

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	24APR2013 04:03:05
Data source version	GOMOS/6.01
Start time of products	07-09-2006 (07SEP2006 00:00:00)
Stop time of products	08-09-2006 (08SEP2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	196
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

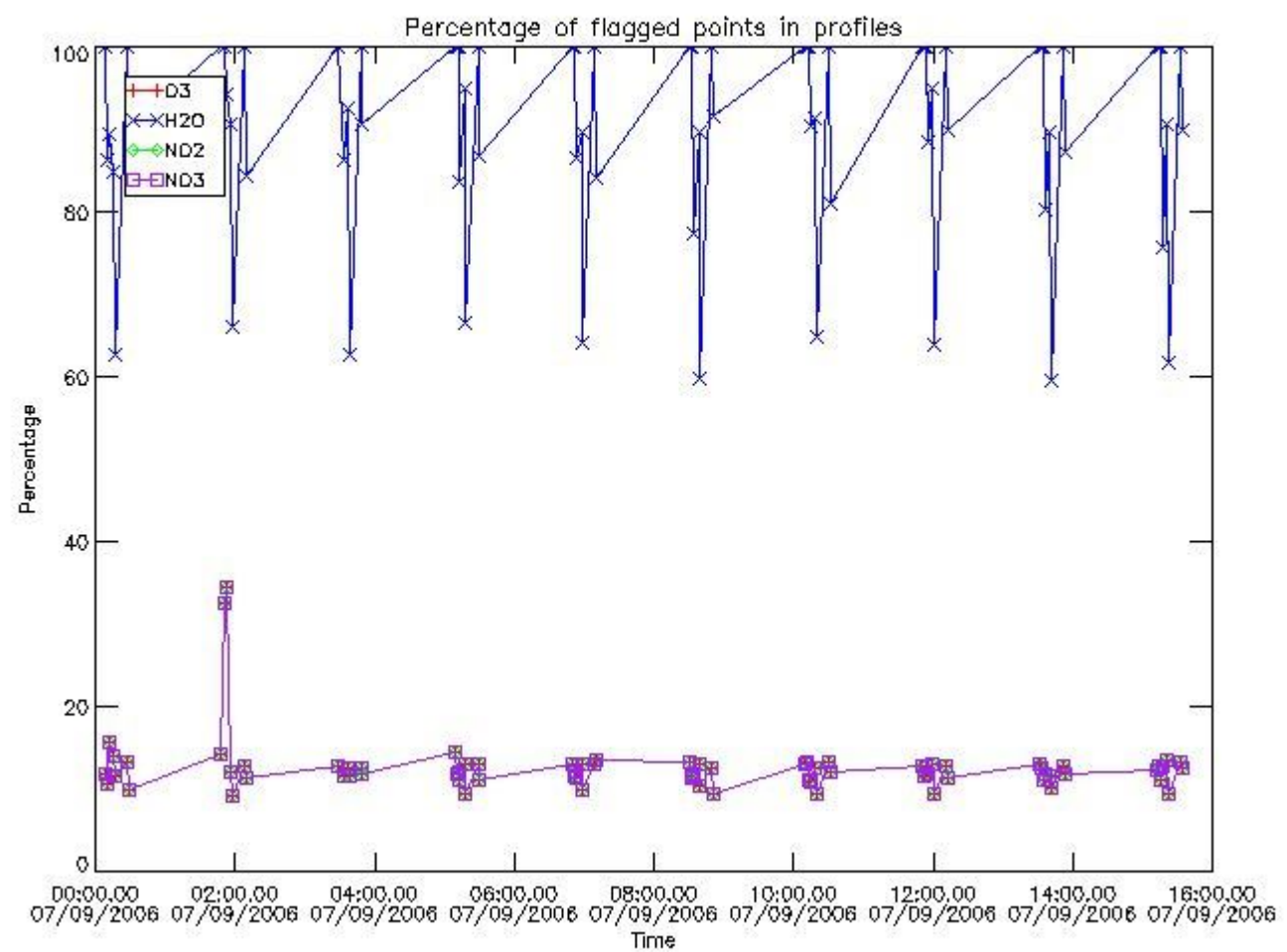
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060907_000836_000000432051_00030_23631_1827.N1	07-SEP-2006 00:08:36	Dark	43.000	179	24Omi2CMa	3.0320	24000.	86	23631	No
2	GOM_NL__2PRFIN20060907_001005_000000482051_00030_23631_1828.N1	07-SEP-2006 00:10:05	Dark	48.000	23	21Eps CMa	1.5020	26000.	96	23631	No
3	GOM_NL__2PRFIN20060907_001128_000000432051_00030_23631_1829.N1	07-SEP-2006 00:11:28	Dark	42.500	117	Pi Pup	2.7060	3800.0	85	23631	No
4	GOM_NL__2PRFIN20060907_001529_000000402051_00030_23631_1830.N1	07-SEP-2006 00:15:29	Dark	40.000	161	Tau Pup	2.9310	4500.0	80	23631	No
5	GOM_NL__2PRFIN20060907_001642_000000452051_00030_23631_1831.N1	07-SEP-2006 00:16:42	Dark	44.500	2	Alp Car	-0.73600	7000.0	89	23631	No
6	GOM_NL__2PRFIN20060907_002706_000000392051_00031_23632_1940.N1	07-SEP-2006 00:27:06	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	23632	No
7	GOM_NL__2PRFIN20060907_002827_000000522051_00031_23632_1941.N1	07-SEP-2006 00:28:27	Dark	51.500	9	Alp Eri	0.45300	24000.	103	23632	No
8	GOM_NL__2PRFIN20060907_003557_000000392051_00031_23632_1942.N1	07-SEP-2006 00:35:57	Straylight	39.000	31	Alp Gru	1.7340	15200.	78	23632	No
9	GOM_NL__2PRFIN20060907_003846_000000382051_00031_23632_1943.N1	07-SEP-2006 00:38:46	Straylight	37.500	172	Gam Gru	3.0030	13100.	75	23632	No
10	GOM_NL__2PRFIN20060907_004005_000000482051_00031_23632_1944.N1	07-SEP-2006 00:40:05	Straylight	47.500	18	24Alp PsA	1.1660	9700.0	95	23632	No
11	GOM_NL__2PRFIN20060907_004445_000000392051_00031_23632_1945.N1	07-SEP-2006 00:44:45	Bright	38.500	142	49Del Cap	2.8500	8900.0	77	23632	No
12	GOM_NL__2PRFIN20060907_004750_000000382051_00031_23632_1946.N1	07-SEP-2006 00:47:50	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	23632	No
13	GOM_NL__2PRFIN20060907_004910_000000392051_00031_23632_1947.N1	07-SEP-2006 00:49:10	Bright	38.500	162	34Alp Aqr	2.9440	5350.0	77	23632	No
14	GOM_NL__2PRFIN20060907_005208_000000382051_00031_23632_1948.N1	07-SEP-2006 00:52:08	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	23632	No
15	GOM_NL__2PRFIN20060907_005910_000000372051_00031_23632_1949.N1	07-SEP-2006 00:59:10	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	23632	No
16	GOM_NL__2PRFIN20060907_010108_000000352051_00031_23632_1950.N1	07-SEP-2006 01:01:08	Bright	35.000	66	37Gam Cyg	2.2080	5900.0	70	23632	No
17	GOM_NL__2PRFIN20060907_010704_000000362051_00031_23632_1951.N1	07-SEP-2006 01:07:04	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	23632	No
18	GOM_NL__2PRFIN20060907_011447_000000362051_00031_23632_1952.N1	07-SEP-2006 01:14:47	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23632	No
19	GOM_NL__2PRFIN20060907_013303_000000562051_00031_23632_1953.N1	07-SEP-2006 01:33:03	Bright	56.000	17	78Bet Gem	1.1610	4500.0	112	23632	No
20	GOM_NL__2PRFIN20060907_013958_000000442051_00031_23632_1954.N1	07-SEP-2006 01:39:58	Twilight	43.500	8	10Alp CMi	0.40000	6500.0	87	23632	No
21	GOM_NL__2PRFIN20060907_014730_000000402051_00031_23632_1955.N1	07-SEP-2006 01:47:30	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	23632	No
22	GOM_NL__2PRFIN20060907_015041_000000452051_00031_23632_1956.N1	07-SEP-2006 01:50:41	Dark	45.000	23	21Eps CMa	1.5020	26000.	90	23632	No
23	GOM_NL__2PRFIN20060907_015205_000000442051_00031_23632_1957.N1	07-SEP-2006 01:52:05	Dark	44.000	117	Pi Pup	2.7060	3800.0	88	23632	No
24	GOM_NL__2PRFIN20060907_015605_000000432051_00031_23632_1958.N1	07-SEP-2006 01:56:05	Dark	42.500	161	Tau Pup	2.9310	4500.0	85	23632	No
25	GOM_NL__2PRFIN20060907_015719_000000552051_00031_23632_1959.N1	07-SEP-2006 01:57:19	Dark	55.000	2	Alp Car	-0.73600	7000.0	110	23632	No
26	GOM_NL__2PRFIN20060907_020742_000000402051_00032_23633_1812.N1	07-SEP-2006 02:07:42	Dark	40.000	143	Alp Hyi	2.8570	7200.0	80	23633	No
27	GOM_NL__2PRFIN20060907_020904_000000452051_00032_23633_1813.N1	07-SEP-2006 02:09:04	Dark	45.000	9	Alp Eri	0.45300	24000.	90	23633	No
28	GOM_NL__2PRFIN20060907_021633_000000392051_00032_23633_1814.N1	07-SEP-2006 02:16:33	Straylight	38.500	31	Alp Gru	1.7340	15200.	77	23633	No
29	GOM_NL__2PRFIN20060907_021922_000000392051_00032_23633_1815.N1	07-SEP-2006 02:19:22	Straylight	39.000	172	Gam Gru	3.0030	13100.	78	23633	No
30	GOM_NL__2PRFIN20060907_022041_000000472051_00032_23633_1816.N1	07-SEP-2006 02:20:41	Straylight	46.500	18	24Alp PsA	1.1660	9700.0	93	23633	No
31	GOM_NL__2PRFIN20060907_022521_000000392051_00032_23633_1817.N1	07-SEP-2006 02:25:21	Bright	38.500	142	49Del Cap	2.8500	8900.0	77	23633	No
32	GOM_NL__2PRFIN20060907_022826_000000382051_00032_23633_1818.N1	07-SEP-2006 02:28:26	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	23633	No
33	GOM_NL__2PRFIN20060907_022946_000000382051_00032_23633_1819.N1	07-SEP-2006 02:29:46	Bright	37.500	162	34Alp Aqr	2.9440	5350.0	75	23633	No
34	GOM_NL__2PRFIN20060907_023244_000000382051_00032_23633_1820.N1	07-SEP-2006 02:32:44	Bright	38.000	61	8Eps Peg	2.1000	3900.0	76	23633	No
35	GOM_NL__2PRFIN20060907_023946_000000352051_00032_23633_1821.N1	07-SEP-2006 02:39:46	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	23633	No
36	GOM_NL__2PRFIN20060907_024145_000000362051_00032_23633_1822.N1	07-SEP-2006 02:41:45	Bright	35.500	66	37Gam Cyg	2.2080	5900.0	71	23633	No
37	GOM_NL__2PRFIN20060907_024740_000000342051_00032_23633_1823.N1	07-SEP-2006 02:47:40	Bright	33.500	89	5Alp Cep	2.4510	8000.0	67	23633	No
38	GOM_NL__2PRFIN20060907_025523_000000332051_00032_23633_1824.N1	07-SEP-2006 02:55:23	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	23633	No
39	GOM_NL__2PRFIN20060907_031339_000000562051_00032_23633_1825.N1	07-SEP-2006 03:13:39	Bright	56.000	17	78Bet Gem	1.1610	4500.0	112	23633	No
40	GOM_NL__2PRFIN20060907_032034_000000452051_00032_23633_1826.N1	07-SEP-2006 03:20:34	Twilight	45.000	8	10Alp CMi	0.40000	6500.0	90	23633	No
41	GOM_NL__2PRFIN20060907_032806_000000402051_00032_23633_1827.N1	07-SEP-2006 03:28:06	Dark	40.000	132	15Rho Pup	2.8030	6900.0	80	23633	No
42	GOM_NL__2PRFIN20060907_033241_000000452051_00032_23633_1828.N1	07-SEP-2006 03:32:41	Dark	44.500	117	Pi Pup	2.7060	3800.0	89	23633	No

161	GOM_NL__2PRFIN20060907_125115_000000522051_00038_23639_1843.N1	07-SEP-2006 12:51:15	Bright	52.000	89	5Alp Cep	2.4510	8000.0	104	23639	No
162	GOM_NL__2PRFIN20060907_125858_000000362051_00038_23639_1844.N1	07-SEP-2006 12:58:58	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23639	No
163	GOM_NL__2PRFIN20060907_131715_000000412051_00038_23639_1845.N1	07-SEP-2006 13:17:15	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	23639	No
164	GOM_NL__2PRFIN20060907_132412_000000512051_00038_23639_1846.N1	07-SEP-2006 13:24:12	Twilight	51.000	8	10Alp CMi	0.40000	6500.0	102	23639	No
165	GOM_NL__2PRFIN20060907_133144_000000402051_00038_23639_1847.N1	07-SEP-2006 13:31:44	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	23639	No
166	GOM_NL__2PRFIN20060907_133328_000000412051_00038_23639_1848.N1	07-SEP-2006 13:33:28	Dark	41.000	179	24Omi2CMa	3.0320	24000.	82	23639	No
167	GOM_NL__2PRFIN20060907_133457_000000462051_00038_23639_1849.N1	07-SEP-2006 13:34:57	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	23639	No
168	GOM_NL__2PRFIN20060907_133620_000000442051_00038_23639_1850.N1	07-SEP-2006 13:36:20	Dark	43.500	117	Pi Pup	2.7060	3800.0	87	23639	No
169	GOM_NL__2PRFIN20060907_134020_000000442051_00038_23639_1851.N1	07-SEP-2006 13:40:20	Dark	44.000	161	Tau Pup	2.9310	4500.0	88	23639	No
170	GOM_NL__2PRFIN20060907_134134_000000502051_00038_23639_1852.N1	07-SEP-2006 13:41:34	Dark	50.000	2	Alp Car	-0.73600	7000.0	100	23639	No
171	GOM_NL__2PRFIN20060907_135158_000000402051_00039_23640_1832.N1	07-SEP-2006 13:51:58	Dark	40.000	143	Alp Hyi	2.8570	7200.0	80	23640	No
172	GOM_NL__2PRFIN20060907_135319_000000442051_00039_23640_1833.N1	07-SEP-2006 13:53:19	Dark	43.500	9	Alp Eri	0.45300	24000.	87	23640	No
173	GOM_NL__2PRFIN20060907_140046_000000372051_00039_23640_1834.N1	07-SEP-2006 14:00:46	Straylight	36.500	31	Alp Gru	1.7340	15200.	73	23640	No
174	GOM_NL__2PRFIN20060907_140334_000000372051_00039_23640_1835.N1	07-SEP-2006 14:03:34	Straylight	36.500	172	Gam Gru	3.0030	13100.	73	23640	No
175	GOM_NL__2PRFIN20060907_140454_000000442051_00039_23640_1836.N1	07-SEP-2006 14:04:54	Straylight	44.000	18	24Alp PsA	1.1660	9700.0	88	23640	No
176	GOM_NL__2PRFIN20060907_140933_000000372051_00039_23640_1837.N1	07-SEP-2006 14:09:33	Bright	36.500	142	49Del Cap	2.8500	8900.0	73	23640	No
177	GOM_NL__2PRFIN20060907_141239_000000372051_00039_23640_1838.N1	07-SEP-2006 14:12:39	Bright	37.000	154	22Bet Aqr	2.8990	5700.0	74	23640	No
178	GOM_NL__2PRFIN20060907_141357_000000392051_00039_23640_1839.N1	07-SEP-2006 14:13:57	Bright	38.500	162	34Alp Aqr	2.9440	5350.0	77	23640	No
179	GOM_NL__2PRFIN20060907_141656_000000372051_00039_23640_1840.N1	07-SEP-2006 14:16:56	Bright	36.500	61	8Eps Peg	2.1000	3900.0	73	23640	No
180	GOM_NL__2PRFIN20060907_142359_000000372051_00039_23640_1841.N1	07-SEP-2006 14:23:59	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	23640	No
181	GOM_NL__2PRFIN20060907_142558_000000362051_00039_23640_1842.N1	07-SEP-2006 14:25:58	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	23640	No
182	GOM_NL__2PRFIN20060907_143151_000000362051_00039_23640_1843.N1	07-SEP-2006 14:31:51	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	23640	No
183	GOM_NL__2PRFIN20060907_143934_000000362051_00039_23640_1844.N1	07-SEP-2006 14:39:34	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23640	No
184	GOM_NL__2PRFIN20060907_145752_000000402051_00039_23640_1845.N1	07-SEP-2006 14:57:52	Bright	40.000	17	78Bet Gem	1.1610	4500.0	80	23640	No
185	GOM_NL__2PRFIN20060907_150448_000000542051_00039_23640_1846.N1	07-SEP-2006 15:04:48	Twilight	54.000	8	10Alp CMi	0.40000	6500.0	108	23640	No
186	GOM_NL__2PRFIN20060907_151220_000000422051_00039_23640_1847.N1	07-SEP-2006 15:12:20	Dark	41.500	132	15Rho Pup	2.8030	6900.0	83	23640	No
187	GOM_NL__2PRFIN20060907_151405_000000402051_00039_23640_1848.N1	07-SEP-2006 15:14:05	Dark	40.000	179	24Omi2CMa	3.0320	24000.	80	23640	No
188	GOM_NL__2PRFIN20060907_151534_000000462051_00039_23640_1849.N1	07-SEP-2006 15:15:34	Dark	45.500	23	21Eps CMa	1.5020	26000.	91	23640	No
189	GOM_NL__2PRFIN20060907_151656_000000442051_00039_23640_1850.N1	07-SEP-2006 15:16:56	Dark	43.500	117	Pi Pup	2.7060	3800.0	87	23640	No
190	GOM_NL__2PRFIN20060907_152056_000000382051_00039_23640_1851.N1	07-SEP-2006 15:20:56	Dark	38.000	161	Tau Pup	2.9310	4500.0	76	23640	No
191	GOM_NL__2PRFIN20060907_152210_000000542051_00039_23640_1852.N1	07-SEP-2006 15:22:10	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	23640	No
192	GOM_NL__2PRFIN20060907_153234_000000392051_00040_23641_1832.N1	07-SEP-2006 15:32:34	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	23641	No
193	GOM_NL__2PRFIN20060907_153355_000000452051_00040_23641_1833.N1	07-SEP-2006 15:33:55	Dark	44.500	9	Alp Eri	0.45300	24000.	89	23641	No
194	GOM_NL__2PRFIN20060907_154122_000000452051_00040_23641_1834.N1	07-SEP-2006 15:41:22	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	23641	No
195	GOM_NL__2PRFIN20060907_154411_000000382051_00040_23641_1835.N1	07-SEP-2006 15:44:11	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	23641	No
196	GOM_NL__2PRFIN20060907_154530_000000442051_00040_23641_1836.N1	07-SEP-2006 15:45:30	Straylight	44.000	18	24Alp PsA	1.1660	9700.0	88	23641	No

3. Quality information per product

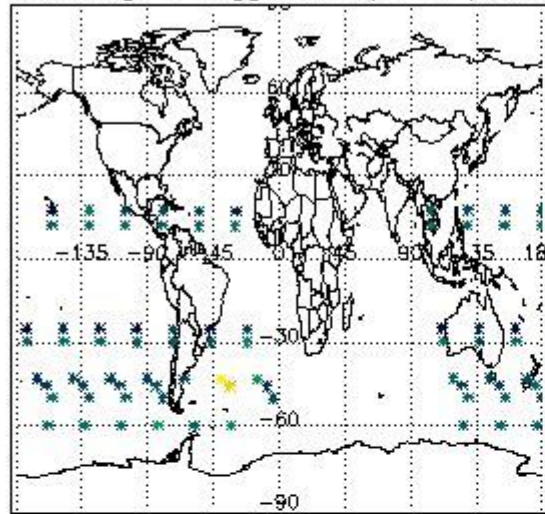
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

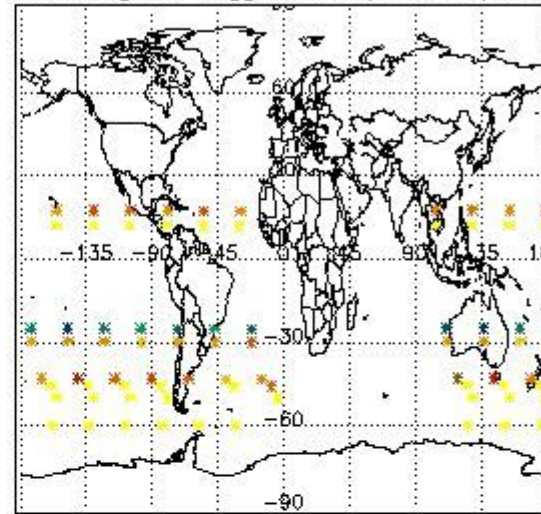


3.2 Plot quality information per product (world map)

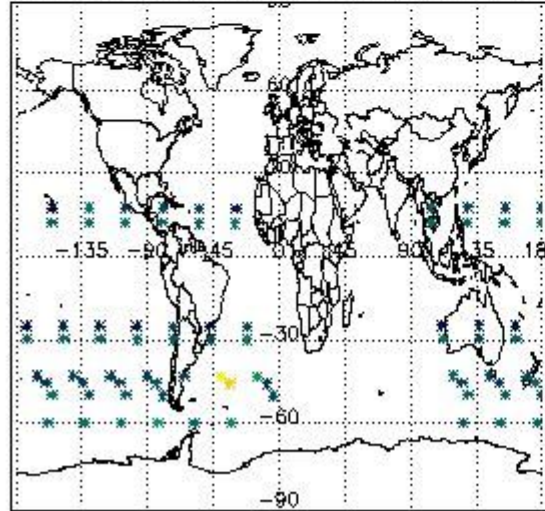
Percentage of flagged data per O3 profile



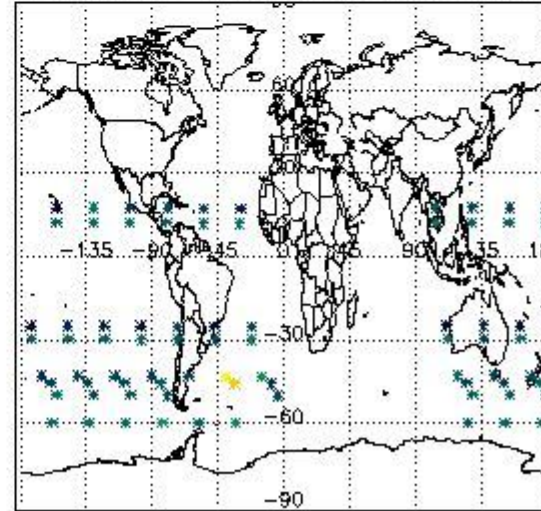
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

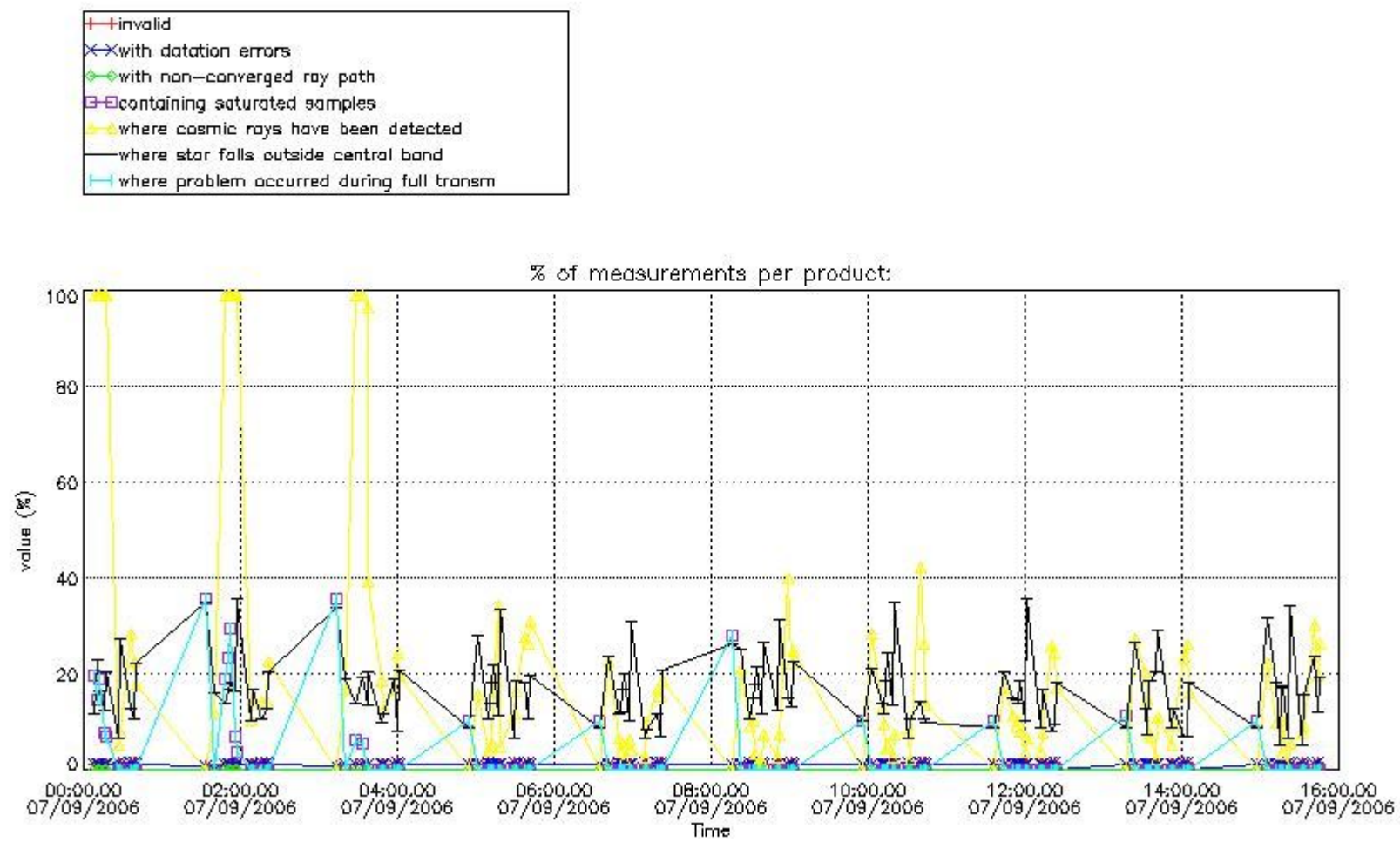


4. Level 1 quality information per product

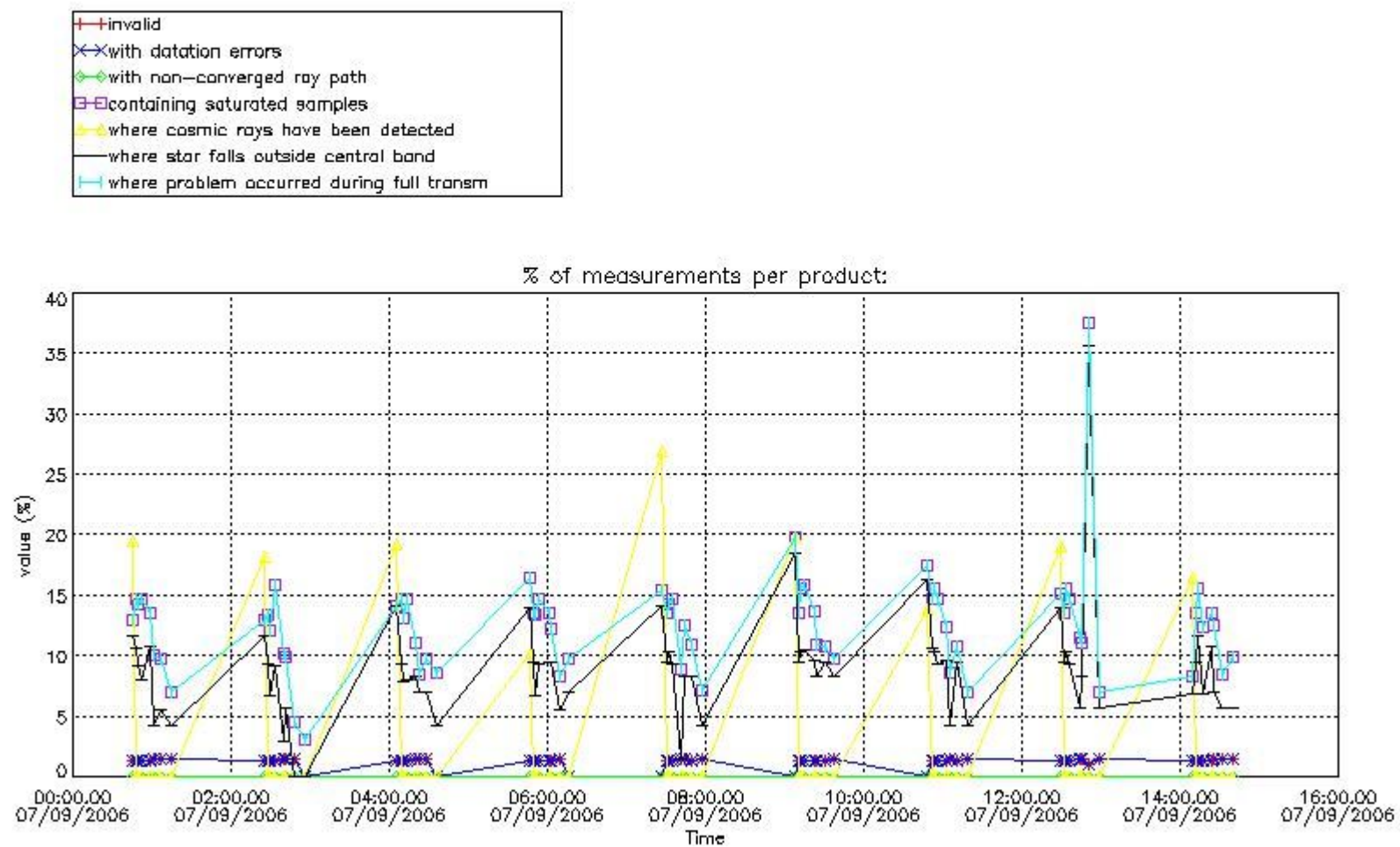
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



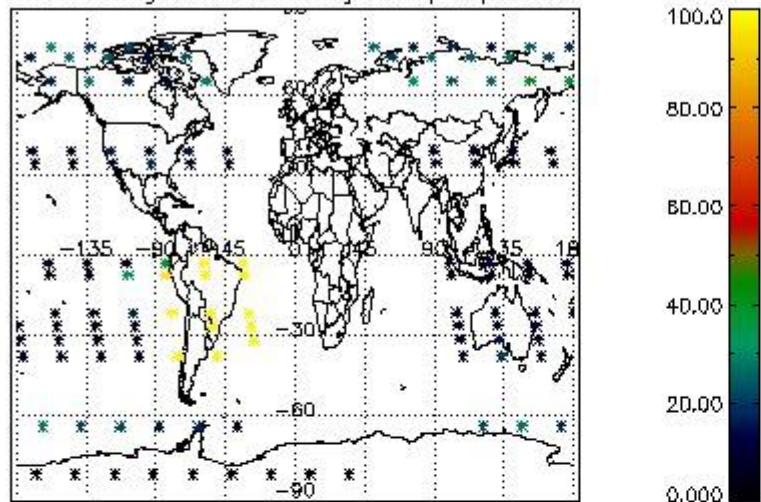
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



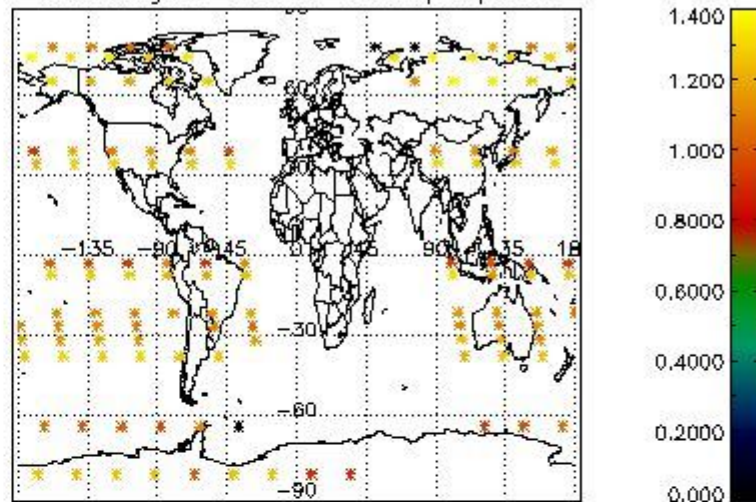
4.2 Plot quality information per product coming from level 1b processing (world map)

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

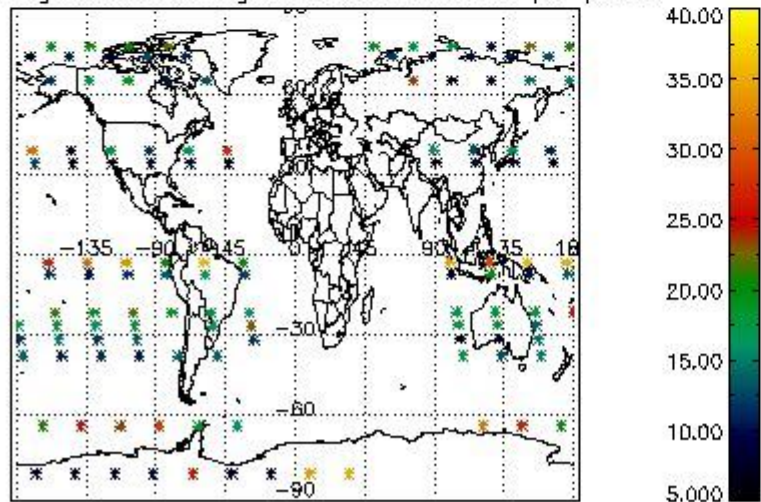
Percentage of cosmic ray hits per profile



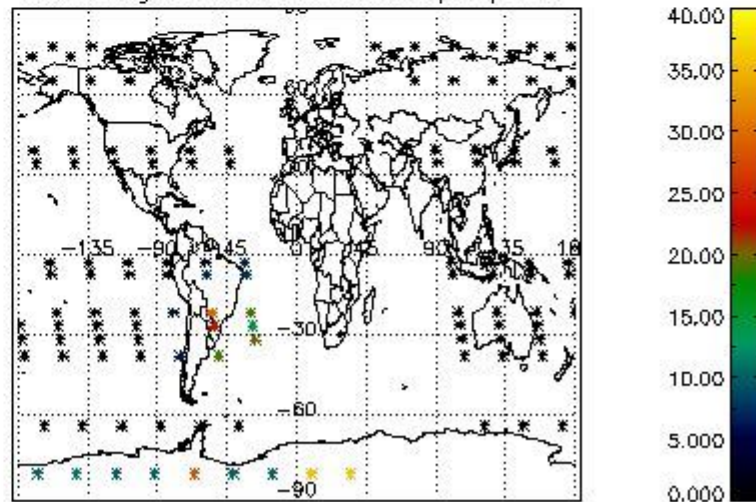
Percentage of datation errors per profile



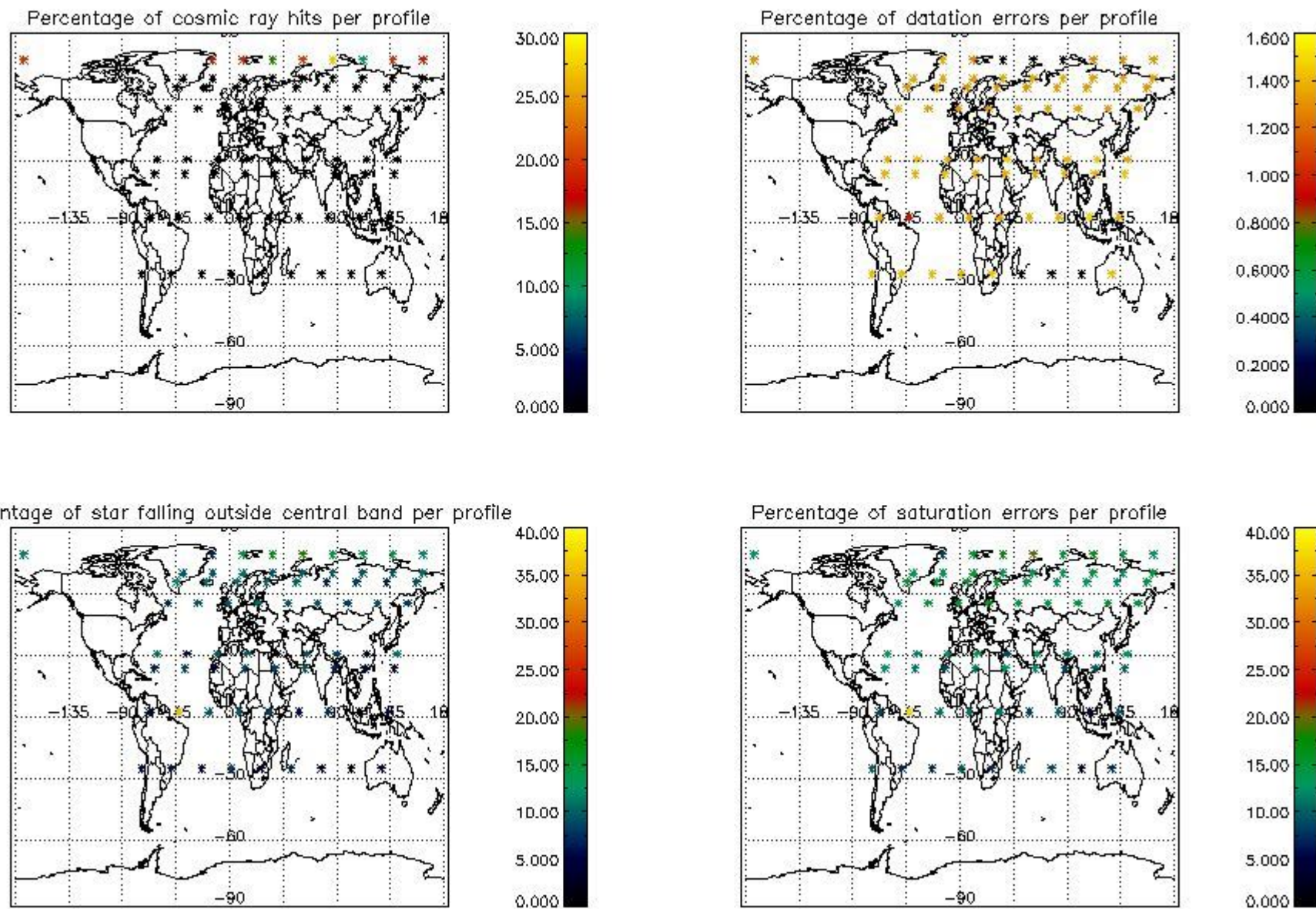
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

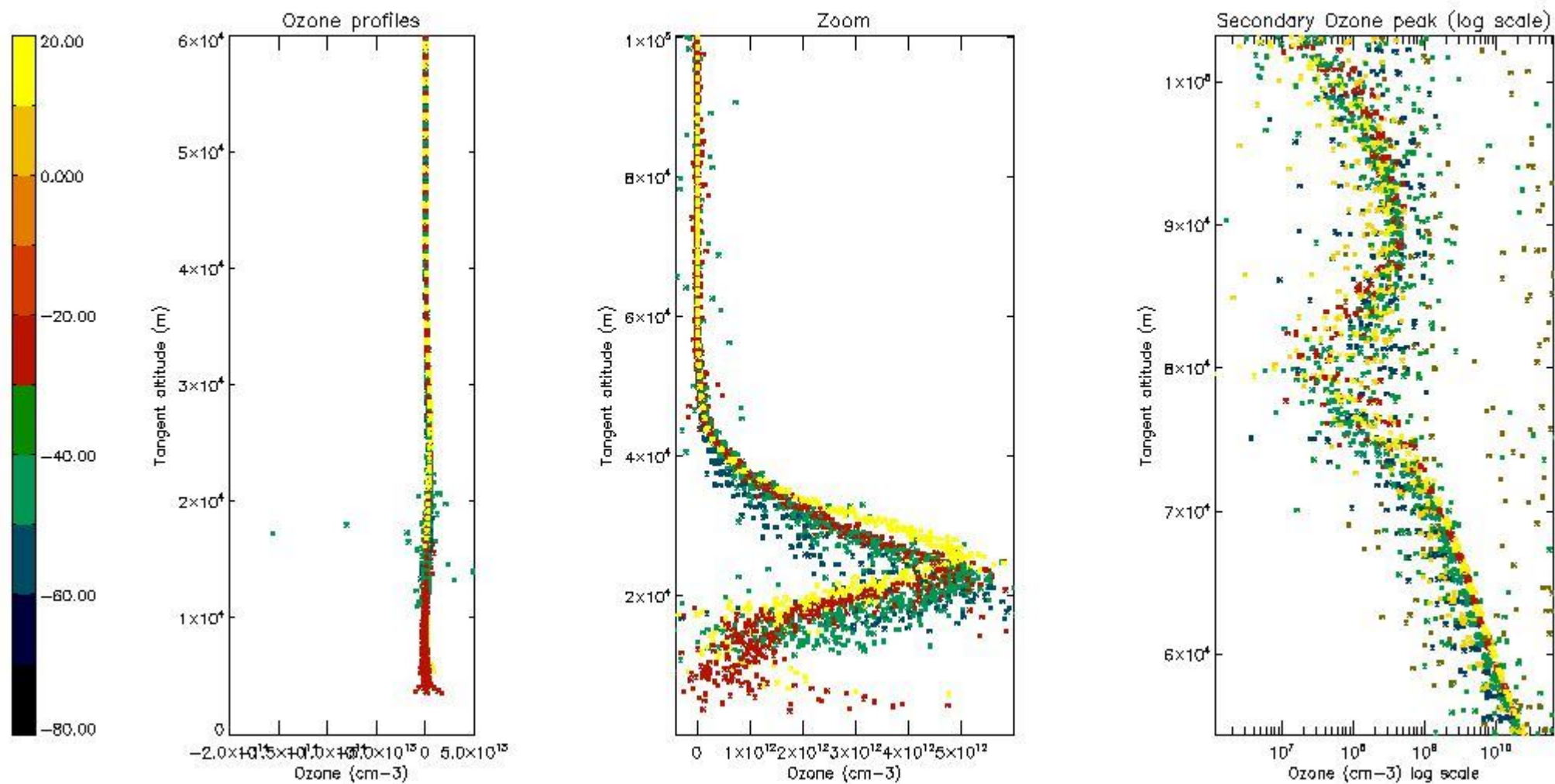
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	21

STD < 10	15
STD < 5	10

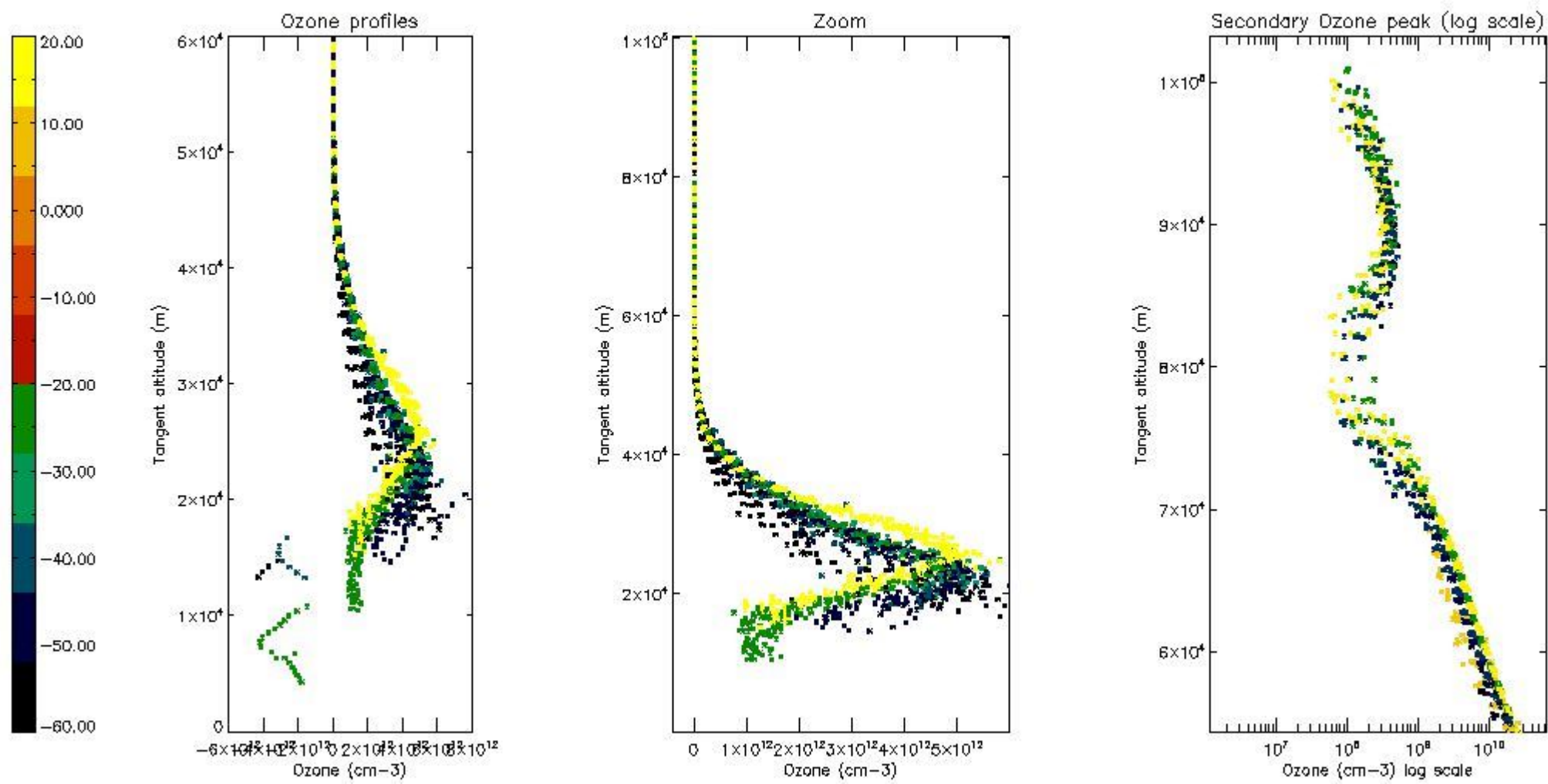
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



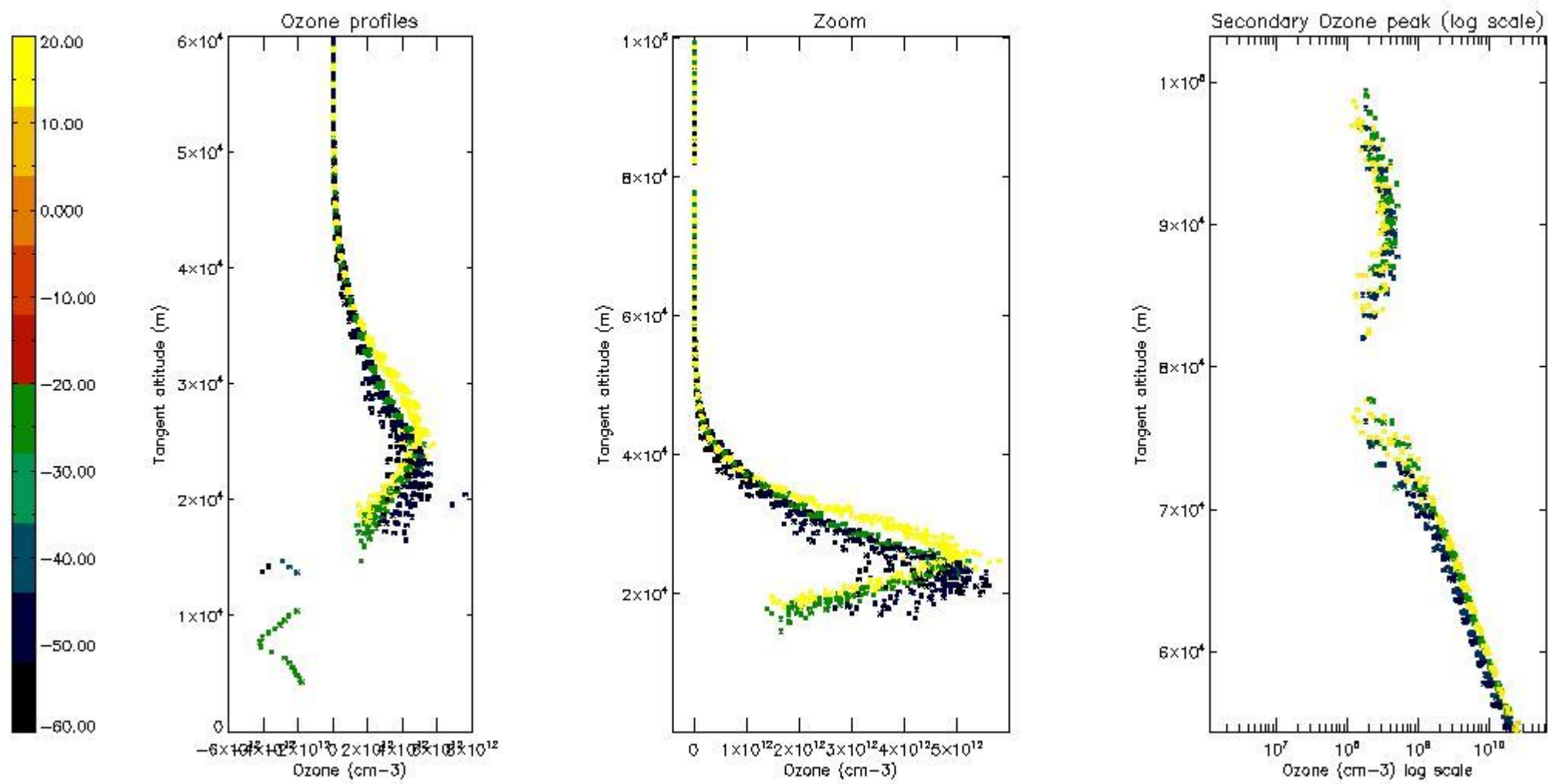
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



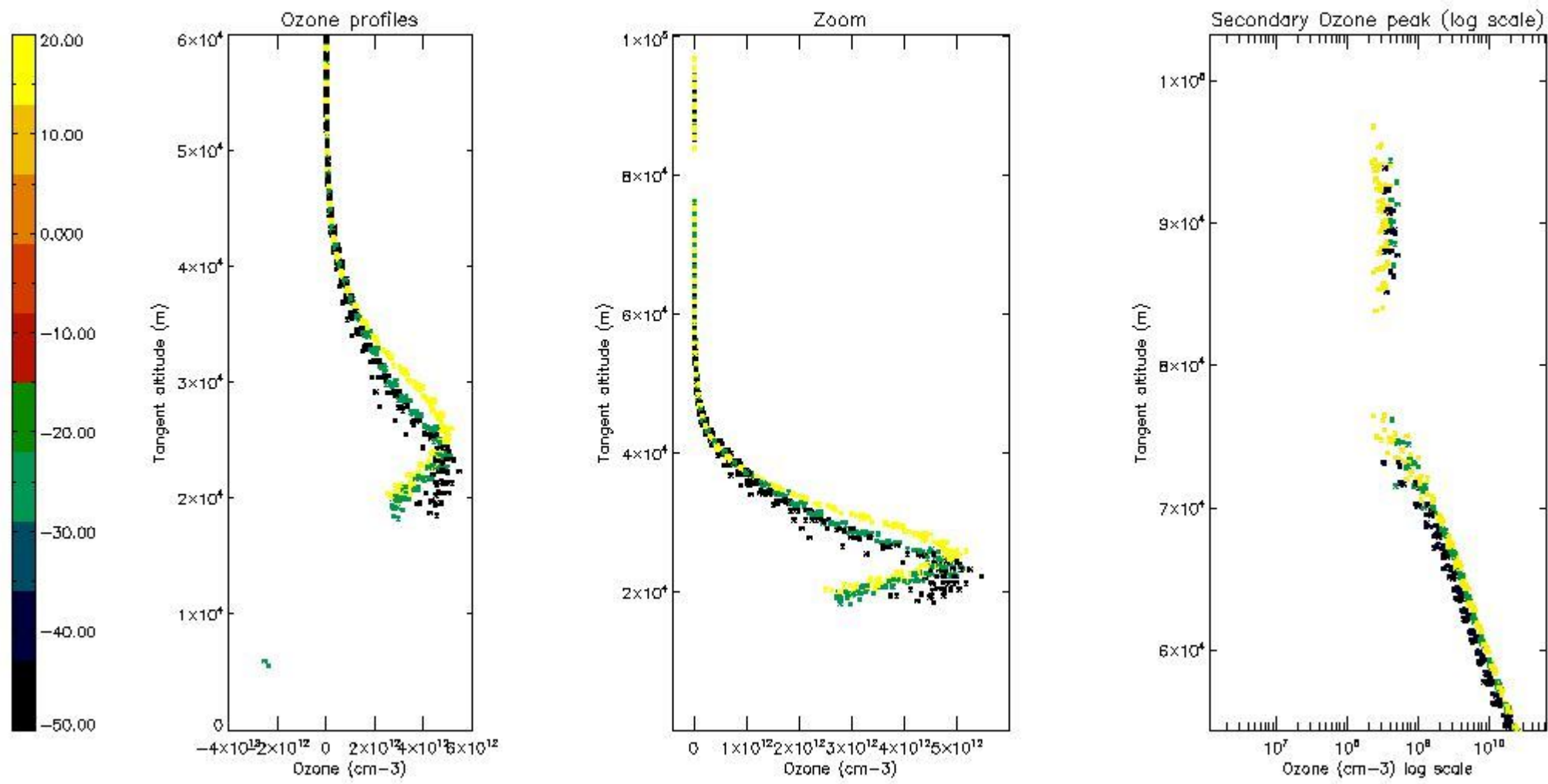
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



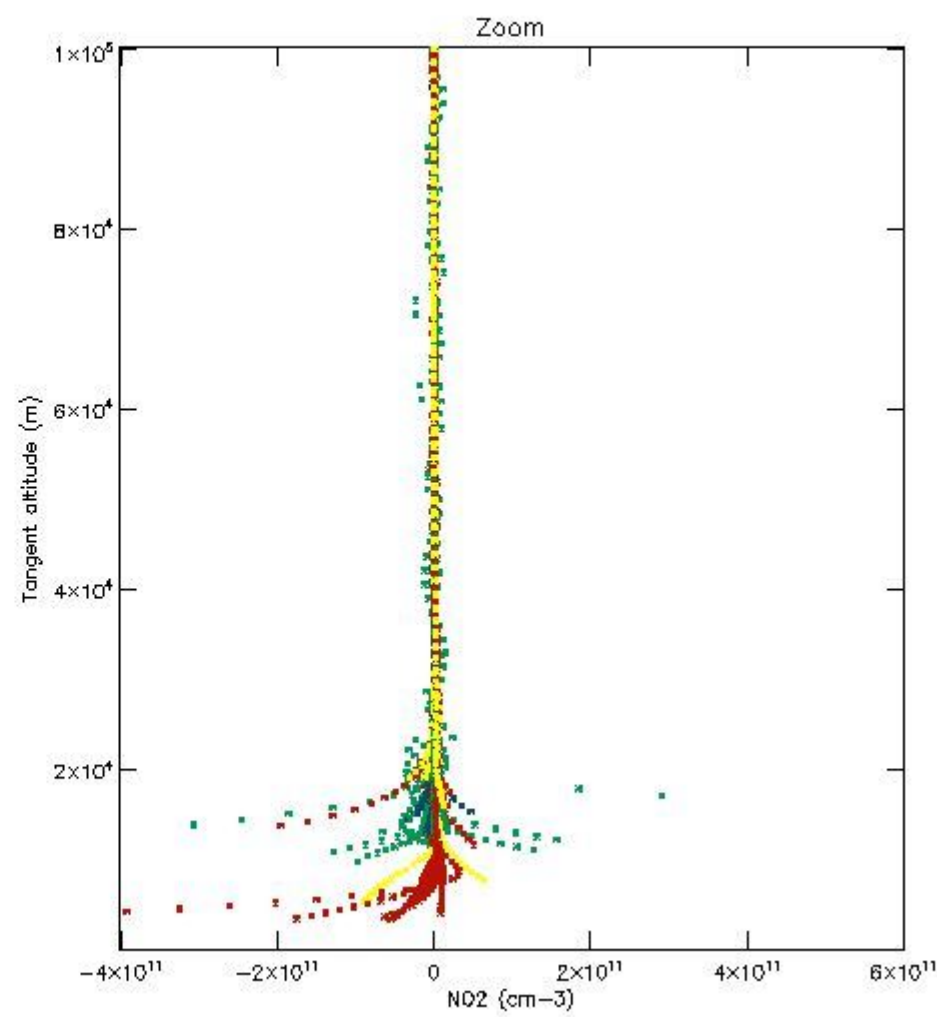
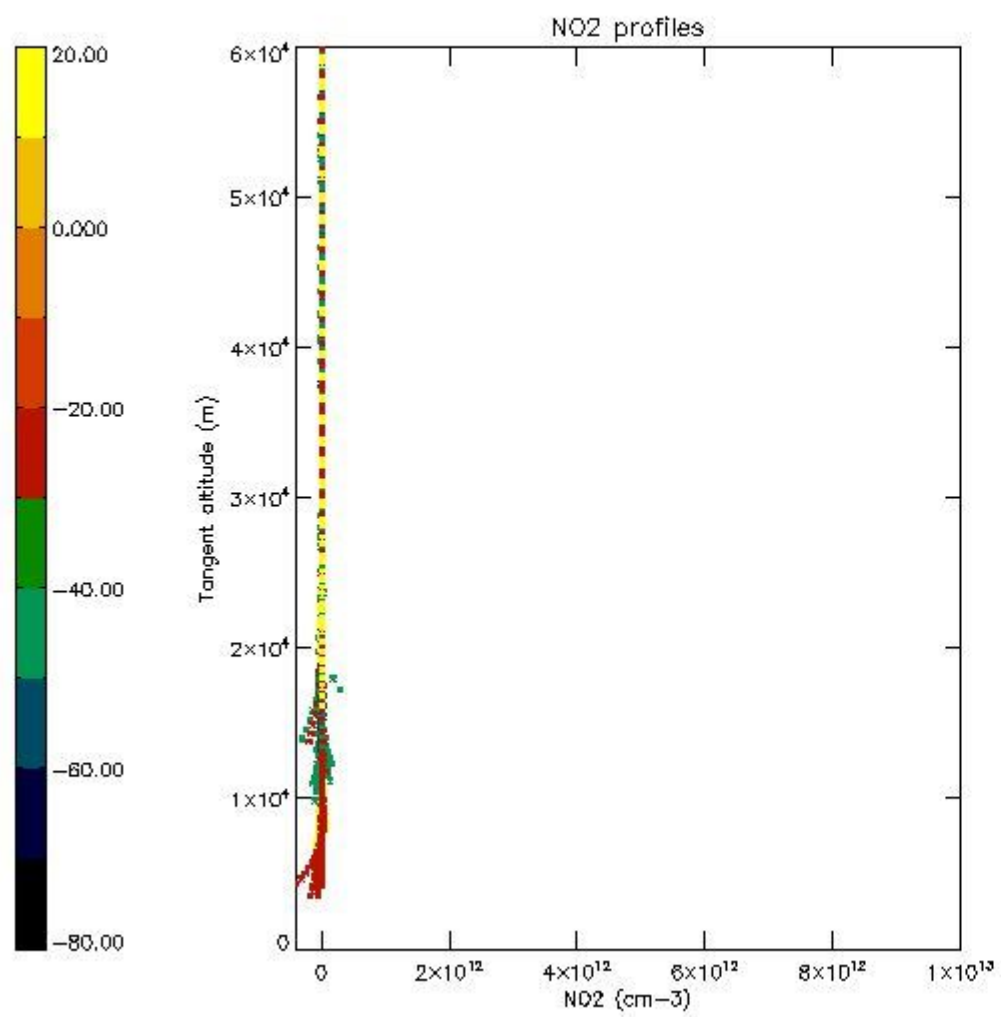
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



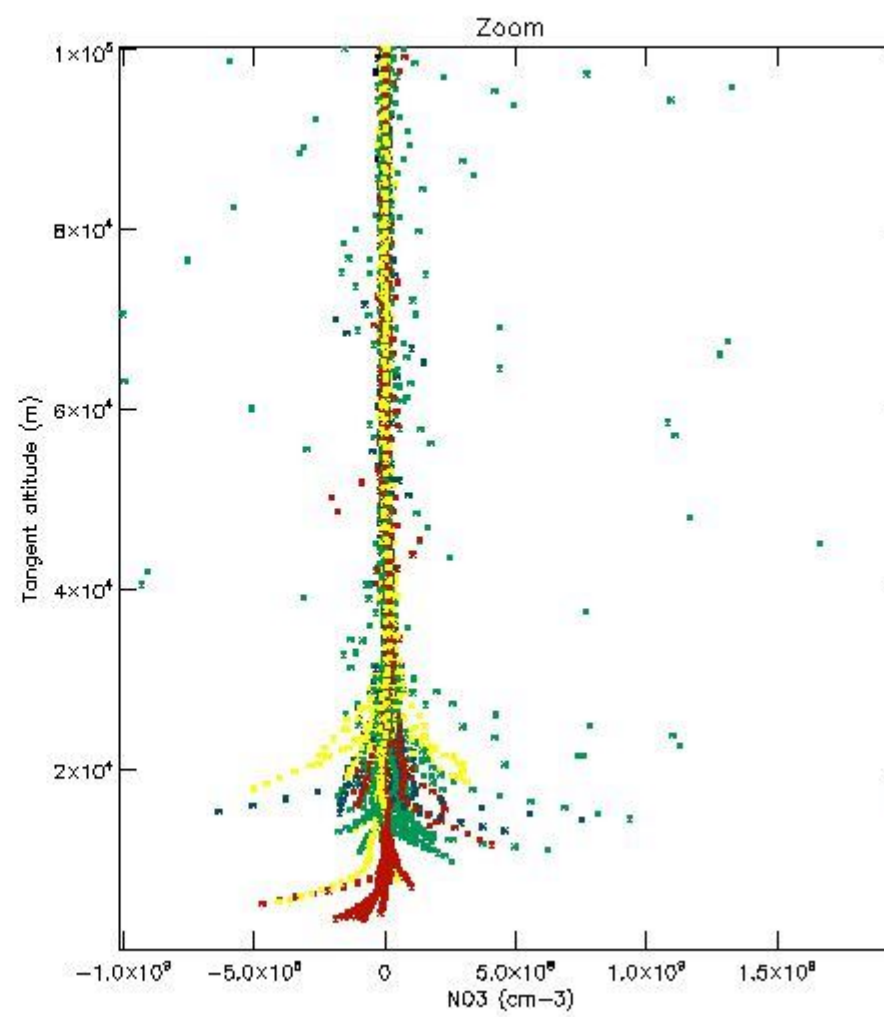
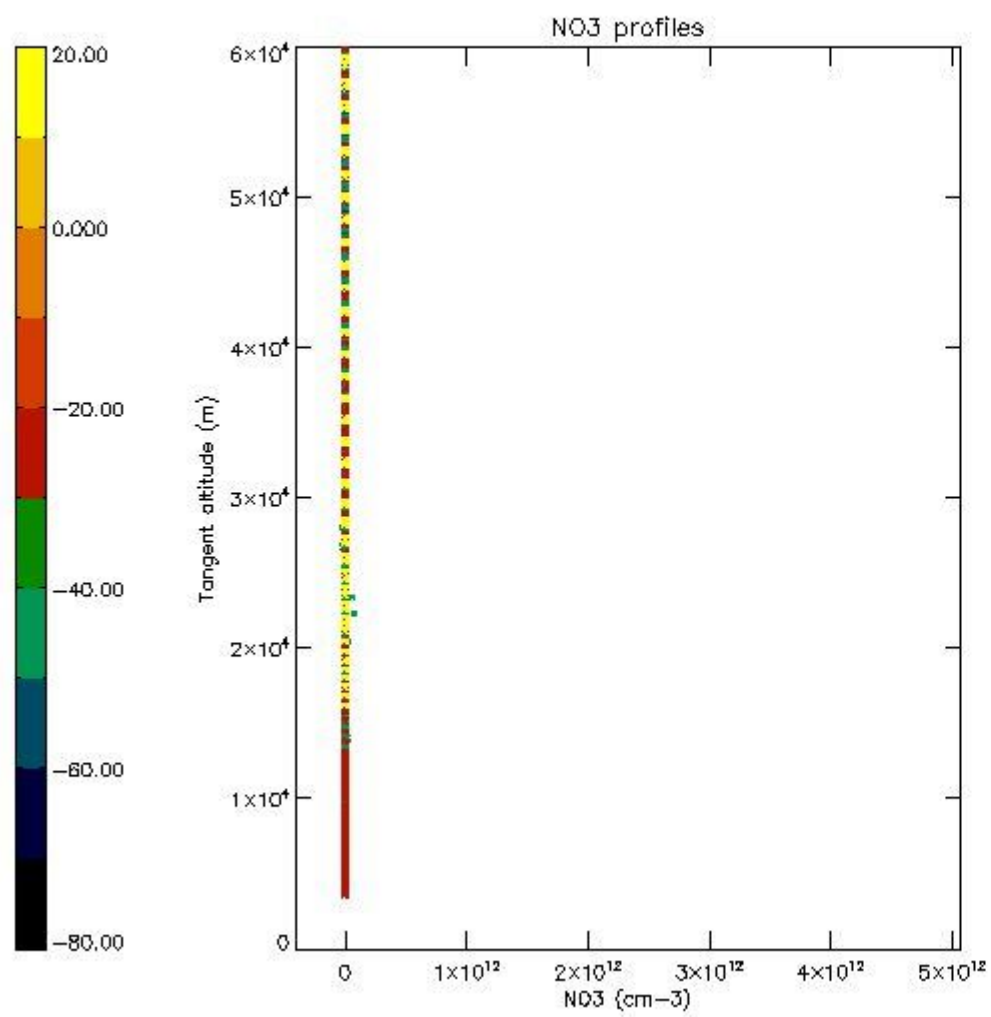
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



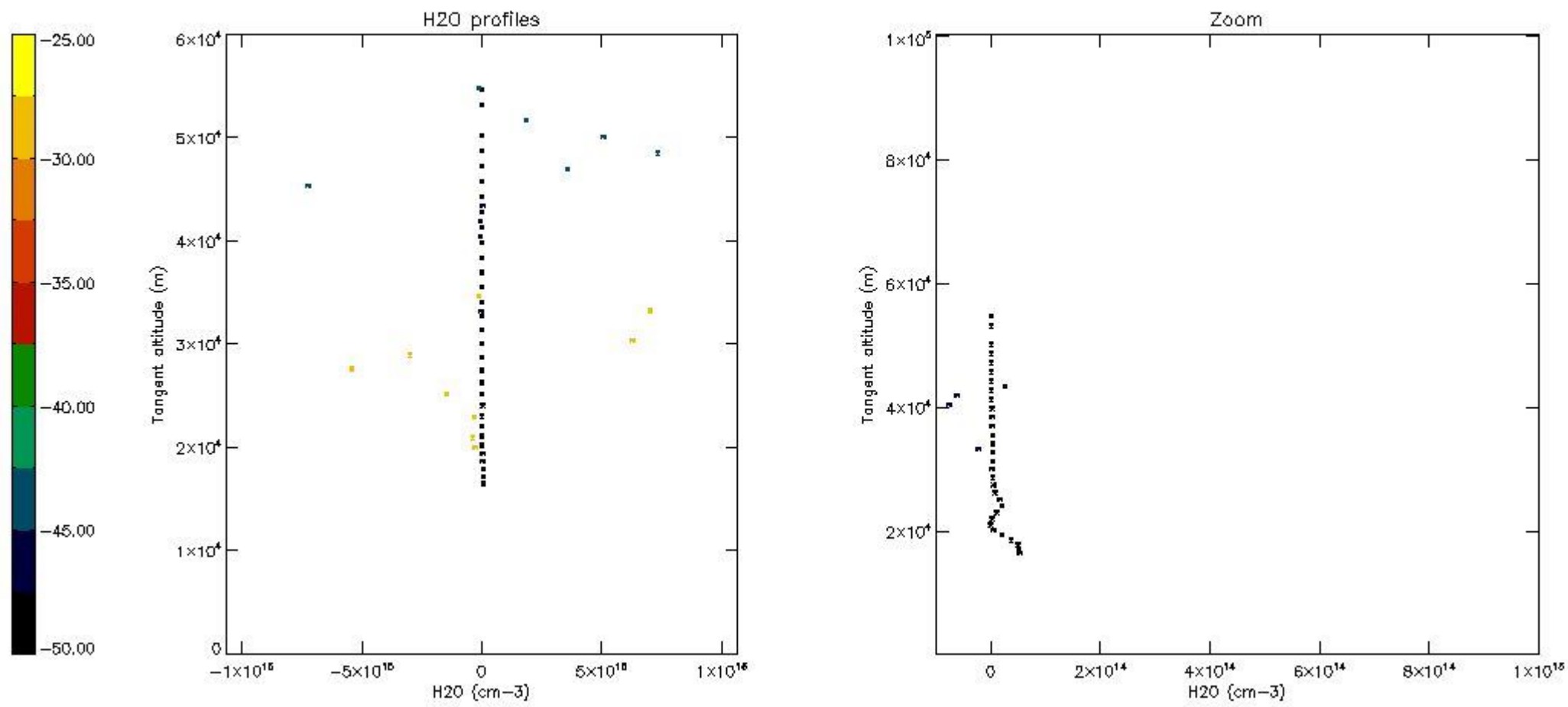
5.7 Plot NO3 profiles for all STD (dark without errors)

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	07-SEP-2006 00:08:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-SEP-2006 00:08:36
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-SEP-2006 00:08:36

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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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](#)

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[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](#)

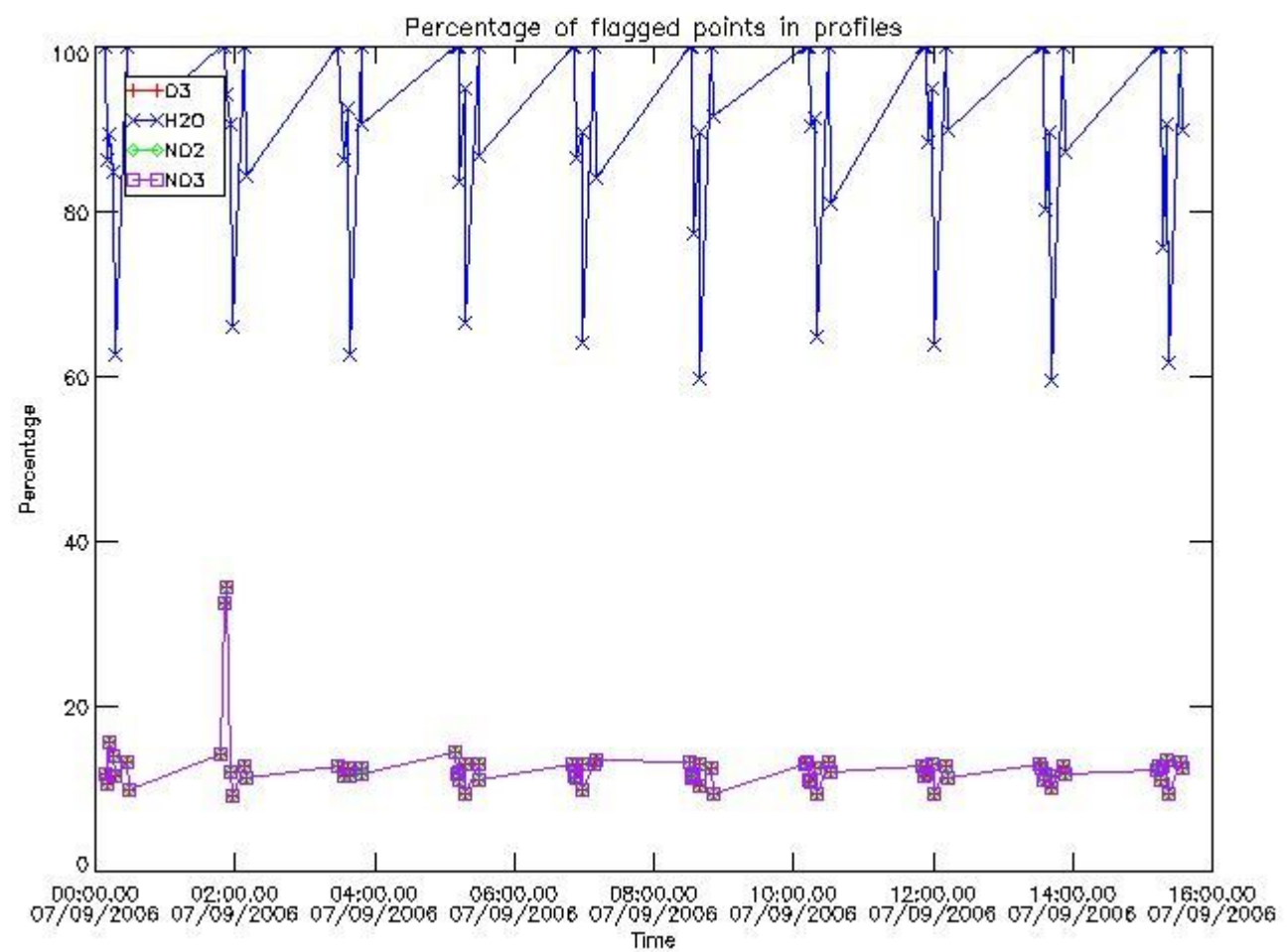
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20060907_125115_000000522051_00038_23639_1843.N1	07-SEP-2006 12:51:15	Bright	52.000	89	5Alp Cep	2.4510	8000.0	104	23639	No
162	GOM_NL__2PRFIN20060907_125858_000000362051_00038_23639_1844.N1	07-SEP-2006 12:58:58	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23639	No
163	GOM_NL__2PRFIN20060907_131715_000000412051_00038_23639_1845.N1	07-SEP-2006 13:17:15	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	23639	No
164	GOM_NL__2PRFIN20060907_132412_000000512051_00038_23639_1846.N1	07-SEP-2006 13:24:12	Twilight	51.000	8	10Alp CMi	0.40000	6500.0	102	23639	No
165	GOM_NL__2PRFIN20060907_133144_000000402051_00038_23639_1847.N1	07-SEP-2006 13:31:44	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	23639	No
166	GOM_NL__2PRFIN20060907_133328_000000412051_00038_23639_1848.N1	07-SEP-2006 13:33:28	Dark	41.000	179	24Omi2CMa	3.0320	24000.	82	23639	No
167	GOM_NL__2PRFIN20060907_133457_000000462051_00038_23639_1849.N1	07-SEP-2006 13:34:57	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	23639	No
168	GOM_NL__2PRFIN20060907_133620_000000442051_00038_23639_1850.N1	07-SEP-2006 13:36:20	Dark	43.500	117	Pi Pup	2.7060	3800.0	87	23639	No
169	GOM_NL__2PRFIN20060907_134020_000000442051_00038_23639_1851.N1	07-SEP-2006 13:40:20	Dark	44.000	161	Tau Pup	2.9310	4500.0	88	23639	No
170	GOM_NL__2PRFIN20060907_134134_000000502051_00038_23639_1852.N1	07-SEP-2006 13:41:34	Dark	50.000	2	Alp Car	-0.73600	7000.0	100	23639	No
171	GOM_NL__2PRFIN20060907_135158_000000402051_00039_23640_1832.N1	07-SEP-2006 13:51:58	Dark	40.000	143	Alp Hyi	2.8570	7200.0	80	23640	No
172	GOM_NL__2PRFIN20060907_135319_000000442051_00039_23640_1833.N1	07-SEP-2006 13:53:19	Dark	43.500	9	Alp Eri	0.45300	24000.	87	23640	No
173	GOM_NL__2PRFIN20060907_140046_000000372051_00039_23640_1834.N1	07-SEP-2006 14:00:46	Straylight	36.500	31	Alp Gru	1.7340	15200.	73	23640	No
174	GOM_NL__2PRFIN20060907_140334_000000372051_00039_23640_1835.N1	07-SEP-2006 14:03:34	Straylight	36.500	172	Gam Gru	3.0030	13100.	73	23640	No
175	GOM_NL__2PRFIN20060907_140454_000000442051_00039_23640_1836.N1	07-SEP-2006 14:04:54	Straylight	44.000	18	24Alp PsA	1.1660	9700.0	88	23640	No
176	GOM_NL__2PRFIN20060907_140933_000000372051_00039_23640_1837.N1	07-SEP-2006 14:09:33	Bright	36.500	142	49Del Cap	2.8500	8900.0	73	23640	No
177	GOM_NL__2PRFIN20060907_141239_000000372051_00039_23640_1838.N1	07-SEP-2006 14:12:39	Bright	37.000	154	22Bet Aqr	2.8990	5700.0	74	23640	No
178	GOM_NL__2PRFIN20060907_141357_000000392051_00039_23640_1839.N1	07-SEP-2006 14:13:57	Bright	38.500	162	34Alp Aqr	2.9440	5350.0	77	23640	No
179	GOM_NL__2PRFIN20060907_141656_000000372051_00039_23640_1840.N1	07-SEP-2006 14:16:56	Bright	36.500	61	8Eps Peg	2.1000	3900.0	73	23640	No
180	GOM_NL__2PRFIN20060907_142359_000000372051_00039_23640_1841.N1	07-SEP-2006 14:23:59	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	23640	No
181	GOM_NL__2PRFIN20060907_142558_000000362051_00039_23640_1842.N1	07-SEP-2006 14:25:58	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	23640	No
182	GOM_NL__2PRFIN20060907_143151_000000362051_00039_23640_1843.N1	07-SEP-2006 14:31:51	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	23640	No
183	GOM_NL__2PRFIN20060907_143934_000000362051_00039_23640_1844.N1	07-SEP-2006 14:39:34	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23640	No
184	GOM_NL__2PRFIN20060907_145752_000000402051_00039_23640_1845.N1	07-SEP-2006 14:57:52	Bright	40.000	17	78Bet Gem	1.1610	4500.0	80	23640	No
185	GOM_NL__2PRFIN20060907_150448_000000542051_00039_23640_1846.N1	07-SEP-2006 15:04:48	Twilight	54.000	8	10Alp CMi	0.40000	6500.0	108	23640	No
186	GOM_NL__2PRFIN20060907_151220_000000422051_00039_23640_1847.N1	07-SEP-2006 15:12:20	Dark	41.500	132	15Rho Pup	2.8030	6900.0	83	23640	No
187	GOM_NL__2PRFIN20060907_151405_000000402051_00039_23640_1848.N1	07-SEP-2006 15:14:05	Dark	40.000	179	24Omi2CMa	3.0320	24000.	80	23640	No
188	GOM_NL__2PRFIN20060907_151534_000000462051_00039_23640_1849.N1	07-SEP-2006 15:15:34	Dark	45.500	23	21Eps CMa	1.5020	26000.	91	23640	No
189	GOM_NL__2PRFIN20060907_151656_000000442051_00039_23640_1850.N1	07-SEP-2006 15:16:56	Dark	43.500	117	Pi Pup	2.7060	3800.0	87	23640	No
190	GOM_NL__2PRFIN20060907_152056_000000382051_00039_23640_1851.N1	07-SEP-2006 15:20:56	Dark	38.000	161	Tau Pup	2.9310	4500.0	76	23640	No
191	GOM_NL__2PRFIN20060907_152210_000000542051_00039_23640_1852.N1	07-SEP-2006 15:22:10	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	23640	No
192	GOM_NL__2PRFIN20060907_153234_000000392051_00040_23641_1832.N1	07-SEP-2006 15:32:34	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	23641	No
193	GOM_NL__2PRFIN20060907_153355_000000452051_00040_23641_1833.N1	07-SEP-2006 15:33:55	Dark	44.500	9	Alp Eri	0.45300	24000.	89	23641	No
194	GOM_NL__2PRFIN20060907_154122_000000452051_00040_23641_1834.N1	07-SEP-2006 15:41:22	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	23641	No
195	GOM_NL__2PRFIN20060907_154411_000000382051_00040_23641_1835.N1	07-SEP-2006 15:44:11	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	23641	No
196	GOM_NL__2PRFIN20060907_154530_000000442051_00040_23641_1836.N1	07-SEP-2006 15:45:30	Straylight	44.000	18	24Alp PsA	1.1660	9700.0	88	23641	No

3. Quality information per product

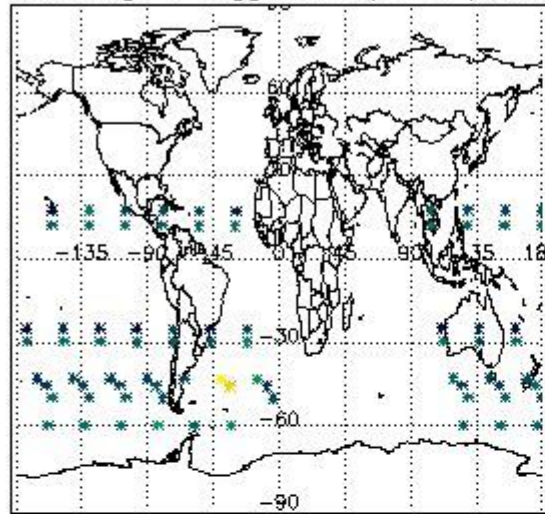
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

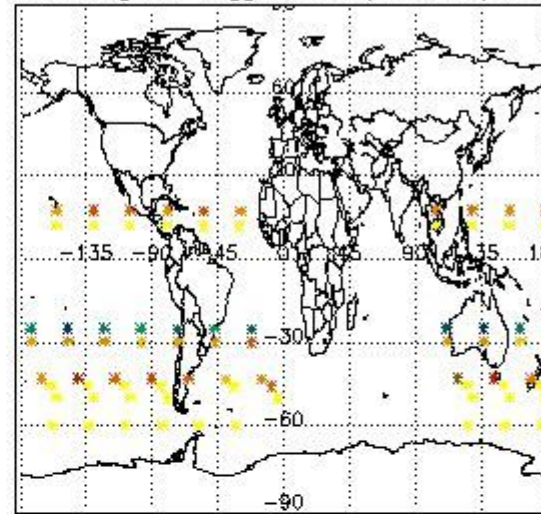


3.2 Plot quality information per product (world map)

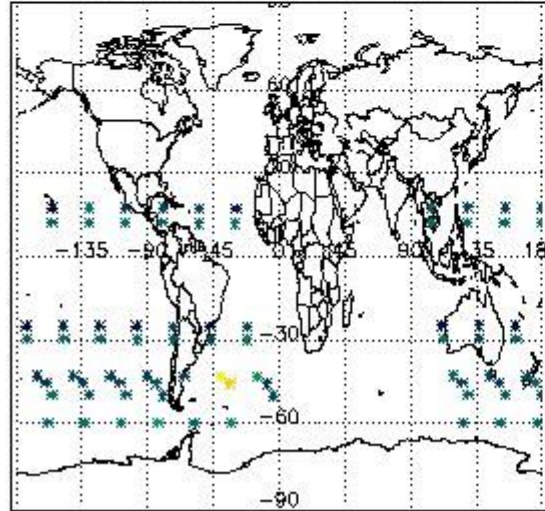
Percentage of flagged data per O3 profile



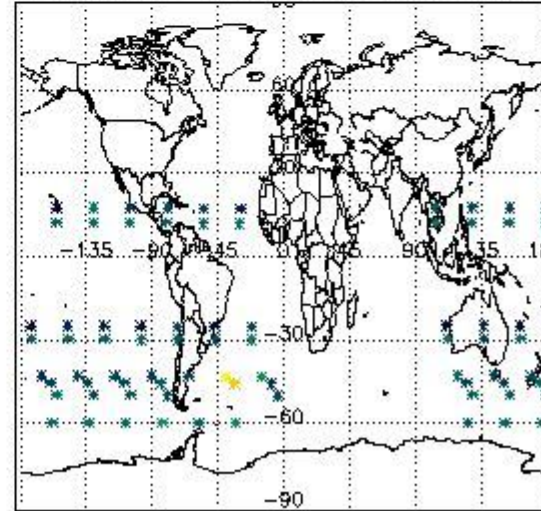
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

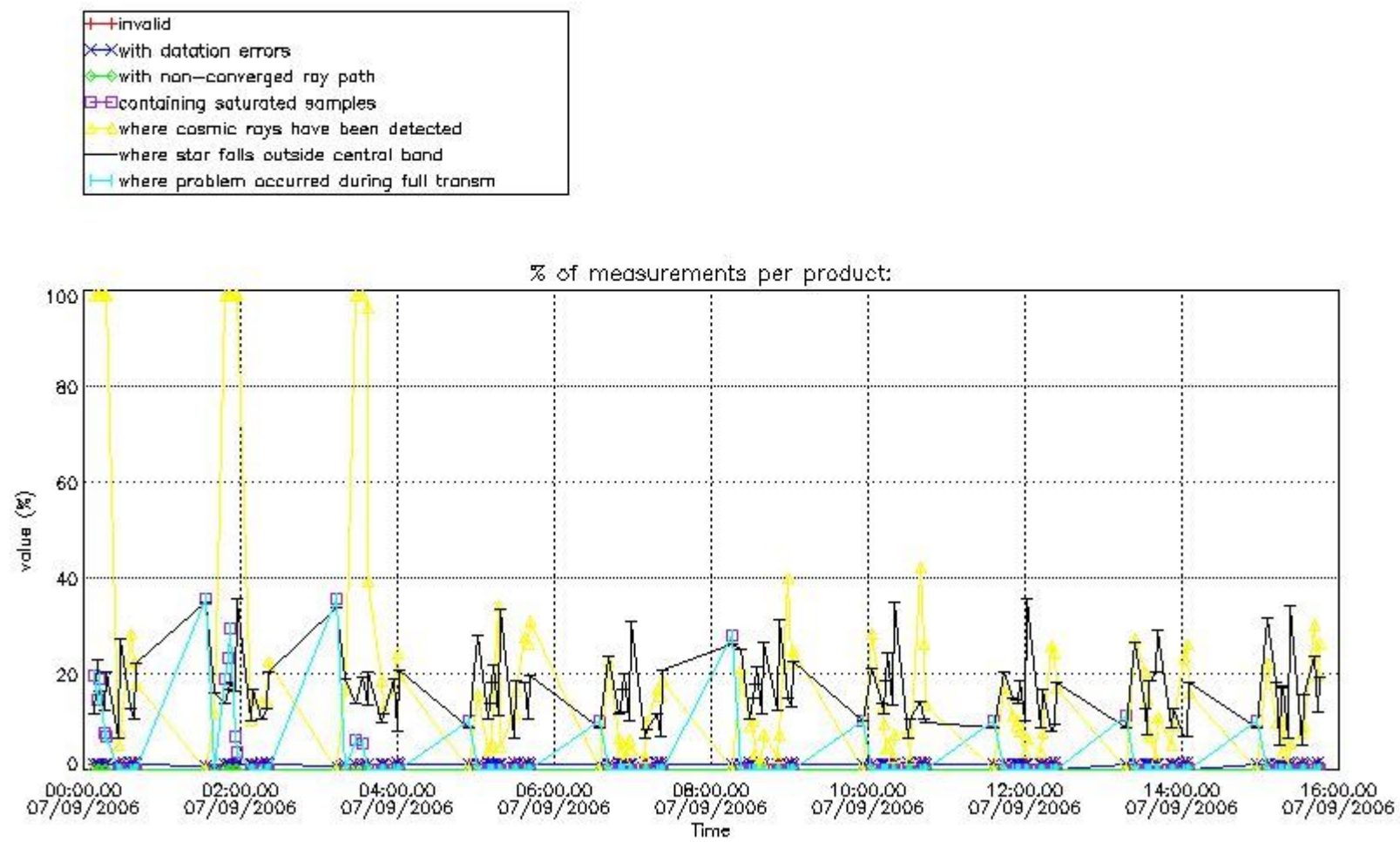


4. Level 1 quality information per product

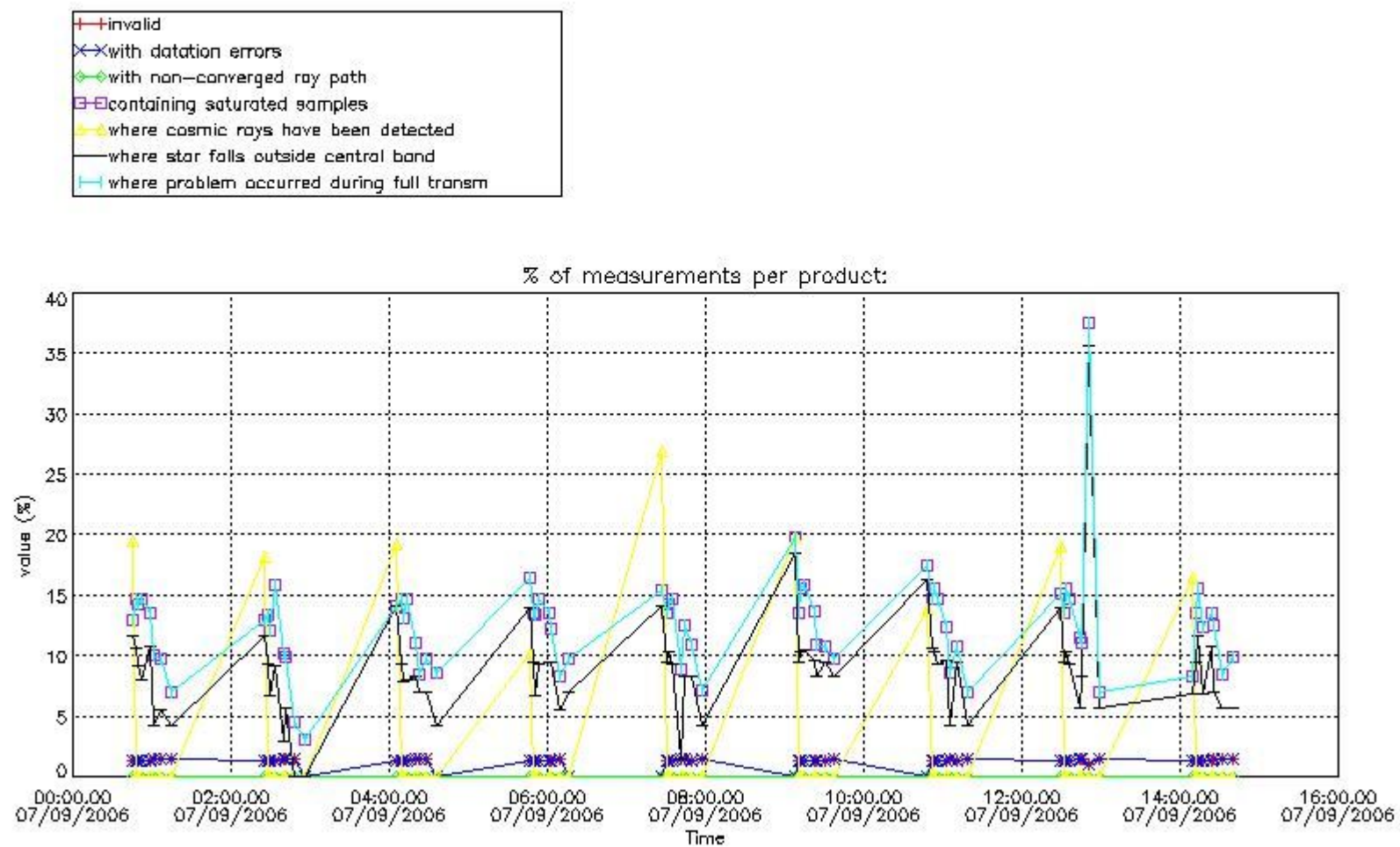
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



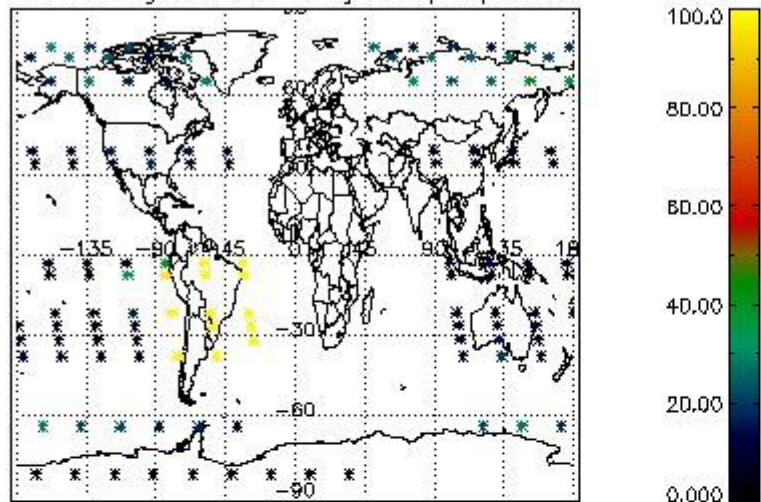
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



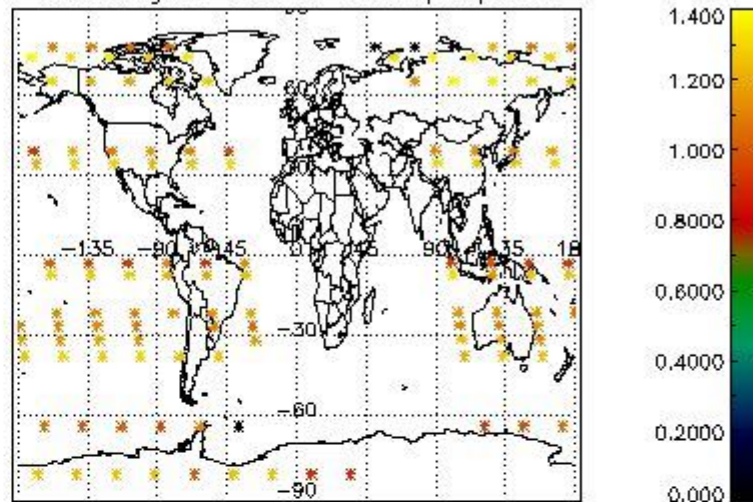
4.2 Plot quality information per product coming from level 1b processing (world map)

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

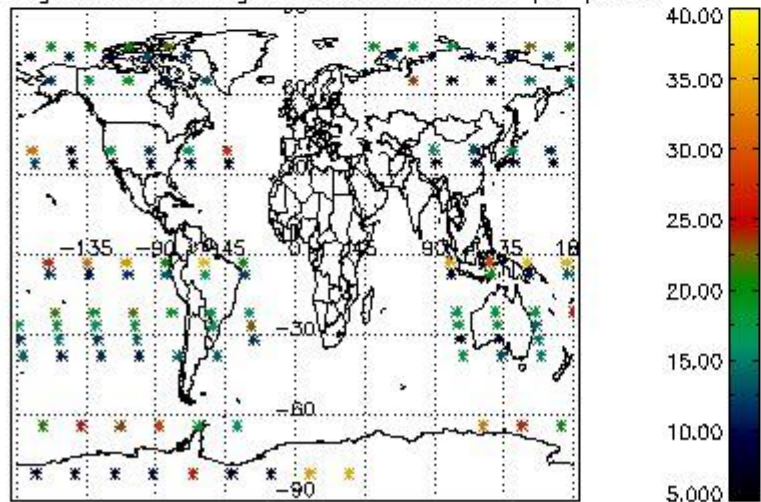
Percentage of cosmic ray hits per profile



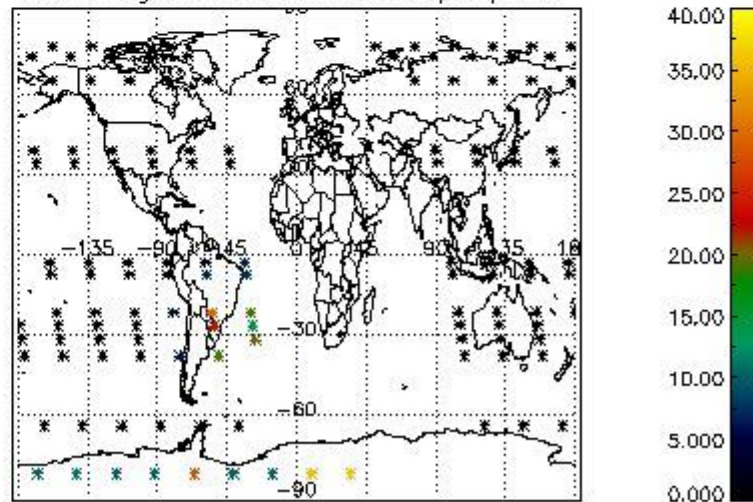
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

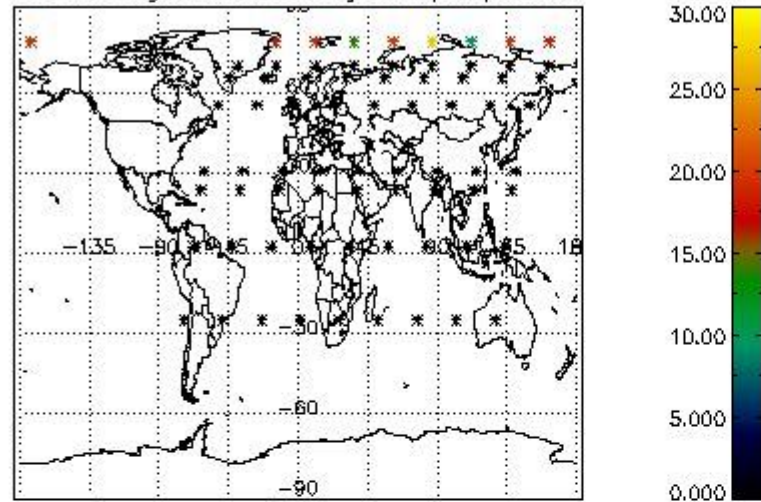


Percentage of saturation errors per profile

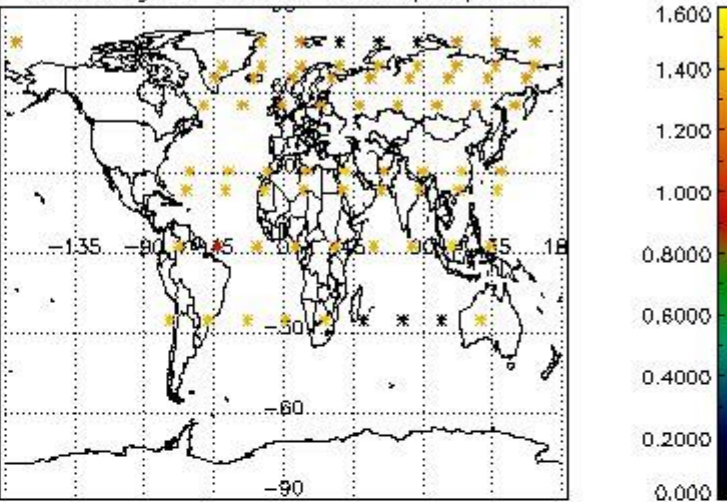


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

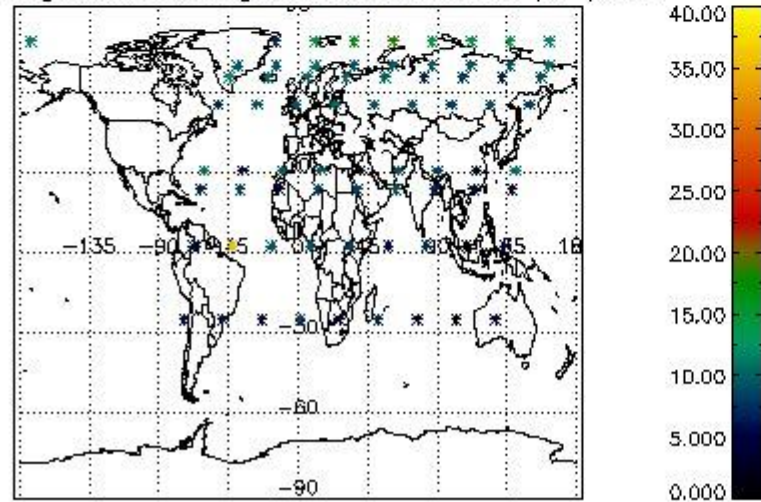
Percentage of cosmic ray hits per profile



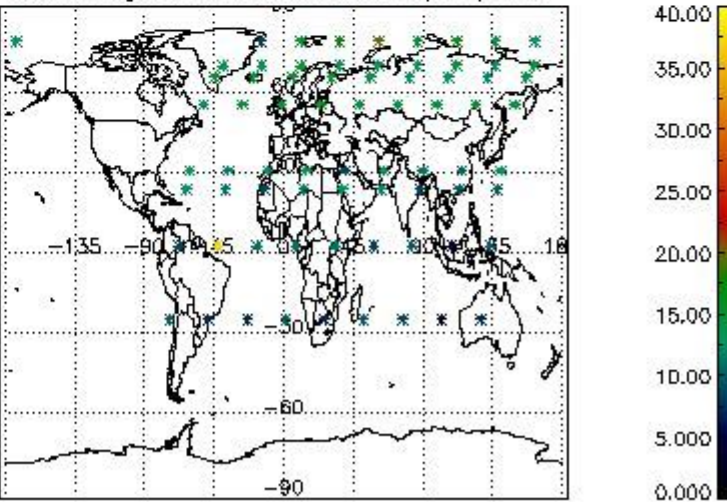
Percentage of datation errors per profile



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

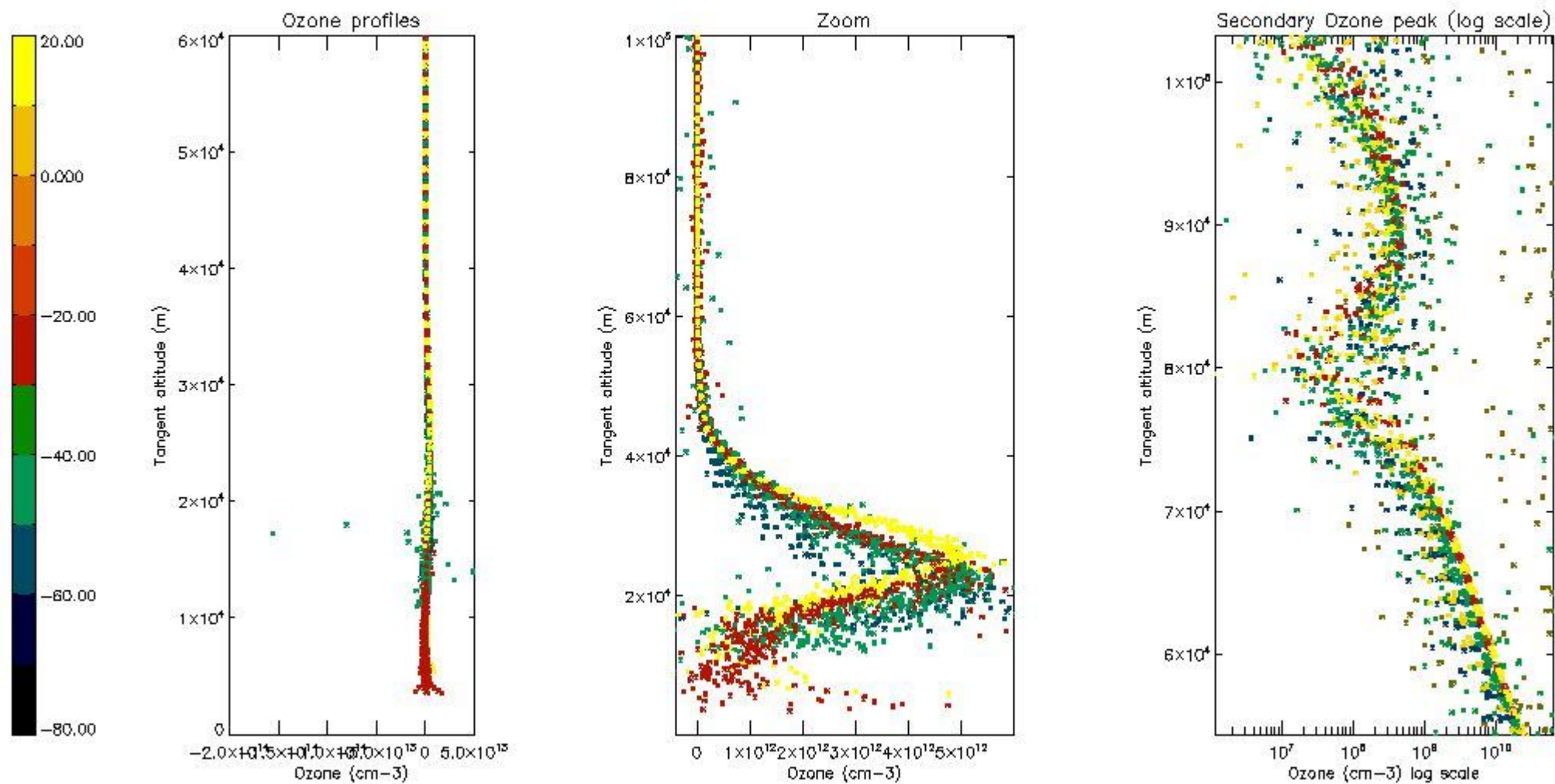
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	21

STD < 10	15
STD < 5	10

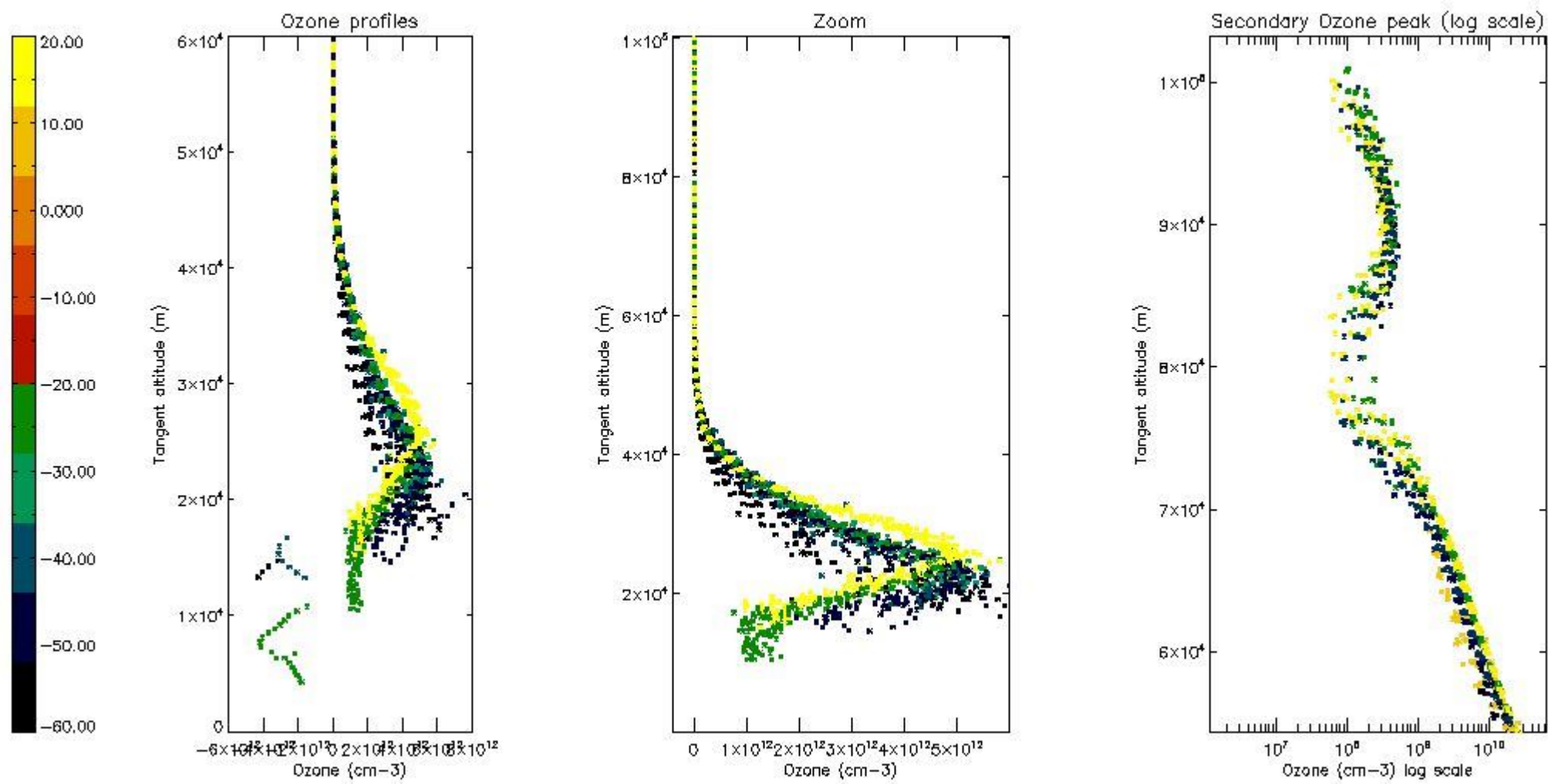
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



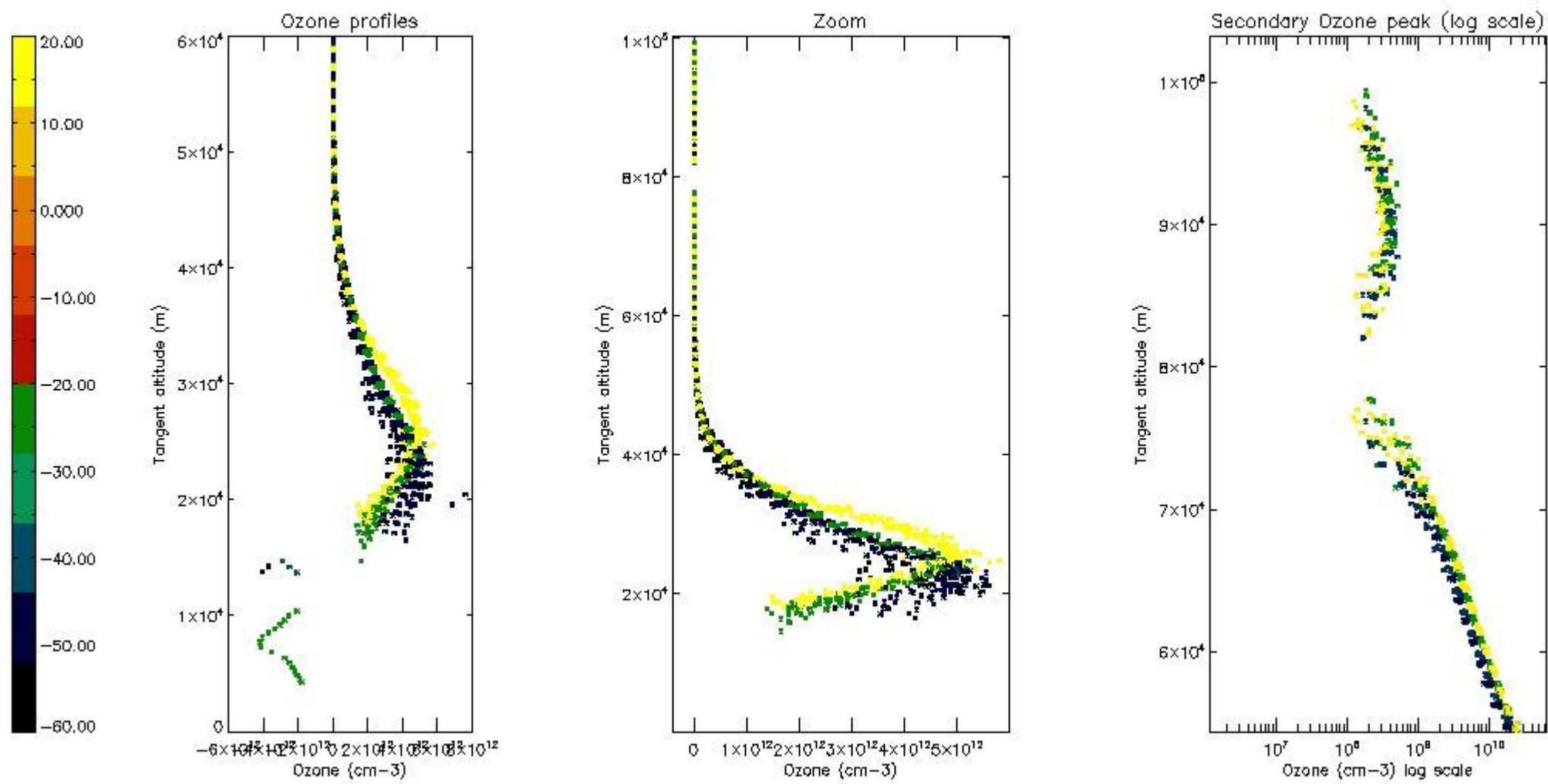
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



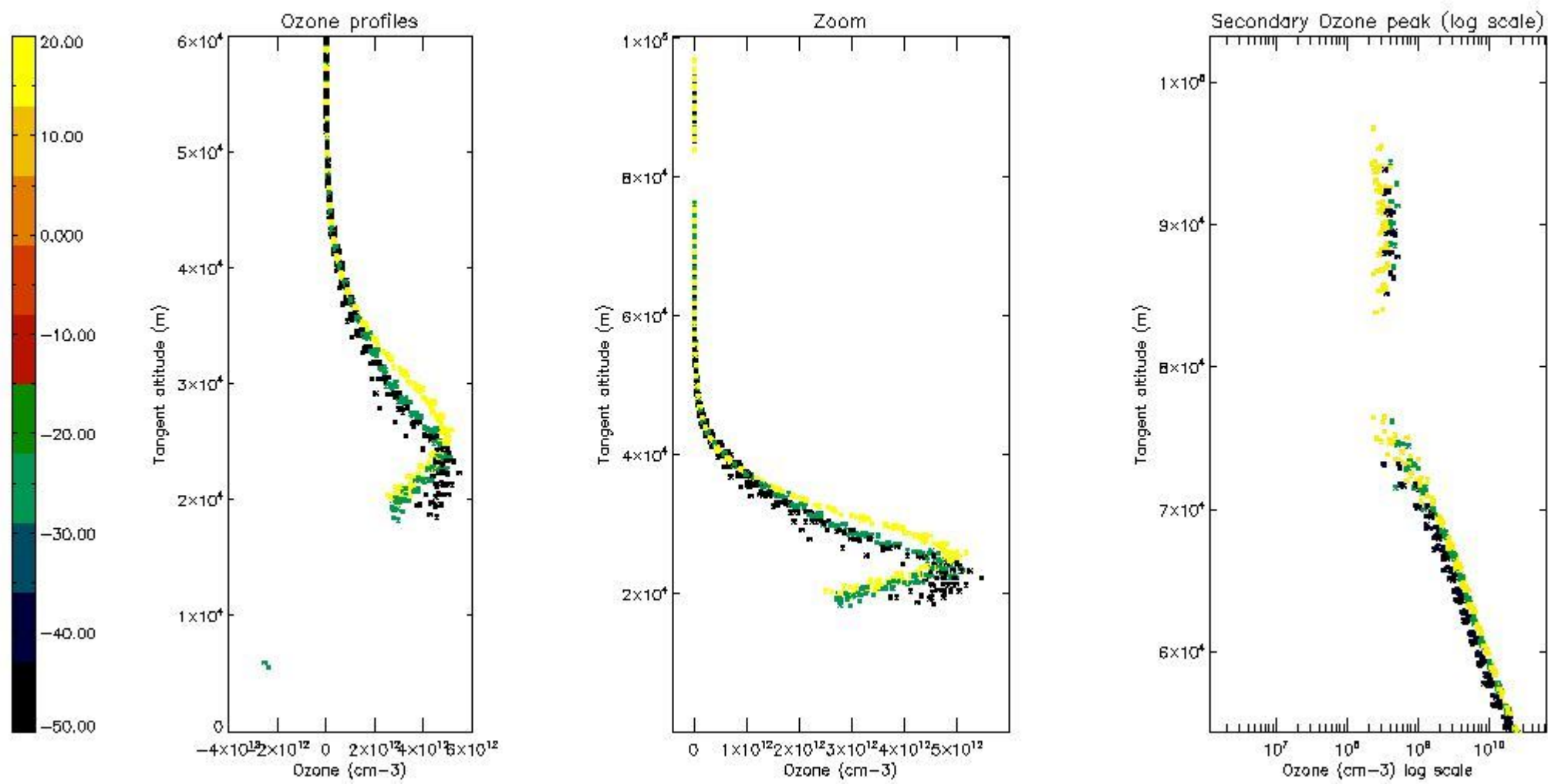
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



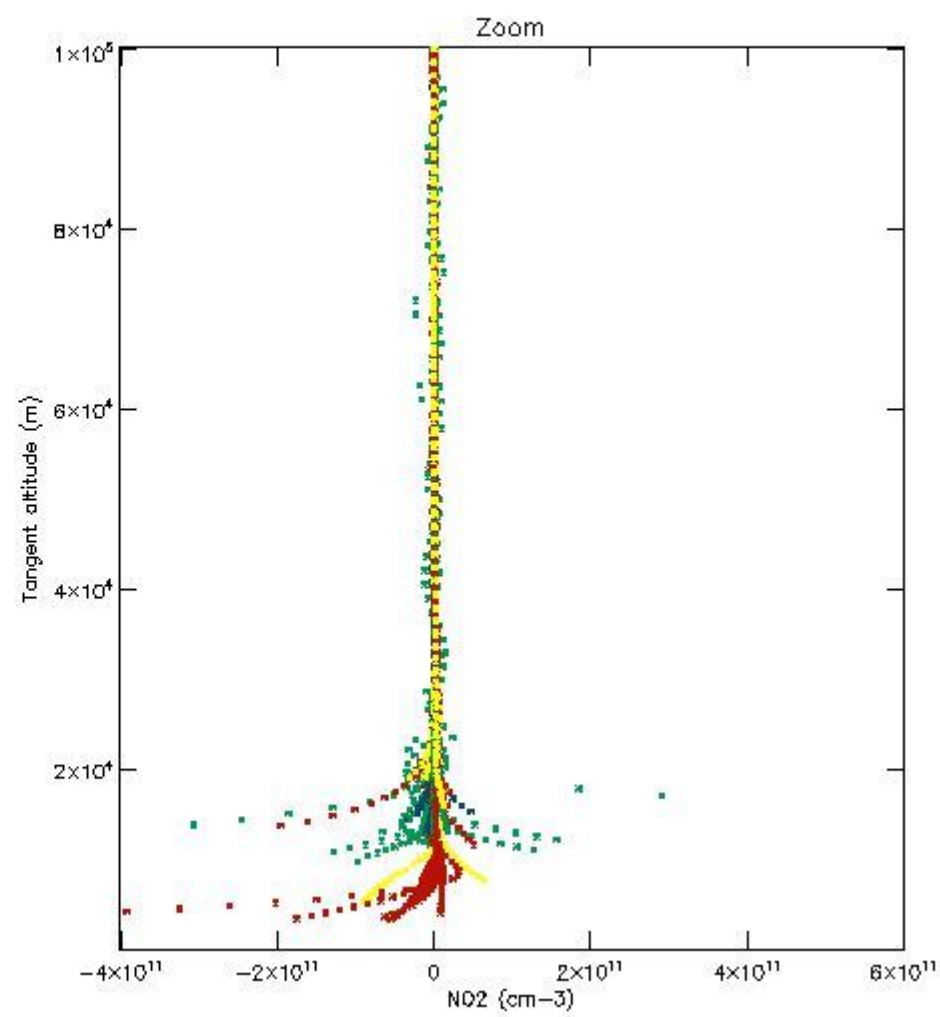
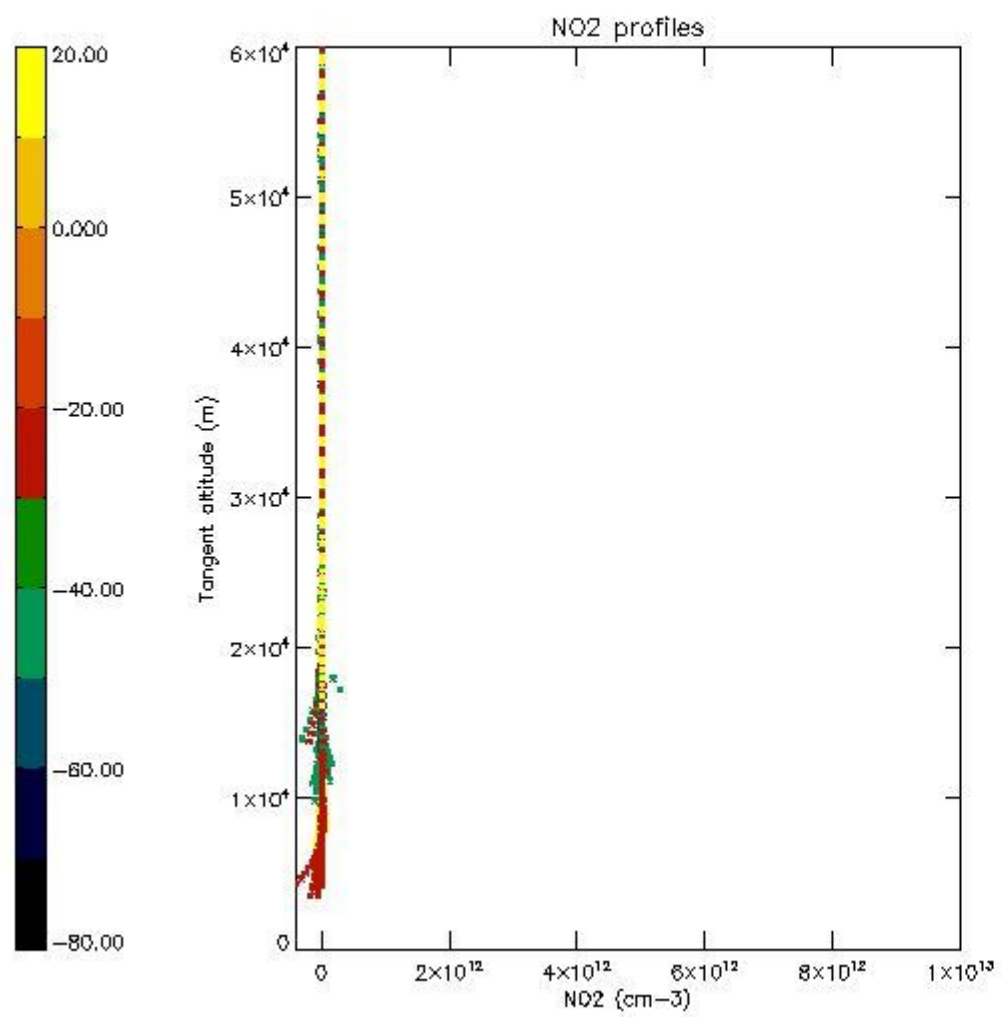
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



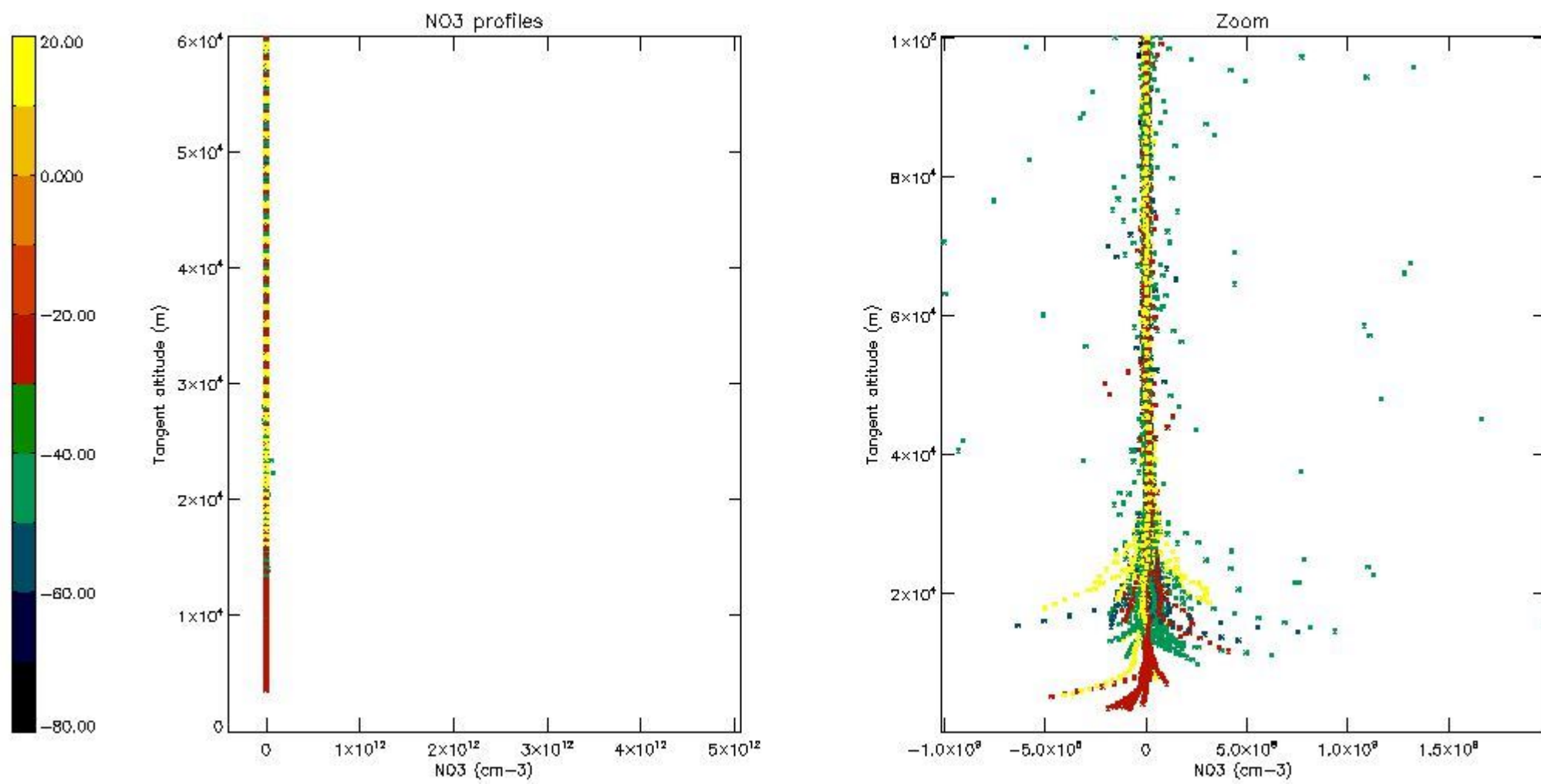
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



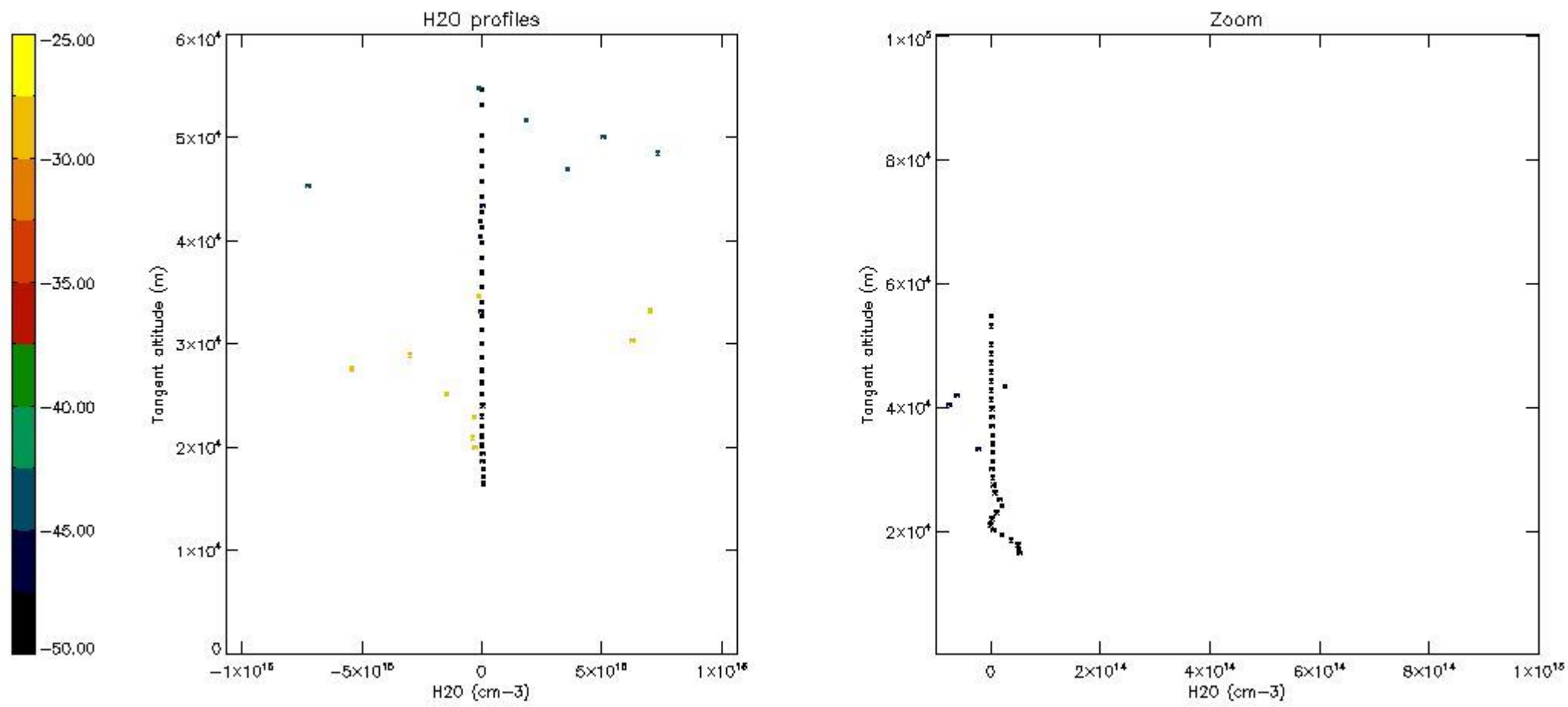
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

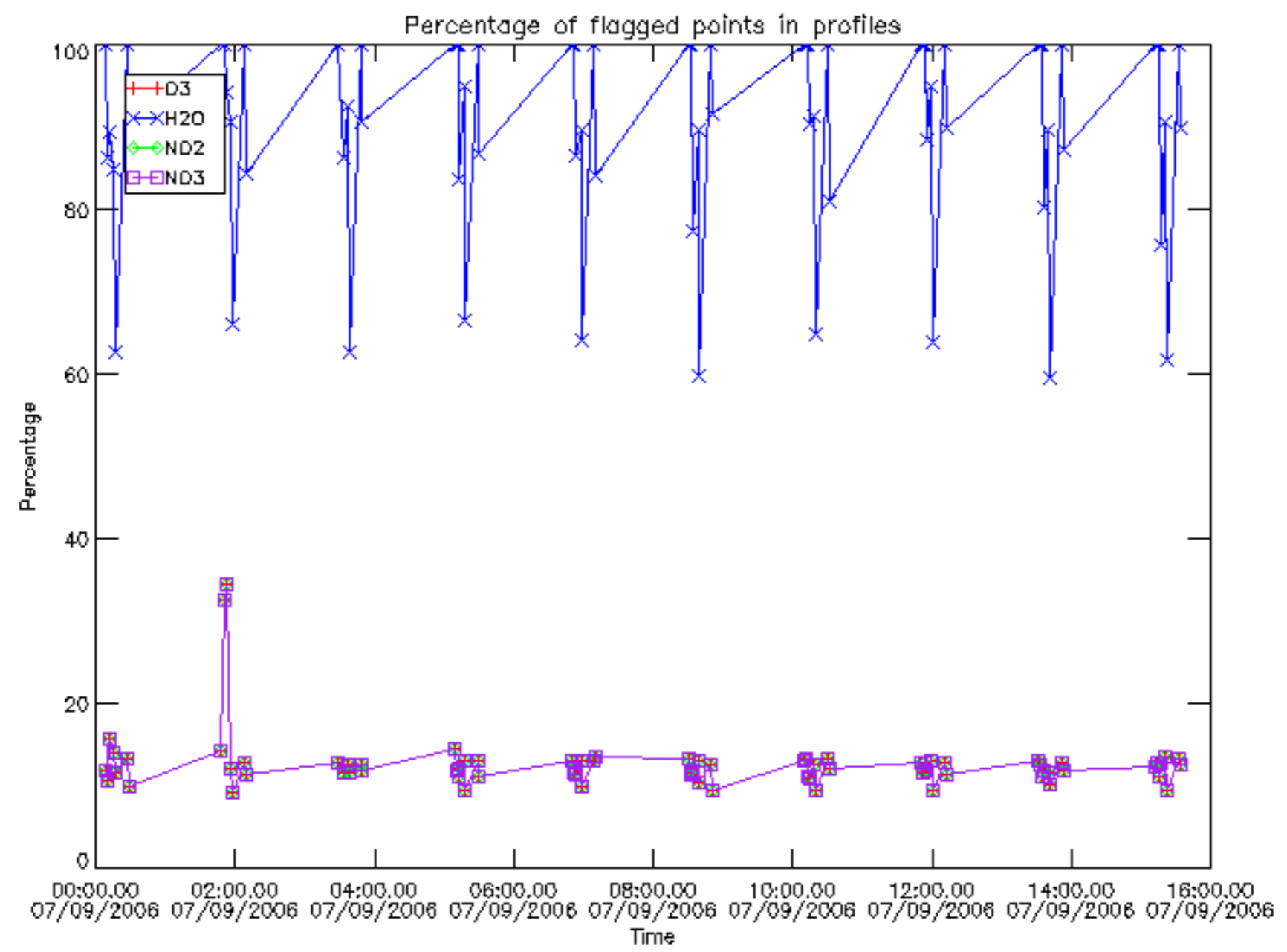
The colorbar represents the latitude.



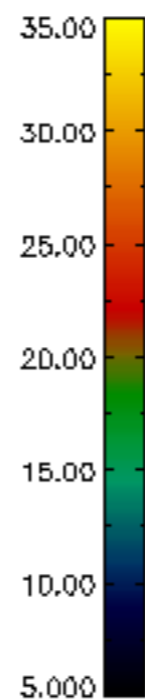
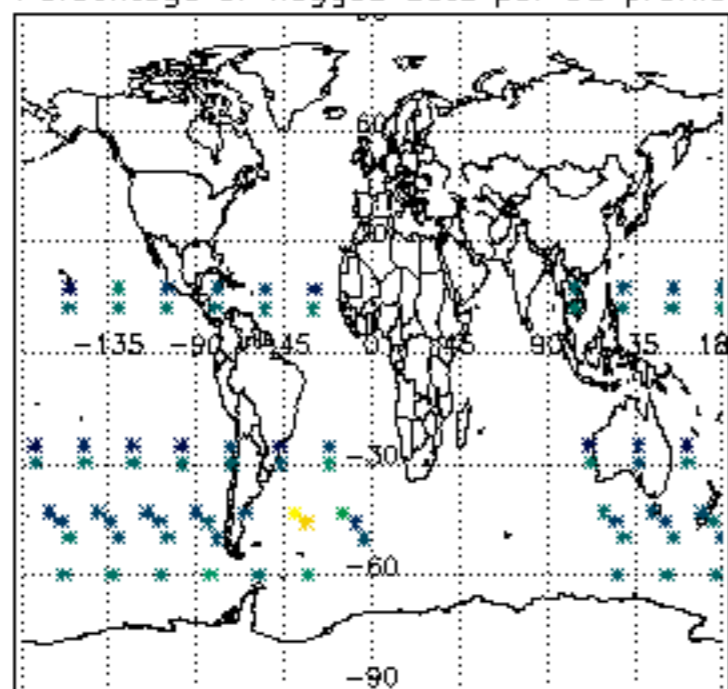
6. Auxiliary Data Files used for the production reported in section 2

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.

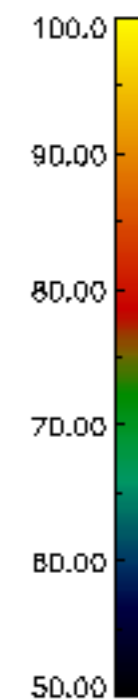
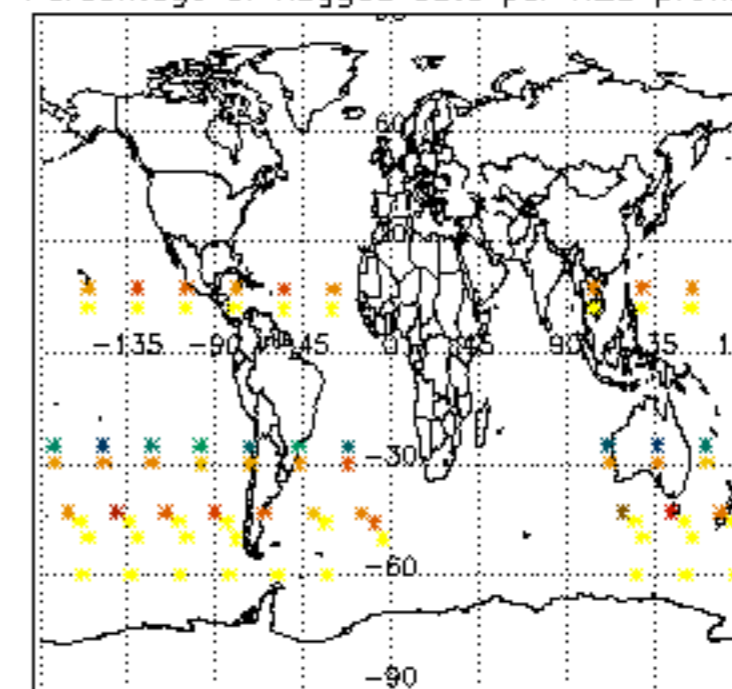
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	07-SEP-2006 00:08:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-SEP-2006 00:08:36
CROSS_SECTIONS_FILE	GOM_CR2_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-SEP-2006 00:08:36



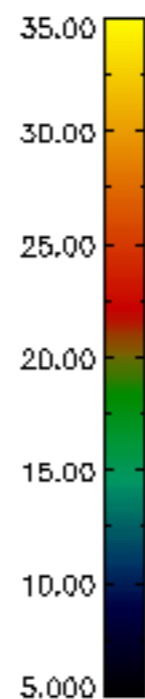
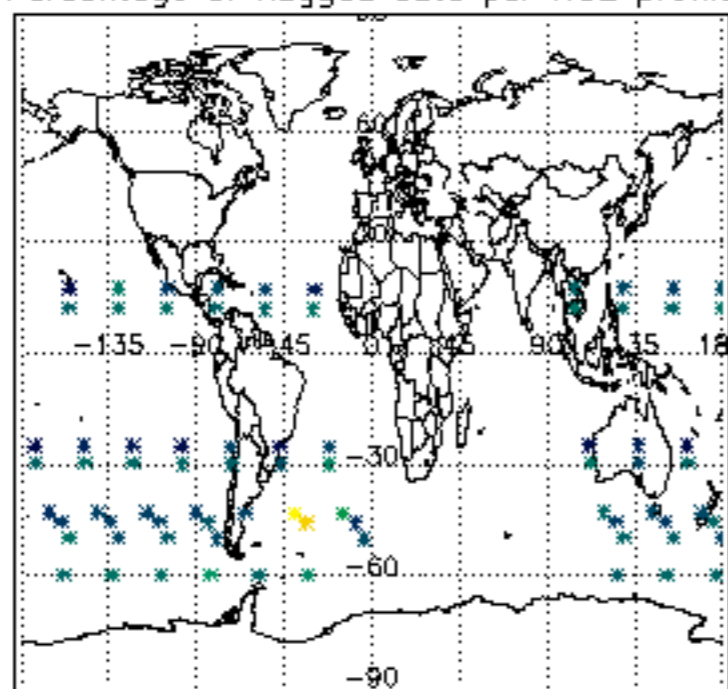
Percentage of flagged data per D3 profile



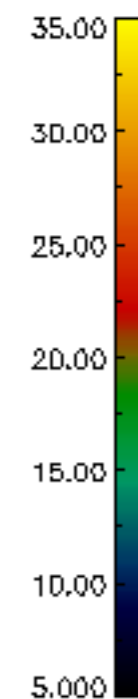
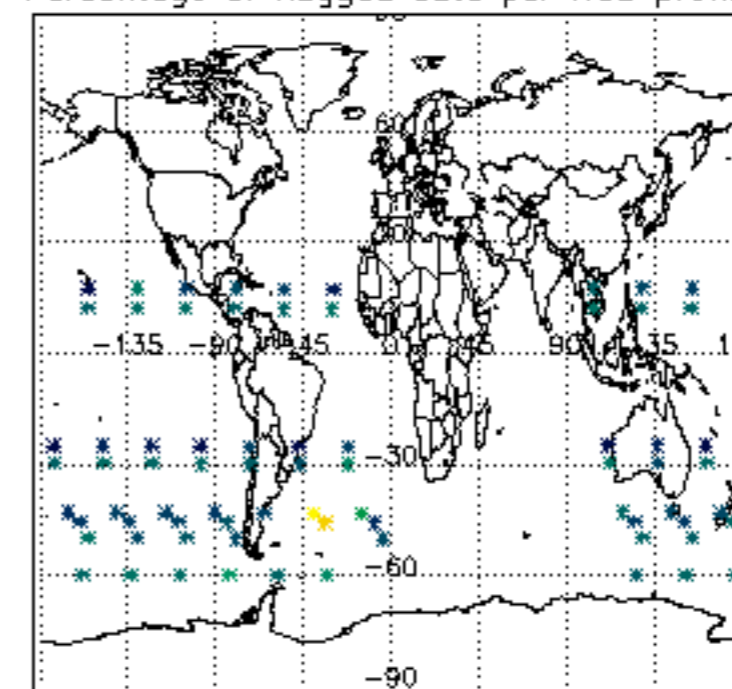
Percentage of flagged data per H2O profile

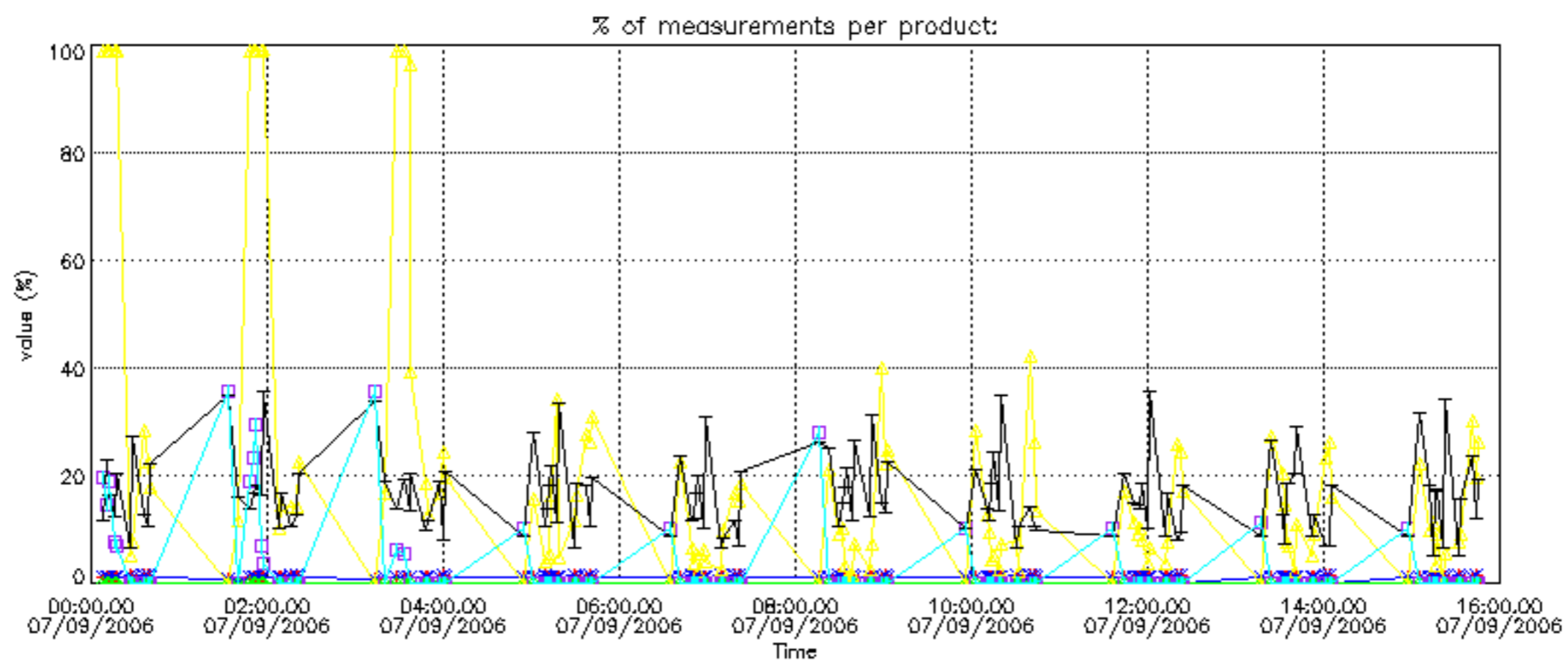
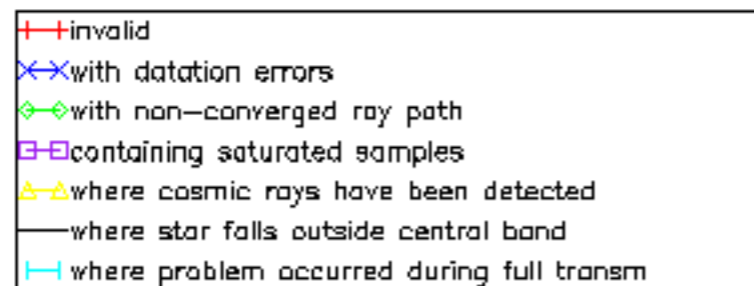


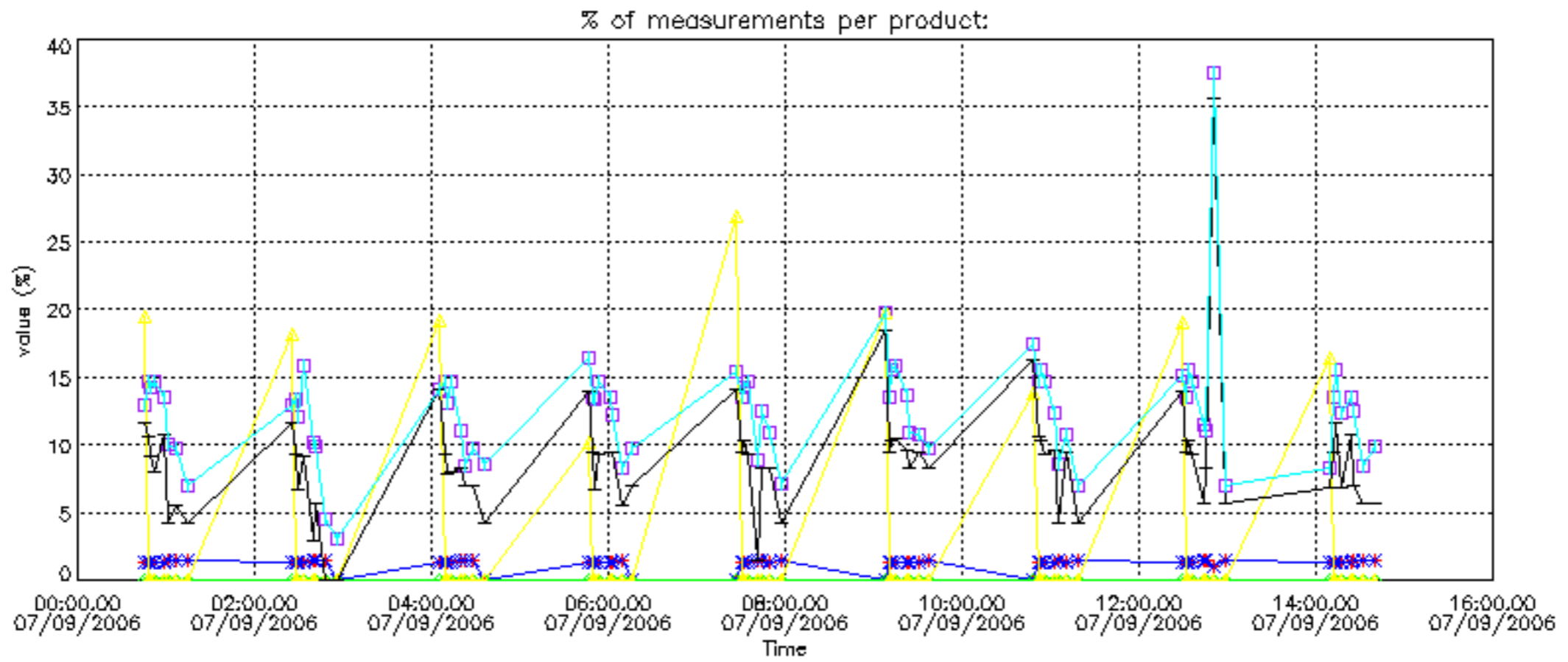
Percentage of flagged data per NO2 profile



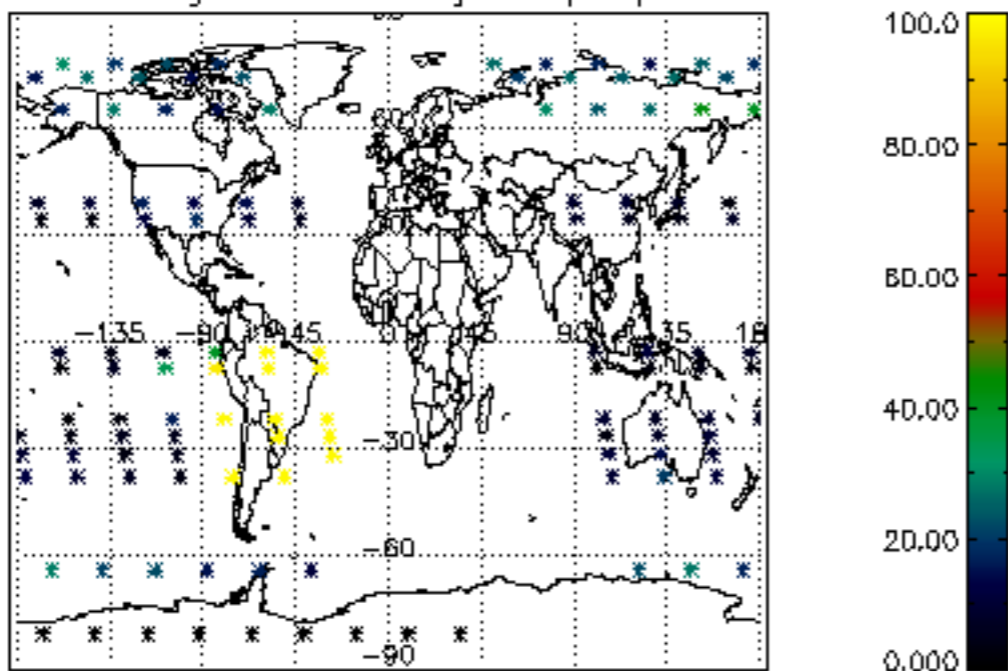
Percentage of flagged data per NO3 profile



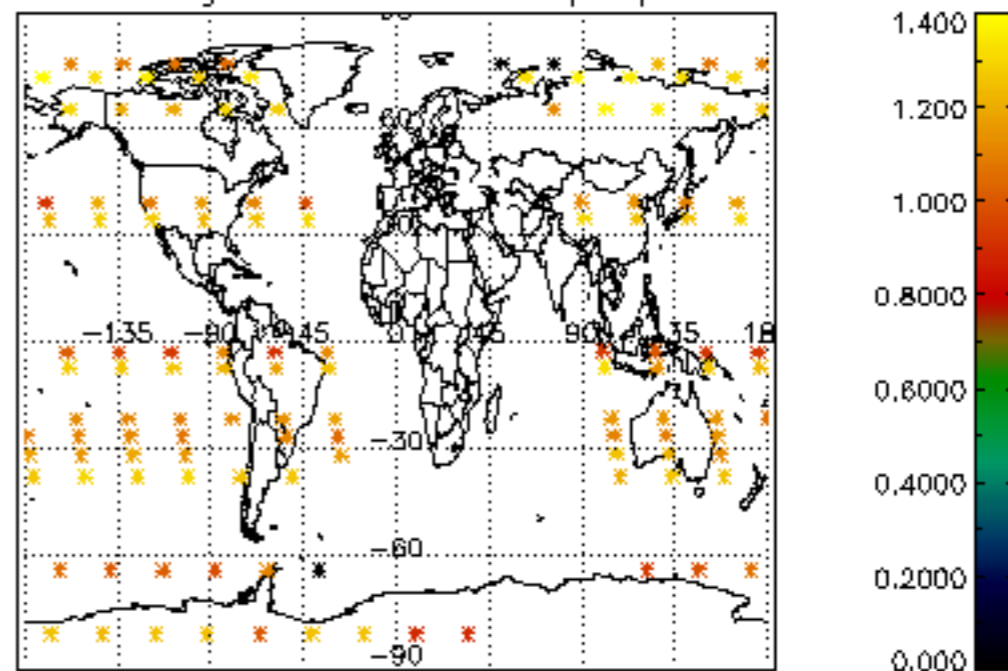




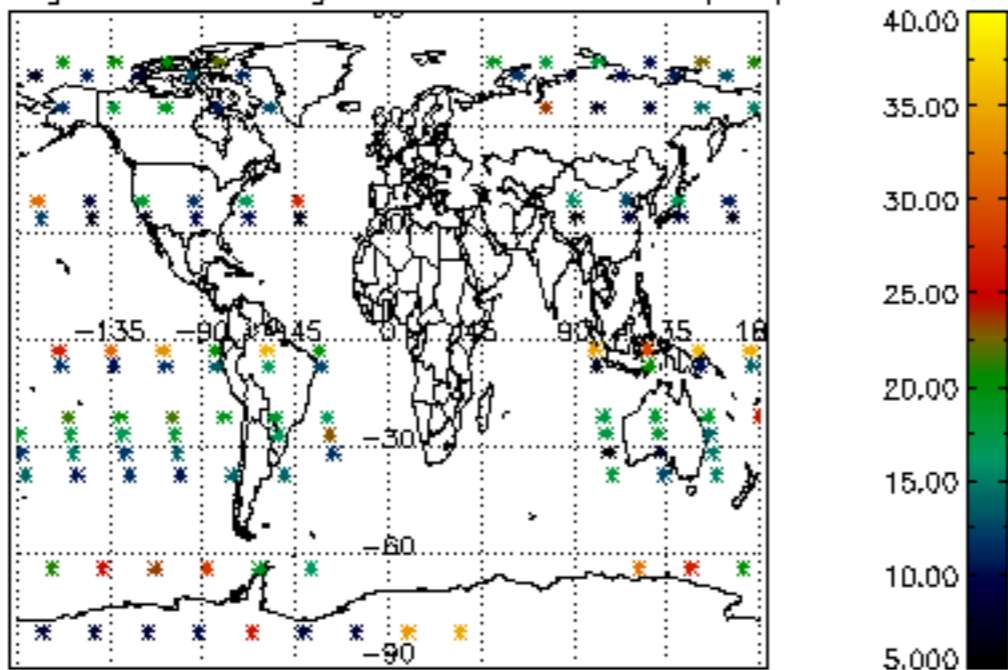
Percentage of cosmic ray hits per profile



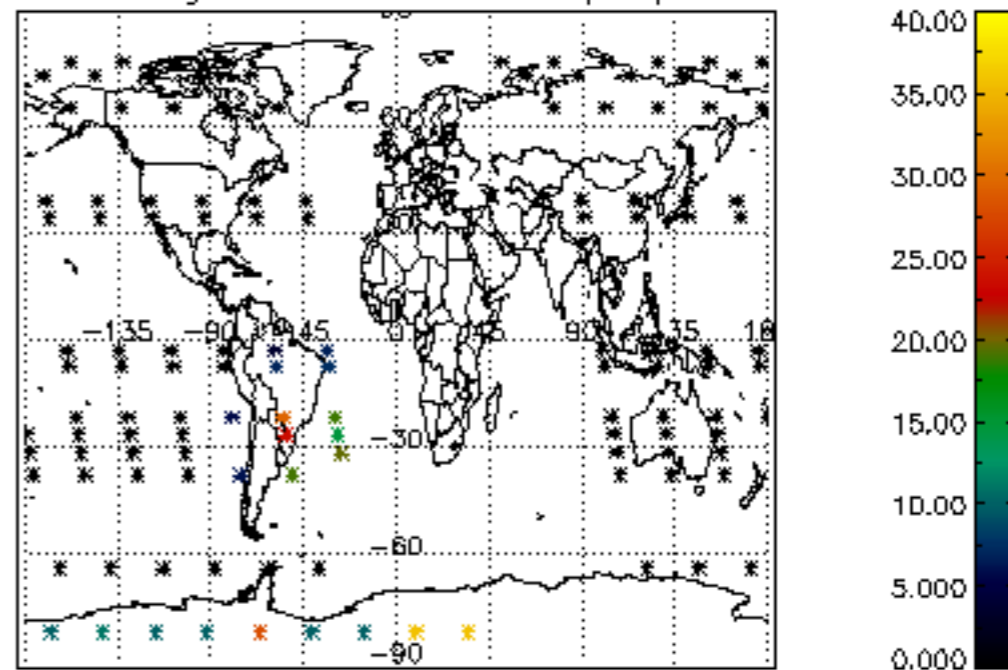
Percentage of datation errors per profile



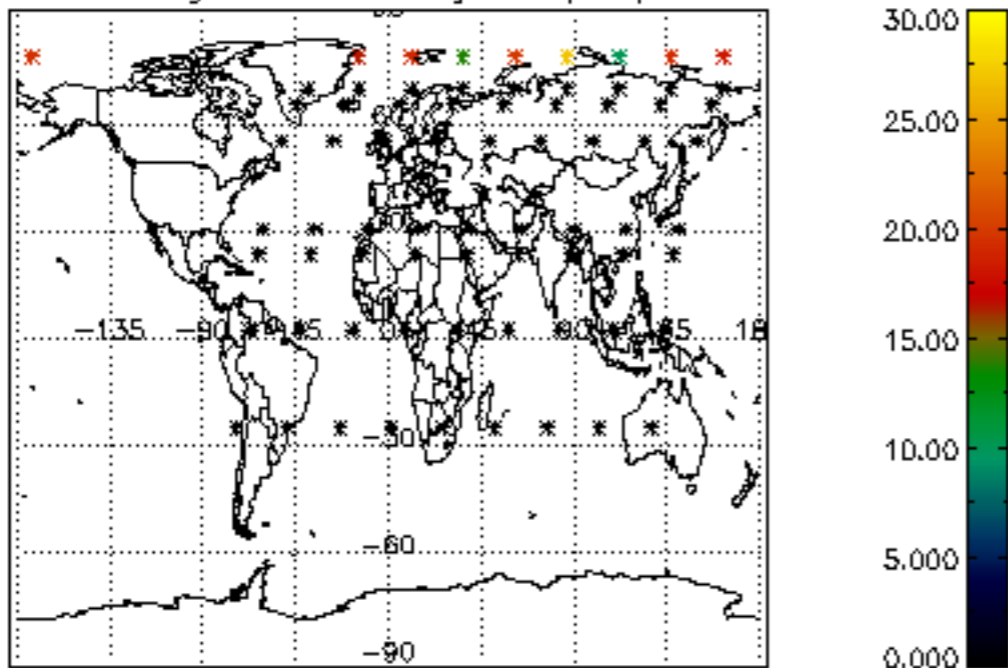
Percentage of star falling outside central band per profile



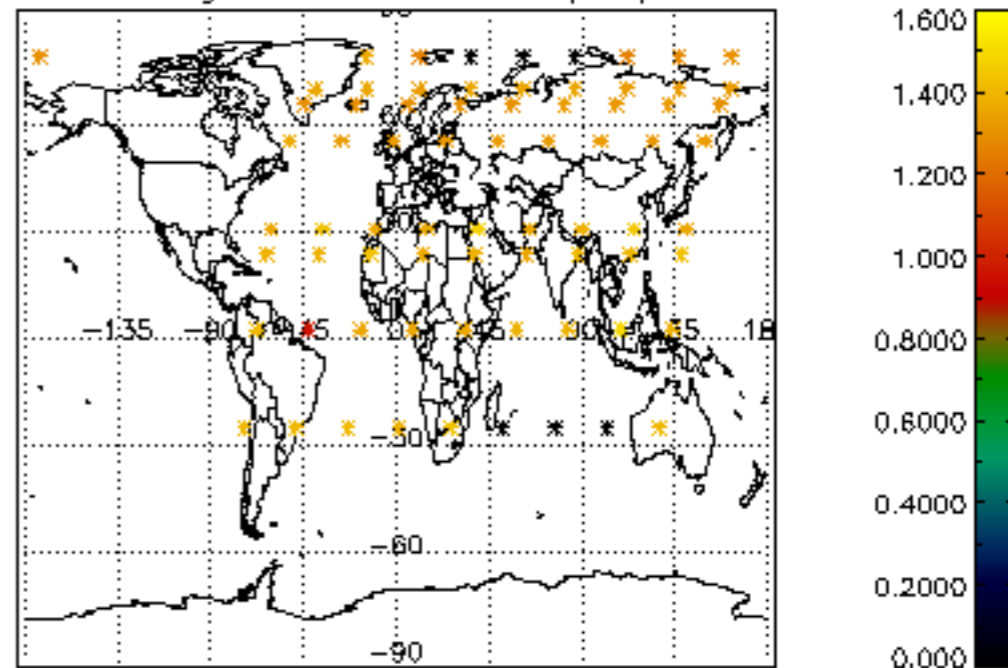
Percentage of saturation errors per profile



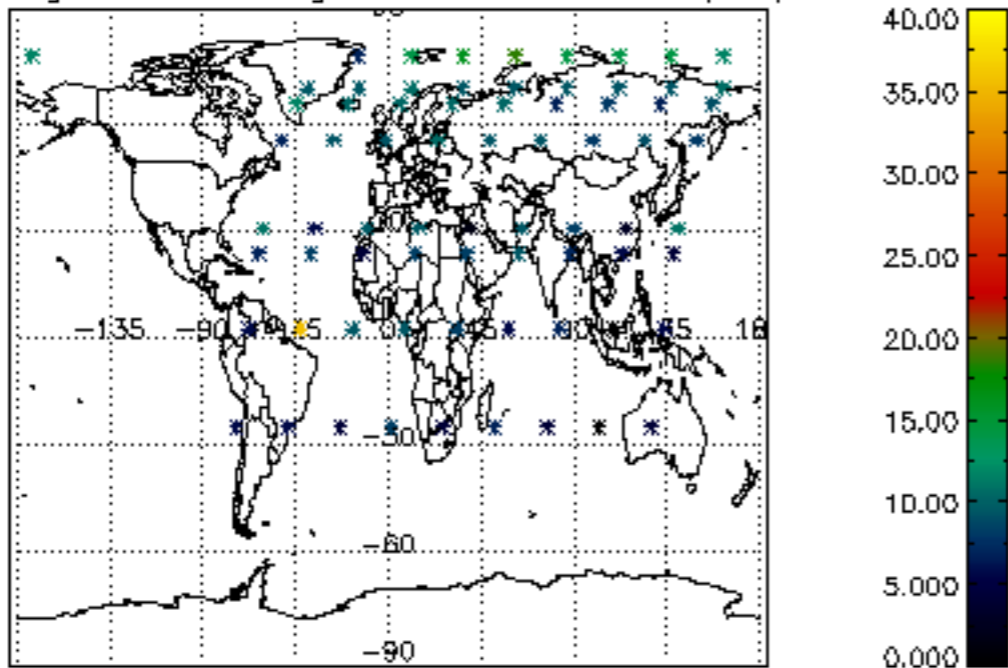
Percentage of cosmic ray hits per profile



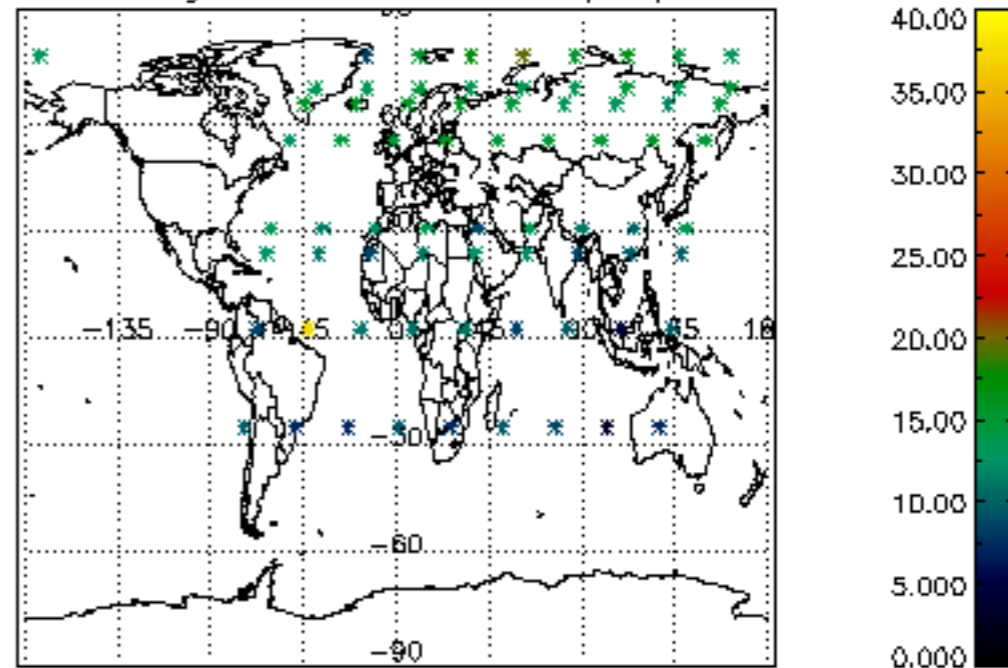
Percentage of datation errors per profile

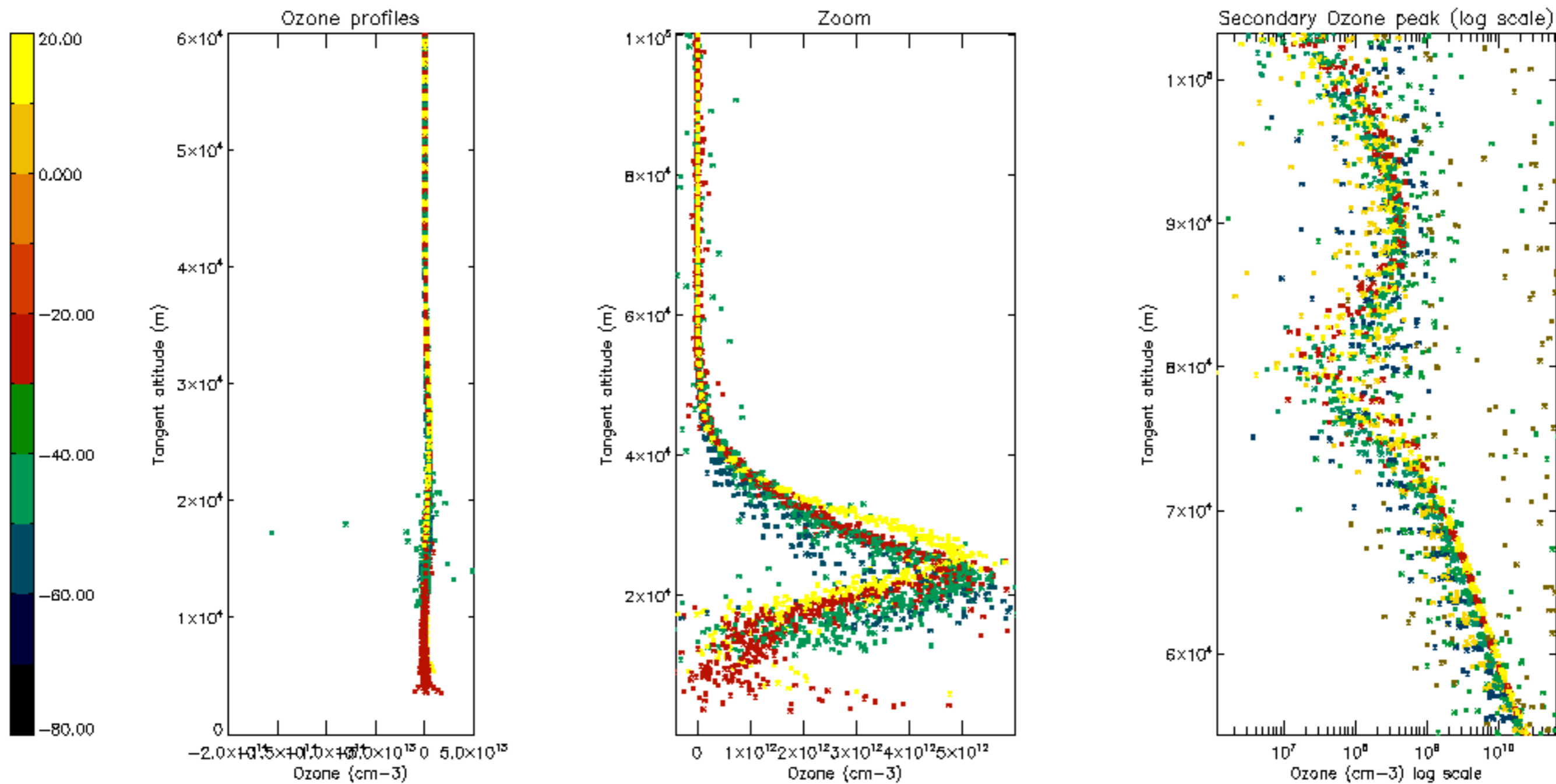


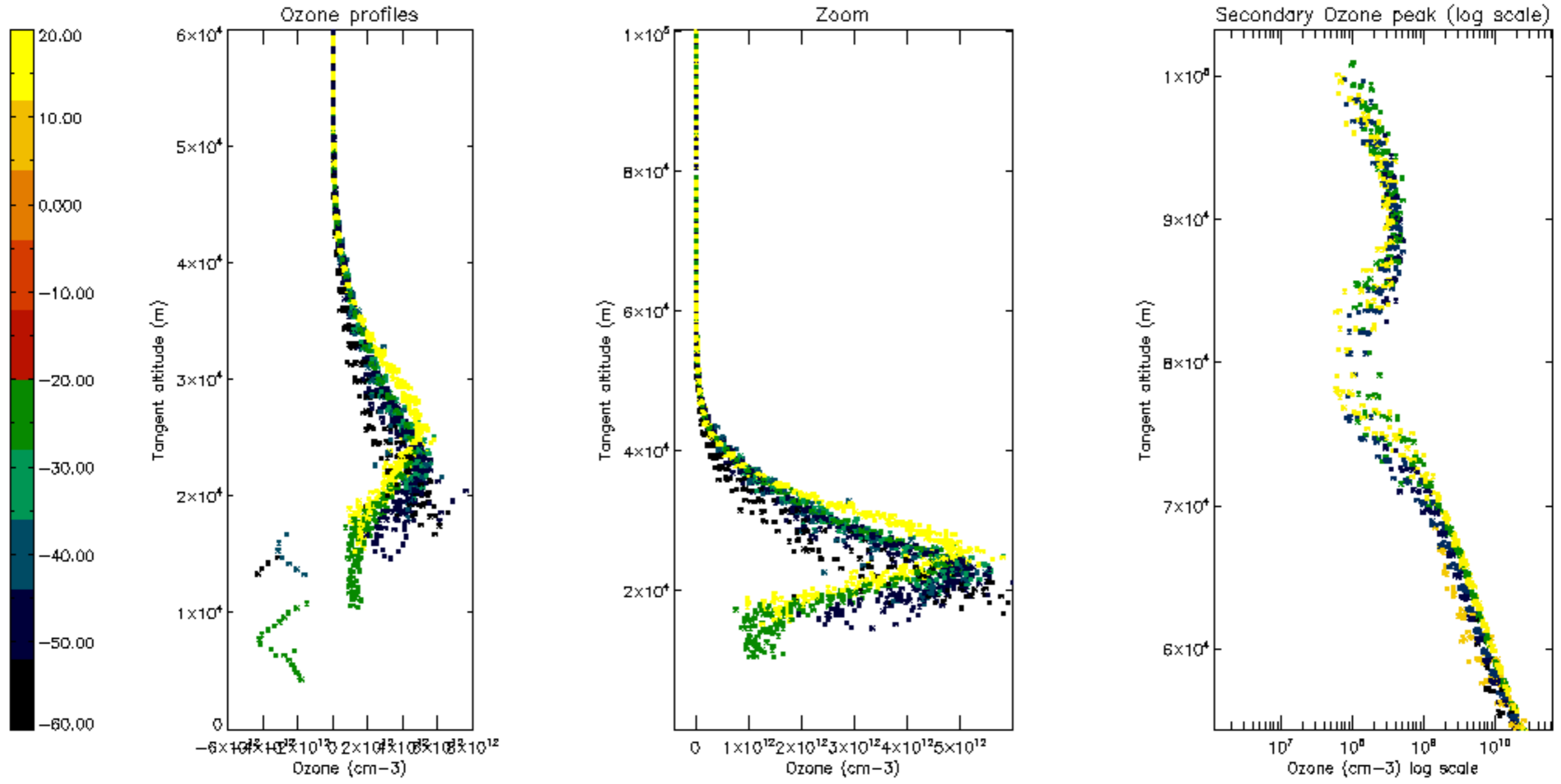
Percentage of star falling outside central band per profile

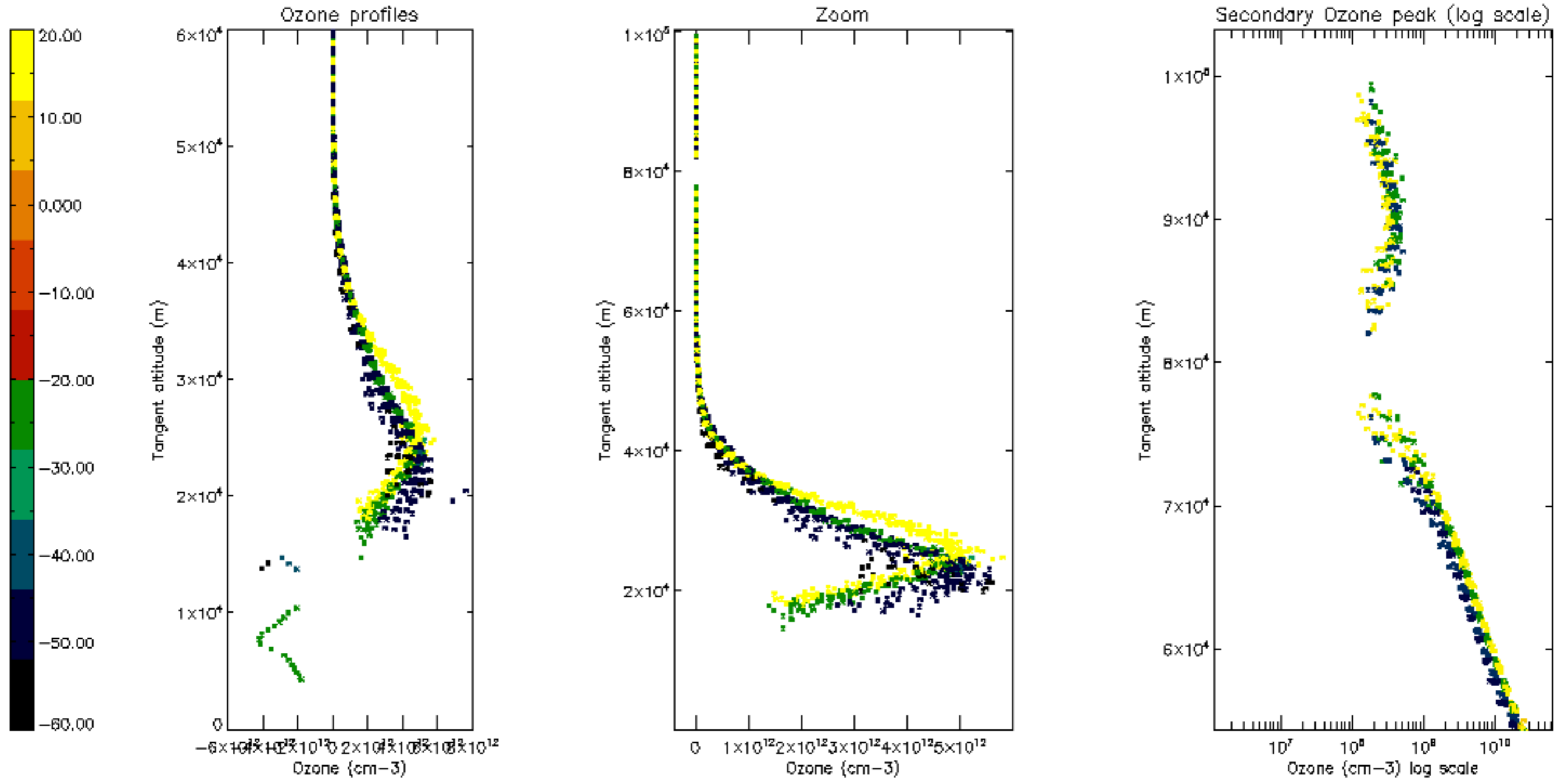


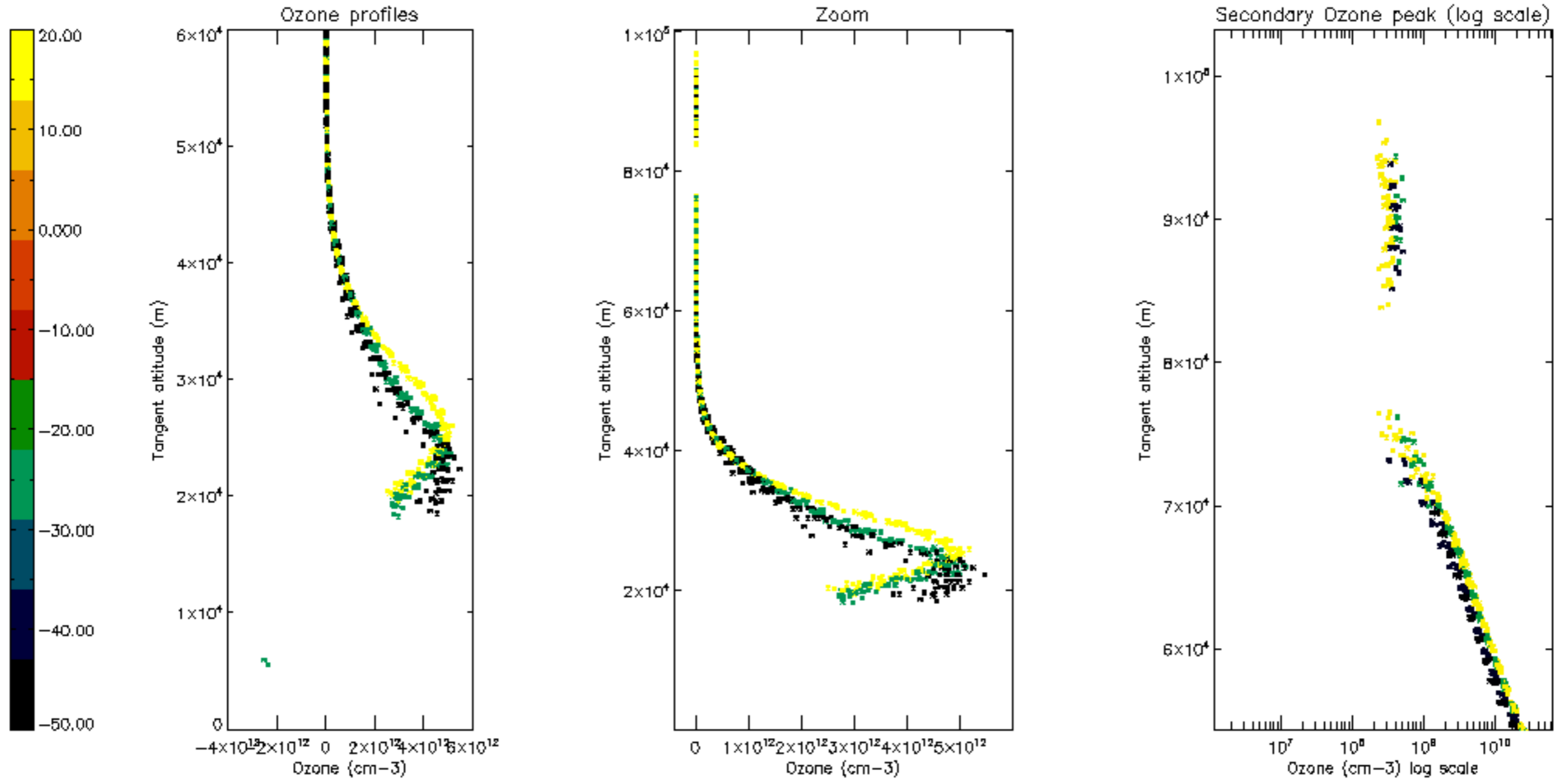
Percentage of saturation errors per profile

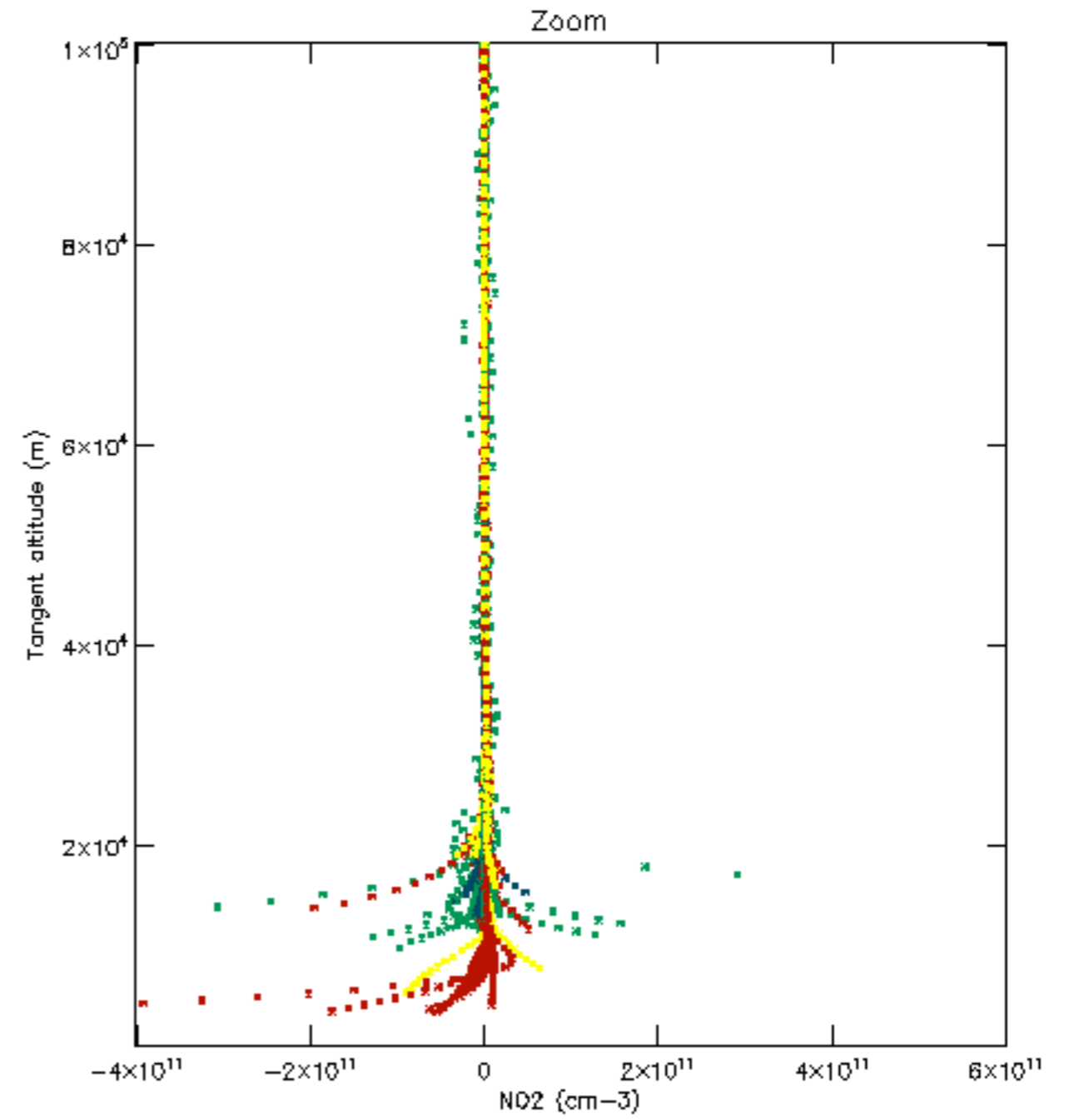
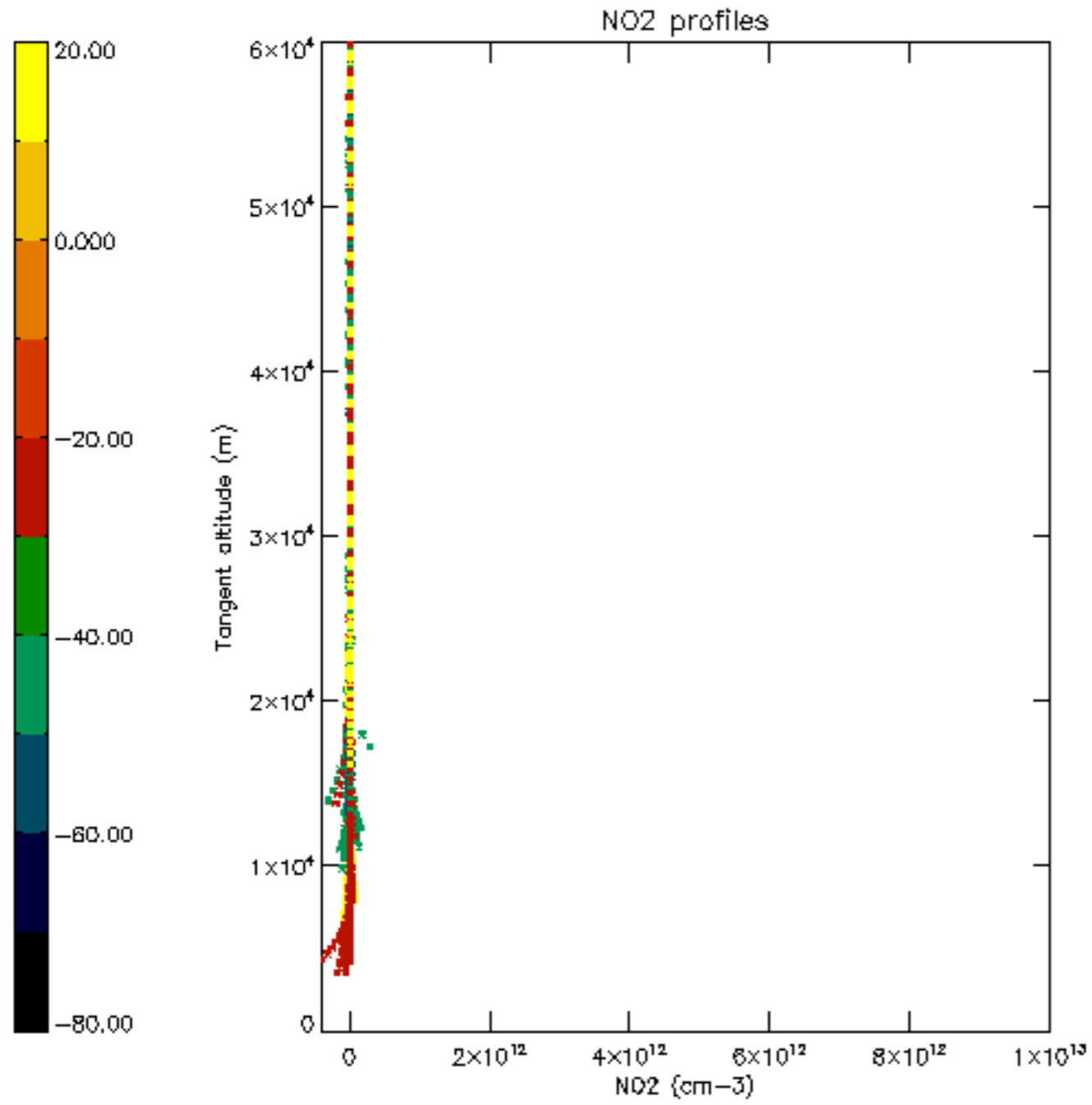


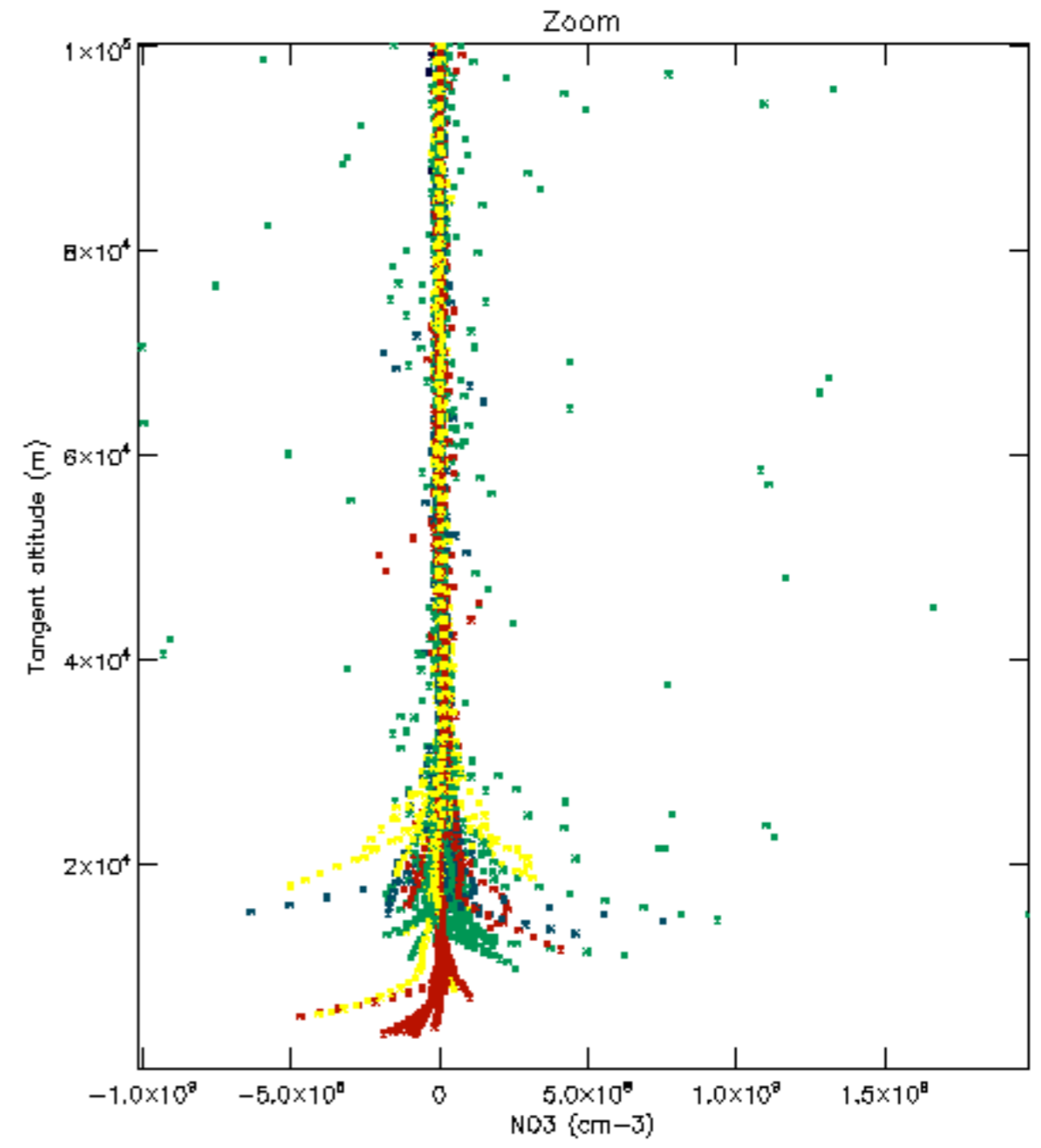
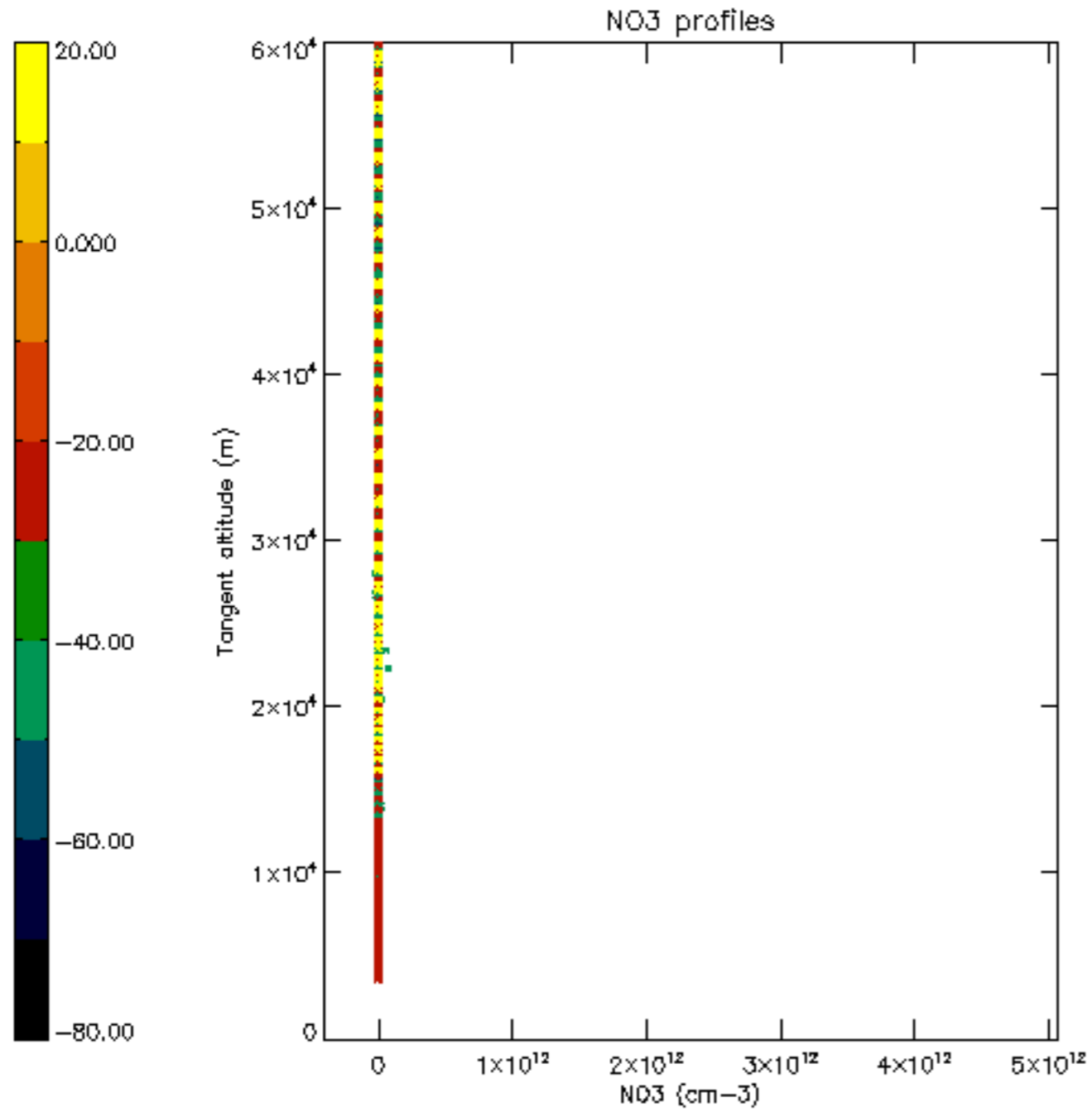


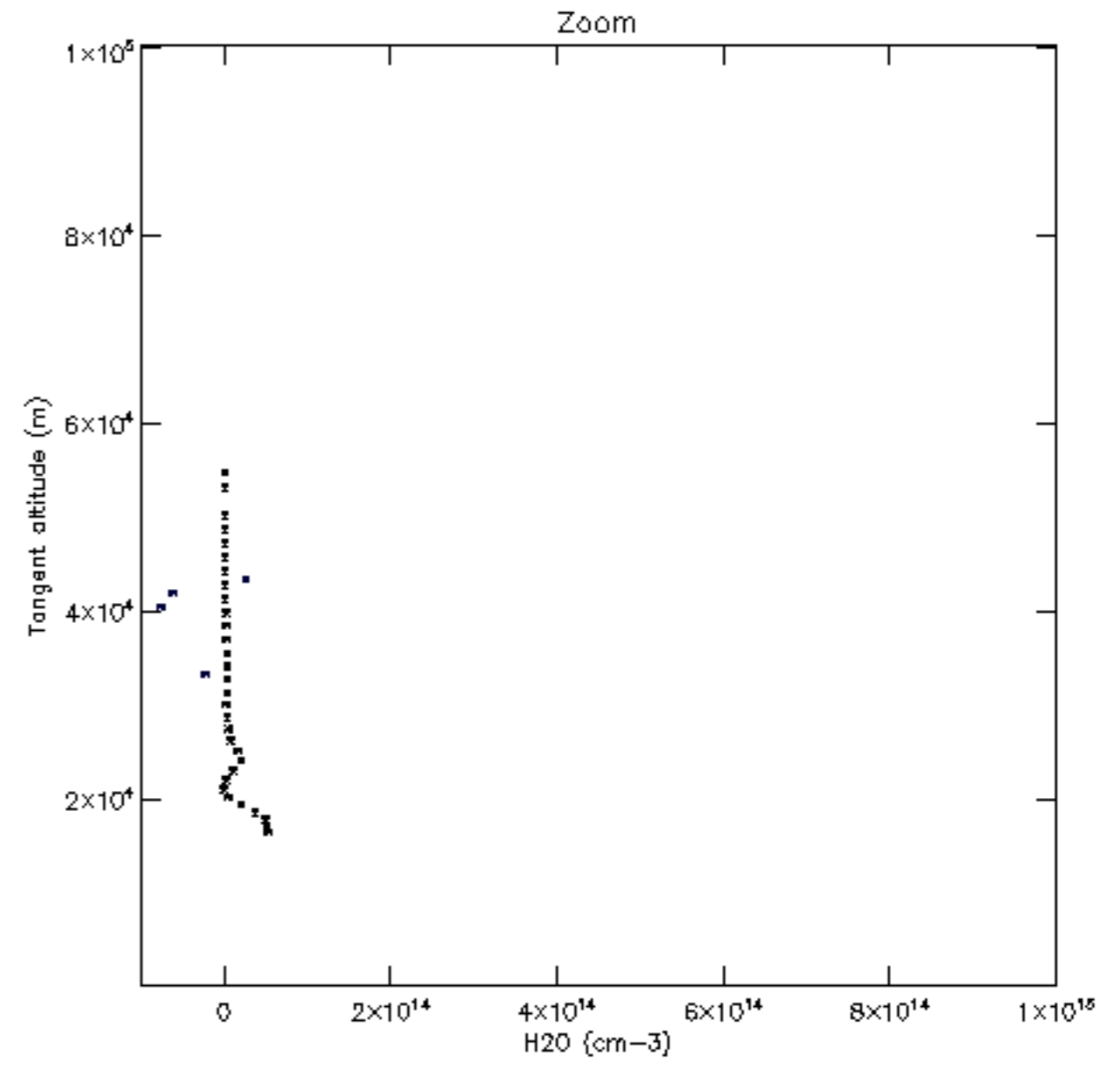
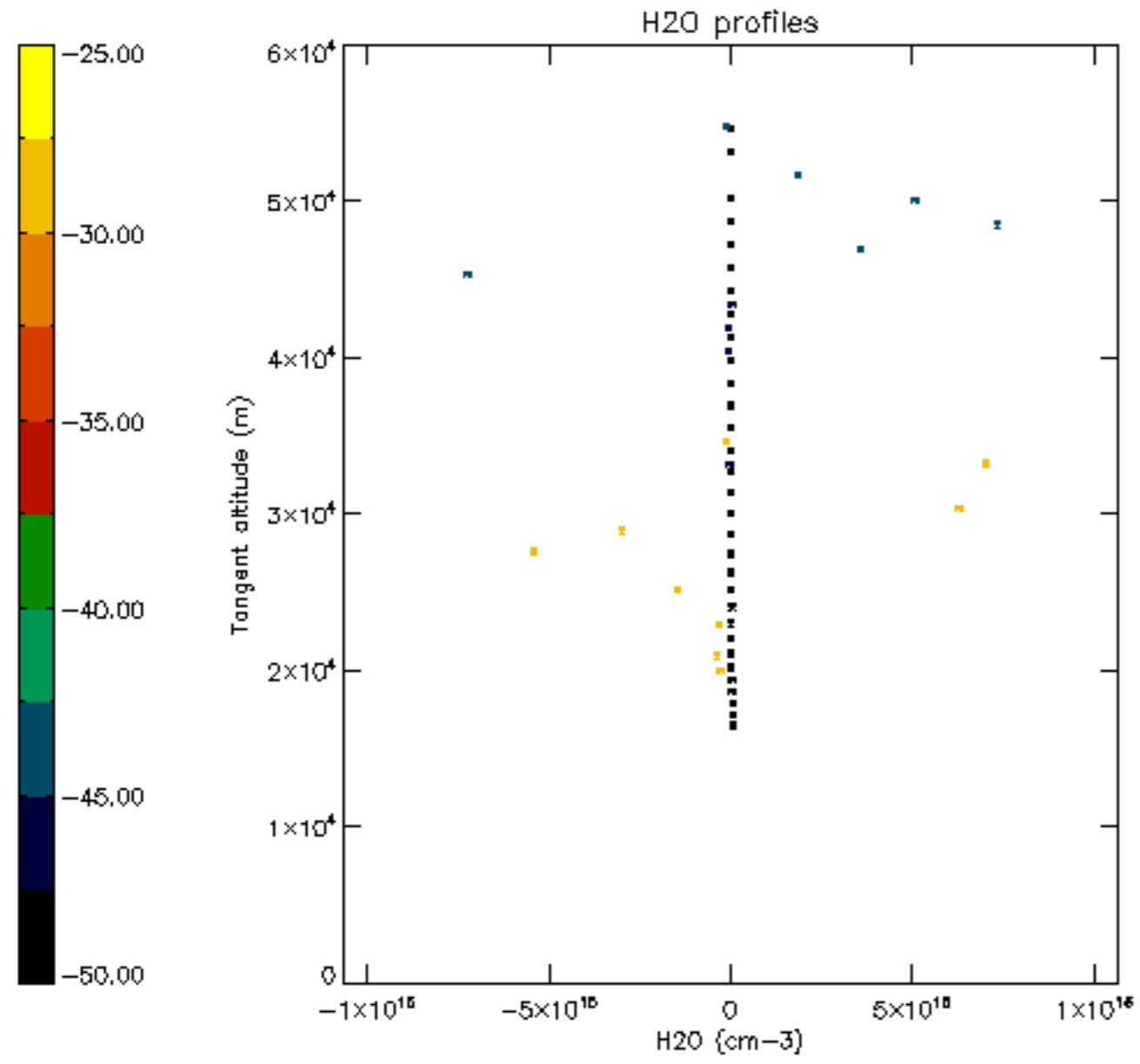


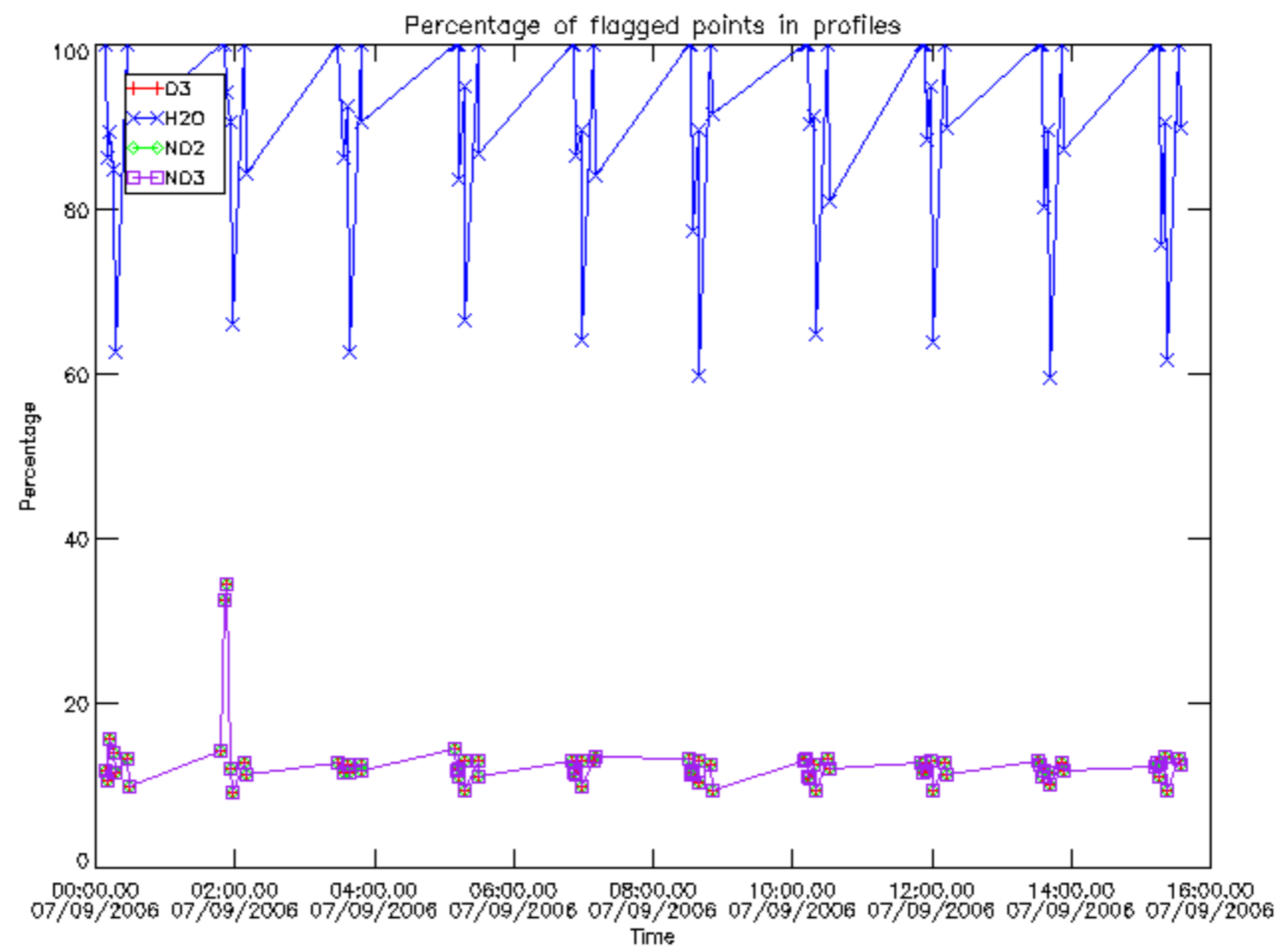




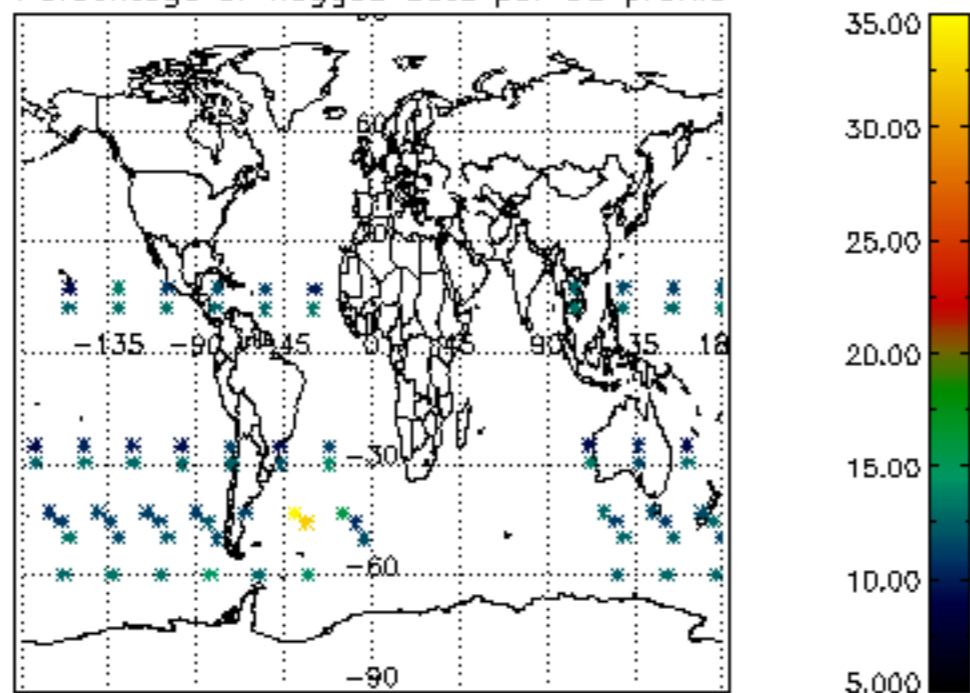




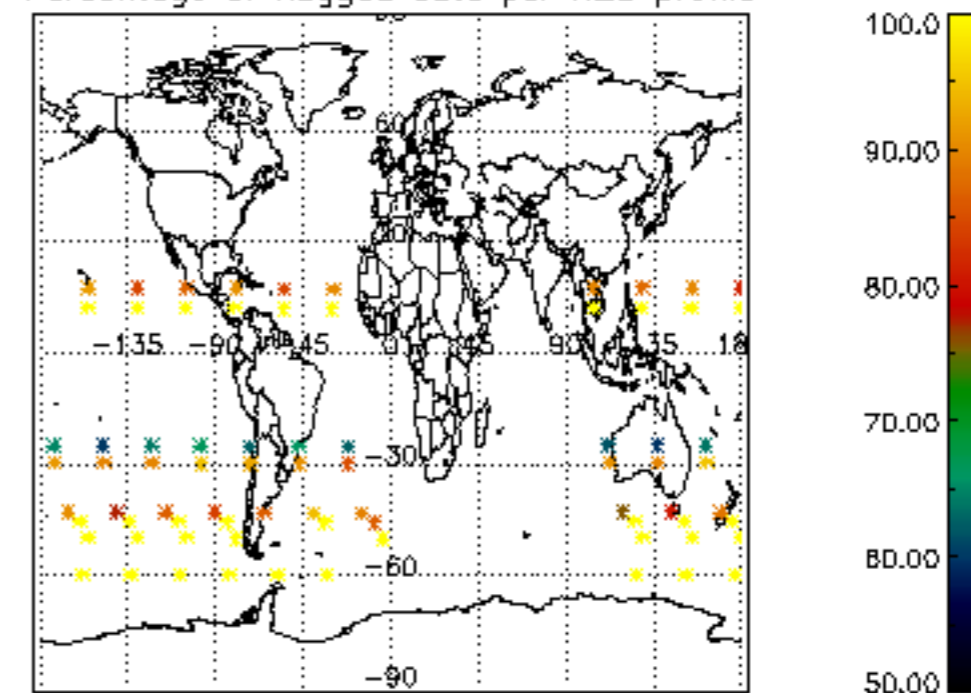




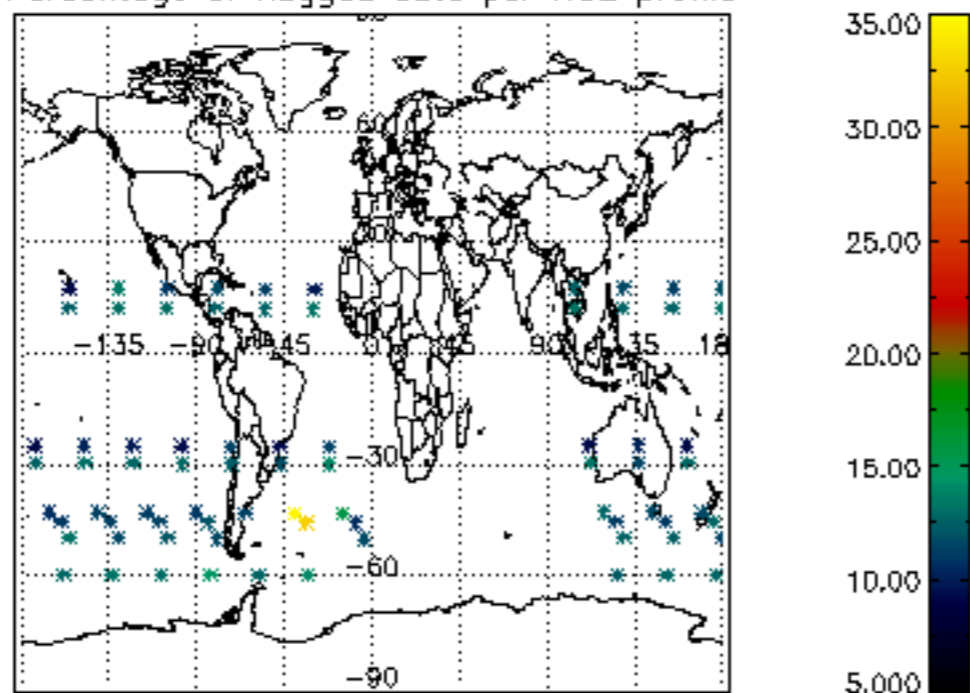
Percentage of flagged data per D3 profile



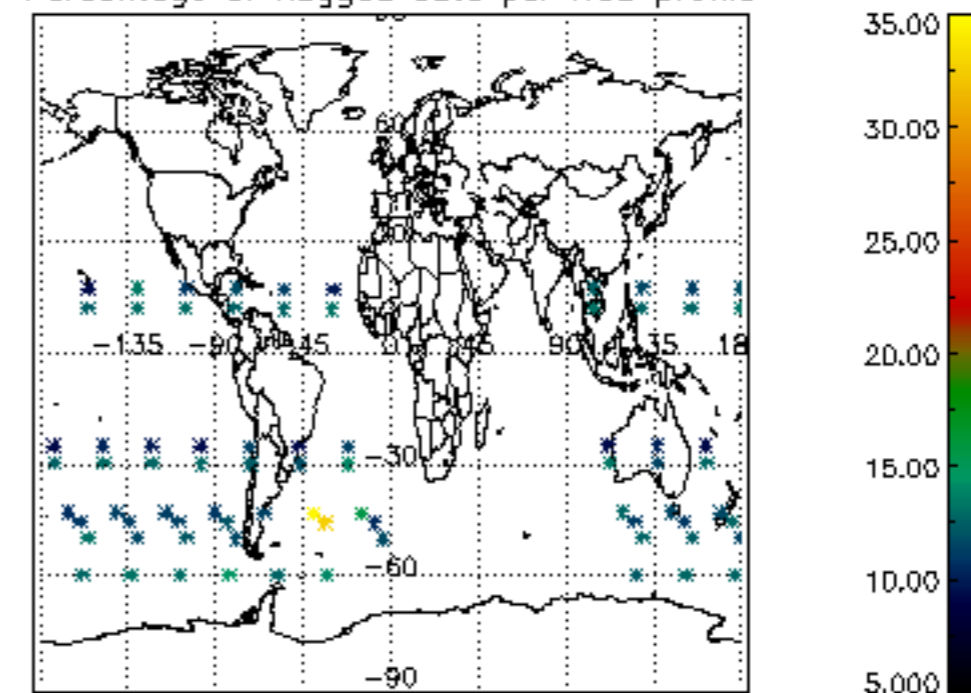
Percentage of flagged data per H2O profile

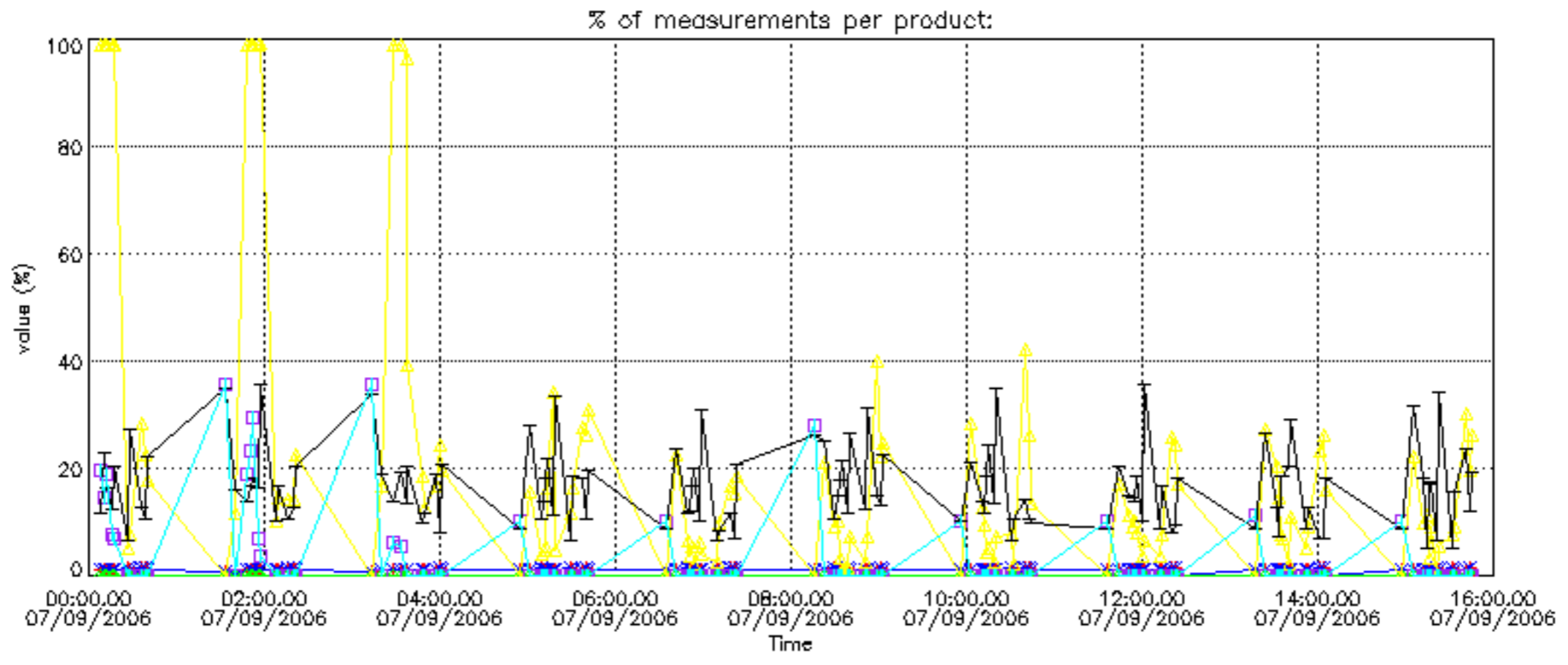


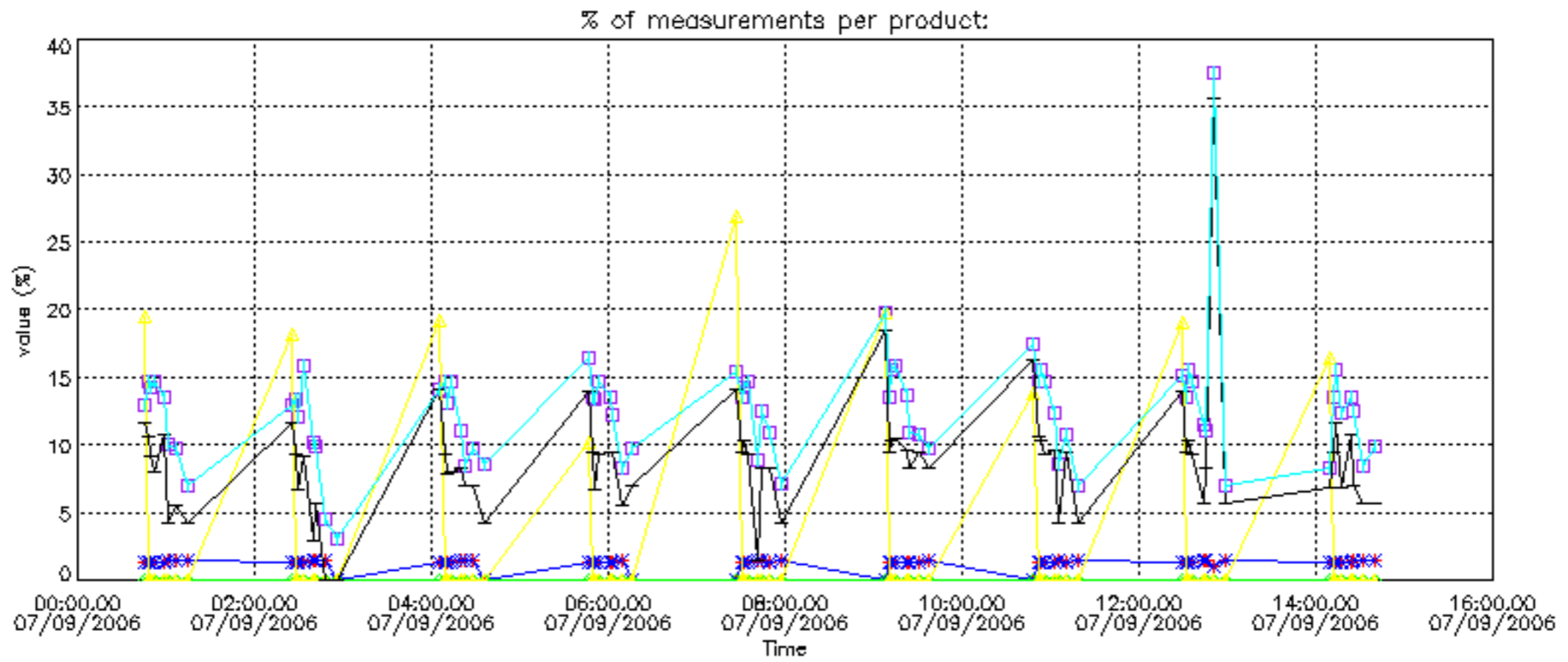
Percentage of flagged data per NO2 profile



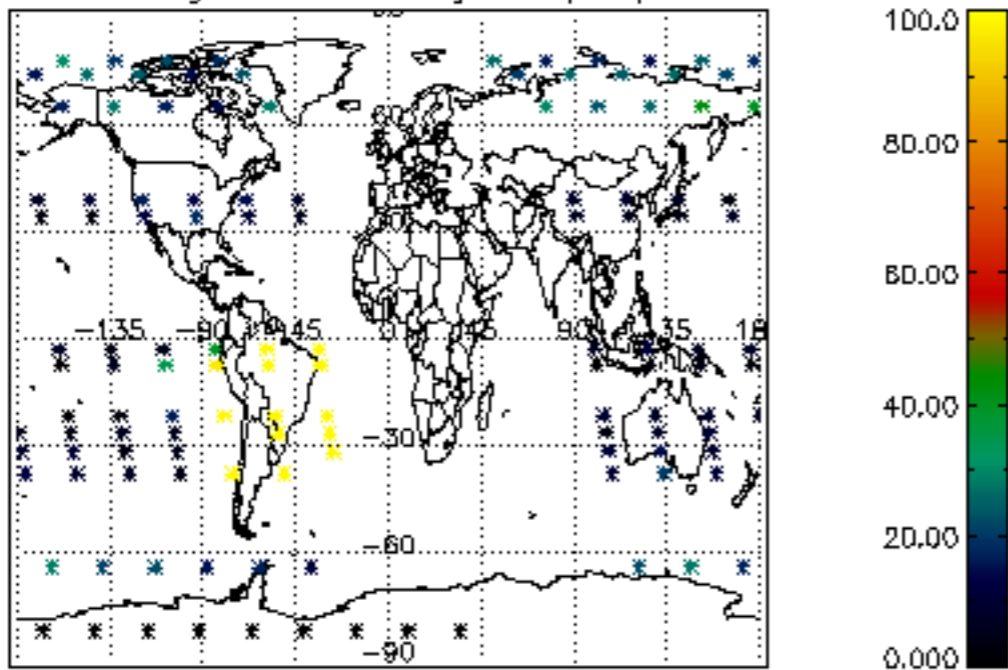
Percentage of flagged data per NO3 profile



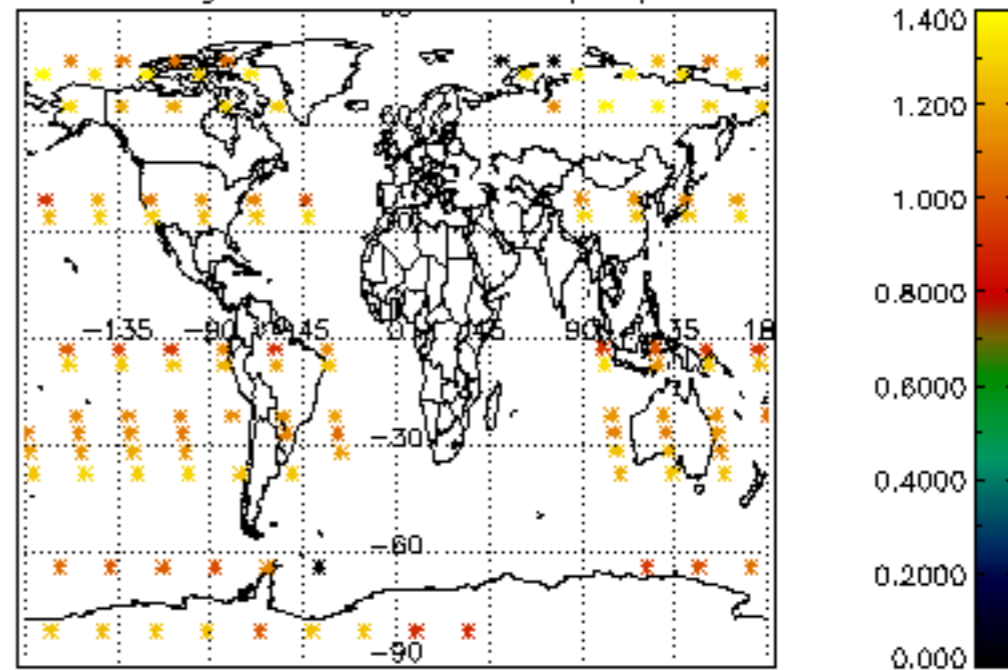




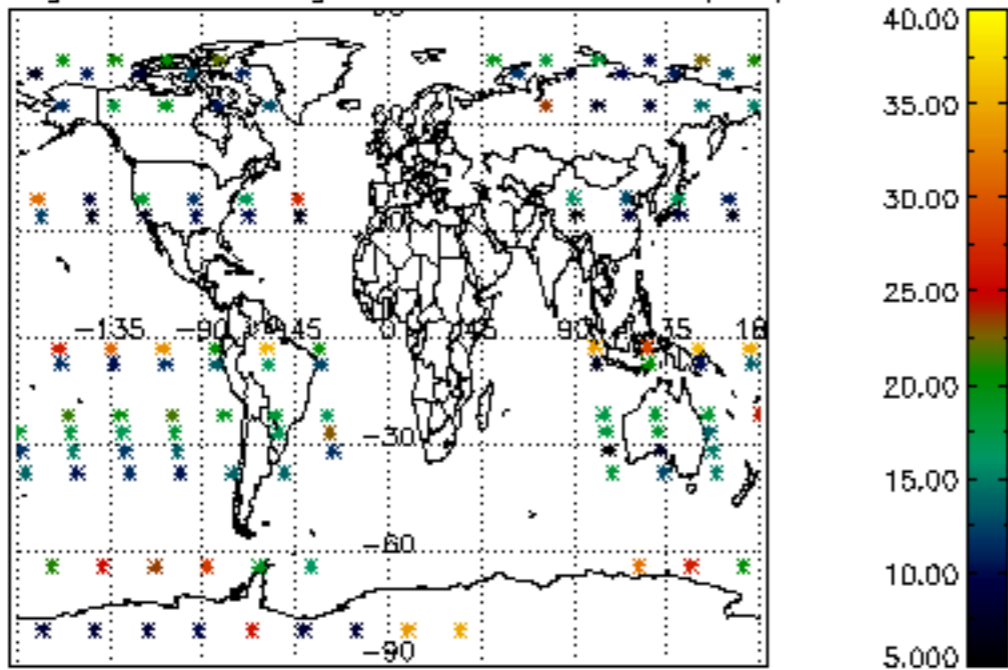
Percentage of cosmic ray hits per profile



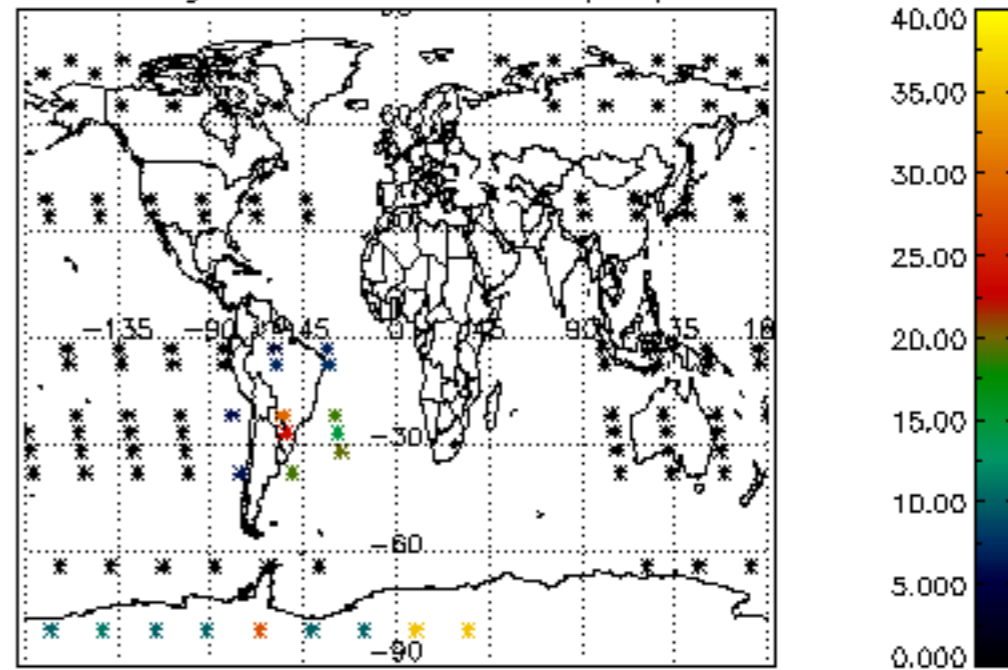
Percentage of datation errors per profile



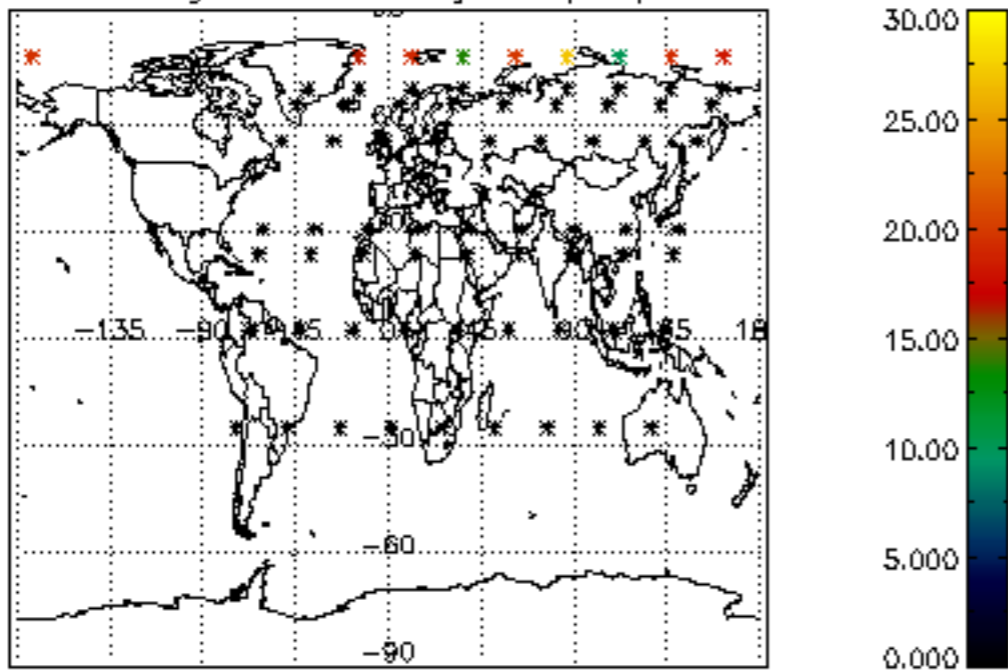
Percentage of star falling outside central band per profile



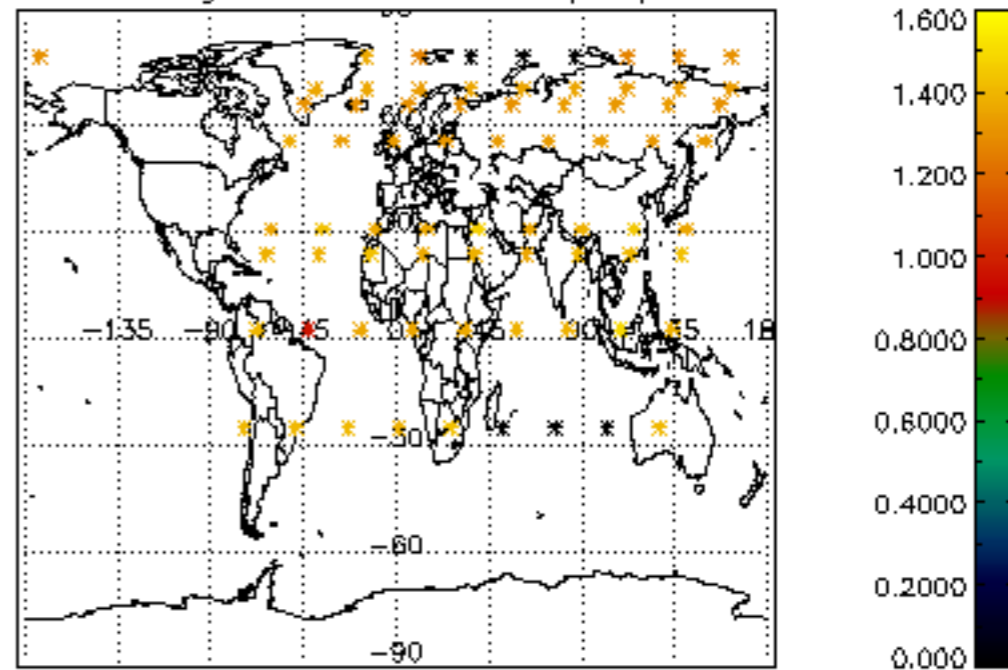
Percentage of saturation errors per profile



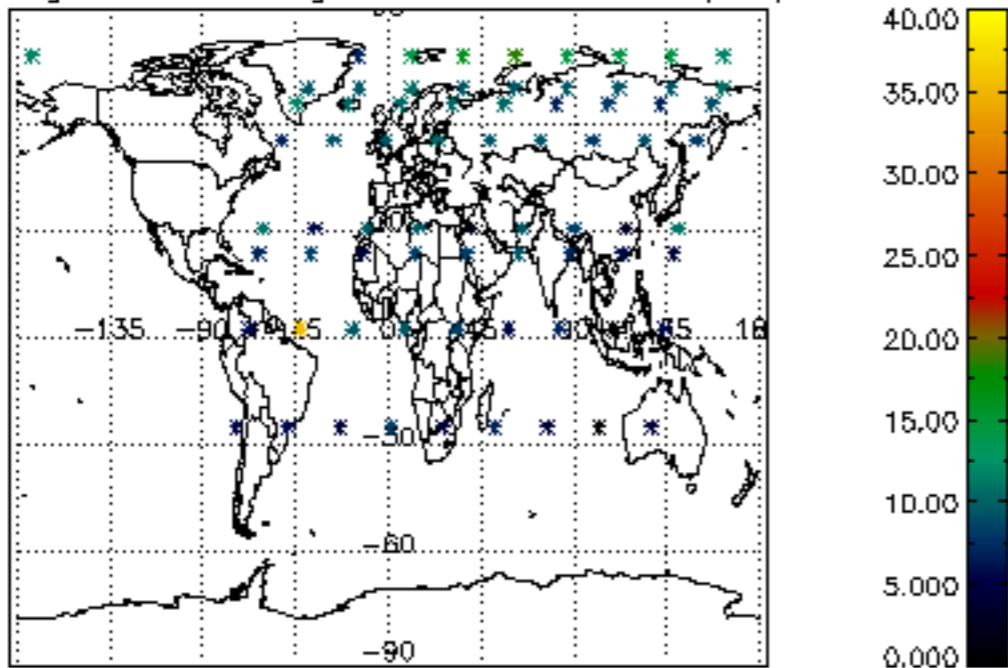
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

