

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 13:07:38
Data source version	GOMOS/6.01
Start time of products	07-10-2009 (07OCT2009 00:00:00)
Stop time of products	08-10-2009 (08OCT2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	110
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

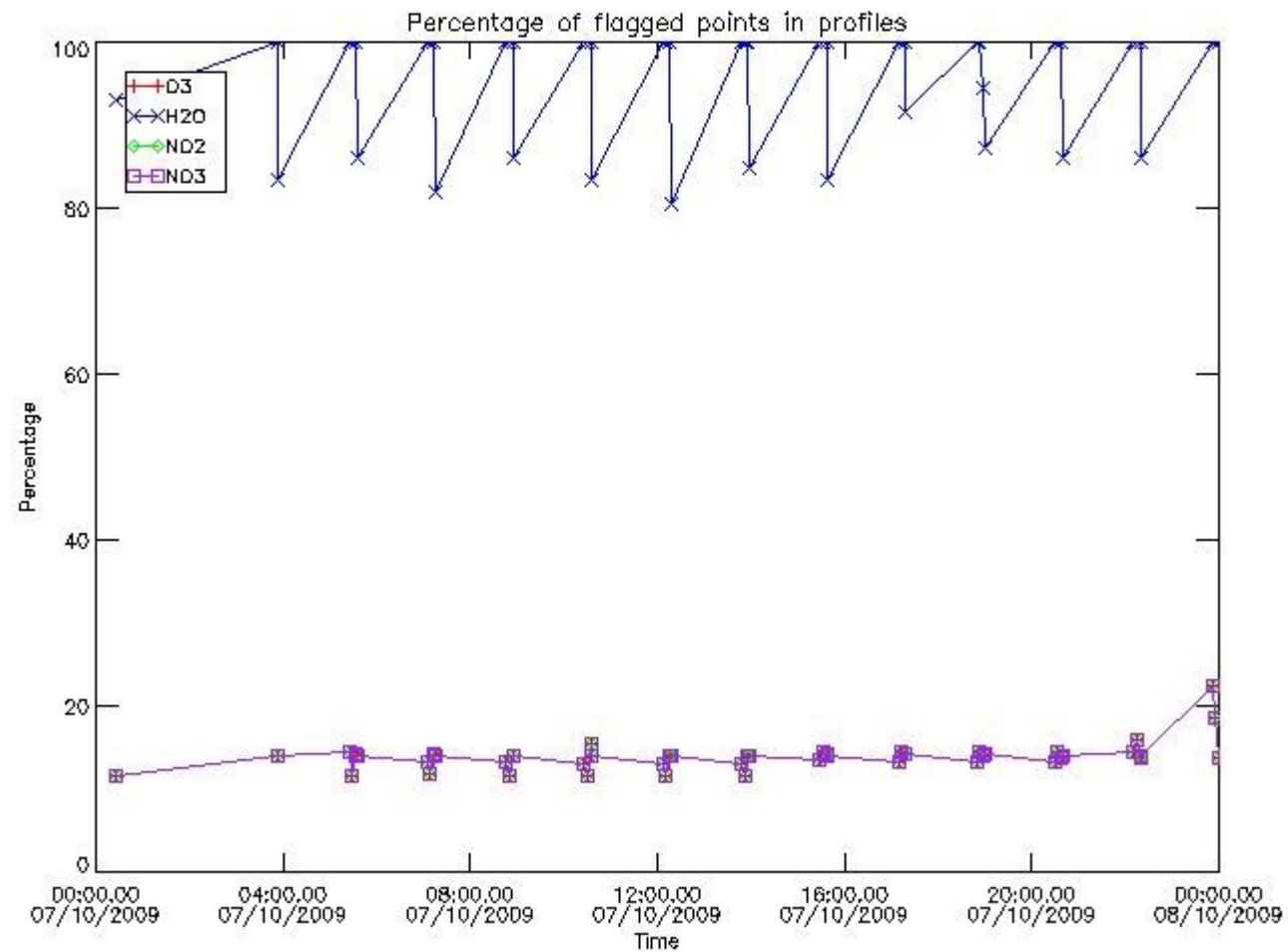
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091007_002639_000000442083_00116_39749_1551.N1	07-OCT-2009 00:26:39	Dark	43.500	88	31Eta CMa	2.4480	20000.	87	39749	No
2	GOM_NL__2PRFIN20091007_035238_000000372083_00119_39752_1572.N1	07-OCT-2009 03:52:38	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39752	No
3	GOM_NL__2PRFIN20091007_035402_000000372083_00119_39752_1573.N1	07-OCT-2009 03:54:02	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39752	No
4	GOM_NL__2PRFIN20091007_040619_000000382083_00119_39752_1574.N1	07-OCT-2009 04:06:19	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39752	No
5	GOM_NL__2PRFIN20091007_043330_000000382083_00119_39752_1575.N1	07-OCT-2009 04:33:30	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39752	No
6	GOM_NL__2PRFIN20091007_043839_000000342083_00119_39752_1576.N1	07-OCT-2009 04:38:39	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39752	No
7	GOM_NL__2PRFIN20091007_044004_000000342083_00119_39752_1577.N1	07-OCT-2009 04:40:04	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39752	No
8	GOM_NL__2PRFIN20091007_044311_000000432083_00119_39752_1578.N1	07-OCT-2009 04:43:11	Bright	42.500	160	23Gam Per	2.9300	4700.0	85	39752	No
9	GOM_NL__2PRFIN20091007_052431_000000392083_00119_39752_1579.N1	07-OCT-2009 05:24:31	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39752	No
10	GOM_NL__2PRFIN20091007_052830_000000442083_00119_39752_1580.N1	07-OCT-2009 05:28:30	Dark	44.000	88	31Eta CMa	2.4480	20000.	88	39752	No
11	GOM_NL__2PRFIN20091007_053316_000000362083_00120_39753_1580.N1	07-OCT-2009 05:33:16	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39753	No
12	GOM_NL__2PRFIN20091007_053439_000000372083_00120_39753_1581.N1	07-OCT-2009 05:34:39	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39753	No
13	GOM_NL__2PRFIN20091007_054656_000000382083_00120_39753_1582.N1	07-OCT-2009 05:46:56	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39753	No
14	GOM_NL__2PRFIN20091007_061406_000000382083_00120_39753_1583.N1	07-OCT-2009 06:14:06	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39753	No
15	GOM_NL__2PRFIN20091007_061915_000000332083_00120_39753_1584.N1	07-OCT-2009 06:19:15	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39753	No
16	GOM_NL__2PRFIN20091007_062040_000000332083_00120_39753_1585.N1	07-OCT-2009 06:20:40	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39753	No
17	GOM_NL__2PRFIN20091007_062346_000000422083_00120_39753_1586.N1	07-OCT-2009 06:23:46	Bright	41.500	160	23Gam Per	2.9300	4700.0	83	39753	No
18	GOM_NL__2PRFIN20091007_070508_000000392083_00120_39753_1587.N1	07-OCT-2009 07:05:08	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39753	No
19	GOM_NL__2PRFIN20091007_070908_000000442083_00120_39753_1588.N1	07-OCT-2009 07:09:08	Dark	43.500	88	31Eta CMa	2.4480	20000.	87	39753	No
20	GOM_NL__2PRFIN20091007_071352_000000362083_00121_39754_1588.N1	07-OCT-2009 07:13:52	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39754	No
21	GOM_NL__2PRFIN20091007_071516_000000372083_00121_39754_1589.N1	07-OCT-2009 07:15:16	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39754	No
22	GOM_NL__2PRFIN20091007_072732_000000382083_00121_39754_1590.N1	07-OCT-2009 07:27:32	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39754	No
23	GOM_NL__2PRFIN20091007_075441_000000382083_00121_39754_1591.N1	07-OCT-2009 07:54:41	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39754	No
24	GOM_NL__2PRFIN20091007_075951_000000342083_00121_39754_1592.N1	07-OCT-2009 07:59:51	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39754	No
25	GOM_NL__2PRFIN20091007_080116_000000342083_00121_39754_1593.N1	07-OCT-2009 08:01:16	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39754	No
26	GOM_NL__2PRFIN20091007_080421_000000432083_00121_39754_1594.N1	07-OCT-2009 08:04:21	Bright	42.500	160	23Gam Per	2.9300	4700.0	85	39754	No
27	GOM_NL__2PRFIN20091007_084545_000000392083_00121_39754_1595.N1	07-OCT-2009 08:45:45	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39754	No
28	GOM_NL__2PRFIN20091007_084945_000000442083_00121_39754_1596.N1	07-OCT-2009 08:49:45	Dark	44.000	88	31Eta CMa	2.4480	20000.	88	39754	No
29	GOM_NL__2PRFIN20091007_085429_000000372083_00122_39755_1632.N1	07-OCT-2009 08:54:29	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39755	No
30	GOM_NL__2PRFIN20091007_085553_000000372083_00122_39755_1633.N1	07-OCT-2009 08:55:53	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39755	No
31	GOM_NL__2PRFIN20091007_090809_000000382083_00122_39755_1634.N1	07-OCT-2009 09:08:09	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39755	No
32	GOM_NL__2PRFIN20091007_093517_000000392083_00122_39755_1635.N1	07-OCT-2009 09:35:17	Bright	38.500	53	43Bet And	2.0480	3300.0	77	39755	No
33	GOM_NL__2PRFIN20091007_094026_000000342083_00122_39755_1636.N1	07-OCT-2009 09:40:26	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39755	No
34	GOM_NL__2PRFIN20091007_094151_000000342083_00122_39755_1637.N1	07-OCT-2009 09:41:51	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39755	No
35	GOM_NL__2PRFIN20091007_094456_000000432083_00122_39755_1638.N1	07-OCT-2009 09:44:56	Bright	43.000	160	23Gam Per	2.9300	4700.0	86	39755	No
36	GOM_NL__2PRFIN20091007_102622_000000392083_00122_39755_1639.N1	07-OCT-2009 10:26:22	Dark	39.000	132	15Rho Pup	2.8030	6900.0	78	39755	No
37	GOM_NL__2PRFIN20091007_103022_000000442083_00122_39755_1640.N1	07-OCT-2009 10:30:22	Dark	44.000	88	31Eta CMa	2.4480	20000.	88	39755	No
38	GOM_NL__2PRFIN20091007_103505_000000372083_00123_39756_1642.N1	07-OCT-2009 10:35:05	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39756	No
39	GOM_NL__2PRFIN20091007_103629_000000372083_00123_39756_1643.N1	07-OCT-2009 10:36:29	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39756	No
40	GOM_NL__2PRFIN20091007_104845_000000382083_00123_39756_1644.N1	07-OCT-2009 10:48:45	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39756	No
41	GOM_NL__2PRFIN20091007_111552_000000382083_00123_39756_1645.N1	07-OCT-2009 11:15:52	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39756	No
42	GOM_NL__2PRFIN20091007_112102_000000342083_00123_39756_1646.N1	07-OCT-2009 11:21:02	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39756	No

102	GOM_NL__2PRFIN20091007_222046_000000372083_00130_39763_1789.N1	07-OCT-2009 22:20:46	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39763	No
103	GOM_NL__2PRFIN20091007_223301_000000382083_00130_39763_1790.N1	07-OCT-2009 22:33:01	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39763	No
104	GOM_NL__2PRFIN20091007_230000_000000382083_00130_39763_1791.N1	07-OCT-2009 23:00:00	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39763	No
105	GOM_NL__2PRFIN20091007_230511_000000332083_00130_39763_1792.N1	07-OCT-2009 23:05:11	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39763	No
106	GOM_NL__2PRFIN20091007_230636_000000342083_00130_39763_1793.N1	07-OCT-2009 23:06:36	Bright	33.500	76	27Gam Cas	2.3000	30000.0	67	39763	No
107	GOM_NL__2PRFIN20091007_230936_000000422083_00130_39763_1794.N1	07-OCT-2009 23:09:36	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39763	No
108	GOM_NL__2PRFIN20091007_235117_000000392083_00130_39763_1795.N1	07-OCT-2009 23:51:17	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39763	No
109	GOM_NL__2PRFIN20091007_235448_000000362083_00130_39763_1796.N1	07-OCT-2009 23:54:48	Dark	35.500	70	Zet Pup	2.2460	39000.0	71	39763	No
110	GOM_NL__2PRFIN20091007_235959_000000372083_00131_39764_1797.N1	07-OCT-2009 23:59:59	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	39764	No

3. Quality information per product

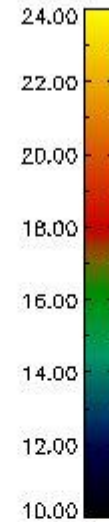
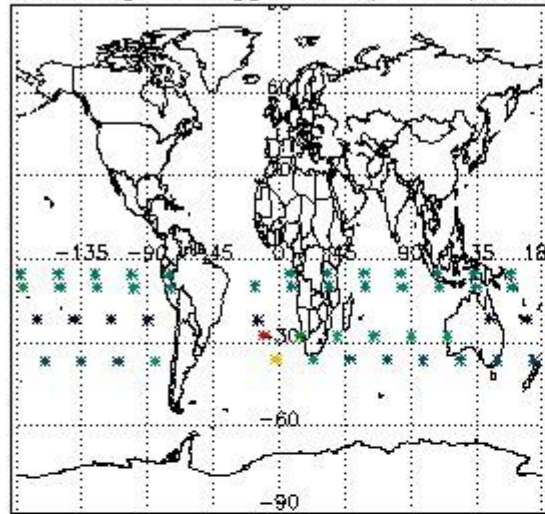
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

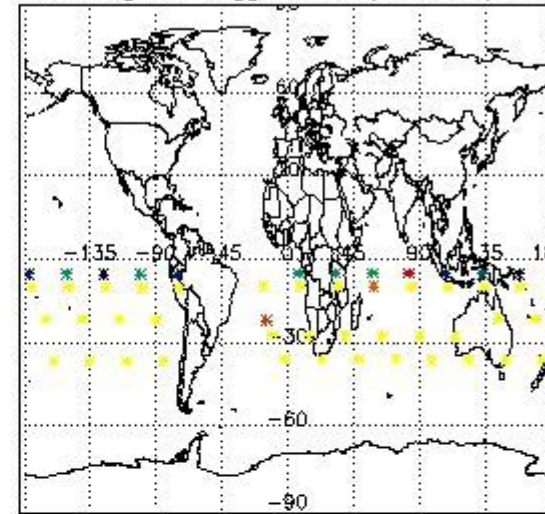


3.2 Plot quality information per product (world map)

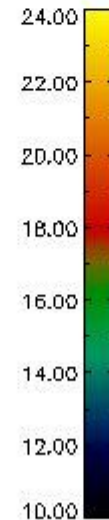
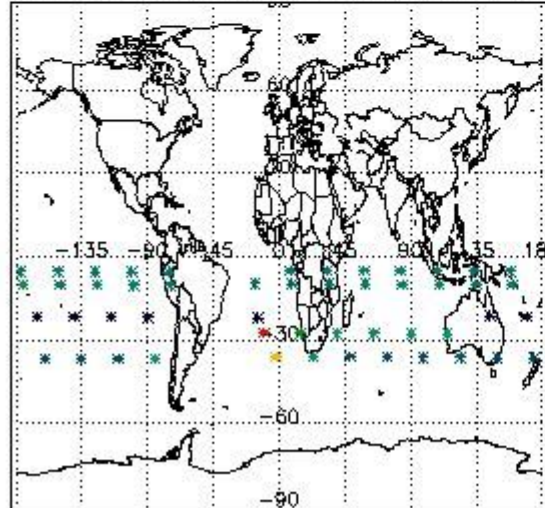
Percentage of flagged data per O3 profile



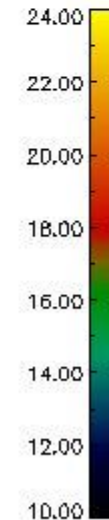
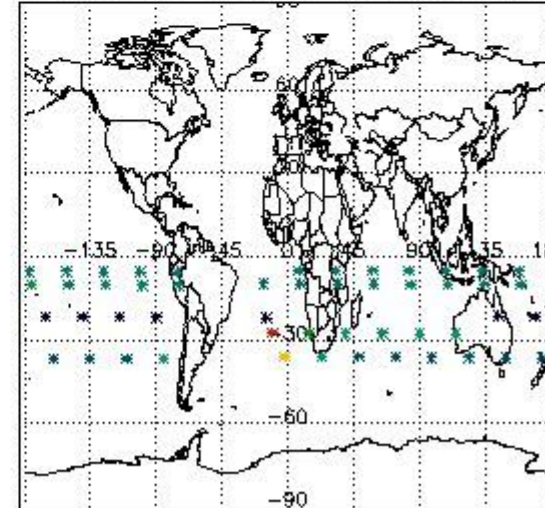
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

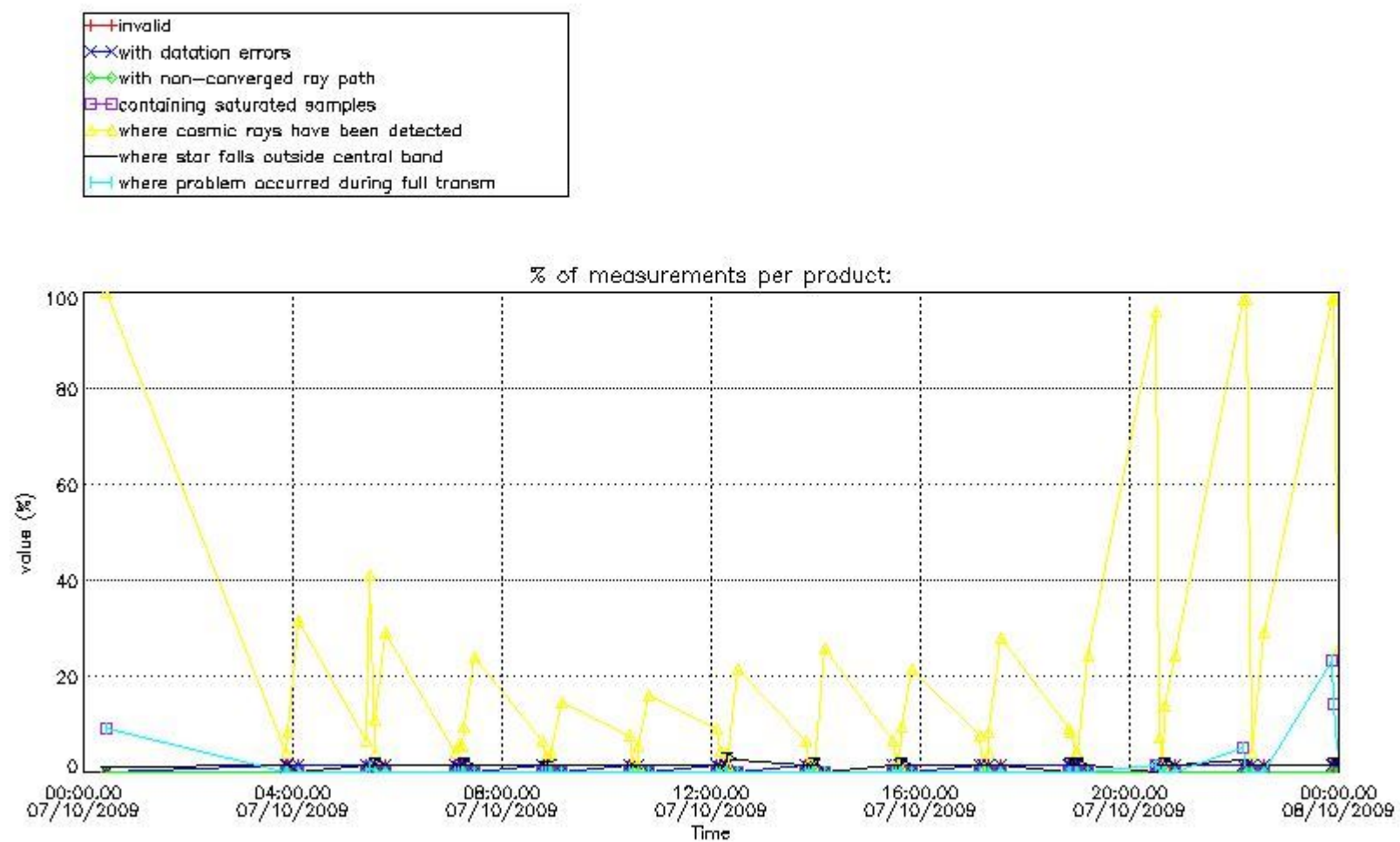


4. Level 1 quality information per product

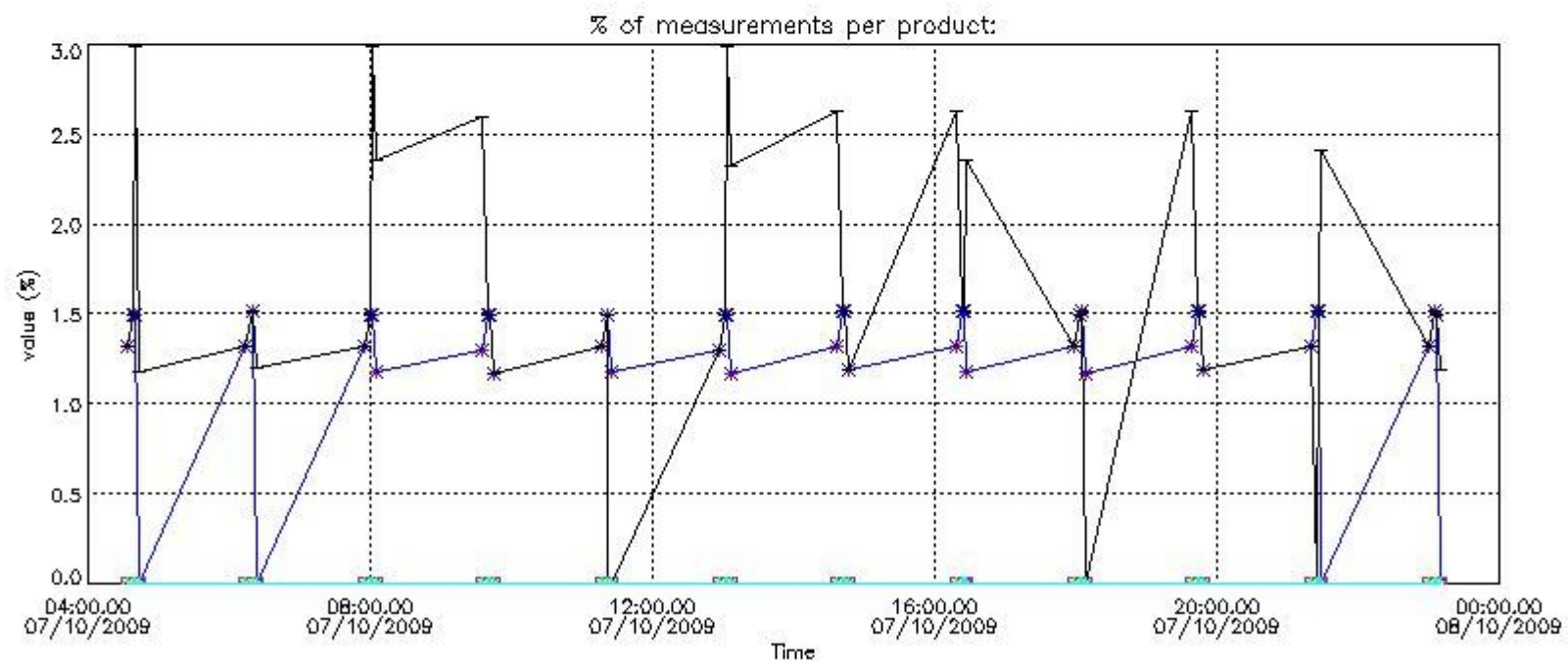
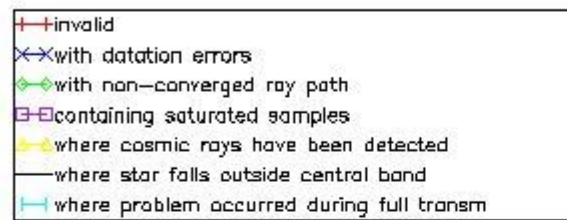
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



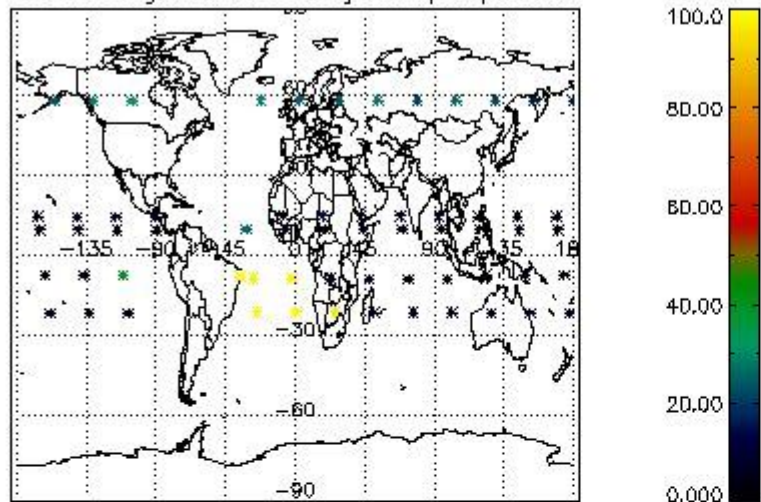
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



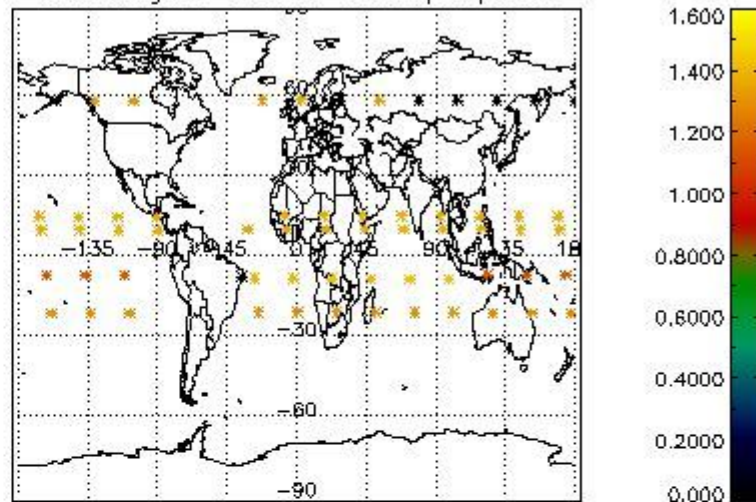
4.2 Plot quality information per product coming from level 1b processing (world map)

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

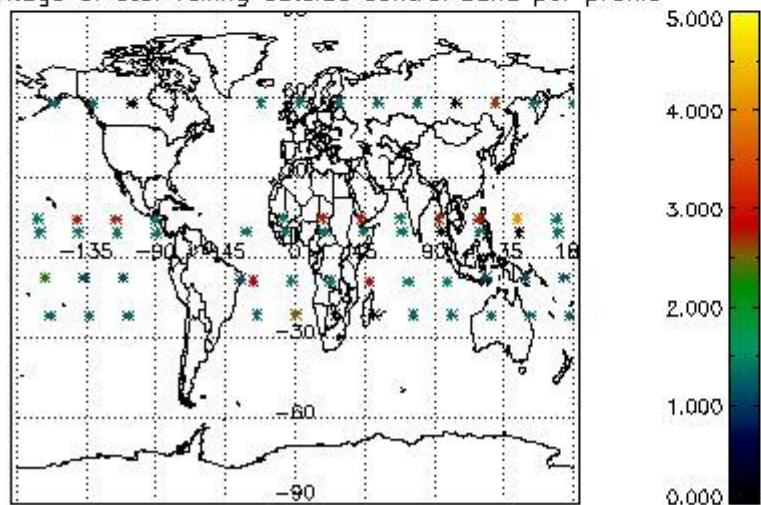
Percentage of cosmic ray hits per profile



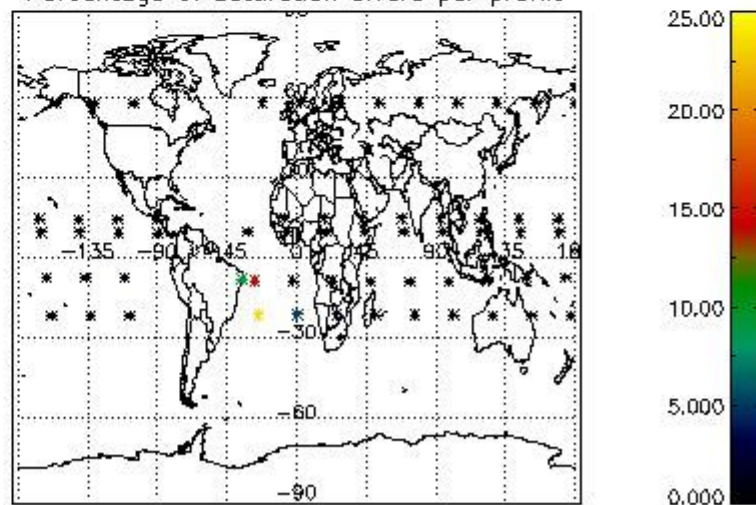
Percentage of datation errors per profile



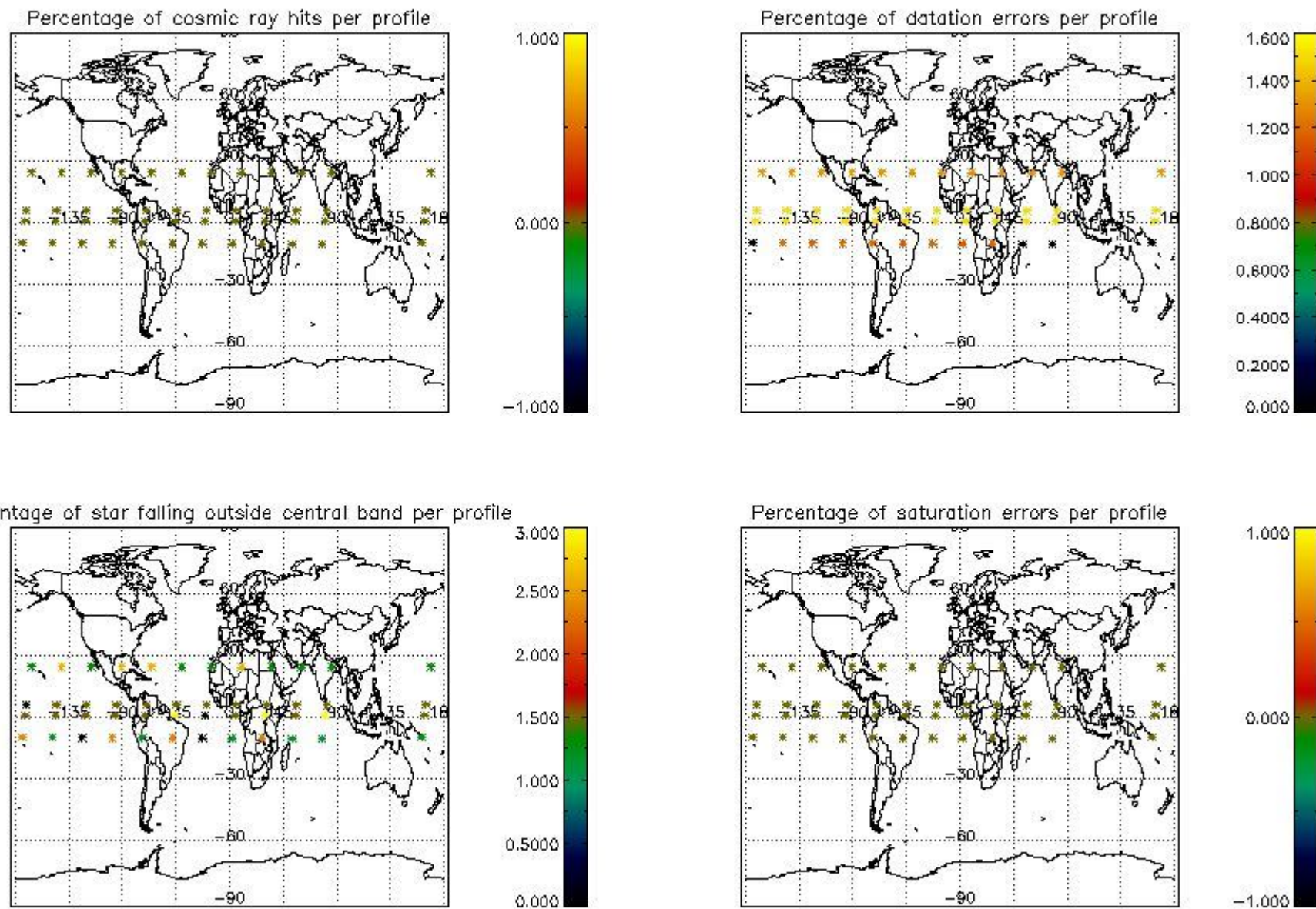
Percentage of star falling outside central band per profile



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

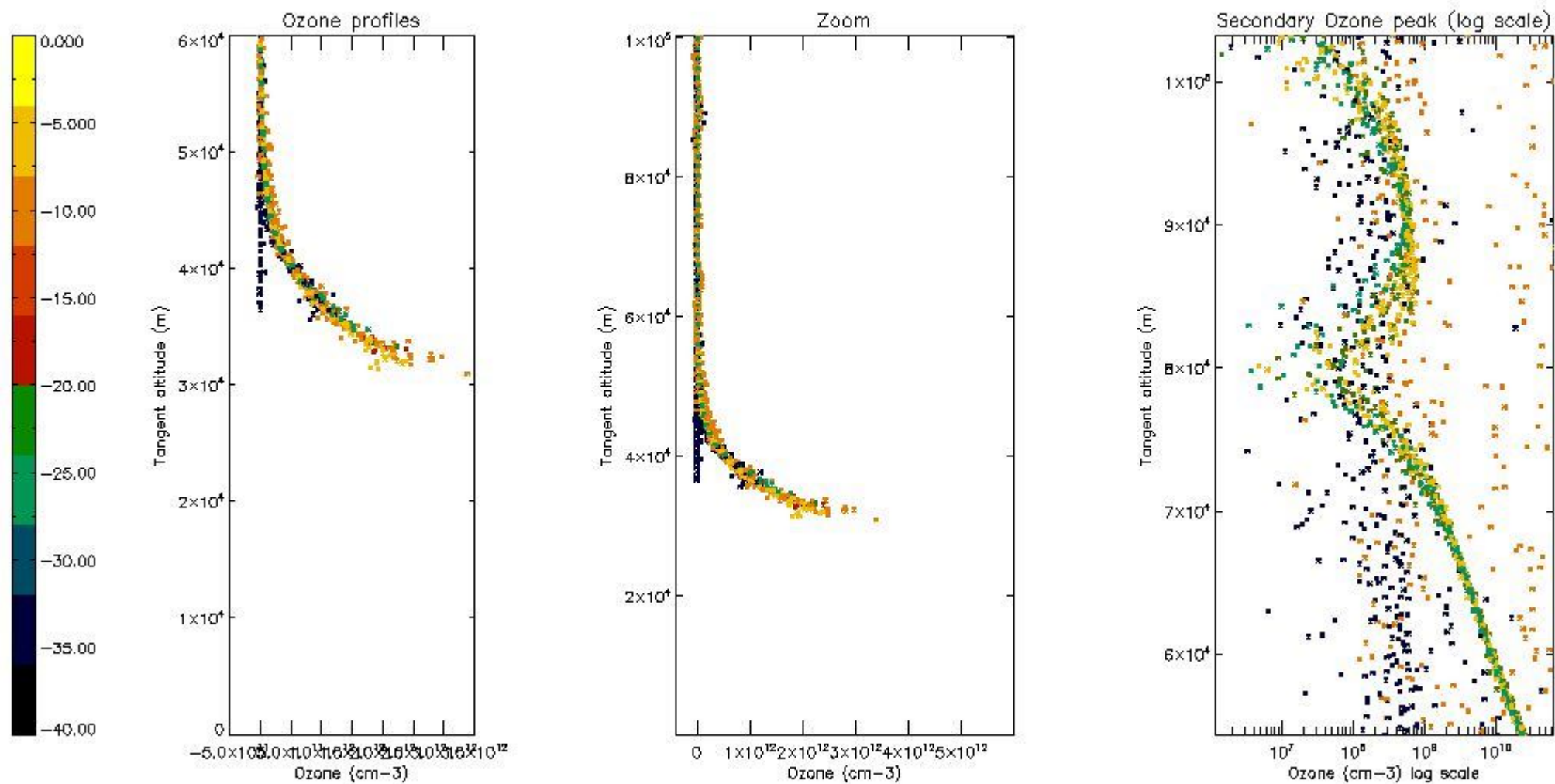
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	46
STD < 20	18

STD < 10	14
STD < 5	11

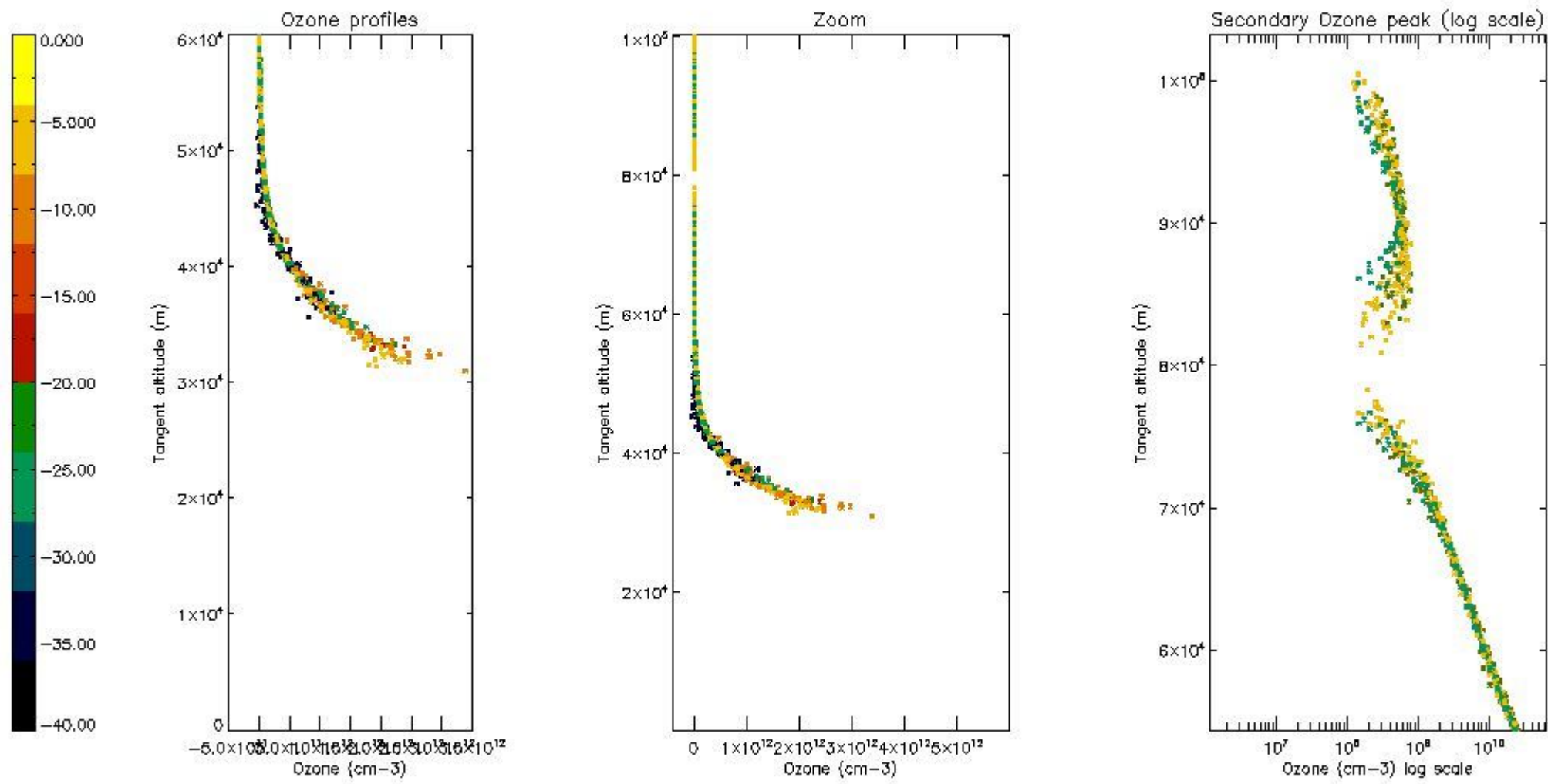
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



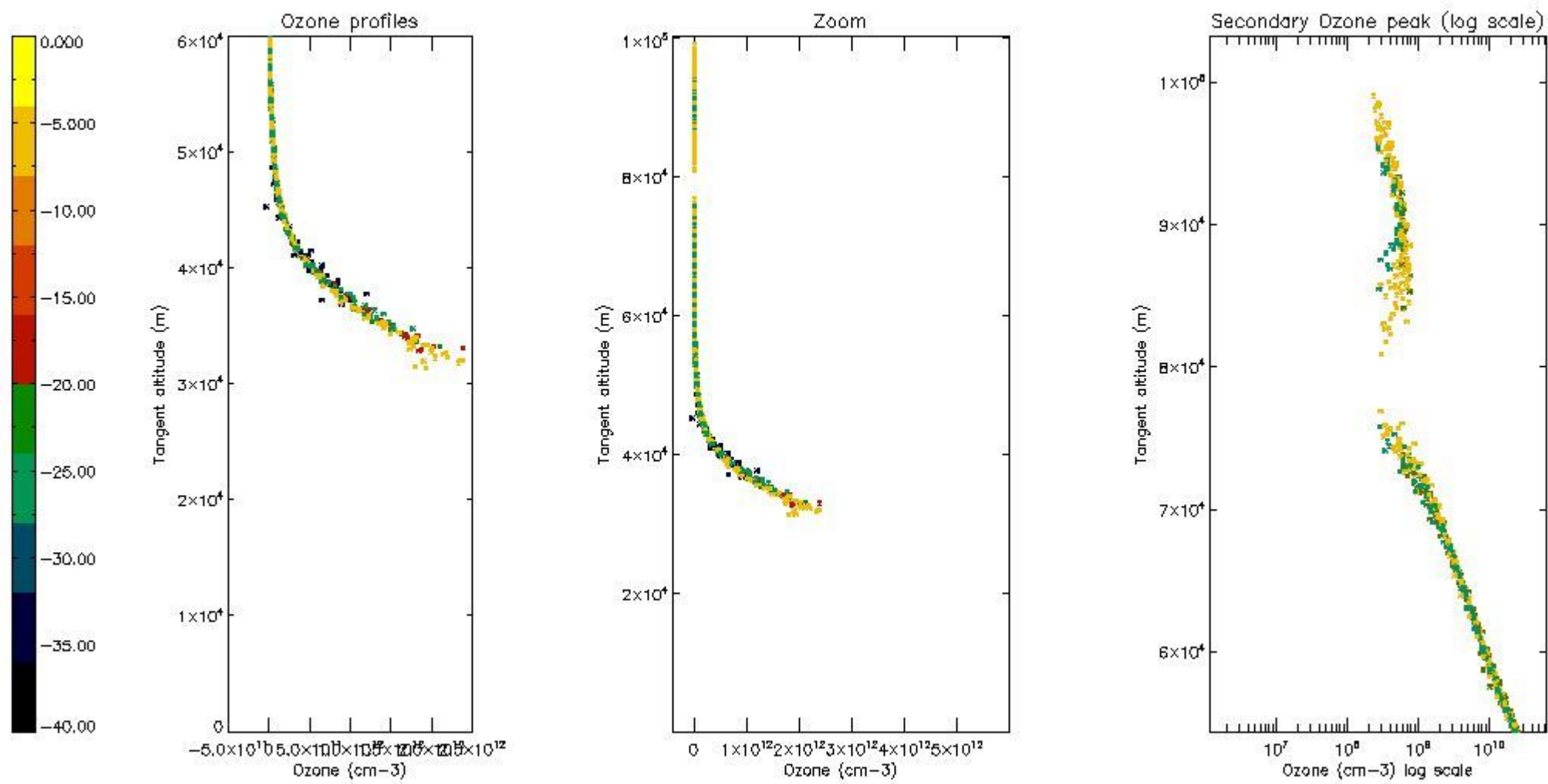
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



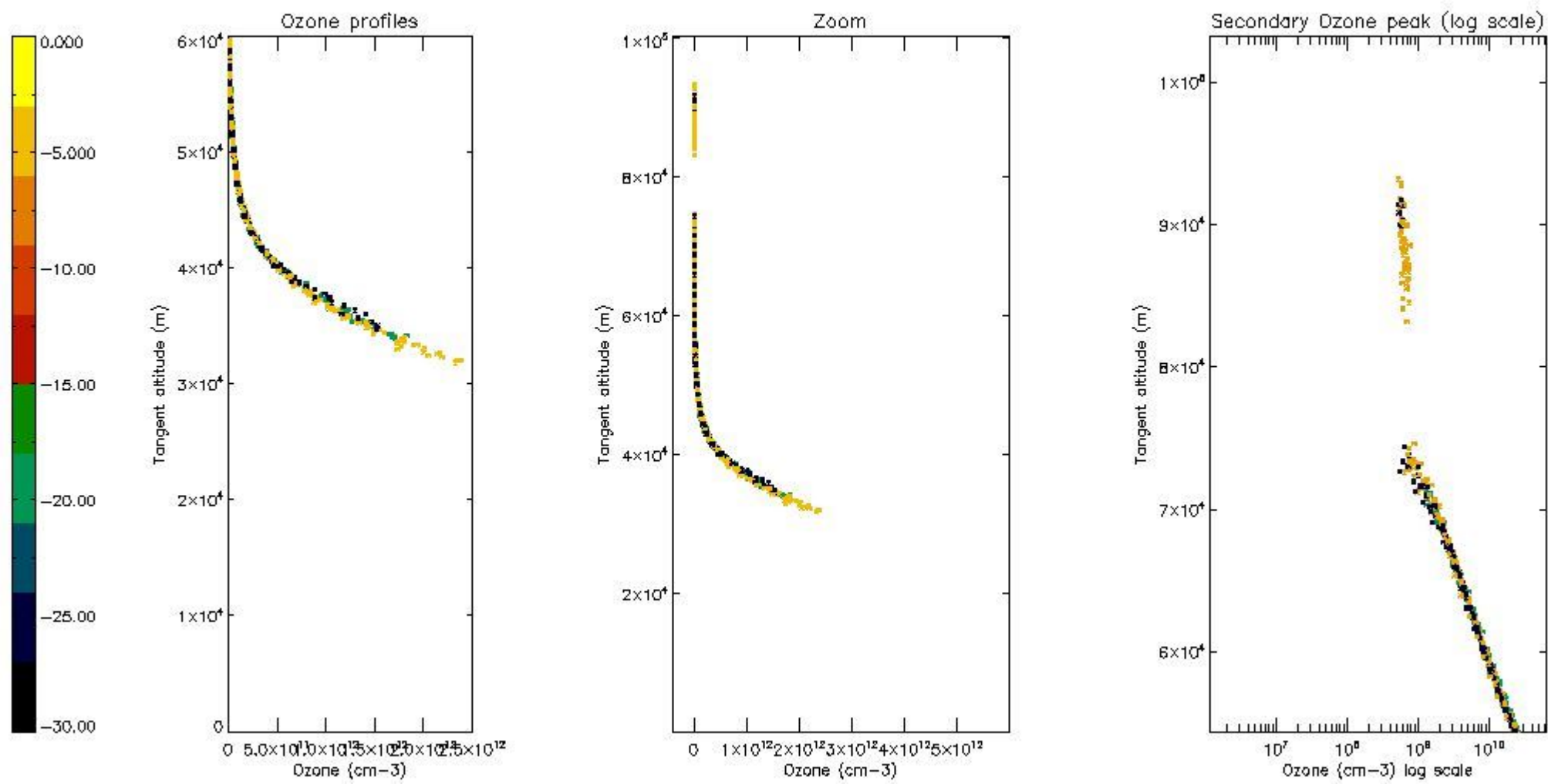
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



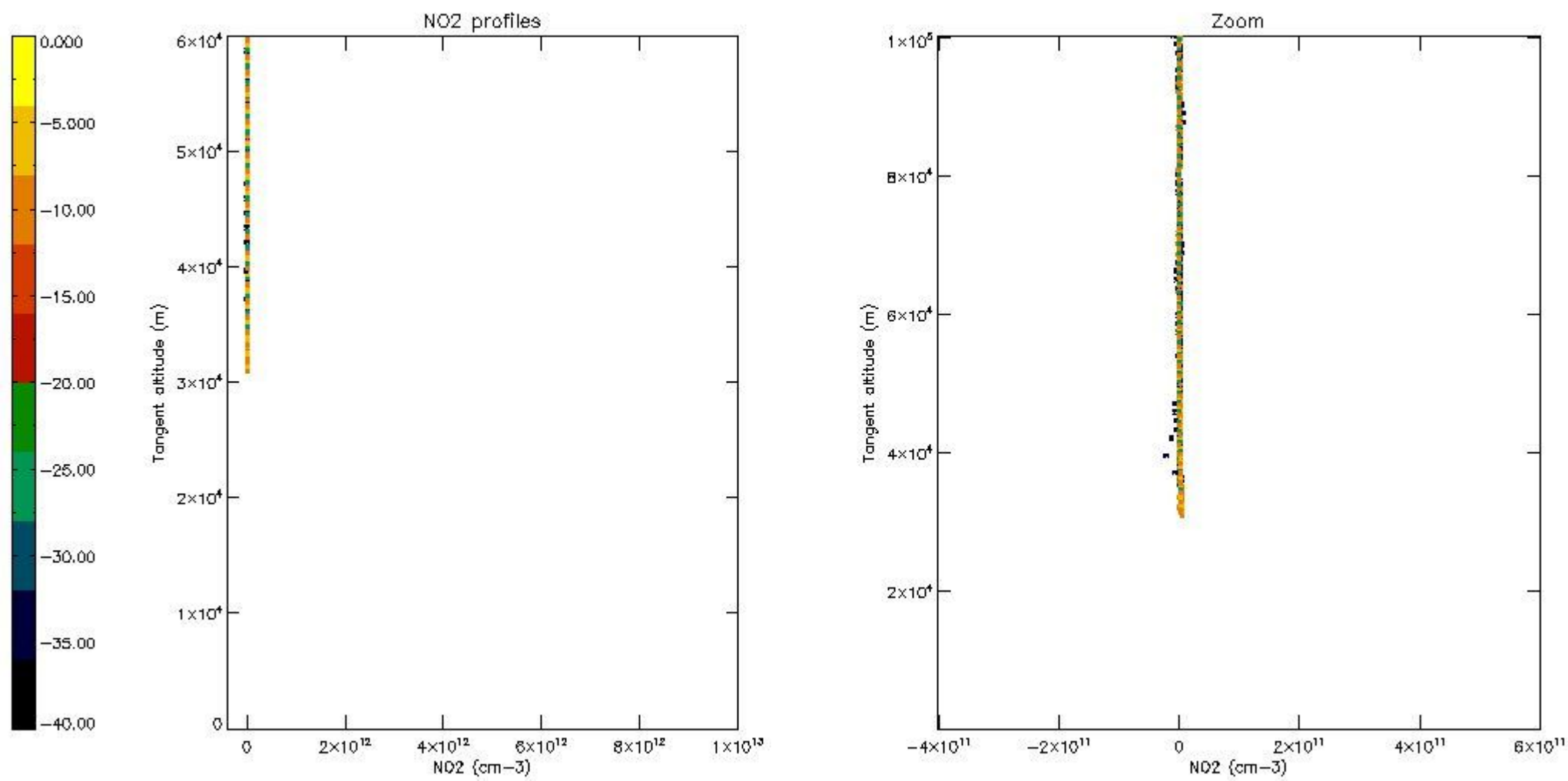
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



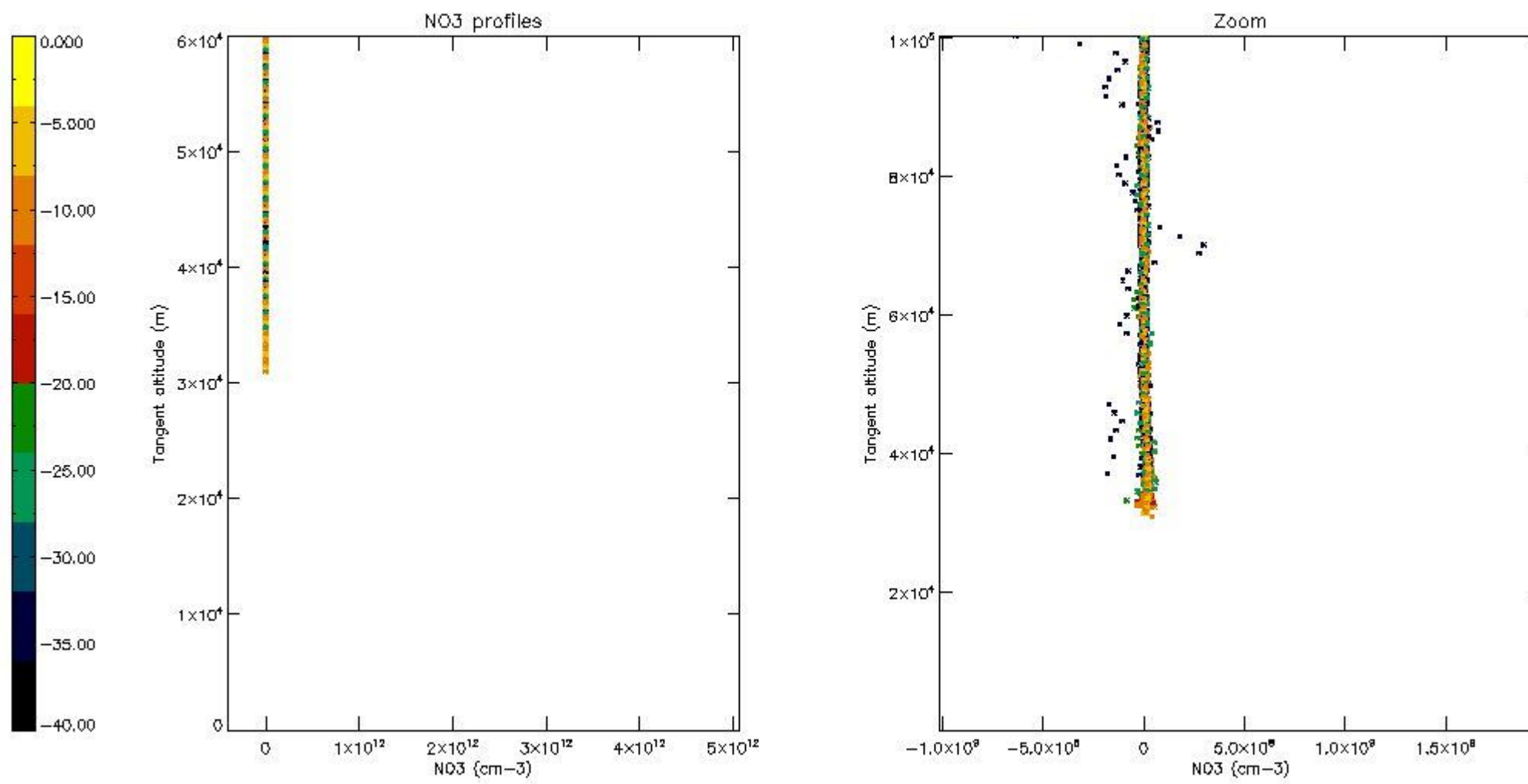
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



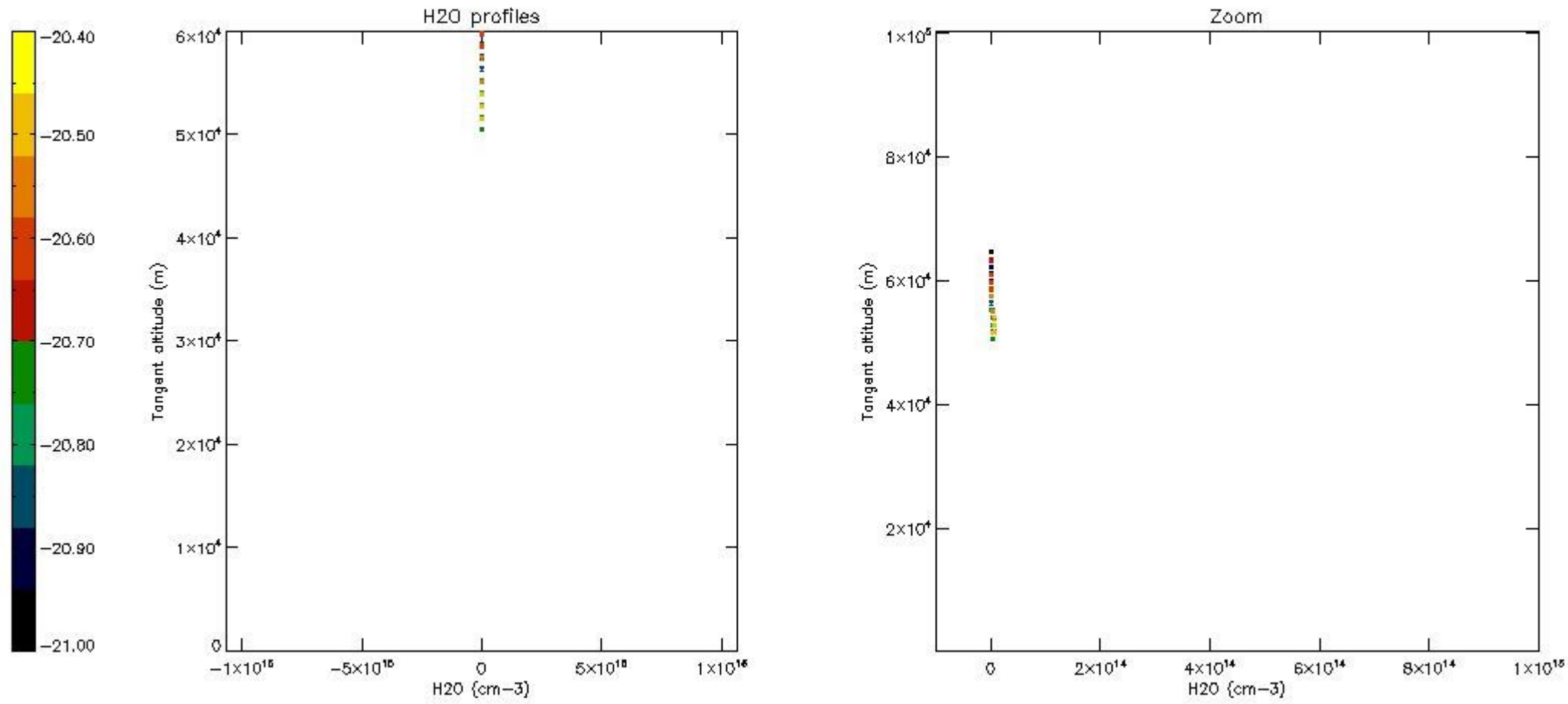
5.7 Plot NO3 profiles for all STD (dark without errors)

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	07-OCT-2009 00:26:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-OCT-2009 00:26:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-OCT-2009 00:26:39

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

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[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 13:07:38
Data source version	GOMOS/6.01
Start time of products	07-10-2009 (07OCT2009 00:00:00)
Stop time of products	08-10-2009 (08OCT2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	110
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

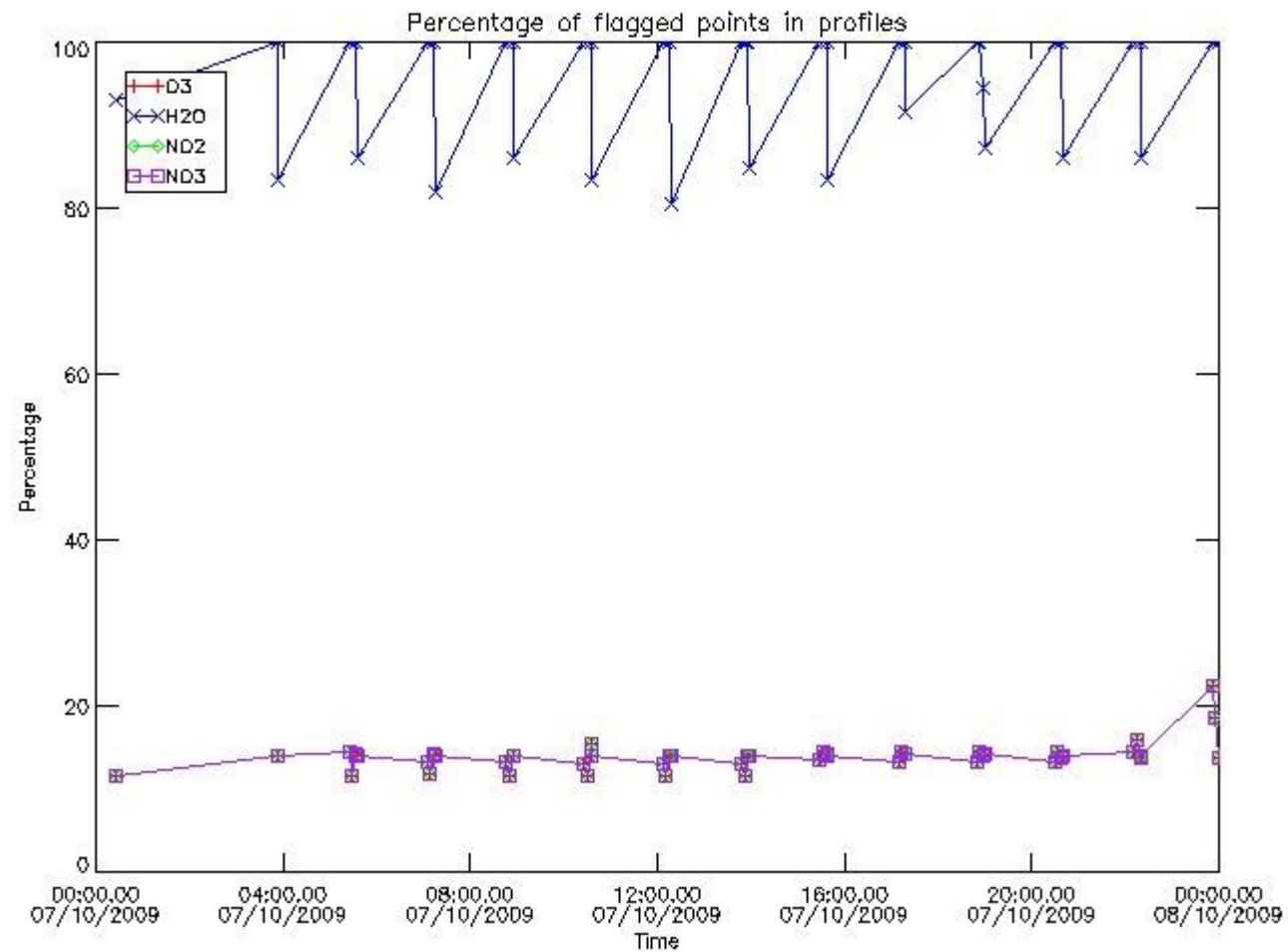
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091007_002639_000000442083_00116_39749_1551.N1	07-OCT-2009 00:26:39	Dark	43.500	88	31Eta CMa	2.4480	20000.	87	39749	No
2	GOM_NL__2PRFIN20091007_035238_000000372083_00119_39752_1572.N1	07-OCT-2009 03:52:38	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39752	No
3	GOM_NL__2PRFIN20091007_035402_000000372083_00119_39752_1573.N1	07-OCT-2009 03:54:02	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39752	No
4	GOM_NL__2PRFIN20091007_040619_000000382083_00119_39752_1574.N1	07-OCT-2009 04:06:19	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39752	No
5	GOM_NL__2PRFIN20091007_043330_000000382083_00119_39752_1575.N1	07-OCT-2009 04:33:30	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39752	No
6	GOM_NL__2PRFIN20091007_043839_000000342083_00119_39752_1576.N1	07-OCT-2009 04:38:39	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39752	No
7	GOM_NL__2PRFIN20091007_044004_000000342083_00119_39752_1577.N1	07-OCT-2009 04:40:04	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39752	No
8	GOM_NL__2PRFIN20091007_044311_000000432083_00119_39752_1578.N1	07-OCT-2009 04:43:11	Bright	42.500	160	23Gam Per	2.9300	4700.0	85	39752	No
9	GOM_NL__2PRFIN20091007_052431_000000392083_00119_39752_1579.N1	07-OCT-2009 05:24:31	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39752	No
10	GOM_NL__2PRFIN20091007_052830_000000442083_00119_39752_1580.N1	07-OCT-2009 05:28:30	Dark	44.000	88	31Eta CMa	2.4480	20000.	88	39752	No
11	GOM_NL__2PRFIN20091007_053316_000000362083_00120_39753_1580.N1	07-OCT-2009 05:33:16	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39753	No
12	GOM_NL__2PRFIN20091007_053439_000000372083_00120_39753_1581.N1	07-OCT-2009 05:34:39	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39753	No
13	GOM_NL__2PRFIN20091007_054656_000000382083_00120_39753_1582.N1	07-OCT-2009 05:46:56	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39753	No
14	GOM_NL__2PRFIN20091007_061406_000000382083_00120_39753_1583.N1	07-OCT-2009 06:14:06	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39753	No
15	GOM_NL__2PRFIN20091007_061915_000000332083_00120_39753_1584.N1	07-OCT-2009 06:19:15	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39753	No
16	GOM_NL__2PRFIN20091007_062040_000000332083_00120_39753_1585.N1	07-OCT-2009 06:20:40	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	39753	No
17	GOM_NL__2PRFIN20091007_062346_000000422083_00120_39753_1586.N1	07-OCT-2009 06:23:46	Bright	41.500	160	23Gam Per	2.9300	4700.0	83	39753	No
18	GOM_NL__2PRFIN20091007_070508_000000392083_00120_39753_1587.N1	07-OCT-2009 07:05:08	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39753	No
19	GOM_NL__2PRFIN20091007_070908_000000442083_00120_39753_1588.N1	07-OCT-2009 07:09:08	Dark	43.500	88	31Eta CMa	2.4480	20000.	87	39753	No
20	GOM_NL__2PRFIN20091007_071352_000000362083_00121_39754_1588.N1	07-OCT-2009 07:13:52	Dark	36.000	161	Tau Pup	2.9310	4500.0	72	39754	No
21	GOM_NL__2PRFIN20091007_071516_000000372083_00121_39754_1589.N1	07-OCT-2009 07:15:16	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39754	No
22	GOM_NL__2PRFIN20091007_072732_000000382083_00121_39754_1590.N1	07-OCT-2009 07:27:32	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39754	No
23	GOM_NL__2PRFIN20091007_075441_000000382083_00121_39754_1591.N1	07-OCT-2009 07:54:41	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39754	No
24	GOM_NL__2PRFIN20091007_075951_000000342083_00121_39754_1592.N1	07-OCT-2009 07:59:51	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39754	No
25	GOM_NL__2PRFIN20091007_080116_000000342083_00121_39754_1593.N1	07-OCT-2009 08:01:16	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39754	No
26	GOM_NL__2PRFIN20091007_080421_000000432083_00121_39754_1594.N1	07-OCT-2009 08:04:21	Bright	42.500	160	23Gam Per	2.9300	4700.0	85	39754	No
27	GOM_NL__2PRFIN20091007_084545_000000392083_00121_39754_1595.N1	07-OCT-2009 08:45:45	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39754	No
28	GOM_NL__2PRFIN20091007_084945_000000442083_00121_39754_1596.N1	07-OCT-2009 08:49:45	Dark	44.000	88	31Eta CMa	2.4480	20000.	88	39754	No
29	GOM_NL__2PRFIN20091007_085429_000000372083_00122_39755_1632.N1	07-OCT-2009 08:54:29	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39755	No
30	GOM_NL__2PRFIN20091007_085553_000000372083_00122_39755_1633.N1	07-OCT-2009 08:55:53	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39755	No
31	GOM_NL__2PRFIN20091007_090809_000000382083_00122_39755_1634.N1	07-OCT-2009 09:08:09	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39755	No
32	GOM_NL__2PRFIN20091007_093517_000000392083_00122_39755_1635.N1	07-OCT-2009 09:35:17	Bright	38.500	53	43Bet And	2.0480	3300.0	77	39755	No
33	GOM_NL__2PRFIN20091007_094026_000000342083_00122_39755_1636.N1	07-OCT-2009 09:40:26	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39755	No
34	GOM_NL__2PRFIN20091007_094151_000000342083_00122_39755_1637.N1	07-OCT-2009 09:41:51	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39755	No
35	GOM_NL__2PRFIN20091007_094456_000000432083_00122_39755_1638.N1	07-OCT-2009 09:44:56	Bright	43.000	160	23Gam Per	2.9300	4700.0	86	39755	No
36	GOM_NL__2PRFIN20091007_102622_000000392083_00122_39755_1639.N1	07-OCT-2009 10:26:22	Dark	39.000	132	15Rho Pup	2.8030	6900.0	78	39755	No
37	GOM_NL__2PRFIN20091007_103022_000000442083_00122_39755_1640.N1	07-OCT-2009 10:30:22	Dark	44.000	88	31Eta CMa	2.4480	20000.	88	39755	No
38	GOM_NL__2PRFIN20091007_103505_000000372083_00123_39756_1642.N1	07-OCT-2009 10:35:05	Dark	36.500	161	Tau Pup	2.9310	4500.0	73	39756	No
39	GOM_NL__2PRFIN20091007_103629_000000372083_00123_39756_1643.N1	07-OCT-2009 10:36:29	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39756	No
40	GOM_NL__2PRFIN20091007_104845_000000382083_00123_39756_1644.N1	07-OCT-2009 10:48:45	Straylight	37.500	157	The1Eri	2.9060	9300.0	75	39756	No
41	GOM_NL__2PRFIN20091007_111552_000000382083_00123_39756_1645.N1	07-OCT-2009 11:15:52	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39756	No
42	GOM_NL__2PRFIN20091007_112102_000000342083_00123_39756_1646.N1	07-OCT-2009 11:21:02	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	39756	No

102	GOM_NL__2PRFIN20091007_222046_000000372083_00130_39763_1789.N1	07-OCT-2009 22:20:46	Dark	36.500	2	Alp Car	-0.73600	7000.0	73	39763	No
103	GOM_NL__2PRFIN20091007_223301_000000382083_00130_39763_1790.N1	07-OCT-2009 22:33:01	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	39763	No
104	GOM_NL__2PRFIN20091007_230000_000000382083_00130_39763_1791.N1	07-OCT-2009 23:00:00	Bright	38.000	53	43Bet And	2.0480	3300.0	76	39763	No
105	GOM_NL__2PRFIN20091007_230511_000000332083_00130_39763_1792.N1	07-OCT-2009 23:05:11	Bright	33.000	68	18Alp Cas	2.2250	4500.0	66	39763	No
106	GOM_NL__2PRFIN20091007_230636_000000342083_00130_39763_1793.N1	07-OCT-2009 23:06:36	Bright	33.500	76	27Gam Cas	2.3000	30000.0	67	39763	No
107	GOM_NL__2PRFIN20091007_230936_000000422083_00130_39763_1794.N1	07-OCT-2009 23:09:36	Bright	42.000	160	23Gam Per	2.9300	4700.0	84	39763	No
108	GOM_NL__2PRFIN20091007_235117_000000392083_00130_39763_1795.N1	07-OCT-2009 23:51:17	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	39763	No
109	GOM_NL__2PRFIN20091007_235448_000000362083_00130_39763_1796.N1	07-OCT-2009 23:54:48	Dark	35.500	70	Zet Pup	2.2460	39000.0	71	39763	No
110	GOM_NL__2PRFIN20091007_235959_000000372083_00131_39764_1797.N1	07-OCT-2009 23:59:59	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	39764	No

3. Quality information per product

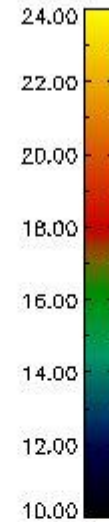
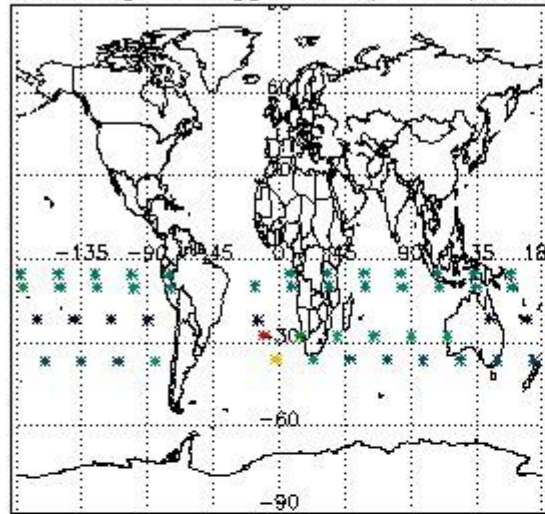
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

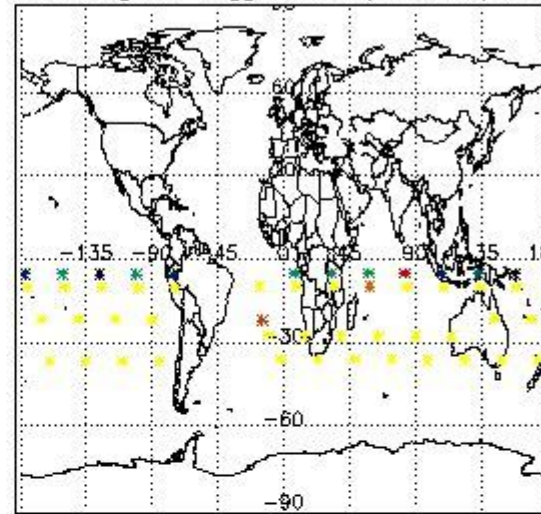


3.2 Plot quality information per product (world map)

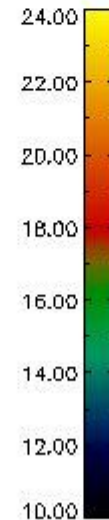
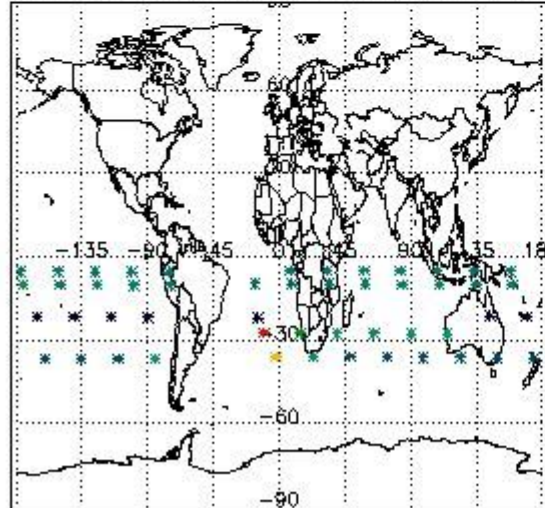
Percentage of flagged data per O3 profile



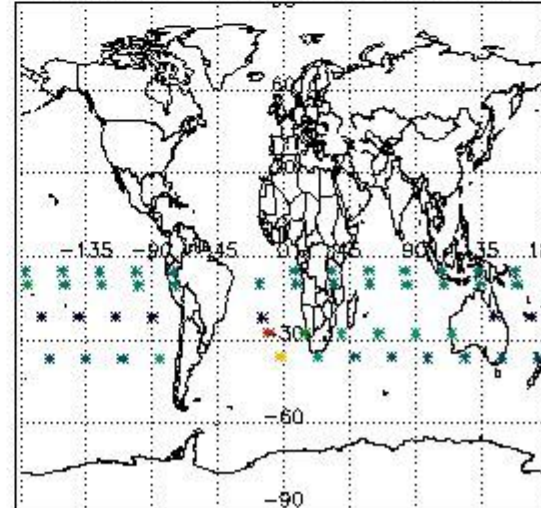
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

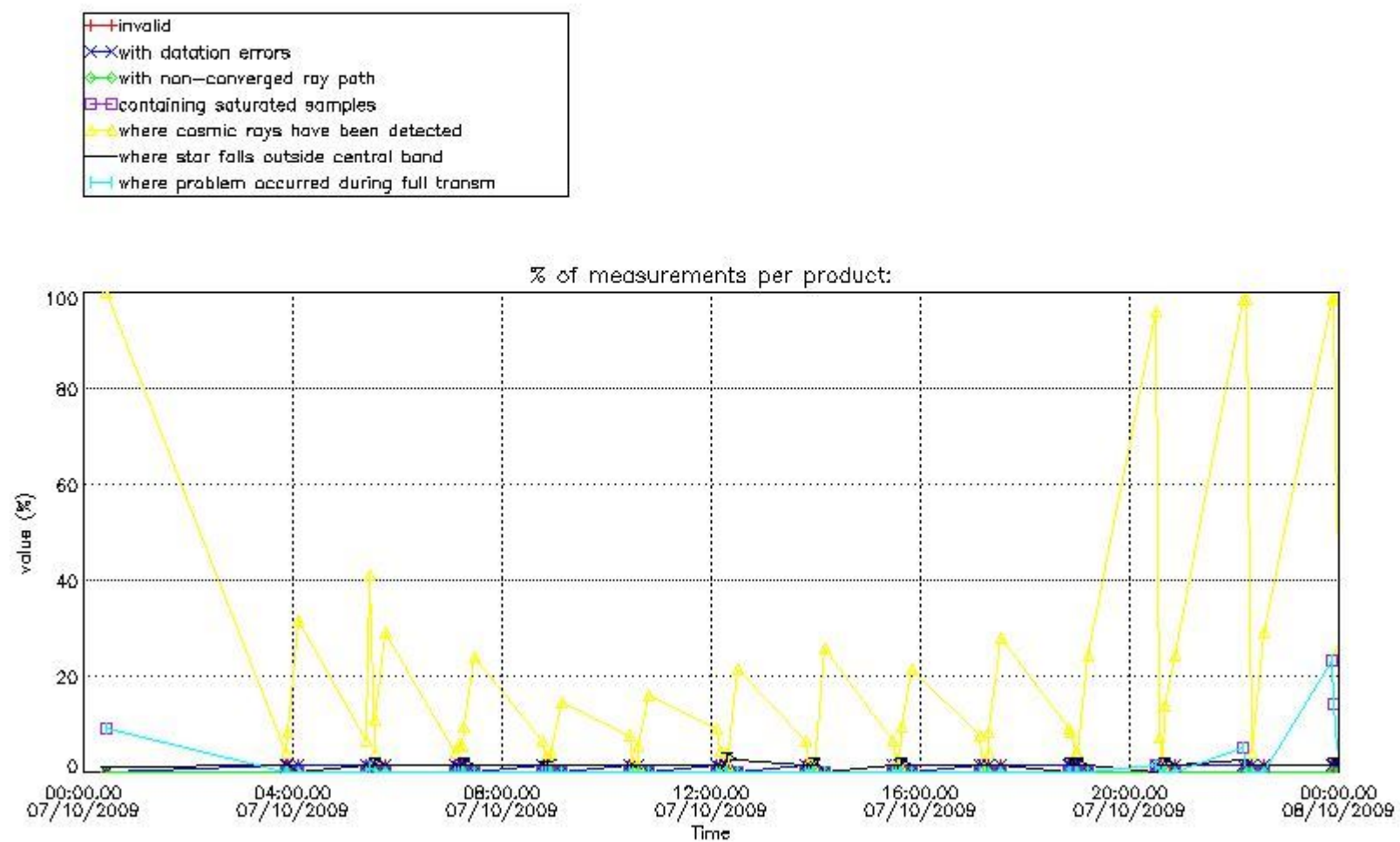


4. Level 1 quality information per product

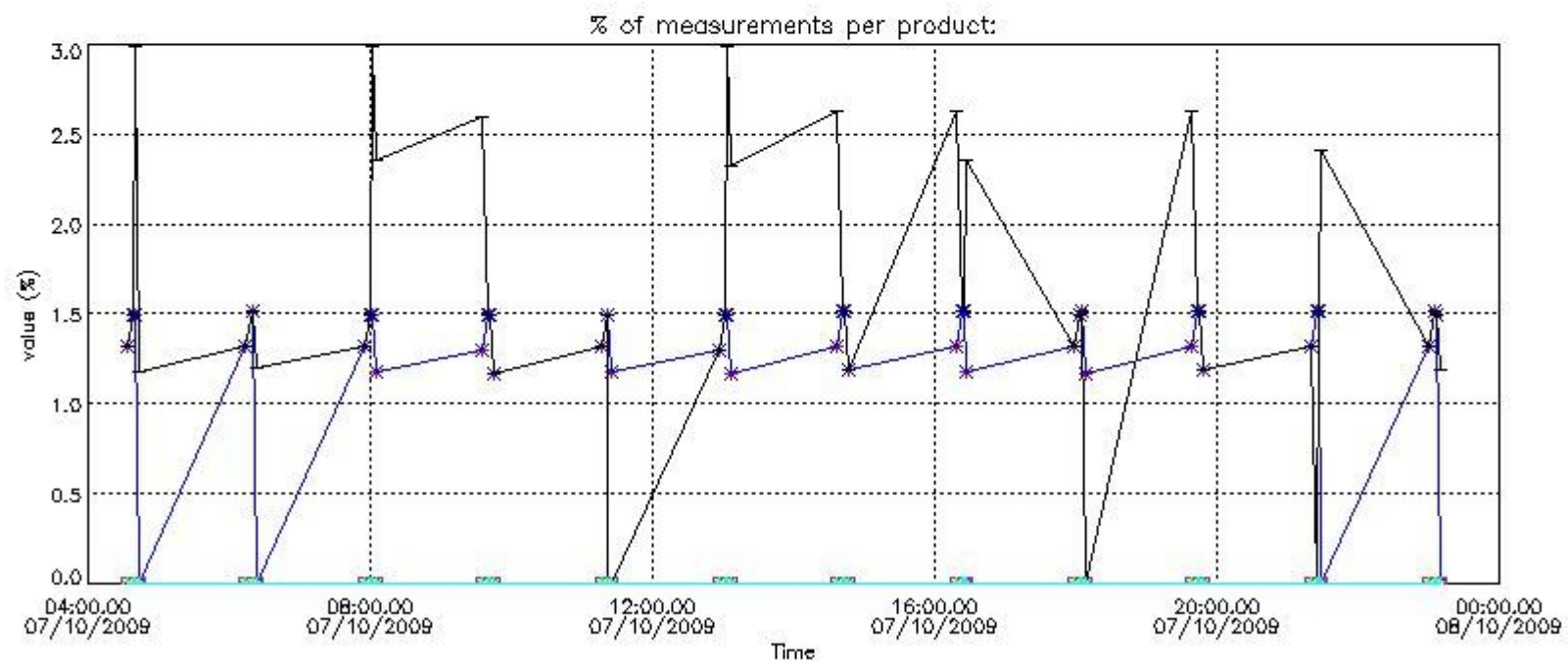
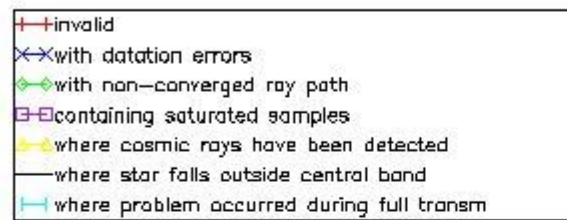
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



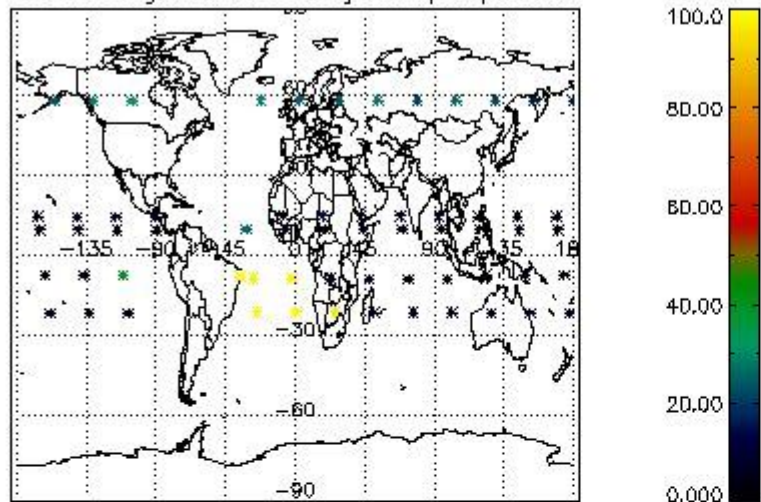
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



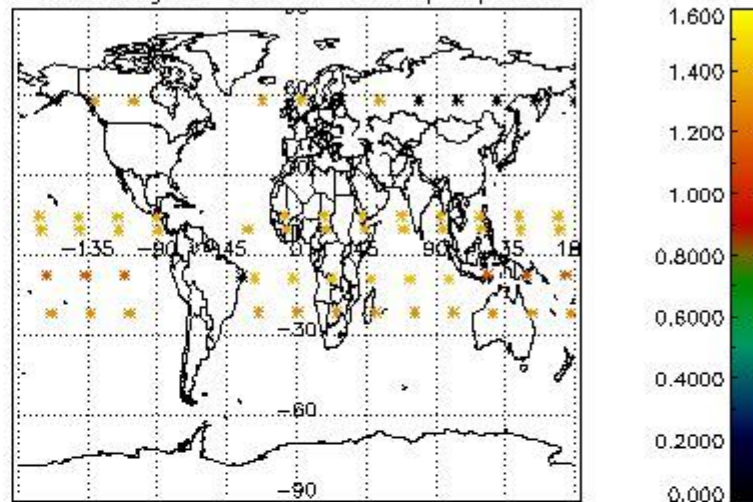
4.2 Plot quality information per product coming from level 1b processing (world map)

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

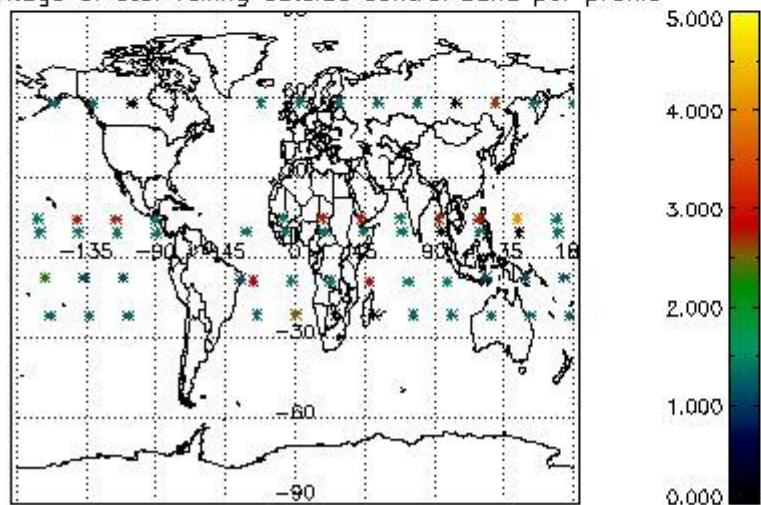
Percentage of cosmic ray hits per profile



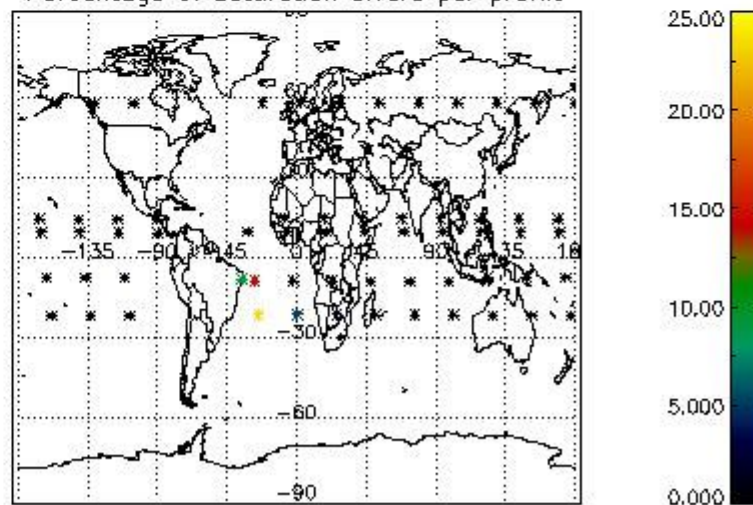
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

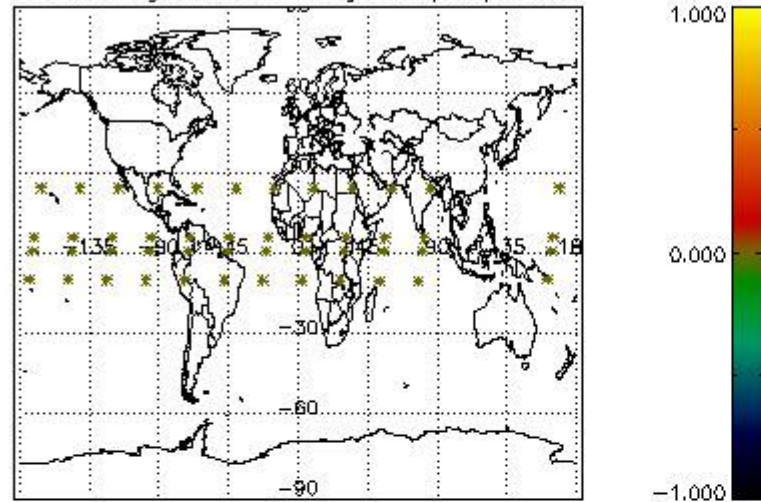


Percentage of saturation errors per profile

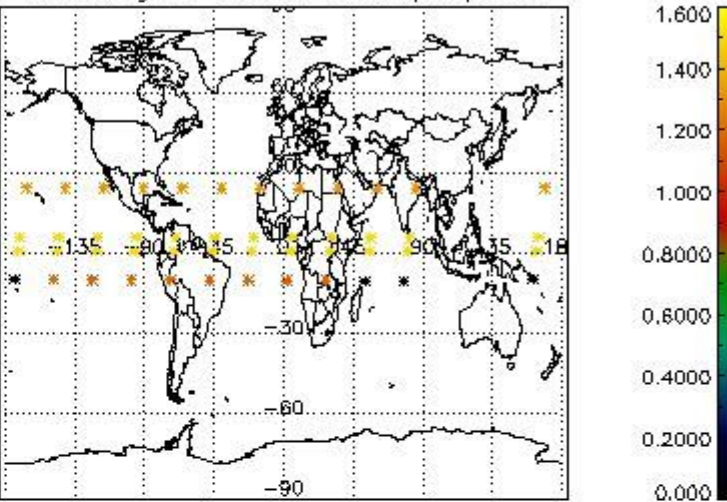


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

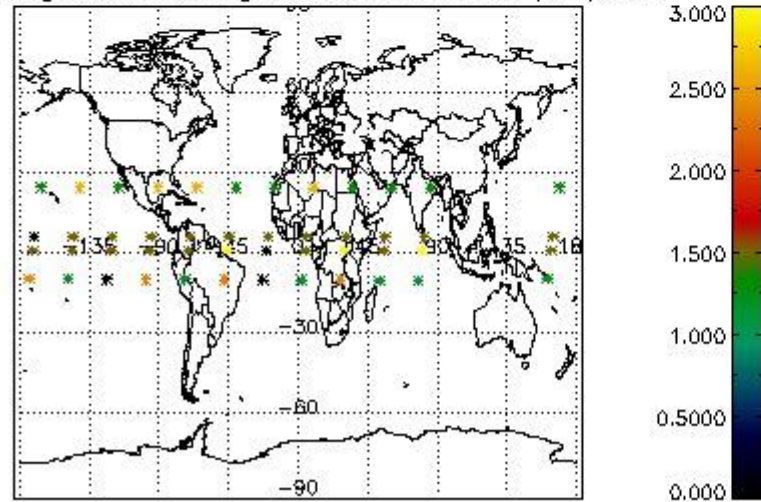
Percentage of cosmic ray hits per profile



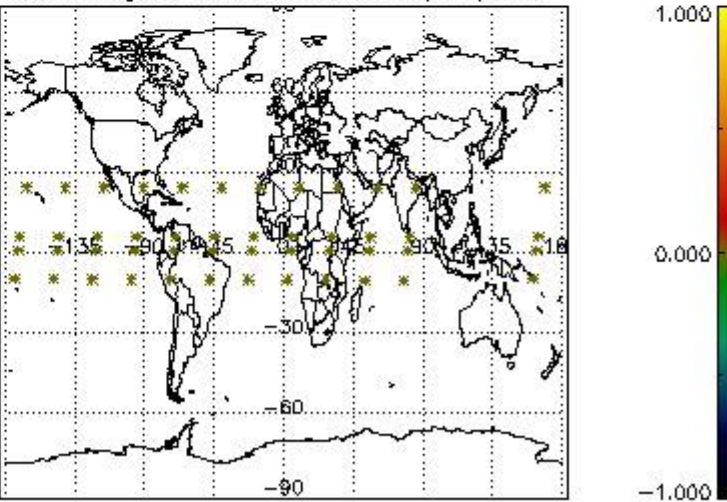
Percentage of datation errors per profile



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

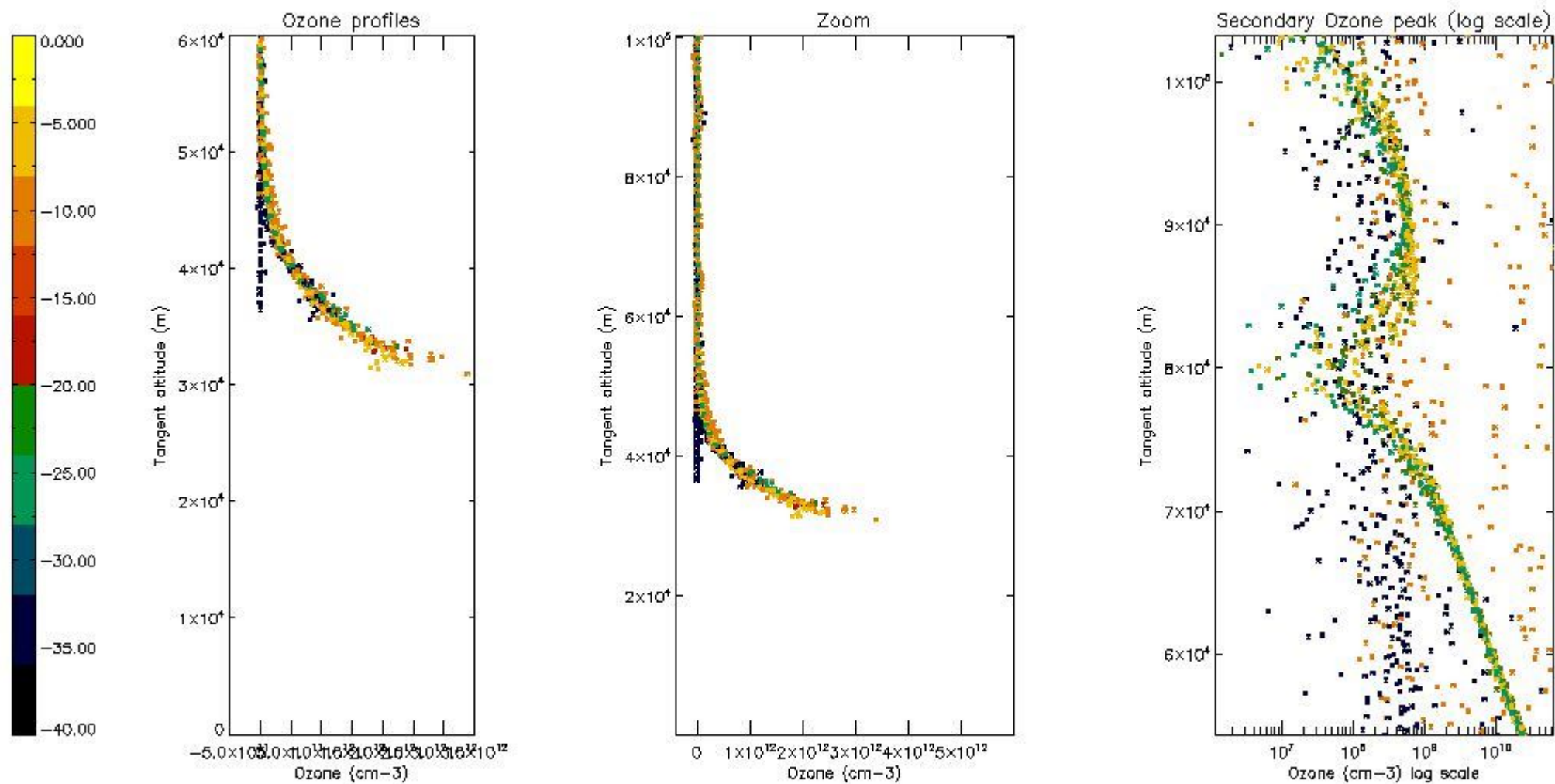
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	46
STD < 20	18

STD < 10	14
STD < 5	11

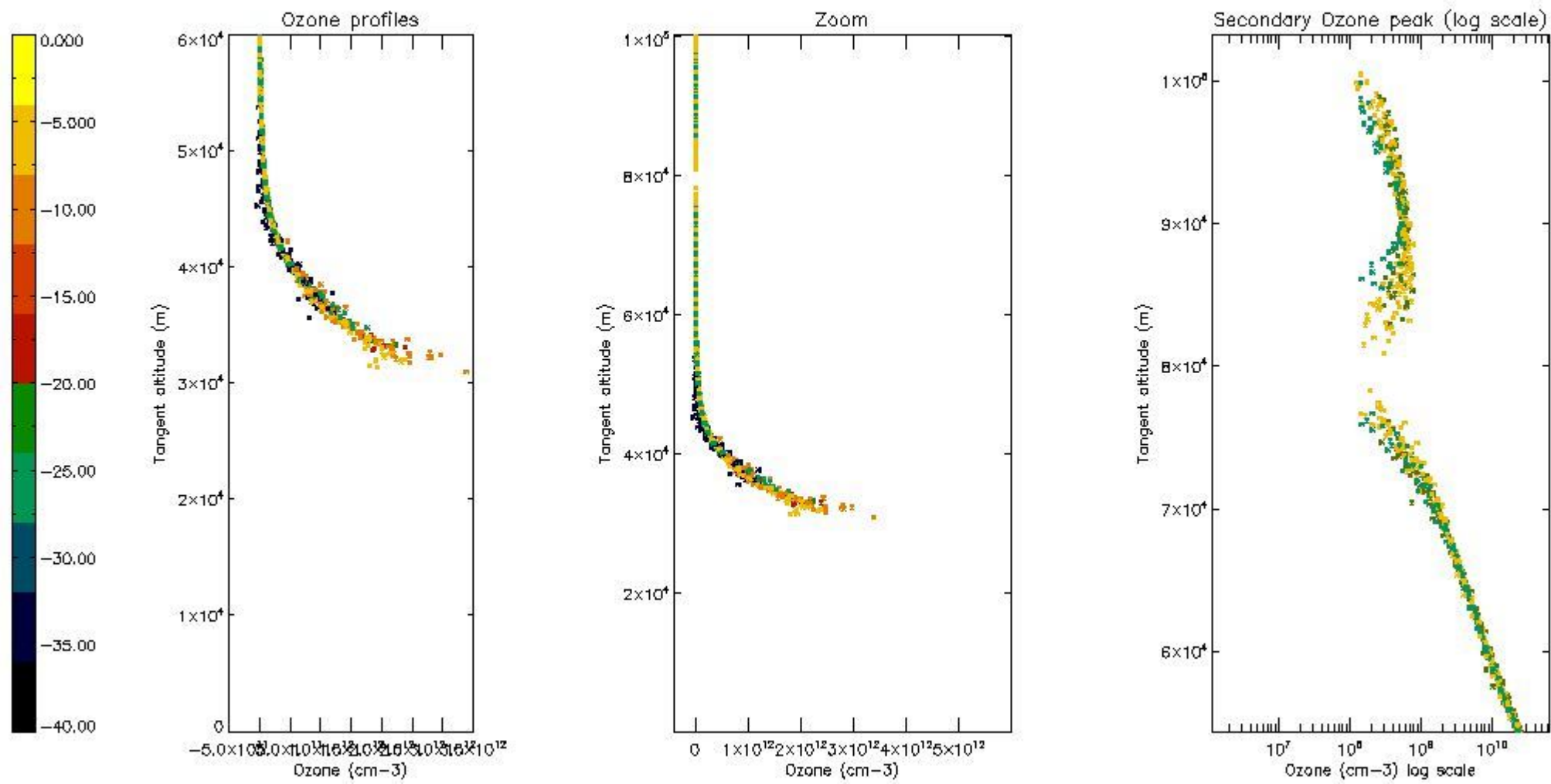
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



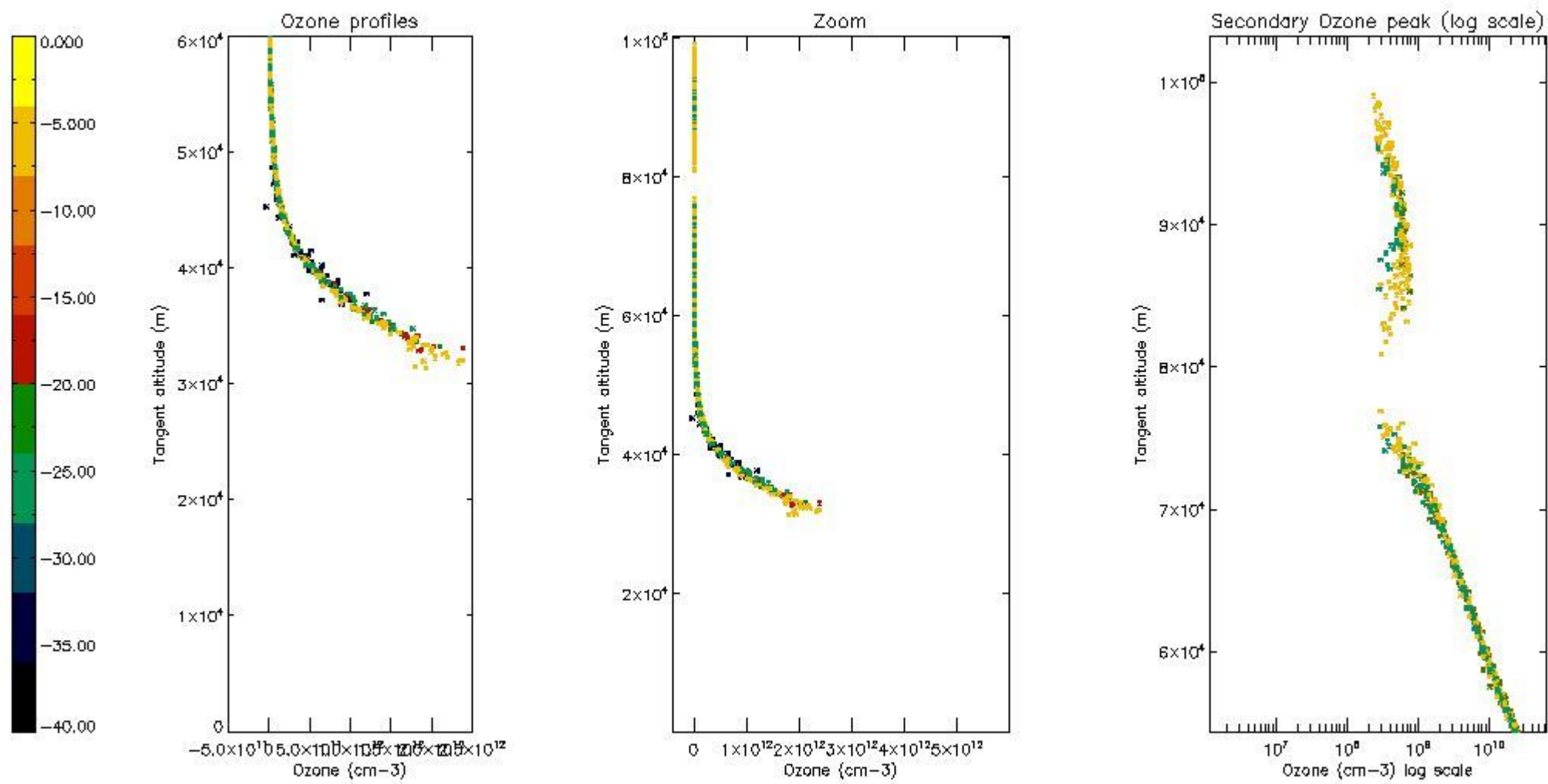
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



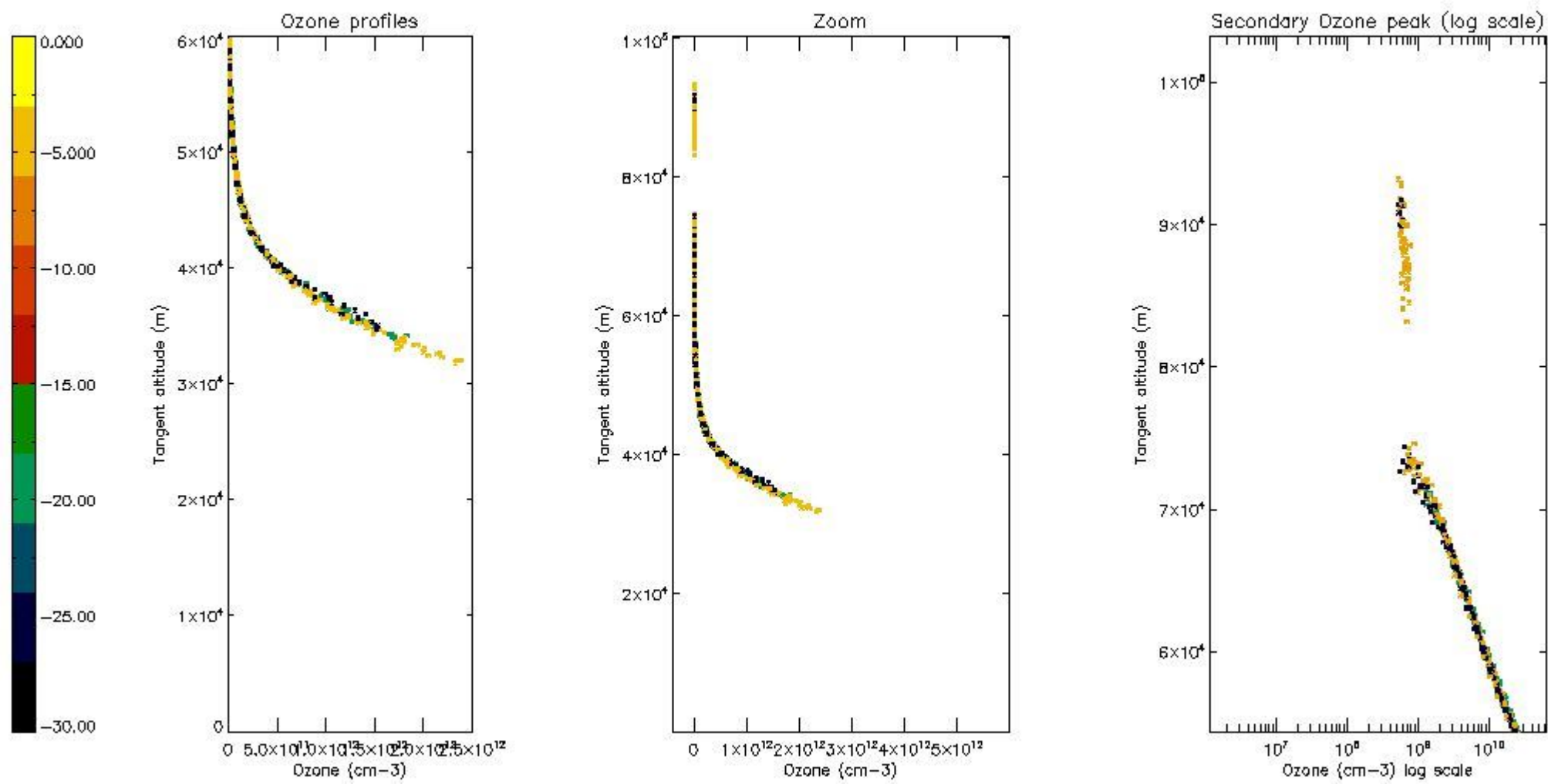
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



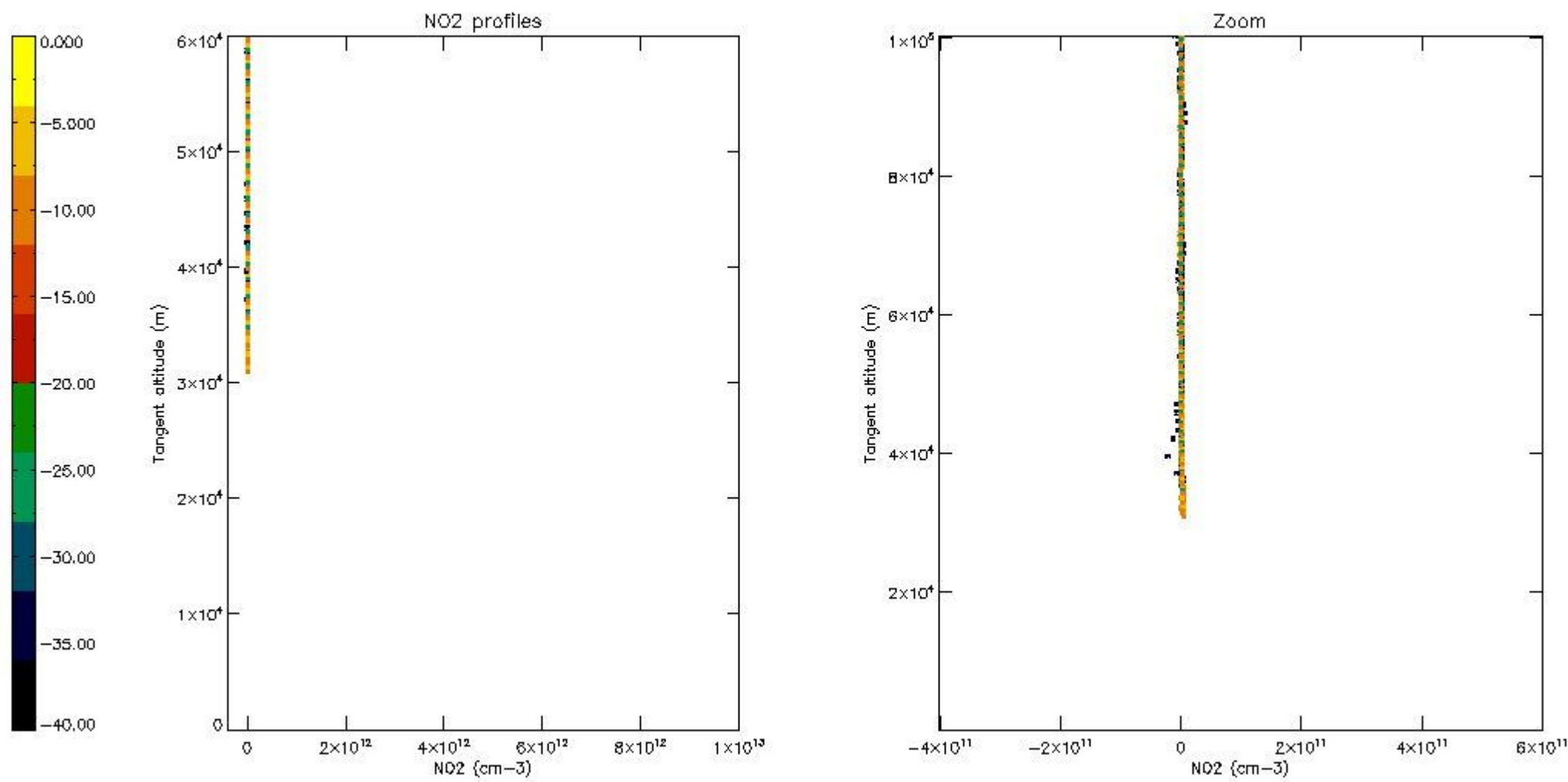
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



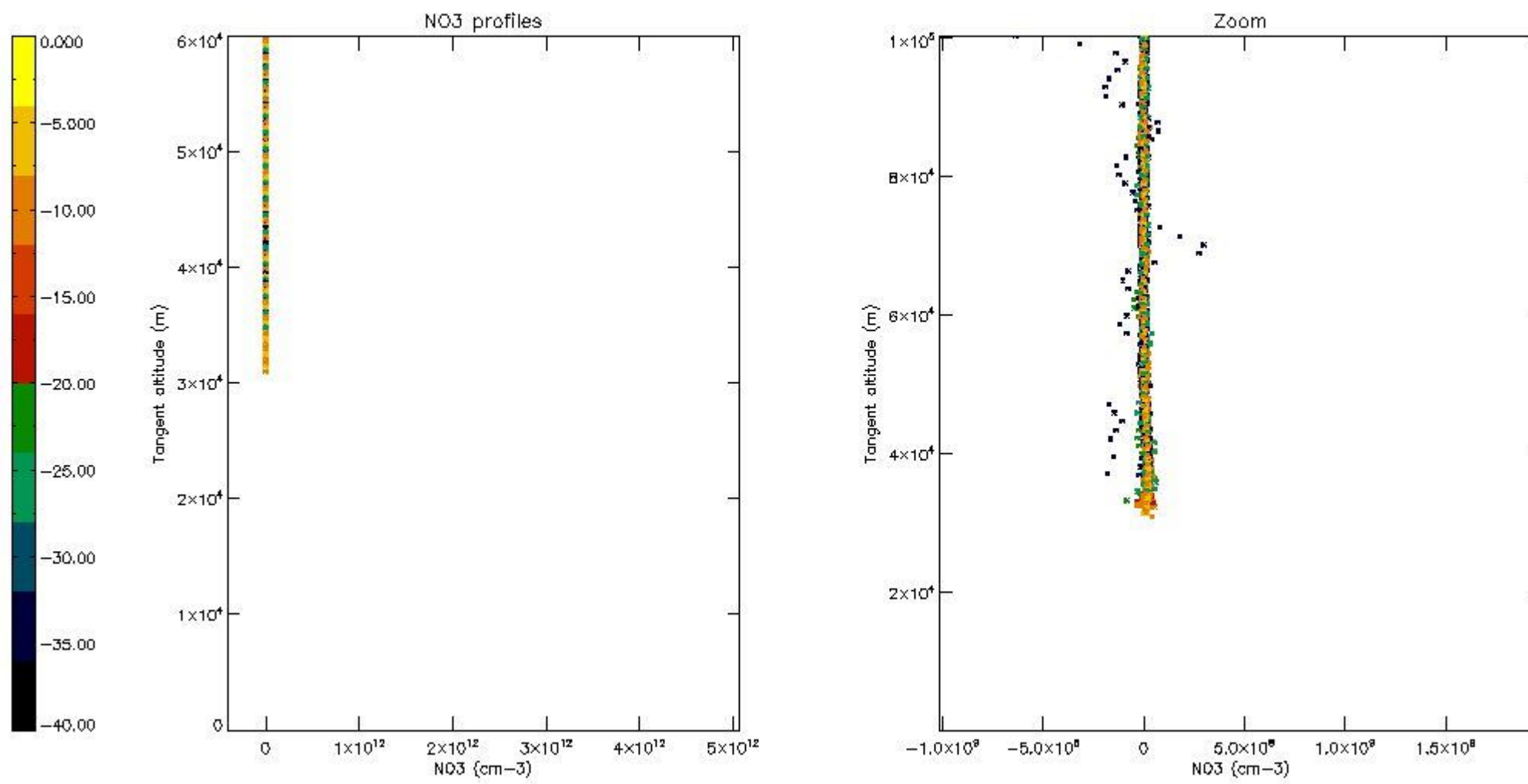
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



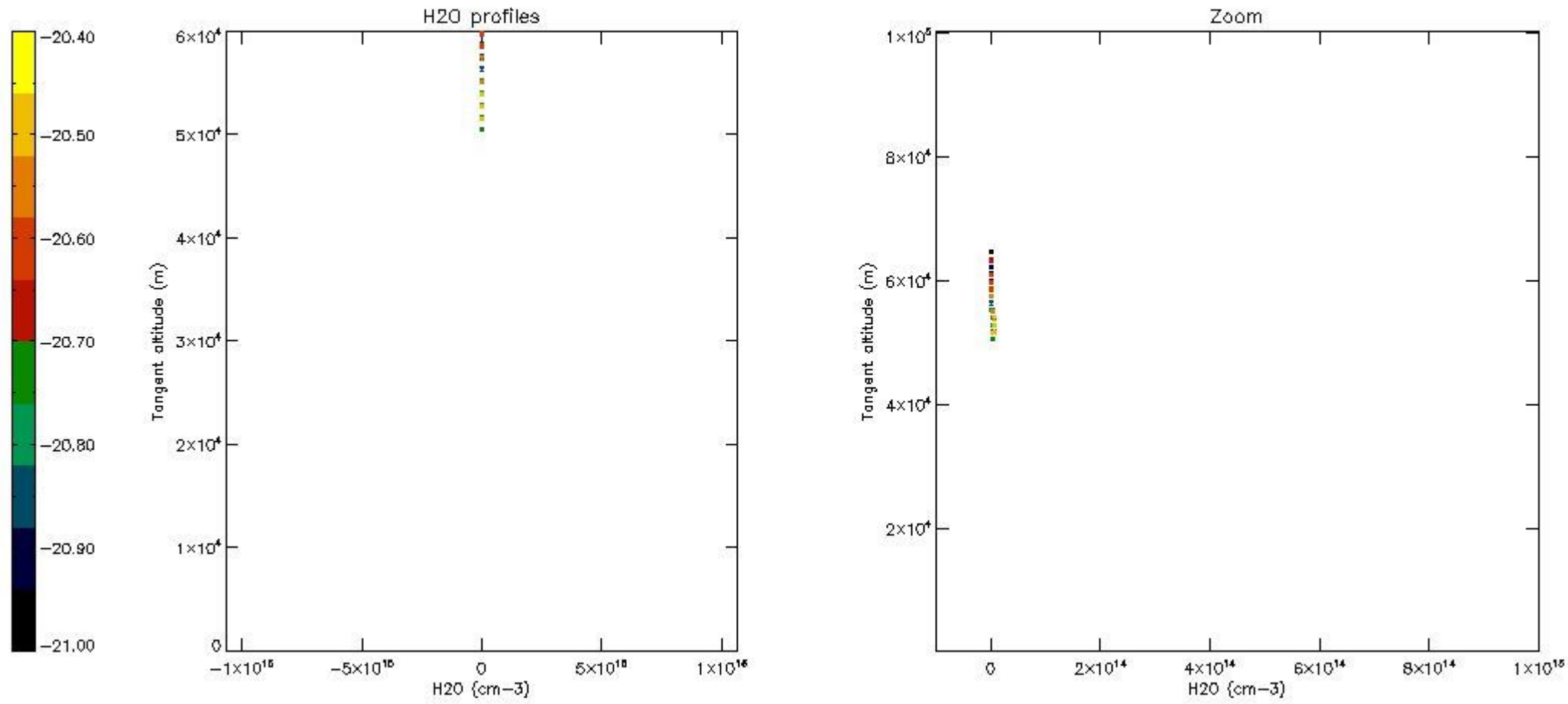
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

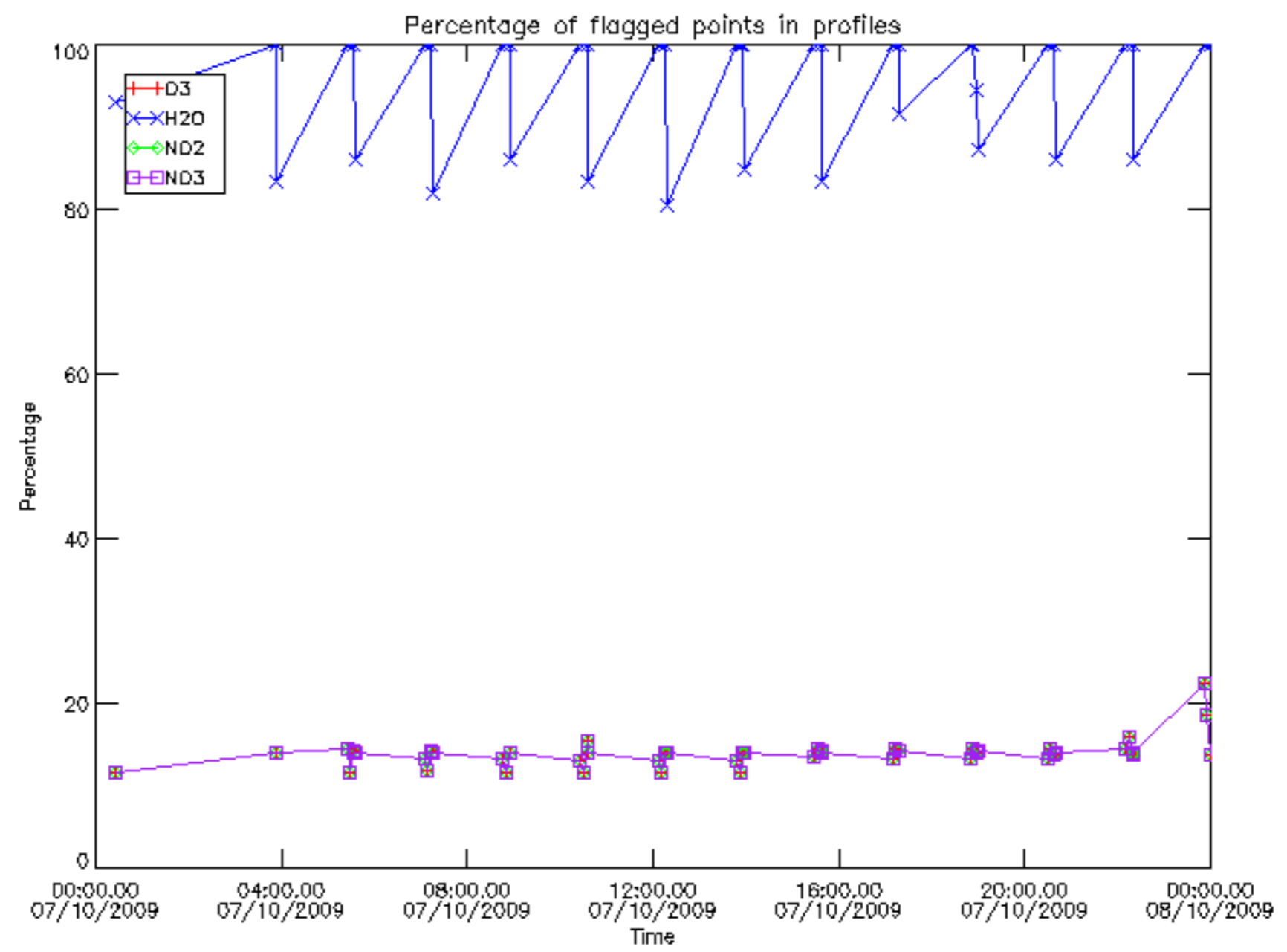
The colorbar represents the latitude.



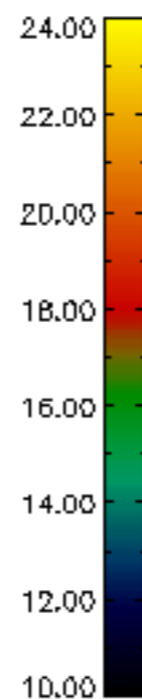
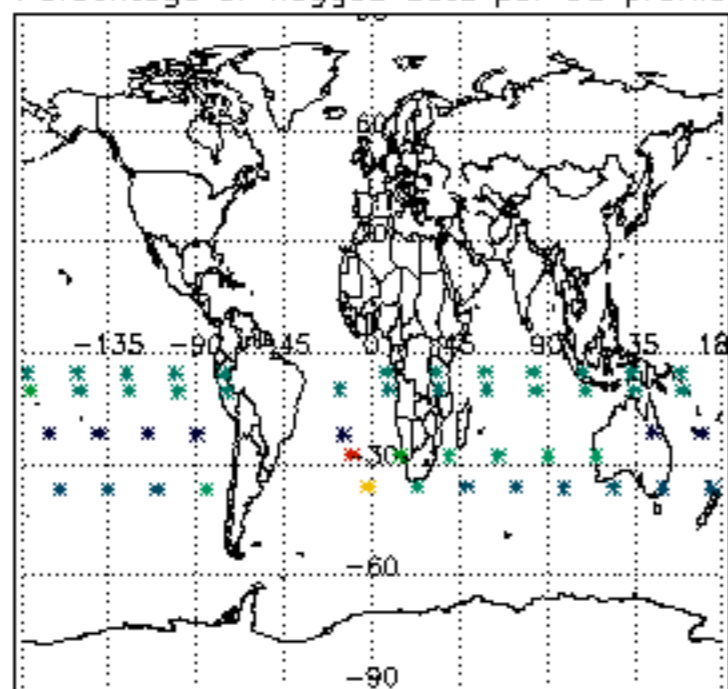
6. Auxiliary Data Files used for the production reported in section 2

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.

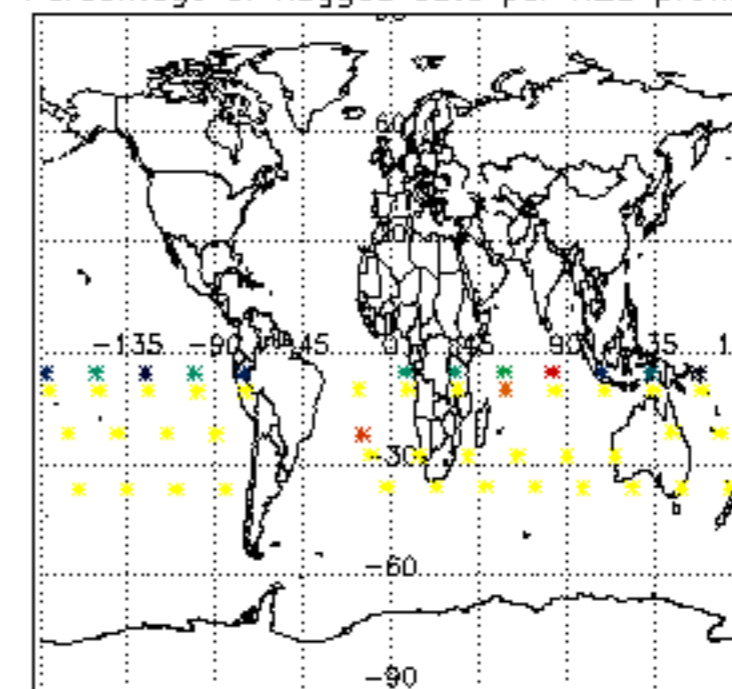
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	07-OCT-2009 00:26:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-OCT-2009 00:26:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-OCT-2009 00:26:39



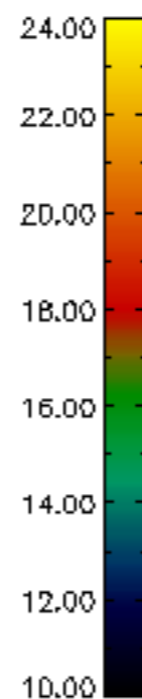
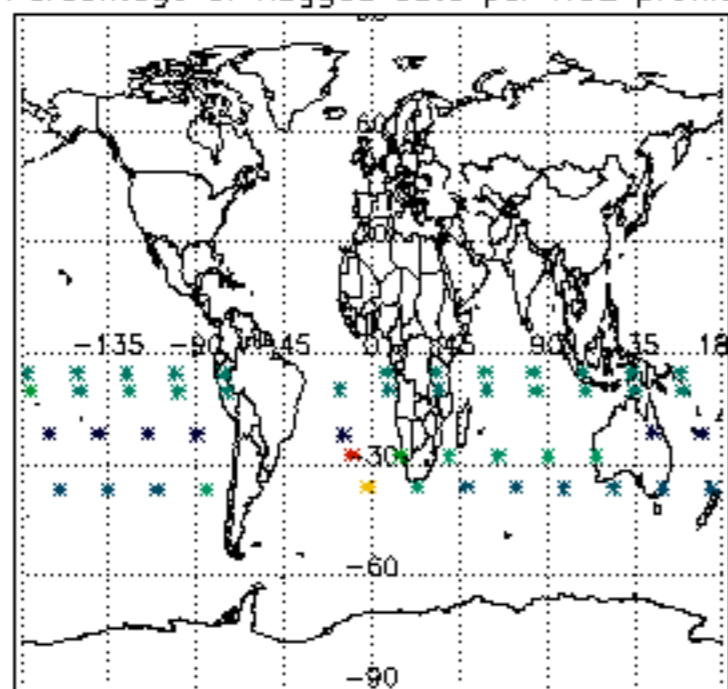
Percentage of flagged data per D3 profile



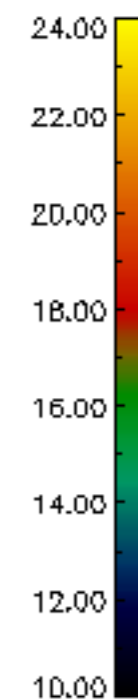
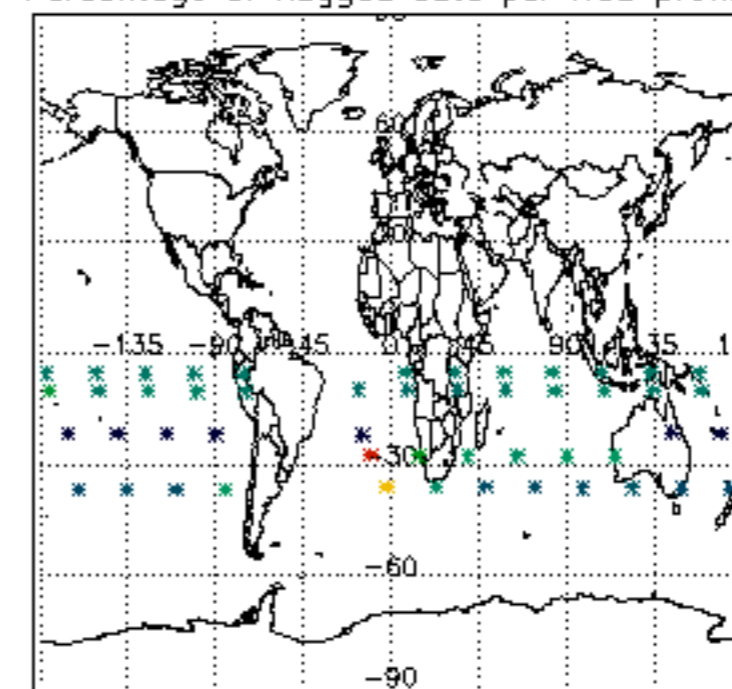
Percentage of flagged data per H2O profile

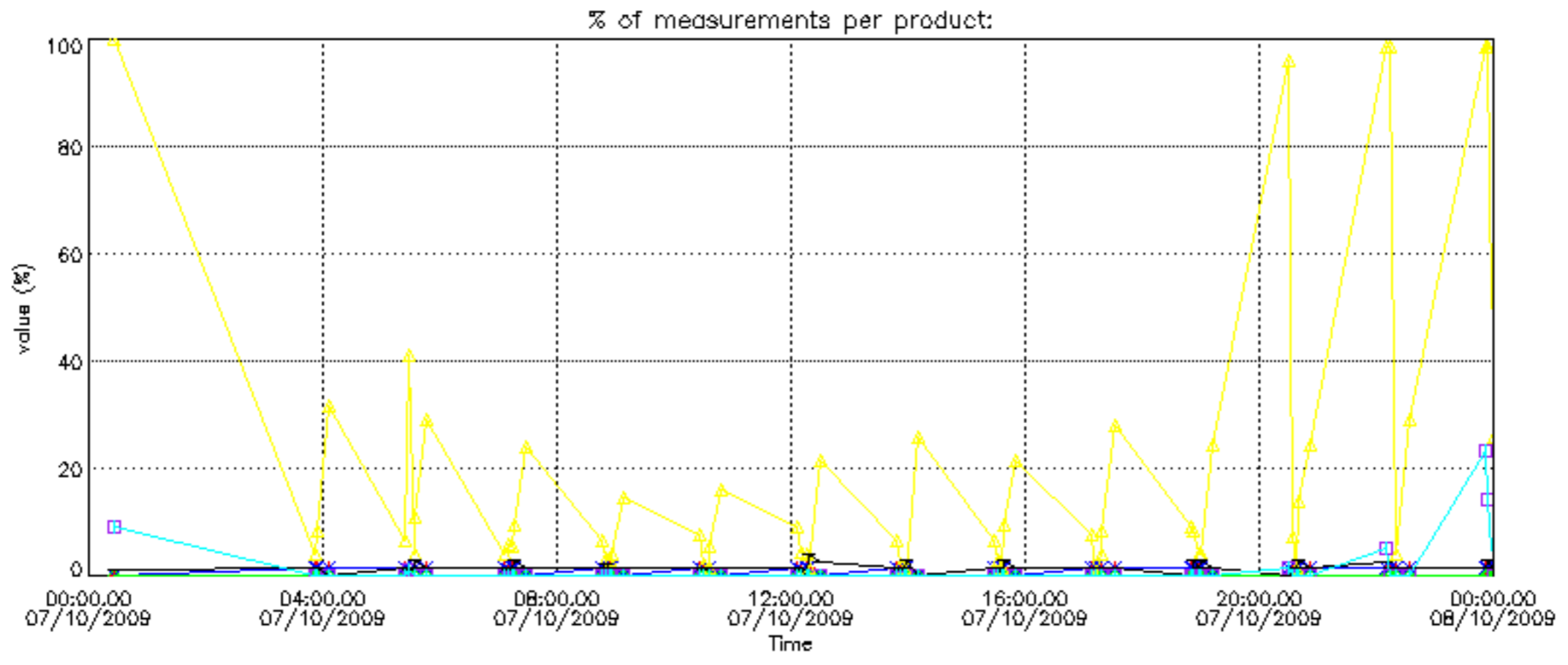


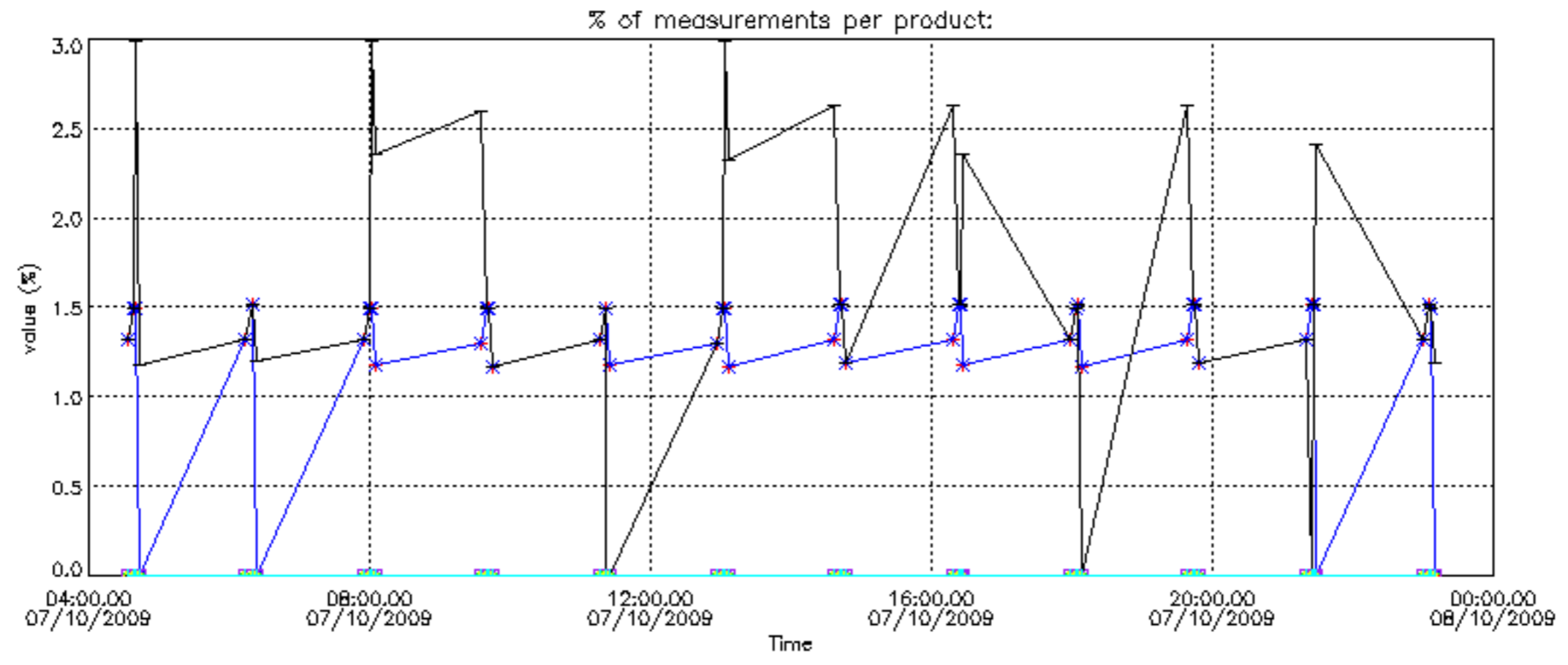
Percentage of flagged data per NO2 profile



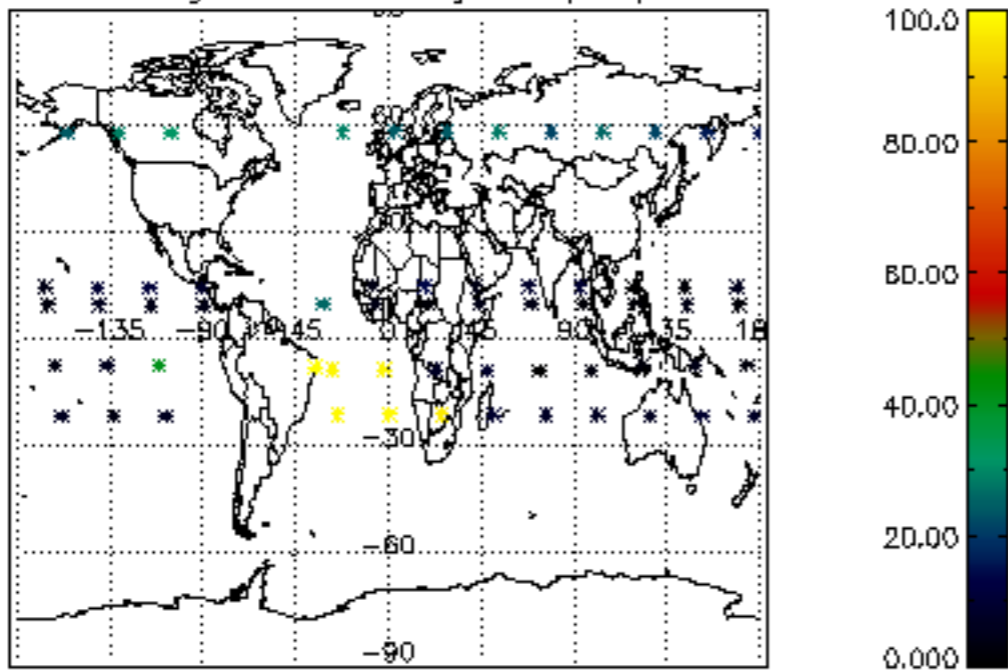
Percentage of flagged data per NO3 profile



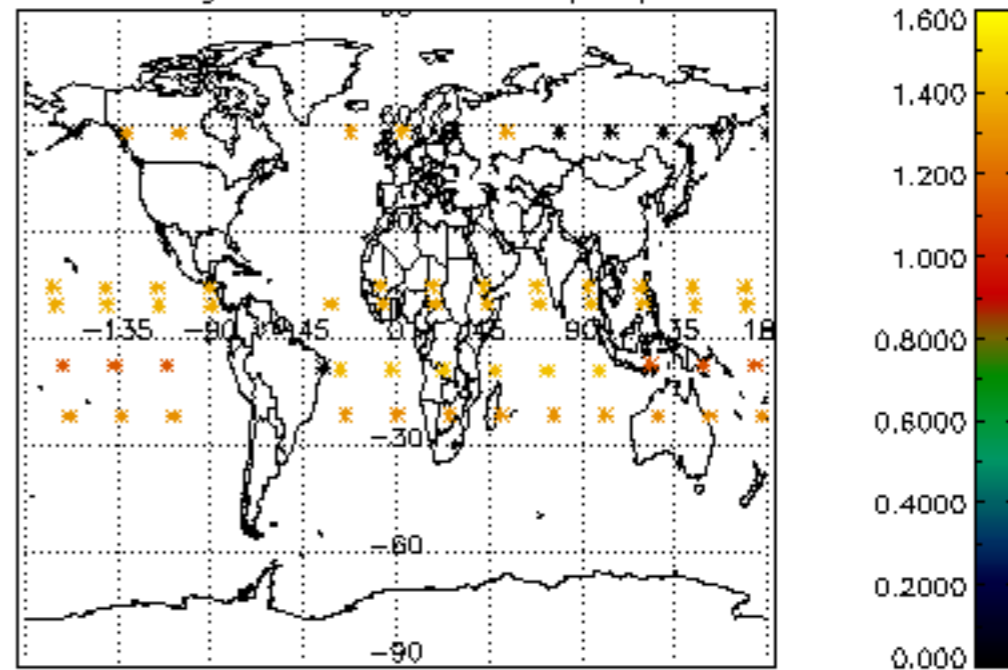




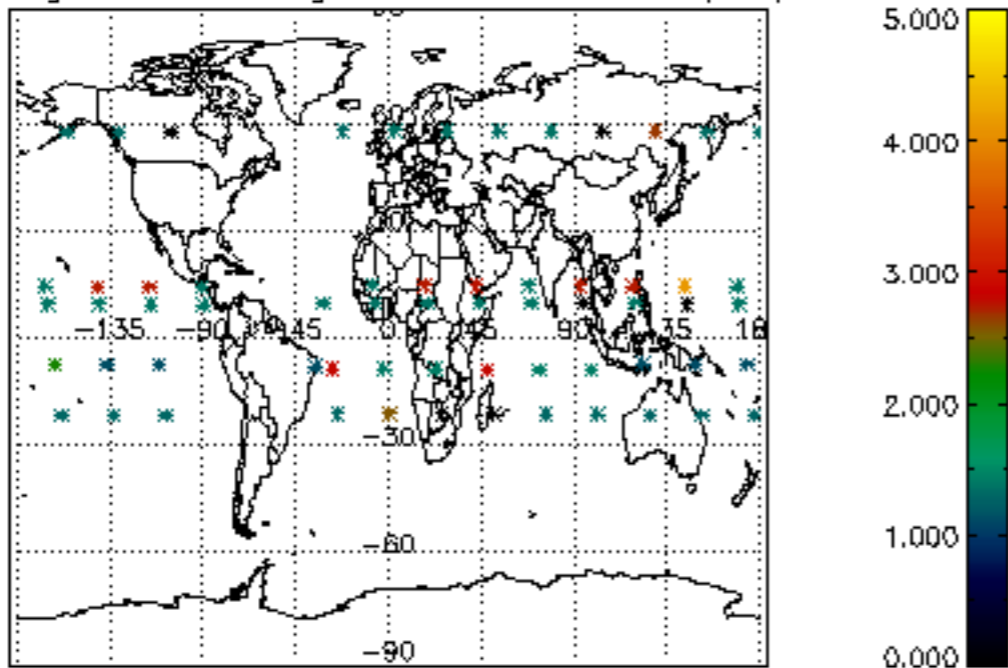
Percentage of cosmic ray hits per profile



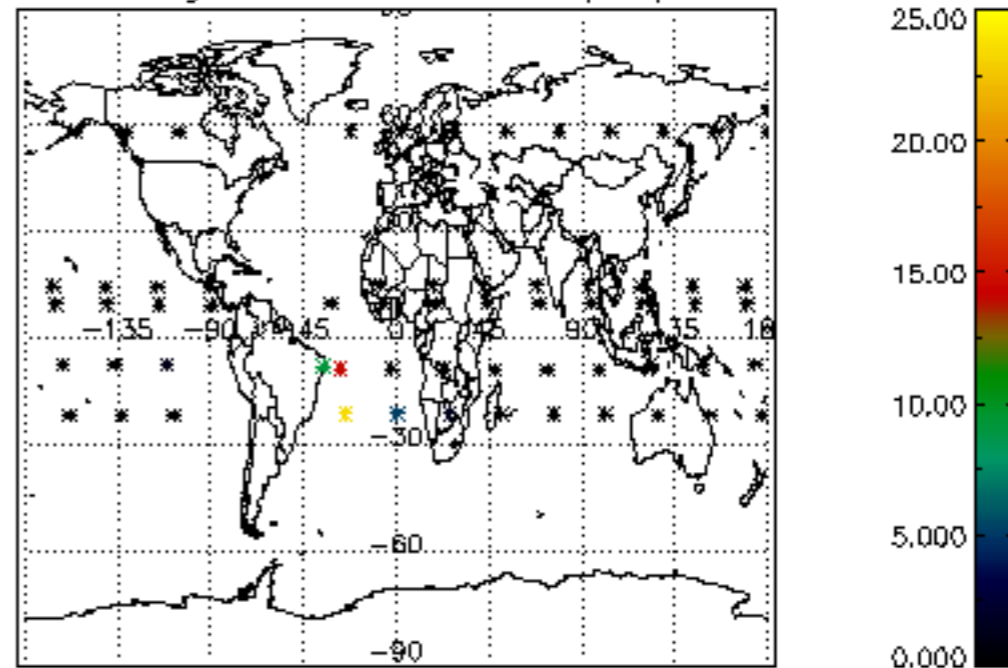
Percentage of datation errors per profile



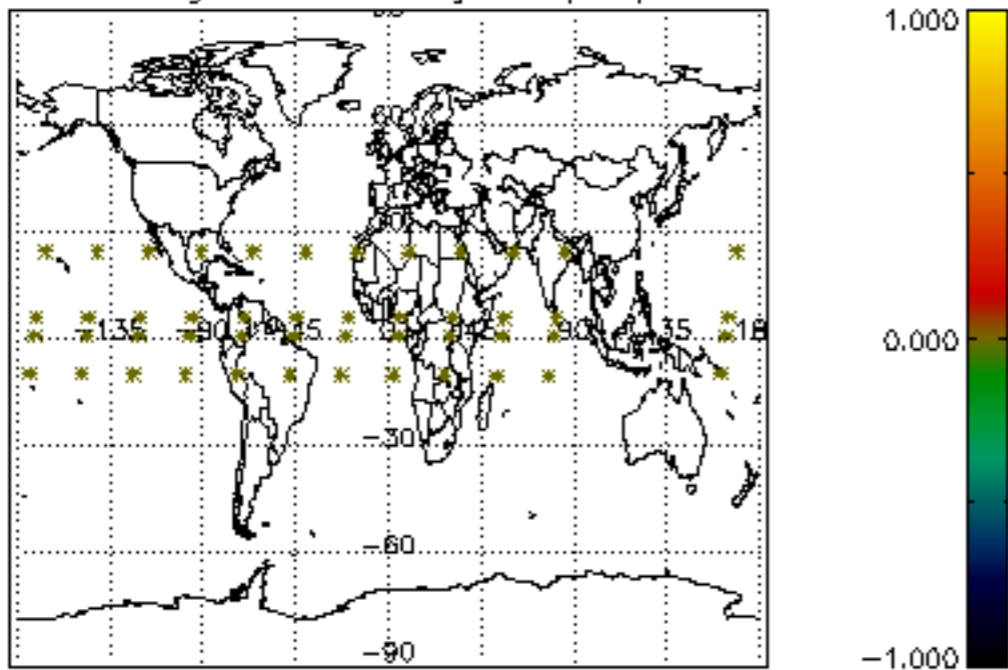
Percentage of star falling outside central band per profile



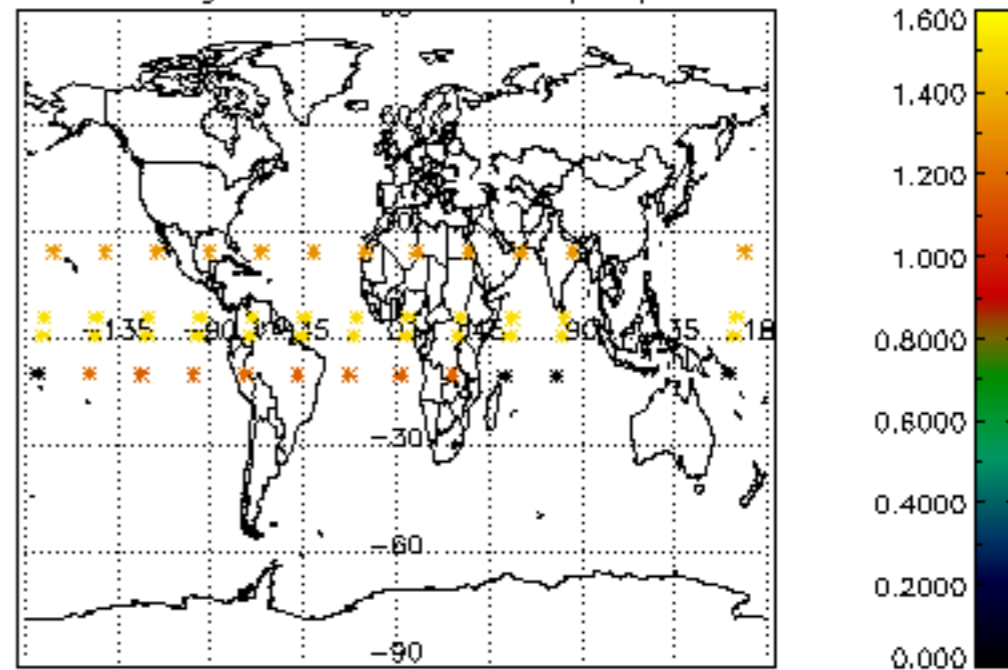
Percentage of saturation errors per profile



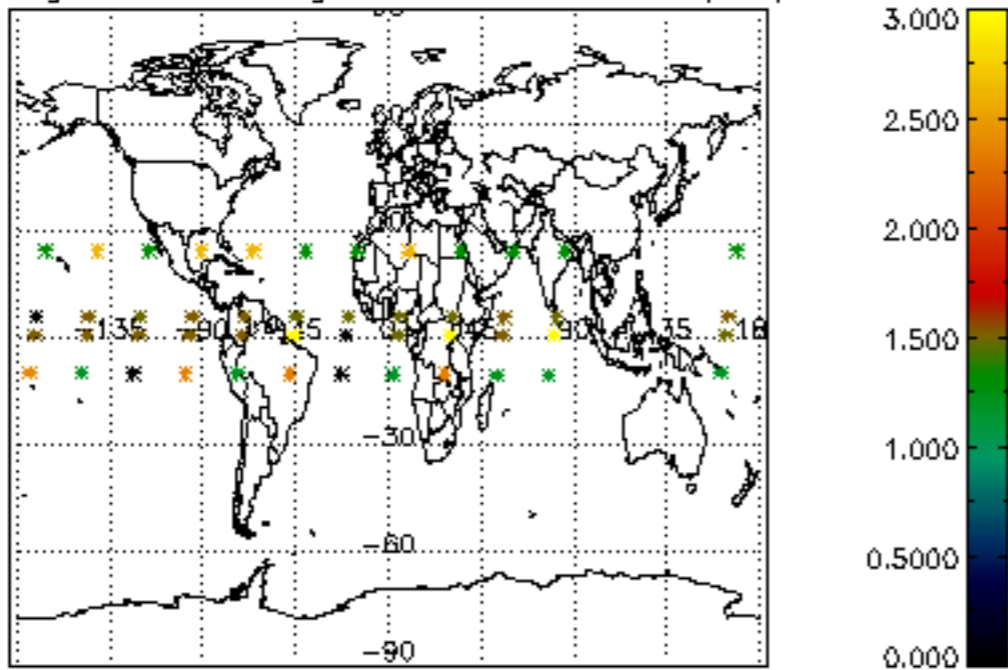
Percentage of cosmic ray hits per profile



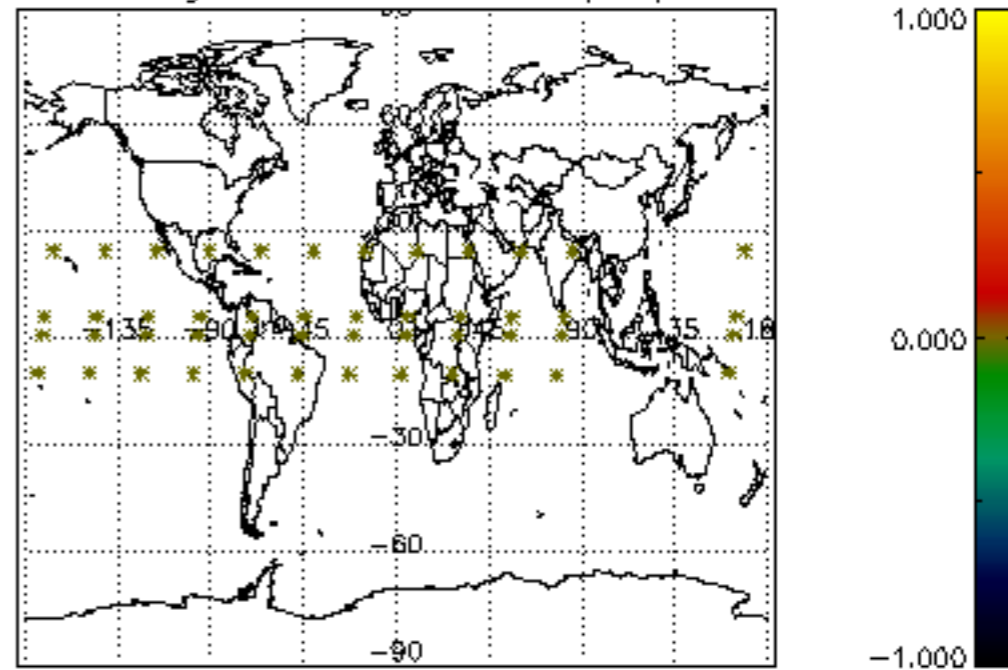
Percentage of datation errors per profile

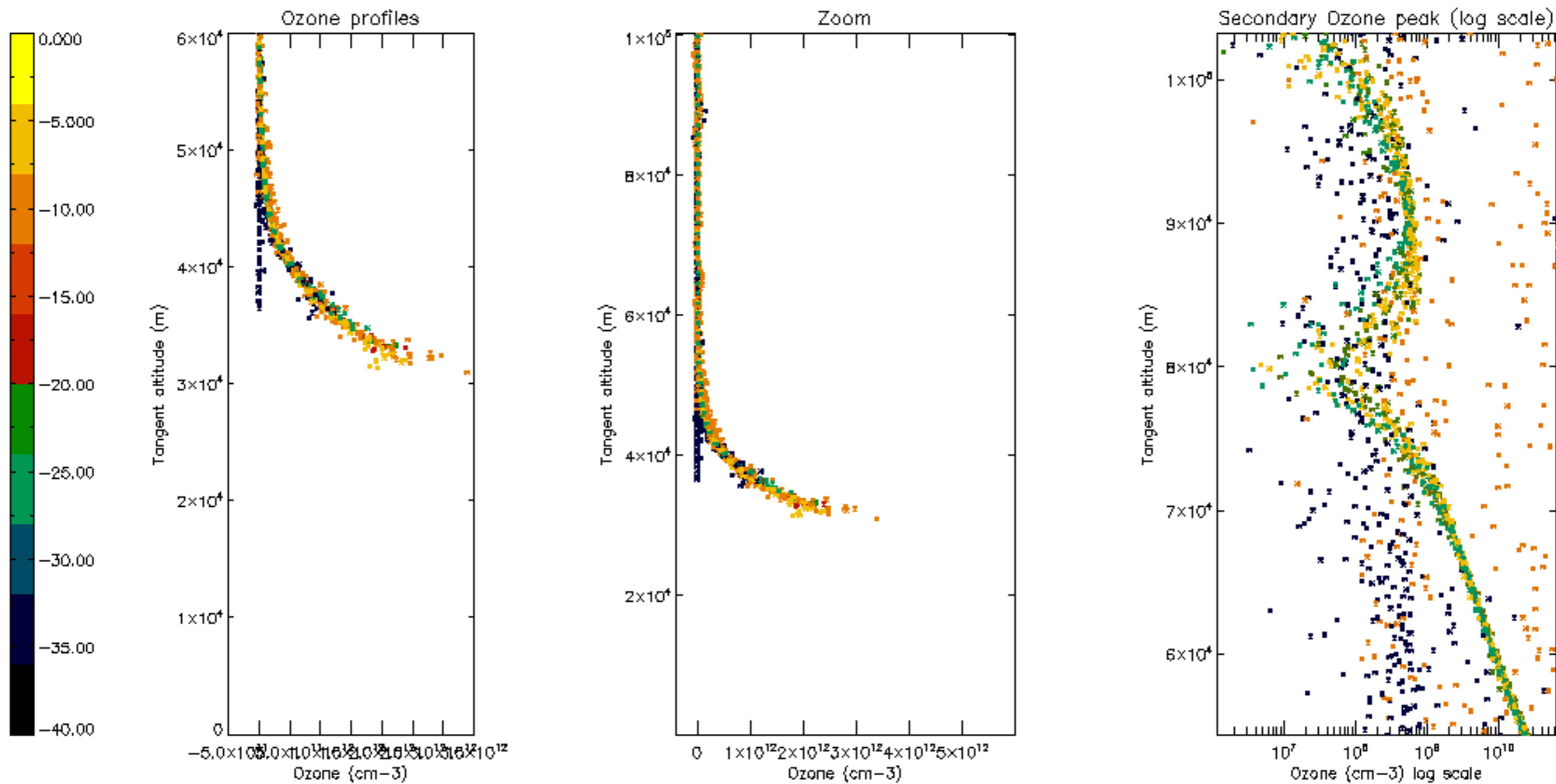


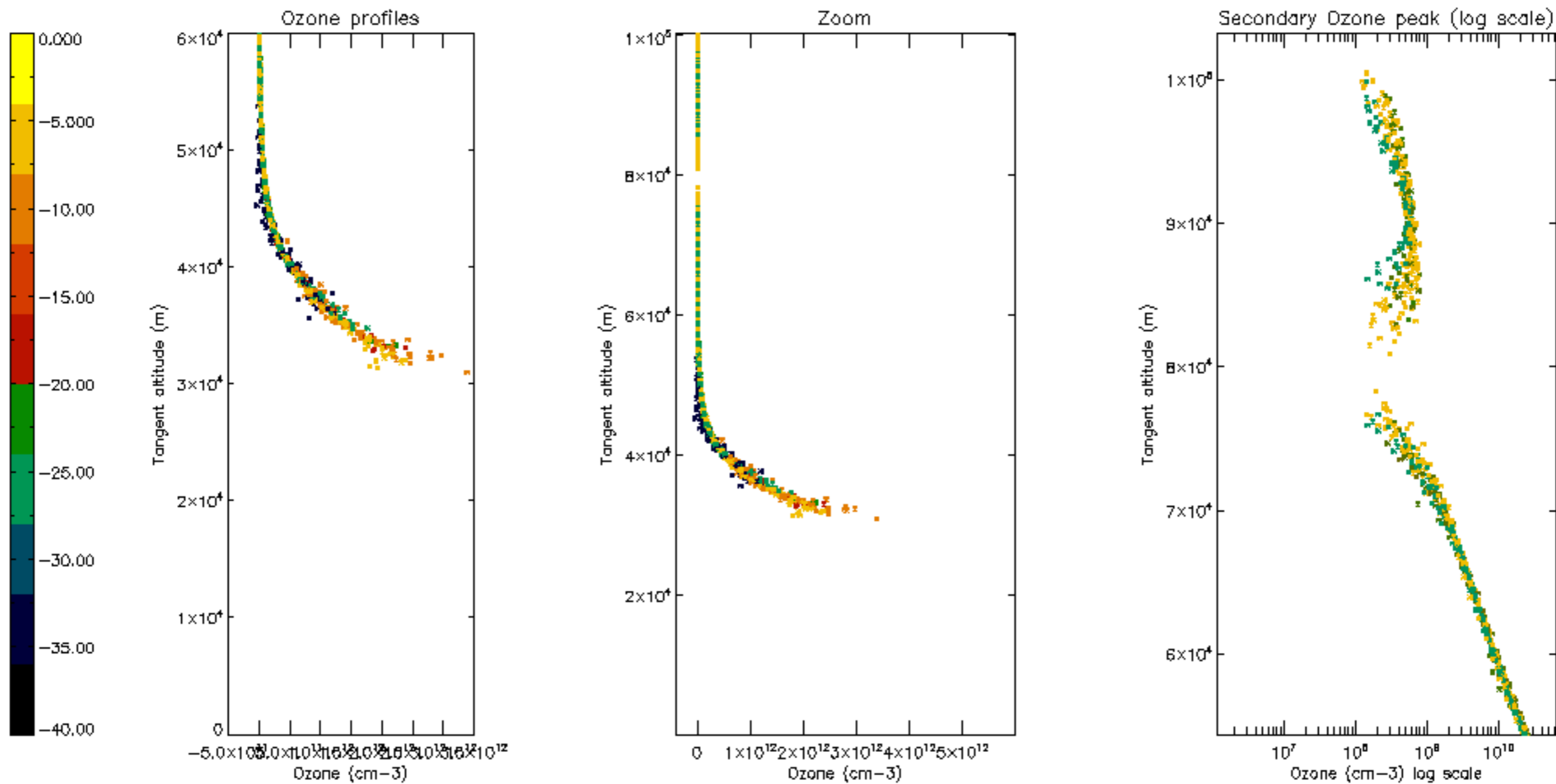
Percentage of star falling outside central band per profile

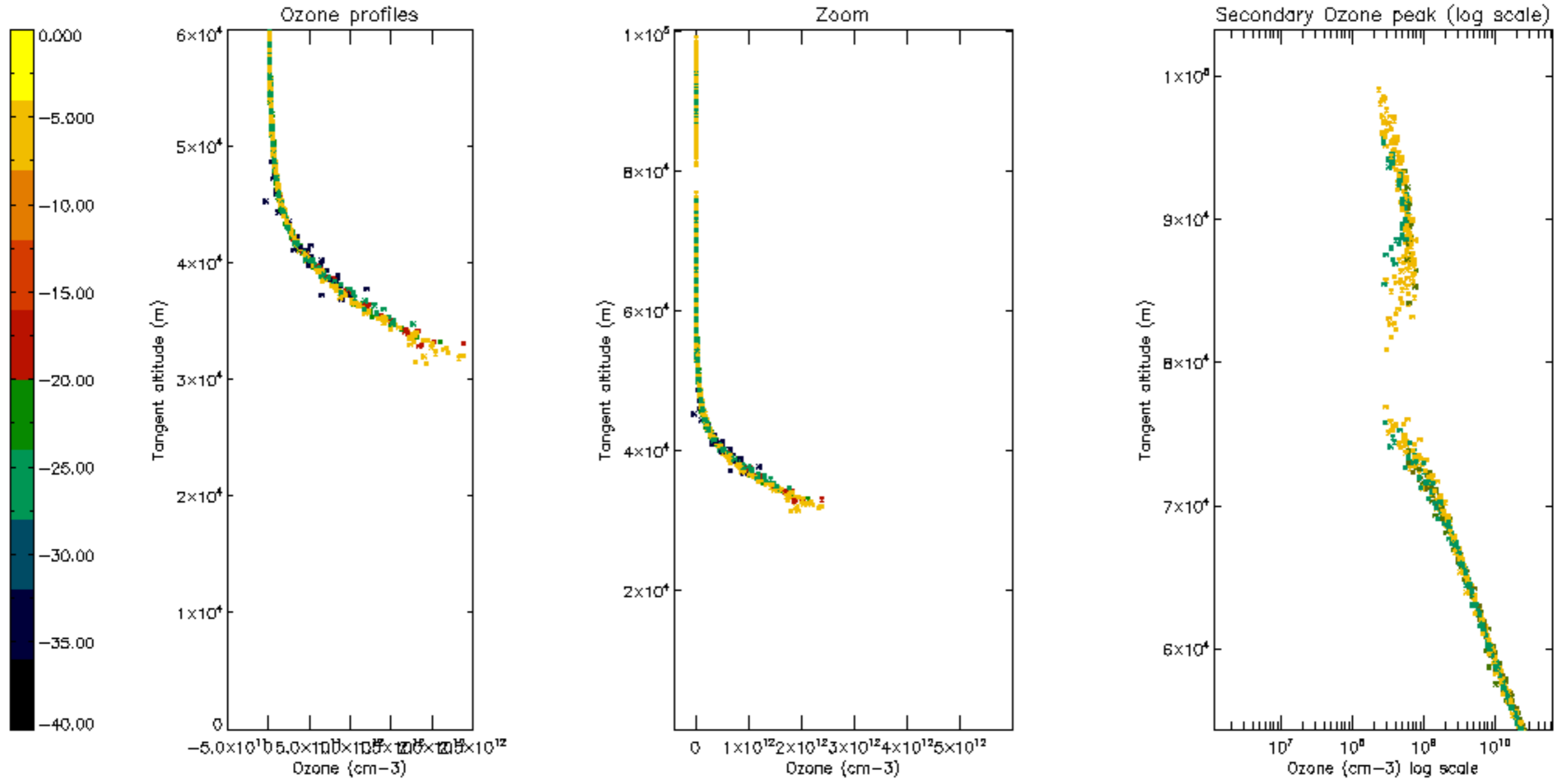


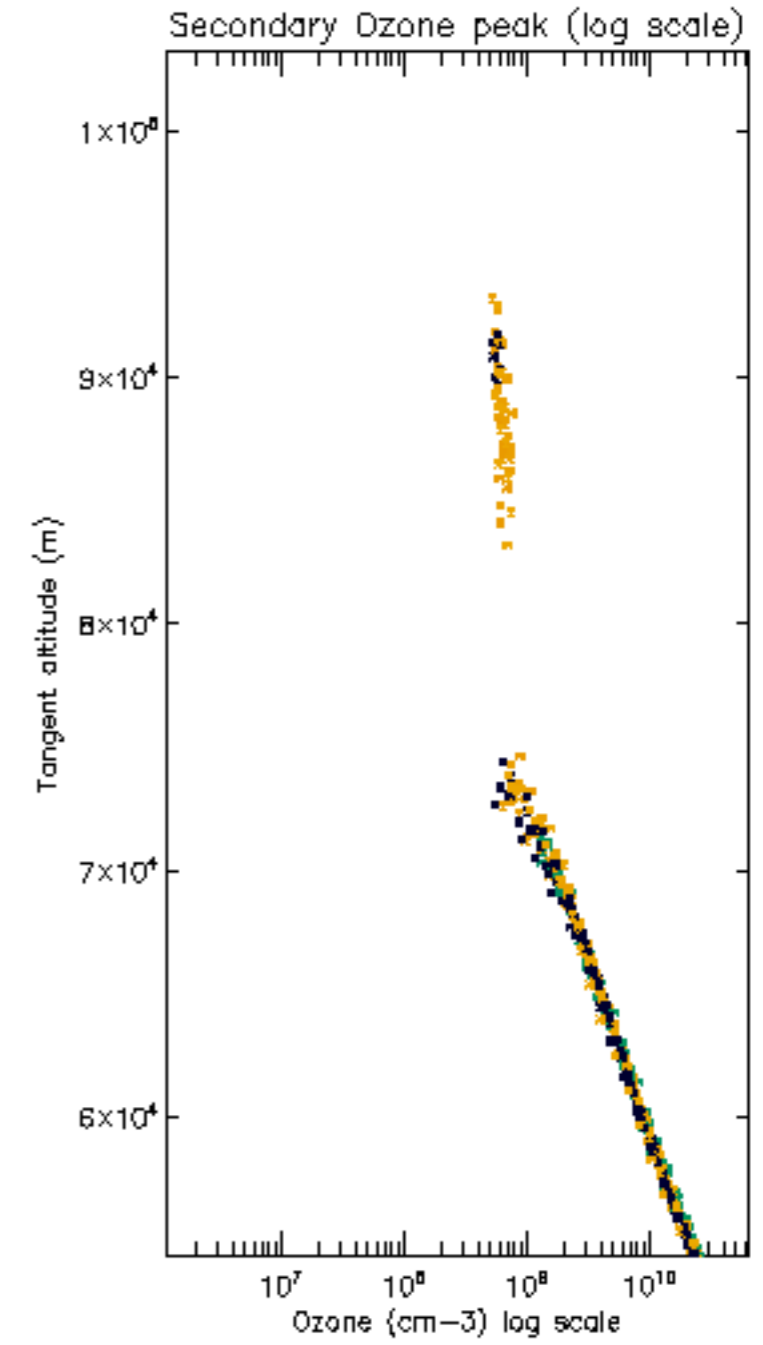
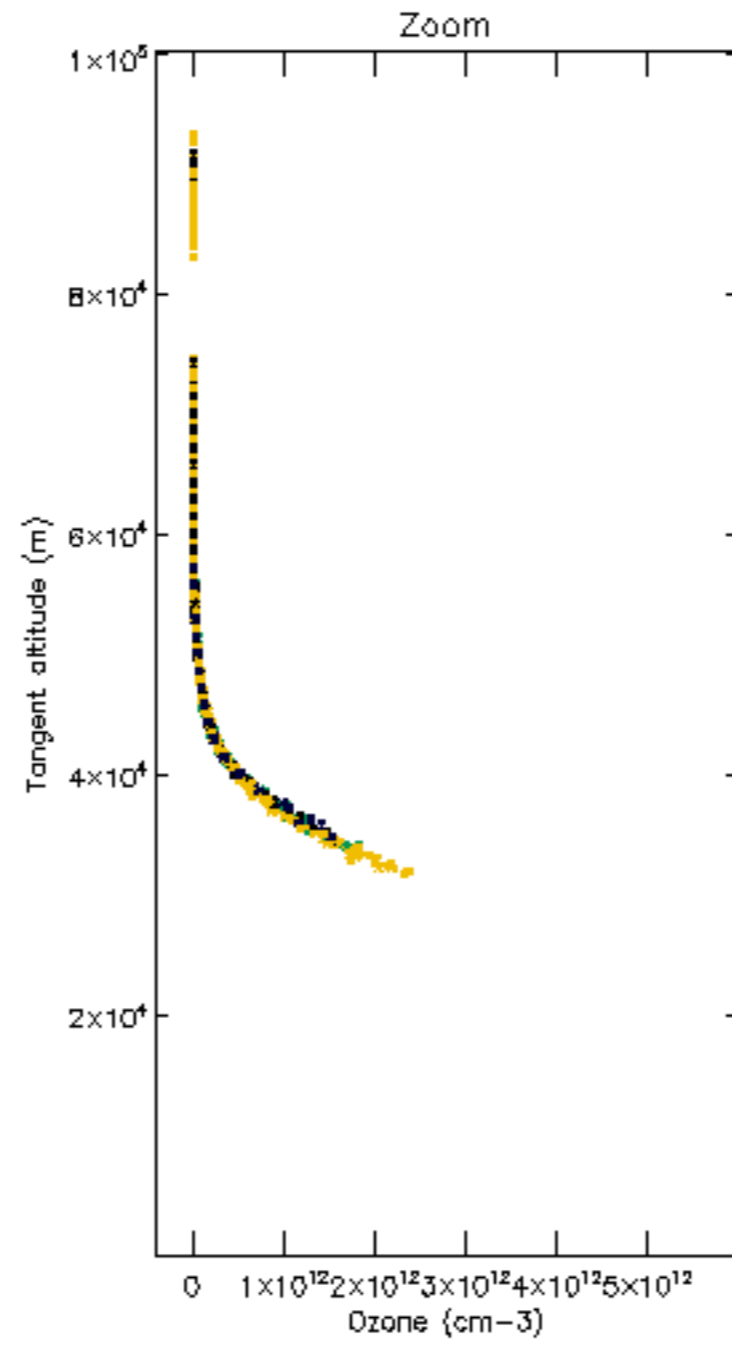
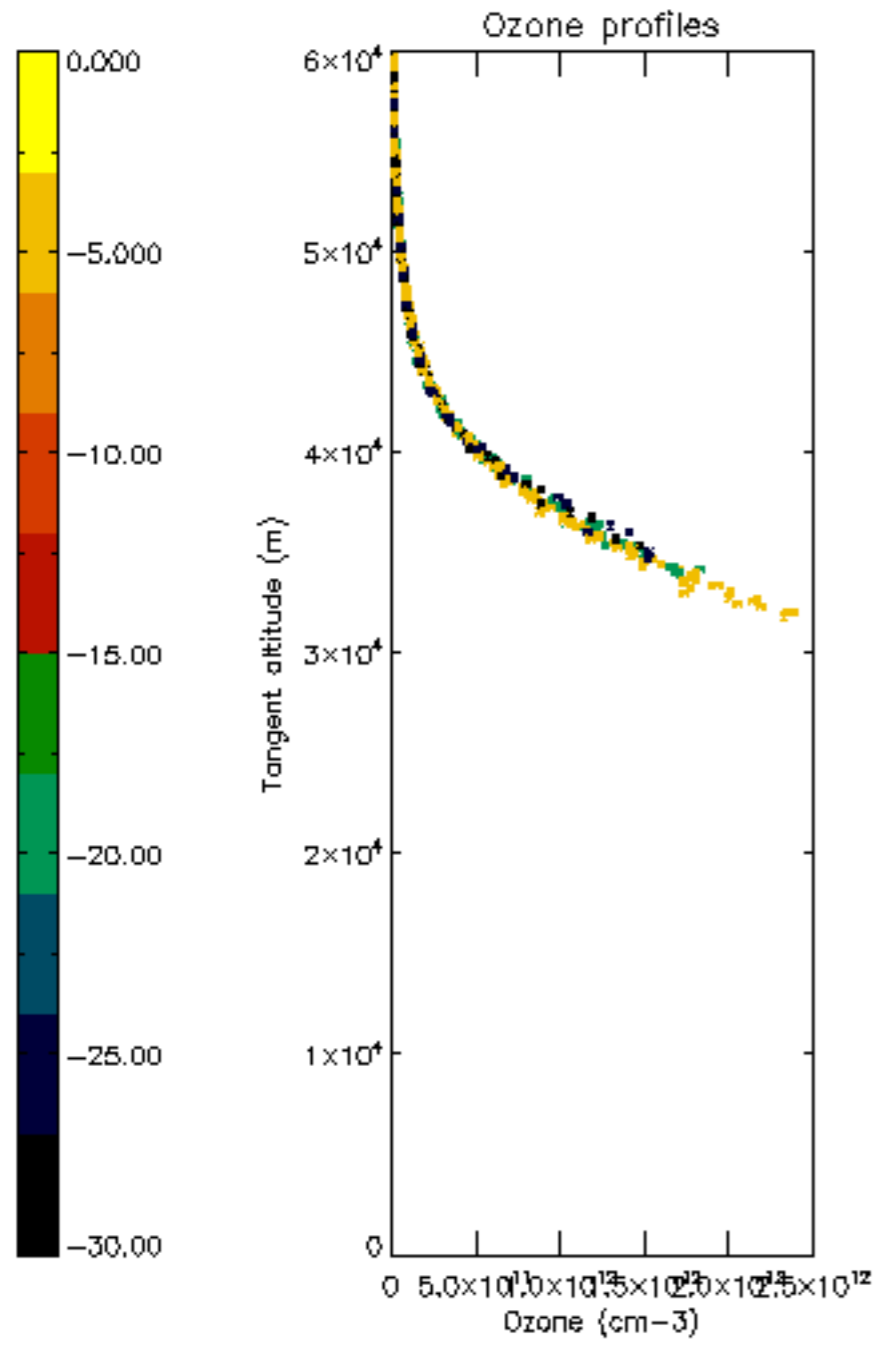
Percentage of saturation errors per profile

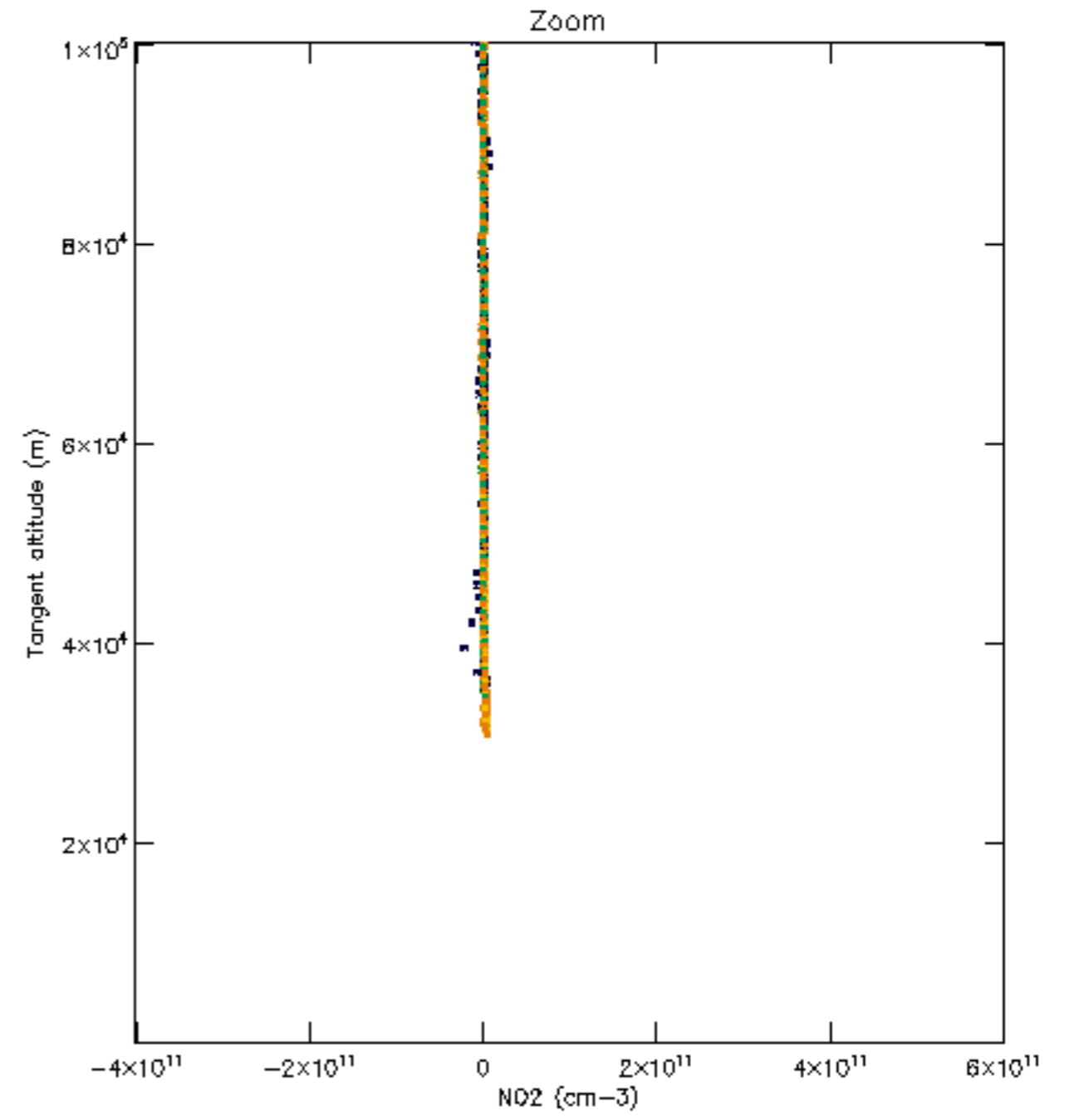
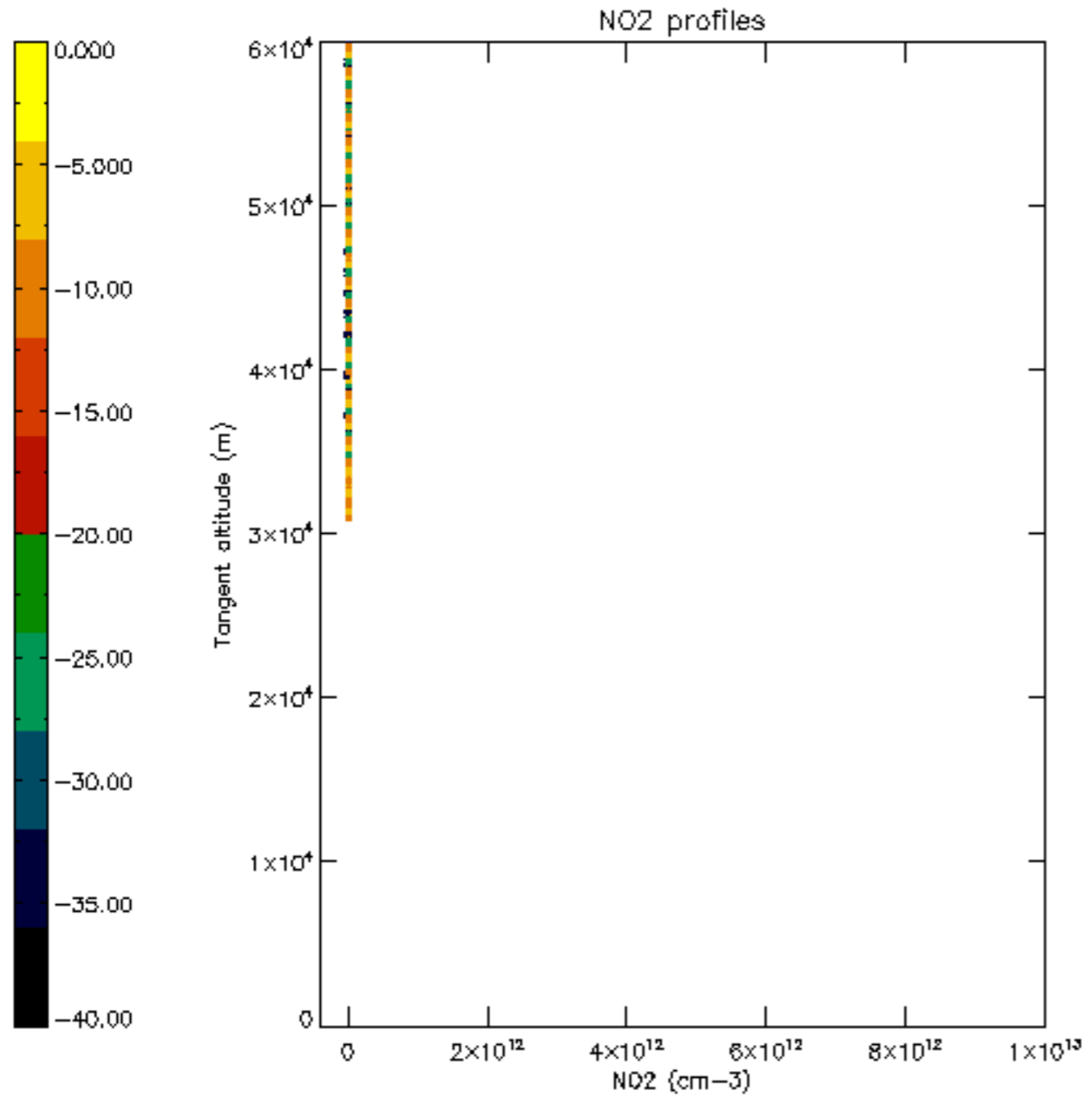


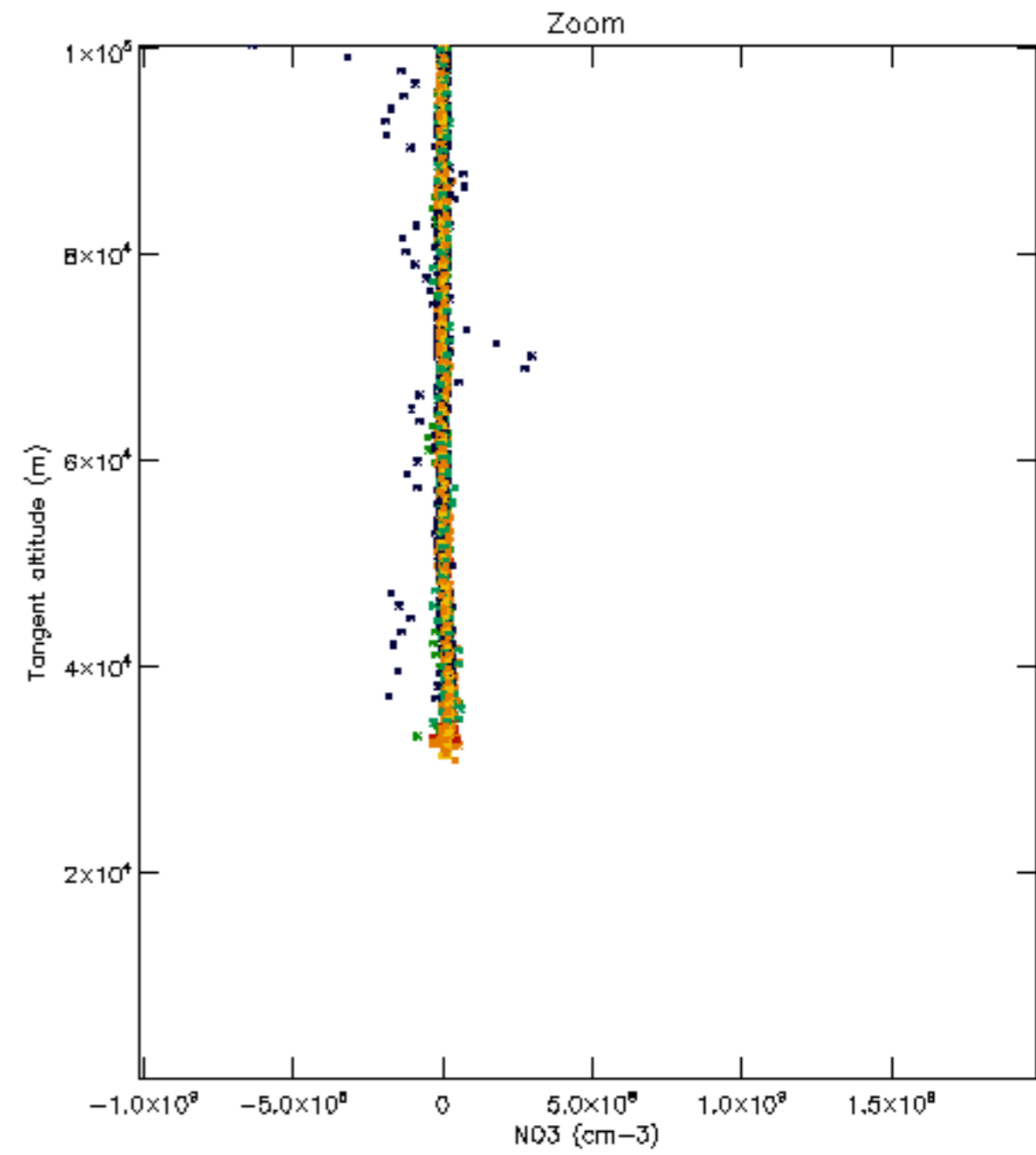
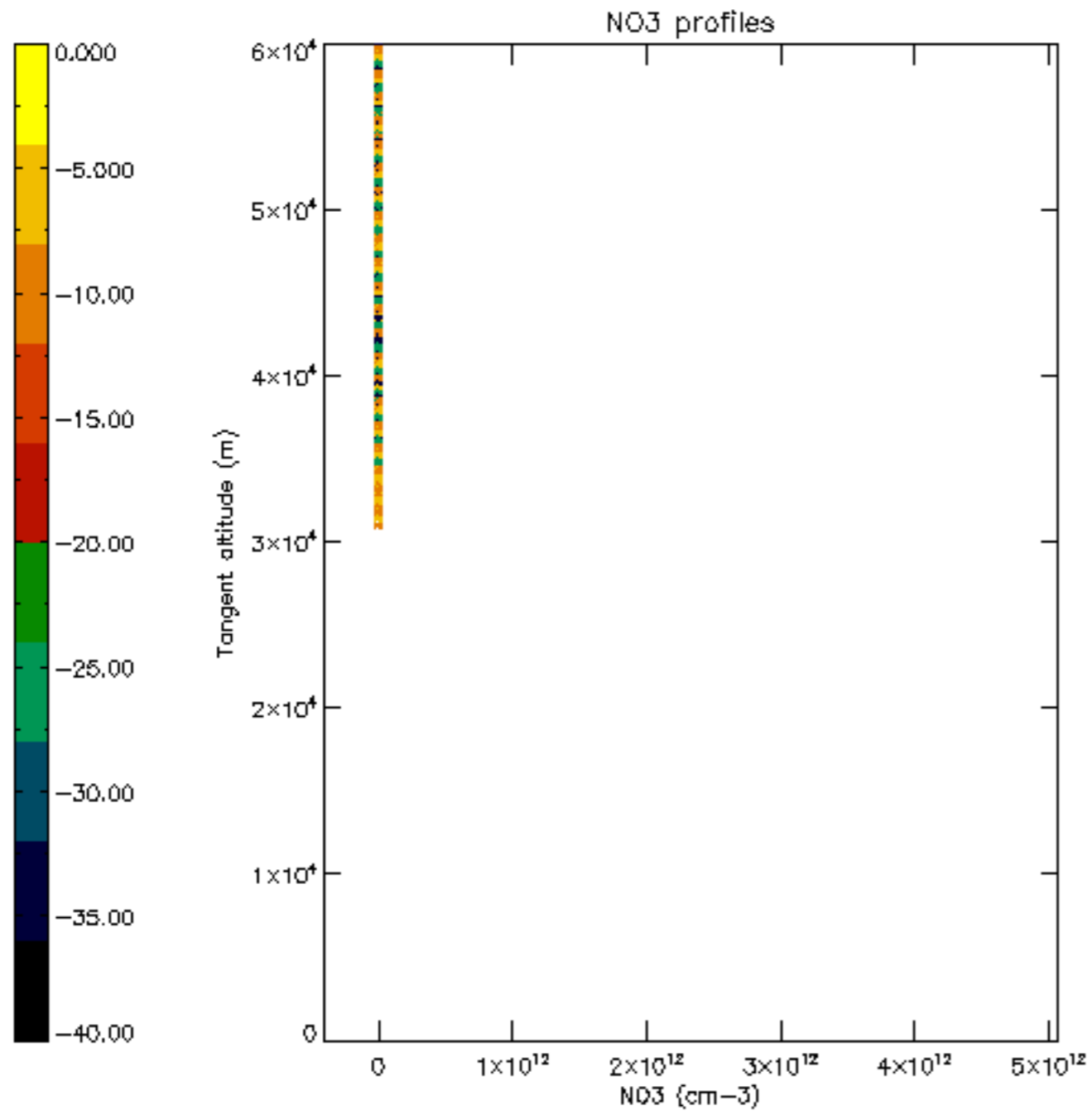


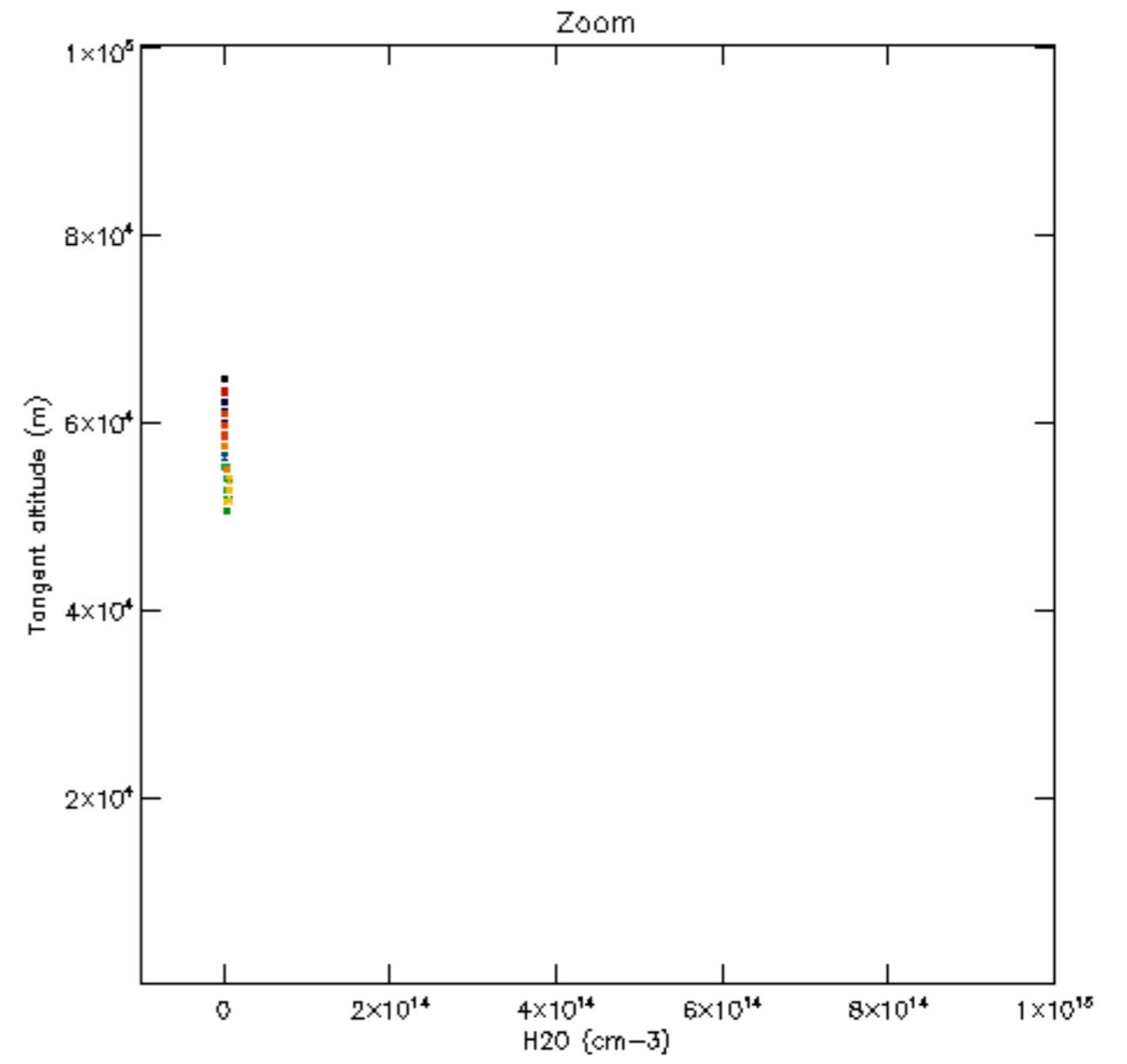
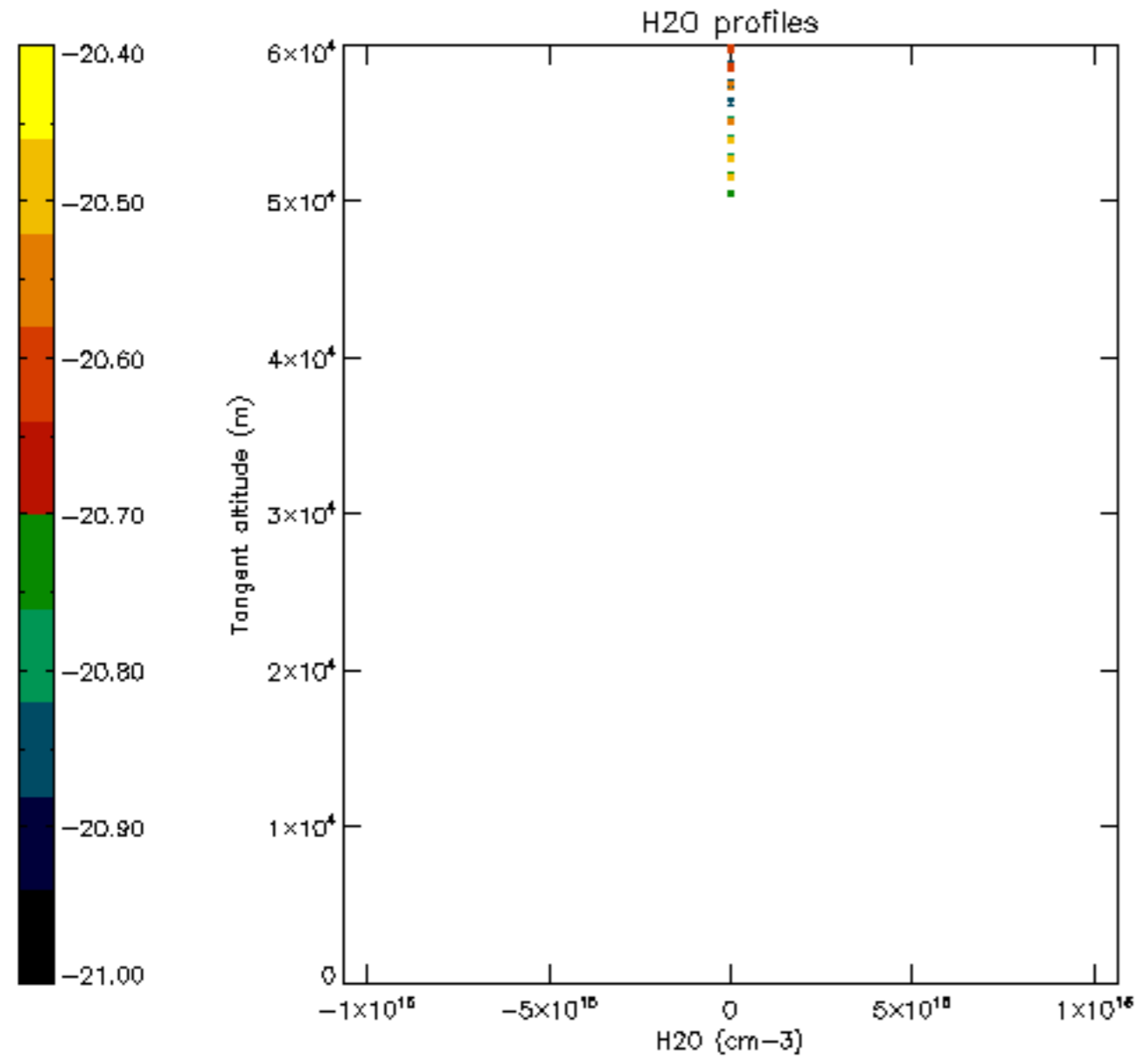


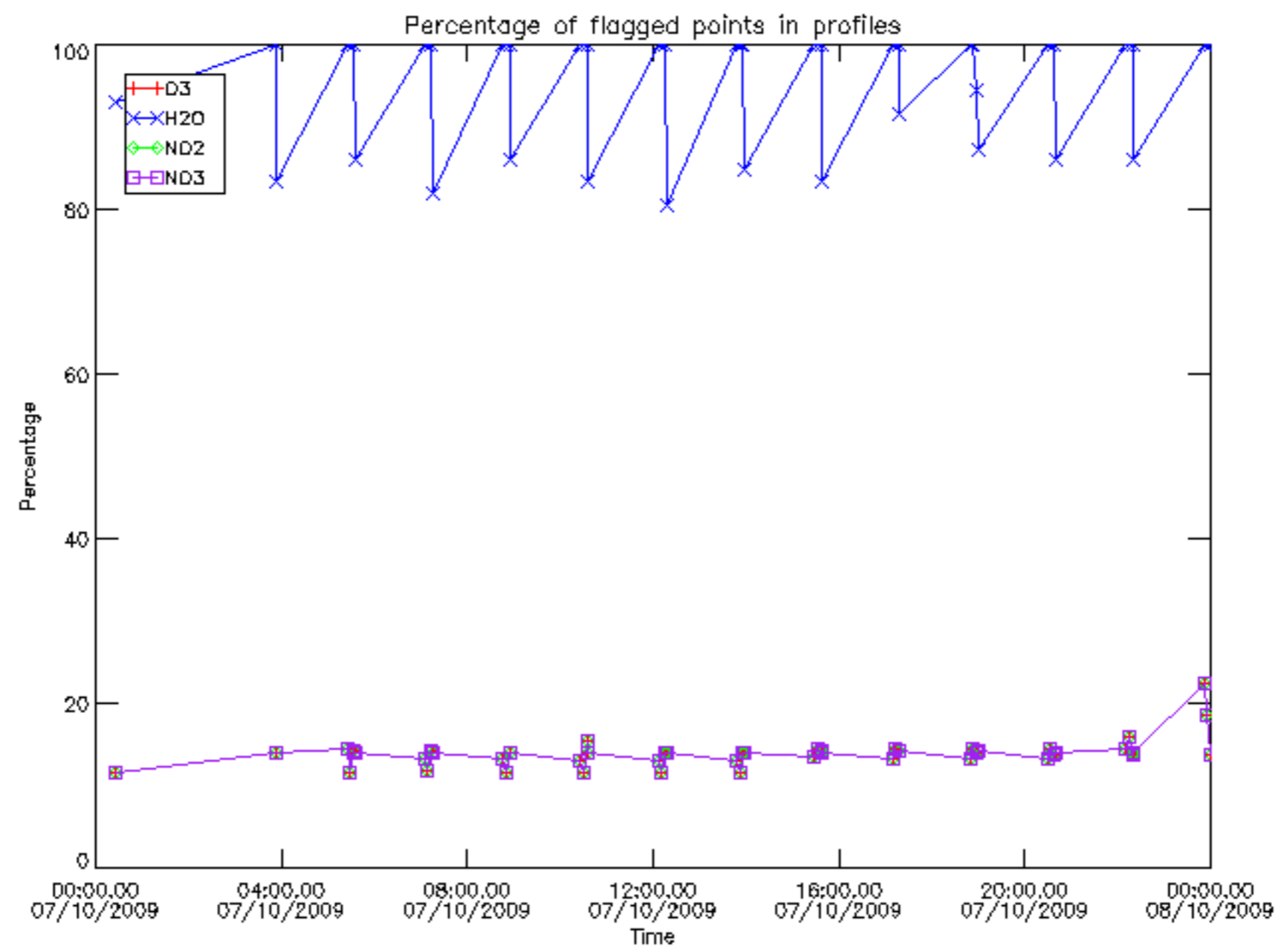




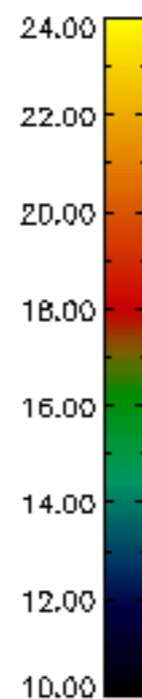
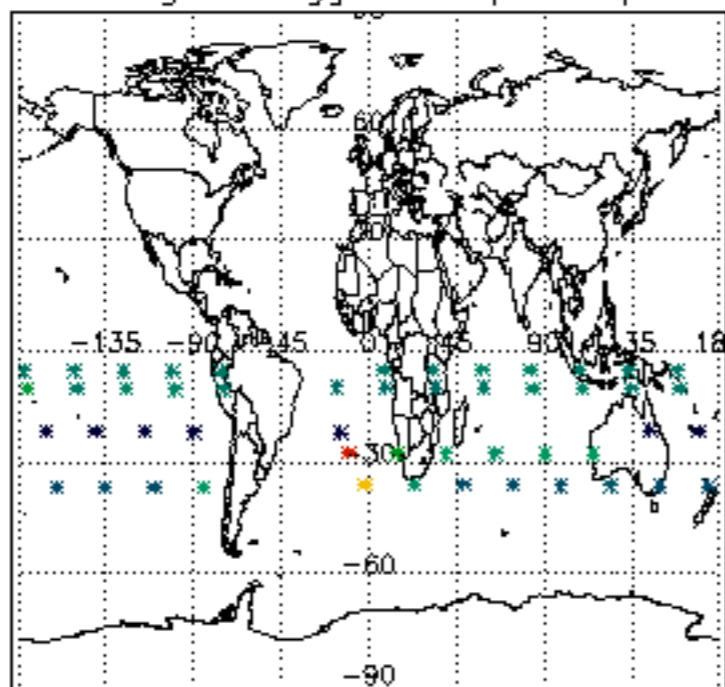




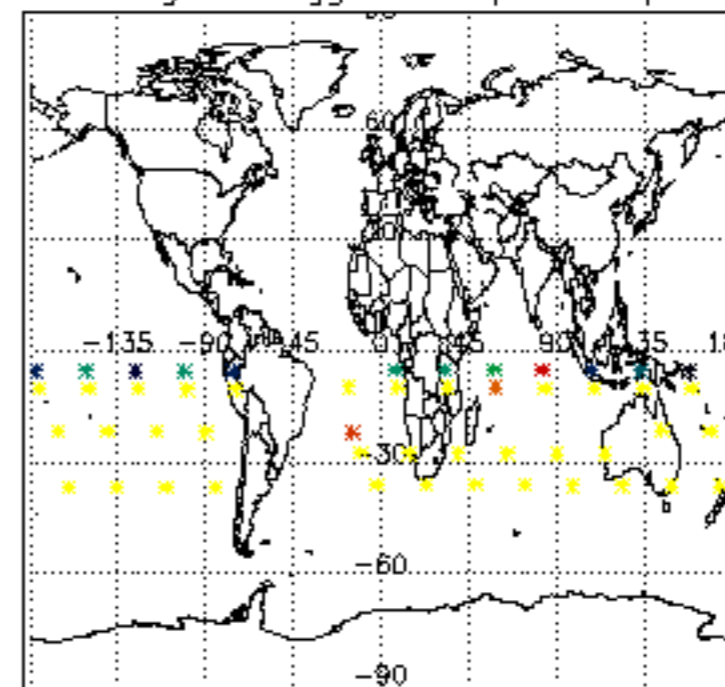




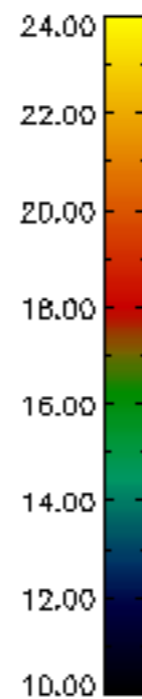
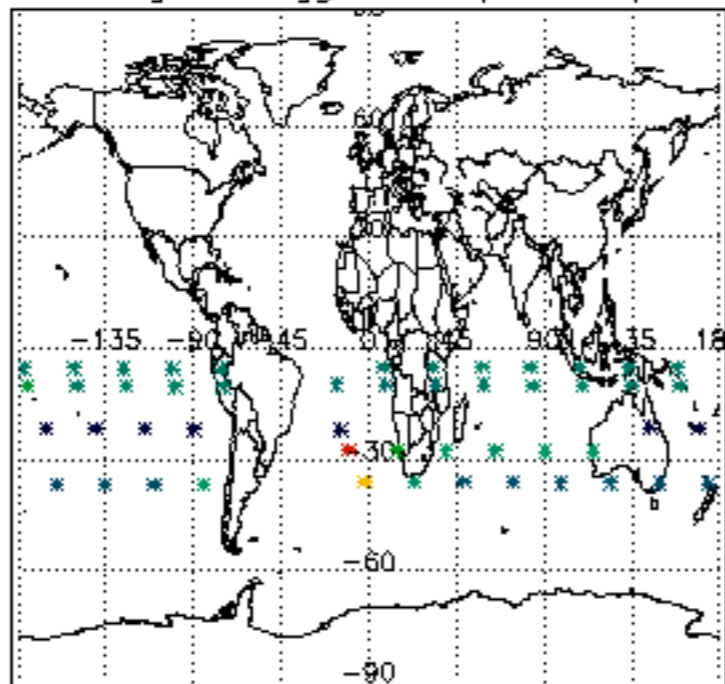
Percentage of flagged data per D3 profile



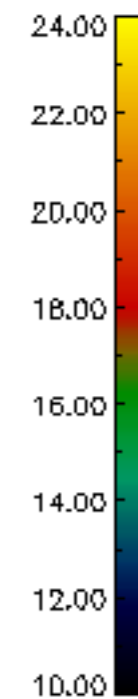
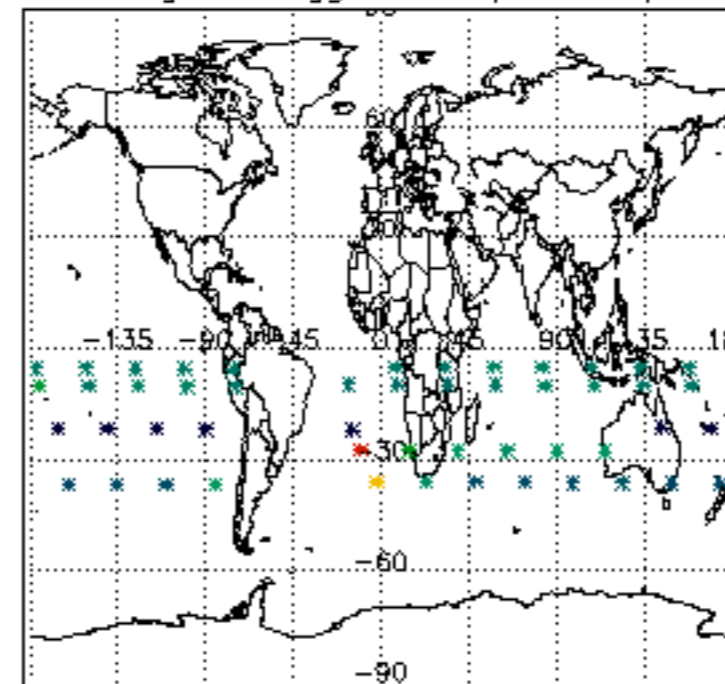
Percentage of flagged data per H2O profile

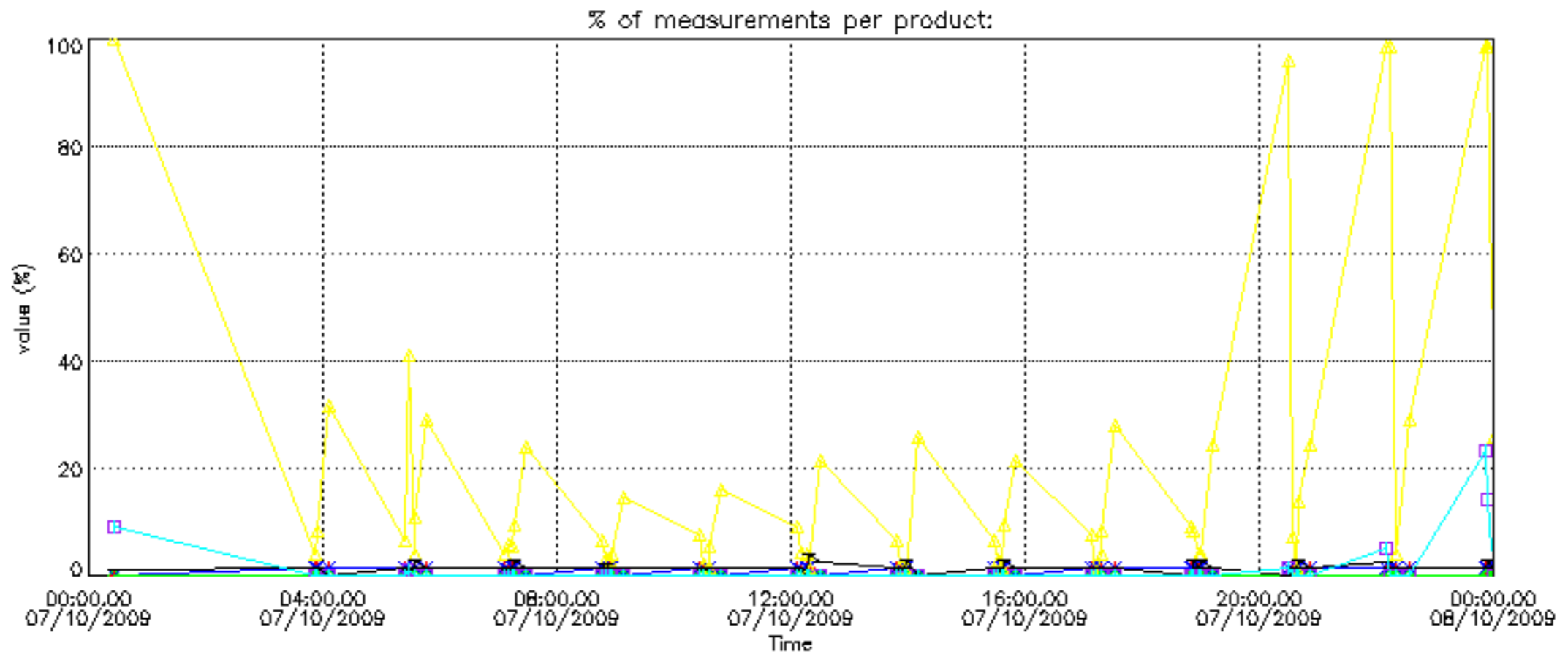


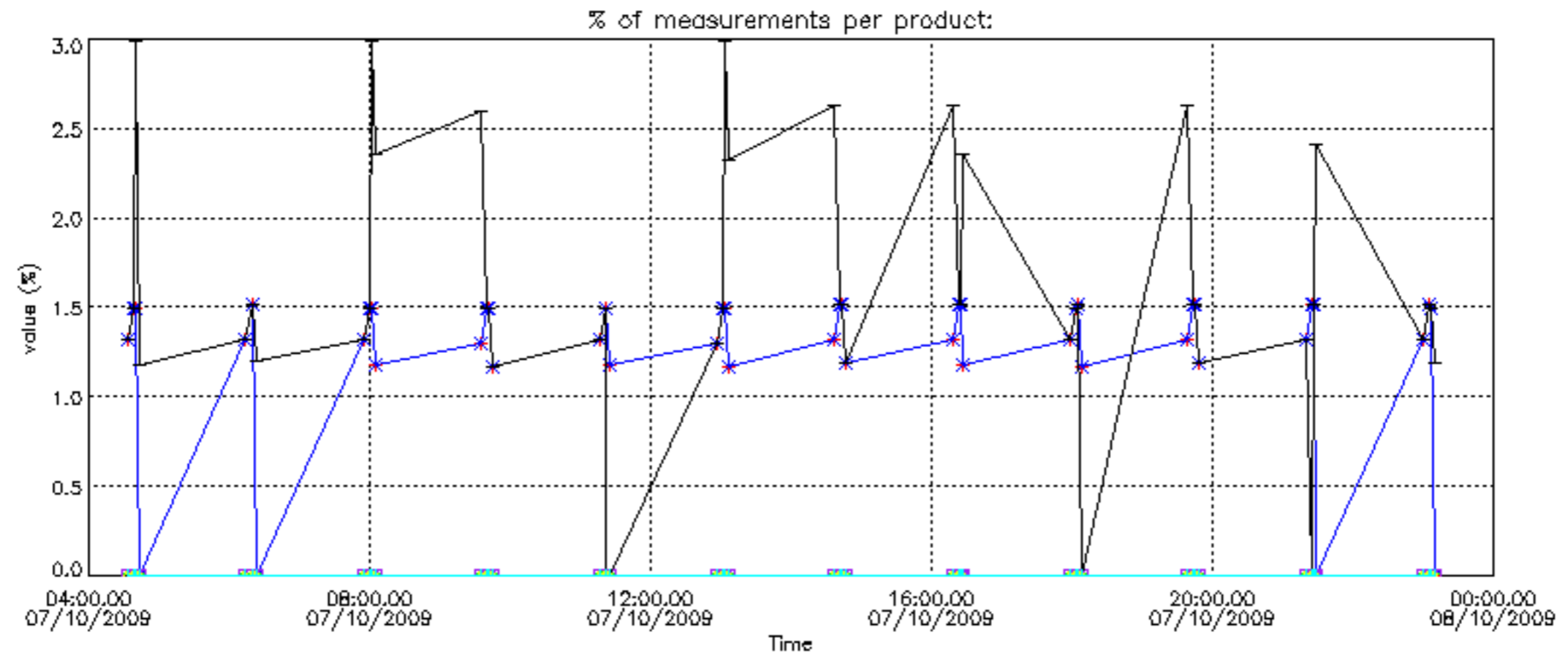
Percentage of flagged data per NO2 profile



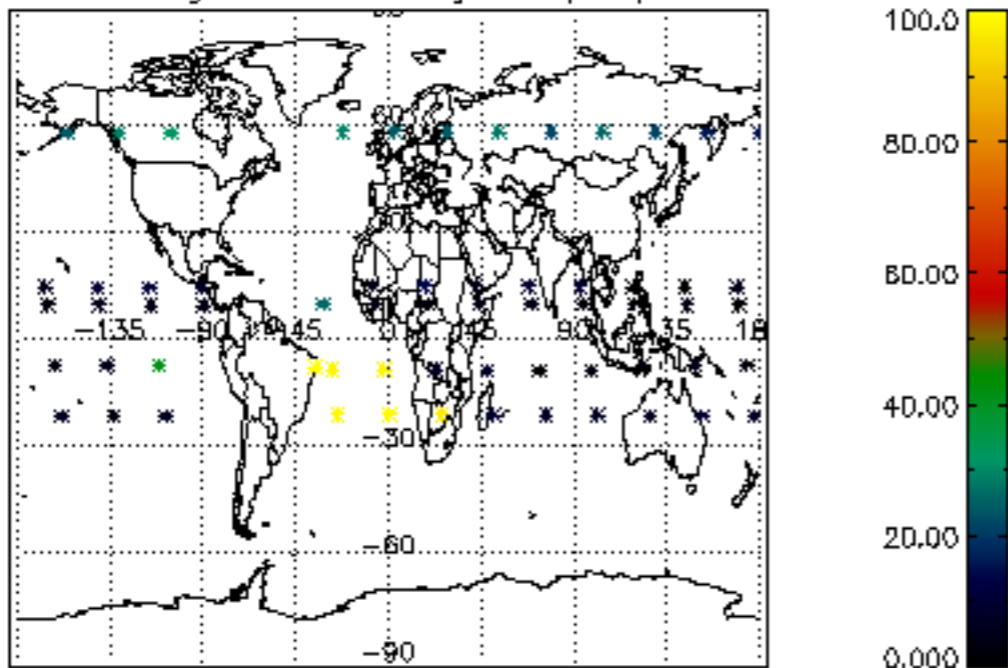
Percentage of flagged data per NO3 profile



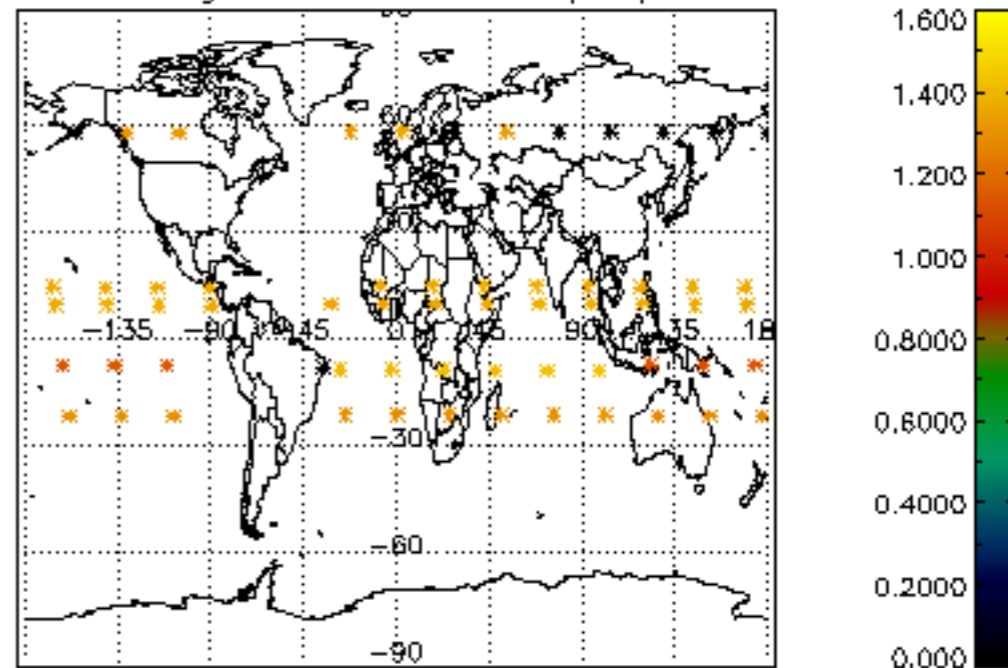




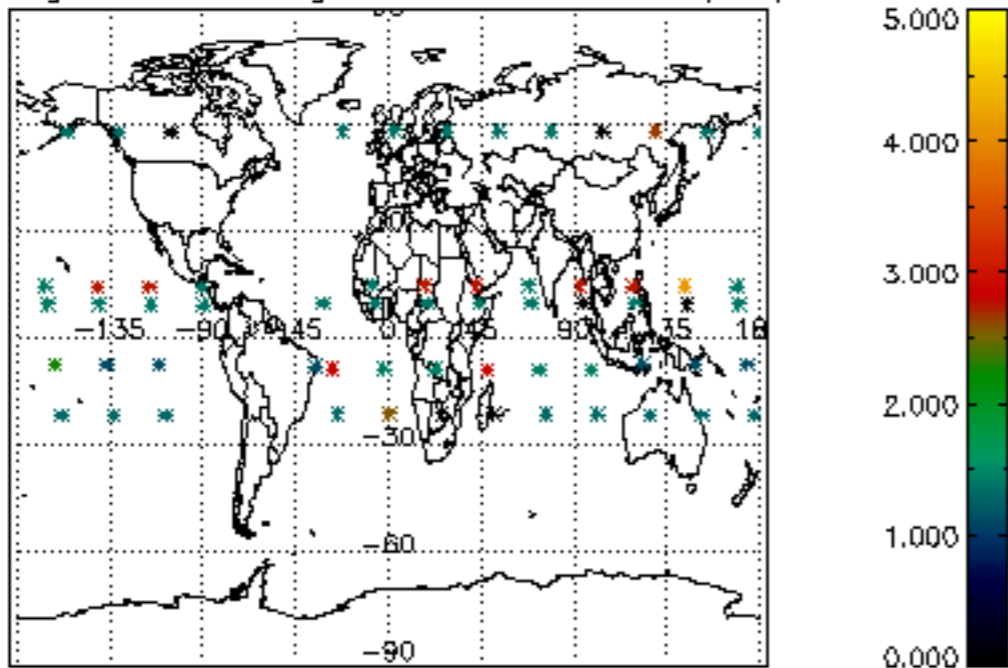
Percentage of cosmic ray hits per profile



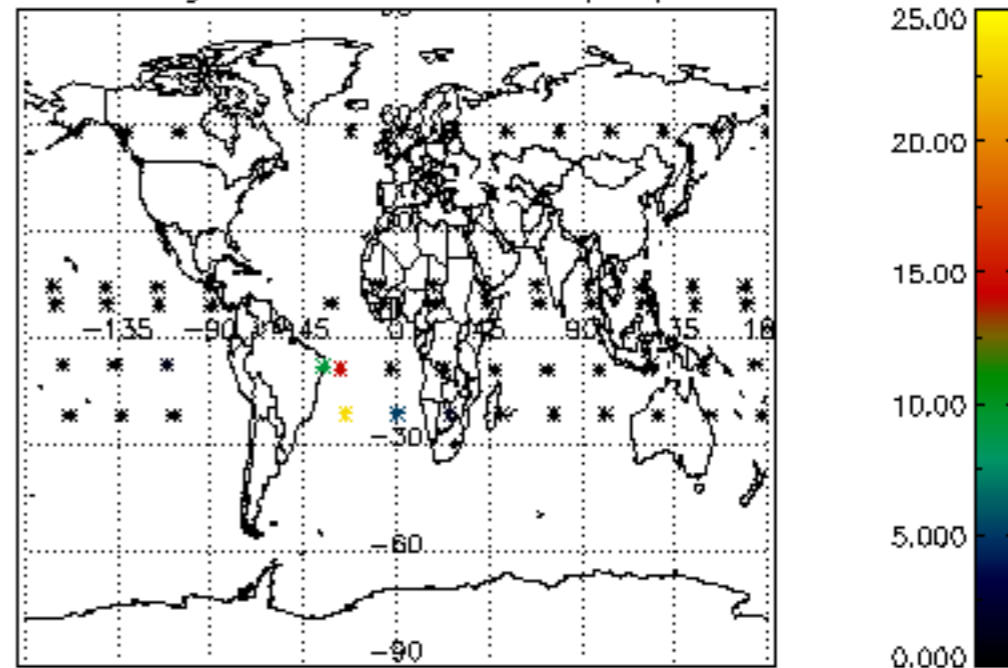
Percentage of datation errors per profile



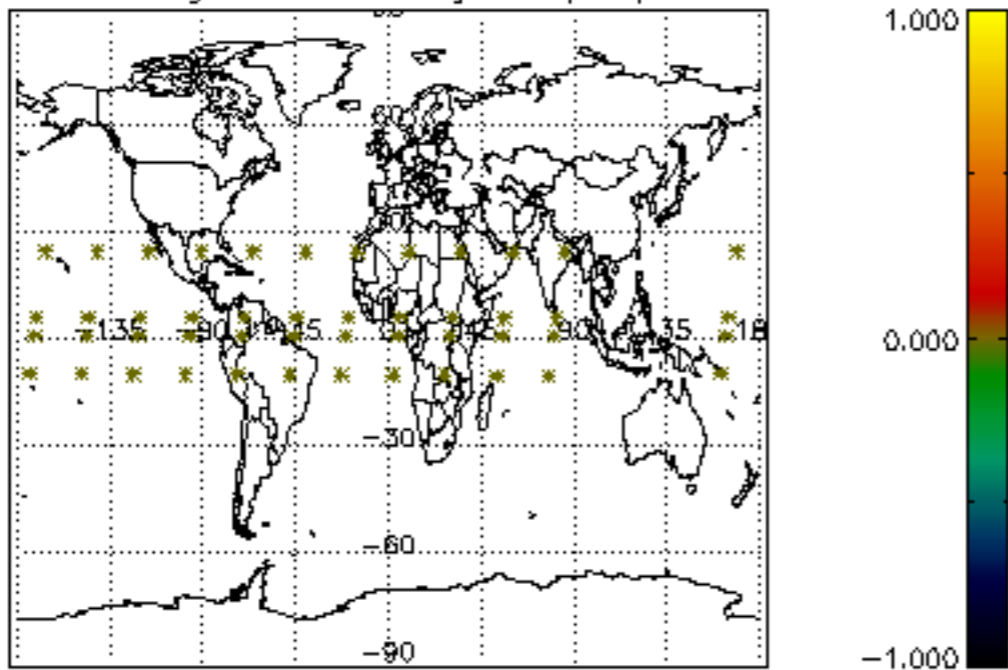
Percentage of star falling outside central band per profile



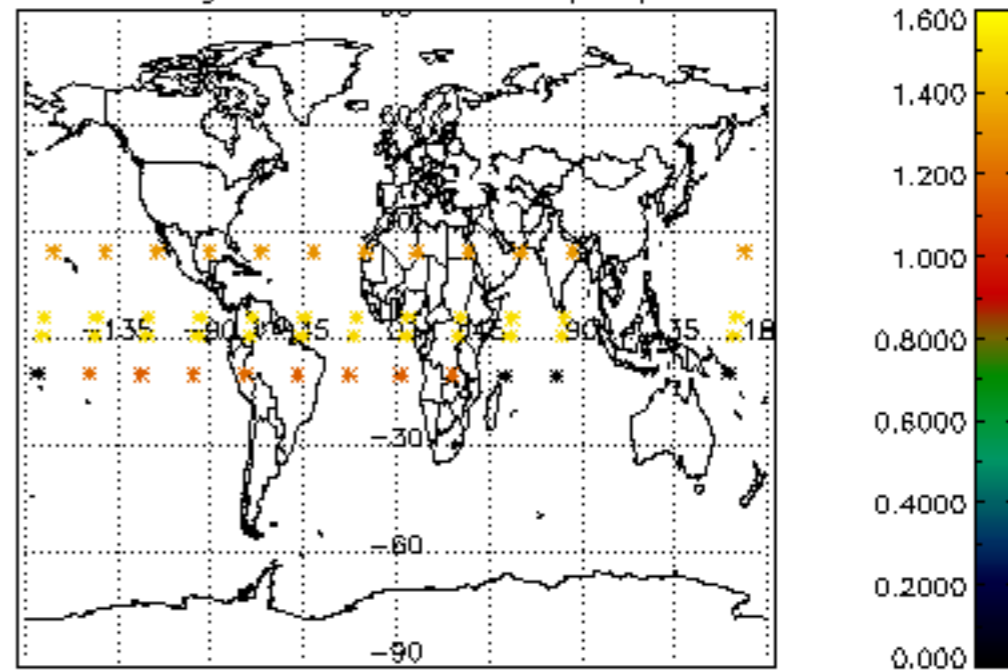
Percentage of saturation errors per profile



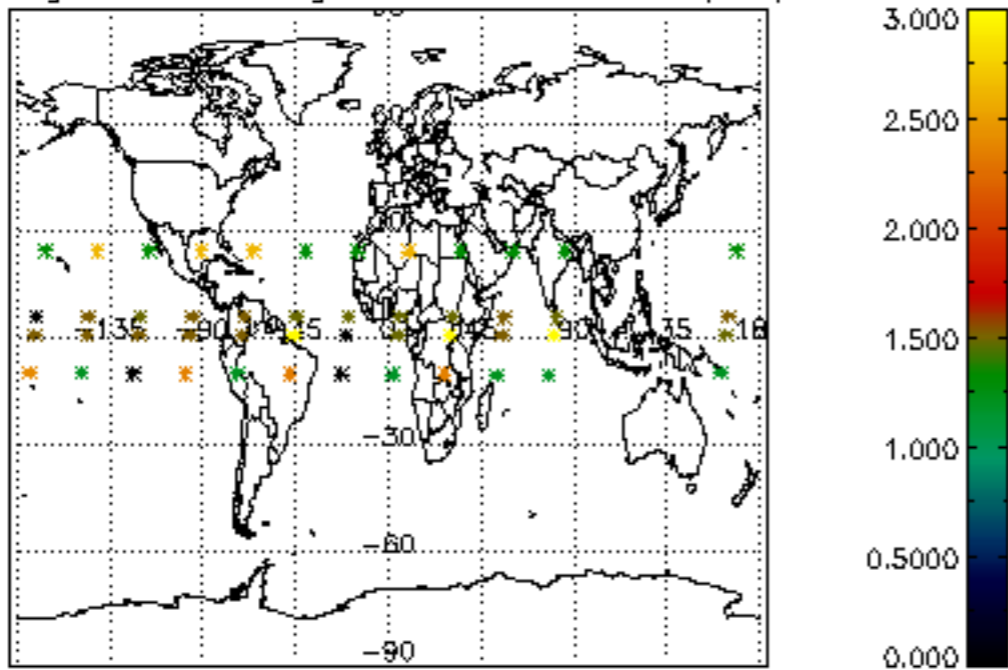
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

