

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	26APR2013 13:08:23
Data source version	GOMOS/6.01
Start time of products	08-10-2009 (08OCT2009 00:00:00)
Stop time of products	09-10-2009 (09OCT2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	76
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

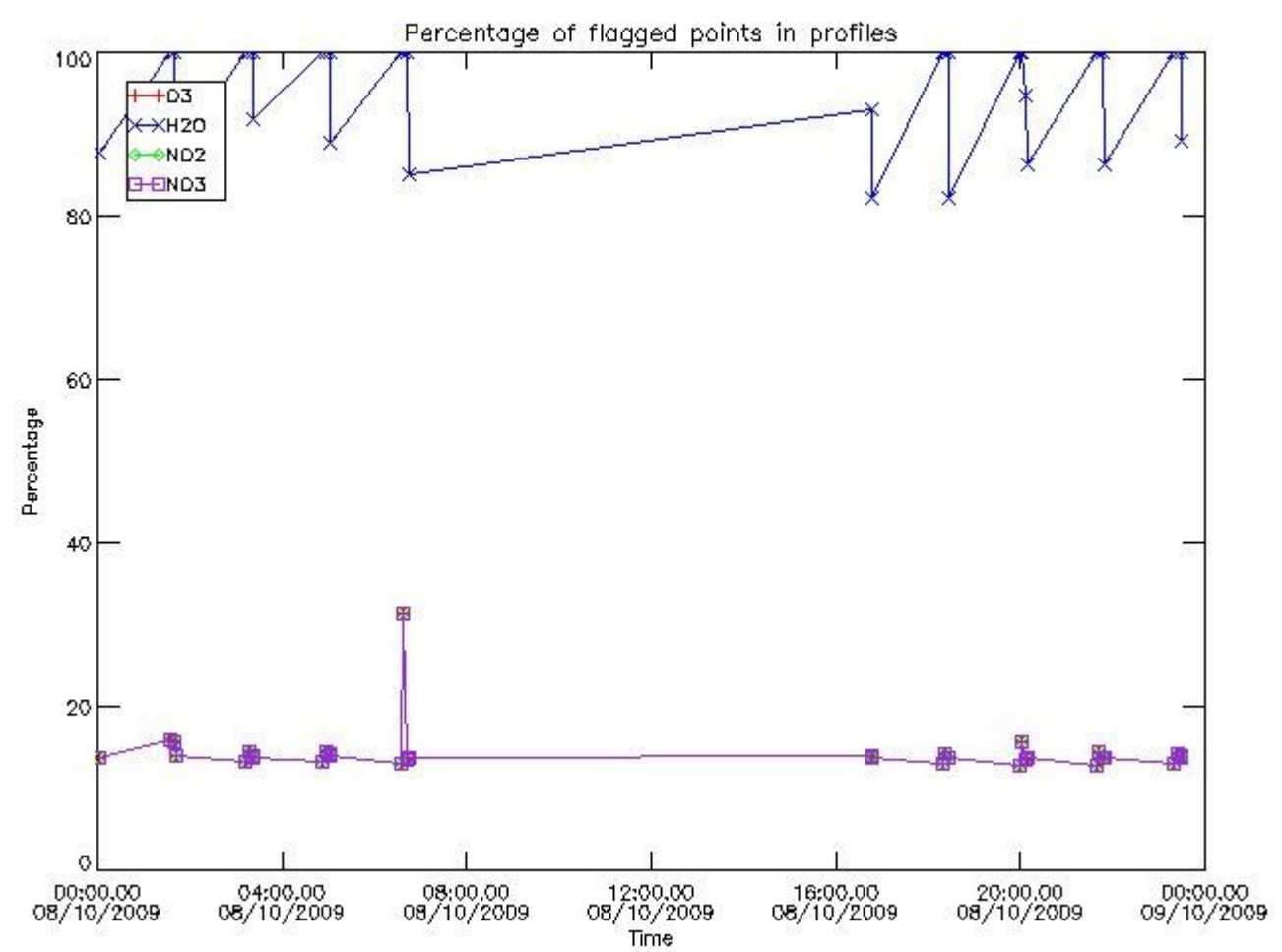
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091008_000123_000000372083_00131_39764_1798.N1	08-OCT-2009 00:01:23	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39764	No
2	GOM_NL__2PRFIN20091008_001338_000000382083_00131_39764_1799.N1	08-OCT-2009 00:13:38	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39764	No
3	GOM_NL__2PRFIN20091008_004035_000000382083_00131_39764_1800.N1	08-OCT-2009 00:40:35	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39764	No
4	GOM_NL__2PRFIN20091008_004547_000000332083_00131_39764_1801.N1	08-OCT-2009 00:45:47	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39764	No
5	GOM_NL__2PRFIN20091008_004712_000000342083_00131_39764_1802.N1	08-OCT-2009 00:47:12	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39764	No
6	GOM_NL__2PRFIN20091008_005011_000000422083_00131_39764_1803.N1	08-OCT-2009 00:50:11	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39764	No
7	GOM_NL__2PRFIN20091008_013525_000000352083_00131_39764_1804.N1	08-OCT-2009 01:35:25	Dark	35.000	70	Zet Pup	2.2460	39000.	70	39764	No
8	GOM_NL__2PRFIN20091008_014036_000000362083_00132_39765_1806.N1	08-OCT-2009 01:40:36	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39765	No
9	GOM_NL__2PRFIN20091008_014200_000000372083_00132_39765_1807.N1	08-OCT-2009 01:42:00	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39765	No
10	GOM_NL__2PRFIN20091008_015414_000000382083_00132_39765_1808.N1	08-OCT-2009 01:54:14	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39765	No
11	GOM_NL__2PRFIN20091008_022110_000000382083_00132_39765_1809.N1	08-OCT-2009 02:21:10	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39765	No
12	GOM_NL__2PRFIN20091008_022623_000000332083_00132_39765_1810.N1	08-OCT-2009 02:26:23	Bright	32.500	68	18Alp Cas	2.2250	4500.0	65	39765	No
13	GOM_NL__2PRFIN20091008_022747_000000332083_00132_39765_1811.N1	08-OCT-2009 02:27:47	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39765	No
14	GOM_NL__2PRFIN20091008_023046_000000422083_00132_39765_1812.N1	08-OCT-2009 02:30:46	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39765	No
15	GOM_NL__2PRFIN20091008_031231_000000392083_00132_39765_1813.N1	08-OCT-2009 03:12:31	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39765	No
16	GOM_NL__2PRFIN20091008_031602_000000352083_00132_39765_1814.N1	08-OCT-2009 03:16:02	Dark	35.000	70	Zet Pup	2.2460	39000.	70	39765	No
17	GOM_NL__2PRFIN20091008_032113_000000372083_00133_39766_1815.N1	08-OCT-2009 03:21:13	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39766	No
18	GOM_NL__2PRFIN20091008_032236_000000372083_00133_39766_1816.N1	08-OCT-2009 03:22:36	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39766	No
19	GOM_NL__2PRFIN20091008_033451_000000382083_00133_39766_1817.N1	08-OCT-2009 03:34:51	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39766	No
20	GOM_NL__2PRFIN20091008_040146_000000382083_00133_39766_1818.N1	08-OCT-2009 04:01:46	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39766	No
21	GOM_NL__2PRFIN20091008_040658_000000332083_00133_39766_1819.N1	08-OCT-2009 04:06:58	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39766	No
22	GOM_NL__2PRFIN20091008_040823_000000332083_00133_39766_1820.N1	08-OCT-2009 04:08:23	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39766	No
23	GOM_NL__2PRFIN20091008_041121_000000422083_00133_39766_1821.N1	08-OCT-2009 04:11:21	Bright	41.500	160	23Gam Per	2.9300	4700.0	83	39766	No
24	GOM_NL__2PRFIN20091008_045308_000000392083_00133_39766_1822.N1	08-OCT-2009 04:53:08	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39766	No
25	GOM_NL__2PRFIN20091008_045638_000000362083_00133_39766_1823.N1	08-OCT-2009 04:56:38	Dark	35.500	70	Zet Pup	2.2460	39000.	71	39766	No
26	GOM_NL__2PRFIN20091008_050149_000000362083_00134_39767_1824.N1	08-OCT-2009 05:01:49	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39767	No
27	GOM_NL__2PRFIN20091008_050313_000000372083_00134_39767_1825.N1	08-OCT-2009 05:03:13	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39767	No
28	GOM_NL__2PRFIN20091008_051527_000000382083_00134_39767_1826.N1	08-OCT-2009 05:15:27	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39767	No
29	GOM_NL__2PRFIN20091008_054222_000000382083_00134_39767_1827.N1	08-OCT-2009 05:42:22	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39767	No
30	GOM_NL__2PRFIN20091008_054734_000000332083_00134_39767_1828.N1	08-OCT-2009 05:47:34	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39767	No
31	GOM_NL__2PRFIN20091008_054900_000000322083_00134_39767_1829.N1	08-OCT-2009 05:49:00	Bright	31.500	76	27Gam Cas	2.3000	30000.	63	39767	No
32	GOM_NL__2PRFIN20091008_055156_000000422083_00134_39767_1830.N1	08-OCT-2009 05:51:56	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39767	No
33	GOM_NL__2PRFIN20091008_063345_000000392083_00134_39767_1831.N1	08-OCT-2009 06:33:45	Dark	39.000	132	15Rho Pup	2.8030	6900.0	78	39767	No
34	GOM_NL__2PRFIN20091008_063715_000000172083_00134_39767_1832.N1	08-OCT-2009 06:37:15	Dark	16.500	70	Zet Pup	2.2460	39000.	33	39767	No
35	GOM_NL__2PRFIN20091008_064226_000000382083_00135_39768_1834.N1	08-OCT-2009 06:42:26	Dark	37.500	161	Tau Pup	2.9310	4500.0	75	39768	No
36	GOM_NL__2PRFIN20091008_064350_000000372083_00135_39768_1835.N1	08-OCT-2009 06:43:50	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39768	No
37	GOM_NL__2PRFIN20091008_065604_000000372083_00135_39768_1836.N1	08-OCT-2009 06:56:04	Straylight	37.000	157	The1Eri	2.9060	9300.0	74	39768	No
38	GOM_NL__2PRFIN20091008_164607_000000372083_00141_39774_1944.N1	08-OCT-2009 16:46:07	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39774	No
39	GOM_NL__2PRFIN20091008_164730_000000372083_00141_39774_1945.N1	08-OCT-2009 16:47:30	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39774	No
40	GOM_NL__2PRFIN20091008_165943_000000382083_00141_39774_1946.N1	08-OCT-2009 16:59:43	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39774	No
41	GOM_NL__2PRFIN20091008_172630_000000382083_00141_39774_1947.N1	08-OCT-2009 17:26:30	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39774	No
42	GOM_NL__2PRFIN20091008_173144_000000332083_00141_39774_1948.N1	08-OCT-2009 17:31:44	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39774	No

43	GOM_NL__2PRFIN20091008_173308_000000332083_00141_39774_1949.N1	08-OCT-2009 17:33:08	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39774	No
44	GOM_NL__2PRFIN20091008_173601_000000432083_00141_39774_1950.N1	08-OCT-2009 17:36:01	Bright	42.500	160	23Gam Per	2.9300	4700.0	85	39774	No
45	GOM_NL__2PRFIN20091008_181804_000000402083_00141_39774_1951.N1	08-OCT-2009 18:18:04	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	39774	No
46	GOM_NL__2PRFIN20091008_182132_000000362083_00141_39774_1952.N1	08-OCT-2009 18:21:32	Dark	36.000	70	Zet Pup	2.2460	39000.	72	39774	No
47	GOM_NL__2PRFIN20091008_182643_000000372083_00142_39775_1953.N1	08-OCT-2009 18:26:43	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	39775	No
48	GOM_NL__2PRFIN20091008_182807_000000372083_00142_39775_1954.N1	08-OCT-2009 18:28:07	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39775	No
49	GOM_NL__2PRFIN20091008_184020_000000382083_00142_39775_1955.N1	08-OCT-2009 18:40:20	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39775	No
50	GOM_NL__2PRFIN20091008_190705_000000382083_00142_39775_1956.N1	08-OCT-2009 19:07:05	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39775	No
51	GOM_NL__2PRFIN20091008_191219_000000342083_00142_39775_1957.N1	08-OCT-2009 19:12:19	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39775	No
52	GOM_NL__2PRFIN20091008_191344_000000332083_00142_39775_1958.N1	08-OCT-2009 19:13:44	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39775	No
53	GOM_NL__2PRFIN20091008_191636_000000432083_00142_39775_1959.N1	08-OCT-2009 19:16:36	Bright	43.000	160	23Gam Per	2.9300	4700.0	86	39775	No
54	GOM_NL__2PRFIN20091008_195841_000000402083_00142_39775_1960.N1	08-OCT-2009 19:58:41	Dark	40.000	132	15Rho Pup	2.8030	6900.0	80	39775	No
55	GOM_NL__2PRFIN20091008_200209_000000362083_00142_39775_1961.N1	08-OCT-2009 20:02:09	Dark	36.000	70	Zet Pup	2.2460	39000.	72	39775	No
56	GOM_NL__2PRFIN20091008_200720_000000382083_00143_39776_1962.N1	08-OCT-2009 20:07:20	Dark	37.500	161	Tau Pup	2.9310	4500.0	75	39776	No
57	GOM_NL__2PRFIN20091008_200844_000000372083_00143_39776_1963.N1	08-OCT-2009 20:08:44	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39776	No
58	GOM_NL__2PRFIN20091008_202056_000000382083_00143_39776_1964.N1	08-OCT-2009 20:20:56	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39776	No
59	GOM_NL__2PRFIN20091008_204741_000000382083_00143_39776_1965.N1	08-OCT-2009 20:47:41	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39776	No
60	GOM_NL__2PRFIN20091008_205255_000000332083_00143_39776_1966.N1	08-OCT-2009 20:52:55	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39776	No
61	GOM_NL__2PRFIN20091008_205419_000000342083_00143_39776_1967.N1	08-OCT-2009 20:54:19	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39776	No
62	GOM_NL__2PRFIN20091008_205712_000000422083_00143_39776_1968.N1	08-OCT-2009 20:57:12	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39776	No
63	GOM_NL__2PRFIN20091008_213918_000000402083_00143_39776_1969.N1	08-OCT-2009 21:39:18	Dark	40.000	132	15Rho Pup	2.8030	6900.0	80	39776	No
64	GOM_NL__2PRFIN20091008_214246_000000362083_00143_39776_1970.N1	08-OCT-2009 21:42:46	Dark	35.500	70	Zet Pup	2.2460	39000.	71	39776	No
65	GOM_NL__2PRFIN20091008_214757_000000372083_00144_39777_1971.N1	08-OCT-2009 21:47:57	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	39777	No
66	GOM_NL__2PRFIN20091008_214921_000000372083_00144_39777_1972.N1	08-OCT-2009 21:49:21	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39777	No
67	GOM_NL__2PRFIN20091008_220133_000000382083_00144_39777_1973.N1	08-OCT-2009 22:01:33	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39777	No
68	GOM_NL__2PRFIN20091008_222816_000000382083_00144_39777_1974.N1	08-OCT-2009 22:28:16	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39777	No
69	GOM_NL__2PRFIN20091008_223331_000000332083_00144_39777_1975.N1	08-OCT-2009 22:33:31	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39777	No
70	GOM_NL__2PRFIN20091008_223455_000000342083_00144_39777_1976.N1	08-OCT-2009 22:34:55	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39777	No
71	GOM_NL__2PRFIN20091008_223747_000000422083_00144_39777_1977.N1	08-OCT-2009 22:37:47	Bright	41.500	160	23Gam Per	2.9300	4700.0	83	39777	No
72	GOM_NL__2PRFIN20091008_231955_000000402083_00144_39777_1978.N1	08-OCT-2009 23:19:55	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	39777	No
73	GOM_NL__2PRFIN20091008_232322_000000362083_00144_39777_1979.N1	08-OCT-2009 23:23:22	Dark	36.000	70	Zet Pup	2.2460	39000.	72	39777	No
74	GOM_NL__2PRFIN20091008_232834_000000372083_00145_39778_1983.N1	08-OCT-2009 23:28:34	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39778	No
75	GOM_NL__2PRFIN20091008_232957_000000372083_00145_39778_1984.N1	08-OCT-2009 23:29:57	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39778	No
76	GOM_NL__2PRFIN20091008_234209_000000382083_00145_39778_1985.N1	08-OCT-2009 23:42:09	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39778	No

3. Quality information per product

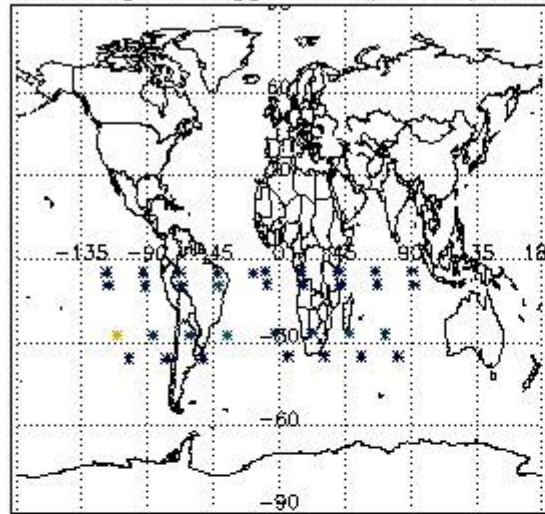
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

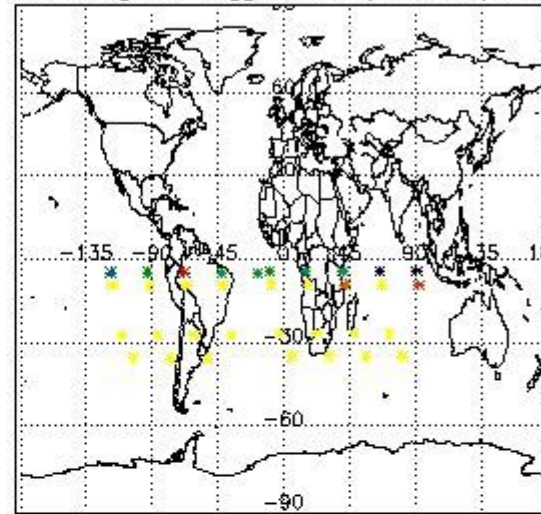


3.2 Plot quality information per product (world map)

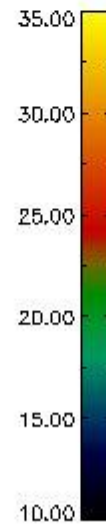
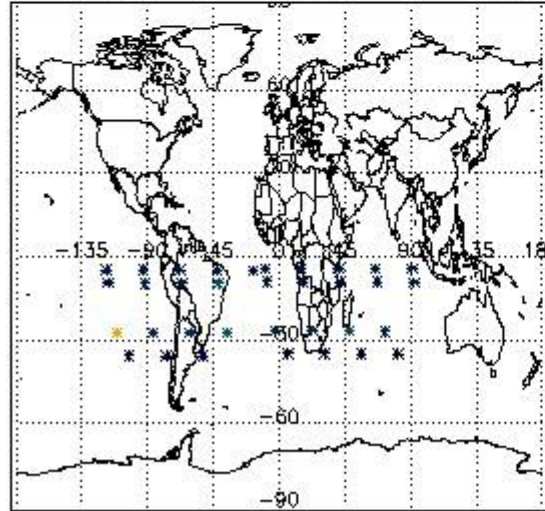
Percentage of flagged data per O3 profile



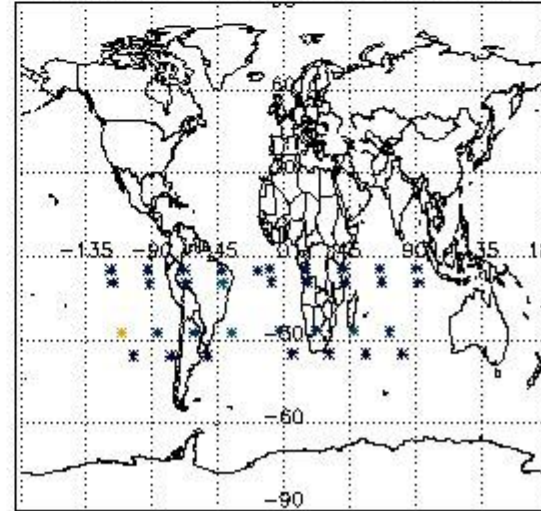
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

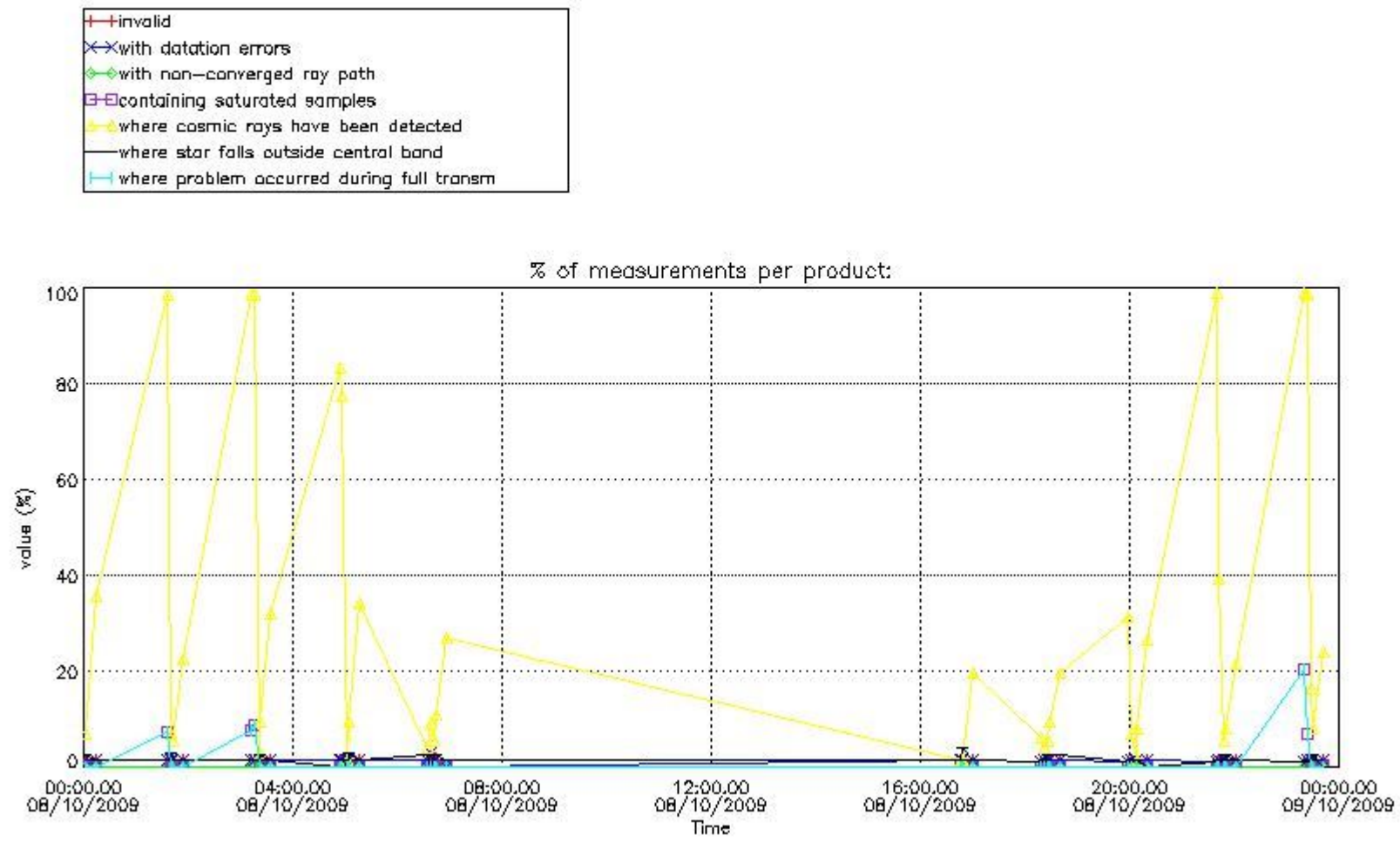


4. Level 1 quality information per product

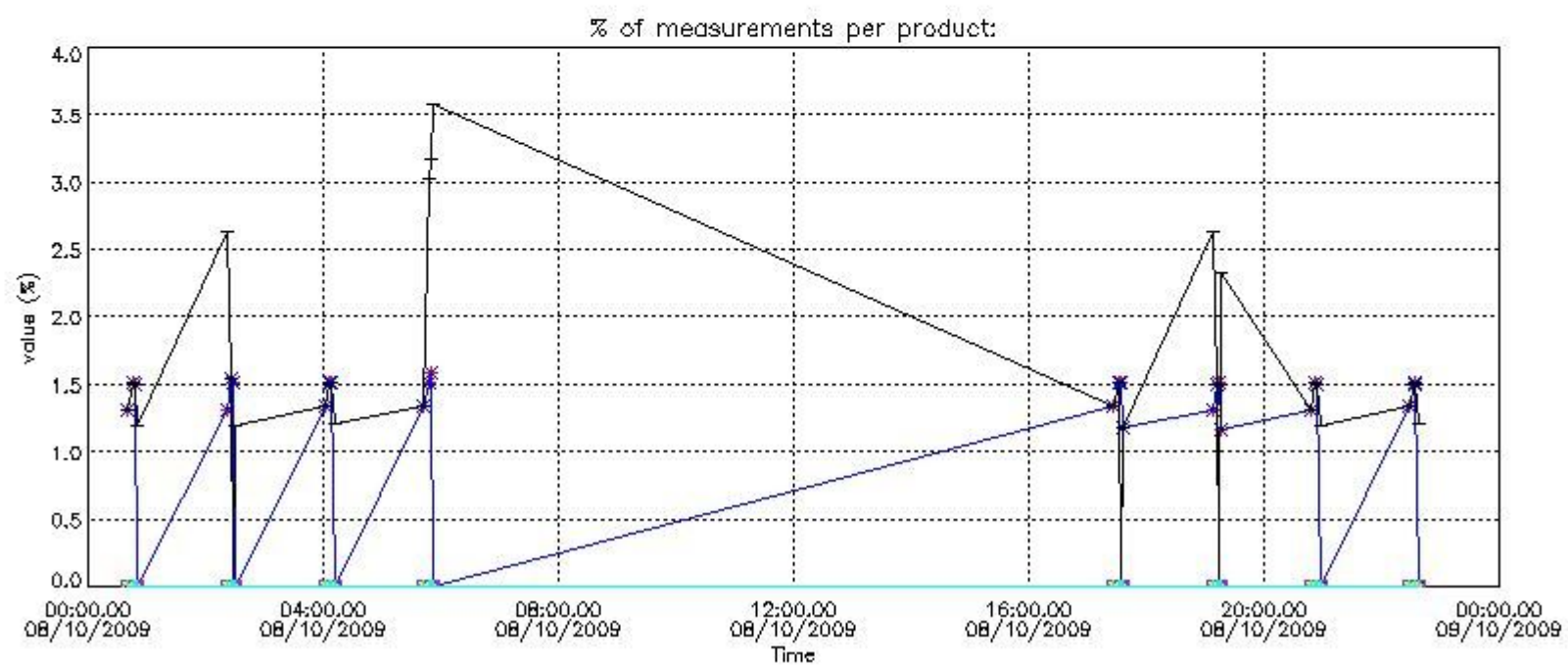
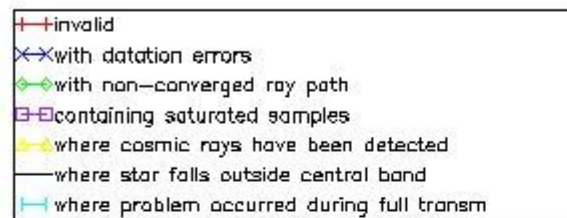
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



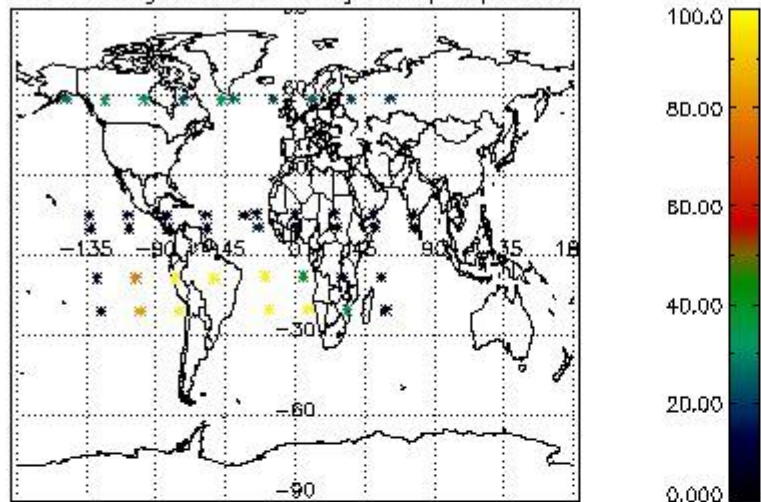
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



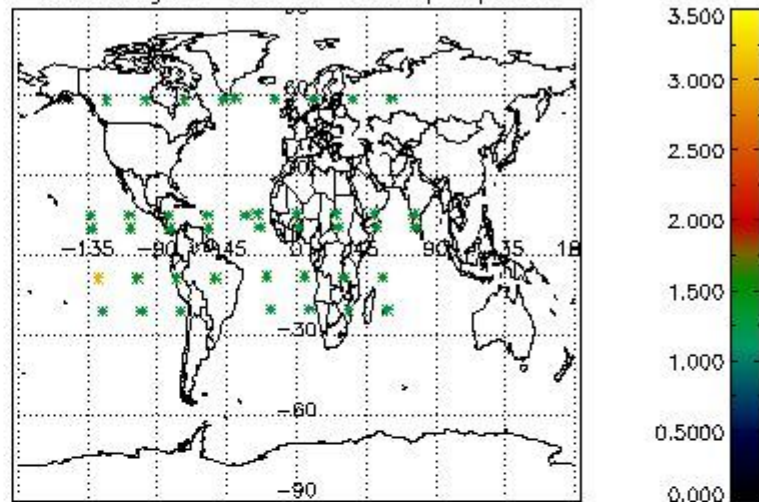
4.2 Plot quality information per product coming from level 1b processing (world map)

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

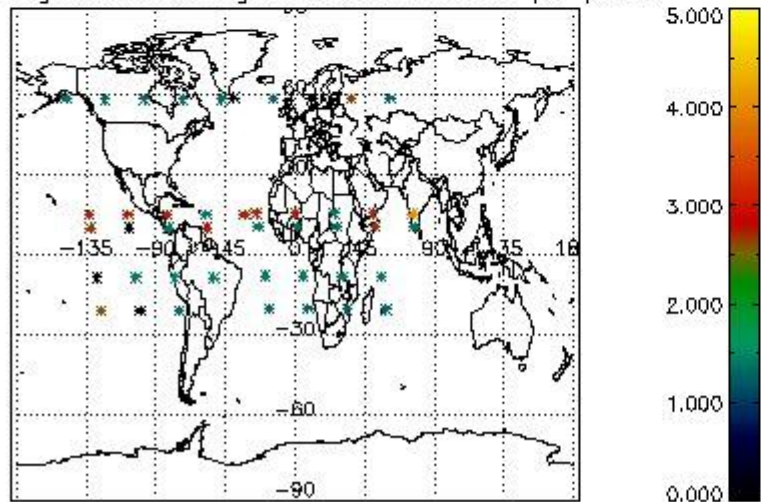
Percentage of cosmic ray hits per profile



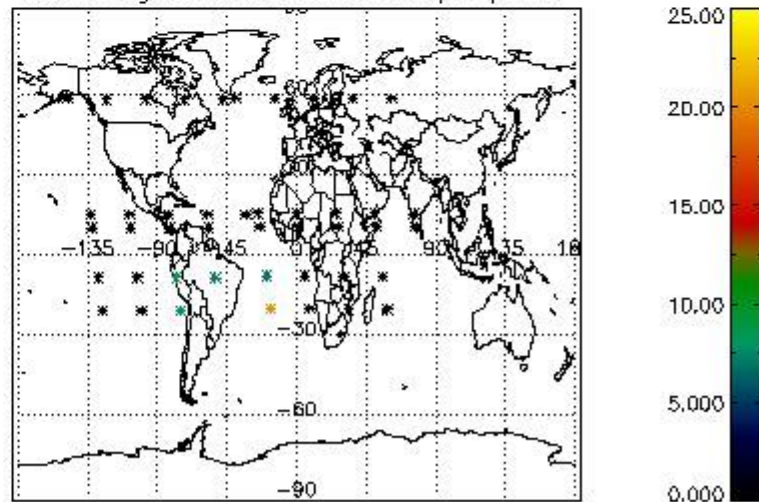
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

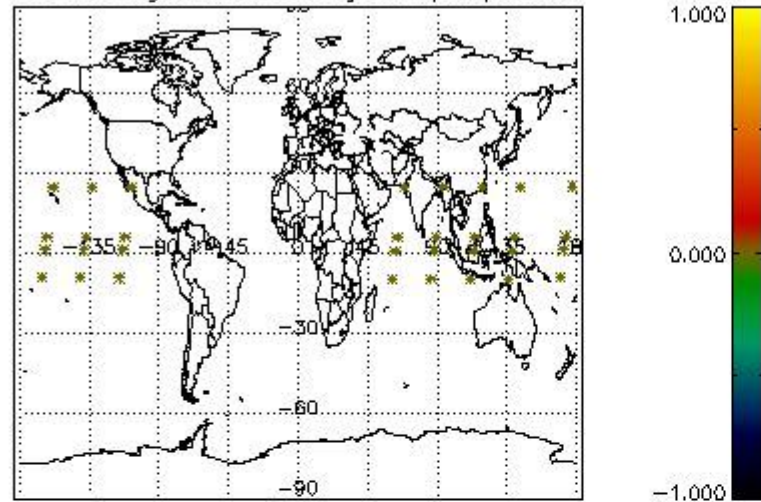


Percentage of saturation errors per profile

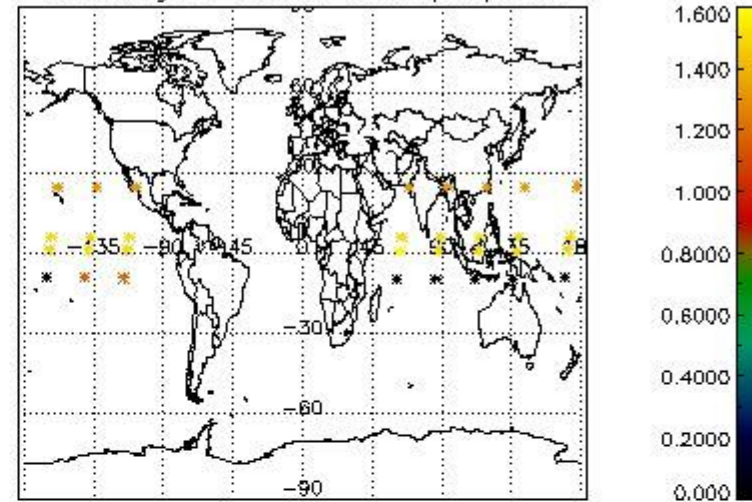


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

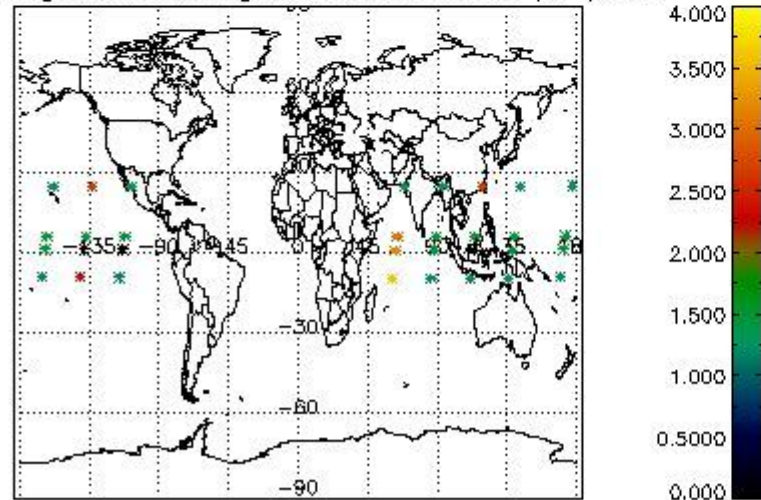
Percentage of cosmic ray hits per profile



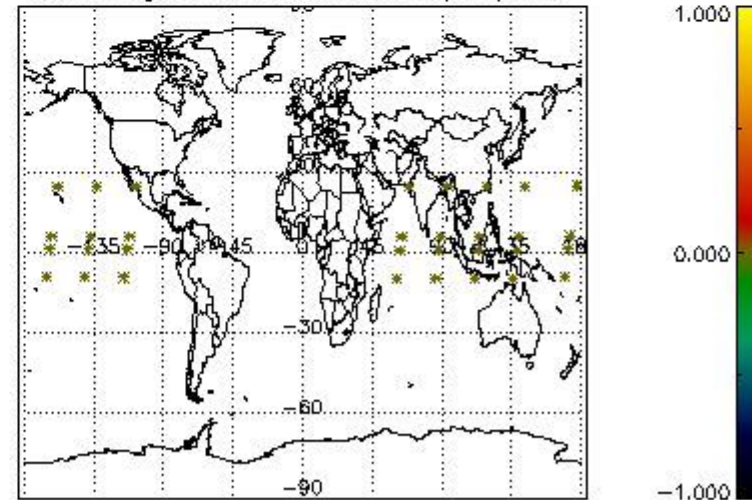
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

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

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

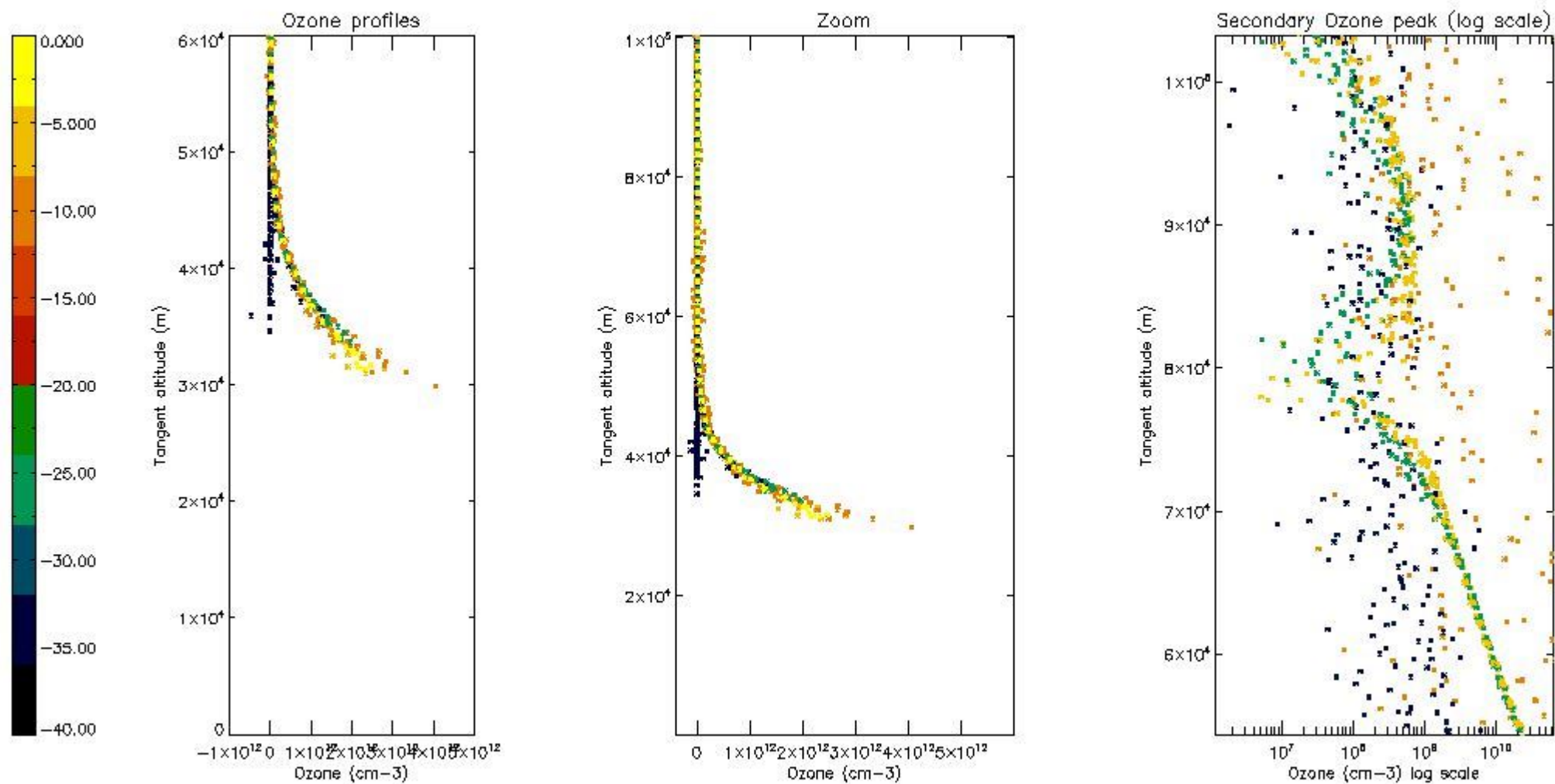
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	17

STD < 10	15
STD < 5	11

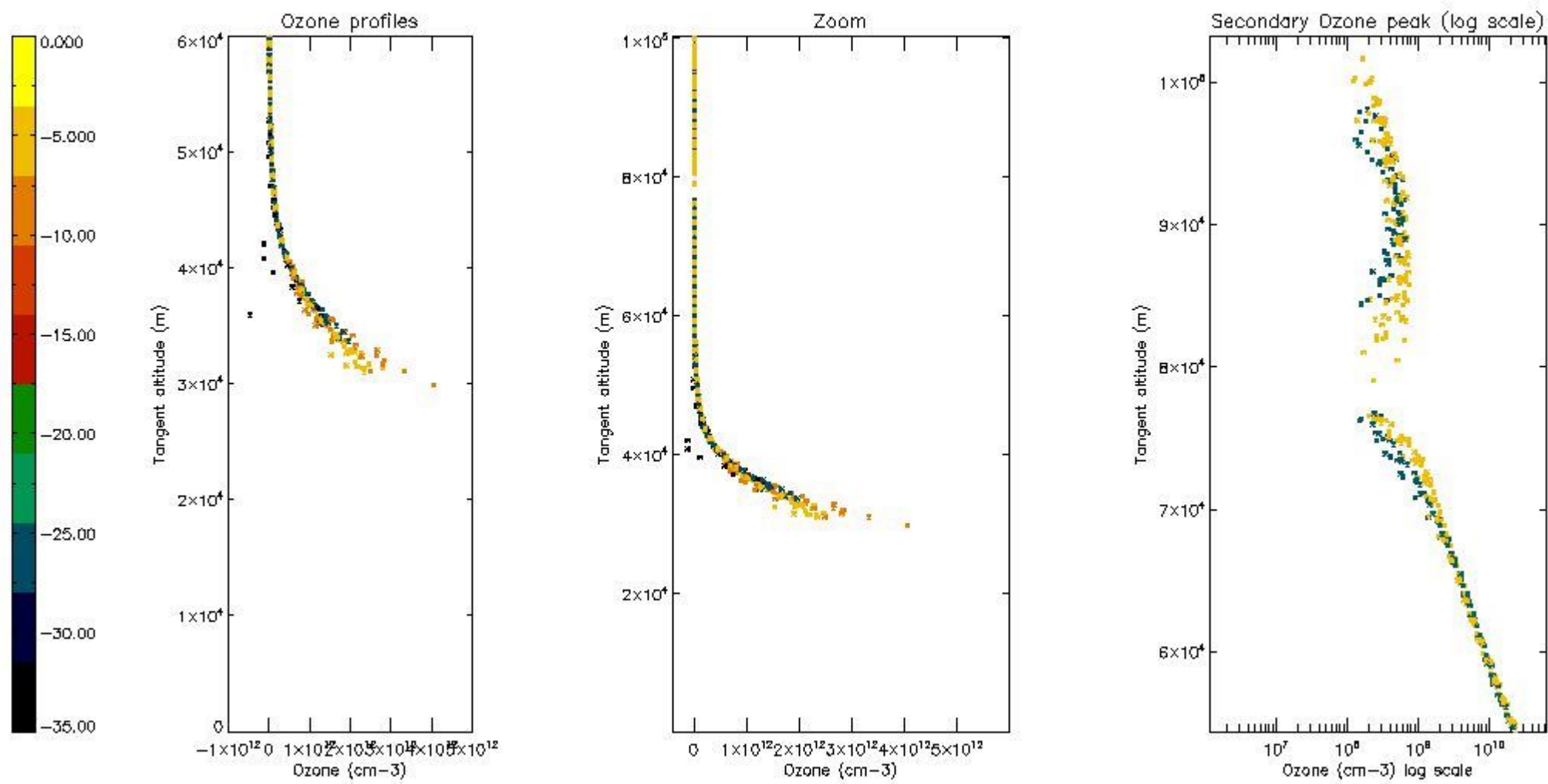
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



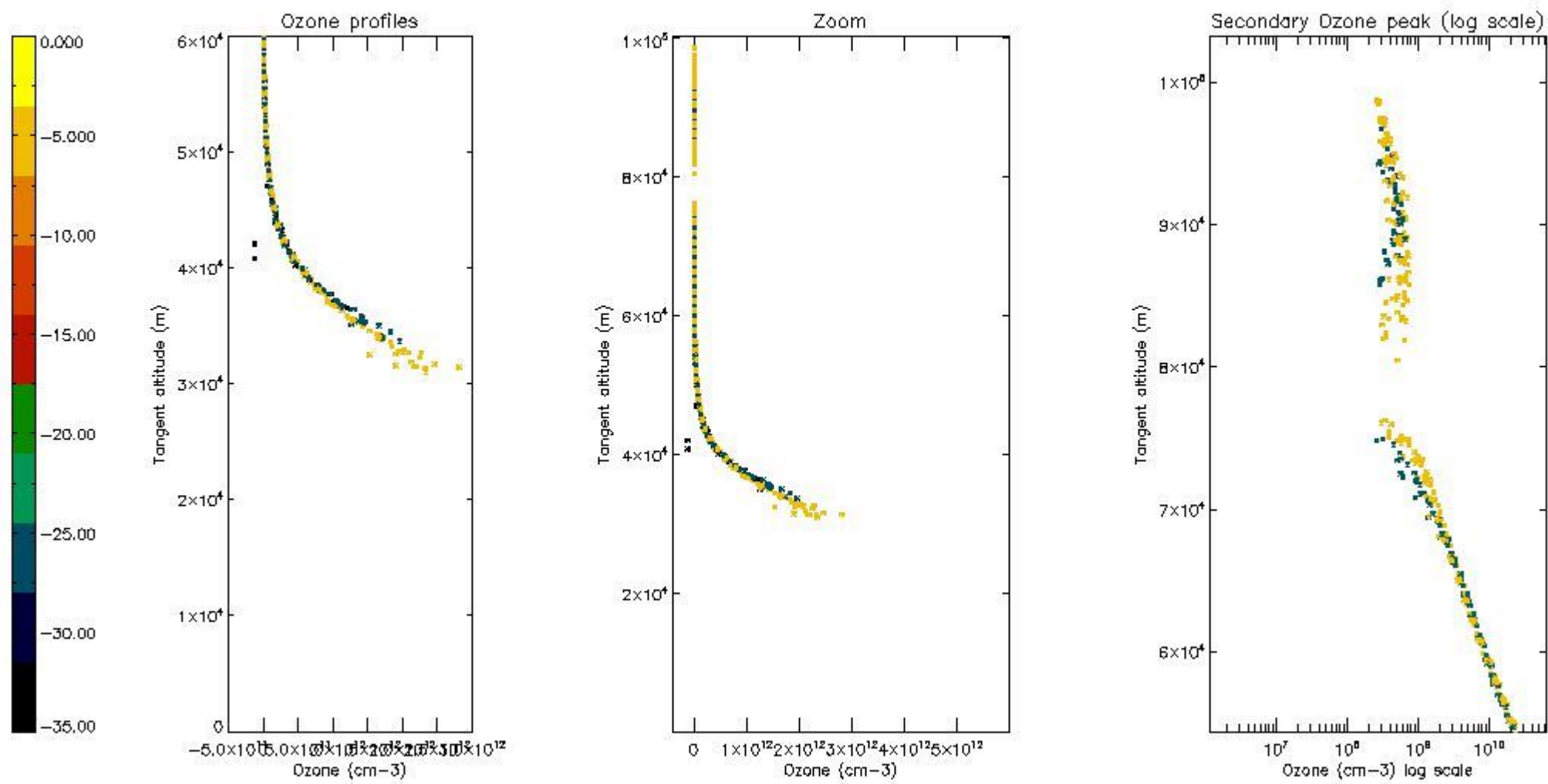
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



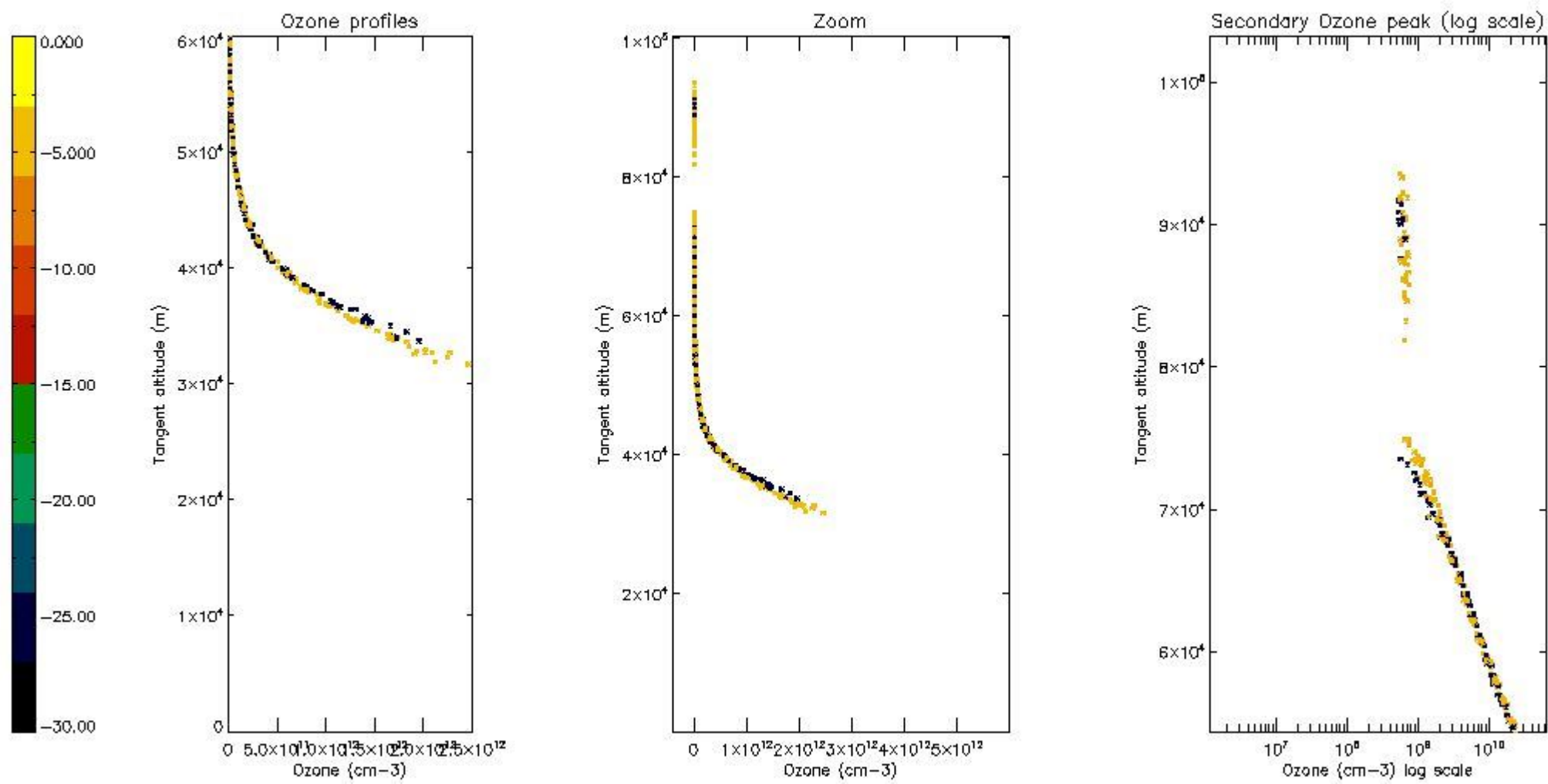
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



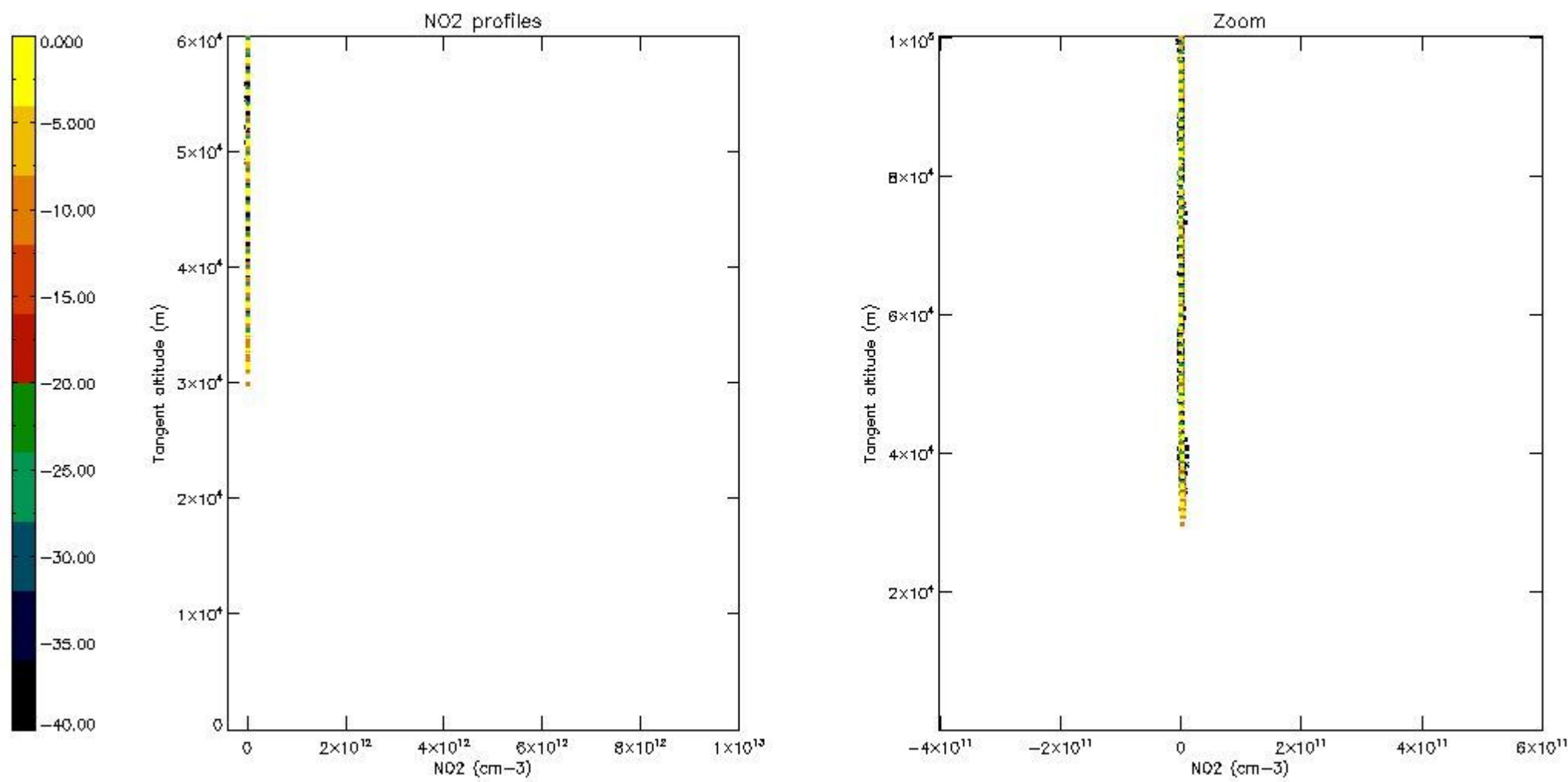
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



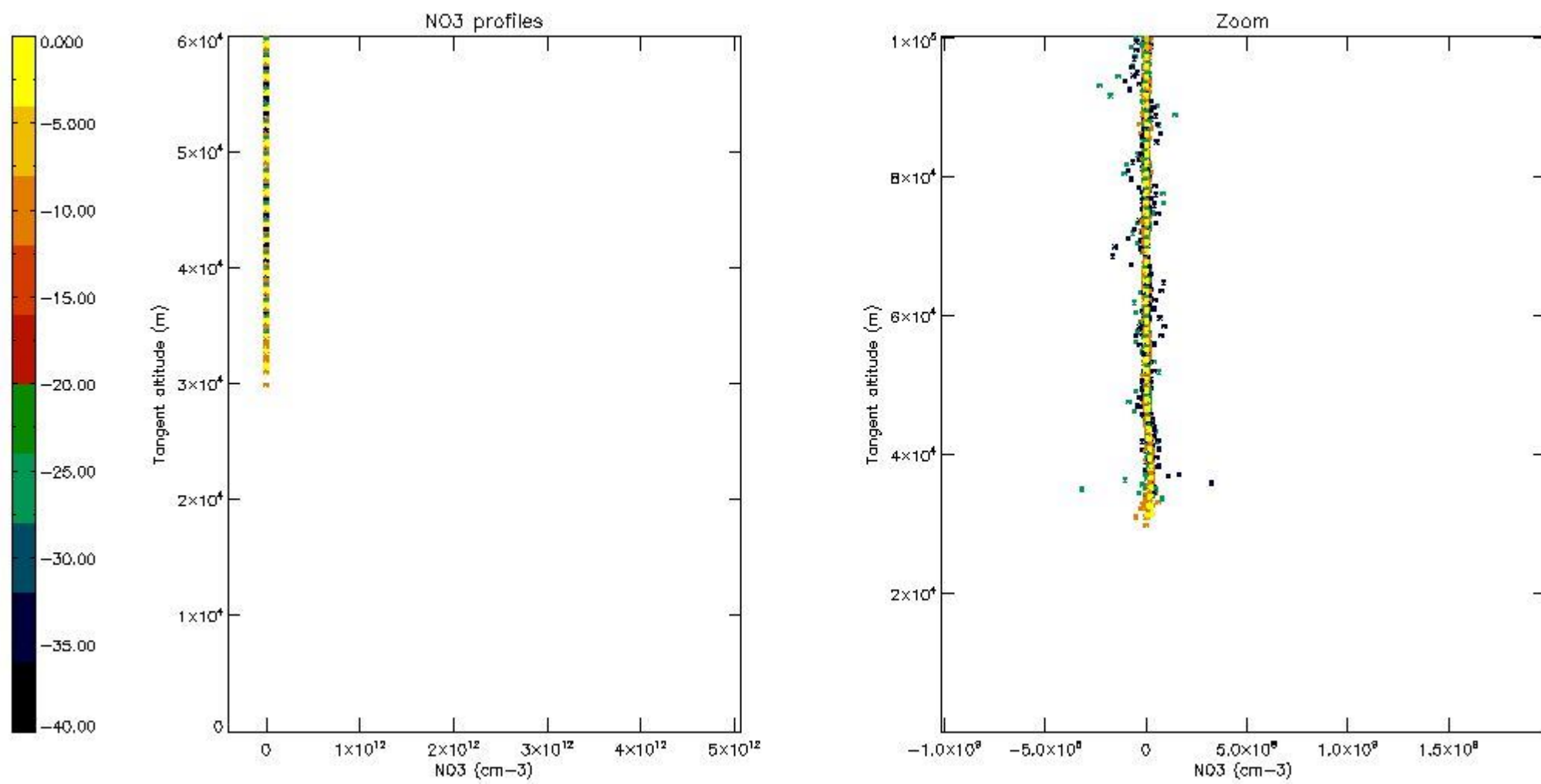
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



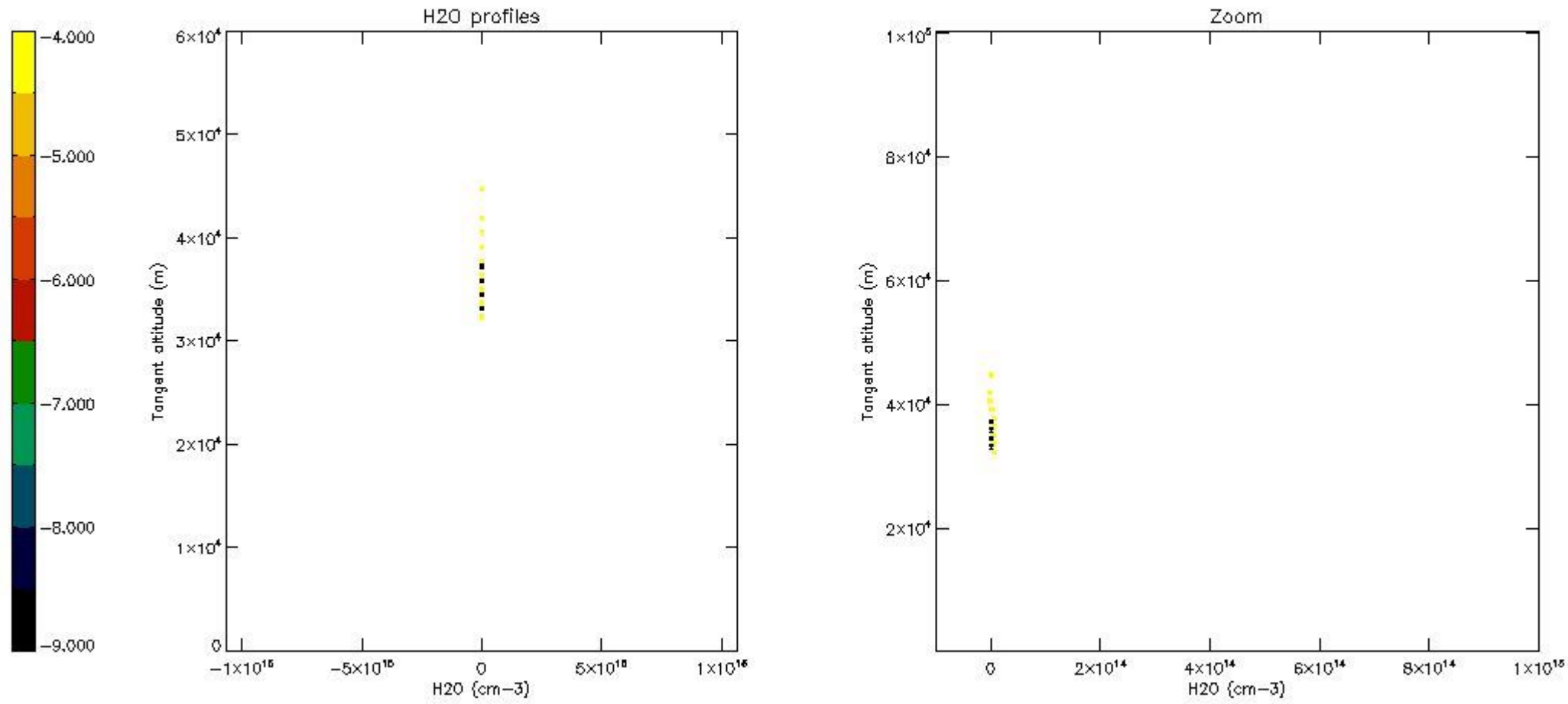
5.7 Plot NO3 profiles for all STD (dark without errors)

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	08-OCT-2009 00:01:23
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-OCT-2009 00:01:23
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-OCT-2009 00:01:23

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

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

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[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](#)

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[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	26APR2013 13:08:23
Data source version	GOMOS/6.01
Start time of products	08-10-2009 (08OCT2009 00:00:00)
Stop time of products	09-10-2009 (09OCT2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	76
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

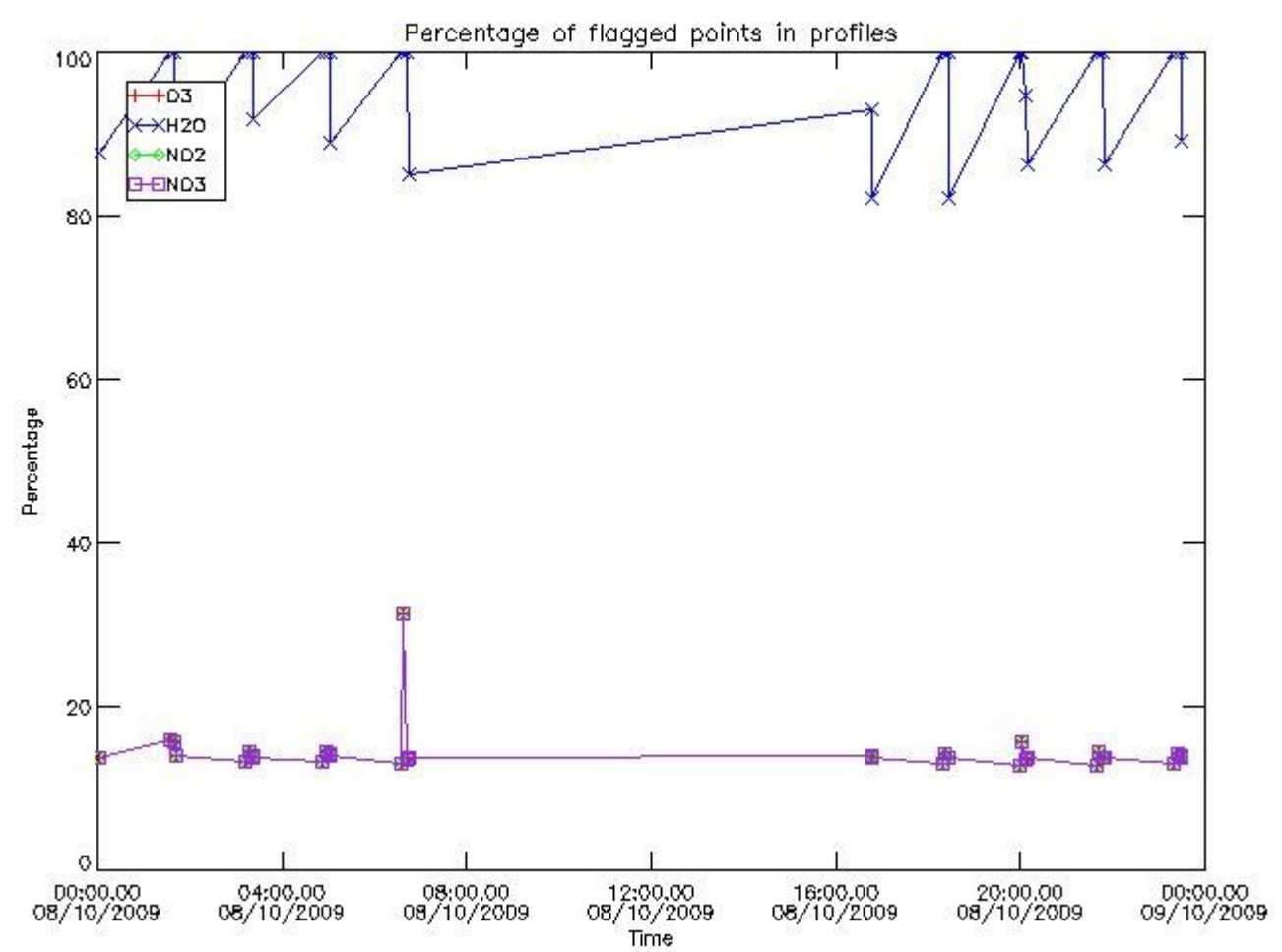
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091008_000123_000000372083_00131_39764_1798.N1	08-OCT-2009 00:01:23	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39764	No
2	GOM_NL__2PRFIN20091008_001338_000000382083_00131_39764_1799.N1	08-OCT-2009 00:13:38	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39764	No
3	GOM_NL__2PRFIN20091008_004035_000000382083_00131_39764_1800.N1	08-OCT-2009 00:40:35	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39764	No
4	GOM_NL__2PRFIN20091008_004547_000000332083_00131_39764_1801.N1	08-OCT-2009 00:45:47	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39764	No
5	GOM_NL__2PRFIN20091008_004712_000000342083_00131_39764_1802.N1	08-OCT-2009 00:47:12	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39764	No
6	GOM_NL__2PRFIN20091008_005011_000000422083_00131_39764_1803.N1	08-OCT-2009 00:50:11	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39764	No
7	GOM_NL__2PRFIN20091008_013525_000000352083_00131_39764_1804.N1	08-OCT-2009 01:35:25	Dark	35.000	70	Zet Pup	2.2460	39000.	70	39764	No
8	GOM_NL__2PRFIN20091008_014036_000000362083_00132_39765_1806.N1	08-OCT-2009 01:40:36	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39765	No
9	GOM_NL__2PRFIN20091008_014200_000000372083_00132_39765_1807.N1	08-OCT-2009 01:42:00	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39765	No
10	GOM_NL__2PRFIN20091008_015414_000000382083_00132_39765_1808.N1	08-OCT-2009 01:54:14	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39765	No
11	GOM_NL__2PRFIN20091008_022110_000000382083_00132_39765_1809.N1	08-OCT-2009 02:21:10	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39765	No
12	GOM_NL__2PRFIN20091008_022623_000000332083_00132_39765_1810.N1	08-OCT-2009 02:26:23	Bright	32.500	68	18Alp Cas	2.2250	4500.0	65	39765	No
13	GOM_NL__2PRFIN20091008_022747_000000332083_00132_39765_1811.N1	08-OCT-2009 02:27:47	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39765	No
14	GOM_NL__2PRFIN20091008_023046_000000422083_00132_39765_1812.N1	08-OCT-2009 02:30:46	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39765	No
15	GOM_NL__2PRFIN20091008_031231_000000392083_00132_39765_1813.N1	08-OCT-2009 03:12:31	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39765	No
16	GOM_NL__2PRFIN20091008_031602_000000352083_00132_39765_1814.N1	08-OCT-2009 03:16:02	Dark	35.000	70	Zet Pup	2.2460	39000.	70	39765	No
17	GOM_NL__2PRFIN20091008_032113_000000372083_00133_39766_1815.N1	08-OCT-2009 03:21:13	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39766	No
18	GOM_NL__2PRFIN20091008_032236_000000372083_00133_39766_1816.N1	08-OCT-2009 03:22:36	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39766	No
19	GOM_NL__2PRFIN20091008_033451_000000382083_00133_39766_1817.N1	08-OCT-2009 03:34:51	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39766	No
20	GOM_NL__2PRFIN20091008_040146_000000382083_00133_39766_1818.N1	08-OCT-2009 04:01:46	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39766	No
21	GOM_NL__2PRFIN20091008_040658_000000332083_00133_39766_1819.N1	08-OCT-2009 04:06:58	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39766	No
22	GOM_NL__2PRFIN20091008_040823_000000332083_00133_39766_1820.N1	08-OCT-2009 04:08:23	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39766	No
23	GOM_NL__2PRFIN20091008_041121_000000422083_00133_39766_1821.N1	08-OCT-2009 04:11:21	Bright	41.500	160	23Gam Per	2.9300	4700.0	83	39766	No
24	GOM_NL__2PRFIN20091008_045308_000000392083_00133_39766_1822.N1	08-OCT-2009 04:53:08	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39766	No
25	GOM_NL__2PRFIN20091008_045638_000000362083_00133_39766_1823.N1	08-OCT-2009 04:56:38	Dark	35.500	70	Zet Pup	2.2460	39000.	71	39766	No
26	GOM_NL__2PRFIN20091008_050149_000000362083_00134_39767_1824.N1	08-OCT-2009 05:01:49	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39767	No
27	GOM_NL__2PRFIN20091008_050313_000000372083_00134_39767_1825.N1	08-OCT-2009 05:03:13	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39767	No
28	GOM_NL__2PRFIN20091008_051527_000000382083_00134_39767_1826.N1	08-OCT-2009 05:15:27	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39767	No
29	GOM_NL__2PRFIN20091008_054222_000000382083_00134_39767_1827.N1	08-OCT-2009 05:42:22	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39767	No
30	GOM_NL__2PRFIN20091008_054734_000000332083_00134_39767_1828.N1	08-OCT-2009 05:47:34	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39767	No
31	GOM_NL__2PRFIN20091008_054900_000000322083_00134_39767_1829.N1	08-OCT-2009 05:49:00	Bright	31.500	76	27Gam Cas	2.3000	30000.	63	39767	No
32	GOM_NL__2PRFIN20091008_055156_000000422083_00134_39767_1830.N1	08-OCT-2009 05:51:56	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39767	No
33	GOM_NL__2PRFIN20091008_063345_000000392083_00134_39767_1831.N1	08-OCT-2009 06:33:45	Dark	39.000	132	15Rho Pup	2.8030	6900.0	78	39767	No
34	GOM_NL__2PRFIN20091008_063715_000000172083_00134_39767_1832.N1	08-OCT-2009 06:37:15	Dark	16.500	70	Zet Pup	2.2460	39000.	33	39767	No
35	GOM_NL__2PRFIN20091008_064226_000000382083_00135_39768_1834.N1	08-OCT-2009 06:42:26	Dark	37.500	161	Tau Pup	2.9310	4500.0	75	39768	No
36	GOM_NL__2PRFIN20091008_064350_000000372083_00135_39768_1835.N1	08-OCT-2009 06:43:50	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39768	No
37	GOM_NL__2PRFIN20091008_065604_000000372083_00135_39768_1836.N1	08-OCT-2009 06:56:04	Straylight	37.000	157	The1Eri	2.9060	9300.0	74	39768	No
38	GOM_NL__2PRFIN20091008_164607_000000372083_00141_39774_1944.N1	08-OCT-2009 16:46:07	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39774	No
39	GOM_NL__2PRFIN20091008_164730_000000372083_00141_39774_1945.N1	08-OCT-2009 16:47:30	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39774	No
40	GOM_NL__2PRFIN20091008_165943_000000382083_00141_39774_1946.N1	08-OCT-2009 16:59:43	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39774	No
41	GOM_NL__2PRFIN20091008_172630_000000382083_00141_39774_1947.N1	08-OCT-2009 17:26:30	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39774	No
42	GOM_NL__2PRFIN20091008_173144_000000332083_00141_39774_1948.N1	08-OCT-2009 17:31:44	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39774	No

43	GOM_NL__2PRFIN20091008_173308_000000332083_00141_39774_1949.N1	08-OCT-2009 17:33:08	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39774	No
44	GOM_NL__2PRFIN20091008_173601_000000432083_00141_39774_1950.N1	08-OCT-2009 17:36:01	Bright	42.500	160	23Gam Per	2.9300	4700.0	85	39774	No
45	GOM_NL__2PRFIN20091008_181804_000000402083_00141_39774_1951.N1	08-OCT-2009 18:18:04	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	39774	No
46	GOM_NL__2PRFIN20091008_182132_000000362083_00141_39774_1952.N1	08-OCT-2009 18:21:32	Dark	36.000	70	Zet Pup	2.2460	39000.	72	39774	No
47	GOM_NL__2PRFIN20091008_182643_000000372083_00142_39775_1953.N1	08-OCT-2009 18:26:43	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	39775	No
48	GOM_NL__2PRFIN20091008_182807_000000372083_00142_39775_1954.N1	08-OCT-2009 18:28:07	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39775	No
49	GOM_NL__2PRFIN20091008_184020_000000382083_00142_39775_1955.N1	08-OCT-2009 18:40:20	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39775	No
50	GOM_NL__2PRFIN20091008_190705_000000382083_00142_39775_1956.N1	08-OCT-2009 19:07:05	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39775	No
51	GOM_NL__2PRFIN20091008_191219_000000342083_00142_39775_1957.N1	08-OCT-2009 19:12:19	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39775	No
52	GOM_NL__2PRFIN20091008_191344_000000332083_00142_39775_1958.N1	08-OCT-2009 19:13:44	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39775	No
53	GOM_NL__2PRFIN20091008_191636_000000432083_00142_39775_1959.N1	08-OCT-2009 19:16:36	Bright	43.000	160	23Gam Per	2.9300	4700.0	86	39775	No
54	GOM_NL__2PRFIN20091008_195841_000000402083_00142_39775_1960.N1	08-OCT-2009 19:58:41	Dark	40.000	132	15Rho Pup	2.8030	6900.0	80	39775	No
55	GOM_NL__2PRFIN20091008_200209_000000362083_00142_39775_1961.N1	08-OCT-2009 20:02:09	Dark	36.000	70	Zet Pup	2.2460	39000.	72	39775	No
56	GOM_NL__2PRFIN20091008_200720_000000382083_00143_39776_1962.N1	08-OCT-2009 20:07:20	Dark	37.500	161	Tau Pup	2.9310	4500.0	75	39776	No
57	GOM_NL__2PRFIN20091008_200844_000000372083_00143_39776_1963.N1	08-OCT-2009 20:08:44	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39776	No
58	GOM_NL__2PRFIN20091008_202056_000000382083_00143_39776_1964.N1	08-OCT-2009 20:20:56	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39776	No
59	GOM_NL__2PRFIN20091008_204741_000000382083_00143_39776_1965.N1	08-OCT-2009 20:47:41	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39776	No
60	GOM_NL__2PRFIN20091008_205255_000000332083_00143_39776_1966.N1	08-OCT-2009 20:52:55	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39776	No
61	GOM_NL__2PRFIN20091008_205419_000000342083_00143_39776_1967.N1	08-OCT-2009 20:54:19	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39776	No
62	GOM_NL__2PRFIN20091008_205712_000000422083_00143_39776_1968.N1	08-OCT-2009 20:57:12	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39776	No
63	GOM_NL__2PRFIN20091008_213918_000000402083_00143_39776_1969.N1	08-OCT-2009 21:39:18	Dark	40.000	132	15Rho Pup	2.8030	6900.0	80	39776	No
64	GOM_NL__2PRFIN20091008_214246_000000362083_00143_39776_1970.N1	08-OCT-2009 21:42:46	Dark	35.500	70	Zet Pup	2.2460	39000.	71	39776	No
65	GOM_NL__2PRFIN20091008_214757_000000372083_00144_39777_1971.N1	08-OCT-2009 21:47:57	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	39777	No
66	GOM_NL__2PRFIN20091008_214921_000000372083_00144_39777_1972.N1	08-OCT-2009 21:49:21	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39777	No
67	GOM_NL__2PRFIN20091008_220133_000000382083_00144_39777_1973.N1	08-OCT-2009 22:01:33	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39777	No
68	GOM_NL__2PRFIN20091008_222816_000000382083_00144_39777_1974.N1	08-OCT-2009 22:28:16	Bright	37.500	53	43Bet And	2.0480	3300.0	75	39777	No
69	GOM_NL__2PRFIN20091008_223331_000000332083_00144_39777_1975.N1	08-OCT-2009 22:33:31	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39777	No
70	GOM_NL__2PRFIN20091008_223455_000000342083_00144_39777_1976.N1	08-OCT-2009 22:34:55	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39777	No
71	GOM_NL__2PRFIN20091008_223747_000000422083_00144_39777_1977.N1	08-OCT-2009 22:37:47	Bright	41.500	160	23Gam Per	2.9300	4700.0	83	39777	No
72	GOM_NL__2PRFIN20091008_231955_000000402083_00144_39777_1978.N1	08-OCT-2009 23:19:55	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	39777	No
73	GOM_NL__2PRFIN20091008_232322_000000362083_00144_39777_1979.N1	08-OCT-2009 23:23:22	Dark	36.000	70	Zet Pup	2.2460	39000.	72	39777	No
74	GOM_NL__2PRFIN20091008_232834_000000372083_00145_39778_1983.N1	08-OCT-2009 23:28:34	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39778	No
75	GOM_NL__2PRFIN20091008_232957_000000372083_00145_39778_1984.N1	08-OCT-2009 23:29:57	Dark	37.000	2	Alp Car	-0.73600	7000.0	74	39778	No
76	GOM_NL__2PRFIN20091008_234209_000000382083_00145_39778_1985.N1	08-OCT-2009 23:42:09	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39778	No

3. Quality information per product

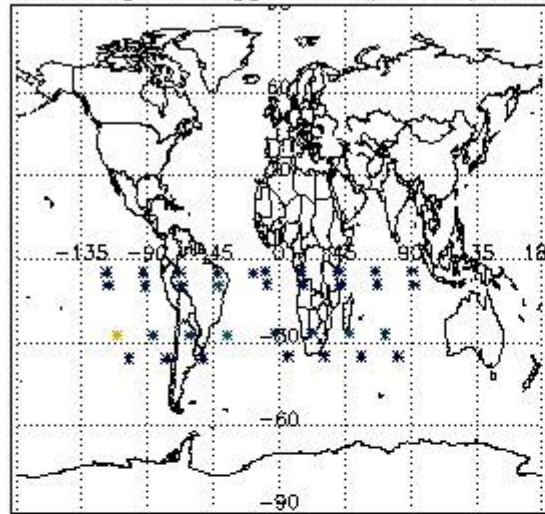
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

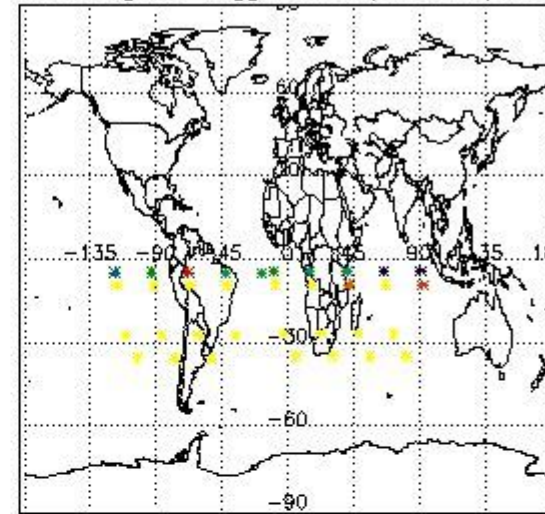


3.2 Plot quality information per product (world map)

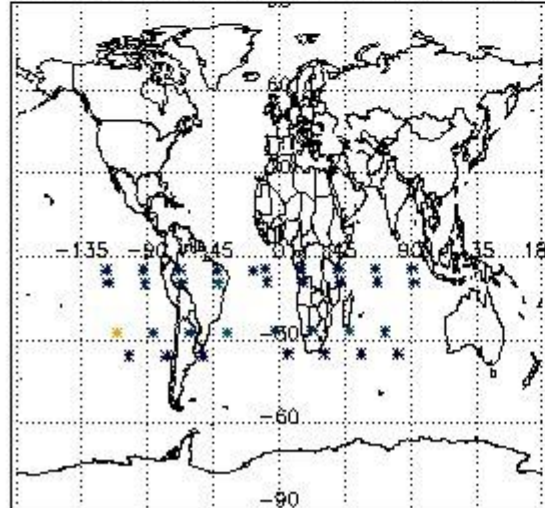
Percentage of flagged data per O3 profile



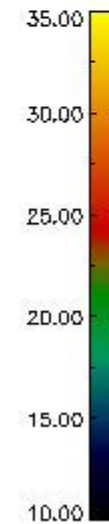
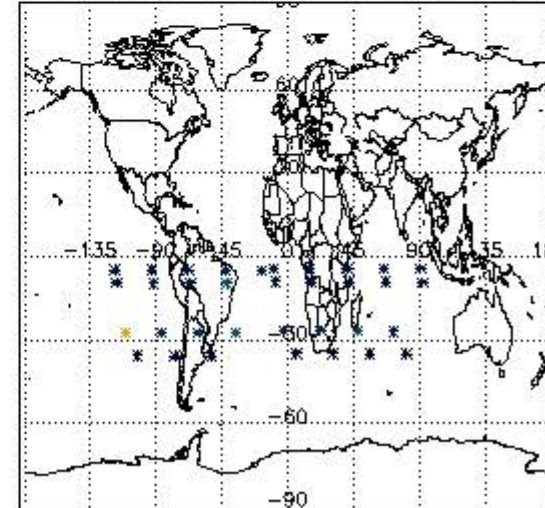
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

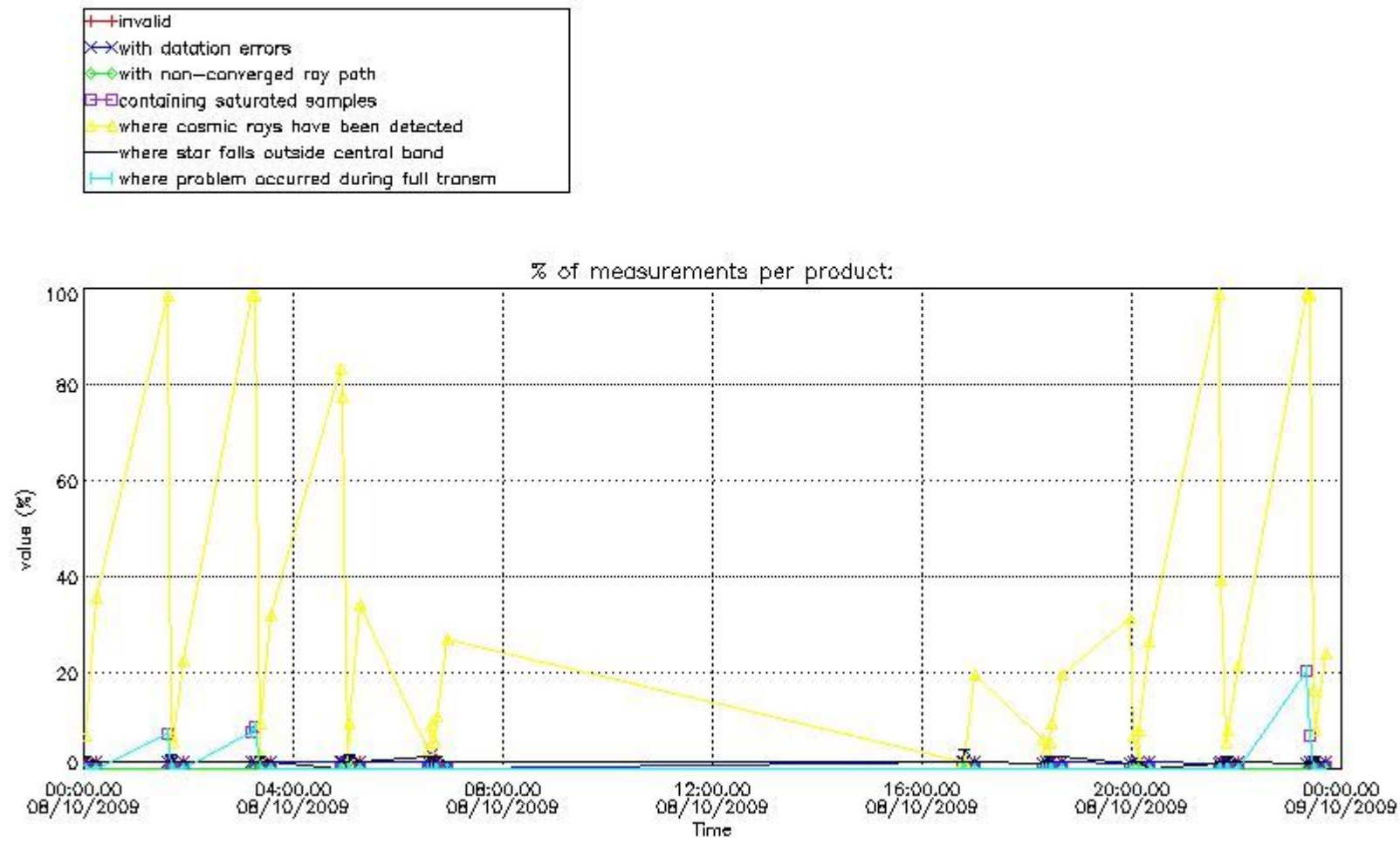


4. Level 1 quality information per product

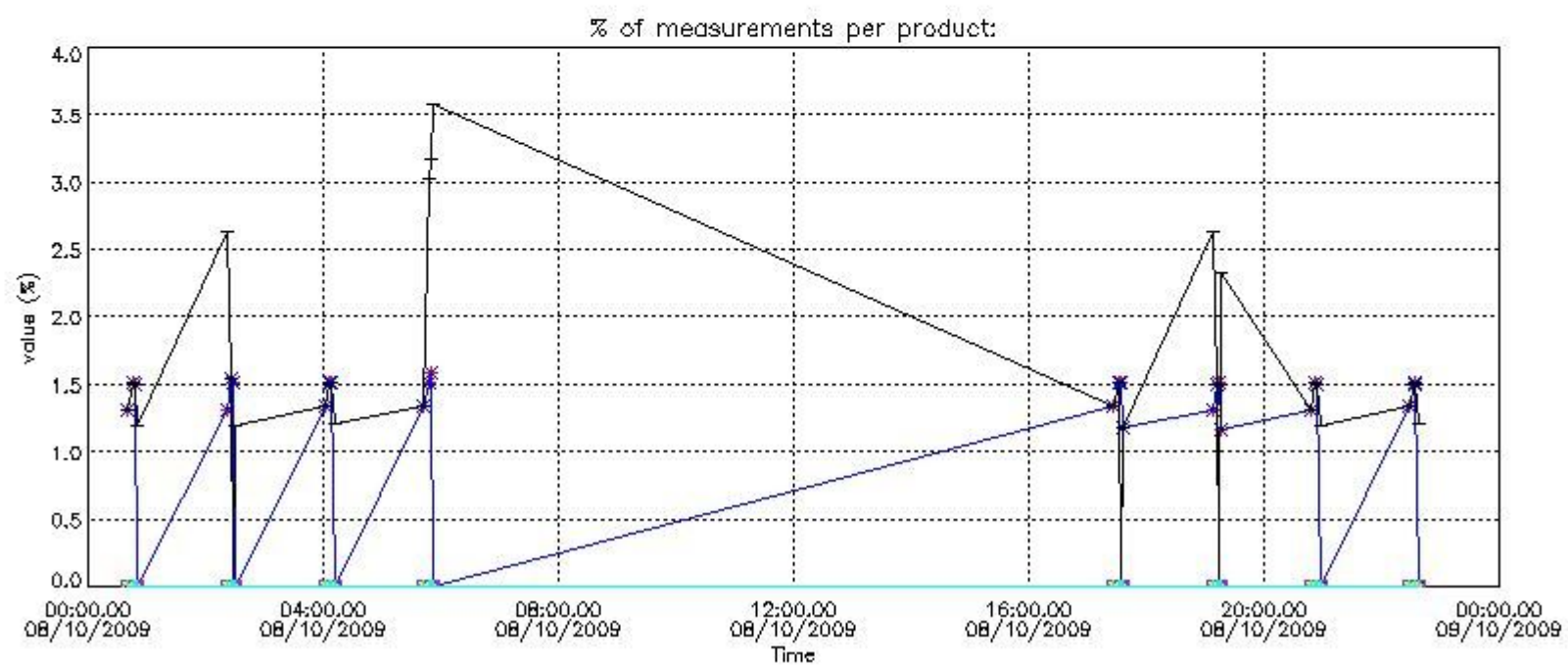
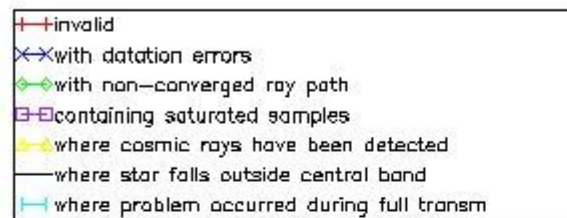
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



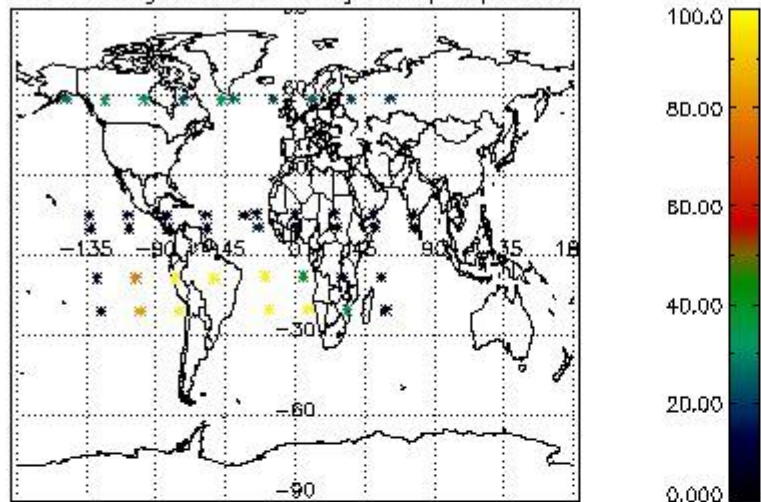
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



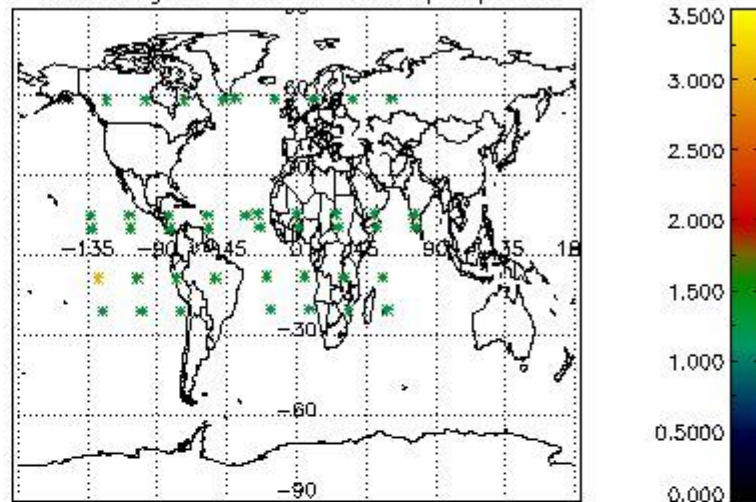
4.2 Plot quality information per product coming from level 1b processing (world map)

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

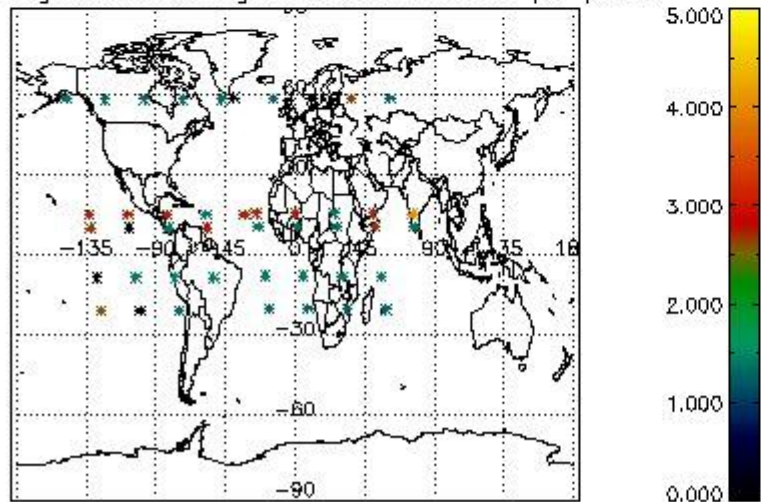
Percentage of cosmic ray hits per profile



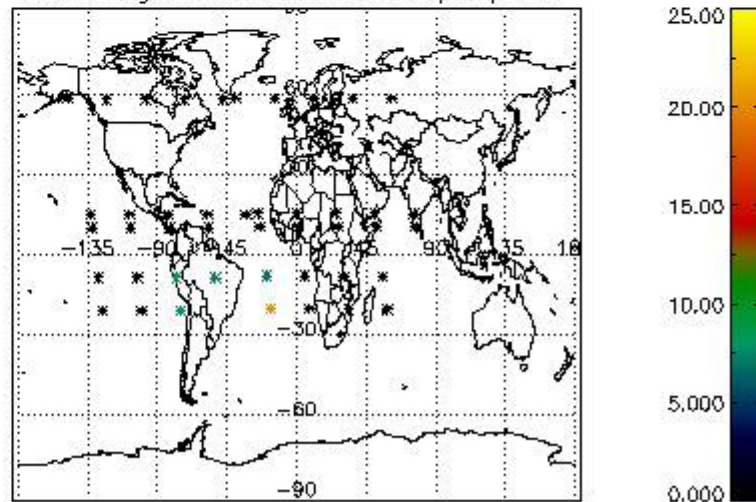
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

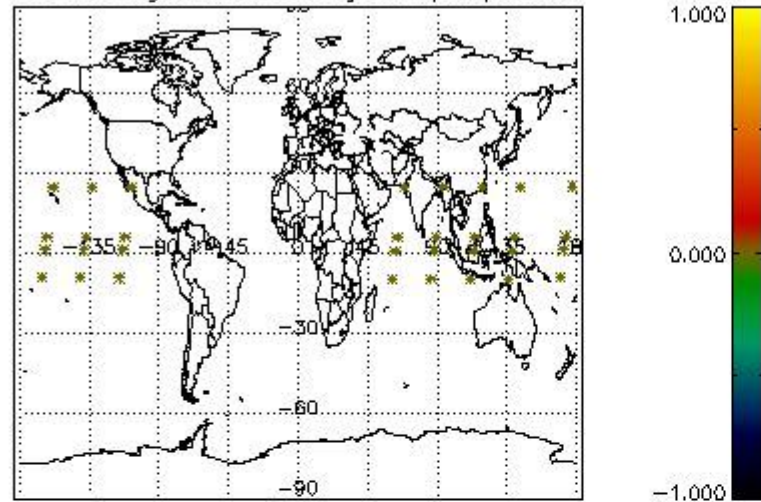


Percentage of saturation errors per profile

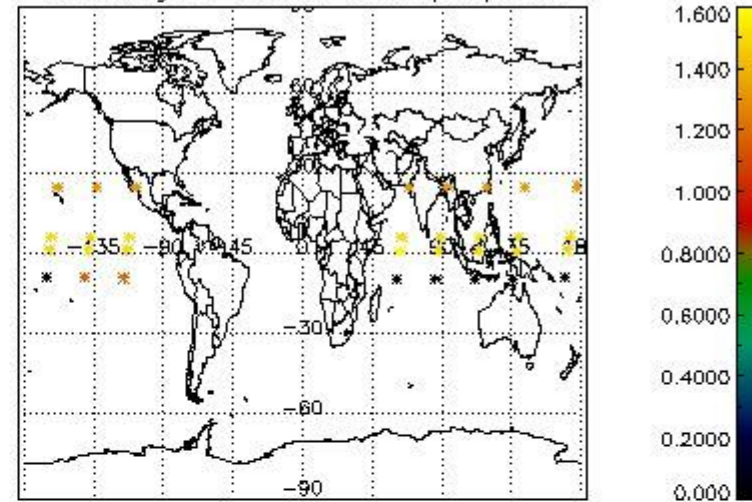


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

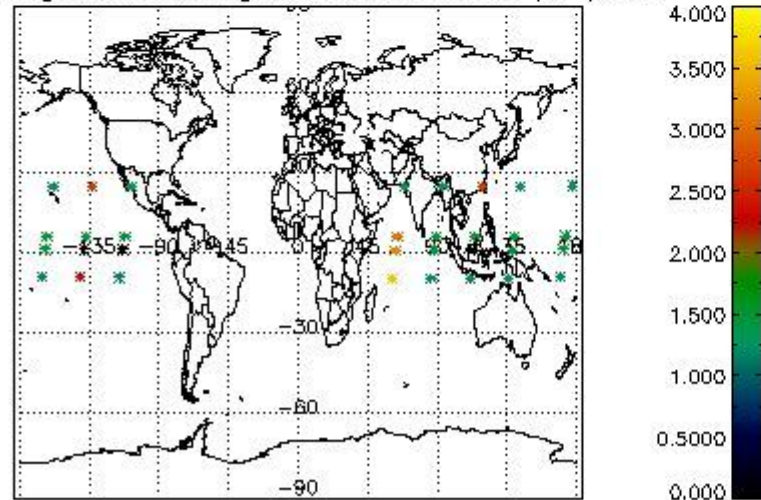
Percentage of cosmic ray hits per profile



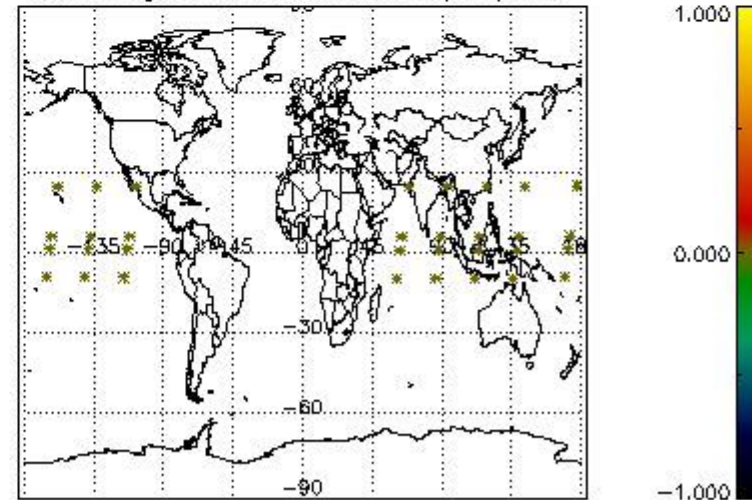
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

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

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

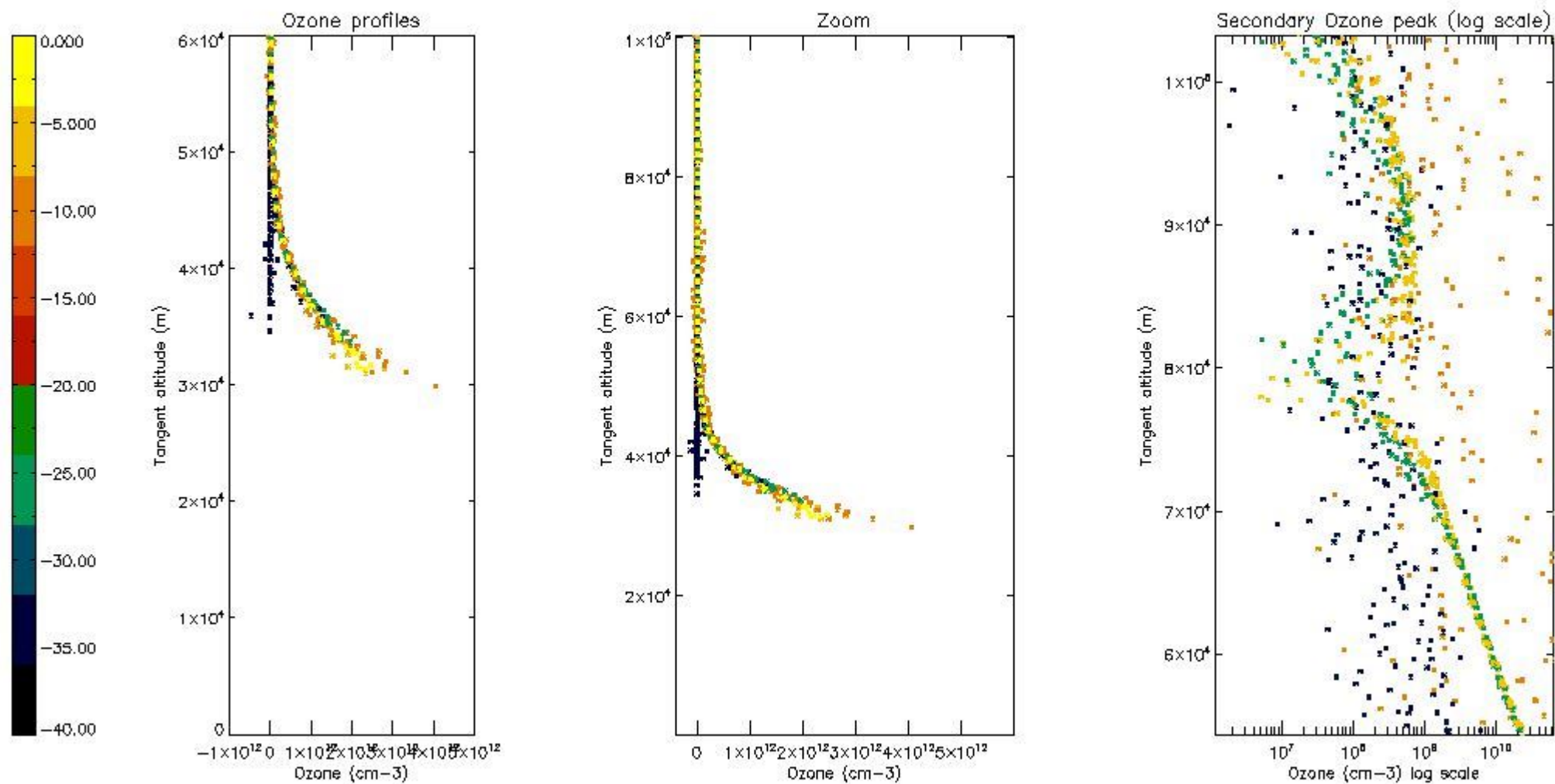
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	17

STD < 10	15
STD < 5	11

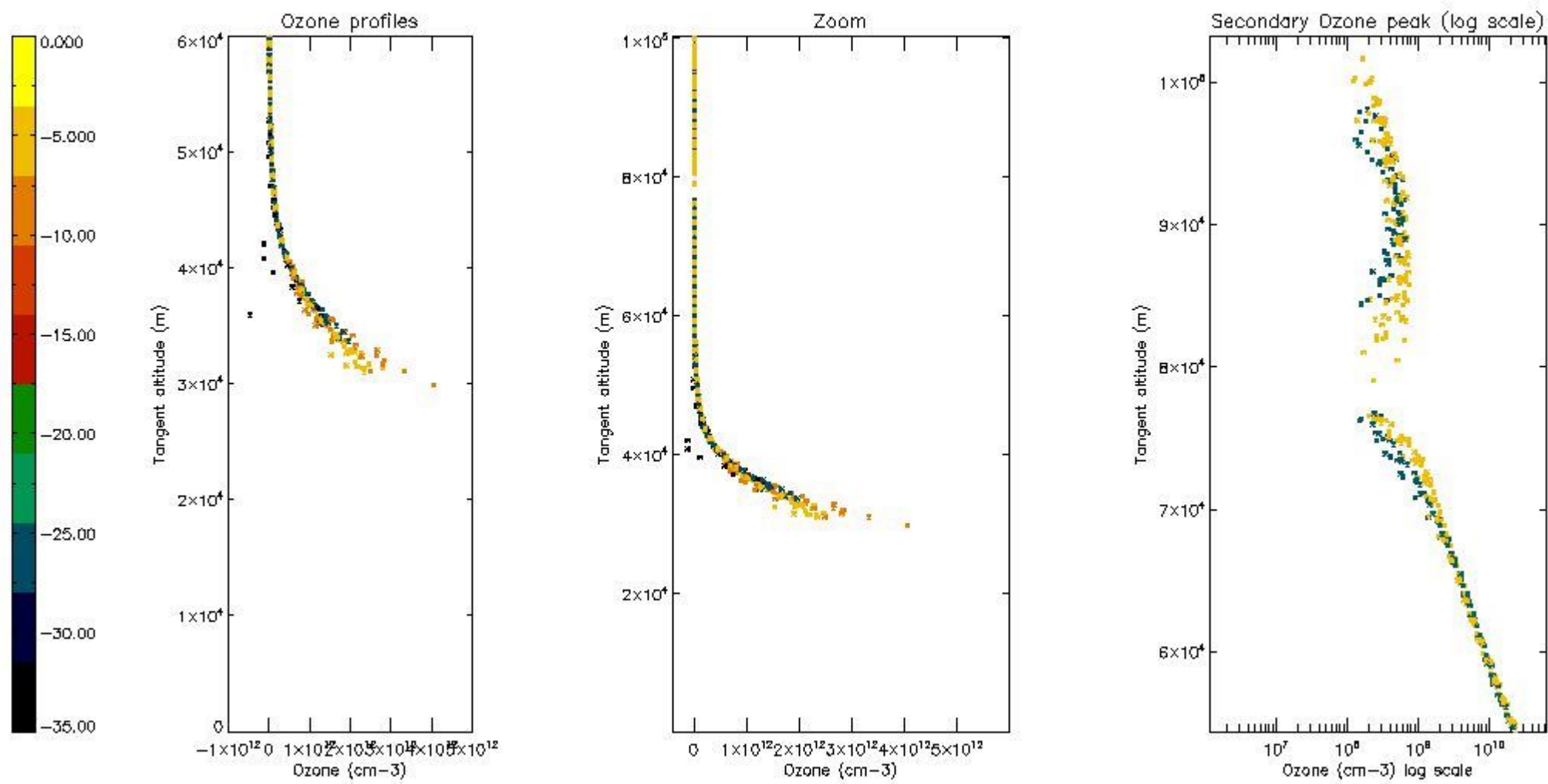
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



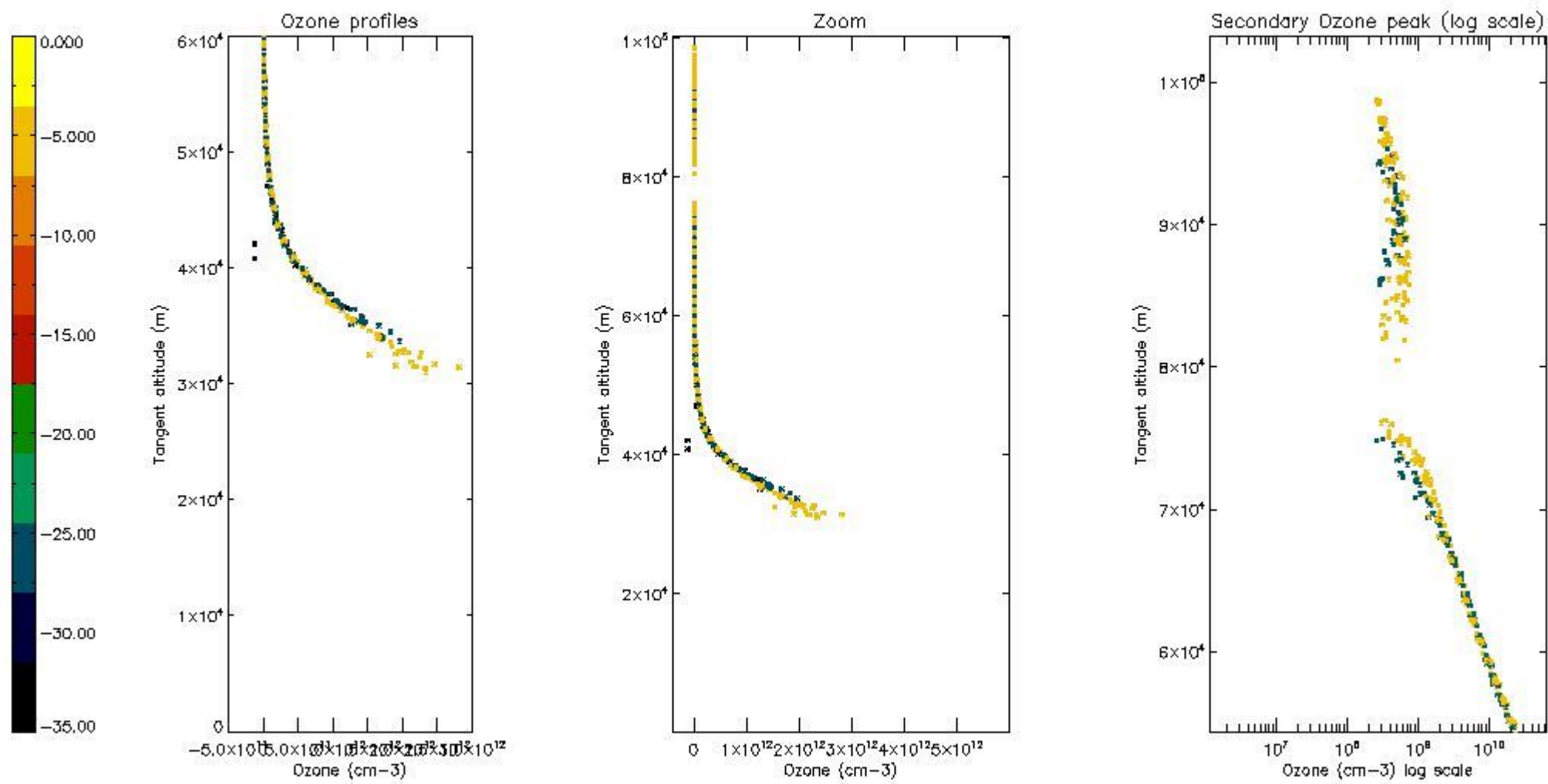
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



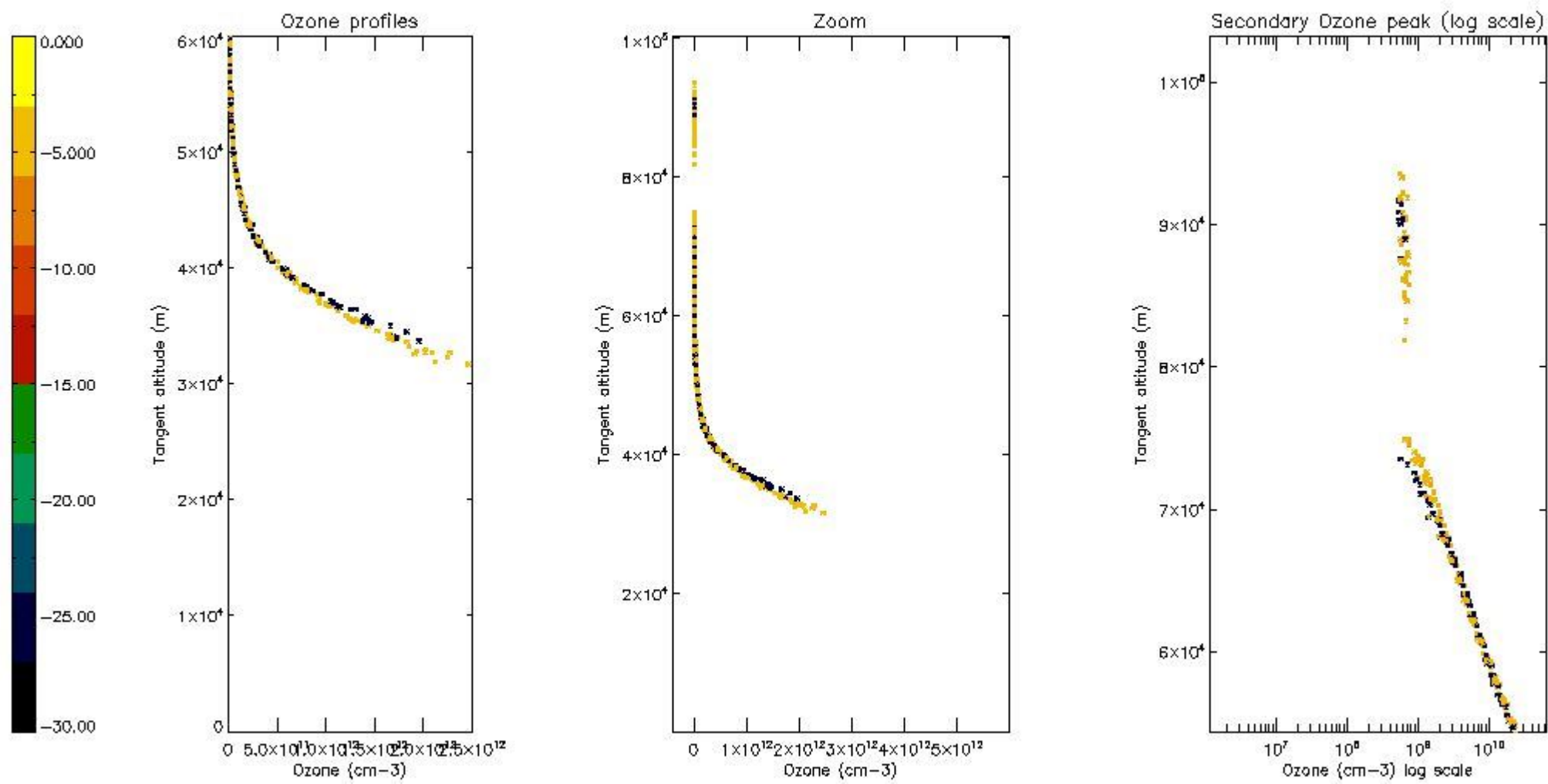
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



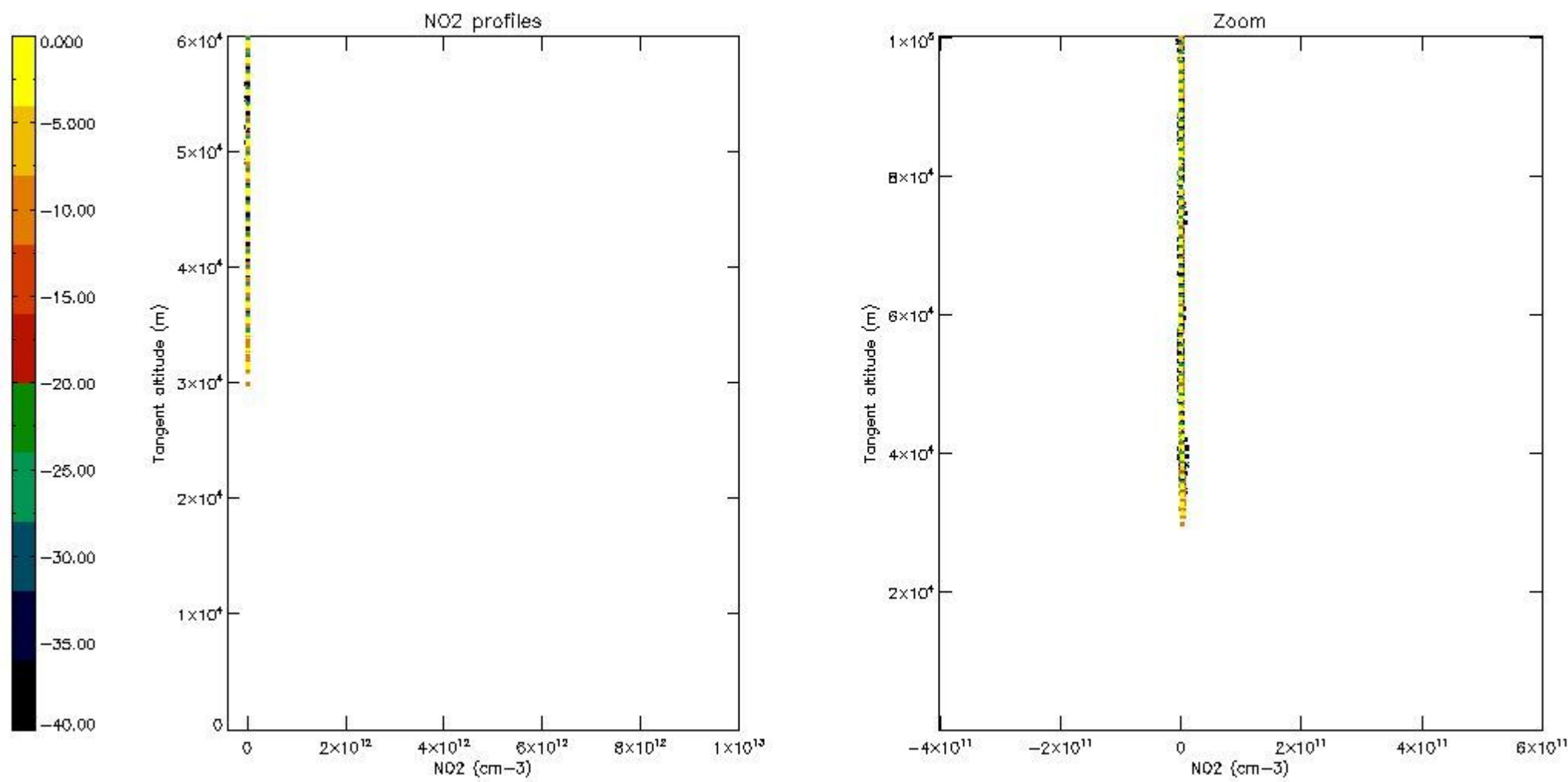
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



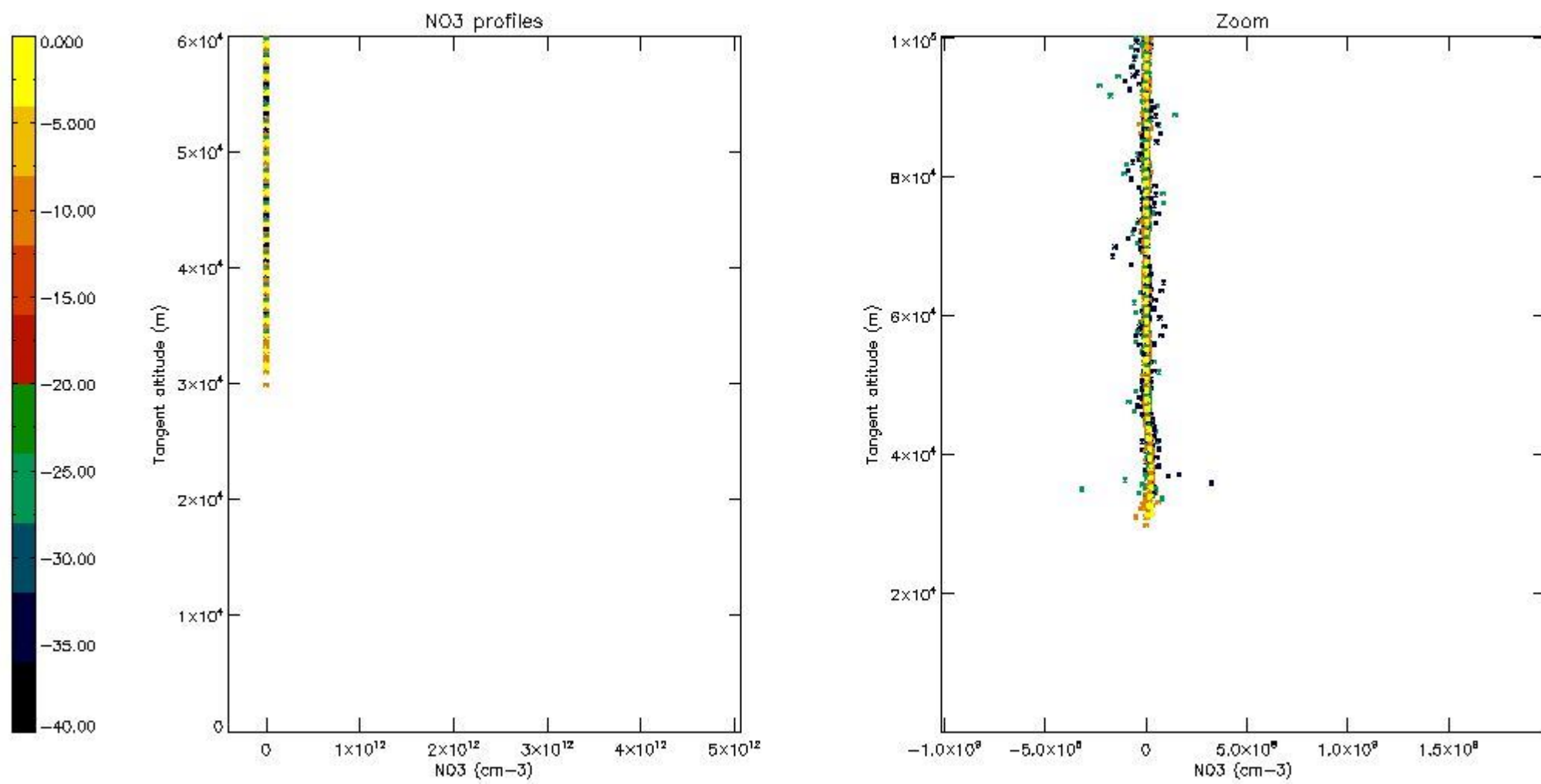
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



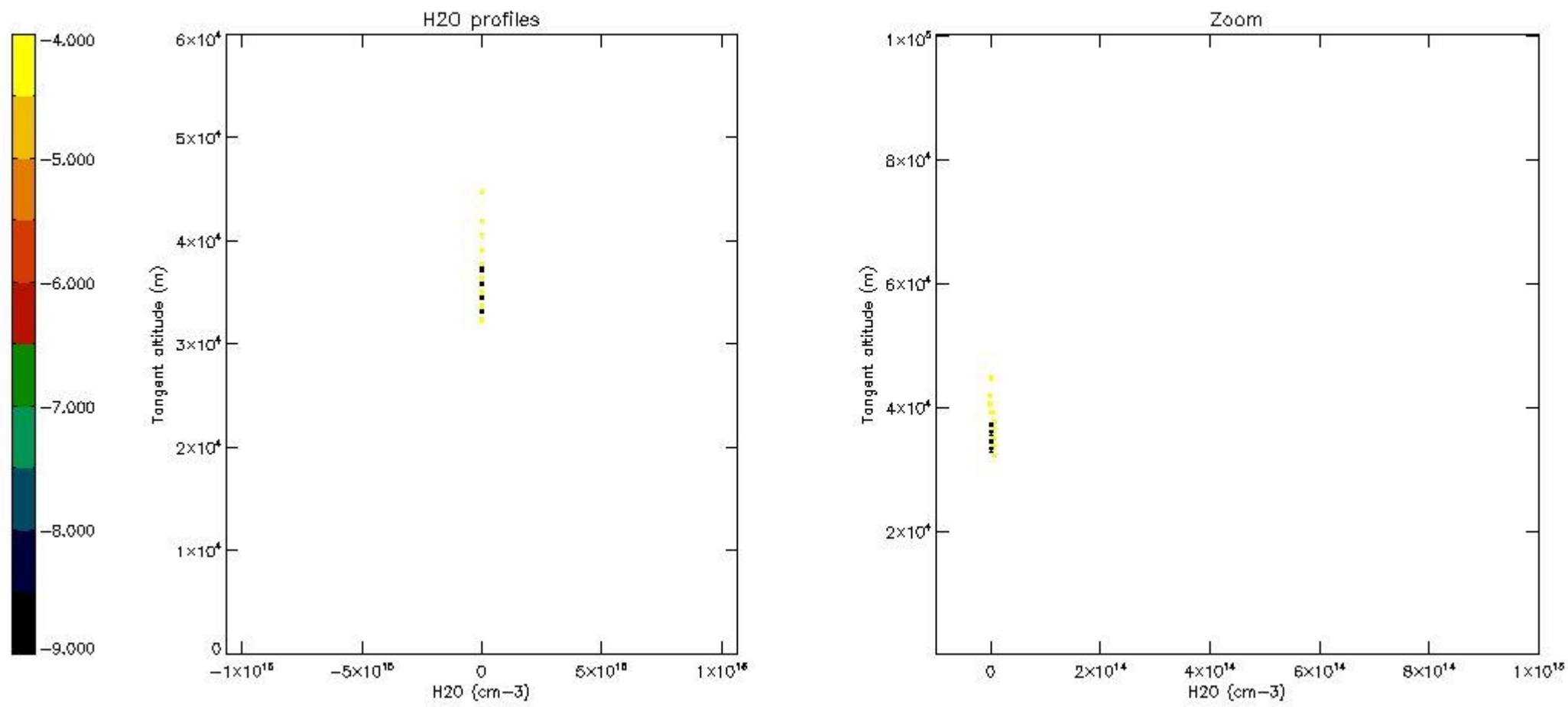
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

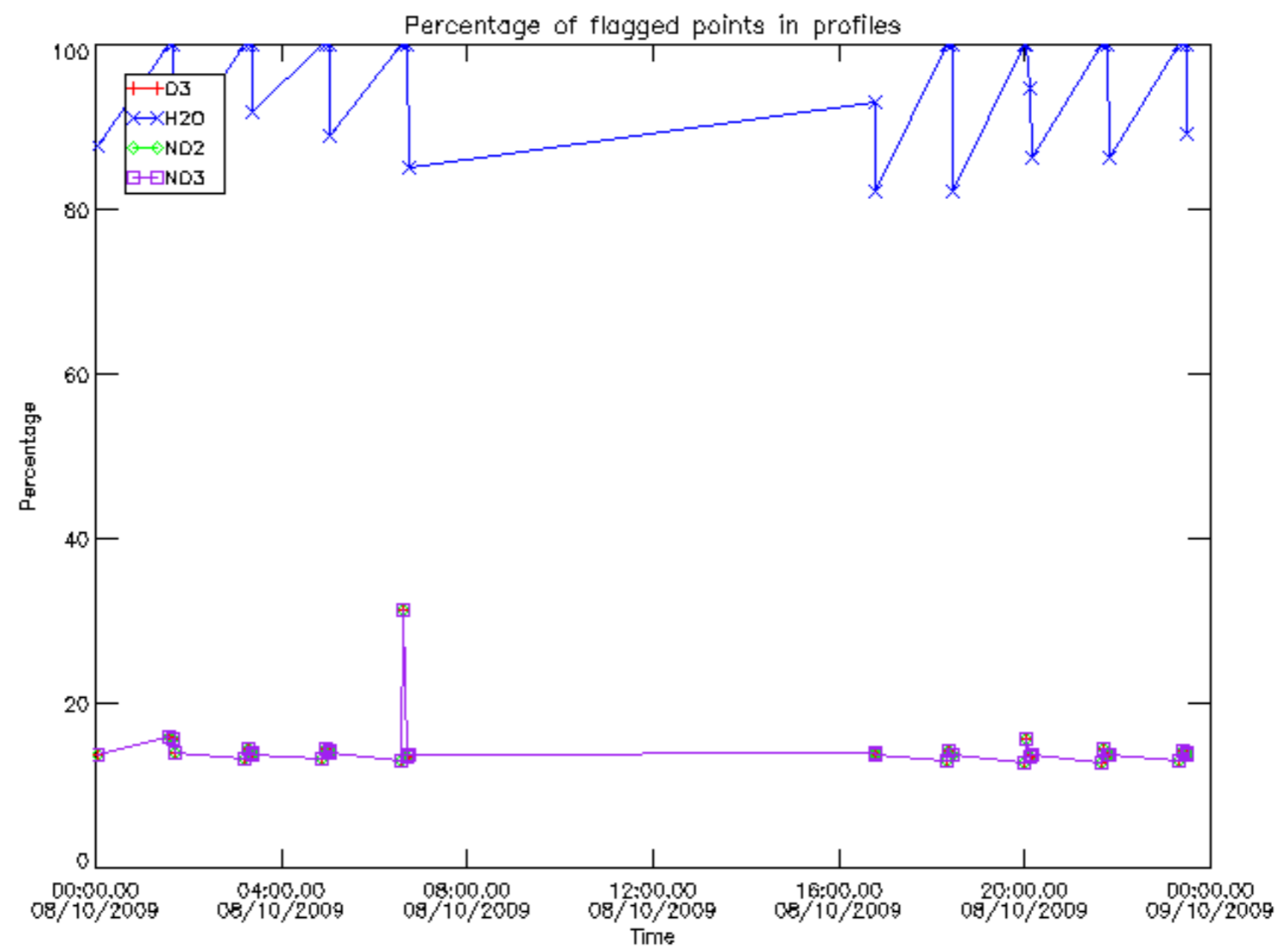
The colorbar represents the latitude.



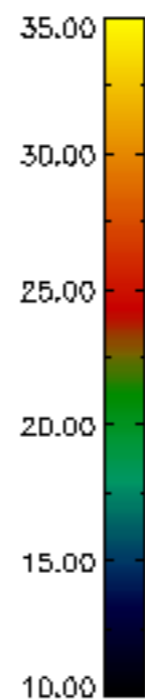
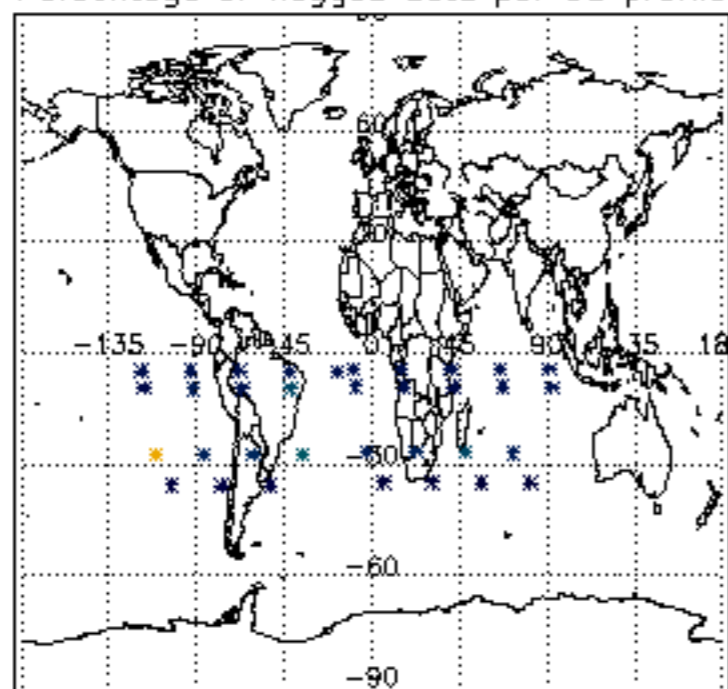
6. Auxiliary Data Files used for the production reported in section 2

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.

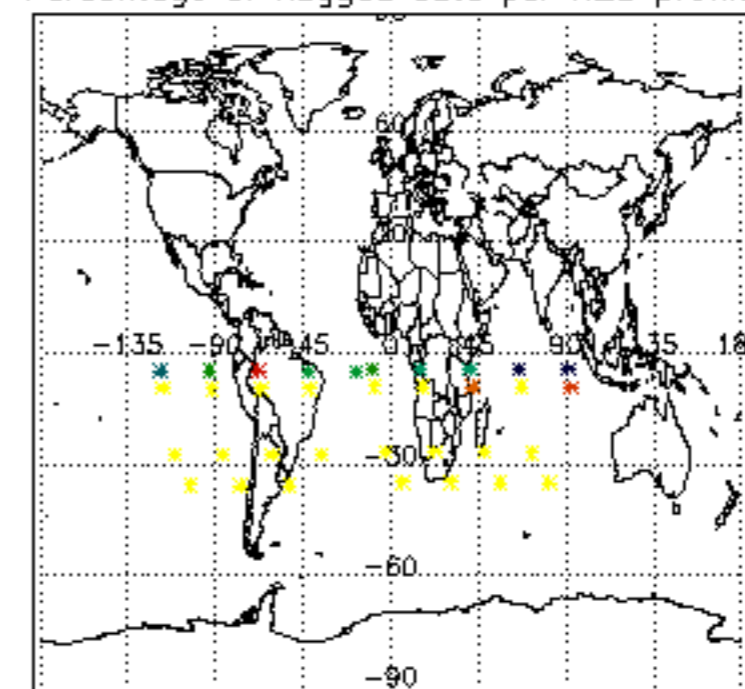
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	08-OCT-2009 00:01:23
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-OCT-2009 00:01:23
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-OCT-2009 00:01:23



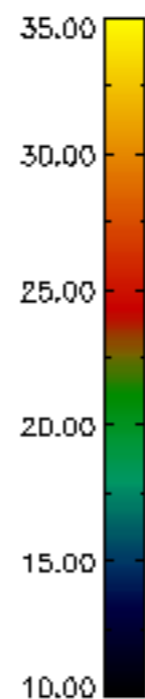
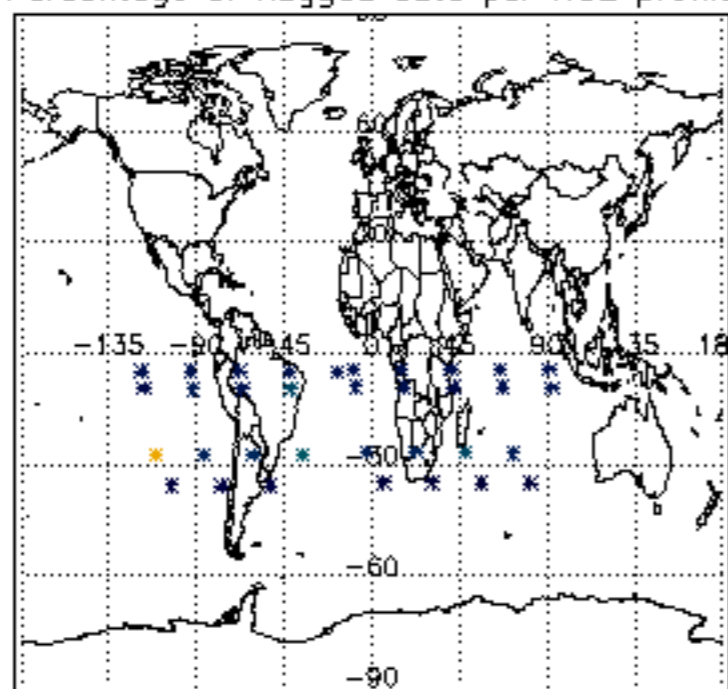
Percentage of flagged data per D3 profile



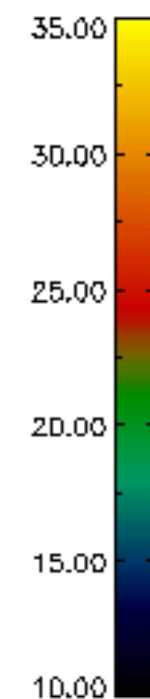
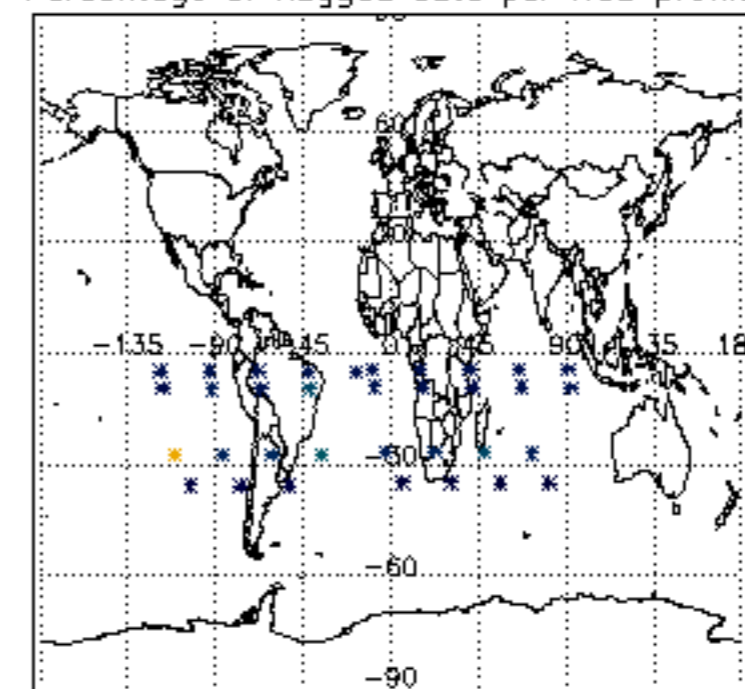
Percentage of flagged data per H2O profile

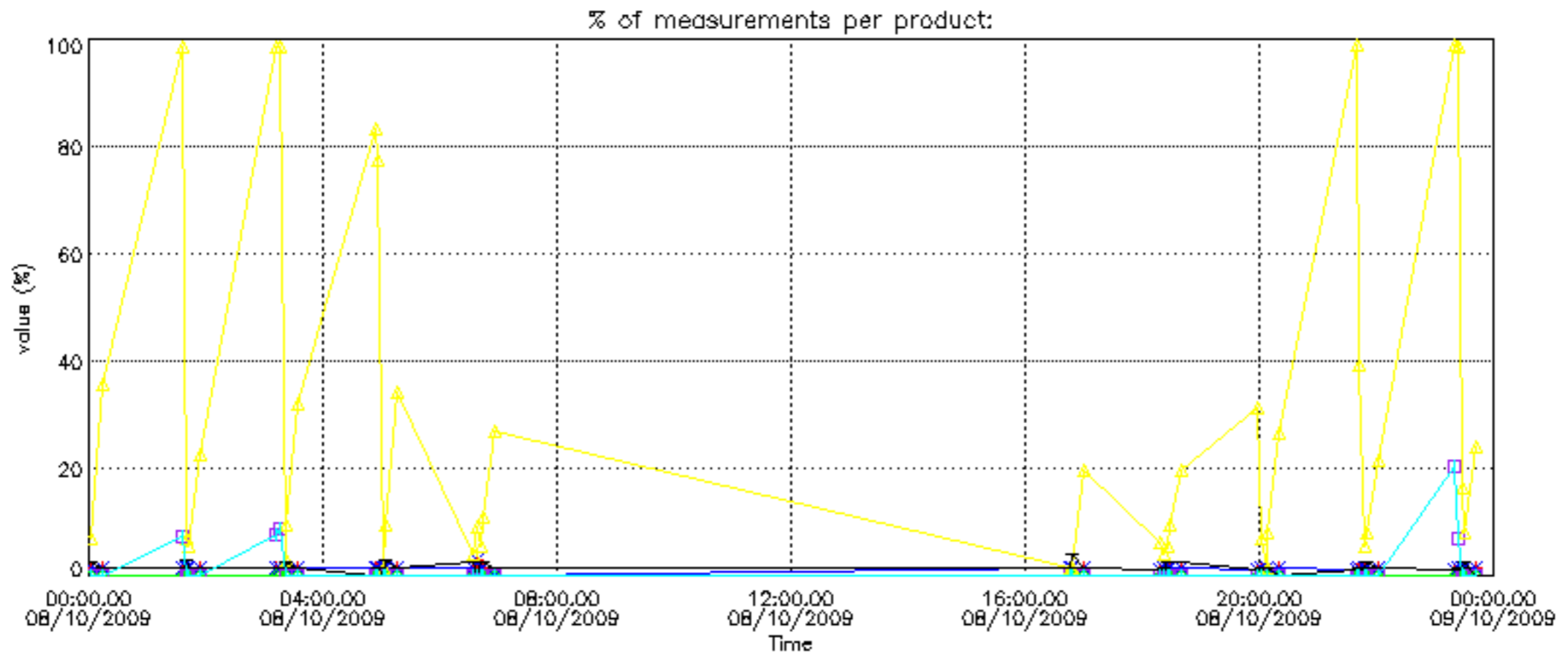


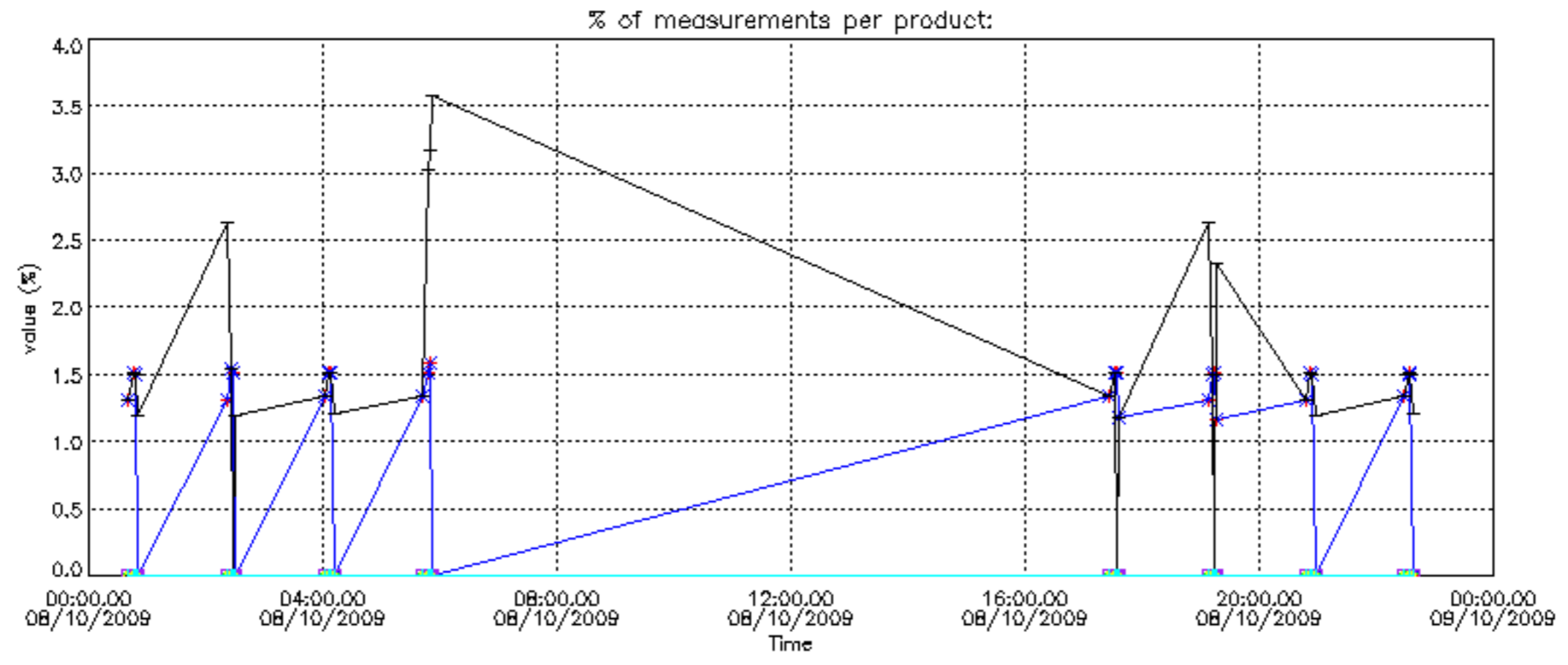
Percentage of flagged data per NO2 profile



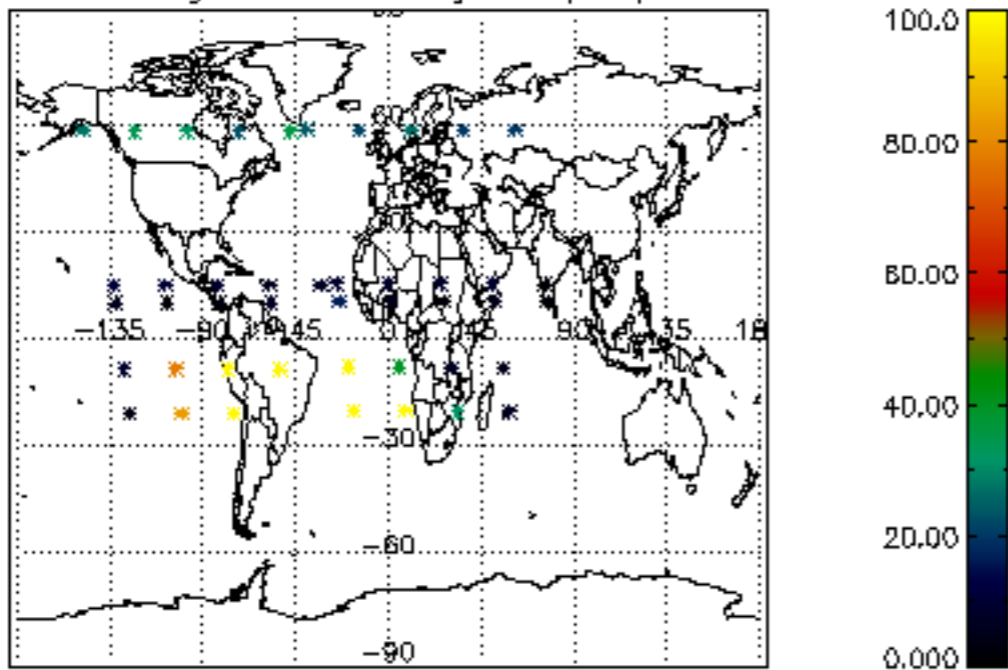
Percentage of flagged data per NO3 profile



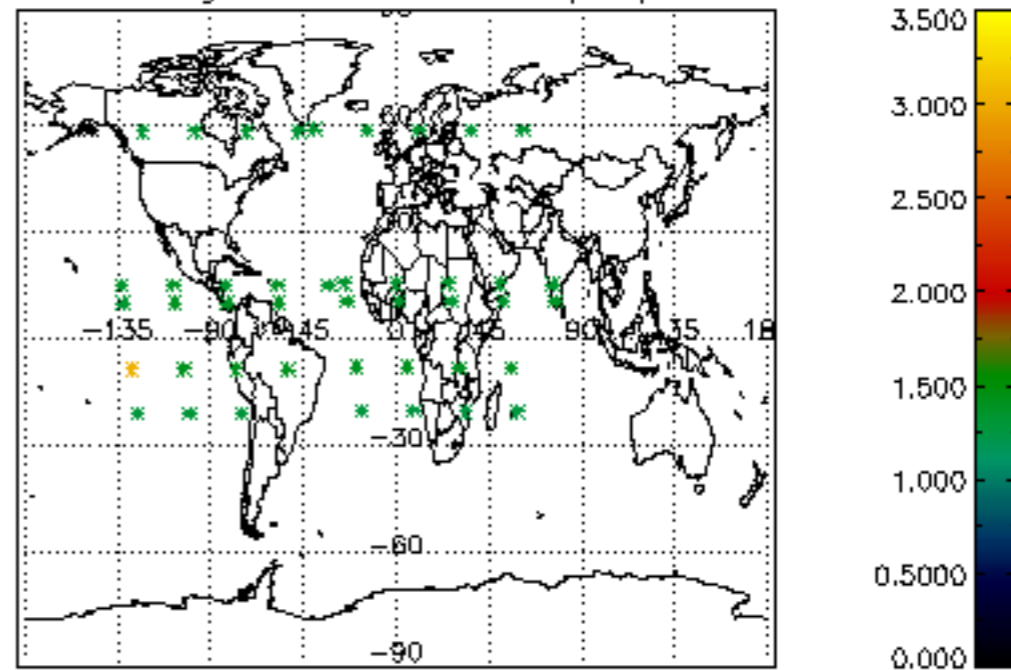




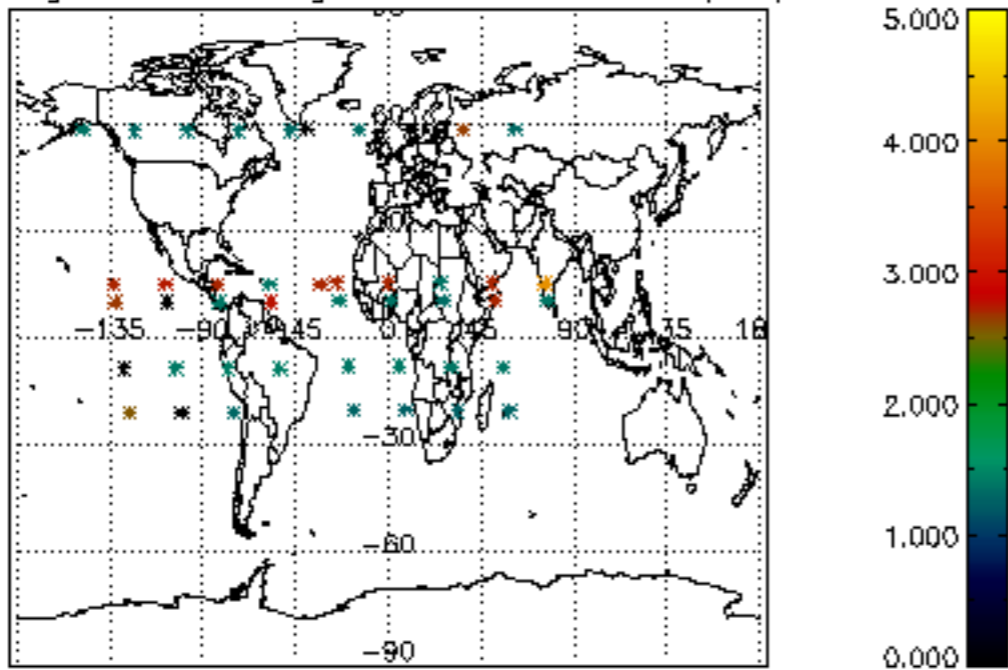
Percentage of cosmic ray hits per profile



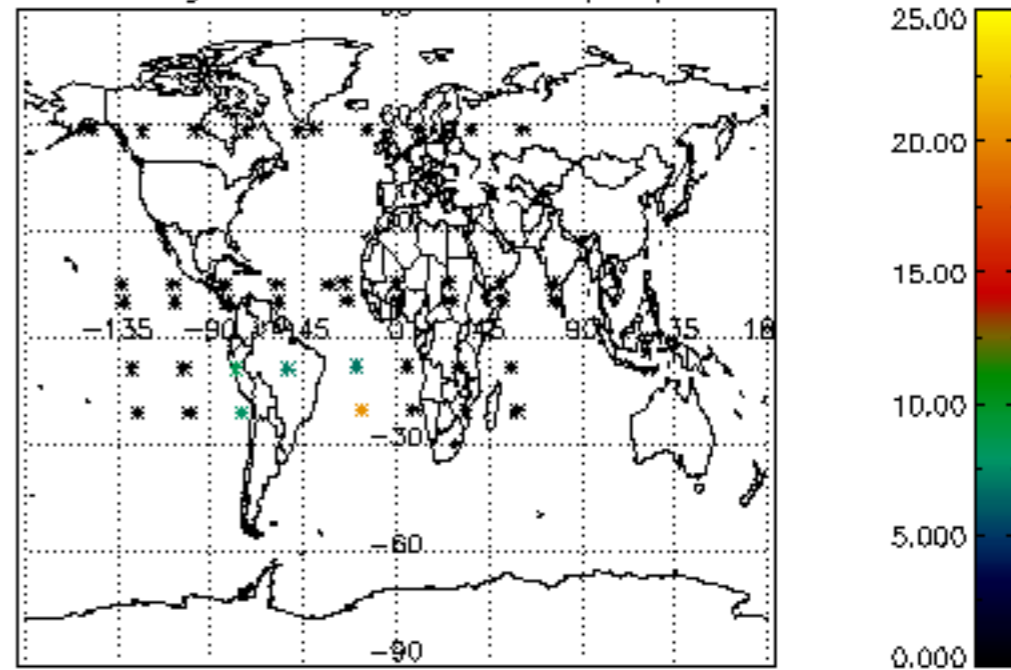
Percentage of datation errors per profile



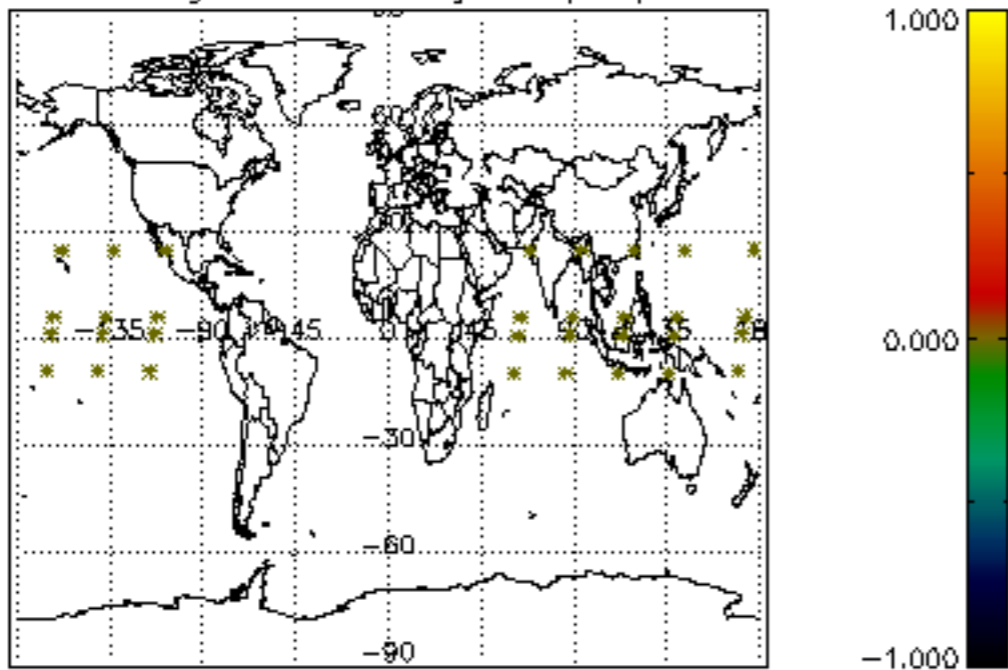
Percentage of star falling outside central band per profile



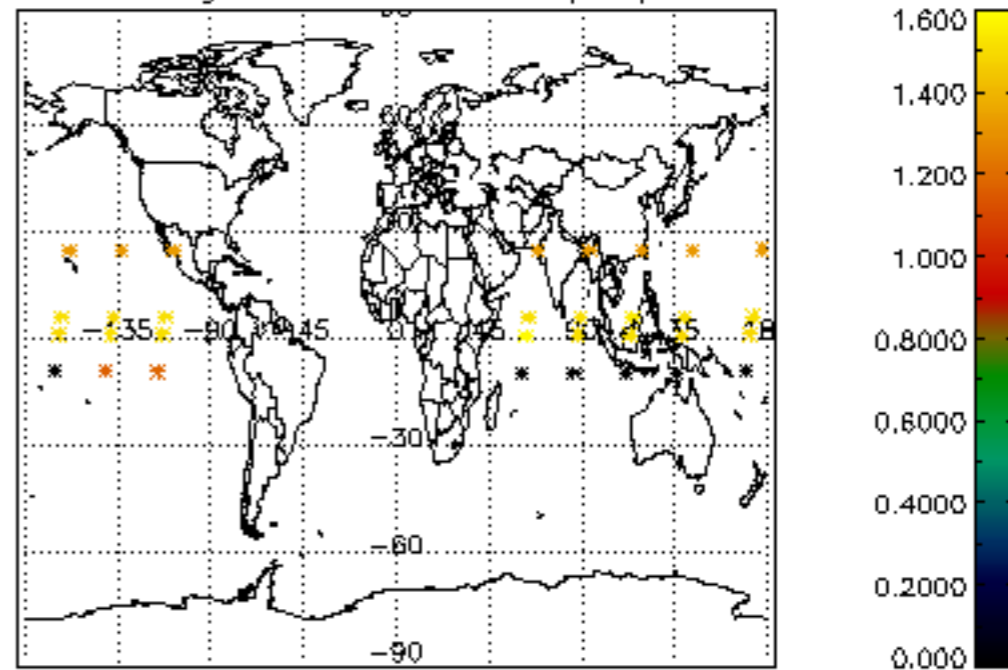
Percentage of saturation errors per profile



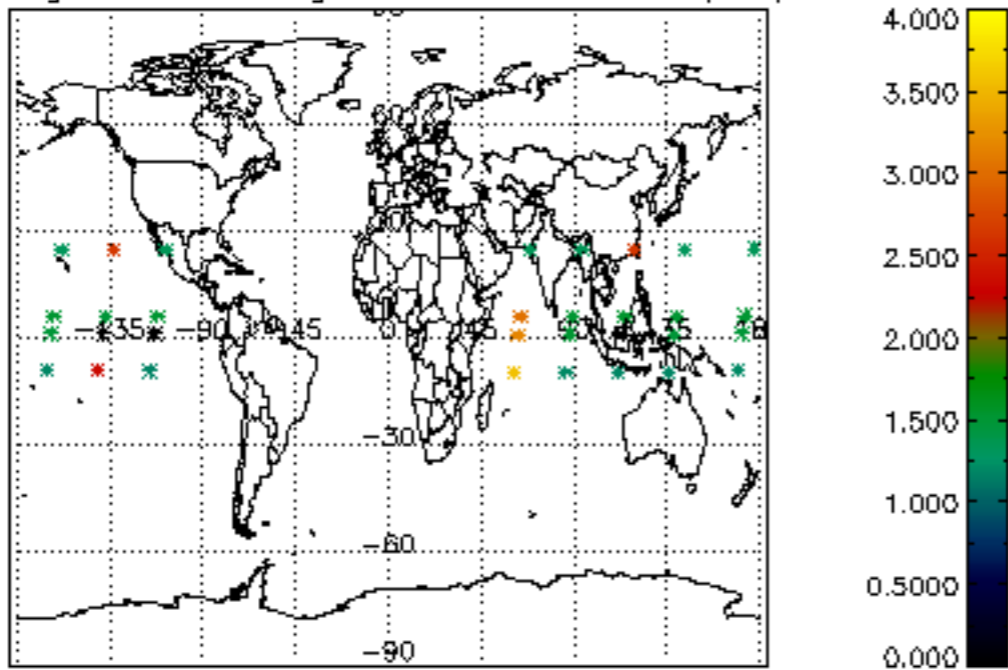
Percentage of cosmic ray hits per profile



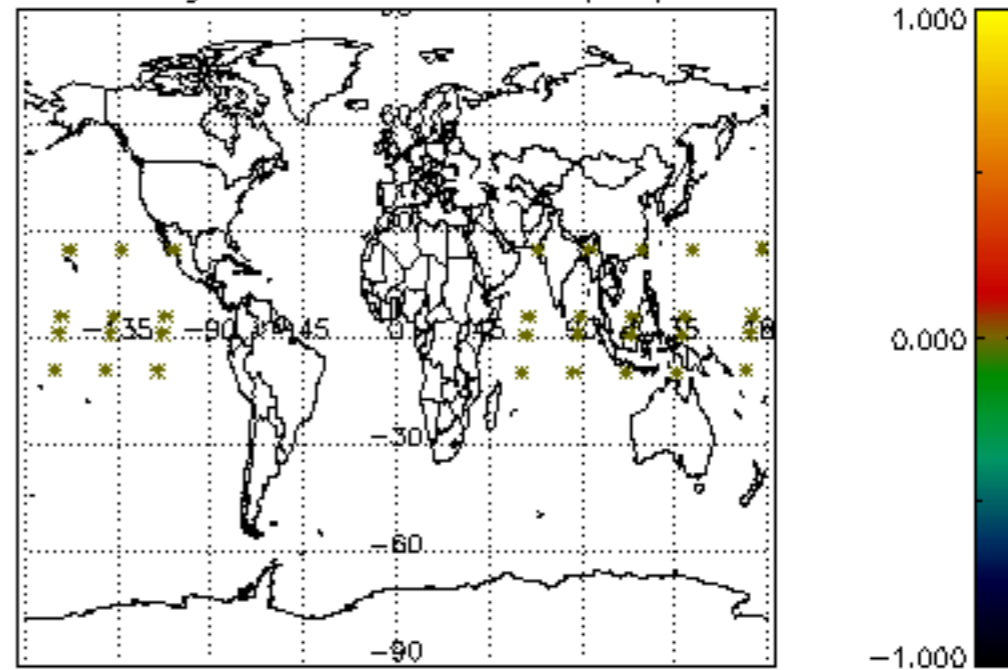
Percentage of datation errors per profile

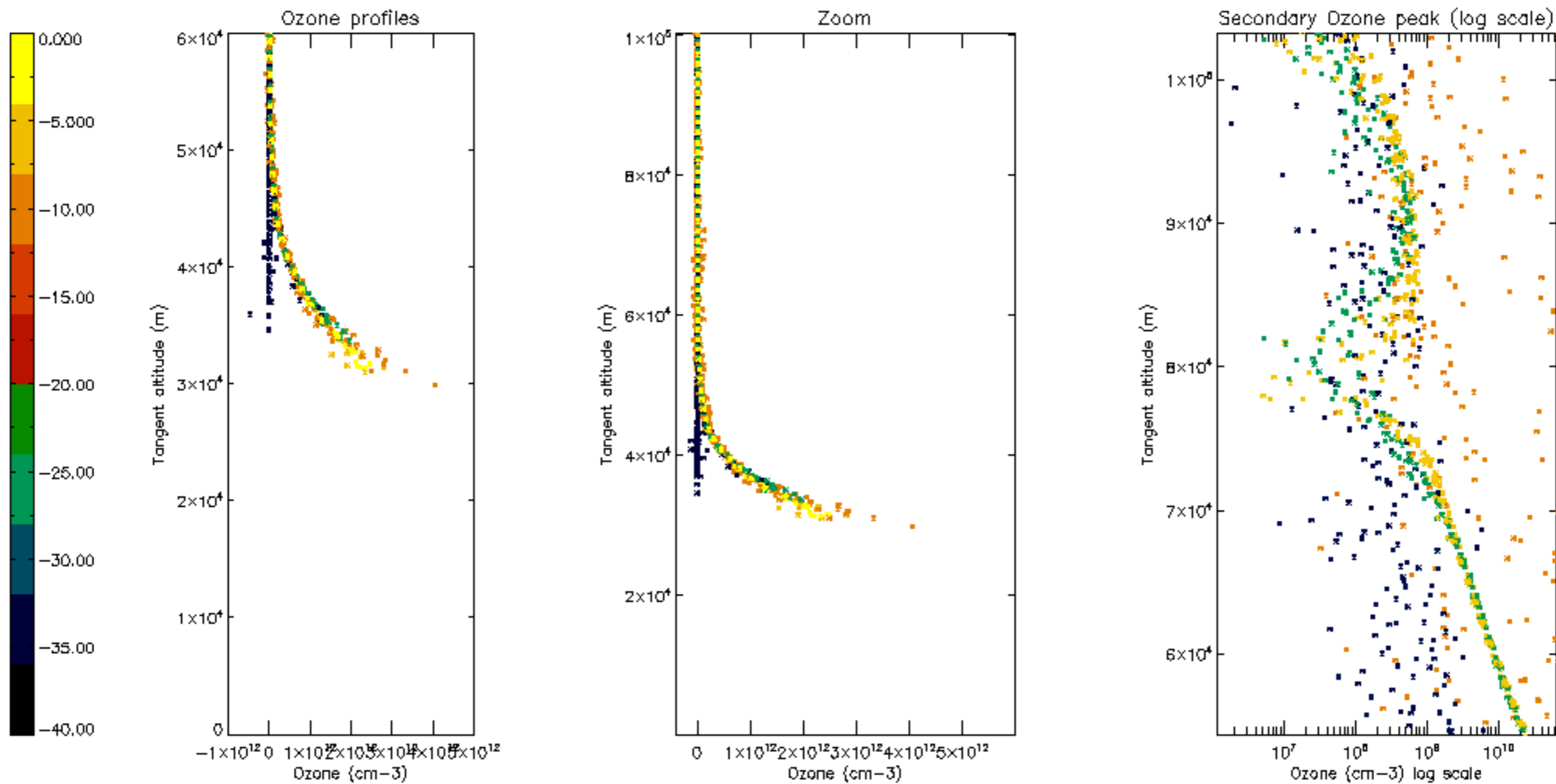


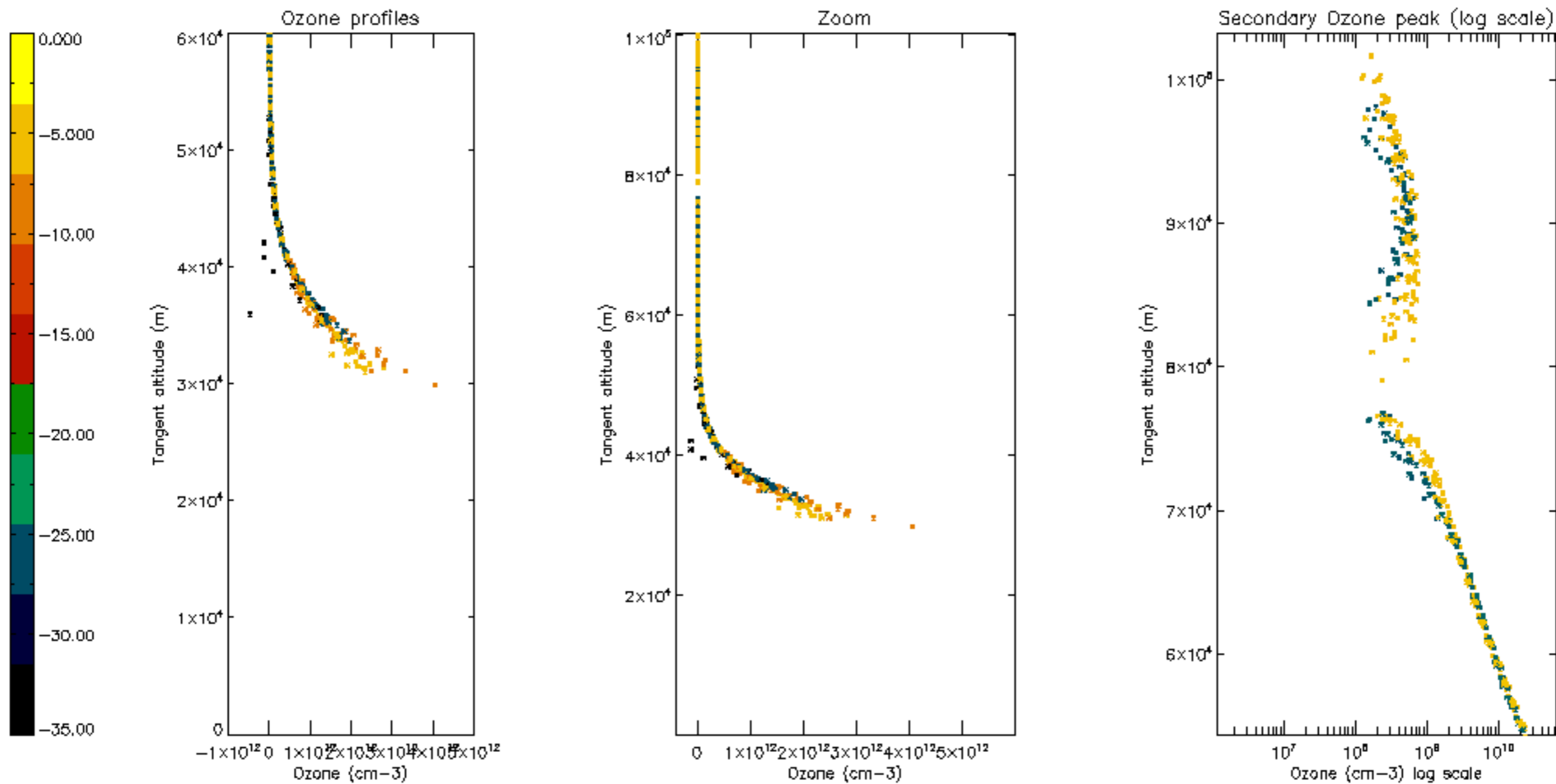
Percentage of star falling outside central band per profile

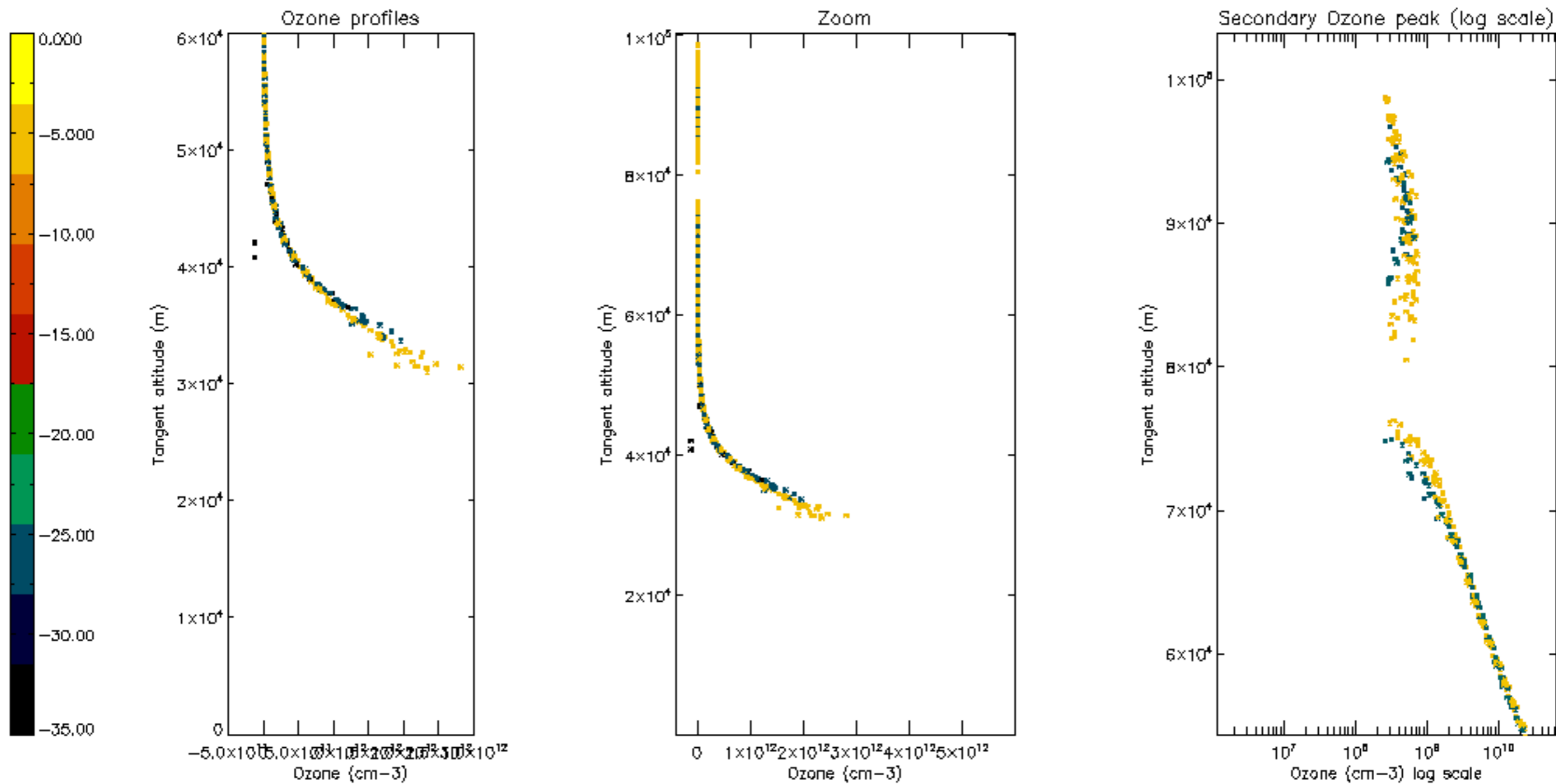


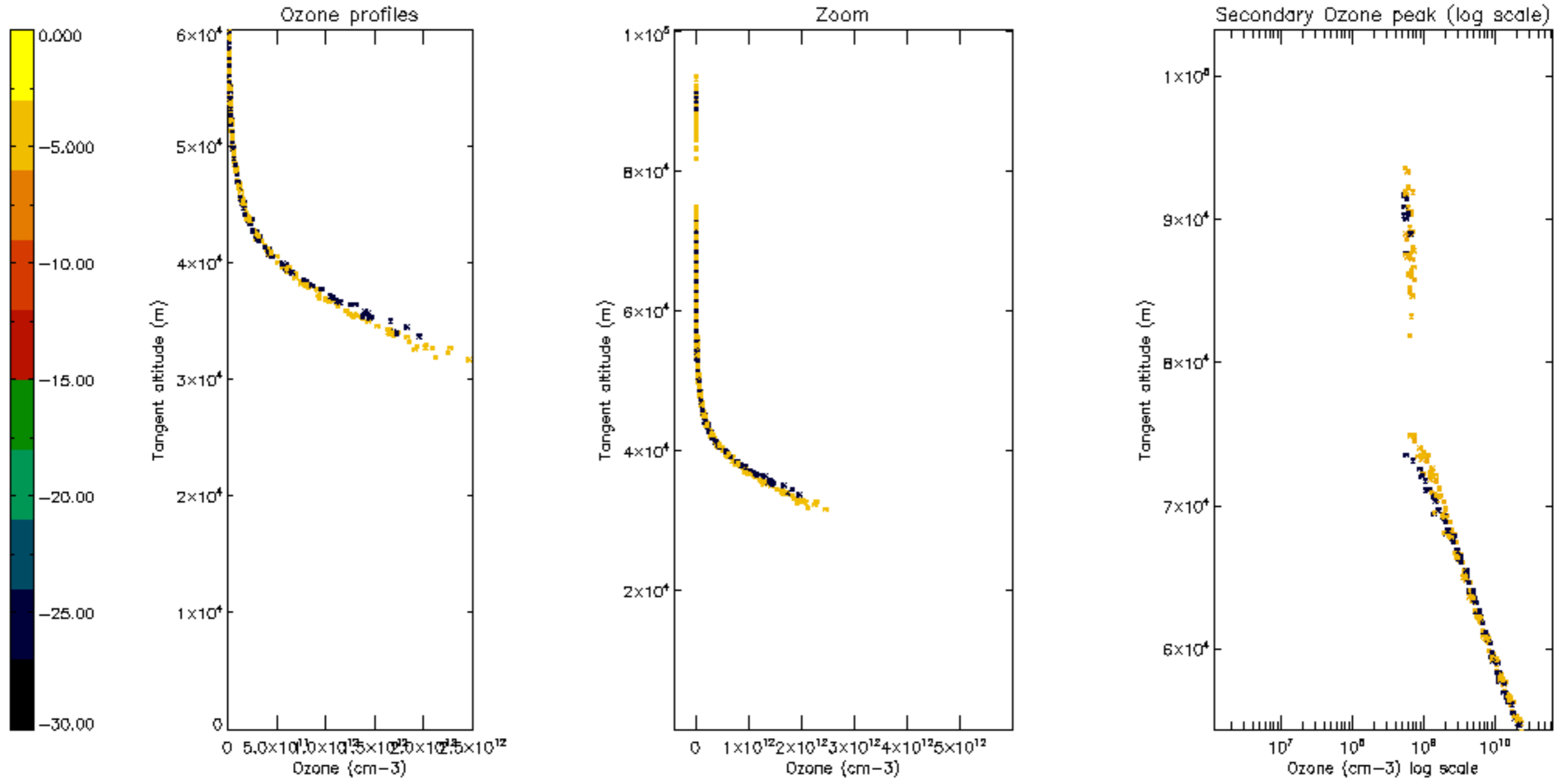
Percentage of saturation errors per profile

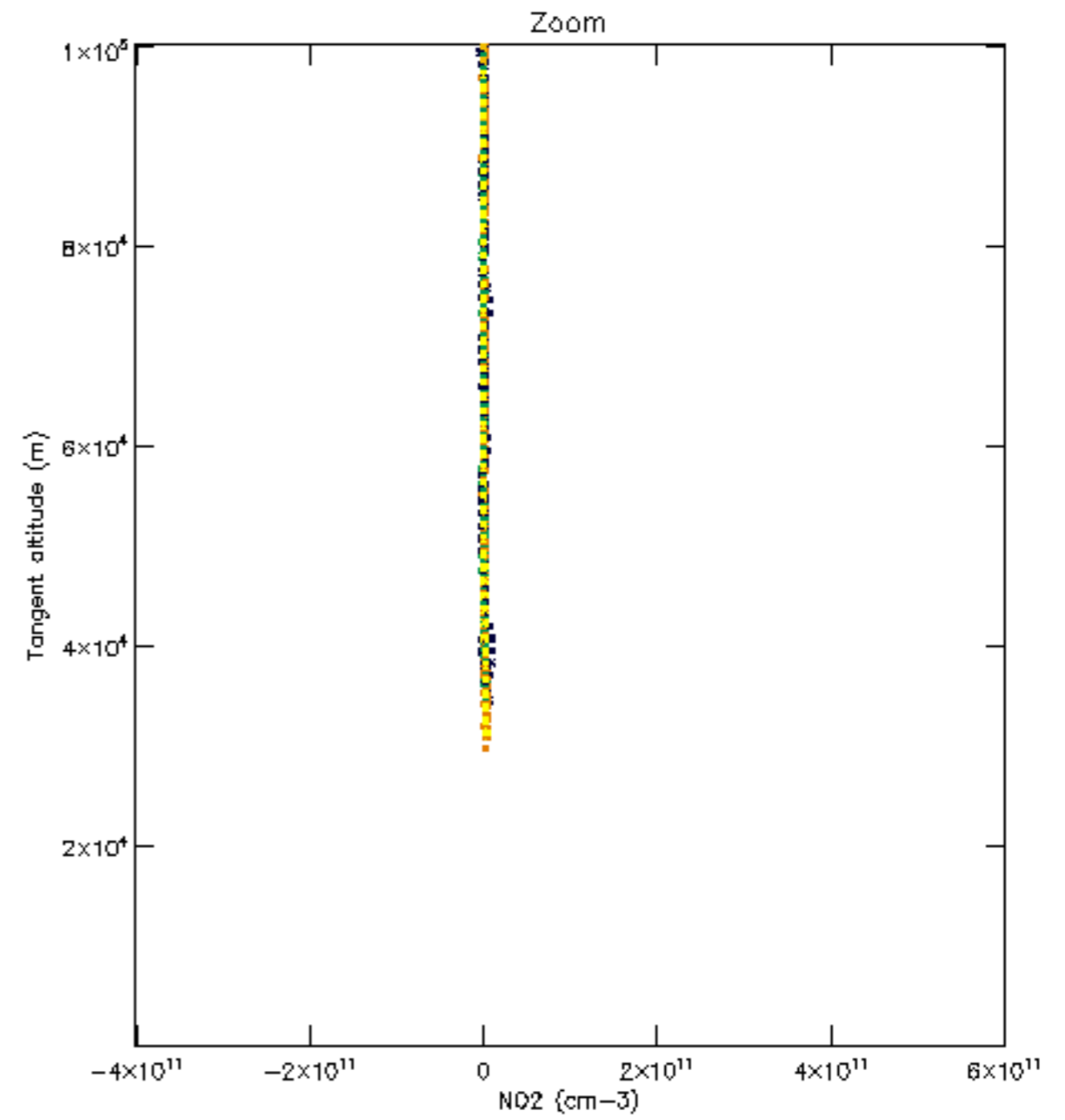
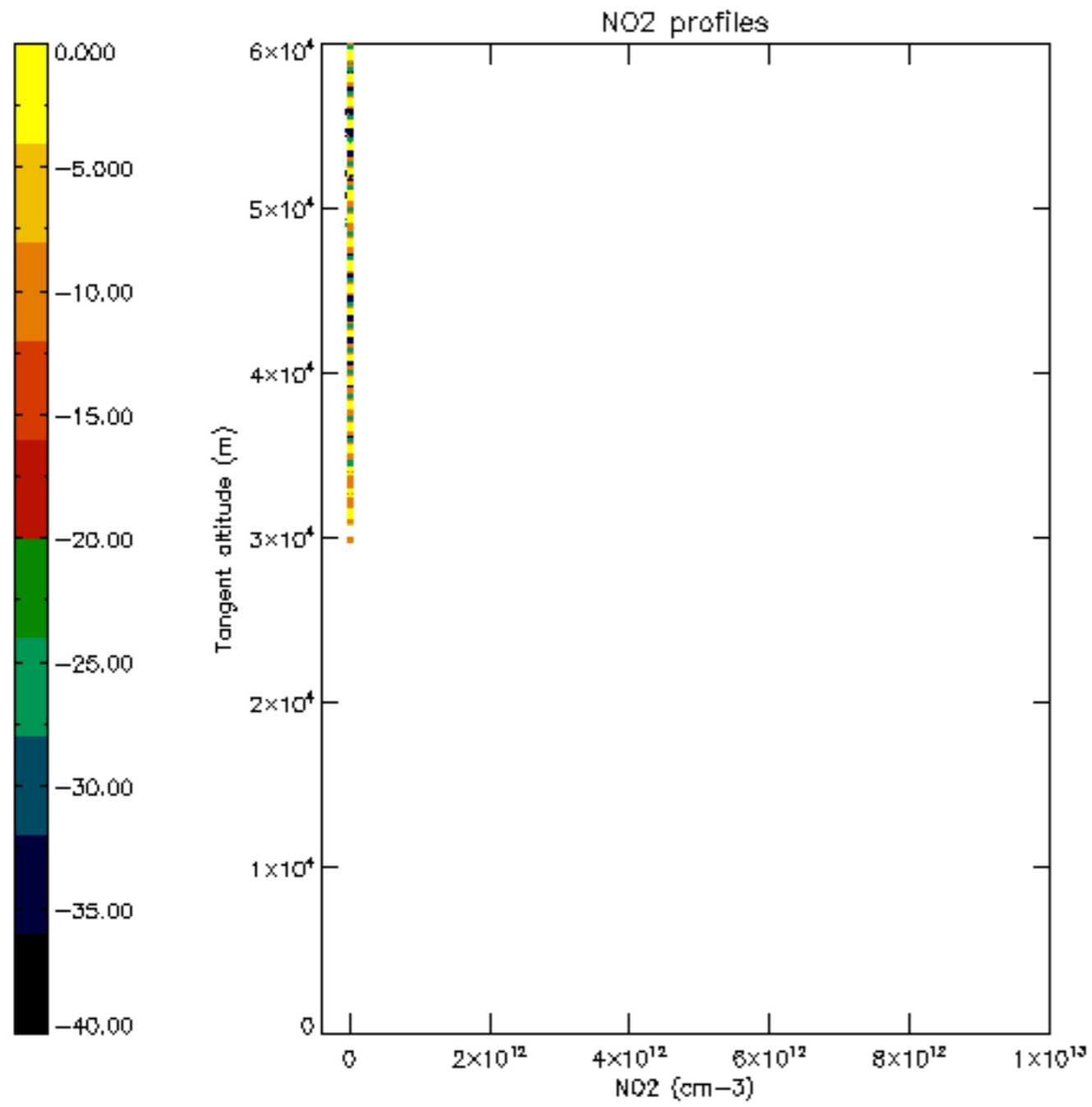


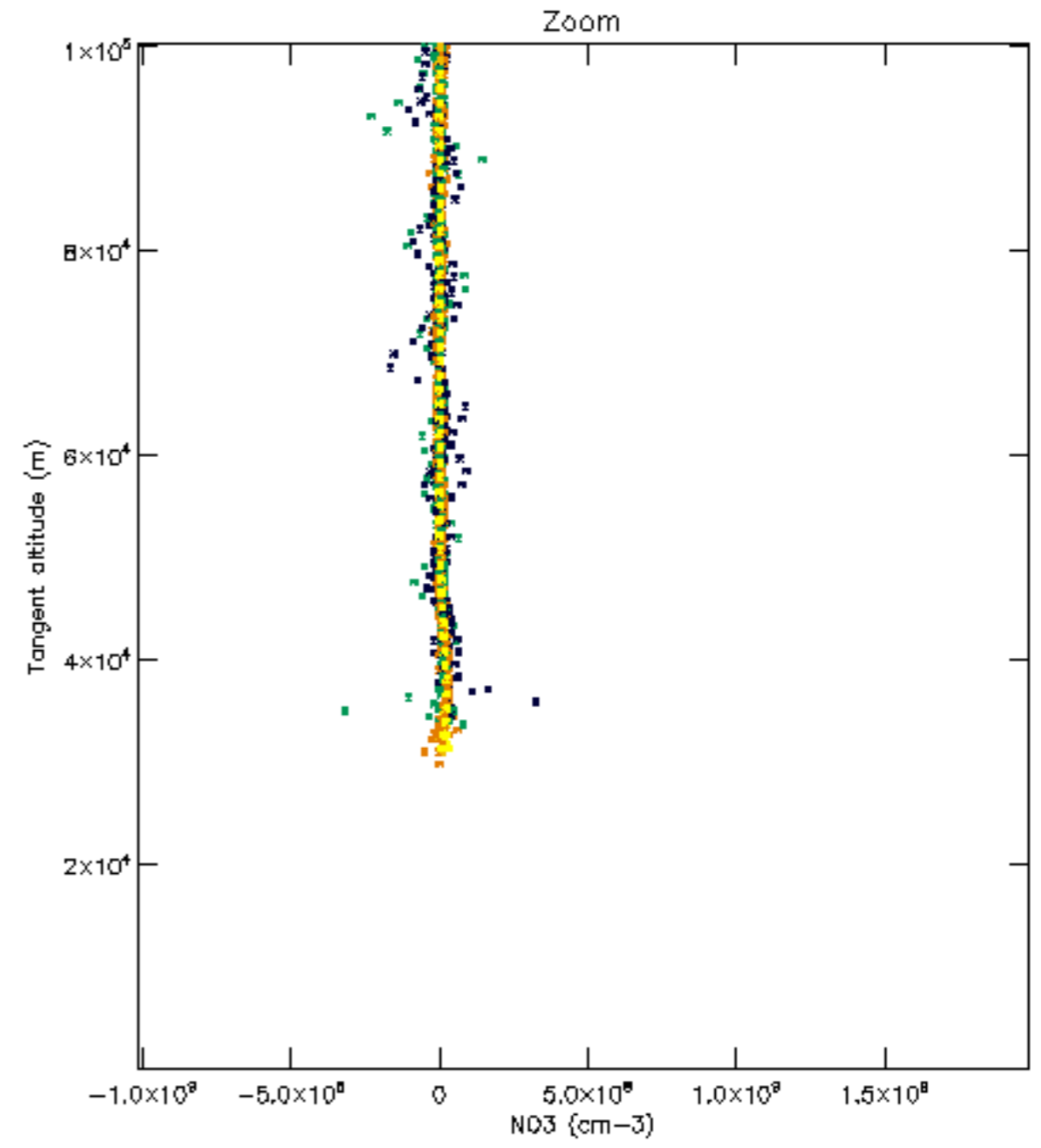
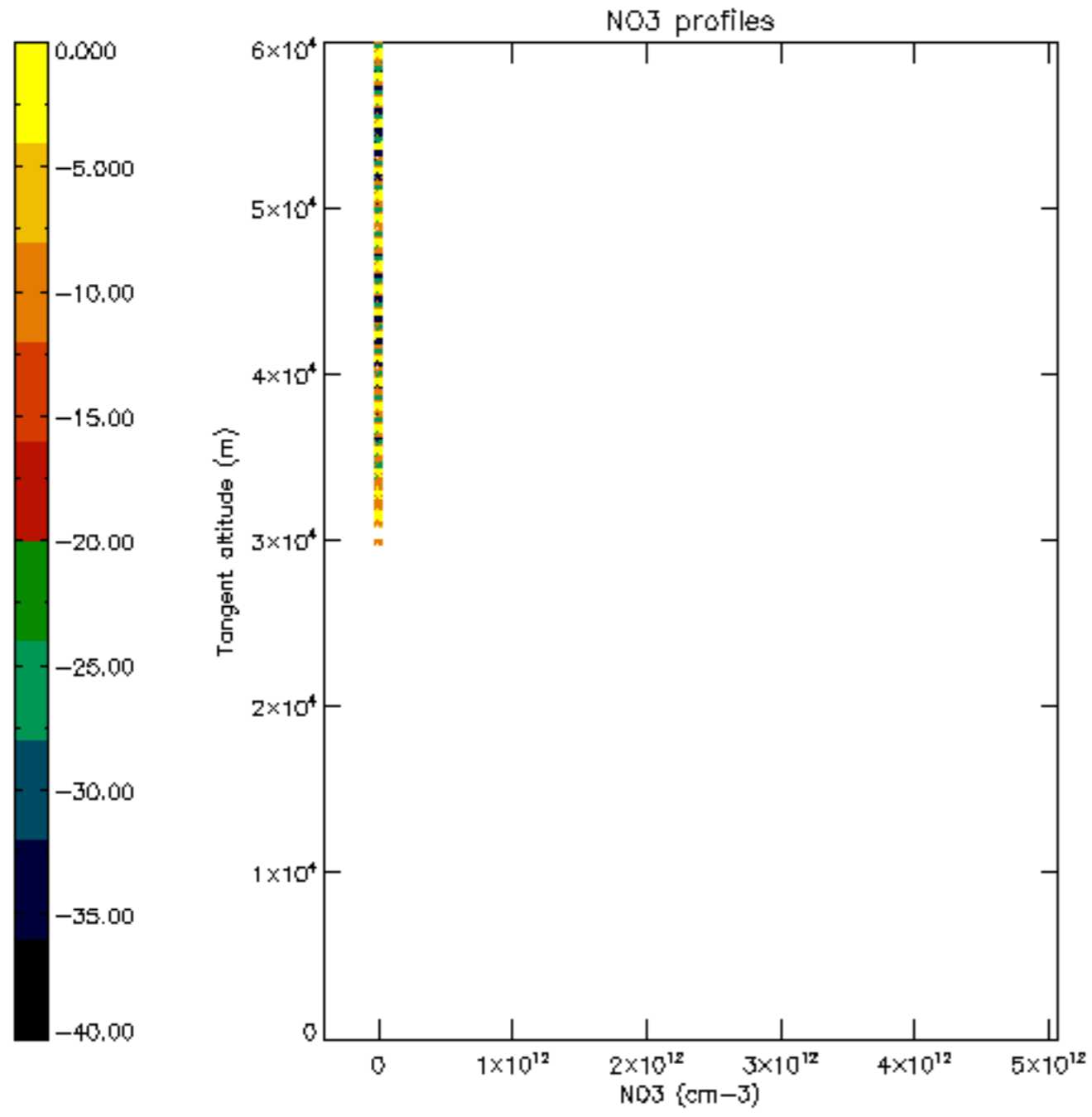


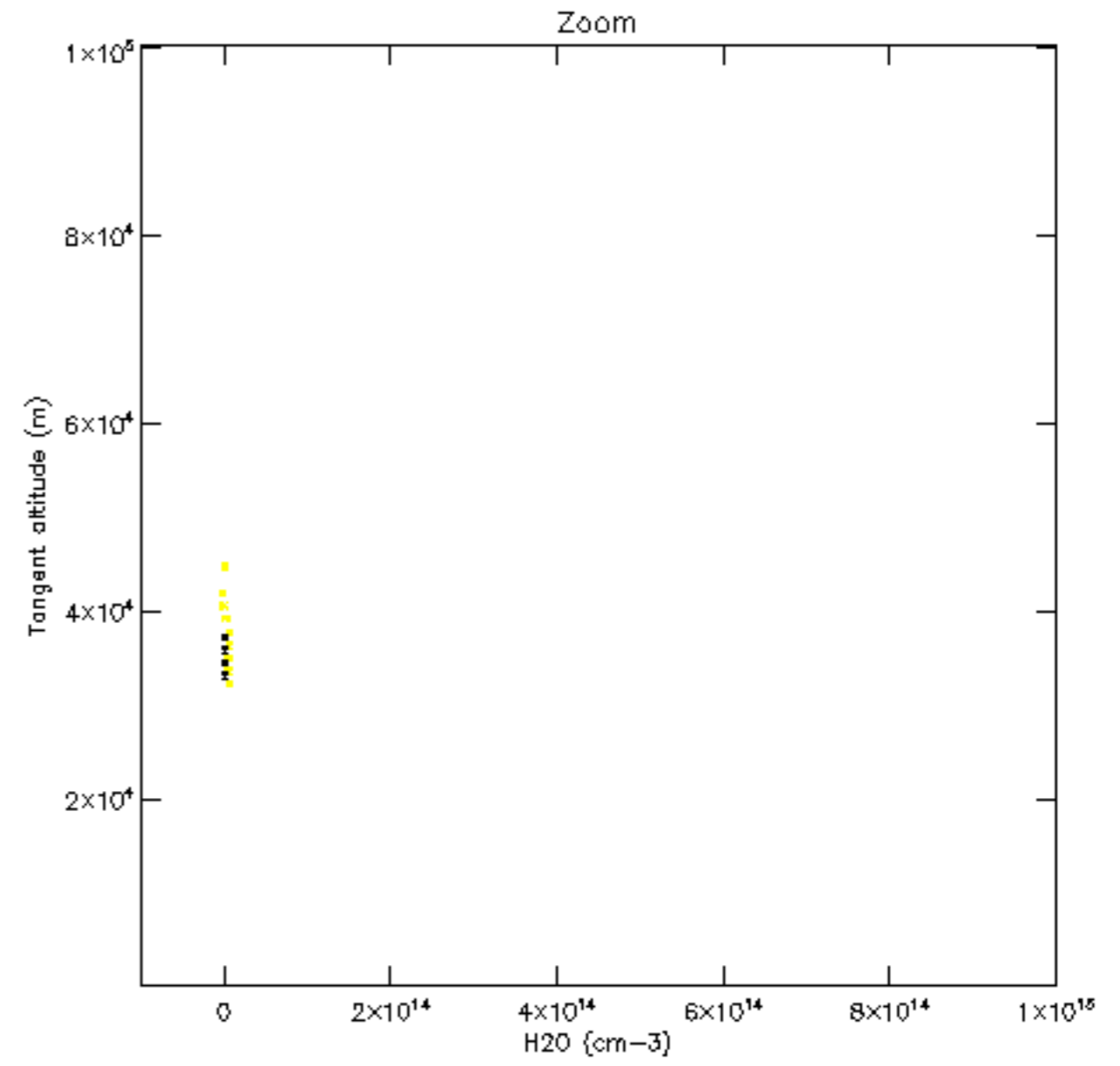
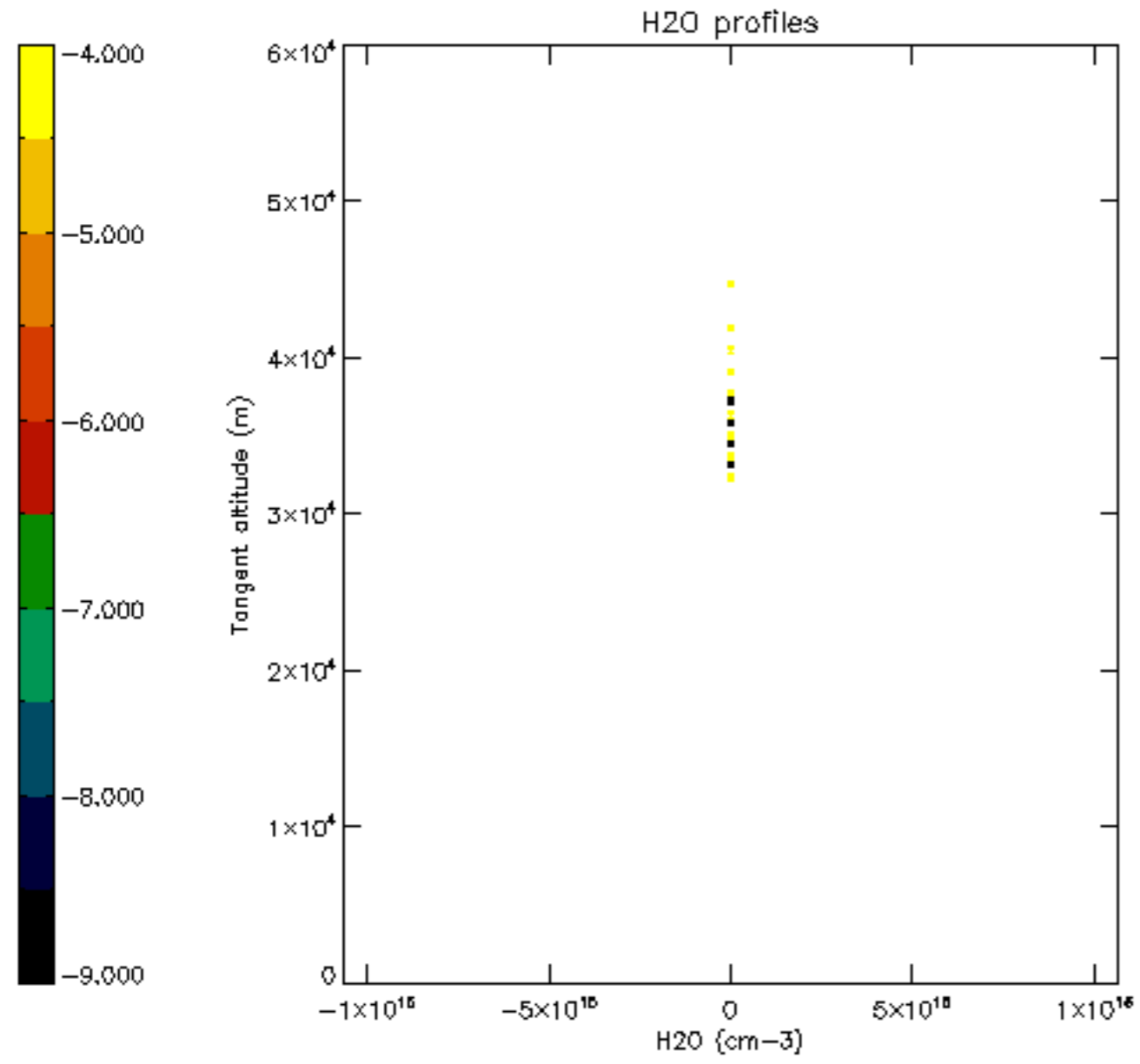


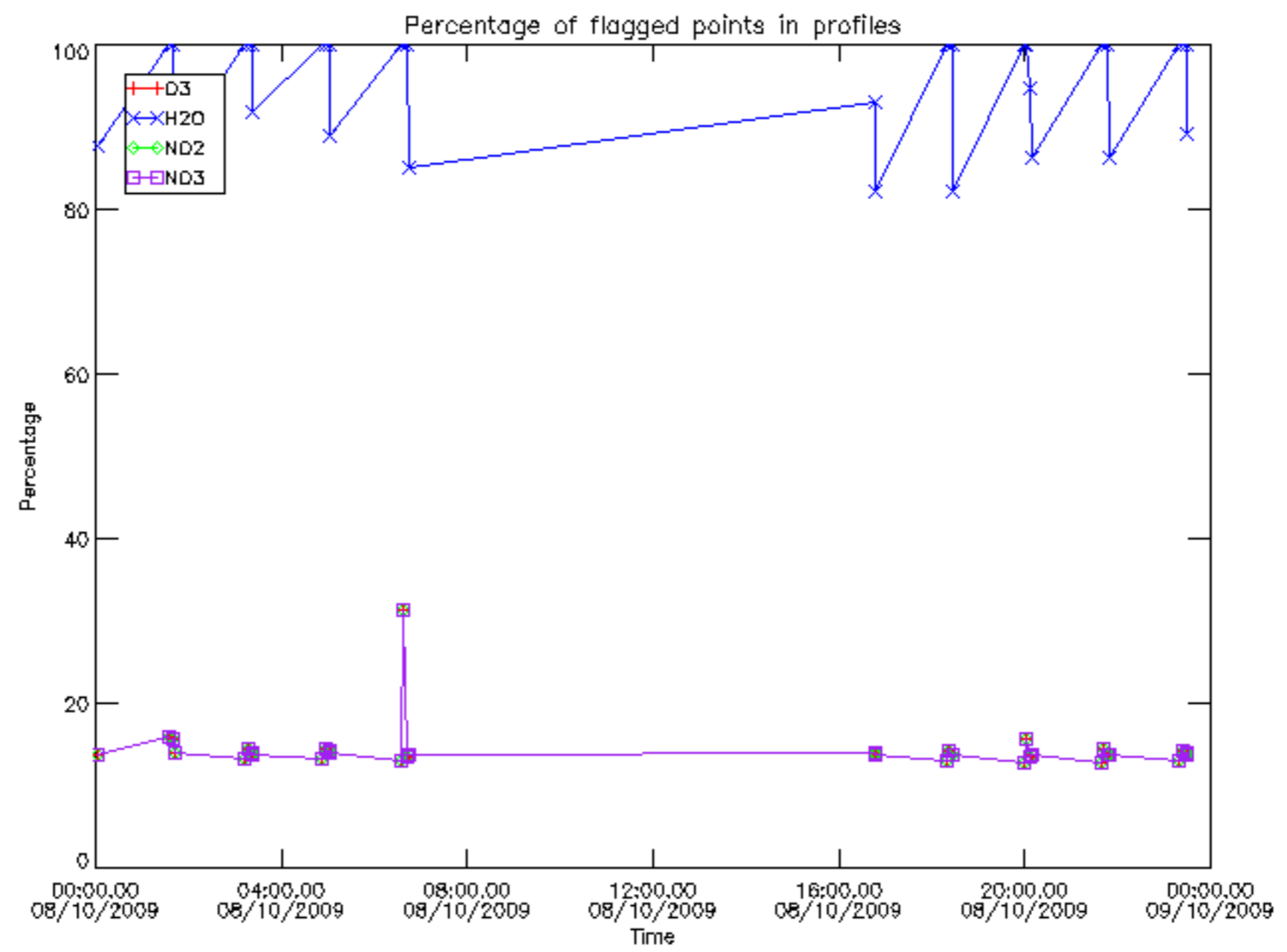




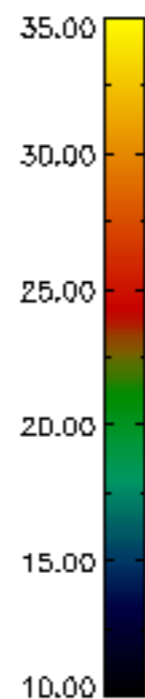
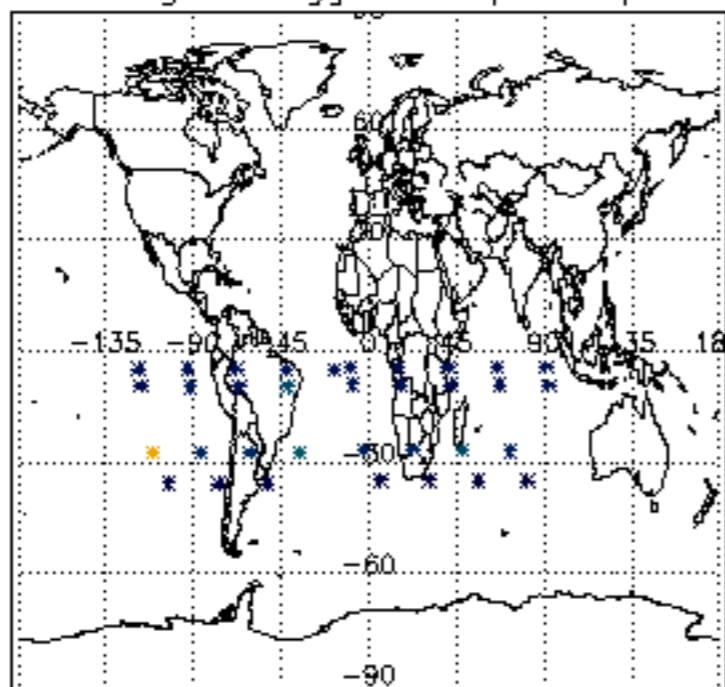




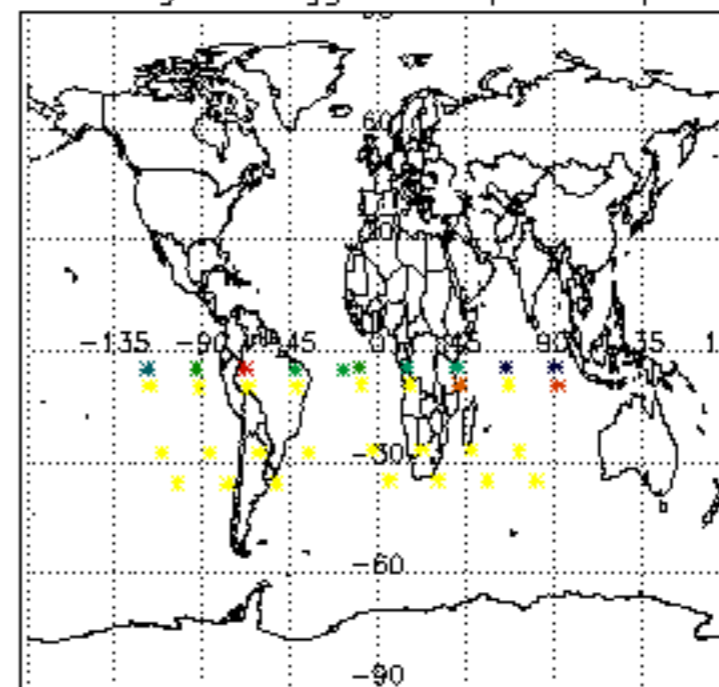




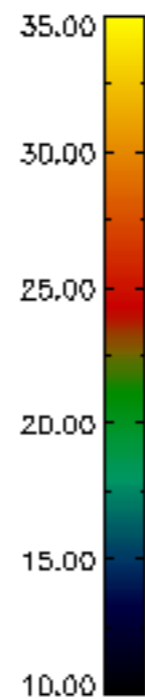
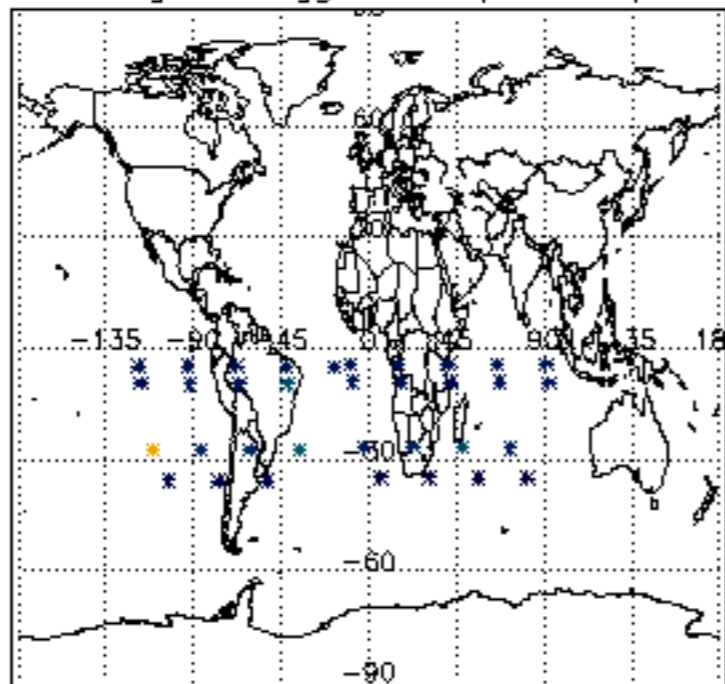
Percentage of flagged data per D3 profile



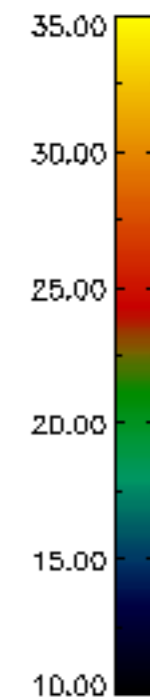
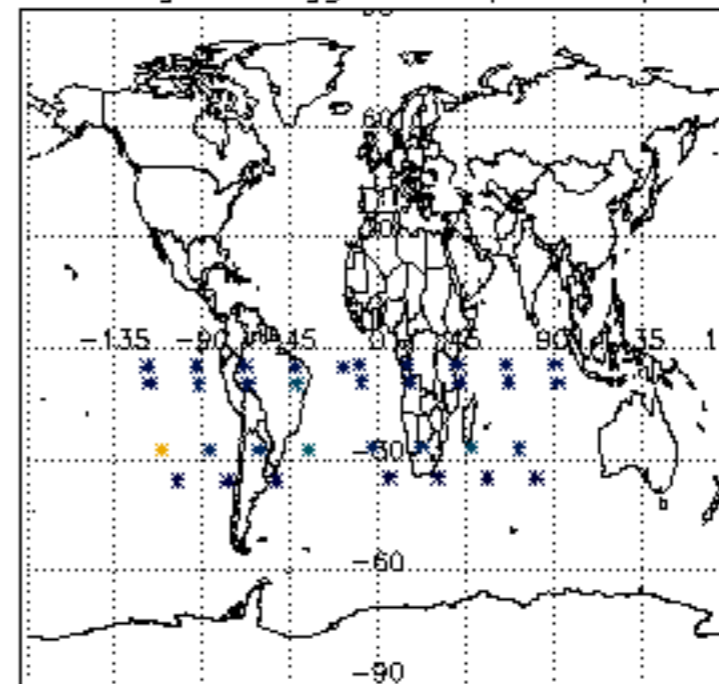
Percentage of flagged data per H2O profile

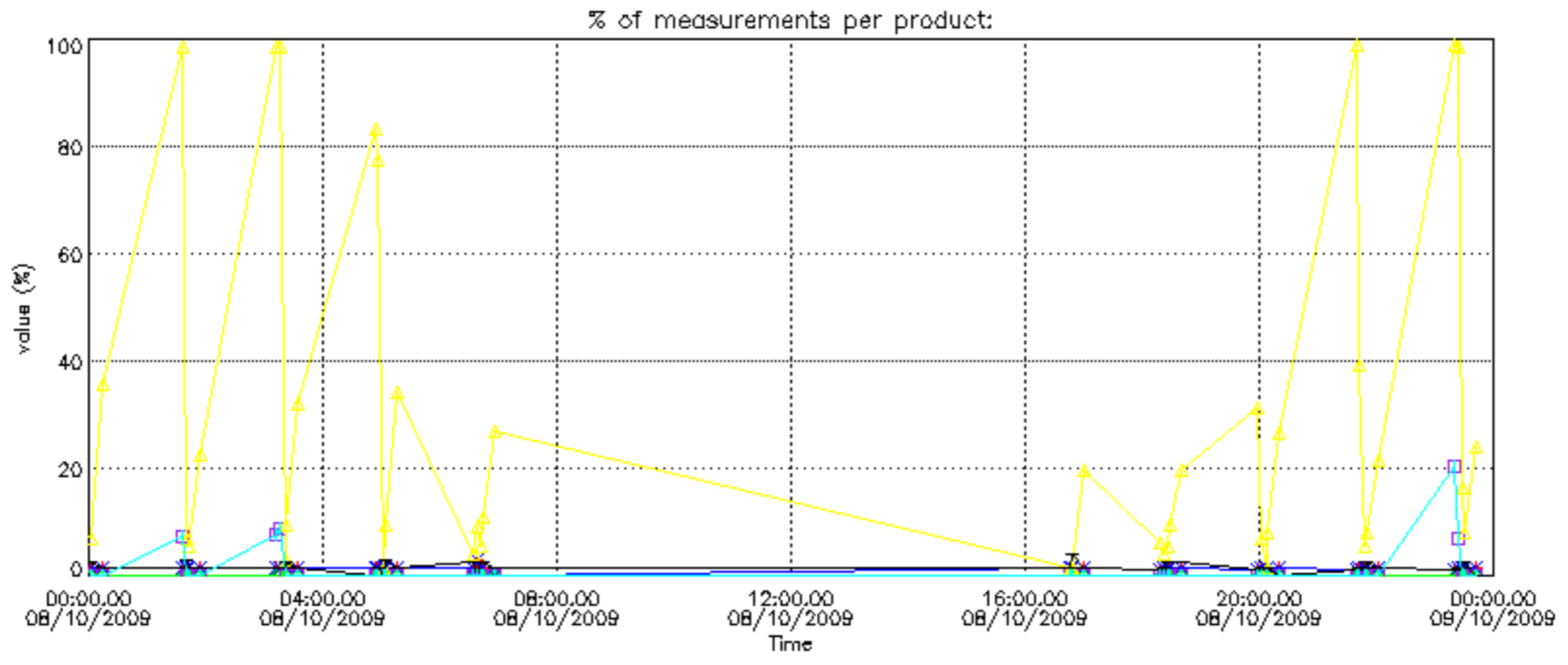


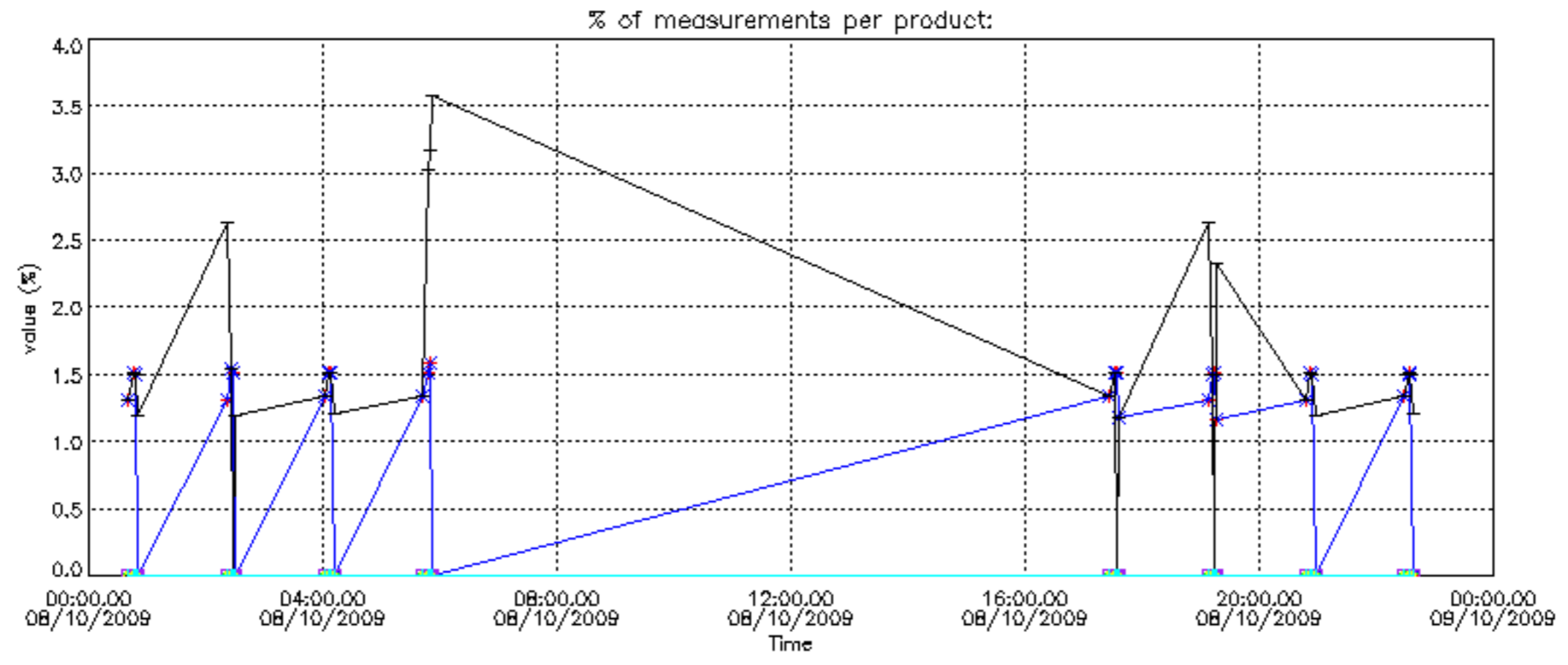
Percentage of flagged data per NO2 profile



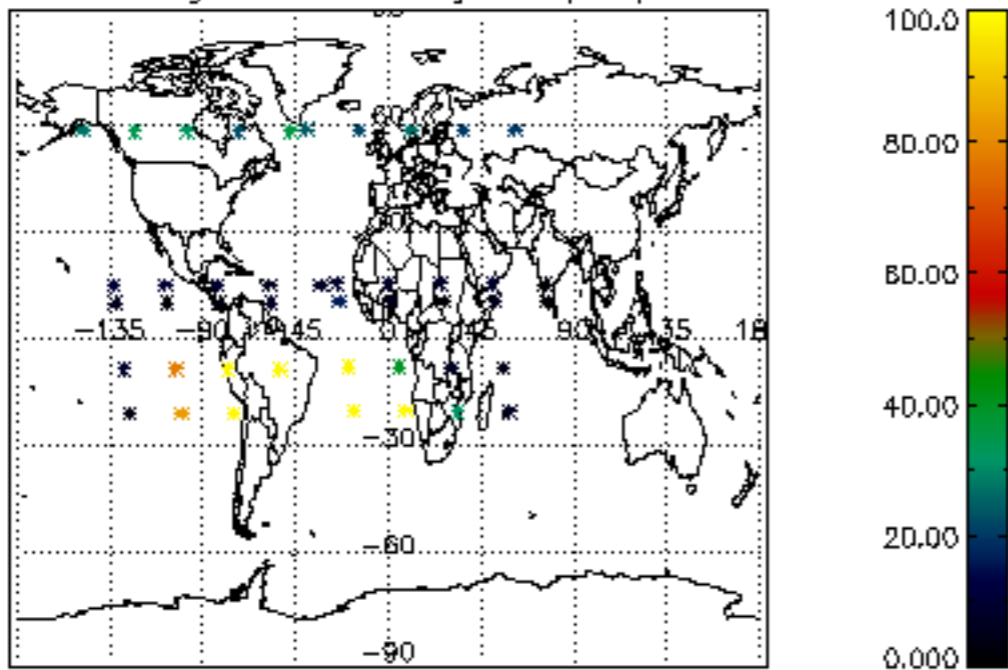
Percentage of flagged data per NO3 profile



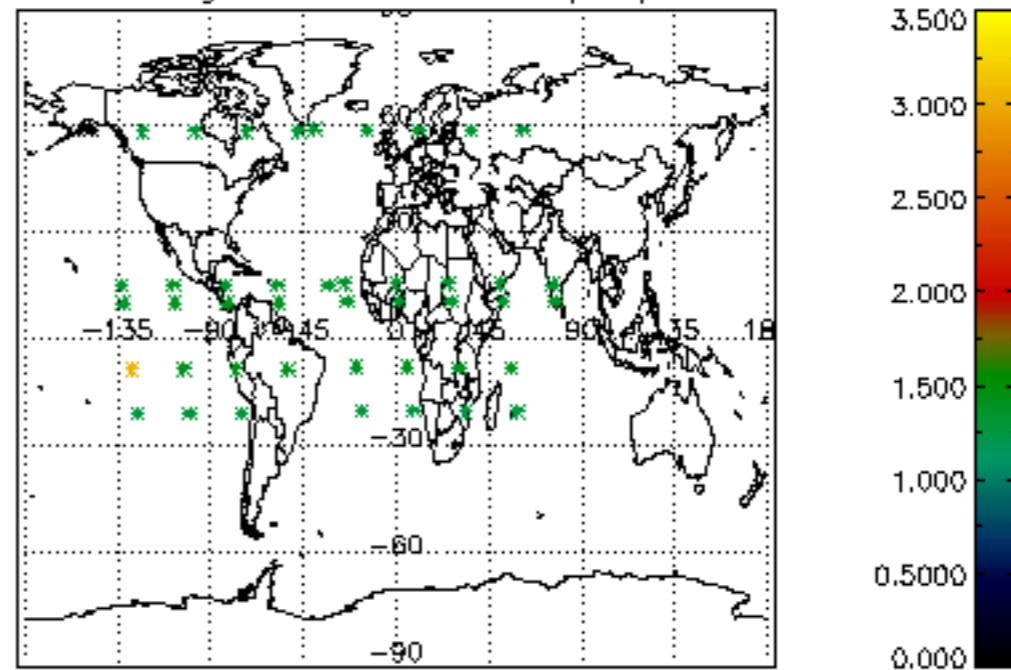




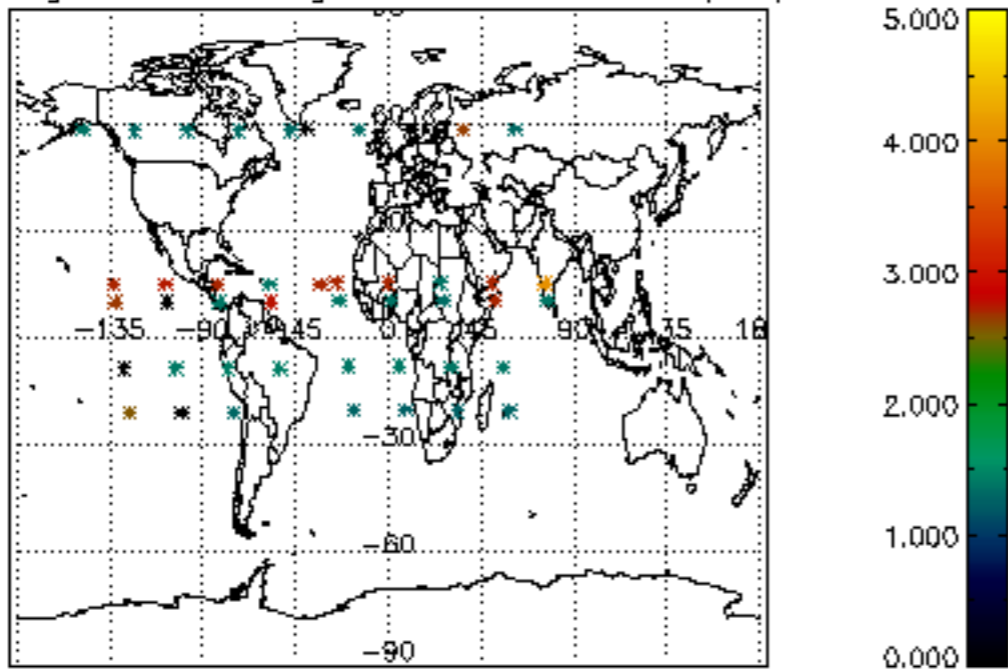
Percentage of cosmic ray hits per profile



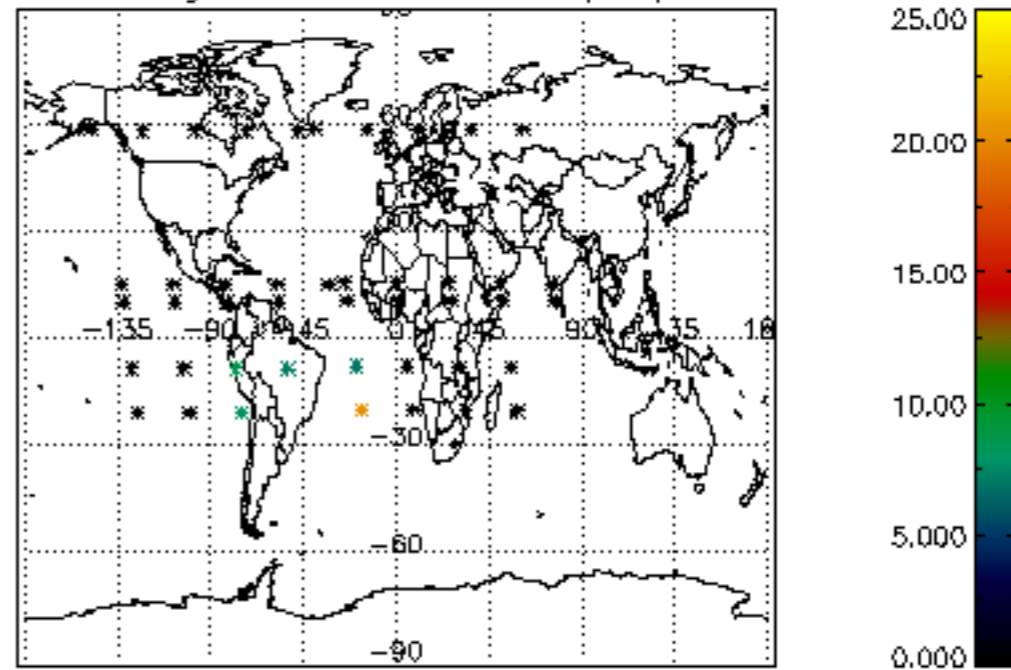
Percentage of datation errors per profile



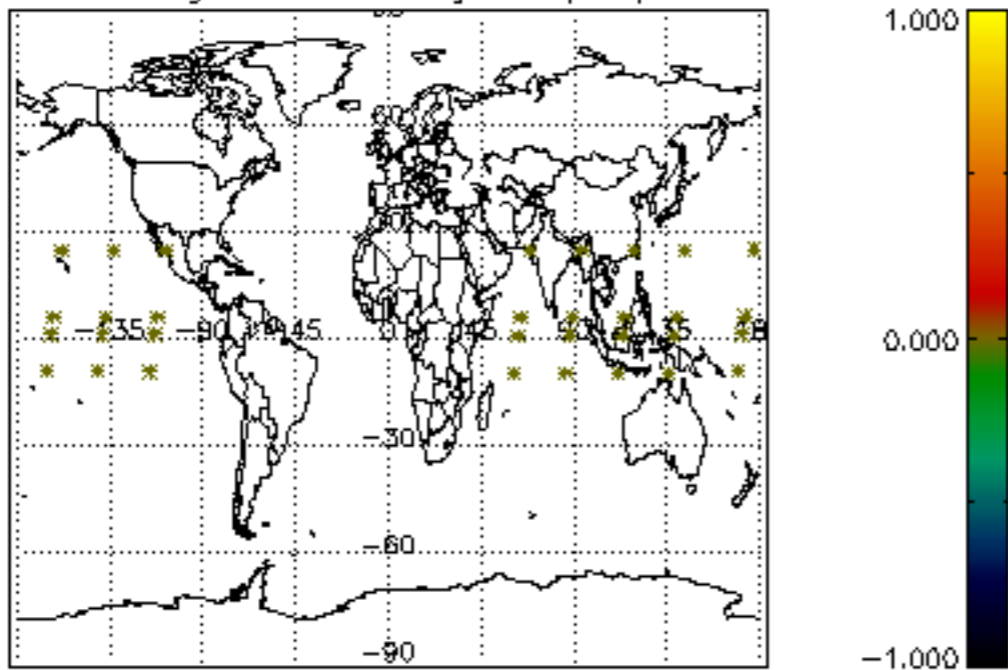
Percentage of star falling outside central band per profile



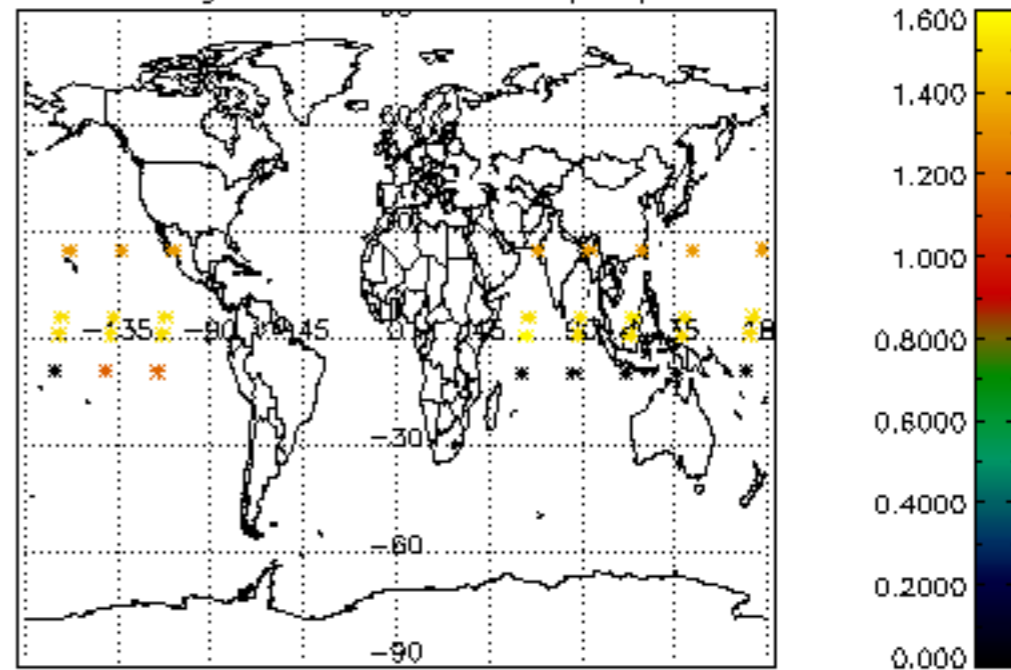
Percentage of saturation errors per profile



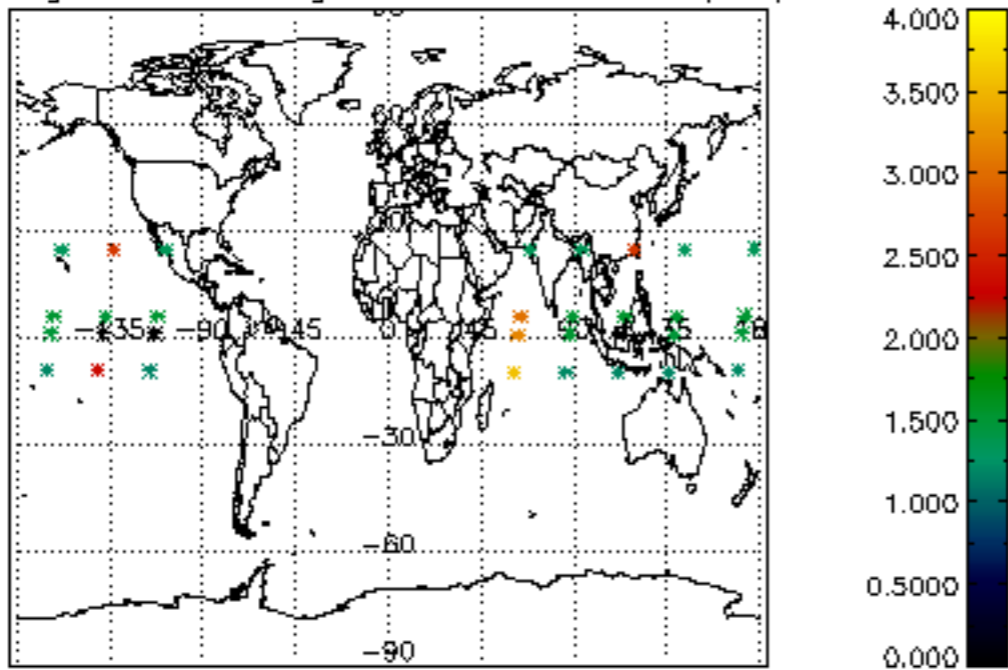
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

