

# GOMOS Level 2 Daily Report

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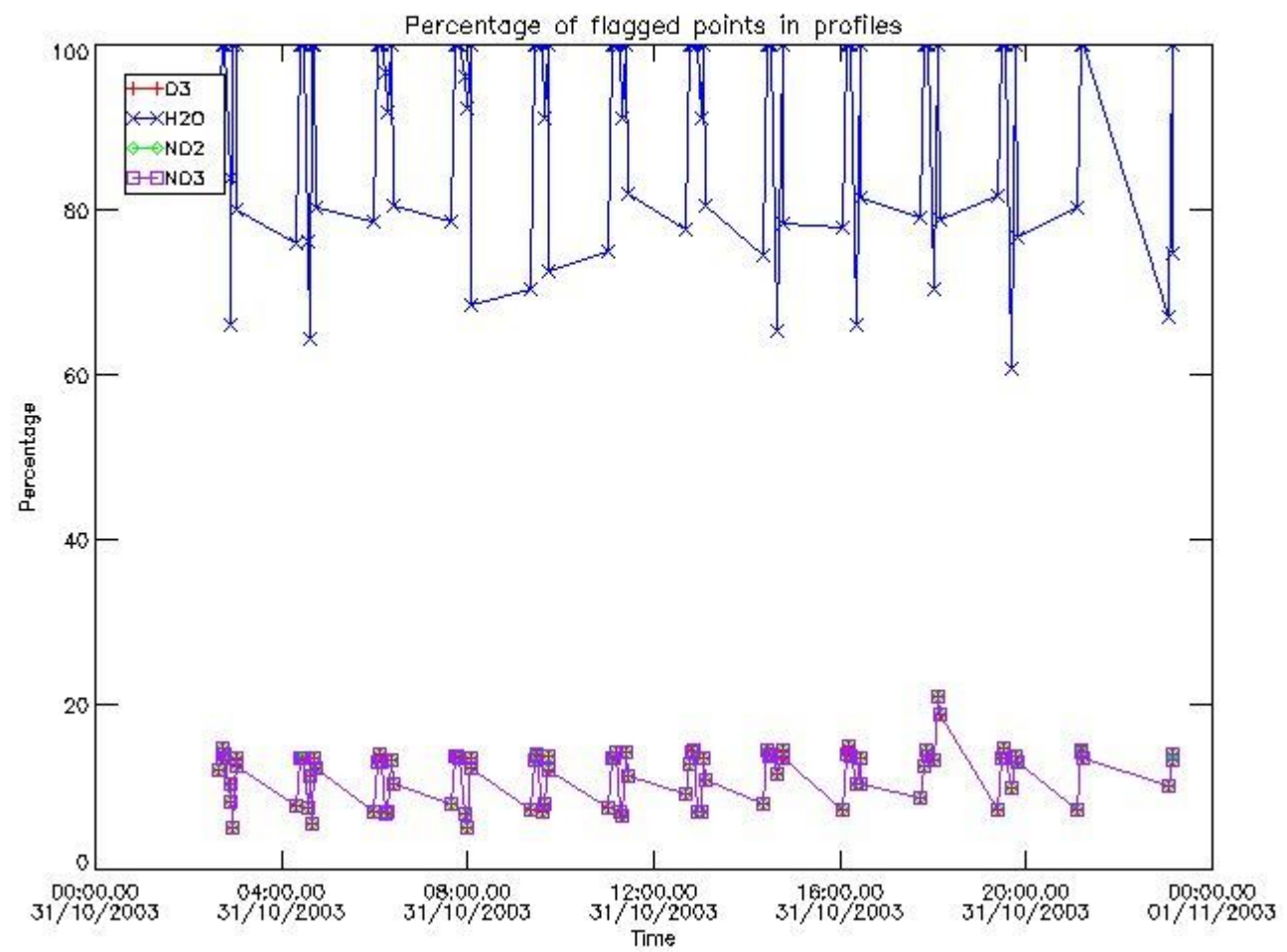


279	GOM_NL__2PRFIN20031031_195158_000000402021_00157_08728_7586.N1	31-OCT-2003 19:51:58	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	8728	No
280	GOM_NL__2PRFIN20031031_195410_000001922021_00157_08728_7587.N1	31-OCT-2003 19:54:10	Straylight	192.00	1	9Alp CMa	-1.4400	11000.	384	8728	No
281	GOM_NL__2PRFIN20031031_200003_000000432021_00157_08728_7588.N1	31-OCT-2003 20:00:03	Straylight	42.500	52	16Bet Cet	2.0370	4500.0	85	8728	No
282	GOM_NL__2PRFIN20031031_200634_000000572021_00157_08728_7589.N1	31-OCT-2003 20:06:34	Tw_i_and_stray	57.000	94	92Alp Cet	2.5260	3100.0	114	8728	No
283	GOM_NL__2PRFIN20031031_201325_000000362021_00157_08728_7590.N1	31-OCT-2003 20:13:25	Bright	35.500	58	21Alp And	2.0730	11000.	71	8728	No
284	GOM_NL__2PRFIN20031031_201455_000000362021_00157_08728_7591.N1	31-OCT-2003 20:14:55	Bright	35.500	53	43Bet And	2.0480	3300.0	71	8728	No
285	GOM_NL__2PRFIN20031031_201724_000000412021_00157_08728_7592.N1	31-OCT-2003 20:17:24	Bright	40.500	73	57Gam1And	2.2600	13100.	81	8728	No
286	GOM_NL__2PRFIN20031031_201849_000000462021_00157_08728_7593.N1	31-OCT-2003 20:18:49	Bright	45.500	79	26Bet Per	2.3100	13100.	91	8728	No
287	GOM_NL__2PRFIN20031031_202048_000000342021_00157_08728_7594.N1	31-OCT-2003 20:20:48	Bright	34.000	68	18Alp Cas	2.2250	4500.0	68	8728	No
288	GOM_NL__2PRFIN20031031_202159_000000342021_00157_08728_7595.N1	31-OCT-2003 20:21:59	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	8728	No
289	GOM_NL__2PRFIN20031031_202533_000000942021_00157_08728_7596.N1	31-OCT-2003 20:25:33	Bright	93.500	114	31ot Aur	2.6930	4600.0	187	8728	No
290	GOM_NL__2PRFIN20031031_203004_000000362021_00157_08728_7597.N1	31-OCT-2003 20:30:04	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	8728	No
291	GOM_NL__2PRFIN20031031_203352_000000342021_00157_08728_7598.N1	31-OCT-2003 20:33:52	Bright	33.500	60	7Bet UMi	2.0810	3950.0	67	8728	No
292	GOM_NL__2PRFIN20031031_203813_000000372021_00157_08728_7599.N1	31-OCT-2003 20:38:13	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	8728	No
293	GOM_NL__2PRFIN20031031_203946_000000332021_00157_08728_7600.N1	31-OCT-2003 20:39:46	Bright	33.000	32	77Eps UMa	1.7630	11000.	66	8728	No
294	GOM_NL__2PRFIN20031031_204103_000000342021_00157_08728_7601.N1	31-OCT-2003 20:41:03	Bright	33.500	39	85Eta UMa	1.8540	24000.	67	8728	No
295	GOM_NL__2PRFIN20031031_204330_000000412021_00157_08728_7602.N1	31-OCT-2003 20:43:30	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	8728	No
296	GOM_NL__2PRFIN20031031_205038_000002552021_00157_08728_7603.N1	31-OCT-2003 20:50:38	Tw_i_and_stray	255.00	24	66Alp Gem	1.5800	10200.	510	8728	No
297	GOM_NL__2PRFIN20031031_210430_000000722021_00157_08728_7604.N1	31-OCT-2003 21:04:30	Dark	71.500	48	30Alp Hya	1.9770	4100.0	143	8728	No
298	GOM_NL__2PRFIN20031031_210942_000000392021_00157_08728_7605.N1	31-OCT-2003 21:09:42	Dark	39.000	99	Del Cen	2.5750	26000.	78	8728	No
299	GOM_NL__2PRFIN20031031_211152_000000362021_00157_08728_7606.N1	31-OCT-2003 21:11:52	Dark	36.000	129	Del Cru	2.7930	26000.	72	8728	No
300	GOM_NL__2PRFIN20031031_211419_000000382021_00158_08729_7483.N1	31-OCT-2003 21:14:19	Dark	37.500	124	The Car	2.7640	30000.	75	8729	No
301	GOM_NL__2PRFIN20031031_230249_000000512021_00159_08730_7603.N1	31-OCT-2003 23:02:49	Dark	50.500	2	Alp Car	-0.73600	7000.0	101	8730	No
302	GOM_NL__2PRFIN20031031_230829_000000402021_00159_08730_7604.N1	31-OCT-2003 23:08:29	Dark	40.000	143	Alp Hyi	2.8570	7200.0	80	8730	No
303	GOM_NL__2PRFIN20031031_230952_000000422021_00159_08730_7605.N1	31-OCT-2003 23:09:52	Dark	42.000	9	Alp Eri	0.45300	24000.	84	8730	No
304	GOM_NL__2PRFIN20031031_231309_000000442021_00159_08730_7606.N1	31-OCT-2003 23:13:09	Straylight	43.500	157	The1Eri	2.9060	9300.0	87	8730	No
305	GOM_NL__2PRFIN20031031_231548_000002142021_00159_08730_7607.N1	31-OCT-2003 23:15:48	Straylight	214.00	47	2Bet CMa	1.9760	28000.	428	8730	No
306	GOM_NL__2PRFIN20031031_232113_000000522021_00159_08730_7608.N1	31-OCT-2003 23:21:13	Straylight	51.500	52	16Bet Cet	2.0370	4500.0	103	8730	No
307	GOM_NL__2PRFIN20031031_232743_000000602021_00159_08730_7609.N1	31-OCT-2003 23:27:43	Tw_i_and_stray	60.000	94	92Alp Cet	2.5260	3100.0	120	8730	No
308	GOM_NL__2PRFIN20031031_233044_000000372021_00159_08730_7610.N1	31-OCT-2003 23:30:44	Bright	36.500	140	88Gam Peg	2.8340	26000.	73	8730	No
309	GOM_NL__2PRFIN20031031_233302_000000442021_00159_08730_7611.N1	31-OCT-2003 23:33:02	Bright	43.500	50	13Alp Ari	2.0070	4250.0	87	8730	No
310	GOM_NL__2PRFIN20031031_233435_000000382021_00159_08730_7612.N1	31-OCT-2003 23:34:35	Bright	38.000	58	21Alp And	2.0730	11000.	76	8730	No
311	GOM_NL__2PRFIN20031031_233604_000000402021_00159_08730_7613.N1	31-OCT-2003 23:36:04	Bright	39.500	53	43Bet And	2.0480	3300.0	79	8730	No
312	GOM_NL__2PRFIN20031031_233833_000000432021_00159_08730_7614.N1	31-OCT-2003 23:38:33	Bright	42.500	73	57Gam1And	2.2600	13100.	85	8730	No
313	GOM_NL__2PRFIN20031031_233957_000000472021_00159_08730_7615.N1	31-OCT-2003 23:39:57	Bright	46.500	79	26Bet Per	2.3100	13100.	93	8730	No
314	GOM_NL__2PRFIN20031031_234155_000000412021_00159_08730_7616.N1	31-OCT-2003 23:41:55	Bright	40.500	68	18Alp Cas	2.2250	4500.0	81	8730	No
315	GOM_NL__2PRFIN20031031_234307_000000412021_00159_08730_7617.N1	31-OCT-2003 23:43:07	Bright	40.500	76	27Gam Cas	2.3000	30000.	81	8730	No
316	GOM_NL__2PRFIN20031031_234639_000000922021_00159_08730_7618.N1	31-OCT-2003 23:46:39	Bright	91.500	114	31ot Aur	2.6930	4600.0	183	8730	No
317	GOM_NL__2PRFIN20031031_235113_000000392021_00159_08730_7619.N1	31-OCT-2003 23:51:13	Bright	39.000	49	1Alp UMi	1.9900	6300.0	78	8730	No
318	GOM_NL__2PRFIN20031031_235501_000000402021_00159_08730_7620.N1	31-OCT-2003 23:55:01	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	8730	No
319	GOM_NL__2PRFIN20031031_235923_000000412021_00159_08730_7621.N1	31-OCT-2003 23:59:23	Bright	41.000	36	50Alp UMa	1.8000	6300.0	82	8730	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.

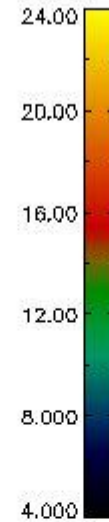
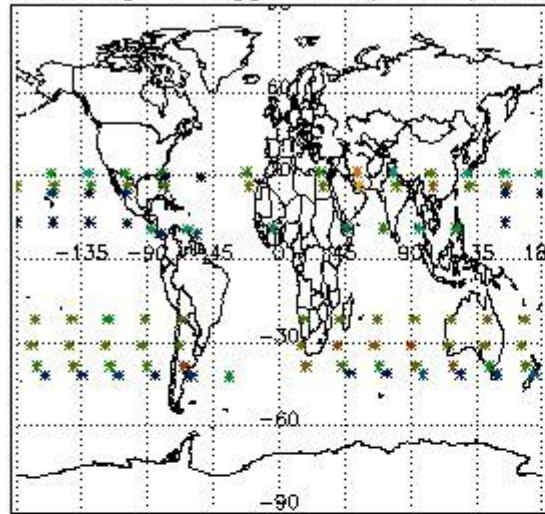
#### 3.1 Plot quality information per product (time dependant)



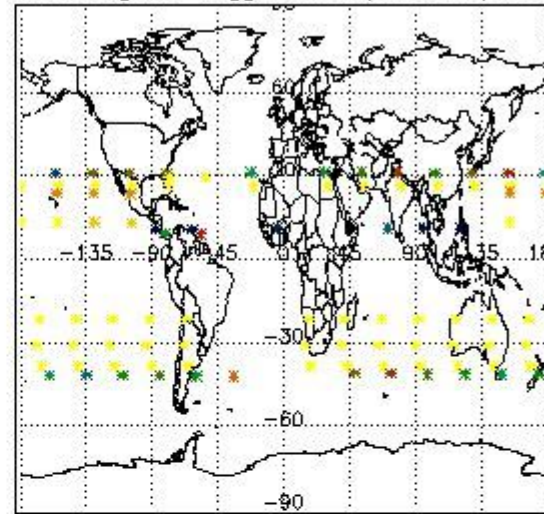
*3.2 Plot quality information per product (world map)*



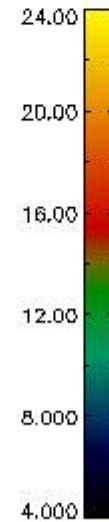
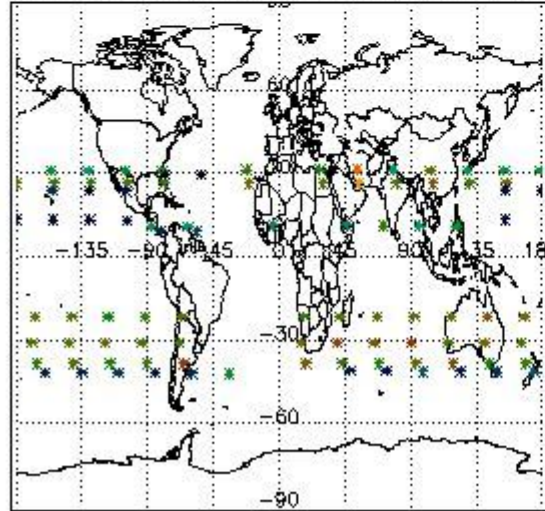
Percentage of flagged data per O3 profile



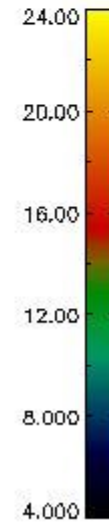
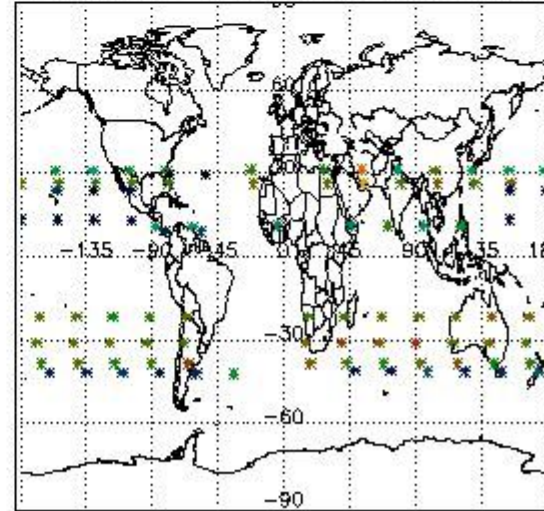
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

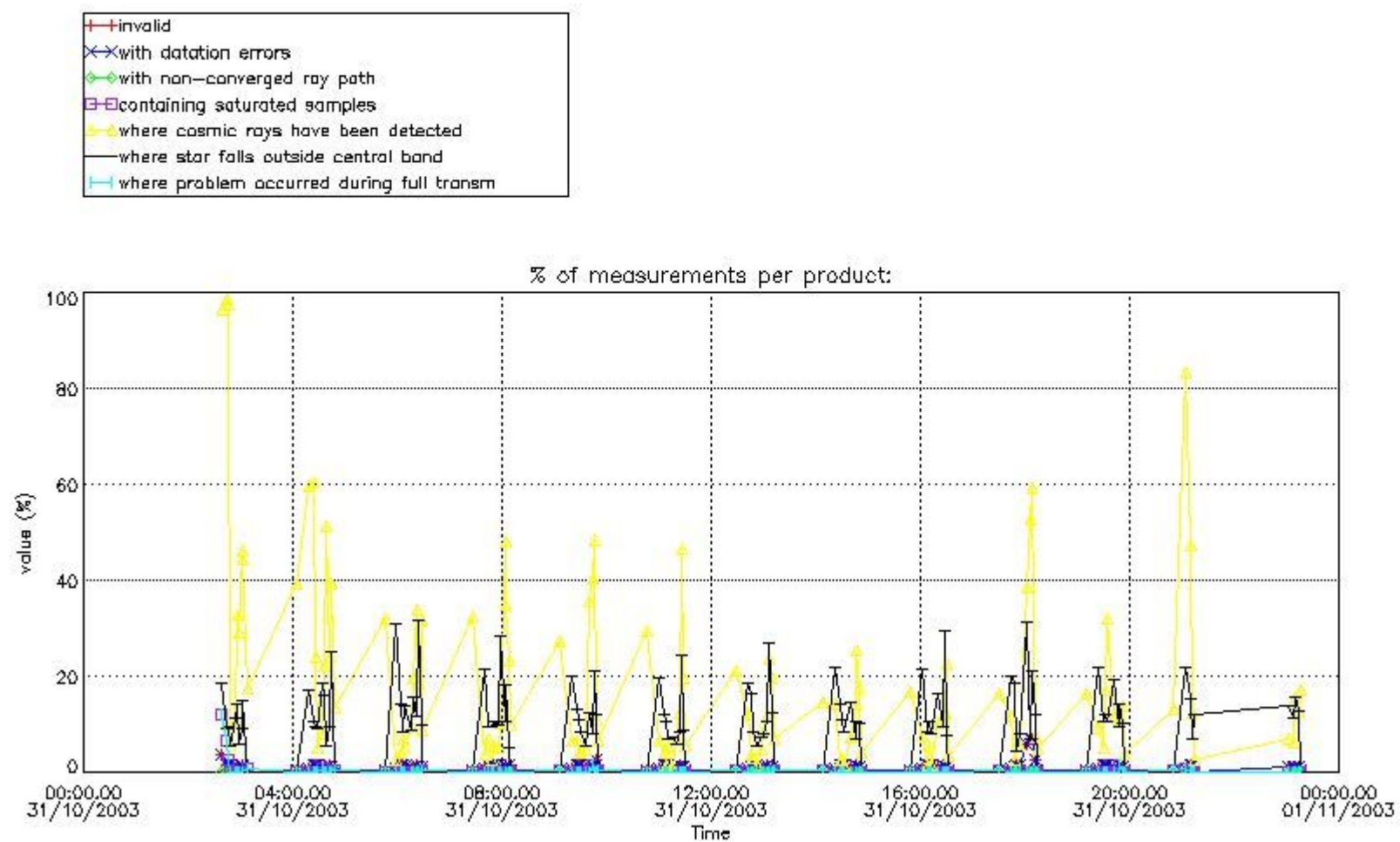


#### 4. Level 1 quality information per product

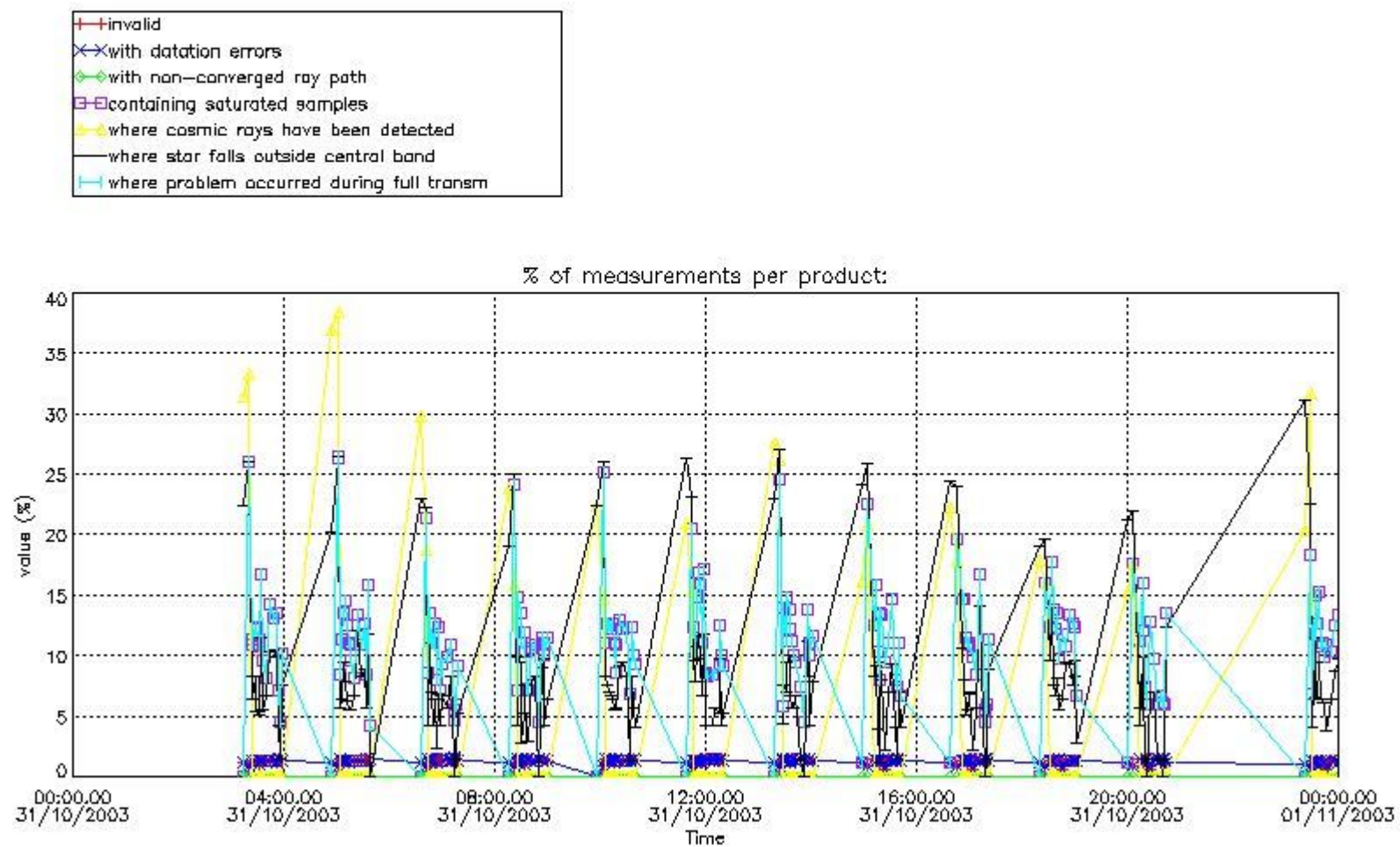
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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



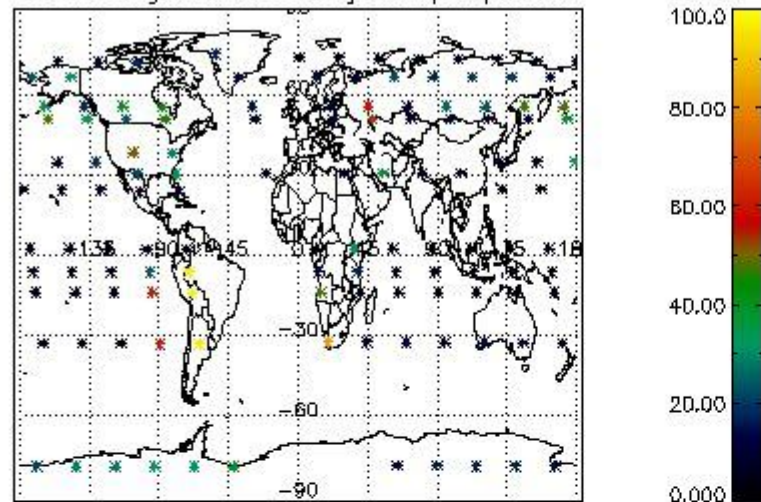
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



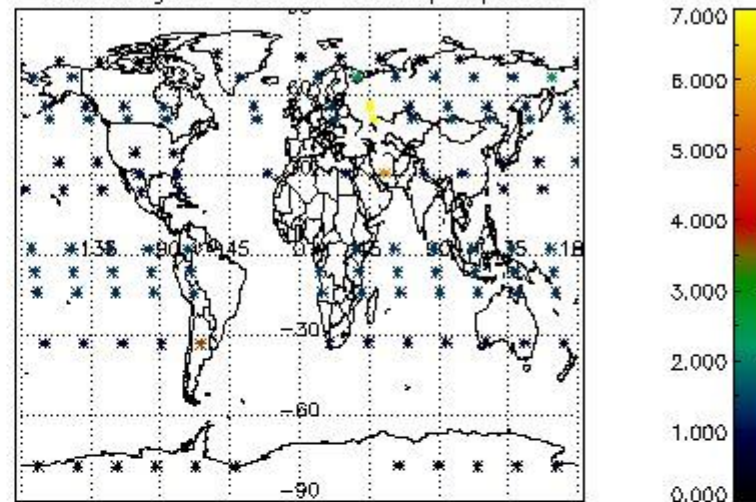
#### 4.2 Plot quality information per product coming from level 1b processing (world map)

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

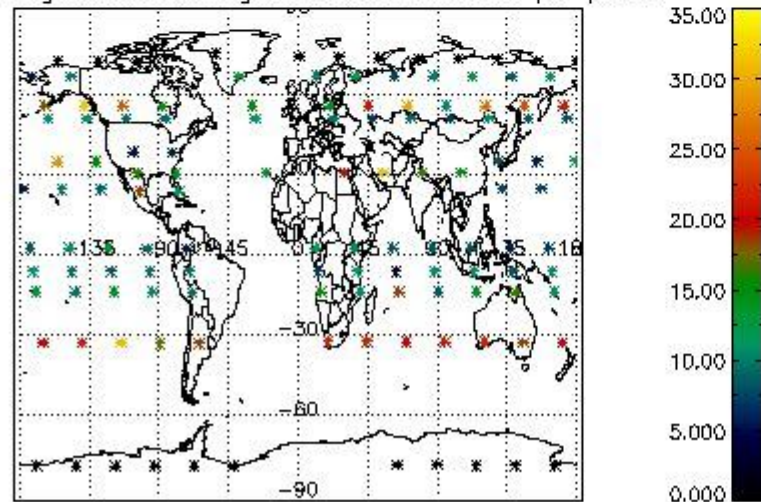
Percentage of cosmic ray hits per profile



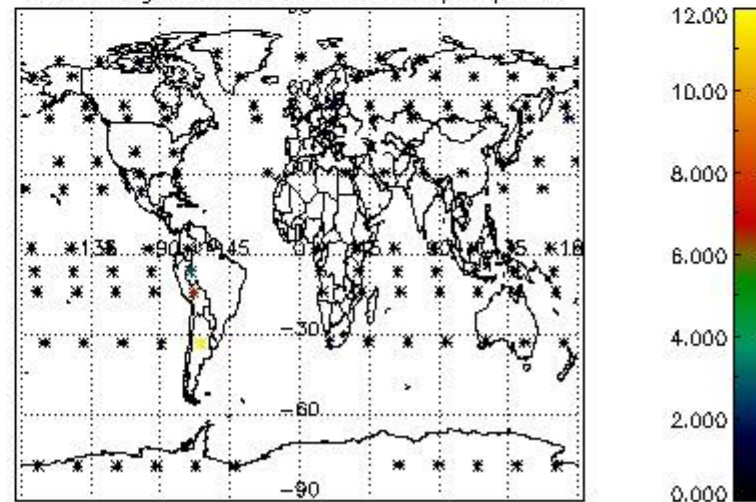
Percentage of datation errors per profile



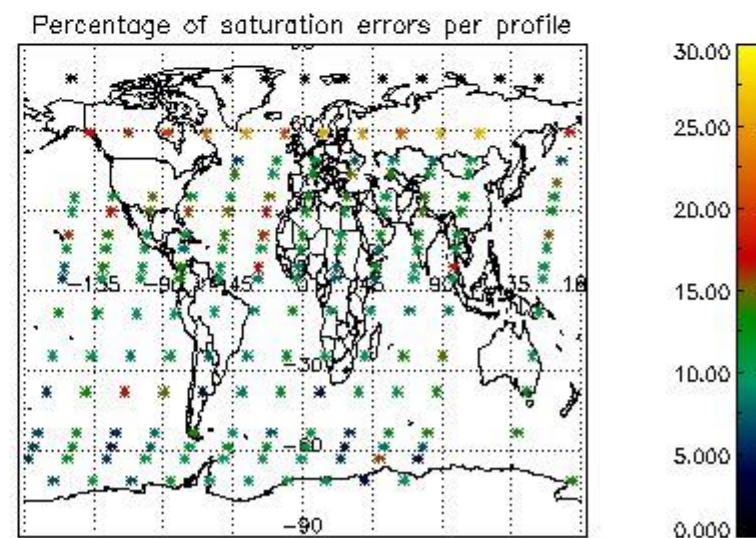
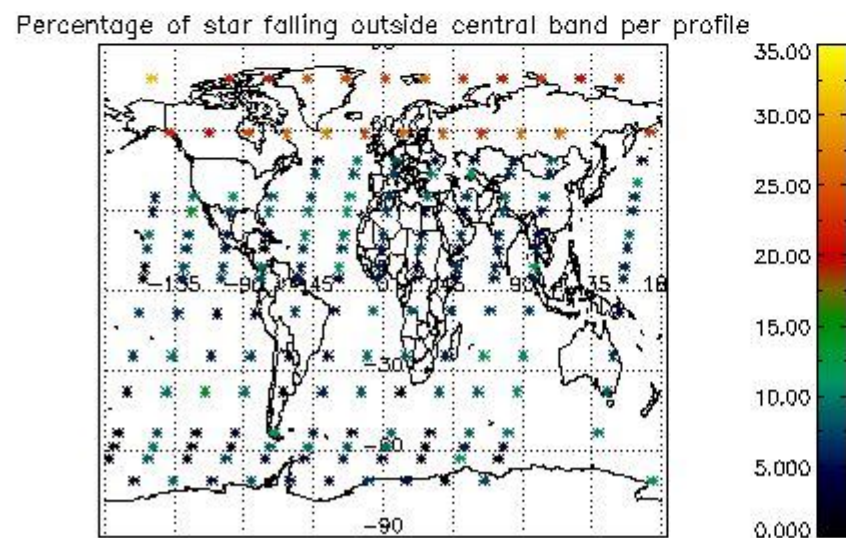
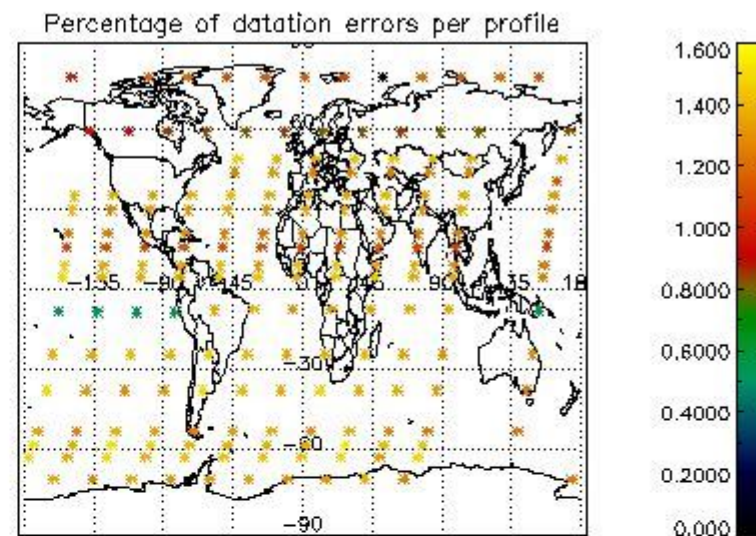
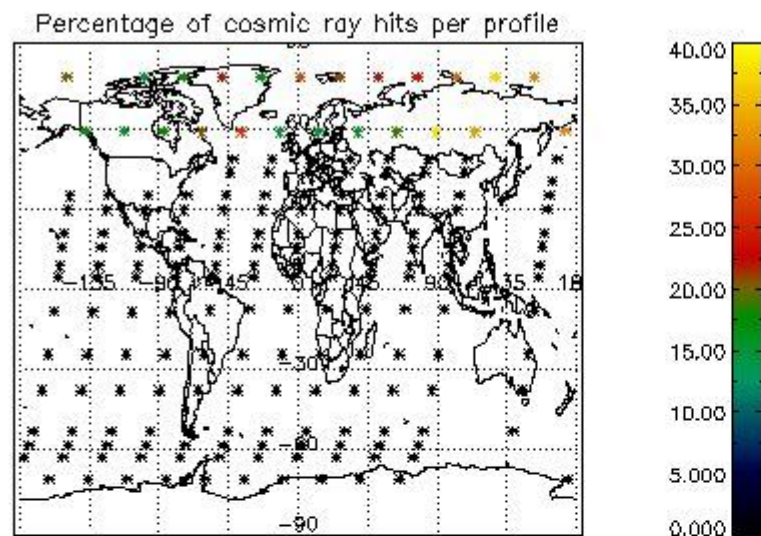
Percentage of star falling outside central band per profile



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

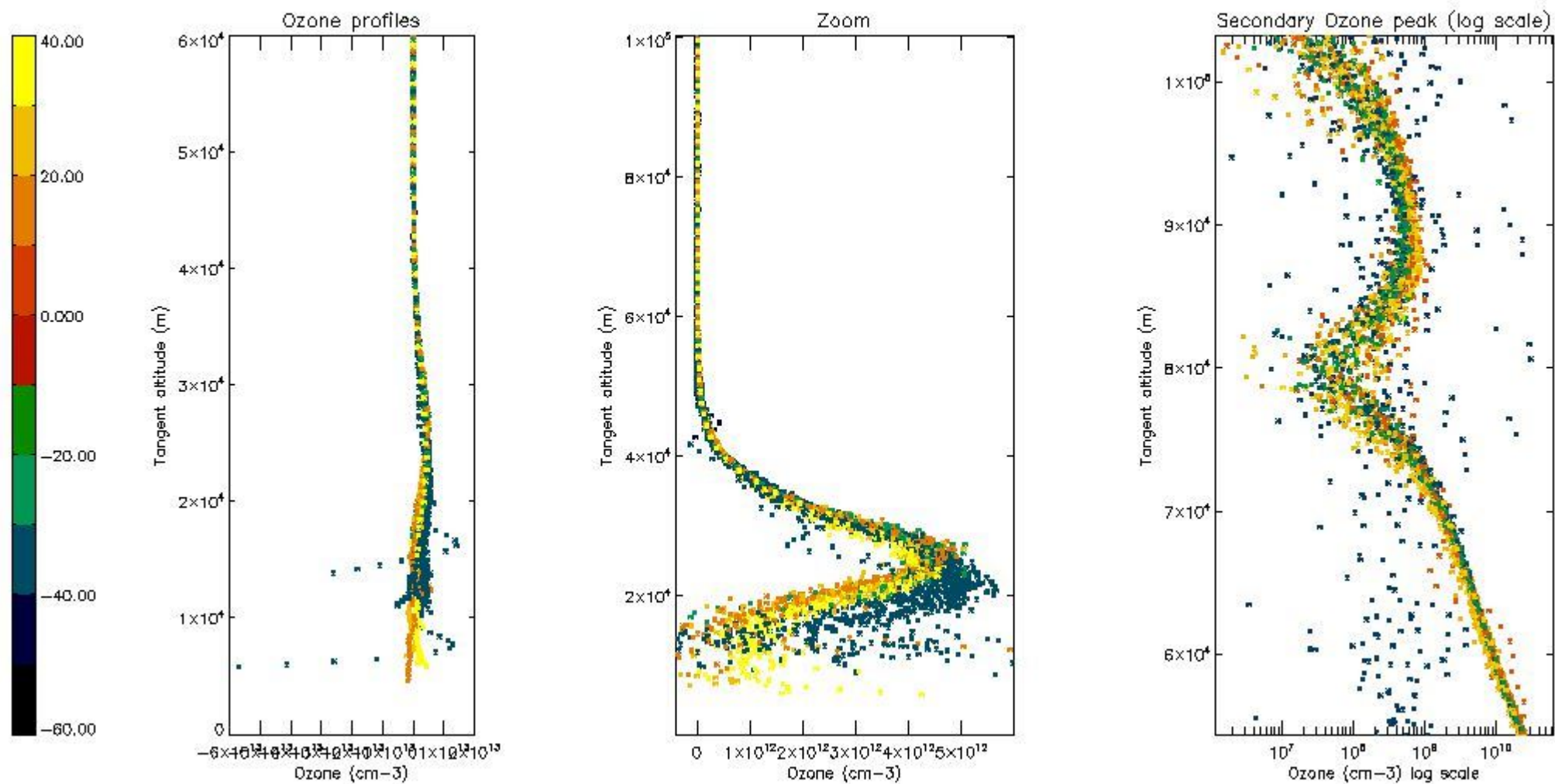
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	17

STD < 10	14
STD < 5	10

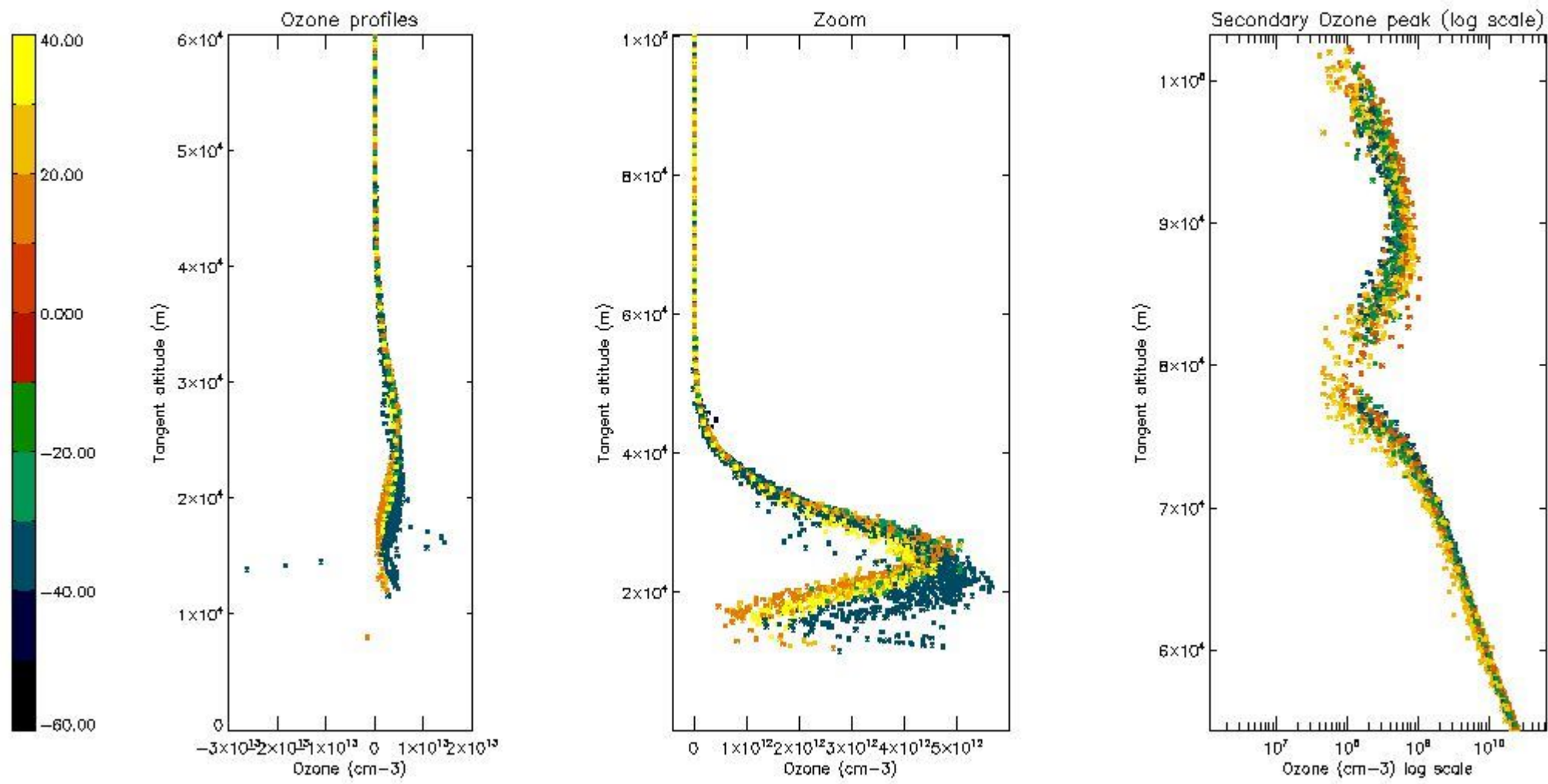
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



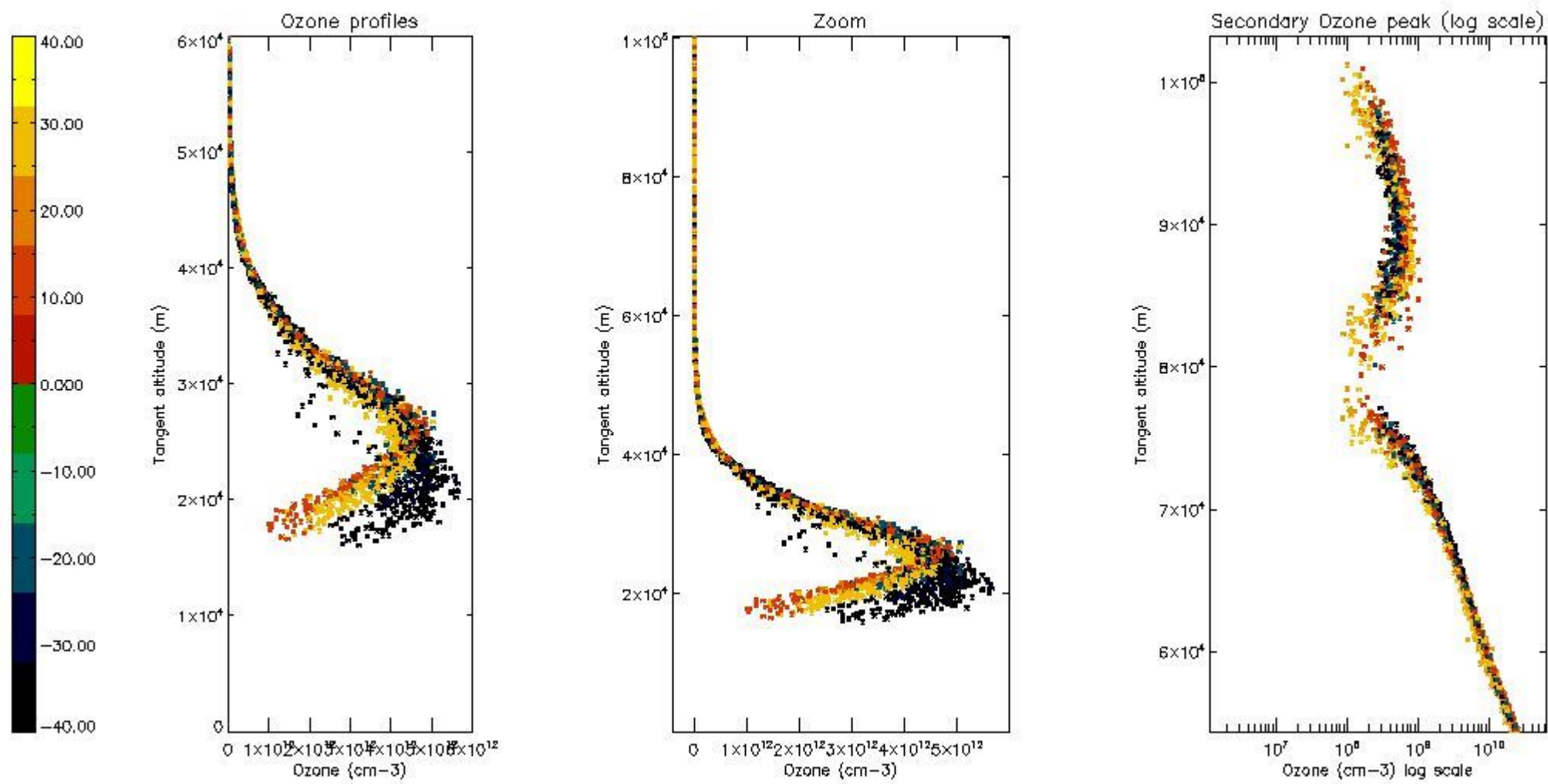
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



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

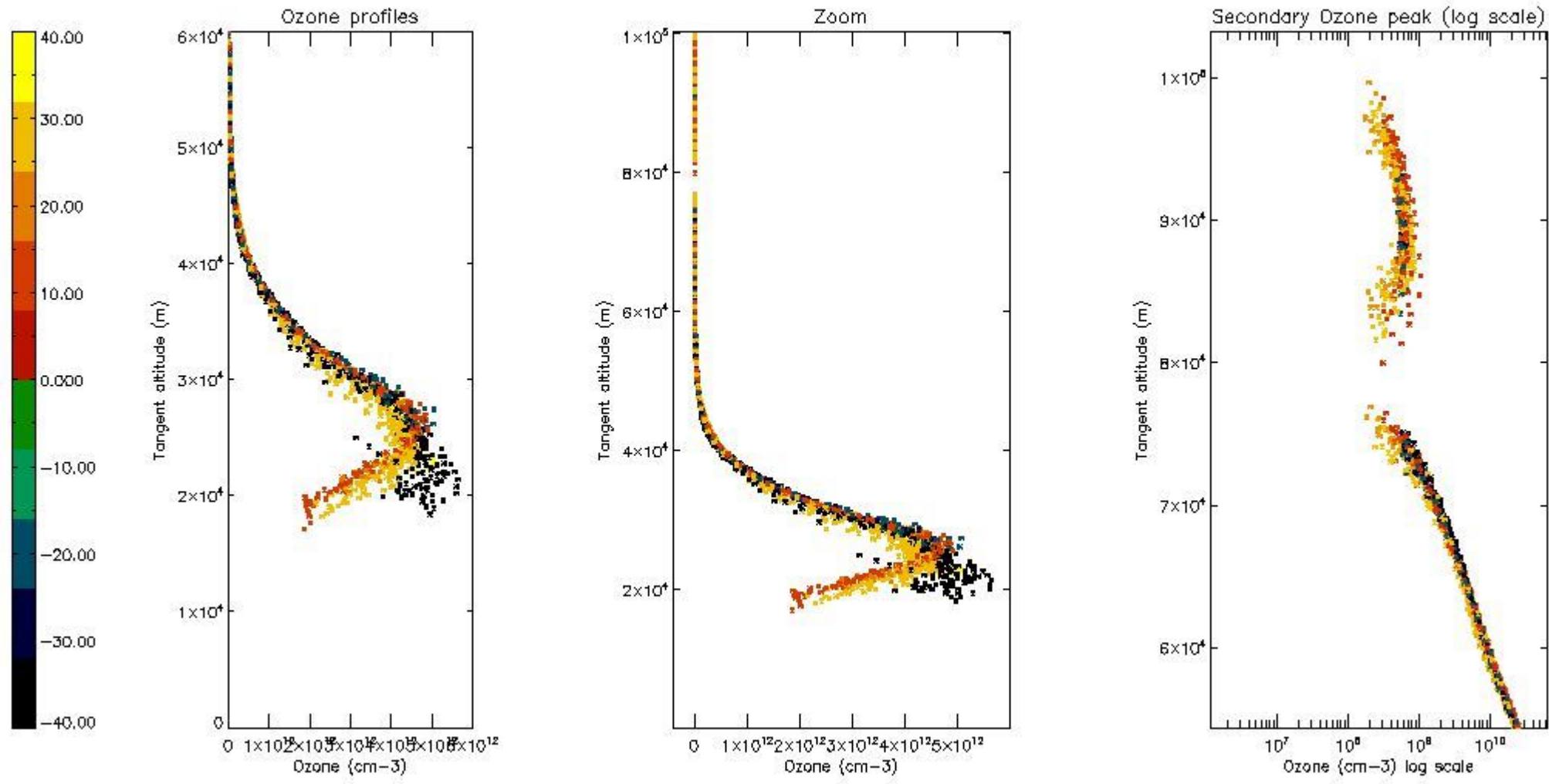
The colorbar represents the latitude.



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

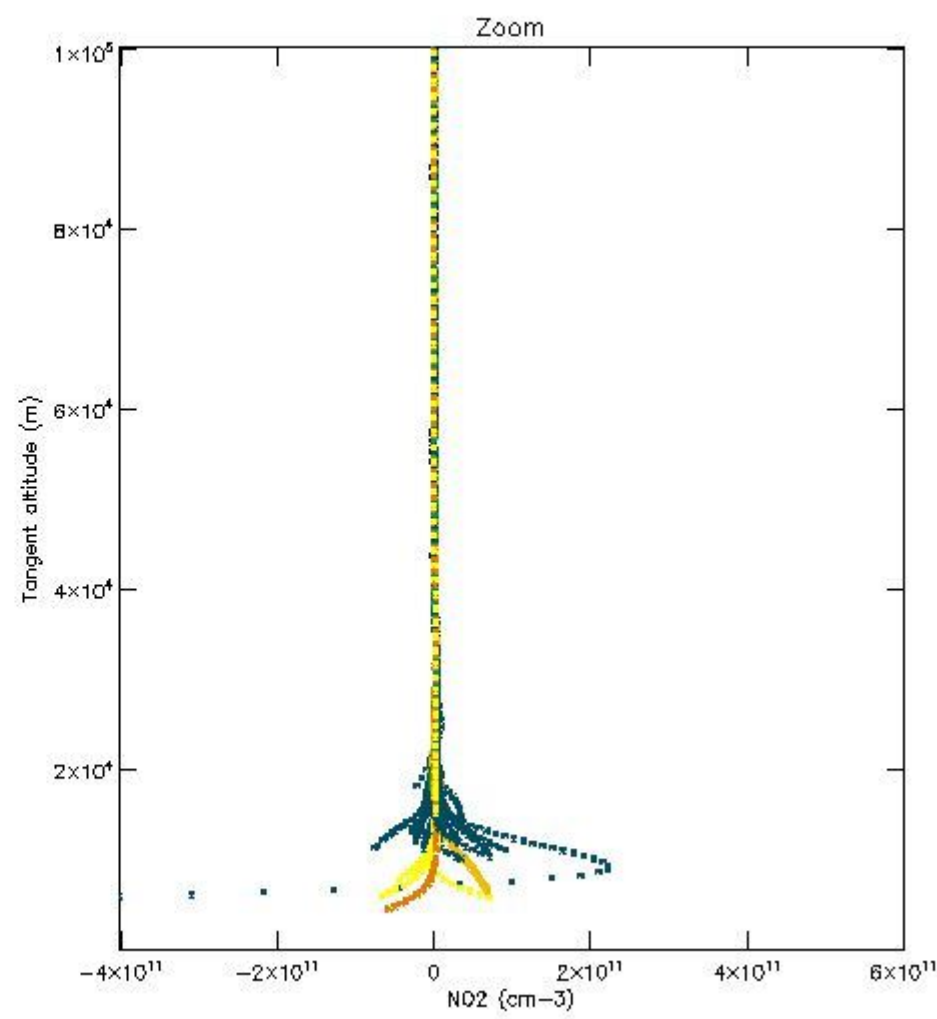
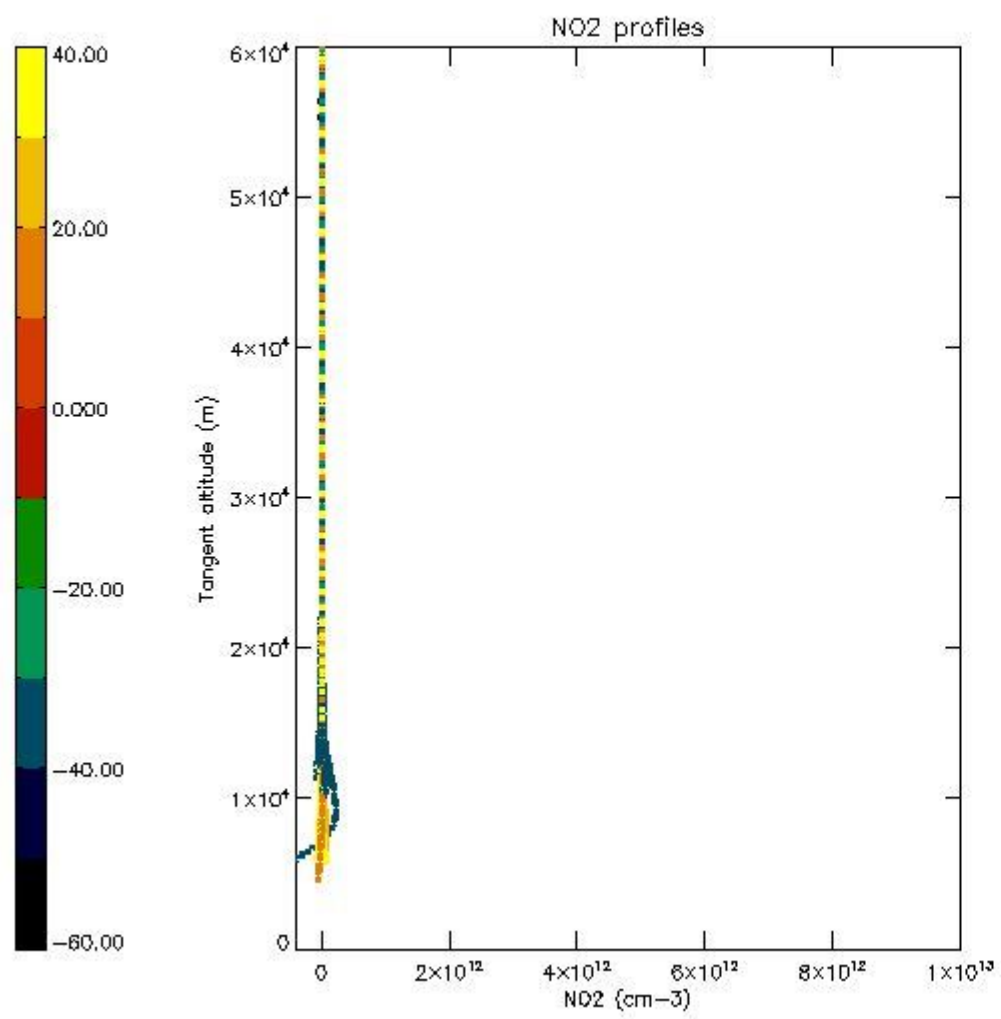
The colorbar represents the latitude.





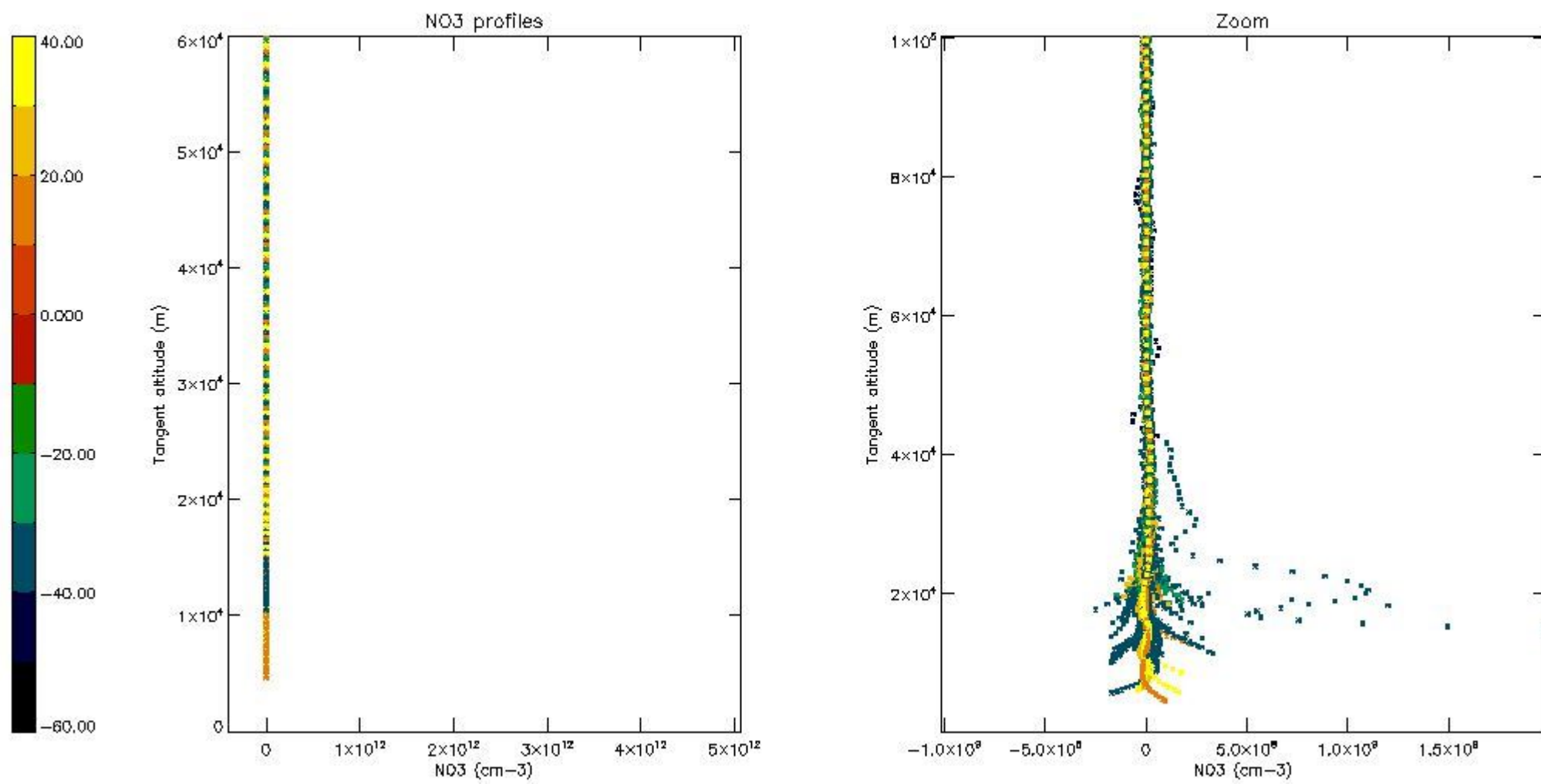
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



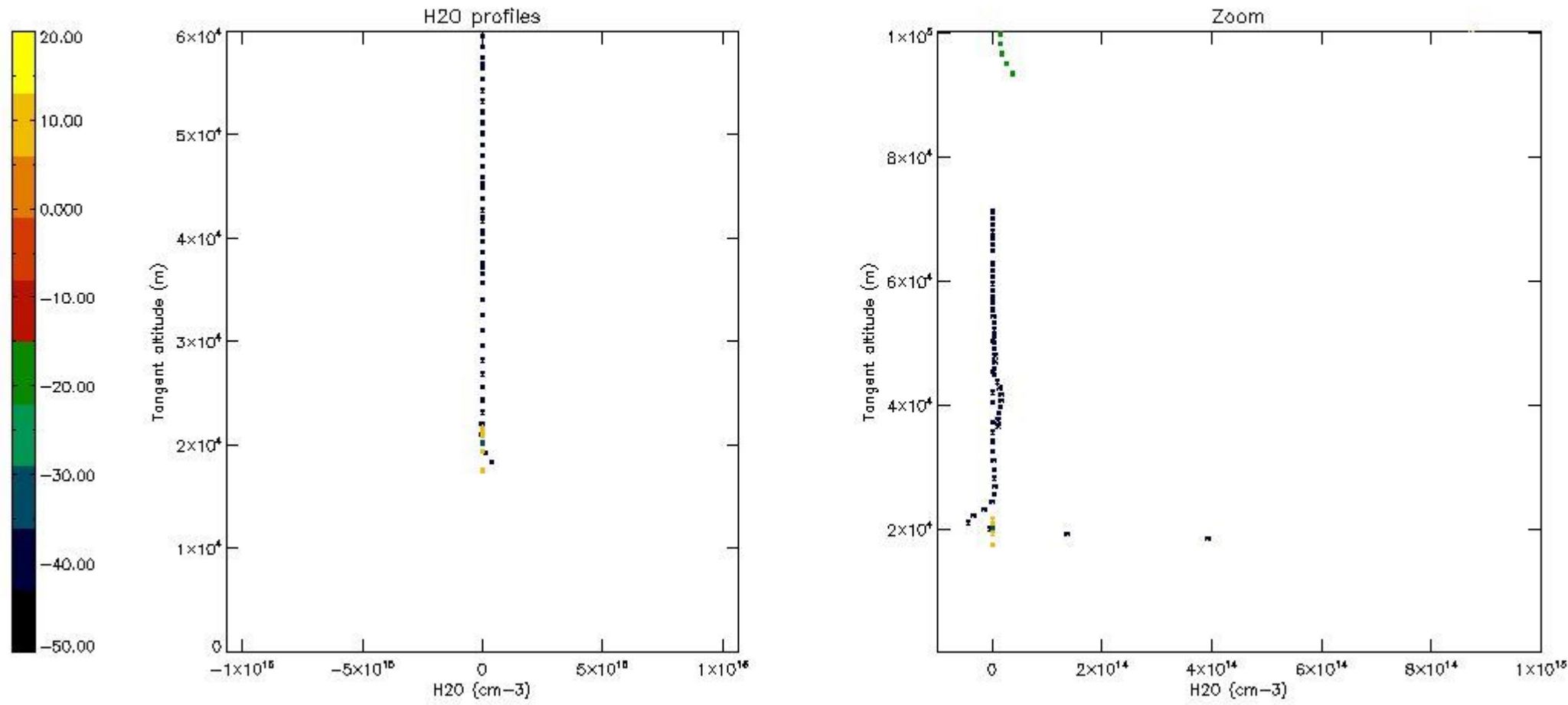
*5.7 Plot NO3 profiles for all STD (dark without errors)*

The colorbar represents the latitude.



5.8 Plot H2O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	31-OCT-2003 02:37:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-OCT-2003 02:37:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-OCT-2003 02:37:39

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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% \(dark without errors\)](#)

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#### [5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

#### [5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

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

Item	Value
Time of report generation	19APR2013 23:11:53
Data source version	GOMOS/6.01
Start time of products	31-10-2003 (31OCT2003 00:00:00)
Stop time of products	01-11-2003 (01NOV2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	319
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__2PRFIN20031031_023739_000000682021_00146_08717_7455.N1	31-OCT-2003 02:37:39	Dark	67.500	48	30Alp Hya	1.9770	4100.0	135	8717	No
2	GOM_NL__2PRFIN20031031_024304_000000382021_00146_08717_7456.N1	31-OCT-2003 02:43:04	Dark	38.000	99	Del Cen	2.5750	26000.	76	8717	No
3	GOM_NL__2PRFIN20031031_024514_000000382021_00146_08717_7457.N1	31-OCT-2003 02:45:14	Dark	37.500	129	Del Cru	2.7930	26000.	75	8717	No
4	GOM_NL__2PRFIN20031031_024740_000000372021_00147_08718_7456.N1	31-OCT-2003 02:47:40	Dark	36.500	124	The Car	2.7640	30000.	73	8718	No
5	GOM_NL__2PRFIN20031031_025335_000000622021_00147_08718_7457.N1	31-OCT-2003 02:53:35	Dark	62.000	117	Pi Pup	2.7060	3800.0	124	8718	No
6	GOM_NL__2PRFIN20031031_025529_000000492021_00147_08718_7458.N1	31-OCT-2003 02:55:29	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	8718	No
7	GOM_NL__2PRFIN20031031_025744_000001022021_00147_08718_7459.N1	31-OCT-2003 02:57:44	Dark	102.00	179	24Omi2Cma	3.0320	24000.	204	8718	No
8	GOM_NL__2PRFIN20031031_030116_000000382021_00147_08718_7460.N1	31-OCT-2003 03:01:16	Dark	38.000	143	Alp Hyi	2.8570	7200.0	76	8718	No
9	GOM_NL__2PRFIN20031031_030240_000000412021_00147_08718_7461.N1	31-OCT-2003 03:02:40	Dark	40.500	9	Alp Eri	0.45300	24000.	81	8718	No
10	GOM_NL__2PRFIN20031031_030733_000002052021_00147_08718_7462.N1	31-OCT-2003 03:07:33	Straylight	204.50	1	9Alp Cma	-1.4400	11000.	409	8718	No
11	GOM_NL__2PRFIN20031031_031401_000000452021_00147_08718_7463.N1	31-OCT-2003 03:14:01	Straylight	44.500	52	16Bet Cet	2.0370	4500.0	89	8718	No
12	GOM_NL__2PRFIN20031031_032036_000000622021_00147_08718_7464.N1	31-OCT-2003 03:20:36	Bright	61.500	94	92Alp Cet	2.5260	3100.0	123	8718	No
13	GOM_NL__2PRFIN20031031_032331_000000372021_00147_08718_7465.N1	31-OCT-2003 03:23:31	Bright	36.500	140	88Gam Peg	2.8340	26000.	73	8718	No
14	GOM_NL__2PRFIN20031031_032456_000000402021_00147_08718_7466.N1	31-OCT-2003 03:24:56	Bright	39.500	105	6Bet Ari	2.6450	8900.0	79	8718	No
15	GOM_NL__2PRFIN20031031_032722_000000372021_00147_08718_7467.N1	31-OCT-2003 03:27:22	Bright	36.500	58	21Alp And	2.0730	11000.	73	8718	No
16	GOM_NL__2PRFIN20031031_032855_000000372021_00147_08718_7468.N1	31-OCT-2003 03:28:55	Bright	37.000	53	43Bet And	2.0480	3300.0	74	8718	No
17	GOM_NL__2PRFIN20031031_033126_000000402021_00147_08718_7469.N1	31-OCT-2003 03:31:26	Bright	39.500	73	57Gam1And	2.2600	13100.	79	8718	No
18	GOM_NL__2PRFIN20031031_033255_000000472021_00147_08718_7470.N1	31-OCT-2003 03:32:55	Bright	46.500	79	26Bet Per	2.3100	13100.	93	8718	No
19	GOM_NL__2PRFIN20031031_033447_000000392021_00147_08718_7471.N1	31-OCT-2003 03:34:47	Bright	39.000	68	18Alp Cas	2.2250	4500.0	78	8718	No
20	GOM_NL__2PRFIN20031031_033559_000000372021_00147_08718_7472.N1	31-OCT-2003 03:35:59	Bright	36.500	76	27Gam Cas	2.3000	30000.	73	8718	No
21	GOM_NL__2PRFIN20031031_033919_000000372021_00147_08718_7473.N1	31-OCT-2003 03:39:19	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	8718	No
22	GOM_NL__2PRFIN20031031_034404_000000392021_00147_08718_7474.N1	31-OCT-2003 03:44:04	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	8718	No
23	GOM_NL__2PRFIN20031031_034750_000000382021_00147_08718_7475.N1	31-OCT-2003 03:47:50	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	8718	No
24	GOM_NL__2PRFIN20031031_035213_000000412021_00147_08718_7476.N1	31-OCT-2003 03:52:13	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	8718	No
25	GOM_NL__2PRFIN20031031_035345_000000352021_00147_08718_7477.N1	31-OCT-2003 03:53:45	Bright	35.000	32	77Eps UMa	1.7630	11000.	70	8718	No
26	GOM_NL__2PRFIN20031031_035501_000000342021_00147_08718_7478.N1	31-OCT-2003 03:55:01	Bright	33.500	39	85Eta UMa	1.8540	24000.	67	8718	No
27	GOM_NL__2PRFIN20031031_035729_000000402021_00147_08718_7479.N1	31-OCT-2003 03:57:29	Bright	39.500	174	52Psi UMa	3.0040	4400.0	79	8718	No
28	GOM_NL__2PRFIN20031031_040427_000002552021_00147_08718_7480.N1	31-OCT-2003 04:04:27	Twilight	255.00	24	66Alp Gem	1.5800	10200.	510	8718	No
29	GOM_NL__2PRFIN20031031_041817_000000672021_00147_08718_7481.N1	31-OCT-2003 04:18:17	Dark	67.000	48	30Alp Hya	1.9770	4100.0	134	8718	No
30	GOM_NL__2PRFIN20031031_042341_000000382021_00147_08718_7482.N1	31-OCT-2003 04:23:41	Dark	38.000	99	Del Cen	2.5750	26000.	76	8718	No
31	GOM_NL__2PRFIN20031031_042551_000000382021_00147_08718_7483.N1	31-OCT-2003 04:25:51	Dark	37.500	129	Del Cru	2.7930	26000.	75	8718	No
32	GOM_NL__2PRFIN20031031_042816_000000382021_00148_08719_7457.N1	31-OCT-2003 04:28:16	Dark	38.000	124	The Car	2.7640	30000.	76	8719	No
33	GOM_NL__2PRFIN20031031_043413_000000682021_00148_08719_7458.N1	31-OCT-2003 04:34:13	Dark	67.500	117	Pi Pup	2.7060	3800.0	135	8719	No
34	GOM_NL__2PRFIN20031031_043606_000000502021_00148_08719_7459.N1	31-OCT-2003 04:36:06	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	8719	No
35	GOM_NL__2PRFIN20031031_043823_000001022021_00148_08719_7460.N1	31-OCT-2003 04:38:23	Dark	101.50	179	24Omi2Cma	3.0320	24000.	203	8719	No
36	GOM_NL__2PRFIN20031031_044153_000000382021_00148_08719_7461.N1	31-OCT-2003 04:41:53	Dark	37.500	143	Alp Hyi	2.8570	7200.0	75	8719	No
37	GOM_NL__2PRFIN20031031_044316_000000462021_00148_08719_7462.N1	31-OCT-2003 04:43:16	Dark	46.000	9	Alp Eri	0.45300	24000.	92	8719	No
38	GOM_NL__2PRFIN20031031_044813_000002052021_00148_08719_7463.N1	31-OCT-2003 04:48:13	Straylight	204.50	1	9Alp Cma	-1.4400	11000.	409	8719	No
39	GOM_NL__2PRFIN20031031_045437_000000422021_00148_08719_7464.N1	31-OCT-2003 04:54:37	Straylight	42.000	52	16Bet Cet	2.0370	4500.0	84	8719	No
40	GOM_NL__2PRFIN20031031_050112_000000632021_00148_08719_7465.N1	31-OCT-2003 05:01:12	Bright	62.500	94	92Alp Cet	2.5260	3100.0	125	8719	No
41	GOM_NL__2PRFIN20031031_050407_000000362021_00148_08719_7466.N1	31-OCT-2003 05:04:07	Bright	35.500	140	88Gam Peg	2.8340	26000.	71	8719	No
42	GOM_NL__2PRFIN20031031_050533_000000402021_00148_08719_7467.N1	31-OCT-2003 05:05:33	Bright	39.500	105	6Bet Ari	2.6450	8900.0	79	8719	No



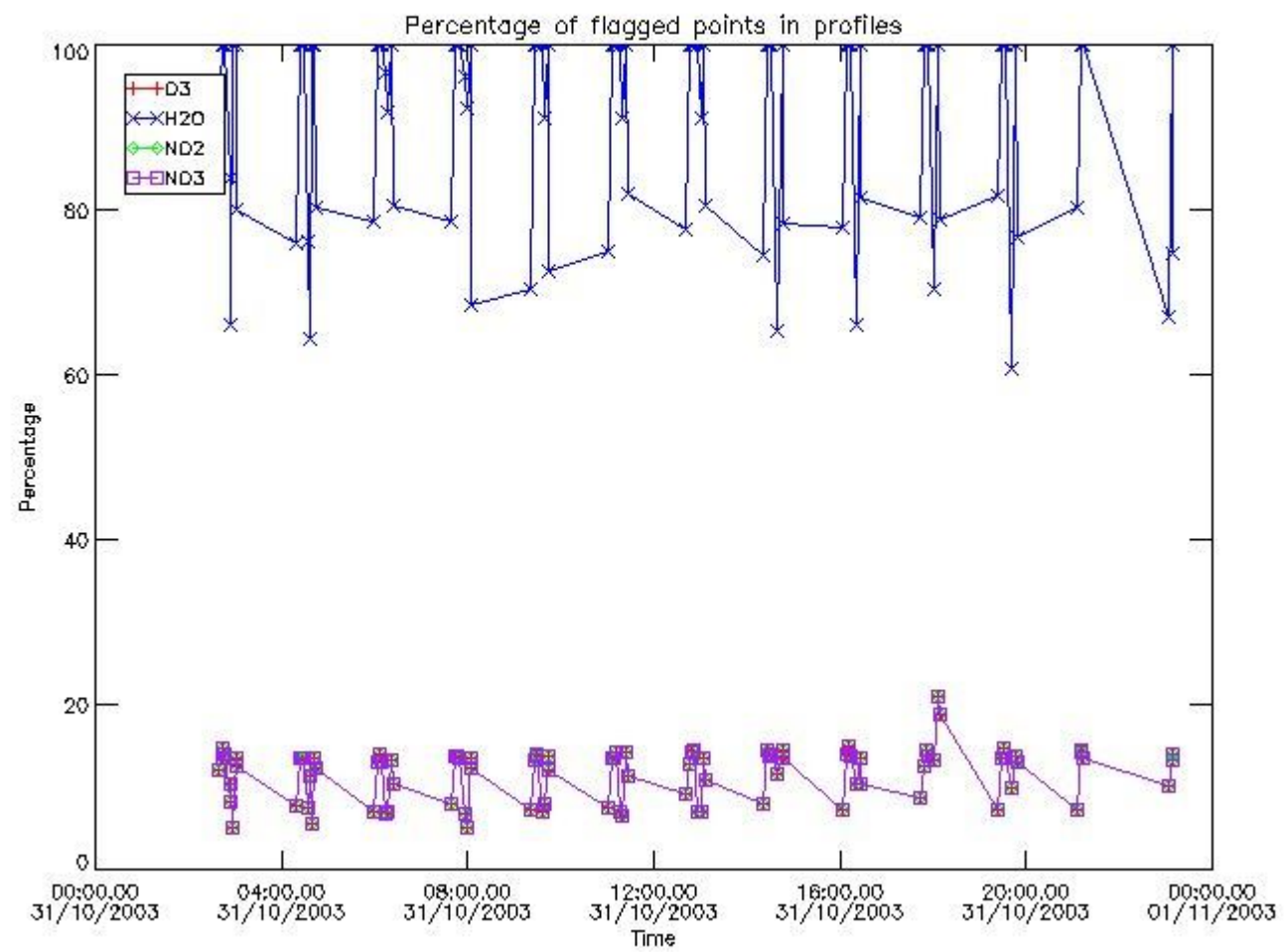






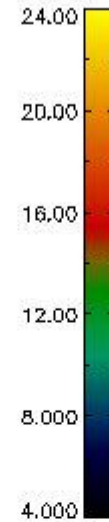
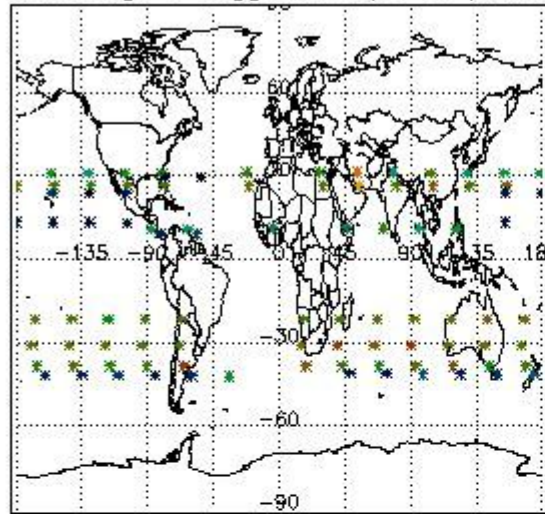




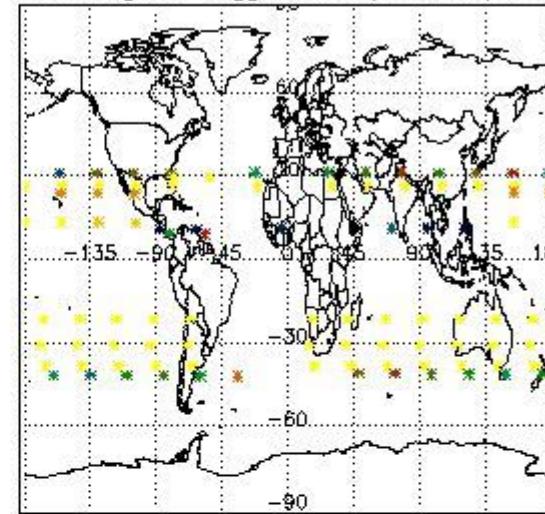


*3.2 Plot quality information per product (world map)*

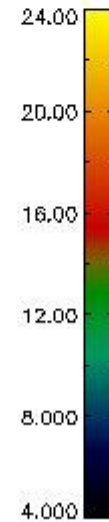
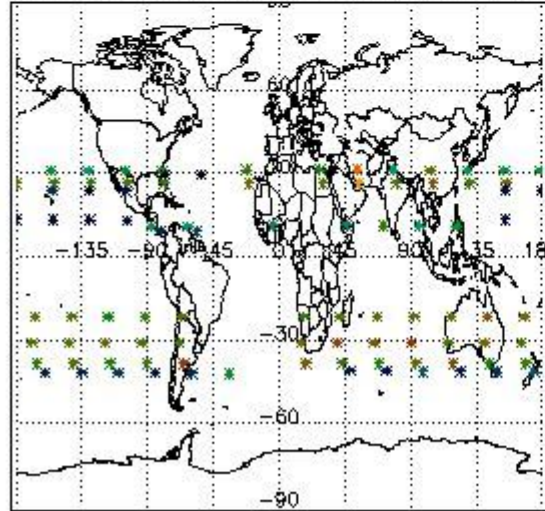
Percentage of flagged data per O3 profile



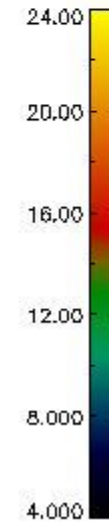
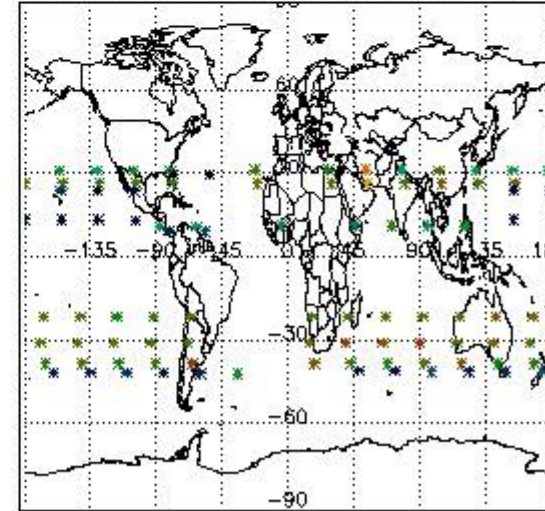
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

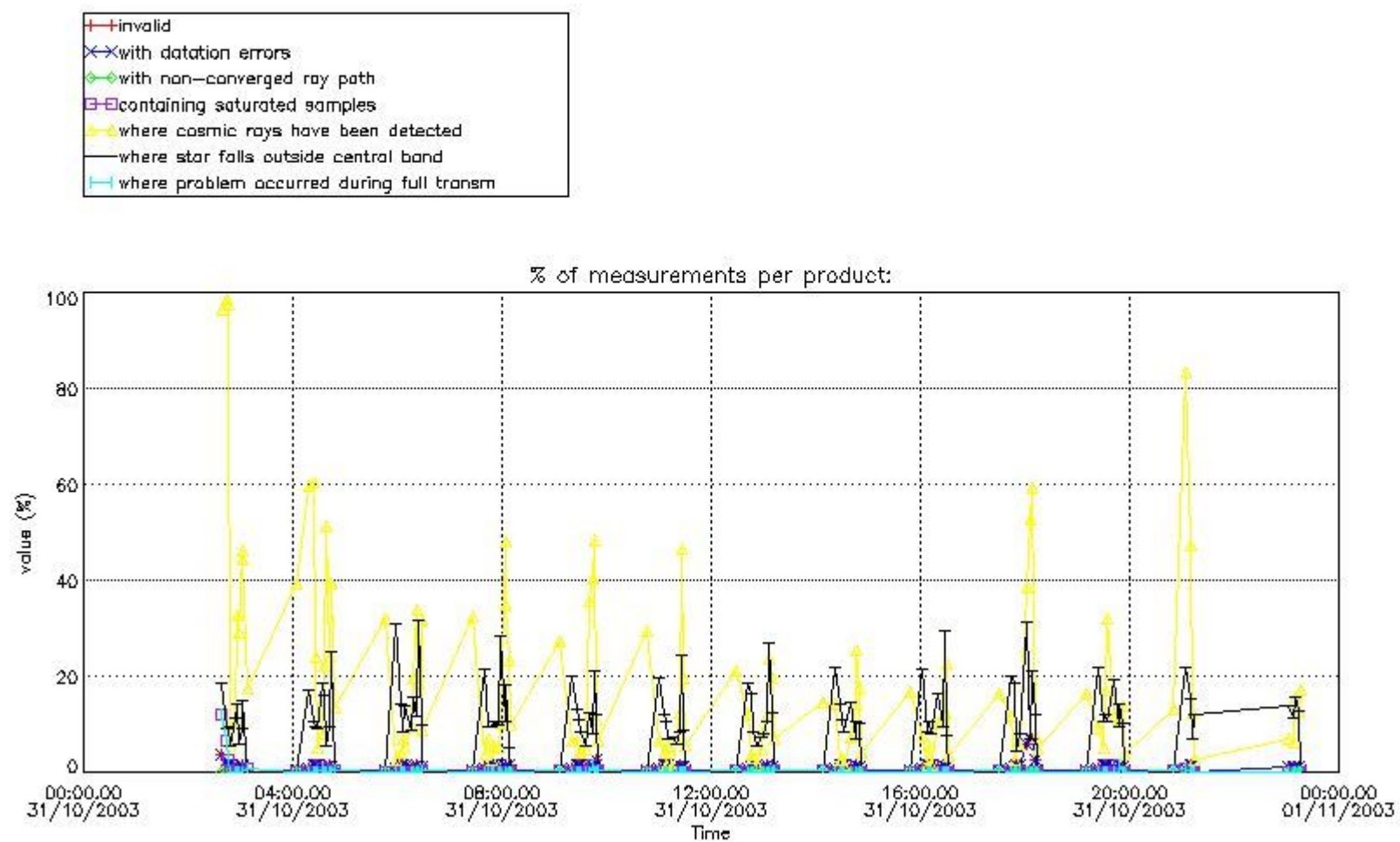


#### 4. Level 1 quality information per product

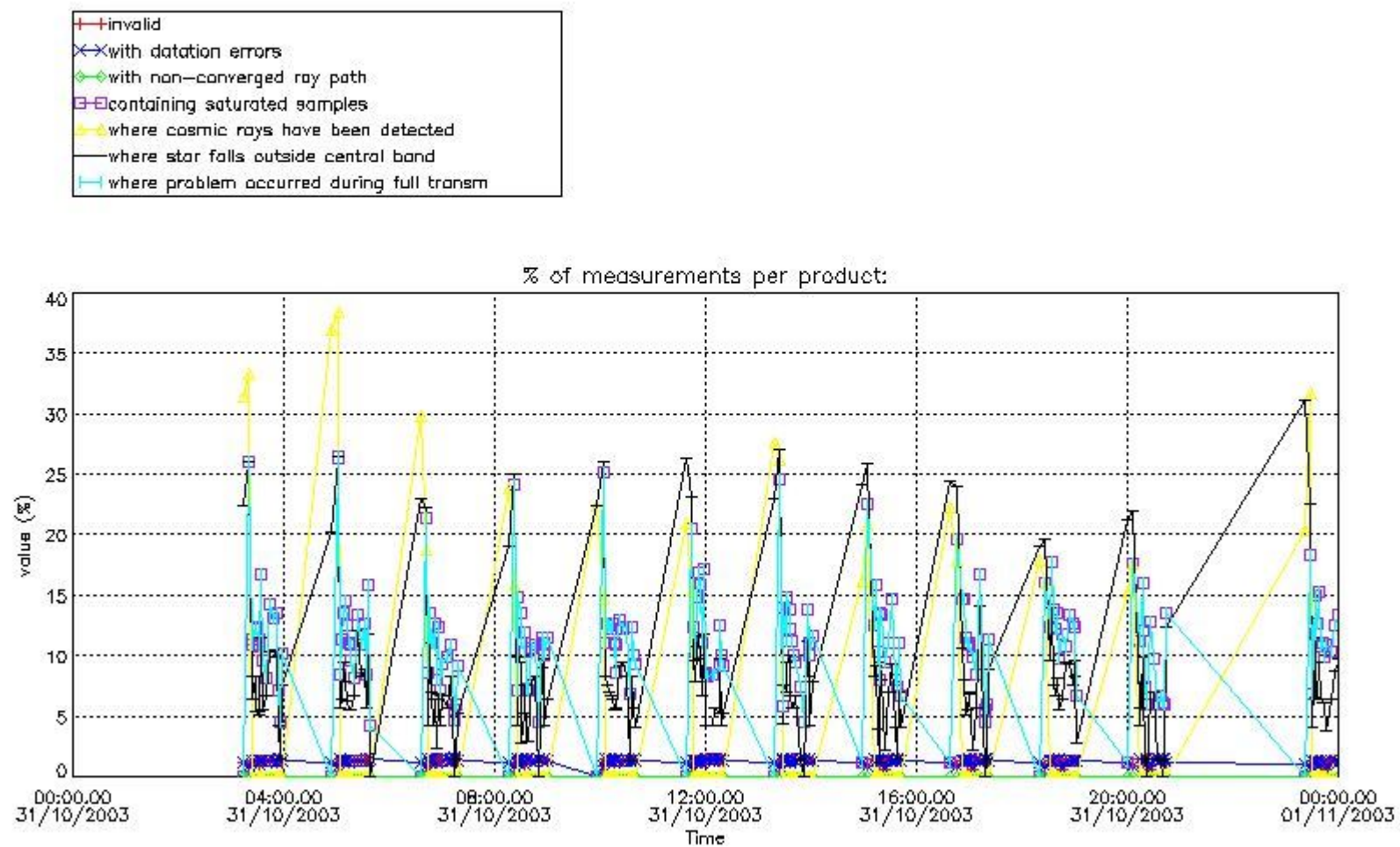
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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



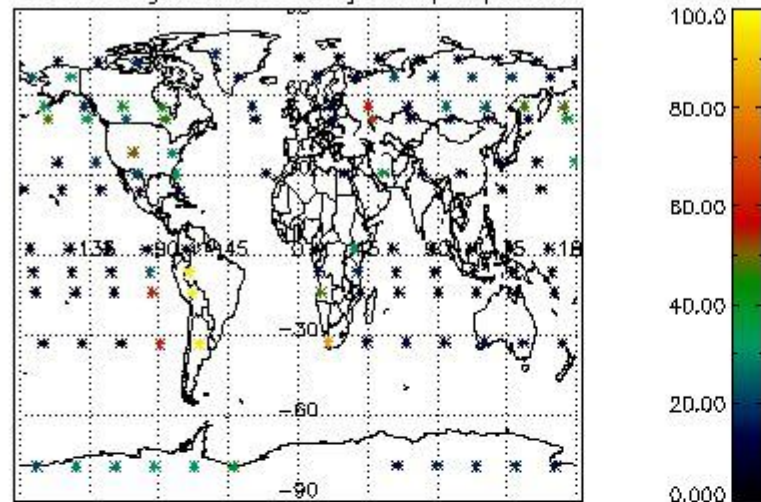
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



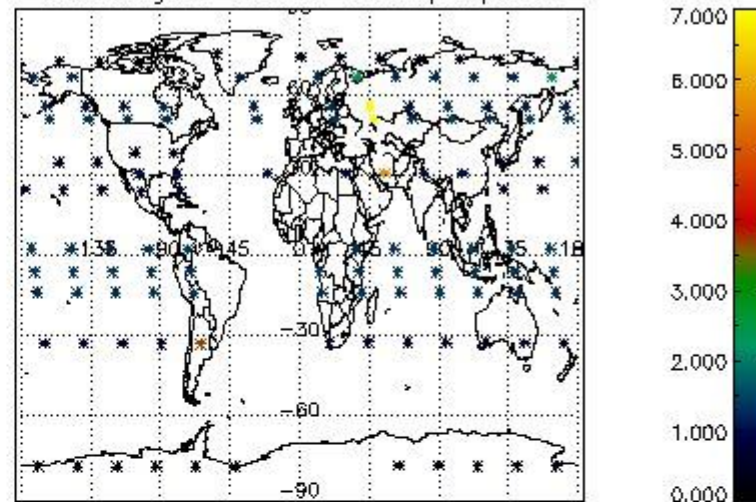
4.2 Plot quality information per product coming from level 1b processing (world map)

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

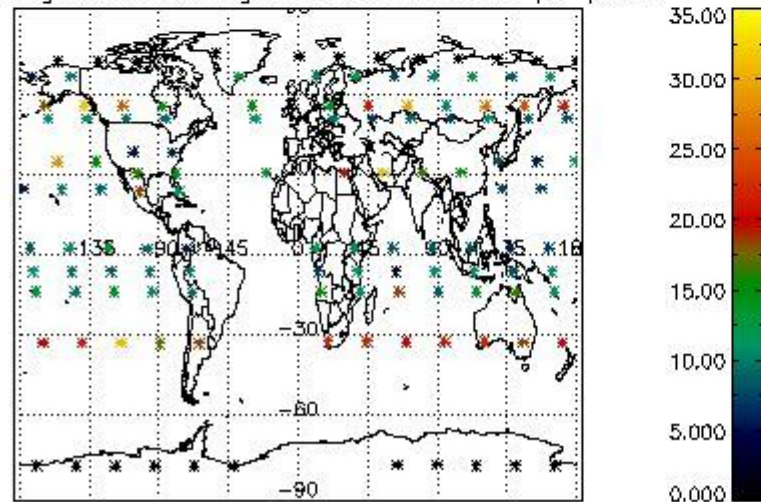
Percentage of cosmic ray hits per profile



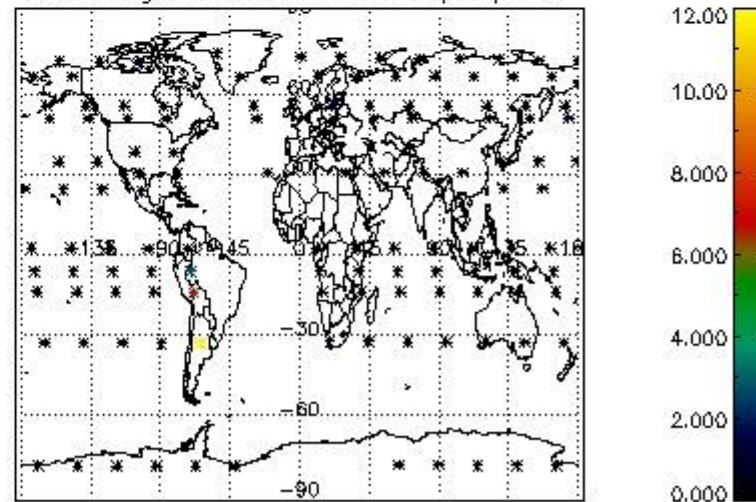
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

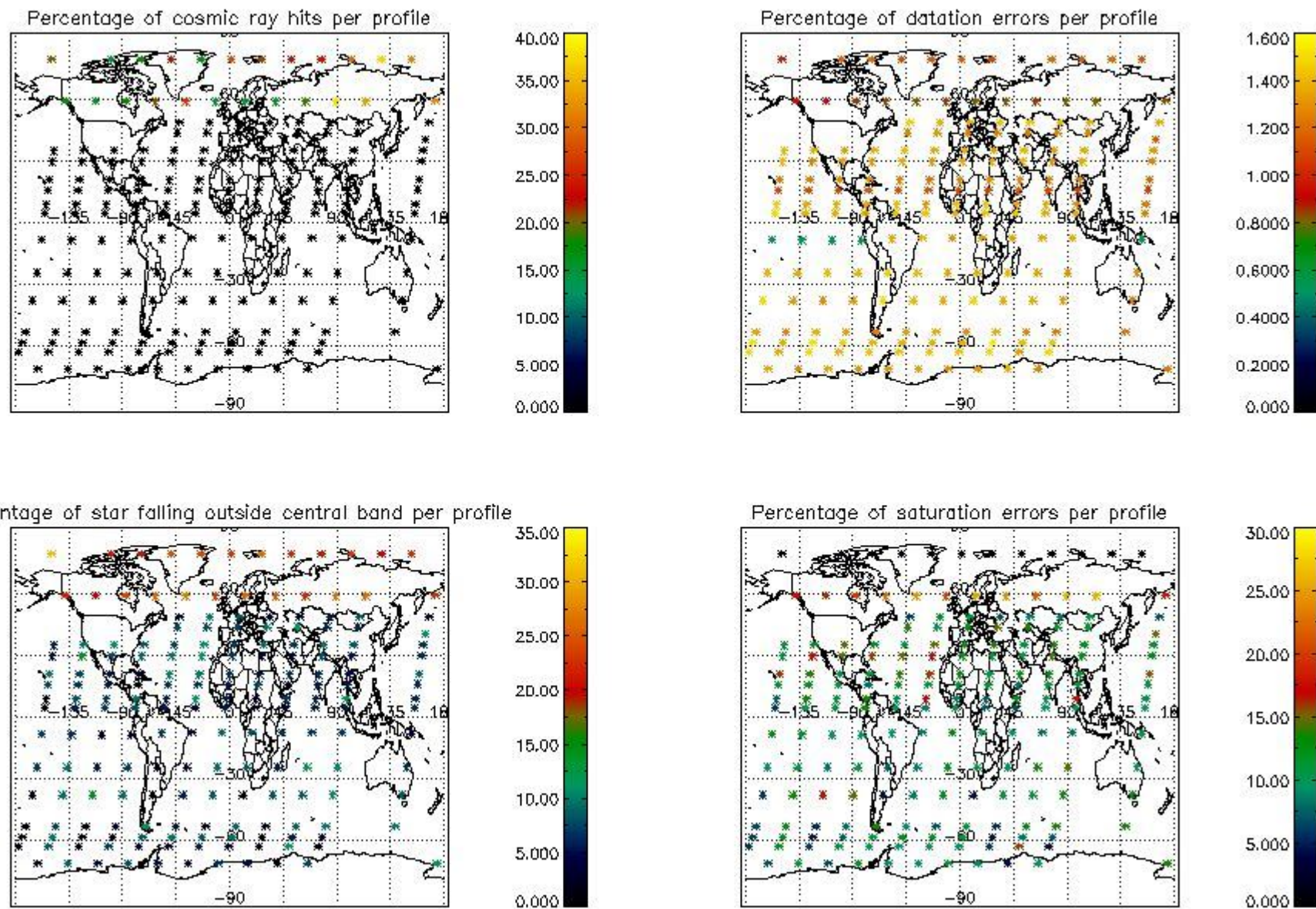


Percentage of saturation errors per profile



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

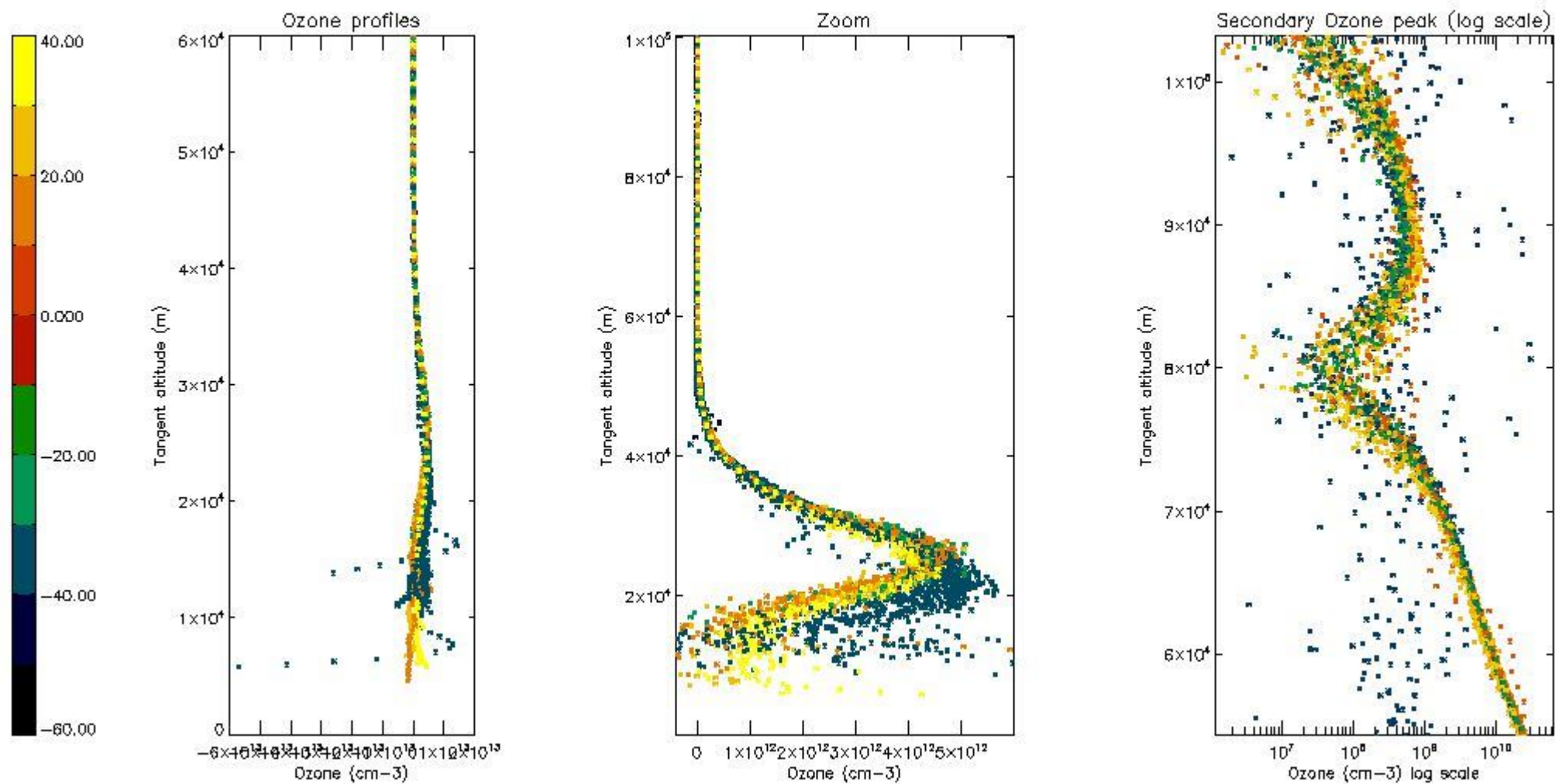
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	17

STD < 10	14
STD < 5	10

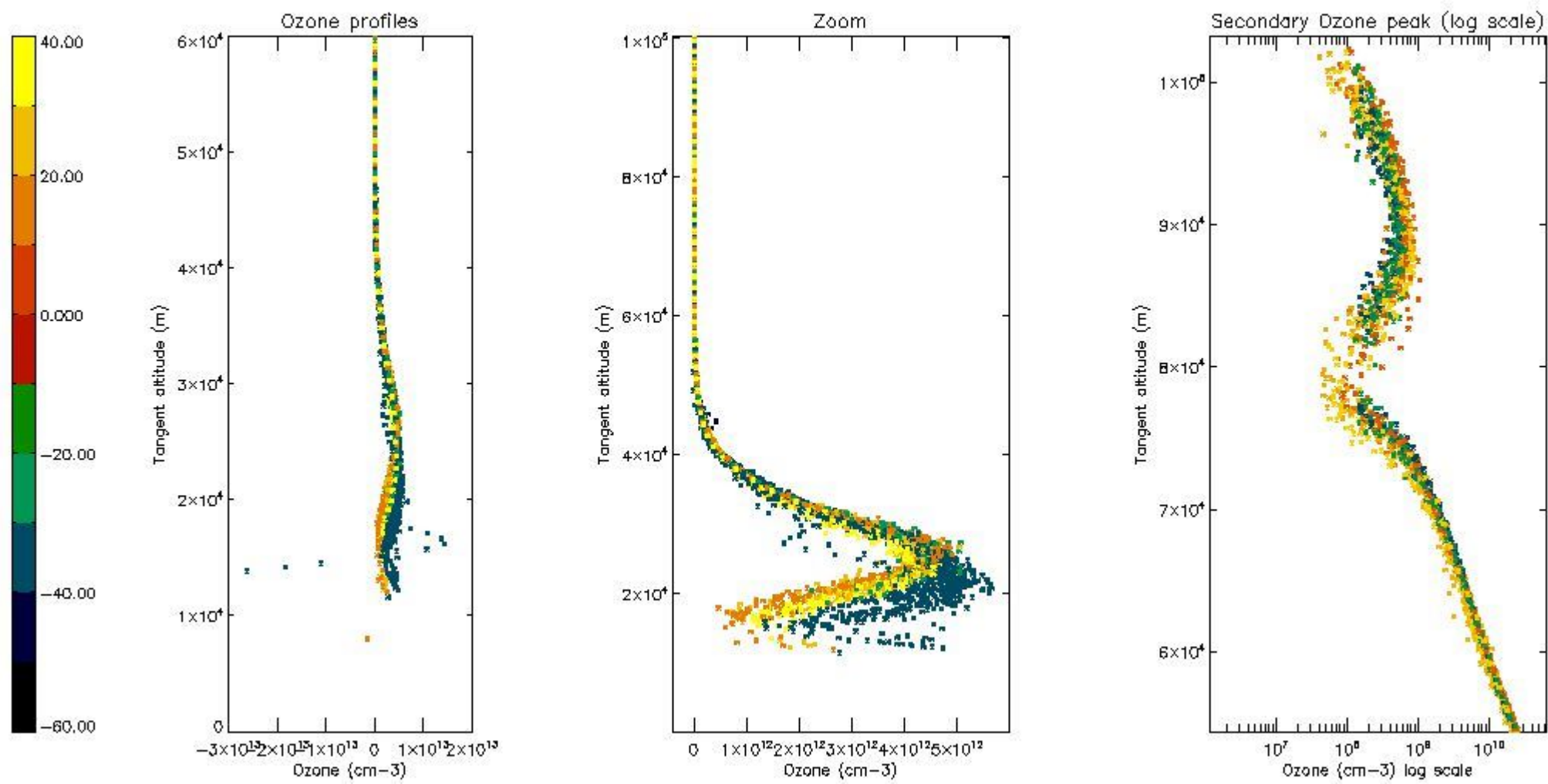
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



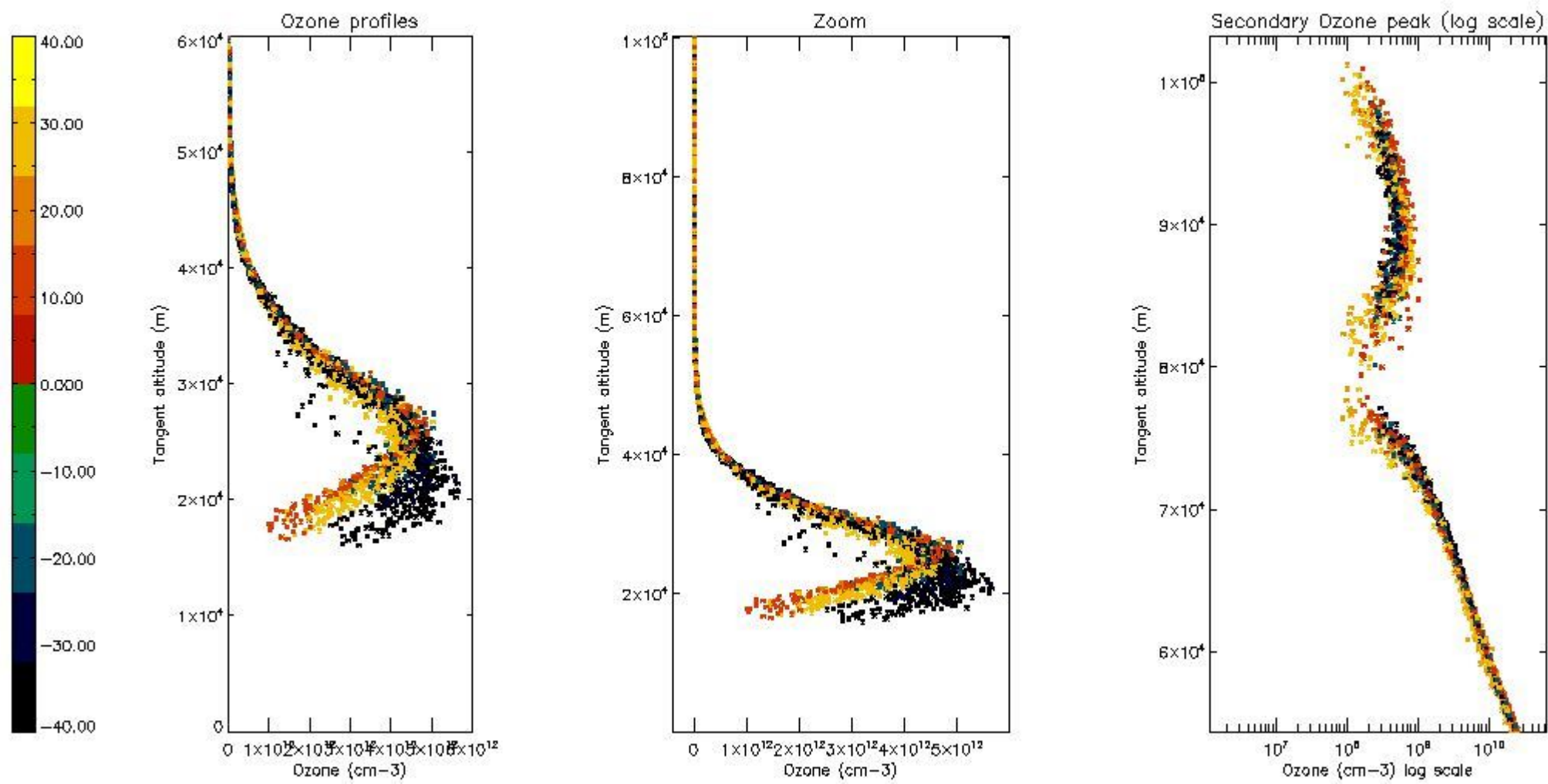
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



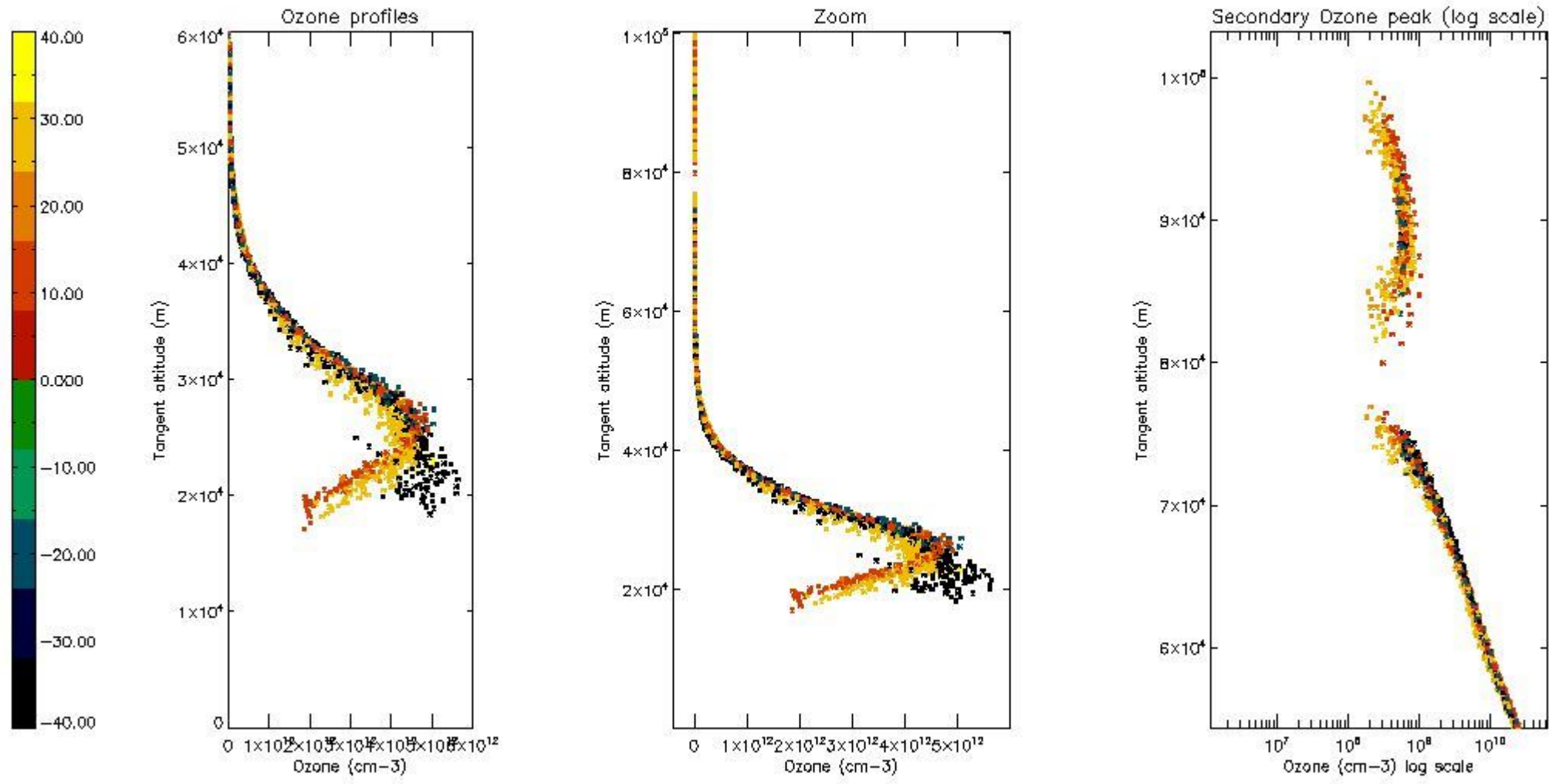
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



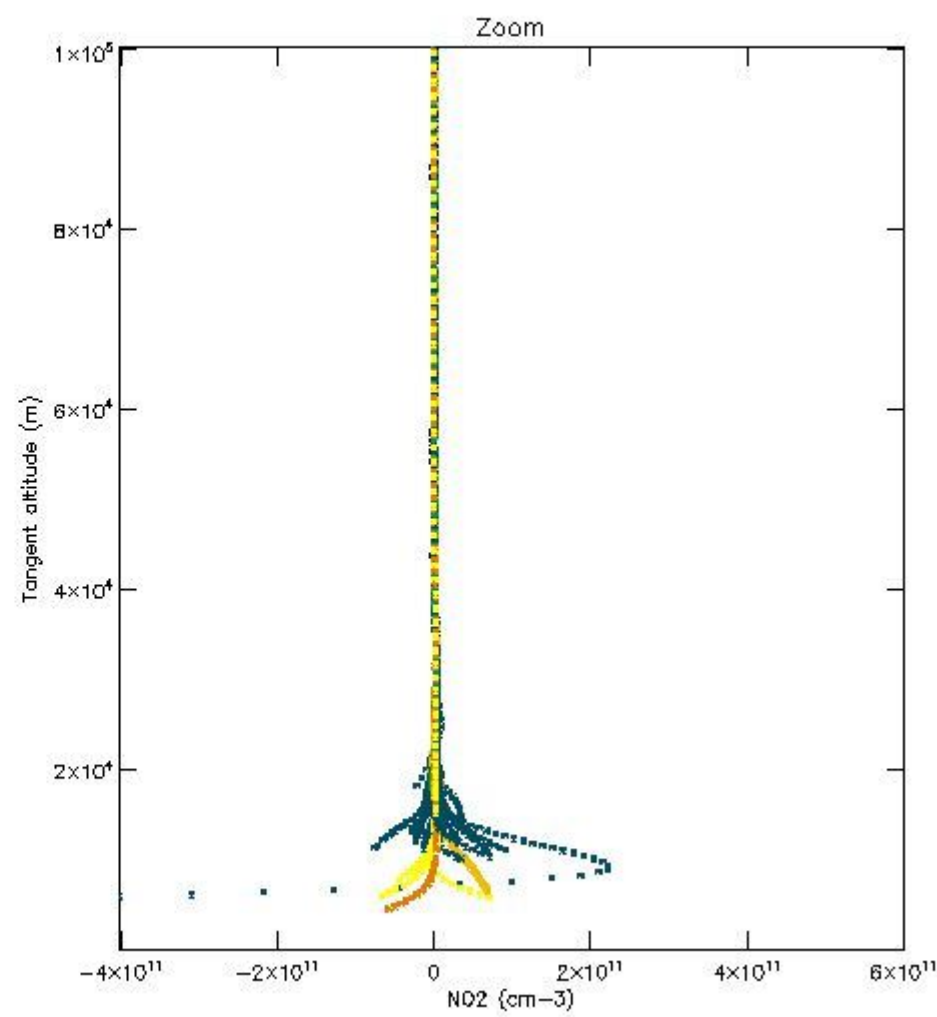
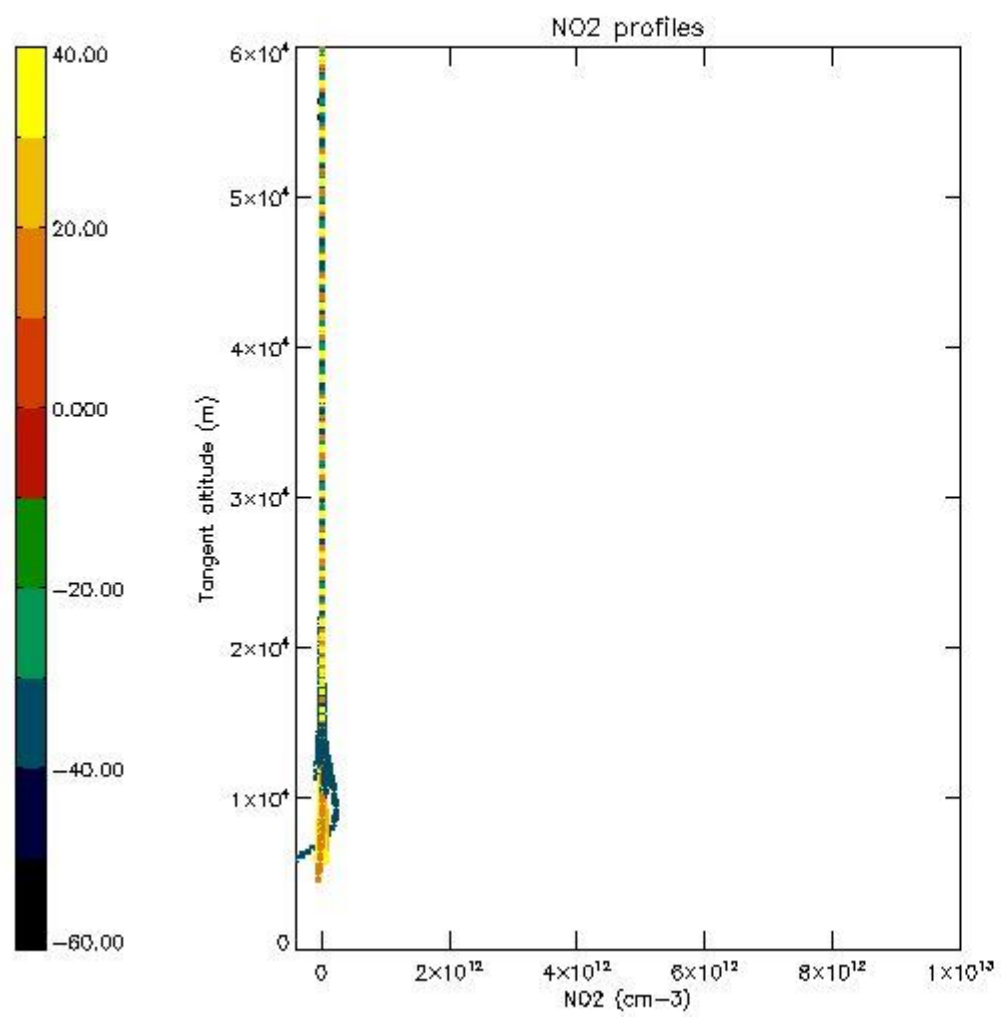
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



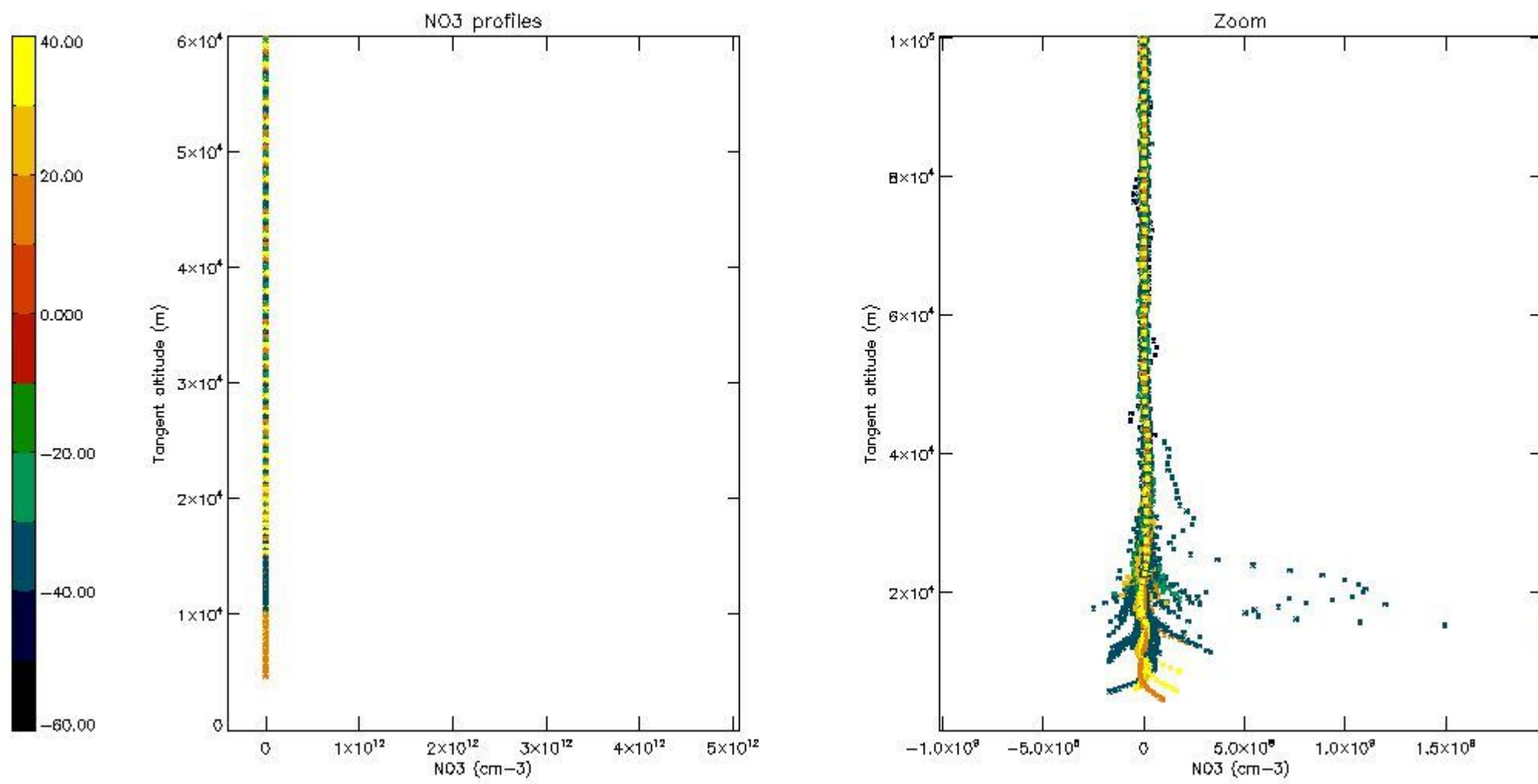
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



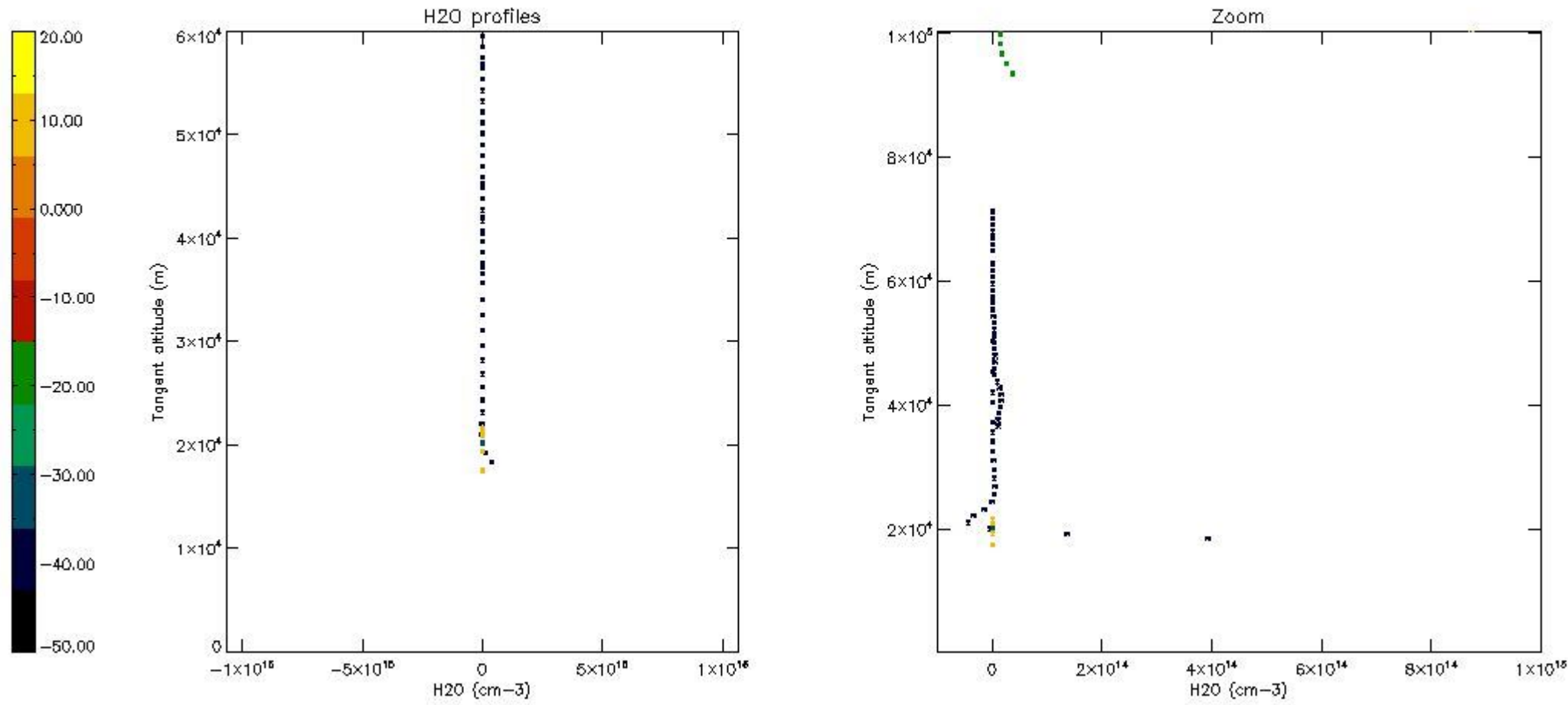
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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.

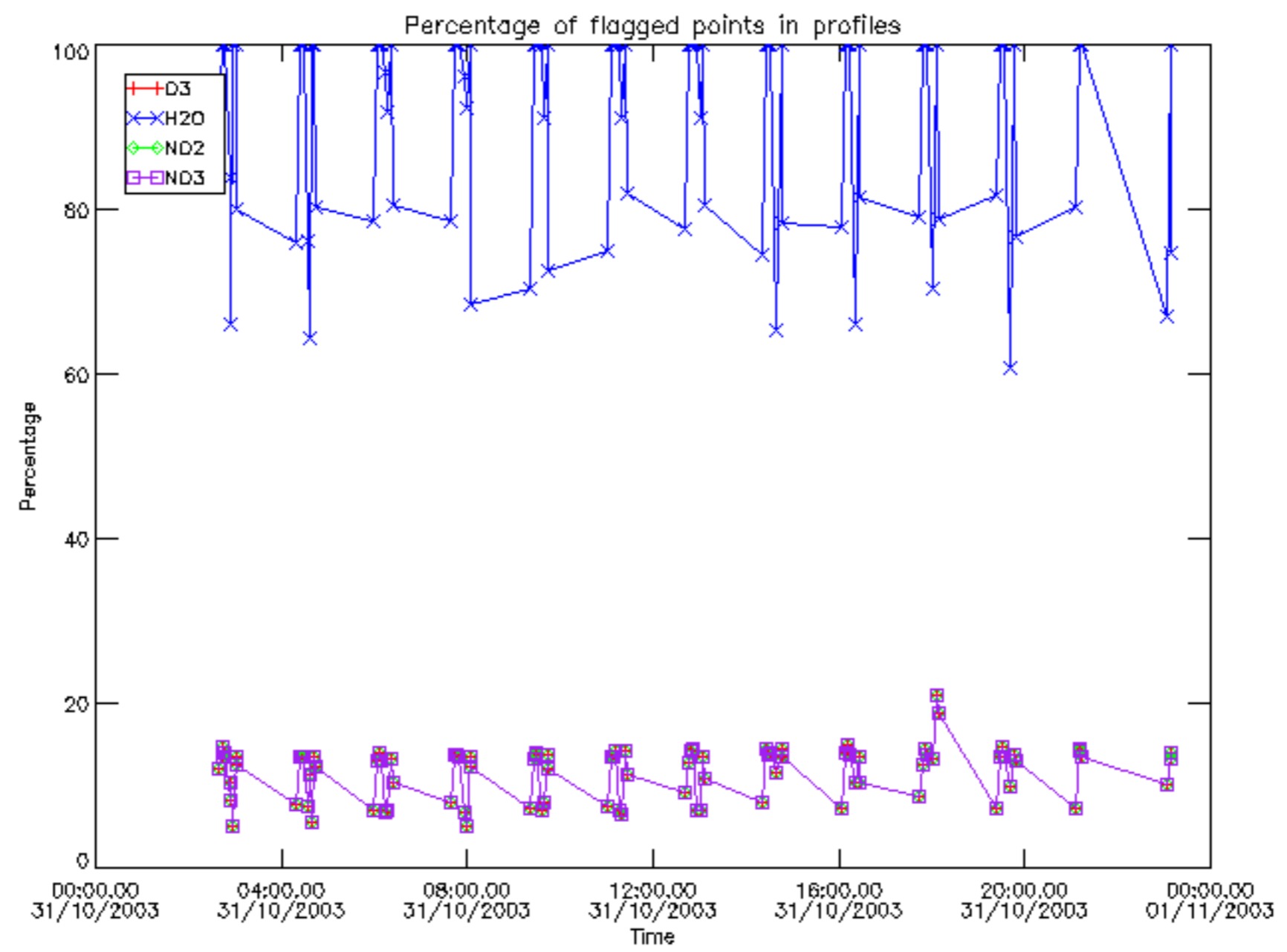


## 6. Auxiliary Data Files used for the production reported in section 2

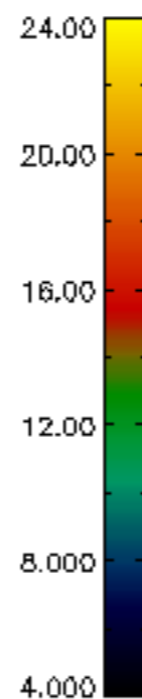
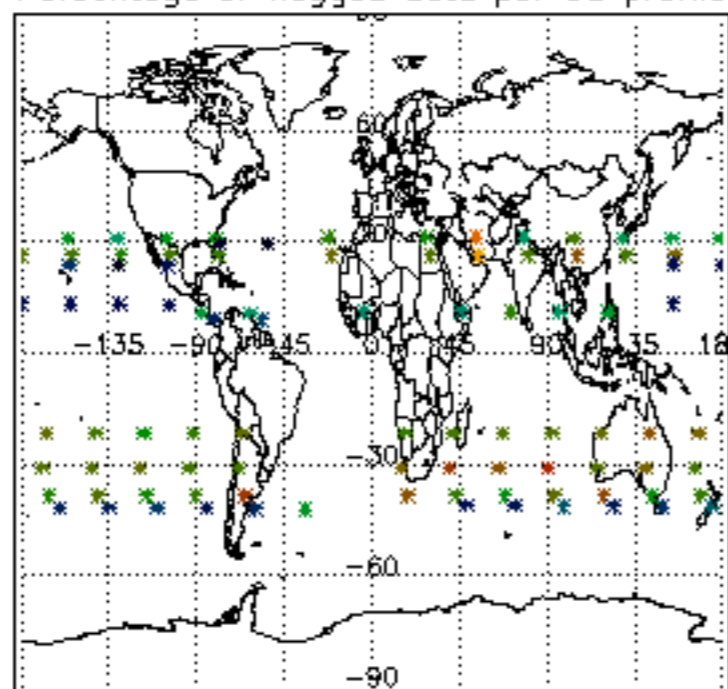
The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	31-OCT-2003 02:37:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-OCT-2003 02:37:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-OCT-2003 02:37:39

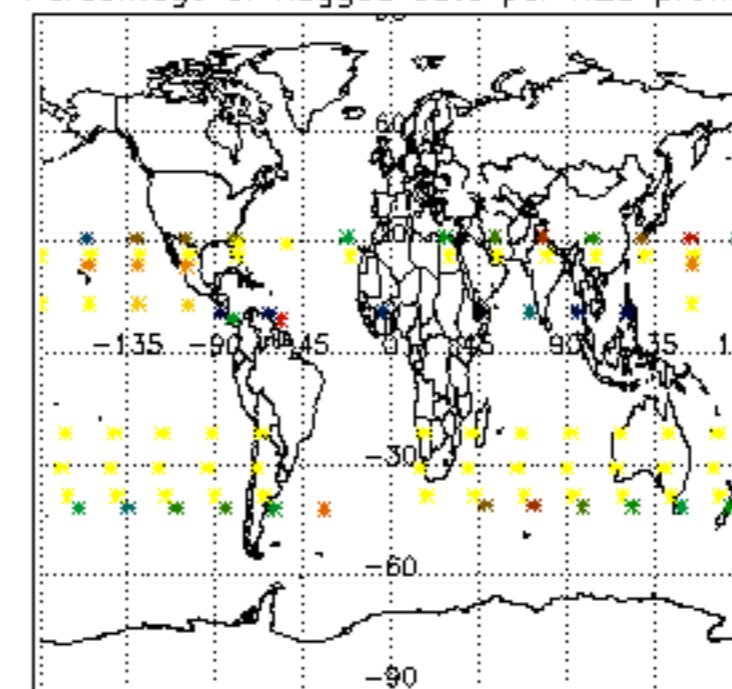




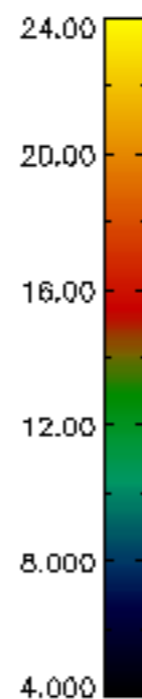
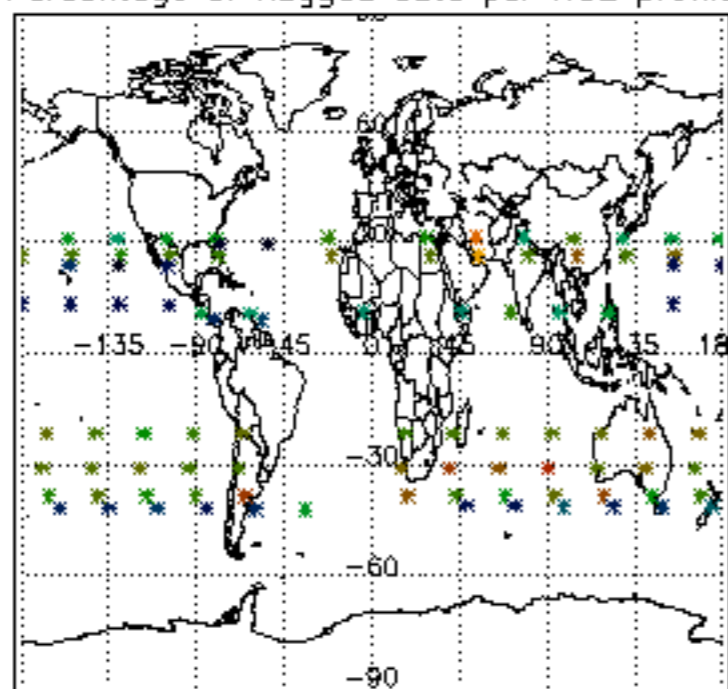
Percentage of flagged data per D3 profile



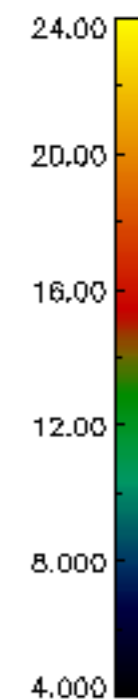
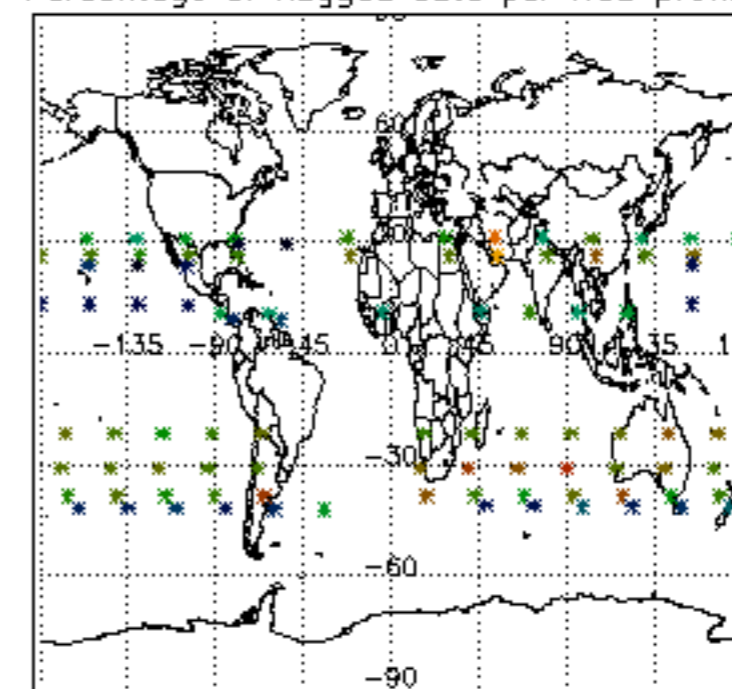
Percentage of flagged data per H2O profile

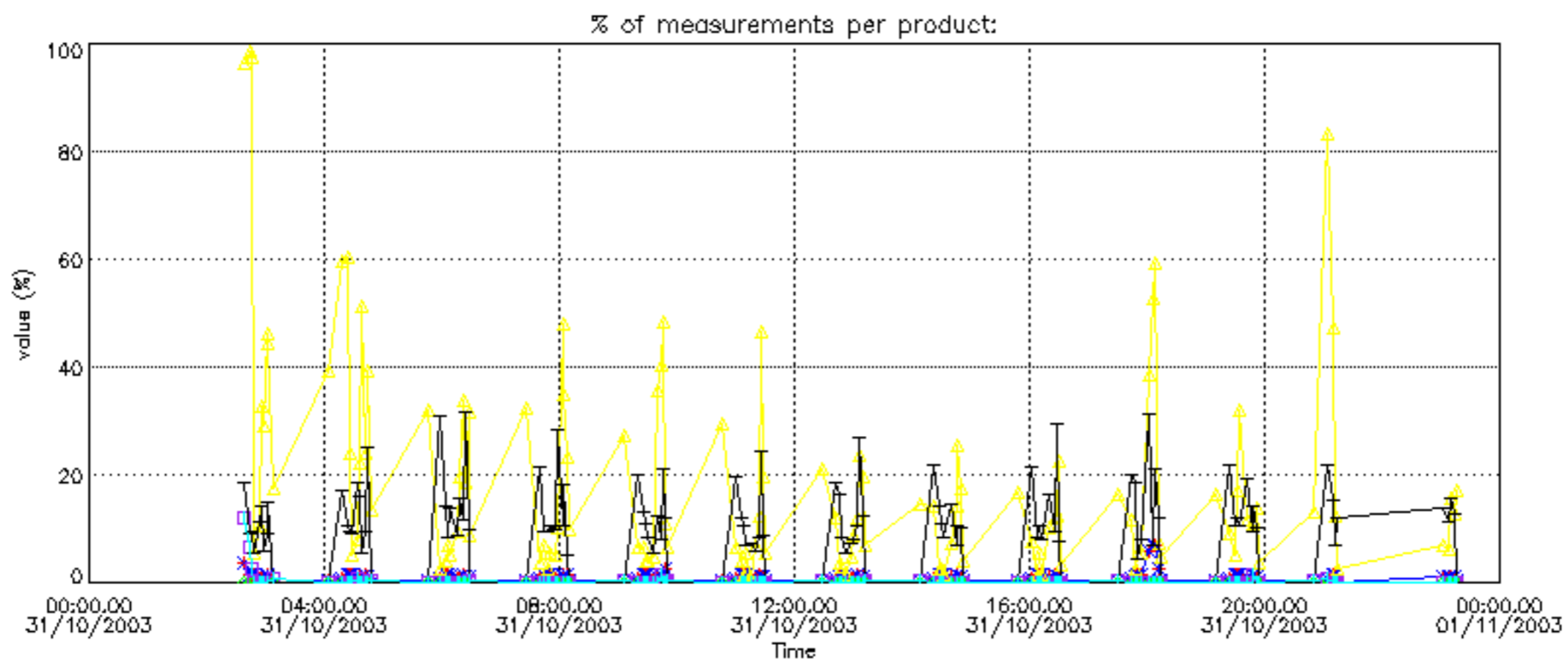


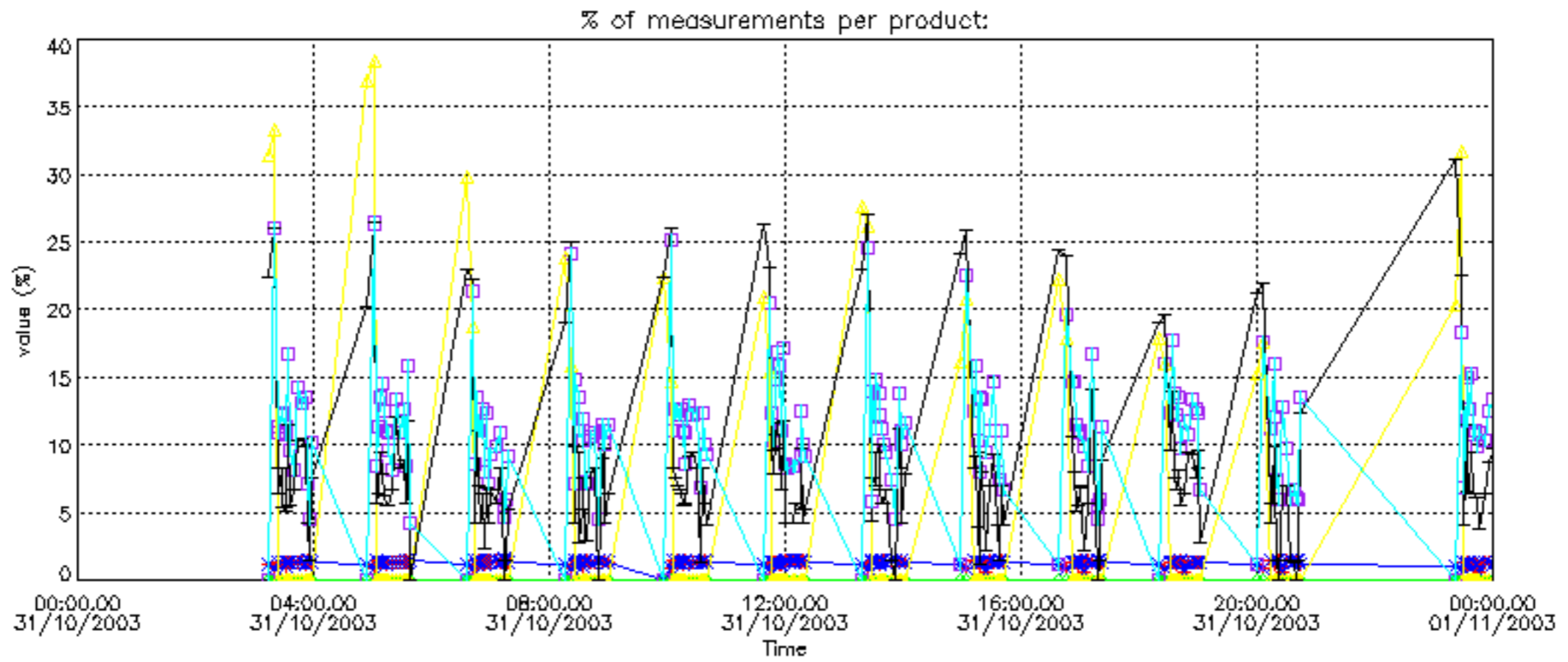
Percentage of flagged data per NO2 profile



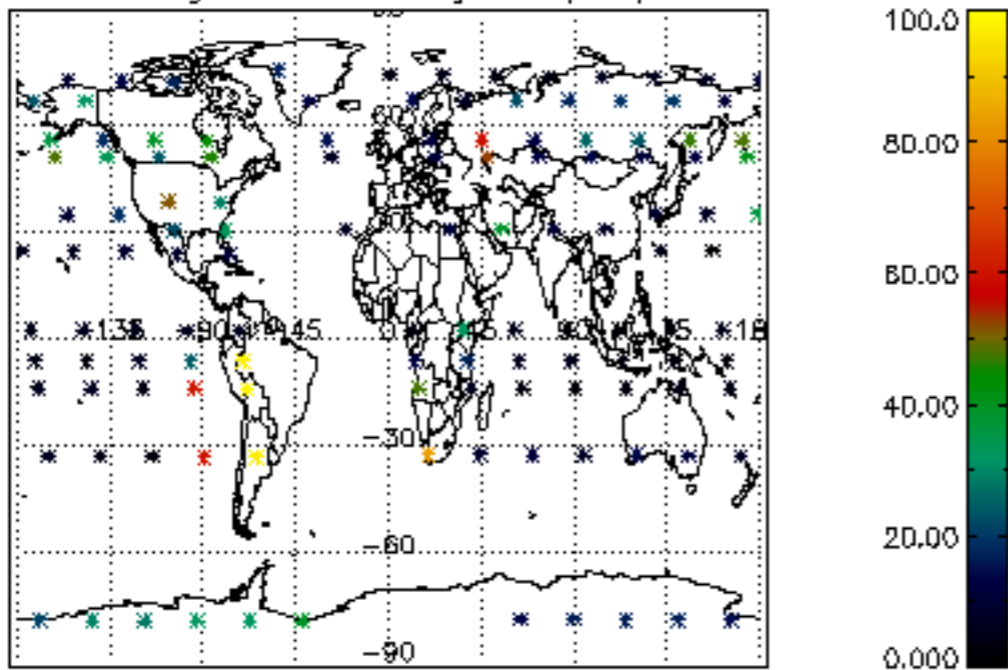
Percentage of flagged data per NO3 profile



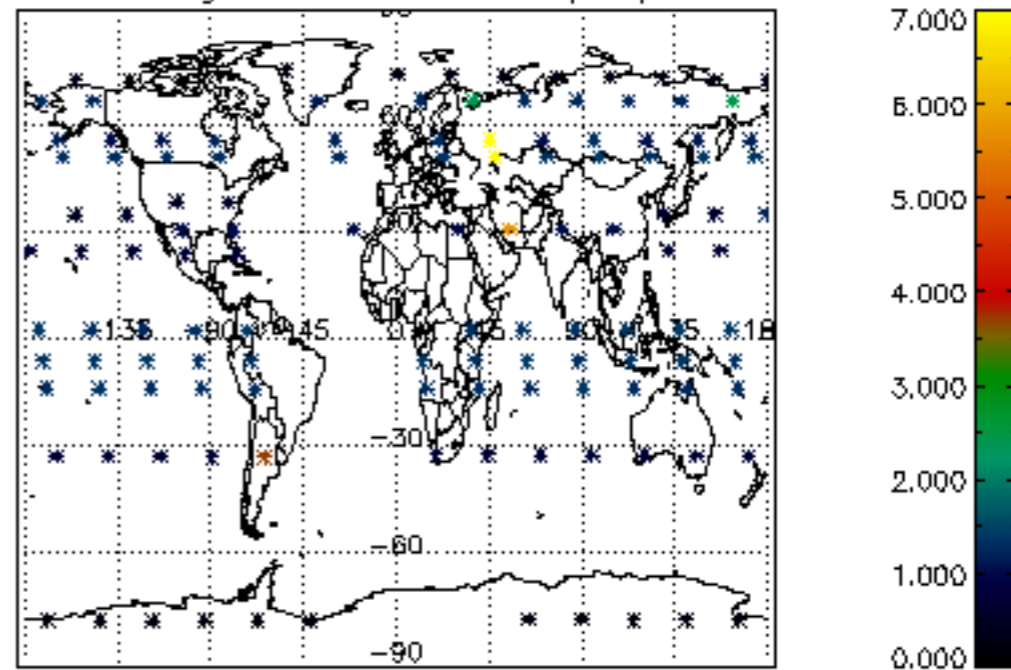




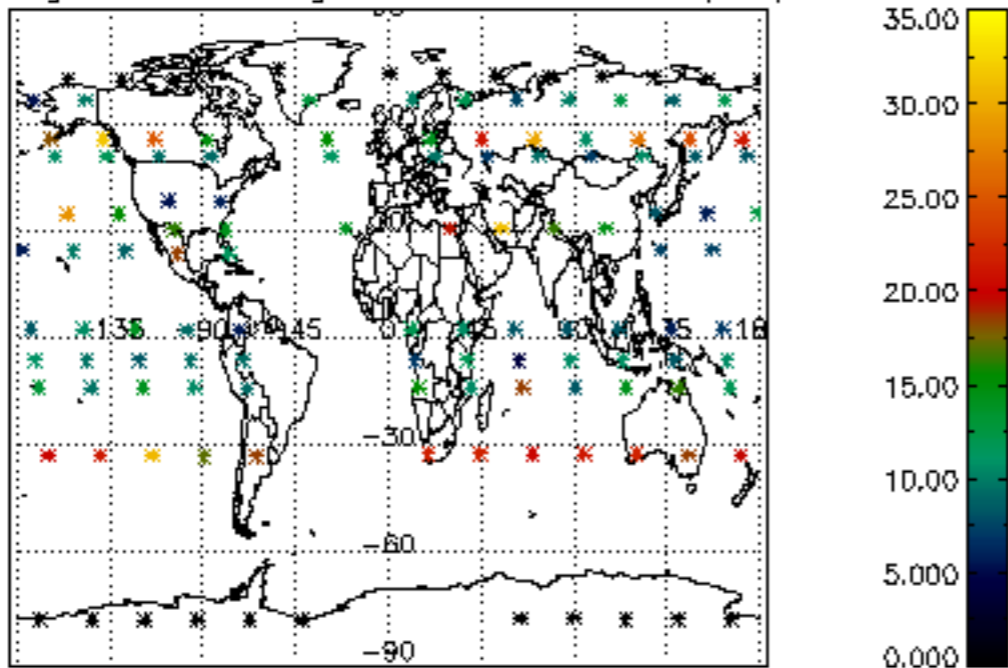
Percentage of cosmic ray hits per profile



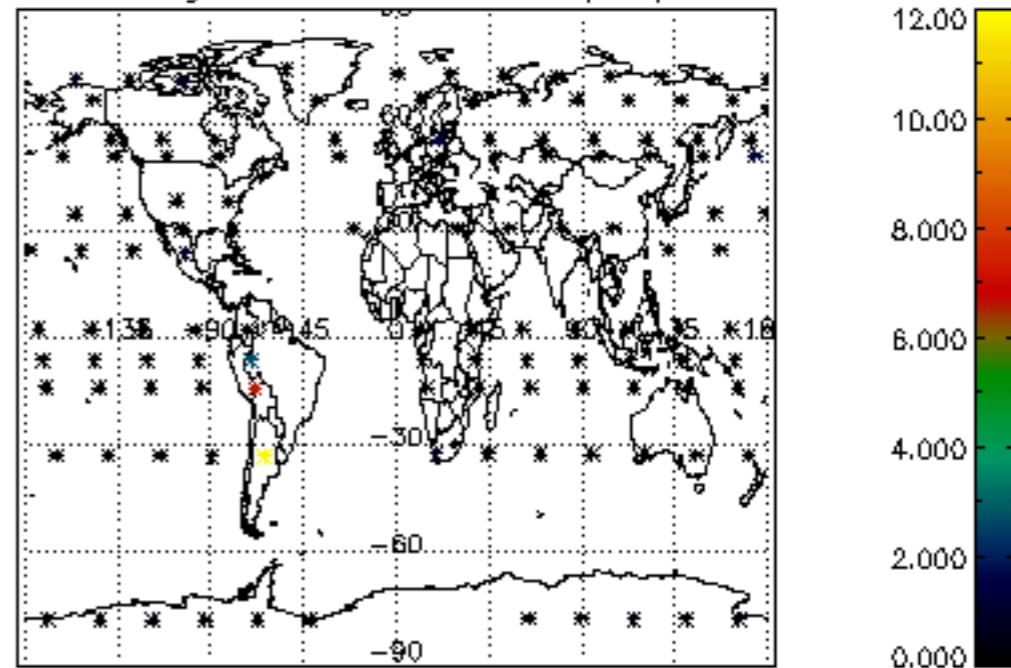
Percentage of datation errors per profile



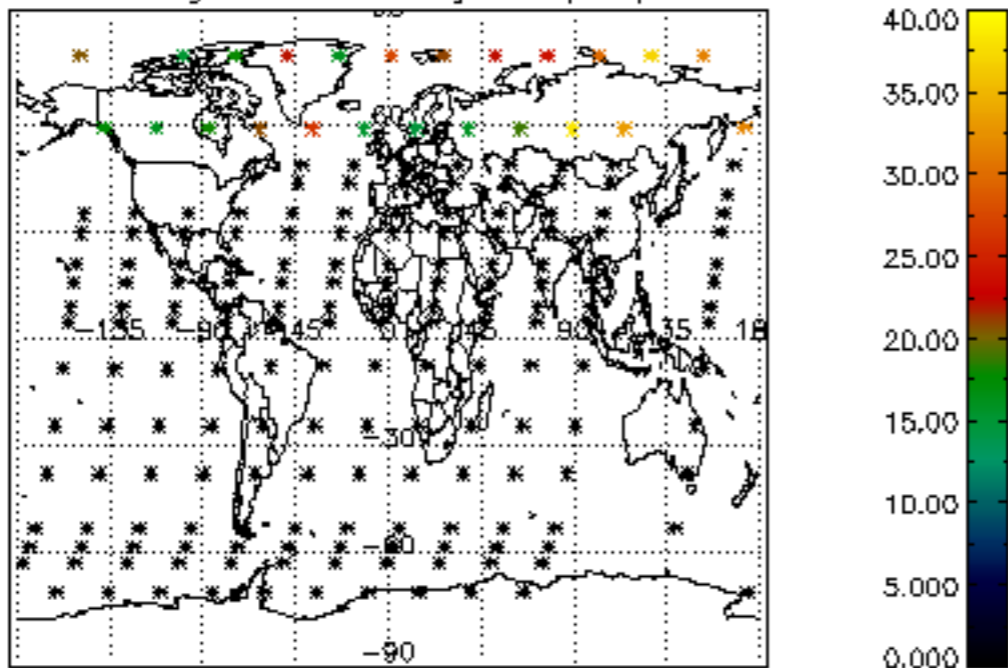
Percentage of star falling outside central band per profile



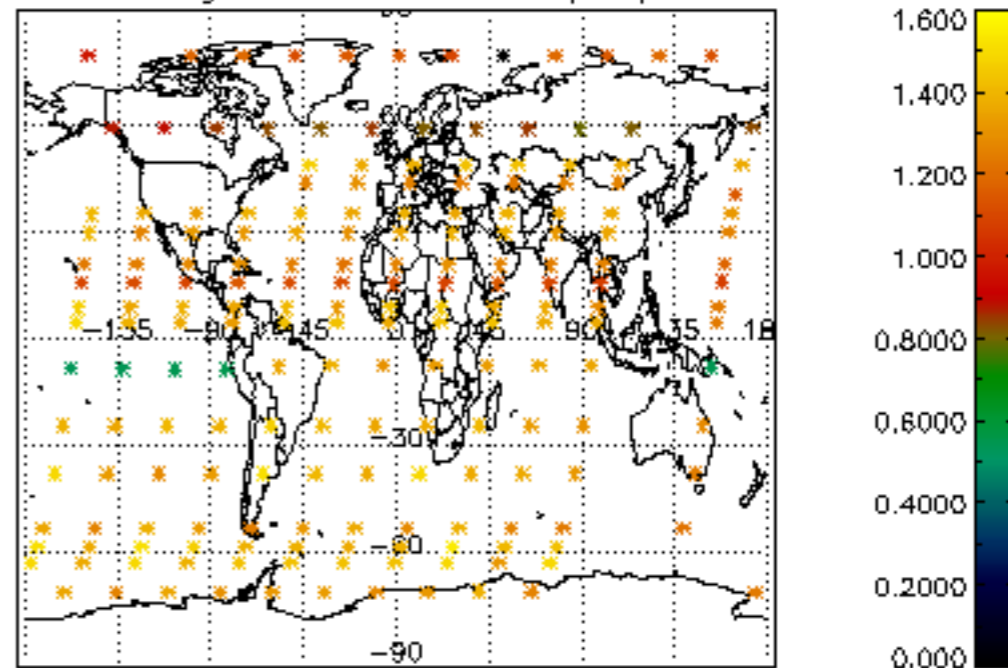
Percentage of saturation errors per profile



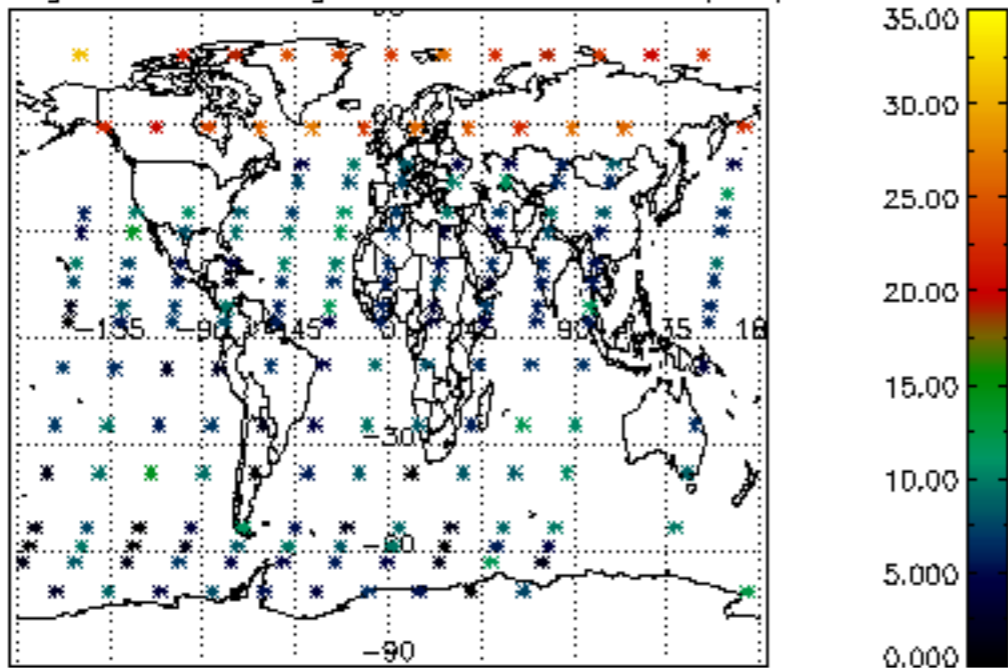
Percentage of cosmic ray hits per profile



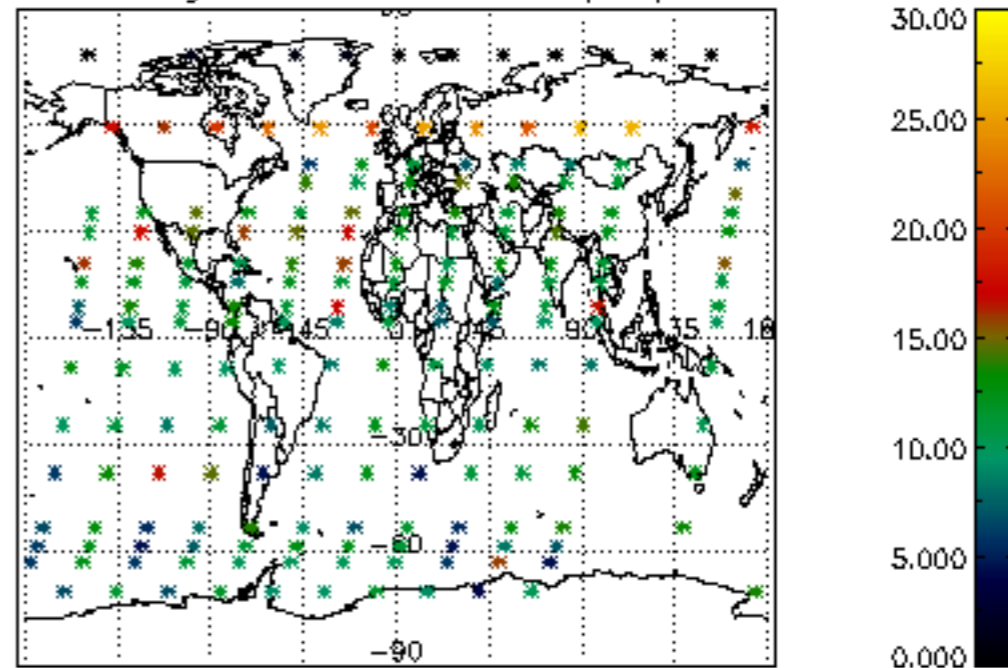
Percentage of datation errors per profile

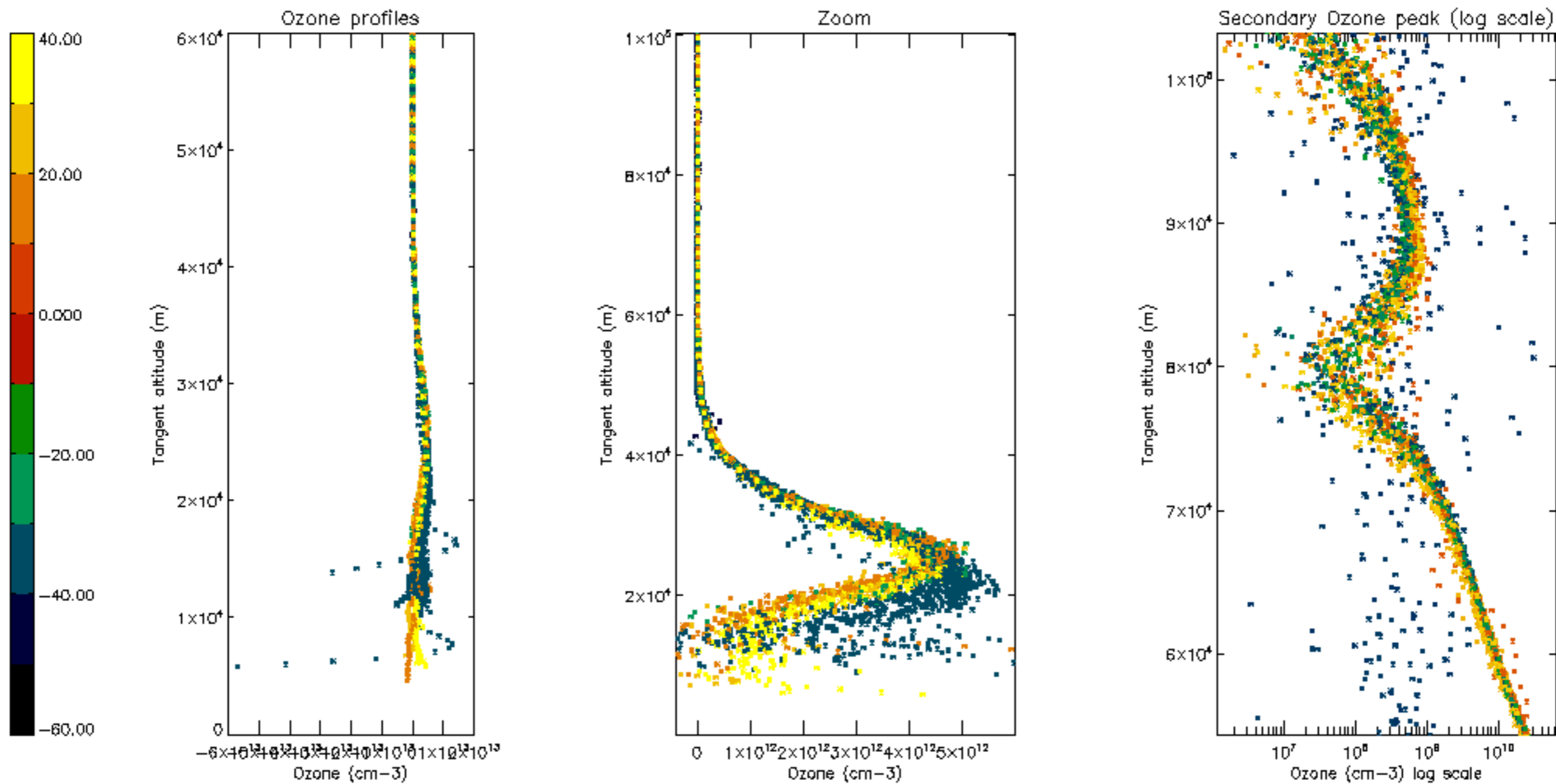


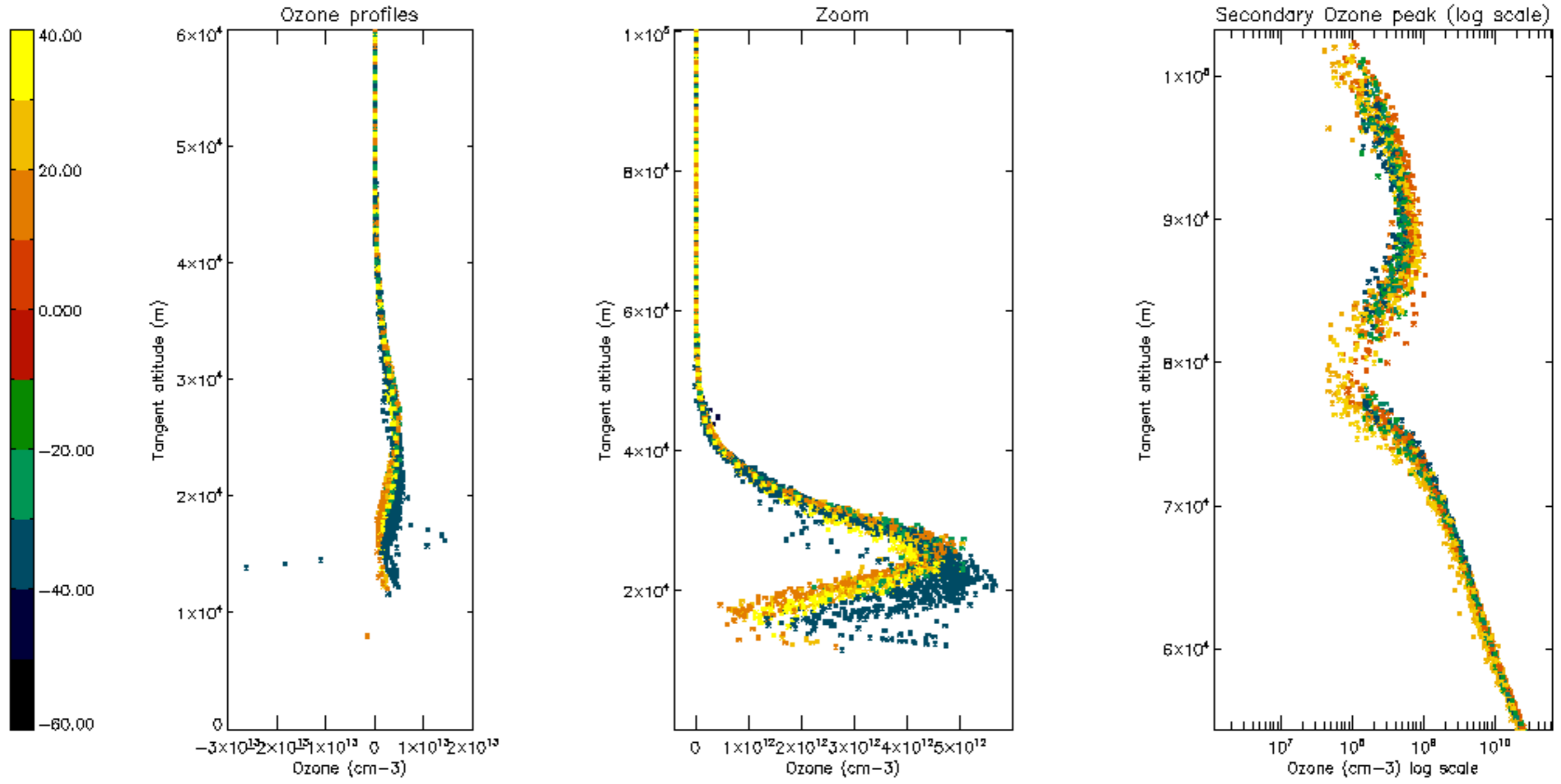
Percentage of star falling outside central band per profile



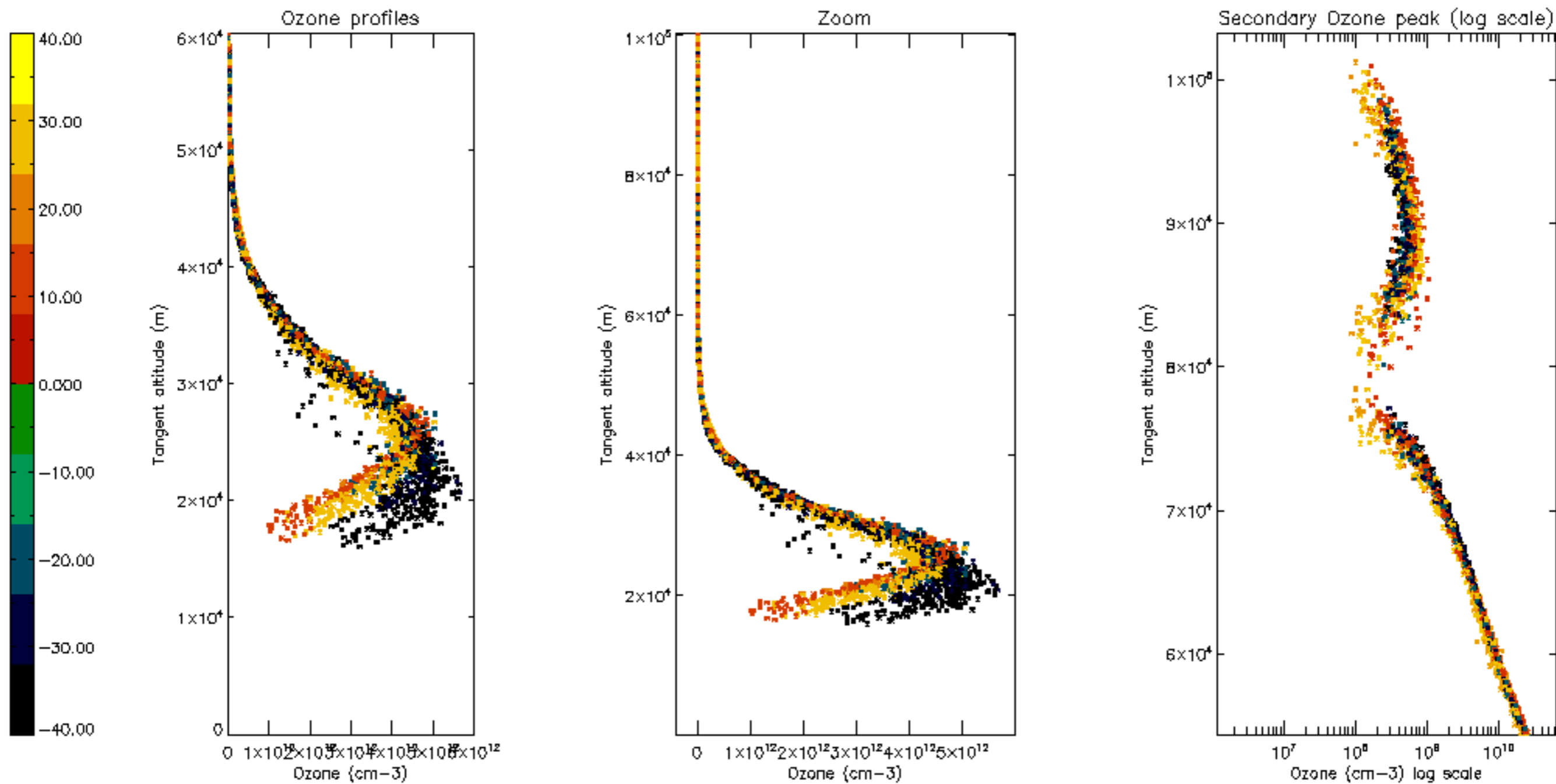
Percentage of saturation errors per profile

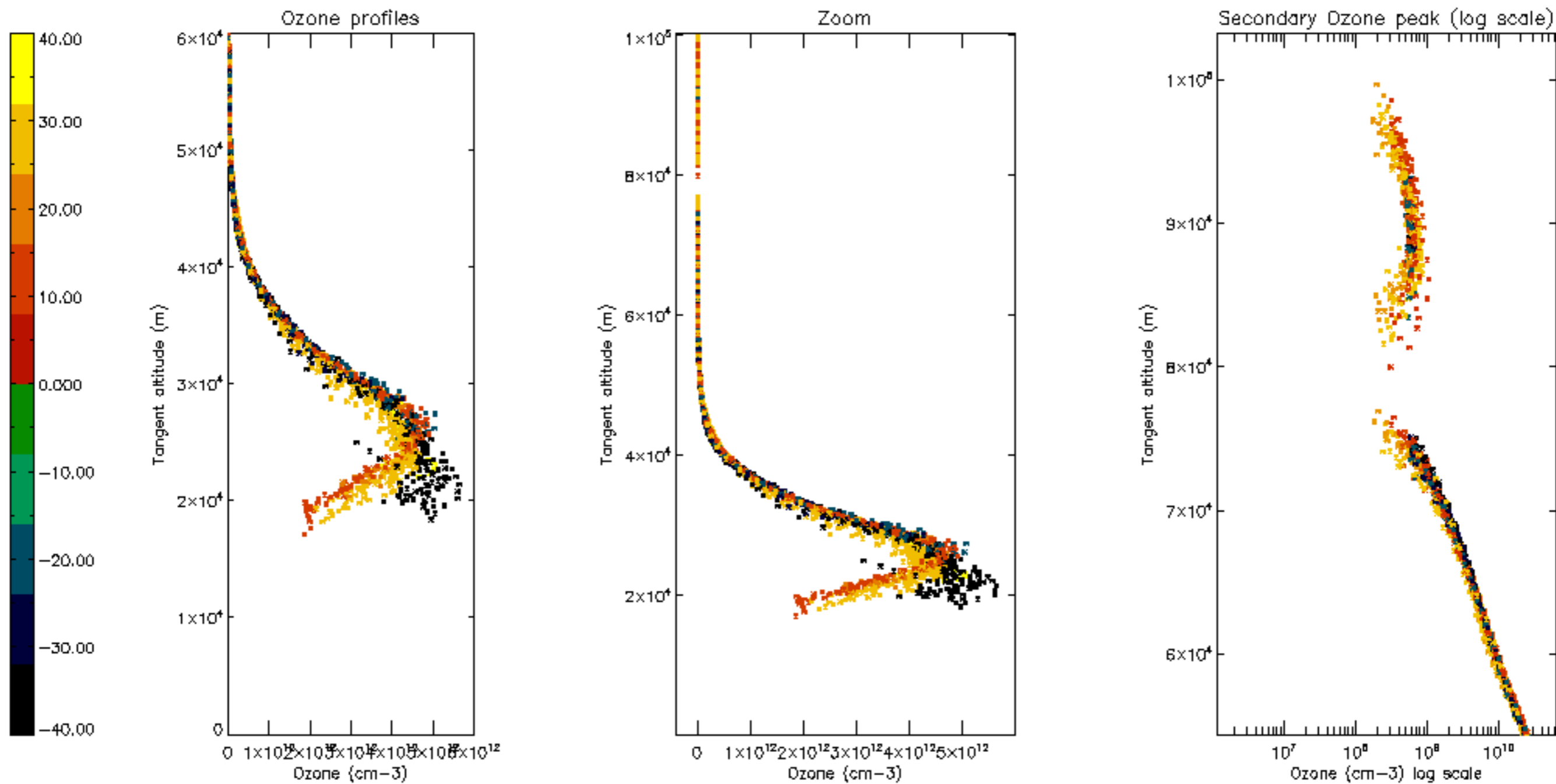


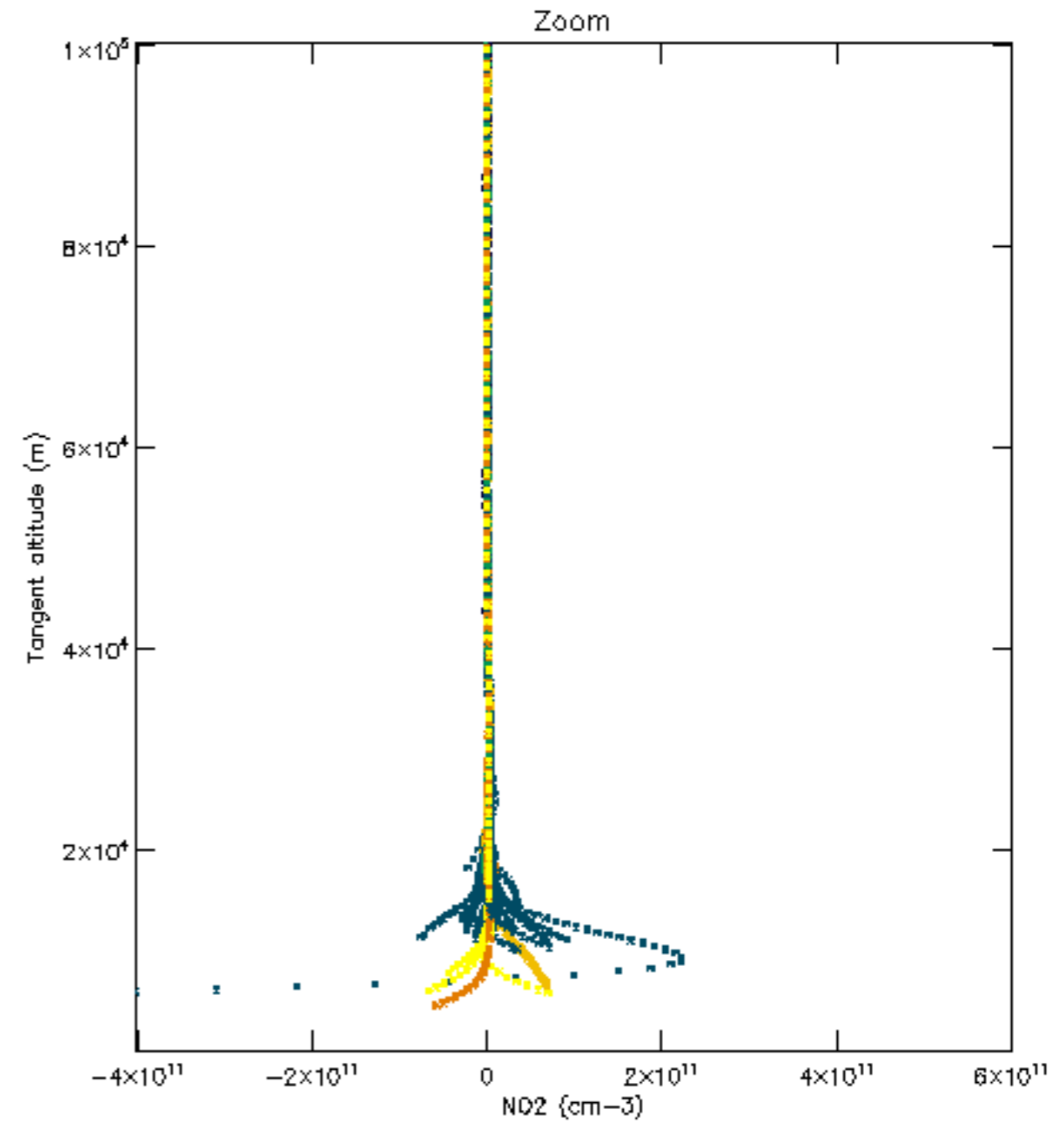
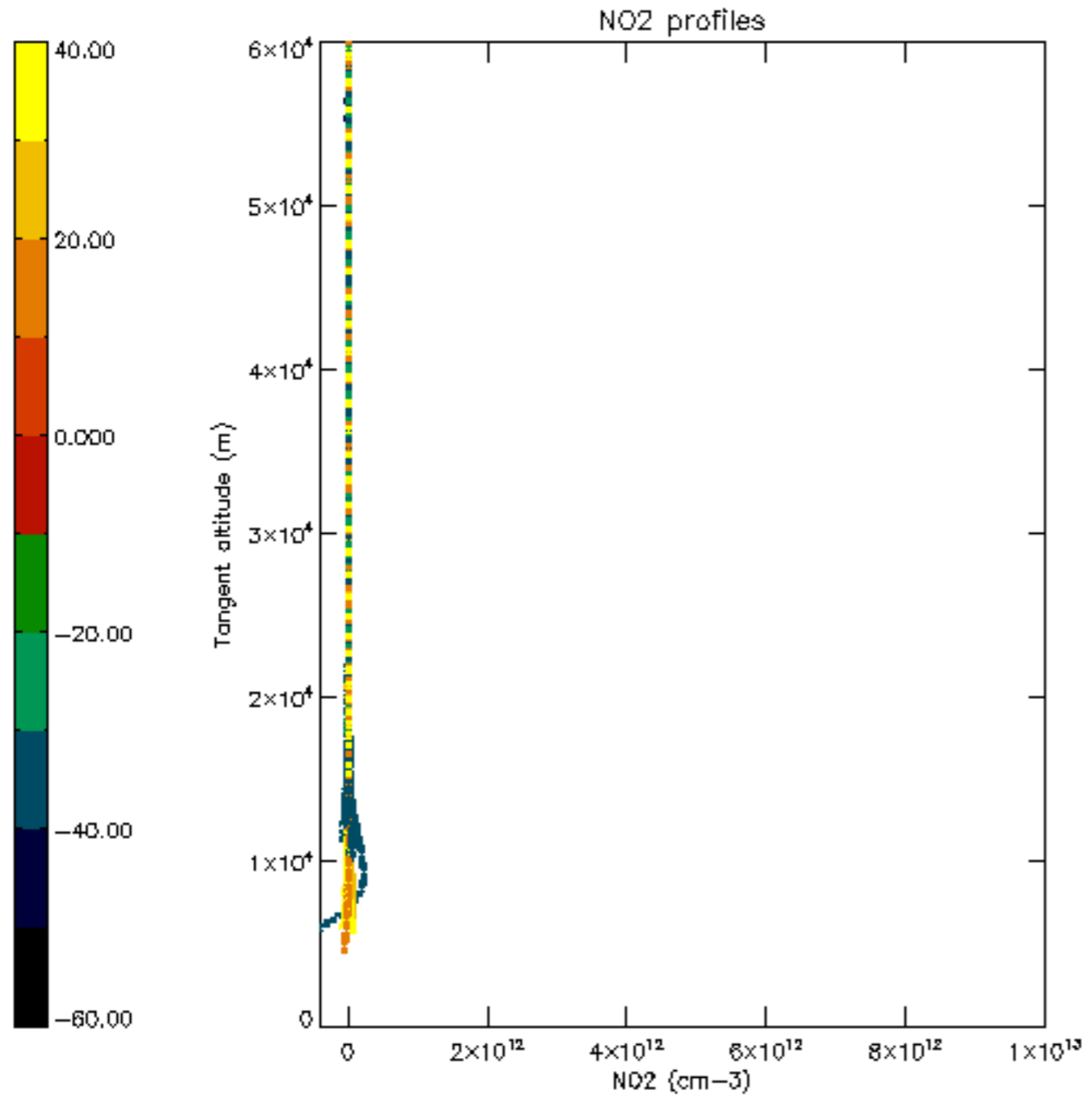


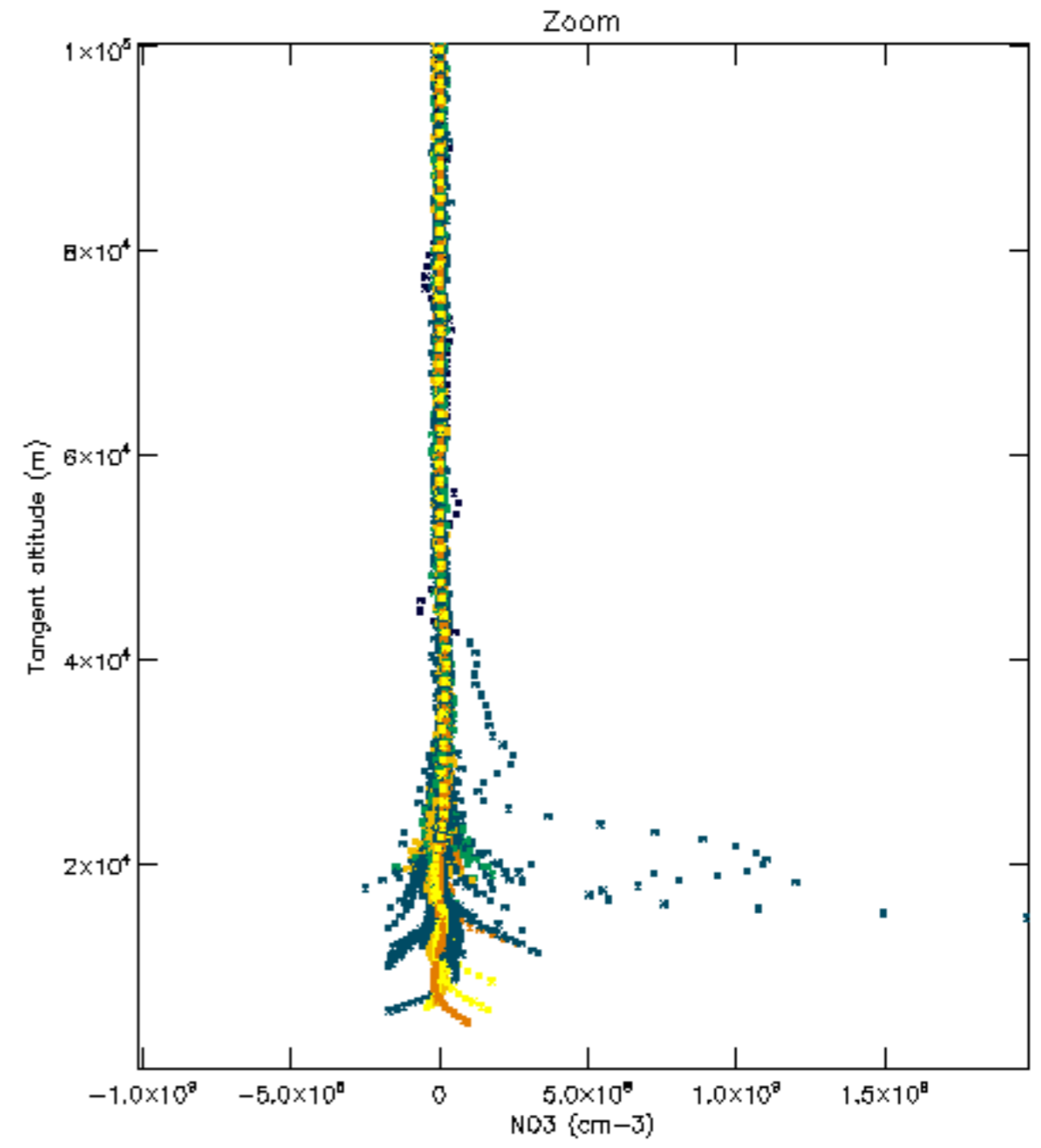
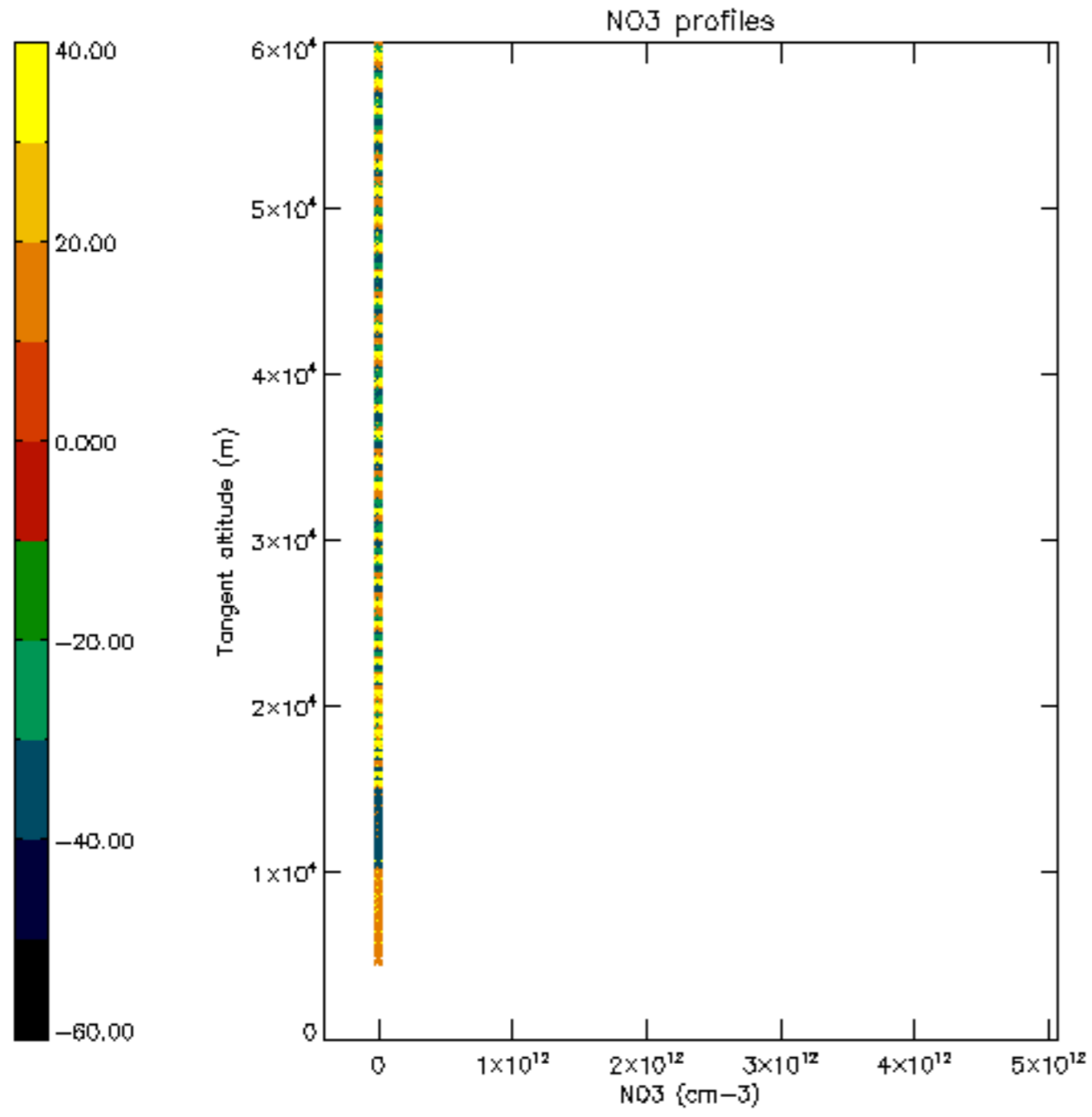


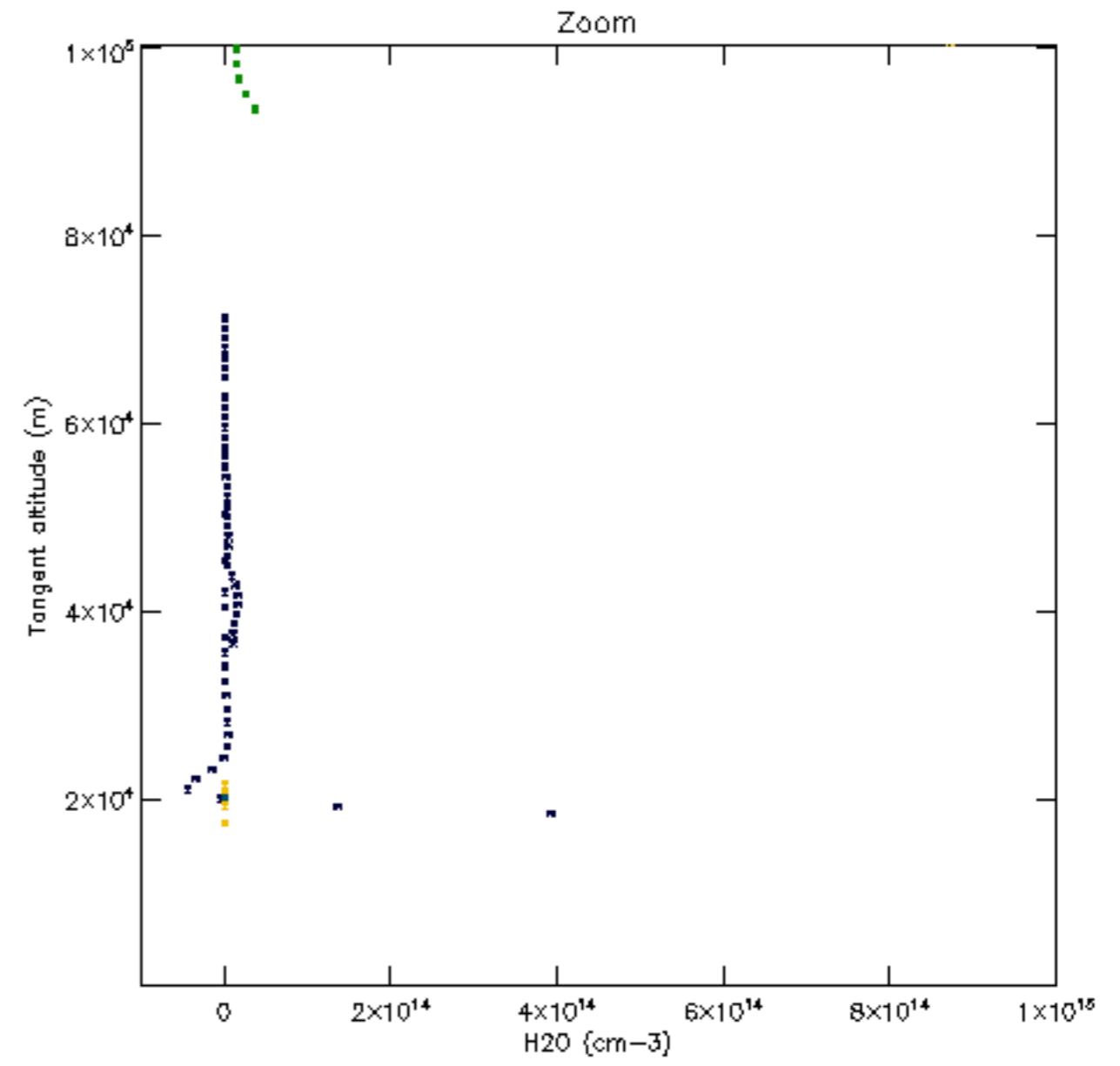
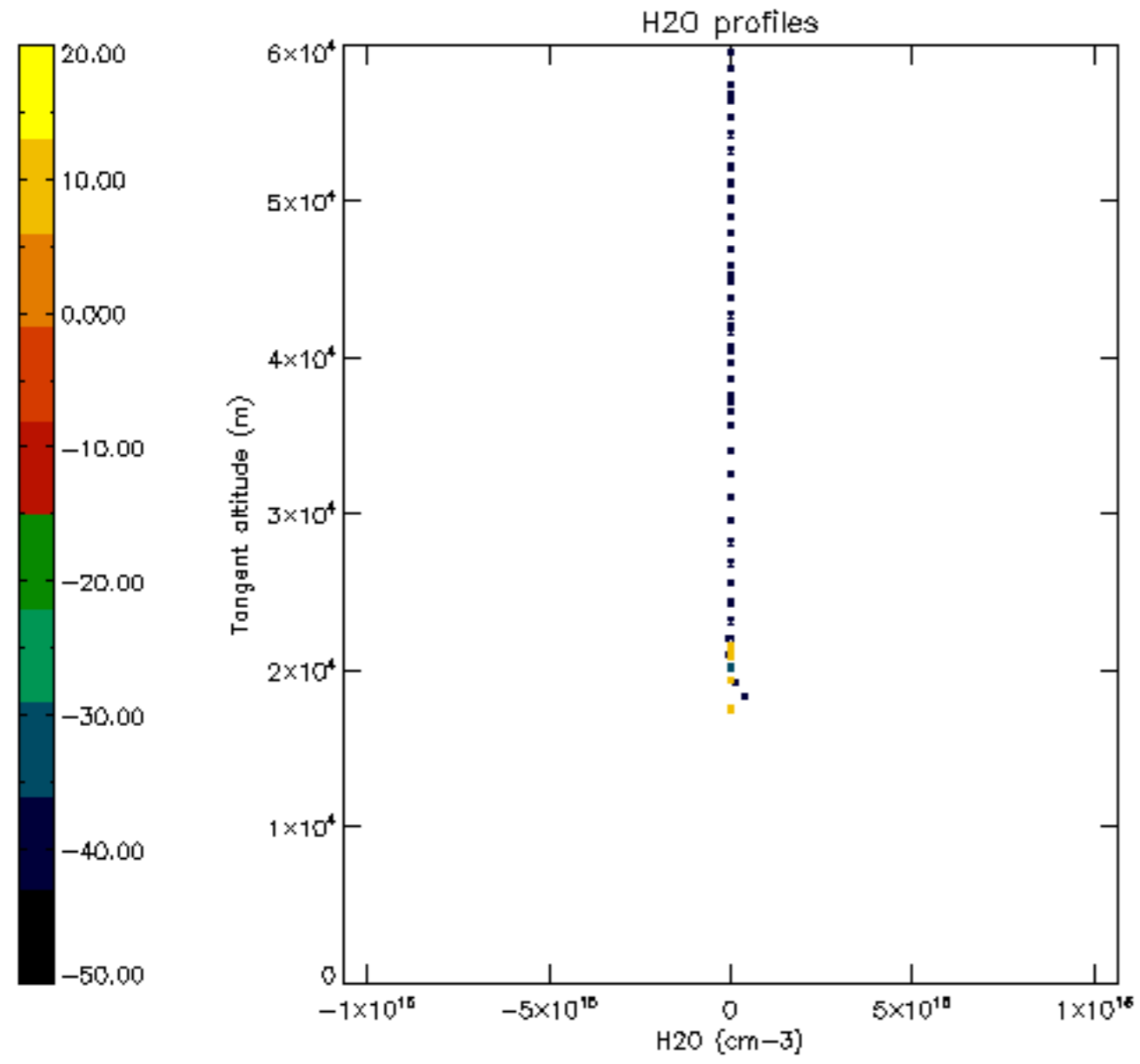


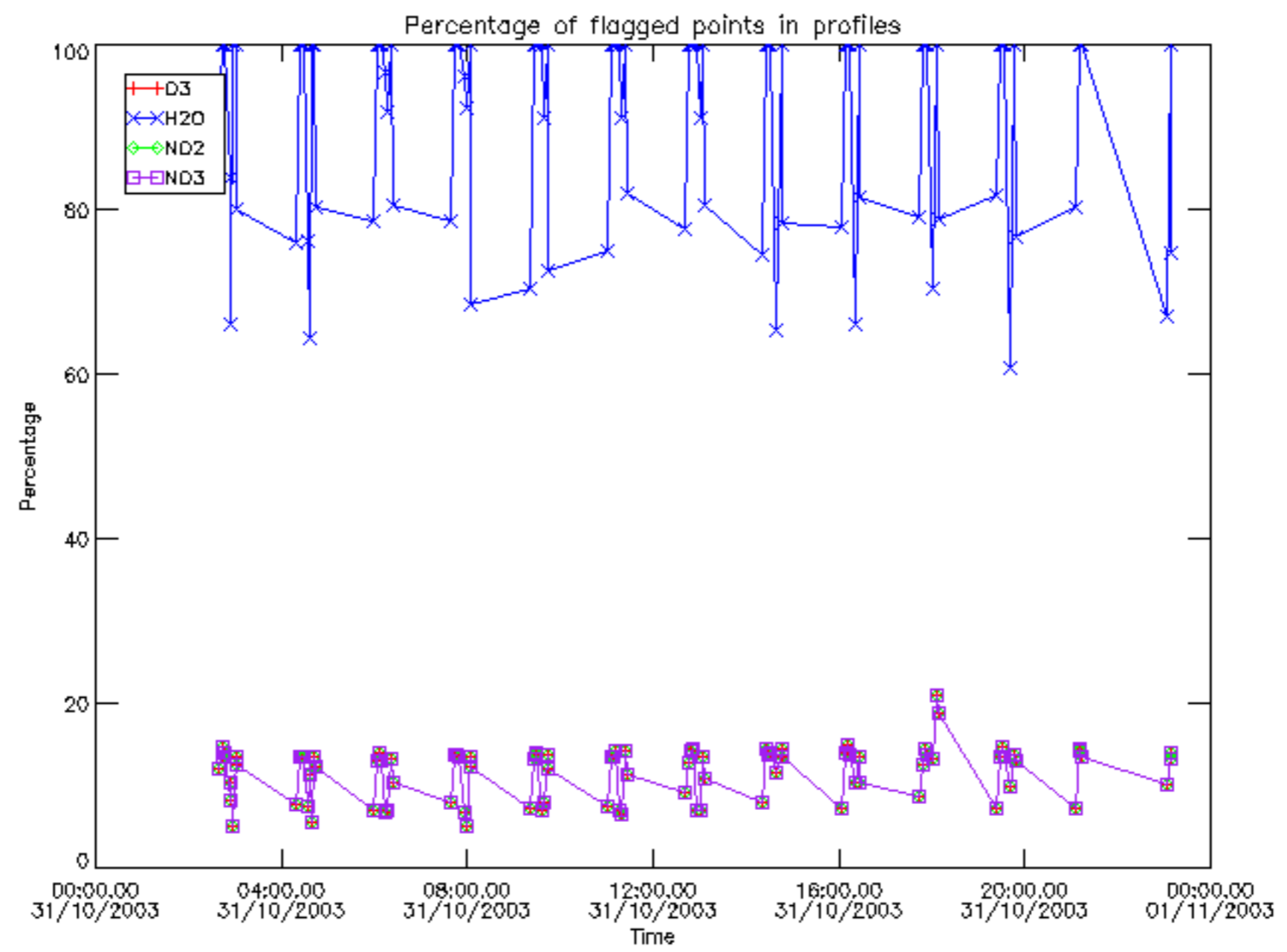




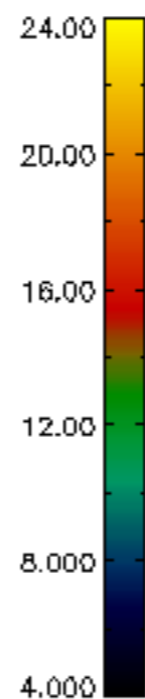
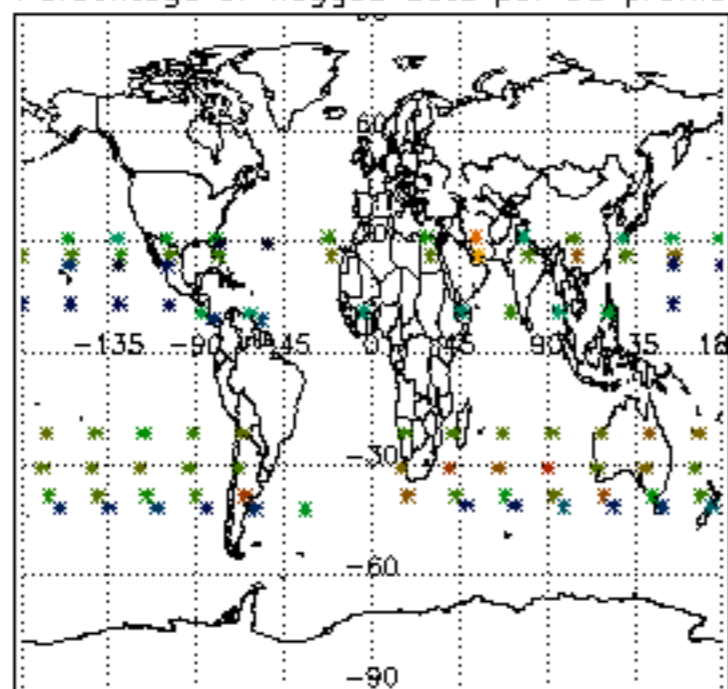




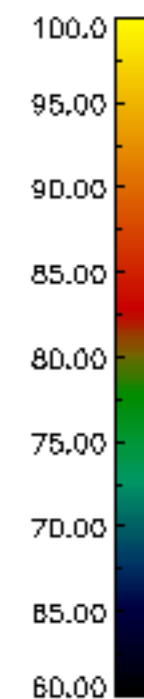
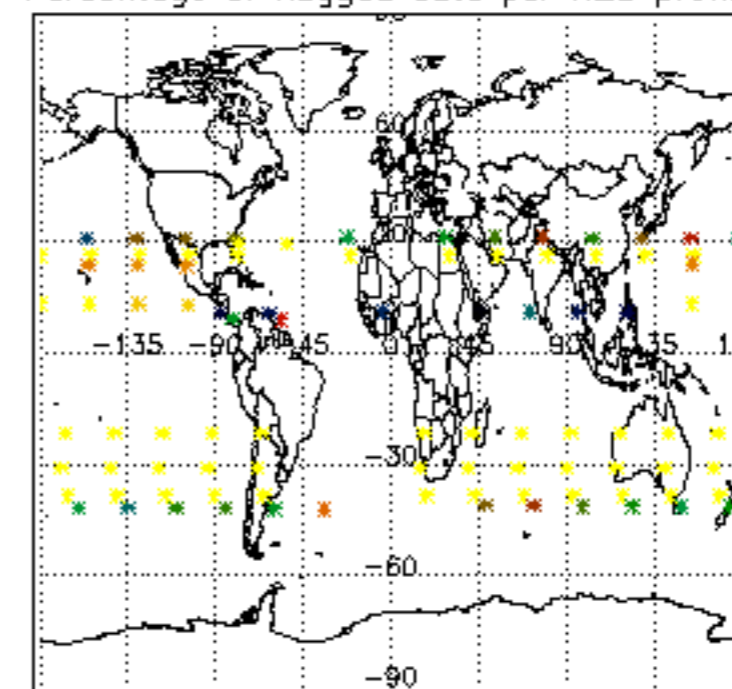




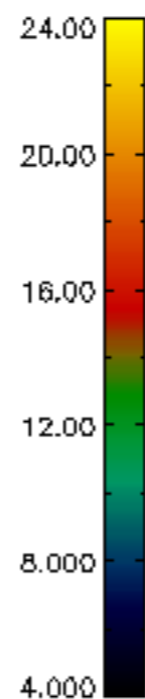
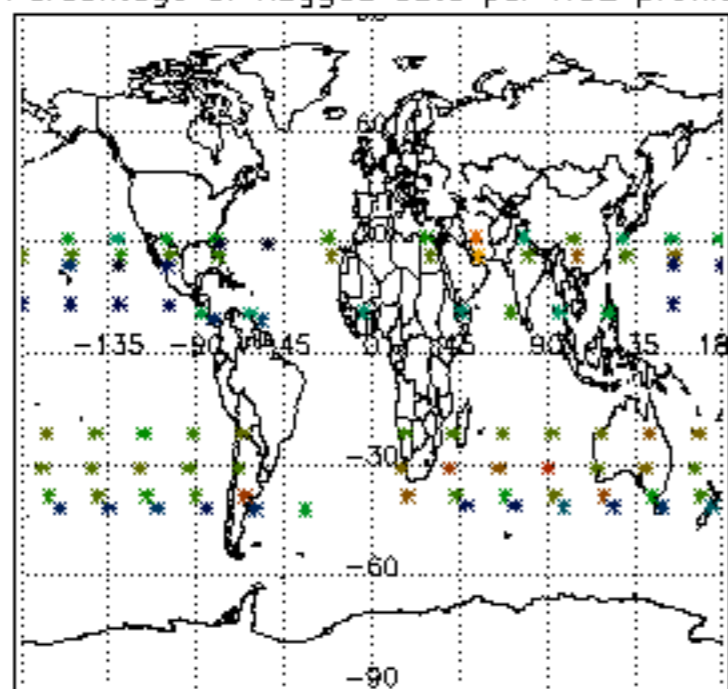
Percentage of flagged data per D3 profile



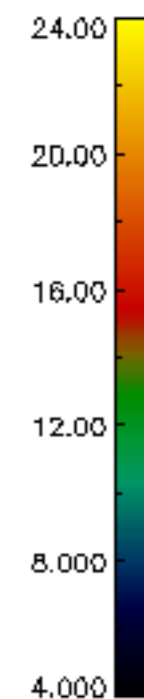
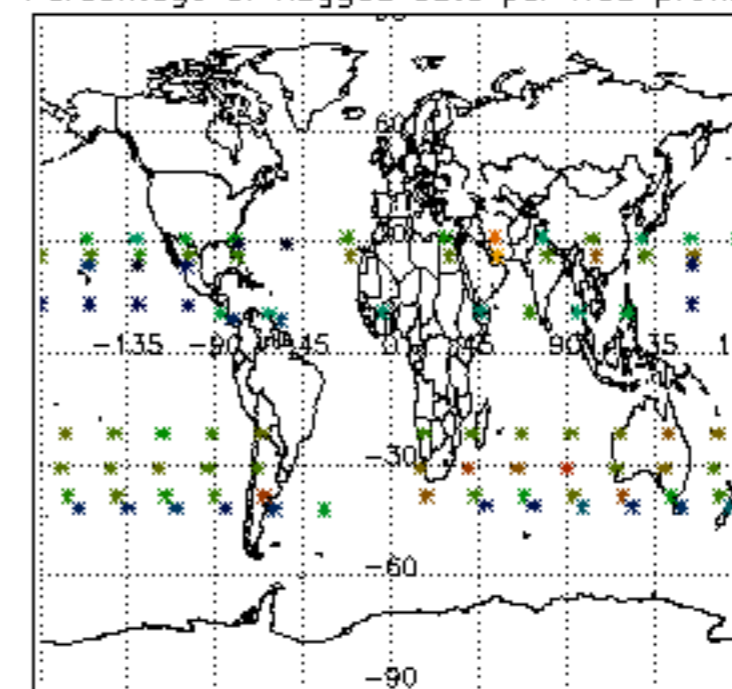
Percentage of flagged data per H2O profile

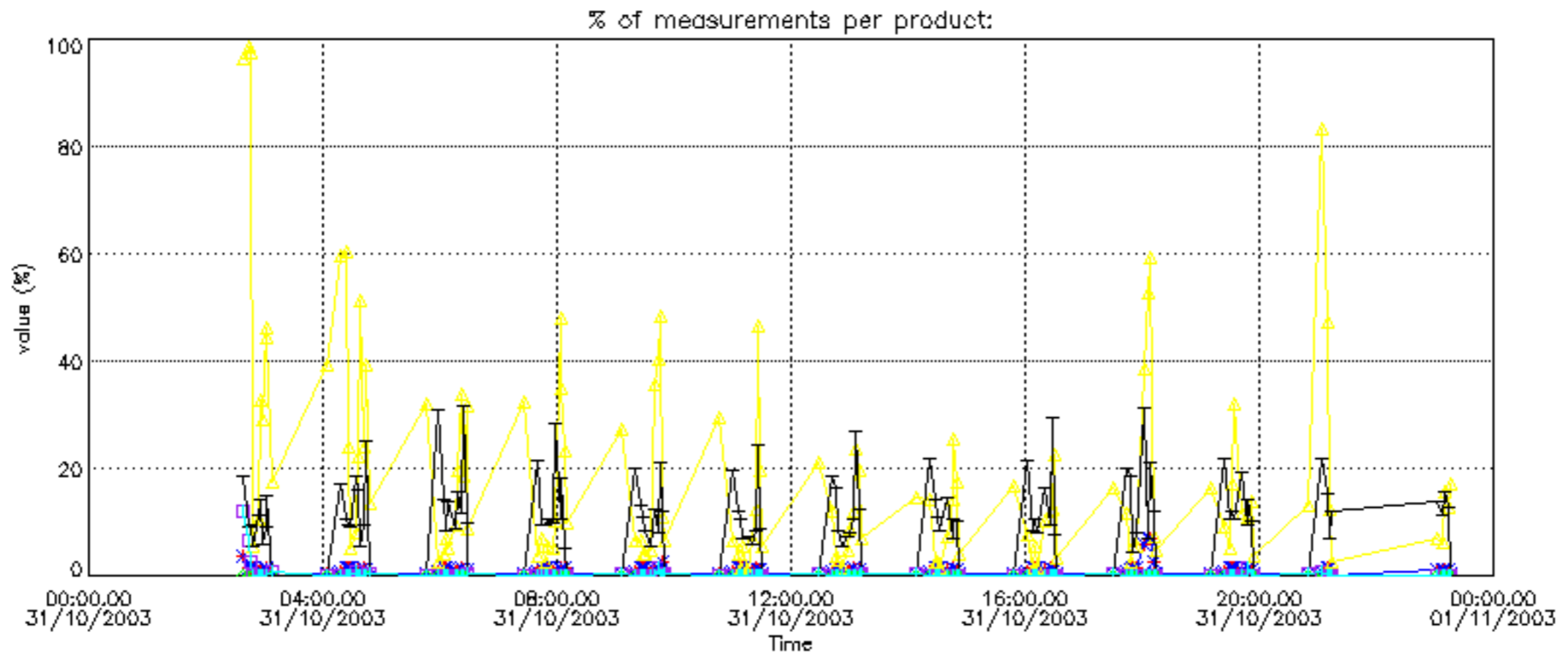


Percentage of flagged data per NO2 profile

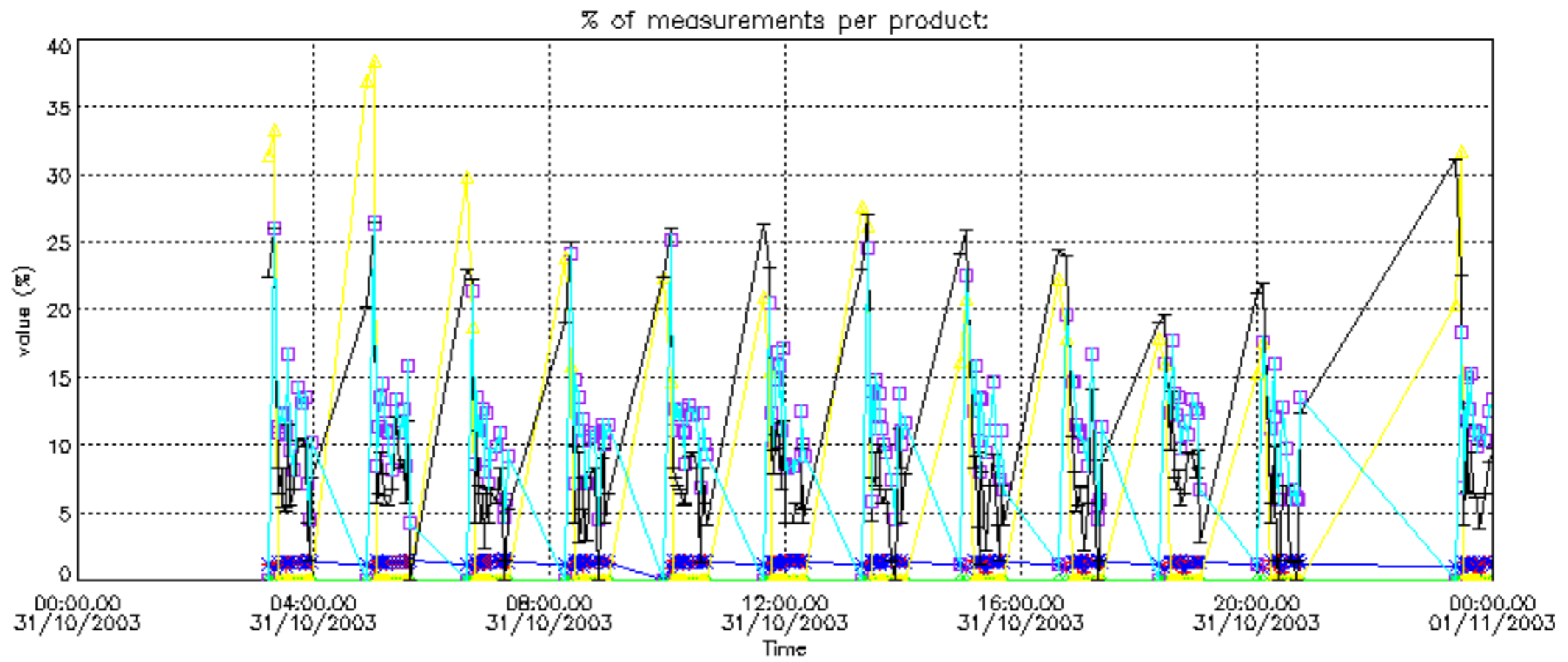


Percentage of flagged data per NO3 profile

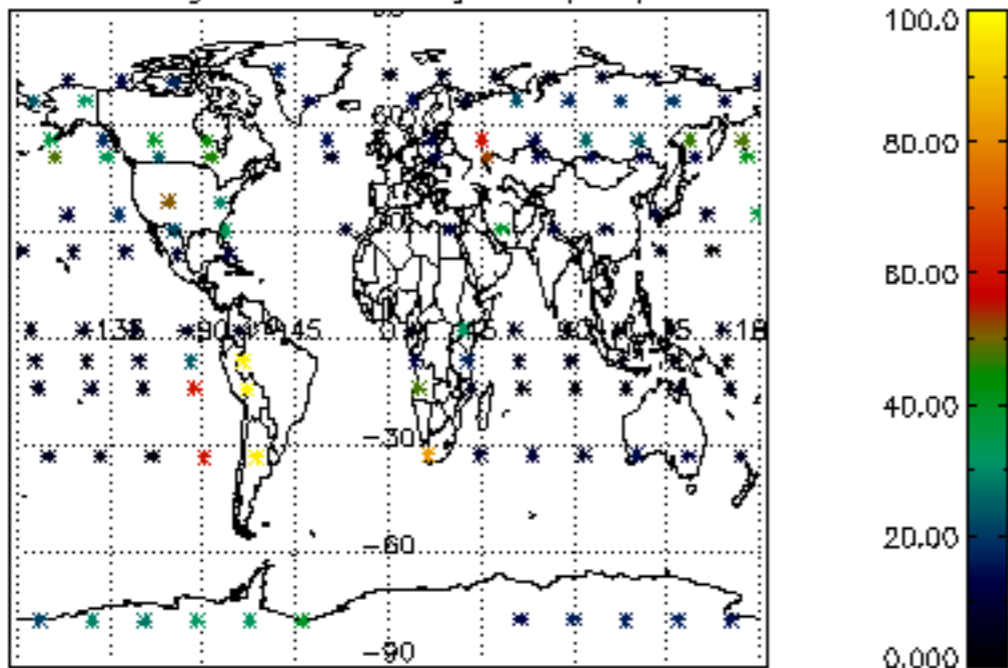




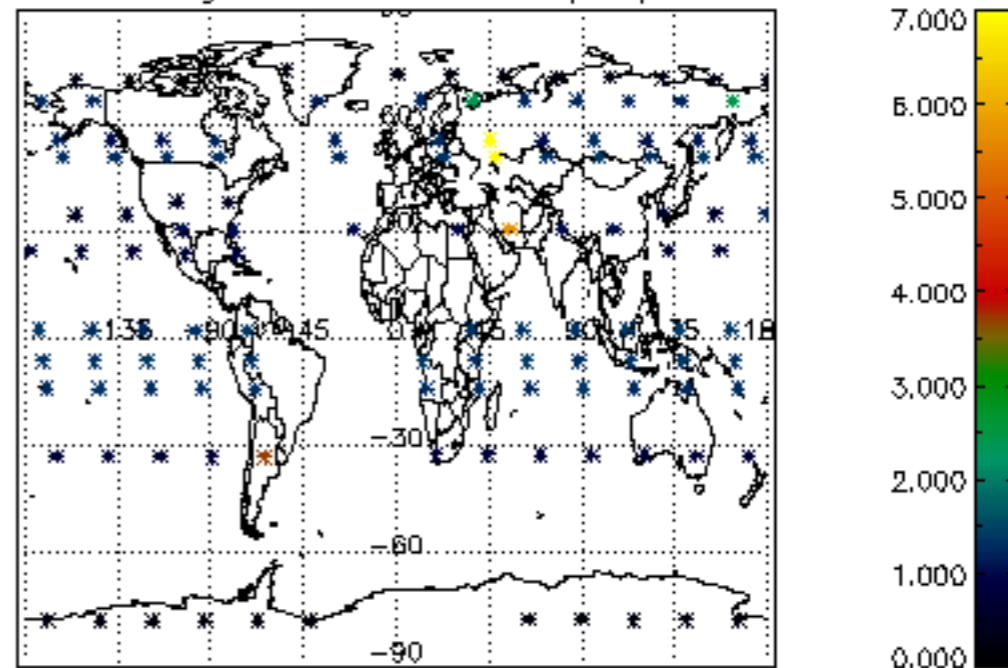




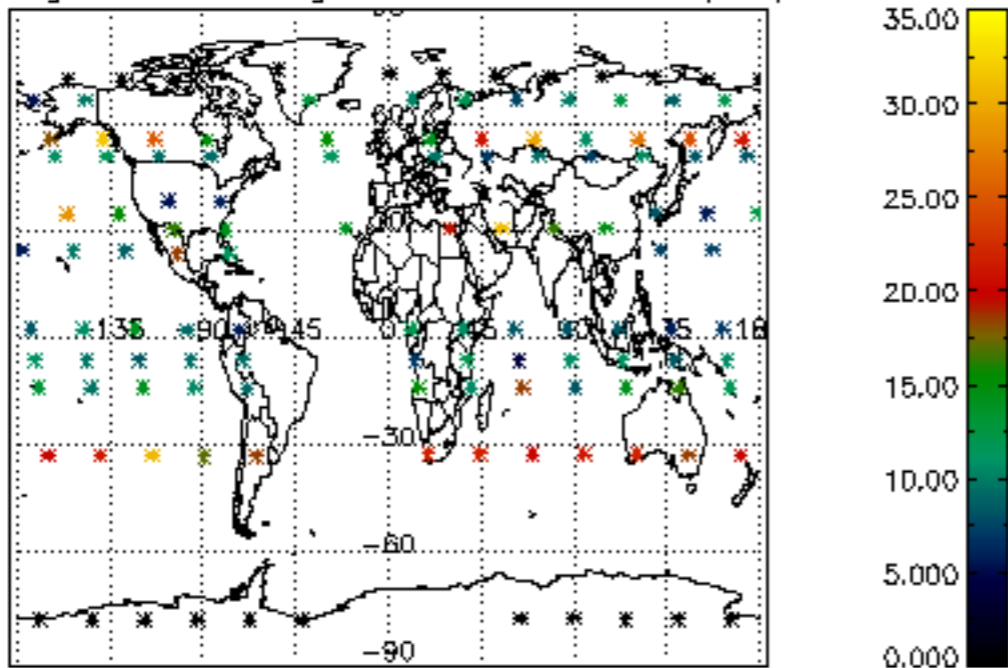
Percentage of cosmic ray hits per profile



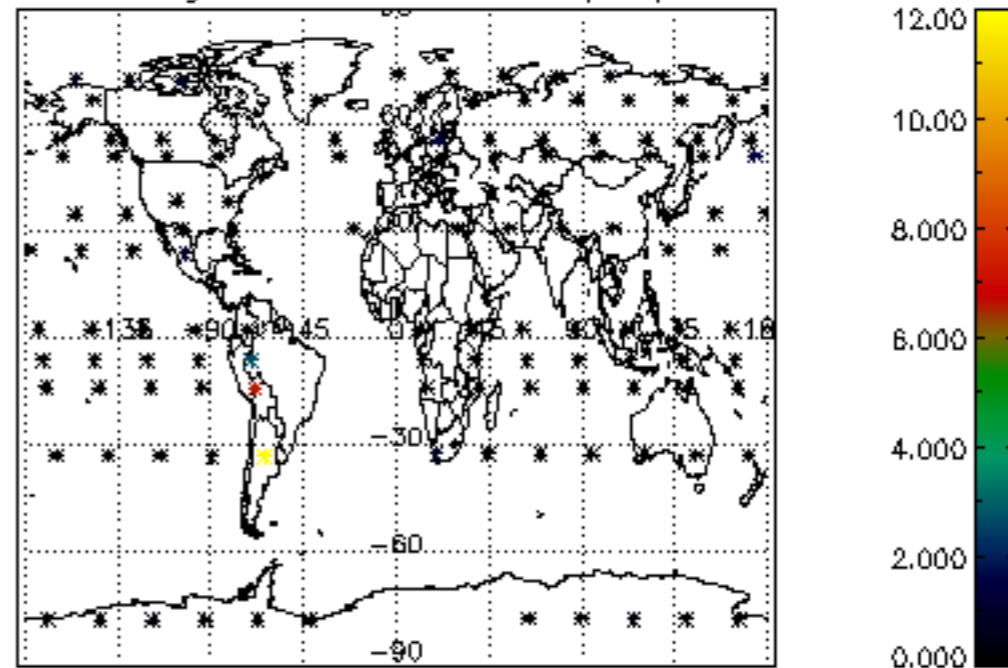
Percentage of datation errors per profile



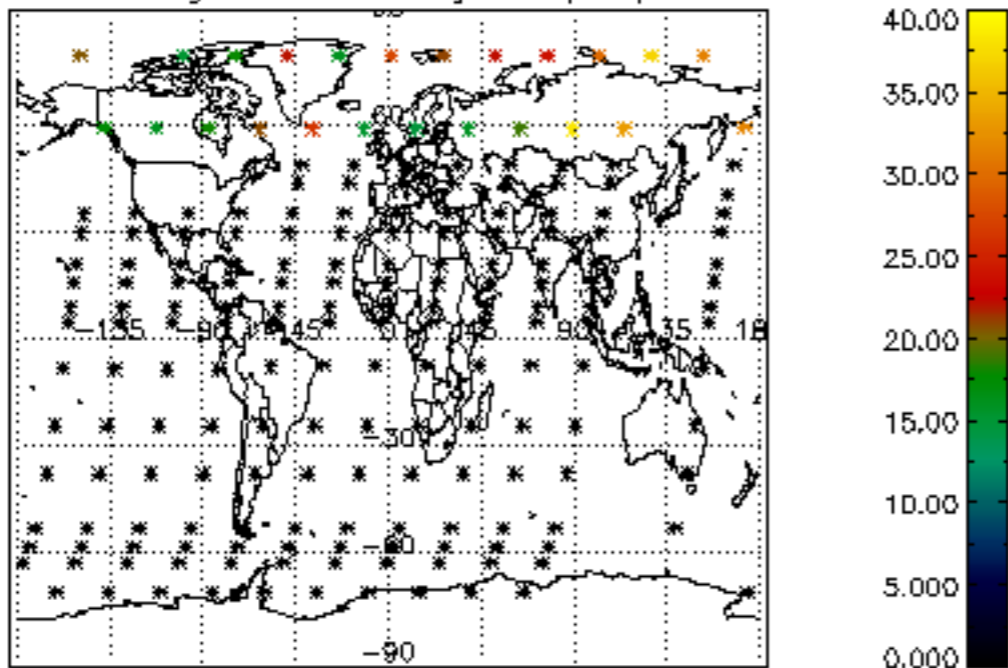
Percentage of star falling outside central band per profile



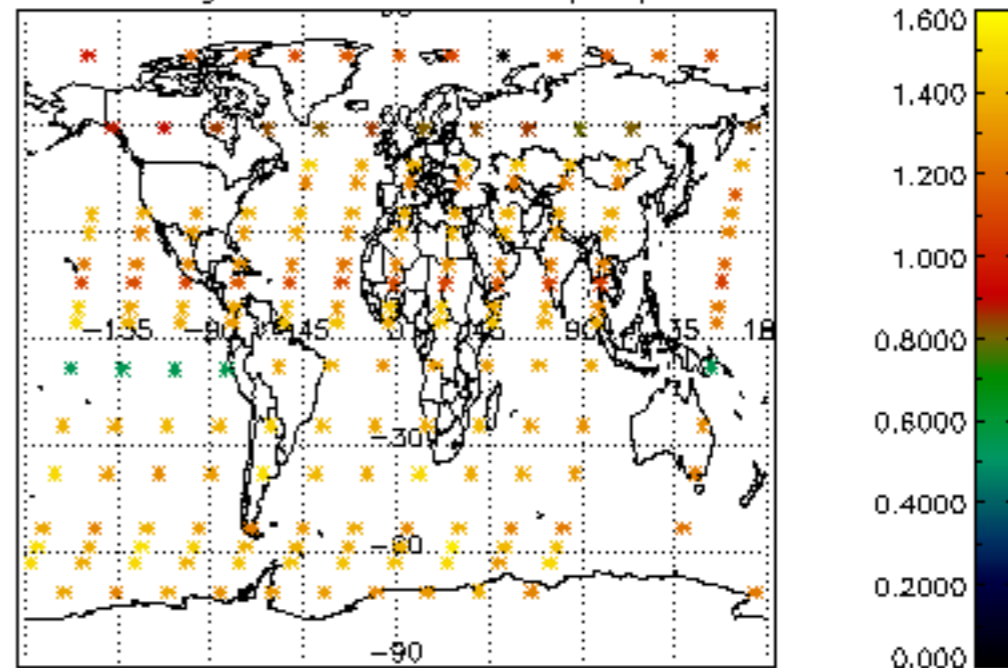
Percentage of saturation errors per profile



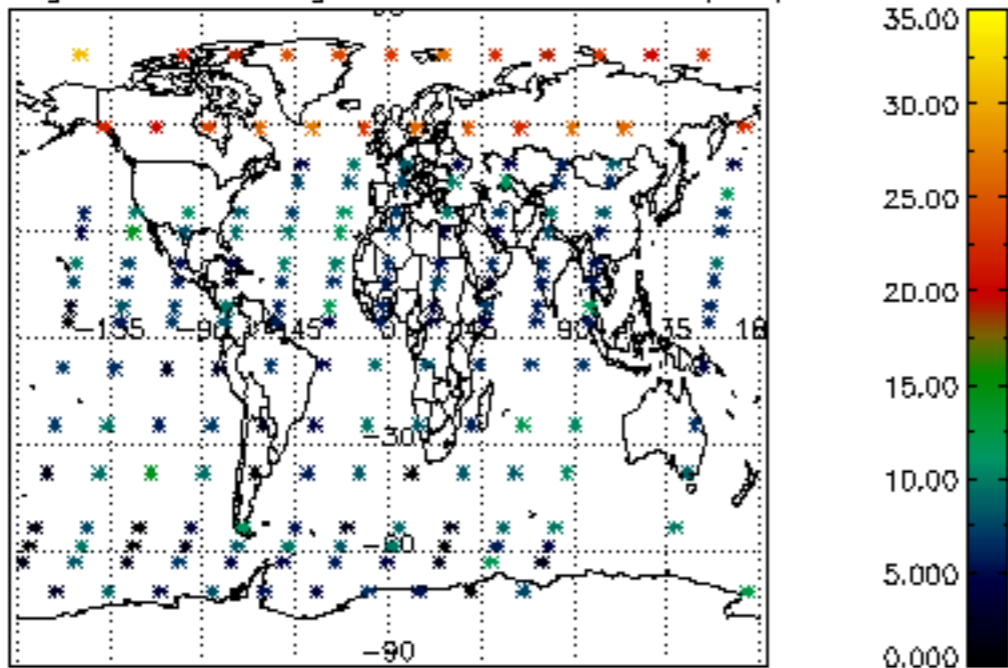
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

