

# 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](#)

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 13:11:22              |
| Data source version       | GOMOS/6.01                      |
| Start time of products    | 13-04-2003 (13APR2003 00:00:00) |
| Stop time of products     | 14-04-2003 (14APR2003 00:00:00) |
| Store outputs in DB       | Yes                             |
| Nb of level 2 prods       | 416                             |
| 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__2PRFIN20030413_000010_000000452015_00274_05839_6746.N1 | 13-APR-2003 00:00:10 | Straylight | 45.000   | 81      | Eta Cen   | 2.3560    | 28000.    | 90      | 5839  | No          |
| 2  | GOM_NL__2PRFIN20030413_000237_000000512015_00274_05839_6747.N1 | 13-APR-2003 00:02:37 | Straylight | 50.500   | 54      | 5The Cen  | 2.0550    | 4500.0    | 101     | 5839  | No          |
| 3  | GOM_NL__2PRFIN20030413_000423_000000952015_00274_05839_6748.N1 | 13-APR-2003 00:04:23 | Twilight   | 95.000   | 80      | 7Del Sco  | 2.3160    | 30000.    | 190     | 5839  | No          |
| 4  | GOM_NL__2PRFIN20030413_000728_000000462015_00274_05839_6749.N1 | 13-APR-2003 00:07:28 | Twilight   | 46.000   | 169     | 46Gam Hya | 2.9910    | 4700.0    | 92      | 5839  | No          |
| 5  | GOM_NL__2PRFIN20030413_000906_000000782015_00274_05839_6750.N1 | 13-APR-2003 00:09:06 | Bright     | 77.500   | 122     | 9Alp2Lib  | 2.7470    | 9700.0    | 155     | 5839  | No          |
| 6  | GOM_NL__2PRFIN20030413_001112_000000482015_00274_05839_6751.N1 | 13-APR-2003 00:11:12 | Bright     | 48.000   | 15      | 67Alp Vir | 0.97600   | 28000.    | 96      | 5839  | No          |
| 7  | GOM_NL__2PRFIN20030413_001417_000000392015_00274_05839_6752.N1 | 13-APR-2003 00:14:17 | Bright     | 39.000   | 121     | 29Gam Vir | 2.7400    | 7200.0    | 78      | 5839  | No          |
| 8  | GOM_NL__2PRFIN20030413_001812_000000402015_00274_05839_6753.N1 | 13-APR-2003 00:18:12 | Bright     | 40.000   | 138     | 47Eps Vir | 2.8280    | 4700.0    | 80      | 5839  | No          |
| 9  | GOM_NL__2PRFIN20030413_002052_000000362015_00274_05839_6754.N1 | 13-APR-2003 00:20:52 | Bright     | 36.000   | 96      | 68Del Leo | 2.5600    | 9300.0    | 72      | 5839  | No          |
| 10 | GOM_NL__2PRFIN20030413_002308_000000622015_00274_05839_6755.N1 | 13-APR-2003 00:23:08 | Bright     | 61.500   | 3       | 16Alp Boo | -0.050000 | 4250.0    | 123     | 5839  | No          |
| 11 | GOM_NL__2PRFIN20030413_002625_000000582015_00274_05839_6756.N1 | 13-APR-2003 00:26:25 | Bright     | 58.000   | 152     | 12Alp2CVn | 2.8900    | 11000.    | 116     | 5839  | No          |
| 12 | GOM_NL__2PRFIN20030413_003005_000000362015_00274_05839_6757.N1 | 13-APR-2003 00:30:05 | Bright     | 36.000   | 87      | 64Gam UMa | 2.4330    | 11000.    | 72      | 5839  | No          |
| 13 | GOM_NL__2PRFIN20030413_003122_000000362015_00274_05839_6758.N1 | 13-APR-2003 00:31:22 | Bright     | 36.000   | 32      | 77Eps UMa | 1.7630    | 11000.    | 72      | 5839  | No          |
| 14 | GOM_NL__2PRFIN20030413_003344_000001142015_00274_05839_6759.N1 | 13-APR-2003 00:33:44 | Bright     | 113.50   | 67      | 5Alp CrB  | 2.2210    | 11000.    | 227     | 5839  | No          |
| 15 | GOM_NL__2PRFIN20030413_003748_000000392015_00274_05839_6760.N1 | 13-APR-2003 00:37:48 | Bright     | 39.000   | 60      | 7Bet UMi  | 2.0810    | 3950.0    | 78      | 5839  | No          |
| 16 | GOM_NL__2PRFIN20030413_004024_000000332015_00274_05839_6761.N1 | 13-APR-2003 00:40:24 | Bright     | 32.500   | 49      | 1Alp UMi  | 1.9900    | 6300.0    | 65      | 5839  | No          |
| 17 | GOM_NL__2PRFIN20030413_004408_000000612015_00274_05839_6762.N1 | 13-APR-2003 00:44:08 | Bright     | 61.000   | 130     | 23Bet Dra | 2.7990    | 5800.0    | 122     | 5839  | No          |
| 18 | GOM_NL__2PRFIN20030413_004840_000000342015_00274_05839_6763.N1 | 13-APR-2003 00:48:40 | Bright     | 34.000   | 74      | 11Bet Cas | 2.2680    | 6600.0    | 68      | 5839  | No          |
| 19 | GOM_NL__2PRFIN20030413_005358_000001112015_00274_05839_6764.N1 | 13-APR-2003 00:53:58 | Bright     | 110.50   | 5       | 3Alp Lyr  | 0.033000  | 11000.    | 221     | 5839  | No          |
| 20 | GOM_NL__2PRFIN20030413_005713_000000512015_00274_05839_6765.N1 | 13-APR-2003 00:57:13 | Bright     | 50.500   | 92      | 53Eps Cyg | 2.5000    | 4500.0    | 101     | 5839  | No          |
| 21 | GOM_NL__2PRFIN20030413_010424_000000522015_00274_05839_6766.N1 | 13-APR-2003 01:04:24 | Twilight   | 52.000   | 61      | 8Eps Peg  | 2.1000    | 3900.0    | 104     | 5839  | No          |
| 22 | GOM_NL__2PRFIN20030413_010652_000000452015_00274_05839_6767.N1 | 13-APR-2003 01:06:52 | Dark       | 45.000   | 162     | 34Alp Aqr | 2.9440    | 5350.0    | 90      | 5839  | No          |
| 23 | GOM_NL__2PRFIN20030413_011010_000001012015_00274_05839_6768.N1 | 13-APR-2003 01:10:10 | Dark       | 101.00   | 11      | 53Alp Aql | 0.76500   | 8000.0    | 202     | 5839  | No          |
| 24 | GOM_NL__2PRFIN20030413_011918_000000382015_00274_05839_6769.N1 | 13-APR-2003 01:19:18 | Dark       | 38.000   | 31      | Alp Gru   | 1.7340    | 15200.    | 76      | 5839  | No          |
| 25 | GOM_NL__2PRFIN20030413_012407_000000402015_00275_05840_6742.N1 | 13-APR-2003 01:24:07 | Dark       | 39.500   | 45      | Alp Pav   | 1.9400    | 26000.    | 79      | 5840  | No          |
| 26 | GOM_NL__2PRFIN20030413_012841_000000582015_00275_05840_6743.N1 | 13-APR-2003 01:28:41 | Dark       | 58.000   | 38      | 20Eps Sgr | 1.8360    | 11000.    | 116     | 5840  | No          |
| 27 | GOM_NL__2PRFIN20030413_013115_000000422015_00275_05840_6744.N1 | 13-APR-2003 01:31:15 | Dark       | 41.500   | 141     | Bet Ara   | 2.8400    | 4600.0    | 83      | 5840  | No          |
| 28 | GOM_NL__2PRFIN20030413_013245_000000622015_00275_05840_6745.N1 | 13-APR-2003 01:32:45 | Dark       | 62.000   | 25      | 35Lam Sco | 1.6200    | 28000.    | 124     | 5840  | No          |
| 29 | GOM_NL__2PRFIN20030413_013604_000000542015_00275_05840_6746.N1 | 13-APR-2003 01:36:04 | Straylight | 54.000   | 4       | Alp1Cen   | -0.010000 | 5800.0    | 108     | 5840  | No          |
| 30 | GOM_NL__2PRFIN20030413_013910_000000422015_00275_05840_6747.N1 | 13-APR-2003 01:39:10 | Straylight | 42.000   | 78      | Alp Lup   | 2.3040    | 28000.    | 84      | 5840  | No          |
| 31 | GOM_NL__2PRFIN20030413_014121_000001142015_00275_05840_6748.N1 | 13-APR-2003 01:41:21 | Straylight | 114.00   | 16      | 21Alp Sco | 1.0200    | 3000.0    | 228     | 5840  | No          |
| 32 | GOM_NL__2PRFIN20030413_014500_000000972015_00275_05840_6749.N1 | 13-APR-2003 01:45:00 | Twilight   | 96.500   | 80      | 7Del Sco  | 2.3160    | 30000.    | 193     | 5840  | No          |
| 33 | GOM_NL__2PRFIN20030413_014804_000000452015_00275_05840_6750.N1 | 13-APR-2003 01:48:04 | Twilight   | 45.000   | 169     | 46Gam Hya | 2.9910    | 4700.0    | 90      | 5840  | No          |
| 34 | GOM_NL__2PRFIN20030413_014942_000000762015_00275_05840_6751.N1 | 13-APR-2003 01:49:42 | Bright     | 75.500   | 122     | 9Alp2Lib  | 2.7470    | 9700.0    | 151     | 5840  | No          |
| 35 | GOM_NL__2PRFIN20030413_015148_000000462015_00275_05840_6752.N1 | 13-APR-2003 01:51:48 | Bright     | 46.000   | 15      | 67Alp Vir | 0.97600   | 28000.    | 92      | 5840  | No          |
| 36 | GOM_NL__2PRFIN20030413_015453_000000402015_00275_05840_6753.N1 | 13-APR-2003 01:54:53 | Bright     | 39.500   | 121     | 29Gam Vir | 2.7400    | 7200.0    | 79      | 5840  | No          |
| 37 | GOM_NL__2PRFIN20030413_015847_000000412015_00275_05840_6754.N1 | 13-APR-2003 01:58:47 | Bright     | 40.500   | 138     | 47Eps Vir | 2.8280    | 4700.0    | 81      | 5840  | No          |
| 38 | GOM_NL__2PRFIN20030413_020127_000000362015_00275_05840_6755.N1 | 13-APR-2003 02:01:27 | Bright     | 35.500   | 96      | 68Del Leo | 2.5600    | 9300.0    | 71      | 5840  | No          |
| 39 | GOM_NL__2PRFIN20030413_020341_000000572015_00275_05840_6756.N1 | 13-APR-2003 02:03:41 | Bright     | 56.500   | 3       | 16Alp Boo | -0.050000 | 4250.0    | 113     | 5840  | No          |
| 40 | GOM_NL__2PRFIN20030413_020700_000000392015_00275_05840_6757.N1 | 13-APR-2003 02:07:00 | Bright     | 39.000   | 152     | 12Alp2CVn | 2.8900    | 11000.    | 78      | 5840  | No          |
| 41 | GOM_NL__2PRFIN20030413_021040_000000362015_00275_05840_6758.N1 | 13-APR-2003 02:10:40 | Bright     | 35.500   | 87      | 64Gam UMa | 2.4330    | 11000.    | 71      | 5840  | No          |
| 42 | GOM_NL__2PRFIN20030413_021157_000000372015_00275_05840_6759.N1 | 13-APR-2003 02:11:57 | Bright     | 36.500   | 32      | 77Eps UMa | 1.7630    | 11000.    | 73      | 5840  | No          |













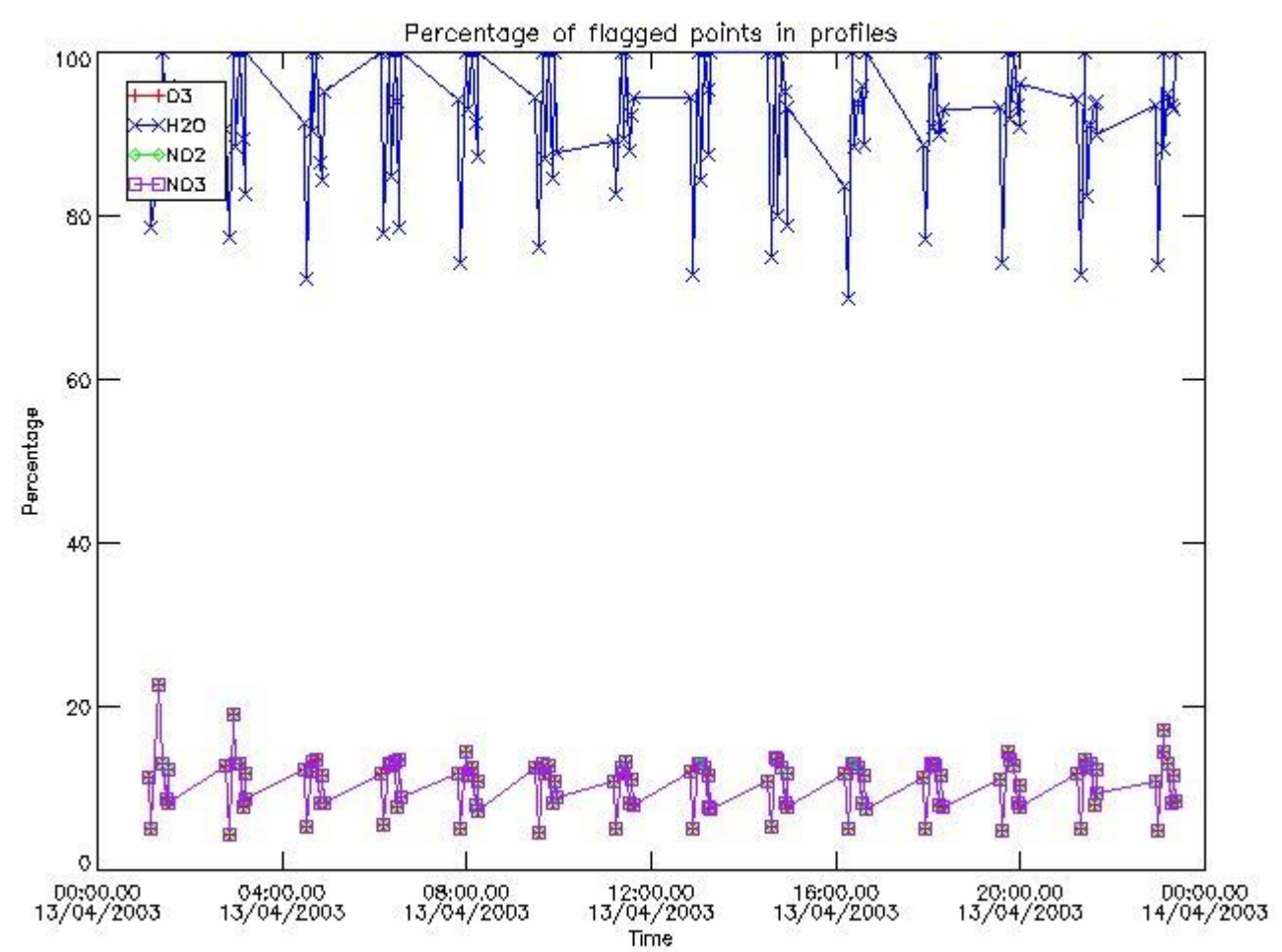


|     |  |                      |                |        |     |           |           |        |     |      |    |
|-----|--|----------------------|----------------|--------|-----|-----------|-----------|--------|-----|------|----|
| 397 | GOM_NL__2PRFIN20030413_230502_000000392015_00287_05852_6815.N1 | 13-APR-2003 23:05:02 | Dark           | 38.500 | 172 | Gam Gru   | 3.0030    | 13100. | 77  | 5852 | No |
| 398 | GOM_NL__2PRFIN20030413_230710_000000392015_00287_05852_6816.N1 | 13-APR-2003 23:07:10 | Dark           | 38.500 | 31  | Alp Gru   | 1.7340    | 15200. | 77  | 5852 | No |
| 399 | GOM_NL__2PRFIN20030413_231201_000000402015_00288_05853_6790.N1 | 13-APR-2003 23:12:01 | Dark           | 39.500 | 45  | Alp Pav   | 1.9400    | 26000. | 79  | 5853 | No |
| 400 | GOM_NL__2PRFIN20030413_231647_000000622015_00288_05853_6791.N1 | 13-APR-2003 23:16:47 | Dark           | 62.000 | 38  | 20Eps Sgr | 1.8360    | 11000. | 124 | 5853 | No |
| 401 | GOM_NL__2PRFIN20030413_231911_000000442015_00288_05853_6792.N1 | 13-APR-2003 23:19:11 | Dark           | 44.000 | 141 | Bet Ara   | 2.8400    | 4600.0 | 88  | 5853 | No |
| 402 | GOM_NL__2PRFIN20030413_232049_000000602015_00288_05853_6793.N1 | 13-APR-2003 23:20:49 | Dark           | 60.000 | 25  | 35Lam Sco | 1.6200    | 28000. | 120 | 5853 | No |
| 403 | GOM_NL__2PRFIN20030413_232357_000000452015_00288_05853_6794.N1 | 13-APR-2003 23:23:57 | Straylight     | 44.500 | 4   | Alp1Cen   | -0.010000 | 5800.0 | 89  | 5853 | No |
| 404 | GOM_NL__2PRFIN20030413_232909_000000402015_00288_05853_6795.N1 | 13-APR-2003 23:29:09 | Straylight     | 40.000 | 64  | Gam Cen   | 2.2000    | 10600. | 80  | 5853 | No |
| 405 | GOM_NL__2PRFIN20030413_233105_000000482015_00288_05853_6796.N1 | 13-APR-2003 23:31:05 | Straylight     | 47.500 | 54  | 5The Cen  | 2.0550    | 4500.0 | 95  | 5853 | No |
| 406 | GOM_NL__2PRFIN20030413_233256_000000942015_00288_05853_6797.N1 | 13-APR-2003 23:32:56 | Tw_i_and_stray | 94.000 | 80  | 7Del Sco  | 2.3160    | 30000. | 188 | 5853 | No |
| 407 | GOM_NL__2PRFIN20030413_233553_000000452015_00288_05853_6798.N1 | 13-APR-2003 23:35:53 | Tw_i_and_stray | 44.500 | 169 | 46Gam Hya | 2.9910    | 4700.0 | 89  | 5853 | No |
| 408 | GOM_NL__2PRFIN20030413_233731_000000742015_00288_05853_6799.N1 | 13-APR-2003 23:37:31 | Bright         | 73.500 | 122 | 9Alp2Lib  | 2.7470    | 9700.0 | 147 | 5853 | No |
| 409 | GOM_NL__2PRFIN20030413_233936_000000462015_00288_05853_6800.N1 | 13-APR-2003 23:39:36 | Bright         | 45.500 | 15  | 67Alp Vir | 0.97600   | 28000. | 91  | 5853 | No |
| 410 | GOM_NL__2PRFIN20030413_234240_000000402015_00288_05853_6801.N1 | 13-APR-2003 23:42:40 | Bright         | 40.000 | 121 | 29Gam Vir | 2.7400    | 7200.0 | 80  | 5853 | No |
| 411 | GOM_NL__2PRFIN20030413_234632_000000412015_00288_05853_6802.N1 | 13-APR-2003 23:46:32 | Bright         | 41.000 | 138 | 47Eps Vir | 2.8280    | 4700.0 | 82  | 5853 | No |
| 412 | GOM_NL__2PRFIN20030413_234917_000000362015_00288_05853_6803.N1 | 13-APR-2003 23:49:17 | Bright         | 35.500 | 96  | 68Del Leo | 2.5600    | 9300.0 | 71  | 5853 | No |
| 413 | GOM_NL__2PRFIN20030413_235119_000000552015_00288_05853_6804.N1 | 13-APR-2003 23:51:19 | Bright         | 55.000 | 3   | 16Alp Boo | -0.050000 | 4250.0 | 110 | 5853 | No |
| 414 | GOM_NL__2PRFIN20030413_235443_000000402015_00288_05853_6805.N1 | 13-APR-2003 23:54:43 | Bright         | 39.500 | 152 | 12Alp2CVn | 2.8900    | 11000. | 79  | 5853 | No |
| 415 | GOM_NL__2PRFIN20030413_235827_000000352015_00288_05853_6806.N1 | 13-APR-2003 23:58:27 | Bright         | 34.500 | 87  | 64Gam UMa | 2.4330    | 11000. | 69  | 5853 | No |
| 416 | GOM_NL__2PRFIN20030413_235959_000000392015_00288_05853_6807.N1 | 13-APR-2003 23:59:59 | Bright         | 39.000 | 55  | 79Zet UMa | 2.0600    | 10200. | 78  | 5853 | No |

### 3. Quality information per product

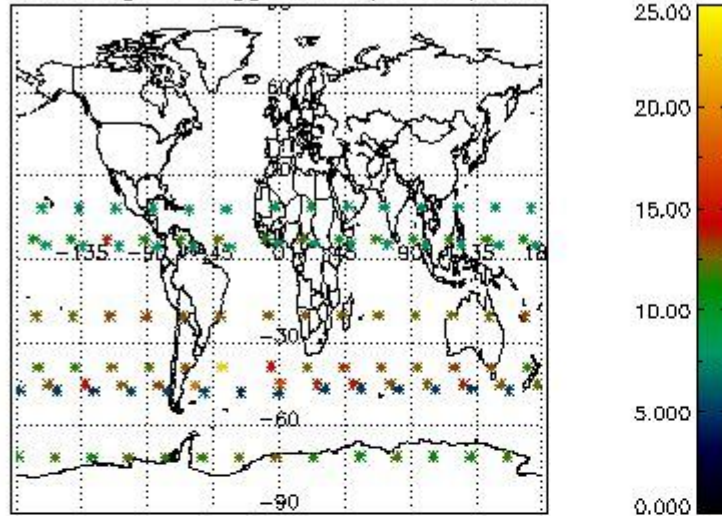
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

#### 3.1 Plot quality information per product (time dependant)

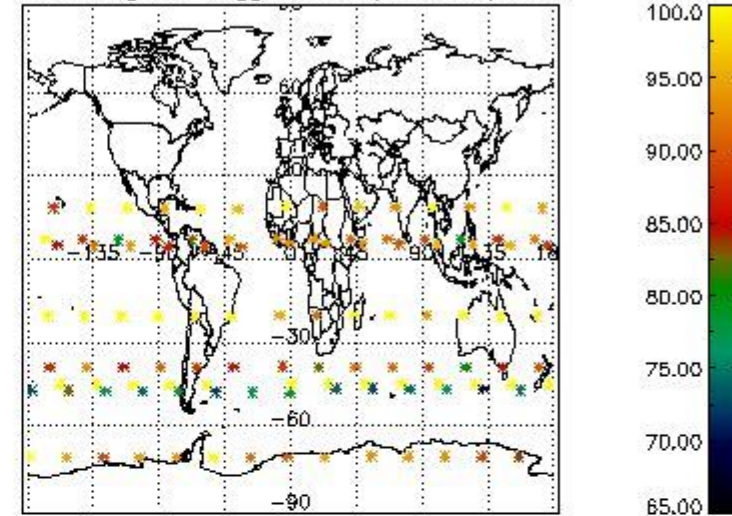


3.2 Plot quality information per product (world map)

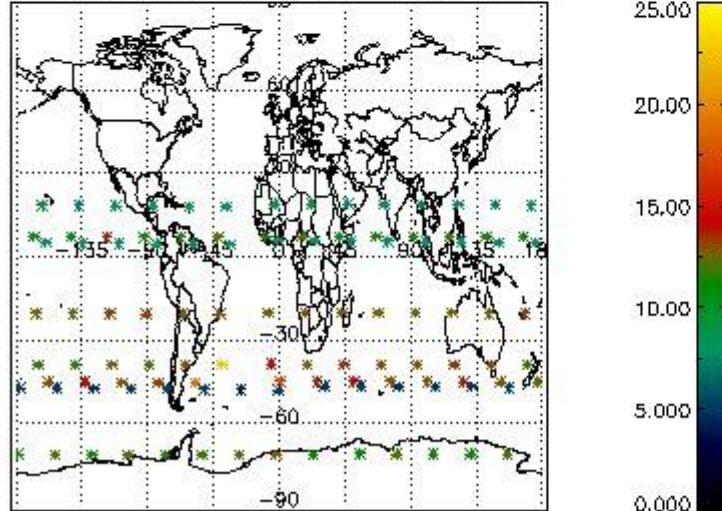
Percentage of flagged data per O3 profile



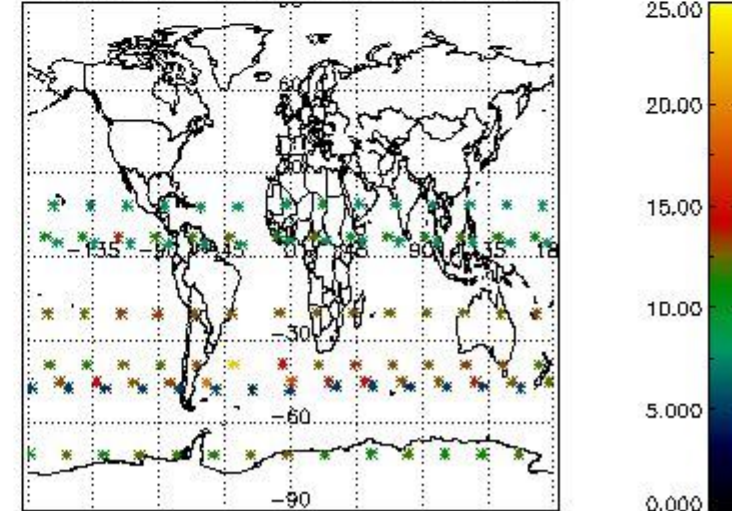
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

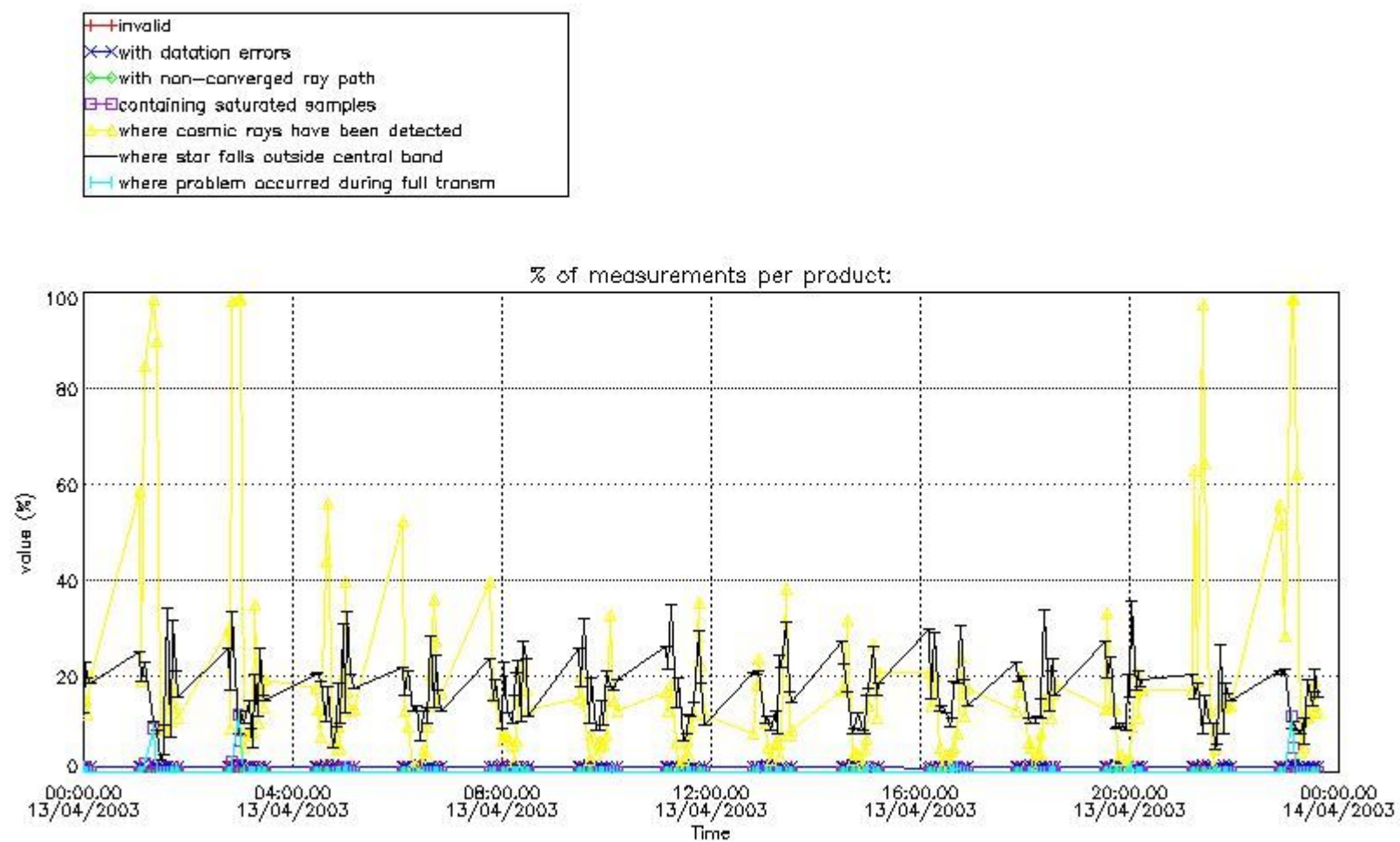


#### 4. Level 1 quality information per product

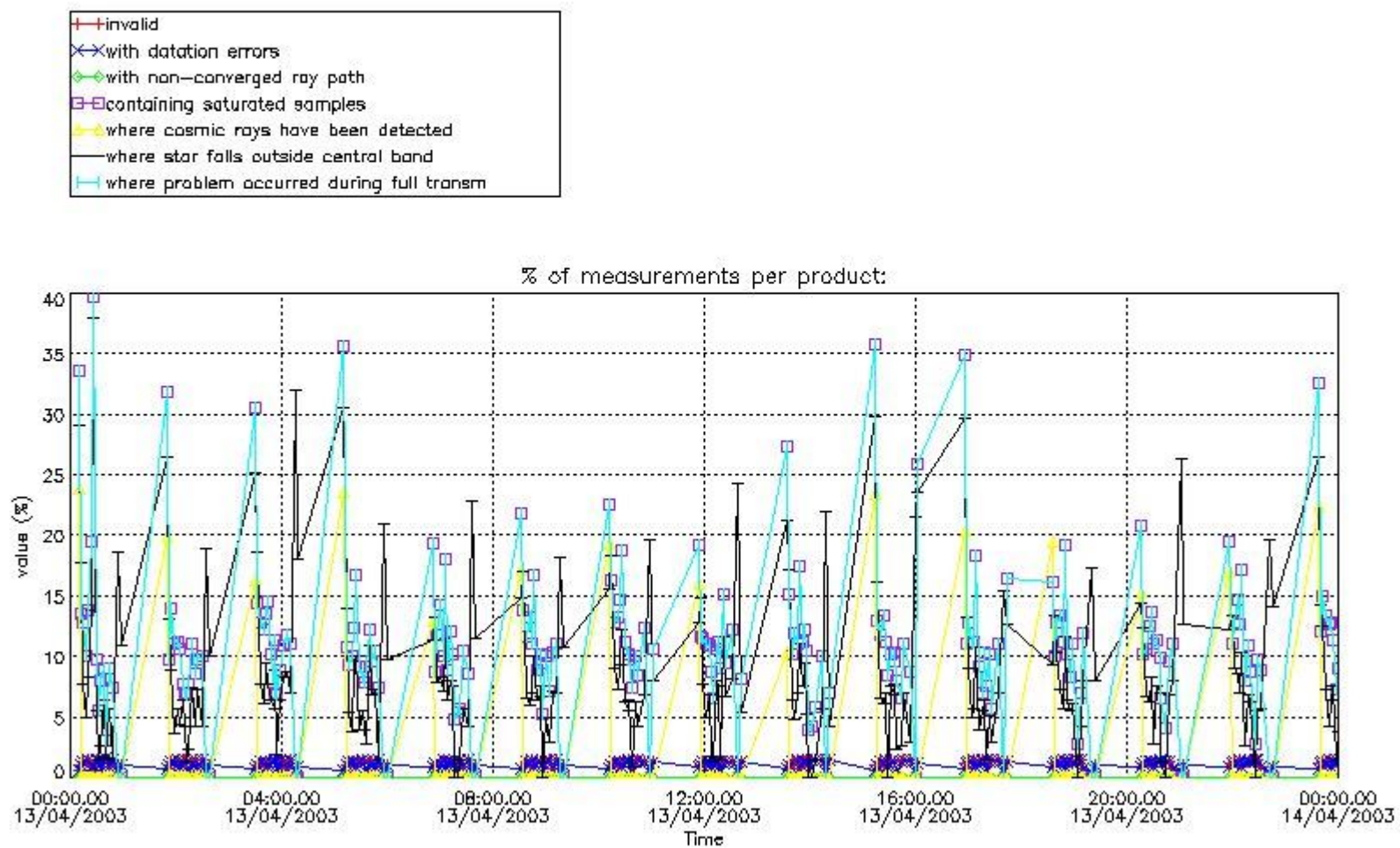
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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



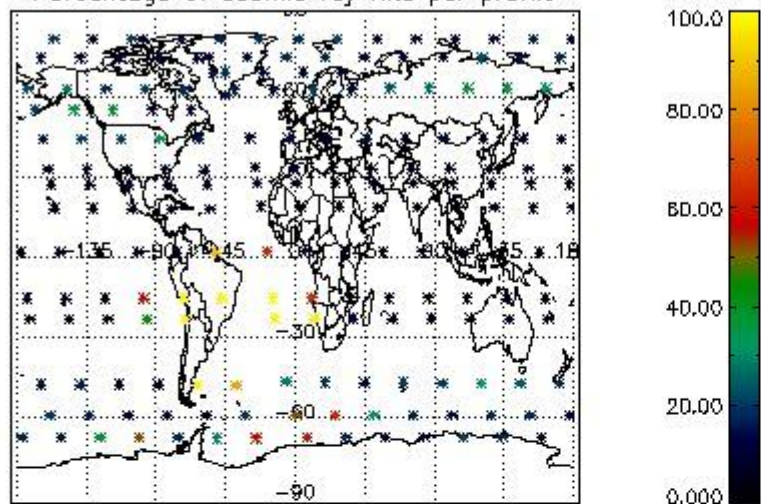
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



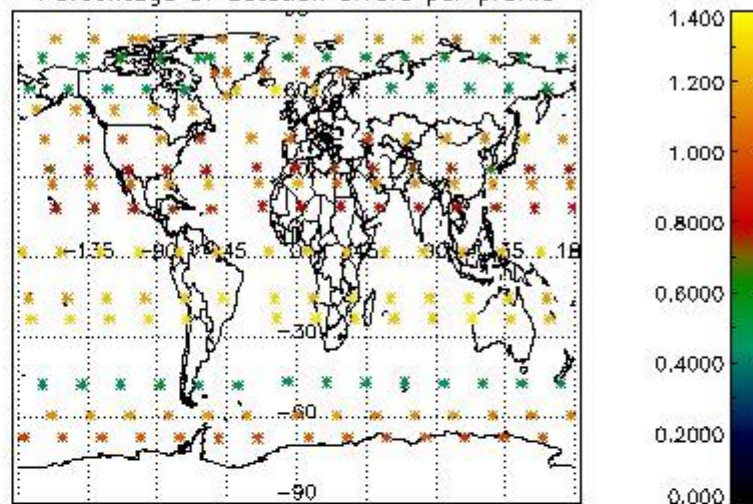
4.2 Plot quality information per product coming from level 1b processing (world map)

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

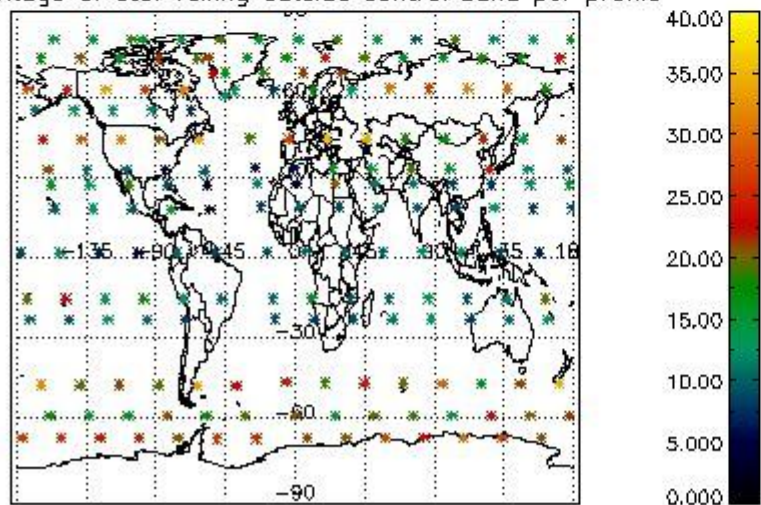
Percentage of cosmic ray hits per profile



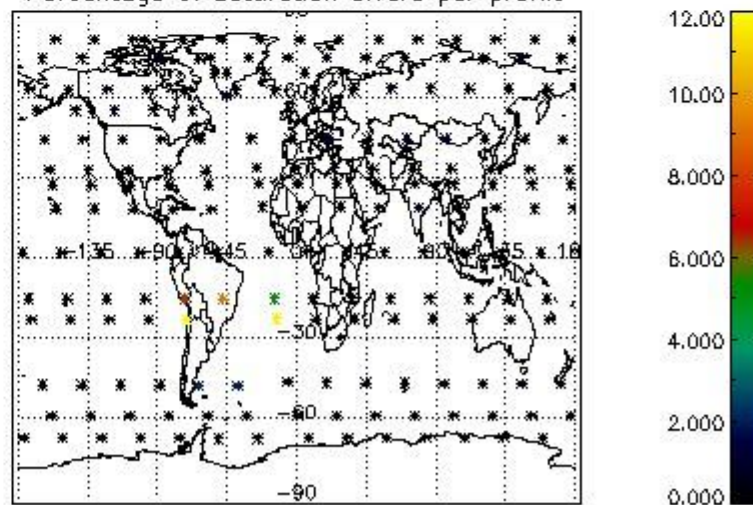
Percentage of datation errors per profile



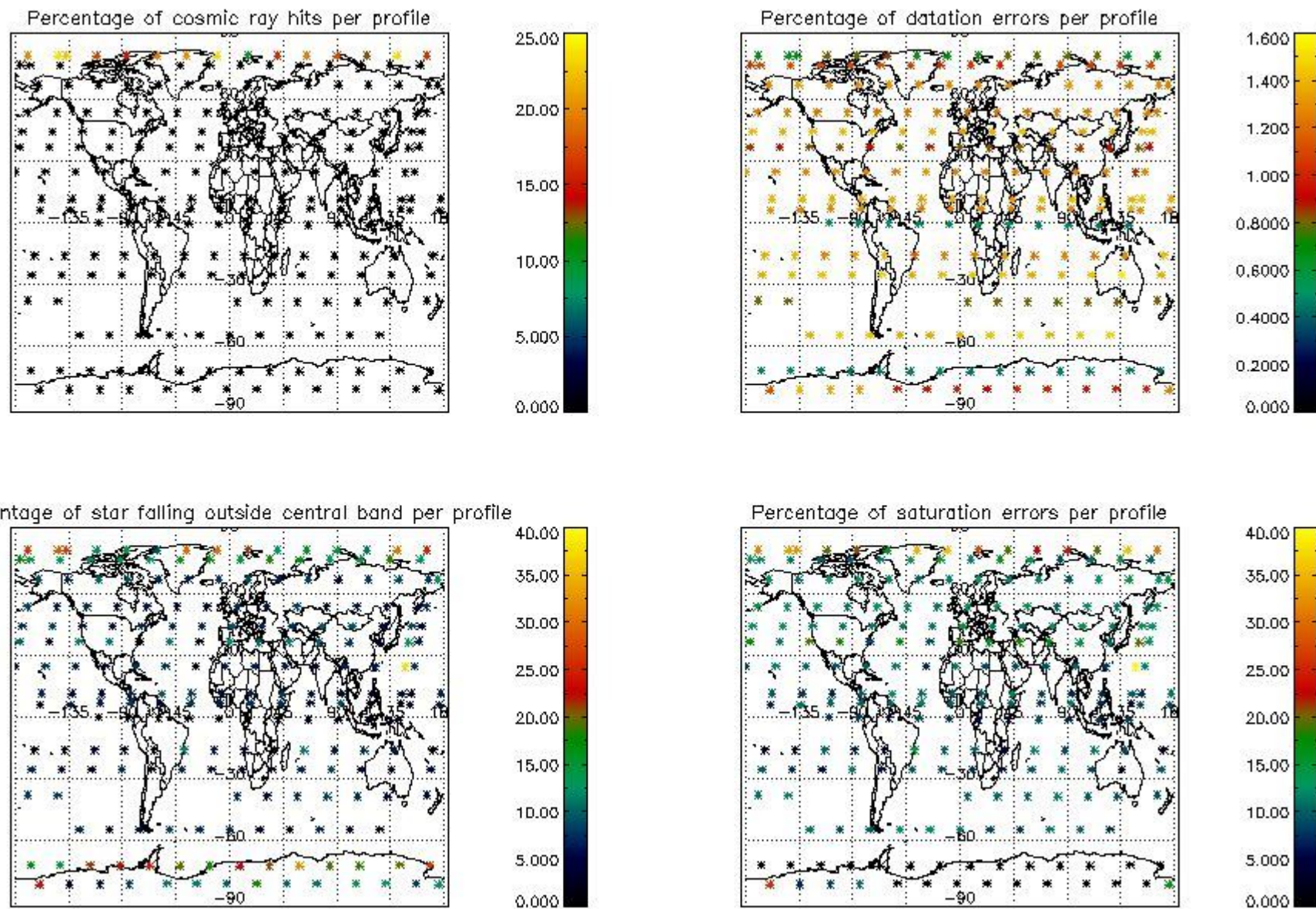
Percentage of star falling outside central band per profile



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

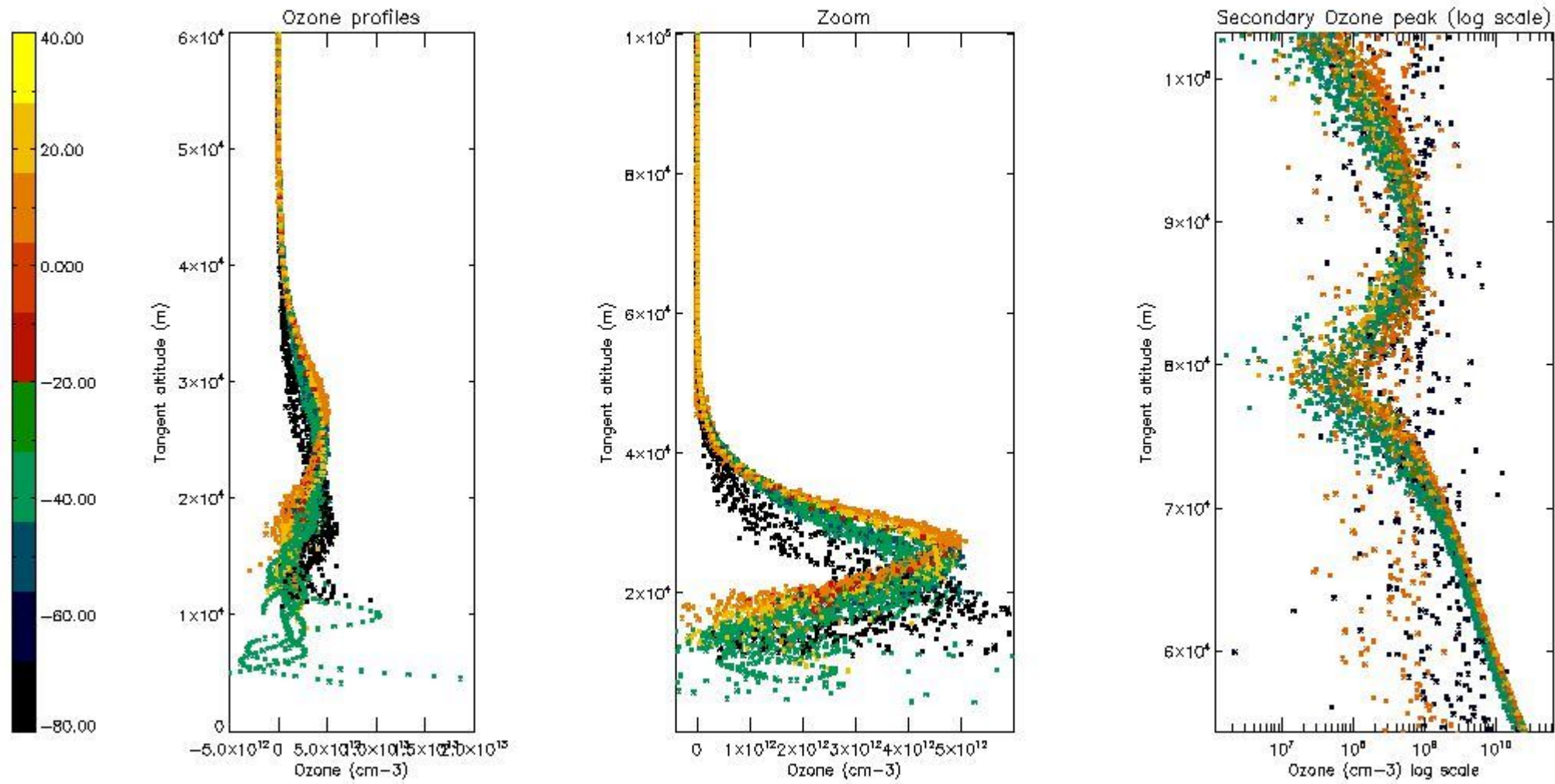
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

| Criteria | % of total production |
|----------|-----------------------|
| All STD  | 27                    |
| STD < 20 | 17                    |

|          |    |
|----------|----|
| STD < 10 | 15 |
| STD < 5  | 12 |

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

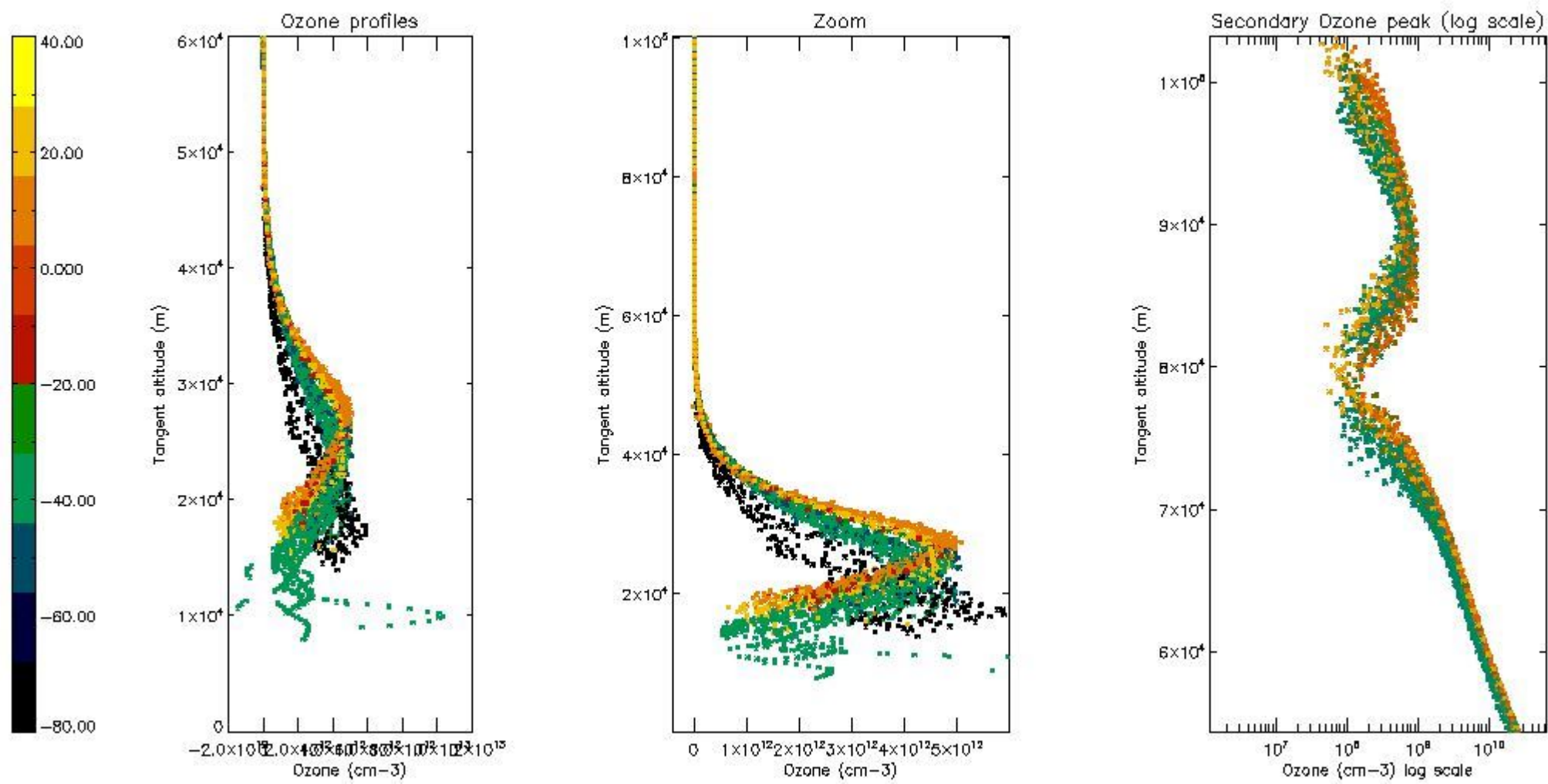
The colorbar represents the latitude.



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

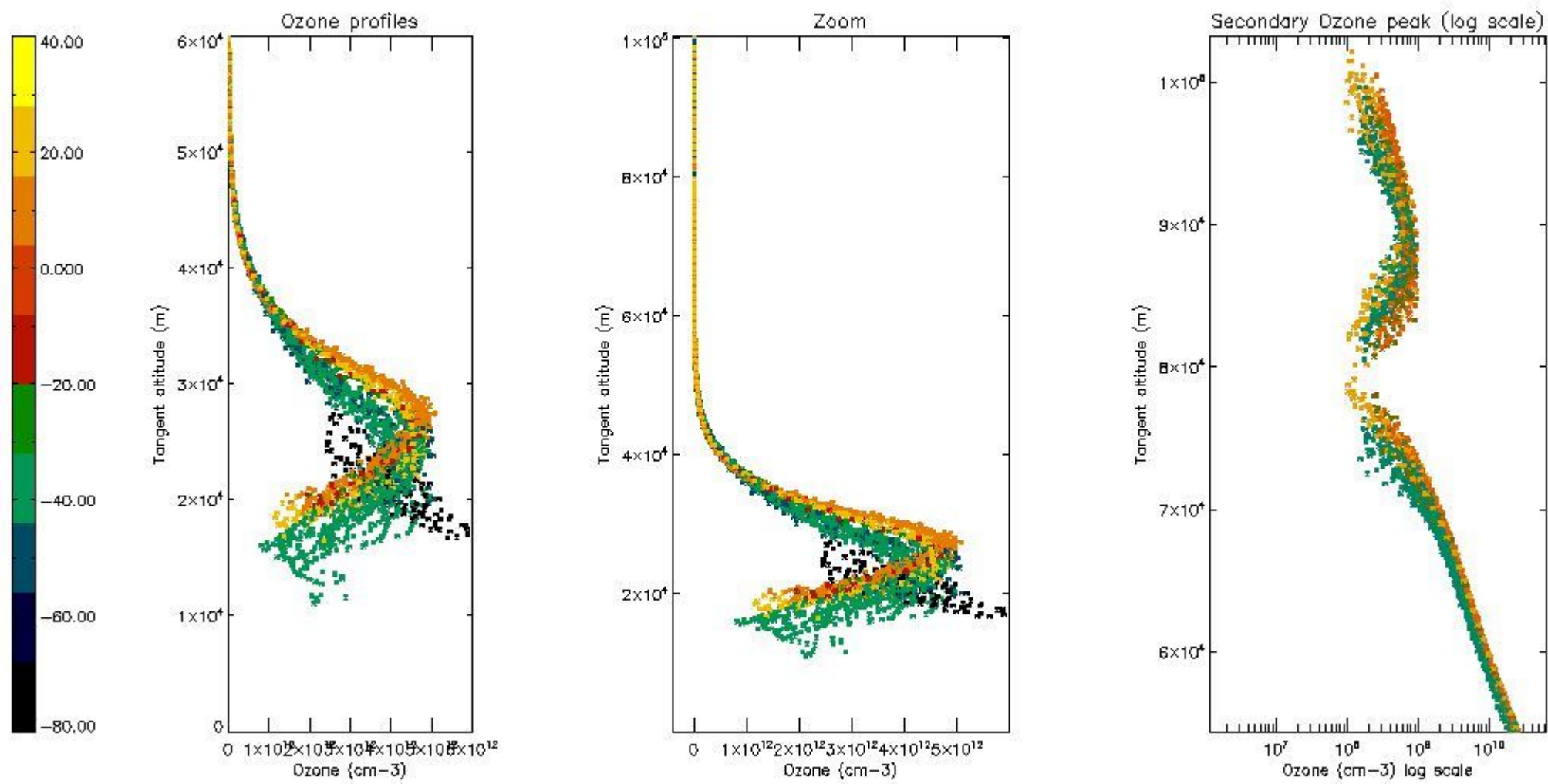
The colorbar represents the latitude.





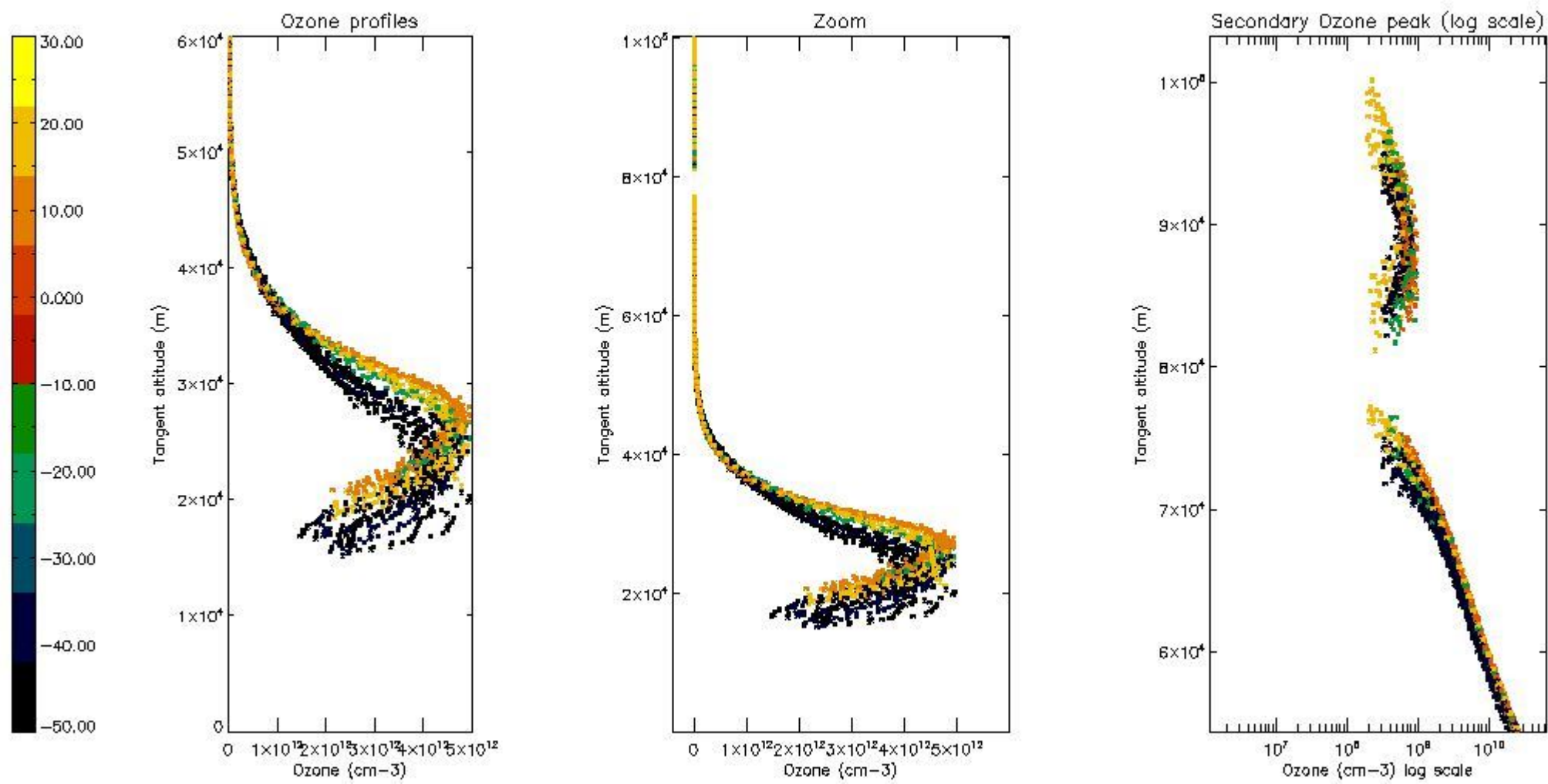
*5.4 Plot ozone profiles where  $STD < 10\%$  (dark without errors)*

The colorbar represents the latitude.



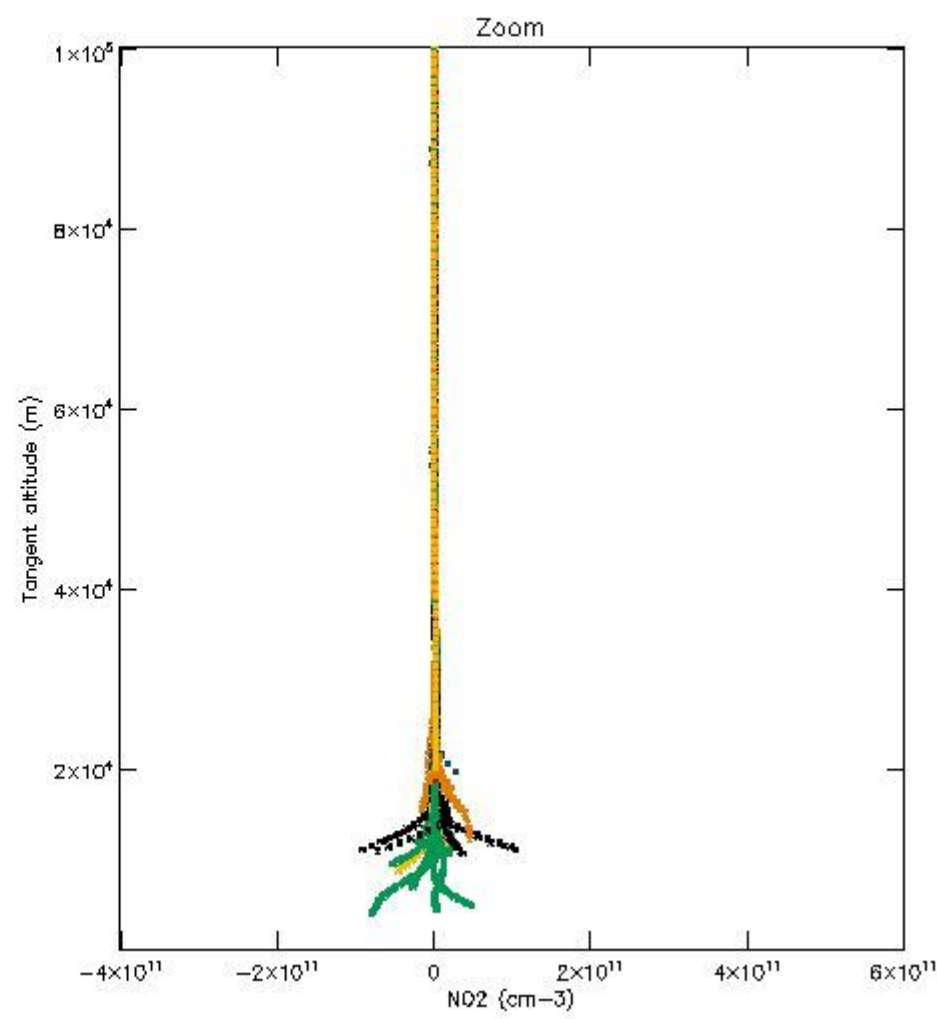
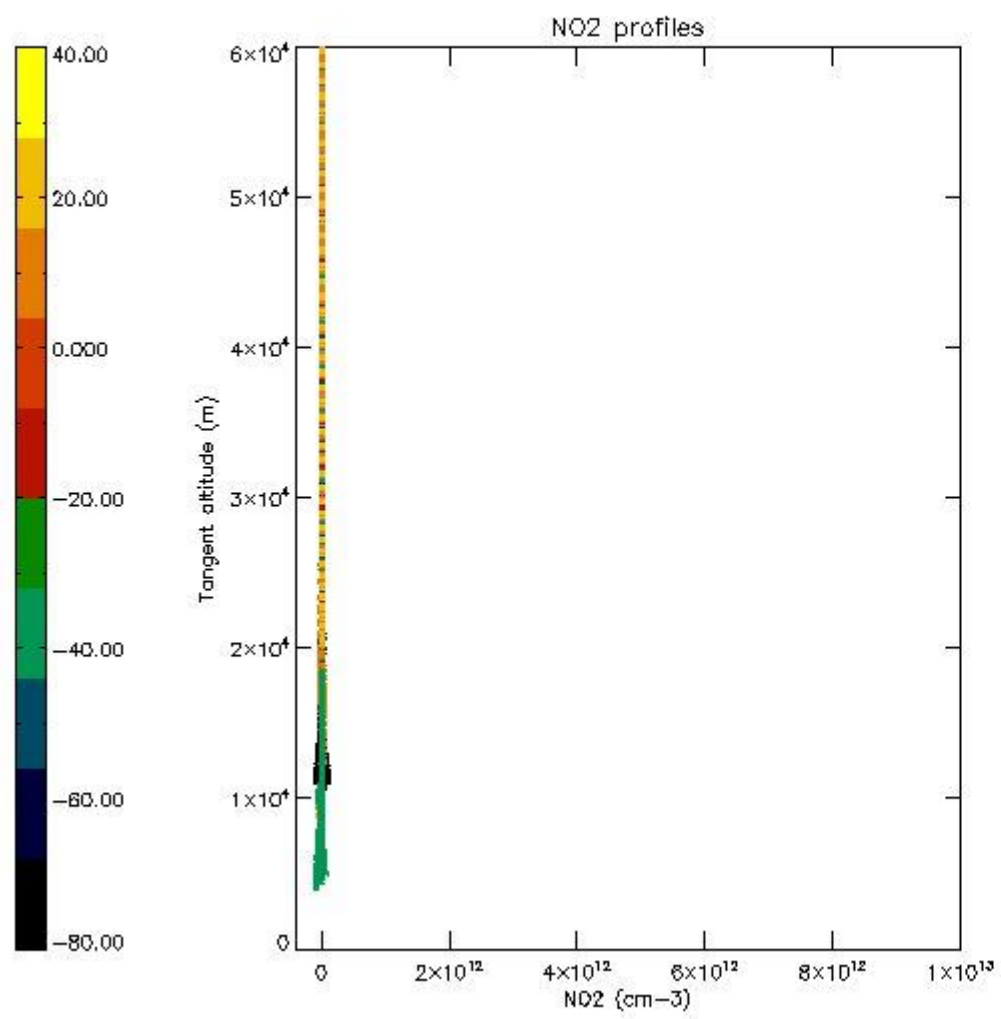
*5.5 Plot ozone profiles where  $STD < 5\%$  (dark without errors)*

The colorbar represents the latitude.



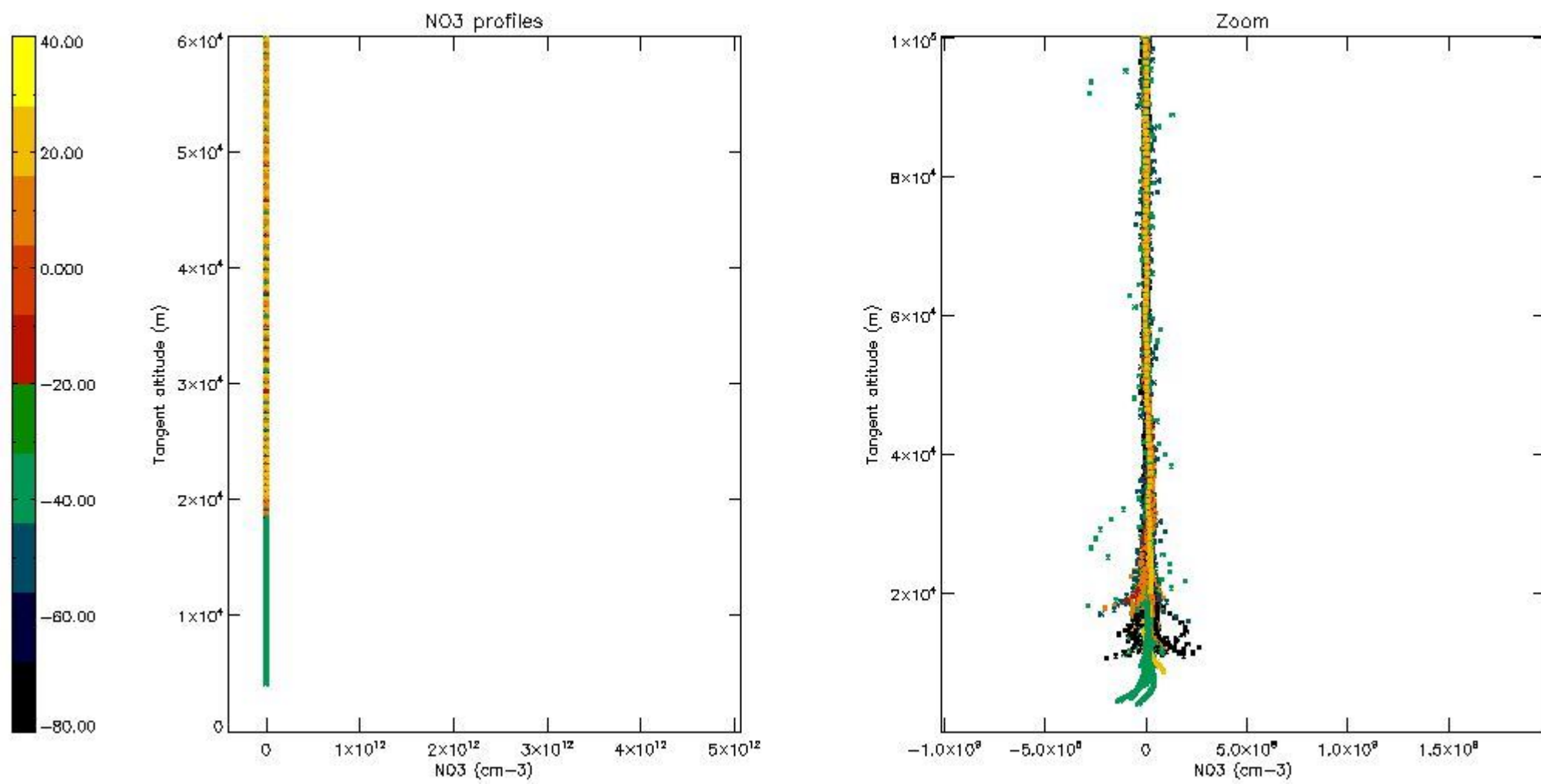
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



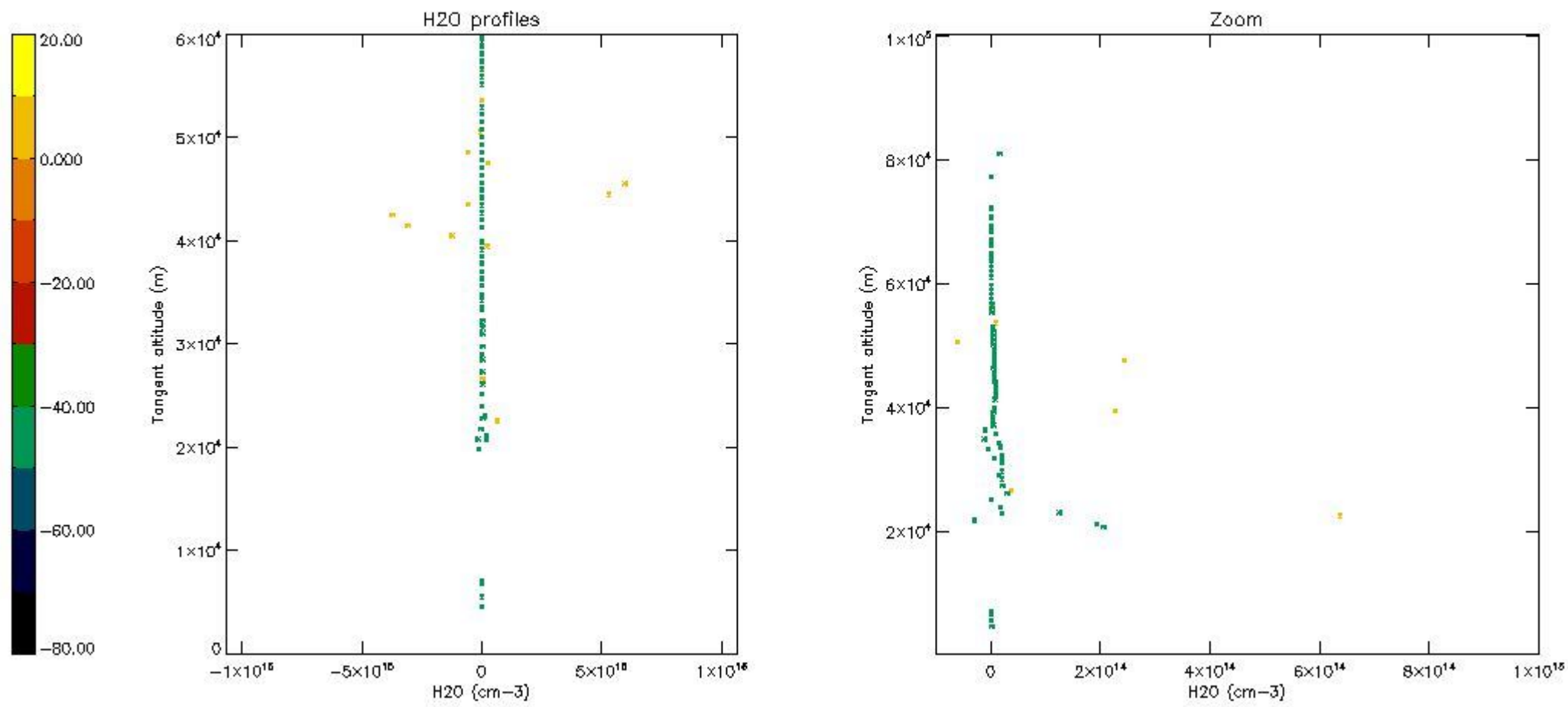
*5.7 Plot NO3 profiles for all STD (dark without errors)*

The colorbar represents the latitude.



5.8 Plot H<sub>2</sub>O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

| Type                      | Auxiliary Filename  | Used since product | Used since product date |
|---------------------------|---|--------------------|-------------------------|
| INST_PHYS_CHARACTERISTICS | GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000 | 1                  | 13-APR-2003 00:00:10    |
| LEVEL-2_PROC_CONFIG       | GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000 | 1                  | 13-APR-2003 00:00:10    |
| CROSS_SECTIONS_FILE       | GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000 | 1                  | 13-APR-2003 00:00:10    |

# 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](#)

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 13:11:22              |
| Data source version       | GOMOS/6.01                      |
| Start time of products    | 13-04-2003 (13APR2003 00:00:00) |
| Stop time of products     | 14-04-2003 (14APR2003 00:00:00) |
| Store outputs in DB       | Yes                             |
| Nb of level 2 prods       | 416                             |
| 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__2PRFIN20030413_000010_00000452015_00274_05839_6746.N1  | 13-APR-2003 00:00:10 | Straylight | 45.000   | 81      | Eta Cen   | 2.3560    | 28000.    | 90      | 5839  | No          |
| 2  | GOM_NL__2PRFIN20030413_000237_000000512015_00274_05839_6747.N1 | 13-APR-2003 00:02:37 | Straylight | 50.500   | 54      | 5The Cen  | 2.0550    | 4500.0    | 101     | 5839  | No          |
| 3  | GOM_NL__2PRFIN20030413_000423_000000952015_00274_05839_6748.N1 | 13-APR-2003 00:04:23 | Twilight   | 95.000   | 80      | 7Del Sco  | 2.3160    | 30000.    | 190     | 5839  | No          |
| 4  | GOM_NL__2PRFIN20030413_000728_000000462015_00274_05839_6749.N1 | 13-APR-2003 00:07:28 | Twilight   | 46.000   | 169     | 46Gam Hya | 2.9910    | 4700.0    | 92      | 5839  | No          |
| 5  | GOM_NL__2PRFIN20030413_000906_000000782015_00274_05839_6750.N1 | 13-APR-2003 00:09:06 | Bright     | 77.500   | 122     | 9Alp2Lib  | 2.7470    | 9700.0    | 155     | 5839  | No          |
| 6  | GOM_NL__2PRFIN20030413_001112_000000482015_00274_05839_6751.N1 | 13-APR-2003 00:11:12 | Bright     | 48.000   | 15      | 67Alp Vir | 0.97600   | 28000.    | 96      | 5839  | No          |
| 7  | GOM_NL__2PRFIN20030413_001417_000000392015_00274_05839_6752.N1 | 13-APR-2003 00:14:17 | Bright     | 39.000   | 121     | 29Gam Vir | 2.7400    | 7200.0    | 78      | 5839  | No          |
| 8  | GOM_NL__2PRFIN20030413_001812_000000402015_00274_05839_6753.N1 | 13-APR-2003 00:18:12 | Bright     | 40.000   | 138     | 47Eps Vir | 2.8280    | 4700.0    | 80      | 5839  | No          |
| 9  | GOM_NL__2PRFIN20030413_002052_000000362015_00274_05839_6754.N1 | 13-APR-2003 00:20:52 | Bright     | 36.000   | 96      | 68Del Leo | 2.5600    | 9300.0    | 72      | 5839  | No          |
| 10 | GOM_NL__2PRFIN20030413_002308_000000622015_00274_05839_6755.N1 | 13-APR-2003 00:23:08 | Bright     | 61.500   | 3       | 16Alp Boo | -0.050000 | 4250.0    | 123     | 5839  | No          |
| 11 | GOM_NL__2PRFIN20030413_002625_000000582015_00274_05839_6756.N1 | 13-APR-2003 00:26:25 | Bright     | 58.000   | 152     | 12Alp2CVn | 2.8900    | 11000.    | 116     | 5839  | No          |
| 12 | GOM_NL__2PRFIN20030413_003005_000000362015_00274_05839_6757.N1 | 13-APR-2003 00:30:05 | Bright     | 36.000   | 87      | 64Gam UMa | 2.4330    | 11000.    | 72      | 5839  | No          |
| 13 | GOM_NL__2PRFIN20030413_003122_000000362015_00274_05839_6758.N1 | 13-APR-2003 00:31:22 | Bright     | 36.000   | 32      | 77Eps UMa | 1.7630    | 11000.    | 72      | 5839  | No          |
| 14 | GOM_NL__2PRFIN20030413_003344_000001142015_00274_05839_6759.N1 | 13-APR-2003 00:33:44 | Bright     | 113.50   | 67      | 5Alp CrB  | 2.2210    | 11000.    | 227     | 5839  | No          |
| 15 | GOM_NL__2PRFIN20030413_003748_000000392015_00274_05839_6760.N1 | 13-APR-2003 00:37:48 | Bright     | 39.000   | 60      | 7Bet UMi  | 2.0810    | 3950.0    | 78      | 5839  | No          |
| 16 | GOM_NL__2PRFIN20030413_004024_000000332015_00274_05839_6761.N1 | 13-APR-2003 00:40:24 | Bright     | 32.500   | 49      | 1Alp UMi  | 1.9900    | 6300.0    | 65      | 5839  | No          |
| 17 | GOM_NL__2PRFIN20030413_004408_000000612015_00274_05839_6762.N1 | 13-APR-2003 00:44:08 | Bright     | 61.000   | 130     | 23Bet Dra | 2.7990    | 5800.0    | 122     | 5839  | No          |
| 18 | GOM_NL__2PRFIN20030413_004840_000000342015_00274_05839_6763.N1 | 13-APR-2003 00:48:40 | Bright     | 34.000   | 74      | 11Bet Cas | 2.2680    | 6600.0    | 68      | 5839  | No          |
| 19 | GOM_NL__2PRFIN20030413_005358_000001112015_00274_05839_6764.N1 | 13-APR-2003 00:53:58 | Bright     | 110.50   | 5       | 3Alp Lyr  | 0.033000  | 11000.    | 221     | 5839  | No          |
| 20 | GOM_NL__2PRFIN20030413_005713_000000512015_00274_05839_6765.N1 | 13-APR-2003 00:57:13 | Bright     | 50.500   | 92      | 53Eps Cyg | 2.5000    | 4500.0    | 101     | 5839  | No          |
| 21 | GOM_NL__2PRFIN20030413_010424_000000522015_00274_05839_6766.N1 | 13-APR-2003 01:04:24 | Twilight   | 52.000   | 61      | 8Eps Peg  | 2.1000    | 3900.0    | 104     | 5839  | No          |
| 22 | GOM_NL__2PRFIN20030413_010652_000000452015_00274_05839_6767.N1 | 13-APR-2003 01:06:52 | Dark       | 45.000   | 162     | 34Alp Aqr | 2.9440    | 5350.0    | 90      | 5839  | No          |
| 23 | GOM_NL__2PRFIN20030413_011010_000001012015_00274_05839_6768.N1 | 13-APR-2003 01:10:10 | Dark       | 101.00   | 11      | 53Alp Aql | 0.76500   | 8000.0    | 202     | 5839  | No          |
| 24 | GOM_NL__2PRFIN20030413_011918_000000382015_00274_05839_6769.N1 | 13-APR-2003 01:19:18 | Dark       | 38.000   | 31      | Alp Gru   | 1.7340    | 15200.    | 76      | 5839  | No          |
| 25 | GOM_NL__2PRFIN20030413_012407_000000402015_00275_05840_6742.N1 | 13-APR-2003 01:24:07 | Dark       | 39.500   | 45      | Alp Pav   | 1.9400    | 26000.    | 79      | 5840  | No          |
| 26 | GOM_NL__2PRFIN20030413_012841_000000582015_00275_05840_6743.N1 | 13-APR-2003 01:28:41 | Dark       | 58.000   | 38      | 20Eps Sgr | 1.8360    | 11000.    | 116     | 5840  | No          |
| 27 | GOM_NL__2PRFIN20030413_013115_000000422015_00275_05840_6744.N1 | 13-APR-2003 01:31:15 | Dark       | 41.500   | 141     | Bet Ara   | 2.8400    | 4600.0    | 83      | 5840  | No          |
| 28 | GOM_NL__2PRFIN20030413_013245_000000622015_00275_05840_6745.N1 | 13-APR-2003 01:32:45 | Dark       | 62.000   | 25      | 35Lam Sco | 1.6200    | 28000.    | 124     | 5840  | No          |
| 29 | GOM_NL__2PRFIN20030413_013604_000000542015_00275_05840_6746.N1 | 13-APR-2003 01:36:04 | Straylight | 54.000   | 4       | Alp1Cen   | -0.010000 | 5800.0    | 108     | 5840  | No          |
| 30 | GOM_NL__2PRFIN20030413_013910_000000422015_00275_05840_6747.N1 | 13-APR-2003 01:39:10 | Straylight | 42.000   | 78      | Alp Lup   | 2.3040    | 28000.    | 84      | 5840  | No          |
| 31 | GOM_NL__2PRFIN20030413_014121_000001142015_00275_05840_6748.N1 | 13-APR-2003 01:41:21 | Straylight | 114.00   | 16      | 21Alp Sco | 1.0200    | 3000.0    | 228     | 5840  | No          |
| 32 | GOM_NL__2PRFIN20030413_014500_000000972015_00275_05840_6749.N1 | 13-APR-2003 01:45:00 | Twilight   | 96.500   | 80      | 7Del Sco  | 2.3160    | 30000.    | 193     | 5840  | No          |
| 33 | GOM_NL__2PRFIN20030413_014804_000000452015_00275_05840_6750.N1 | 13-APR-2003 01:48:04 | Twilight   | 45.000   | 169     | 46Gam Hya | 2.9910    | 4700.0    | 90      | 5840  | No          |
| 34 | GOM_NL__2PRFIN20030413_014942_000000762015_00275_05840_6751.N1 | 13-APR-2003 01:49:42 | Bright     | 75.500   | 122     | 9Alp2Lib  | 2.7470    | 9700.0    | 151     | 5840  | No          |
| 35 | GOM_NL__2PRFIN20030413_015148_000000462015_00275_05840_6752.N1 | 13-APR-2003 01:51:48 | Bright     | 46.000   | 15      | 67Alp Vir | 0.97600   | 28000.    | 92      | 5840  | No          |
| 36 | GOM_NL__2PRFIN20030413_015453_000000402015_00275_05840_6753.N1 | 13-APR-2003 01:54:53 | Bright     | 39.500   | 121     | 29Gam Vir | 2.7400    | 7200.0    | 79      | 5840  | No          |
| 37 | GOM_NL__2PRFIN20030413_015847_000000412015_00275_05840_6754.N1 | 13-APR-2003 01:58:47 | Bright     | 40.500   | 138     | 47Eps Vir | 2.8280    | 4700.0    | 81      | 5840  | No          |
| 38 | GOM_NL__2PRFIN20030413_020127_000000362015_00275_05840_6755.N1 | 13-APR-2003 02:01:27 | Bright     | 35.500   | 96      | 68Del Leo | 2.5600    | 9300.0    | 71      | 5840  | No          |
| 39 | GOM_NL__2PRFIN20030413_020341_000000572015_00275_05840_6756.N1 | 13-APR-2003 02:03:41 | Bright     | 56.500   | 3       | 16Alp Boo | -0.050000 | 4250.0    | 113     | 5840  | No          |
| 40 | GOM_NL__2PRFIN20030413_020700_000000392015_00275_05840_6757.N1 | 13-APR-2003 02:07:00 | Bright     | 39.000   | 152     | 12Alp2CVn | 2.8900    | 11000.    | 78      | 5840  | No          |
| 41 | GOM_NL__2PRFIN20030413_021040_000000362015_00275_05840_6758.N1 | 13-APR-2003 02:10:40 | Bright     | 35.500   | 87      | 64Gam UMa | 2.4330    | 11000.    | 71      | 5840  | No          |
| 42 | GOM_NL__2PRFIN20030413_021157_000000372015_00275_05840_6759.N1 | 13-APR-2003 02:11:57 | Bright     | 36.500   | 32      | 77Eps UMa | 1.7630    | 11000.    | 73      | 5840  | No          |













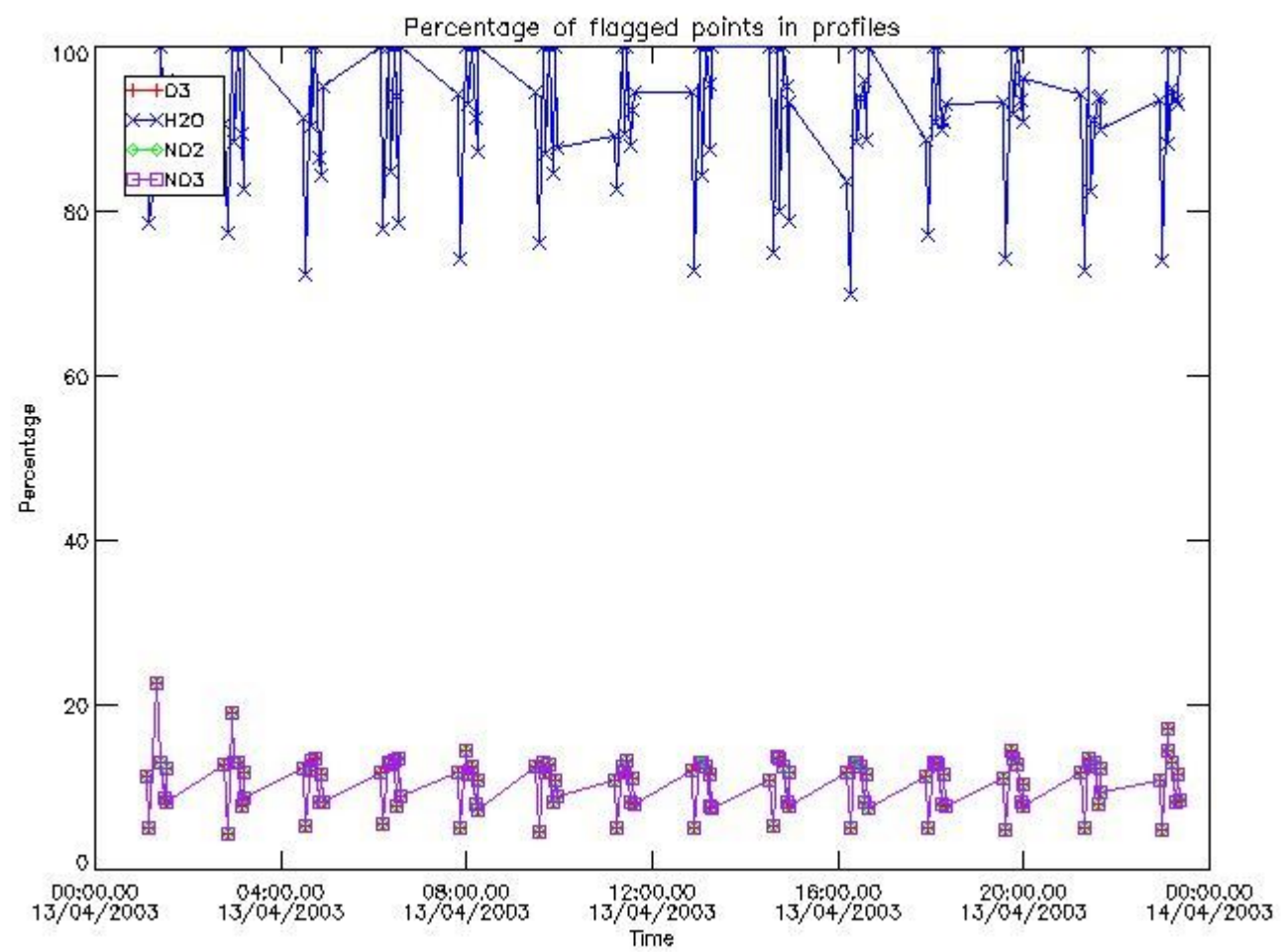


|     |  |                      |                |        |     |           |           |        |     |      |    |
|-----|--|----------------------|----------------|--------|-----|-----------|-----------|--------|-----|------|----|
| 397 | GOM_NL__2PRFIN20030413_230502_000000392015_00287_05852_6815.N1 | 13-APR-2003 23:05:02 | Dark           | 38.500 | 172 | Gam Gru   | 3.0030    | 13100. | 77  | 5852 | No |
| 398 | GOM_NL__2PRFIN20030413_230710_000000392015_00287_05852_6816.N1 | 13-APR-2003 23:07:10 | Dark           | 38.500 | 31  | Alp Gru   | 1.7340    | 15200. | 77  | 5852 | No |
| 399 | GOM_NL__2PRFIN20030413_231201_000000402015_00288_05853_6790.N1 | 13-APR-2003 23:12:01 | Dark           | 39.500 | 45  | Alp Pav   | 1.9400    | 26000. | 79  | 5853 | No |
| 400 | GOM_NL__2PRFIN20030413_231647_000000622015_00288_05853_6791.N1 | 13-APR-2003 23:16:47 | Dark           | 62.000 | 38  | 20Eps Sgr | 1.8360    | 11000. | 124 | 5853 | No |
| 401 | GOM_NL__2PRFIN20030413_231911_000000442015_00288_05853_6792.N1 | 13-APR-2003 23:19:11 | Dark           | 44.000 | 141 | Bet Ara   | 2.8400    | 4600.0 | 88  | 5853 | No |
| 402 | GOM_NL__2PRFIN20030413_232049_000000602015_00288_05853_6793.N1 | 13-APR-2003 23:20:49 | Dark           | 60.000 | 25  | 35Lam Sco | 1.6200    | 28000. | 120 | 5853 | No |
| 403 | GOM_NL__2PRFIN20030413_232357_000000452015_00288_05853_6794.N1 | 13-APR-2003 23:23:57 | Straylight     | 44.500 | 4   | Alp1Cen   | -0.010000 | 5800.0 | 89  | 5853 | No |
| 404 | GOM_NL__2PRFIN20030413_232909_000000402015_00288_05853_6795.N1 | 13-APR-2003 23:29:09 | Straylight     | 40.000 | 64  | Gam Cen   | 2.2000    | 10600. | 80  | 5853 | No |
| 405 | GOM_NL__2PRFIN20030413_233105_000000482015_00288_05853_6796.N1 | 13-APR-2003 23:31:05 | Straylight     | 47.500 | 54  | 5The Cen  | 2.0550    | 4500.0 | 95  | 5853 | No |
| 406 | GOM_NL__2PRFIN20030413_233256_000000942015_00288_05853_6797.N1 | 13-APR-2003 23:32:56 | Tw_i_and_stray | 94.000 | 80  | 7Del Sco  | 2.3160    | 30000. | 188 | 5853 | No |
| 407 | GOM_NL__2PRFIN20030413_233553_000000452015_00288_05853_6798.N1 | 13-APR-2003 23:35:53 | Tw_i_and_stray | 44.500 | 169 | 46Gam Hya | 2.9910    | 4700.0 | 89  | 5853 | No |
| 408 | GOM_NL__2PRFIN20030413_233731_000000742015_00288_05853_6799.N1 | 13-APR-2003 23:37:31 | Bright         | 73.500 | 122 | 9Alp2Lib  | 2.7470    | 9700.0 | 147 | 5853 | No |
| 409 | GOM_NL__2PRFIN20030413_233936_000000462015_00288_05853_6800.N1 | 13-APR-2003 23:39:36 | Bright         | 45.500 | 15  | 67Alp Vir | 0.97600   | 28000. | 91  | 5853 | No |
| 410 | GOM_NL__2PRFIN20030413_234240_000000402015_00288_05853_6801.N1 | 13-APR-2003 23:42:40 | Bright         | 40.000 | 121 | 29Gam Vir | 2.7400    | 7200.0 | 80  | 5853 | No |
| 411 | GOM_NL__2PRFIN20030413_234632_000000412015_00288_05853_6802.N1 | 13-APR-2003 23:46:32 | Bright         | 41.000 | 138 | 47Eps Vir | 2.8280    | 4700.0 | 82  | 5853 | No |
| 412 | GOM_NL__2PRFIN20030413_234917_000000362015_00288_05853_6803.N1 | 13-APR-2003 23:49:17 | Bright         | 35.500 | 96  | 68Del Leo | 2.5600    | 9300.0 | 71  | 5853 | No |
| 413 | GOM_NL__2PRFIN20030413_235119_000000552015_00288_05853_6804.N1 | 13-APR-2003 23:51:19 | Bright         | 55.000 | 3   | 16Alp Boo | -0.050000 | 4250.0 | 110 | 5853 | No |
| 414 | GOM_NL__2PRFIN20030413_235443_000000402015_00288_05853_6805.N1 | 13-APR-2003 23:54:43 | Bright         | 39.500 | 152 | 12Alp2CVn | 2.8900    | 11000. | 79  | 5853 | No |
| 415 | GOM_NL__2PRFIN20030413_235827_000000352015_00288_05853_6806.N1 | 13-APR-2003 23:58:27 | Bright         | 34.500 | 87  | 64Gam UMa | 2.4330    | 11000. | 69  | 5853 | No |
| 416 | GOM_NL__2PRFIN20030413_235959_000000392015_00288_05853_6807.N1 | 13-APR-2003 23:59:59 | Bright         | 39.000 | 55  | 79Zet UMa | 2.0600    | 10200. | 78  | 5853 | 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.

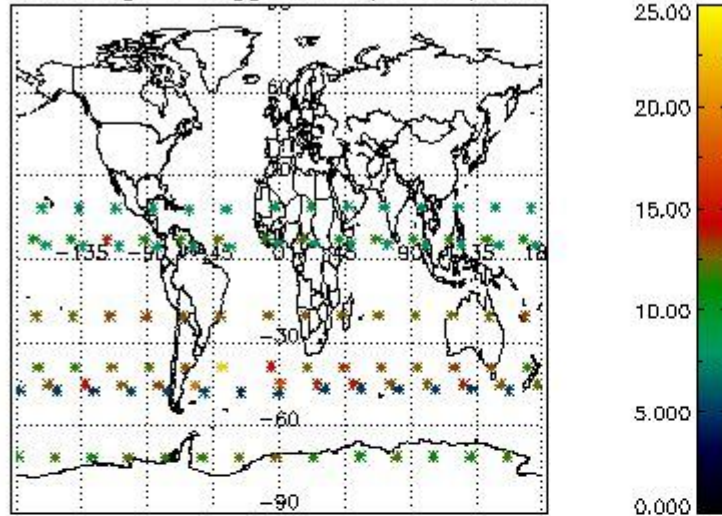
#### 3.1 Plot quality information per product (time dependant)



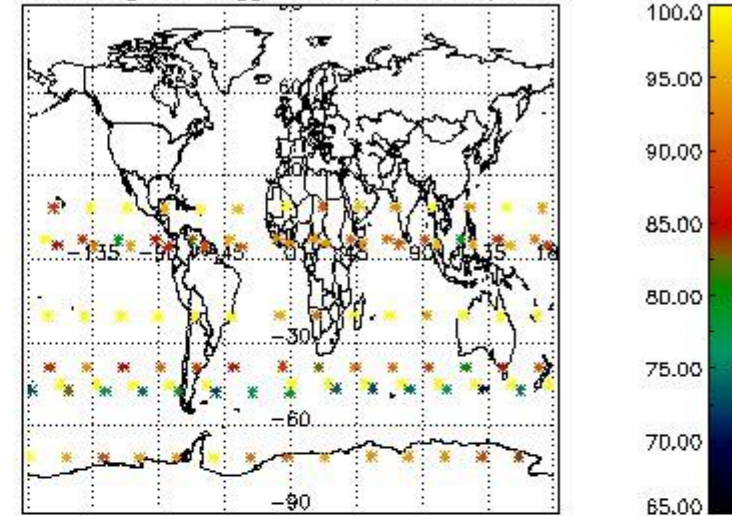
*3.2 Plot quality information per product (world map)*



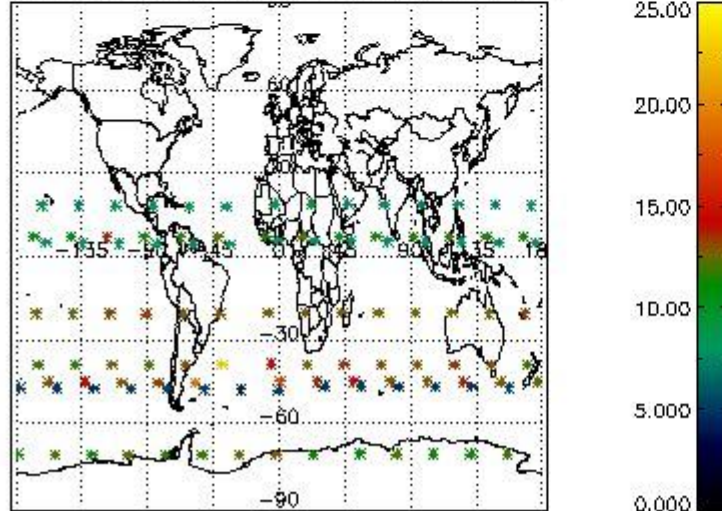
Percentage of flagged data per O3 profile



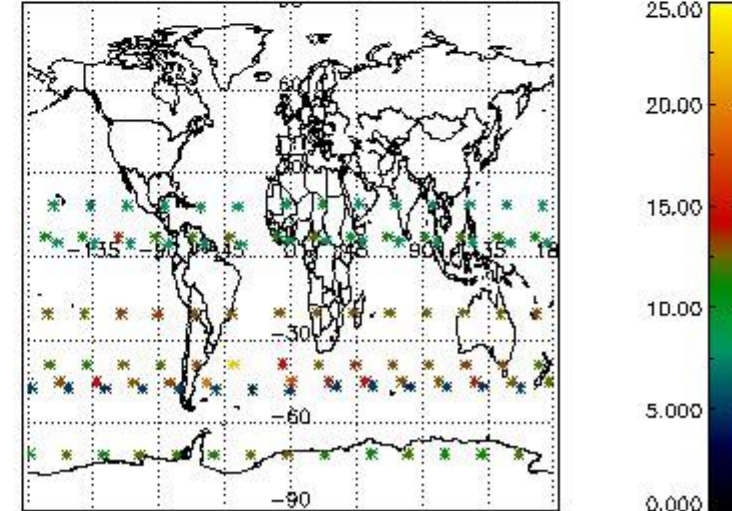
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

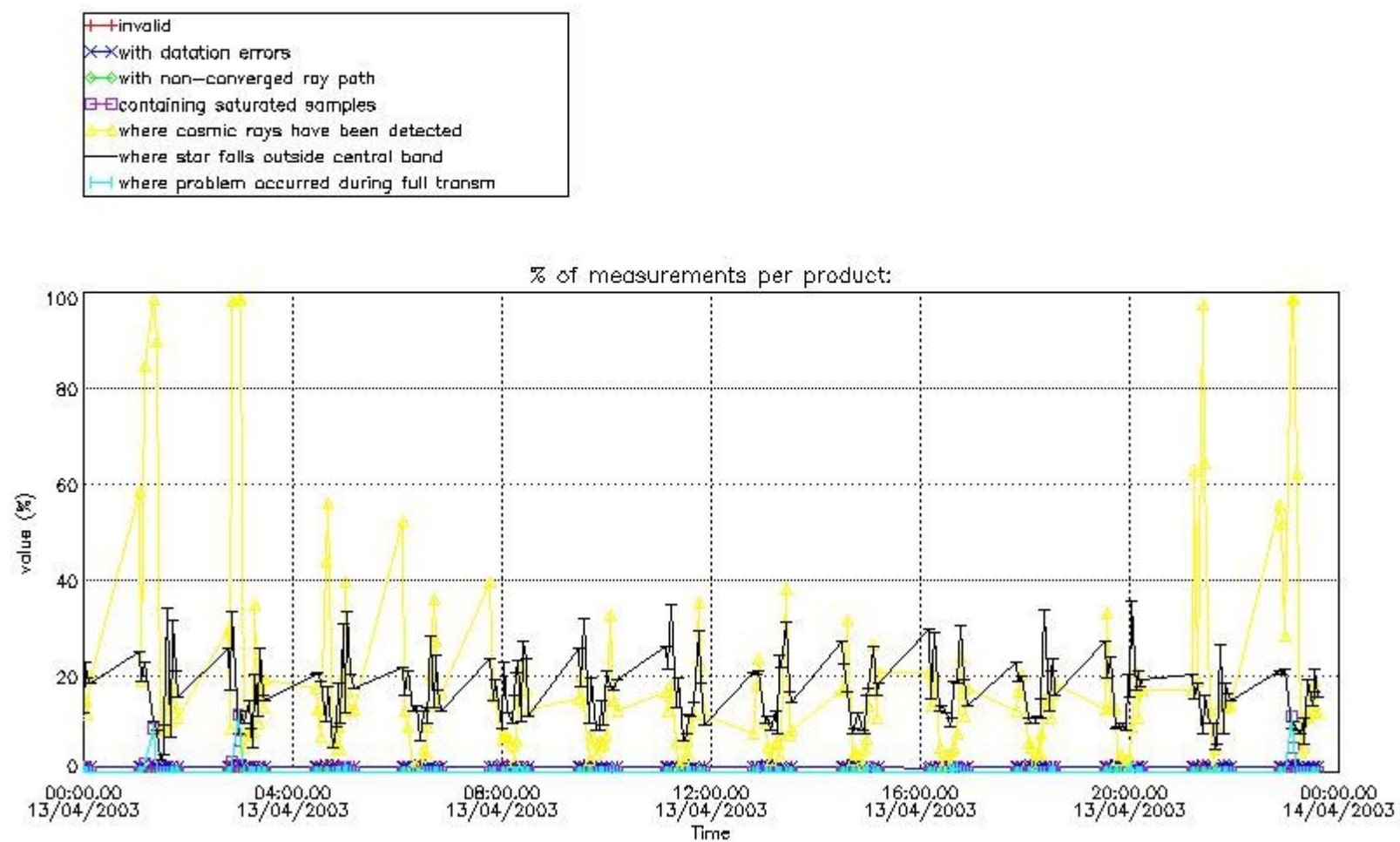


#### 4. Level 1 quality information per product

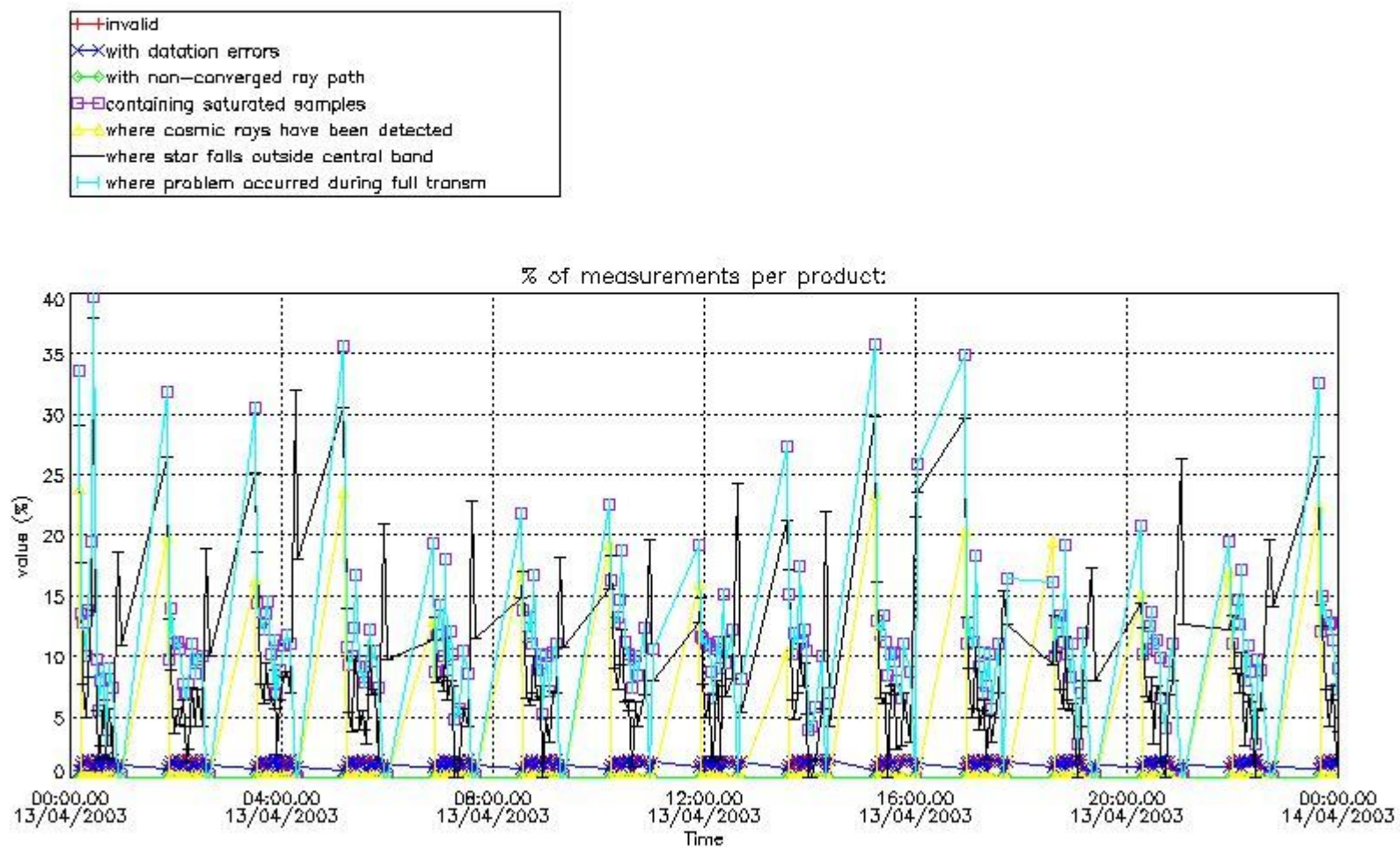
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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



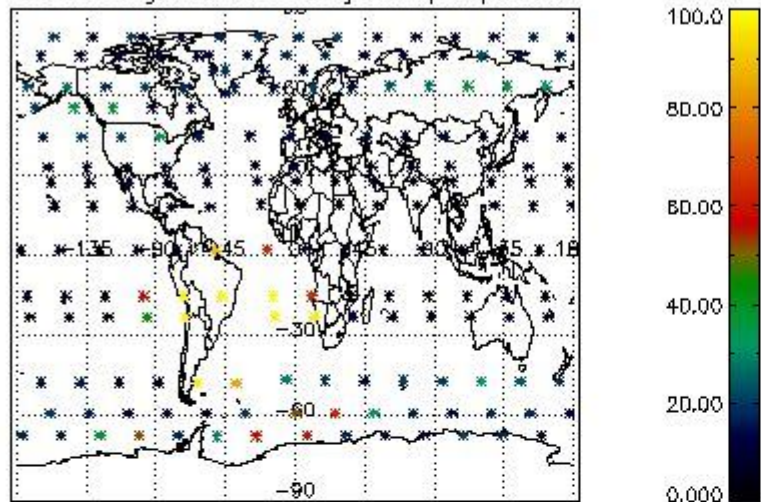
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



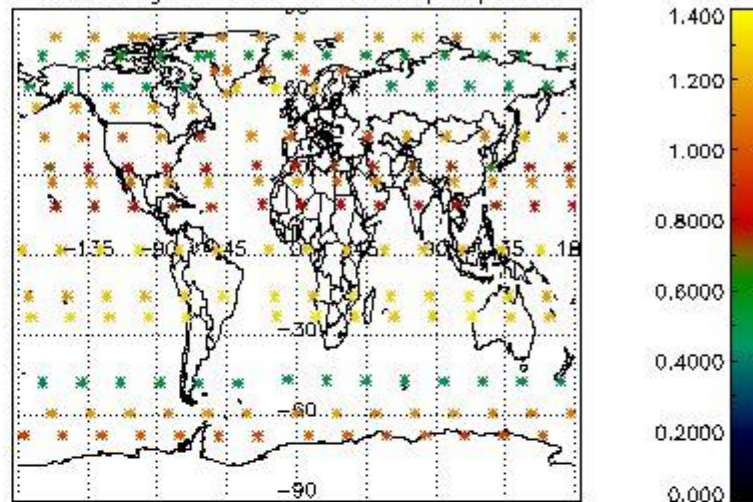
4.2 Plot quality information per product coming from level 1b processing (world map)

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

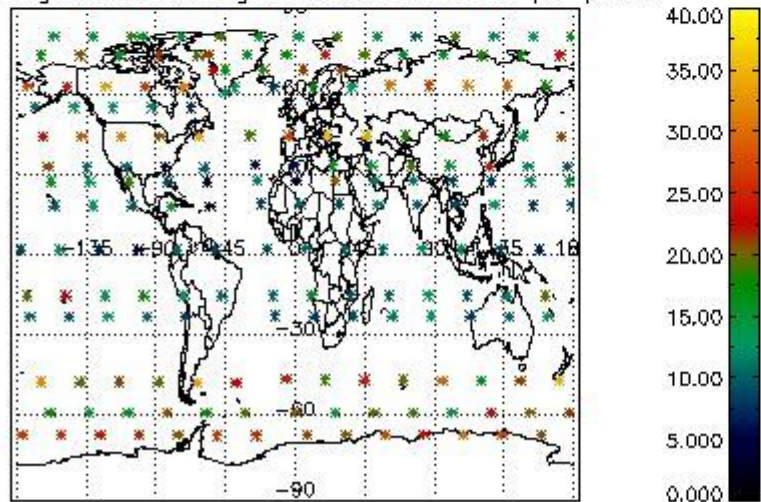
Percentage of cosmic ray hits per profile



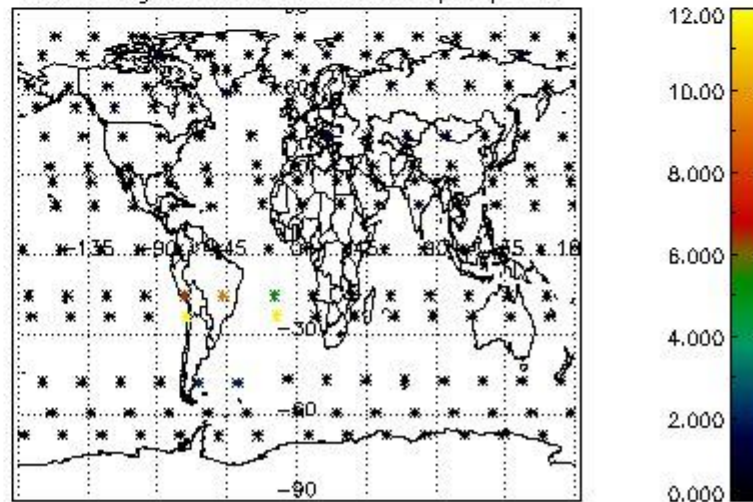
Percentage of datation errors per profile



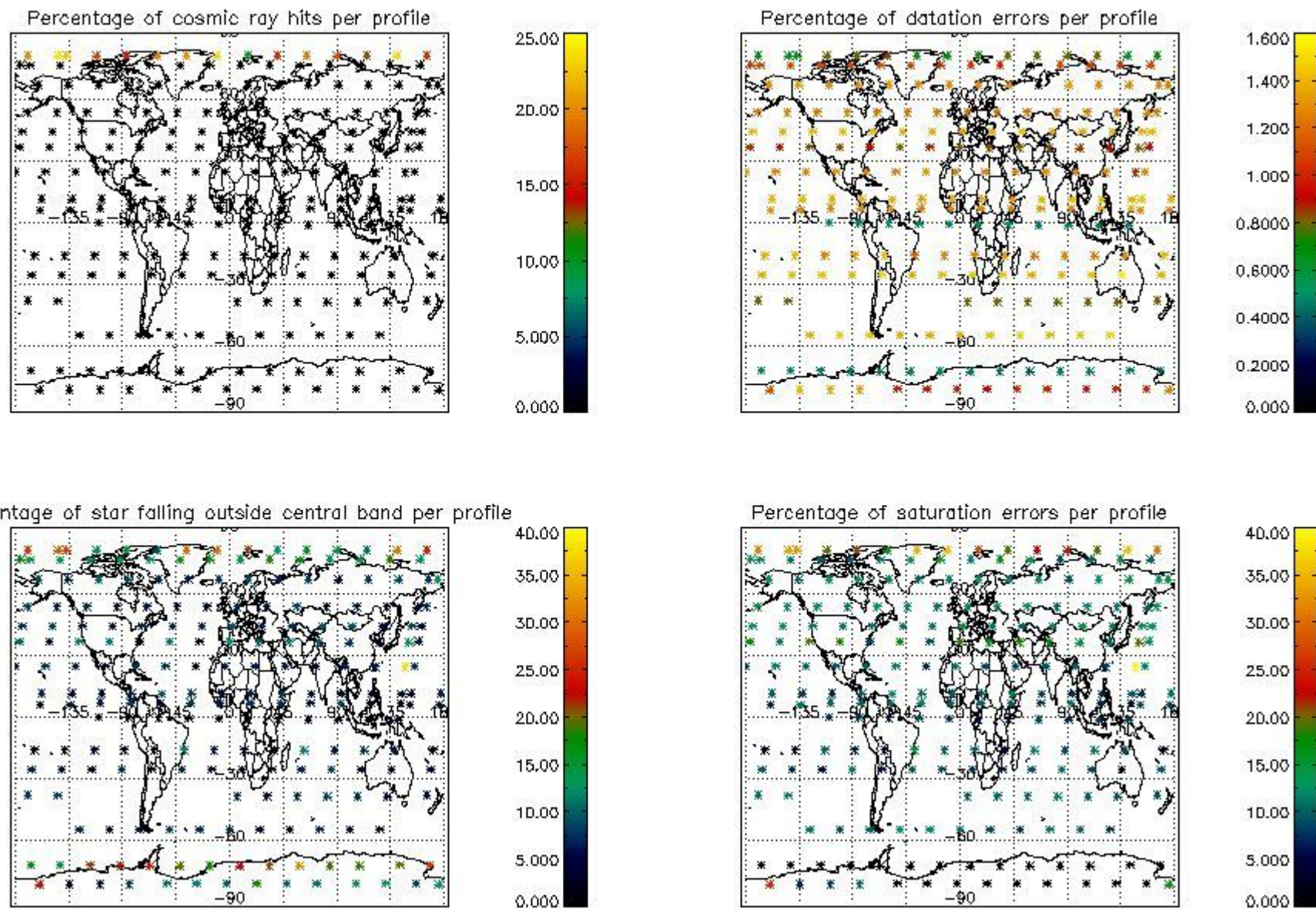
Percentage of star falling outside central band per profile



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

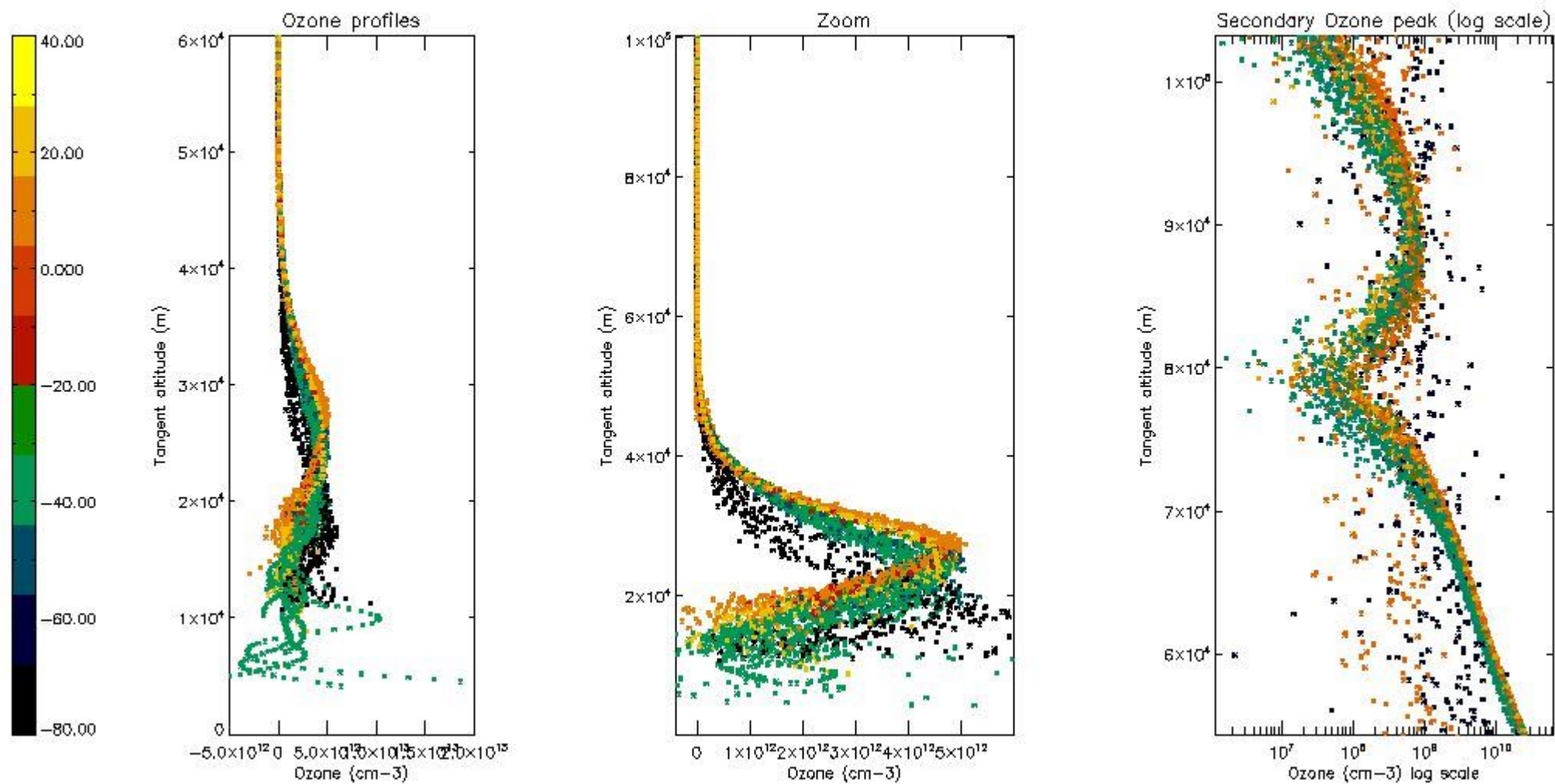
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

| Criteria | % of total production |
|----------|-----------------------|
| All STD  | 27                    |
| STD < 20 | 17                    |

|          |    |
|----------|----|
| STD < 10 | 15 |
| STD < 5  | 12 |

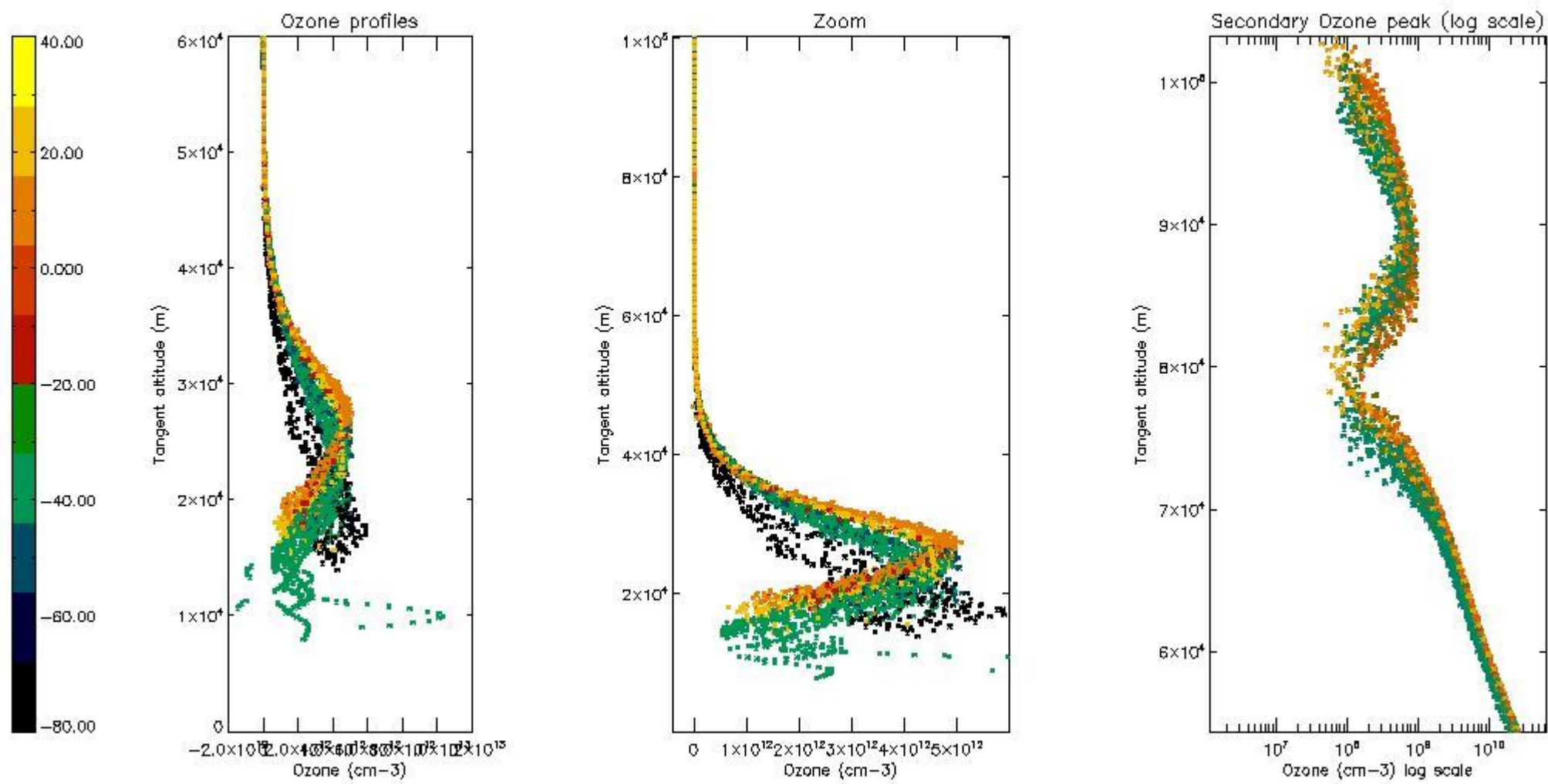
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



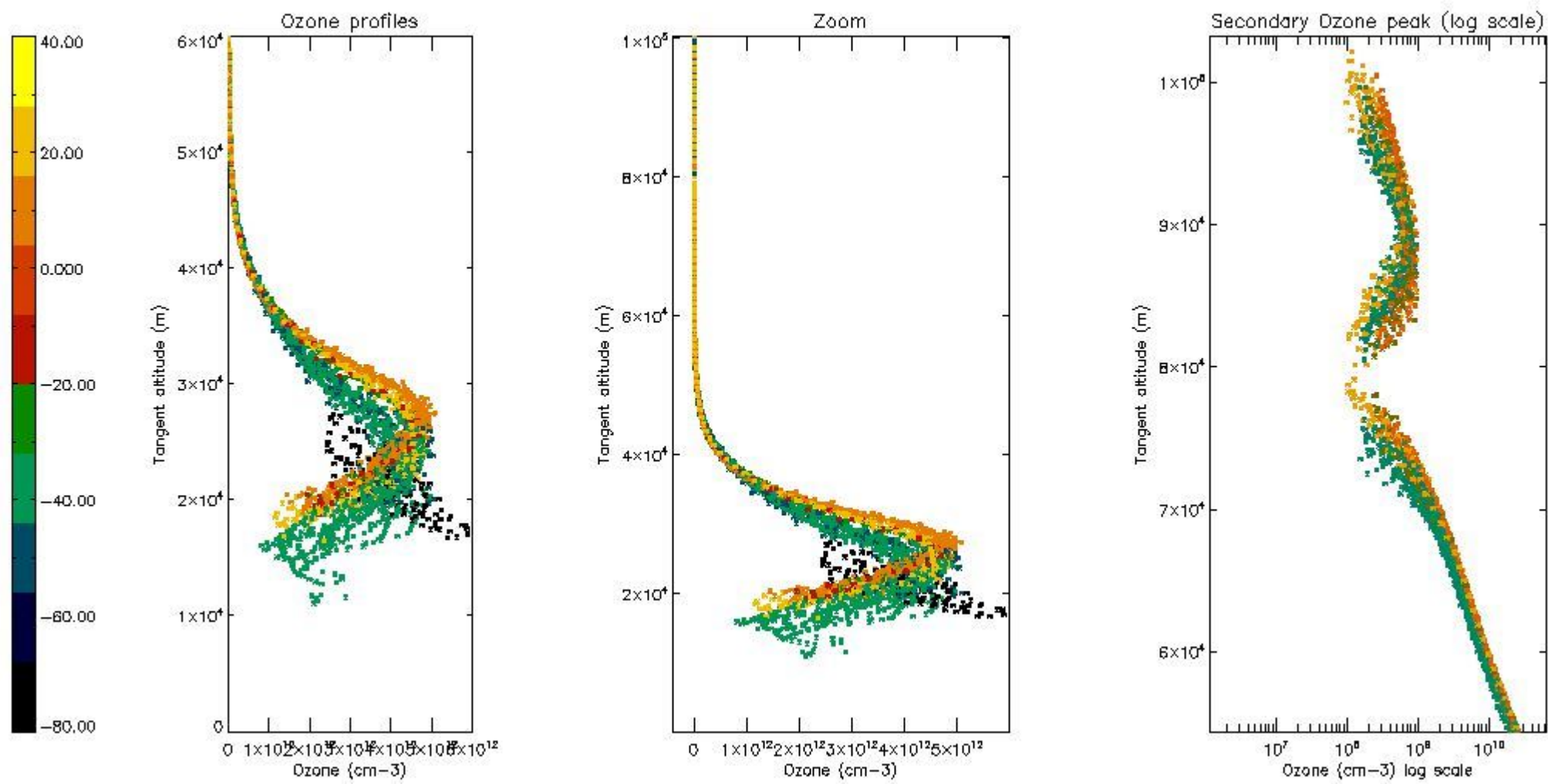
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



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

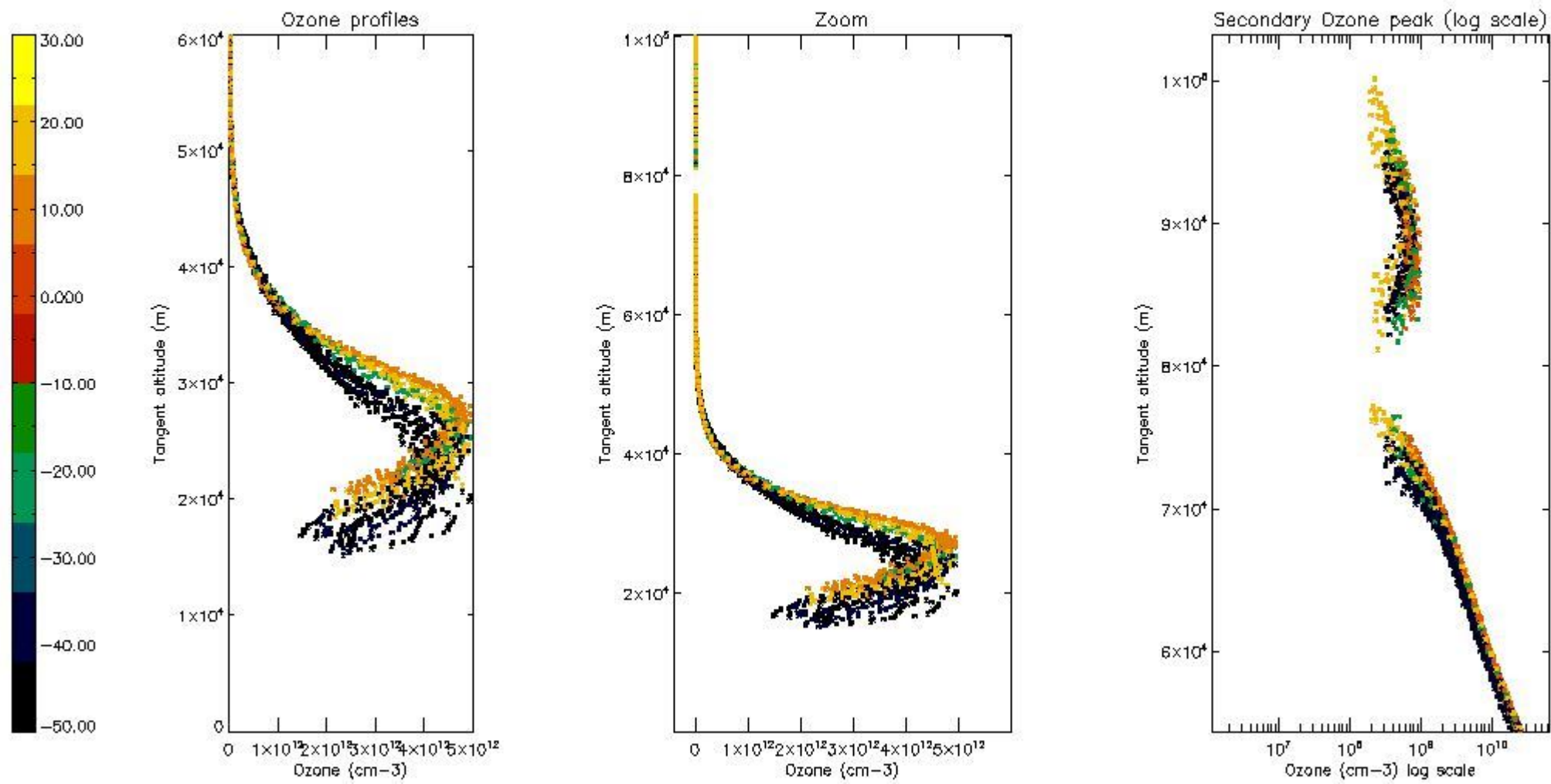
The colorbar represents the latitude.



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

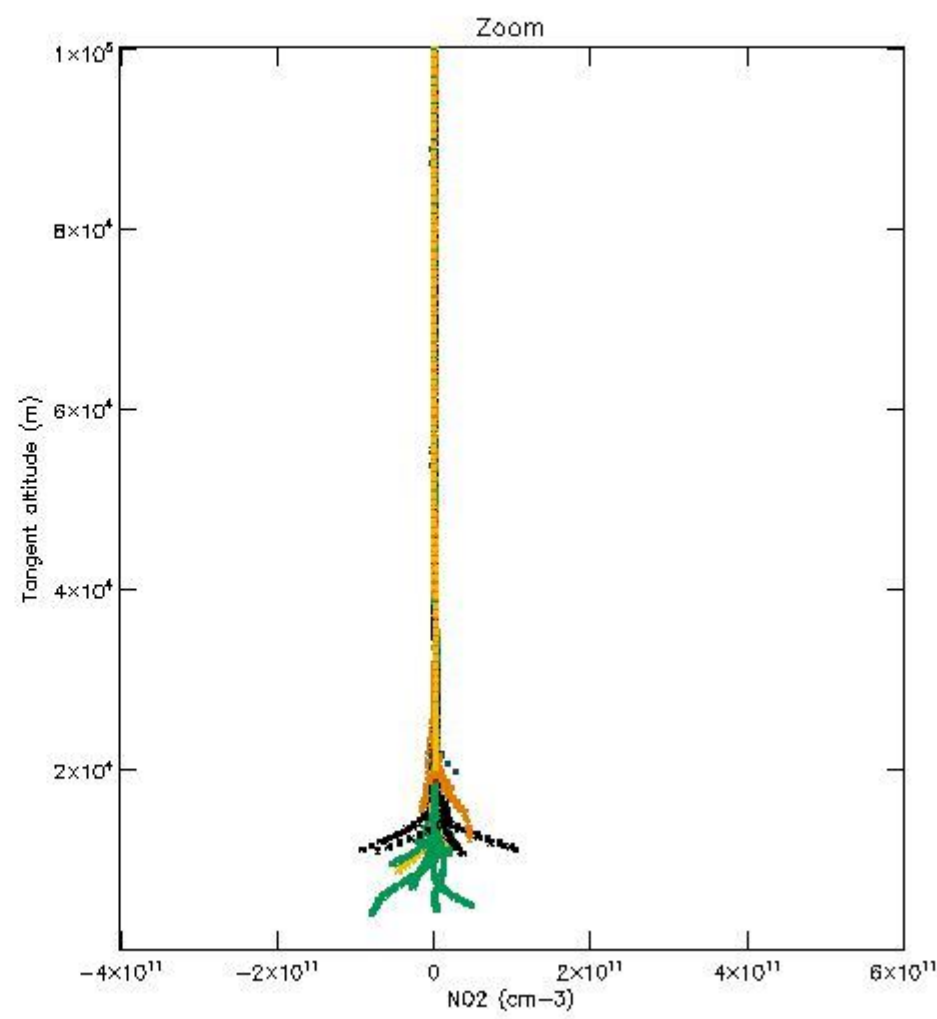
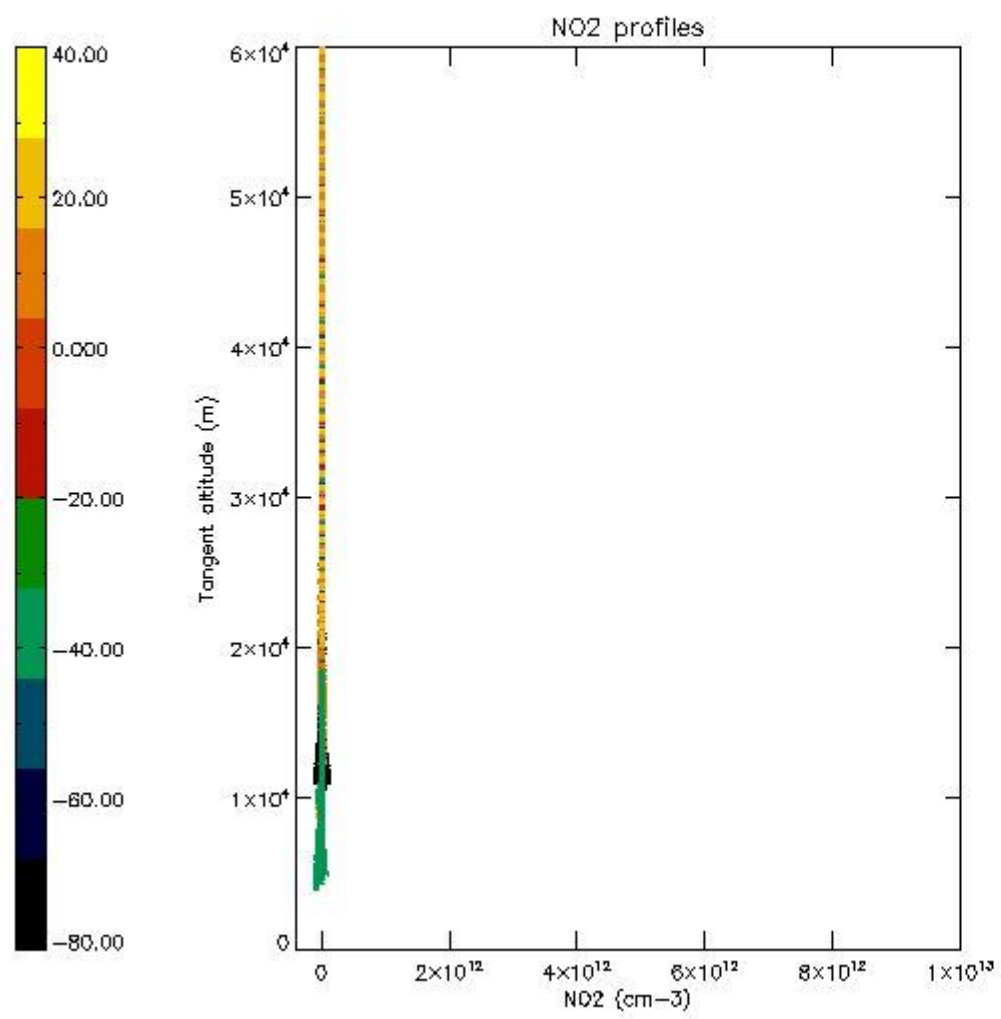
The colorbar represents the latitude.





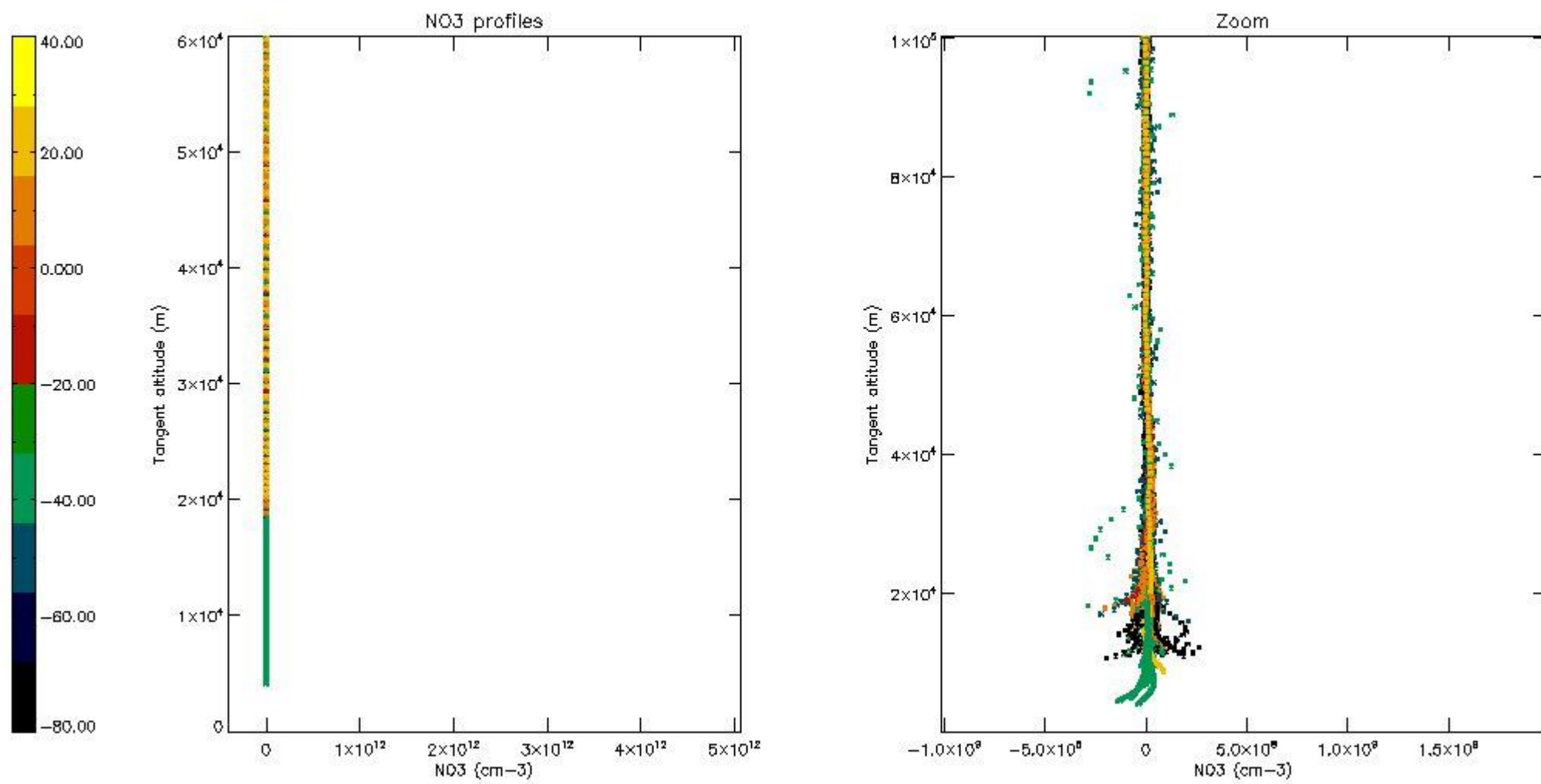
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



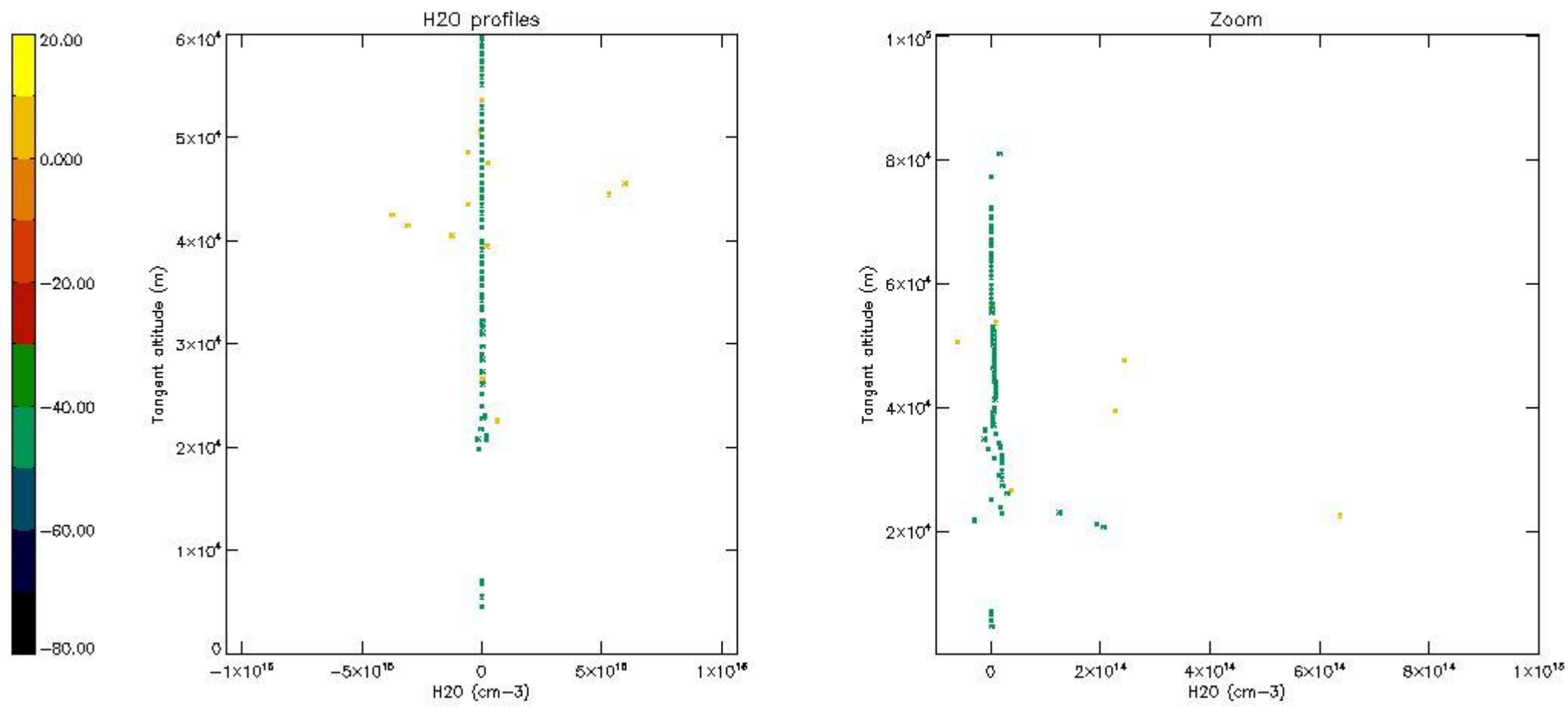
*5.7 Plot NO3 profiles for all STD (dark without errors)*

The colorbar represents the latitude.



5.8 Plot H<sub>2</sub>O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

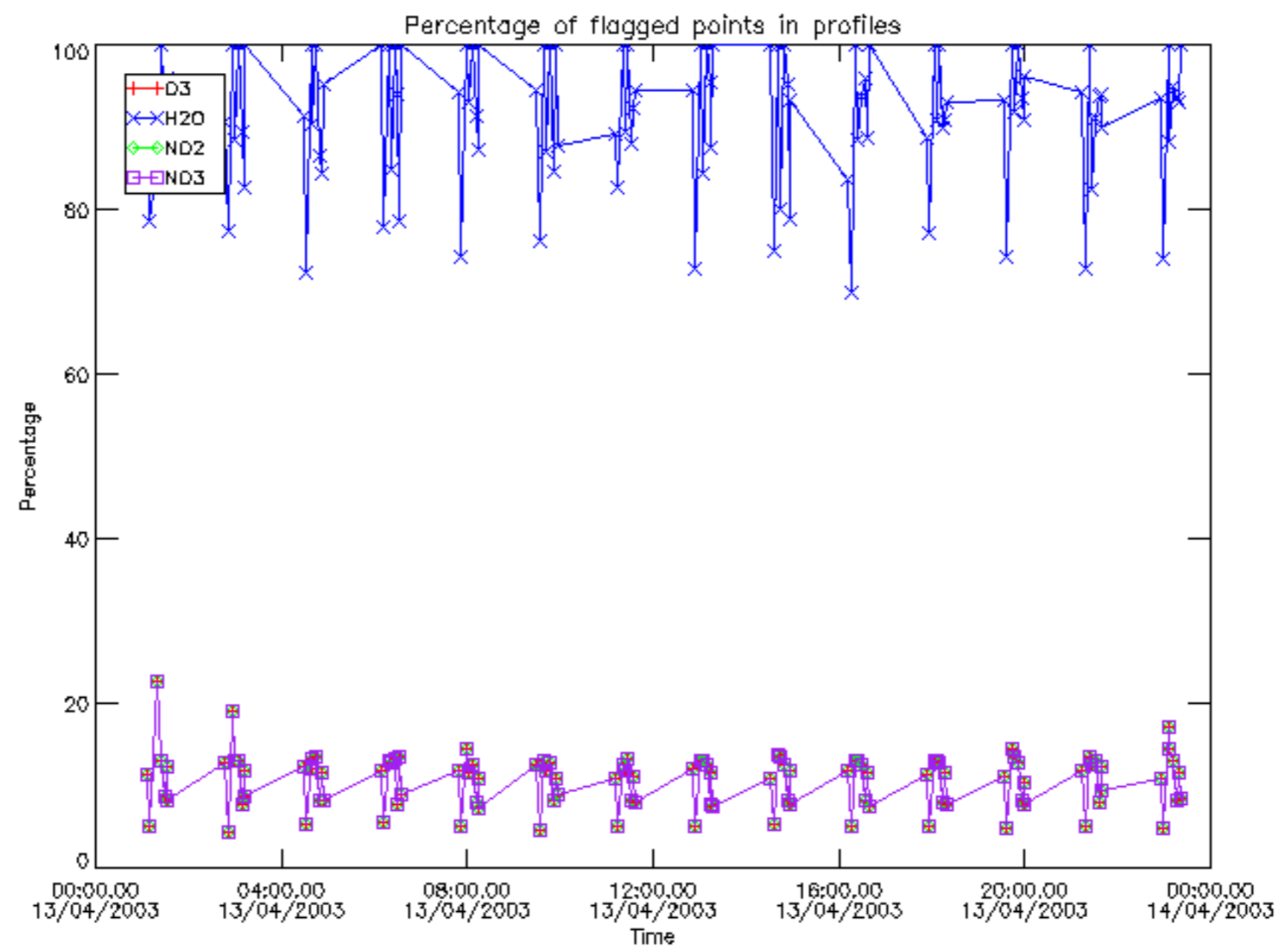
The colorbar represents the latitude.



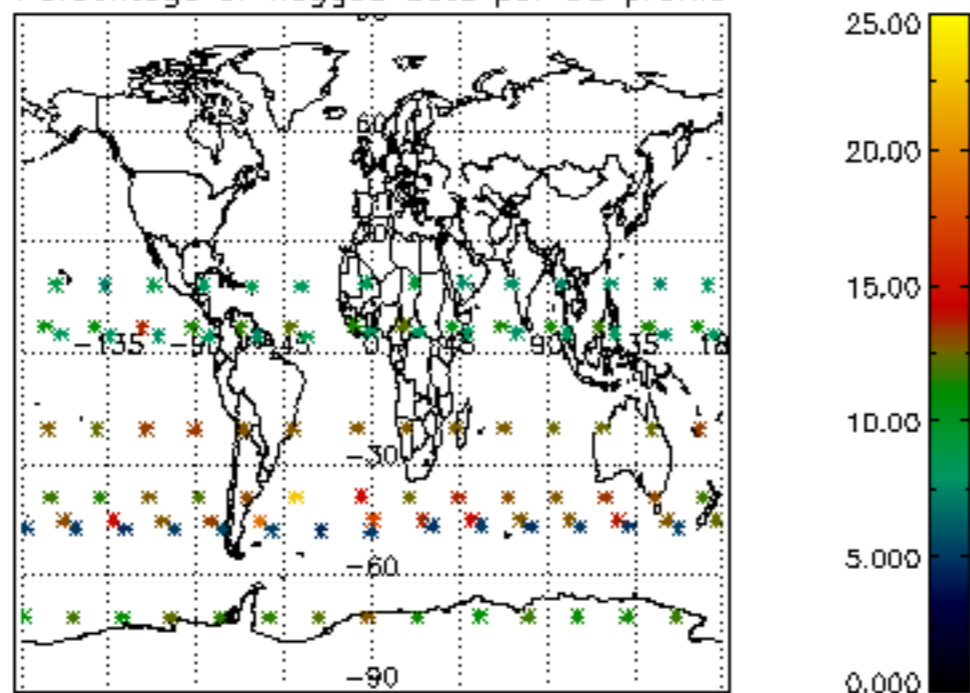
## 6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

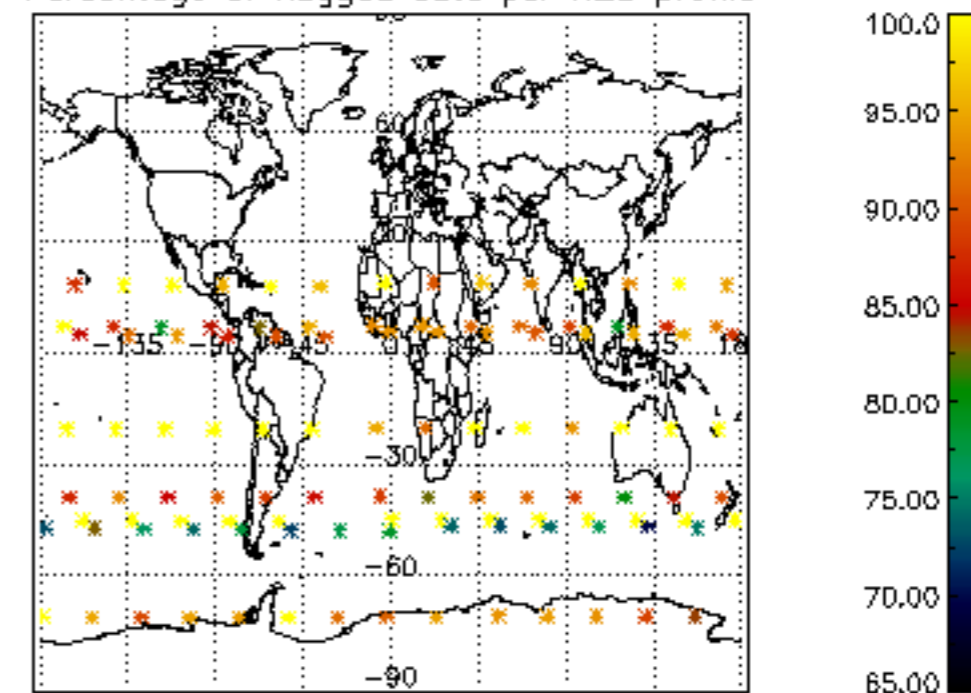
| Type                      | Auxiliary Filename  | Used since product | Used since product date |
|---------------------------|---|--------------------|-------------------------|
| INST_PHYS_CHARACTERISTICS | GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000 | 1                  | 13-APR-2003 00:00:10    |
| LEVEL-2_PROC_CONFIG       | GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000 | 1                  | 13-APR-2003 00:00:10    |
| CROSS_SECTIONS_FILE       | GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000 | 1                  | 13-APR-2003 00:00:10    |



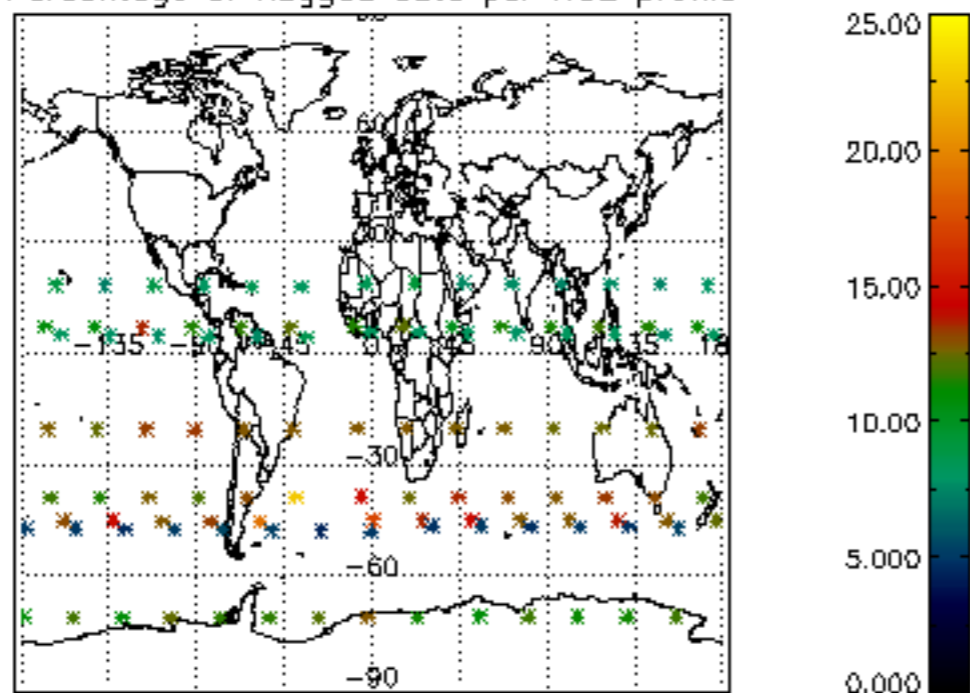
Percentage of flagged data per D3 profile



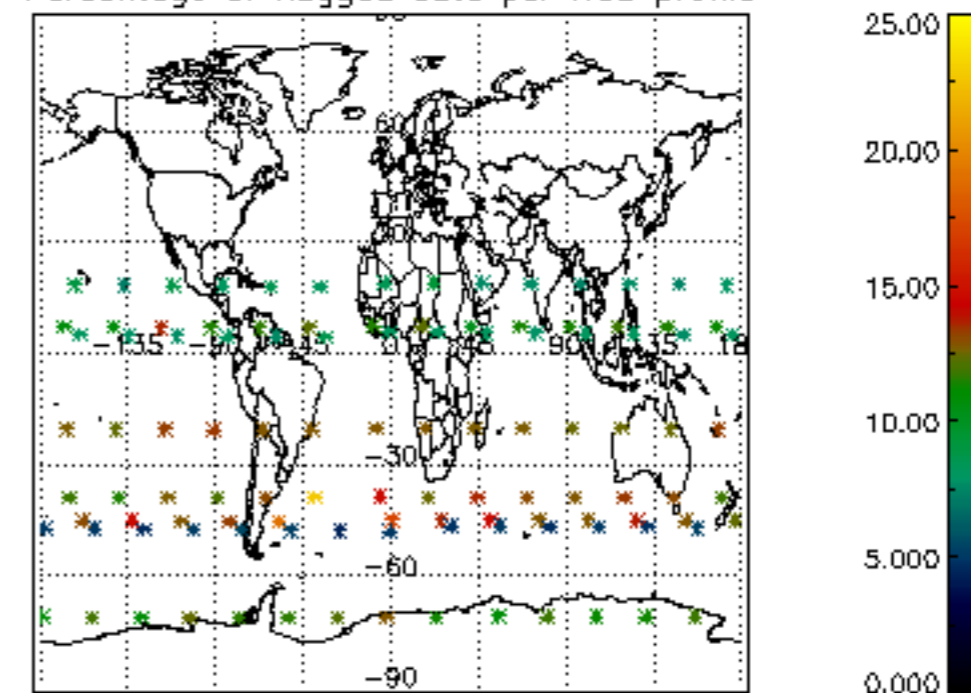
Percentage of flagged data per H2O profile

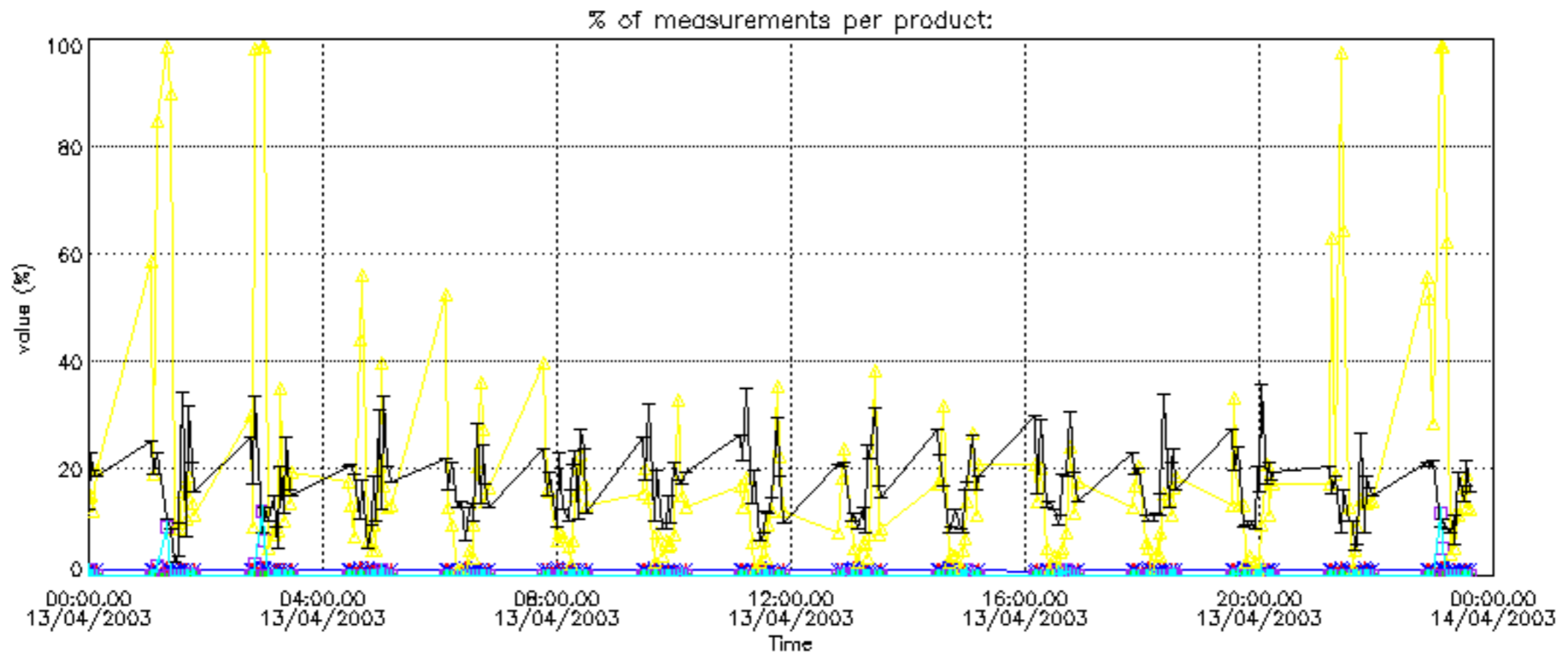


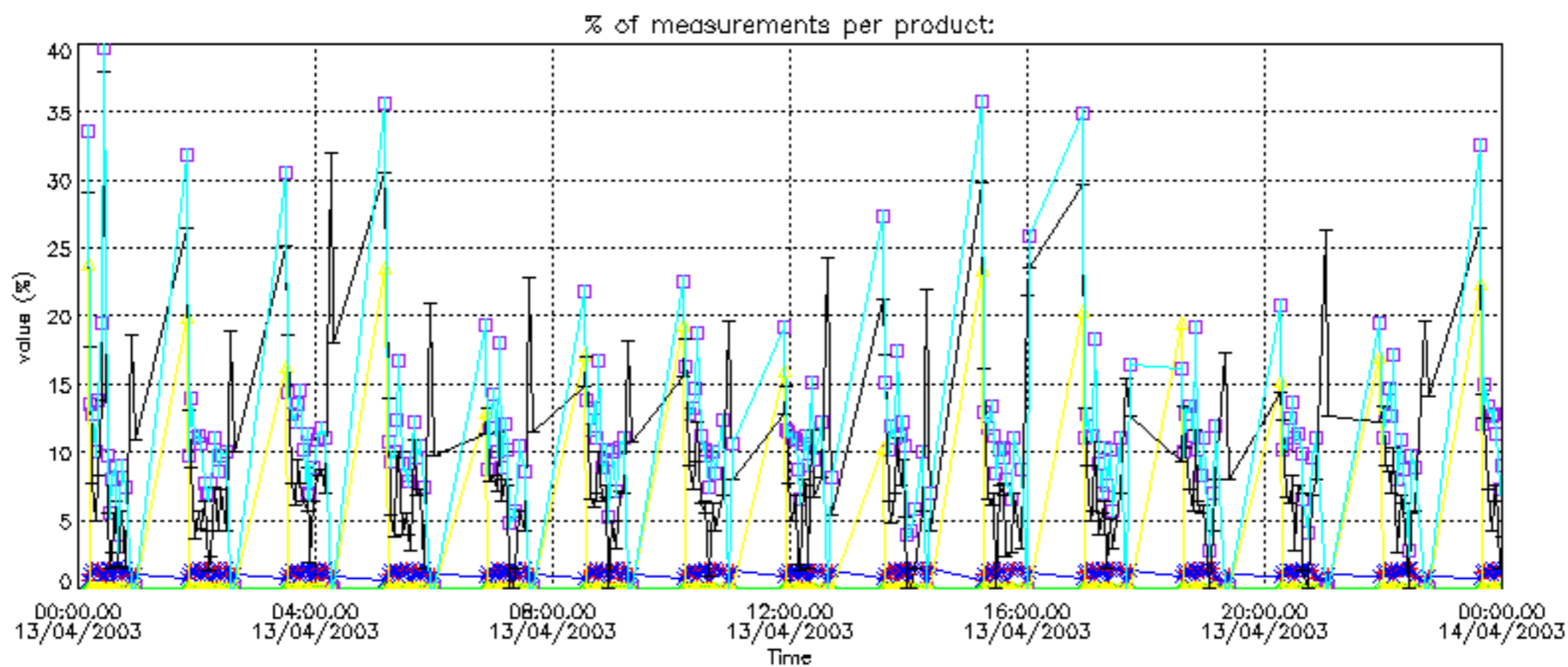
Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

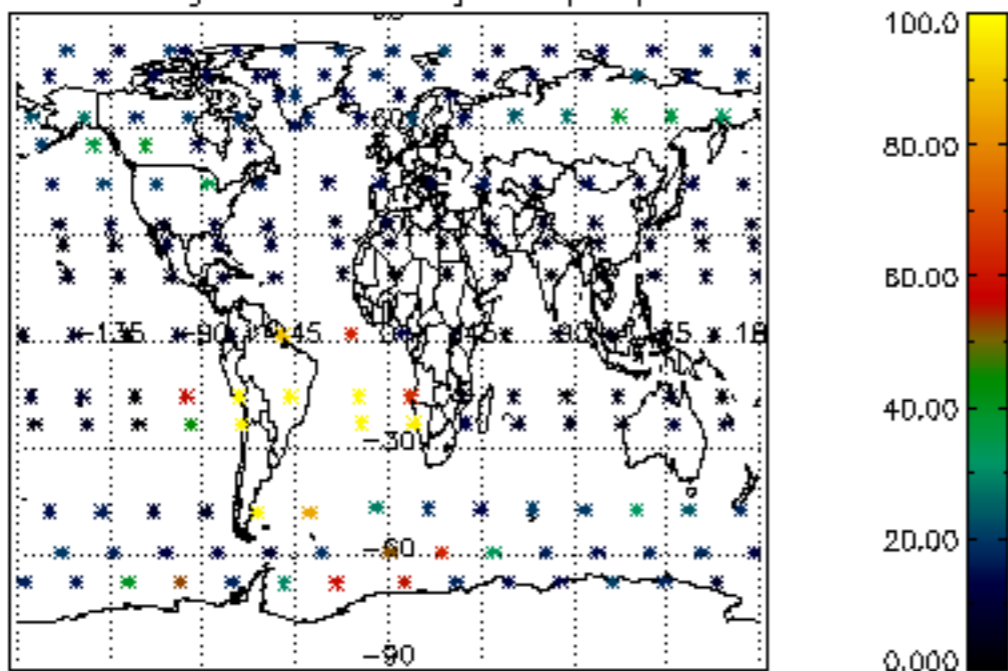




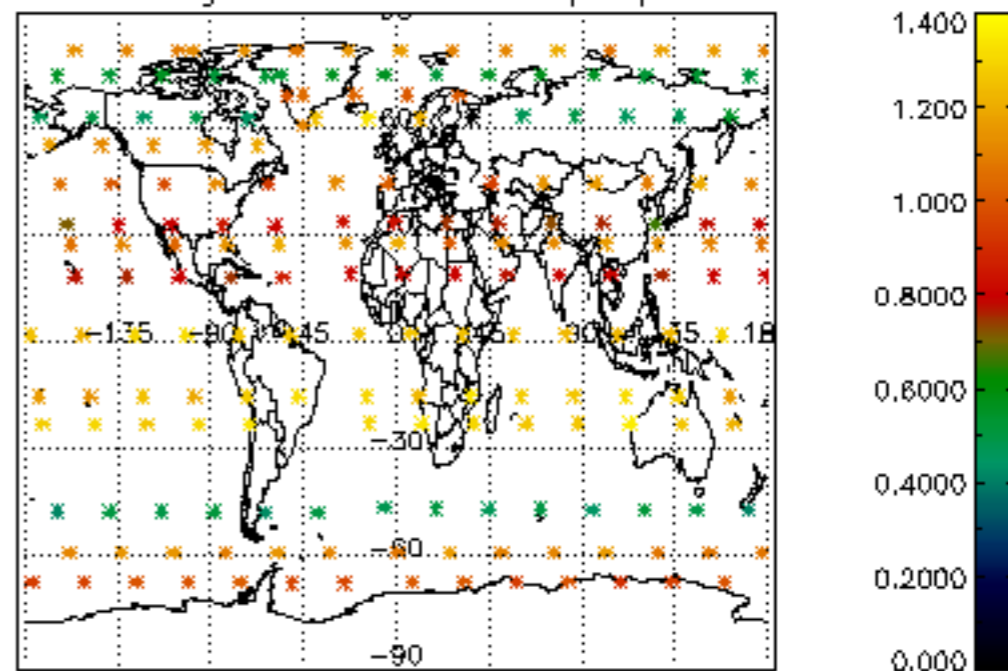




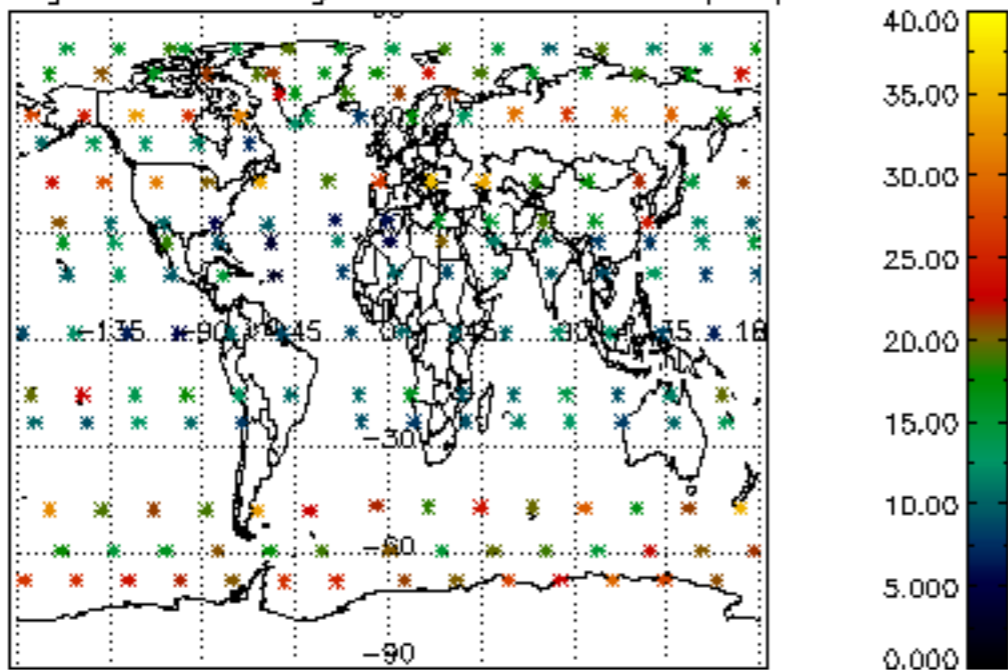
Percentage of cosmic ray hits per profile



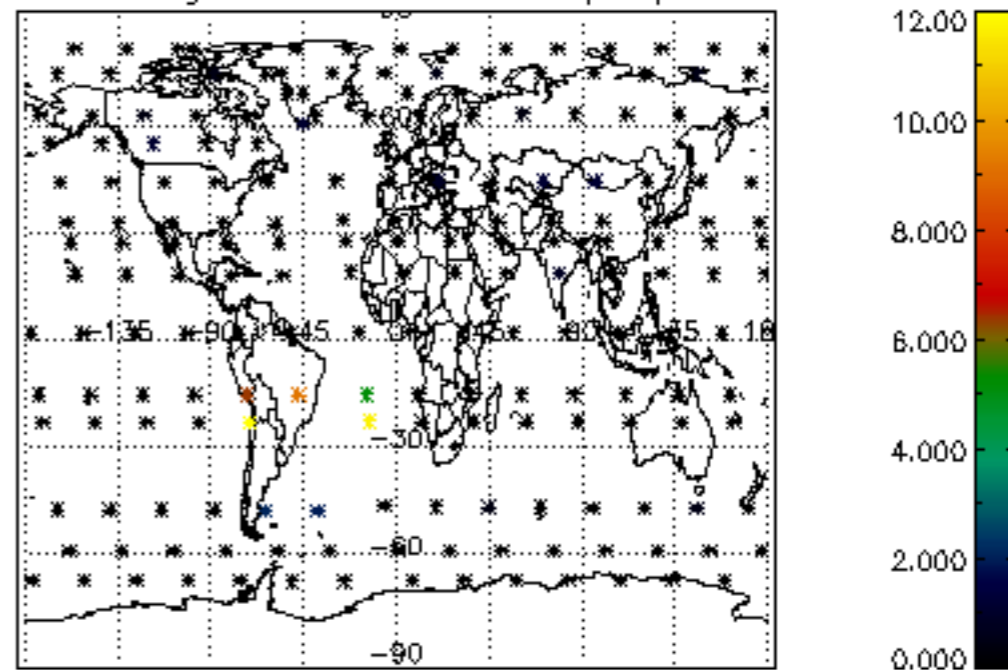
Percentage of datation errors per profile



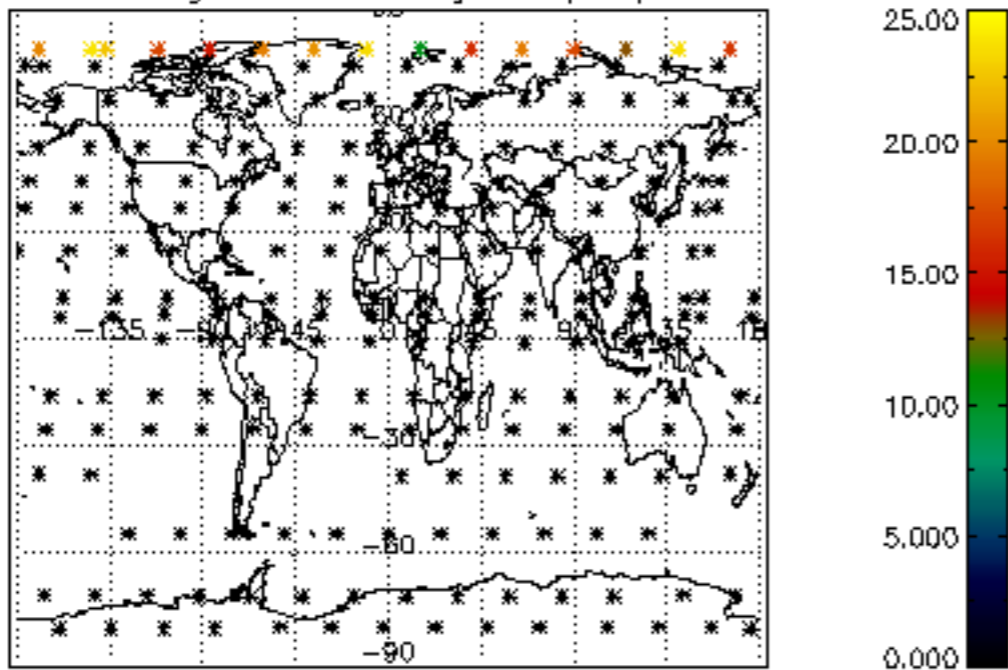
Percentage of star falling outside central band per profile



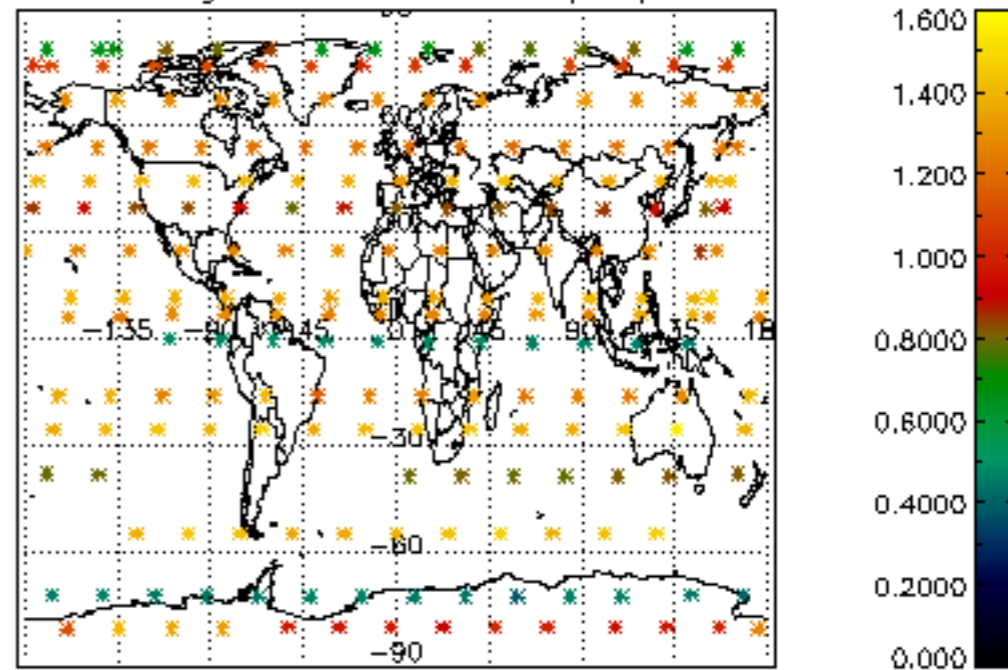
Percentage of saturation errors per profile



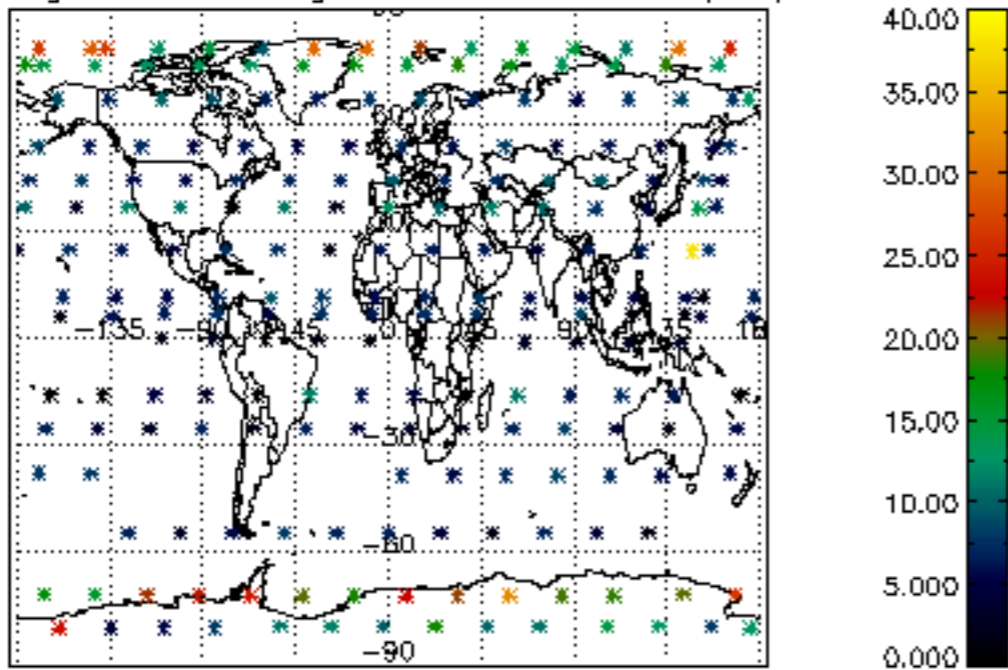
Percentage of cosmic ray hits per profile



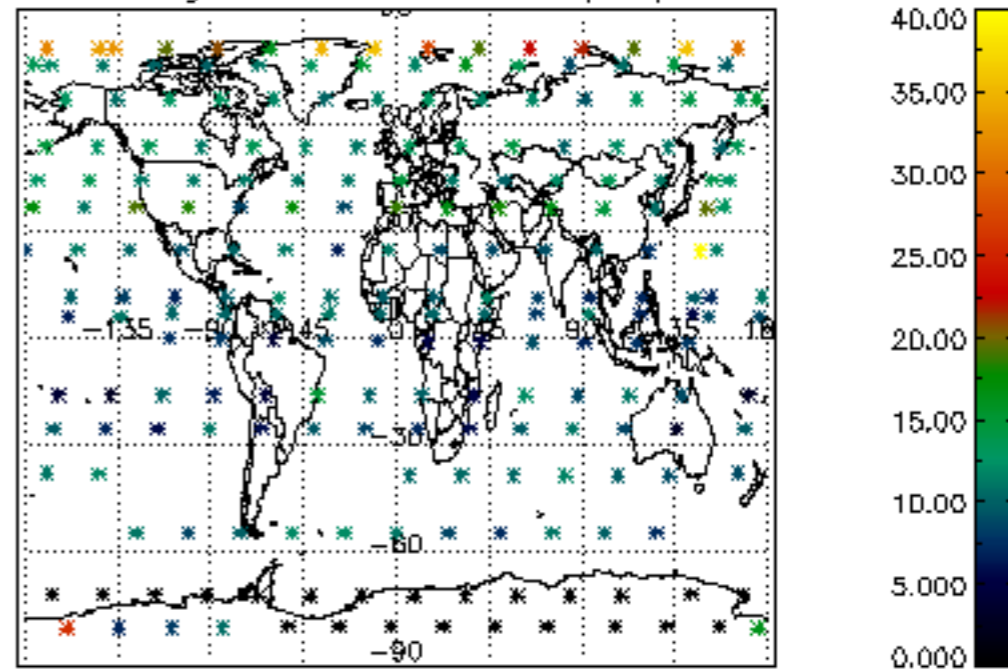
Percentage of datation errors per profile

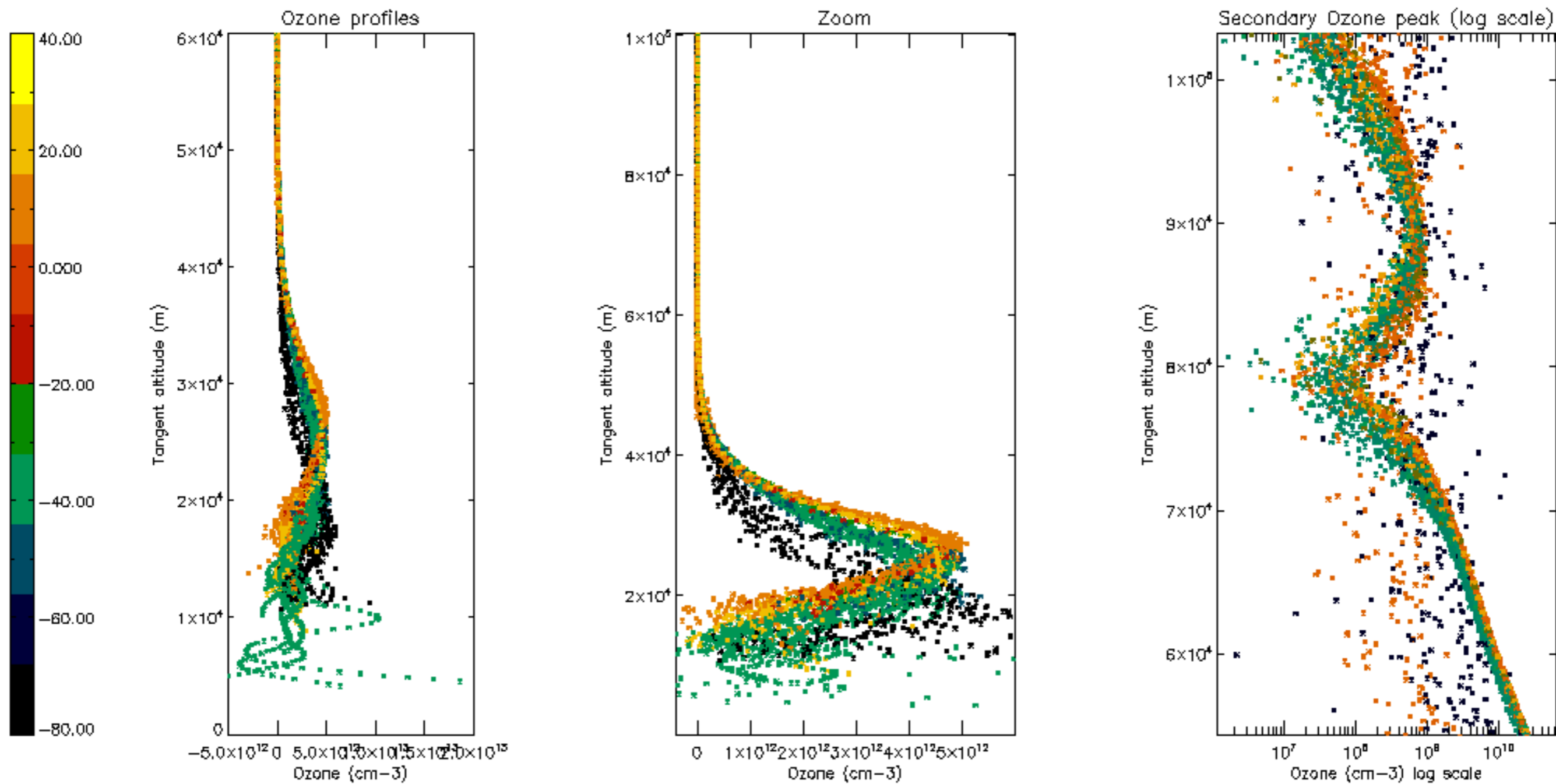


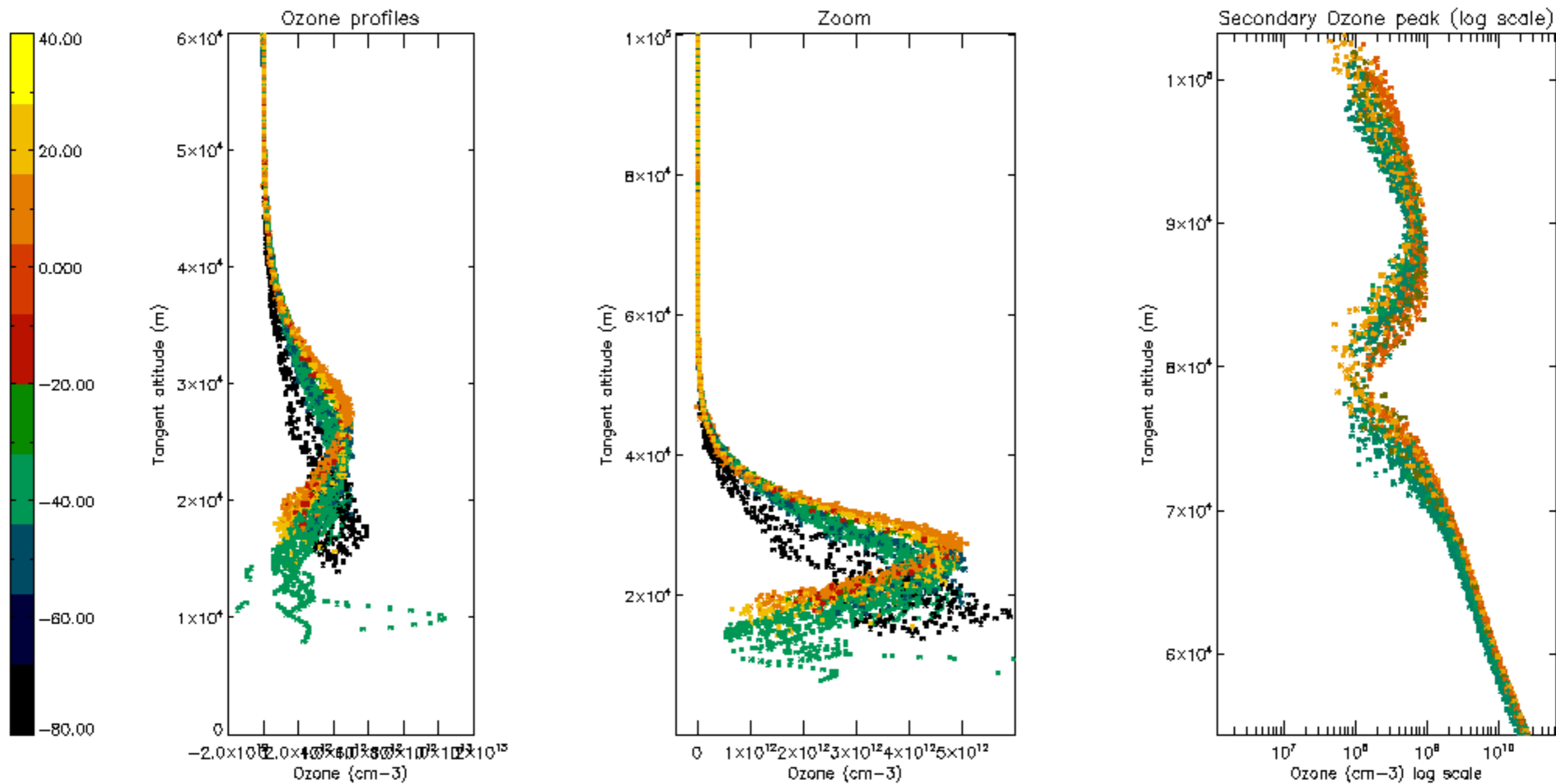
Percentage of star falling outside central band per profile

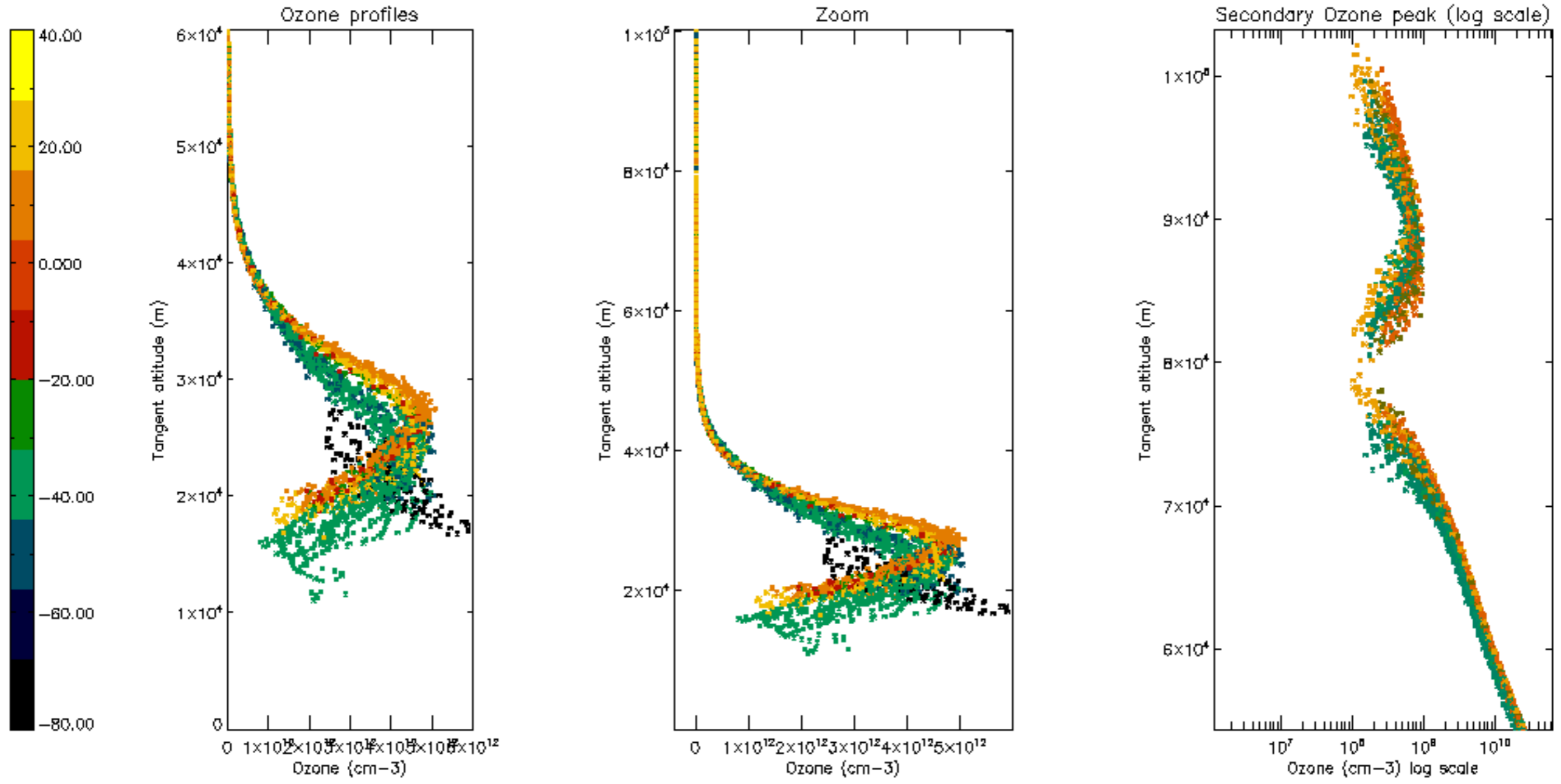


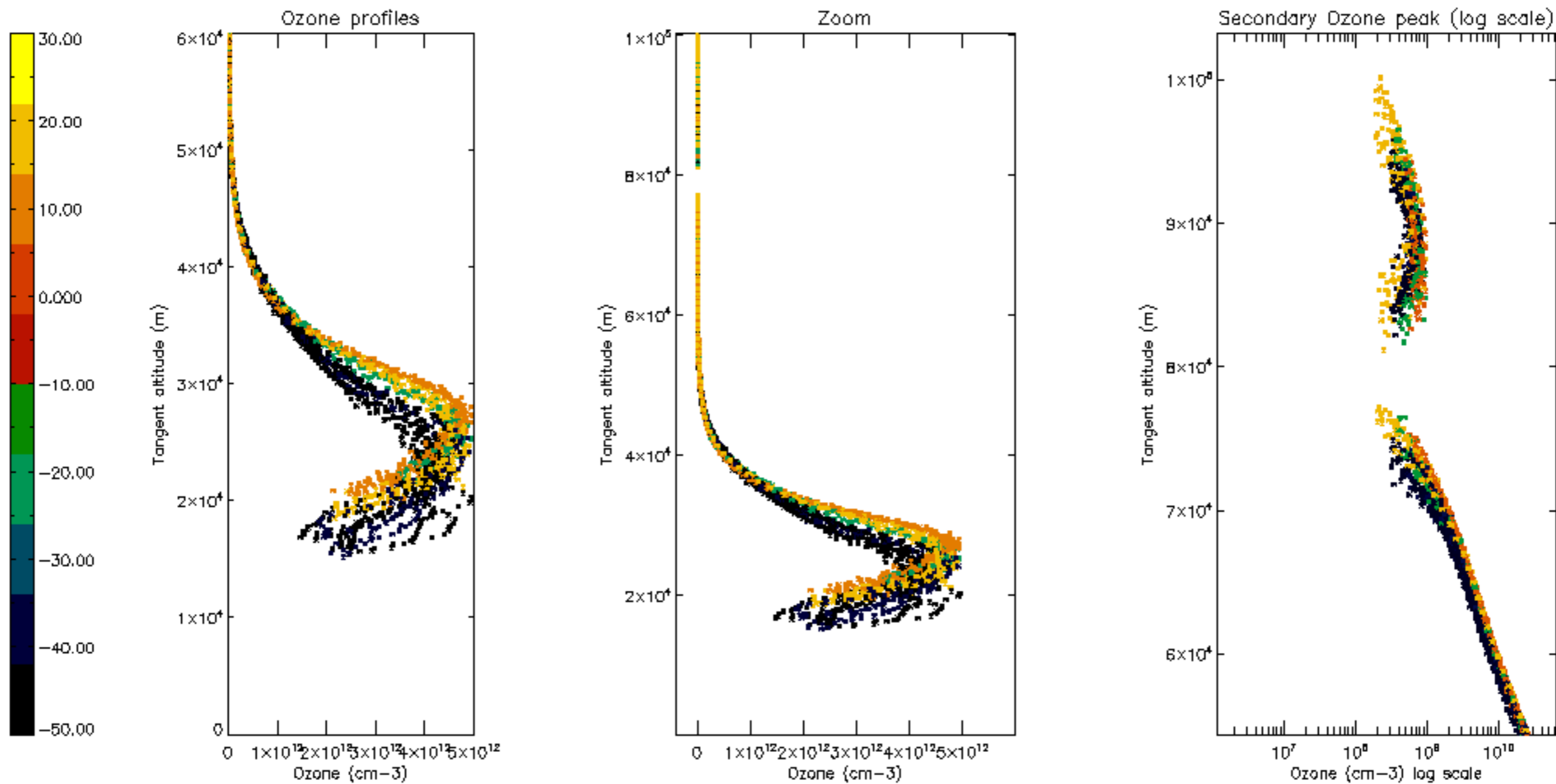
Percentage of saturation errors per profile

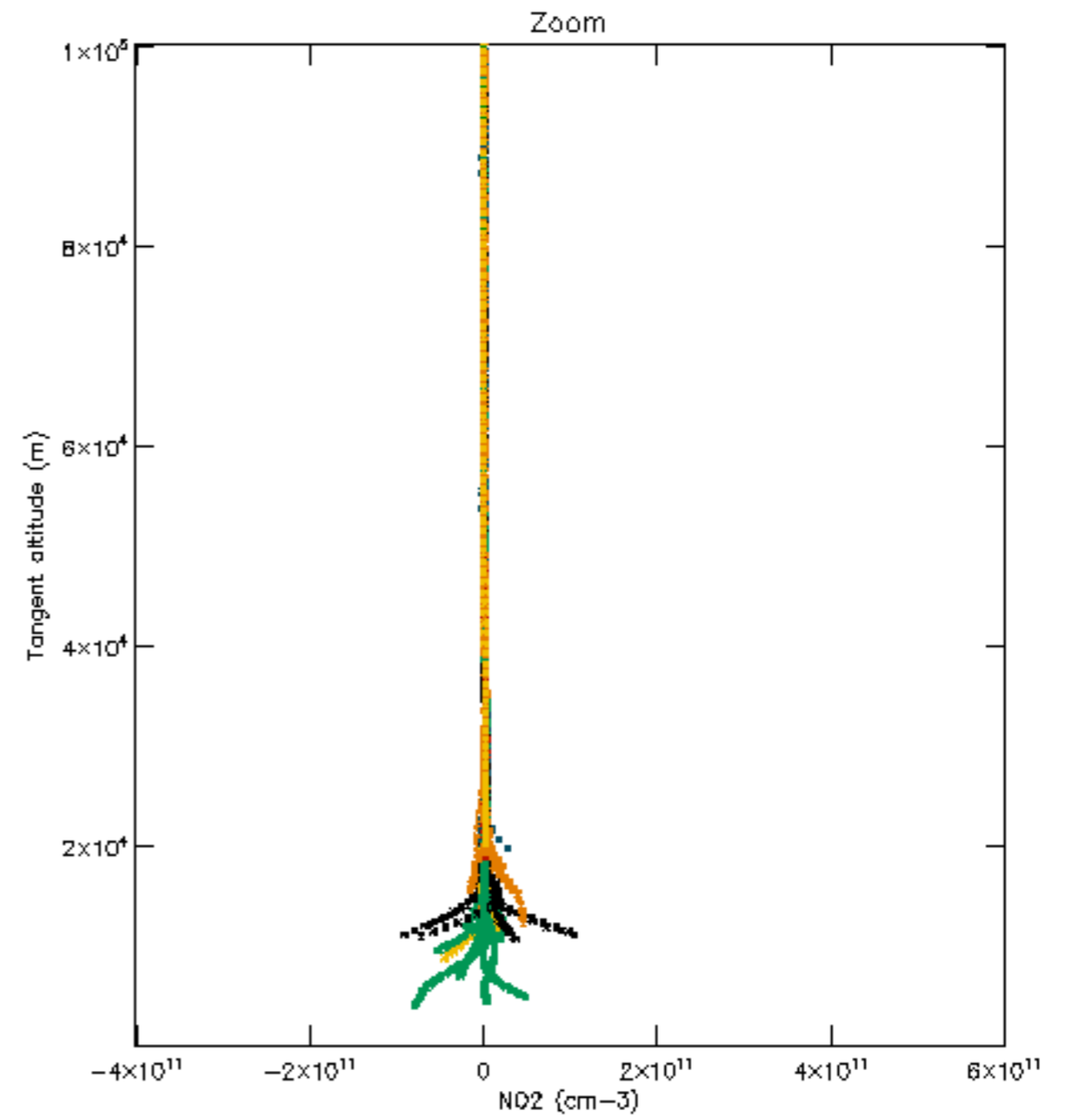
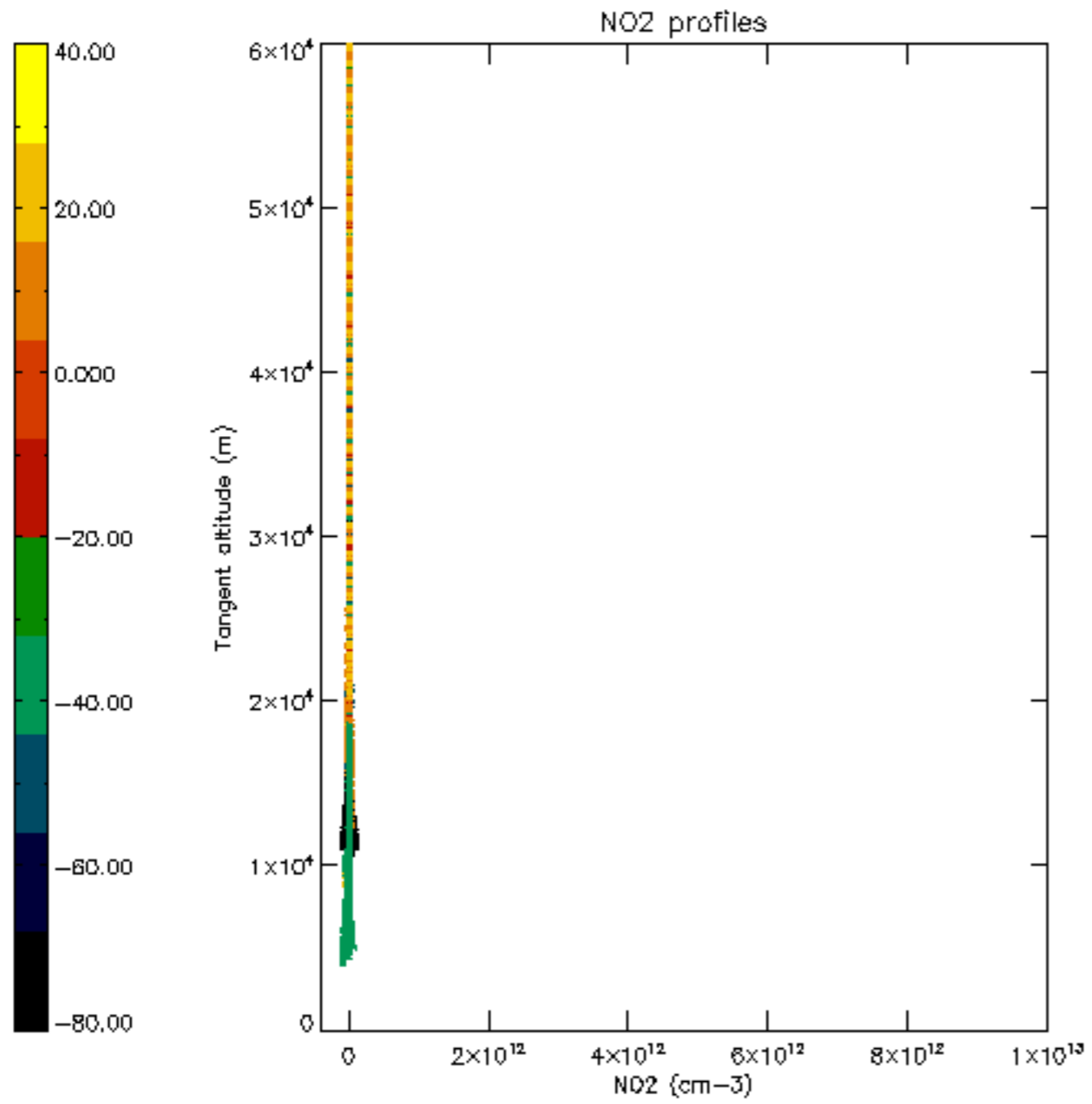


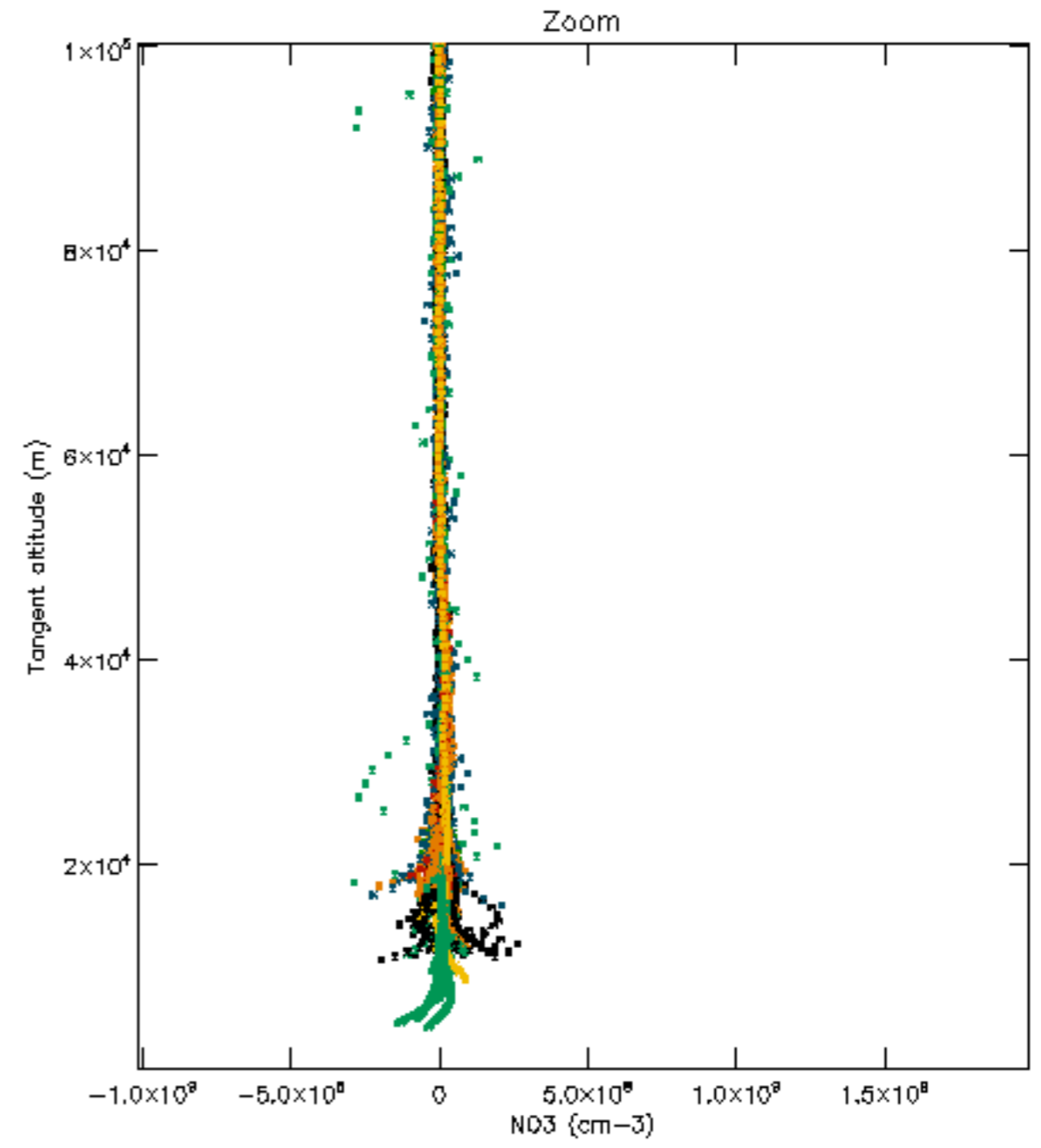
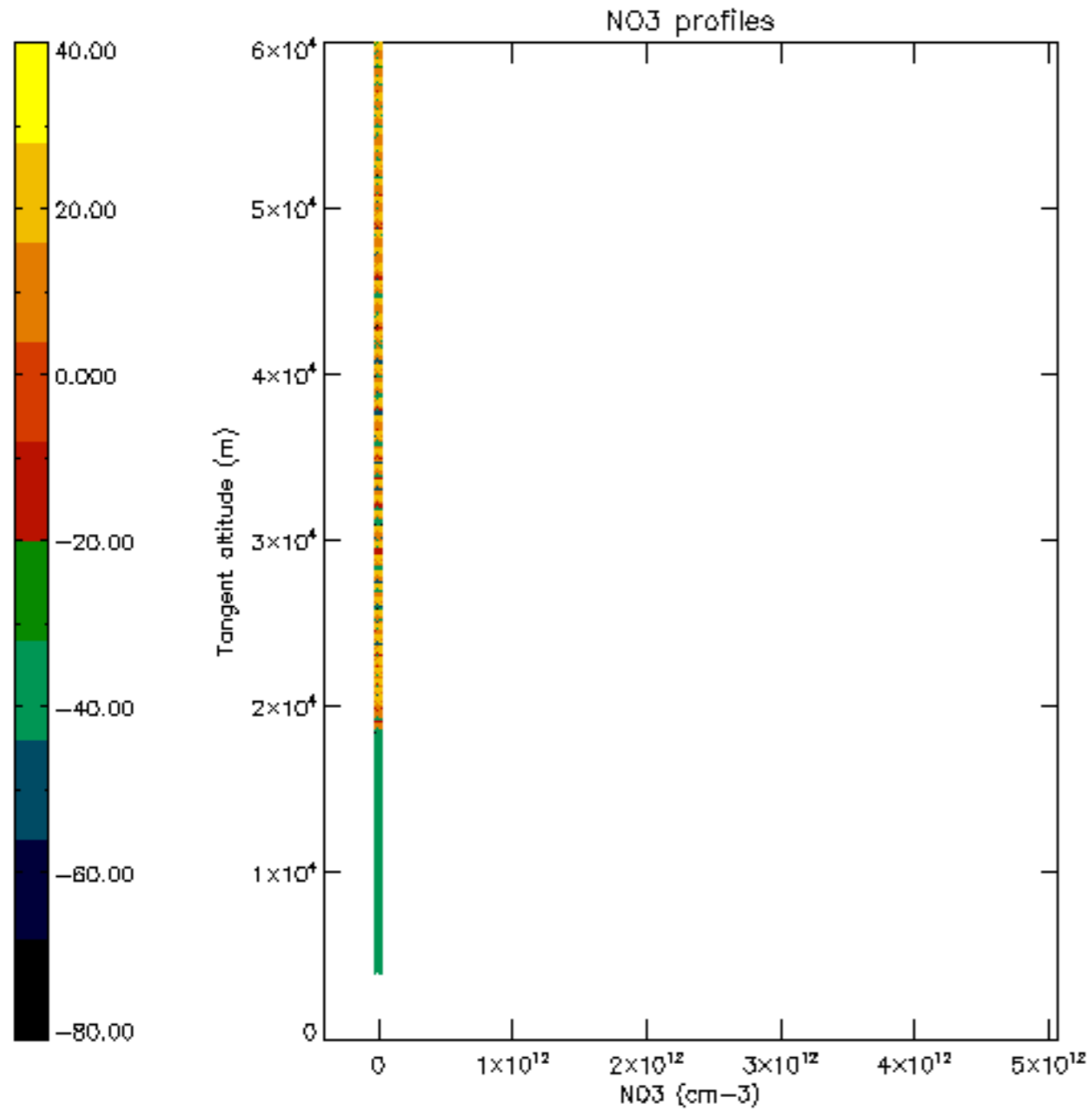




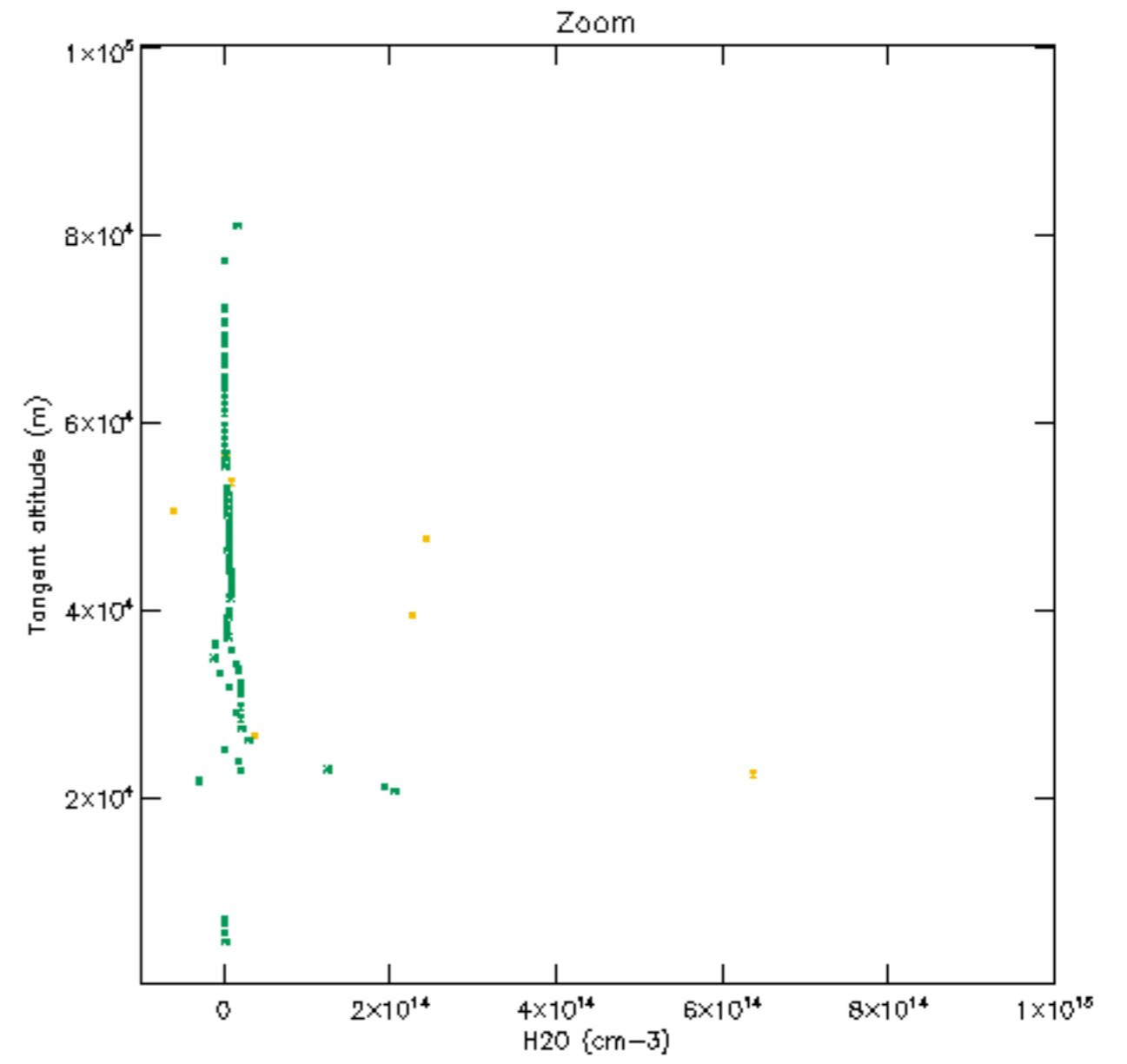
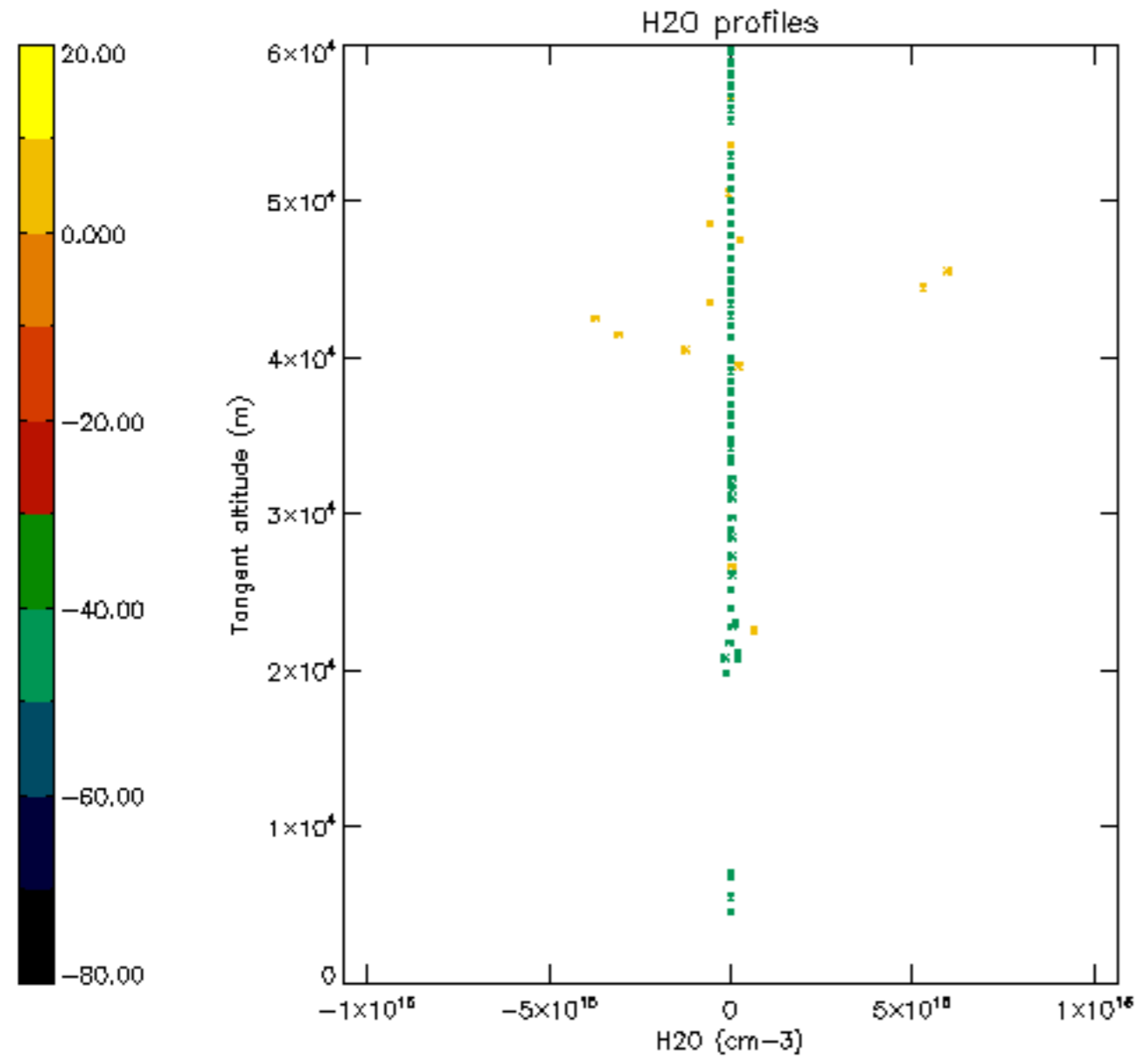


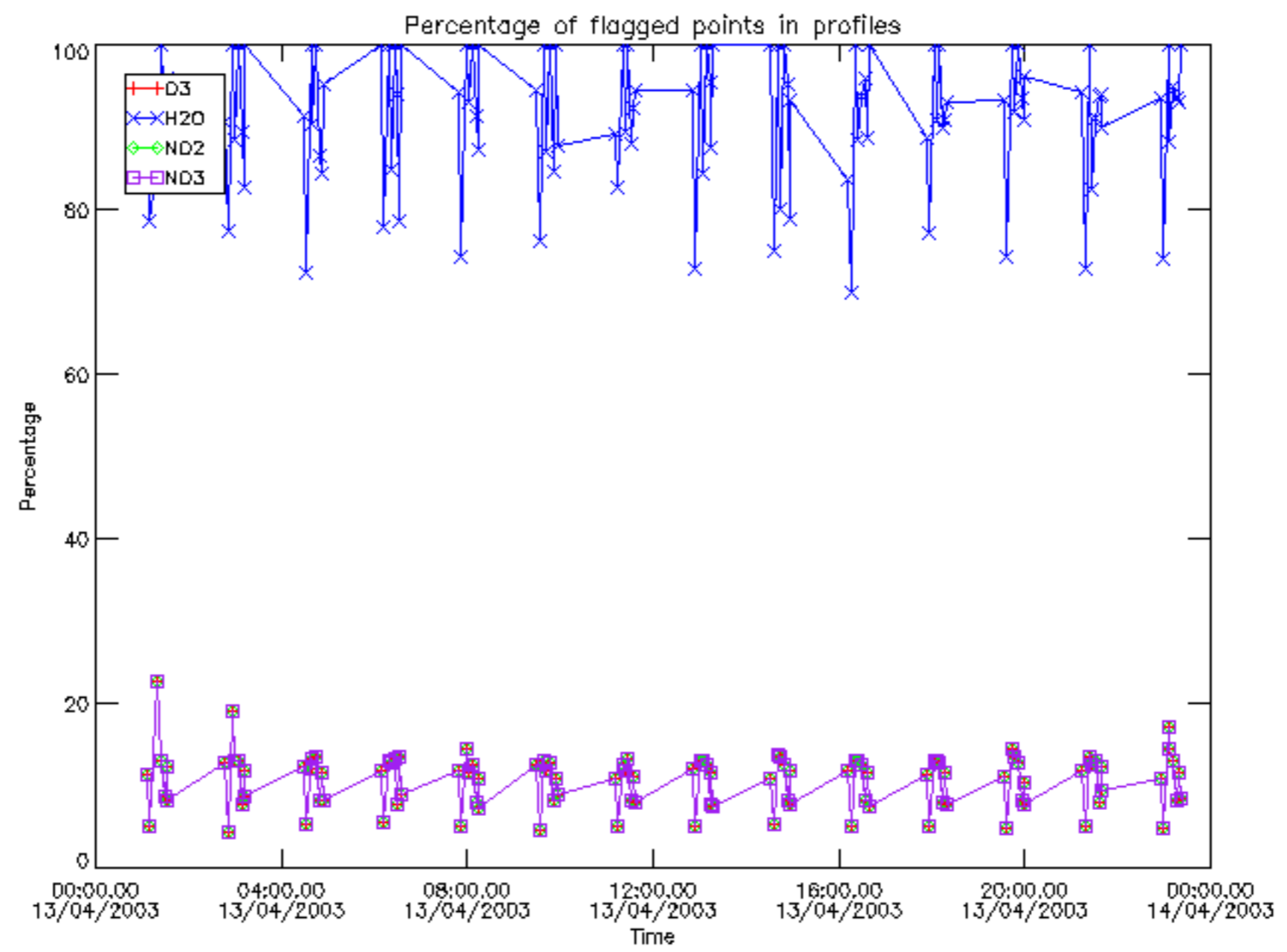




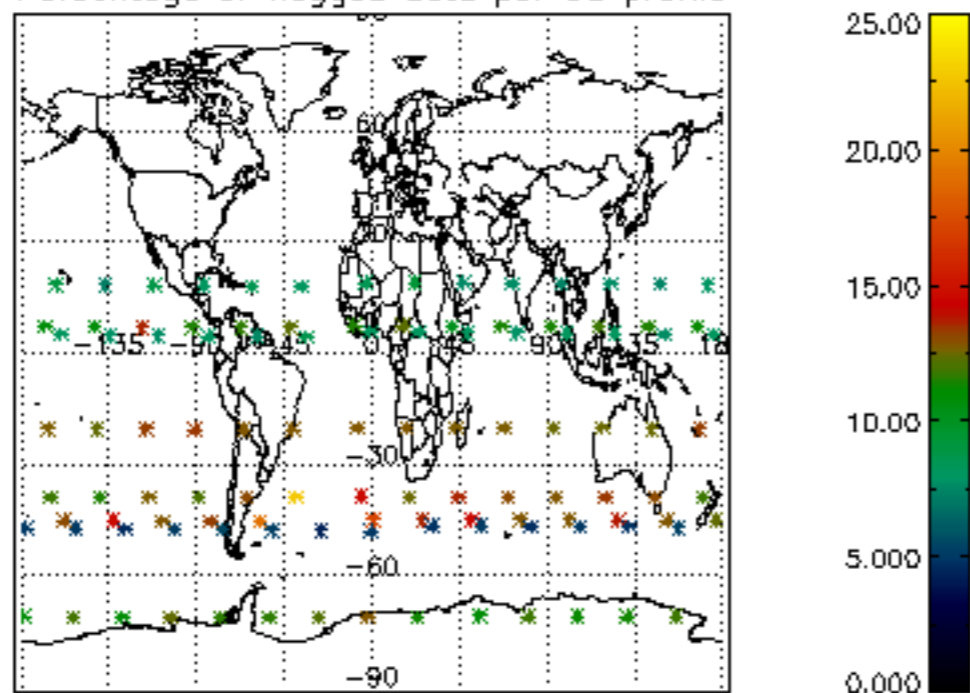




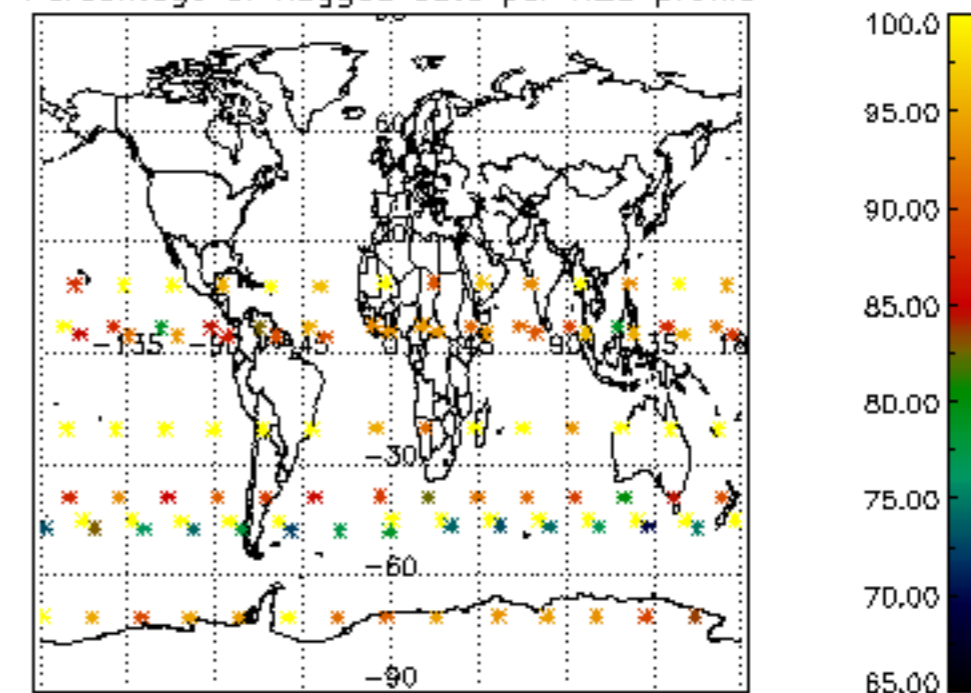




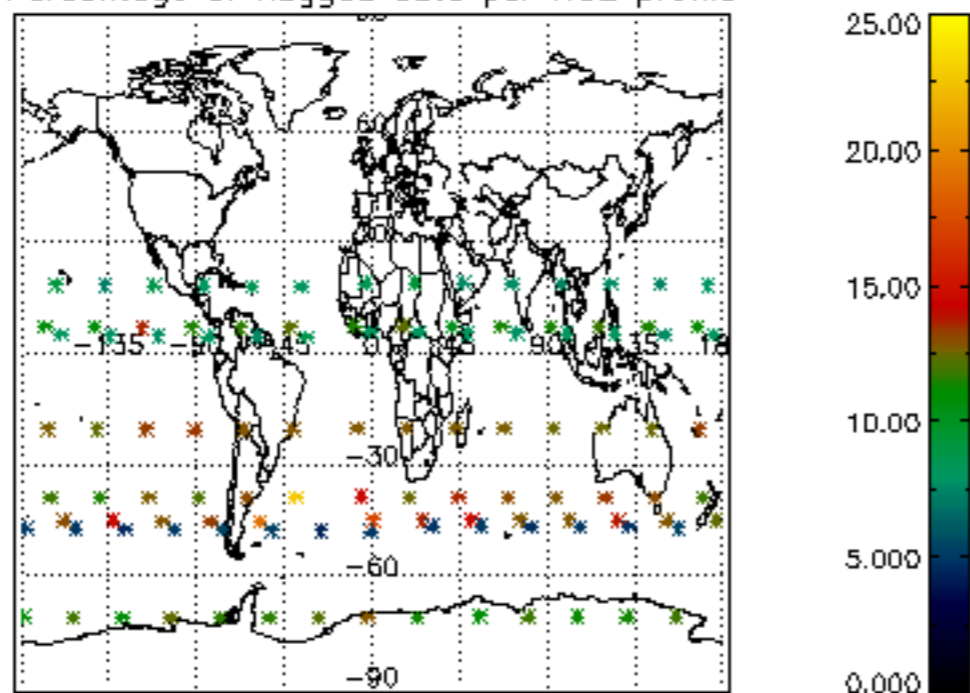
Percentage of flagged data per D3 profile



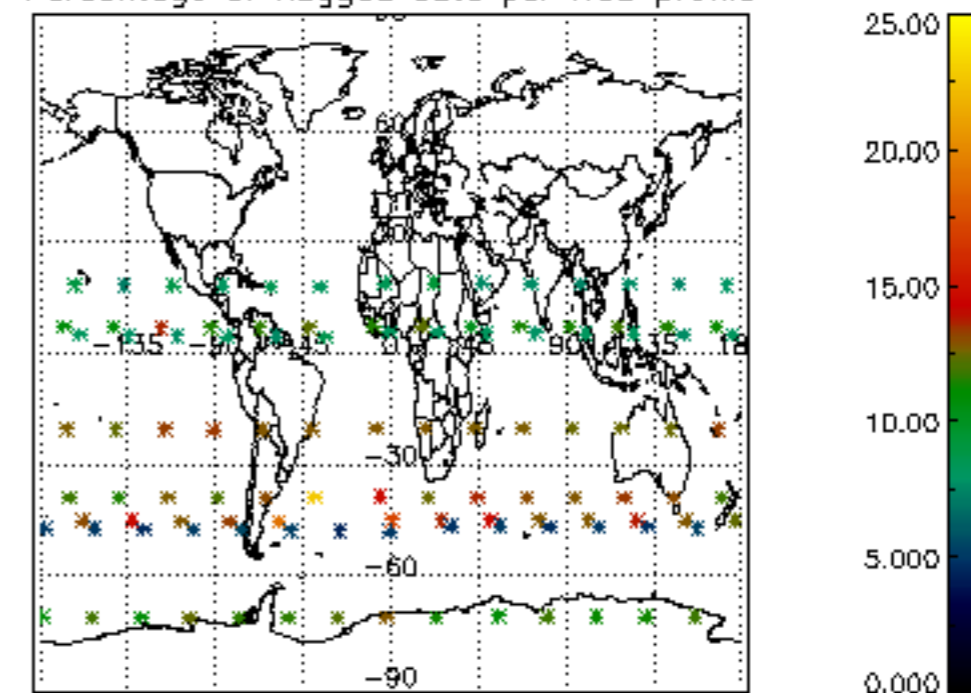
Percentage of flagged data per H2O profile

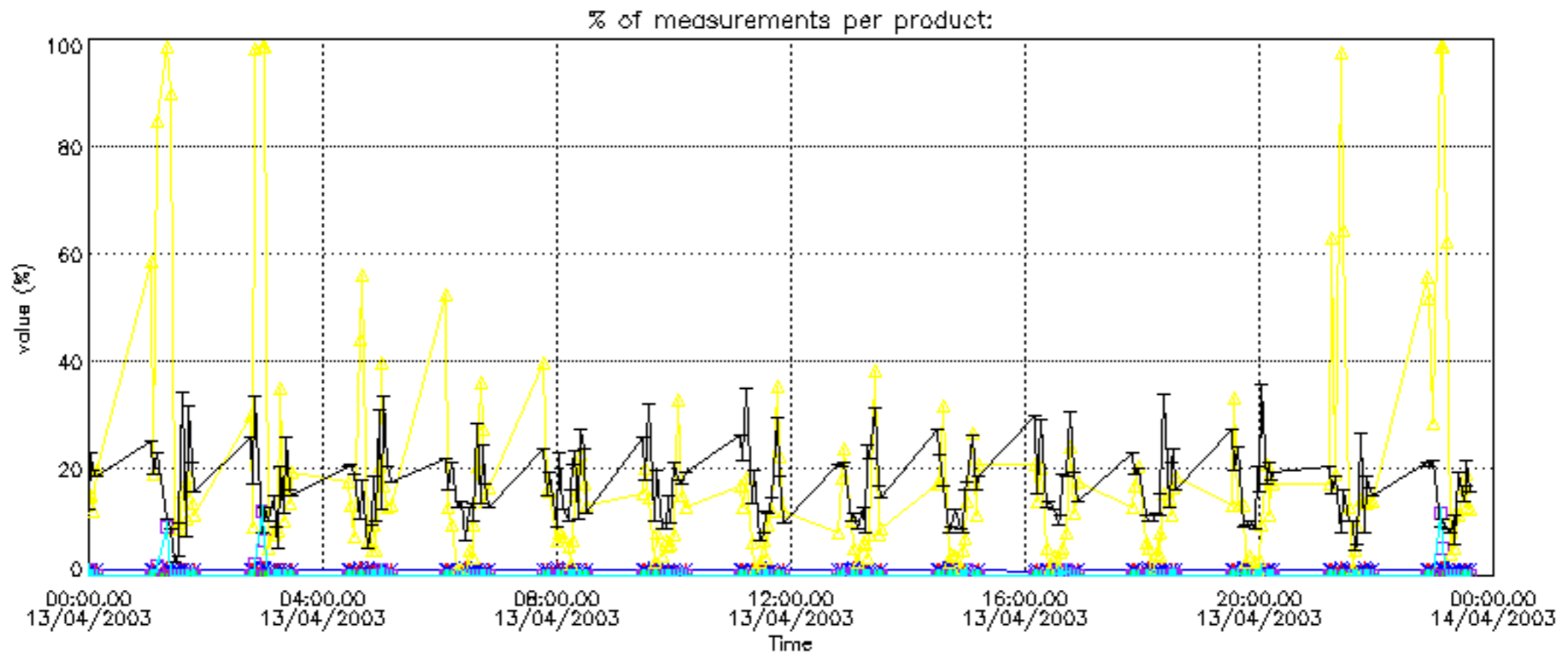


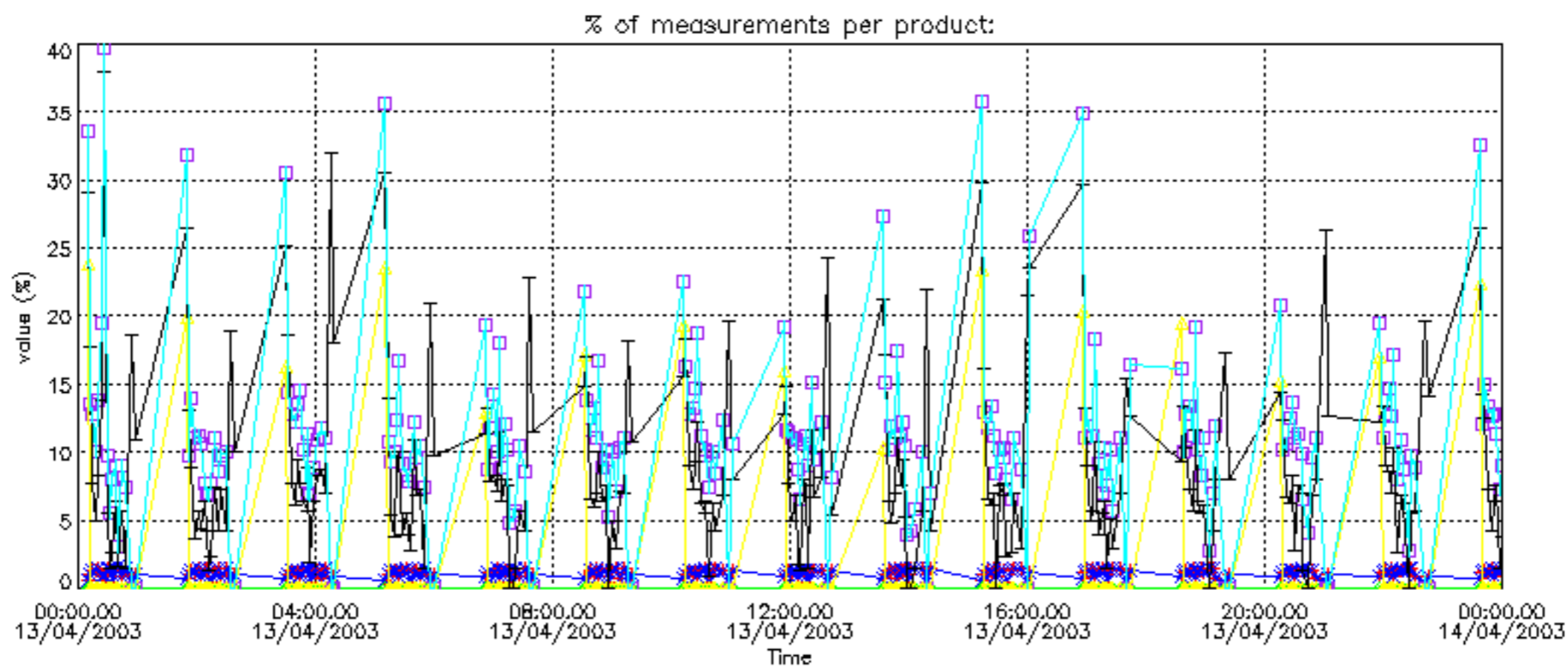
Percentage of flagged data per NO2 profile



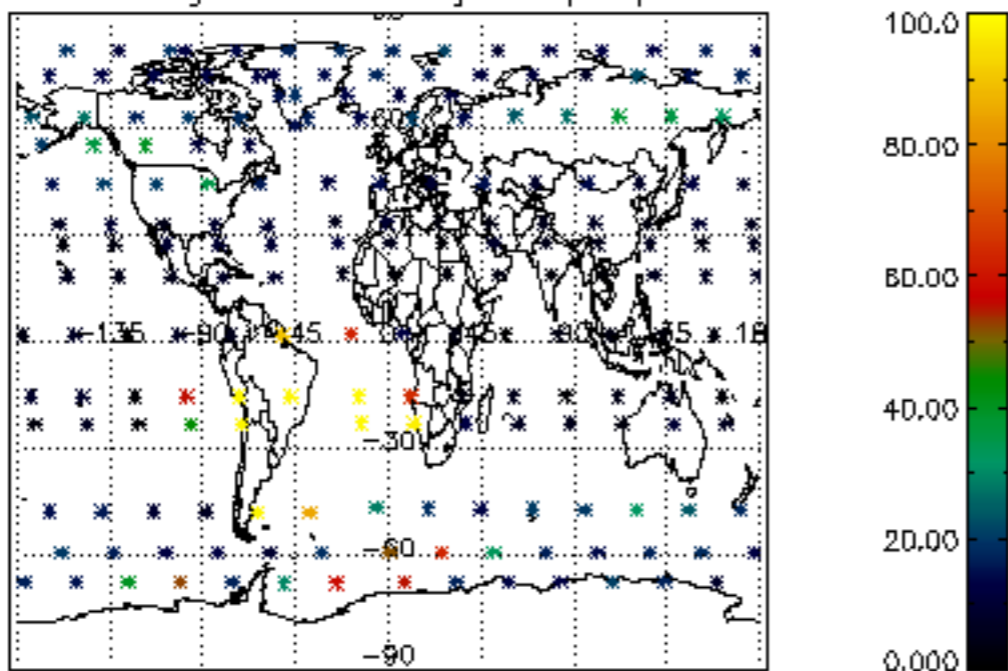
Percentage of flagged data per NO3 profile



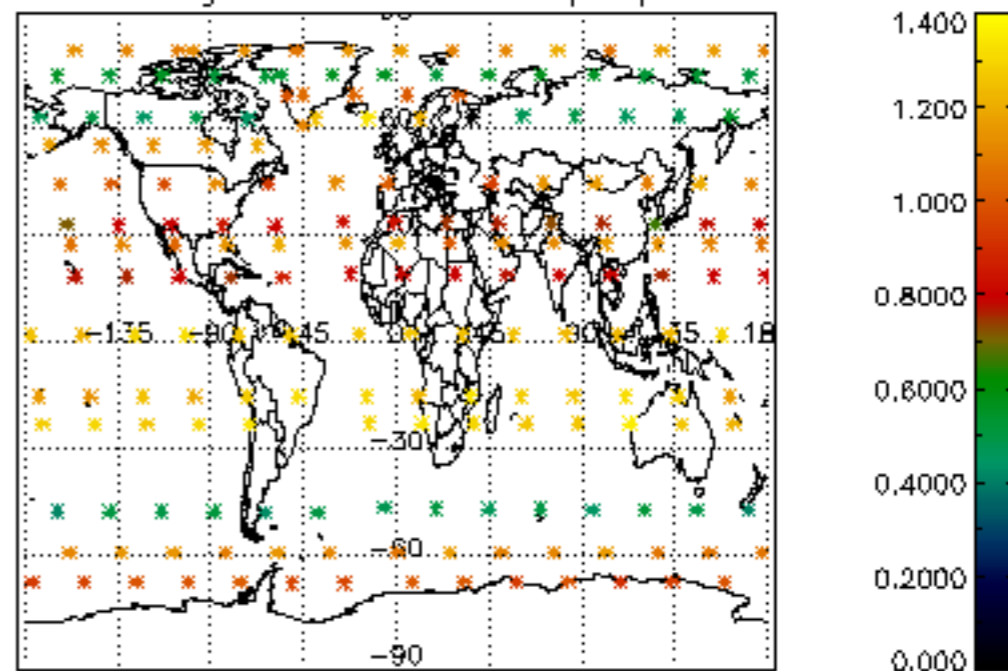




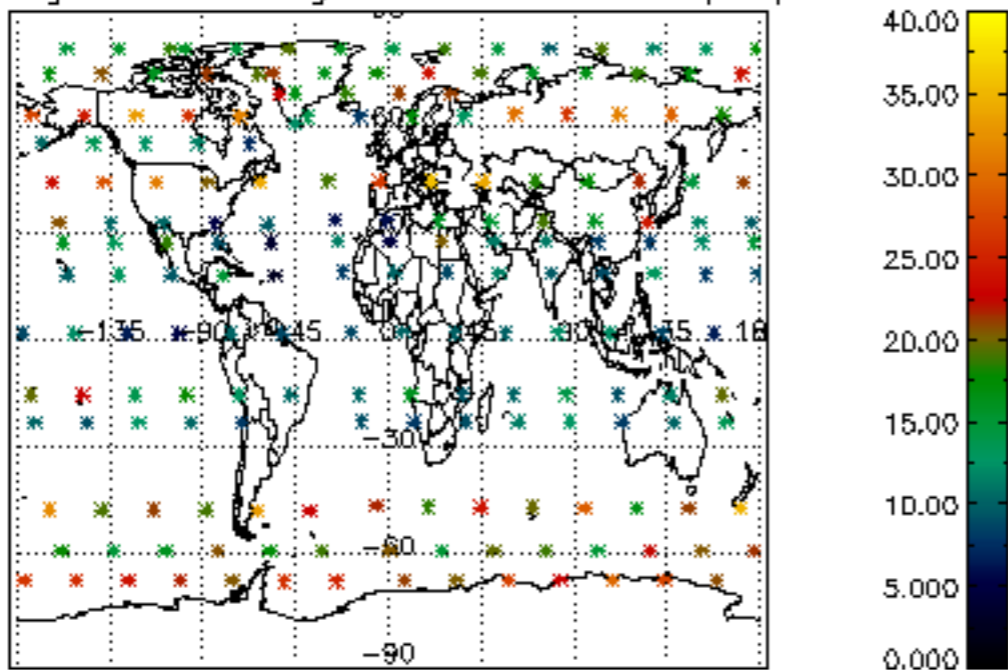
Percentage of cosmic ray hits per profile



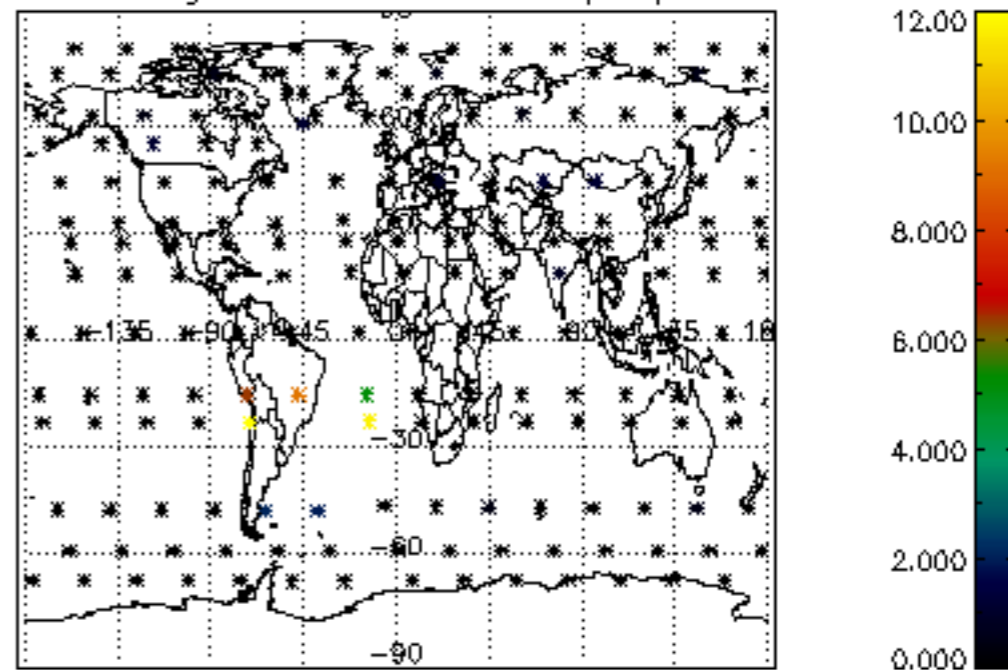
Percentage of datation errors per profile



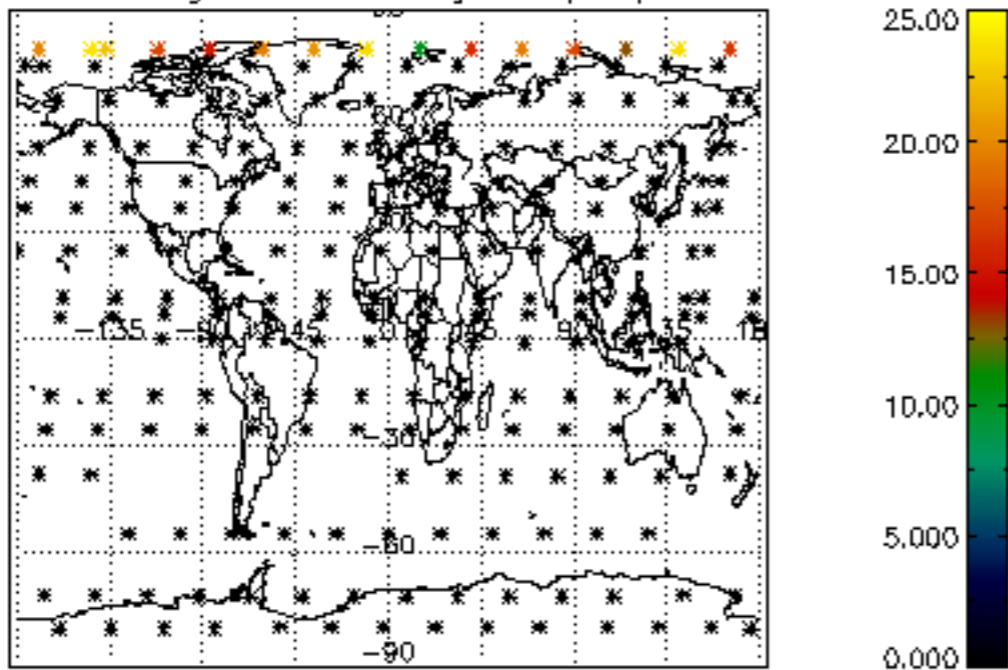
Percentage of star falling outside central band per profile



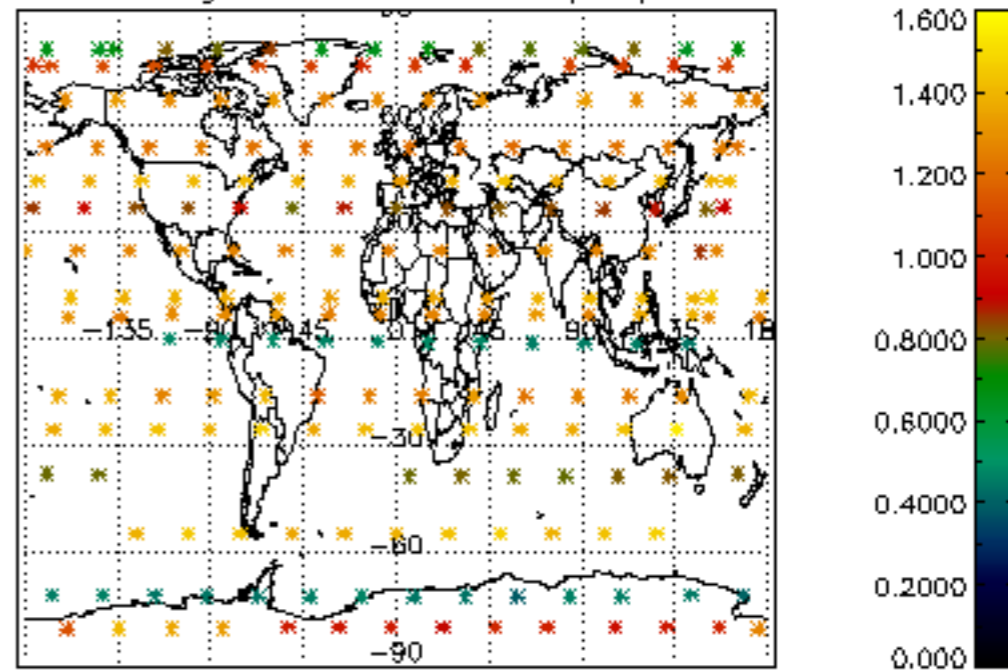
Percentage of saturation errors per profile



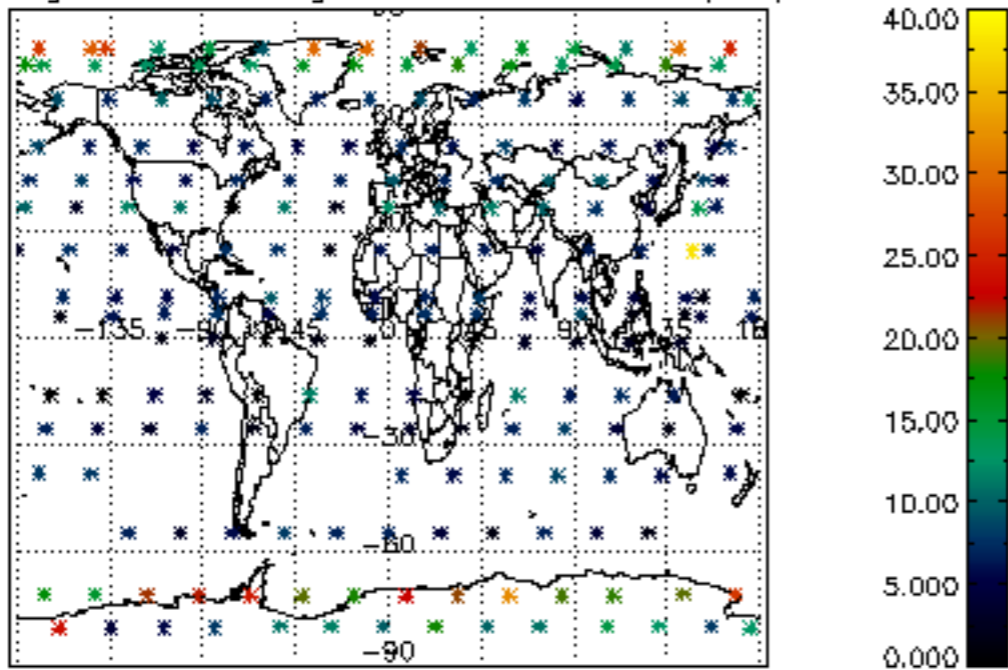
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

