

# 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 09:17:15
Data source version	GOMOS/6.01
Start time of products	05-05-2009 (05MAY2009 00:00:00)
Stop time of products	06-05-2009 (06MAY2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	186
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__2PRFIN20090505_001328_000000492078_00403_37531_2492.N1	05-MAY-2009 00:13:28	Straylight	49.000	40	The Sco	1.8590	7100.0	98	37531	No
2	GOM_NL__2PRFIN20090505_001516_000000532078_00403_37531_2493.N1	05-MAY-2009 00:15:16	Straylight	53.000	25	35Lam Sco	1.6200	28000.	106	37531	No
3	GOM_NL__2PRFIN20090505_001810_000000502078_00403_37531_2494.N1	05-MAY-2009 00:18:10	Straylight	49.500	75	26Eps Sco	2.2910	4250.0	99	37531	No
4	GOM_NL__2PRFIN20090505_002143_000000512078_00403_37531_2495.N1	05-MAY-2009 00:21:43	Twilight_and_stray	51.000	16	21Alp Sco	1.0200	3000.0	102	37531	No
5	GOM_NL__2PRFIN20090505_002348_000000482078_00403_37531_2496.N1	05-MAY-2009 00:23:48	Twilight_and_stray	47.500	80	7Del Sco	2.3160	30000.	95	37531	No
6	GOM_NL__2PRFIN20090505_002857_000000442078_00403_37531_2497.N1	05-MAY-2009 00:28:57	Bright	43.500	104	27Bet Lib	2.6140	13100.	87	37531	No
7	GOM_NL__2PRFIN20090505_004039_000000482078_00403_37531_2498.N1	05-MAY-2009 00:40:39	Bright	47.500	83		2.3780	11000.	95	37531	No
8	GOM_NL__2PRFIN20090505_004220_000000422078_00403_37531_2499.N1	05-MAY-2009 00:42:20	Bright	42.000	67	5Alp CrB	2.2210	11000.	84	37531	No
9	GOM_NL__2PRFIN20090505_004342_000000392078_00403_37531_2500.N1	05-MAY-2009 00:43:42	Bright	39.000	180	27Gam Boo	3.0400	8000.0	78	37531	No
10	GOM_NL__2PRFIN20090505_005305_000000422078_00403_37531_2501.N1	05-MAY-2009 00:53:05	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	37531	No
11	GOM_NL__2PRFIN20090505_010340_000000372078_00403_37531_2502.N1	05-MAY-2009 01:03:40	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	37531	No
12	GOM_NL__2PRFIN20090505_011558_000000342078_00403_37531_2503.N1	05-MAY-2009 01:15:58	Twilight_and_stray	34.000	93	53Bet Peg	2.5200	3100.0	68	37531	No
13	GOM_NL__2PRFIN20090505_012720_000000472078_00403_37531_2504.N1	05-MAY-2009 01:27:20	Dark	47.000	162	34Alp Aqr	2.9440	5350.0	94	37531	No
14	GOM_NL__2PRFIN20090505_015404_000000492078_00404_37532_2528.N1	05-MAY-2009 01:54:04	Straylight	49.000	40	The Sco	1.8590	7100.0	98	37532	No
15	GOM_NL__2PRFIN20090505_015553_000000542078_00404_37532_2529.N1	05-MAY-2009 01:55:53	Straylight	53.500	25	35Lam Sco	1.6200	28000.	107	37532	No
16	GOM_NL__2PRFIN20090505_015847_000000502078_00404_37532_2530.N1	05-MAY-2009 01:58:47	Straylight	49.500	75	26Eps Sco	2.2910	4250.0	99	37532	No
17	GOM_NL__2PRFIN20090505_020220_000000522078_00404_37532_2531.N1	05-MAY-2009 02:02:20	Twilight_and_stray	51.500	16	21Alp Sco	1.0200	3000.0	103	37532	No
18	GOM_NL__2PRFIN20090505_020424_000000472078_00404_37532_2532.N1	05-MAY-2009 02:04:24	Twilight_and_stray	47.000	80	7Del Sco	2.3160	30000.	94	37532	No
19	GOM_NL__2PRFIN20090505_020932_000000442078_00404_37532_2533.N1	05-MAY-2009 02:09:32	Bright	43.500	104	27Bet Lib	2.6140	13100.	87	37532	No
20	GOM_NL__2PRFIN20090505_022114_000000462078_00404_37532_2534.N1	05-MAY-2009 02:21:14	Bright	45.500	83		2.3780	11000.	91	37532	No
21	GOM_NL__2PRFIN20090505_022255_000000482078_00404_37532_2535.N1	05-MAY-2009 02:22:55	Bright	48.000	67	5Alp CrB	2.2210	11000.	96	37532	No
22	GOM_NL__2PRFIN20090505_022418_000000392078_00404_37532_2536.N1	05-MAY-2009 02:24:18	Bright	39.000	180	27Gam Boo	3.0400	8000.0	78	37532	No
23	GOM_NL__2PRFIN20090505_023341_000000432078_00404_37532_2537.N1	05-MAY-2009 02:33:41	Bright	43.000	119	14Eta Dra	2.7270	4700.0	86	37532	No
24	GOM_NL__2PRFIN20090505_024416_000000362078_00404_37532_2538.N1	05-MAY-2009 02:44:16	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	37532	No
25	GOM_NL__2PRFIN20090505_025634_000000342078_00404_37532_2539.N1	05-MAY-2009 02:56:34	Twilight_and_stray	34.000	93	53Bet Peg	2.5200	3100.0	68	37532	No
26	GOM_NL__2PRFIN20090505_030757_000000472078_00404_37532_2540.N1	05-MAY-2009 03:07:57	Dark	47.000	162	34Alp Aqr	2.9440	5350.0	94	37532	No
27	GOM_NL__2PRFIN20090505_033441_000000492078_00405_37533_2544.N1	05-MAY-2009 03:34:41	Straylight	49.000	40	The Sco	1.8590	7100.0	98	37533	No
28	GOM_NL__2PRFIN20090505_033630_000000542078_00405_37533_2545.N1	05-MAY-2009 03:36:30	Straylight	53.500	25	35Lam Sco	1.6200	28000.	107	37533	No
29	GOM_NL__2PRFIN20090505_033923_000000502078_00405_37533_2546.N1	05-MAY-2009 03:39:23	Straylight	49.500	75	26Eps Sco	2.2910	4250.0	99	37533	No
30	GOM_NL__2PRFIN20090505_034256_000000522078_00405_37533_2547.N1	05-MAY-2009 03:42:56	Twilight_and_stray	51.500	16	21Alp Sco	1.0200	3000.0	103	37533	No
31	GOM_NL__2PRFIN20090505_034500_000000482078_00405_37533_2548.N1	05-MAY-2009 03:45:00	Twilight_and_stray	47.500	80	7Del Sco	2.3160	30000.	95	37533	No
32	GOM_NL__2PRFIN20090505_035009_000000432078_00405_37533_2549.N1	05-MAY-2009 03:50:09	Bright	43.000	104	27Bet Lib	2.6140	13100.	86	37533	No
33	GOM_NL__2PRFIN20090505_040150_000000452078_00405_37533_2550.N1	05-MAY-2009 04:01:50	Bright	44.500	83		2.3780	11000.	89	37533	No
34	GOM_NL__2PRFIN20090505_040331_000000482078_00405_37533_2551.N1	05-MAY-2009 04:03:31	Bright	48.000	67	5Alp CrB	2.2210	11000.	96	37533	No
35	GOM_NL__2PRFIN20090505_040454_000000392078_00405_37533_2552.N1	05-MAY-2009 04:04:54	Bright	39.000	180	27Gam Boo	3.0400	8000.0	78	37533	No
36	GOM_NL__2PRFIN20090505_041416_000000442078_00405_37533_2553.N1	05-MAY-2009 04:14:16	Bright	43.500	119	14Eta Dra	2.7270	4700.0	87	37533	No
37	GOM_NL__2PRFIN20090505_042452_000000372078_00405_37533_2554.N1	05-MAY-2009 04:24:52	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	37533	No
38	GOM_NL__2PRFIN20090505_043710_000000342078_00405_37533_2555.N1	05-MAY-2009 04:37:10	Twilight_and_stray	34.000	93	53Bet Peg	2.5200	3100.0	68	37533	No
39	GOM_NL__2PRFIN20090505_044834_000000472078_00405_37533_2556.N1	05-MAY-2009 04:48:34	Dark	47.000	162	34Alp Aqr	2.9440	5350.0	94	37533	No
40	GOM_NL__2PRFIN20090505_051518_000000492078_00406_37534_2559.N1	05-MAY-2009 05:15:18	Straylight	48.500	40	The Sco	1.8590	7100.0	97	37534	No
41	GOM_NL__2PRFIN20090505_051707_000000532078_00406_37534_2560.N1	05-MAY-2009 05:17:07	Straylight	52.500	25	35Lam Sco	1.6200	28000.	105	37534	No
42	GOM_NL__2PRFIN20090505_052000_000000492078_00406_37534_2561.N1	05-MAY-2009 05:20:00	Straylight	49.000	75	26Eps Sco	2.2910	4250.0	98	37534	No



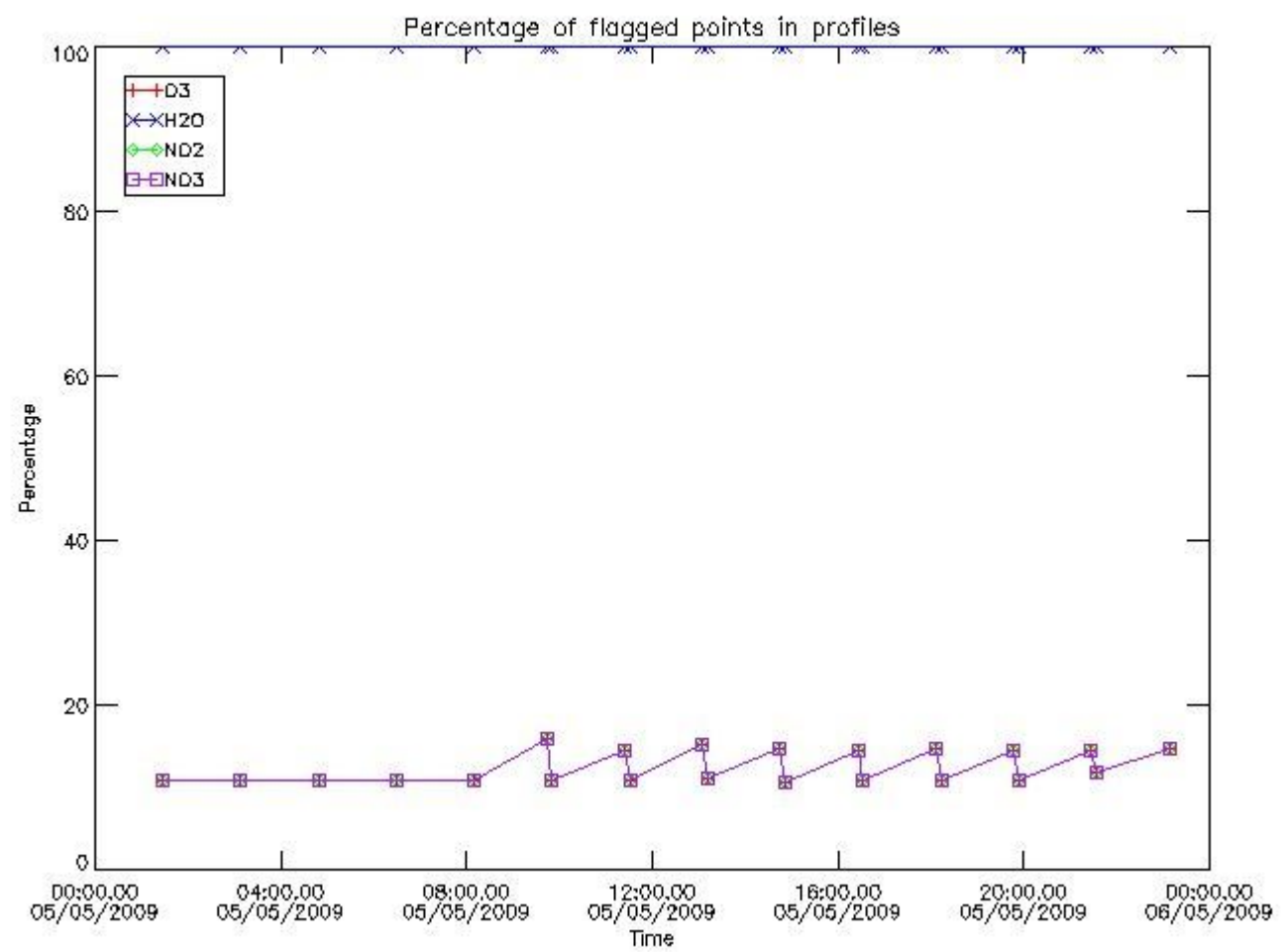


161	GOM_NL__2PRFIN20090505_203608_000000442078_00415_37543_2720.N1	05-MAY-2009 20:36:08	Bright	44.000	104	27Bet Lib	2.6140	13100.	88	37543	No
162	GOM_NL__2PRFIN20090505_204745_000000412078_00415_37543_2721.N1	05-MAY-2009 20:47:45	Bright	40.500	83		2.3780	11000.	81	37543	No
163	GOM_NL__2PRFIN20090505_205049_000000392078_00415_37543_2722.N1	05-MAY-2009 20:50:49	Bright	38.500	180	27Gam Boo	3.0400	8000.0	77	37543	No
164	GOM_NL__2PRFIN20090505_210010_000000432078_00415_37543_2723.N1	05-MAY-2009 21:00:10	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	37543	No
165	GOM_NL__2PRFIN20090505_211048_000000372078_00415_37543_2724.N1	05-MAY-2009 21:10:48	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	37543	No
166	GOM_NL__2PRFIN20090505_212311_000000342078_00415_37543_2725.N1	05-MAY-2009 21:23:11	Twilight	34.000	93	53Bet Peg	2.5200	3100.0	68	37543	No
167	GOM_NL__2PRFIN20090505_212720_000000352078_00415_37543_2726.N1	05-MAY-2009 21:27:20	Dark	35.000	90	54Alp Peg	2.4870	11000.	70	37543	No
168	GOM_NL__2PRFIN20090505_213443_000000472078_00415_37543_2727.N1	05-MAY-2009 21:34:43	Dark	47.000	162	34Alp Aqr	2.9440	5350.0	94	37543	No
169	GOM_NL__2PRFIN20090505_220125_000000482078_00416_37544_2729.N1	05-MAY-2009 22:01:25	Straylight	48.000	40	The Sco	1.8590	7100.0	96	37544	No
170	GOM_NL__2PRFIN20090505_220315_000000522078_00416_37544_2730.N1	05-MAY-2009 22:03:15	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	37544	No
171	GOM_NL__2PRFIN20090505_220606_000000482078_00416_37544_2731.N1	05-MAY-2009 22:06:06	Straylight	48.000	75	26Eps Sco	2.2910	4250.0	96	37544	No
172	GOM_NL__2PRFIN20090505_220936_000000502078_00416_37544_2732.N1	05-MAY-2009 22:09:36	Twilight	50.000	16	21Alp Sco	1.0200	3000.0	100	37544	No
173	GOM_NL__2PRFIN20090505_221138_000000462078_00416_37544_2733.N1	05-MAY-2009 22:11:38	Twilight	46.000	80	7Del Sco	2.3160	30000.	92	37544	No
174	GOM_NL__2PRFIN20090505_221643_000000442078_00416_37544_2734.N1	05-MAY-2009 22:16:43	Bright	43.500	104	27Bet Lib	2.6140	13100.	87	37544	No
175	GOM_NL__2PRFIN20090505_222821_000000412078_00416_37544_2735.N1	05-MAY-2009 22:28:21	Bright	40.500	83		2.3780	11000.	81	37544	No
176	GOM_NL__2PRFIN20090505_223125_000000382078_00416_37544_2736.N1	05-MAY-2009 22:31:25	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	37544	No
177	GOM_NL__2PRFIN20090505_224045_000000432078_00416_37544_2737.N1	05-MAY-2009 22:40:45	Bright	43.000	119	14Eta Dra	2.7270	4700.0	86	37544	No
178	GOM_NL__2PRFIN20090505_225123_000000372078_00416_37544_2738.N1	05-MAY-2009 22:51:23	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	37544	No
179	GOM_NL__2PRFIN20090505_230348_000000342078_00416_37544_2739.N1	05-MAY-2009 23:03:48	Twilight	34.000	93	53Bet Peg	2.5200	3100.0	68	37544	No
180	GOM_NL__2PRFIN20090505_230756_000000342078_00416_37544_2740.N1	05-MAY-2009 23:07:56	Dark	34.000	90	54Alp Peg	2.4870	11000.	68	37544	No
181	GOM_NL__2PRFIN20090505_234202_000000482078_00417_37545_2746.N1	05-MAY-2009 23:42:02	Straylight	48.000	40	The Sco	1.8590	7100.0	96	37545	No
182	GOM_NL__2PRFIN20090505_234351_000000522078_00417_37545_2747.N1	05-MAY-2009 23:43:51	Straylight	52.000	25	35Lam Sco	1.6200	28000.	104	37545	No
183	GOM_NL__2PRFIN20090505_234642_000000482078_00417_37545_2748.N1	05-MAY-2009 23:46:42	Straylight	48.000	75	26Eps Sco	2.2910	4250.0	96	37545	No
184	GOM_NL__2PRFIN20090505_235013_000000502078_00417_37545_2749.N1	05-MAY-2009 23:50:13	Twilight	49.500	16	21Alp Sco	1.0200	3000.0	99	37545	No
185	GOM_NL__2PRFIN20090505_235214_000000462078_00417_37545_2750.N1	05-MAY-2009 23:52:14	Twilight	46.000	80	7Del Sco	2.3160	30000.	92	37545	No
186	GOM_NL__2PRFIN20090505_235719_000000432078_00417_37545_2751.N1	05-MAY-2009 23:57:19	Bright	43.000	104	27Bet Lib	2.6140	13100.	86	37545	No

### 3. Quality information per product

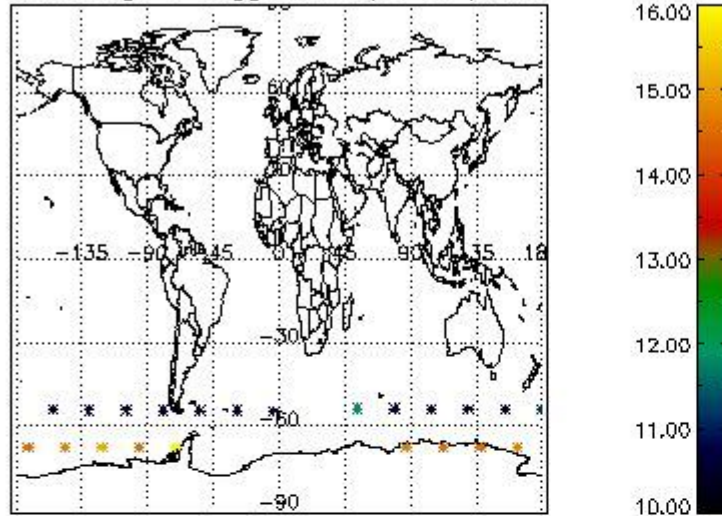
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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

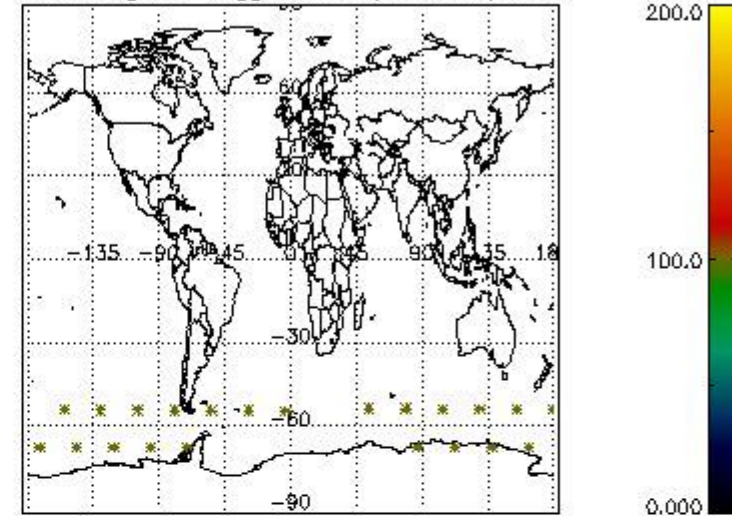


*3.2 Plot quality information per product (world map)*

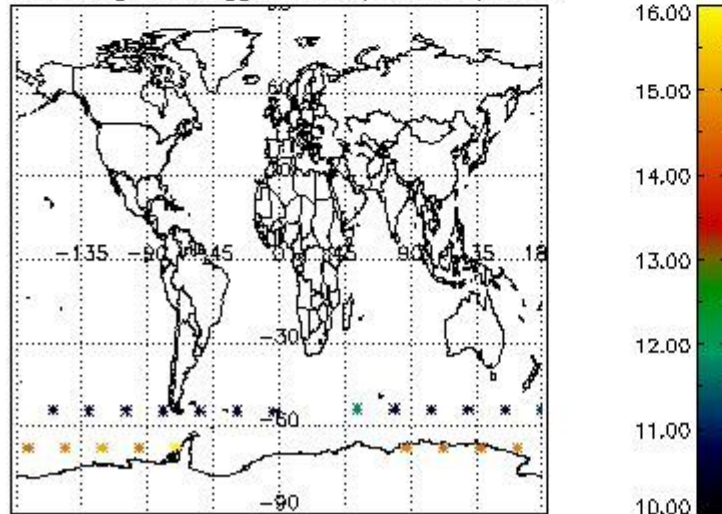
Percentage of flagged data per O3 profile



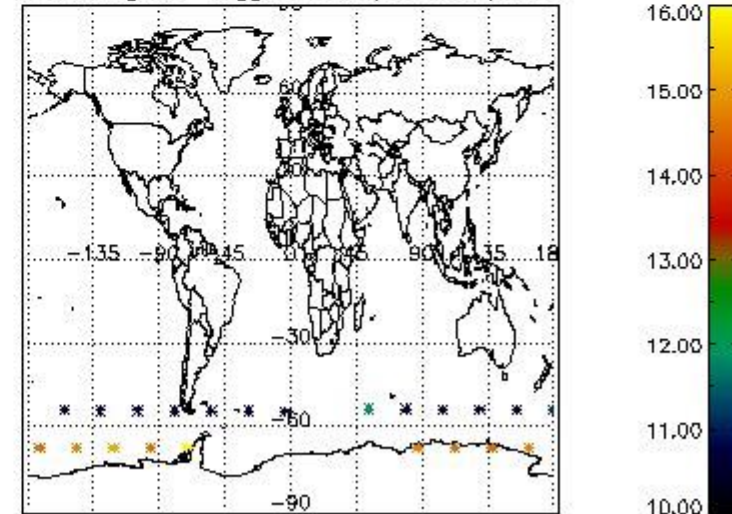
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

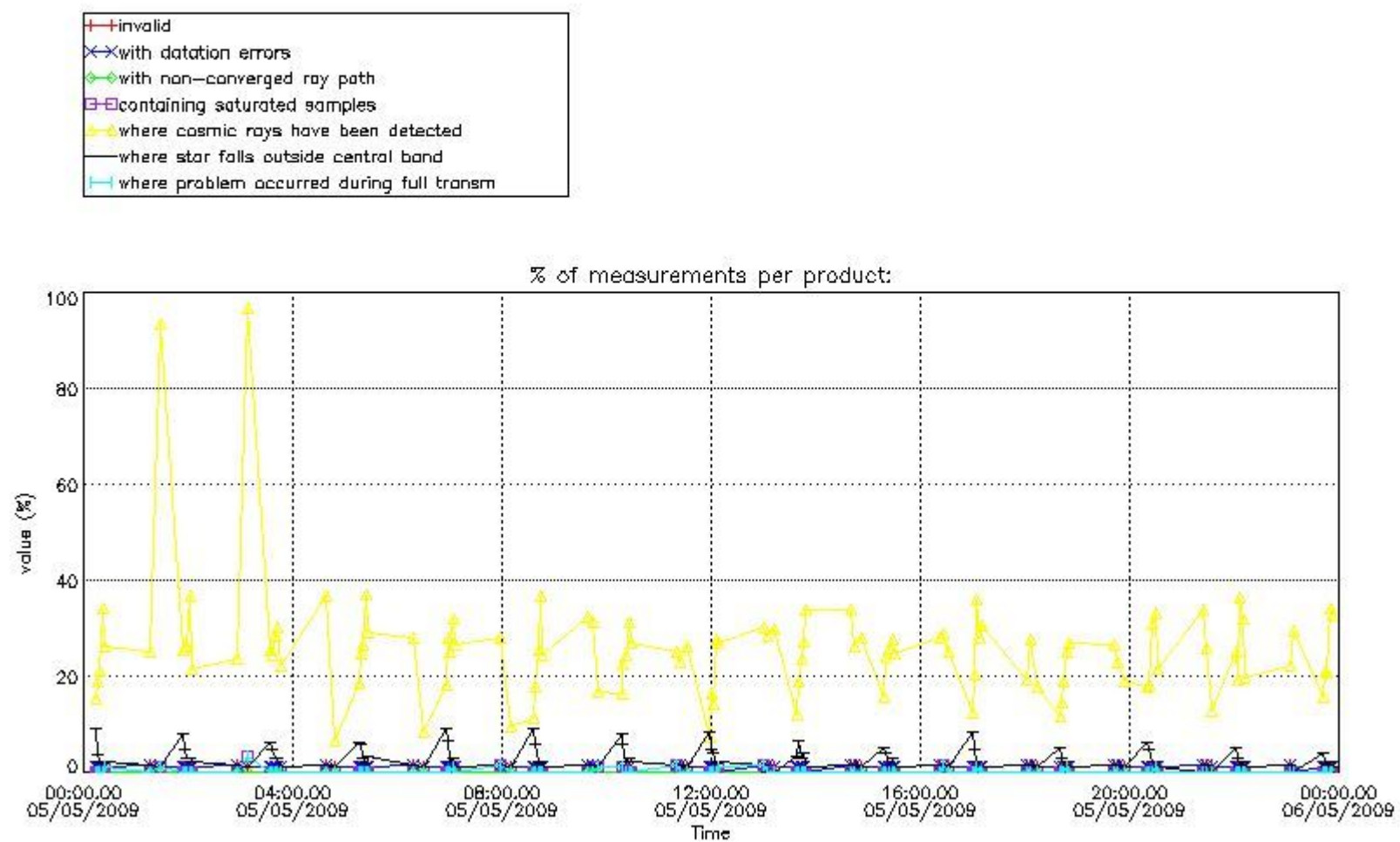


#### 4. Level 1 quality information per product

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.

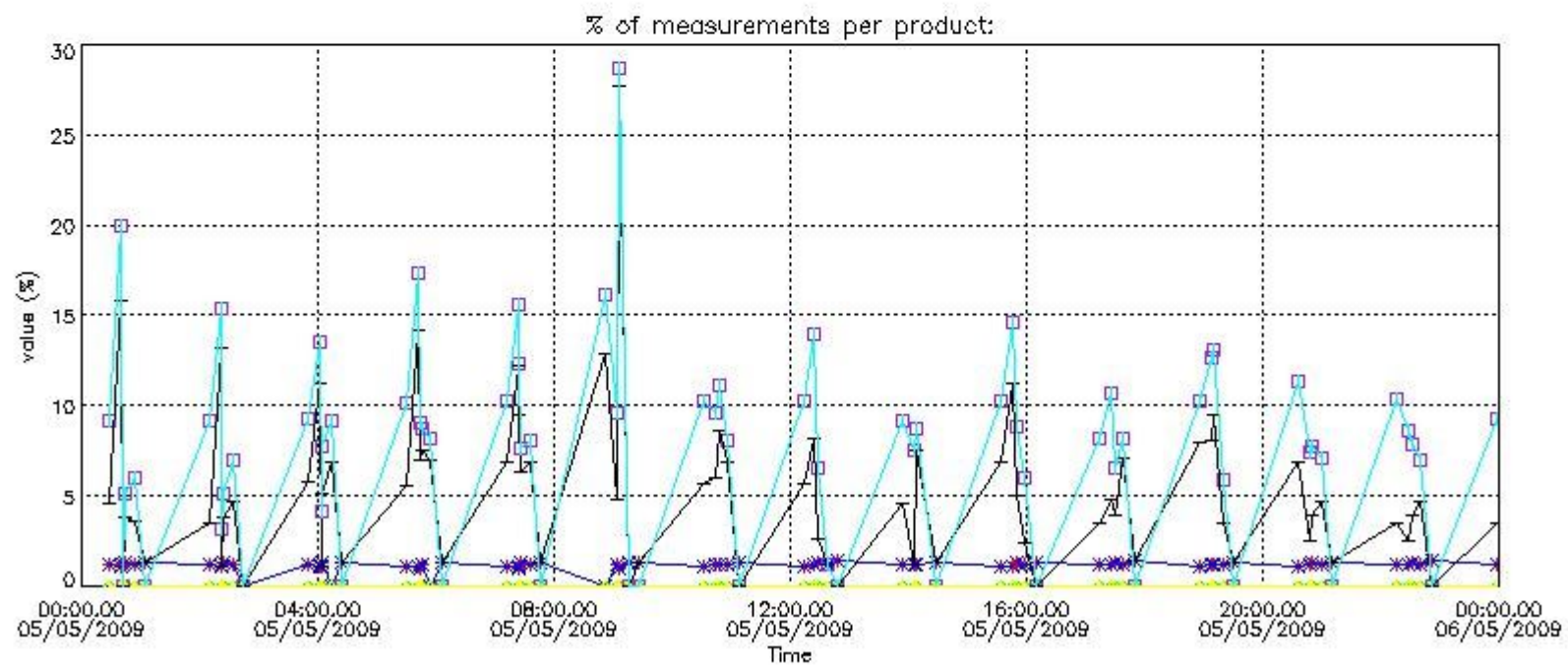
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

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



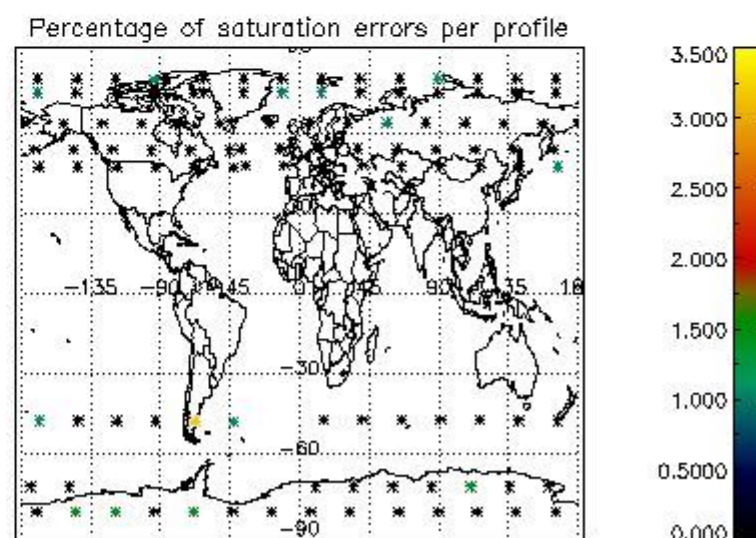
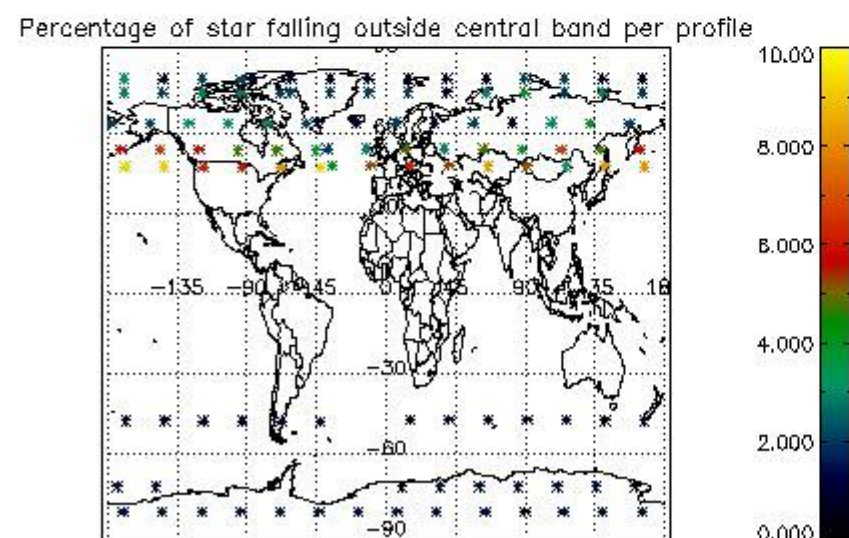
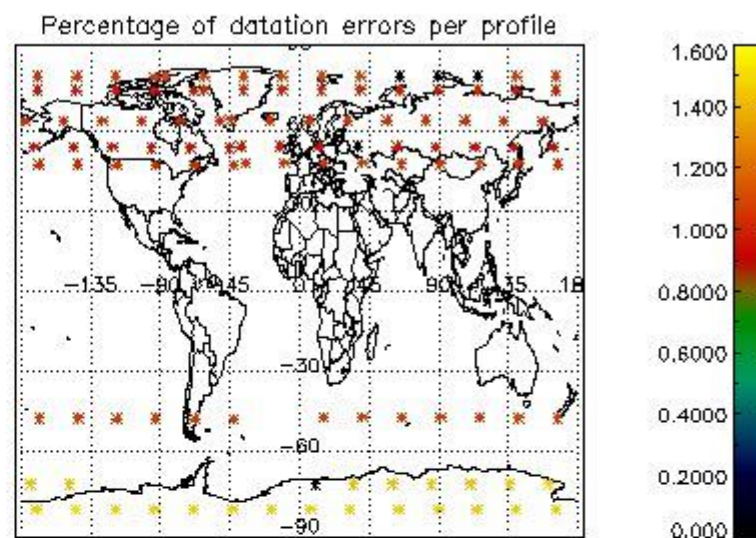
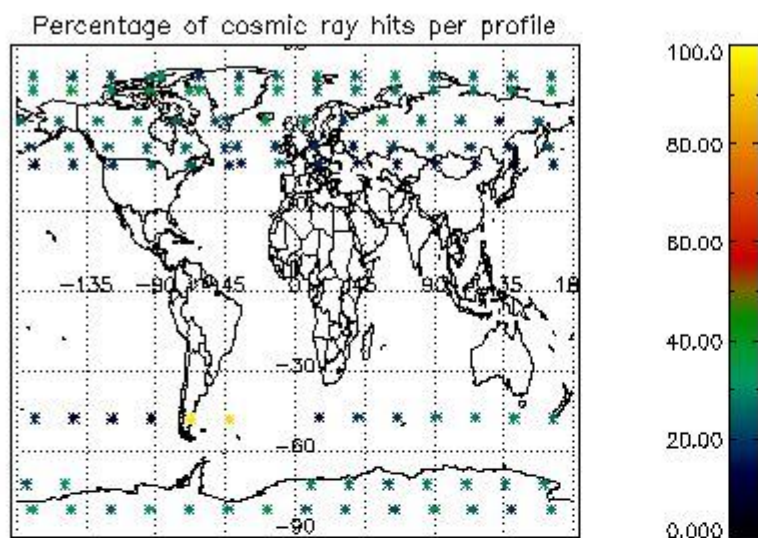
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



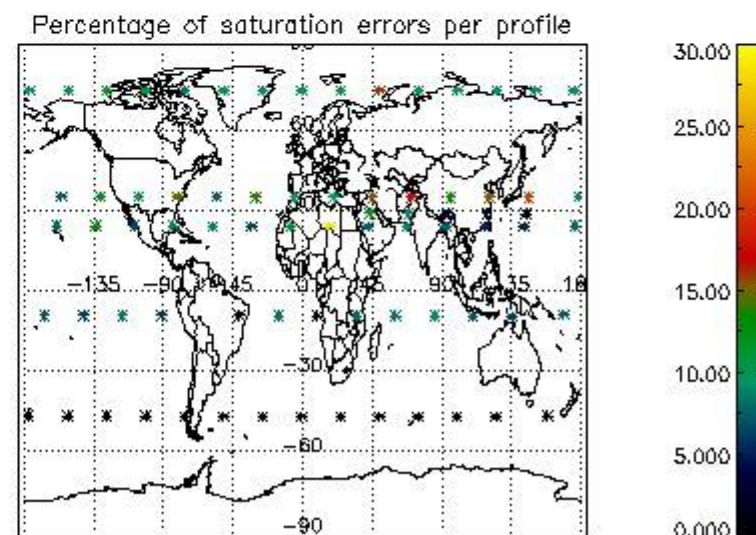
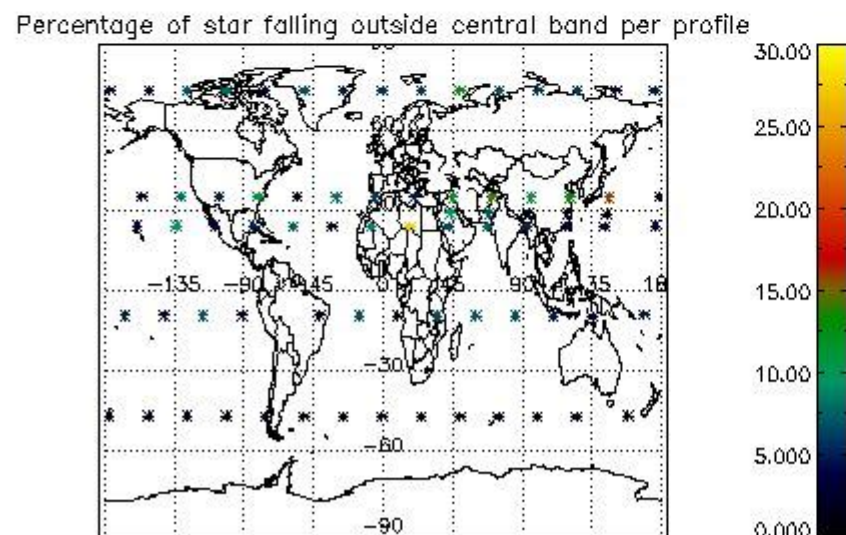
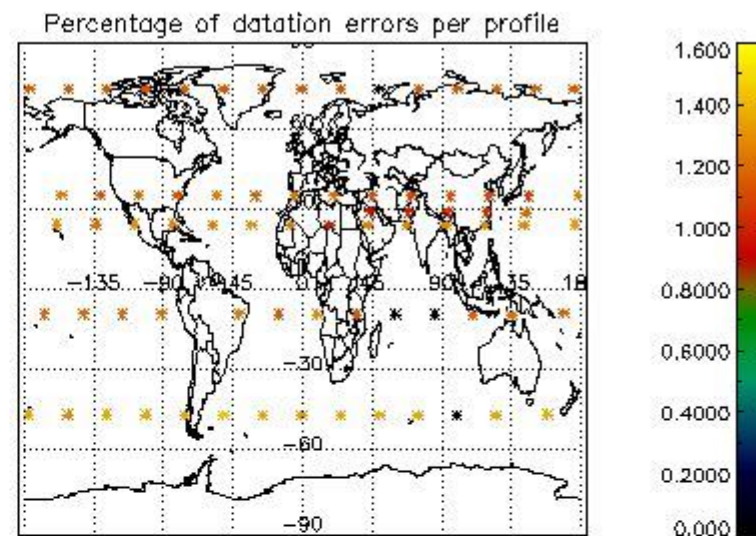
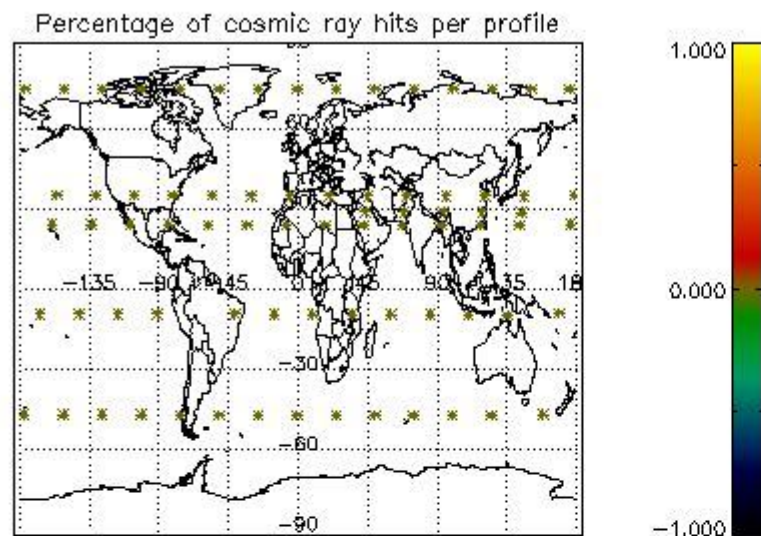


*4.2 Plot quality information per product coming from level 1b processing (world map)*

*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

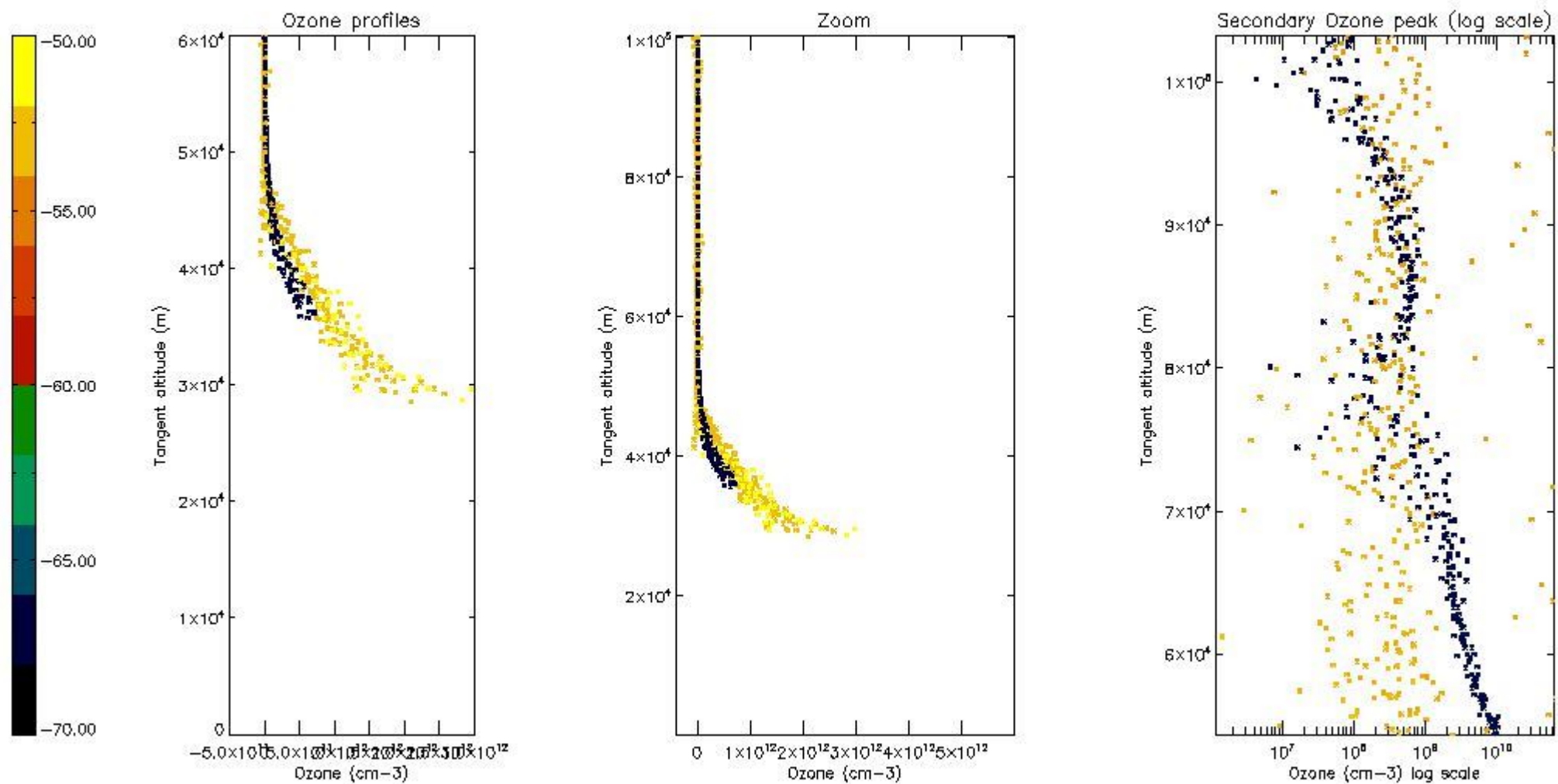
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	11
STD < 20	3

STD < 10	1
STD < 5	0

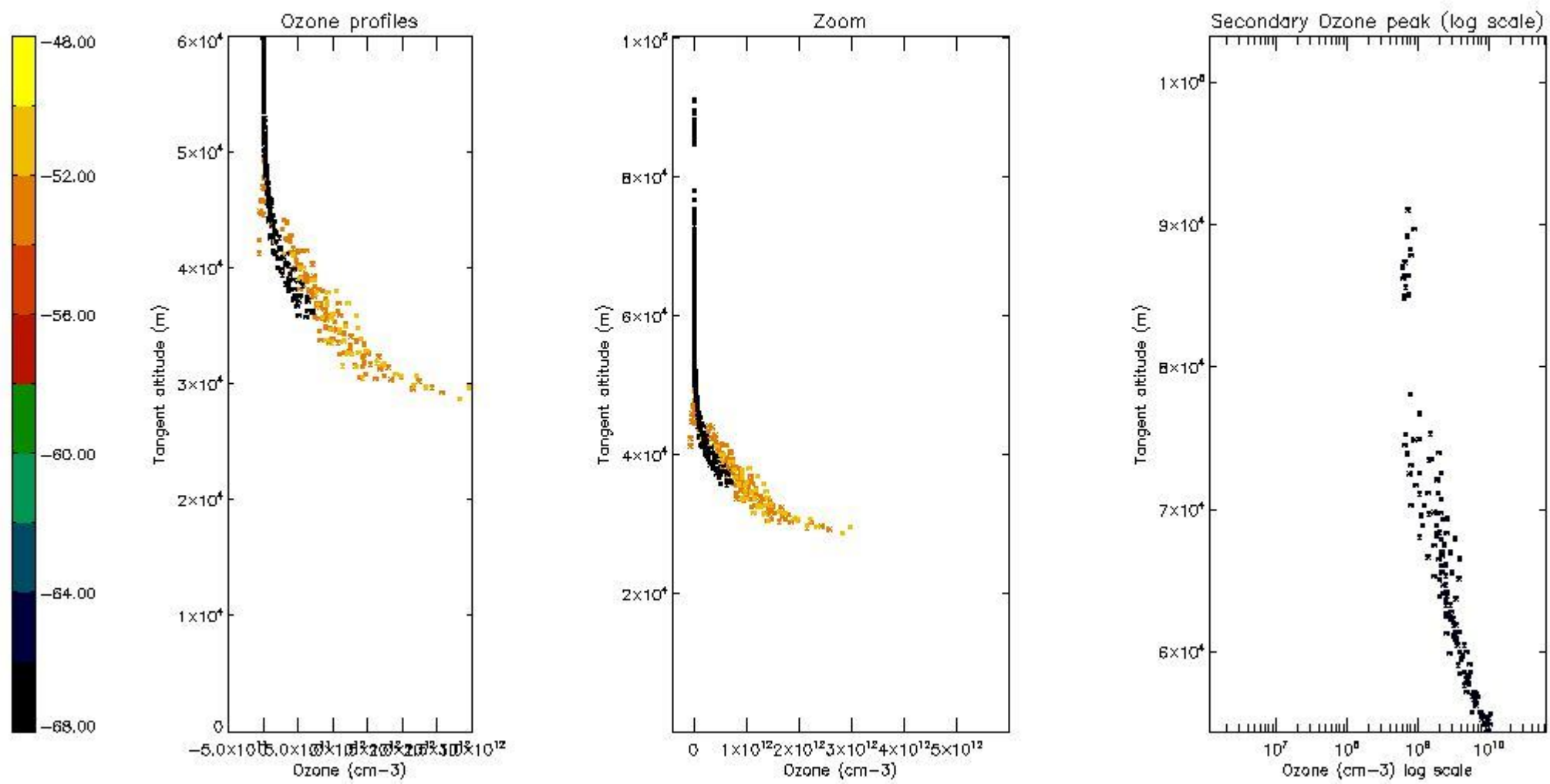
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



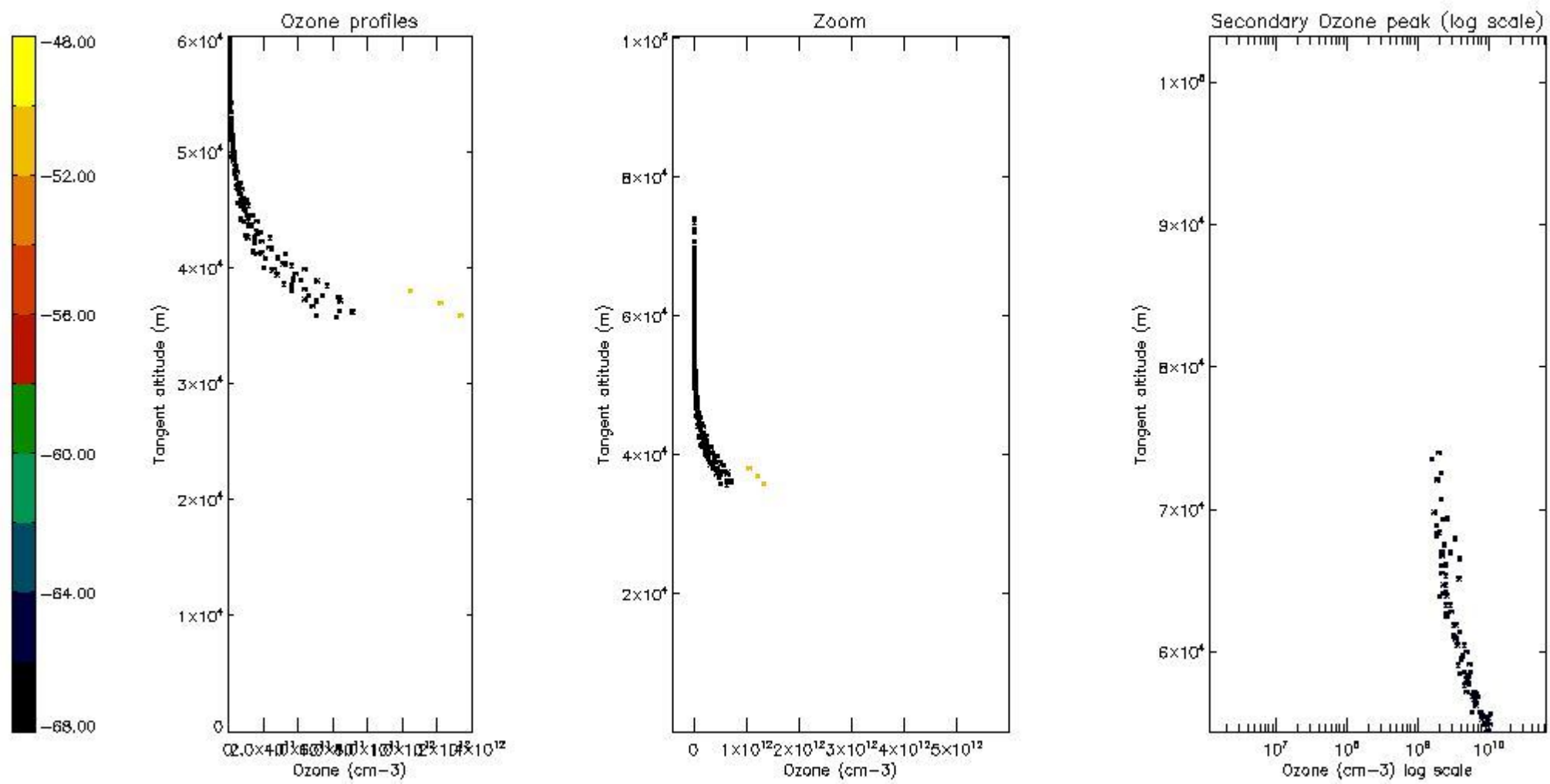
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



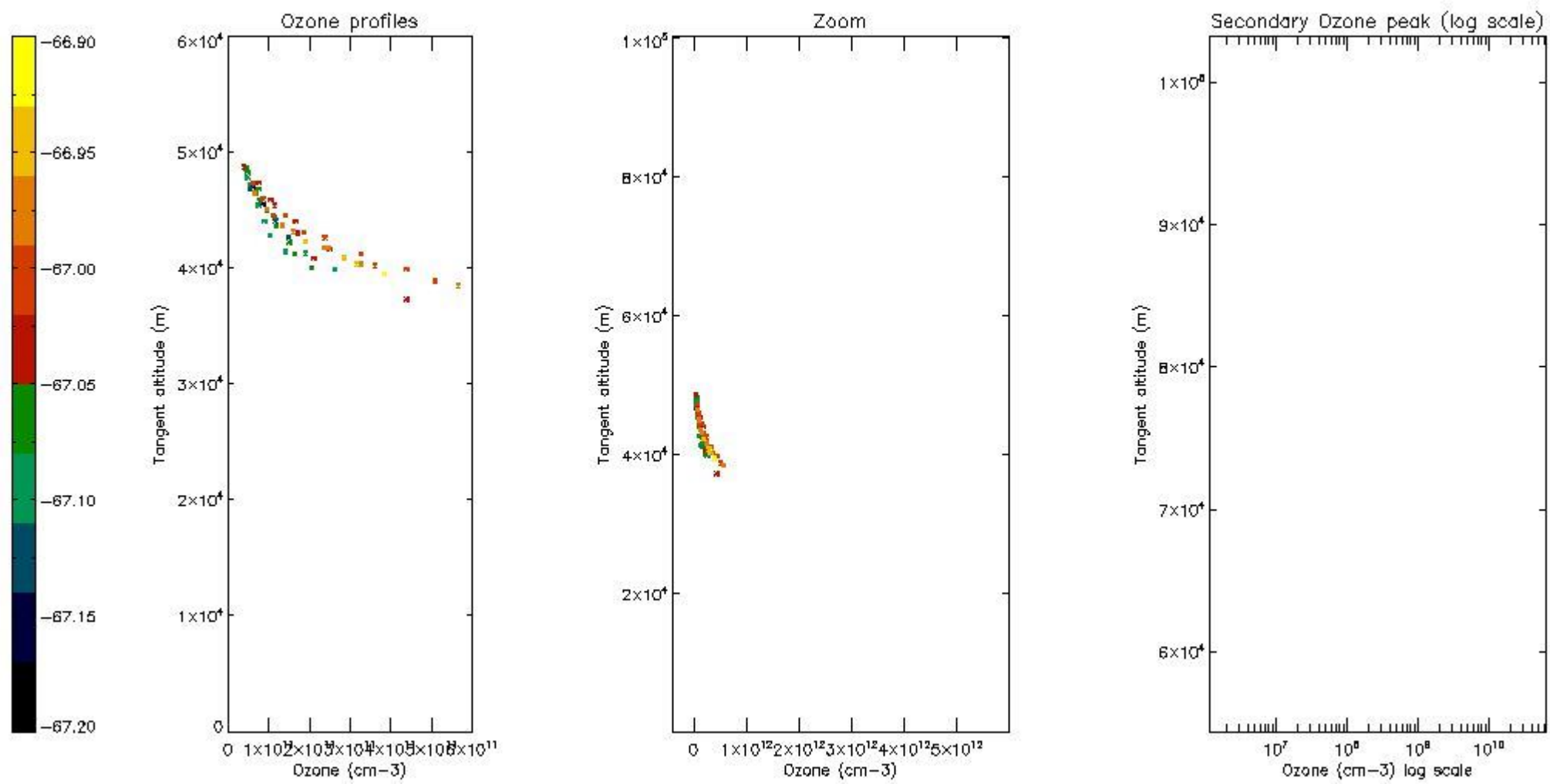
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



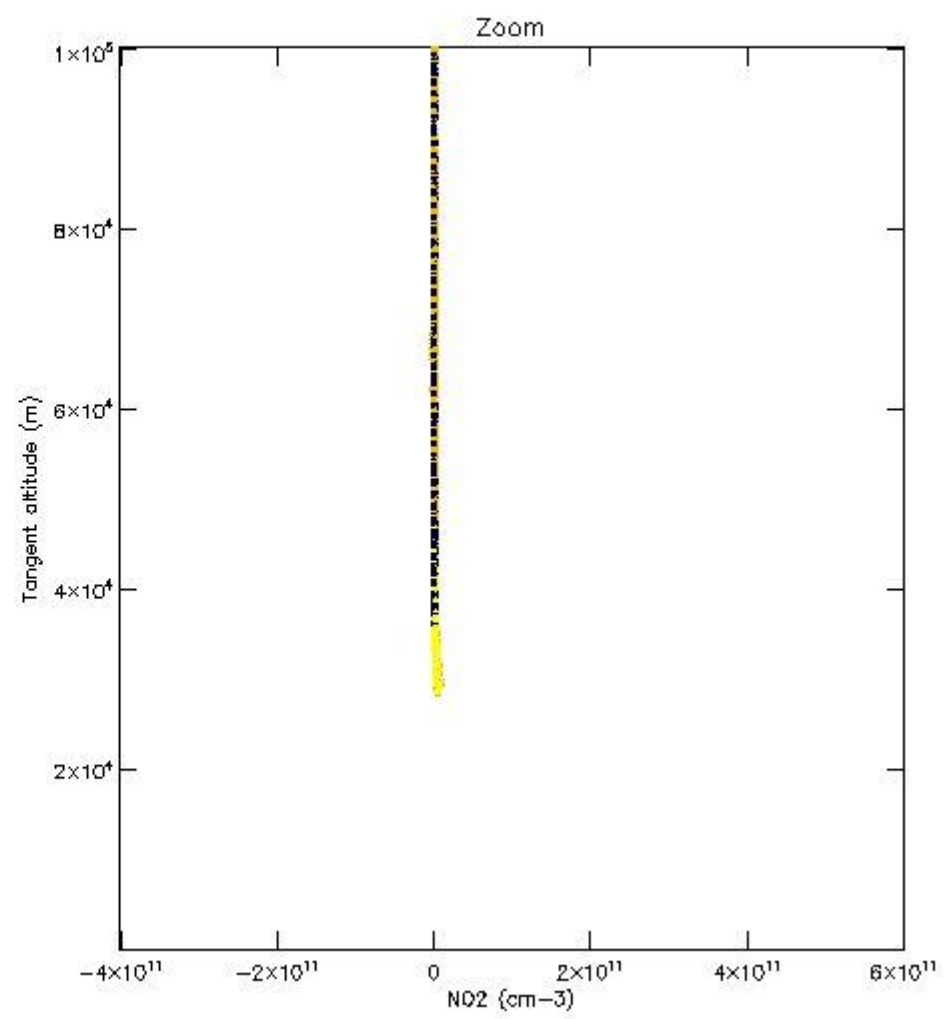
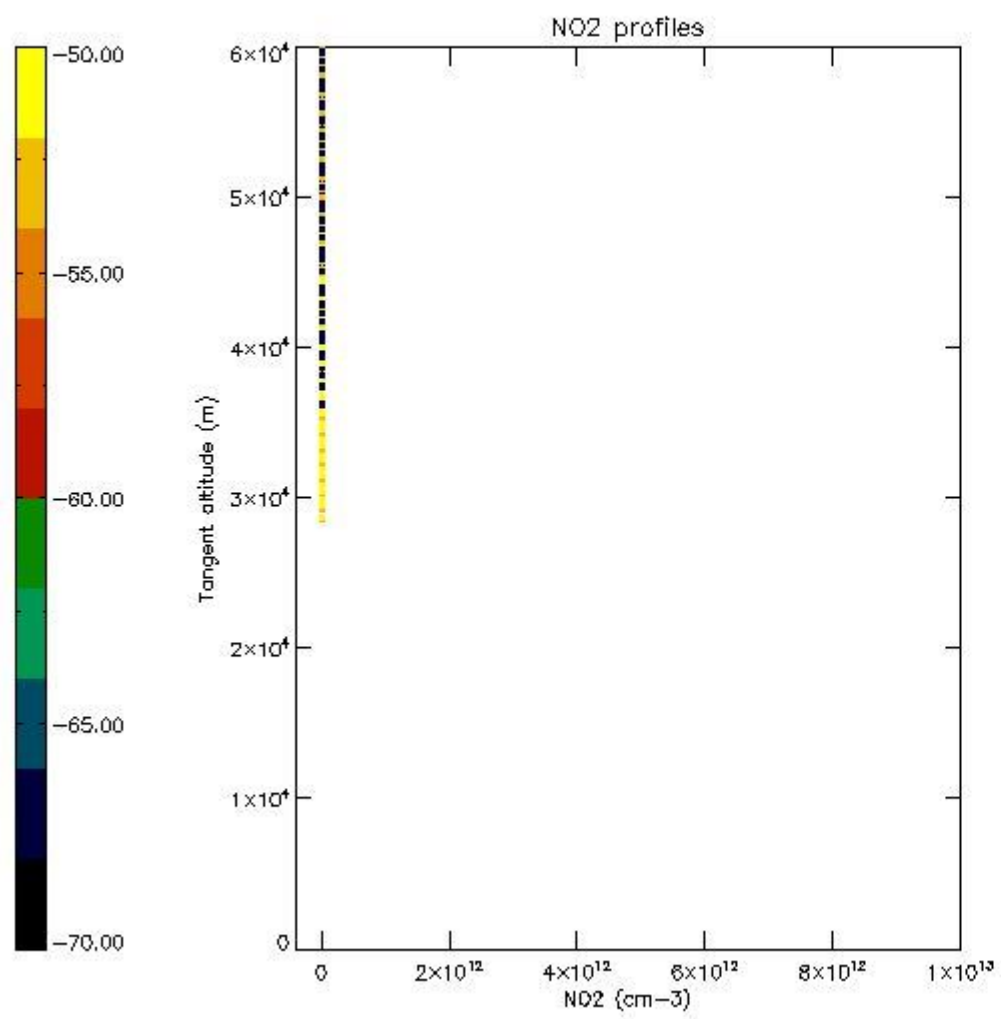
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



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

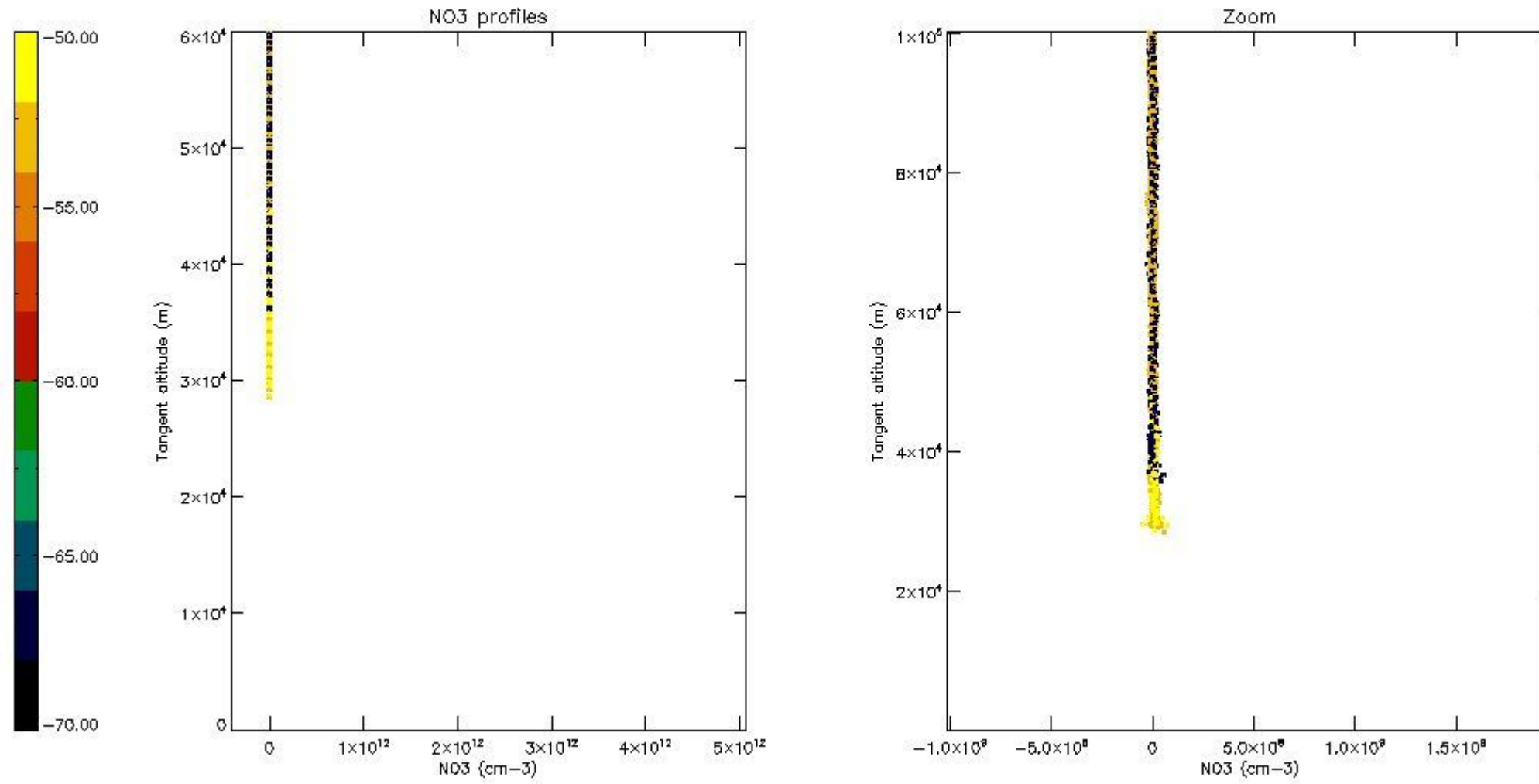
The colorbar represents the latitude.



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

The colorbar represents the latitude.





## 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	05-MAY-2009 00:13:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-MAY-2009 00:13:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-MAY-2009 00:13:28

# GOMOS Level 2 Daily Report

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





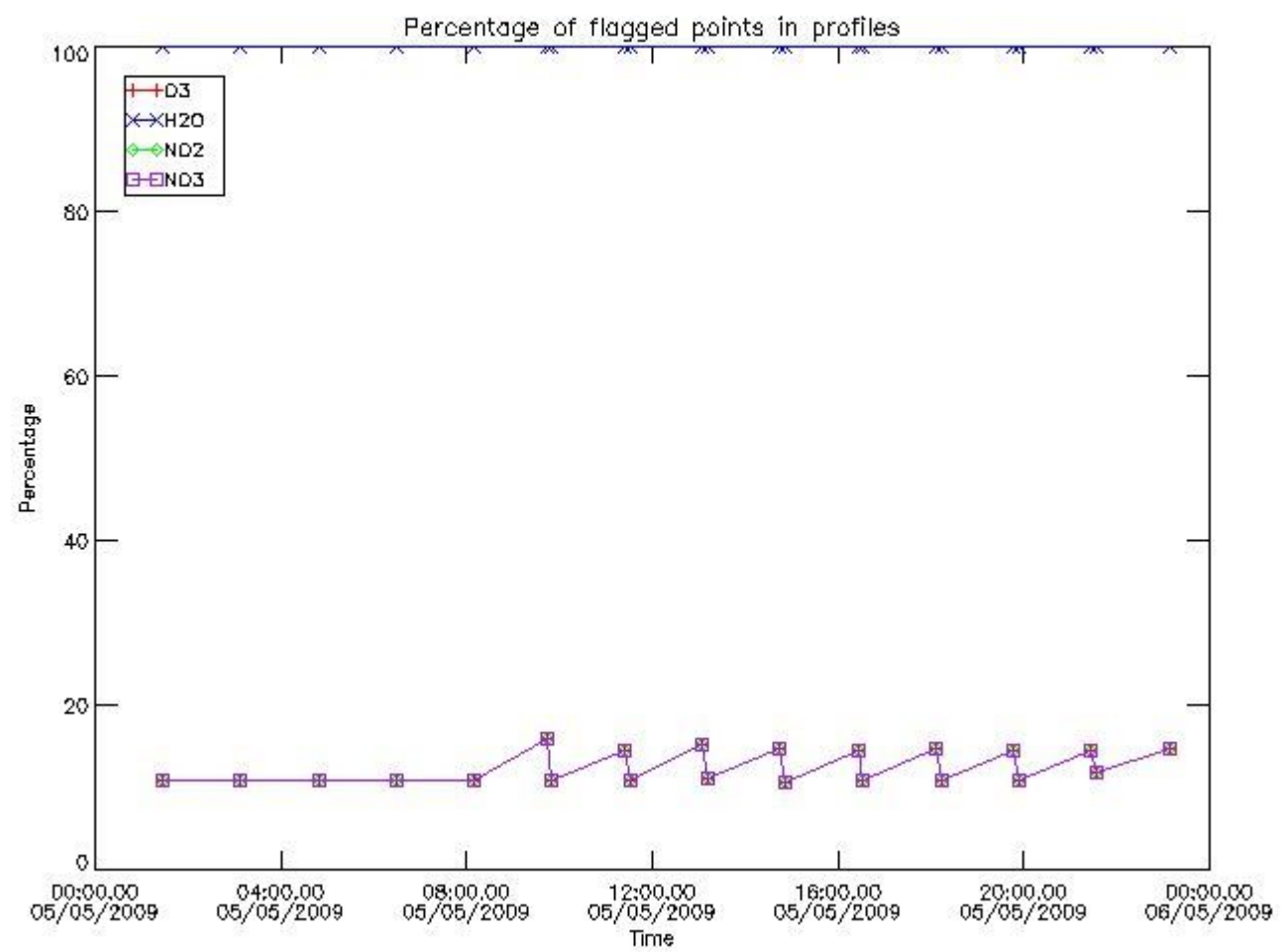


161	GOM_NL__2PRFIN20090505_203608_000000442078_00415_37543_2720.N1	05-MAY-2009 20:36:08	Bright	44.000	104	27Bet Lib	2.6140	13100.	88	37543	No
162	GOM_NL__2PRFIN20090505_204745_000000412078_00415_37543_2721.N1	05-MAY-2009 20:47:45	Bright	40.500	83		2.3780	11000.	81	37543	No
163	GOM_NL__2PRFIN20090505_205049_000000392078_00415_37543_2722.N1	05-MAY-2009 20:50:49	Bright	38.500	180	27Gam Boo	3.0400	8000.0	77	37543	No
164	GOM_NL__2PRFIN20090505_210010_000000432078_00415_37543_2723.N1	05-MAY-2009 21:00:10	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	37543	No
165	GOM_NL__2PRFIN20090505_211048_000000372078_00415_37543_2724.N1	05-MAY-2009 21:10:48	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	37543	No
166	GOM_NL__2PRFIN20090505_212311_000000342078_00415_37543_2725.N1	05-MAY-2009 21:23:11	Twilight	34.000	93	53Bet Peg	2.5200	3100.0	68	37543	No
167	GOM_NL__2PRFIN20090505_212720_000000352078_00415_37543_2726.N1	05-MAY-2009 21:27:20	Dark	35.000	90	54Alp Peg	2.4870	11000.	70	37543	No
168	GOM_NL__2PRFIN20090505_213443_000000472078_00415_37543_2727.N1	05-MAY-2009 21:34:43	Dark	47.000	162	34Alp Aqr	2.9440	5350.0	94	37543	No
169	GOM_NL__2PRFIN20090505_220125_000000482078_00416_37544_2729.N1	05-MAY-2009 22:01:25	Straylight	48.000	40	The Sco	1.8590	7100.0	96	37544	No
170	GOM_NL__2PRFIN20090505_220315_000000522078_00416_37544_2730.N1	05-MAY-2009 22:03:15	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	37544	No
171	GOM_NL__2PRFIN20090505_220606_000000482078_00416_37544_2731.N1	05-MAY-2009 22:06:06	Straylight	48.000	75	26Eps Sco	2.2910	4250.0	96	37544	No
172	GOM_NL__2PRFIN20090505_220936_000000502078_00416_37544_2732.N1	05-MAY-2009 22:09:36	Twilight	50.000	16	21Alp Sco	1.0200	3000.0	100	37544	No
173	GOM_NL__2PRFIN20090505_221138_000000462078_00416_37544_2733.N1	05-MAY-2009 22:11:38	Twilight	46.000	80	7Del Sco	2.3160	30000.	92	37544	No
174	GOM_NL__2PRFIN20090505_221643_000000442078_00416_37544_2734.N1	05-MAY-2009 22:16:43	Bright	43.500	104	27Bet Lib	2.6140	13100.	87	37544	No
175	GOM_NL__2PRFIN20090505_222821_000000412078_00416_37544_2735.N1	05-MAY-2009 22:28:21	Bright	40.500	83		2.3780	11000.	81	37544	No
176	GOM_NL__2PRFIN20090505_223125_000000382078_00416_37544_2736.N1	05-MAY-2009 22:31:25	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	37544	No
177	GOM_NL__2PRFIN20090505_224045_000000432078_00416_37544_2737.N1	05-MAY-2009 22:40:45	Bright	43.000	119	14Eta Dra	2.7270	4700.0	86	37544	No
178	GOM_NL__2PRFIN20090505_225123_000000372078_00416_37544_2738.N1	05-MAY-2009 22:51:23	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	37544	No
179	GOM_NL__2PRFIN20090505_230348_000000342078_00416_37544_2739.N1	05-MAY-2009 23:03:48	Twilight	34.000	93	53Bet Peg	2.5200	3100.0	68	37544	No
180	GOM_NL__2PRFIN20090505_230756_000000342078_00416_37544_2740.N1	05-MAY-2009 23:07:56	Dark	34.000	90	54Alp Peg	2.4870	11000.	68	37544	No
181	GOM_NL__2PRFIN20090505_234202_000000482078_00417_37545_2746.N1	05-MAY-2009 23:42:02	Straylight	48.000	40	The Sco	1.8590	7100.0	96	37545	No
182	GOM_NL__2PRFIN20090505_234351_000000522078_00417_37545_2747.N1	05-MAY-2009 23:43:51	Straylight	52.000	25	35Lam Sco	1.6200	28000.	104	37545	No
183	GOM_NL__2PRFIN20090505_234642_000000482078_00417_37545_2748.N1	05-MAY-2009 23:46:42	Straylight	48.000	75	26Eps Sco	2.2910	4250.0	96	37545	No
184	GOM_NL__2PRFIN20090505_235013_000000502078_00417_37545_2749.N1	05-MAY-2009 23:50:13	Twilight	49.500	16	21Alp Sco	1.0200	3000.0	99	37545	No
185	GOM_NL__2PRFIN20090505_235214_000000462078_00417_37545_2750.N1	05-MAY-2009 23:52:14	Twilight	46.000	80	7Del Sco	2.3160	30000.	92	37545	No
186	GOM_NL__2PRFIN20090505_235719_000000432078_00417_37545_2751.N1	05-MAY-2009 23:57:19	Bright	43.000	104	27Bet Lib	2.6140	13100.	86	37545	No

### 3. Quality information per product

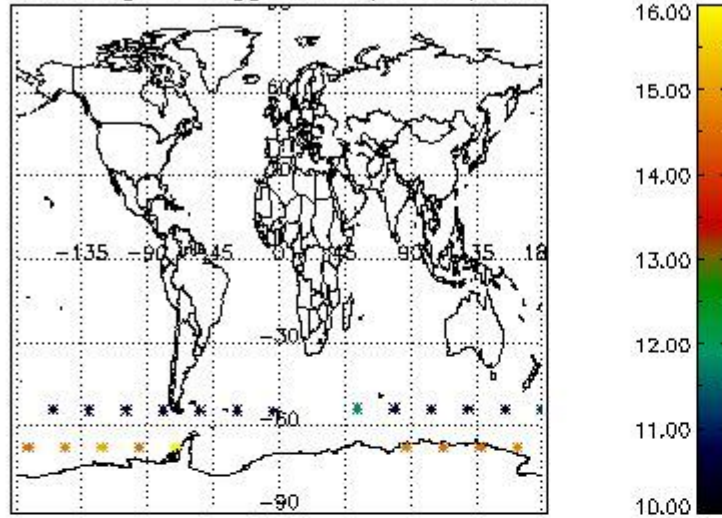
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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

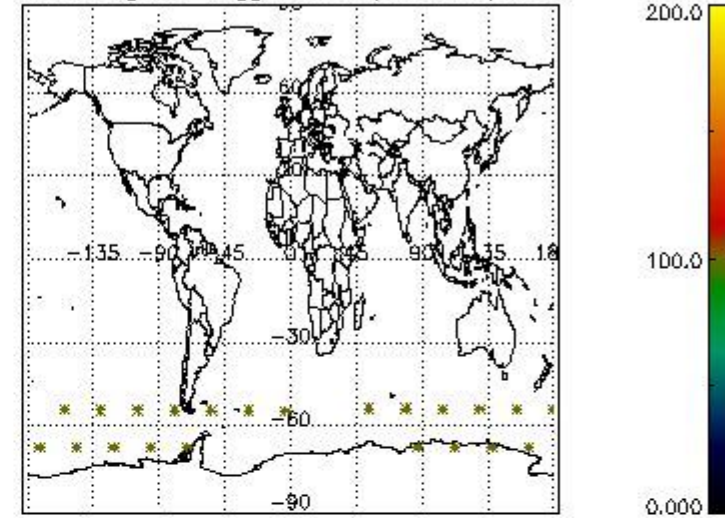


*3.2 Plot quality information per product (world map)*

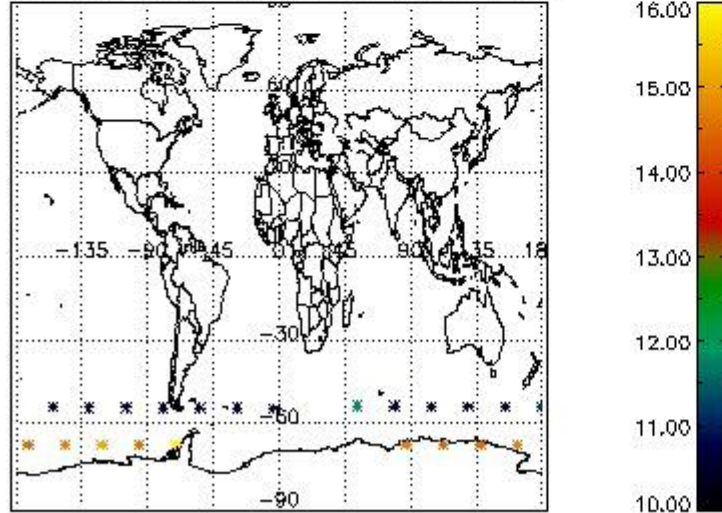
Percentage of flagged data per O3 profile



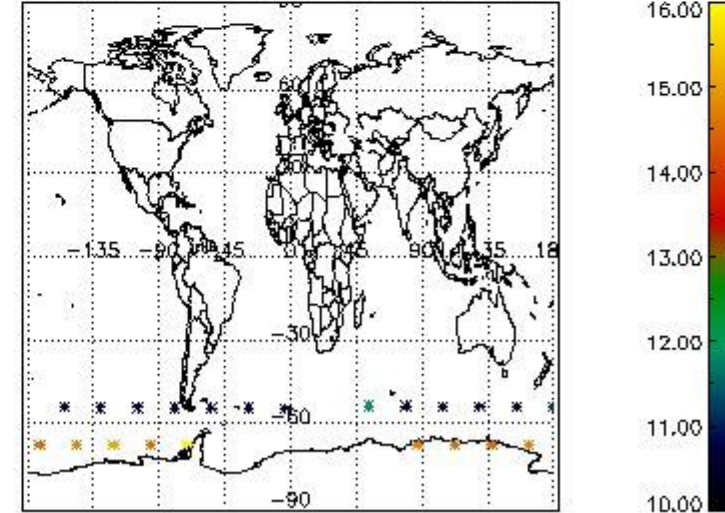
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile



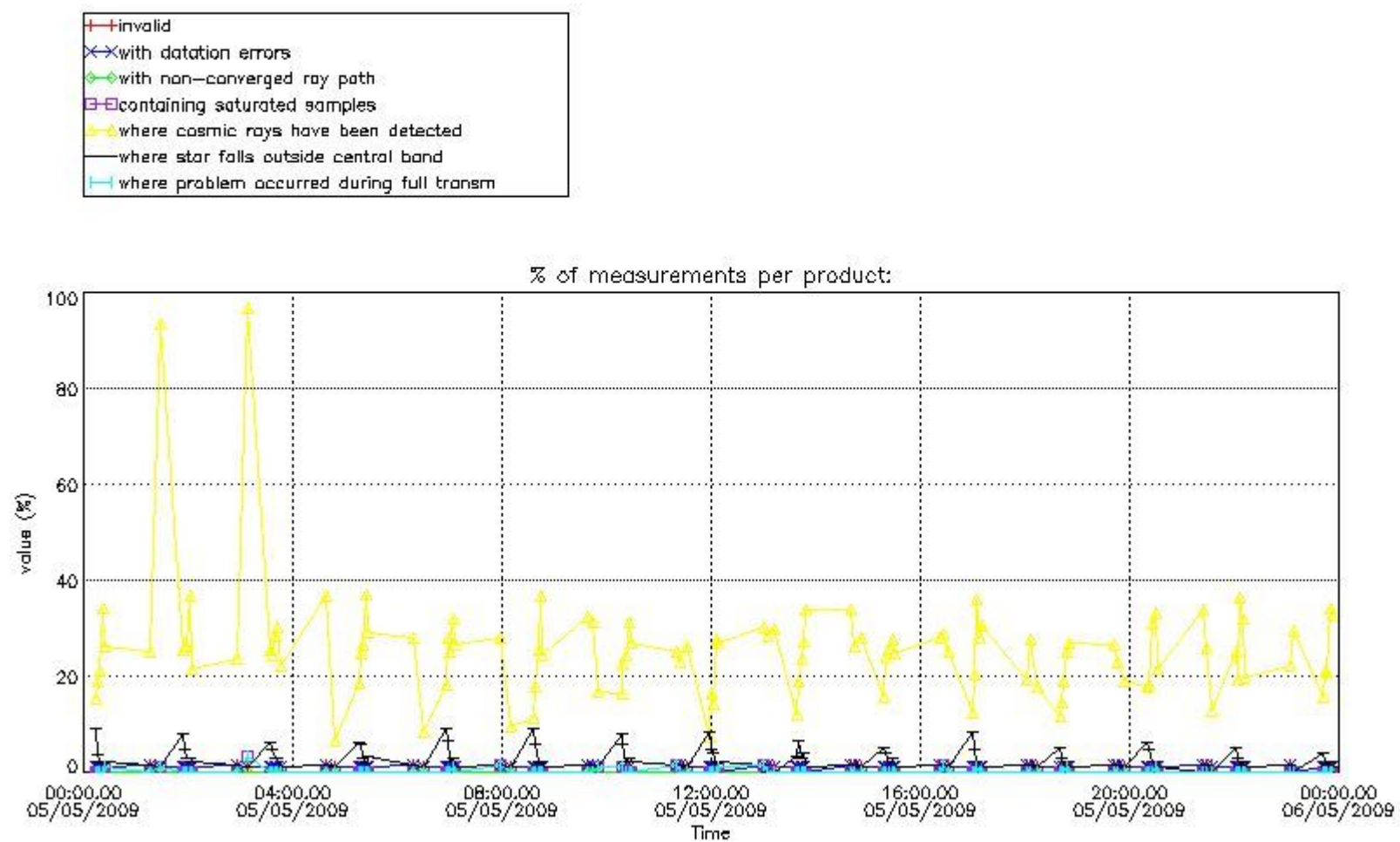
#### 4. Level 1 quality information per product

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.

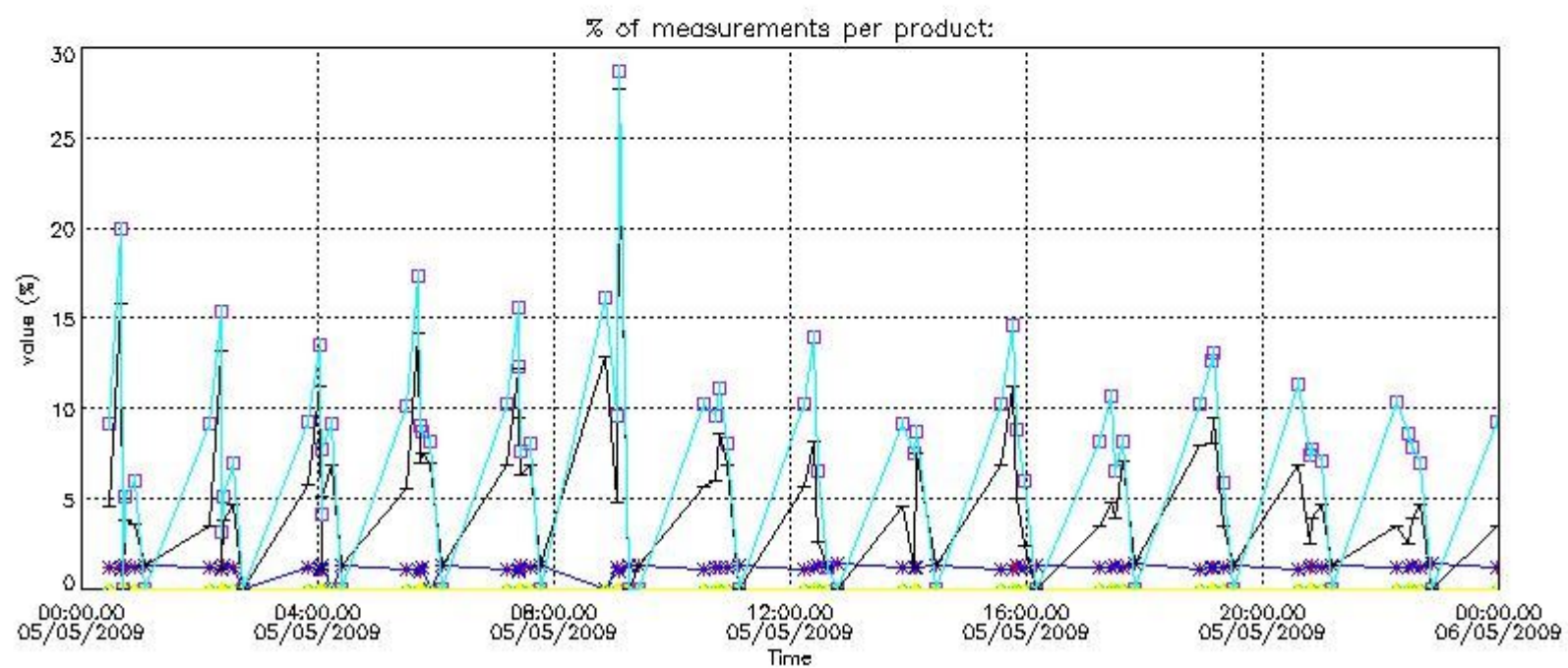
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

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



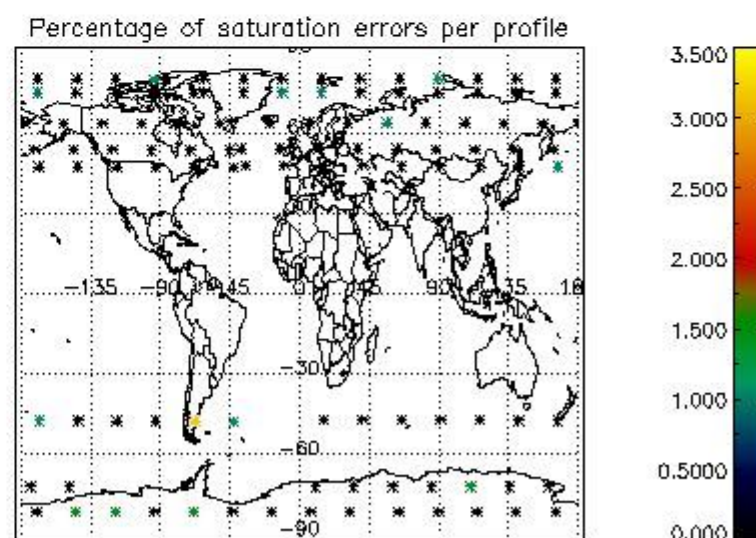
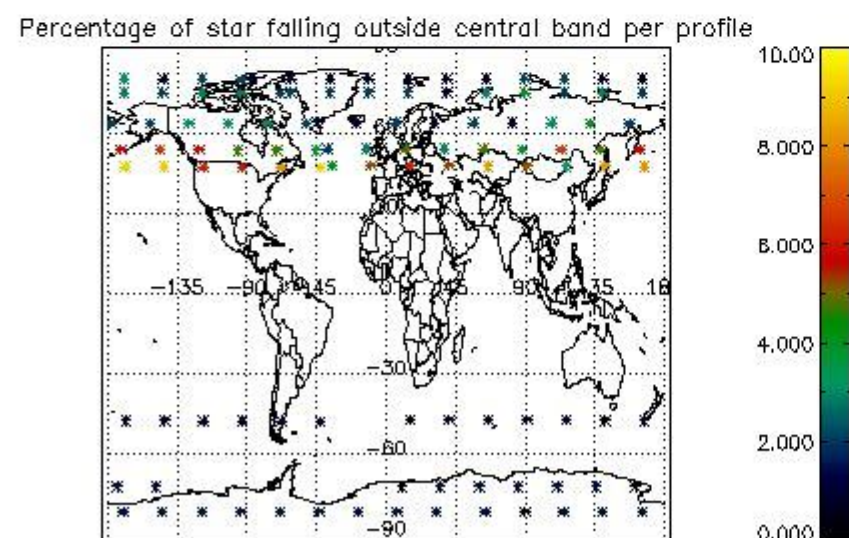
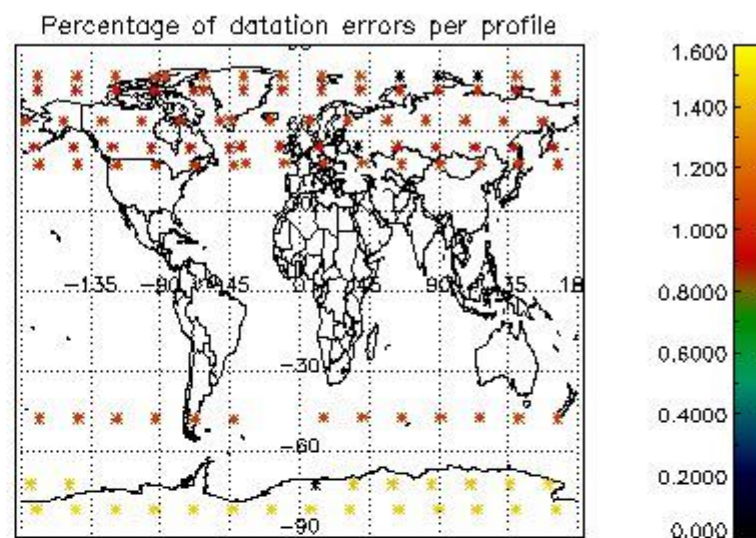
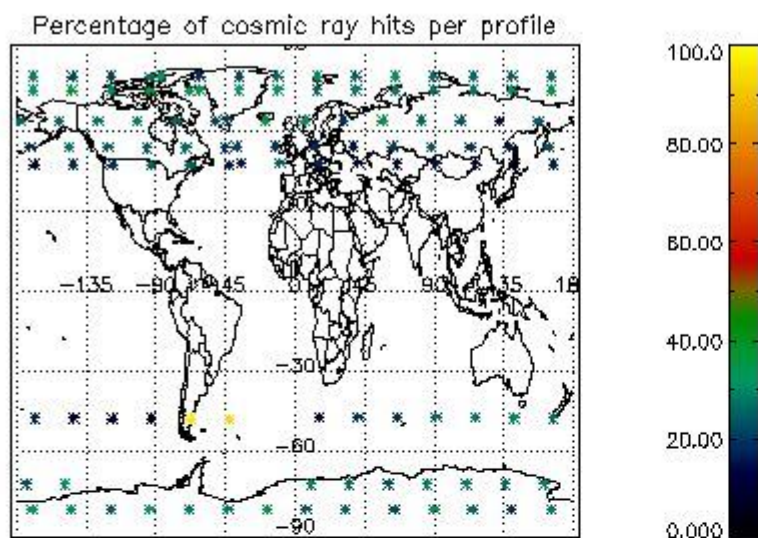


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



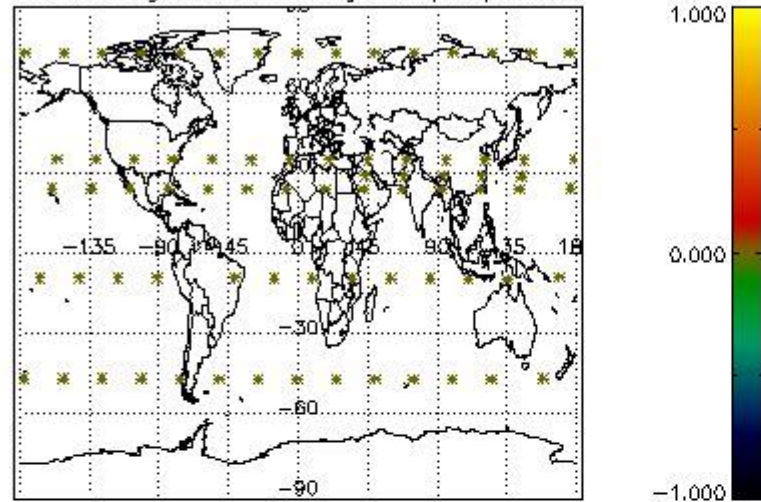
*4.2 Plot quality information per product coming from level 1b processing (world map)*

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

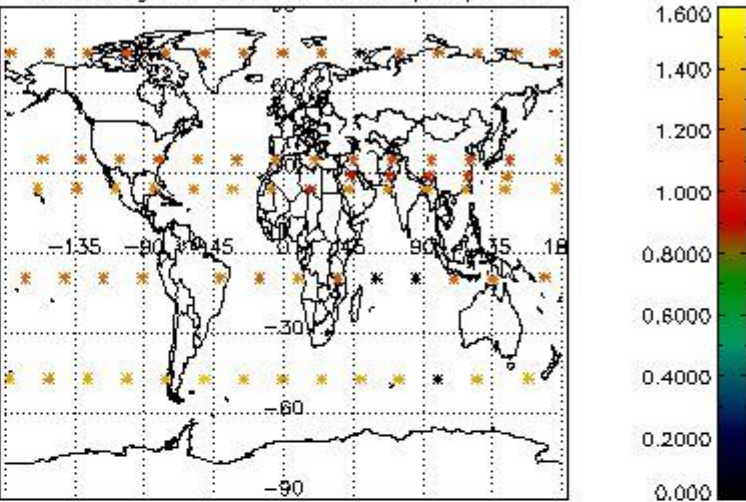


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

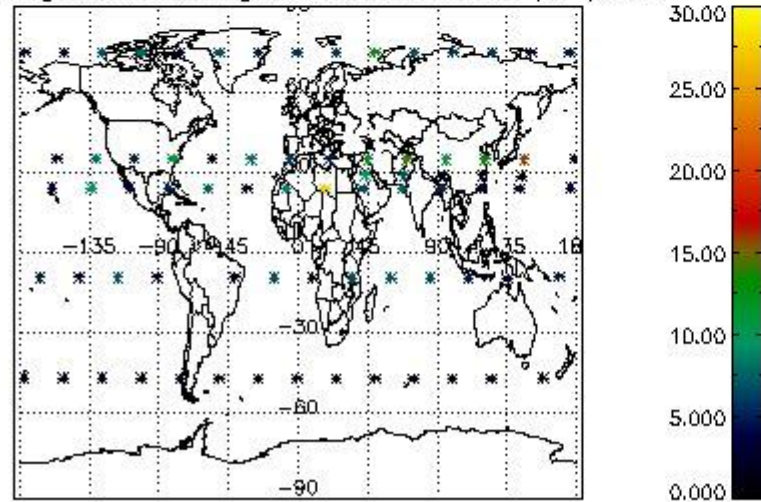
Percentage of cosmic ray hits per profile



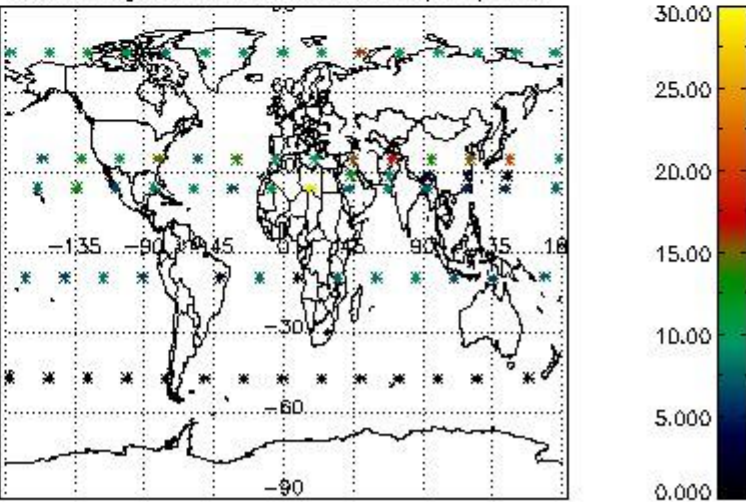
Percentage of datation errors per profile



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

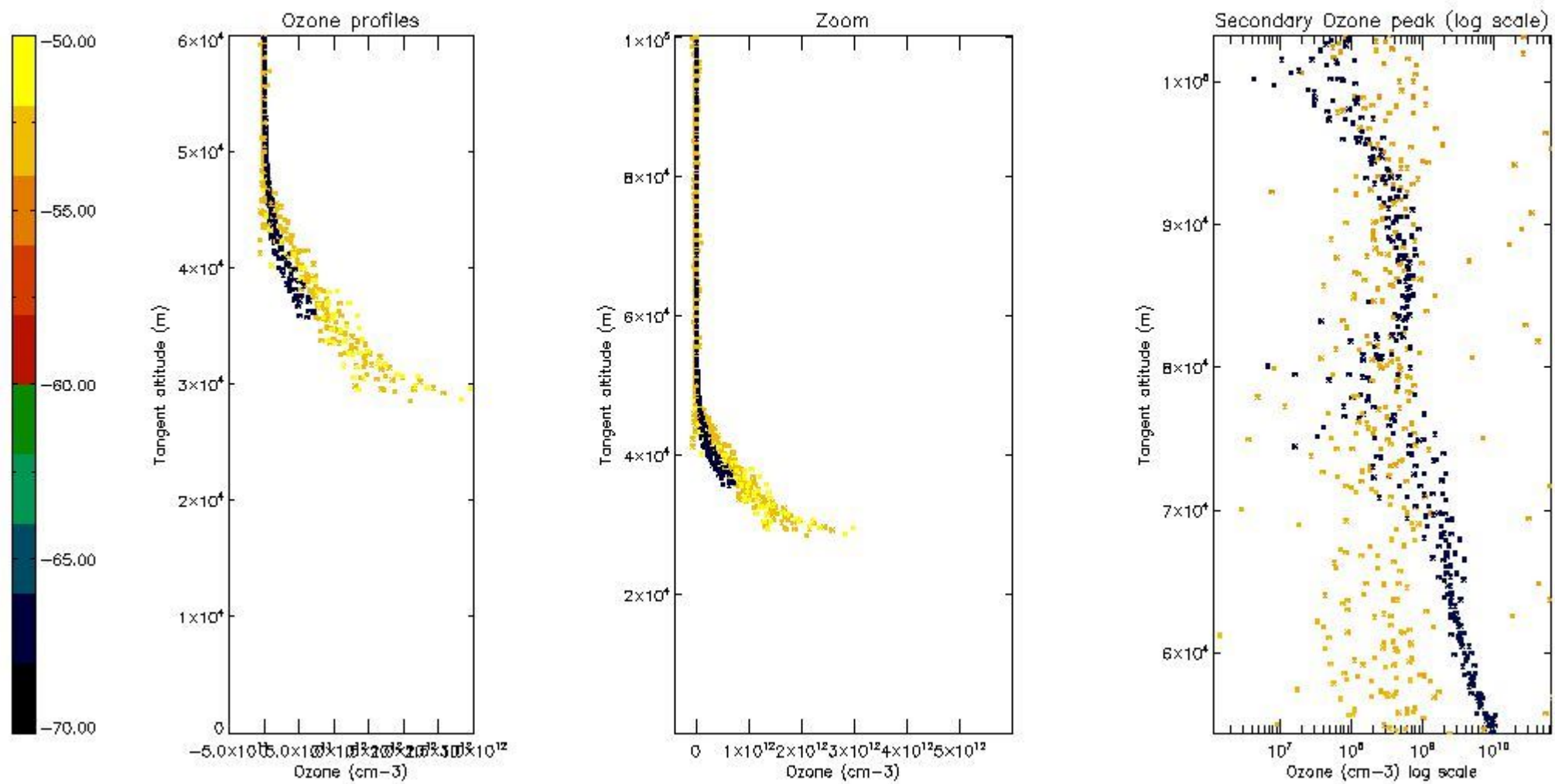
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	11
STD < 20	3

STD < 10	1
STD < 5	0

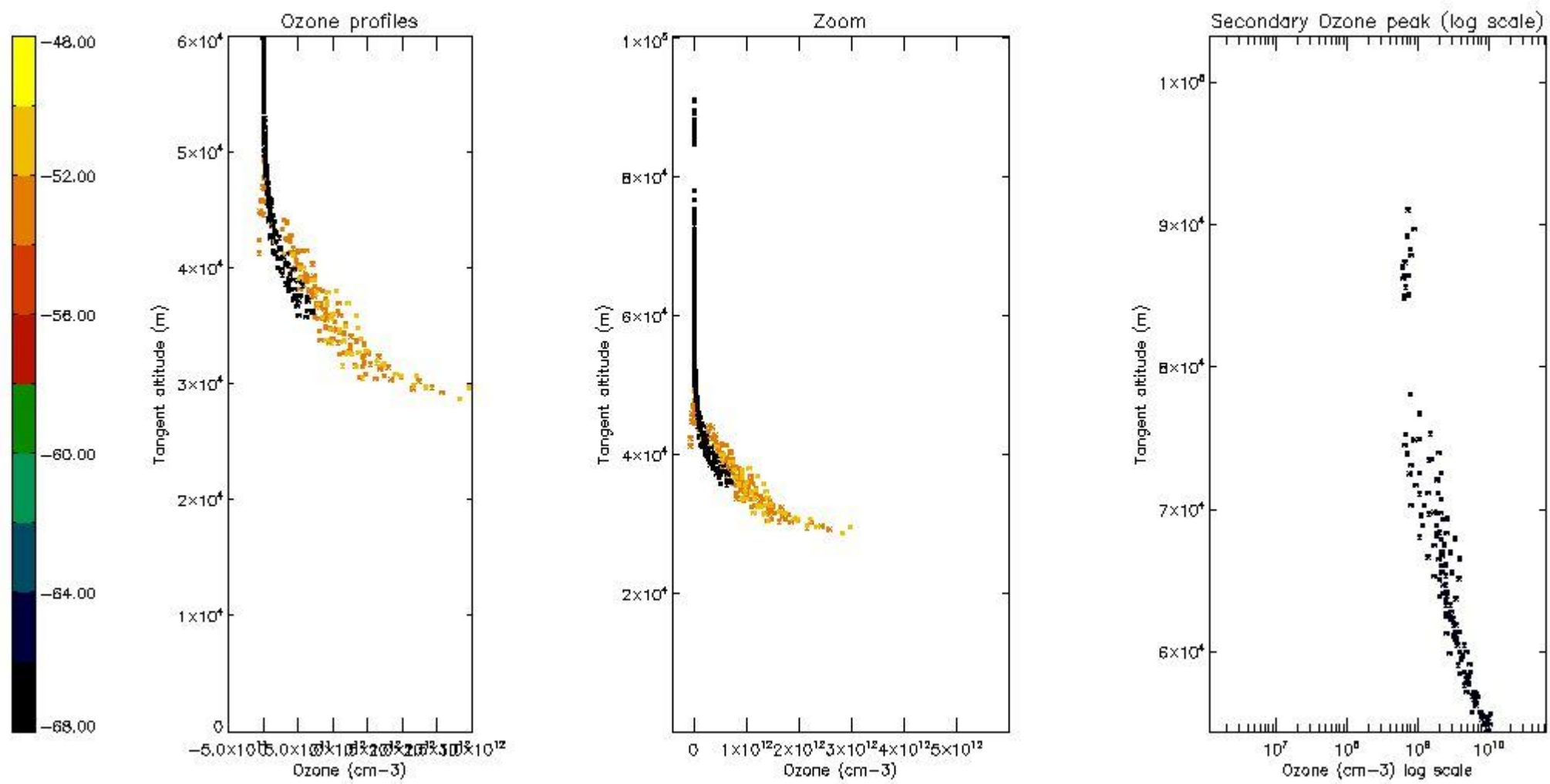
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



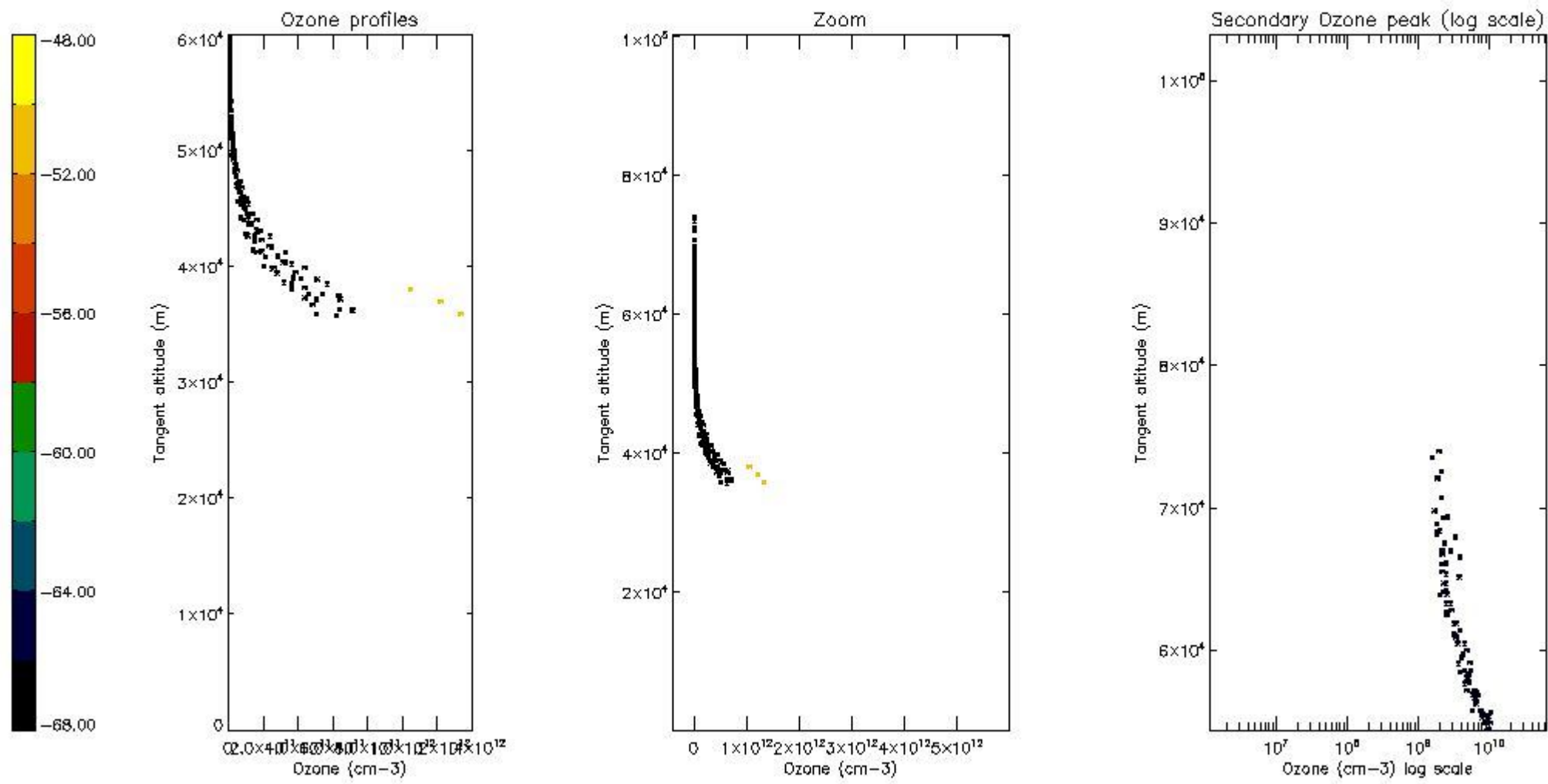
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



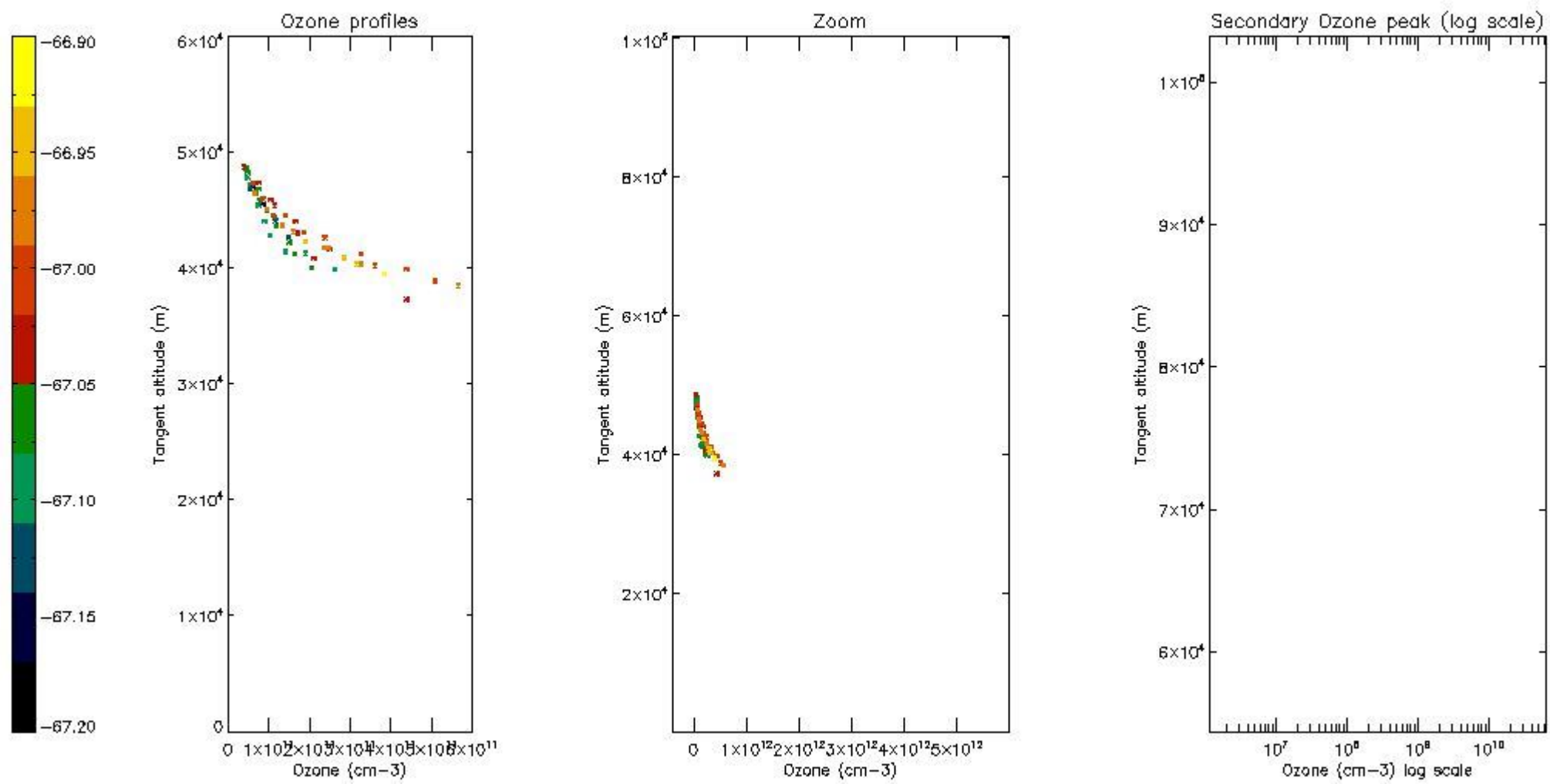
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



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

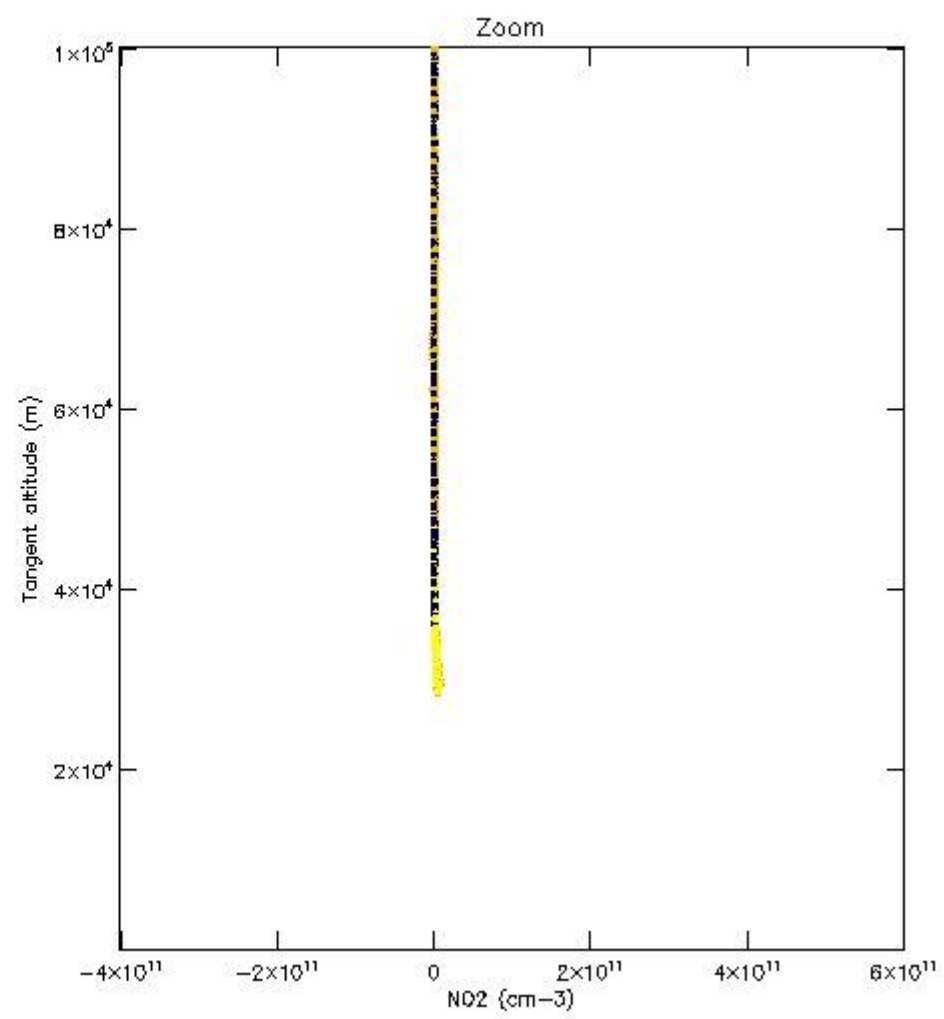
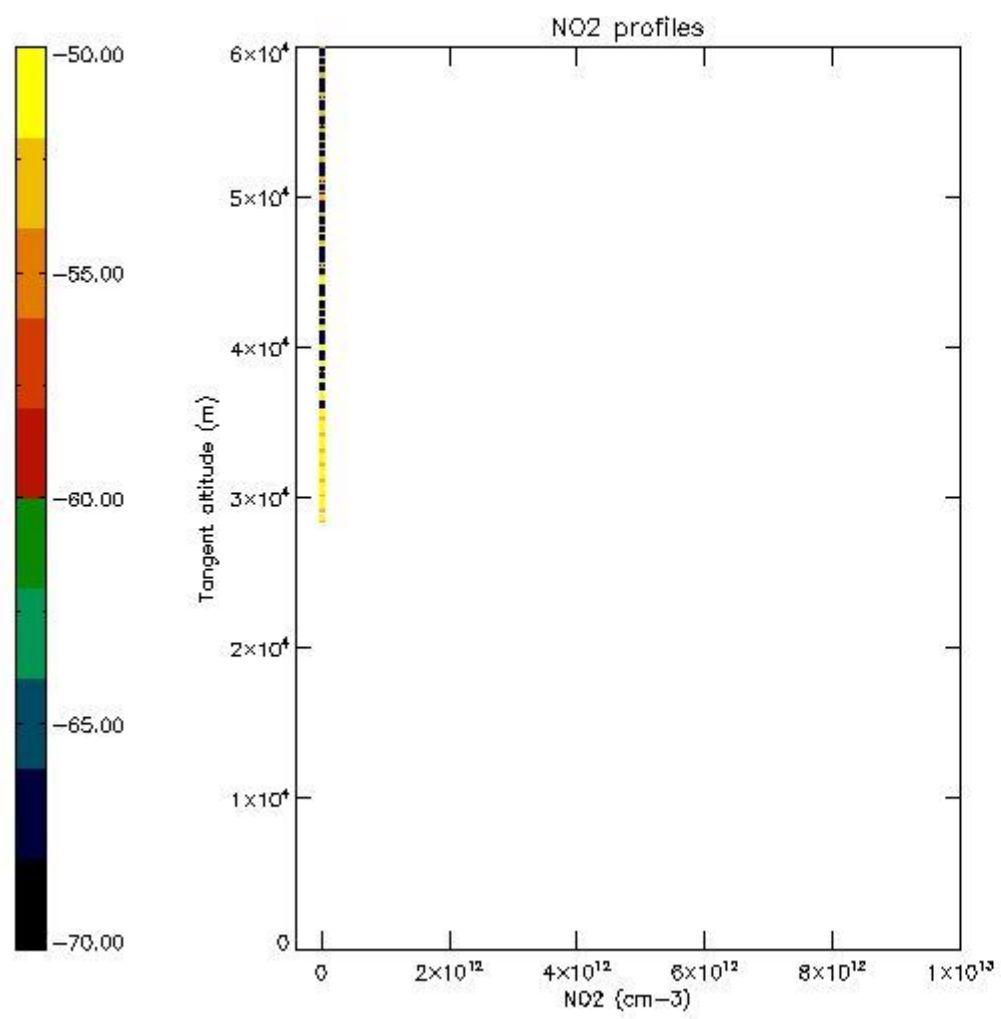
The colorbar represents the latitude.



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

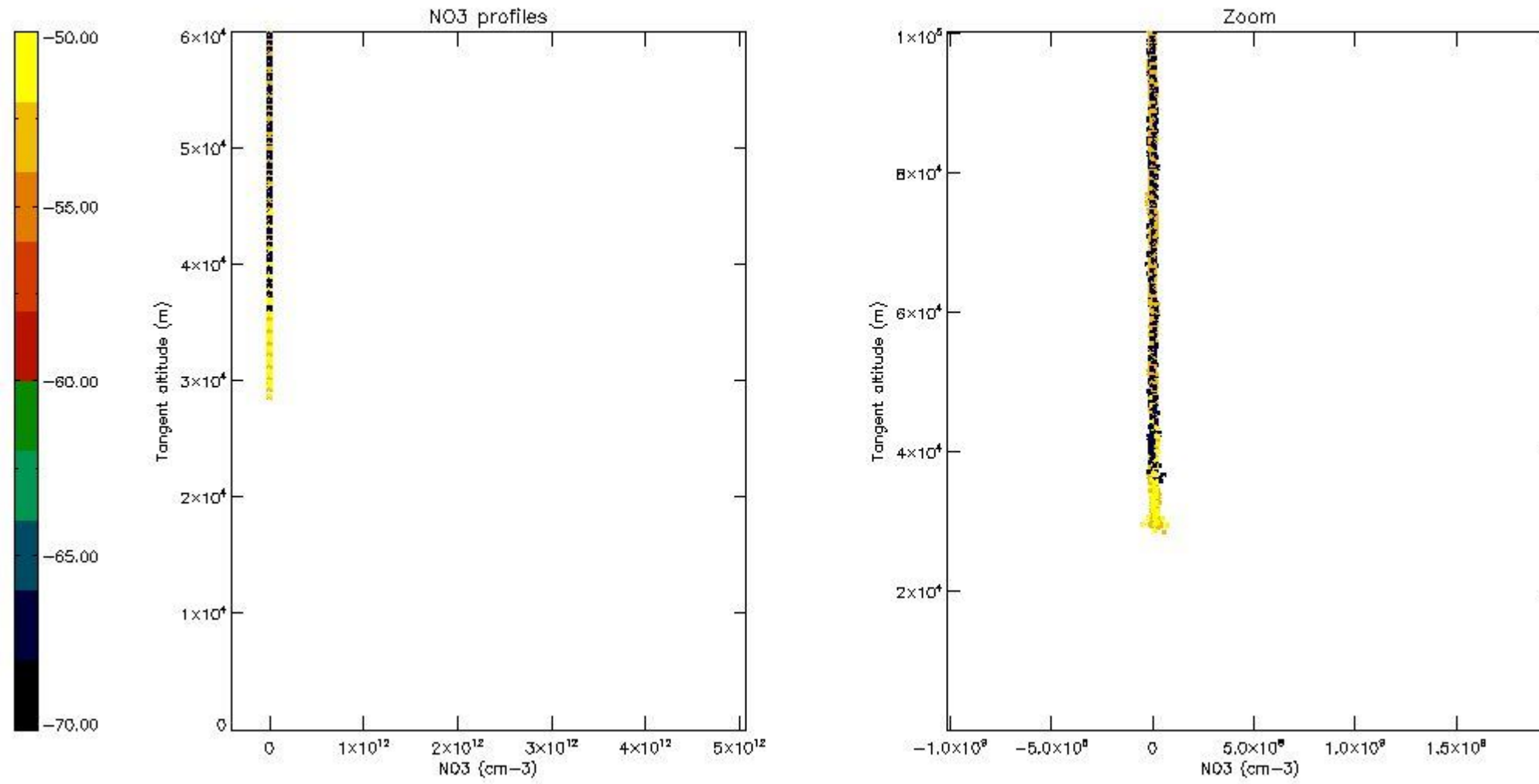
The colorbar represents the latitude.





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

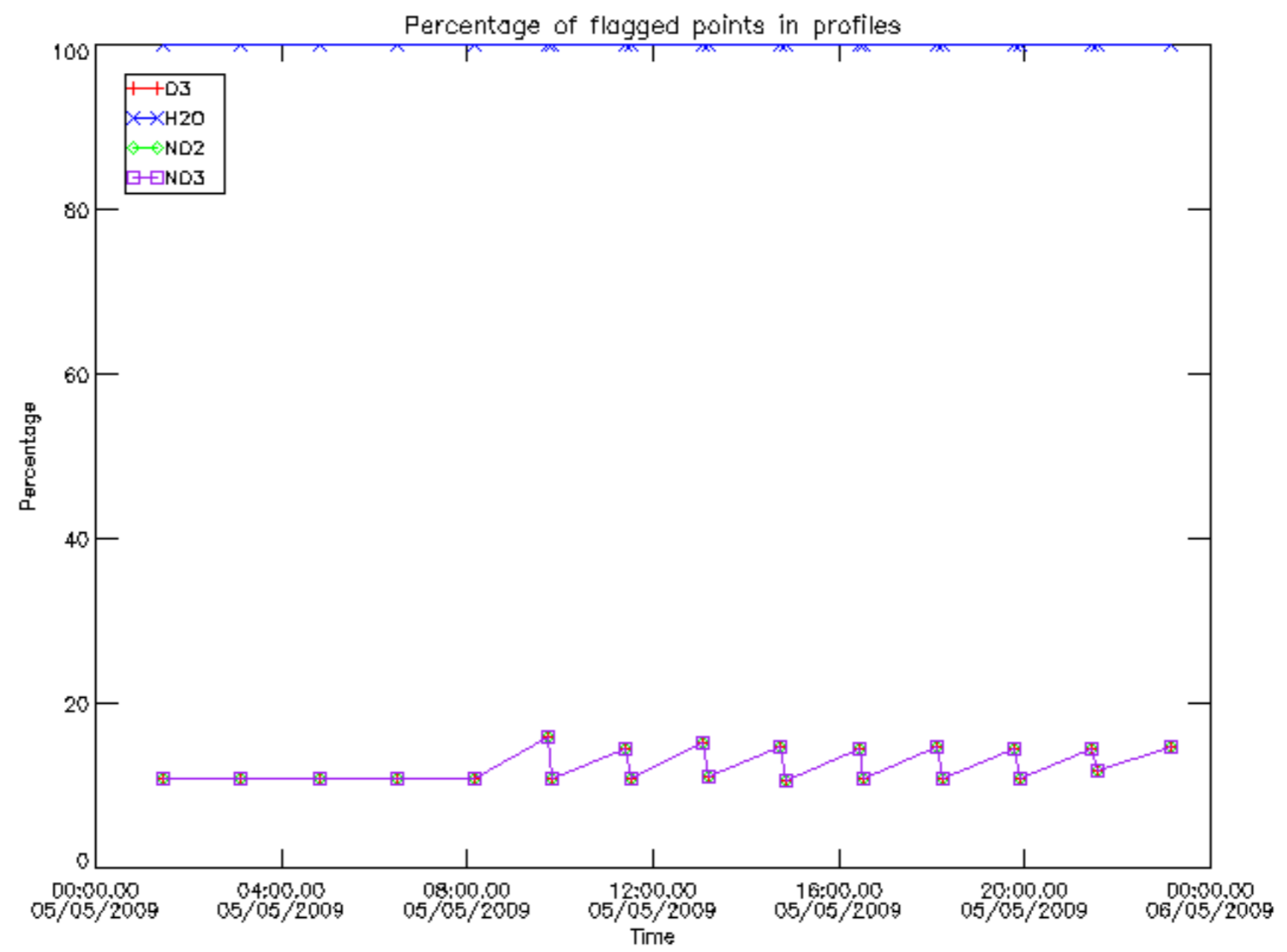
The colorbar represents the latitude.



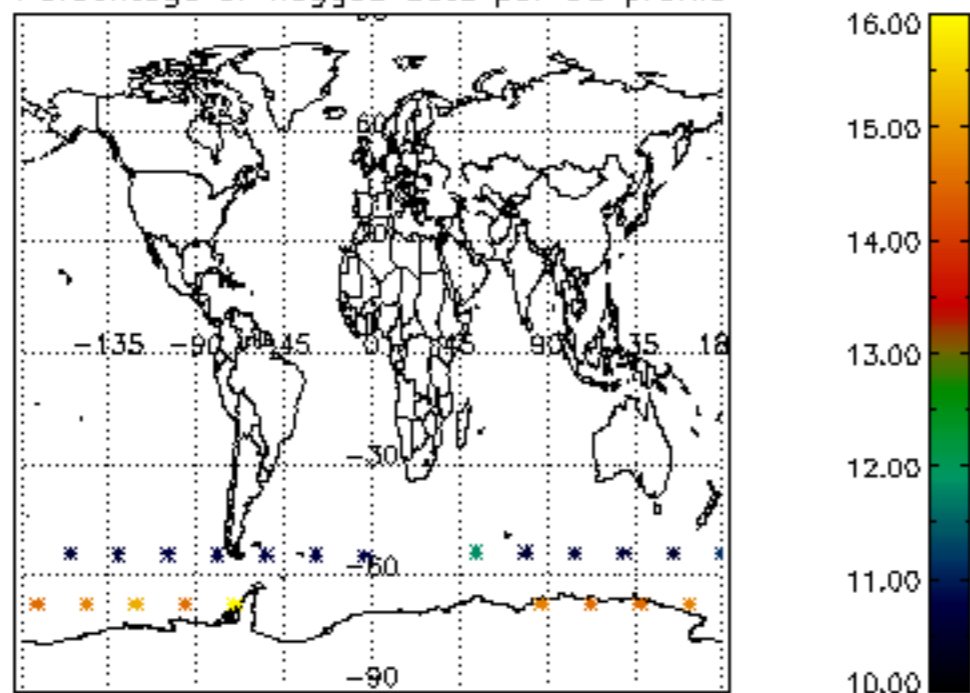
## 6. Auxiliary Data Files used for the production reported in section 2

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.

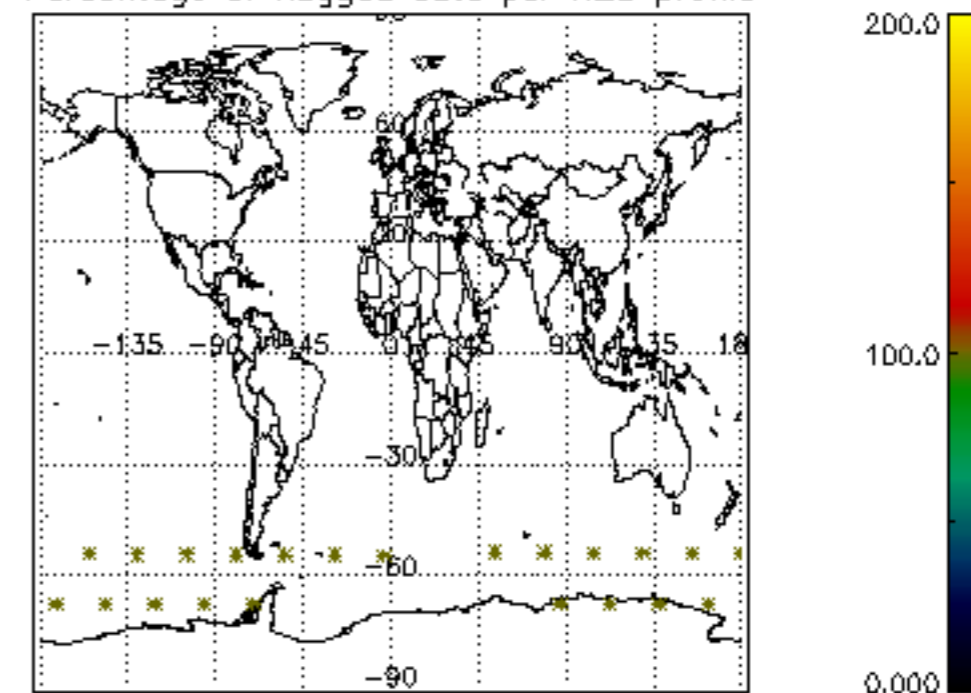
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	05-MAY-2009 00:13:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-MAY-2009 00:13:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-MAY-2009 00:13:28



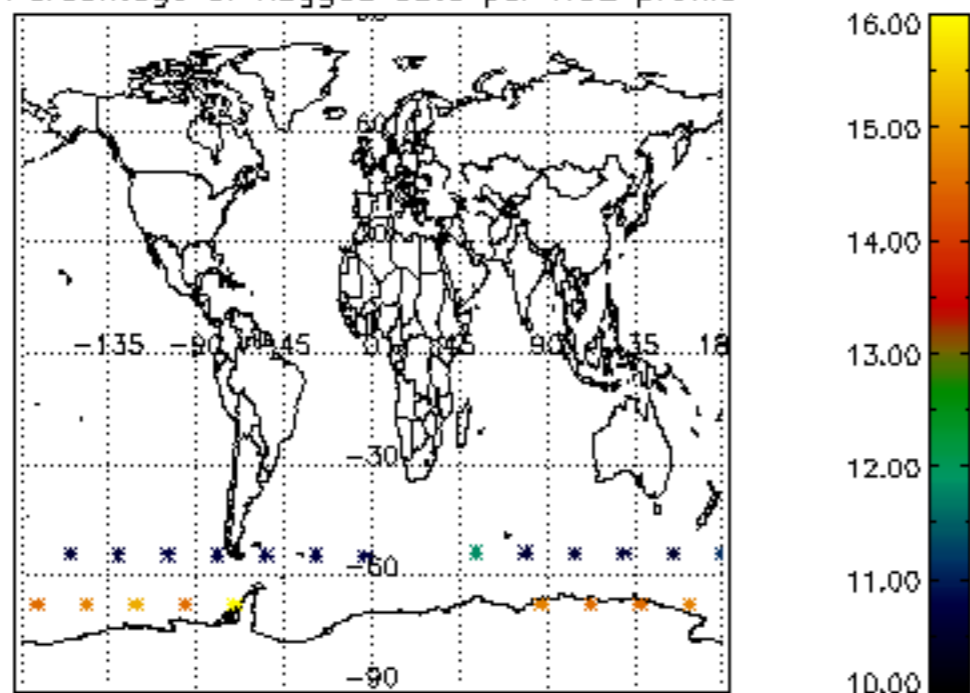
Percentage of flagged data per D3 profile



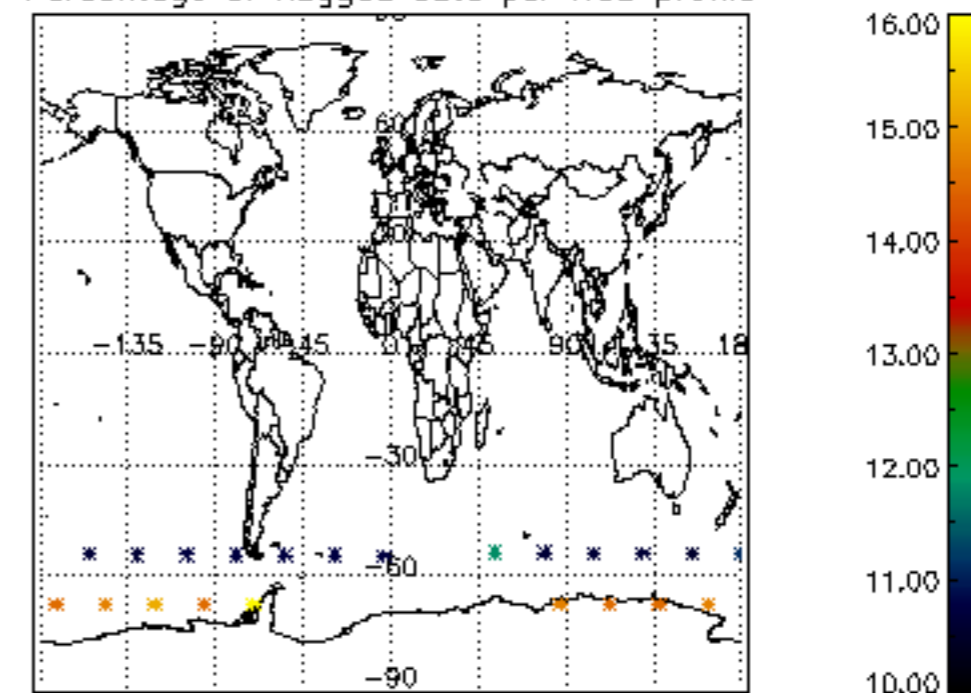
Percentage of flagged data per H2O profile

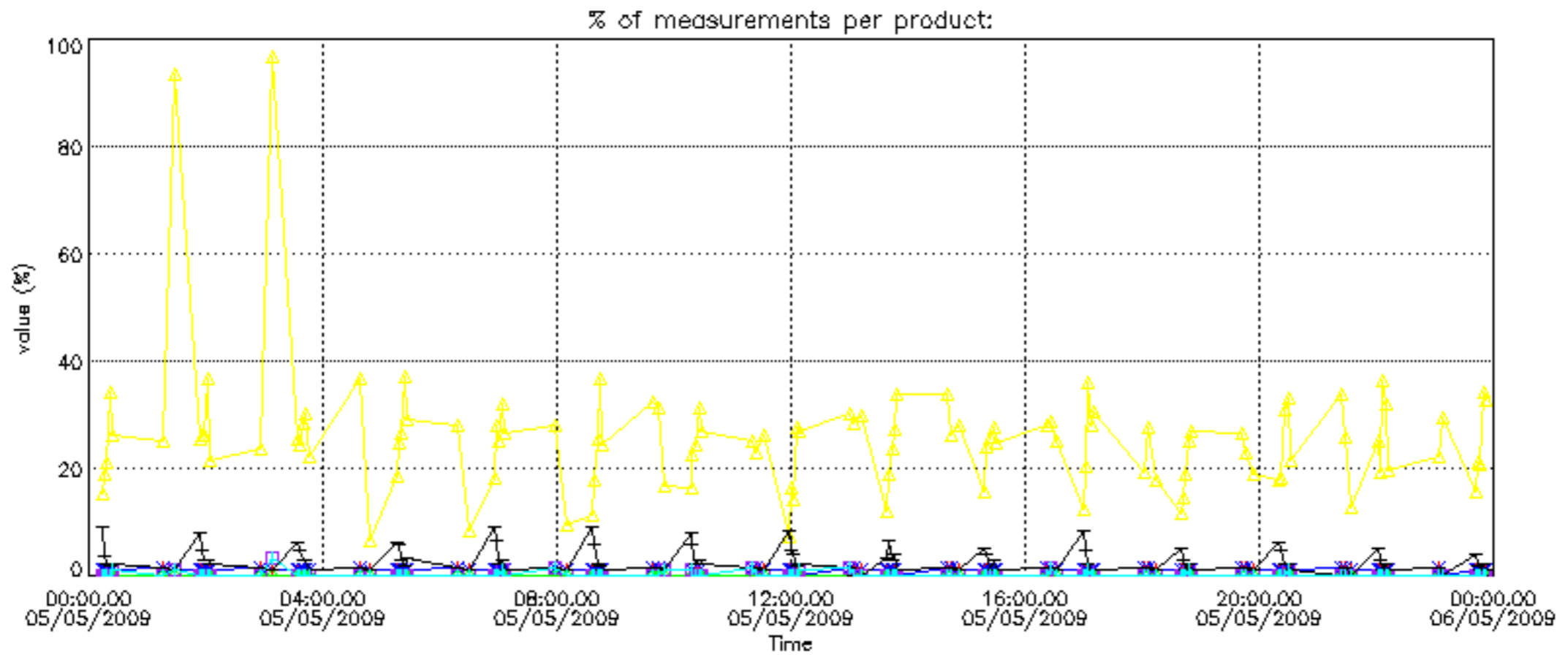


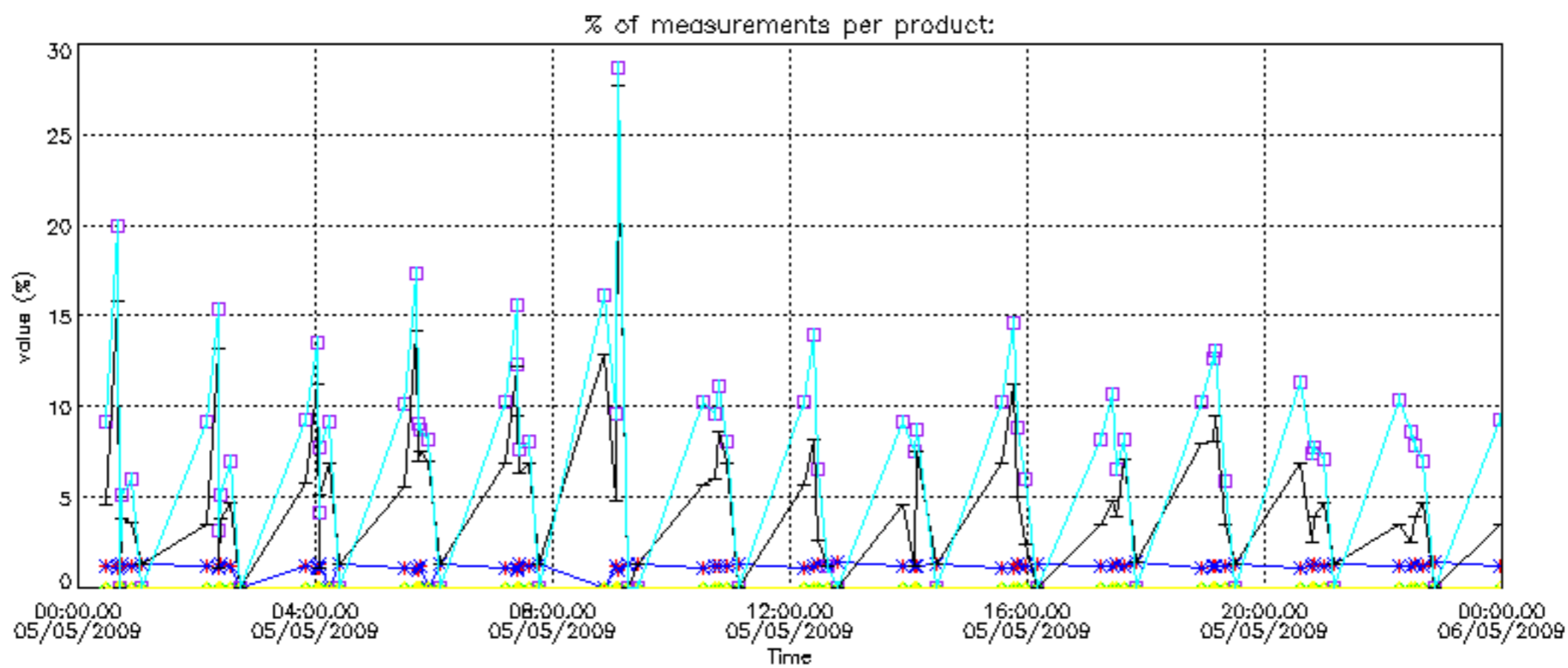
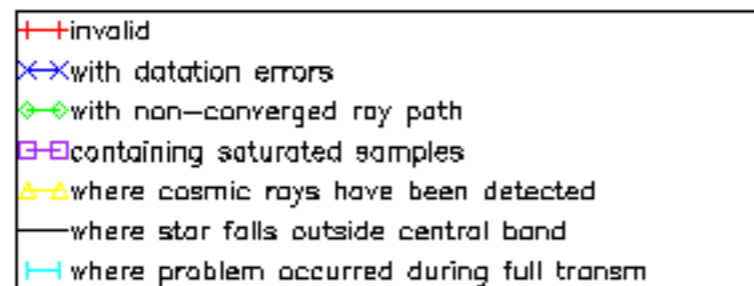
Percentage of flagged data per NO2 profile



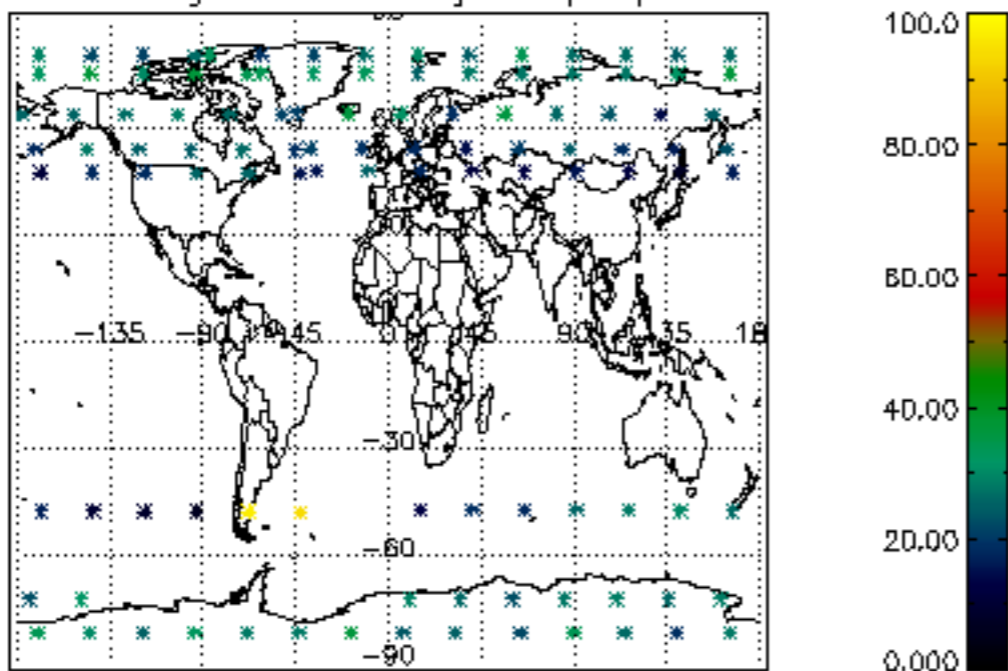
Percentage of flagged data per NO3 profile



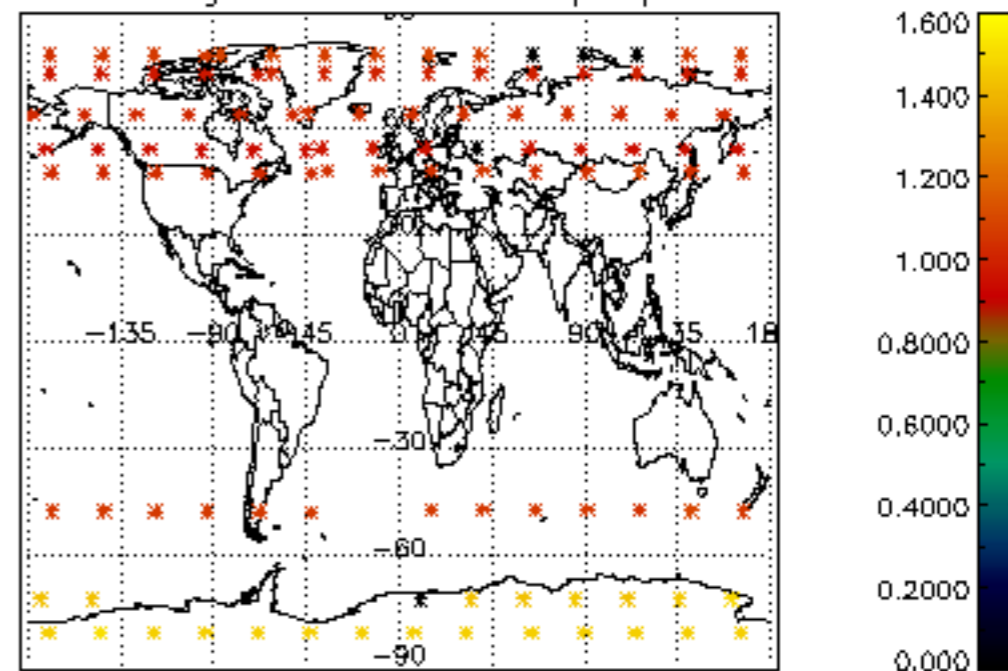




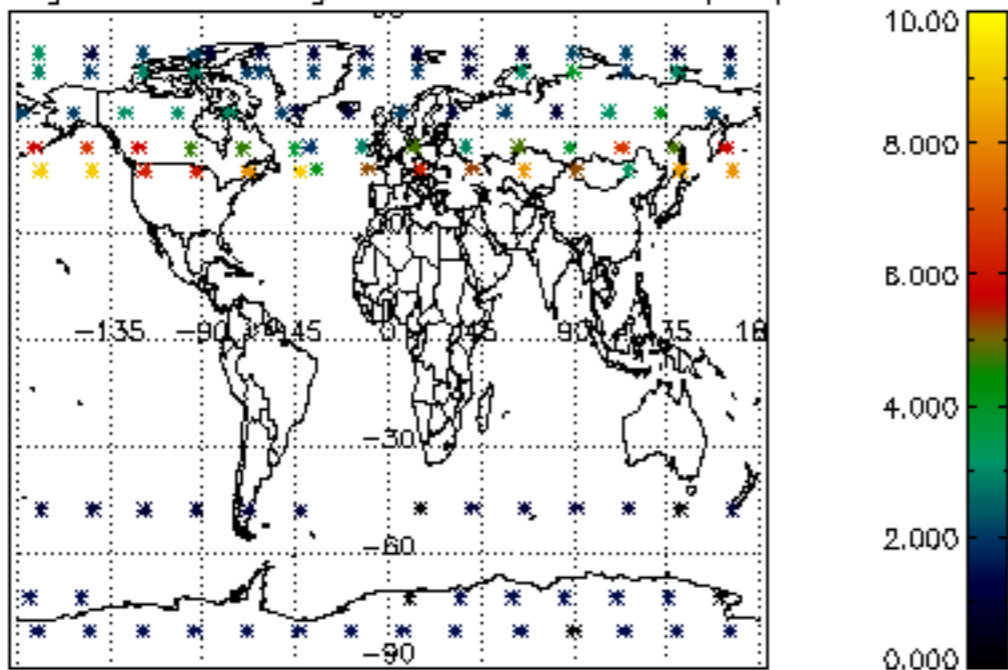
Percentage of cosmic ray hits per profile



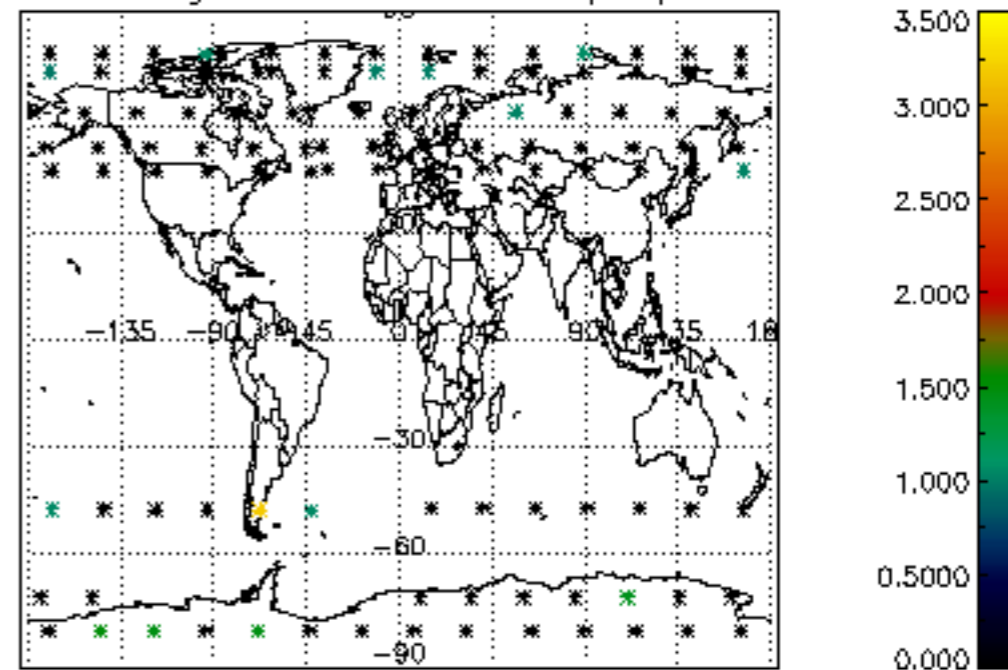
Percentage of datation errors per profile



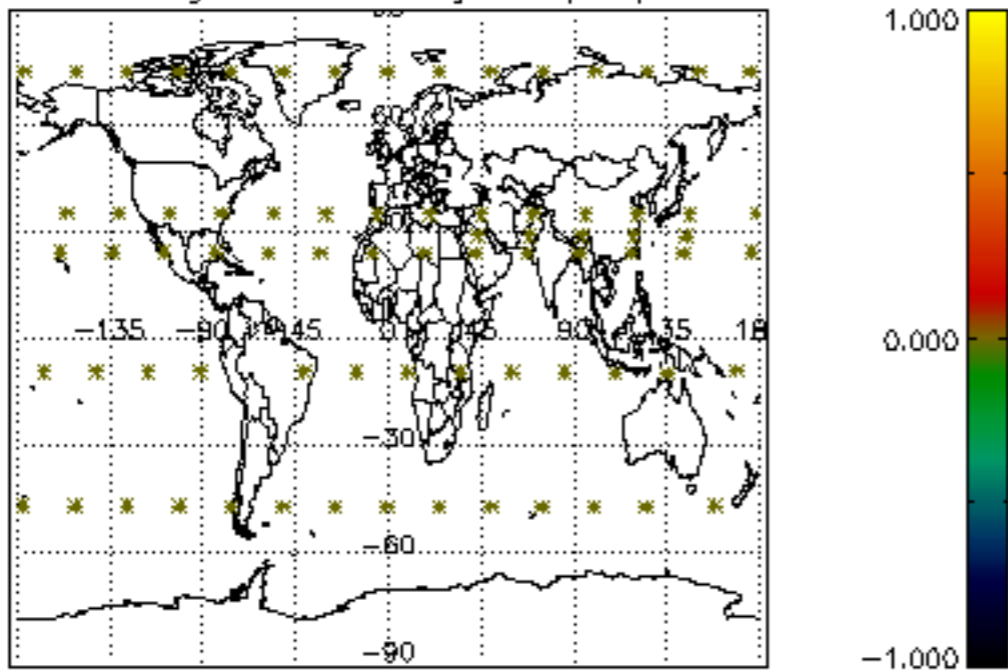
Percentage of star falling outside central band per profile



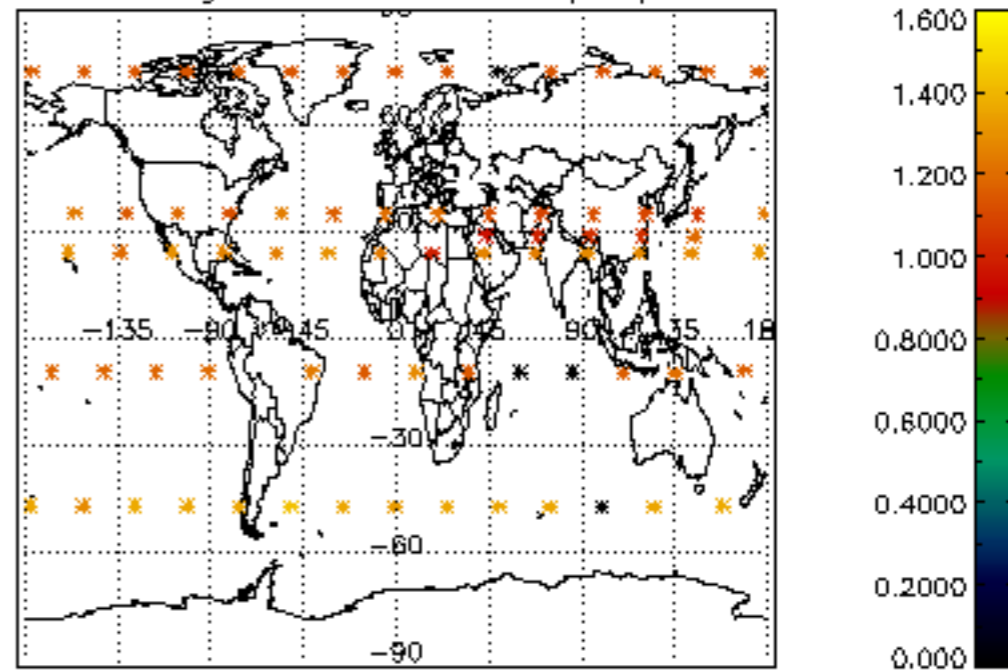
Percentage of saturation errors per profile



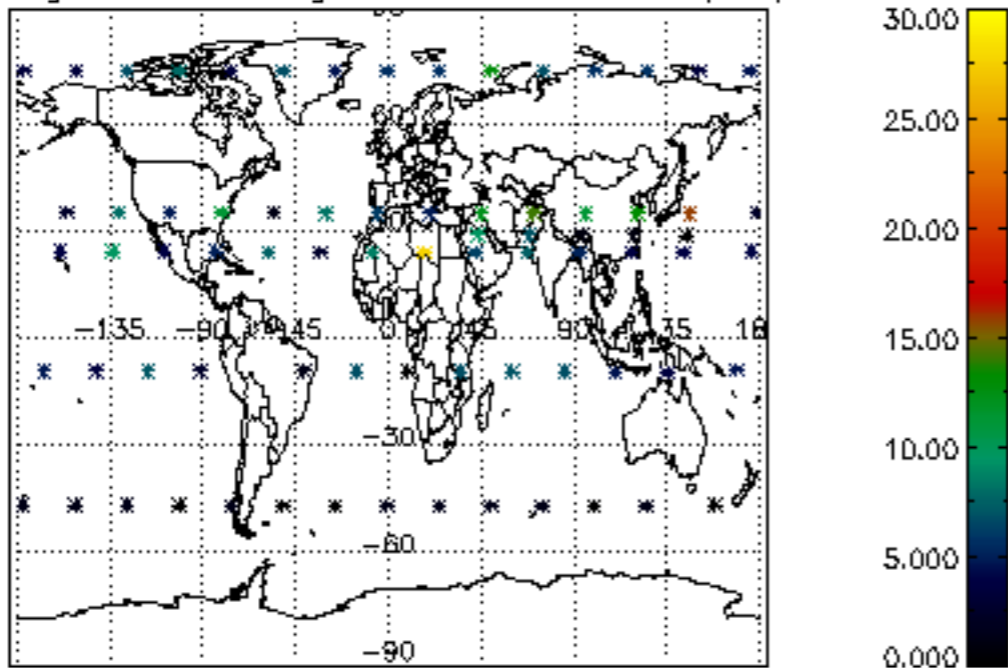
Percentage of cosmic ray hits per profile



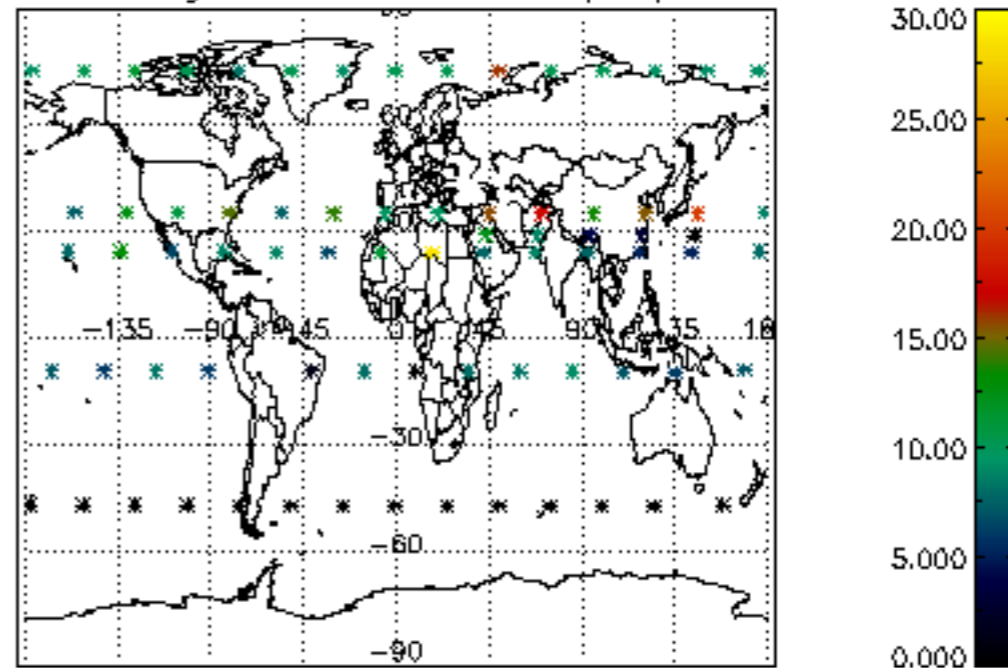
Percentage of datation errors per profile



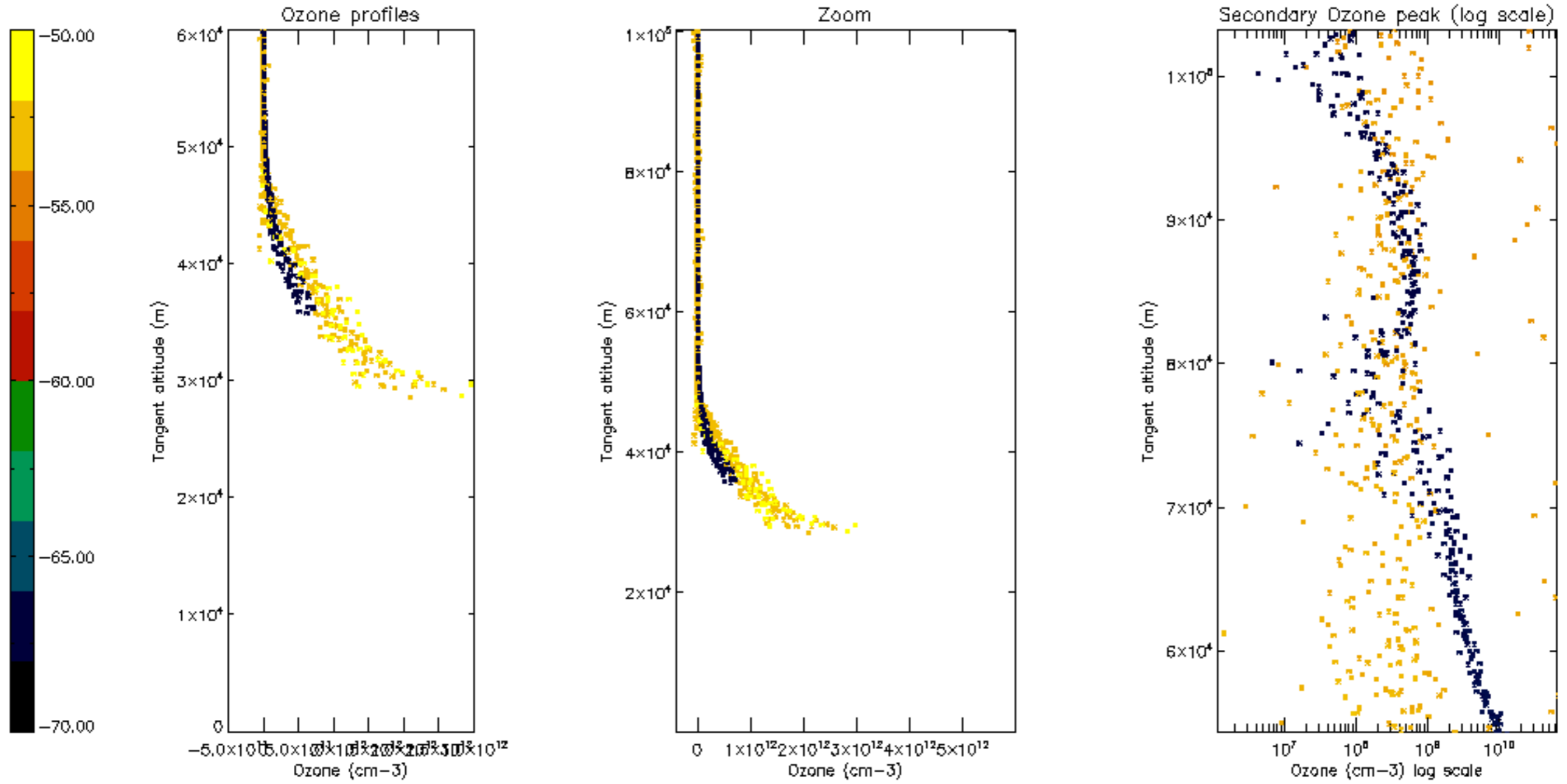
Percentage of star falling outside central band per profile

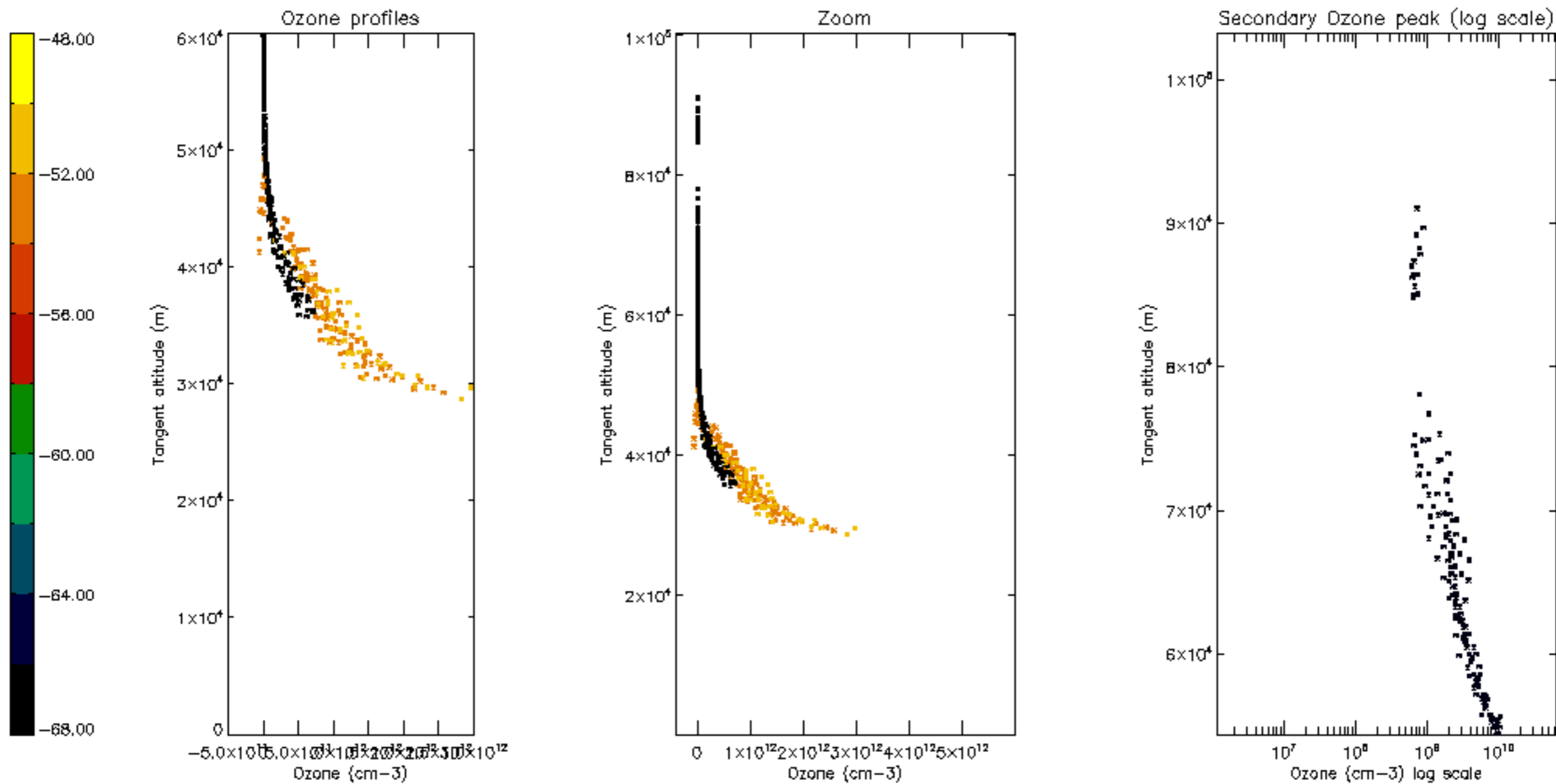


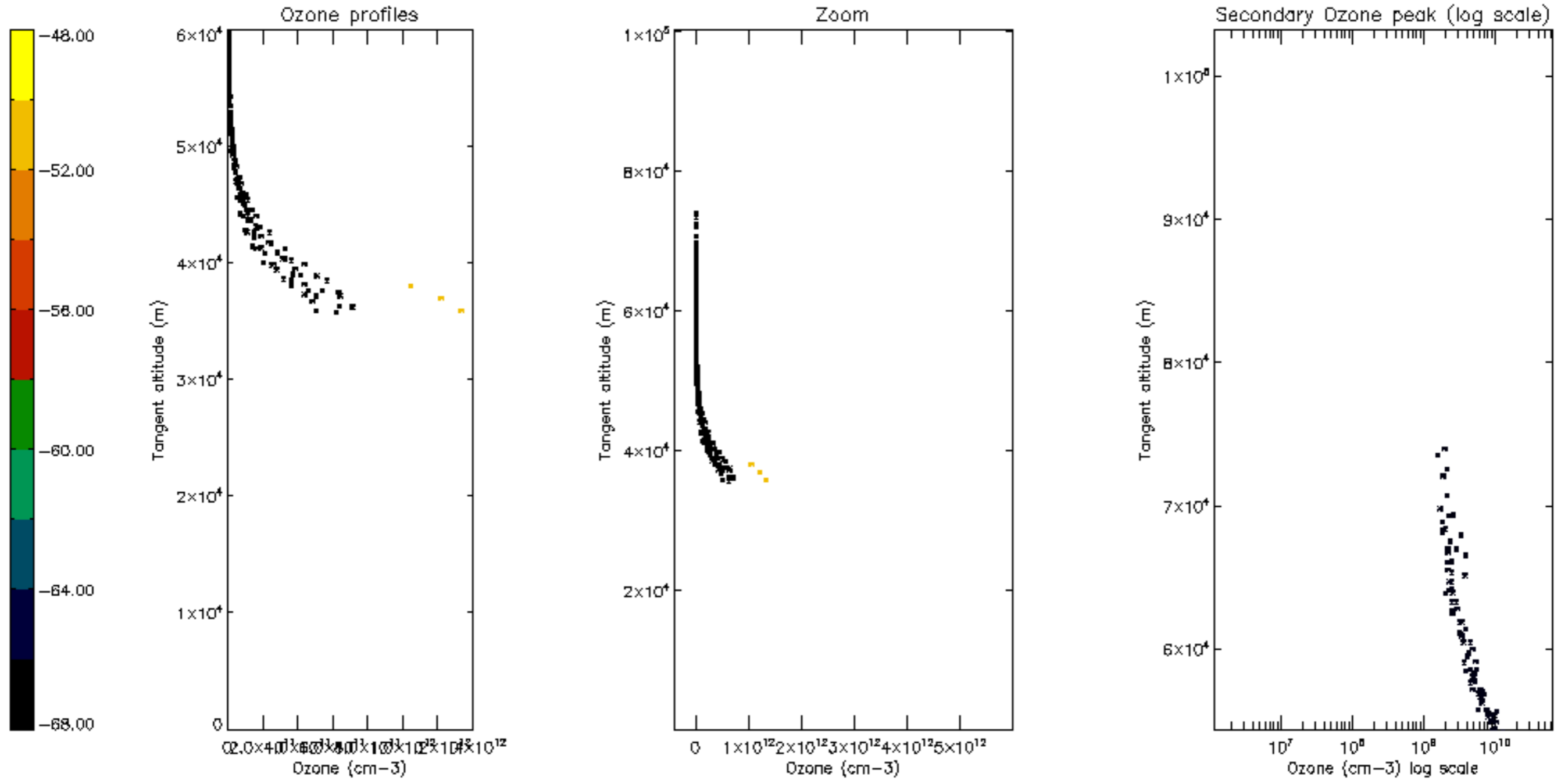
Percentage of saturation errors per profile

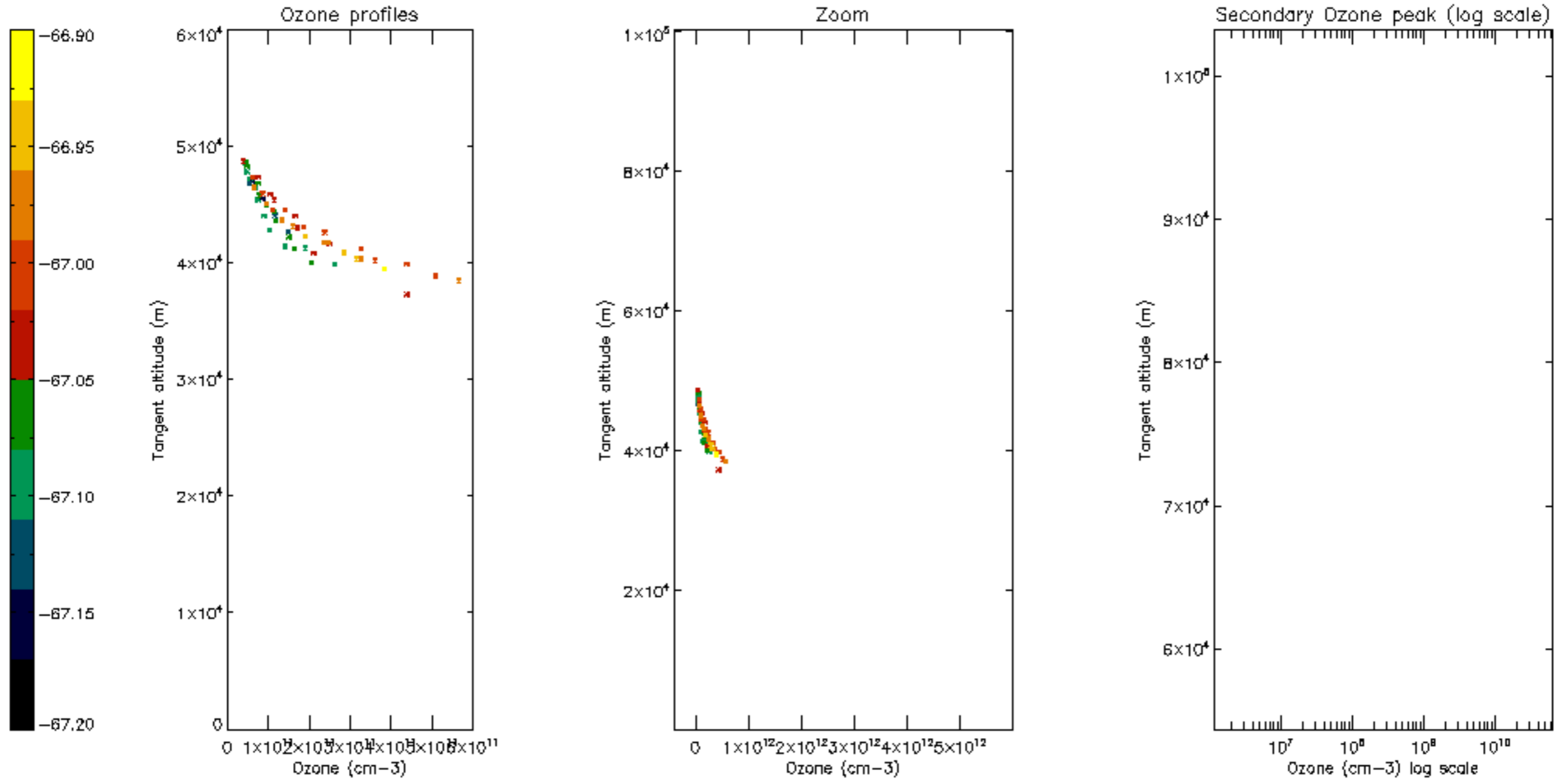


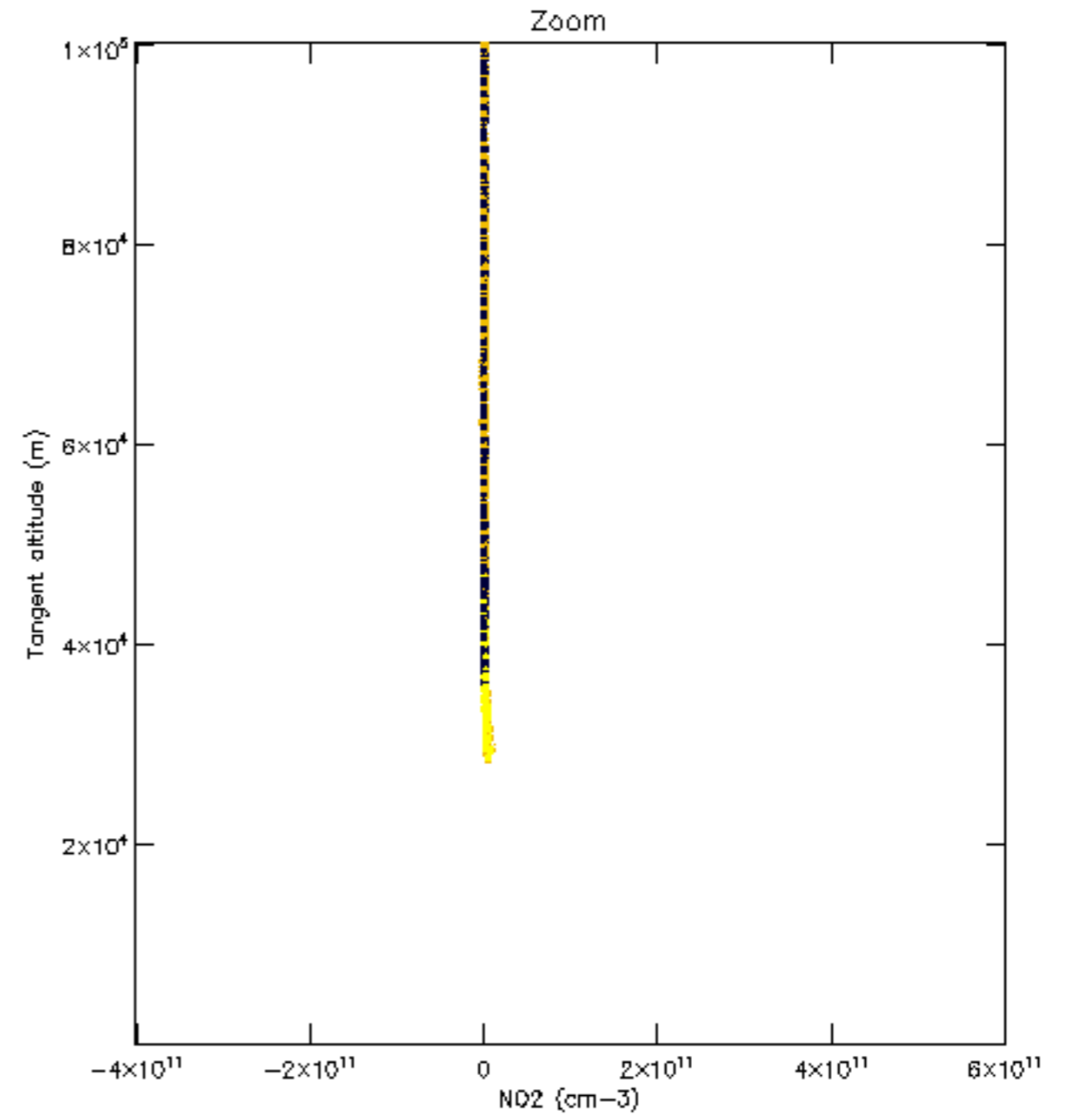
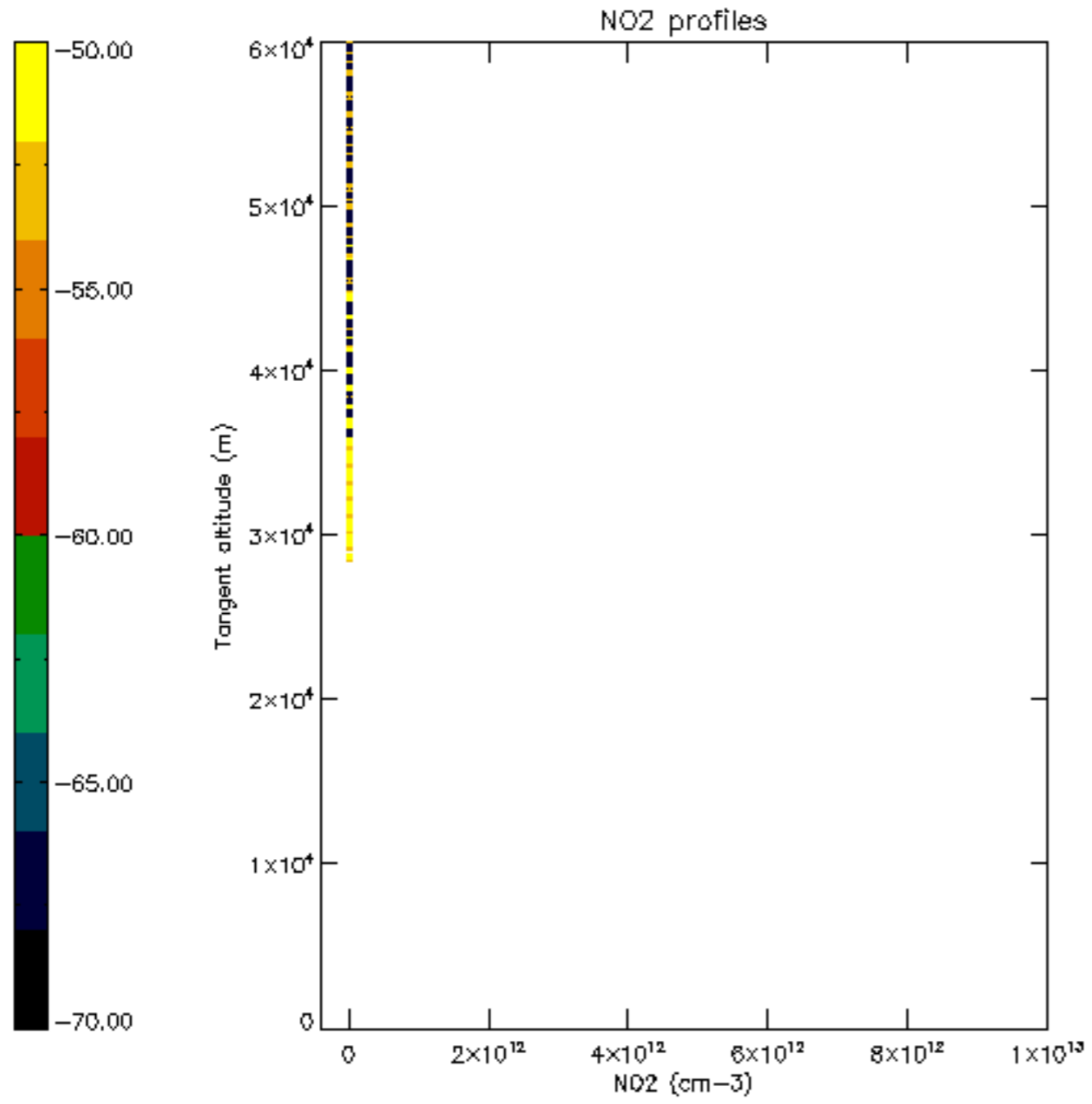


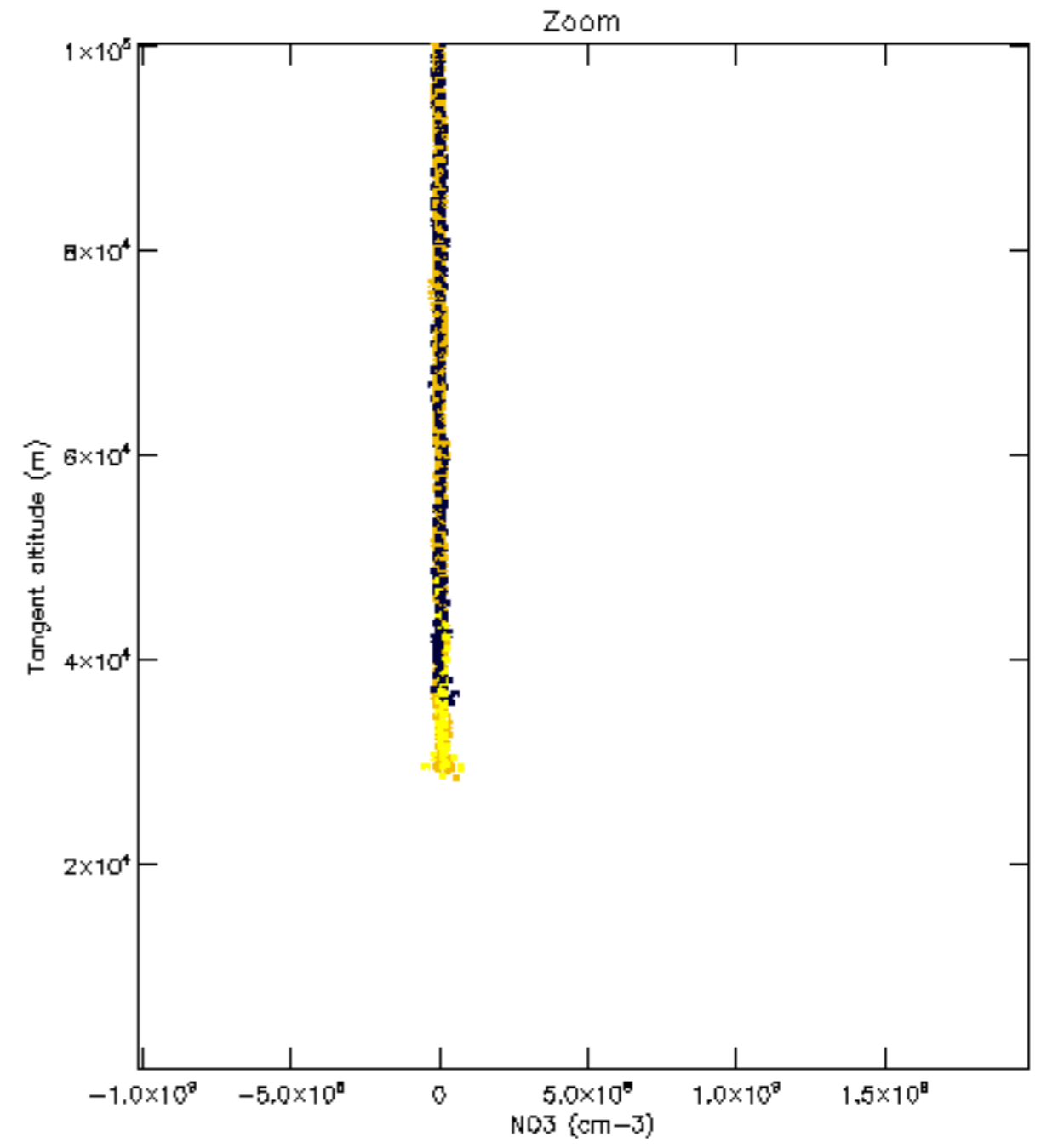
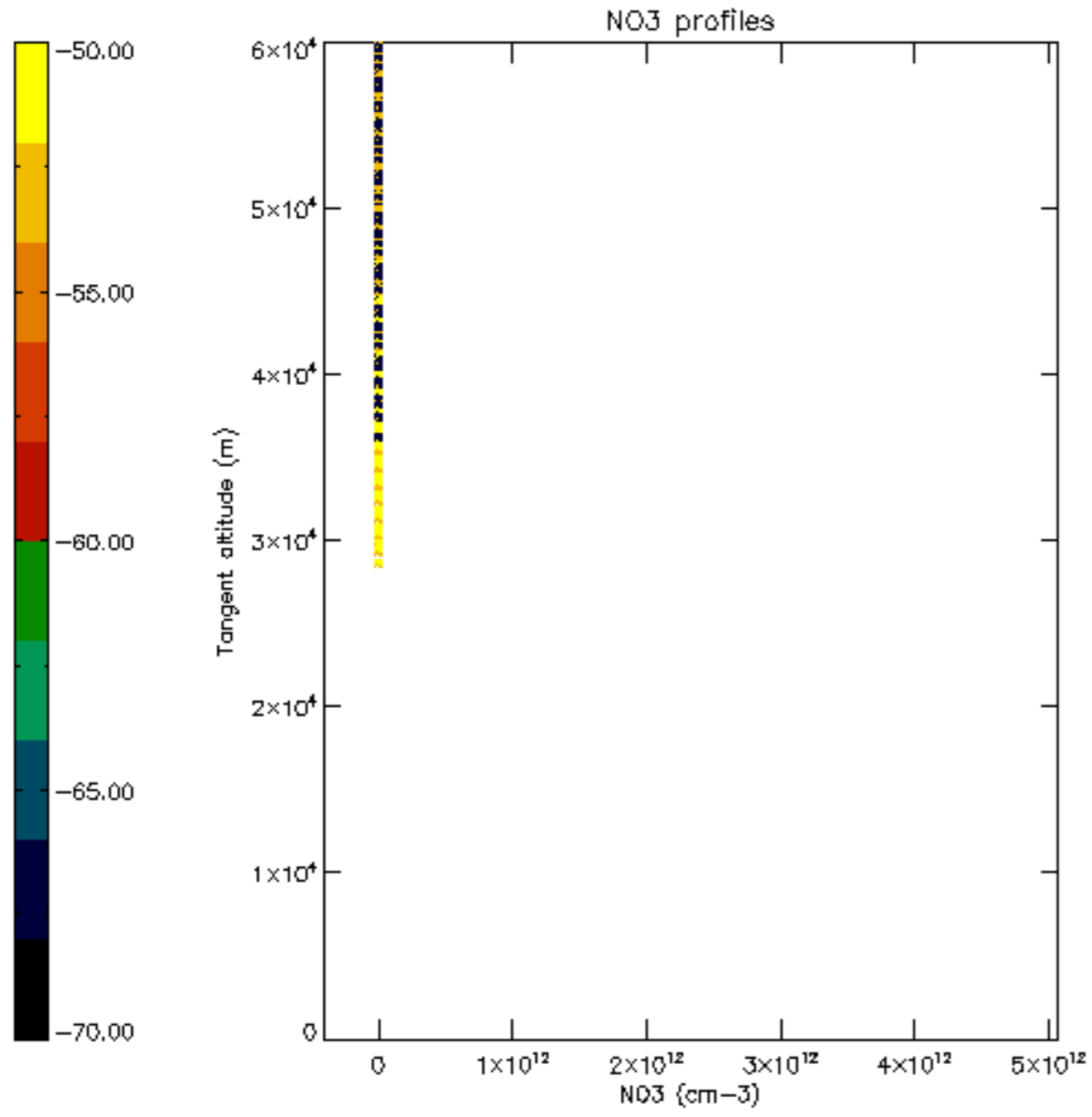


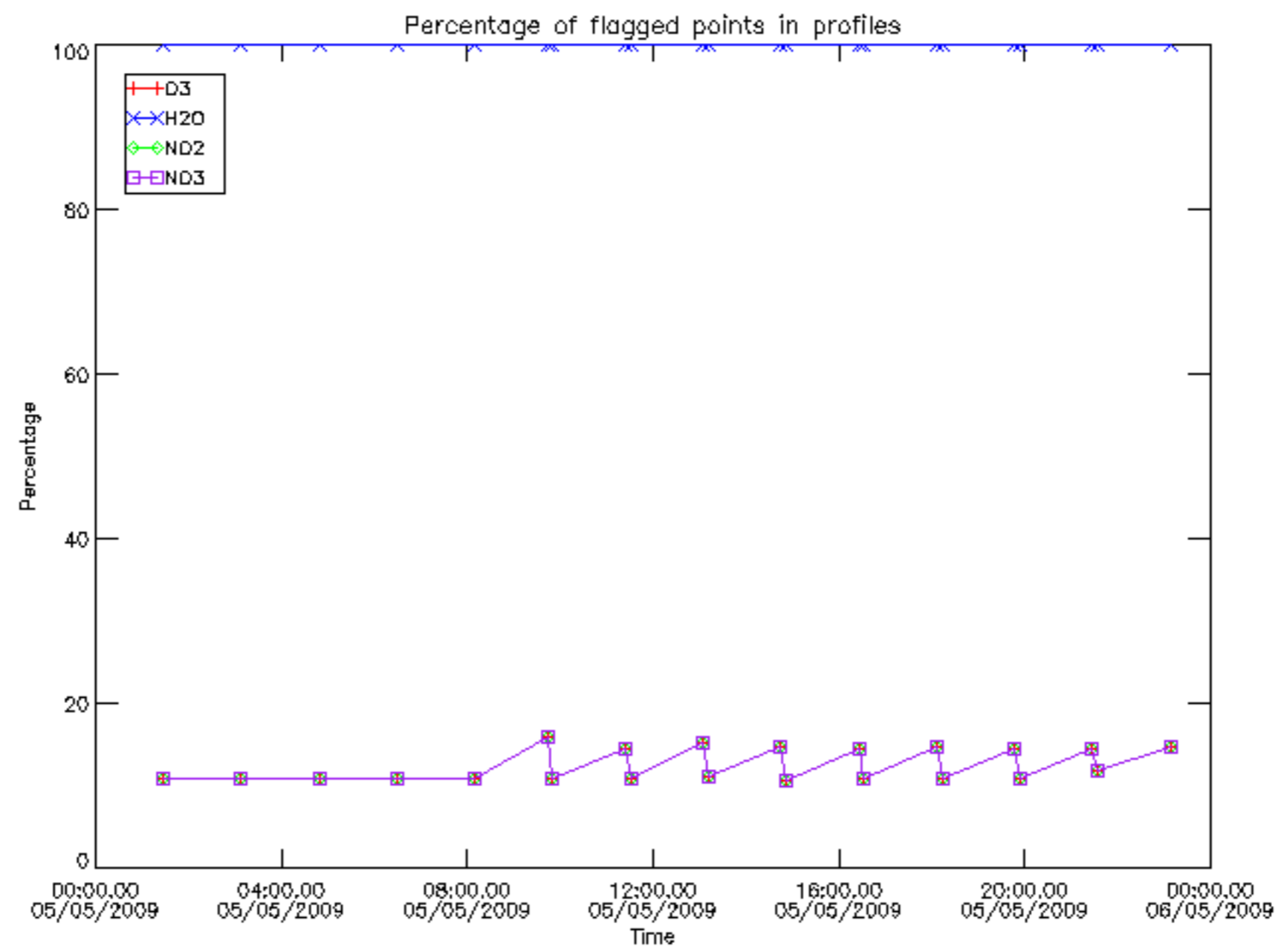




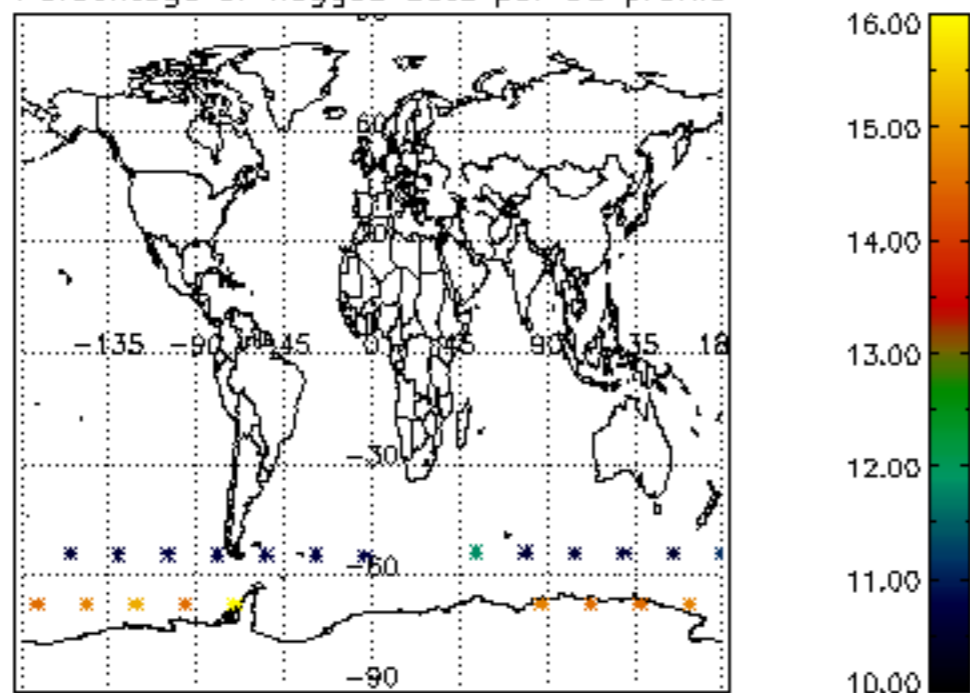




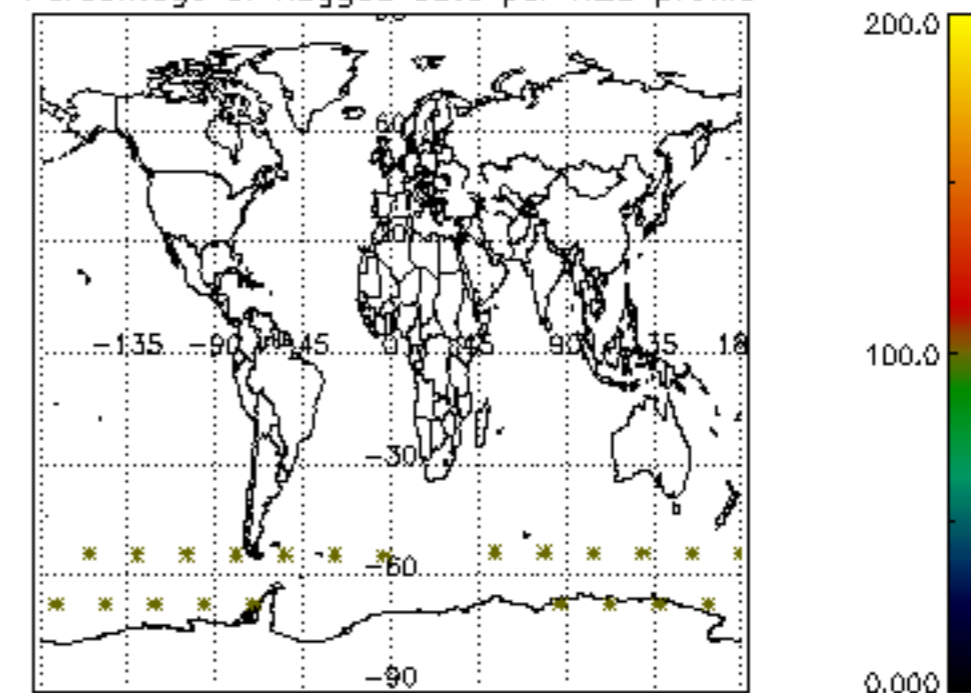




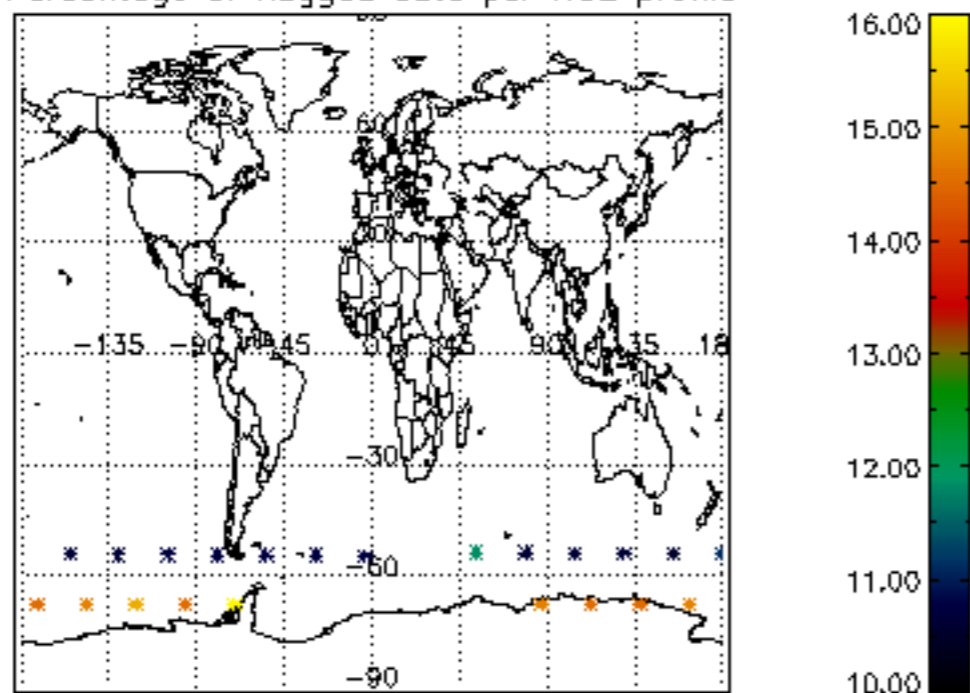
Percentage of flagged data per D3 profile



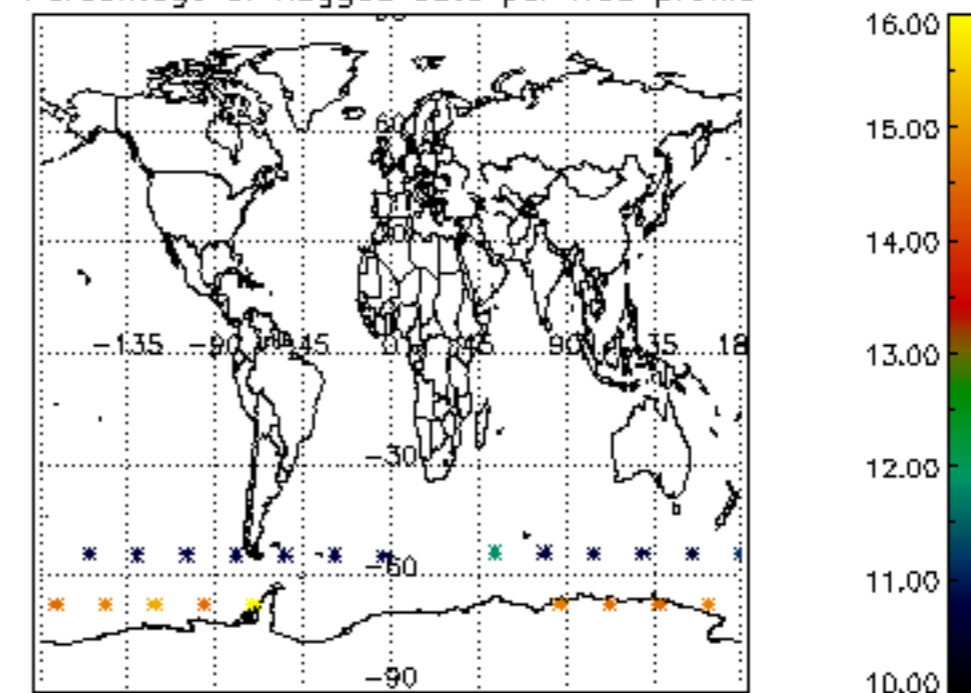
Percentage of flagged data per H2O profile



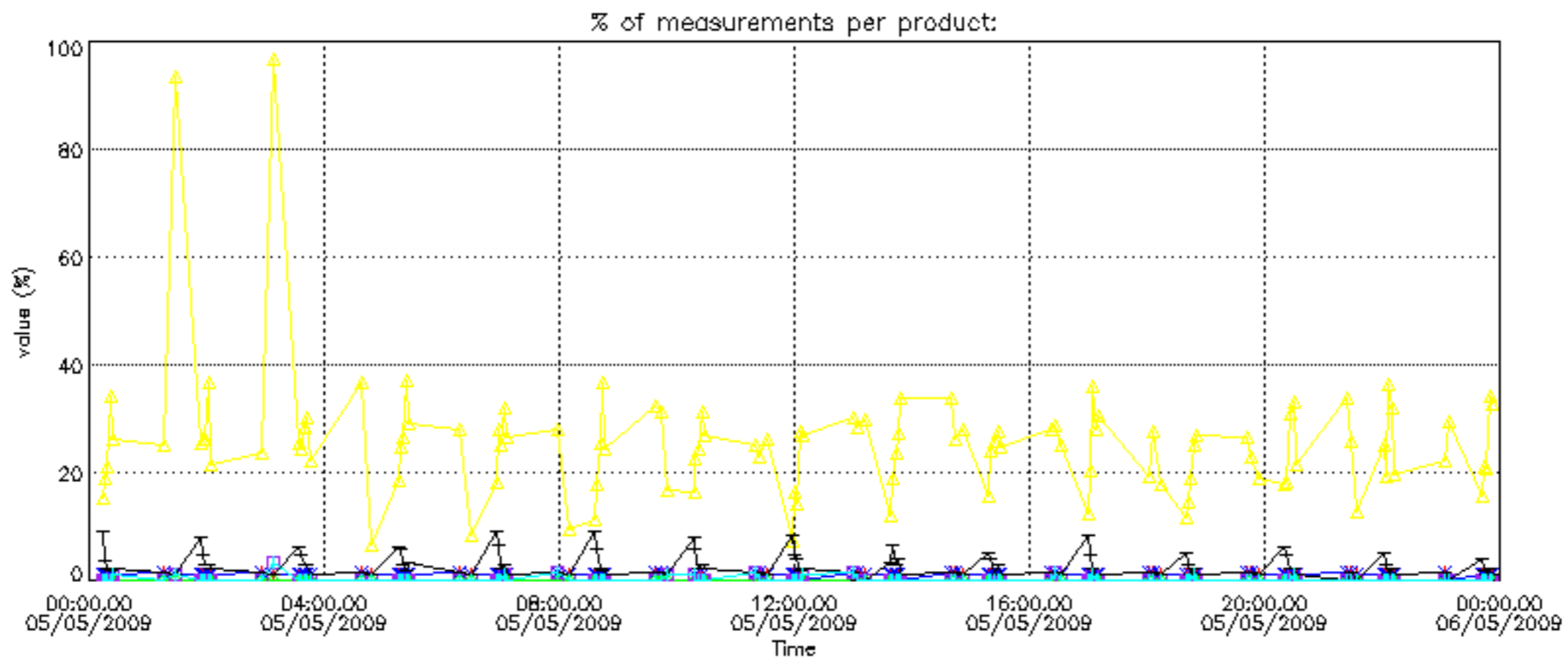
Percentage of flagged data per NO2 profile

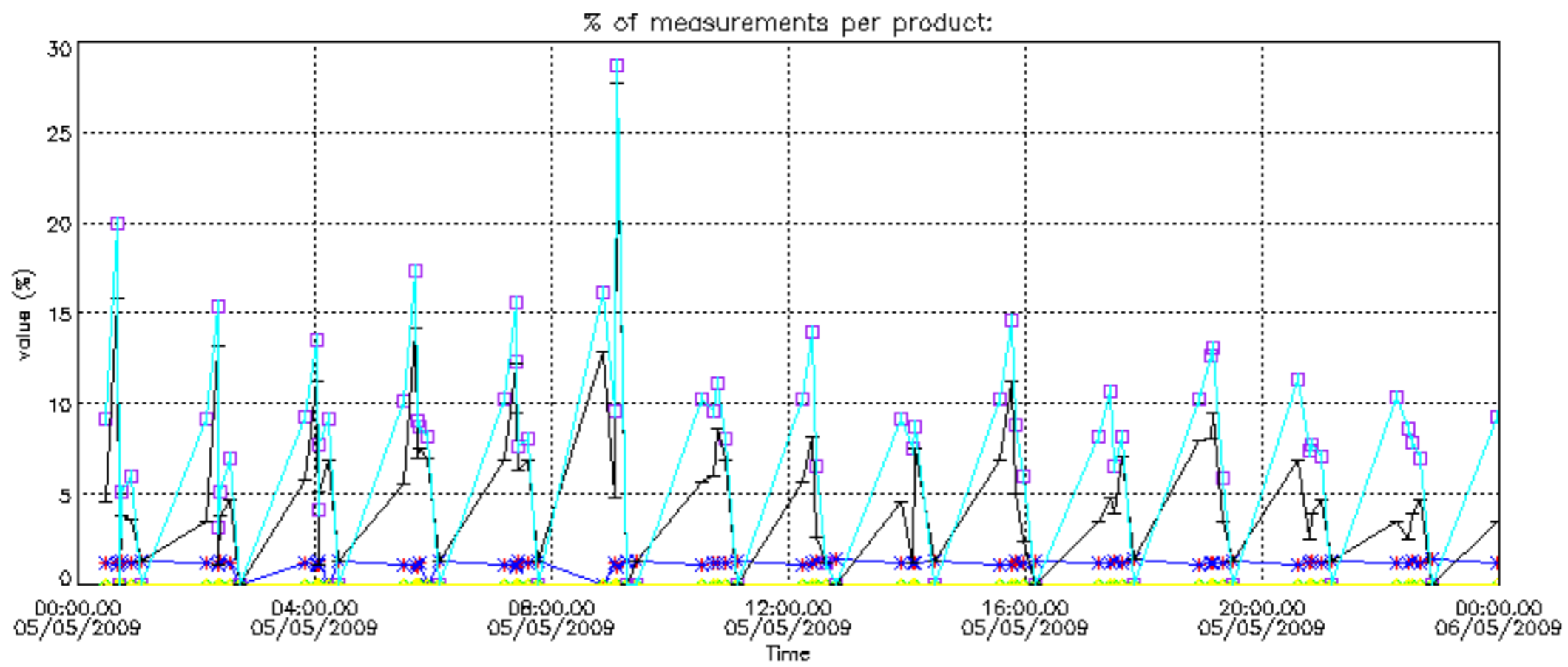


Percentage of flagged data per NO3 profile

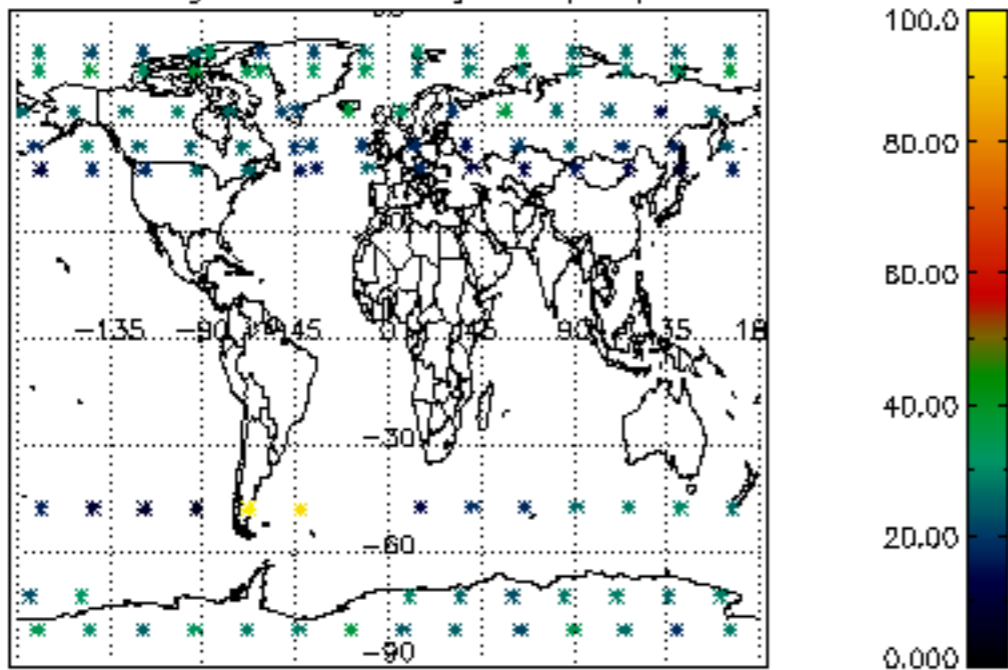




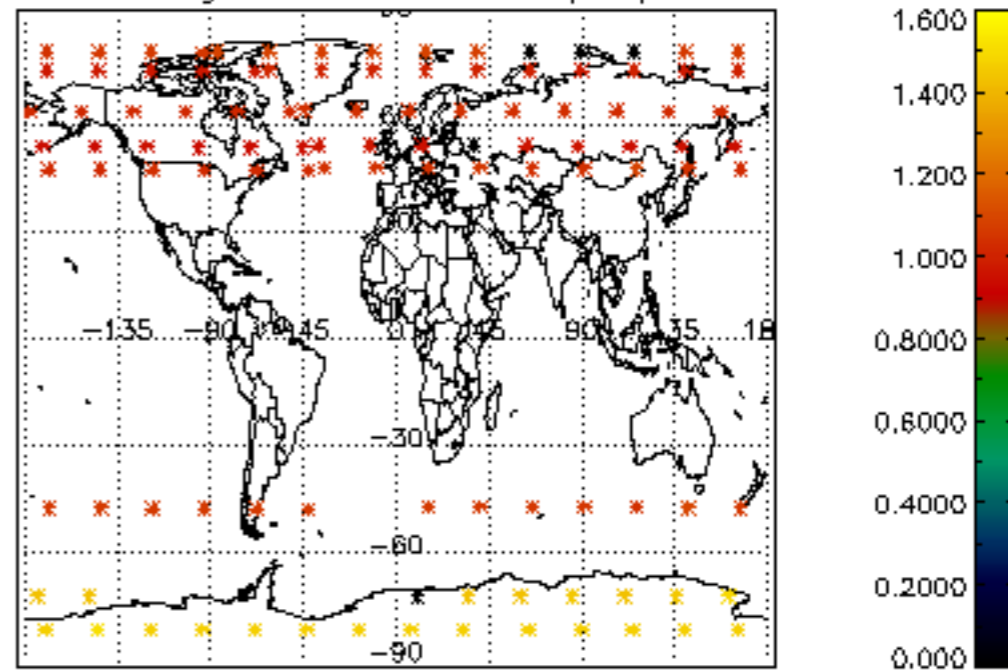




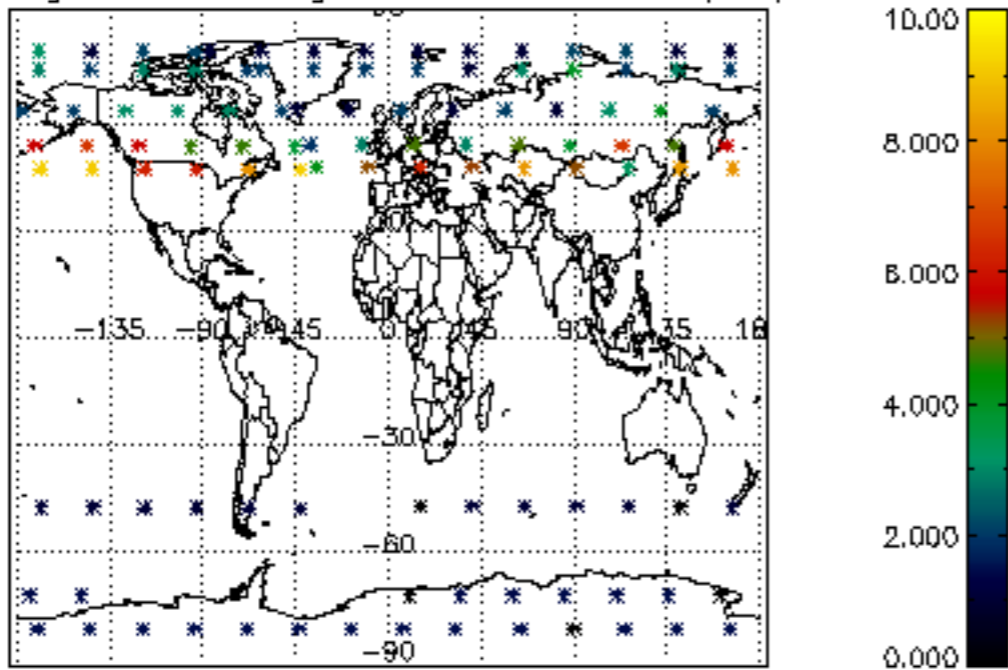
Percentage of cosmic ray hits per profile



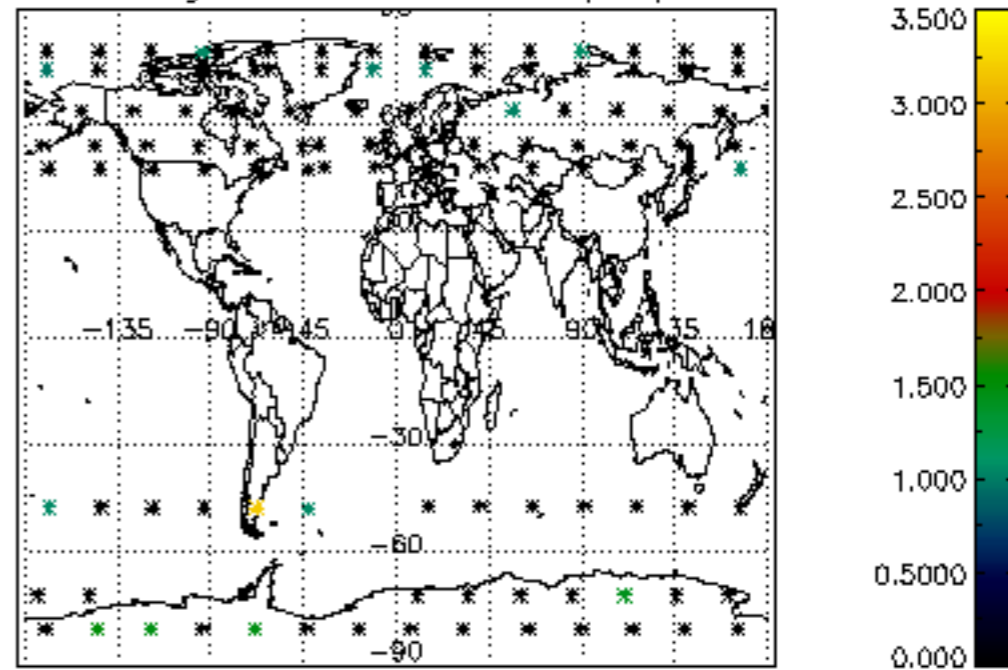
Percentage of datation errors per profile



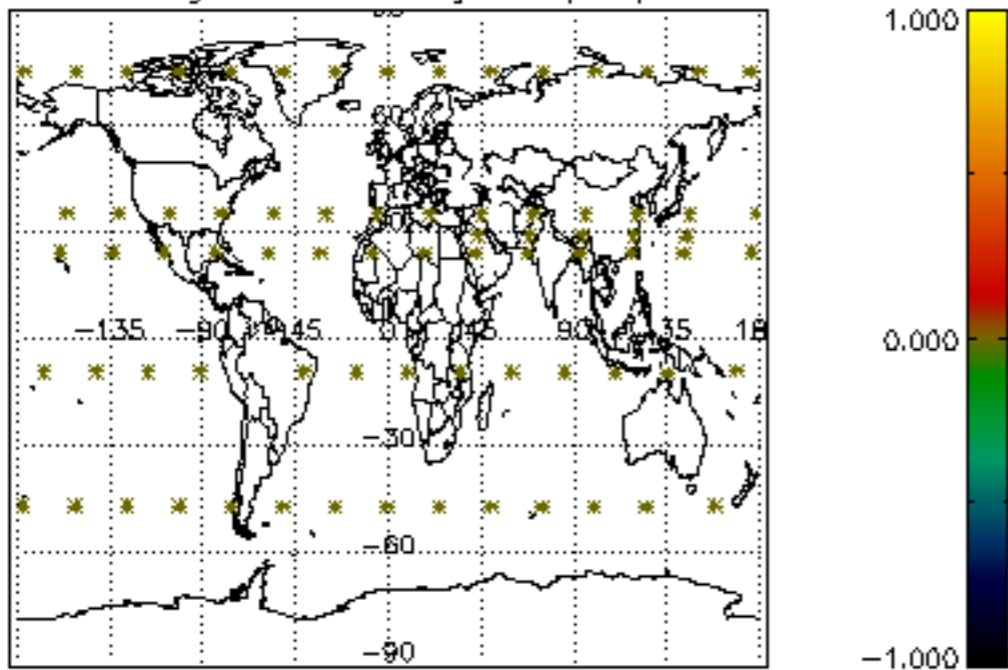
Percentage of star falling outside central band per profile



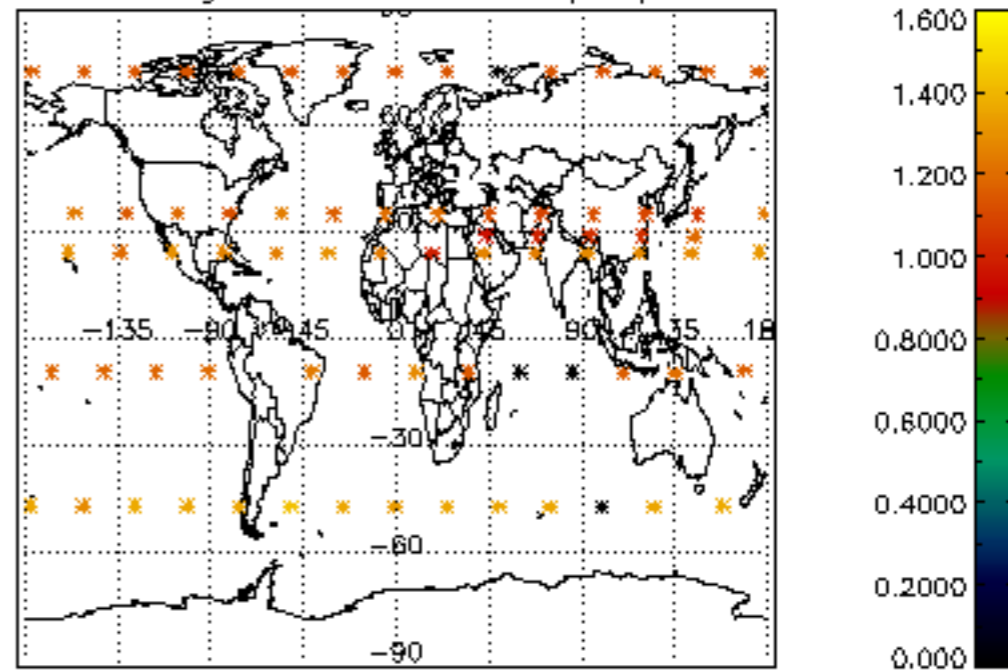
Percentage of saturation errors per profile



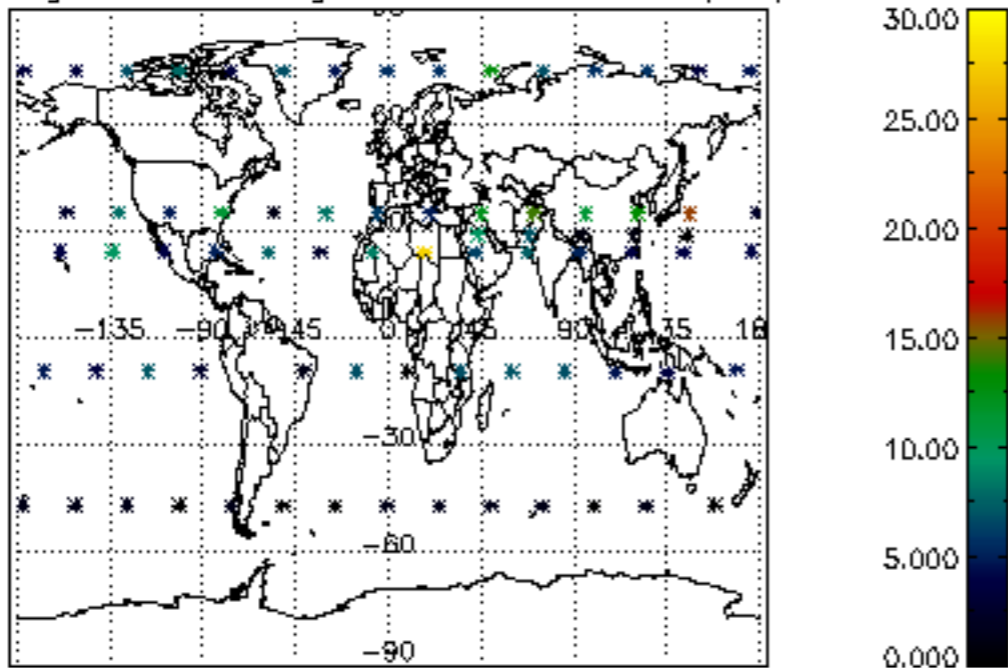
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

