

GOMOS Level 2 Daily Report

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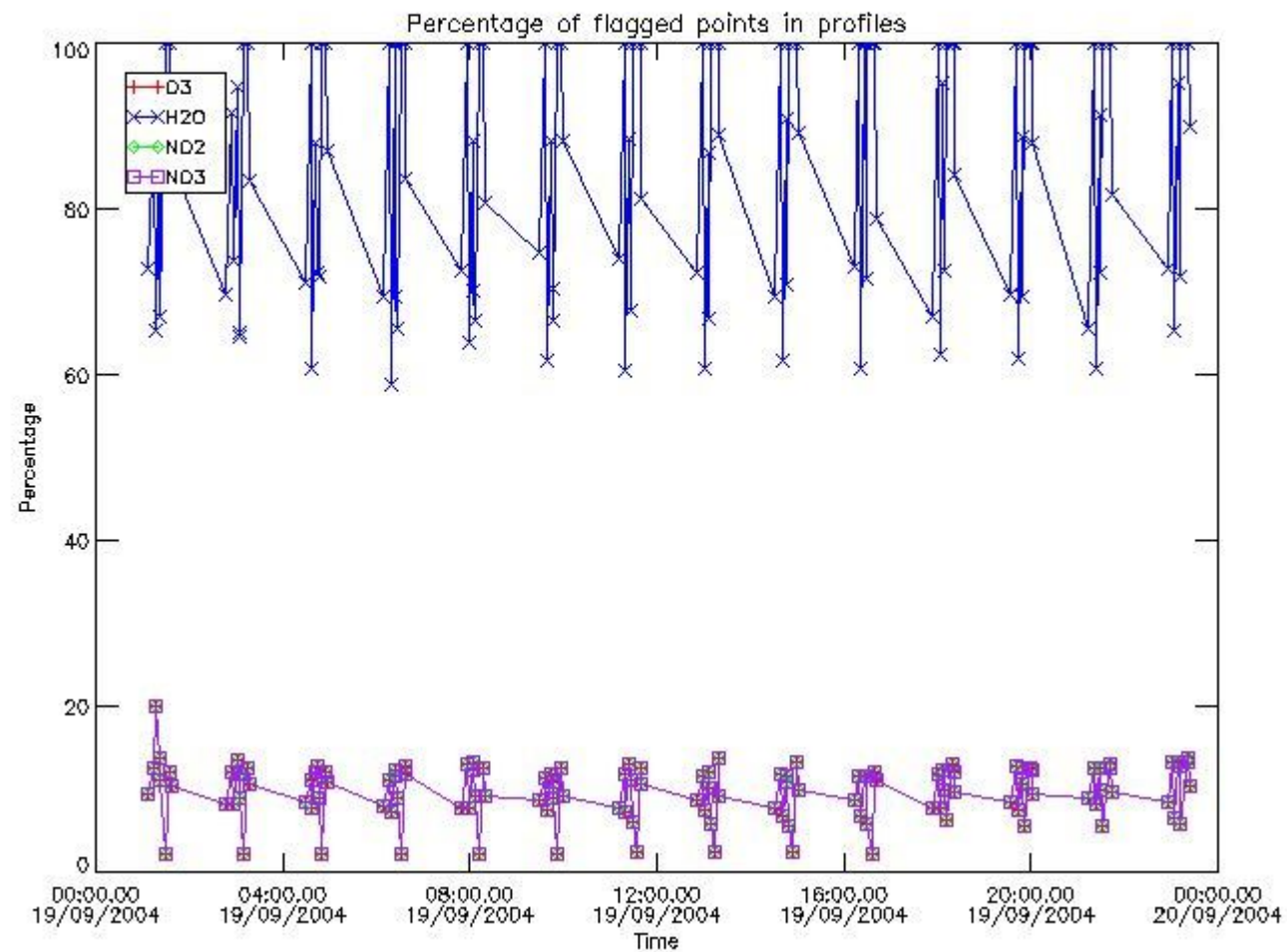
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456	GOM_NL__2PRFIN20040919_231235_000000882030_00288_13368_4167.N1	19-SEP-2004 23:12:35	Dark	88.000	101	11Alp Lep	2.5820	7000.0	176	13368	No
457	GOM_NL__2PRFIN20040919_232110_000000392030_00288_13368_4168.N1	19-SEP-2004 23:21:10	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	13368	No
458	GOM_NL__2PRFIN20040919_232235_000000412030_00288_13368_4169.N1	19-SEP-2004 23:22:35	Dark	41.000	143	Alp Hyi	2.8570	7200.0	82	13368	No
459	GOM_NL__2PRFIN20040919_232401_000000502030_00288_13368_4170.N1	19-SEP-2004 23:24:01	Dark	49.500	9	Alp Eri	0.45300	24000.	99	13368	No
460	GOM_NL__2PRFIN20040919_232641_000000392030_00288_13368_4171.N1	19-SEP-2004 23:26:41	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	13368	No
461	GOM_NL__2PRFIN20040919_233005_000000432030_00288_13368_4172.N1	19-SEP-2004 23:30:05	Straylight	42.500	63	Bet Gru	2.1500	2800.0	85	13368	No
462	GOM_NL__2PRFIN20040919_233313_000000382030_00288_13368_4173.N1	19-SEP-2004 23:33:13	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	13368	No
463	GOM_NL__2PRFIN20040919_233440_000000482030_00288_13368_4174.N1	19-SEP-2004 23:34:40	Straylight	48.000	18	24Alp PsA	1.1660	9700.0	96	13368	No
464	GOM_NL__2PRFIN20040919_233704_000000592030_00288_13368_4175.N1	19-SEP-2004 23:37:04	Twilight_stray	58.500	52	16Bet Cet	2.0370	4500.0	117	13368	No
465	GOM_NL__2PRFIN20040919_233911_000000412030_00288_13368_4176.N1	19-SEP-2004 23:39:11	Twilight_stray	41.000	142	49Del Cap	2.8500	8900.0	82	13368	No
466	GOM_NL__2PRFIN20040919_234322_000000402030_00288_13368_4177.N1	19-SEP-2004 23:43:22	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	13368	No
467	GOM_NL__2PRFIN20040919_234624_000000392030_00288_13368_4178.N1	19-SEP-2004 23:46:24	Bright	39.000	61	8Eps Peg	2.1000	3900.0	78	13368	No
468	GOM_NL__2PRFIN20040919_234843_000000482030_00288_13368_4179.N1	19-SEP-2004 23:48:43	Bright	48.000	140	88Gam Peg	2.8340	26000.	96	13368	No
469	GOM_NL__2PRFIN20040919_235126_000000412030_00288_13368_4180.N1	19-SEP-2004 23:51:26	Bright	40.500	93	53Bet Peg	2.5200	3100.0	81	13368	No
470	GOM_NL__2PRFIN20040919_235306_000000472030_00288_13368_4181.N1	19-SEP-2004 23:53:06	Bright	47.000	58	21Alp And	2.0730	11000.	94	13368	No
471	GOM_NL__2PRFIN20040919_235604_000000392030_00288_13368_4182.N1	19-SEP-2004 23:56:04	Bright	39.000	66	37Gam Cyg	2.2080	5900.0	78	13368	No
472	GOM_NL__2PRFIN20040919_235805_000000592030_00288_13368_4183.N1	19-SEP-2004 23:58:05	Bright	59.000	53	43Bet And	2.0480	3300.0	118	13368	No

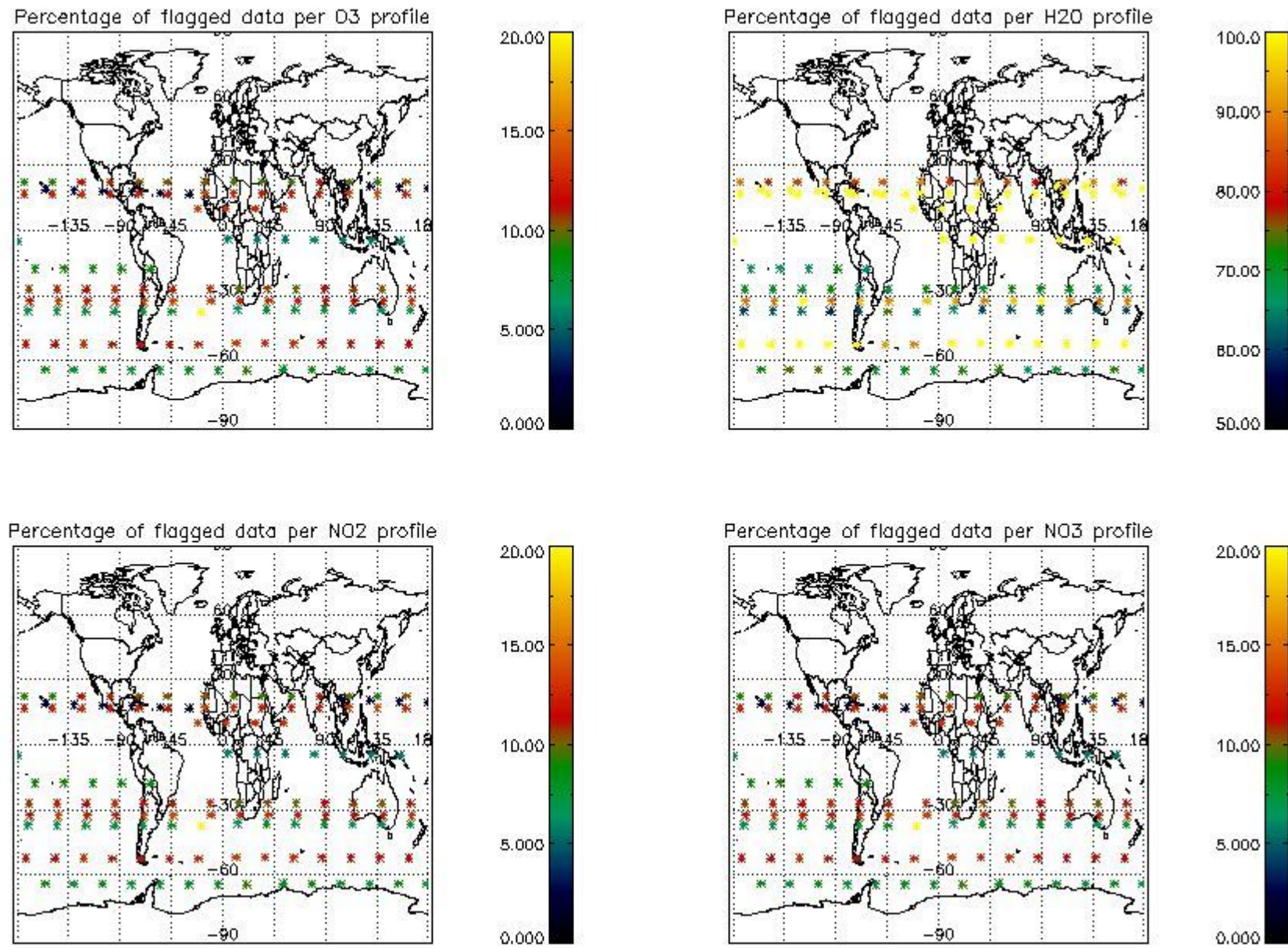
3. Quality information per product

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)

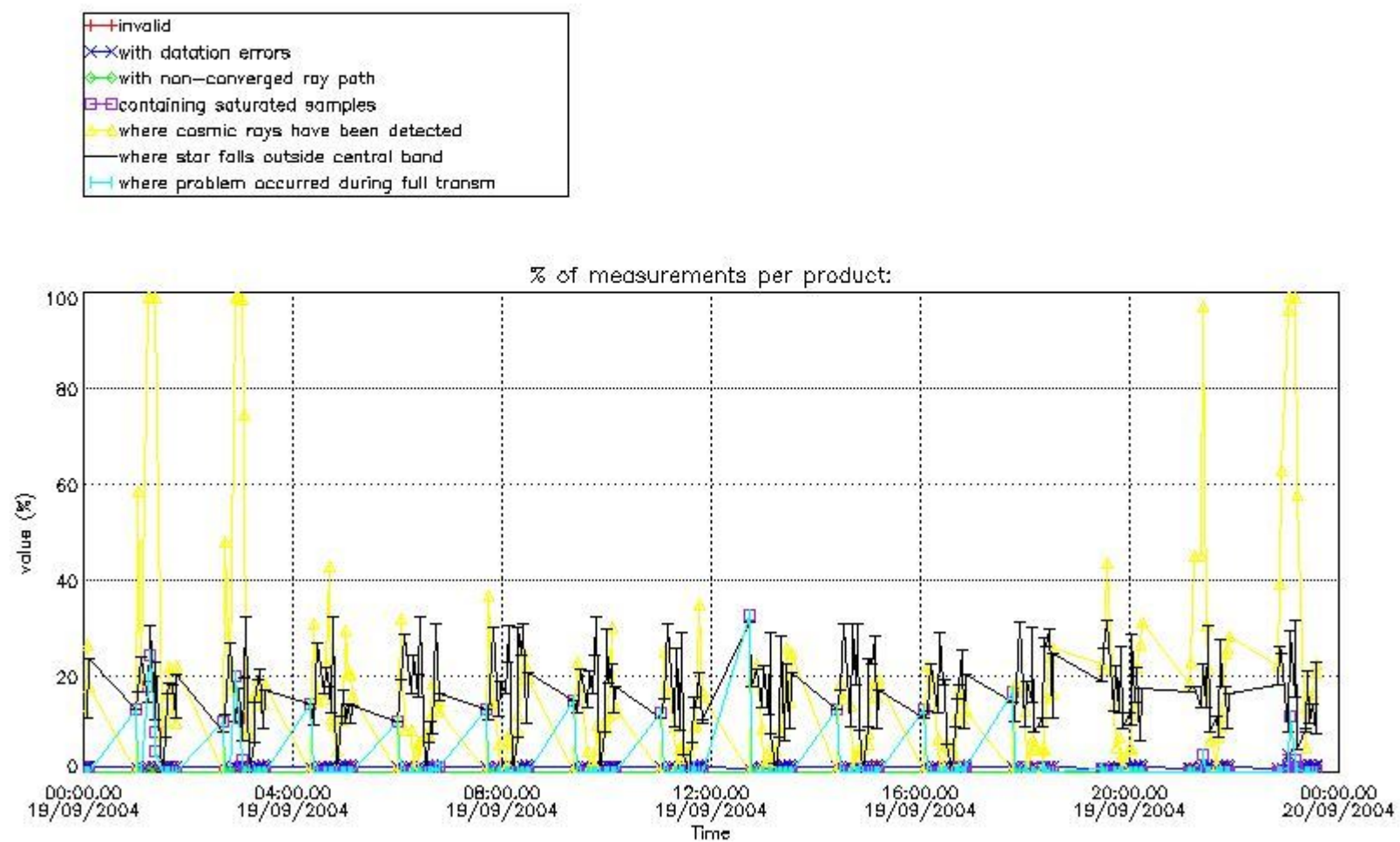


4. Level 1 quality information per product

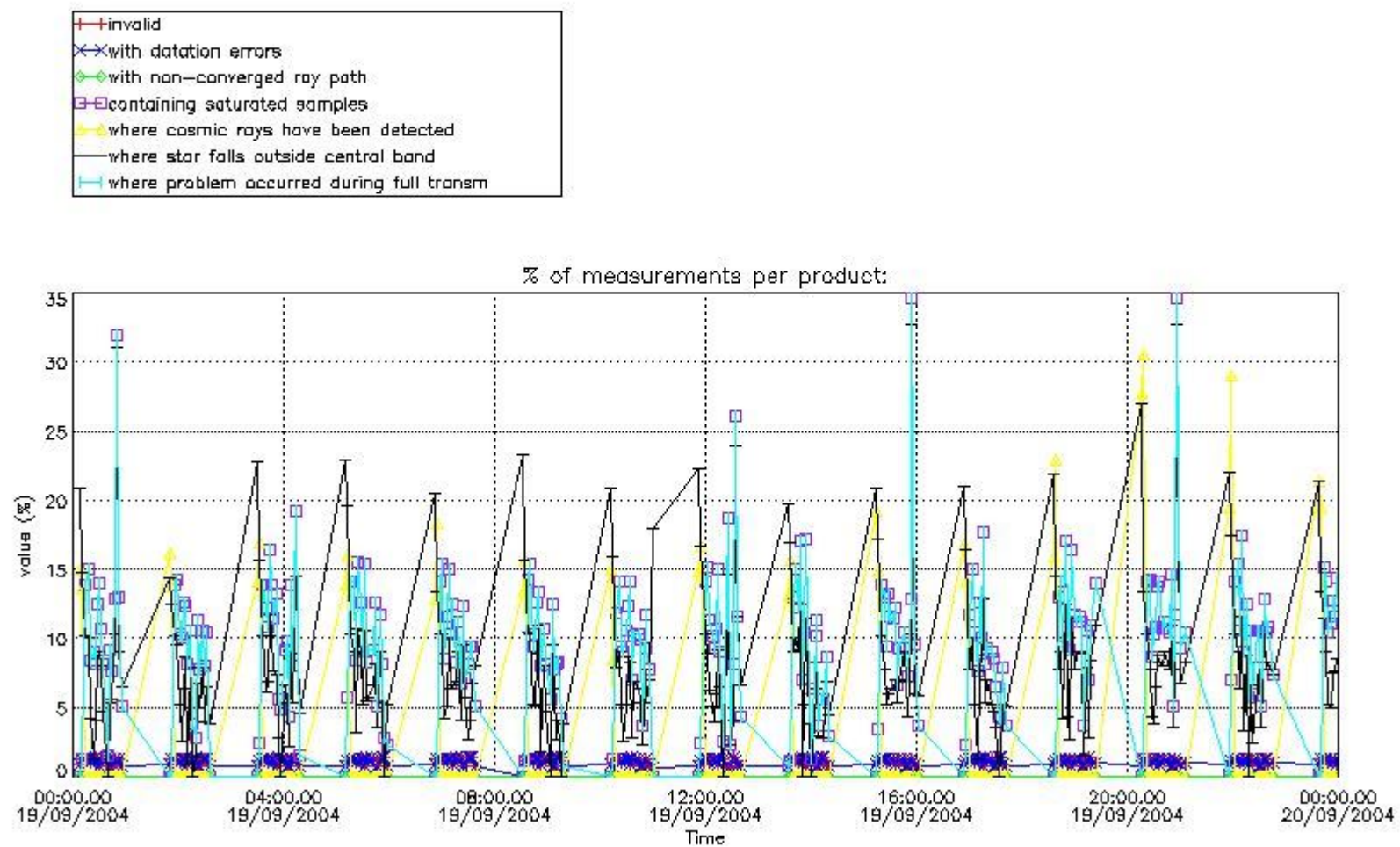
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



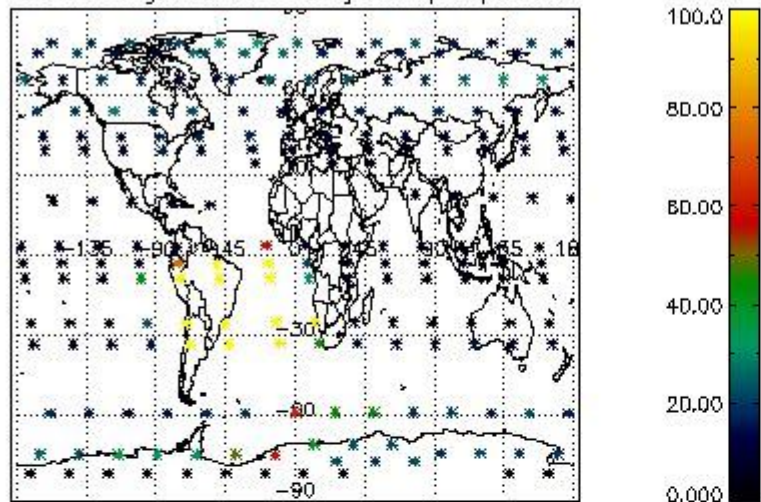
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



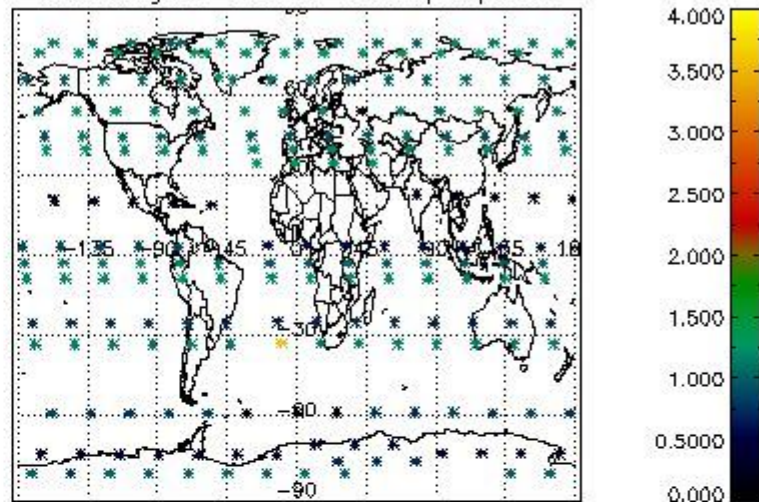
4.2 Plot quality information per product coming from level 1b processing (world map)

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

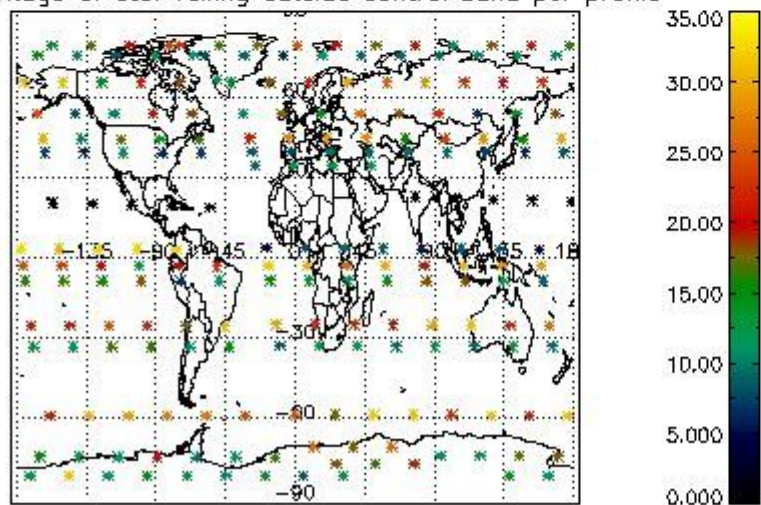
Percentage of cosmic ray hits per profile



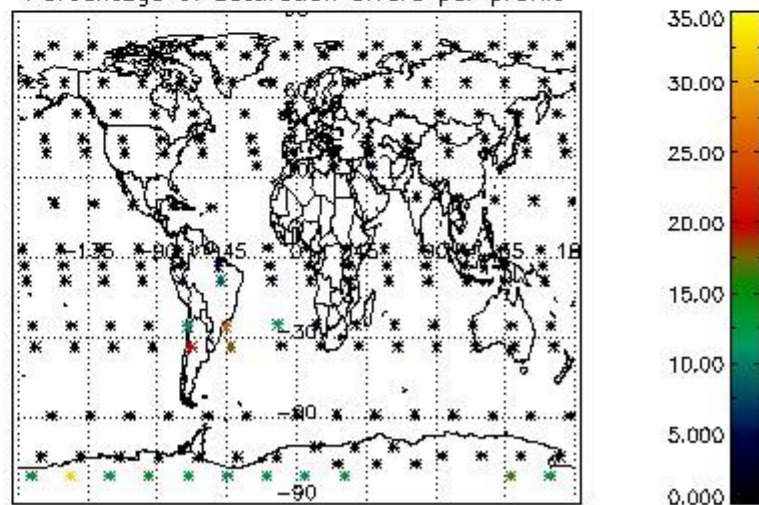
Percentage of datation errors per profile



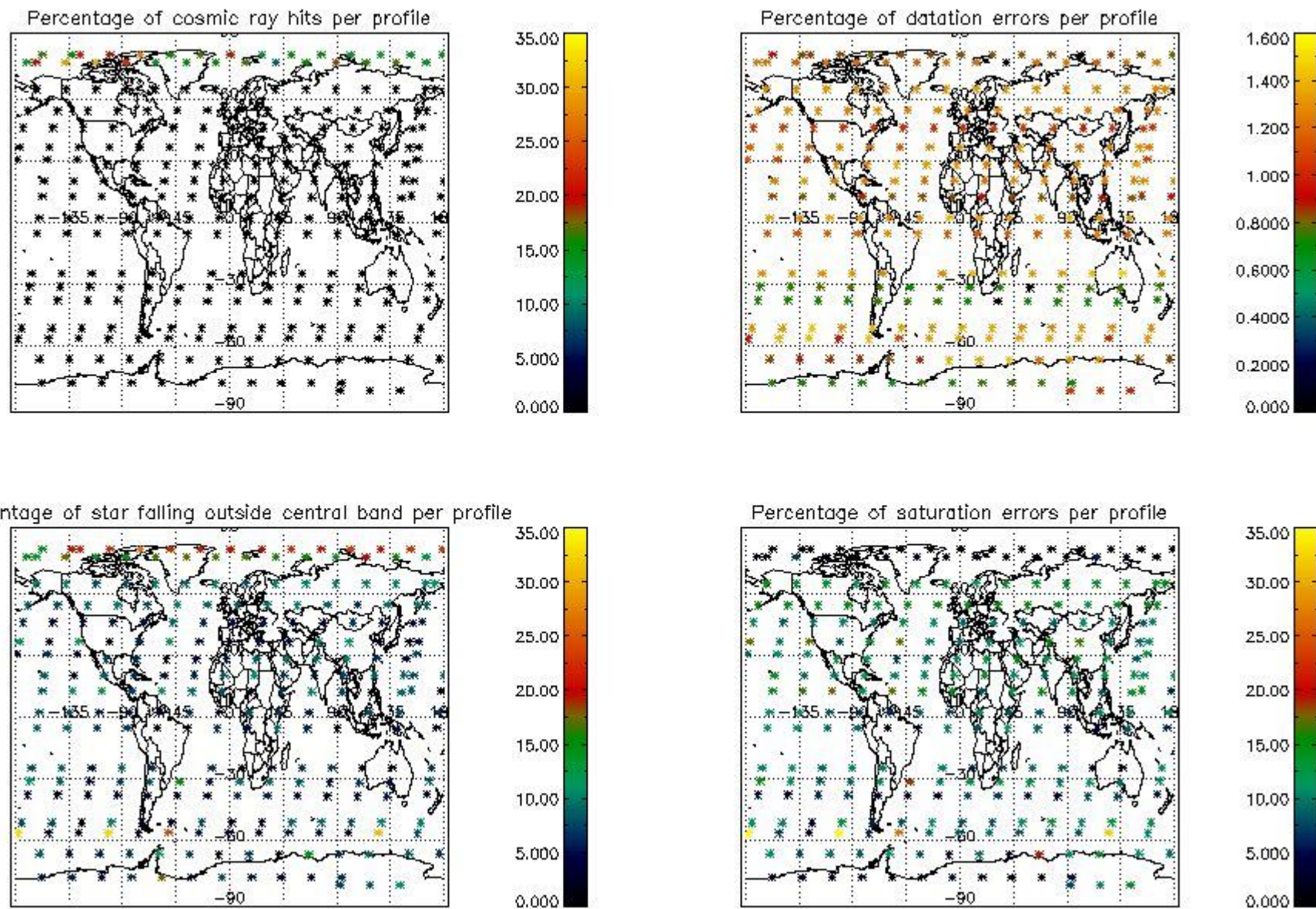
Percentage of star falling outside central band per profile



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

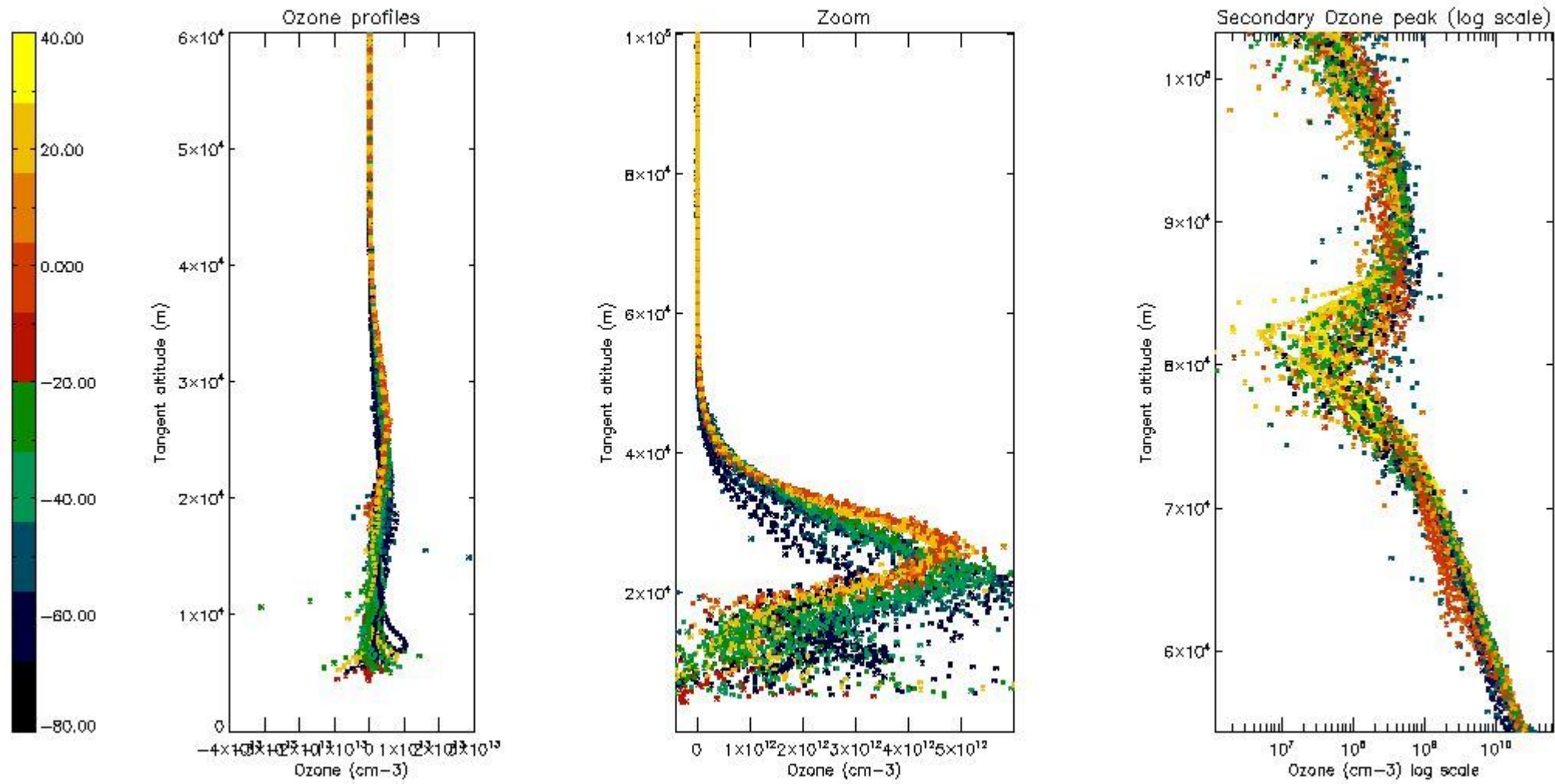
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	21

STD < 10	18
STD < 5	14

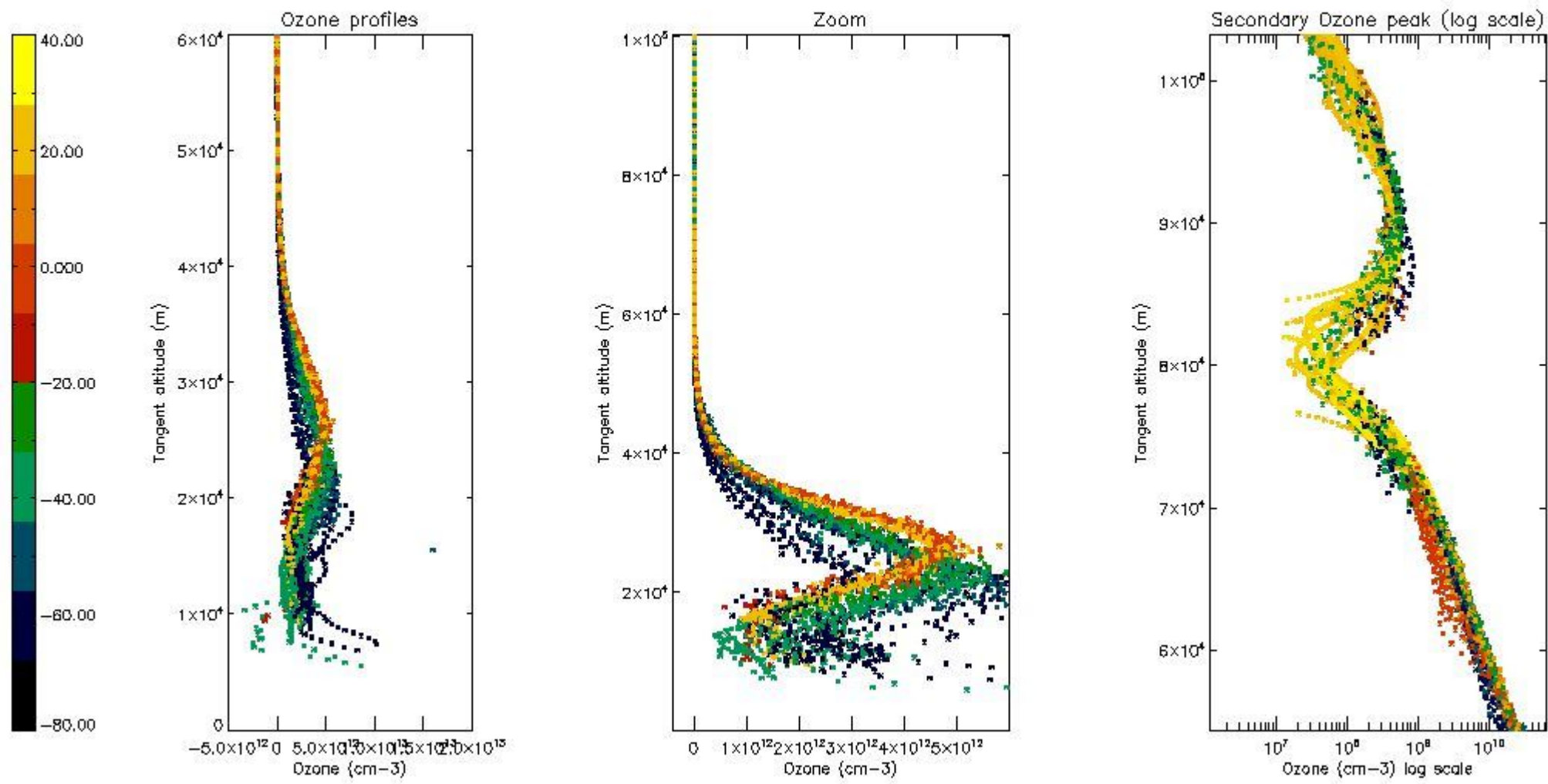
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



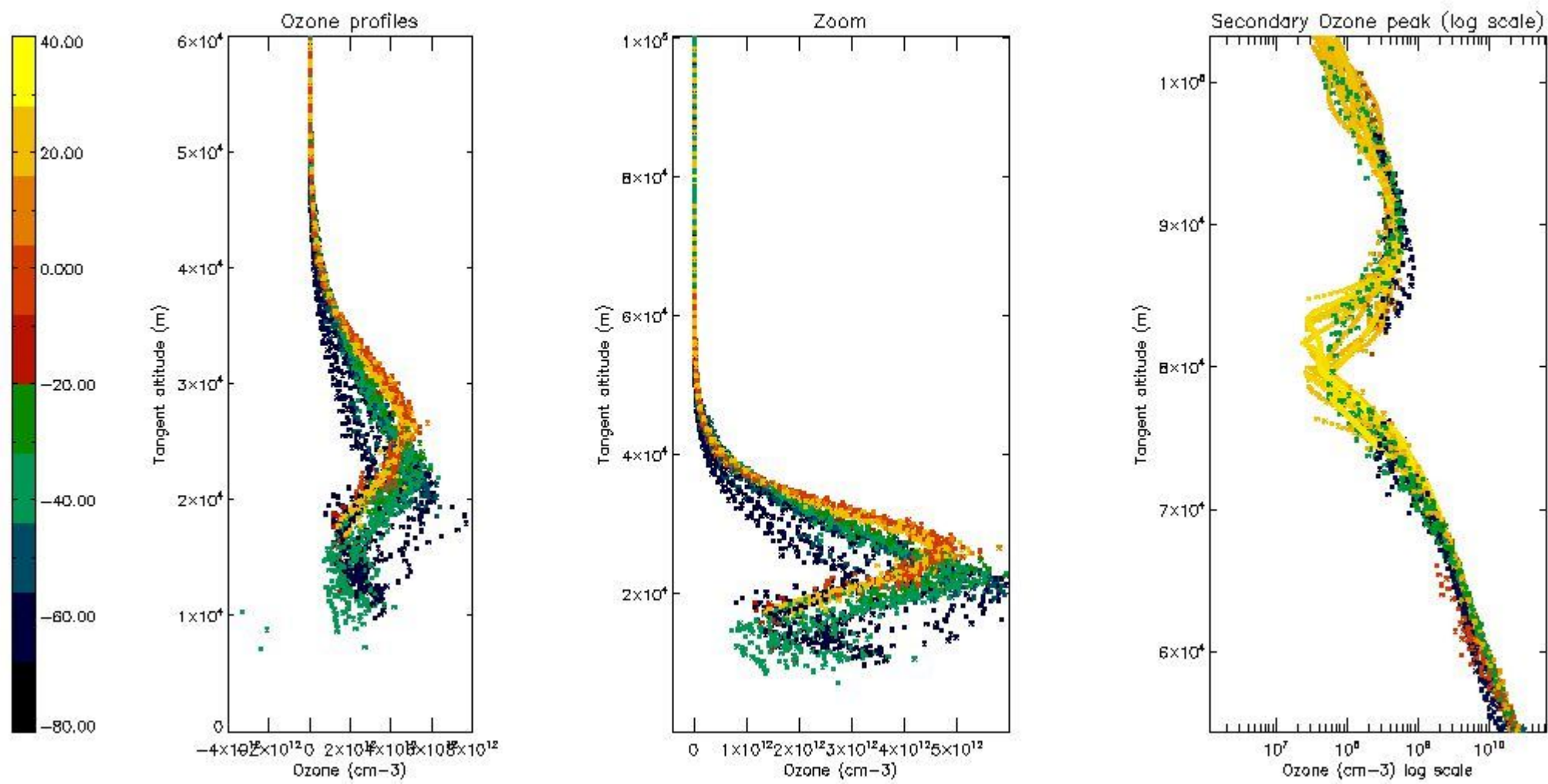
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



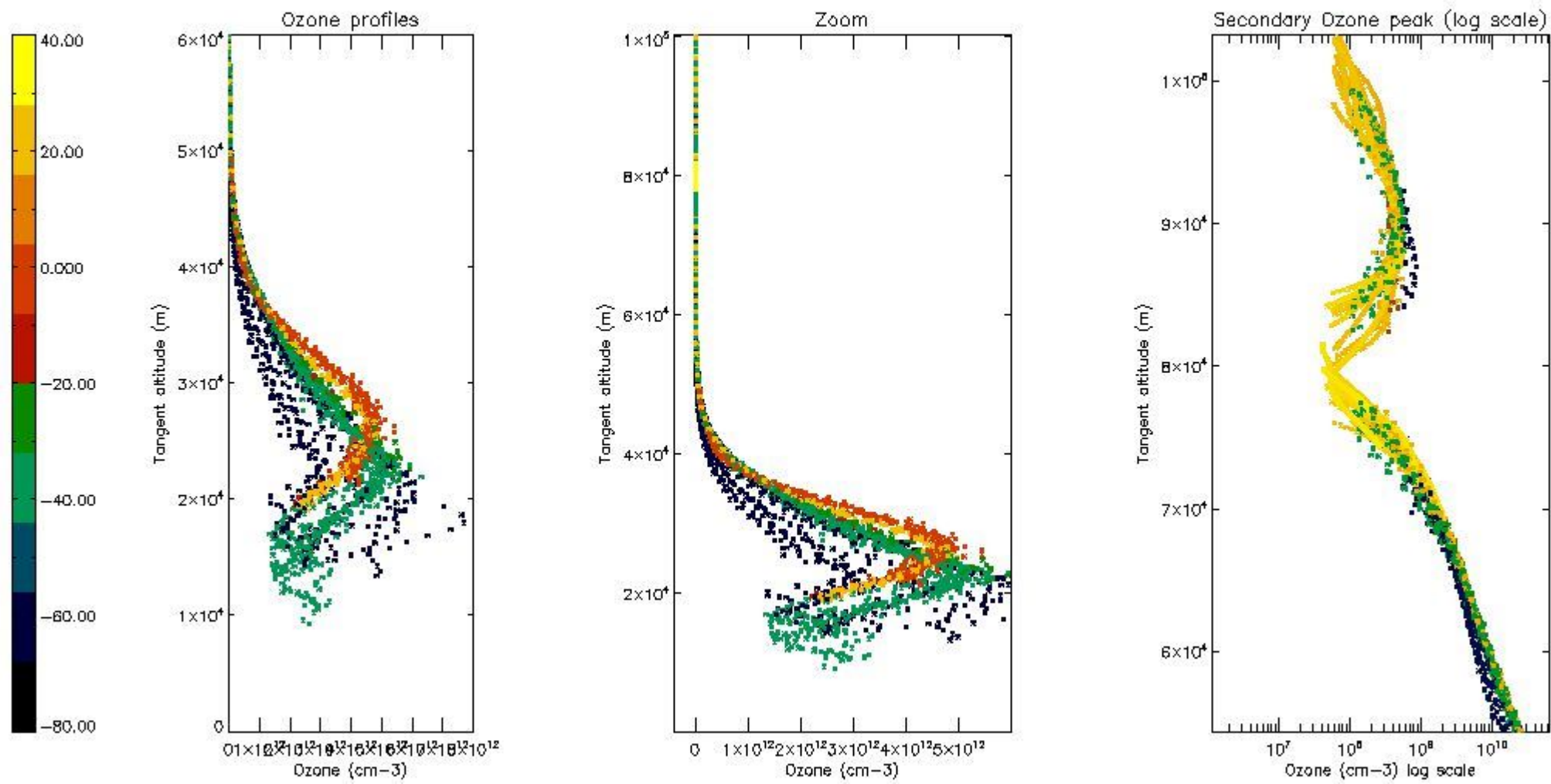
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



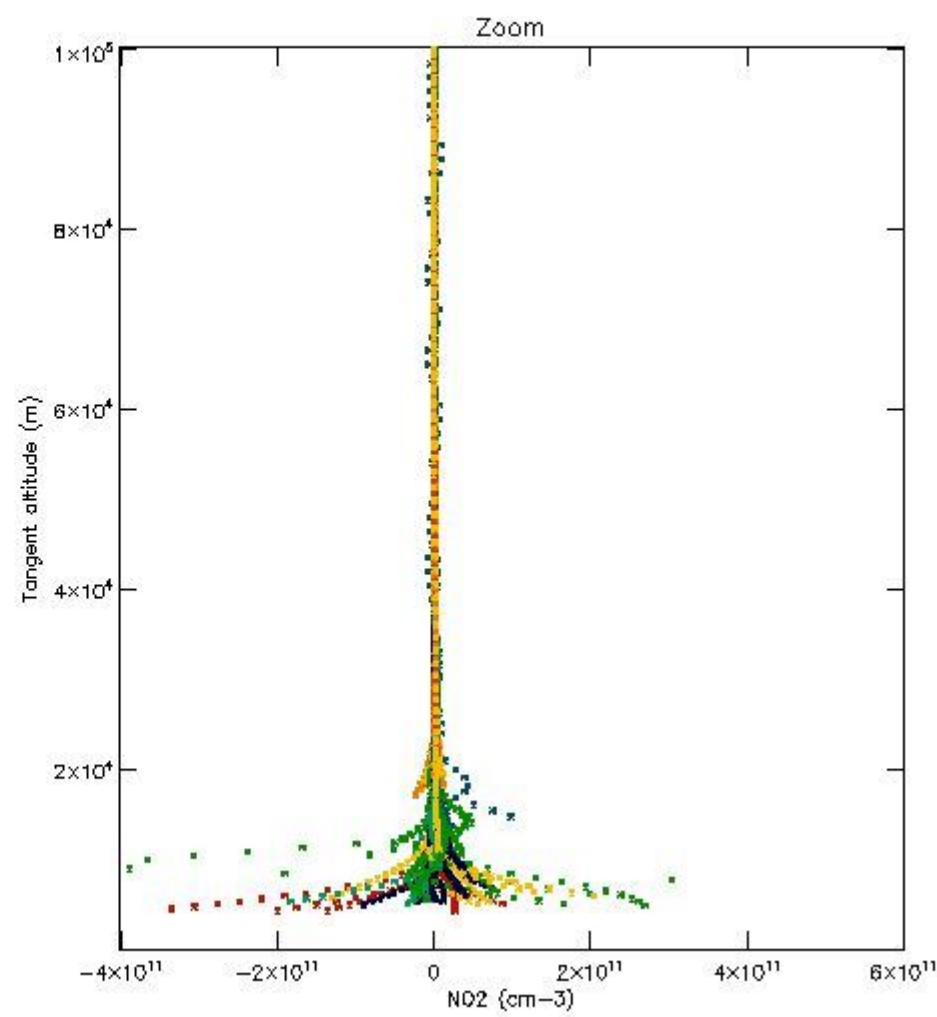
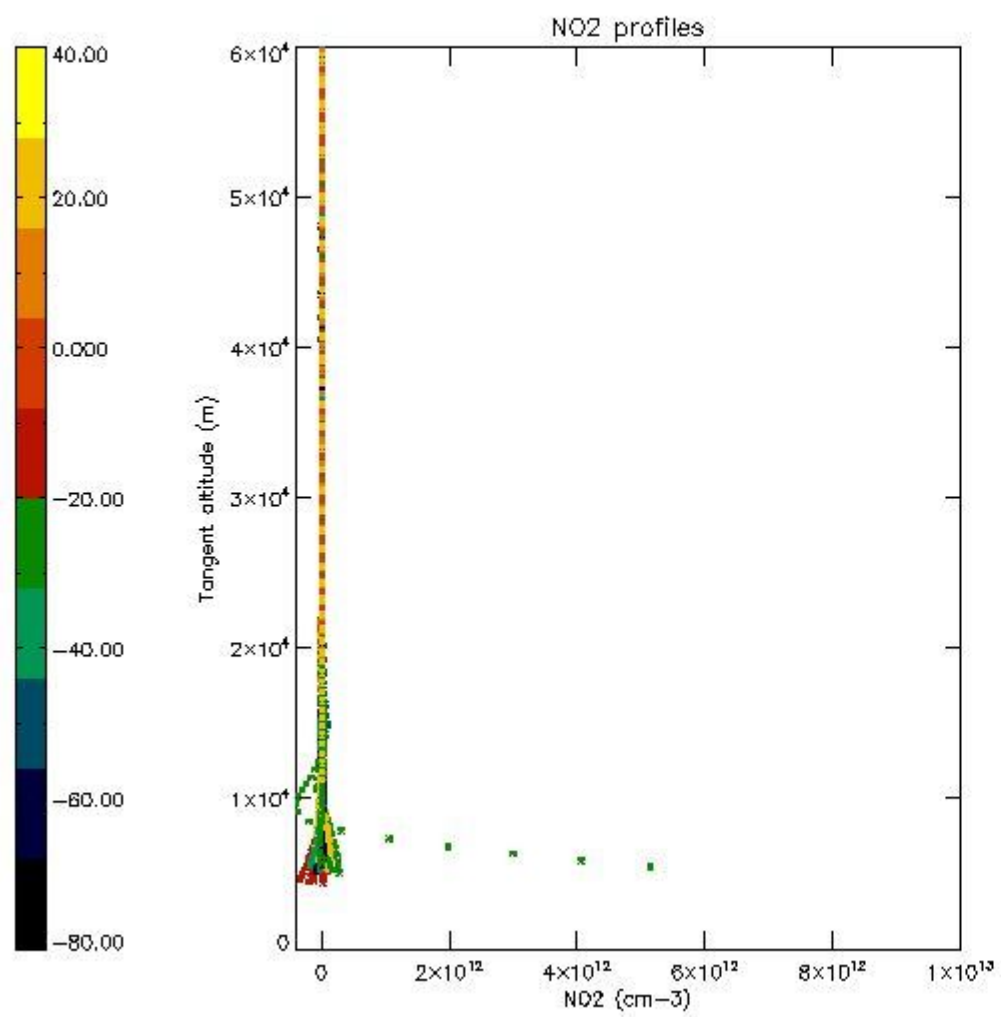
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



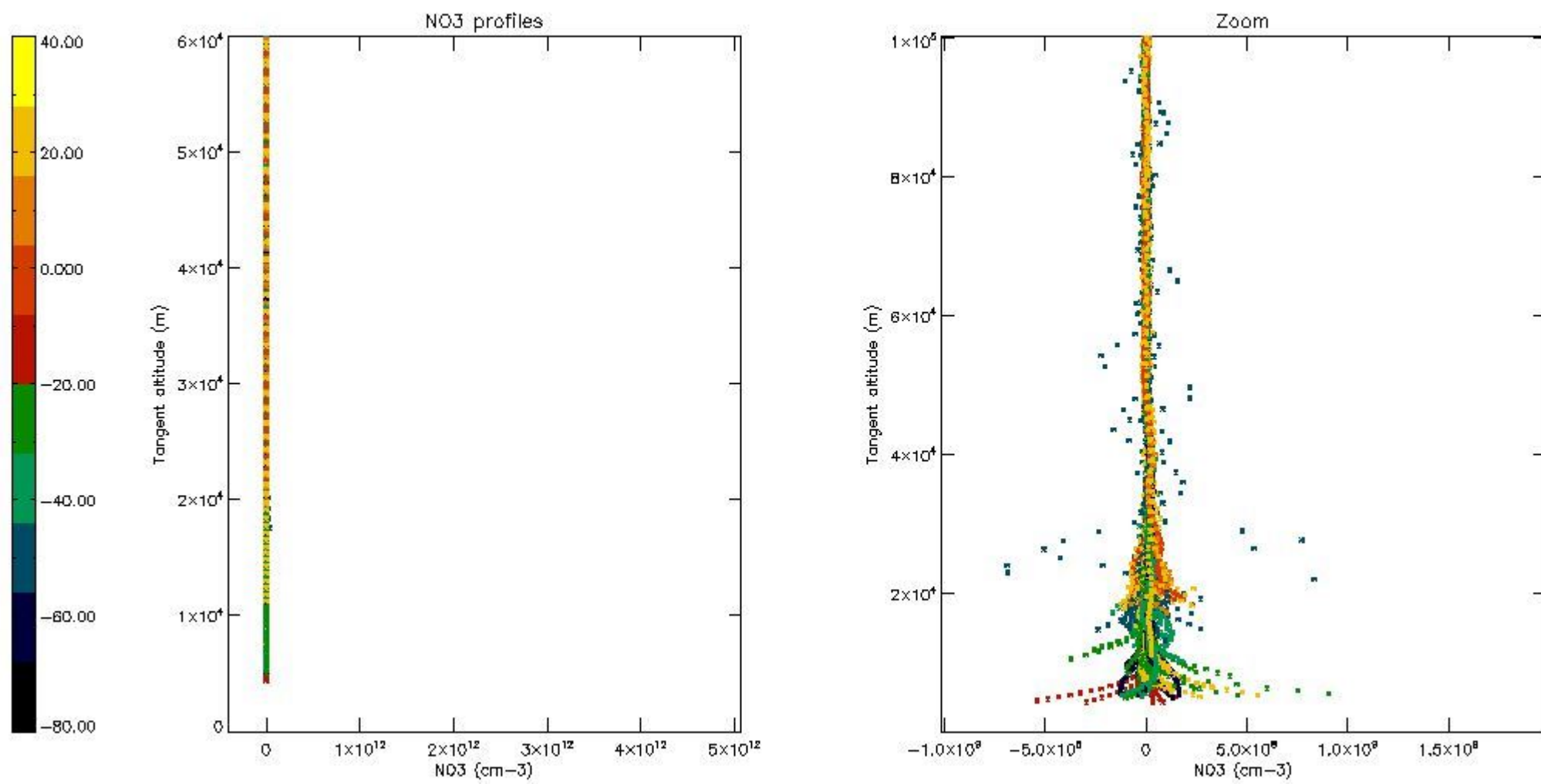
5.6 Plot NO2 profiles for all STD (dark without errors)

The colorbar represents the latitude.



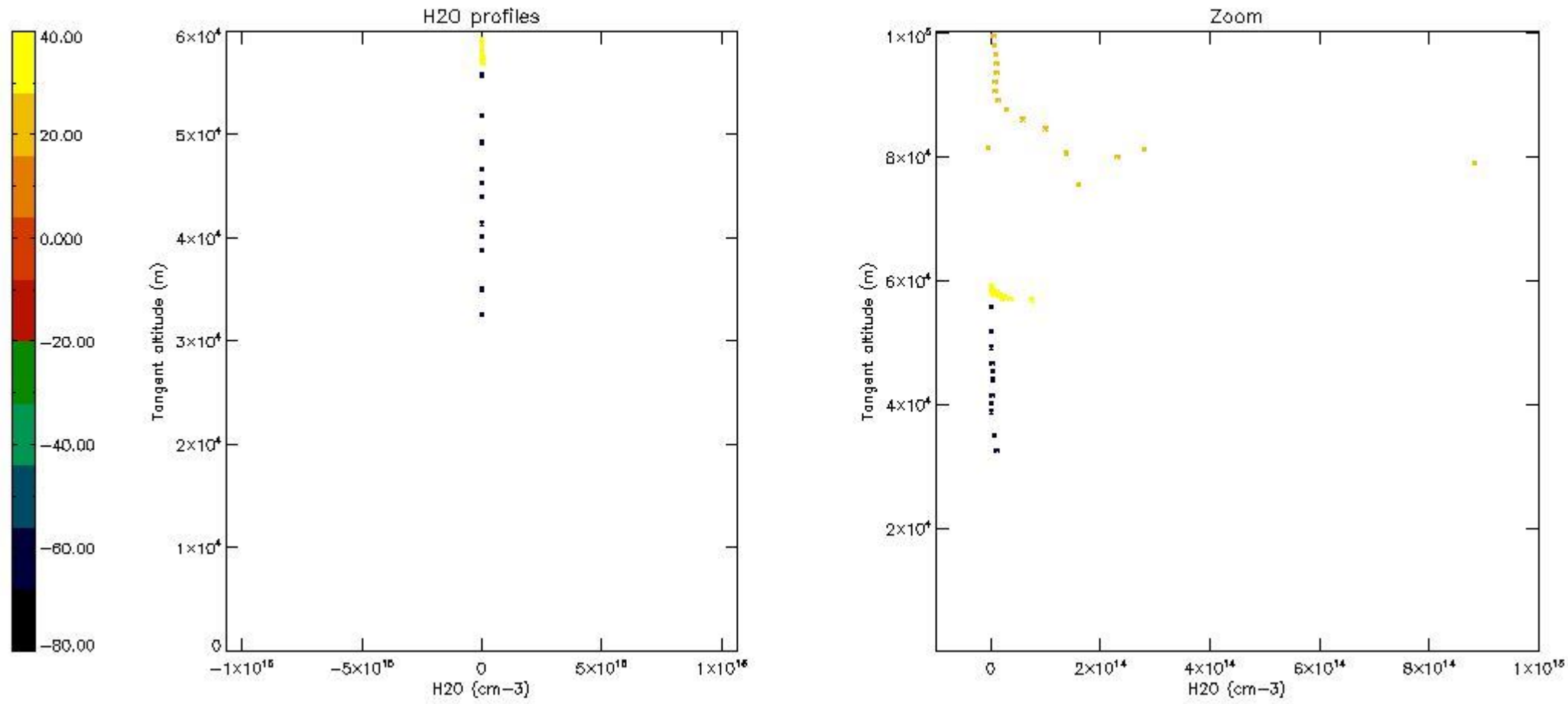
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	19-SEP-2004 00:02:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-SEP-2004 00:02:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-SEP-2004 00:02:00

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[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](#)

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[5.1 Ozone statistics based on quality of products](#)

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[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](#)

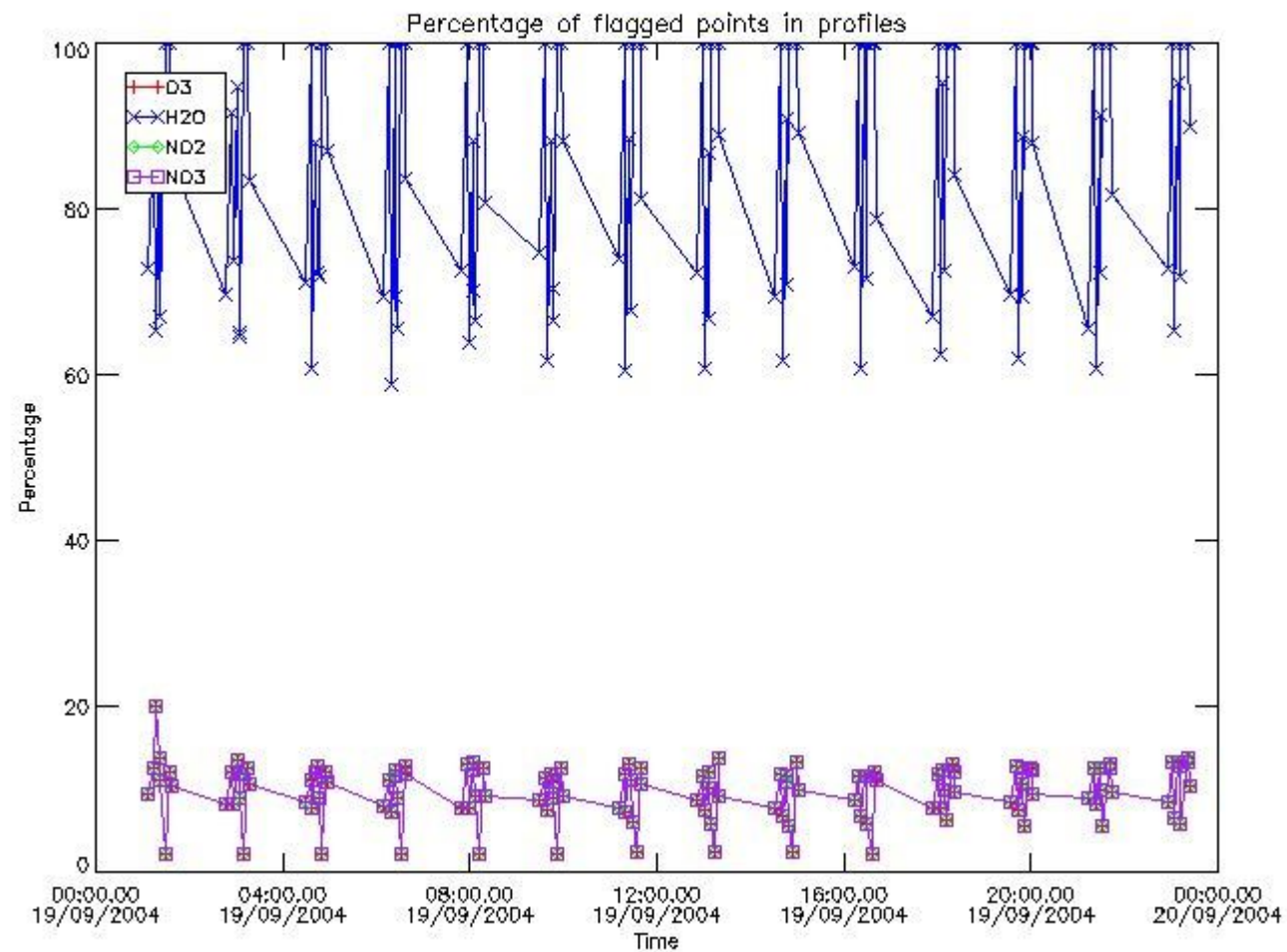
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456	GOM_NL__2PRFIN20040919_231235_000000882030_00288_13368_4167.N1	19-SEP-2004 23:12:35	Dark	88.000	101	11Alp Lep	2.5820	7000.0	176	13368	No
457	GOM_NL__2PRFIN20040919_232110_000000392030_00288_13368_4168.N1	19-SEP-2004 23:21:10	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	13368	No
458	GOM_NL__2PRFIN20040919_232235_000000412030_00288_13368_4169.N1	19-SEP-2004 23:22:35	Dark	41.000	143	Alp Hyi	2.8570	7200.0	82	13368	No
459	GOM_NL__2PRFIN20040919_232401_000000502030_00288_13368_4170.N1	19-SEP-2004 23:24:01	Dark	49.500	9	Alp Eri	0.45300	24000.	99	13368	No
460	GOM_NL__2PRFIN20040919_232641_000000392030_00288_13368_4171.N1	19-SEP-2004 23:26:41	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	13368	No
461	GOM_NL__2PRFIN20040919_233005_000000432030_00288_13368_4172.N1	19-SEP-2004 23:30:05	Straylight	42.500	63	Bet Gru	2.1500	2800.0	85	13368	No
462	GOM_NL__2PRFIN20040919_233313_000000382030_00288_13368_4173.N1	19-SEP-2004 23:33:13	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	13368	No
463	GOM_NL__2PRFIN20040919_233440_000000482030_00288_13368_4174.N1	19-SEP-2004 23:34:40	Straylight	48.000	18	24Alp PsA	1.1660	9700.0	96	13368	No
464	GOM_NL__2PRFIN20040919_233704_000000592030_00288_13368_4175.N1	19-SEP-2004 23:37:04	Twilight_stray	58.500	52	16Bet Cet	2.0370	4500.0	117	13368	No
465	GOM_NL__2PRFIN20040919_233911_000000412030_00288_13368_4176.N1	19-SEP-2004 23:39:11	Twilight_stray	41.000	142	49Del Cap	2.8500	8900.0	82	13368	No
466	GOM_NL__2PRFIN20040919_234322_000000402030_00288_13368_4177.N1	19-SEP-2004 23:43:22	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	13368	No
467	GOM_NL__2PRFIN20040919_234624_000000392030_00288_13368_4178.N1	19-SEP-2004 23:46:24	Bright	39.000	61	8Eps Peg	2.1000	3900.0	78	13368	No
468	GOM_NL__2PRFIN20040919_234843_000000482030_00288_13368_4179.N1	19-SEP-2004 23:48:43	Bright	48.000	140	88Gam Peg	2.8340	26000.	96	13368	No
469	GOM_NL__2PRFIN20040919_235126_000000412030_00288_13368_4180.N1	19-SEP-2004 23:51:26	Bright	40.500	93	53Bet Peg	2.5200	3100.0	81	13368	No
470	GOM_NL__2PRFIN20040919_235306_000000472030_00288_13368_4181.N1	19-SEP-2004 23:53:06	Bright	47.000	58	21Alp And	2.0730	11000.	94	13368	No
471	GOM_NL__2PRFIN20040919_235604_000000392030_00288_13368_4182.N1	19-SEP-2004 23:56:04	Bright	39.000	66	37Gam Cyg	2.2080	5900.0	78	13368	No
472	GOM_NL__2PRFIN20040919_235805_000000592030_00288_13368_4183.N1	19-SEP-2004 23:58:05	Bright	59.000	53	43Bet And	2.0480	3300.0	118	13368	No

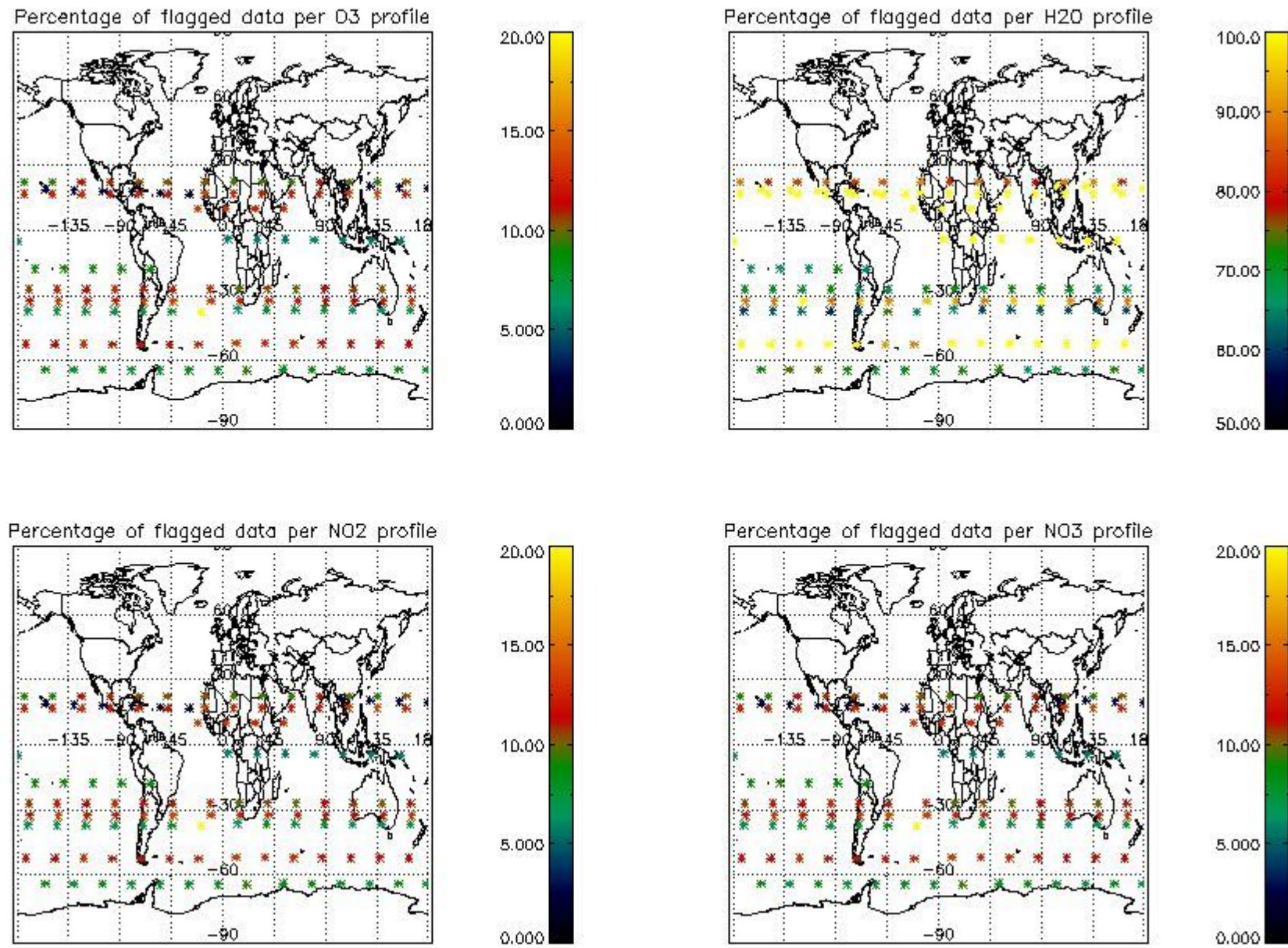
3. Quality information per product

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)

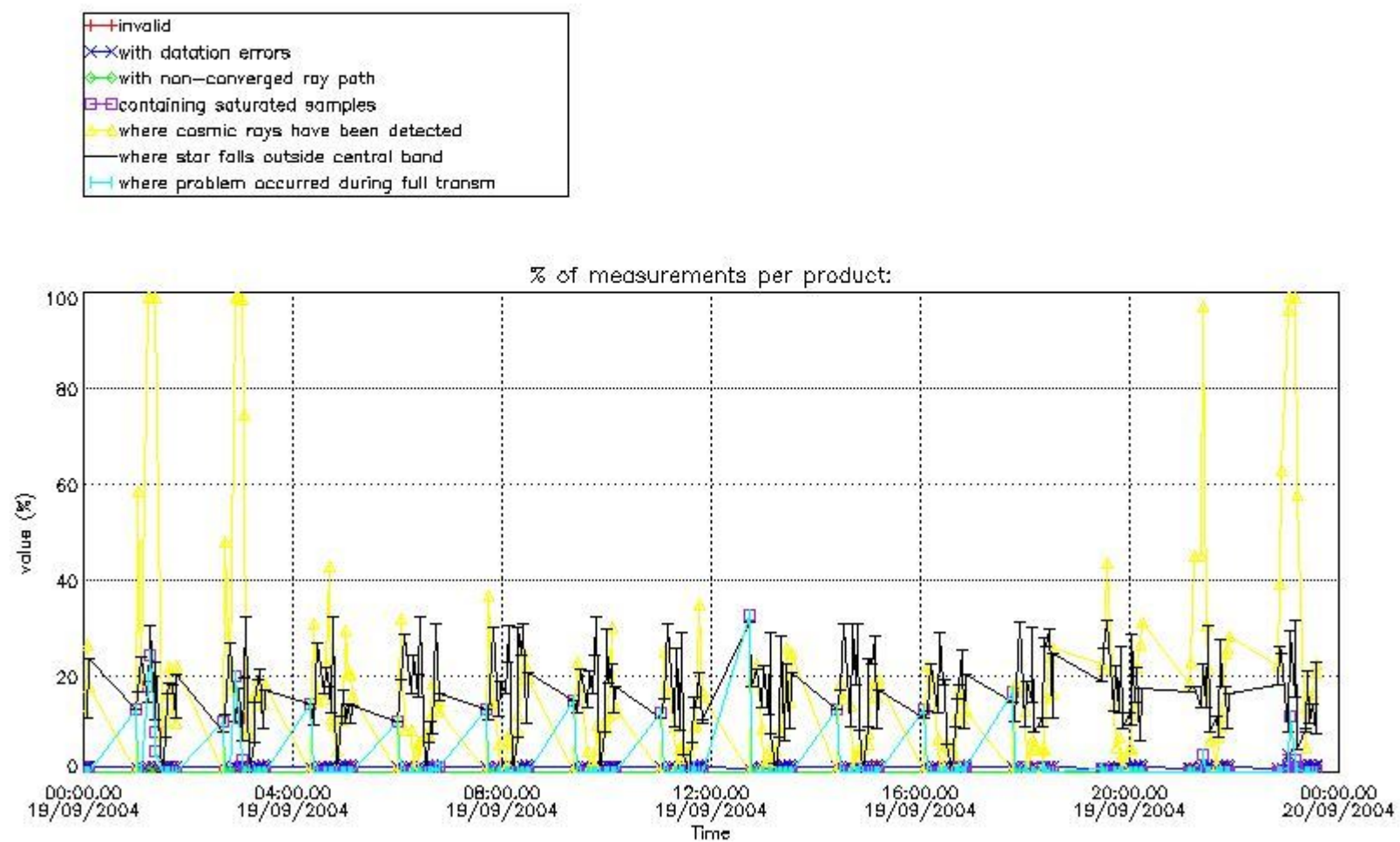


4. Level 1 quality information per product

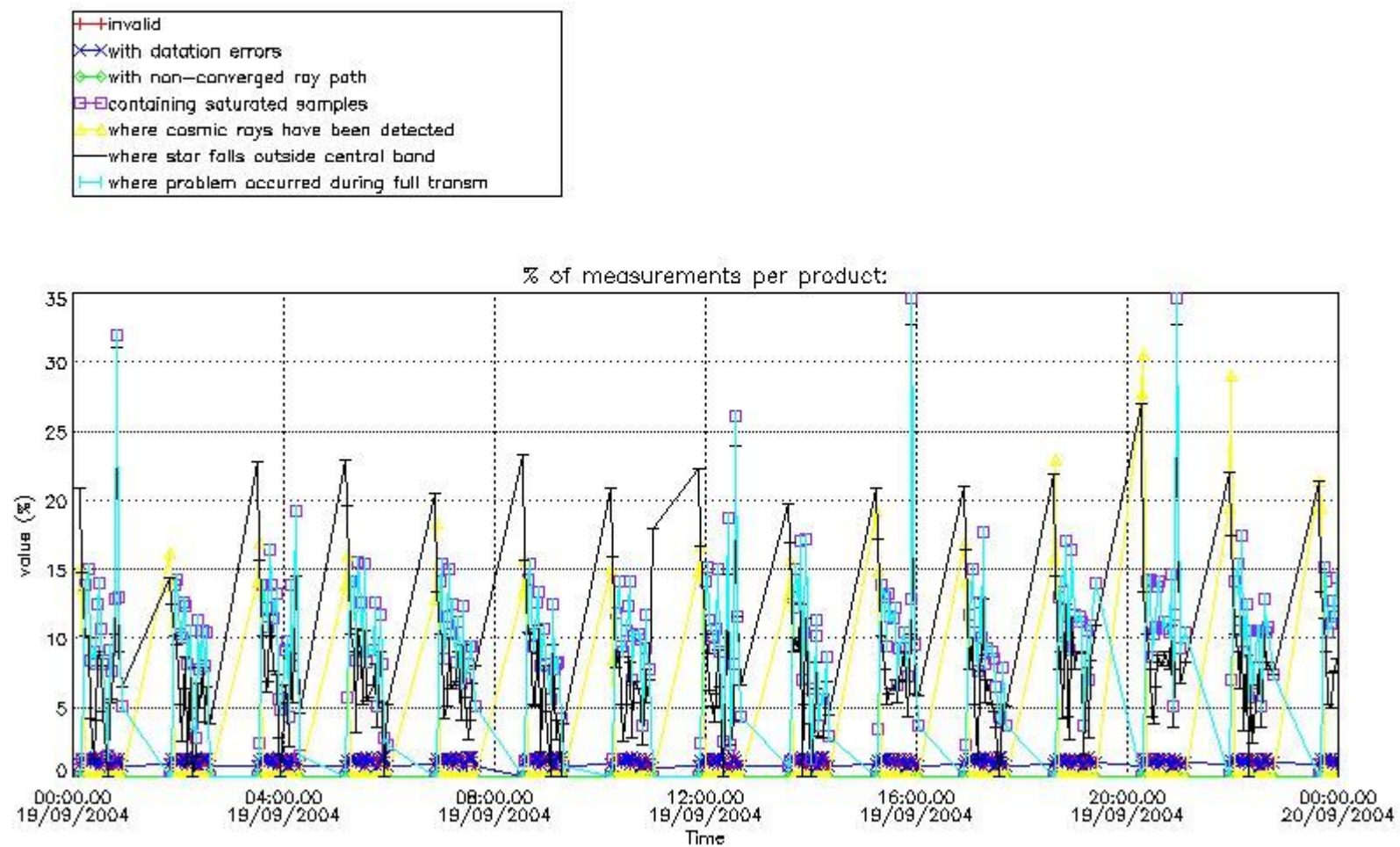
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



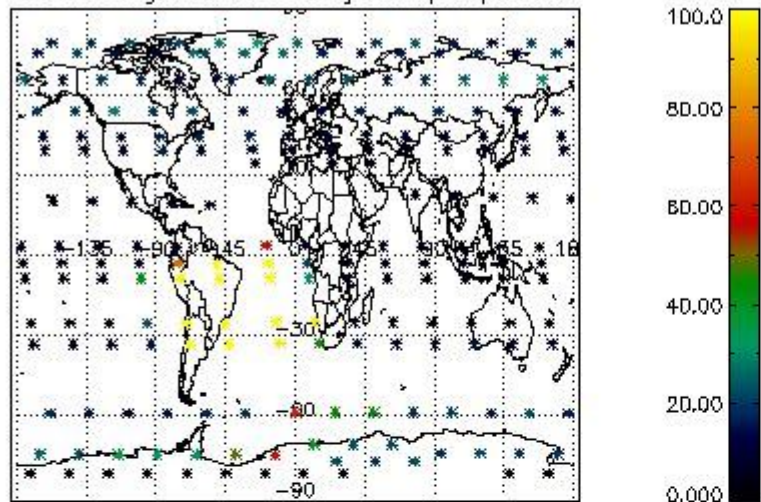
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



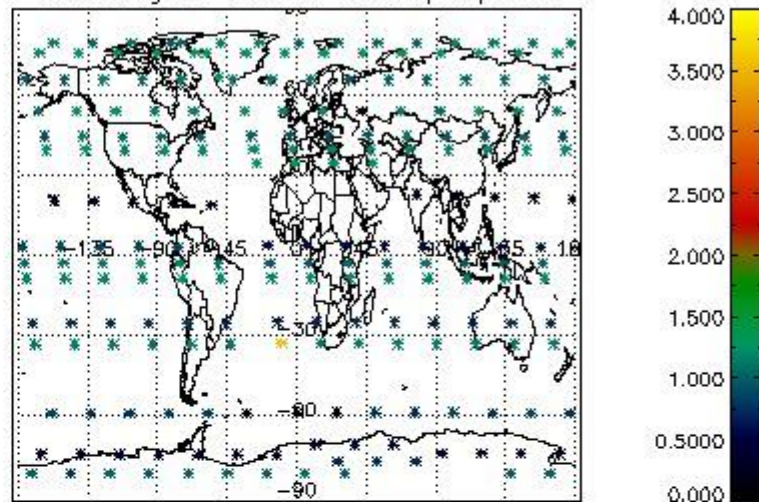
4.2 Plot quality information per product coming from level 1b processing (world map)

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

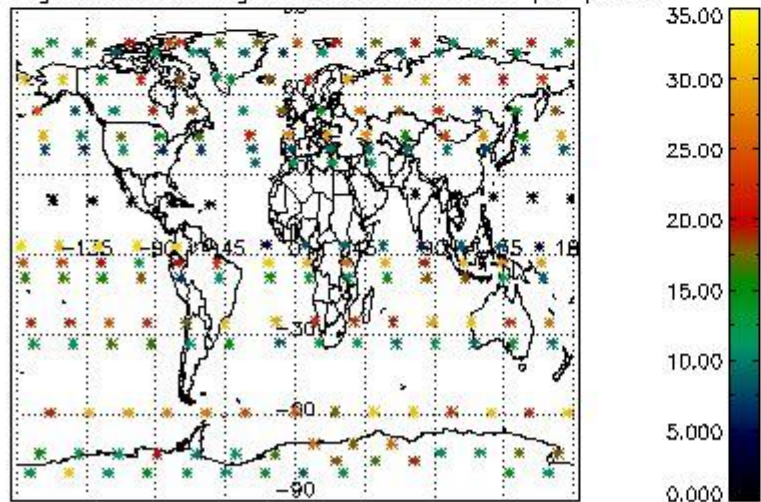
Percentage of cosmic ray hits per profile



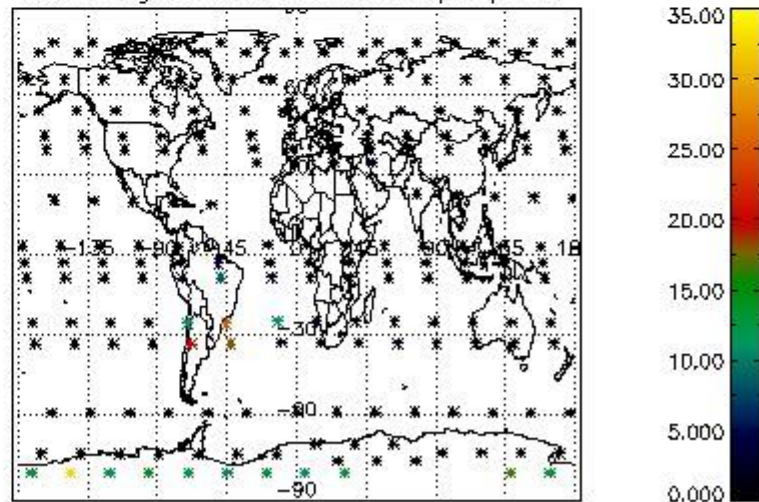
Percentage of datation errors per profile



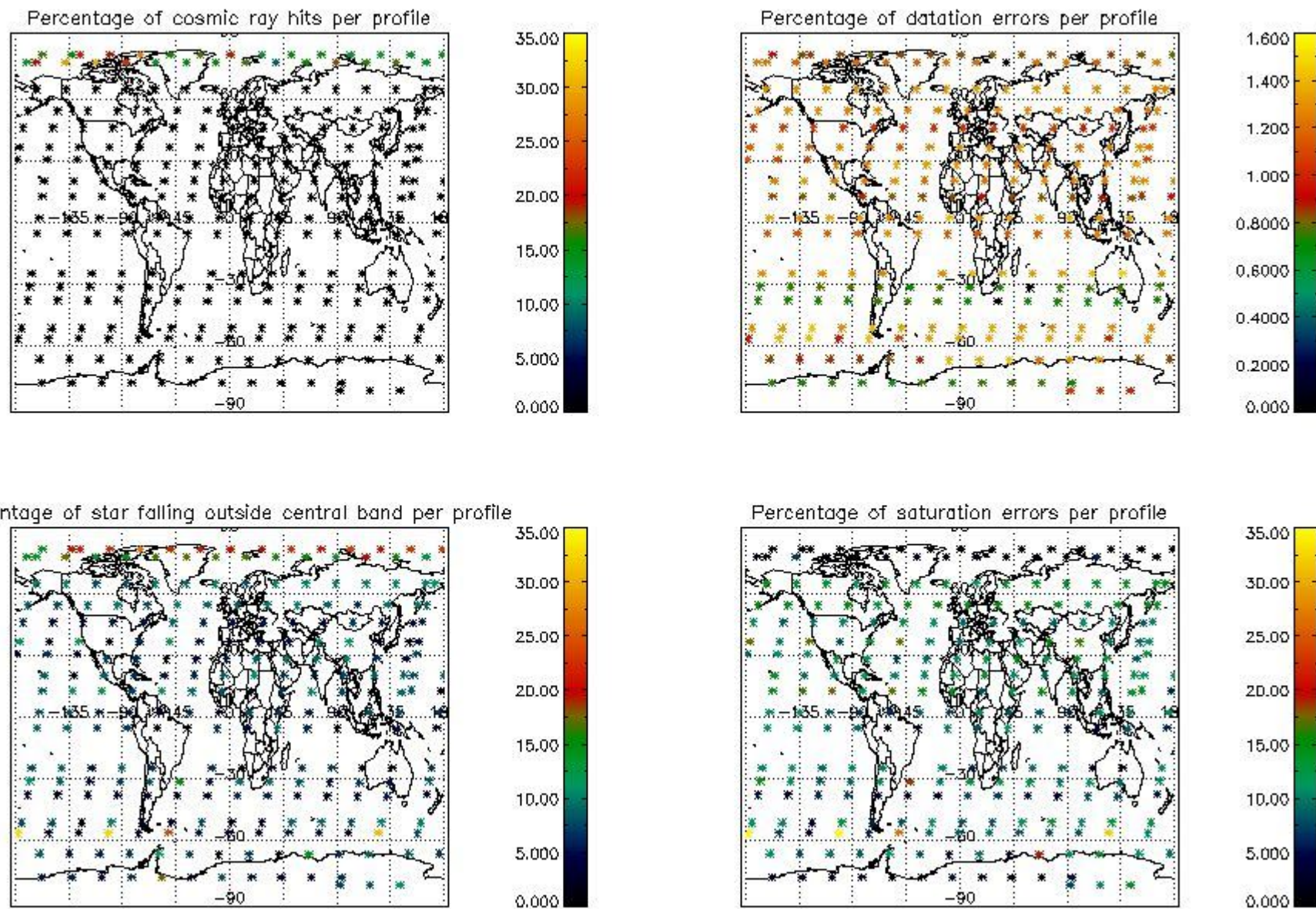
Percentage of star falling outside central band per profile



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

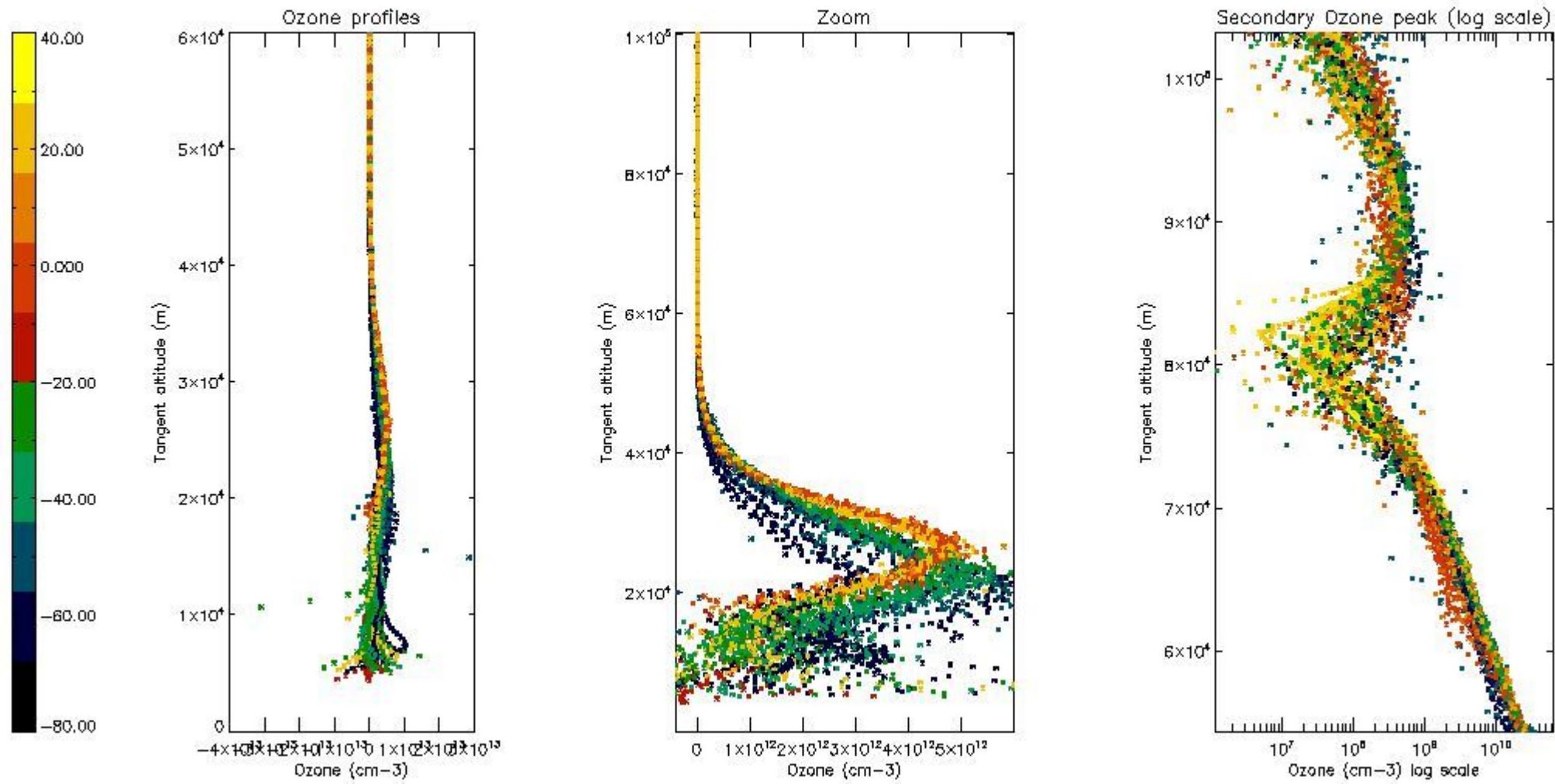
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	21

STD < 10	18
STD < 5	14

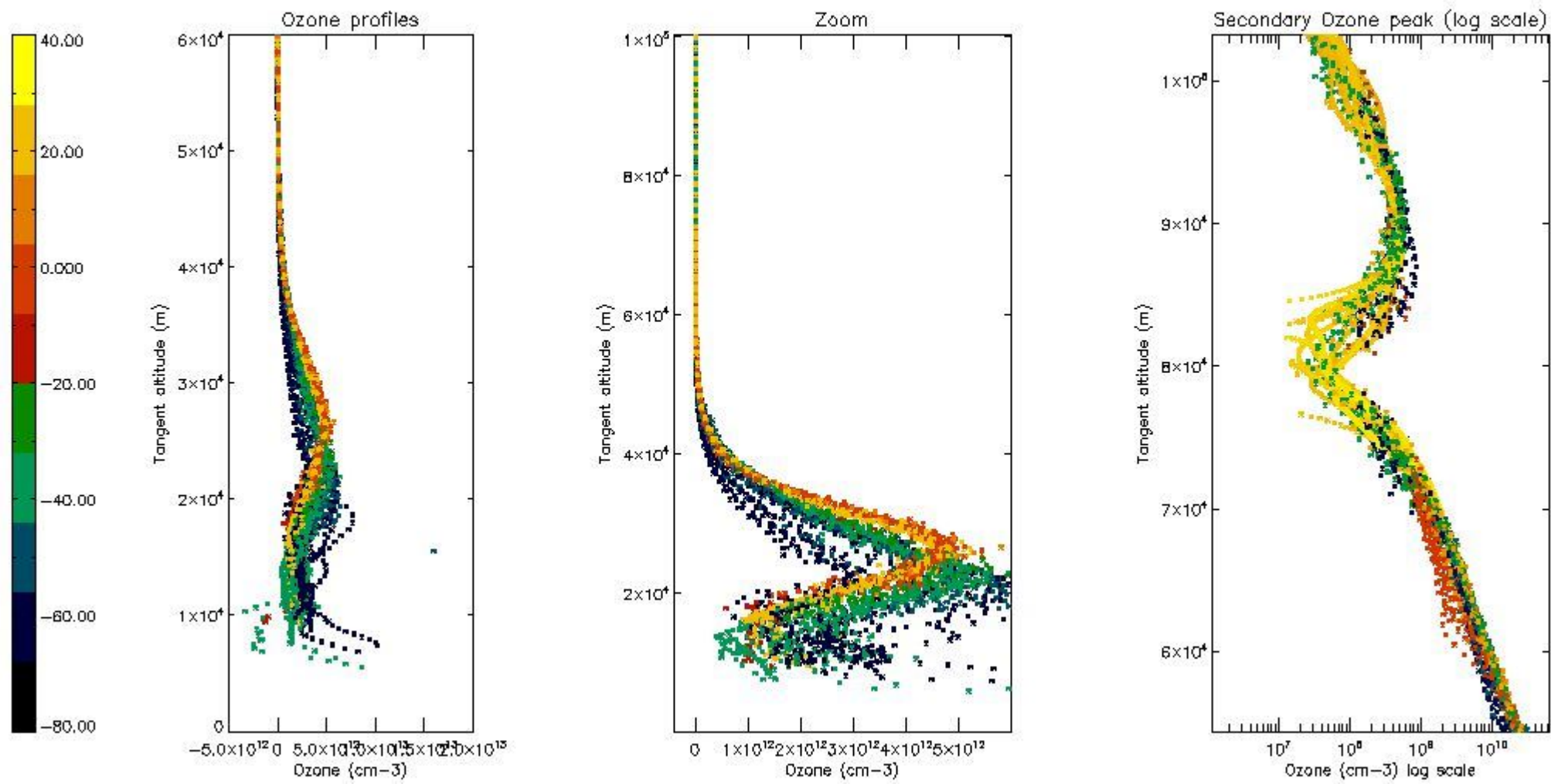
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



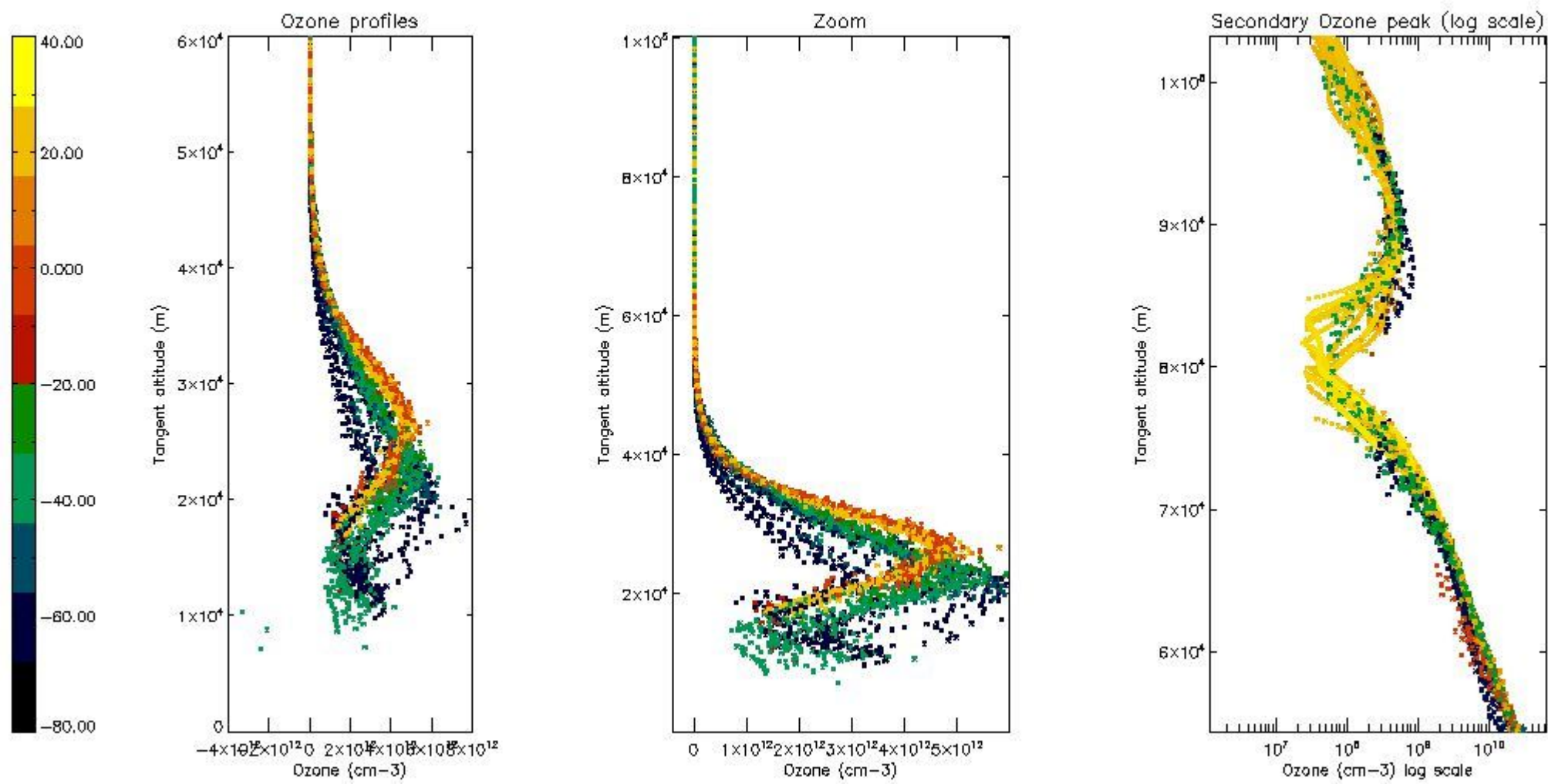
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



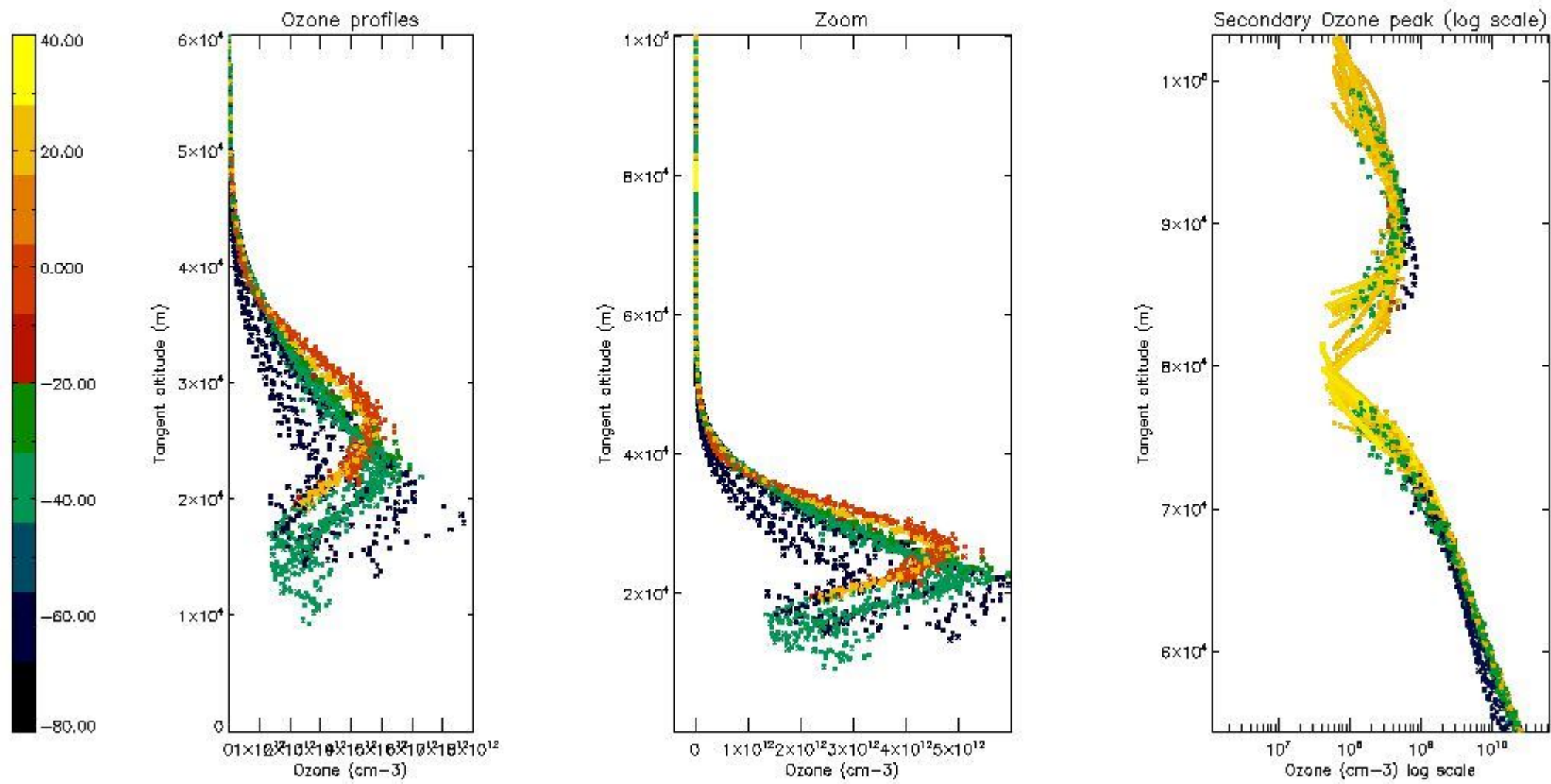
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



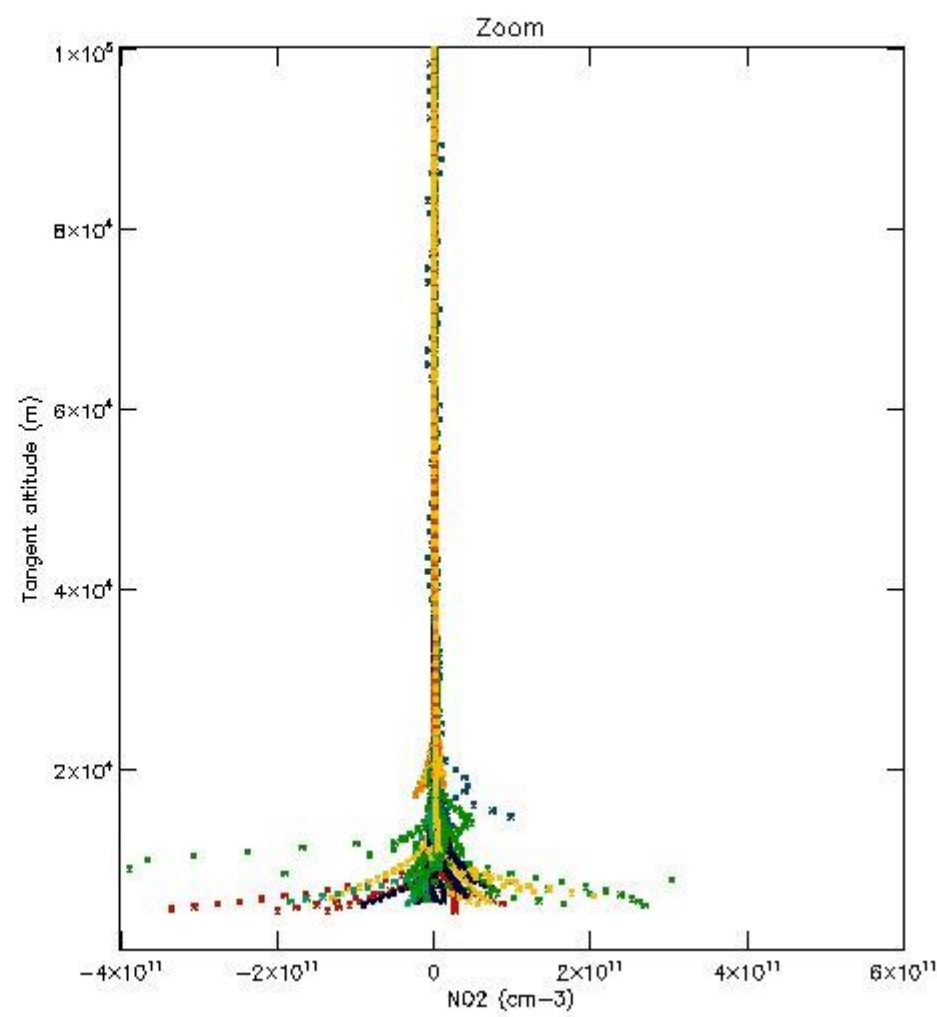
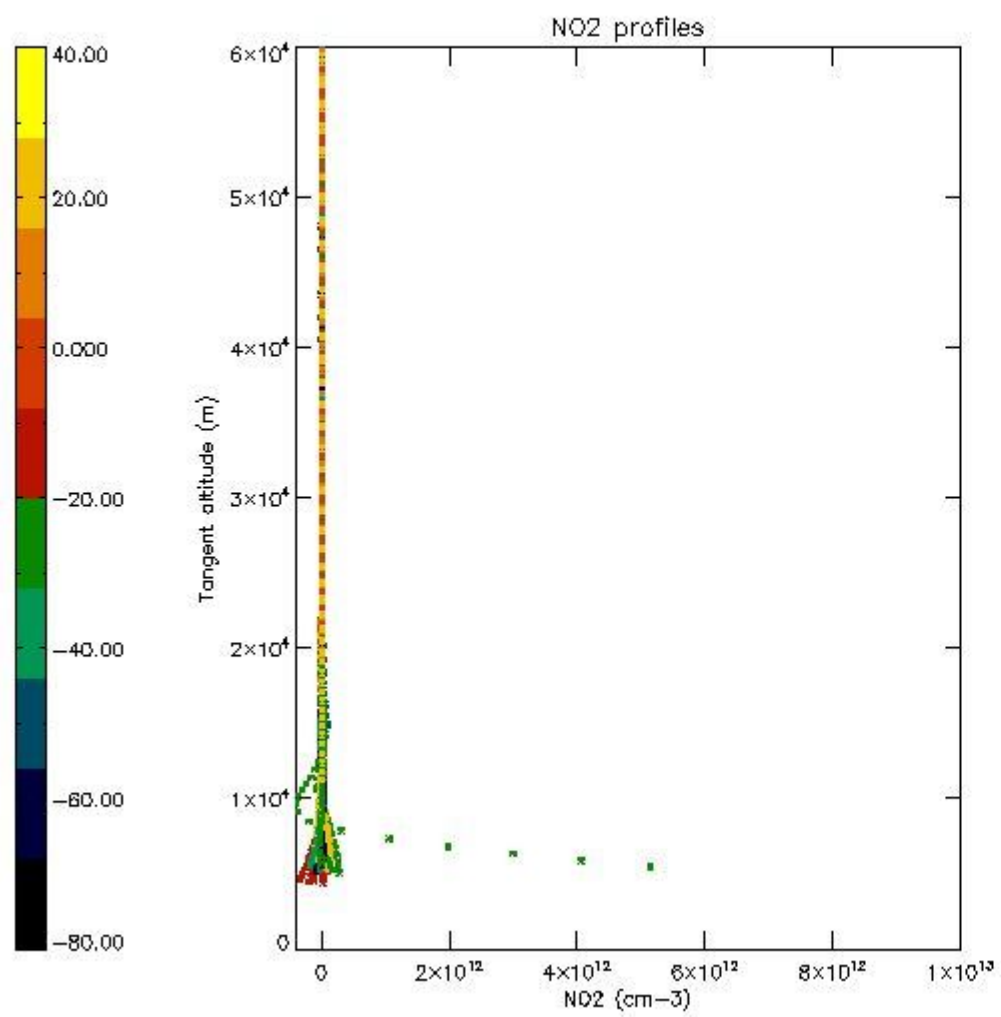
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



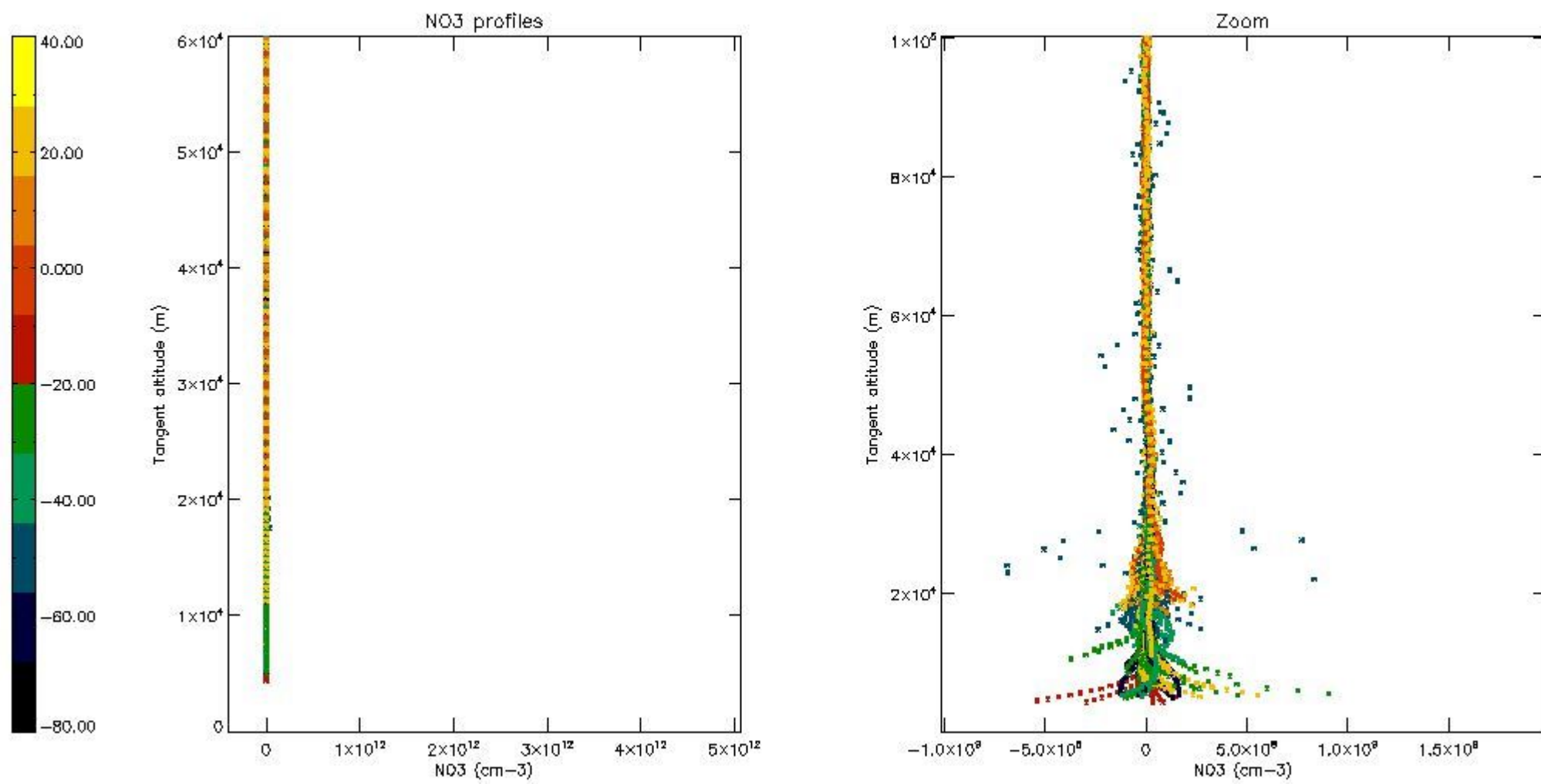
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



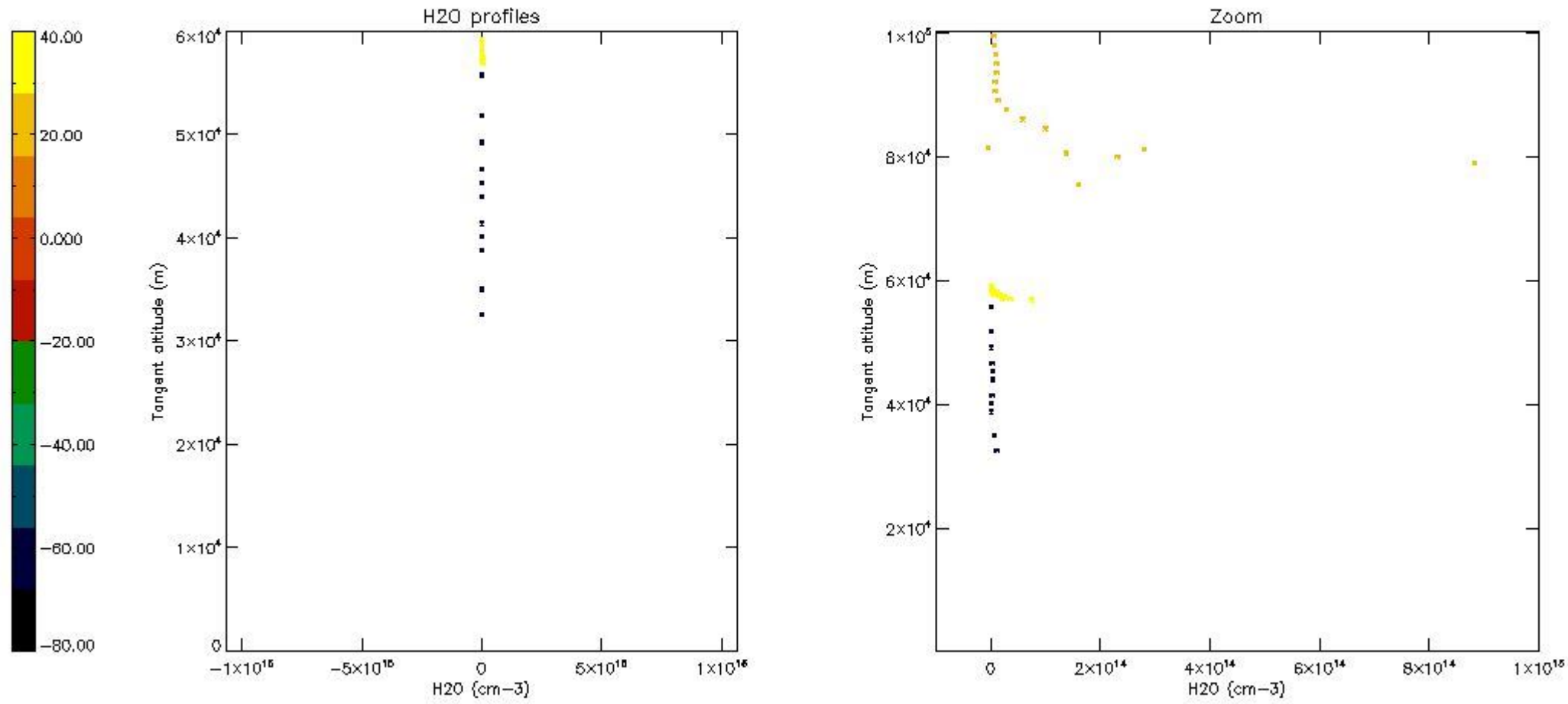
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

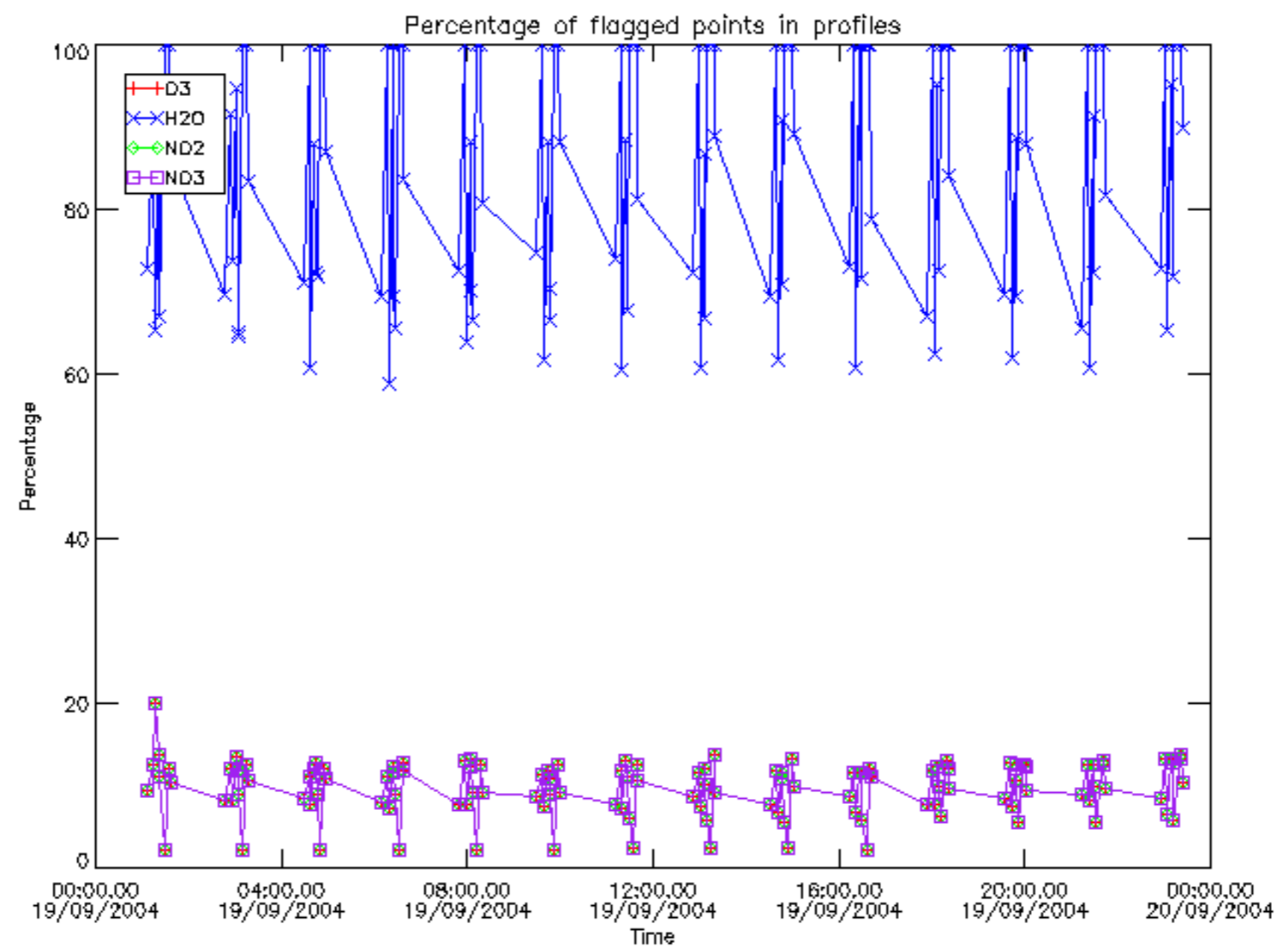
The colorbar represents the latitude.



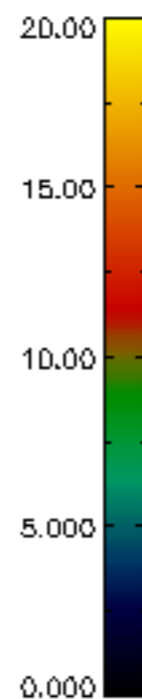
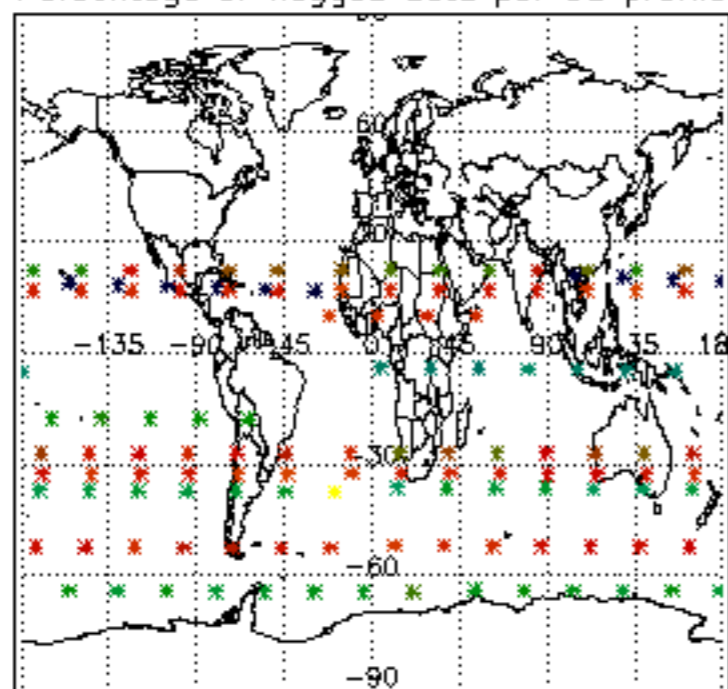
6. Auxiliary Data Files used for the production reported in section 2

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.

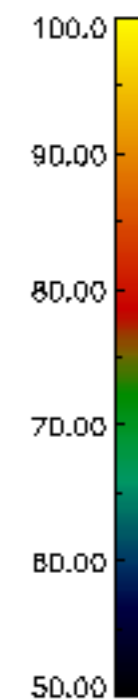
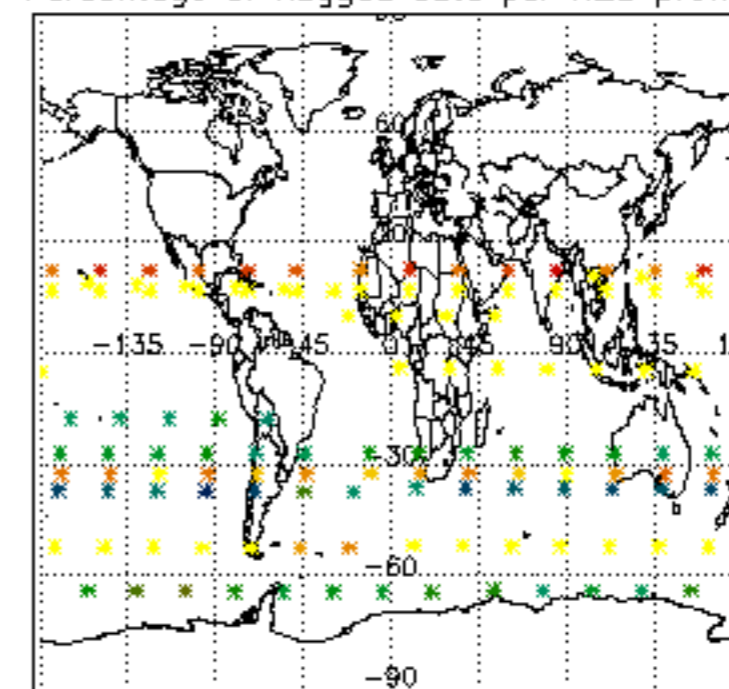
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	19-SEP-2004 00:02:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-SEP-2004 00:02:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-SEP-2004 00:02:00



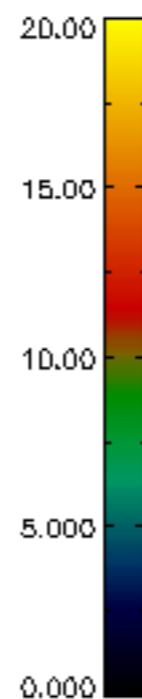
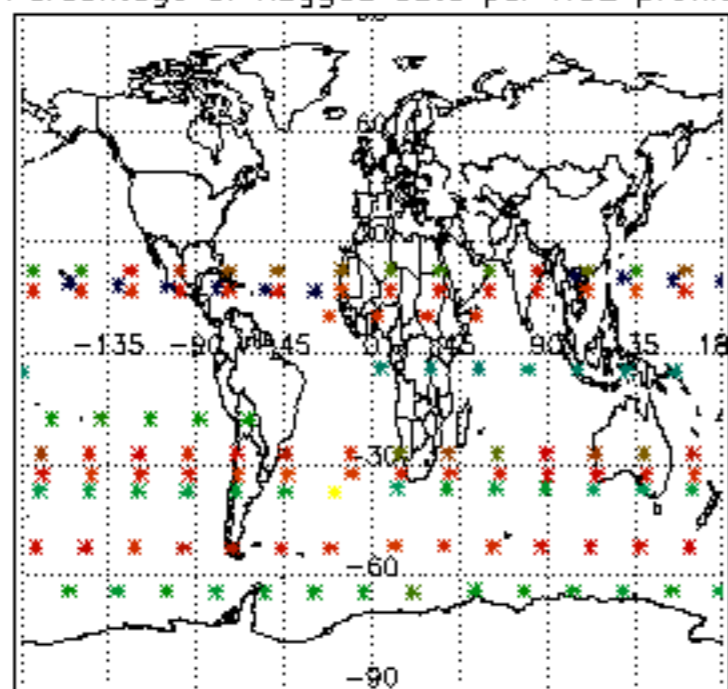
Percentage of flagged data per D3 profile



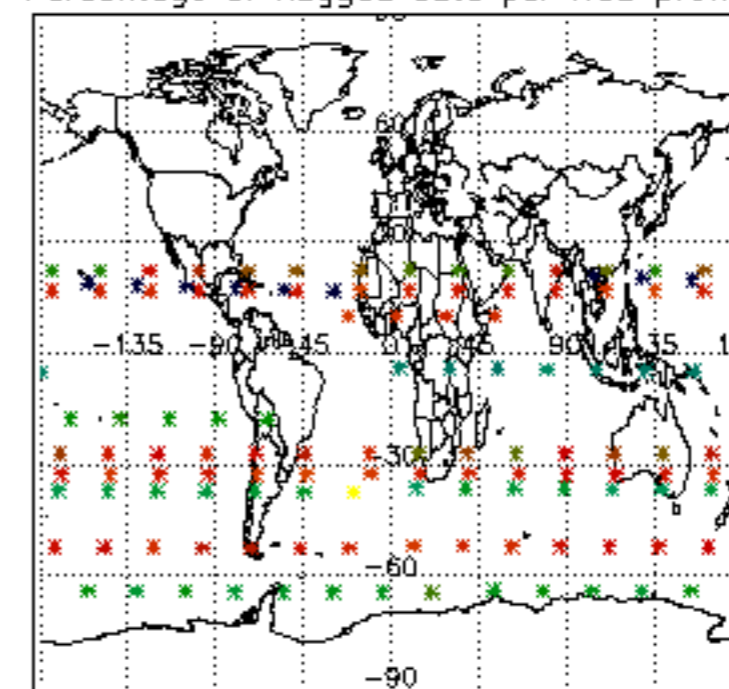
Percentage of flagged data per H2O profile

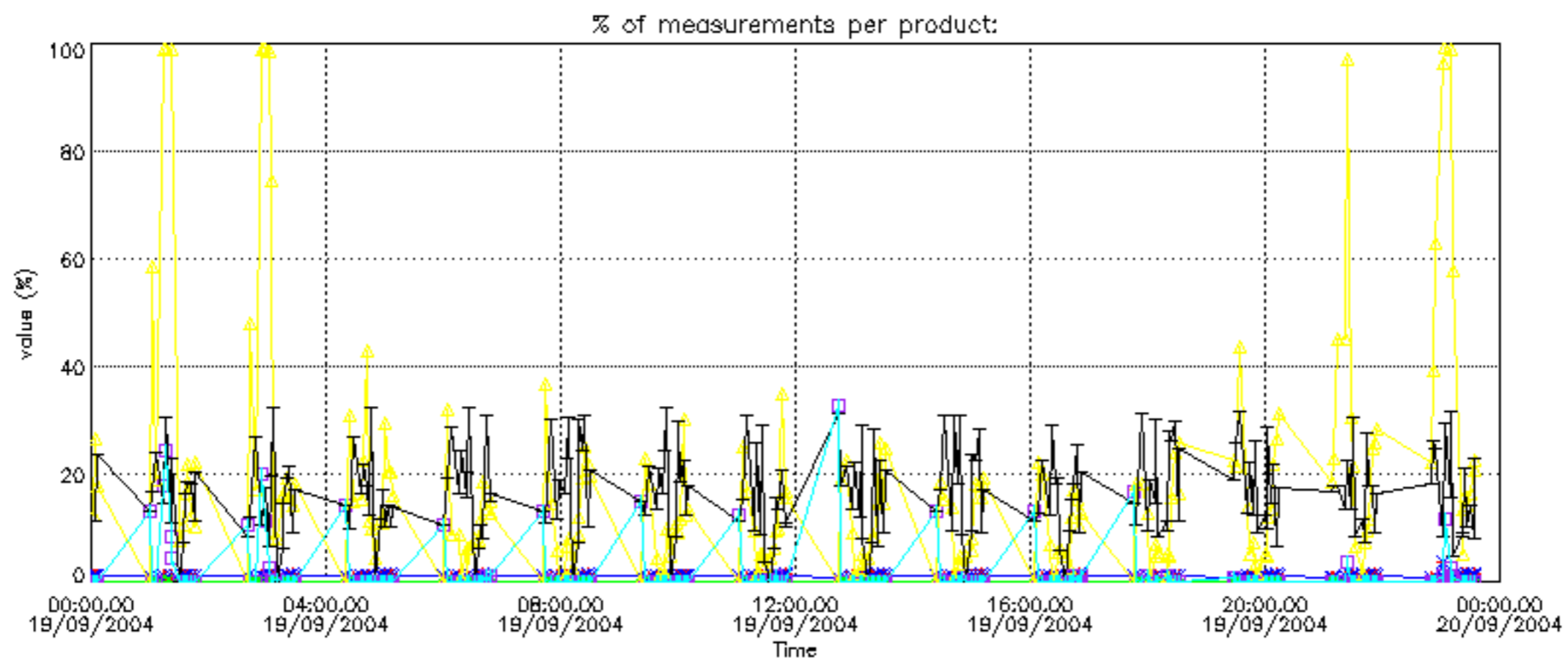
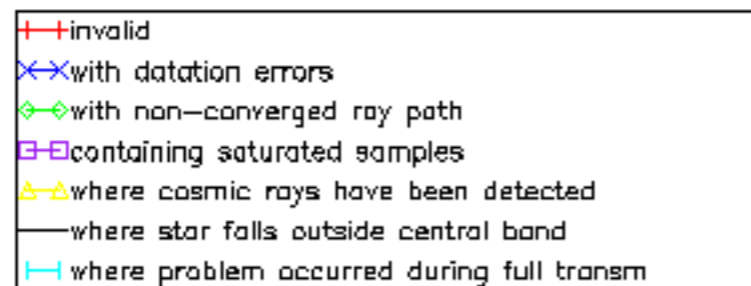


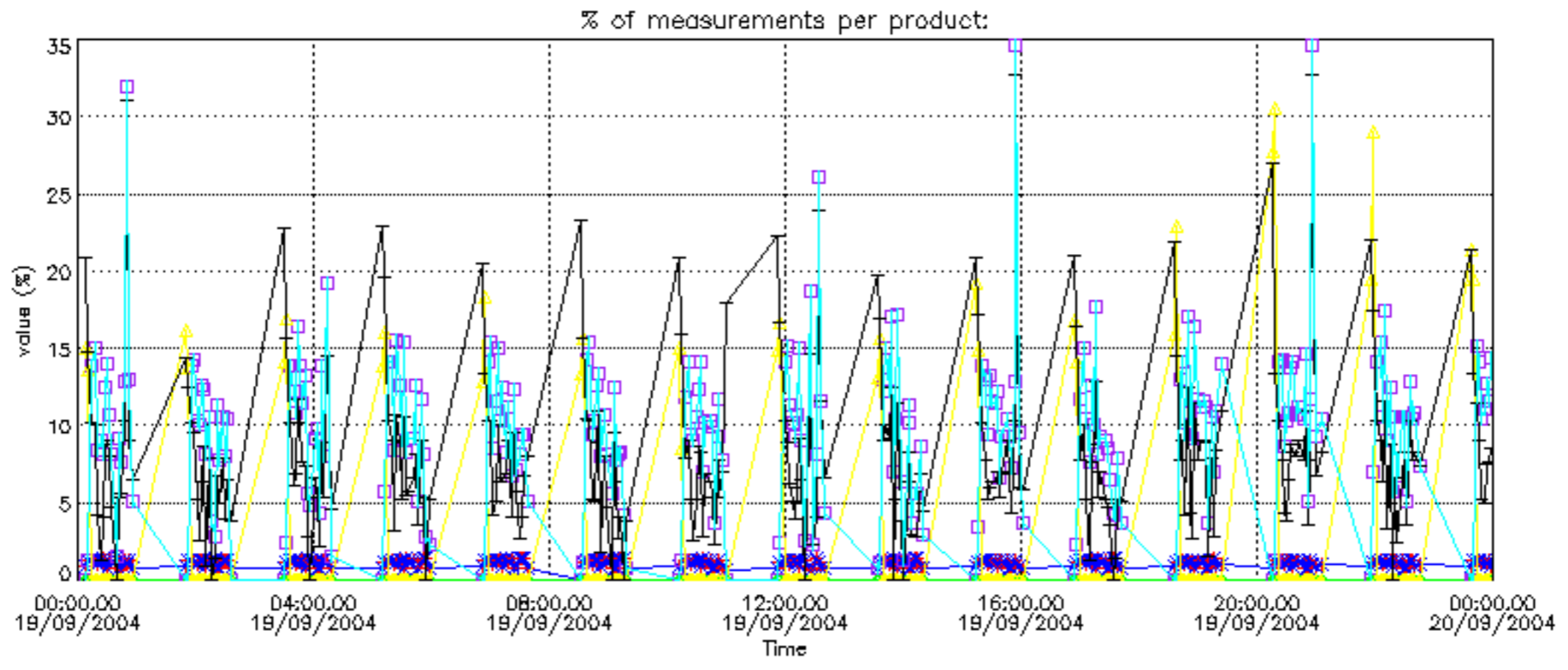
Percentage of flagged data per NO2 profile



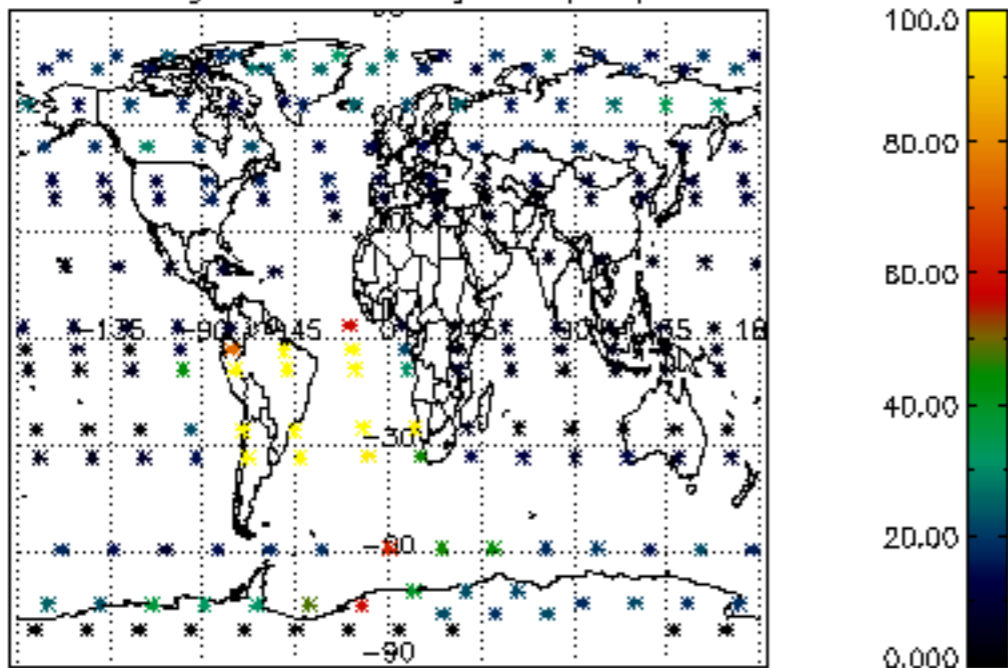
Percentage of flagged data per NO3 profile



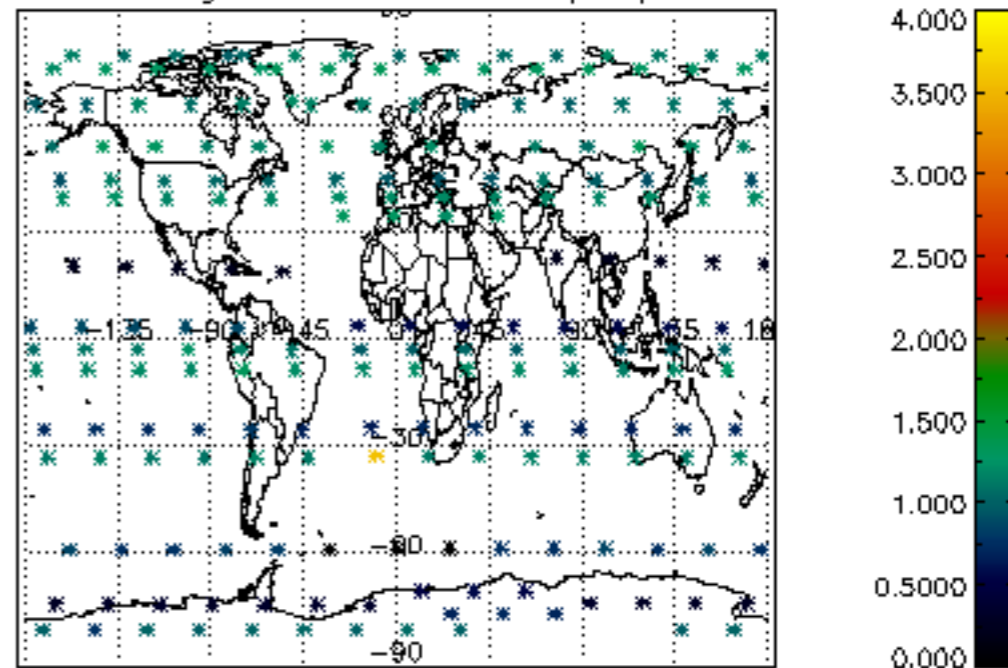




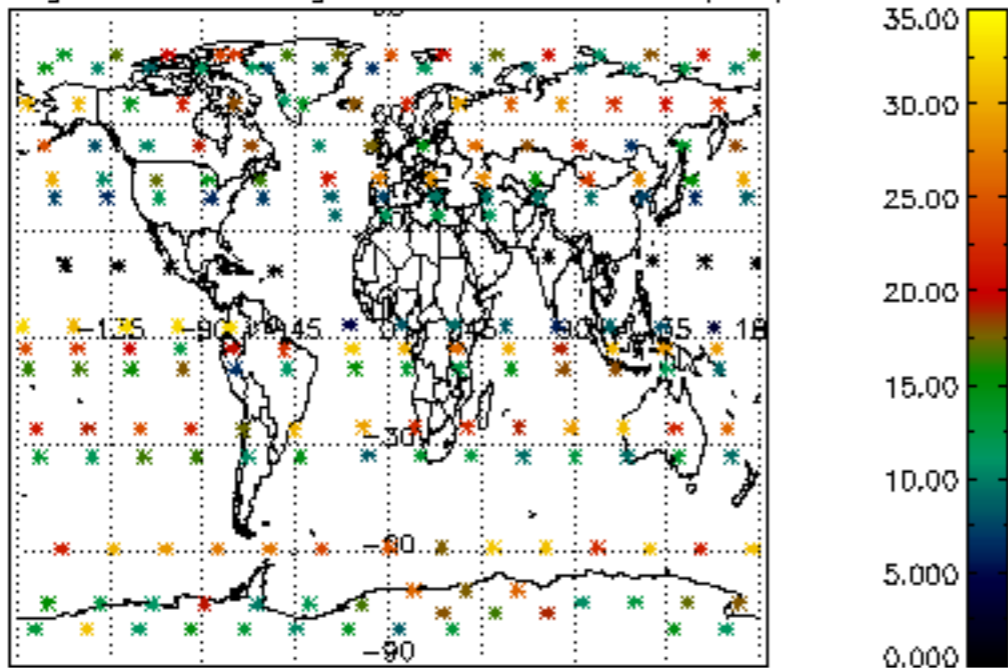
Percentage of cosmic ray hits per profile



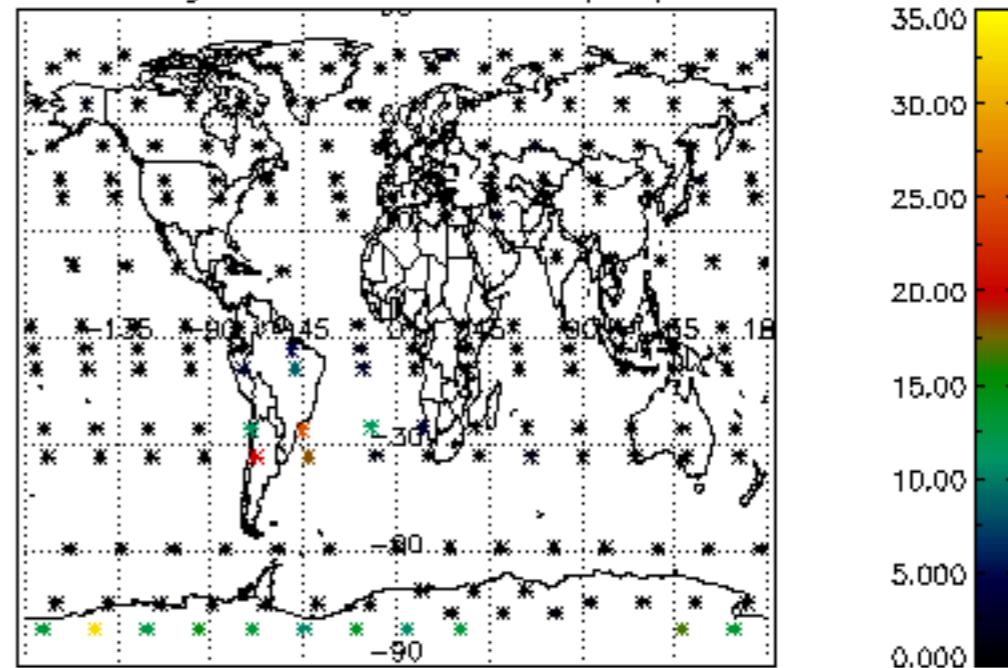
Percentage of datation errors per profile



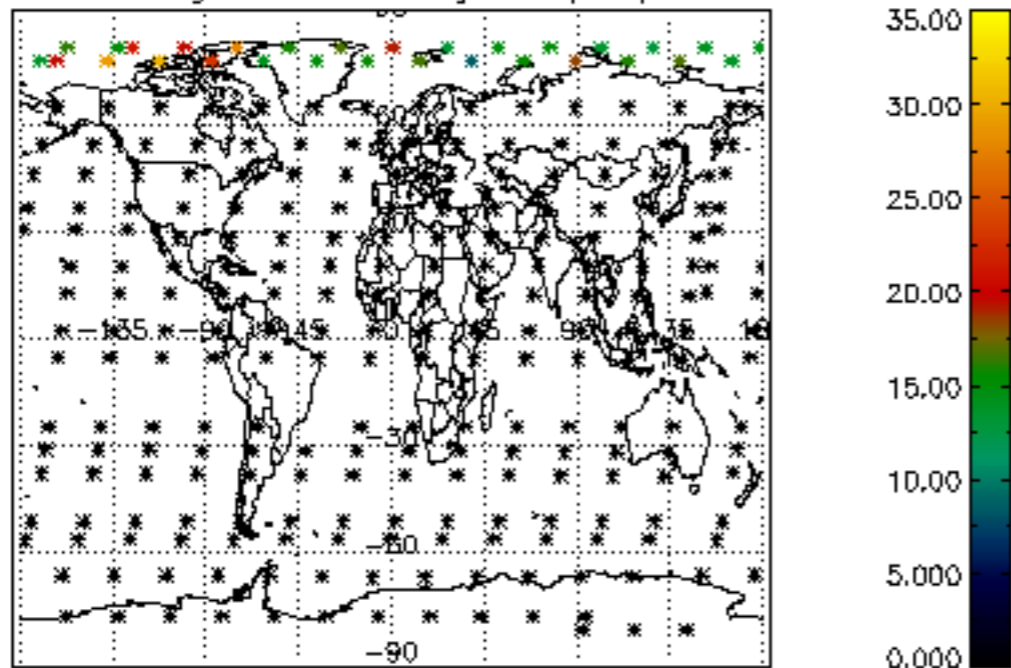
Percentage of star falling outside central band per profile



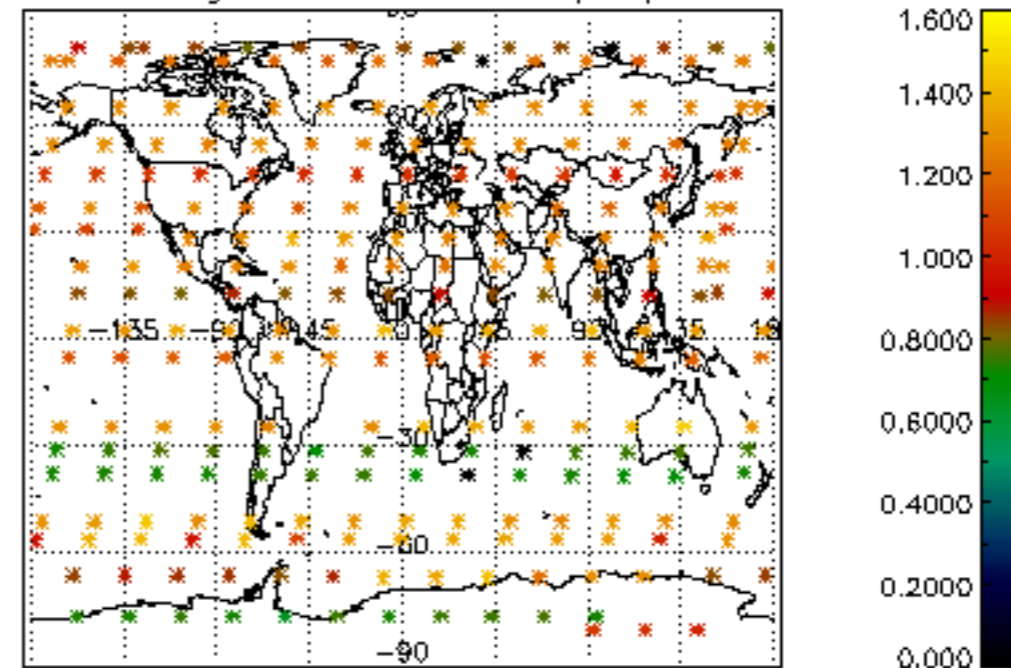
Percentage of saturation errors per profile



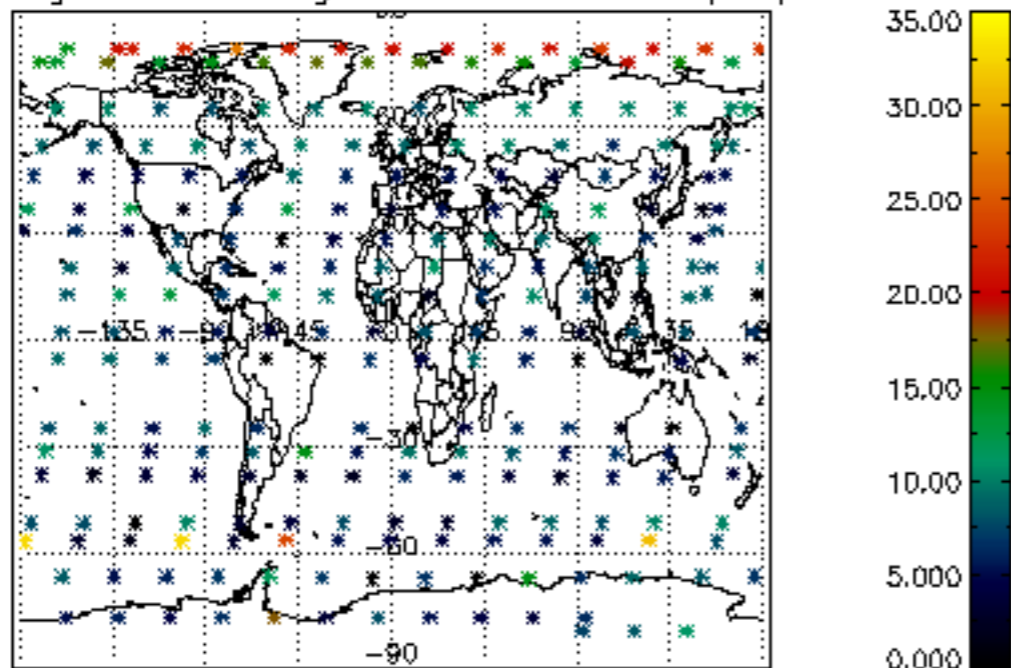
Percentage of cosmic ray hits per profile



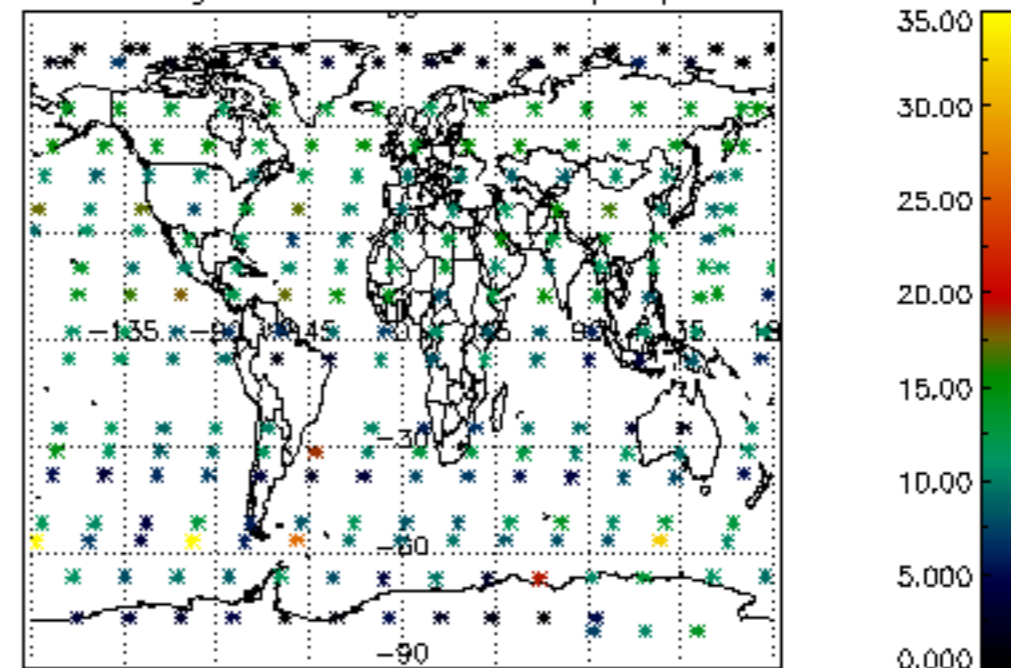
Percentage of datation errors per profile

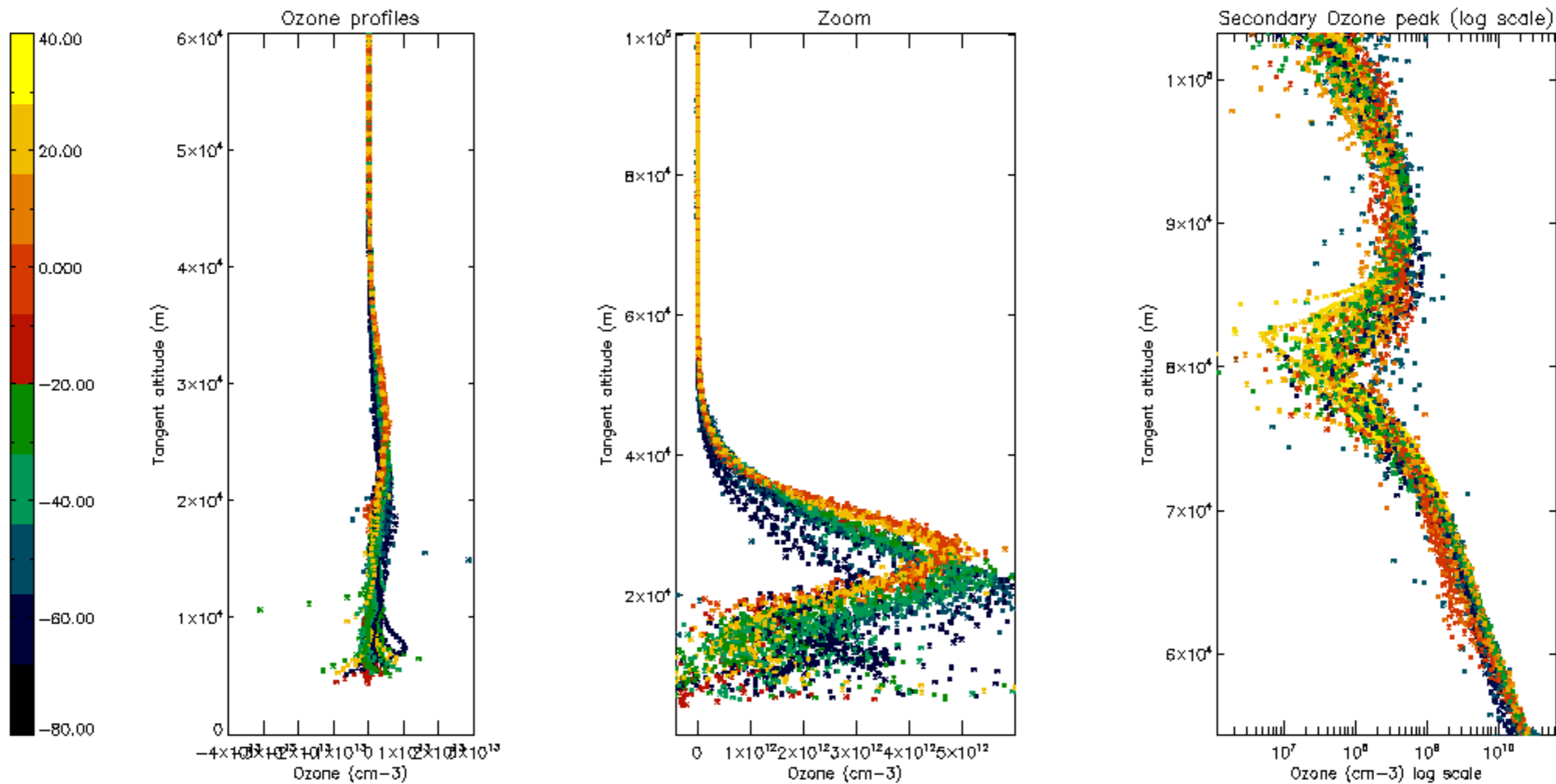


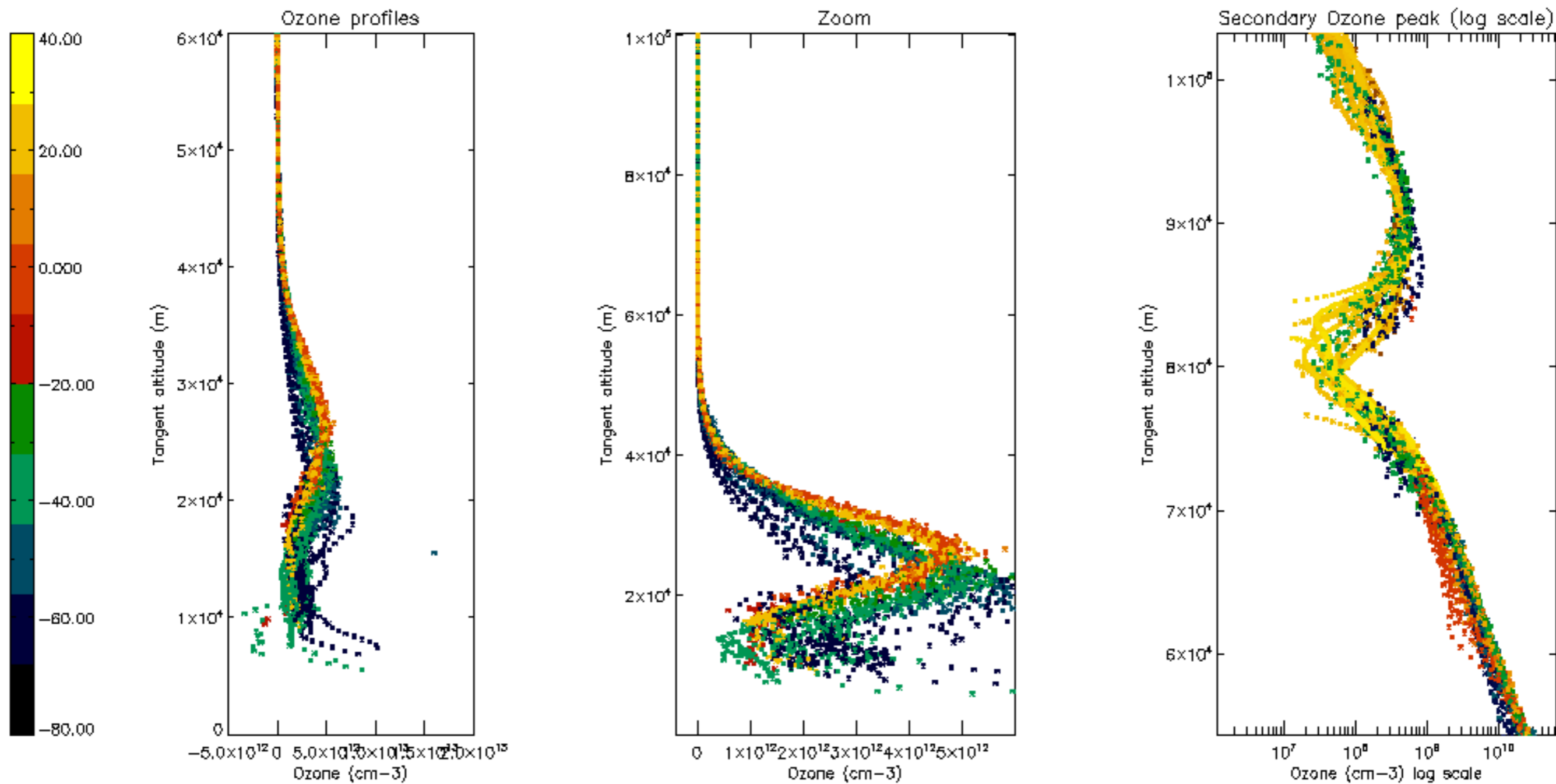
Percentage of star falling outside central band per profile

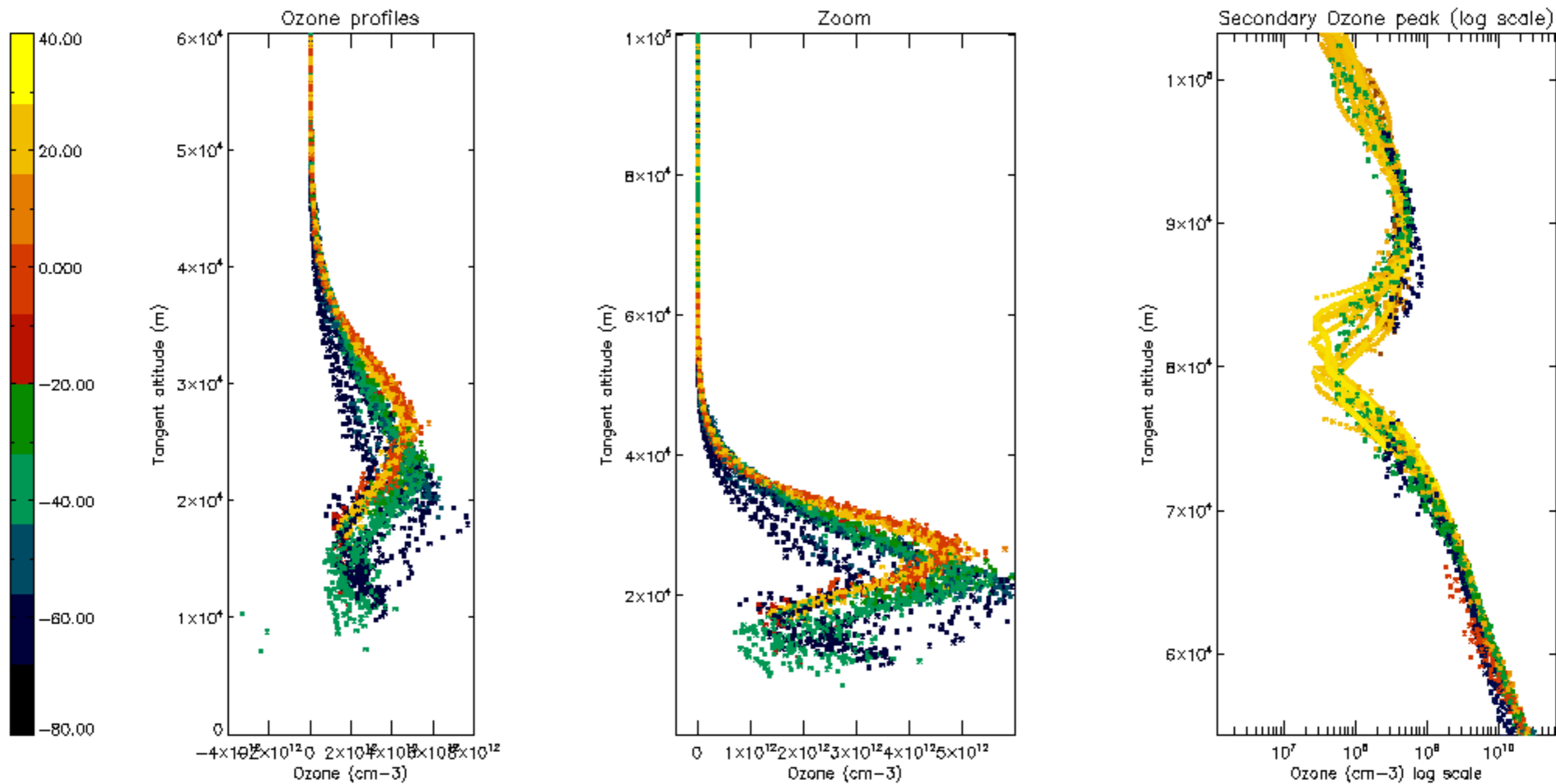


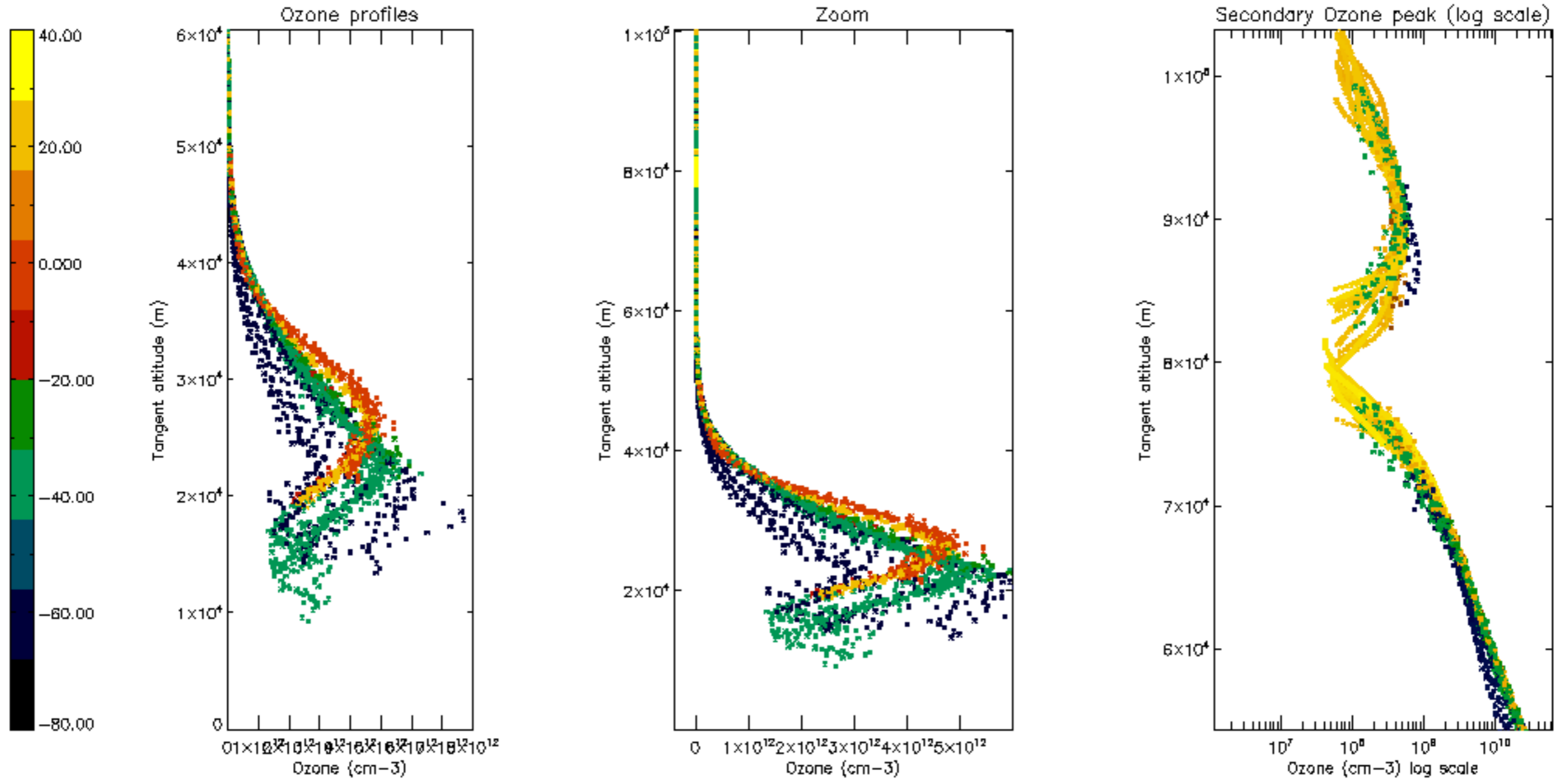
Percentage of saturation errors per profile

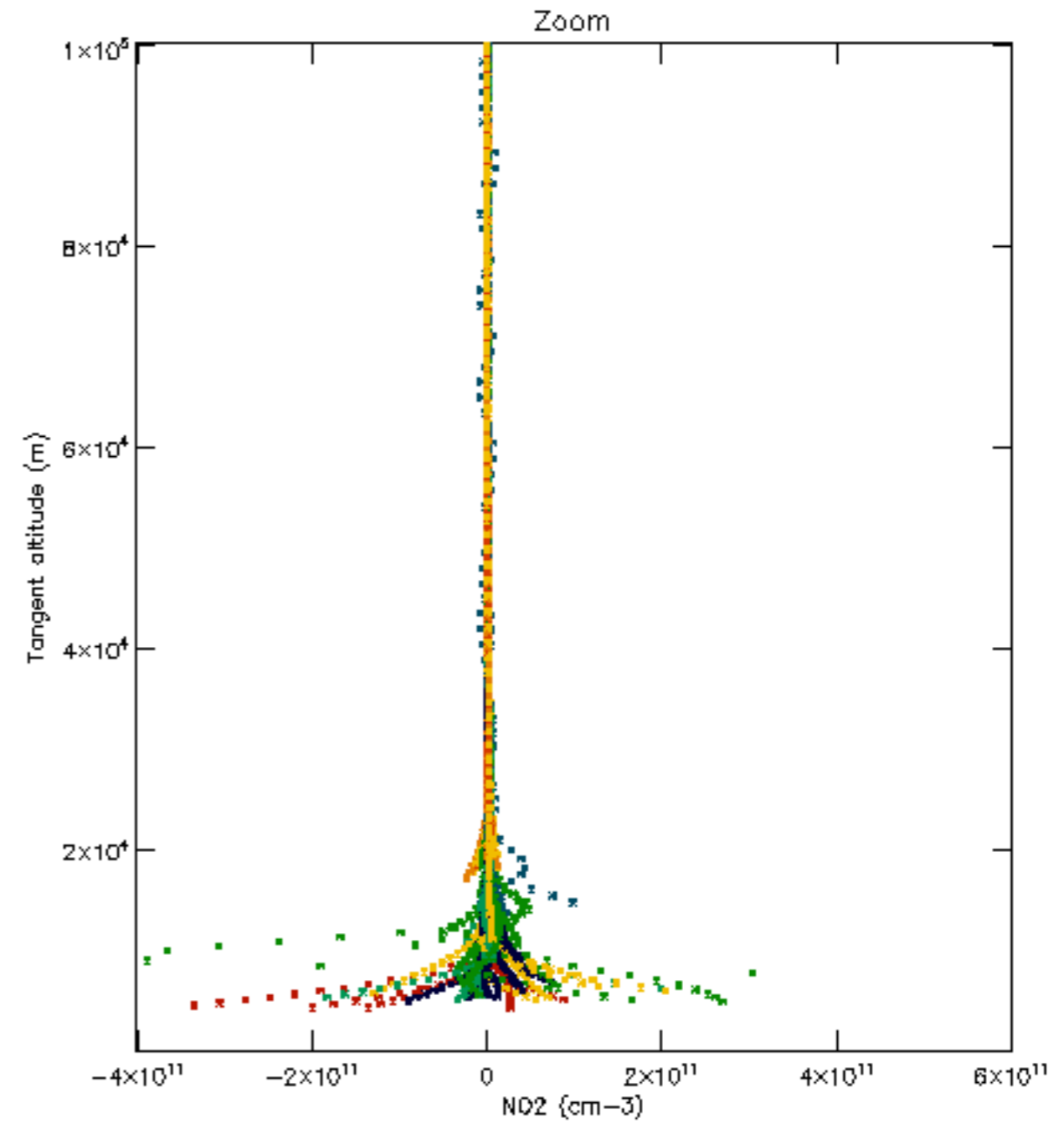
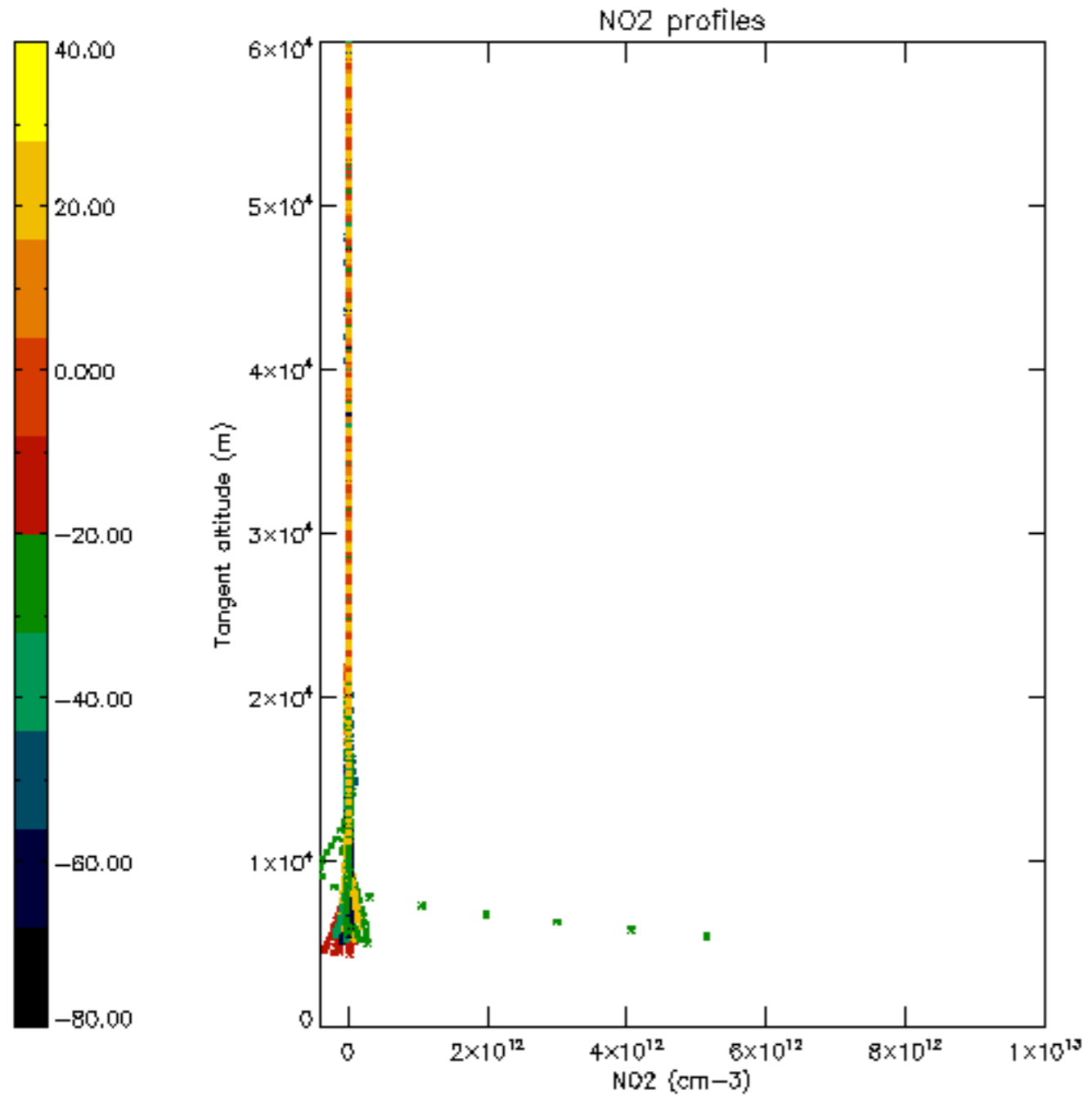


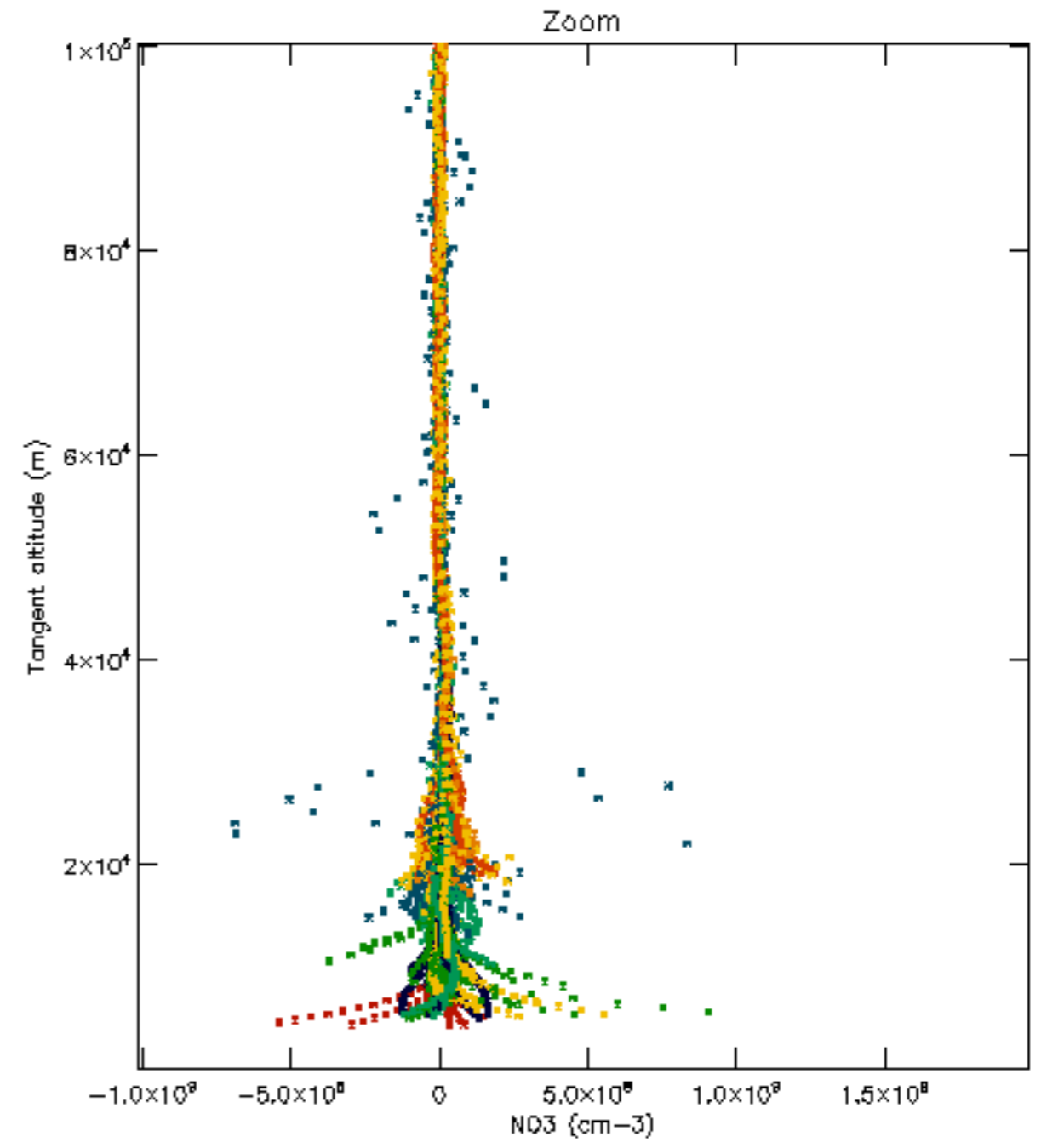
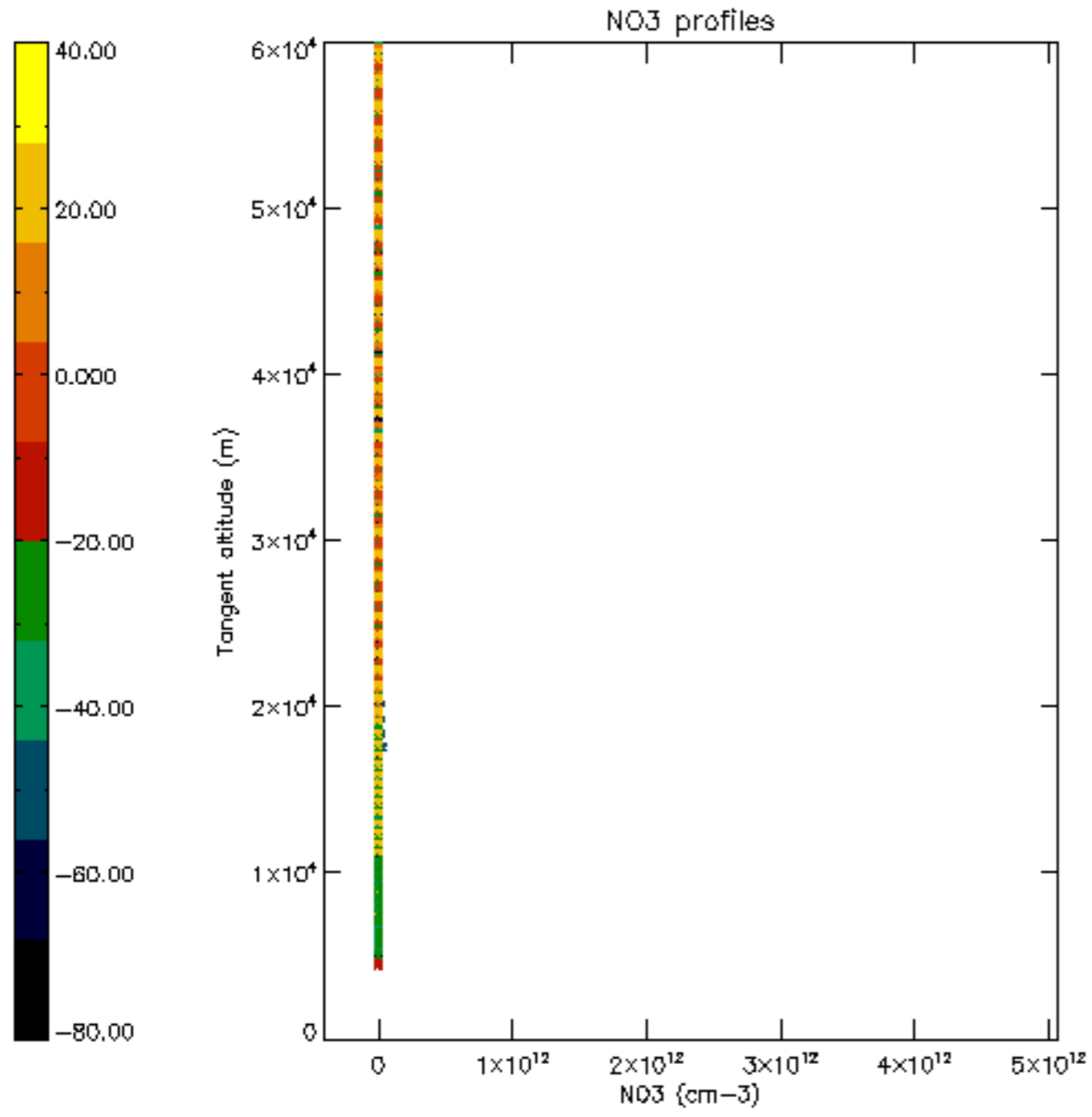


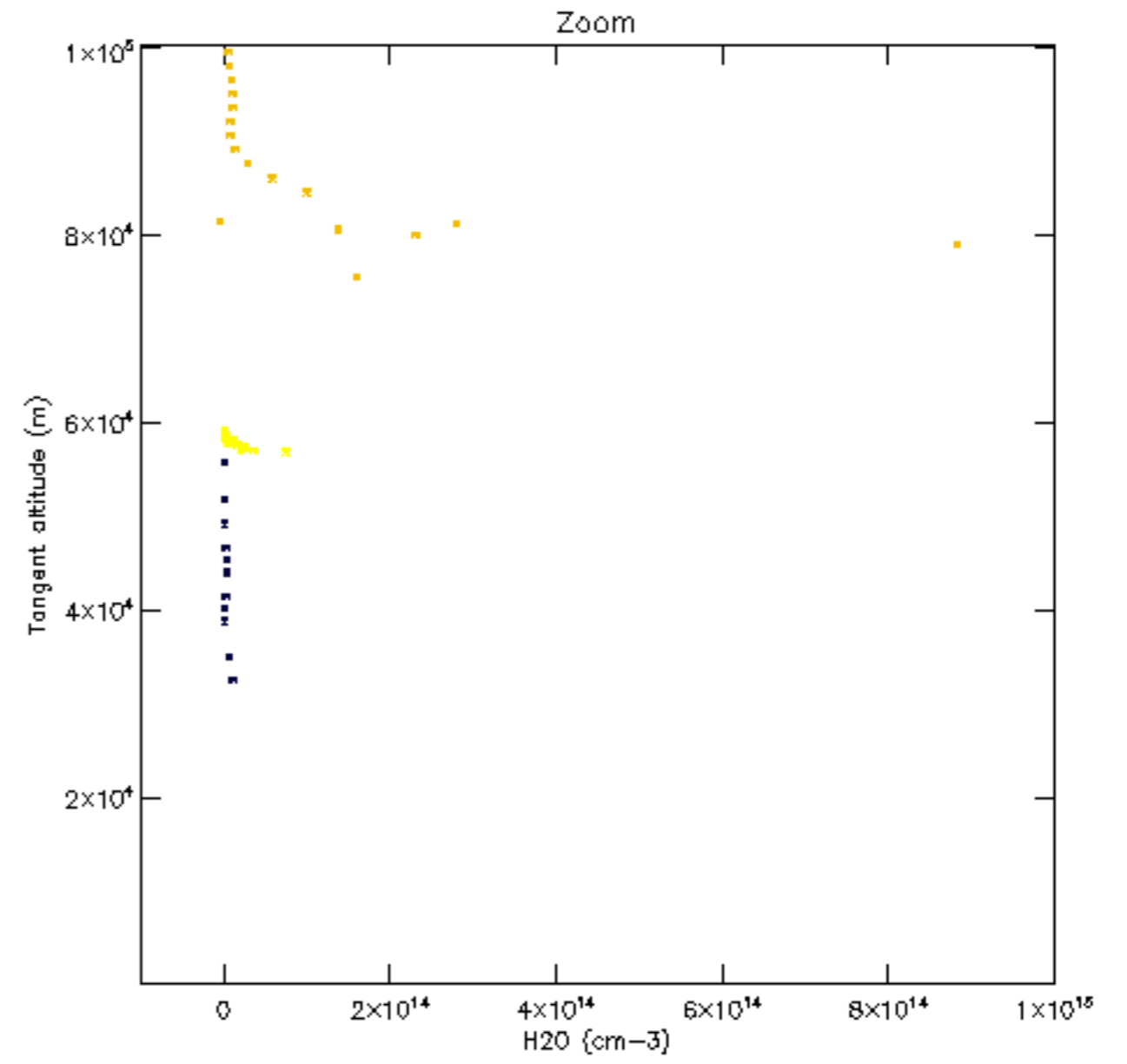
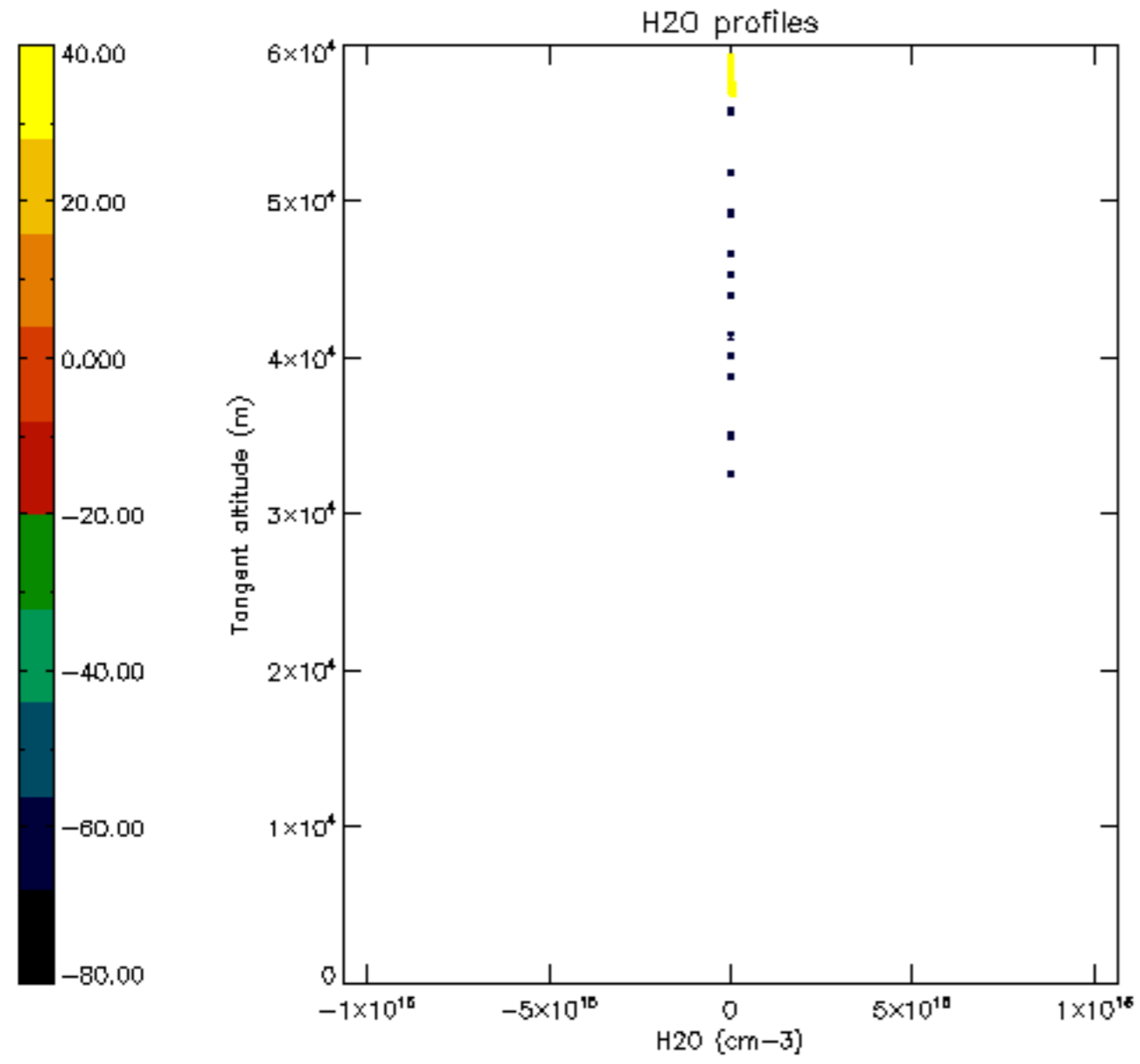


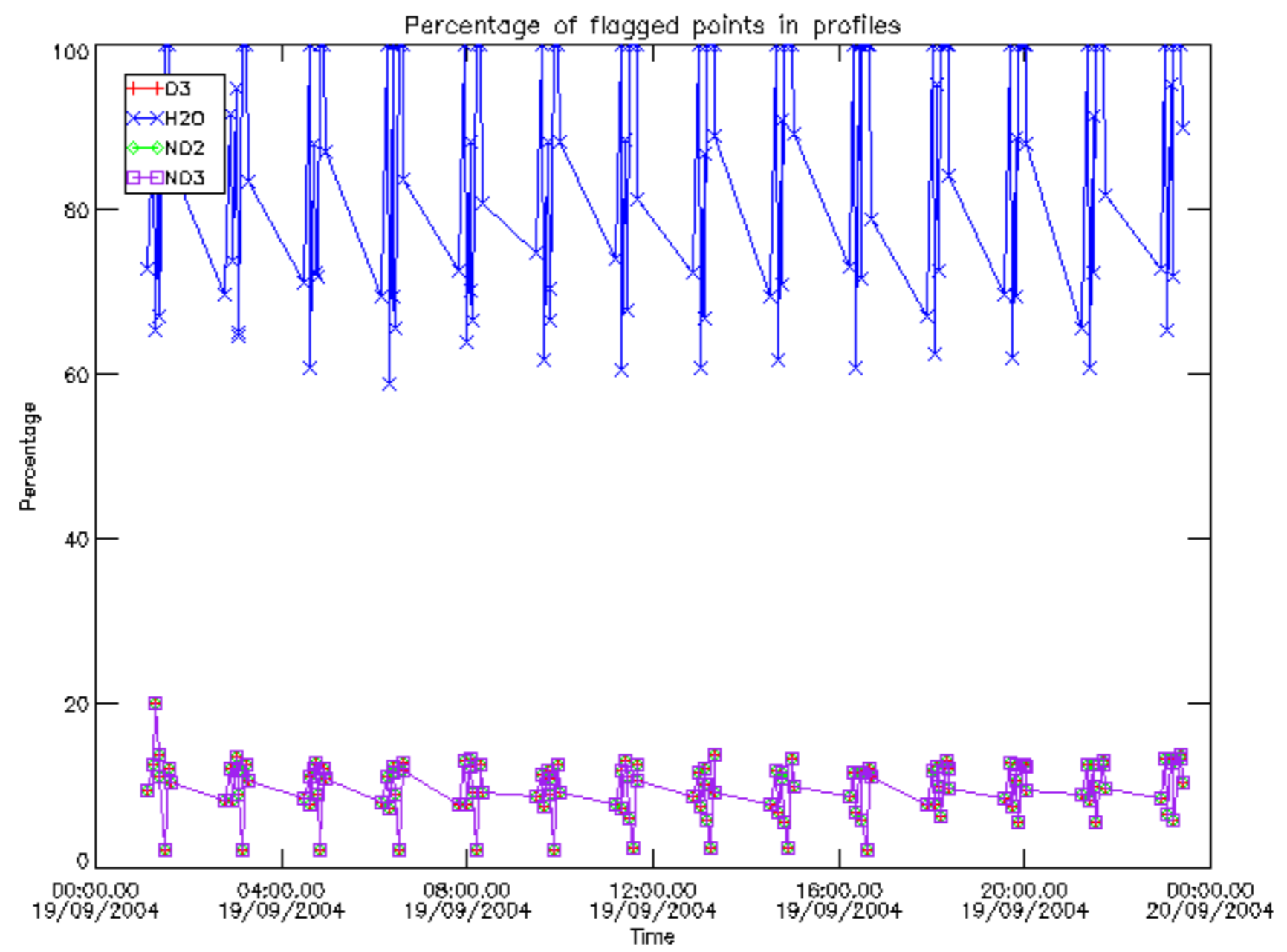




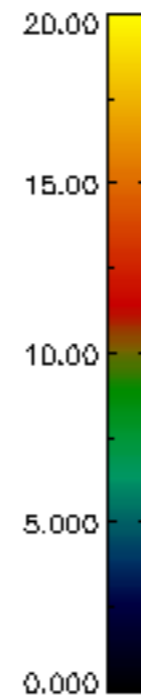
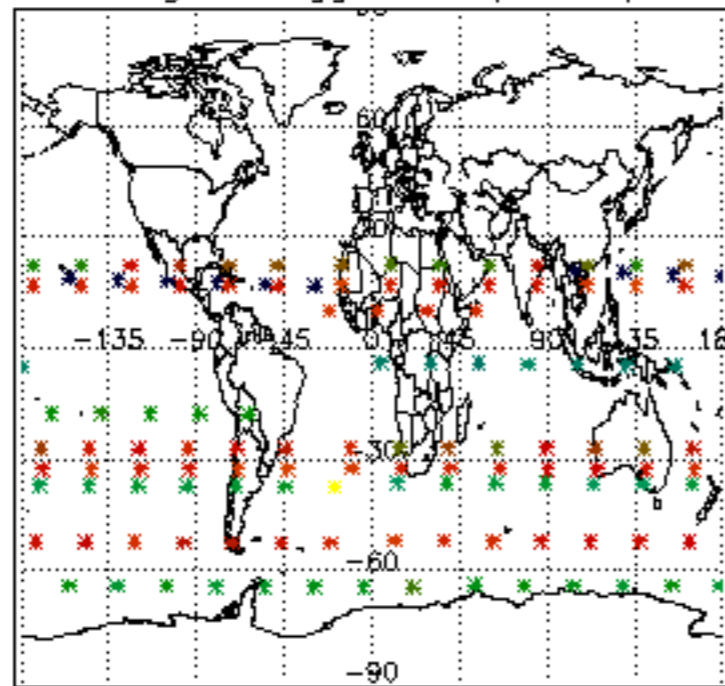




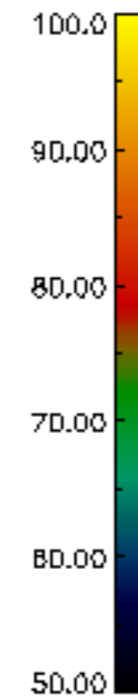
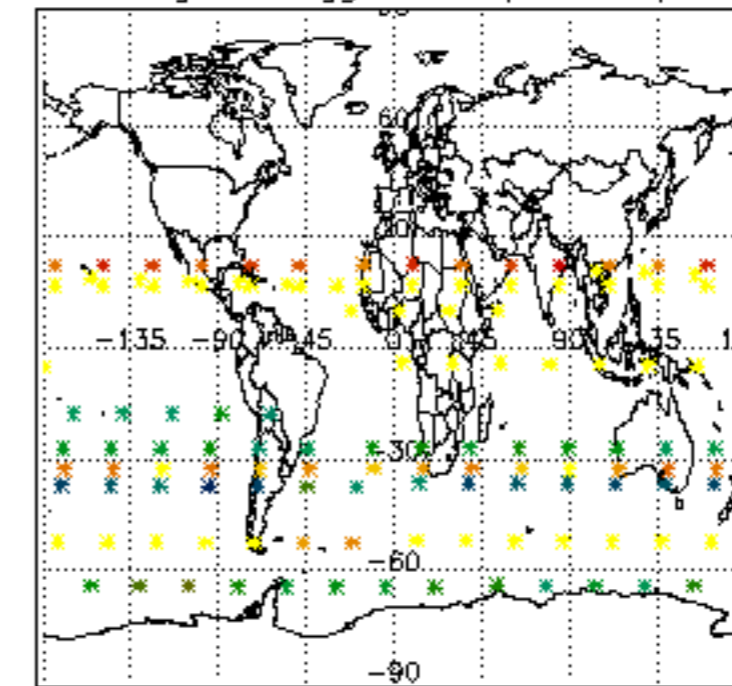




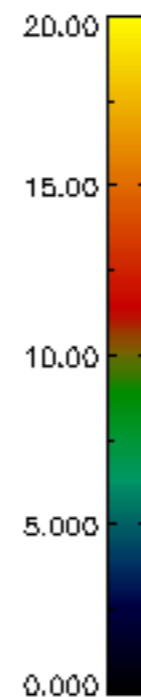
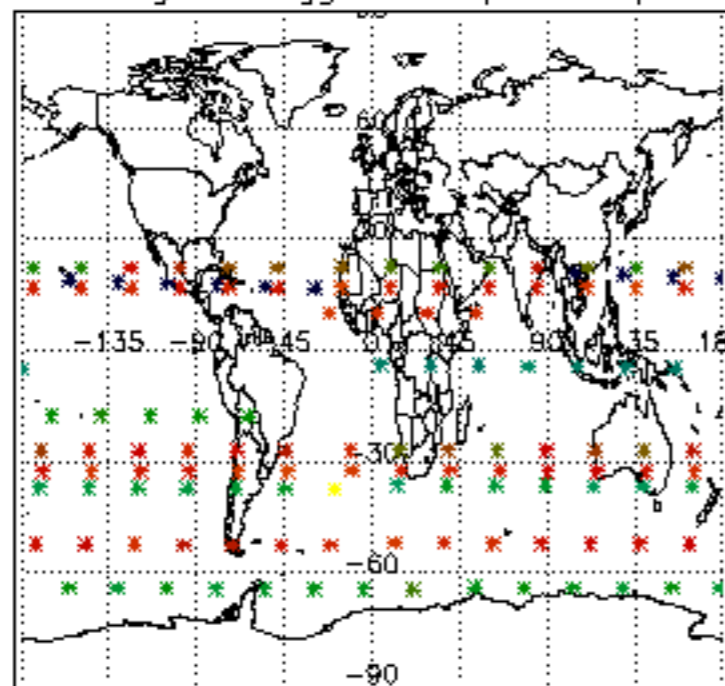
Percentage of flagged data per D3 profile



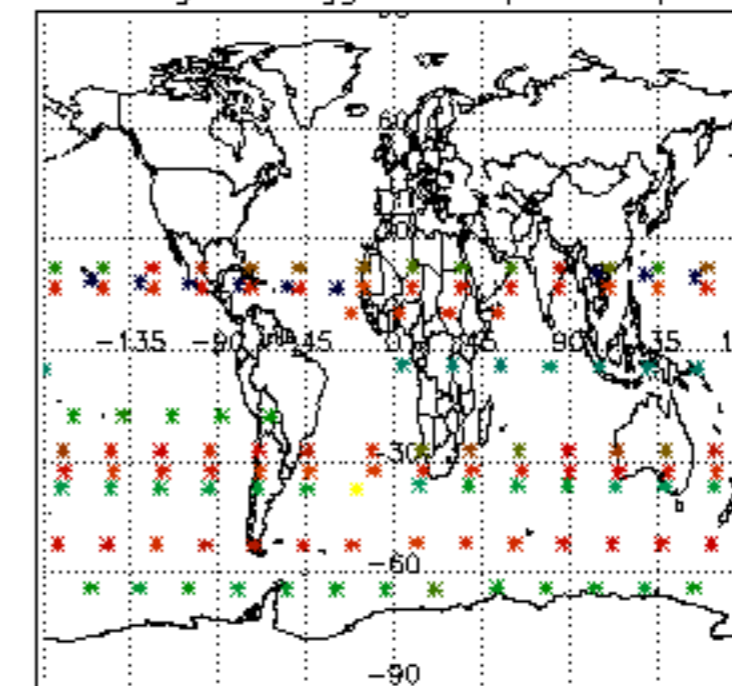
Percentage of flagged data per H2O profile

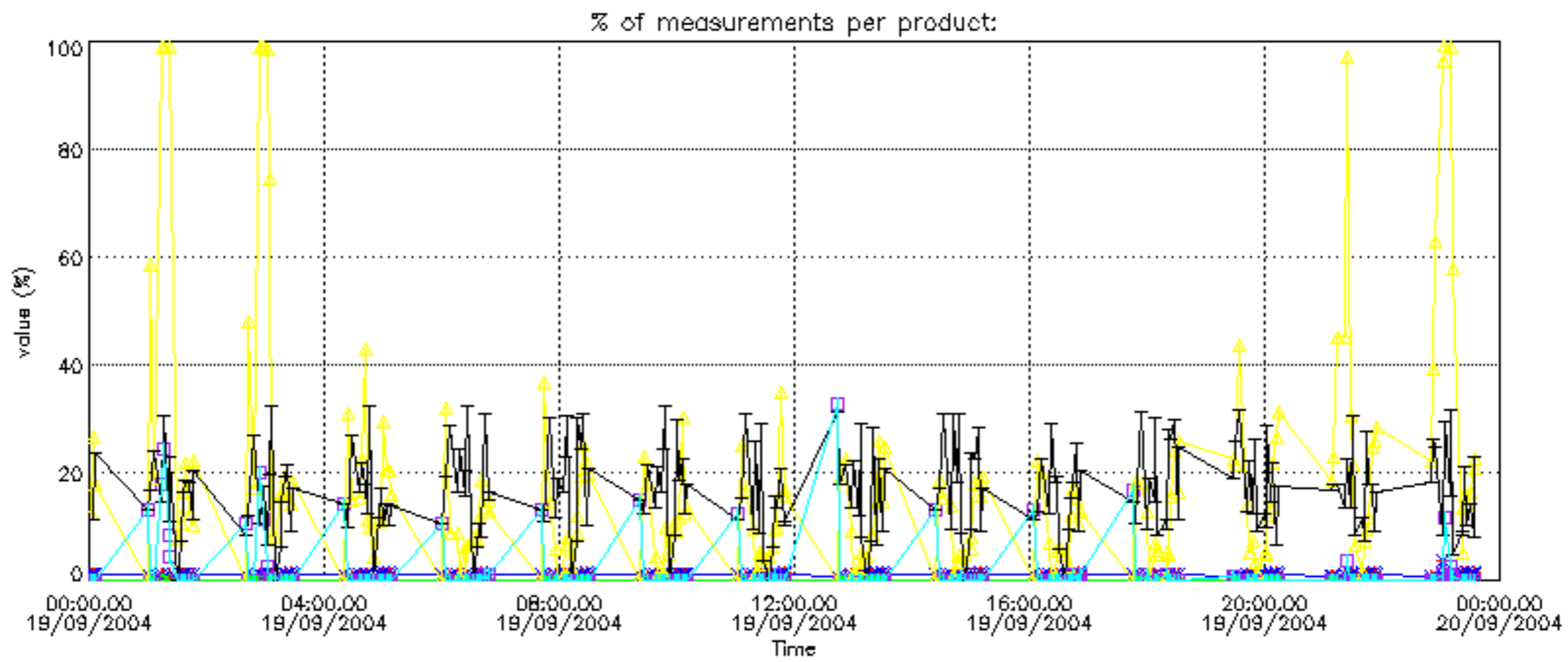
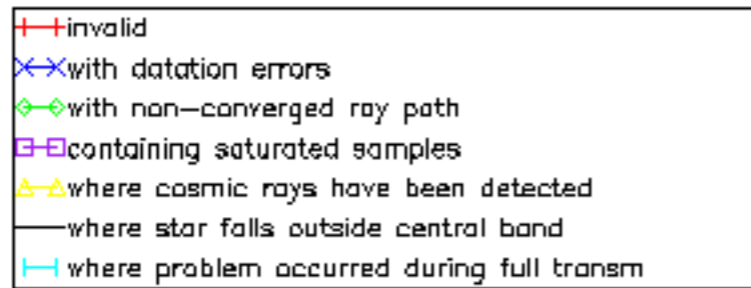


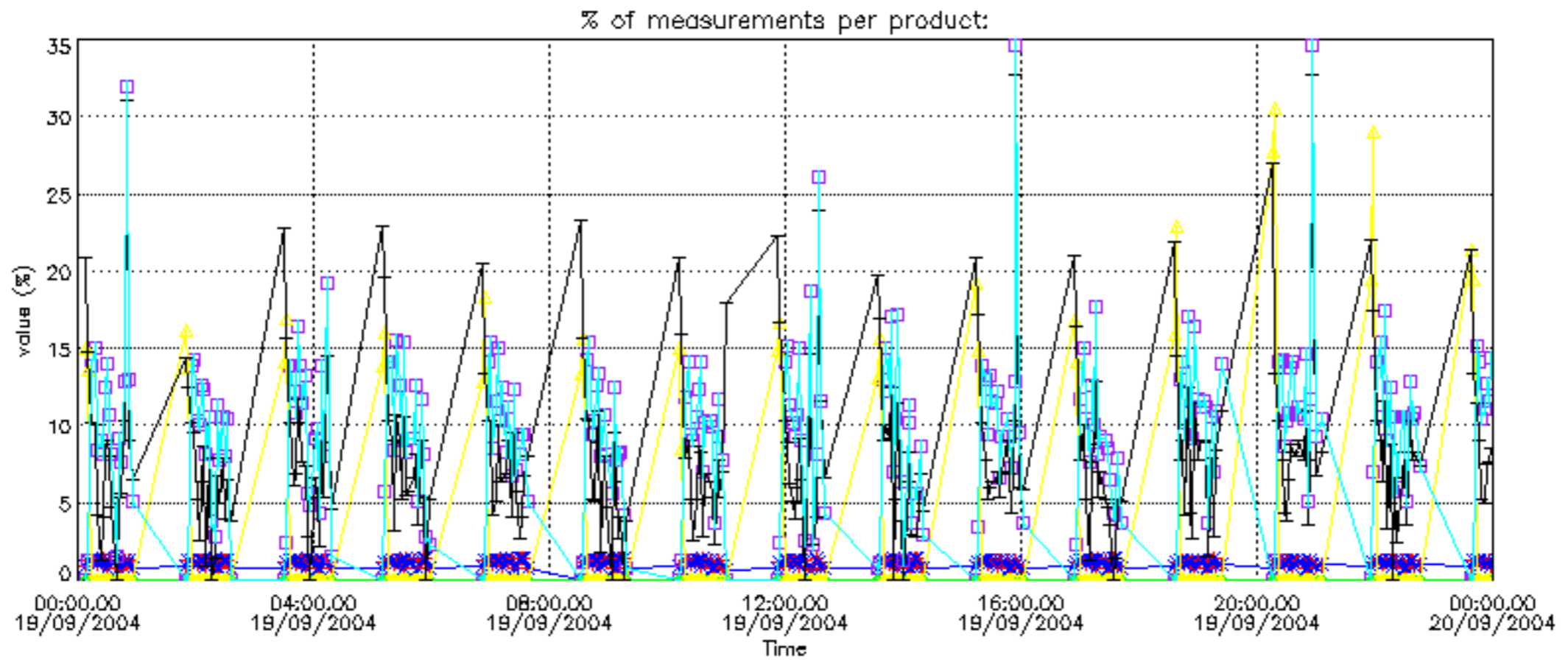
Percentage of flagged data per NO2 profile



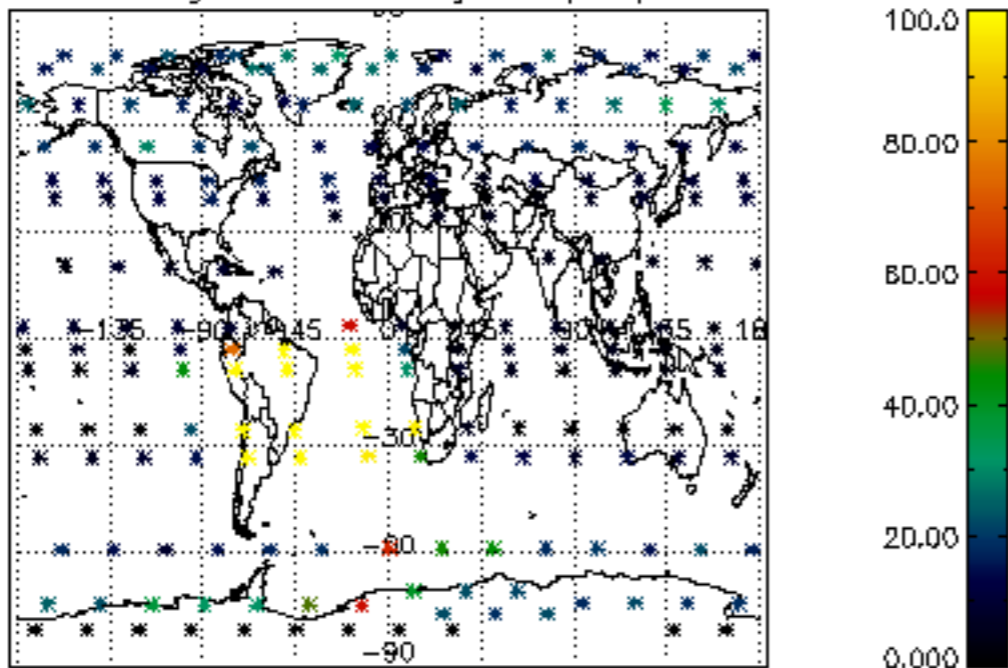
Percentage of flagged data per NO3 profile



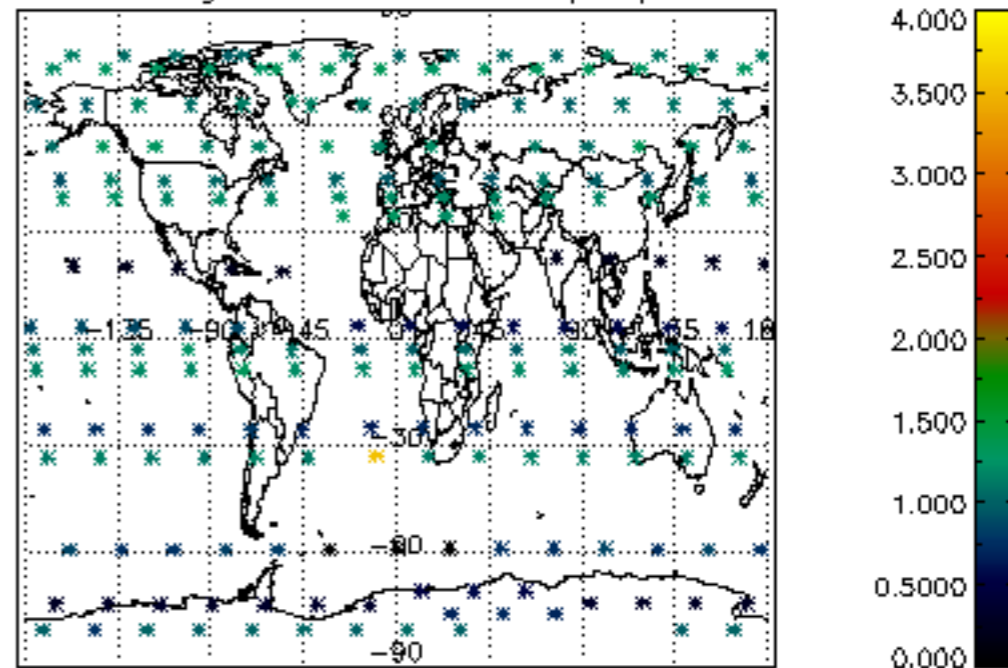




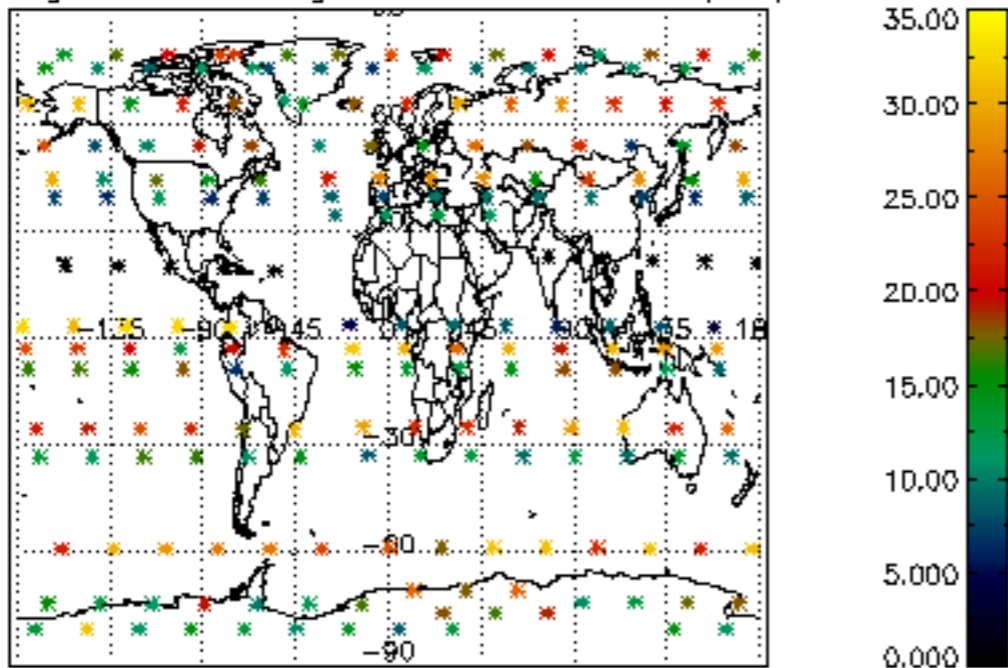
Percentage of cosmic ray hits per profile



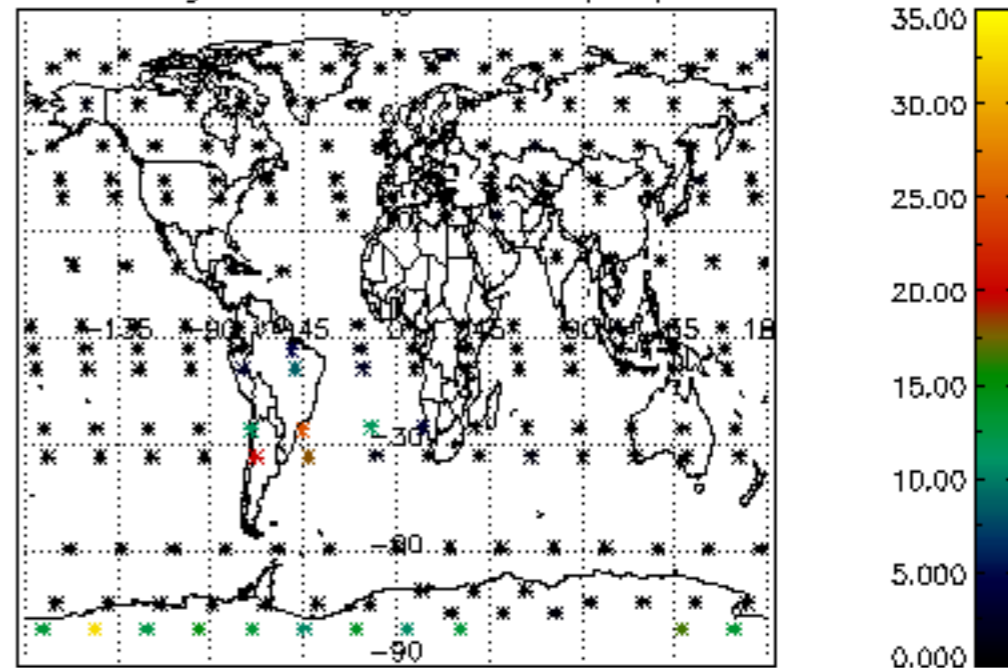
Percentage of datation errors per profile



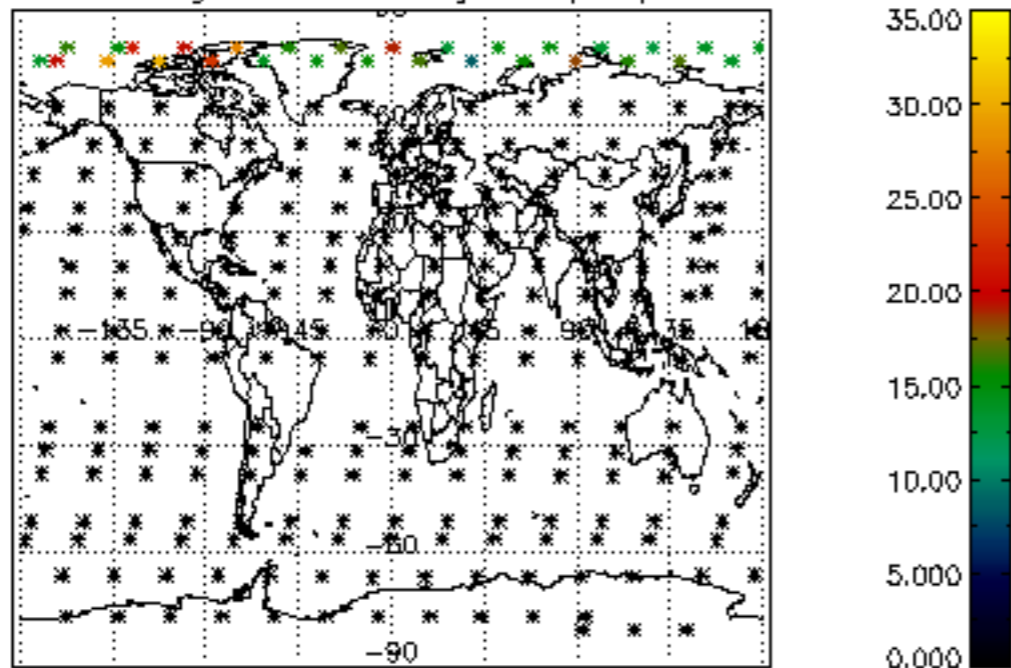
Percentage of star falling outside central band per profile



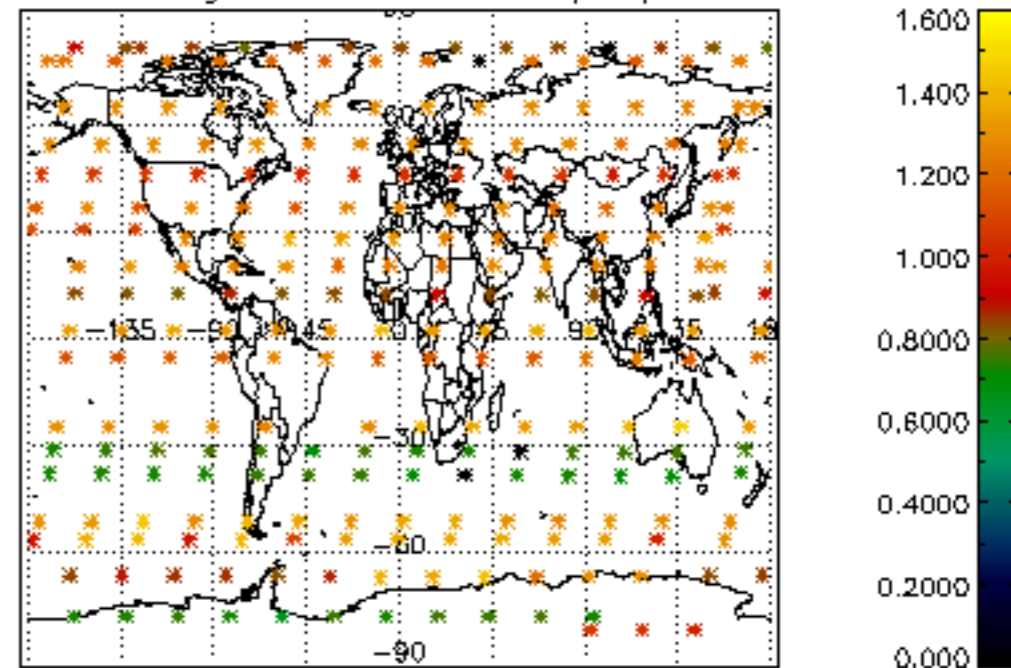
Percentage of saturation errors per profile



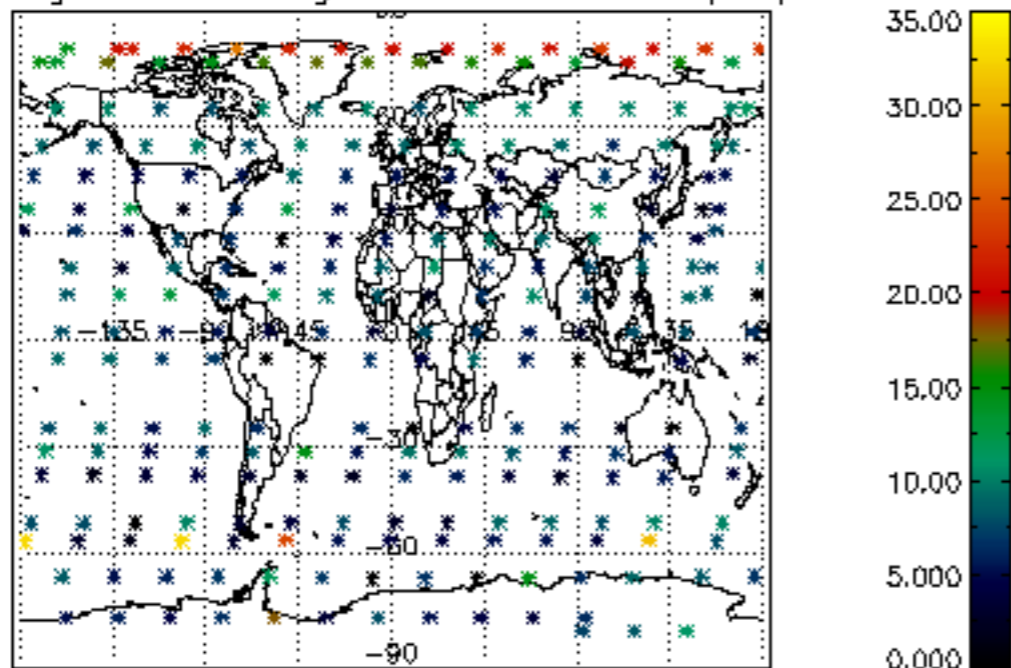
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

