

GOMOS Level 2 Daily Report

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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

| Item | Value |
|---------------------------|---------------------------------|
| Time of report generation | 19APR2013 20:08:18 |
| Data source version | GOMOS/6.01 |
| Start time of products | 16-09-2003 (16SEP2003 00:00:00) |
| Stop time of products | 17-09-2003 (17SEP2003 00:00:00) |
| Store outputs in DB | Yes |
| Nb of level 2 prods | 50 |
| Nb of prods with errors | 0 |

2. Summary of processed GOM_NL__2P products.

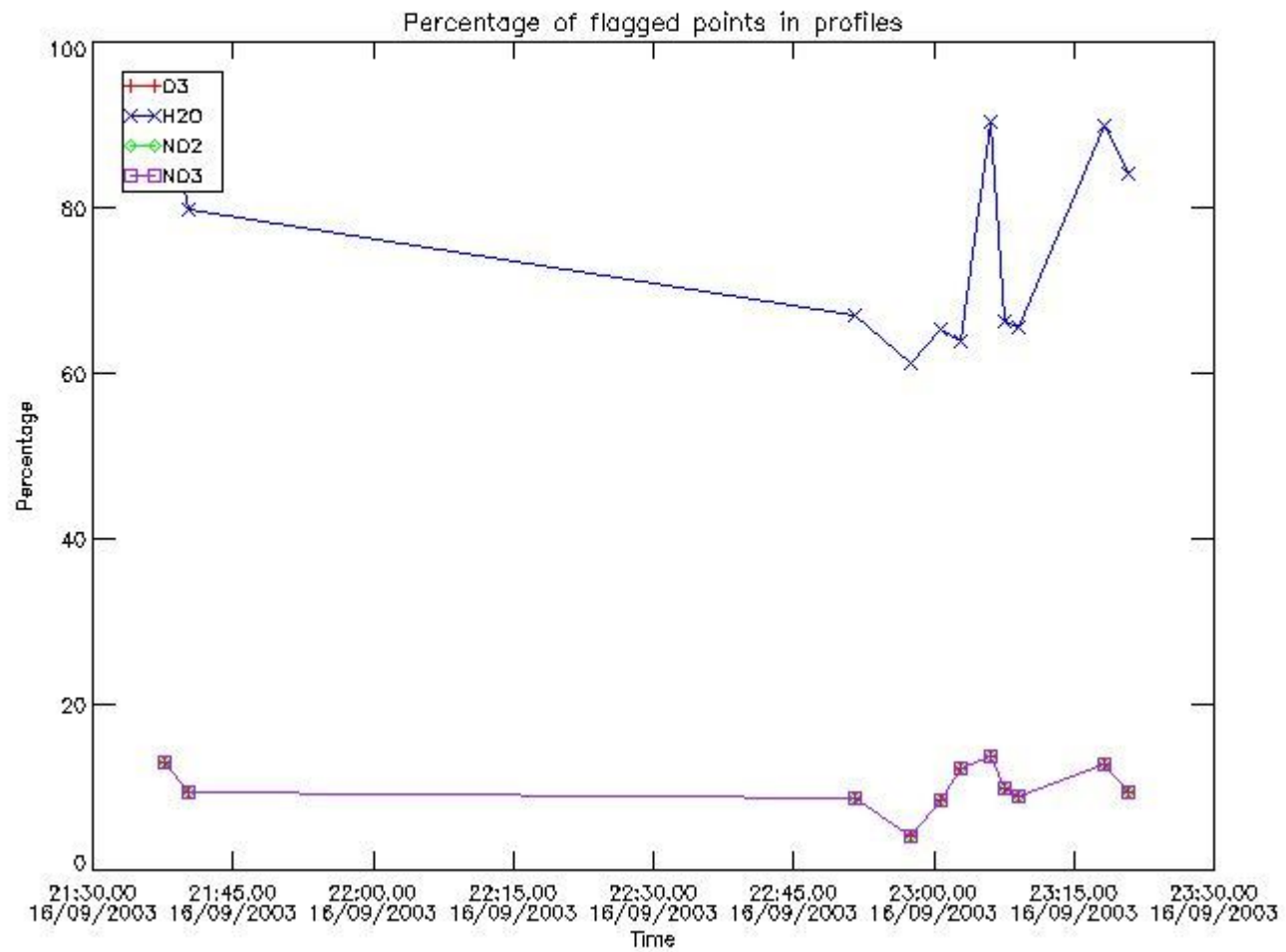
| Nr | Filename | UTC Start time | Limb | Duration | Star Id | Star Name | Star Mag | Star Temp | Nb Meas | Orbit | Prod. error |
|----|--|----------------------|------------|----------|---------|-----------|----------|-----------|---------|-------|-------------|
| 1 | GOM_NL__2PRFIN20030916_213738_000000392020_00015_08085_8868.N1 | 16-SEP-2003 21:37:38 | Dark | 39.000 | 135 | Bet Hyi | 2.8200 | 5800.0 | 78 | 8085 | No |
| 2 | GOM_NL__2PRFIN20030916_214011_000000552020_00015_08085_8869.N1 | 16-SEP-2003 21:40:11 | Dark | 54.500 | 9 | Alp Eri | 0.45300 | 24000. | 109 | 8085 | No |
| 3 | GOM_NL__2PRFIN20030916_214310_000000412020_00015_08085_8870.N1 | 16-SEP-2003 21:43:10 | Straylight | 40.500 | 148 | Alp Tuc | 2.8780 | 4100.0 | 81 | 8085 | No |
| 4 | GOM_NL__2PRFIN20030916_214630_000000472020_00015_08085_8871.N1 | 16-SEP-2003 21:46:30 | Straylight | 47.000 | 63 | Bet Gru | 2.1500 | 2800.0 | 94 | 8085 | No |
| 5 | GOM_NL__2PRFIN20030916_214942_000000402020_00015_08085_8872.N1 | 16-SEP-2003 21:49:42 | Straylight | 39.500 | 172 | Gam Gru | 3.0030 | 13100. | 79 | 8085 | No |
| 6 | GOM_NL__2PRFIN20030916_215104_000000492020_00015_08085_8873.N1 | 16-SEP-2003 21:51:04 | Straylight | 48.500 | 18 | 24Alp PsA | 1.1660 | 9700.0 | 97 | 8085 | No |
| 7 | GOM_NL__2PRFIN20030916_215330_000000662020_00015_08085_8874.N1 | 16-SEP-2003 21:53:30 | Twilight | 65.500 | 52 | 16Bet Cet | 2.0370 | 4500.0 | 131 | 8085 | No |
| 8 | GOM_NL__2PRFIN20030916_215537_000000412020_00015_08085_8875.N1 | 16-SEP-2003 21:55:37 | Twilight | 41.000 | 142 | 49Del Cap | 2.8500 | 8900.0 | 82 | 8085 | No |
| 9 | GOM_NL__2PRFIN20030916_215950_000000412020_00015_08085_8876.N1 | 16-SEP-2003 21:59:50 | Bright | 40.500 | 162 | 34Alp Aqr | 2.9440 | 5350.0 | 81 | 8085 | No |
| 10 | GOM_NL__2PRFIN20030916_220251_000000402020_00015_08085_8877.N1 | 16-SEP-2003 22:02:51 | Bright | 40.000 | 61 | 8Eps Peg | 2.1000 | 3900.0 | 80 | 8085 | No |
| 11 | GOM_NL__2PRFIN20030916_220423_000000412020_00015_08085_8878.N1 | 16-SEP-2003 22:04:23 | Bright | 40.500 | 90 | 54Alp Peg | 2.4870 | 11000. | 81 | 8085 | No |
| 12 | GOM_NL__2PRFIN20030916_220550_000000502020_00015_08085_8879.N1 | 16-SEP-2003 22:05:50 | Bright | 50.000 | 140 | 88Gam Peg | 2.8340 | 26000. | 100 | 8085 | No |
| 13 | GOM_NL__2PRFIN20030916_220814_000000412020_00015_08085_8880.N1 | 16-SEP-2003 22:08:14 | Bright | 41.000 | 93 | 53Bet Peg | 2.5200 | 3100.0 | 82 | 8085 | No |
| 14 | GOM_NL__2PRFIN20030916_221011_000000382020_00015_08085_8881.N1 | 16-SEP-2003 22:10:11 | Bright | 38.000 | 92 | 53Eps Cyg | 2.5000 | 4500.0 | 76 | 8085 | No |
| 15 | GOM_NL__2PRFIN20030916_221218_000000392020_00015_08085_8882.N1 | 16-SEP-2003 22:12:18 | Bright | 39.000 | 66 | 37Gam Cyg | 2.2080 | 5900.0 | 78 | 8085 | No |
| 16 | GOM_NL__2PRFIN20030916_221737_000000392020_00015_08085_8883.N1 | 16-SEP-2003 22:17:37 | Bright | 39.000 | 89 | 5Alp Cep | 2.4510 | 8000.0 | 78 | 8085 | No |
| 17 | GOM_NL__2PRFIN20030916_222016_000000442020_00015_08085_8884.N1 | 16-SEP-2003 22:20:16 | Bright | 44.000 | 76 | 27Gam Cas | 2.3000 | 30000. | 88 | 8085 | No |
| 18 | GOM_NL__2PRFIN20030916_222206_000000902020_00015_08085_8885.N1 | 16-SEP-2003 22:22:06 | Bright | 90.000 | 173 | 4Bet Tri | 3.0040 | 8900.0 | 180 | 8085 | No |
| 19 | GOM_NL__2PRFIN20030916_222516_000000382020_00015_08085_8886.N1 | 16-SEP-2003 22:25:16 | Bright | 38.000 | 49 | 1Alp UMi | 1.9900 | 6300.0 | 76 | 8085 | No |
| 20 | GOM_NL__2PRFIN20030916_222807_000000672020_00015_08085_8887.N1 | 16-SEP-2003 22:28:07 | Bright | 67.000 | 35 | 33Alp Per | 1.7950 | 6250.0 | 134 | 8085 | No |
| 21 | GOM_NL__2PRFIN20030916_223002_000000662020_00015_08085_8888.N1 | 16-SEP-2003 22:30:02 | Bright | 66.000 | 175 | 39Del Per | 3.0100 | 19400. | 132 | 8085 | No |
| 22 | GOM_NL__2PRFIN20030916_223237_000000392020_00015_08085_8889.N1 | 16-SEP-2003 22:32:37 | Bright | 39.000 | 36 | 50Alp UMa | 1.8000 | 6300.0 | 78 | 8085 | No |
| 23 | GOM_NL__2PRFIN20030916_223404_000000382020_00015_08085_8890.N1 | 16-SEP-2003 22:34:04 | Bright | 37.500 | 82 | 48Bet UMa | 2.3650 | 10600. | 75 | 8085 | No |
| 24 | GOM_NL__2PRFIN20030916_223556_000000732020_00015_08085_8891.N1 | 16-SEP-2003 22:35:56 | Bright | 73.000 | 6 | 13Alp Aur | 0.080000 | 3400.0 | 146 | 8085 | No |
| 25 | GOM_NL__2PRFIN20030916_224059_000000632020_00015_08085_8892.N1 | 16-SEP-2003 22:40:59 | Bright | 62.500 | 107 | 37The Aur | 2.6490 | 11000. | 125 | 8085 | No |
| 26 | GOM_NL__2PRFIN20030916_224359_000000482020_00015_08085_8893.N1 | 16-SEP-2003 22:43:59 | Bright | 47.500 | 17 | 78Bet Gem | 1.1610 | 4500.0 | 95 | 8085 | No |
| 27 | GOM_NL__2PRFIN20030916_224636_000001242020_00015_08085_8894.N1 | 16-SEP-2003 22:46:36 | Straylight | 124.00 | 28 | 12Bet Tau | 1.6500 | 15200. | 248 | 8085 | No |
| 28 | GOM_NL__2PRFIN20030916_225131_000000602020_00015_08085_8895.N1 | 16-SEP-2003 22:51:31 | Dark | 59.500 | 8 | 10Alp Cmi | 0.40000 | 6500.0 | 119 | 8085 | No |
| 29 | GOM_NL__2PRFIN20030916_225732_000001242020_00015_08085_8896.N1 | 16-SEP-2003 22:57:32 | Dark | 124.00 | 14 | 58Alp Ori | 0.87000 | 3000.0 | 248 | 8085 | No |
| 30 | GOM_NL__2PRFIN20030916_230043_000000612020_00015_08085_8897.N1 | 16-SEP-2003 23:00:43 | Dark | 61.000 | 1 | 9Alp CMa | -1.4400 | 11000. | 122 | 8085 | No |
| 31 | GOM_NL__2PRFIN20030916_230249_000000462020_00015_08085_8898.N1 | 16-SEP-2003 23:02:49 | Dark | 46.000 | 65 | Lam Vel | 2.2040 | 4400.0 | 92 | 8085 | No |
| 32 | GOM_NL__2PRFIN20030916_230607_000000372020_00015_08085_8899.N1 | 16-SEP-2003 23:06:07 | Dark | 37.000 | 46 | Del Vel | 1.9540 | 10600. | 74 | 8085 | No |
| 33 | GOM_NL__2PRFIN20030916_230738_000000512020_00015_08085_8900.N1 | 16-SEP-2003 23:07:38 | Dark | 51.000 | 41 | Eps Car | 1.8600 | 4100.0 | 102 | 8085 | No |
| 34 | GOM_NL__2PRFIN20030916_230907_000000572020_00016_08086_9823.N1 | 16-SEP-2003 23:09:07 | Dark | 57.000 | 2 | Alp Car | -0.73600 | 7000.0 | 114 | 8086 | No |
| 35 | GOM_NL__2PRFIN20030916_231814_000000402020_00016_08086_9824.N1 | 16-SEP-2003 23:18:14 | Dark | 40.000 | 135 | Bet Hyi | 2.8200 | 5800.0 | 80 | 8086 | No |
| 36 | GOM_NL__2PRFIN20030916_232047_000000542020_00016_08086_9825.N1 | 16-SEP-2003 23:20:47 | Dark | 54.000 | 9 | Alp Eri | 0.45300 | 24000. | 108 | 8086 | No |
| 37 | GOM_NL__2PRFIN20030916_232346_000000432020_00016_08086_9826.N1 | 16-SEP-2003 23:23:46 | Straylight | 42.500 | 148 | Alp Tuc | 2.8780 | 4100.0 | 85 | 8086 | No |
| 38 | GOM_NL__2PRFIN20030916_232708_000000472020_00016_08086_9827.N1 | 16-SEP-2003 23:27:08 | Straylight | 46.500 | 63 | Bet Gru | 2.1500 | 2800.0 | 93 | 8086 | No |
| 39 | GOM_NL__2PRFIN20030916_233018_000000402020_00016_08086_9828.N1 | 16-SEP-2003 23:30:18 | Straylight | 40.000 | 172 | Gam Gru | 3.0030 | 13100. | 80 | 8086 | No |
| 40 | GOM_NL__2PRFIN20030916_233142_000000482020_00016_08086_9829.N1 | 16-SEP-2003 23:31:42 | Straylight | 48.000 | 18 | 24Alp PsA | 1.1660 | 9700.0 | 96 | 8086 | No |
| 41 | GOM_NL__2PRFIN20030916_233409_000000612020_00016_08086_9830.N1 | 16-SEP-2003 23:34:09 | Twilight | 61.000 | 52 | 16Bet Cet | 2.0370 | 4500.0 | 122 | 8086 | No |
| 42 | GOM_NL__2PRFIN20030916_233613_000000432020_00016_08086_9831.N1 | 16-SEP-2003 23:36:13 | Twilight | 43.000 | 142 | 49Del Cap | 2.8500 | 8900.0 | 86 | 8086 | No |

| | | | | | | | | | | | |
|----|--|----------------------|--------|--------|-----|-----------|--------|--------|----|------|----|
| 43 | GOM_NL__2PRFIN20030916_234026_000000402020_00016_08086_9832.N1 | 16-SEP-2003 23:40:26 | Bright | 40.000 | 162 | 34Alp Aqr | 2.9440 | 5350.0 | 80 | 8086 | No |
| 44 | GOM_NL__2PRFIN20030916_234325_000000422020_00016_08086_9833.N1 | 16-SEP-2003 23:43:25 | Bright | 41.500 | 61 | 8Eps Peg | 2.1000 | 3900.0 | 83 | 8086 | No |
| 45 | GOM_NL__2PRFIN20030916_234459_000000412020_00016_08086_9834.N1 | 16-SEP-2003 23:44:59 | Bright | 41.000 | 90 | 54Alp Peg | 2.4870 | 11000. | 82 | 8086 | No |
| 46 | GOM_NL__2PRFIN20030916_234625_000000492020_00016_08086_9835.N1 | 16-SEP-2003 23:46:25 | Bright | 48.500 | 140 | 88Gam Peg | 2.8340 | 26000. | 97 | 8086 | No |
| 47 | GOM_NL__2PRFIN20030916_234850_000000402020_00016_08086_9836.N1 | 16-SEP-2003 23:48:50 | Bright | 40.000 | 93 | 53Bet Peg | 2.5200 | 3100.0 | 80 | 8086 | No |
| 48 | GOM_NL__2PRFIN20030916_235048_000000372020_00016_08086_9837.N1 | 16-SEP-2003 23:50:48 | Bright | 37.000 | 92 | 53Eps Cyg | 2.5000 | 4500.0 | 74 | 8086 | No |
| 49 | GOM_NL__2PRFIN20030916_235255_000000412020_00016_08086_9838.N1 | 16-SEP-2003 23:52:55 | Bright | 41.000 | 66 | 37Gam Cyg | 2.2080 | 5900.0 | 82 | 8086 | No |
| 50 | GOM_NL__2PRFIN20030916_235813_000000392020_00016_08086_9839.N1 | 16-SEP-2003 23:58:13 | Bright | 39.000 | 89 | 5Alp Cep | 2.4510 | 8000.0 | 78 | 8086 | No |

3. Quality information per product

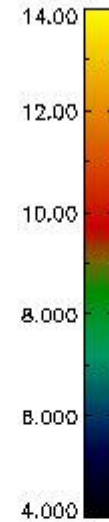
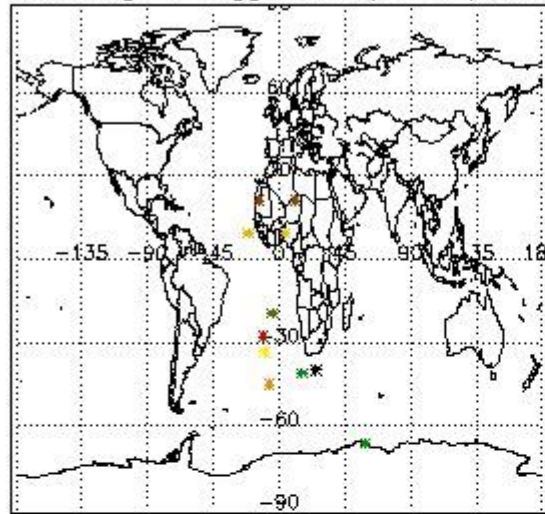
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

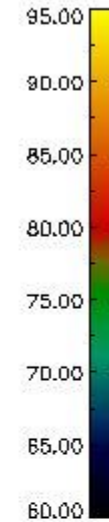
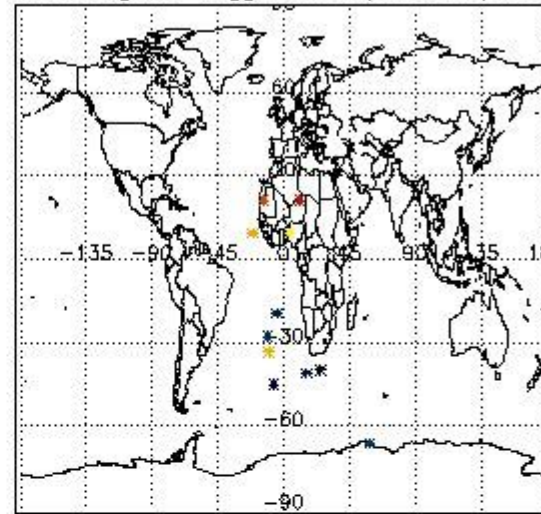


3.2 Plot quality information per product (world map)

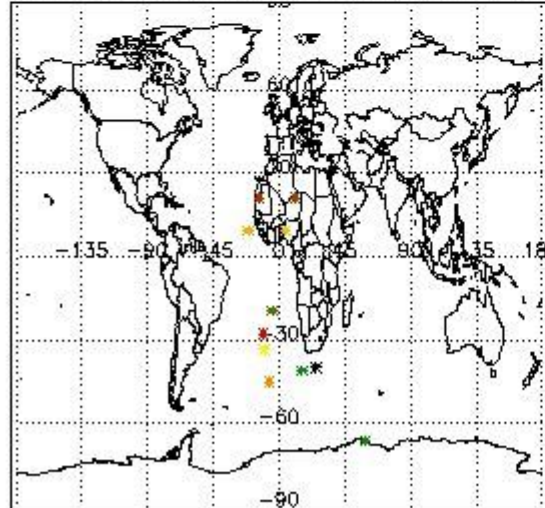
Percentage of flagged data per O3 profile



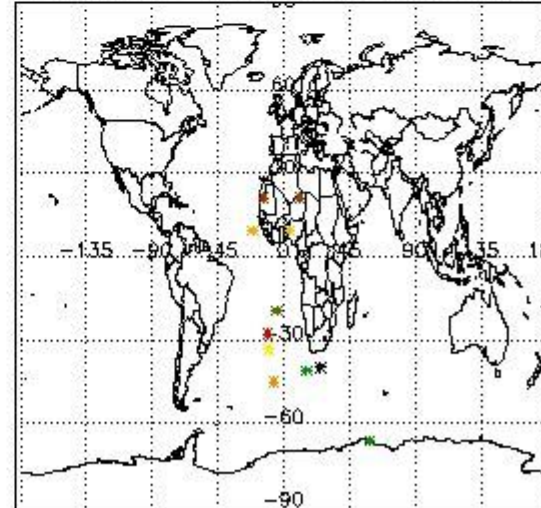
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

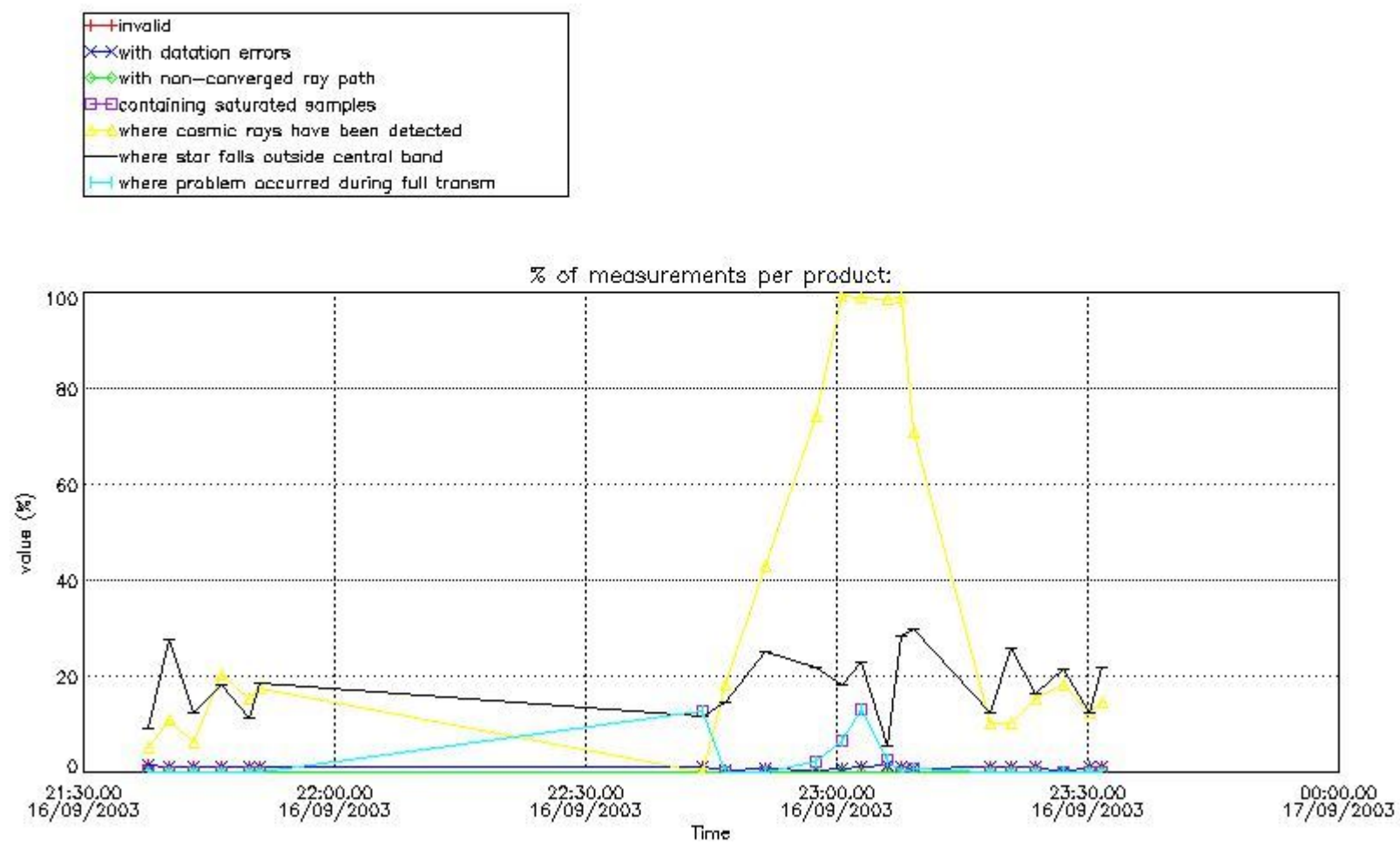


4. Level 1 quality information per product

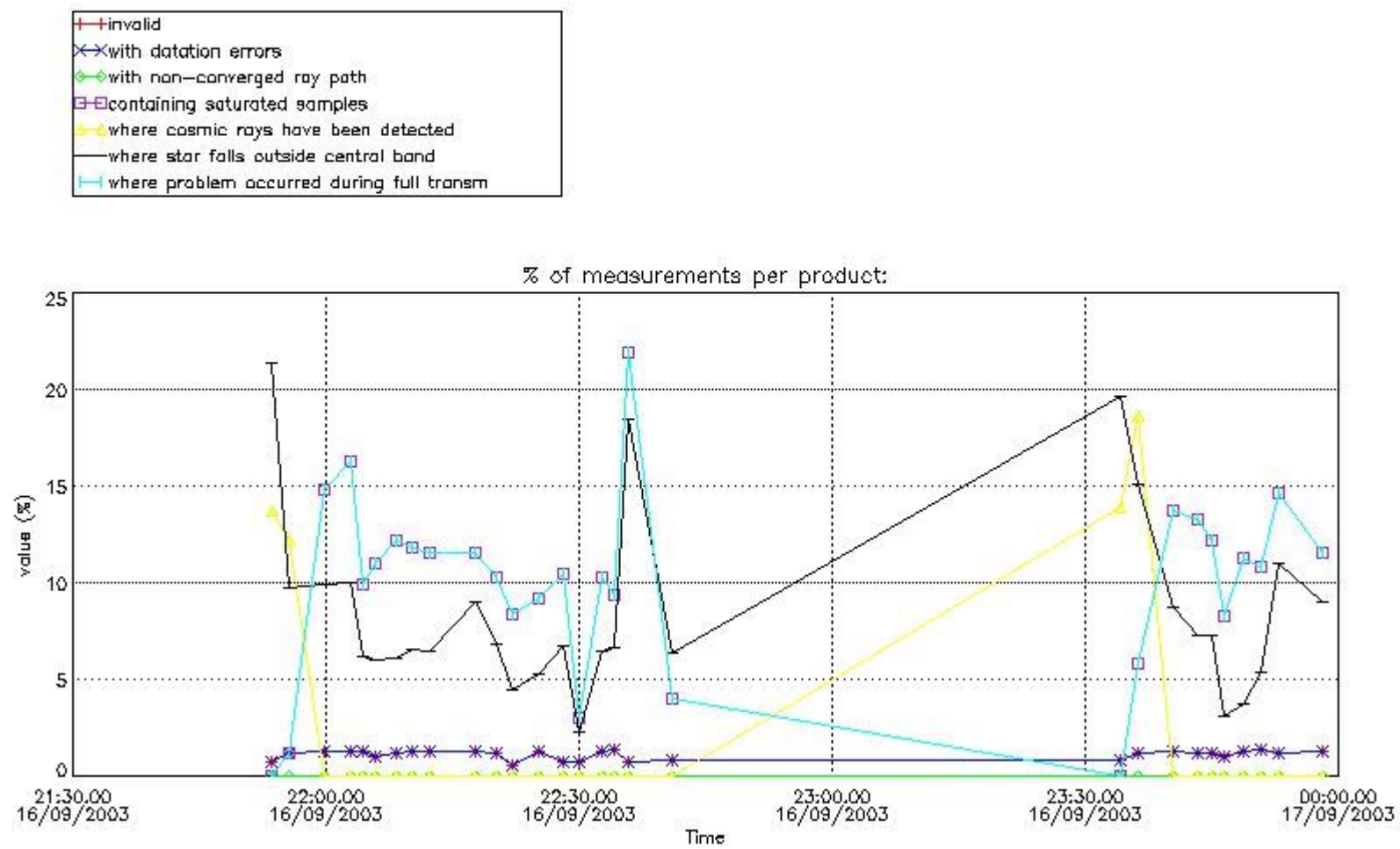
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



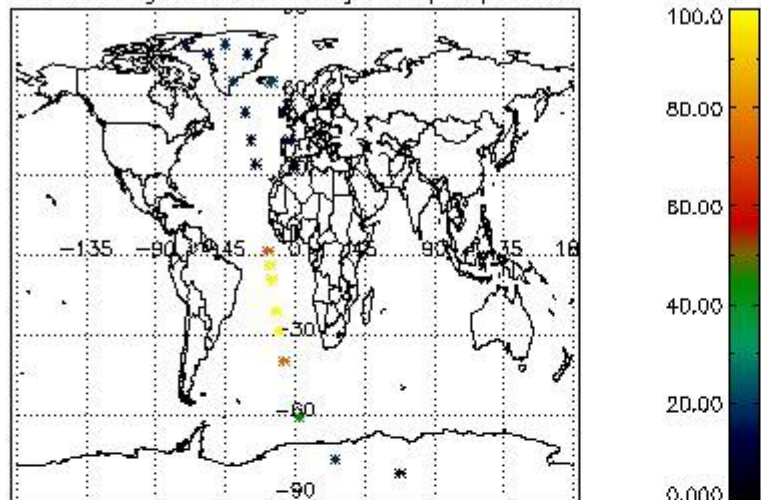
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



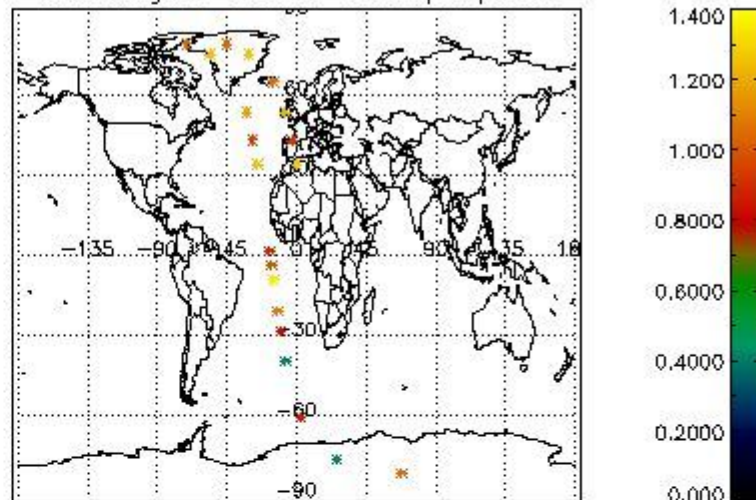
4.2 Plot quality information per product coming from level 1b processing (world map)

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

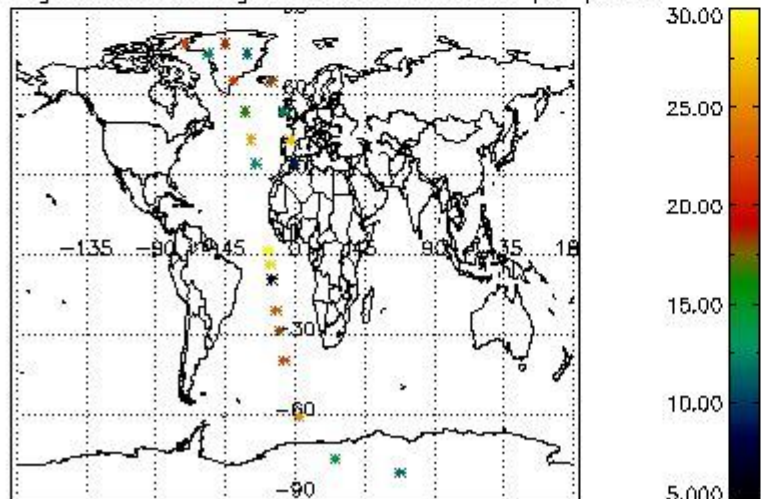
Percentage of cosmic ray hits per profile



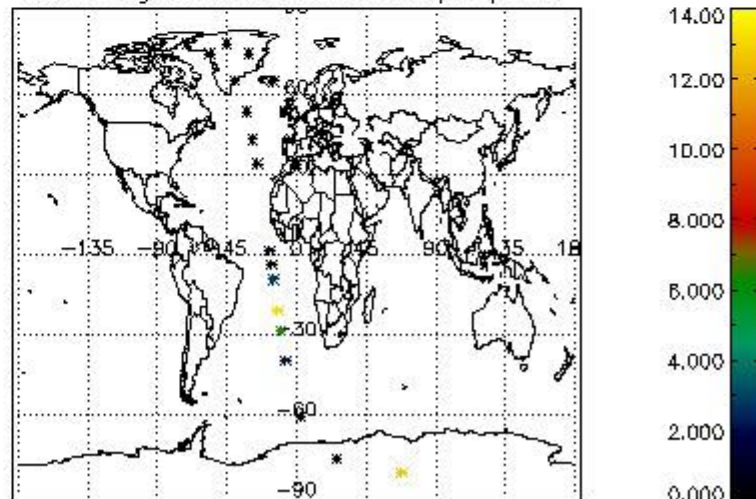
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

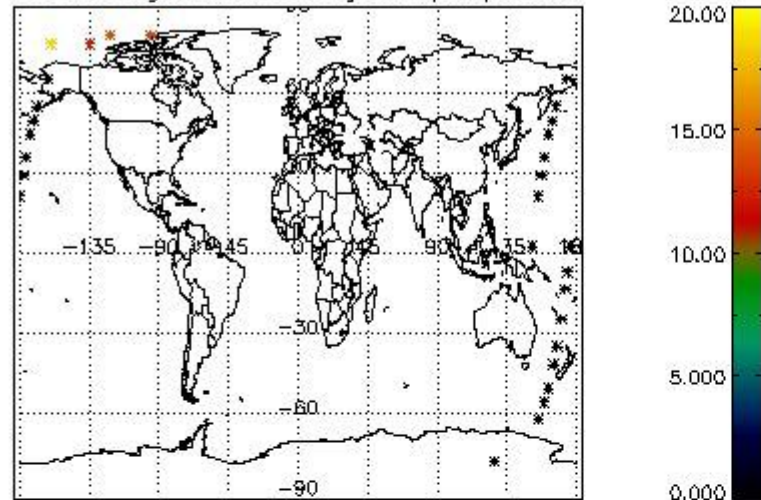


Percentage of saturation errors per profile

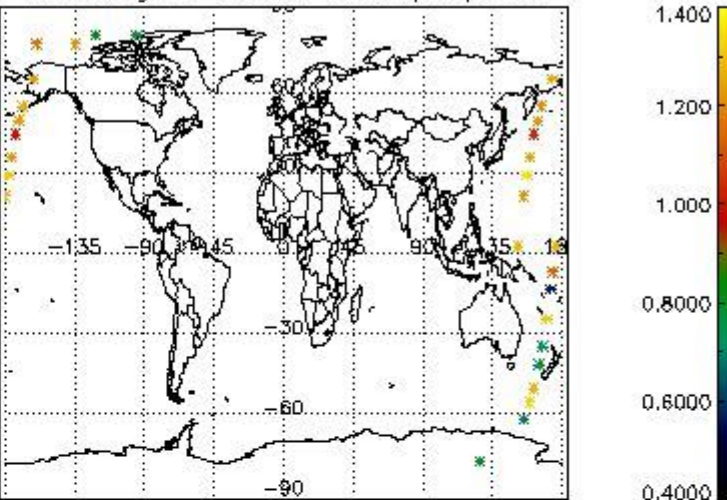


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

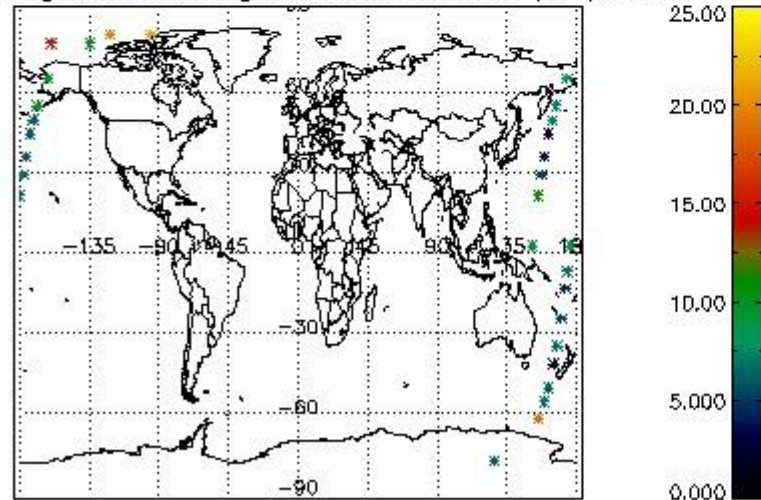
Percentage of cosmic ray hits per profile



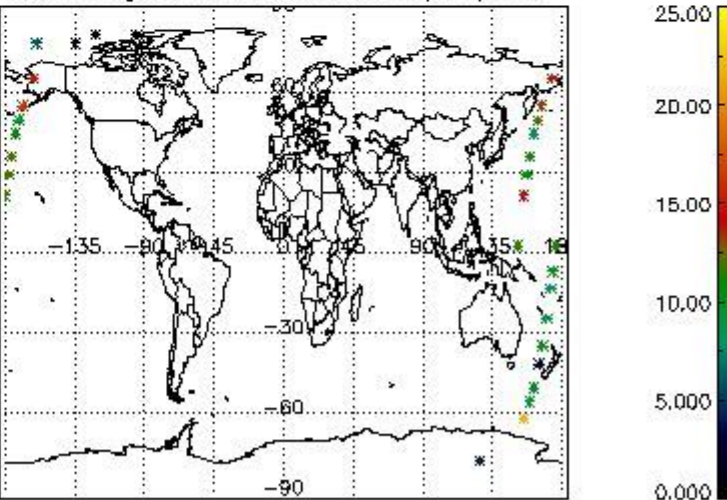
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

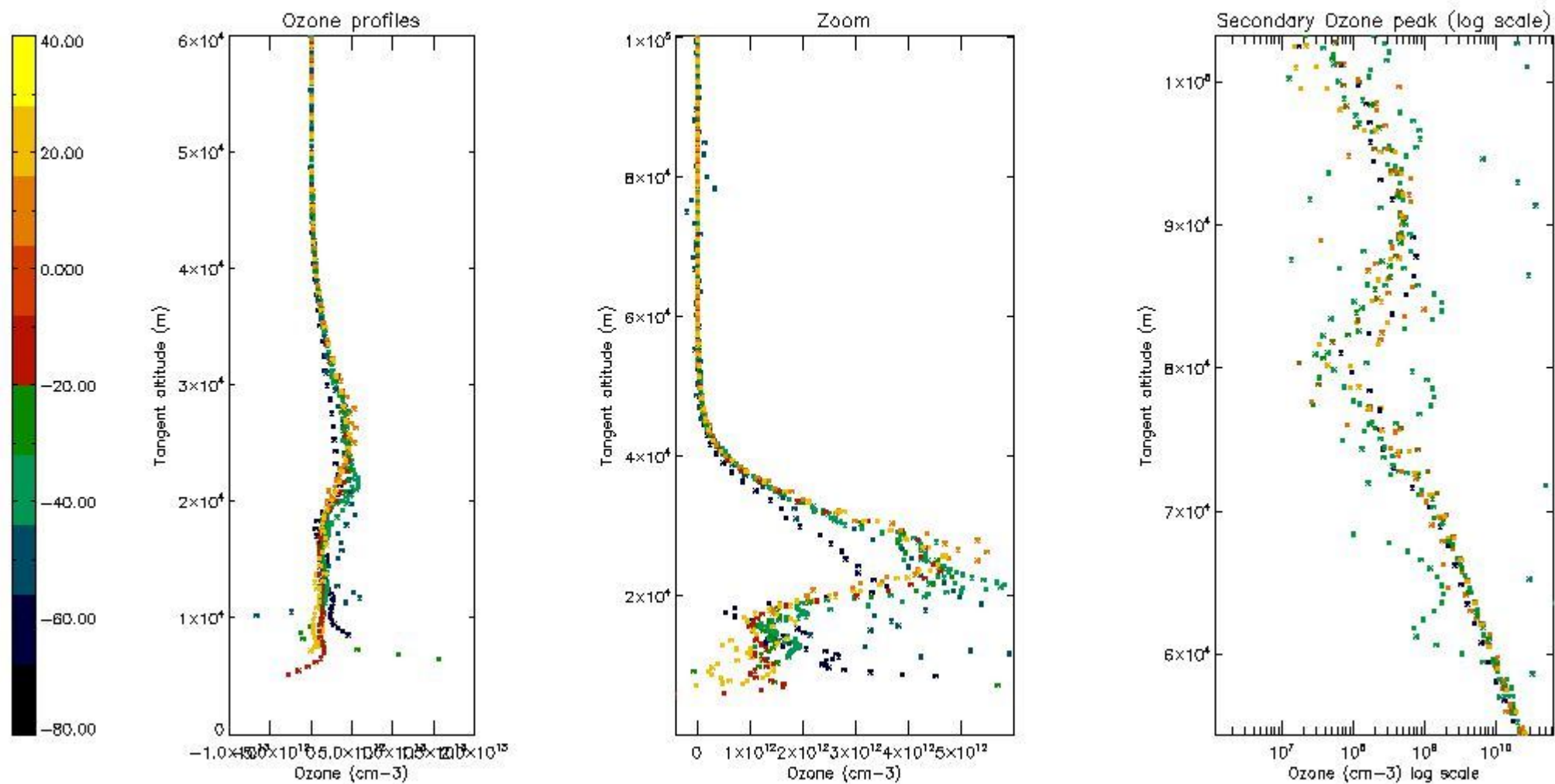
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

| Criteria | % of total production |
|----------|-----------------------|
| All STD | 25 |
| STD < 20 | 15 |

| | |
|----------|----|
| STD < 10 | 12 |
| STD < 5 | 9 |

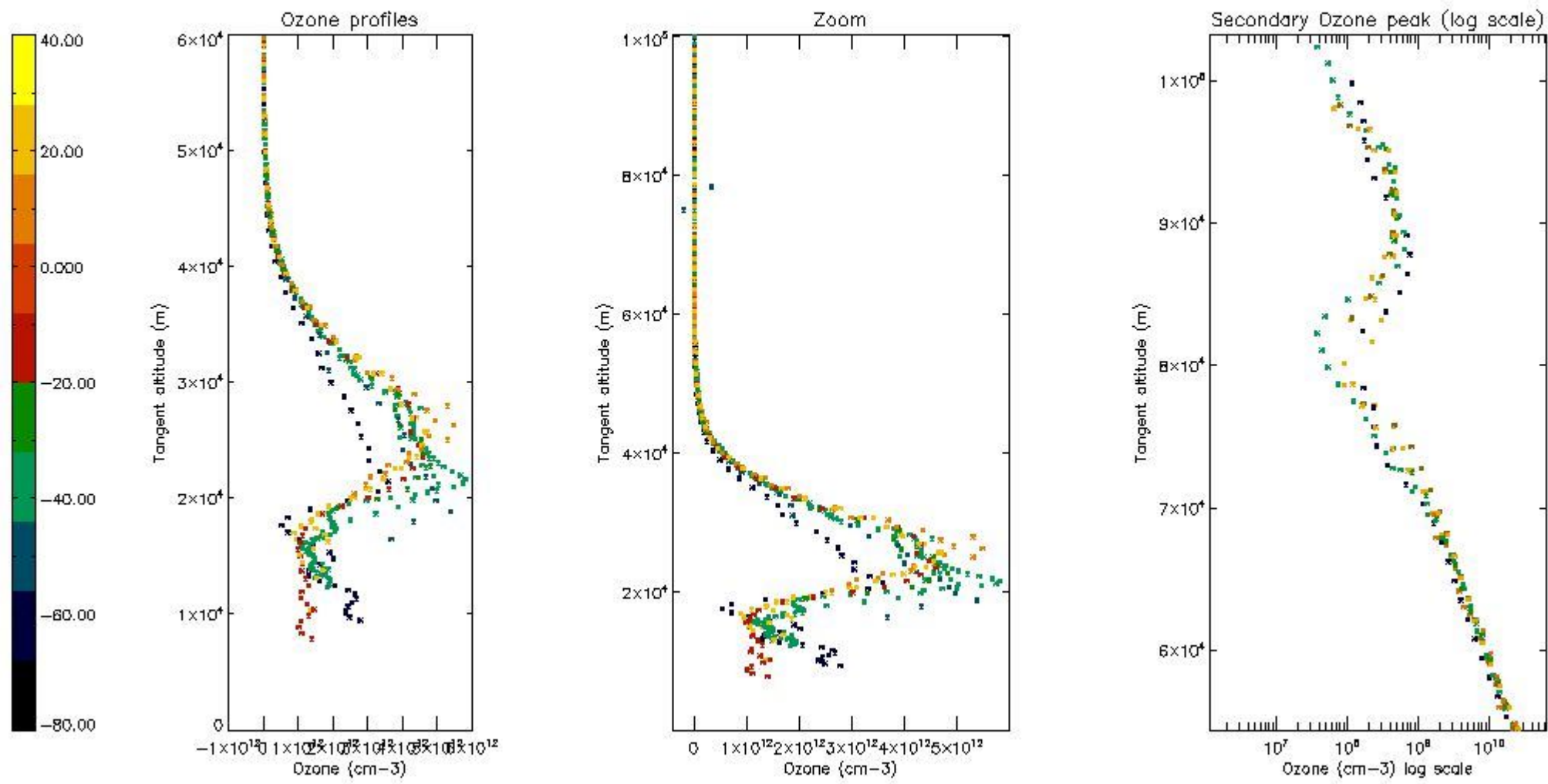
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



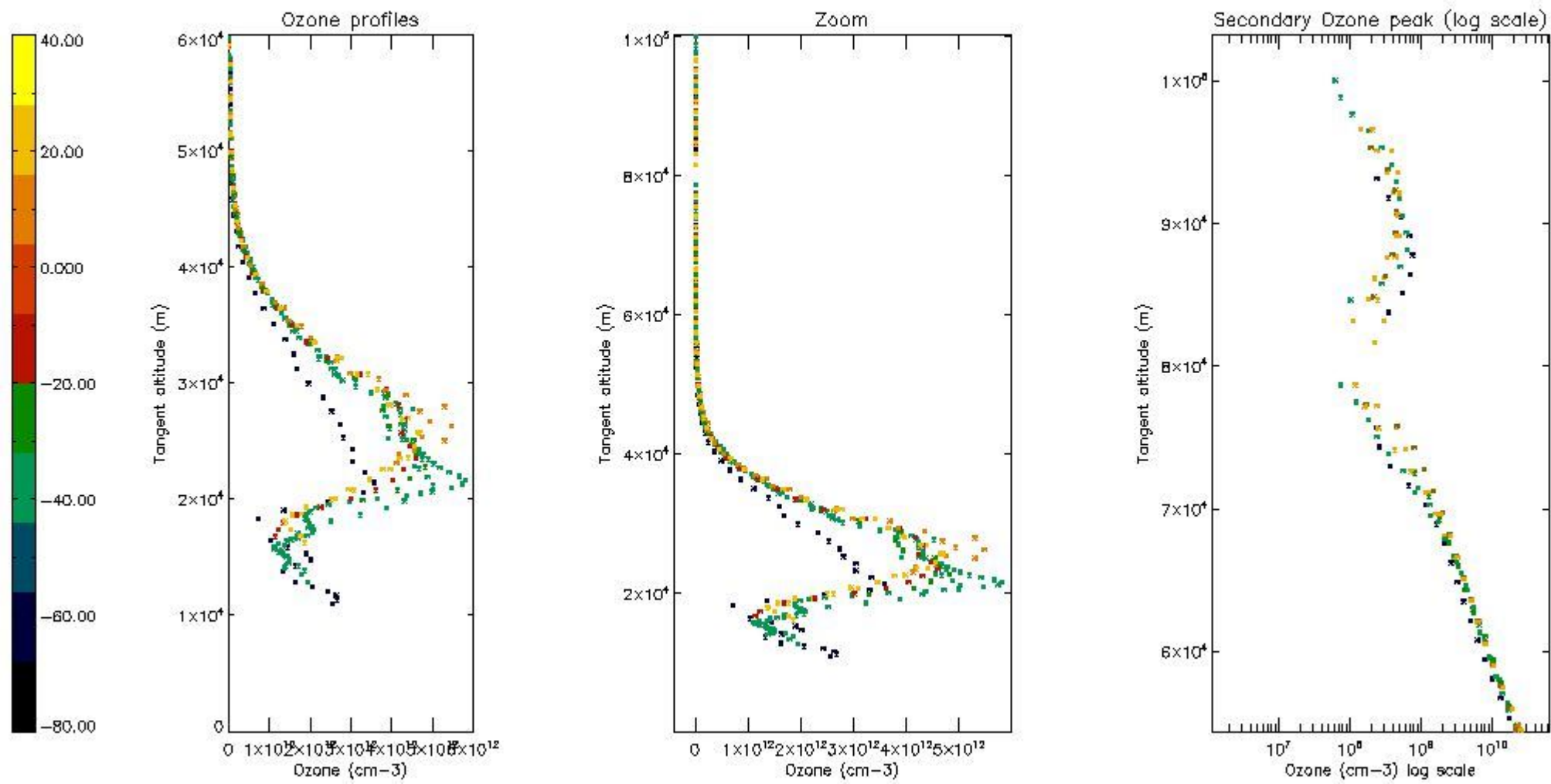
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



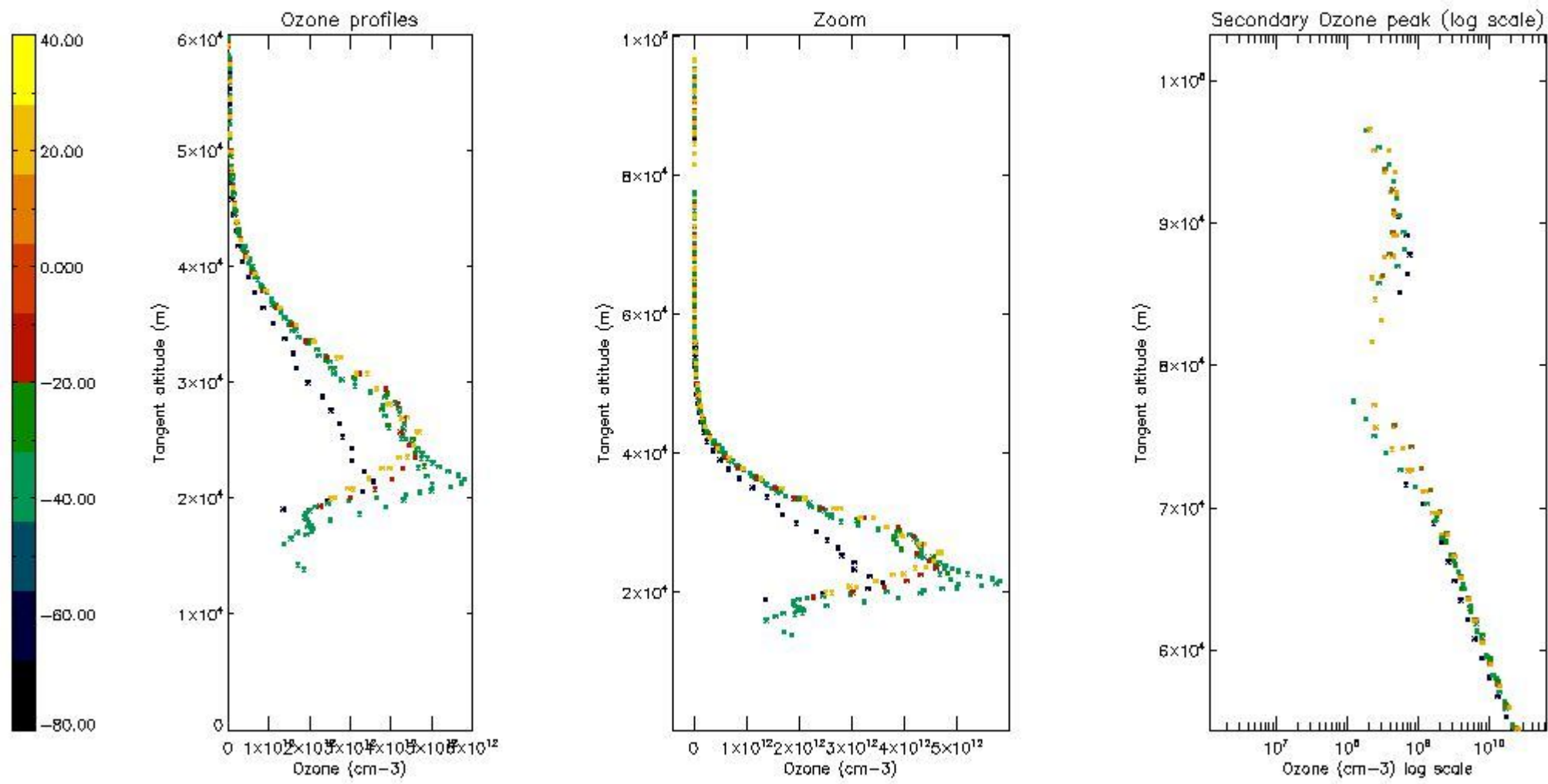
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



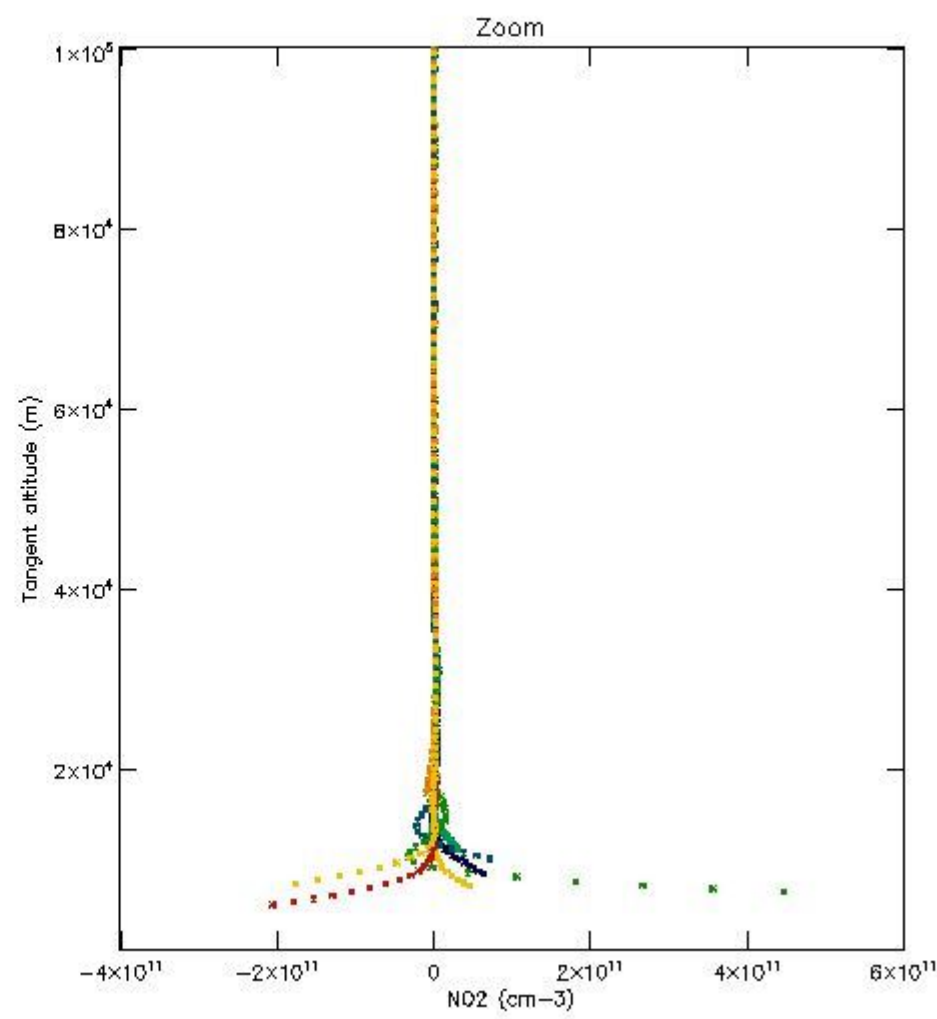
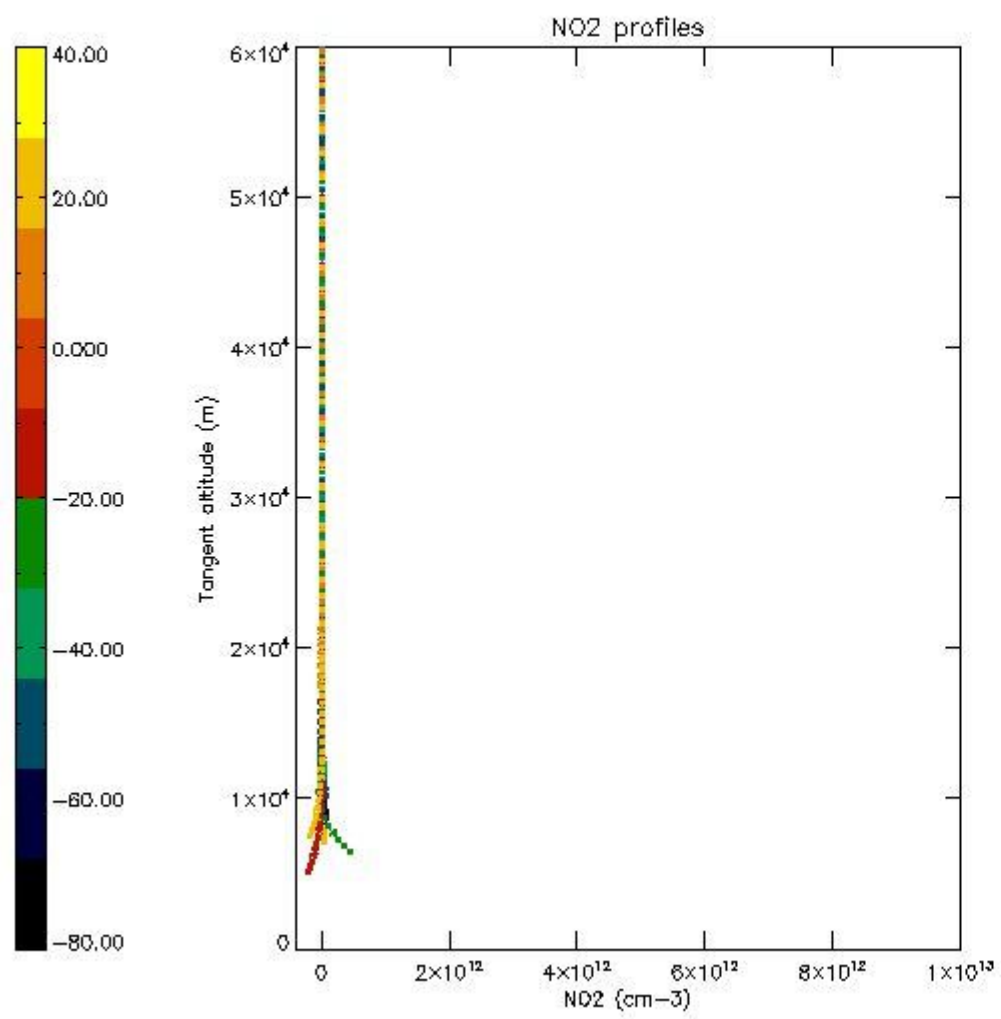
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



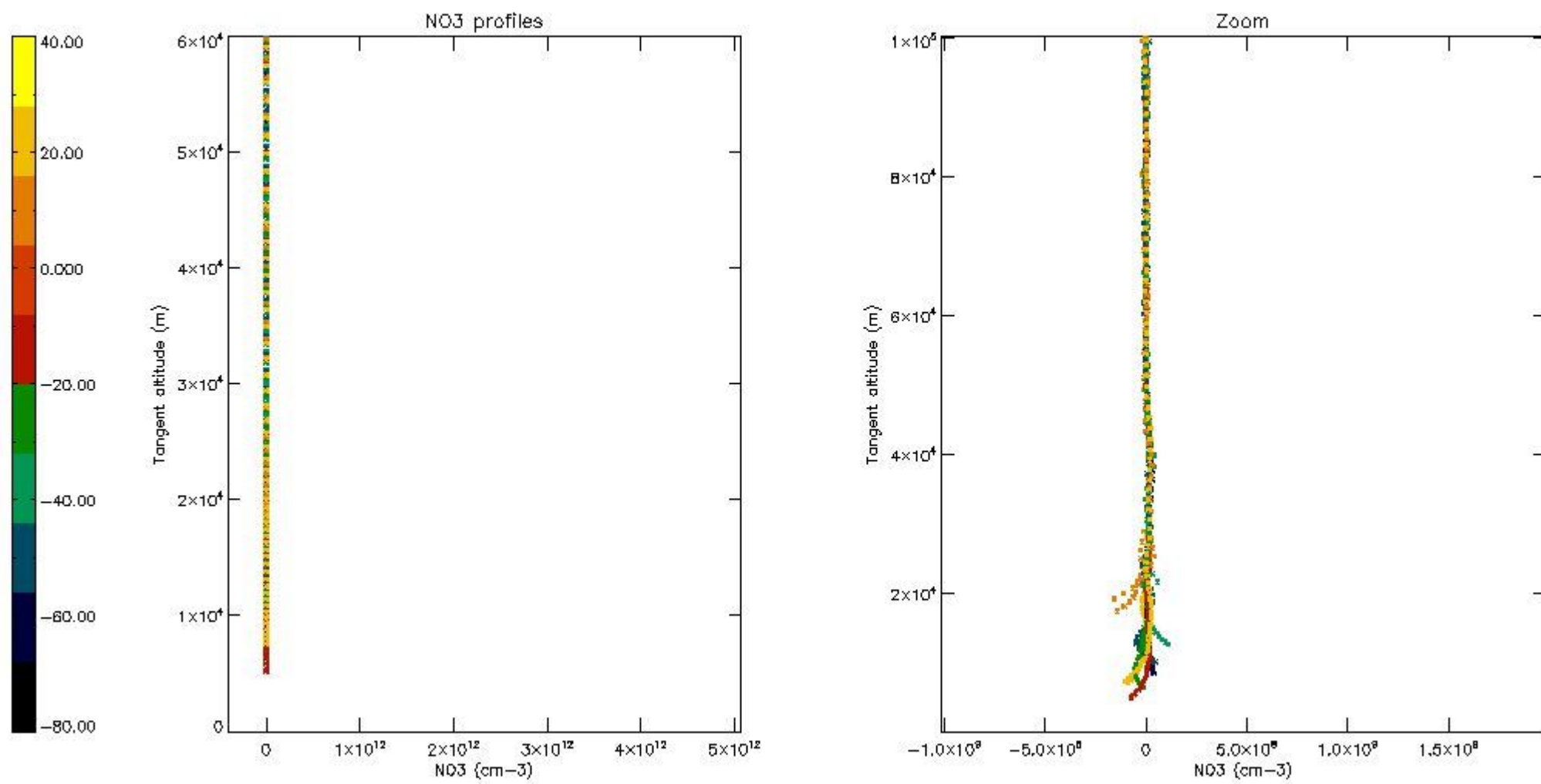
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



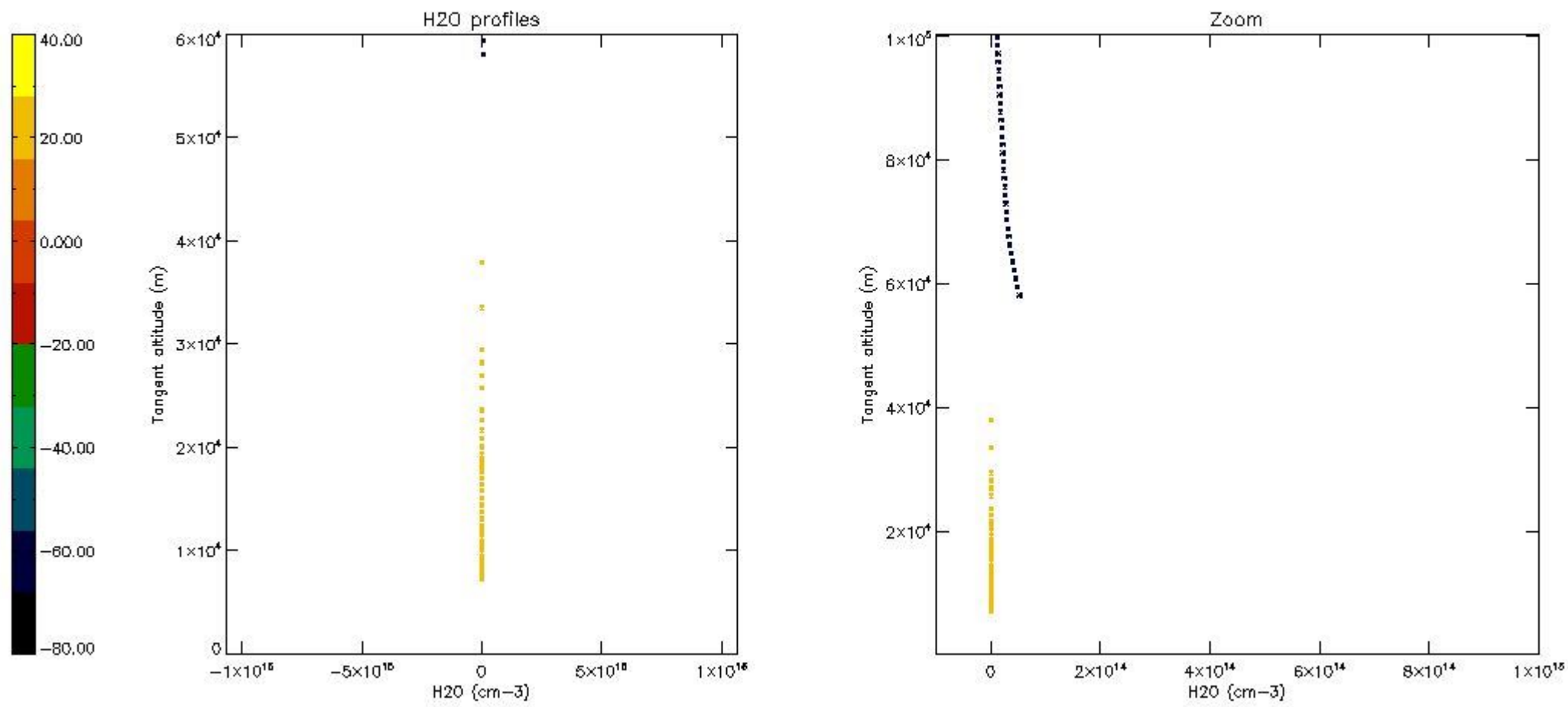
5.7 Plot NO3 profiles for all STD (dark without errors)

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 | 16-SEP-2003 21:37:38 |
| LEVEL-2_PROC_CONFIG | GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000 | 1 | 16-SEP-2003 21:37:38 |
| CROSS_SECTIONS_FILE | GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000 | 1 | 16-SEP-2003 21:37:38 |

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](#)

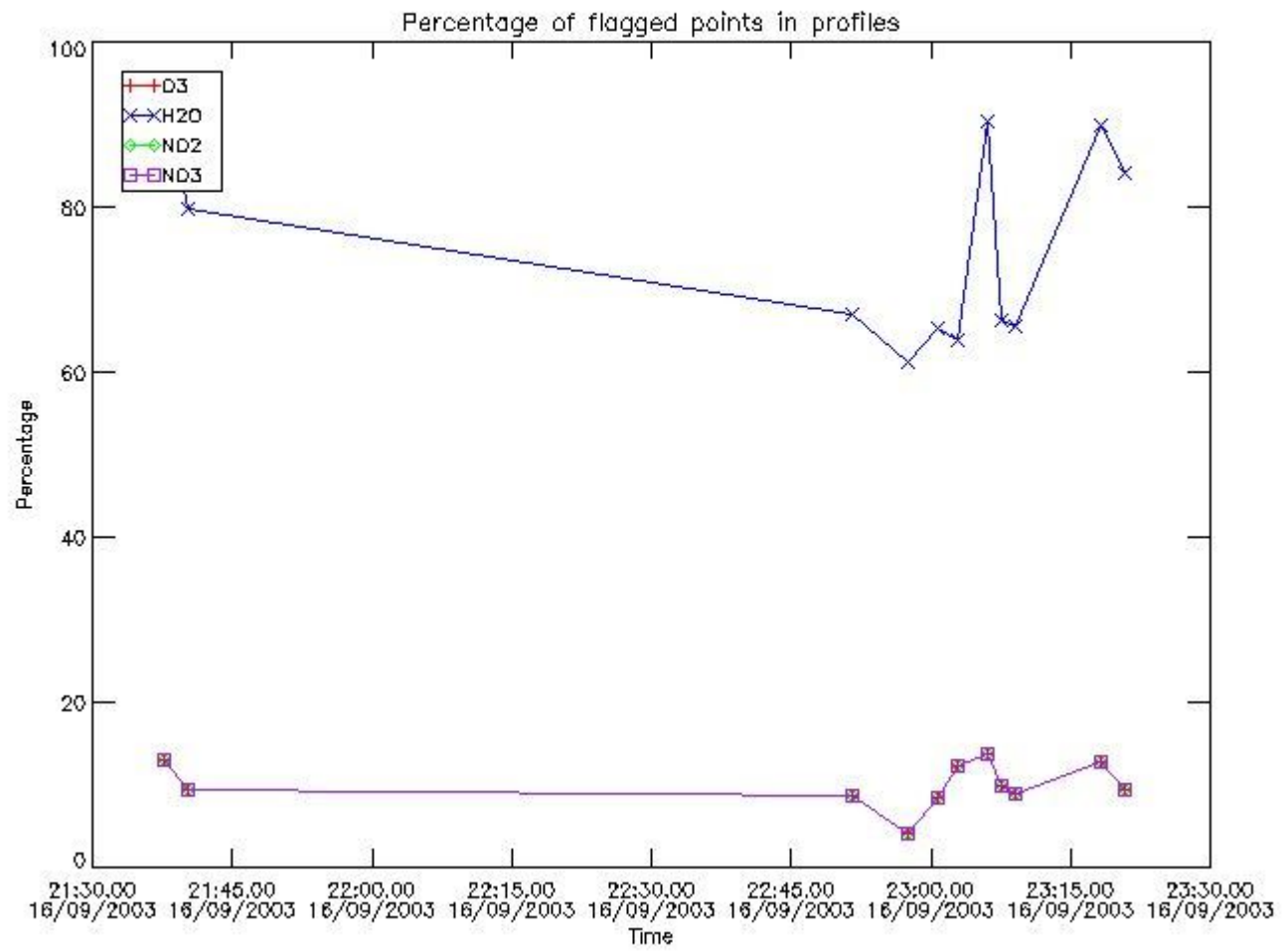
[6. Auxiliary Data Files used for the production reported in section 2](#)

| | | | | | | | | | | | |
|----|--|----------------------|--------|--------|-----|-----------|--------|--------|----|------|----|
| 43 | GOM_NL__2PRFIN20030916_234026_000000402020_00016_08086_9832.N1 | 16-SEP-2003 23:40:26 | Bright | 40.000 | 162 | 34Alp Aqr | 2.9440 | 5350.0 | 80 | 8086 | No |
| 44 | GOM_NL__2PRFIN20030916_234325_000000422020_00016_08086_9833.N1 | 16-SEP-2003 23:43:25 | Bright | 41.500 | 61 | 8Eps Peg | 2.1000 | 3900.0 | 83 | 8086 | No |
| 45 | GOM_NL__2PRFIN20030916_234459_000000412020_00016_08086_9834.N1 | 16-SEP-2003 23:44:59 | Bright | 41.000 | 90 | 54Alp Peg | 2.4870 | 11000. | 82 | 8086 | No |
| 46 | GOM_NL__2PRFIN20030916_234625_000000492020_00016_08086_9835.N1 | 16-SEP-2003 23:46:25 | Bright | 48.500 | 140 | 88Gam Peg | 2.8340 | 26000. | 97 | 8086 | No |
| 47 | GOM_NL__2PRFIN20030916_234850_000000402020_00016_08086_9836.N1 | 16-SEP-2003 23:48:50 | Bright | 40.000 | 93 | 53Bet Peg | 2.5200 | 3100.0 | 80 | 8086 | No |
| 48 | GOM_NL__2PRFIN20030916_235048_000000372020_00016_08086_9837.N1 | 16-SEP-2003 23:50:48 | Bright | 37.000 | 92 | 53Eps Cyg | 2.5000 | 4500.0 | 74 | 8086 | No |
| 49 | GOM_NL__2PRFIN20030916_235255_000000412020_00016_08086_9838.N1 | 16-SEP-2003 23:52:55 | Bright | 41.000 | 66 | 37Gam Cyg | 2.2080 | 5900.0 | 82 | 8086 | No |
| 50 | GOM_NL__2PRFIN20030916_235813_000000392020_00016_08086_9839.N1 | 16-SEP-2003 23:58:13 | Bright | 39.000 | 89 | 5Alp Cep | 2.4510 | 8000.0 | 78 | 8086 | No |

3. Quality information per product

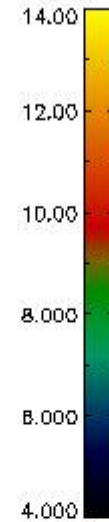
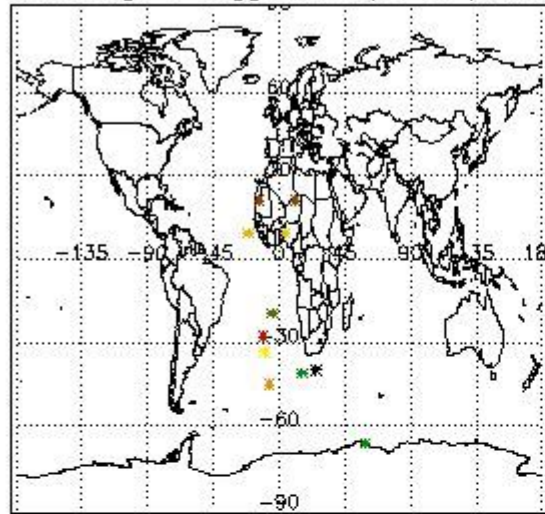
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

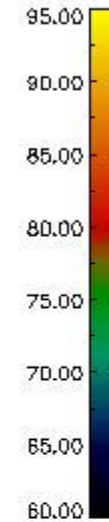
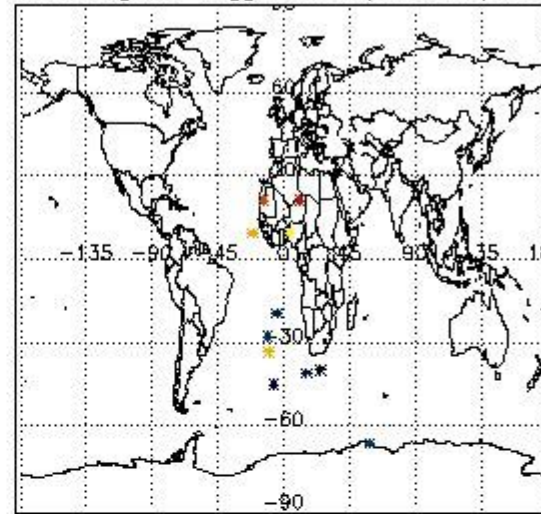


3.2 Plot quality information per product (world map)

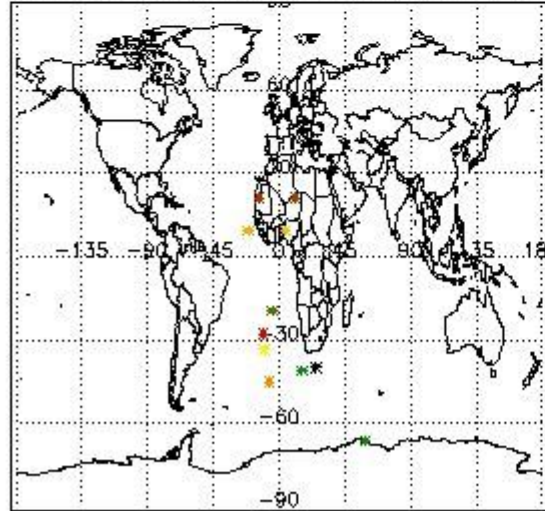
Percentage of flagged data per O3 profile



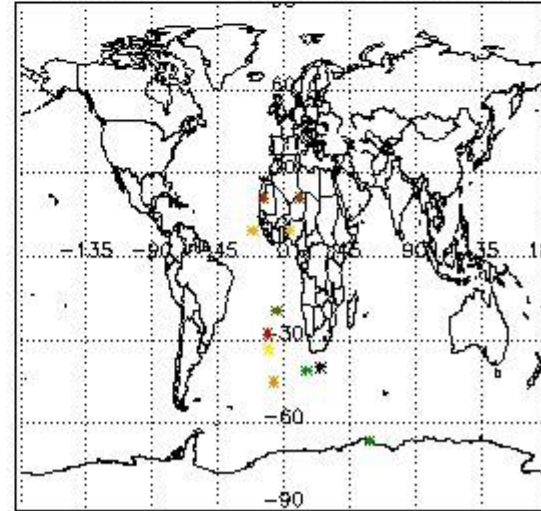
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

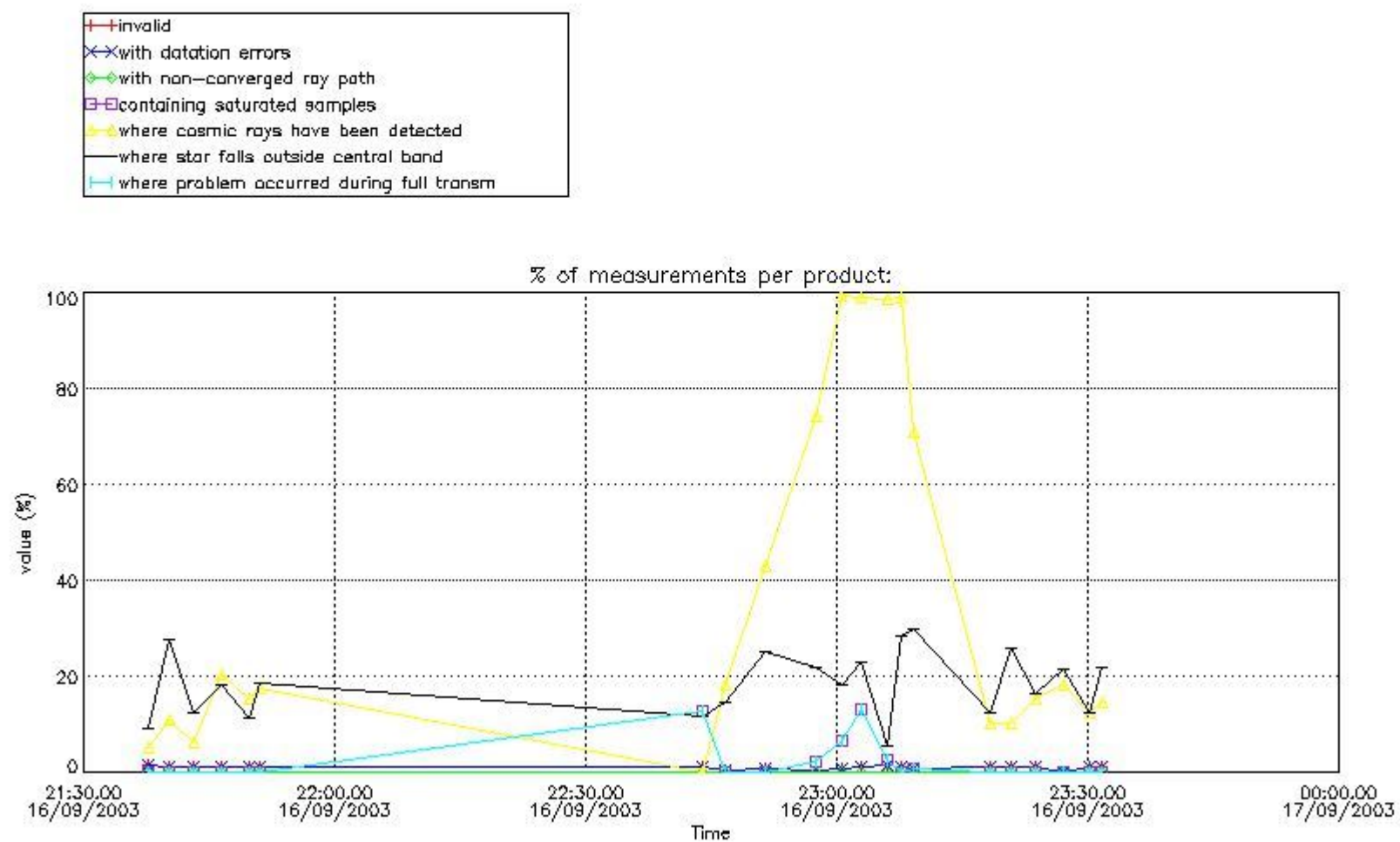


4. Level 1 quality information per product

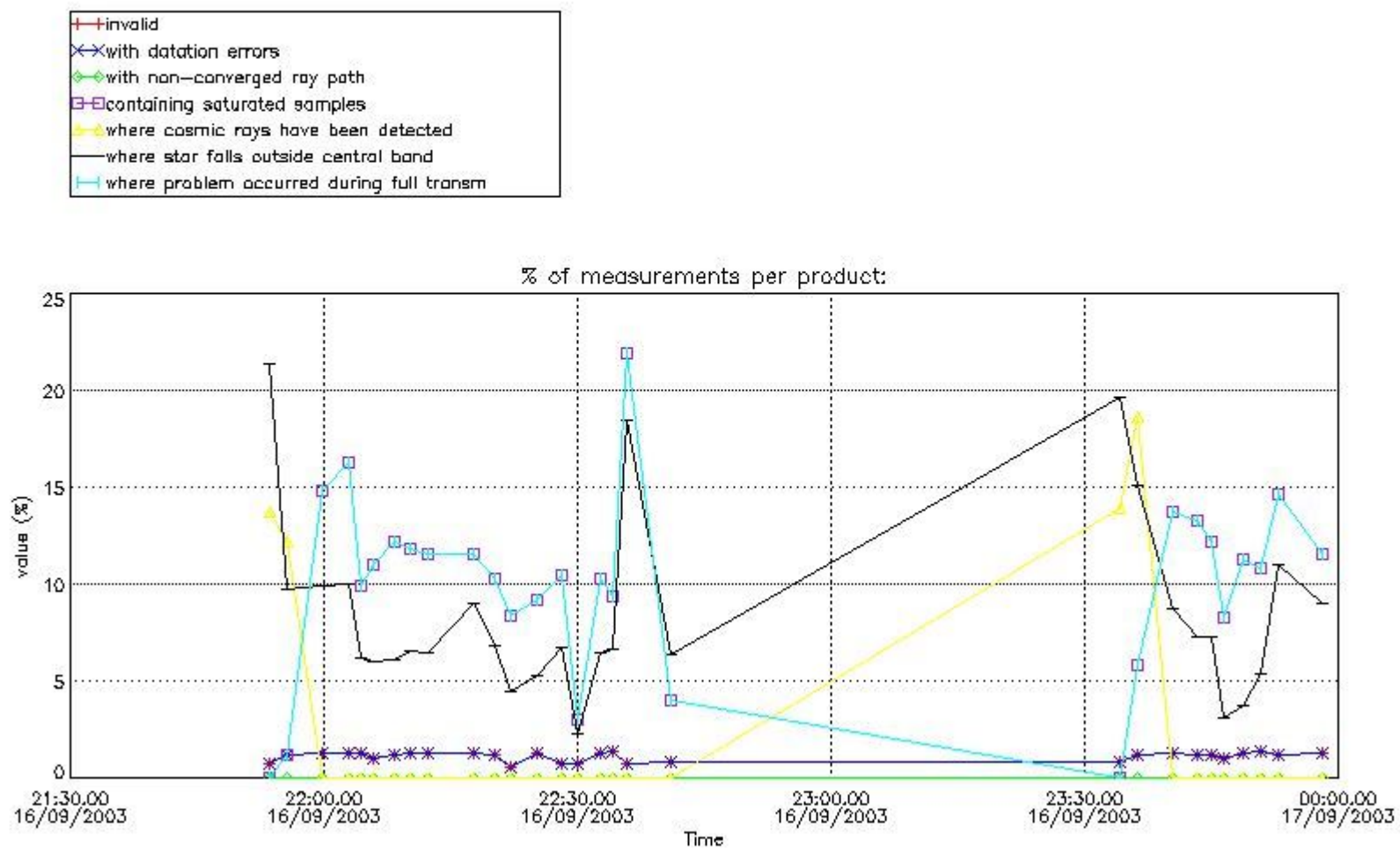
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



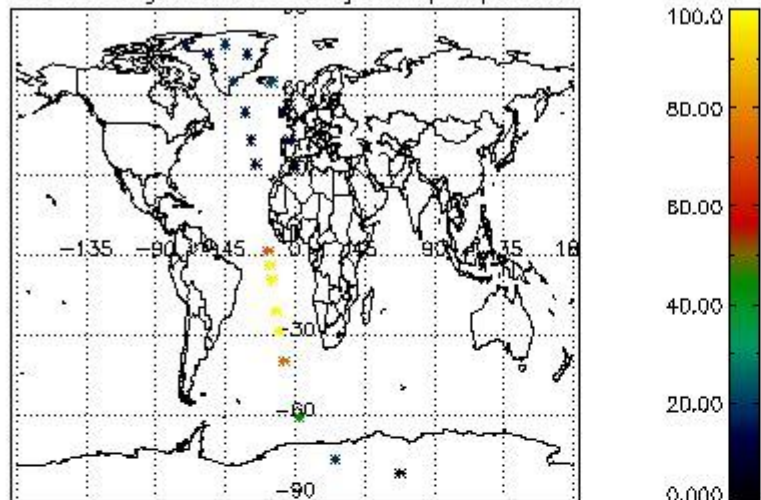
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



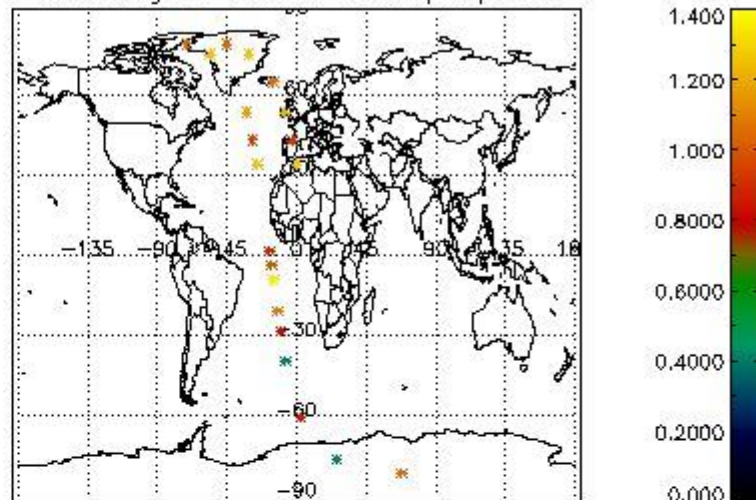
4.2 Plot quality information per product coming from level 1b processing (world map)

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

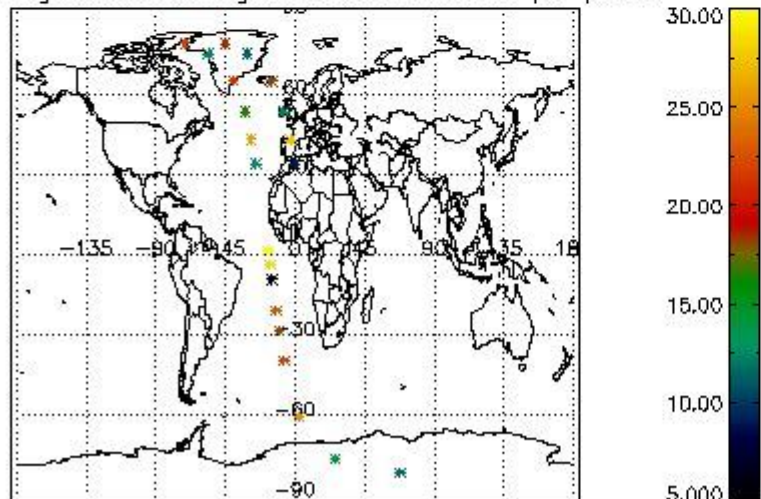
Percentage of cosmic ray hits per profile



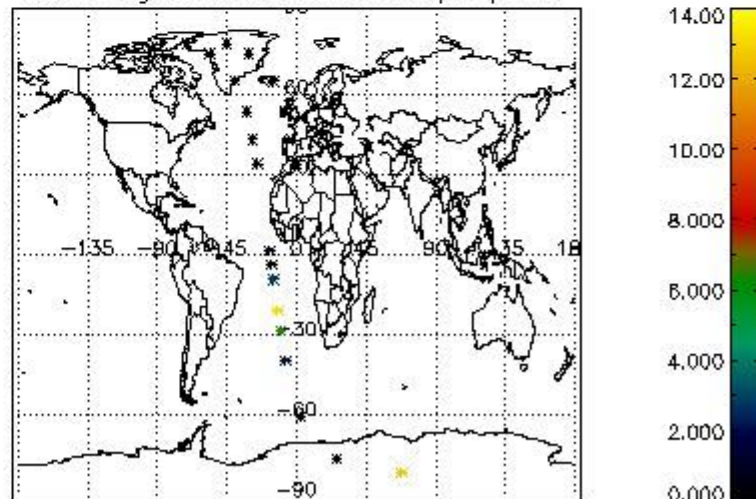
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

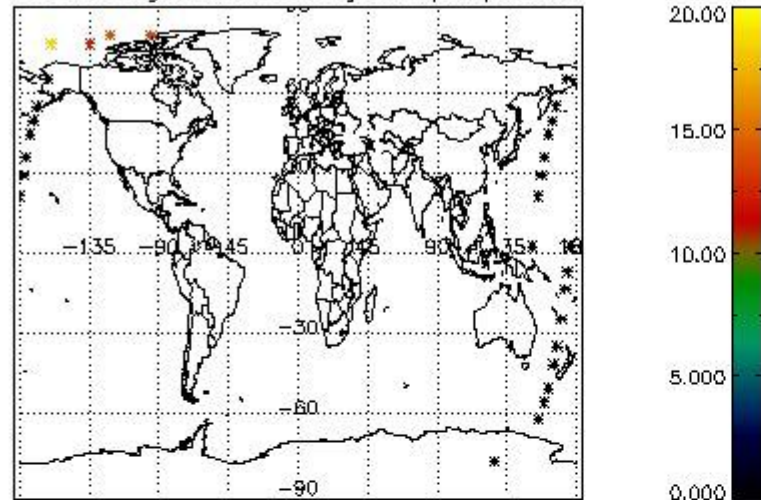


Percentage of saturation errors per profile

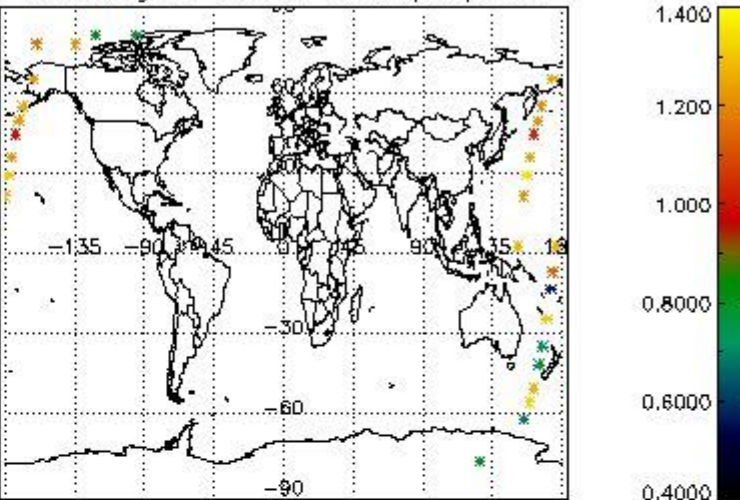


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

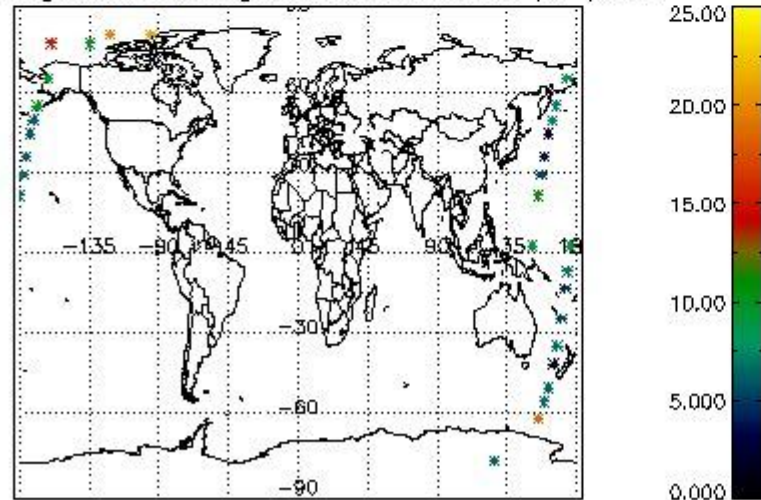
Percentage of cosmic ray hits per profile



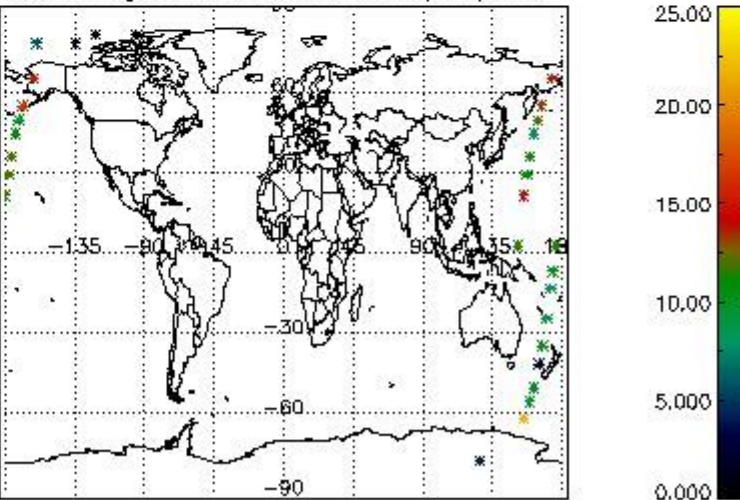
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

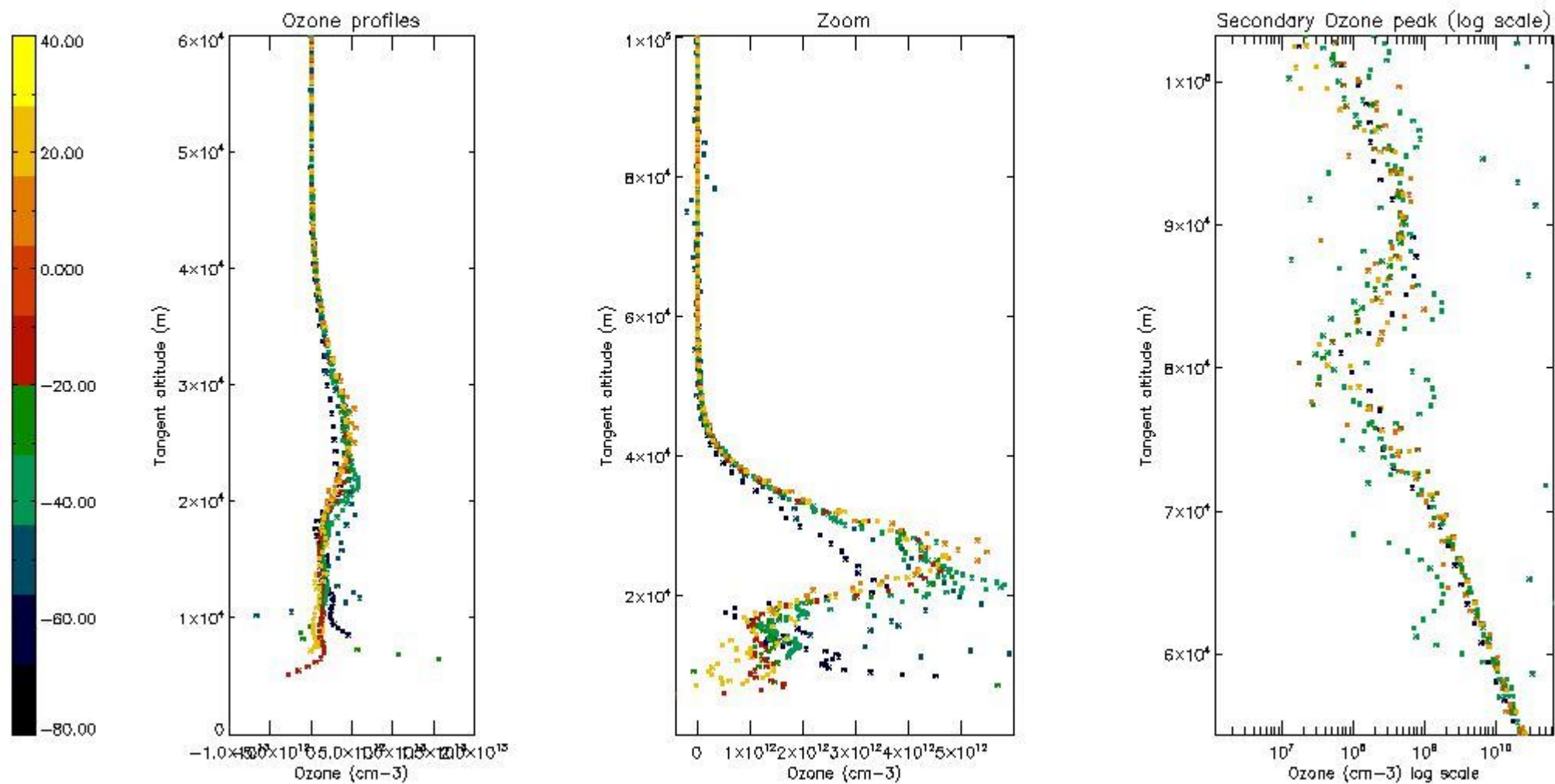
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

| Criteria | % of total production |
|----------|-----------------------|
| All STD | 25 |
| STD < 20 | 15 |

| | |
|----------|----|
| STD < 10 | 12 |
| STD < 5 | 9 |

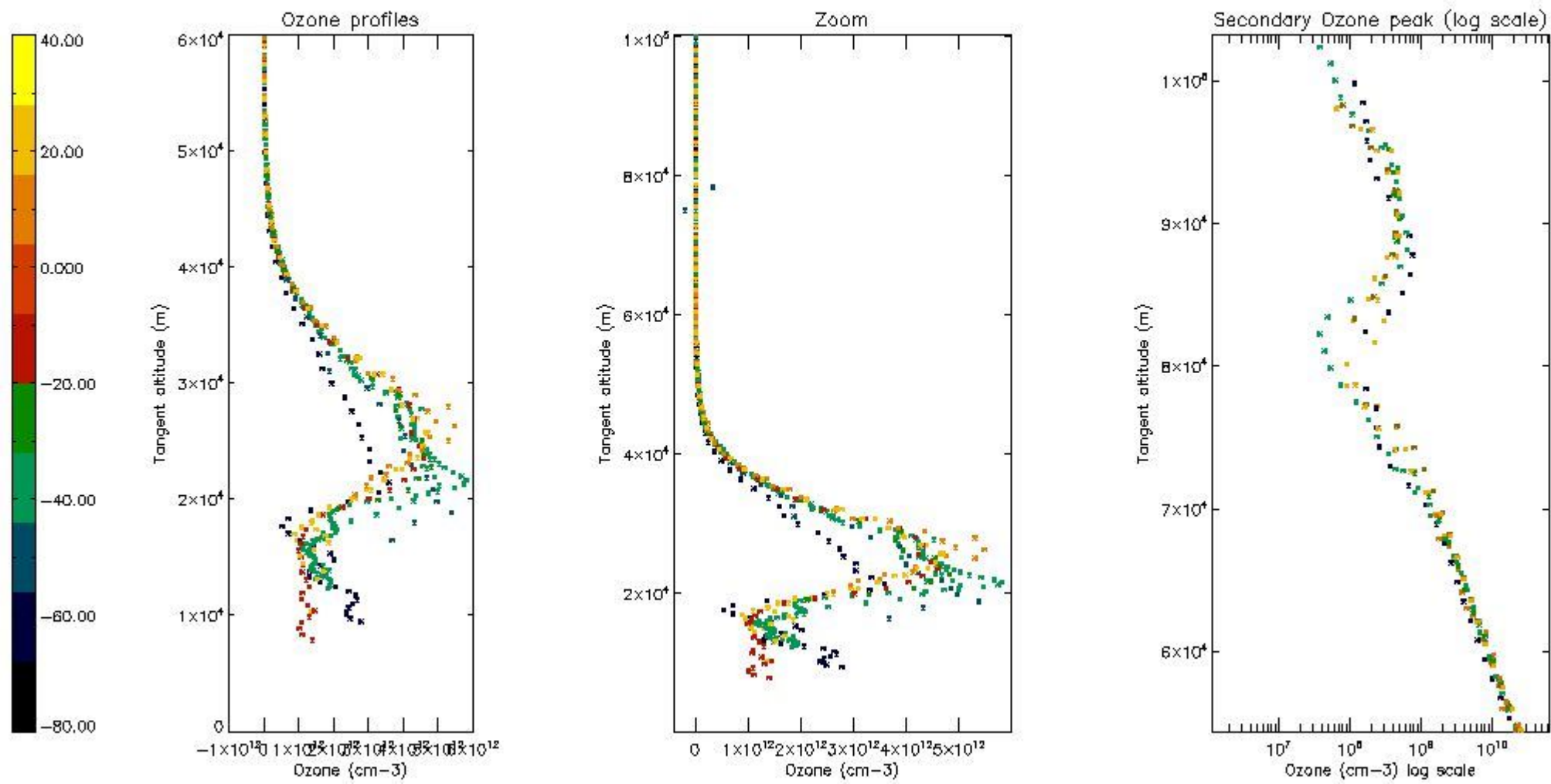
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



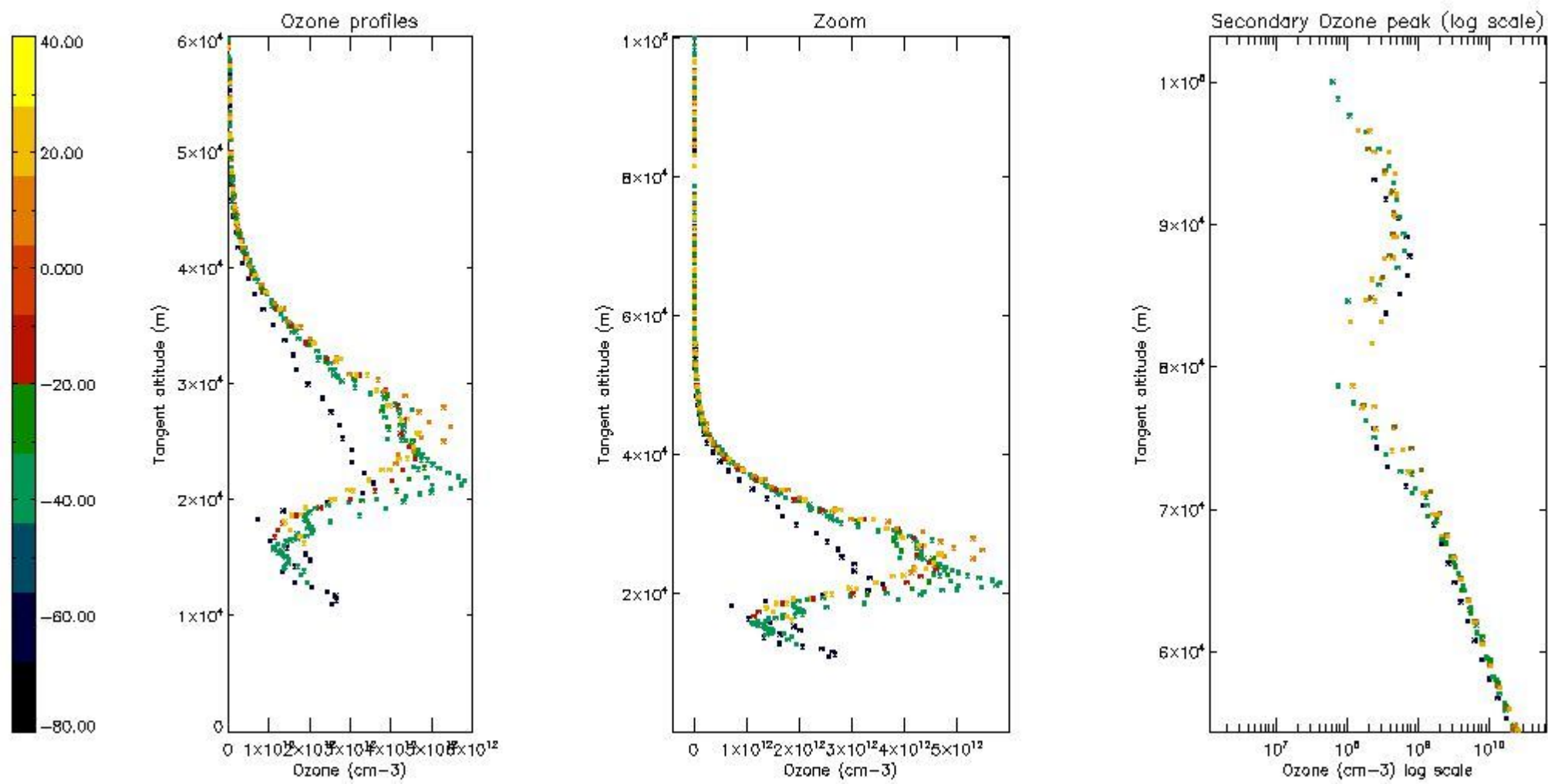
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



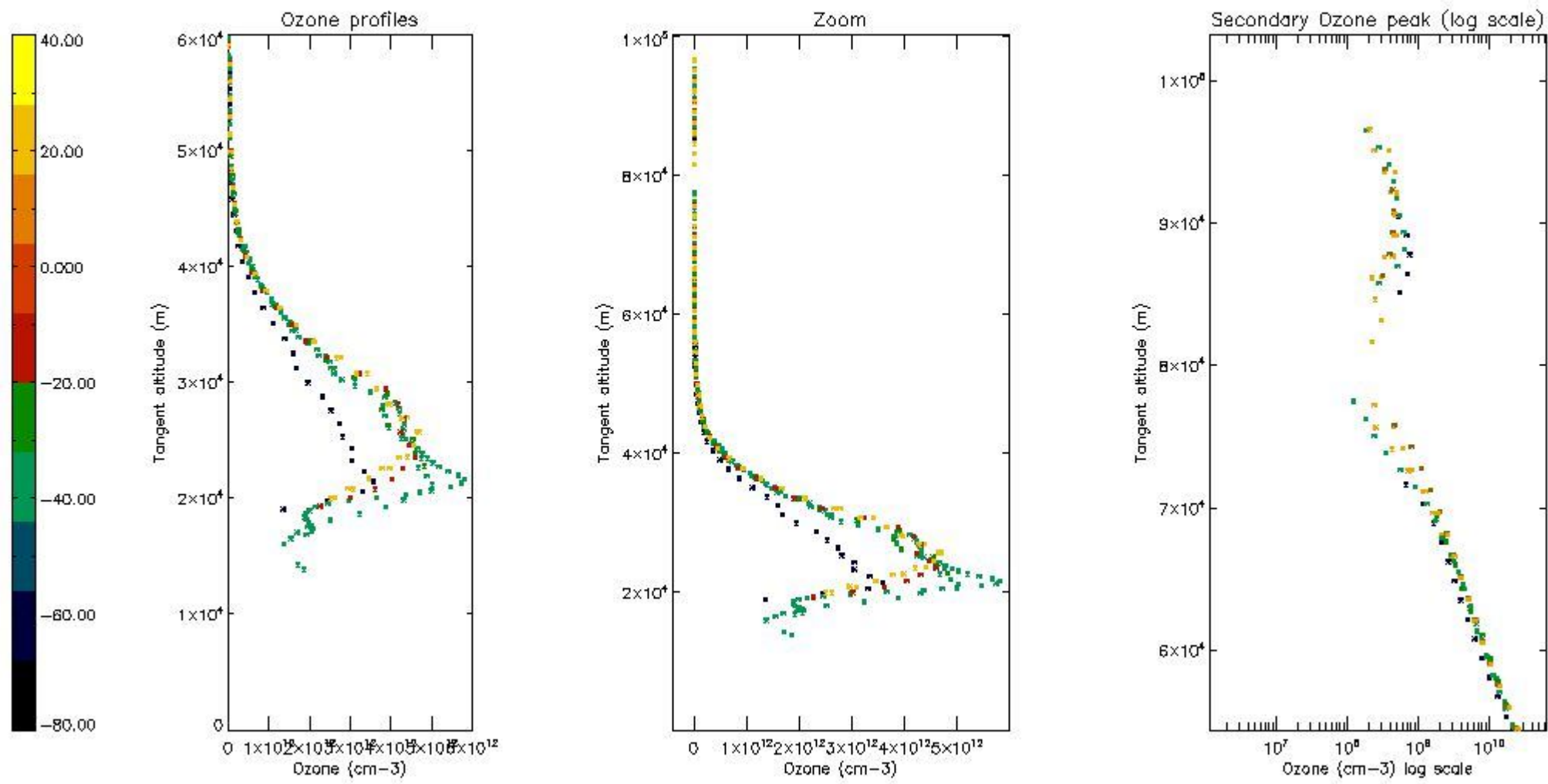
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



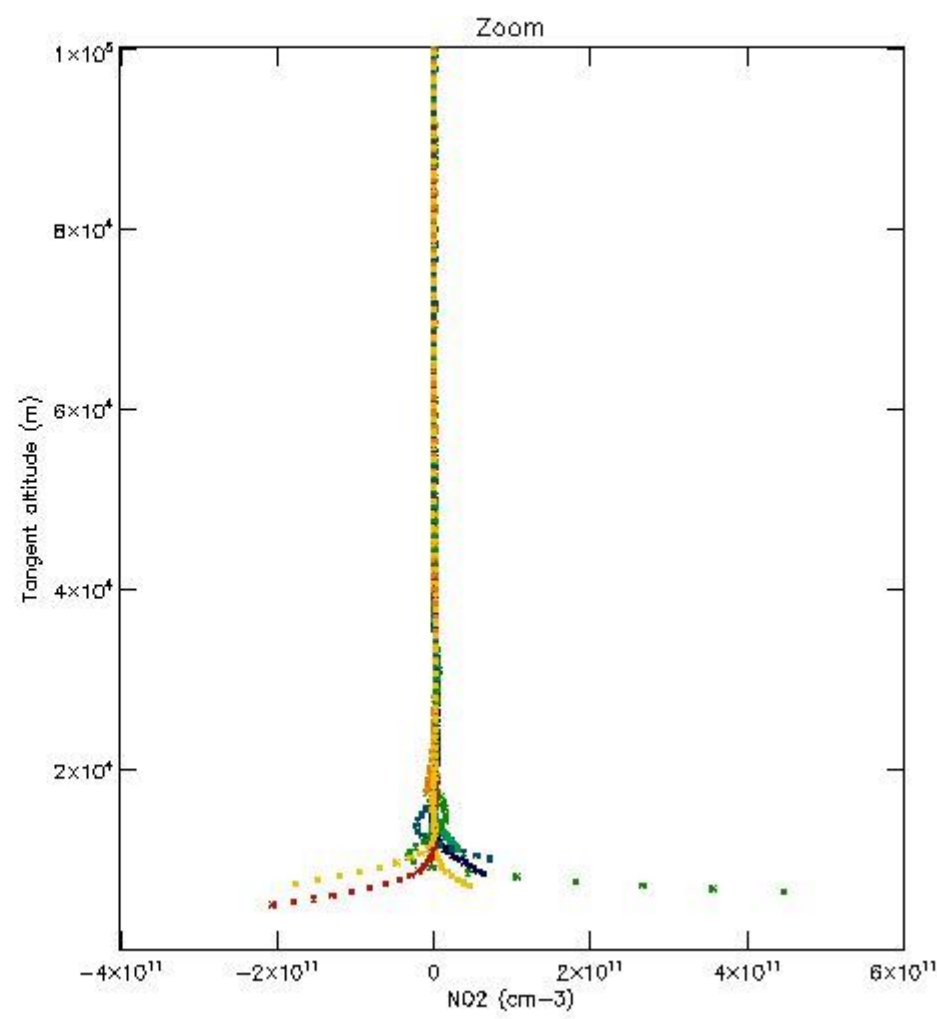
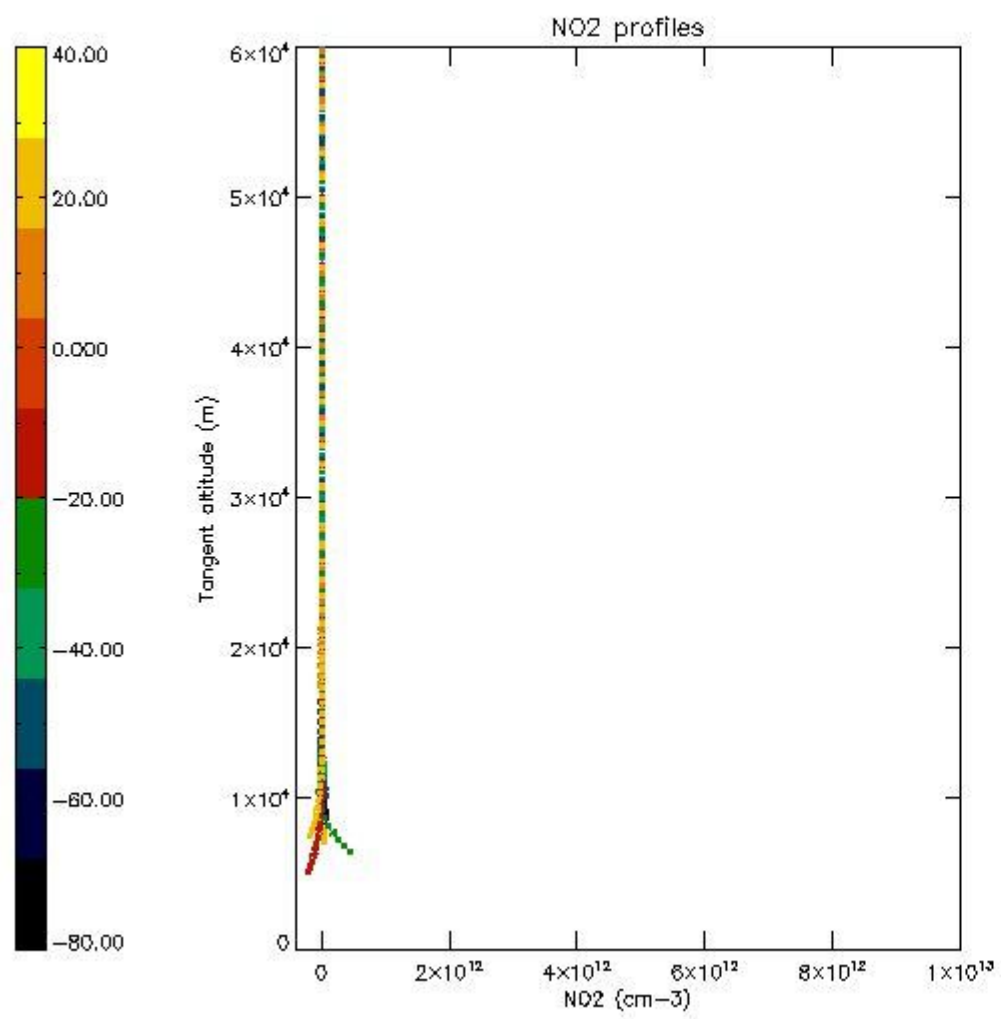
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



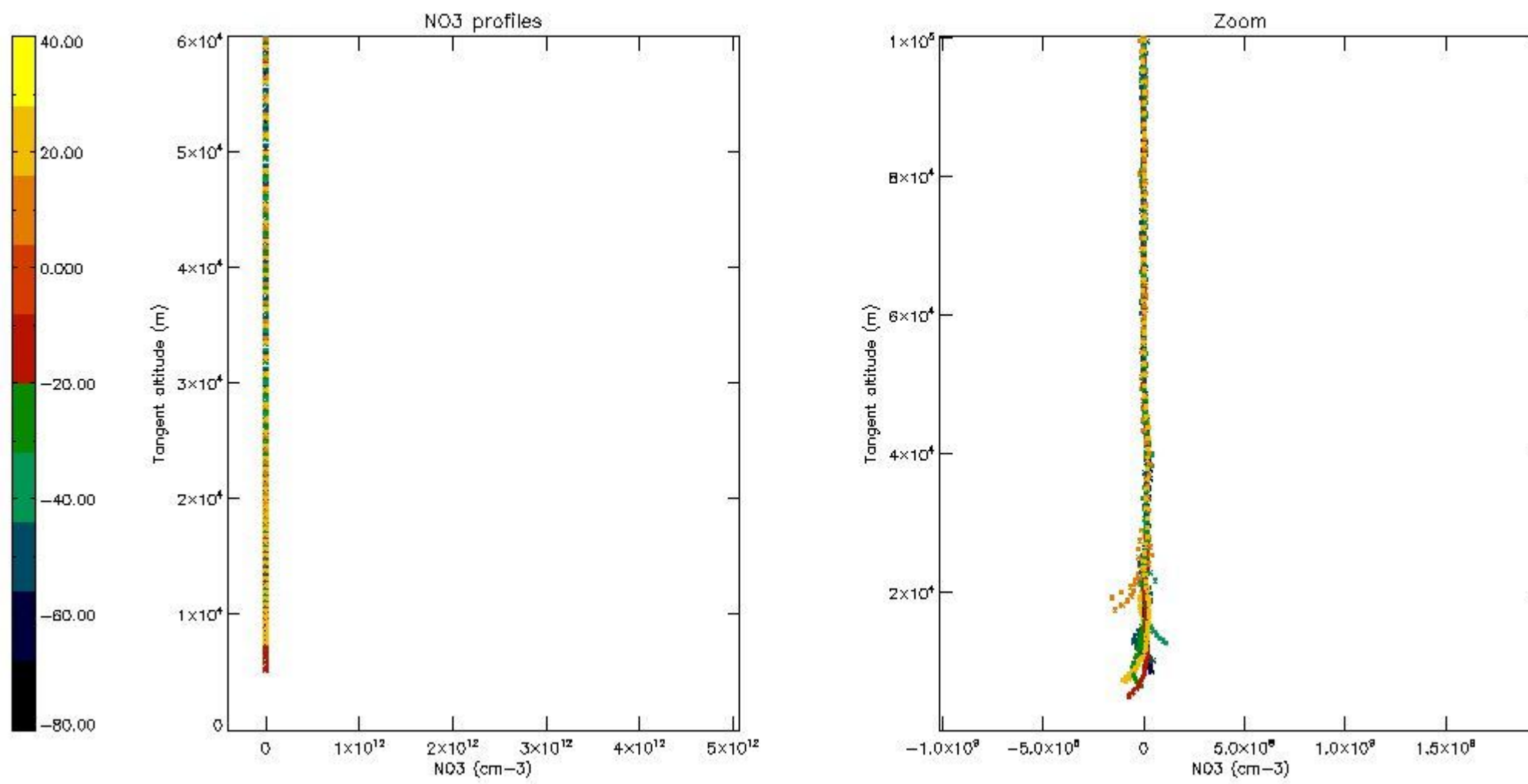
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



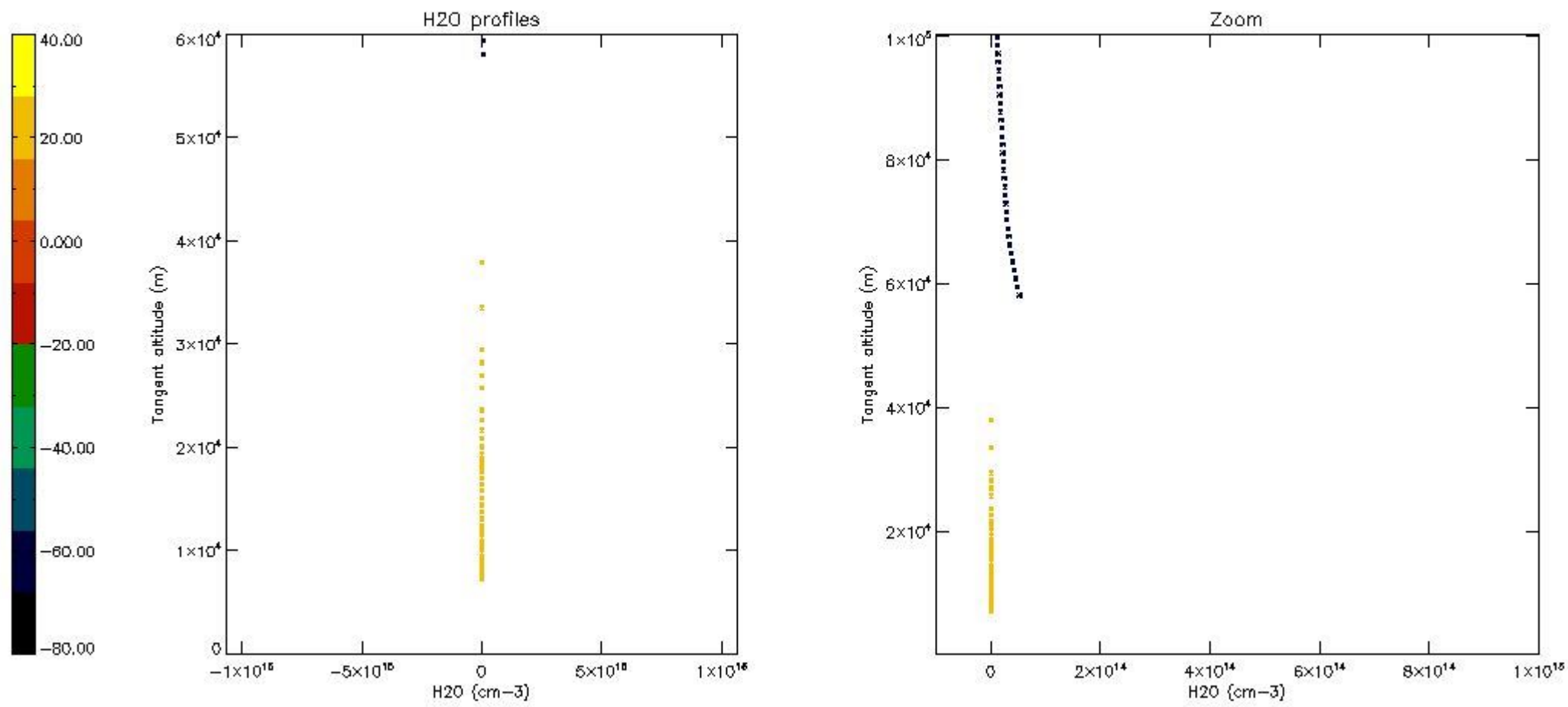
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

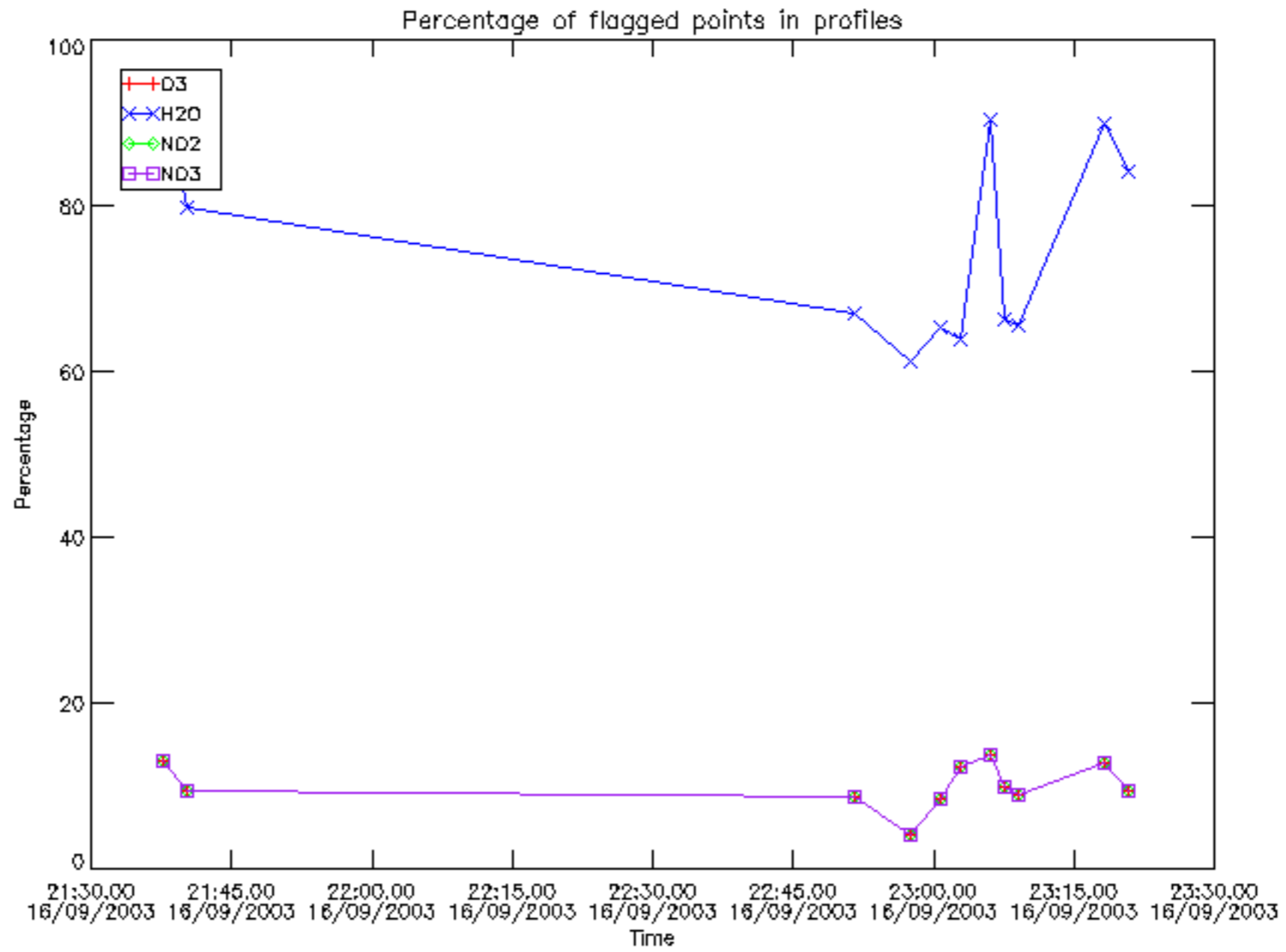
The colorbar represents the latitude.



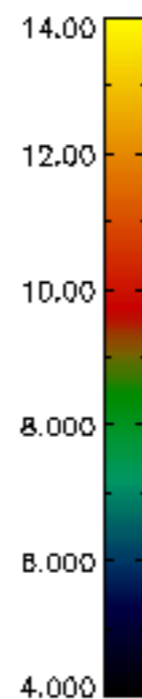
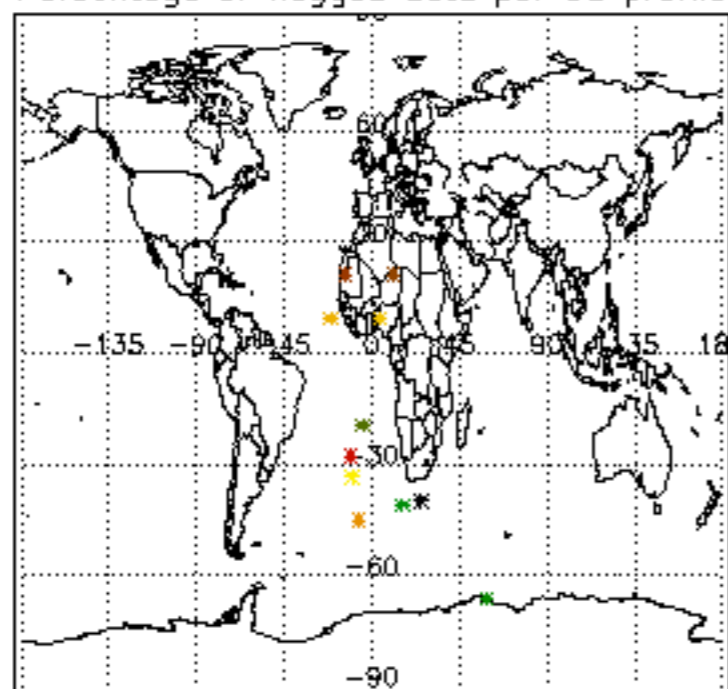
6. Auxiliary Data Files used for the production reported in section 2

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.

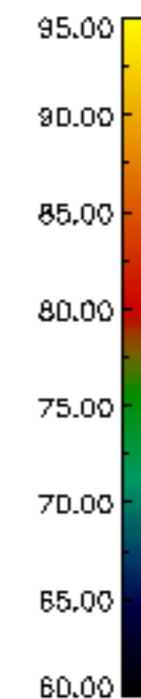
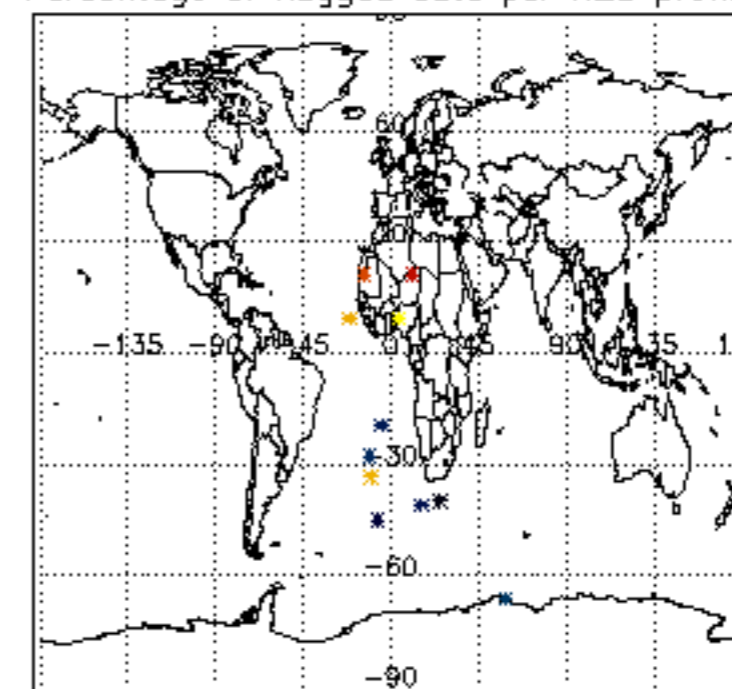
| Type | Auxiliary Filename | Used since product | Used since product date |
|---------------------------|---|--------------------|-------------------------|
| INST_PHYS_CHARACTERISTICS | GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000 | 1 | 16-SEP-2003 21:37:38 |
| LEVEL-2_PROC_CONFIG | GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000 | 1 | 16-SEP-2003 21:37:38 |
| CROSS_SECTIONS_FILE | GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000 | 1 | 16-SEP-2003 21:37:38 |



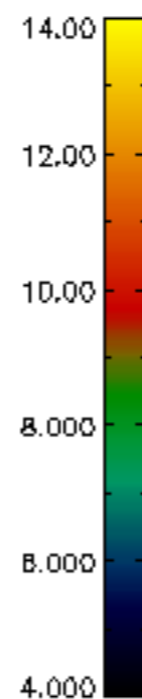
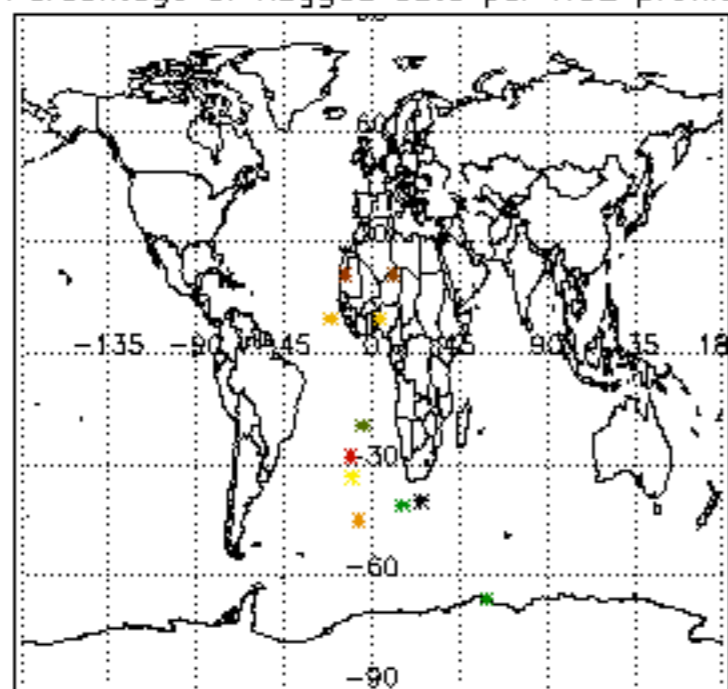
Percentage of flagged data per D3 profile



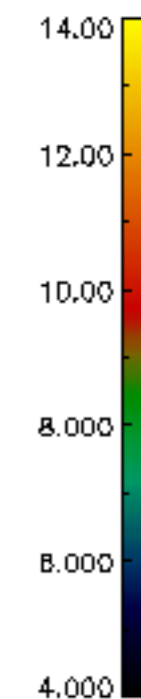
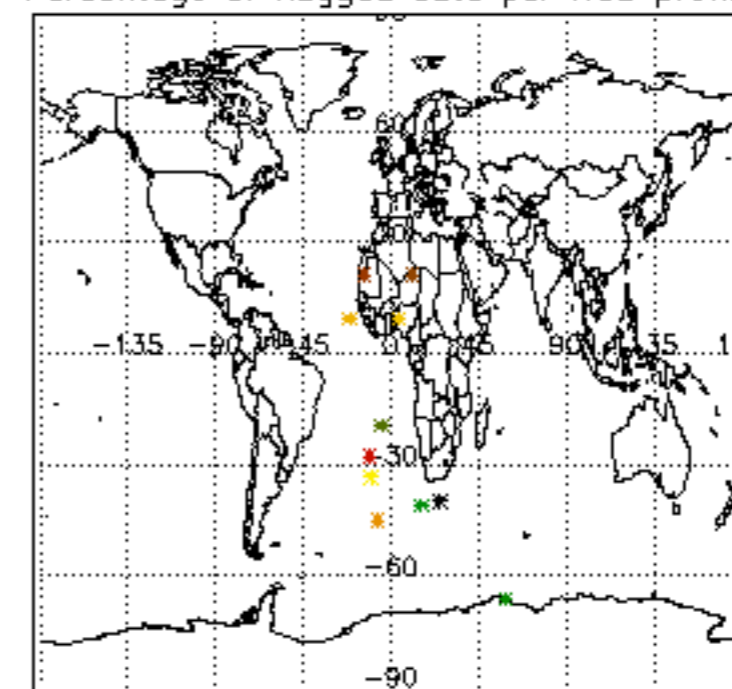
Percentage of flagged data per H2O profile

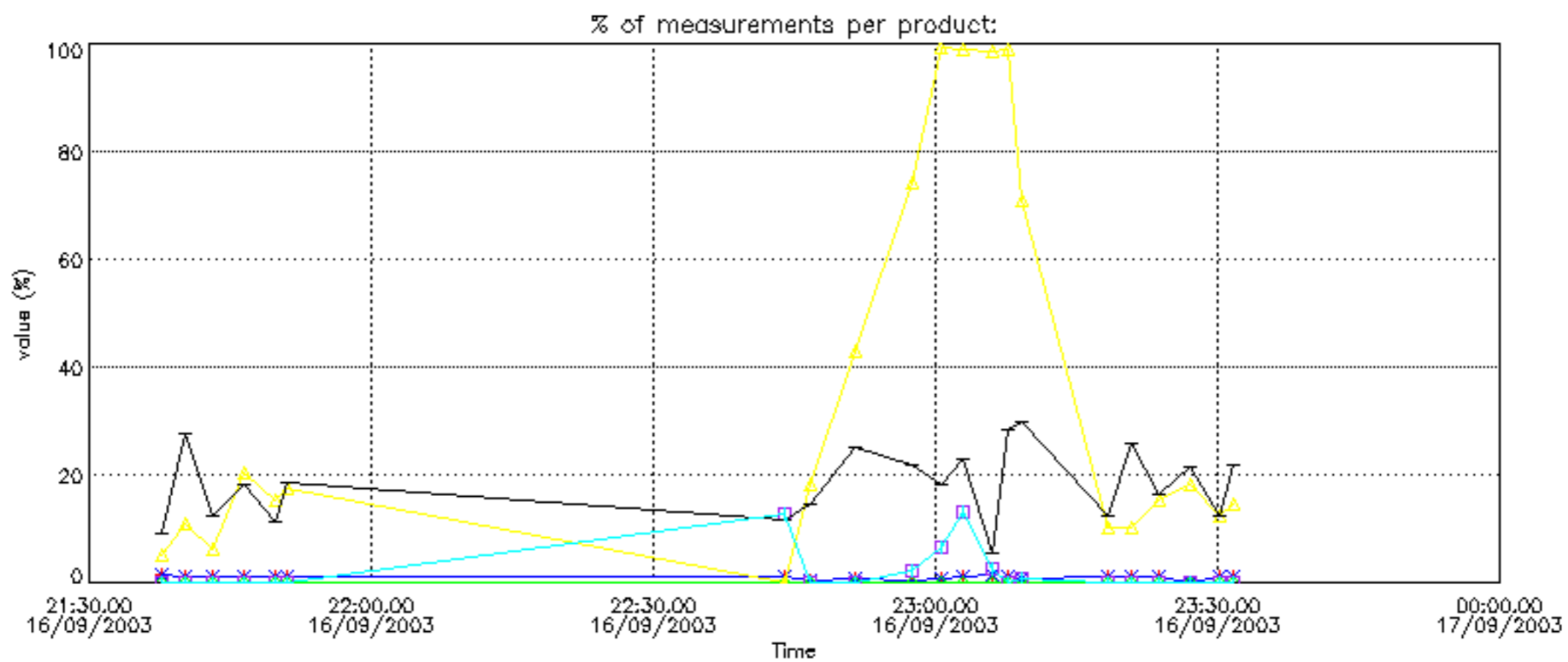


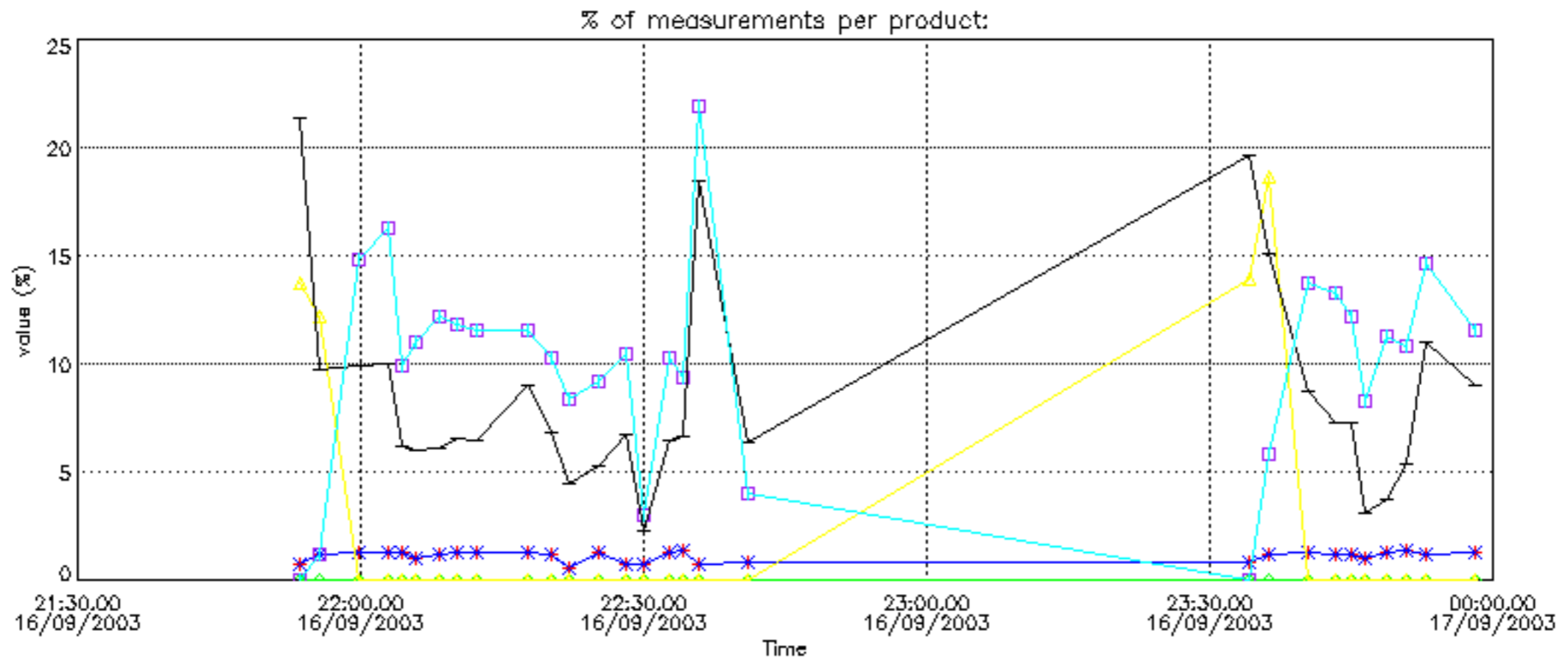
Percentage of flagged data per NO2 profile



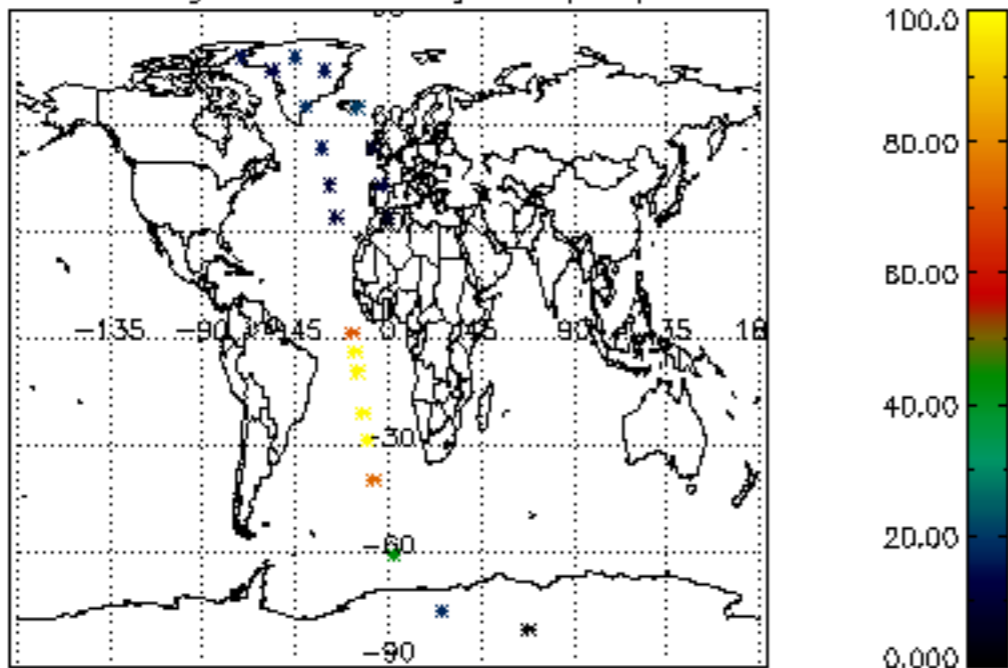
Percentage of flagged data per NO3 profile



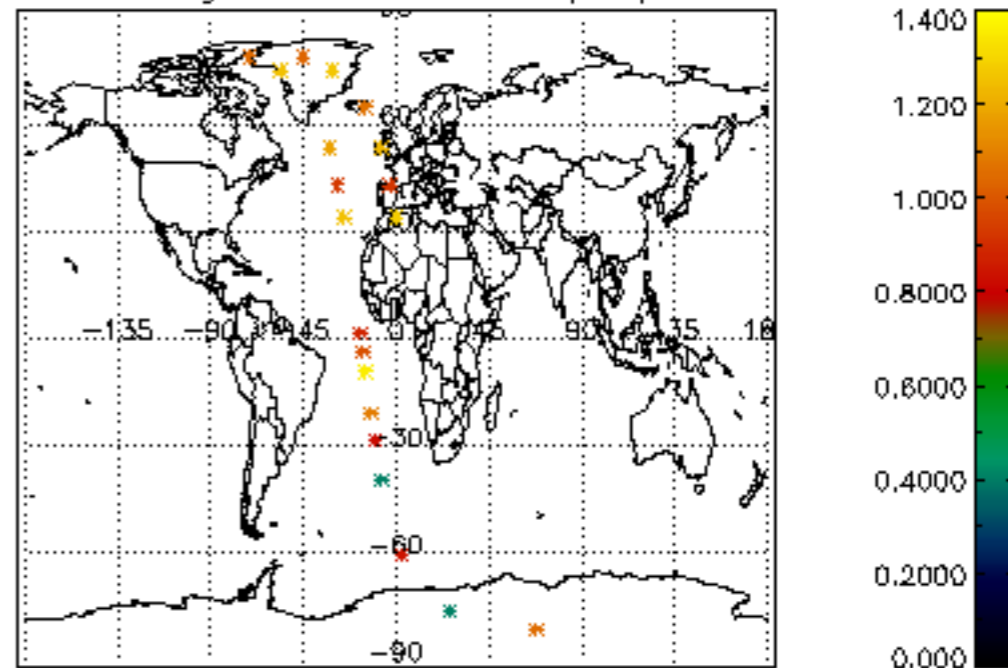




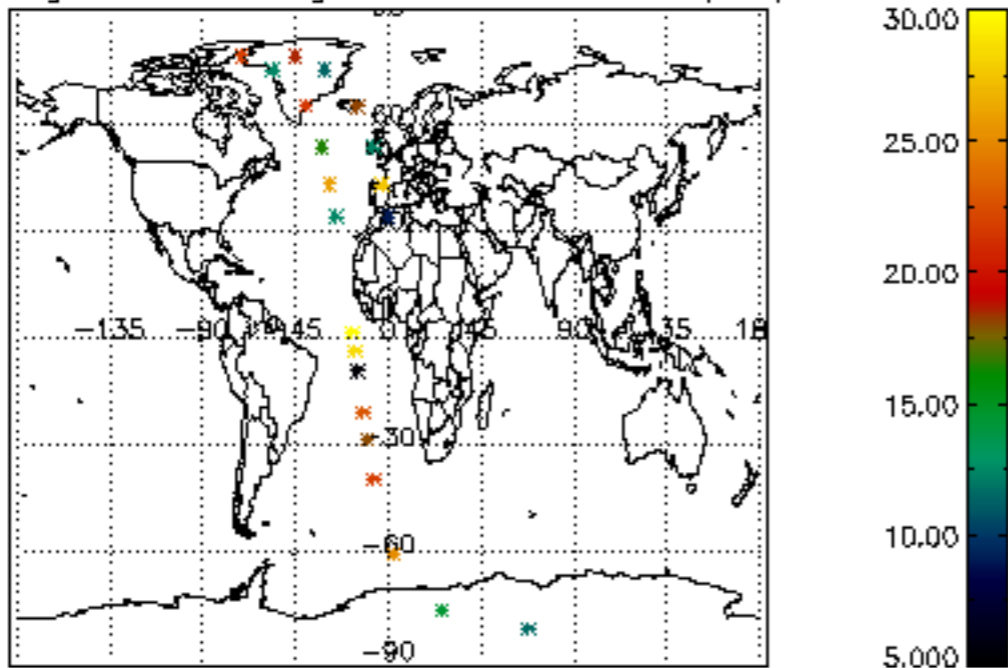
Percentage of cosmic ray hits per profile



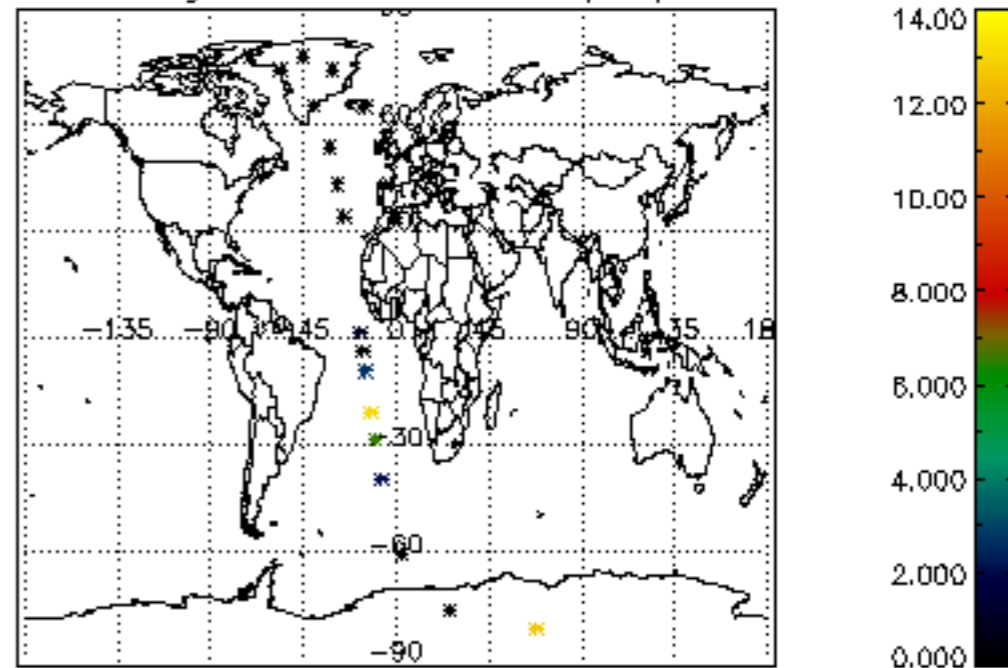
Percentage of datation errors per profile



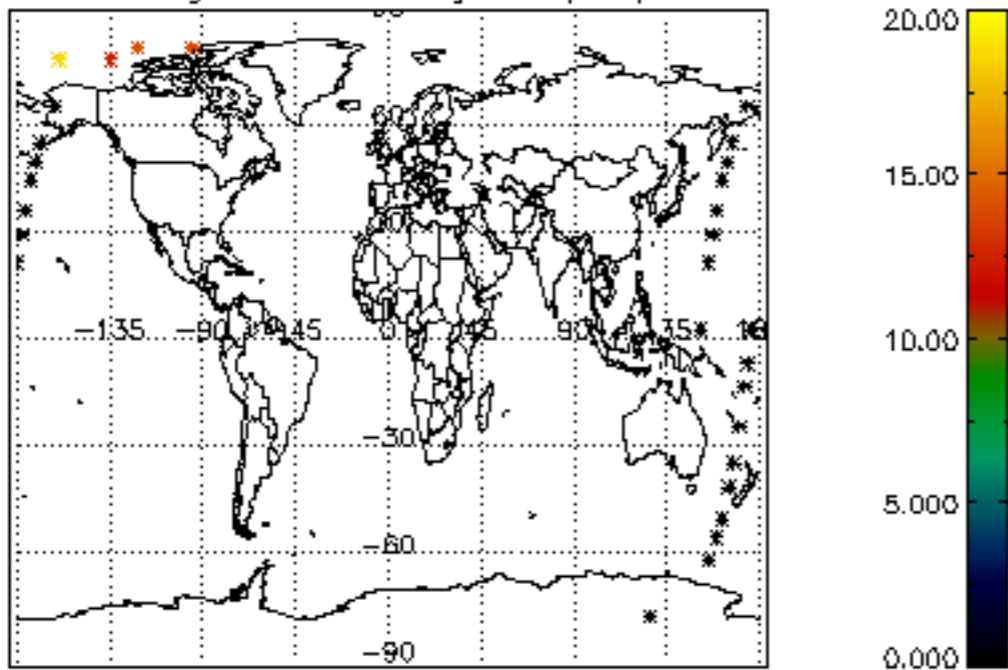
Percentage of star falling outside central band per profile



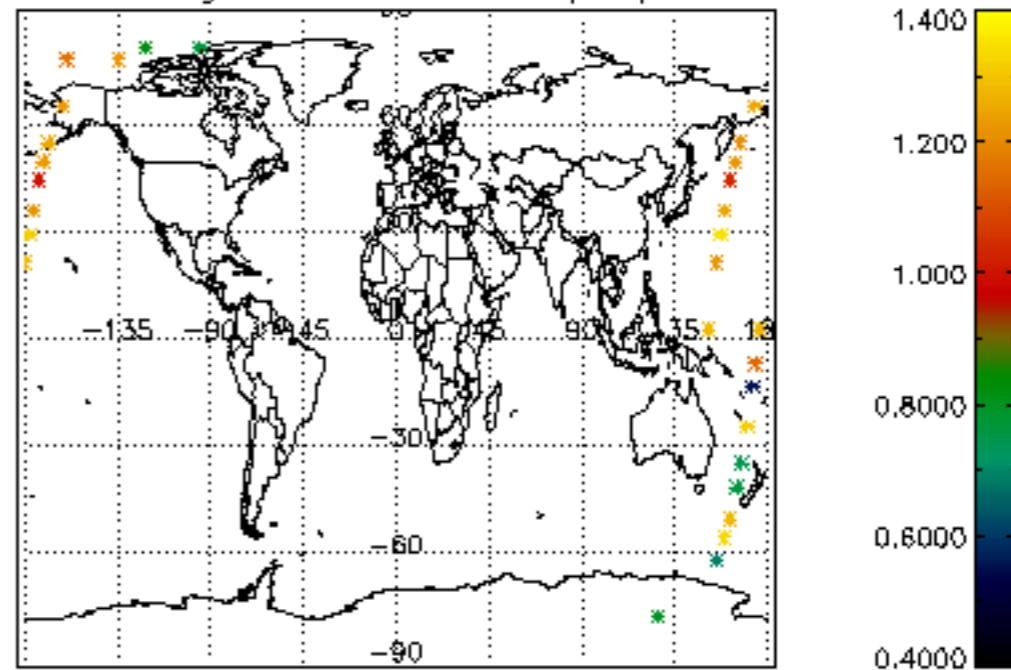
Percentage of saturation errors per profile



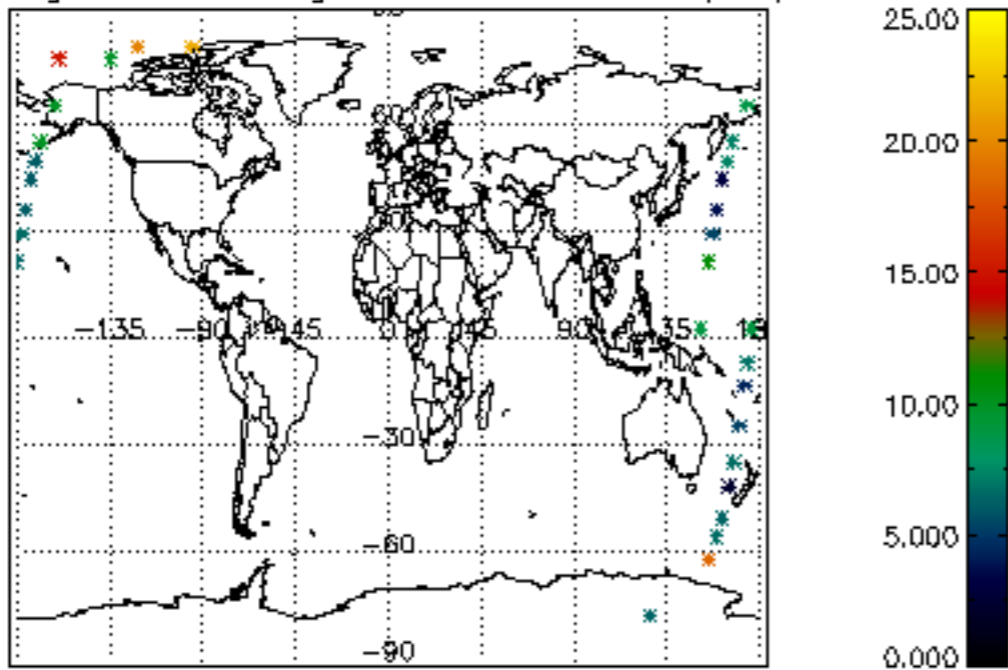
Percentage of cosmic ray hits per profile



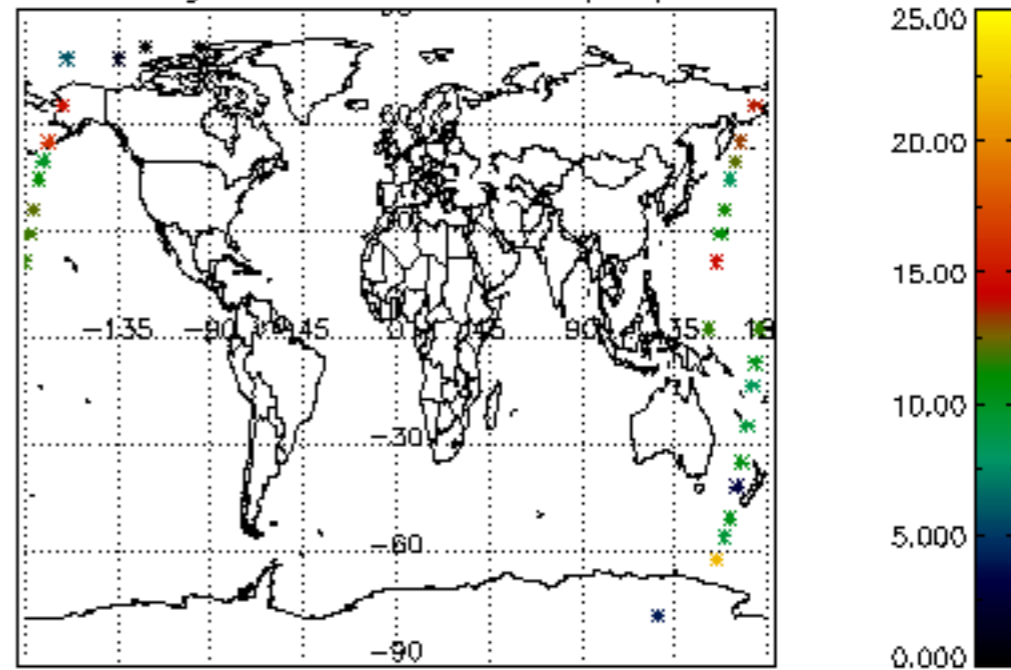
Percentage of datation errors per profile

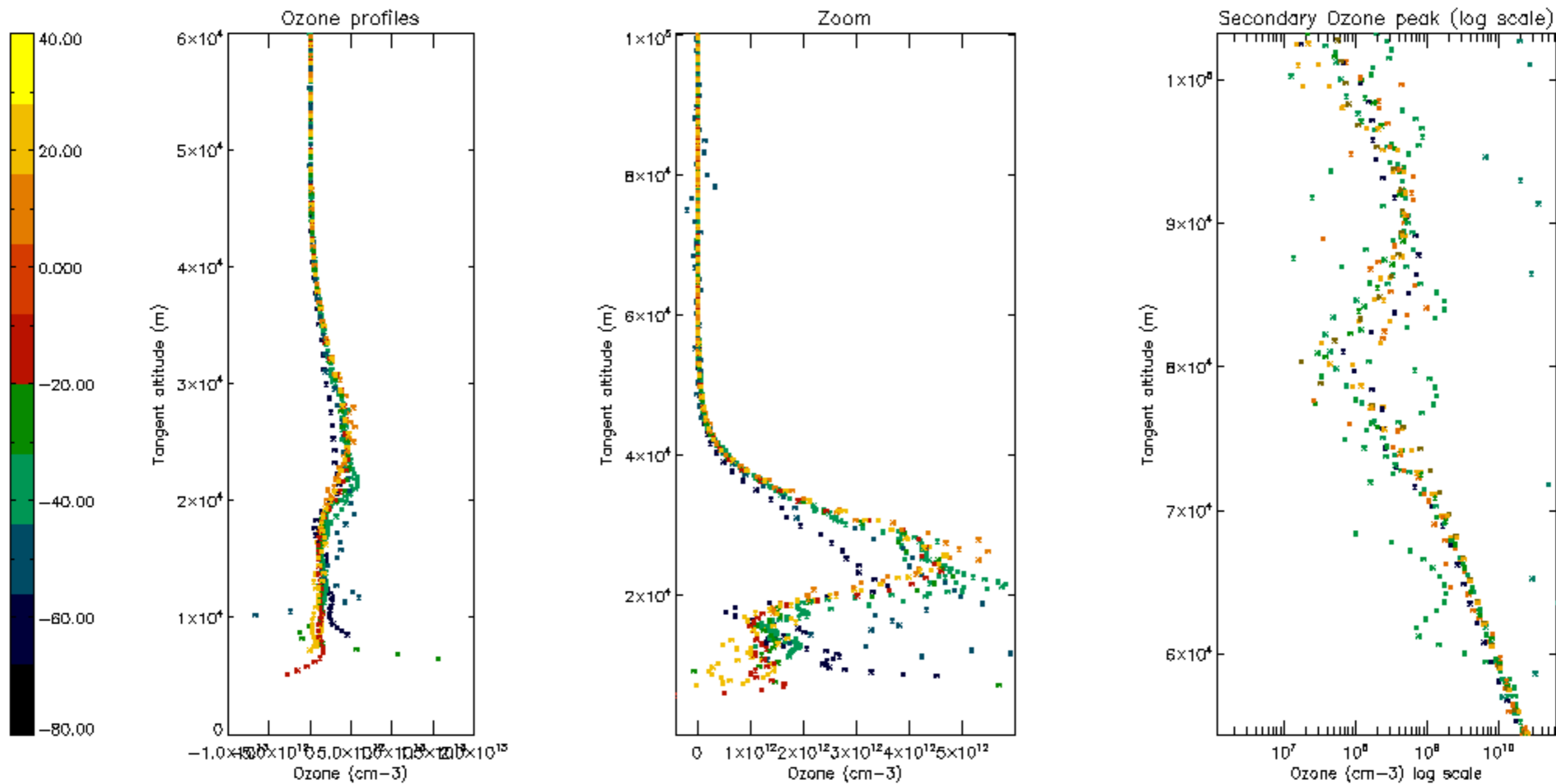


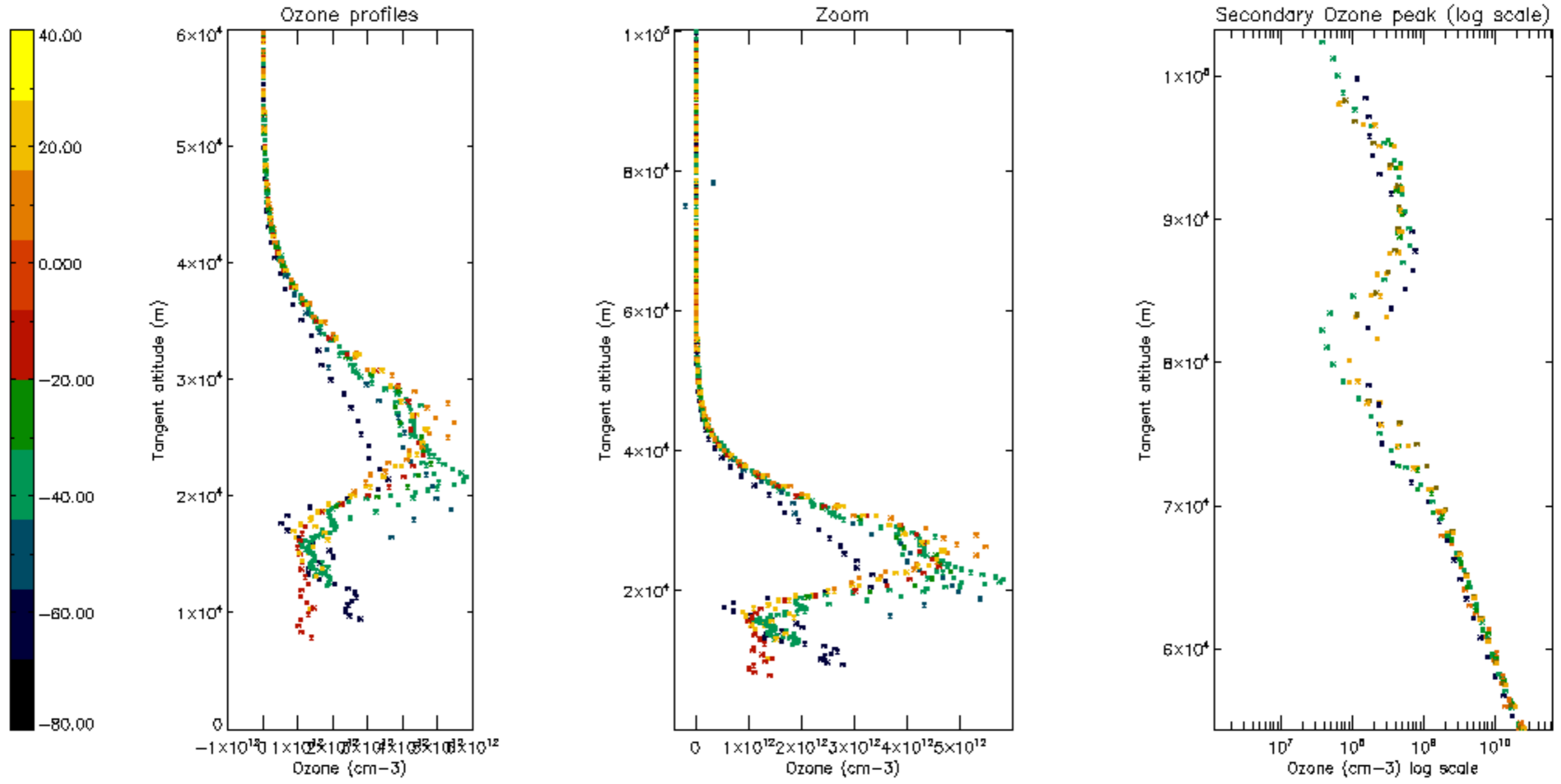
Percentage of star falling outside central band per profile

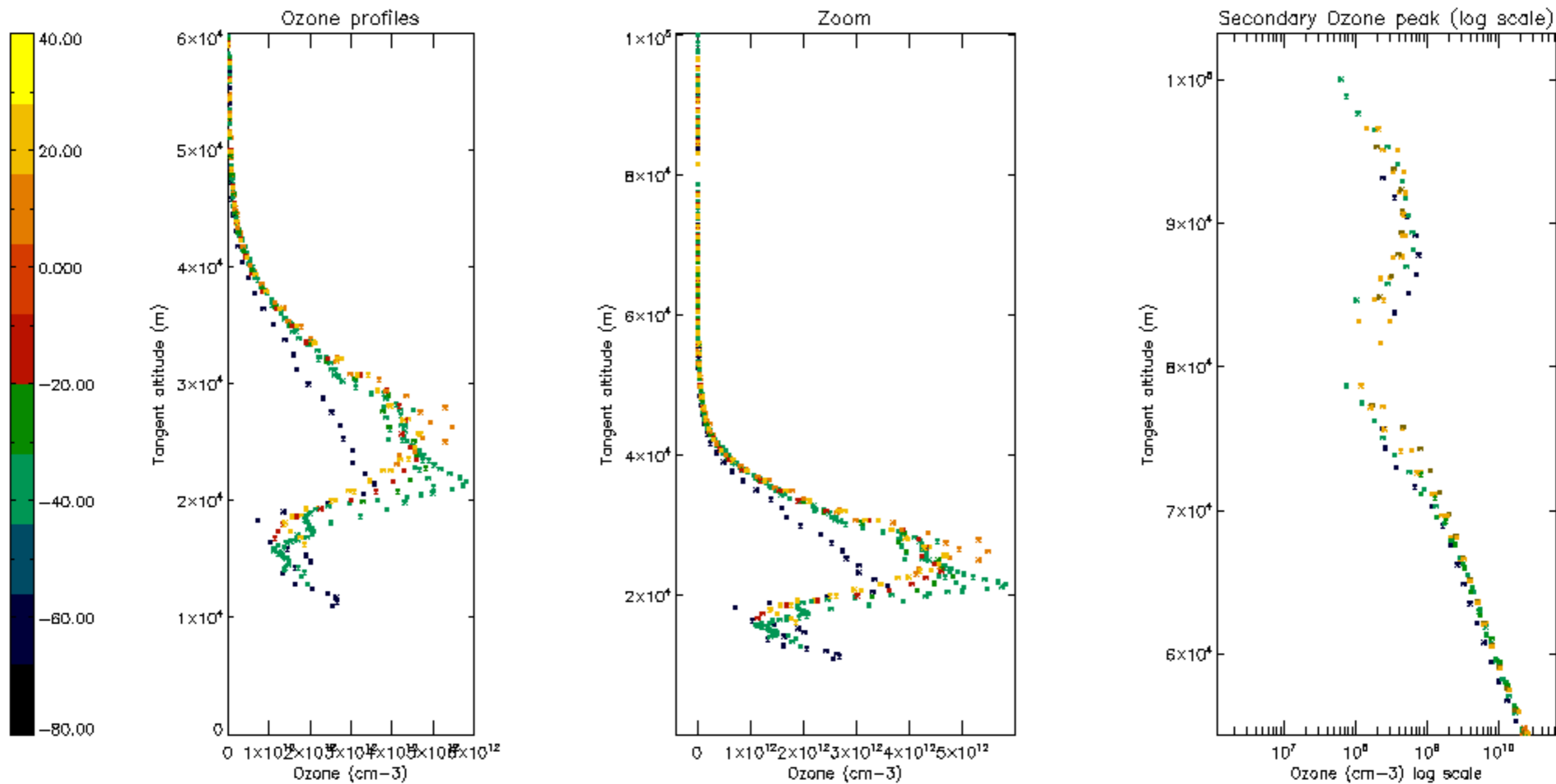


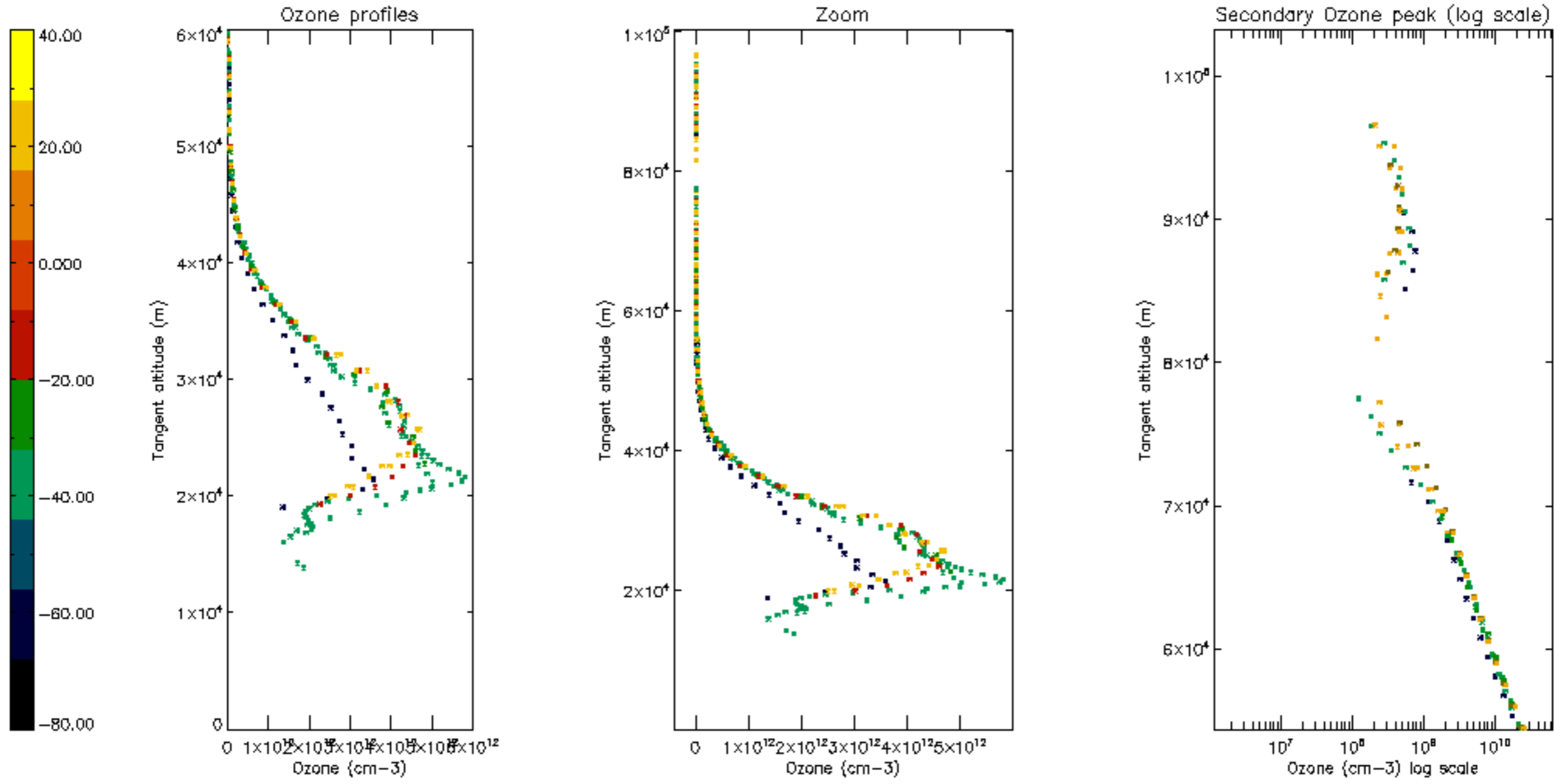
Percentage of saturation errors per profile

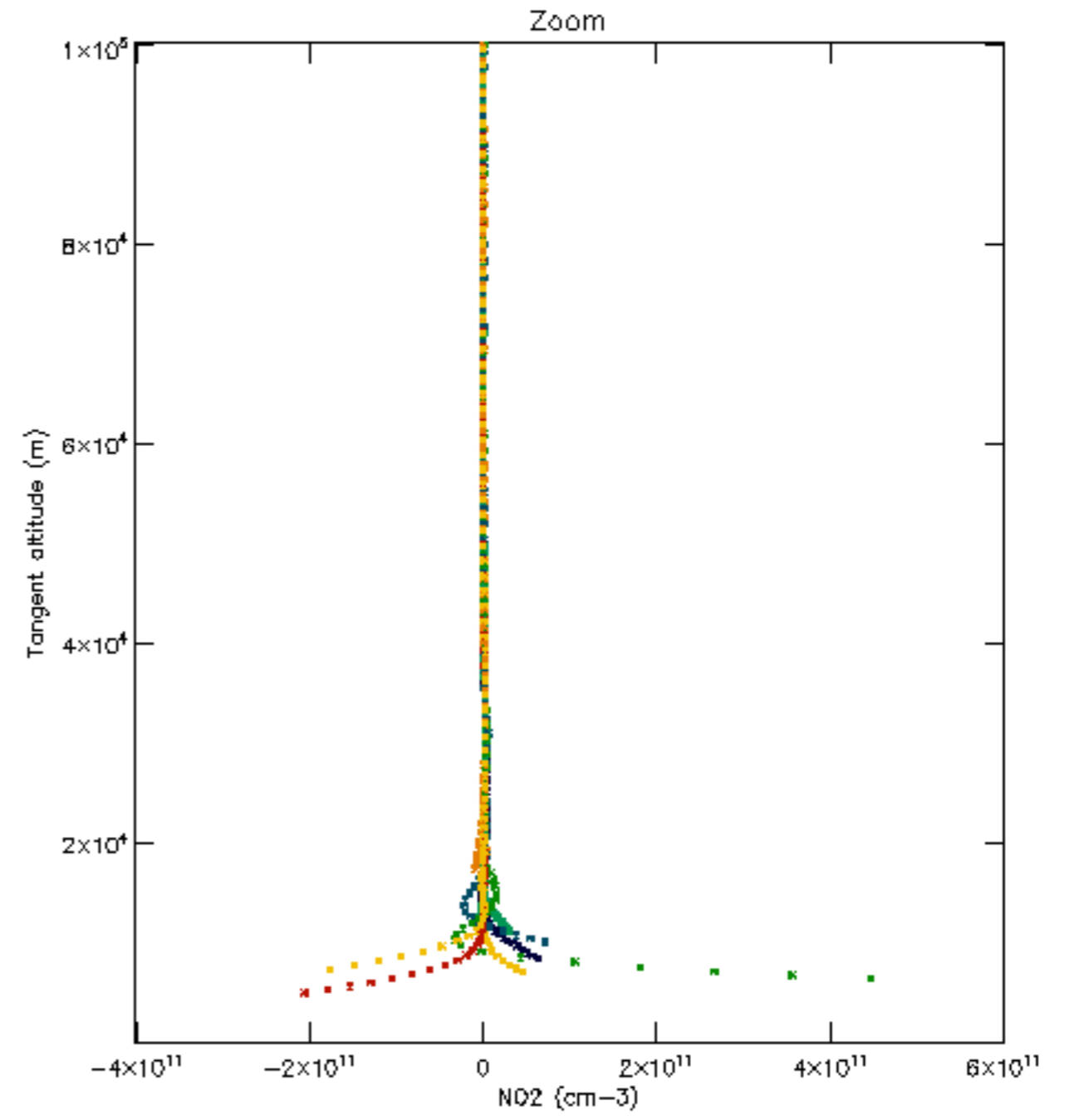
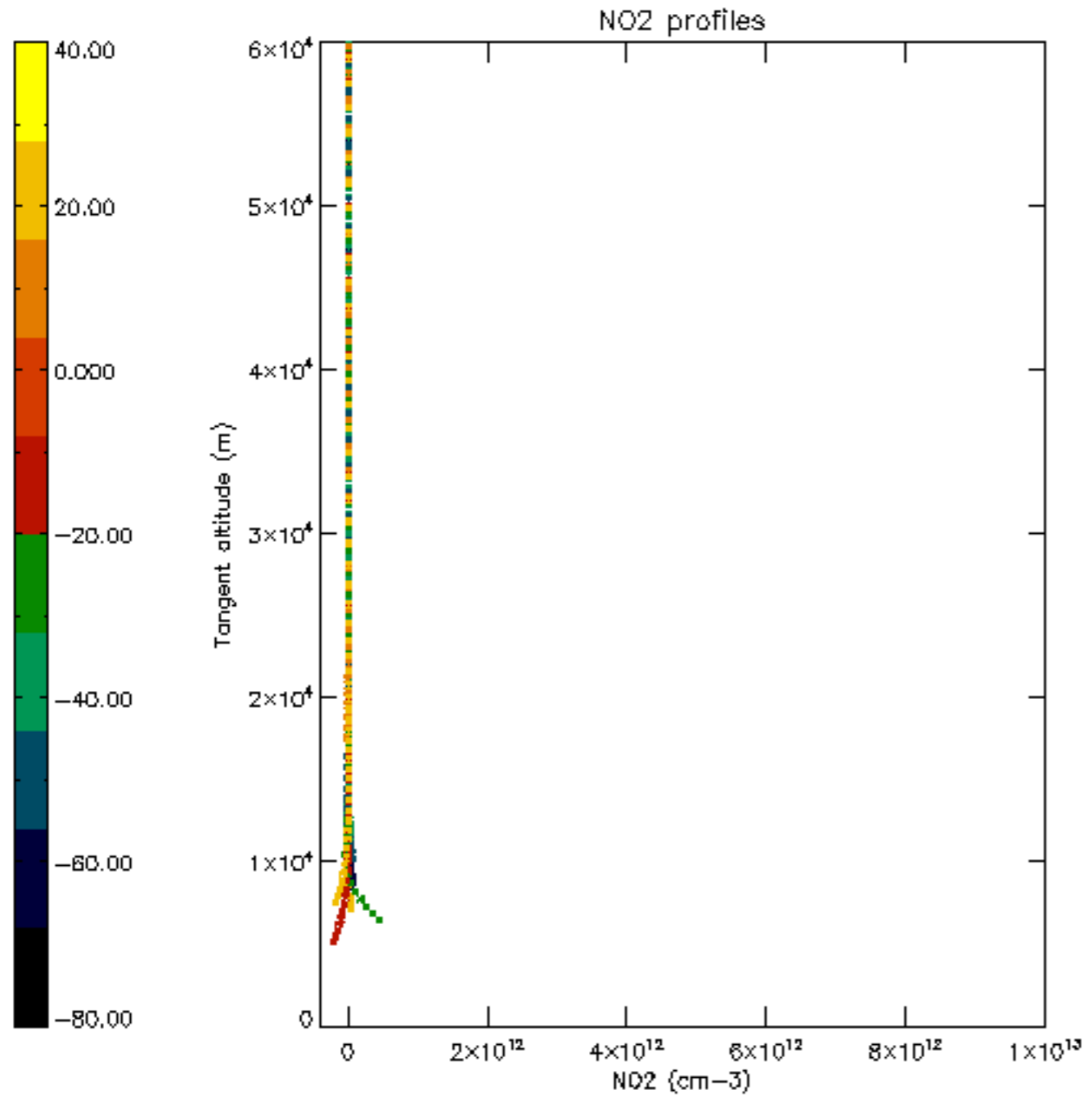


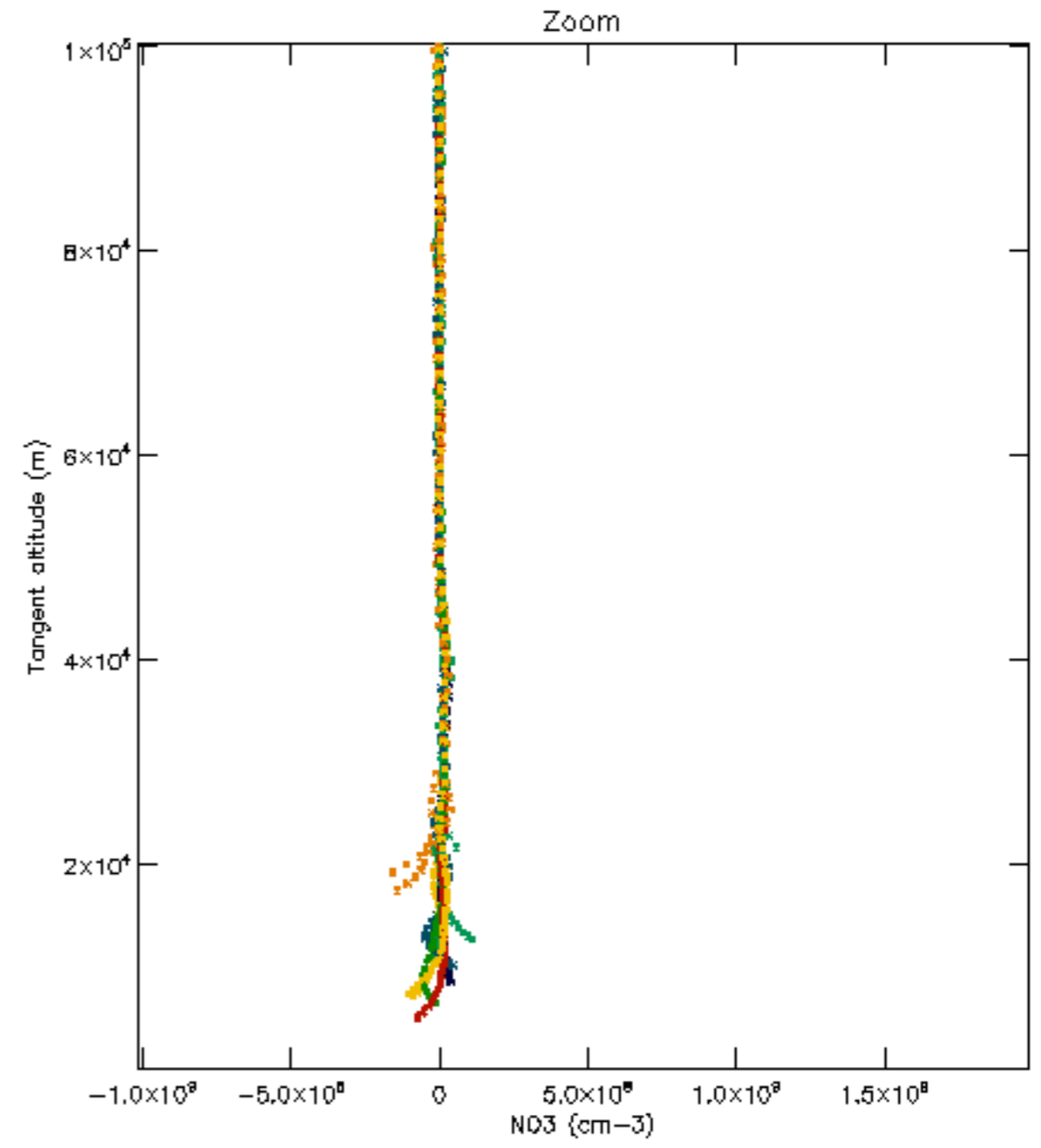
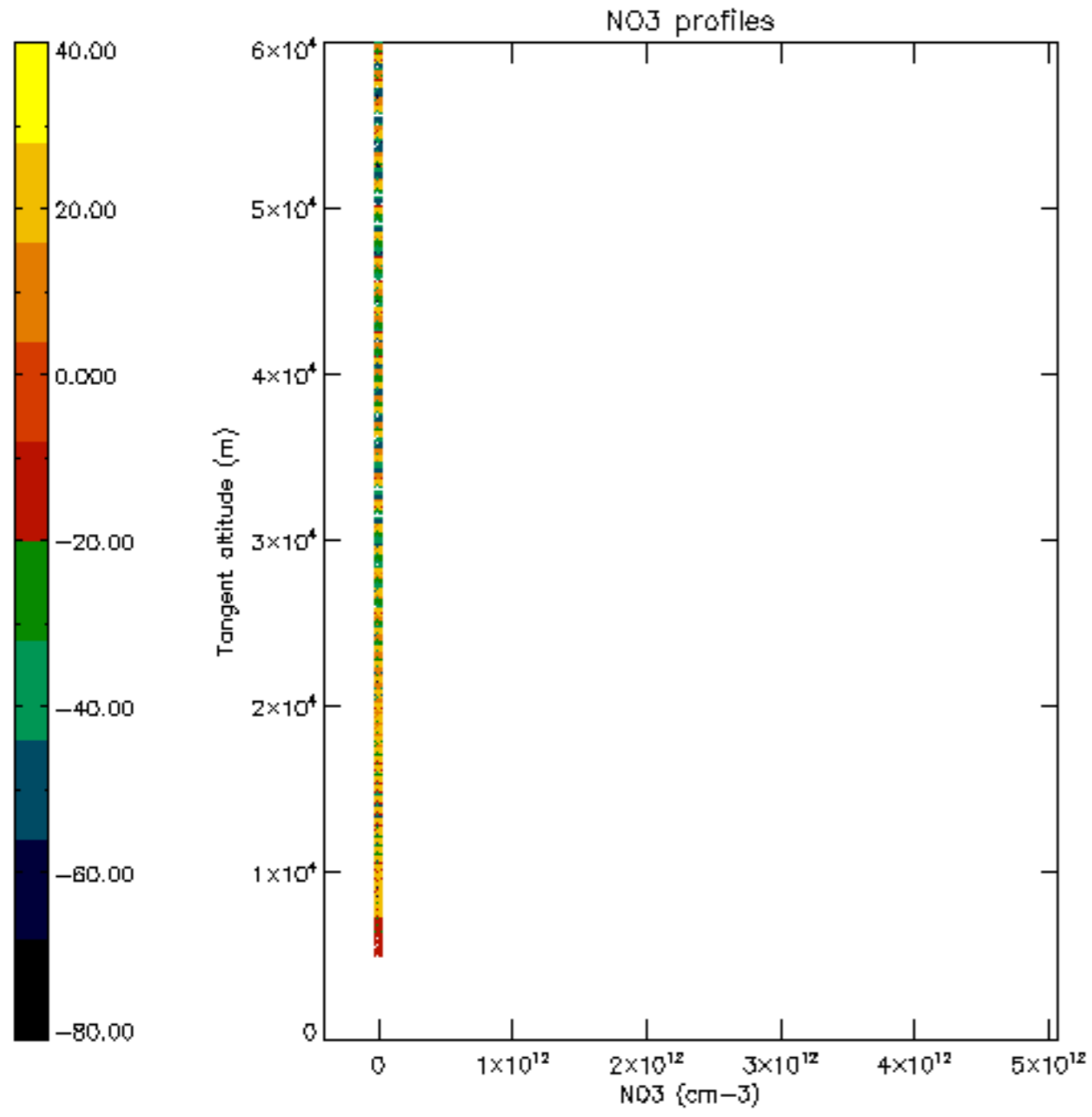


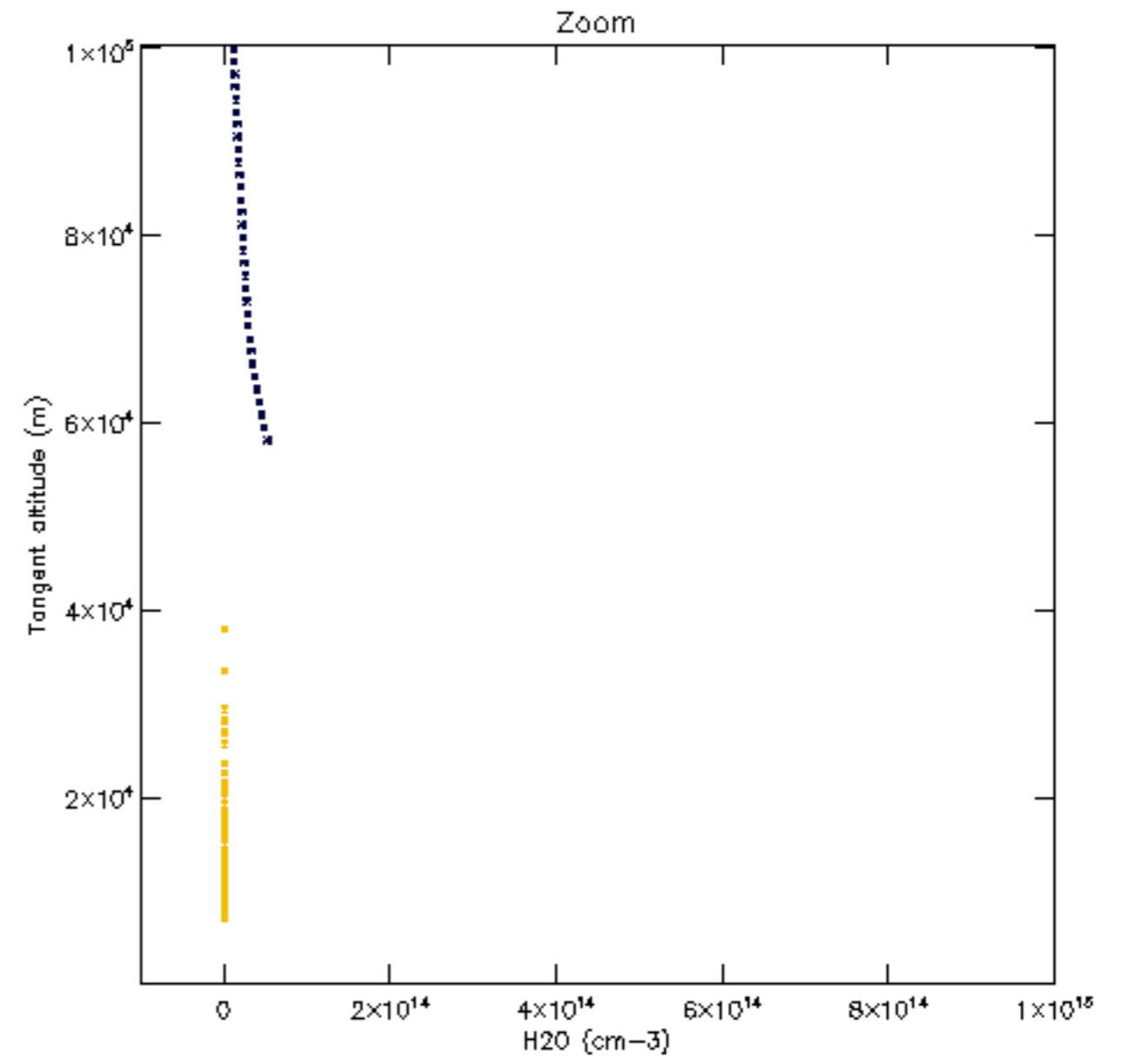
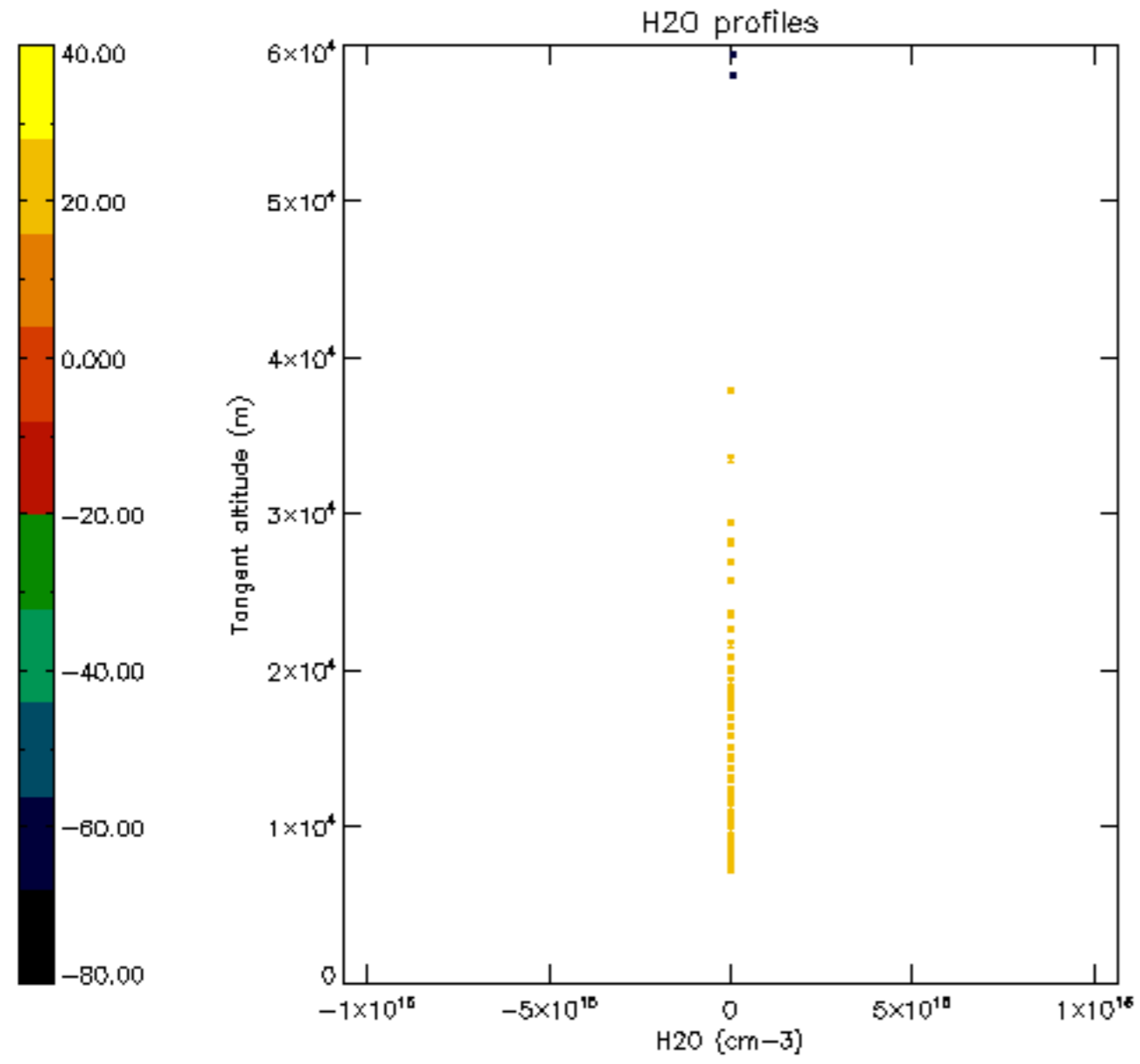


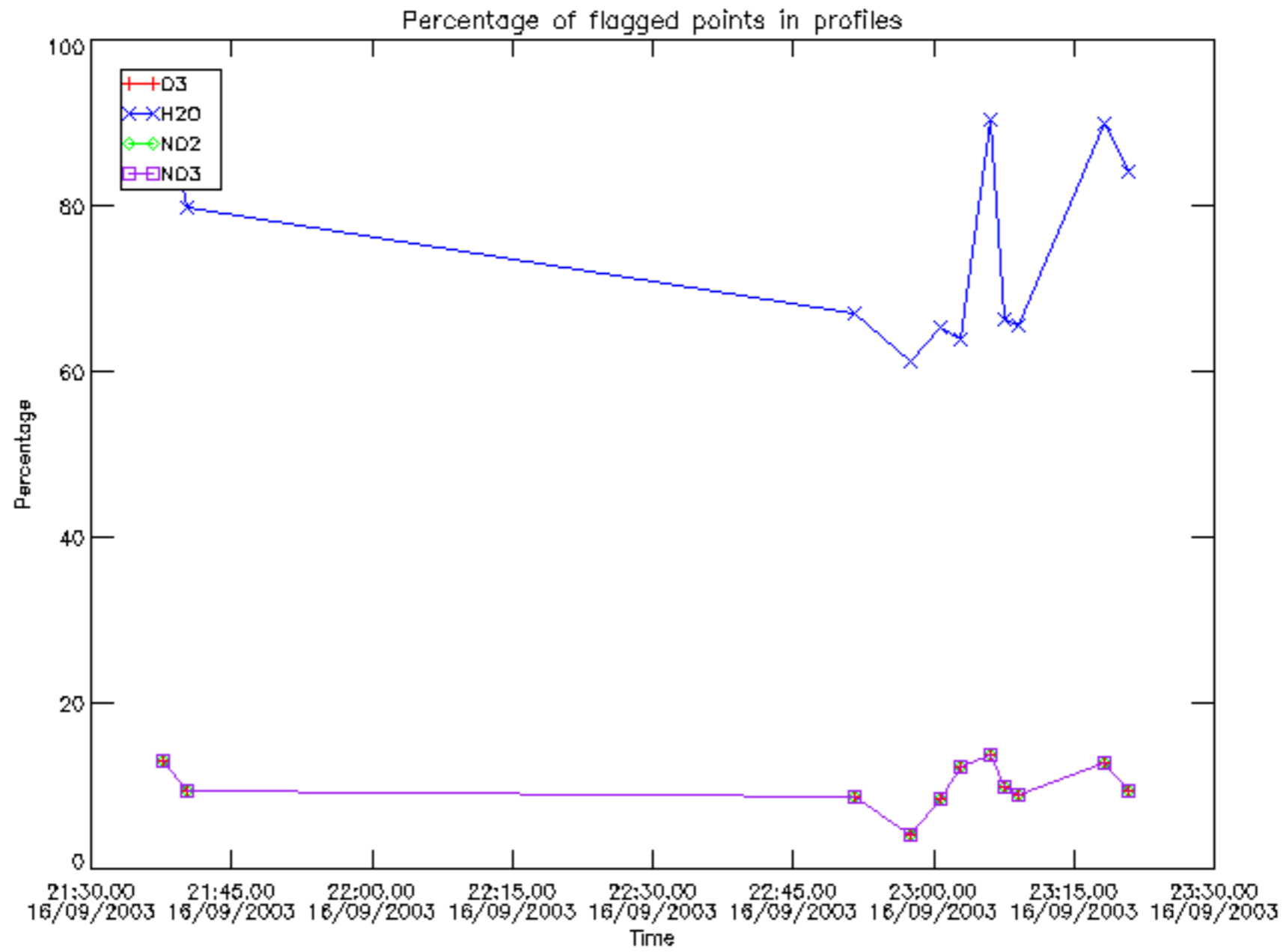




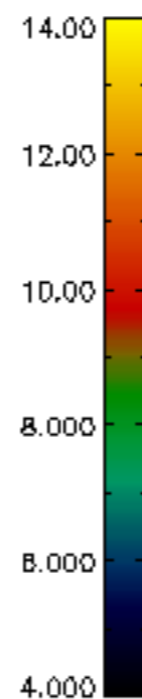
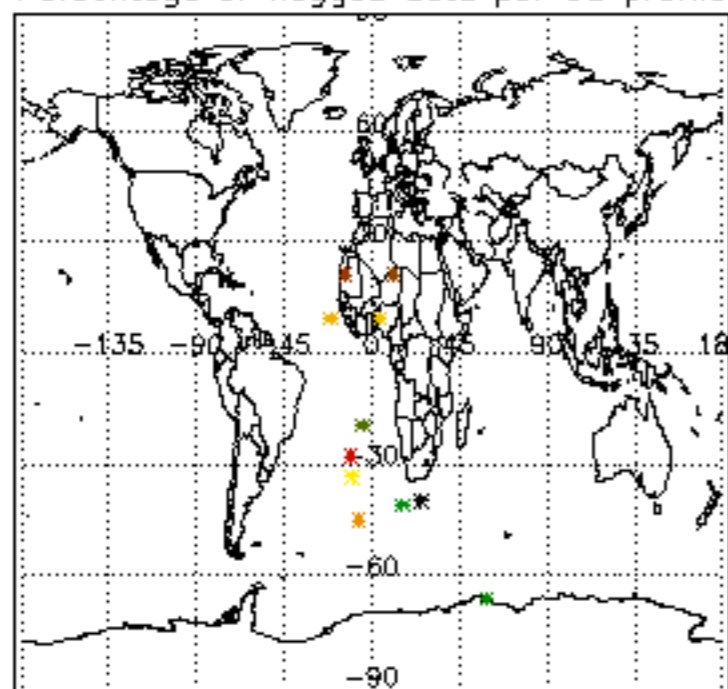




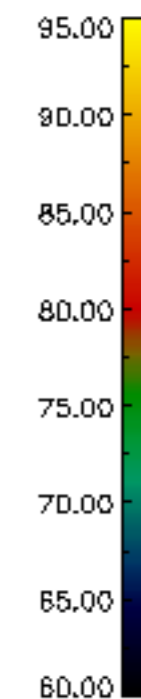
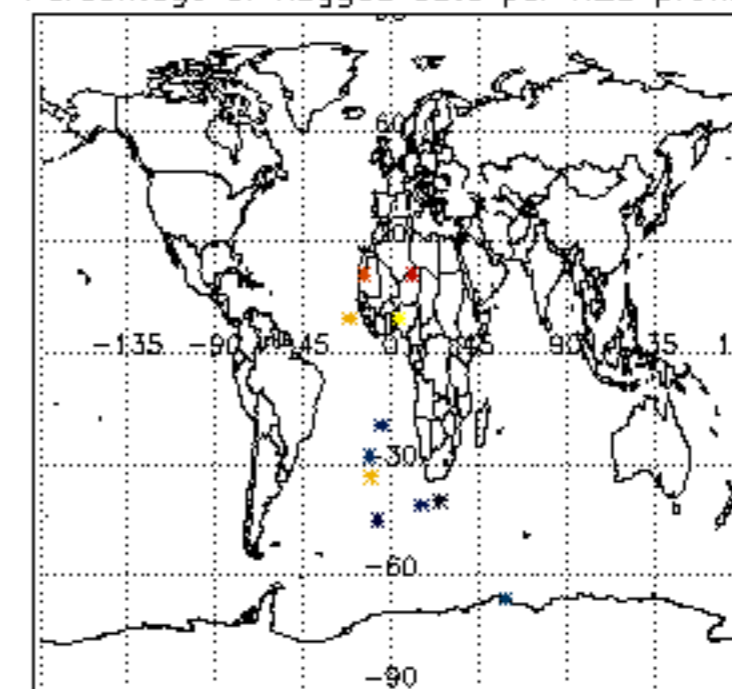




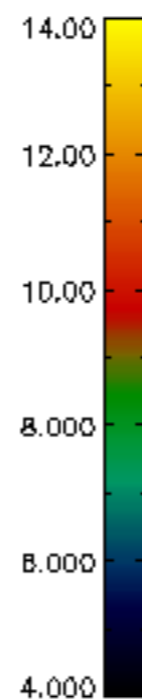
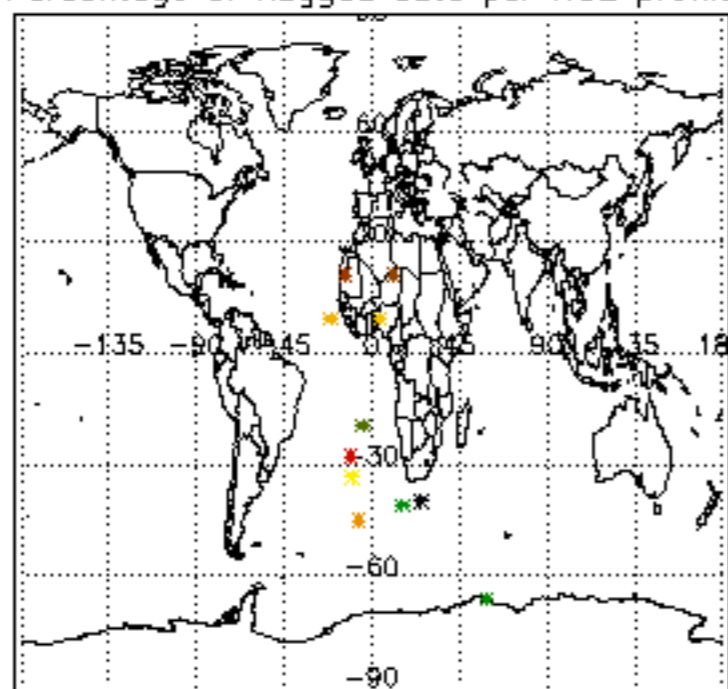
Percentage of flagged data per D3 profile



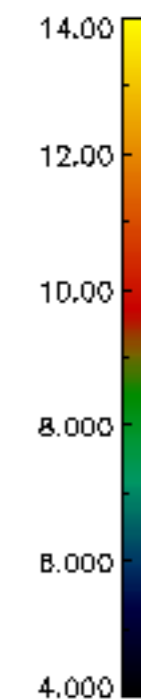
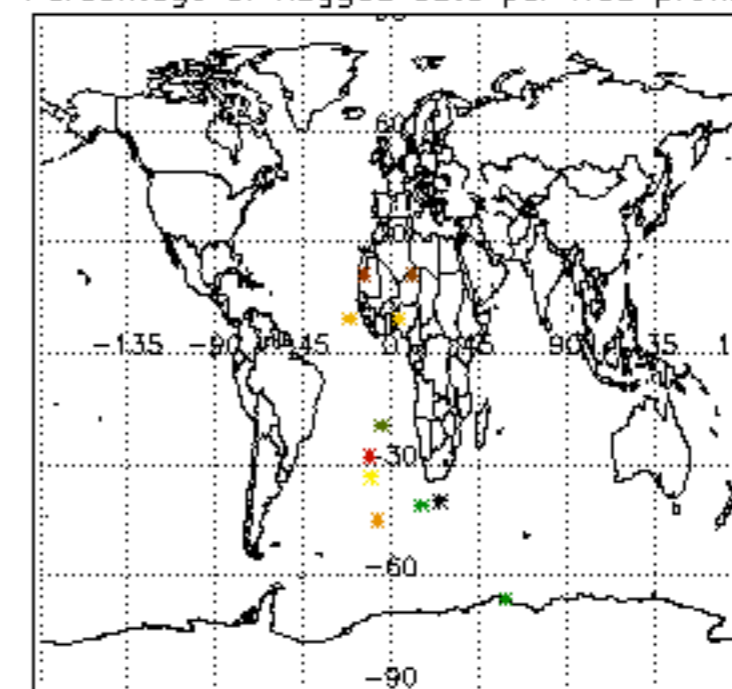
Percentage of flagged data per H2O profile

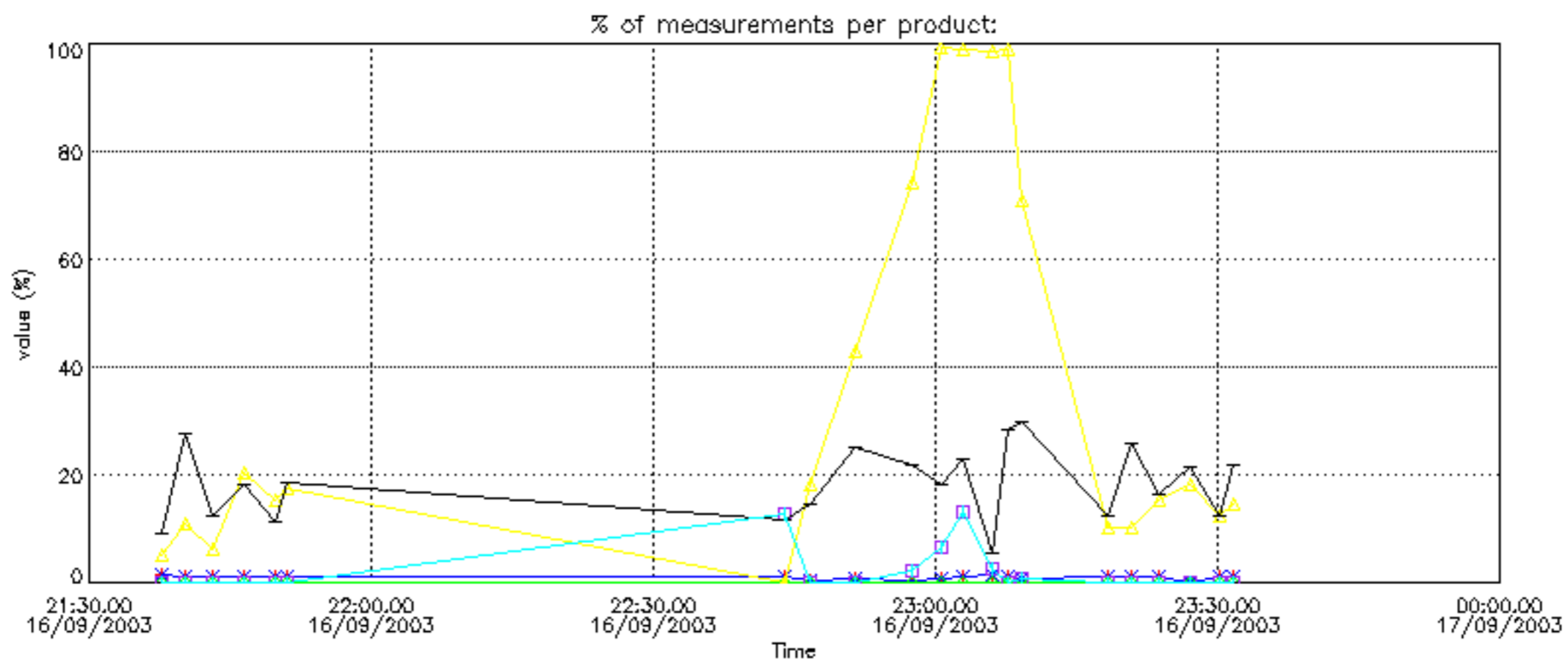


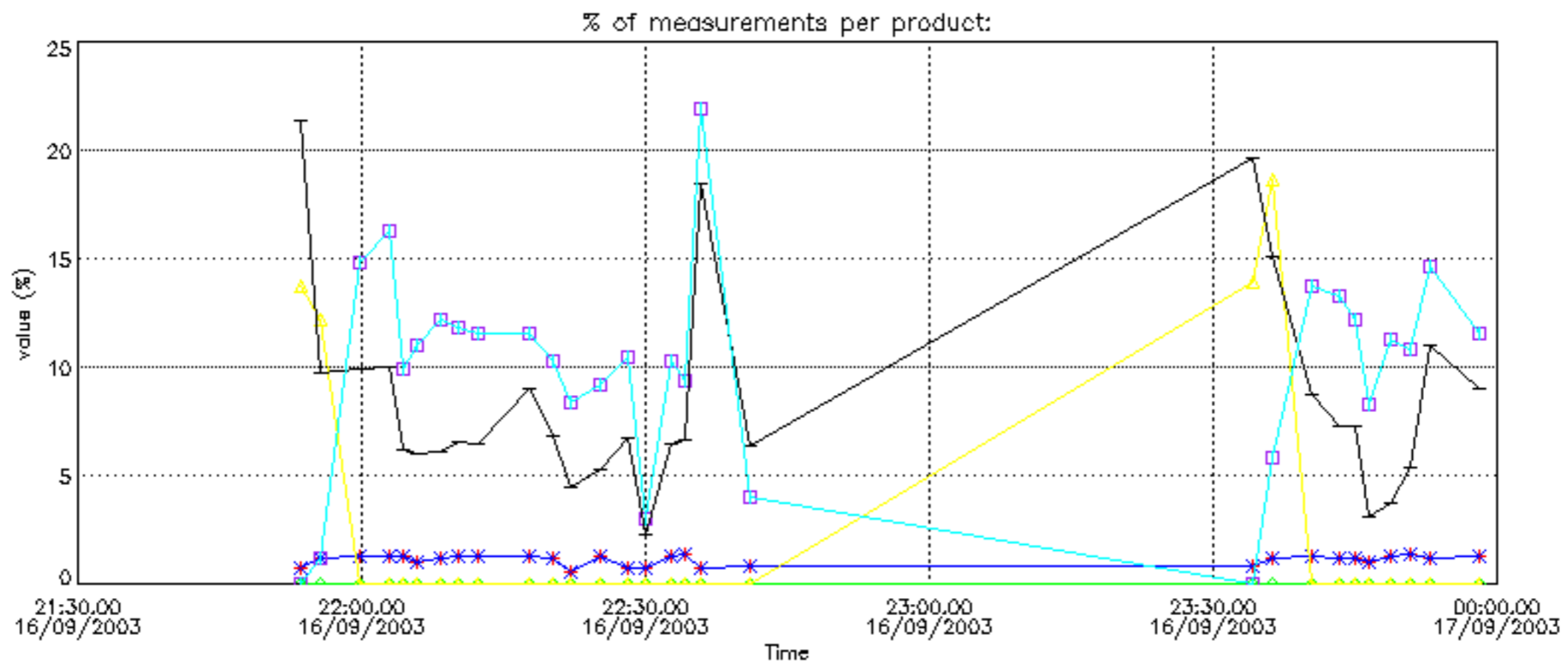
Percentage of flagged data per NO2 profile



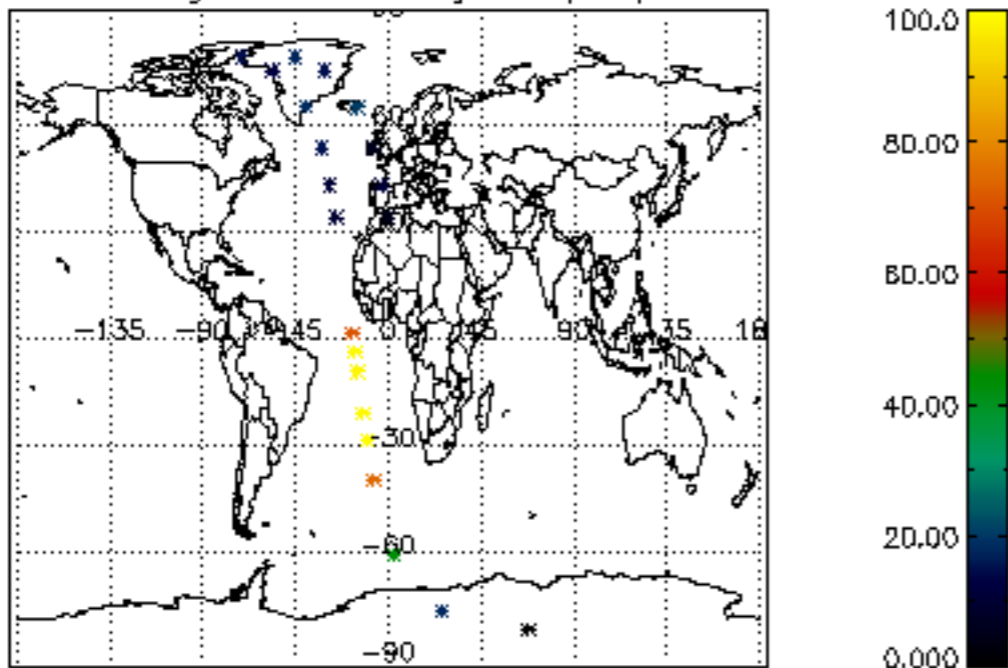
Percentage of flagged data per NO3 profile



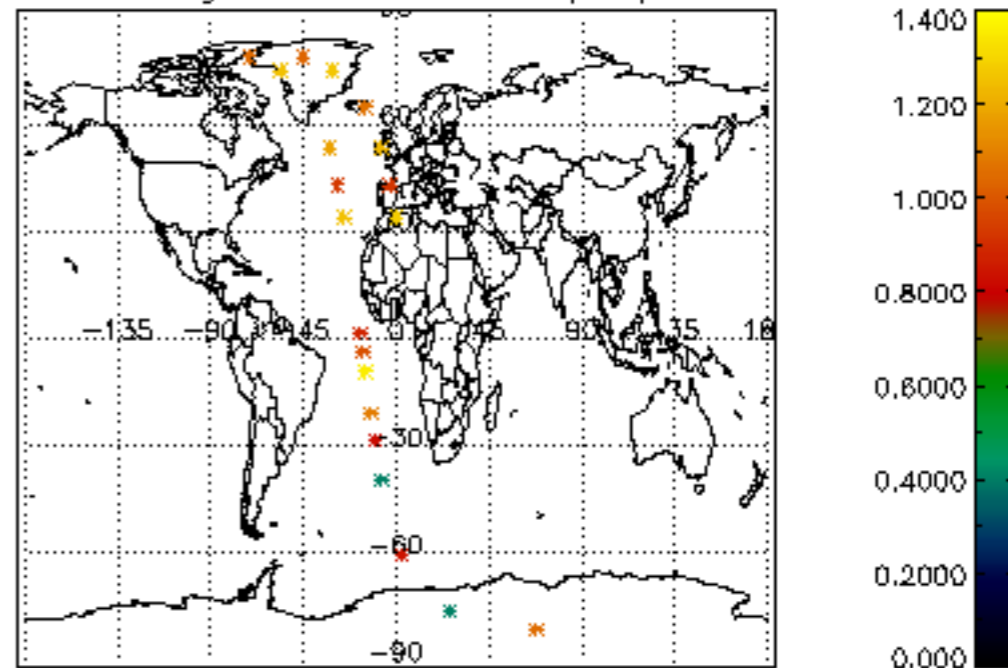




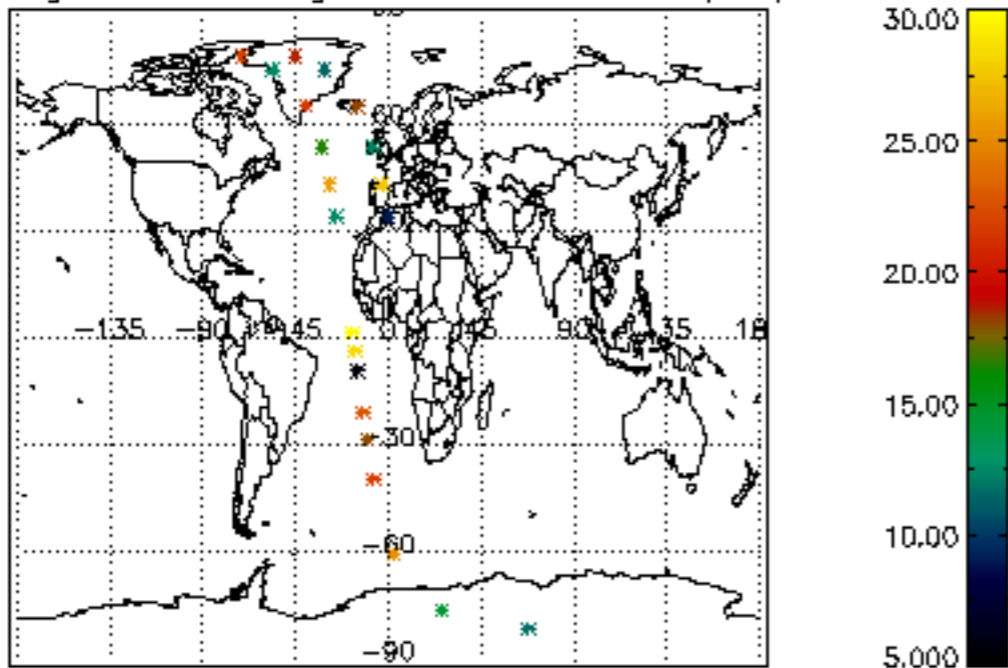
Percentage of cosmic ray hits per profile



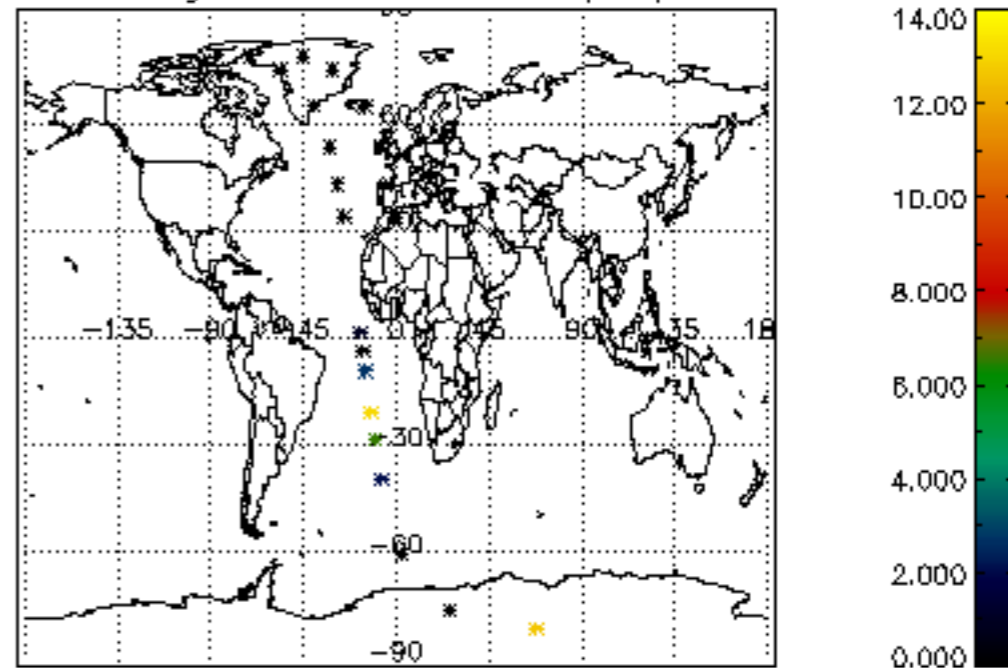
Percentage of datation errors per profile



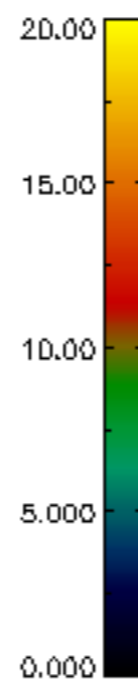
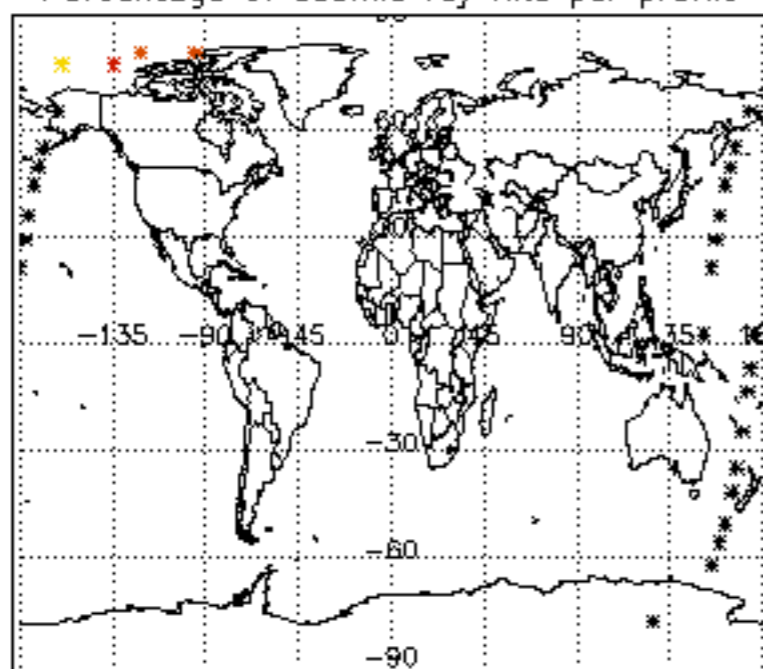
Percentage of star falling outside central band per profile



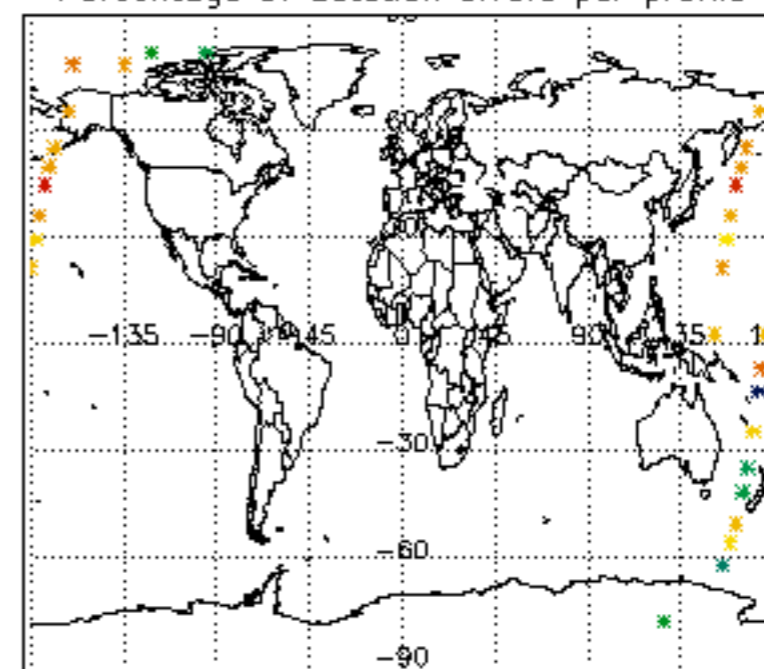
Percentage of saturation errors per profile



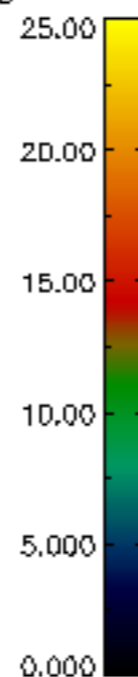
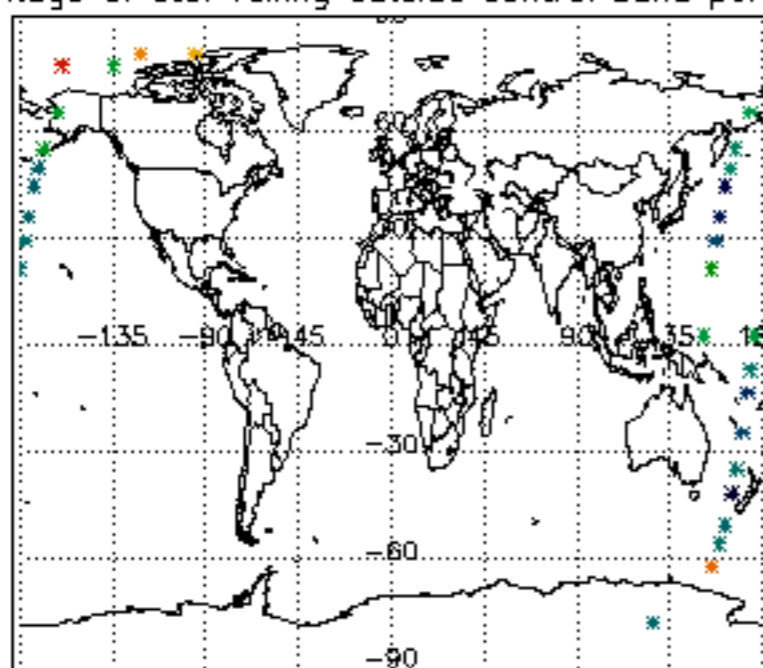
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

