

GOMOS Level 2 Daily Report

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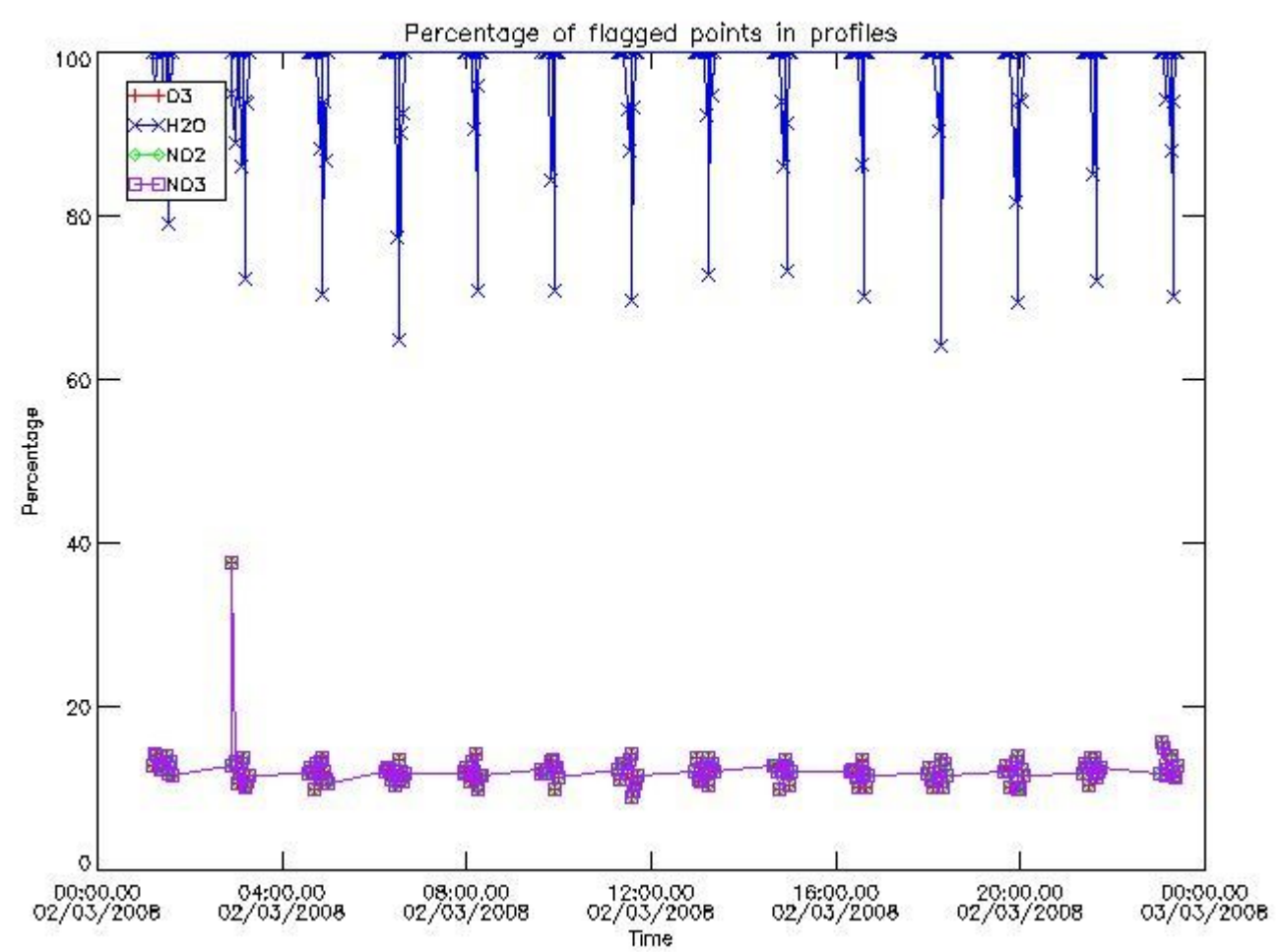
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| | | | | | | | | | | | |
|-----|--|----------------------|--------------------|--------|-----|-----------|-----------|--------|----|-------|----|
| 279 | GOM_NL__2PRFIN20080302_213655_000000372066_00287_31403_9743.N1 | 02-MAR-2008 21:36:55 | Dark | 37.000 | 145 | Gam TrA | 2.8720 | 10600. | 74 | 31403 | No |
| 280 | GOM_NL__2PRFIN20080302_213818_000000442066_00287_31403_9744.N1 | 02-MAR-2008 21:38:18 | Dark | 43.500 | 4 | Alp1Cen | -0.010000 | 5800.0 | 87 | 31403 | No |
| 281 | GOM_NL__2PRFIN20080302_213937_000000452066_00287_31403_9745.N1 | 02-MAR-2008 21:39:37 | Dark | 45.000 | 10 | Bet Cen | 0.61000 | 28000. | 90 | 31403 | No |
| 282 | GOM_NL__2PRFIN20080302_214206_000000422066_00287_31403_9746.N1 | 02-MAR-2008 21:42:06 | Dark | 42.000 | 12 | Alp1Cru | 0.77500 | 30000. | 84 | 31403 | No |
| 283 | GOM_NL__2PRFIN20080302_214438_000000412066_00287_31403_9747.N1 | 02-MAR-2008 21:44:38 | Dark | 41.000 | 64 | Gam Cen | 2.2000 | 10600. | 82 | 31403 | No |
| 284 | GOM_NL__2PRFIN20080302_214735_000000412066_00287_31403_9748.N1 | 02-MAR-2008 21:47:35 | Straylight | 41.000 | 113 | Mu Vel | 2.6920 | 5000.0 | 82 | 31403 | No |
| 285 | GOM_NL__2PRFIN20080302_220003_000000462066_00287_31403_9749.N1 | 02-MAR-2008 22:00:03 | Twilight_and_stray | 46.000 | 48 | 30Alp Hya | 1.9770 | 4100.0 | 92 | 31403 | No |
| 286 | GOM_NL__2PRFIN20080302_220605_000000402066_00287_31403_9750.N1 | 02-MAR-2008 22:06:05 | Bright | 40.000 | 22 | 32Alp Leo | 1.3600 | 15200. | 80 | 31403 | No |
| 287 | GOM_NL__2PRFIN20080302_220839_000000422066_00287_31403_9751.N1 | 02-MAR-2008 22:08:39 | Bright | 42.000 | 51 | 41Gam1Leo | 2.0100 | 4500.0 | 84 | 31403 | No |
| 288 | GOM_NL__2PRFIN20080302_222014_000000422066_00287_31403_9752.N1 | 02-MAR-2008 22:20:14 | Bright | 41.500 | 82 | 48Bet UMa | 2.3650 | 10600. | 83 | 31403 | No |
| 289 | GOM_NL__2PRFIN20080302_222136_000000412066_00287_31403_9753.N1 | 02-MAR-2008 22:21:36 | Bright | 41.000 | 36 | 50Alp UMa | 1.8000 | 6300.0 | 82 | 31403 | No |
| 290 | GOM_NL__2PRFIN20080302_222800_000000362066_00287_31403_9754.N1 | 02-MAR-2008 22:28:00 | Bright | 35.500 | 49 | 1Alp UMi | 1.9900 | 6300.0 | 71 | 31403 | No |
| 291 | GOM_NL__2PRFIN20080302_223533_000000362066_00287_31403_9755.N1 | 02-MAR-2008 22:35:33 | Bright | 35.500 | 89 | 5Alp Cep | 2.4510 | 8000.0 | 71 | 31403 | No |
| 292 | GOM_NL__2PRFIN20080302_224039_000000362066_00287_31403_9756.N1 | 02-MAR-2008 22:40:39 | Bright | 36.000 | 19 | 50Alp Cyg | 1.2460 | 10500. | 72 | 31403 | No |
| 293 | GOM_NL__2PRFIN20080302_224213_000000362066_00287_31403_9757.N1 | 02-MAR-2008 22:42:13 | Bright | 35.500 | 66 | 37Gam Cyg | 2.2080 | 5900.0 | 71 | 31403 | No |
| 294 | GOM_NL__2PRFIN20080302_225054_000000402066_00287_31403_9758.N1 | 02-MAR-2008 22:50:54 | Bright | 40.000 | 168 | 17Zet Aql | 2.9860 | 11000. | 80 | 31403 | No |
| 295 | GOM_NL__2PRFIN20080302_230047_000000442066_00287_31403_9759.N1 | 02-MAR-2008 23:00:47 | Dark | 43.500 | 155 | 41Pi Sgr | 2.9000 | 6600.0 | 87 | 31403 | No |
| 296 | GOM_NL__2PRFIN20080302_230319_000000422066_00287_31403_9760.N1 | 02-MAR-2008 23:03:19 | Dark | 42.000 | 103 | 38Zet Sgr | 2.6000 | 9700.0 | 84 | 31403 | No |
| 297 | GOM_NL__2PRFIN20080302_230547_000000452066_00287_31403_9761.N1 | 02-MAR-2008 23:05:47 | Dark | 44.500 | 38 | 20Eps Sgr | 1.8360 | 11000. | 89 | 31403 | No |
| 298 | GOM_NL__2PRFIN20080302_230845_000000442066_00287_31403_9762.N1 | 02-MAR-2008 23:08:45 | Dark | 44.000 | 25 | 35Lam Sco | 1.6200 | 28000. | 88 | 31403 | No |
| 299 | GOM_NL__2PRFIN20080302_231219_000000422066_00288_31404_9741.N1 | 02-MAR-2008 23:12:19 | Dark | 41.500 | 141 | Bet Ara | 2.8400 | 4600.0 | 83 | 31404 | No |
| 300 | GOM_NL__2PRFIN20080302_231520_000000382066_00288_31404_9742.N1 | 02-MAR-2008 23:15:20 | Dark | 38.000 | 43 | Alp TrA | 1.9100 | 4250.0 | 76 | 31404 | No |
| 301 | GOM_NL__2PRFIN20080302_231731_000000372066_00288_31404_9743.N1 | 02-MAR-2008 23:17:31 | Dark | 36.500 | 145 | Gam TrA | 2.8720 | 10600. | 73 | 31404 | No |
| 302 | GOM_NL__2PRFIN20080302_231854_000000442066_00288_31404_9744.N1 | 02-MAR-2008 23:18:54 | Dark | 44.000 | 4 | Alp1Cen | -0.010000 | 5800.0 | 88 | 31404 | No |
| 303 | GOM_NL__2PRFIN20080302_232013_000000432066_00288_31404_9745.N1 | 02-MAR-2008 23:20:13 | Dark | 42.500 | 10 | Bet Cen | 0.61000 | 28000. | 85 | 31404 | No |
| 304 | GOM_NL__2PRFIN20080302_232242_000000452066_00288_31404_9746.N1 | 02-MAR-2008 23:22:42 | Dark | 45.000 | 12 | Alp1Cru | 0.77500 | 30000. | 90 | 31404 | No |
| 305 | GOM_NL__2PRFIN20080302_232515_000000442066_00288_31404_9747.N1 | 02-MAR-2008 23:25:15 | Dark | 44.000 | 64 | Gam Cen | 2.2000 | 10600. | 88 | 31404 | No |
| 306 | GOM_NL__2PRFIN20080302_232811_000000412066_00288_31404_9748.N1 | 02-MAR-2008 23:28:11 | Straylight | 40.500 | 113 | Mu Vel | 2.6920 | 5000.0 | 81 | 31404 | No |
| 307 | GOM_NL__2PRFIN20080302_234039_000000432066_00288_31404_9749.N1 | 02-MAR-2008 23:40:39 | Twilight_and_stray | 43.000 | 48 | 30Alp Hya | 1.9770 | 4100.0 | 86 | 31404 | No |
| 308 | GOM_NL__2PRFIN20080302_234641_000000422066_00288_31404_9750.N1 | 02-MAR-2008 23:46:41 | Bright | 41.500 | 22 | 32Alp Leo | 1.3600 | 15200. | 83 | 31404 | No |
| 309 | GOM_NL__2PRFIN20080302_234914_000000462066_00288_31404_9751.N1 | 02-MAR-2008 23:49:14 | Bright | 46.000 | 51 | 41Gam1Leo | 2.0100 | 4500.0 | 92 | 31404 | No |

3. Quality information per product

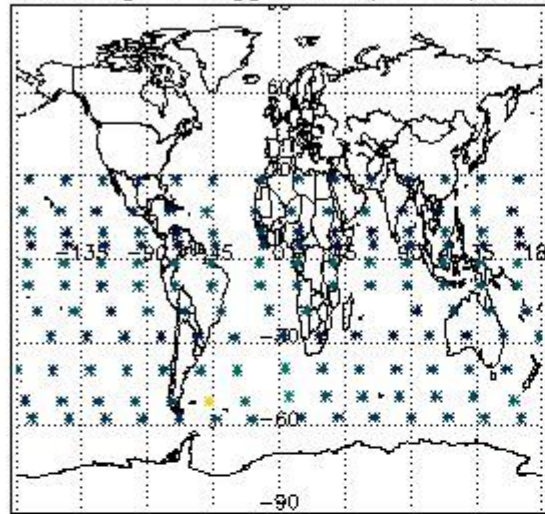
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

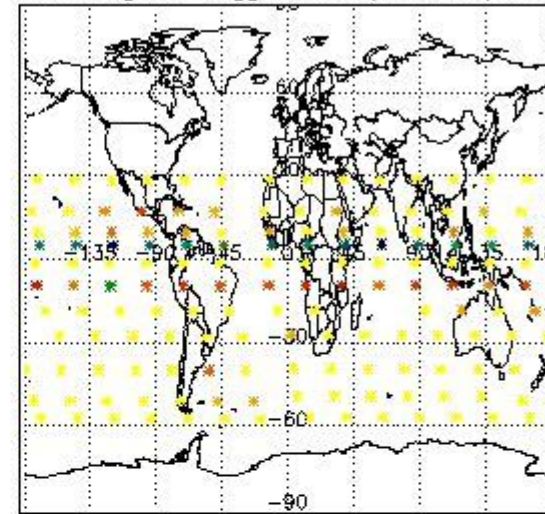


3.2 Plot quality information per product (world map)

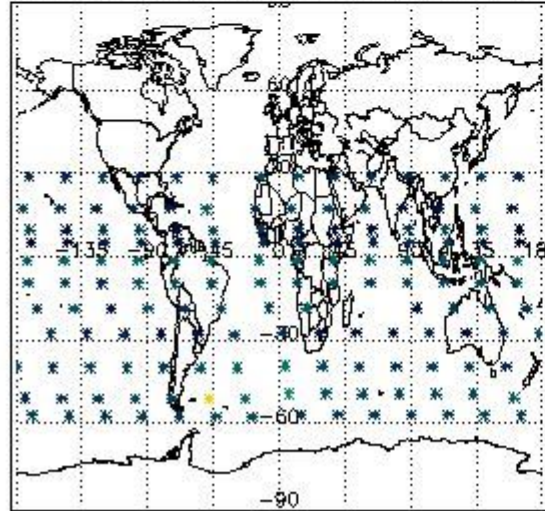
Percentage of flagged data per O3 profile



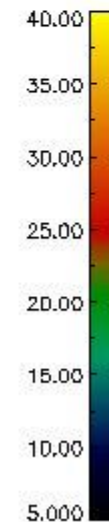
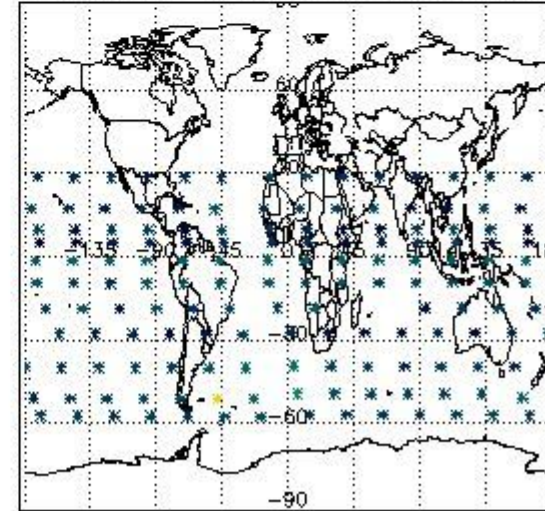
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

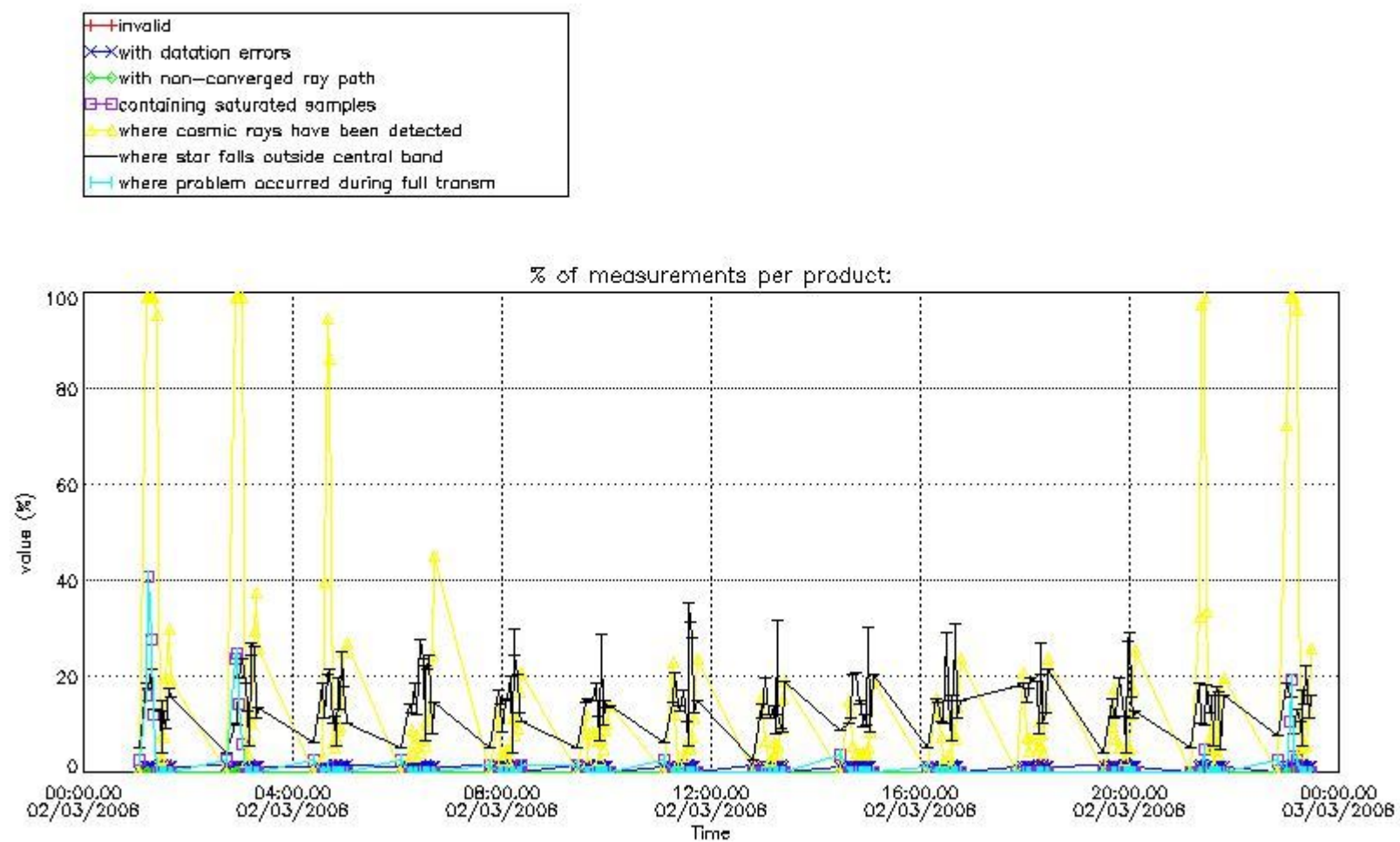


4. Level 1 quality information per product

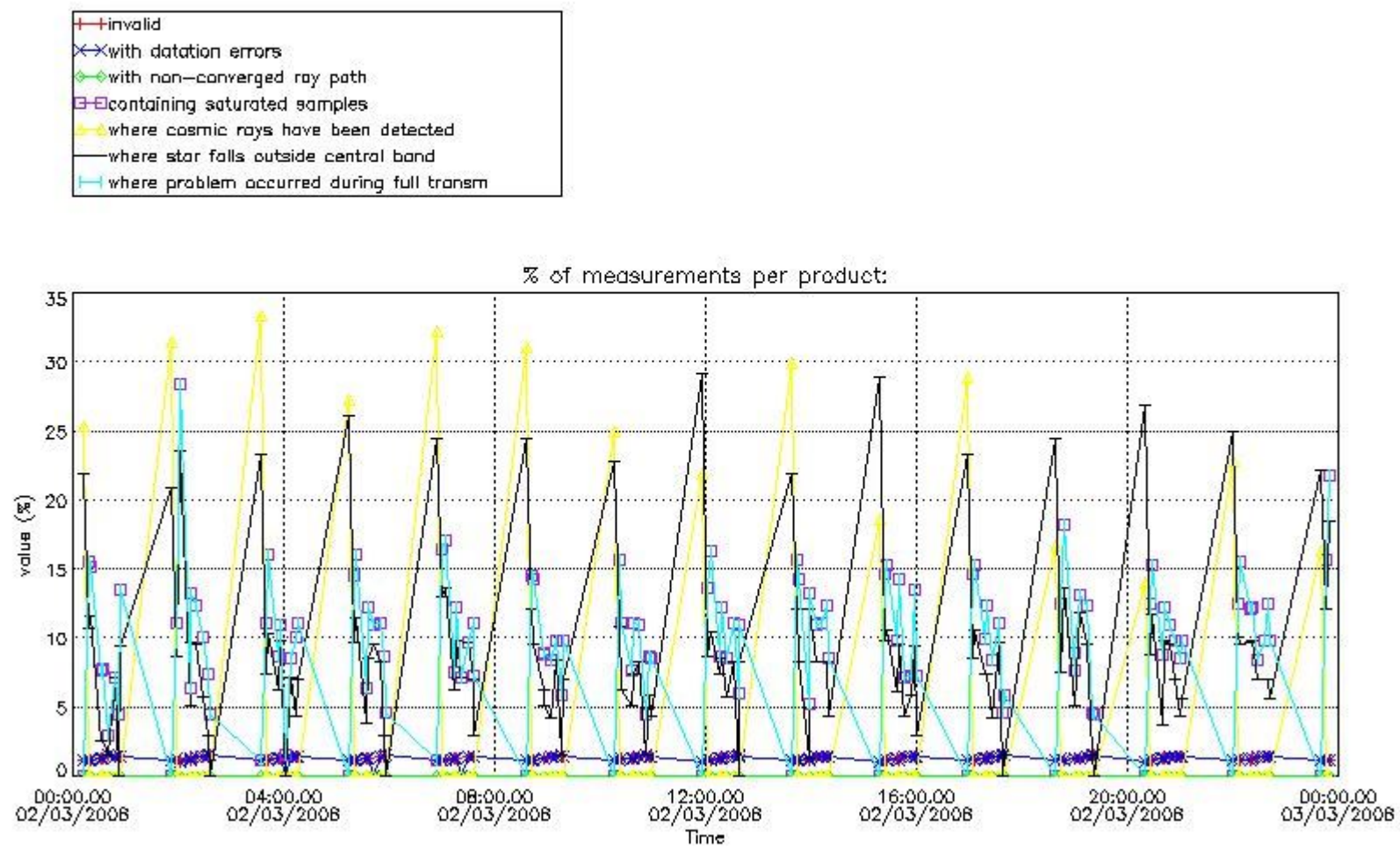
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

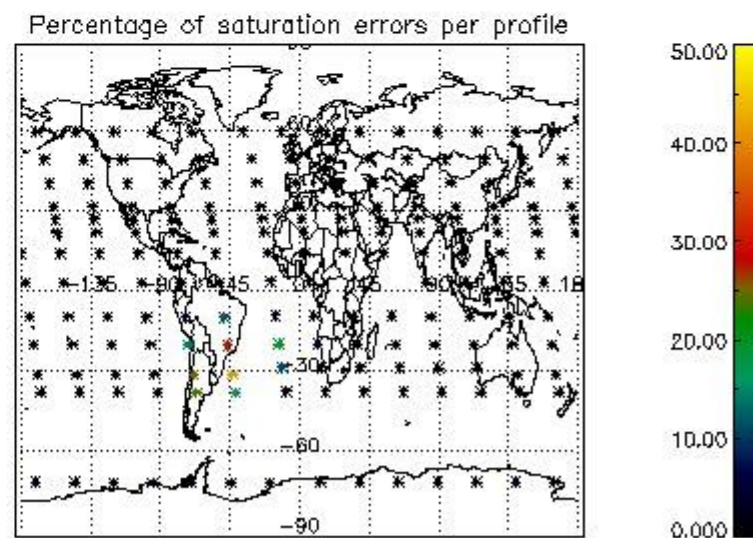
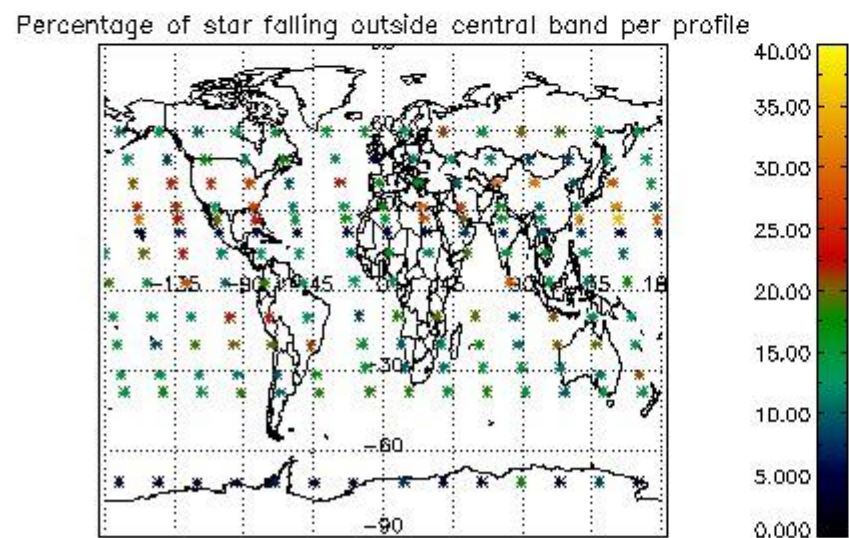
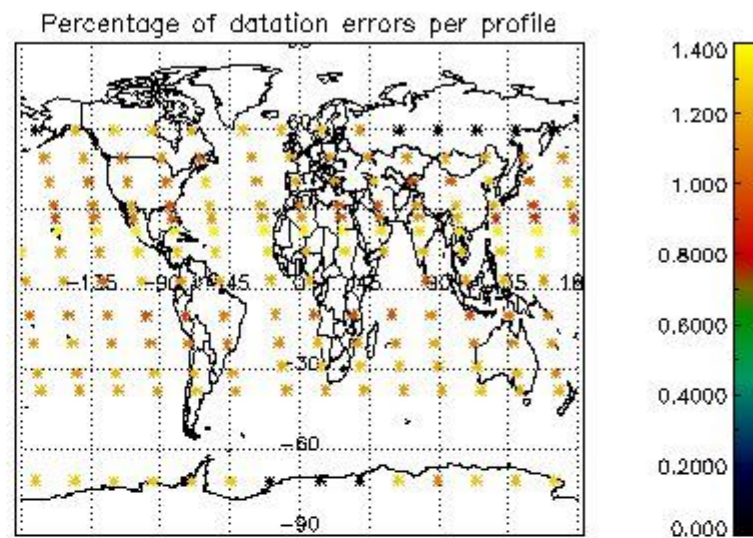
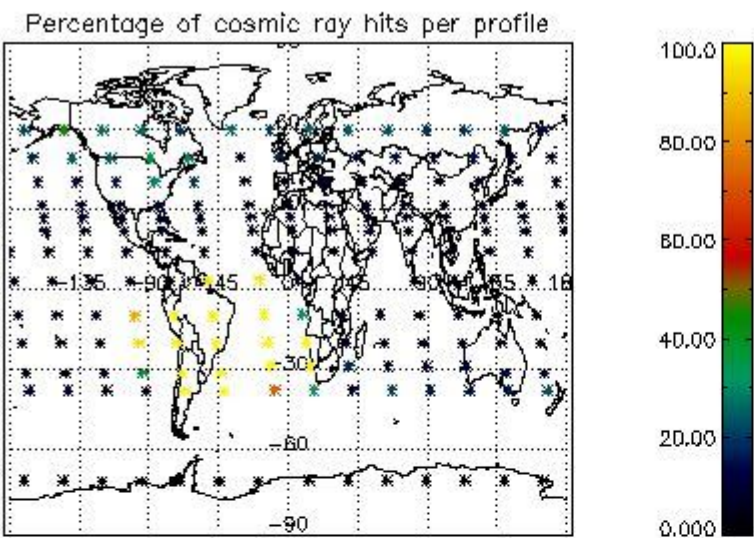


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

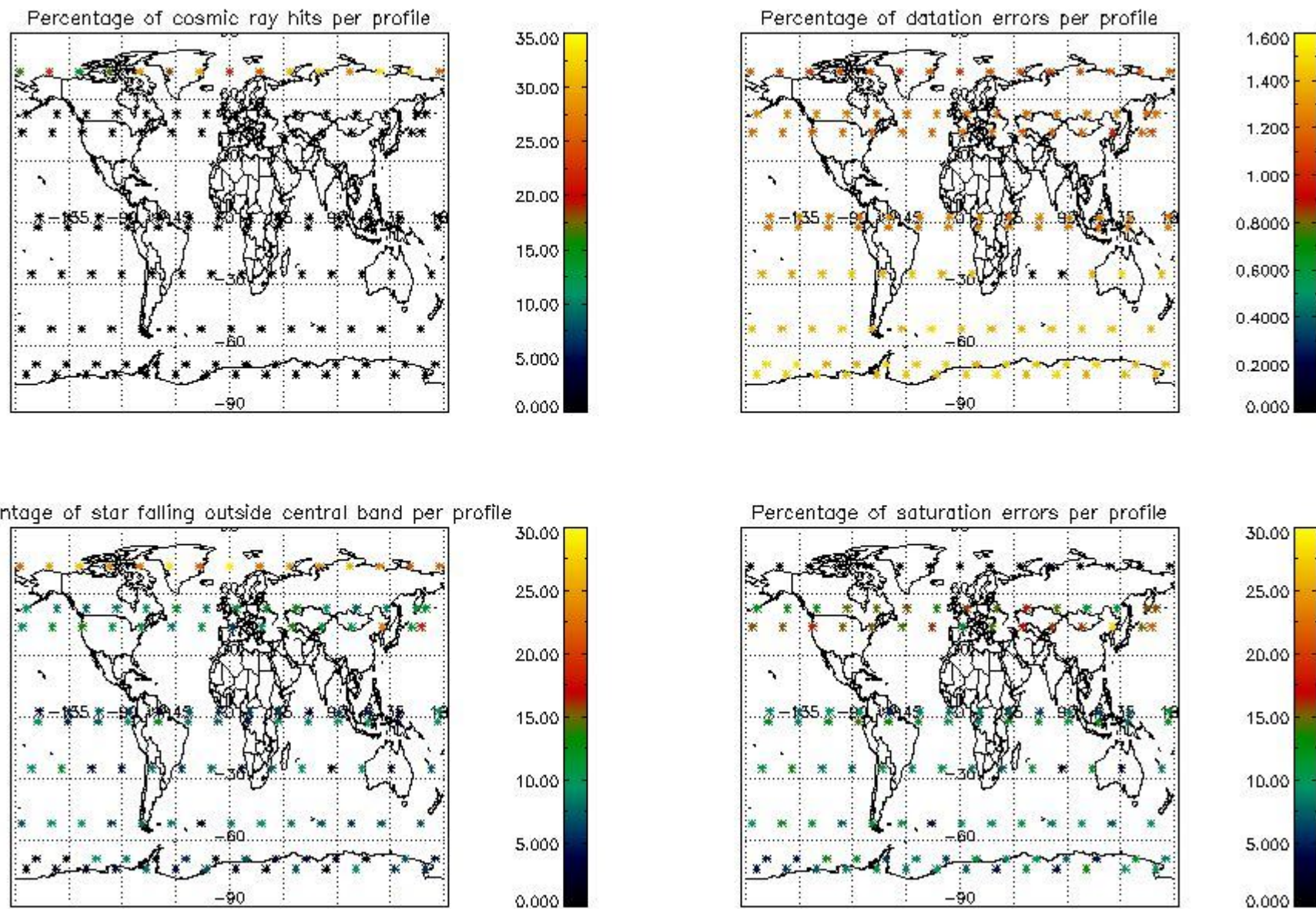


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

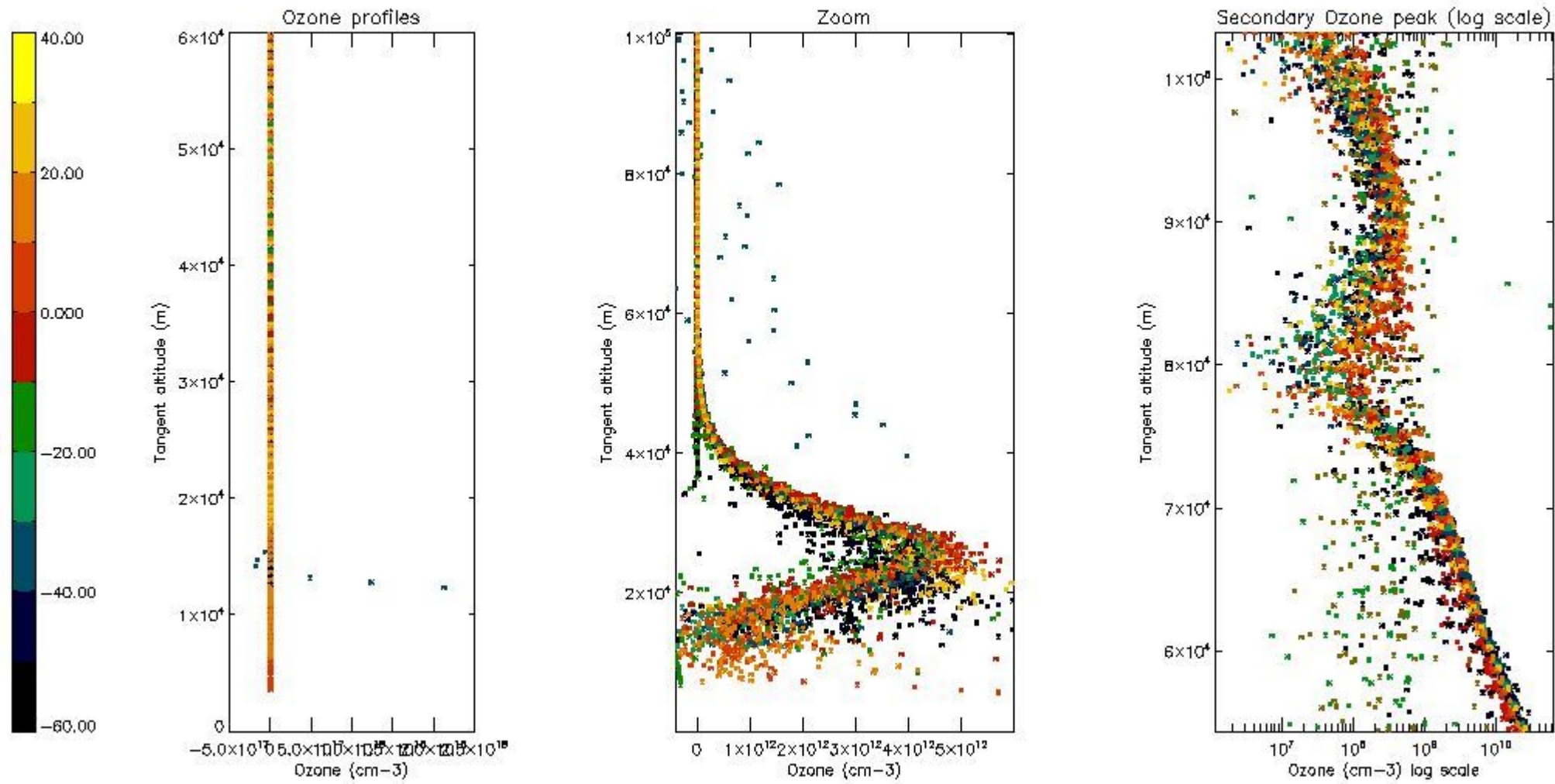
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

| Criteria | % of total production |
|----------|-----------------------|
| All STD | 53 |
| STD < 20 | 28 |

| | |
|----------|----|
| STD < 10 | 22 |
| STD < 5 | 15 |

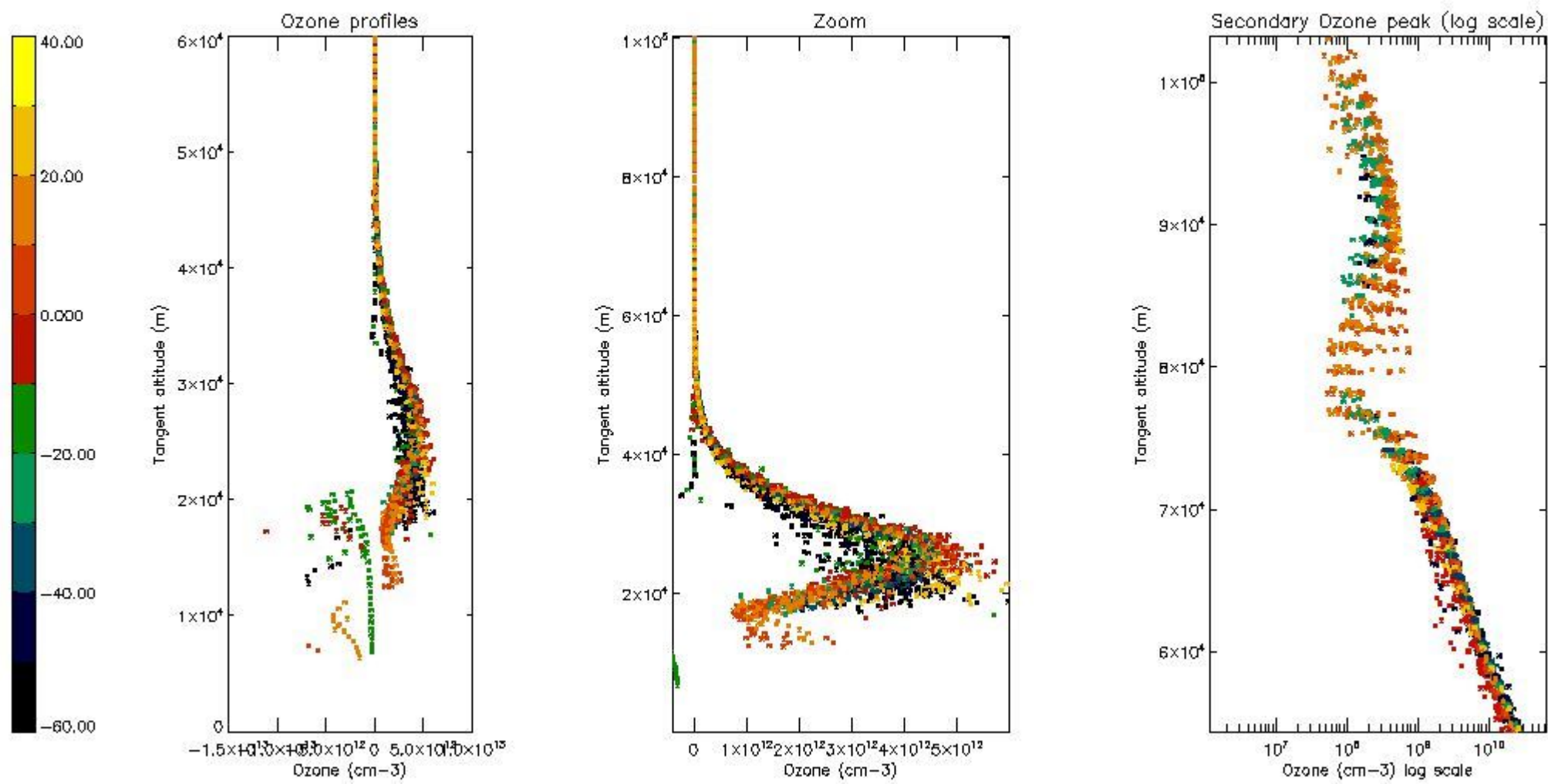
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



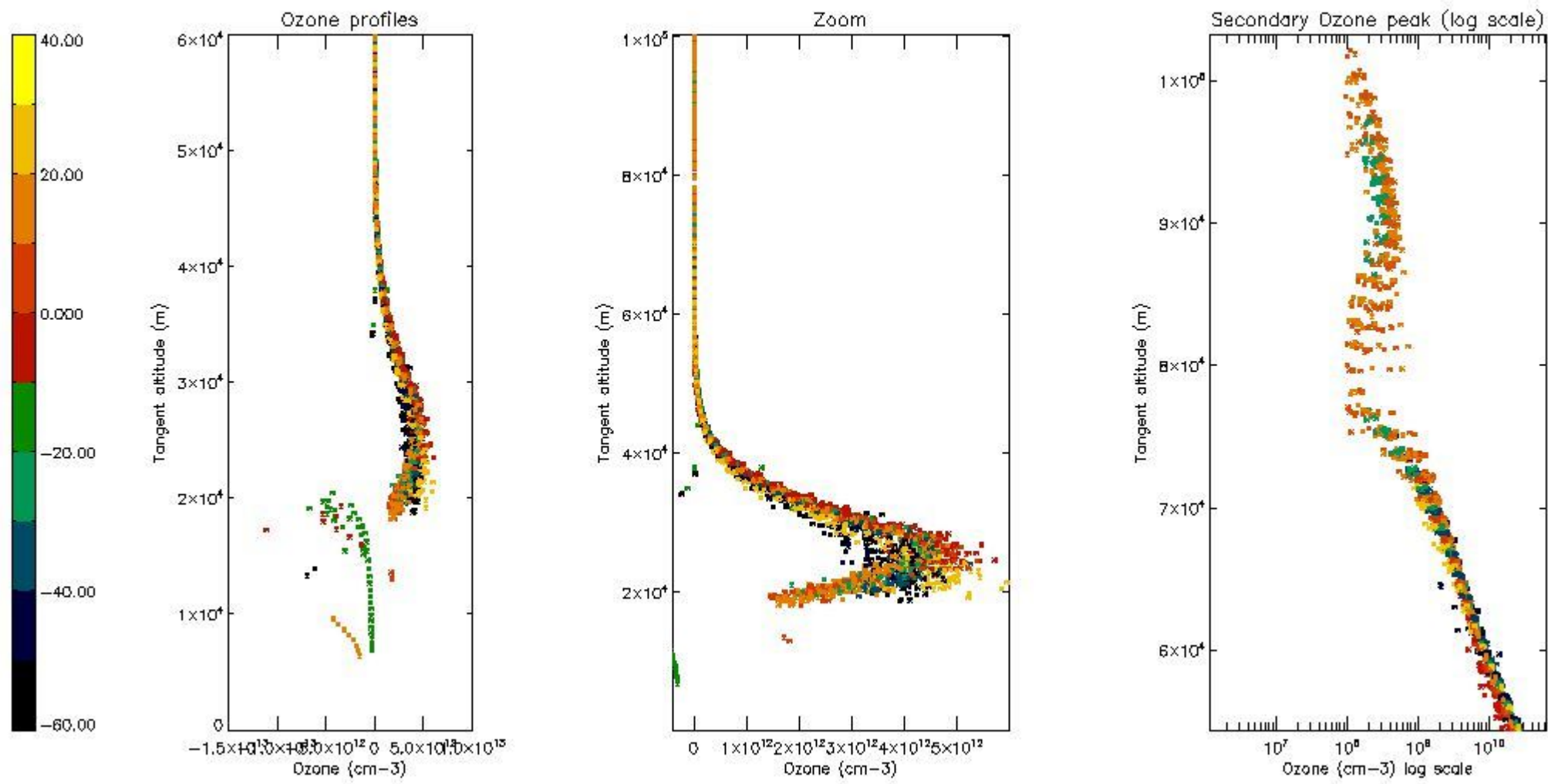
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



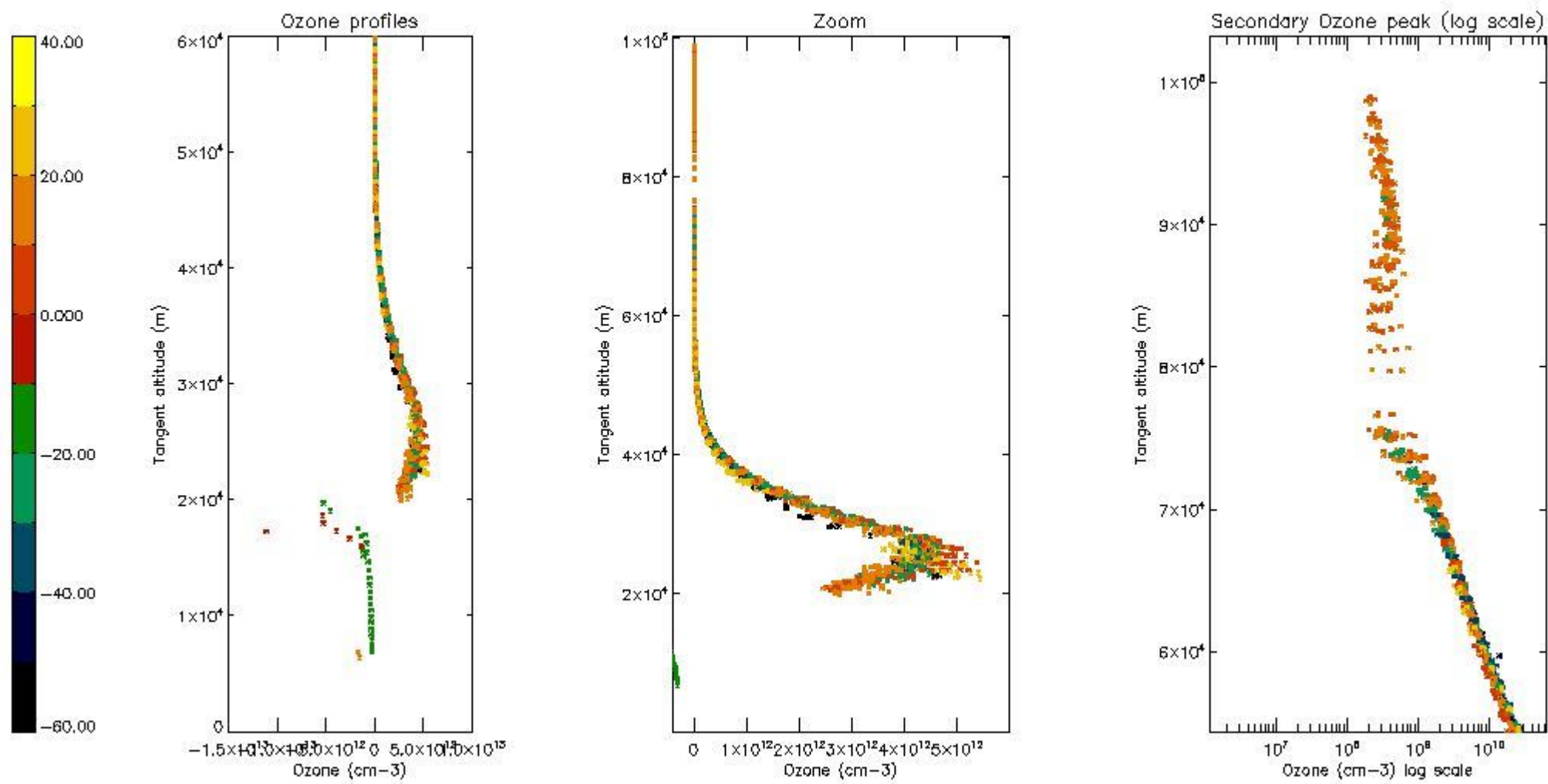
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



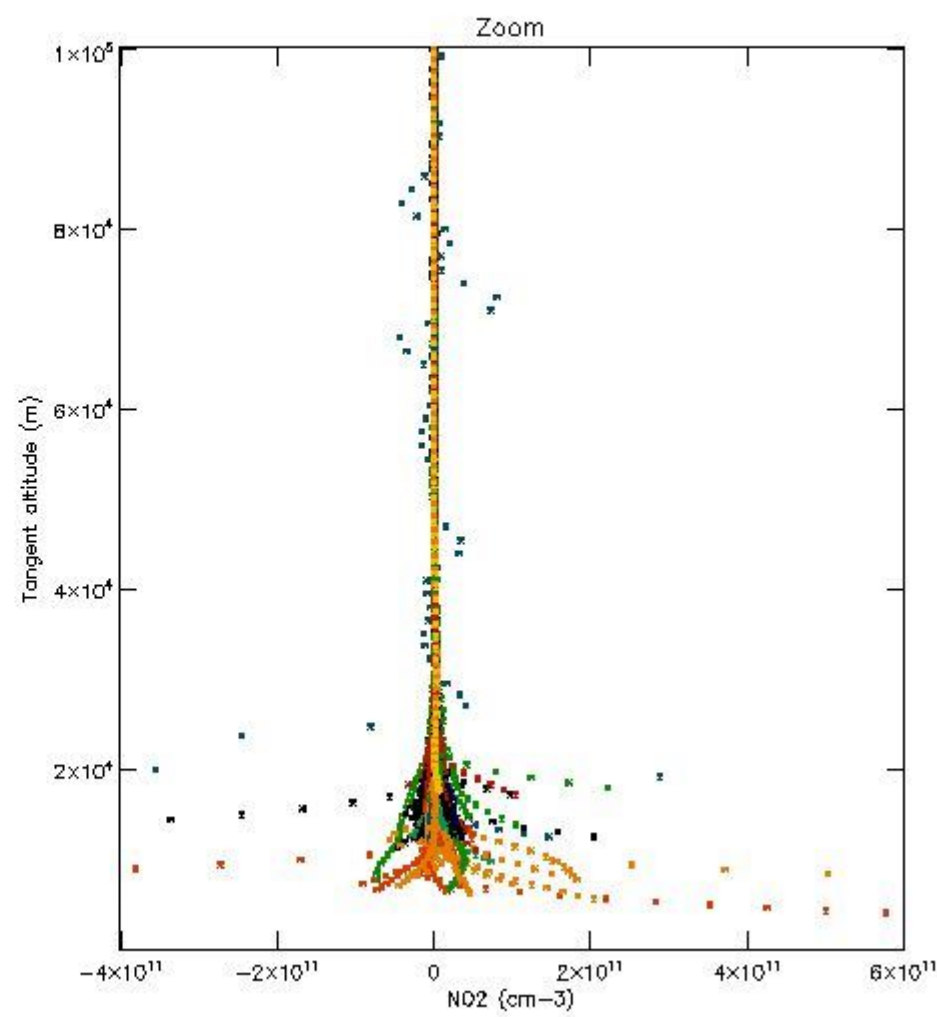
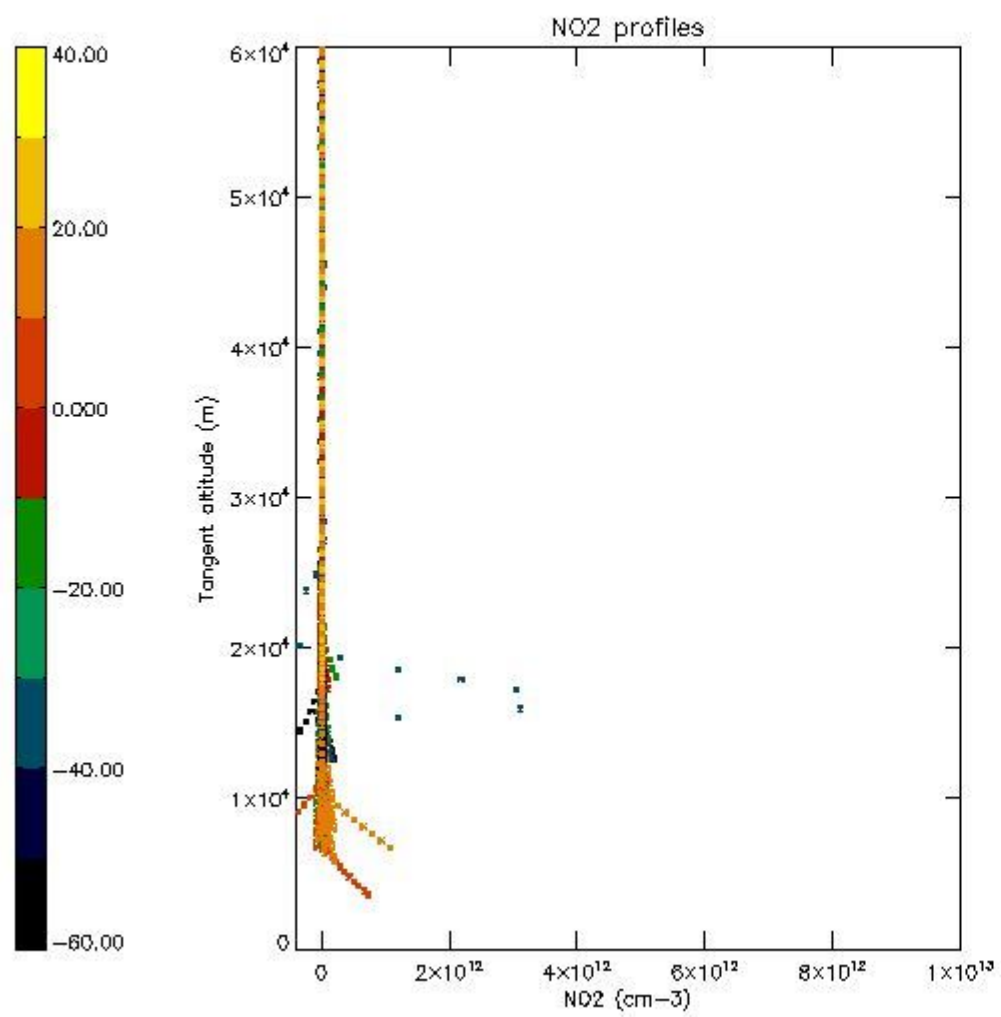
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



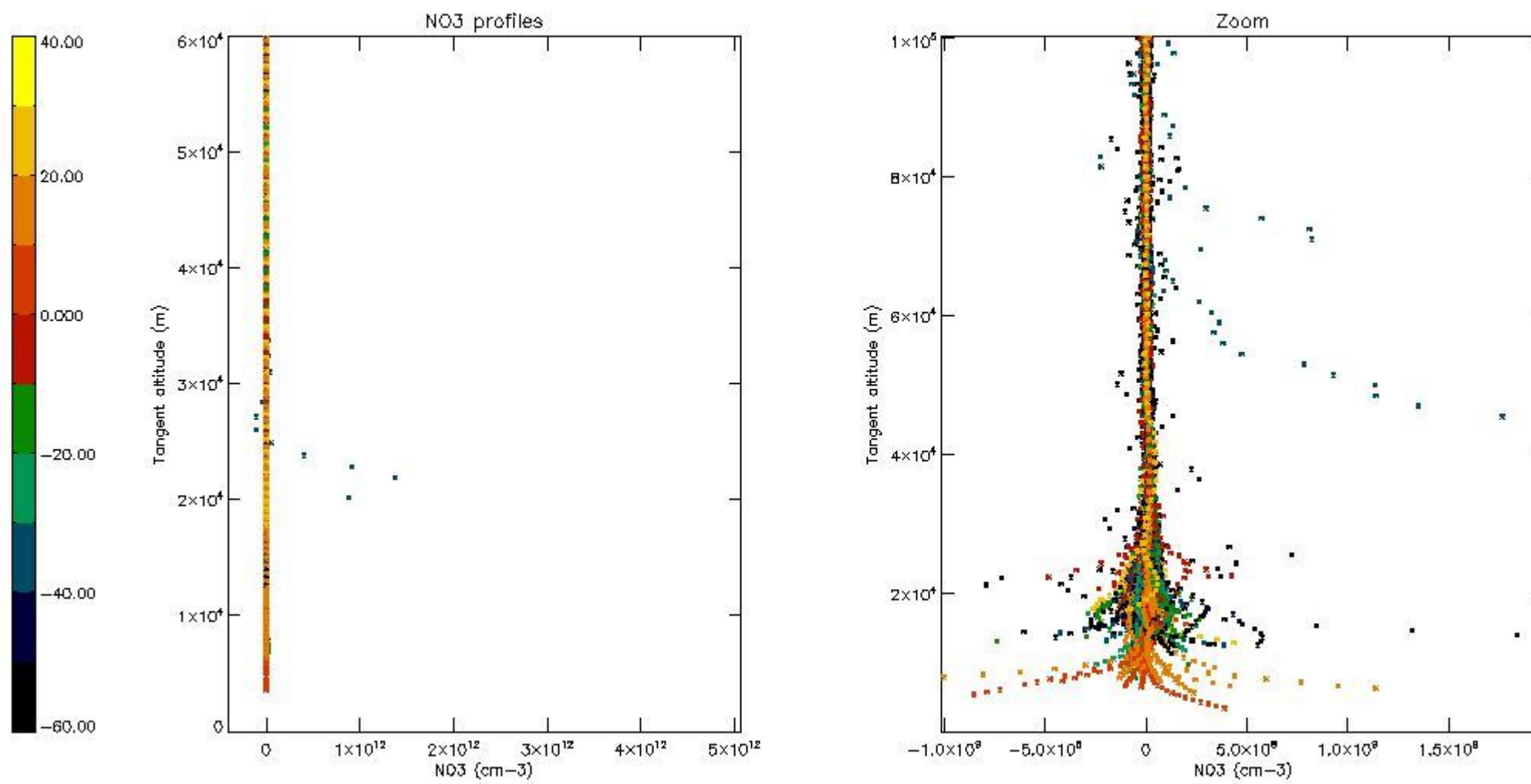
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



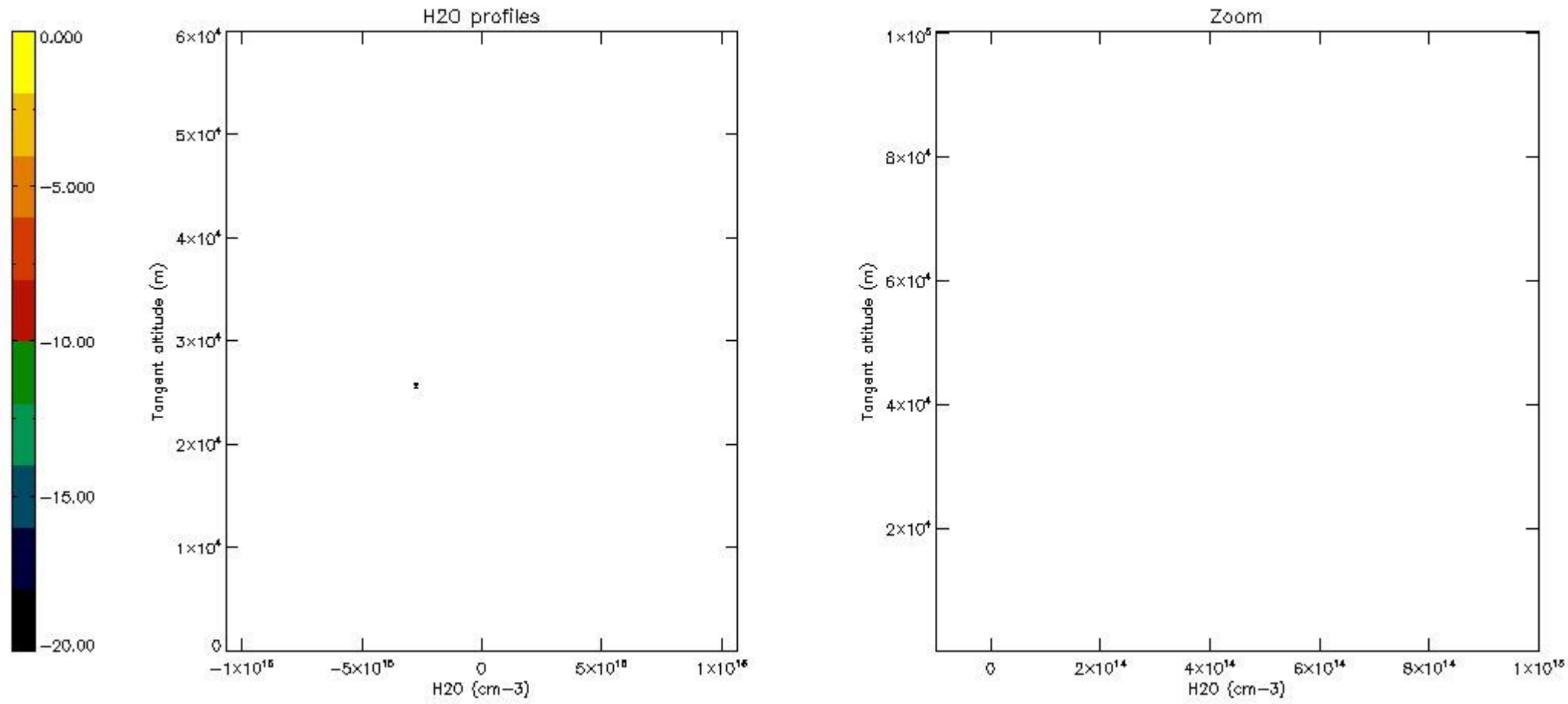
5.7 Plot NO3 profiles for all STD (dark without errors)

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 | 02-MAR-2008 00:12:14 |
| LEVEL-2_PROC_CONFIG | GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000 | 1 | 02-MAR-2008 00:12:14 |
| CROSS_SECTIONS_FILE | GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000 | 1 | 02-MAR-2008 00:12:14 |

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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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[5.6 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](#)

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 | 25APR2013 11:08:52 |
| Data source version | GOMOS/6.01 |
| Start time of products | 02-03-2008 (02MAR2008 00:00:00) |
| Stop time of products | 03-03-2008 (03MAR2008 00:00:00) |
| Store outputs in DB | Yes |
| Nb of level 2 prods | 309 |
| Nb of prods with errors | 0 |

2. Summary of processed GOM_NL__2P products.

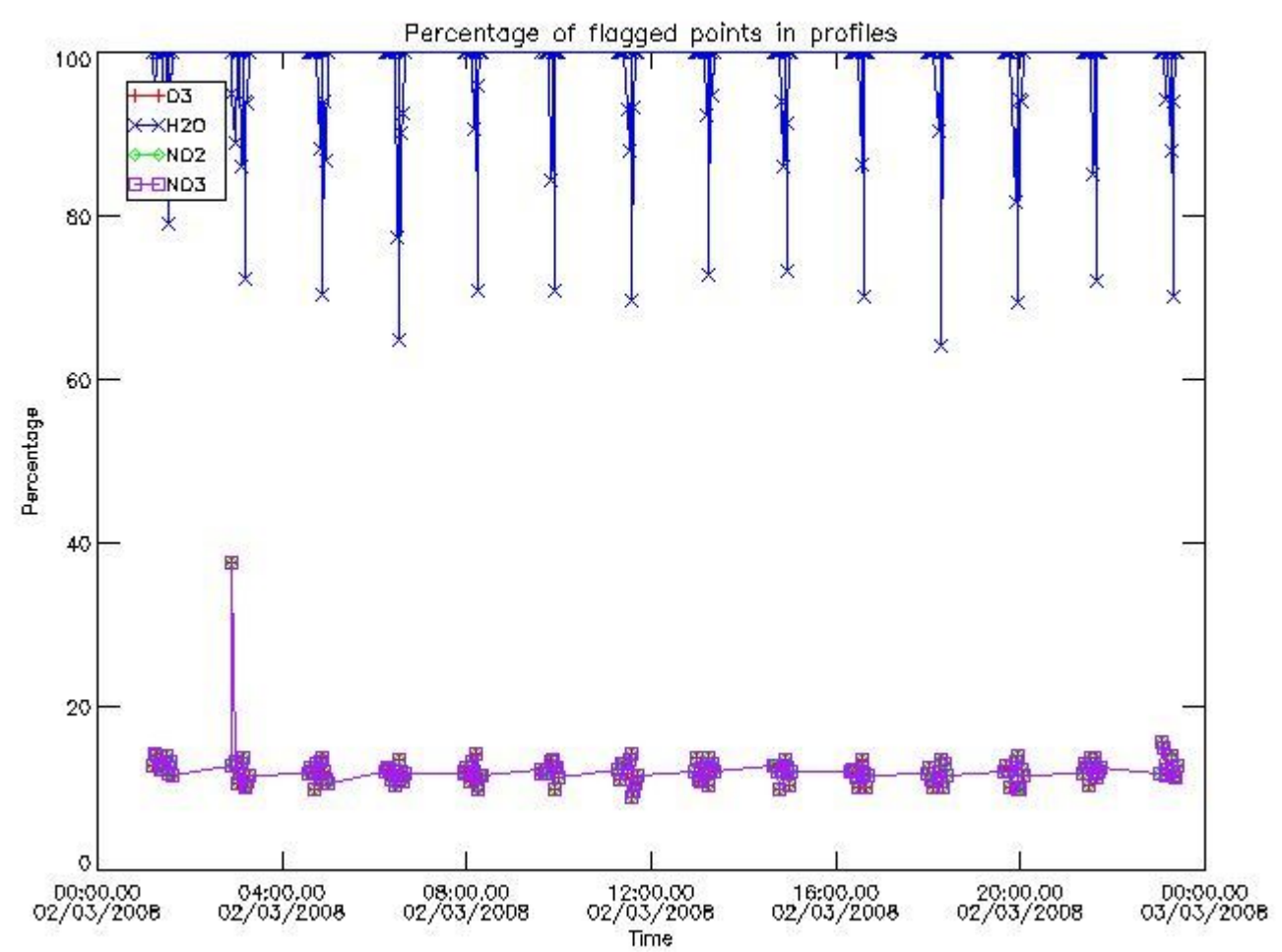
| Nr | Filename | UTC Start time | Limb | Duration | Star Id | Star Name | Star Mag | Star Temp | Nb Meas | Orbit | Prod. error |
|----|--|----------------------|------------|----------|---------|-----------|-----------|-----------|---------|-------|-------------|
| 1 | GOM_NL__2PRFIN20080302_001214_000000442066_00274_31390_9749.N1 | 02-MAR-2008 00:12:14 | Twilight | 43.500 | 48 | 30Alp Hya | 1.9770 | 4100.0 | 87 | 31390 | No |
| 2 | GOM_NL__2PRFIN20080302_001820_000000422066_00274_31390_9750.N1 | 02-MAR-2008 00:18:20 | Bright | 42.000 | 22 | 32Alp Leo | 1.3600 | 15200. | 84 | 31390 | No |
| 3 | GOM_NL__2PRFIN20080302_002055_000000432066_00274_31390_9751.N1 | 02-MAR-2008 00:20:55 | Bright | 43.000 | 51 | 41Gam1Leo | 2.0100 | 4500.0 | 86 | 31390 | No |
| 4 | GOM_NL__2PRFIN20080302_003233_000000402066_00274_31390_9752.N1 | 02-MAR-2008 00:32:33 | Bright | 39.500 | 82 | 48Bet UMa | 2.3650 | 10600. | 79 | 31390 | No |
| 5 | GOM_NL__2PRFIN20080302_003354_000000392066_00274_31390_9753.N1 | 02-MAR-2008 00:33:54 | Bright | 38.500 | 36 | 50Alp UMa | 1.8000 | 6300.0 | 77 | 31390 | No |
| 6 | GOM_NL__2PRFIN20080302_004012_000000342066_00274_31390_9754.N1 | 02-MAR-2008 00:40:12 | Bright | 33.500 | 49 | 1Alp UMi | 1.9900 | 6300.0 | 67 | 31390 | No |
| 7 | GOM_NL__2PRFIN20080302_004744_000000352066_00274_31390_9755.N1 | 02-MAR-2008 00:47:44 | Bright | 35.000 | 89 | 5Alp Cep | 2.4510 | 8000.0 | 70 | 31390 | No |
| 8 | GOM_NL__2PRFIN20080302_005250_000000342066_00274_31390_9756.N1 | 02-MAR-2008 00:52:50 | Bright | 33.500 | 19 | 50Alp Cyg | 1.2460 | 10500. | 67 | 31390 | No |
| 9 | GOM_NL__2PRFIN20080302_005424_000000372066_00274_31390_9757.N1 | 02-MAR-2008 00:54:24 | Bright | 37.000 | 66 | 37Gam Cyg | 2.2080 | 5900.0 | 74 | 31390 | No |
| 10 | GOM_NL__2PRFIN20080302_010303_000000392066_00274_31390_9758.N1 | 02-MAR-2008 01:03:03 | Bright | 38.500 | 168 | 17Zet Aql | 2.9860 | 11000. | 77 | 31390 | No |
| 11 | GOM_NL__2PRFIN20080302_011253_000000442066_00274_31390_9759.N1 | 02-MAR-2008 01:12:53 | Dark | 43.500 | 155 | 41Pi Sgr | 2.9000 | 6600.0 | 87 | 31390 | No |
| 12 | GOM_NL__2PRFIN20080302_011443_000000432066_00274_31390_9760.N1 | 02-MAR-2008 01:14:43 | Dark | 43.000 | 57 | 34Sig Sgr | 2.0660 | 26000. | 86 | 31390 | No |
| 13 | GOM_NL__2PRFIN20080302_011751_000000472066_00274_31390_9761.N1 | 02-MAR-2008 01:17:51 | Dark | 47.000 | 38 | 20Eps Sgr | 1.8360 | 11000. | 94 | 31390 | No |
| 14 | GOM_NL__2PRFIN20080302_012046_000000462066_00274_31390_9762.N1 | 02-MAR-2008 01:20:46 | Dark | 46.000 | 25 | 35Lam Sco | 1.6200 | 28000. | 92 | 31390 | No |
| 15 | GOM_NL__2PRFIN20080302_012425_000000422066_00275_31391_9741.N1 | 02-MAR-2008 01:24:25 | Dark | 41.500 | 141 | Bet Ara | 2.8400 | 4600.0 | 83 | 31391 | No |
| 16 | GOM_NL__2PRFIN20080302_012728_000000392066_00275_31391_9742.N1 | 02-MAR-2008 01:27:28 | Dark | 39.000 | 43 | Alp TrA | 1.9100 | 4250.0 | 78 | 31391 | No |
| 17 | GOM_NL__2PRFIN20080302_012938_000000372066_00275_31391_9743.N1 | 02-MAR-2008 01:29:38 | Dark | 36.500 | 145 | Gam TrA | 2.8720 | 10600. | 73 | 31391 | No |
| 18 | GOM_NL__2PRFIN20080302_013059_000000442066_00275_31391_9744.N1 | 02-MAR-2008 01:30:59 | Dark | 43.500 | 4 | Alp1Cen | -0.010000 | 5800.0 | 87 | 31391 | No |
| 19 | GOM_NL__2PRFIN20080302_013218_000000412066_00275_31391_9745.N1 | 02-MAR-2008 01:32:18 | Dark | 41.000 | 10 | Bet Cen | 0.61000 | 28000. | 82 | 31391 | No |
| 20 | GOM_NL__2PRFIN20080302_013450_000000392066_00275_31391_9746.N1 | 02-MAR-2008 01:34:50 | Dark | 38.500 | 12 | Alp1Cru | 0.77500 | 30000. | 77 | 31391 | No |
| 21 | GOM_NL__2PRFIN20080302_013720_000000492066_00275_31391_9747.N1 | 02-MAR-2008 01:37:20 | Dark | 48.500 | 64 | Gam Cen | 2.2000 | 10600. | 97 | 31391 | No |
| 22 | GOM_NL__2PRFIN20080302_014020_000000422066_00275_31391_9748.N1 | 02-MAR-2008 01:40:20 | Straylight | 41.500 | 113 | Mu Vel | 2.6920 | 5000.0 | 83 | 31391 | No |
| 23 | GOM_NL__2PRFIN20080302_015250_000000432066_00275_31391_9749.N1 | 02-MAR-2008 01:52:50 | Twilight | 43.000 | 48 | 30Alp Hya | 1.9770 | 4100.0 | 86 | 31391 | No |
| 24 | GOM_NL__2PRFIN20080302_015856_000000412066_00275_31391_9750.N1 | 02-MAR-2008 01:58:56 | Bright | 40.500 | 22 | 32Alp Leo | 1.3600 | 15200. | 81 | 31391 | No |
| 25 | GOM_NL__2PRFIN20080302_020131_000000512066_00275_31391_9751.N1 | 02-MAR-2008 02:01:31 | Bright | 51.000 | 51 | 41Gam1Leo | 2.0100 | 4500.0 | 102 | 31391 | No |
| 26 | GOM_NL__2PRFIN20080302_021308_000000402066_00275_31391_9752.N1 | 02-MAR-2008 02:13:08 | Bright | 39.500 | 82 | 48Bet UMa | 2.3650 | 10600. | 79 | 31391 | No |
| 27 | GOM_NL__2PRFIN20080302_021429_000000422066_00275_31391_9753.N1 | 02-MAR-2008 02:14:29 | Bright | 41.500 | 36 | 50Alp UMa | 1.8000 | 6300.0 | 83 | 31391 | No |
| 28 | GOM_NL__2PRFIN20080302_022048_000000372066_00275_31391_9754.N1 | 02-MAR-2008 02:20:48 | Bright | 36.500 | 49 | 1Alp UMi | 1.9900 | 6300.0 | 73 | 31391 | No |
| 29 | GOM_NL__2PRFIN20080302_022820_000000352066_00275_31391_9755.N1 | 02-MAR-2008 02:28:20 | Bright | 35.000 | 89 | 5Alp Cep | 2.4510 | 8000.0 | 70 | 31391 | No |
| 30 | GOM_NL__2PRFIN20080302_023326_000000342066_00275_31391_9756.N1 | 02-MAR-2008 02:33:26 | Bright | 34.000 | 19 | 50Alp Cyg | 1.2460 | 10500. | 68 | 31391 | No |
| 31 | GOM_NL__2PRFIN20080302_023500_000000342066_00275_31391_9757.N1 | 02-MAR-2008 02:35:00 | Bright | 33.500 | 66 | 37Gam Cyg | 2.2080 | 5900.0 | 67 | 31391 | No |
| 32 | GOM_NL__2PRFIN20080302_024339_000000392066_00275_31391_9758.N1 | 02-MAR-2008 02:43:39 | Bright | 39.000 | 168 | 17Zet Aql | 2.9860 | 11000. | 78 | 31391 | No |
| 33 | GOM_NL__2PRFIN20080302_025329_000000402066_00275_31391_9759.N1 | 02-MAR-2008 02:53:29 | Dark | 40.000 | 155 | 41Pi Sgr | 2.9000 | 6600.0 | 80 | 31391 | No |
| 34 | GOM_NL__2PRFIN20080302_025520_000000412066_00275_31391_9760.N1 | 02-MAR-2008 02:55:20 | Dark | 40.500 | 57 | 34Sig Sgr | 2.0660 | 26000. | 81 | 31391 | No |
| 35 | GOM_NL__2PRFIN20080302_025828_000000462066_00275_31391_9761.N1 | 02-MAR-2008 02:58:28 | Dark | 46.000 | 38 | 20Eps Sgr | 1.8360 | 11000. | 92 | 31391 | No |
| 36 | GOM_NL__2PRFIN20080302_030123_000000532066_00275_31391_9762.N1 | 02-MAR-2008 03:01:23 | Dark | 53.000 | 25 | 35Lam Sco | 1.6200 | 28000. | 106 | 31391 | No |
| 37 | GOM_NL__2PRFIN20080302_030501_000000442066_00276_31392_9741.N1 | 02-MAR-2008 03:05:01 | Dark | 43.500 | 141 | Bet Ara | 2.8400 | 4600.0 | 87 | 31392 | No |
| 38 | GOM_NL__2PRFIN20080302_030804_000000402066_00276_31392_9742.N1 | 02-MAR-2008 03:08:04 | Dark | 39.500 | 43 | Alp TrA | 1.9100 | 4250.0 | 79 | 31392 | No |
| 39 | GOM_NL__2PRFIN20080302_031015_000000372066_00276_31392_9743.N1 | 02-MAR-2008 03:10:15 | Dark | 37.000 | 145 | Gam TrA | 2.8720 | 10600. | 74 | 31392 | No |
| 40 | GOM_NL__2PRFIN20080302_031136_000000492066_00276_31392_9744.N1 | 02-MAR-2008 03:11:36 | Dark | 49.000 | 4 | Alp1Cen | -0.010000 | 5800.0 | 98 | 31392 | No |
| 41 | GOM_NL__2PRFIN20080302_031255_000000512066_00276_31392_9745.N1 | 02-MAR-2008 03:12:55 | Dark | 50.500 | 10 | Bet Cen | 0.61000 | 28000. | 101 | 31392 | No |
| 42 | GOM_NL__2PRFIN20080302_031526_000000482066_00276_31392_9746.N1 | 02-MAR-2008 03:15:26 | Dark | 47.500 | 12 | Alp1Cru | 0.77500 | 30000. | 95 | 31392 | No |

| | | | | | | | | | | | |
|-----|--|----------------------|--------------------|--------|-----|-----------|-----------|--------|----|-------|----|
| 279 | GOM_NL__2PRFIN20080302_213655_000000372066_00287_31403_9743.N1 | 02-MAR-2008 21:36:55 | Dark | 37.000 | 145 | Gam TrA | 2.8720 | 10600. | 74 | 31403 | No |
| 280 | GOM_NL__2PRFIN20080302_213818_000000442066_00287_31403_9744.N1 | 02-MAR-2008 21:38:18 | Dark | 43.500 | 4 | Alp1Cen | -0.010000 | 5800.0 | 87 | 31403 | No |
| 281 | GOM_NL__2PRFIN20080302_213937_000000452066_00287_31403_9745.N1 | 02-MAR-2008 21:39:37 | Dark | 45.000 | 10 | Bet Cen | 0.61000 | 28000. | 90 | 31403 | No |
| 282 | GOM_NL__2PRFIN20080302_214206_000000422066_00287_31403_9746.N1 | 02-MAR-2008 21:42:06 | Dark | 42.000 | 12 | Alp1Cru | 0.77500 | 30000. | 84 | 31403 | No |
| 283 | GOM_NL__2PRFIN20080302_214438_000000412066_00287_31403_9747.N1 | 02-MAR-2008 21:44:38 | Dark | 41.000 | 64 | Gam Cen | 2.2000 | 10600. | 82 | 31403 | No |
| 284 | GOM_NL__2PRFIN20080302_214735_000000412066_00287_31403_9748.N1 | 02-MAR-2008 21:47:35 | Straylight | 41.000 | 113 | Mu Vel | 2.6920 | 5000.0 | 82 | 31403 | No |
| 285 | GOM_NL__2PRFIN20080302_220003_000000462066_00287_31403_9749.N1 | 02-MAR-2008 22:00:03 | Twilight_and_stray | 46.000 | 48 | 30Alp Hya | 1.9770 | 4100.0 | 92 | 31403 | No |
| 286 | GOM_NL__2PRFIN20080302_220605_000000402066_00287_31403_9750.N1 | 02-MAR-2008 22:06:05 | Bright | 40.000 | 22 | 32Alp Leo | 1.3600 | 15200. | 80 | 31403 | No |
| 287 | GOM_NL__2PRFIN20080302_220839_000000422066_00287_31403_9751.N1 | 02-MAR-2008 22:08:39 | Bright | 42.000 | 51 | 41Gam1Leo | 2.0100 | 4500.0 | 84 | 31403 | No |
| 288 | GOM_NL__2PRFIN20080302_222014_000000422066_00287_31403_9752.N1 | 02-MAR-2008 22:20:14 | Bright | 41.500 | 82 | 48Bet UMa | 2.3650 | 10600. | 83 | 31403 | No |
| 289 | GOM_NL__2PRFIN20080302_222136_000000412066_00287_31403_9753.N1 | 02-MAR-2008 22:21:36 | Bright | 41.000 | 36 | 50Alp UMa | 1.8000 | 6300.0 | 82 | 31403 | No |
| 290 | GOM_NL__2PRFIN20080302_222800_000000362066_00287_31403_9754.N1 | 02-MAR-2008 22:28:00 | Bright | 35.500 | 49 | 1Alp UMi | 1.9900 | 6300.0 | 71 | 31403 | No |
| 291 | GOM_NL__2PRFIN20080302_223533_000000362066_00287_31403_9755.N1 | 02-MAR-2008 22:35:33 | Bright | 35.500 | 89 | 5Alp Cep | 2.4510 | 8000.0 | 71 | 31403 | No |
| 292 | GOM_NL__2PRFIN20080302_224039_000000362066_00287_31403_9756.N1 | 02-MAR-2008 22:40:39 | Bright | 36.000 | 19 | 50Alp Cyg | 1.2460 | 10500. | 72 | 31403 | No |
| 293 | GOM_NL__2PRFIN20080302_224213_000000362066_00287_31403_9757.N1 | 02-MAR-2008 22:42:13 | Bright | 35.500 | 66 | 37Gam Cyg | 2.2080 | 5900.0 | 71 | 31403 | No |
| 294 | GOM_NL__2PRFIN20080302_225054_000000402066_00287_31403_9758.N1 | 02-MAR-2008 22:50:54 | Bright | 40.000 | 168 | 17Zet Aql | 2.9860 | 11000. | 80 | 31403 | No |
| 295 | GOM_NL__2PRFIN20080302_230047_000000442066_00287_31403_9759.N1 | 02-MAR-2008 23:00:47 | Dark | 43.500 | 155 | 41Pi Sgr | 2.9000 | 6600.0 | 87 | 31403 | No |
| 296 | GOM_NL__2PRFIN20080302_230319_000000422066_00287_31403_9760.N1 | 02-MAR-2008 23:03:19 | Dark | 42.000 | 103 | 38Zet Sgr | 2.6000 | 9700.0 | 84 | 31403 | No |
| 297 | GOM_NL__2PRFIN20080302_230547_000000452066_00287_31403_9761.N1 | 02-MAR-2008 23:05:47 | Dark | 44.500 | 38 | 20Eps Sgr | 1.8360 | 11000. | 89 | 31403 | No |
| 298 | GOM_NL__2PRFIN20080302_230845_000000442066_00287_31403_9762.N1 | 02-MAR-2008 23:08:45 | Dark | 44.000 | 25 | 35Lam Sco | 1.6200 | 28000. | 88 | 31403 | No |
| 299 | GOM_NL__2PRFIN20080302_231219_000000422066_00288_31404_9741.N1 | 02-MAR-2008 23:12:19 | Dark | 41.500 | 141 | Bet Ara | 2.8400 | 4600.0 | 83 | 31404 | No |
| 300 | GOM_NL__2PRFIN20080302_231520_000000382066_00288_31404_9742.N1 | 02-MAR-2008 23:15:20 | Dark | 38.000 | 43 | Alp TrA | 1.9100 | 4250.0 | 76 | 31404 | No |
| 301 | GOM_NL__2PRFIN20080302_231731_000000372066_00288_31404_9743.N1 | 02-MAR-2008 23:17:31 | Dark | 36.500 | 145 | Gam TrA | 2.8720 | 10600. | 73 | 31404 | No |
| 302 | GOM_NL__2PRFIN20080302_231854_000000442066_00288_31404_9744.N1 | 02-MAR-2008 23:18:54 | Dark | 44.000 | 4 | Alp1Cen | -0.010000 | 5800.0 | 88 | 31404 | No |
| 303 | GOM_NL__2PRFIN20080302_232013_000000432066_00288_31404_9745.N1 | 02-MAR-2008 23:20:13 | Dark | 42.500 | 10 | Bet Cen | 0.61000 | 28000. | 85 | 31404 | No |
| 304 | GOM_NL__2PRFIN20080302_232242_000000452066_00288_31404_9746.N1 | 02-MAR-2008 23:22:42 | Dark | 45.000 | 12 | Alp1Cru | 0.77500 | 30000. | 90 | 31404 | No |
| 305 | GOM_NL__2PRFIN20080302_232515_000000442066_00288_31404_9747.N1 | 02-MAR-2008 23:25:15 | Dark | 44.000 | 64 | Gam Cen | 2.2000 | 10600. | 88 | 31404 | No |
| 306 | GOM_NL__2PRFIN20080302_232811_000000412066_00288_31404_9748.N1 | 02-MAR-2008 23:28:11 | Straylight | 40.500 | 113 | Mu Vel | 2.6920 | 5000.0 | 81 | 31404 | No |
| 307 | GOM_NL__2PRFIN20080302_234039_000000432066_00288_31404_9749.N1 | 02-MAR-2008 23:40:39 | Twilight_and_stray | 43.000 | 48 | 30Alp Hya | 1.9770 | 4100.0 | 86 | 31404 | No |
| 308 | GOM_NL__2PRFIN20080302_234641_000000422066_00288_31404_9750.N1 | 02-MAR-2008 23:46:41 | Bright | 41.500 | 22 | 32Alp Leo | 1.3600 | 15200. | 83 | 31404 | No |
| 309 | GOM_NL__2PRFIN20080302_234914_000000462066_00288_31404_9751.N1 | 02-MAR-2008 23:49:14 | Bright | 46.000 | 51 | 41Gam1Leo | 2.0100 | 4500.0 | 92 | 31404 | No |

3. Quality information per product

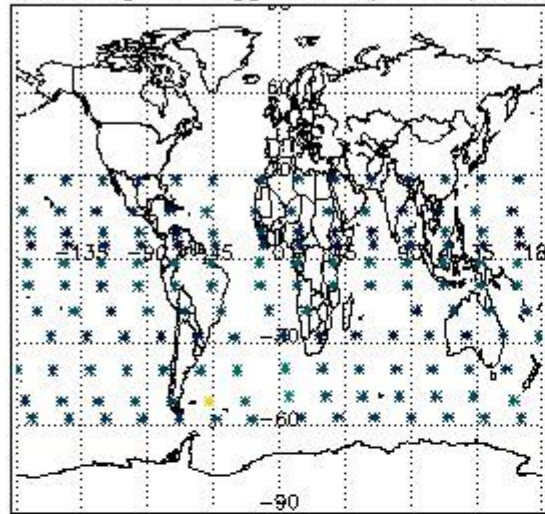
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

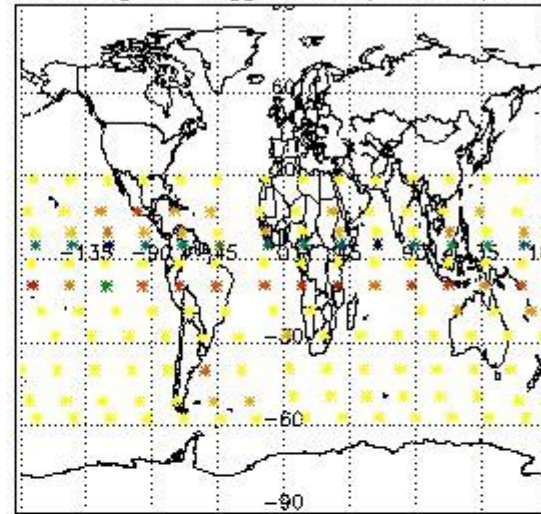


3.2 Plot quality information per product (world map)

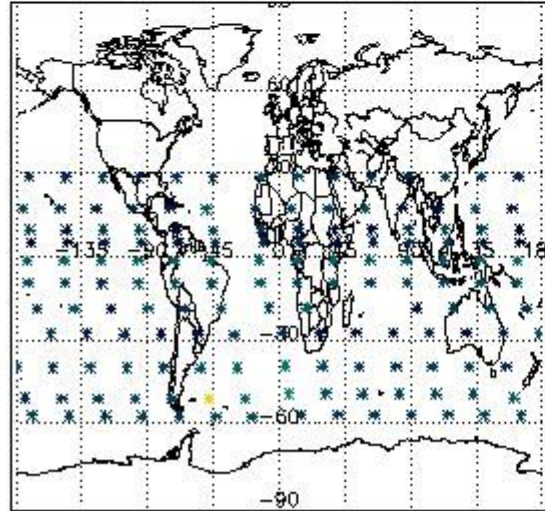
Percentage of flagged data per O3 profile



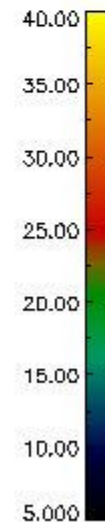
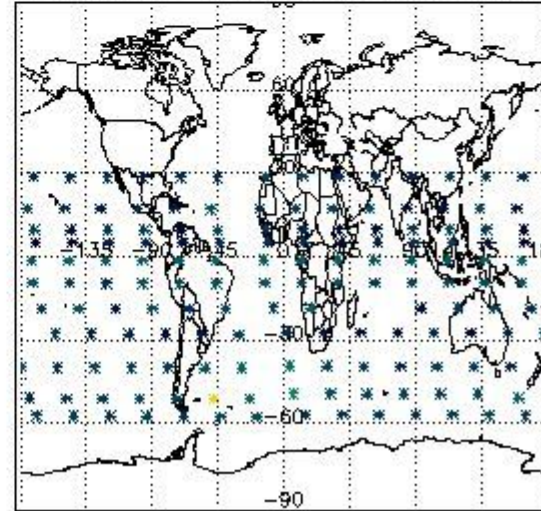
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

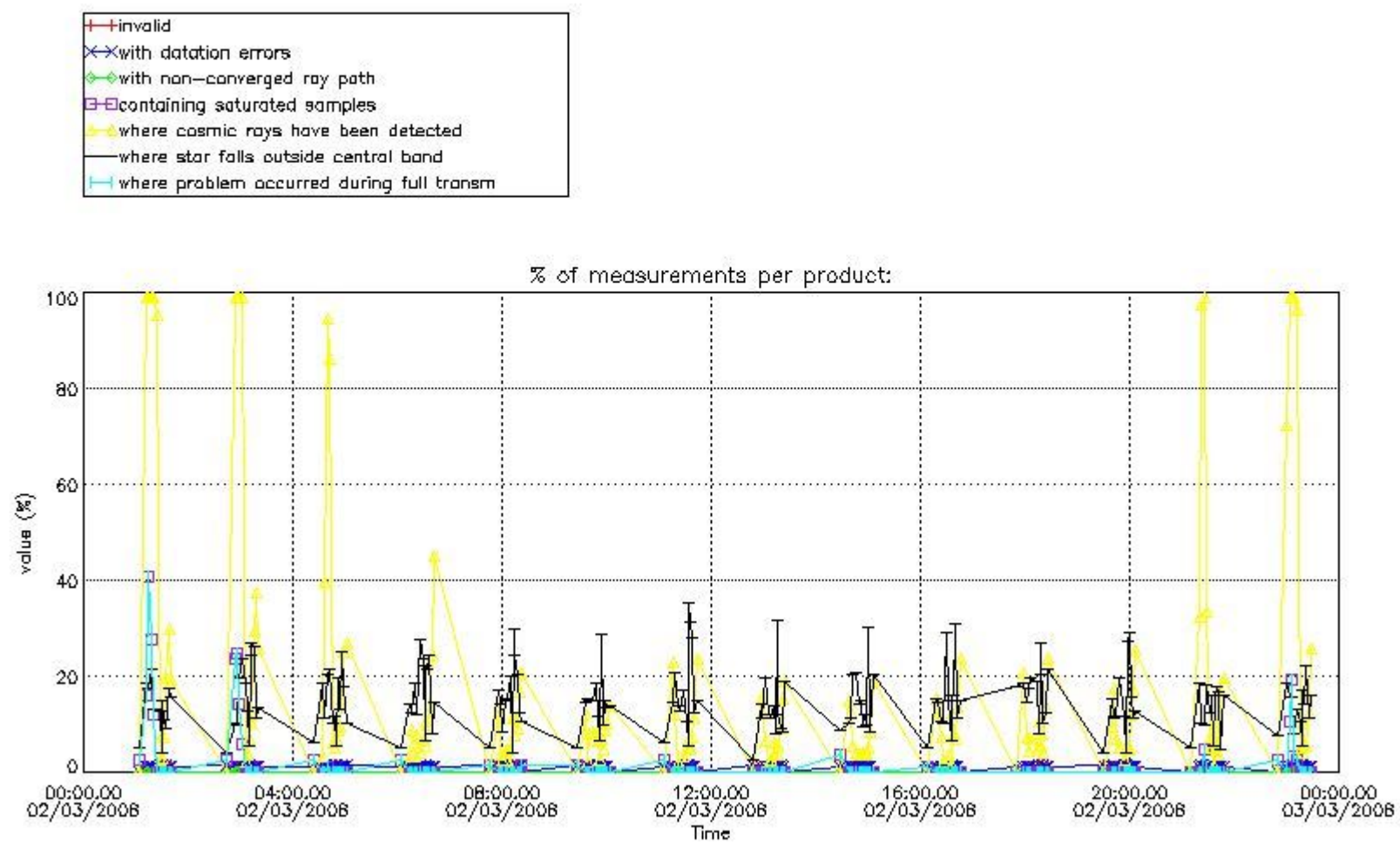


4. Level 1 quality information per product

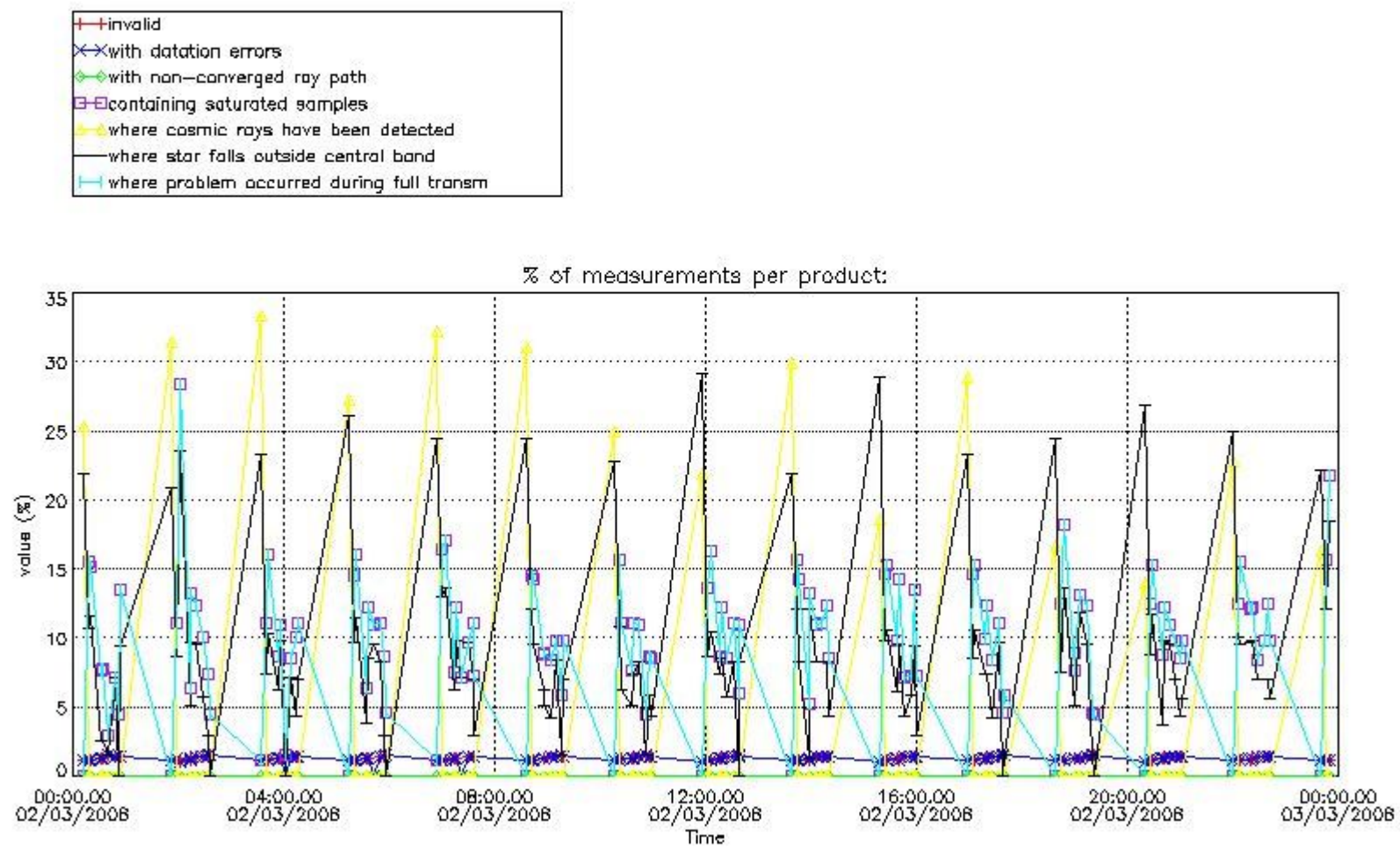
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



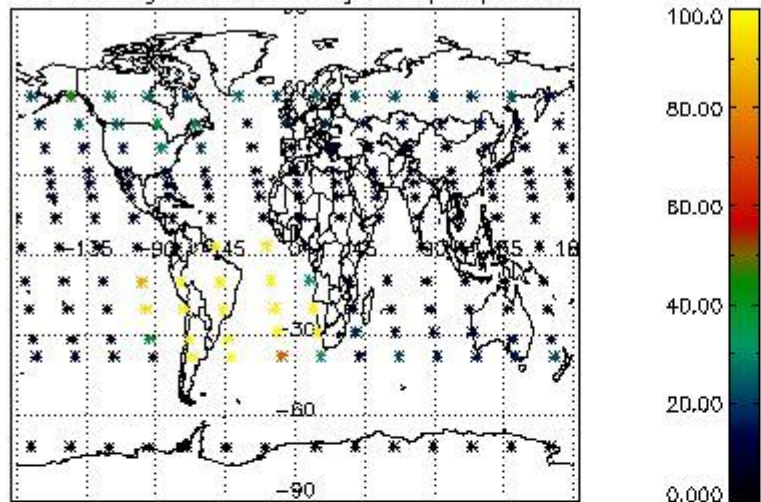
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



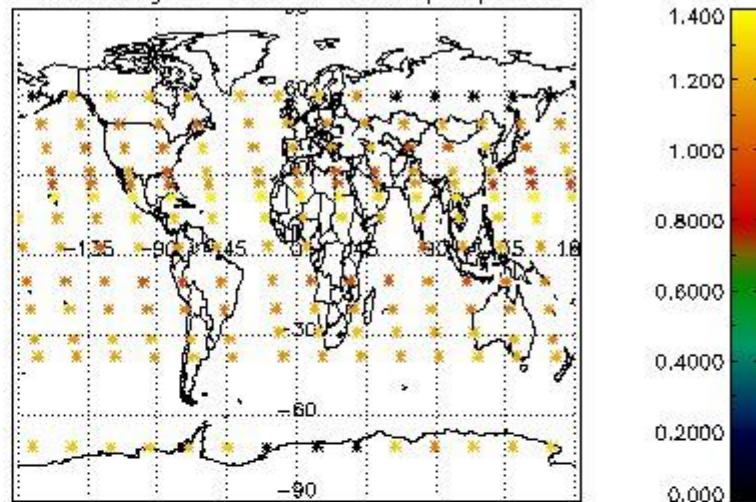
4.2 Plot quality information per product coming from level 1b processing (world map)

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

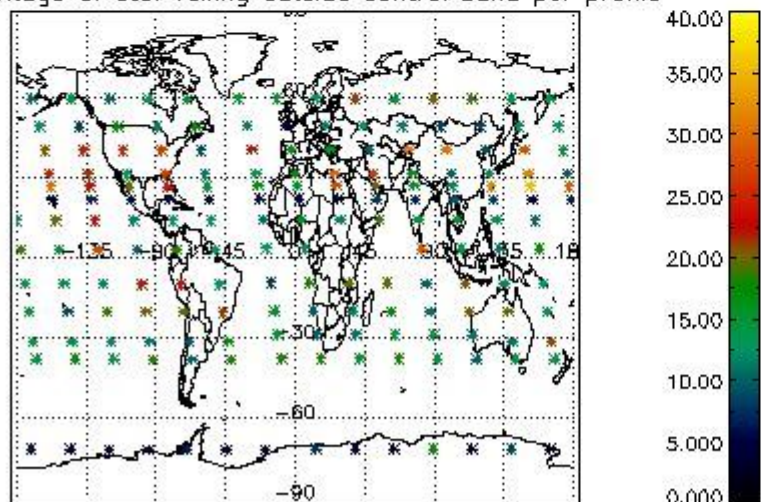
Percentage of cosmic ray hits per profile



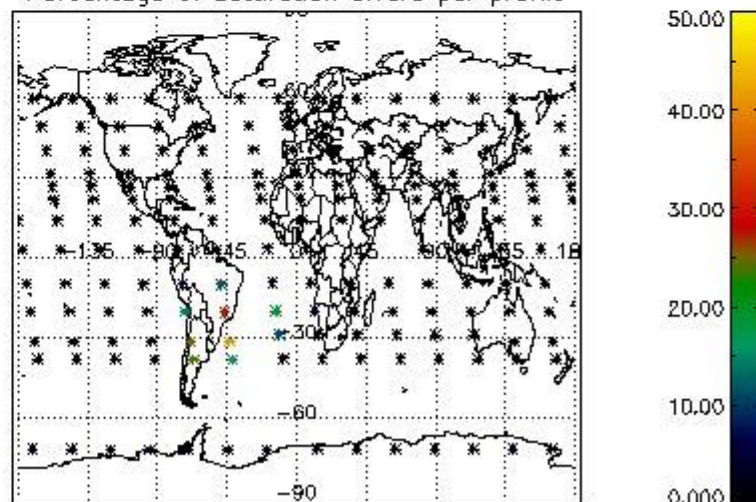
Percentage of datation errors per profile



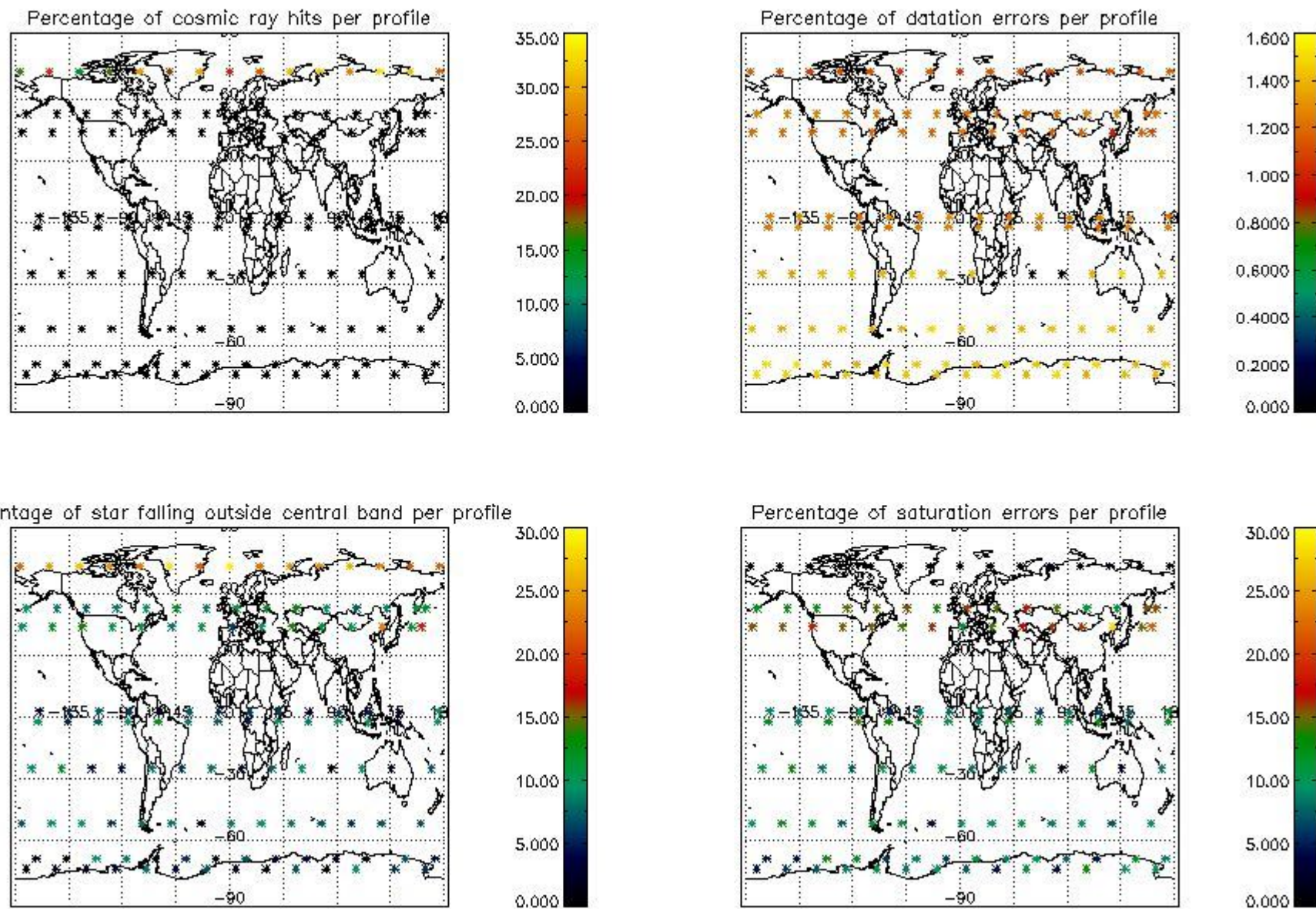
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



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

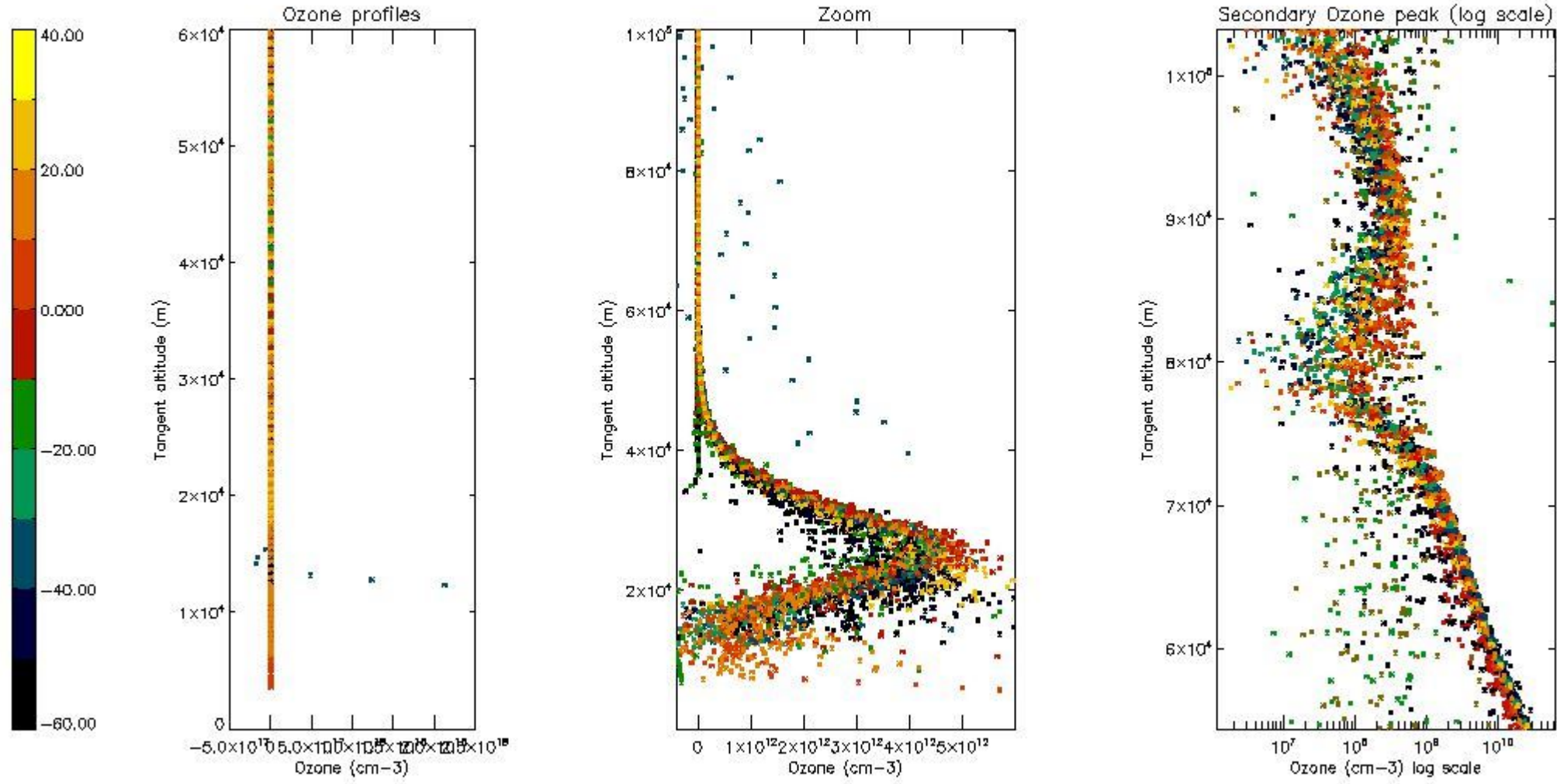
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

| Criteria | % of total production |
|----------|-----------------------|
| All STD | 53 |
| STD < 20 | 28 |

| | |
|----------|----|
| STD < 10 | 22 |
| STD < 5 | 15 |

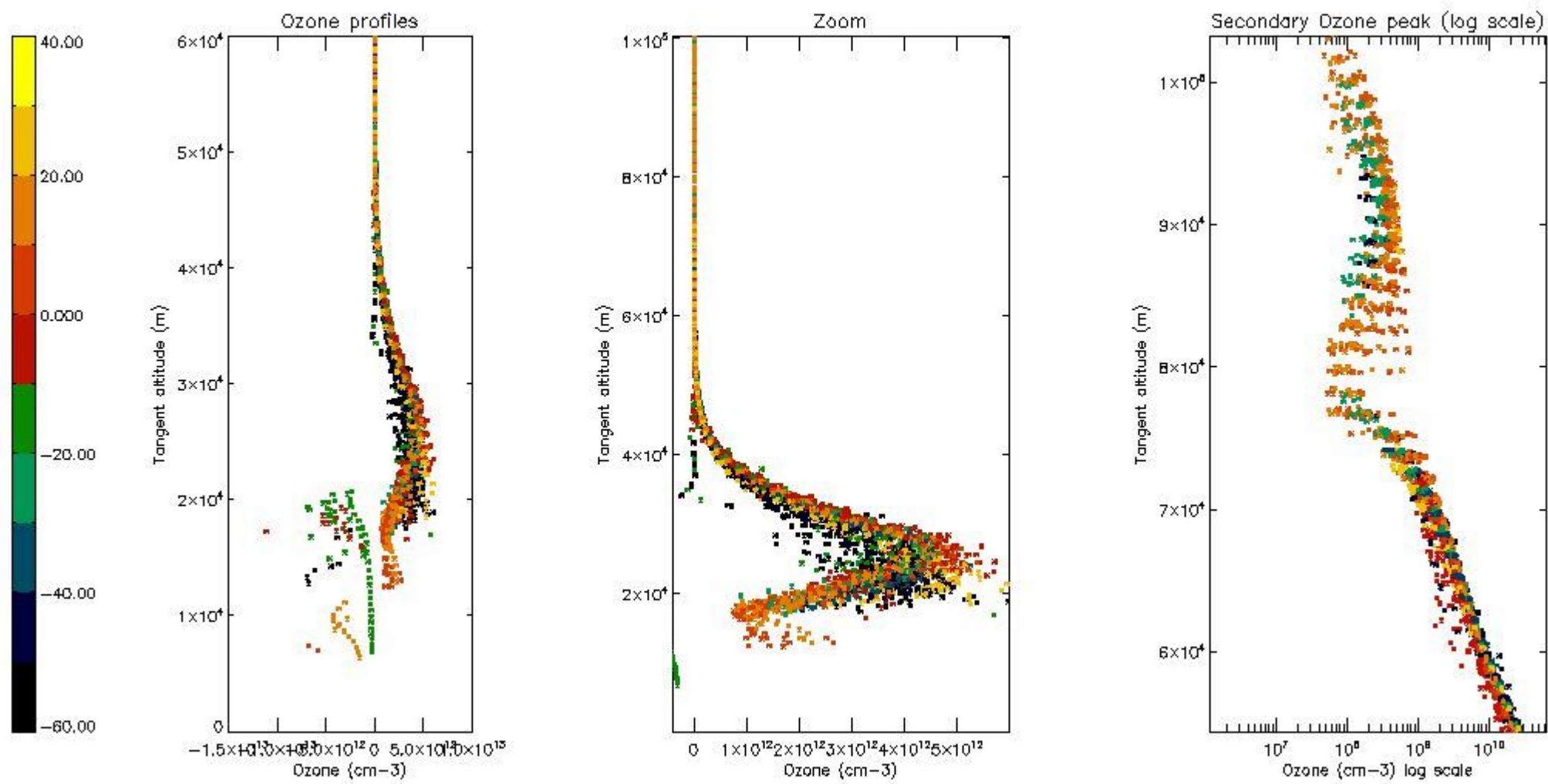
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



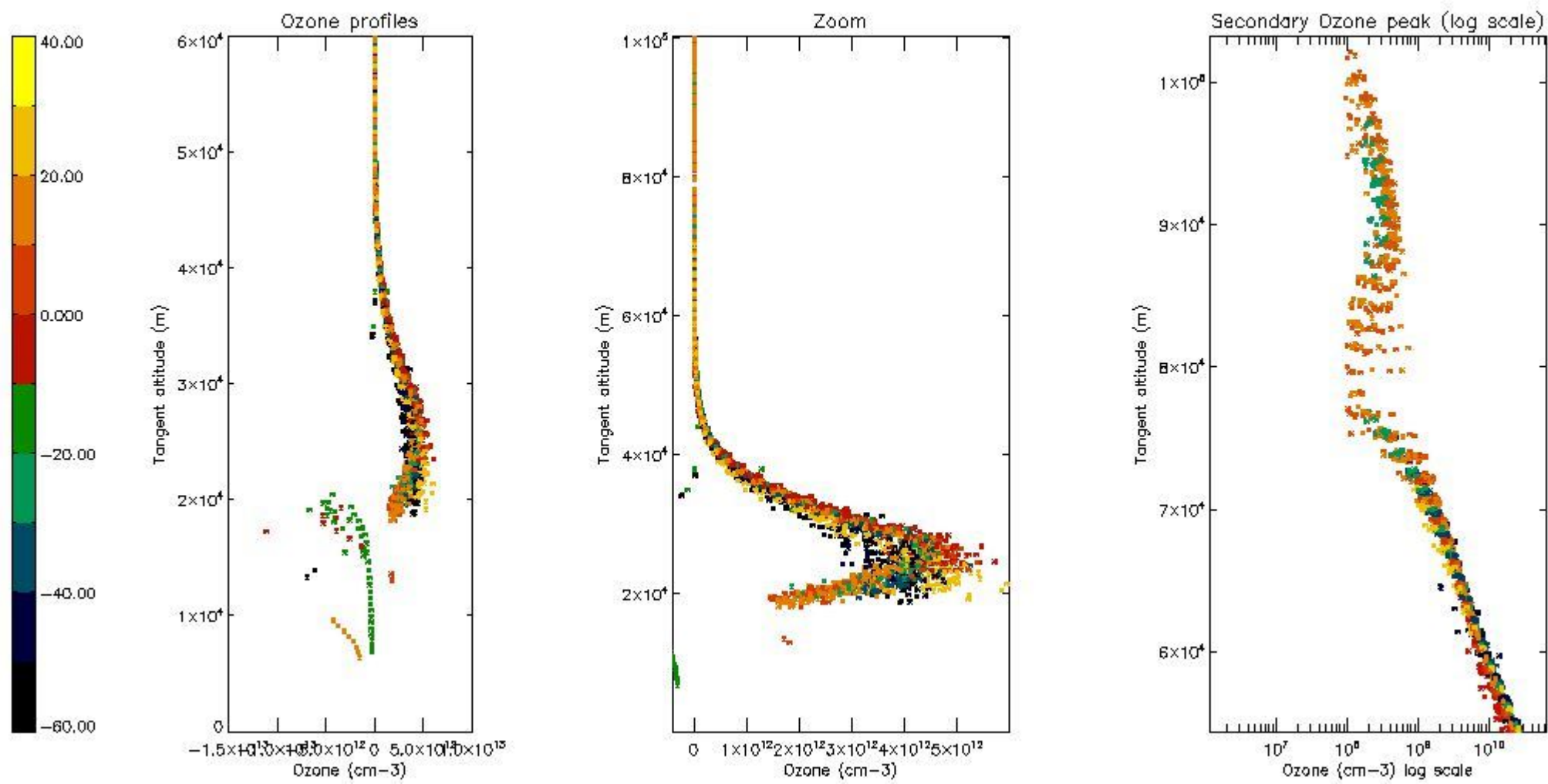
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



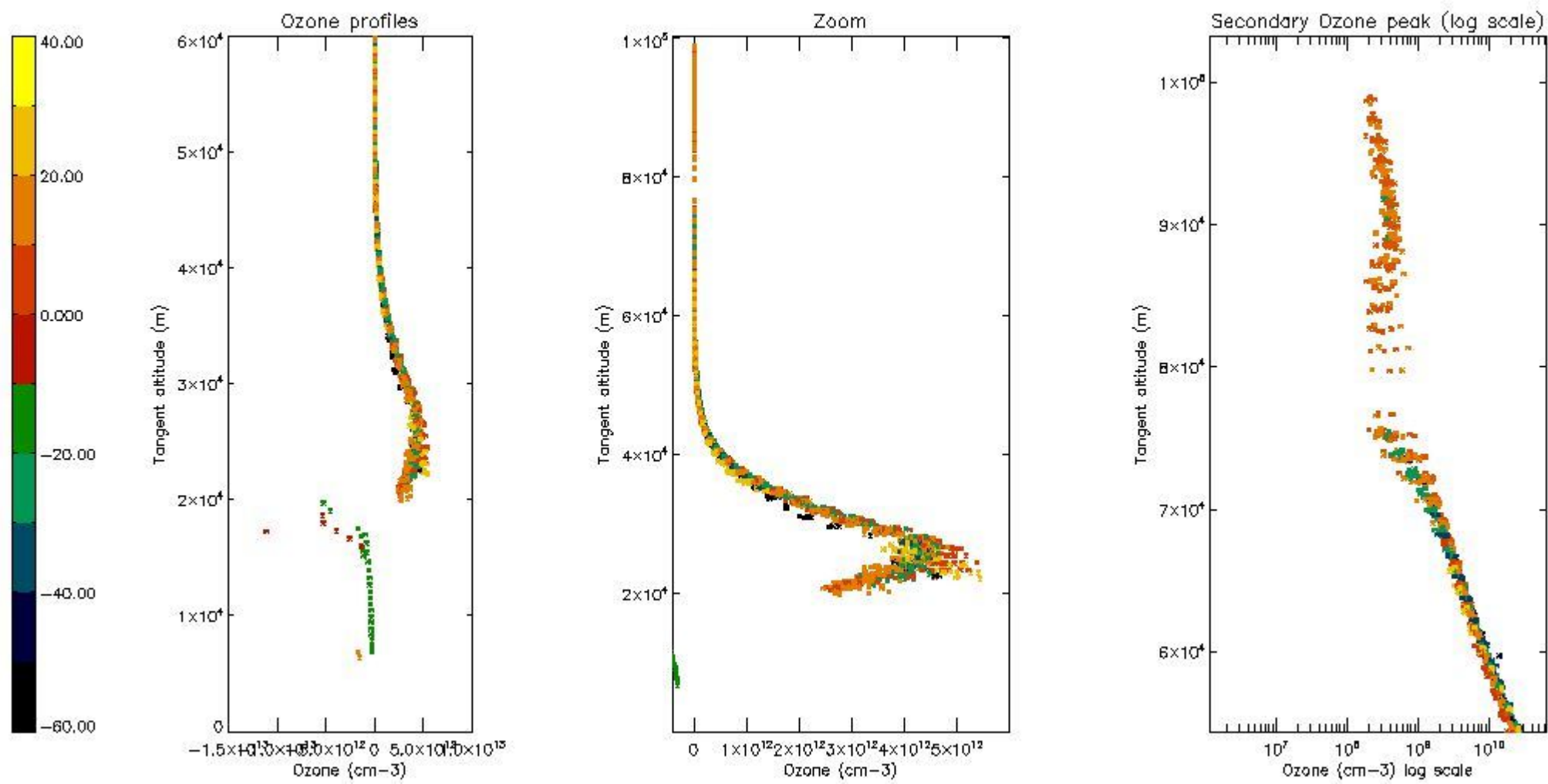
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



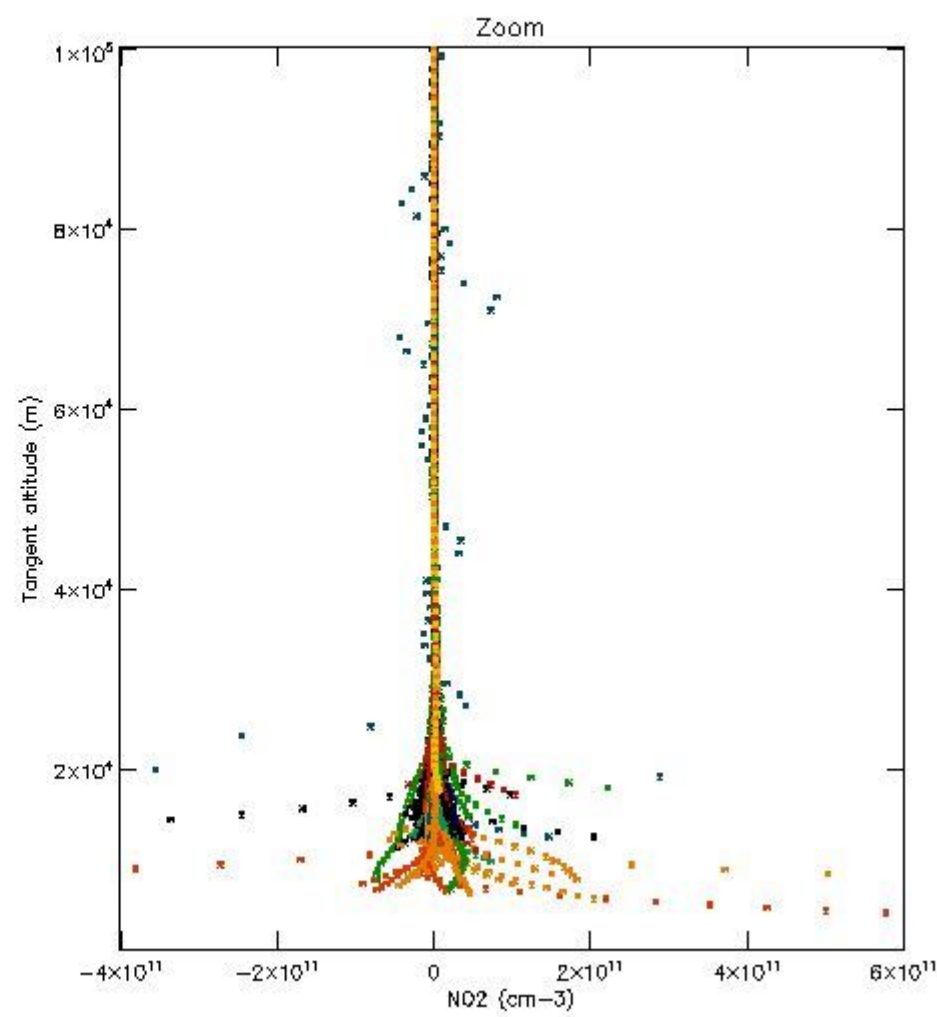
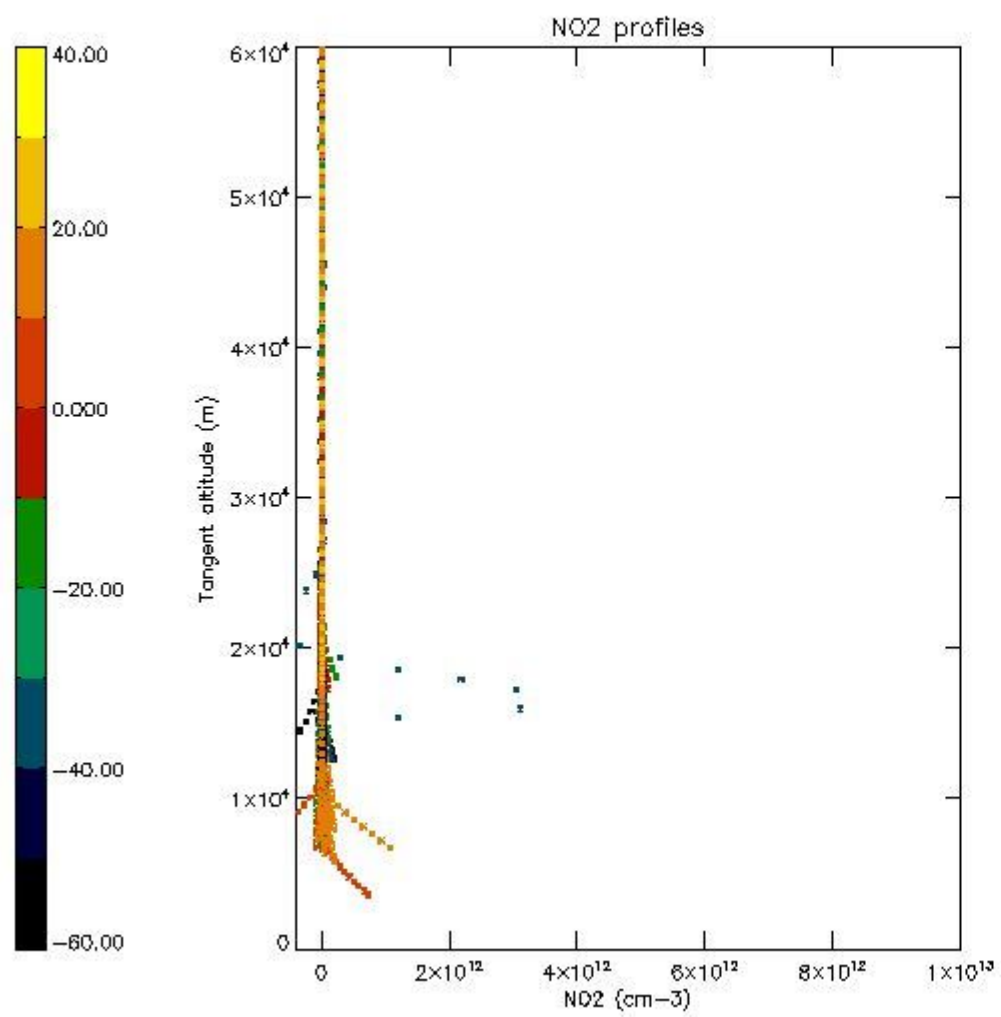
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



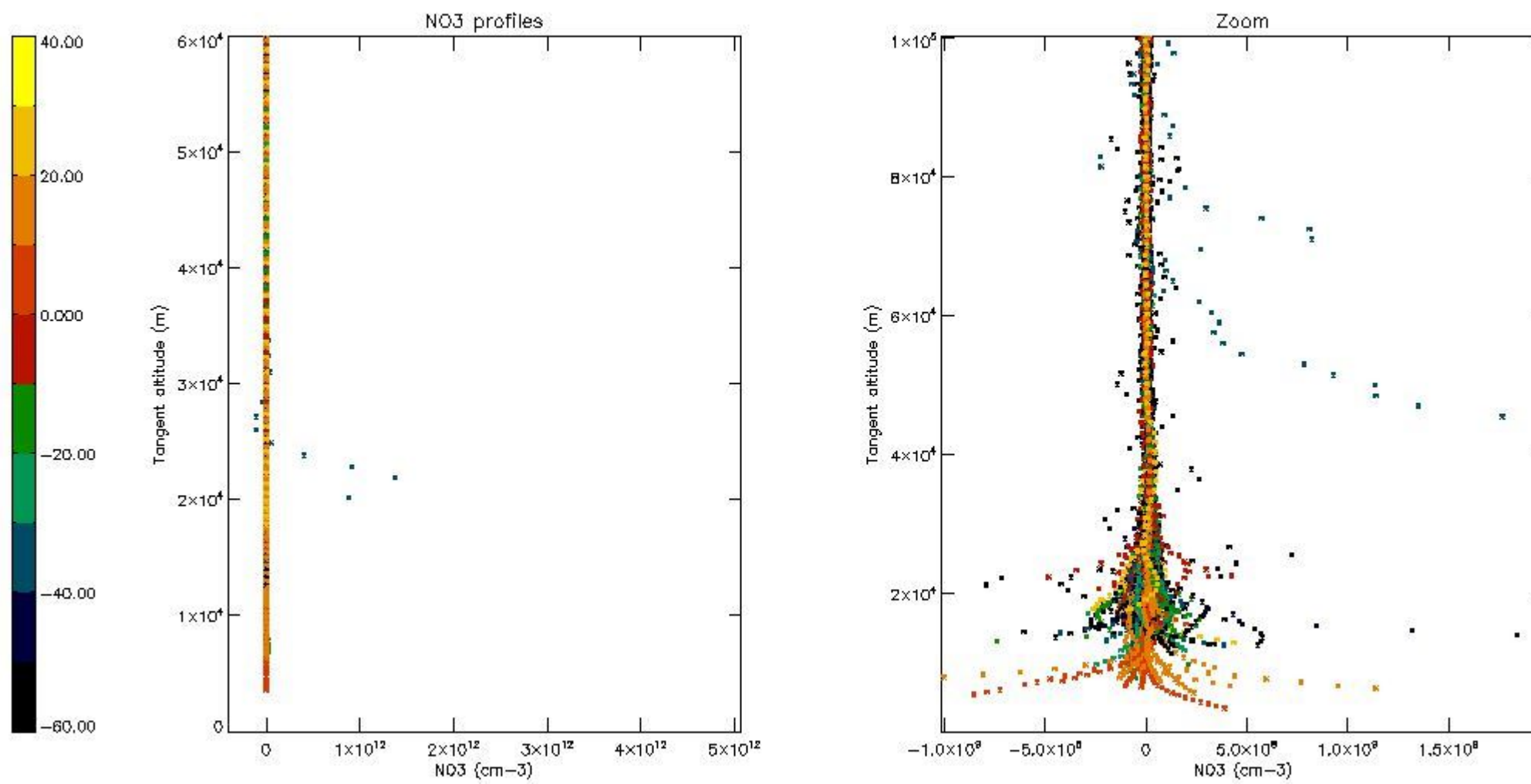
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



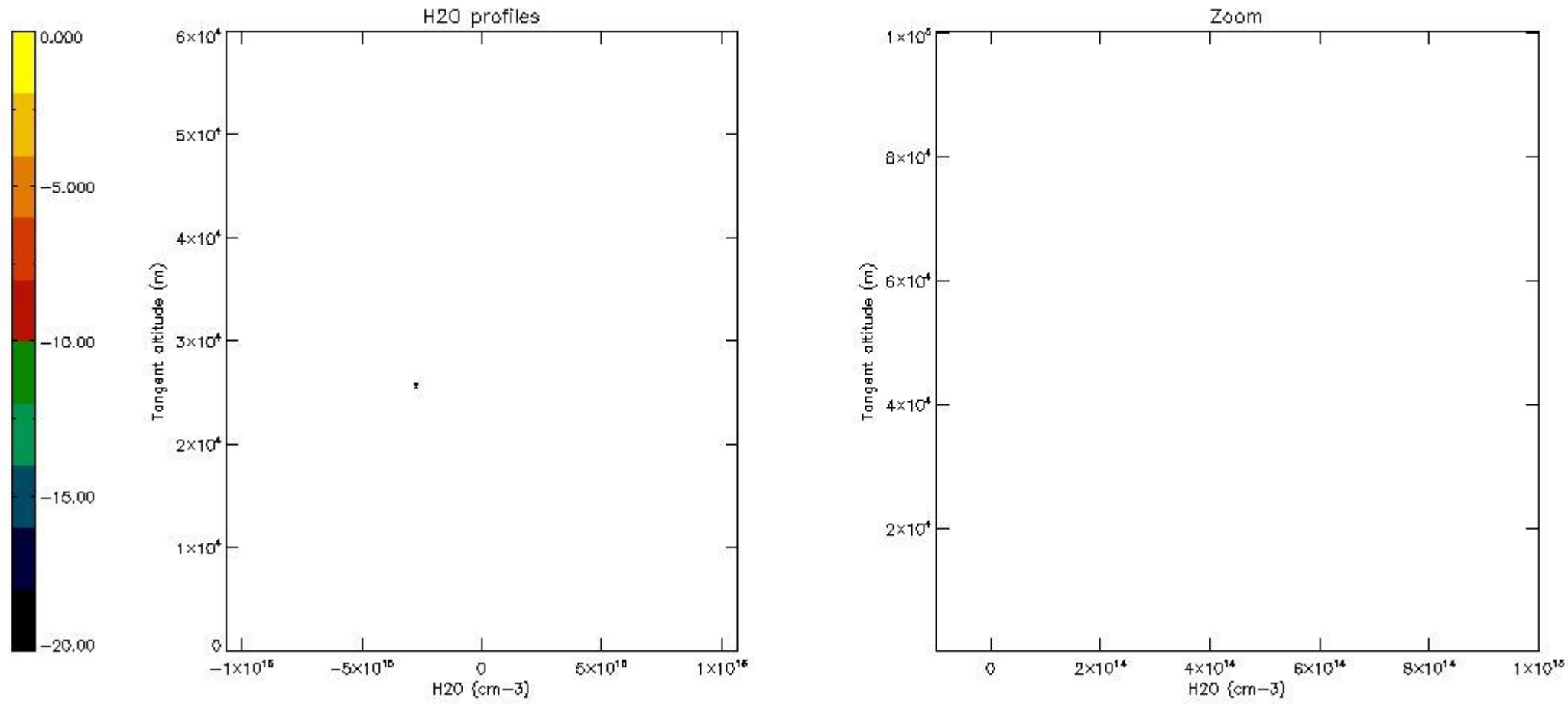
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

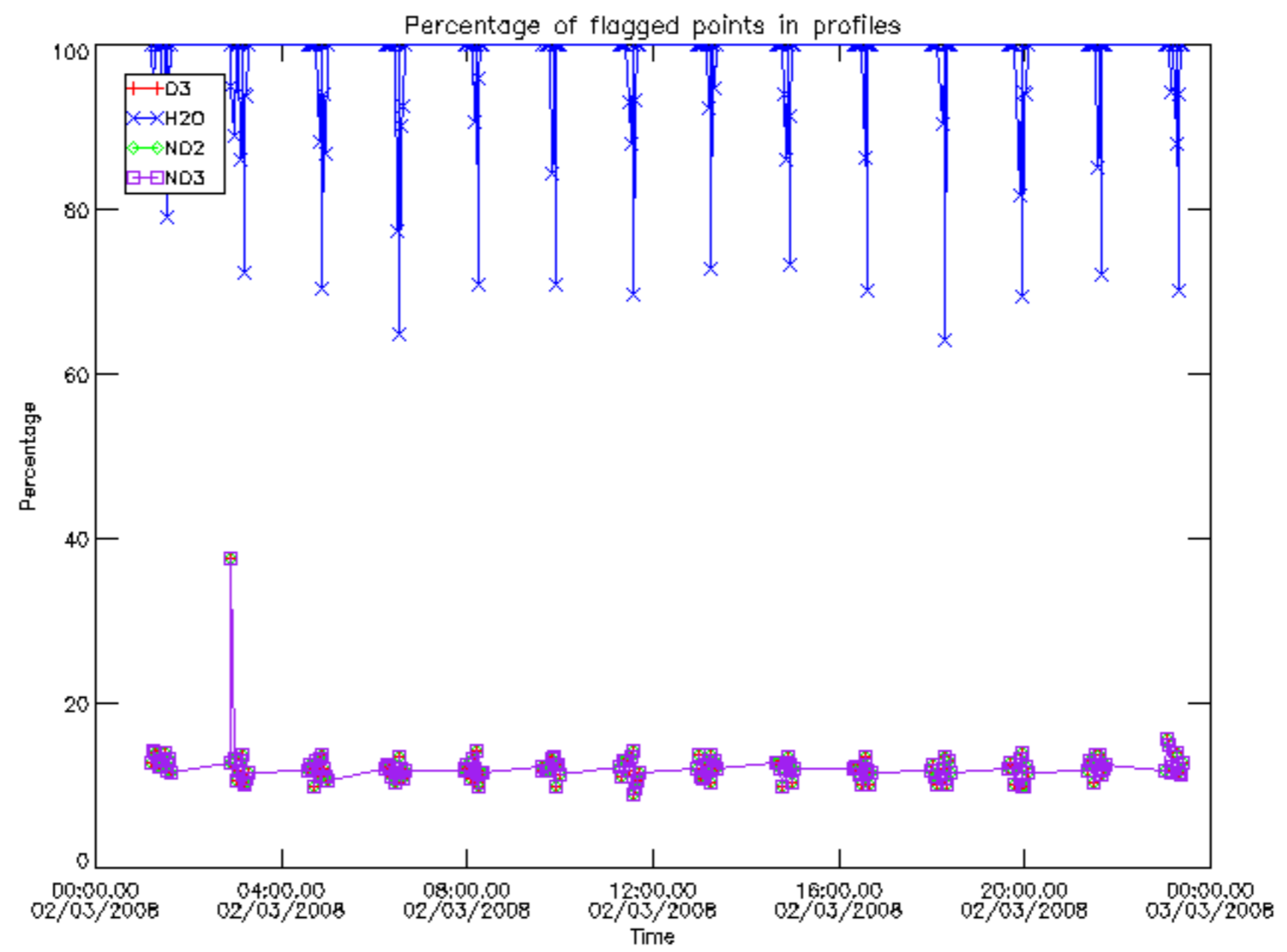
The colorbar represents the latitude.



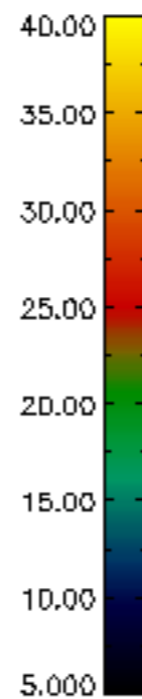
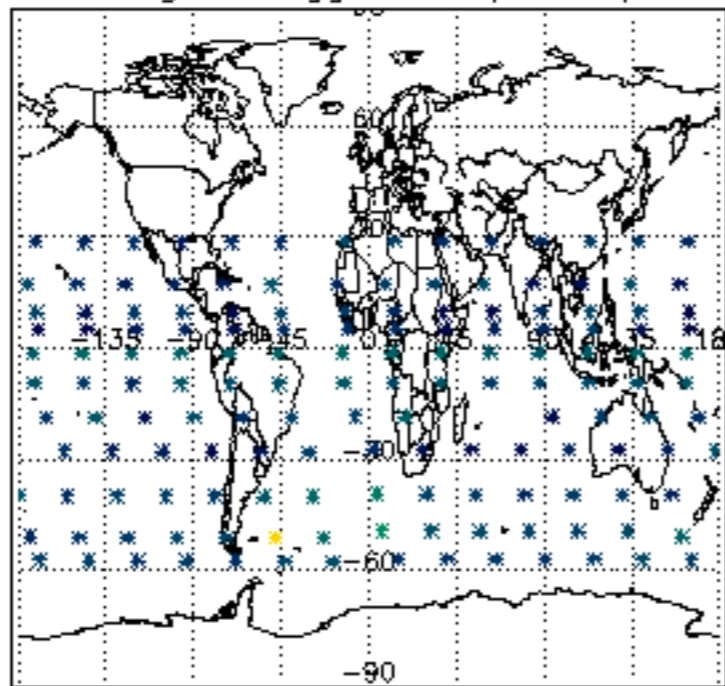
6. Auxiliary Data Files used for the production reported in section 2

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.

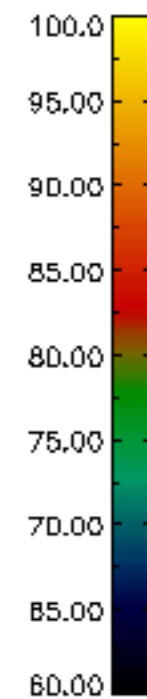
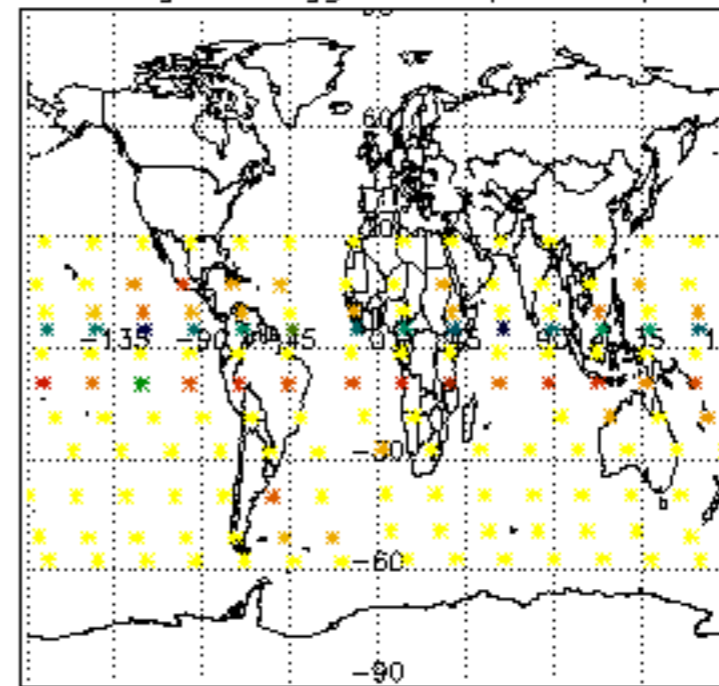
| Type | Auxiliary Filename | Used since product | Used since product date |
|---------------------------|---|--------------------|-------------------------|
| INST_PHYS_CHARACTERISTICS | GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000 | 1 | 02-MAR-2008 00:12:14 |
| LEVEL-2_PROC_CONFIG | GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000 | 1 | 02-MAR-2008 00:12:14 |
| CROSS_SECTIONS_FILE | GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000 | 1 | 02-MAR-2008 00:12:14 |



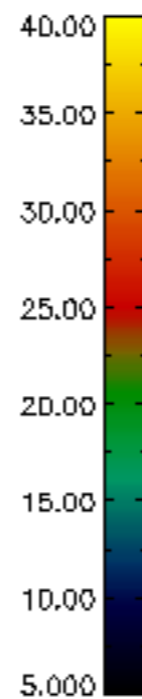
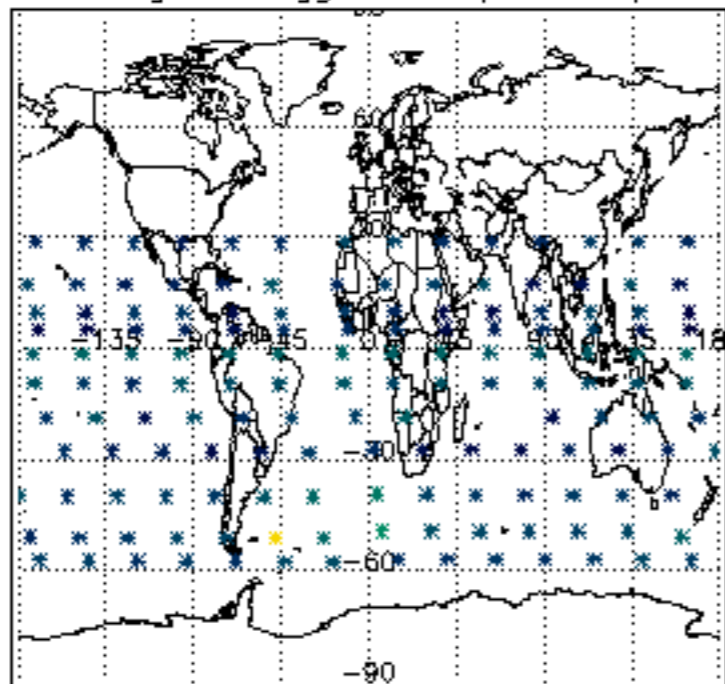
Percentage of flagged data per D3 profile



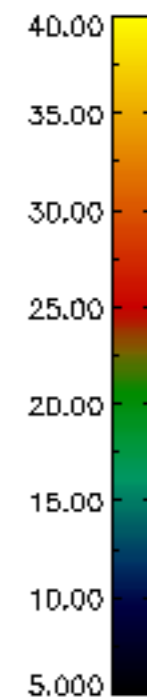
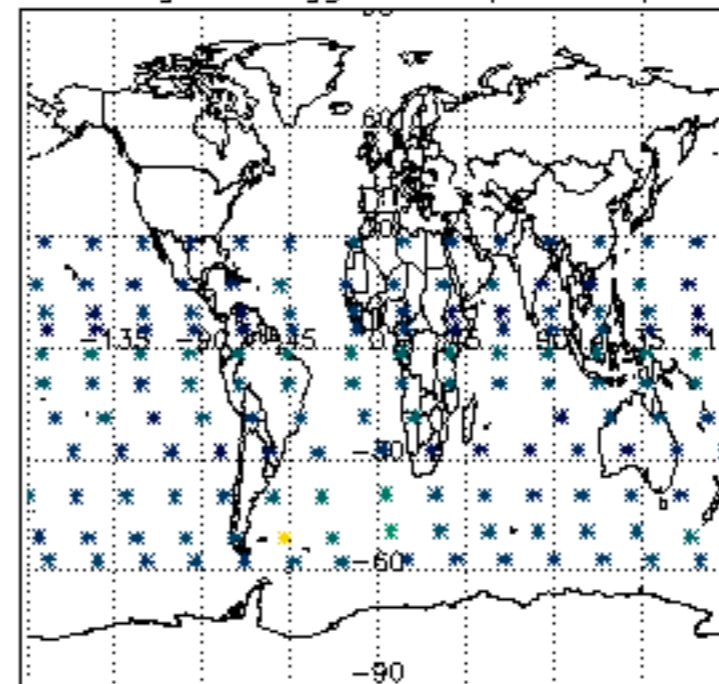
Percentage of flagged data per H2O profile

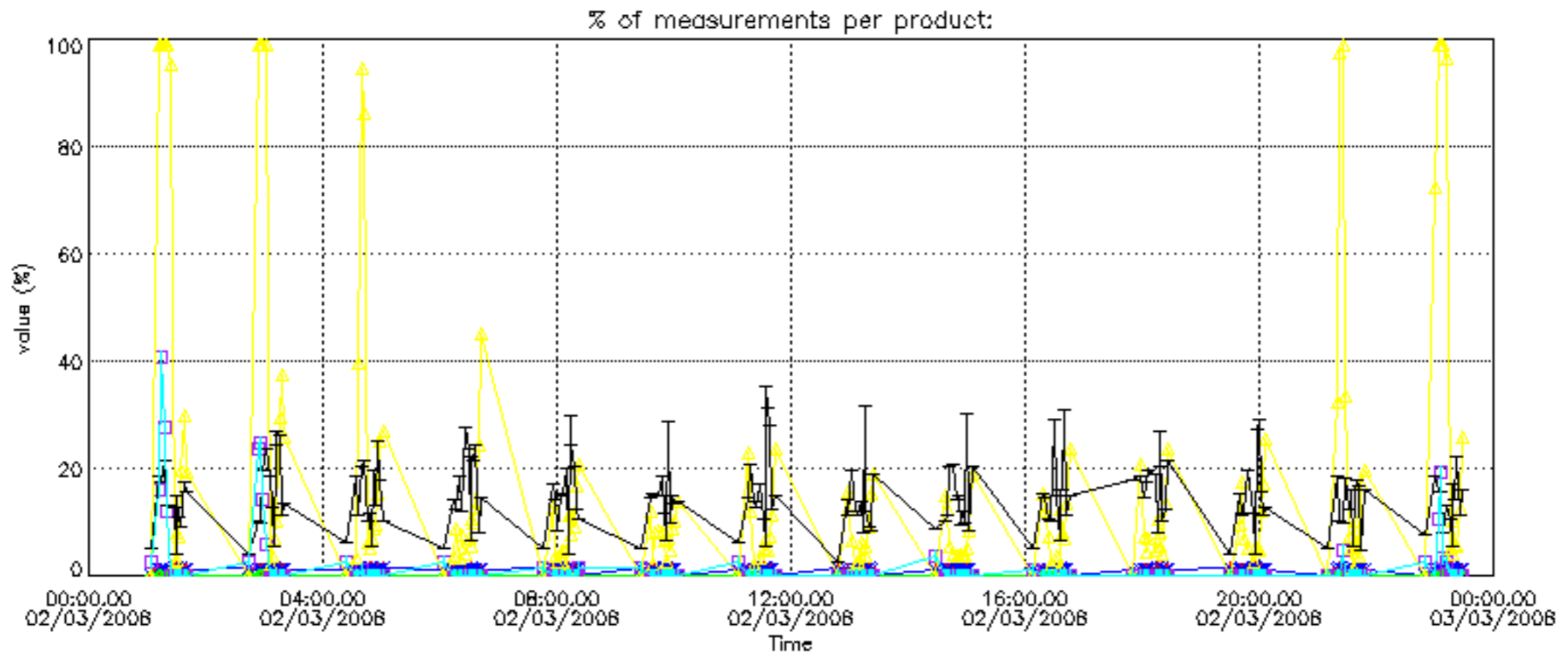


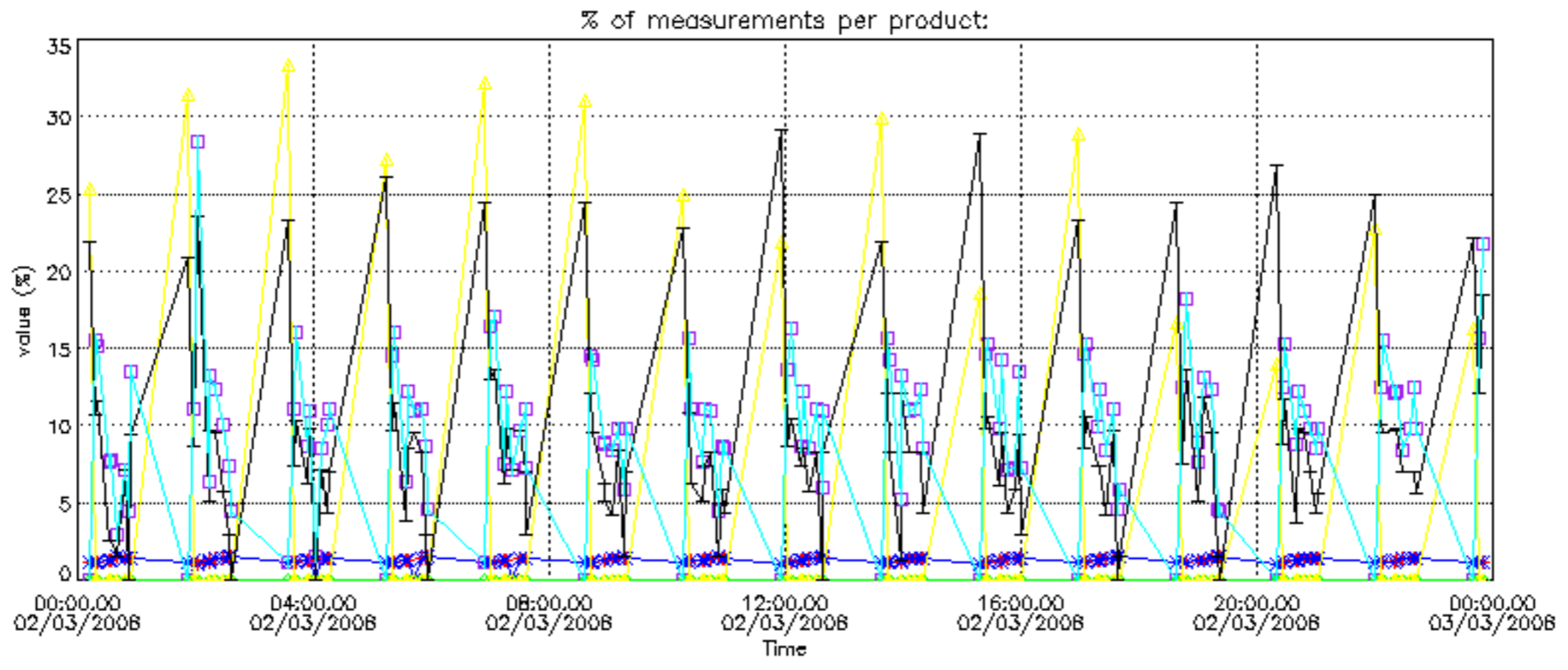
Percentage of flagged data per NO2 profile



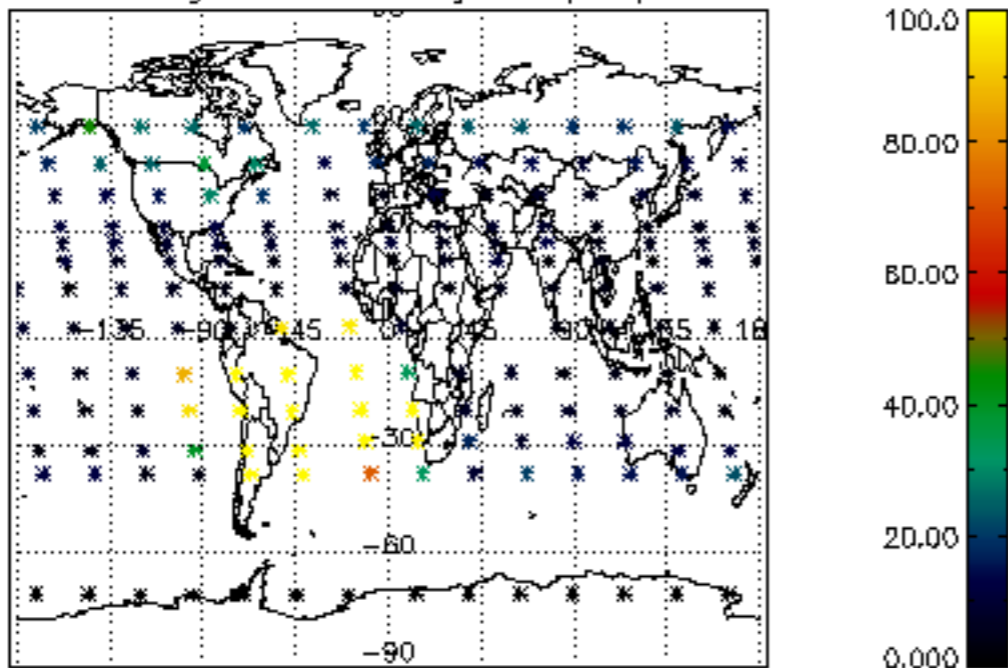
Percentage of flagged data per NO3 profile



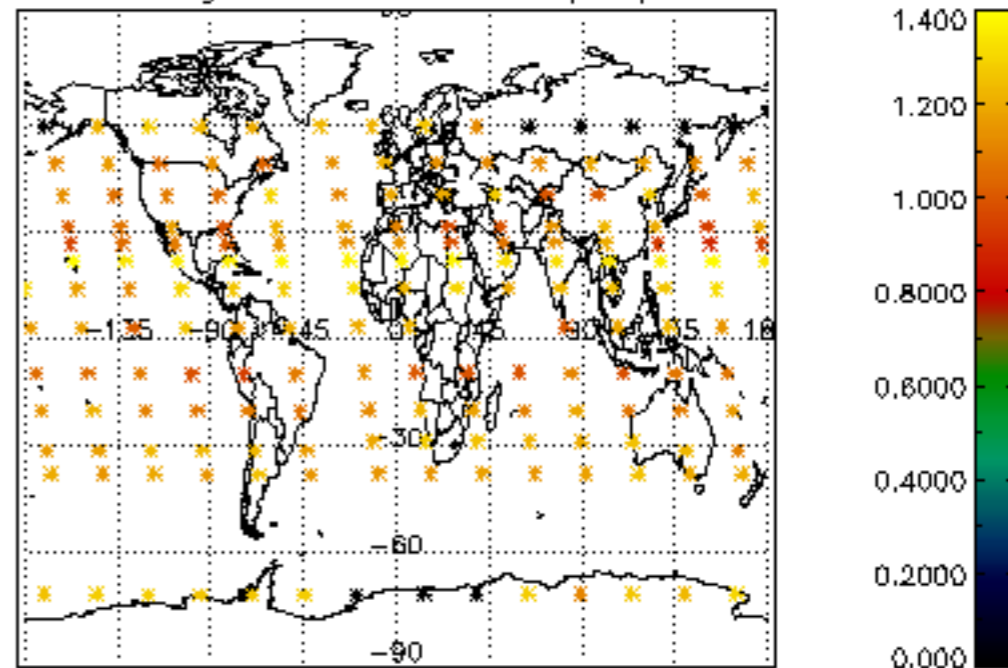




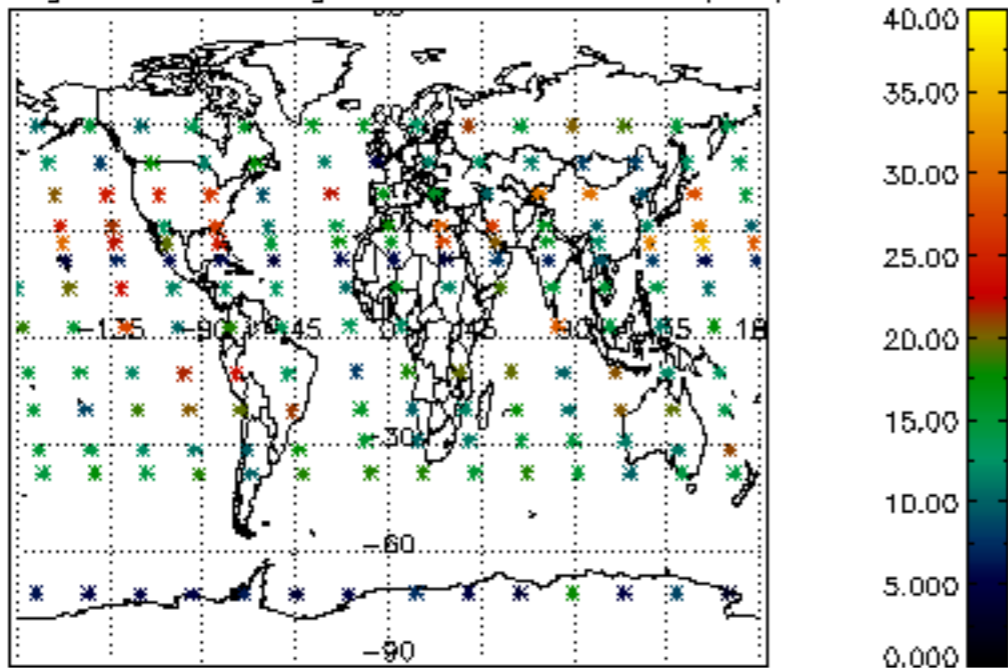
Percentage of cosmic ray hits per profile



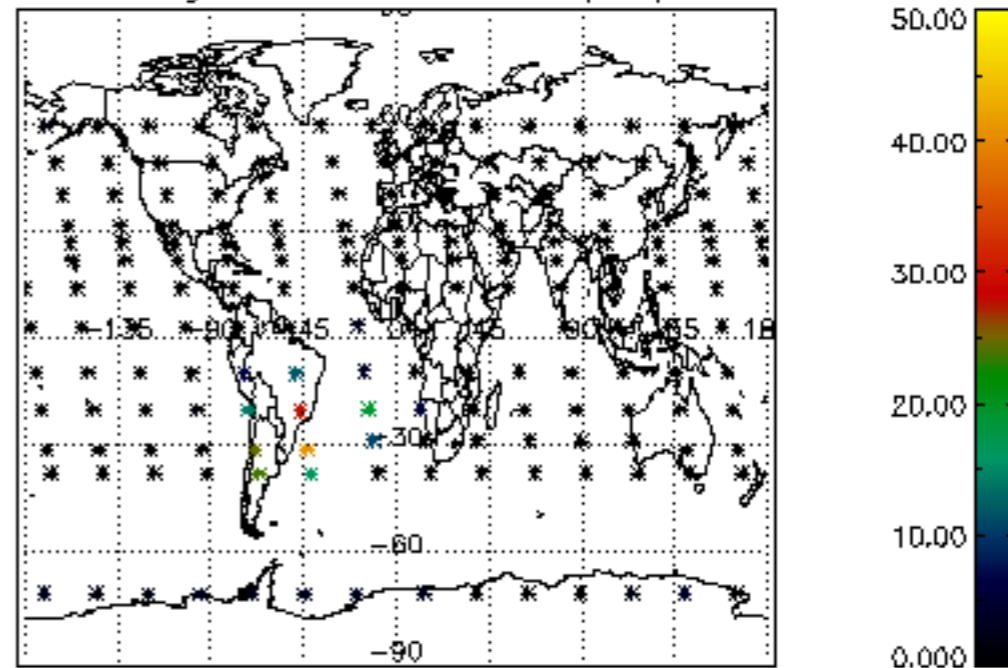
Percentage of datation errors per profile



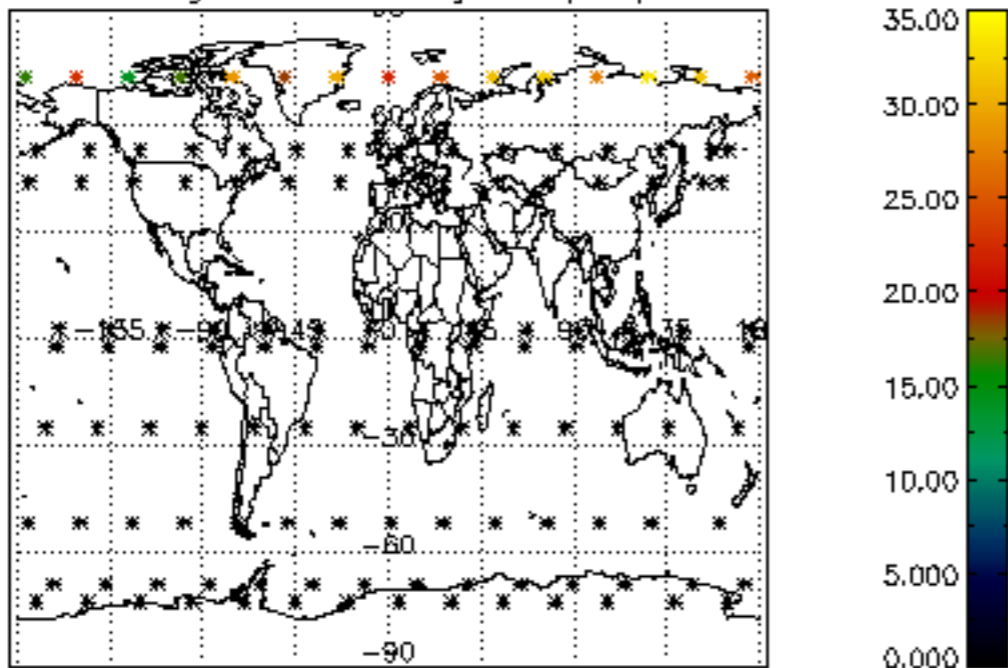
Percentage of star falling outside central band per profile



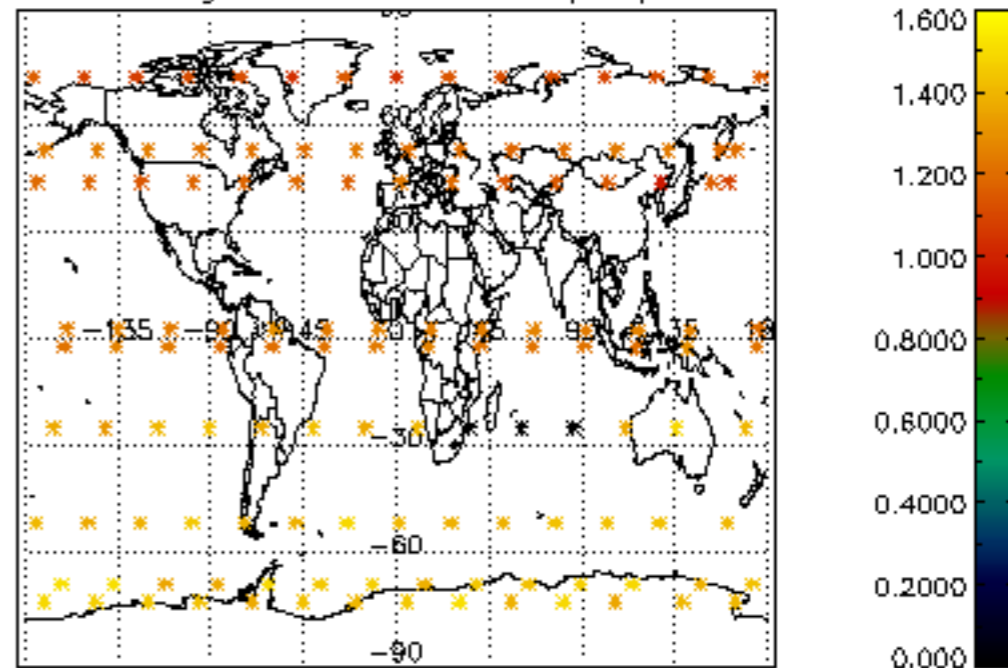
Percentage of saturation errors per profile



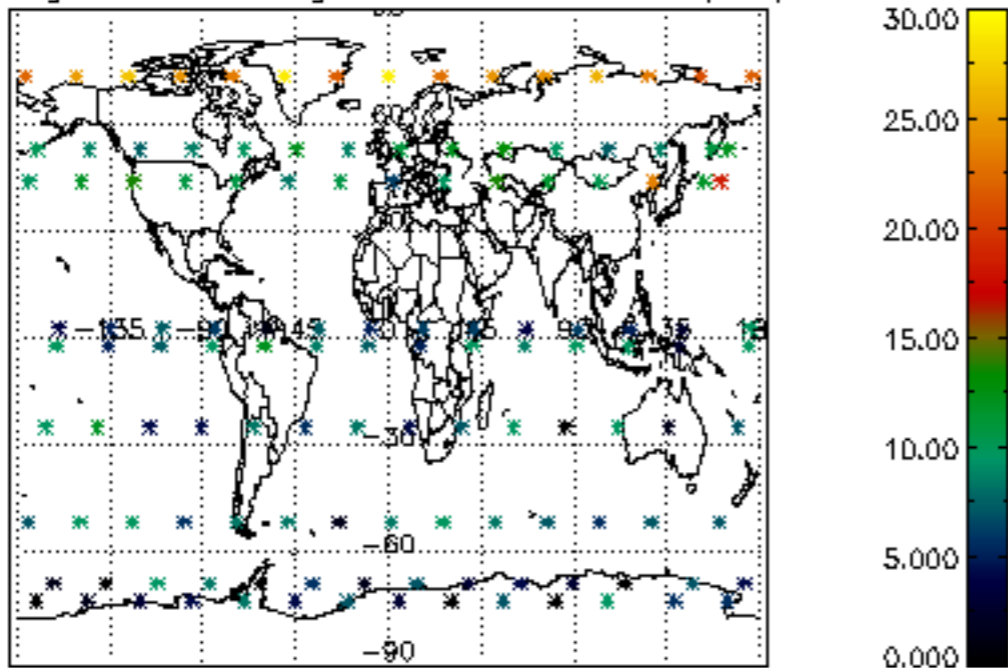
Percentage of cosmic ray hits per profile



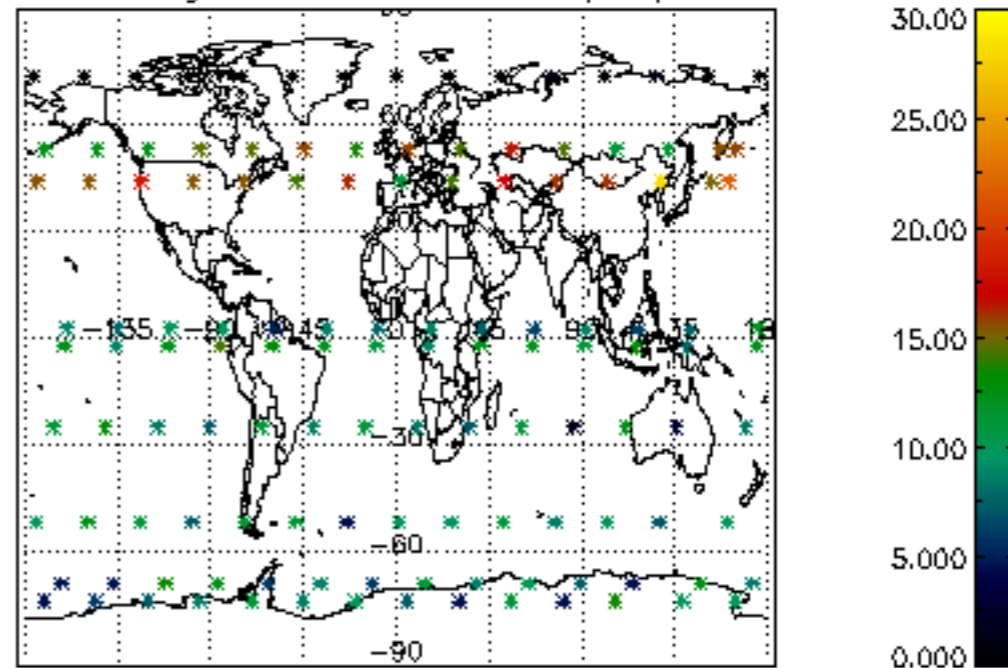
Percentage of datation errors per profile

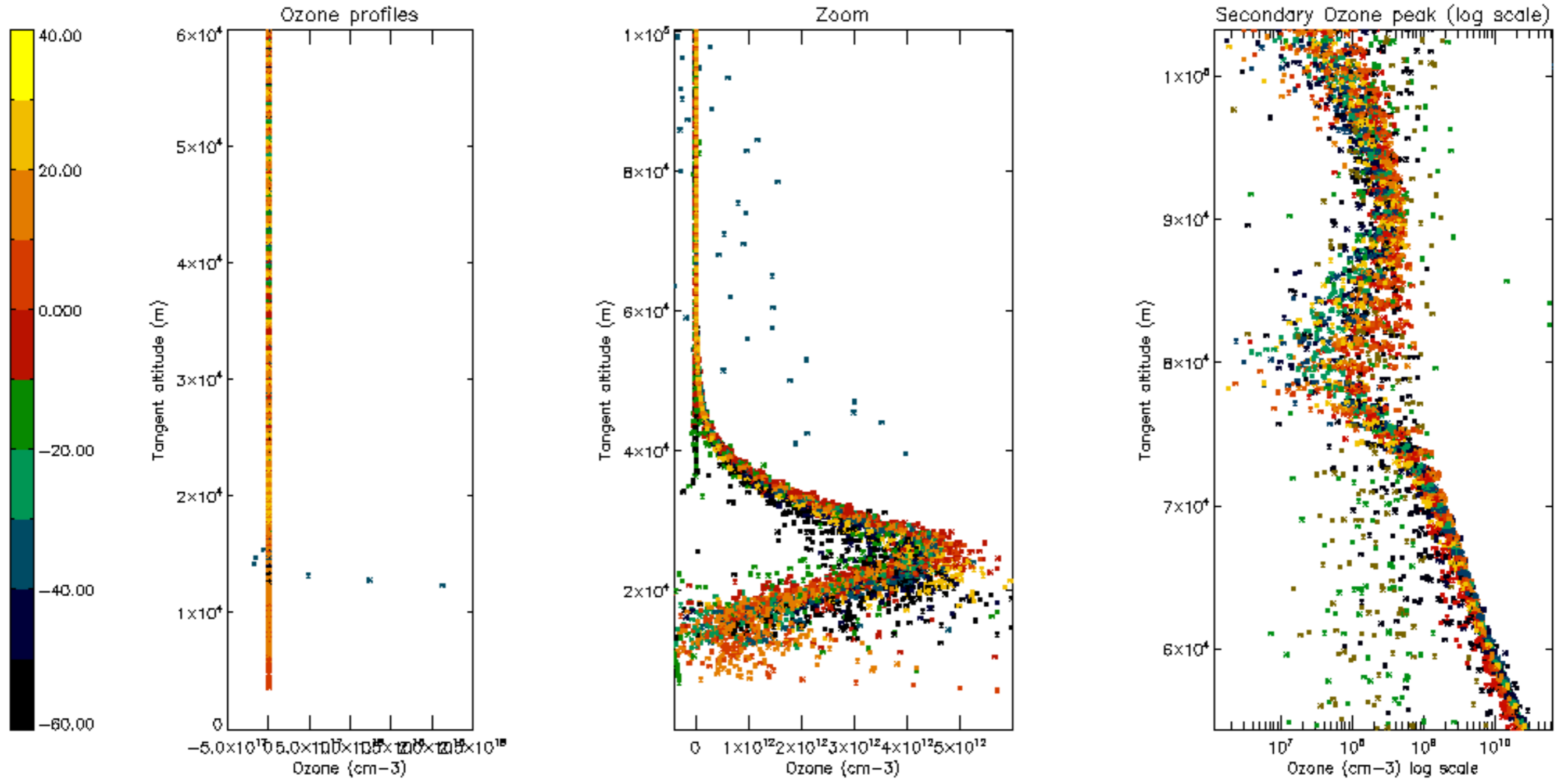


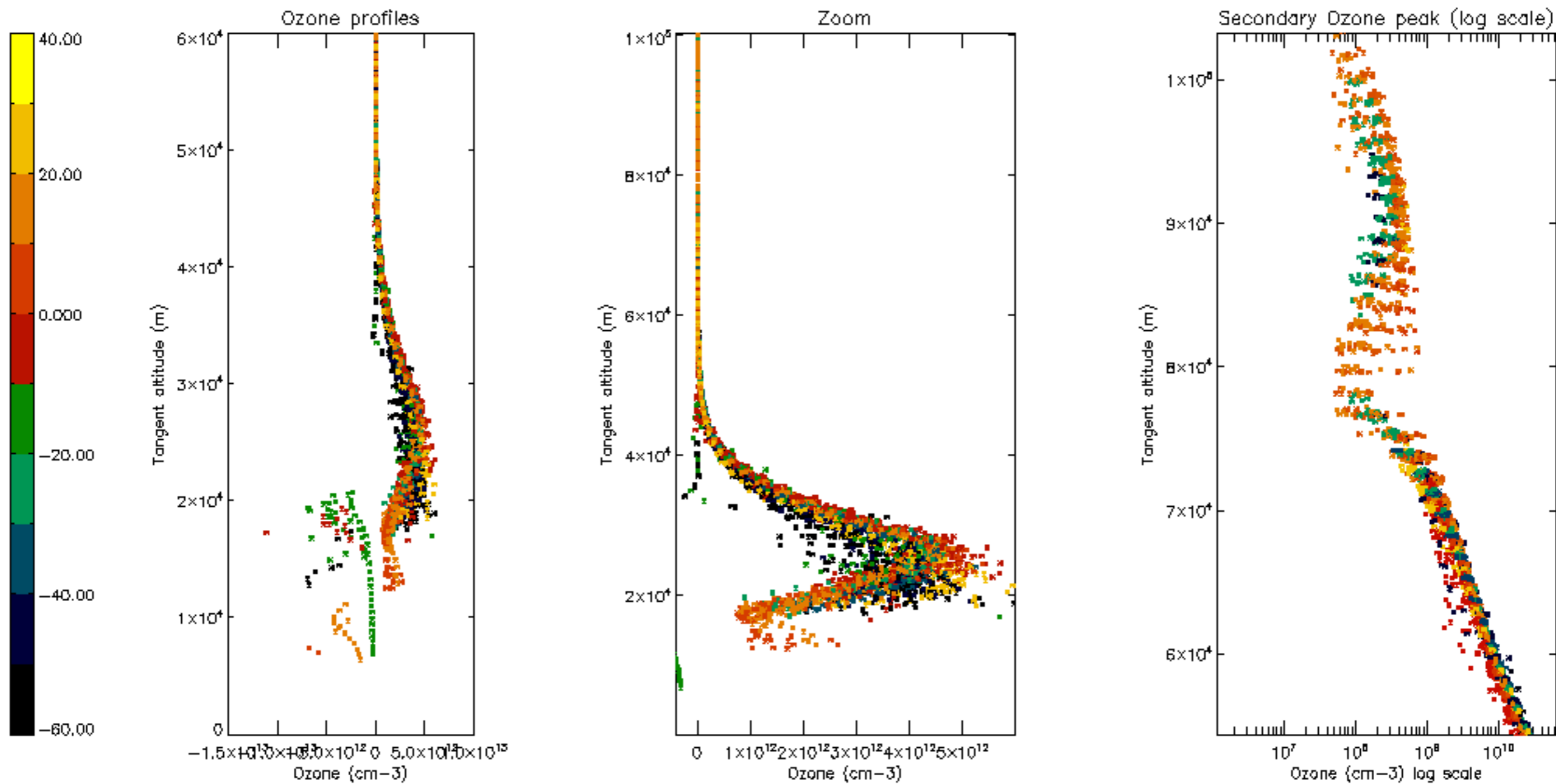
Percentage of star falling outside central band per profile

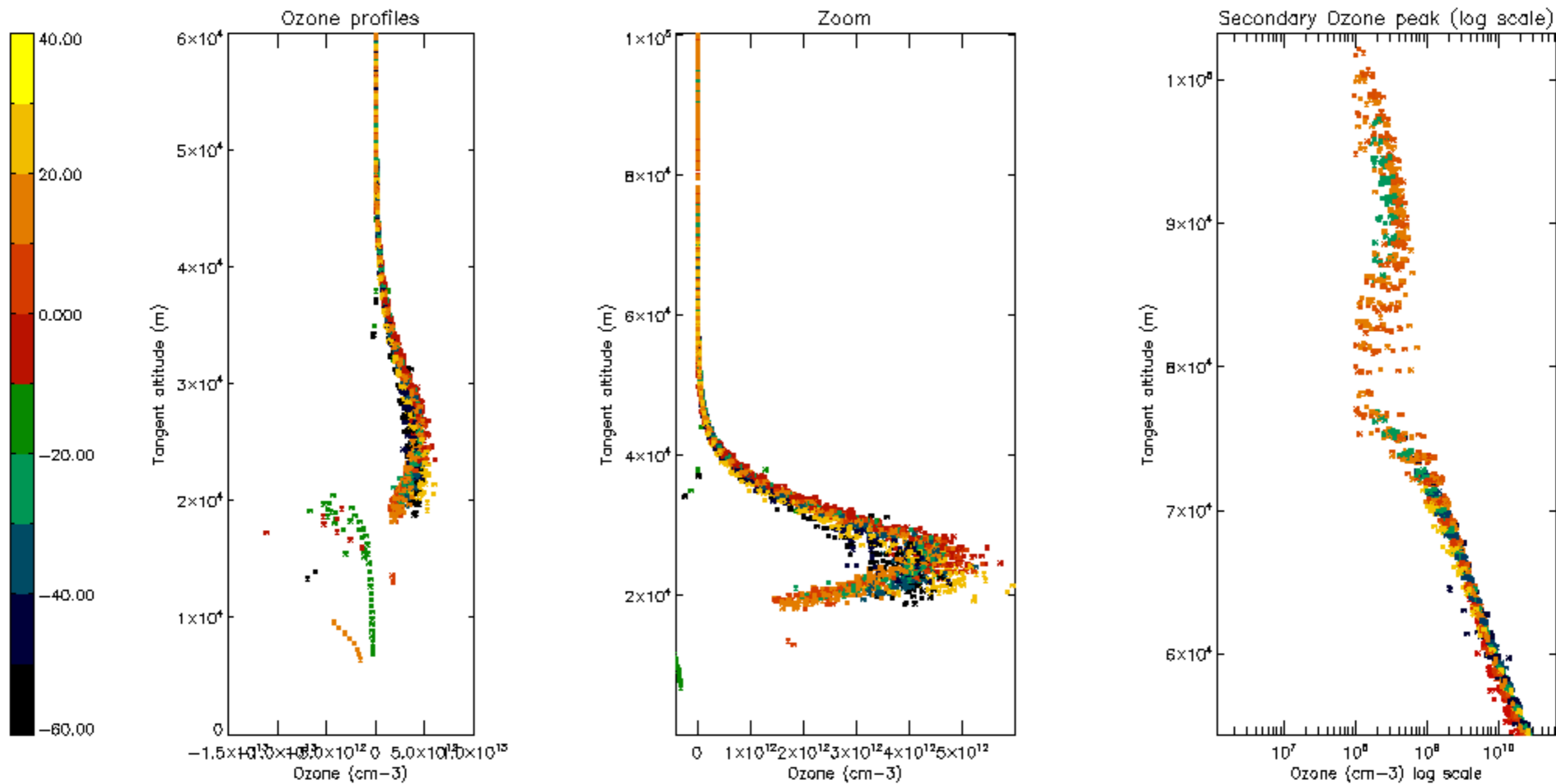


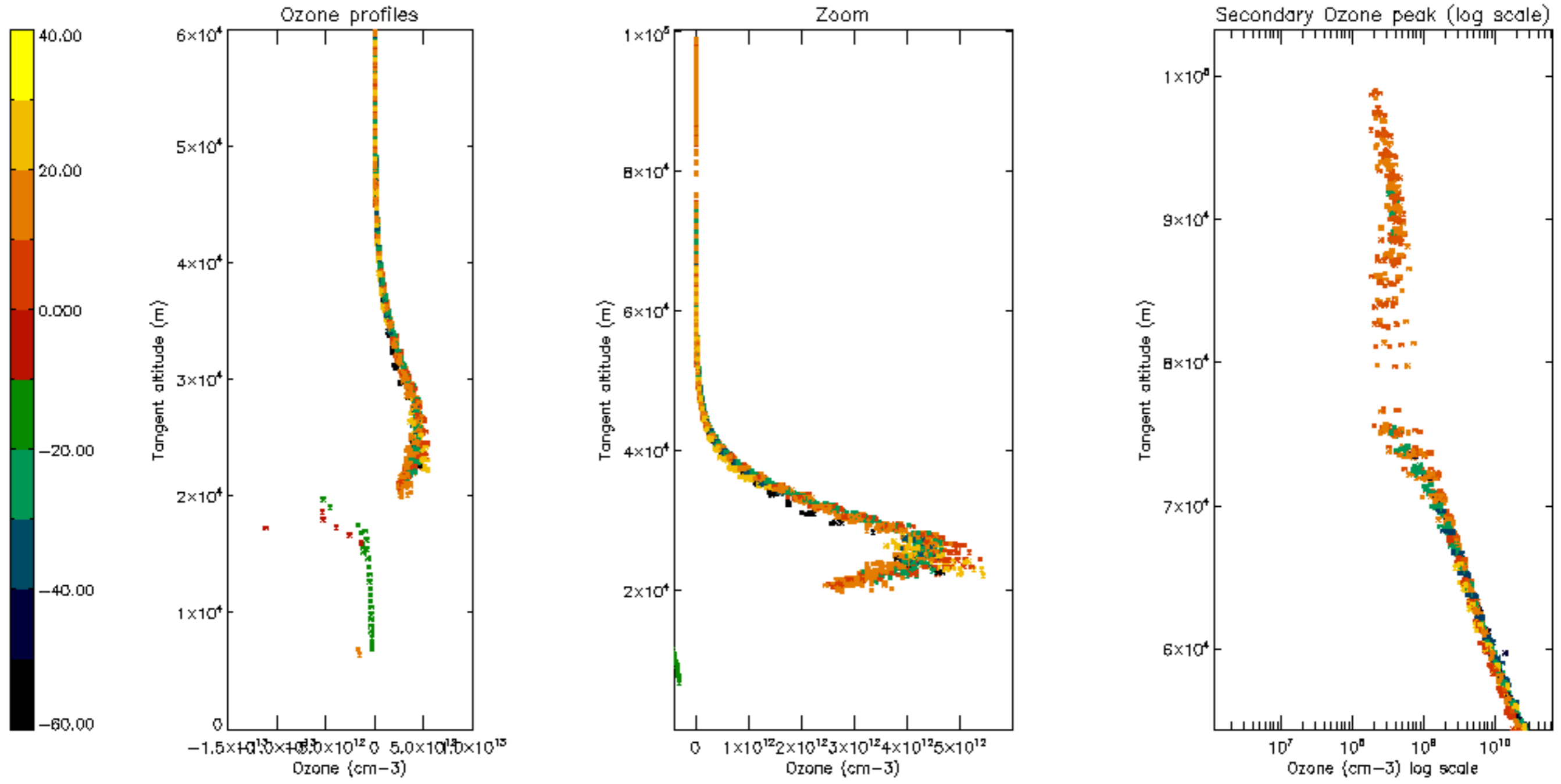
Percentage of saturation errors per profile

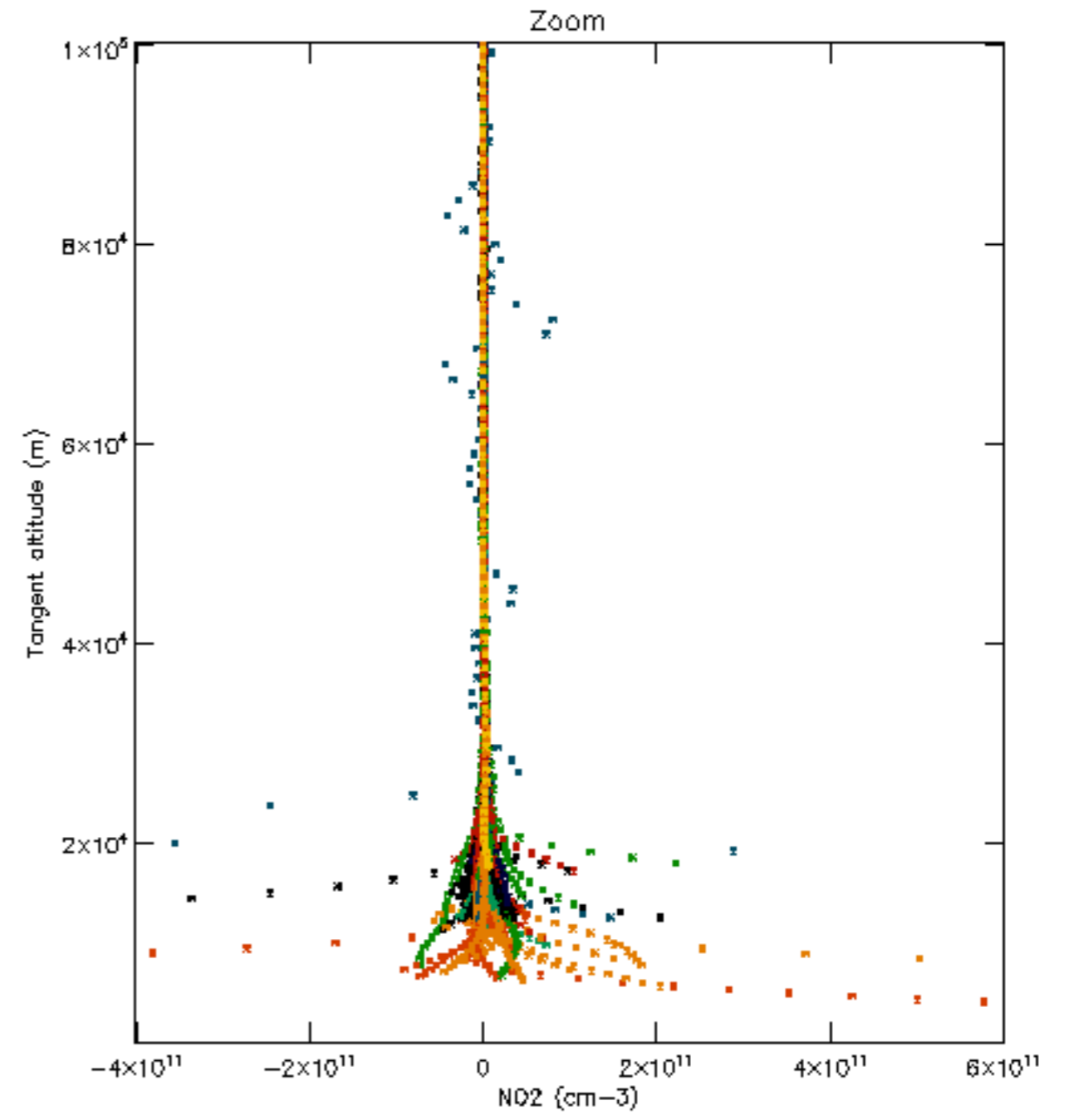
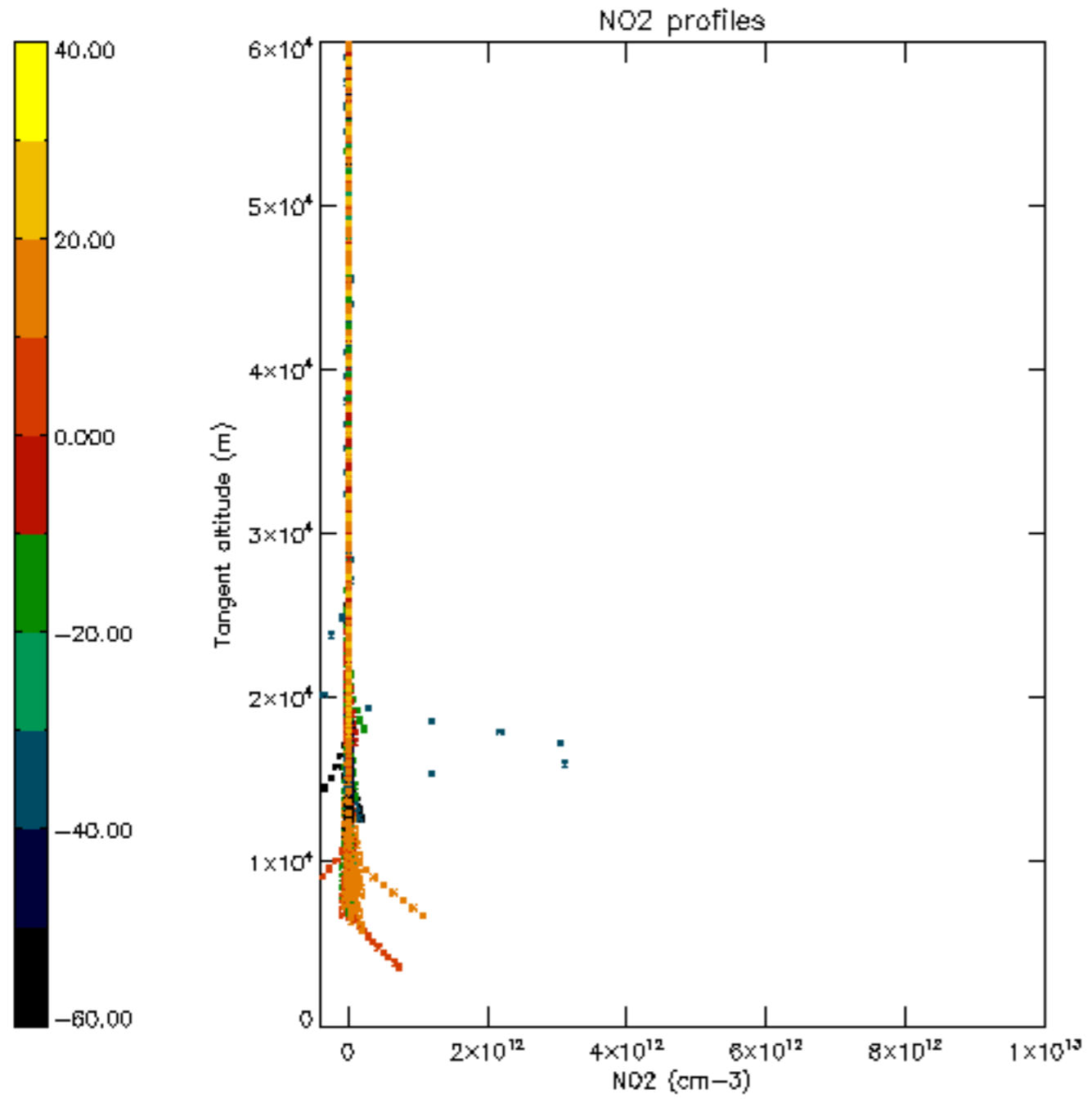


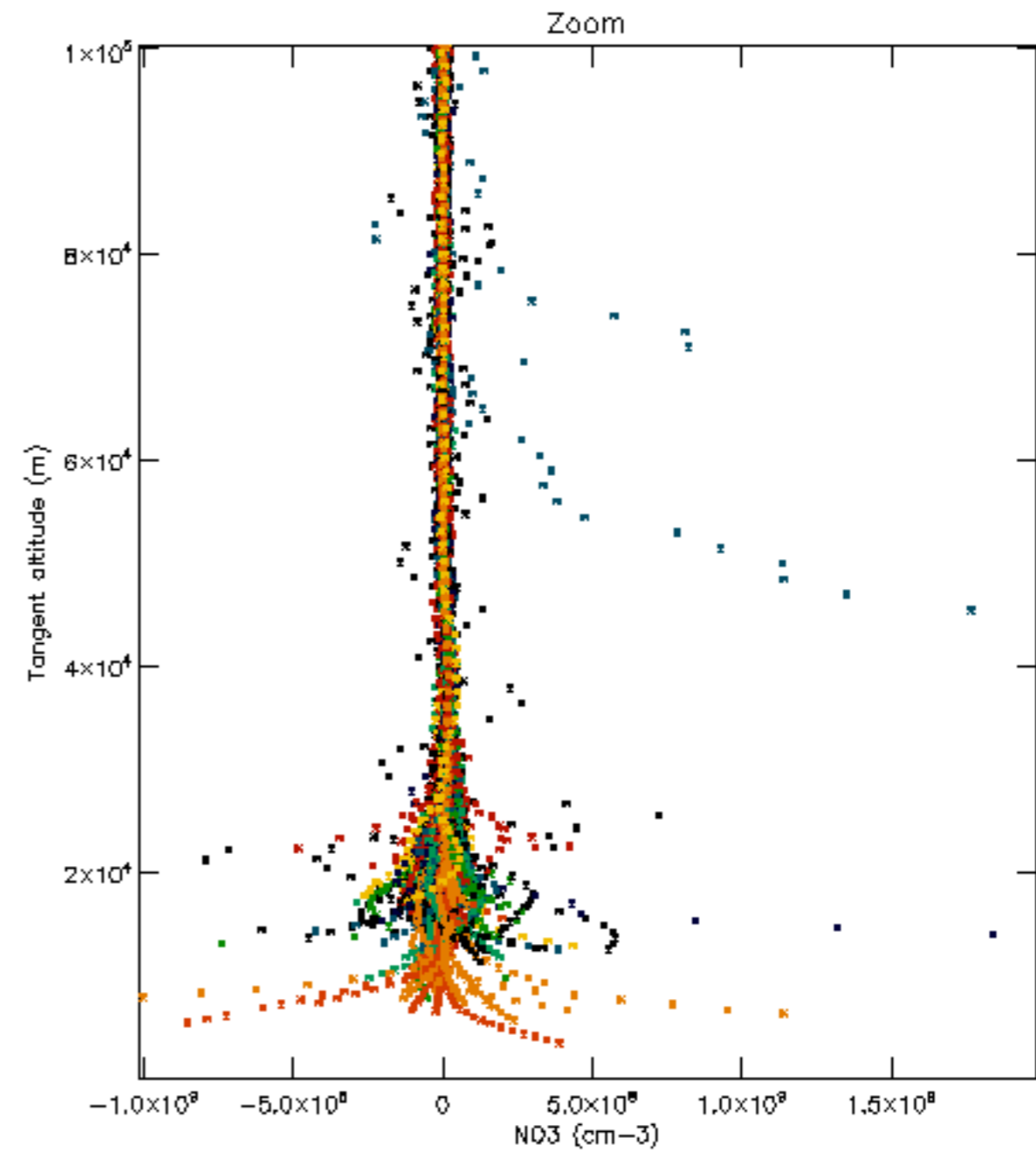
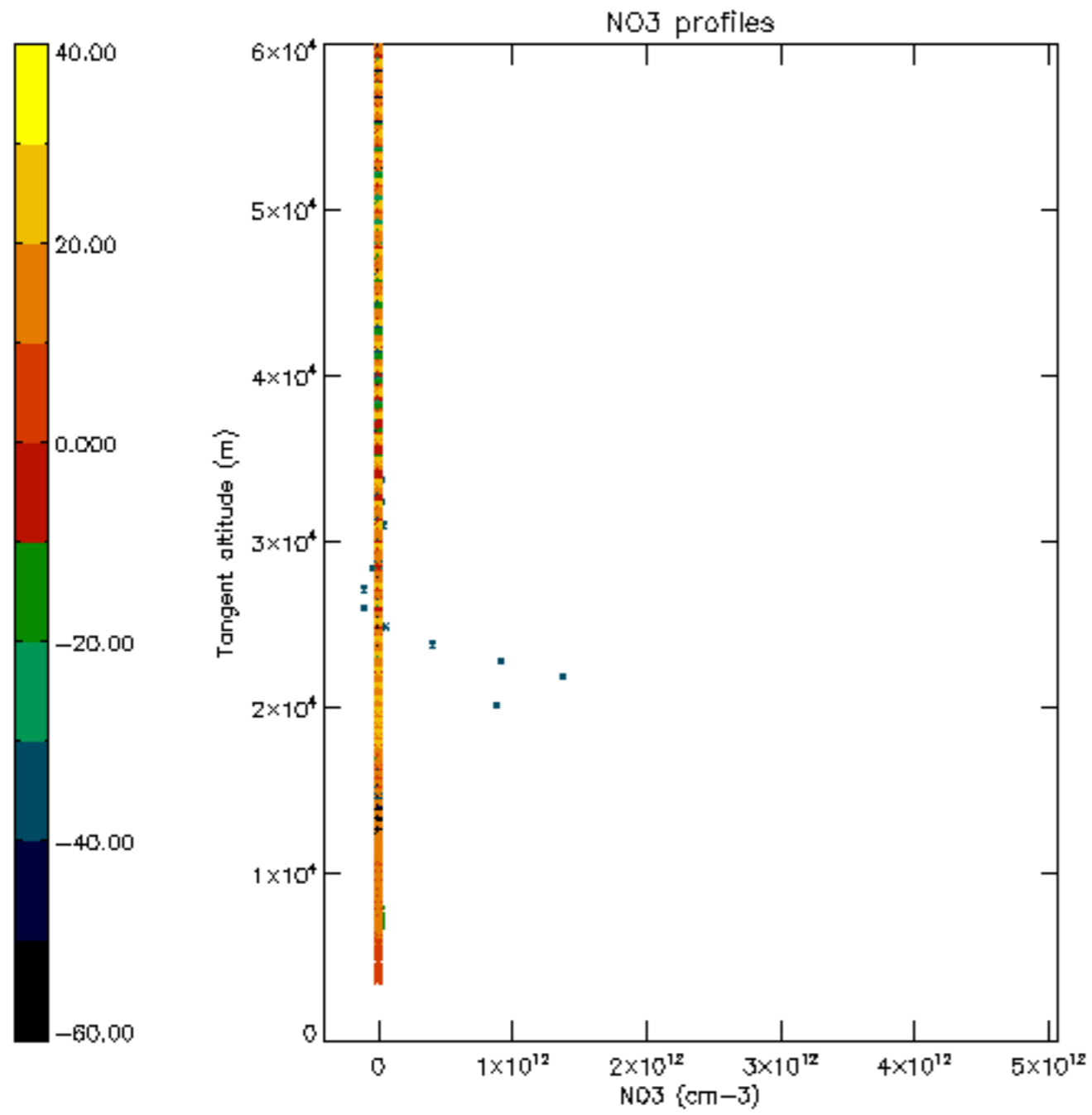


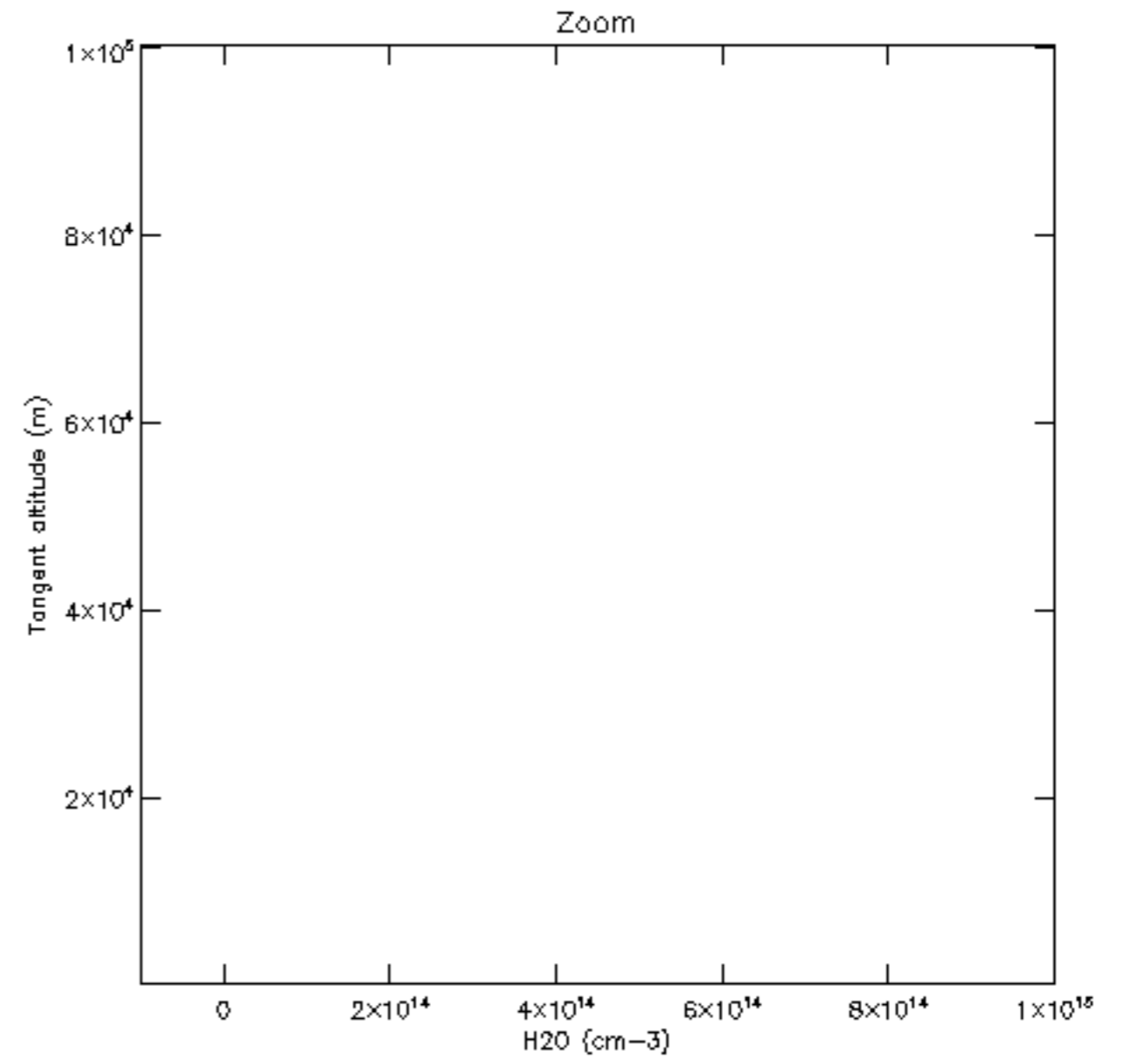
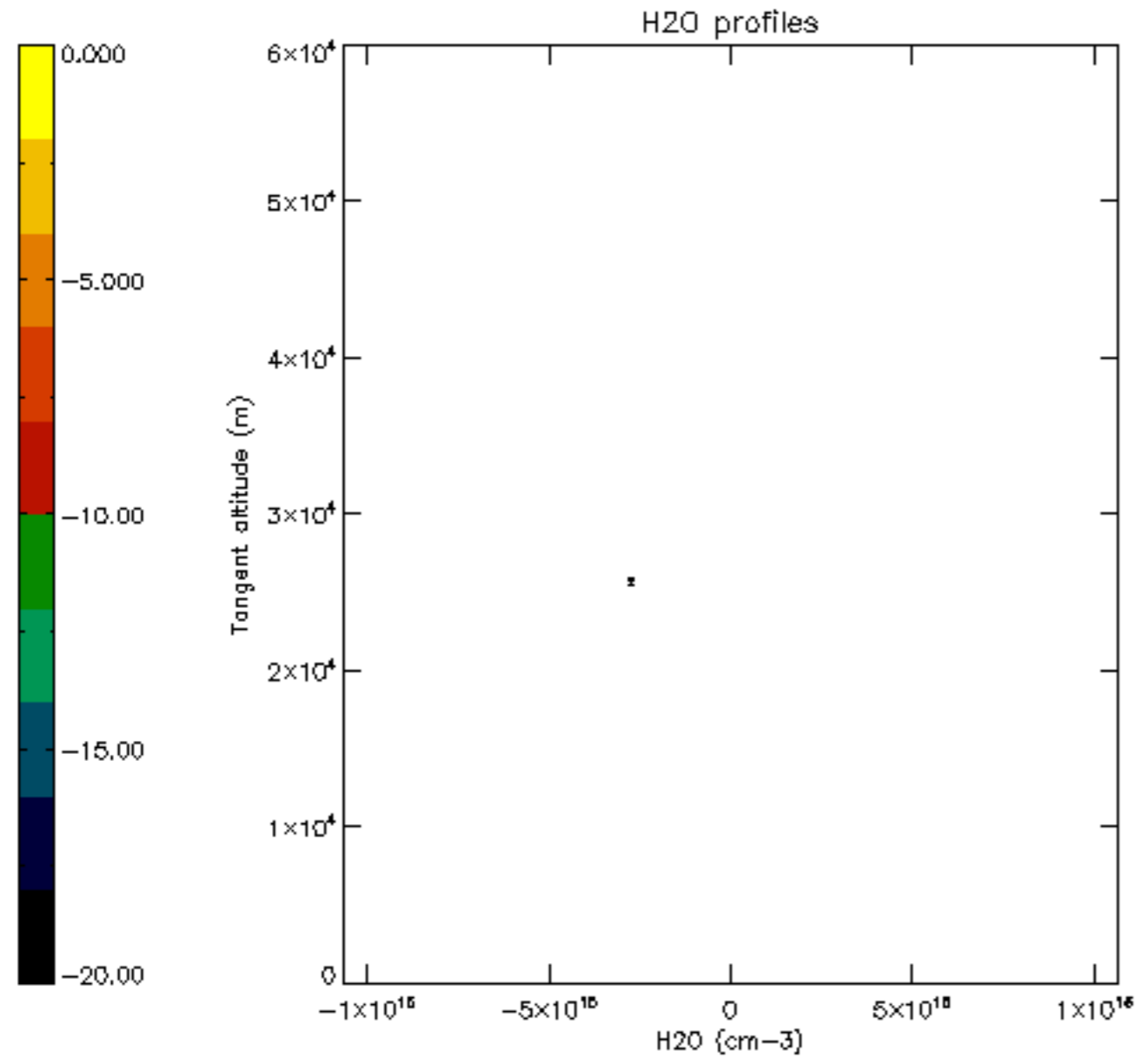


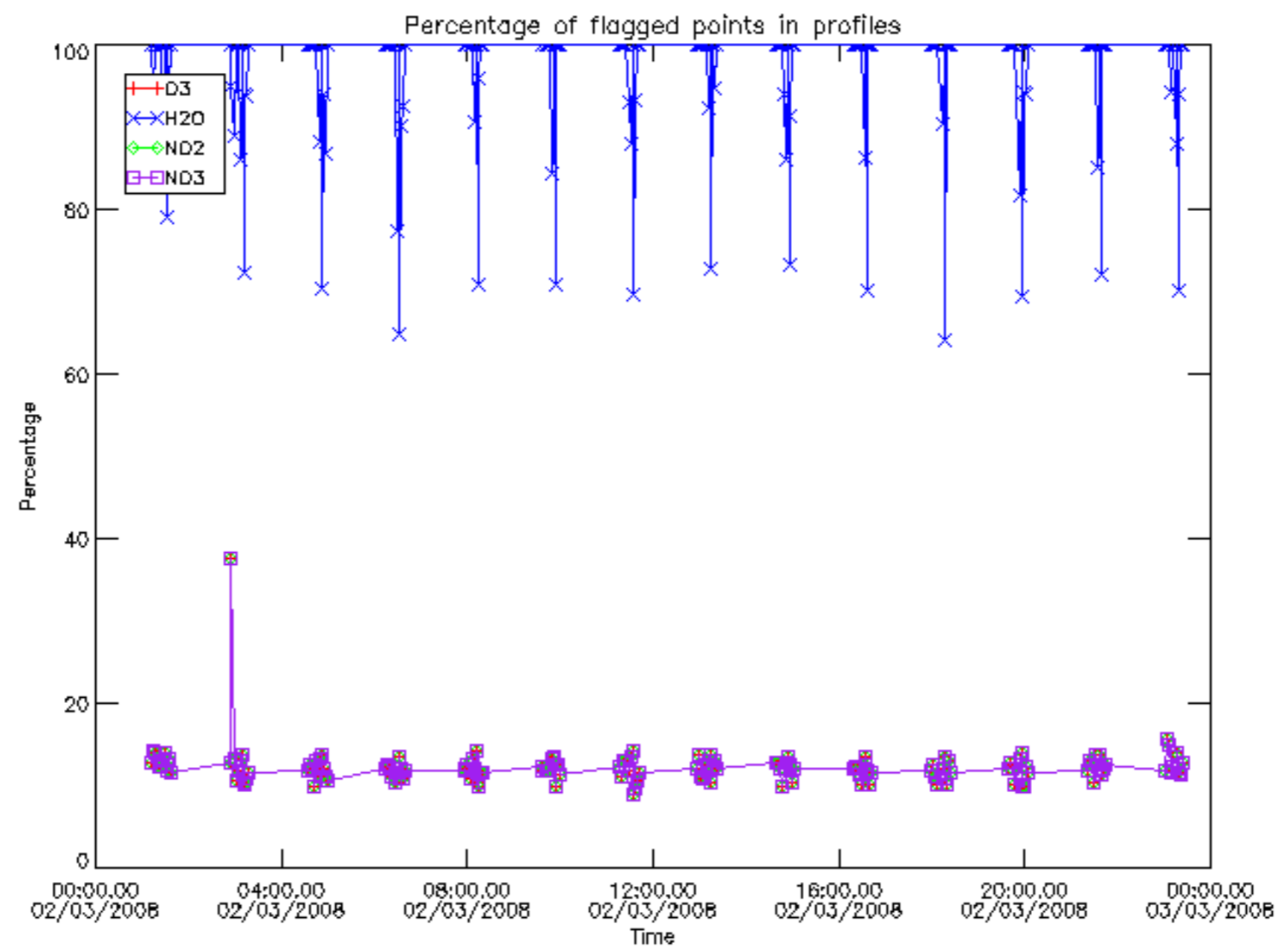




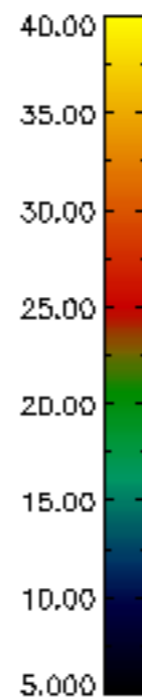
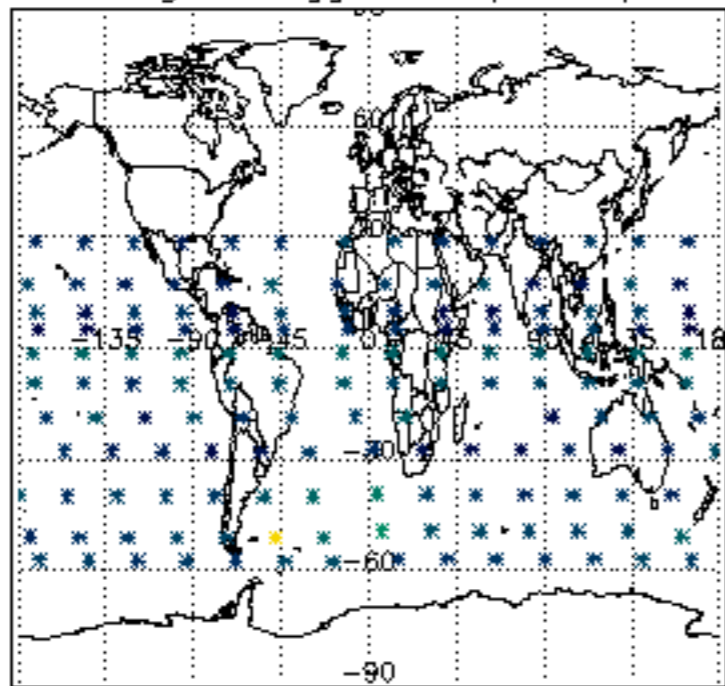




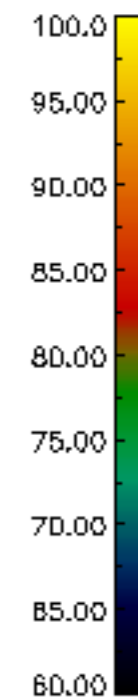
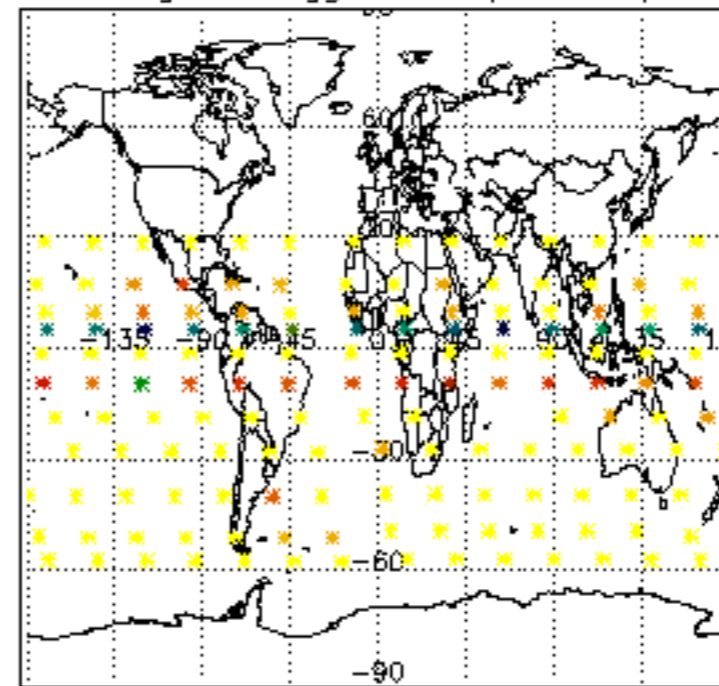




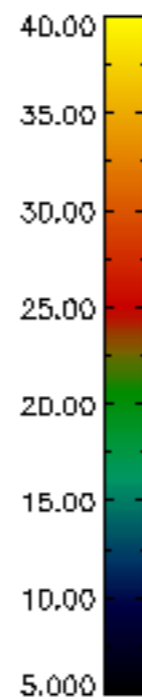
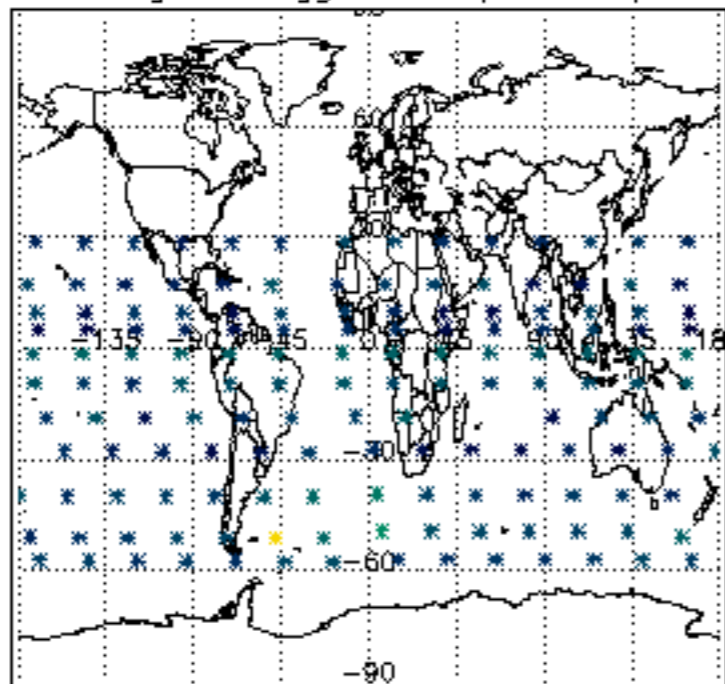
Percentage of flagged data per D3 profile



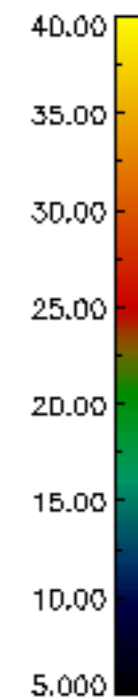
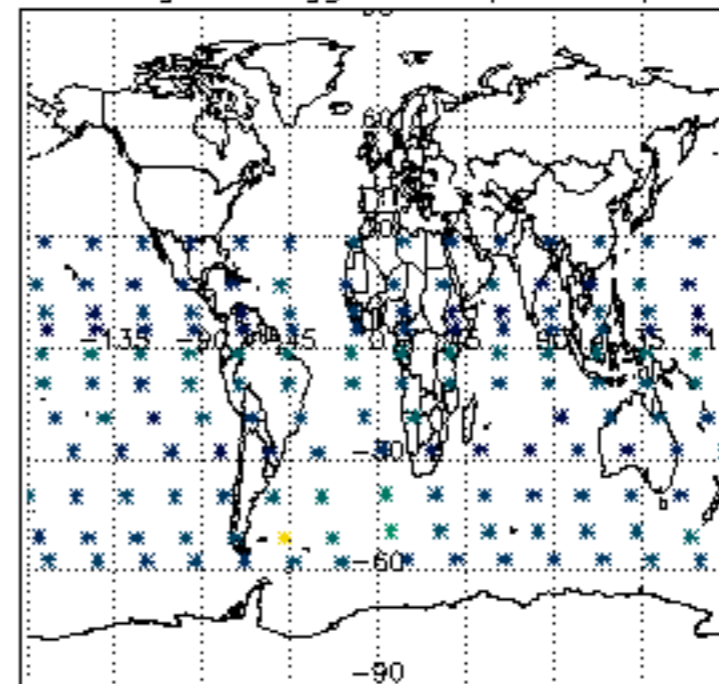
Percentage of flagged data per H2O profile

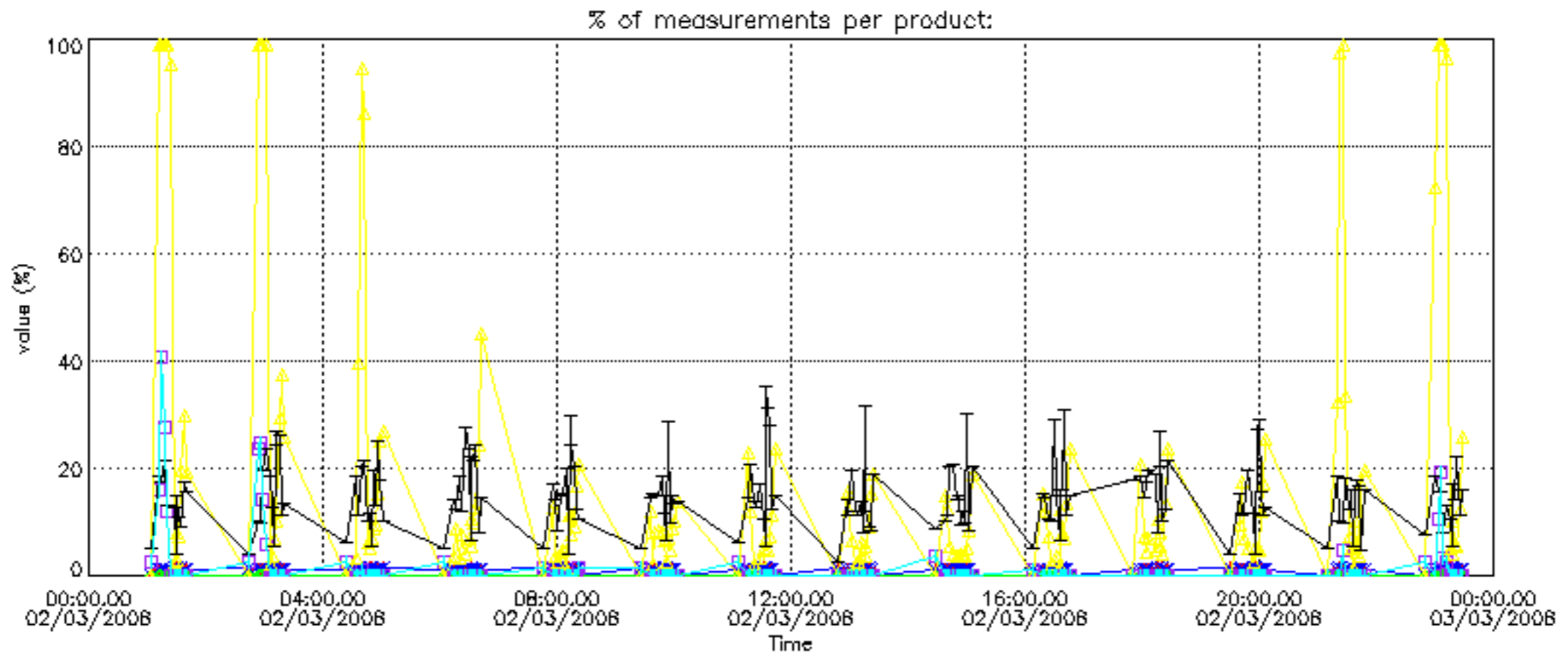


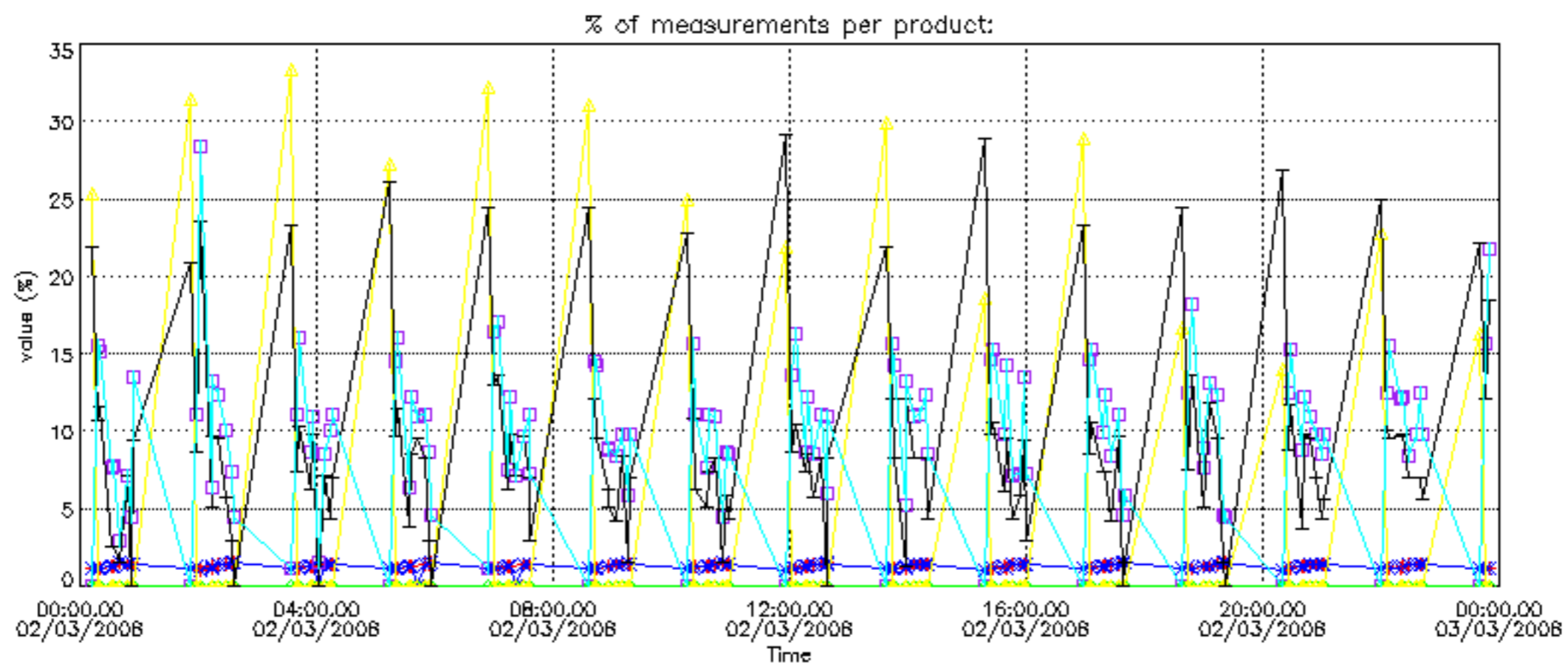
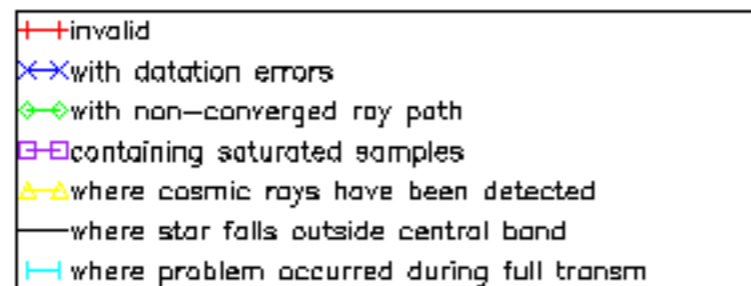
Percentage of flagged data per NO2 profile



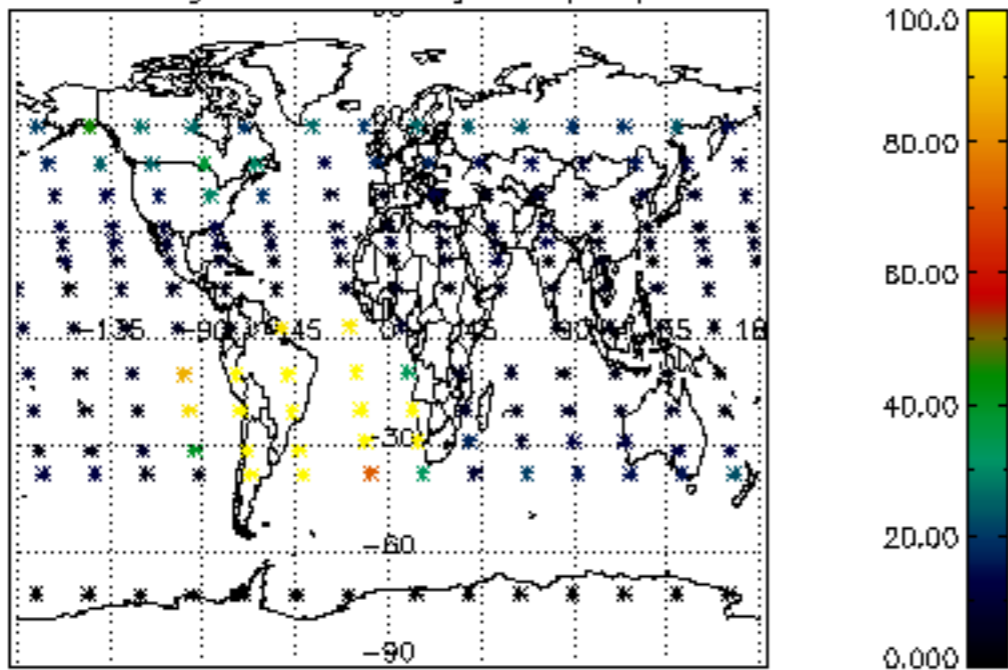
Percentage of flagged data per NO3 profile



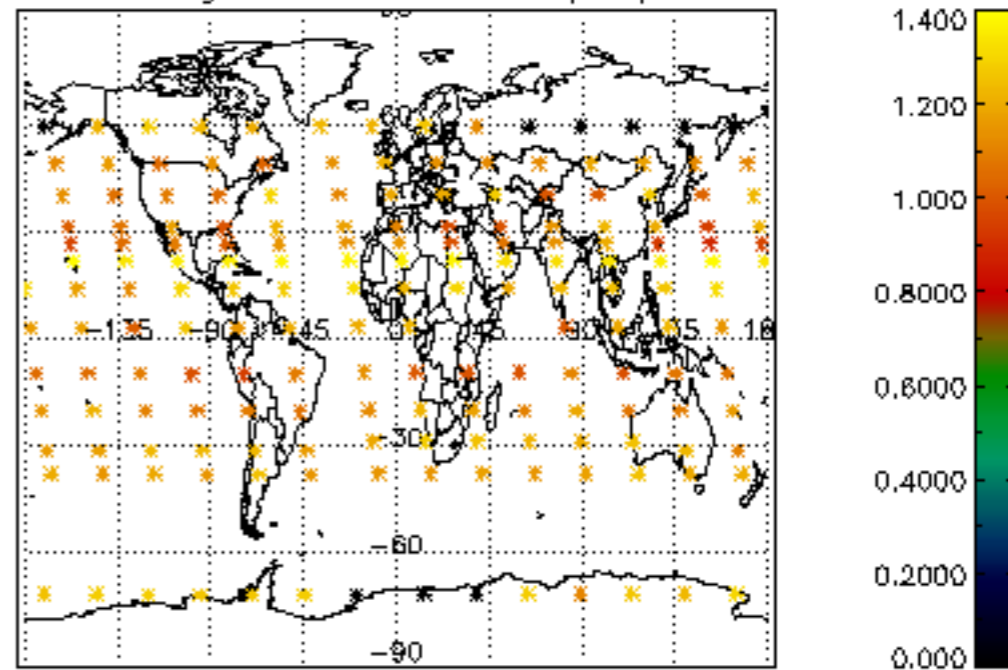




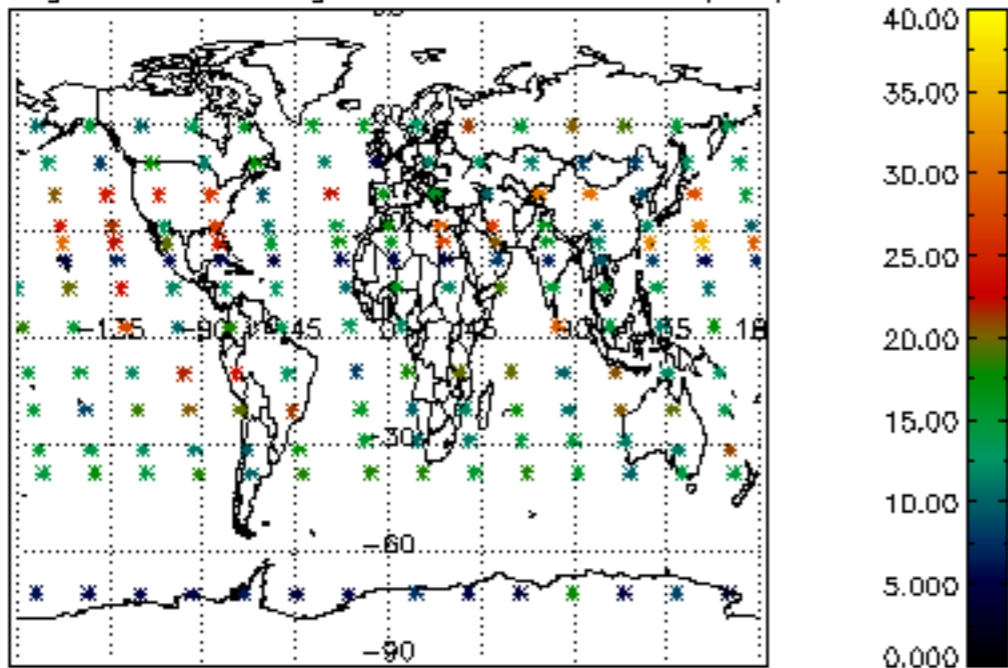
Percentage of cosmic ray hits per profile



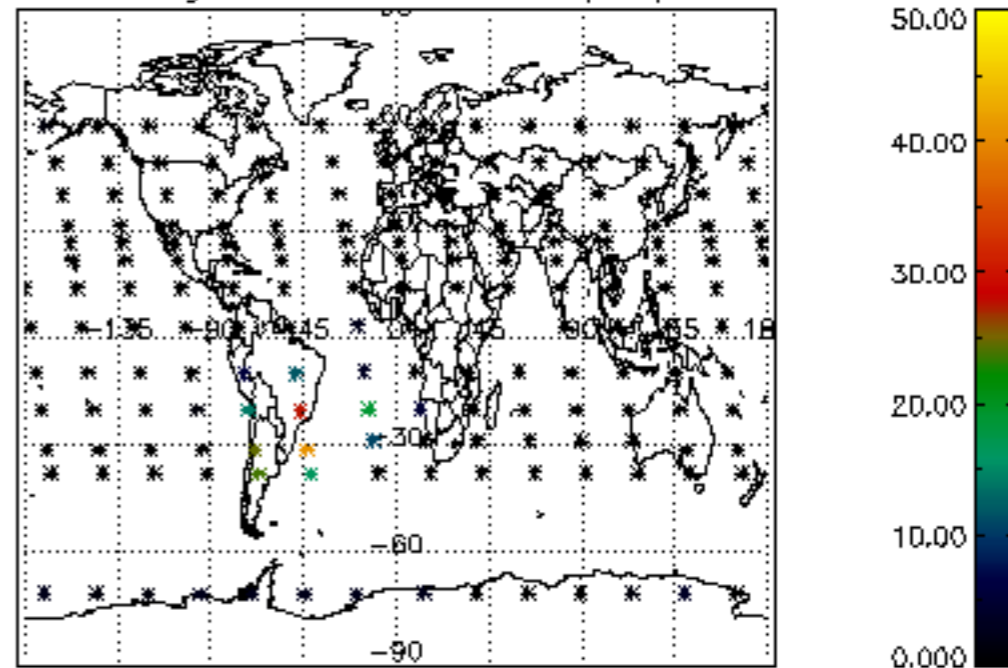
Percentage of datation errors per profile



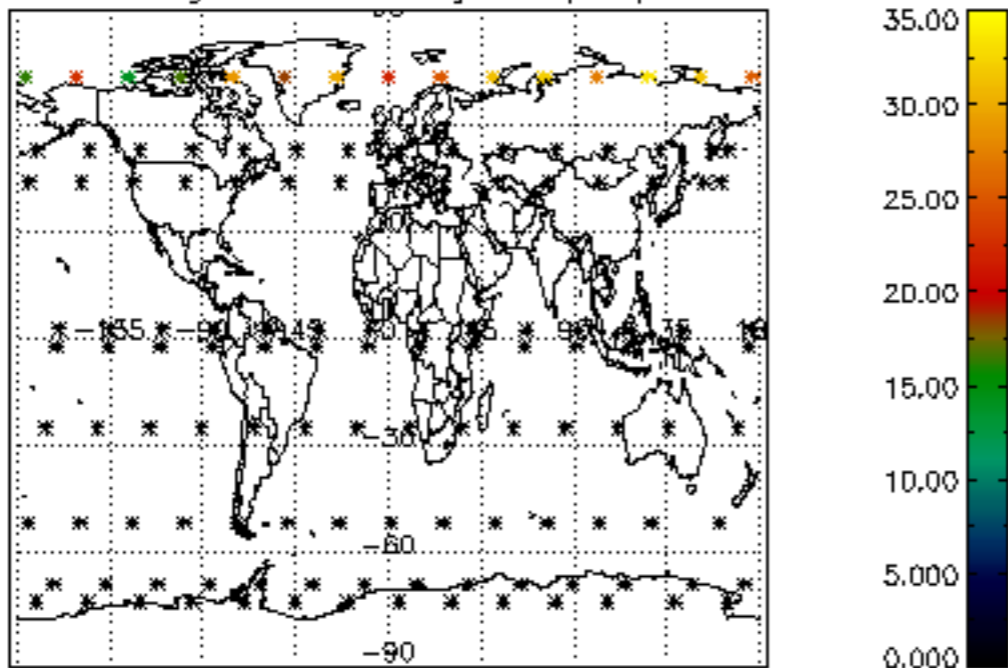
Percentage of star falling outside central band per profile



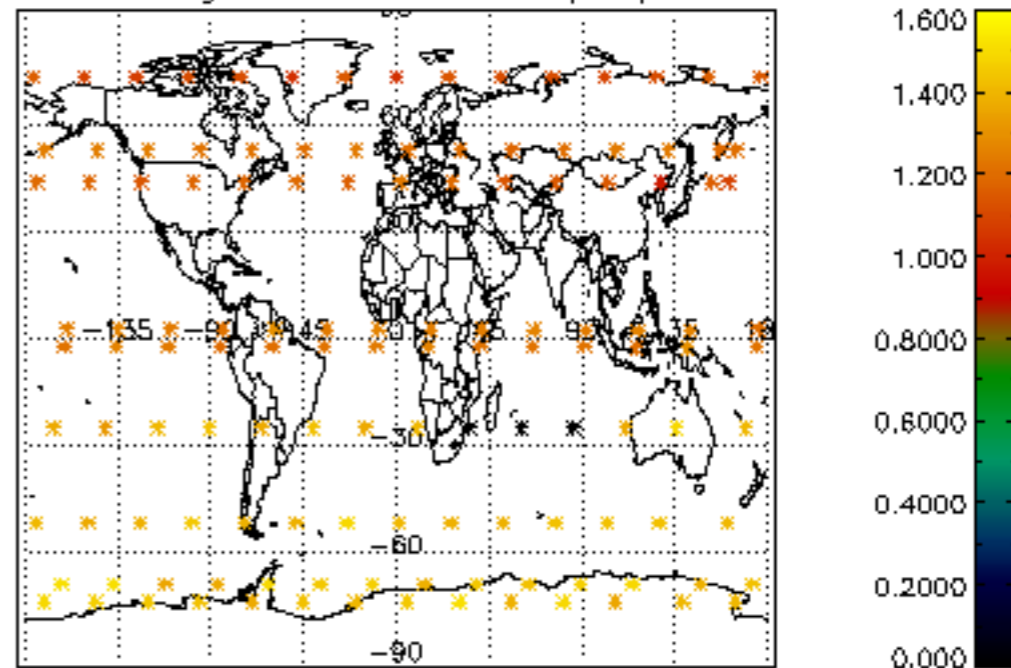
Percentage of saturation errors per profile



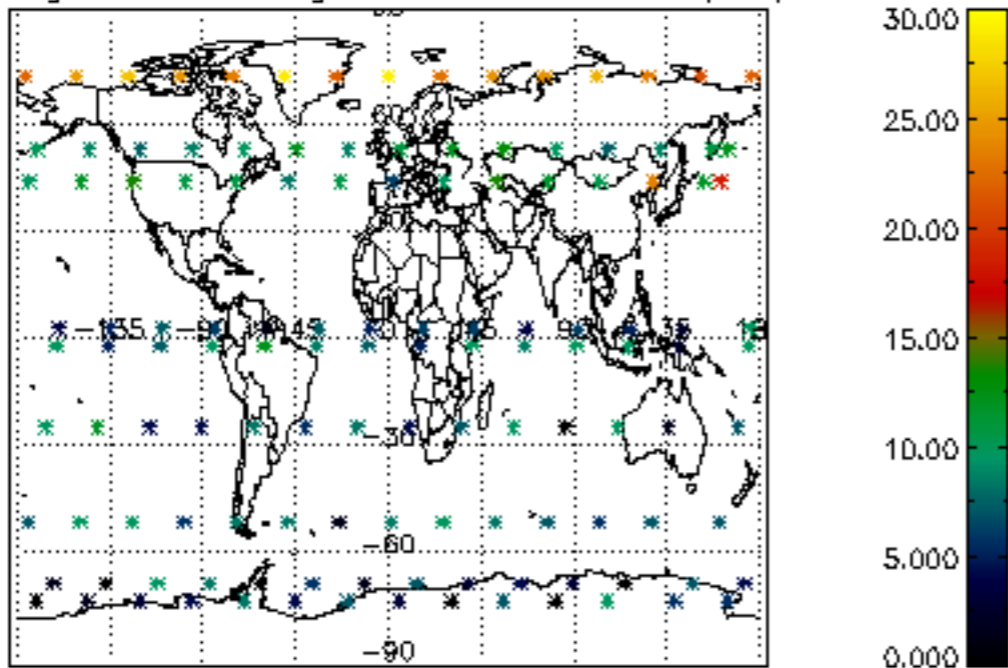
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

