

GOMOS Level 2 Daily Report

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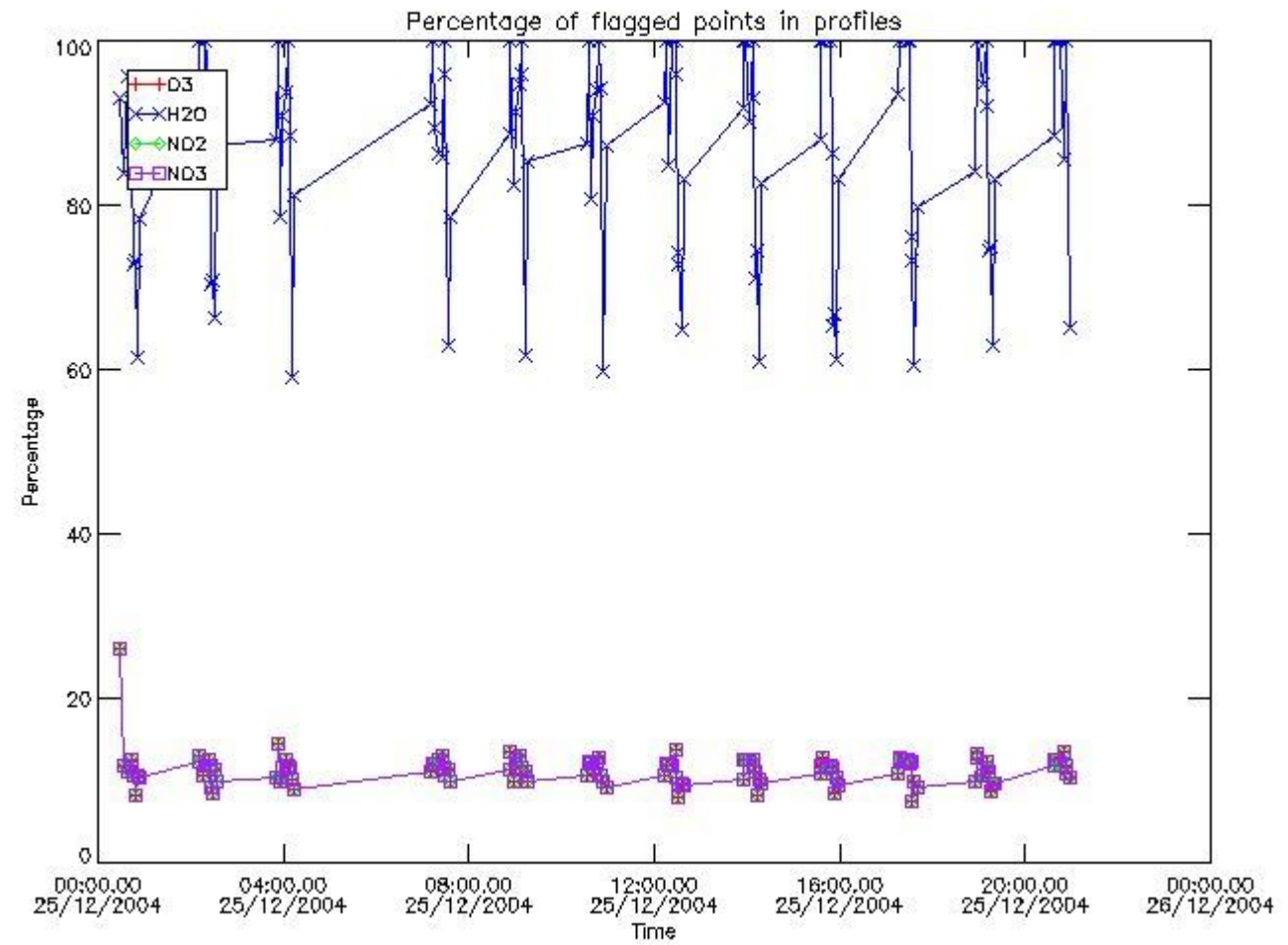
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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P).
 It is intended to monitor some important parameters that will impact the quality of these products.
 A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	22APR2013 10:51:52
Data source version	GOMOS/6.01
Start time of products	25-12-2004 (25DEC2004 00:00:00)
Stop time of products	26-12-2004 (26DEC2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	385
Nb of prods with errors	0

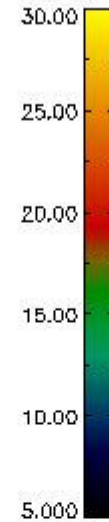
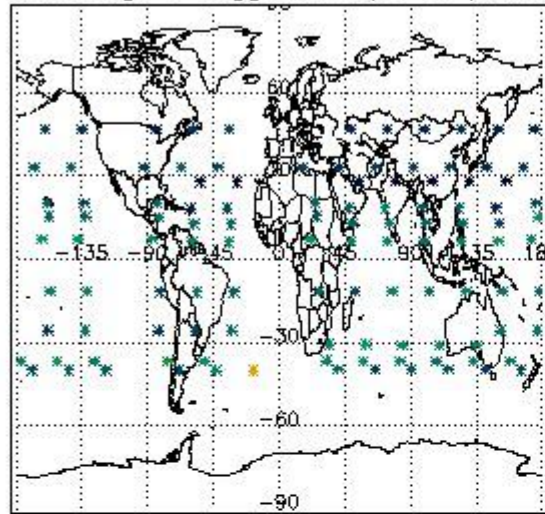
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20041225_000110_00000532033_00159_14742_7551.N1	25-DEC-2004 00:01:10	Bright	53.000	69	33Gam Dra	2.2310	3800.0	106	14742	No
2	GOM_NL__2PRFIN20041225_000257_00000422033_00159_14742_7552.N1	25-DEC-2004 00:02:57	Bright	41.500	39	85Eta UMa	1.8540	24000.	83	14742	No
3	GOM_NL__2PRFIN20041225_000639_00000422033_00159_14742_7553.N1	25-DEC-2004 00:06:39	Bright	41.500	180	27Gam Boo	3.0400	8000.0	83	14742	No
4	GOM_NL__2PRFIN20041225_001006_00000572033_00159_14742_7554.N1	25-DEC-2004 00:10:06	Bright	57.000	83		2.3780	11000.	114	14742	No
5	GOM_NL__2PRFIN20041225_001350_00000682033_00159_14742_7555.N1	25-DEC-2004 00:13:50	Bright	68.000	111	8Eta Boo	2.6800	6000.0	136	14742	No
6	GOM_NL__2PRFIN20041225_001854_00000752033_00159_14742_7556.N1	25-DEC-2004 00:18:54	Twilight	74.500	138	47Eps Vir	2.8280	4700.0	149	14742	No
7	GOM_NL__2PRFIN20041225_002234_00000422033_00159_14742_7557.N1	25-DEC-2004 00:22:34	Bright	41.500	122	9Alp2Lib	2.7470	9700.0	83	14742	No
8	GOM_NL__2PRFIN20041225_002454_00000632033_00159_14742_7558.N1	25-DEC-2004 00:24:54	Straylight	62.500	15	67Alp Vir	0.97600	28000.	125	14742	No
9	GOM_NL__2PRFIN20041225_002914_00000432033_00159_14742_7559.N1	25-DEC-2004 00:29:14	Dark	43.000	54	5The Cen	2.0550	4500.0	86	14742	No
10	GOM_NL__2PRFIN20041225_003419_00000442033_00159_14742_7560.N1	25-DEC-2004 00:34:19	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	14742	No
11	GOM_NL__2PRFIN20041225_003748_00000462033_00160_14743_7529.N1	25-DEC-2004 00:37:48	Dark	45.500	12	Alp1Cru	0.77500	30000.	91	14743	No
12	GOM_NL__2PRFIN20041225_004249_00000412033_00160_14743_7530.N1	25-DEC-2004 00:42:49	Dark	40.500	159	Ups Car	2.9200	7200.0	81	14743	No
13	GOM_NL__2PRFIN20041225_004423_00000492033_00160_14743_7531.N1	25-DEC-2004 00:44:23	Dark	48.500	71	Iot Car	2.2460	7700.0	97	14743	No
14	GOM_NL__2PRFIN20041225_004605_00000482033_00160_14743_7532.N1	25-DEC-2004 00:46:05	Dark	48.000	41	Eps Car	1.8600	4100.0	96	14743	No
15	GOM_NL__2PRFIN20041225_004735_00000622033_00160_14743_7533.N1	25-DEC-2004 00:47:35	Dark	62.000	65	Lam Vel	2.2040	4400.0	124	14743	No
16	GOM_NL__2PRFIN20041225_005038_00000492033_00160_14743_7534.N1	25-DEC-2004 00:50:38	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	14743	No
17	GOM_NL__2PRFIN20041225_005341_00000492033_00160_14743_7535.N1	25-DEC-2004 00:53:41	Dark	49.000	117	Pi Pup	2.7060	3800.0	98	14743	No
18	GOM_NL__2PRFIN20041225_005639_00000522033_00160_14743_7536.N1	25-DEC-2004 00:56:39	Straylight	51.500	23	21Eps CMa	1.5020	26000.	103	14743	No
19	GOM_NL__2PRFIN20041225_005817_00000522033_00160_14743_7537.N1	25-DEC-2004 00:58:17	Straylight	51.500	179	24Omi2CMa	3.0320	24000.	103	14743	No
20	GOM_NL__2PRFIN20041225_010057_00000612033_00160_14743_7538.N1	25-DEC-2004 01:00:57	Straylight	60.500	1	9Alp CMa	-1.4400	11000.	121	14743	No
21	GOM_NL__2PRFIN20041225_010406_00000472033_00160_14743_7539.N1	25-DEC-2004 01:04:06	Straylight	46.500	7	19Bet Ori	0.10000	14000.	93	14743	No
22	GOM_NL__2PRFIN20041225_010606_00000462033_00160_14743_7540.N1	25-DEC-2004 01:06:06	Straylight	46.000	30	46Eps Ori	1.6940	30000.	92	14743	No
23	GOM_NL__2PRFIN20041225_010850_00000532033_00160_14743_7541.N1	25-DEC-2004 01:08:50	Twilight	53.000	14	58Alp Ori	0.87000	3000.0	106	14743	No
24	GOM_NL__2PRFIN20041225_011117_00000522033_00160_14743_7542.N1	25-DEC-2004 01:11:17	Bright	52.000	13	87Alp Tau	0.86700	3800.0	104	14743	No
25	GOM_NL__2PRFIN20041225_011251_00000422033_00160_14743_7543.N1	25-DEC-2004 01:12:51	Bright	41.500	176	23Zet Tau	3.0200	22000.	83	14743	No
26	GOM_NL__2PRFIN20041225_011456_00000432033_00160_14743_7544.N1	25-DEC-2004 01:14:56	Bright	43.000	28	12Bet Tau	1.6500	15200.	86	14743	No
27	GOM_NL__2PRFIN20041225_011802_00000392033_00160_14743_7545.N1	25-DEC-2004 01:18:02	Bright	39.000	149	45Eps Per	2.8880	30000.	78	14743	No
28	GOM_NL__2PRFIN20041225_011952_00000462033_00160_14743_7546.N1	25-DEC-2004 01:19:52	Bright	45.500	6	13Alp Aur	0.080000	3400.0	91	14743	No
29	GOM_NL__2PRFIN20041225_012217_00000372033_00160_14743_7547.N1	25-DEC-2004 01:22:17	Bright	37.000	160	23Gam Per	2.9300	4700.0	74	14743	No
30	GOM_NL__2PRFIN20041225_012556_00000392033_00160_14743_7548.N1	25-DEC-2004 01:25:56	Bright	38.500	110	37Del Cas	2.6780	8900.0	77	14743	No
31	GOM_NL__2PRFIN20041225_013149_00000382033_00160_14743_7549.N1	25-DEC-2004 01:31:49	Bright	37.500	49	1Alp UMi	1.9900	6300.0	75	14743	No
32	GOM_NL__2PRFIN20041225_013626_00000402033_00160_14743_7550.N1	25-DEC-2004 01:36:26	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	14743	No
33	GOM_NL__2PRFIN20041225_014002_00000372033_00160_14743_7551.N1	25-DEC-2004 01:40:02	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	14743	No
34	GOM_NL__2PRFIN20041225_014146_00000362033_00160_14743_7552.N1	25-DEC-2004 01:41:46	Bright	35.500	69	33Gam Dra	2.2310	3800.0	71	14743	No
35	GOM_NL__2PRFIN20041225_014332_00000442033_00160_14743_7553.N1	25-DEC-2004 01:43:32	Bright	43.500	39	85Eta UMa	1.8540	24000.	87	14743	No
36	GOM_NL__2PRFIN20041225_014716_00000402033_00160_14743_7554.N1	25-DEC-2004 01:47:16	Bright	39.500	180	27Gam Boo	3.0400	8000.0	79	14743	No
37	GOM_NL__2PRFIN20041225_015042_00000412033_00160_14743_7555.N1	25-DEC-2004 01:50:42	Bright	41.000	83		2.3780	11000.	82	14743	No
38	GOM_NL__2PRFIN20041225_015425_00000522033_00160_14743_7556.N1	25-DEC-2004 01:54:25	Bright	51.500	111	8Eta Boo	2.6800	6000.0	103	14743	No
39	GOM_NL__2PRFIN20041225_015931_00000722033_00160_14743_7557.N1	25-DEC-2004 01:59:31	Twilight	72.000	138	47Eps Vir	2.8280	4700.0	144	14743	No
40	GOM_NL__2PRFIN20041225_020311_00000422033_00160_14743_7558.N1	25-DEC-2004 02:03:11	Bright	41.500	122	9Alp2Lib	2.7470	9700.0	83	14743	No
41	GOM_NL__2PRFIN20041225_020530_00000702033_00160_14743_7559.N1	25-DEC-2004 02:05:30	Straylight	70.000	15	67Alp Vir	0.97600	28000.	140	14743	No
42	GOM_NL__2PRFIN20041225_020951_00000502033_00160_14743_7560.N1	25-DEC-2004 02:09:51	Dark	50.000	54	5The Cen	2.0550	4500.0	100	14743	No

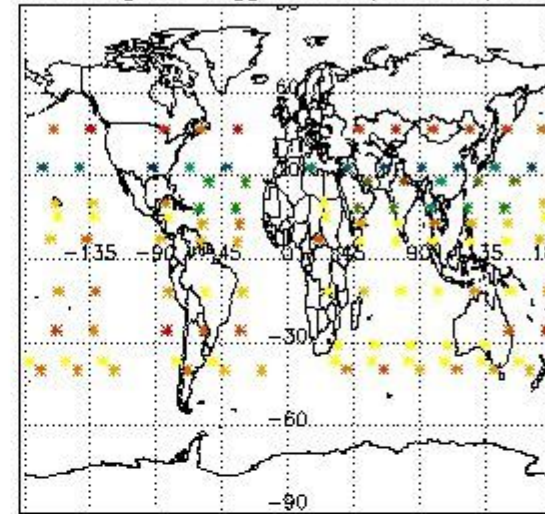


3.2 Plot quality information per product (world map)

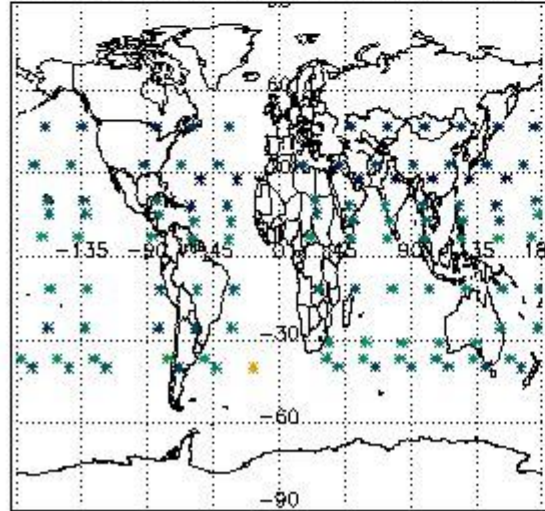
Percentage of flagged data per O3 profile



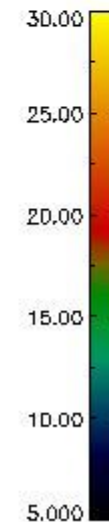
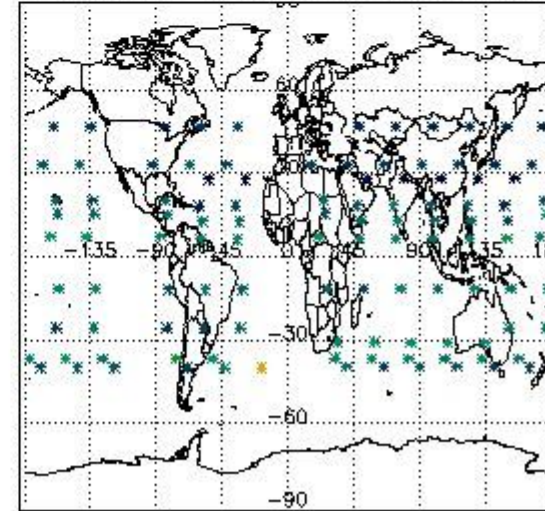
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

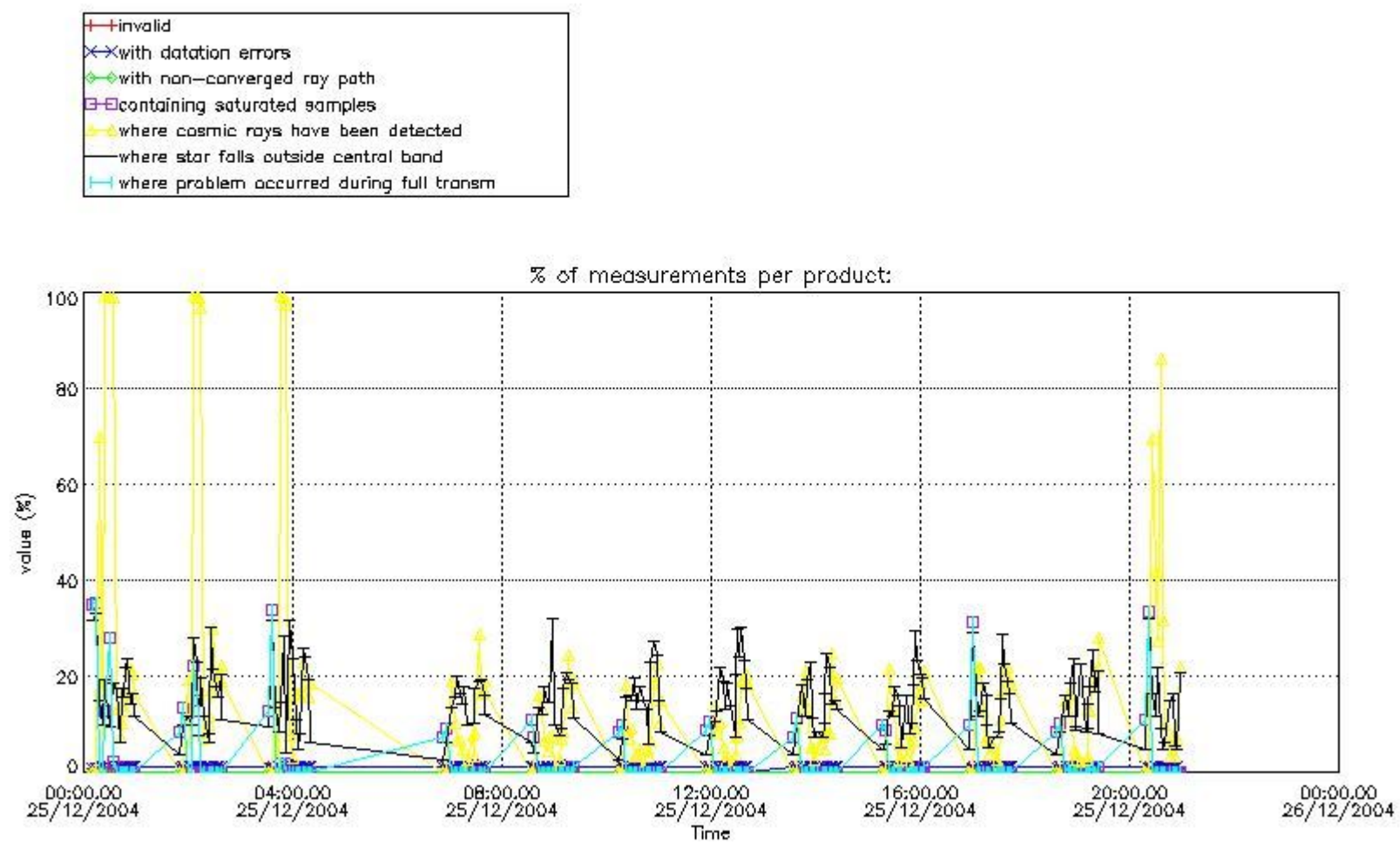


4. Level 1 quality information per product

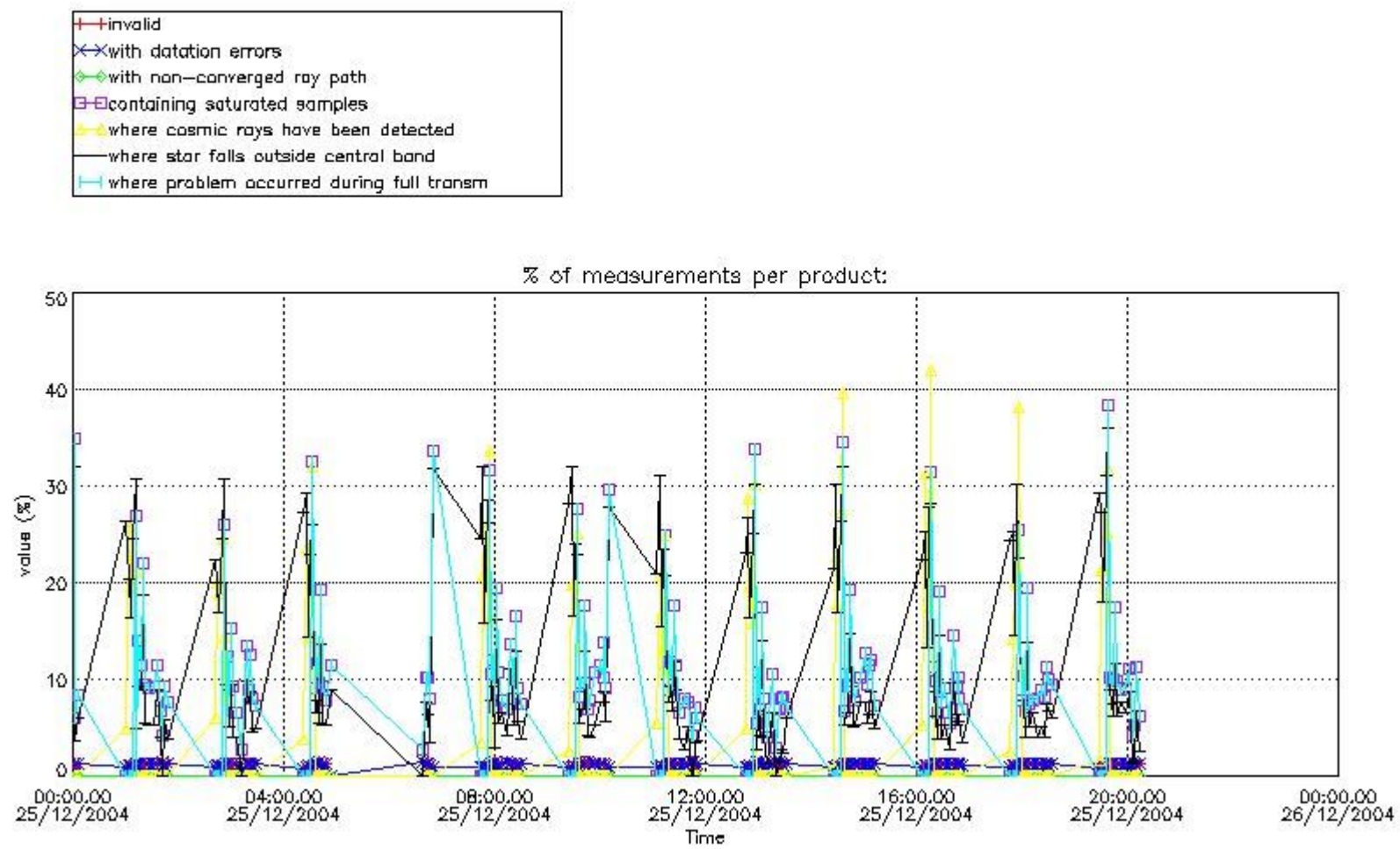
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

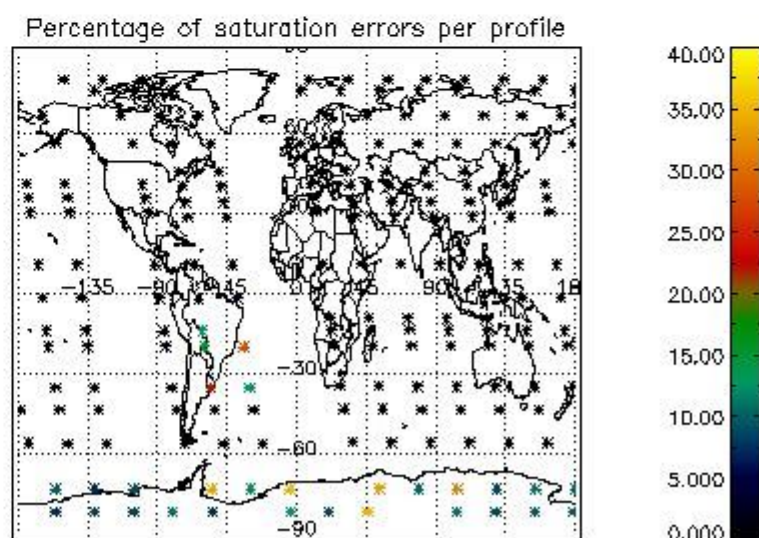
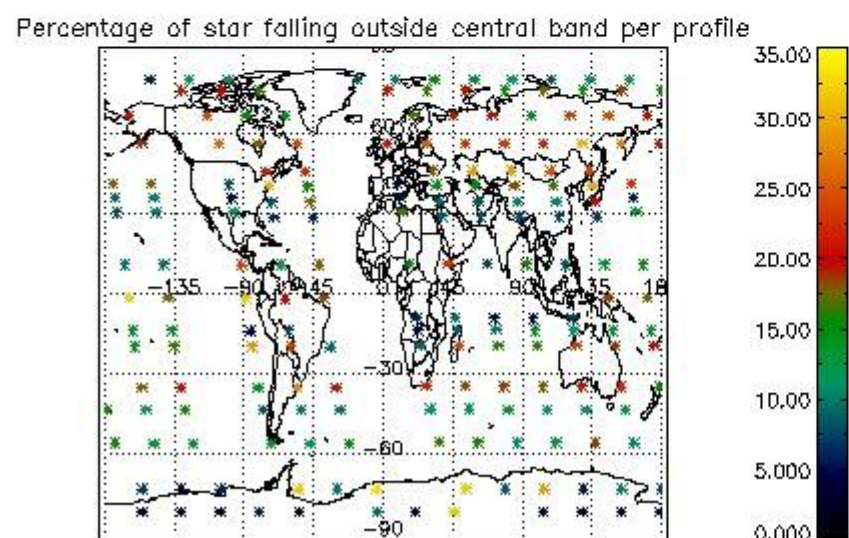
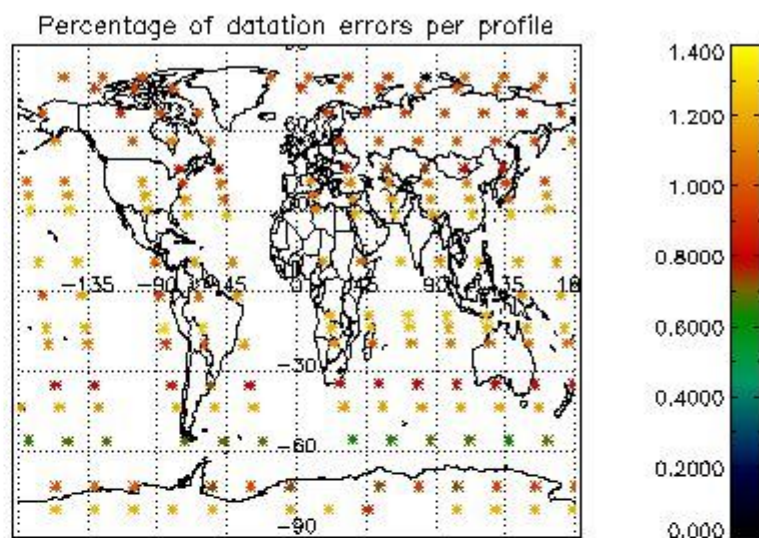
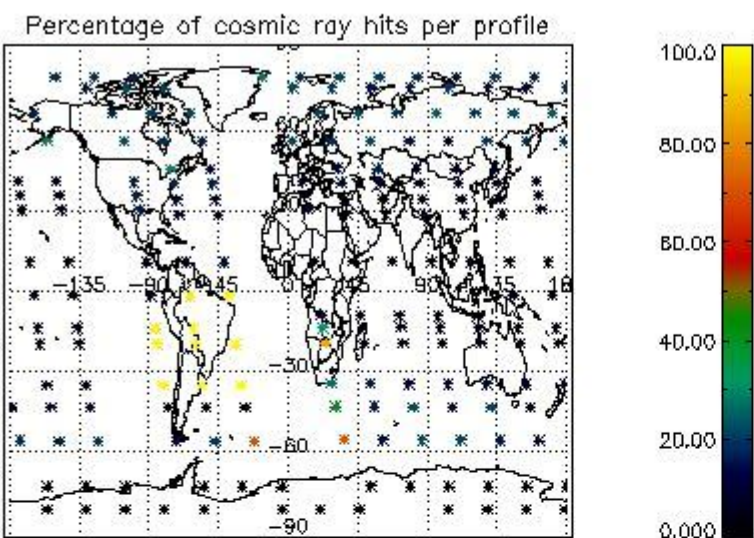


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

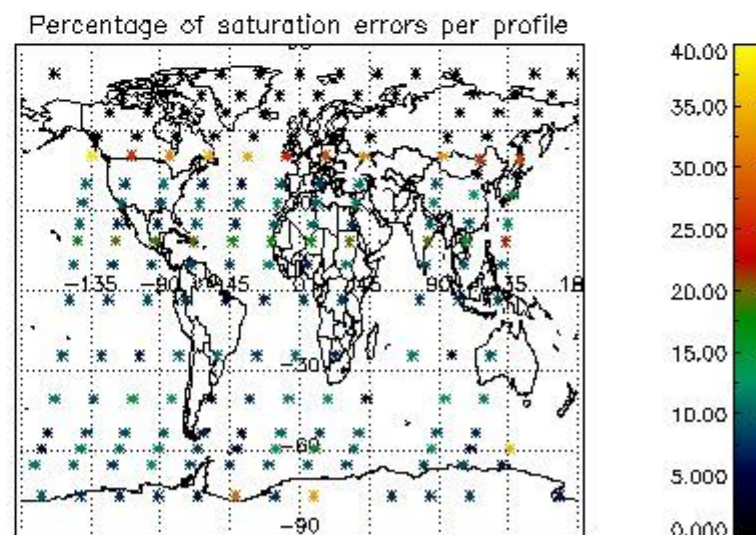
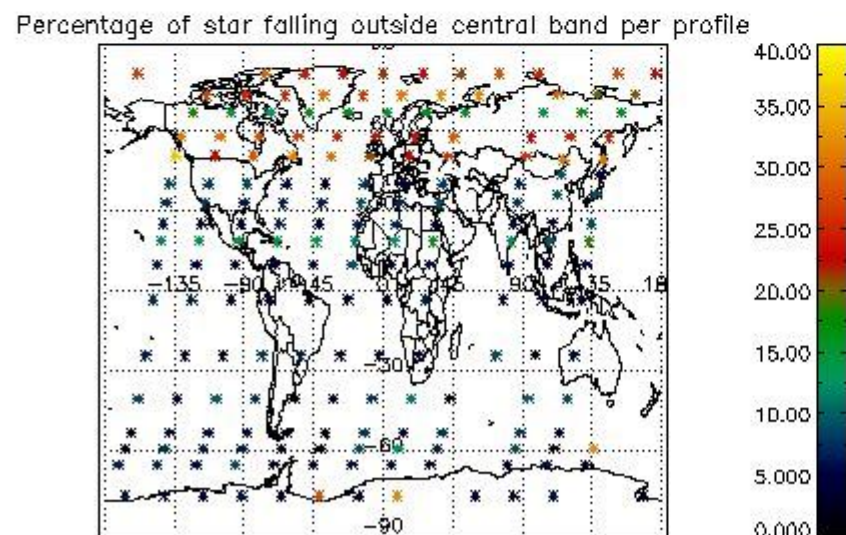
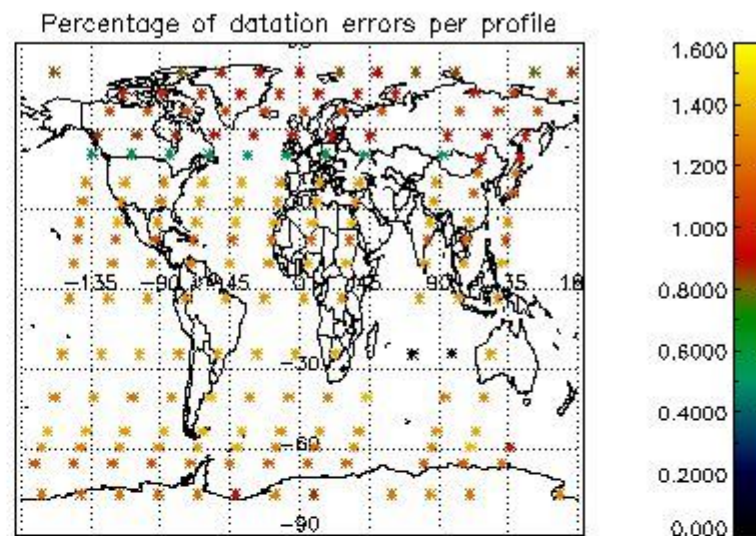
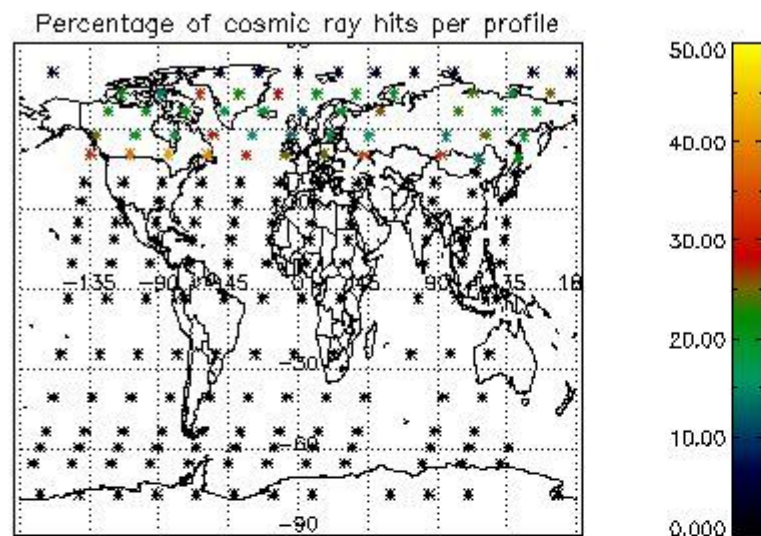


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

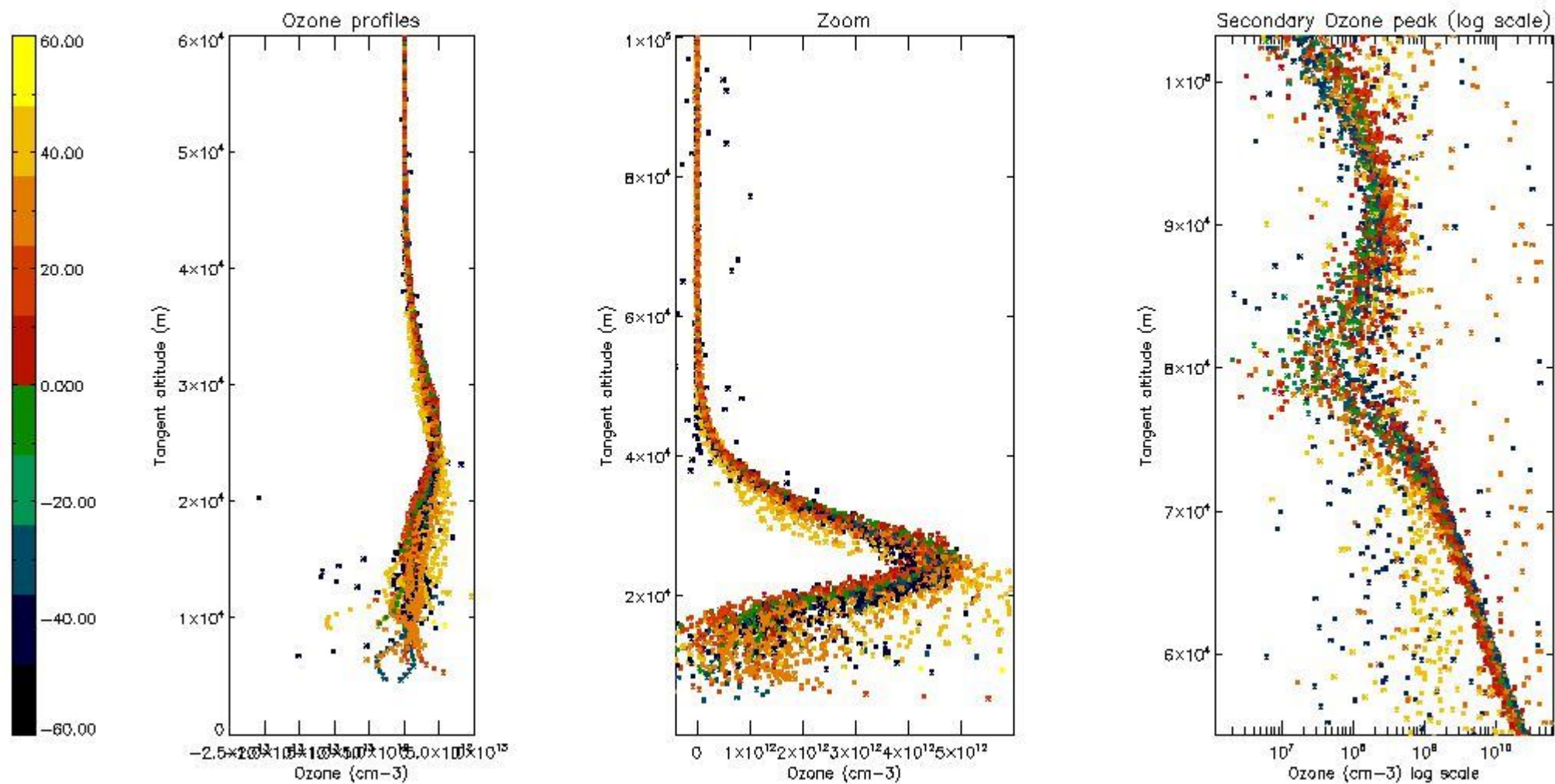
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	15

STD < 10	12
STD < 5	7

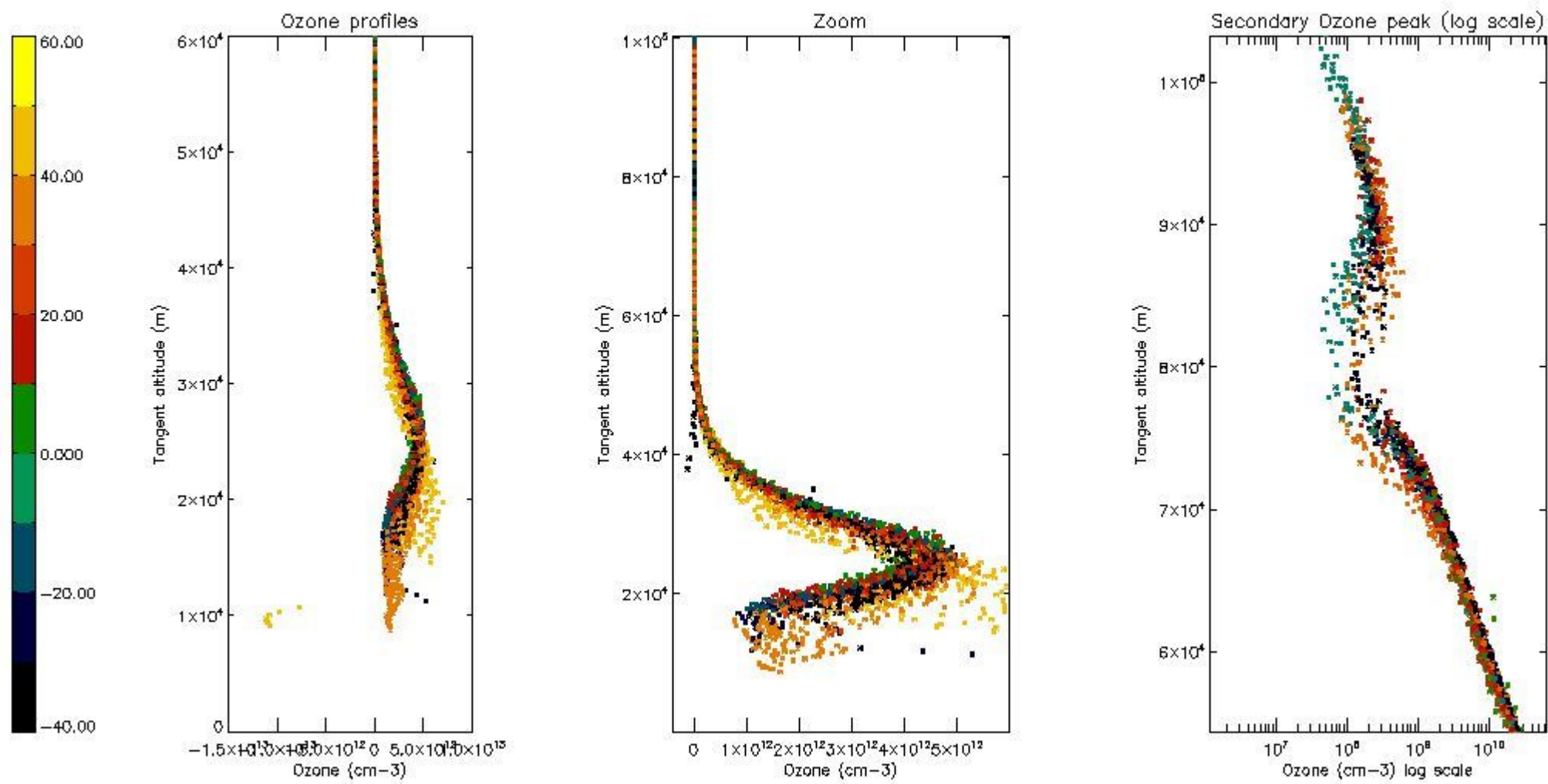
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



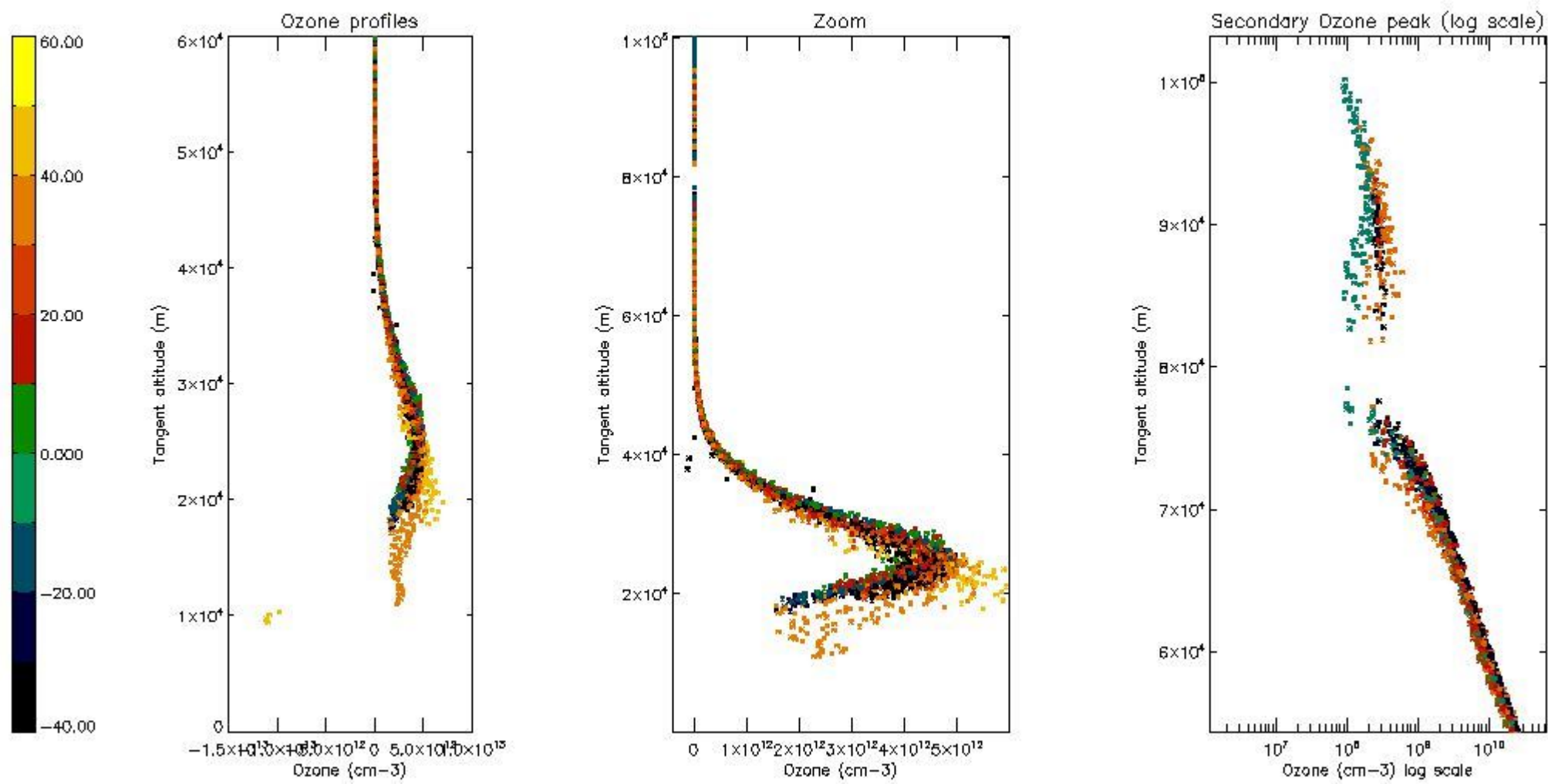
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



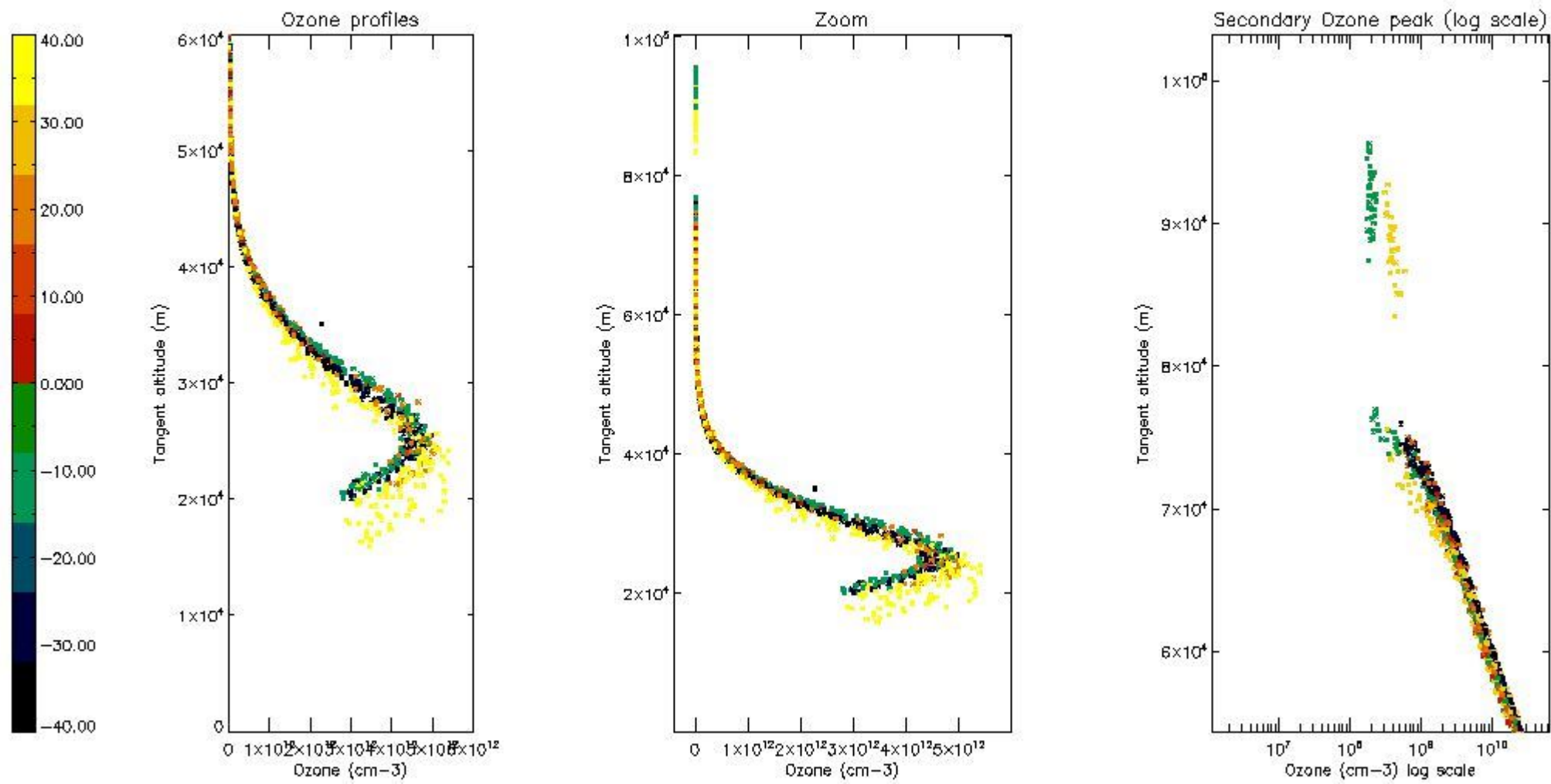
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



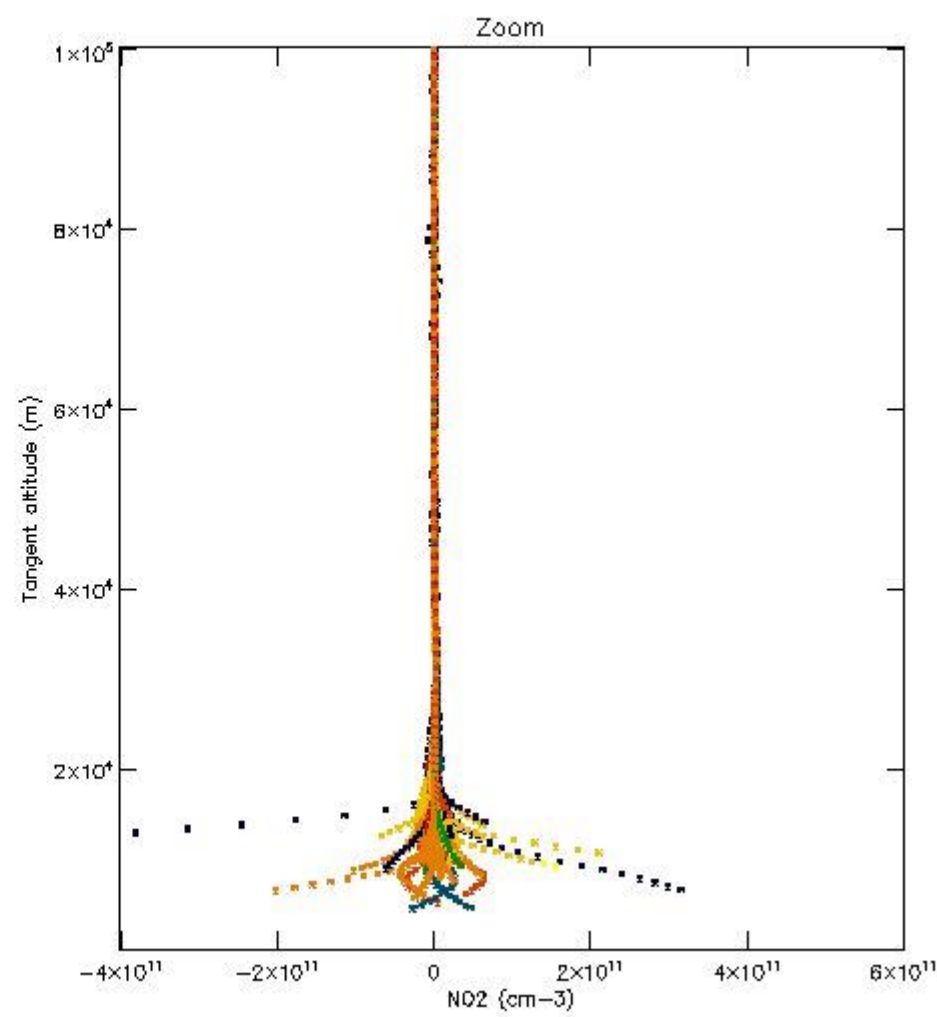
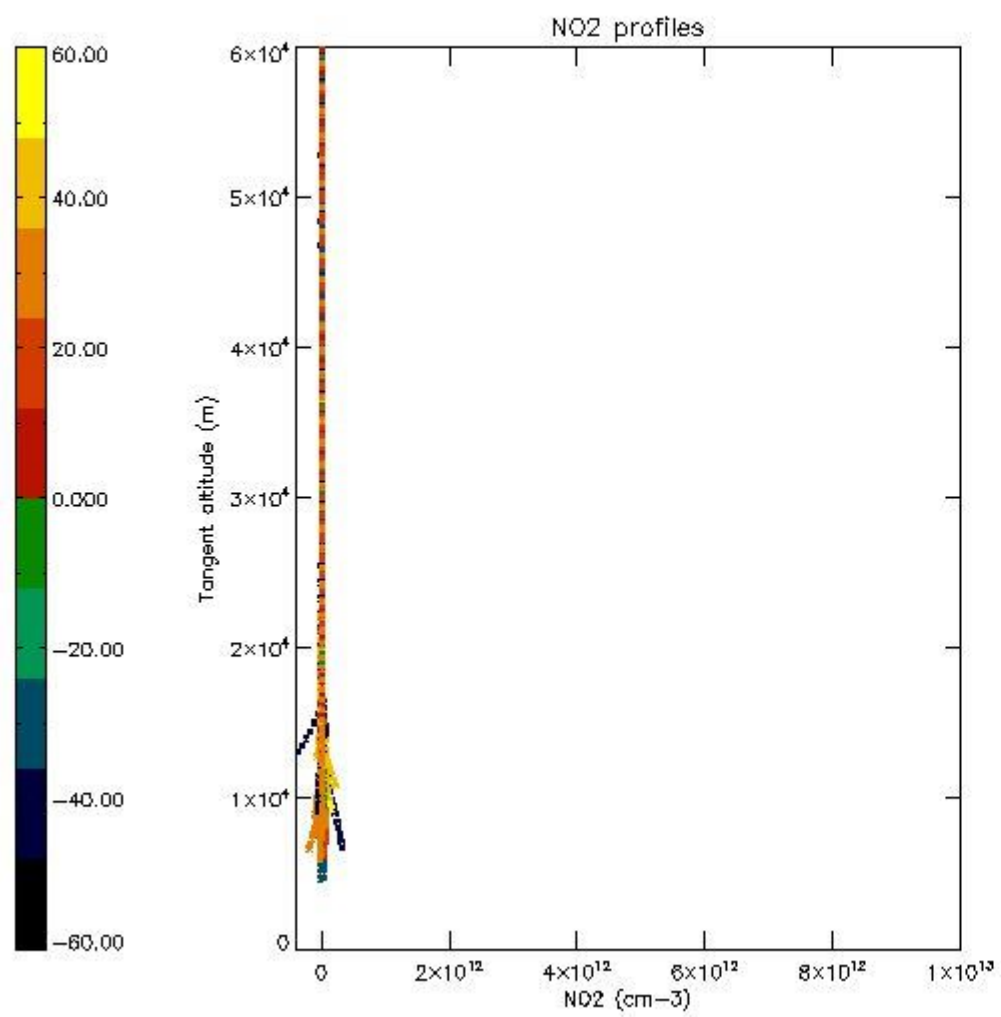
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



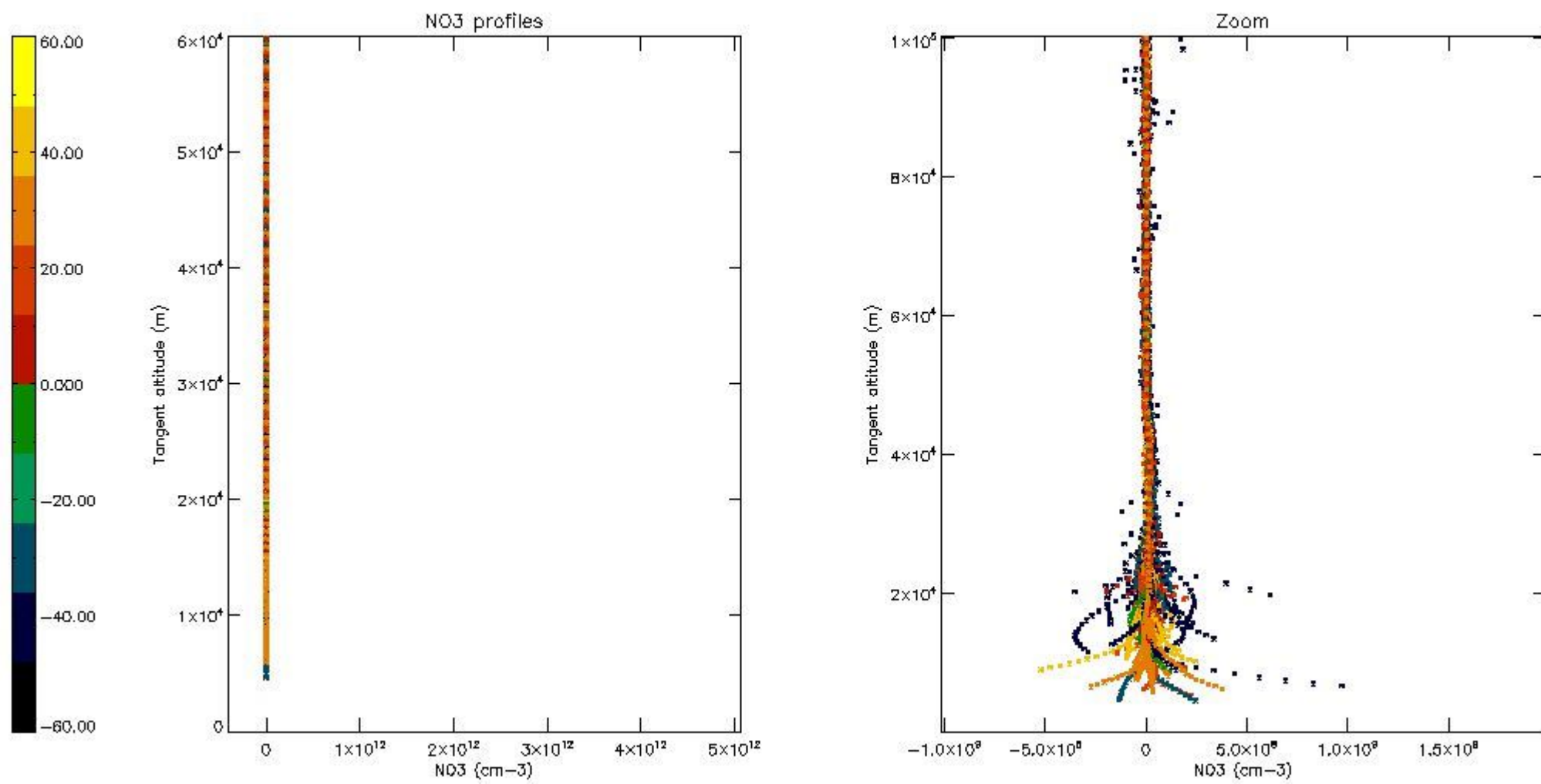
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



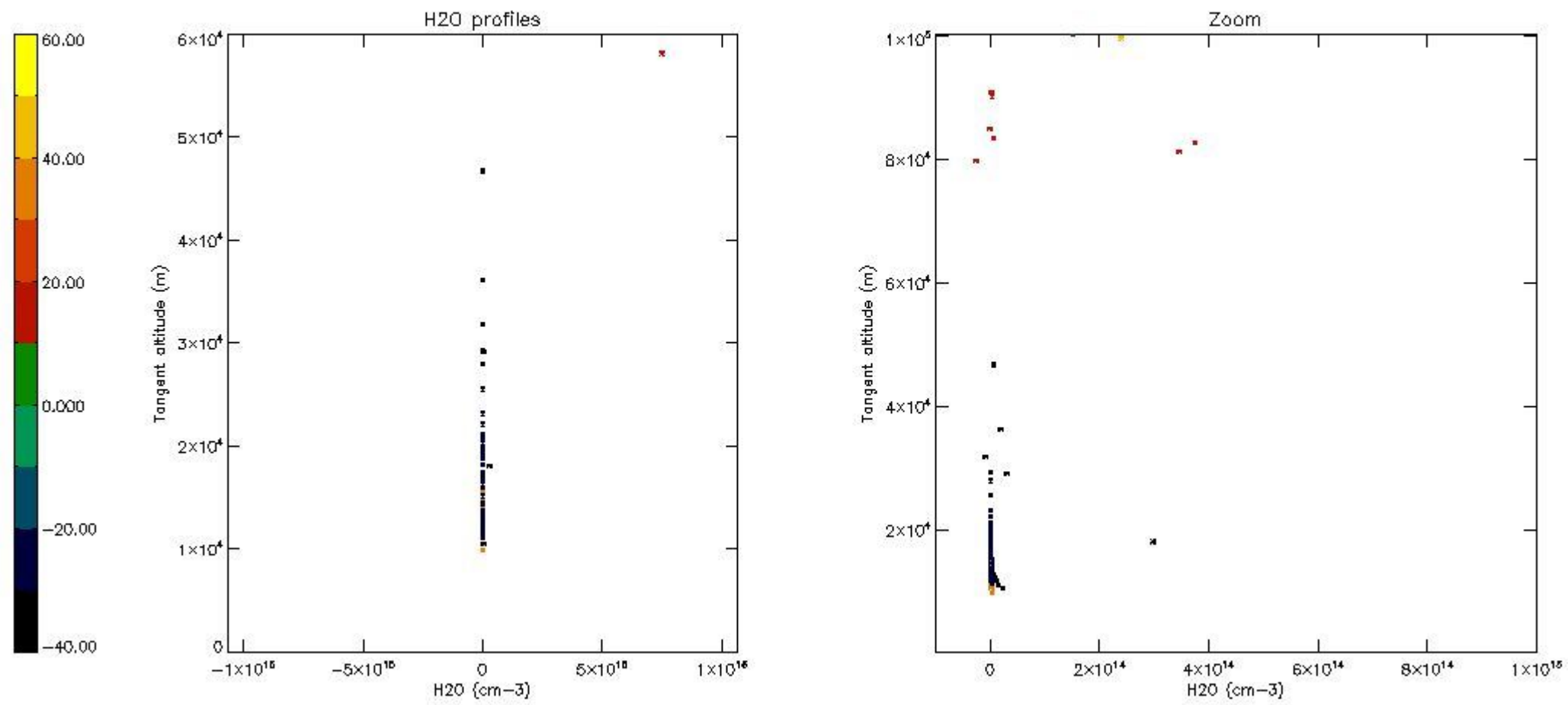
5.7 Plot NO3 profiles for all STD (dark without errors)

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	25-DEC-2004 00:01:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-DEC-2004 00:01:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-DEC-2004 00:01:10

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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](#)

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[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](#)

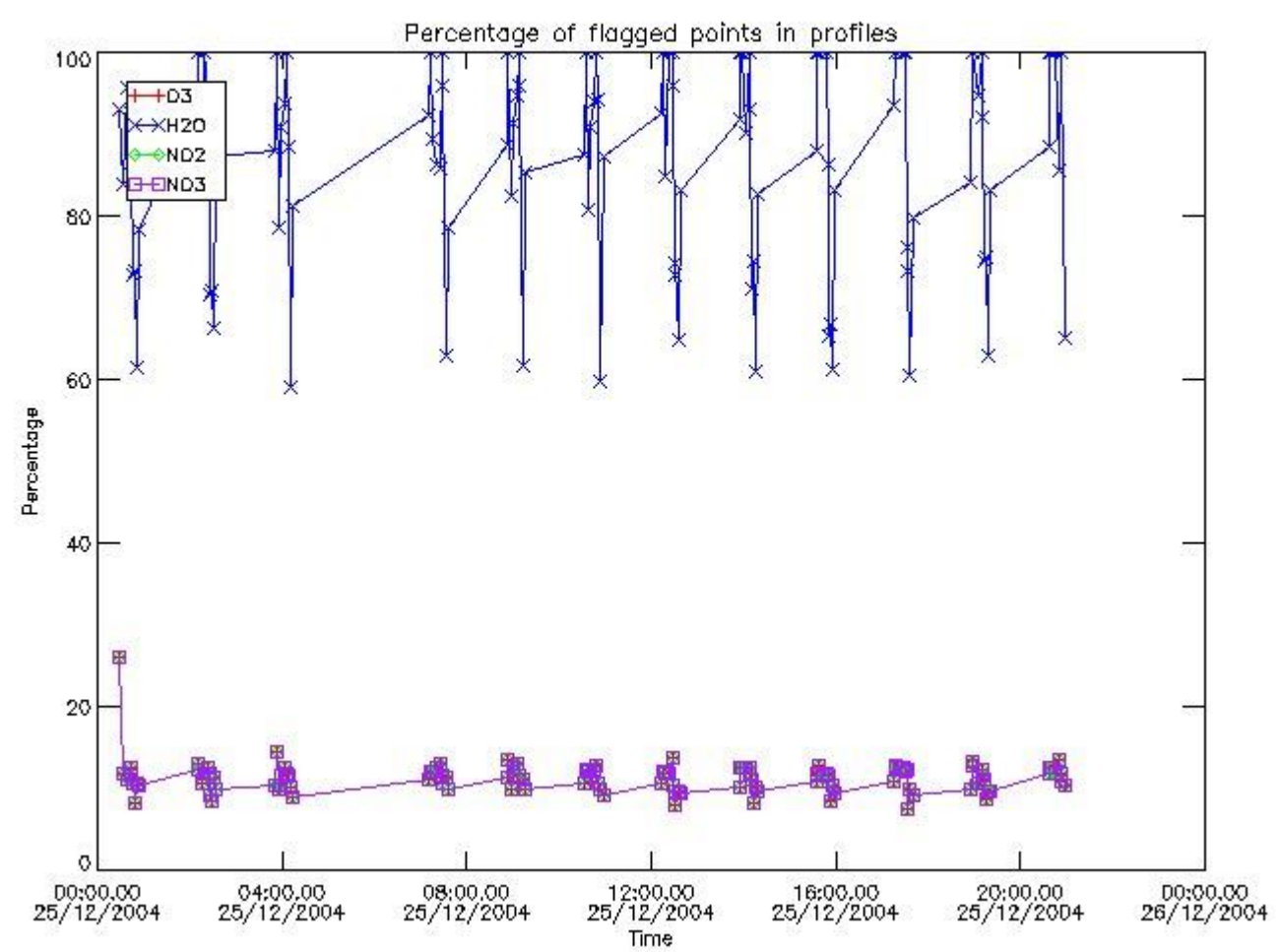
[6. Auxiliary Data Files used for the production reported in section 2](#)

338	GOM_NL__2PRFIN20041225_183315_000000422033_00170_14753_7465.N1	25-DEC-2004 18:33:15	Bright	42.000	180	27Gam Boo	3.0400	8000.0	84	14753	No
339	GOM_NL__2PRFIN20041225_183643_000000412033_00170_14753_7466.N1	25-DEC-2004 18:36:43	Bright	41.000	83		2.3780	11000.	82	14753	No
340	GOM_NL__2PRFIN20041225_184027_000000542033_00170_14753_7467.N1	25-DEC-2004 18:40:27	Bright	53.500	111	8Eta Boo	2.6800	6000.0	107	14753	No
341	GOM_NL__2PRFIN20041225_184541_000000782033_00170_14753_7468.N1	25-DEC-2004 18:45:41	Tw_i_and_stray	78.000	138	47Eps Vir	2.8280	4700.0	156	14753	No
342	GOM_NL__2PRFIN20041225_184915_000000432033_00170_14753_7469.N1	25-DEC-2004 18:49:15	Bright	42.500	122	9Alp2Lib	2.7470	9700.0	85	14753	No
343	GOM_NL__2PRFIN20041225_185141_000000632033_00170_14753_7470.N1	25-DEC-2004 18:51:41	Straylight	62.500	15	67Alp Vir	0.97600	28000.	125	14753	No
344	GOM_NL__2PRFIN20041225_185557_000000512033_00170_14753_7471.N1	25-DEC-2004 18:55:57	Dark	51.000	54	5The Cen	2.0550	4500.0	102	14753	No
345	GOM_NL__2PRFIN20041225_185735_000000402033_00170_14753_7472.N1	25-DEC-2004 18:57:35	Dark	40.000	78	Alp Lup	2.3040	28000.	80	14753	No
346	GOM_NL__2PRFIN20041225_185850_000000422033_00170_14753_7473.N1	25-DEC-2004 18:58:50	Dark	42.000	95	Zet Cen	2.5450	26000.	84	14753	No
347	GOM_NL__2PRFIN20041225_190430_000000492033_00171_14754_7440.N1	25-DEC-2004 19:04:30	Dark	48.500	12	Alp1Cru	0.77500	30000.	97	14754	No
348	GOM_NL__2PRFIN20041225_190930_000000422033_00171_14754_7441.N1	25-DEC-2004 19:09:30	Dark	41.500	159	Ups Car	2.9200	7200.0	83	14754	No
349	GOM_NL__2PRFIN20041225_191105_000000442033_00171_14754_7442.N1	25-DEC-2004 19:11:05	Dark	44.000	71	lot Car	2.2460	7700.0	88	14754	No
350	GOM_NL__2PRFIN20041225_191248_000000462033_00171_14754_7443.N1	25-DEC-2004 19:12:48	Dark	45.500	41	Eps Car	1.8600	4100.0	91	14754	No
351	GOM_NL__2PRFIN20041225_191421_000000592033_00171_14754_7444.N1	25-DEC-2004 19:14:21	Dark	58.500	65	Lam Vel	2.2040	4400.0	117	14754	No
352	GOM_NL__2PRFIN20041225_191714_000000532033_00171_14754_7445.N1	25-DEC-2004 19:17:14	Dark	53.000	2	Alp Car	-0.73600	7000.0	106	14754	No
353	GOM_NL__2PRFIN20041225_192019_000000542033_00171_14754_7446.N1	25-DEC-2004 19:20:19	Dark	53.500	117	Pi Pup	2.7060	3800.0	107	14754	No
354	GOM_NL__2PRFIN20041225_192318_000000552033_00171_14754_7447.N1	25-DEC-2004 19:23:18	Straylight	55.000	23	21Eps CMa	1.5020	26000.	110	14754	No
355	GOM_NL__2PRFIN20041225_192454_000000502033_00171_14754_7448.N1	25-DEC-2004 19:24:54	Straylight	50.000	179	24Omi2CMa	3.0320	24000.	100	14754	No
356	GOM_NL__2PRFIN20041225_192734_000000622033_00171_14754_7449.N1	25-DEC-2004 19:27:34	Straylight	61.500	1	9Alp CMa	-1.4400	11000.	123	14754	No
357	GOM_NL__2PRFIN20041225_193042_000000522033_00171_14754_7450.N1	25-DEC-2004 19:30:42	Straylight	51.500	7	19Bet Ori	0.10000	14000.	103	14754	No
358	GOM_NL__2PRFIN20041225_193240_000000472033_00171_14754_7451.N1	25-DEC-2004 19:32:40	Straylight	47.000	30	46Eps Ori	1.6940	30000.	94	14754	No
359	GOM_NL__2PRFIN20041225_193523_000000582033_00171_14754_7452.N1	25-DEC-2004 19:35:23	Tw_i_and_stray	58.000	14	58Alp Ori	0.87000	3000.0	116	14754	No
360	GOM_NL__2PRFIN20041225_193724_000001032033_00171_14754_7453.N1	25-DEC-2004 19:37:24	Bright	103.00	8	10Alp CMi	0.40000	6500.0	206	14754	No
361	GOM_NL__2PRFIN20041225_194025_000000402033_00171_14754_7454.N1	25-DEC-2004 19:40:25	Bright	39.500	146	25Eta Tau	2.8730	15200.	79	14754	No
362	GOM_NL__2PRFIN20041225_194225_000000412033_00171_14754_7455.N1	25-DEC-2004 19:42:25	Bright	40.500	150	44Zet Per	2.8900	28000.	81	14754	No
363	GOM_NL__2PRFIN20041225_194437_000000402033_00171_14754_7456.N1	25-DEC-2004 19:44:37	Bright	40.000	149	45Eps Per	2.8880	30000.	80	14754	No
364	GOM_NL__2PRFIN20041225_194625_000000432033_00171_14754_7457.N1	25-DEC-2004 19:46:25	Bright	43.000	6	13Alp Aur	0.080000	3400.0	86	14754	No
365	GOM_NL__2PRFIN20041225_194853_000000412033_00171_14754_7458.N1	25-DEC-2004 19:48:53	Bright	40.500	160	23Gam Per	2.9300	4700.0	81	14754	No
366	GOM_NL__2PRFIN20041225_195235_000000402033_00171_14754_7459.N1	25-DEC-2004 19:52:35	Bright	39.500	110	37Del Cas	2.6780	8900.0	79	14754	No
367	GOM_NL__2PRFIN20041225_195824_000000392033_00171_14754_7460.N1	25-DEC-2004 19:58:24	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	14754	No
368	GOM_NL__2PRFIN20041225_200259_000000412033_00171_14754_7461.N1	25-DEC-2004 20:02:59	Bright	40.500	60	7Bet UMi	2.0810	3950.0	81	14754	No
369	GOM_NL__2PRFIN20041225_200638_000000362033_00171_14754_7462.N1	25-DEC-2004 20:06:38	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	14754	No
370	GOM_NL__2PRFIN20041225_200822_000000392033_00171_14754_7463.N1	25-DEC-2004 20:08:22	Bright	38.500	69	33Gam Dra	2.2310	3800.0	77	14754	No
371	GOM_NL__2PRFIN20041225_201006_000000452033_00171_14754_7464.N1	25-DEC-2004 20:10:06	Bright	44.500	39	85Eta UMa	1.8540	24000.	89	14754	No
372	GOM_NL__2PRFIN20041225_201351_000000402033_00171_14754_7465.N1	25-DEC-2004 20:13:51	Bright	40.000	180	27Gam Boo	3.0400	8000.0	80	14754	No
373	GOM_NL__2PRFIN20041225_201720_000000422033_00171_14754_7466.N1	25-DEC-2004 20:17:20	Bright	41.500	83		2.3780	11000.	83	14754	No
374	GOM_NL__2PRFIN20041225_202105_000000692033_00171_14754_7467.N1	25-DEC-2004 20:21:05	Bright	69.000	111	8Eta Boo	2.6800	6000.0	138	14754	No
375	GOM_NL__2PRFIN20041225_202618_000000792033_00171_14754_7468.N1	25-DEC-2004 20:26:18	Tw_i_and_stray	79.000	138	47Eps Vir	2.8280	4700.0	158	14754	No
376	GOM_NL__2PRFIN20041225_202951_000000432033_00171_14754_7469.N1	25-DEC-2004 20:29:51	Bright	43.000	122	9Alp2Lib	2.7470	9700.0	86	14754	No
377	GOM_NL__2PRFIN20041225_203218_000000652033_00171_14754_7470.N1	25-DEC-2004 20:32:18	Straylight	64.500	15	67Alp Vir	0.97600	28000.	129	14754	No
378	GOM_NL__2PRFIN20041225_203632_000000442033_00171_14754_7471.N1	25-DEC-2004 20:36:32	Dark	43.500	54	5The Cen	2.0550	4500.0	87	14754	No
379	GOM_NL__2PRFIN20041225_203809_000000412033_00171_14754_7472.N1	25-DEC-2004 20:38:09	Dark	41.000	78	Alp Lup	2.3040	28000.	82	14754	No
380	GOM_NL__2PRFIN20041225_203926_000000412033_00171_14754_7473.N1	25-DEC-2004 20:39:26	Dark	40.500	95	Zet Cen	2.5450	26000.	81	14754	No
381	GOM_NL__2PRFIN20041225_204506_000000442033_00172_14755_7440.N1	25-DEC-2004 20:45:06	Dark	43.500	12	Alp1Cru	0.77500	30000.	87	14755	No
382	GOM_NL__2PRFIN20041225_205033_000000462033_00172_14755_7441.N1	25-DEC-2004 20:50:33	Dark	45.500	29	Bet Car	1.6720	10200.	91	14755	No
383	GOM_NL__2PRFIN20041225_205204_000000472033_00172_14755_7442.N1	25-DEC-2004 20:52:04	Dark	46.500	91	Kap Vel	2.4900	26000.	93	14755	No
384	GOM_NL__2PRFIN20041225_205334_000000442033_00172_14755_7443.N1	25-DEC-2004 20:53:34	Dark	43.500	46	Del Vel	1.9540	10600.	87	14755	No
385	GOM_NL__2PRFIN20041225_205750_000000492033_00172_14755_7444.N1	25-DEC-2004 20:57:50	Dark	48.500	2	Alp Car	-0.73600	7000.0	97	14755	No

3. Quality information per product

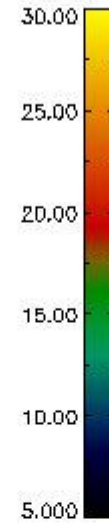
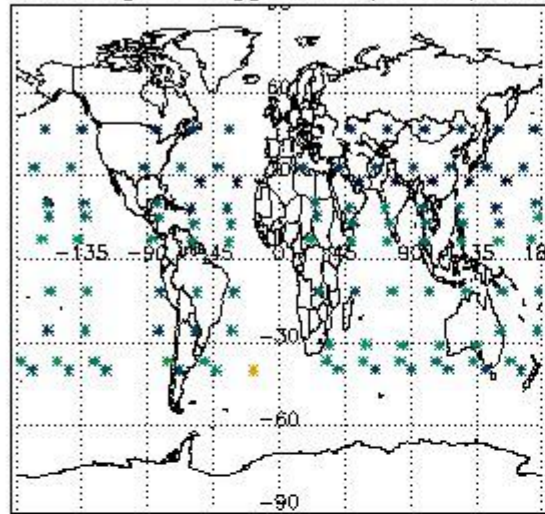
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

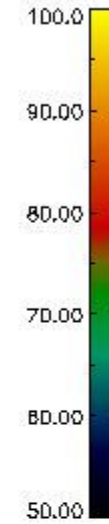
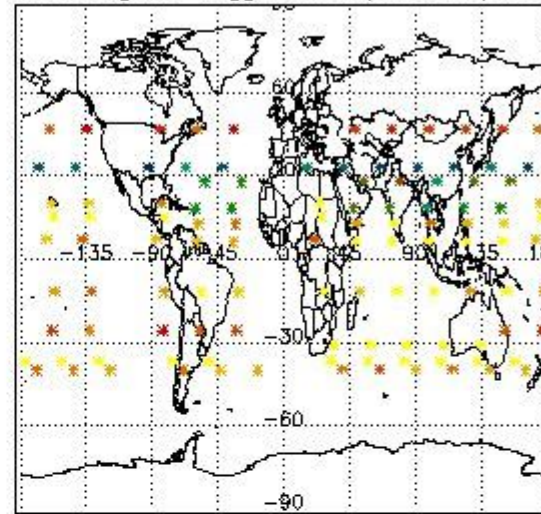


3.2 Plot quality information per product (world map)

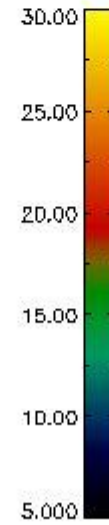
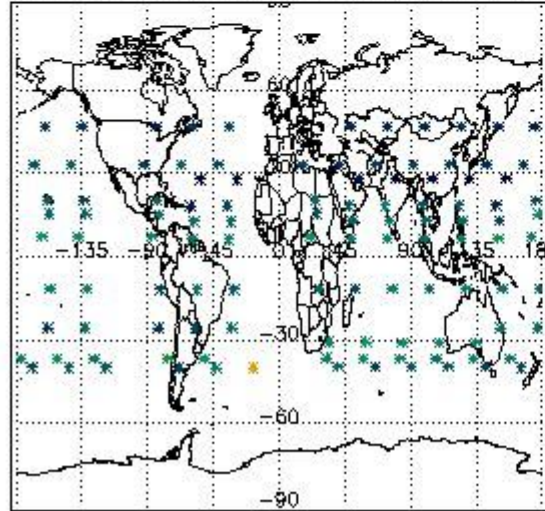
Percentage of flagged data per O3 profile



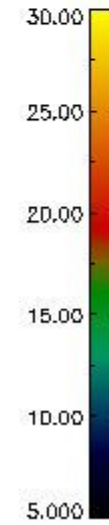
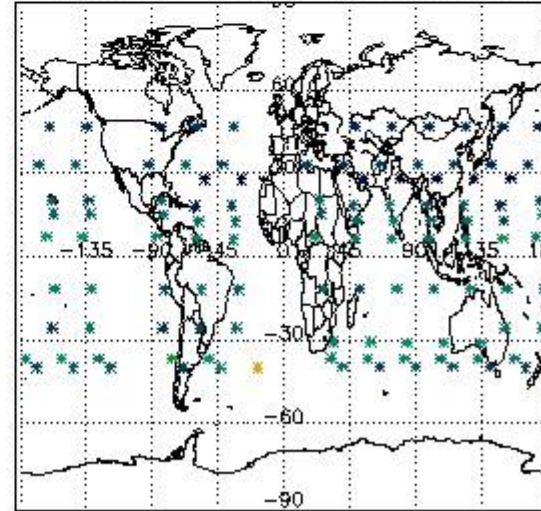
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

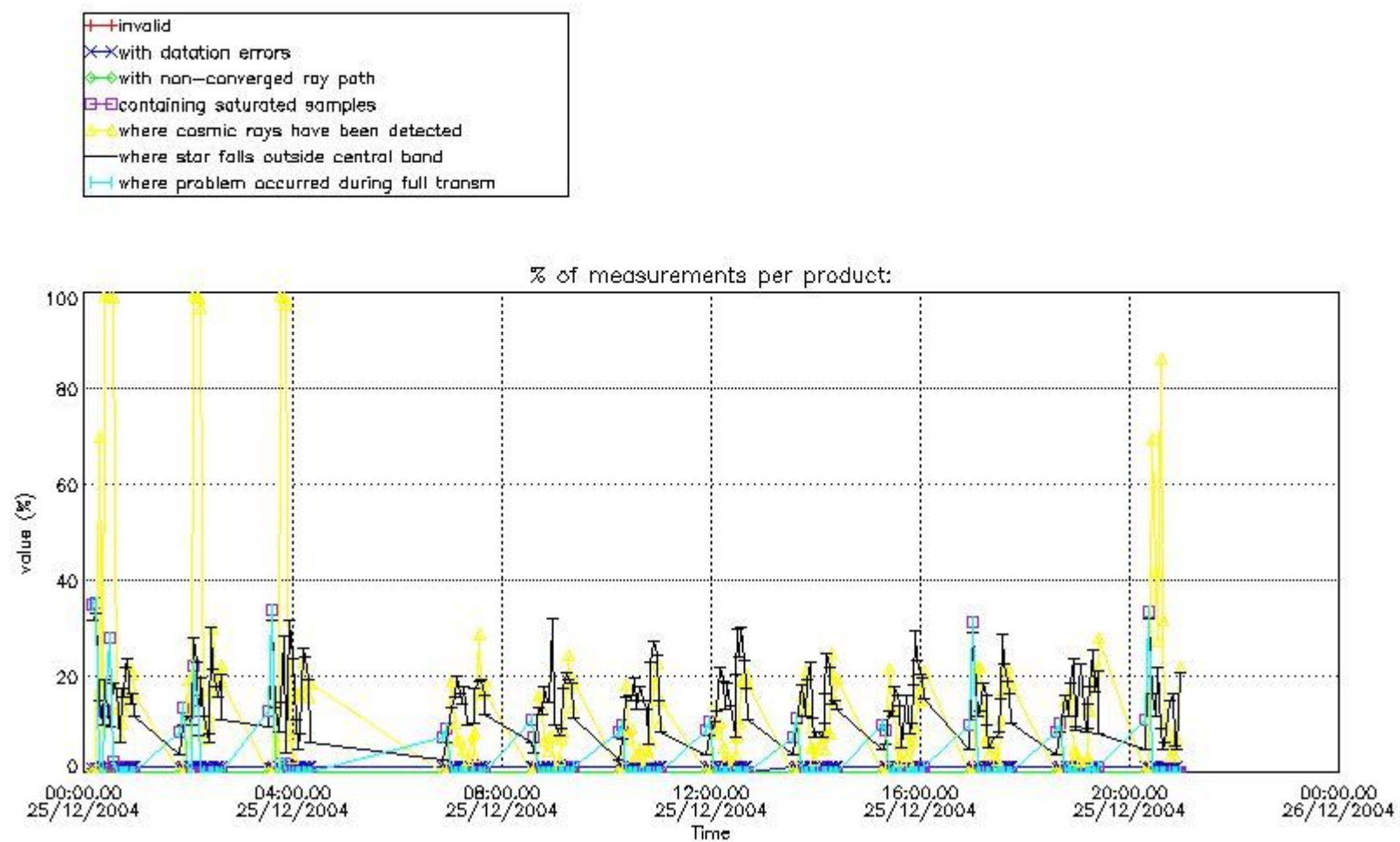


4. Level 1 quality information per product

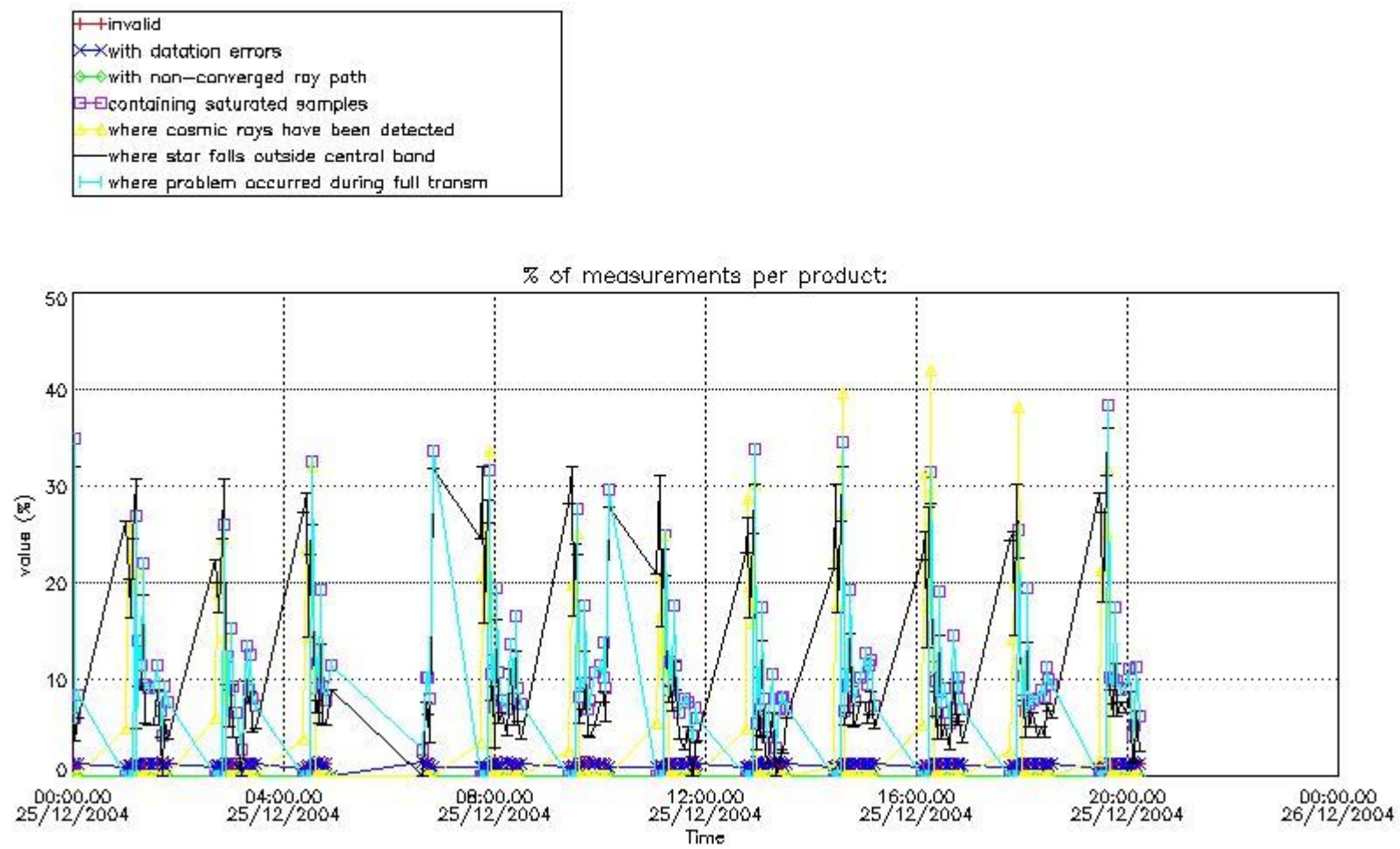
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



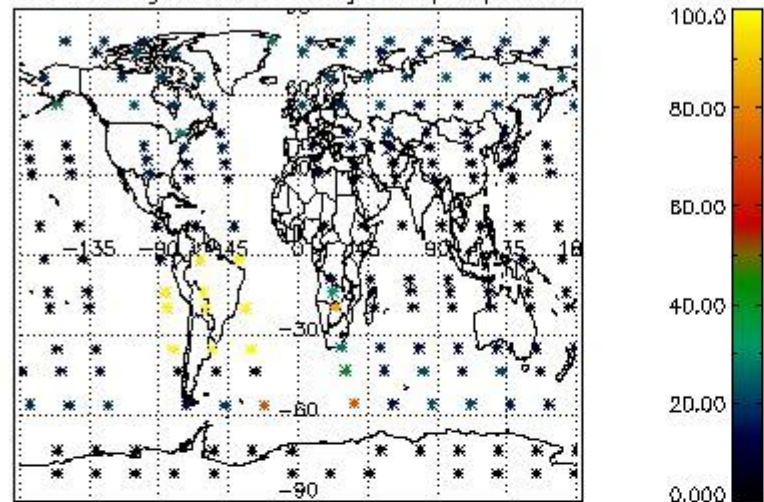
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



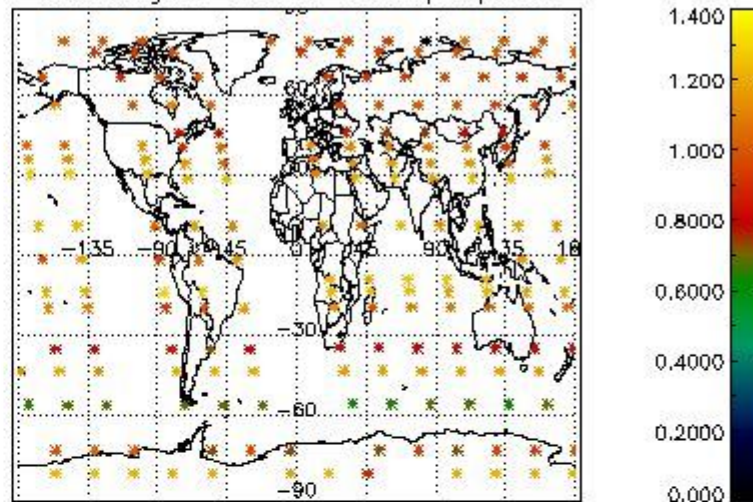
4.2 Plot quality information per product coming from level 1b processing (world map)

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

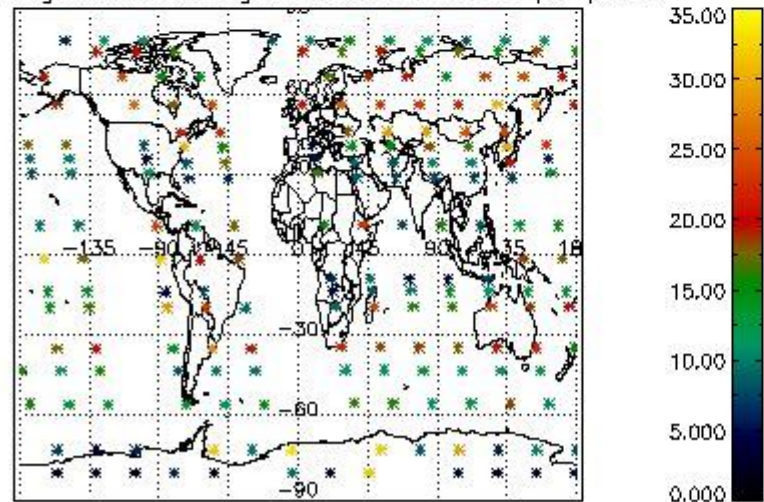
Percentage of cosmic ray hits per profile



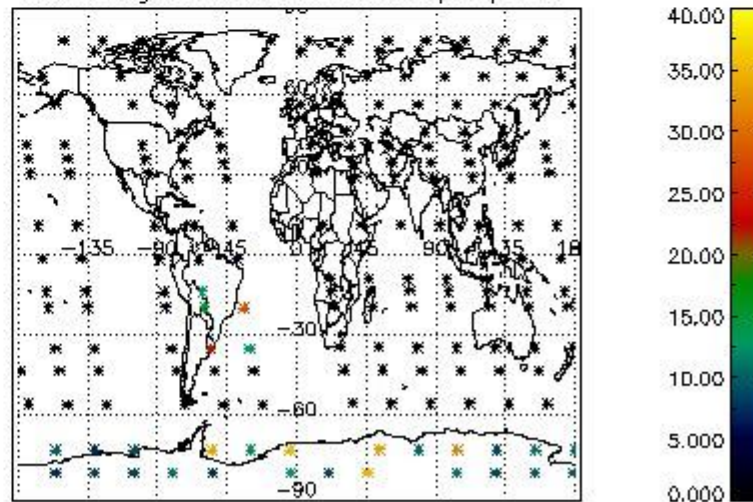
Percentage of datation errors per profile



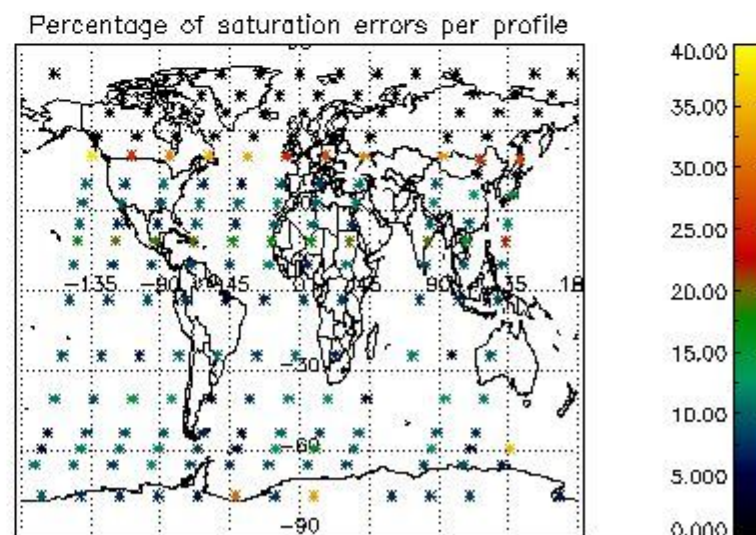
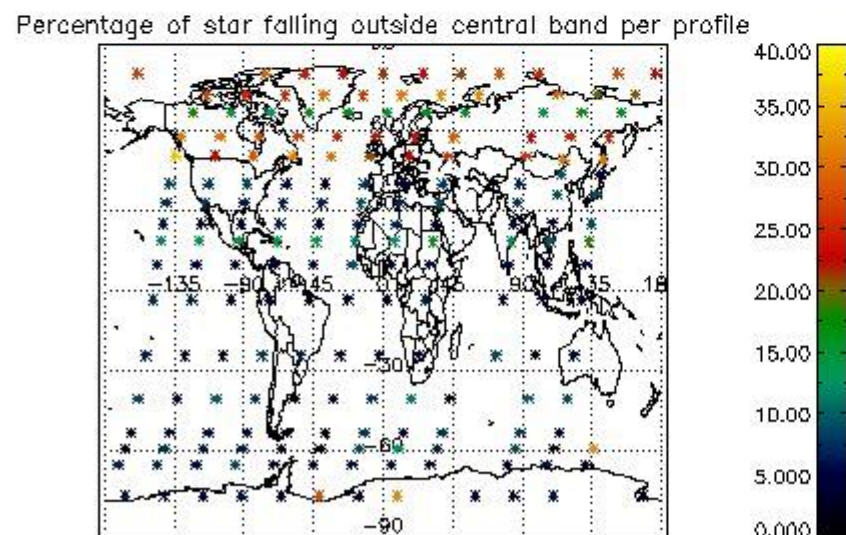
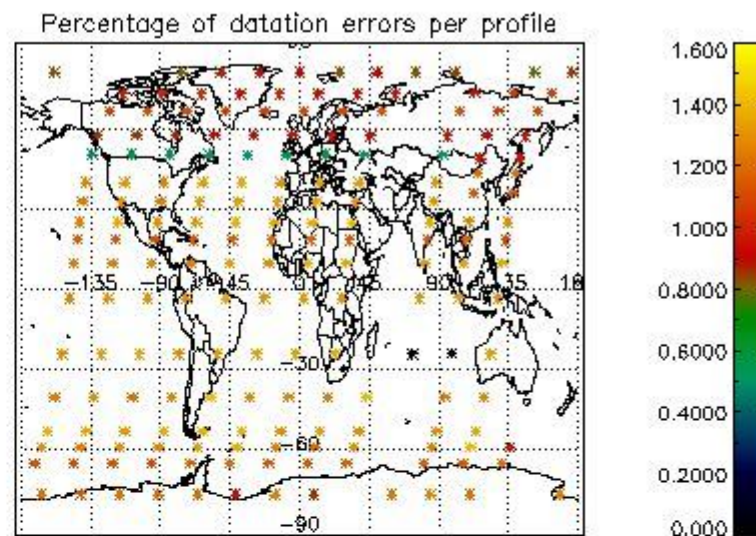
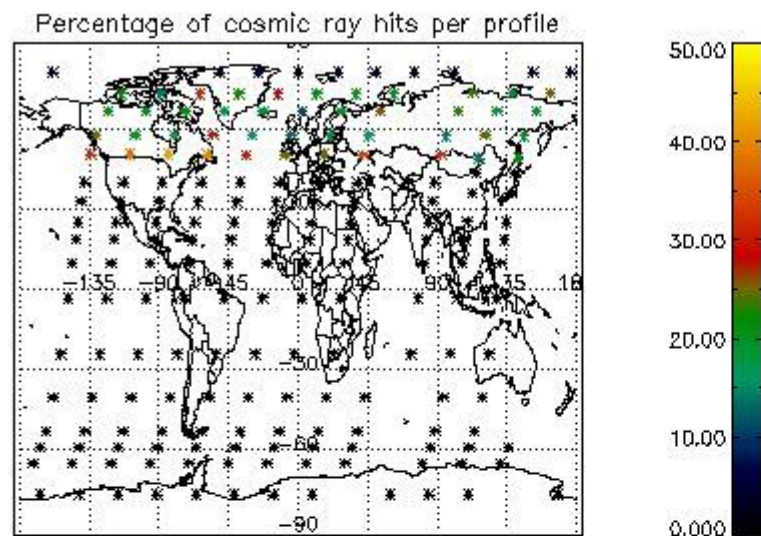
Percentage of star falling outside central band per profile



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

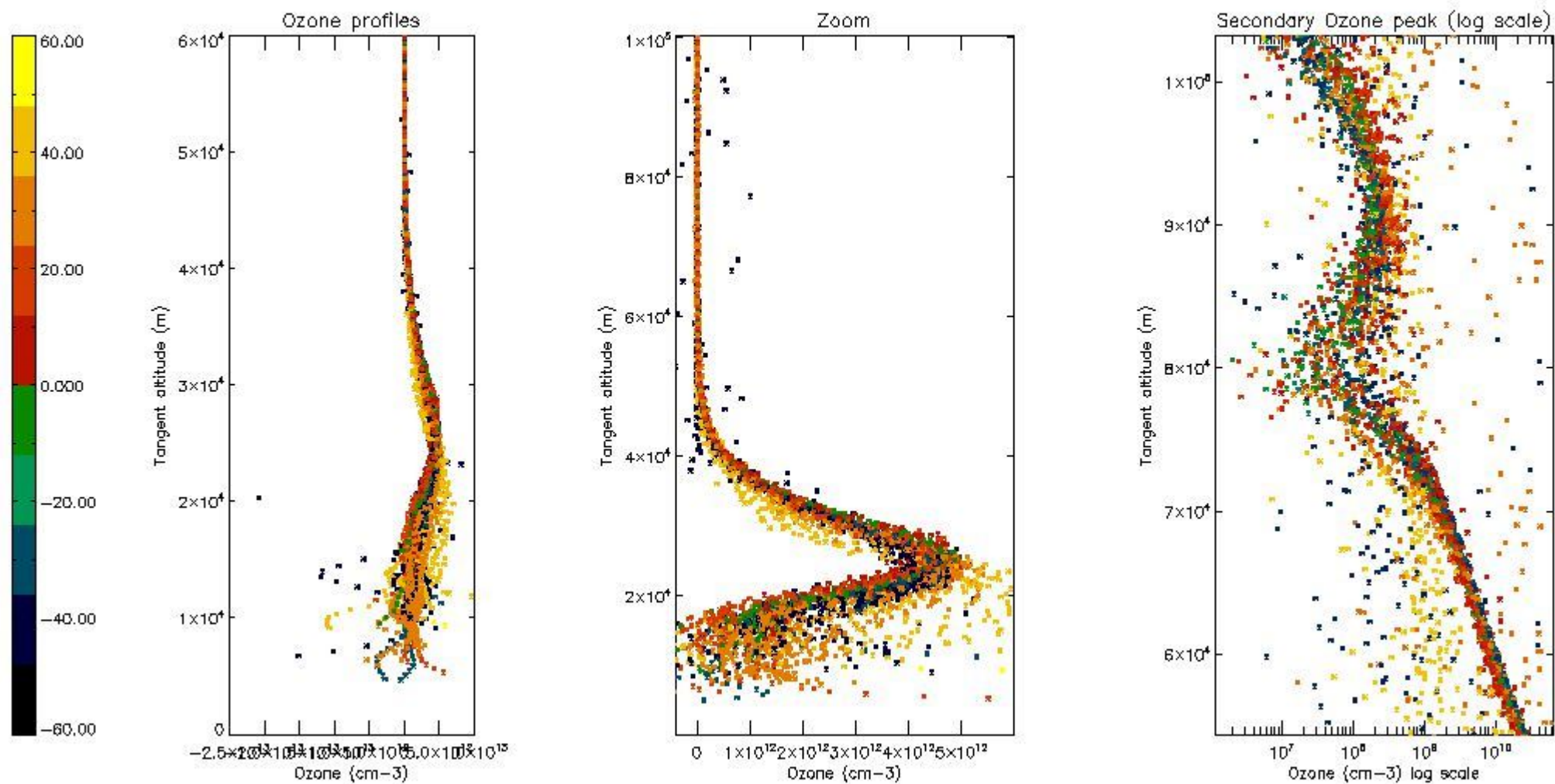
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	15

STD < 10	12
STD < 5	7

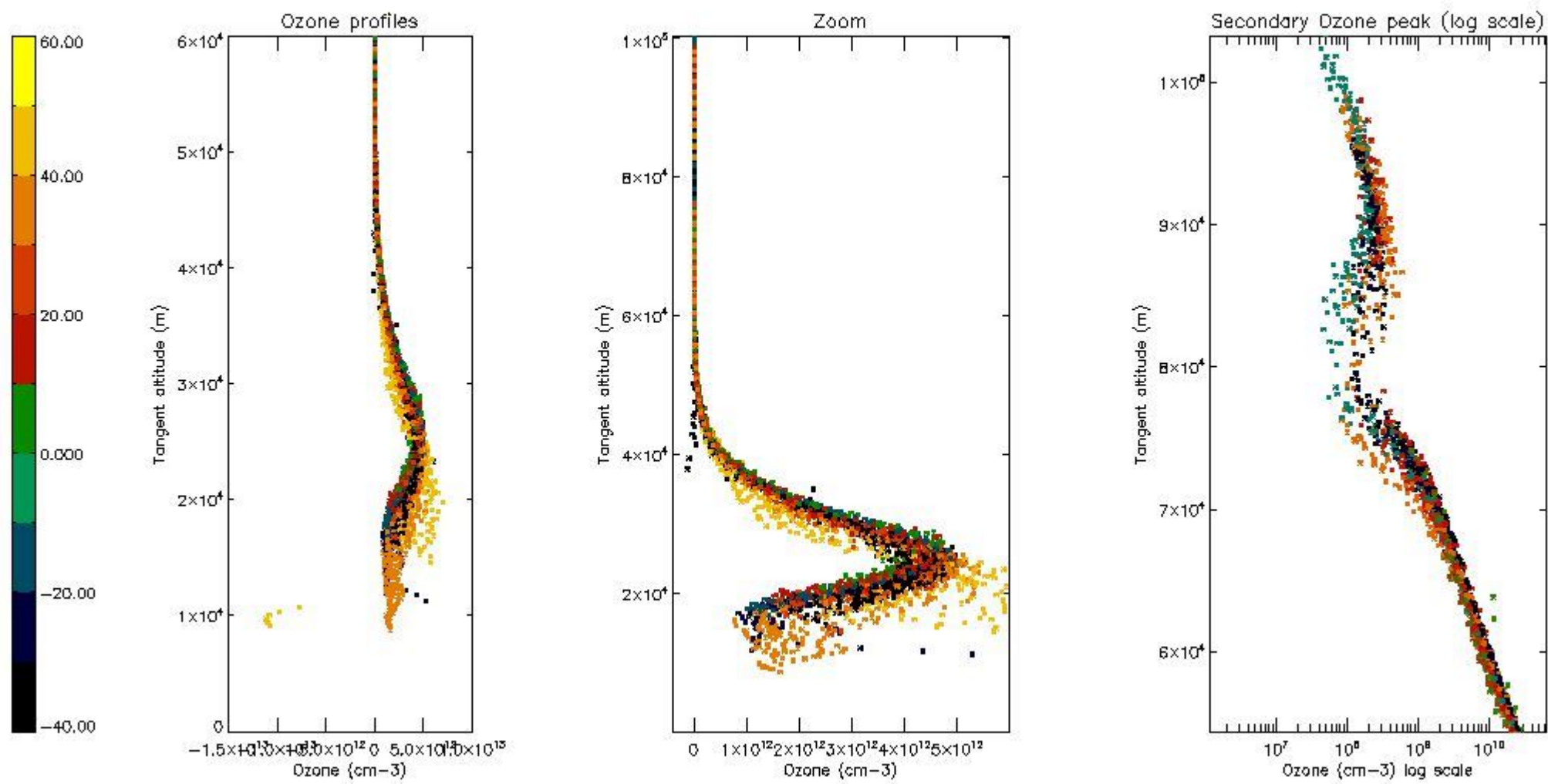
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



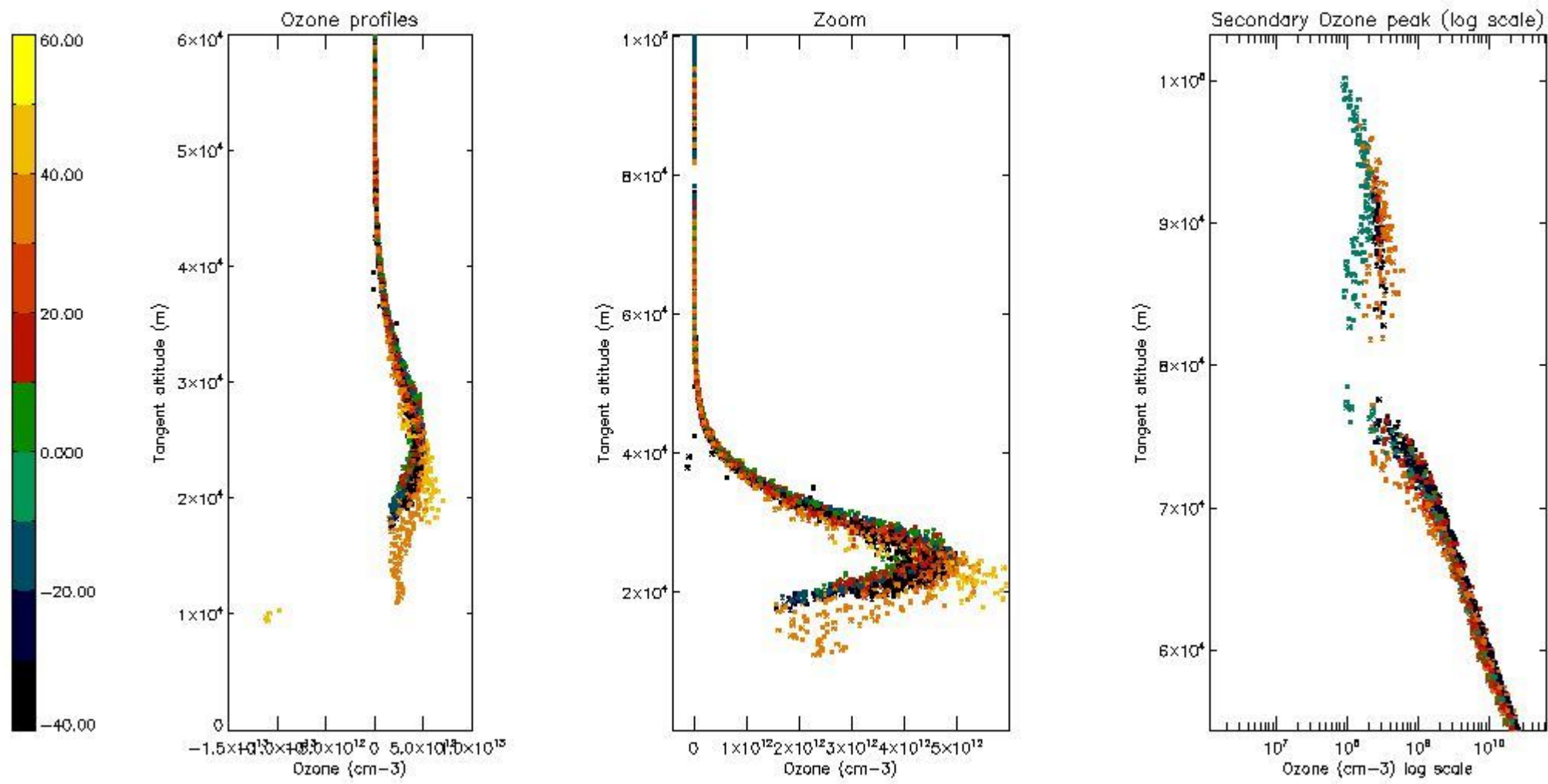
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



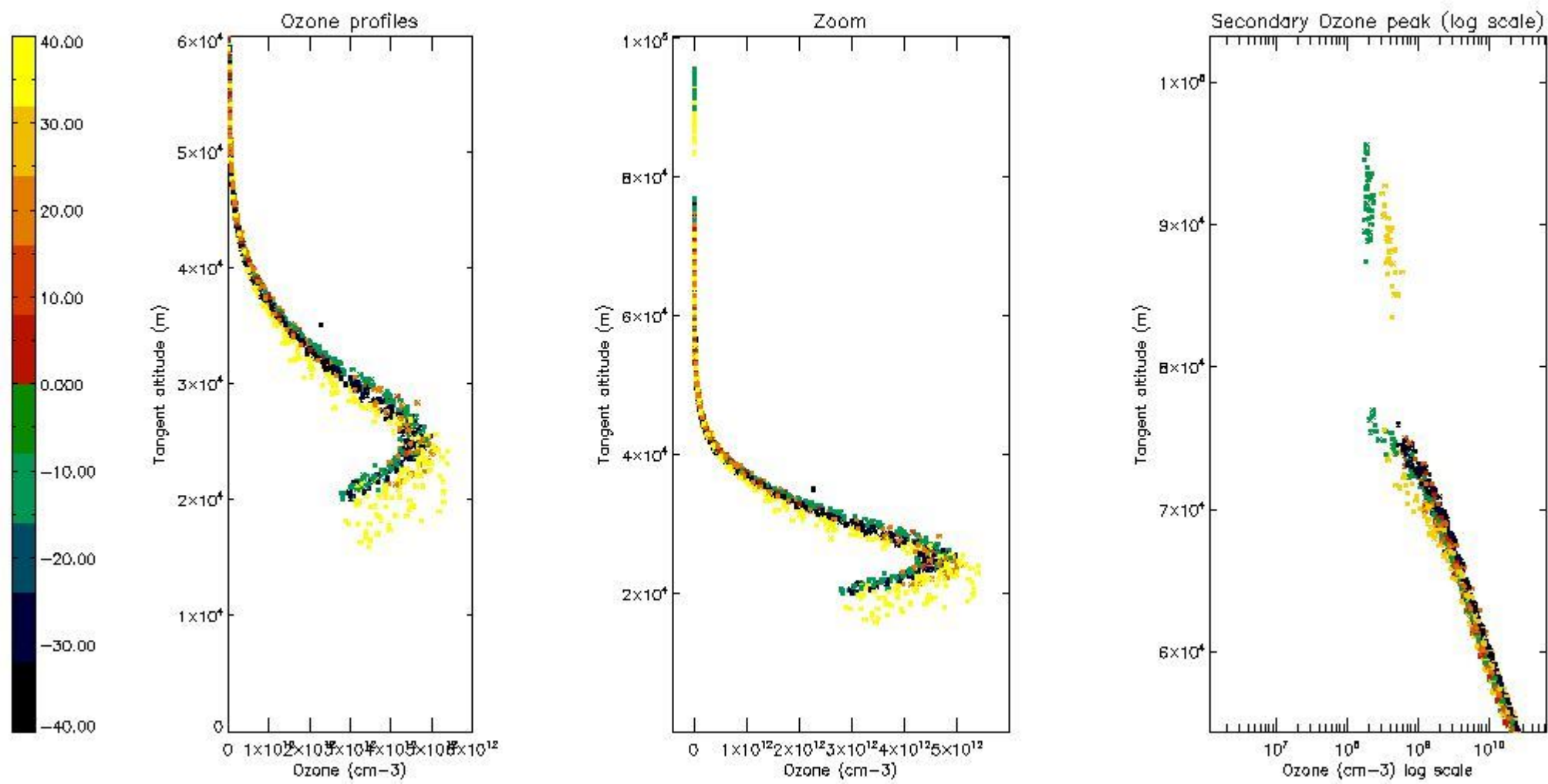
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



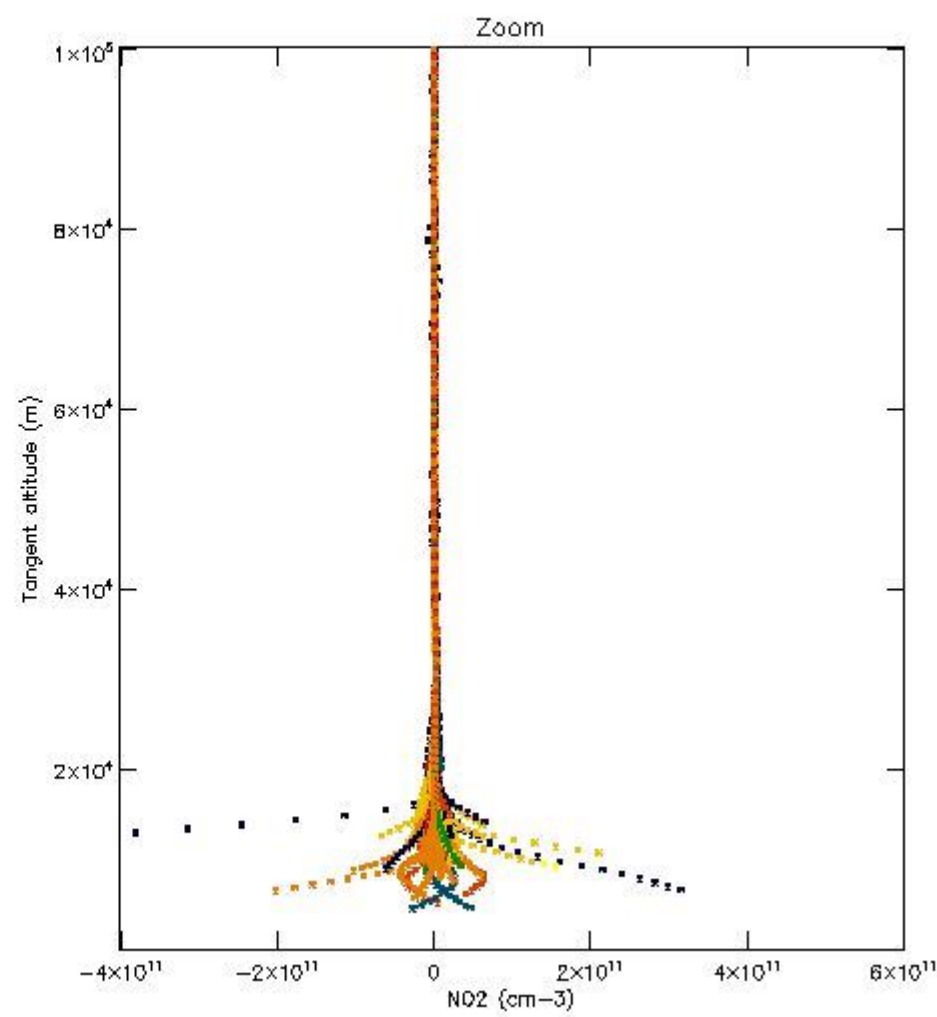
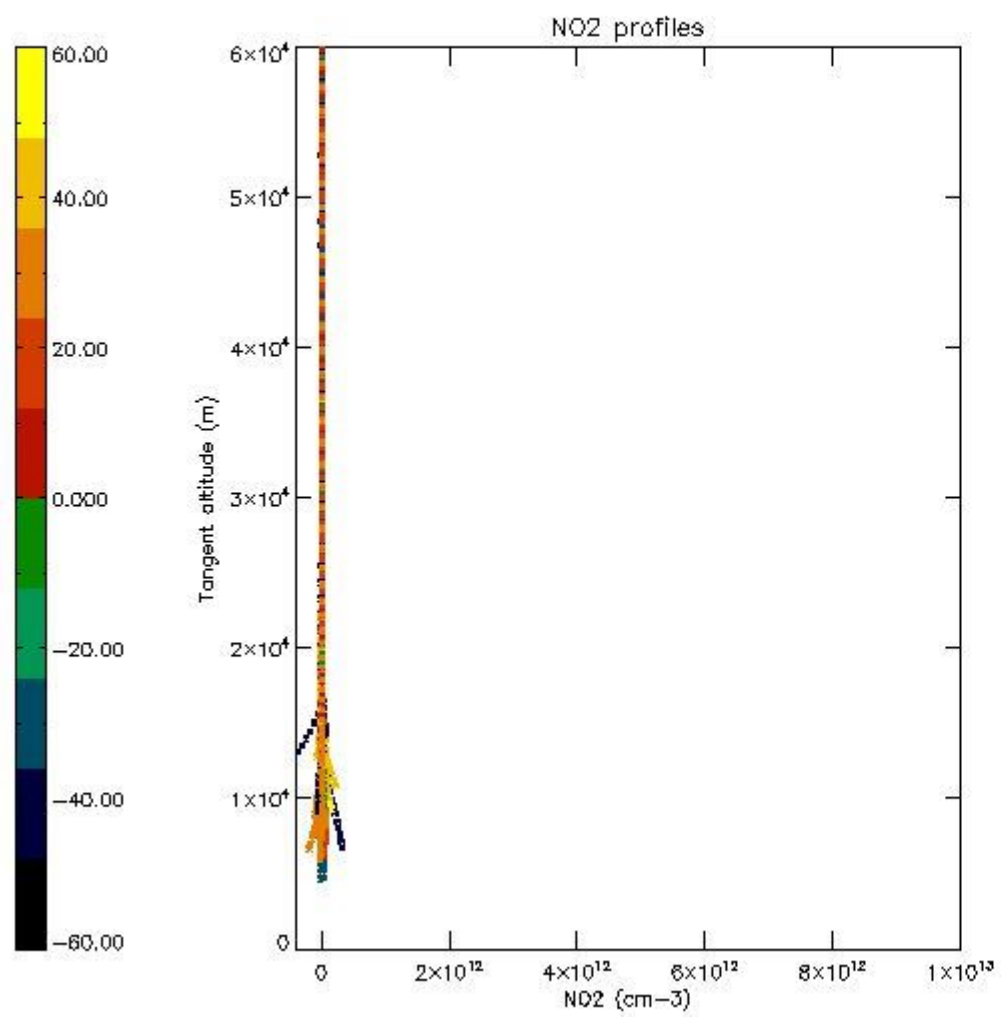
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



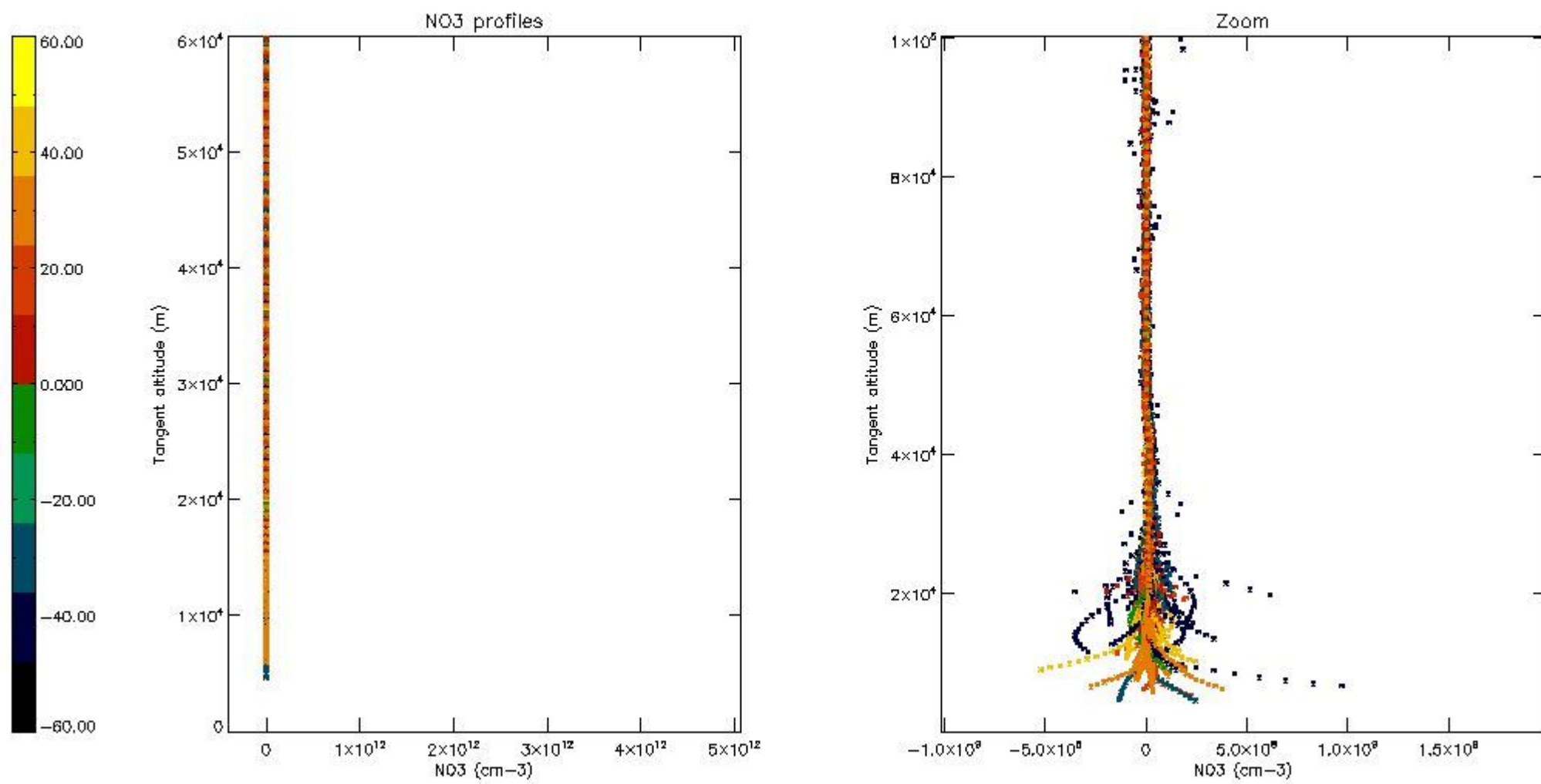
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



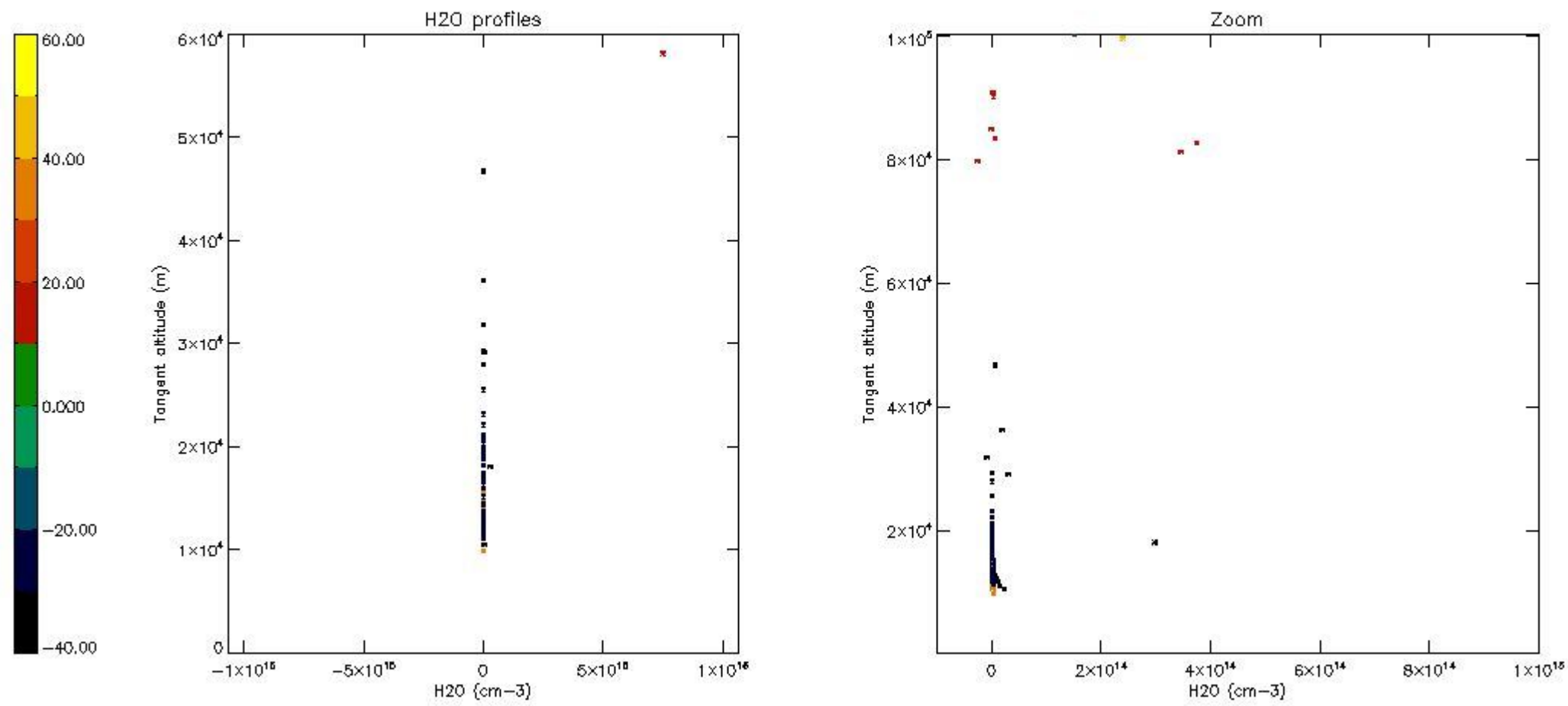
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

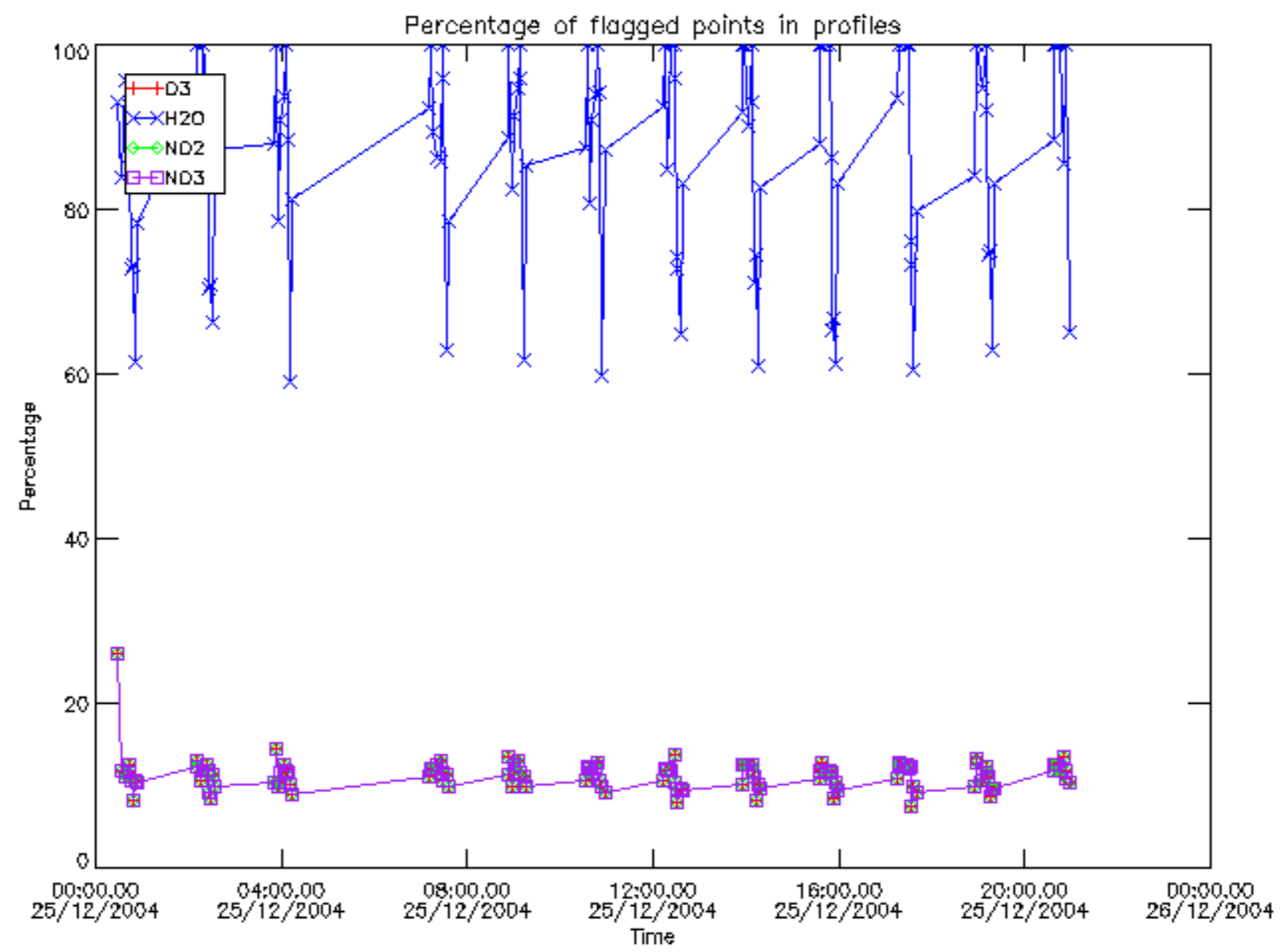
The colorbar represents the latitude.



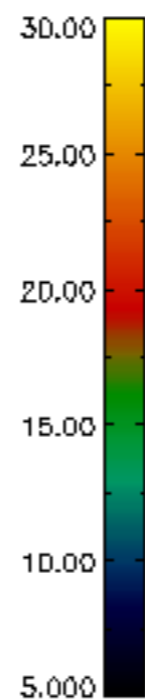
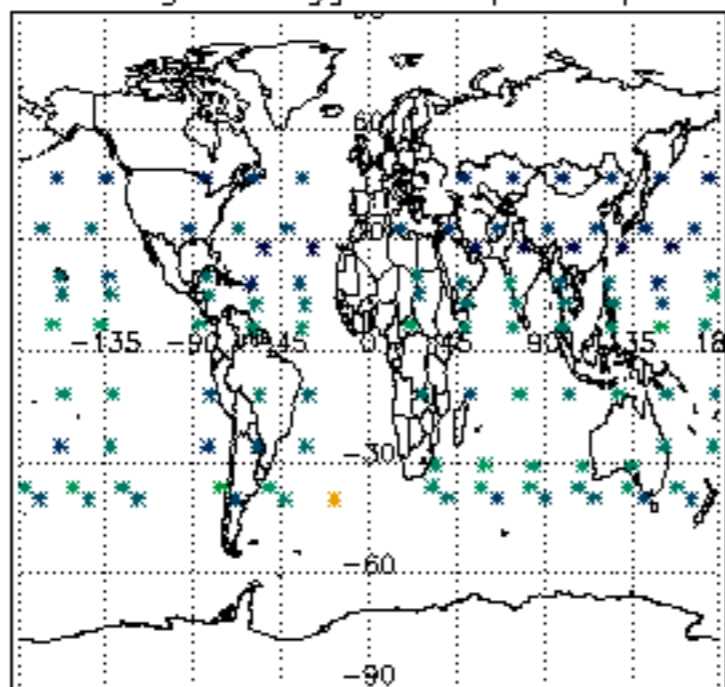
6. Auxiliary Data Files used for the production reported in section 2

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.

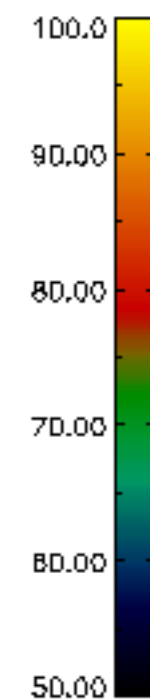
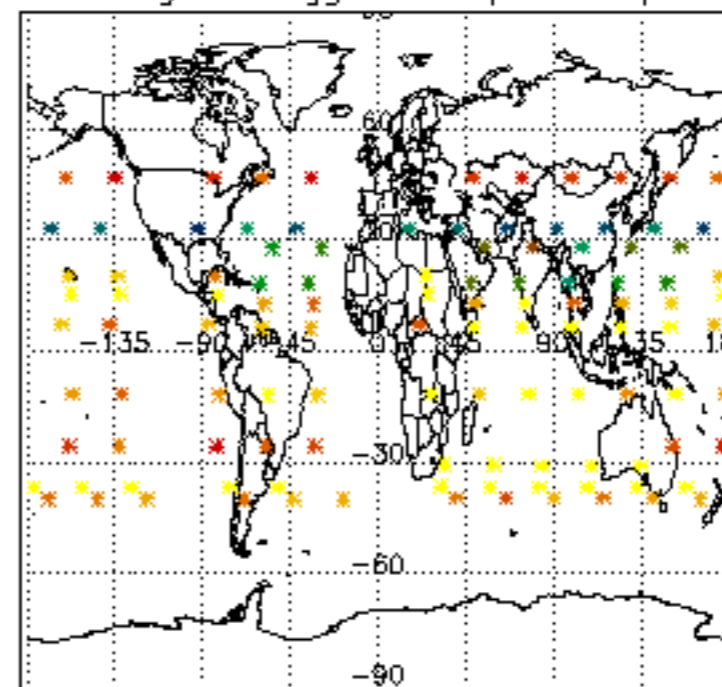
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	25-DEC-2004 00:01:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-DEC-2004 00:01:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-DEC-2004 00:01:10



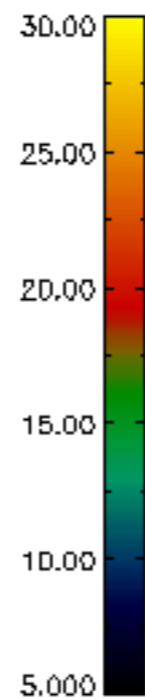
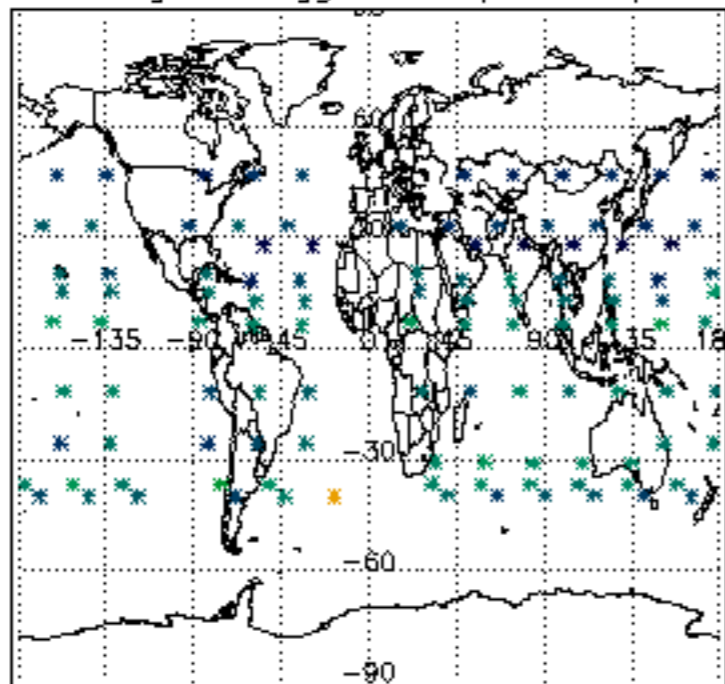
Percentage of flagged data per D3 profile



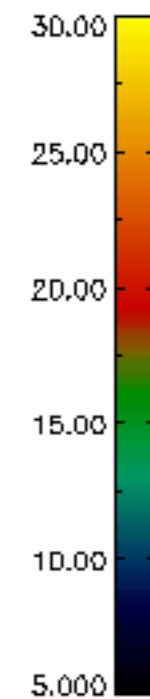
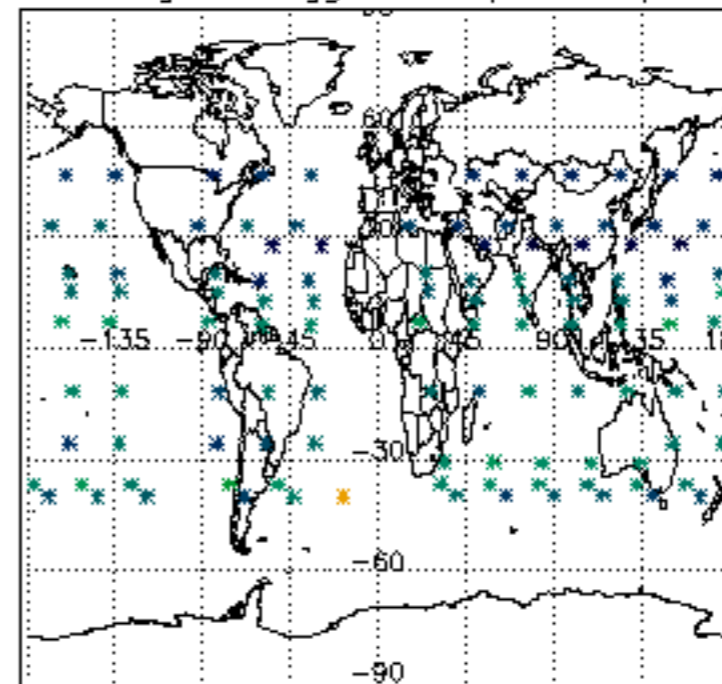
Percentage of flagged data per H2O profile

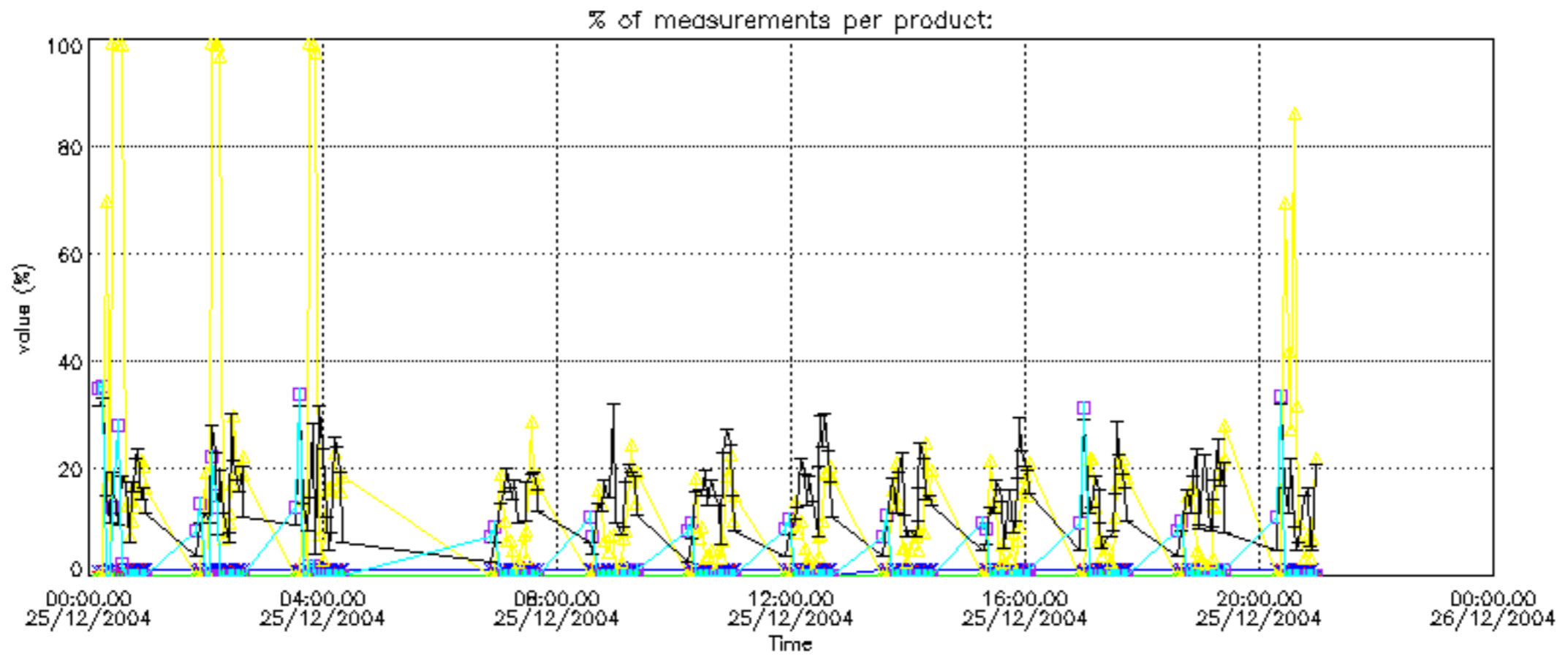


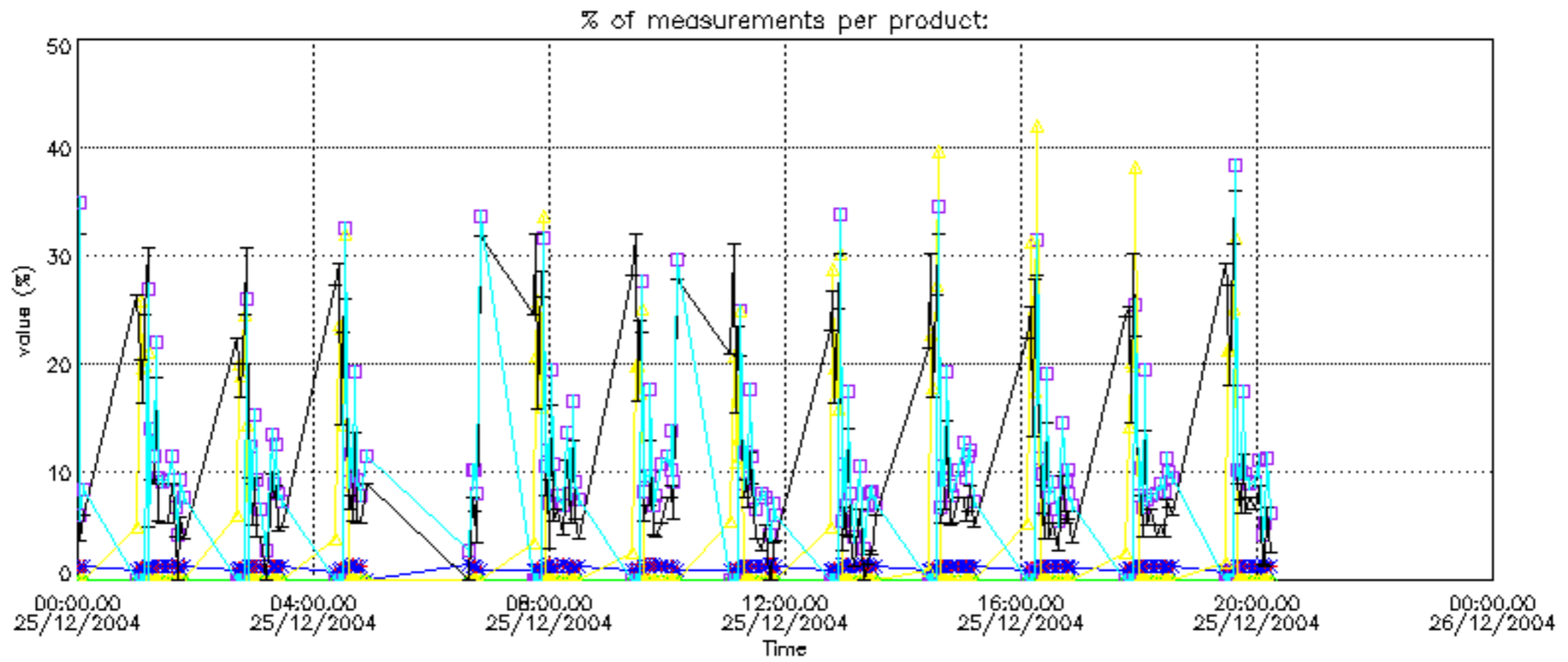
Percentage of flagged data per NO2 profile



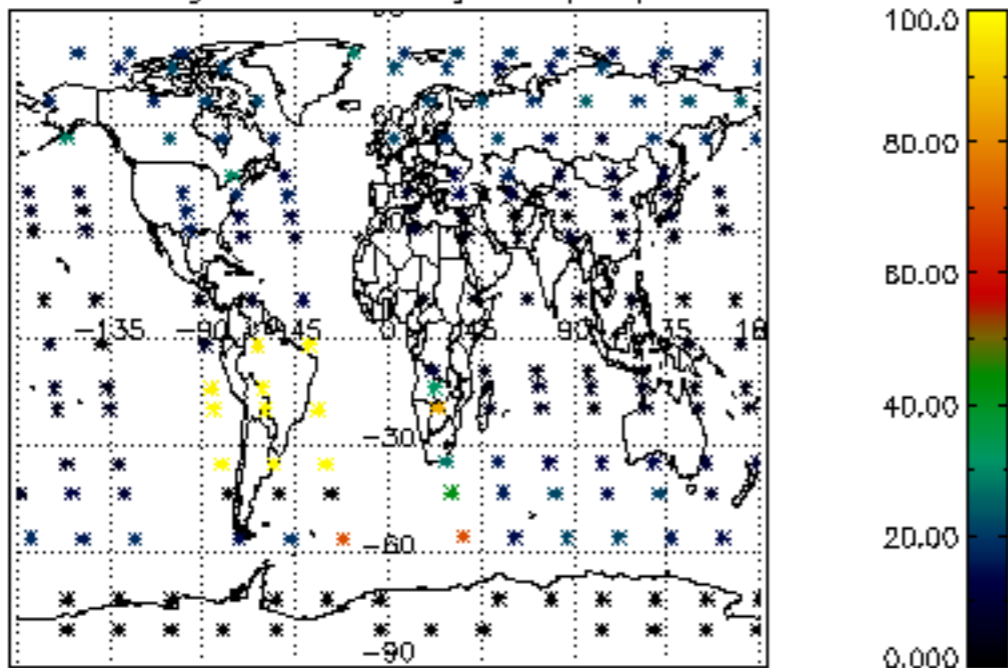
Percentage of flagged data per NO3 profile



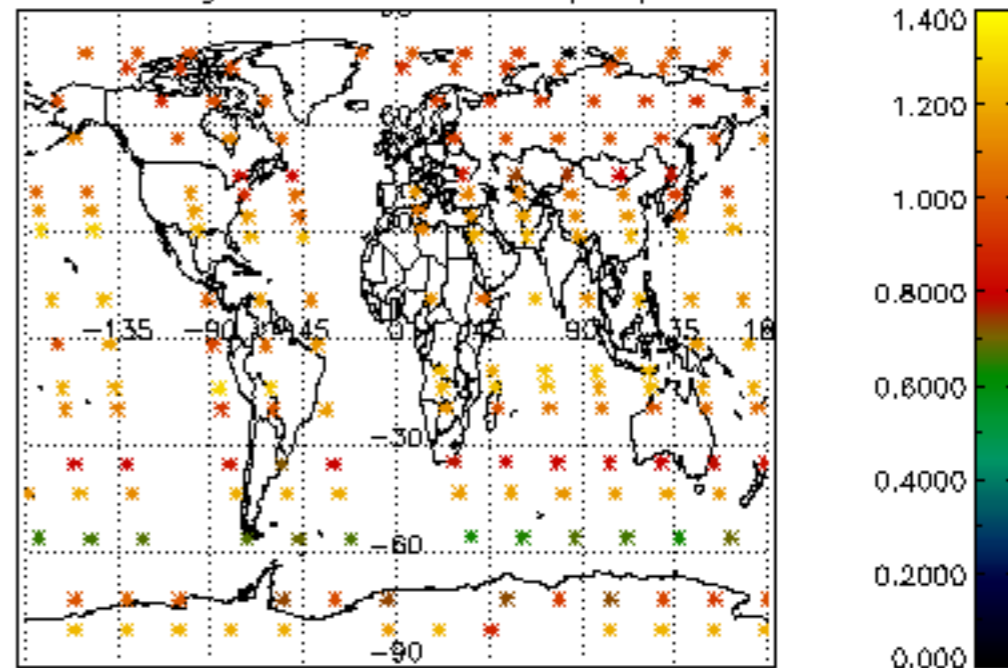




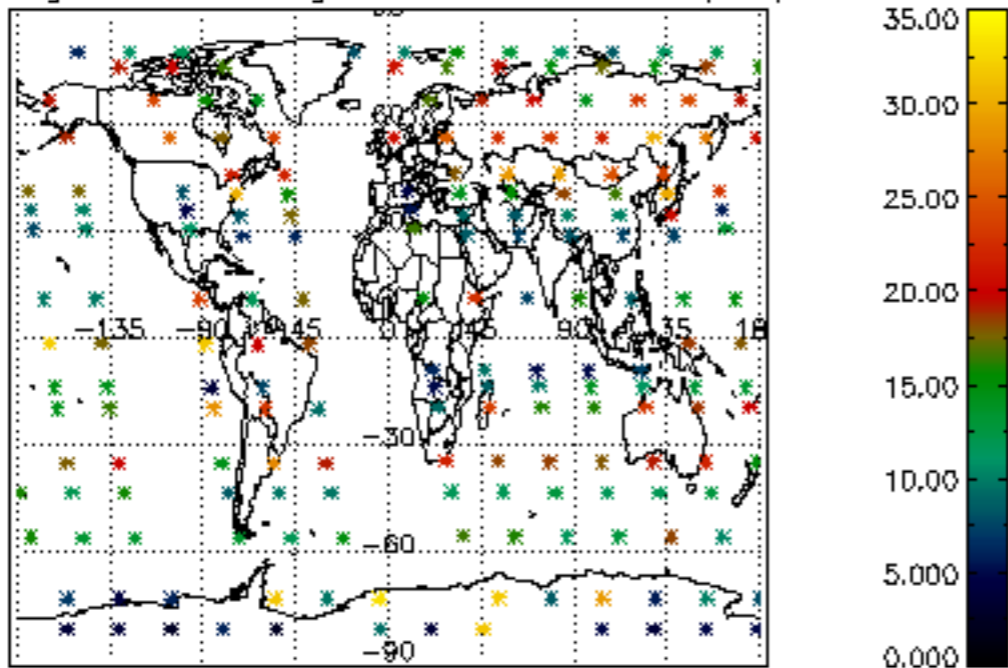
Percentage of cosmic ray hits per profile



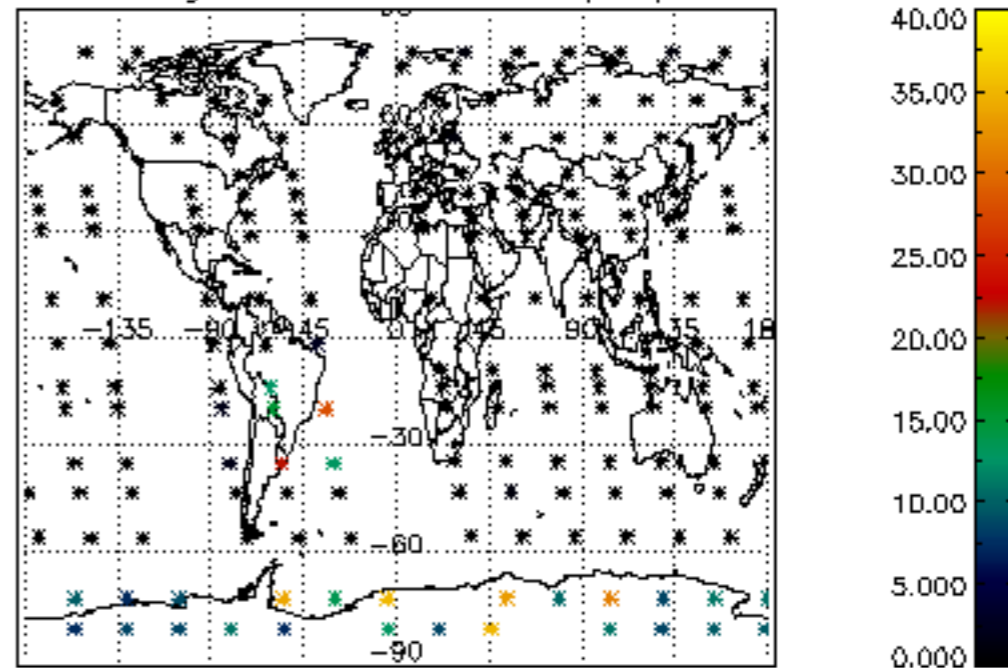
Percentage of datation errors per profile



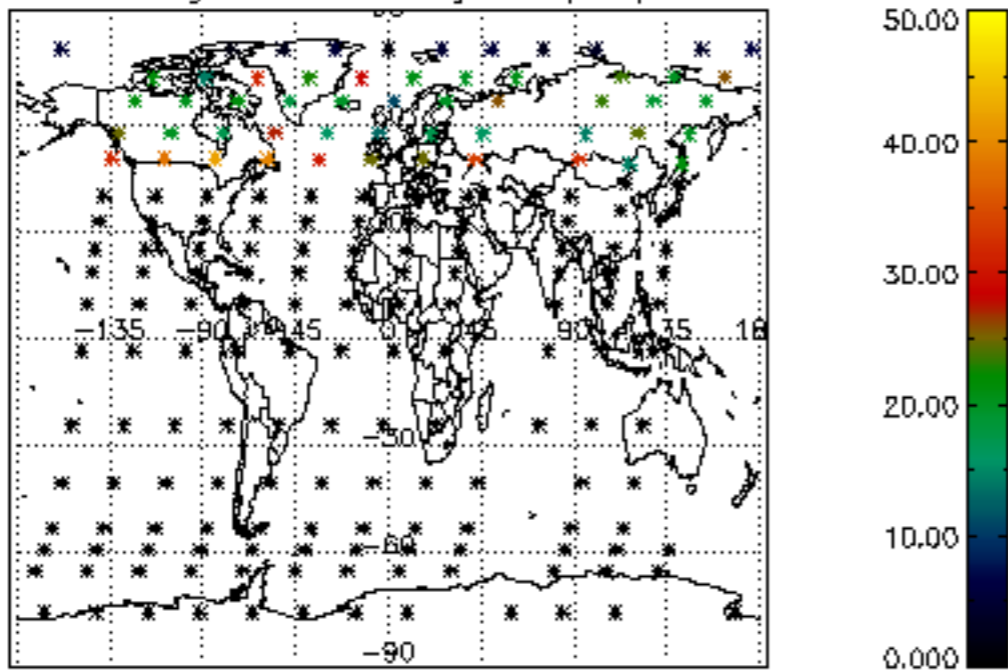
Percentage of star falling outside central band per profile



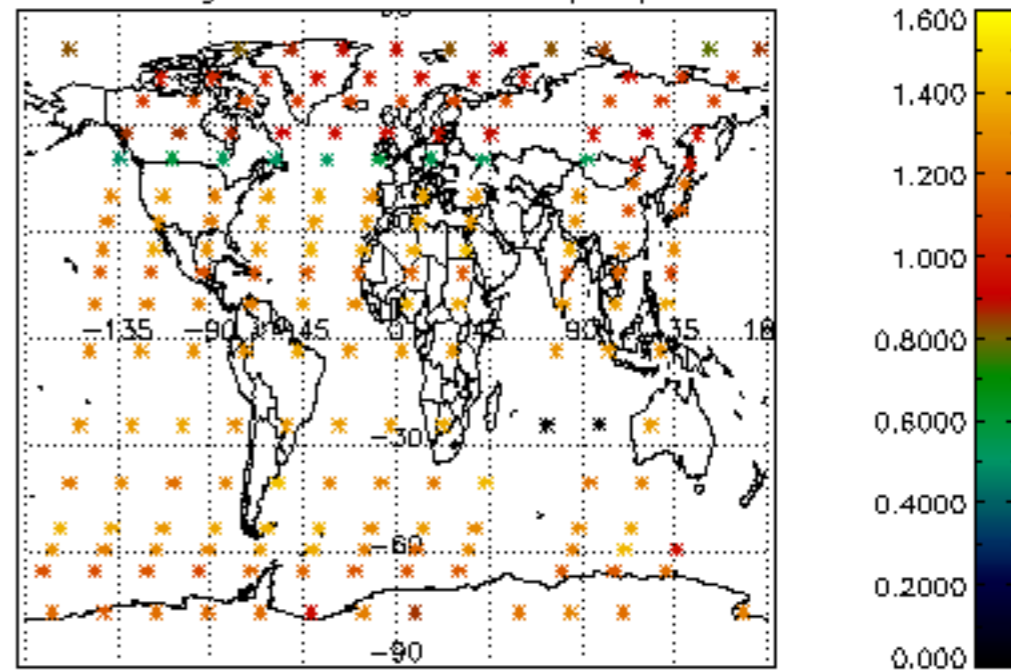
Percentage of saturation errors per profile



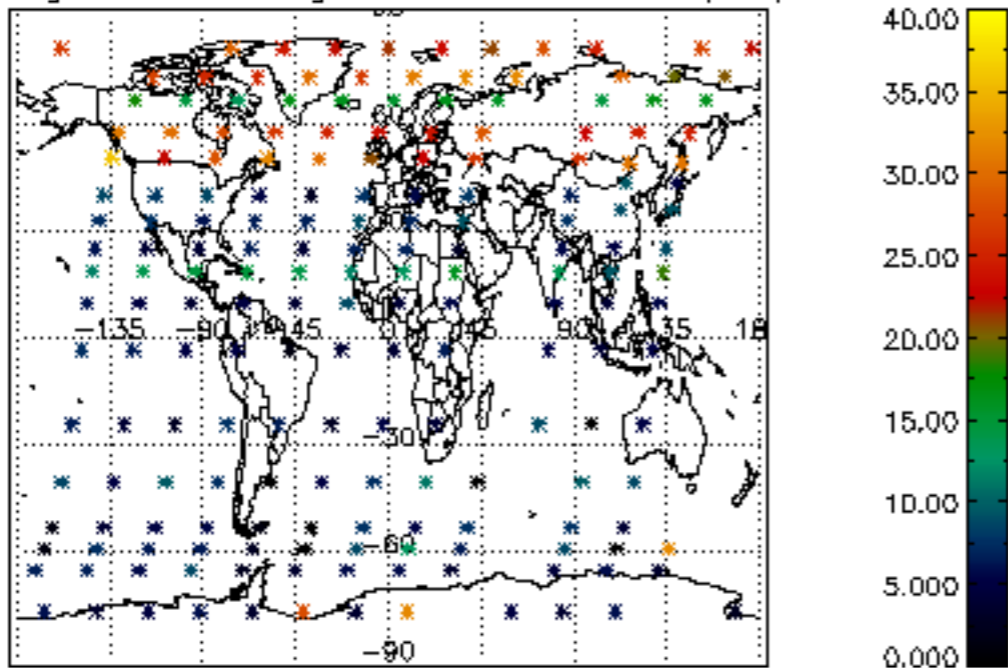
Percentage of cosmic ray hits per profile



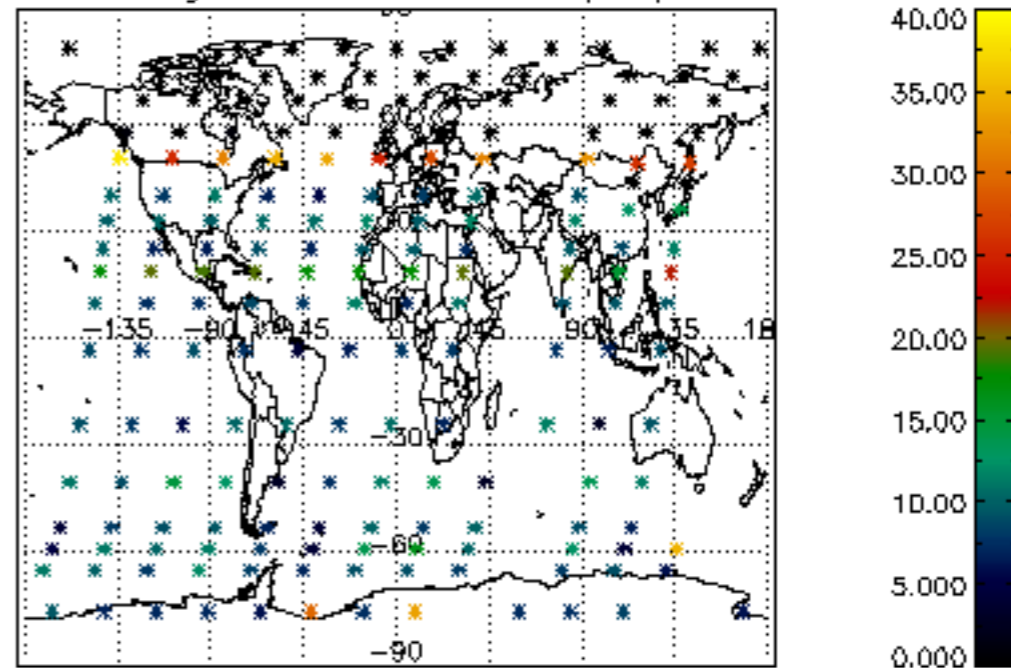
Percentage of datation errors per profile

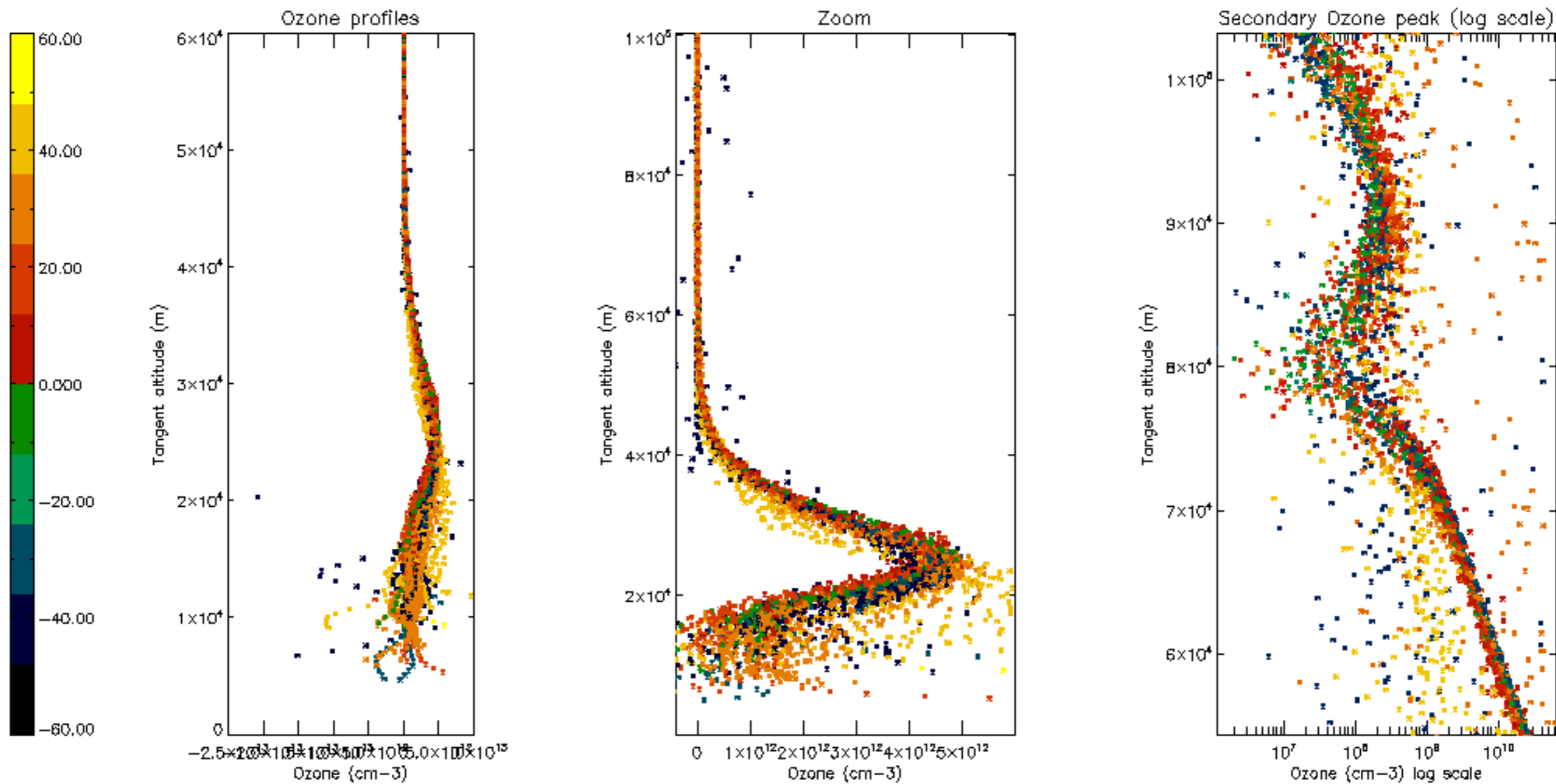


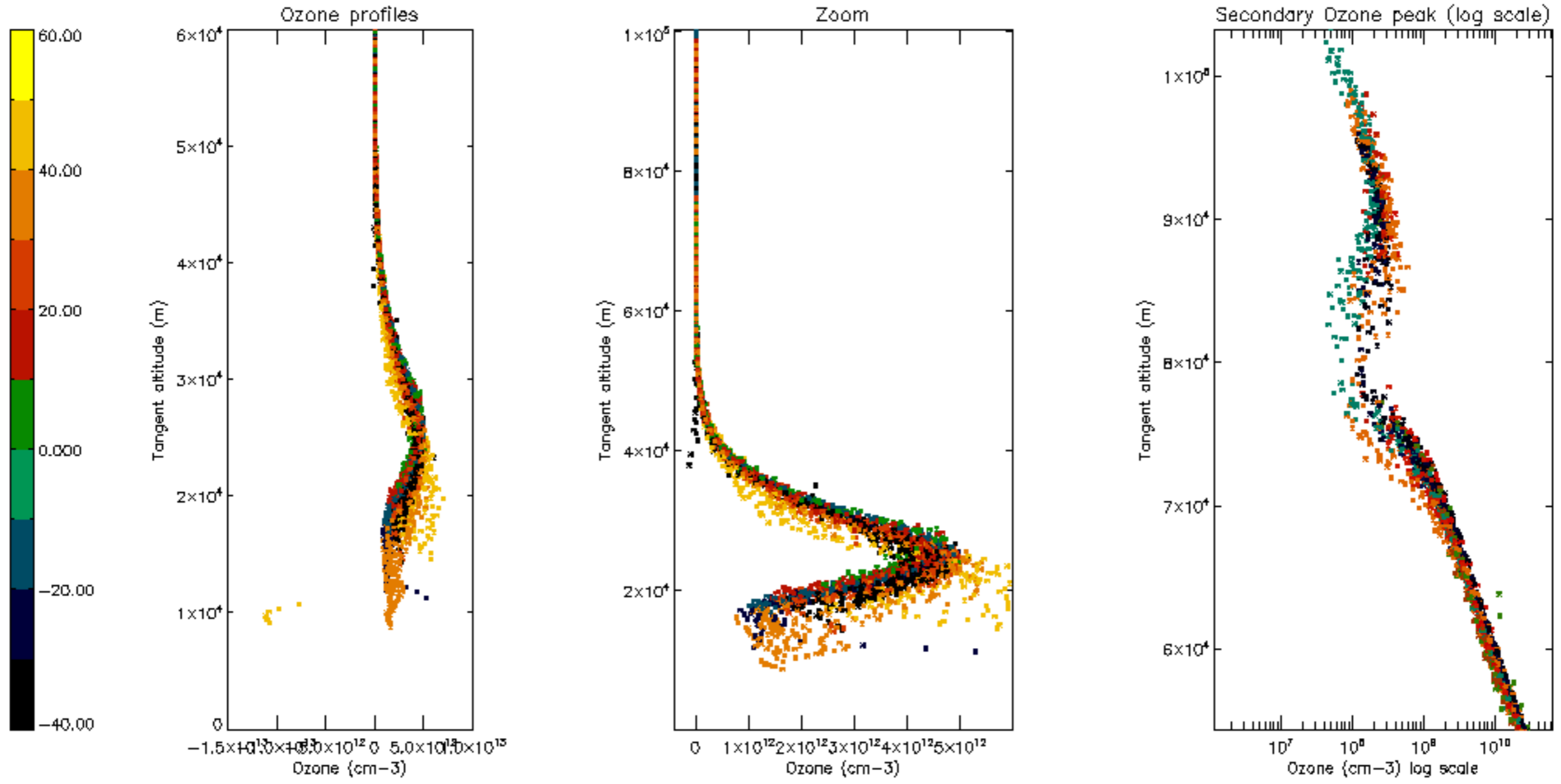
Percentage of star falling outside central band per profile

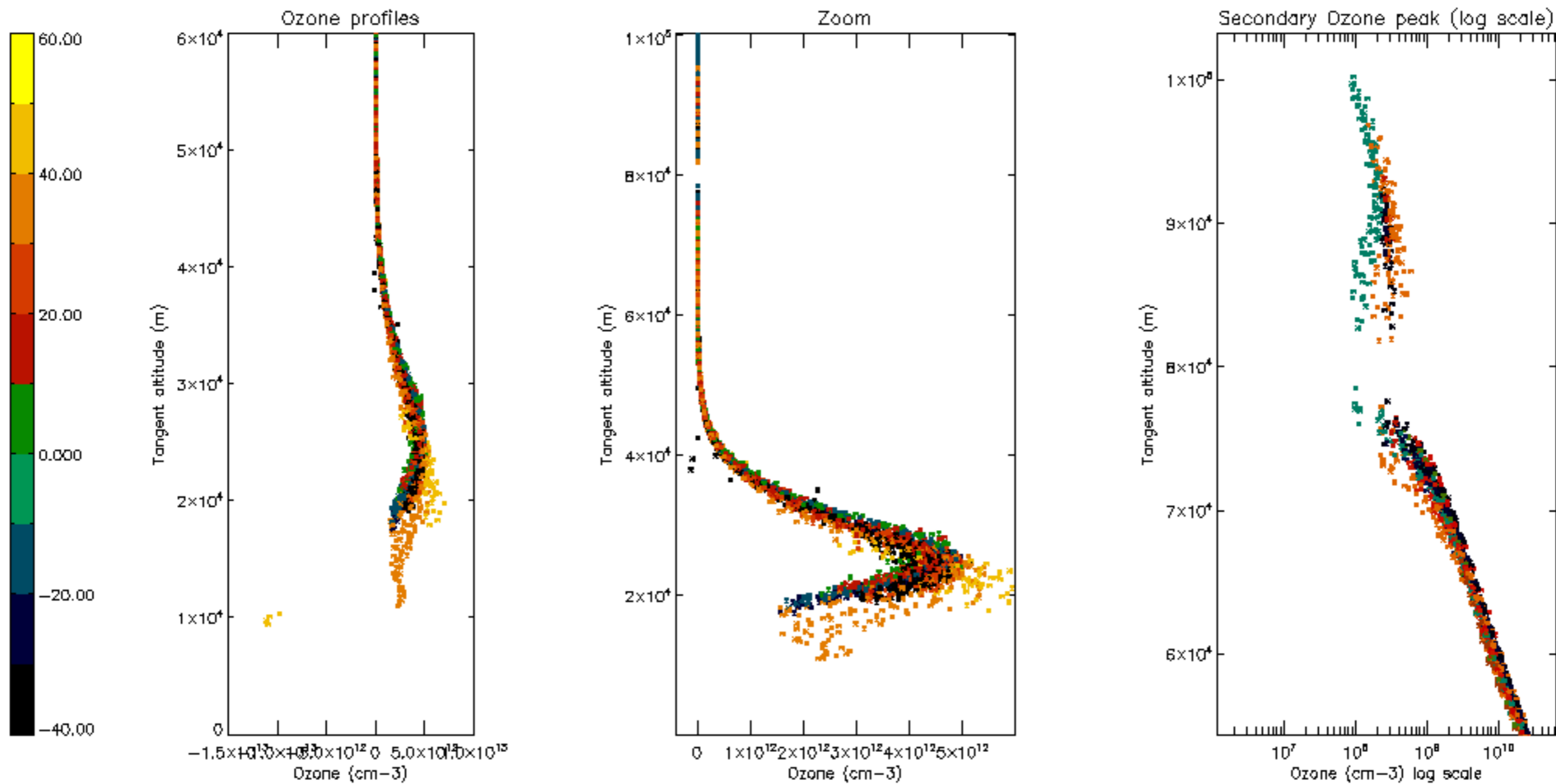


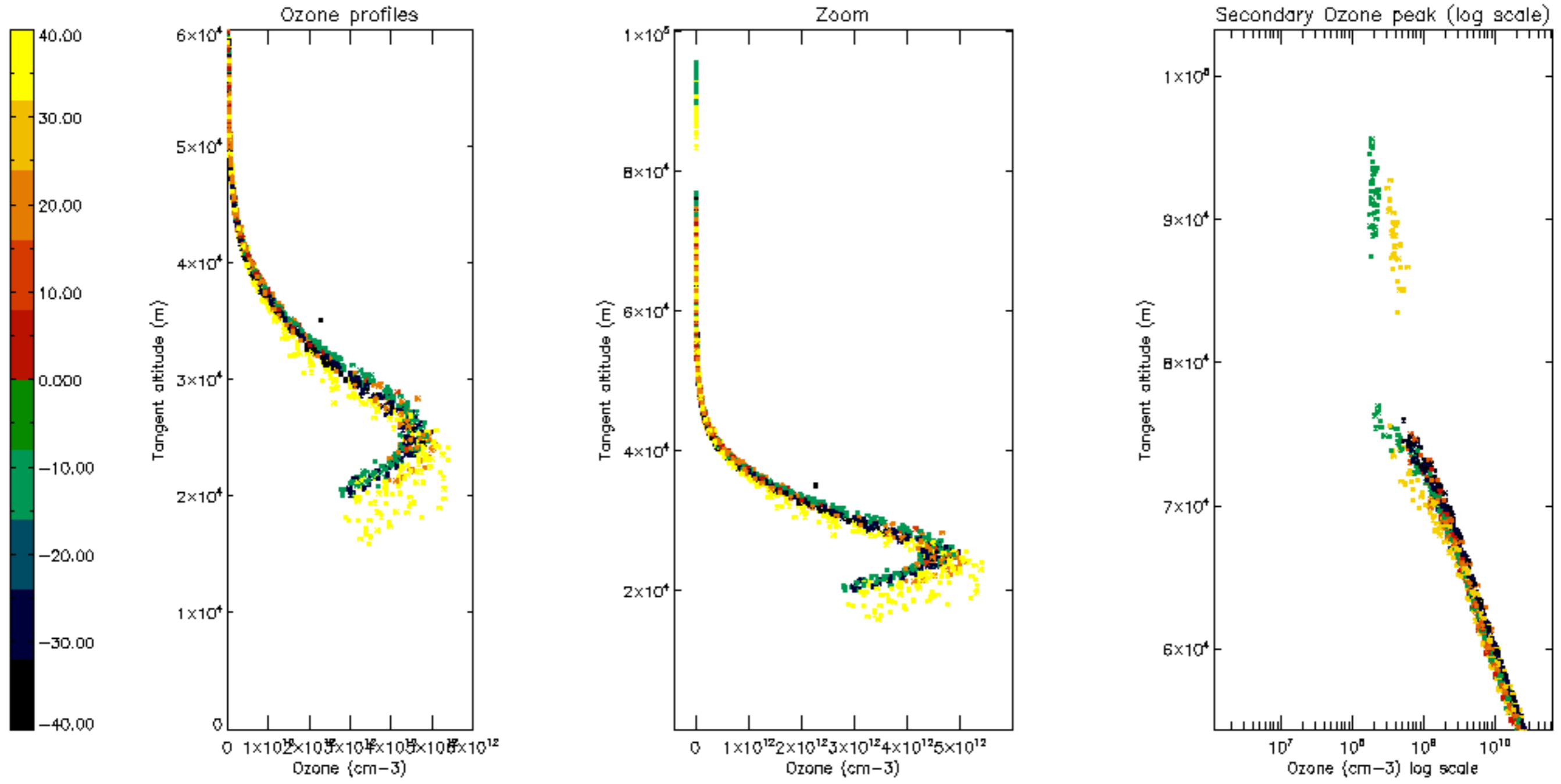
Percentage of saturation errors per profile

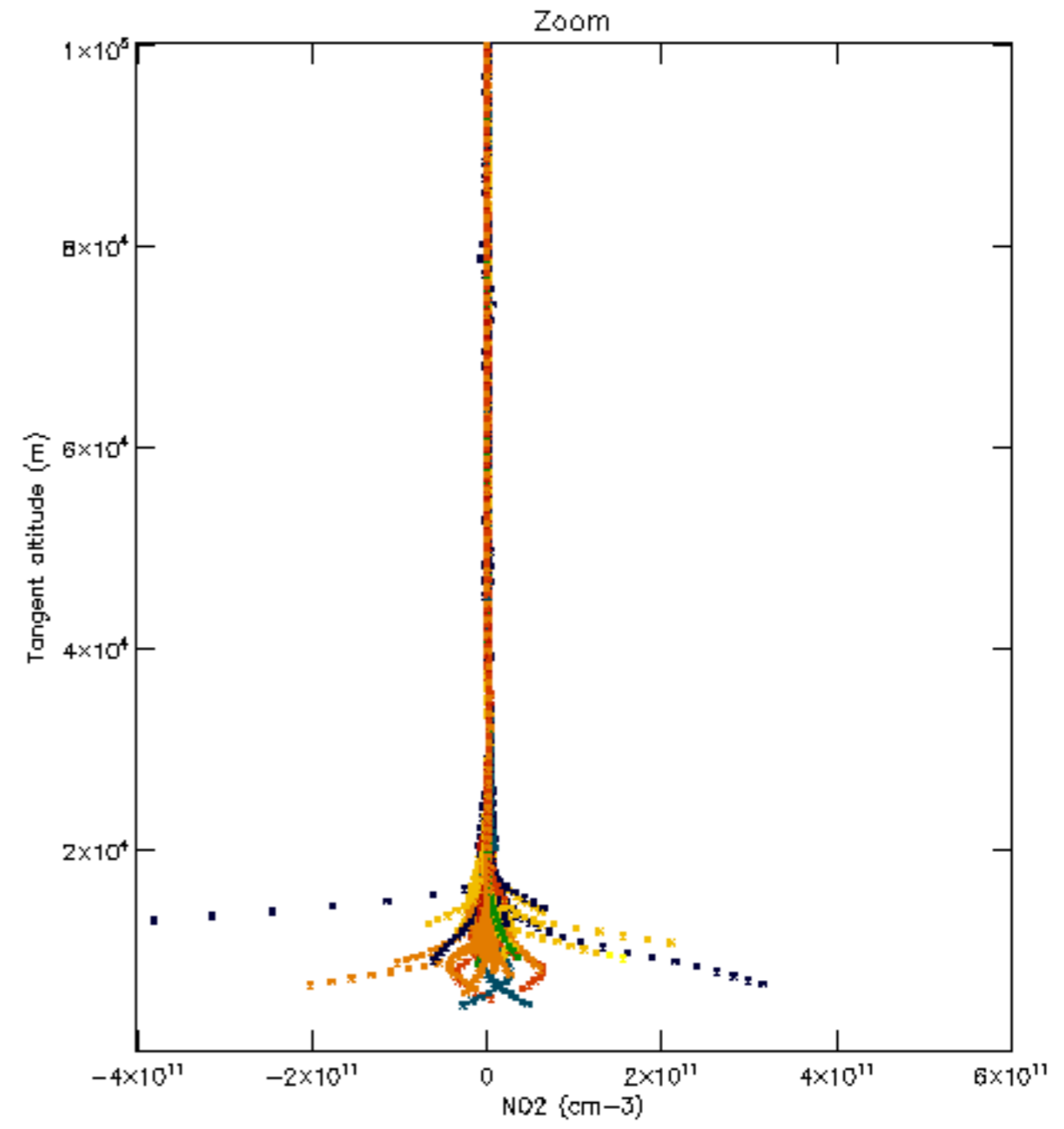
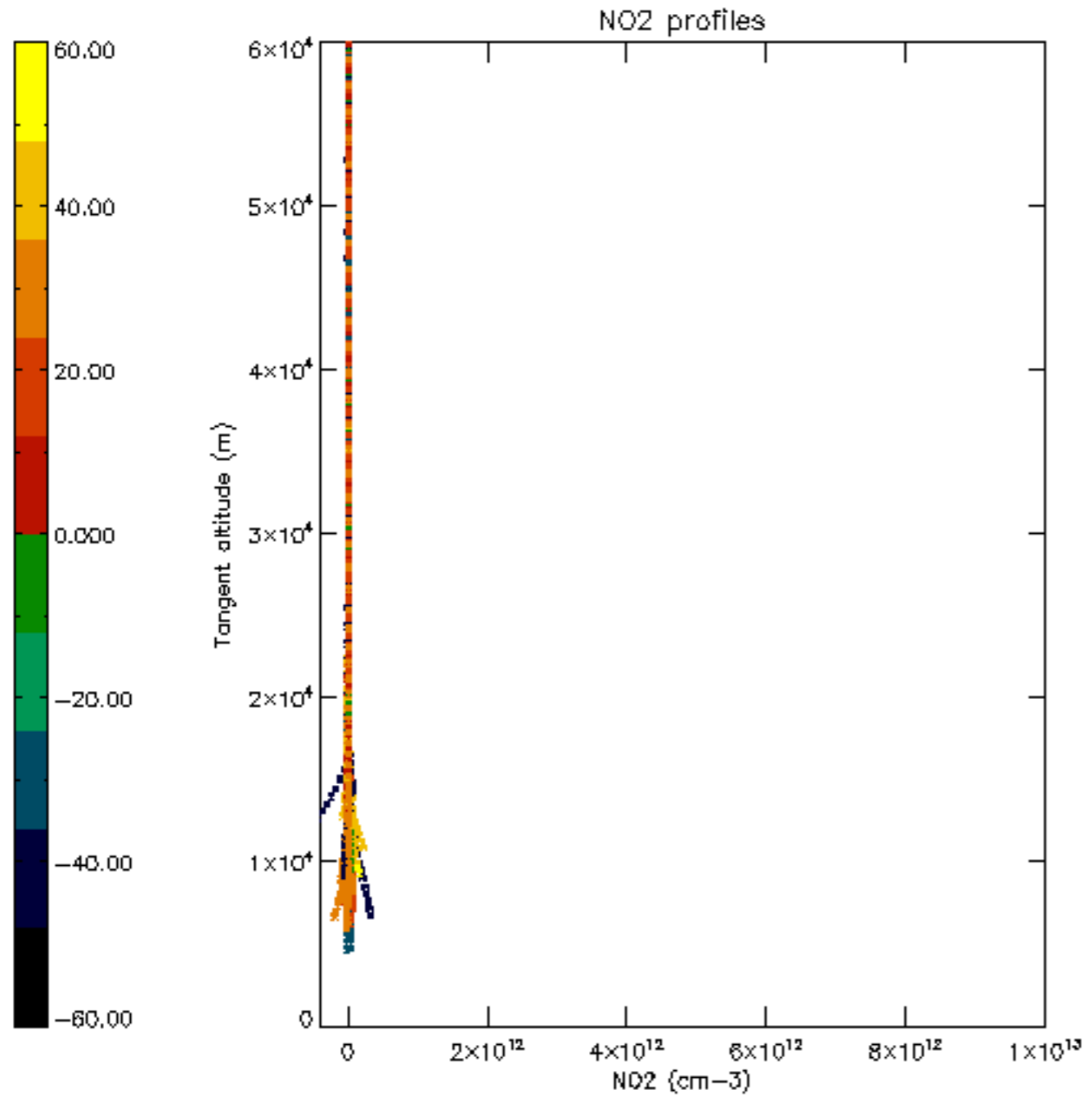


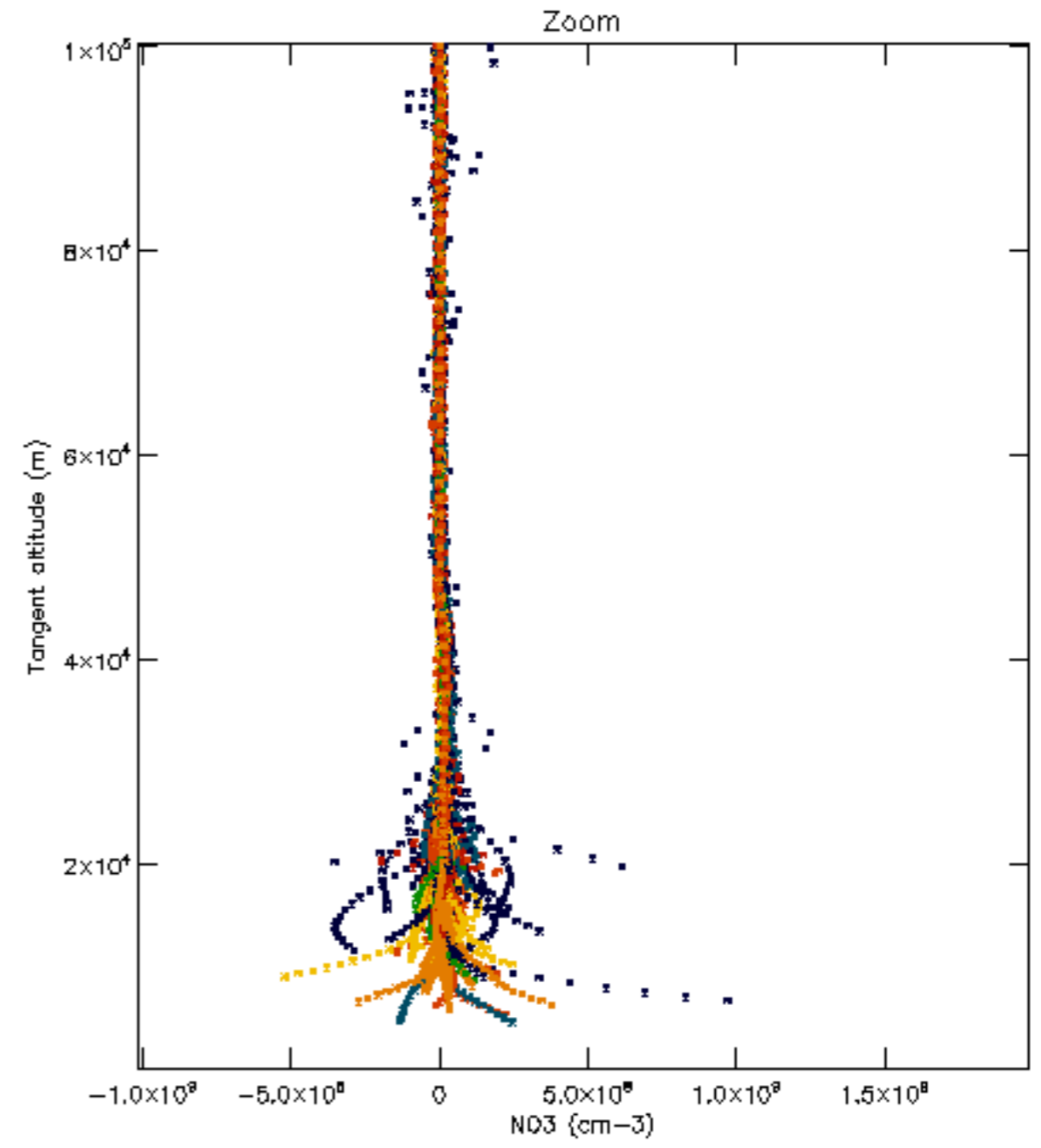
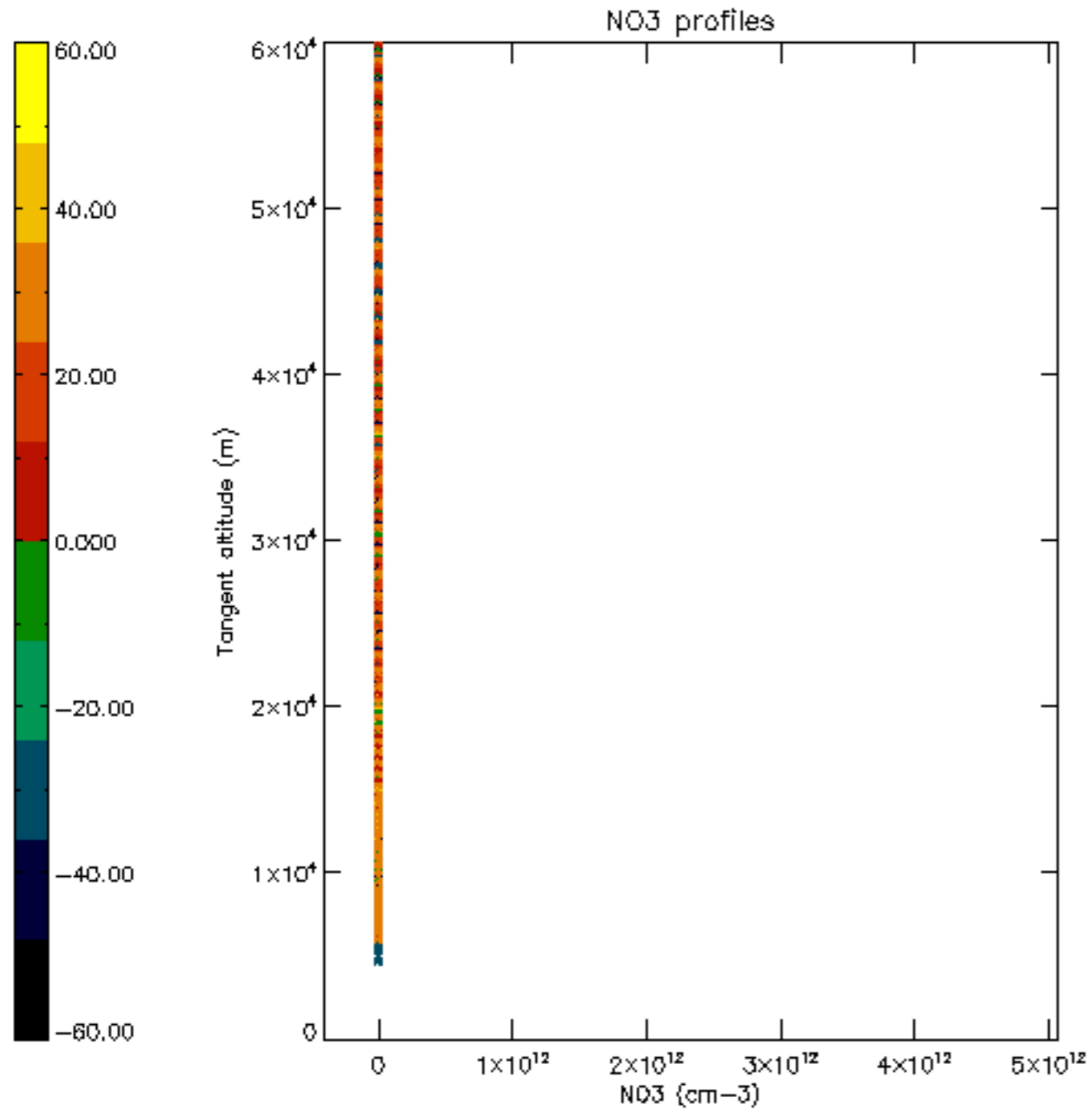


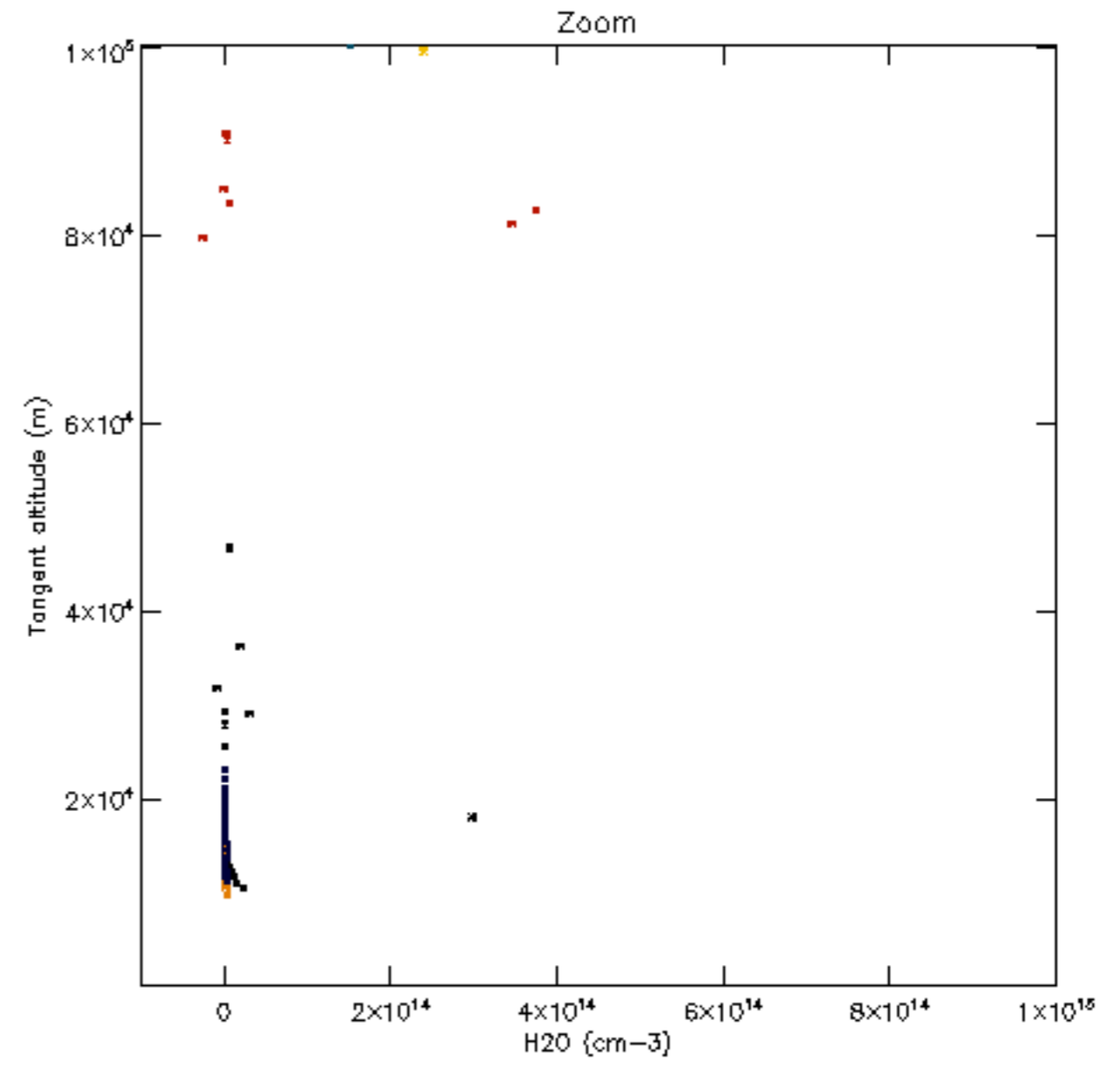
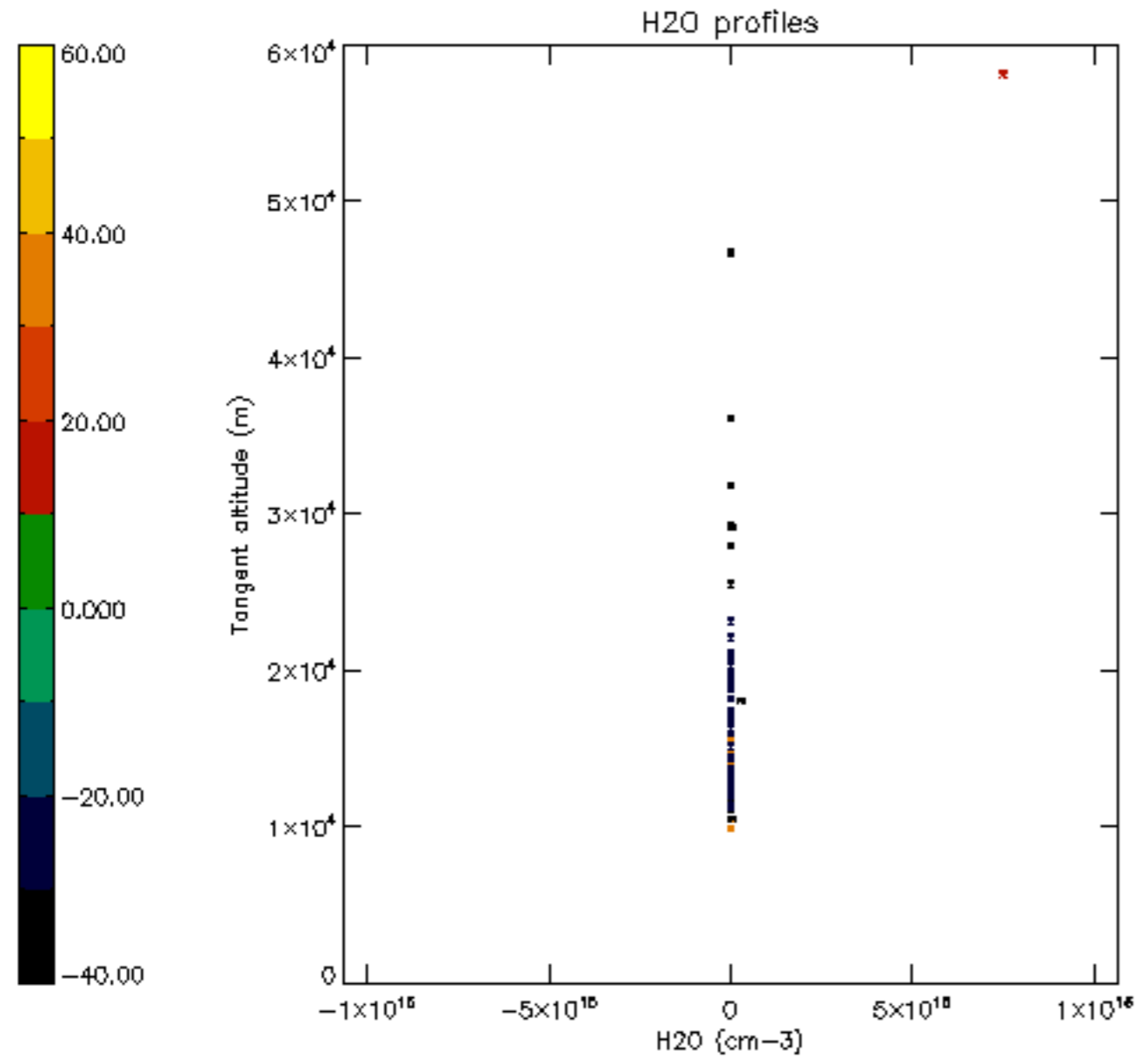


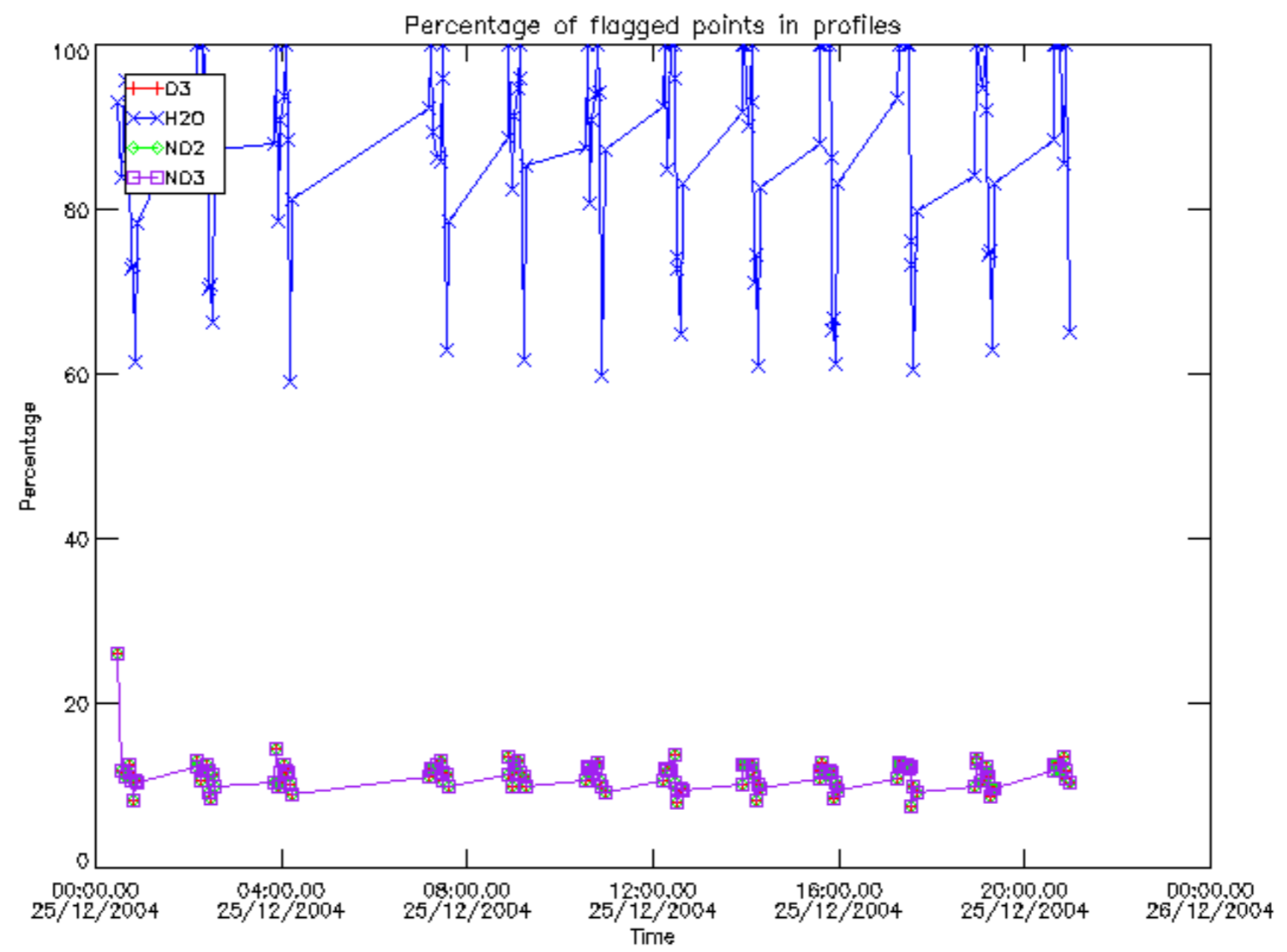




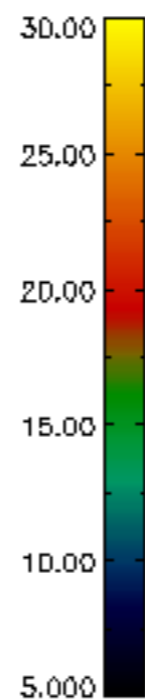
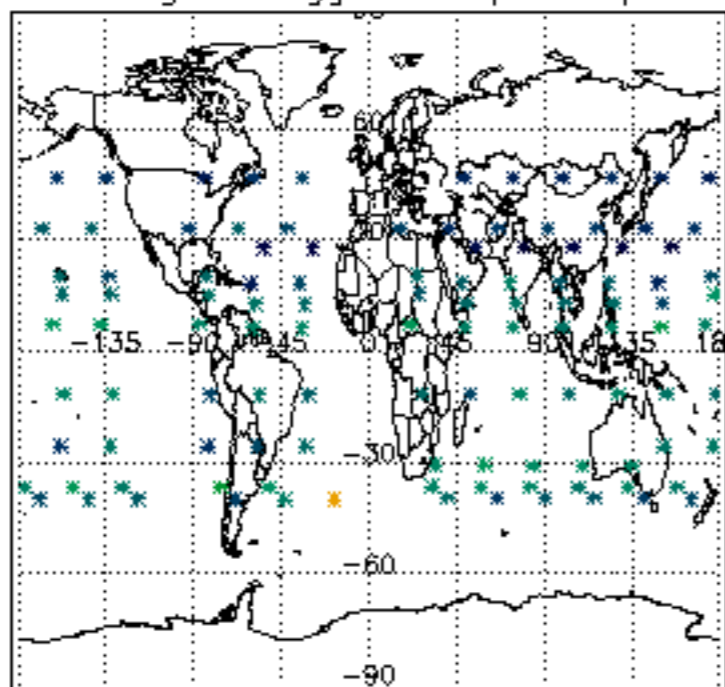




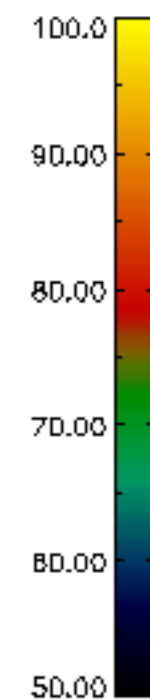
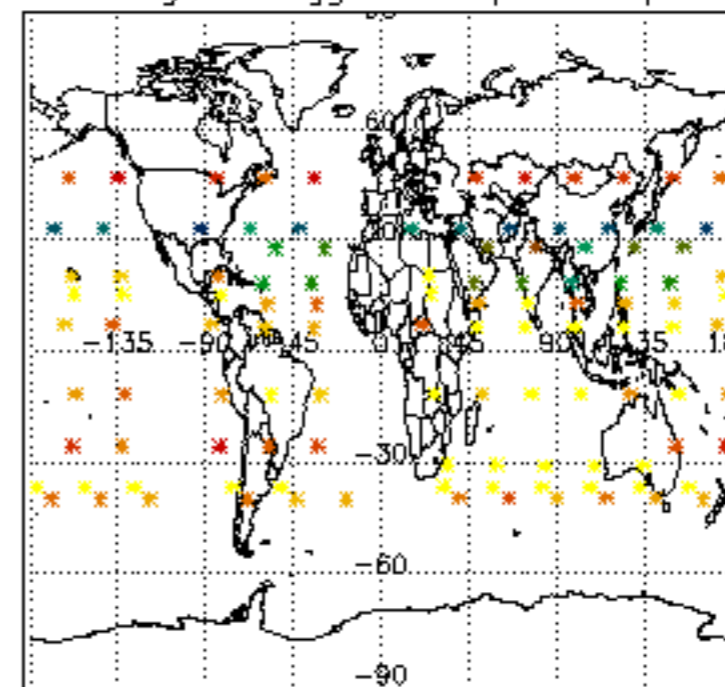




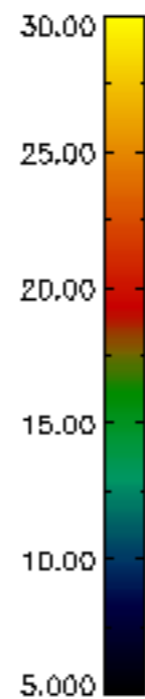
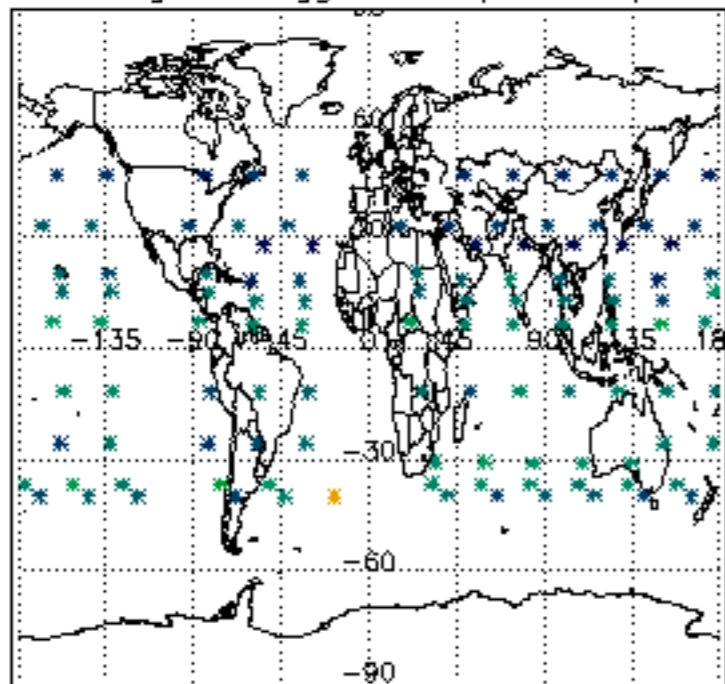
Percentage of flagged data per D3 profile



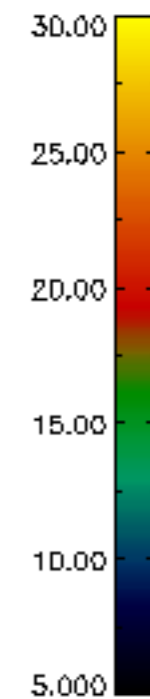
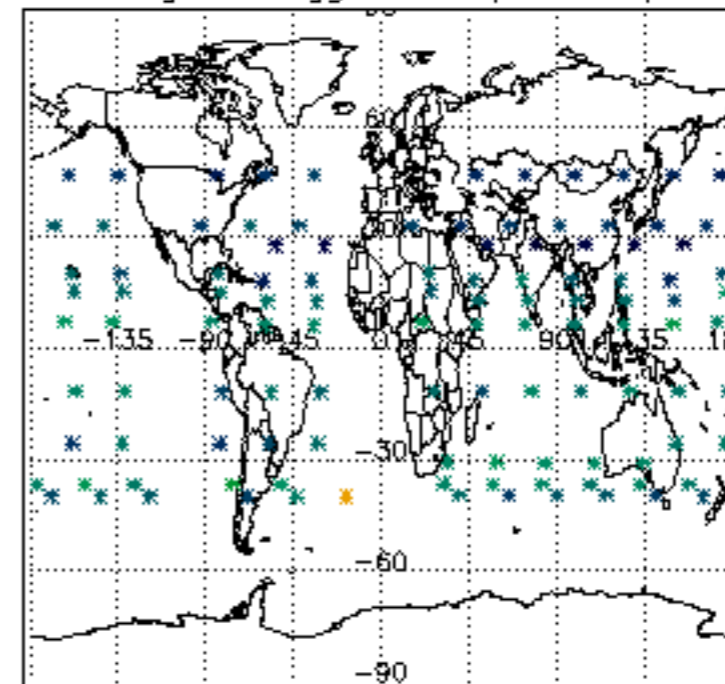
Percentage of flagged data per H2O profile

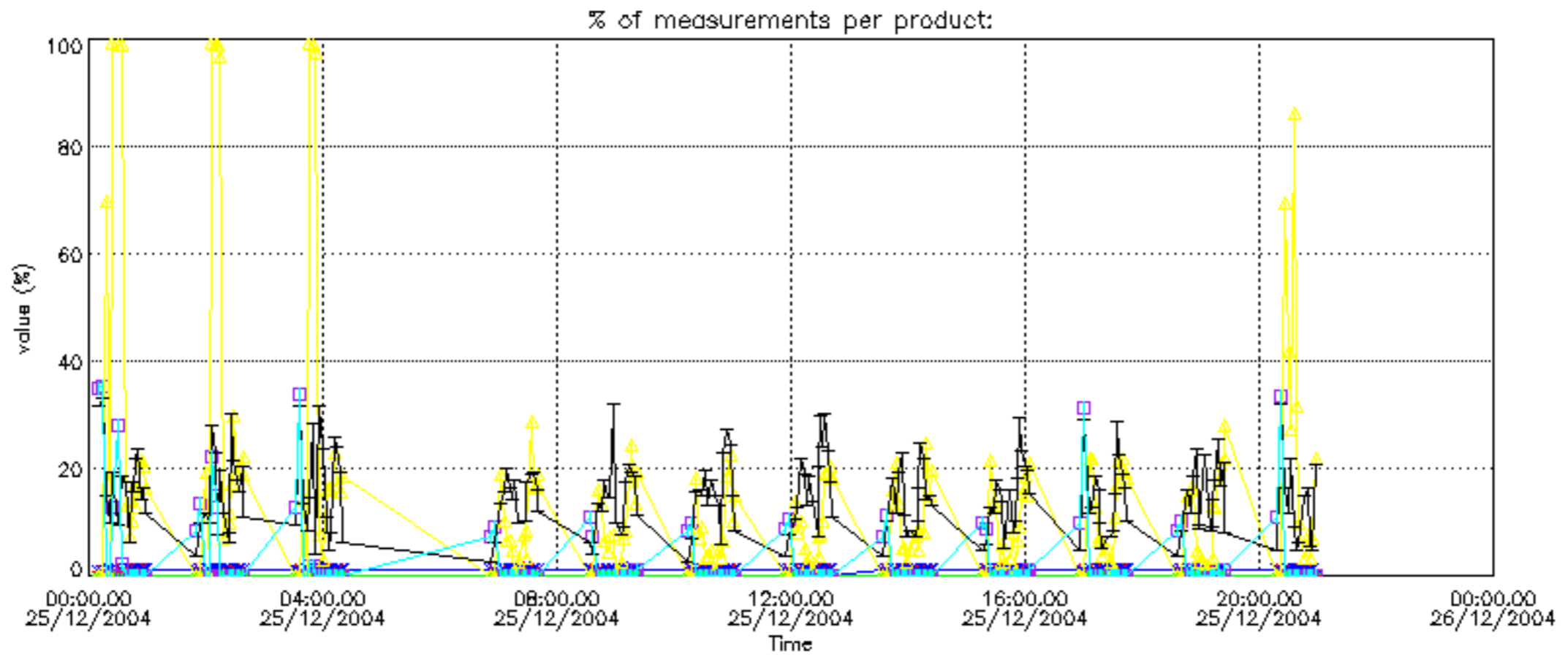


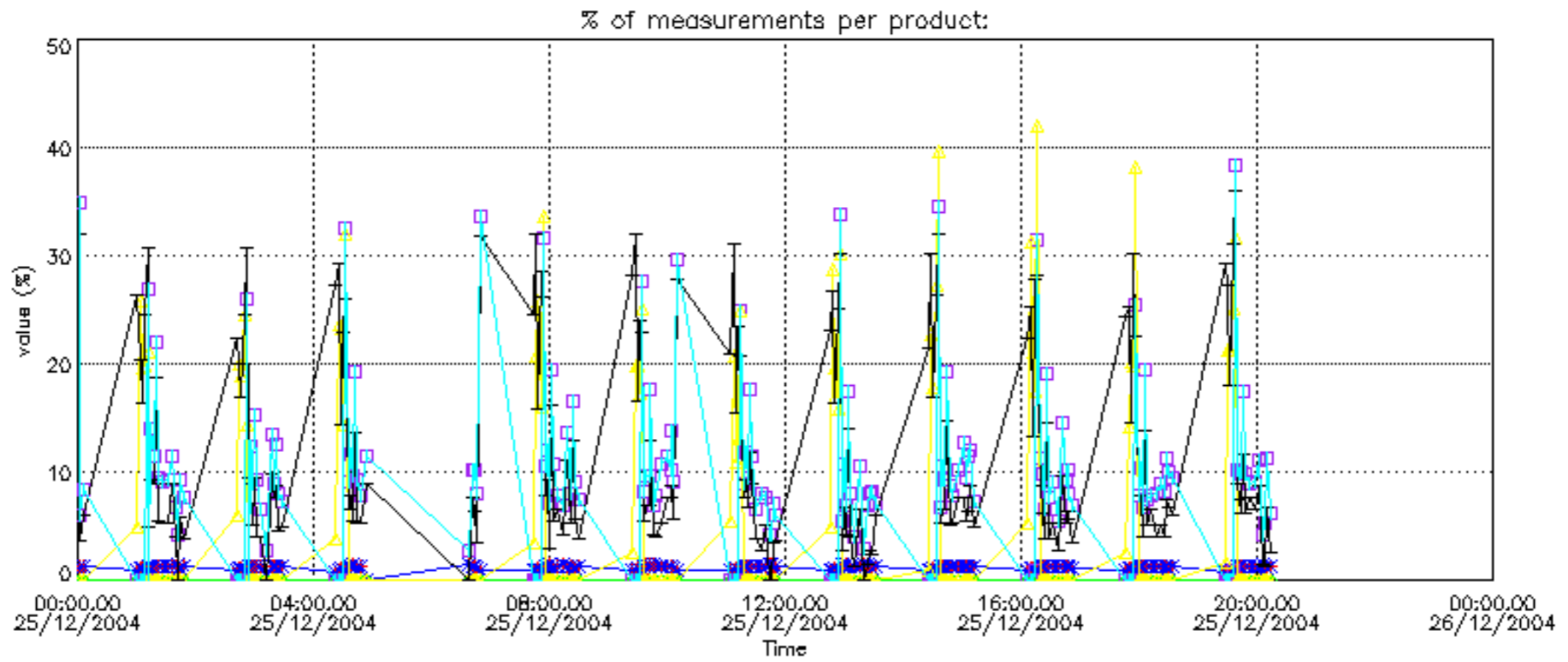
Percentage of flagged data per NO2 profile



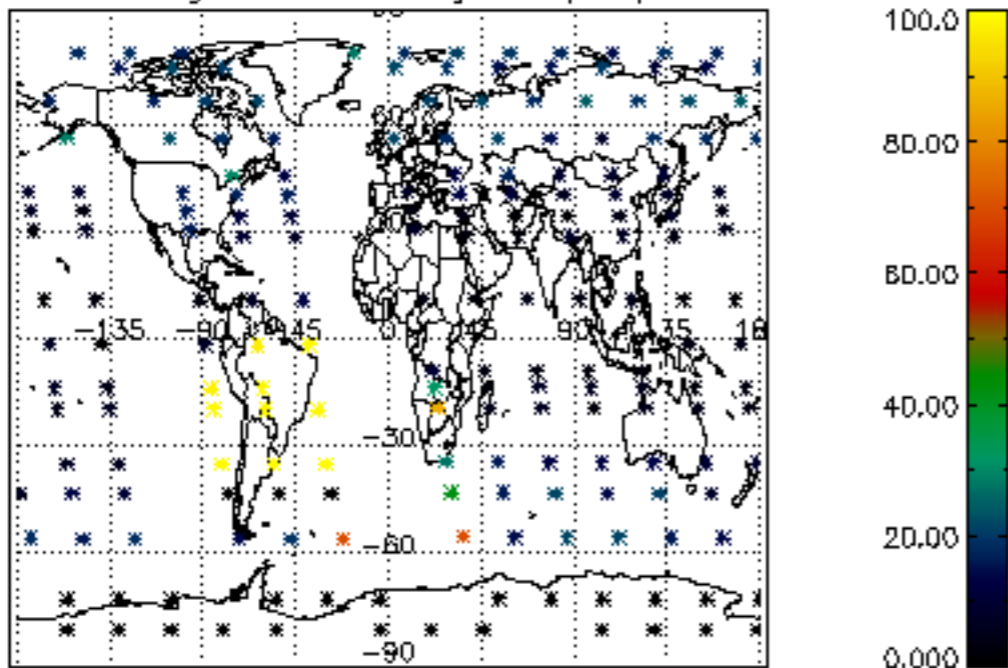
Percentage of flagged data per NO3 profile



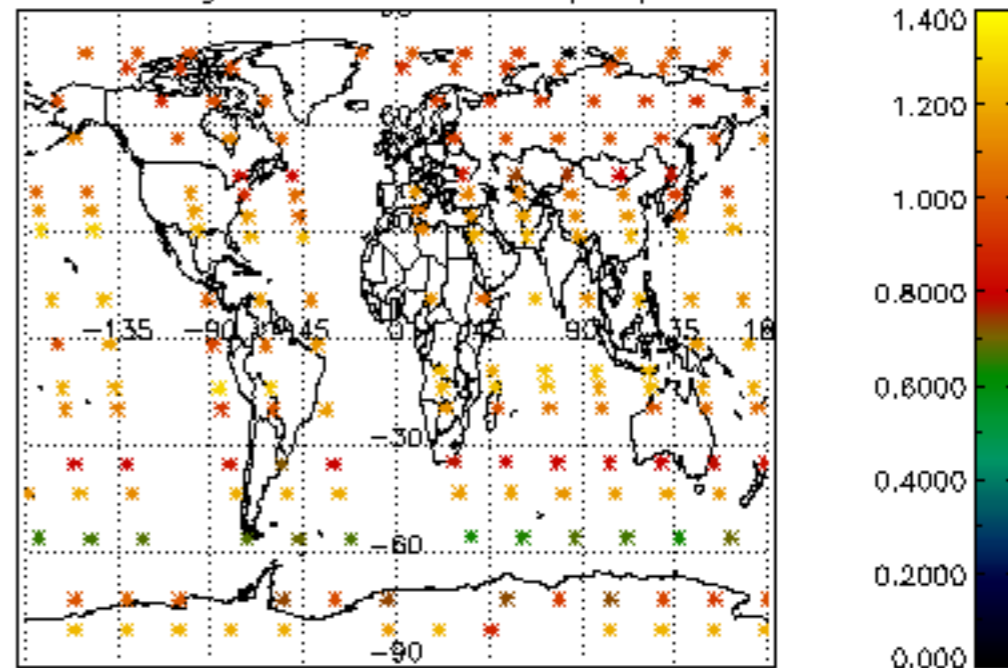




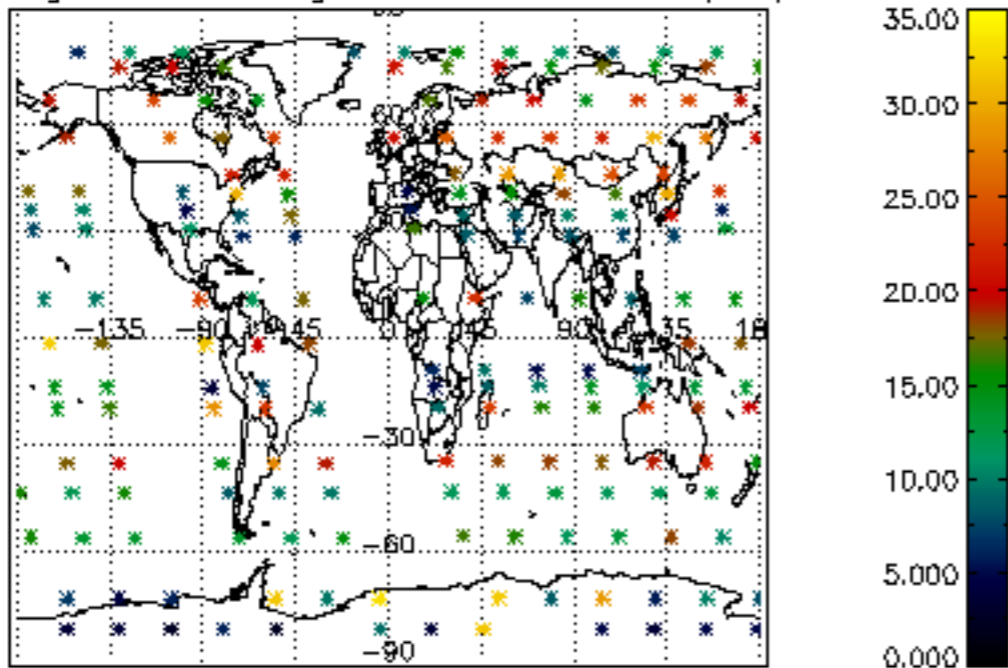
Percentage of cosmic ray hits per profile



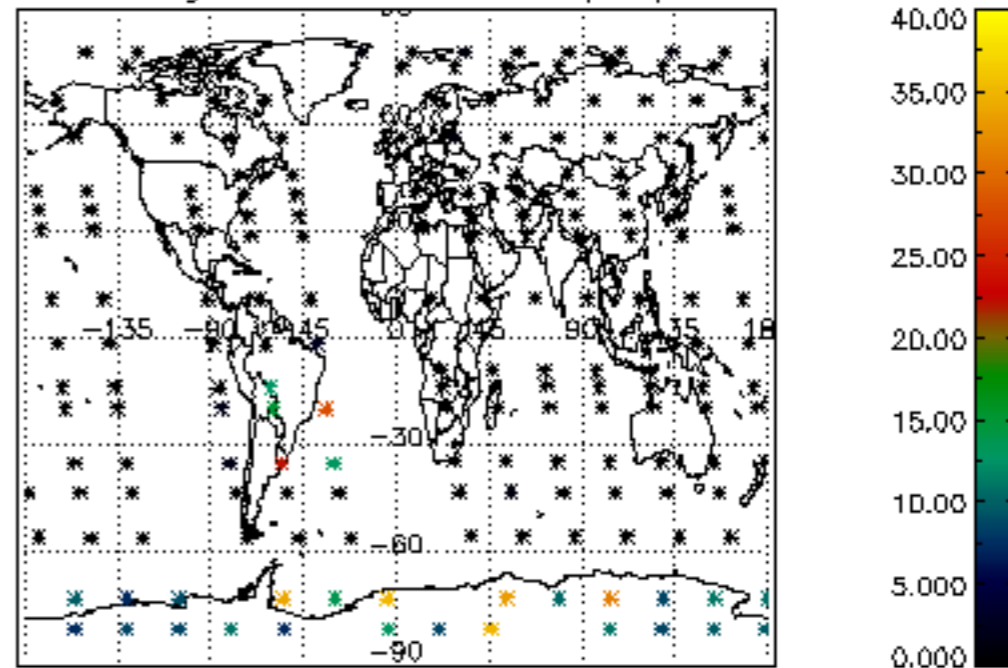
Percentage of datation errors per profile



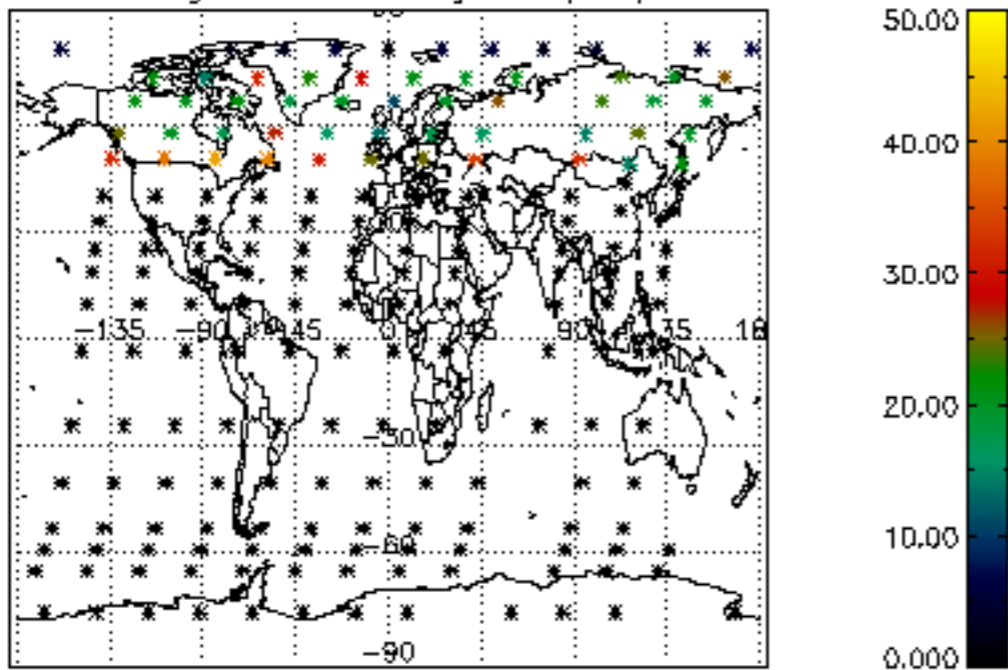
Percentage of star falling outside central band per profile



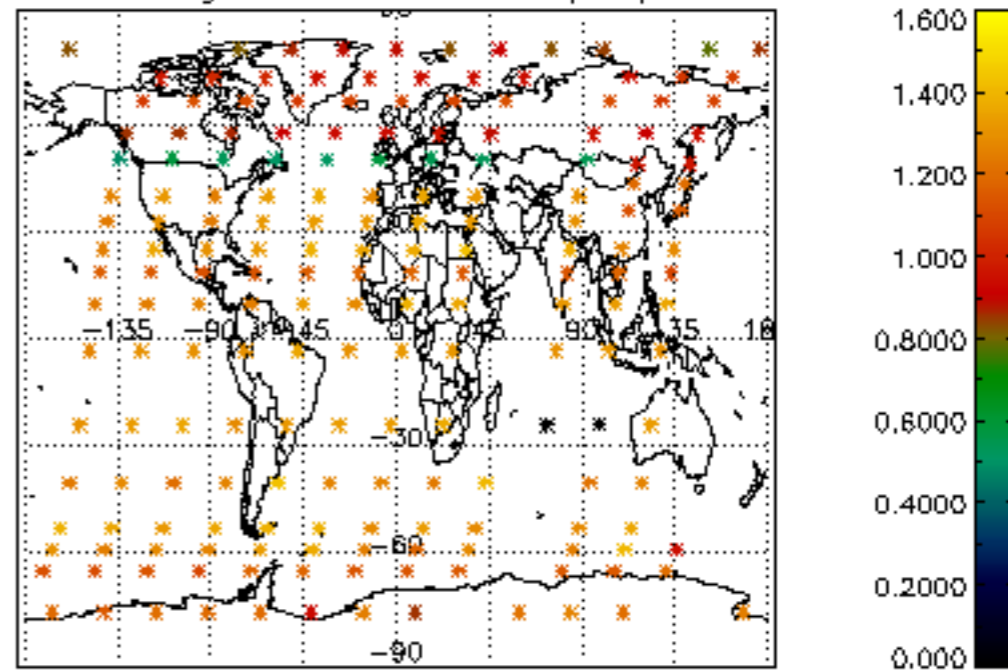
Percentage of saturation errors per profile



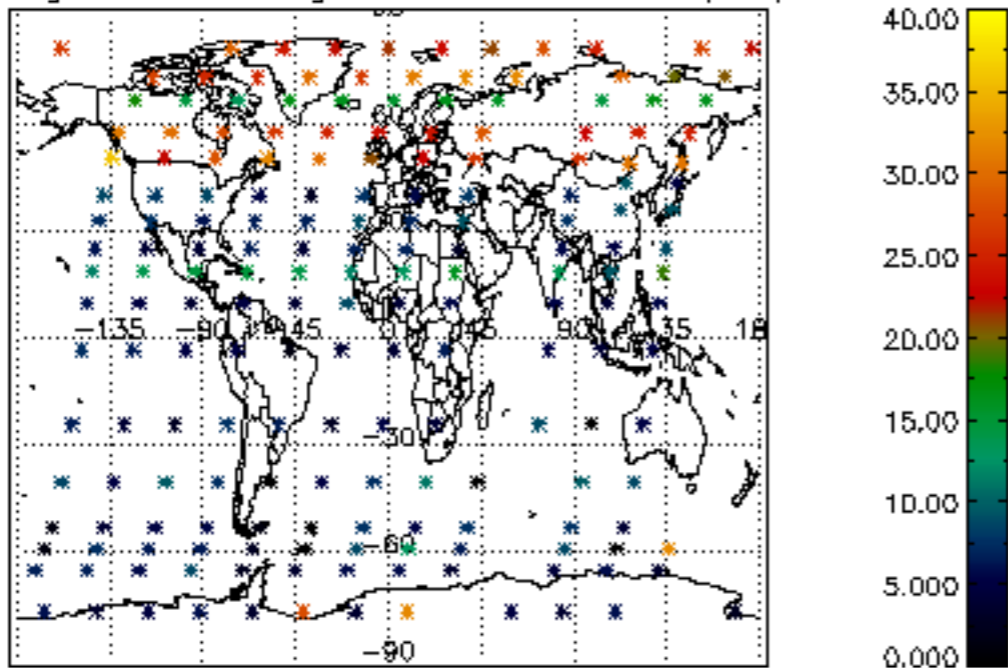
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

