

# GOMOS Level 2 Daily Report

## SUMMARY

### [1. General Info](#)

### [2. Summary of processed GOM\\_NL\\_2P products](#)

### [3. Level 2 Quality information per product](#)

#### [3.1 Plot of level 2 quality information per product \(time dependant\)](#)

#### [3.2 Plot of level 2 quality information per product \(world map\)](#)

### [4. Level 1 Quality information per product \(stored on level 2 products\)](#)

#### [4.1 Plot of level 1 quality information per product \(time dependant\)](#)

##### [4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

##### [4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

#### [4.2 Plot of level 1 quality information per product \(world map\)](#)

##### [4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

##### [4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

### [5. Ozone profiles based on quality statistics and other trace gas profiles](#)

#### [5.1 Ozone statistics based on quality of products](#)

#### [5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

#### [5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

#### [5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

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

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

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

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

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

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

Item	Value
Time of report generation	24APR2013 02:33:20
Data source version	GOMOS/6.01
Start time of products	27-07-2006 (27JUL2006 00:00:00)
Stop time of products	28-07-2006 (28JUL2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	259
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__2PRFIN20060727_000715_000000362049_00431_23030_0672.N1	27-JUL-2006 00:07:15	Bright	36.000	6	13Alp Aur	0.080000	3400.0	72	23030	No
2	GOM_NL__2PRFIN20060727_001113_000000362049_00431_23030_0673.N1	27-JUL-2006 00:11:13	Bright	36.000	114	3Iot Aur	2.6930	4600.0	72	23030	No
3	GOM_NL__2PRFIN20060727_001639_000000512049_00431_23030_0674.N1	27-JUL-2006 00:16:39	Dark	51.000	13	87Alp Tau	0.86700	3800.0	102	23030	No
4	GOM_NL__2PRFIN20060727_001842_000000332049_00431_23030_0675.N1	27-JUL-2006 00:18:42	Dark	32.500	27	24Gam Ori	1.6360	26000.	65	23030	No
5	GOM_NL__2PRFIN20060727_002027_000000312049_00431_23030_0676.N1	27-JUL-2006 00:20:27	Dark	31.000	72	34Del Ori	2.2500	30000.	62	23030	No
6	GOM_NL__2PRFIN20060727_002259_000000362049_00431_23030_0677.N1	27-JUL-2006 00:22:59	Dark	36.000	7	19Bet Ori	0.10000	14000.	72	23030	No
7	GOM_NL__2PRFIN20060727_002700_000000442049_00431_23030_0678.N1	27-JUL-2006 00:27:00	Dark	43.500	165	34Gam Eri	2.9500	3200.0	87	23030	No
8	GOM_NL__2PRFIN20060727_003620_000000372049_00431_23030_0679.N1	27-JUL-2006 00:36:20	Dark	37.000	157	The1Eri	2.9060	9300.0	74	23030	No
9	GOM_NL__2PRFIN20060727_004209_000000362049_00432_23031_0662.N1	27-JUL-2006 00:42:09	Dark	36.000	9	Alp Eri	0.45300	24000.	72	23031	No
10	GOM_NL__2PRFIN20060727_004917_000000352049_00432_23031_0663.N1	27-JUL-2006 00:49:17	Straylight	35.000	148	Alp Tuc	2.8780	4100.0	70	23031	No
11	GOM_NL__2PRFIN20060727_005112_000000552049_00432_23031_0664.N1	27-JUL-2006 00:51:12	Straylight	55.000	63	Bet Gru	2.1500	2800.0	110	23031	No
12	GOM_NL__2PRFIN20060727_005231_000000412049_00432_23031_0665.N1	27-JUL-2006 00:52:31	Straylight	41.000	31	Alp Gru	1.7340	15200.	82	23031	No
13	GOM_NL__2PRFIN20060727_011219_000000332049_00432_23031_0666.N1	27-JUL-2006 01:12:19	Bright	32.500	11	53Alp Aql	0.76500	8000.0	65	23031	No
14	GOM_NL__2PRFIN20060727_011335_000000292049_00432_23031_0667.N1	27-JUL-2006 01:13:35	Bright	29.000	168	17Zet Aql	2.9860	11000.	58	23031	No
15	GOM_NL__2PRFIN20060727_012039_000000322049_00432_23031_0668.N1	27-JUL-2006 01:20:39	Bright	32.000	5	3Alp Lyr	0.033000	11000.	64	23031	No
16	GOM_NL__2PRFIN20060727_012306_000000312049_00432_23031_0669.N1	27-JUL-2006 01:23:06	Bright	31.000	144	18Del Cyg	2.8600	11000.	62	23031	No
17	GOM_NL__2PRFIN20060727_012958_000000322049_00432_23031_0670.N1	27-JUL-2006 01:29:58	Bright	31.500	89	5Alp Cep	2.4510	8000.0	63	23031	No
18	GOM_NL__2PRFIN20060727_013514_000000302049_00432_23031_0671.N1	27-JUL-2006 01:35:14	Bright	30.000	49	1Alp UMi	1.9900	6300.0	60	23031	No
19	GOM_NL__2PRFIN20060727_014751_000000362049_00432_23031_0672.N1	27-JUL-2006 01:47:51	Bright	35.500	6	13Alp Aur	0.080000	3400.0	71	23031	No
20	GOM_NL__2PRFIN20060727_015149_000000332049_00432_23031_0673.N1	27-JUL-2006 01:51:49	Bright	33.000	114	3Iot Aur	2.6930	4600.0	66	23031	No
21	GOM_NL__2PRFIN20060727_015716_000000452049_00432_23031_0674.N1	27-JUL-2006 01:57:16	Dark	44.500	13	87Alp Tau	0.86700	3800.0	89	23031	No
22	GOM_NL__2PRFIN20060727_015919_000000332049_00432_23031_0675.N1	27-JUL-2006 01:59:19	Dark	32.500	27	24Gam Ori	1.6360	26000.	65	23031	No
23	GOM_NL__2PRFIN20060727_020103_000000302049_00432_23031_0676.N1	27-JUL-2006 02:01:03	Dark	30.000	72	34Del Ori	2.2500	30000.	60	23031	No
24	GOM_NL__2PRFIN20060727_020335_000000312049_00432_23031_0677.N1	27-JUL-2006 02:03:35	Dark	31.000	7	19Bet Ori	0.10000	14000.	62	23031	No
25	GOM_NL__2PRFIN20060727_020737_000000442049_00432_23031_0678.N1	27-JUL-2006 02:07:37	Dark	44.000	165	34Gam Eri	2.9500	3200.0	88	23031	No
26	GOM_NL__2PRFIN20060727_021657_000000382049_00432_23031_0679.N1	27-JUL-2006 02:16:57	Dark	38.000	157	The1Eri	2.9060	9300.0	76	23031	No
27	GOM_NL__2PRFIN20060727_022245_000000422049_00433_23032_0662.N1	27-JUL-2006 02:22:45	Dark	42.000	9	Alp Eri	0.45300	24000.	84	23032	No
28	GOM_NL__2PRFIN20060727_022953_000000392049_00433_23032_0663.N1	27-JUL-2006 02:29:53	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	23032	No
29	GOM_NL__2PRFIN20060727_023149_000000522049_00433_23032_0664.N1	27-JUL-2006 02:31:49	Straylight	52.000	63	Bet Gru	2.1500	2800.0	104	23032	No
30	GOM_NL__2PRFIN20060727_023307_000000432049_00433_23032_0665.N1	27-JUL-2006 02:33:07	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	23032	No
31	GOM_NL__2PRFIN20060727_025255_000000362049_00433_23032_0666.N1	27-JUL-2006 02:52:55	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	23032	No
32	GOM_NL__2PRFIN20060727_025411_000000292049_00433_23032_0667.N1	27-JUL-2006 02:54:11	Bright	29.000	168	17Zet Aql	2.9860	11000.	58	23032	No
33	GOM_NL__2PRFIN20060727_030115_000000312049_00433_23032_0668.N1	27-JUL-2006 03:01:15	Bright	31.000	5	3Alp Lyr	0.033000	11000.	62	23032	No
34	GOM_NL__2PRFIN20060727_030342_000000332049_00433_23032_0669.N1	27-JUL-2006 03:03:42	Bright	33.000	144	18Del Cyg	2.8600	11000.	66	23032	No
35	GOM_NL__2PRFIN20060727_031033_000000342049_00433_23032_0670.N1	27-JUL-2006 03:10:33	Bright	33.500	89	5Alp Cep	2.4510	8000.0	67	23032	No
36	GOM_NL__2PRFIN20060727_031550_000000282049_00433_23032_0671.N1	27-JUL-2006 03:15:50	Bright	27.500	49	1Alp UMi	1.9900	6300.0	55	23032	No
37	GOM_NL__2PRFIN20060727_032827_000000362049_00433_23032_0672.N1	27-JUL-2006 03:28:27	Bright	35.500	6	13Alp Aur	0.080000	3400.0	71	23032	No
38	GOM_NL__2PRFIN20060727_033225_000000332049_00433_23032_0673.N1	27-JUL-2006 03:32:25	Bright	33.000	114	3Iot Aur	2.6930	4600.0	66	23032	No
39	GOM_NL__2PRFIN20060727_033752_000000452049_00433_23032_0674.N1	27-JUL-2006 03:37:52	Dark	44.500	13	87Alp Tau	0.86700	3800.0	89	23032	No
40	GOM_NL__2PRFIN20060727_033955_000000312049_00433_23032_0675.N1	27-JUL-2006 03:39:55	Dark	30.500	27	24Gam Ori	1.6360	26000.	61	23032	No
41	GOM_NL__2PRFIN20060727_034139_000000312049_00433_23032_0676.N1	27-JUL-2006 03:41:39	Dark	30.500	72	34Del Ori	2.2500	30000.	61	23032	No
42	GOM_NL__2PRFIN20060727_034411_000000342049_00433_23032_0677.N1	27-JUL-2006 03:44:11	Dark	33.500	7	19Bet Ori	0.10000	14000.	67	23032	No





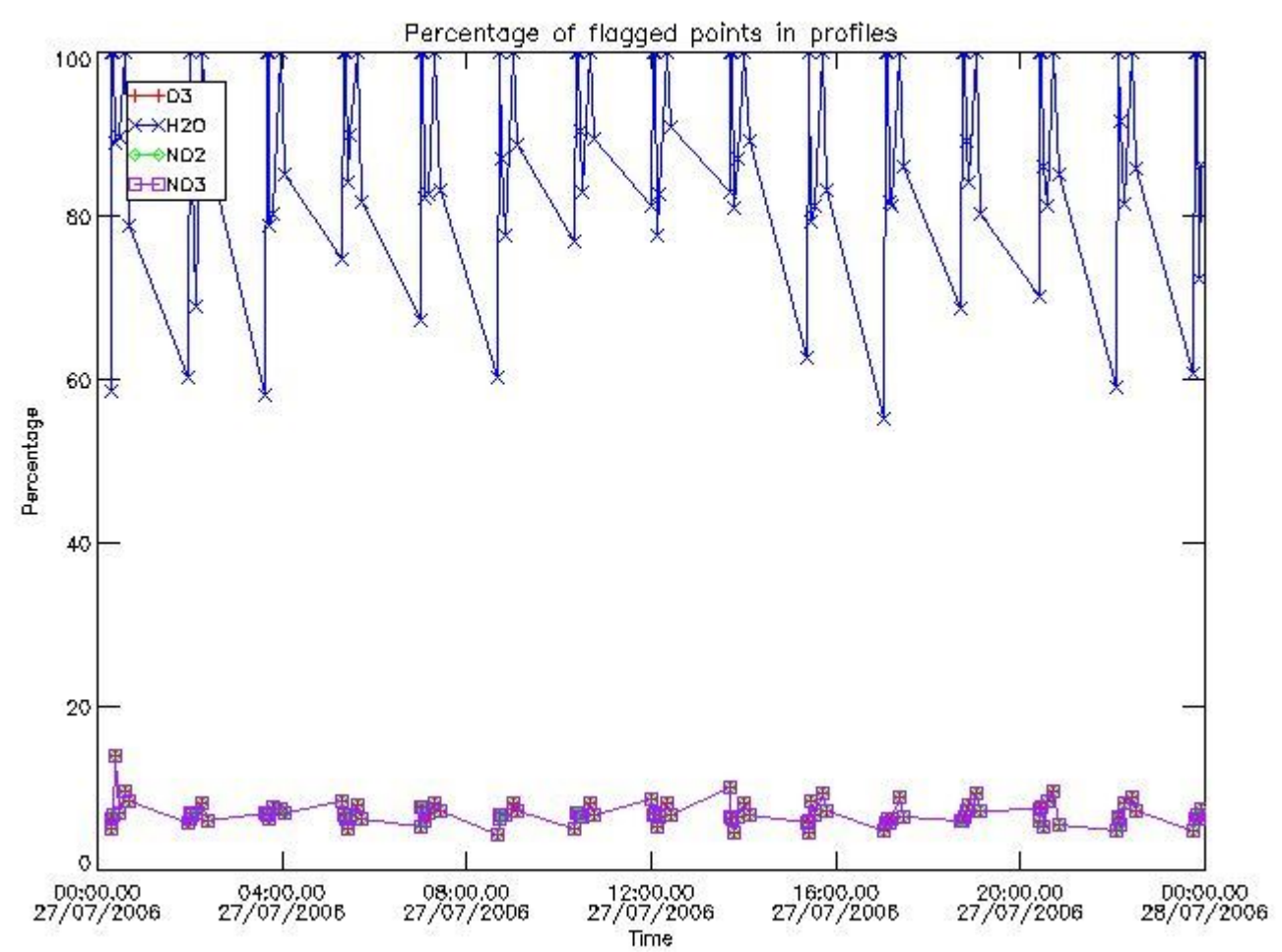


220	GOM_NL__2PRFIN20060727_202557_000000342049_00443_23042_0695.N1	27-JUL-2006 20:25:57	Dark	34.000	27	24Gam Ori	1.6360	26000.	68	23042	No
221	GOM_NL__2PRFIN20060727_202742_000000332049_00443_23042_0696.N1	27-JUL-2006 20:27:42	Dark	33.000	72	34Del Ori	2.2500	30000.	66	23042	No
222	GOM_NL__2PRFIN20060727_203014_000000402049_00443_23042_0697.N1	27-JUL-2006 20:30:14	Dark	39.500	7	19Bet Ori	0.10000	14000.	79	23042	No
223	GOM_NL__2PRFIN20060727_203421_000000432049_00443_23042_0698.N1	27-JUL-2006 20:34:21	Dark	43.000	165	34Gam Eri	2.9500	3200.0	86	23042	No
224	GOM_NL__2PRFIN20060727_204342_000000382049_00443_23042_0699.N1	27-JUL-2006 20:43:42	Dark	37.500	157	The1Eri	2.9060	9300.0	75	23042	No
225	GOM_NL__2PRFIN20060727_204928_000000472049_00444_23043_0682.N1	27-JUL-2006 20:49:28	Dark	47.000	9	Alp Eri	0.45300	24000.	94	23043	No
226	GOM_NL__2PRFIN20060727_205634_000000342049_00444_23043_0683.N1	27-JUL-2006 20:56:34	Straylight	33.500	148	Alp Tuc	2.8780	4100.0	67	23043	No
227	GOM_NL__2PRFIN20060727_205832_000000562049_00444_23043_0684.N1	27-JUL-2006 20:58:32	Straylight	56.000	63	Bet Gru	2.1500	2800.0	112	23043	No
228	GOM_NL__2PRFIN20060727_205949_000000382049_00444_23043_0685.N1	27-JUL-2006 20:59:49	Straylight	37.500	31	Alp Gru	1.7340	15200.	75	23043	No
229	GOM_NL__2PRFIN20060727_211929_000000332049_00444_23043_0686.N1	27-JUL-2006 21:19:29	Bright	32.500	11	53Alp Aql	0.76500	8000.0	65	23043	No
230	GOM_NL__2PRFIN20060727_212047_000000292049_00444_23043_0687.N1	27-JUL-2006 21:20:47	Bright	29.000	168	17Zet Aql	2.9860	11000.	58	23043	No
231	GOM_NL__2PRFIN20060727_212751_000000302049_00444_23043_0688.N1	27-JUL-2006 21:27:51	Bright	29.500	5	3Alp Lyr	0.033000	11000.	59	23043	No
232	GOM_NL__2PRFIN20060727_213014_000000312049_00444_23043_0689.N1	27-JUL-2006 21:30:14	Bright	31.000	144	18Del Cyg	2.8600	11000.	62	23043	No
233	GOM_NL__2PRFIN20060727_213703_000000342049_00444_23043_0690.N1	27-JUL-2006 21:37:03	Bright	34.000	89	5Alp Cep	2.4510	8000.0	68	23043	No
234	GOM_NL__2PRFIN20060727_214225_000000302049_00444_23043_0691.N1	27-JUL-2006 21:42:25	Bright	30.000	49	1Alp UMi	1.9900	6300.0	60	23043	No
235	GOM_NL__2PRFIN20060727_215503_000000332049_00444_23043_0692.N1	27-JUL-2006 21:55:03	Bright	33.000	6	13Alp Aur	0.080000	3400.0	66	23043	No
236	GOM_NL__2PRFIN20060727_220008_000000352049_00444_23043_0693.N1	27-JUL-2006 22:00:08	Bright	35.000	28	12Bet Tau	1.6500	15200.	70	23043	No
237	GOM_NL__2PRFIN20060727_220431_000000532049_00444_23043_0694.N1	27-JUL-2006 22:04:31	Dark	53.000	13	87Alp Tau	0.86700	3800.0	106	23043	No
238	GOM_NL__2PRFIN20060727_220633_000000332049_00444_23043_0695.N1	27-JUL-2006 22:06:33	Dark	33.000	27	24Gam Ori	1.6360	26000.	66	23043	No
239	GOM_NL__2PRFIN20060727_220818_000000322049_00444_23043_0696.N1	27-JUL-2006 22:08:18	Dark	31.500	72	34Del Ori	2.2500	30000.	63	23043	No
240	GOM_NL__2PRFIN20060727_221051_000000362049_00444_23043_0697.N1	27-JUL-2006 22:10:51	Dark	36.000	7	19Bet Ori	0.10000	14000.	72	23043	No
241	GOM_NL__2PRFIN20060727_221457_000000442049_00444_23043_0698.N1	27-JUL-2006 22:14:57	Dark	43.500	165	34Gam Eri	2.9500	3200.0	87	23043	No
242	GOM_NL__2PRFIN20060727_222419_000000402049_00444_23043_0699.N1	27-JUL-2006 22:24:19	Dark	40.000	157	The1Eri	2.9060	9300.0	80	23043	No
243	GOM_NL__2PRFIN20060727_223004_000000362049_00445_23044_0682.N1	27-JUL-2006 22:30:04	Dark	35.500	9	Alp Eri	0.45300	24000.	71	23044	No
244	GOM_NL__2PRFIN20060727_223710_000000342049_00445_23044_0683.N1	27-JUL-2006 22:37:10	Straylight	33.500	148	Alp Tuc	2.8780	4100.0	67	23044	No
245	GOM_NL__2PRFIN20060727_223909_000000542049_00445_23044_0684.N1	27-JUL-2006 22:39:09	Straylight	54.000	63	Bet Gru	2.1500	2800.0	108	23044	No
246	GOM_NL__2PRFIN20060727_224025_000000472049_00445_23044_0685.N1	27-JUL-2006 22:40:25	Straylight	46.500	31	Alp Gru	1.7340	15200.	93	23044	No
247	GOM_NL__2PRFIN20060727_230005_000000332049_00445_23044_0686.N1	27-JUL-2006 23:00:05	Bright	33.000	11	53Alp Aql	0.76500	8000.0	66	23044	No
248	GOM_NL__2PRFIN20060727_230123_000000302049_00445_23044_0687.N1	27-JUL-2006 23:01:23	Bright	29.500	168	17Zet Aql	2.9860	11000.	59	23044	No
249	GOM_NL__2PRFIN20060727_230827_000000302049_00445_23044_0688.N1	27-JUL-2006 23:08:27	Bright	29.500	5	3Alp Lyr	0.033000	11000.	59	23044	No
250	GOM_NL__2PRFIN20060727_231049_000000312049_00445_23044_0689.N1	27-JUL-2006 23:10:49	Bright	30.500	144	18Del Cyg	2.8600	11000.	61	23044	No
251	GOM_NL__2PRFIN20060727_231739_000000342049_00445_23044_0690.N1	27-JUL-2006 23:17:39	Bright	34.000	89	5Alp Cep	2.4510	8000.0	68	23044	No
252	GOM_NL__2PRFIN20060727_232301_000000292049_00445_23044_0691.N1	27-JUL-2006 23:23:01	Bright	29.000	49	1Alp UMi	1.9900	6300.0	58	23044	No
253	GOM_NL__2PRFIN20060727_233538_000000392049_00445_23044_0692.N1	27-JUL-2006 23:35:38	Bright	38.500	6	13Alp Aur	0.080000	3400.0	77	23044	No
254	GOM_NL__2PRFIN20060727_234044_000000342049_00445_23044_0693.N1	27-JUL-2006 23:40:44	Bright	34.000	28	12Bet Tau	1.6500	15200.	68	23044	No
255	GOM_NL__2PRFIN20060727_234507_000000542049_00445_23044_0694.N1	27-JUL-2006 23:45:07	Dark	54.000	13	87Alp Tau	0.86700	3800.0	108	23044	No
256	GOM_NL__2PRFIN20060727_234710_000000332049_00445_23044_0695.N1	27-JUL-2006 23:47:10	Dark	32.500	27	24Gam Ori	1.6360	26000.	65	23044	No
257	GOM_NL__2PRFIN20060727_234904_000000312049_00445_23044_0696.N1	27-JUL-2006 23:49:04	Dark	30.500	30	46Eps Ori	1.6940	30000.	61	23044	No
258	GOM_NL__2PRFIN20060727_235127_000000332049_00445_23044_0697.N1	27-JUL-2006 23:51:27	Dark	32.500	7	19Bet Ori	0.10000	14000.	65	23044	No
259	GOM_NL__2PRFIN20060727_235534_000000482049_00445_23044_0698.N1	27-JUL-2006 23:55:34	Dark	47.500	165	34Gam Eri	2.9500	3200.0	95	23044	No

### 3. Quality information per product

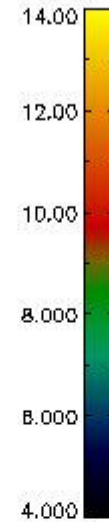
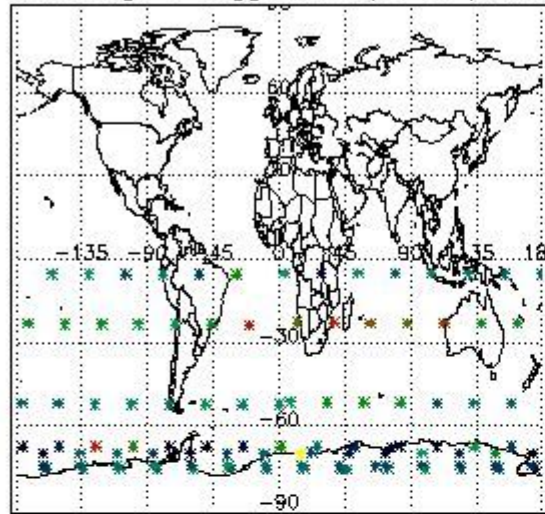
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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

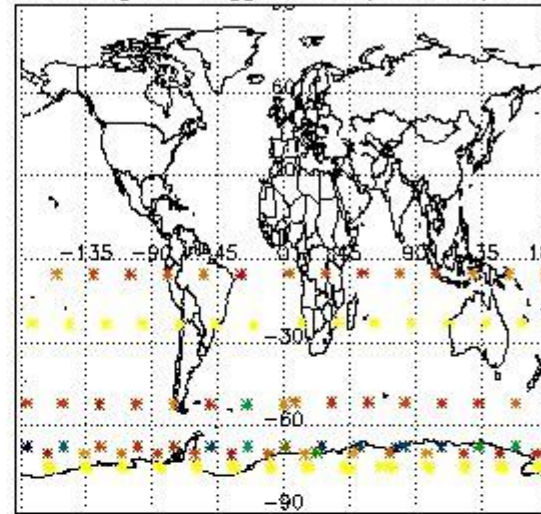


3.2 Plot quality information per product (world map)

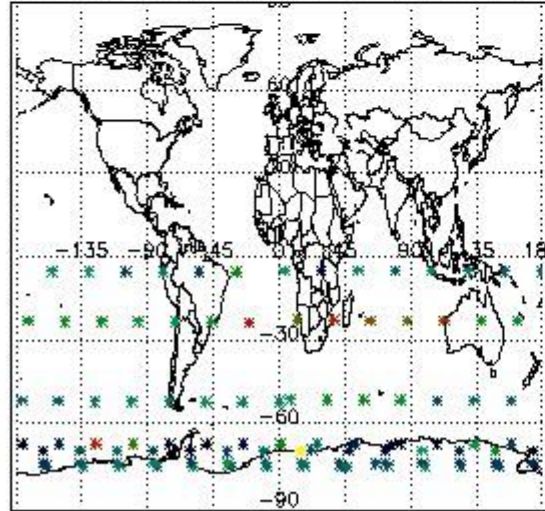
Percentage of flagged data per O3 profile



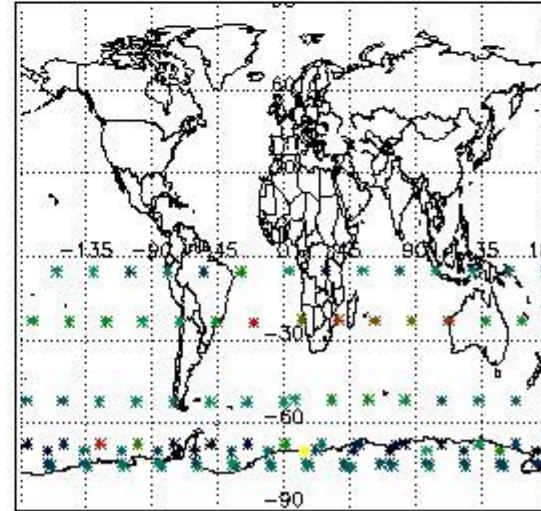
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile



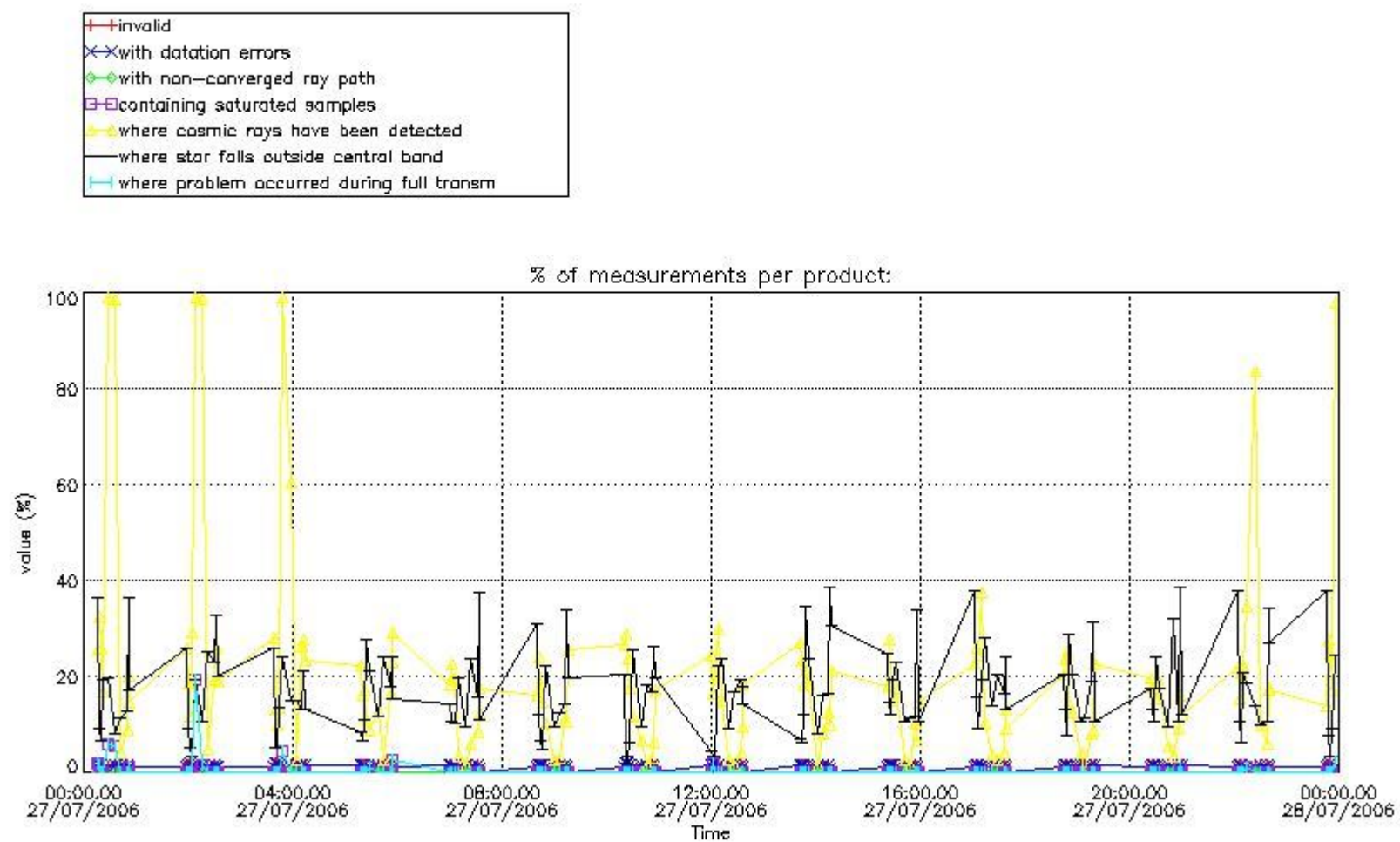
#### 4. Level 1 quality information per product

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.

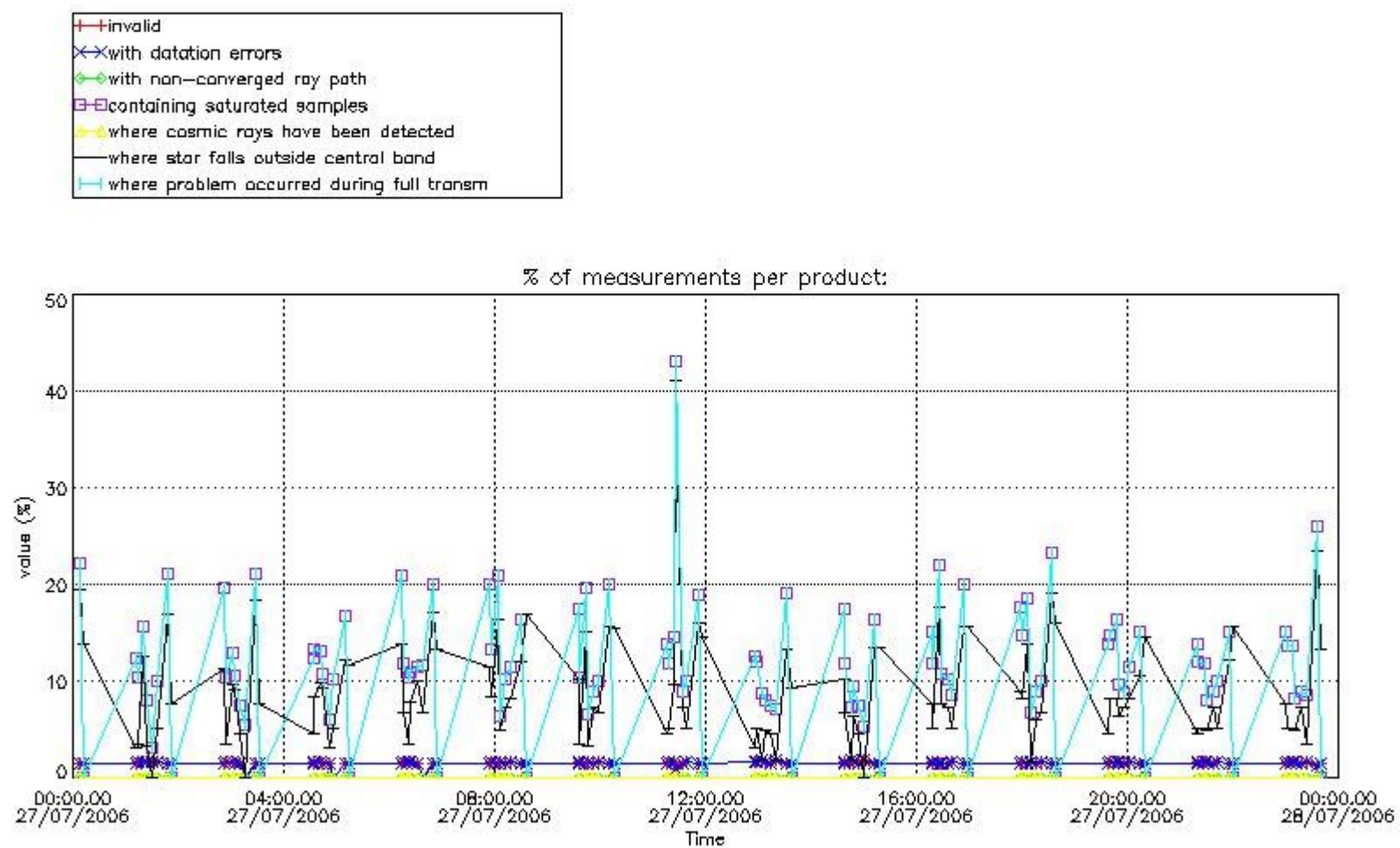
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

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





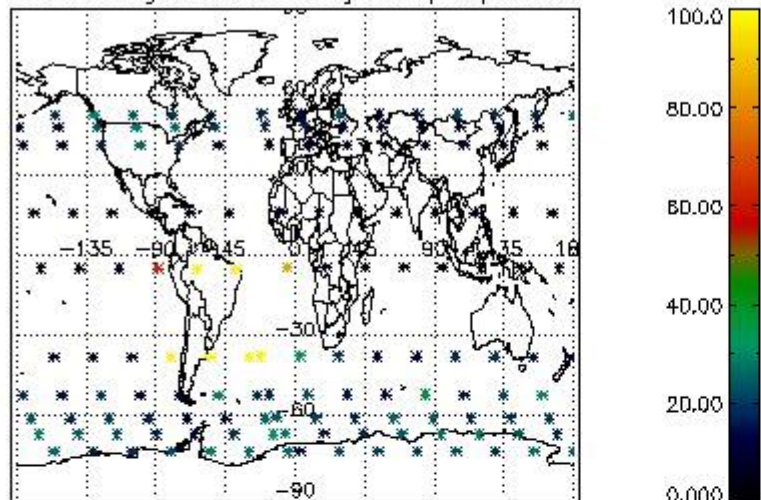
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



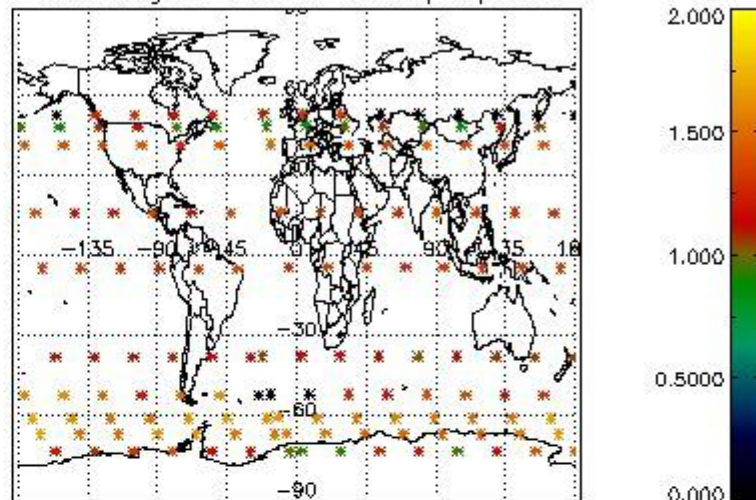
4.2 Plot quality information per product coming from level 1b processing (world map)

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

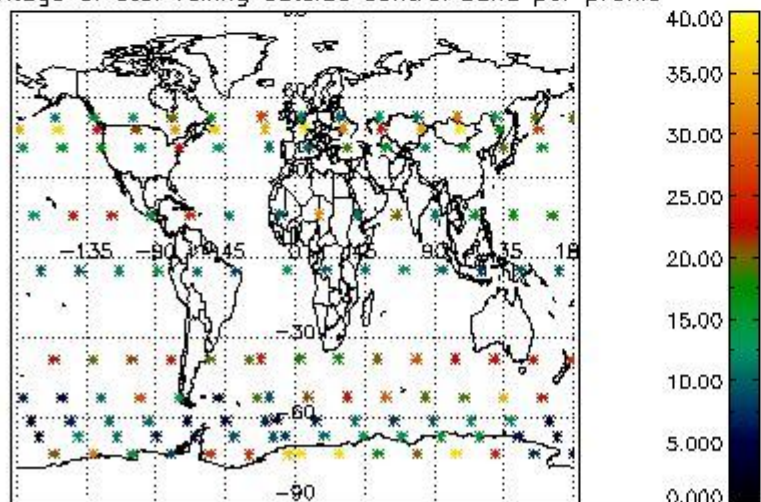
Percentage of cosmic ray hits per profile



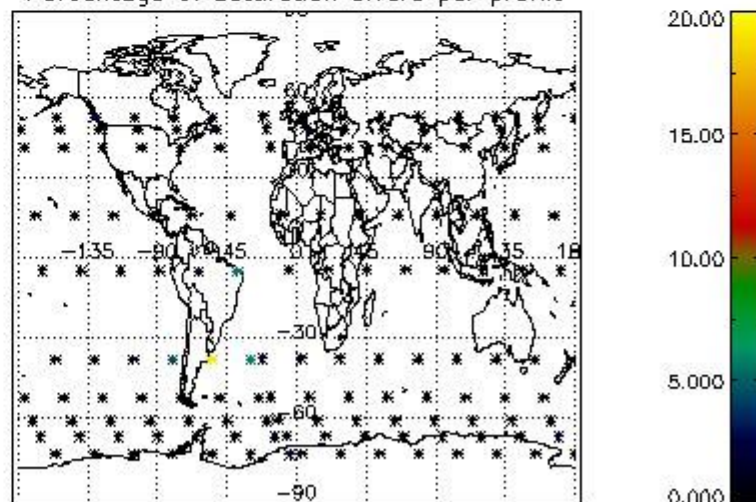
Percentage of datation errors per profile



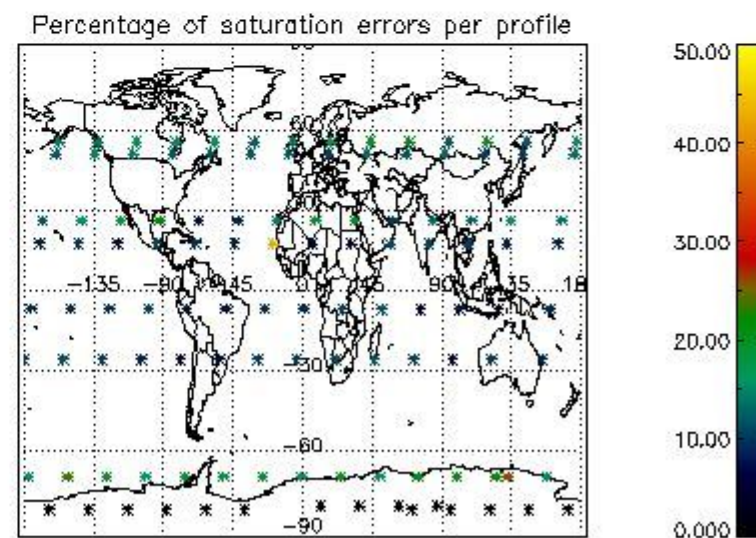
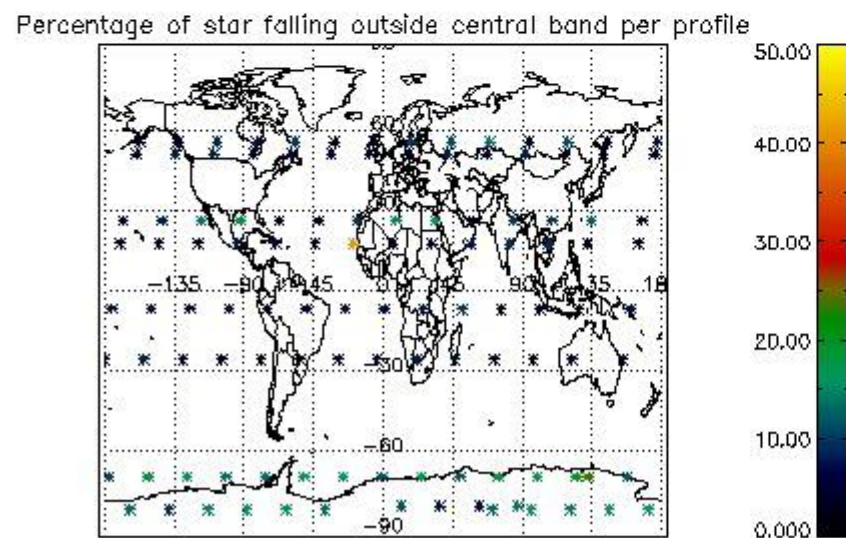
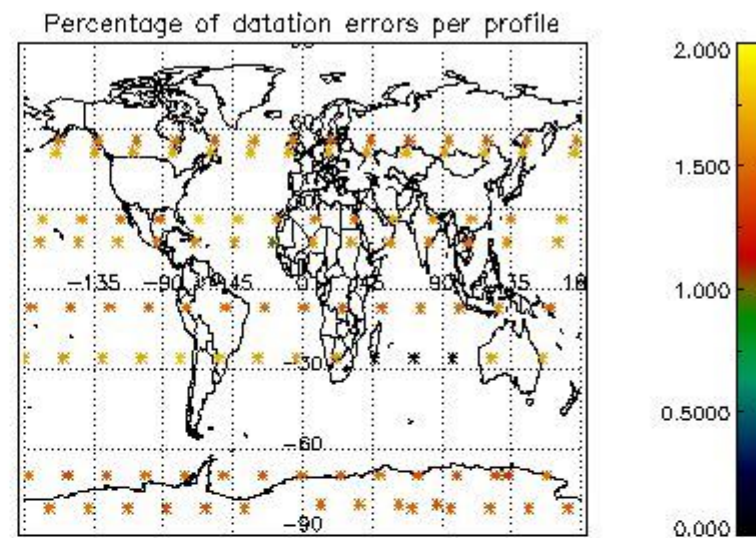
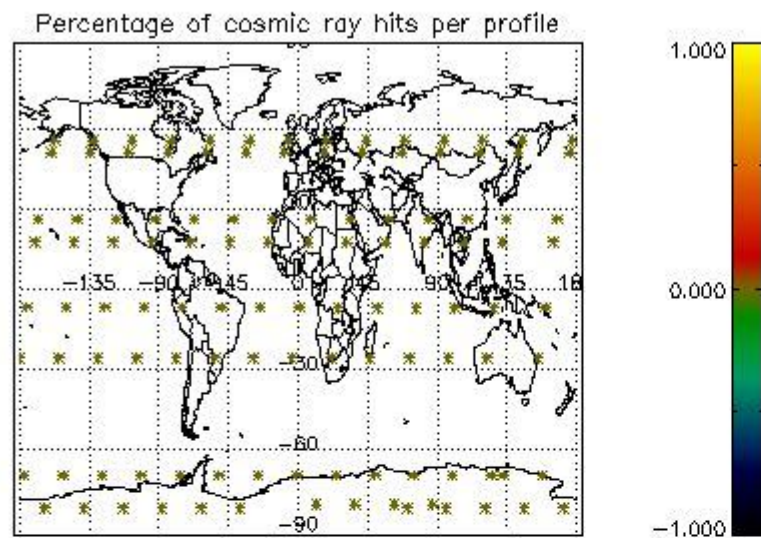
Percentage of star falling outside central band per profile



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

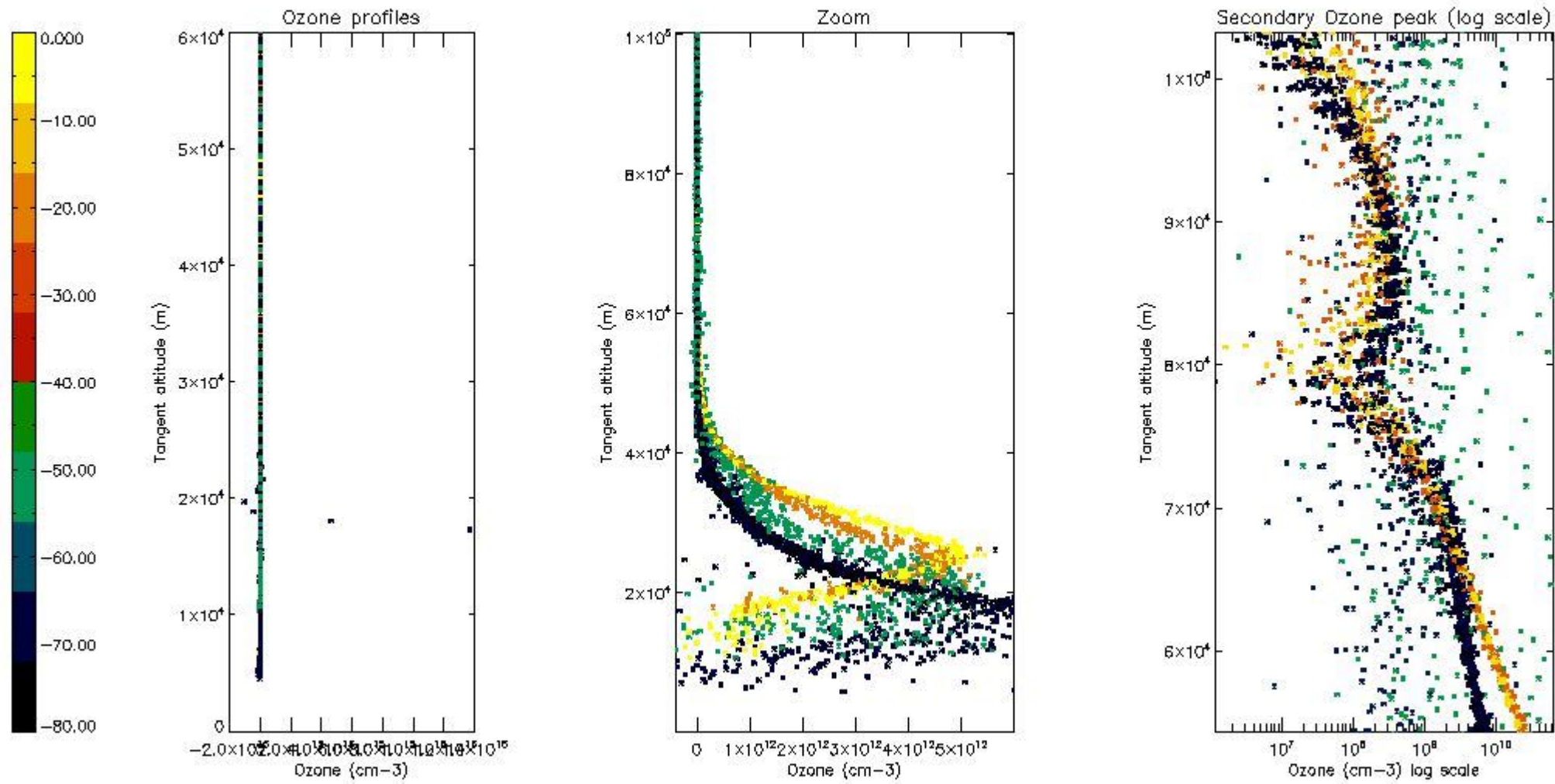
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	26

STD < 10	21
STD < 5	14

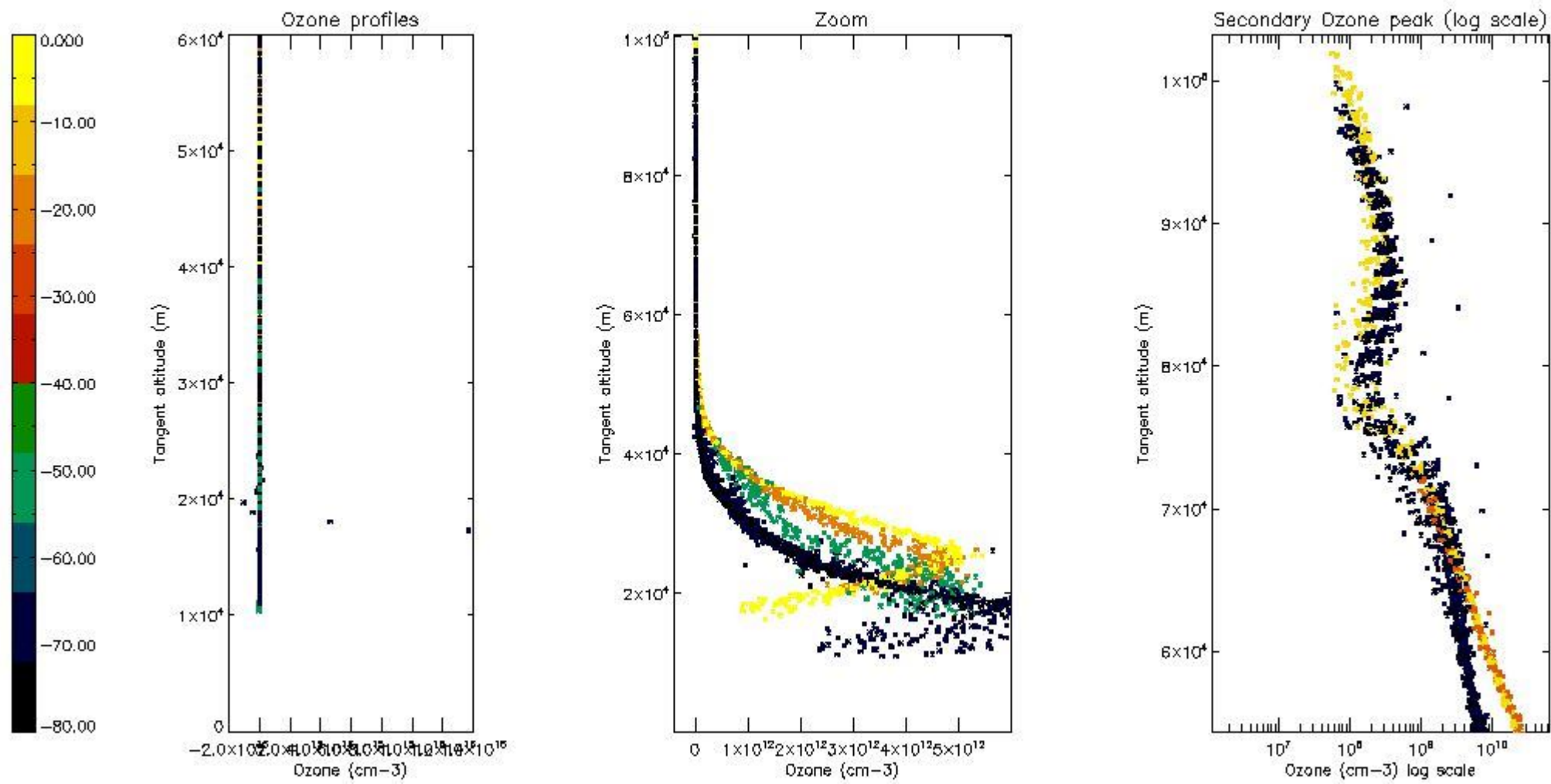
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



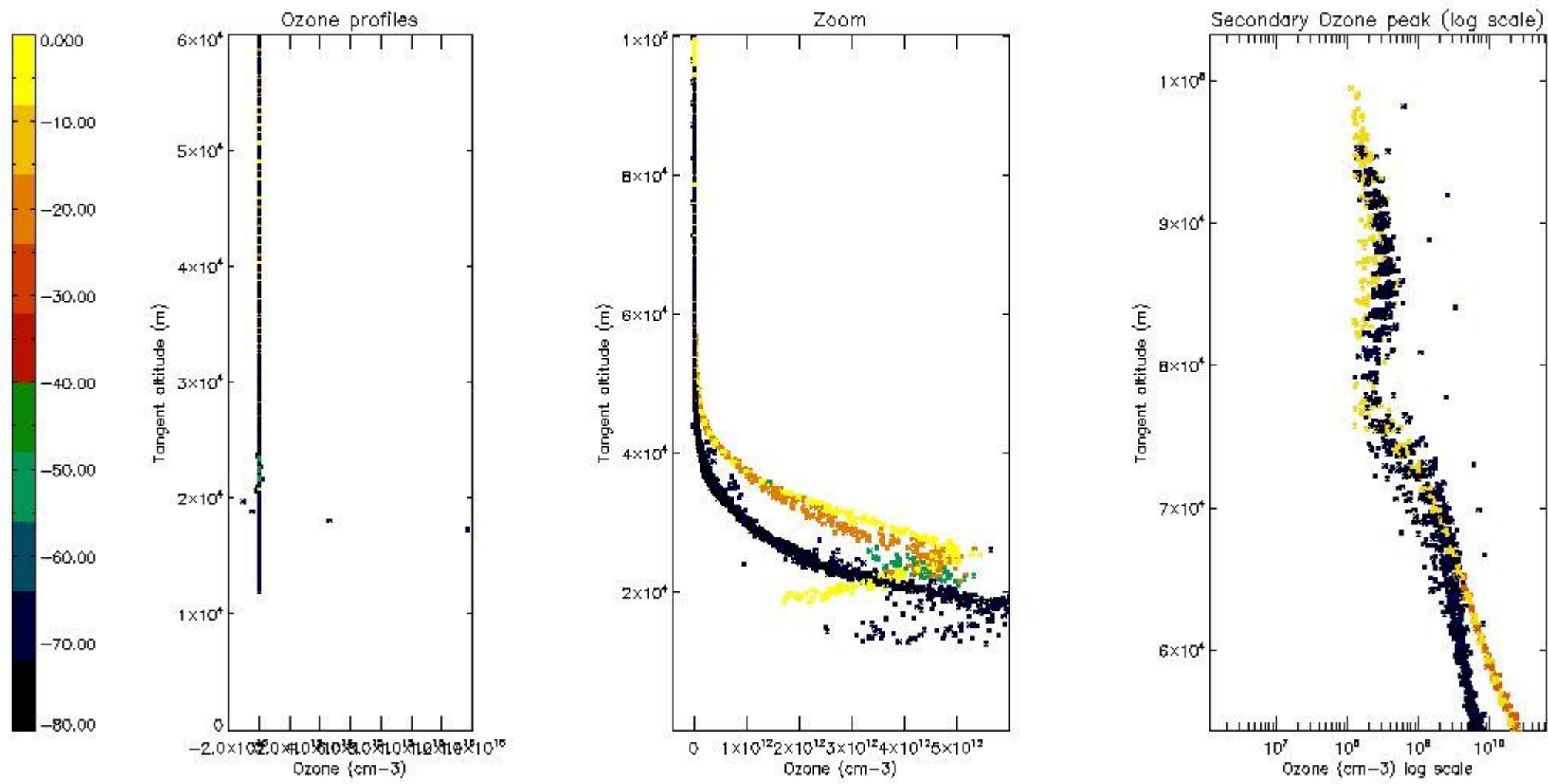
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



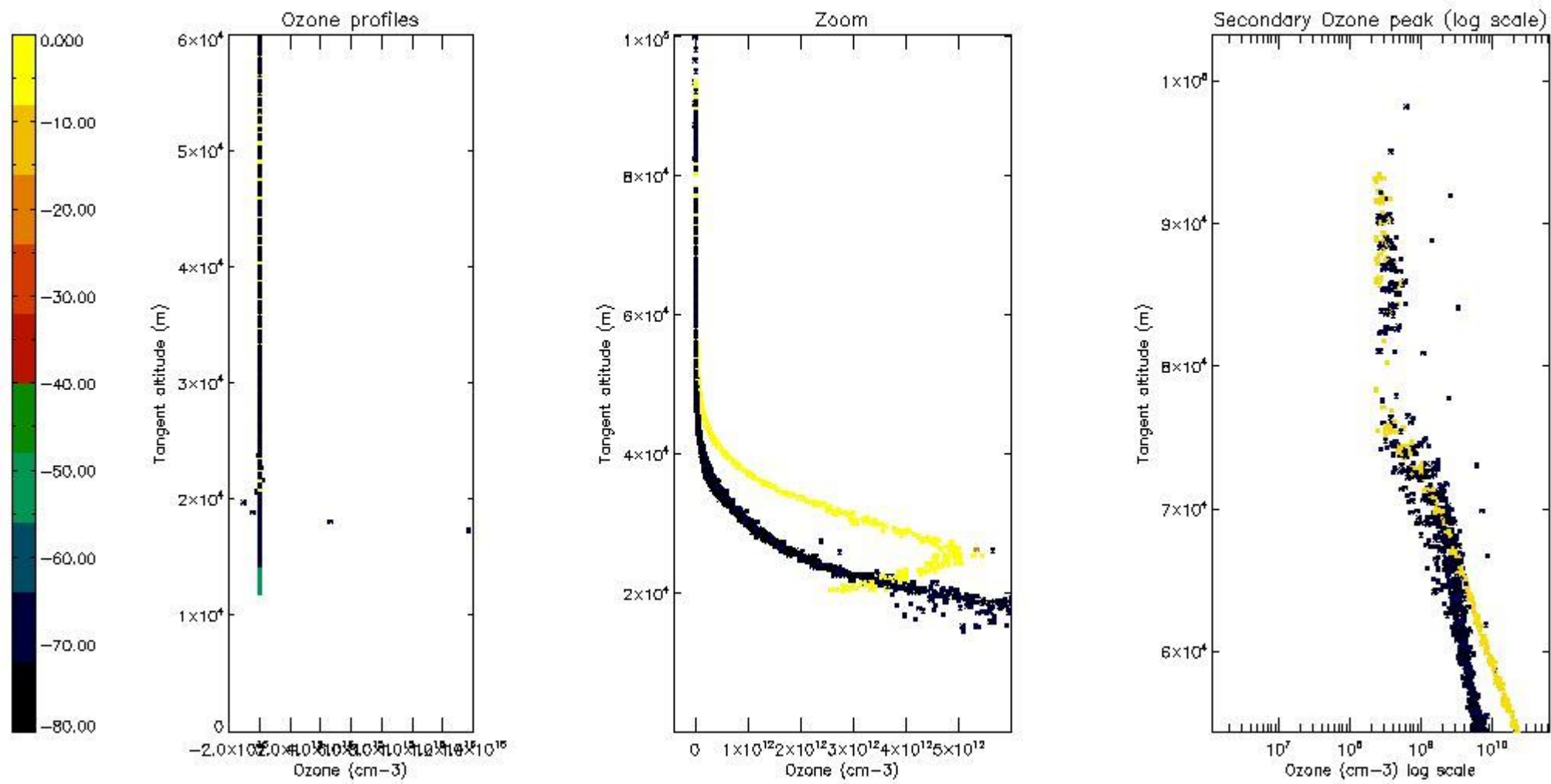
*5.4 Plot ozone profiles where  $STD < 10\%$  (dark without errors)*

The colorbar represents the latitude.



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

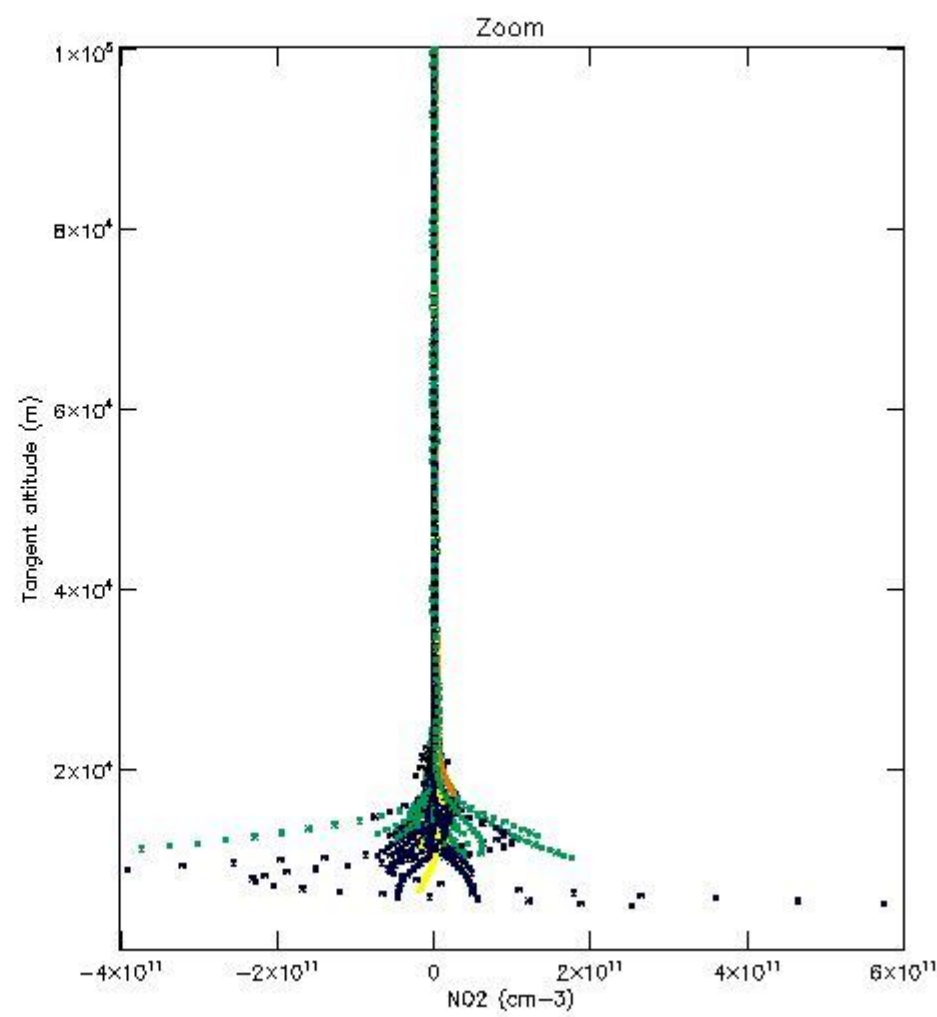
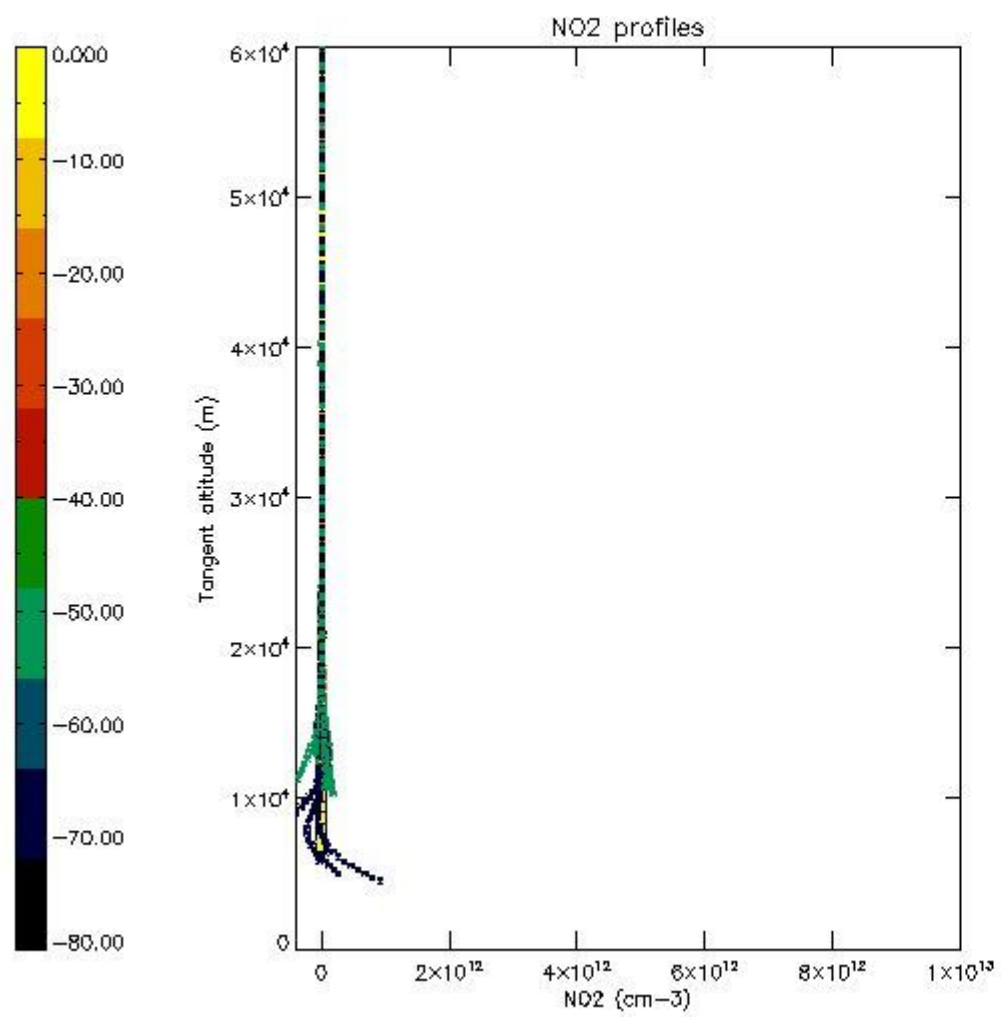
The colorbar represents the latitude.



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

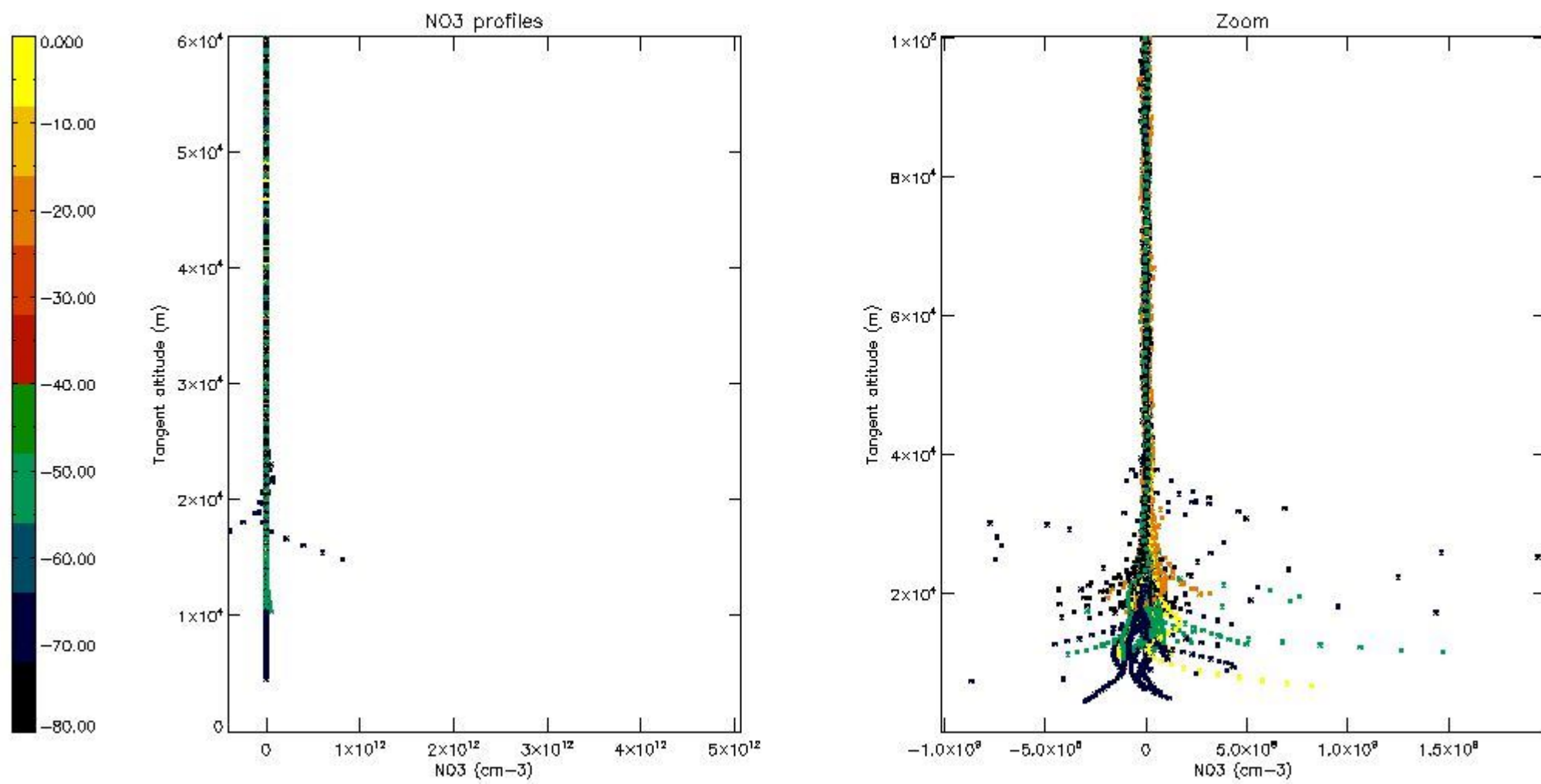
The colorbar represents the latitude.





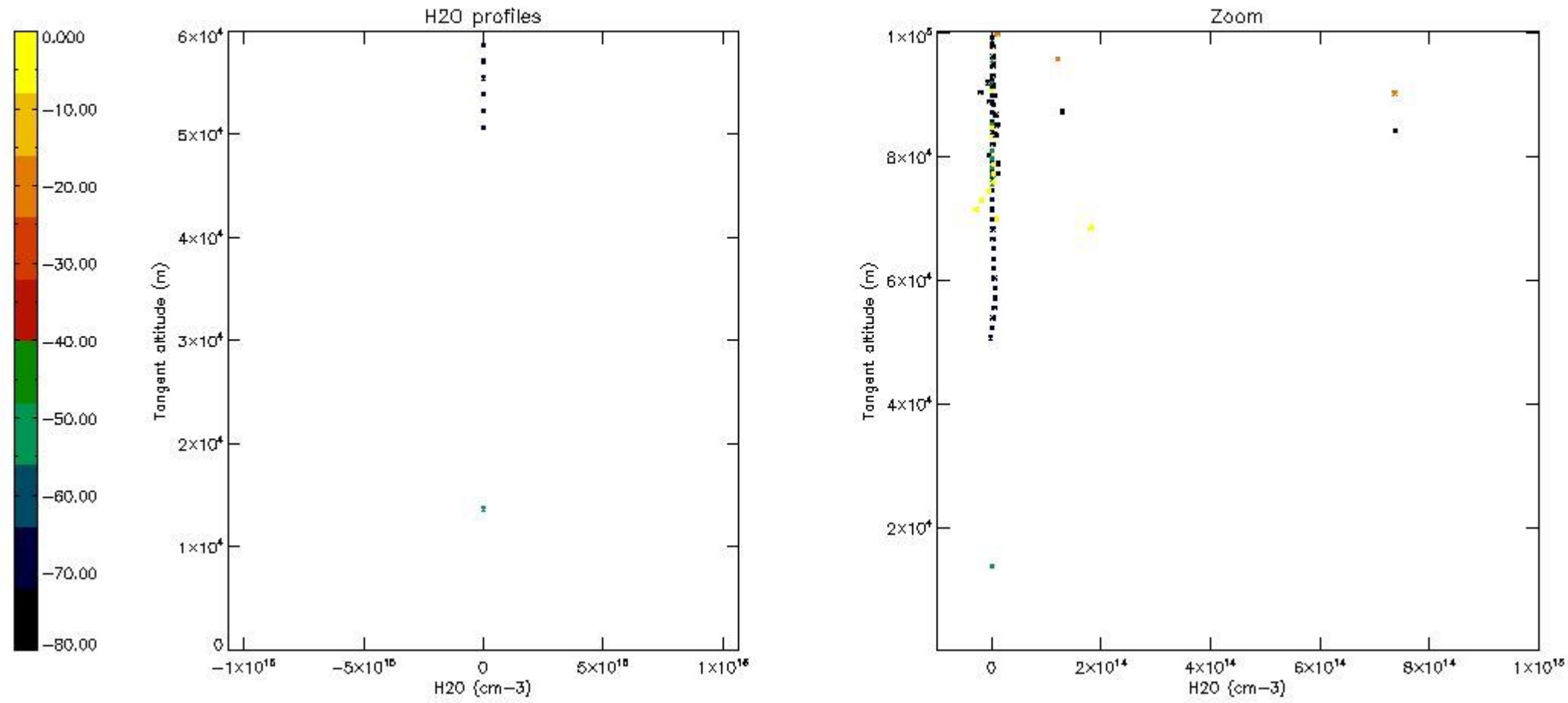
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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	27-JUL-2006 00:07:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-JUL-2006 00:07:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-JUL-2006 00:07:15

# GOMOS Level 2 Daily Report

## SUMMARY

### [1. General Info](#)

### [2. Summary of processed GOM\\_NL\\_2P products](#)

### [3. Level 2 Quality information per product](#)

#### [3.1 Plot of level 2 quality information per product \(time dependant\)](#)

#### [3.2 Plot of level 2 quality information per product \(world map\)](#)

### [4. Level 1 Quality information per product \(stored on level 2 products\)](#)

#### [4.1 Plot of level 1 quality information per product \(time dependant\)](#)

##### [4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

##### [4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

#### [4.2 Plot of level 1 quality information per product \(world map\)](#)

##### [4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

##### [4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

### [5. Ozone profiles based on quality statistics and other trace gas profiles](#)

#### [5.1 Ozone statistics based on quality of products](#)

#### [5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

#### [5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

#### [5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

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

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

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

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

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



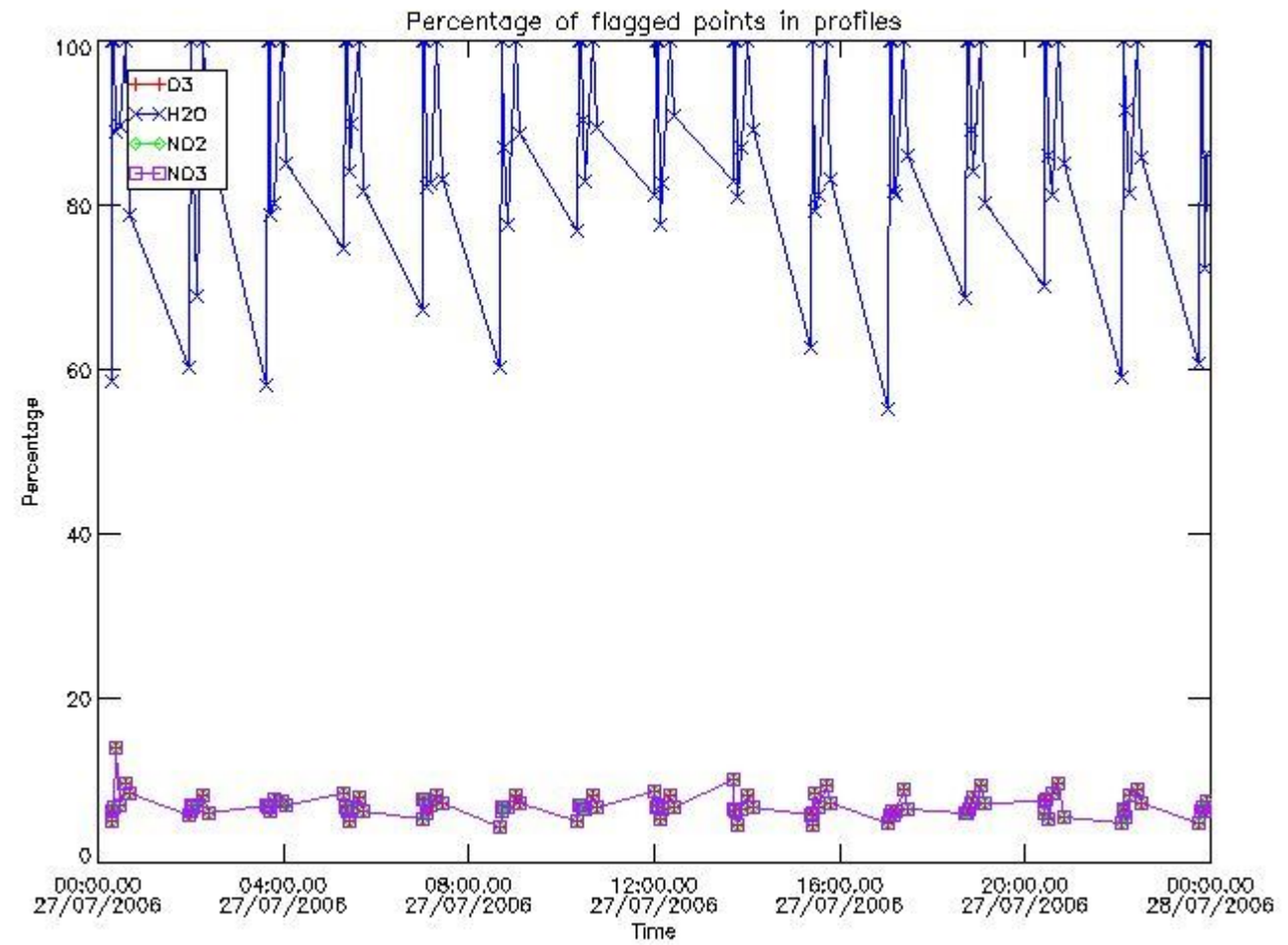






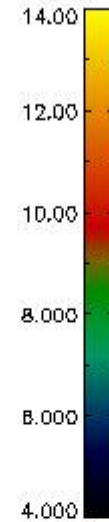
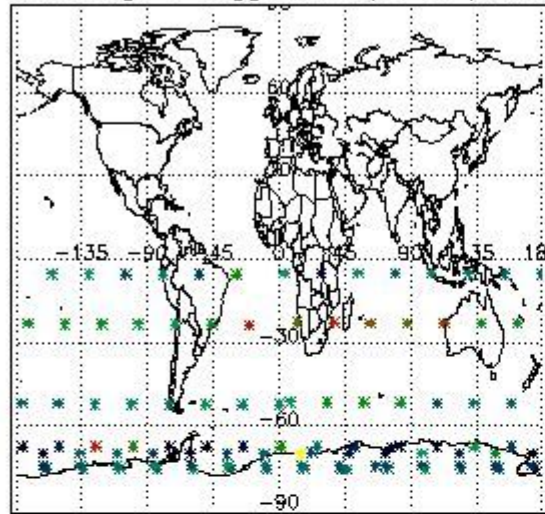




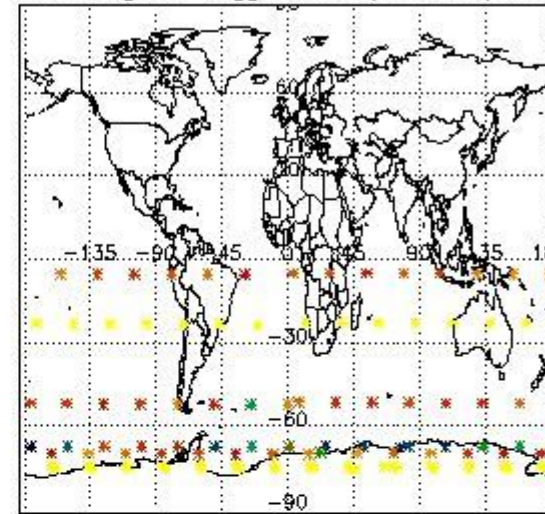


3.2 Plot quality information per product (world map)

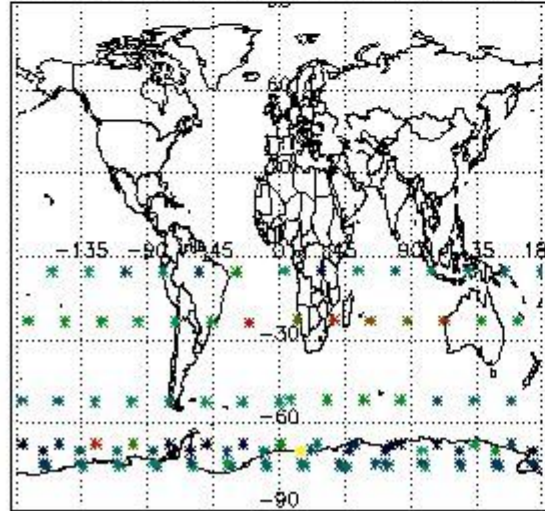
Percentage of flagged data per O3 profile



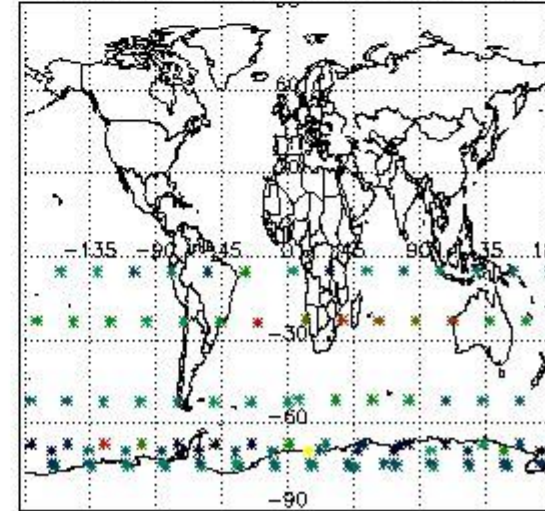
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

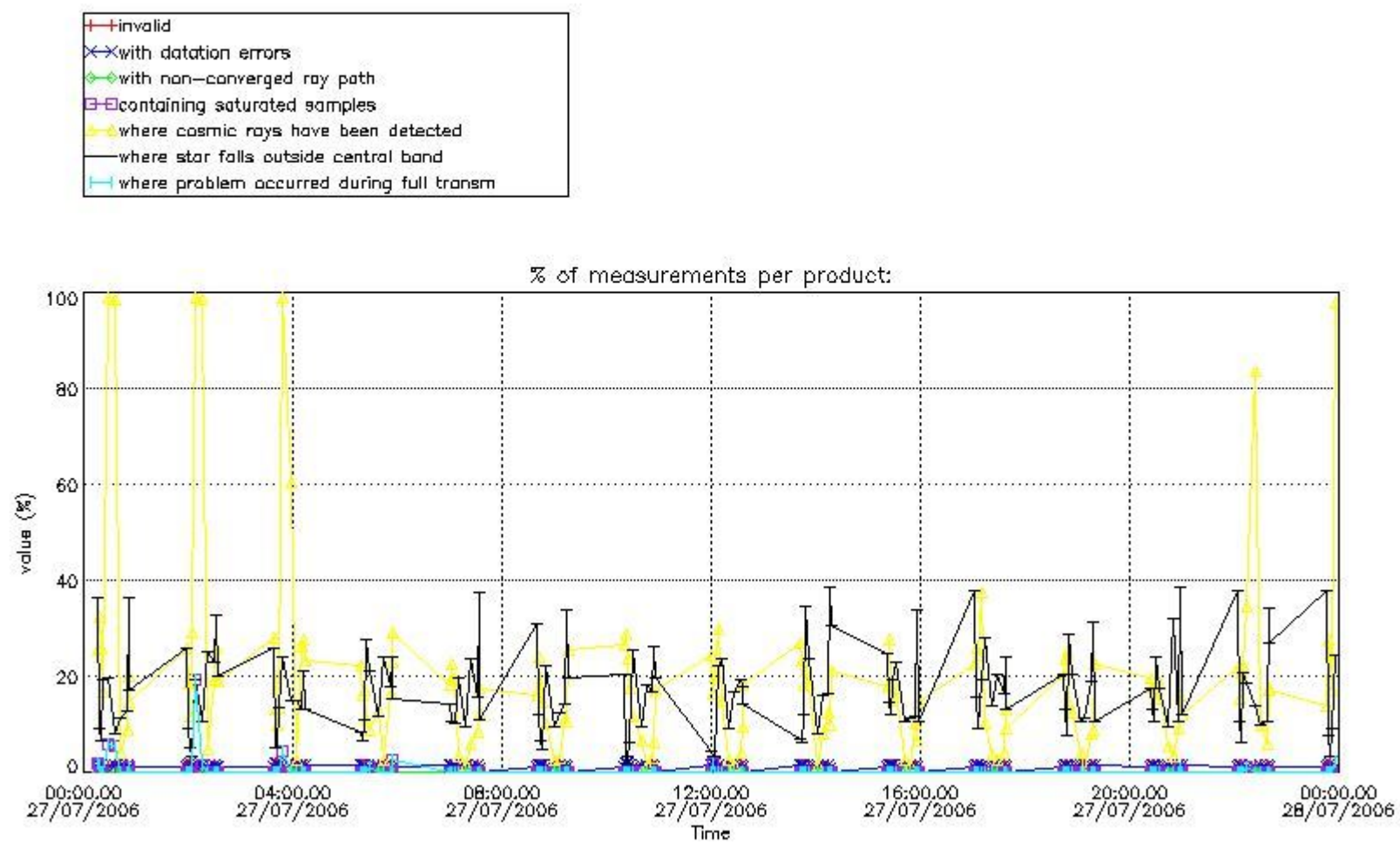


#### 4. Level 1 quality information per product

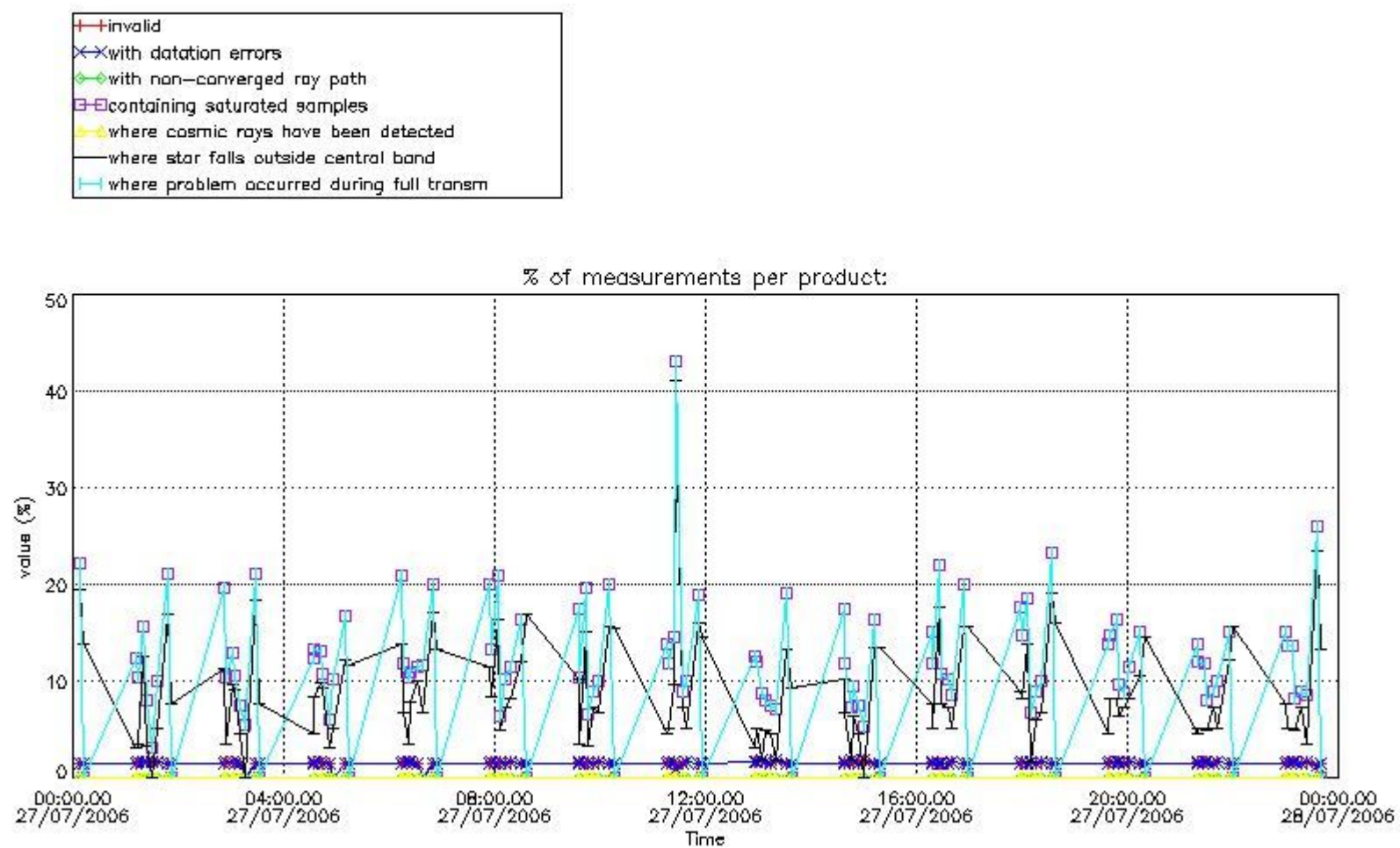
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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

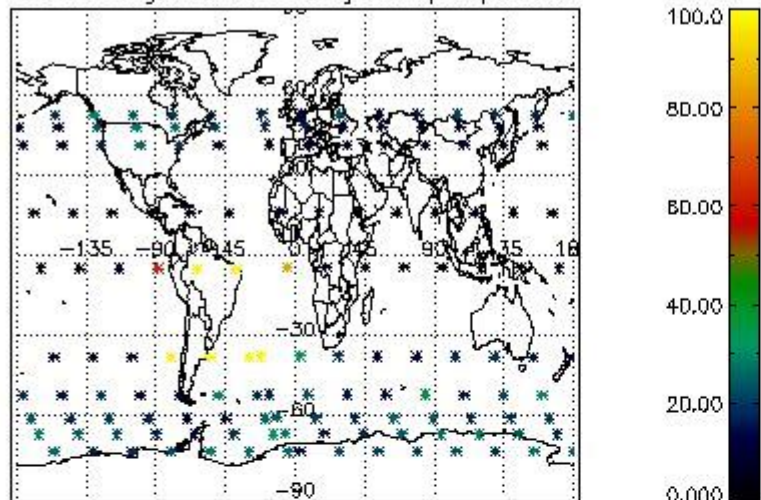


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

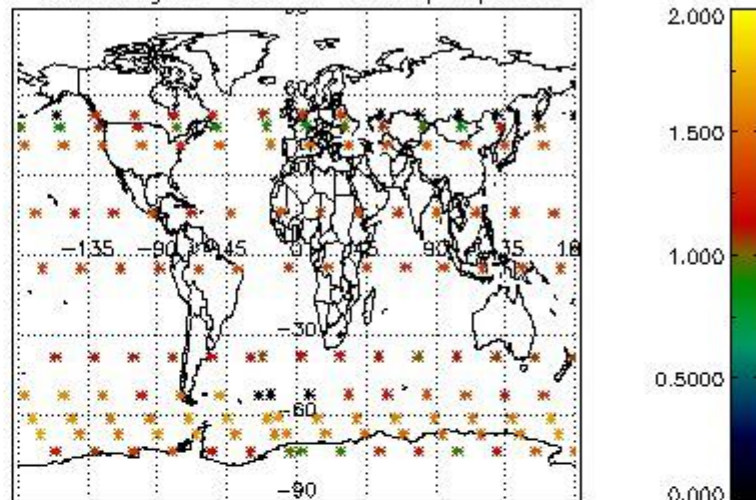


4.2 Plot quality information per product coming from level 1b processing (world map)  
 4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

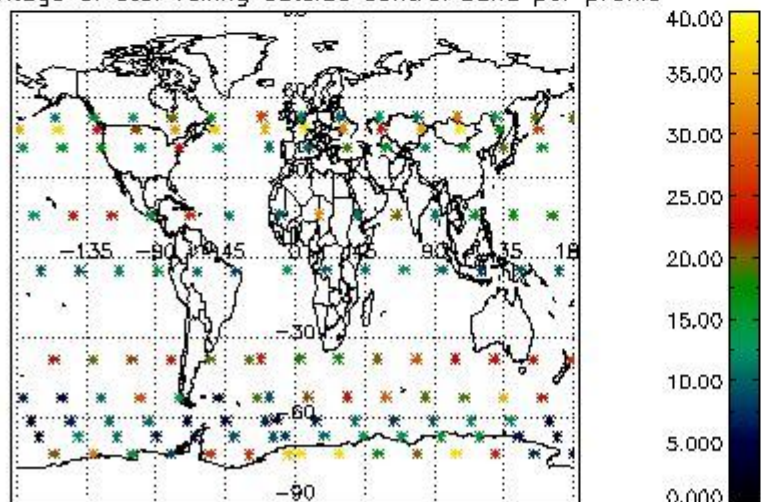
Percentage of cosmic ray hits per profile



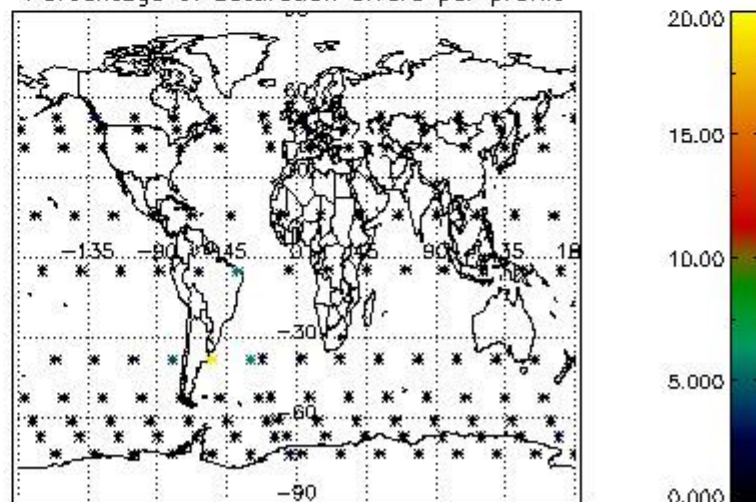
Percentage of datation errors per profile



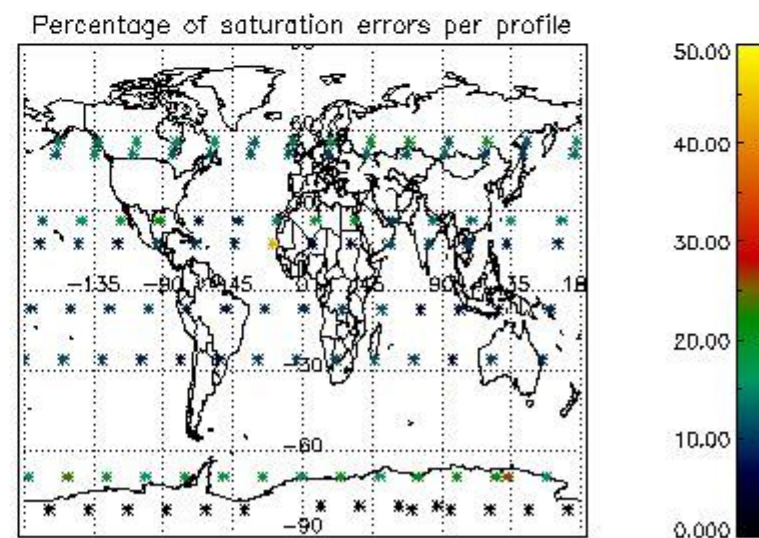
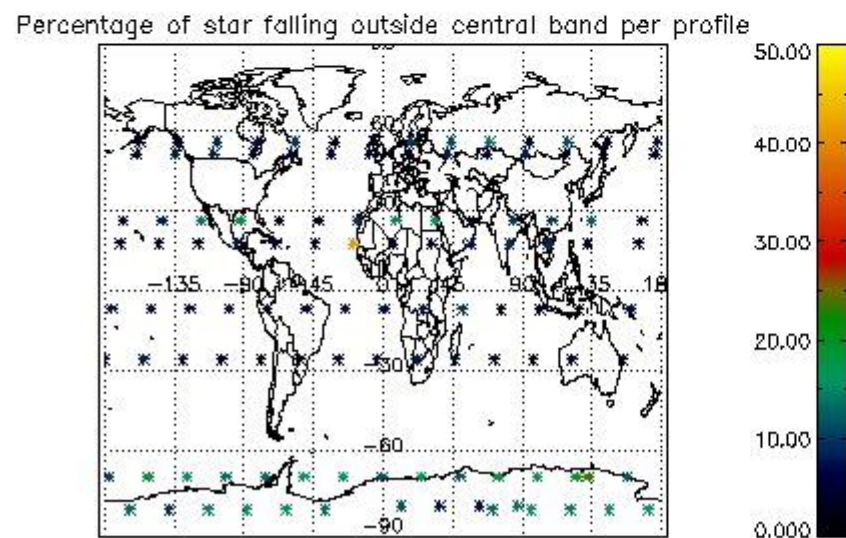
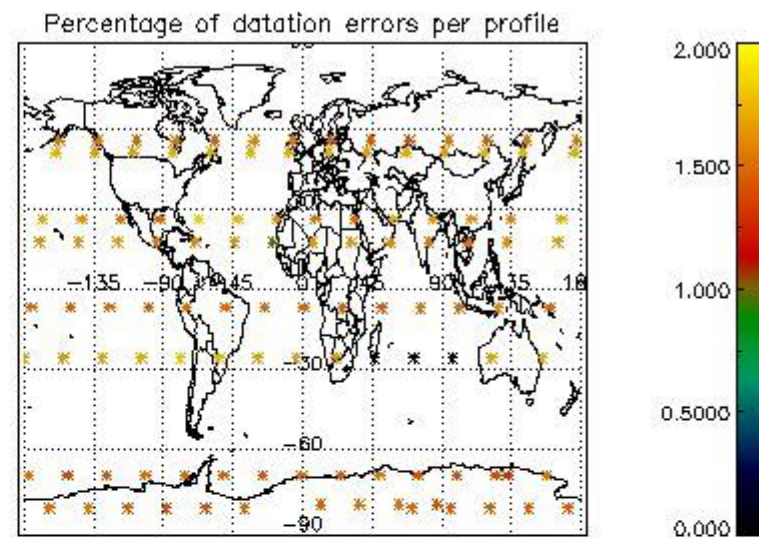
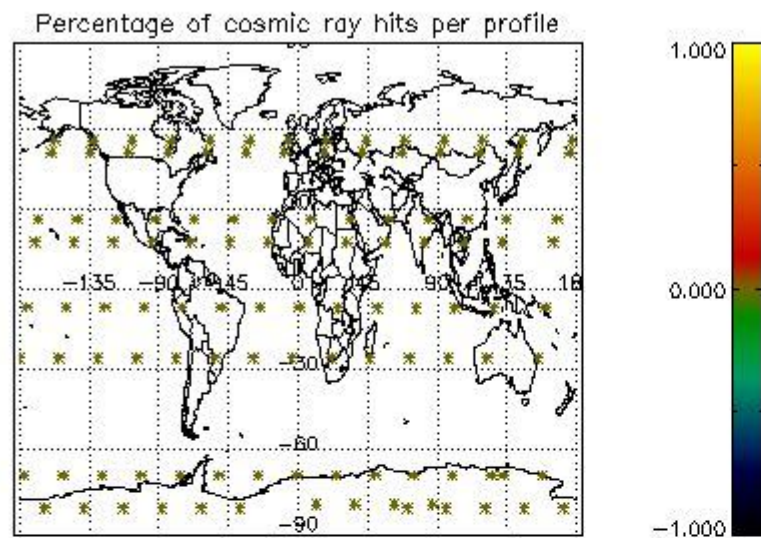
Percentage of star falling outside central band per profile



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

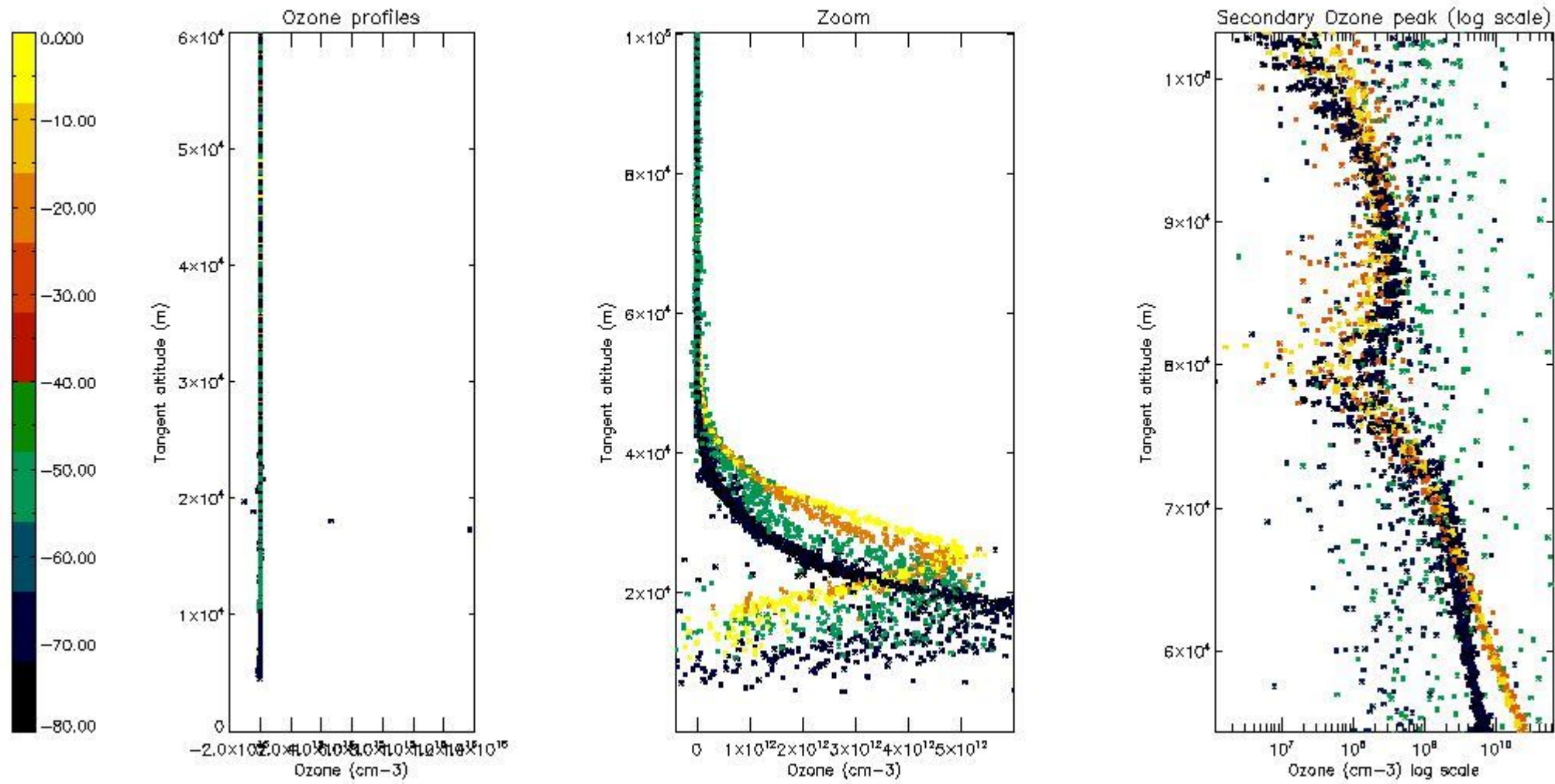
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	26

STD < 10	21
STD < 5	14

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

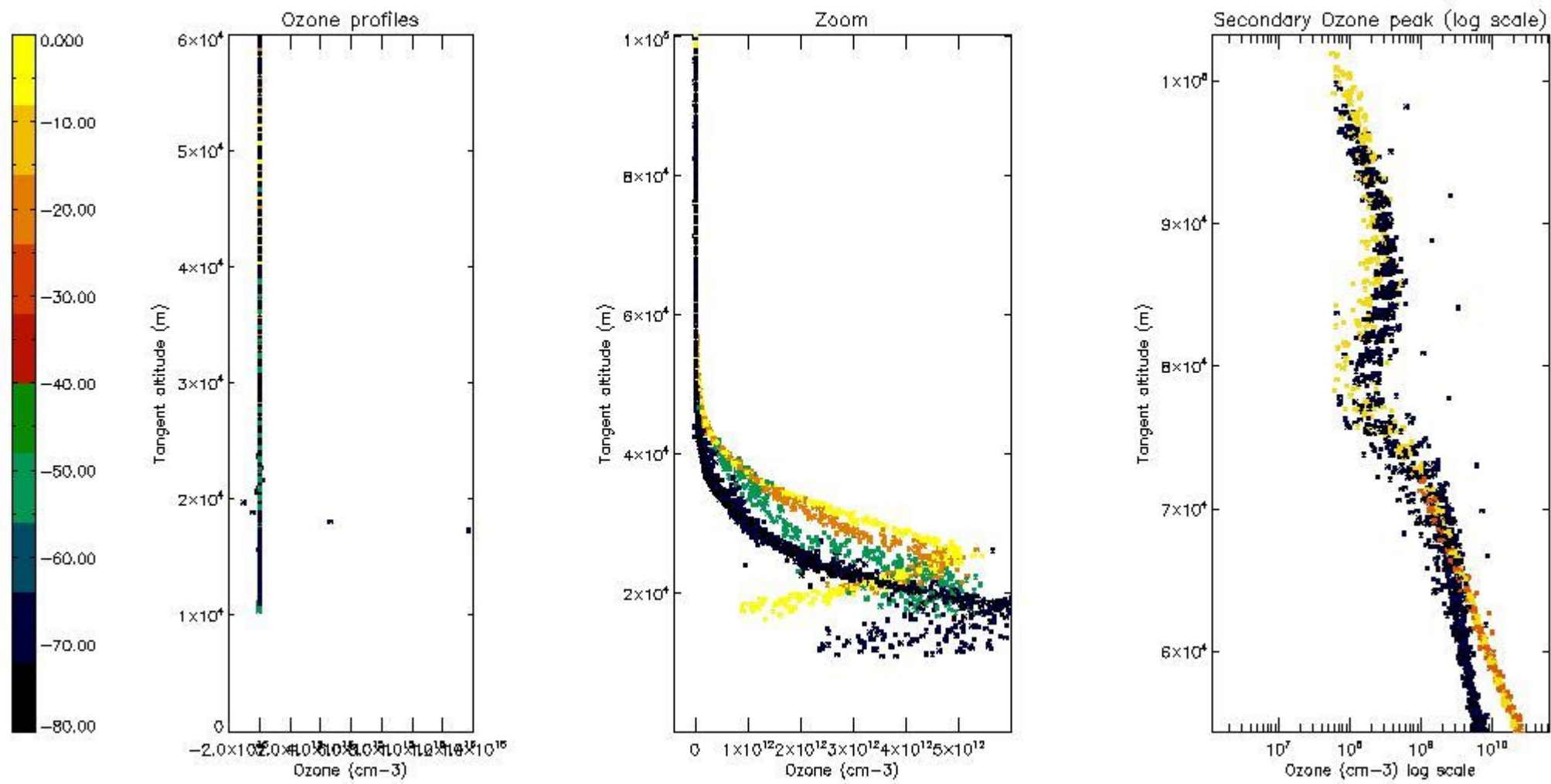
The colorbar represents the latitude.



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

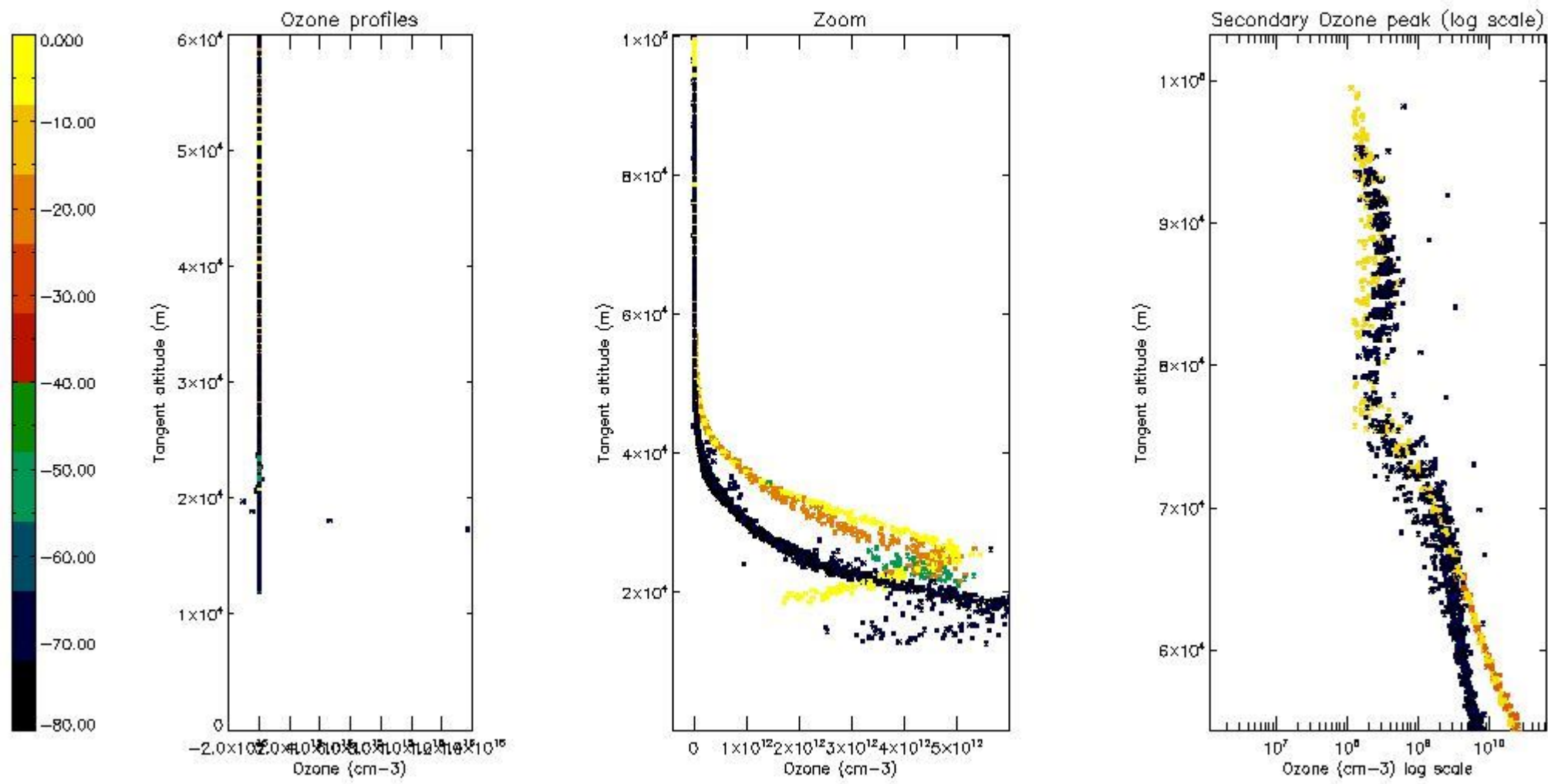
The colorbar represents the latitude.





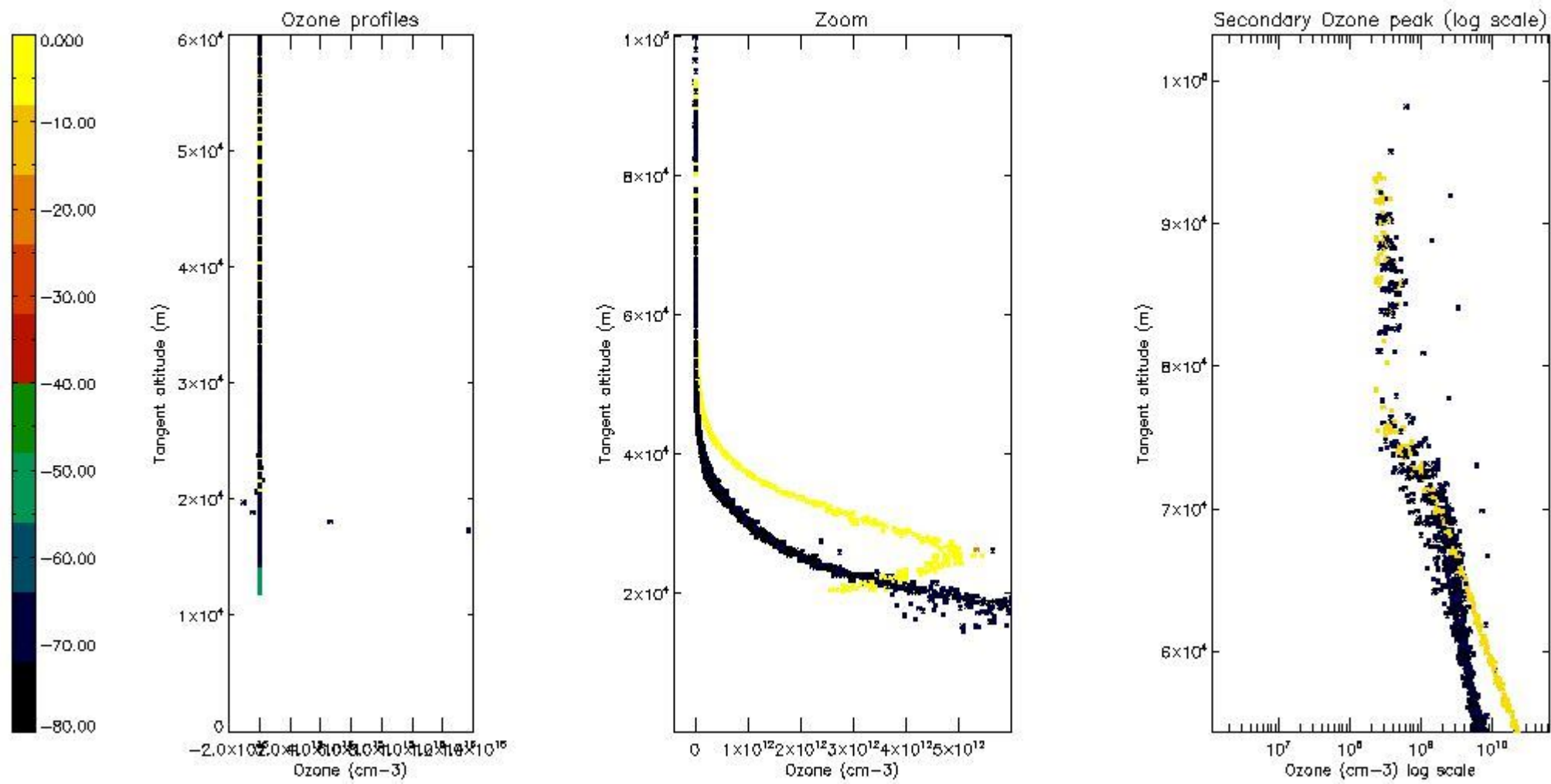
5.4 Plot ozone profiles where  $STD < 10\%$  (dark without errors)

The colorbar represents the latitude.



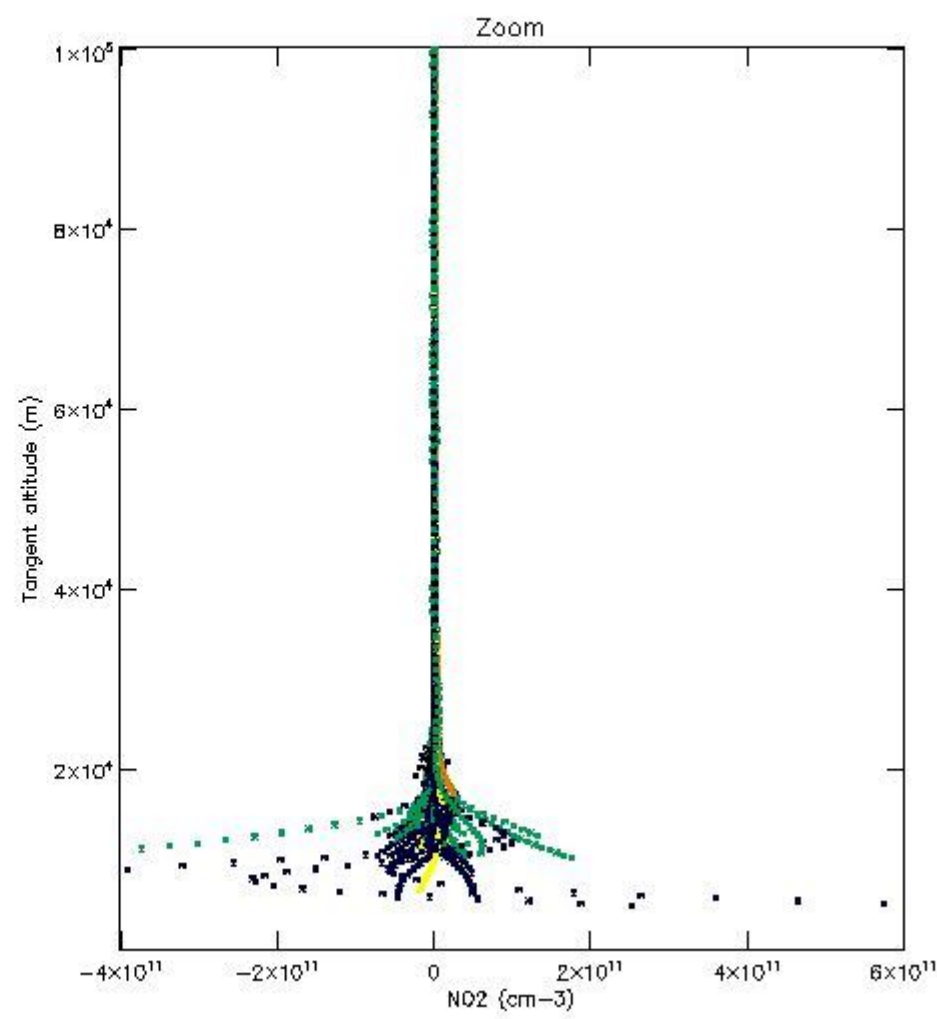
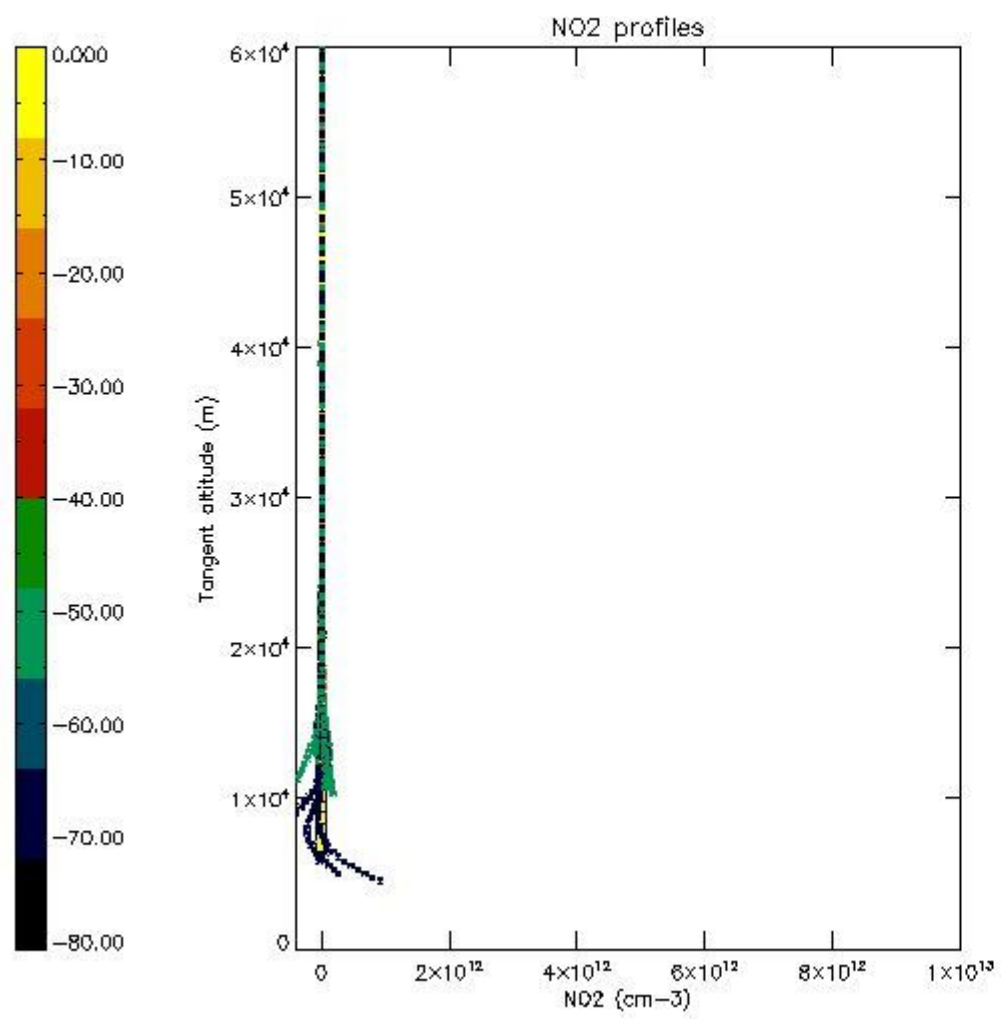
*5.5 Plot ozone profiles where  $STD < 5\%$  (dark without errors)*

The colorbar represents the latitude.



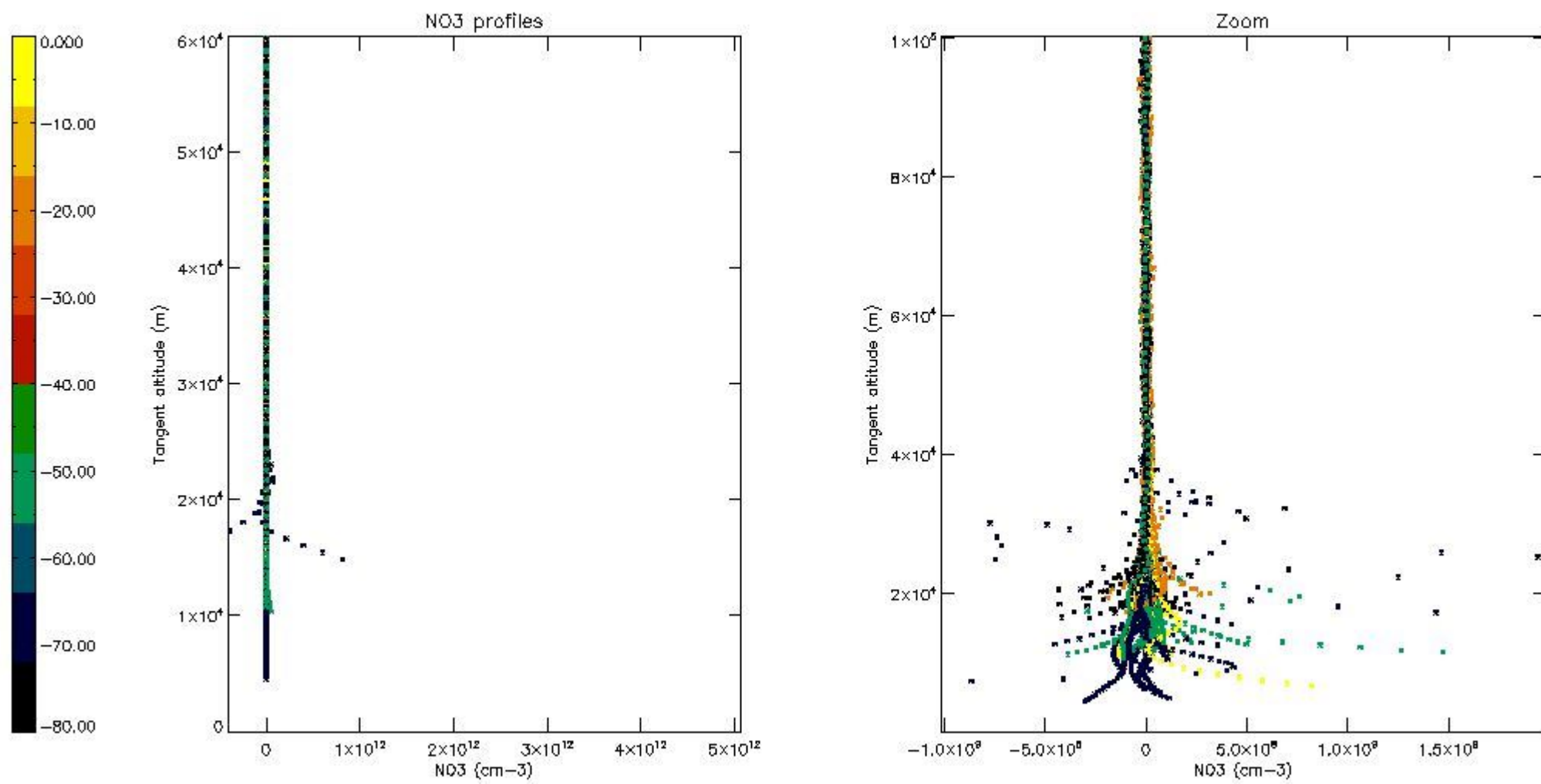
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



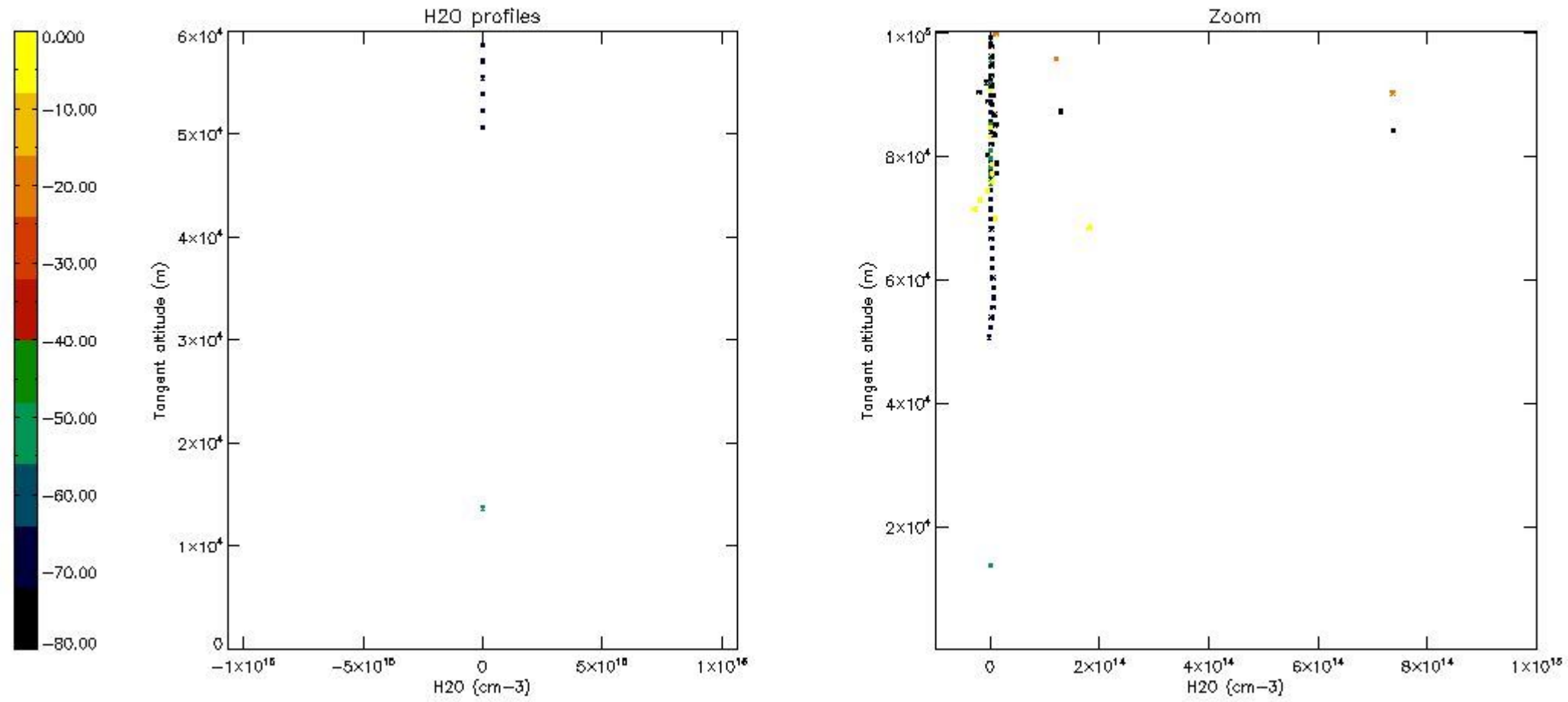
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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)

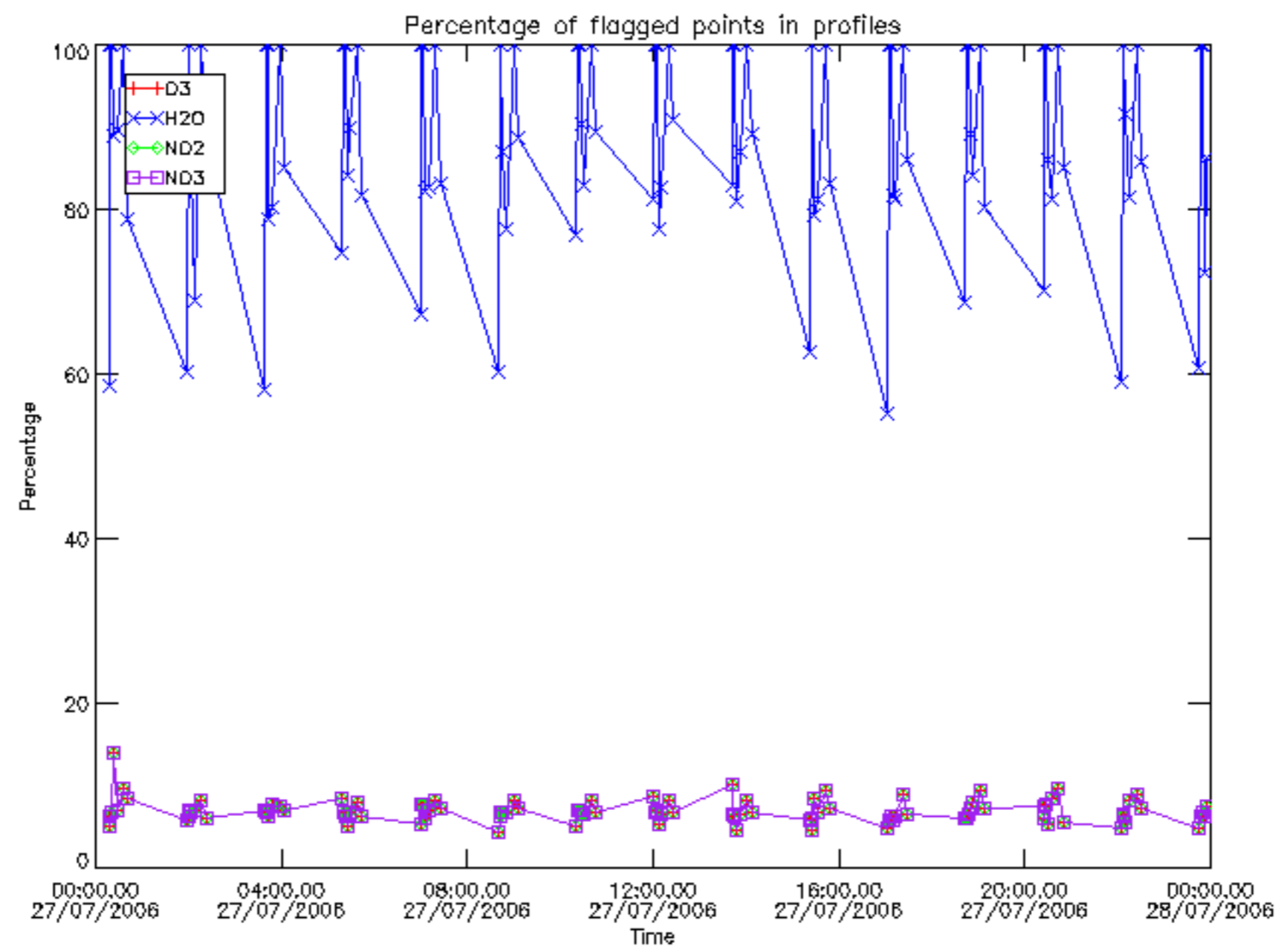
The colorbar represents the latitude.



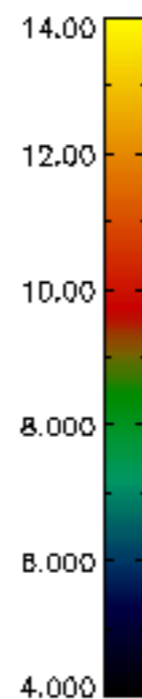
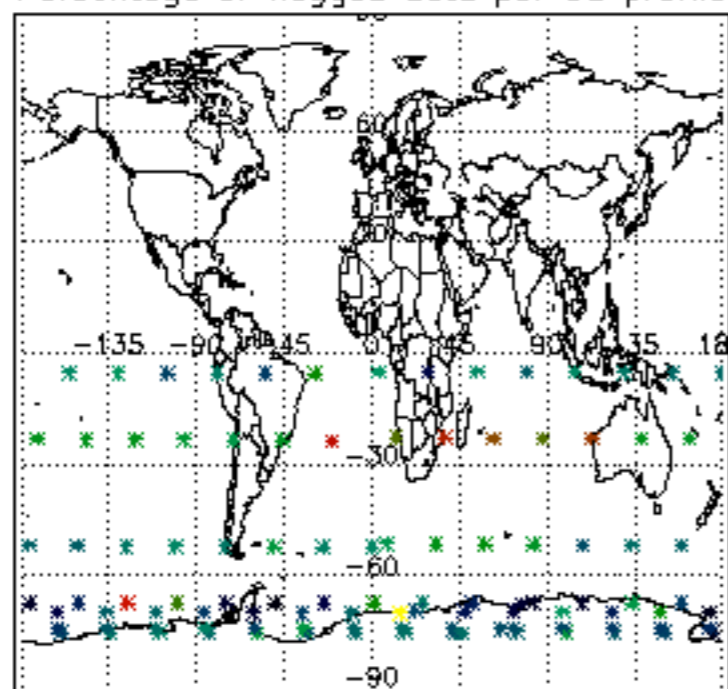
## 6. Auxiliary Data Files used for the production reported in section 2

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.

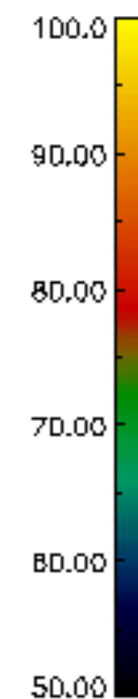
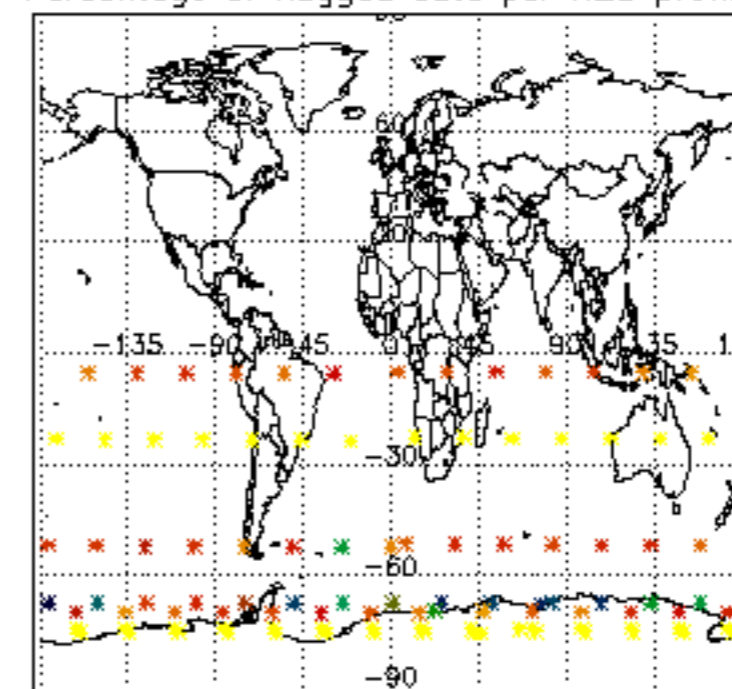
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	27-JUL-2006 00:07:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-JUL-2006 00:07:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-JUL-2006 00:07:15



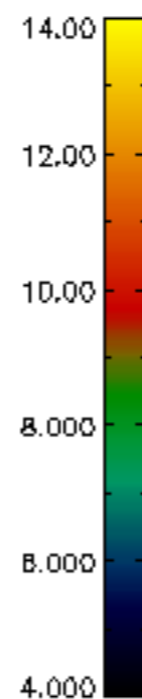
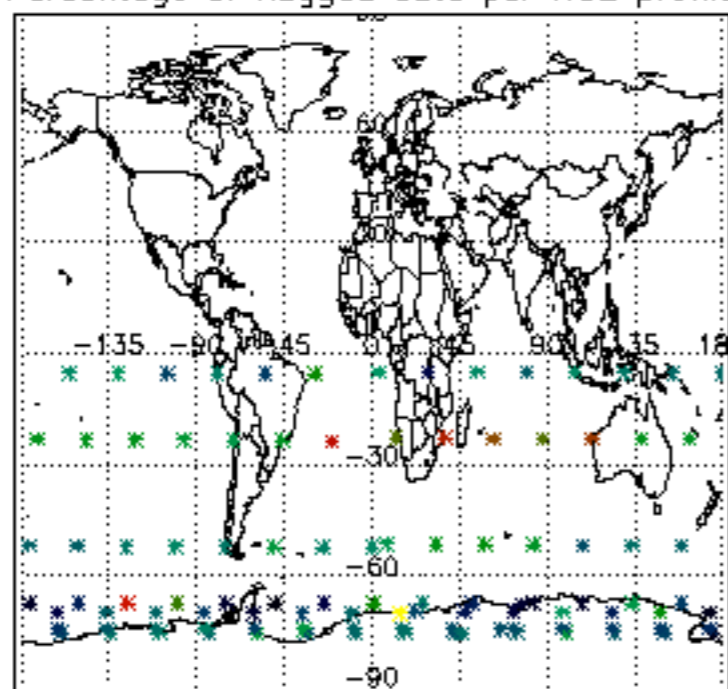
Percentage of flagged data per D3 profile



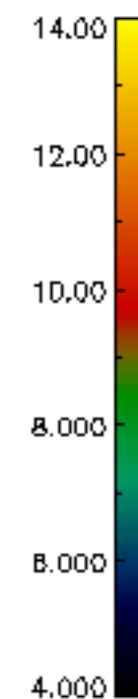
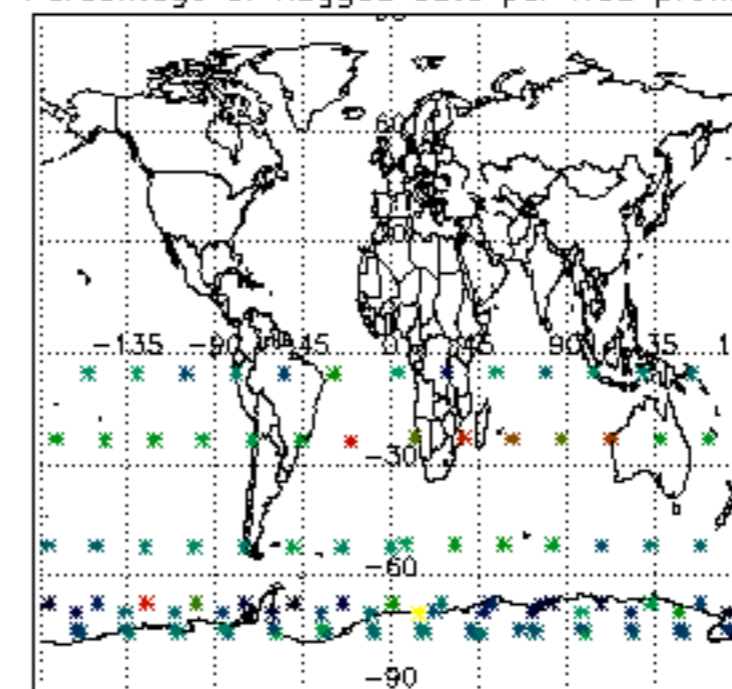
Percentage of flagged data per H2O profile



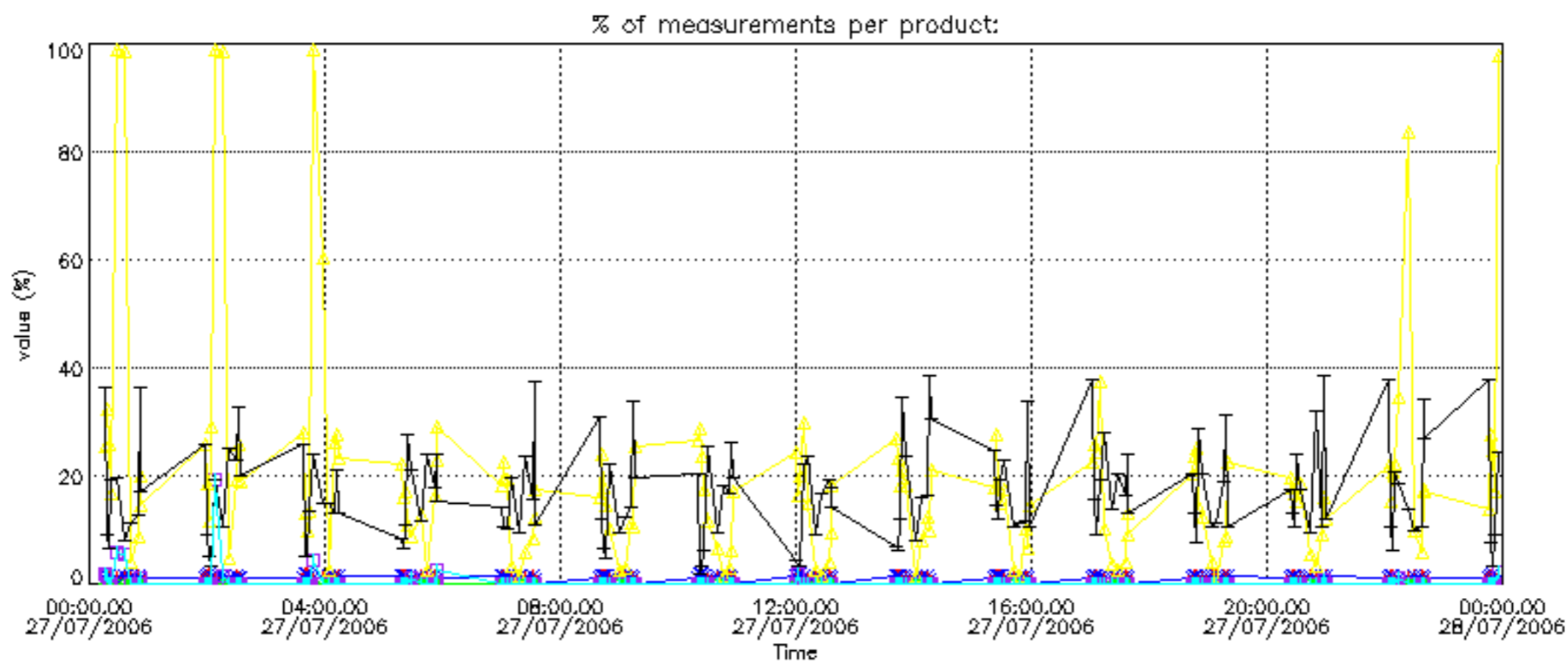
Percentage of flagged data per NO2 profile

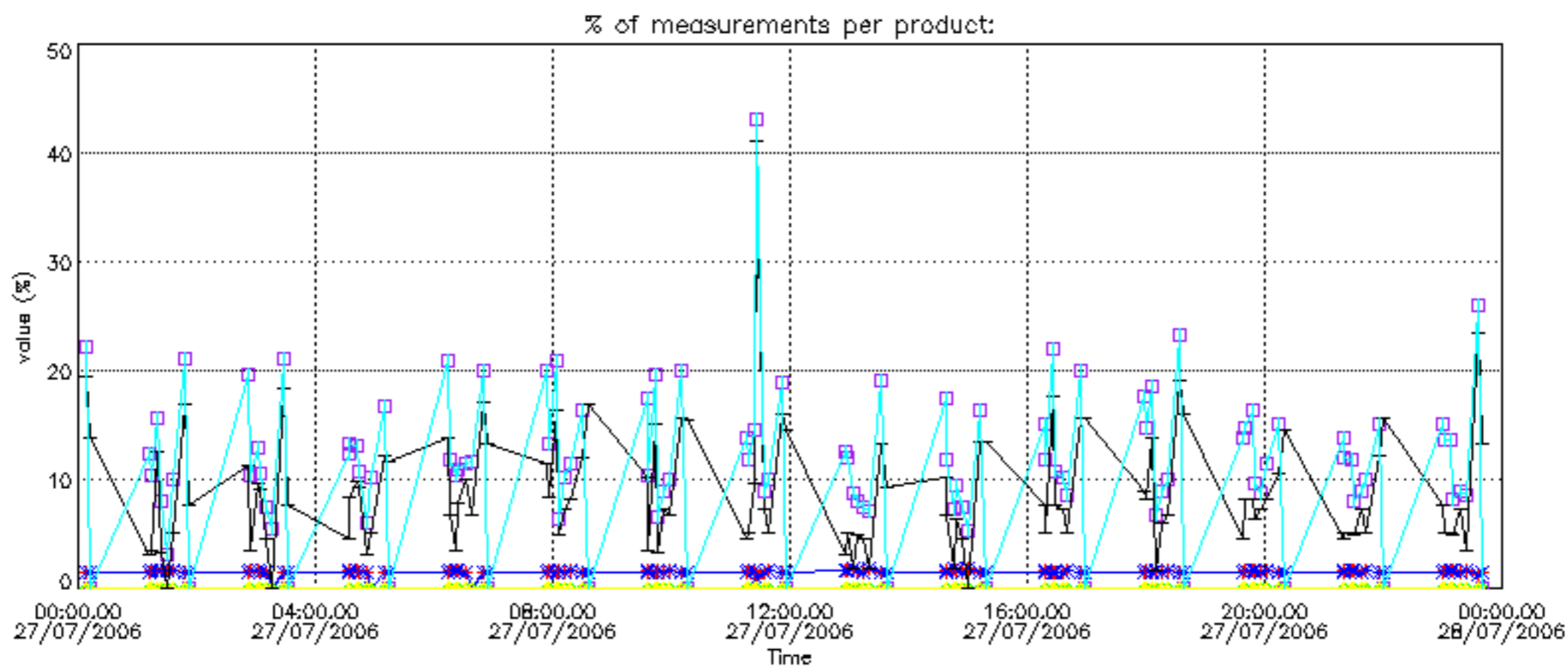


Percentage of flagged data per NO3 profile

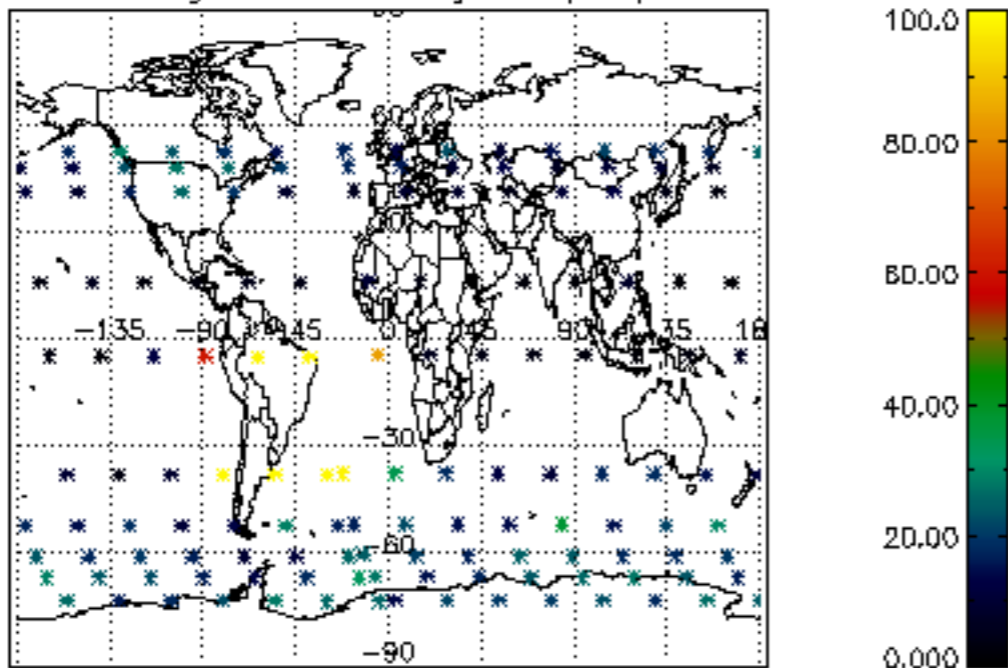




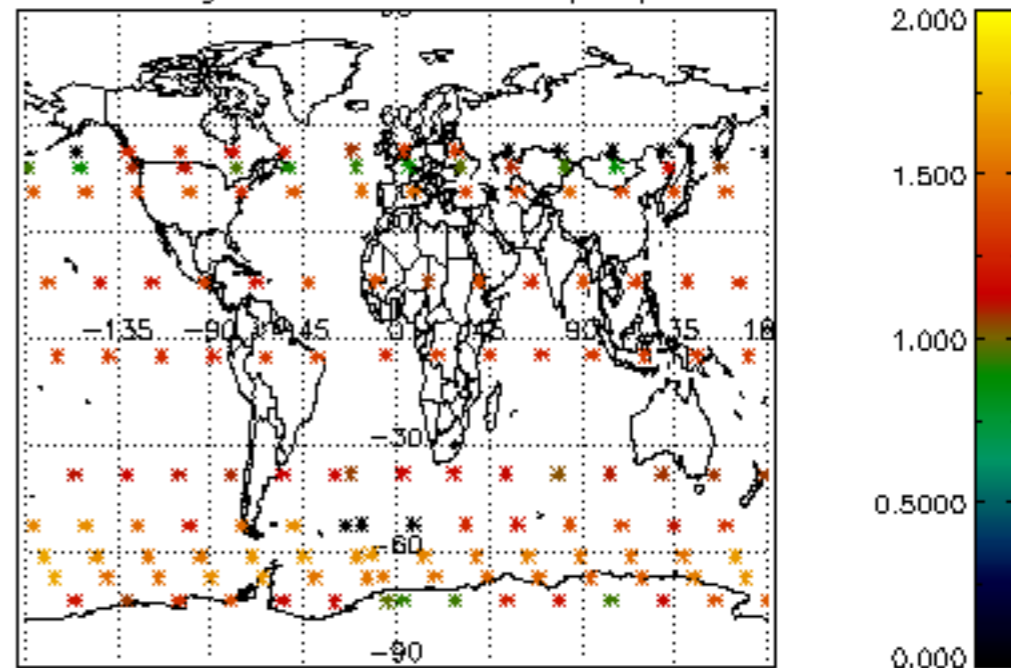




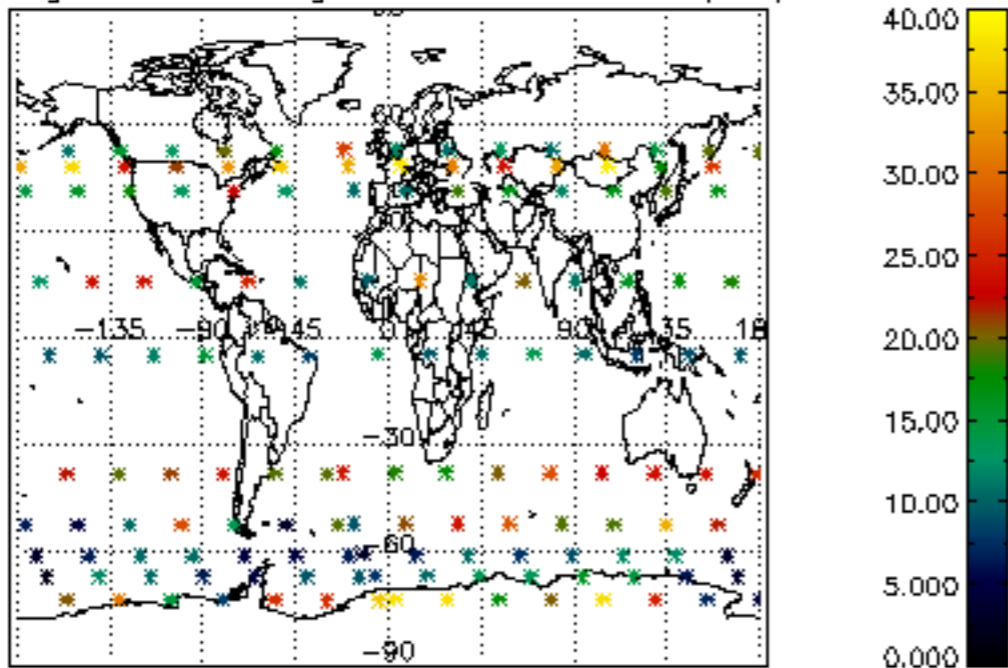
Percentage of cosmic ray hits per profile



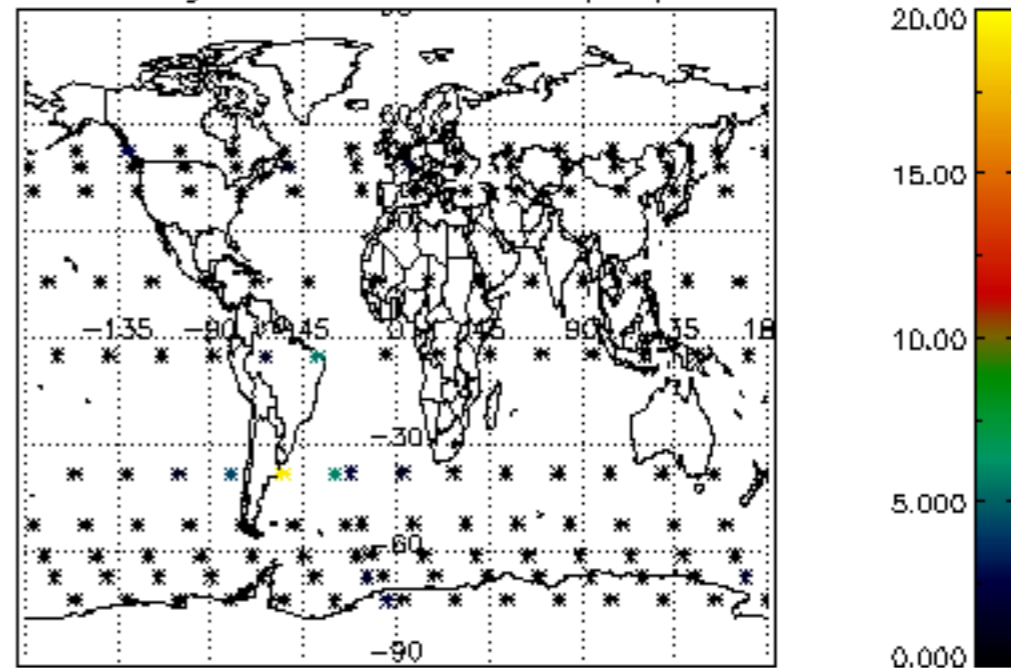
Percentage of datation errors per profile



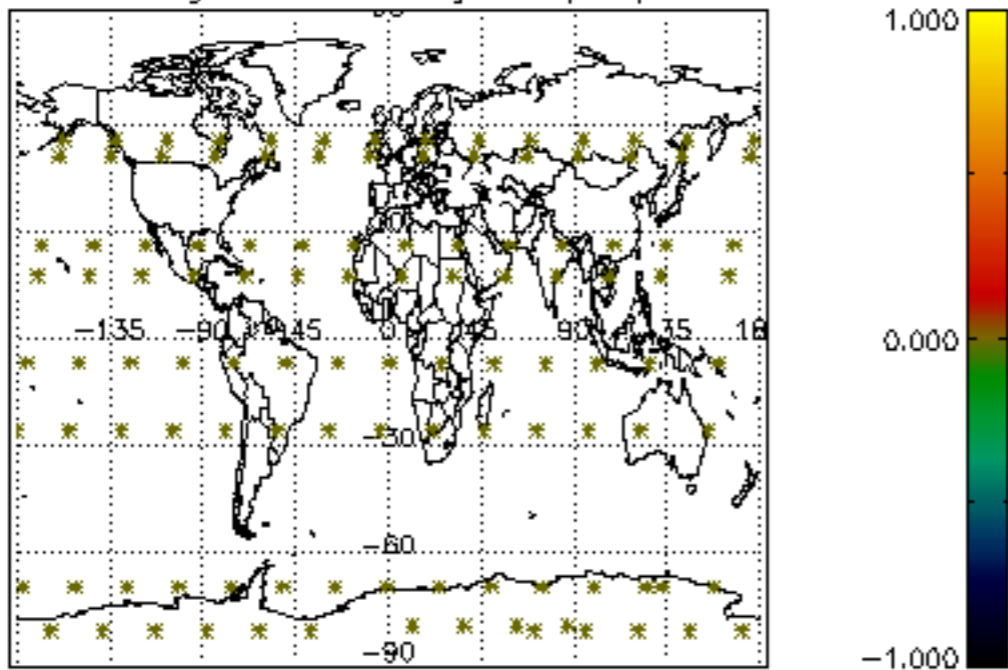
Percentage of star falling outside central band per profile



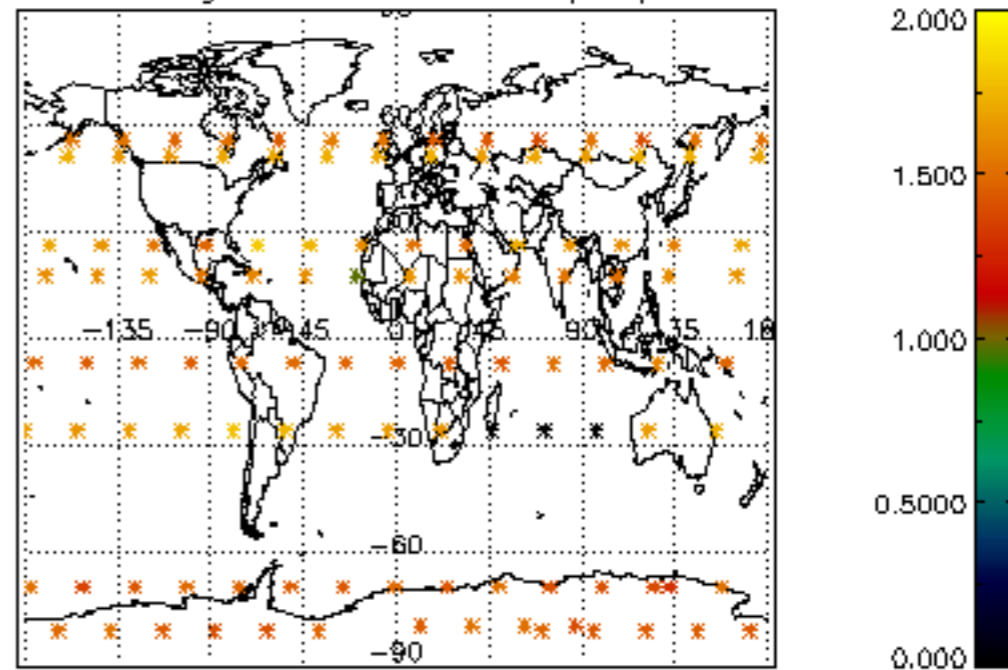
Percentage of saturation errors per profile



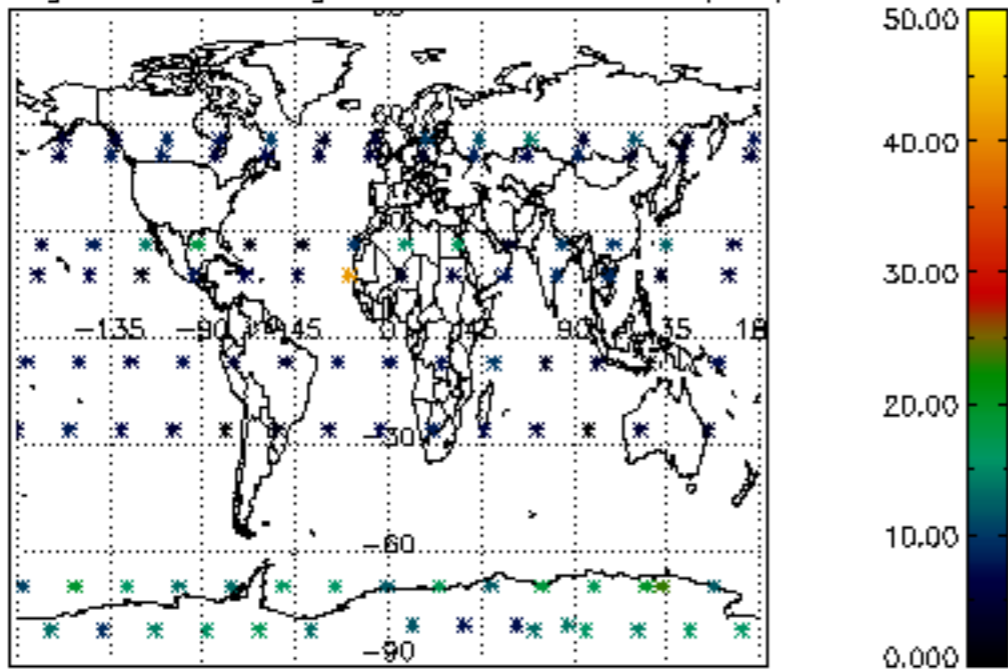
Percentage of cosmic ray hits per profile



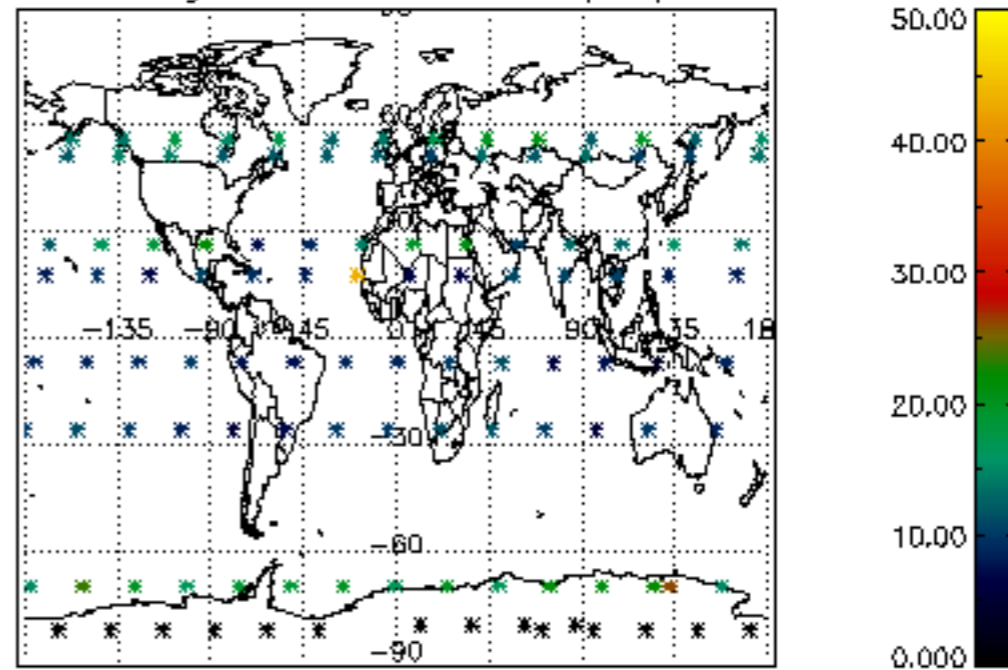
Percentage of datation errors per profile

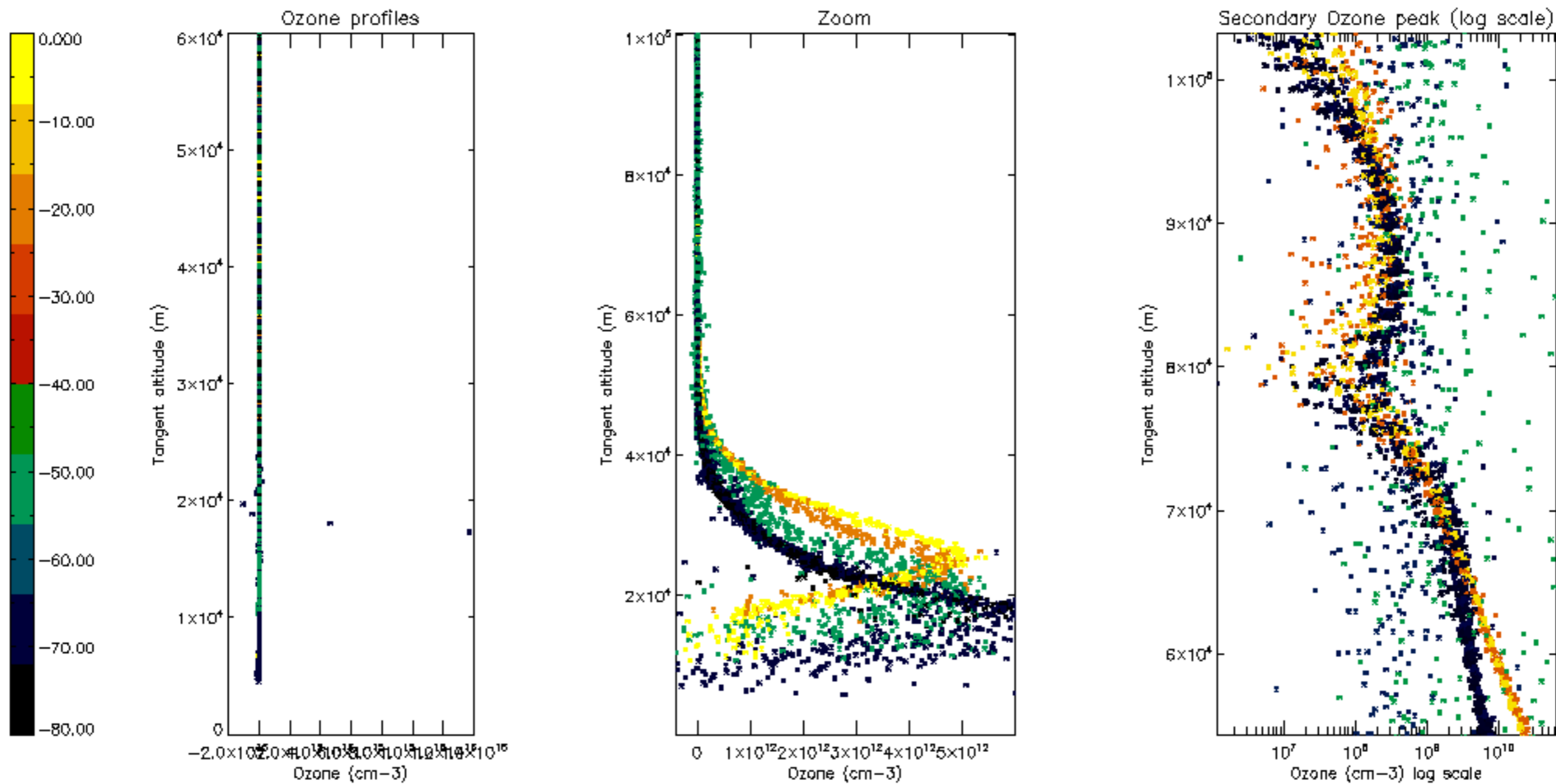


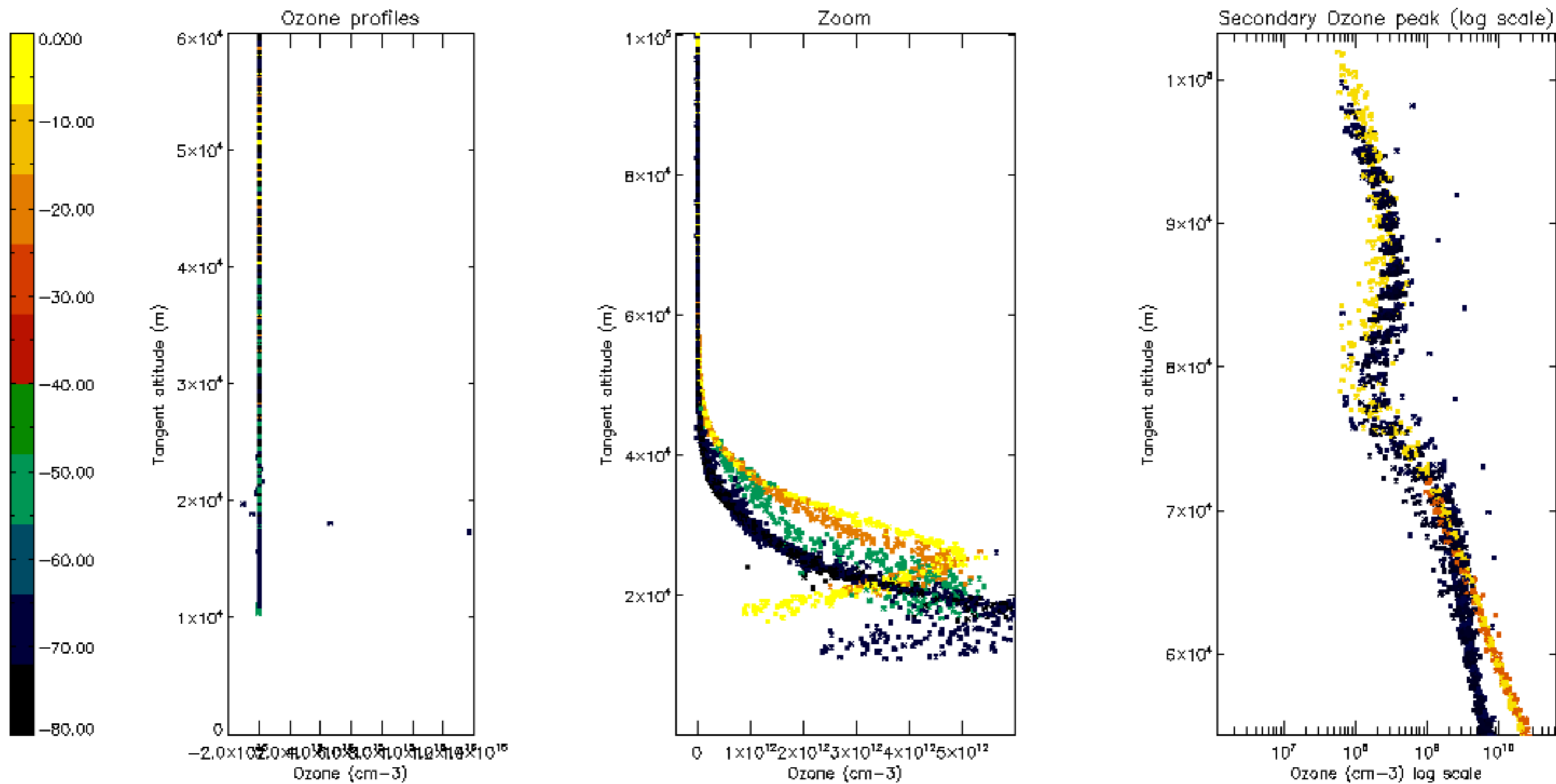
Percentage of star falling outside central band per profile

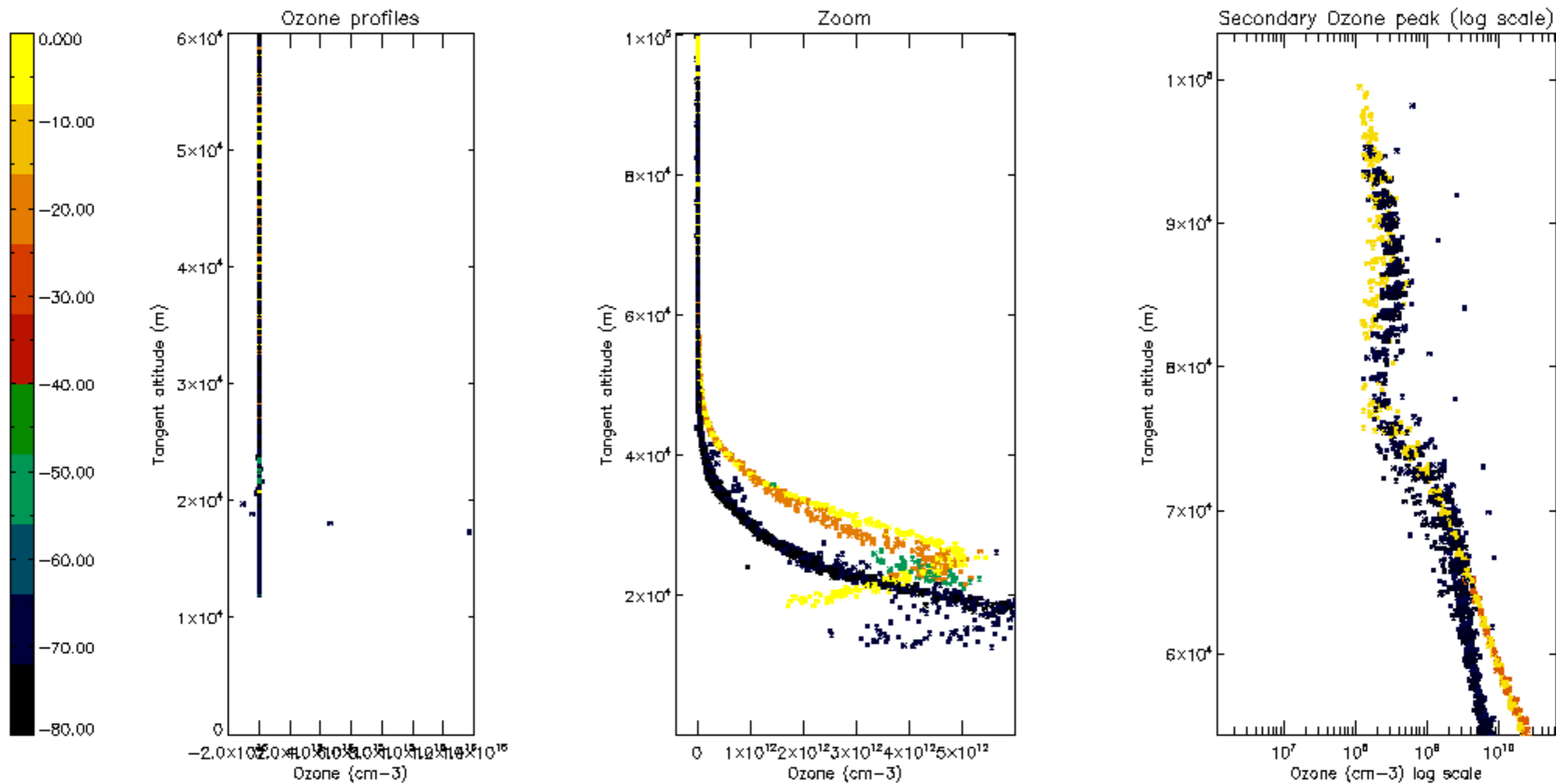


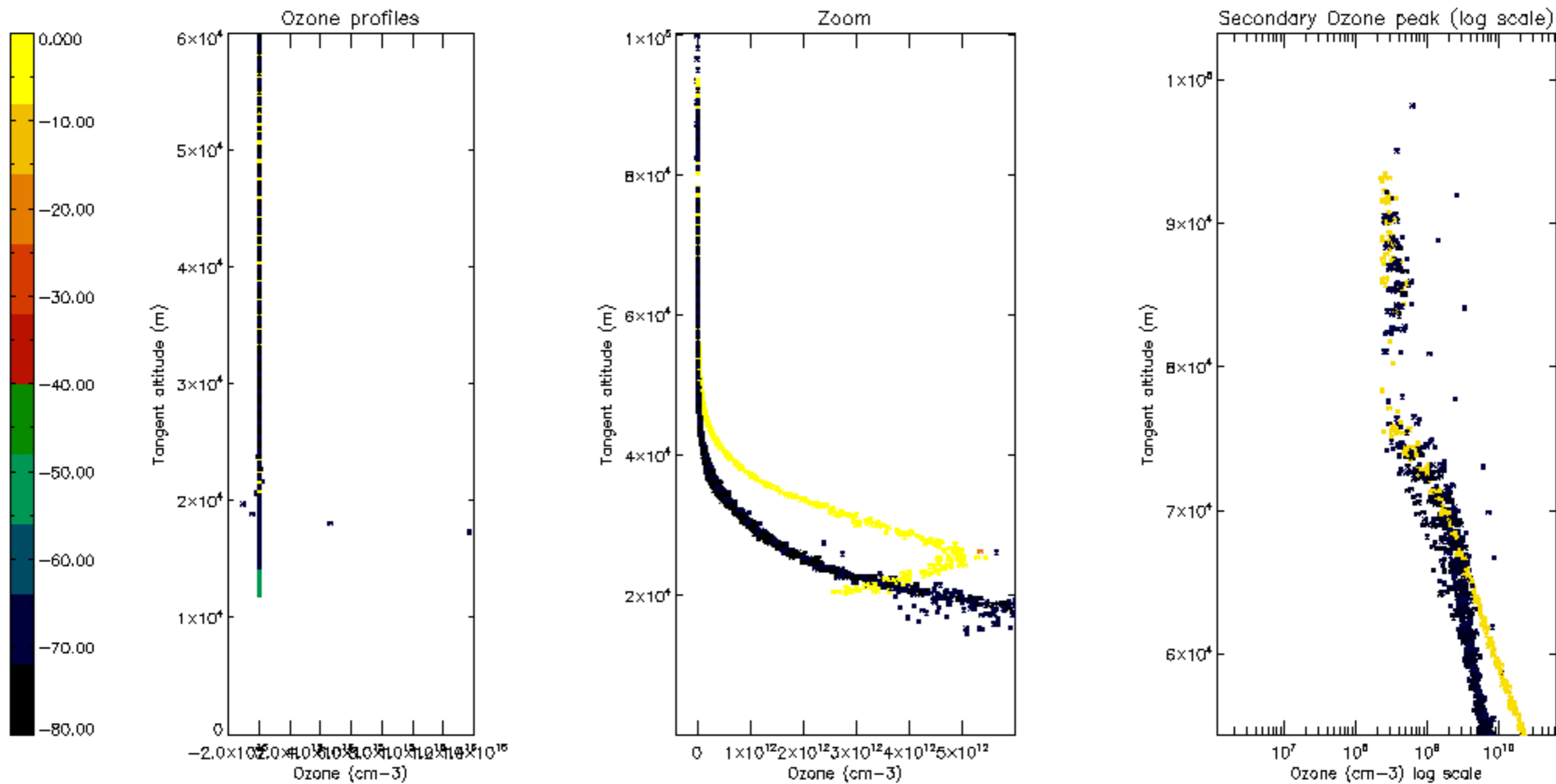
Percentage of saturation errors per profile



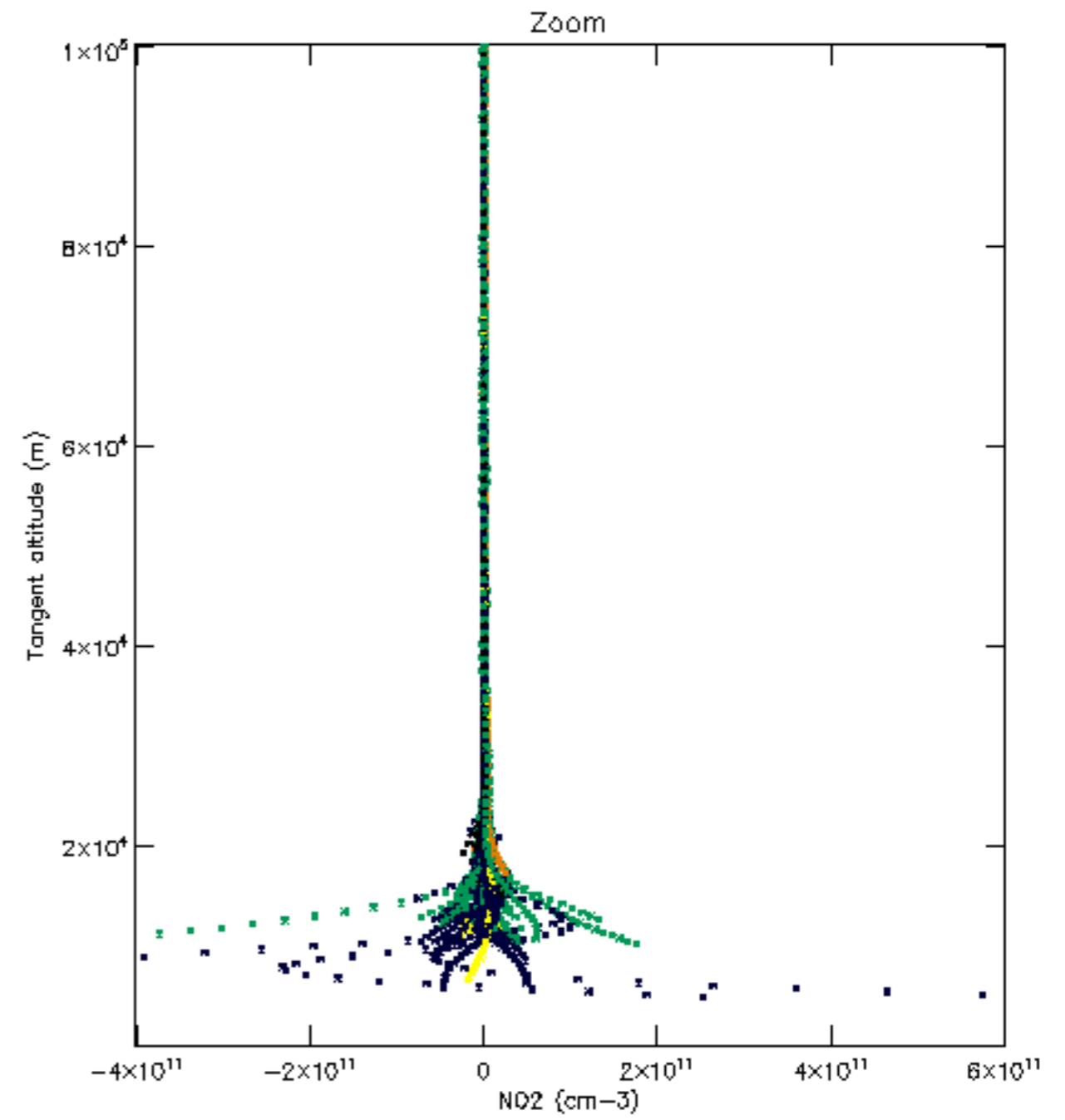
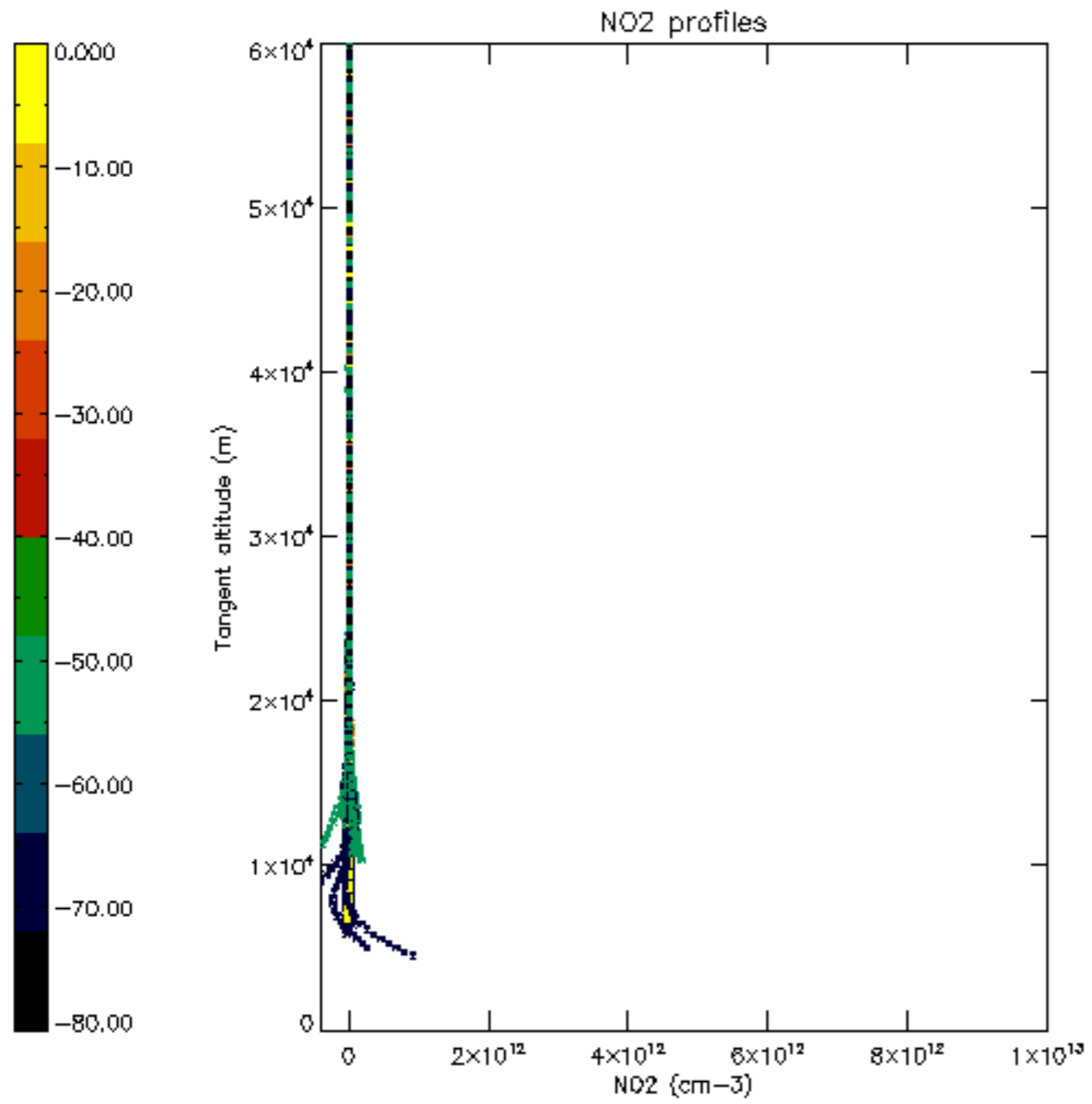


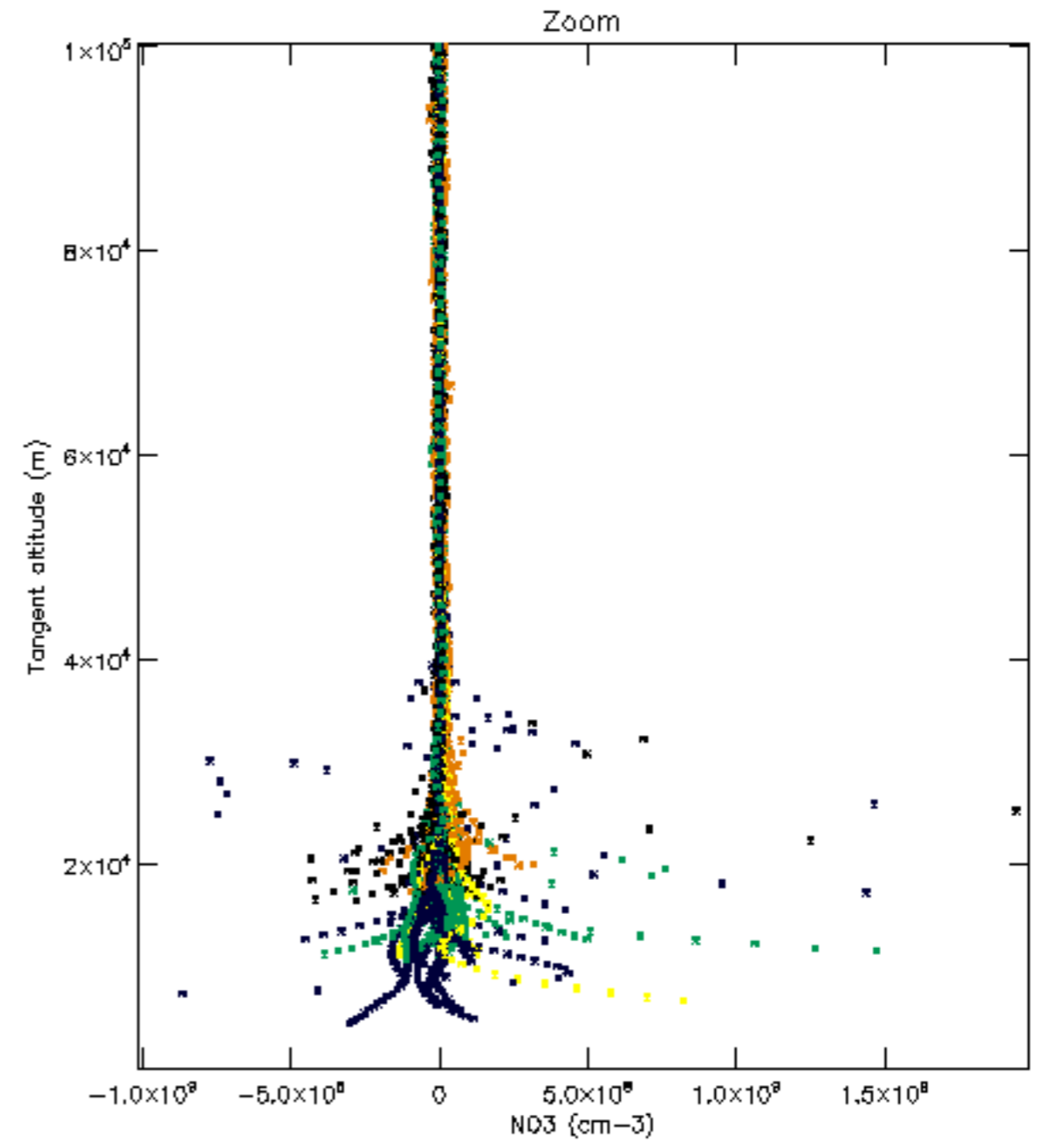
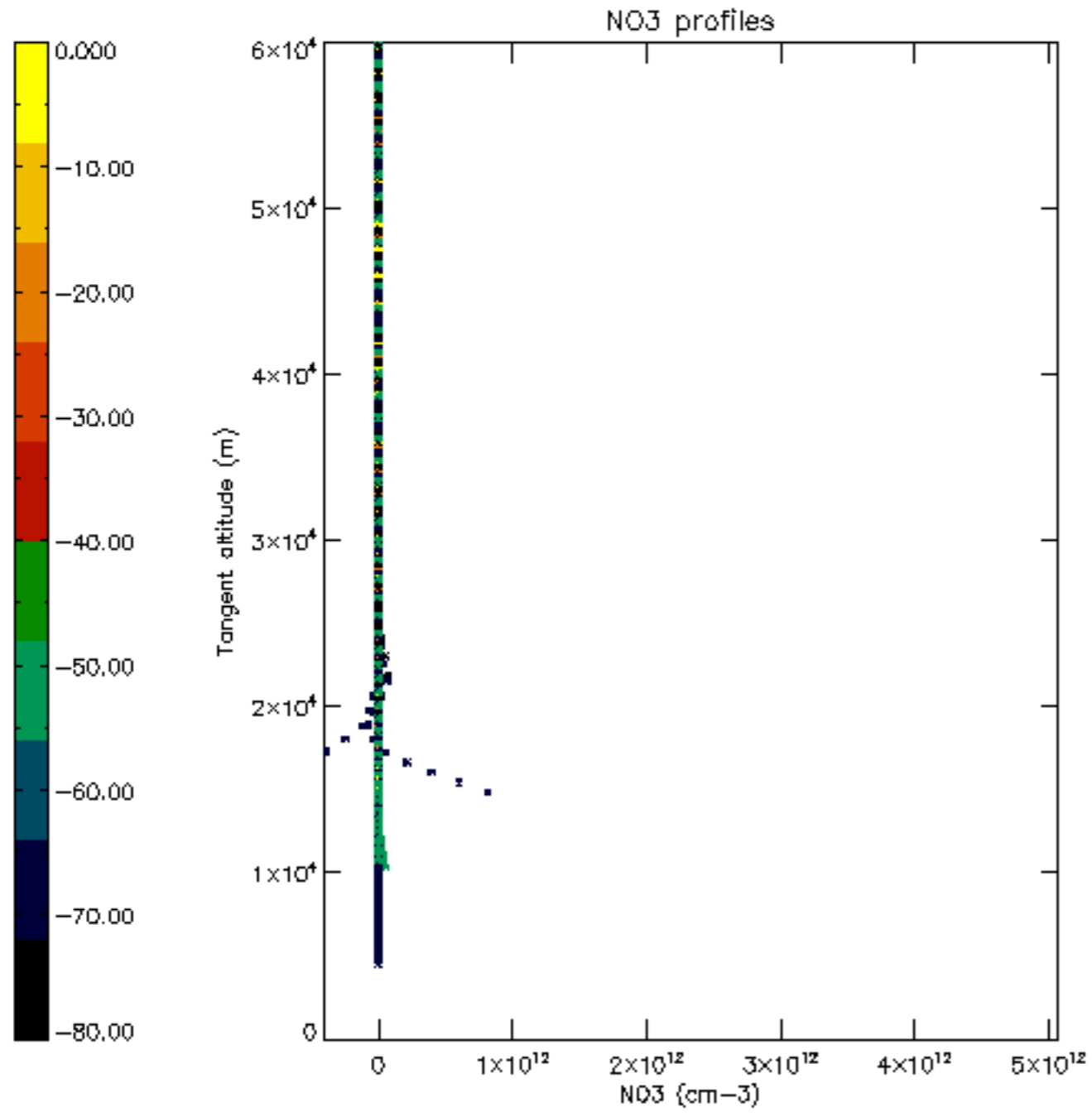


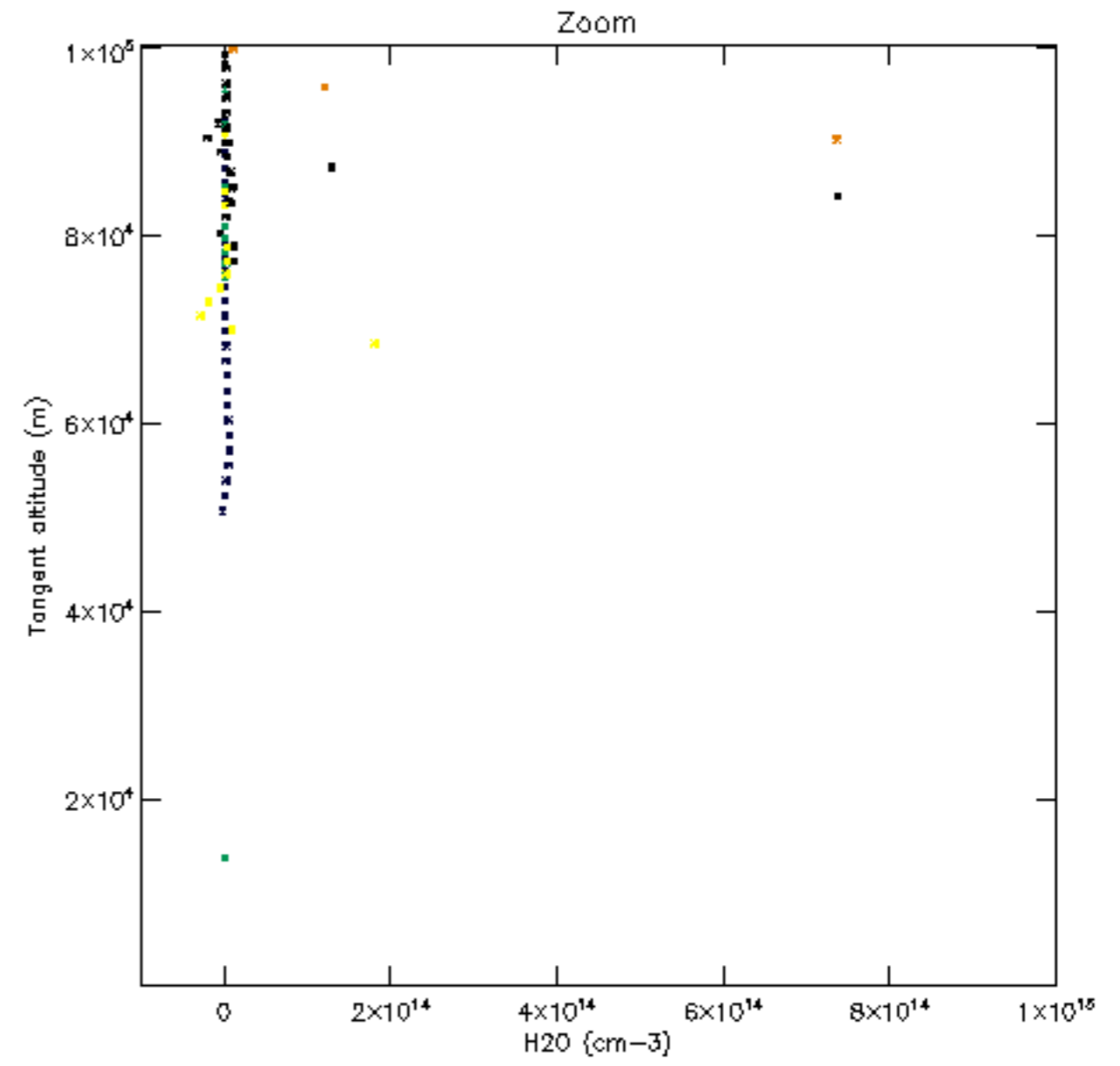
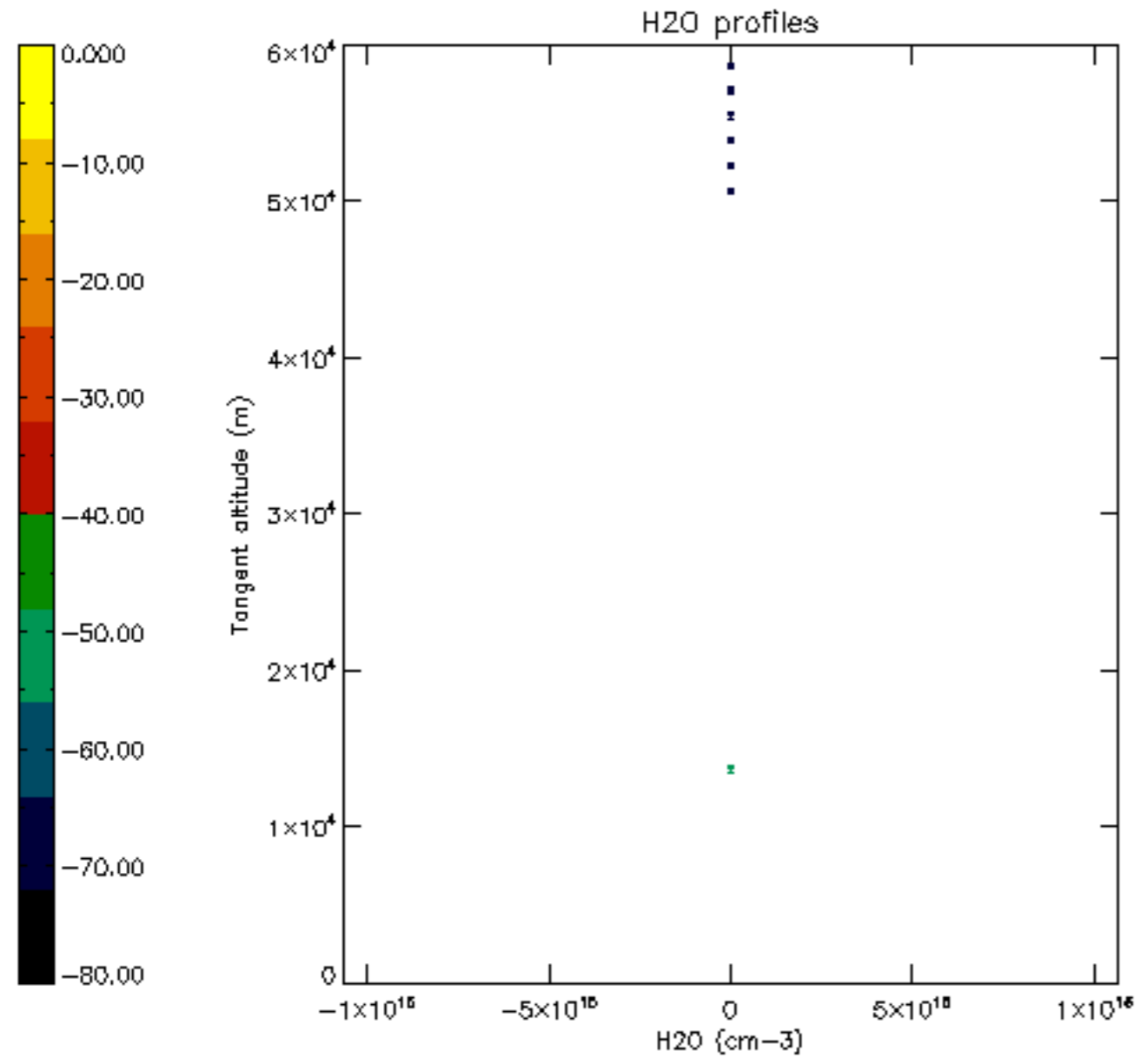


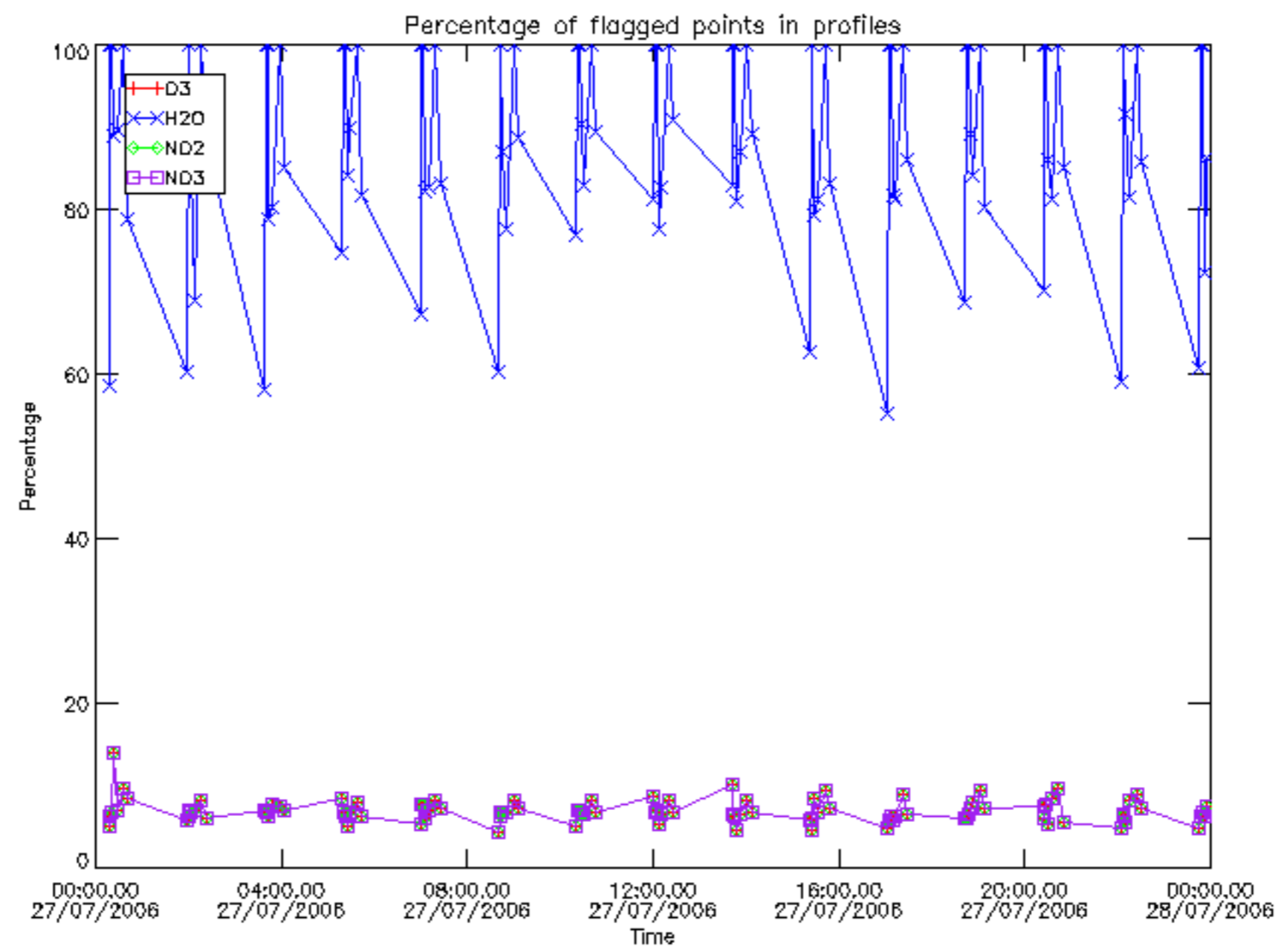




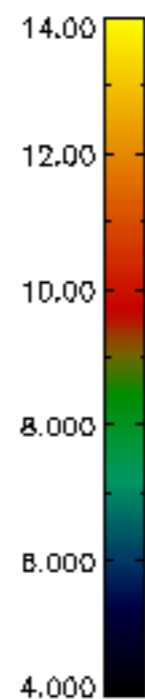
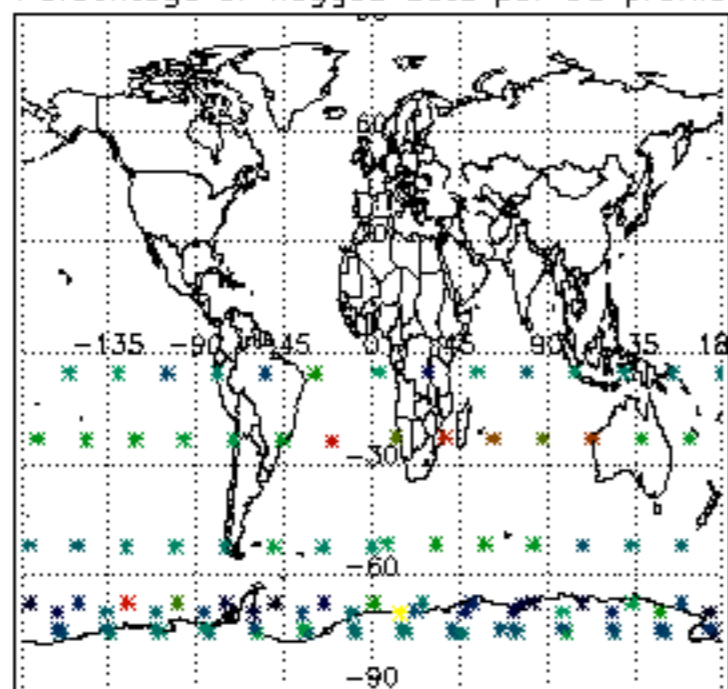




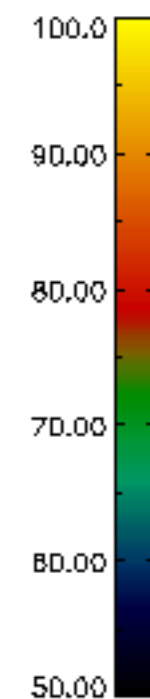
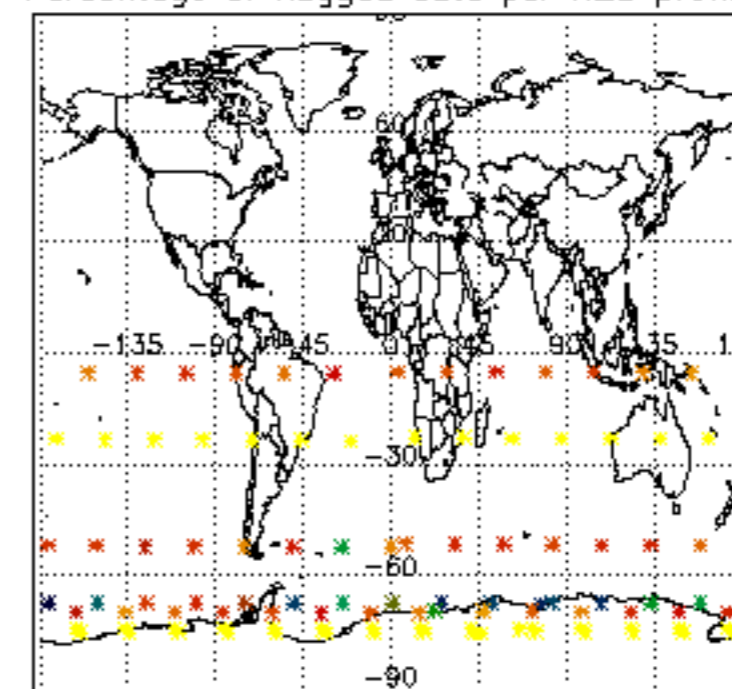




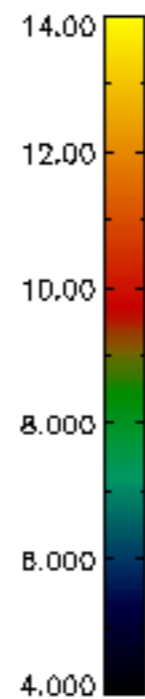
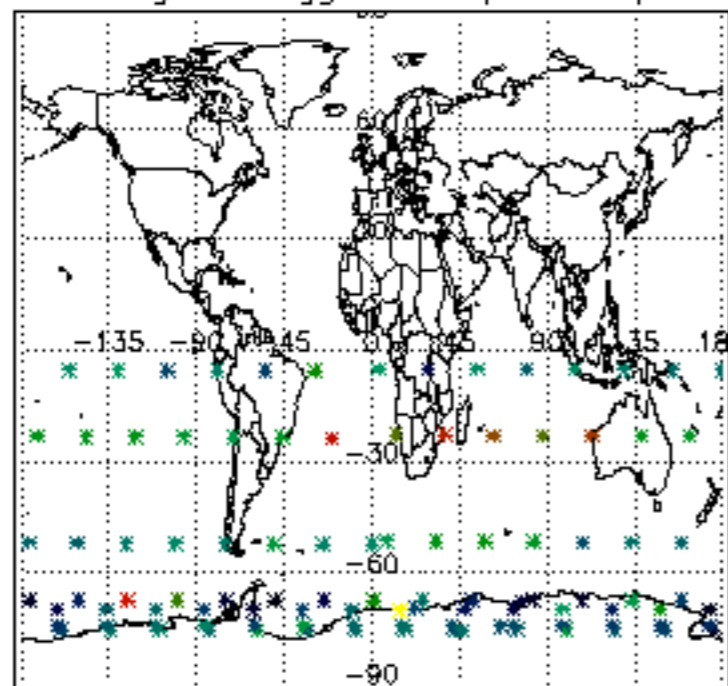
Percentage of flagged data per D3 profile



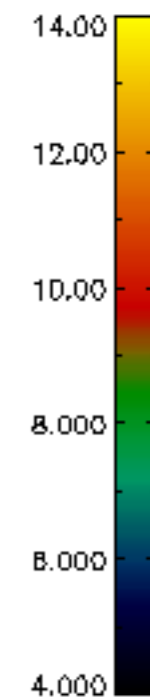
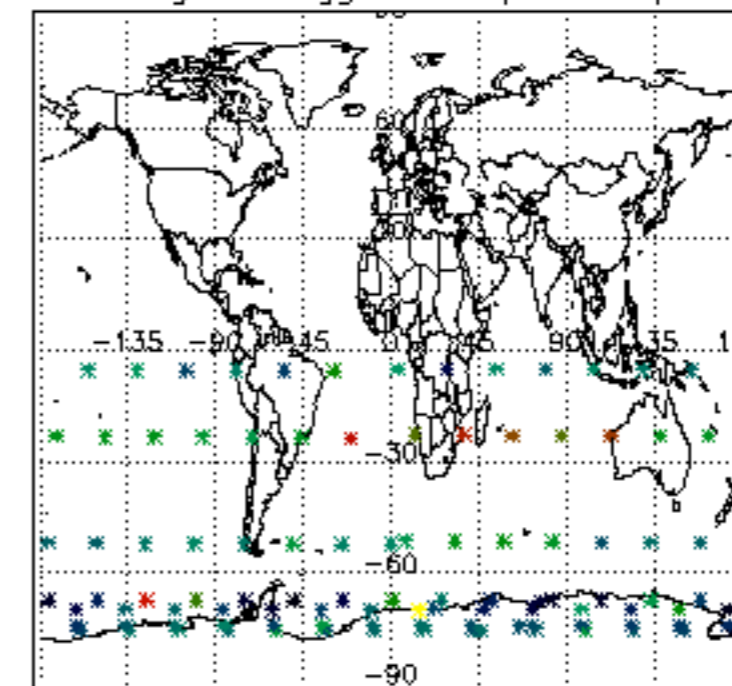
Percentage of flagged data per H2O profile

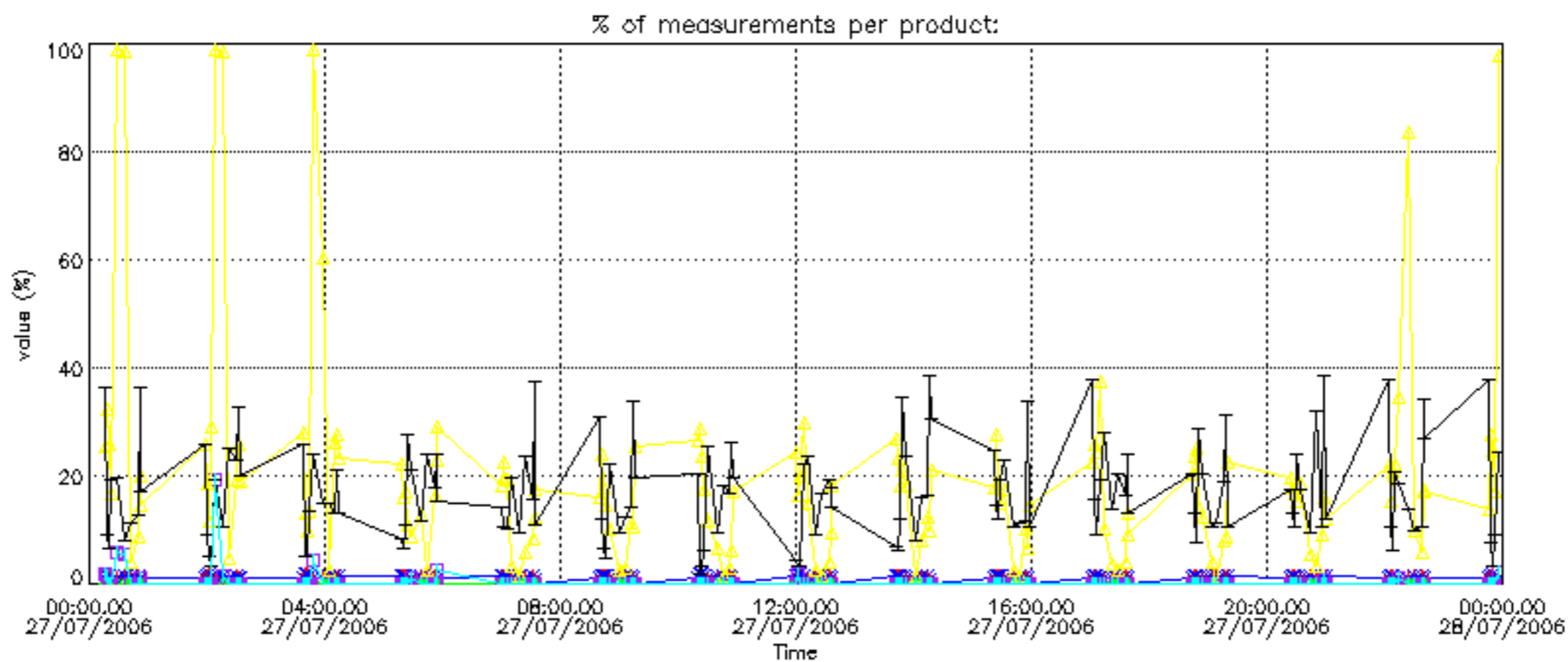


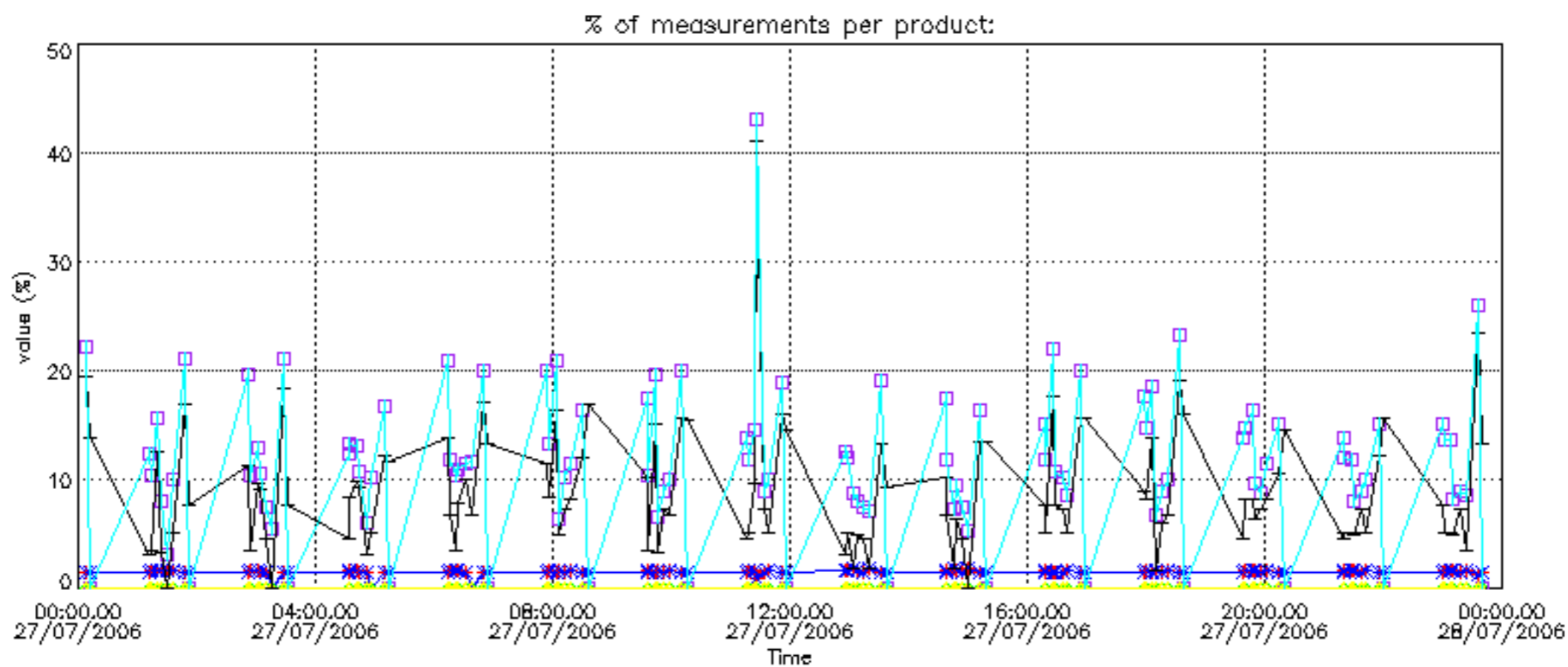
Percentage of flagged data per NO2 profile



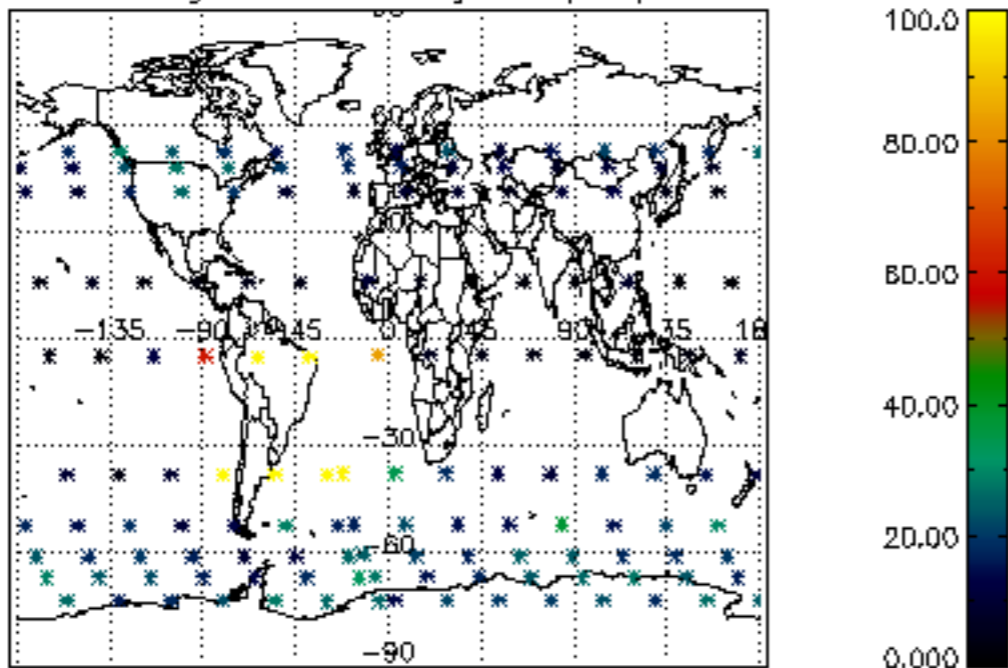
Percentage of flagged data per NO3 profile



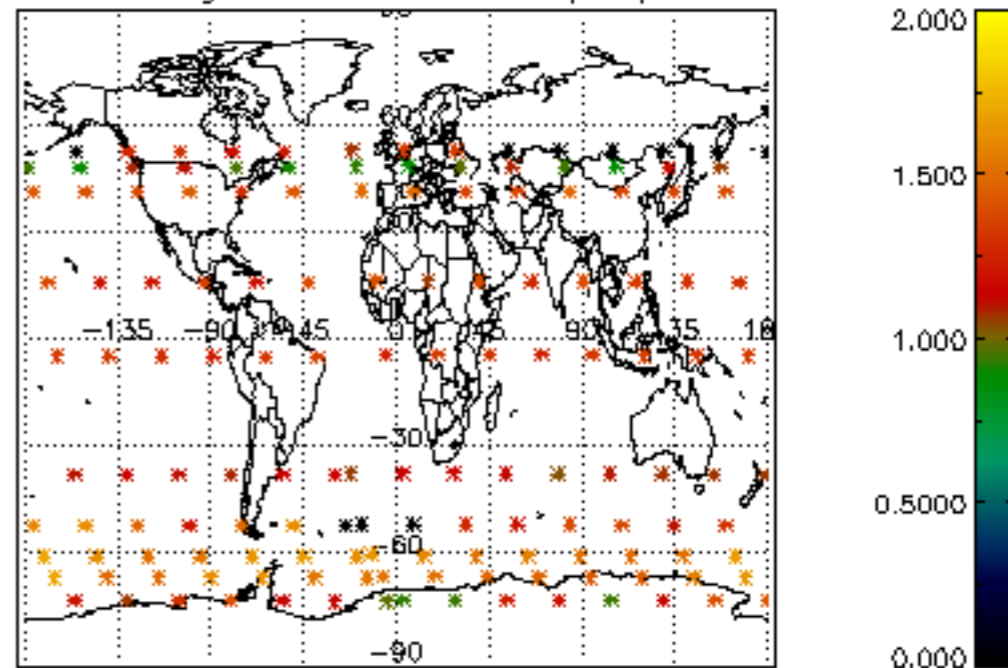




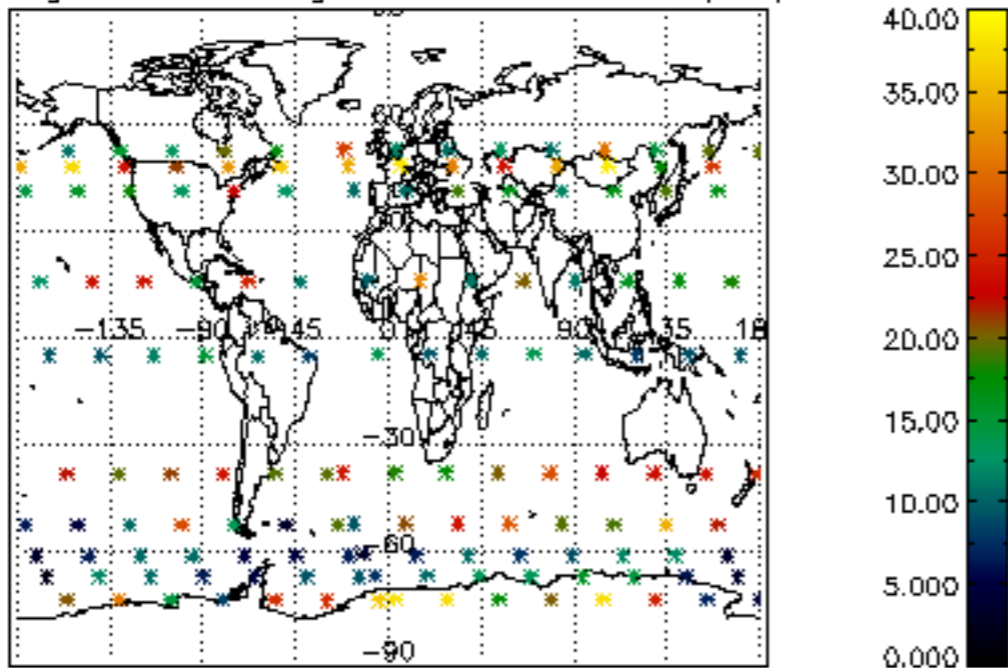
Percentage of cosmic ray hits per profile



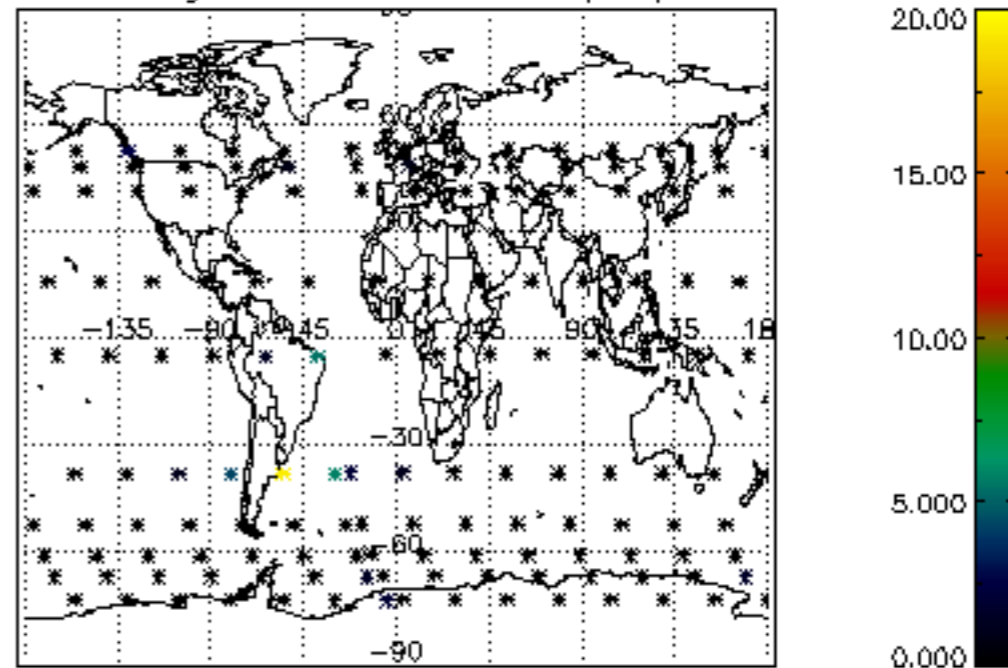
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

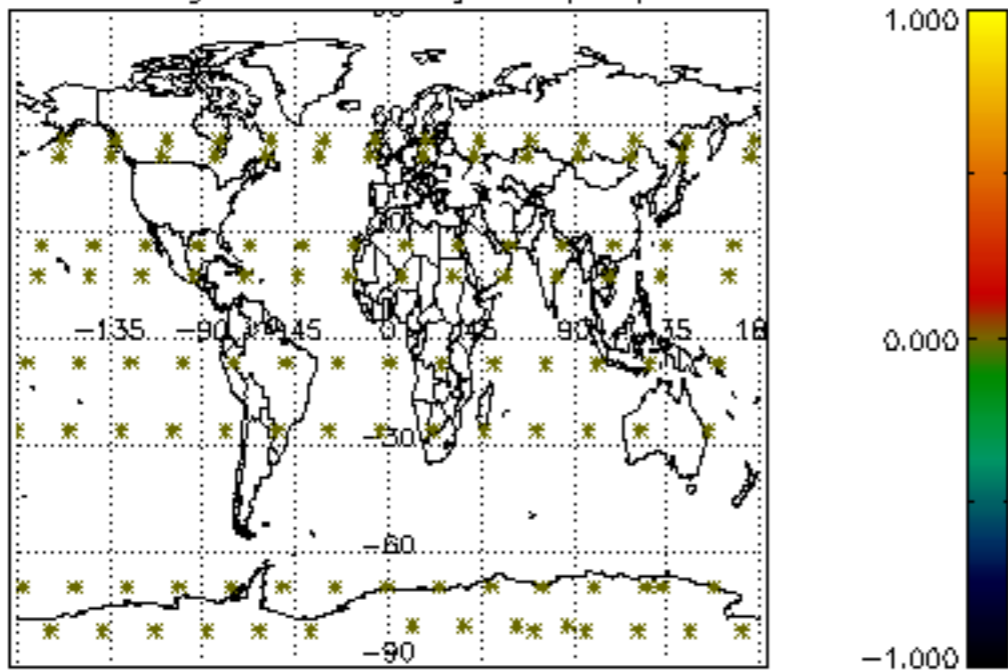


Percentage of saturation errors per profile

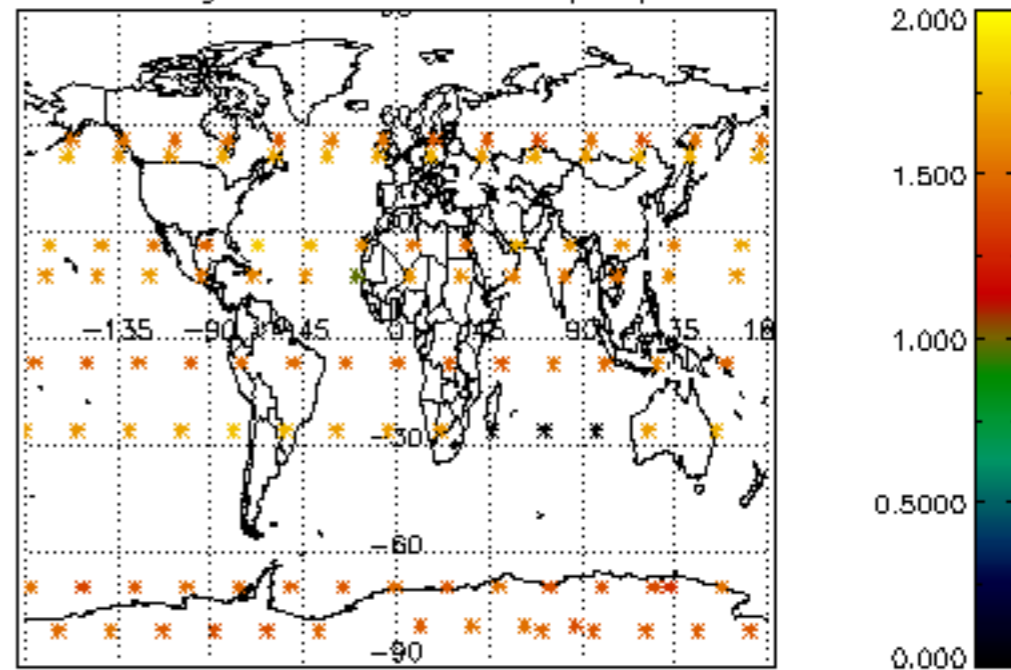




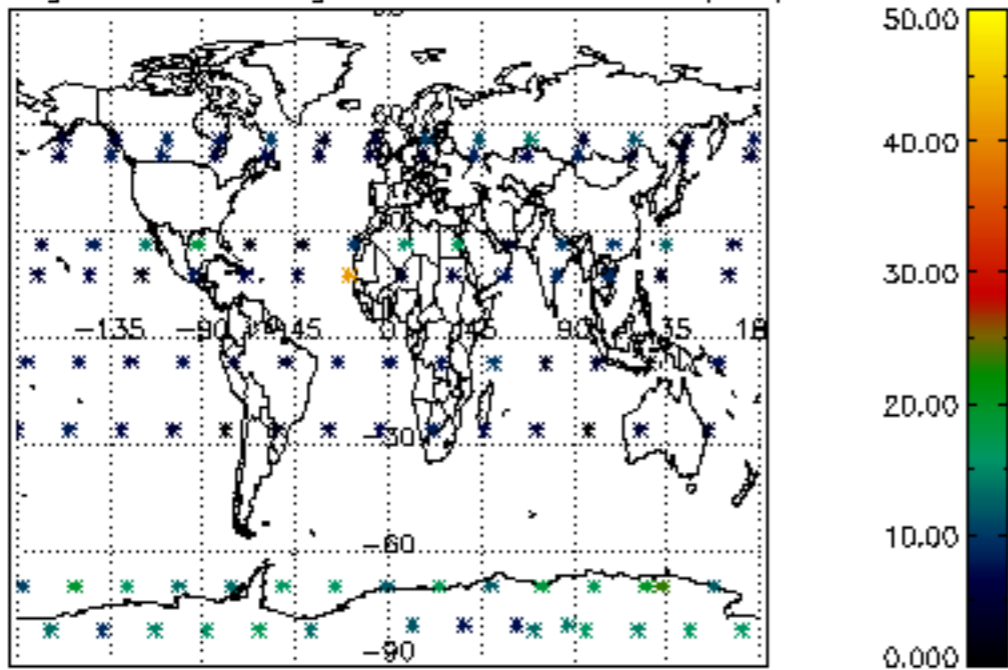
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

