

# GOMOS Level 2 Daily Report

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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM\_NL\_\_2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	26APR2013 13:27:24
Data source version	GOMOS/6.01
Start time of products	26-10-2009 (26OCT2009 00:00:00)
Stop time of products	27-10-2009 (27OCT2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	31
Nb of prods with errors	0

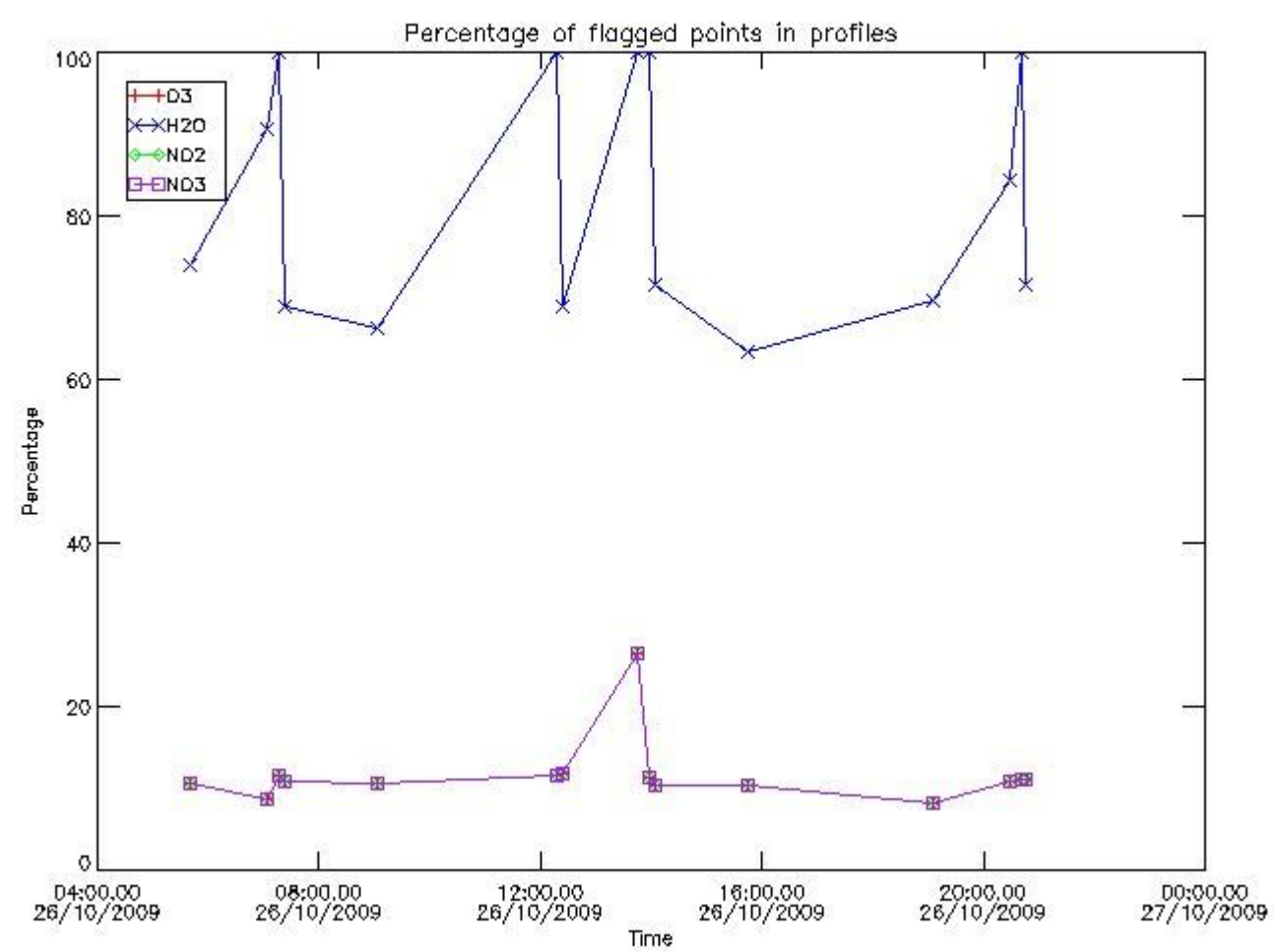
## 2. Summary of processed GOM\_NL\_\_2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091026_011435_000000412083_00389_40022_6284.N1	26-OCT-2009 01:14:35	Bright	41.000	173	4Bet Tri	3.0040	8900.0	82	40022	No
2	GOM_NL__2PRFIN20091026_011635_000000412083_00389_40022_6285.N1	26-OCT-2009 01:16:35	Bright	40.500	73	57Gam1And	2.2600	13100.	81	40022	No
3	GOM_NL__2PRFIN20091026_043108_000000412083_00391_40024_6305.N1	26-OCT-2009 04:31:08	Bright	41.000	105	6Bet Ari	2.6450	8900.0	82	40024	No
4	GOM_NL__2PRFIN20091026_043546_000000422083_00391_40024_6306.N1	26-OCT-2009 04:35:46	Bright	42.000	173	4Bet Tri	3.0040	8900.0	84	40024	No
5	GOM_NL__2PRFIN20091026_043746_000000432083_00391_40024_6307.N1	26-OCT-2009 04:37:46	Bright	42.500	73	57Gam1And	2.2600	13100.	85	40024	No
6	GOM_NL__2PRFIN20091026_054112_000000492083_00392_40025_6316.N1	26-OCT-2009 05:41:12	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	40025	No
7	GOM_NL__2PRFIN20091026_061622_00000022083_00392_40025_6317.N1	26-OCT-2009 06:16:22	Straylight	2.0000	173	4Bet Tri	3.0040	8900.0	4	40025	No
8	GOM_NL__2PRFIN20091026_070336_000000592083_00392_40025_6319.N1	26-OCT-2009 07:03:36	Dark	59.000	48	30Alp Hya	1.9770	4100.0	118	40025	No
9	GOM_NL__2PRFIN20091026_071612_000000452083_00393_40026_6334.N1	26-OCT-2009 07:16:12	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	40026	No
10	GOM_NL__2PRFIN20091026_072148_000000472083_00393_40026_6335.N1	26-OCT-2009 07:21:48	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	40026	No
11	GOM_NL__2PRFIN20091026_083542_000000472083_00393_40026_6336.N1	26-OCT-2009 08:35:42	Bright	47.000	22	32Alp Leo	1.3600	15200.	94	40026	No
12	GOM_NL__2PRFIN20091026_090225_000000482083_00394_40027_6380.N1	26-OCT-2009 09:02:25	Dark	47.500	2	Alp Car	-0.73600	7000.0	95	40027	No
13	GOM_NL__2PRFIN20091026_111808_000000182083_00395_40028_6412.N1	26-OCT-2009 11:18:08	Twilight_stray	18.000	173	4Bet Tri	3.0040	8900.0	36	40028	No
14	GOM_NL__2PRFIN20091026_112008_000000422083_00395_40028_6413.N1	26-OCT-2009 11:20:08	Bright	42.000	73	57Gam1And	2.2600	13100.	84	40028	No
15	GOM_NL__2PRFIN20091026_121803_000000452083_00396_40029_6455.N1	26-OCT-2009 12:18:03	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	40029	No
16	GOM_NL__2PRFIN20091026_122339_000000472083_00396_40029_6456.N1	26-OCT-2009 12:23:39	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	40029	No
17	GOM_NL__2PRFIN20091026_125843_000000412083_00396_40029_6457.N1	26-OCT-2009 12:58:43	Bright	41.000	173	4Bet Tri	3.0040	8900.0	82	40029	No
18	GOM_NL__2PRFIN20091026_130043_000000392083_00396_40029_6458.N1	26-OCT-2009 13:00:43	Bright	39.000	73	57Gam1And	2.2600	13100.	78	40029	No
19	GOM_NL__2PRFIN20091026_134604_000000202083_00396_40029_6459.N1	26-OCT-2009 13:46:04	Dark	19.500	48	30Alp Hya	1.9770	4100.0	39	40029	No
20	GOM_NL__2PRFIN20091026_135840_000000452083_00397_40030_6511.N1	26-OCT-2009 13:58:40	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	40030	No
21	GOM_NL__2PRFIN20091026_140415_000000492083_00397_40030_6512.N1	26-OCT-2009 14:04:15	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	40030	No
22	GOM_NL__2PRFIN20091026_143919_000000082083_00397_40030_6513.N1	26-OCT-2009 14:39:19	Straylight	7.5000	173	4Bet Tri	3.0040	8900.0	15	40030	No
23	GOM_NL__2PRFIN20091026_144119_000000422083_00397_40030_6514.N1	26-OCT-2009 14:41:19	Bright	42.000	73	57Gam1And	2.2600	13100.	84	40030	No
24	GOM_NL__2PRFIN20091026_151807_000000442083_00397_40030_6515.N1	26-OCT-2009 15:18:07	Bright	43.500	22	32Alp Leo	1.3600	15200.	87	40030	No
25	GOM_NL__2PRFIN20091026_154452_000000492083_00398_40031_6543.N1	26-OCT-2009 15:44:52	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	40031	No
26	GOM_NL__2PRFIN20091026_180030_000000192083_00399_40032_6553.N1	26-OCT-2009 18:00:30	Twilight_stray	18.500	173	4Bet Tri	3.0040	8900.0	37	40032	No
27	GOM_NL__2PRFIN20091026_180230_000000262083_00399_40032_6554.N1	26-OCT-2009 18:02:30	Twilight_stray	25.500	73	57Gam1And	2.2600	13100.	51	40032	No
28	GOM_NL__2PRFIN20091026_190606_000000612083_00400_40033_6565.N1	26-OCT-2009 19:06:06	Dark	61.000	2	Alp Car	-0.73600	7000.0	122	40033	No
29	GOM_NL__2PRFIN20091026_202832_000000622083_00400_40033_6566.N1	26-OCT-2009 20:28:32	Dark	61.500	48	30Alp Hya	1.9770	4100.0	123	40033	No
30	GOM_NL__2PRFIN20091026_204107_000000462083_00401_40034_6576.N1	26-OCT-2009 20:41:07	Dark	46.000	34	Gam2Vel	1.7930	23000.	92	40034	No
31	GOM_NL__2PRFIN20091026_204642_000000462083_00401_40034_6577.N1	26-OCT-2009 20:46:42	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	40034	No

## 3. Quality information per product

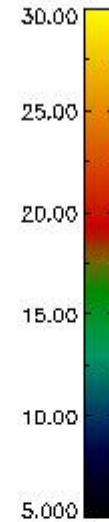
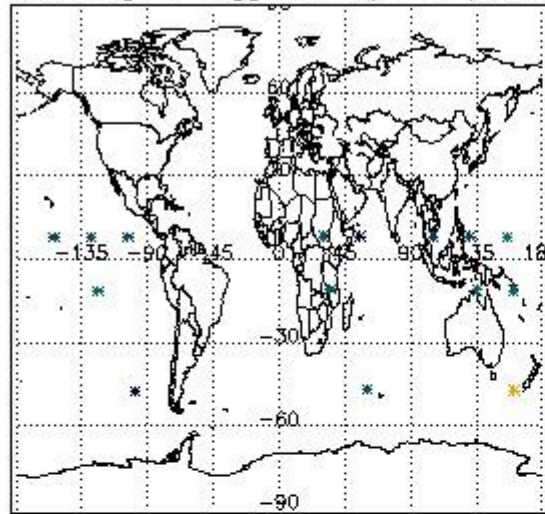
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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

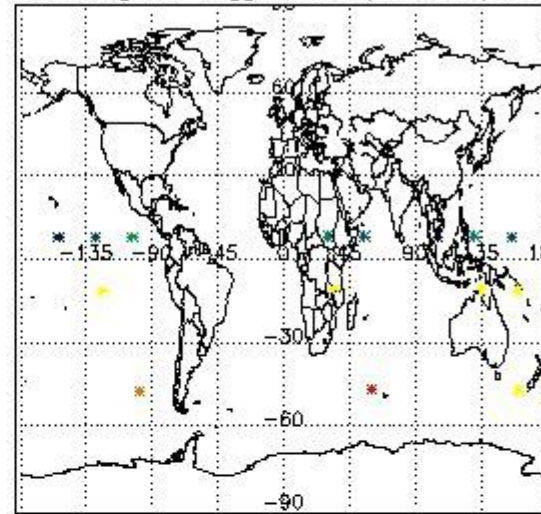


3.2 Plot quality information per product (world map)

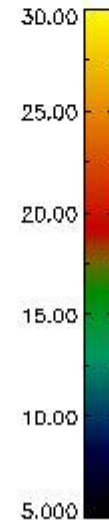
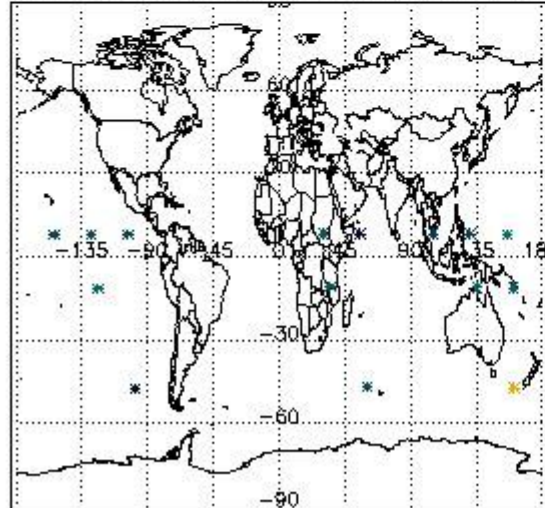
Percentage of flagged data per O3 profile



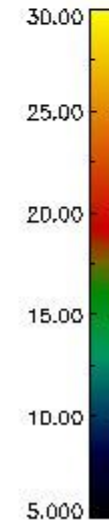
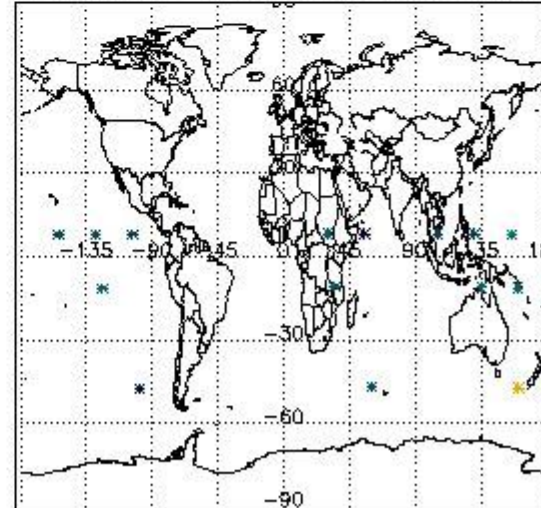
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

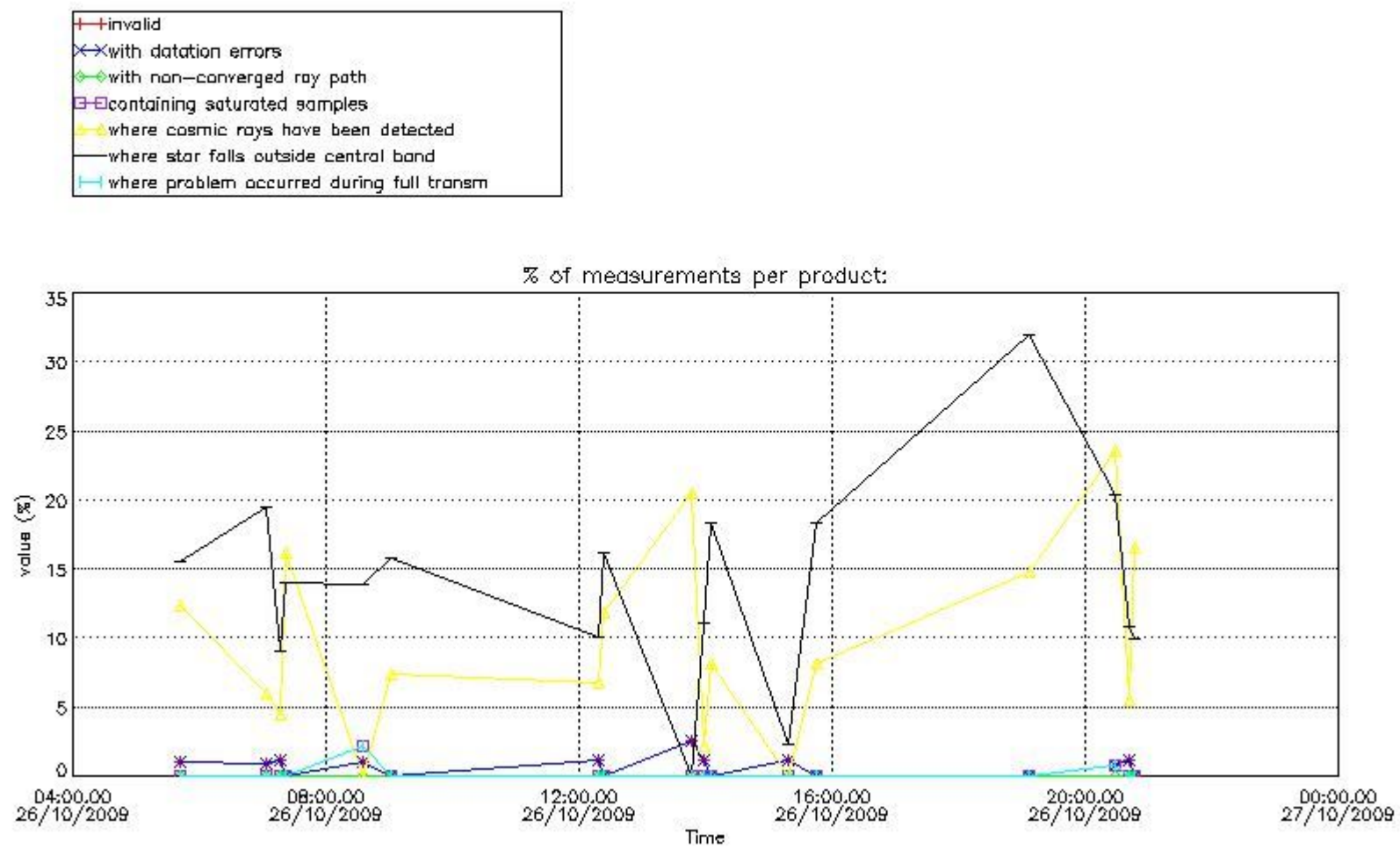


#### 4. Level 1 quality information per product

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.

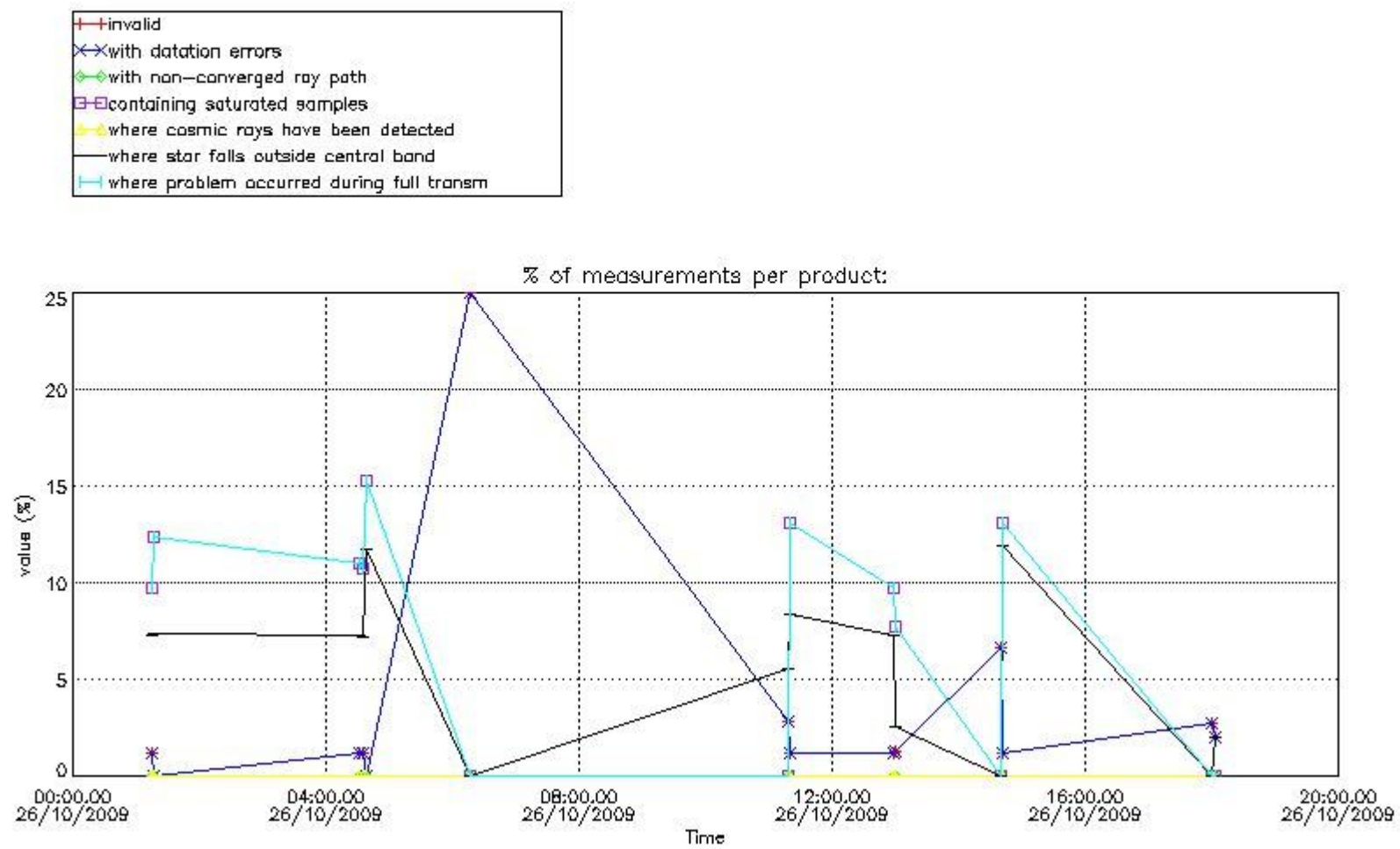
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

###### 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): ENVISAT DESCENDING passes

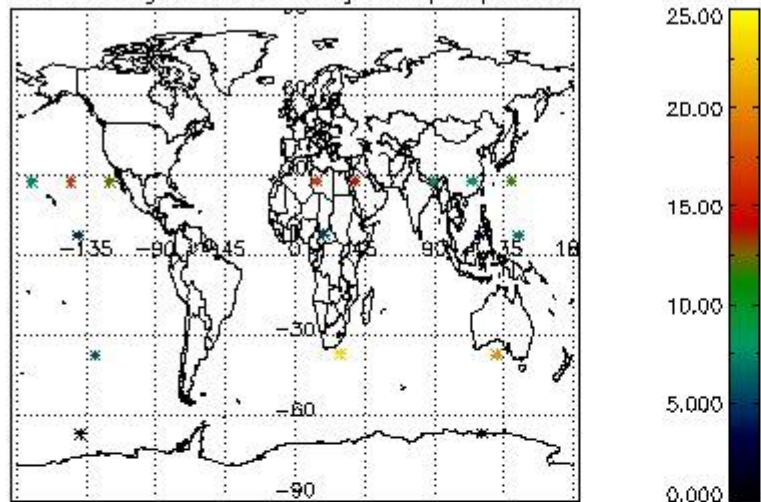




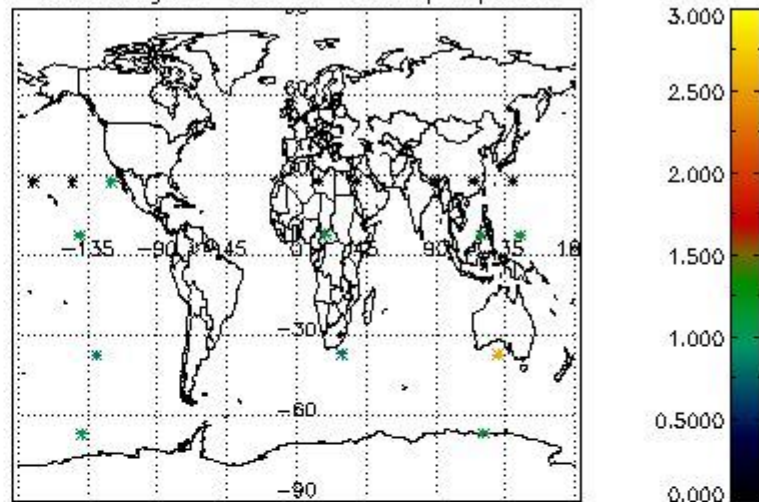
4.2 Plot quality information per product coming from level 1b processing (world map)

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

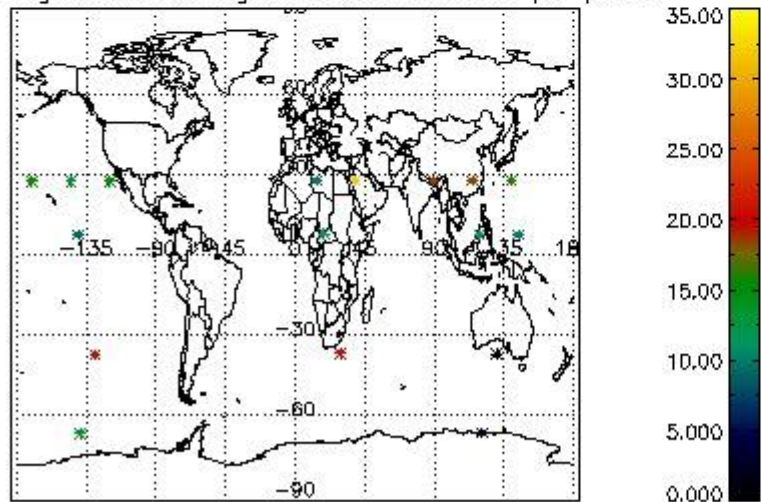
Percentage of cosmic ray hits per profile



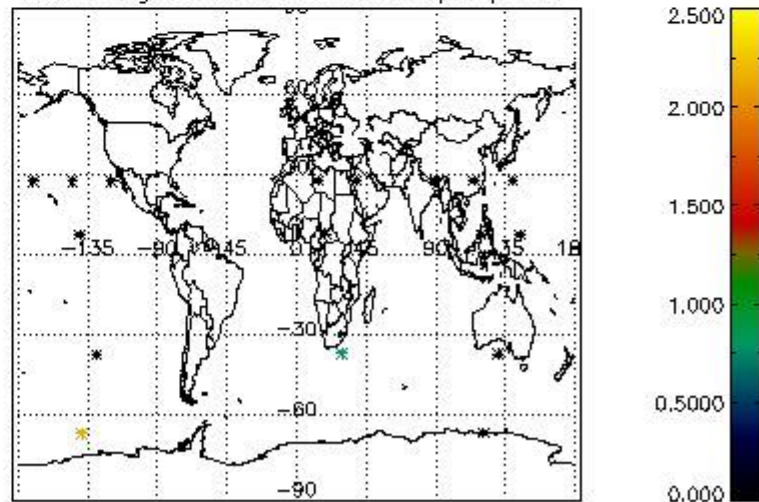
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

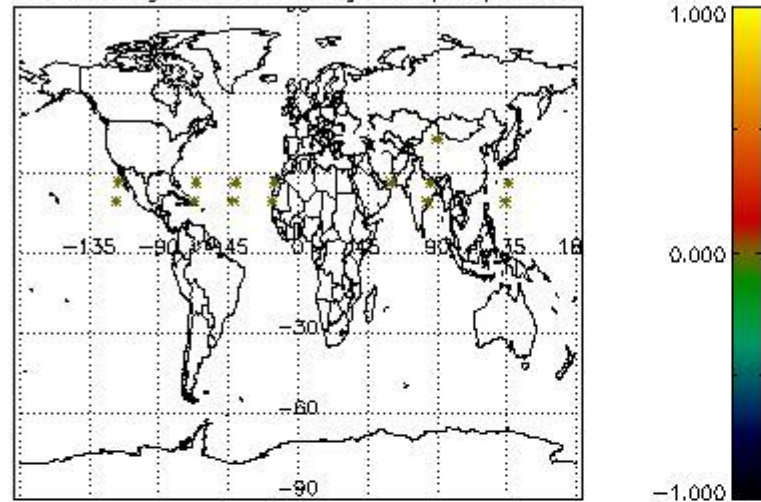


Percentage of saturation errors per profile

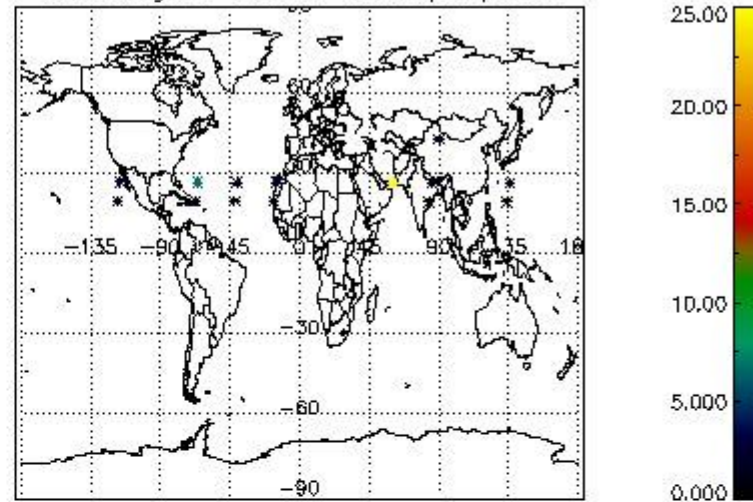


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

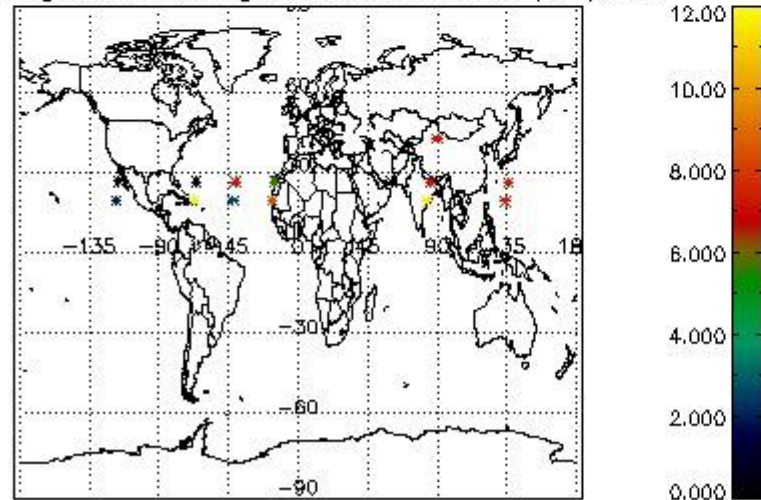
Percentage of cosmic ray hits per profile



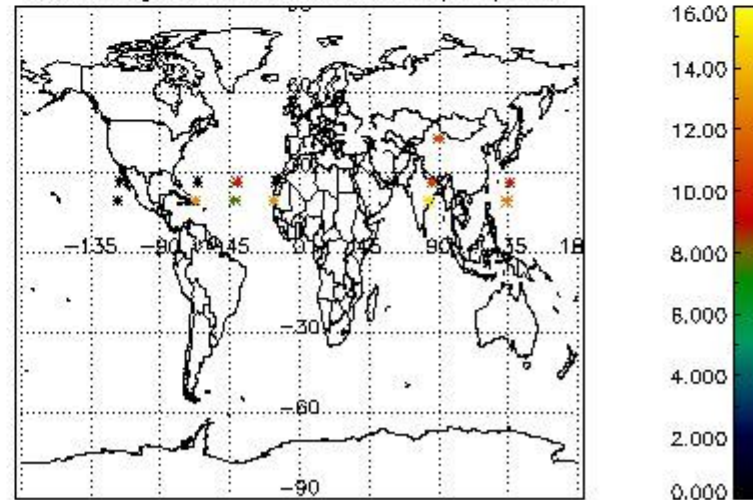
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



## 5. Trace gas profiles

### 5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/o3\_std of the level 2 products. The table below shows the statistics for given STD ranges.

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

- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

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

- Products in dark limb illumination condition: GOM\_NL\_\_2P/NL\_SUMMARY\_QUALITY/obs\_ill\_cond=0
- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

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

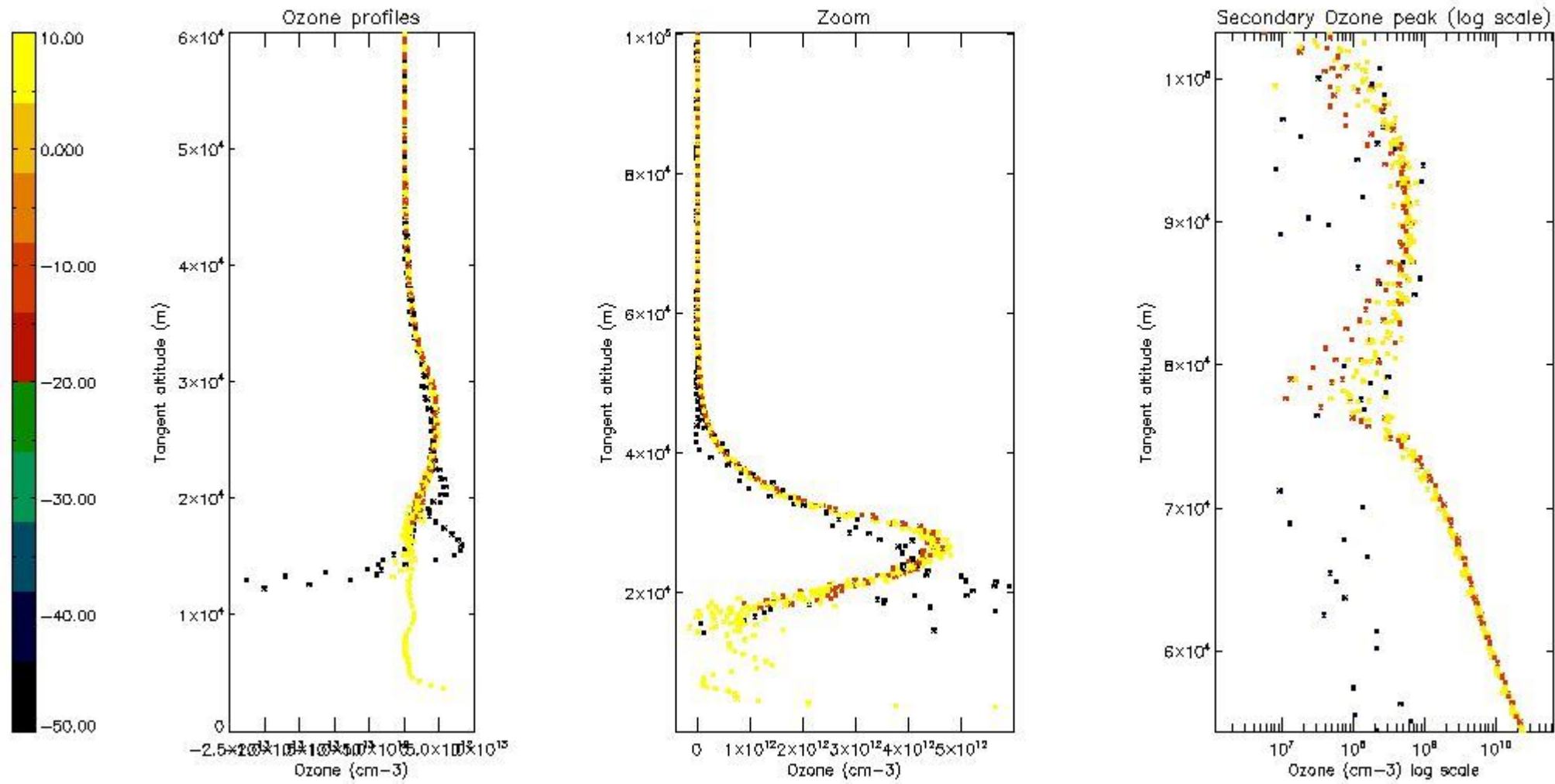
Criteria	% of total production
All STD	59
STD < 20	39



STD < 10	34
STD < 5	26

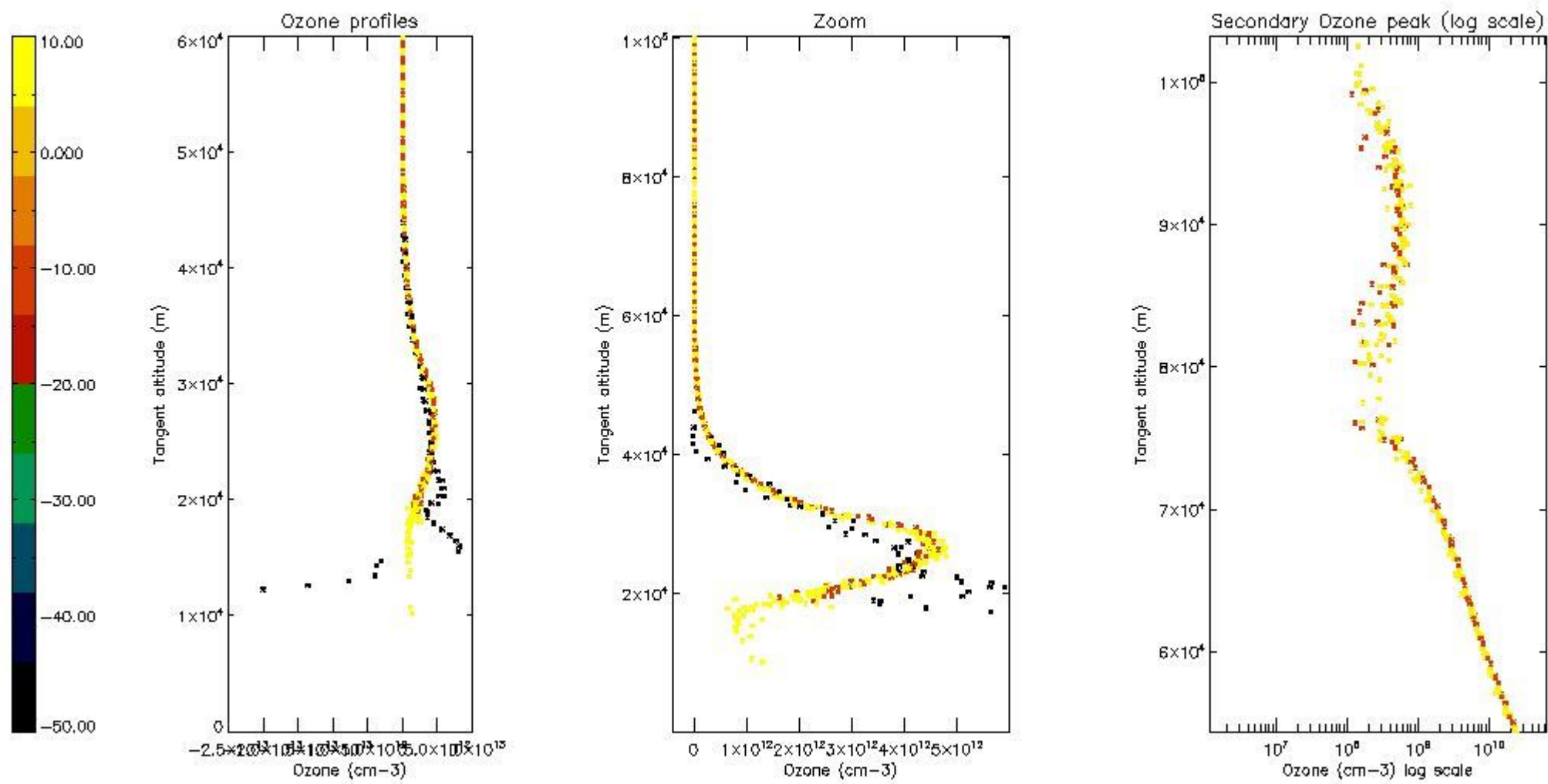
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



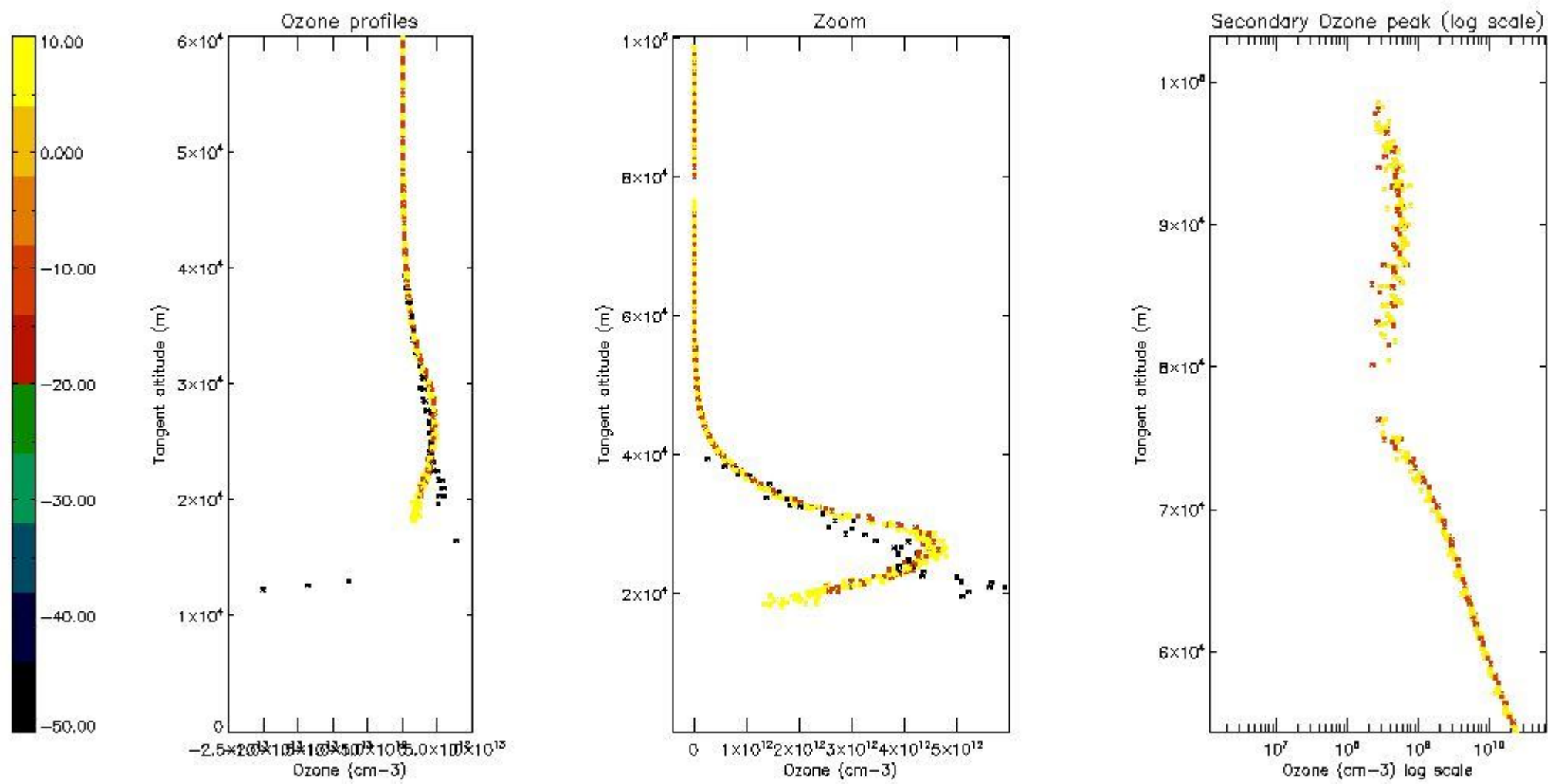
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



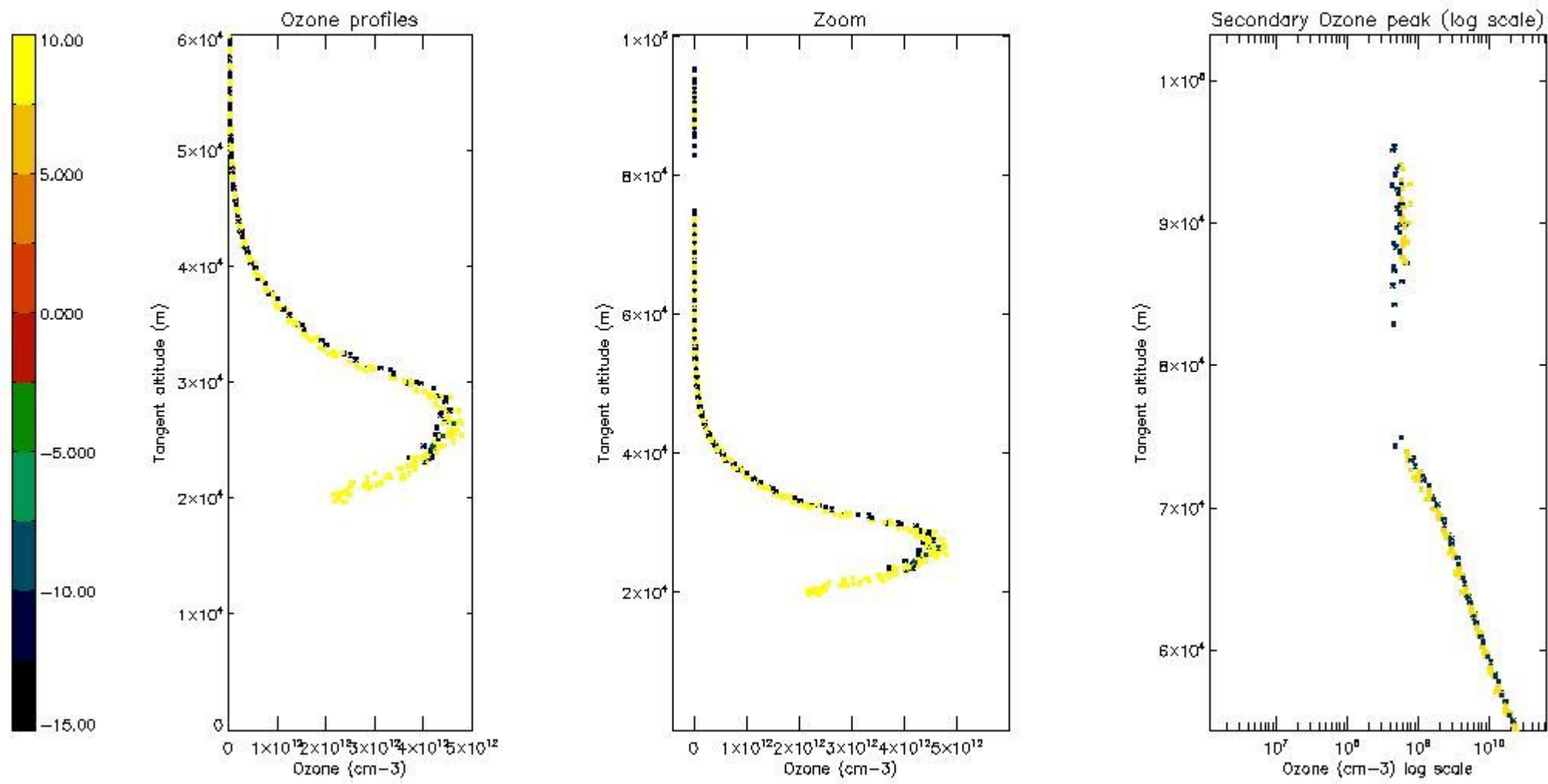
*5.4 Plot ozone profiles where  $STD < 10\%$  (dark without errors)*

The colorbar represents the latitude.



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

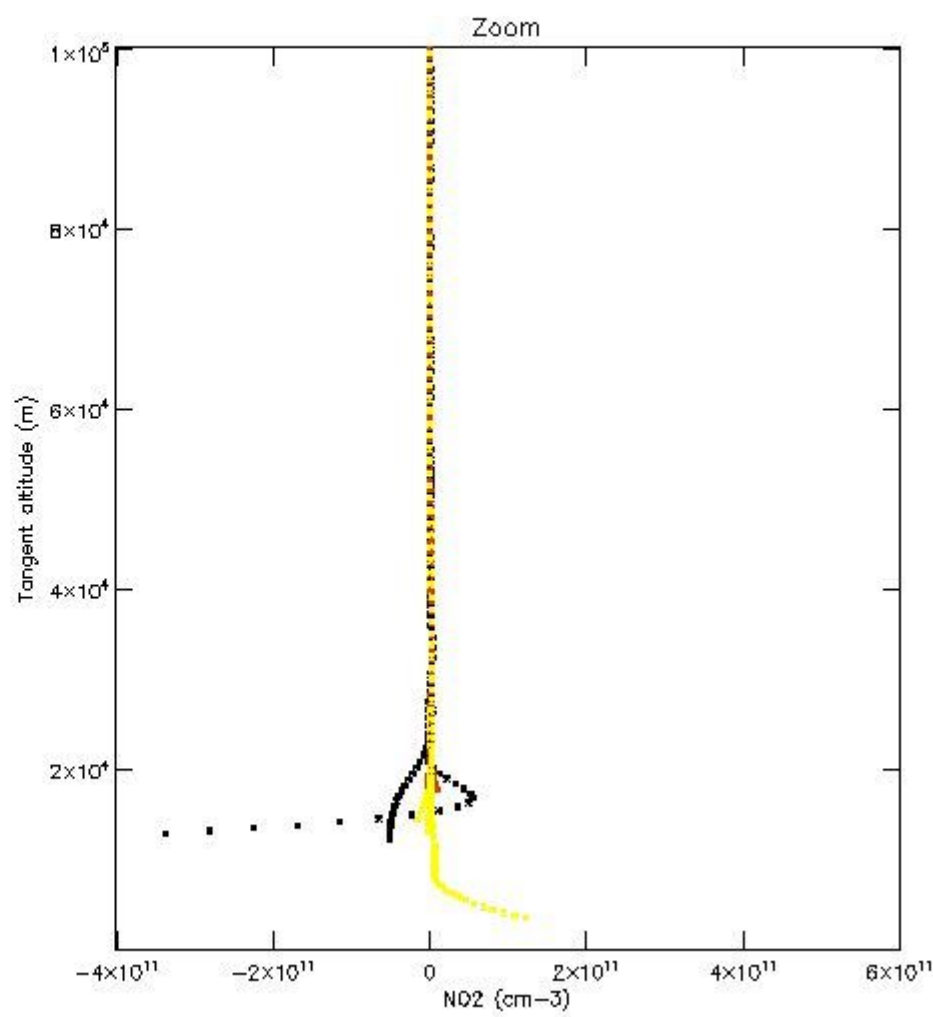
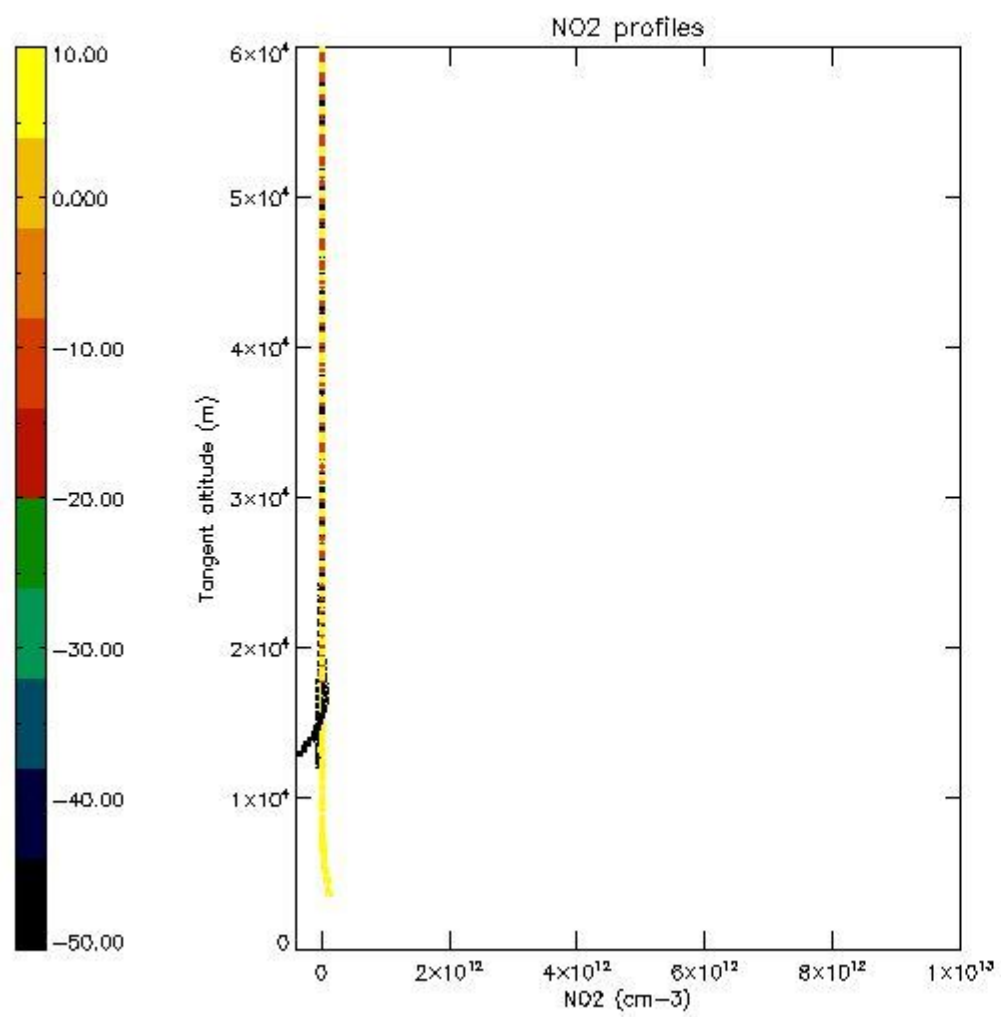
The colorbar represents the latitude.



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

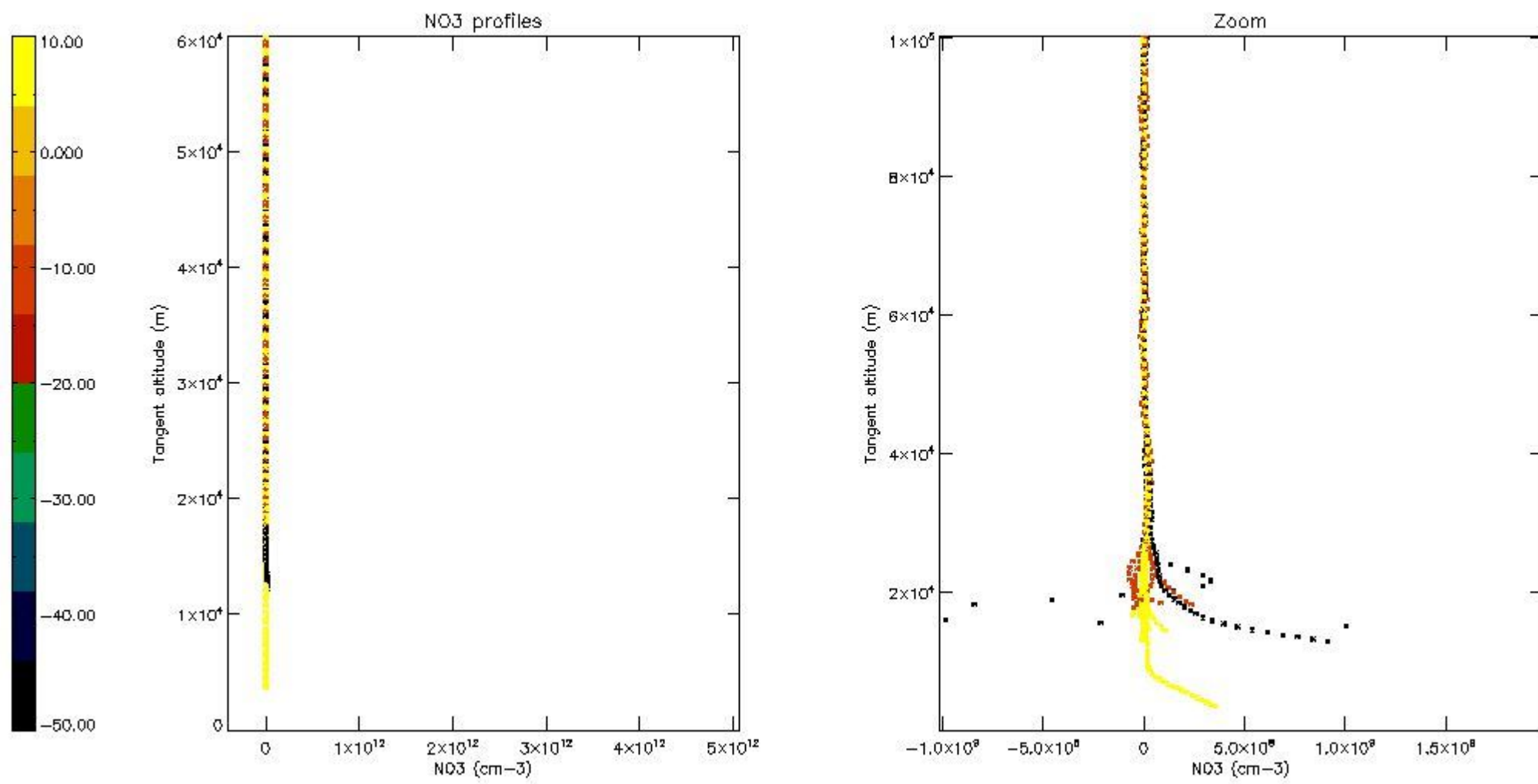
The colorbar represents the latitude.





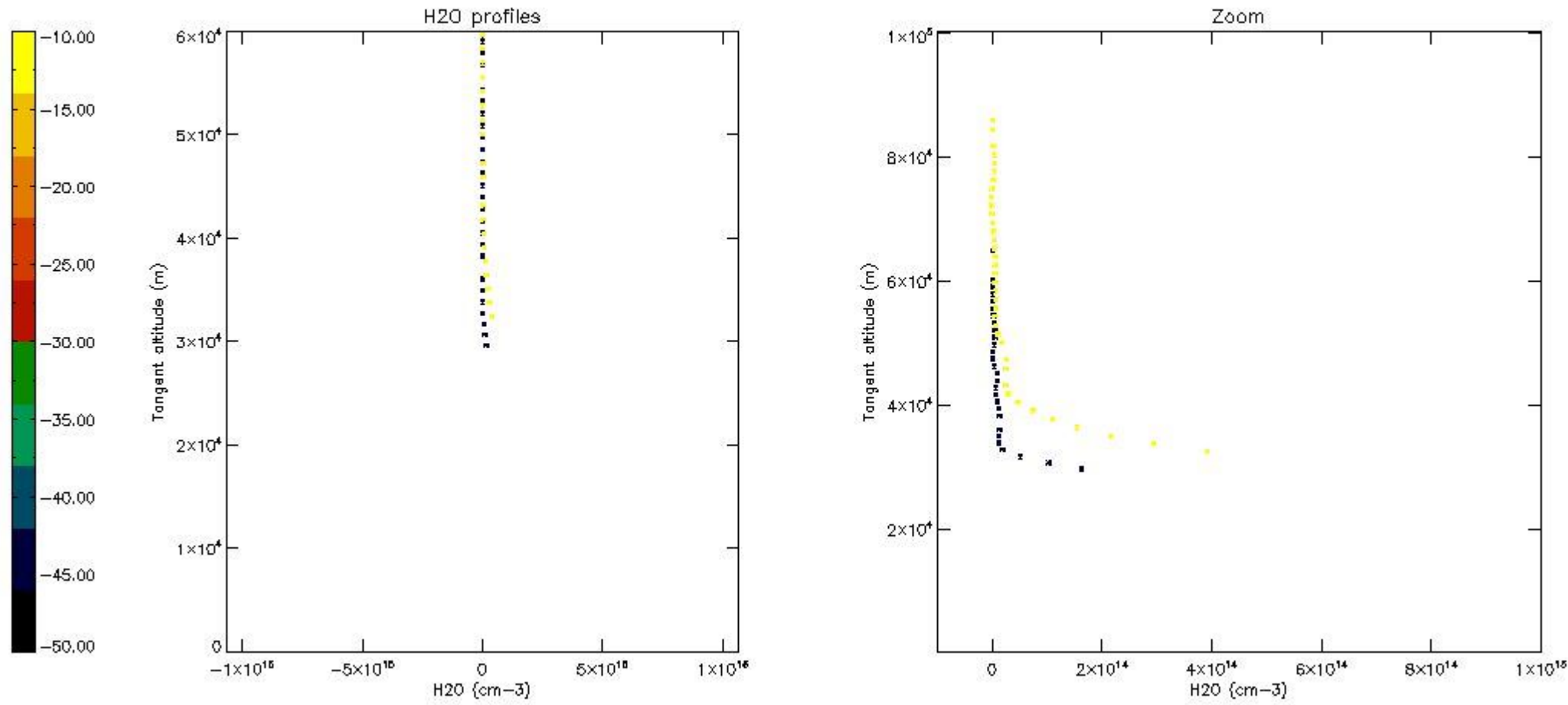
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	26-OCT-2009 01:14:35
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-OCT-2009 01:14:35
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-OCT-2009 01:14:35

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##### [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](#)

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##### [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](#)

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#### [5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

#### [5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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### [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	26APR2013 13:27:24
Data source version	GOMOS/6.01
Start time of products	26-10-2009 (26OCT2009 00:00:00)
Stop time of products	27-10-2009 (27OCT2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	31
Nb of prods with errors	0

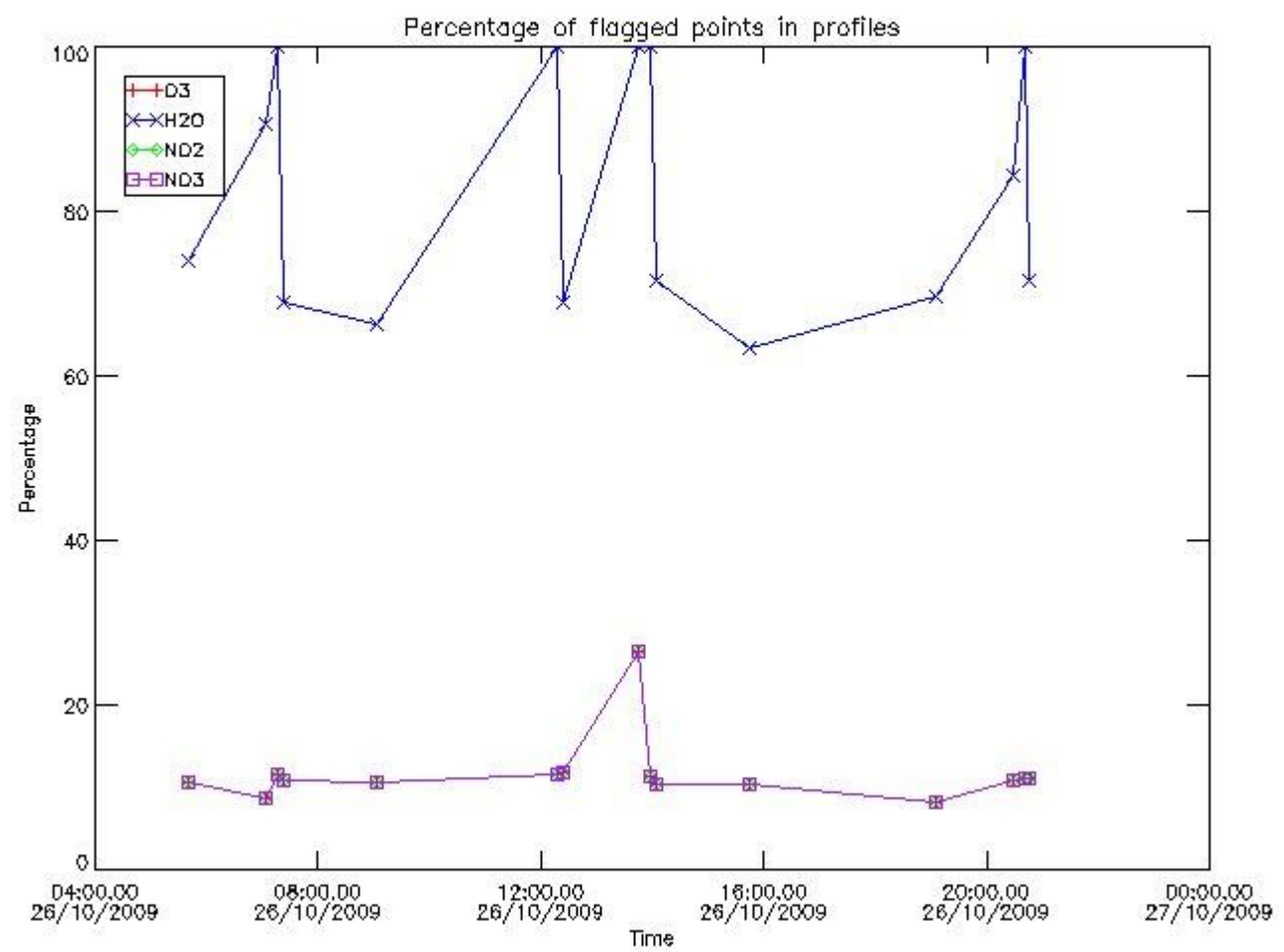
## 2. Summary of processed GOM\_NL\_\_2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091026_011435_000000412083_00389_40022_6284.N1	26-OCT-2009 01:14:35	Bright	41.000	173	4Bet Tri	3.0040	8900.0	82	40022	No
2	GOM_NL__2PRFIN20091026_011635_000000412083_00389_40022_6285.N1	26-OCT-2009 01:16:35	Bright	40.500	73	57Gam1And	2.2600	13100.	81	40022	No
3	GOM_NL__2PRFIN20091026_043108_000000412083_00391_40024_6305.N1	26-OCT-2009 04:31:08	Bright	41.000	105	6Bet Ari	2.6450	8900.0	82	40024	No
4	GOM_NL__2PRFIN20091026_043546_000000422083_00391_40024_6306.N1	26-OCT-2009 04:35:46	Bright	42.000	173	4Bet Tri	3.0040	8900.0	84	40024	No
5	GOM_NL__2PRFIN20091026_043746_000000432083_00391_40024_6307.N1	26-OCT-2009 04:37:46	Bright	42.500	73	57Gam1And	2.2600	13100.	85	40024	No
6	GOM_NL__2PRFIN20091026_054112_000000492083_00392_40025_6316.N1	26-OCT-2009 05:41:12	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	40025	No
7	GOM_NL__2PRFIN20091026_061622_00000022083_00392_40025_6317.N1	26-OCT-2009 06:16:22	Straylight	2.0000	173	4Bet Tri	3.0040	8900.0	4	40025	No
8	GOM_NL__2PRFIN20091026_070336_000000592083_00392_40025_6319.N1	26-OCT-2009 07:03:36	Dark	59.000	48	30Alp Hya	1.9770	4100.0	118	40025	No
9	GOM_NL__2PRFIN20091026_071612_000000452083_00393_40026_6334.N1	26-OCT-2009 07:16:12	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	40026	No
10	GOM_NL__2PRFIN20091026_072148_000000472083_00393_40026_6335.N1	26-OCT-2009 07:21:48	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	40026	No
11	GOM_NL__2PRFIN20091026_083542_000000472083_00393_40026_6336.N1	26-OCT-2009 08:35:42	Bright	47.000	22	32Alp Leo	1.3600	15200.	94	40026	No
12	GOM_NL__2PRFIN20091026_090225_000000482083_00394_40027_6380.N1	26-OCT-2009 09:02:25	Dark	47.500	2	Alp Car	-0.73600	7000.0	95	40027	No
13	GOM_NL__2PRFIN20091026_111808_000000182083_00395_40028_6412.N1	26-OCT-2009 11:18:08	Twilight	18.000	173	4Bet Tri	3.0040	8900.0	36	40028	No
14	GOM_NL__2PRFIN20091026_112008_000000422083_00395_40028_6413.N1	26-OCT-2009 11:20:08	Bright	42.000	73	57Gam1And	2.2600	13100.	84	40028	No
15	GOM_NL__2PRFIN20091026_121803_000000452083_00396_40029_6455.N1	26-OCT-2009 12:18:03	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	40029	No
16	GOM_NL__2PRFIN20091026_122339_000000472083_00396_40029_6456.N1	26-OCT-2009 12:23:39	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	40029	No
17	GOM_NL__2PRFIN20091026_125843_000000412083_00396_40029_6457.N1	26-OCT-2009 12:58:43	Bright	41.000	173	4Bet Tri	3.0040	8900.0	82	40029	No
18	GOM_NL__2PRFIN20091026_130043_000000392083_00396_40029_6458.N1	26-OCT-2009 13:00:43	Bright	39.000	73	57Gam1And	2.2600	13100.	78	40029	No
19	GOM_NL__2PRFIN20091026_134604_000000202083_00396_40029_6459.N1	26-OCT-2009 13:46:04	Dark	19.500	48	30Alp Hya	1.9770	4100.0	39	40029	No
20	GOM_NL__2PRFIN20091026_135840_000000452083_00397_40030_6511.N1	26-OCT-2009 13:58:40	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	40030	No
21	GOM_NL__2PRFIN20091026_140415_000000492083_00397_40030_6512.N1	26-OCT-2009 14:04:15	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	40030	No
22	GOM_NL__2PRFIN20091026_143919_000000082083_00397_40030_6513.N1	26-OCT-2009 14:39:19	Straylight	7.5000	173	4Bet Tri	3.0040	8900.0	15	40030	No
23	GOM_NL__2PRFIN20091026_144119_000000422083_00397_40030_6514.N1	26-OCT-2009 14:41:19	Bright	42.000	73	57Gam1And	2.2600	13100.	84	40030	No
24	GOM_NL__2PRFIN20091026_151807_000000442083_00397_40030_6515.N1	26-OCT-2009 15:18:07	Bright	43.500	22	32Alp Leo	1.3600	15200.	87	40030	No
25	GOM_NL__2PRFIN20091026_154452_000000492083_00398_40031_6543.N1	26-OCT-2009 15:44:52	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	40031	No
26	GOM_NL__2PRFIN20091026_180030_000000192083_00399_40032_6553.N1	26-OCT-2009 18:00:30	Twilight	18.500	173	4Bet Tri	3.0040	8900.0	37	40032	No
27	GOM_NL__2PRFIN20091026_180230_000000262083_00399_40032_6554.N1	26-OCT-2009 18:02:30	Twilight	25.500	73	57Gam1And	2.2600	13100.	51	40032	No
28	GOM_NL__2PRFIN20091026_190606_000000612083_00400_40033_6565.N1	26-OCT-2009 19:06:06	Dark	61.000	2	Alp Car	-0.73600	7000.0	122	40033	No
29	GOM_NL__2PRFIN20091026_202832_000000622083_00400_40033_6566.N1	26-OCT-2009 20:28:32	Dark	61.500	48	30Alp Hya	1.9770	4100.0	123	40033	No
30	GOM_NL__2PRFIN20091026_204107_000000462083_00401_40034_6576.N1	26-OCT-2009 20:41:07	Dark	46.000	34	Gam2Vel	1.7930	23000.	92	40034	No
31	GOM_NL__2PRFIN20091026_204642_000000462083_00401_40034_6577.N1	26-OCT-2009 20:46:42	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	40034	No

## 3. Quality information per product

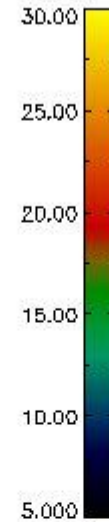
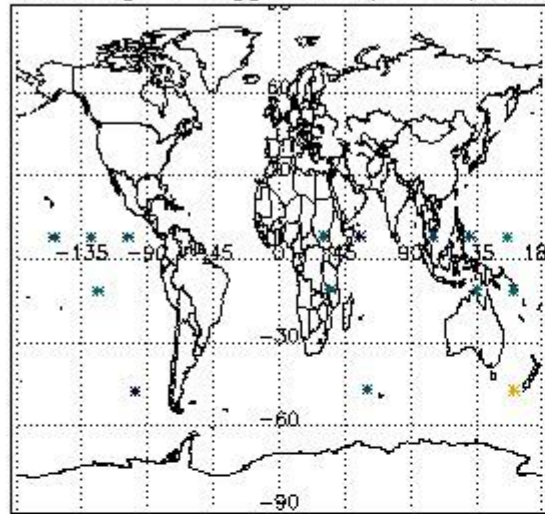
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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

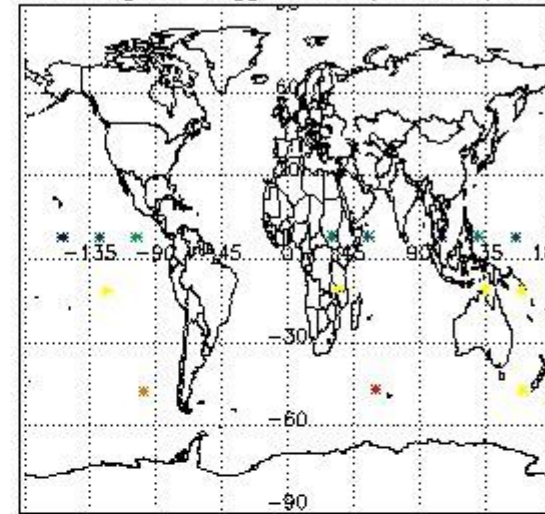


*3.2 Plot quality information per product (world map)*

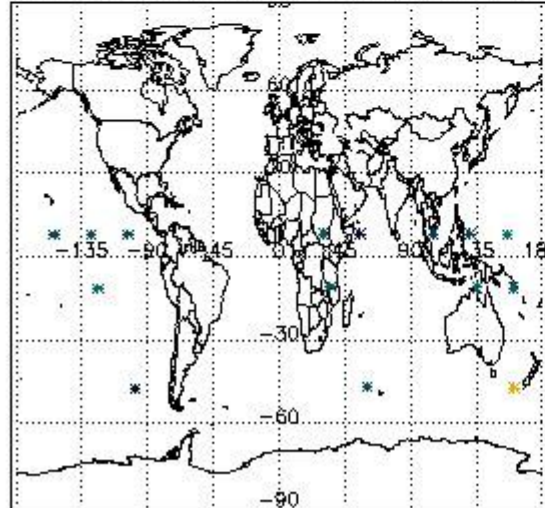
Percentage of flagged data per O3 profile



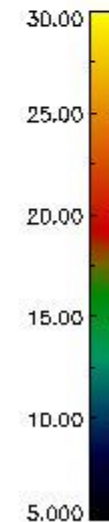
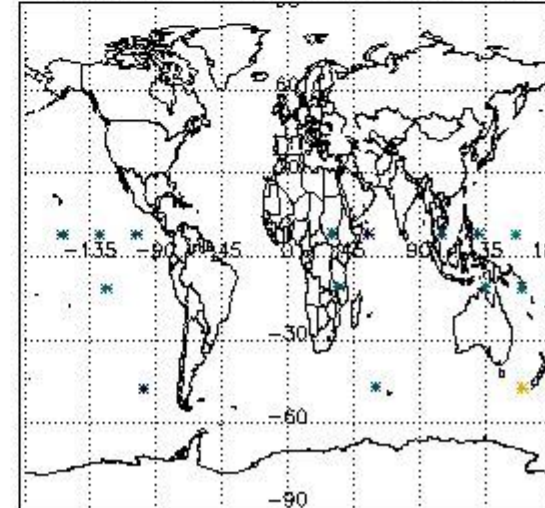
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

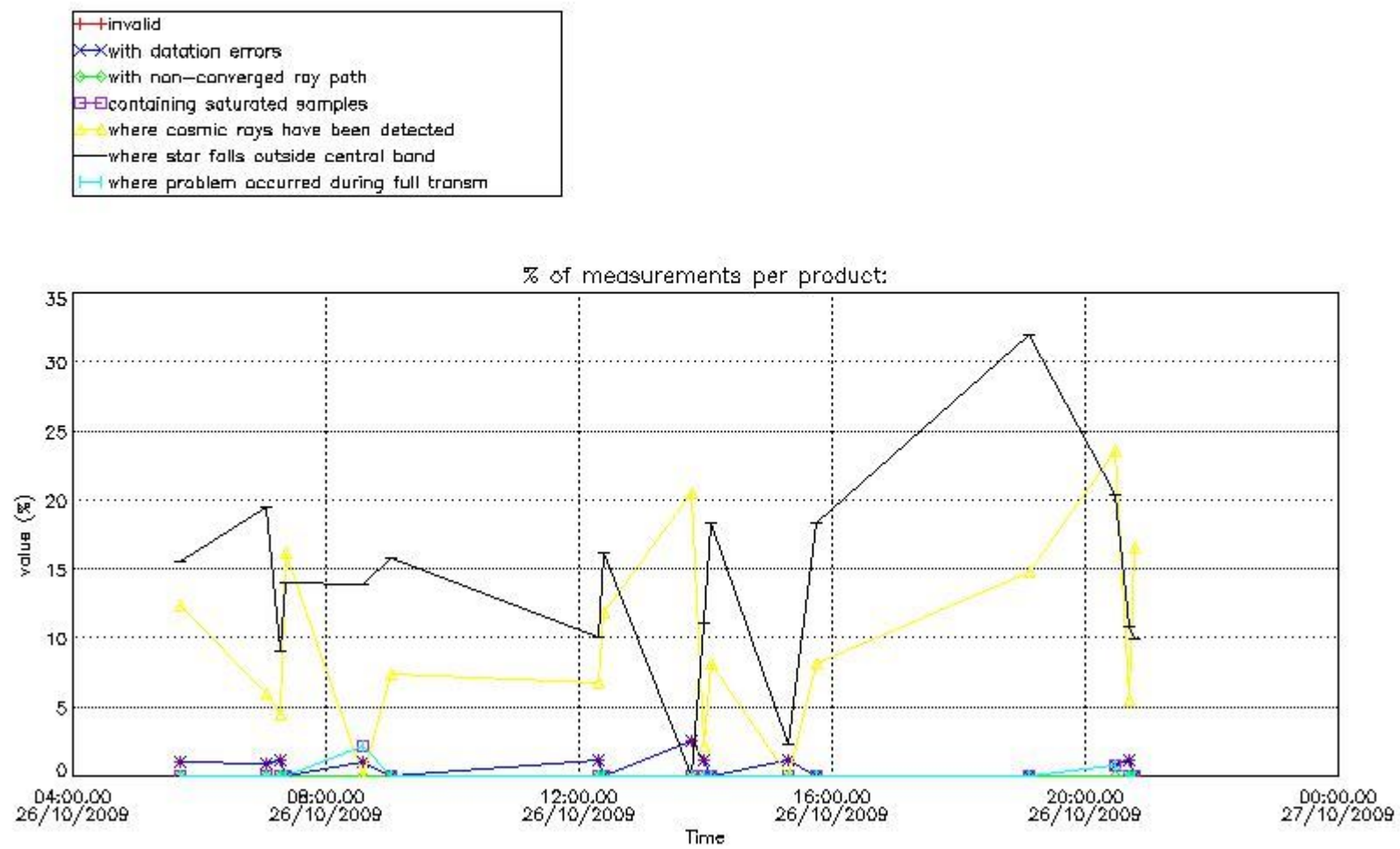


#### 4. Level 1 quality information per product

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.

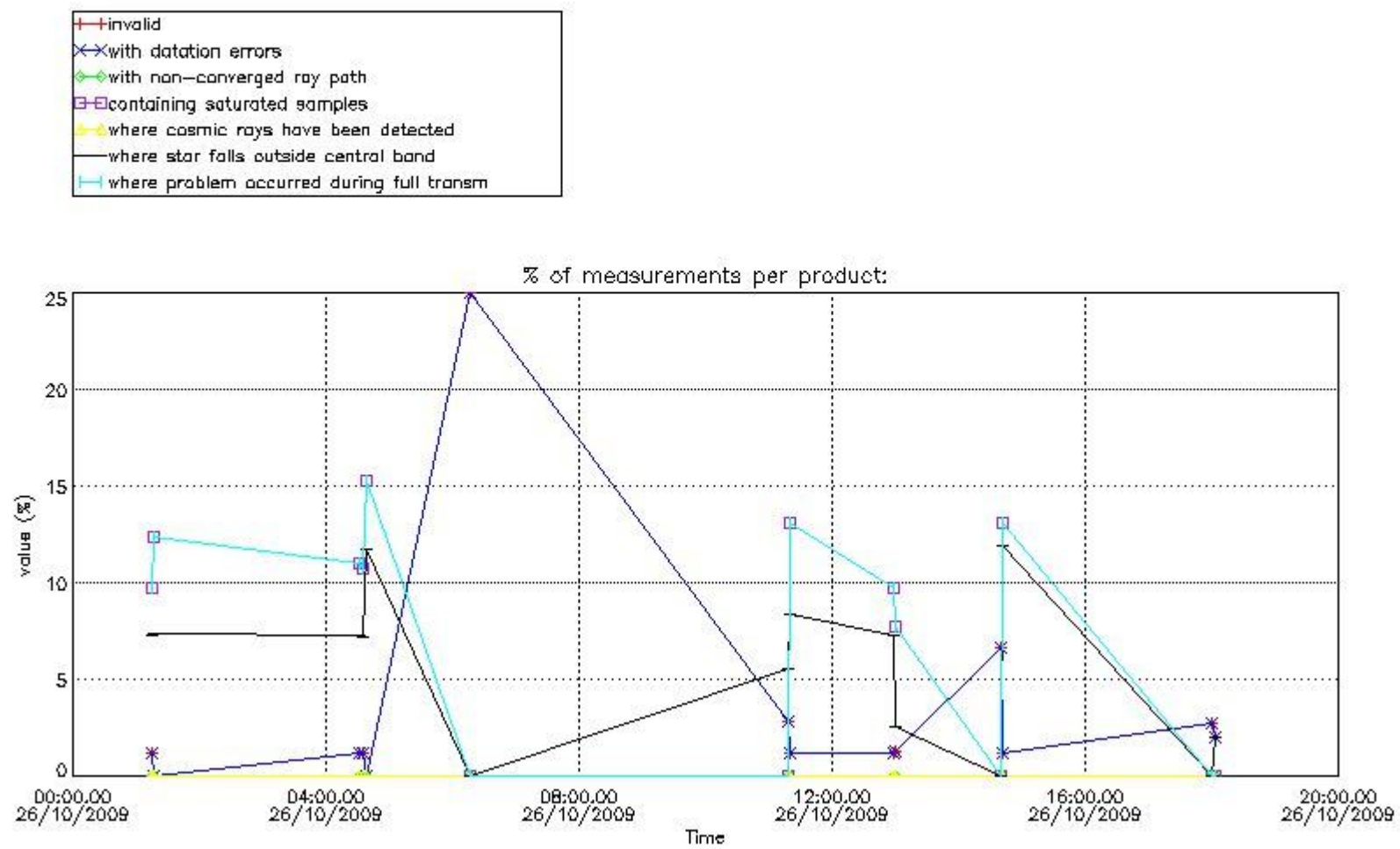
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

###### 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): ENVISAT DESCENDING passes

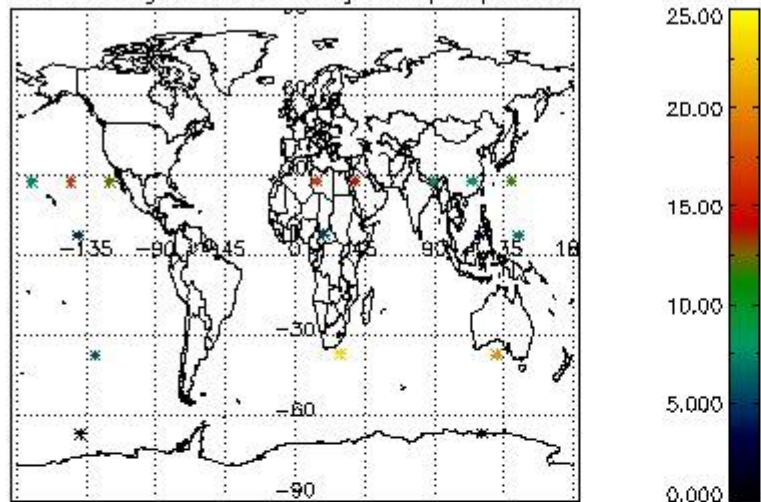




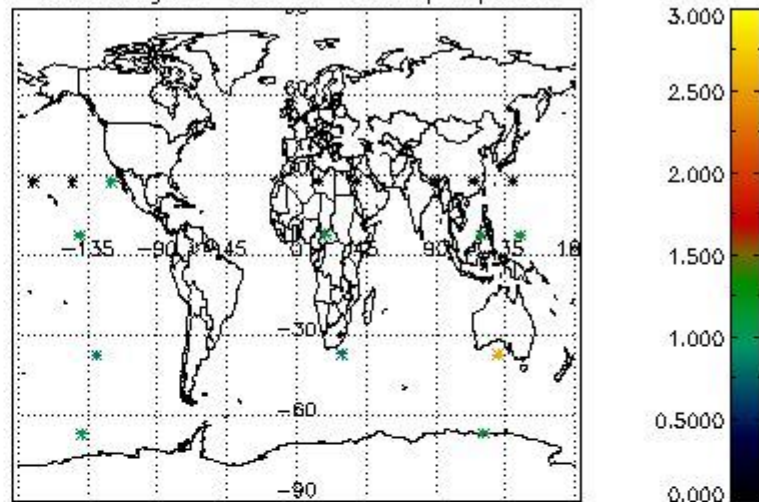
4.2 Plot quality information per product coming from level 1b processing (world map)

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

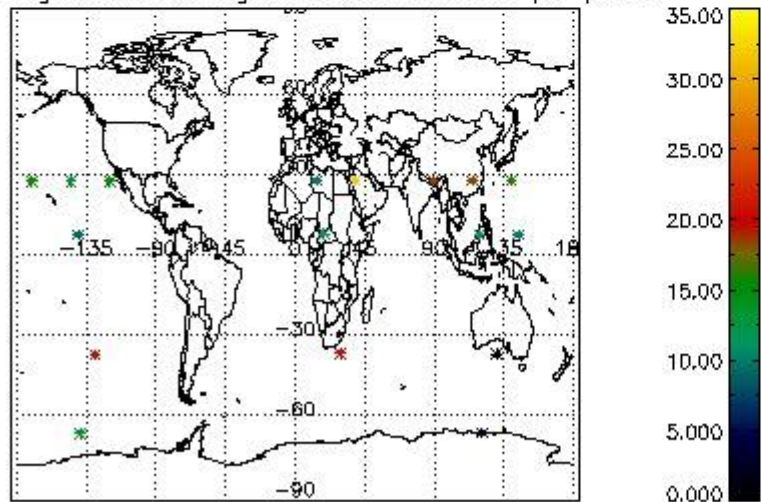
Percentage of cosmic ray hits per profile



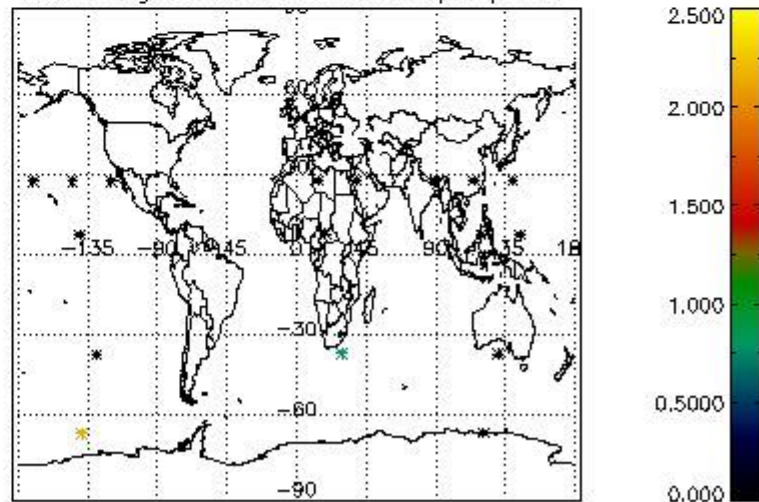
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

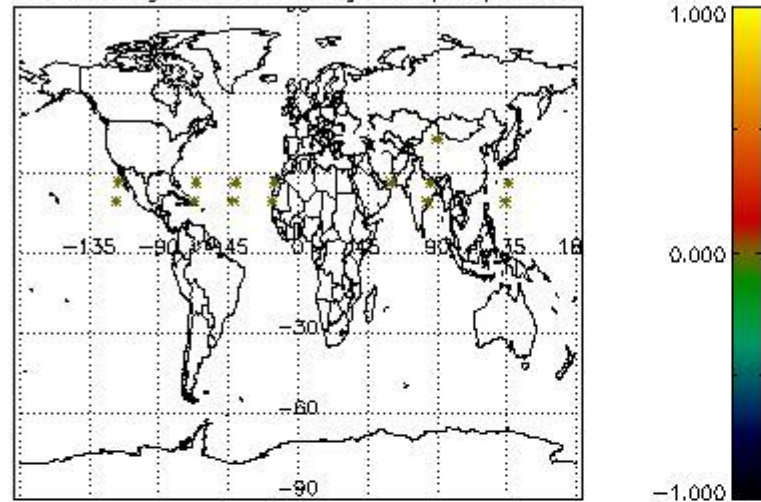


Percentage of saturation errors per profile

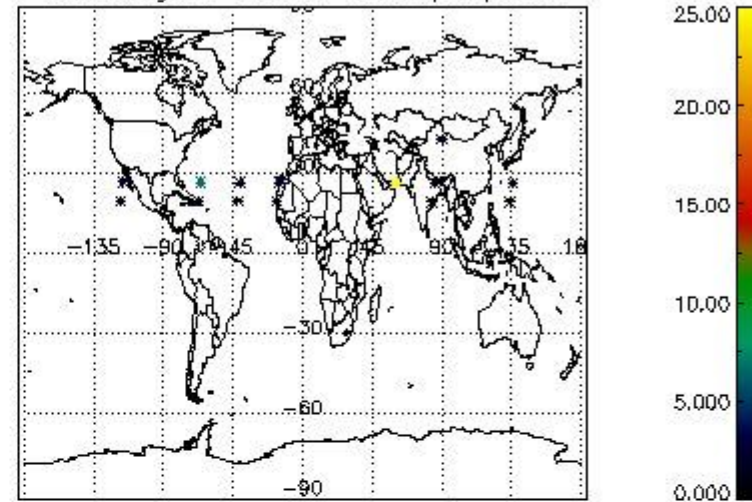


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

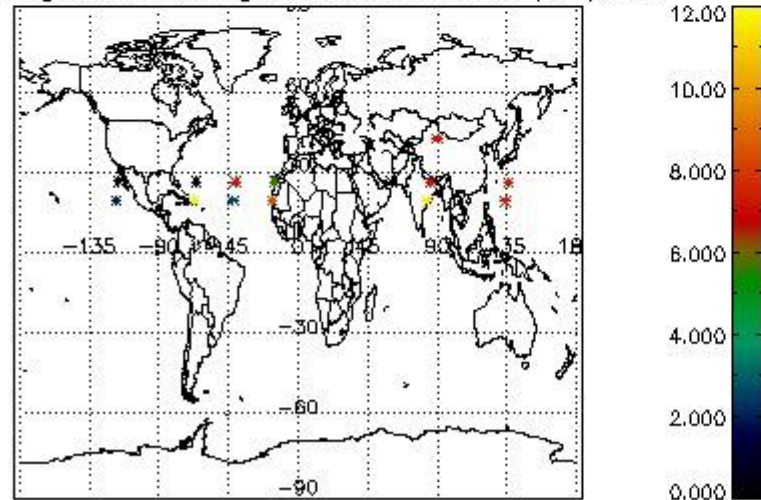
Percentage of cosmic ray hits per profile



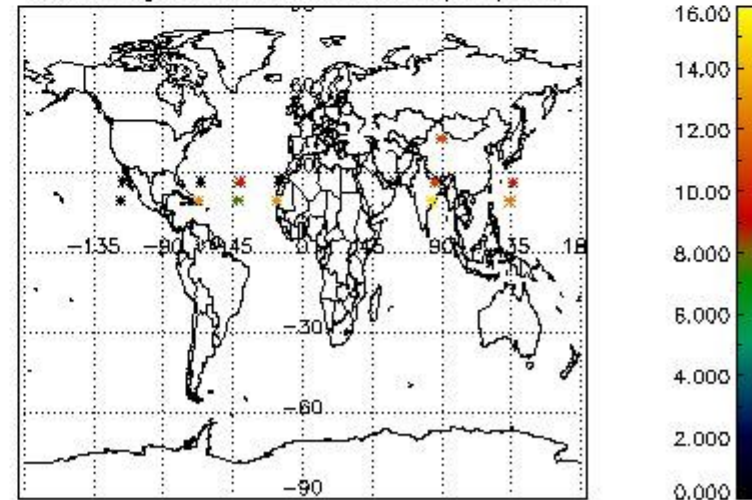
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



## 5. Trace gas profiles

### 5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/o3\_std of the level 2 products. The table below shows the statistics for given STD ranges.

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

- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

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

- Products in dark limb illumination condition: GOM\_NL\_\_2P/NL\_SUMMARY\_QUALITY/obs\_ill\_cond=0
- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

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

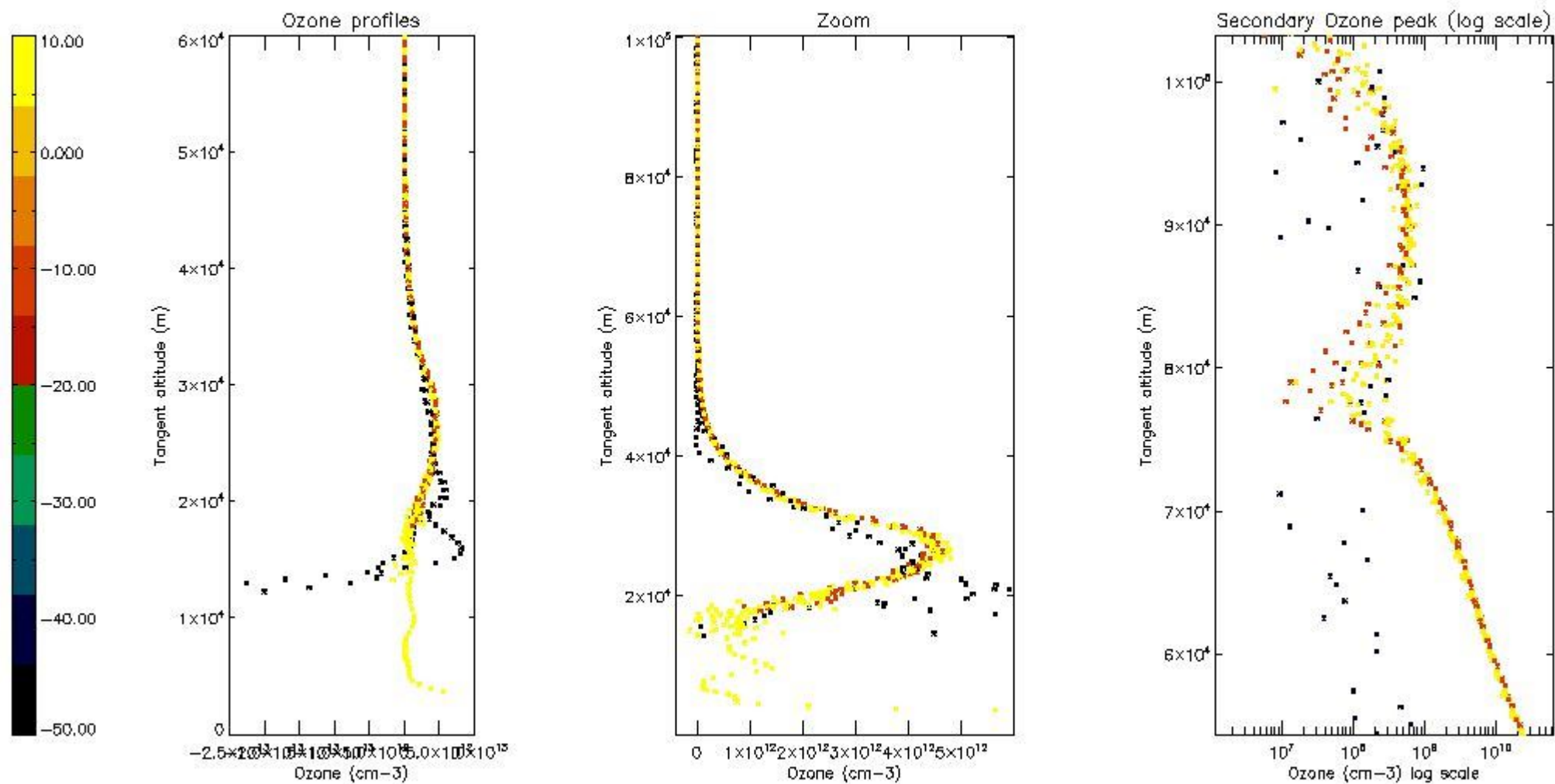
Criteria	% of total production
All STD	59
STD < 20	39



STD < 10	34
STD < 5	26

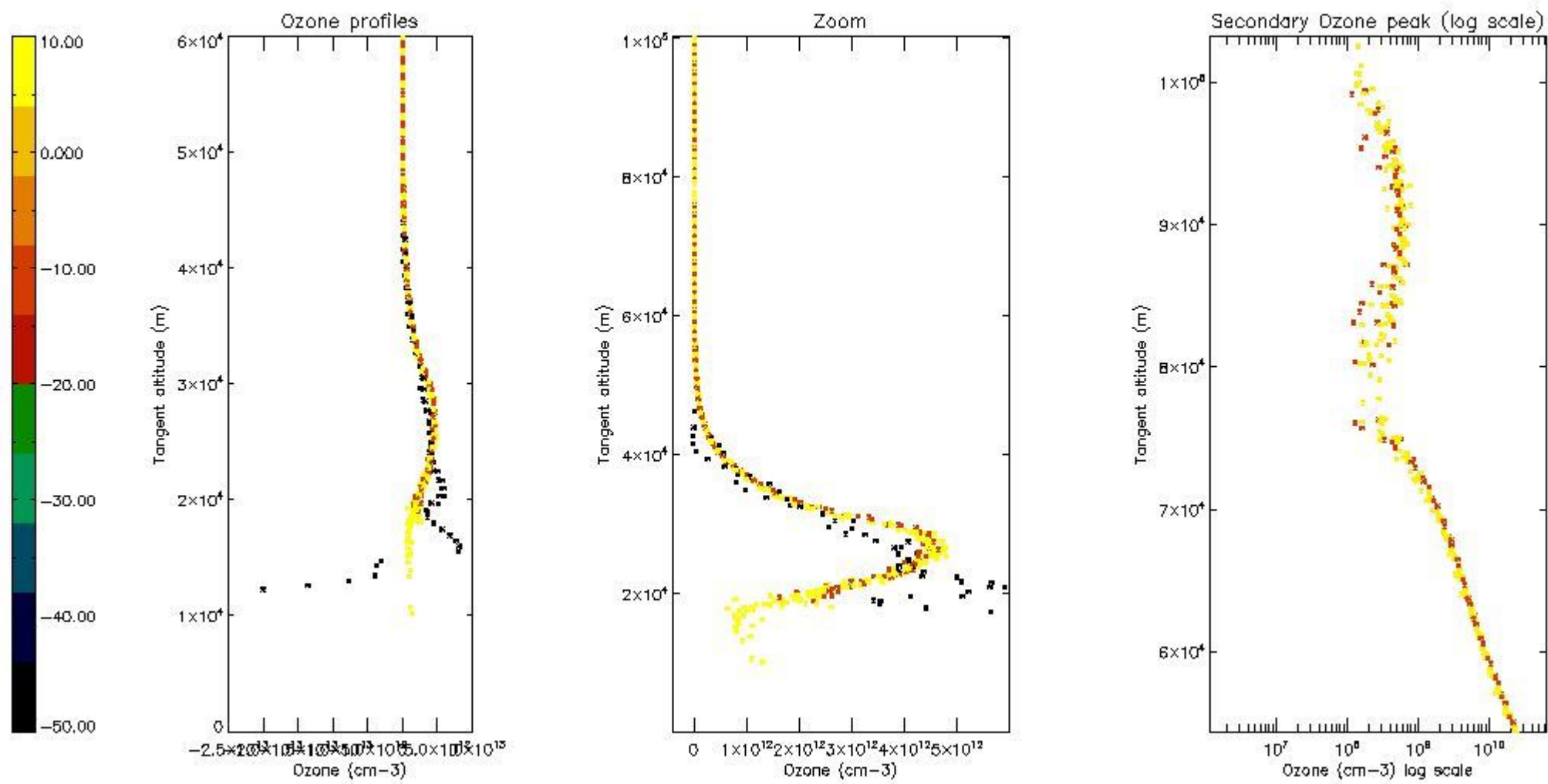
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

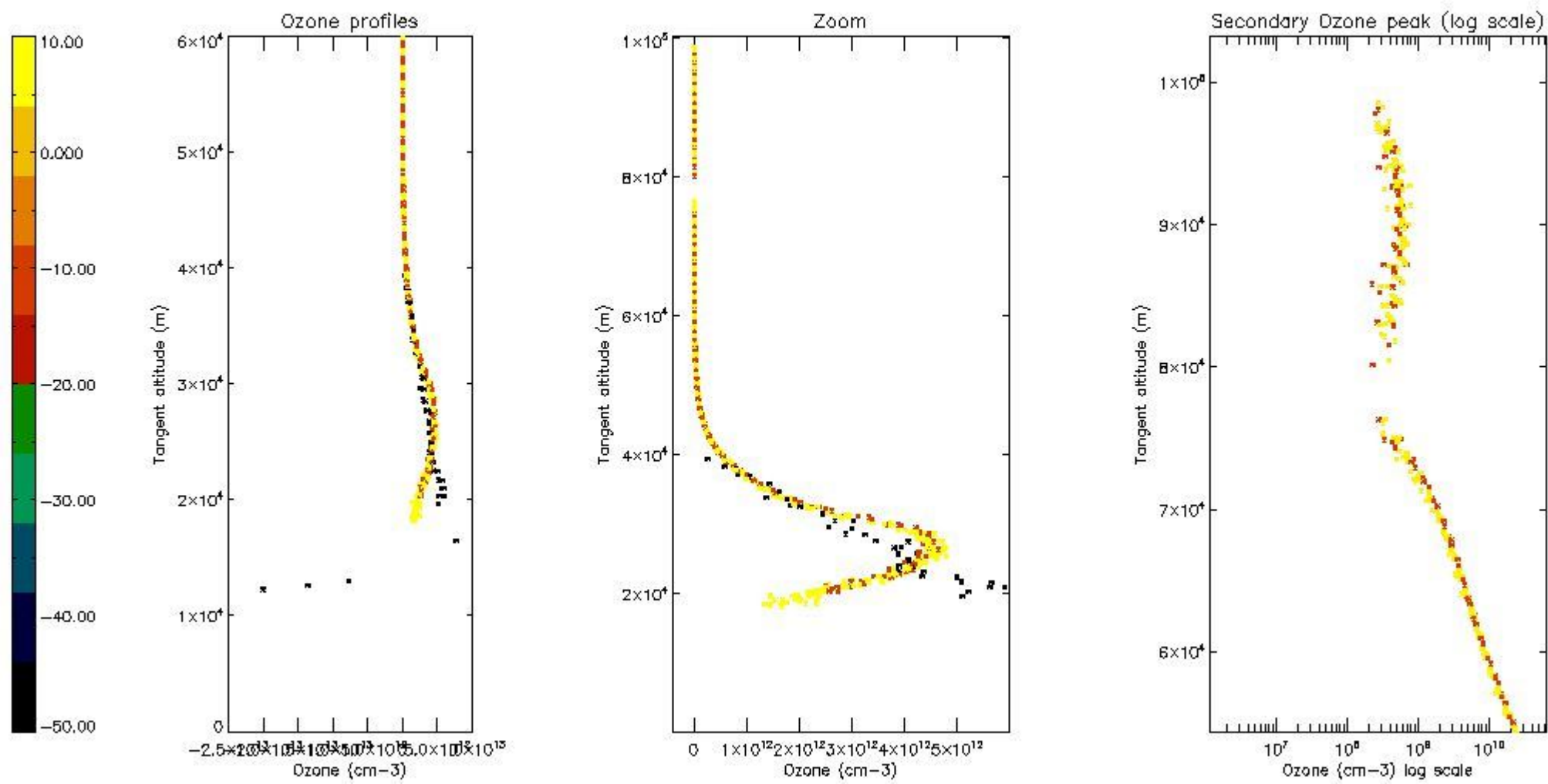
The colorbar represents the latitude.



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

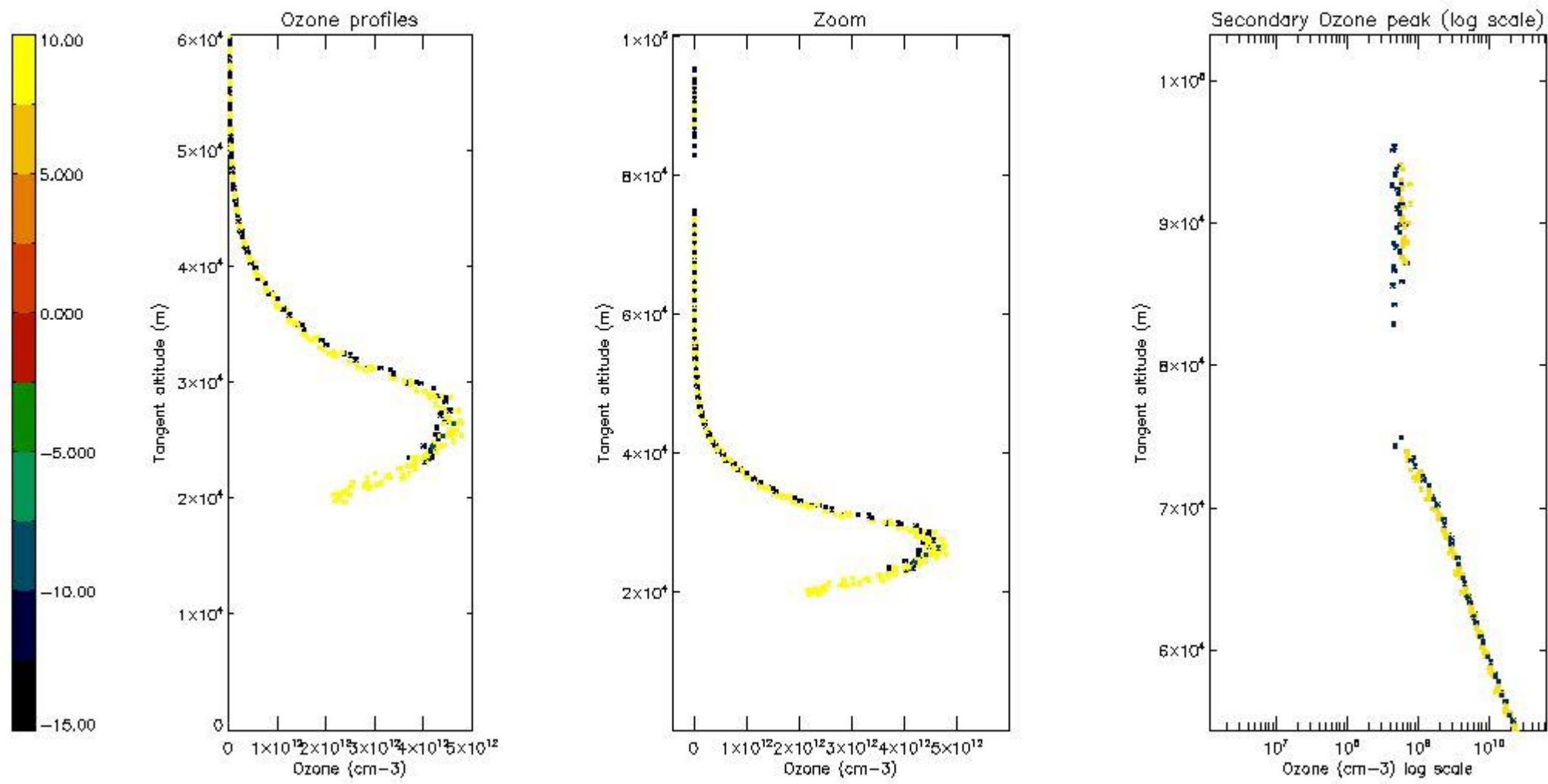
The colorbar represents the latitude.





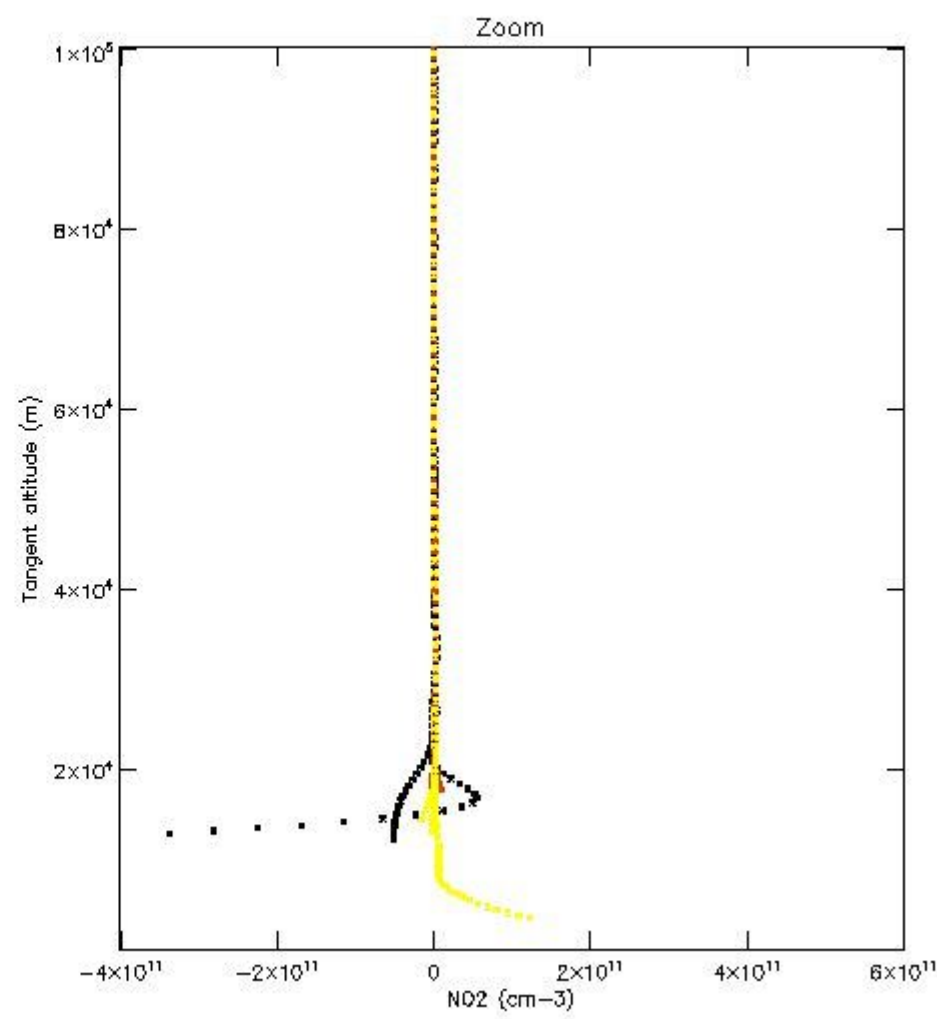
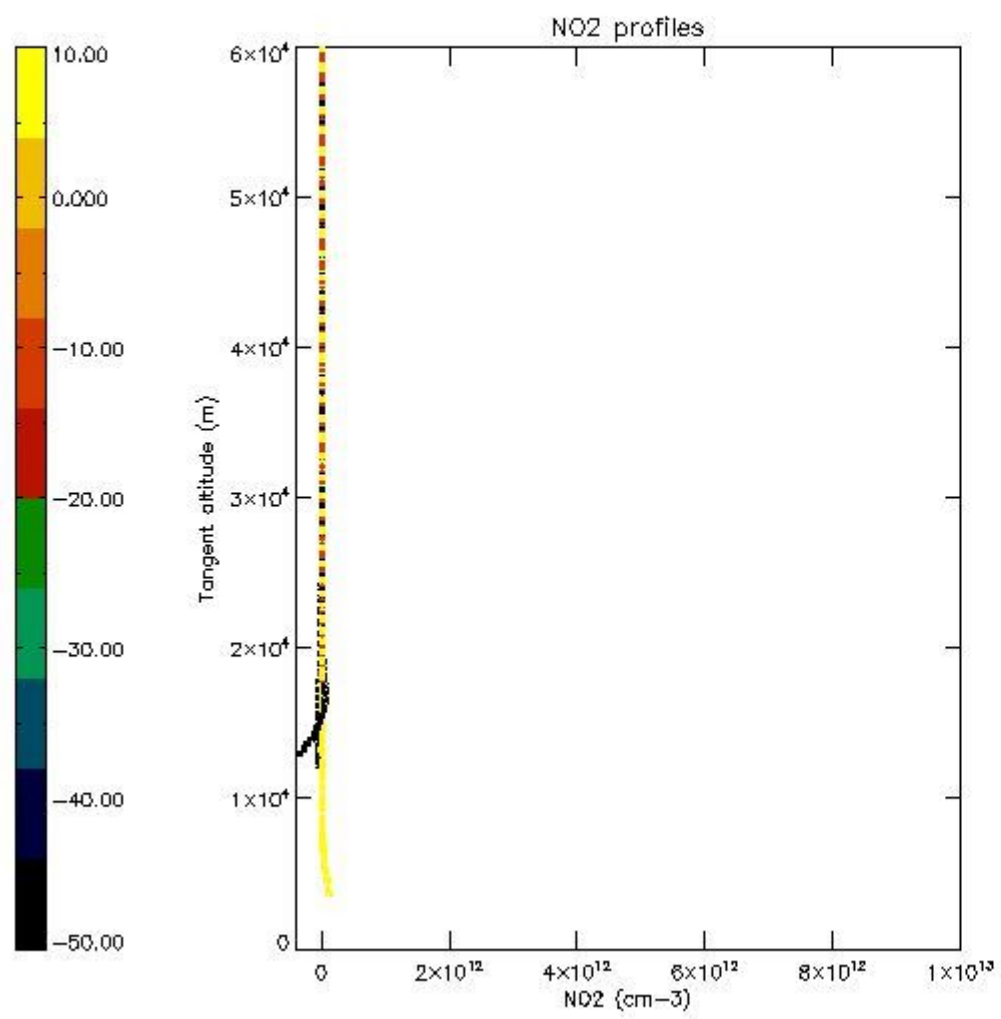
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



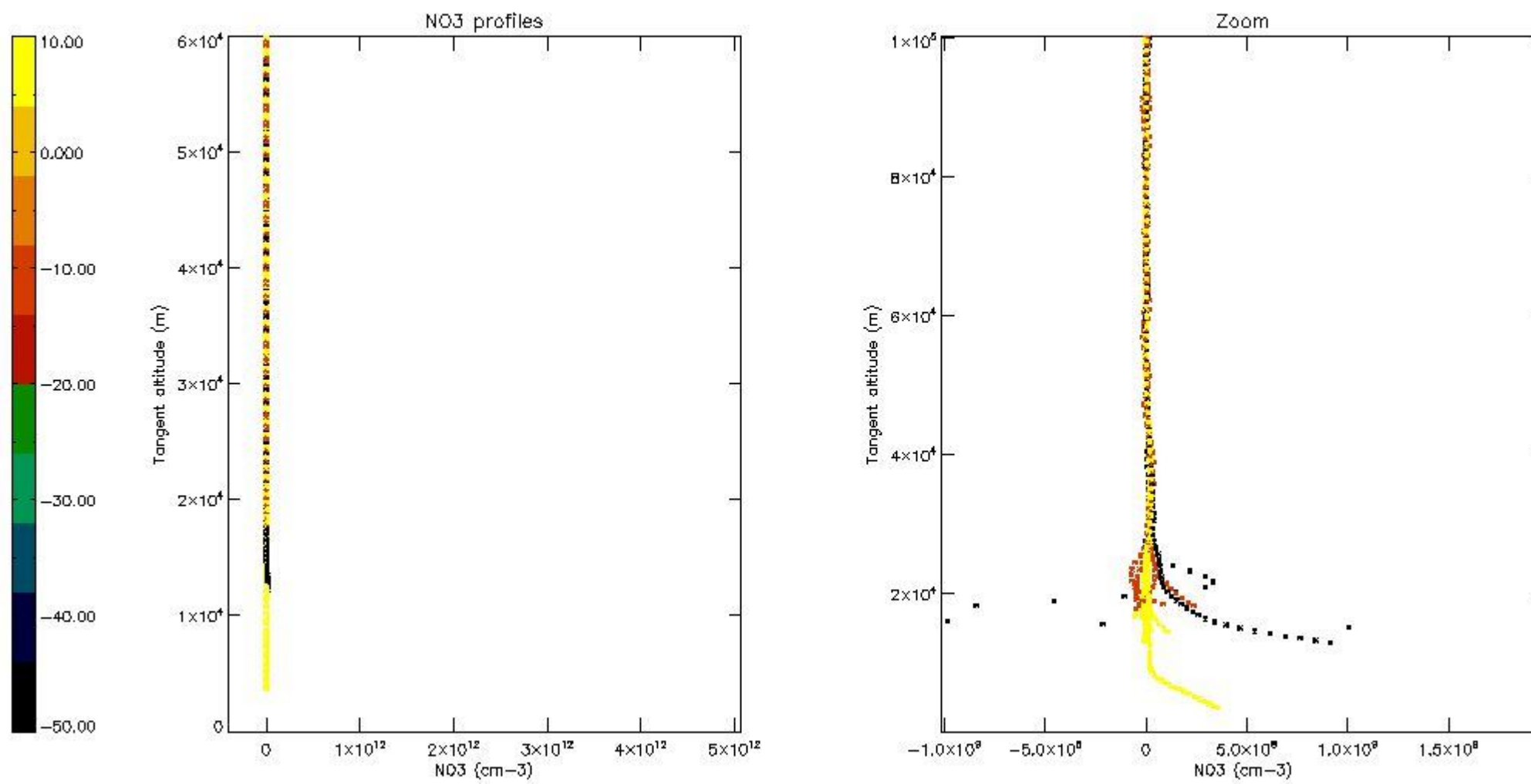
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



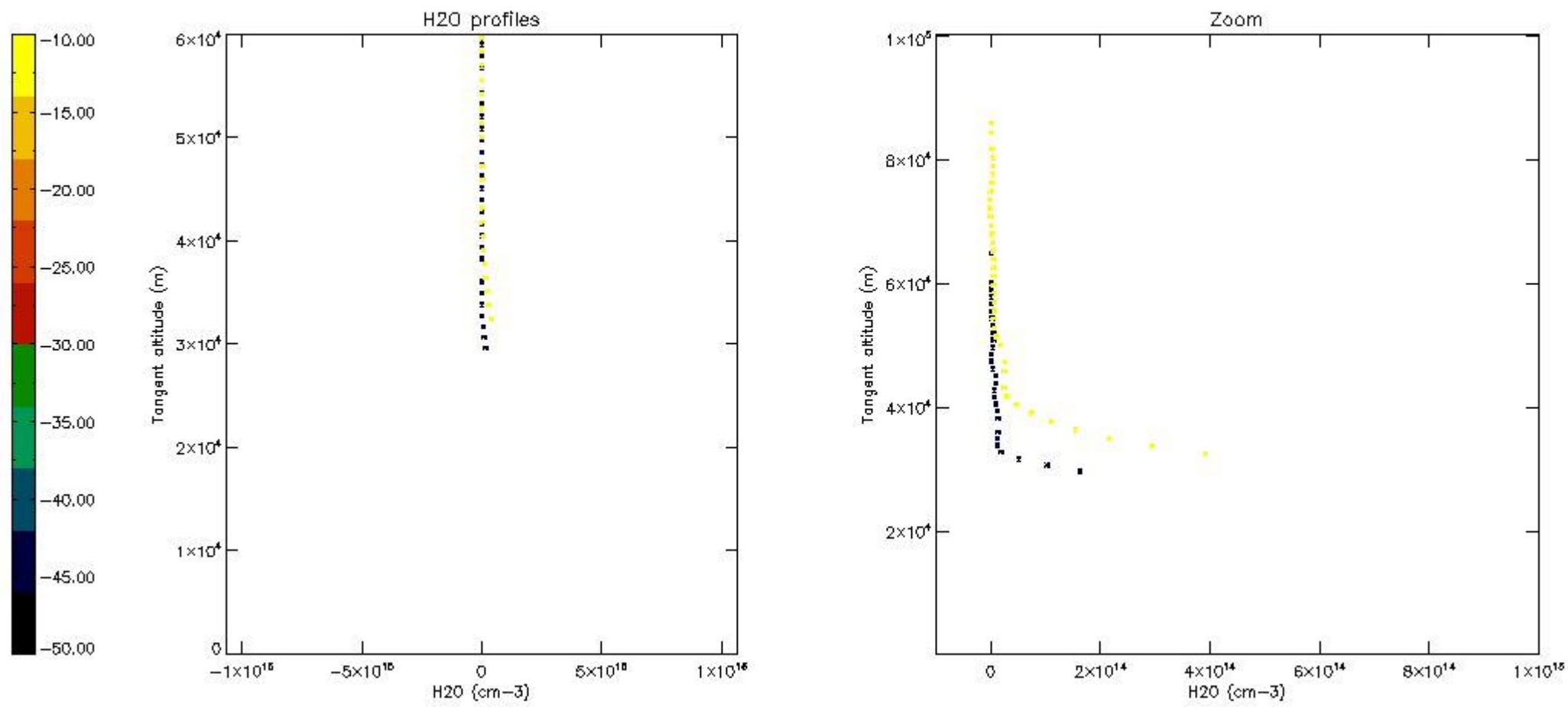
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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.

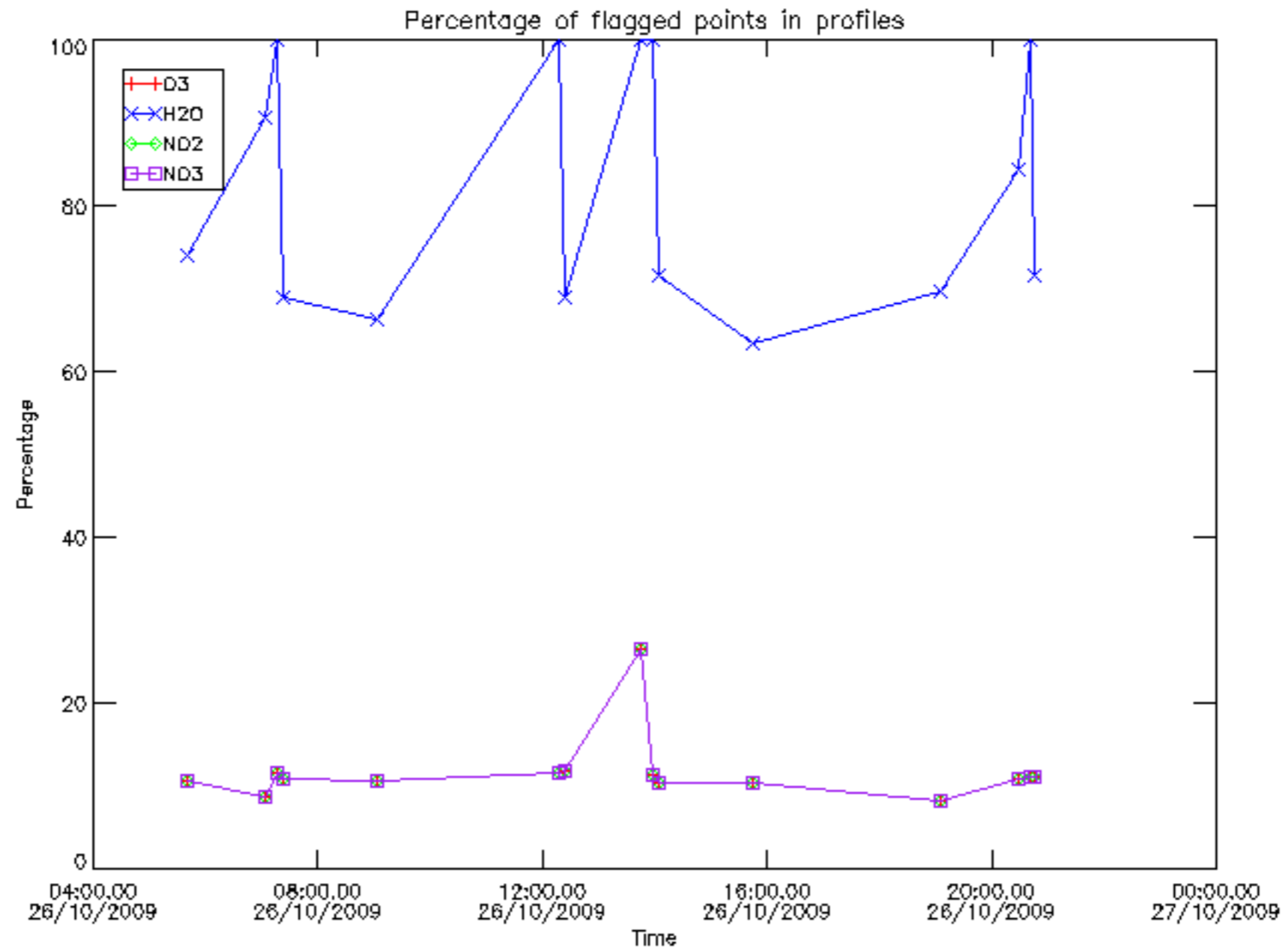


## 6. Auxiliary Data Files used for the production reported in section 2

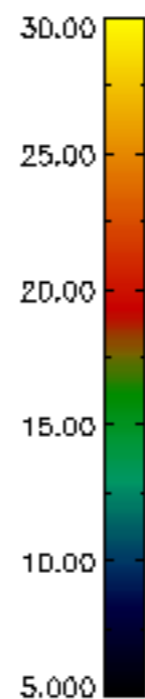
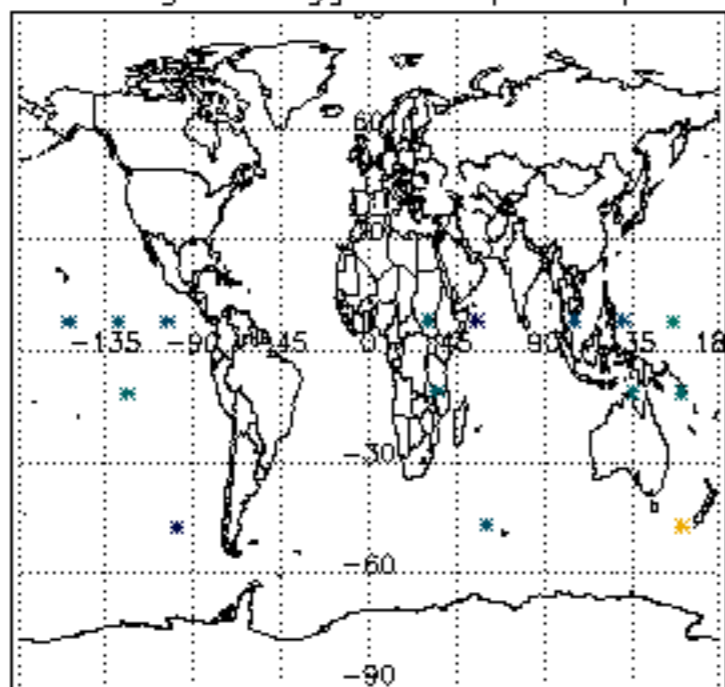
The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	26-OCT-2009 01:14:35
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-OCT-2009 01:14:35
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-OCT-2009 01:14:35

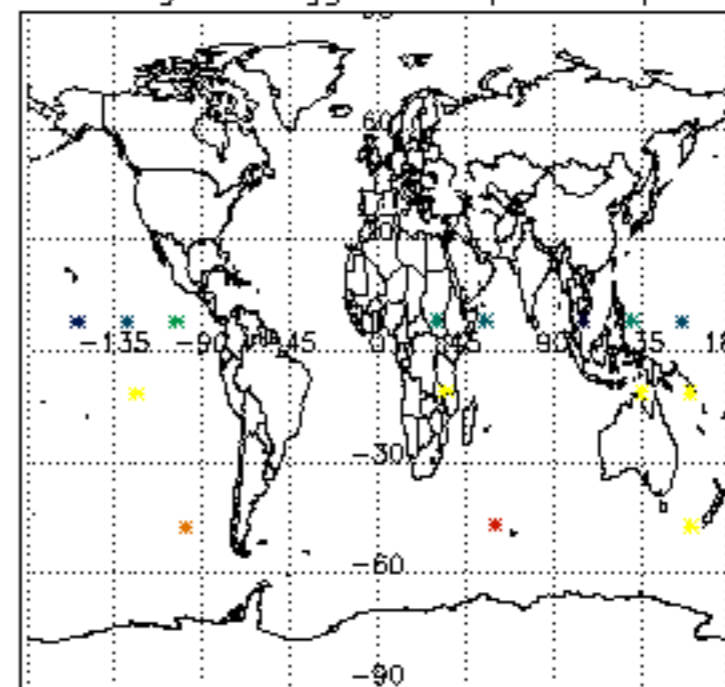




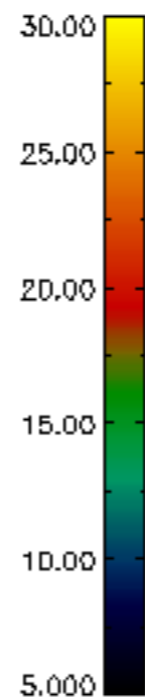
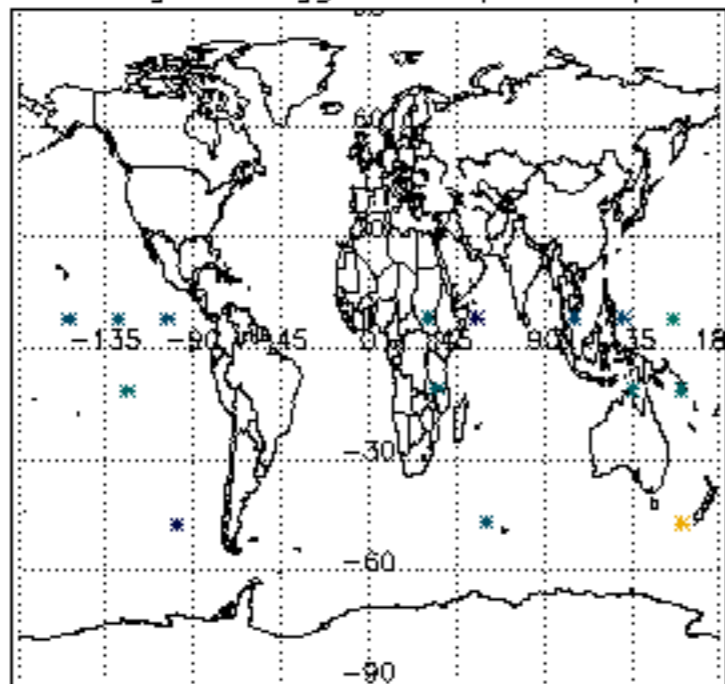
Percentage of flagged data per D3 profile



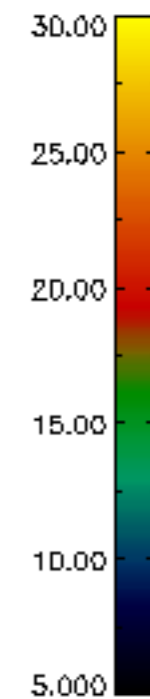
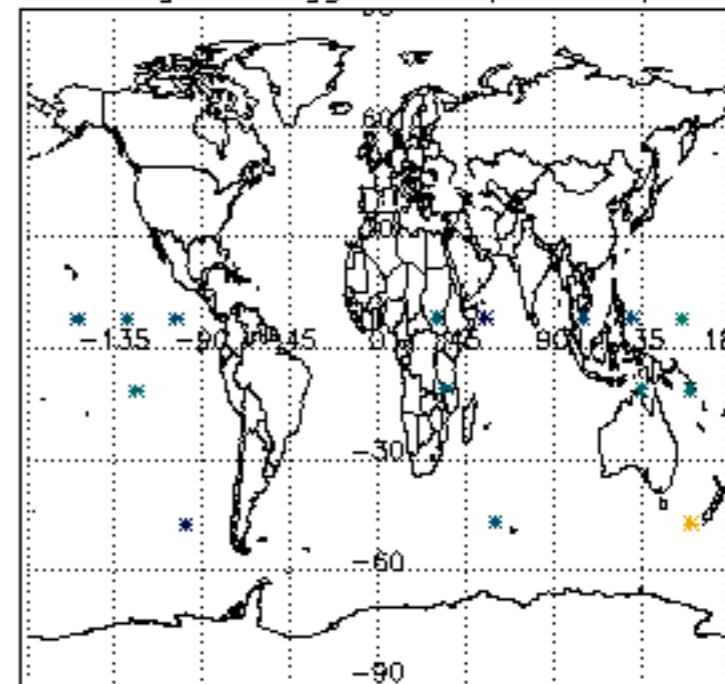
Percentage of flagged data per H2O profile

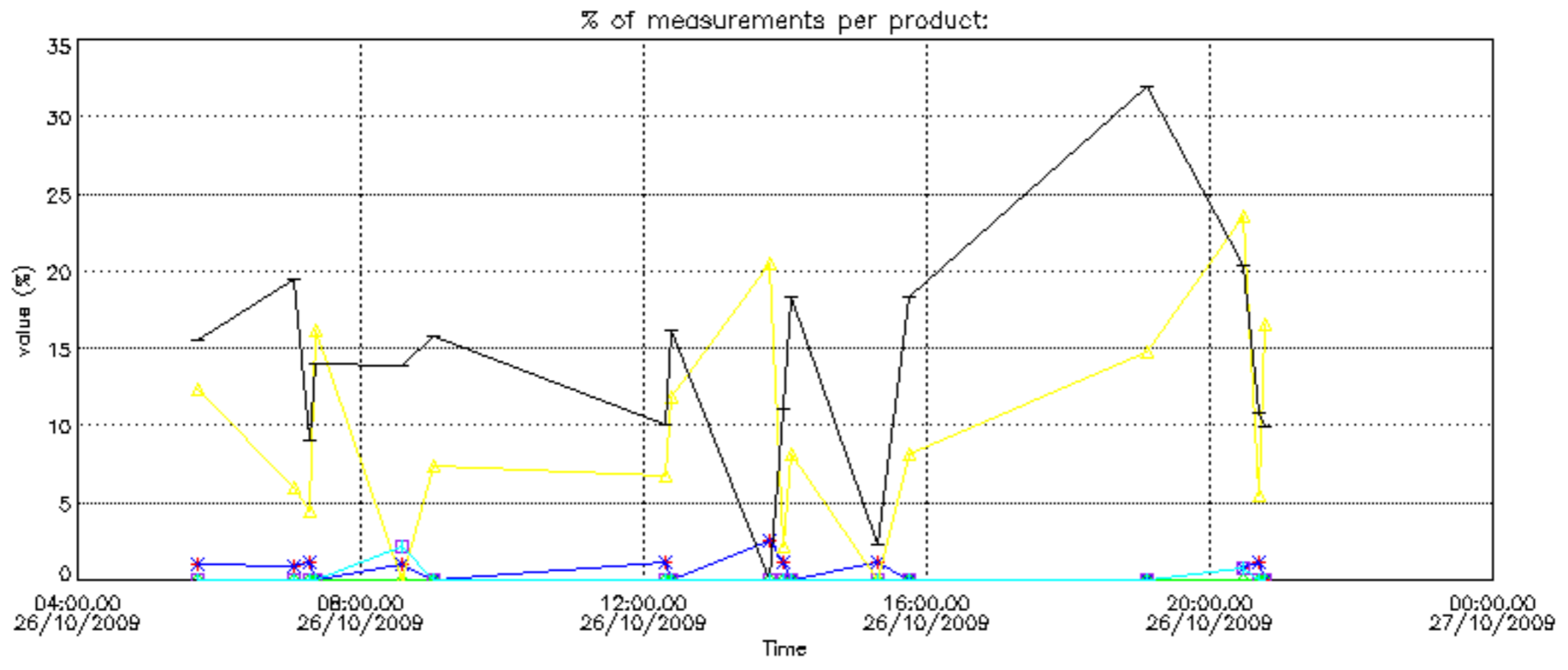


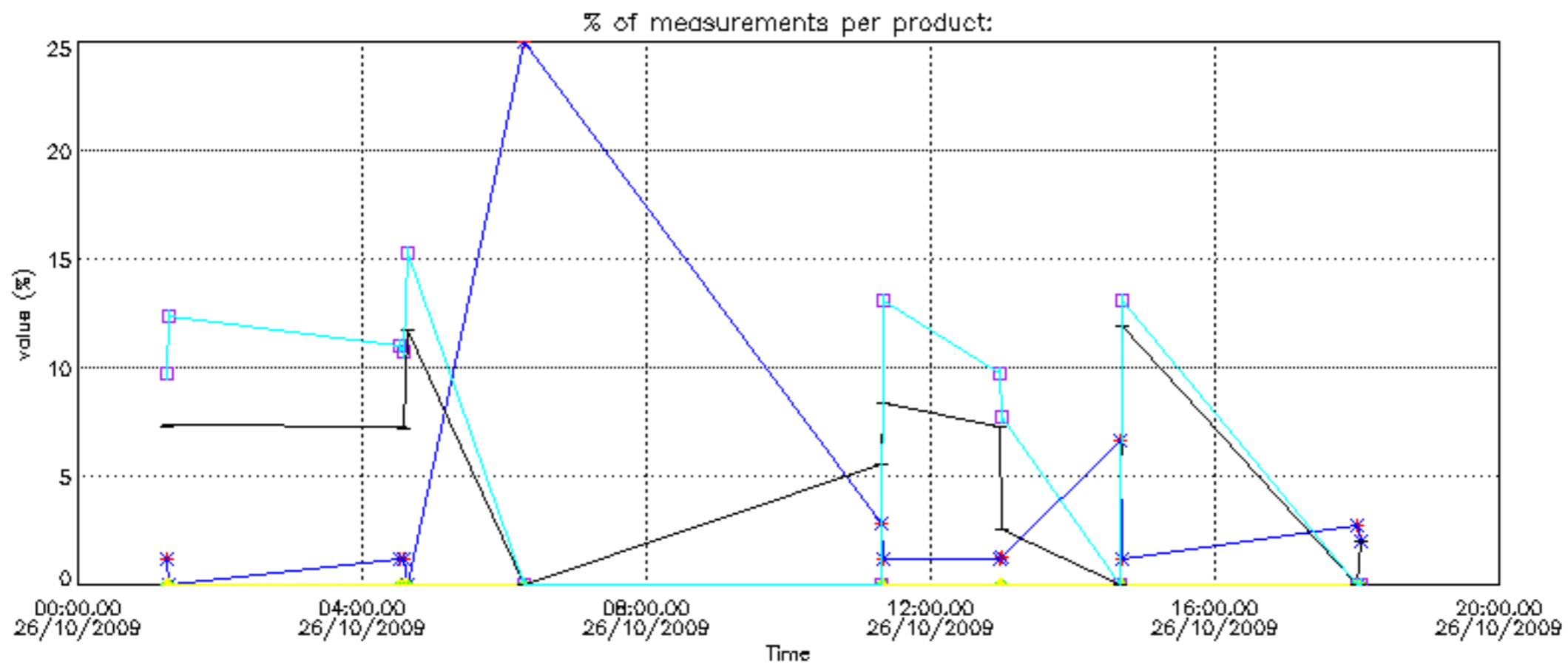
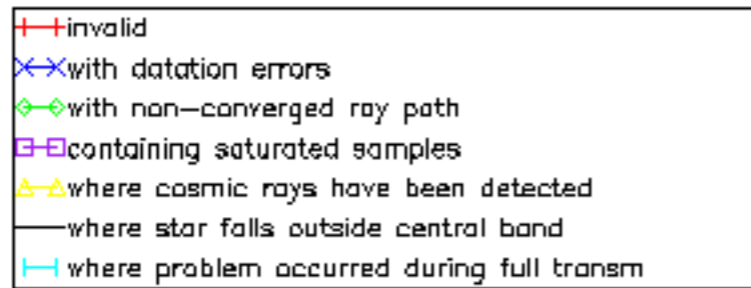
Percentage of flagged data per NO2 profile



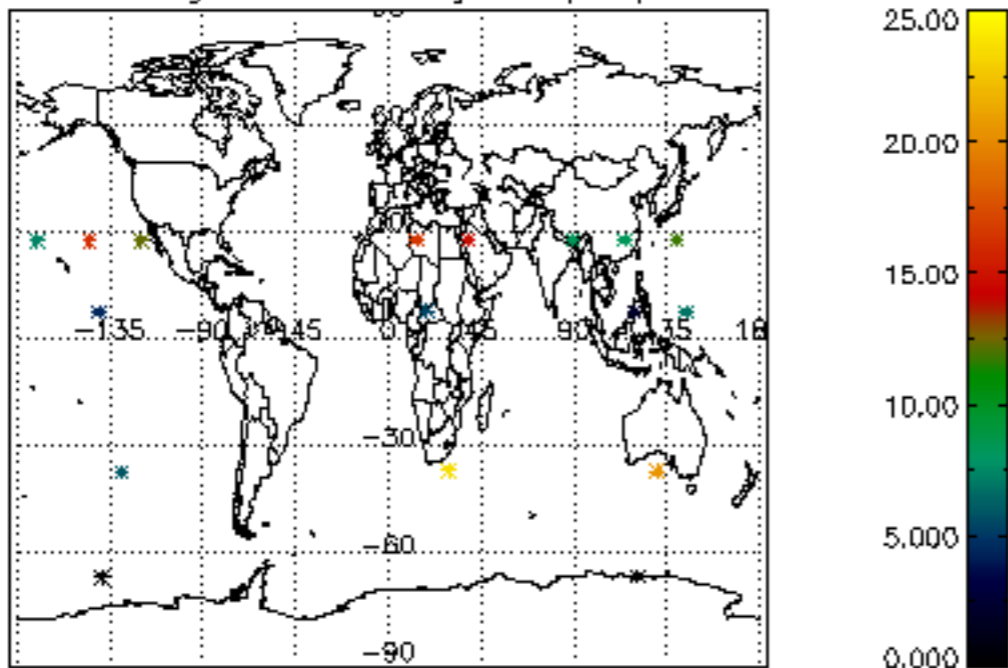
Percentage of flagged data per NO3 profile



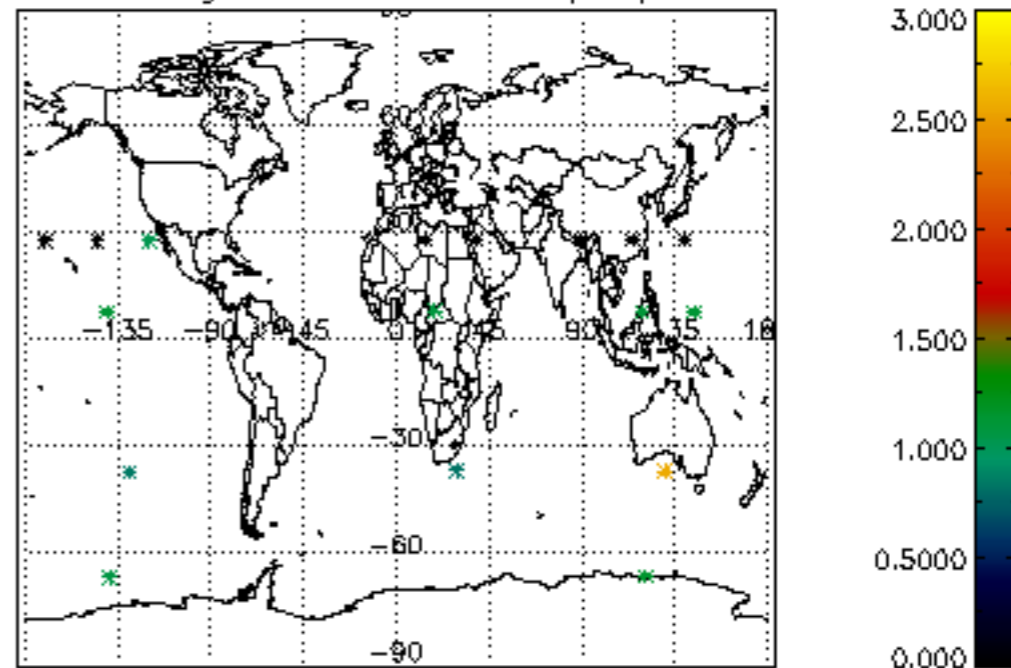




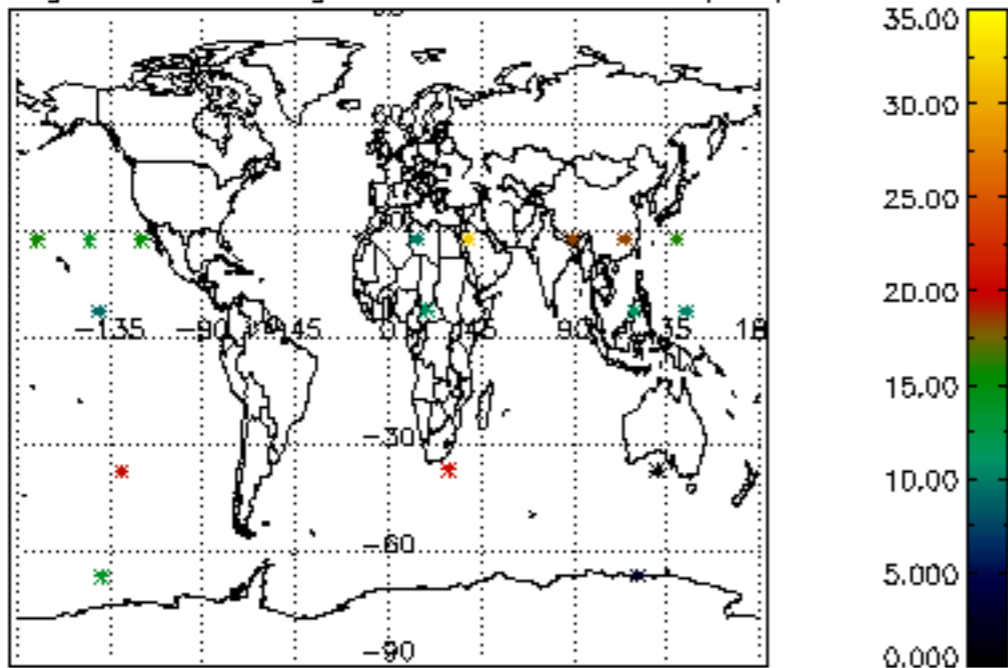
Percentage of cosmic ray hits per profile



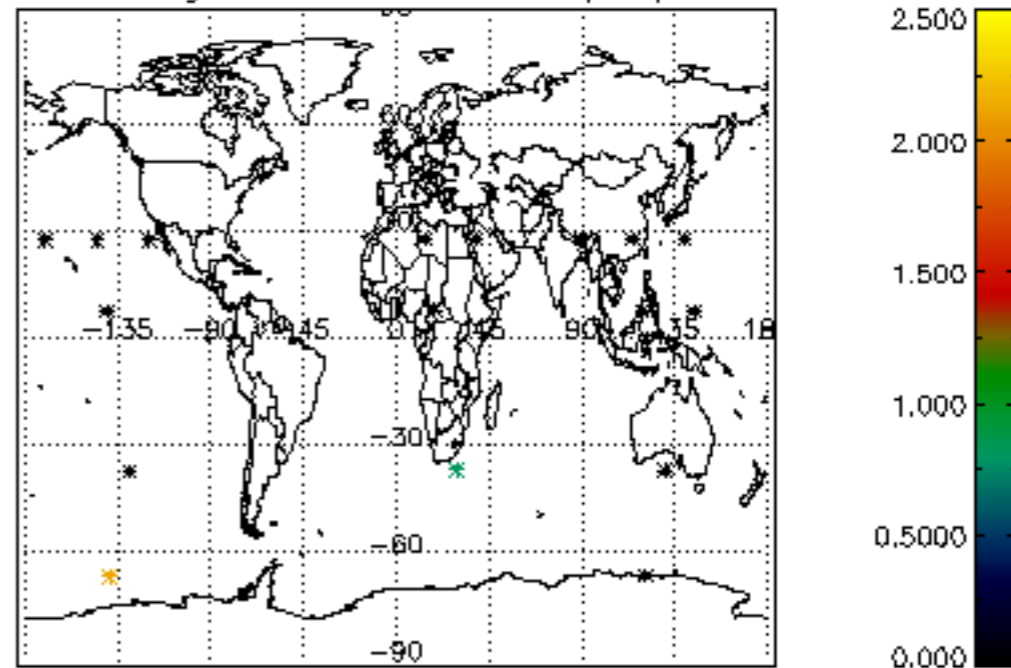
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

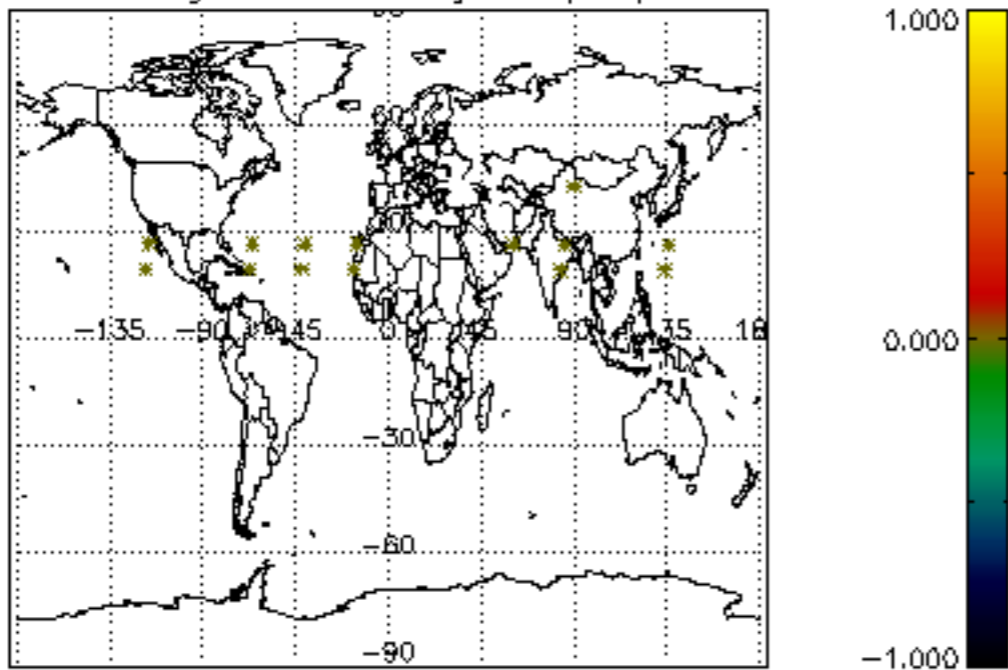


Percentage of saturation errors per profile

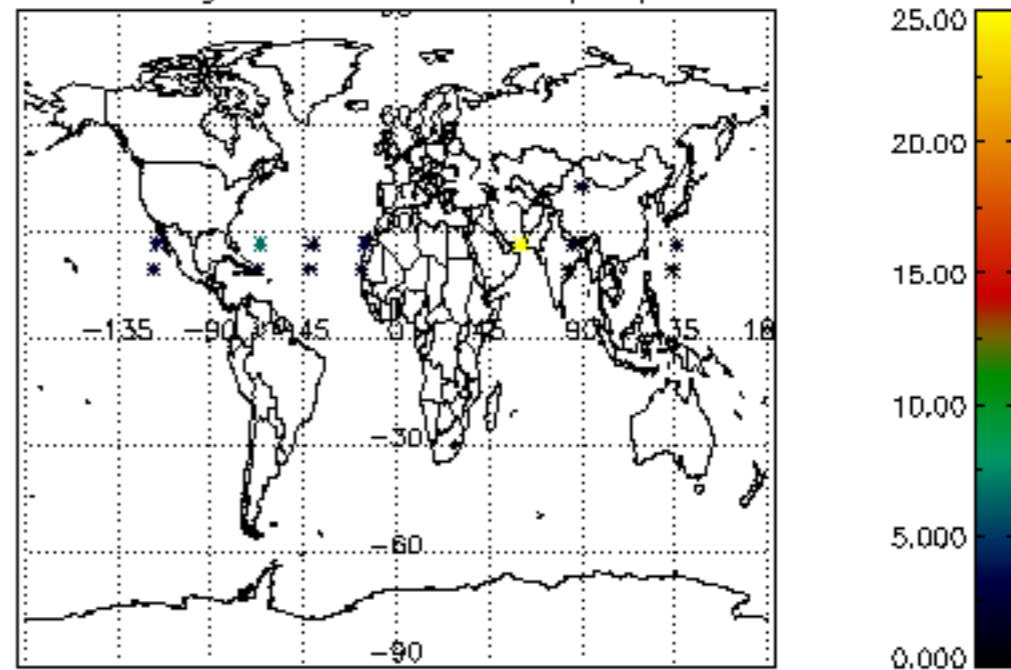




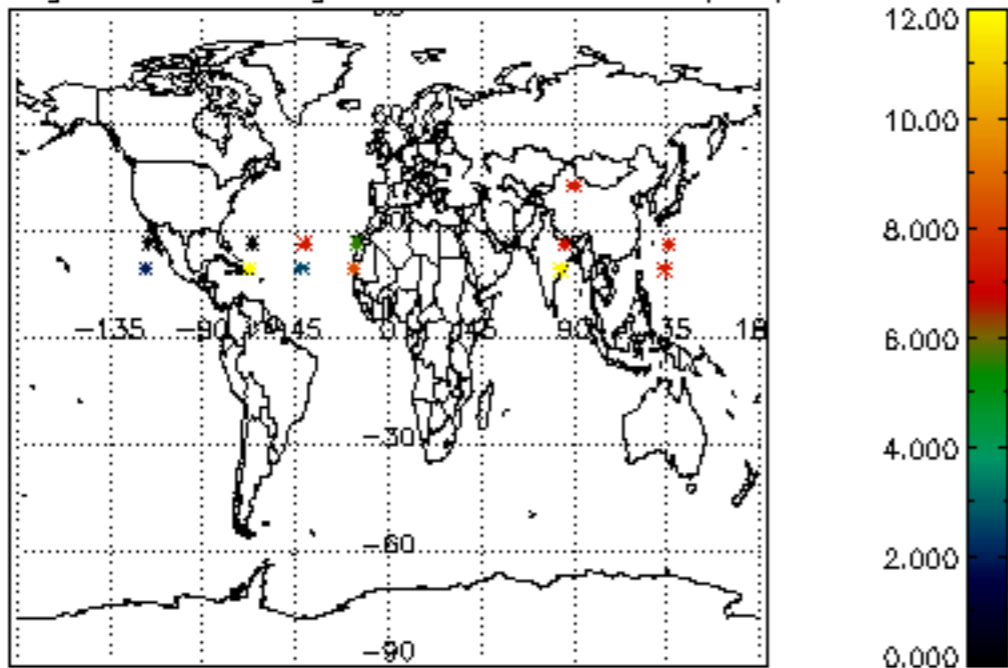
Percentage of cosmic ray hits per profile



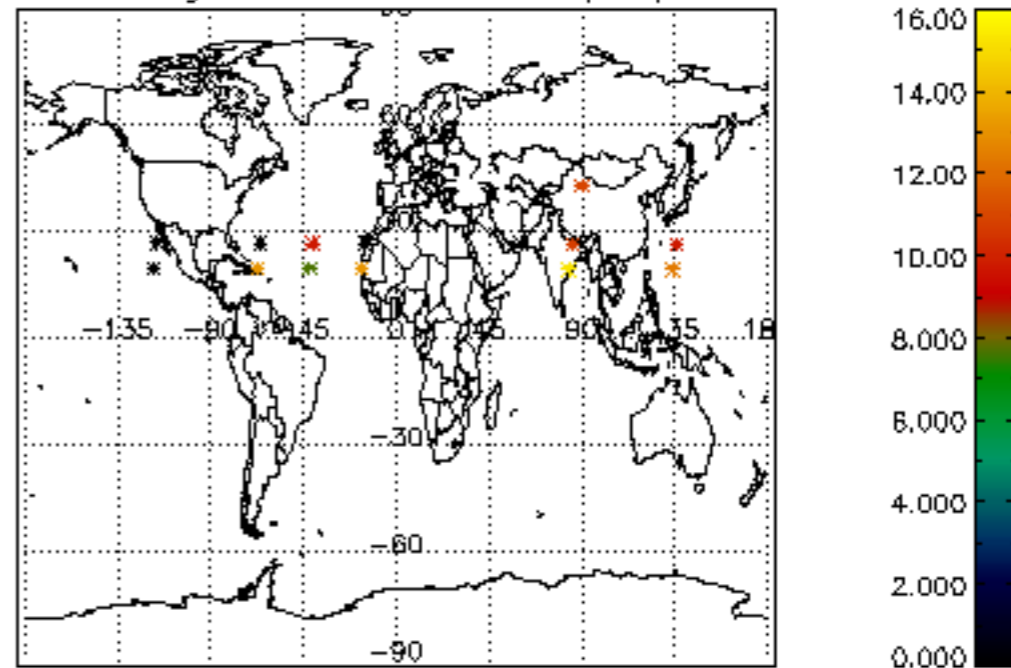
Percentage of datation errors per profile

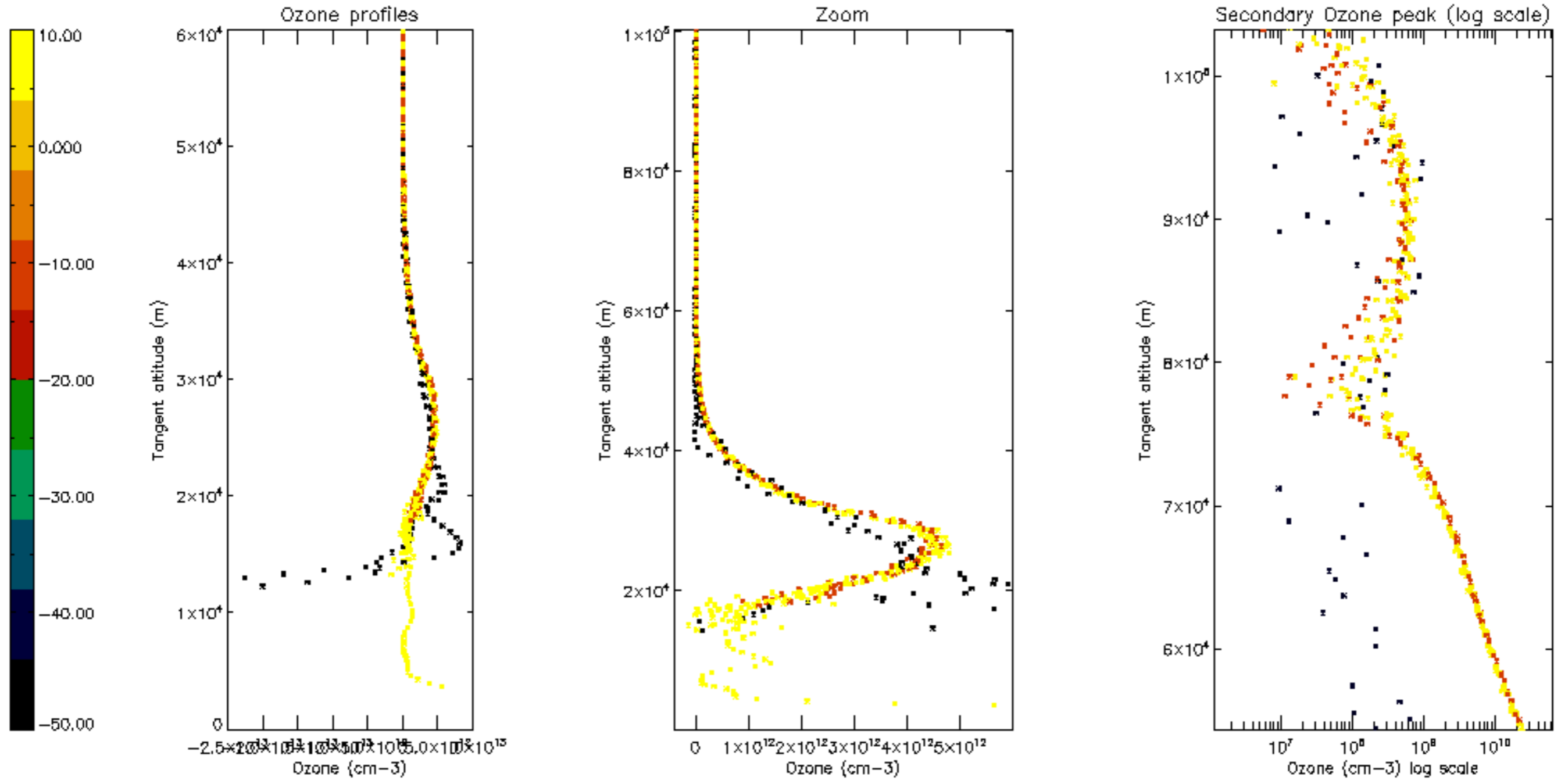


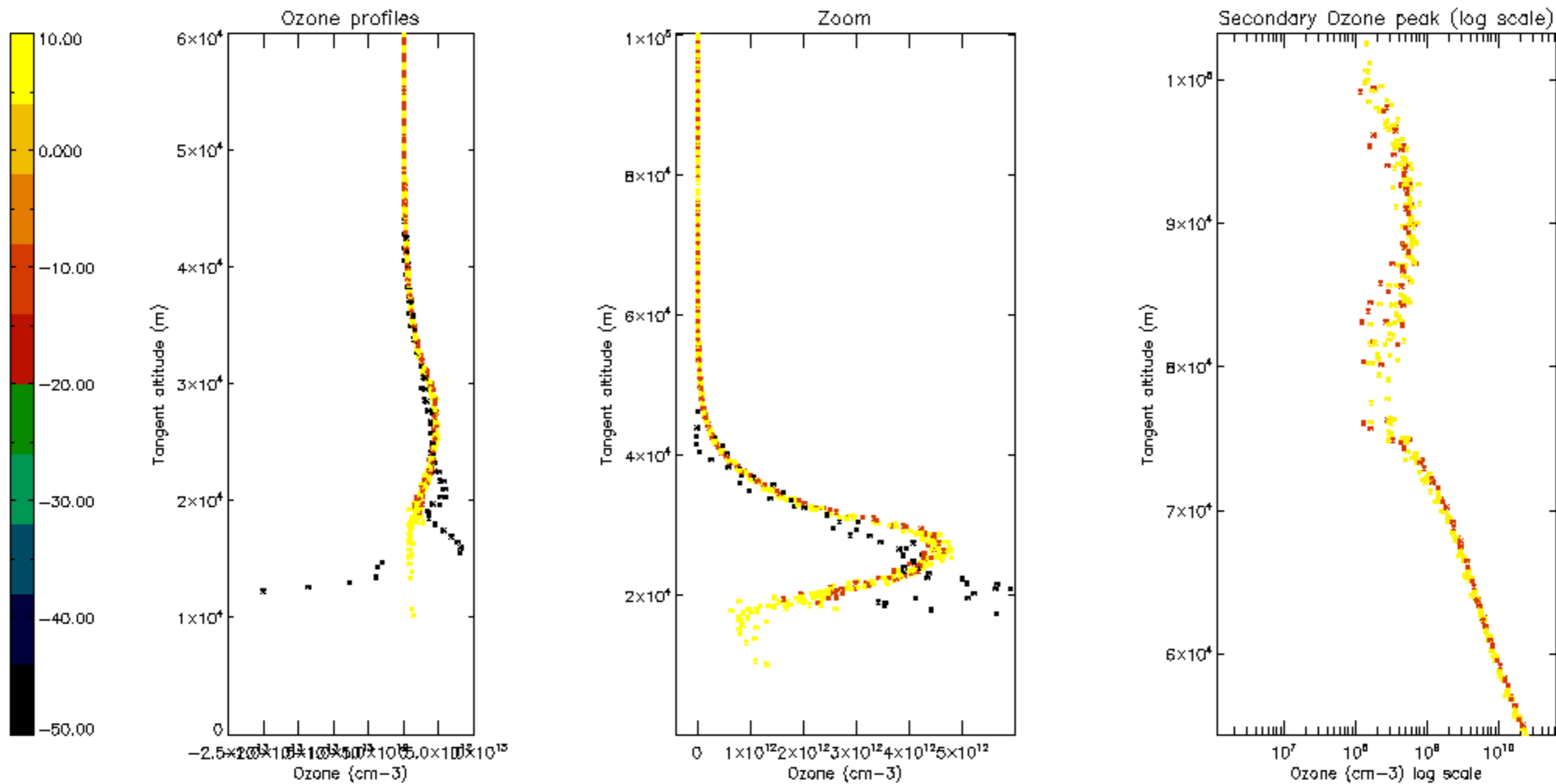
Percentage of star falling outside central band per profile

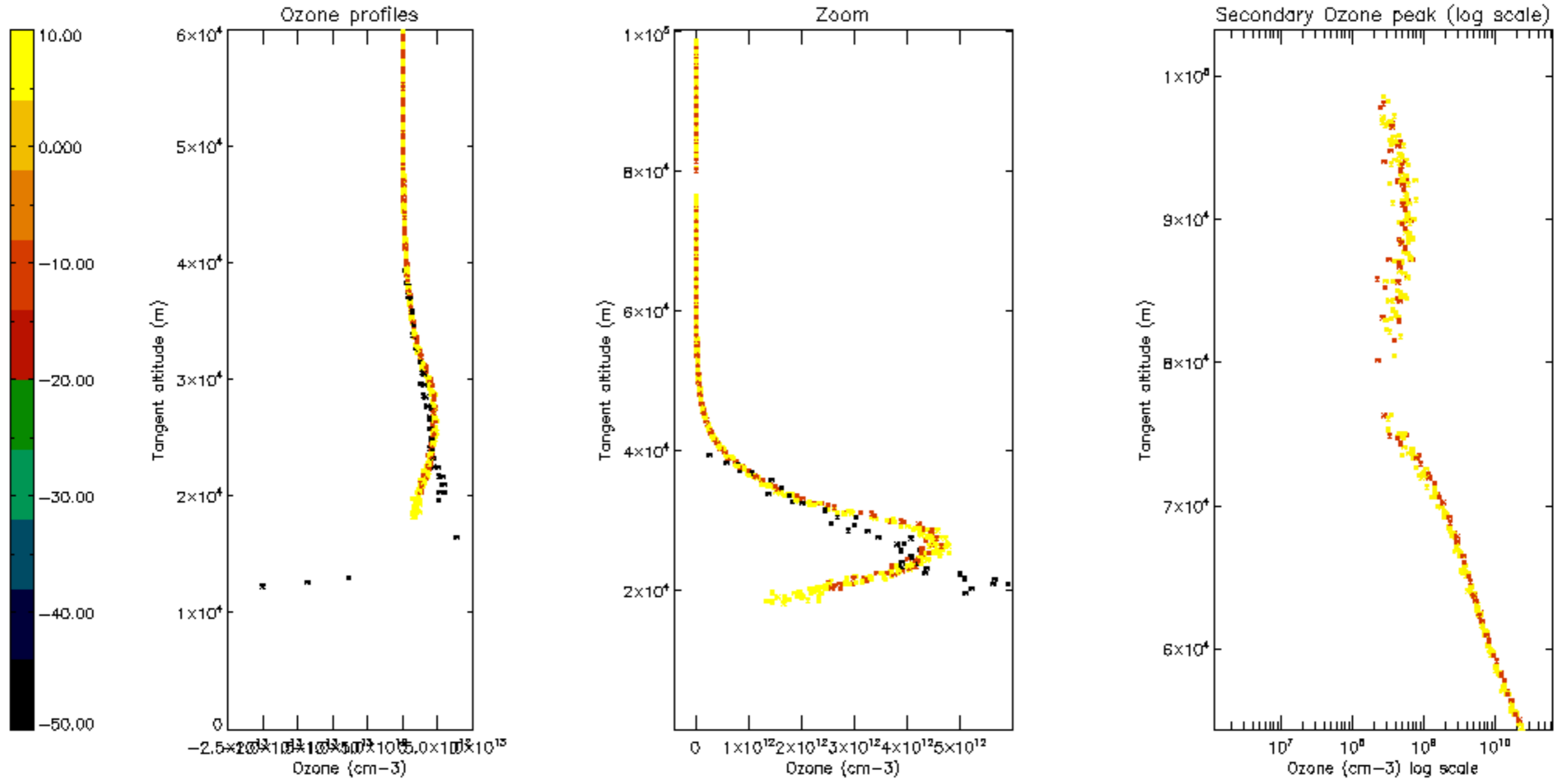


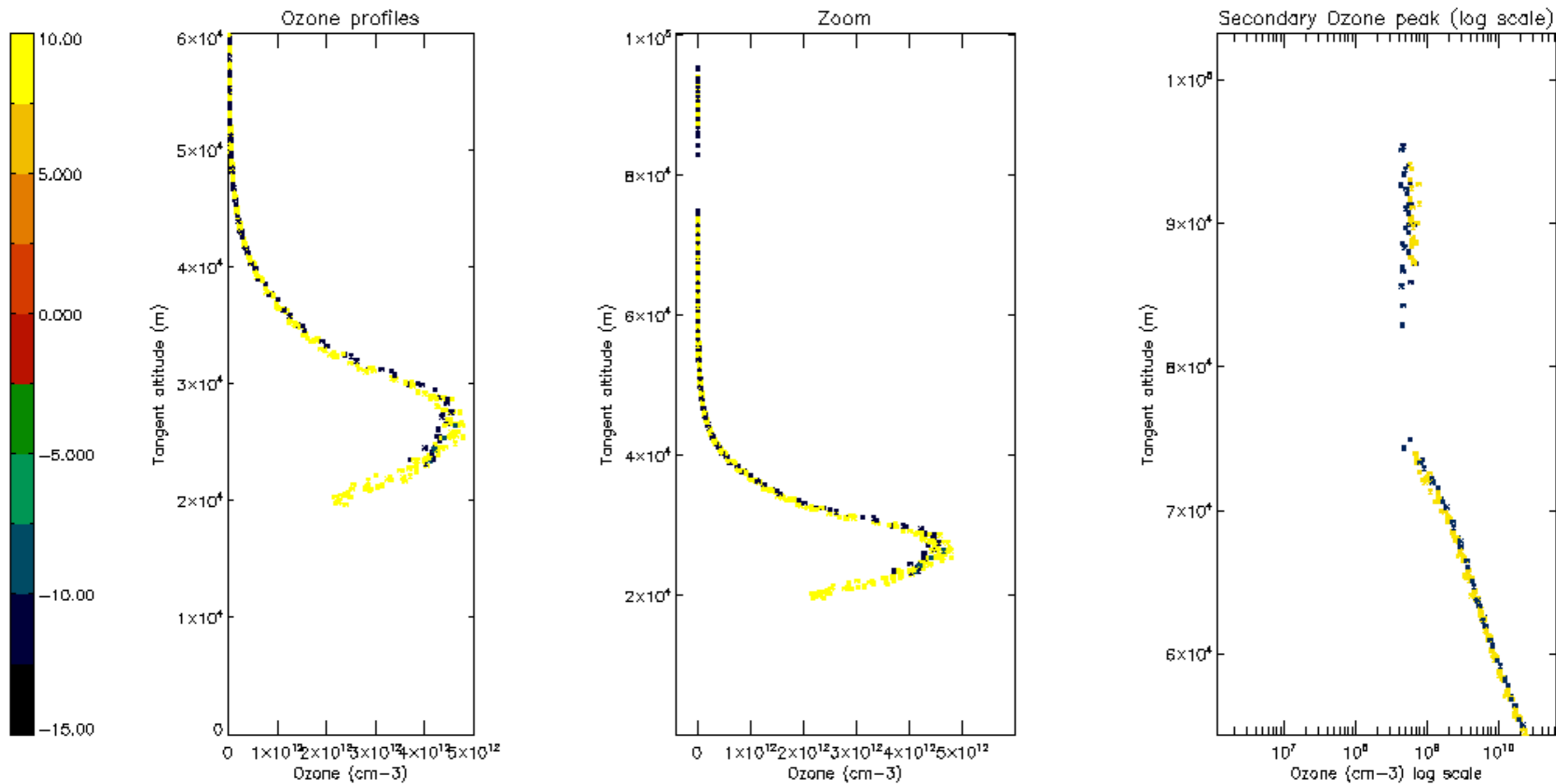
Percentage of saturation errors per profile



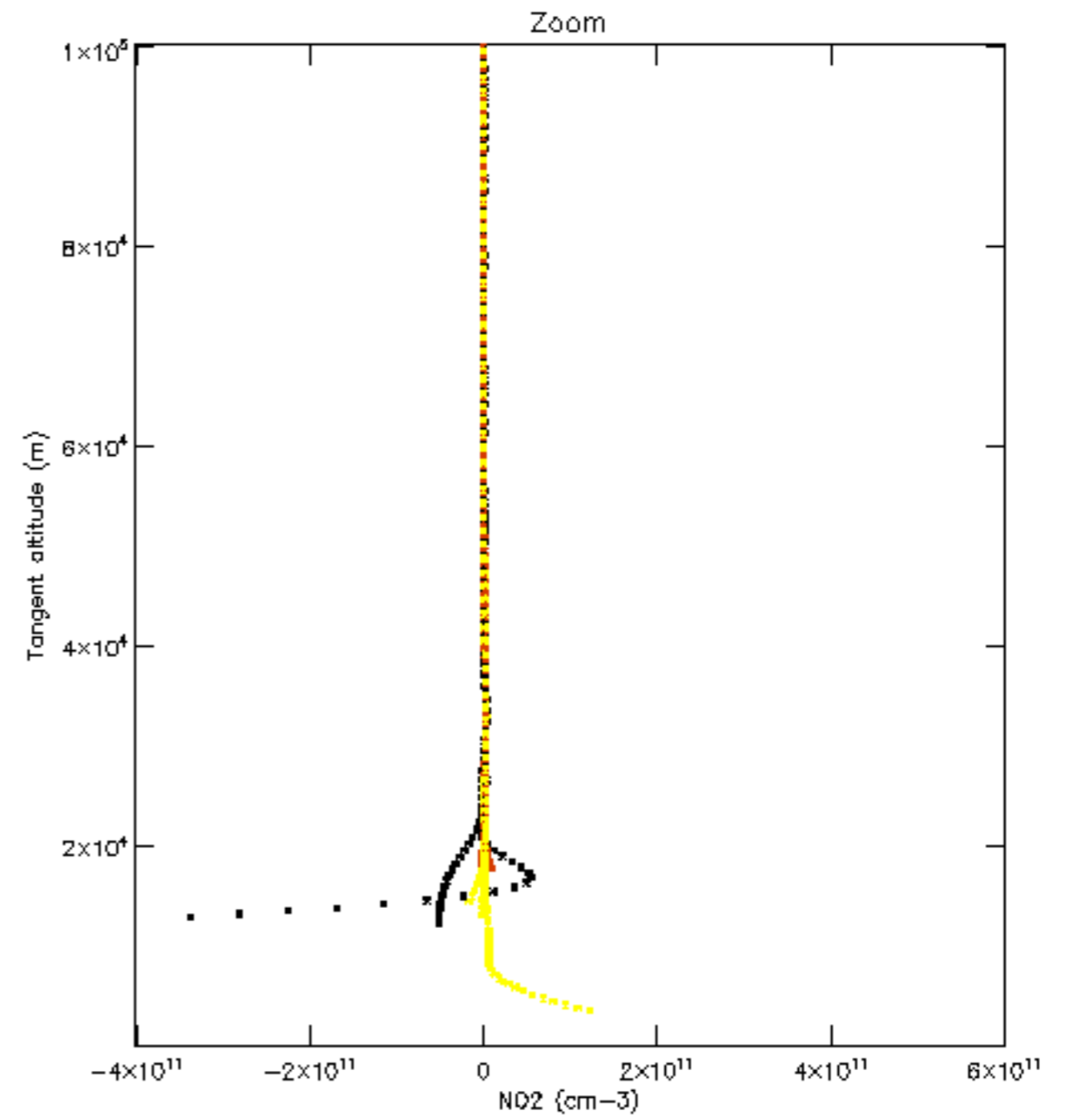
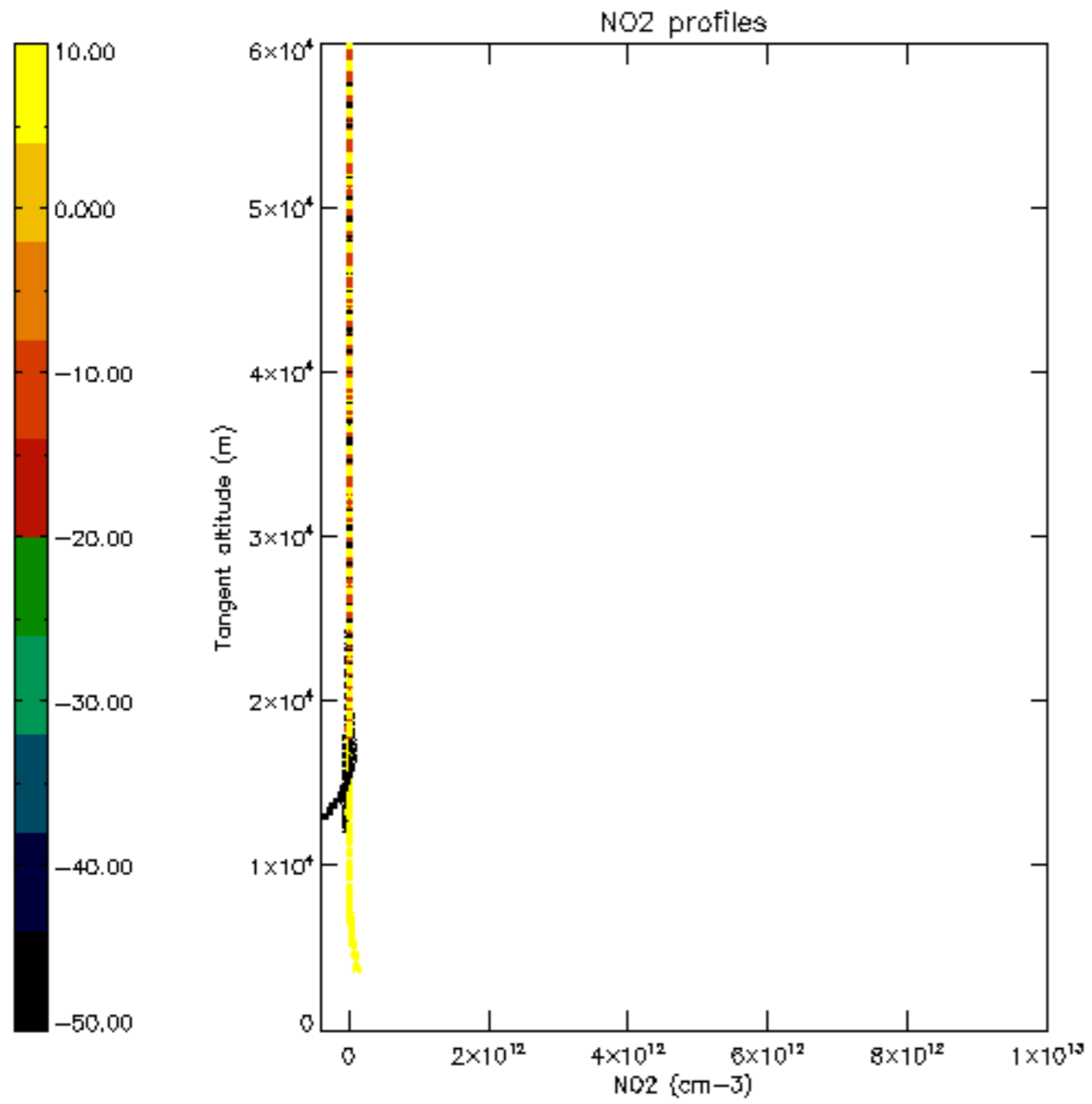


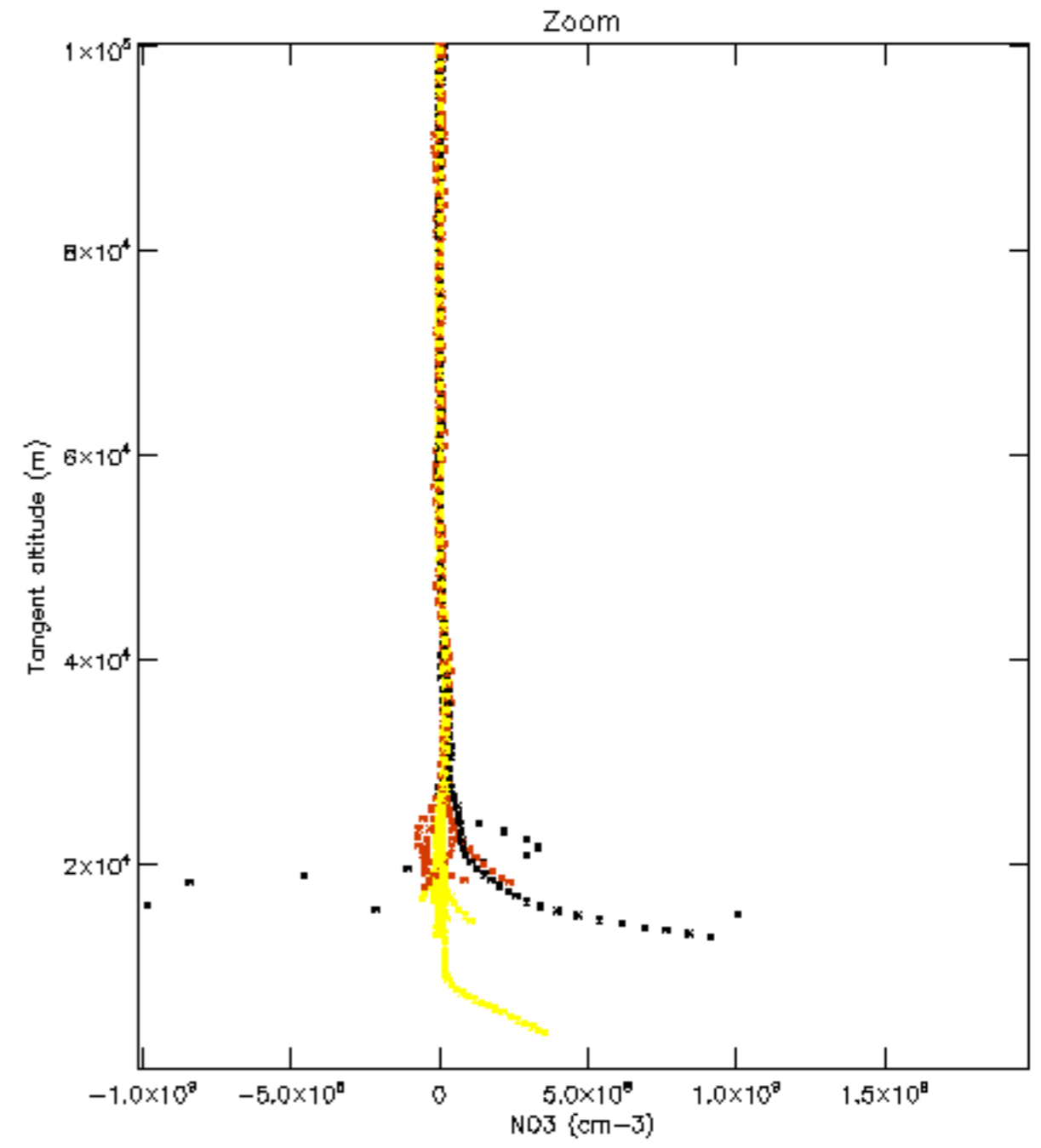
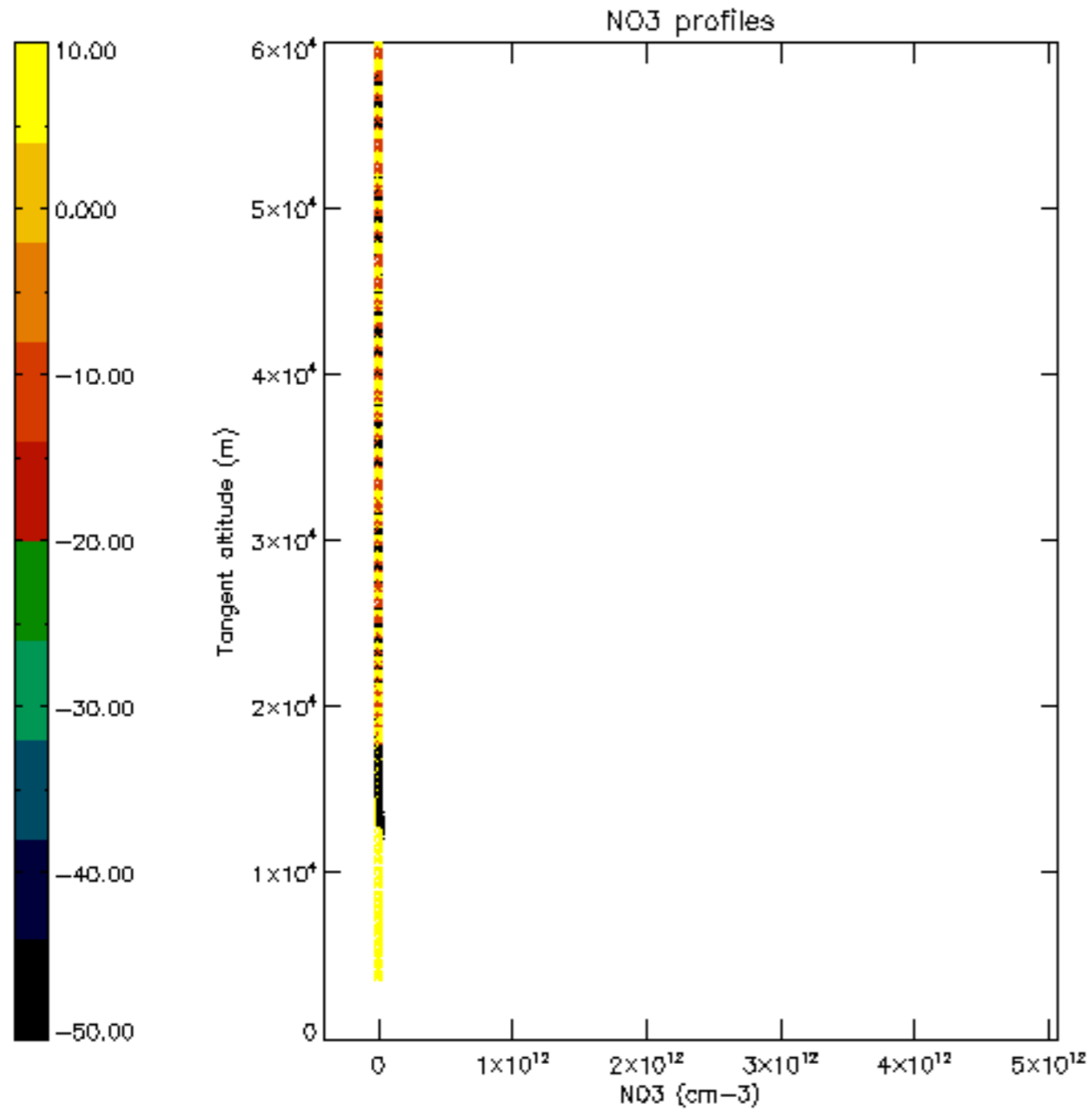


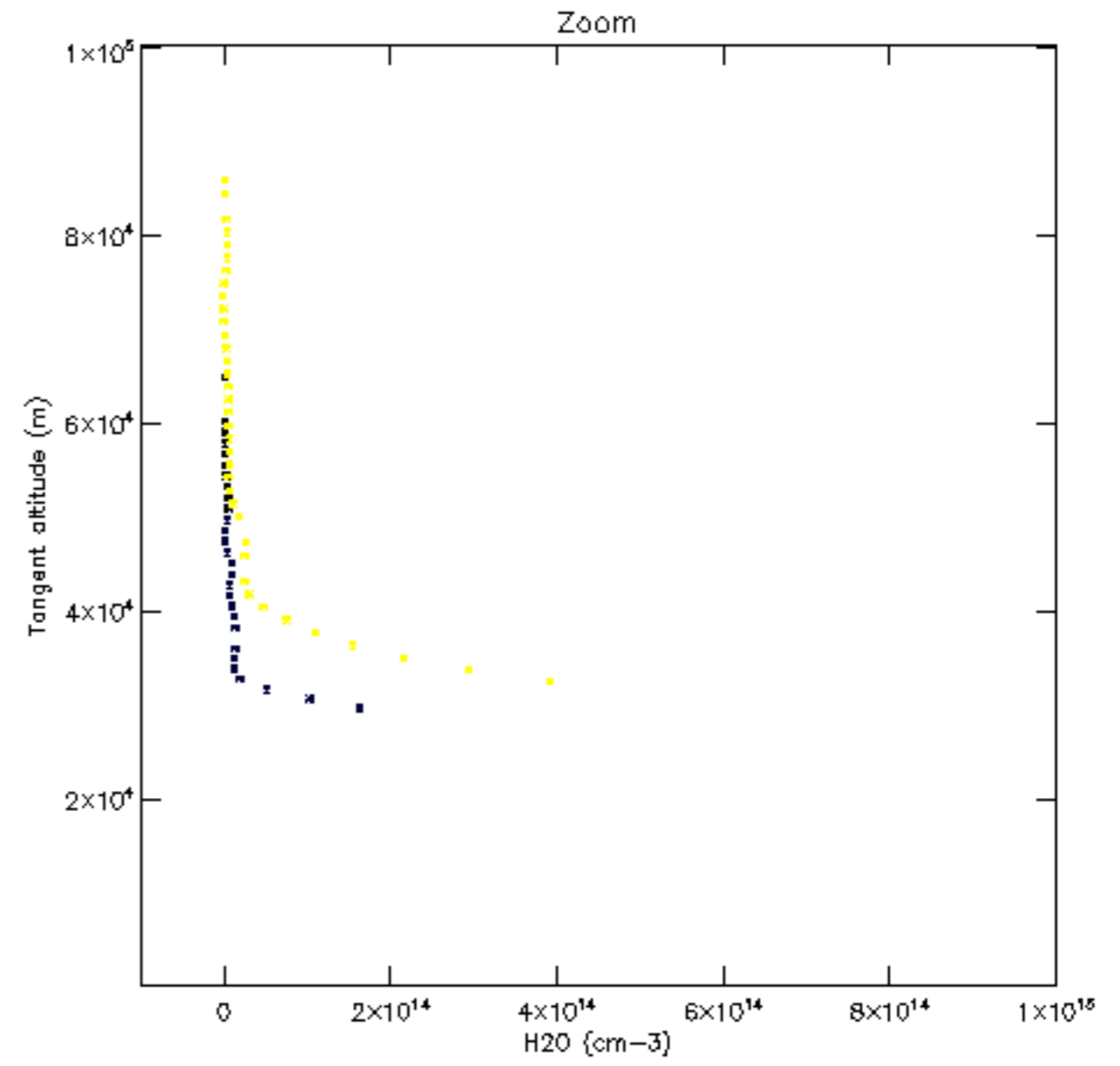
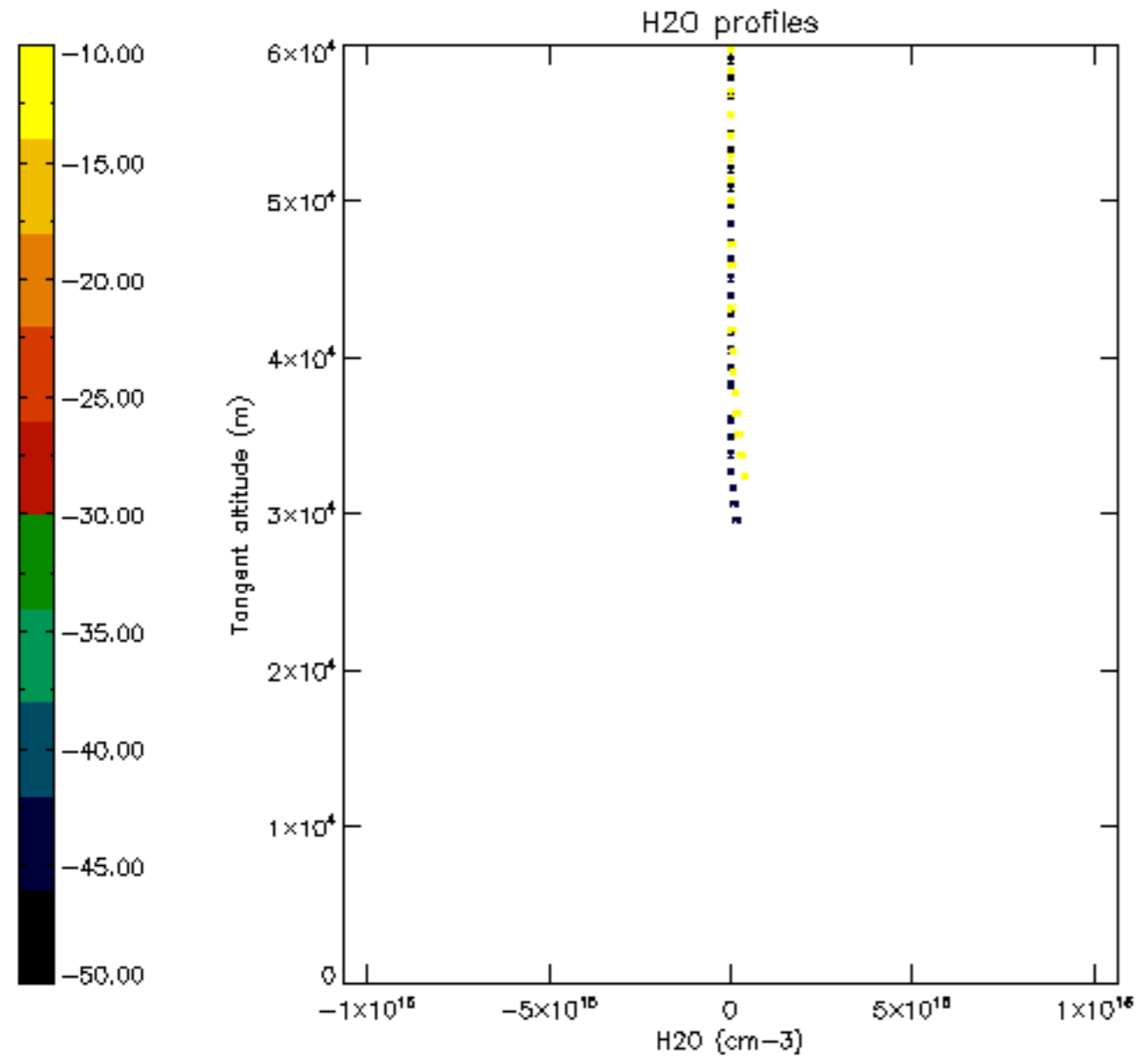


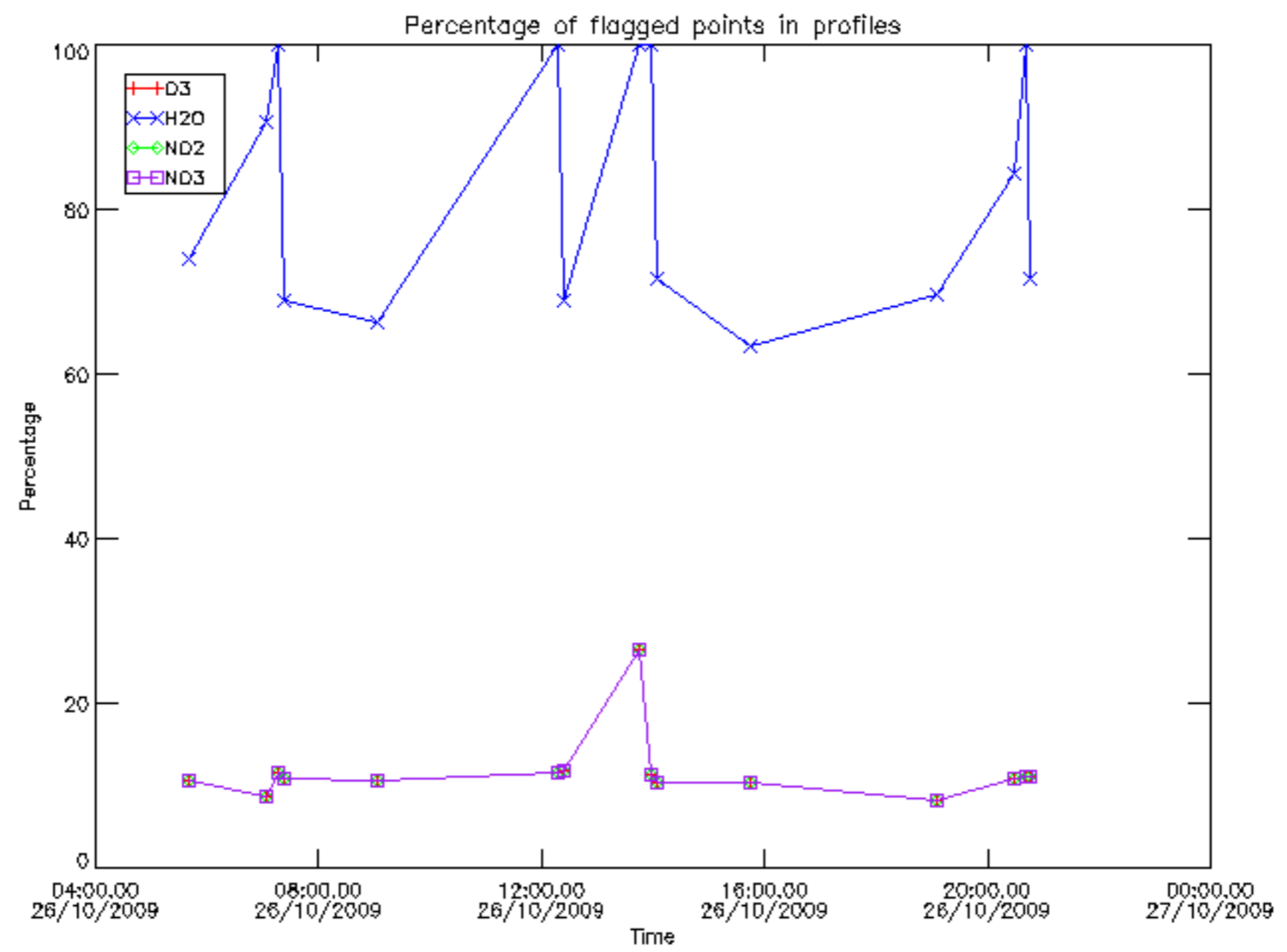




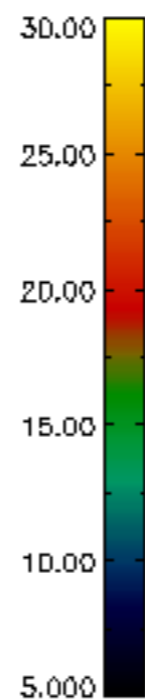
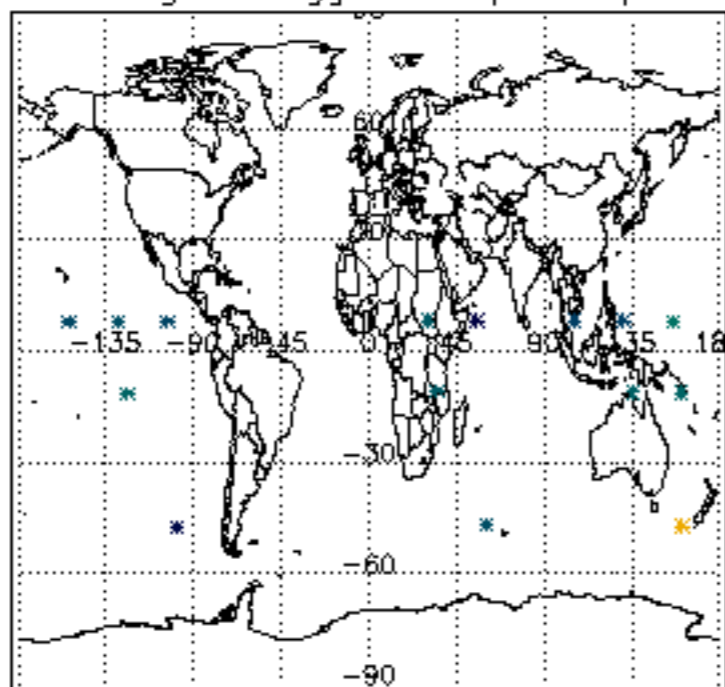




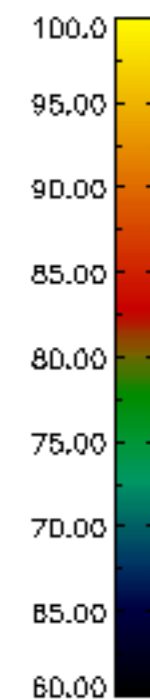
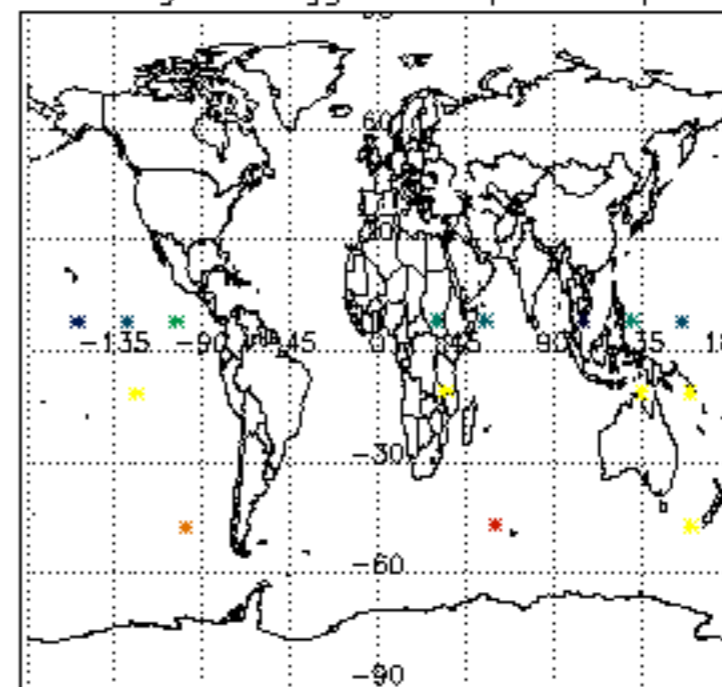




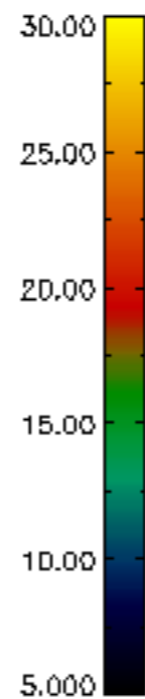
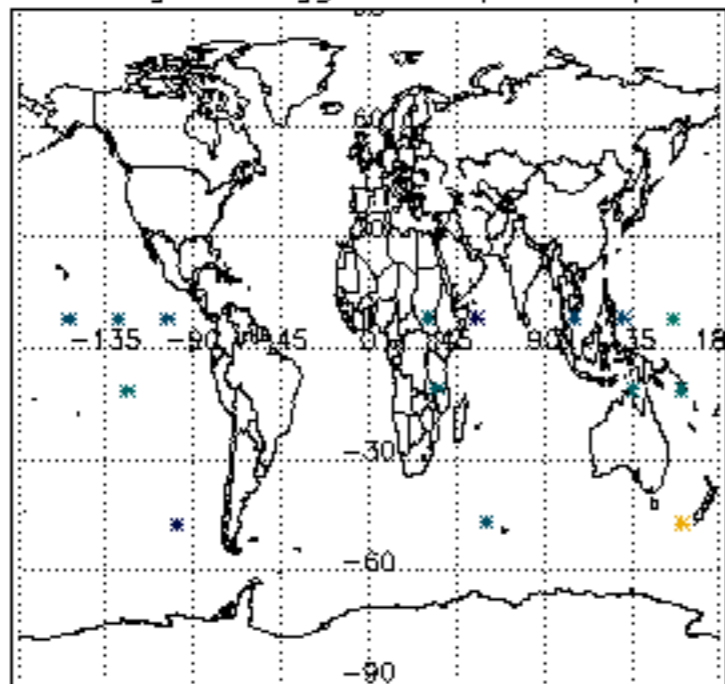
Percentage of flagged data per D3 profile



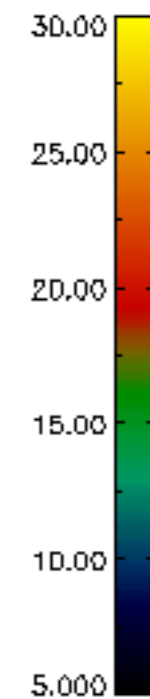
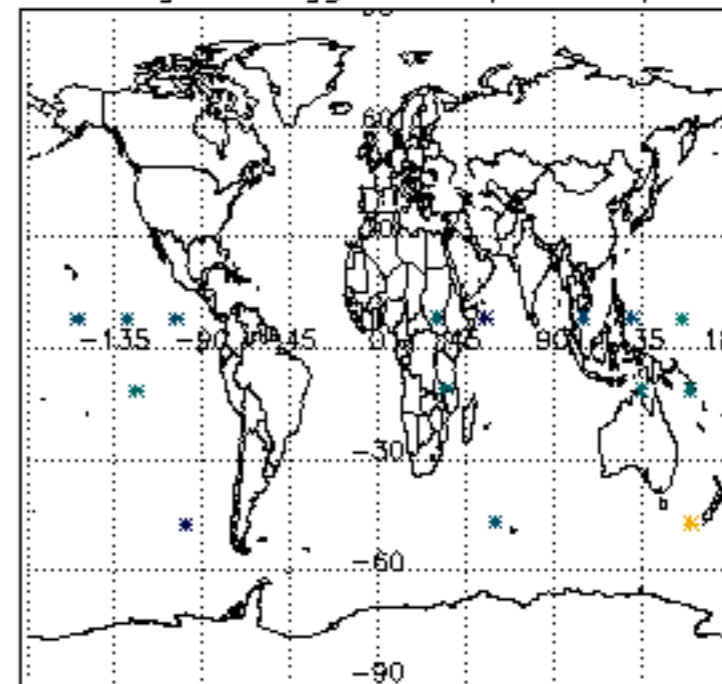
Percentage of flagged data per H2O profile



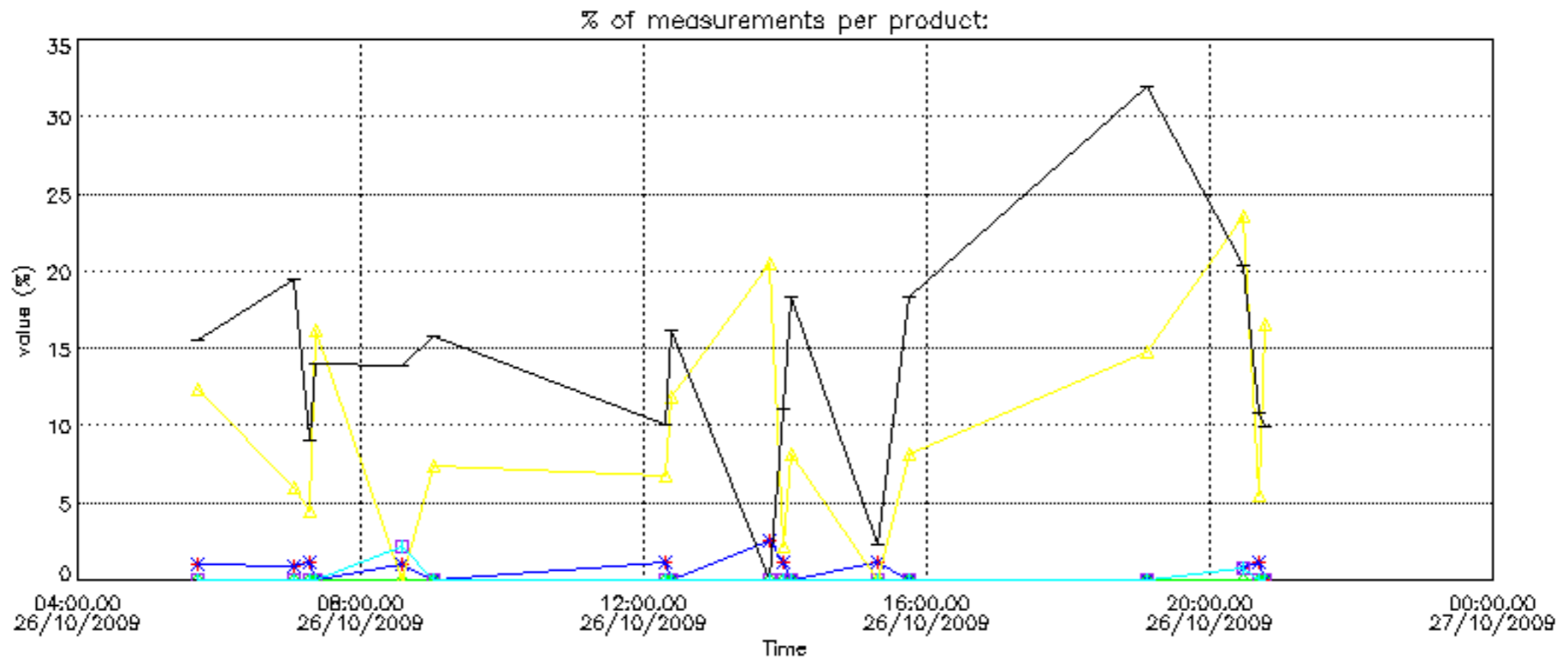
Percentage of flagged data per NO2 profile

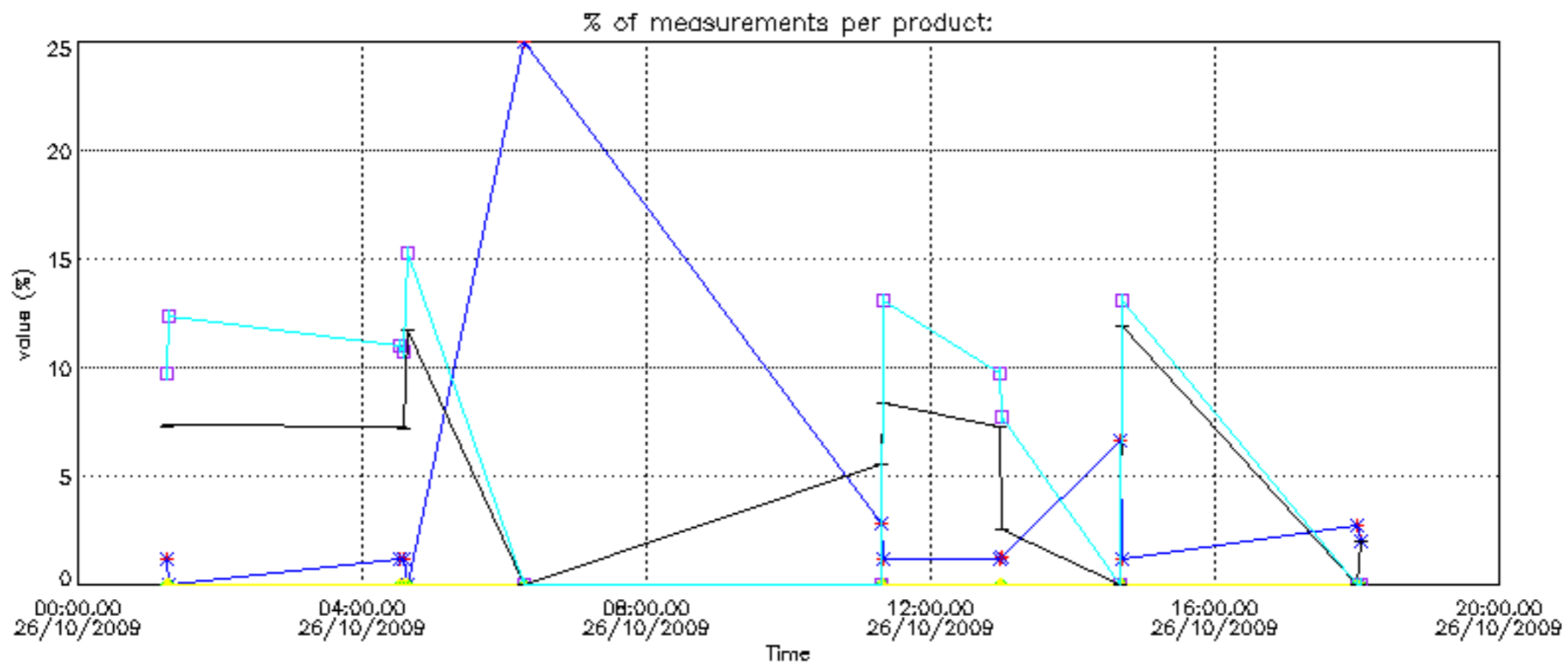
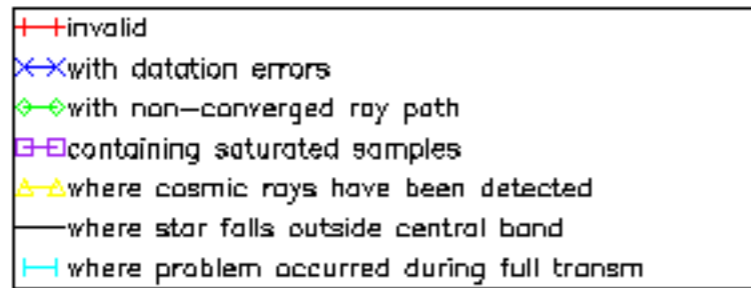


Percentage of flagged data per NO3 profile

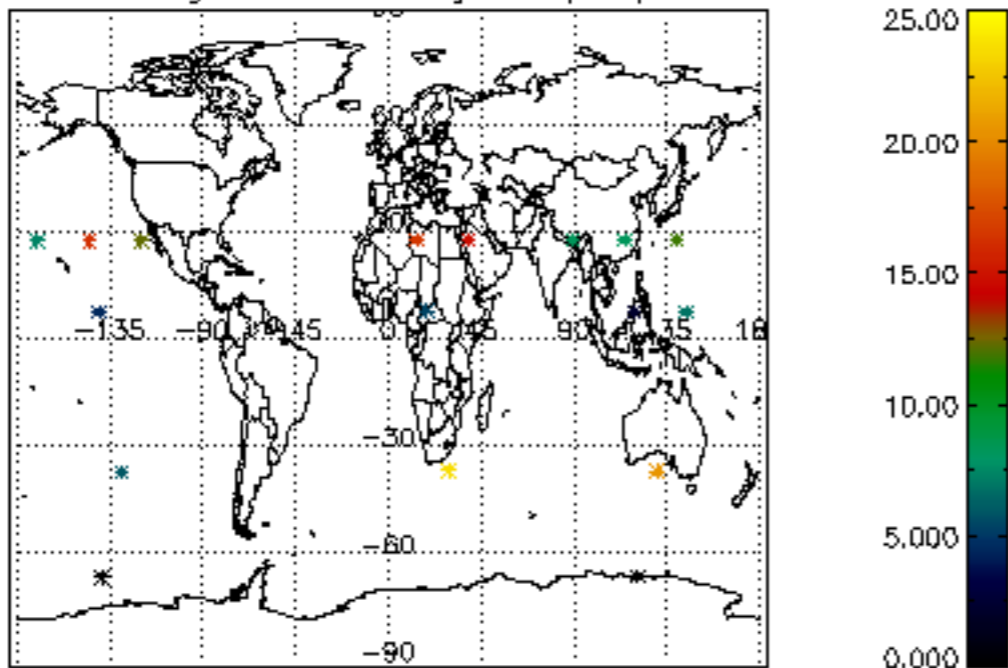




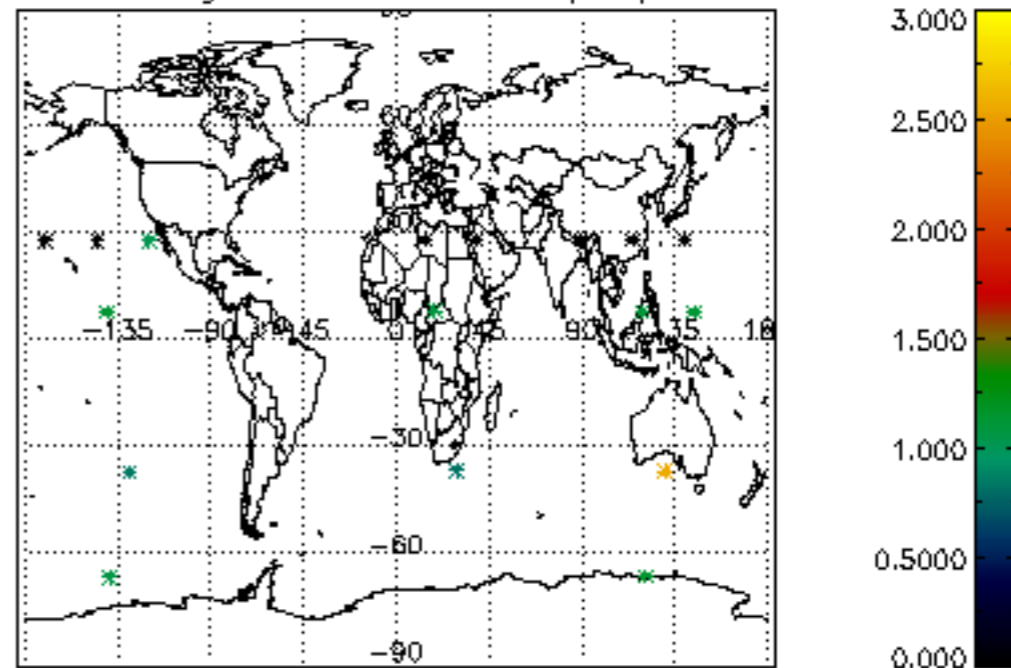




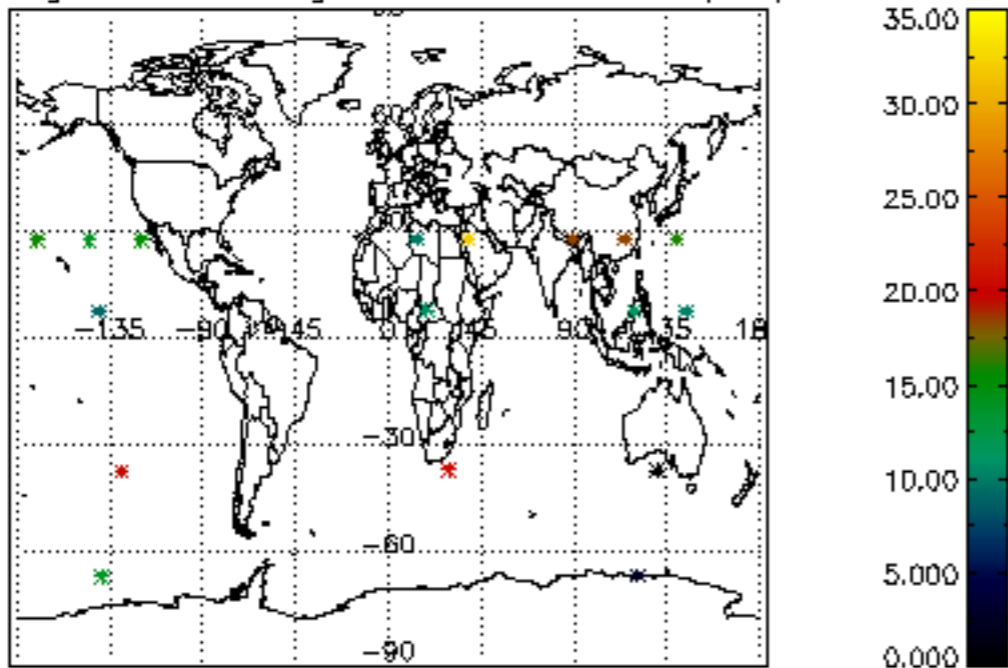
Percentage of cosmic ray hits per profile



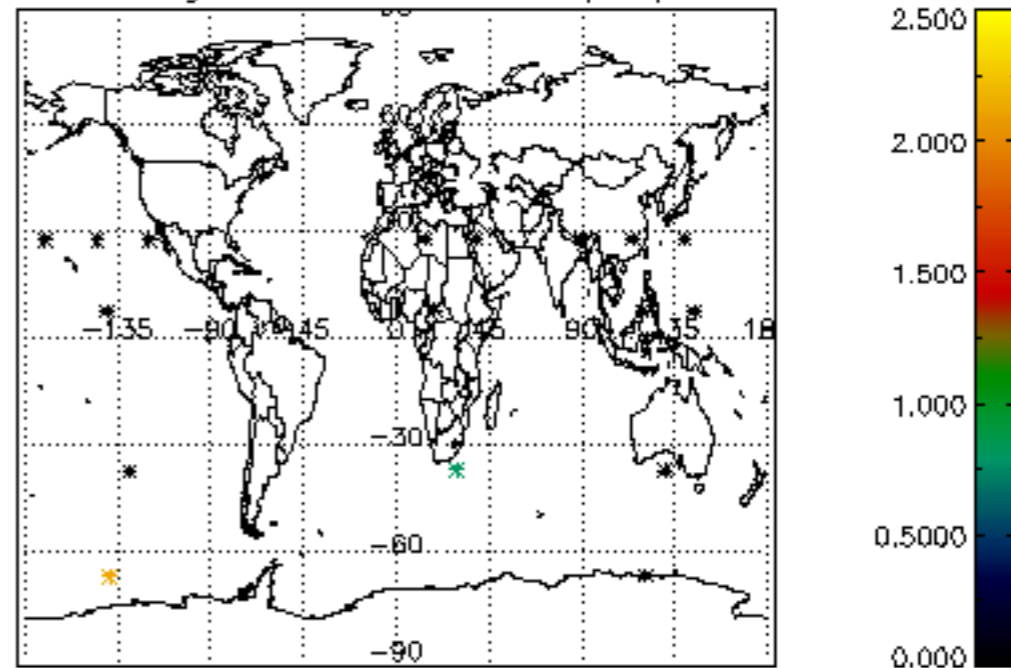
Percentage of datation errors per profile



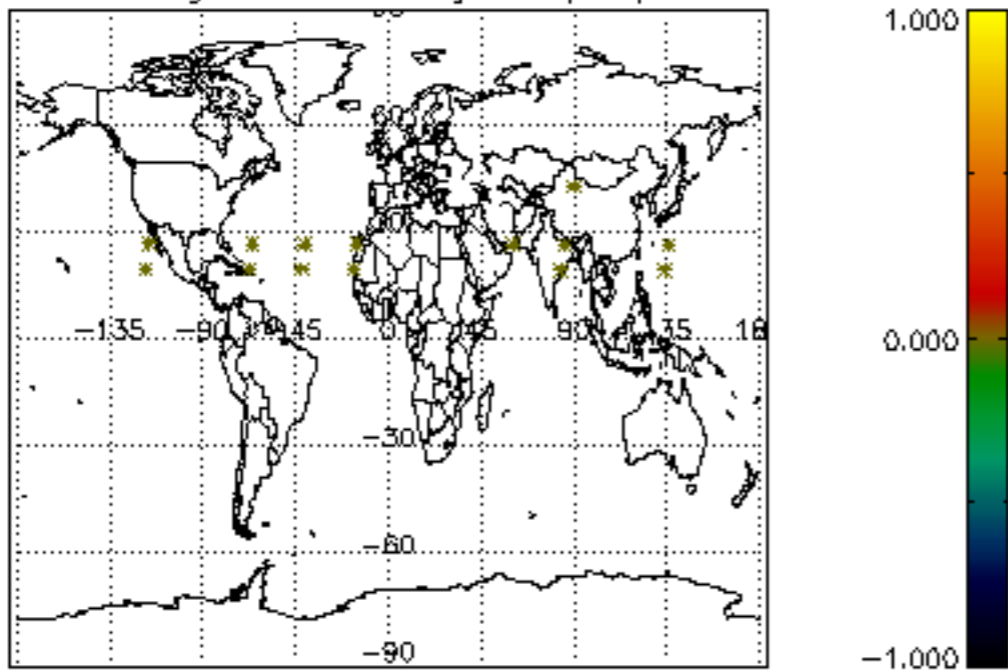
Percentage of star falling outside central band per profile



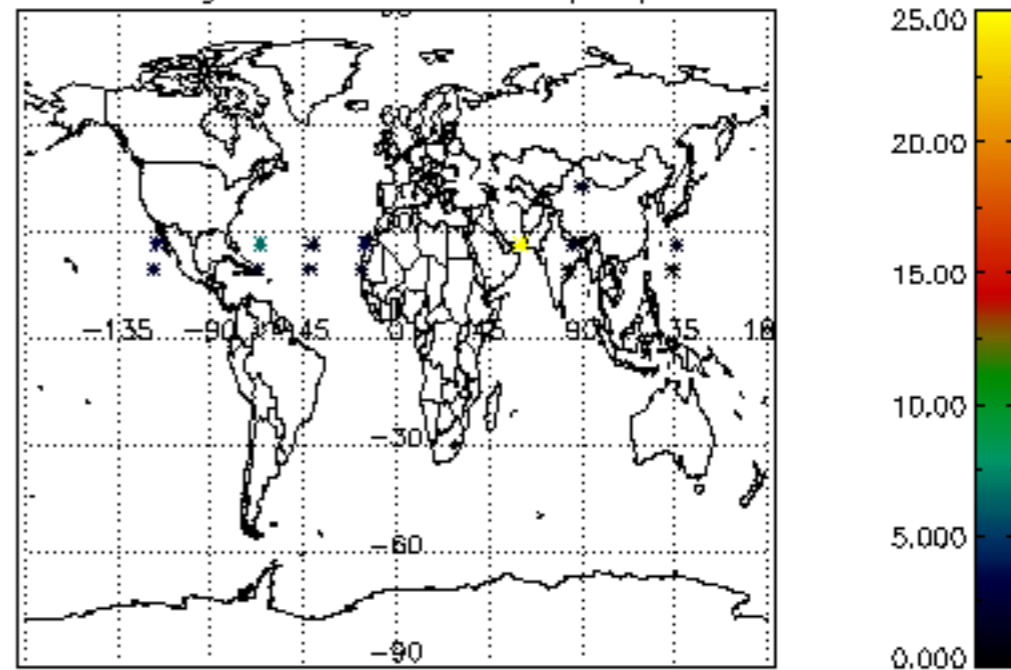
Percentage of saturation errors per profile



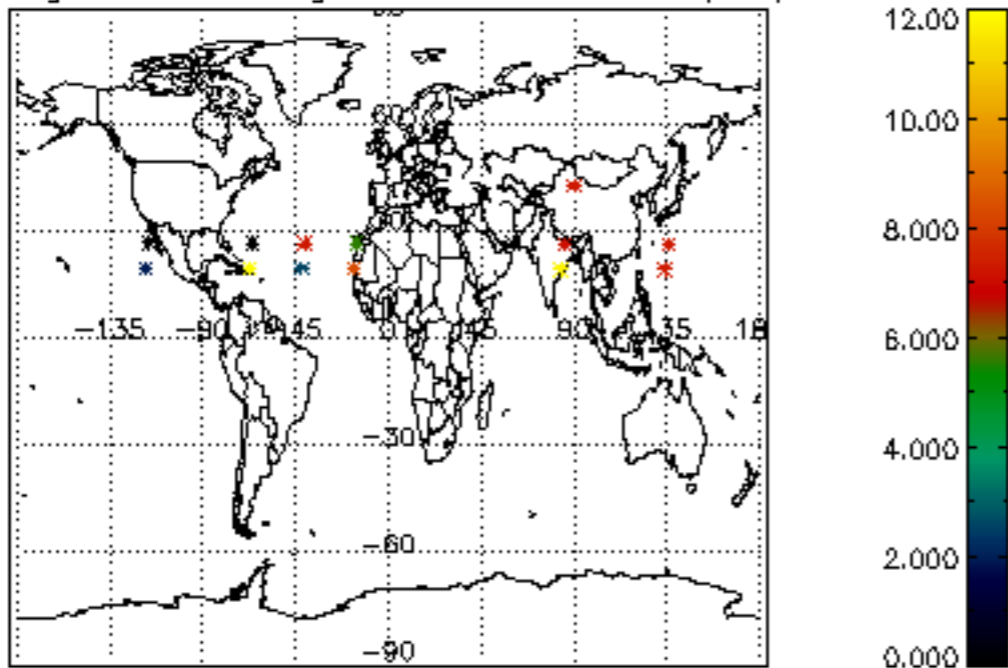
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

