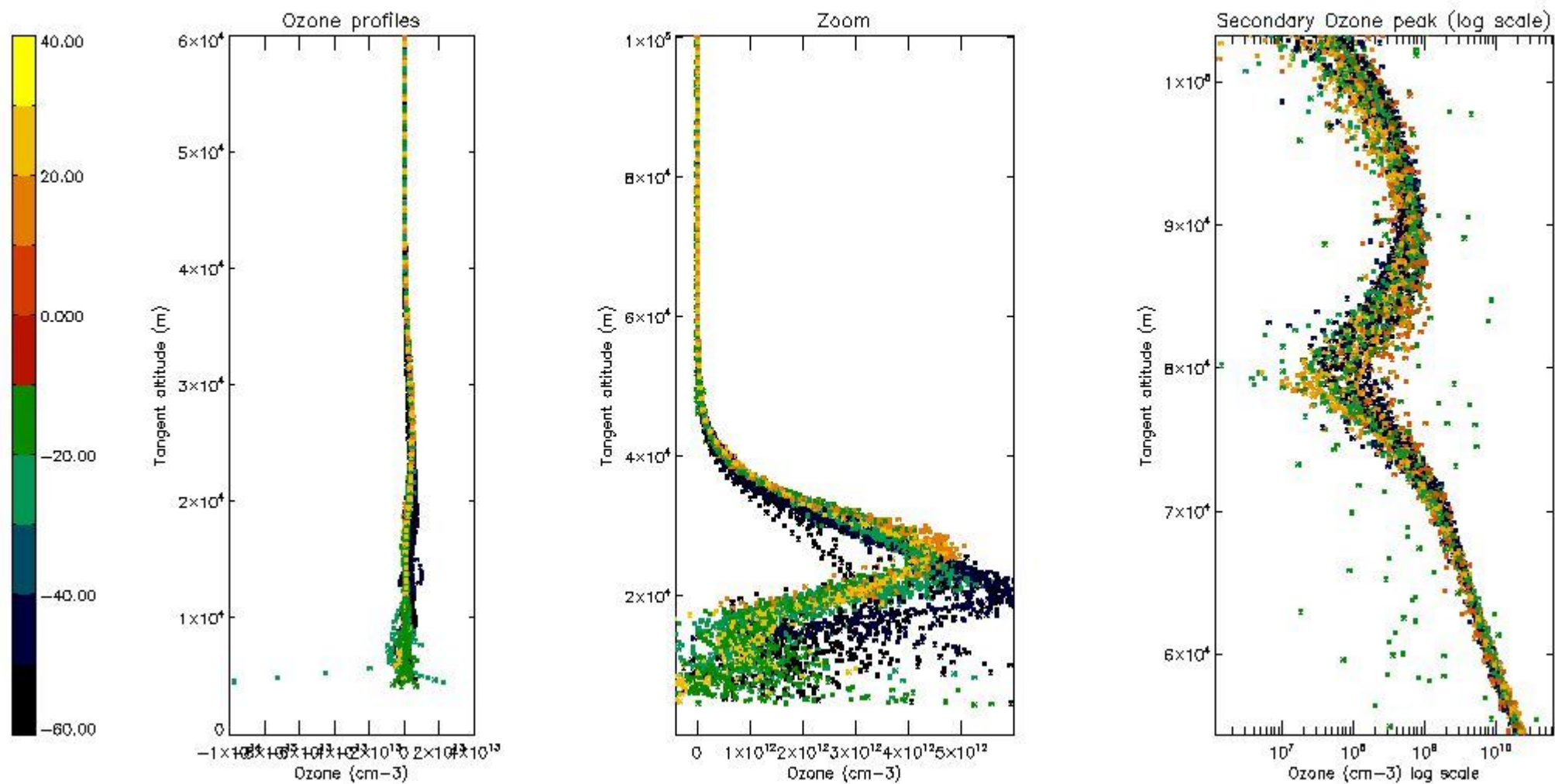
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	21

STD < 10	19
STD < 5	14

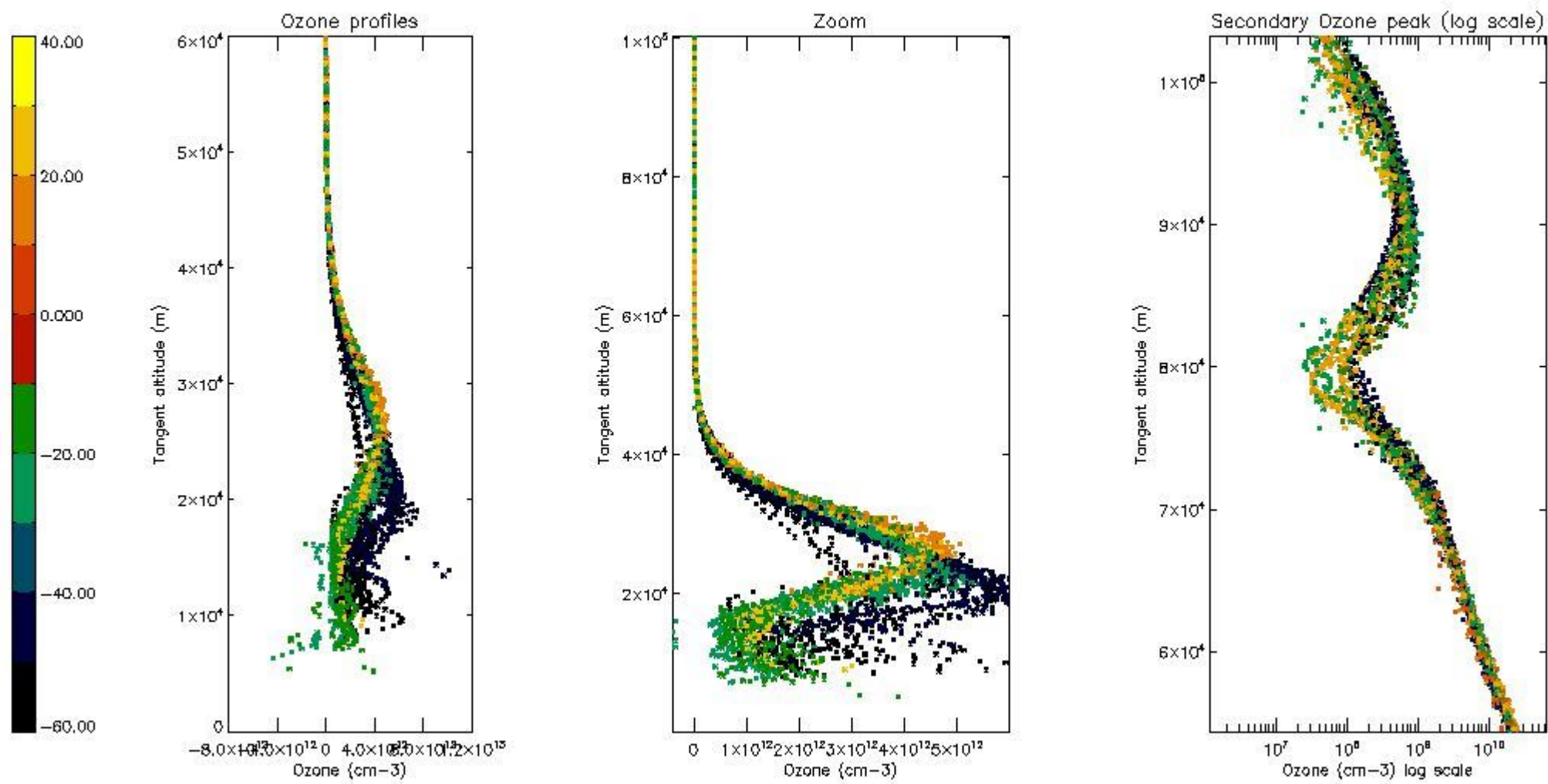
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



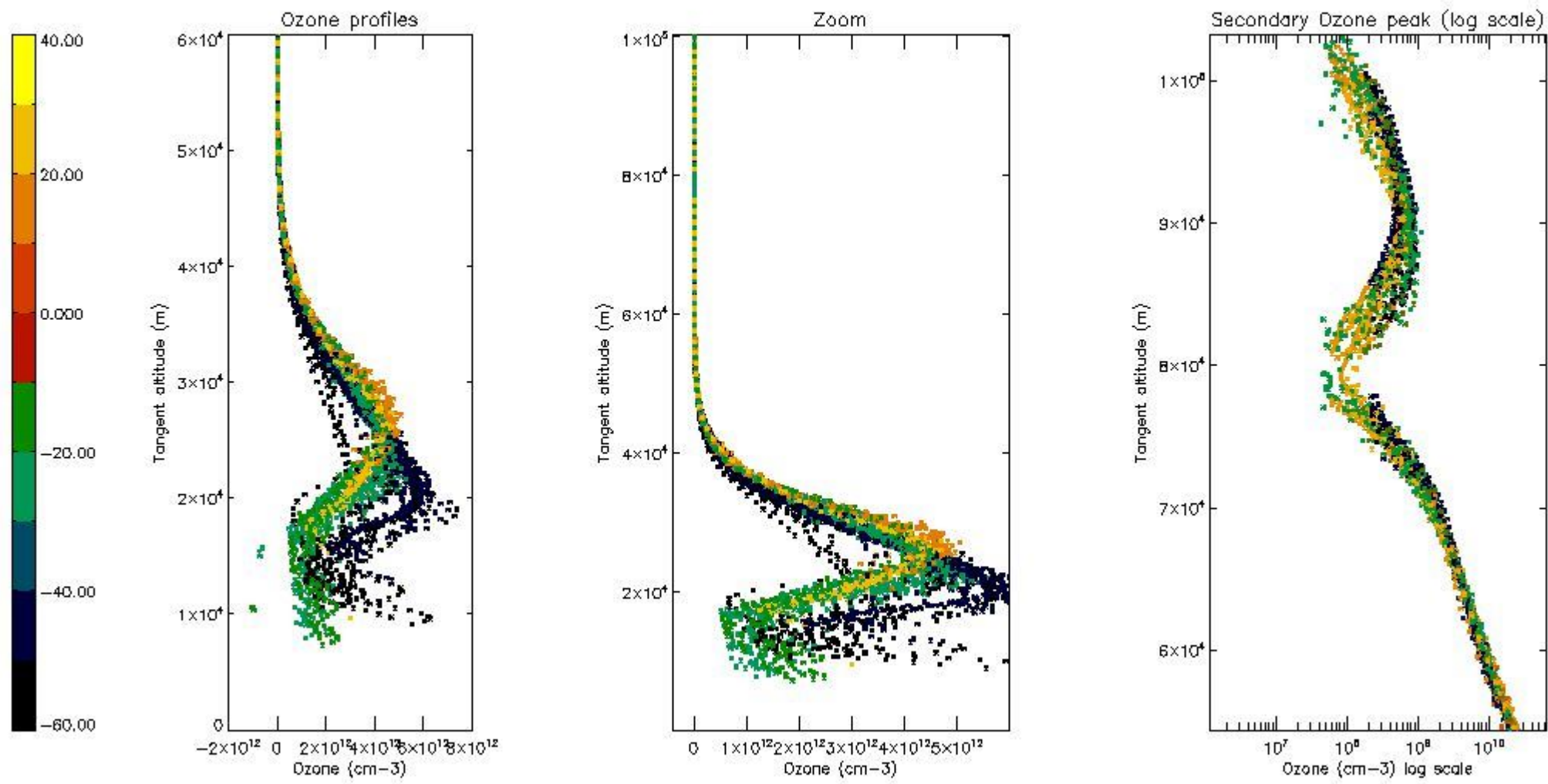
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



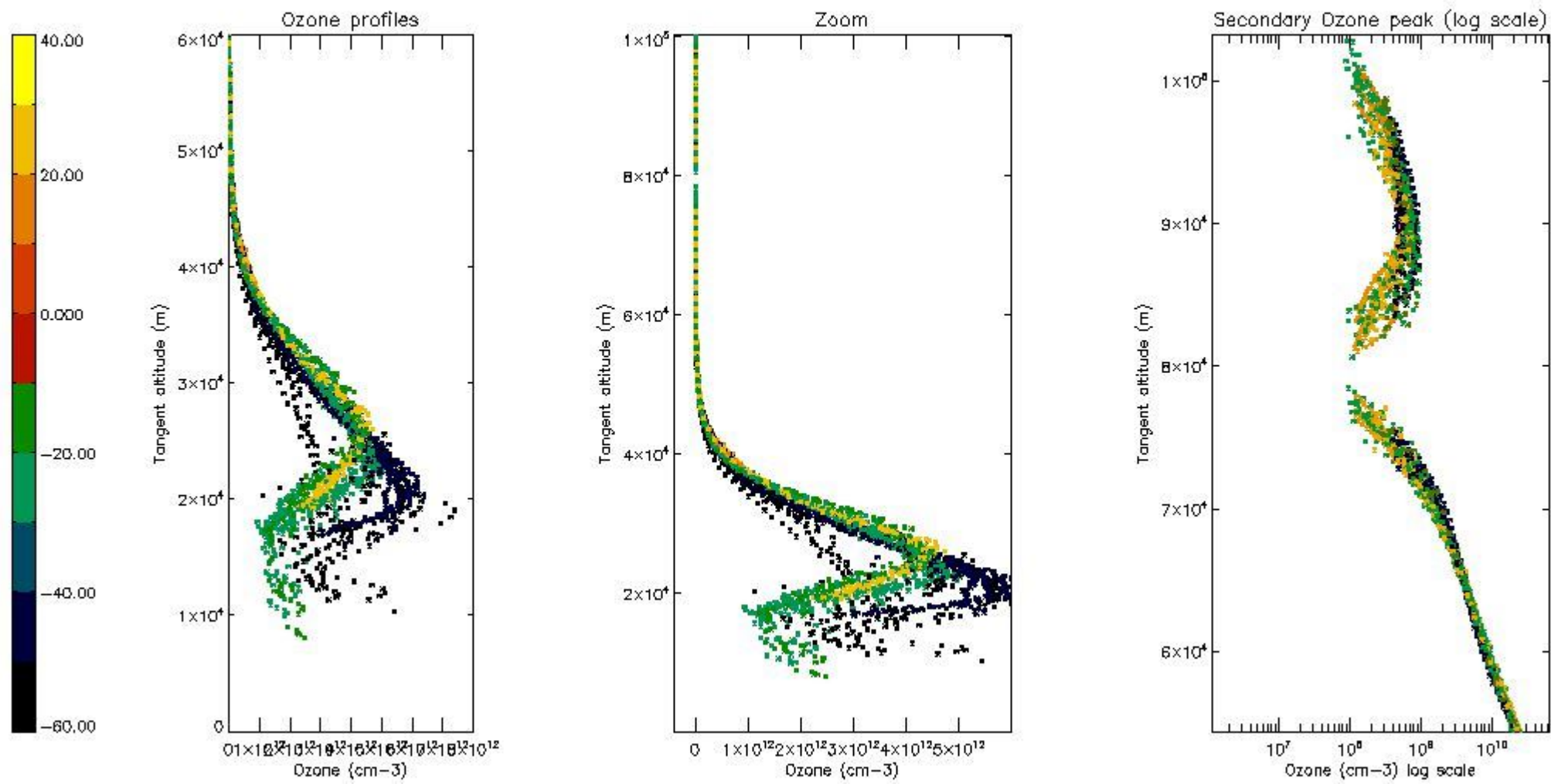
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



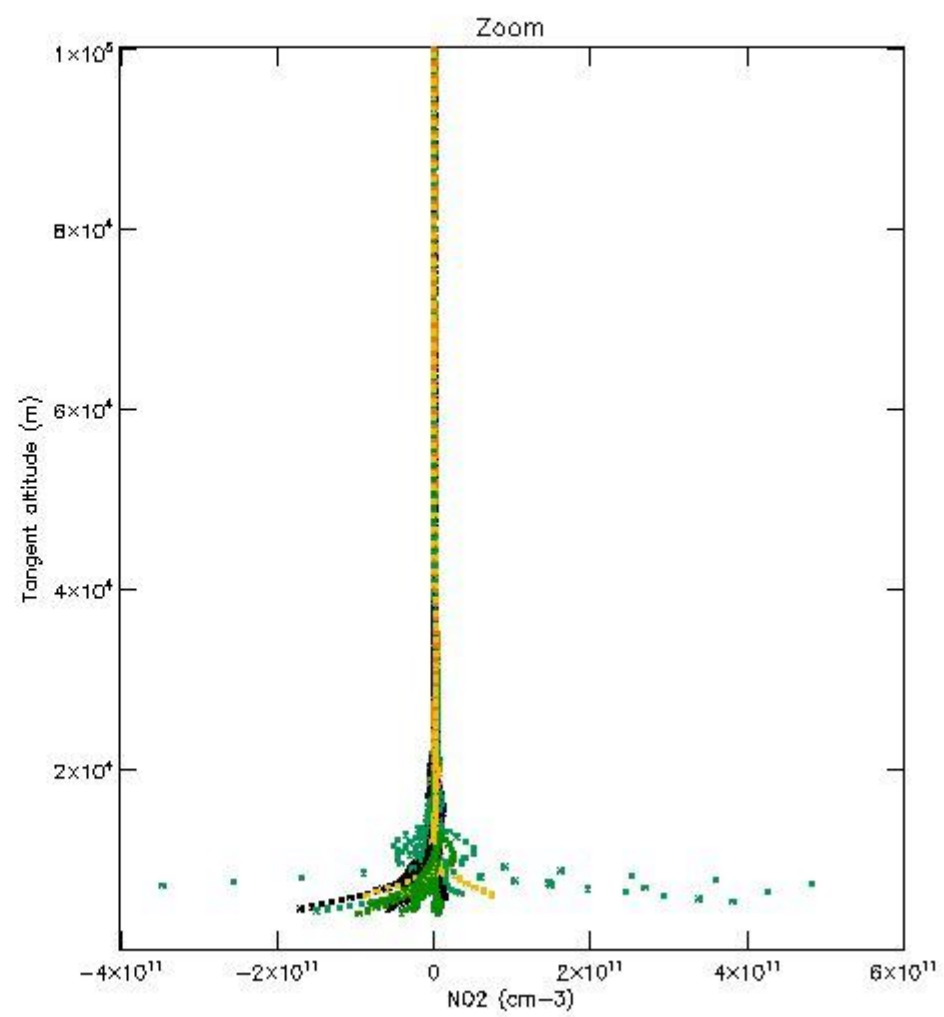
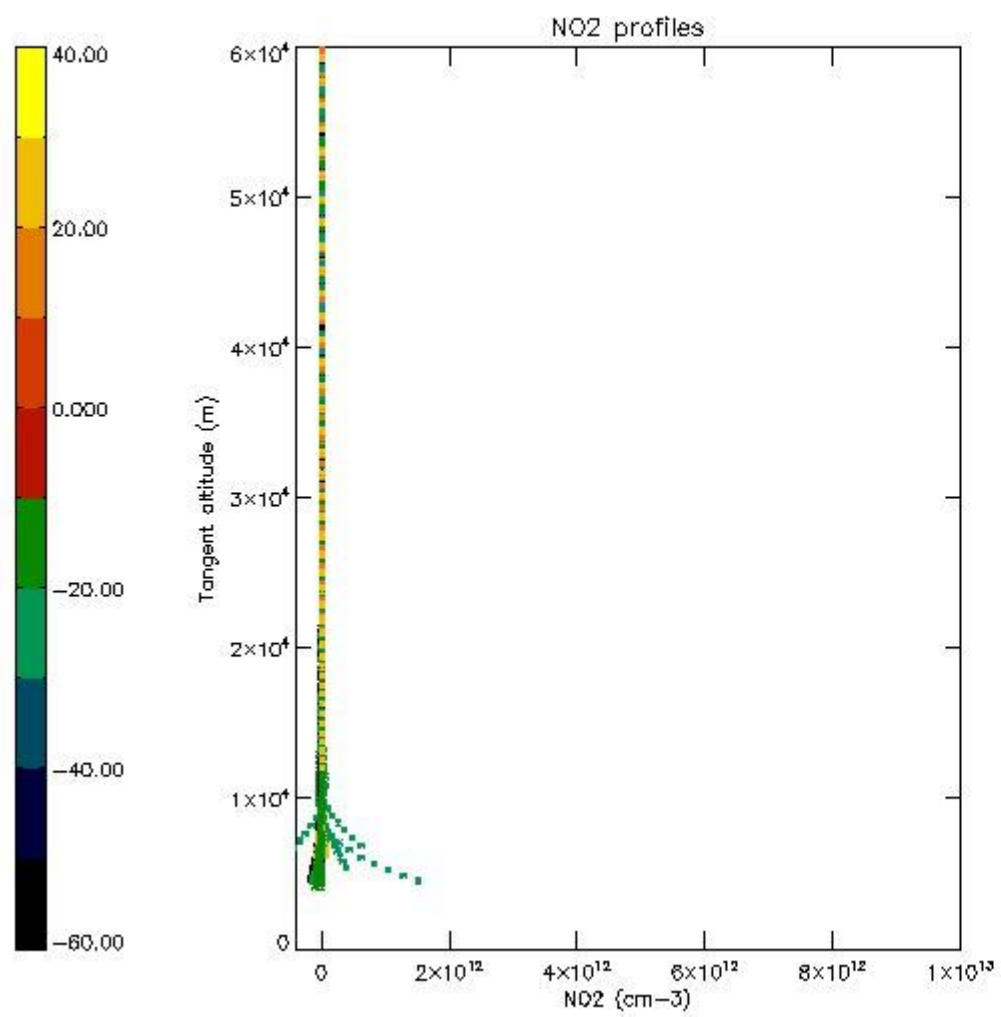
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



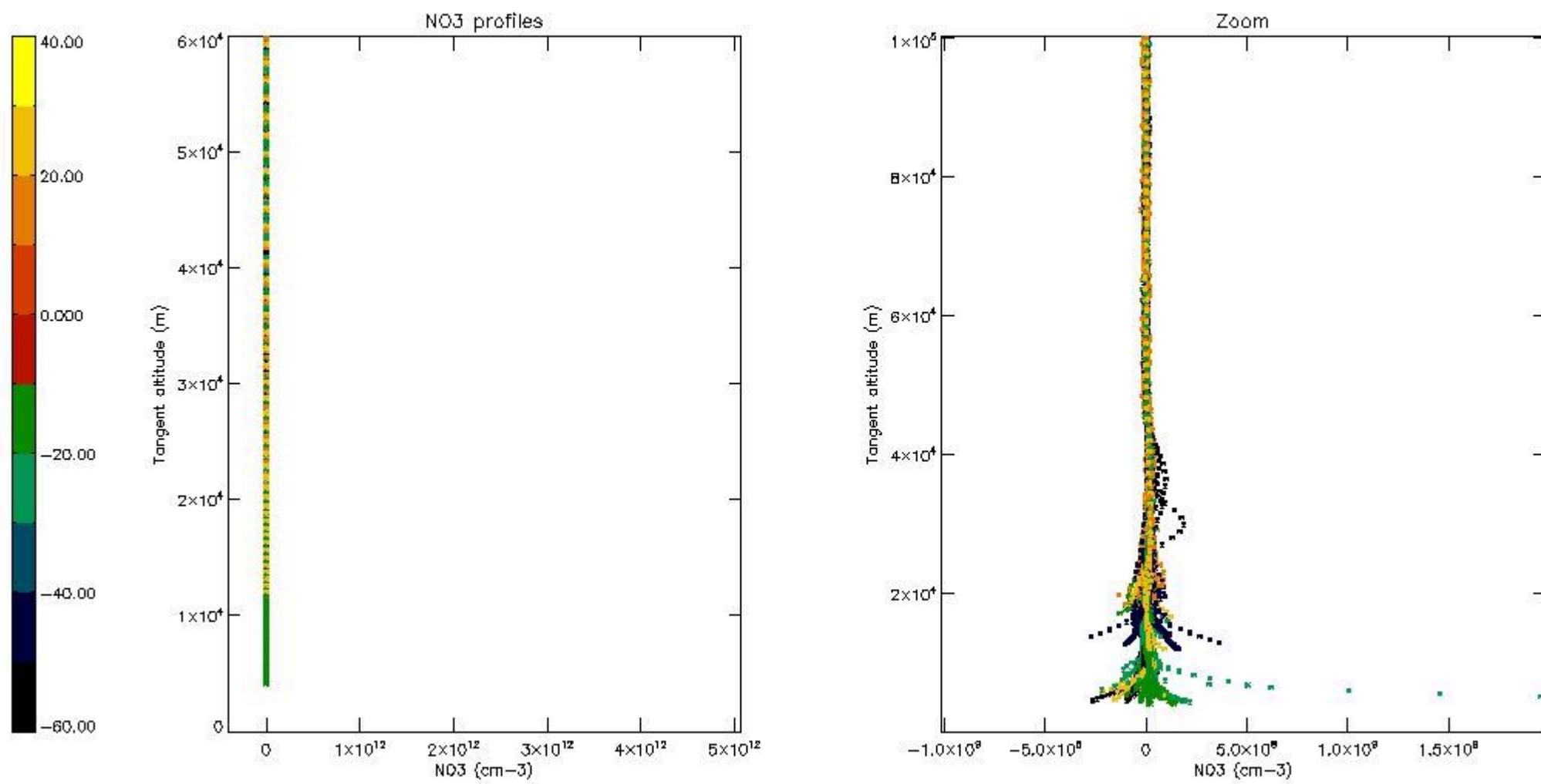
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



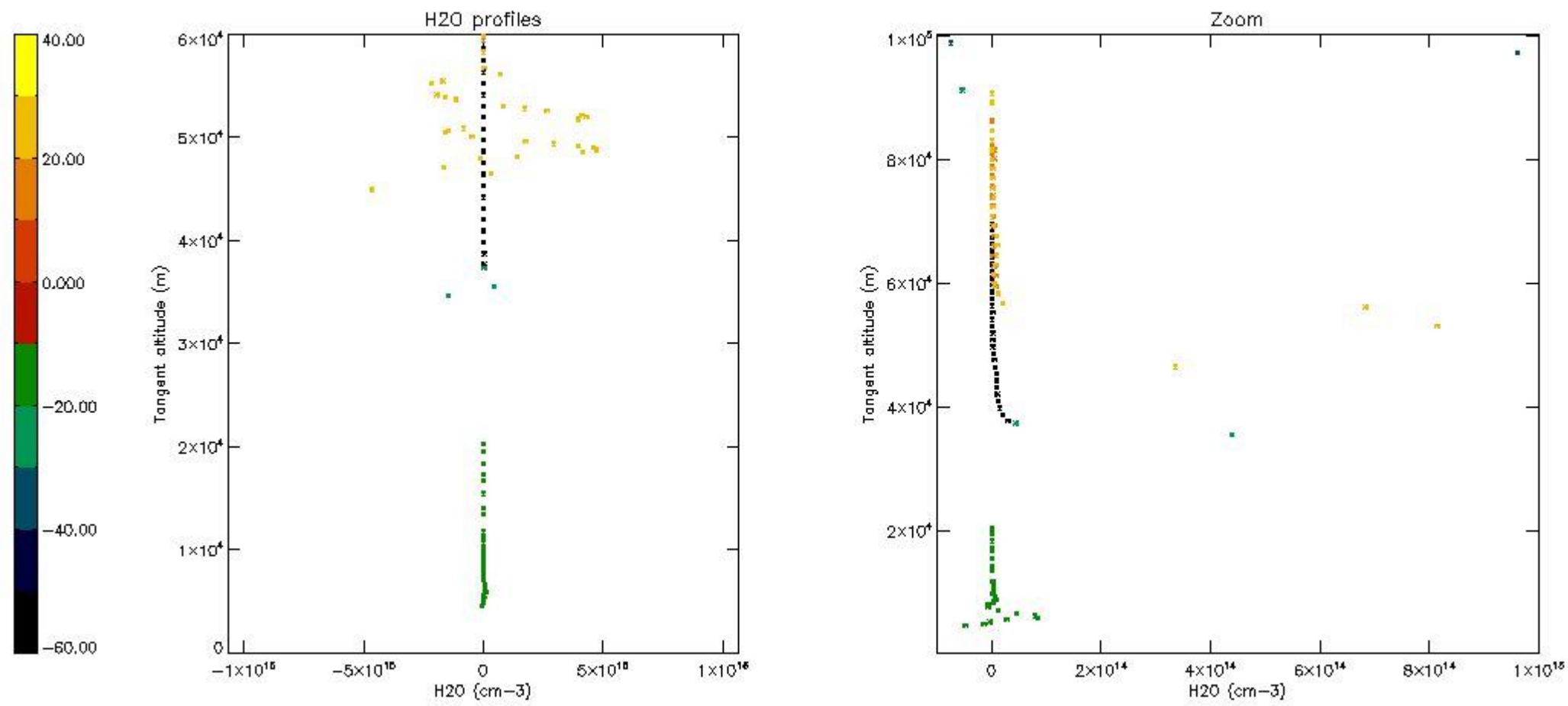
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

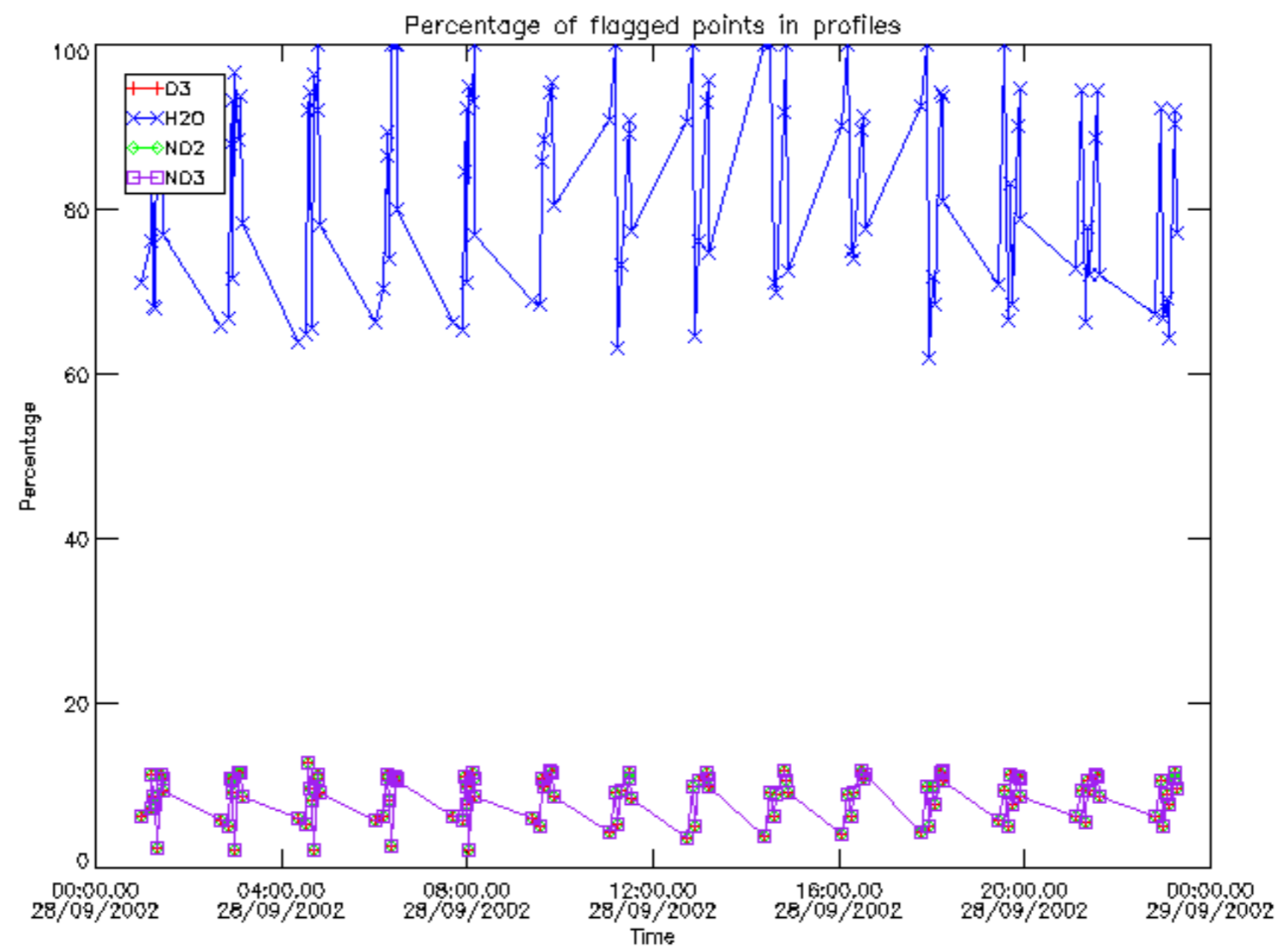
The colorbar represents the latitude.



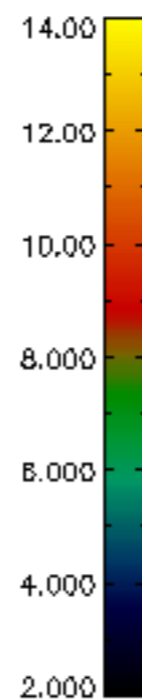
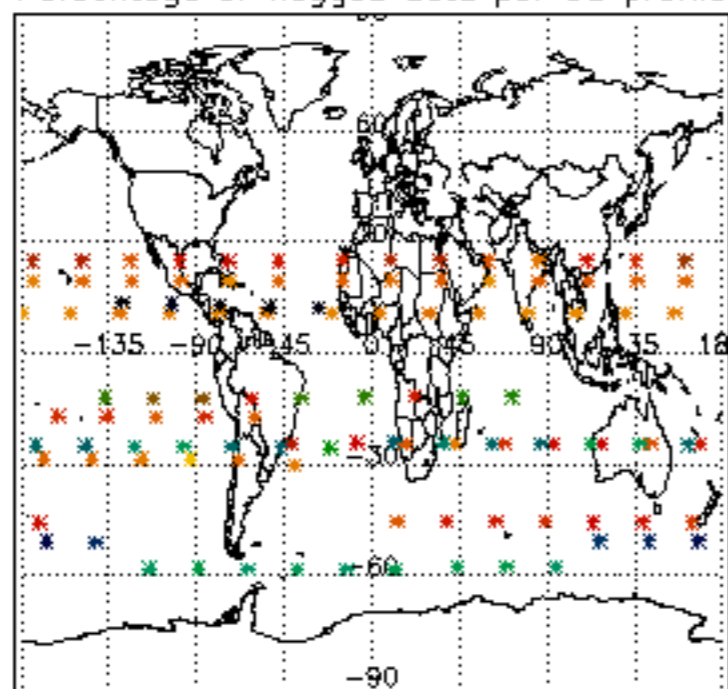
6. Auxiliary Data Files used for the production reported in section 2

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.

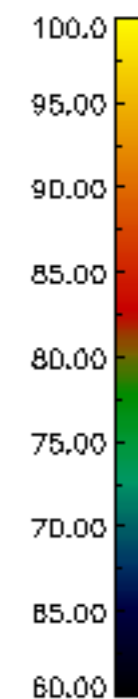
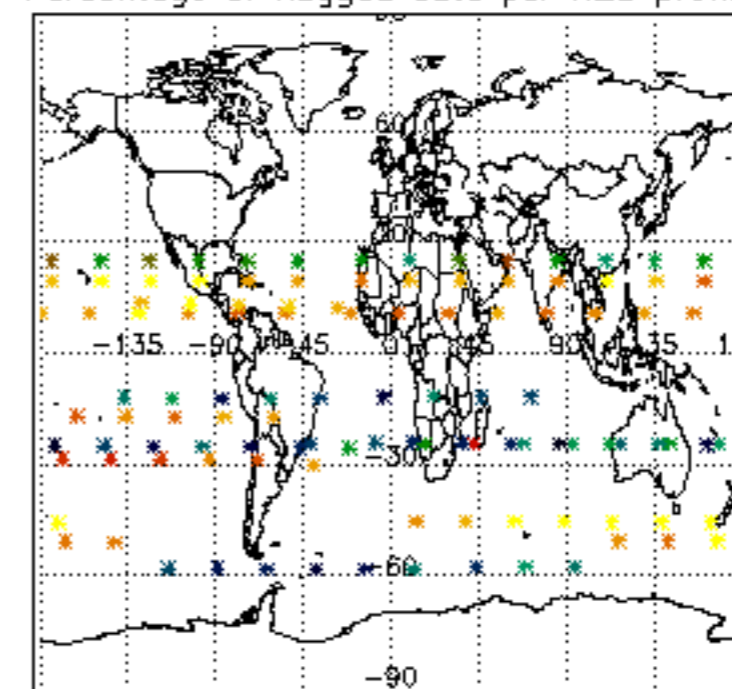
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	28-SEP-2002 00:00:05
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-SEP-2002 00:00:05
CROSS_SECTIONS_FILE	GOM_CR2_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-SEP-2002 00:00:05



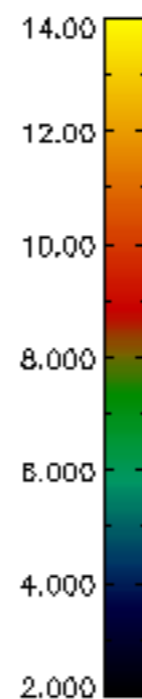
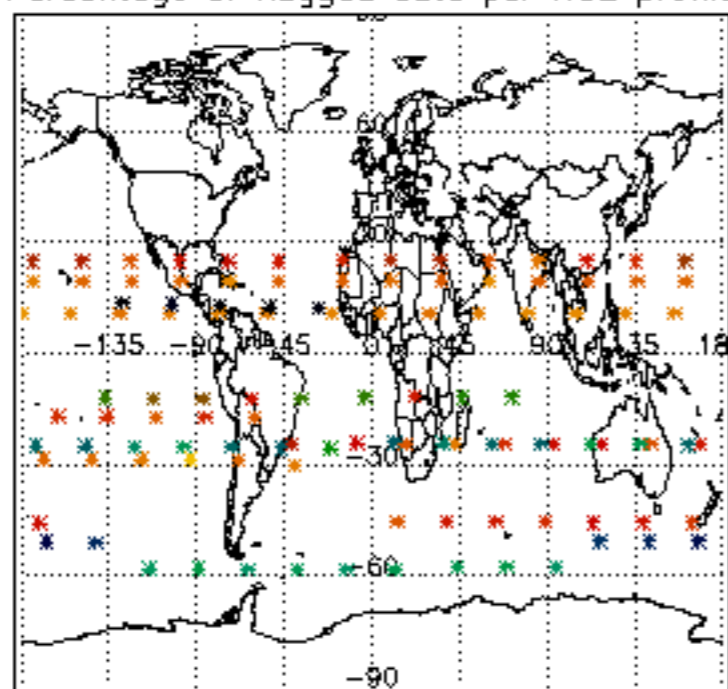
Percentage of flagged data per D3 profile



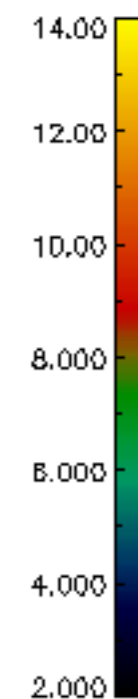
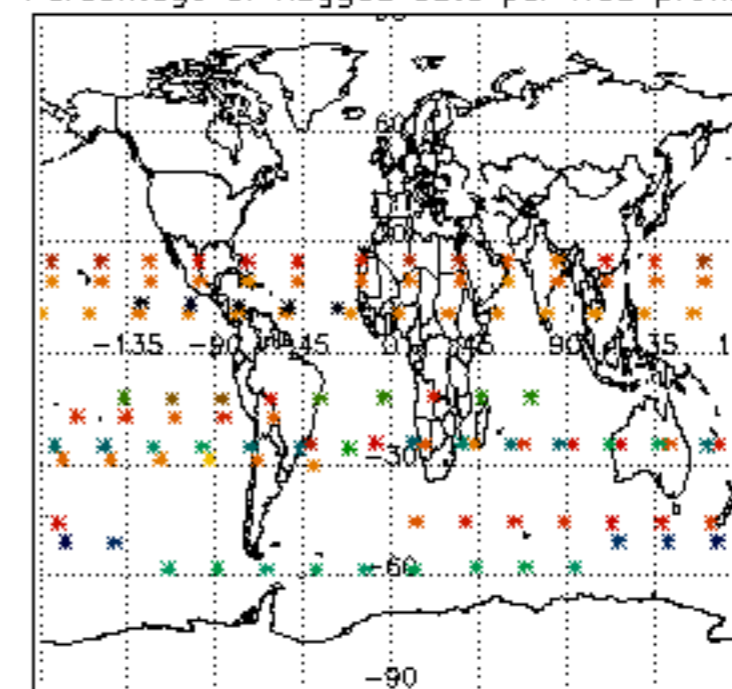
Percentage of flagged data per H2O profile

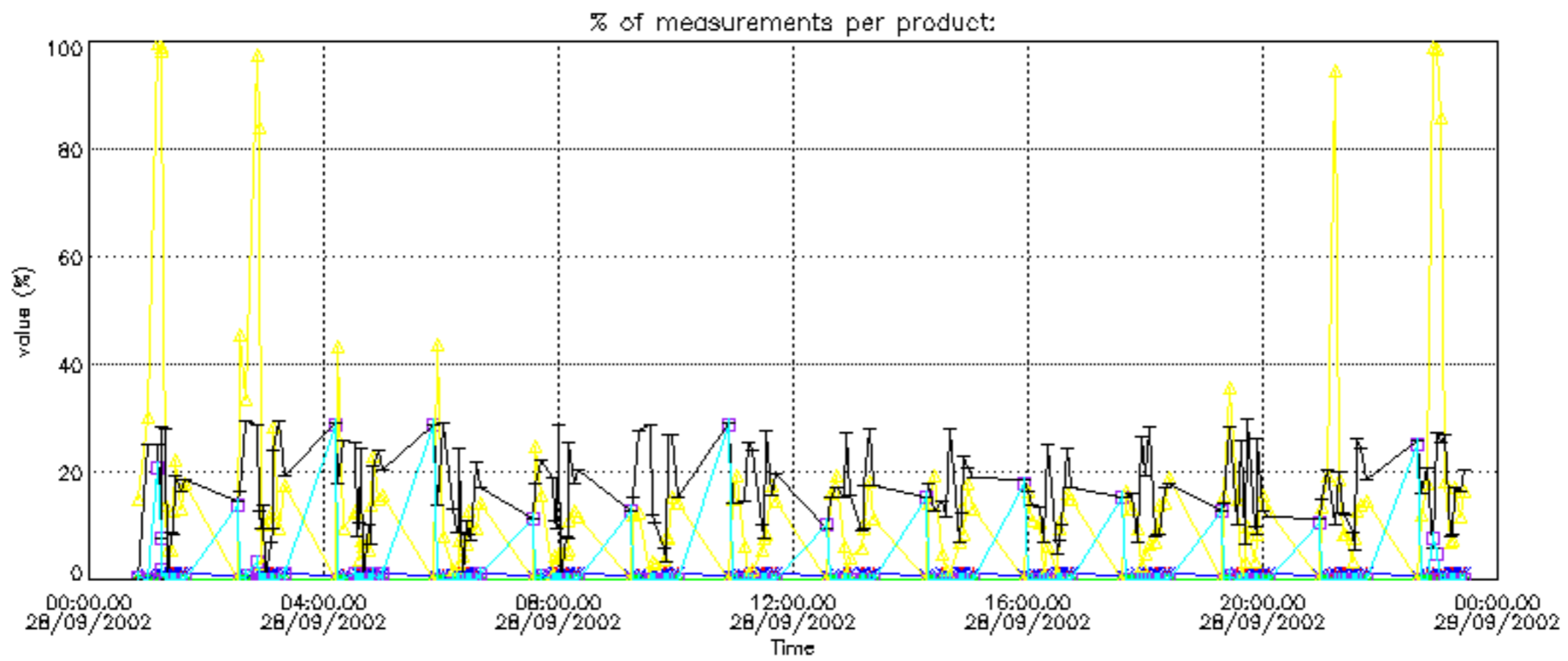
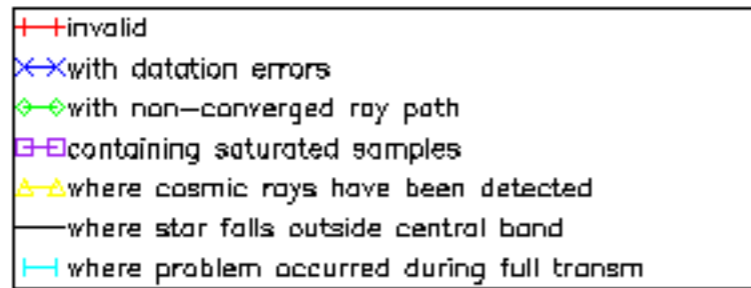


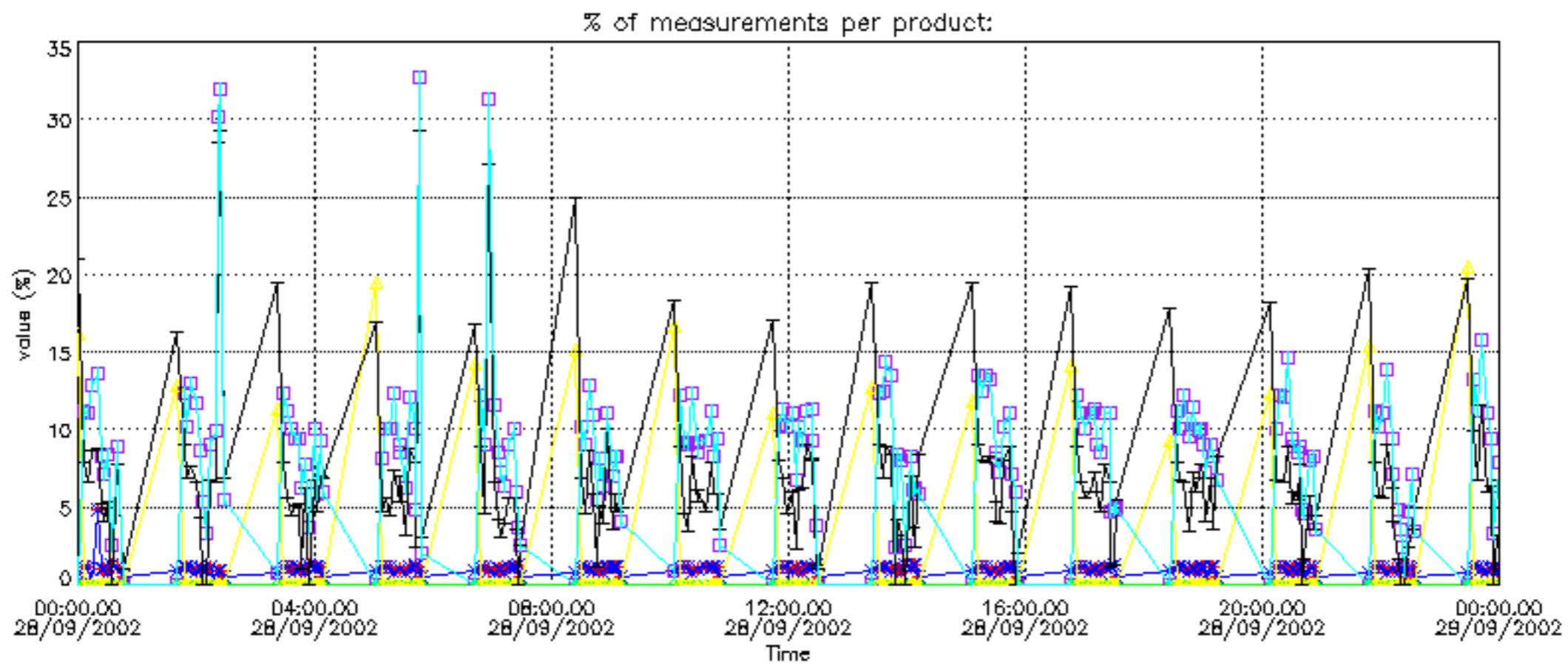
Percentage of flagged data per NO2 profile



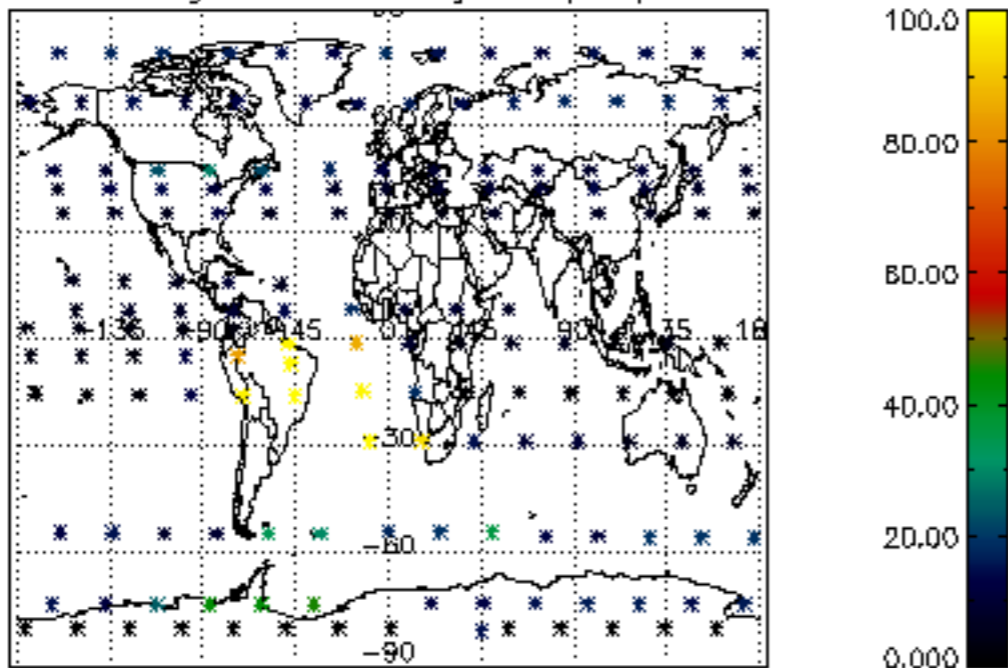
Percentage of flagged data per NO3 profile



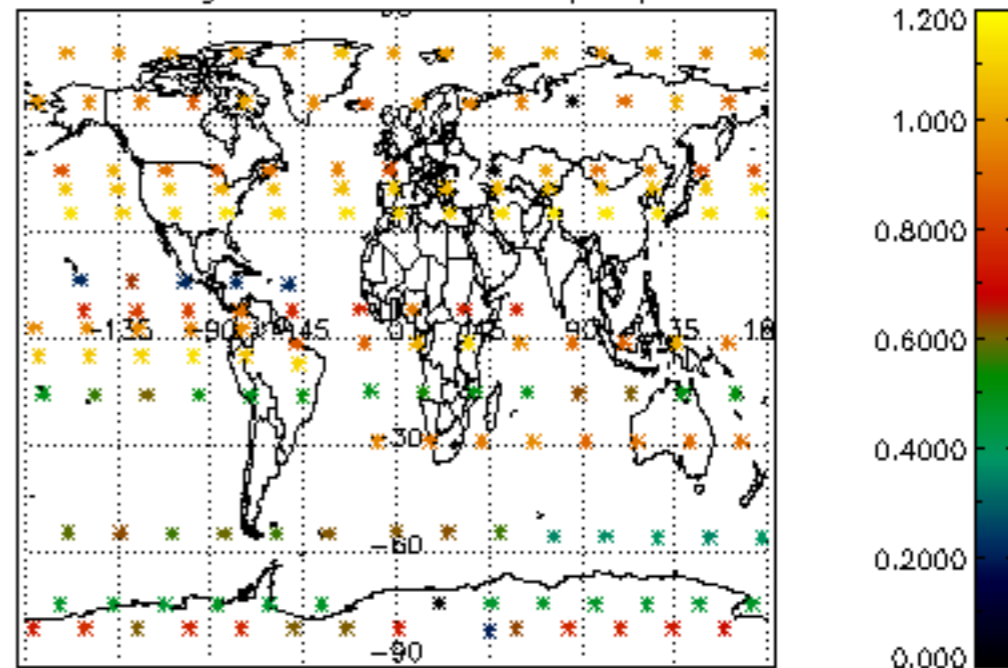




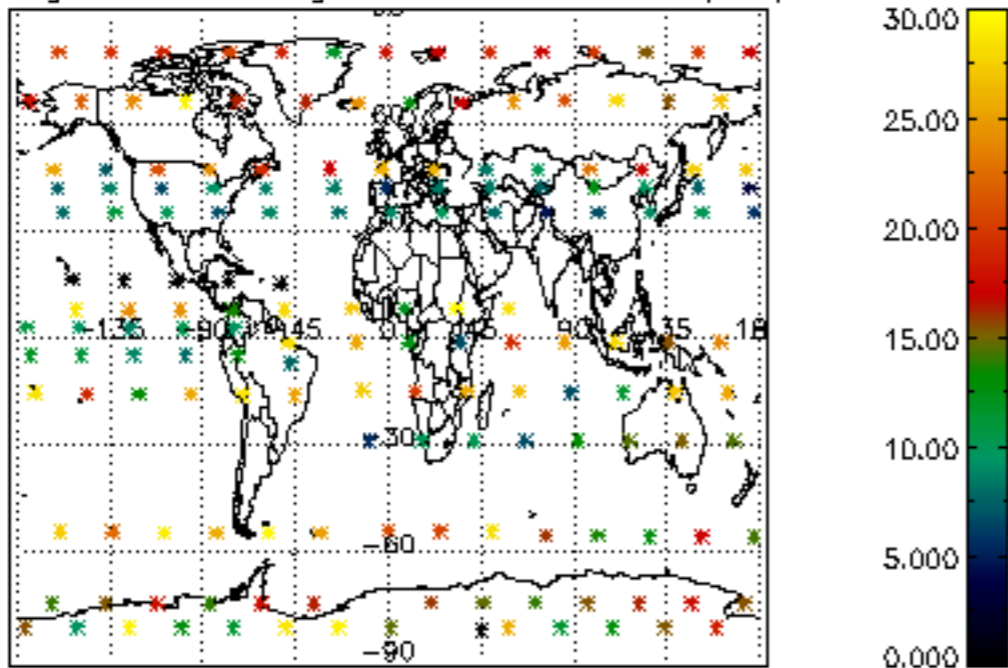
Percentage of cosmic ray hits per profile



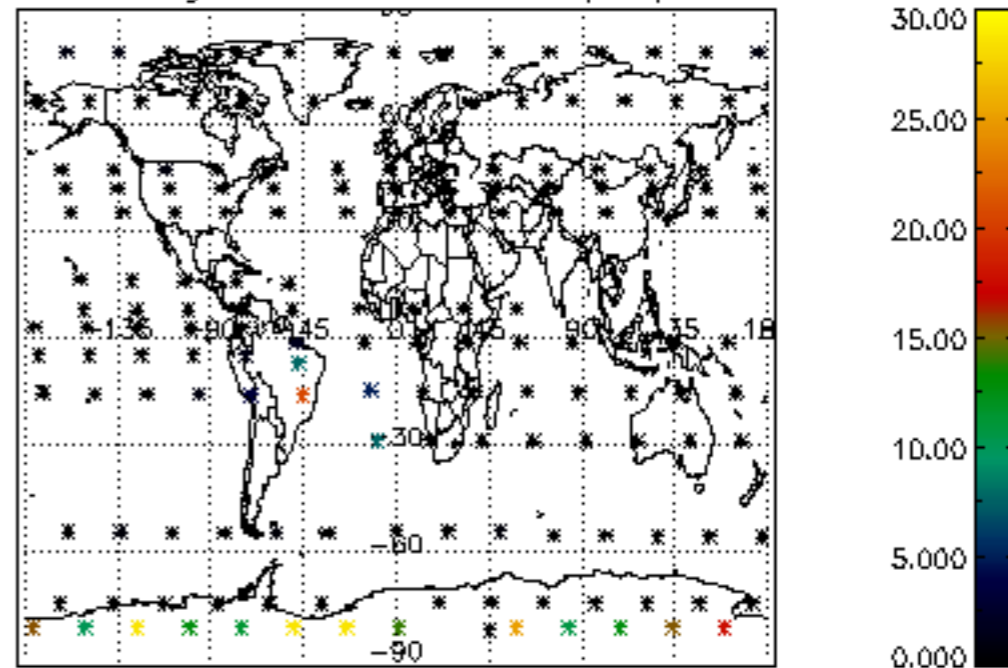
Percentage of datation errors per profile



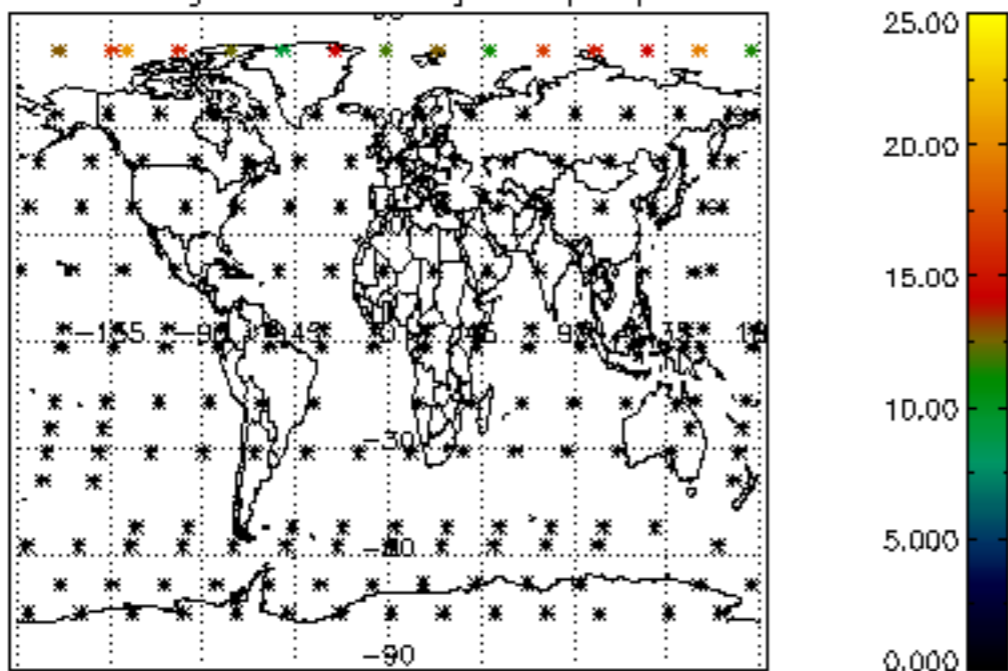
Percentage of star falling outside central band per profile



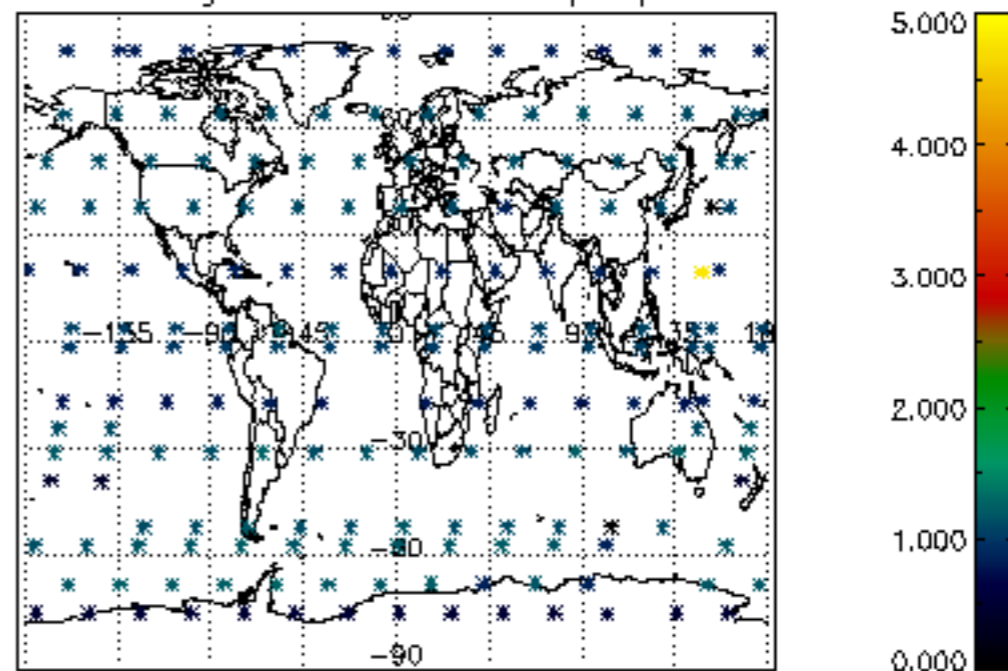
Percentage of saturation errors per profile



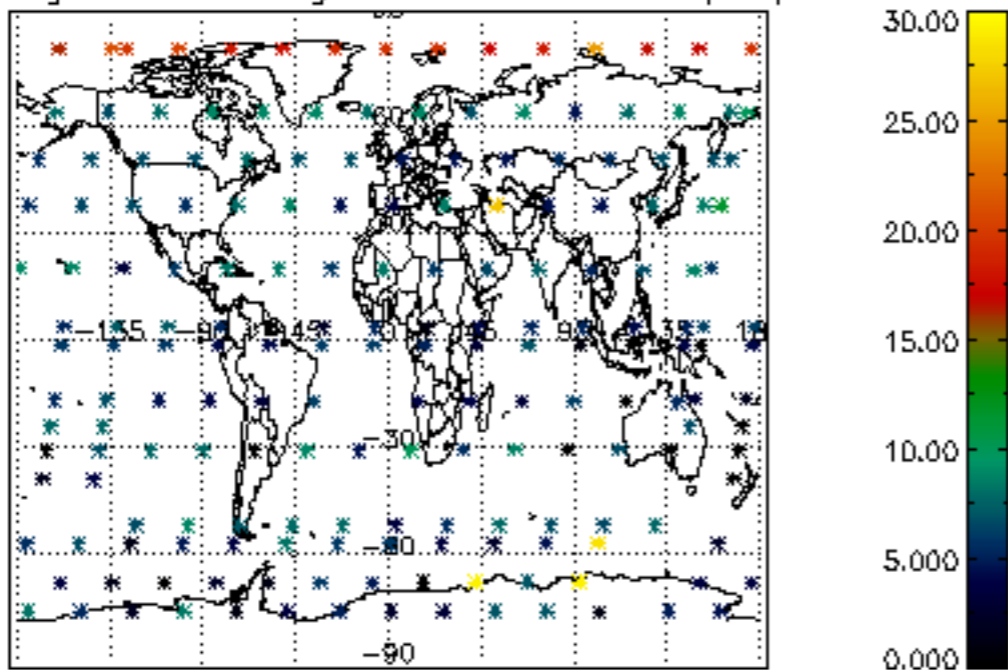
Percentage of cosmic ray hits per profile



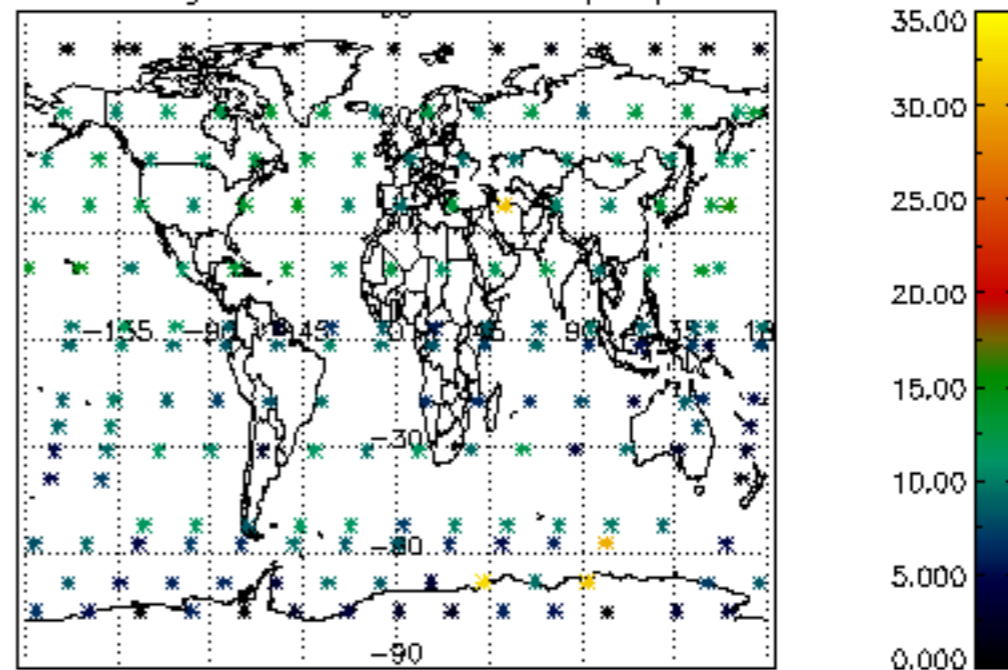
Percentage of datation errors per profile

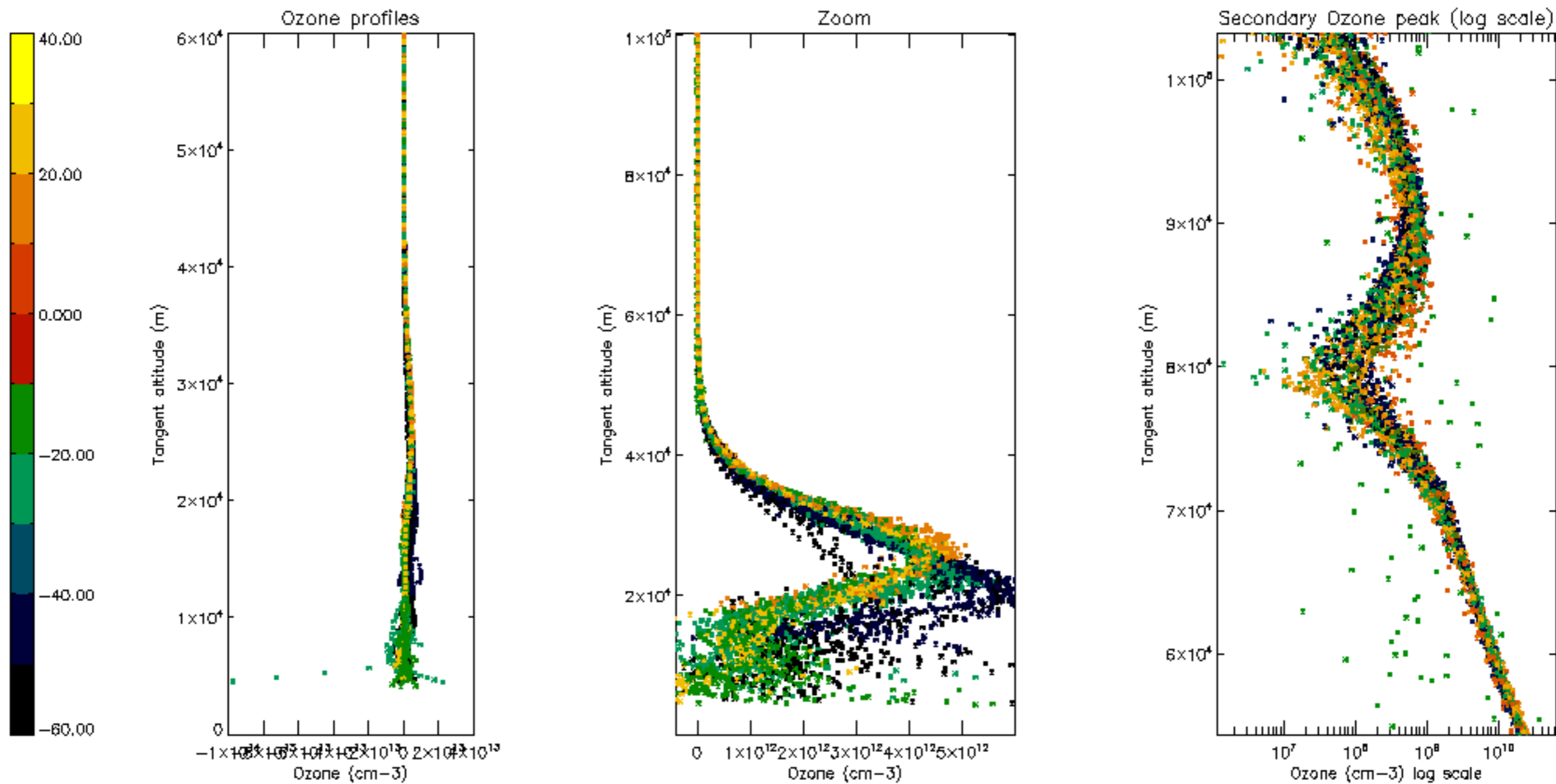


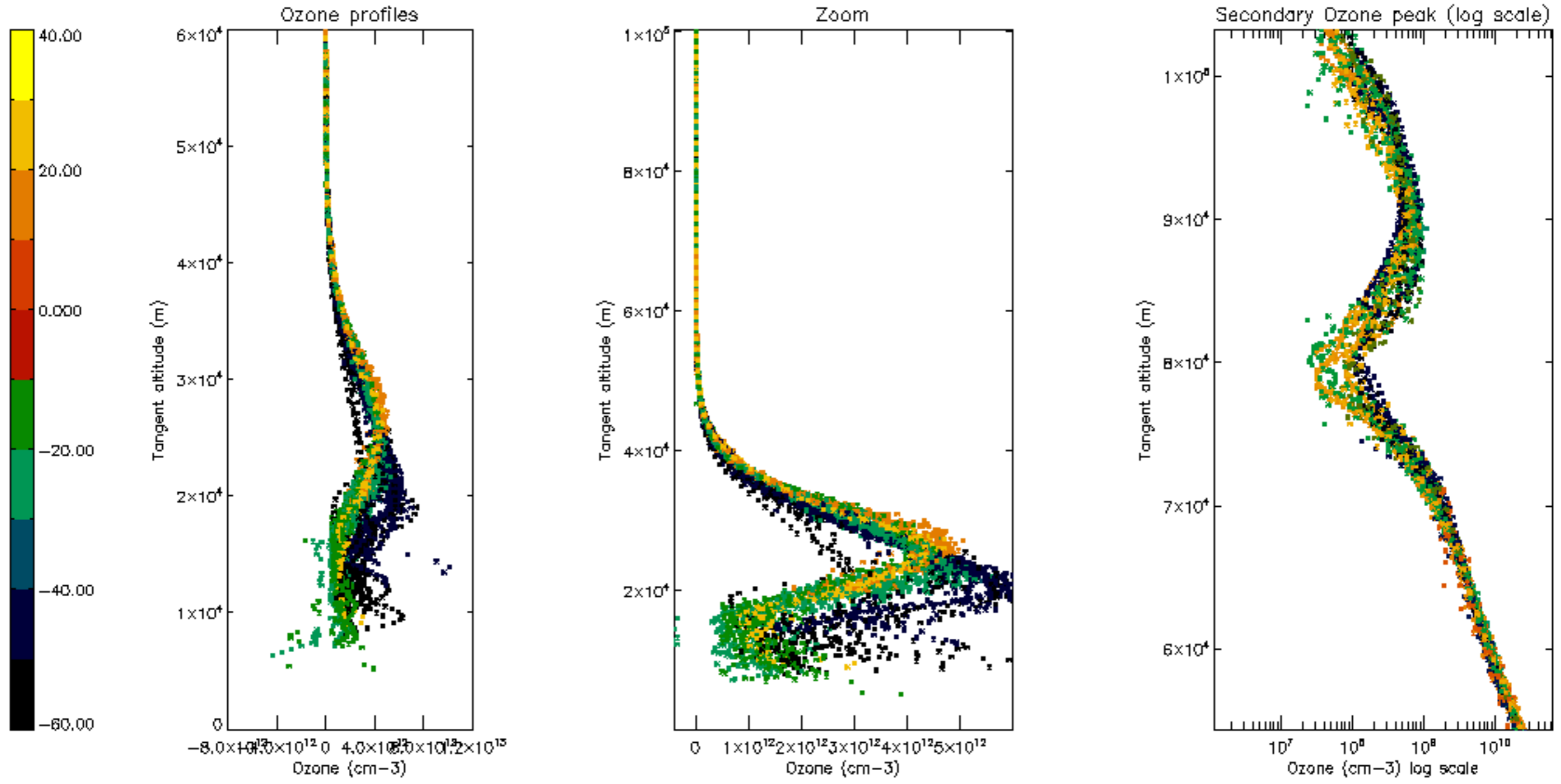
Percentage of star falling outside central band per profile

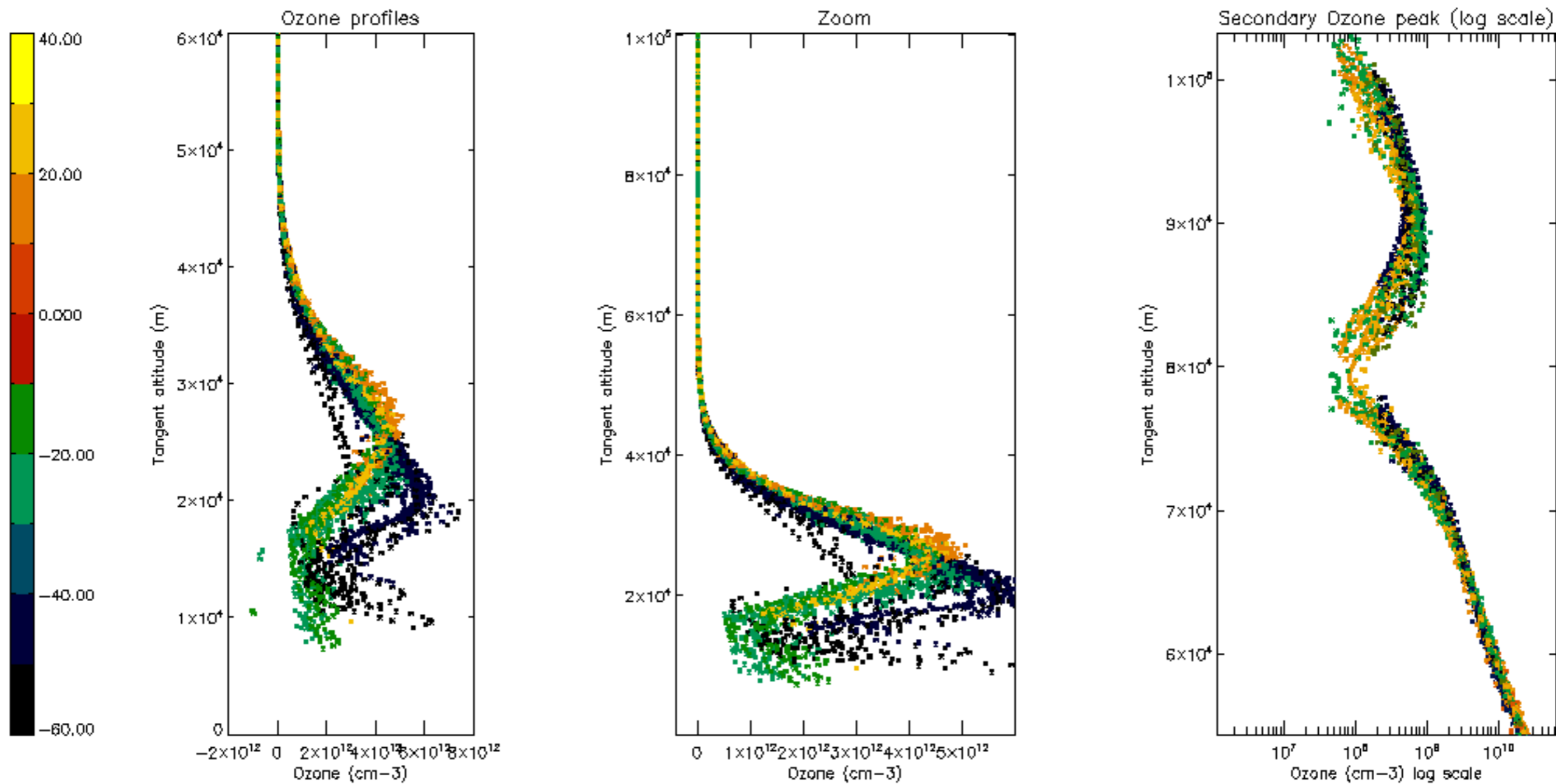


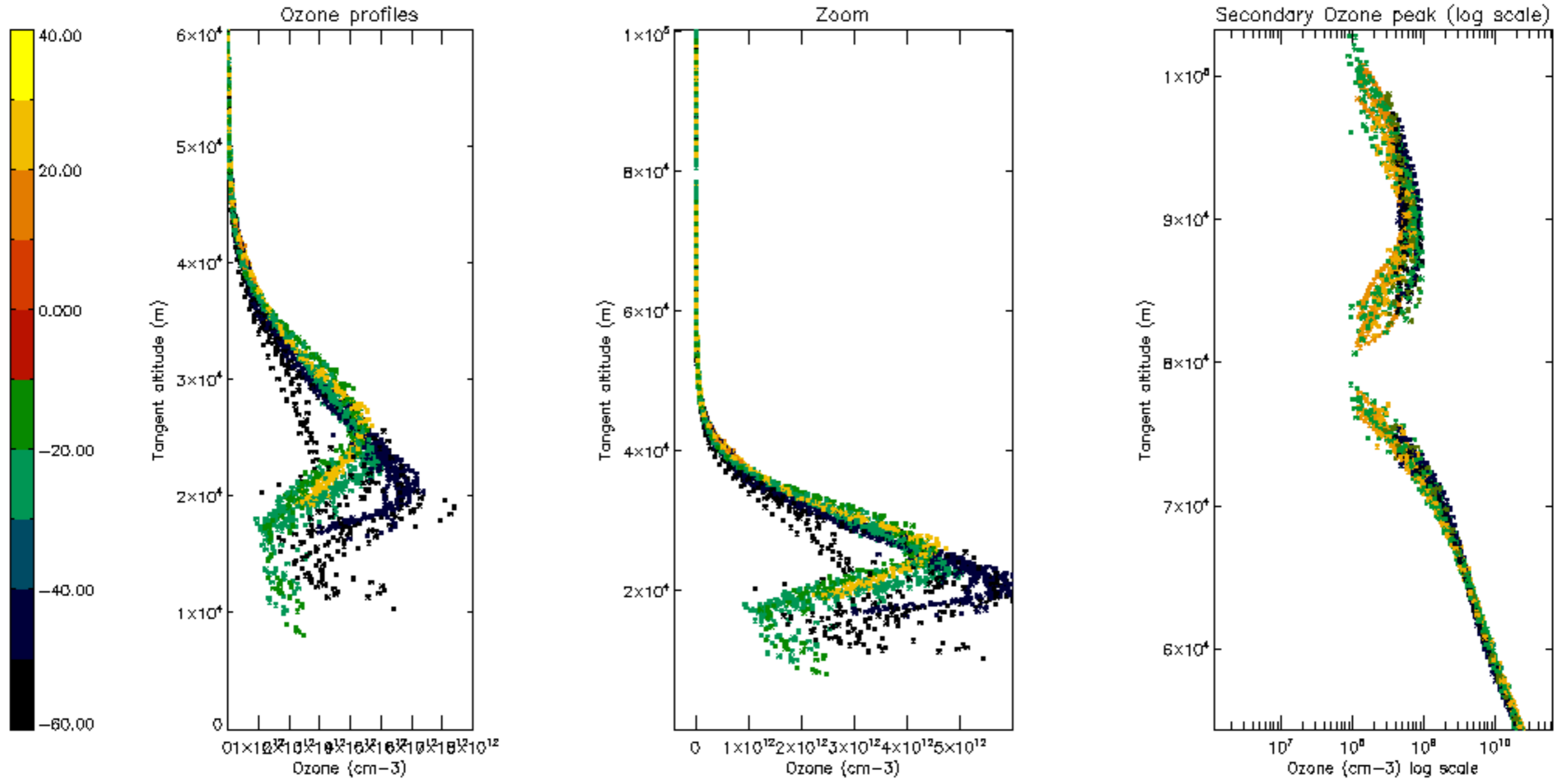
Percentage of saturation errors per profile

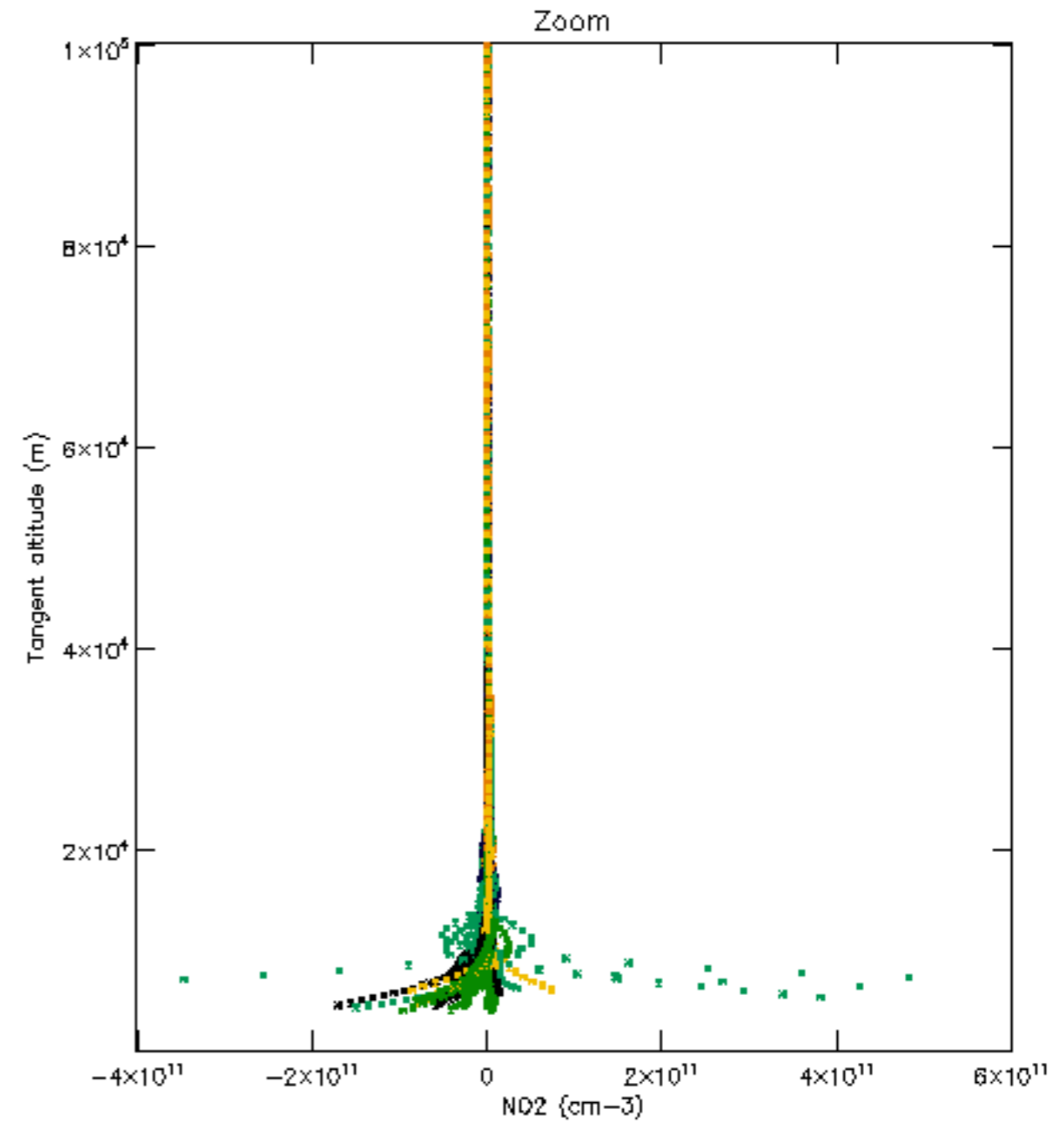
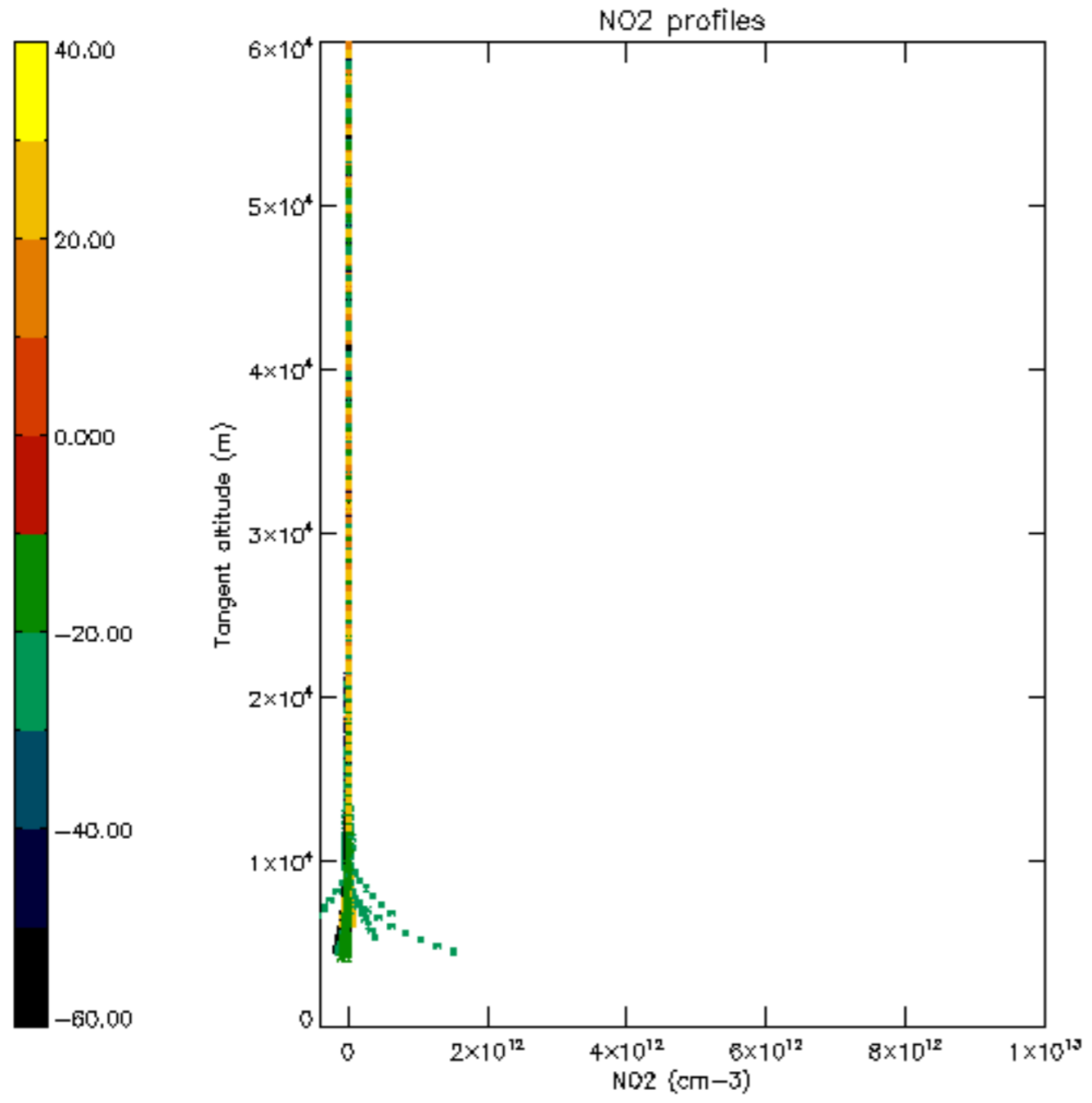


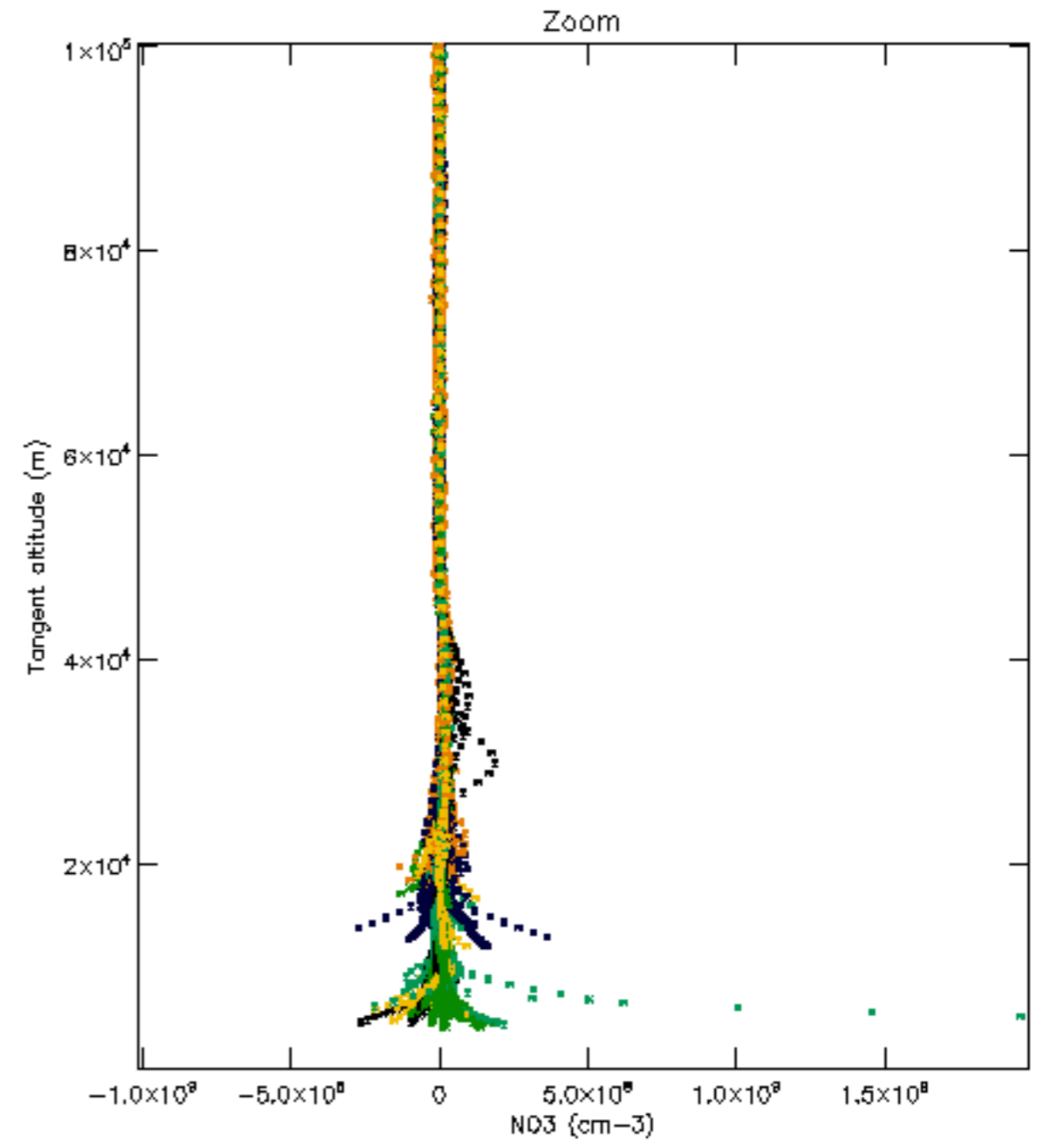
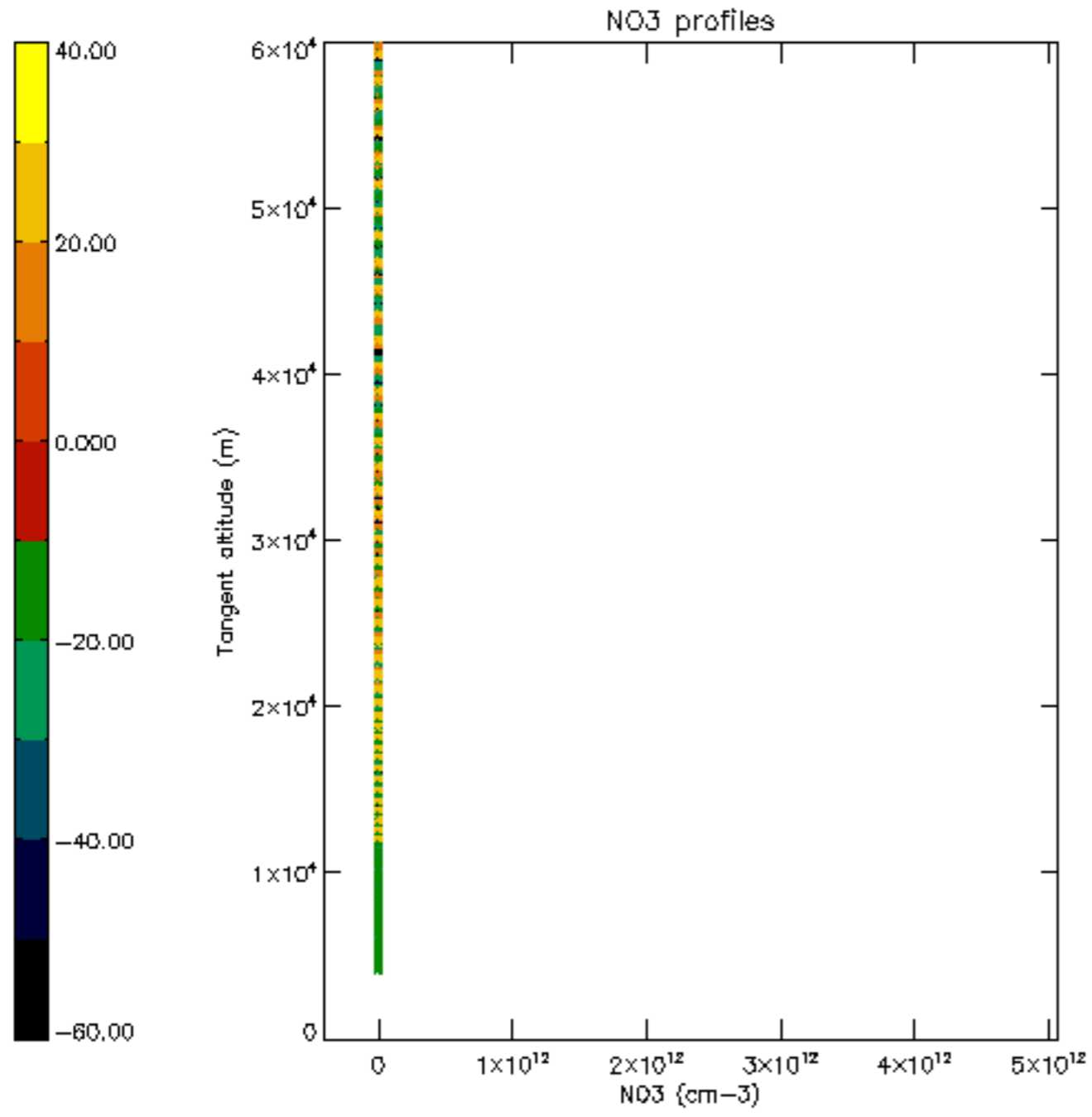


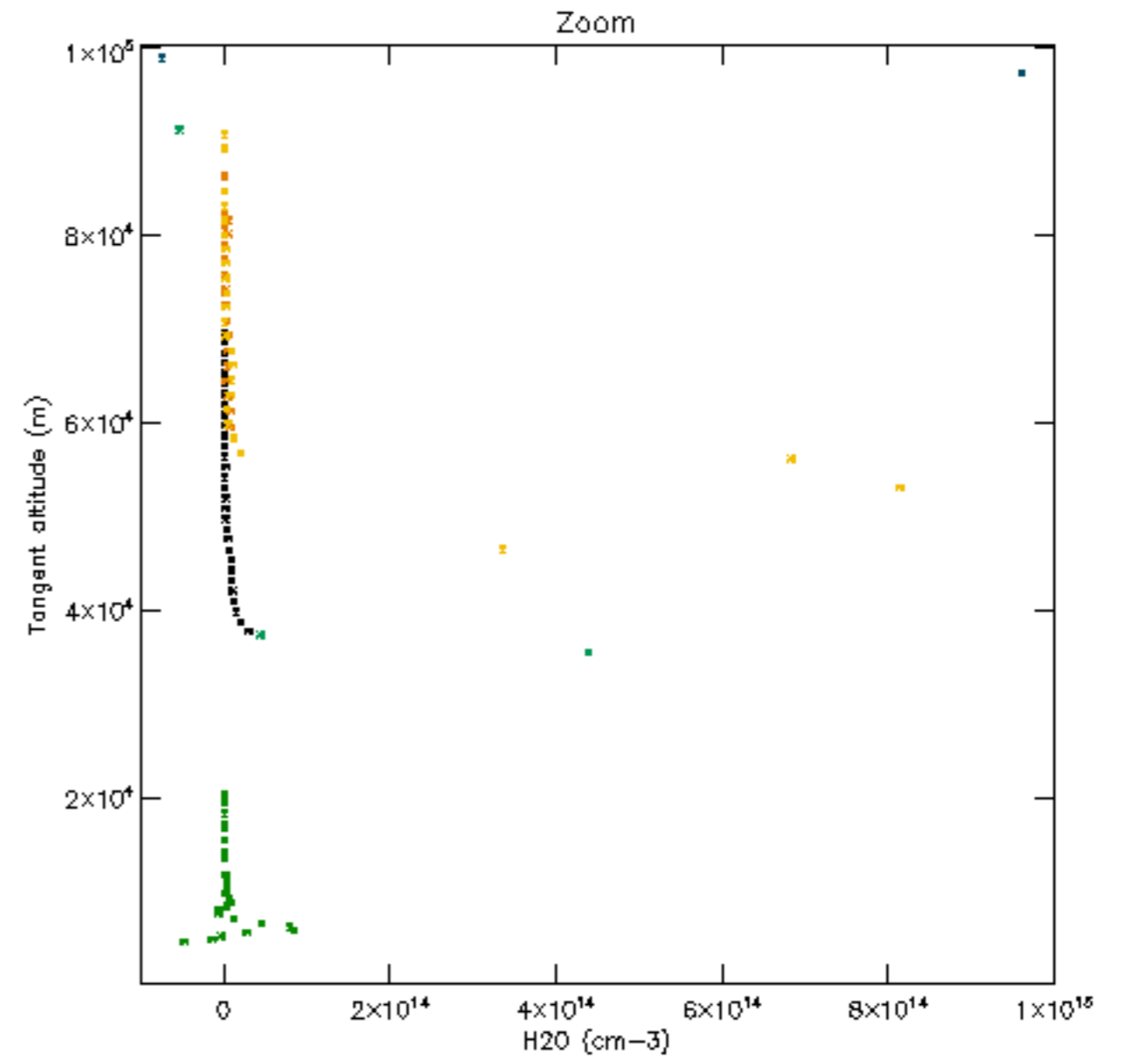
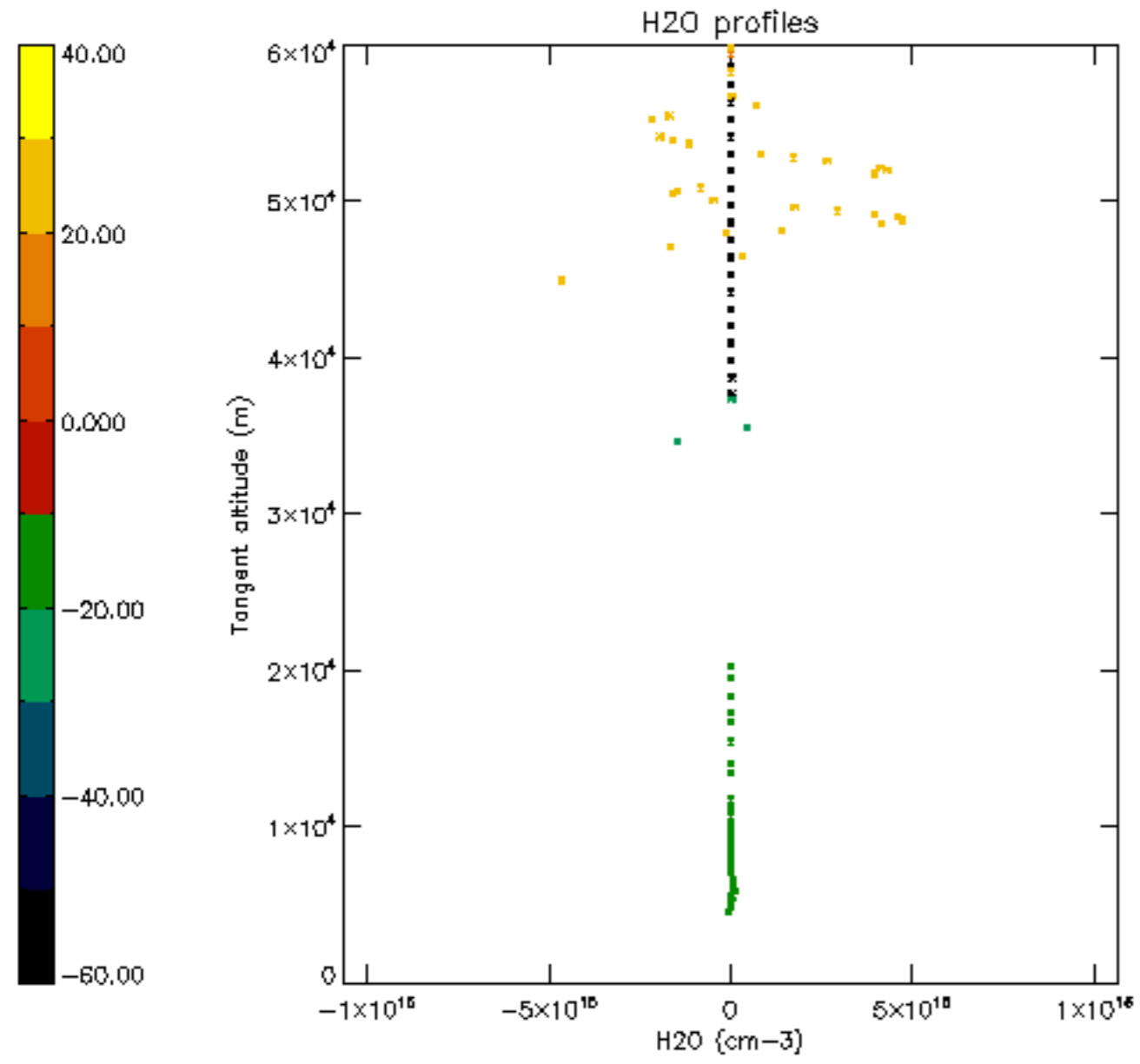


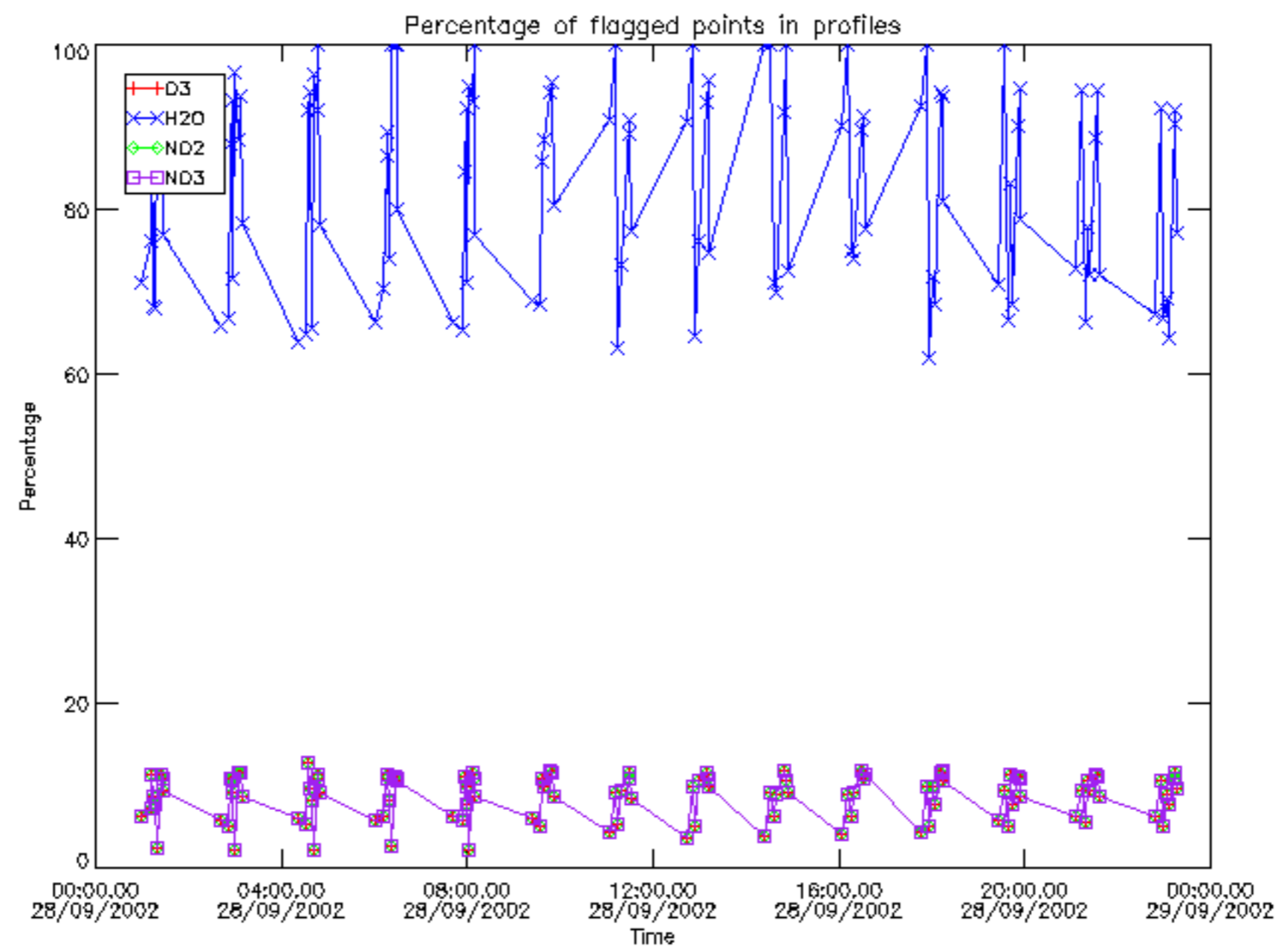




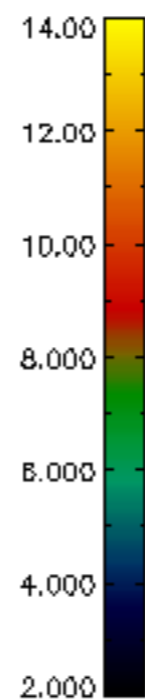
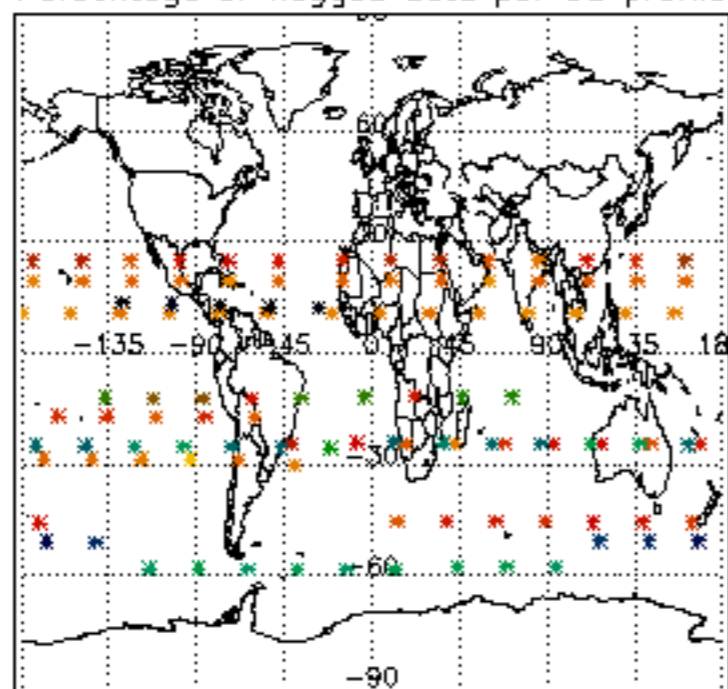




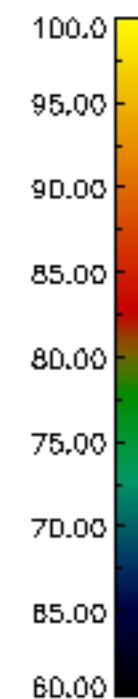
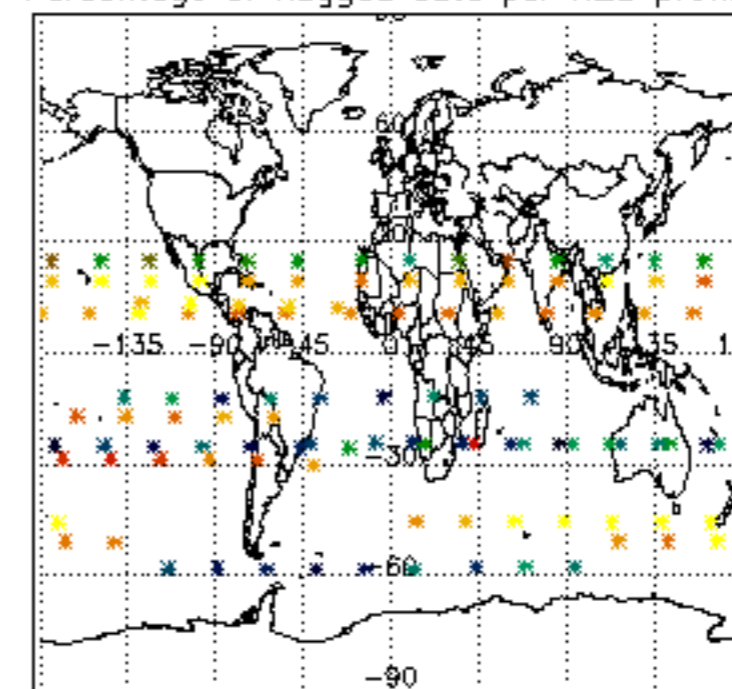




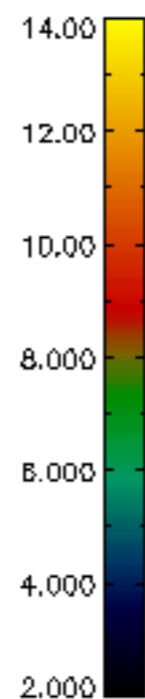
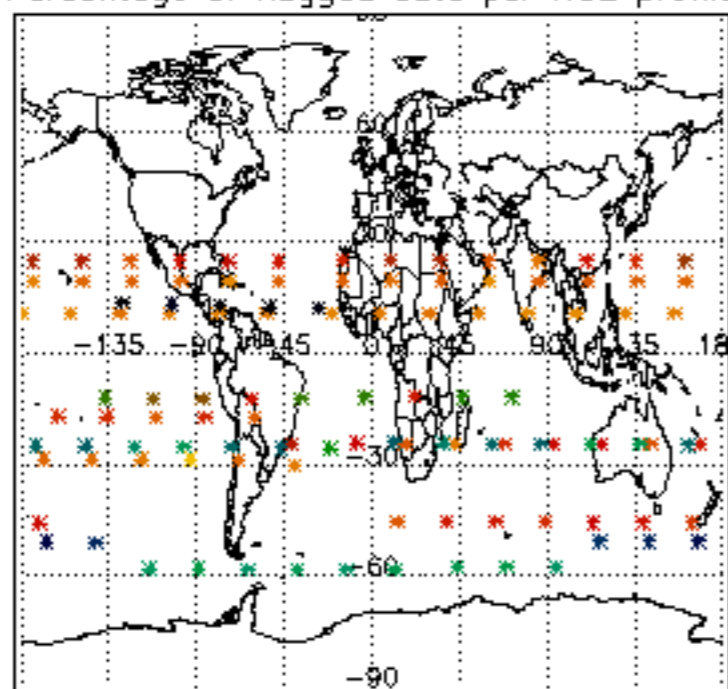
Percentage of flagged data per D3 profile



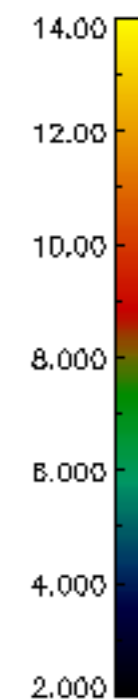
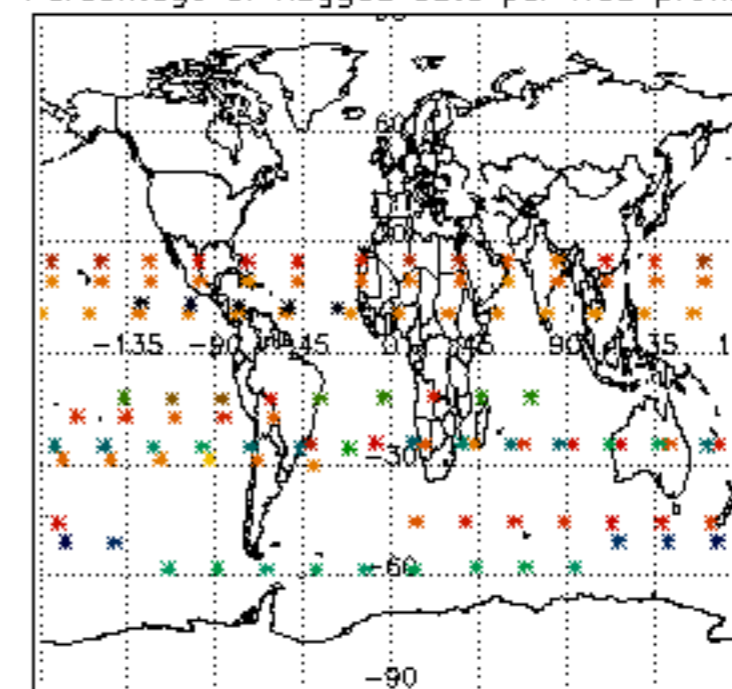
Percentage of flagged data per H2O profile

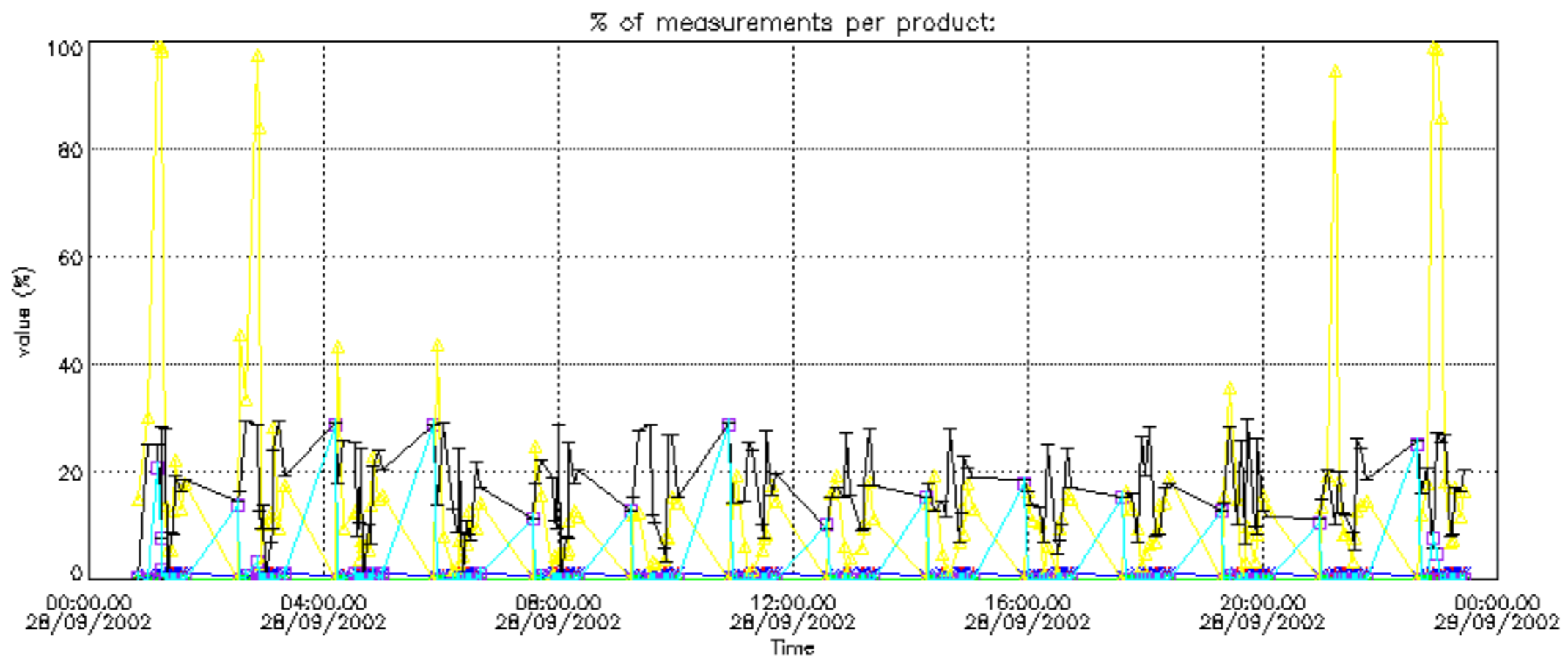


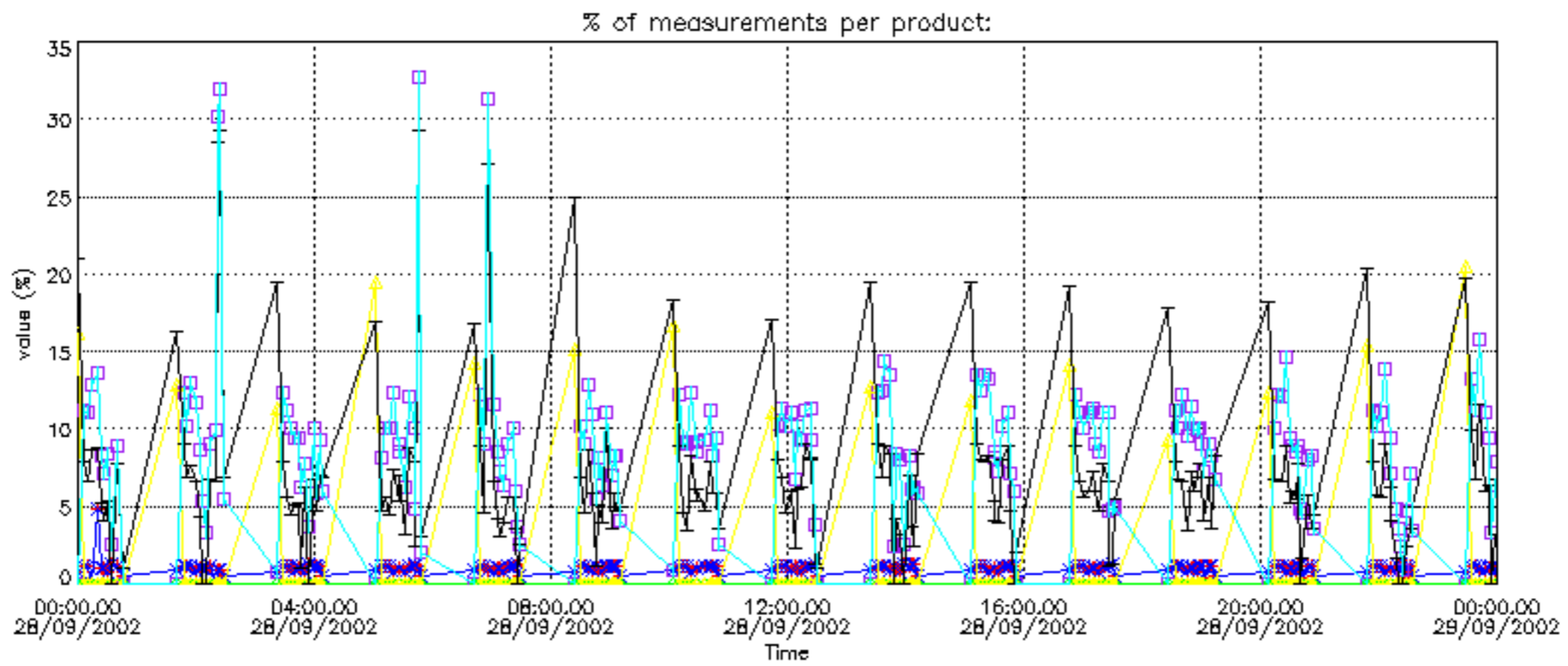
Percentage of flagged data per NO2 profile



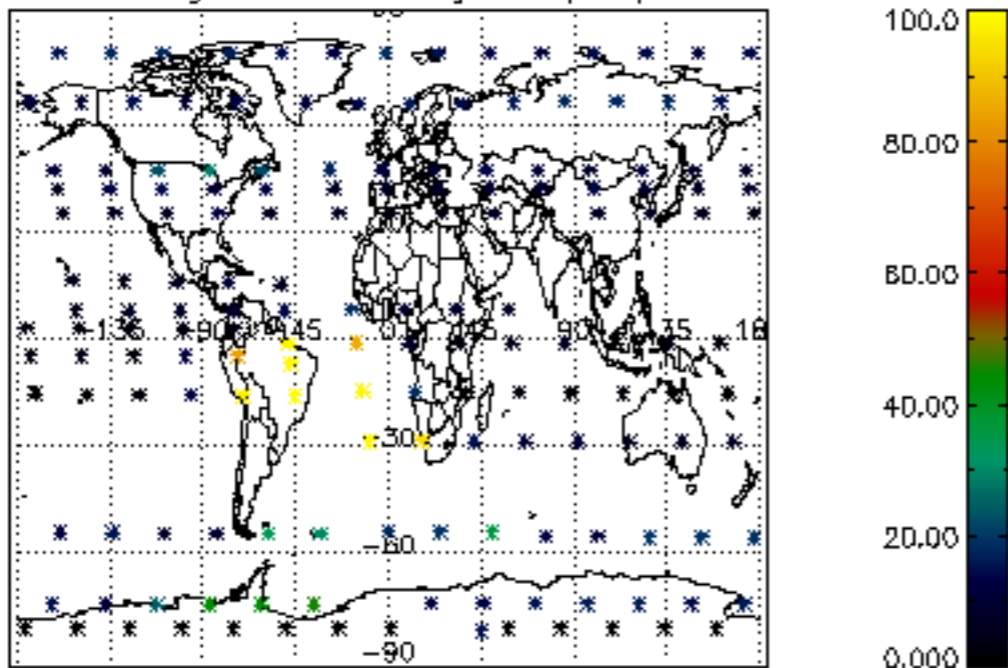
Percentage of flagged data per NO3 profile



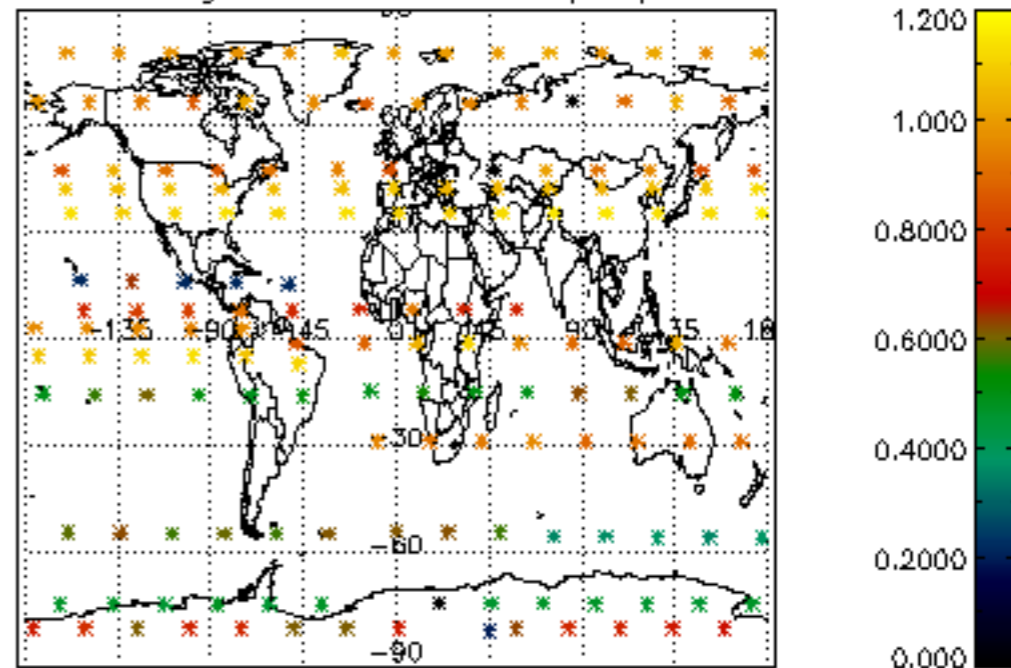




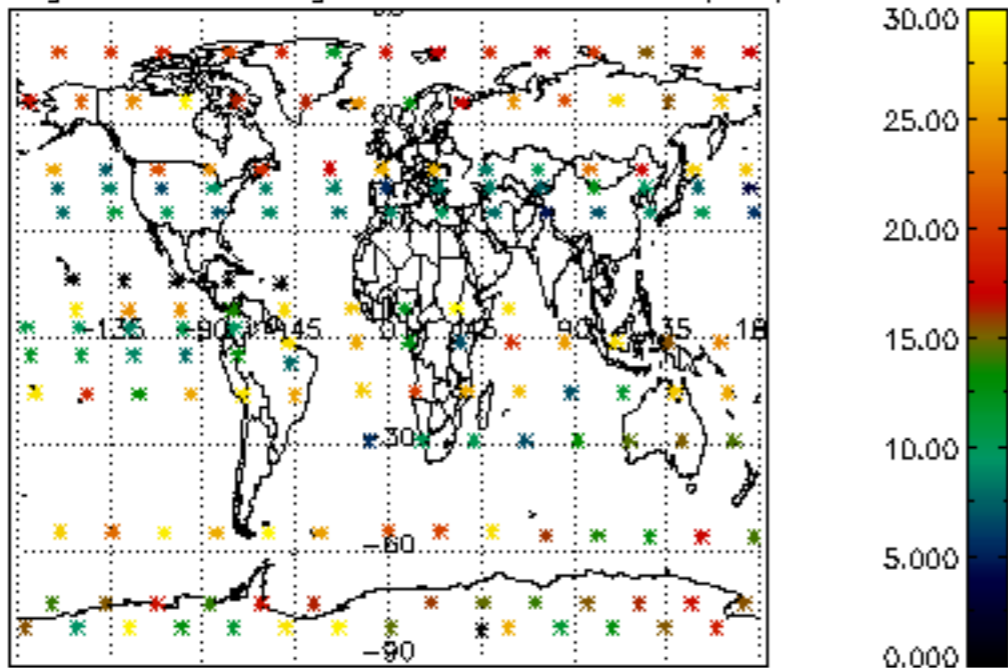
Percentage of cosmic ray hits per profile



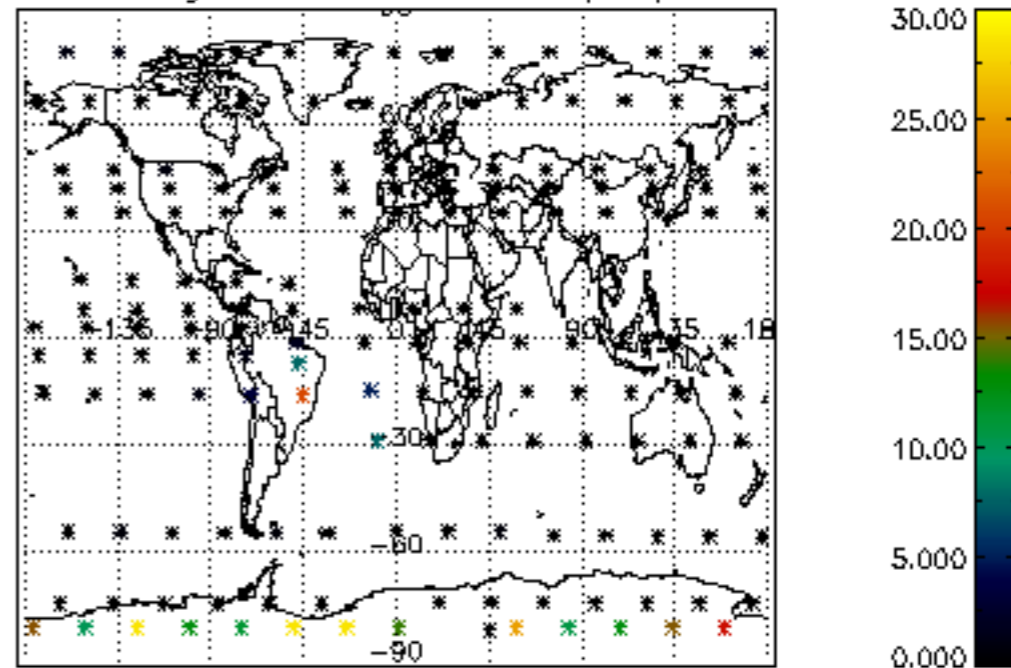
Percentage of datation errors per profile



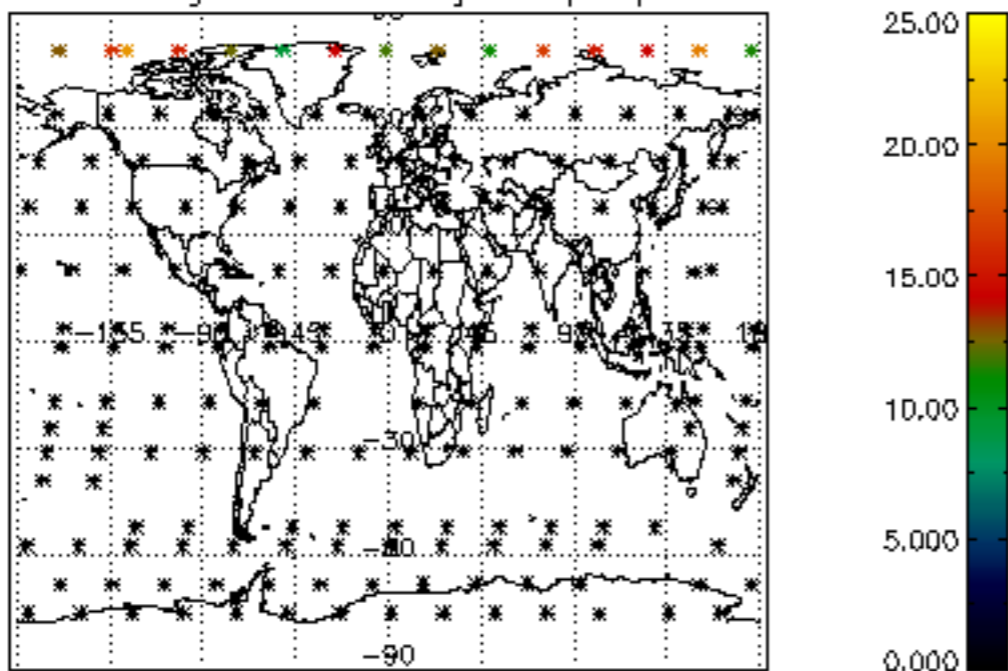
Percentage of star falling outside central band per profile



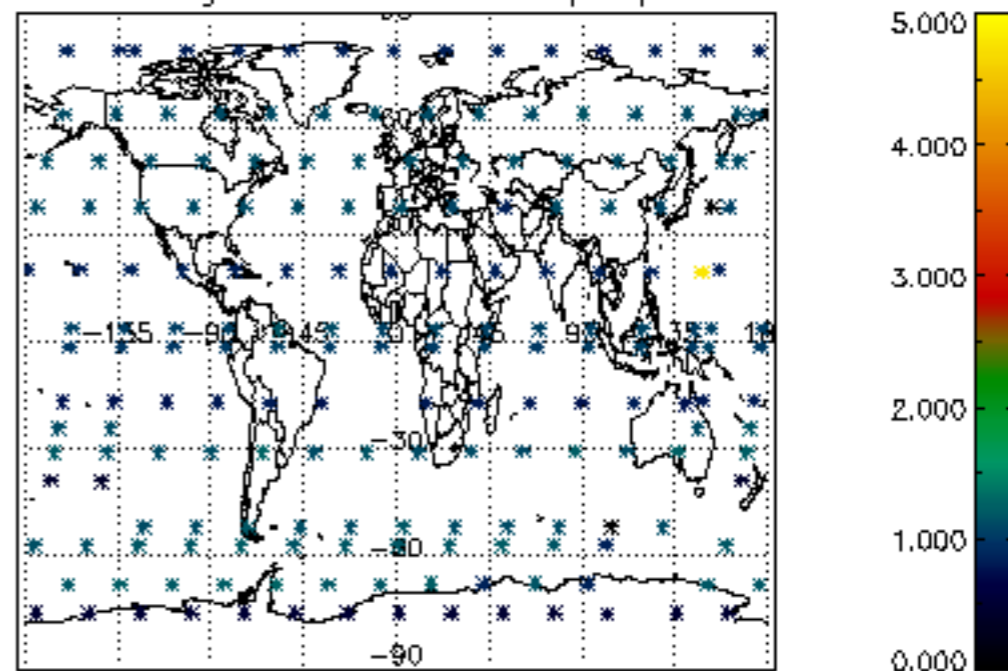
Percentage of saturation errors per profile



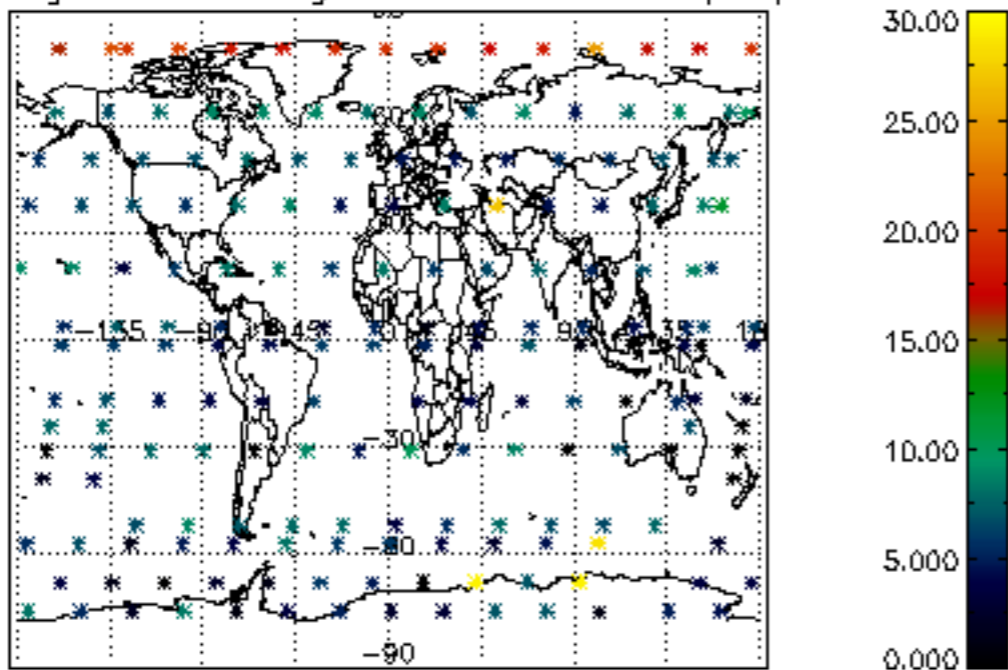
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

