

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[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](#)

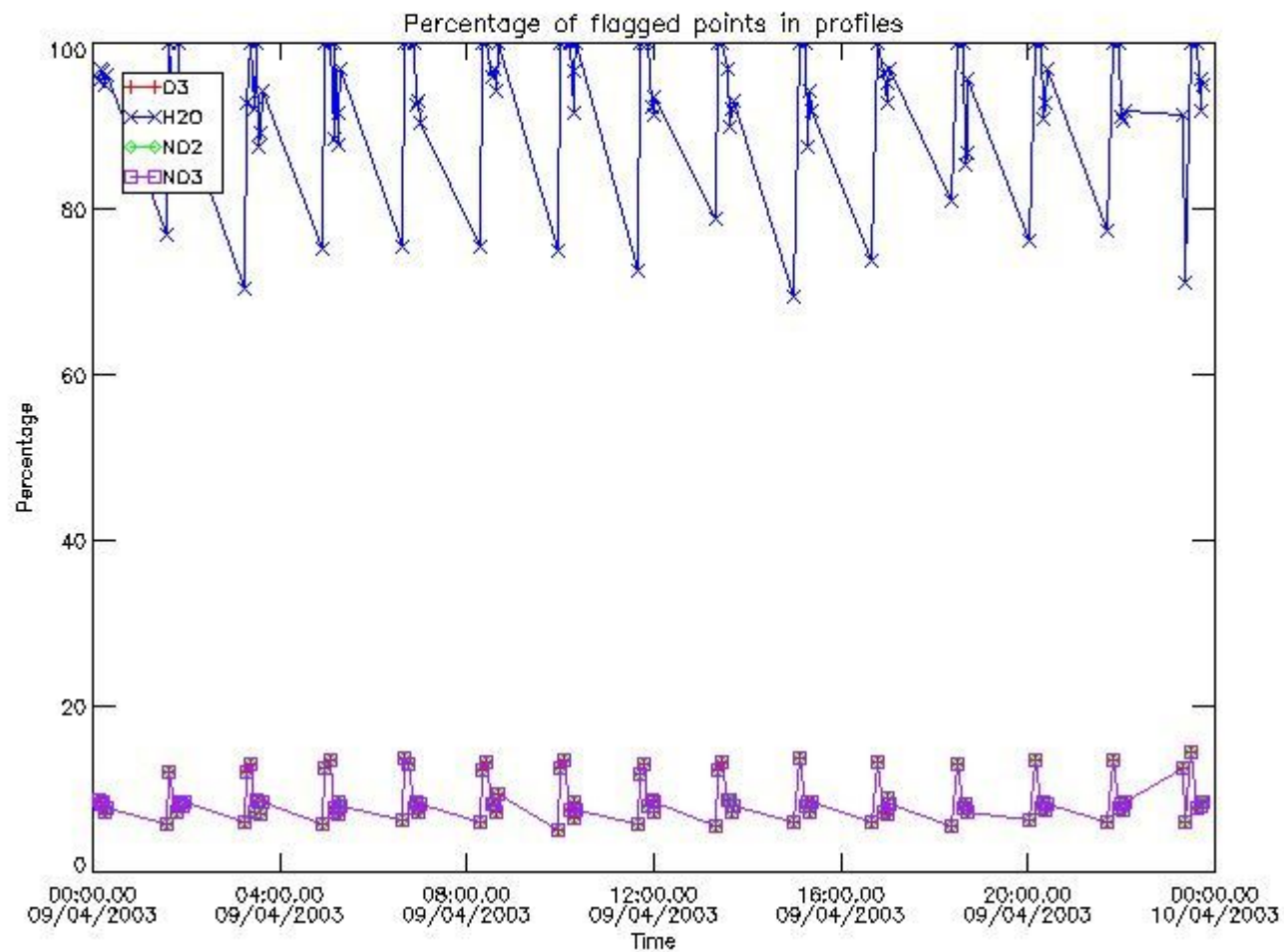
[6. Auxiliary Data Files used for the production reported in section 2](#)

397	GOM_NL__2PRFIN20030409_230758_000001042015_00230_05795_6640.N1	09-APR-2003 23:07:58	Bright	103.50	5	3Alp Lyr	0.033000	11000.	207	5795	No
398	GOM_NL__2PRFIN20030409_231047_000000502015_00230_05795_6641.N1	09-APR-2003 23:10:47	Bright	50.000	92	53Eps Cyg	2.5000	4500.0	100	5795	No
399	GOM_NL__2PRFIN20030409_231746_000000492015_00230_05795_6642.N1	09-APR-2003 23:17:46	Twilight	49.000	61	8Eps Peg	2.1000	3900.0	98	5795	No
400	GOM_NL__2PRFIN20030409_232014_000000412015_00230_05795_6643.N1	09-APR-2003 23:20:14	Dark	40.500	162	34Alp Aqr	2.9440	5350.0	81	5795	No
401	GOM_NL__2PRFIN20030409_232245_000000862015_00230_05795_6644.N1	09-APR-2003 23:22:45	Dark	85.500	11	53Alp Aql	0.76500	8000.0	171	5795	No
402	GOM_NL__2PRFIN20030409_233031_000000392015_00230_05795_6645.N1	09-APR-2003 23:30:31	Dark	39.000	172	Gam Gru	3.0030	13100.	78	5795	No
403	GOM_NL__2PRFIN20030409_233757_000000672015_00231_05796_6610.N1	09-APR-2003 23:37:57	Dark	67.000	57	34Sig Sgr	2.0660	26000.	134	5796	No
404	GOM_NL__2PRFIN20030409_234114_000000612015_00231_05796_6611.N1	09-APR-2003 23:41:14	Dark	61.000	38	20Eps Sgr	1.8360	11000.	122	5796	No
405	GOM_NL__2PRFIN20030409_234311_000000722015_00231_05796_6612.N1	09-APR-2003 23:43:11	Dark	71.500	167	10Gam2Sgr	2.9840	4500.0	143	5796	No
406	GOM_NL__2PRFIN20030409_234524_000000612015_00231_05796_6613.N1	09-APR-2003 23:45:24	Dark	60.500	25	35Lam Sco	1.6200	28000.	121	5796	No
407	GOM_NL__2PRFIN20030409_234925_000000452015_00231_05796_6614.N1	09-APR-2003 23:49:25	Straylight	44.500	4	Alp1Cen	-0.010000	5800.0	89	5796	No
408	GOM_NL__2PRFIN20030409_235232_000000412015_00231_05796_6615.N1	09-APR-2003 23:52:32	Straylight	40.500	77	Eps Cen	2.3030	28000.	81	5796	No
409	GOM_NL__2PRFIN20030409_235403_000000462015_00231_05796_6616.N1	09-APR-2003 23:54:03	Straylight	46.000	81	Eta Cen	2.3560	28000.	92	5796	No
410	GOM_NL__2PRFIN20030409_235634_000000482015_00231_05796_6617.N1	09-APR-2003 23:56:34	Straylight	47.500	54	5The Cen	2.0550	4500.0	95	5796	No
411	GOM_NL__2PRFIN20030409_235807_000001012015_00231_05796_6618.N1	09-APR-2003 23:58:07	Twilight	101.00	80	7Del Sco	2.3160	30000.	202	5796	No

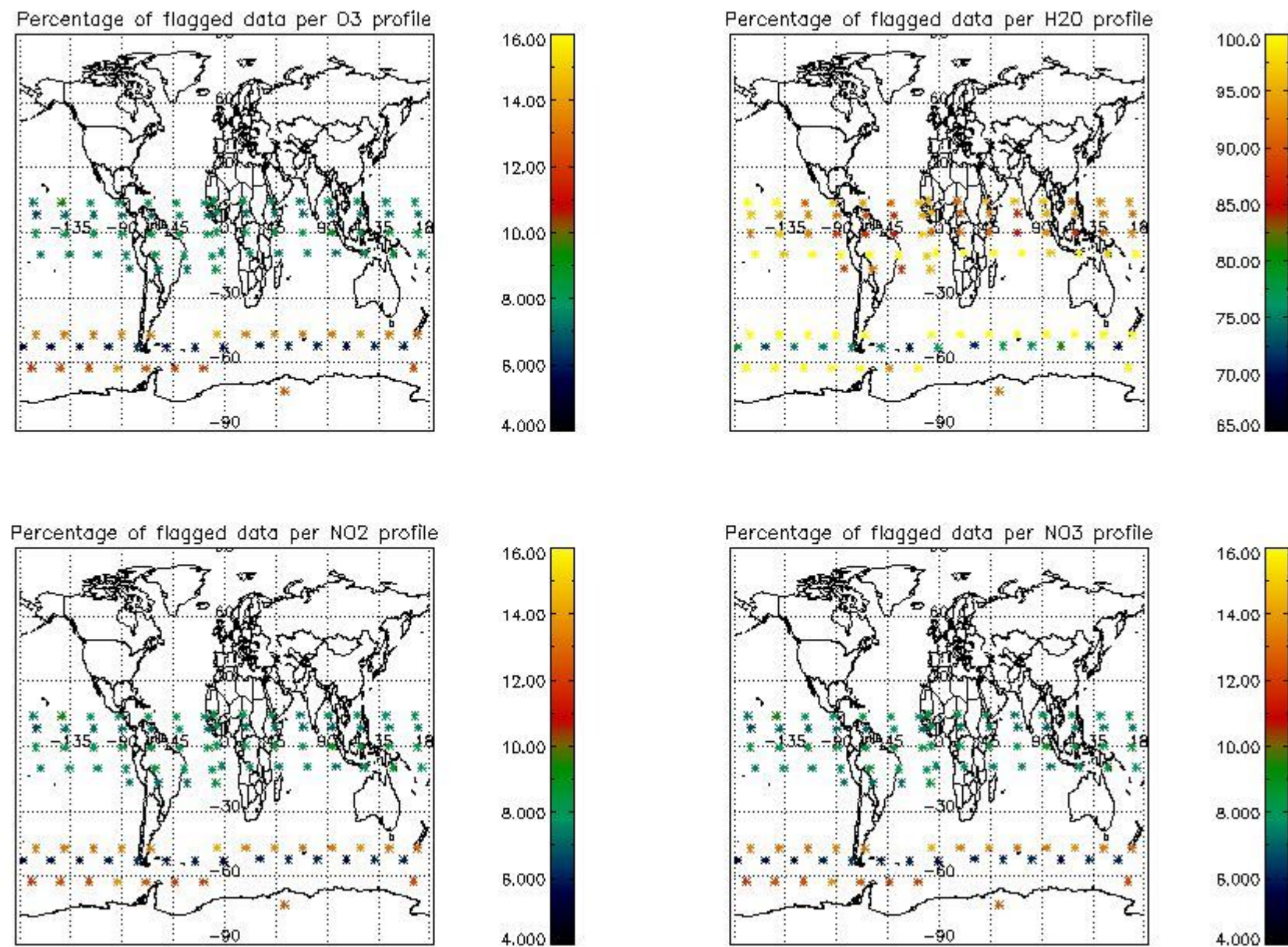
3. Quality information per product

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)

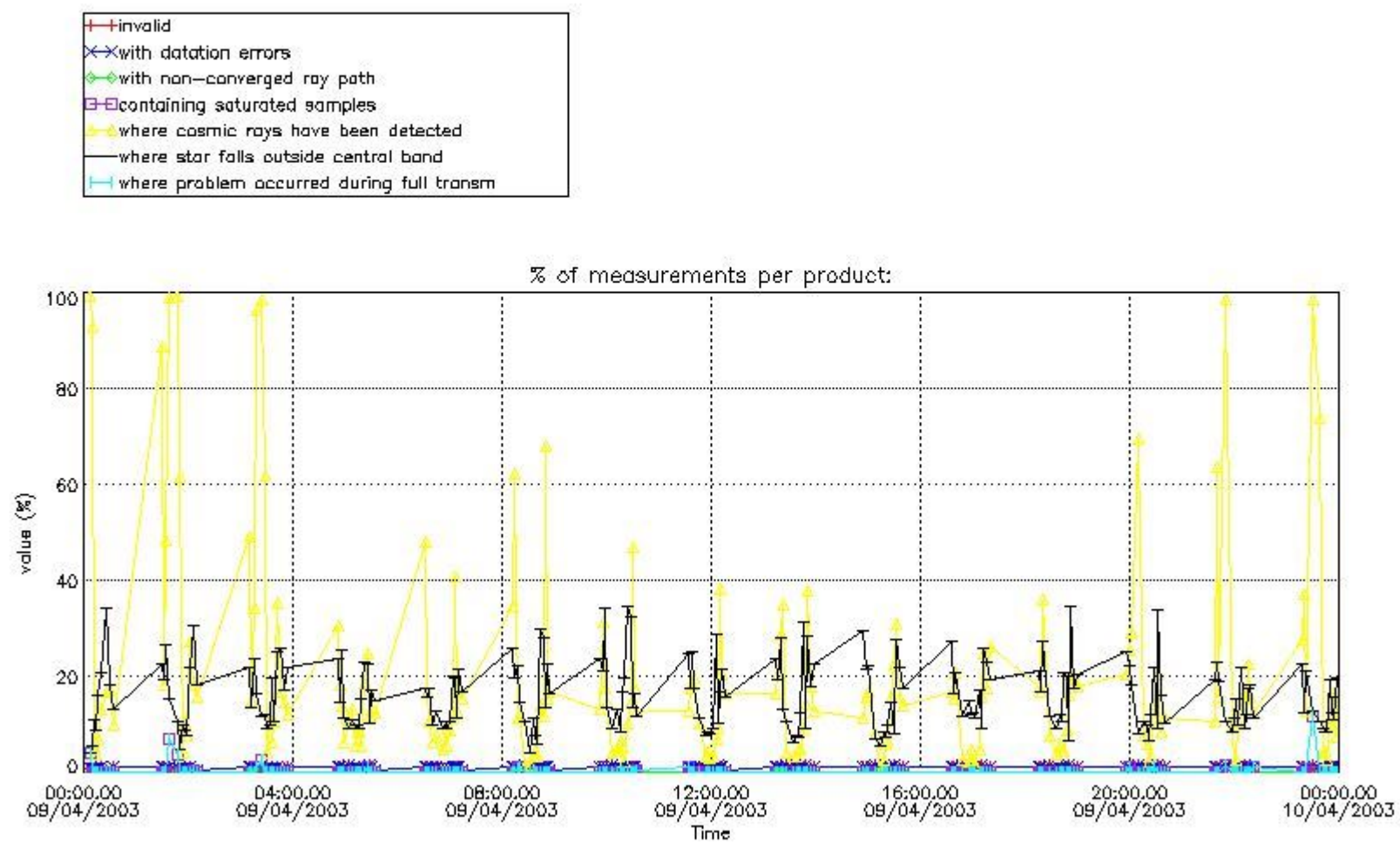


4. Level 1 quality information per product

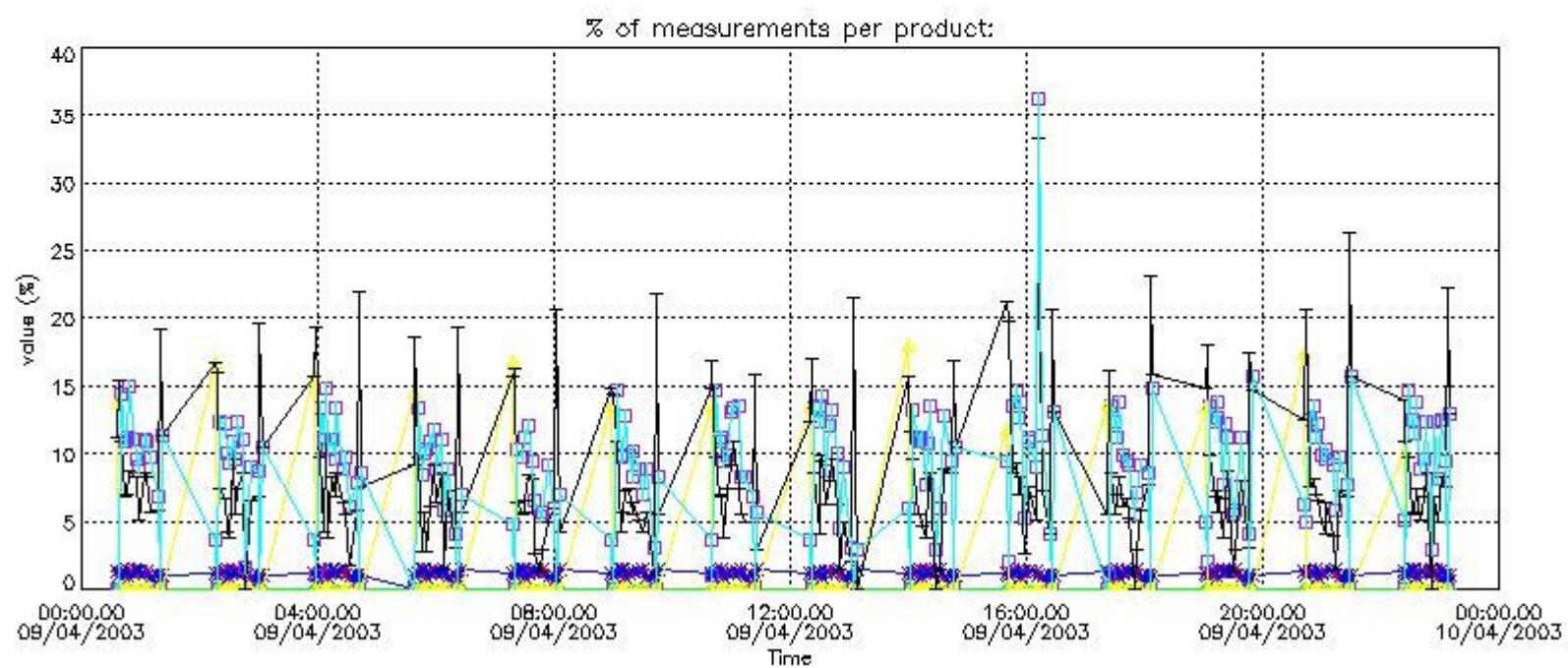
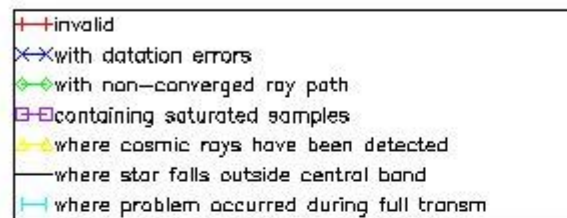
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



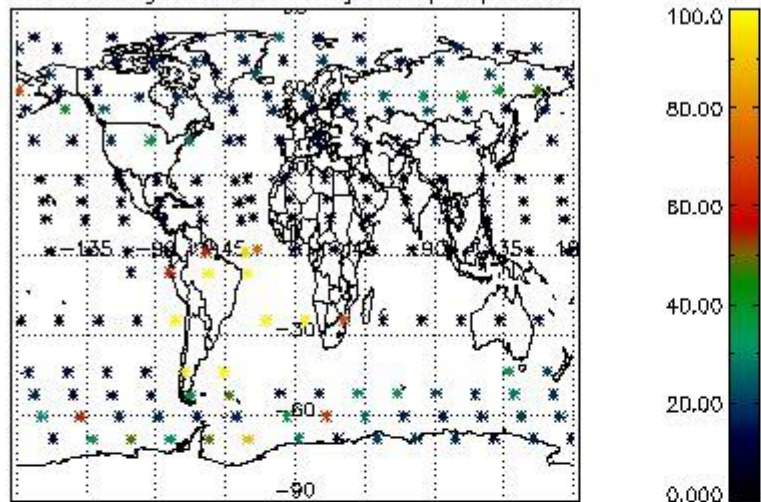
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



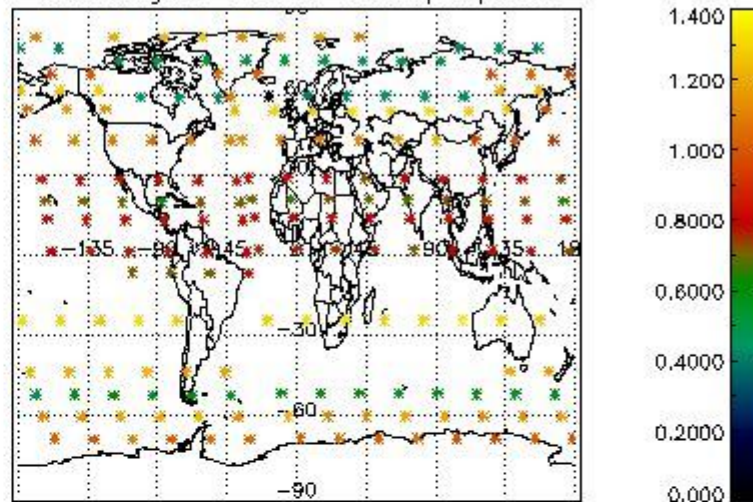
4.2 Plot quality information per product coming from level 1b processing (world map)

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

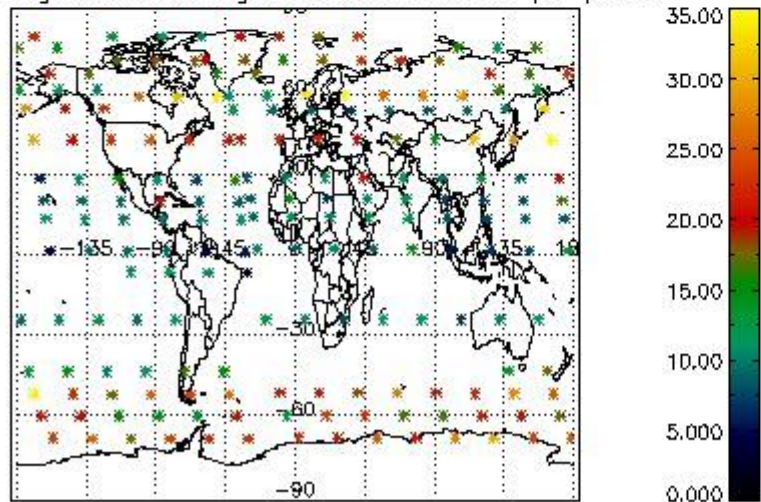
Percentage of cosmic ray hits per profile



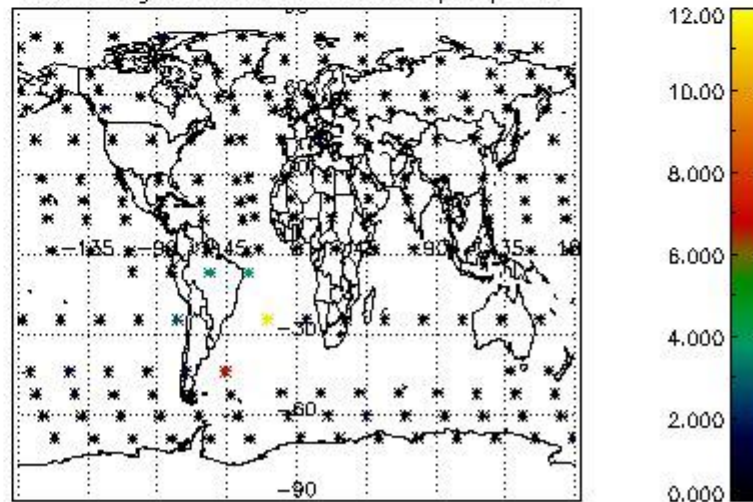
Percentage of datation errors per profile



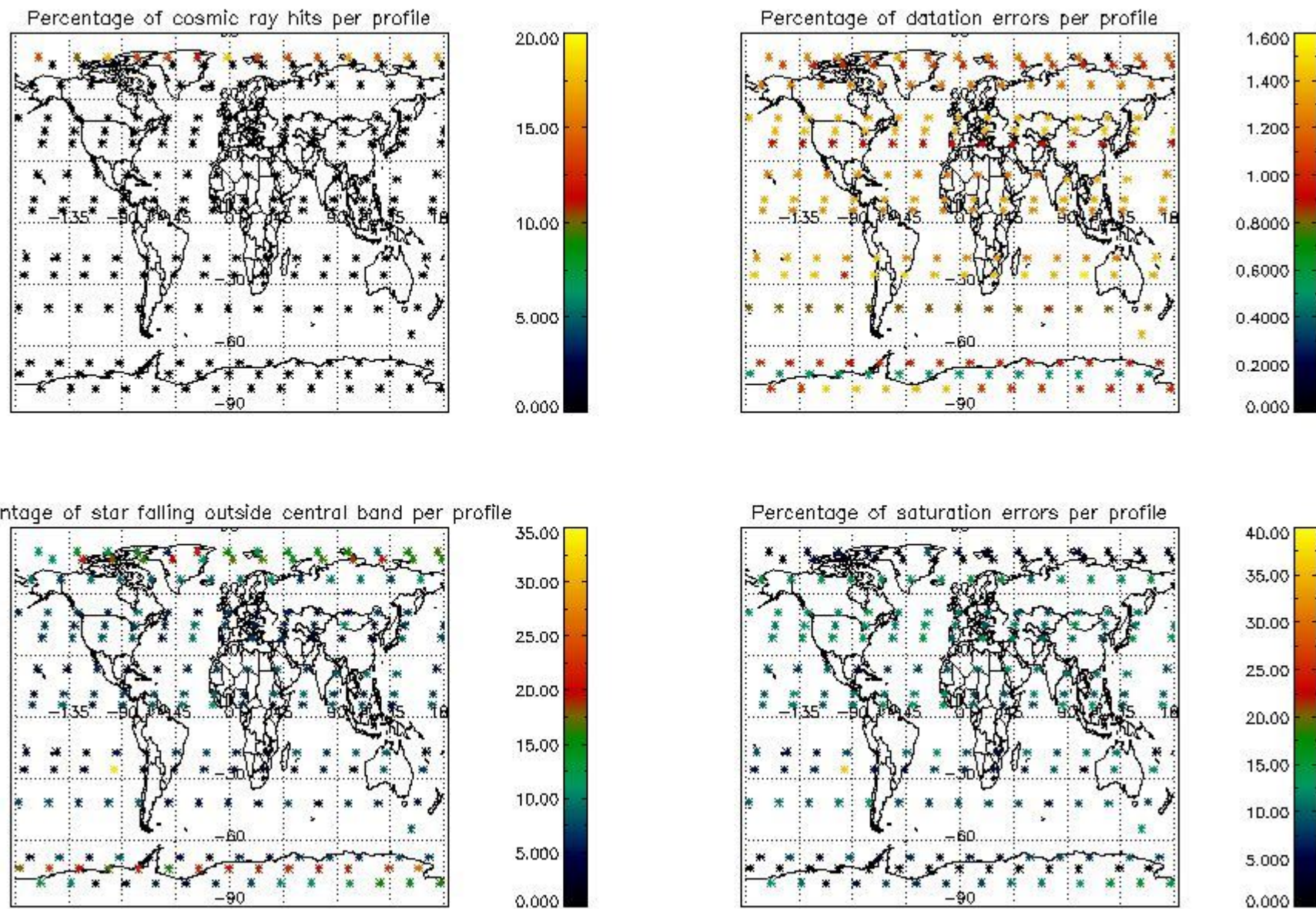
Percentage of star falling outside central band per profile



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

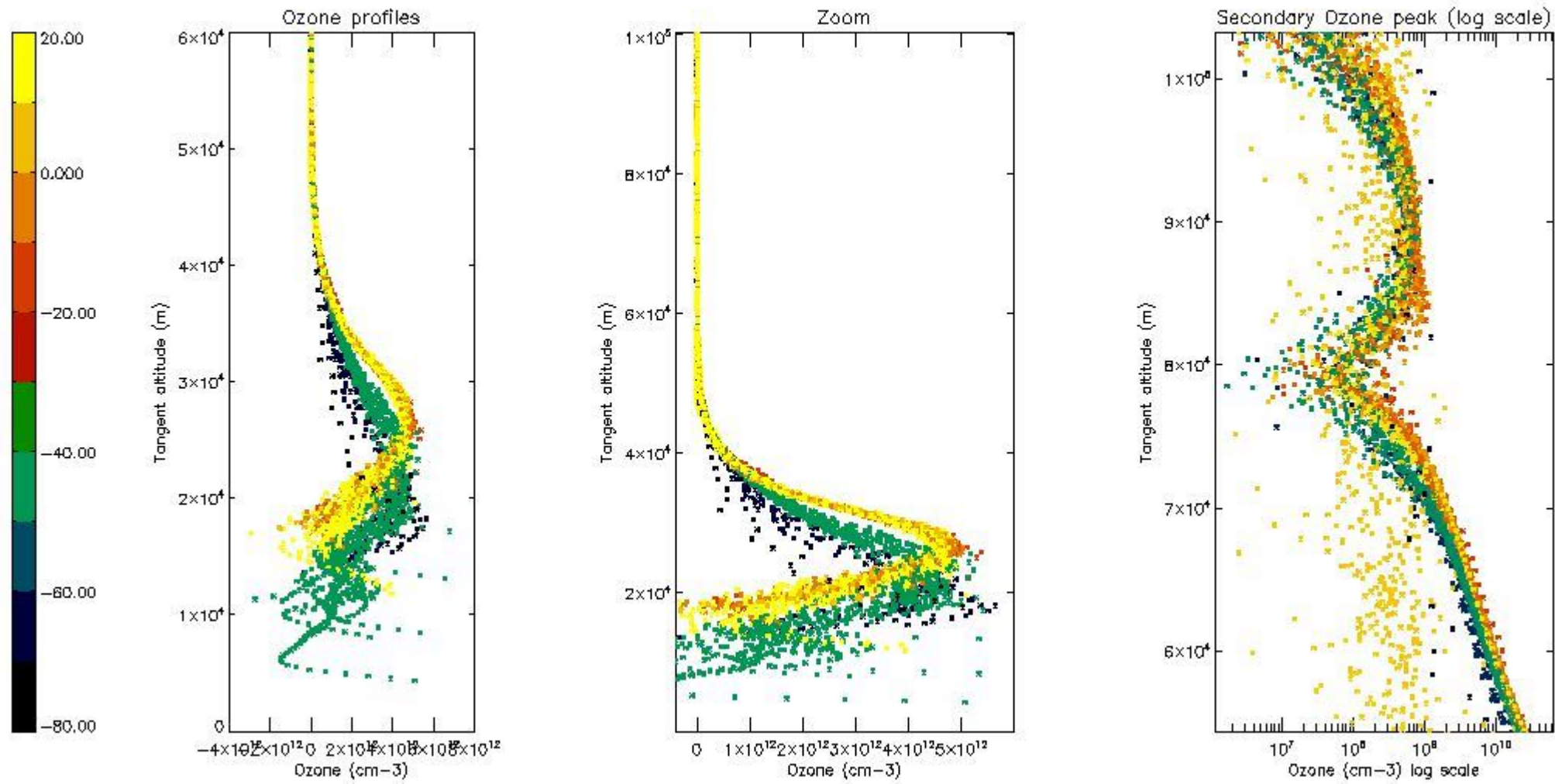
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	18

STD < 10	16
STD < 5	13

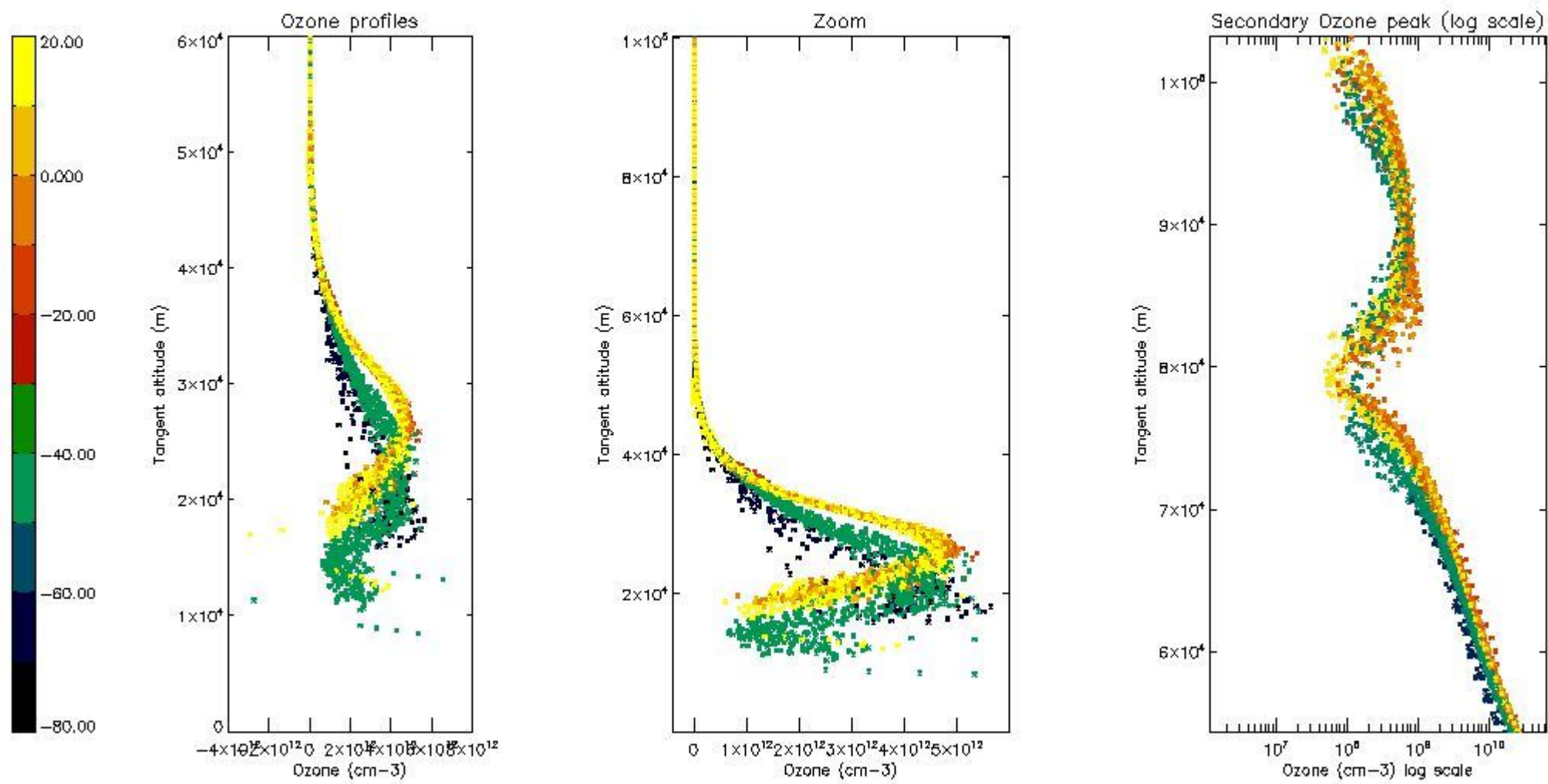
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



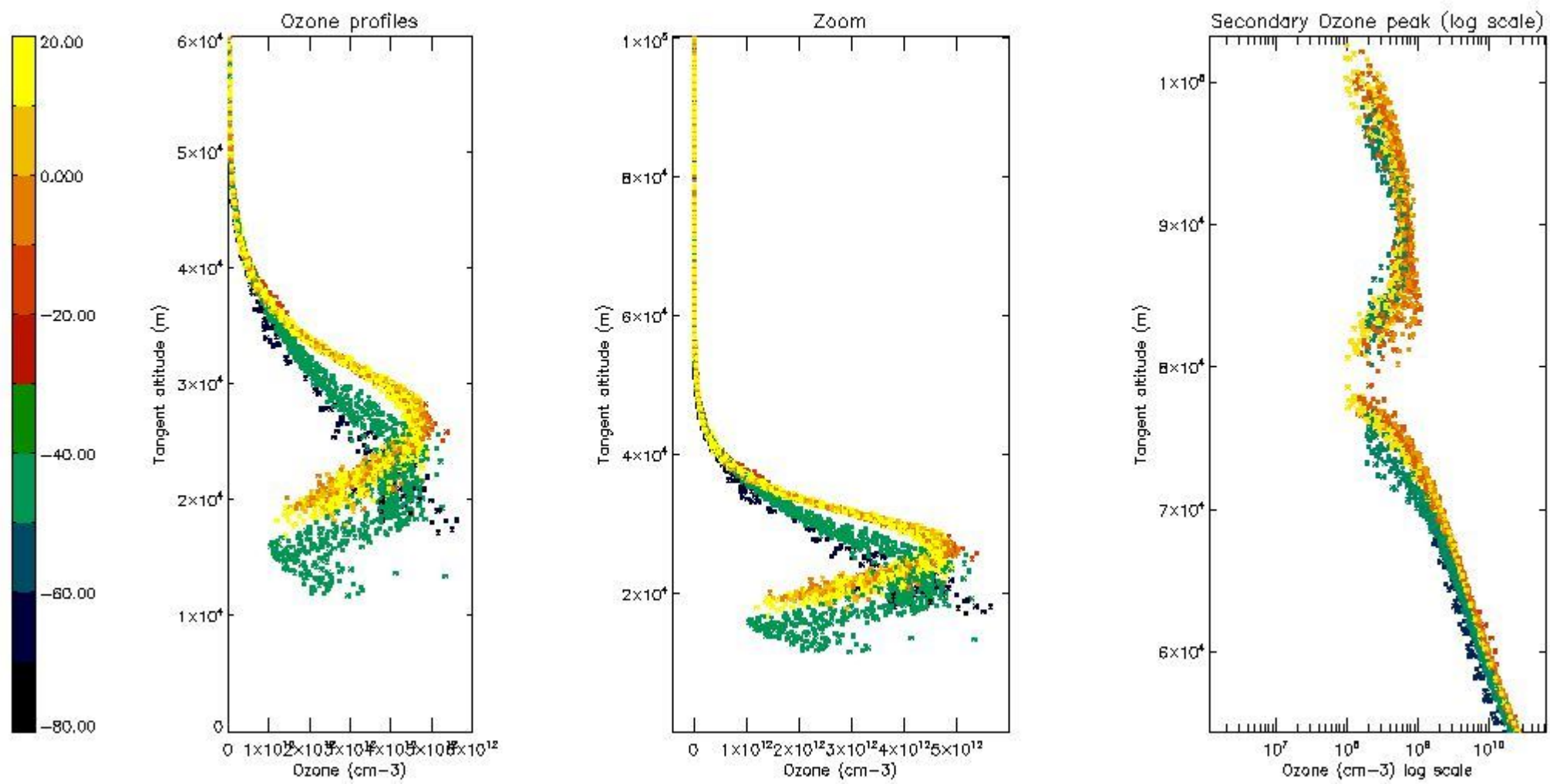
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



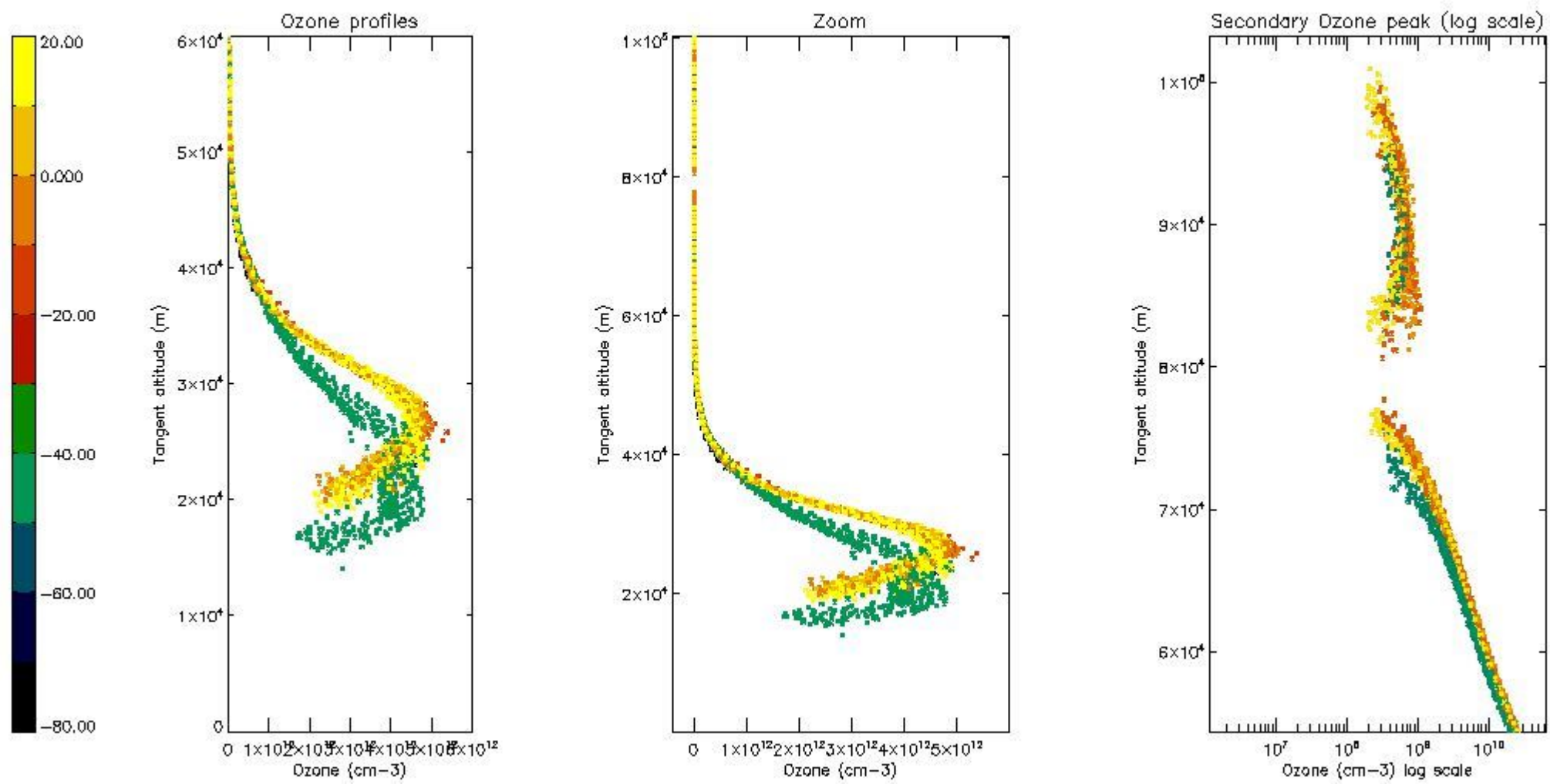
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



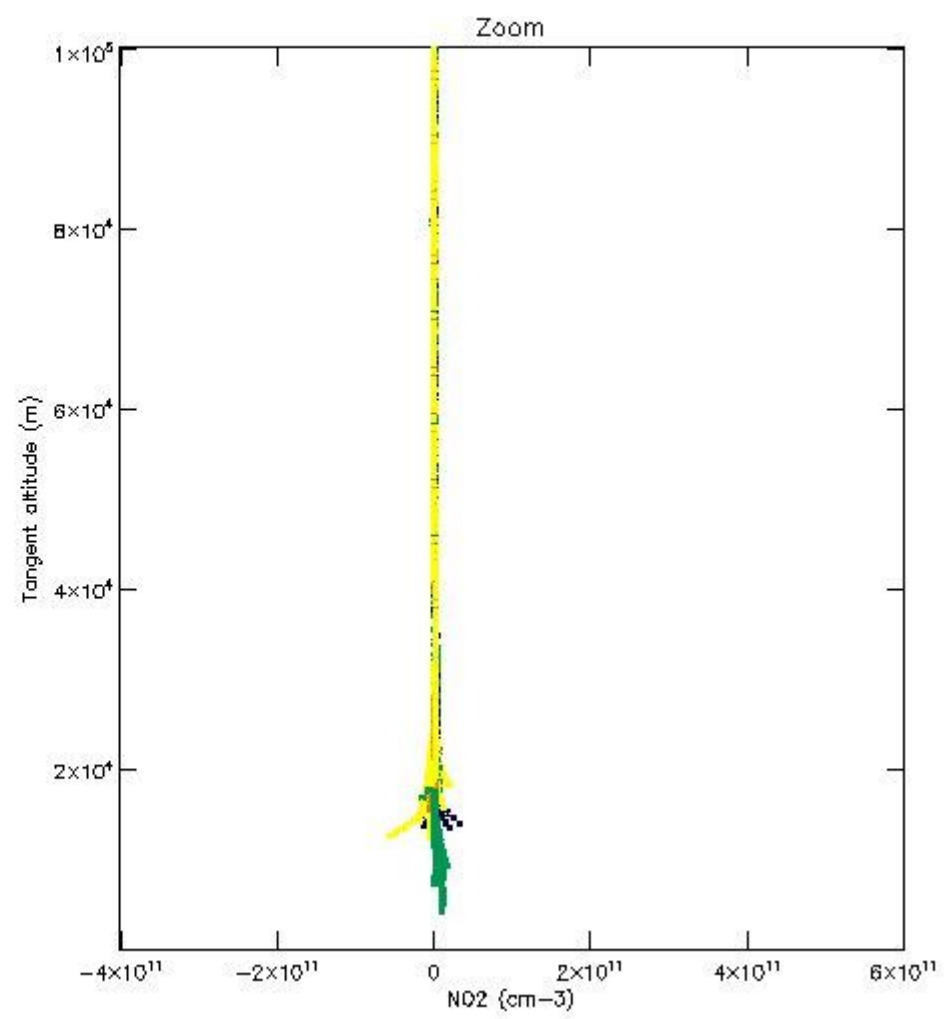
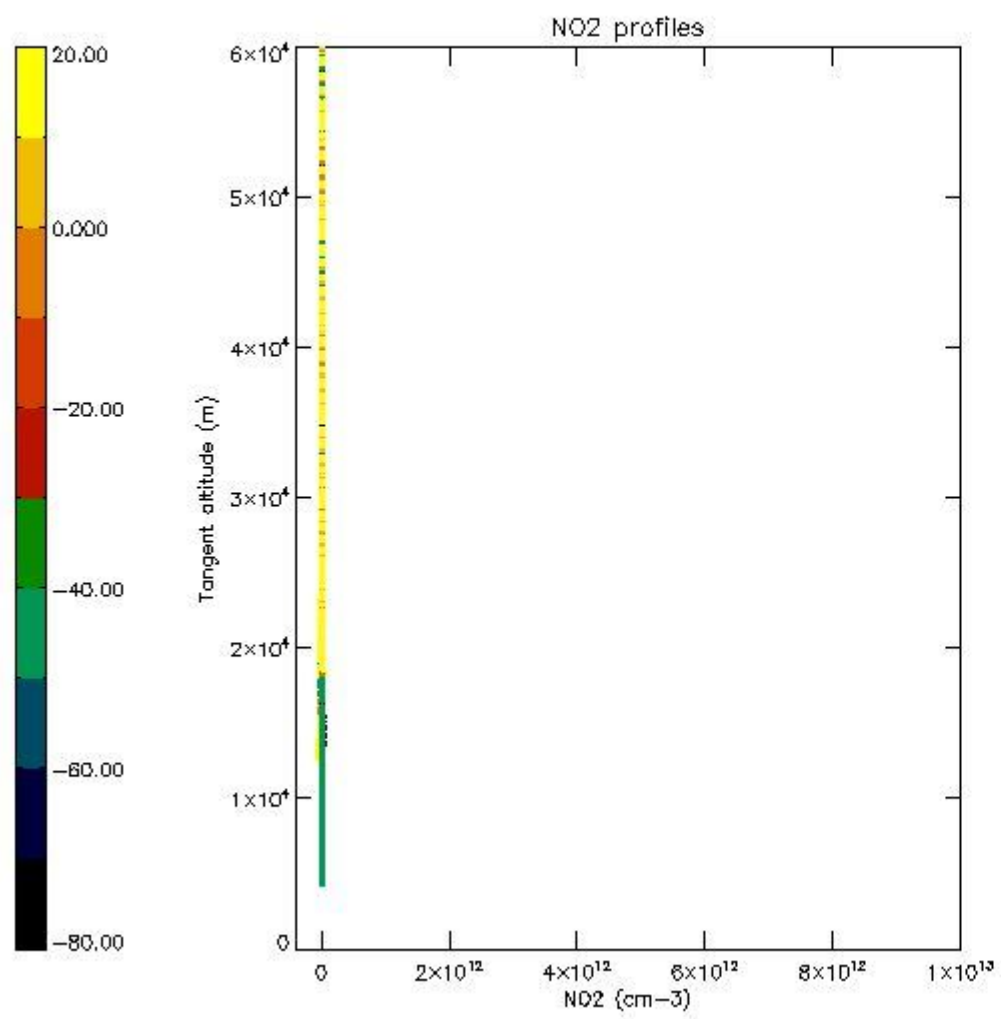
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



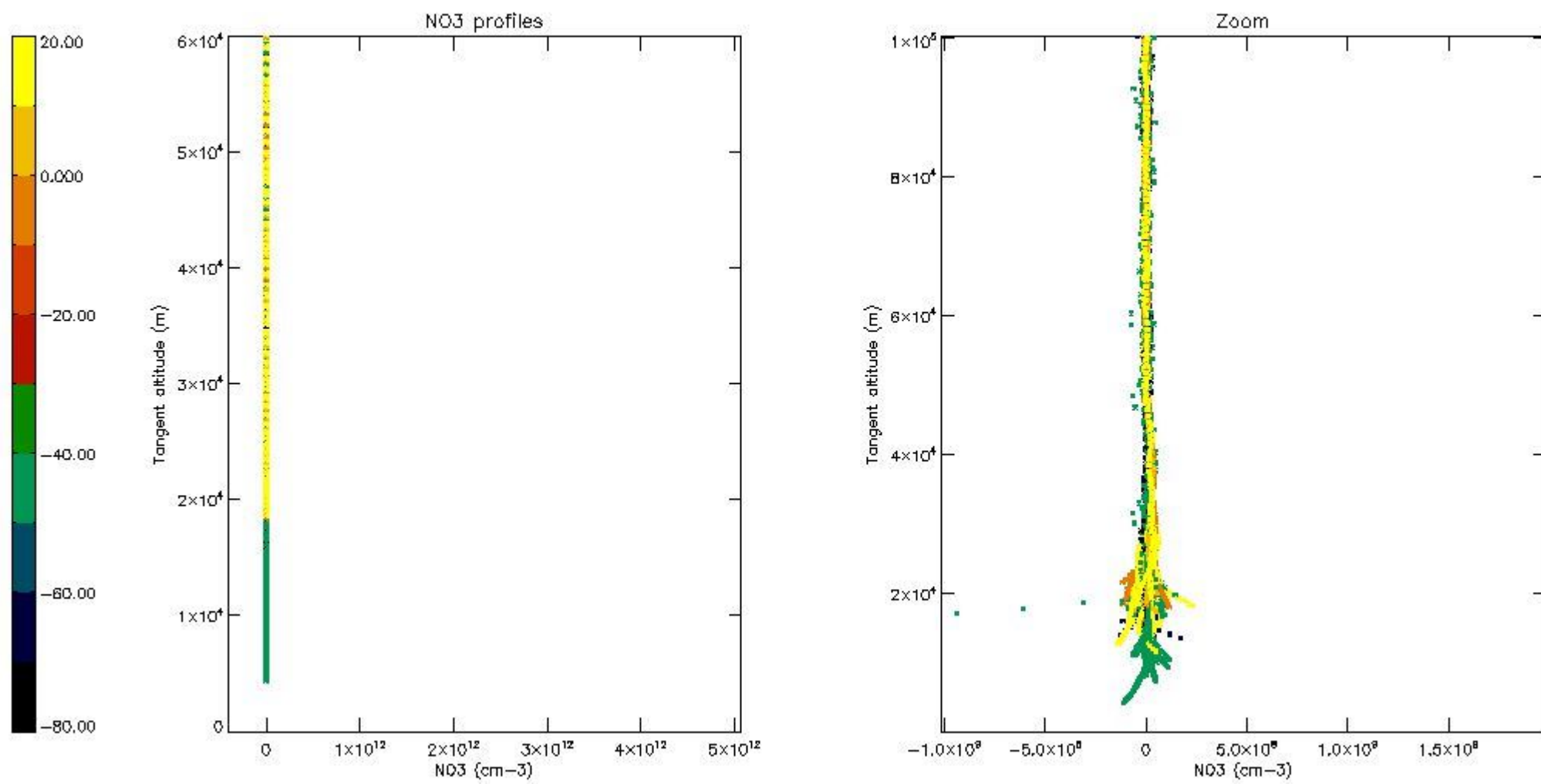
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



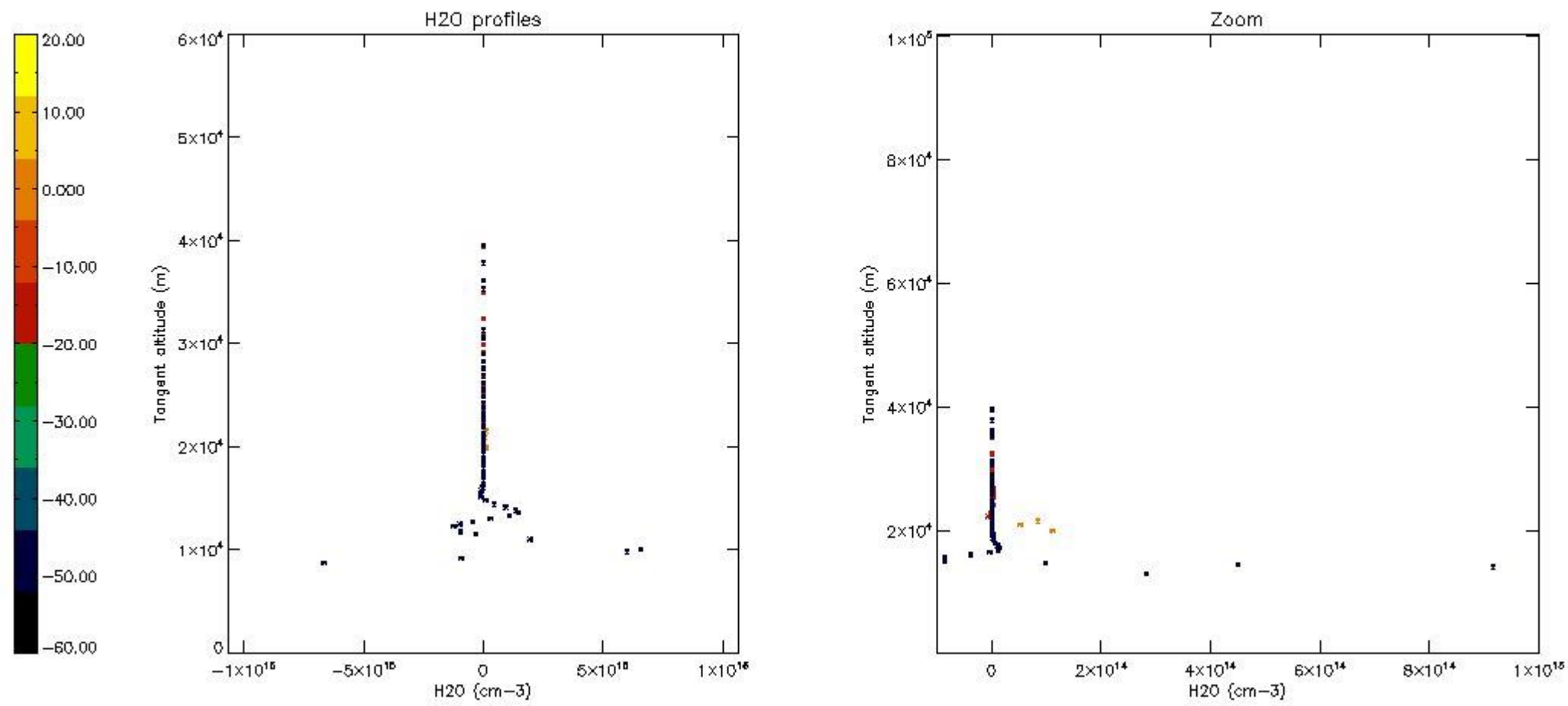
5.7 Plot NO3 profiles for all STD (dark without errors)

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	09-APR-2003 00:07:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-APR-2003 00:07:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-APR-2003 00:07:02

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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](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

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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](#)

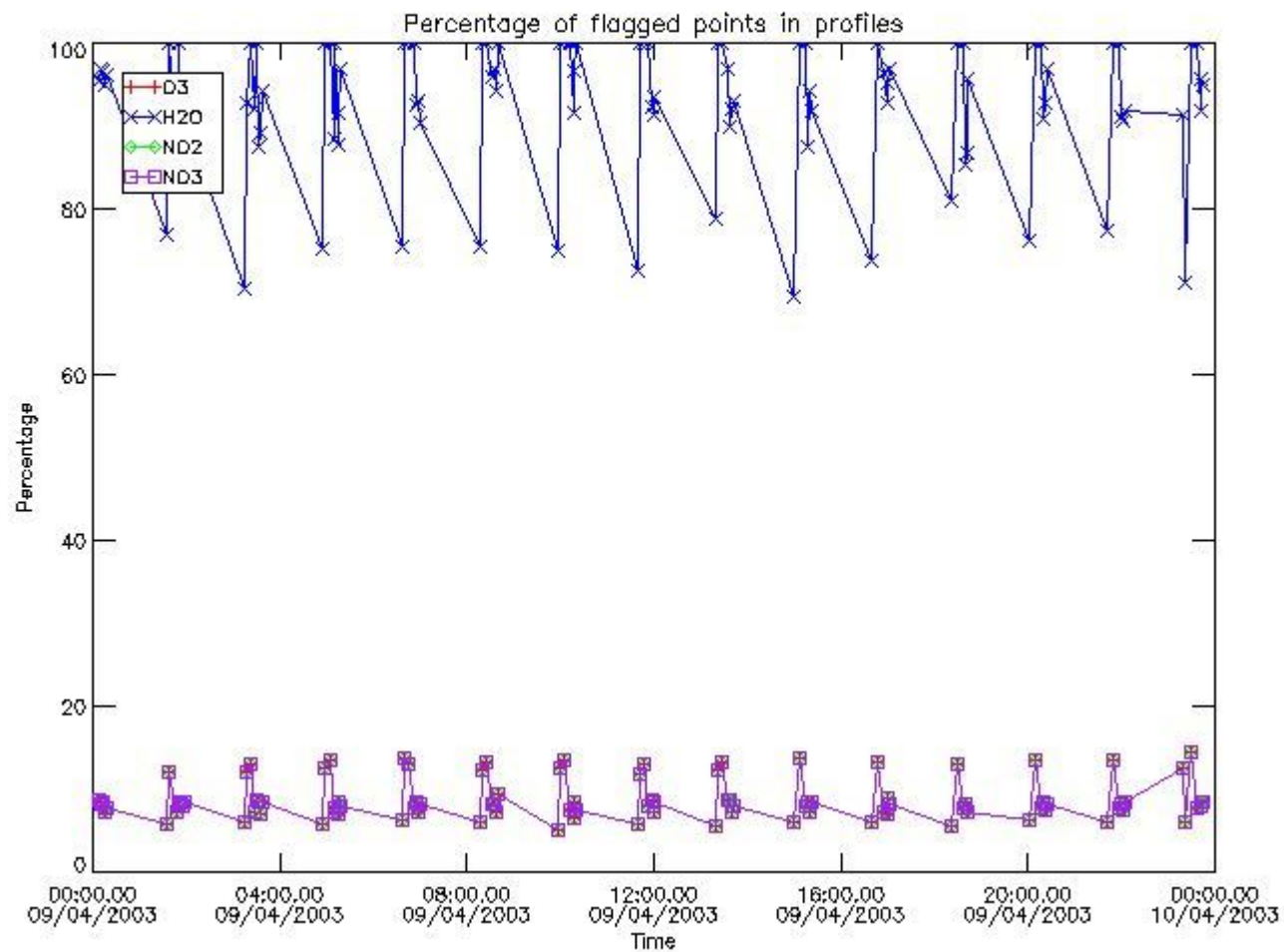
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397	GOM_NL__2PRFIN20030409_230758_000001042015_00230_05795_6640.N1	09-APR-2003 23:07:58	Bright	103.50	5	3Alp Lyr	0.033000	11000.	207	5795	No
398	GOM_NL__2PRFIN20030409_231047_000000502015_00230_05795_6641.N1	09-APR-2003 23:10:47	Bright	50.000	92	53Eps Cyg	2.5000	4500.0	100	5795	No
399	GOM_NL__2PRFIN20030409_231746_000000492015_00230_05795_6642.N1	09-APR-2003 23:17:46	Twilight	49.000	61	8Eps Peg	2.1000	3900.0	98	5795	No
400	GOM_NL__2PRFIN20030409_232014_000000412015_00230_05795_6643.N1	09-APR-2003 23:20:14	Dark	40.500	162	34Alp Aqr	2.9440	5350.0	81	5795	No
401	GOM_NL__2PRFIN20030409_232245_000000862015_00230_05795_6644.N1	09-APR-2003 23:22:45	Dark	85.500	11	53Alp Aql	0.76500	8000.0	171	5795	No
402	GOM_NL__2PRFIN20030409_233031_000000392015_00230_05795_6645.N1	09-APR-2003 23:30:31	Dark	39.000	172	Gam Gru	3.0030	13100.	78	5795	No
403	GOM_NL__2PRFIN20030409_233757_000000672015_00231_05796_6610.N1	09-APR-2003 23:37:57	Dark	67.000	57	34Sig Sgr	2.0660	26000.	134	5796	No
404	GOM_NL__2PRFIN20030409_234114_000000612015_00231_05796_6611.N1	09-APR-2003 23:41:14	Dark	61.000	38	20Eps Sgr	1.8360	11000.	122	5796	No
405	GOM_NL__2PRFIN20030409_234311_000000722015_00231_05796_6612.N1	09-APR-2003 23:43:11	Dark	71.500	167	10Gam2Sgr	2.9840	4500.0	143	5796	No
406	GOM_NL__2PRFIN20030409_234524_000000612015_00231_05796_6613.N1	09-APR-2003 23:45:24	Dark	60.500	25	35Lam Sco	1.6200	28000.	121	5796	No
407	GOM_NL__2PRFIN20030409_234925_000000452015_00231_05796_6614.N1	09-APR-2003 23:49:25	Straylight	44.500	4	Alp1Cen	-0.010000	5800.0	89	5796	No
408	GOM_NL__2PRFIN20030409_235232_000000412015_00231_05796_6615.N1	09-APR-2003 23:52:32	Straylight	40.500	77	Eps Cen	2.3030	28000.	81	5796	No
409	GOM_NL__2PRFIN20030409_235403_000000462015_00231_05796_6616.N1	09-APR-2003 23:54:03	Straylight	46.000	81	Eta Cen	2.3560	28000.	92	5796	No
410	GOM_NL__2PRFIN20030409_235634_000000482015_00231_05796_6617.N1	09-APR-2003 23:56:34	Straylight	47.500	54	5The Cen	2.0550	4500.0	95	5796	No
411	GOM_NL__2PRFIN20030409_235807_000001012015_00231_05796_6618.N1	09-APR-2003 23:58:07	Twilight	101.00	80	7Del Sco	2.3160	30000.	202	5796	No

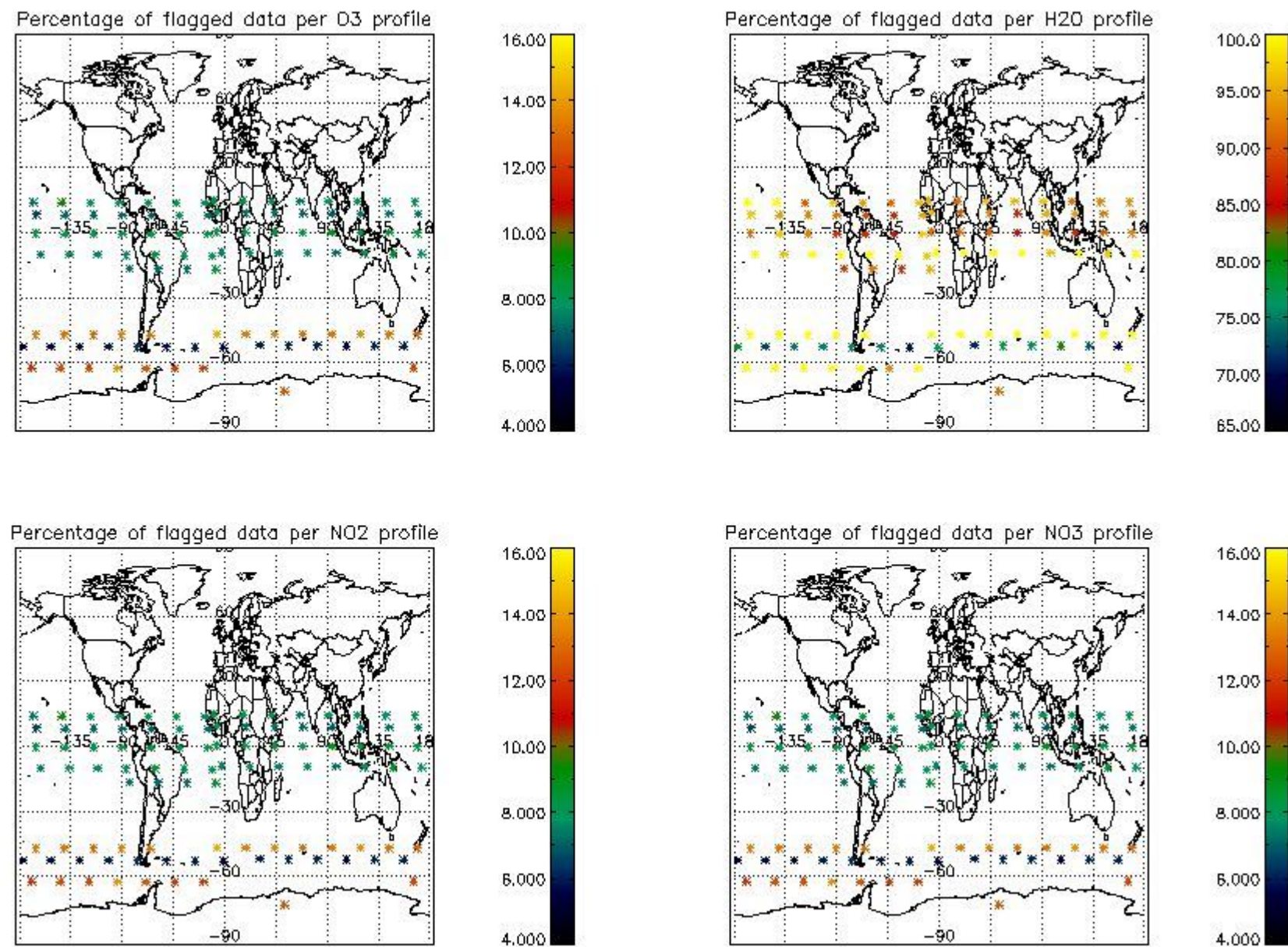
3. Quality information per product

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)

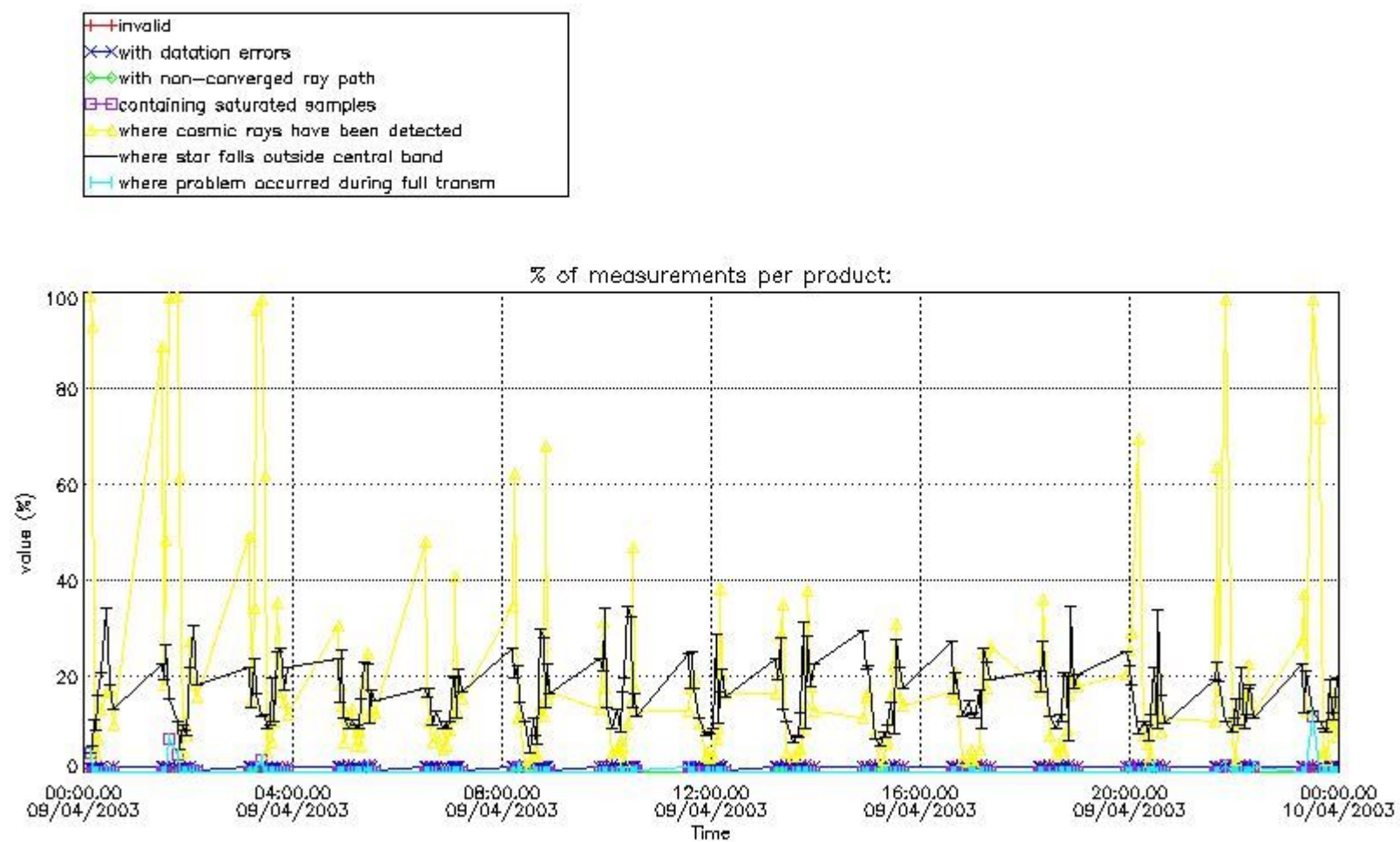


4. Level 1 quality information per product

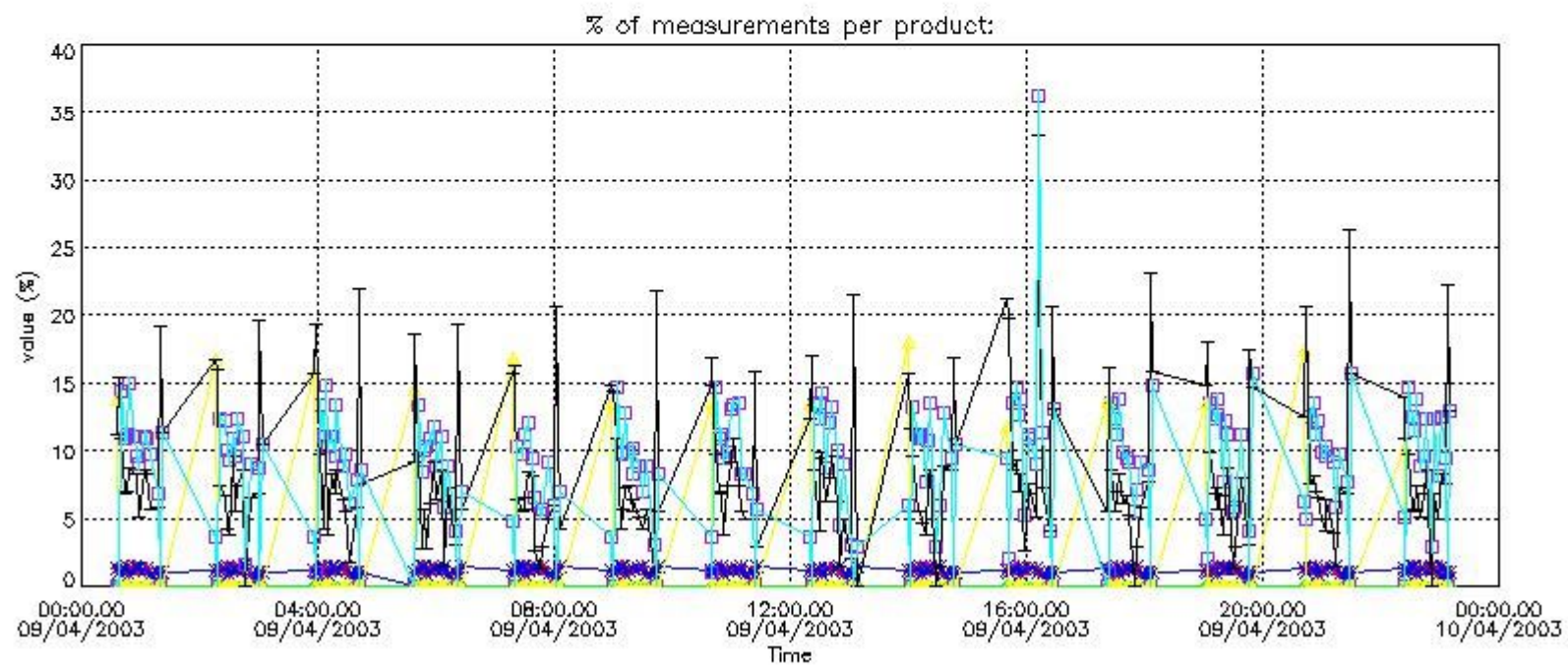
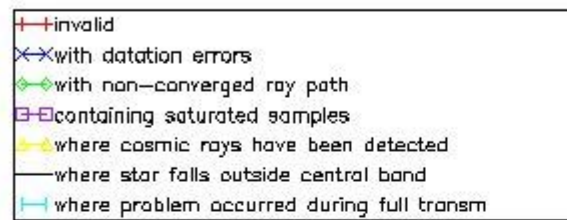
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



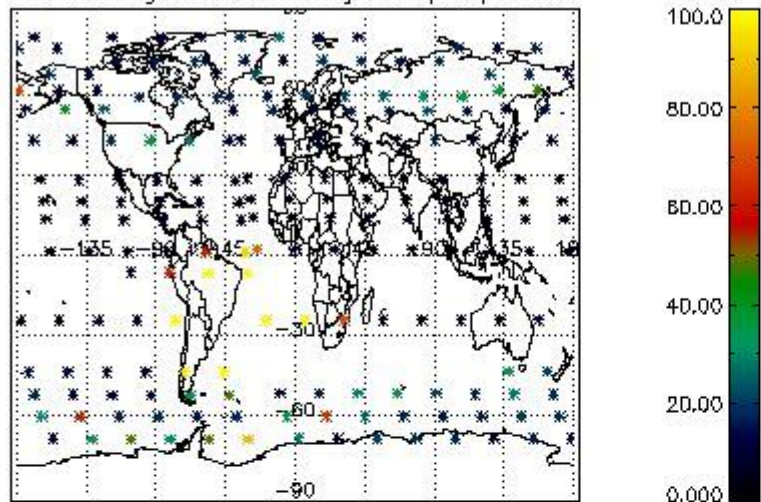
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



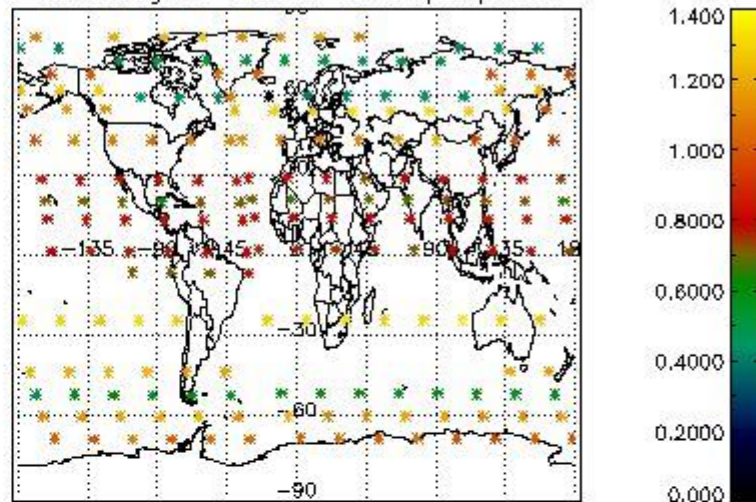
4.2 Plot quality information per product coming from level 1b processing (world map)

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

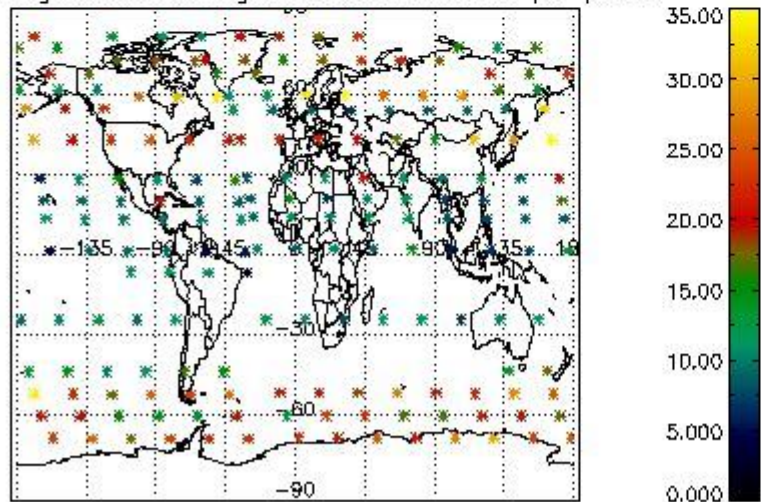
Percentage of cosmic ray hits per profile



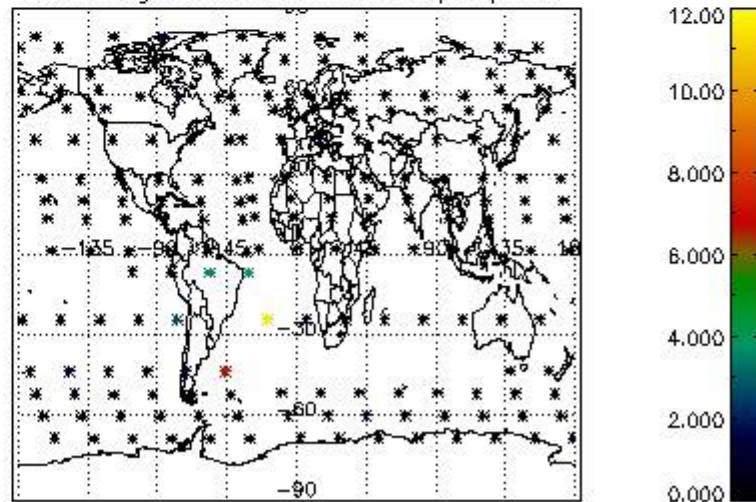
Percentage of datation errors per profile



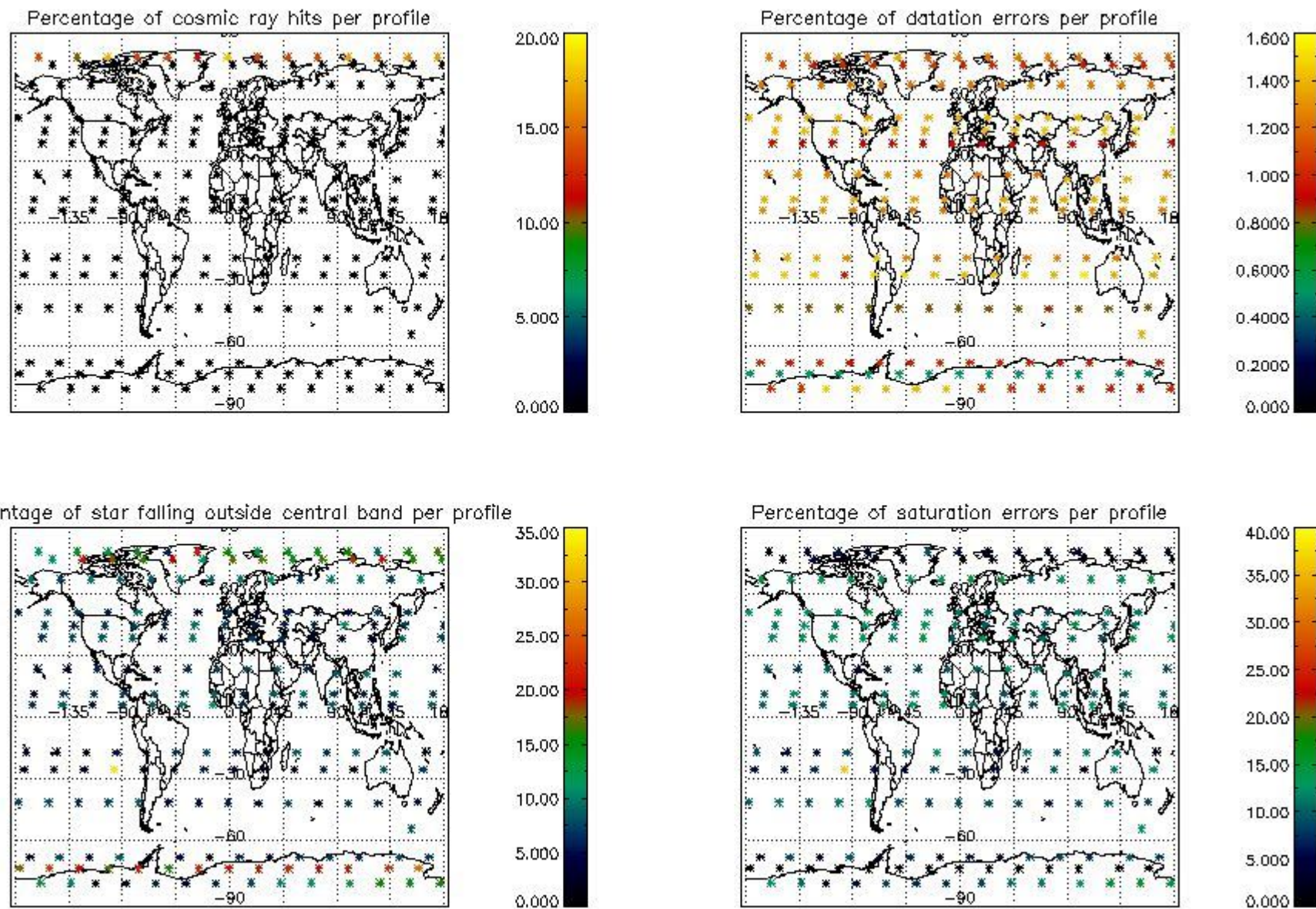
Percentage of star falling outside central band per profile



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

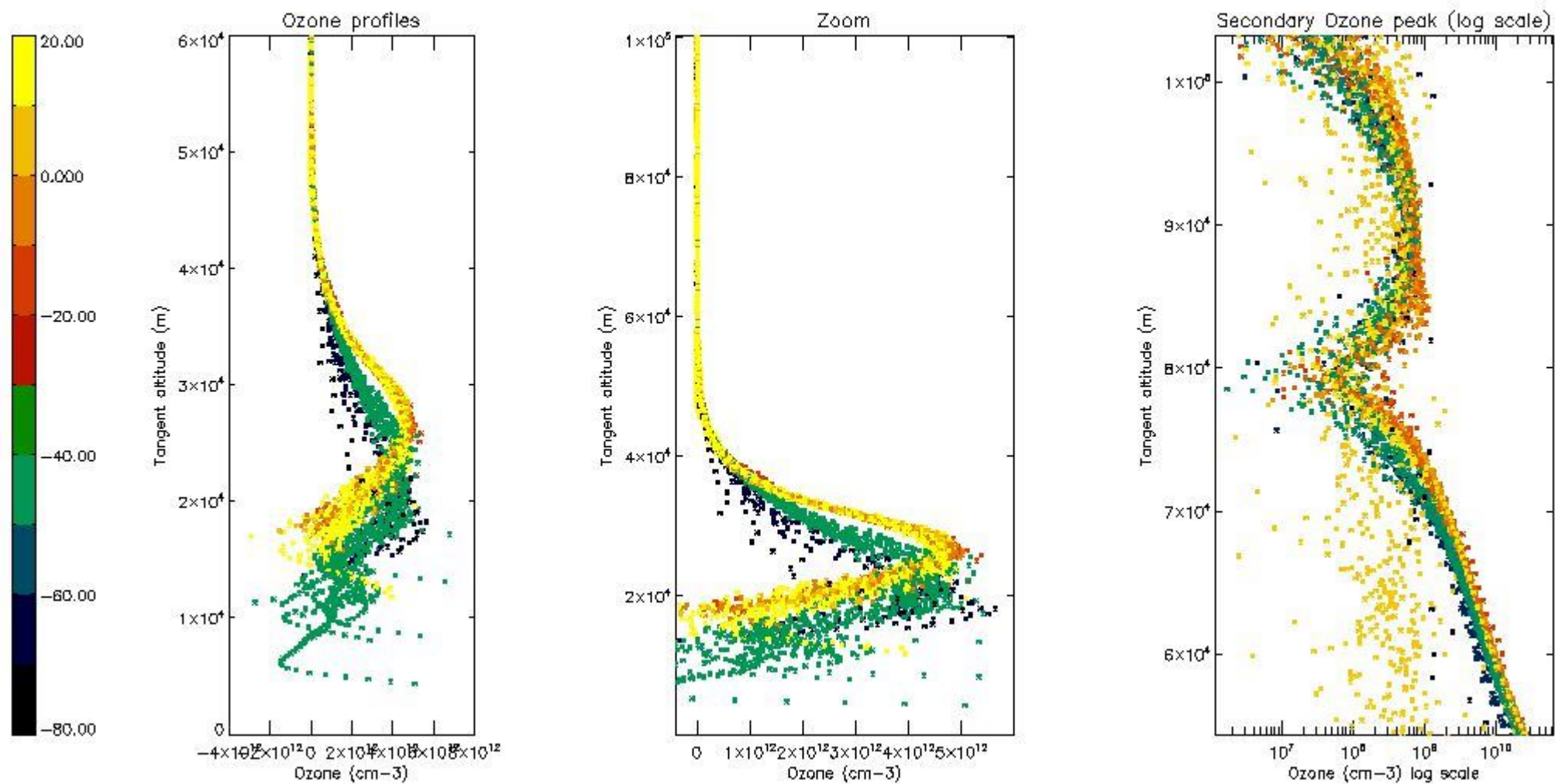
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	18

STD < 10	16
STD < 5	13

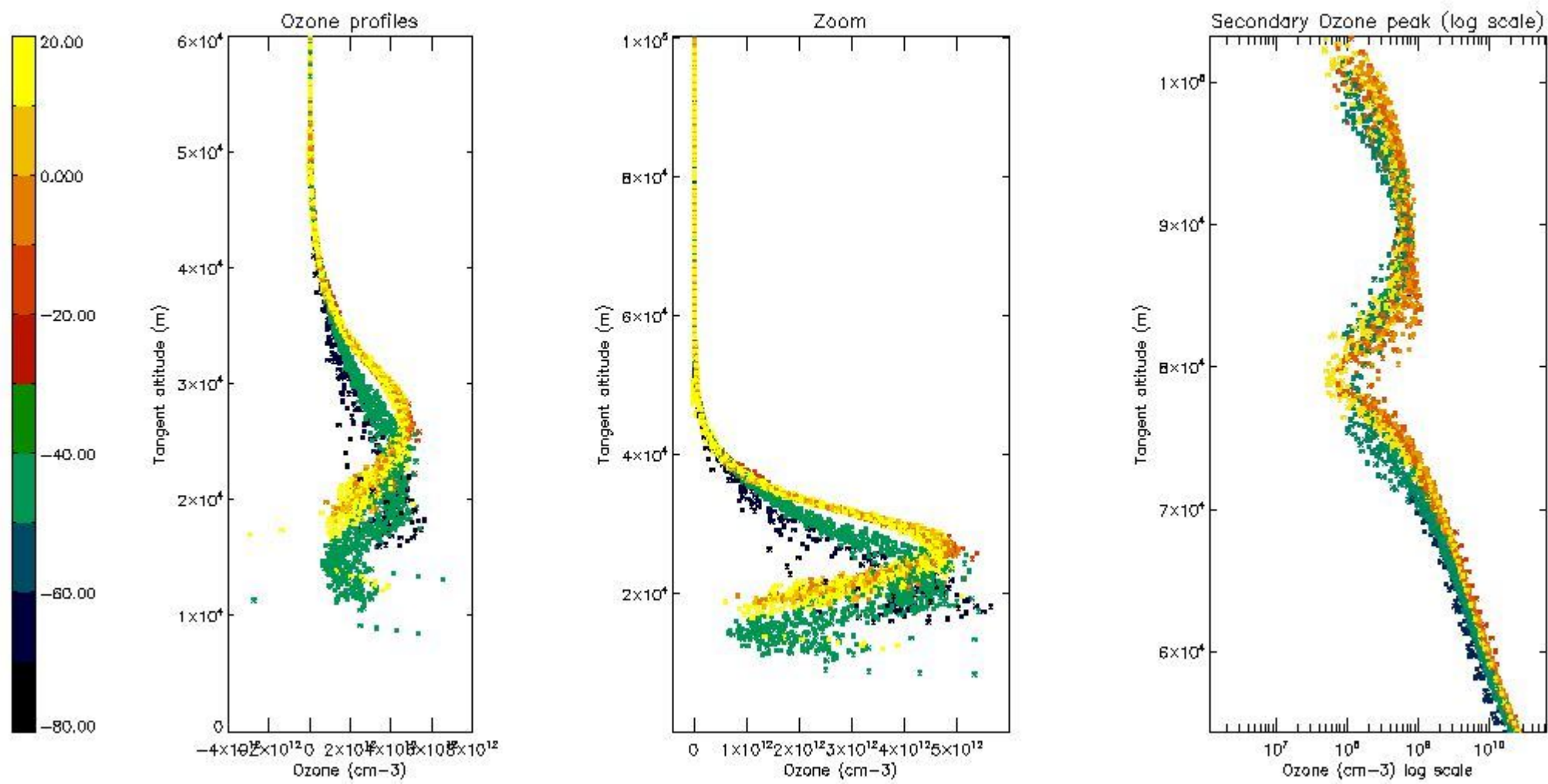
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



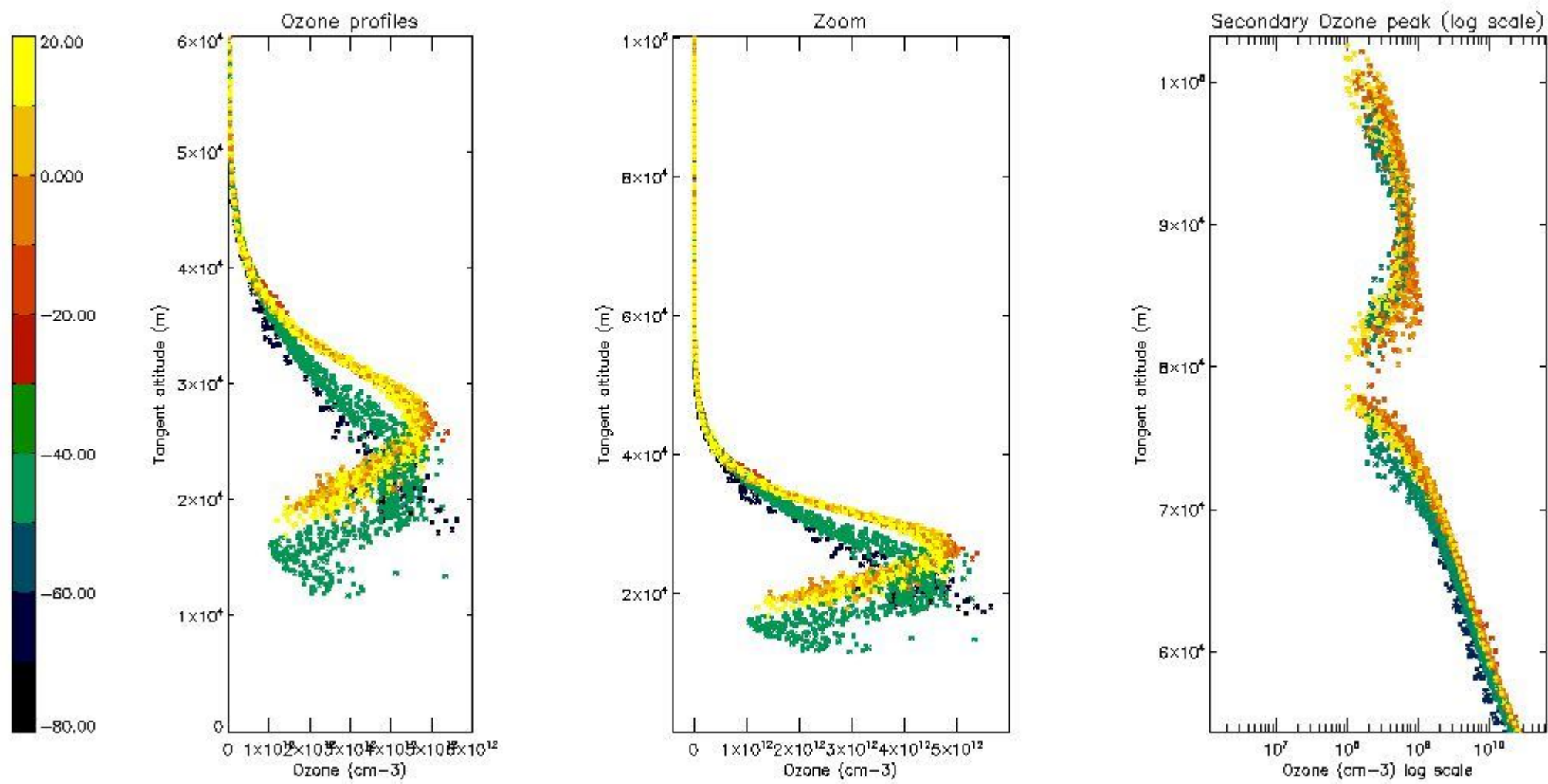
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



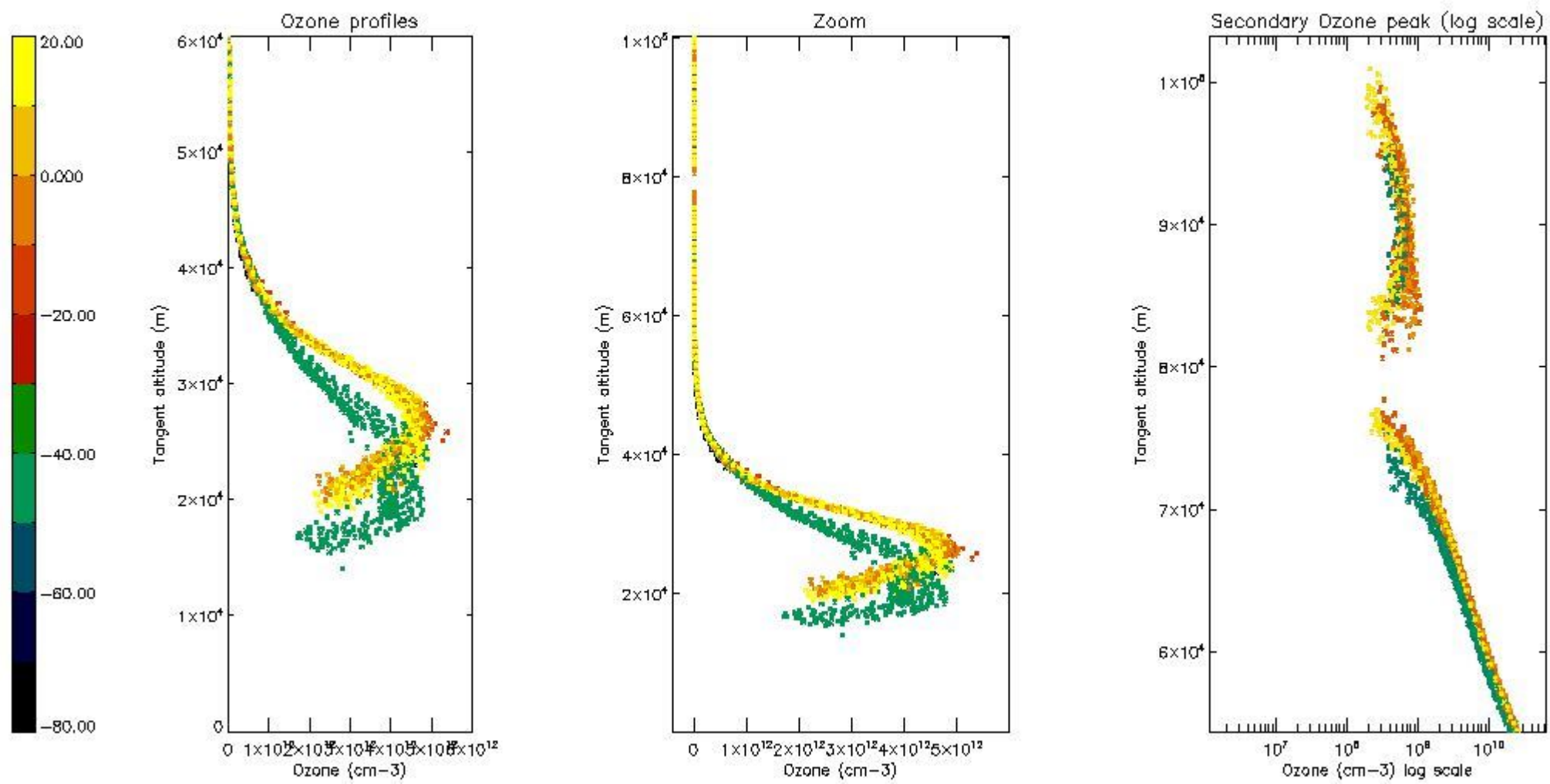
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



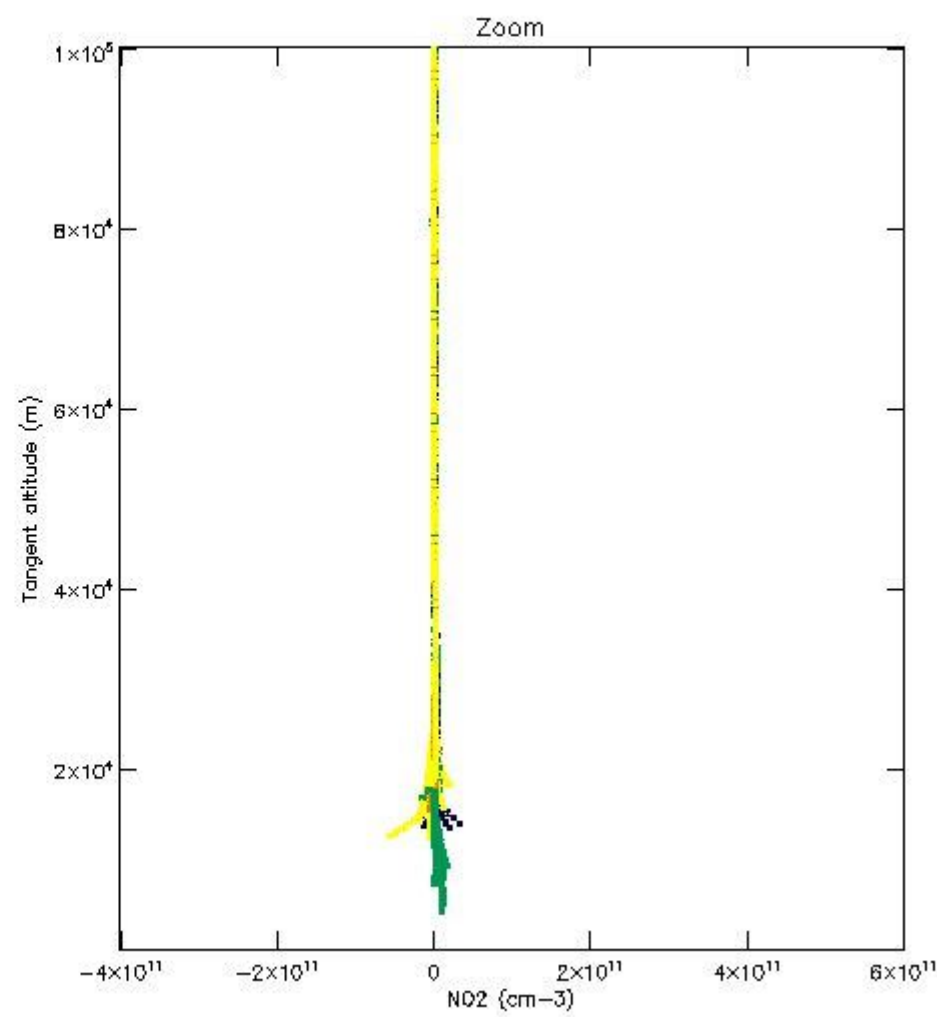
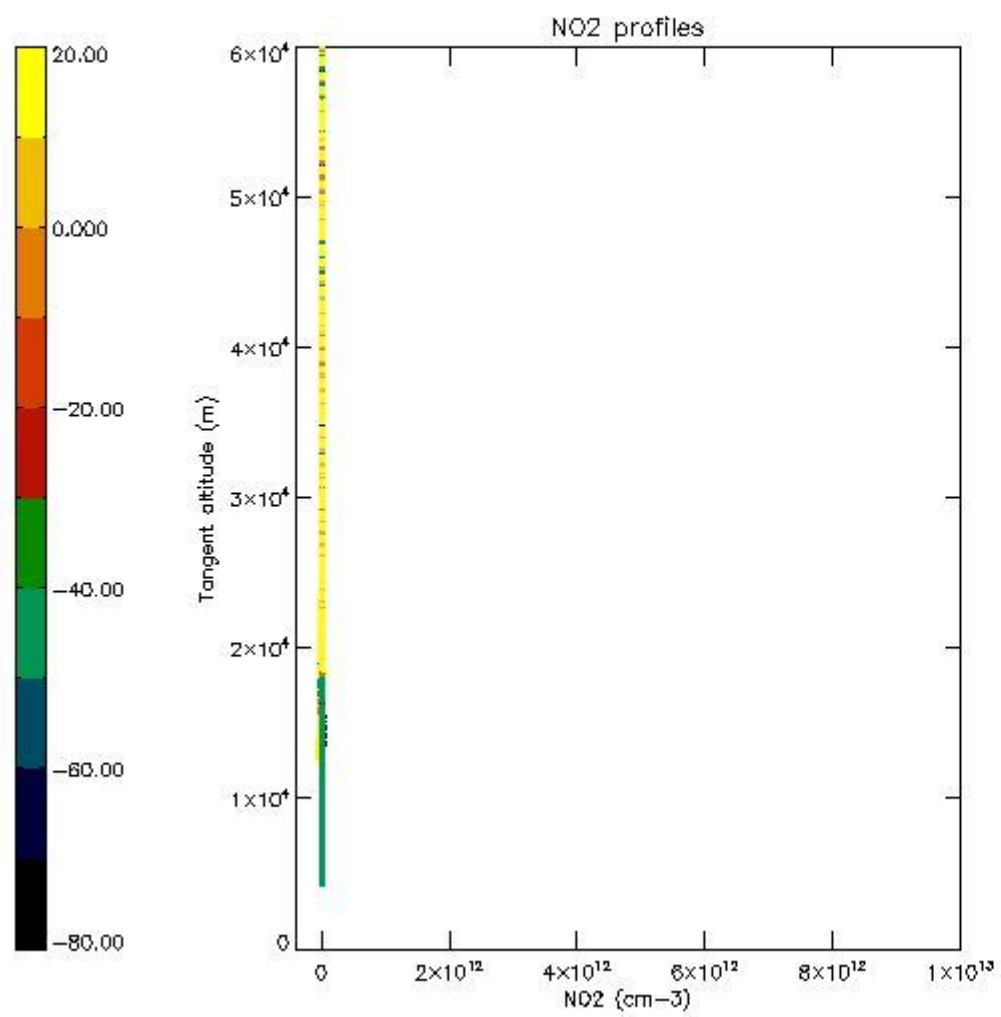
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



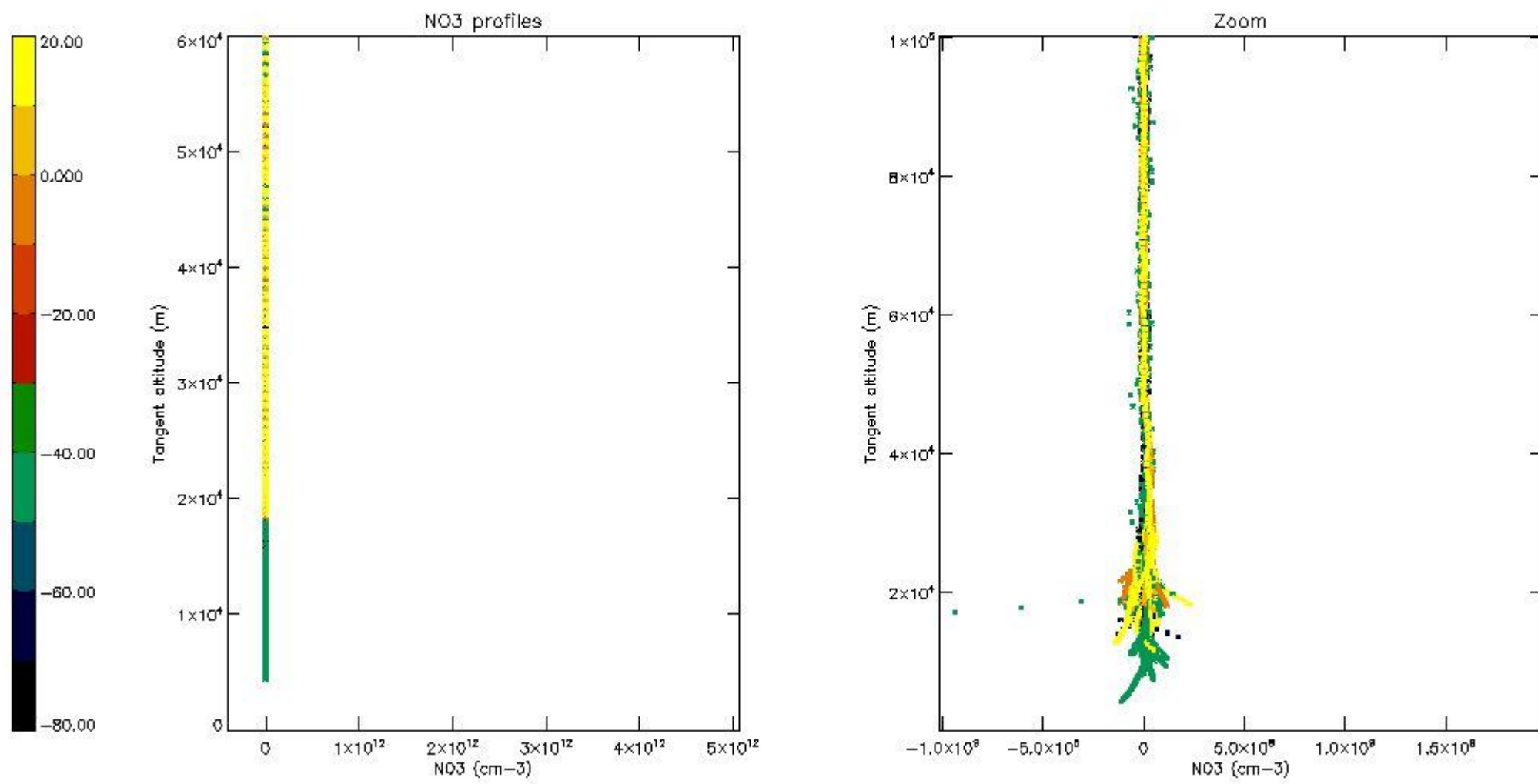
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



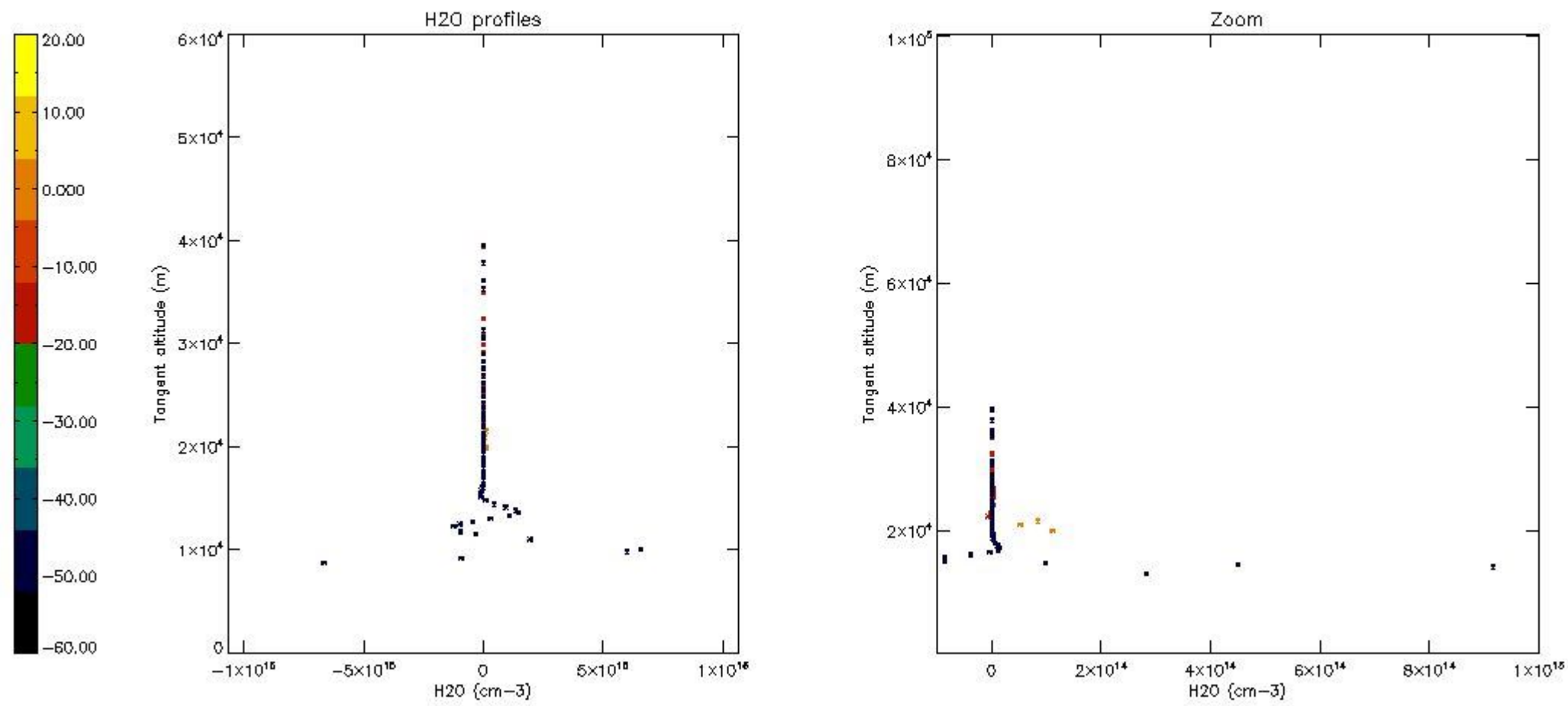
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

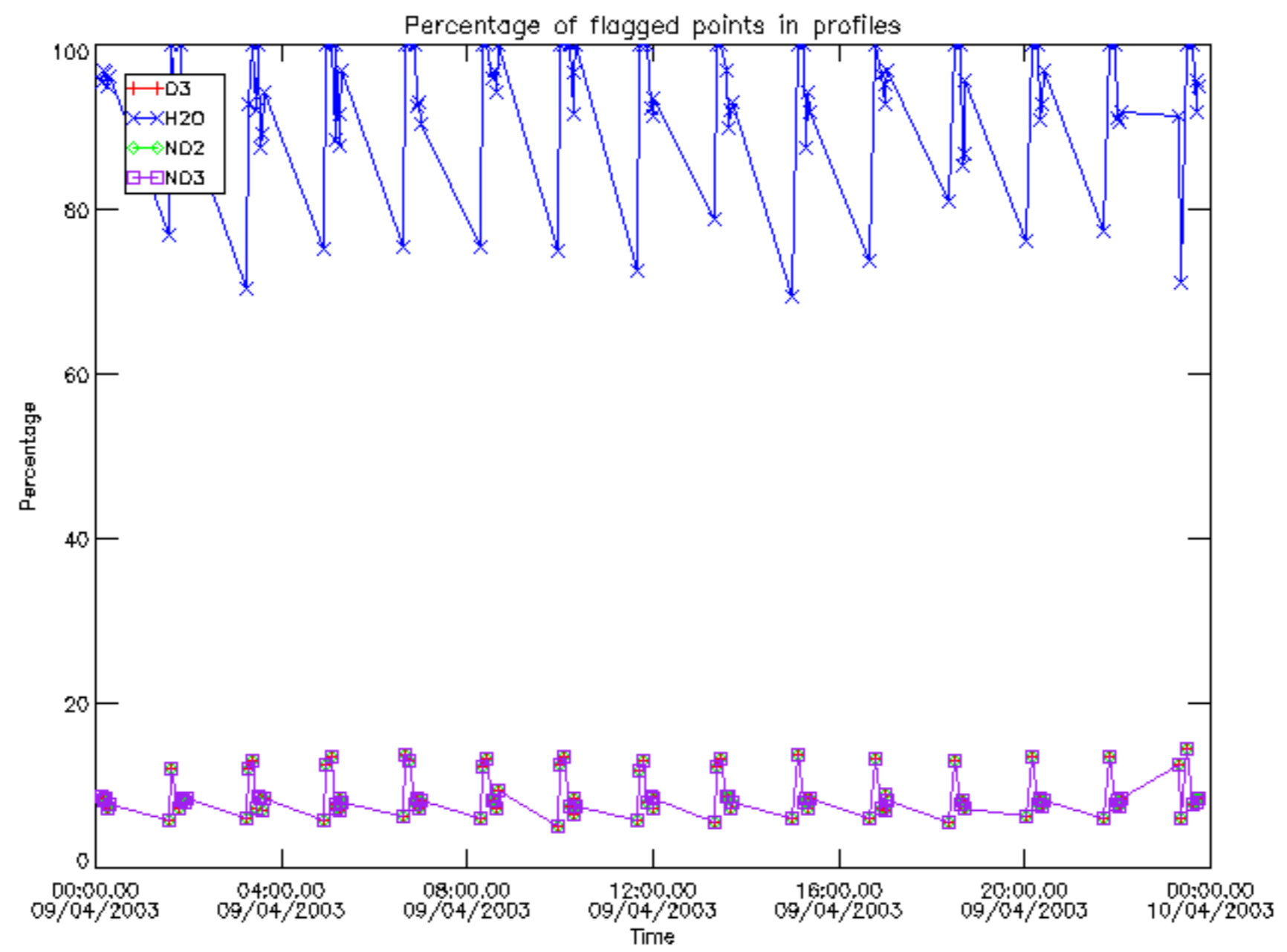
The colorbar represents the latitude.



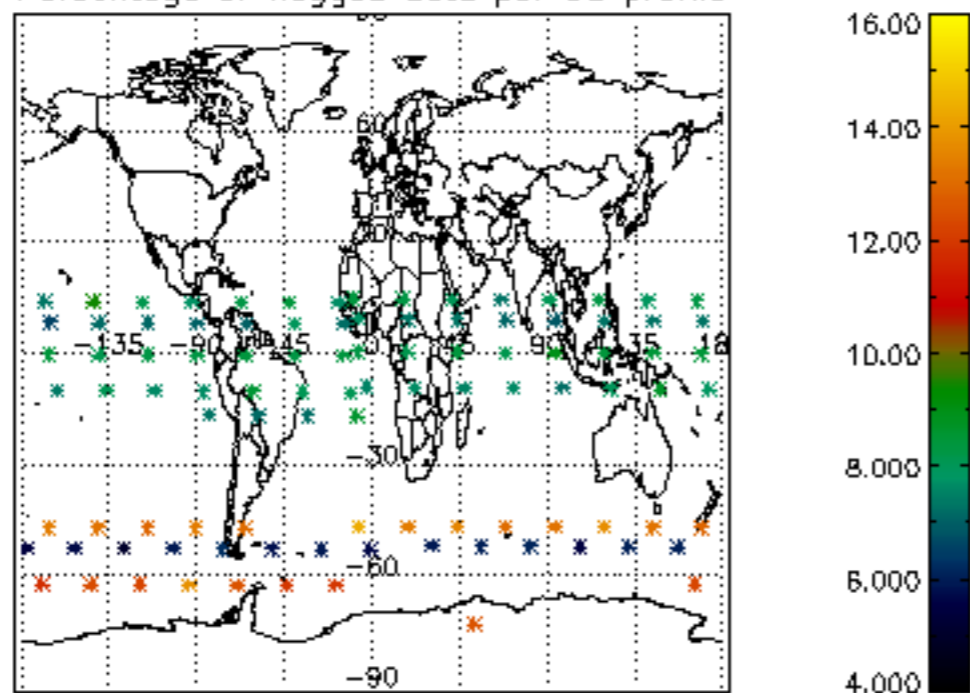
6. Auxiliary Data Files used for the production reported in section 2

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.

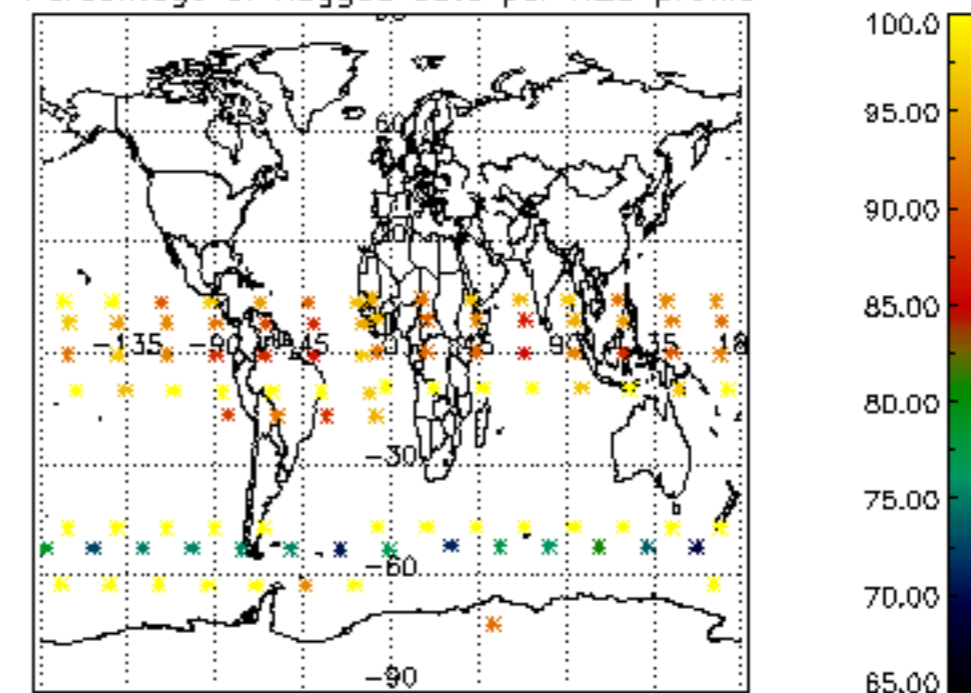
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	09-APR-2003 00:07:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-APR-2003 00:07:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-APR-2003 00:07:02



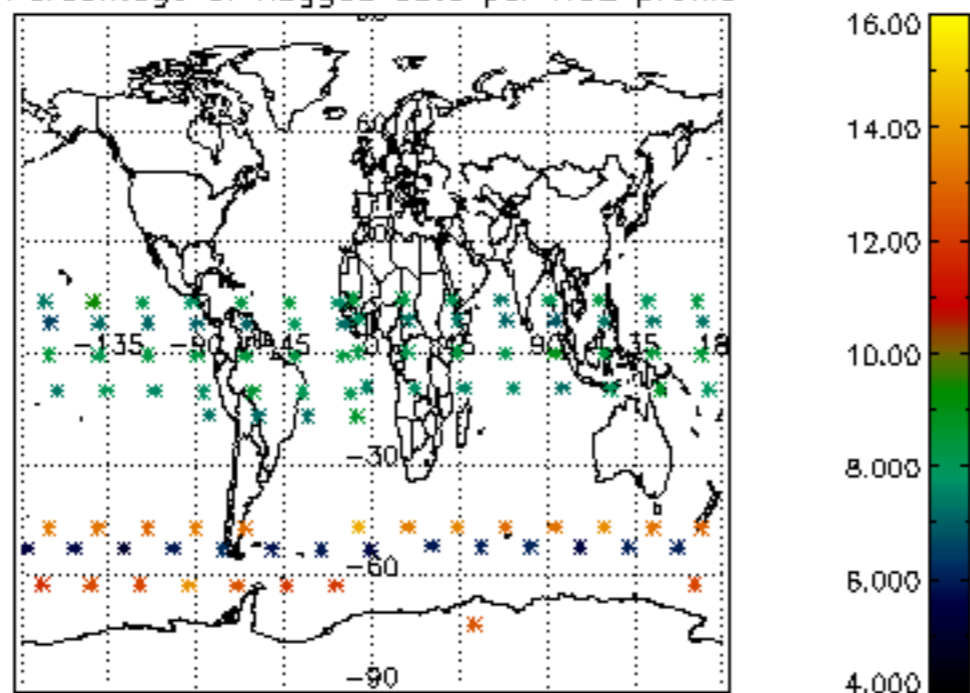
Percentage of flagged data per D3 profile



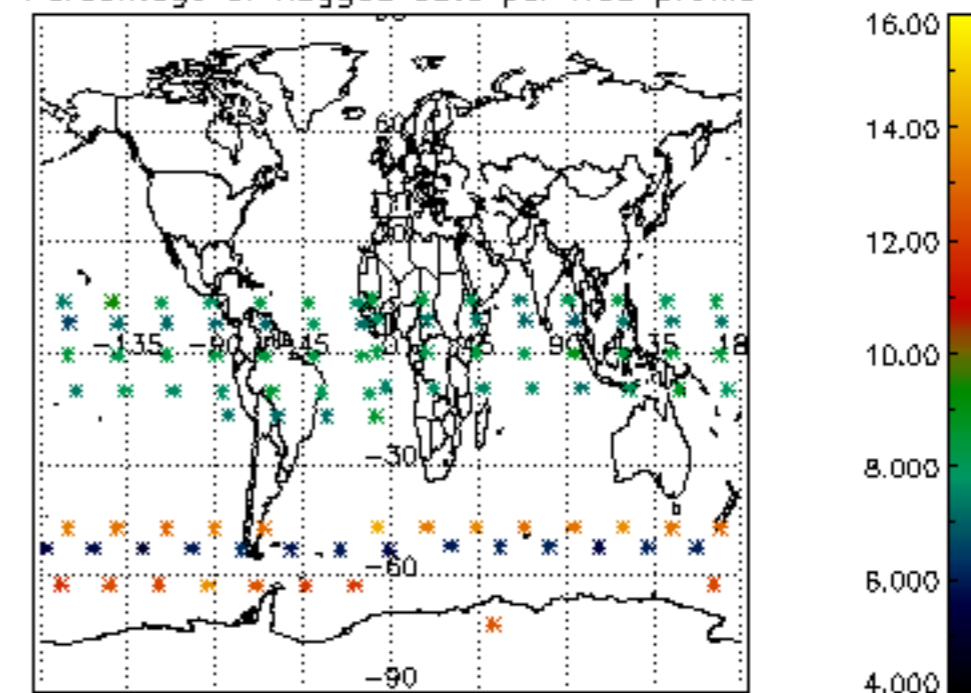
Percentage of flagged data per H2O profile

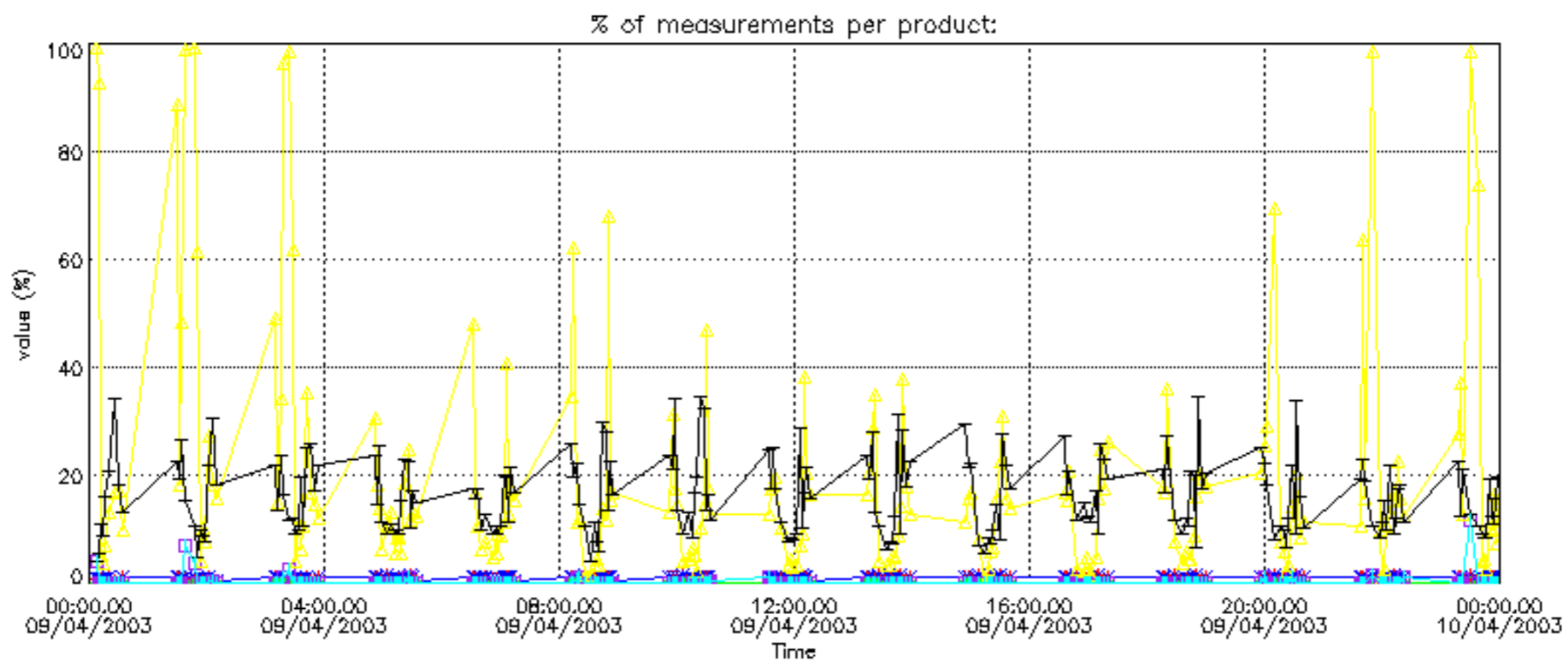


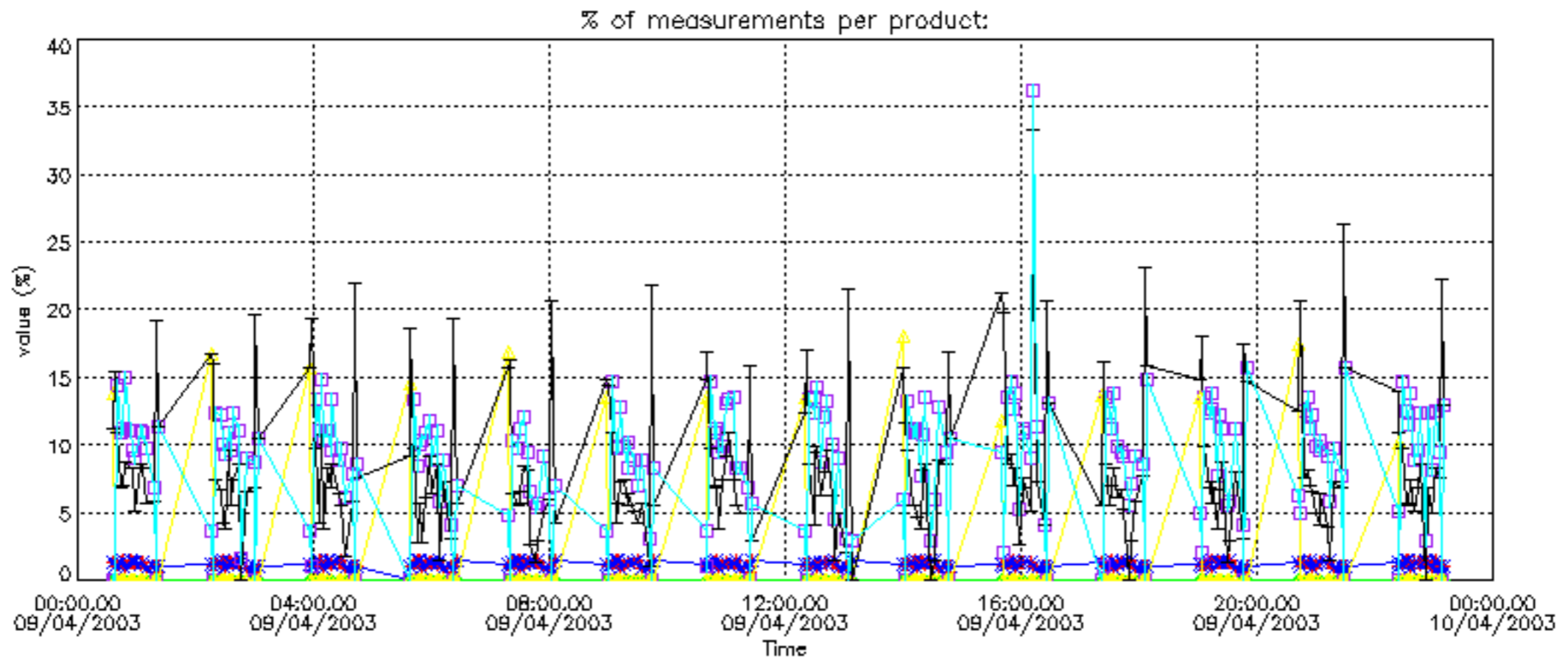
Percentage of flagged data per NO2 profile



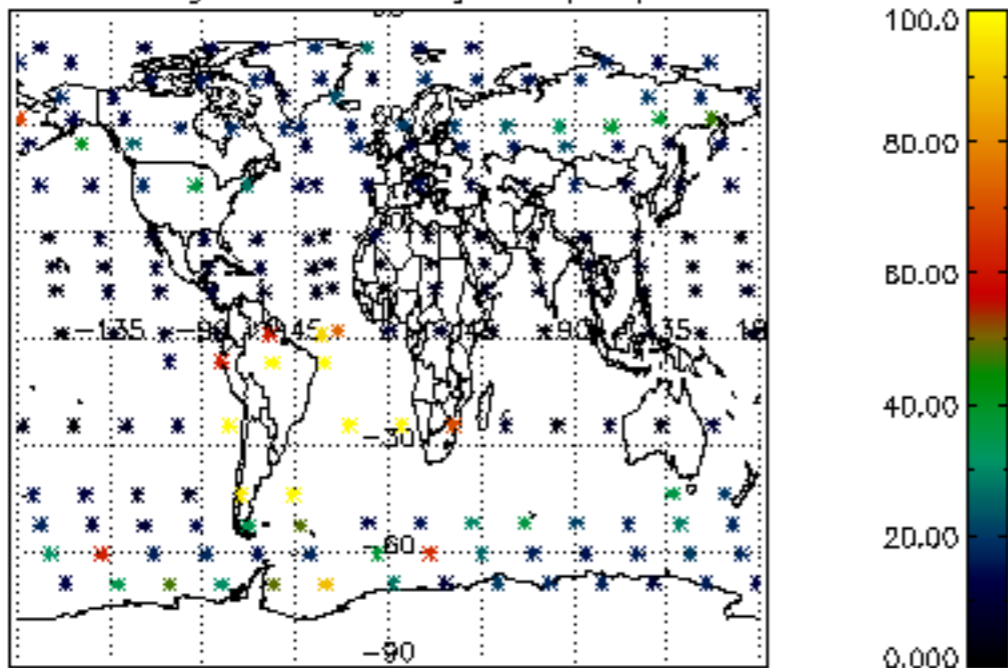
Percentage of flagged data per NO3 profile



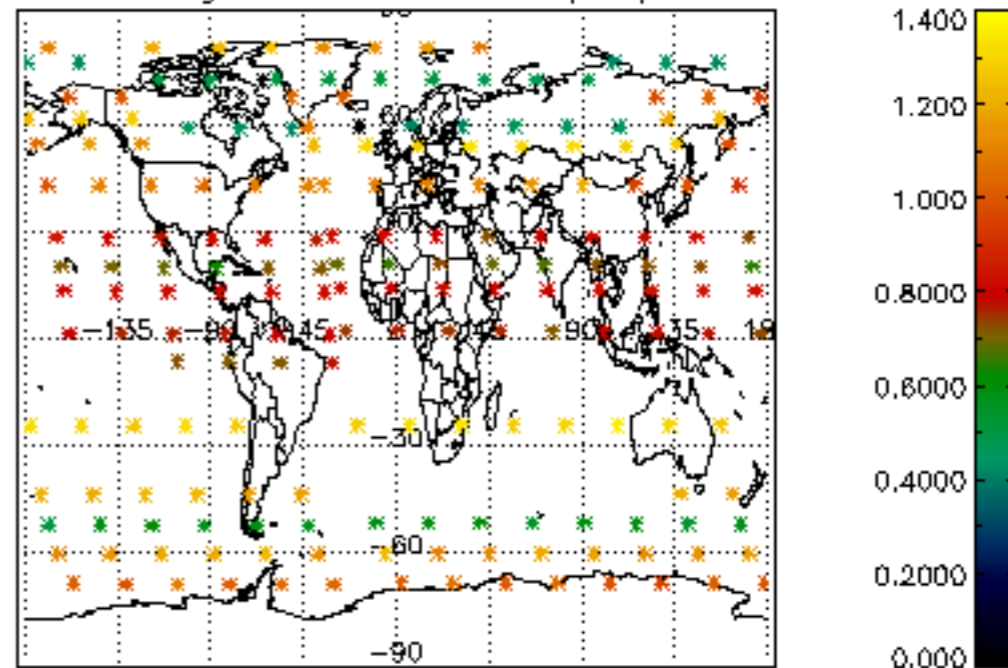




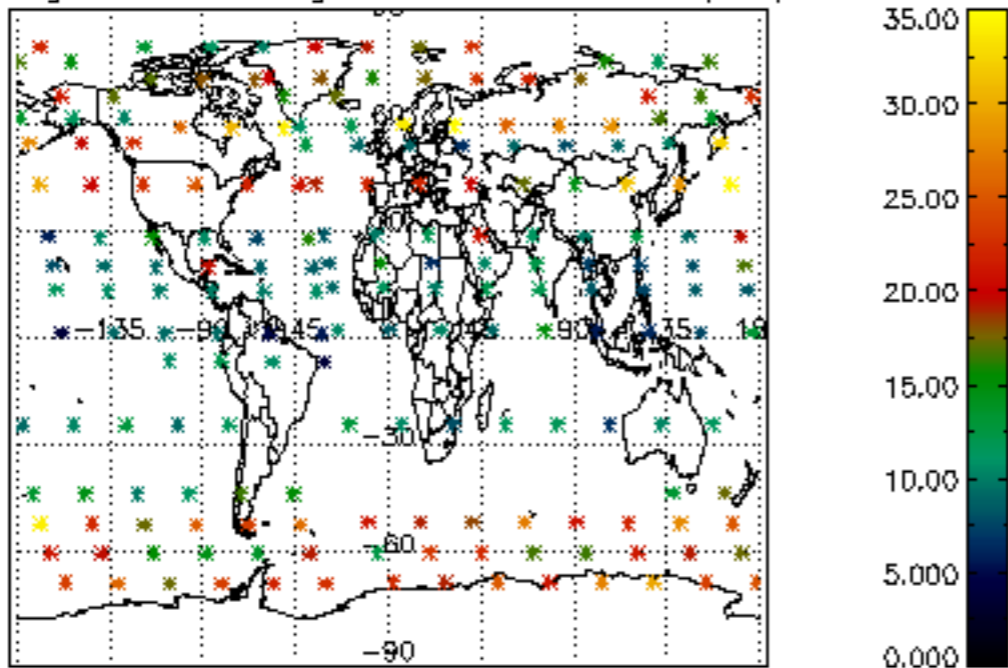
Percentage of cosmic ray hits per profile



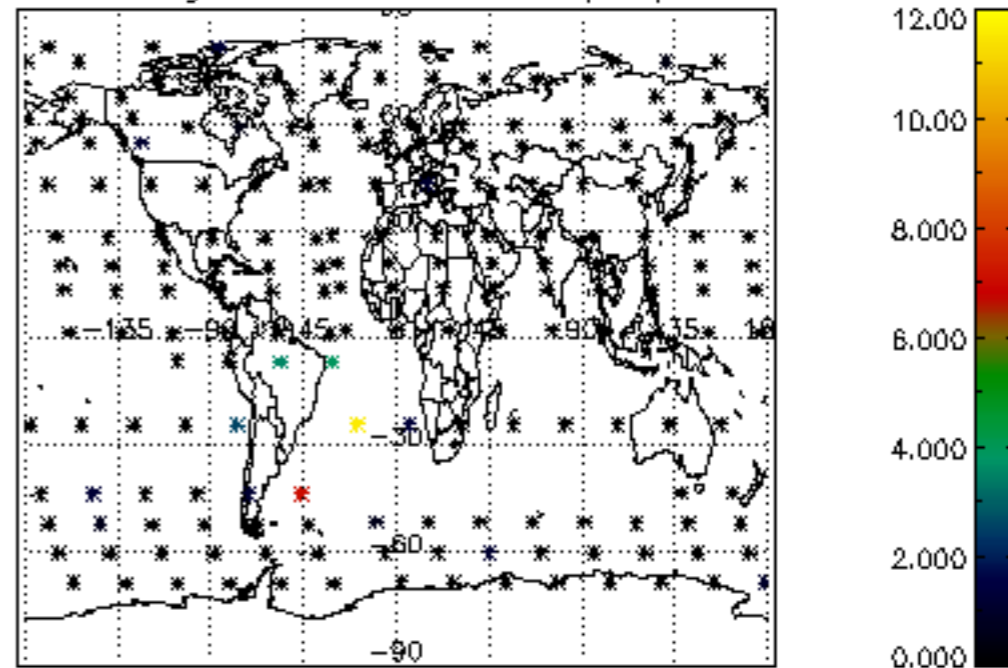
Percentage of datation errors per profile



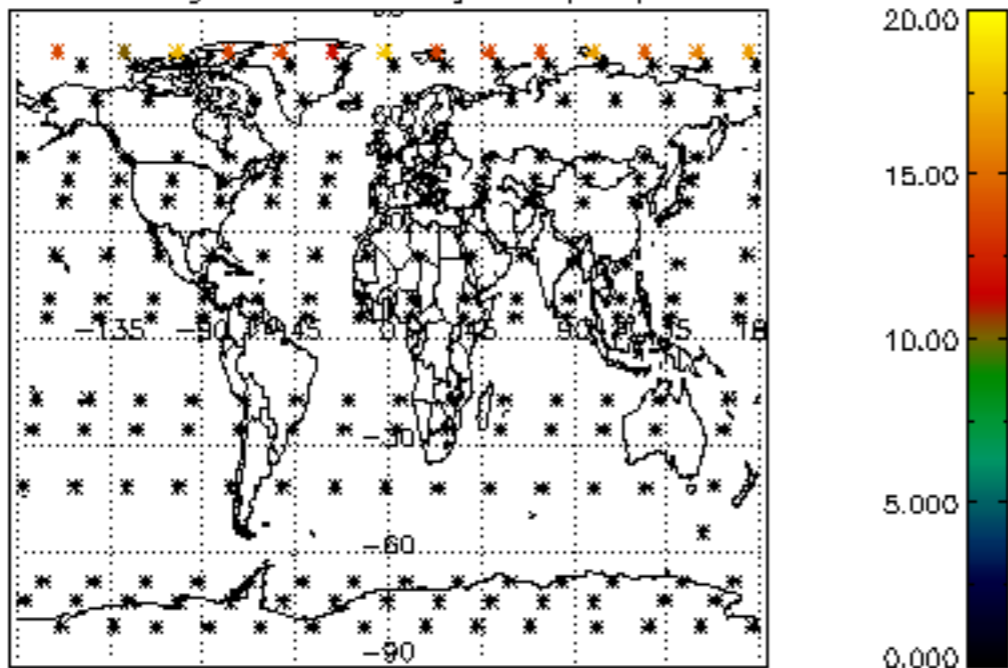
Percentage of star falling outside central band per profile



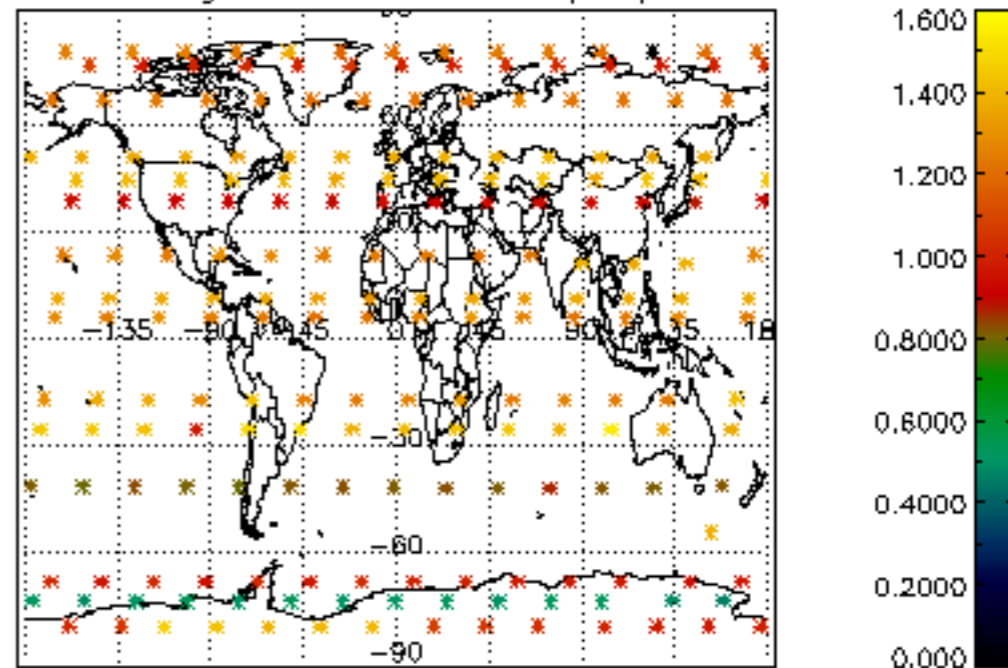
Percentage of saturation errors per profile



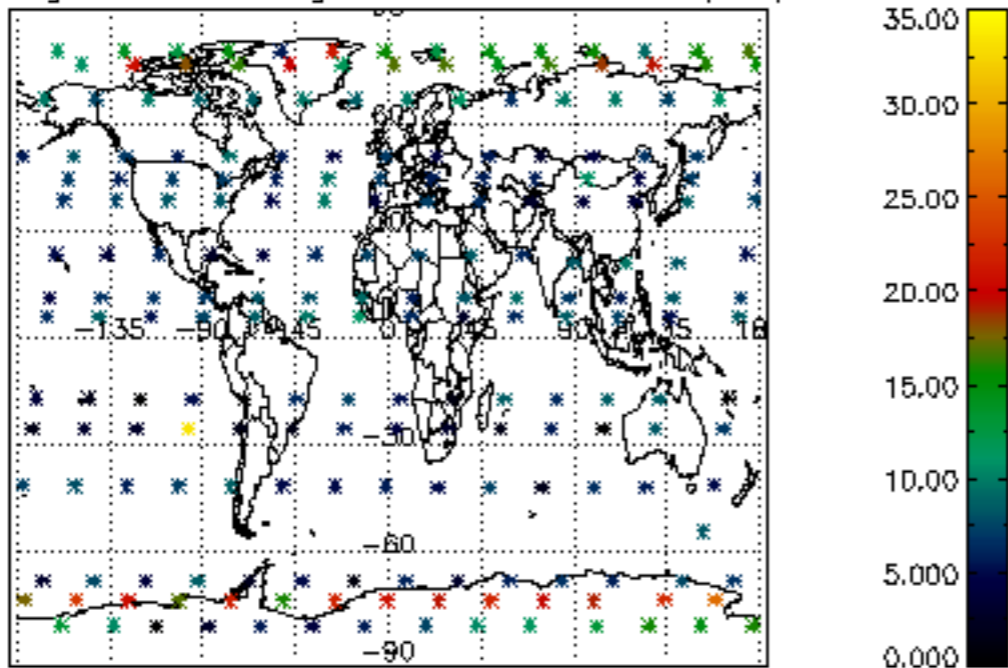
Percentage of cosmic ray hits per profile



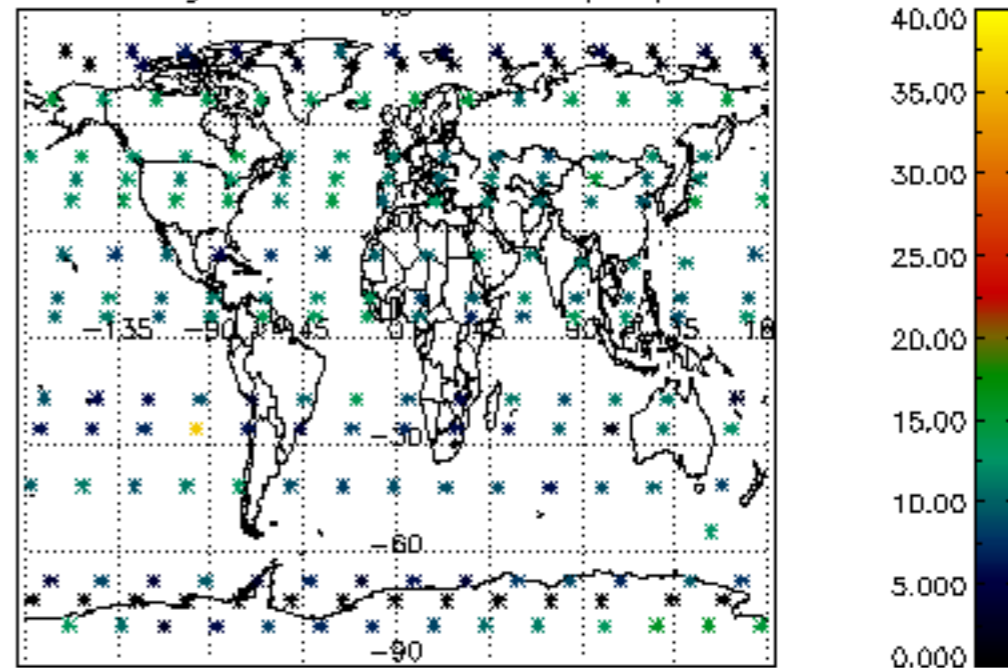
Percentage of datation errors per profile

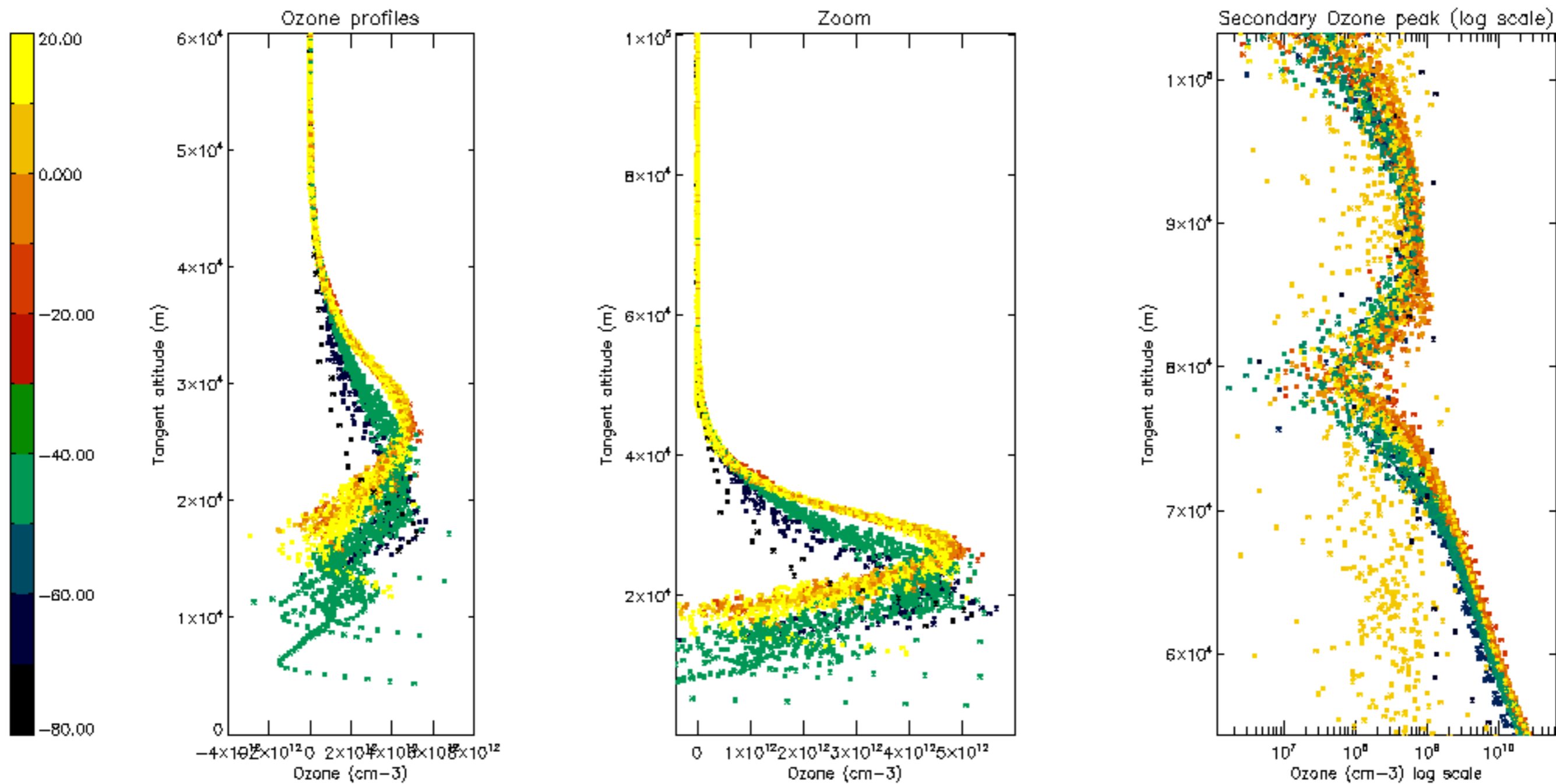


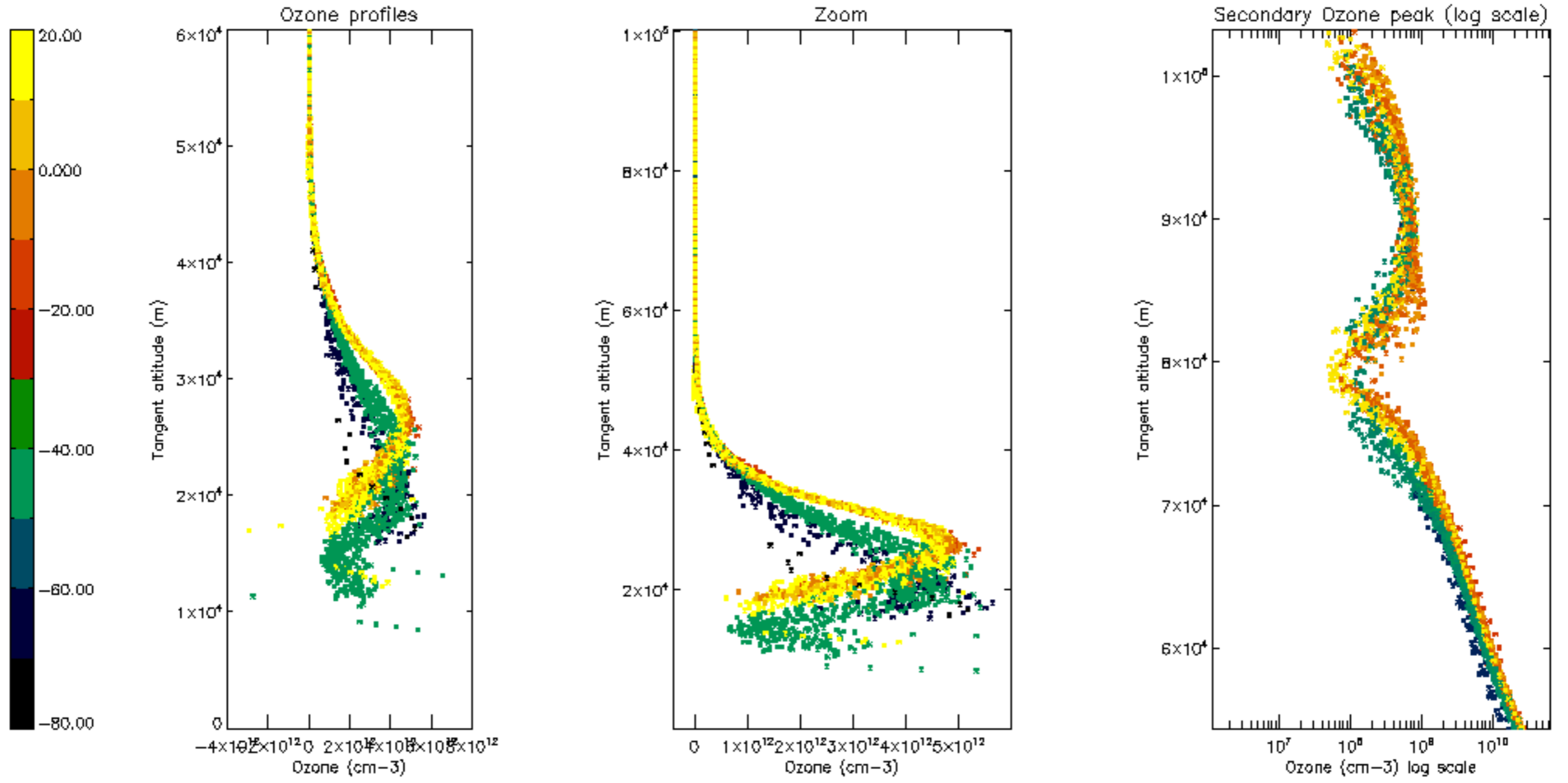
Percentage of star falling outside central band per profile

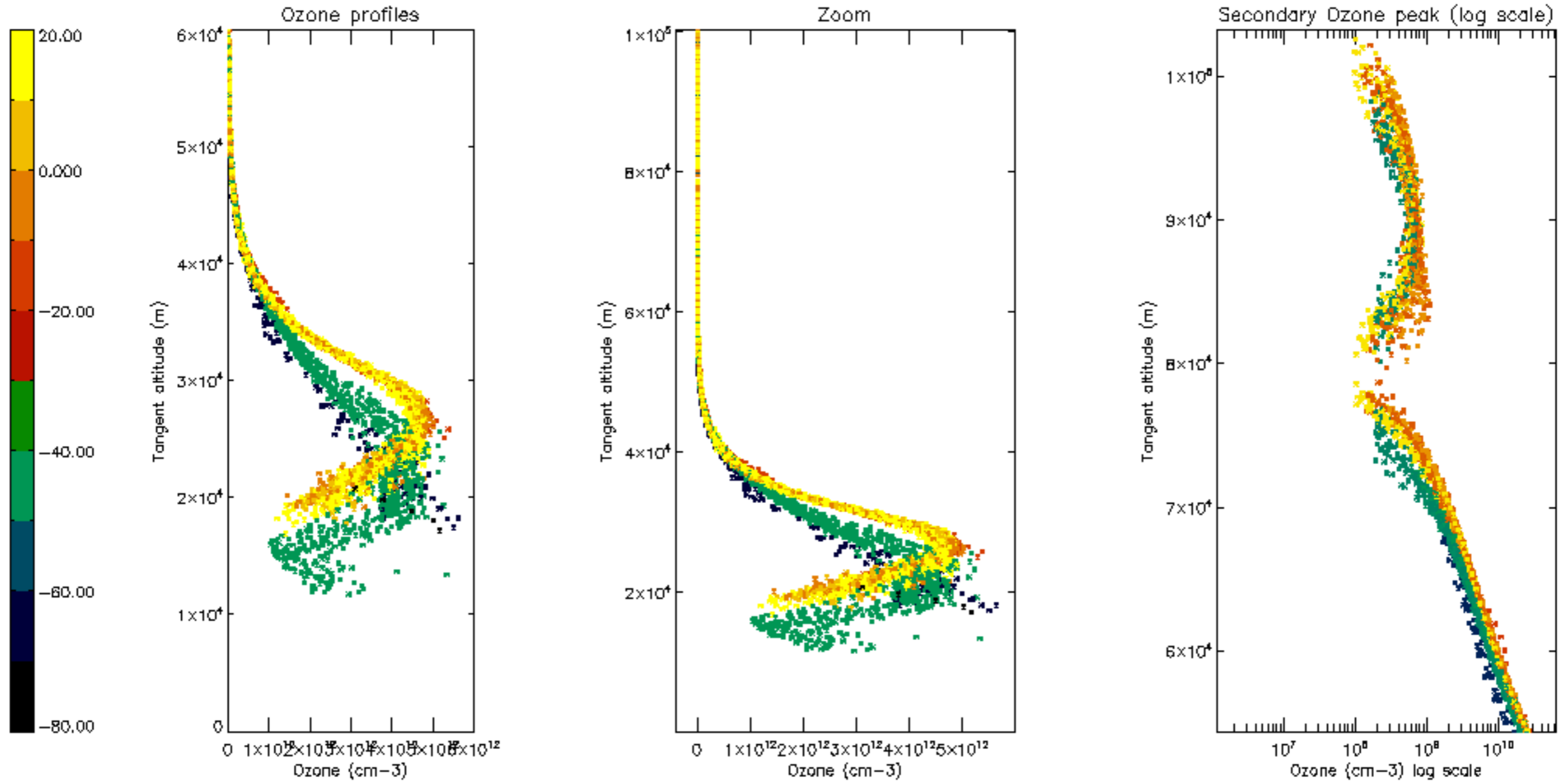


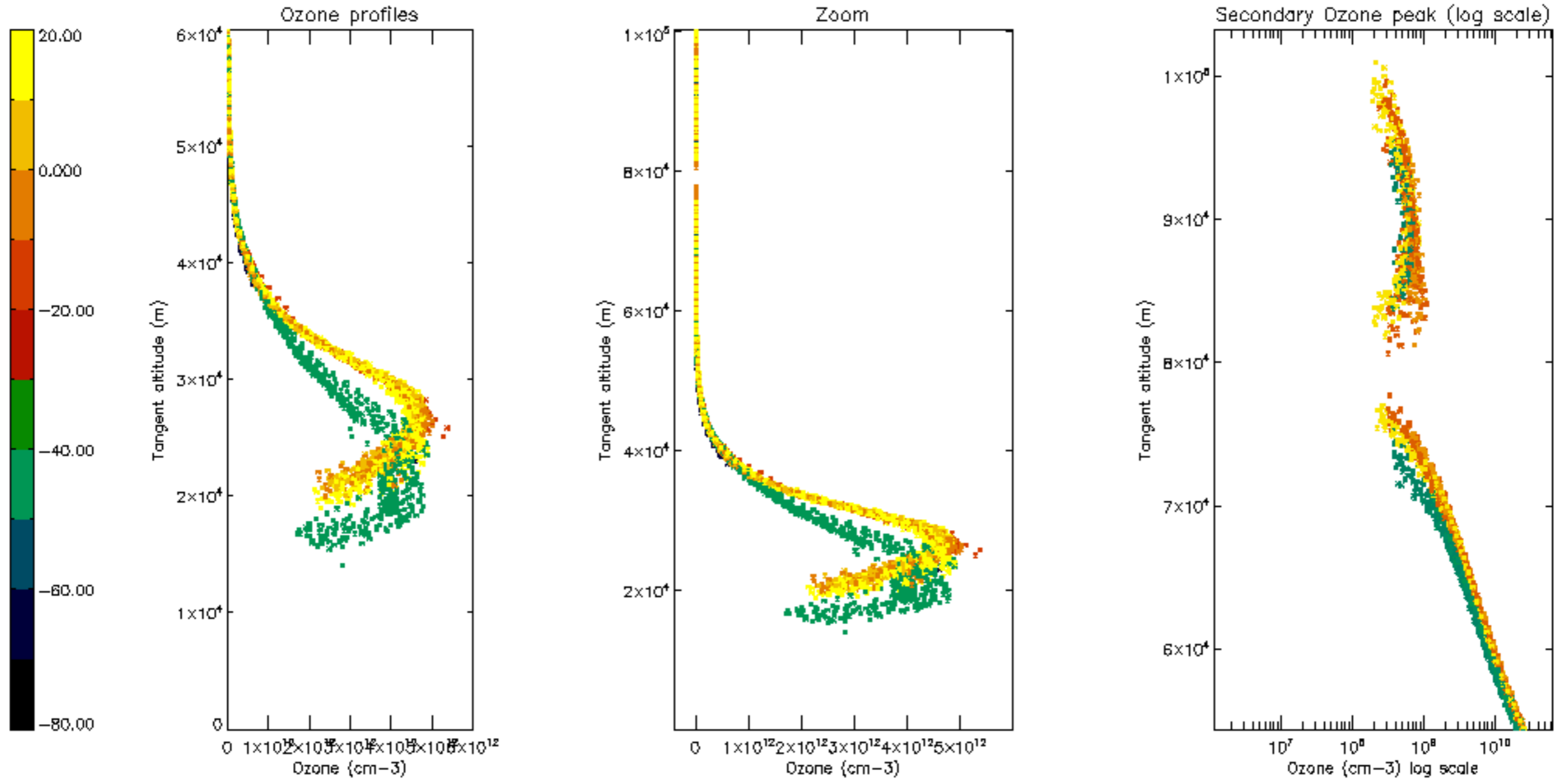
Percentage of saturation errors per profile

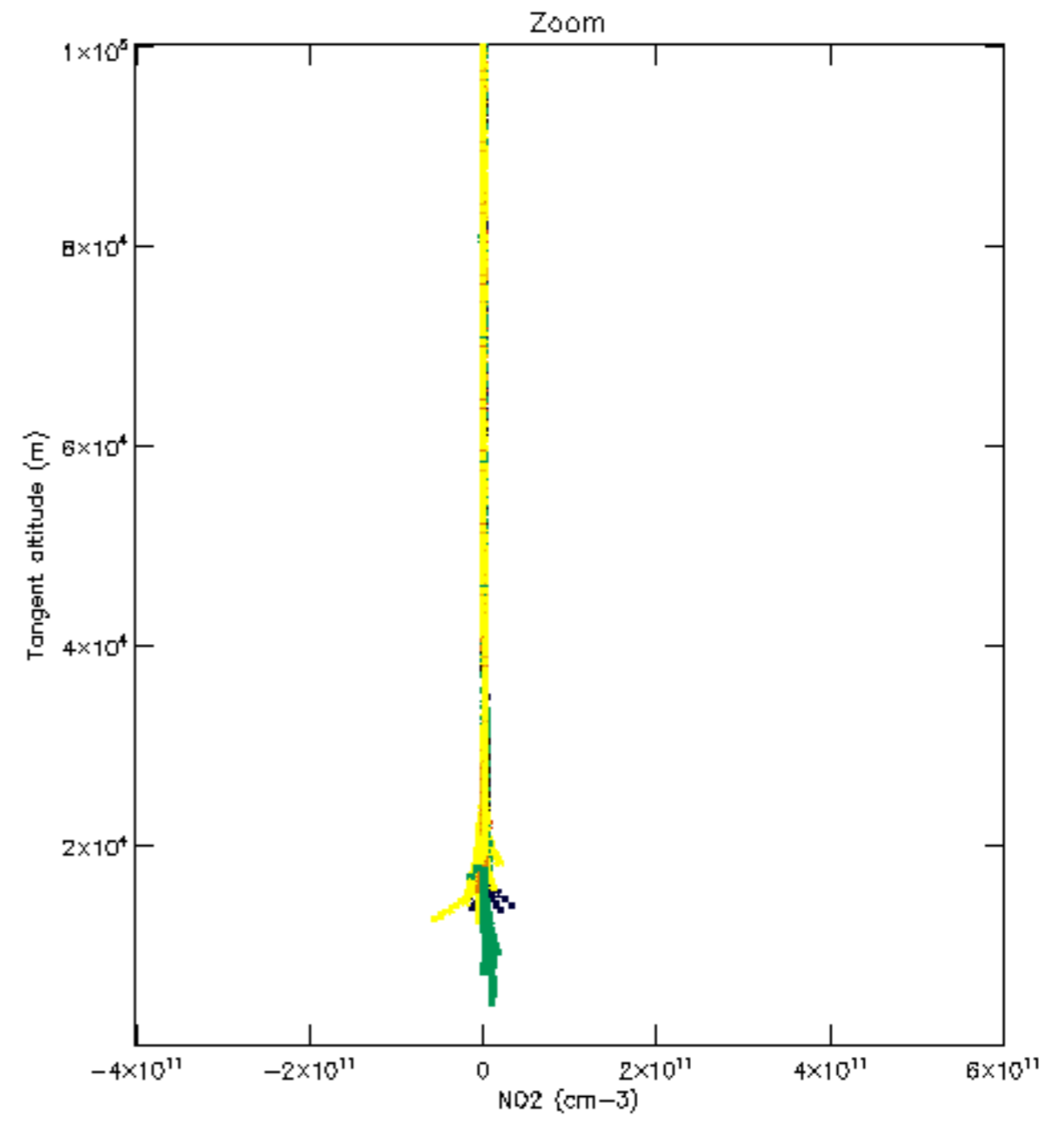
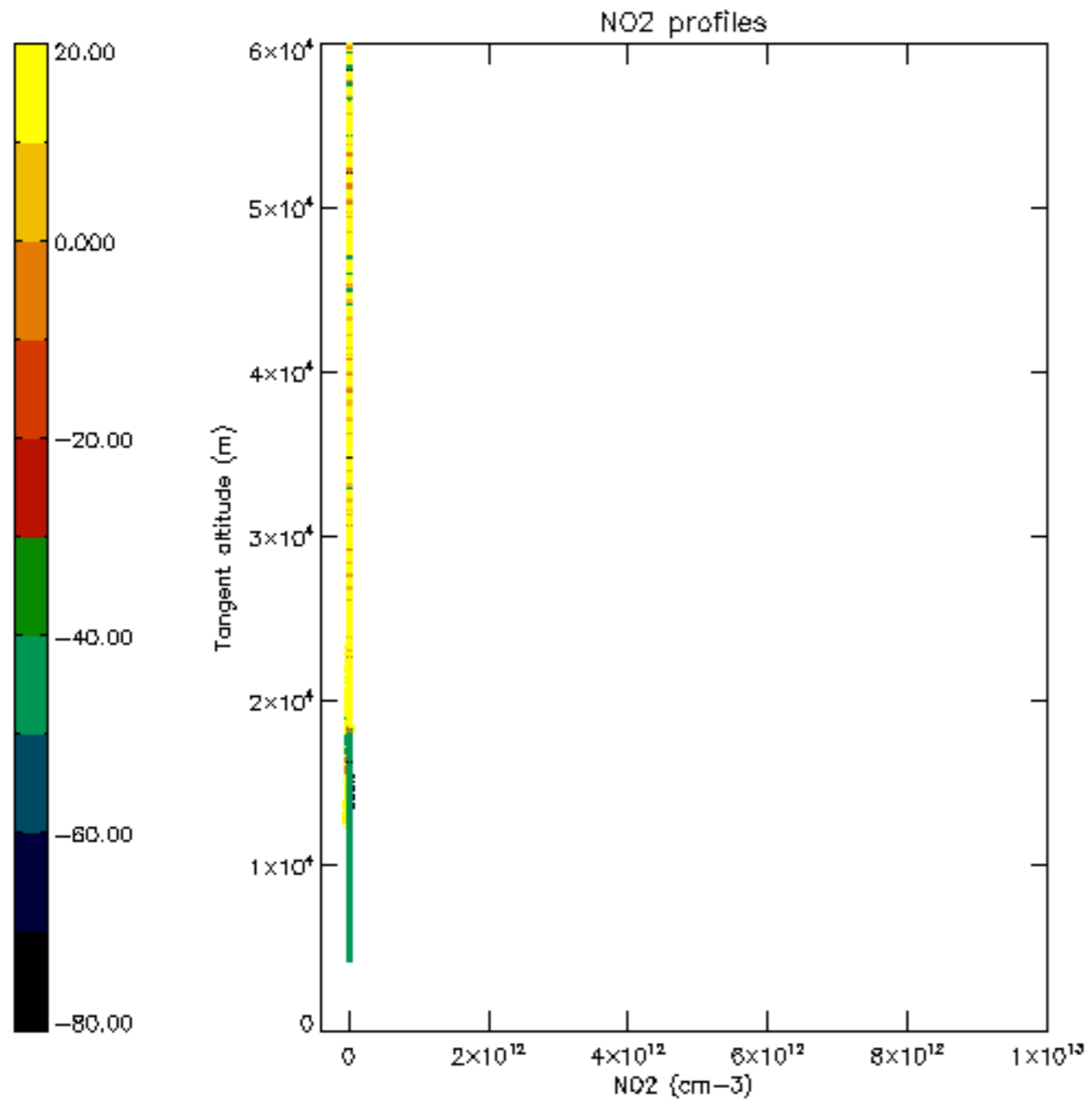


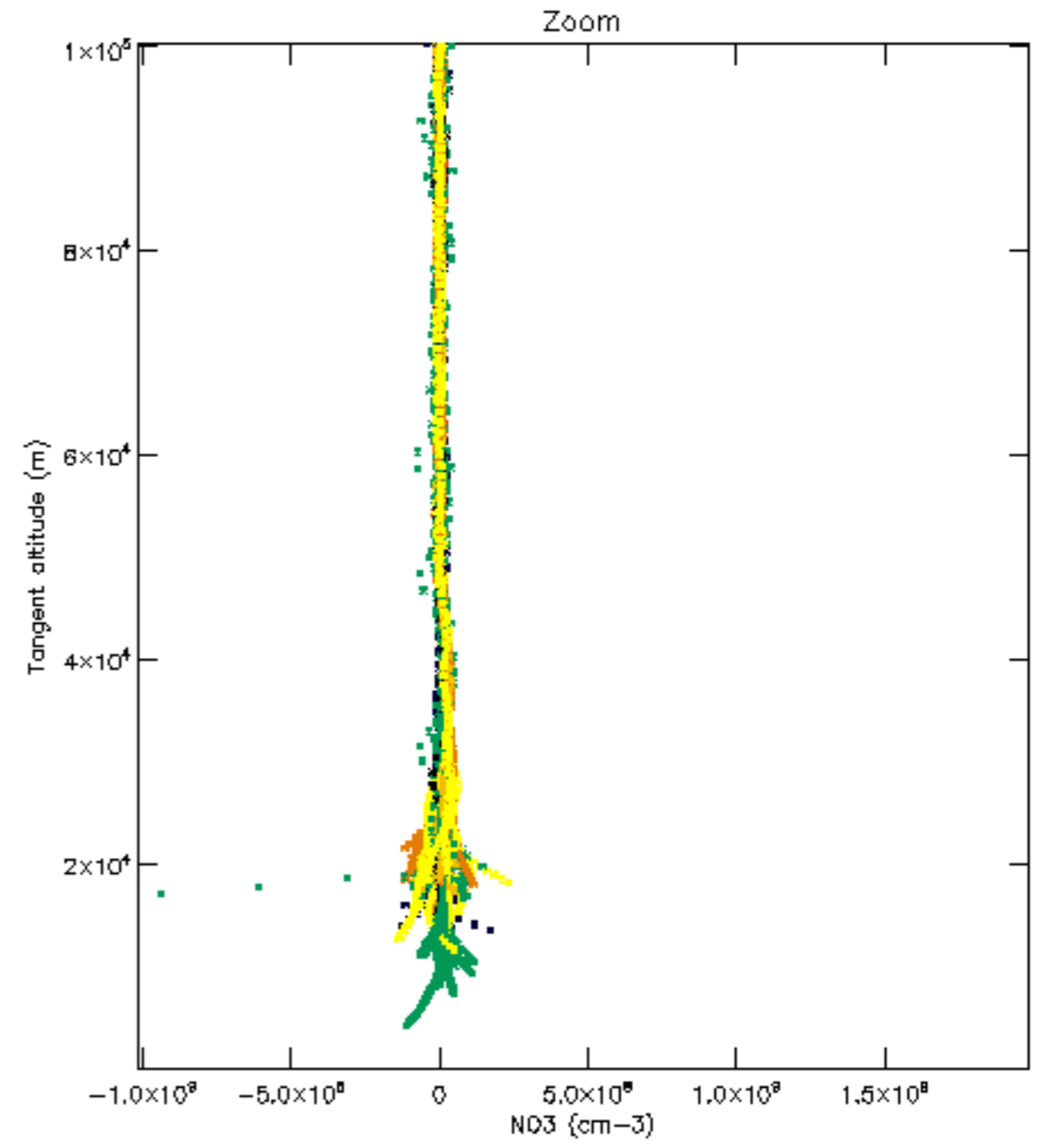
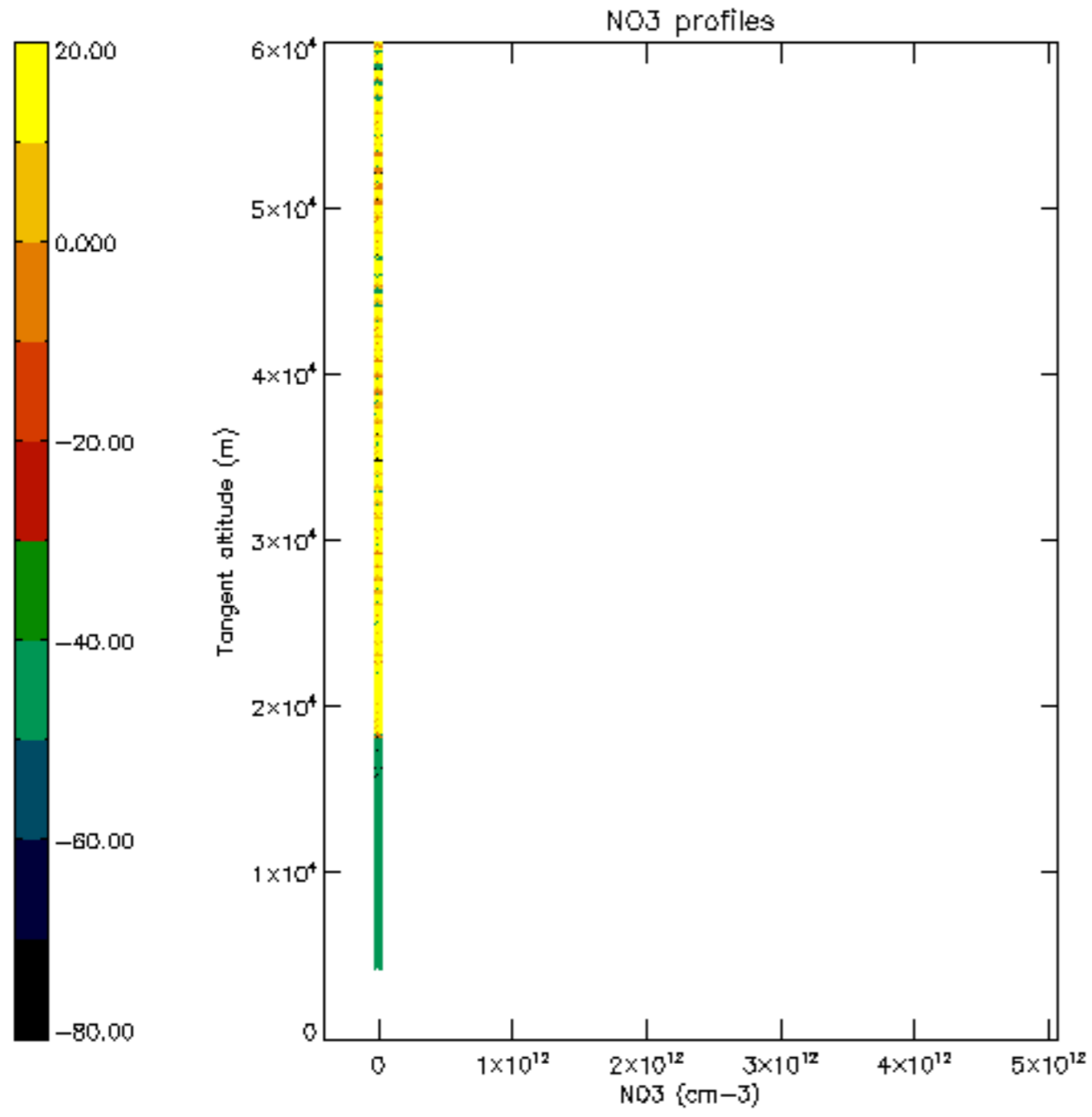


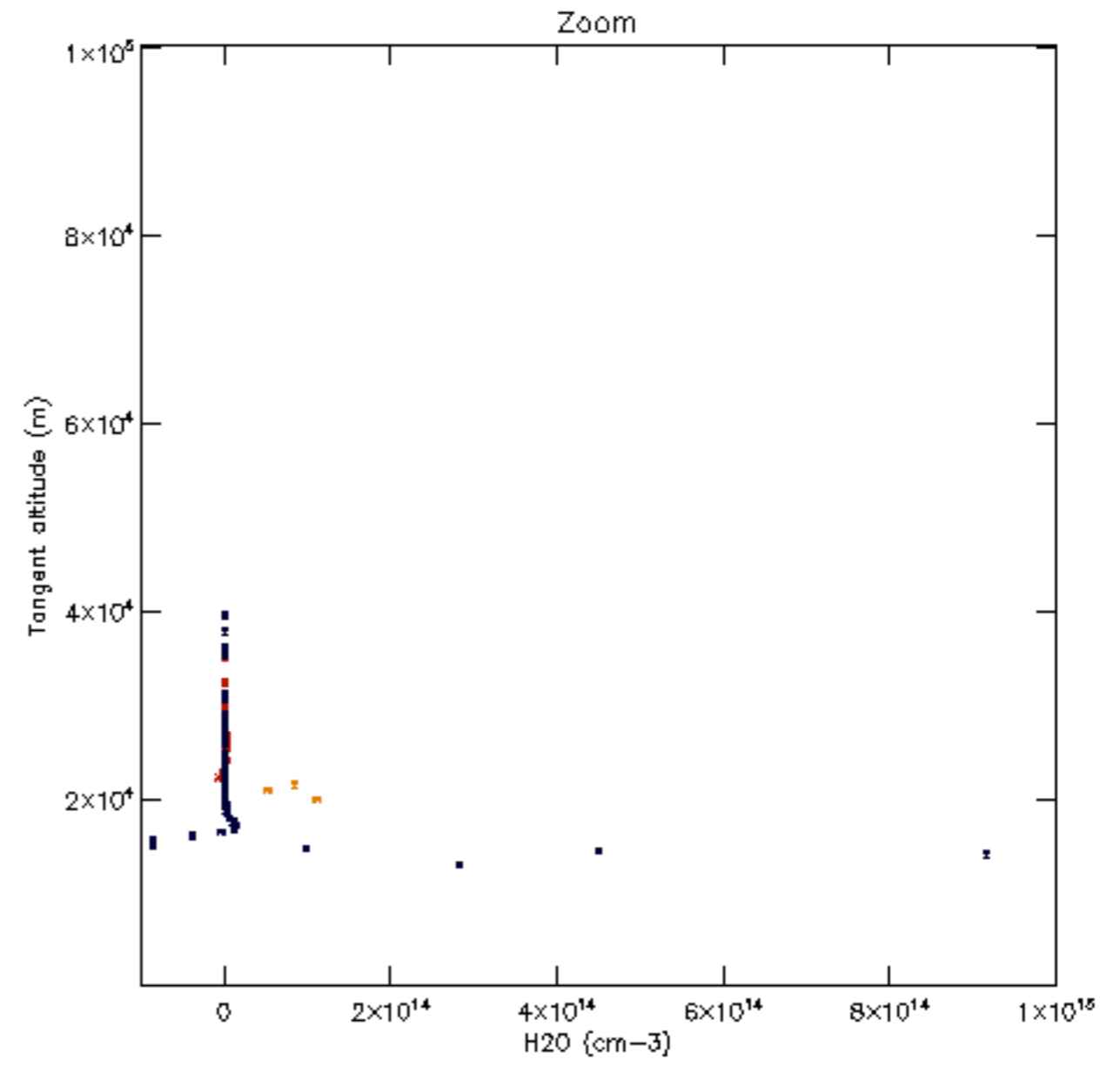
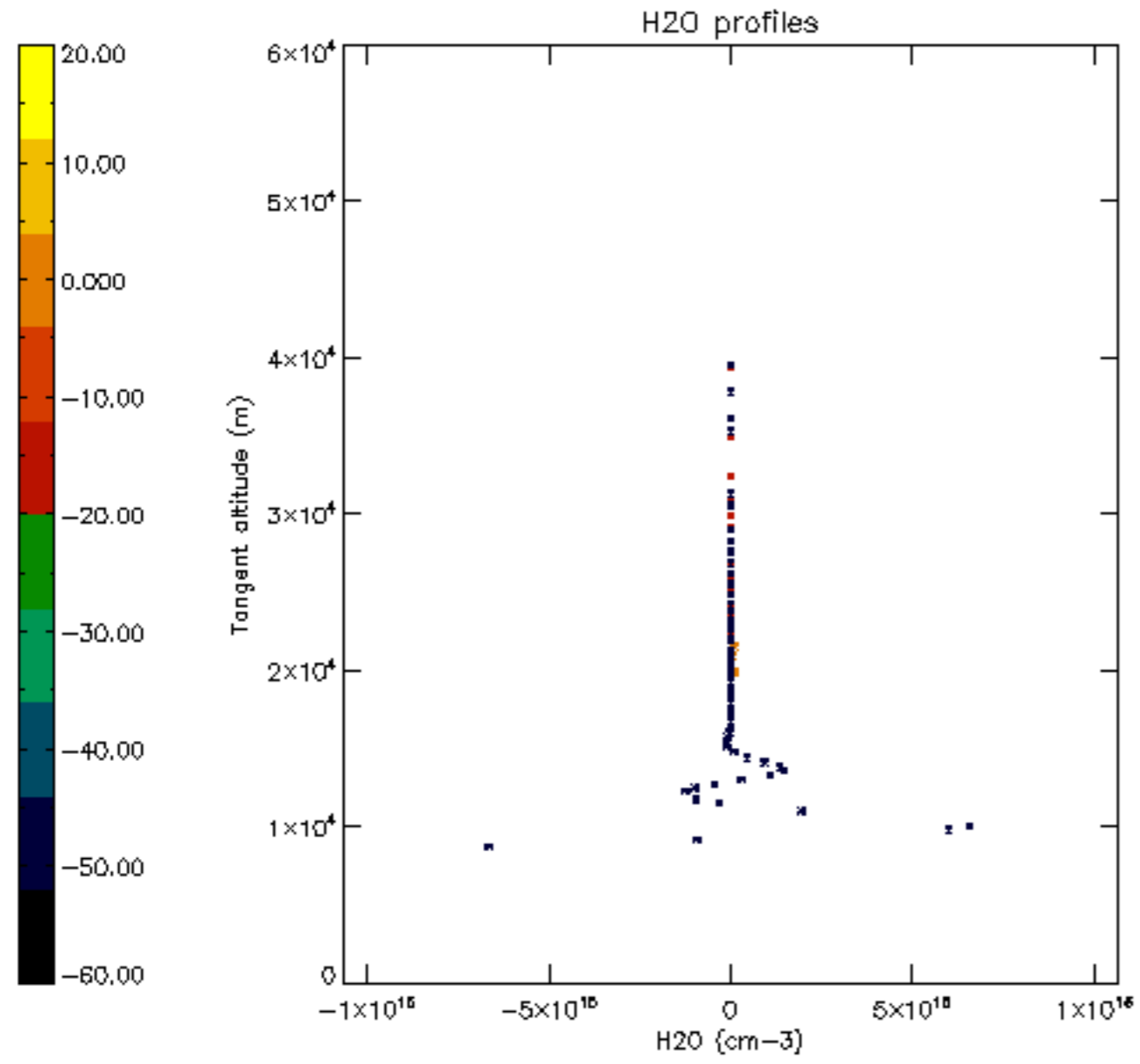


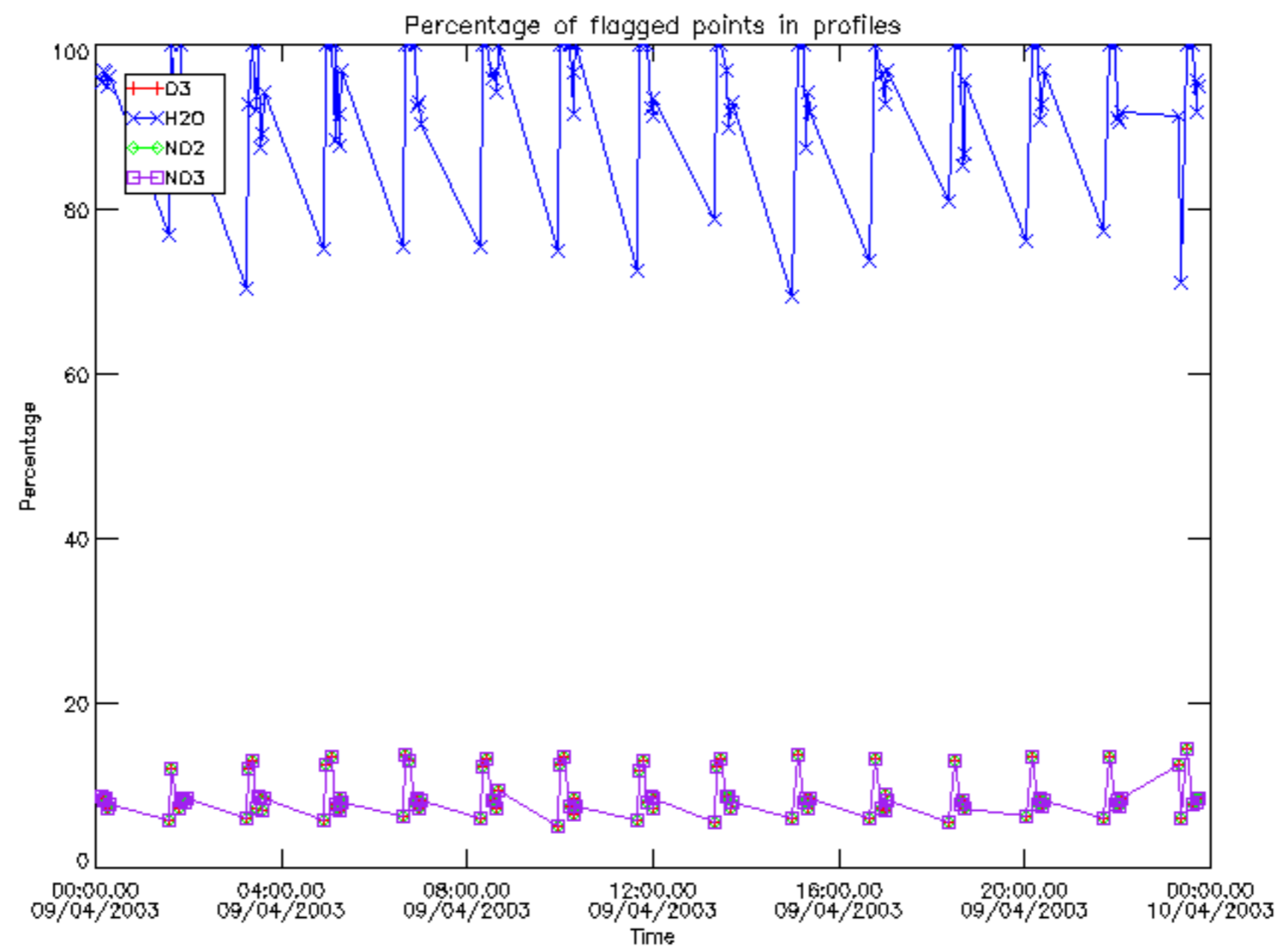




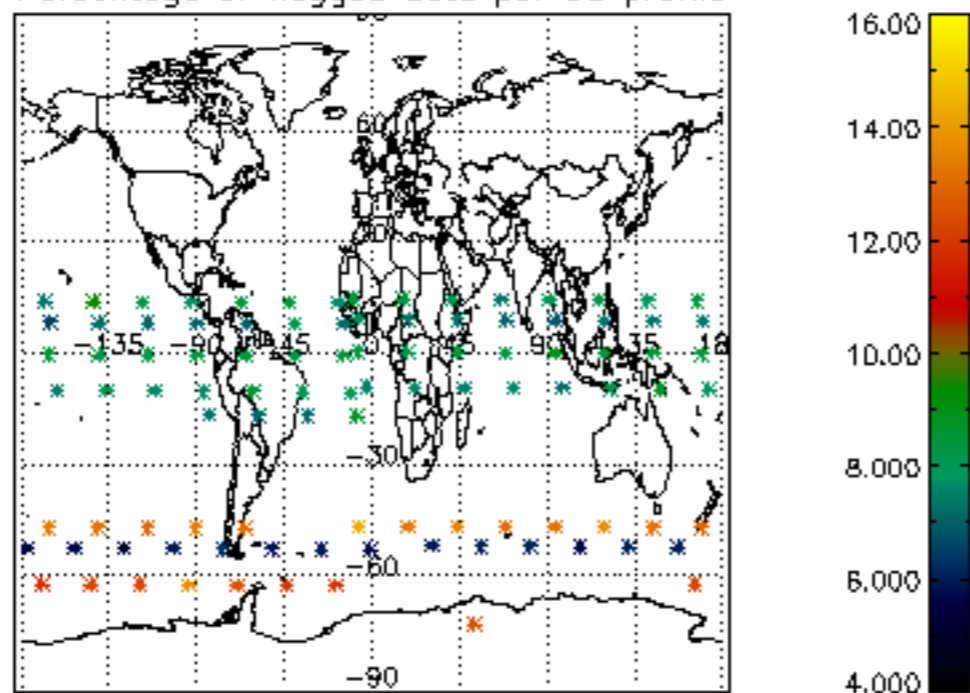




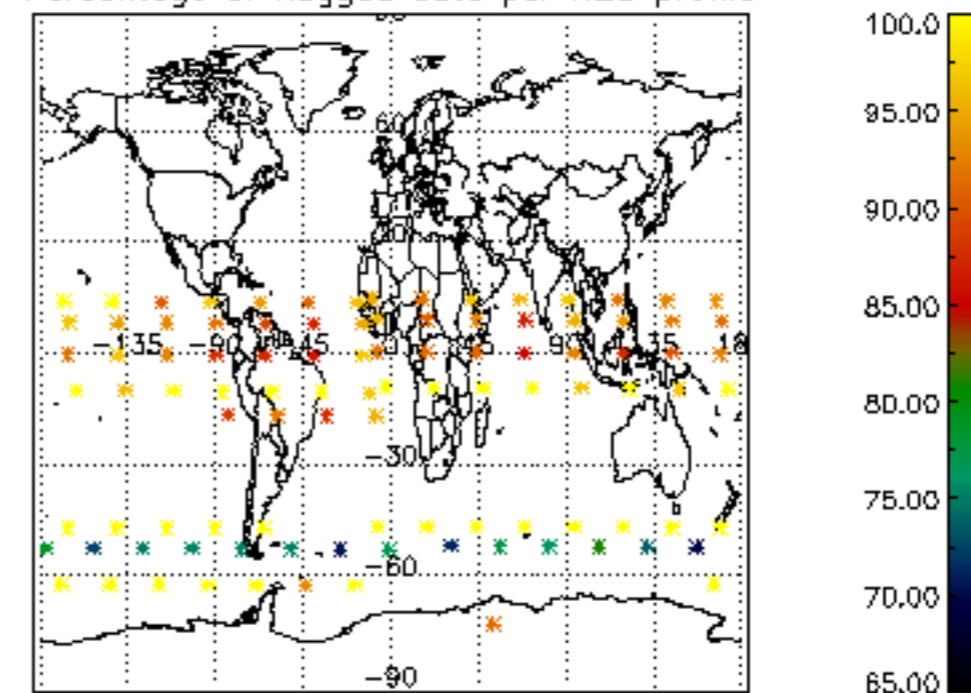




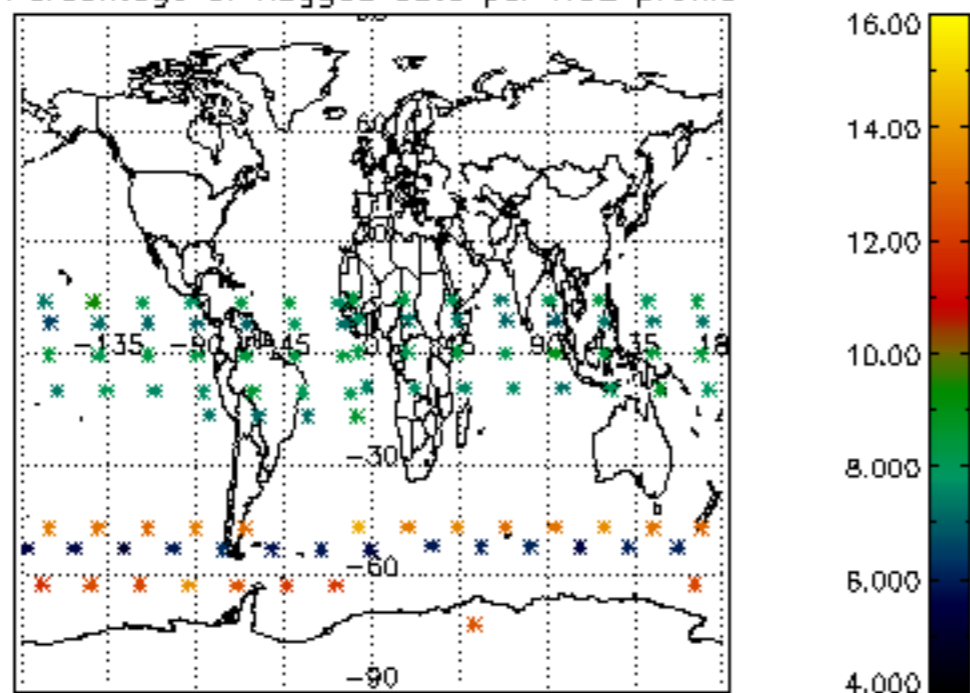
Percentage of flagged data per D3 profile



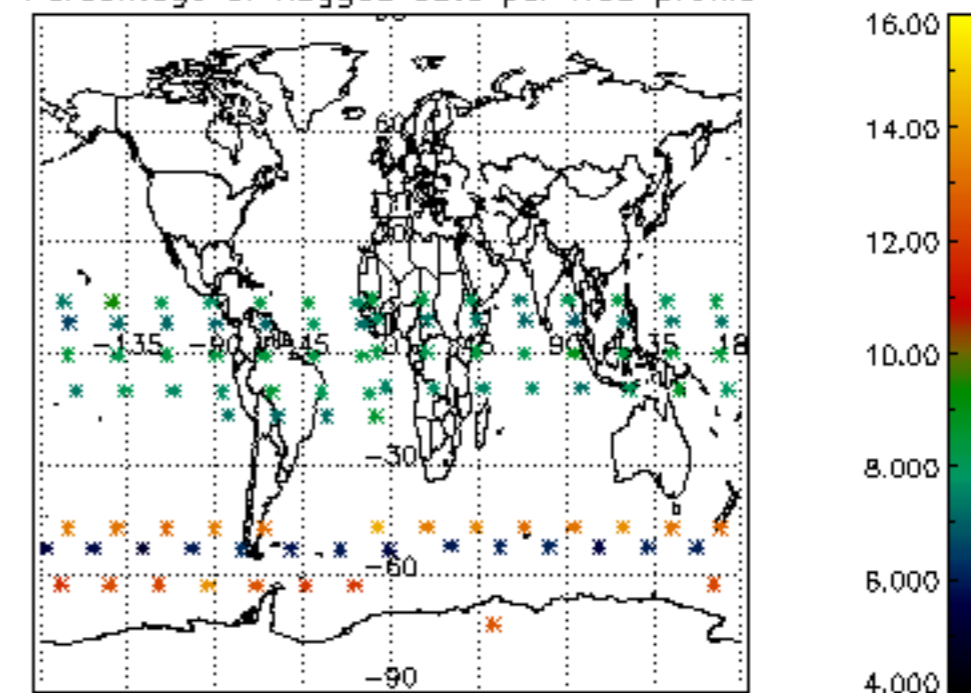
Percentage of flagged data per H2O profile

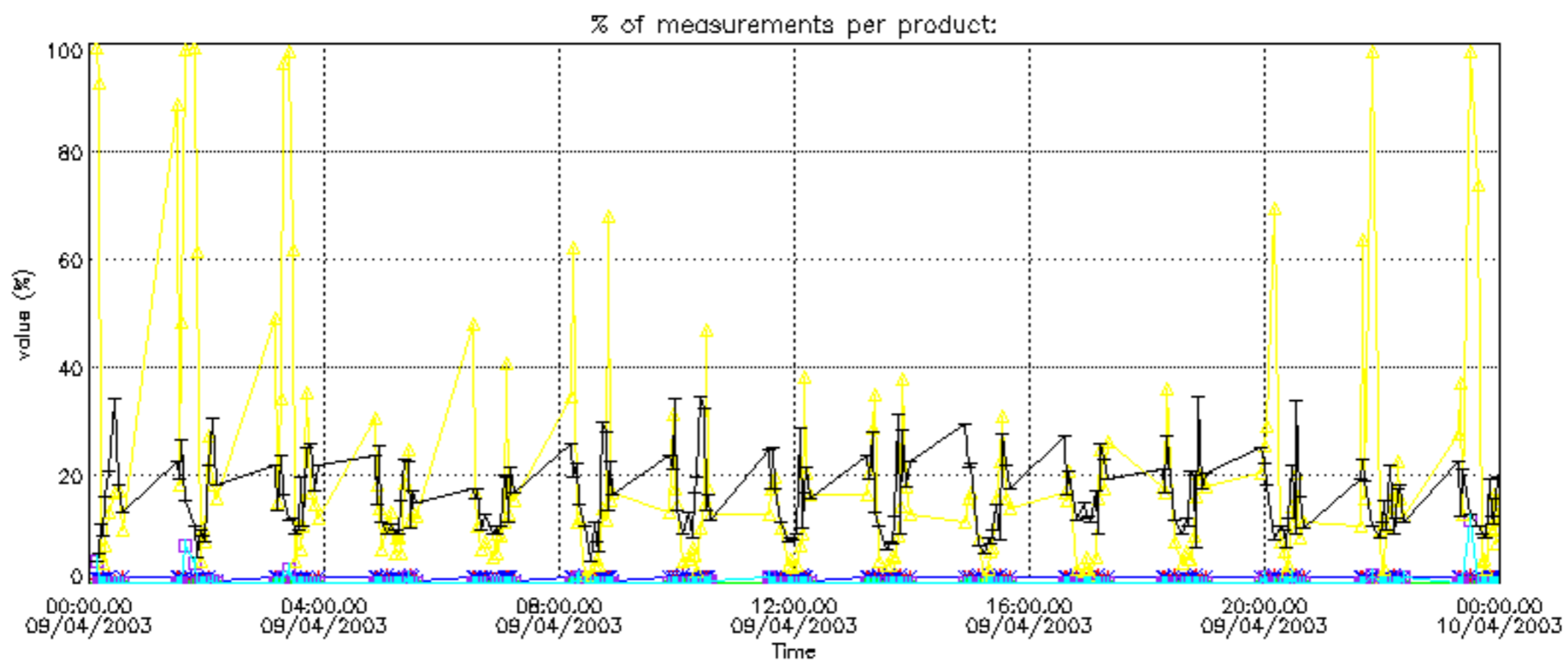


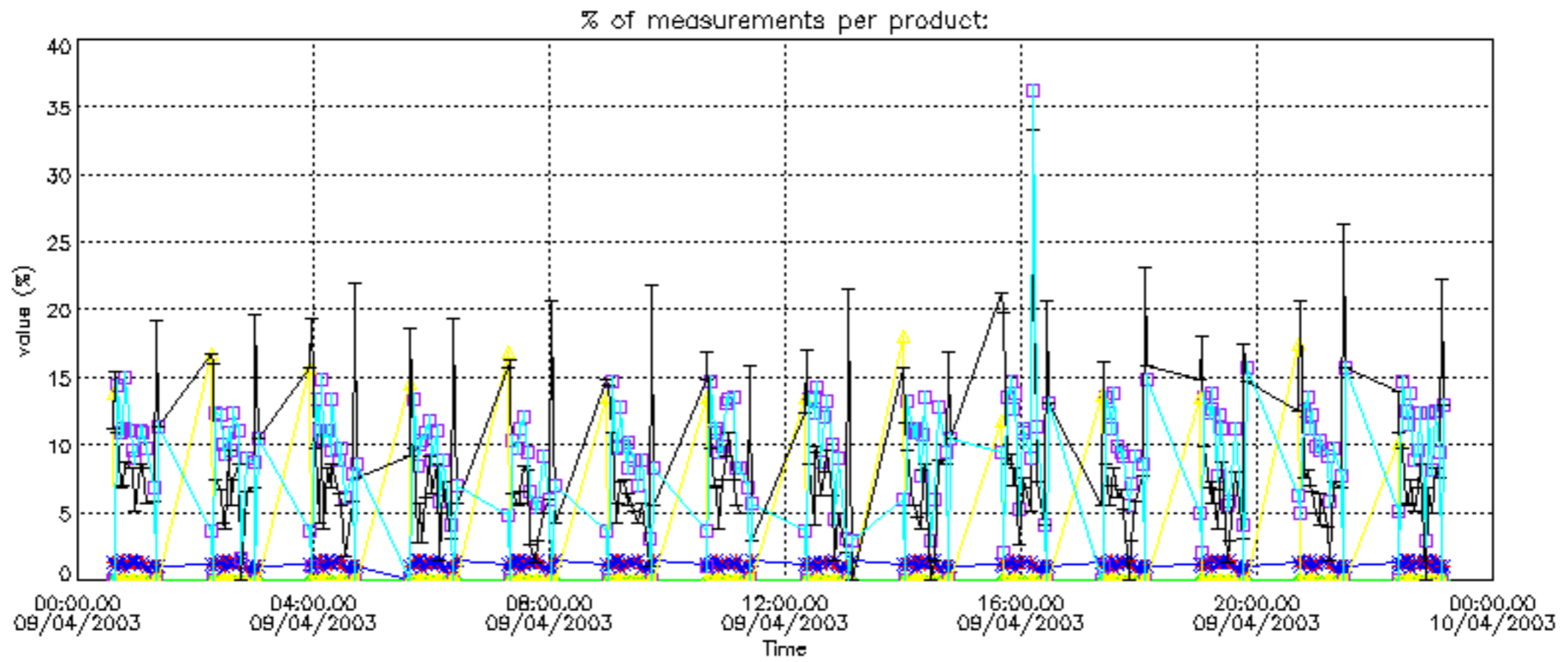
Percentage of flagged data per NO2 profile



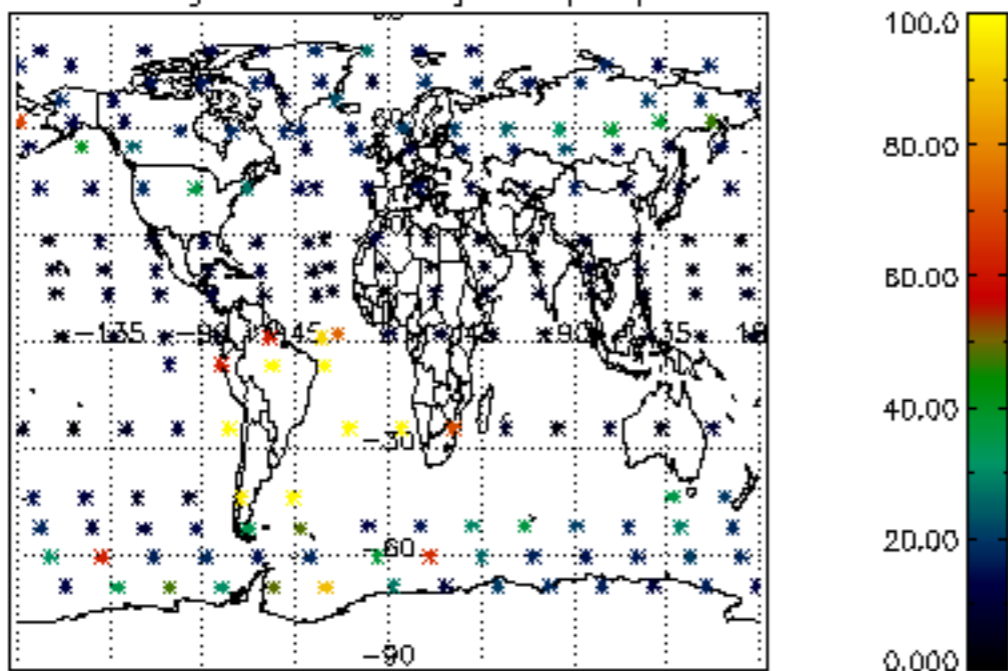
Percentage of flagged data per NO3 profile



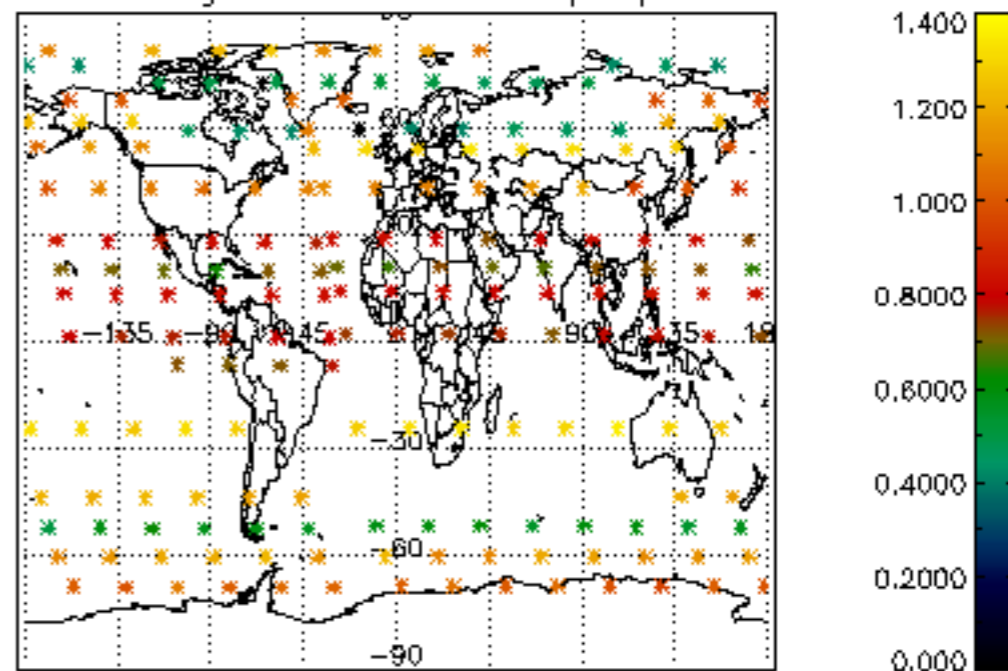




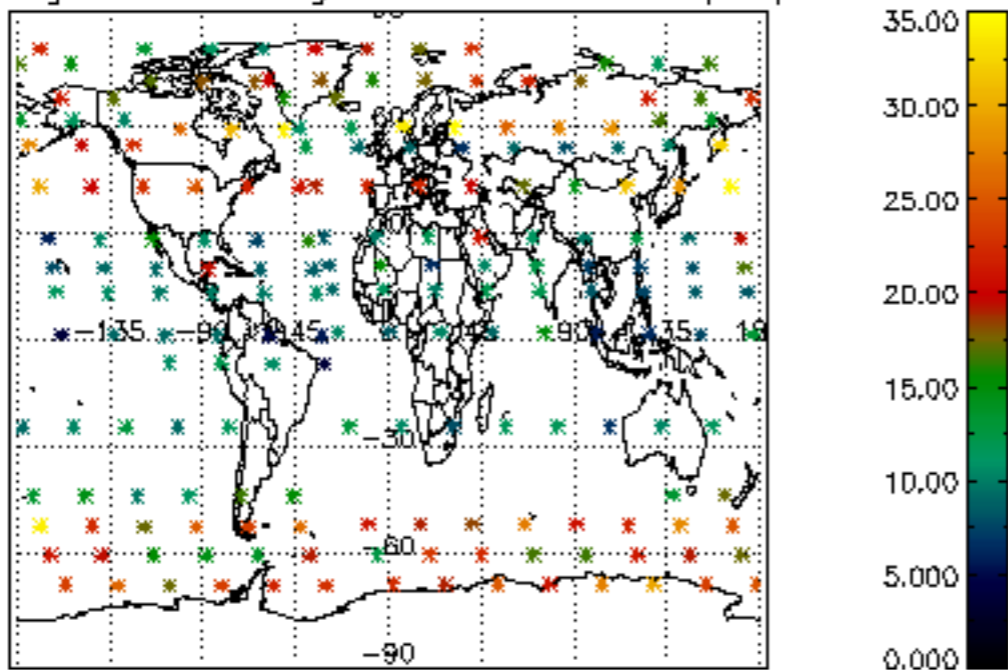
Percentage of cosmic ray hits per profile



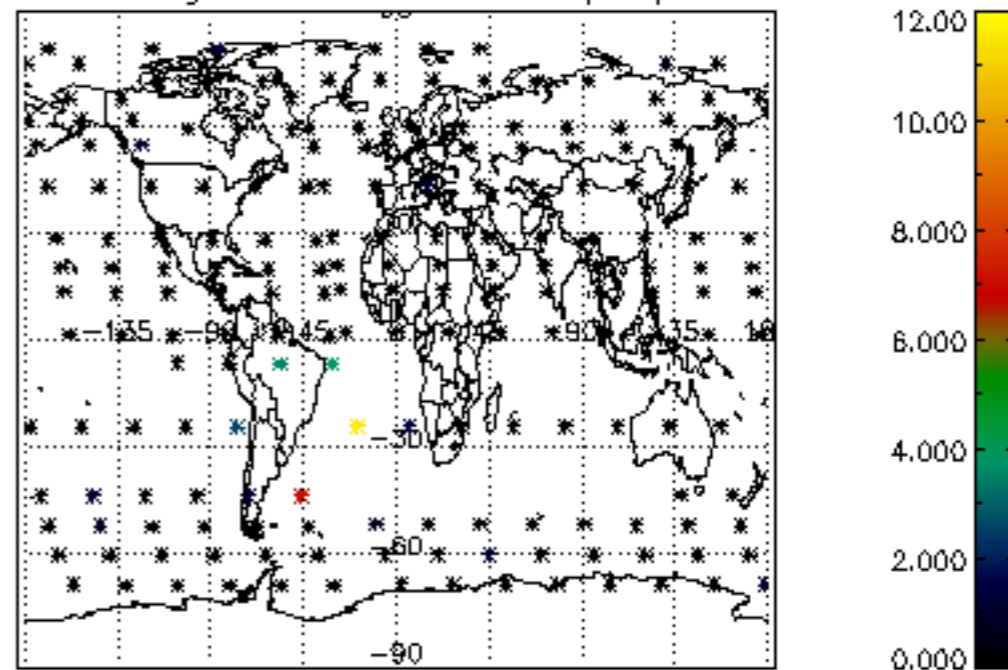
Percentage of datation errors per profile



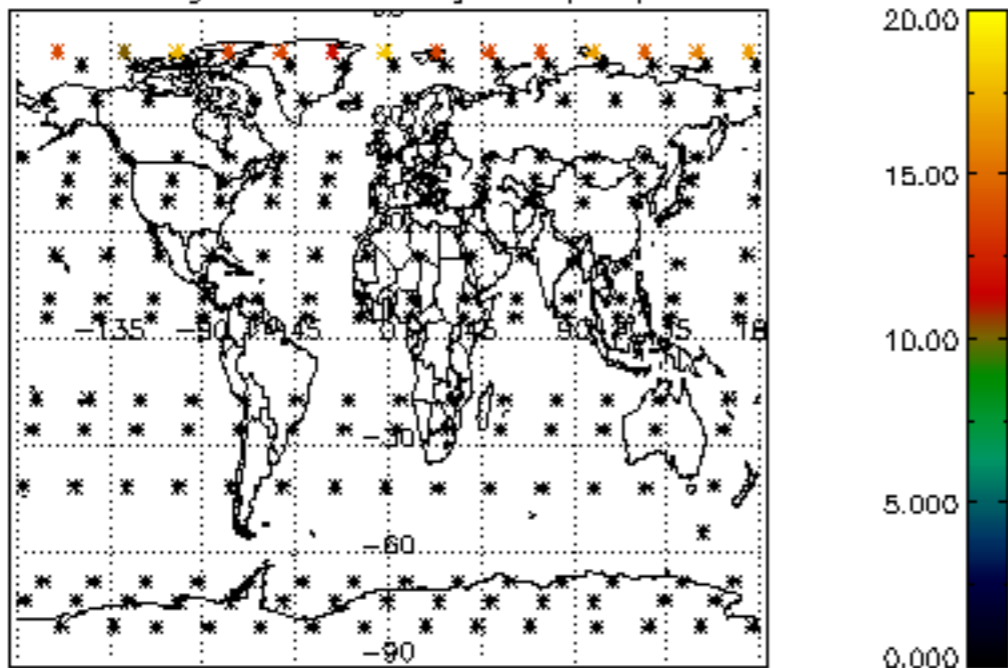
Percentage of star falling outside central band per profile



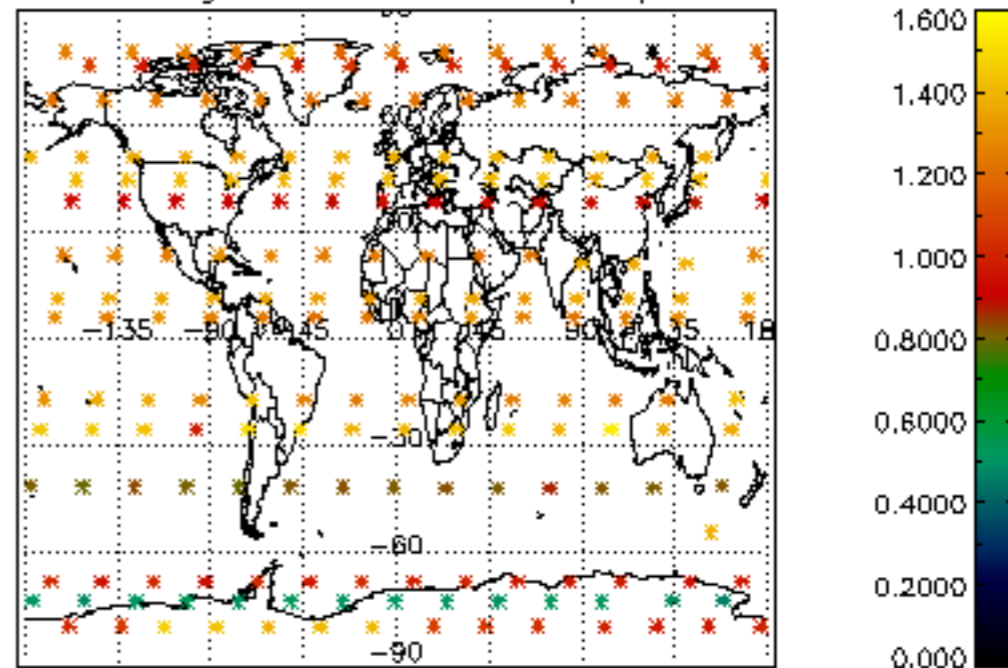
Percentage of saturation errors per profile



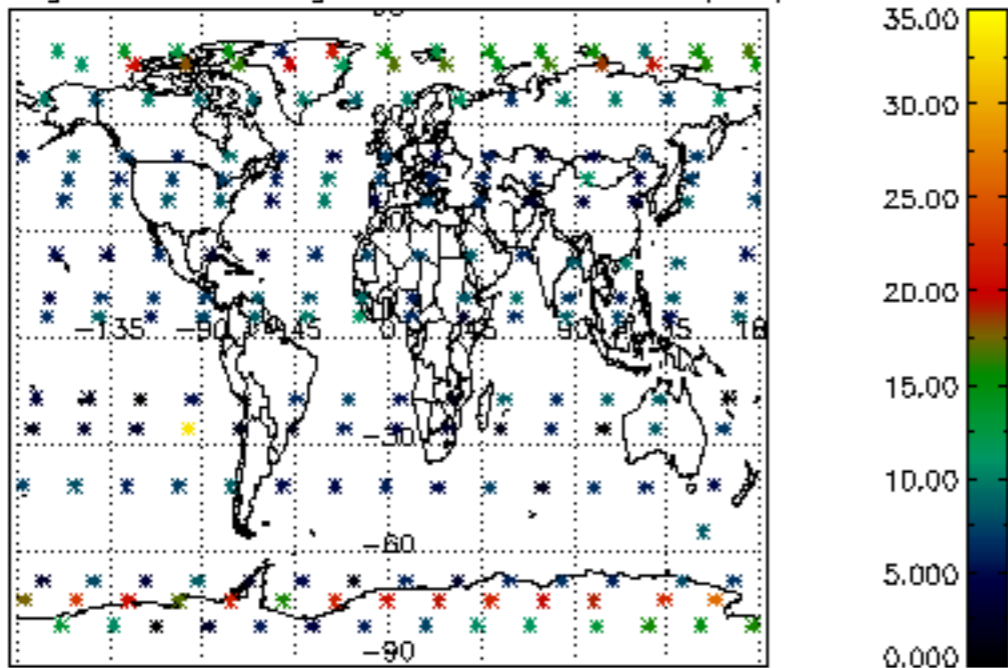
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

