

# GOMOS Level 2 Daily Report

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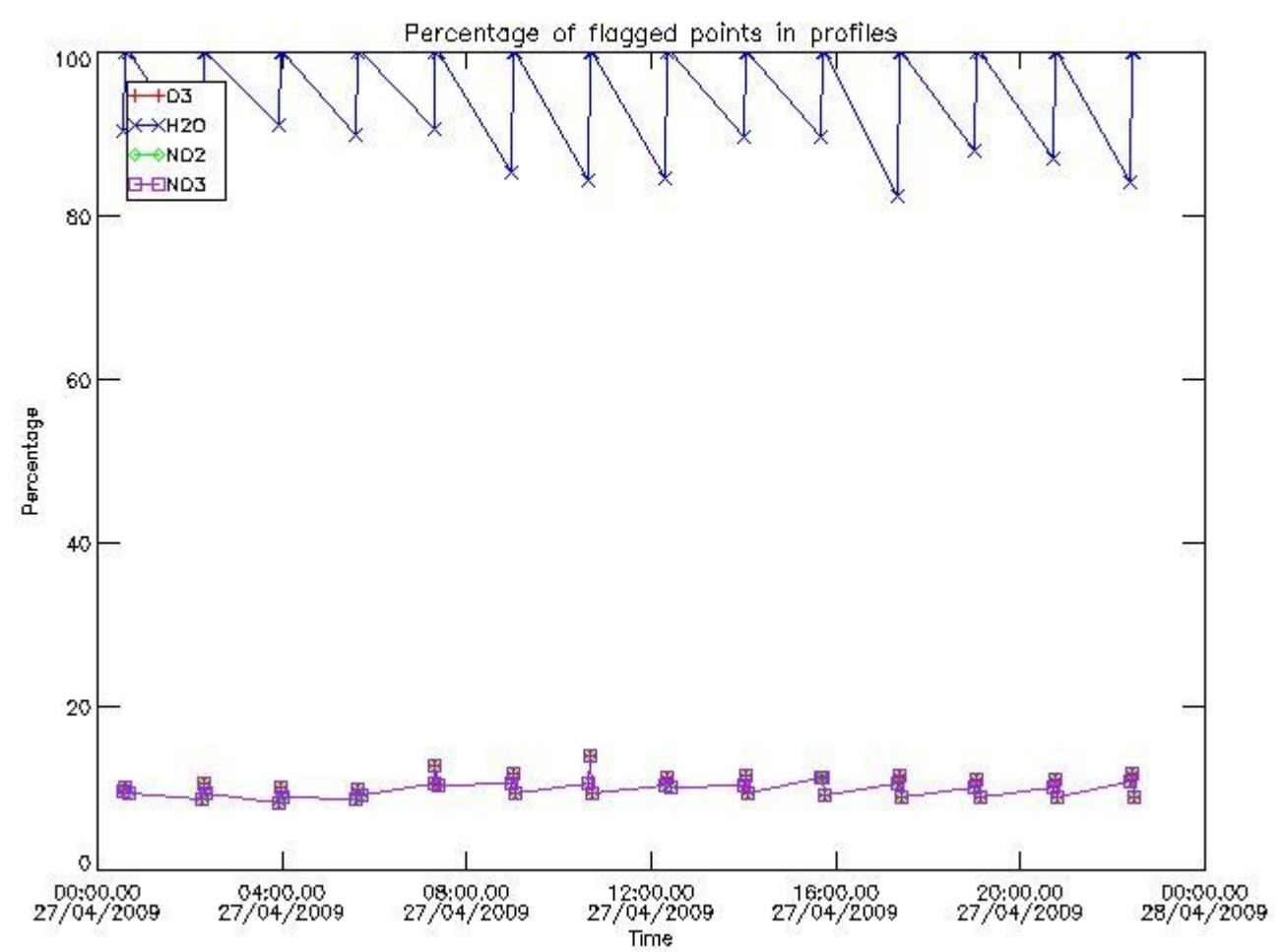


161	GOM_NL__2PRFIN20090427_193516_000000632078_00300_37428_0741.N1	27-APR-2009 19:35:16	Straylight	62.500	75	26Eps Sco	2.2910	4250.0	125	37428	No
162	GOM_NL__2PRFIN20090427_194136_000000422078_00300_37428_0742.N1	27-APR-2009 19:41:36	Tw_i_and_stray	42.000	80	7Del Sco	2.3160	30000.	84	37428	No
163	GOM_NL__2PRFIN20090427_194455_000000452078_00300_37428_0743.N1	27-APR-2009 19:44:55	Bright	44.500	122	9Alp2Lib	2.7470	9700.0	89	37428	No
164	GOM_NL__2PRFIN20090427_194721_000000512078_00300_37428_0744.N1	27-APR-2009 19:47:21	Bright	51.000	104	27Bet Lib	2.6140	13100.	102	37428	No
165	GOM_NL__2PRFIN20090427_195628_000000622078_00300_37428_0745.N1	27-APR-2009 19:56:28	Bright	62.000	3	16Alp Boo	-0.050000	4250.0	124	37428	No
166	GOM_NL__2PRFIN20090427_195951_000000492078_00300_37428_0746.N1	27-APR-2009 19:59:51	Bright	49.000	83		2.3780	11000.	98	37428	No
167	GOM_NL__2PRFIN20090427_200248_000000442078_00300_37428_0747.N1	27-APR-2009 20:02:48	Bright	44.000	180	27Gam Boo	3.0400	8000.0	88	37428	No
168	GOM_NL__2PRFIN20090427_201228_000000452078_00300_37428_0748.N1	27-APR-2009 20:12:28	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	37428	No
169	GOM_NL__2PRFIN20090427_202231_000000412078_00300_37428_0749.N1	27-APR-2009 20:22:31	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	37428	No
170	GOM_NL__2PRFIN20090427_204148_000000502078_00300_37428_0750.N1	27-APR-2009 20:41:48	Dark	49.500	61	8Eps Peg	2.1000	3900.0	99	37428	No
171	GOM_NL__2PRFIN20090427_204415_000000462078_00300_37428_0751.N1	27-APR-2009 20:44:15	Dark	46.000	162	34Alp Aqr	2.9440	5350.0	92	37428	No
172	GOM_NL__2PRFIN20090427_204740_000000572078_00300_37428_0752.N1	27-APR-2009 20:47:40	Dark	57.000	154	22Bet Aqr	2.8990	5700.0	114	37428	No
173	GOM_NL__2PRFIN20090427_211053_000000582078_00301_37429_0753.N1	27-APR-2009 21:10:53	Straylight	58.000	40	The Sco	1.8590	7100.0	116	37429	No
174	GOM_NL__2PRFIN20090427_211234_000000632078_00301_37429_0754.N1	27-APR-2009 21:12:34	Straylight	62.500	25	35Lam Sco	1.6200	28000.	125	37429	No
175	GOM_NL__2PRFIN20090427_211553_000000592078_00301_37429_0755.N1	27-APR-2009 21:15:53	Straylight	59.000	75	26Eps Sco	2.2910	4250.0	118	37429	No
176	GOM_NL__2PRFIN20090427_212212_000000422078_00301_37429_0756.N1	27-APR-2009 21:22:12	Tw_i_and_stray	42.000	80	7Del Sco	2.3160	30000.	84	37429	No
177	GOM_NL__2PRFIN20090427_212531_000000472078_00301_37429_0757.N1	27-APR-2009 21:25:31	Bright	47.000	122	9Alp2Lib	2.7470	9700.0	94	37429	No
178	GOM_NL__2PRFIN20090427_212757_000000512078_00301_37429_0758.N1	27-APR-2009 21:27:57	Bright	51.000	104	27Bet Lib	2.6140	13100.	102	37429	No
179	GOM_NL__2PRFIN20090427_213704_000000412078_00301_37429_0759.N1	27-APR-2009 21:37:04	Bright	41.000	3	16Alp Boo	-0.050000	4250.0	82	37429	No
180	GOM_NL__2PRFIN20090427_214026_000000452078_00301_37429_0760.N1	27-APR-2009 21:40:26	Bright	44.500	83		2.3780	11000.	89	37429	No
181	GOM_NL__2PRFIN20090427_214323_000000402078_00301_37429_0761.N1	27-APR-2009 21:43:23	Bright	39.500	180	27Gam Boo	3.0400	8000.0	79	37429	No
182	GOM_NL__2PRFIN20090427_215304_000000462078_00301_37429_0762.N1	27-APR-2009 21:53:04	Bright	45.500	119	14Eta Dra	2.7270	4700.0	91	37429	No
183	GOM_NL__2PRFIN20090427_220306_000000422078_00301_37429_0763.N1	27-APR-2009 22:03:06	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	37429	No
184	GOM_NL__2PRFIN20090427_222224_000000482078_00301_37429_0764.N1	27-APR-2009 22:22:24	Dark	47.500	61	8Eps Peg	2.1000	3900.0	95	37429	No
185	GOM_NL__2PRFIN20090427_222451_000000442078_00301_37429_0765.N1	27-APR-2009 22:24:51	Dark	43.500	162	34Alp Aqr	2.9440	5350.0	87	37429	No
186	GOM_NL__2PRFIN20090427_222817_000000582078_00301_37429_0766.N1	27-APR-2009 22:28:17	Dark	57.500	154	22Bet Aqr	2.8990	5700.0	115	37429	No
187	GOM_NL__2PRFIN20090427_225130_000000522078_00302_37430_0773.N1	27-APR-2009 22:51:30	Straylight	52.000	40	The Sco	1.8590	7100.0	104	37430	No
188	GOM_NL__2PRFIN20090427_225311_000000572078_00302_37430_0774.N1	27-APR-2009 22:53:11	Straylight	57.000	25	35Lam Sco	1.6200	28000.	114	37430	No
189	GOM_NL__2PRFIN20090427_225629_000000632078_00302_37430_0775.N1	27-APR-2009 22:56:29	Straylight	62.500	75	26Eps Sco	2.2910	4250.0	125	37430	No
190	GOM_NL__2PRFIN20090427_230248_000000462078_00302_37430_0776.N1	27-APR-2009 23:02:48	Tw_i_and_stray	46.000	80	7Del Sco	2.3160	30000.	92	37430	No
191	GOM_NL__2PRFIN20090427_230607_000000452078_00302_37430_0777.N1	27-APR-2009 23:06:07	Bright	45.000	122	9Alp2Lib	2.7470	9700.0	90	37430	No
192	GOM_NL__2PRFIN20090427_230833_000000502078_00302_37430_0778.N1	27-APR-2009 23:08:33	Bright	49.500	104	27Bet Lib	2.6140	13100.	99	37430	No
193	GOM_NL__2PRFIN20090427_231739_000000422078_00302_37430_0779.N1	27-APR-2009 23:17:39	Bright	42.000	3	16Alp Boo	-0.050000	4250.0	84	37430	No
194	GOM_NL__2PRFIN20090427_232101_000000462078_00302_37430_0780.N1	27-APR-2009 23:21:01	Bright	46.000	83		2.3780	11000.	92	37430	No
195	GOM_NL__2PRFIN20090427_232359_000000432078_00302_37430_0781.N1	27-APR-2009 23:23:59	Bright	42.500	180	27Gam Boo	3.0400	8000.0	85	37430	No
196	GOM_NL__2PRFIN20090427_233339_000000402078_00302_37430_0782.N1	27-APR-2009 23:33:39	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	37430	No
197	GOM_NL__2PRFIN20090427_234342_000000602078_00302_37430_0783.N1	27-APR-2009 23:43:42	Bright	60.000	89	5Alp Cep	2.4510	8000.0	120	37430	No

### 3. Quality information per product

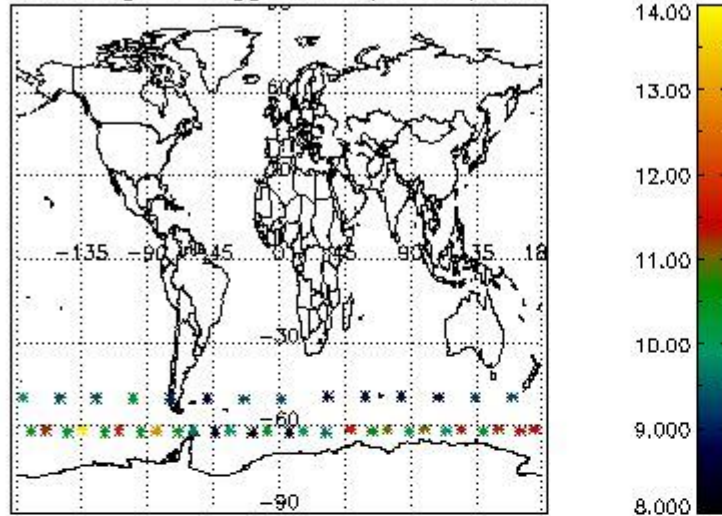
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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

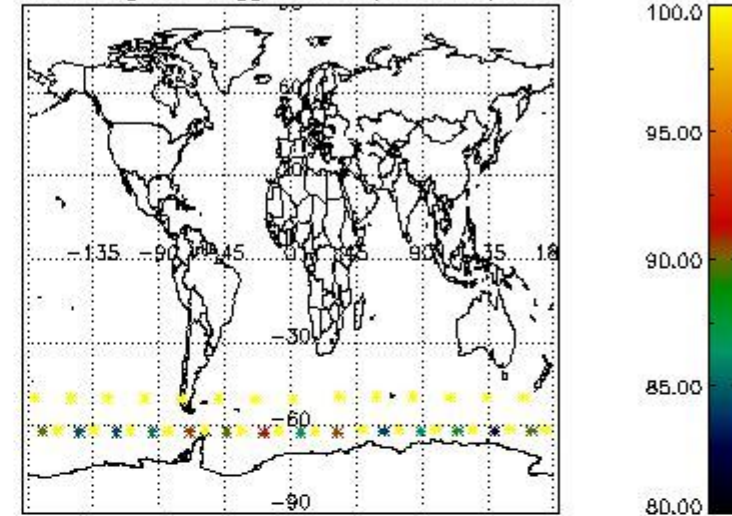


3.2 Plot quality information per product (world map)

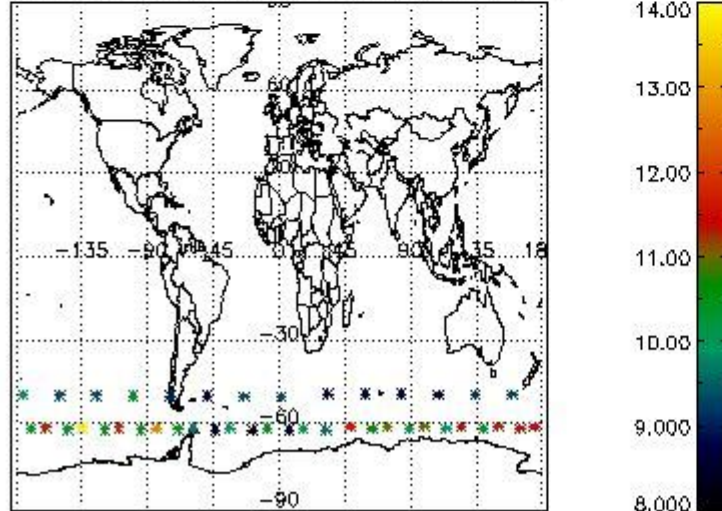
Percentage of flagged data per O3 profile



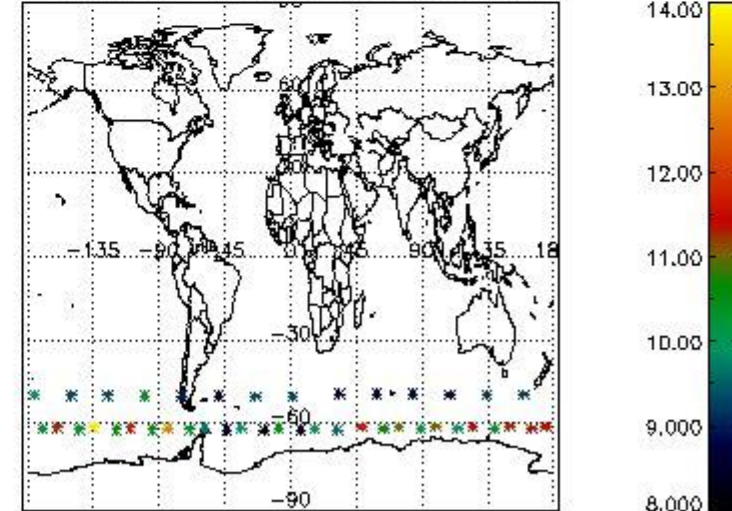
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

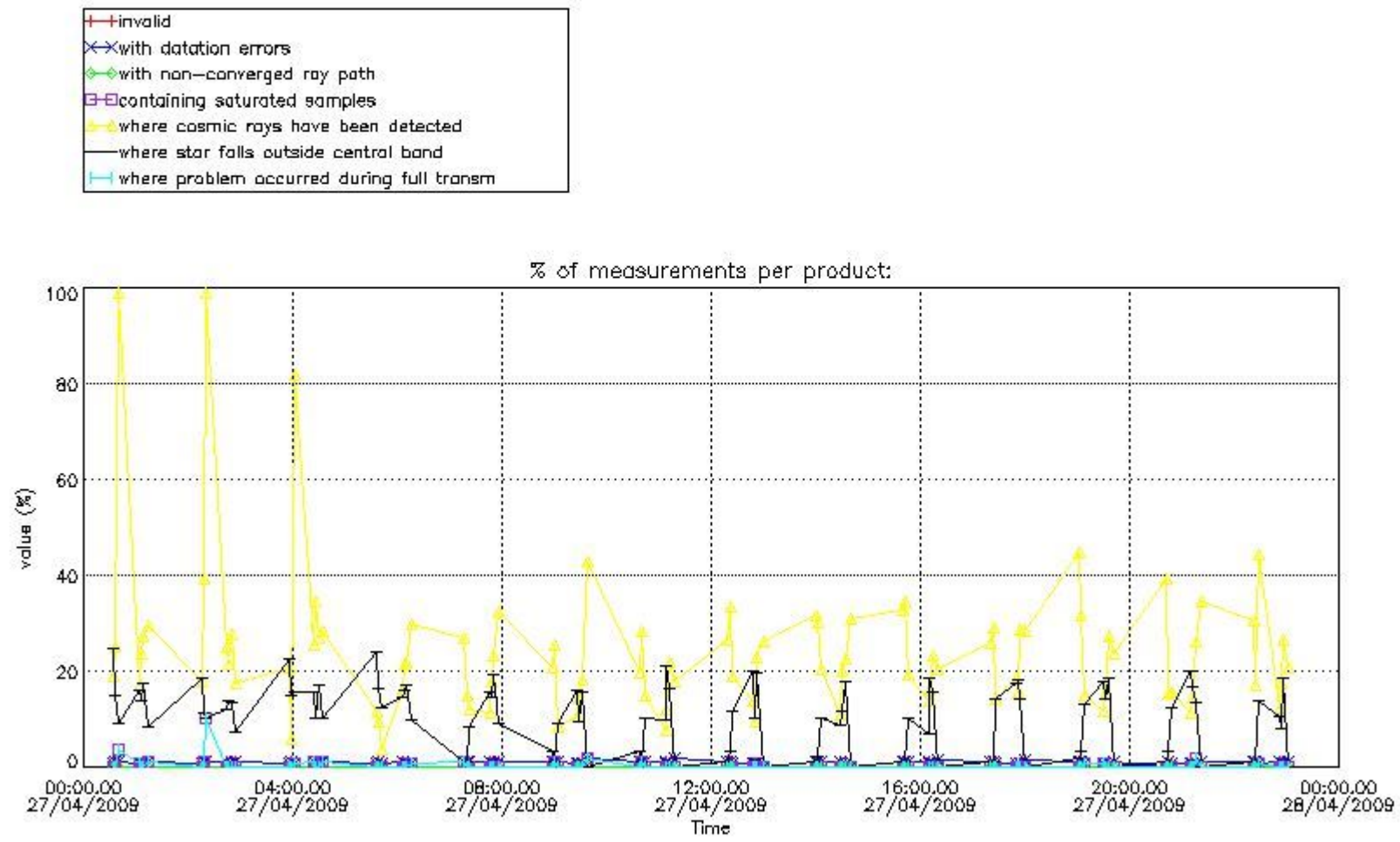


#### 4. Level 1 quality information per product

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.

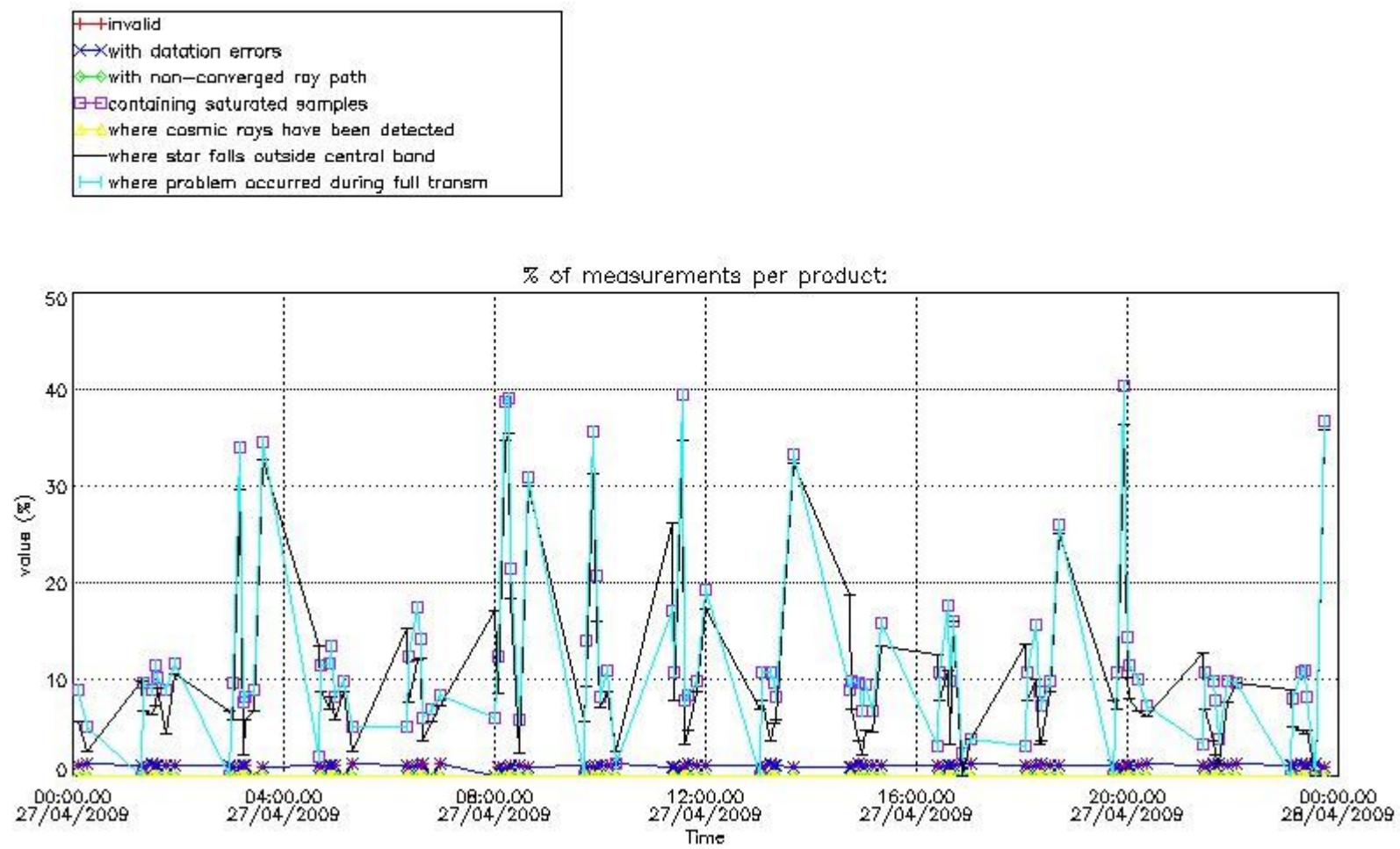
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

###### 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

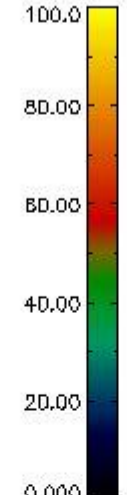
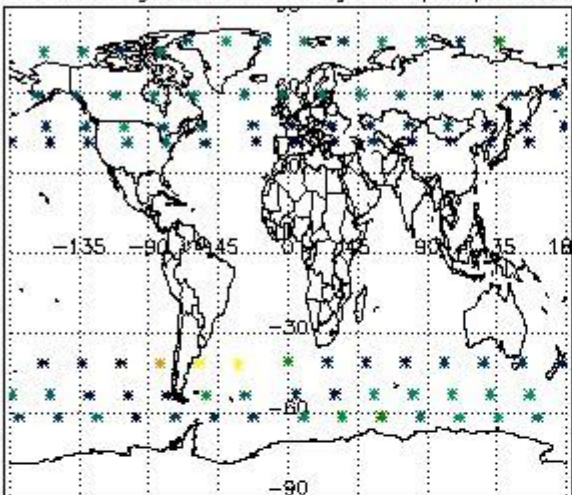




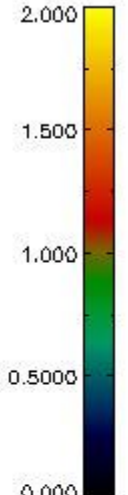
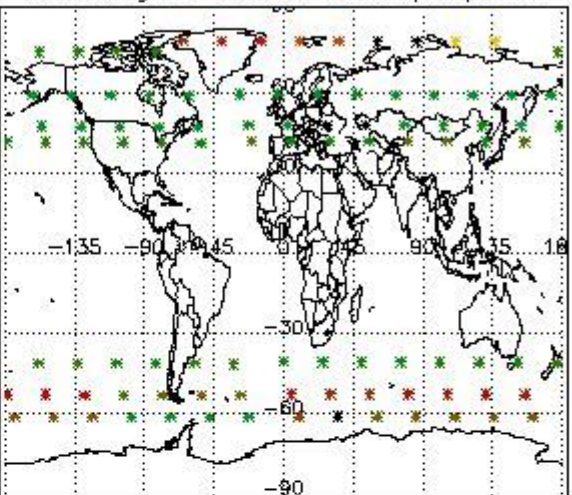
#### 4.2 Plot quality information per product coming from level 1b processing (world map)

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

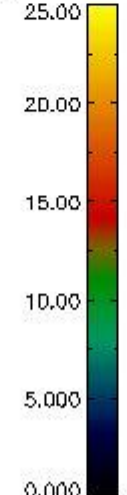
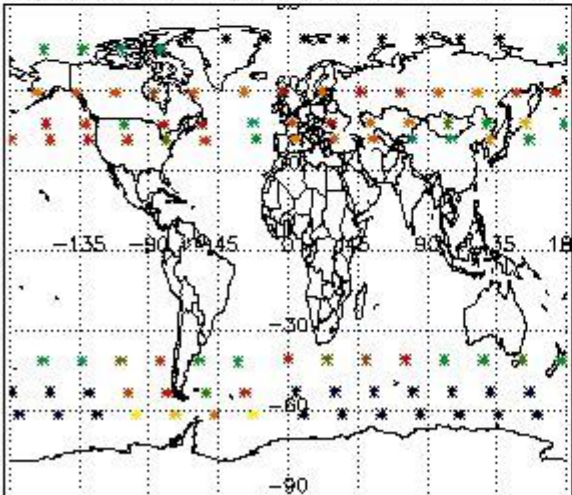
Percentage of cosmic ray hits per profile



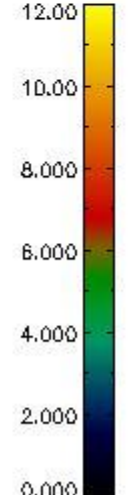
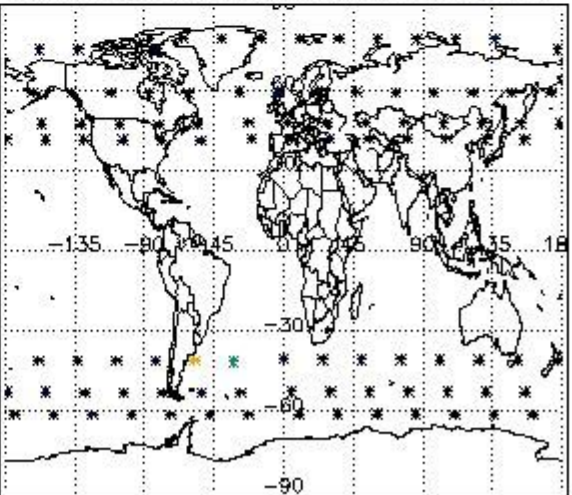
Percentage of datation errors per profile



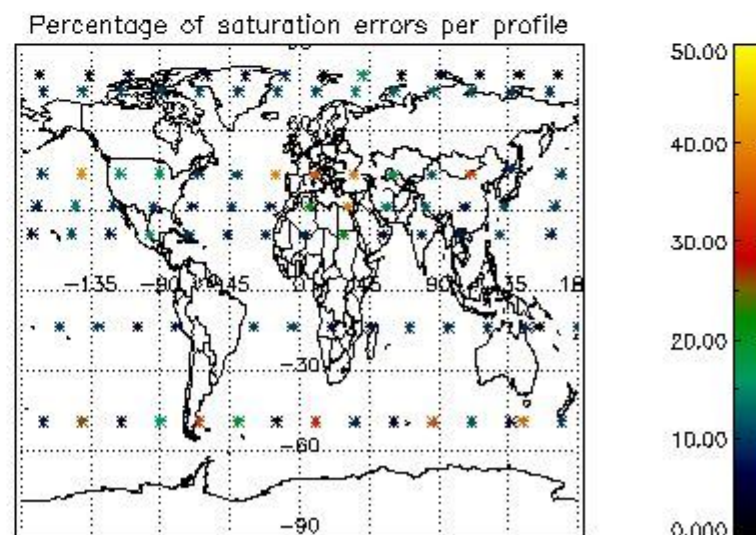
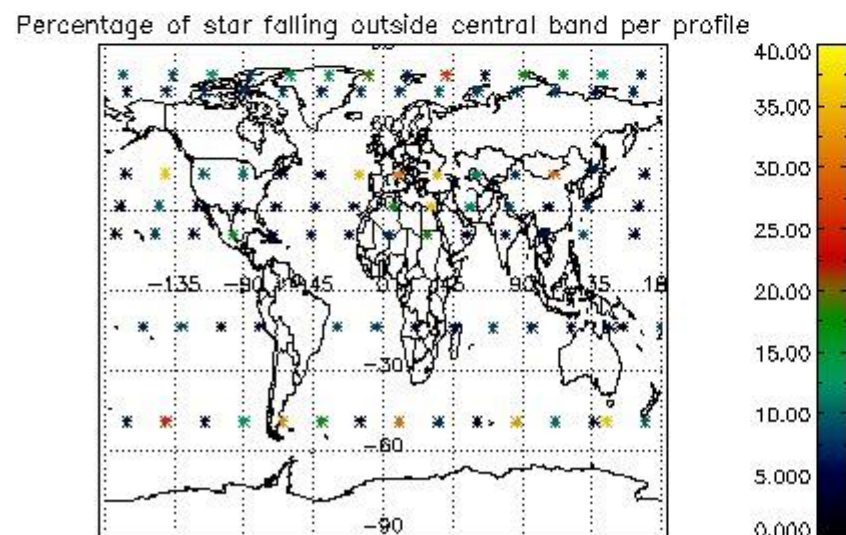
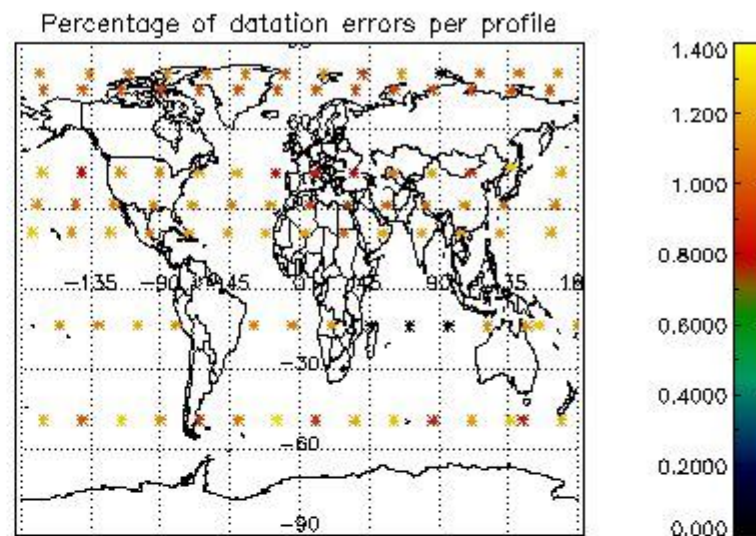
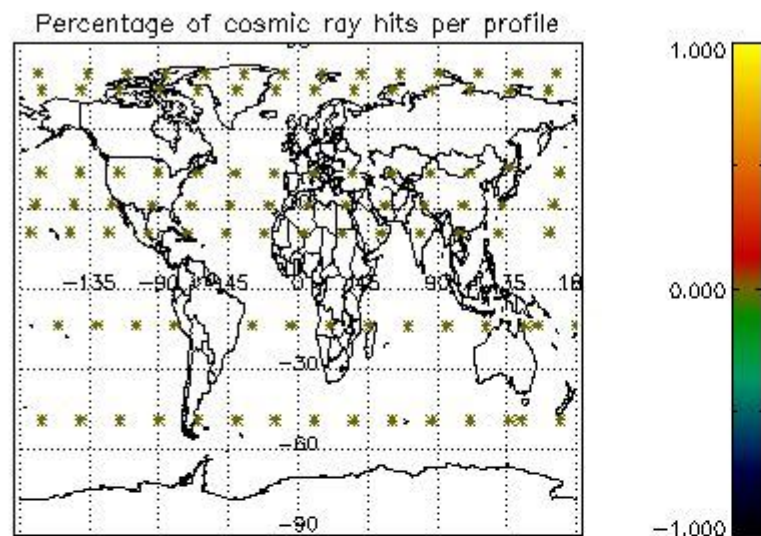
Percentage of star falling outside central band per profile



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

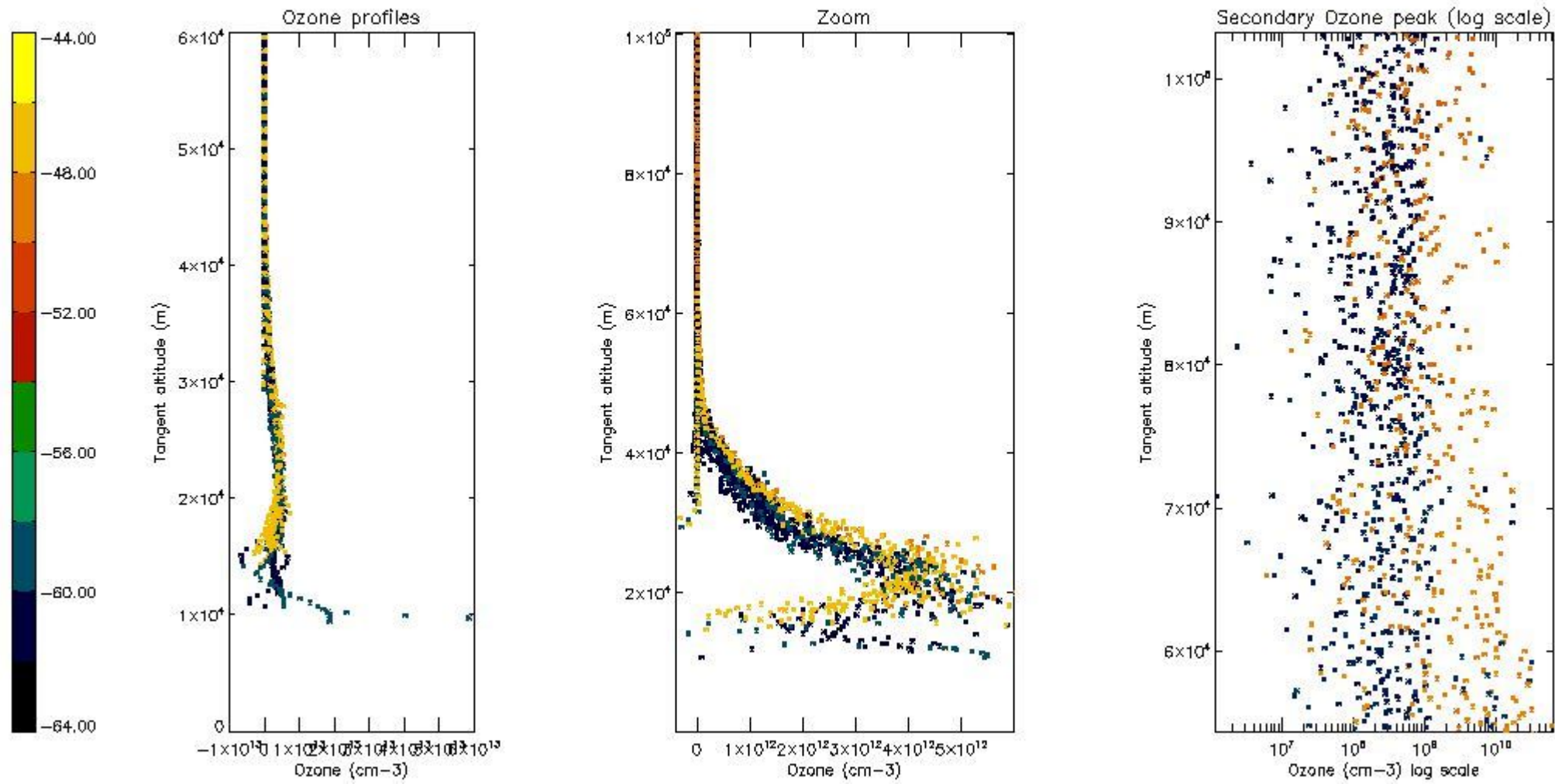
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	5

STD < 10	1
STD < 5	0

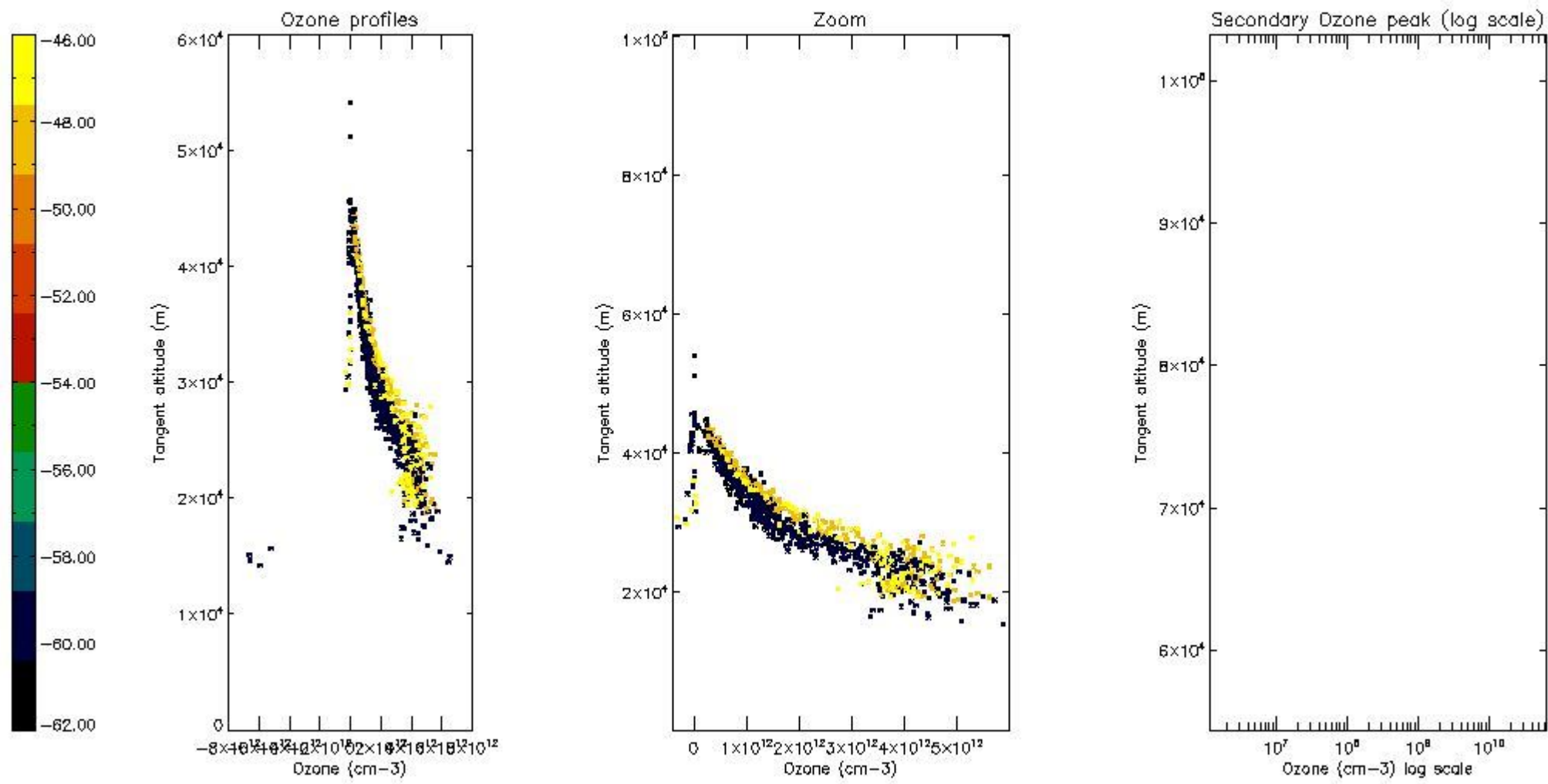
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



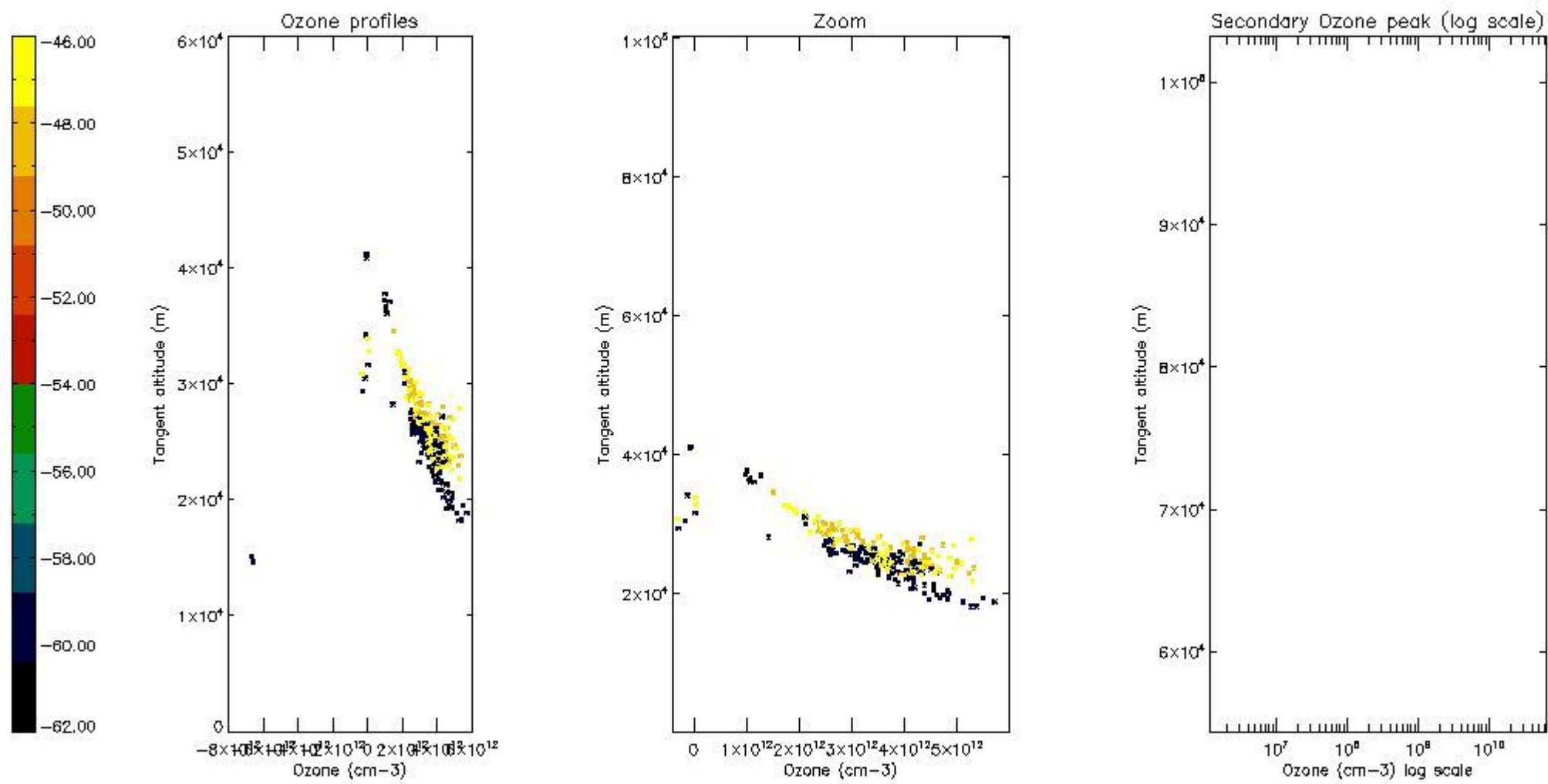
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



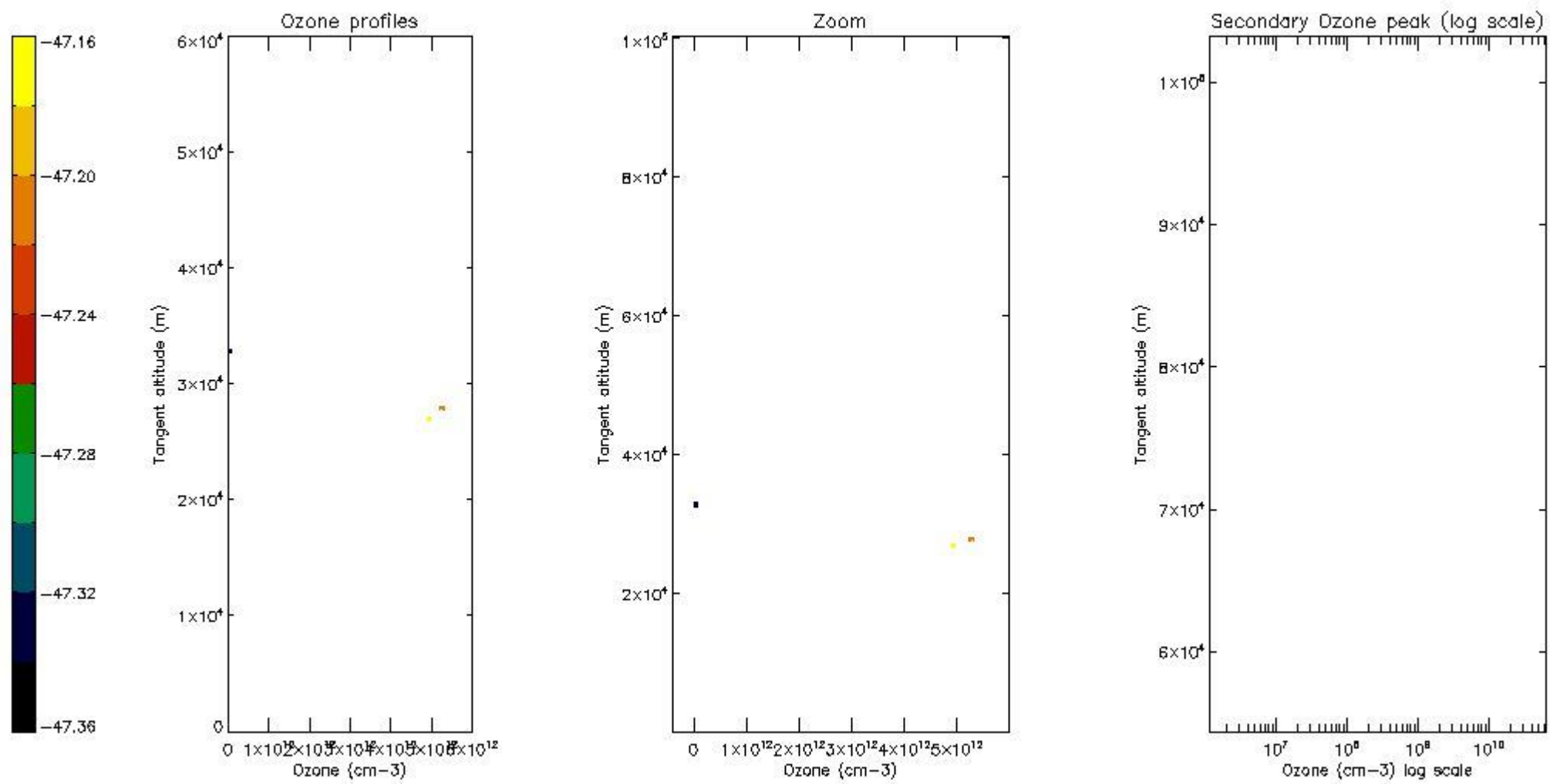
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



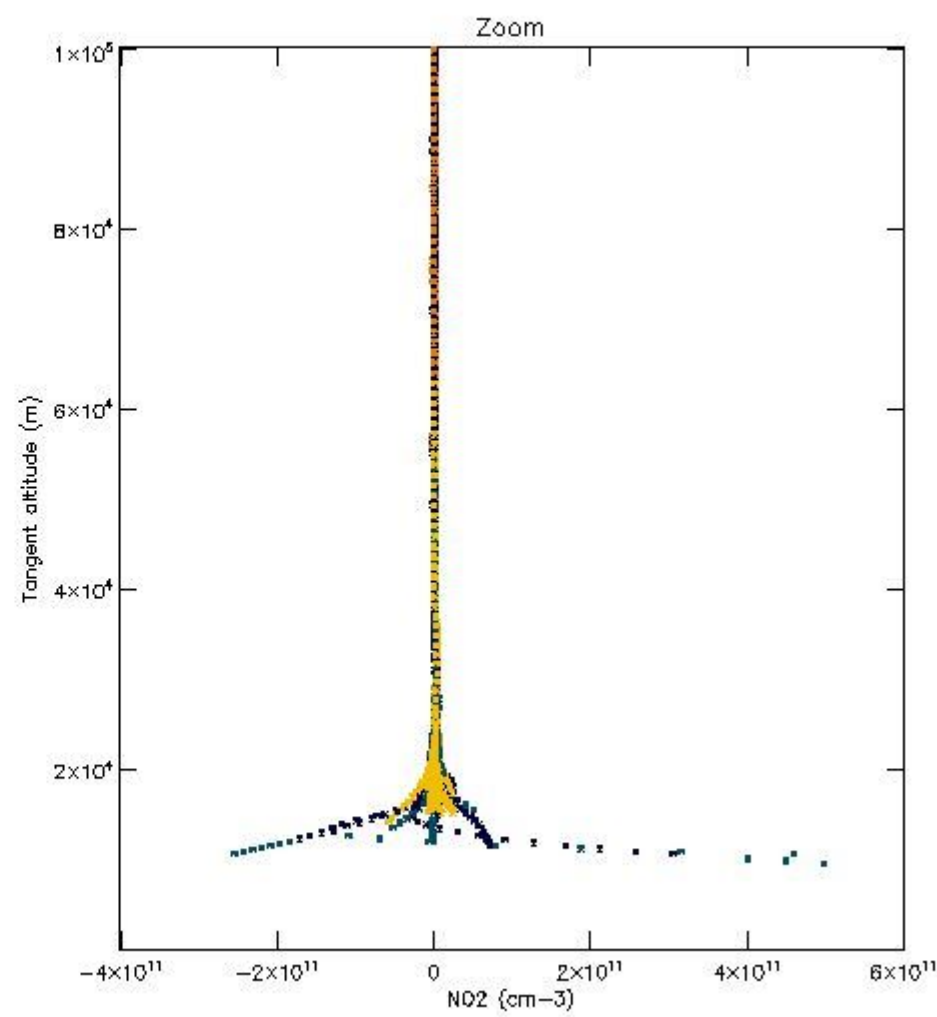
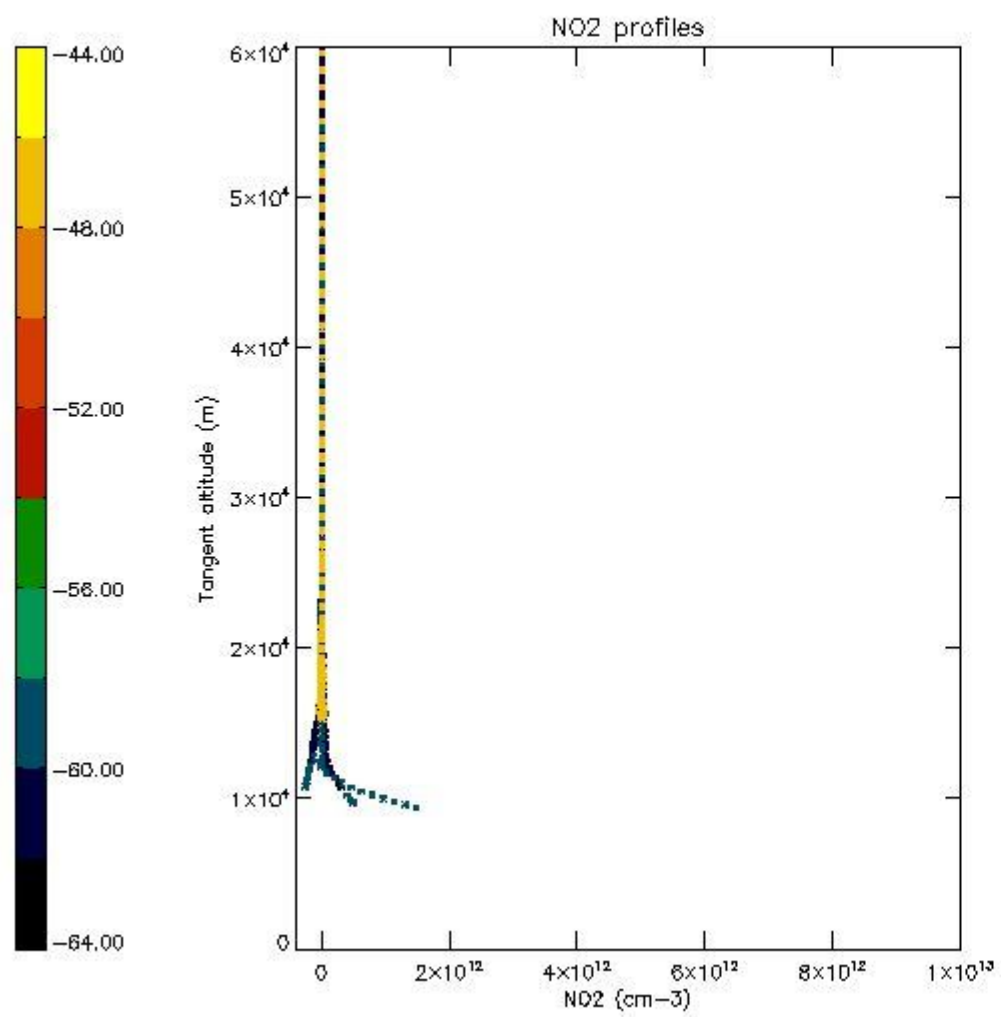
*5.5 Plot ozone profiles where  $STD < 5\%$  (dark without errors)*

The colorbar represents the latitude.



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

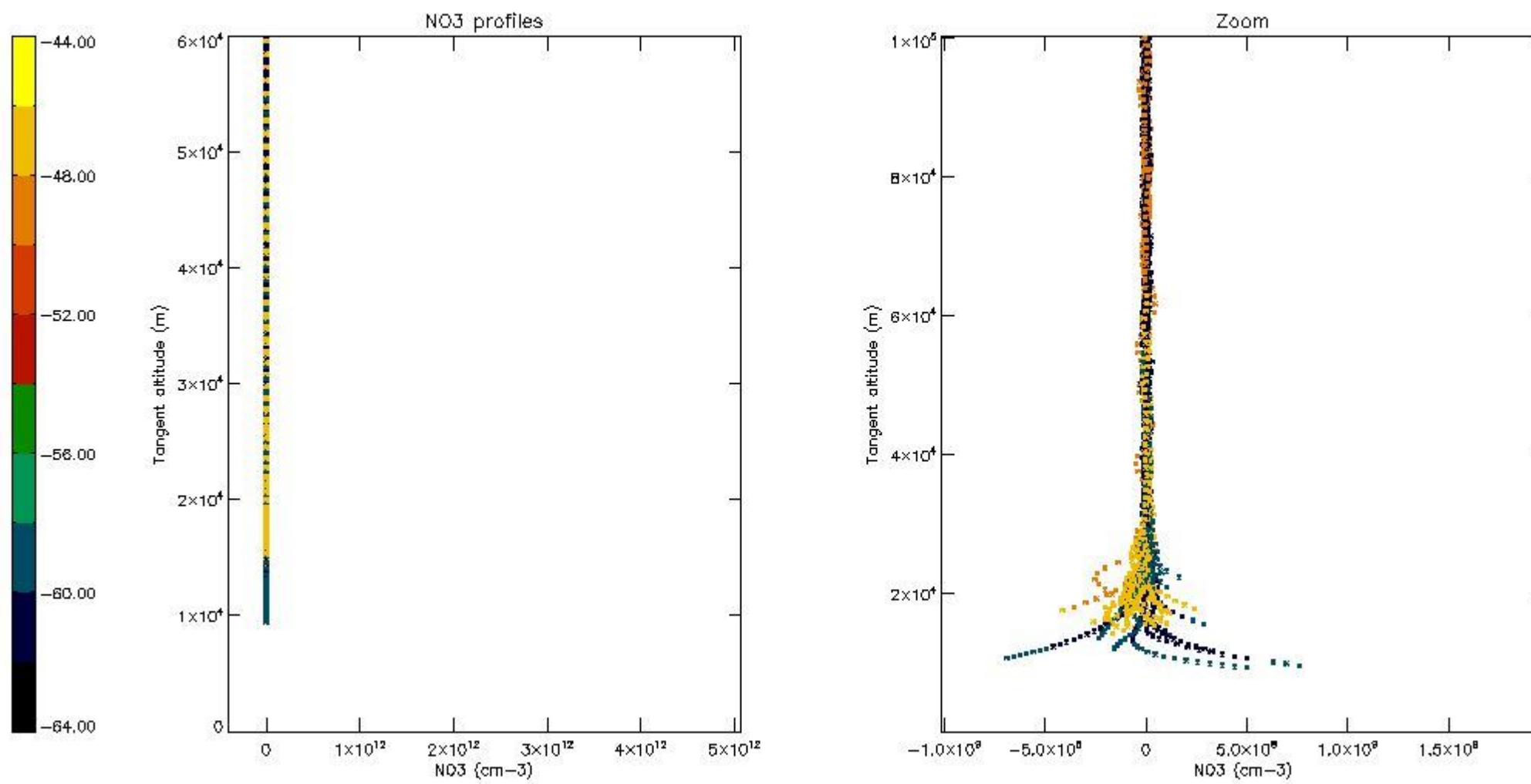
The colorbar represents the latitude.



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

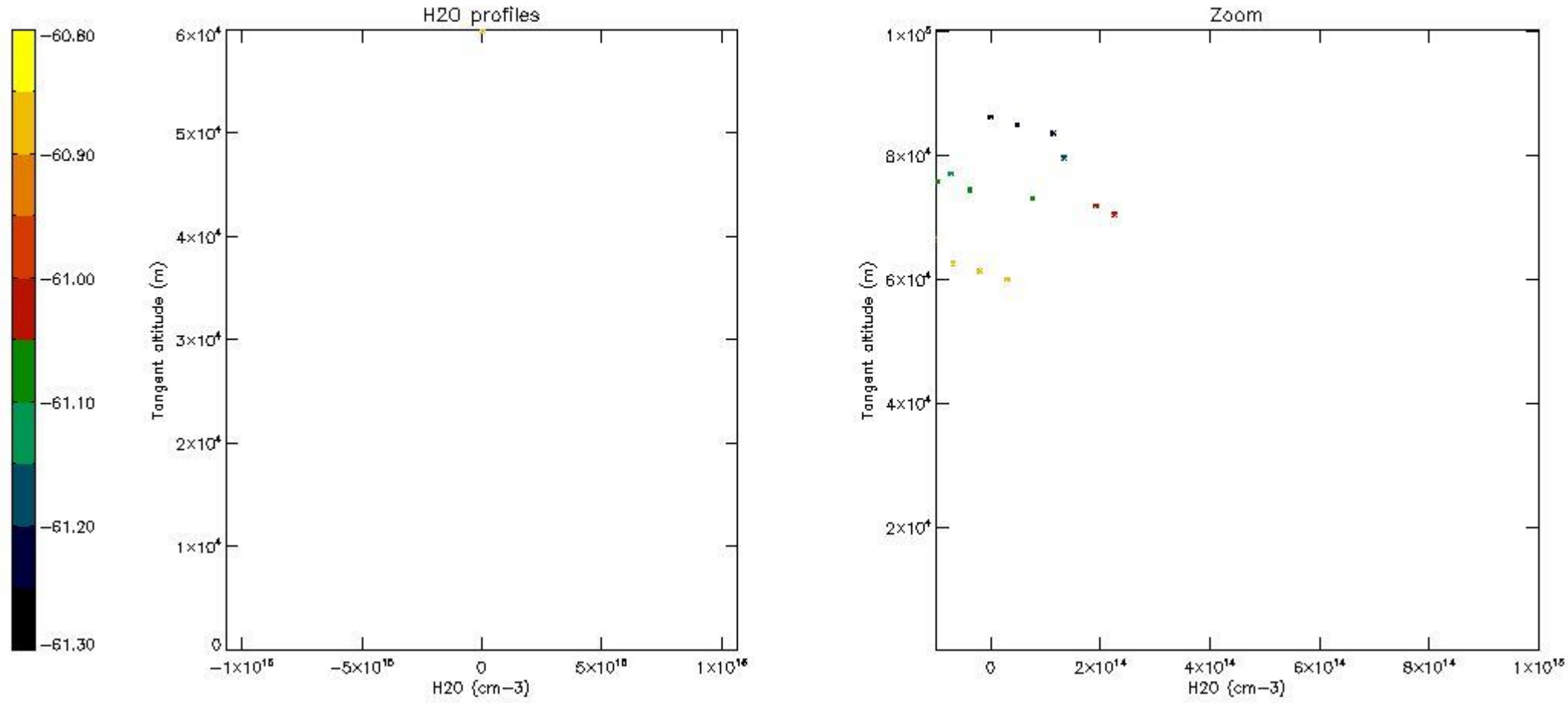
The colorbar represents the latitude.





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	27-APR-2009 00:05:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-APR-2009 00:05:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-APR-2009 00:05:25

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#### [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](#)





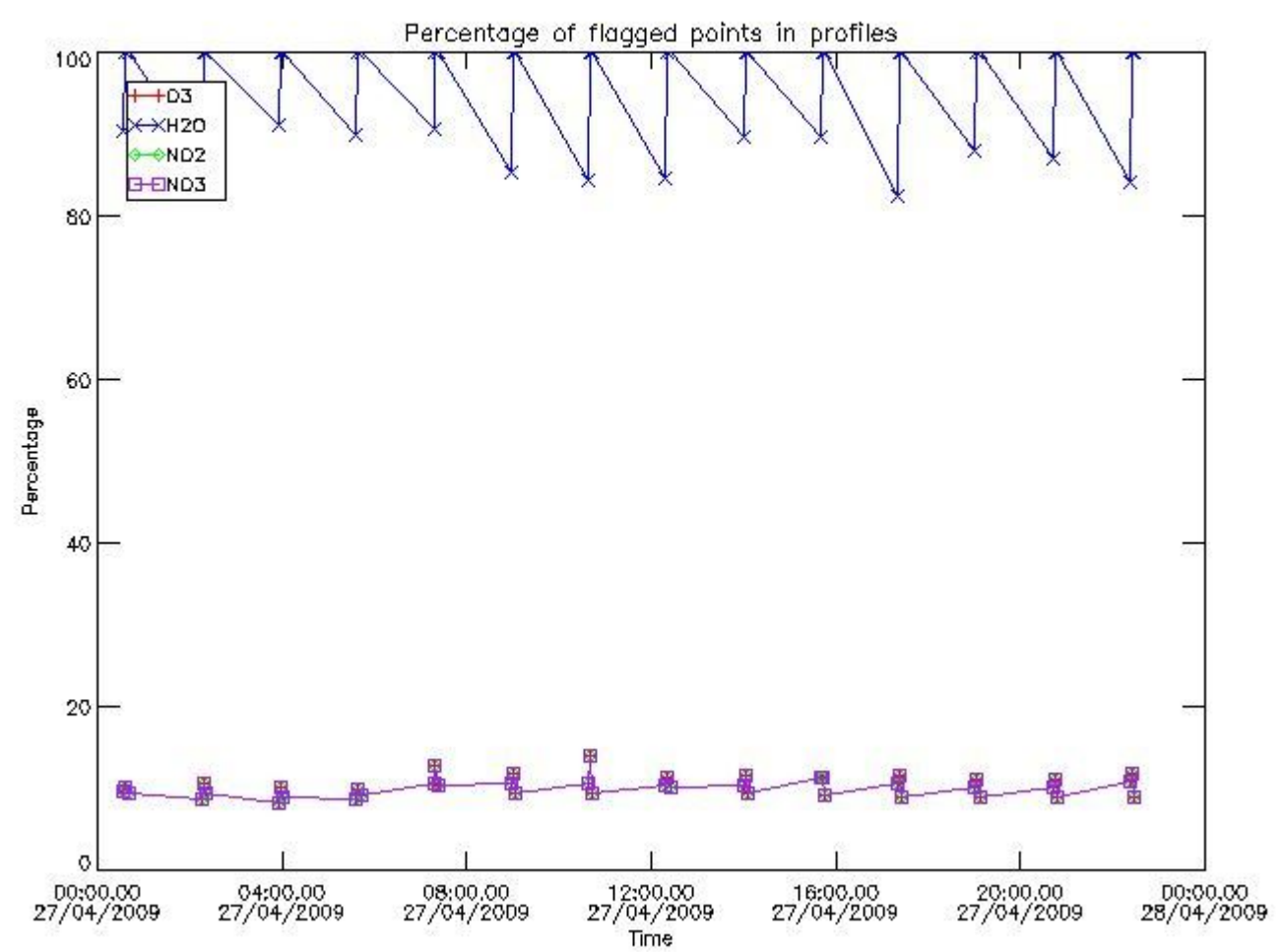


161	GOM_NL__2PRFIN20090427_193516_000000632078_00300_37428_0741.N1	27-APR-2009 19:35:16	Straylight	62.500	75	26Eps Sco	2.2910	4250.0	125	37428	No
162	GOM_NL__2PRFIN20090427_194136_000000422078_00300_37428_0742.N1	27-APR-2009 19:41:36	Tw_i_and_stray	42.000	80	7Del Sco	2.3160	30000.	84	37428	No
163	GOM_NL__2PRFIN20090427_194455_000000452078_00300_37428_0743.N1	27-APR-2009 19:44:55	Bright	44.500	122	9Alp2Lib	2.7470	9700.0	89	37428	No
164	GOM_NL__2PRFIN20090427_194721_000000512078_00300_37428_0744.N1	27-APR-2009 19:47:21	Bright	51.000	104	27Bet Lib	2.6140	13100.	102	37428	No
165	GOM_NL__2PRFIN20090427_195628_000000622078_00300_37428_0745.N1	27-APR-2009 19:56:28	Bright	62.000	3	16Alp Boo	-0.050000	4250.0	124	37428	No
166	GOM_NL__2PRFIN20090427_195951_000000492078_00300_37428_0746.N1	27-APR-2009 19:59:51	Bright	49.000	83		2.3780	11000.	98	37428	No
167	GOM_NL__2PRFIN20090427_200248_000000442078_00300_37428_0747.N1	27-APR-2009 20:02:48	Bright	44.000	180	27Gam Boo	3.0400	8000.0	88	37428	No
168	GOM_NL__2PRFIN20090427_201228_000000452078_00300_37428_0748.N1	27-APR-2009 20:12:28	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	37428	No
169	GOM_NL__2PRFIN20090427_202231_000000412078_00300_37428_0749.N1	27-APR-2009 20:22:31	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	37428	No
170	GOM_NL__2PRFIN20090427_204148_000000502078_00300_37428_0750.N1	27-APR-2009 20:41:48	Dark	49.500	61	8Eps Peg	2.1000	3900.0	99	37428	No
171	GOM_NL__2PRFIN20090427_204415_000000462078_00300_37428_0751.N1	27-APR-2009 20:44:15	Dark	46.000	162	34Alp Aqr	2.9440	5350.0	92	37428	No
172	GOM_NL__2PRFIN20090427_204740_000000572078_00300_37428_0752.N1	27-APR-2009 20:47:40	Dark	57.000	154	22Bet Aqr	2.8990	5700.0	114	37428	No
173	GOM_NL__2PRFIN20090427_211053_000000582078_00301_37429_0753.N1	27-APR-2009 21:10:53	Straylight	58.000	40	The Sco	1.8590	7100.0	116	37429	No
174	GOM_NL__2PRFIN20090427_211234_000000632078_00301_37429_0754.N1	27-APR-2009 21:12:34	Straylight	62.500	25	35Lam Sco	1.6200	28000.	125	37429	No
175	GOM_NL__2PRFIN20090427_211553_000000592078_00301_37429_0755.N1	27-APR-2009 21:15:53	Straylight	59.000	75	26Eps Sco	2.2910	4250.0	118	37429	No
176	GOM_NL__2PRFIN20090427_212212_000000422078_00301_37429_0756.N1	27-APR-2009 21:22:12	Tw_i_and_stray	42.000	80	7Del Sco	2.3160	30000.	84	37429	No
177	GOM_NL__2PRFIN20090427_212531_000000472078_00301_37429_0757.N1	27-APR-2009 21:25:31	Bright	47.000	122	9Alp2Lib	2.7470	9700.0	94	37429	No
178	GOM_NL__2PRFIN20090427_212757_000000512078_00301_37429_0758.N1	27-APR-2009 21:27:57	Bright	51.000	104	27Bet Lib	2.6140	13100.	102	37429	No
179	GOM_NL__2PRFIN20090427_213704_000000412078_00301_37429_0759.N1	27-APR-2009 21:37:04	Bright	41.000	3	16Alp Boo	-0.050000	4250.0	82	37429	No
180	GOM_NL__2PRFIN20090427_214026_000000452078_00301_37429_0760.N1	27-APR-2009 21:40:26	Bright	44.500	83		2.3780	11000.	89	37429	No
181	GOM_NL__2PRFIN20090427_214323_000000402078_00301_37429_0761.N1	27-APR-2009 21:43:23	Bright	39.500	180	27Gam Boo	3.0400	8000.0	79	37429	No
182	GOM_NL__2PRFIN20090427_215304_000000462078_00301_37429_0762.N1	27-APR-2009 21:53:04	Bright	45.500	119	14Eta Dra	2.7270	4700.0	91	37429	No
183	GOM_NL__2PRFIN20090427_220306_000000422078_00301_37429_0763.N1	27-APR-2009 22:03:06	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	37429	No
184	GOM_NL__2PRFIN20090427_222224_000000482078_00301_37429_0764.N1	27-APR-2009 22:22:24	Dark	47.500	61	8Eps Peg	2.1000	3900.0	95	37429	No
185	GOM_NL__2PRFIN20090427_222451_000000442078_00301_37429_0765.N1	27-APR-2009 22:24:51	Dark	43.500	162	34Alp Aqr	2.9440	5350.0	87	37429	No
186	GOM_NL__2PRFIN20090427_222817_000000582078_00301_37429_0766.N1	27-APR-2009 22:28:17	Dark	57.500	154	22Bet Aqr	2.8990	5700.0	115	37429	No
187	GOM_NL__2PRFIN20090427_225130_000000522078_00302_37430_0773.N1	27-APR-2009 22:51:30	Straylight	52.000	40	The Sco	1.8590	7100.0	104	37430	No
188	GOM_NL__2PRFIN20090427_225311_000000572078_00302_37430_0774.N1	27-APR-2009 22:53:11	Straylight	57.000	25	35Lam Sco	1.6200	28000.	114	37430	No
189	GOM_NL__2PRFIN20090427_225629_000000632078_00302_37430_0775.N1	27-APR-2009 22:56:29	Straylight	62.500	75	26Eps Sco	2.2910	4250.0	125	37430	No
190	GOM_NL__2PRFIN20090427_230248_000000462078_00302_37430_0776.N1	27-APR-2009 23:02:48	Tw_i_and_stray	46.000	80	7Del Sco	2.3160	30000.	92	37430	No
191	GOM_NL__2PRFIN20090427_230607_000000452078_00302_37430_0777.N1	27-APR-2009 23:06:07	Bright	45.000	122	9Alp2Lib	2.7470	9700.0	90	37430	No
192	GOM_NL__2PRFIN20090427_230833_000000502078_00302_37430_0778.N1	27-APR-2009 23:08:33	Bright	49.500	104	27Bet Lib	2.6140	13100.	99	37430	No
193	GOM_NL__2PRFIN20090427_231739_000000422078_00302_37430_0779.N1	27-APR-2009 23:17:39	Bright	42.000	3	16Alp Boo	-0.050000	4250.0	84	37430	No
194	GOM_NL__2PRFIN20090427_232101_000000462078_00302_37430_0780.N1	27-APR-2009 23:21:01	Bright	46.000	83		2.3780	11000.	92	37430	No
195	GOM_NL__2PRFIN20090427_232359_000000432078_00302_37430_0781.N1	27-APR-2009 23:23:59	Bright	42.500	180	27Gam Boo	3.0400	8000.0	85	37430	No
196	GOM_NL__2PRFIN20090427_233339_000000402078_00302_37430_0782.N1	27-APR-2009 23:33:39	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	37430	No
197	GOM_NL__2PRFIN20090427_234342_000000602078_00302_37430_0783.N1	27-APR-2009 23:43:42	Bright	60.000	89	5Alp Cep	2.4510	8000.0	120	37430	No

### 3. Quality information per product

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

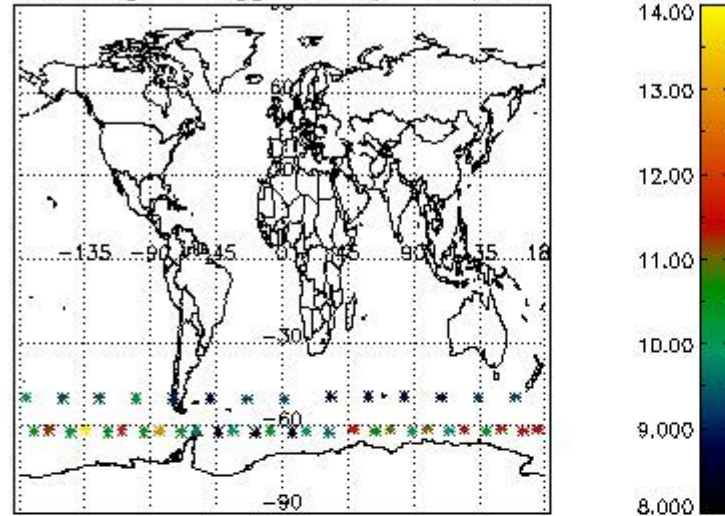
#### 3.1 Plot quality information per product (time dependant)



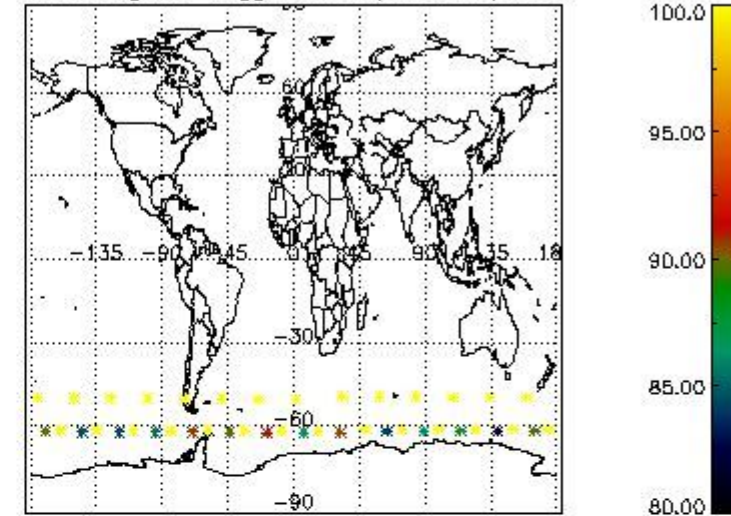
3.2 Plot quality information per product (world map)



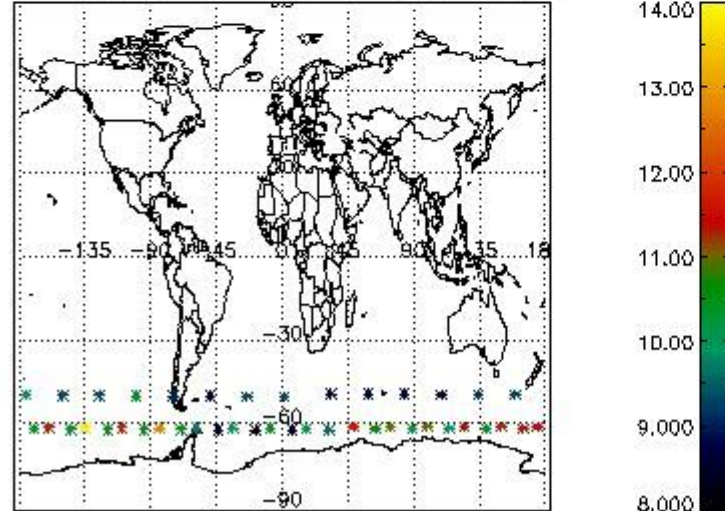
Percentage of flagged data per O3 profile



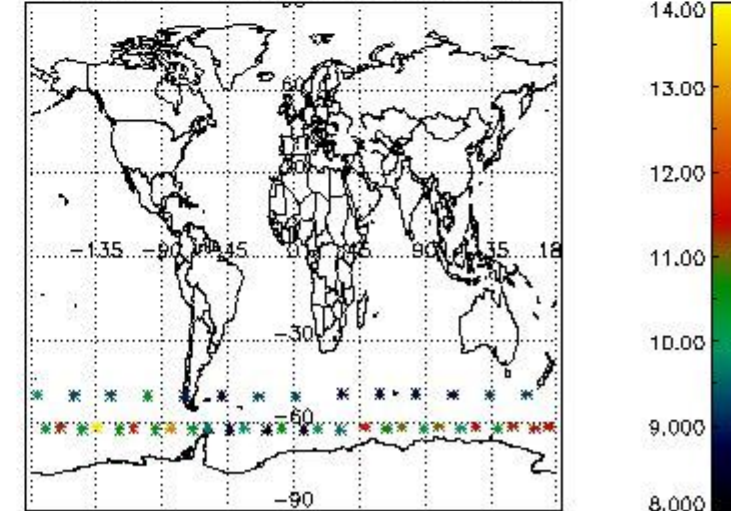
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

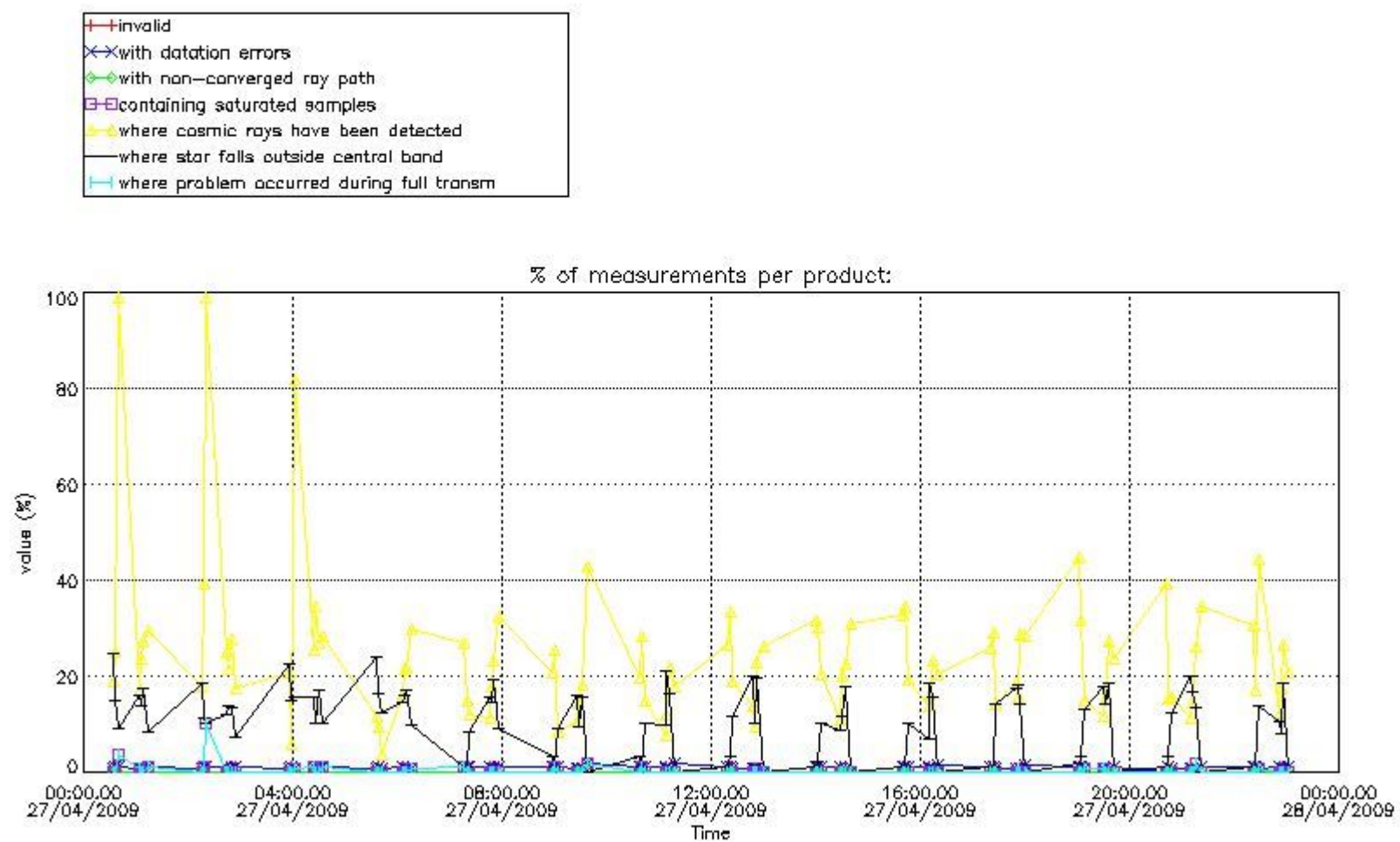


#### 4. Level 1 quality information per product

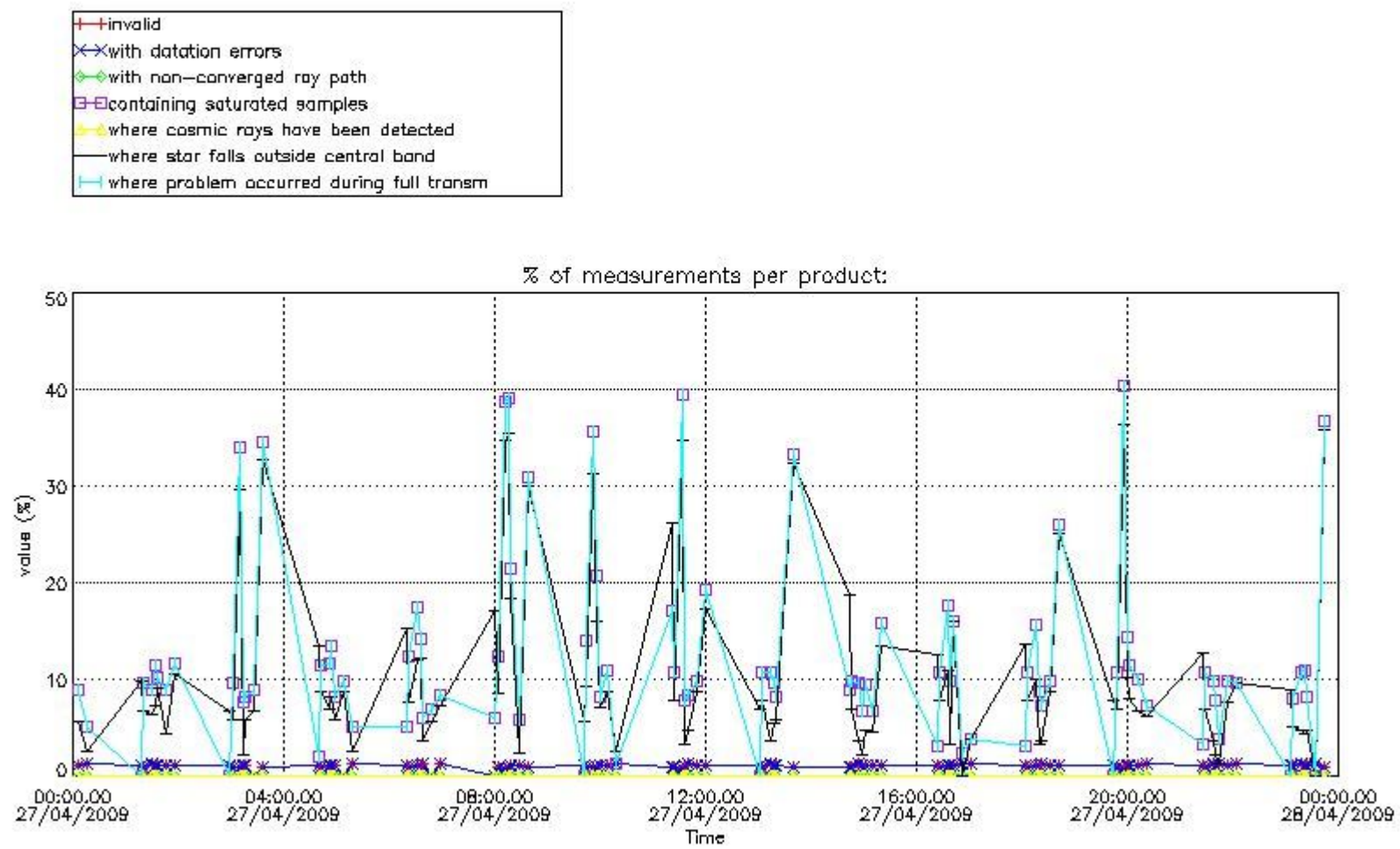
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

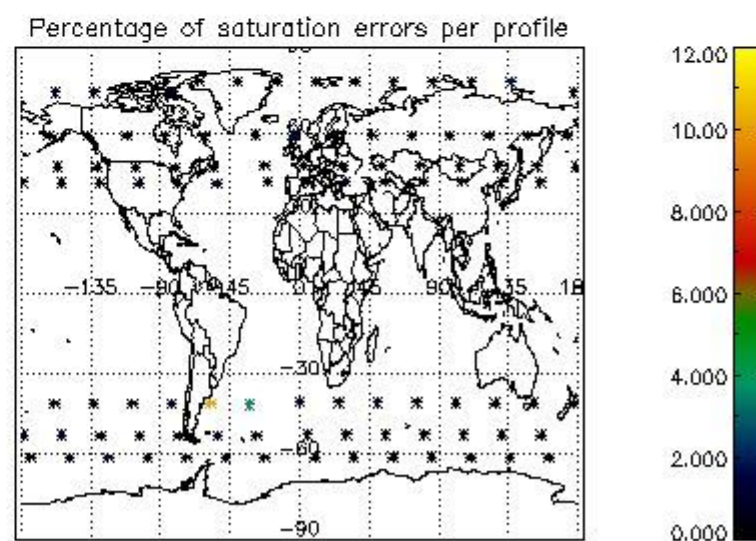
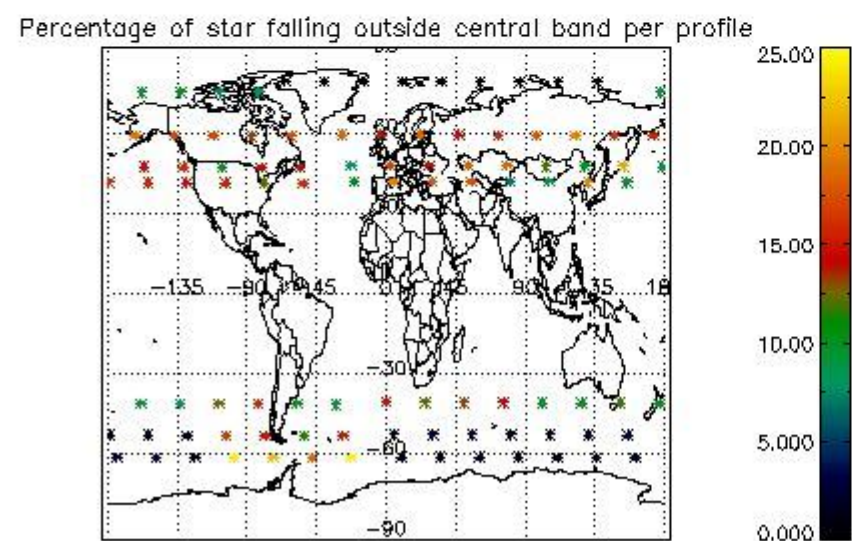
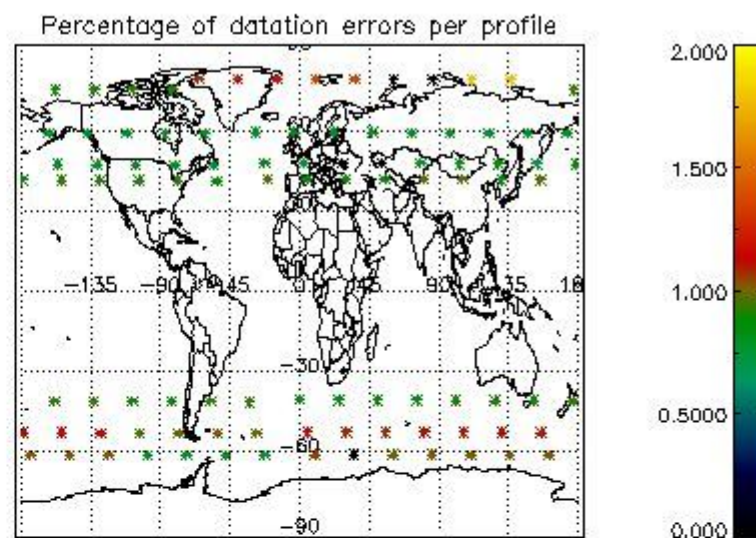
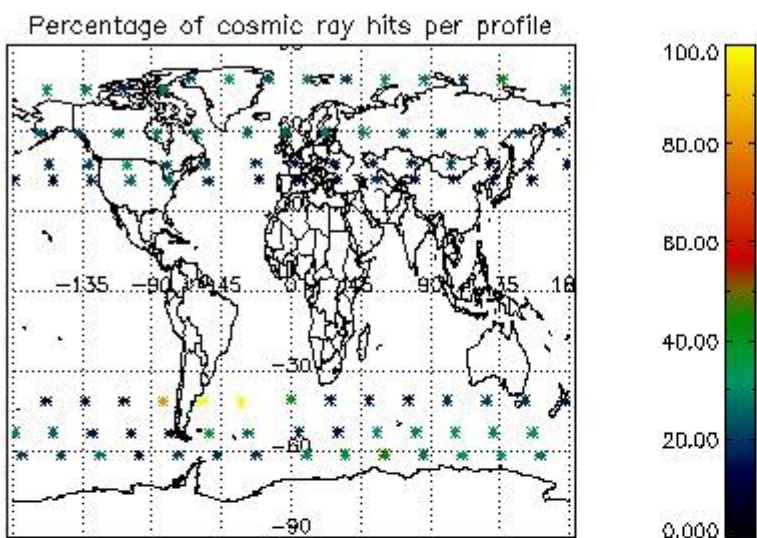


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

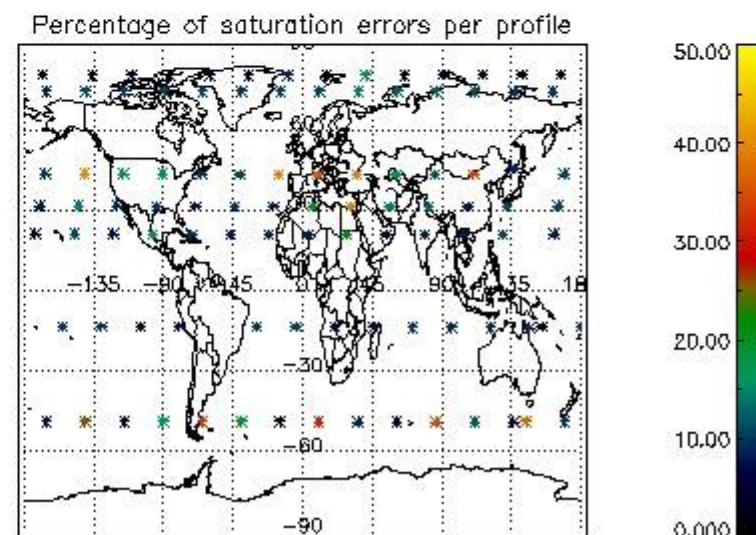
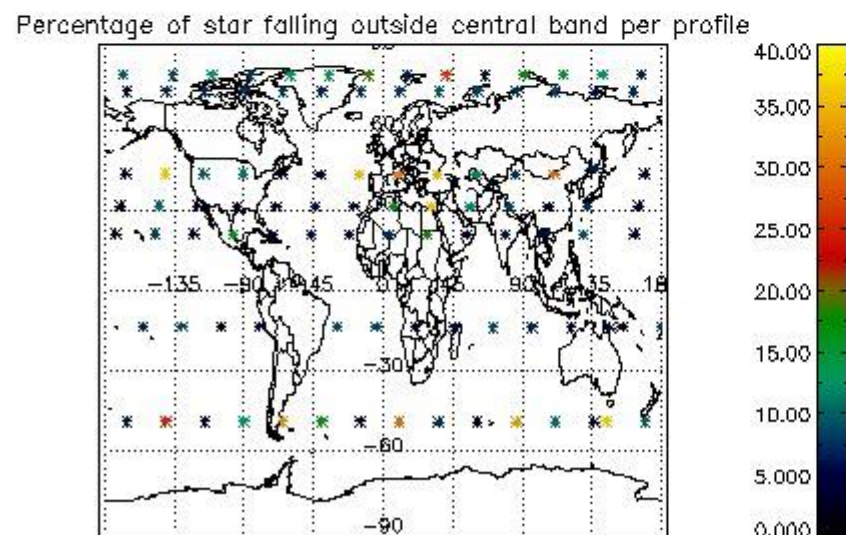
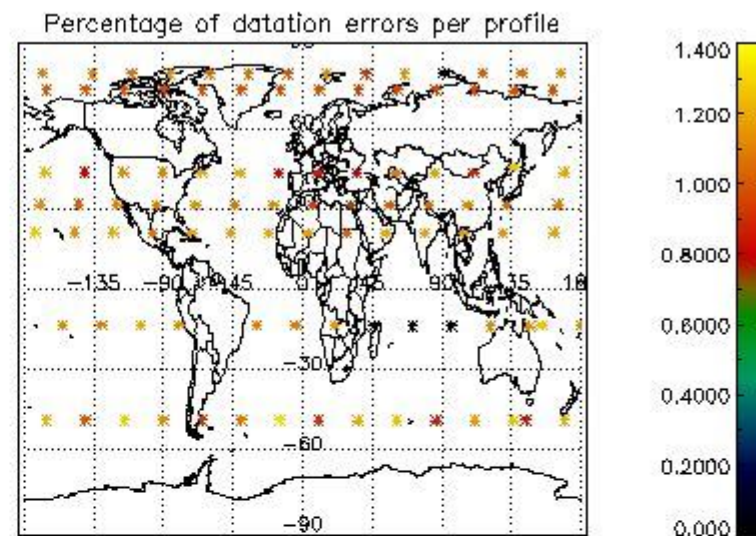
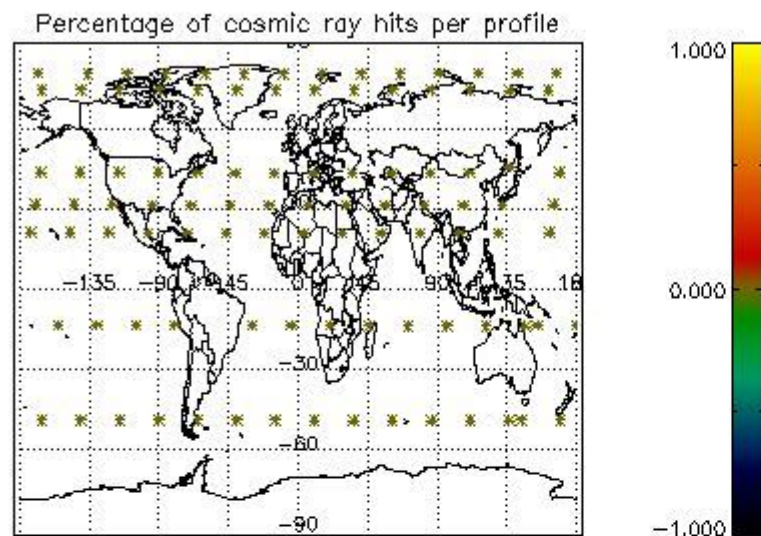


*4.2 Plot quality information per product coming from level 1b processing (world map)*

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



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



## 5. Trace gas profiles

### 5.1 Ozone statistics based on quality of products

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

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

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

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

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

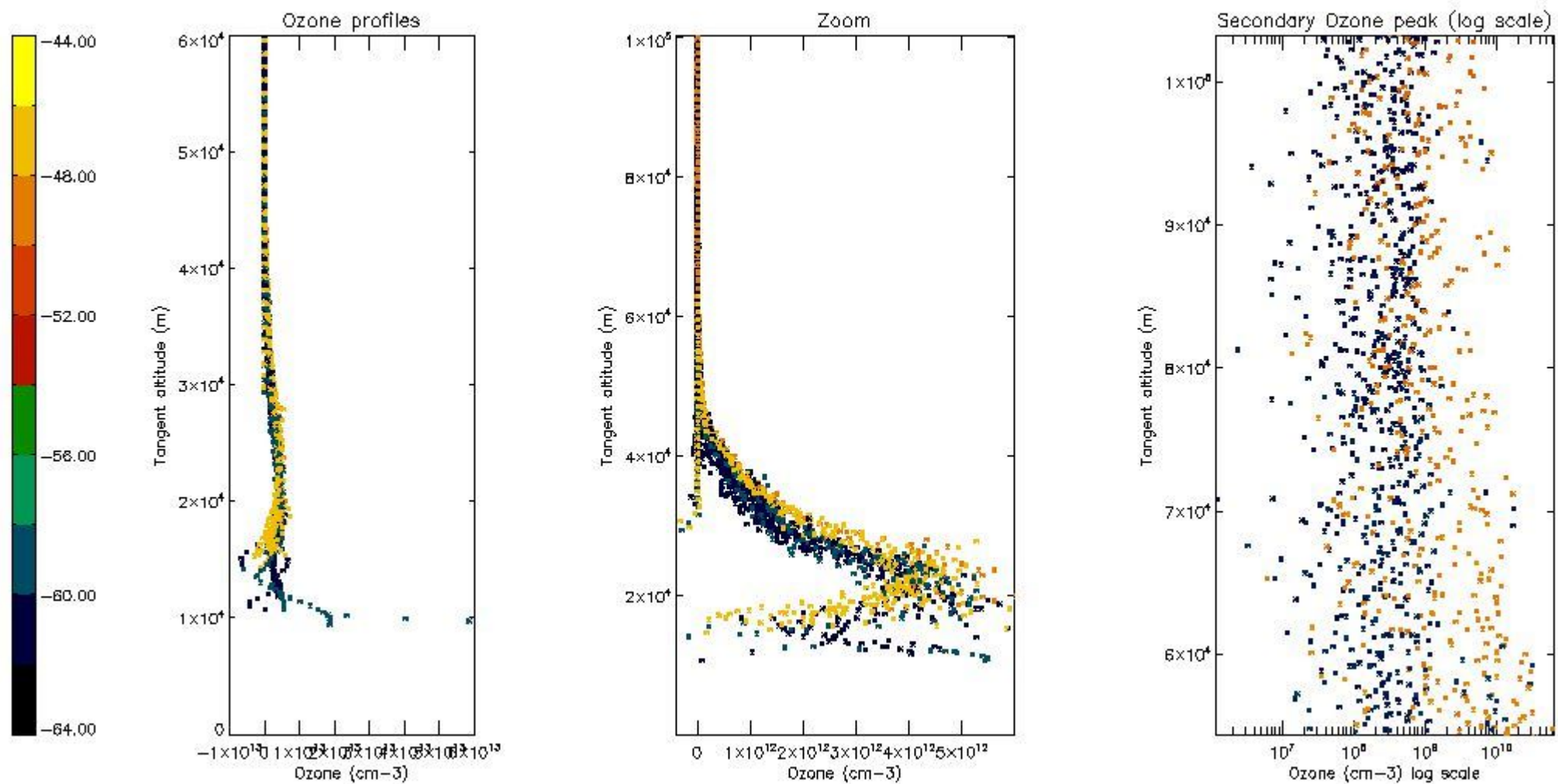
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	5

STD < 10	1
STD < 5	0

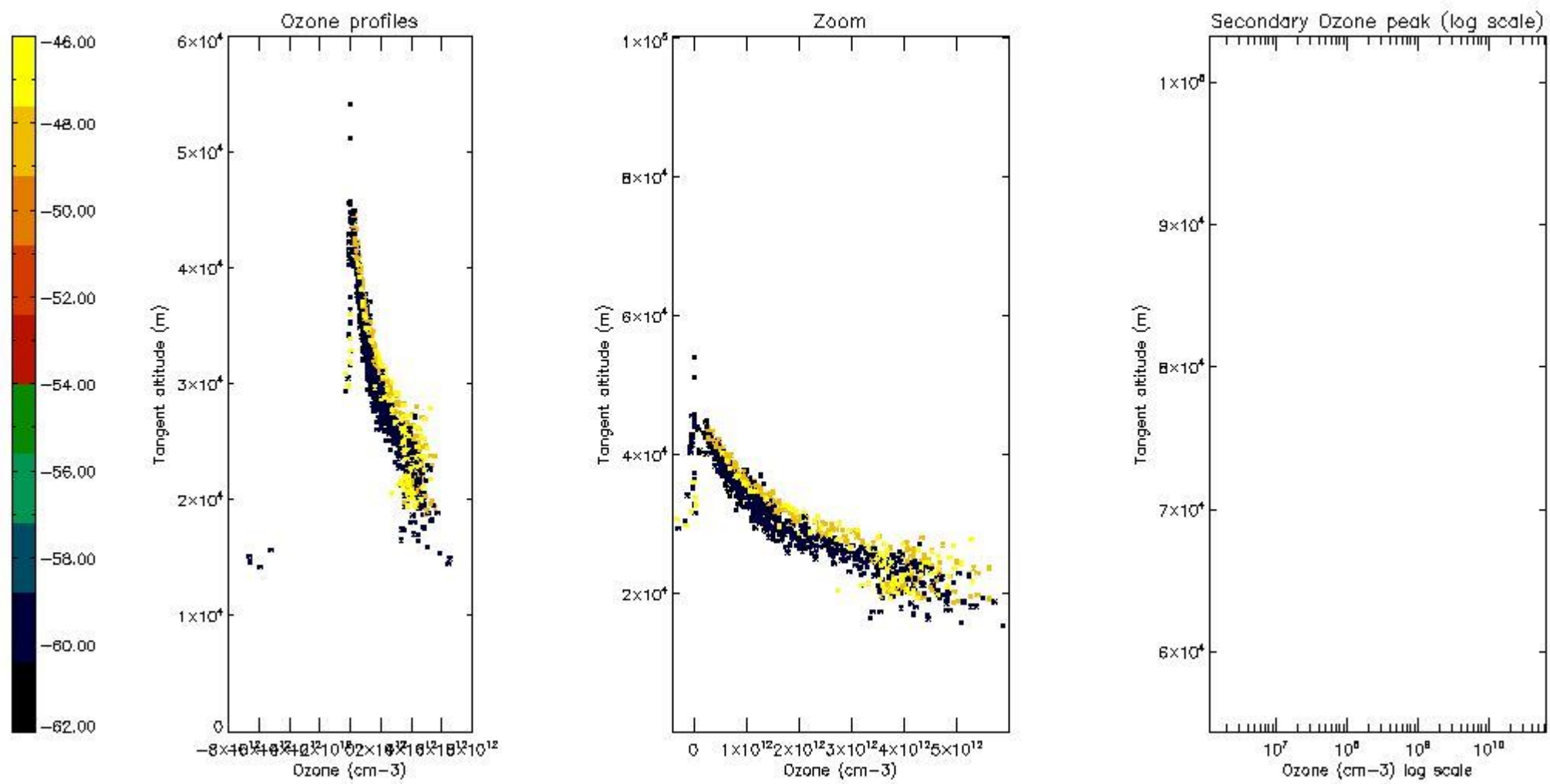
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



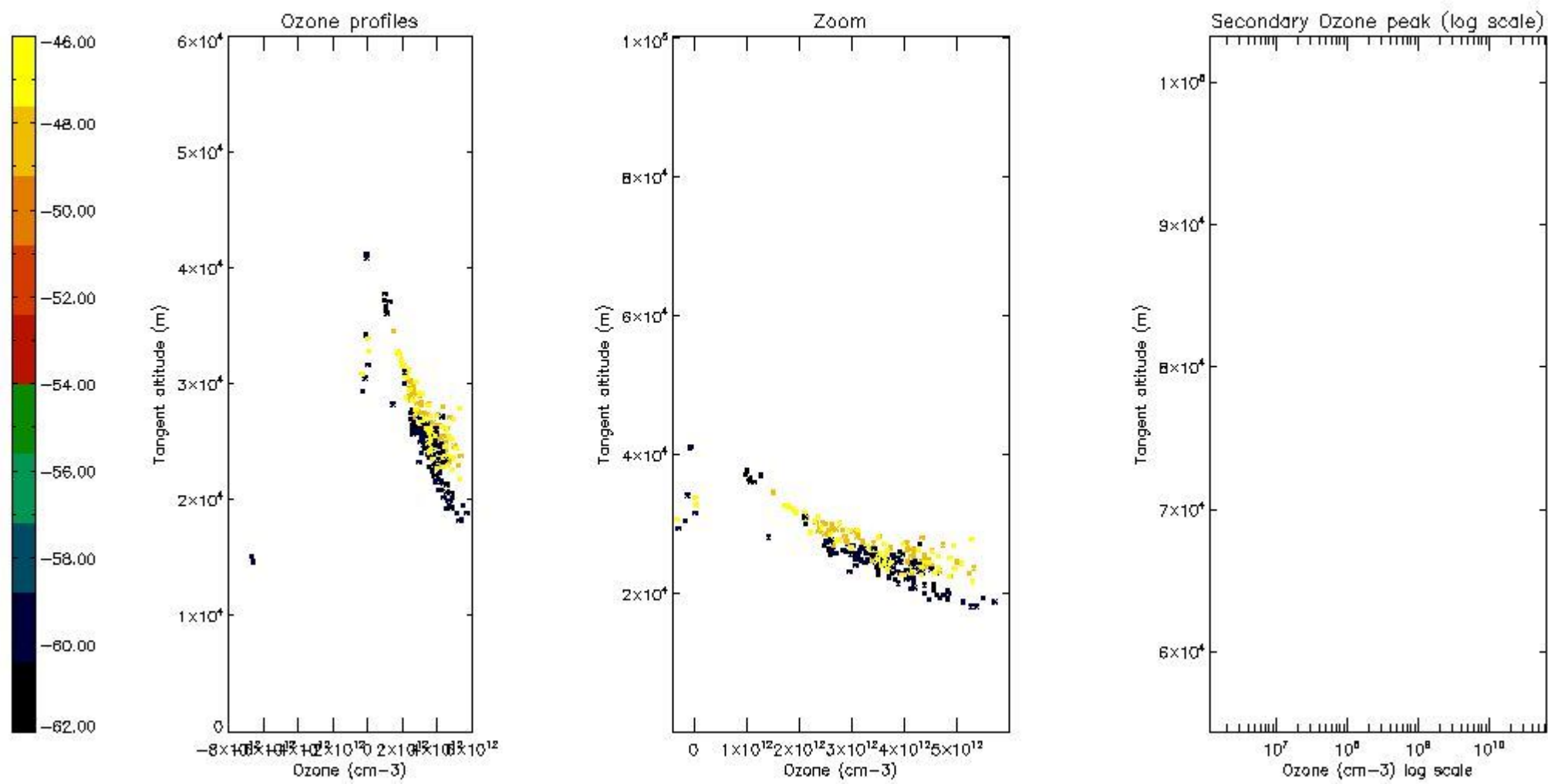
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



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

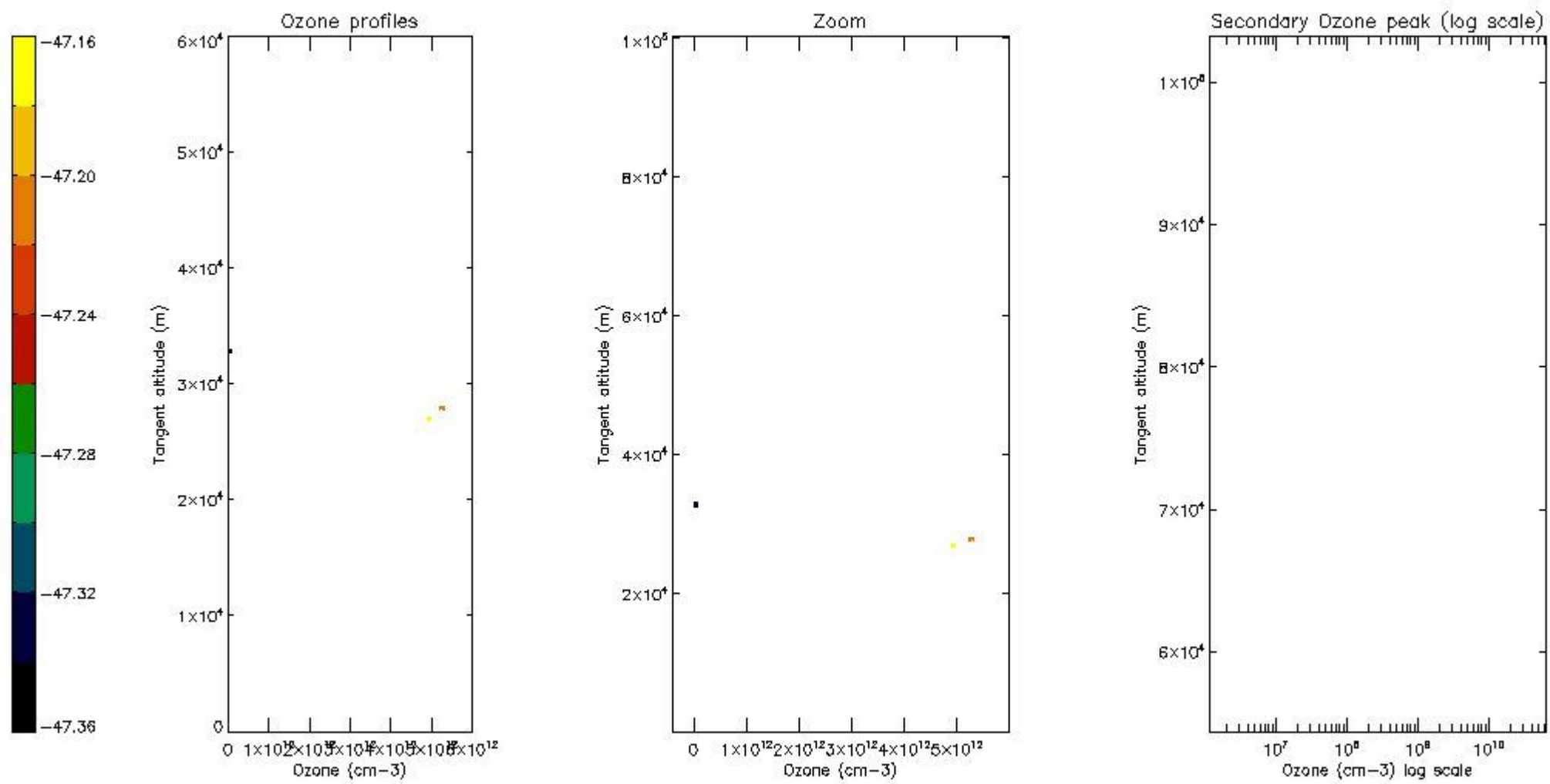
The colorbar represents the latitude.



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

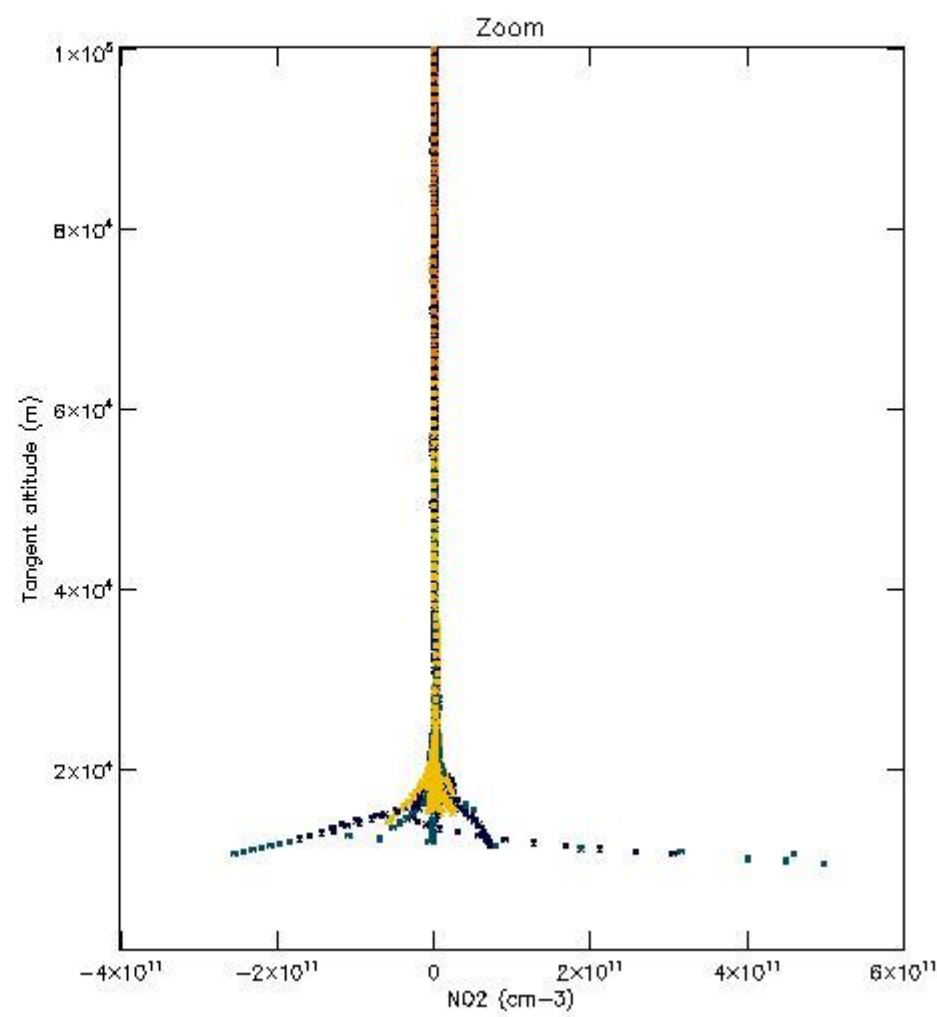
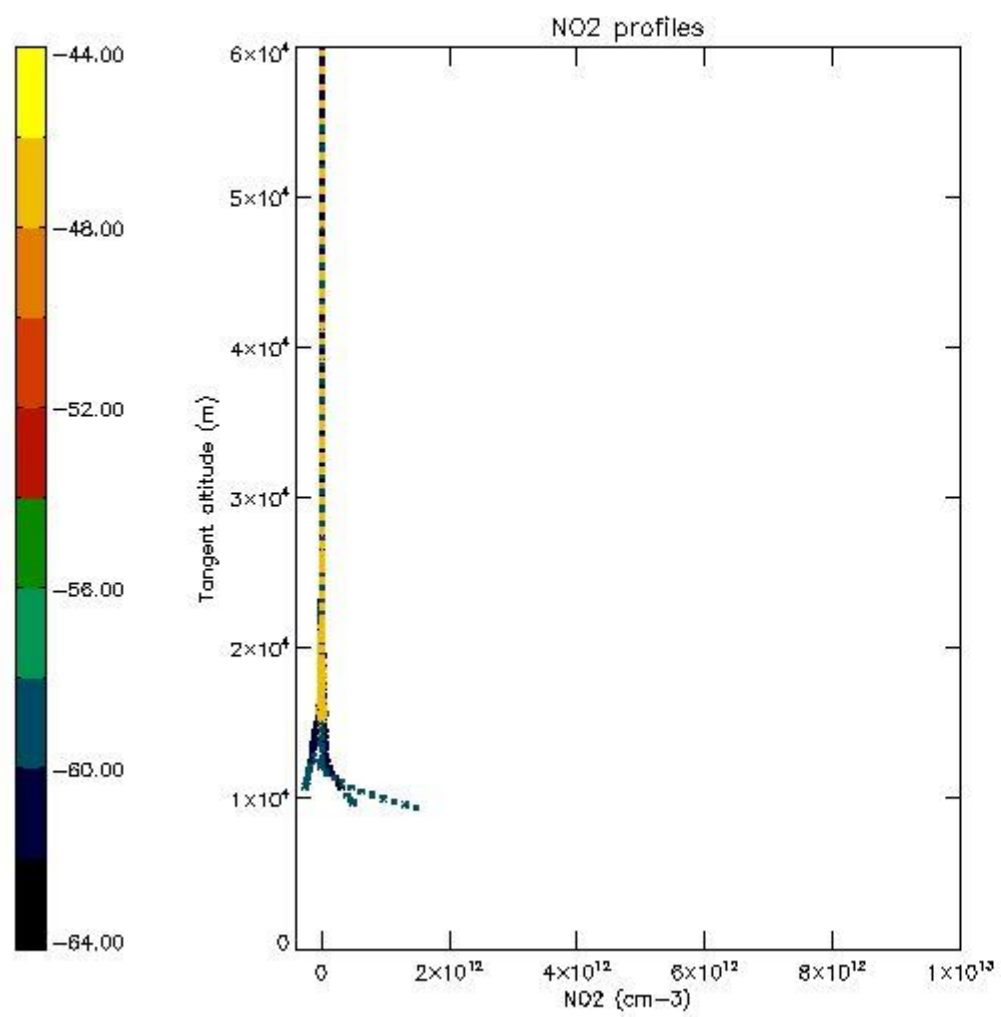
The colorbar represents the latitude.





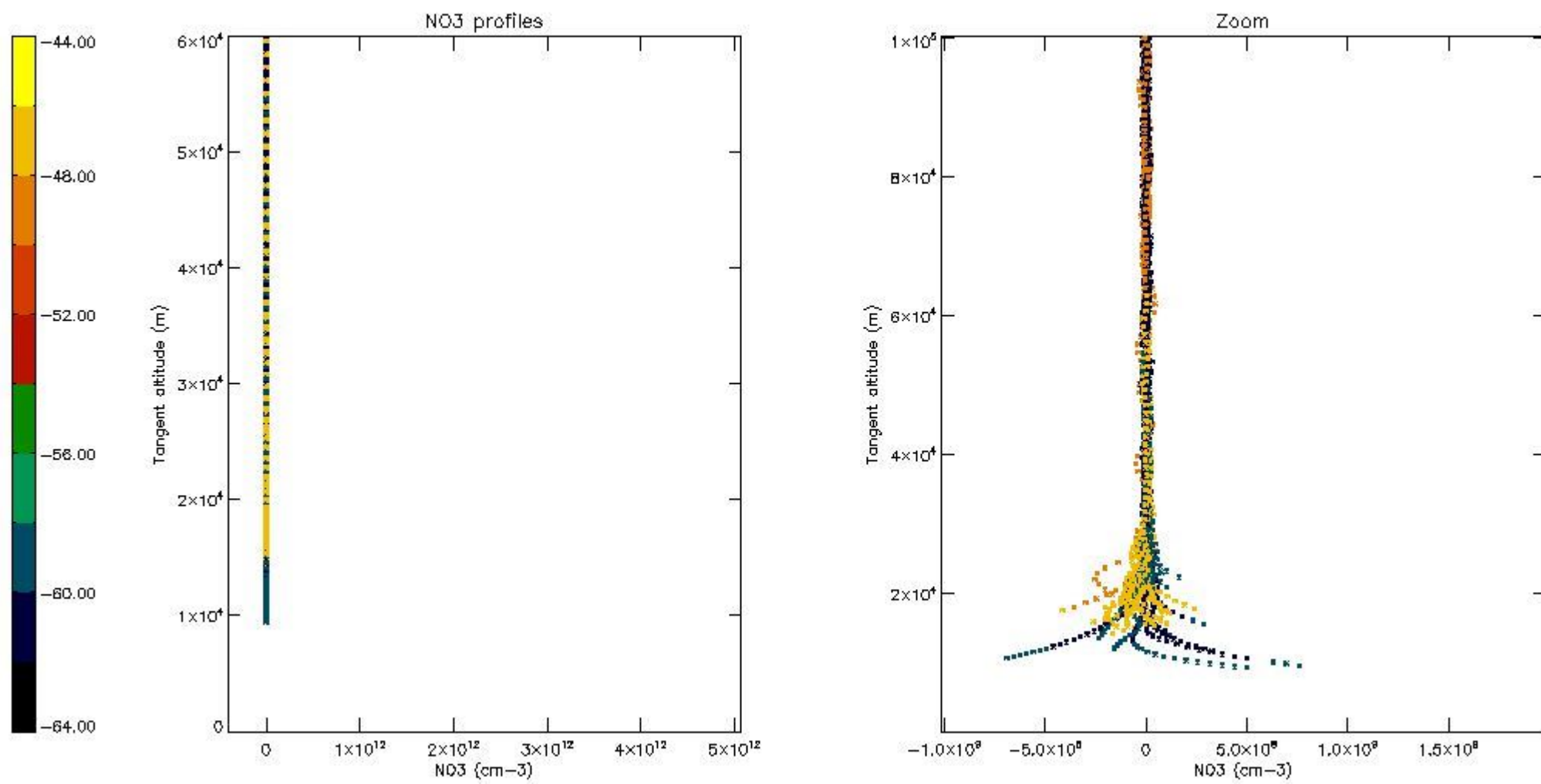
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



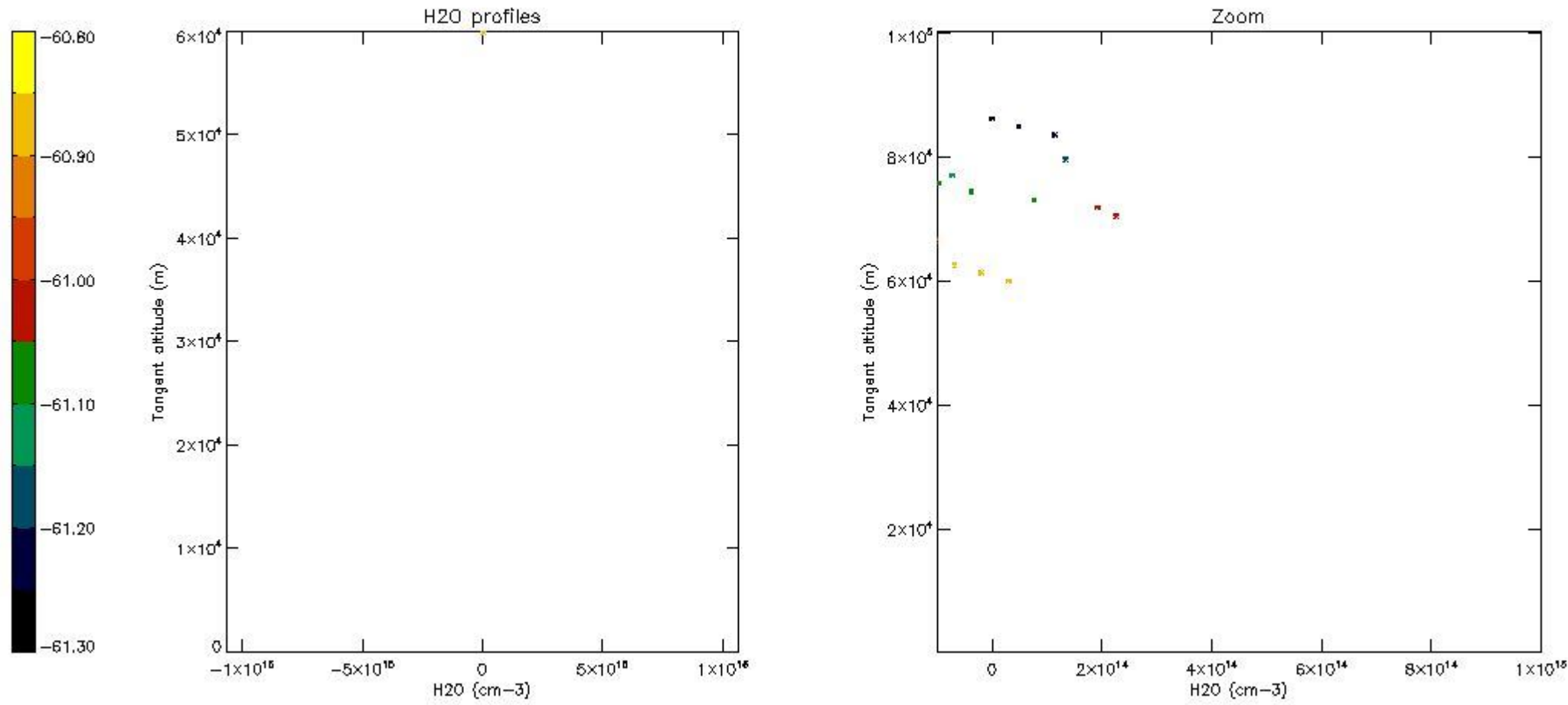
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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)

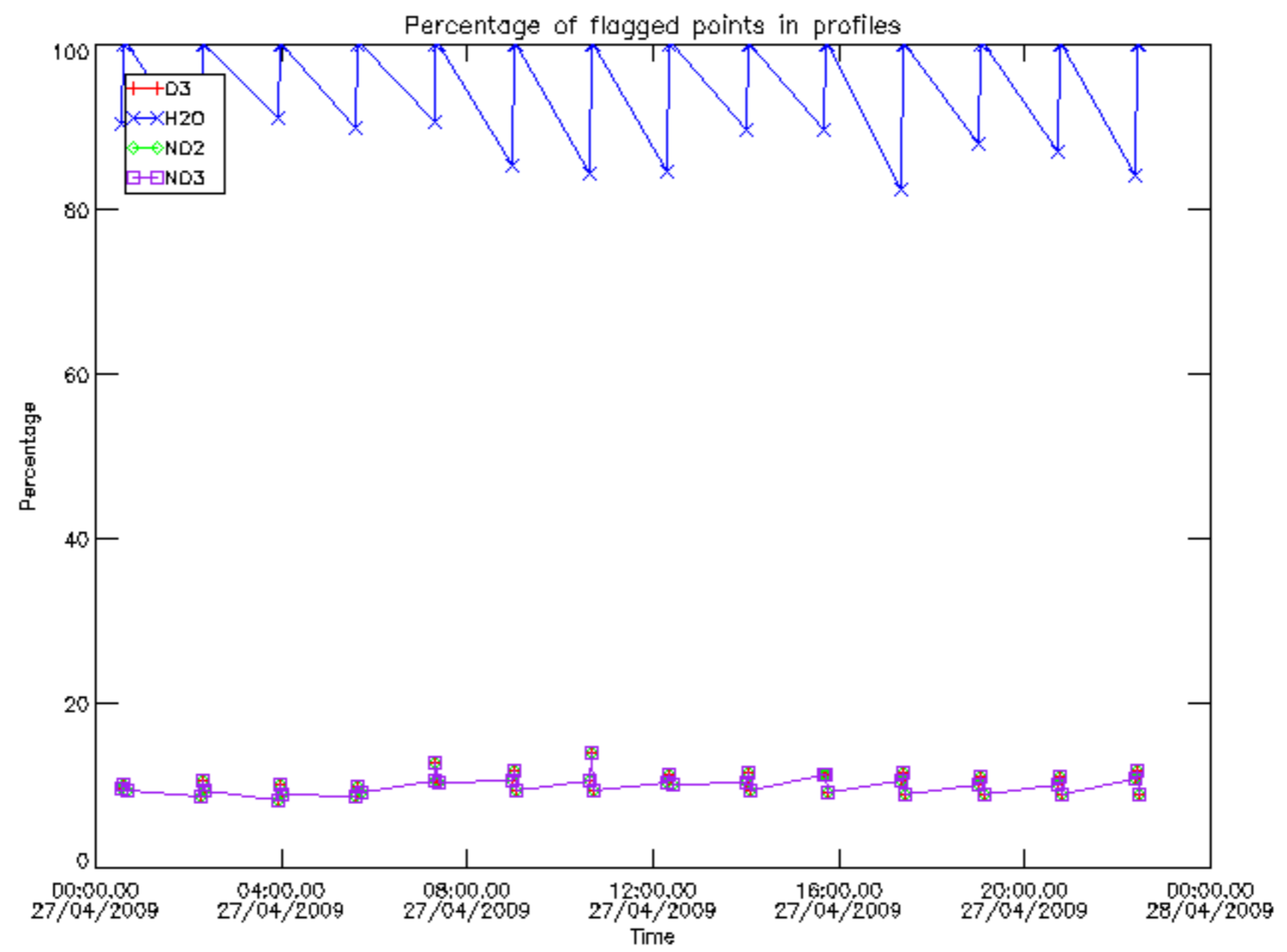
The colorbar represents the latitude.



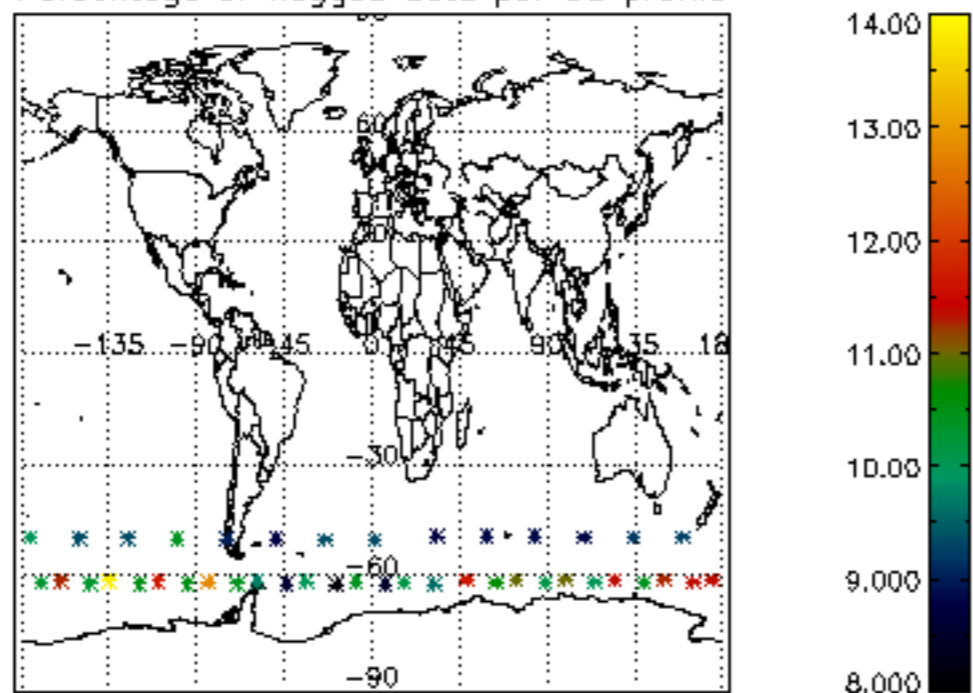
## 6. Auxiliary Data Files used for the production reported in section 2

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.

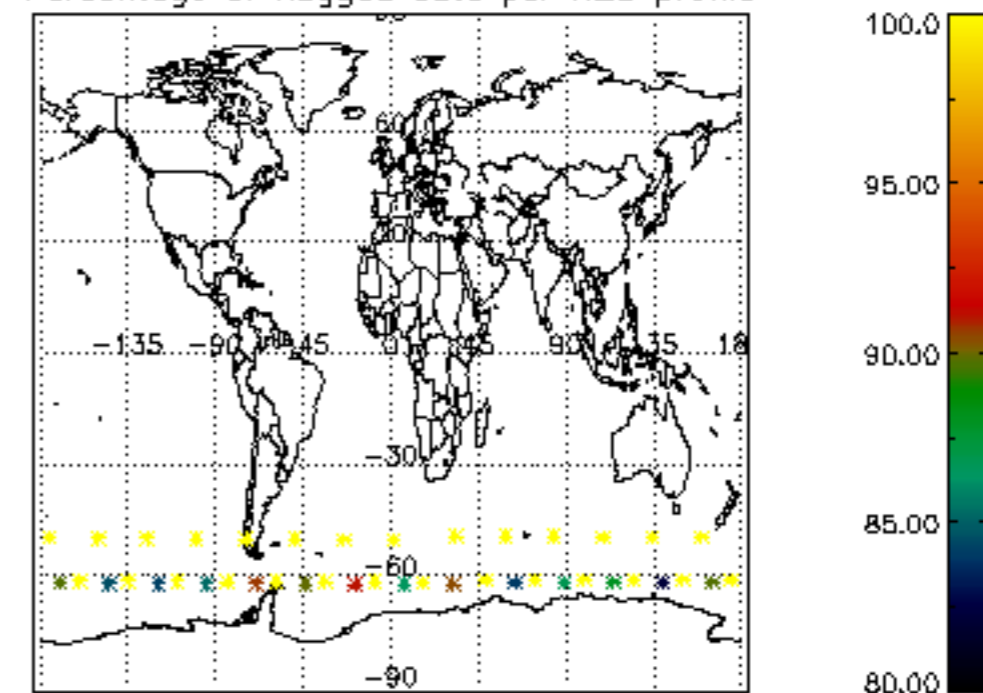
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	27-APR-2009 00:05:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-APR-2009 00:05:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-APR-2009 00:05:25



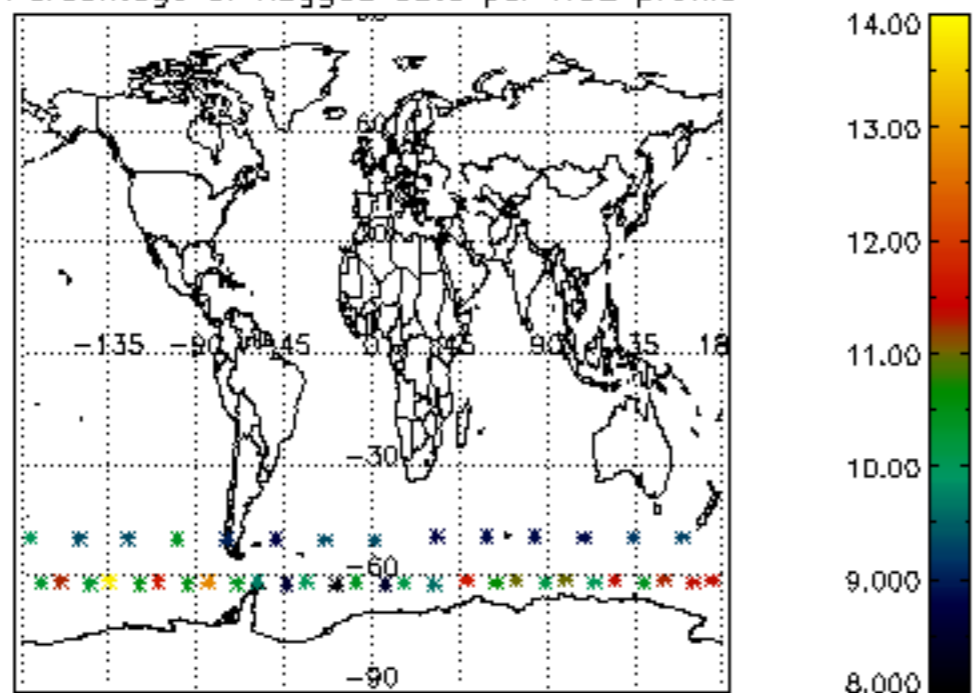
Percentage of flagged data per D3 profile



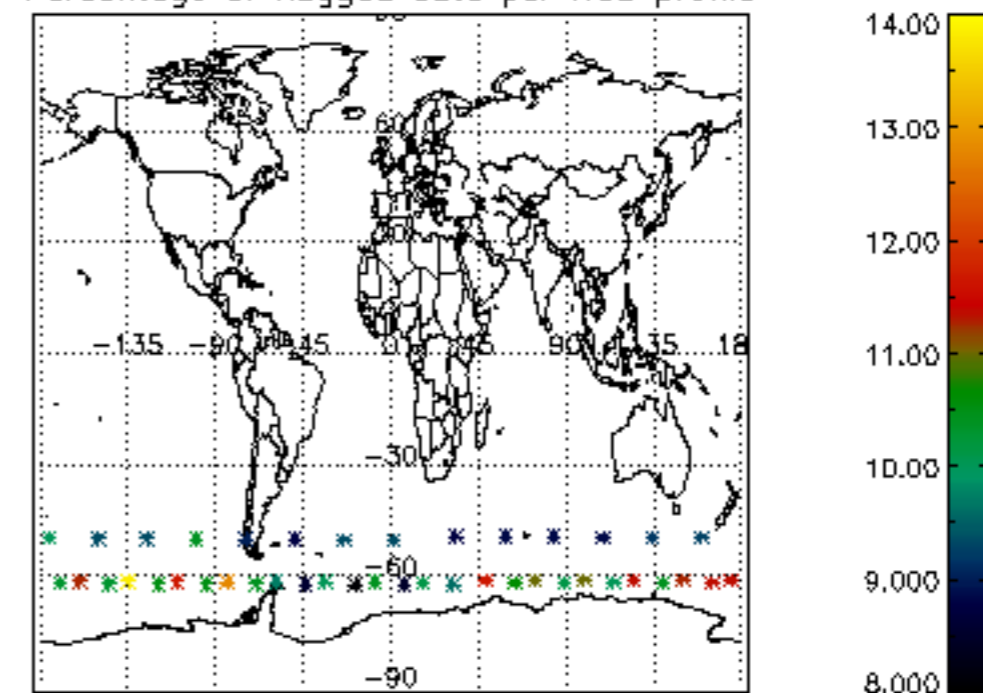
Percentage of flagged data per H2O profile

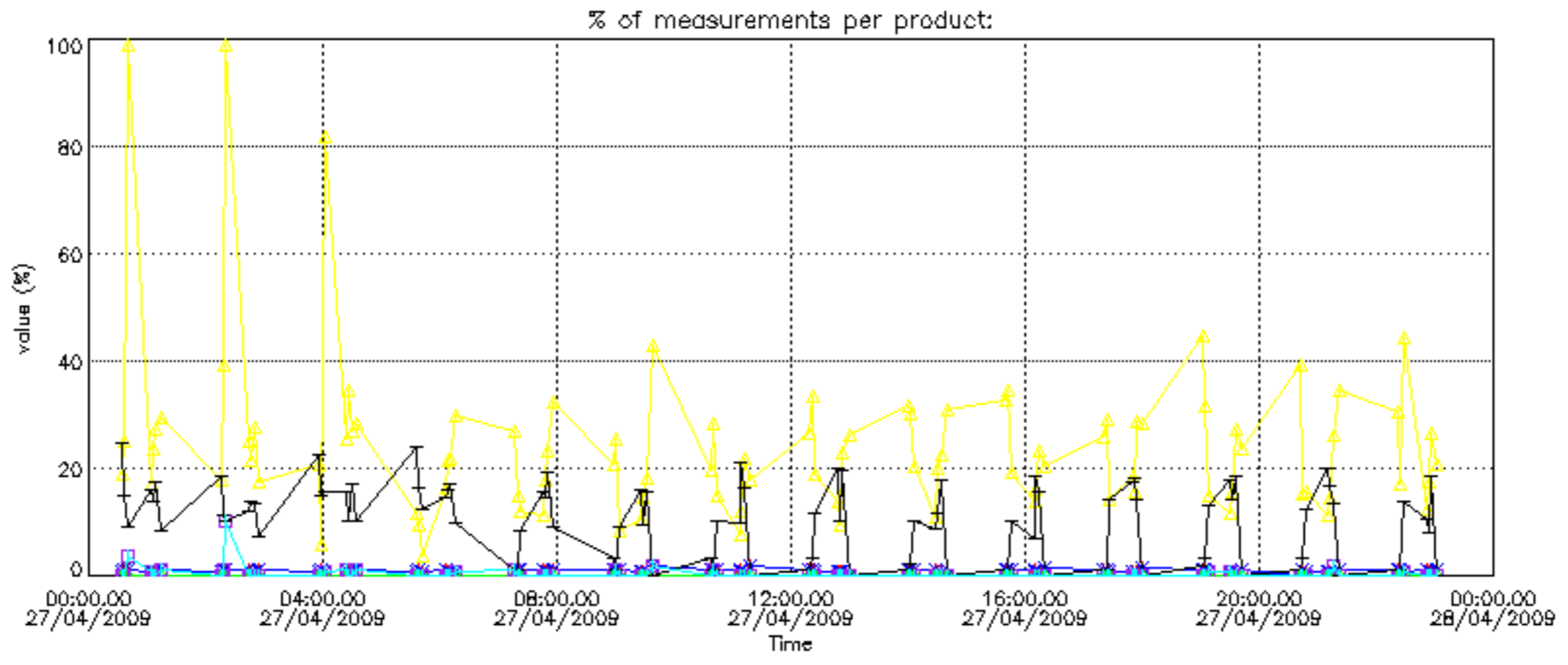


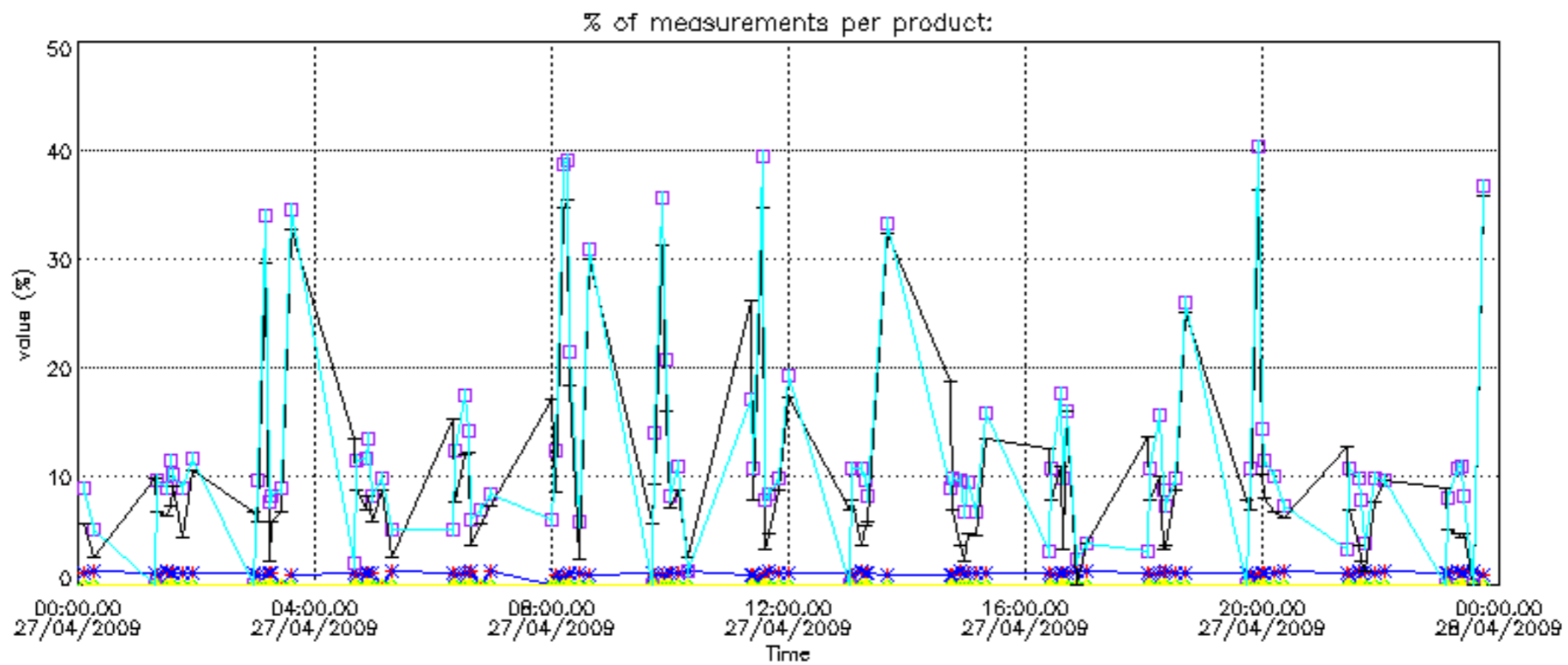
Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

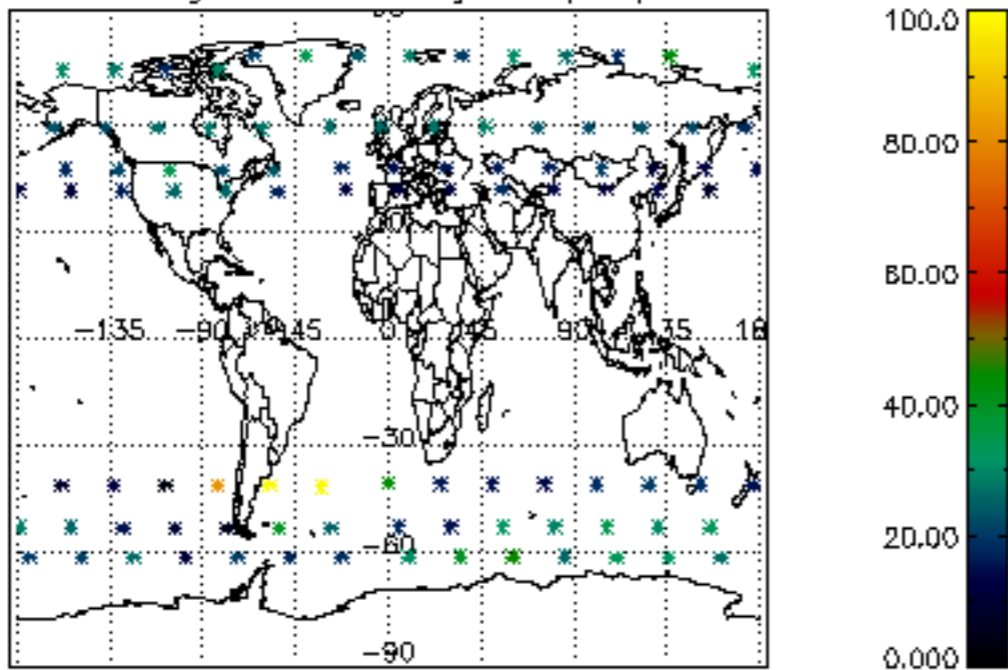




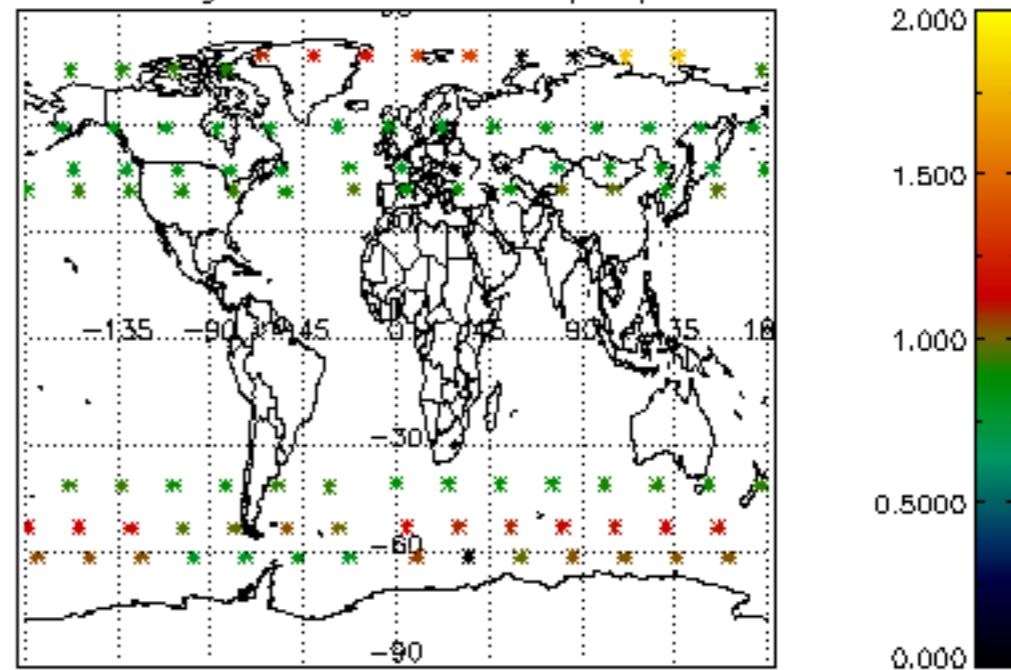




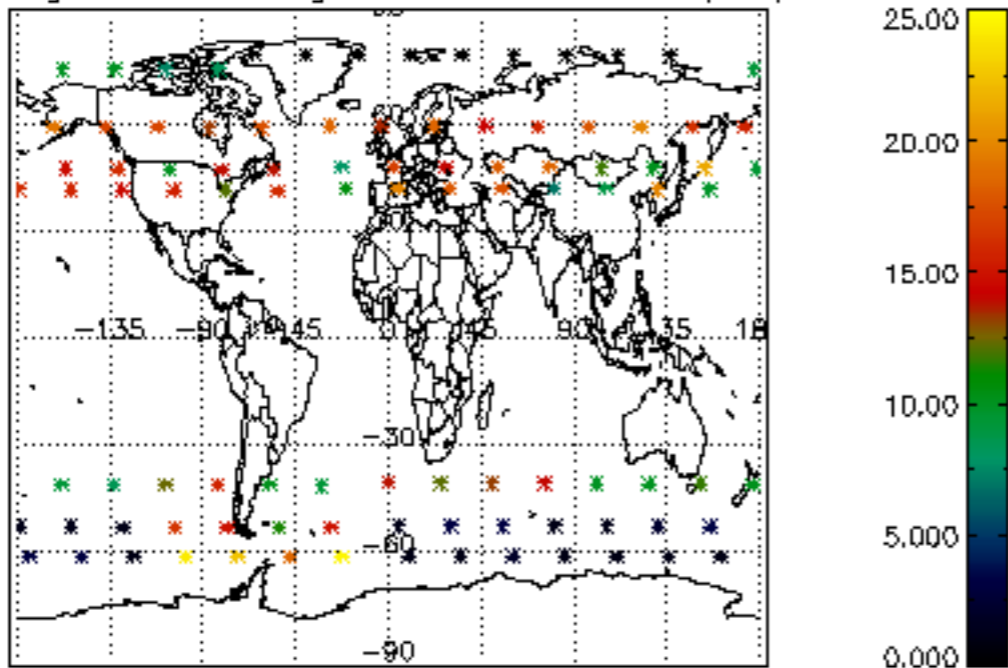
Percentage of cosmic ray hits per profile



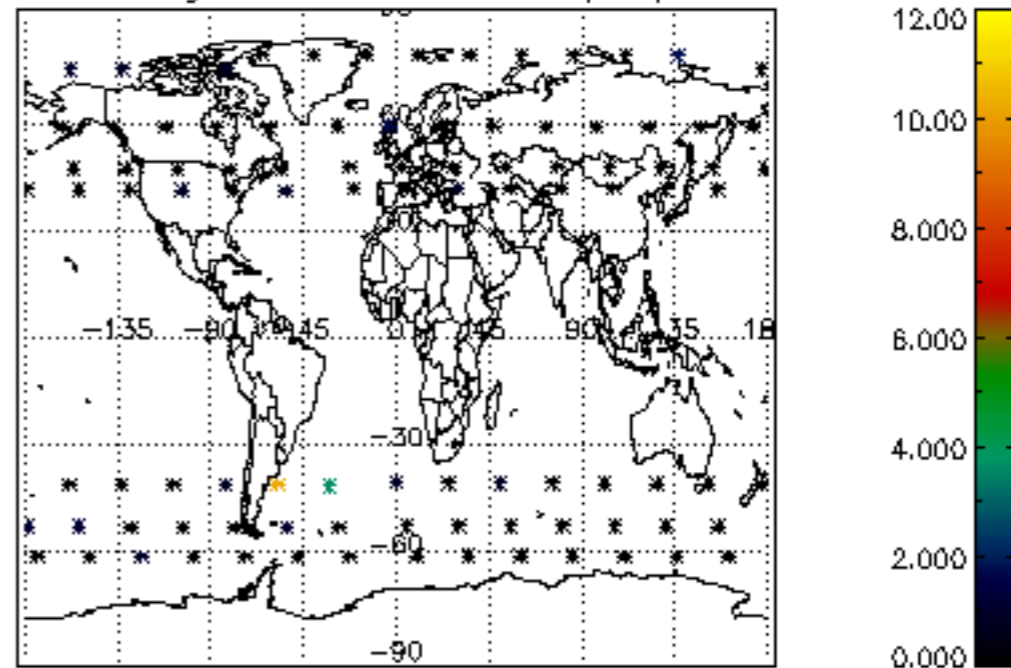
Percentage of datation errors per profile



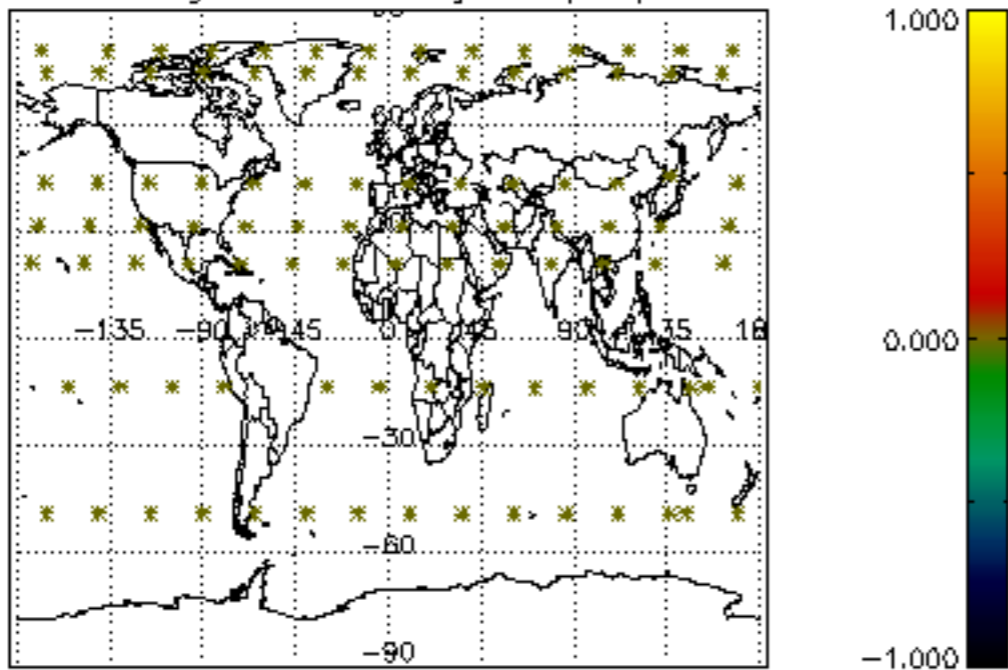
Percentage of star falling outside central band per profile



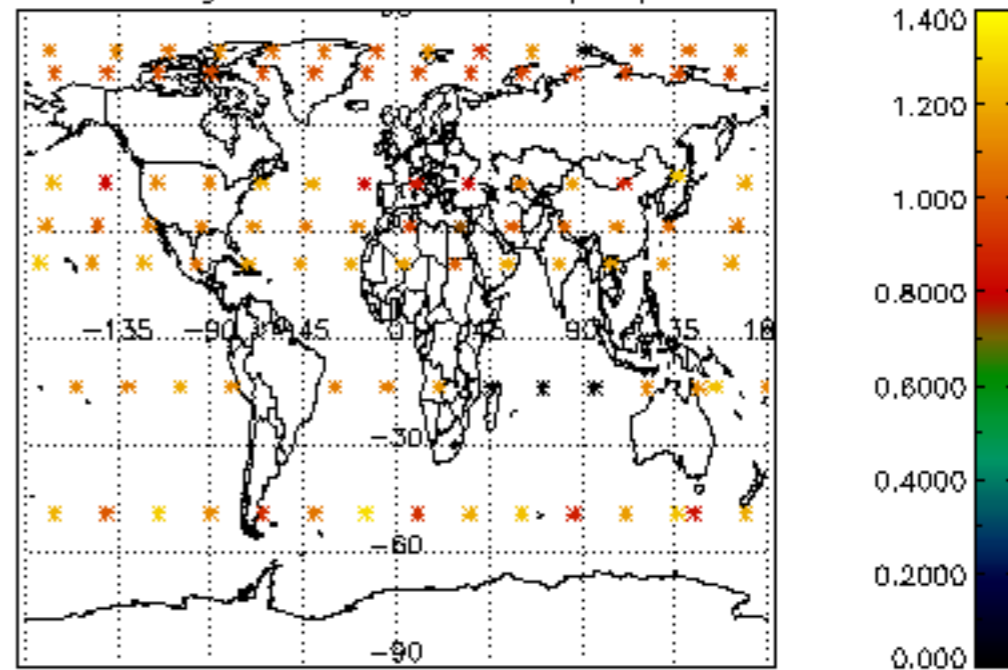
Percentage of saturation errors per profile



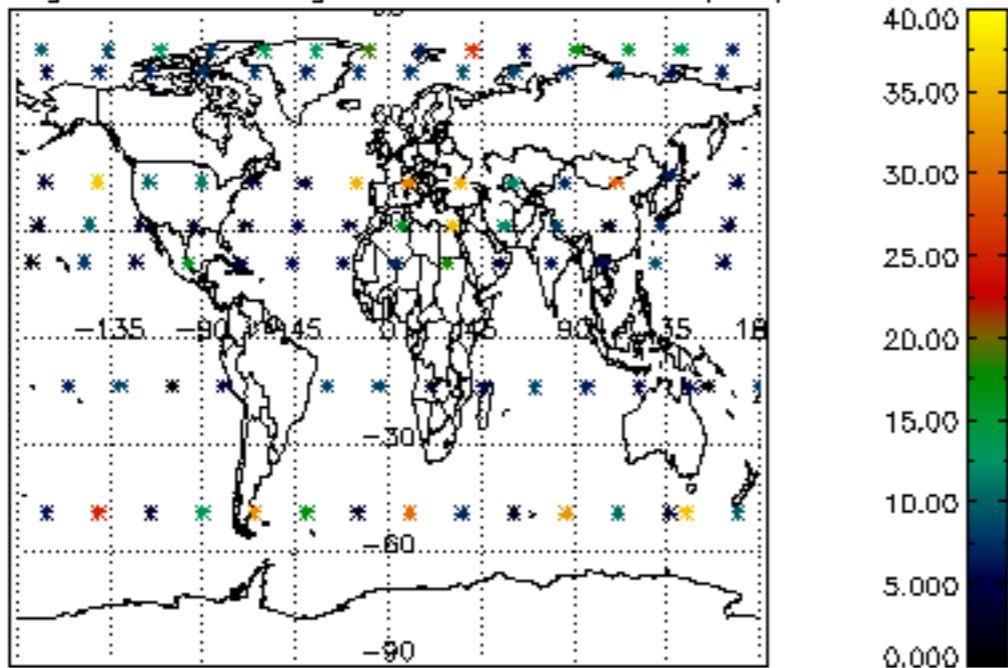
Percentage of cosmic ray hits per profile



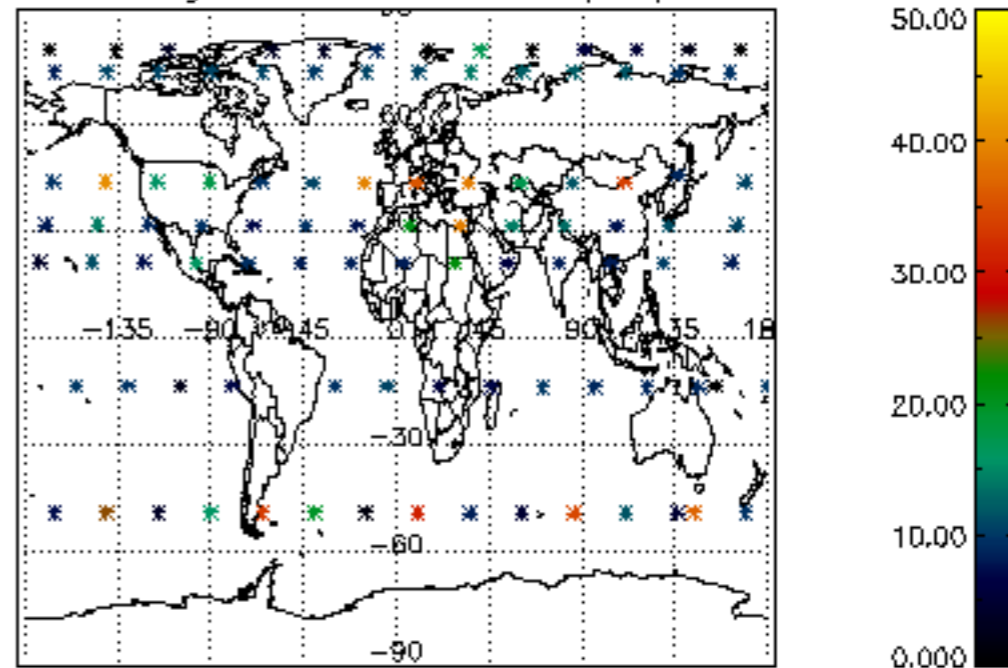
Percentage of datation errors per profile

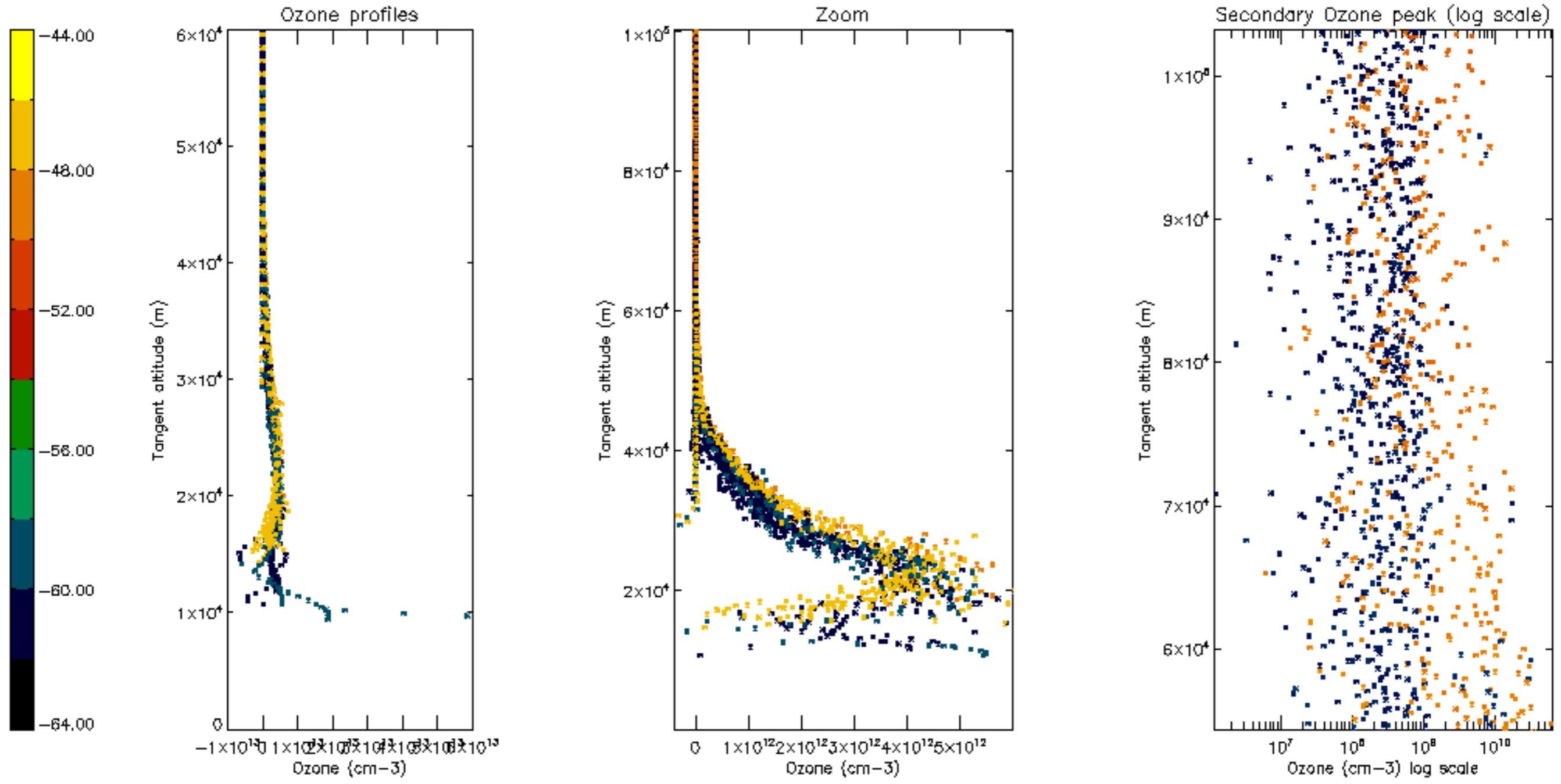


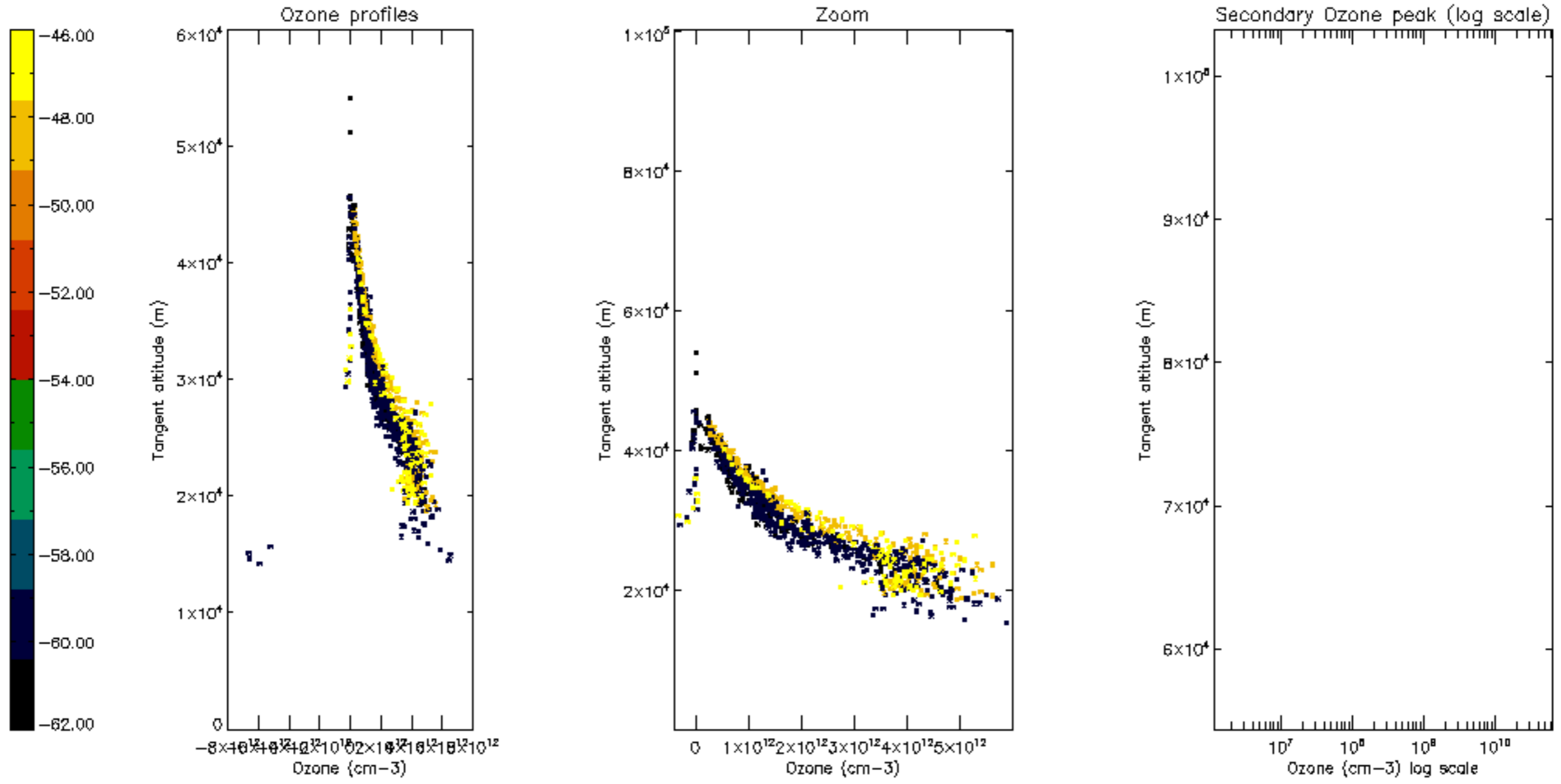
Percentage of star falling outside central band per profile

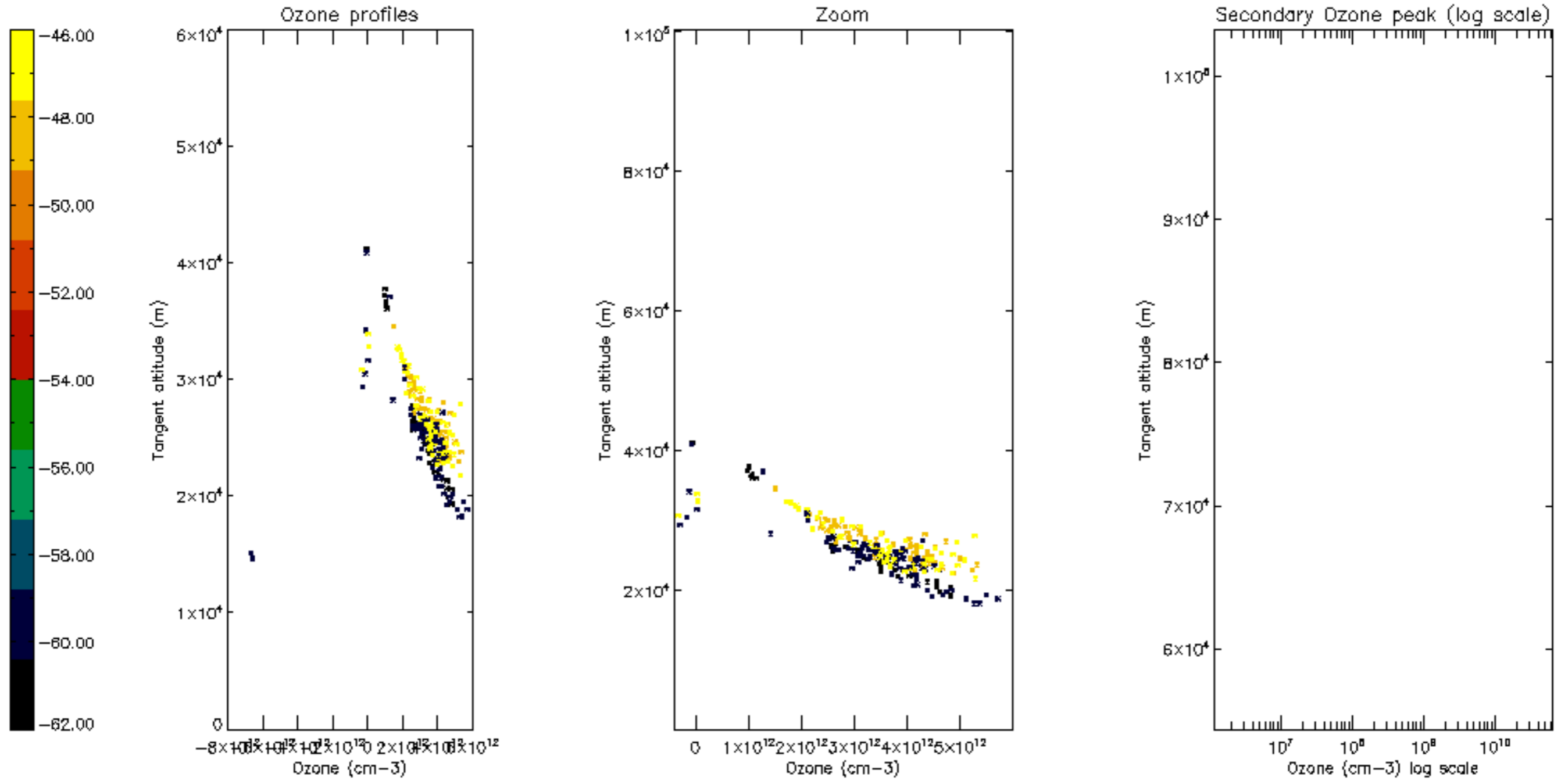


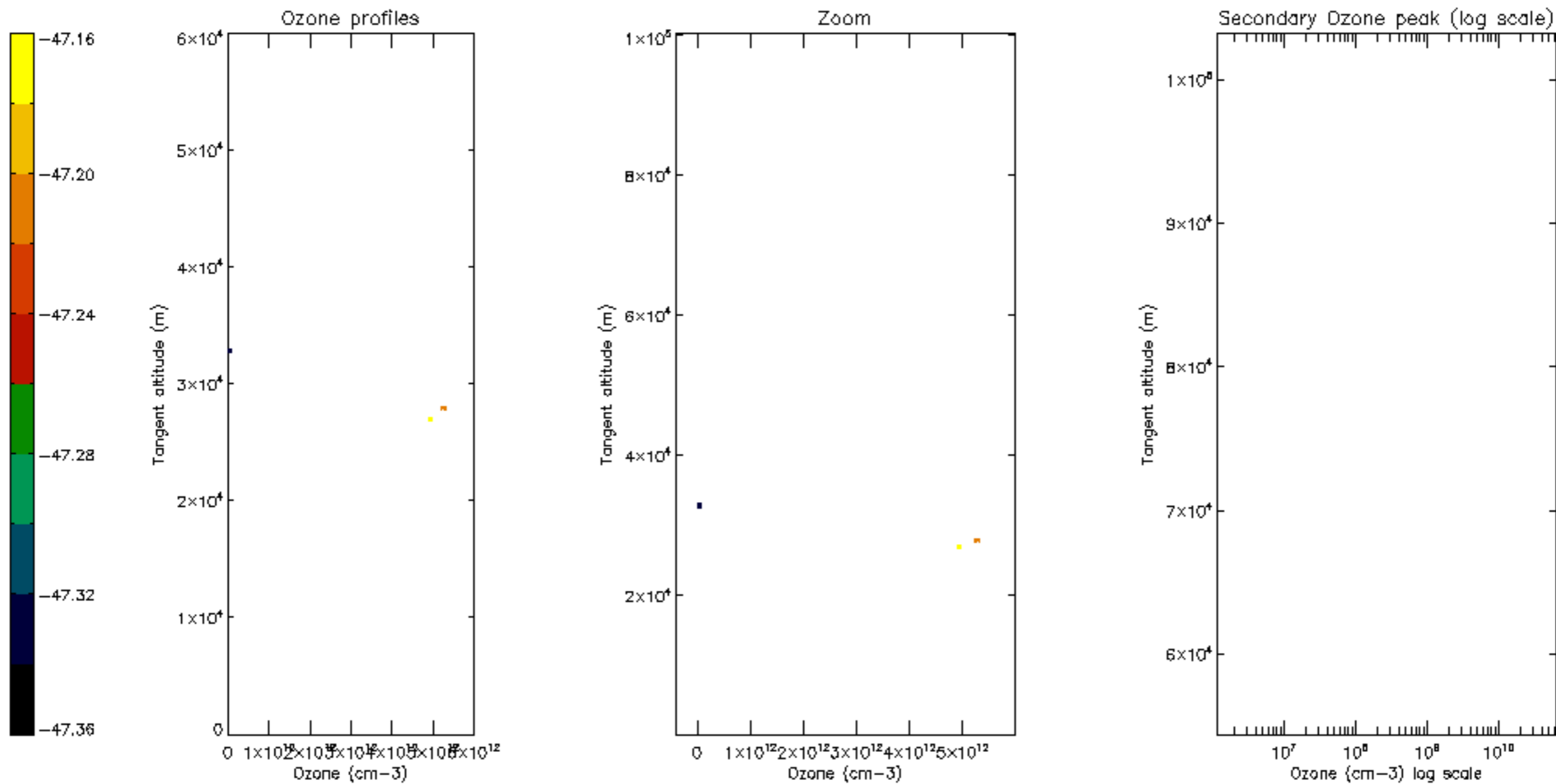
Percentage of saturation errors per profile

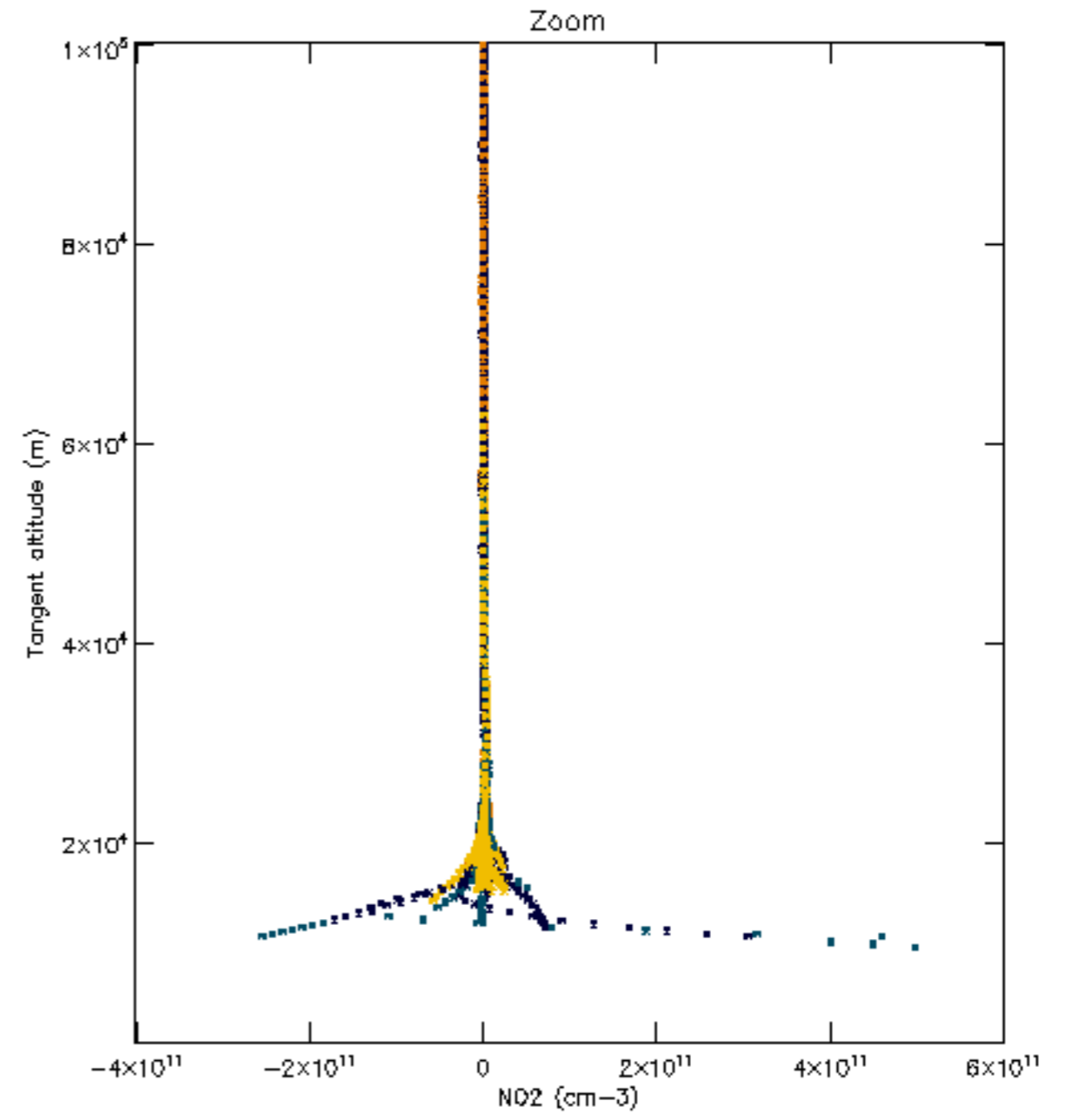
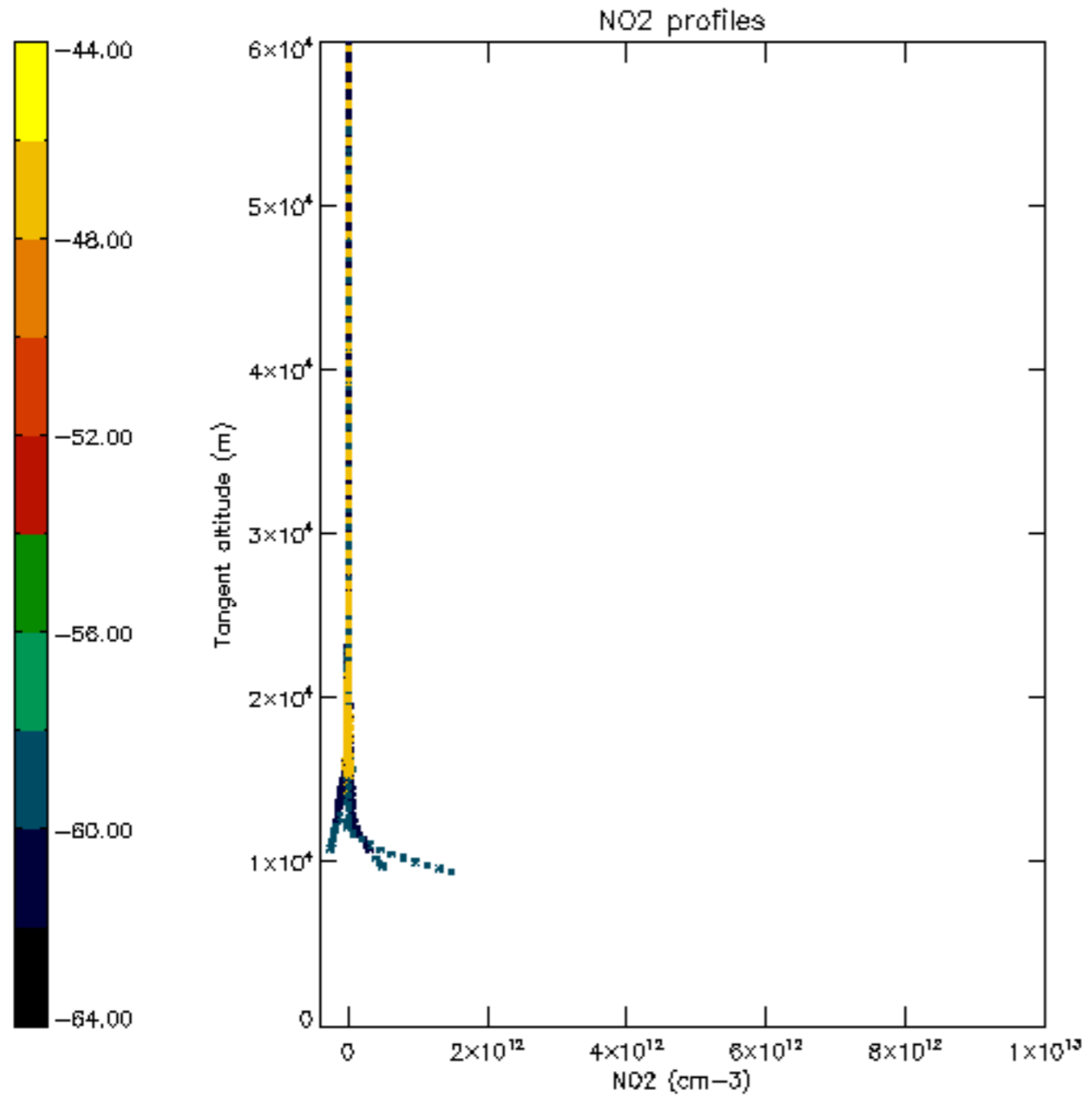


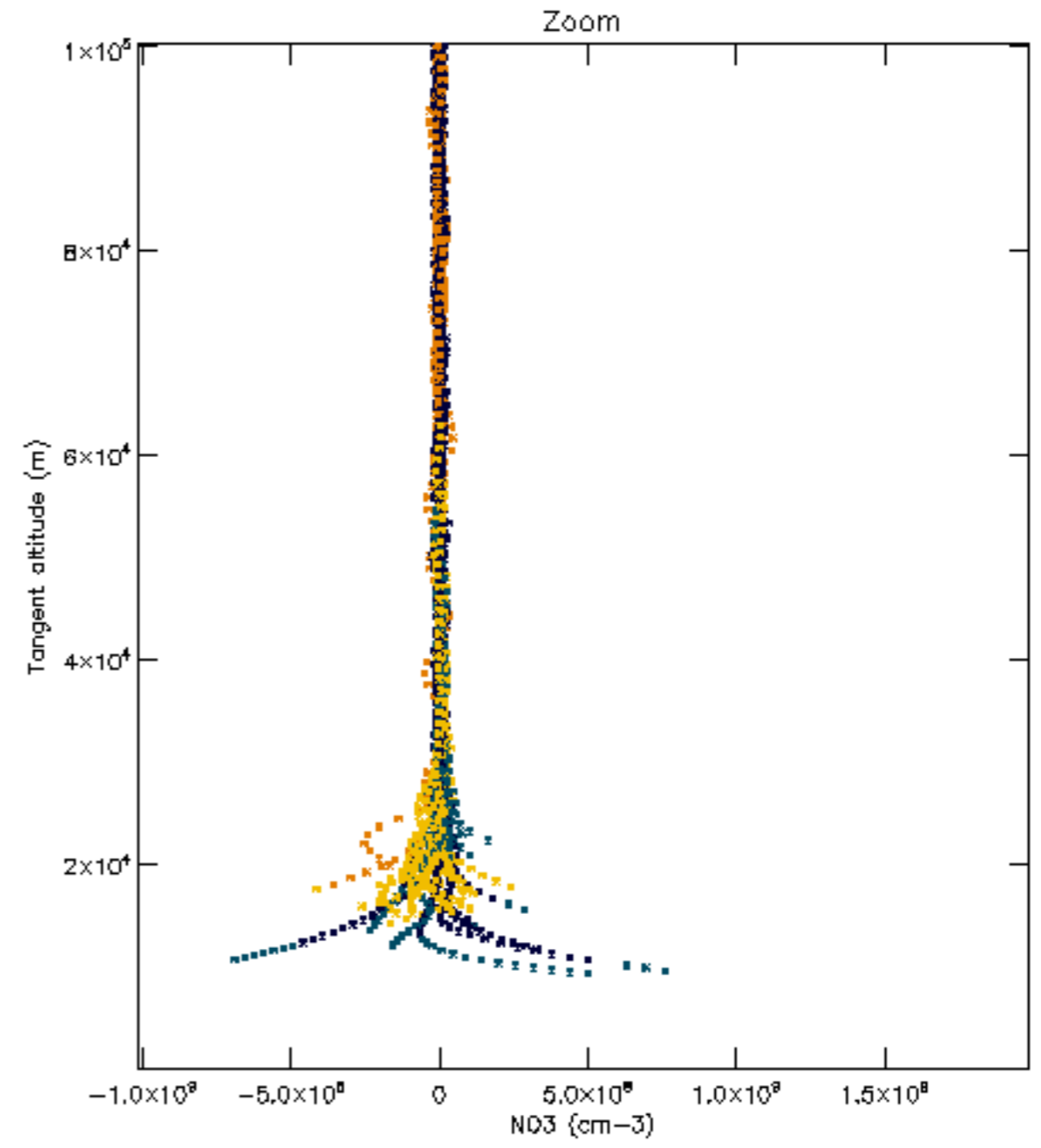
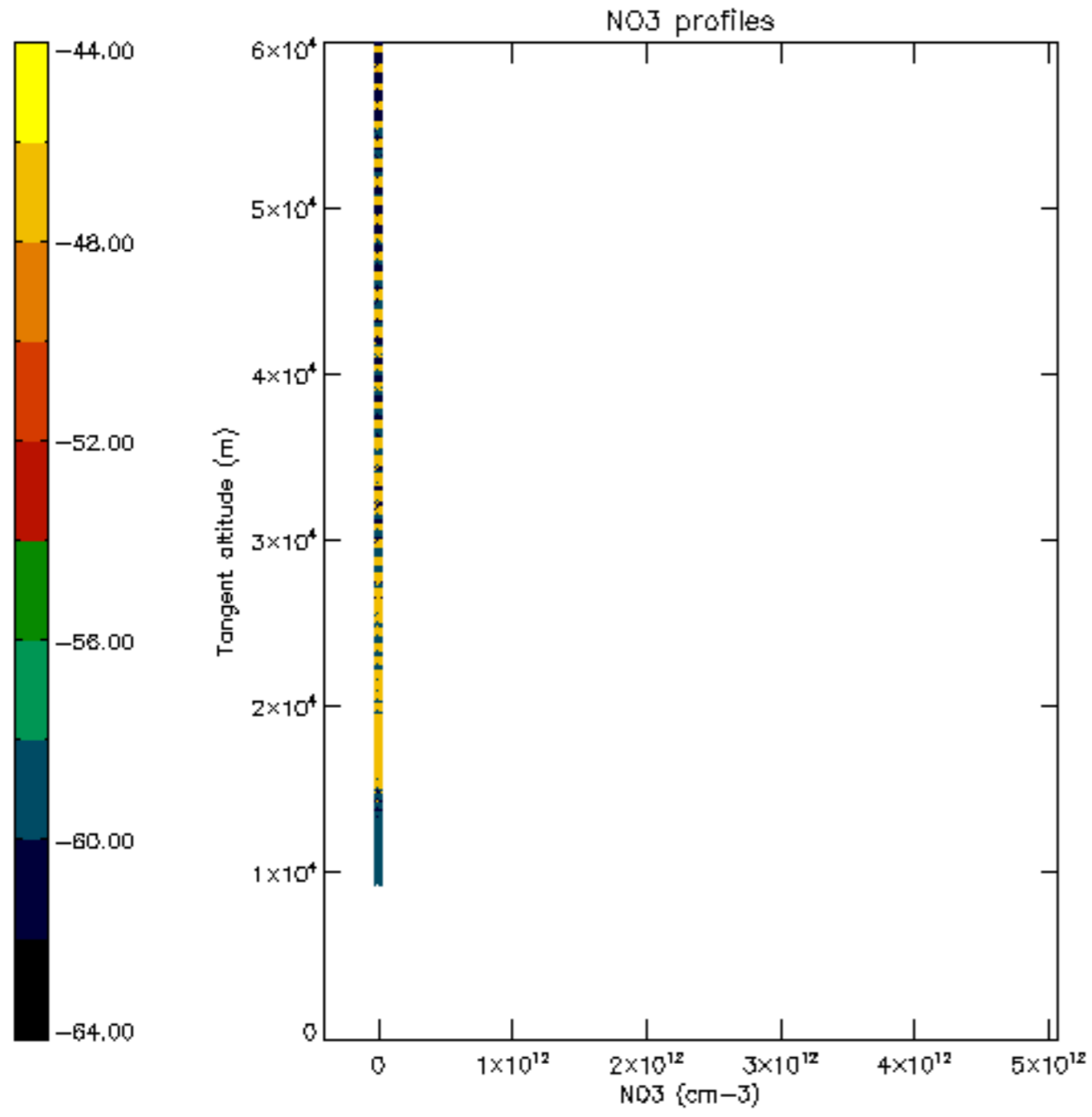




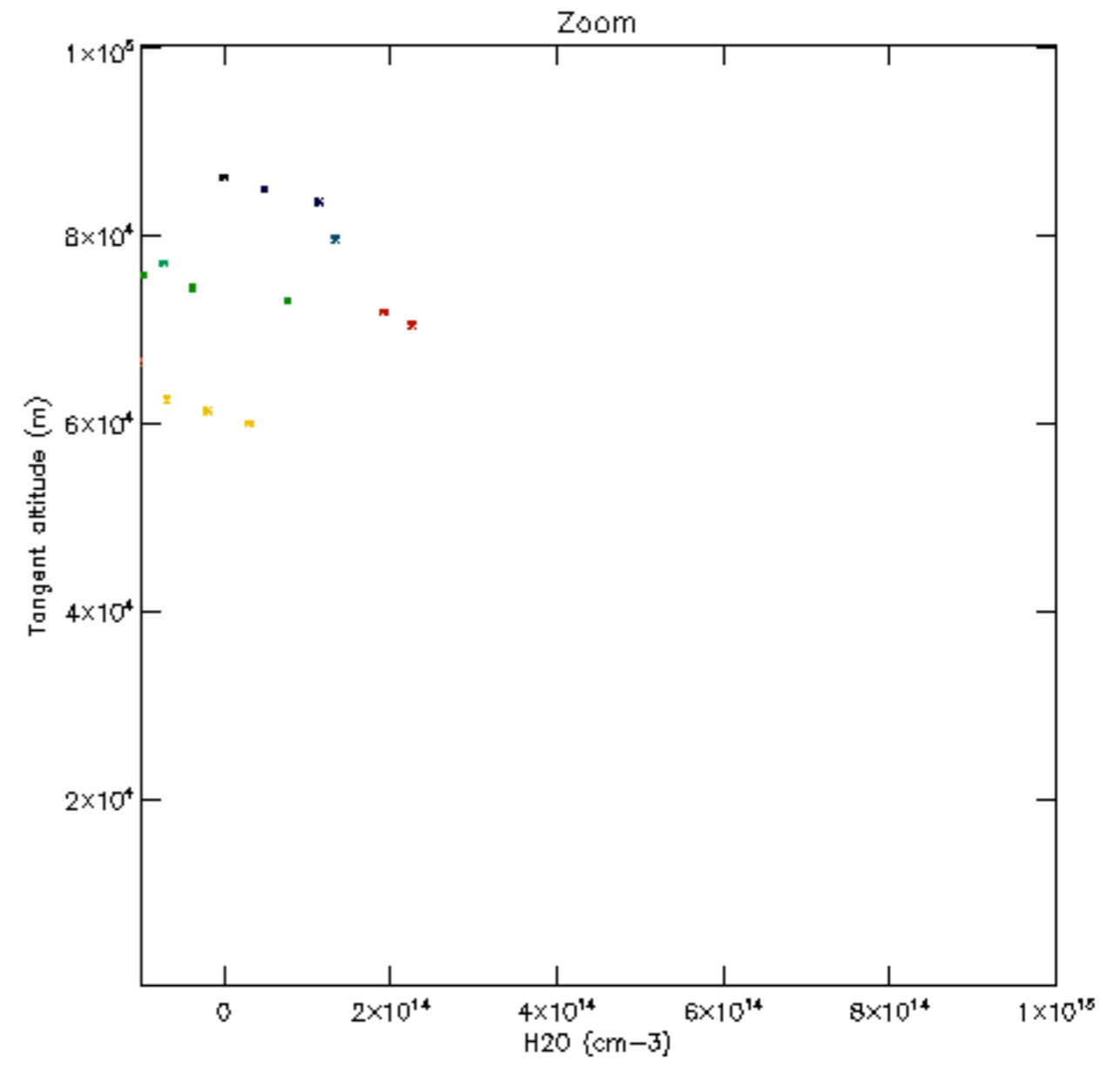
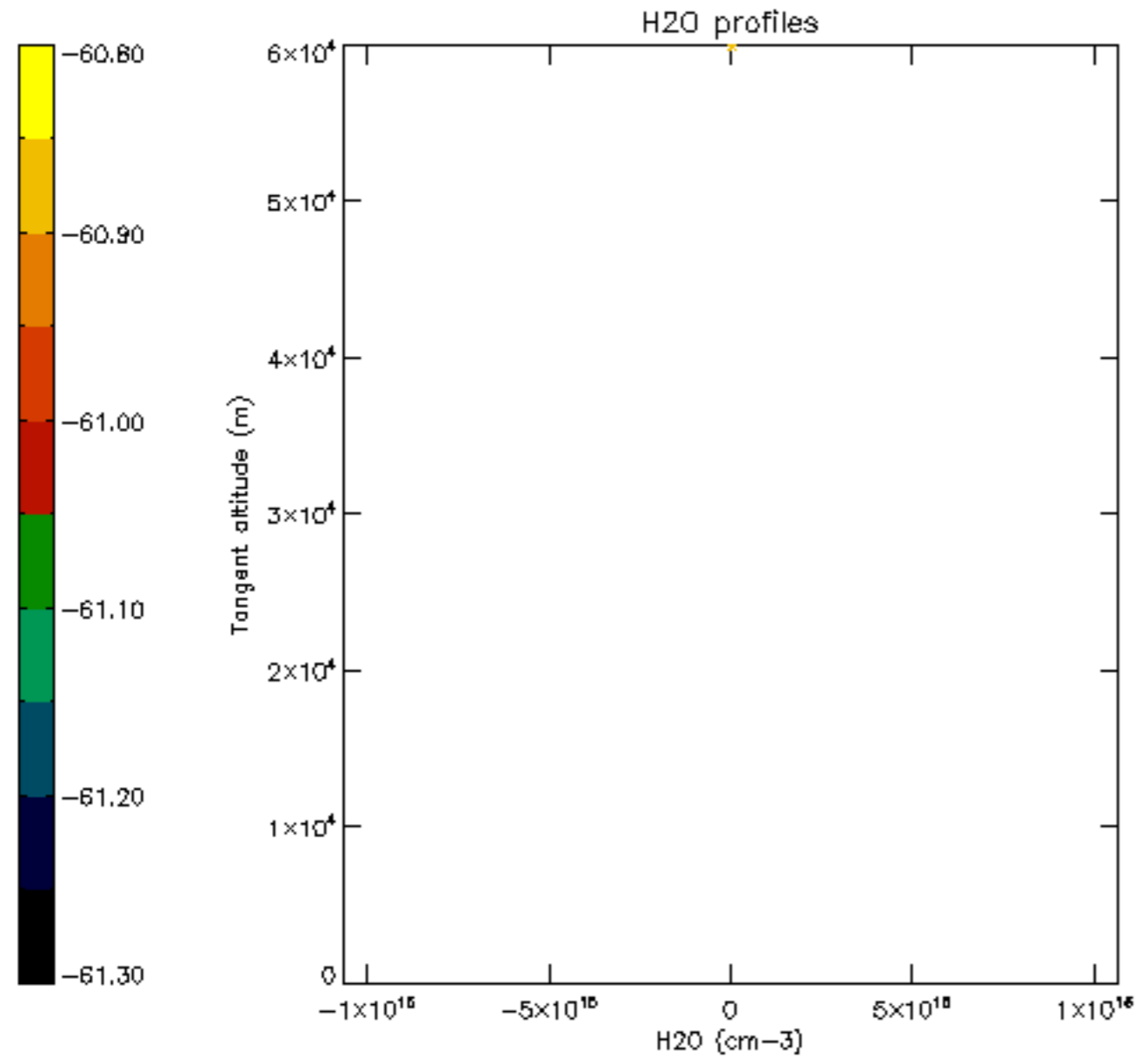


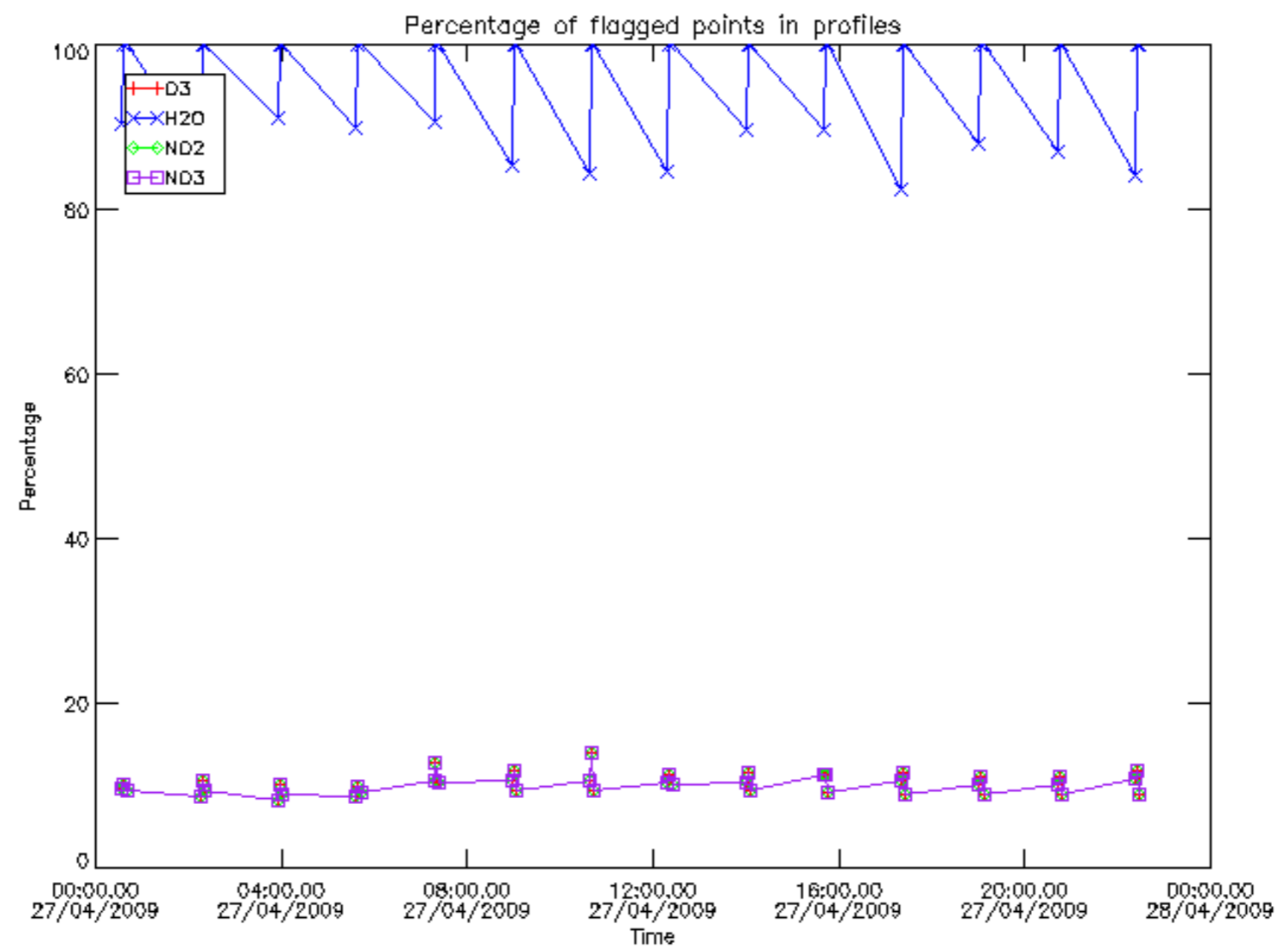




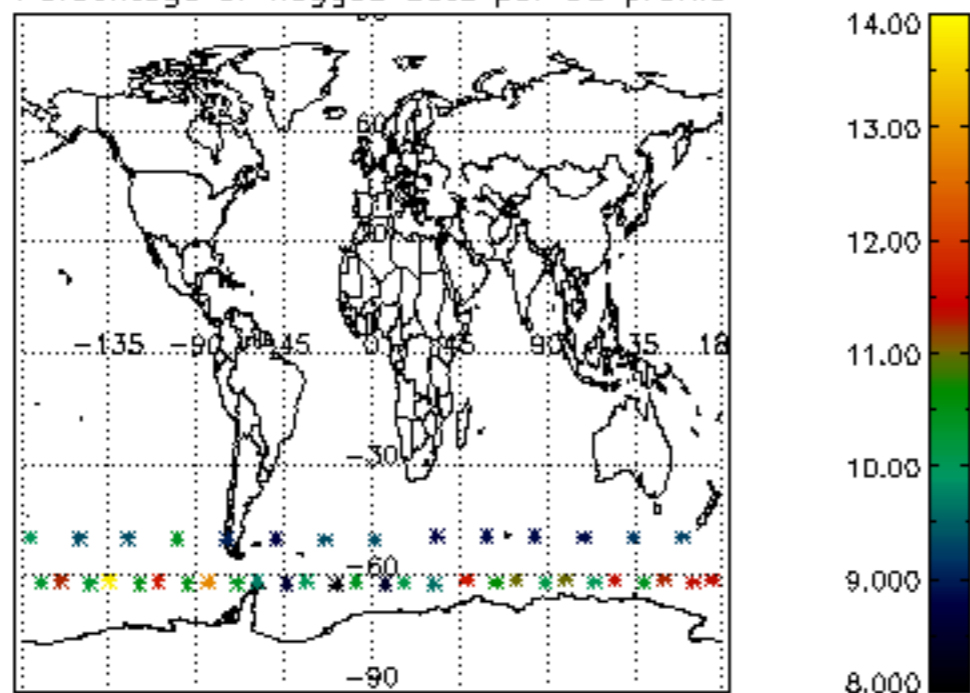




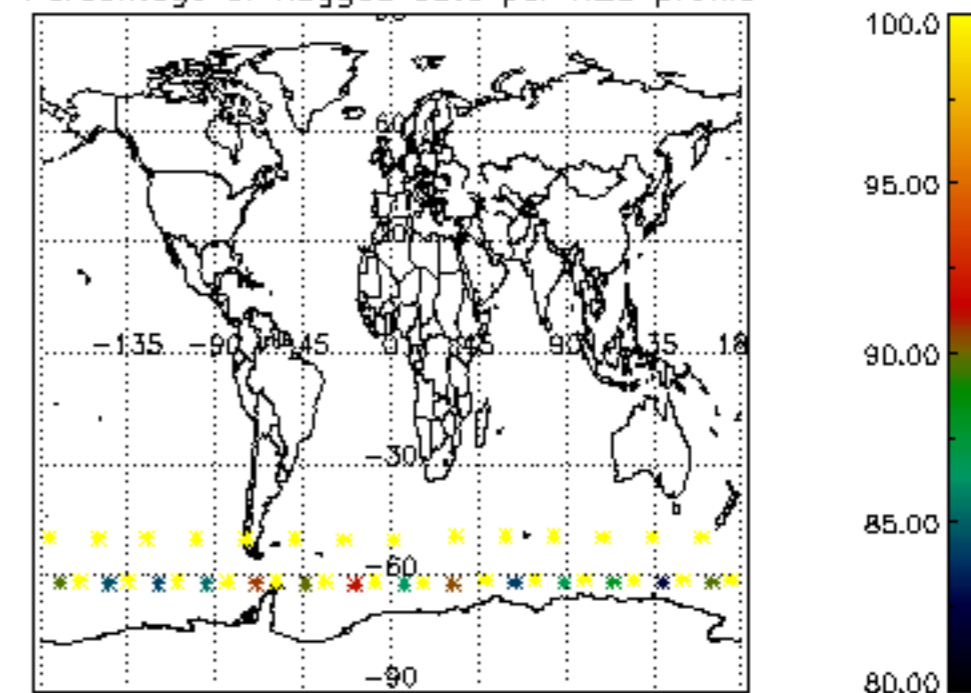




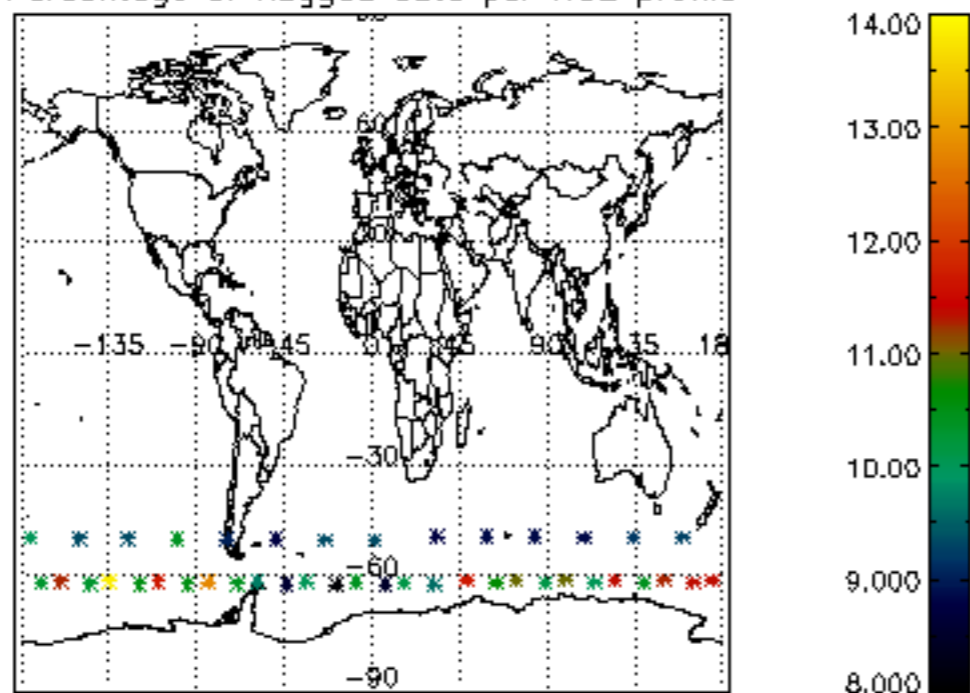
Percentage of flagged data per D3 profile



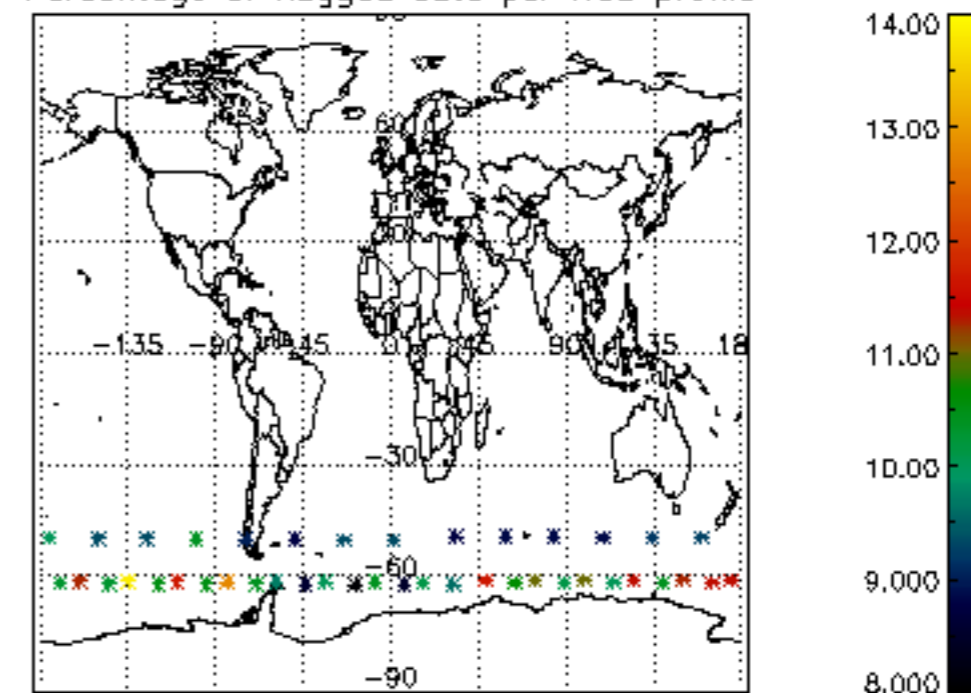
Percentage of flagged data per H2O profile

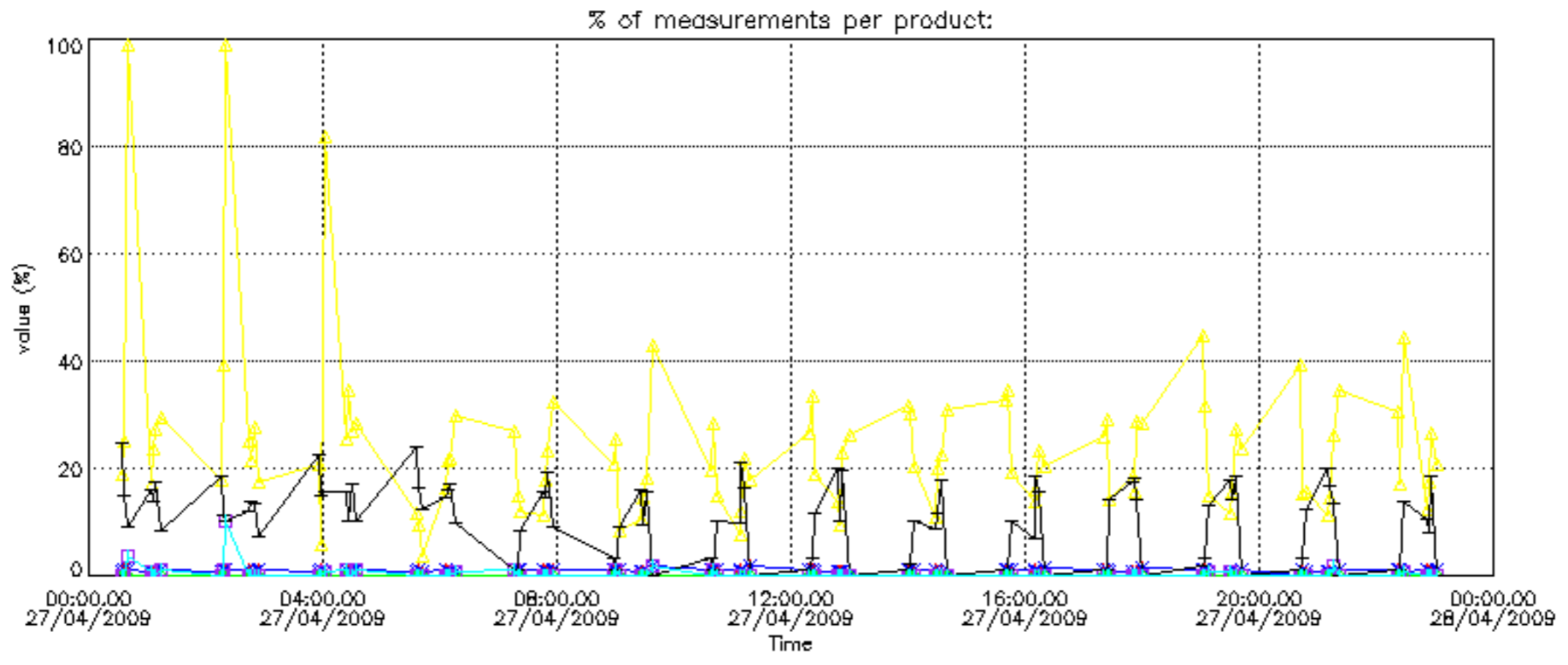


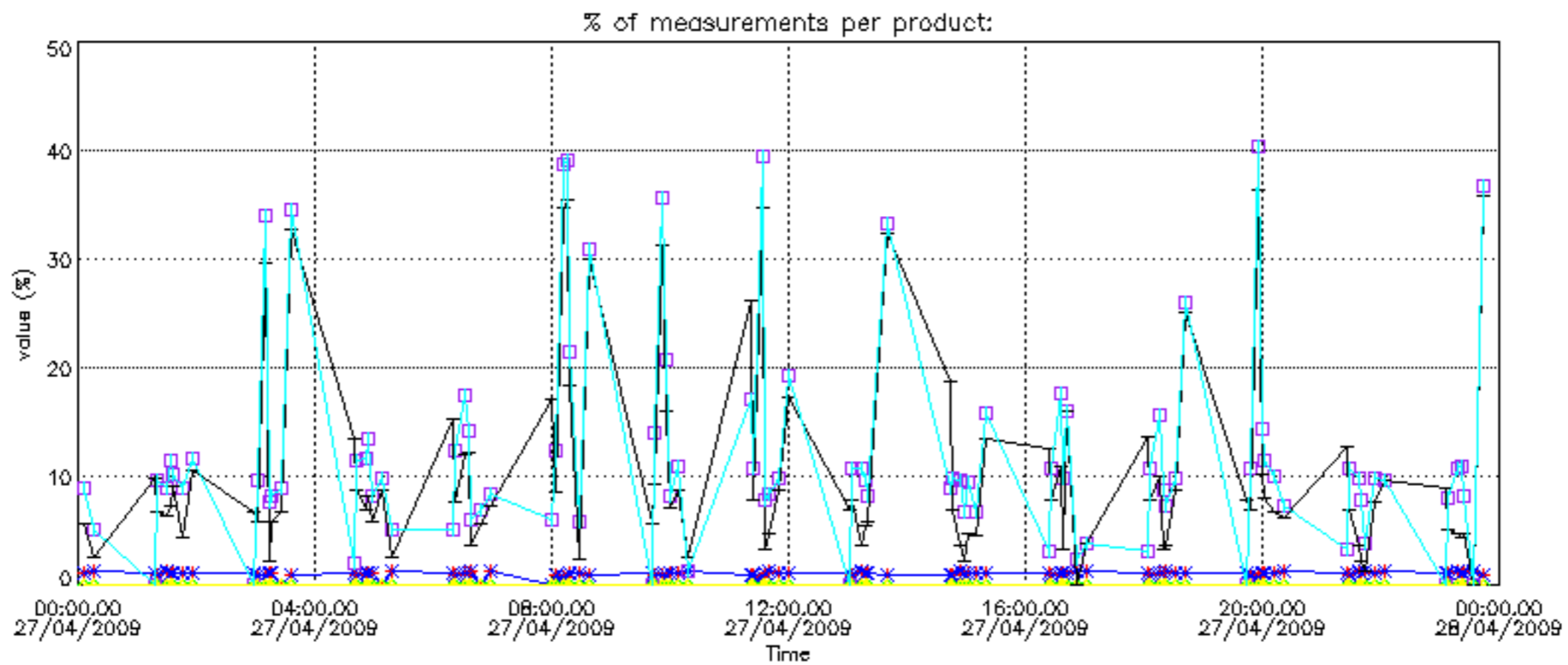
Percentage of flagged data per NO2 profile



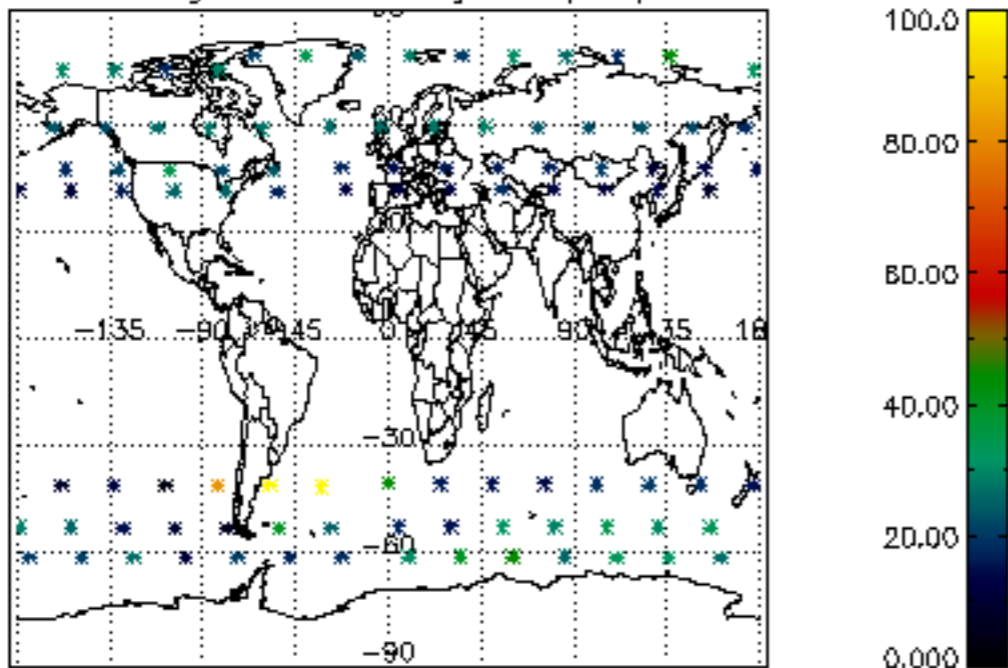
Percentage of flagged data per NO3 profile



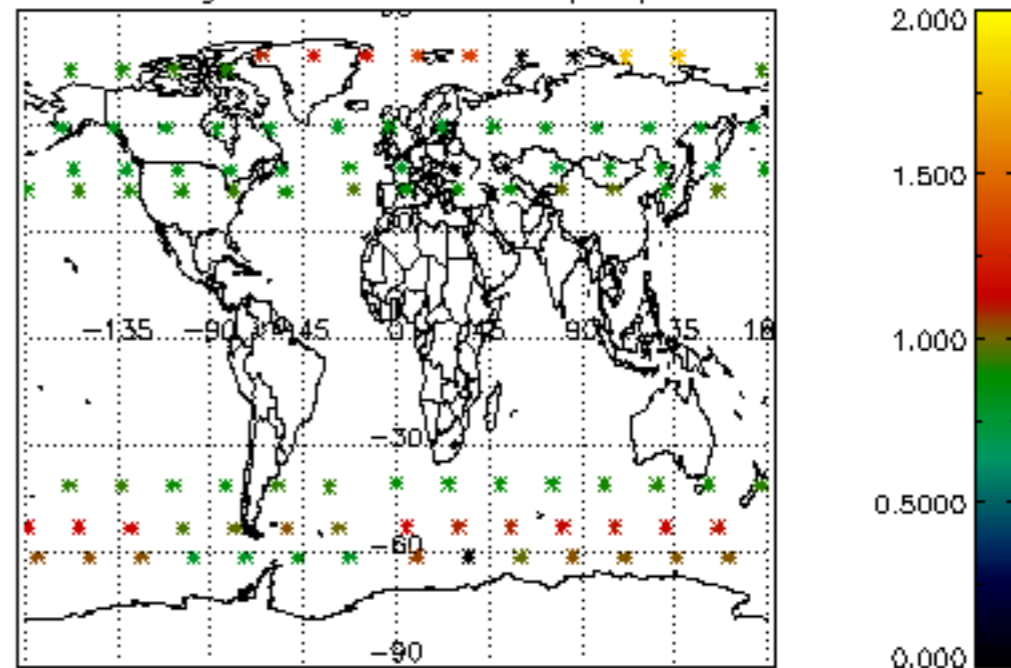




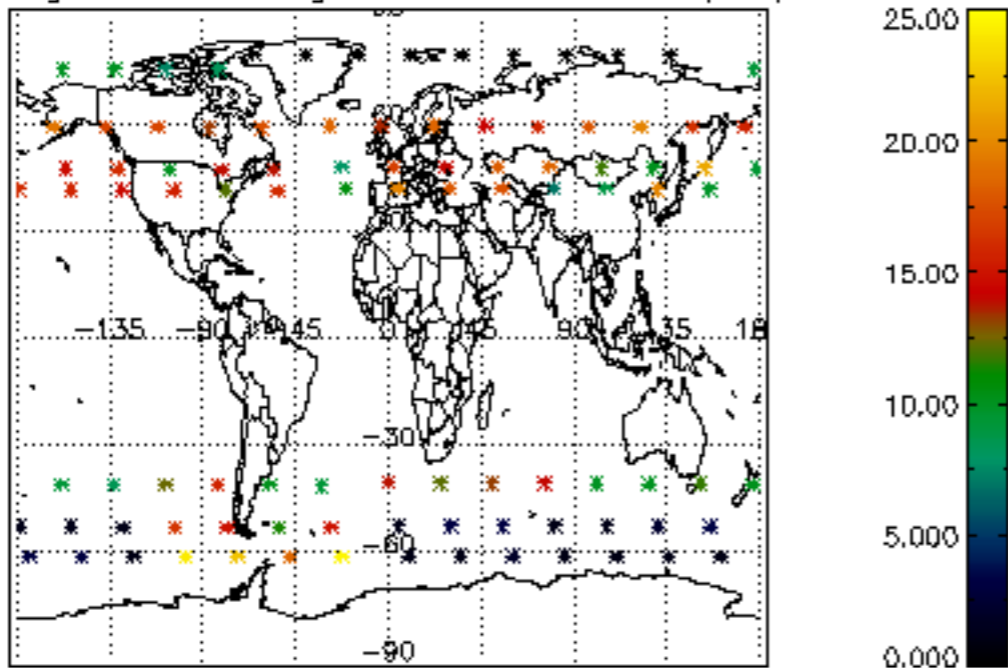
Percentage of cosmic ray hits per profile



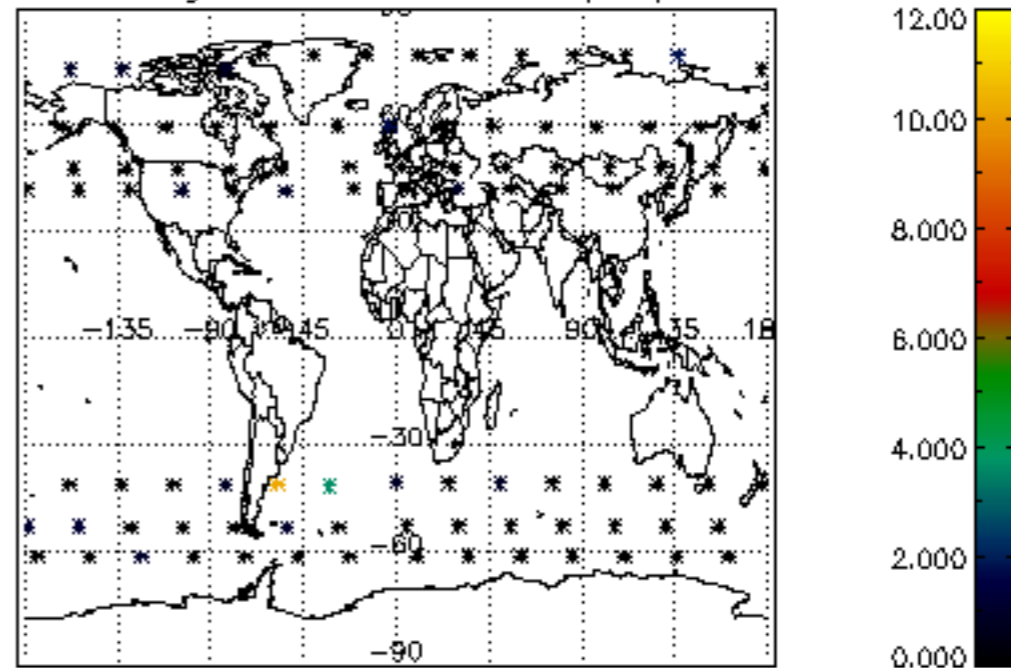
Percentage of datation errors per profile



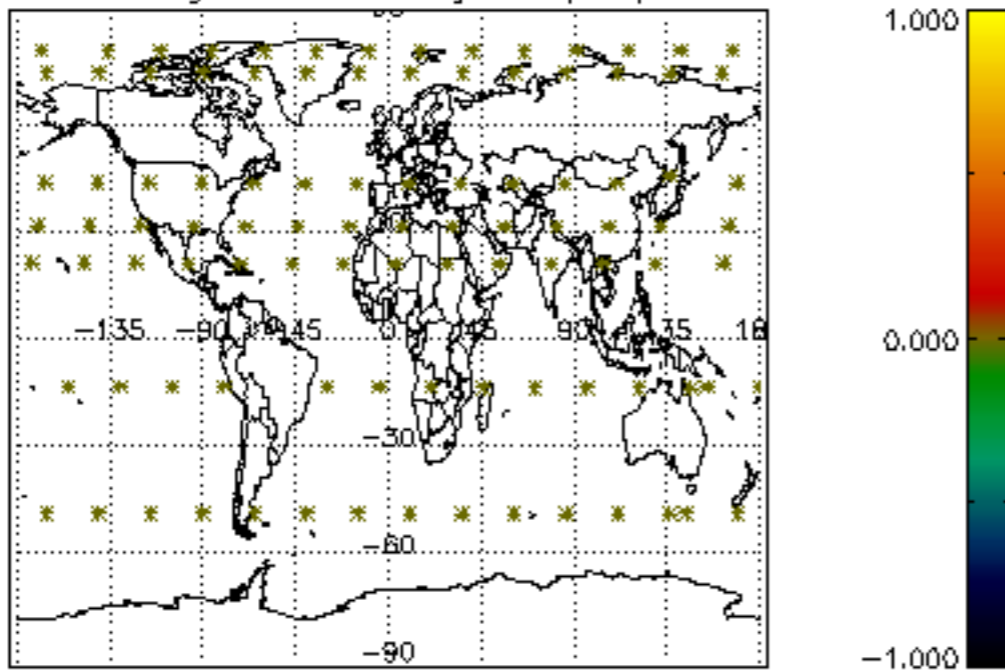
Percentage of star falling outside central band per profile



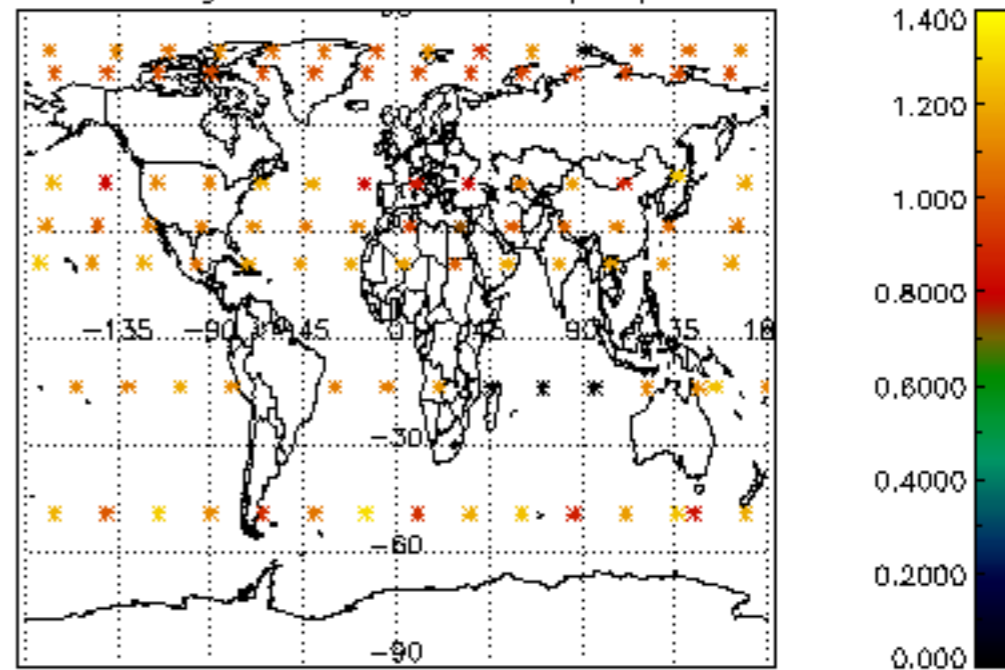
Percentage of saturation errors per profile



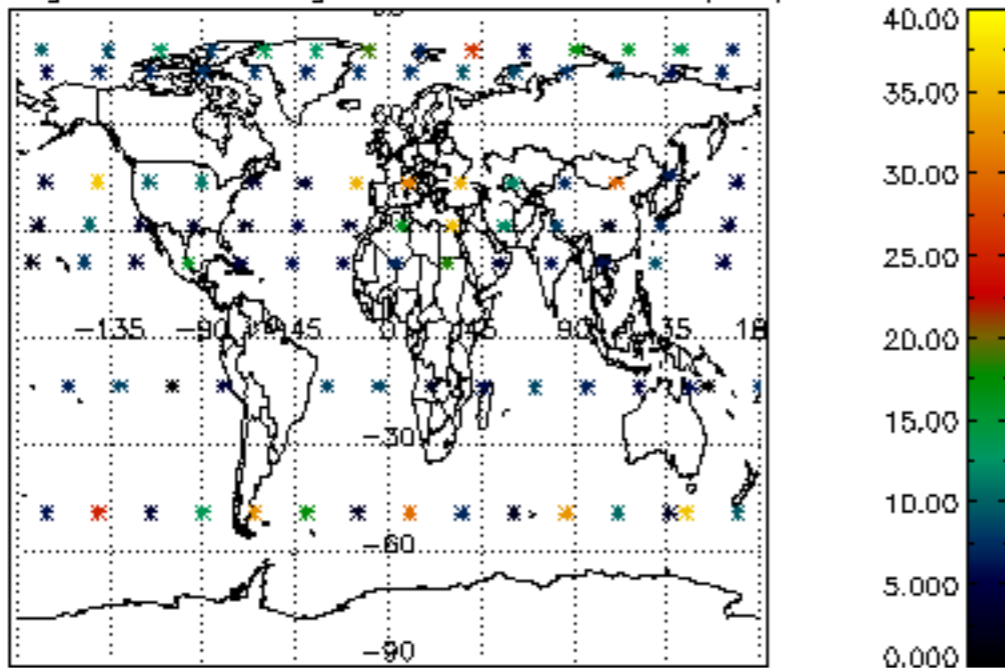
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

