

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 10:39:26
Data source version	GOMOS/6.01
Start time of products	07-07-2009 (07JUL2009 00:00:00)
Stop time of products	08-07-2009 (08JUL2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	182
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

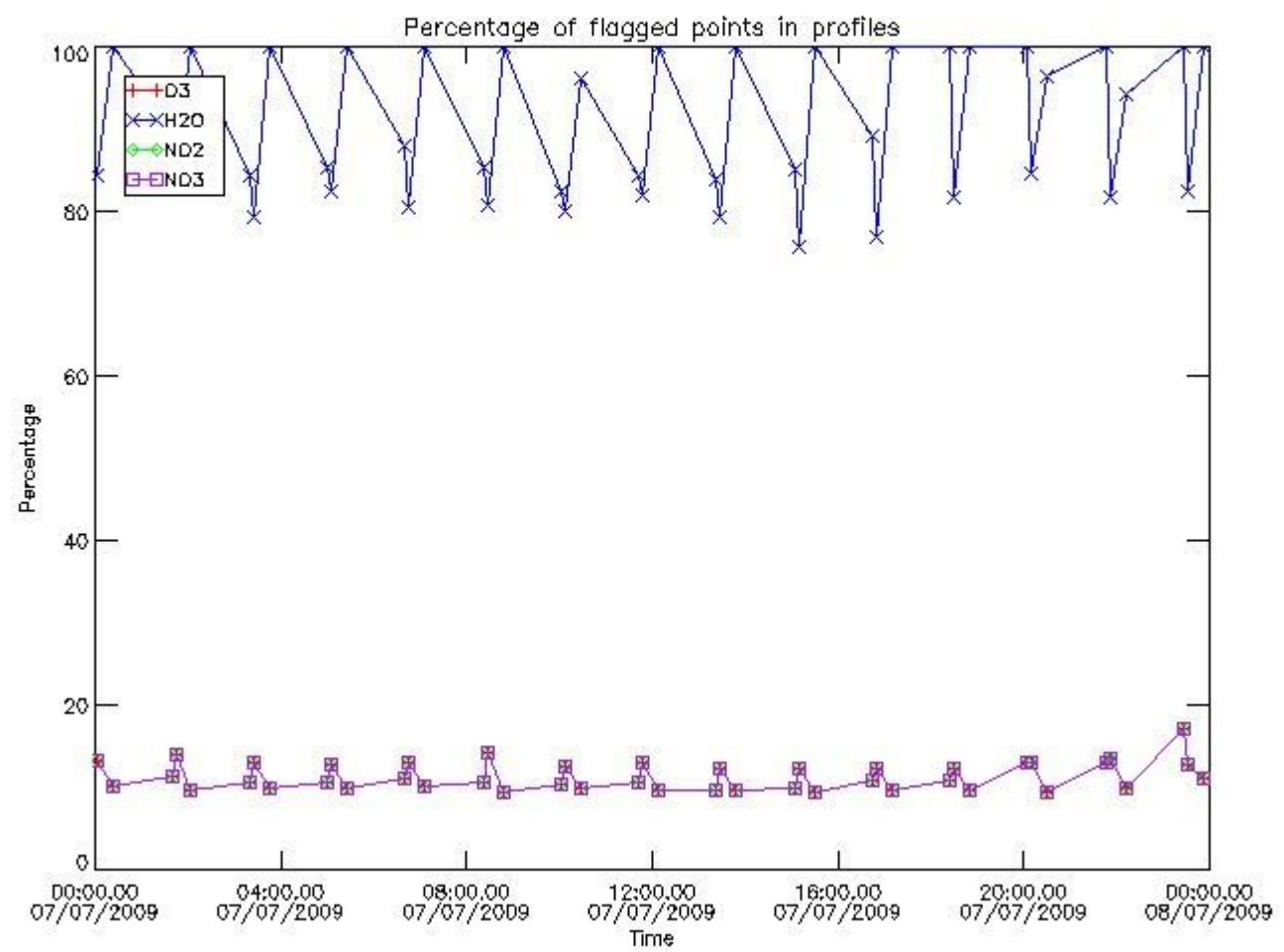
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090707_000322_000000382080_00302_38432_8535.N1	07-JUL-2009 00:03:22	Dark	38.000	94	92Alp Cet	2.5260	3100.0	76	38432	No
2	GOM_NL__2PRFIN20090707_002329_000000512080_00303_38433_8542.N1	07-JUL-2009 00:23:29	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	38433	No
3	GOM_NL__2PRFIN20090707_002948_000000522080_00303_38433_8543.N1	07-JUL-2009 00:29:48	Straylight	52.000	63	Bet Gru	2.1500	2800.0	104	38433	No
4	GOM_NL__2PRFIN20090707_003137_000000572080_00303_38433_8544.N1	07-JUL-2009 00:31:37	Straylight	57.000	31	Alp Gru	1.7340	15200.	114	38433	No
5	GOM_NL__2PRFIN20090707_003442_000000572080_00303_38433_8545.N1	07-JUL-2009 00:34:42	Straylight	56.500	172	Gam Gru	3.0030	13100.	113	38433	No
6	GOM_NL__2PRFIN20090707_005652_000000432080_00303_38433_8546.N1	07-JUL-2009 00:56:52	Bright	43.000	168	17Zet Aql	2.9860	11000.	86	38433	No
7	GOM_NL__2PRFIN20090707_010400_000000352080_00303_38433_8547.N1	07-JUL-2009 01:04:00	Bright	34.500	5	3Alp Lyr	0.033000	11000.	69	38433	No
8	GOM_NL__2PRFIN20090707_010754_000000432080_00303_38433_8548.N1	07-JUL-2009 01:07:54	Bright	43.000	144	18Del Cyg	2.8600	11000.	86	38433	No
9	GOM_NL__2PRFIN20090707_011506_000000462080_00303_38433_8549.N1	07-JUL-2009 01:15:06	Bright	45.500	89	5Alp Cep	2.4510	8000.0	91	38433	No
10	GOM_NL__2PRFIN20090707_012237_000000512080_00303_38433_8550.N1	07-JUL-2009 01:22:37	Bright	50.500	74	11Bet Cas	2.2680	6600.0	101	38433	No
11	GOM_NL__2PRFIN20090707_012429_000000382080_00303_38433_8551.N1	07-JUL-2009 01:24:29	Bright	37.500	110	37Del Cas	2.6780	8900.0	75	38433	No
12	GOM_NL__2PRFIN20090707_013119_000000402080_00303_38433_8552.N1	07-JUL-2009 01:31:19	Bright	39.500	73	57Gam1And	2.2600	13100.	79	38433	No
13	GOM_NL__2PRFIN20090707_013852_000000452080_00303_38433_8553.N1	07-JUL-2009 01:38:52	Dark	45.000	50	13Alp Ari	2.0070	4250.0	90	38433	No
14	GOM_NL__2PRFIN20090707_014359_000000362080_00303_38433_8554.N1	07-JUL-2009 01:43:59	Dark	36.000	94	92Alp Cet	2.5260	3100.0	72	38433	No
15	GOM_NL__2PRFIN20090707_020406_000000532080_00304_38434_8552.N1	07-JUL-2009 02:04:06	Dark	52.500	84	Alp Phe	2.3970	4500.0	105	38434	No
16	GOM_NL__2PRFIN20090707_021025_000000642080_00304_38434_8553.N1	07-JUL-2009 02:10:25	Straylight	64.000	63	Bet Gru	2.1500	2800.0	128	38434	No
17	GOM_NL__2PRFIN20090707_021214_000000522080_00304_38434_8554.N1	07-JUL-2009 02:12:14	Straylight	52.000	31	Alp Gru	1.7340	15200.	104	38434	No
18	GOM_NL__2PRFIN20090707_021519_000000582080_00304_38434_8555.N1	07-JUL-2009 02:15:19	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	38434	No
19	GOM_NL__2PRFIN20090707_023728_000000482080_00304_38434_8556.N1	07-JUL-2009 02:37:28	Bright	48.000	168	17Zet Aql	2.9860	11000.	96	38434	No
20	GOM_NL__2PRFIN20090707_024829_000000422080_00304_38434_8557.N1	07-JUL-2009 02:48:29	Bright	42.000	144	18Del Cyg	2.8600	11000.	84	38434	No
21	GOM_NL__2PRFIN20090707_025541_000000472080_00304_38434_8558.N1	07-JUL-2009 02:55:41	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	38434	No
22	GOM_NL__2PRFIN20090707_030312_000000462080_00304_38434_8559.N1	07-JUL-2009 03:03:12	Bright	46.000	74	11Bet Cas	2.2680	6600.0	92	38434	No
23	GOM_NL__2PRFIN20090707_030505_000000392080_00304_38434_8560.N1	07-JUL-2009 03:05:05	Bright	38.500	110	37Del Cas	2.6780	8900.0	77	38434	No
24	GOM_NL__2PRFIN20090707_031155_000000432080_00304_38434_8561.N1	07-JUL-2009 03:11:55	Bright	43.000	73	57Gam1And	2.2600	13100.	86	38434	No
25	GOM_NL__2PRFIN20090707_031928_000000492080_00304_38434_8562.N1	07-JUL-2009 03:19:28	Dark	48.500	50	13Alp Ari	2.0070	4250.0	97	38434	No
26	GOM_NL__2PRFIN20090707_032435_000000392080_00304_38434_8563.N1	07-JUL-2009 03:24:35	Dark	39.000	94	92Alp Cet	2.5260	3100.0	78	38434	No
27	GOM_NL__2PRFIN20090707_034443_000000512080_00305_38435_8586.N1	07-JUL-2009 03:44:43	Dark	51.000	84	Alp Phe	2.3970	4500.0	102	38435	No
28	GOM_NL__2PRFIN20090707_035102_000000542080_00305_38435_8587.N1	07-JUL-2009 03:51:02	Straylight	53.500	63	Bet Gru	2.1500	2800.0	107	38435	No
29	GOM_NL__2PRFIN20090707_035251_000000552080_00305_38435_8588.N1	07-JUL-2009 03:52:51	Straylight	54.500	31	Alp Gru	1.7340	15200.	109	38435	No
30	GOM_NL__2PRFIN20090707_035556_000000542080_00305_38435_8589.N1	07-JUL-2009 03:55:56	Straylight	54.000	172	Gam Gru	3.0030	13100.	108	38435	No
31	GOM_NL__2PRFIN20090707_041804_000000422080_00305_38435_8590.N1	07-JUL-2009 04:18:04	Bright	41.500	168	17Zet Aql	2.9860	11000.	83	38435	No
32	GOM_NL__2PRFIN20090707_042905_000000462080_00305_38435_8591.N1	07-JUL-2009 04:29:05	Bright	45.500	144	18Del Cyg	2.8600	11000.	91	38435	No
33	GOM_NL__2PRFIN20090707_043617_000000422080_00305_38435_8592.N1	07-JUL-2009 04:36:17	Bright	42.000	89	5Alp Cep	2.4510	8000.0	84	38435	No
34	GOM_NL__2PRFIN20090707_044347_000000462080_00305_38435_8593.N1	07-JUL-2009 04:43:47	Bright	46.000	74	11Bet Cas	2.2680	6600.0	92	38435	No
35	GOM_NL__2PRFIN20090707_044540_000000402080_00305_38435_8594.N1	07-JUL-2009 04:45:40	Bright	39.500	110	37Del Cas	2.6780	8900.0	79	38435	No
36	GOM_NL__2PRFIN20090707_045230_000000422080_00305_38435_8595.N1	07-JUL-2009 04:52:30	Bright	42.000	73	57Gam1And	2.2600	13100.	84	38435	No
37	GOM_NL__2PRFIN20090707_050005_000000482080_00305_38435_8596.N1	07-JUL-2009 05:00:05	Dark	48.000	50	13Alp Ari	2.0070	4250.0	96	38435	No
38	GOM_NL__2PRFIN20090707_050512_000000402080_00305_38435_8597.N1	07-JUL-2009 05:05:12	Dark	40.000	94	92Alp Cet	2.5260	3100.0	80	38435	No
39	GOM_NL__2PRFIN20090707_052520_000000522080_00306_38436_8614.N1	07-JUL-2009 05:25:20	Dark	51.500	84	Alp Phe	2.3970	4500.0	103	38436	No
40	GOM_NL__2PRFIN20090707_053139_000000562080_00306_38436_8615.N1	07-JUL-2009 05:31:39	Straylight	55.500	63	Bet Gru	2.1500	2800.0	111	38436	No
41	GOM_NL__2PRFIN20090707_053328_000000502080_00306_38436_8616.N1	07-JUL-2009 05:33:28	Straylight	50.000	31	Alp Gru	1.7340	15200.	100	38436	No
42	GOM_NL__2PRFIN20090707_053633_000000552080_00306_38436_8617.N1	07-JUL-2009 05:36:33	Straylight	54.500	172	Gam Gru	3.0030	13100.	109	38436	No

161	GOM_NL__2PRFIN20090707_212210_000000432080_00315_38445_8787.N1	07-JUL-2009 21:22:10	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	38445	No
162	GOM_NL__2PRFIN20090707_212941_000000642080_00315_38445_8788.N1	07-JUL-2009 21:29:41	Bright	64.000	74	11Bet Cas	2.2680	6600.0	128	38445	No
163	GOM_NL__2PRFIN20090707_213136_000000392080_00315_38445_8789.N1	07-JUL-2009 21:31:36	Bright	38.500	110	37Del Cas	2.6780	8900.0	77	38445	No
164	GOM_NL__2PRFIN20090707_213829_000000462080_00315_38445_8790.N1	07-JUL-2009 21:38:29	Bright	46.000	73	57Gam1And	2.2600	13100.	92	38445	No
165	GOM_NL__2PRFIN20090707_214122_000000452080_00315_38445_8791.N1	07-JUL-2009 21:41:22	Tw_i_and_stray	45.000	173	4Bet Tri	3.0040	8900.0	90	38445	No
166	GOM_NL__2PRFIN20090707_214608_000000392080_00315_38445_8792.N1	07-JUL-2009 21:46:08	Dark	39.000	50	13Alp Ari	2.0070	4250.0	78	38445	No
167	GOM_NL__2PRFIN20090707_215116_000000412080_00315_38445_8793.N1	07-JUL-2009 21:51:16	Dark	41.000	94	92Alp Cet	2.5260	3100.0	82	38445	No
168	GOM_NL__2PRFIN20090707_221130_000000522080_00316_38446_8796.N1	07-JUL-2009 22:11:30	Dark	51.500	84	Alp Phe	2.3970	4500.0	103	38446	No
169	GOM_NL__2PRFIN20090707_221747_000000542080_00316_38446_8797.N1	07-JUL-2009 22:17:47	Straylight	54.000	63	Bet Gru	2.1500	2800.0	108	38446	No
170	GOM_NL__2PRFIN20090707_221935_000000482080_00316_38446_8798.N1	07-JUL-2009 22:19:35	Straylight	47.500	31	Alp Gru	1.7340	15200.	95	38446	No
171	GOM_NL__2PRFIN20090707_222242_000000552080_00316_38446_8799.N1	07-JUL-2009 22:22:42	Straylight	55.000	172	Gam Gru	3.0030	13100.	110	38446	No
172	GOM_NL__2PRFIN20090707_224435_000000452080_00316_38446_8800.N1	07-JUL-2009 22:44:35	Bright	44.500	168	17Zet Aql	2.9860	11000.	89	38446	No
173	GOM_NL__2PRFIN20090707_225532_000000452080_00316_38446_8801.N1	07-JUL-2009 22:55:32	Bright	45.000	144	18Del Cyg	2.8600	11000.	90	38446	No
174	GOM_NL__2PRFIN20090707_230245_000000442080_00316_38446_8802.N1	07-JUL-2009 23:02:45	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	38446	No
175	GOM_NL__2PRFIN20090707_231016_000000552080_00316_38446_8803.N1	07-JUL-2009 23:10:16	Bright	54.500	74	11Bet Cas	2.2680	6600.0	109	38446	No
176	GOM_NL__2PRFIN20090707_231211_000000402080_00316_38446_8804.N1	07-JUL-2009 23:12:11	Bright	40.000	110	37Del Cas	2.6780	8900.0	80	38446	No
177	GOM_NL__2PRFIN20090707_231904_000000442080_00316_38446_8805.N1	07-JUL-2009 23:19:04	Bright	43.500	73	57Gam1And	2.2600	13100.	87	38446	No
178	GOM_NL__2PRFIN20090707_232158_000000442080_00316_38446_8806.N1	07-JUL-2009 23:21:58	Tw_i_and_stray	43.500	173	4Bet Tri	3.0040	8900.0	87	38446	No
179	GOM_NL__2PRFIN20090707_232644_000000302080_00316_38446_8807.N1	07-JUL-2009 23:26:44	Dark	30.000	50	13Alp Ari	2.0070	4250.0	60	38446	No
180	GOM_NL__2PRFIN20090707_233153_000000402080_00316_38446_8808.N1	07-JUL-2009 23:31:53	Dark	39.500	94	92Alp Cet	2.5260	3100.0	79	38446	No
181	GOM_NL__2PRFIN20090707_235207_000000512080_00317_38447_8813.N1	07-JUL-2009 23:52:07	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	38447	No
182	GOM_NL__2PRFIN20090707_235824_000000632080_00317_38447_8814.N1	07-JUL-2009 23:58:24	Straylight	62.500	63	Bet Gru	2.1500	2800.0	125	38447	No

3. Quality information per product

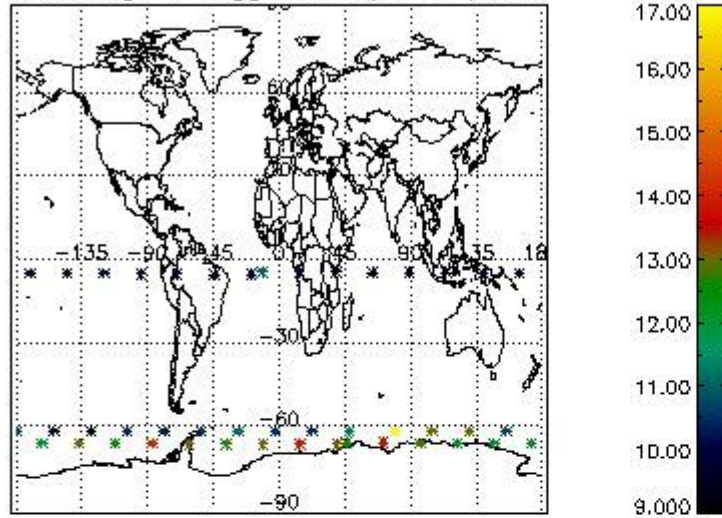
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

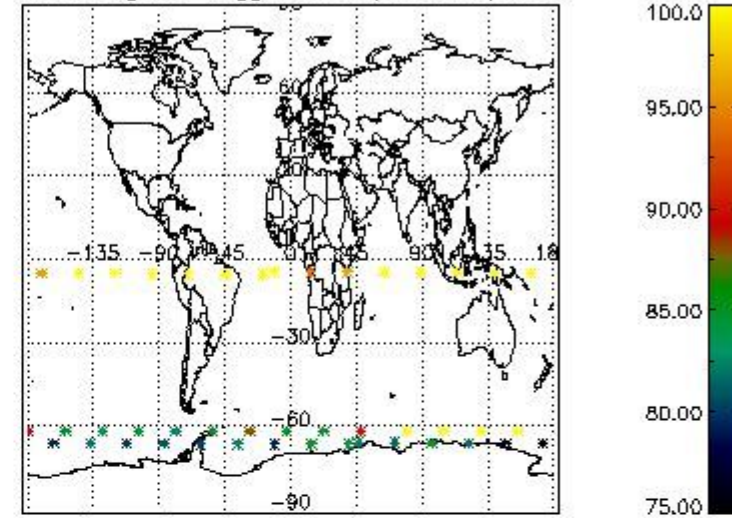


3.2 Plot quality information per product (world map)

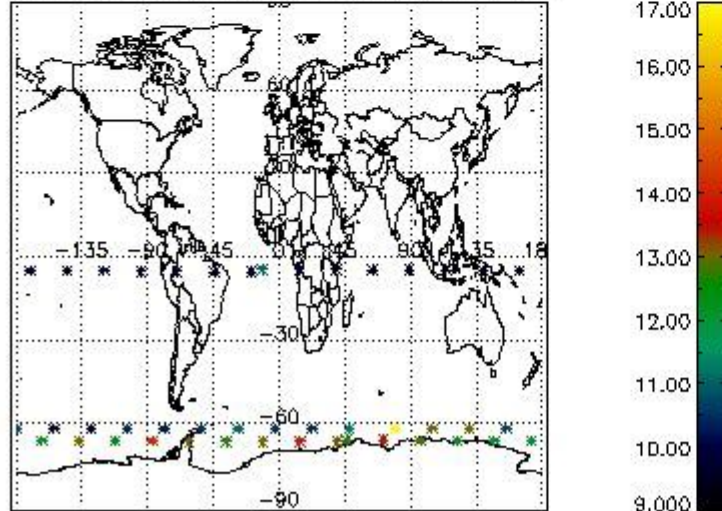
Percentage of flagged data per O3 profile



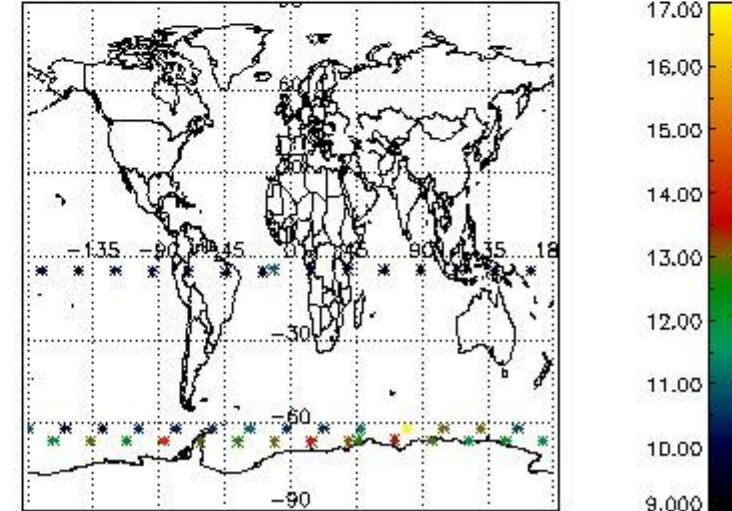
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

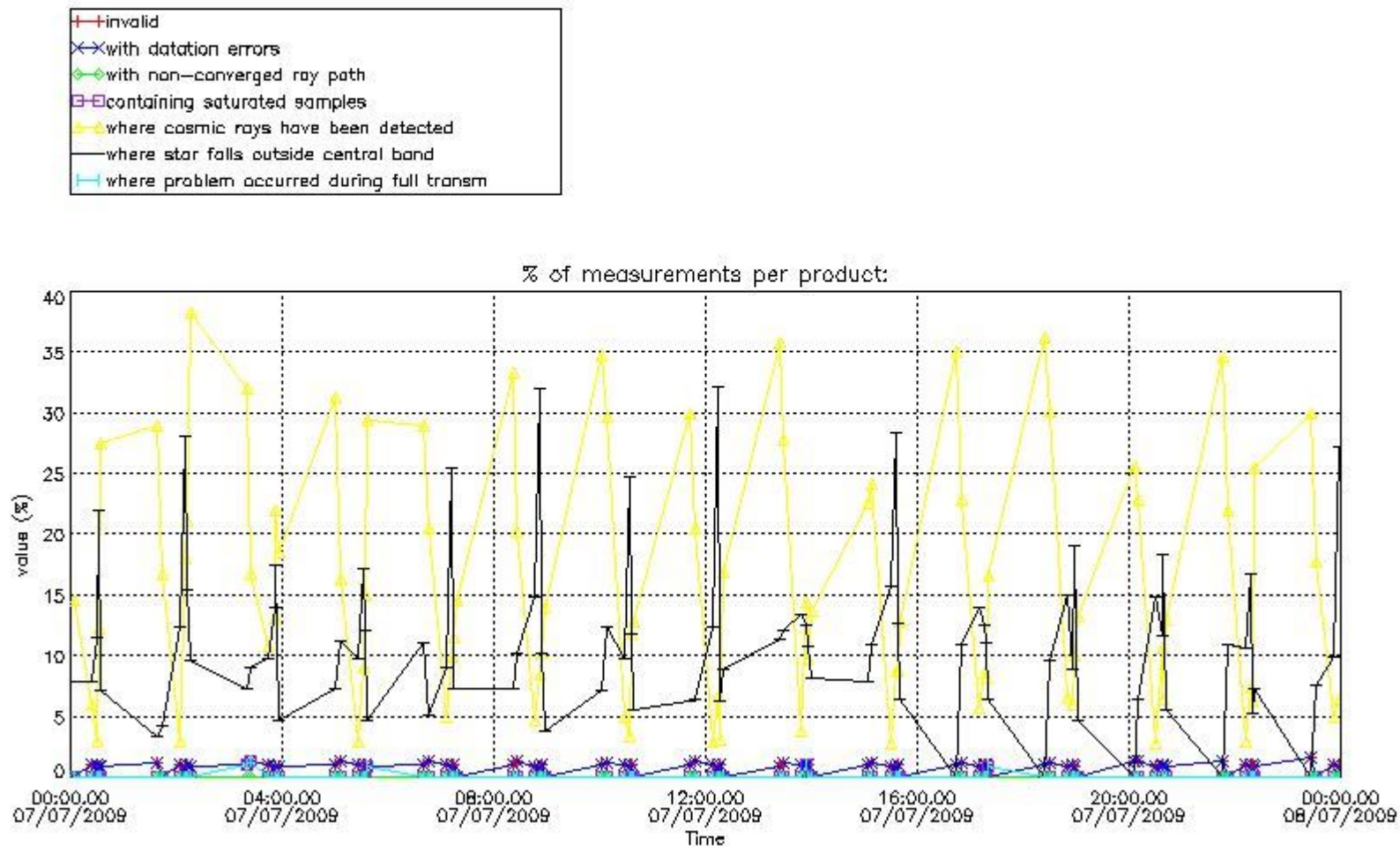


4. Level 1 quality information per product

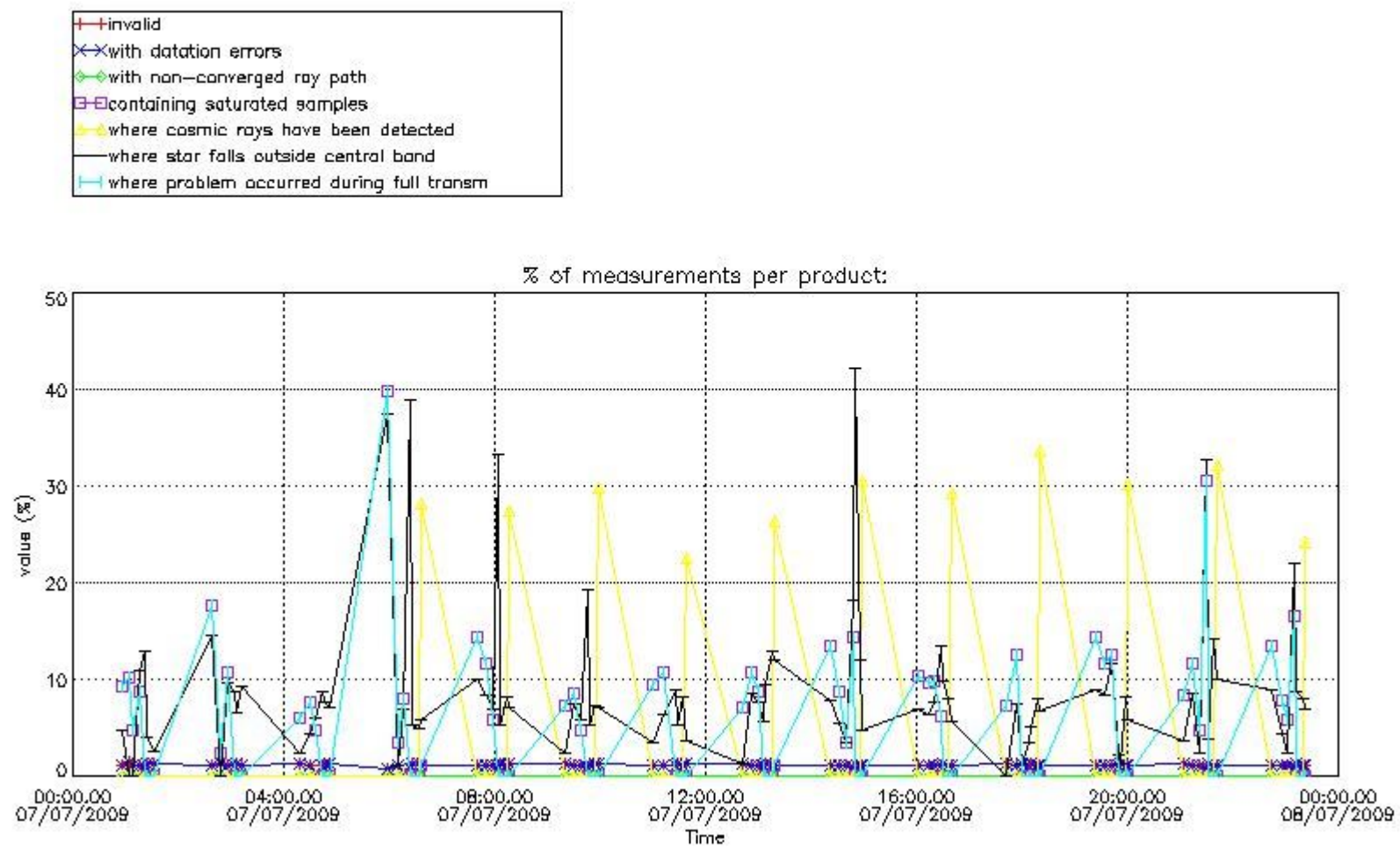
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



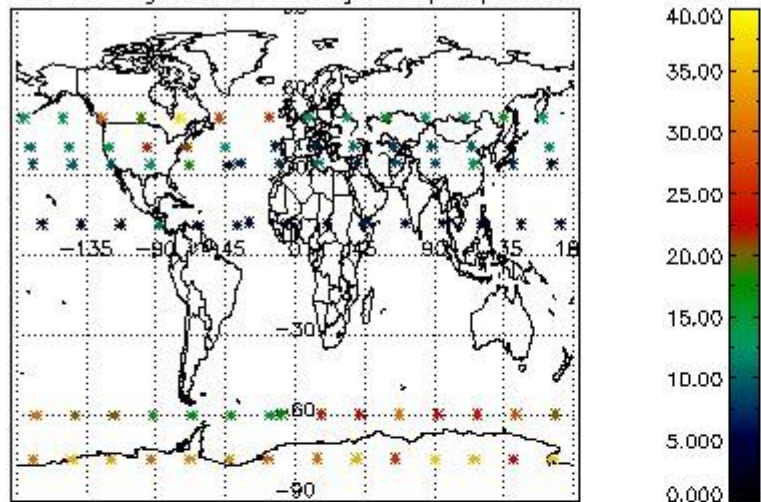
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



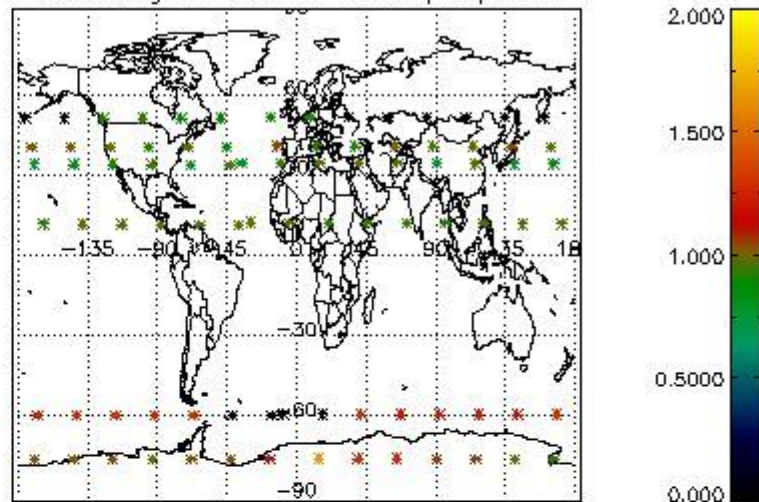
4.2 Plot quality information per product coming from level 1b processing (world map)

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

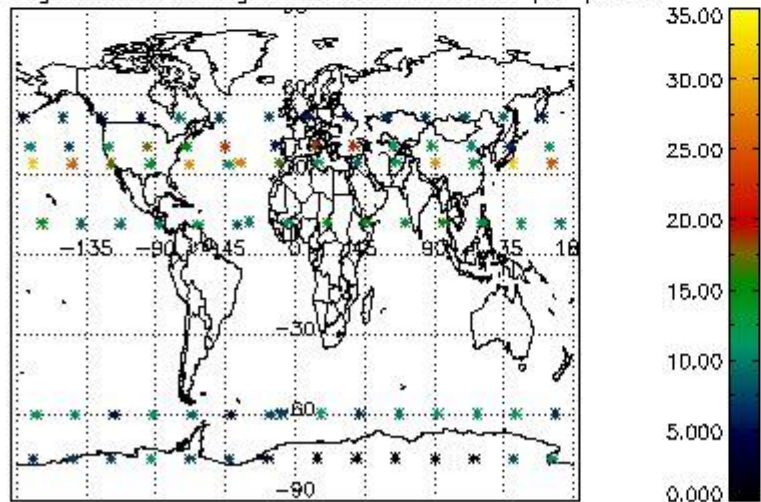
Percentage of cosmic ray hits per profile



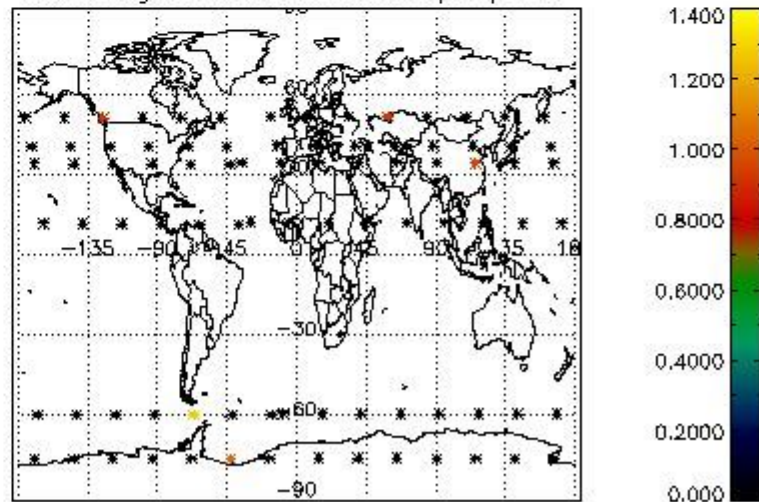
Percentage of datation errors per profile



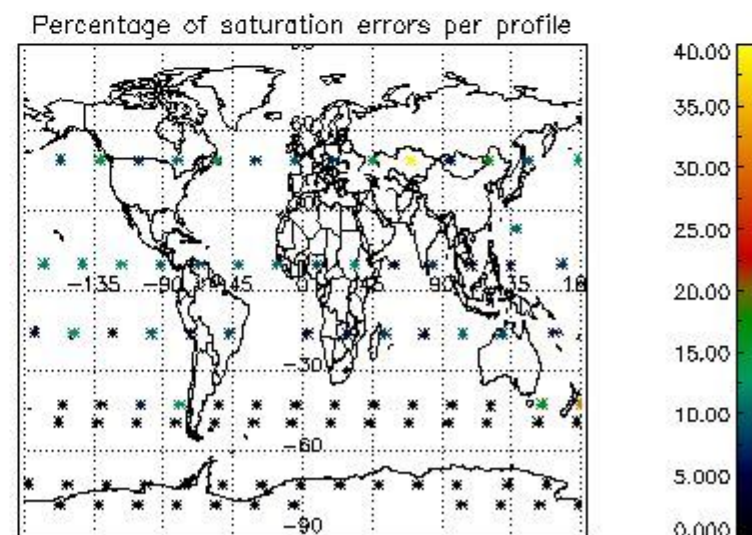
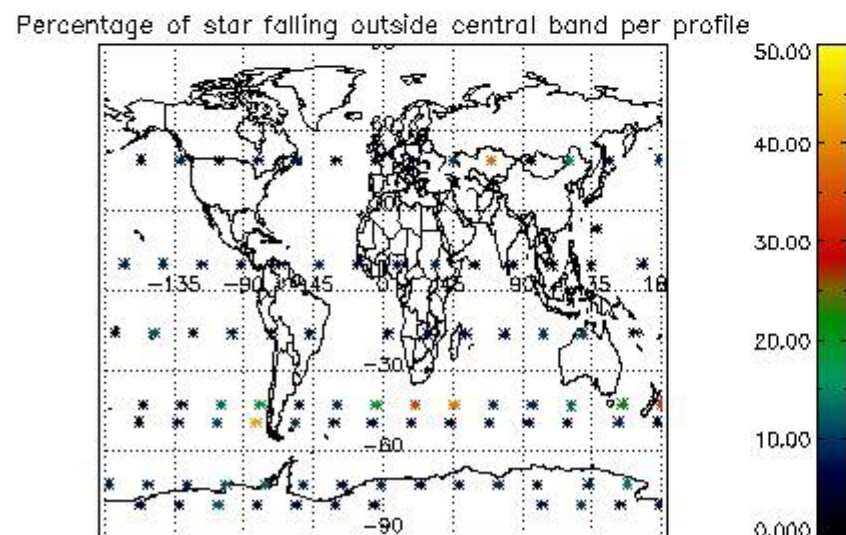
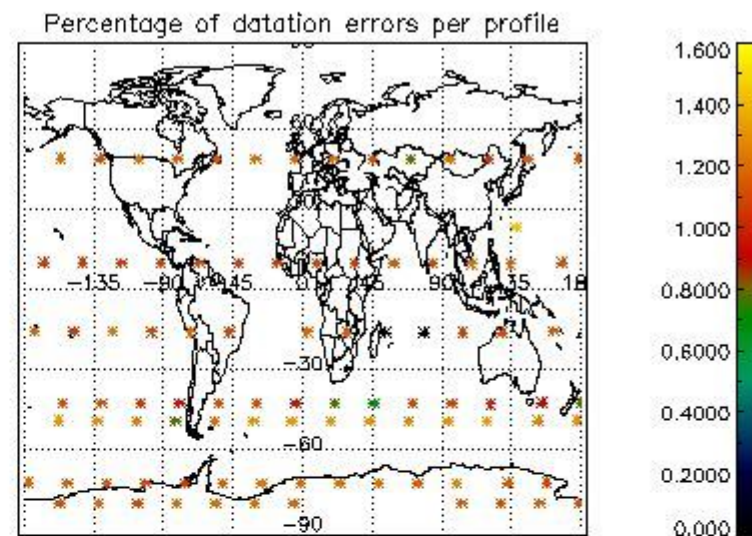
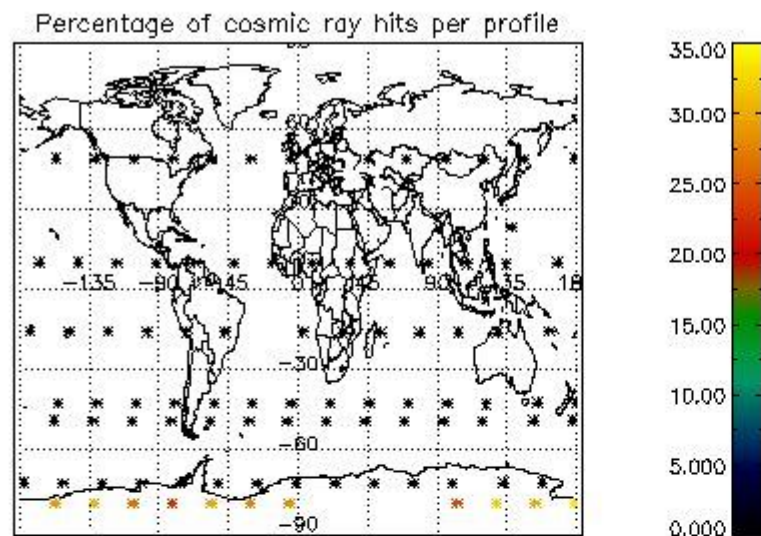
Percentage of star falling outside central band per profile



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

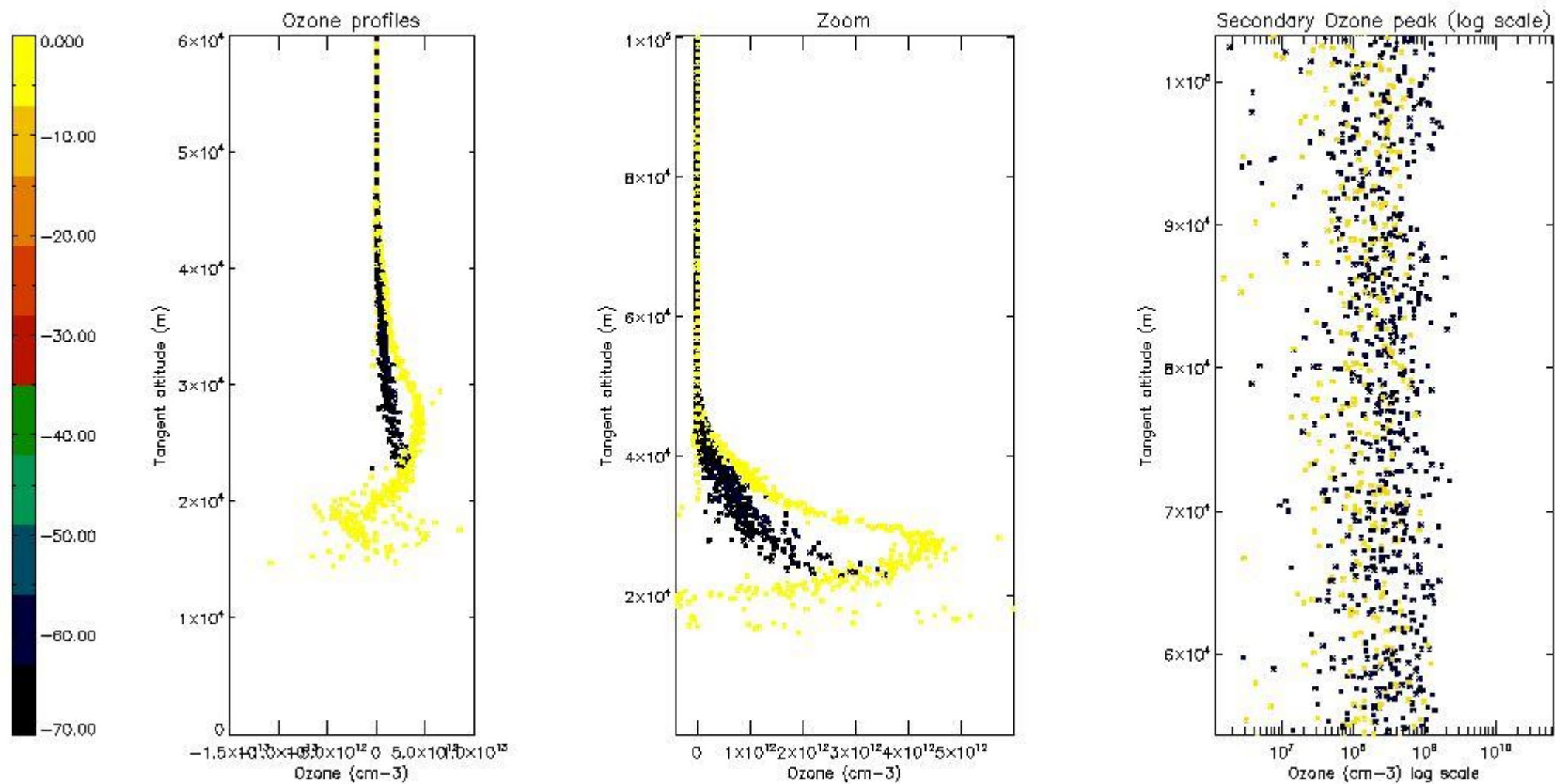
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	24
STD < 20	4

STD < 10	2
STD < 5	0

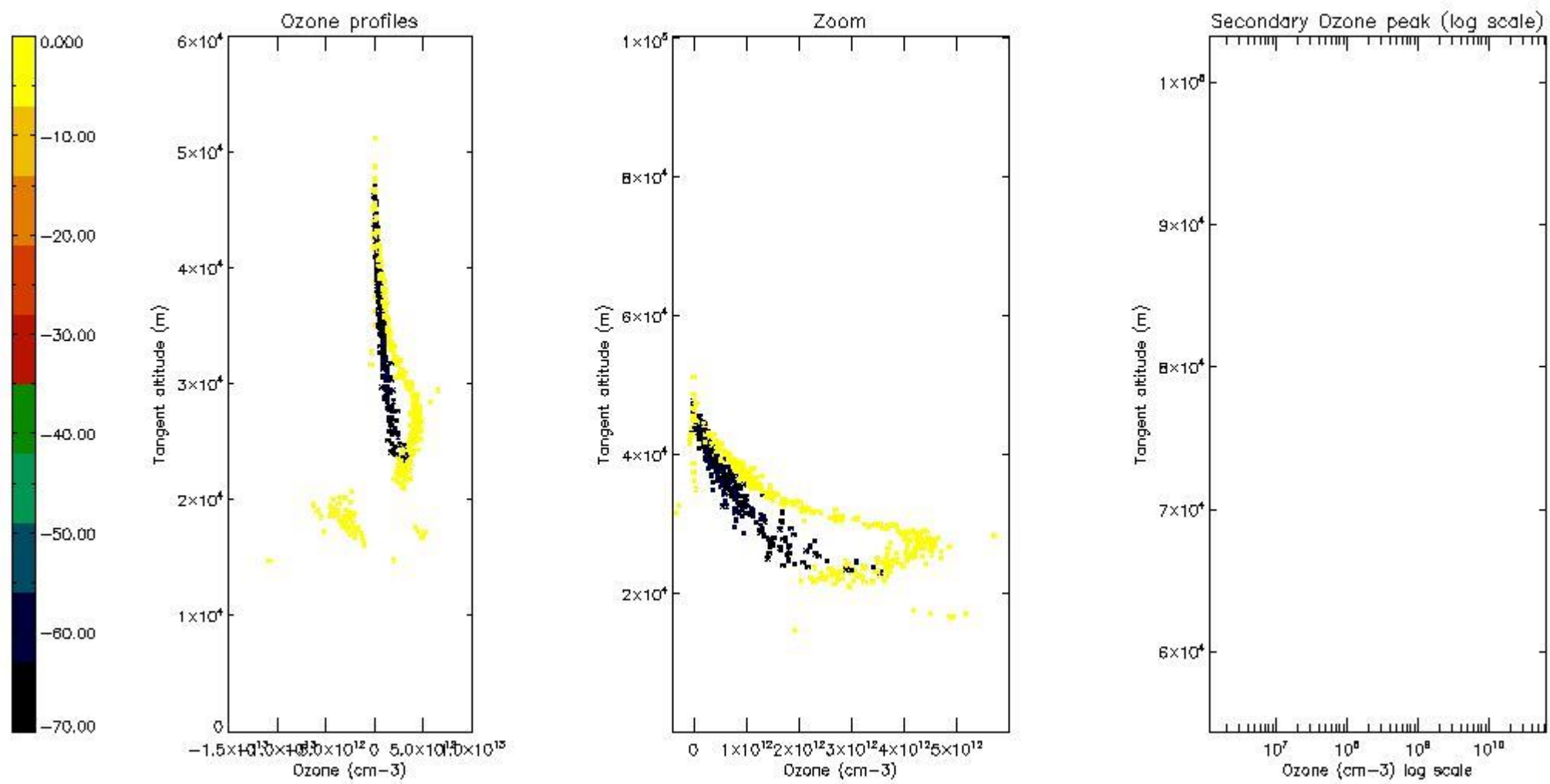
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



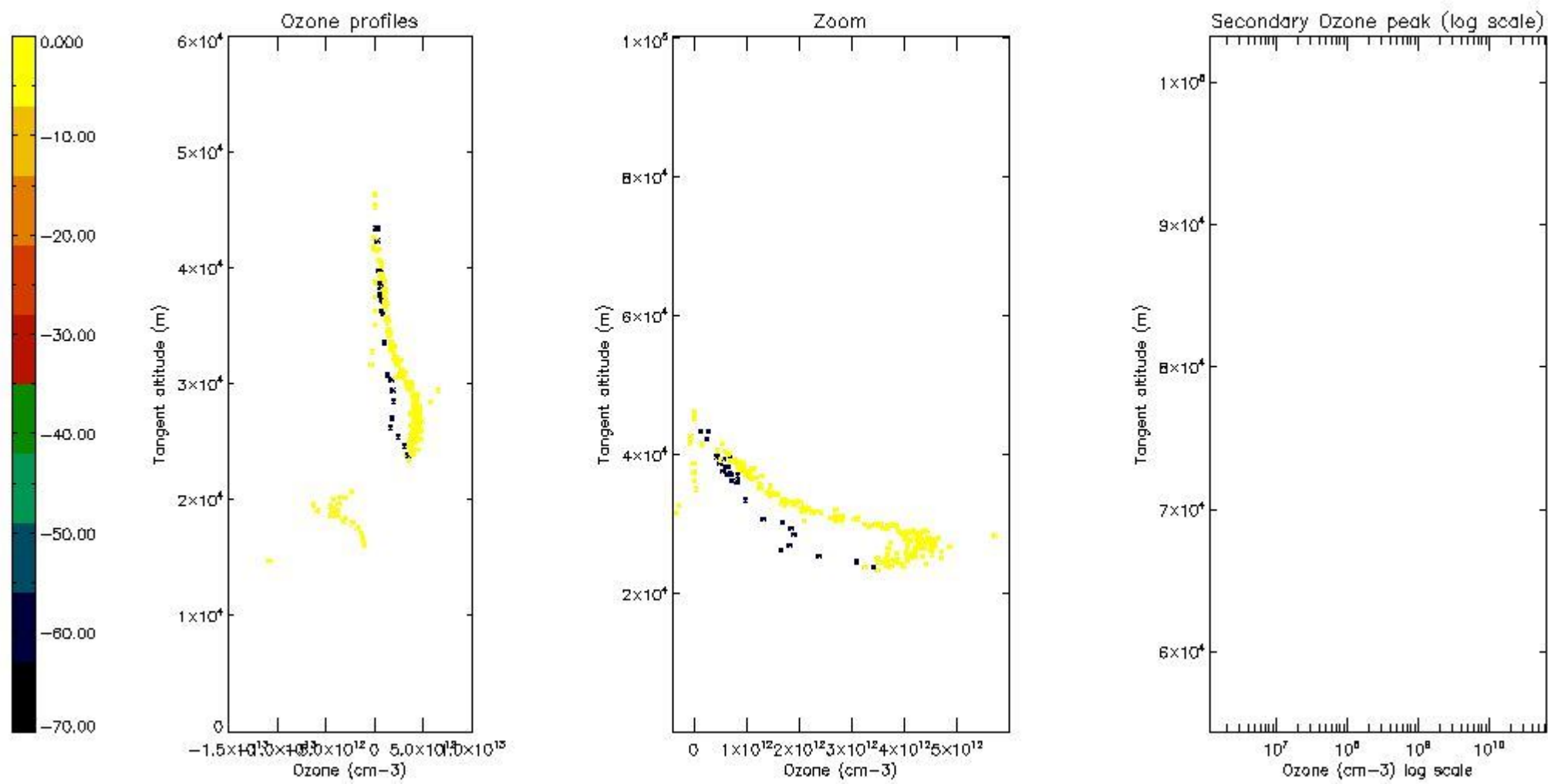
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



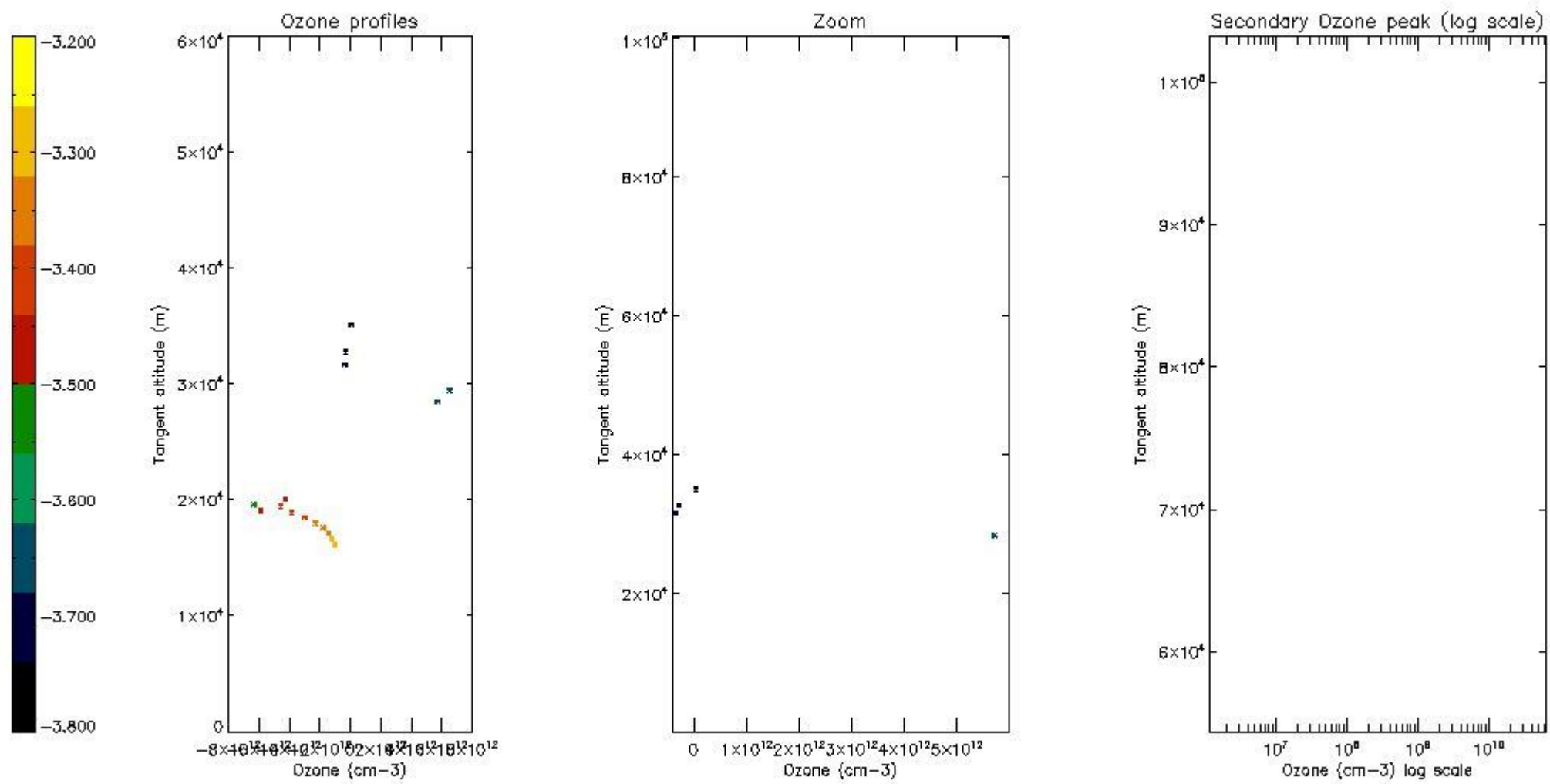
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



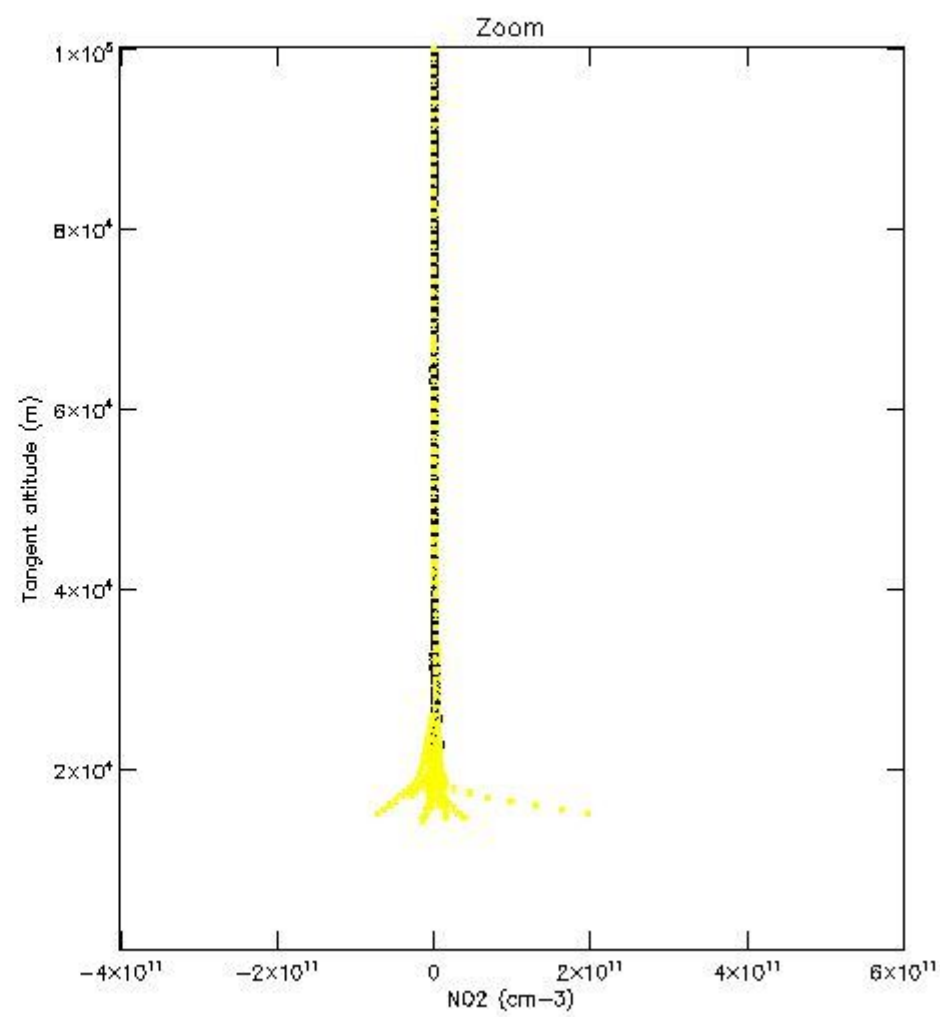
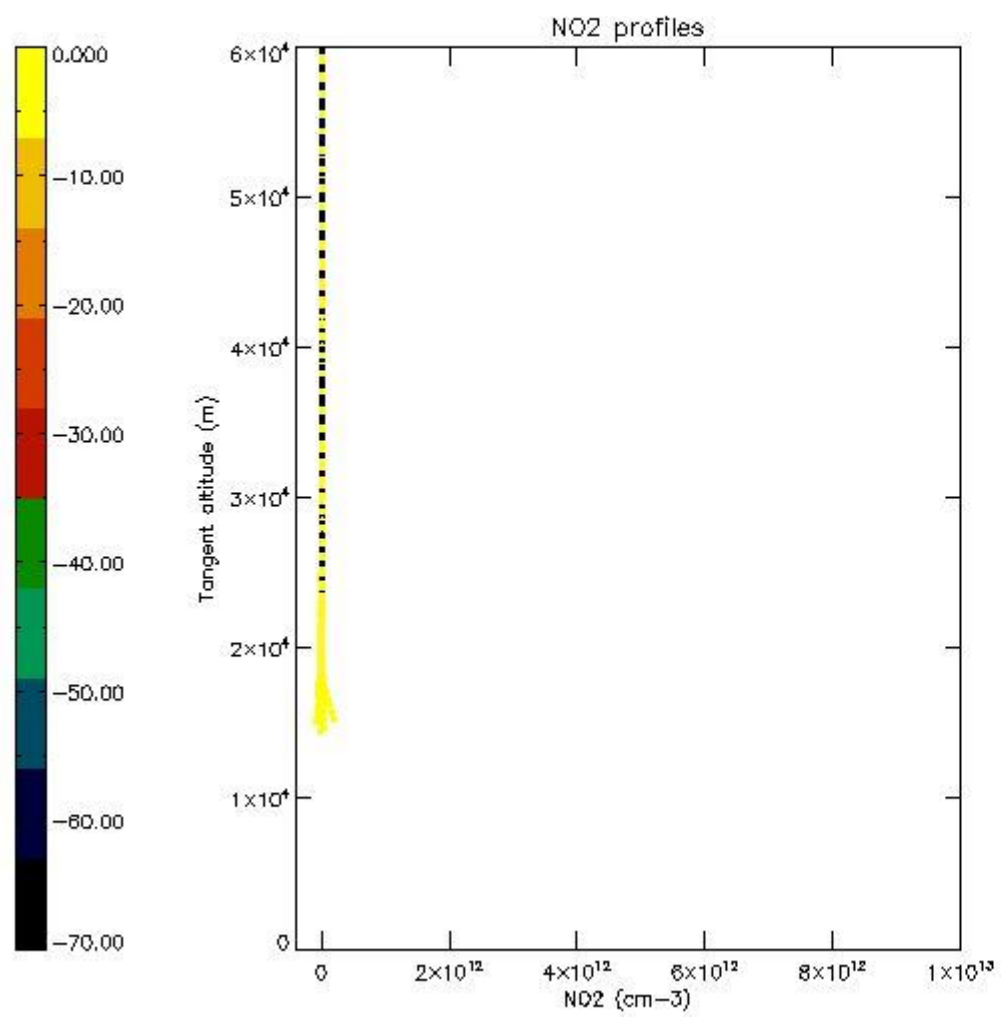
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



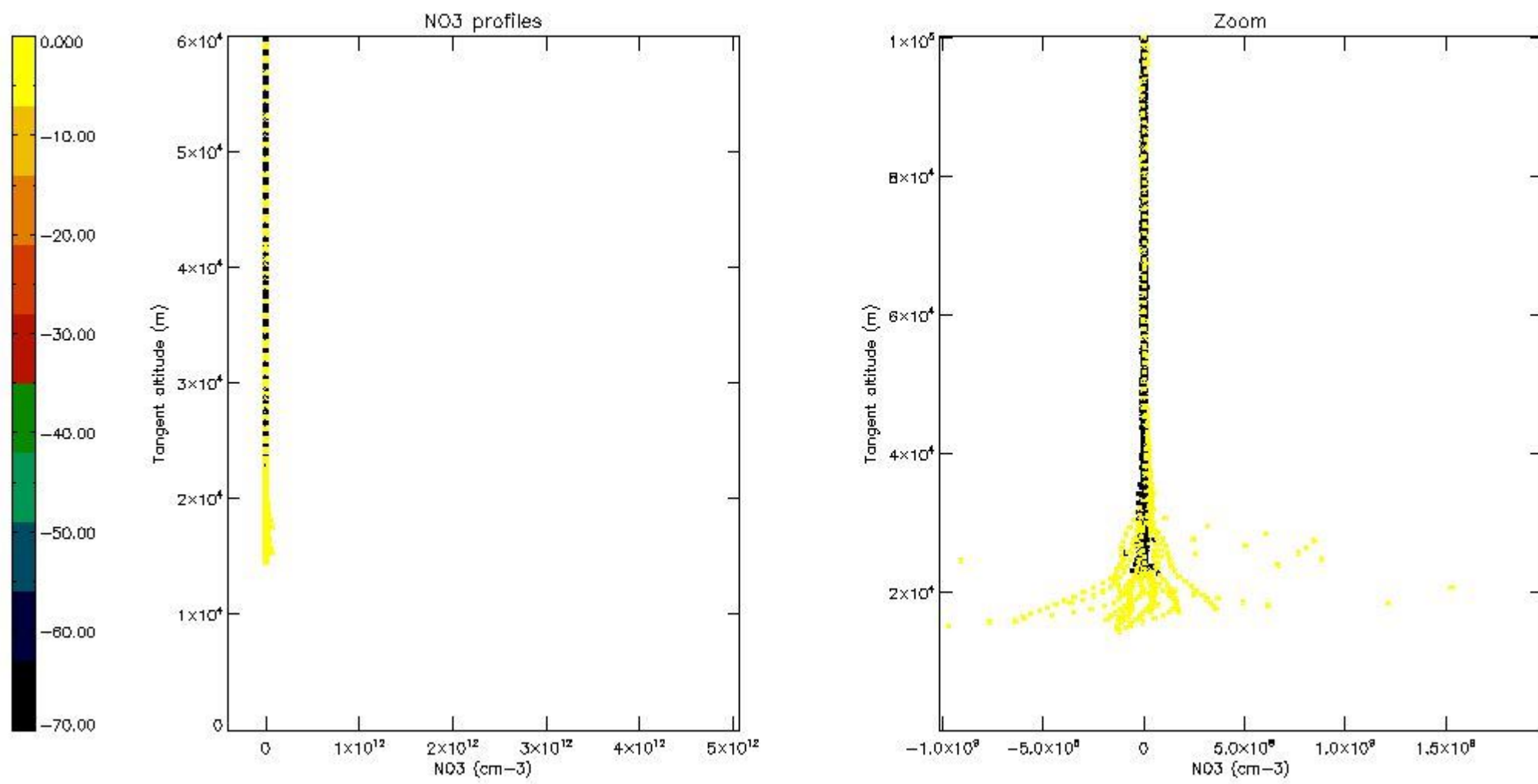
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



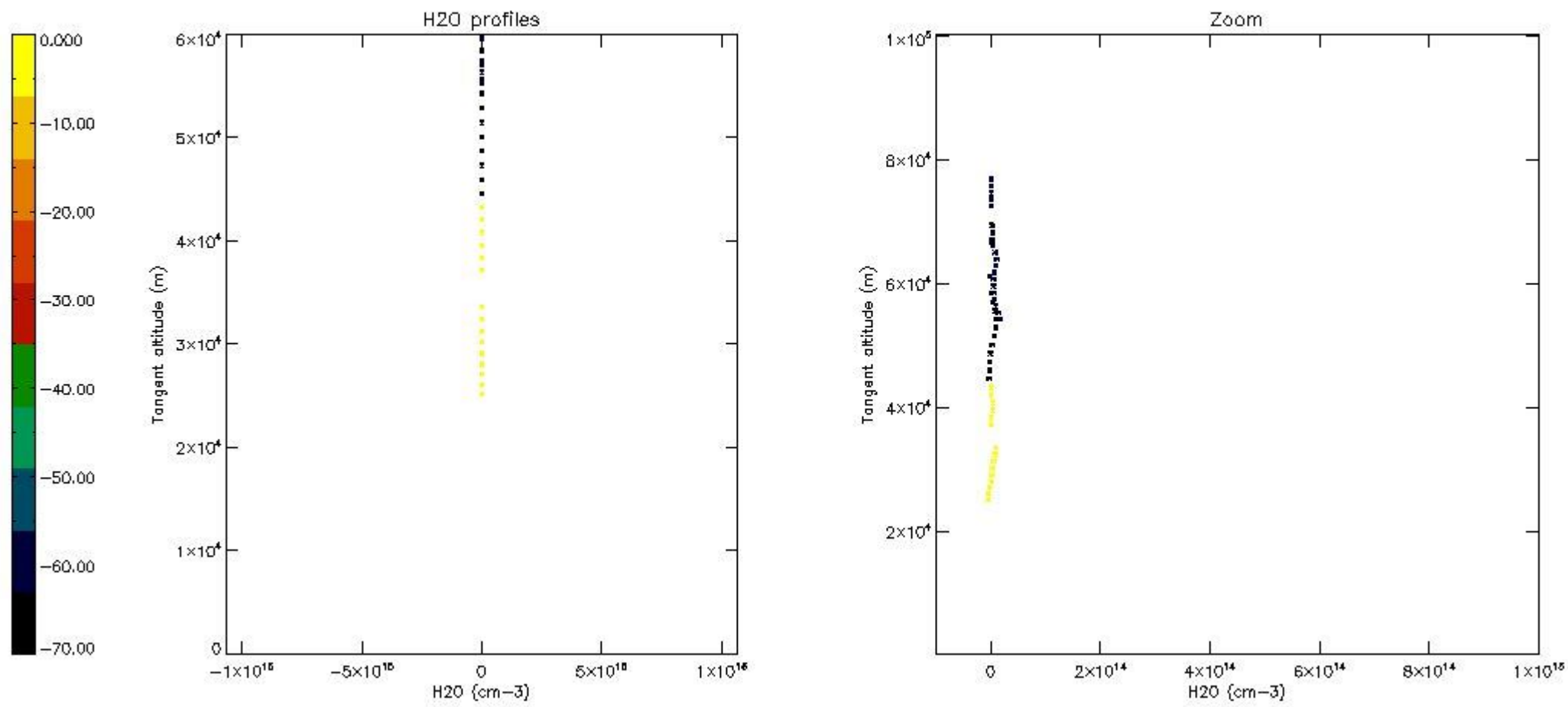
5.7 Plot NO3 profiles for all STD (dark without errors)

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-JUL-2009 00:03:22
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-JUL-2009 00:03:22
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-JUL-2009 00:03:22

GOMOS Level 2 Daily Report

SUMMARY

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[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 10:39:26
Data source version	GOMOS/6.01
Start time of products	07-07-2009 (07JUL2009 00:00:00)
Stop time of products	08-07-2009 (08JUL2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	182
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

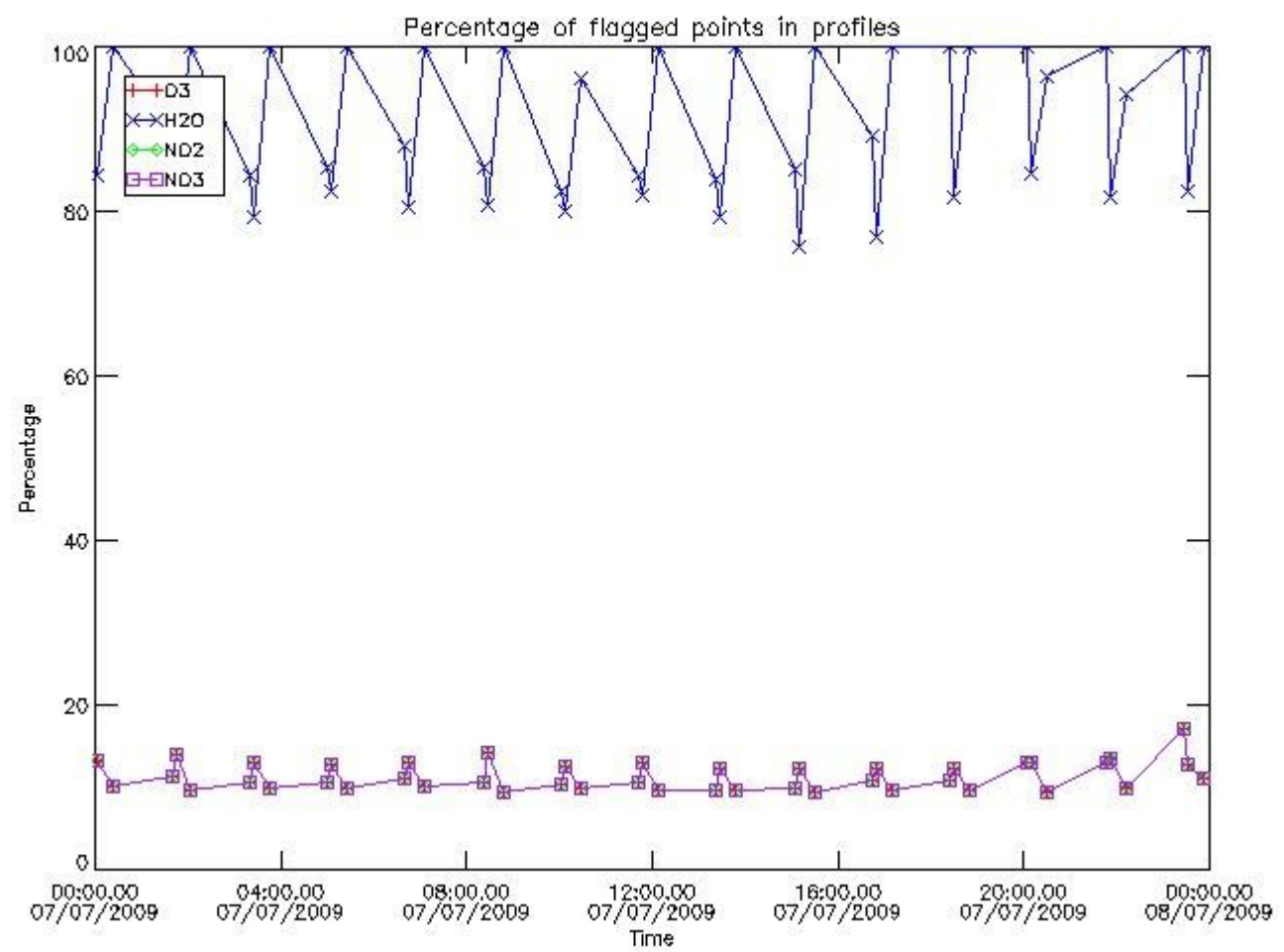
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090707_000322_000000382080_00302_38432_8535.N1	07-JUL-2009 00:03:22	Dark	38.000	94	92Alp Cet	2.5260	3100.0	76	38432	No
2	GOM_NL__2PRFIN20090707_002329_000000512080_00303_38433_8542.N1	07-JUL-2009 00:23:29	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	38433	No
3	GOM_NL__2PRFIN20090707_002948_000000522080_00303_38433_8543.N1	07-JUL-2009 00:29:48	Straylight	52.000	63	Bet Gru	2.1500	2800.0	104	38433	No
4	GOM_NL__2PRFIN20090707_003137_000000572080_00303_38433_8544.N1	07-JUL-2009 00:31:37	Straylight	57.000	31	Alp Gru	1.7340	15200.	114	38433	No
5	GOM_NL__2PRFIN20090707_003442_000000572080_00303_38433_8545.N1	07-JUL-2009 00:34:42	Straylight	56.500	172	Gam Gru	3.0030	13100.	113	38433	No
6	GOM_NL__2PRFIN20090707_005652_000000432080_00303_38433_8546.N1	07-JUL-2009 00:56:52	Bright	43.000	168	17Zet Aql	2.9860	11000.	86	38433	No
7	GOM_NL__2PRFIN20090707_010400_000000352080_00303_38433_8547.N1	07-JUL-2009 01:04:00	Bright	34.500	5	3Alp Lyr	0.033000	11000.	69	38433	No
8	GOM_NL__2PRFIN20090707_010754_000000432080_00303_38433_8548.N1	07-JUL-2009 01:07:54	Bright	43.000	144	18Del Cyg	2.8600	11000.	86	38433	No
9	GOM_NL__2PRFIN20090707_011506_000000462080_00303_38433_8549.N1	07-JUL-2009 01:15:06	Bright	45.500	89	5Alp Cep	2.4510	8000.0	91	38433	No
10	GOM_NL__2PRFIN20090707_012237_000000512080_00303_38433_8550.N1	07-JUL-2009 01:22:37	Bright	50.500	74	11Bet Cas	2.2680	6600.0	101	38433	No
11	GOM_NL__2PRFIN20090707_012429_000000382080_00303_38433_8551.N1	07-JUL-2009 01:24:29	Bright	37.500	110	37Del Cas	2.6780	8900.0	75	38433	No
12	GOM_NL__2PRFIN20090707_013119_000000402080_00303_38433_8552.N1	07-JUL-2009 01:31:19	Bright	39.500	73	57Gam1And	2.2600	13100.	79	38433	No
13	GOM_NL__2PRFIN20090707_013852_000000452080_00303_38433_8553.N1	07-JUL-2009 01:38:52	Dark	45.000	50	13Alp Ari	2.0070	4250.0	90	38433	No
14	GOM_NL__2PRFIN20090707_014359_000000362080_00303_38433_8554.N1	07-JUL-2009 01:43:59	Dark	36.000	94	92Alp Cet	2.5260	3100.0	72	38433	No
15	GOM_NL__2PRFIN20090707_020406_000000532080_00304_38434_8552.N1	07-JUL-2009 02:04:06	Dark	52.500	84	Alp Phe	2.3970	4500.0	105	38434	No
16	GOM_NL__2PRFIN20090707_021025_000000642080_00304_38434_8553.N1	07-JUL-2009 02:10:25	Straylight	64.000	63	Bet Gru	2.1500	2800.0	128	38434	No
17	GOM_NL__2PRFIN20090707_021214_000000522080_00304_38434_8554.N1	07-JUL-2009 02:12:14	Straylight	52.000	31	Alp Gru	1.7340	15200.	104	38434	No
18	GOM_NL__2PRFIN20090707_021519_000000582080_00304_38434_8555.N1	07-JUL-2009 02:15:19	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	38434	No
19	GOM_NL__2PRFIN20090707_023728_000000482080_00304_38434_8556.N1	07-JUL-2009 02:37:28	Bright	48.000	168	17Zet Aql	2.9860	11000.	96	38434	No
20	GOM_NL__2PRFIN20090707_024829_000000422080_00304_38434_8557.N1	07-JUL-2009 02:48:29	Bright	42.000	144	18Del Cyg	2.8600	11000.	84	38434	No
21	GOM_NL__2PRFIN20090707_025541_000000472080_00304_38434_8558.N1	07-JUL-2009 02:55:41	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	38434	No
22	GOM_NL__2PRFIN20090707_030312_000000462080_00304_38434_8559.N1	07-JUL-2009 03:03:12	Bright	46.000	74	11Bet Cas	2.2680	6600.0	92	38434	No
23	GOM_NL__2PRFIN20090707_030505_000000392080_00304_38434_8560.N1	07-JUL-2009 03:05:05	Bright	38.500	110	37Del Cas	2.6780	8900.0	77	38434	No
24	GOM_NL__2PRFIN20090707_031155_000000432080_00304_38434_8561.N1	07-JUL-2009 03:11:55	Bright	43.000	73	57Gam1And	2.2600	13100.	86	38434	No
25	GOM_NL__2PRFIN20090707_031928_000000492080_00304_38434_8562.N1	07-JUL-2009 03:19:28	Dark	48.500	50	13Alp Ari	2.0070	4250.0	97	38434	No
26	GOM_NL__2PRFIN20090707_032435_000000392080_00304_38434_8563.N1	07-JUL-2009 03:24:35	Dark	39.000	94	92Alp Cet	2.5260	3100.0	78	38434	No
27	GOM_NL__2PRFIN20090707_034443_000000512080_00305_38435_8586.N1	07-JUL-2009 03:44:43	Dark	51.000	84	Alp Phe	2.3970	4500.0	102	38435	No
28	GOM_NL__2PRFIN20090707_035102_000000542080_00305_38435_8587.N1	07-JUL-2009 03:51:02	Straylight	53.500	63	Bet Gru	2.1500	2800.0	107	38435	No
29	GOM_NL__2PRFIN20090707_035251_000000552080_00305_38435_8588.N1	07-JUL-2009 03:52:51	Straylight	54.500	31	Alp Gru	1.7340	15200.	109	38435	No
30	GOM_NL__2PRFIN20090707_035556_000000542080_00305_38435_8589.N1	07-JUL-2009 03:55:56	Straylight	54.000	172	Gam Gru	3.0030	13100.	108	38435	No
31	GOM_NL__2PRFIN20090707_041804_000000422080_00305_38435_8590.N1	07-JUL-2009 04:18:04	Bright	41.500	168	17Zet Aql	2.9860	11000.	83	38435	No
32	GOM_NL__2PRFIN20090707_042905_000000462080_00305_38435_8591.N1	07-JUL-2009 04:29:05	Bright	45.500	144	18Del Cyg	2.8600	11000.	91	38435	No
33	GOM_NL__2PRFIN20090707_043617_000000422080_00305_38435_8592.N1	07-JUL-2009 04:36:17	Bright	42.000	89	5Alp Cep	2.4510	8000.0	84	38435	No
34	GOM_NL__2PRFIN20090707_044347_000000462080_00305_38435_8593.N1	07-JUL-2009 04:43:47	Bright	46.000	74	11Bet Cas	2.2680	6600.0	92	38435	No
35	GOM_NL__2PRFIN20090707_044540_000000402080_00305_38435_8594.N1	07-JUL-2009 04:45:40	Bright	39.500	110	37Del Cas	2.6780	8900.0	79	38435	No
36	GOM_NL__2PRFIN20090707_045230_000000422080_00305_38435_8595.N1	07-JUL-2009 04:52:30	Bright	42.000	73	57Gam1And	2.2600	13100.	84	38435	No
37	GOM_NL__2PRFIN20090707_050005_000000482080_00305_38435_8596.N1	07-JUL-2009 05:00:05	Dark	48.000	50	13Alp Ari	2.0070	4250.0	96	38435	No
38	GOM_NL__2PRFIN20090707_050512_000000402080_00305_38435_8597.N1	07-JUL-2009 05:05:12	Dark	40.000	94	92Alp Cet	2.5260	3100.0	80	38435	No
39	GOM_NL__2PRFIN20090707_052520_000000522080_00306_38436_8614.N1	07-JUL-2009 05:25:20	Dark	51.500	84	Alp Phe	2.3970	4500.0	103	38436	No
40	GOM_NL__2PRFIN20090707_053139_000000562080_00306_38436_8615.N1	07-JUL-2009 05:31:39	Straylight	55.500	63	Bet Gru	2.1500	2800.0	111	38436	No
41	GOM_NL__2PRFIN20090707_053328_000000502080_00306_38436_8616.N1	07-JUL-2009 05:33:28	Straylight	50.000	31	Alp Gru	1.7340	15200.	100	38436	No
42	GOM_NL__2PRFIN20090707_053633_000000552080_00306_38436_8617.N1	07-JUL-2009 05:36:33	Straylight	54.500	172	Gam Gru	3.0030	13100.	109	38436	No

161	GOM_NL__2PRFIN20090707_212210_000000432080_00315_38445_8787.N1	07-JUL-2009 21:22:10	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	38445	No
162	GOM_NL__2PRFIN20090707_212941_000000642080_00315_38445_8788.N1	07-JUL-2009 21:29:41	Bright	64.000	74	11Bet Cas	2.2680	6600.0	128	38445	No
163	GOM_NL__2PRFIN20090707_213136_000000392080_00315_38445_8789.N1	07-JUL-2009 21:31:36	Bright	38.500	110	37Del Cas	2.6780	8900.0	77	38445	No
164	GOM_NL__2PRFIN20090707_213829_000000462080_00315_38445_8790.N1	07-JUL-2009 21:38:29	Bright	46.000	73	57Gam1And	2.2600	13100.	92	38445	No
165	GOM_NL__2PRFIN20090707_214122_000000452080_00315_38445_8791.N1	07-JUL-2009 21:41:22	Tw_i_and_stray	45.000	173	4Bet Tri	3.0040	8900.0	90	38445	No
166	GOM_NL__2PRFIN20090707_214608_000000392080_00315_38445_8792.N1	07-JUL-2009 21:46:08	Dark	39.000	50	13Alp Ari	2.0070	4250.0	78	38445	No
167	GOM_NL__2PRFIN20090707_215116_000000412080_00315_38445_8793.N1	07-JUL-2009 21:51:16	Dark	41.000	94	92Alp Cet	2.5260	3100.0	82	38445	No
168	GOM_NL__2PRFIN20090707_221130_000000522080_00316_38446_8796.N1	07-JUL-2009 22:11:30	Dark	51.500	84	Alp Phe	2.3970	4500.0	103	38446	No
169	GOM_NL__2PRFIN20090707_221747_000000542080_00316_38446_8797.N1	07-JUL-2009 22:17:47	Straylight	54.000	63	Bet Gru	2.1500	2800.0	108	38446	No
170	GOM_NL__2PRFIN20090707_221935_000000482080_00316_38446_8798.N1	07-JUL-2009 22:19:35	Straylight	47.500	31	Alp Gru	1.7340	15200.	95	38446	No
171	GOM_NL__2PRFIN20090707_222242_000000552080_00316_38446_8799.N1	07-JUL-2009 22:22:42	Straylight	55.000	172	Gam Gru	3.0030	13100.	110	38446	No
172	GOM_NL__2PRFIN20090707_224435_000000452080_00316_38446_8800.N1	07-JUL-2009 22:44:35	Bright	44.500	168	17Zet Aql	2.9860	11000.	89	38446	No
173	GOM_NL__2PRFIN20090707_225532_000000452080_00316_38446_8801.N1	07-JUL-2009 22:55:32	Bright	45.000	144	18Del Cyg	2.8600	11000.	90	38446	No
174	GOM_NL__2PRFIN20090707_230245_000000442080_00316_38446_8802.N1	07-JUL-2009 23:02:45	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	38446	No
175	GOM_NL__2PRFIN20090707_231016_000000552080_00316_38446_8803.N1	07-JUL-2009 23:10:16	Bright	54.500	74	11Bet Cas	2.2680	6600.0	109	38446	No
176	GOM_NL__2PRFIN20090707_231211_000000402080_00316_38446_8804.N1	07-JUL-2009 23:12:11	Bright	40.000	110	37Del Cas	2.6780	8900.0	80	38446	No
177	GOM_NL__2PRFIN20090707_231904_000000442080_00316_38446_8805.N1	07-JUL-2009 23:19:04	Bright	43.500	73	57Gam1And	2.2600	13100.	87	38446	No
178	GOM_NL__2PRFIN20090707_232158_000000442080_00316_38446_8806.N1	07-JUL-2009 23:21:58	Tw_i_and_stray	43.500	173	4Bet Tri	3.0040	8900.0	87	38446	No
179	GOM_NL__2PRFIN20090707_232644_000000302080_00316_38446_8807.N1	07-JUL-2009 23:26:44	Dark	30.000	50	13Alp Ari	2.0070	4250.0	60	38446	No
180	GOM_NL__2PRFIN20090707_233153_000000402080_00316_38446_8808.N1	07-JUL-2009 23:31:53	Dark	39.500	94	92Alp Cet	2.5260	3100.0	79	38446	No
181	GOM_NL__2PRFIN20090707_235207_000000512080_00317_38447_8813.N1	07-JUL-2009 23:52:07	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	38447	No
182	GOM_NL__2PRFIN20090707_235824_000000632080_00317_38447_8814.N1	07-JUL-2009 23:58:24	Straylight	62.500	63	Bet Gru	2.1500	2800.0	125	38447	No

3. Quality information per product

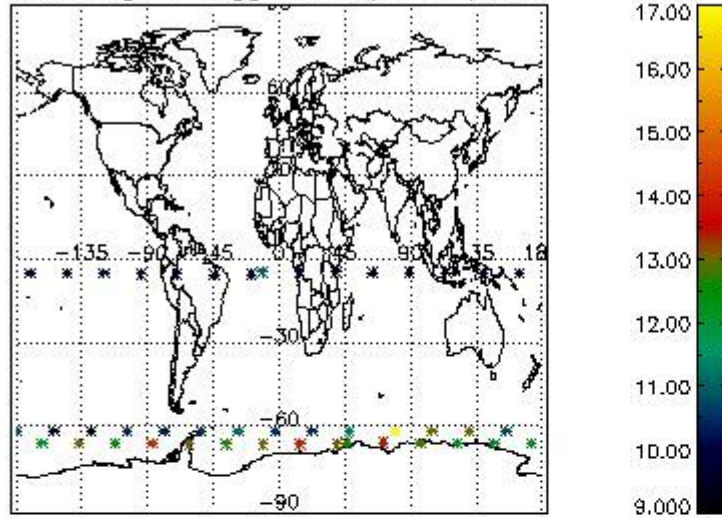
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

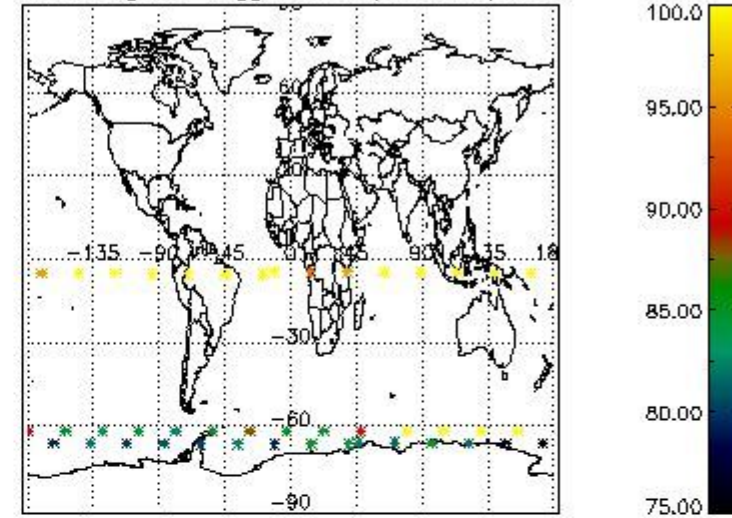


3.2 Plot quality information per product (world map)

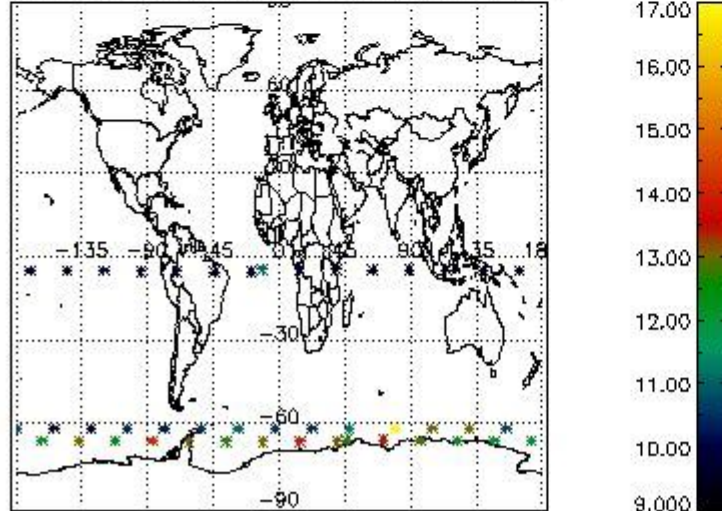
Percentage of flagged data per O3 profile



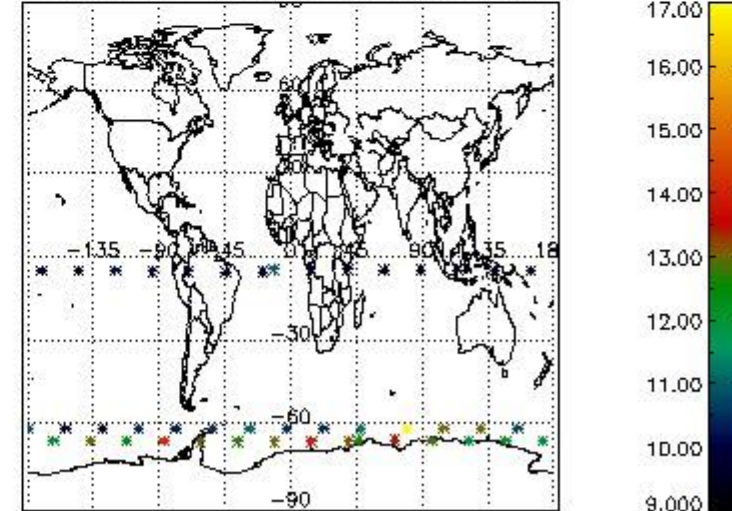
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

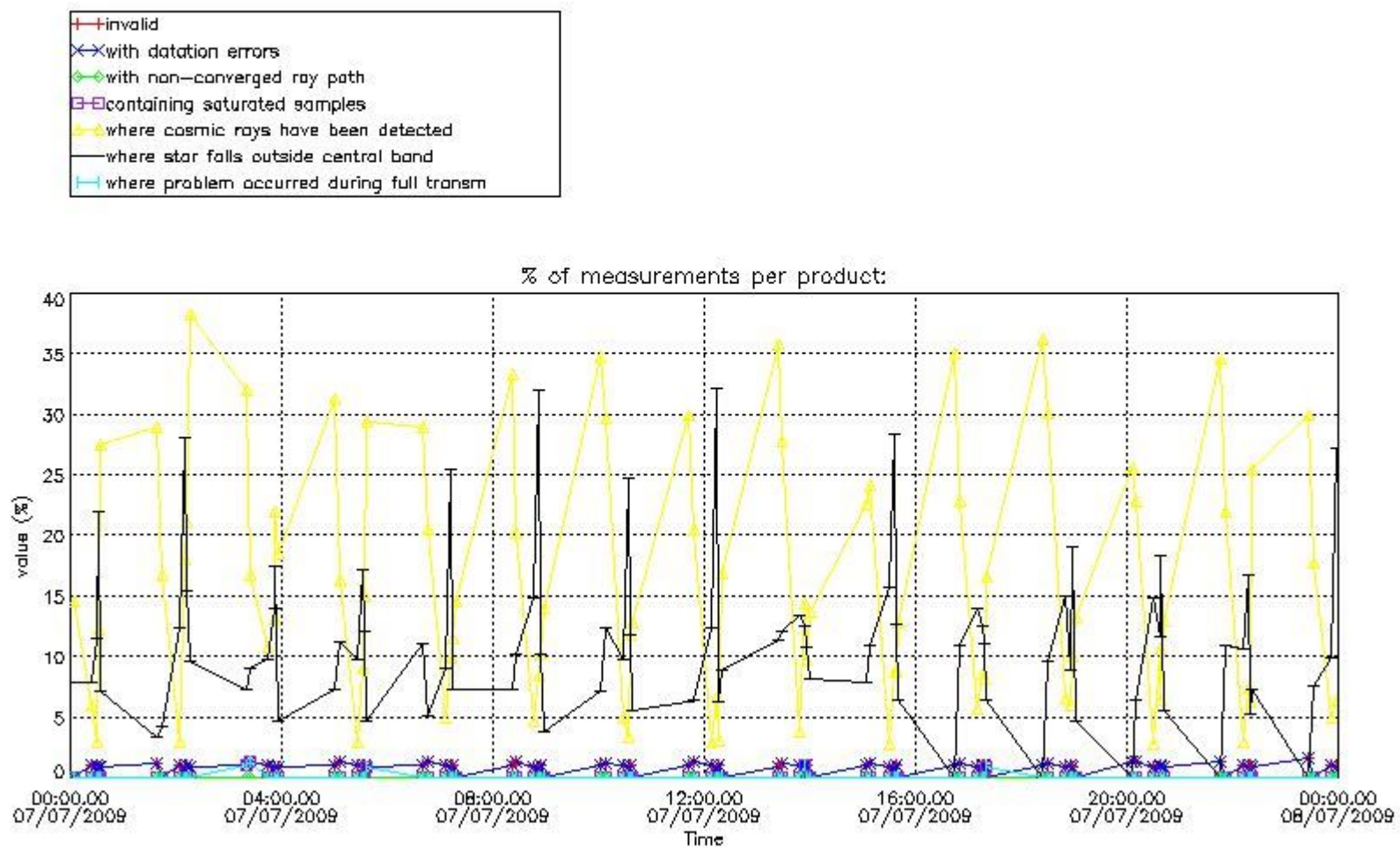


4. Level 1 quality information per product

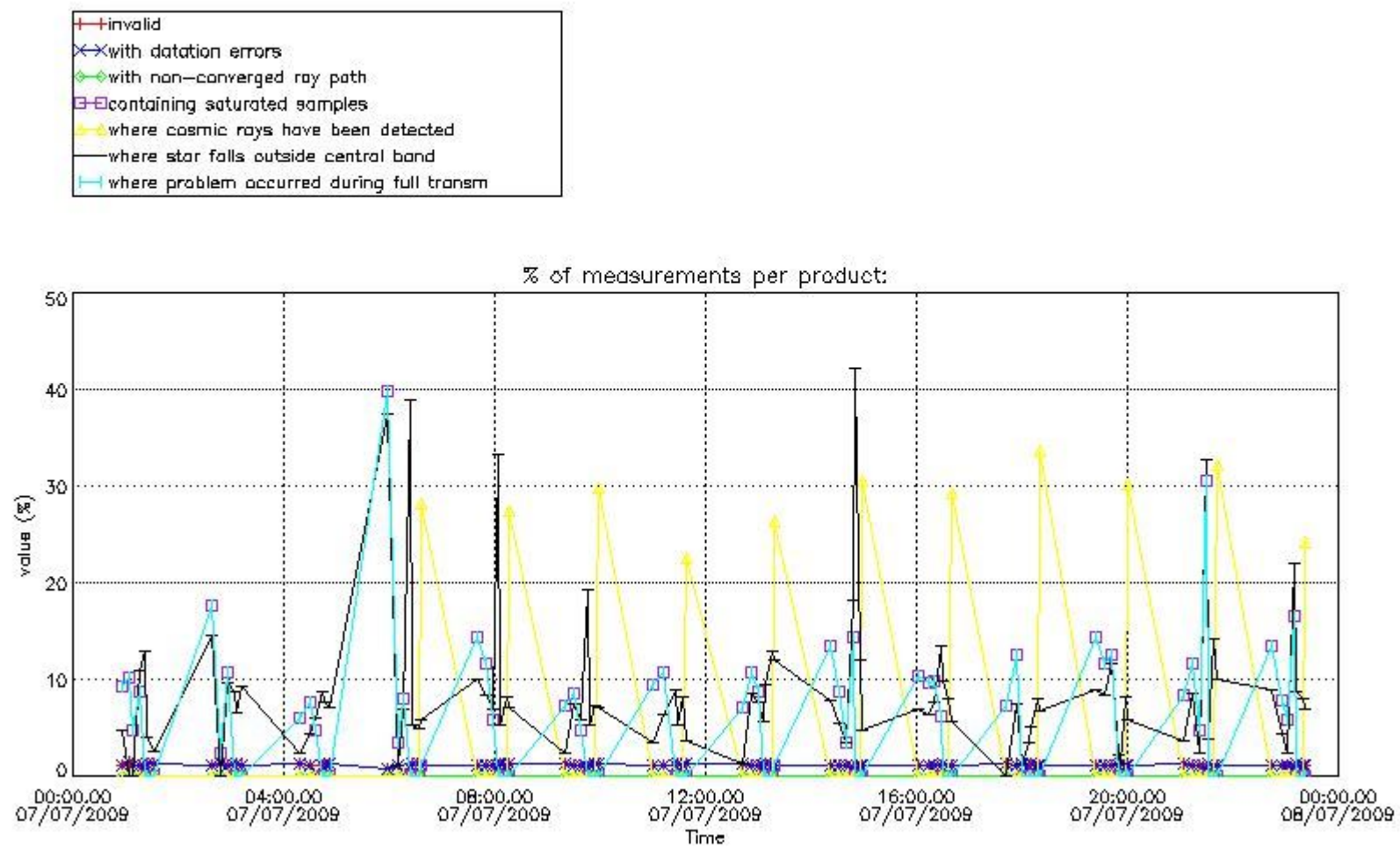
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



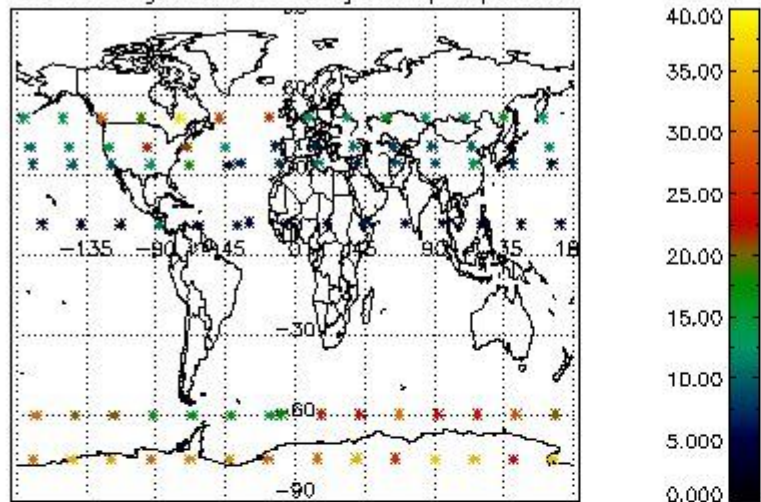
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



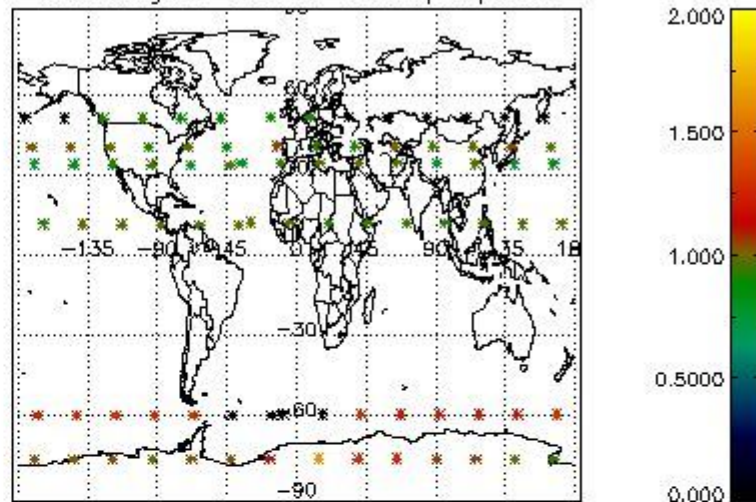
4.2 Plot quality information per product coming from level 1b processing (world map)

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

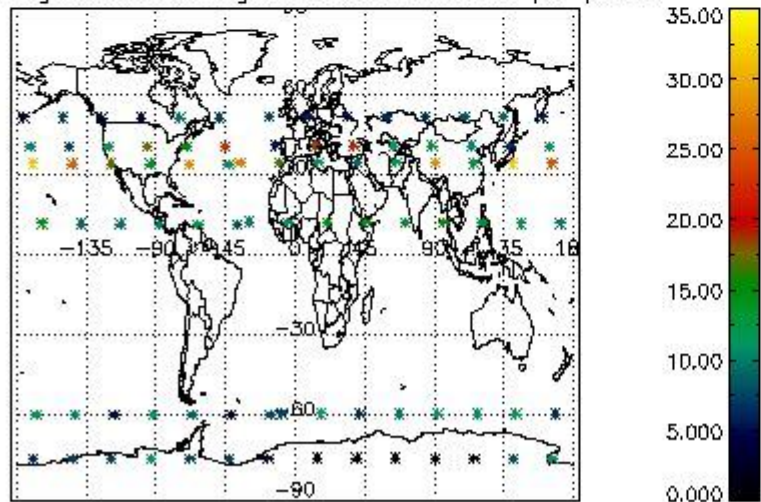
Percentage of cosmic ray hits per profile



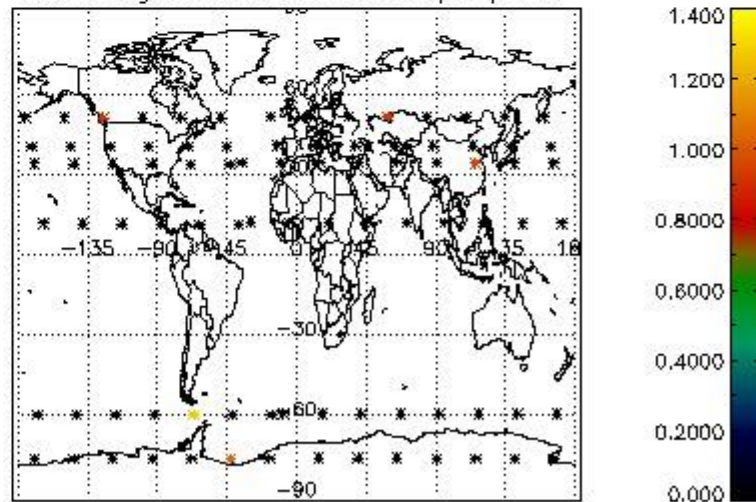
Percentage of datation errors per profile



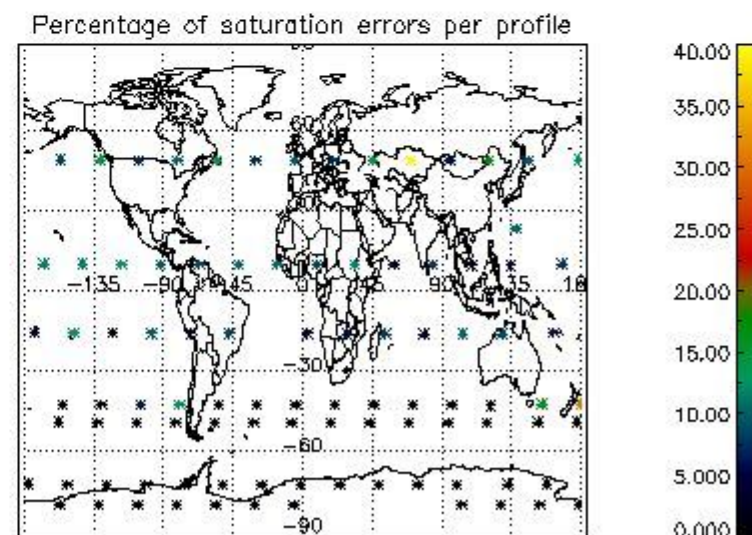
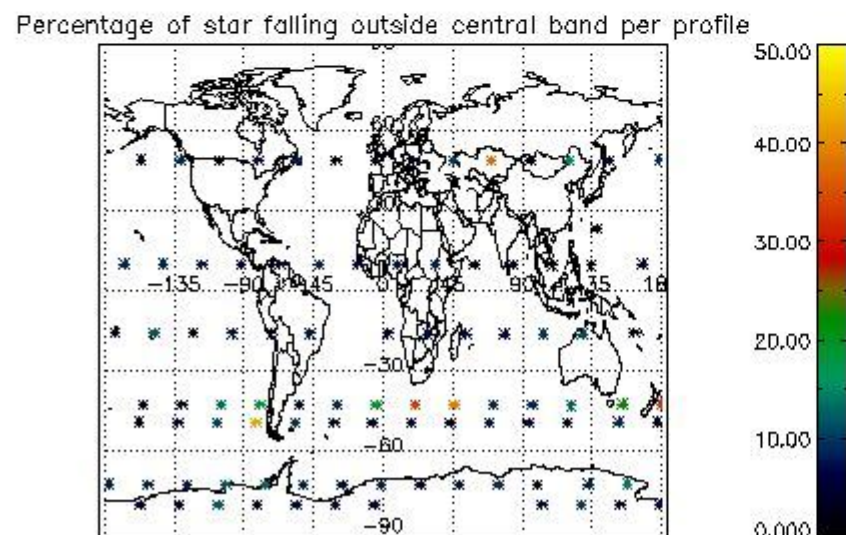
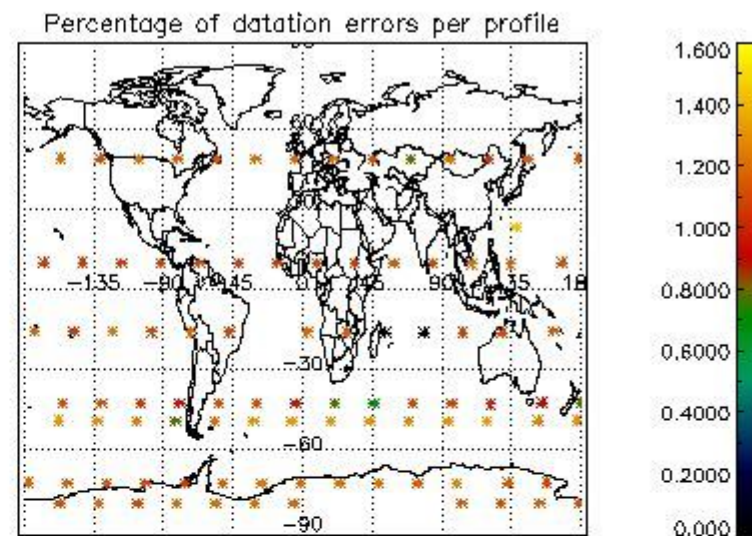
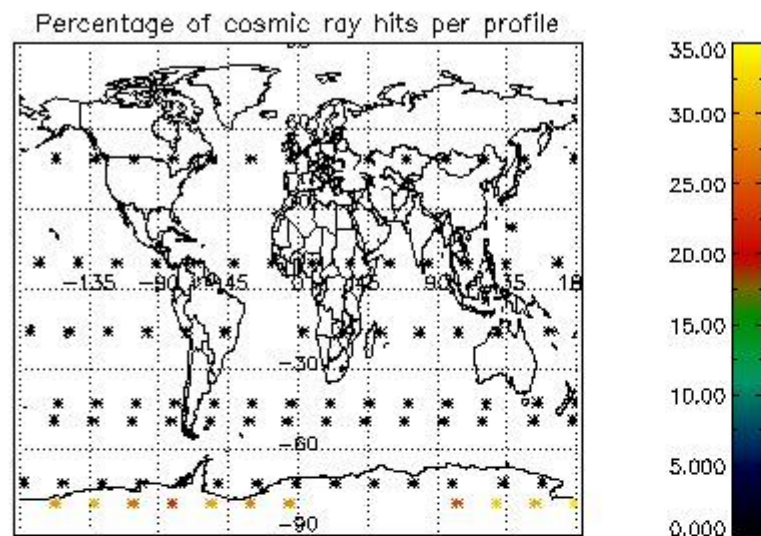
Percentage of star falling outside central band per profile



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

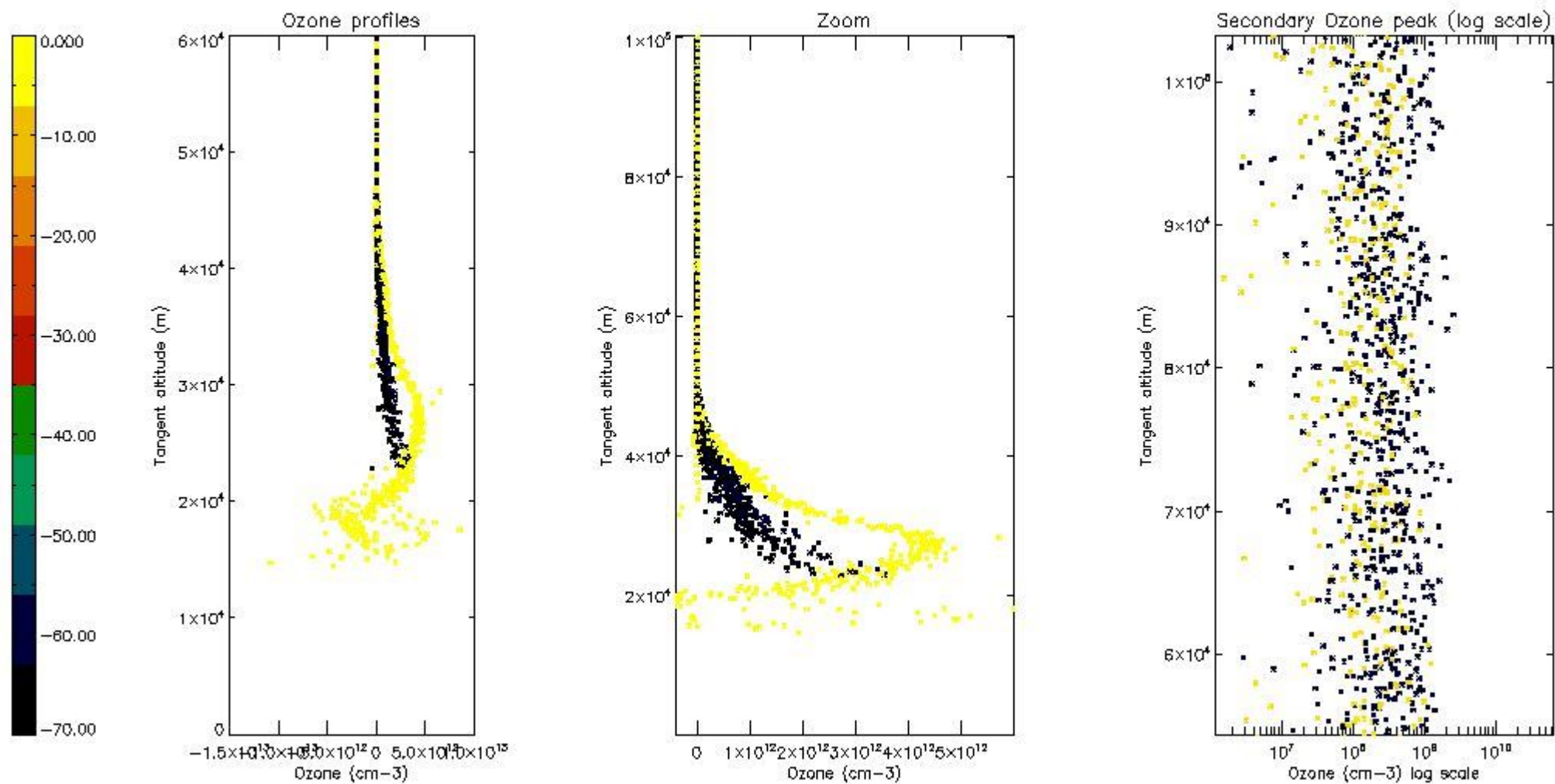
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	24
STD < 20	4

STD < 10	2
STD < 5	0

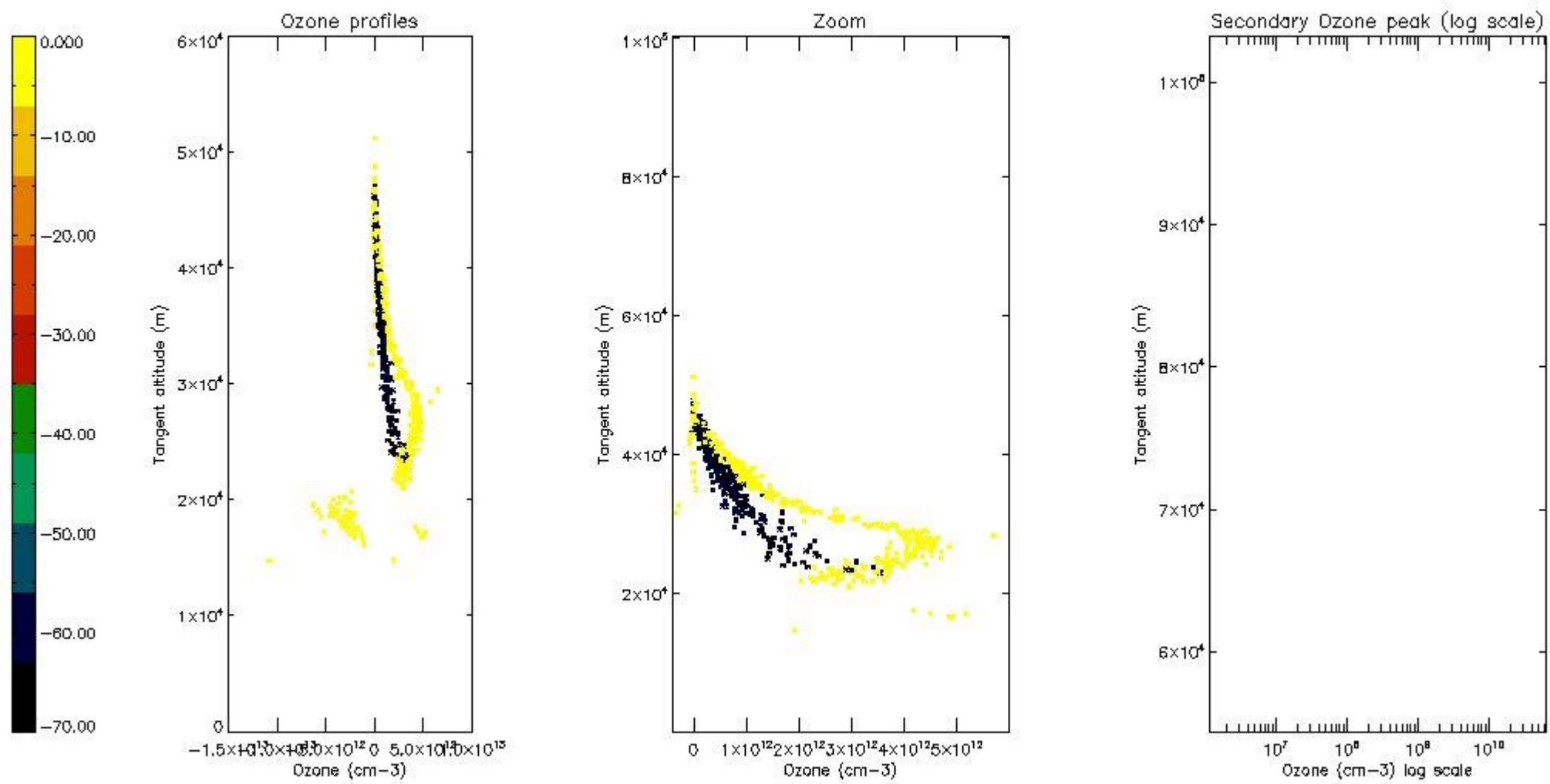
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



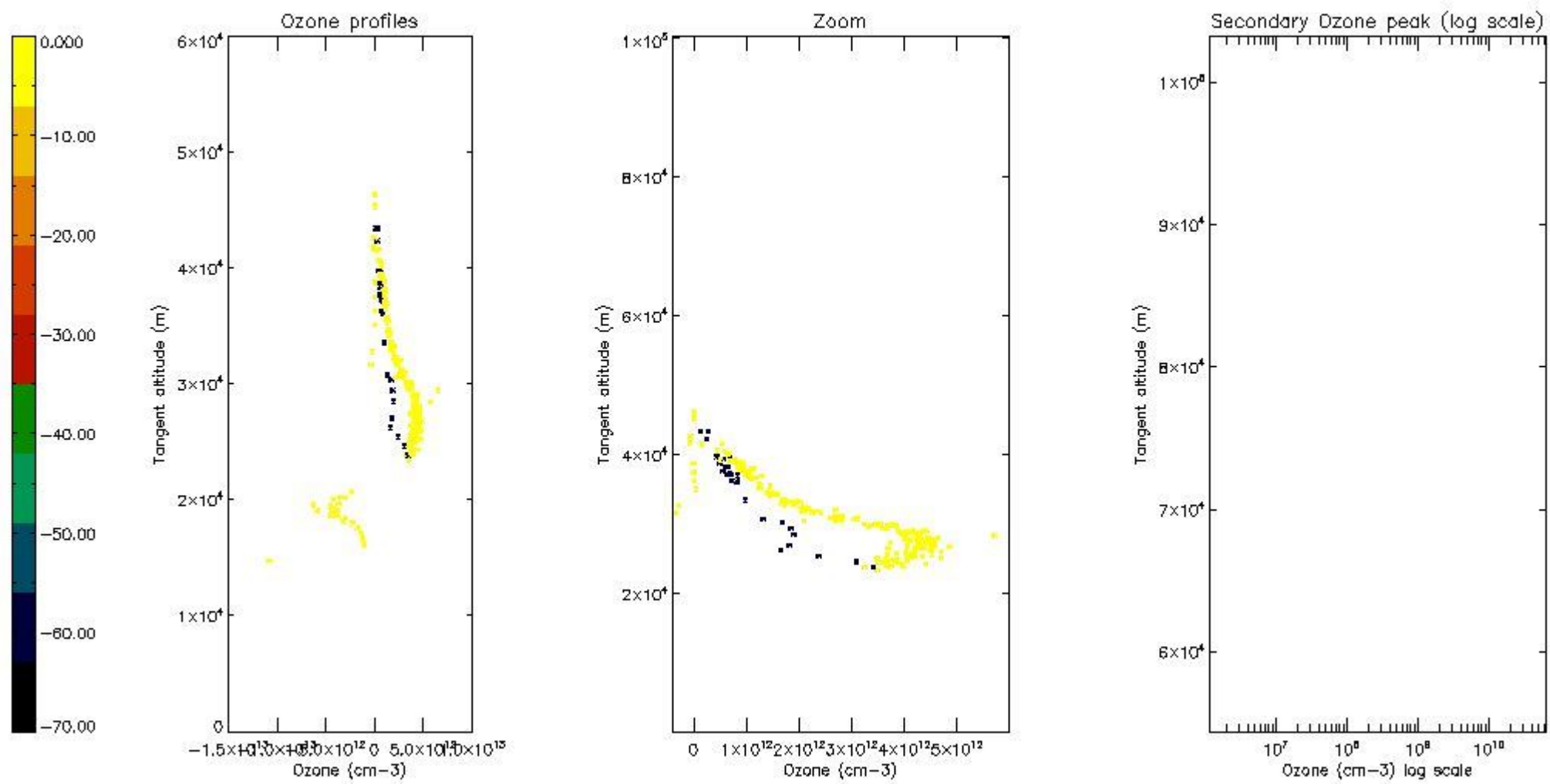
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



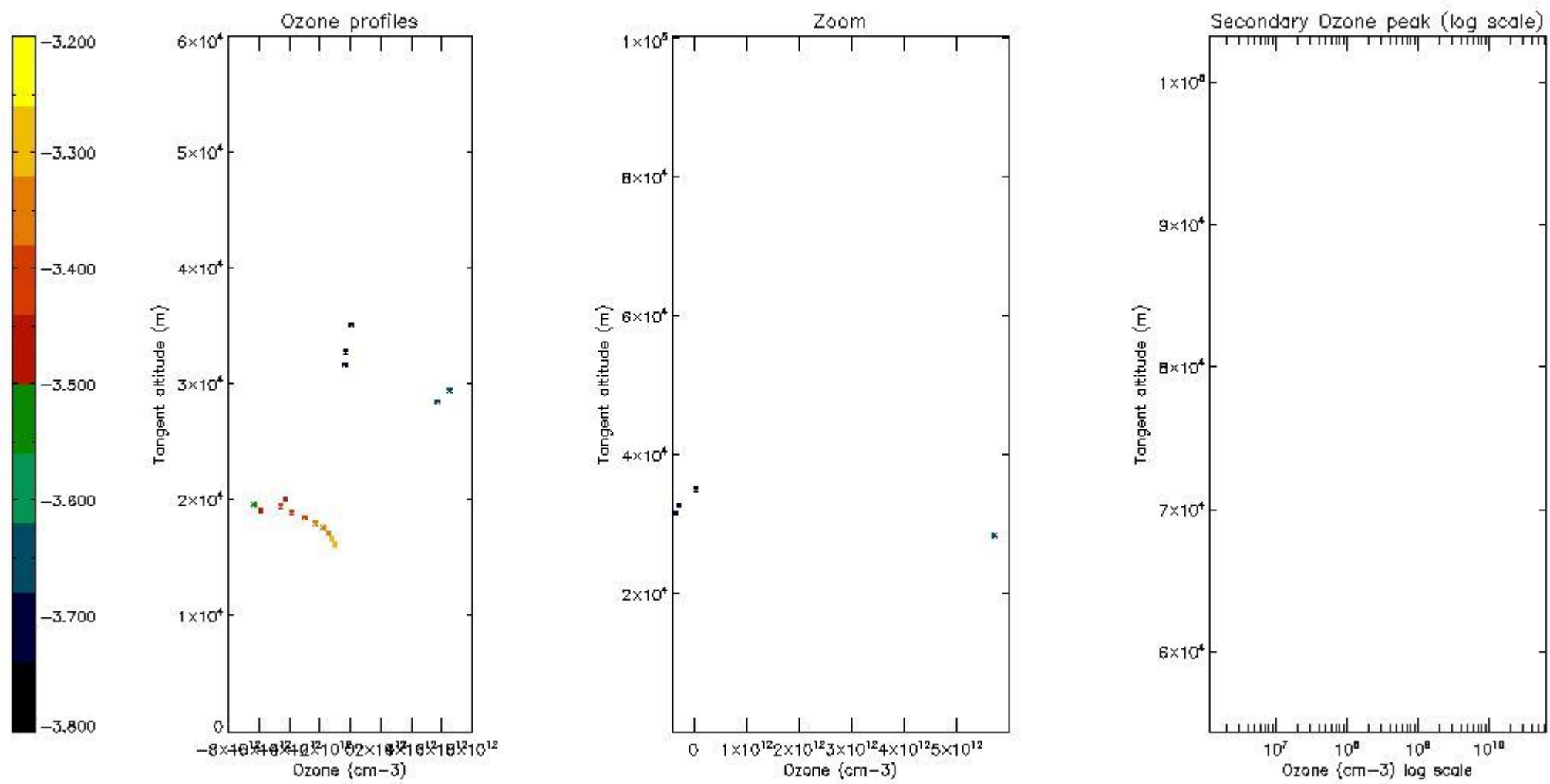
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



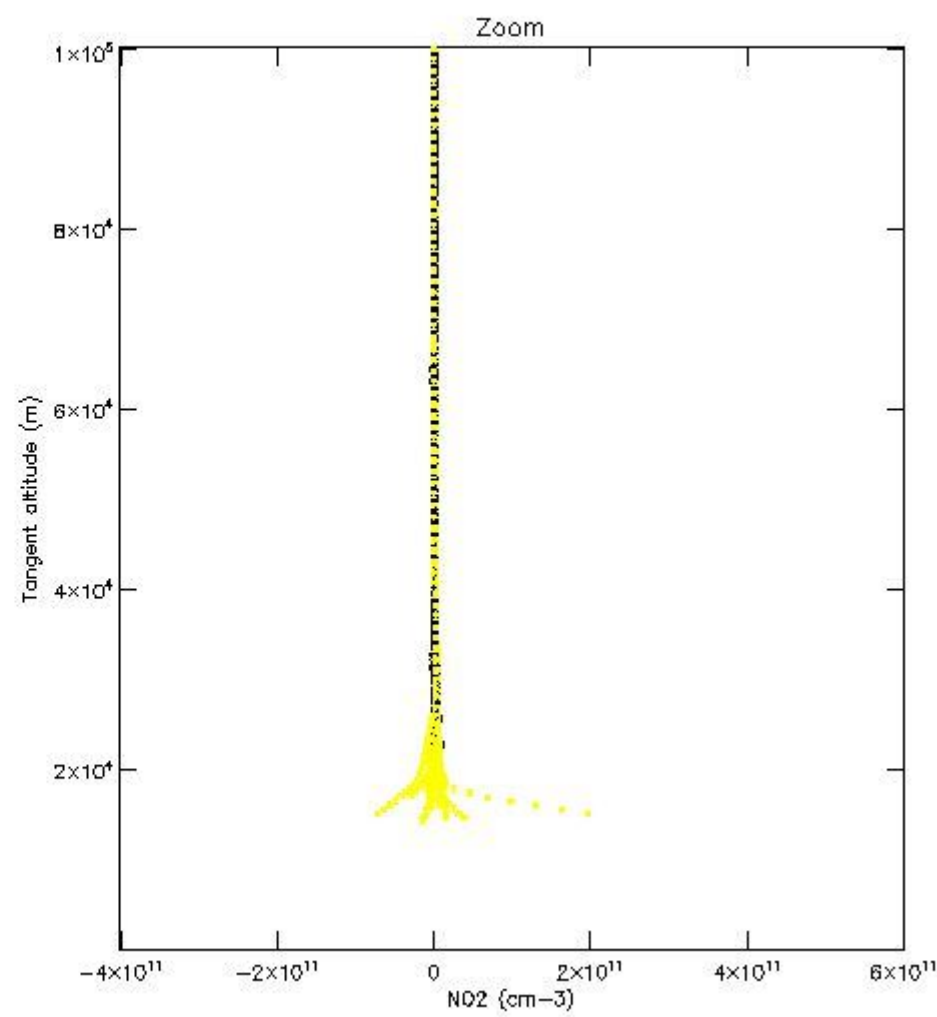
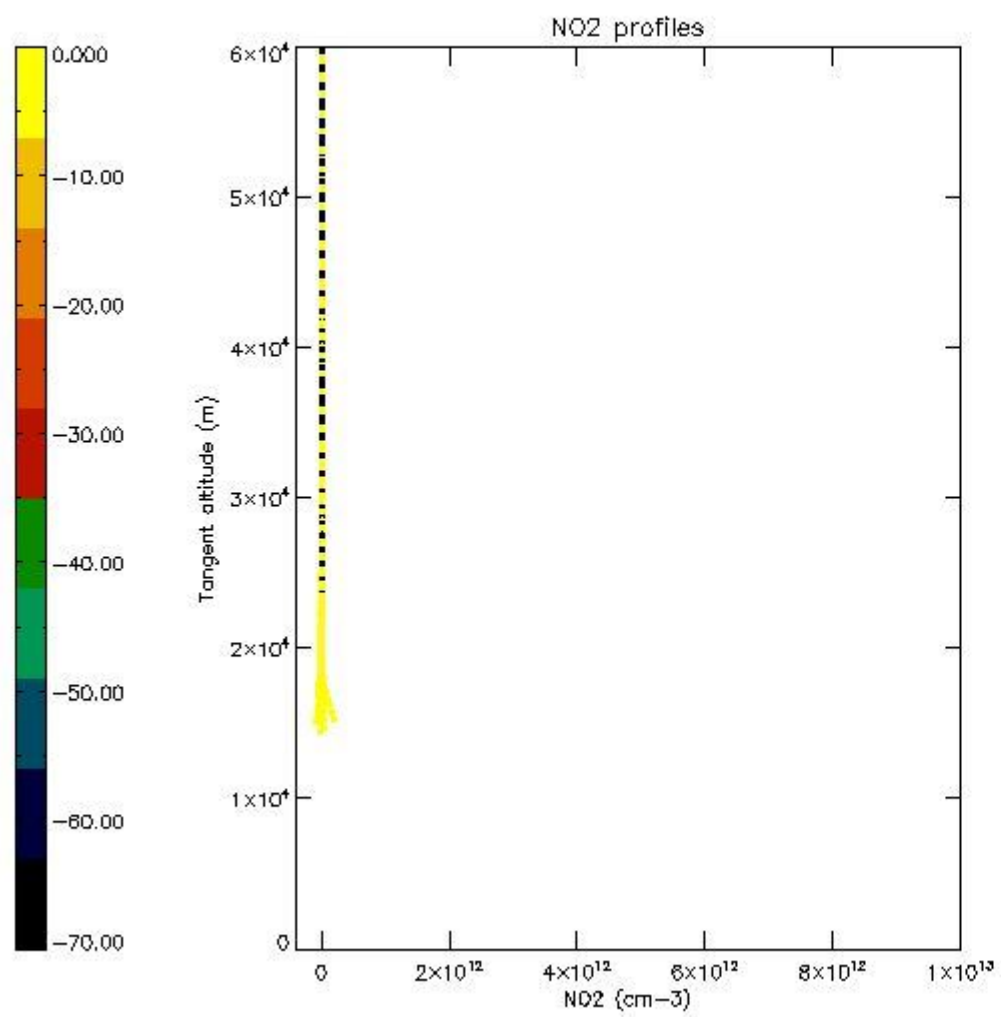
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



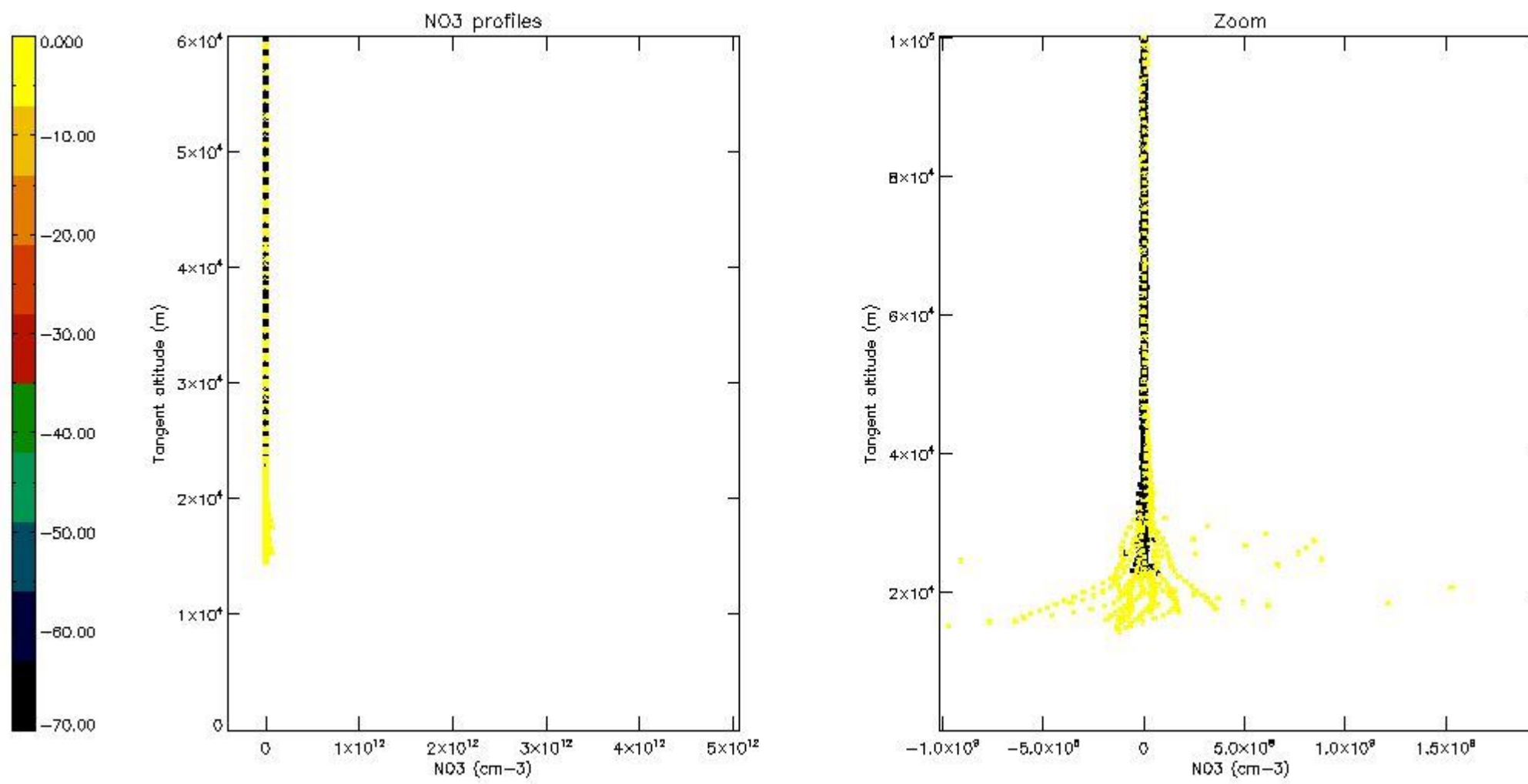
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



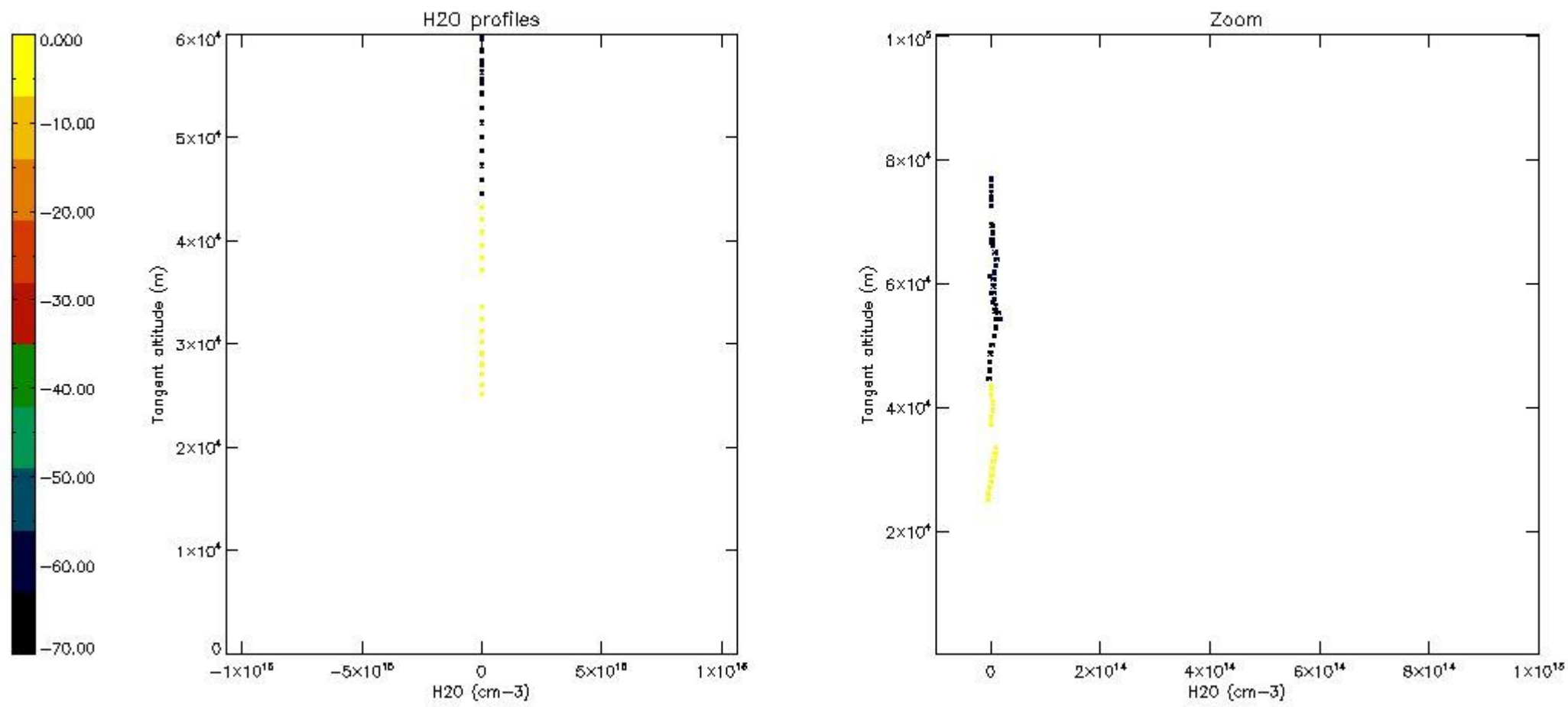
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

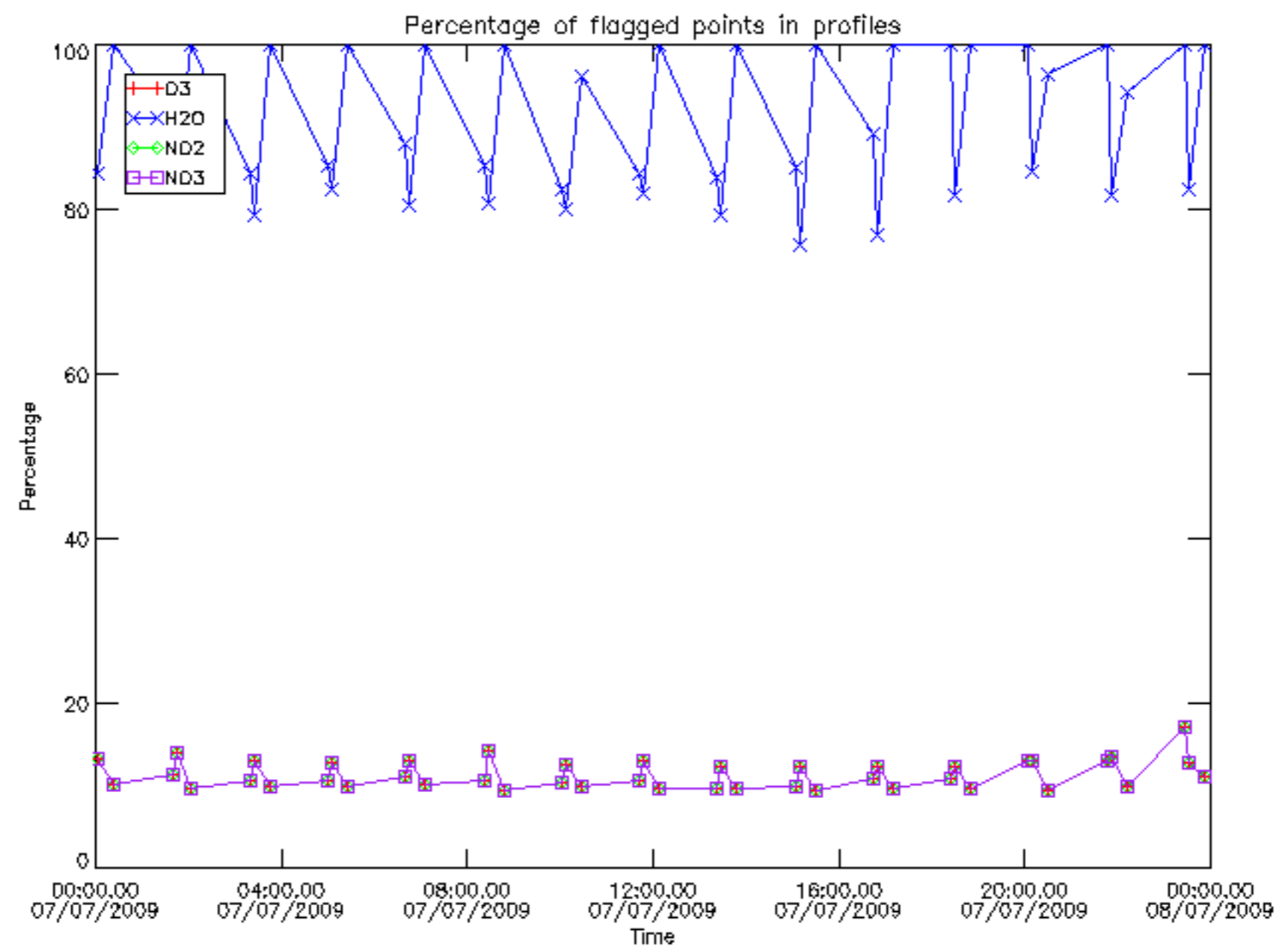
The colorbar represents the latitude.



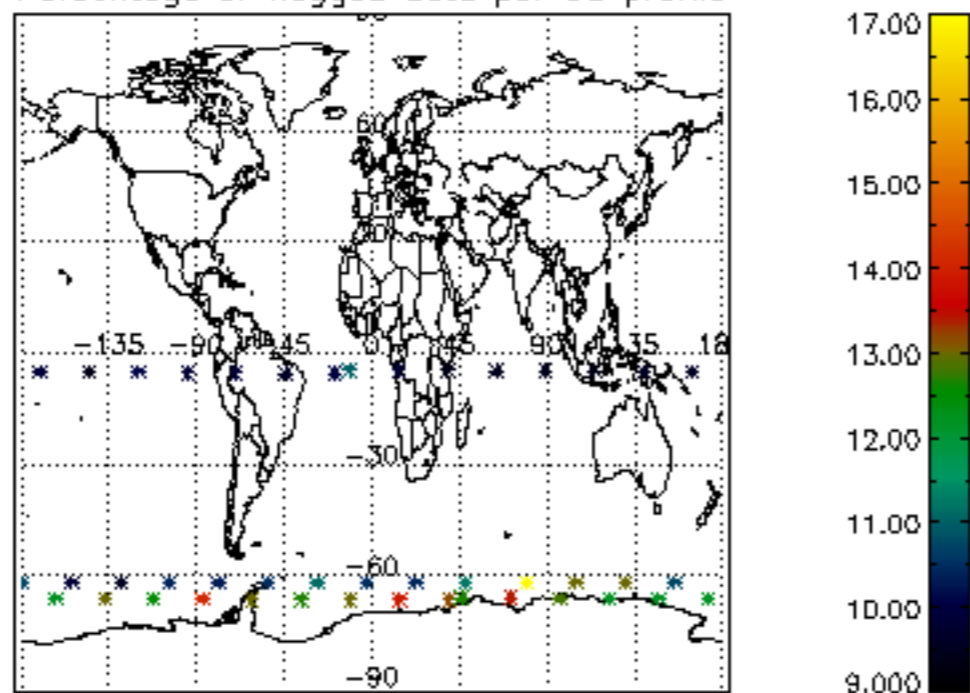
6. Auxiliary Data Files used for the production reported in section 2

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.

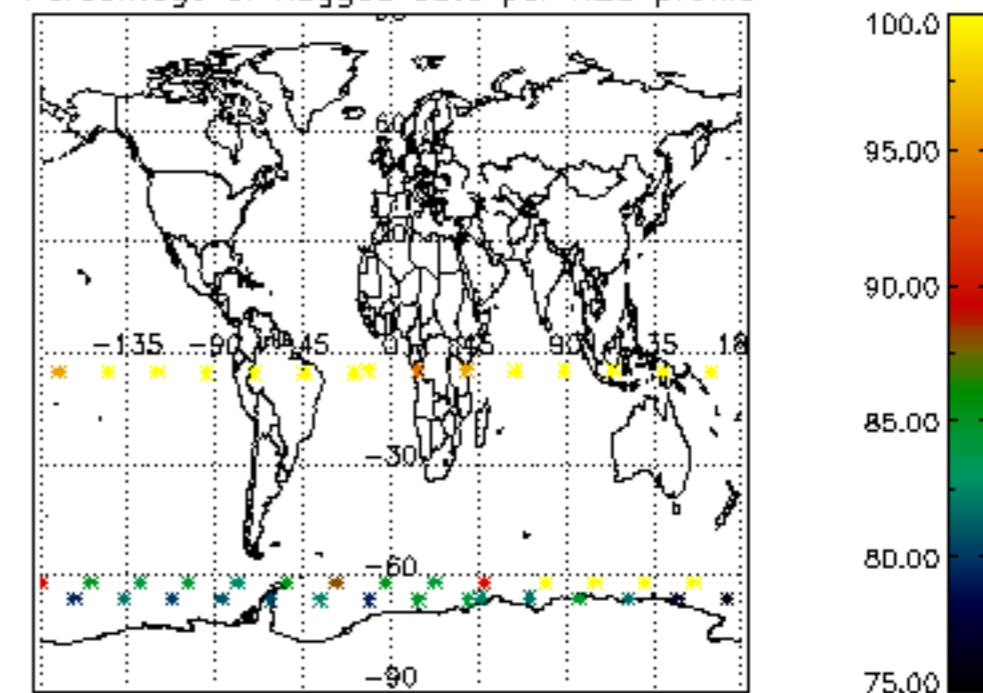
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	07-JUL-2009 00:03:22
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-JUL-2009 00:03:22
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-JUL-2009 00:03:22



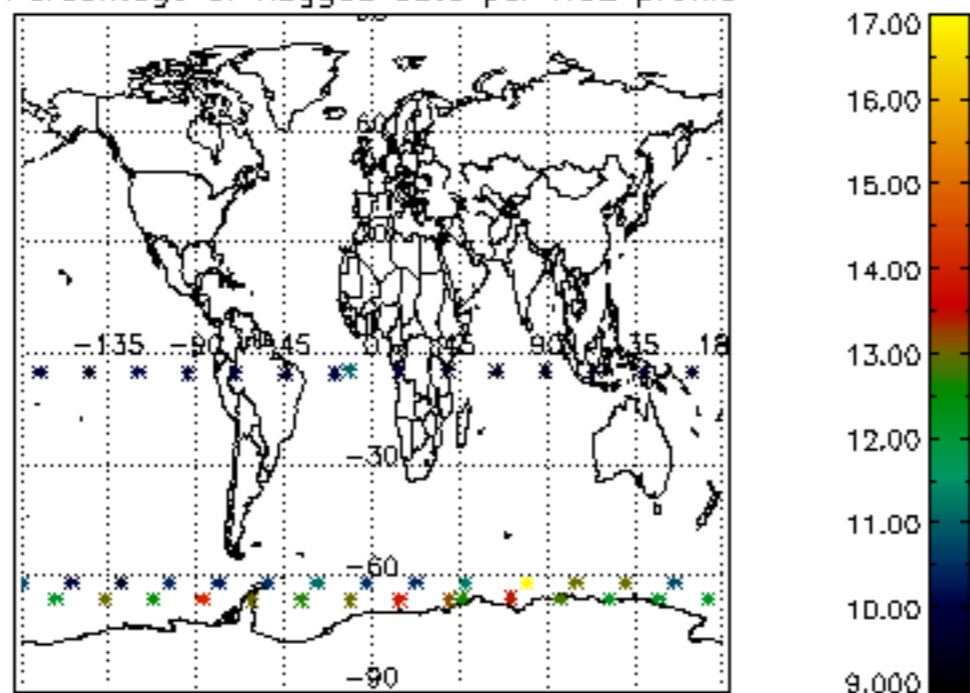
Percentage of flagged data per D3 profile



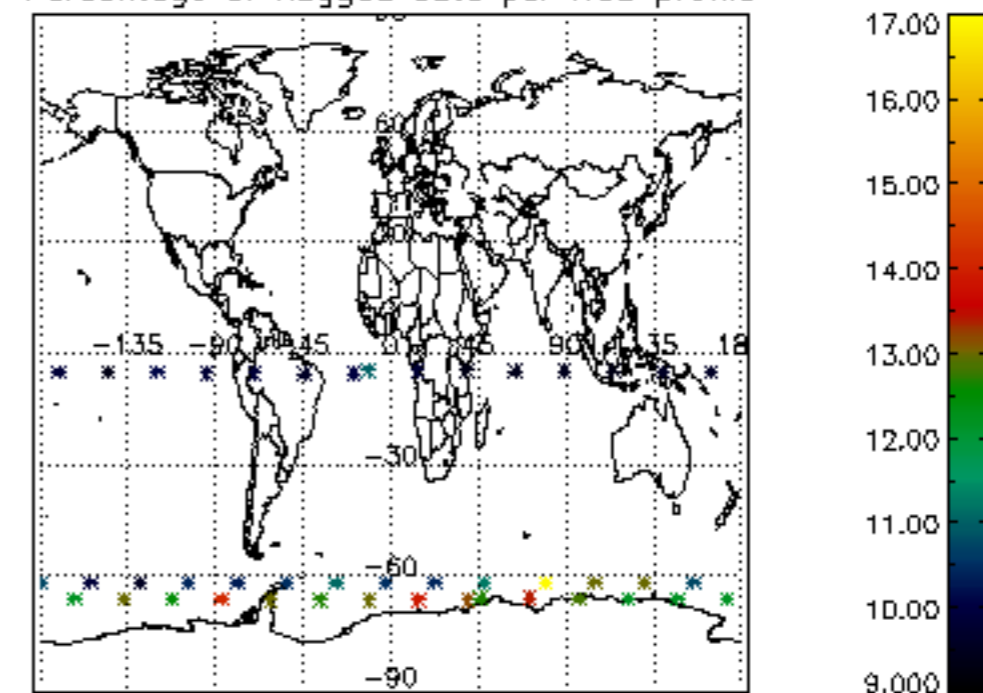
Percentage of flagged data per H2O profile

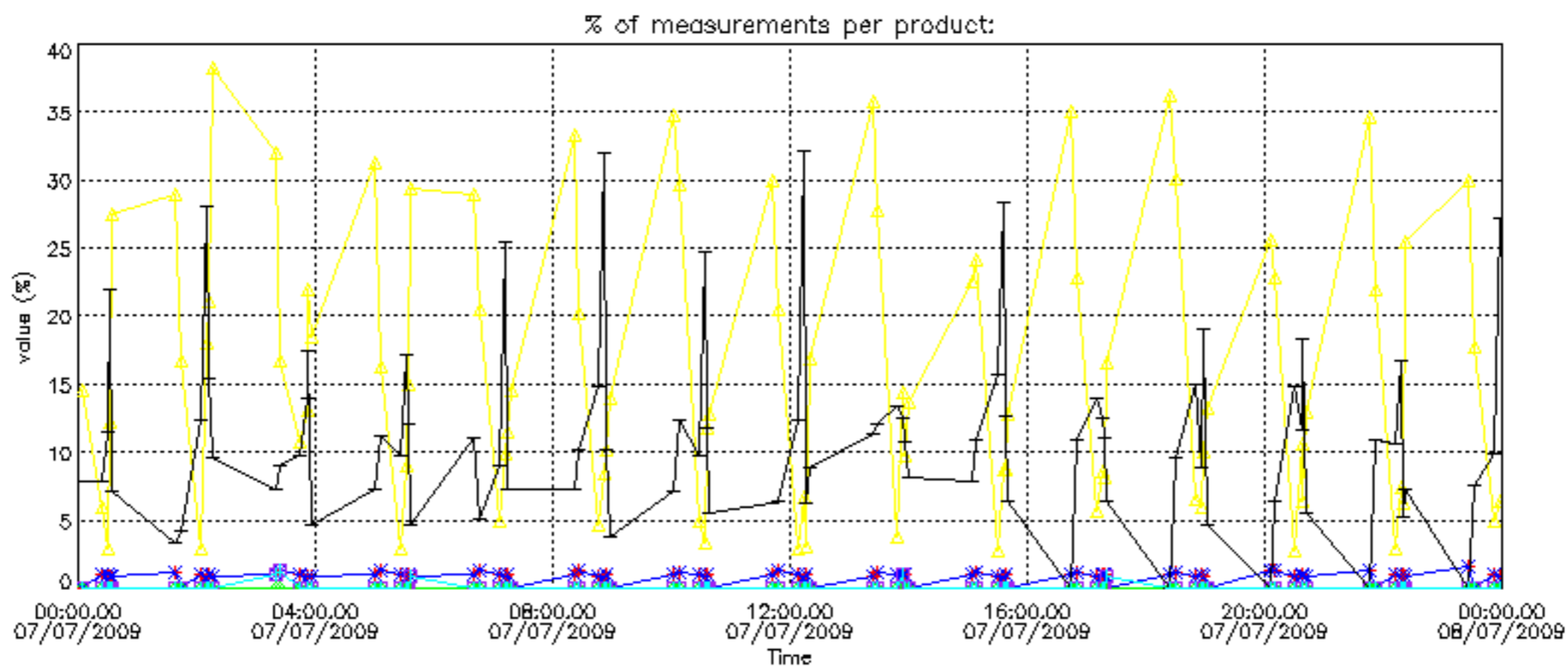


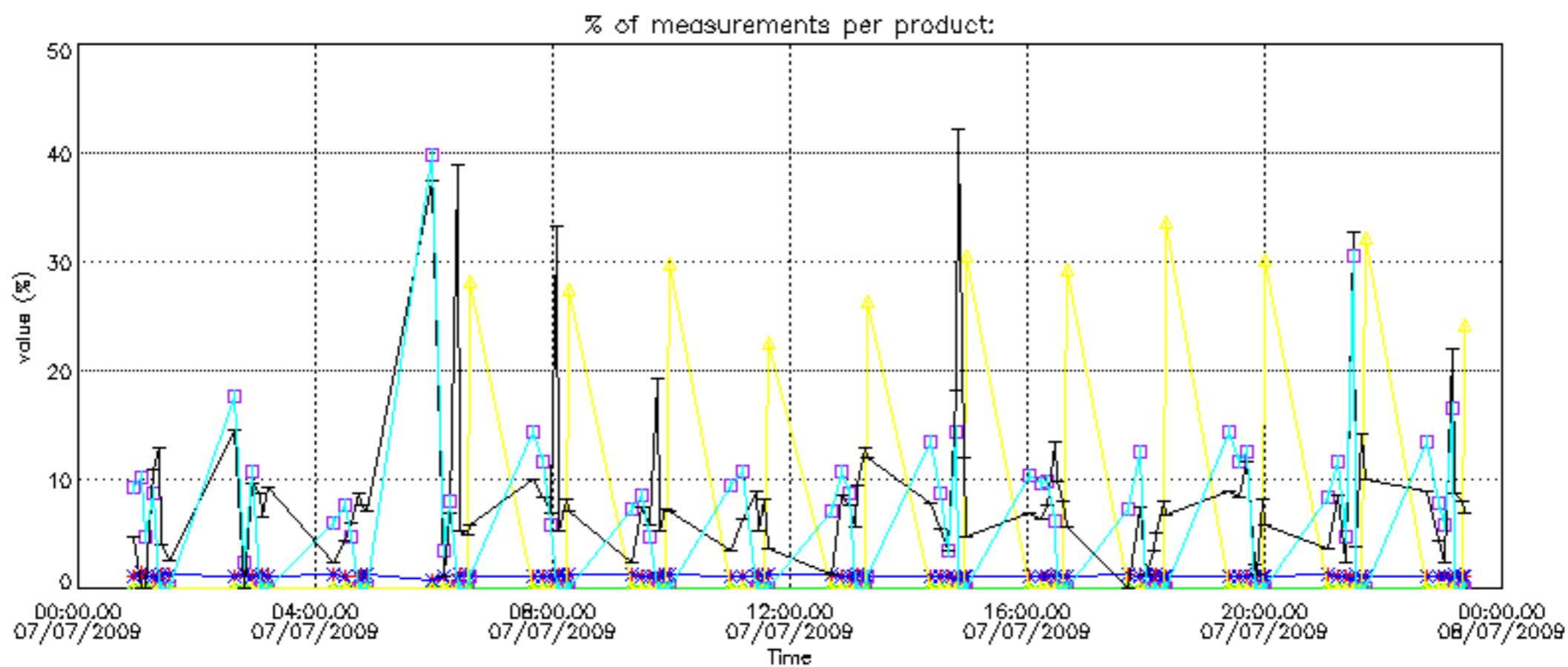
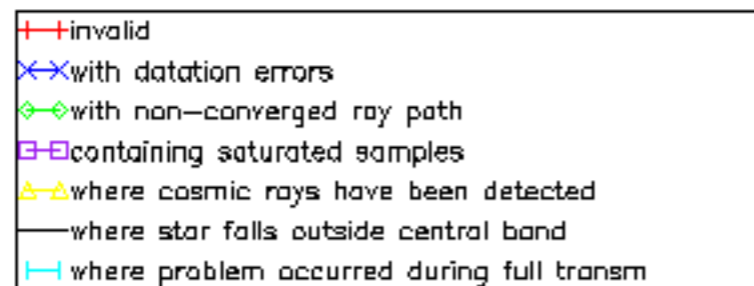
Percentage of flagged data per NO2 profile



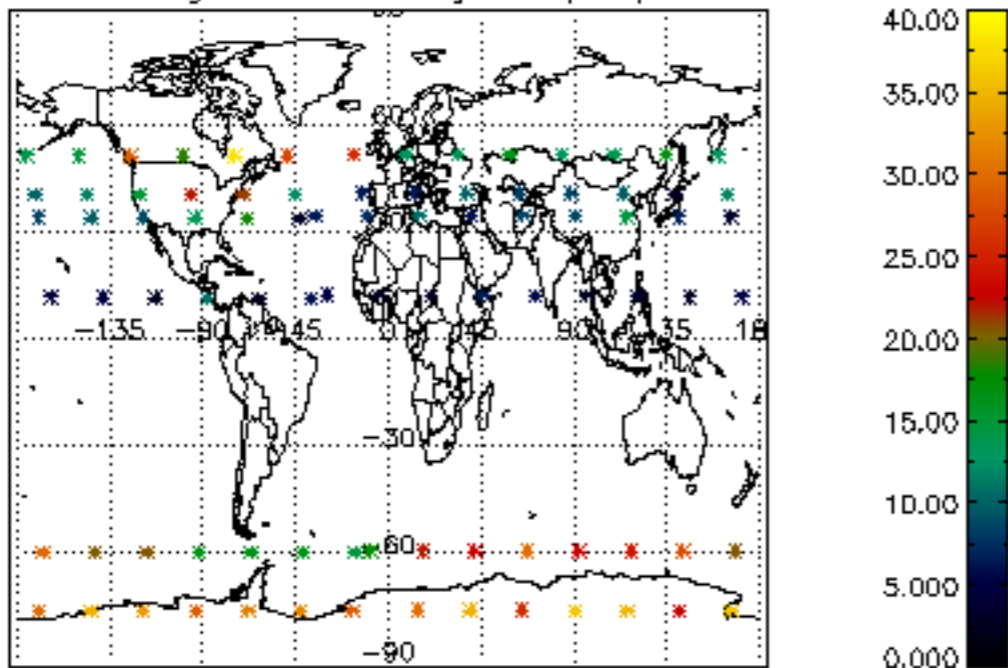
Percentage of flagged data per NO3 profile



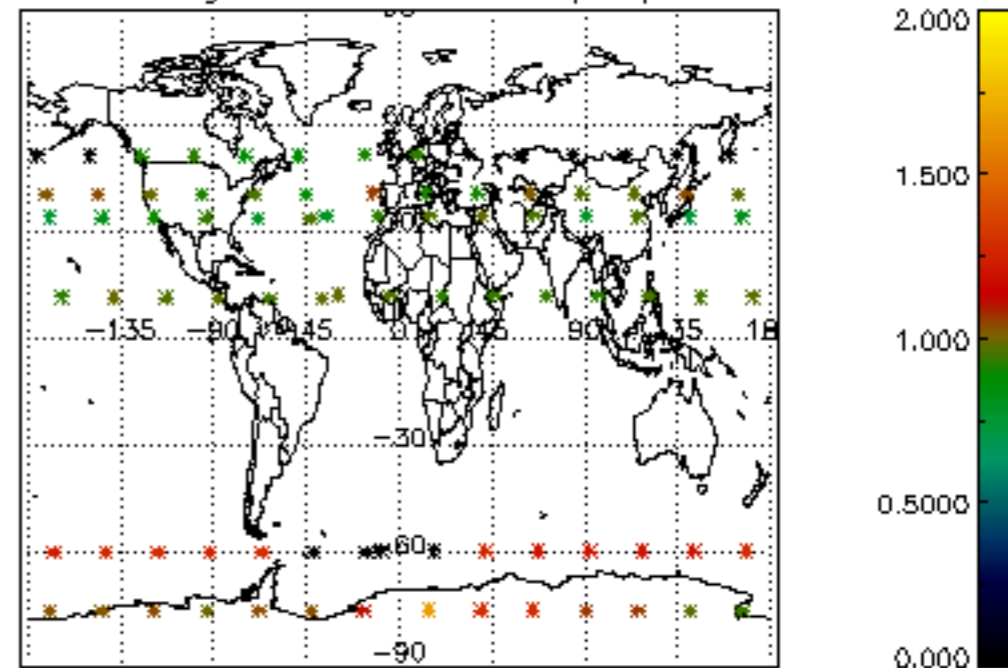




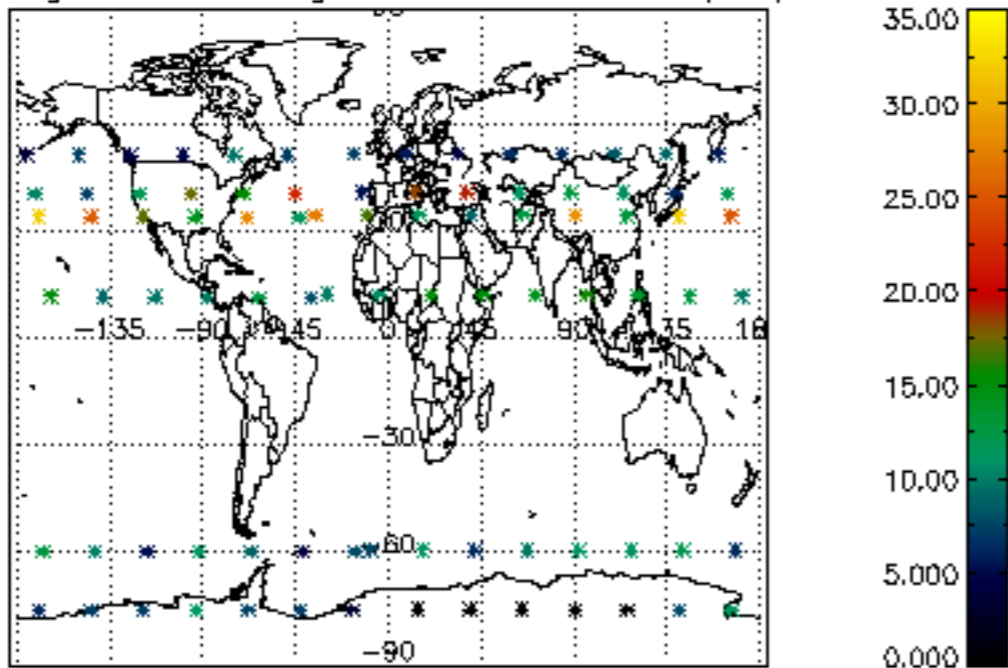
Percentage of cosmic ray hits per profile



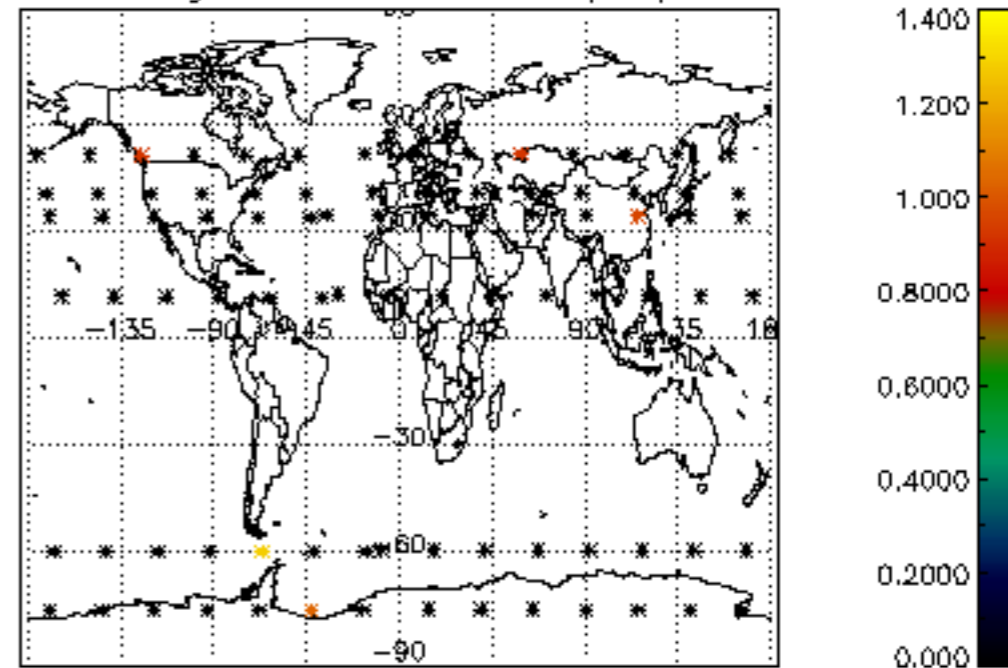
Percentage of datation errors per profile



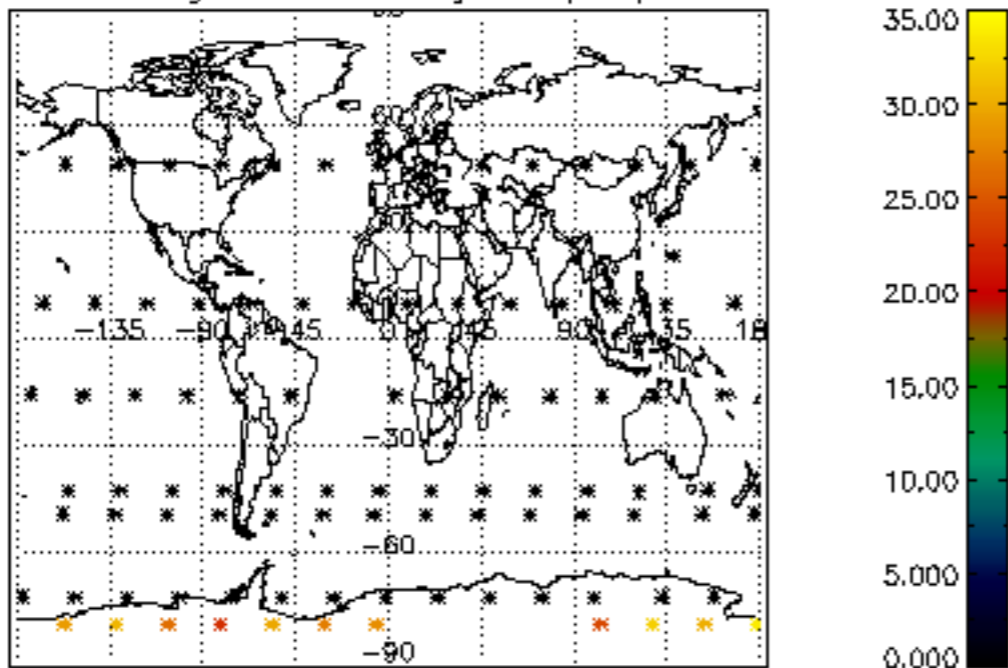
Percentage of star falling outside central band per profile



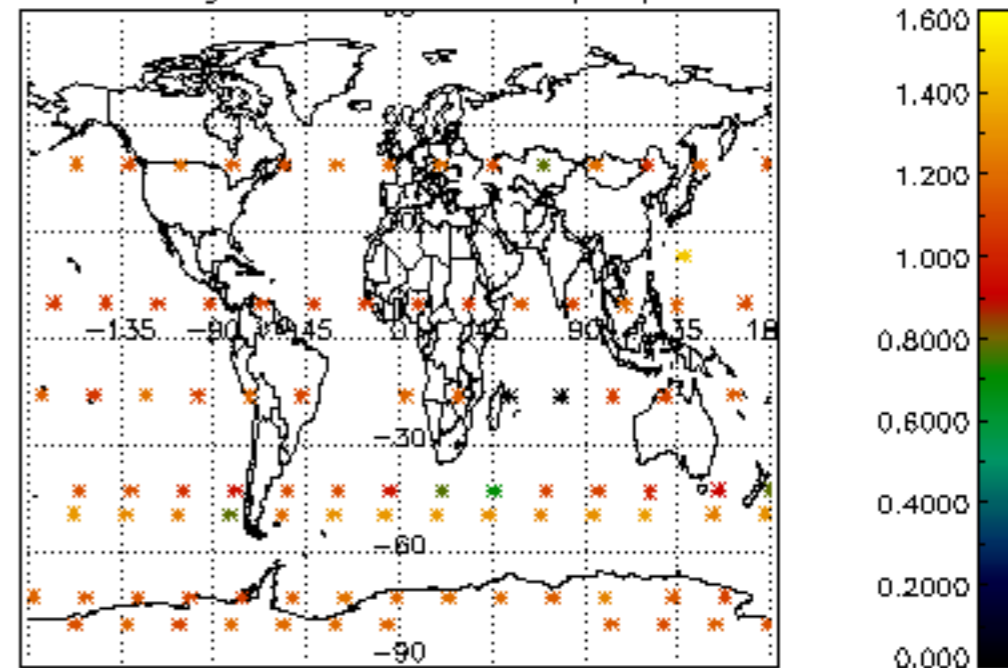
Percentage of saturation errors per profile



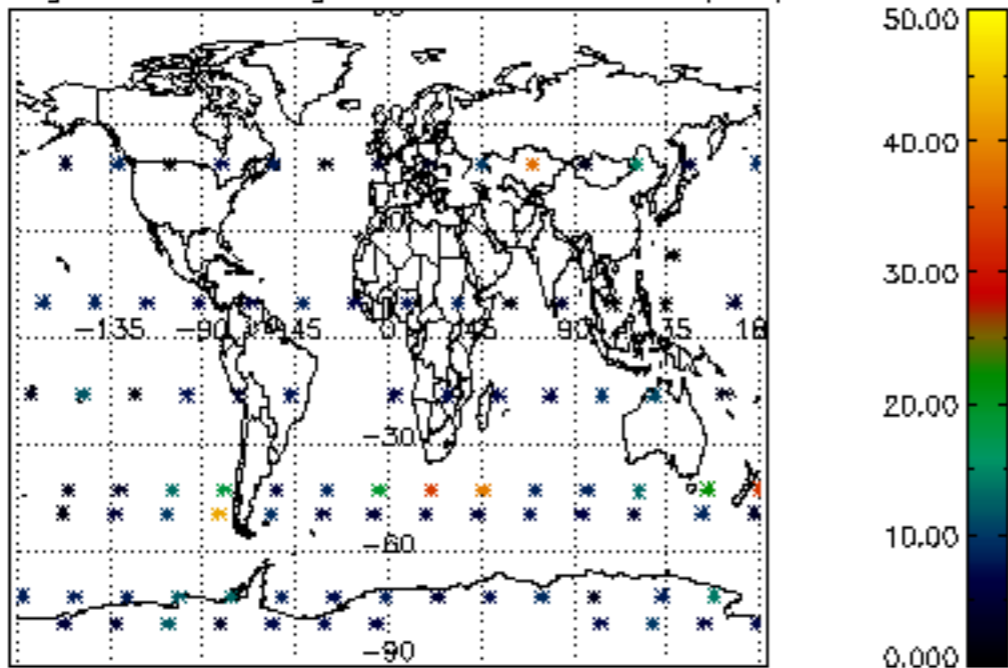
Percentage of cosmic ray hits per profile



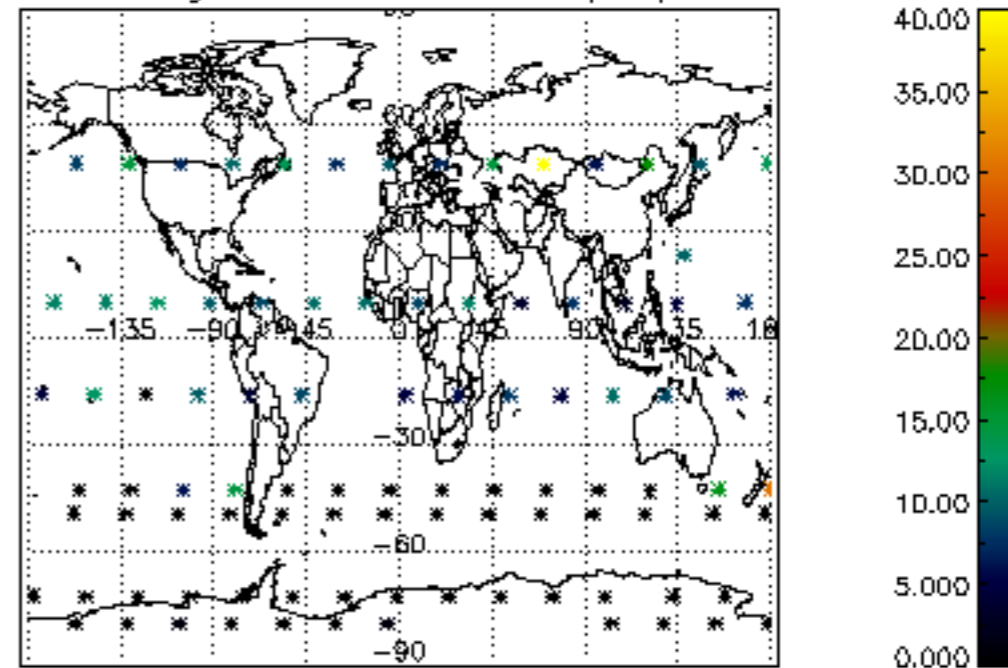
Percentage of datation errors per profile

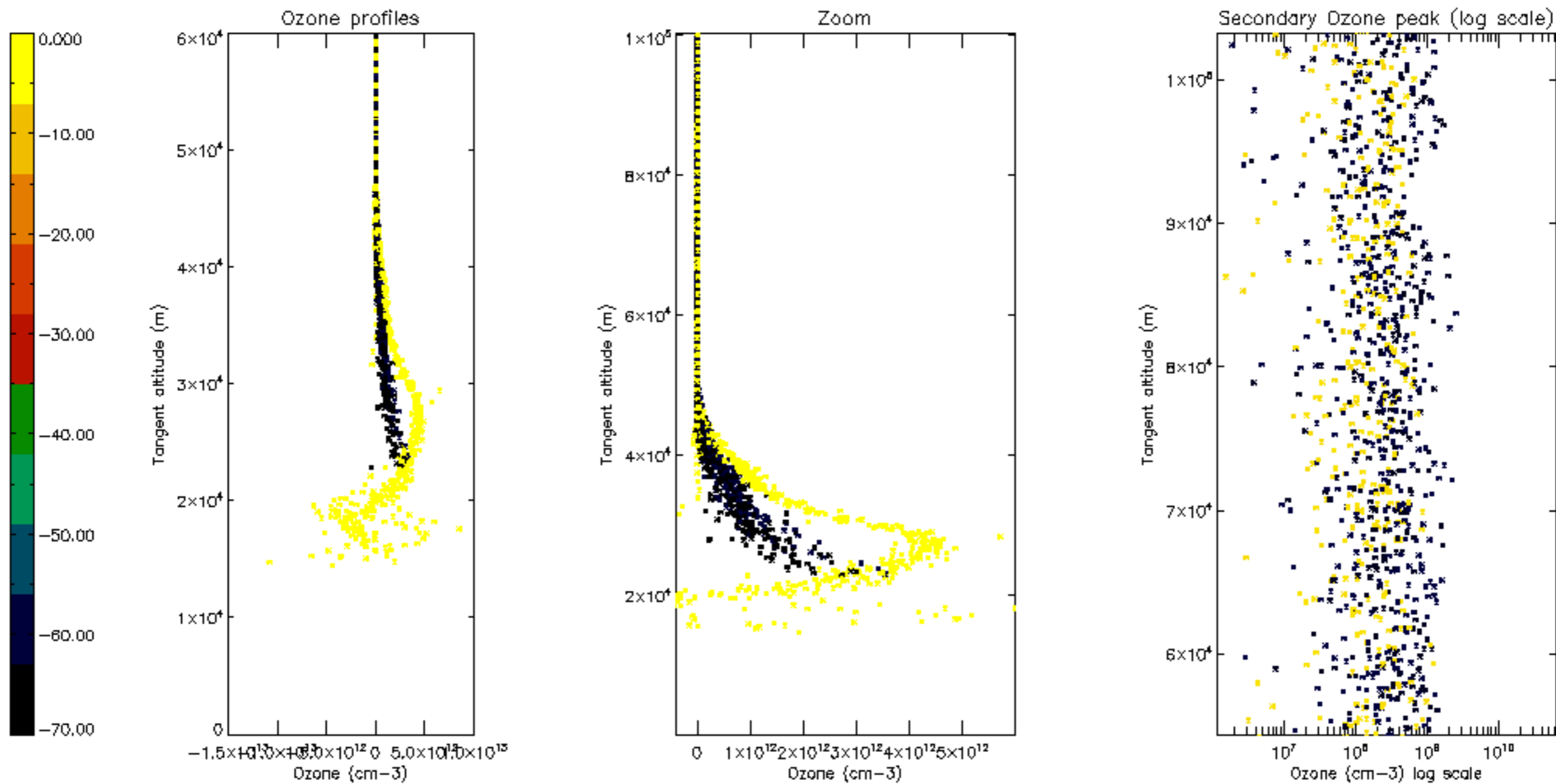


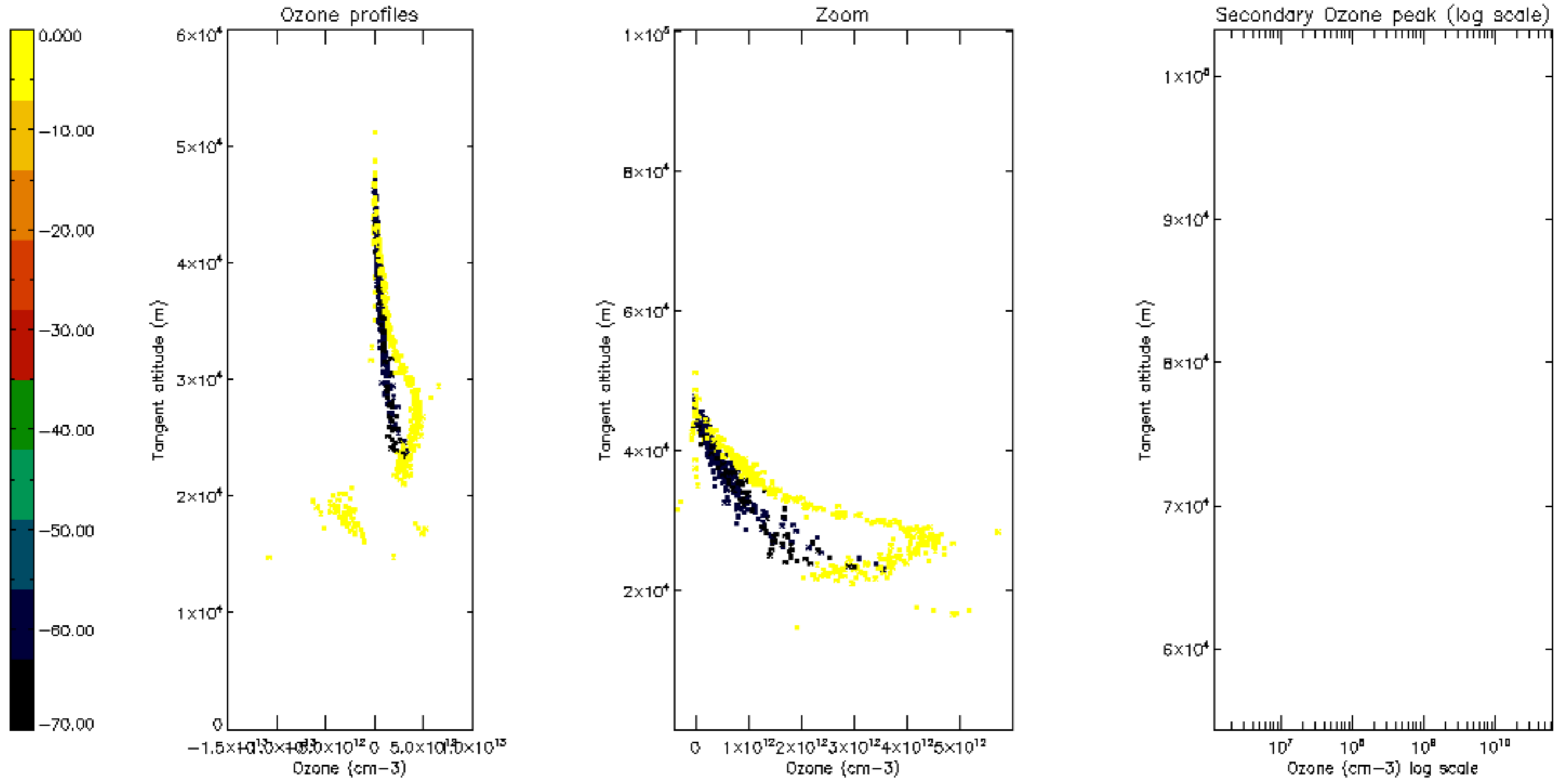
Percentage of star falling outside central band per profile

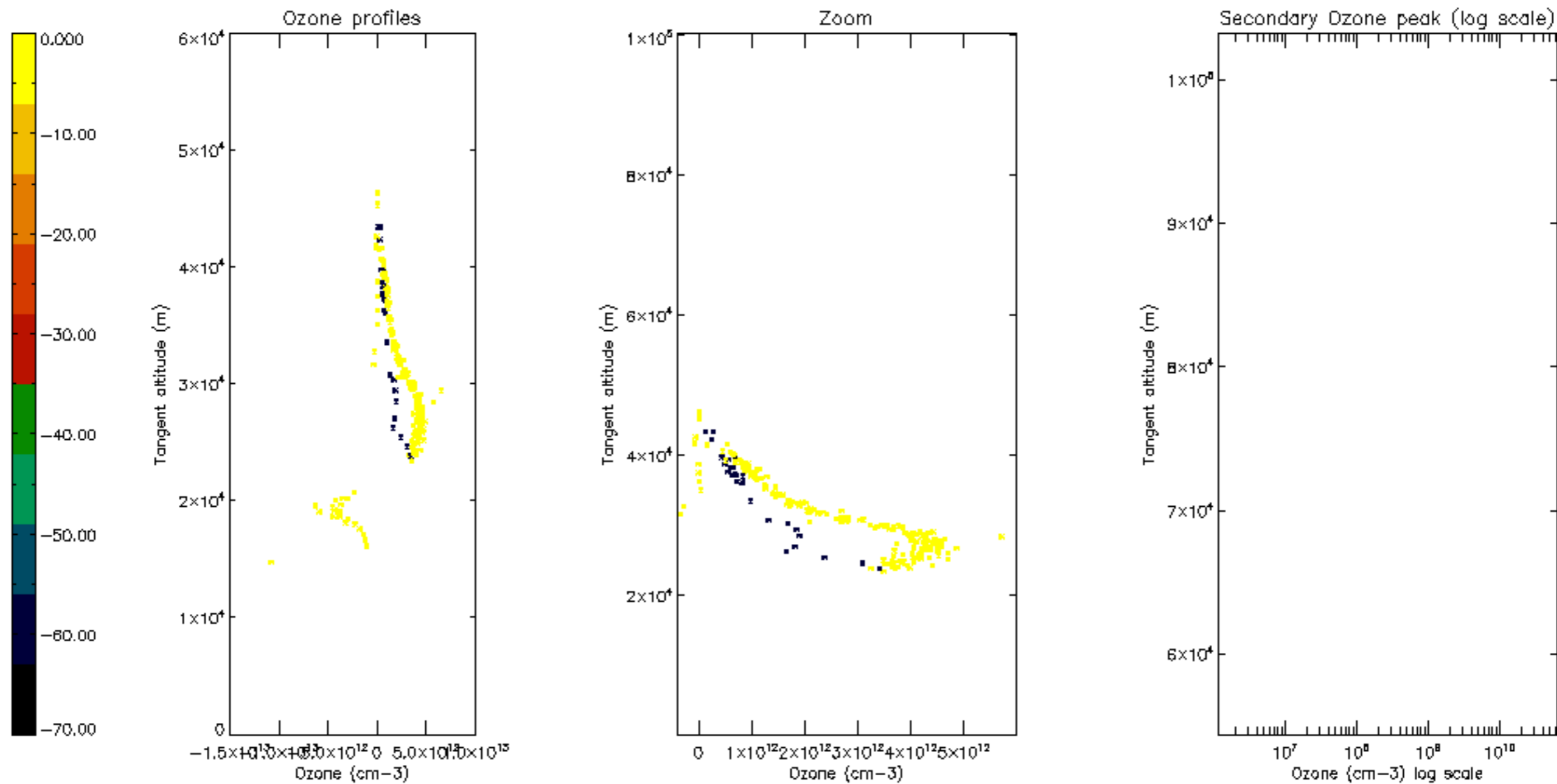


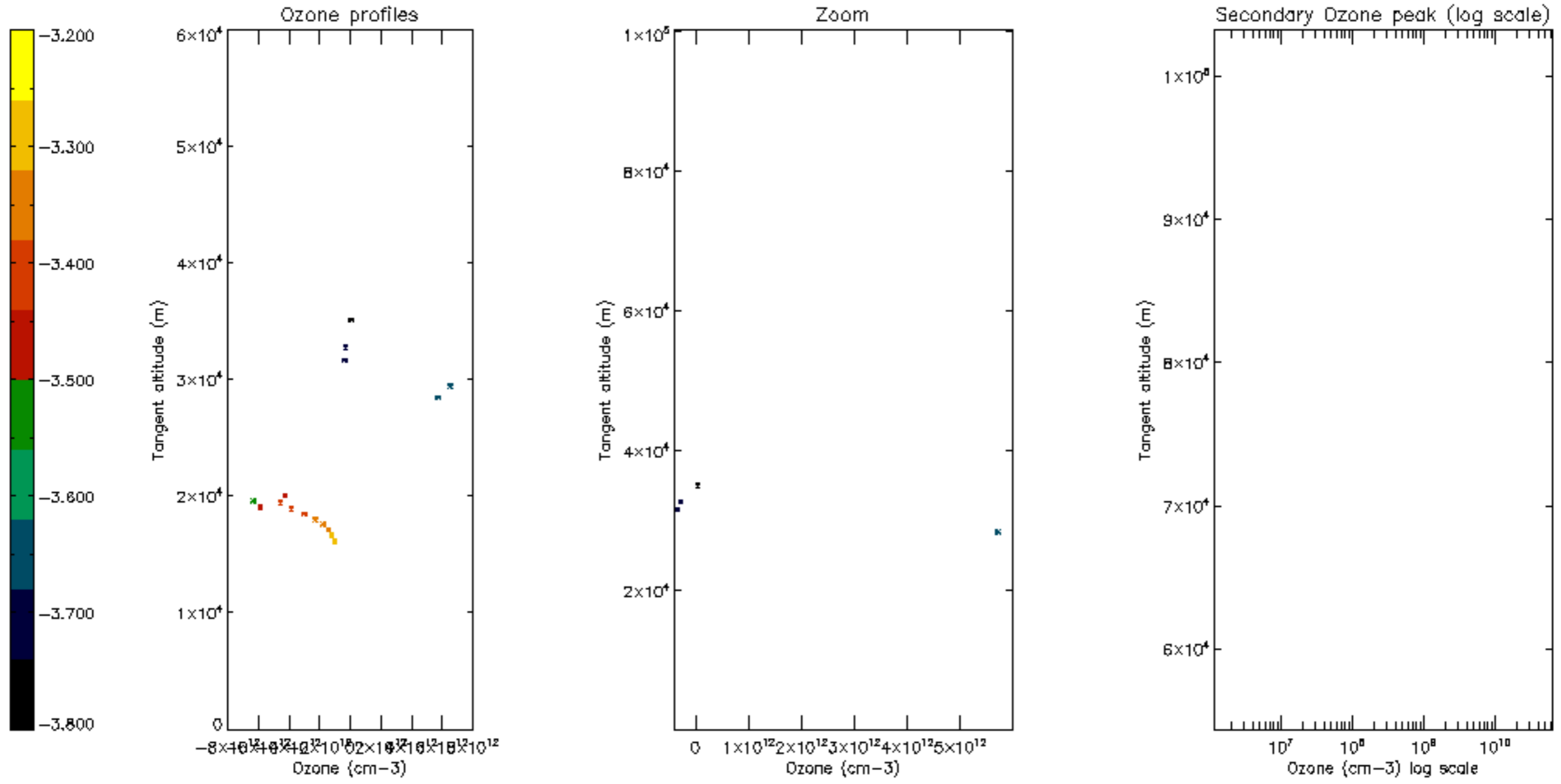
Percentage of saturation errors per profile

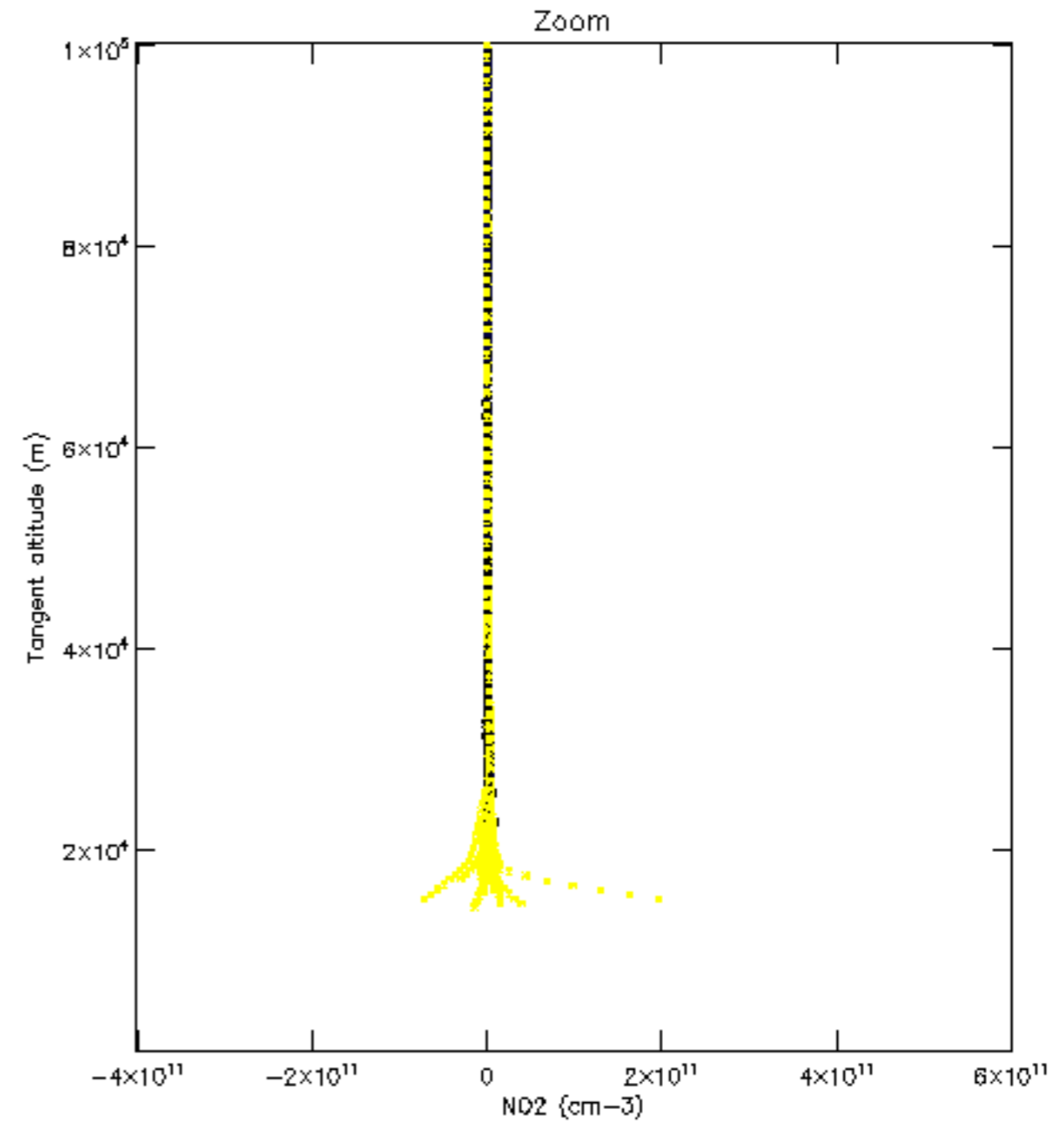
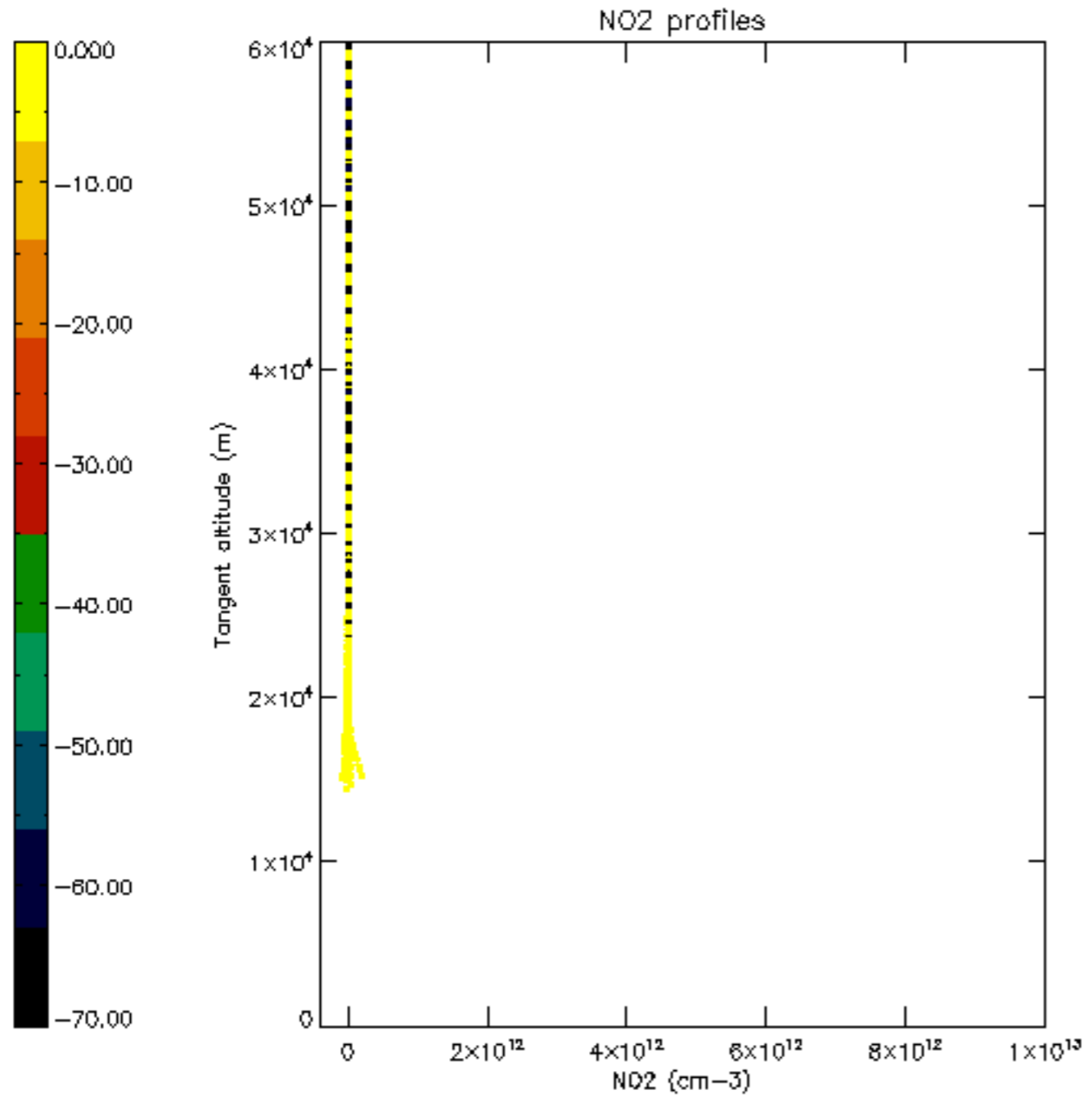


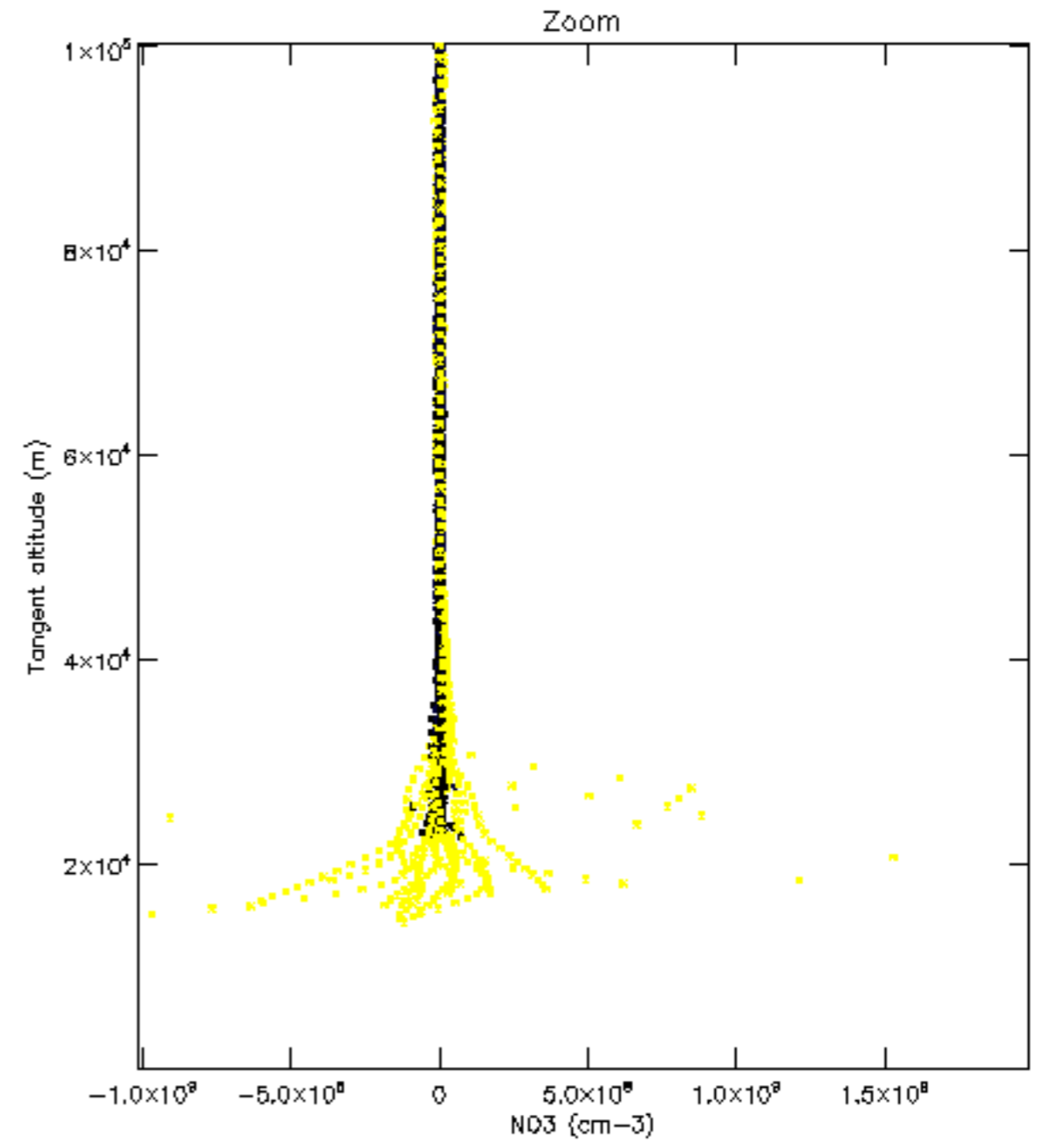
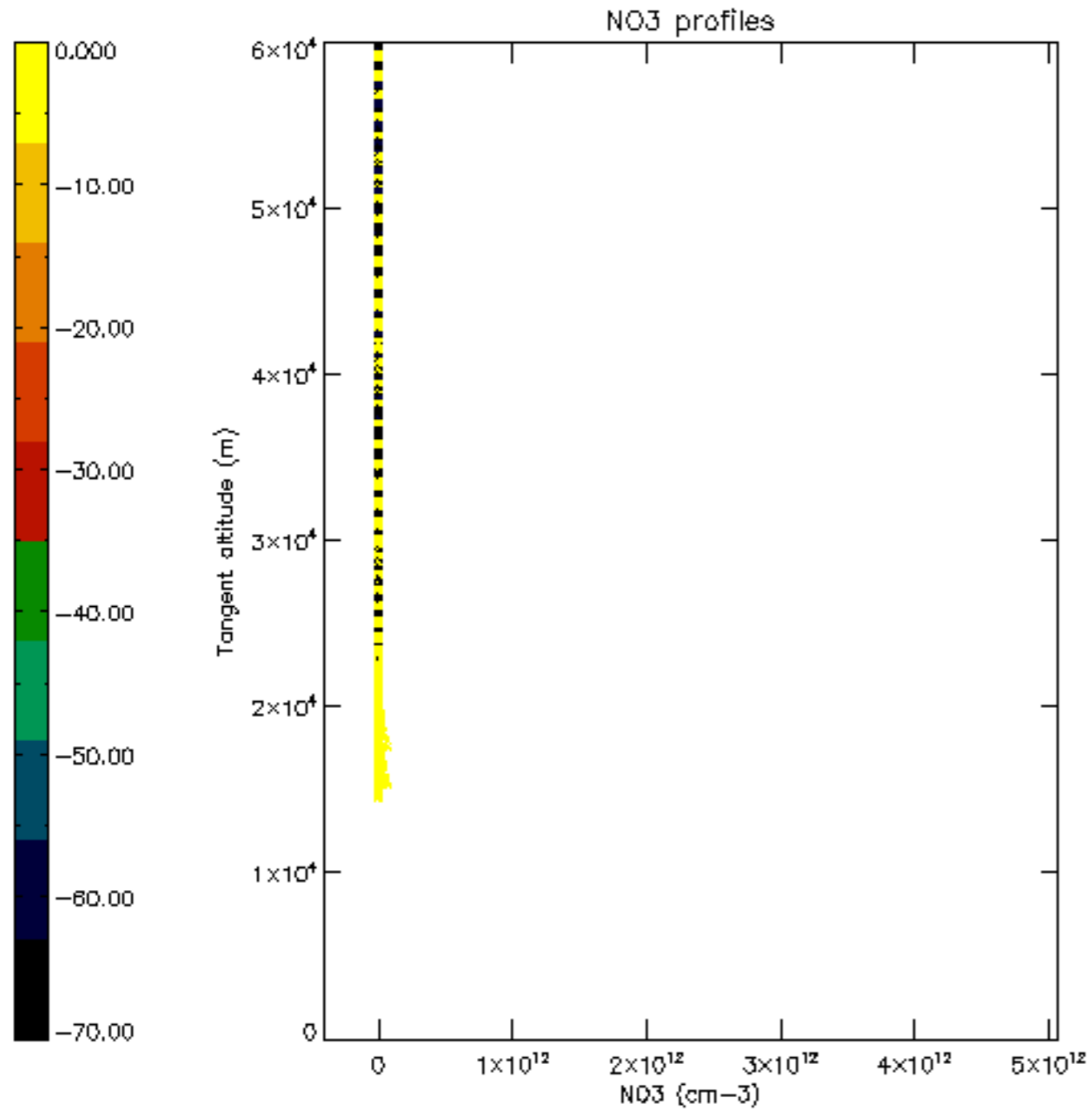


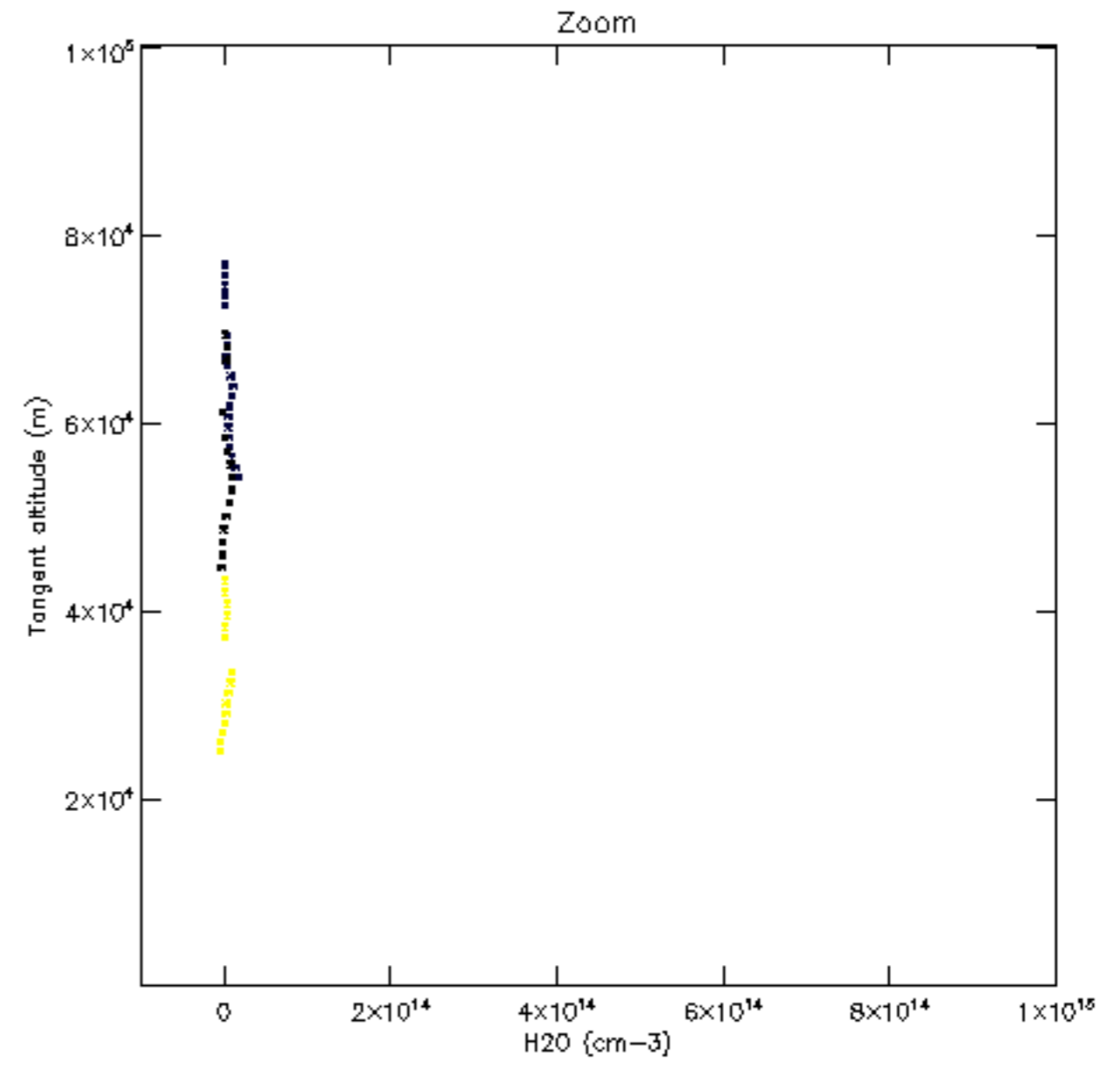
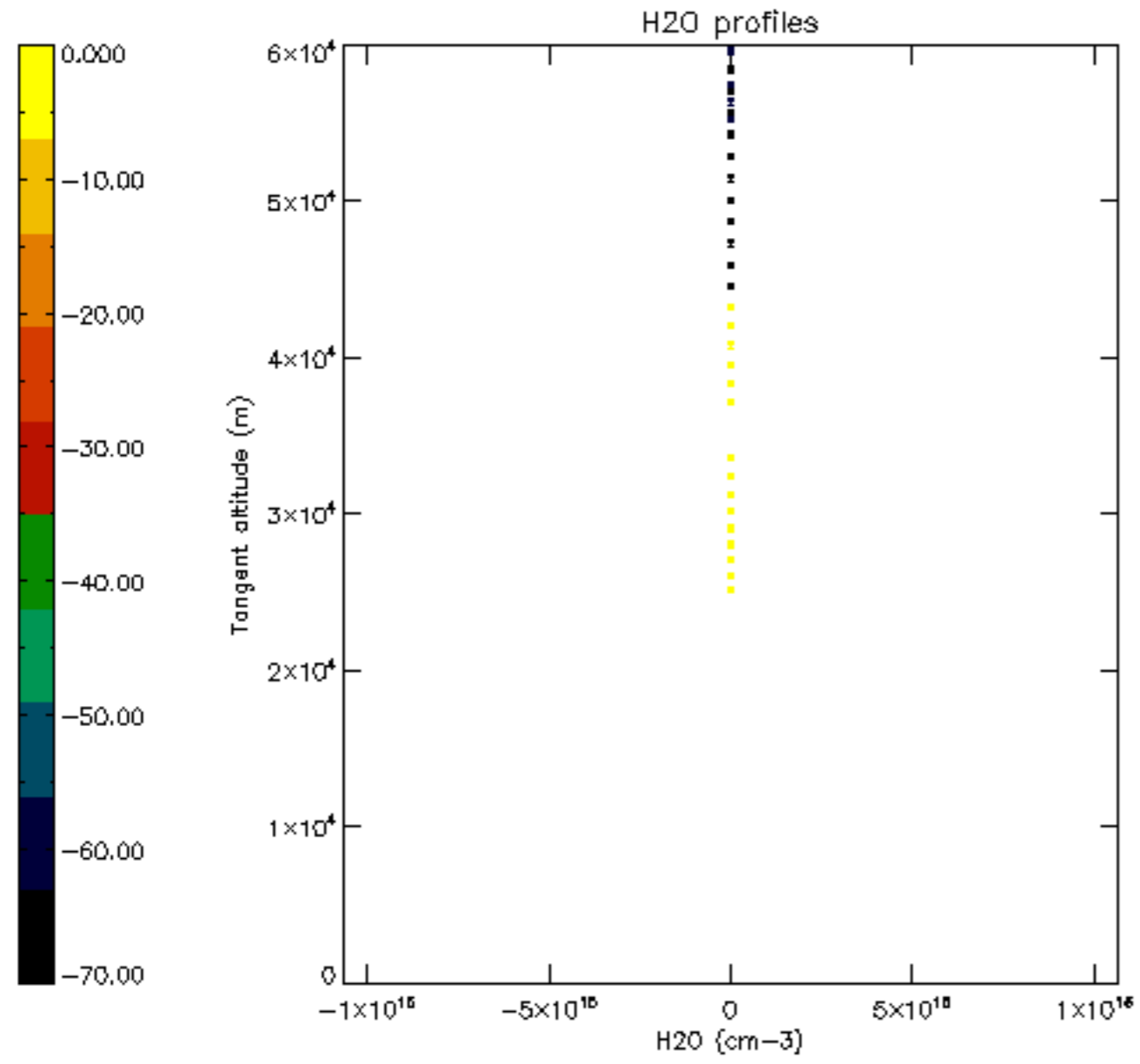


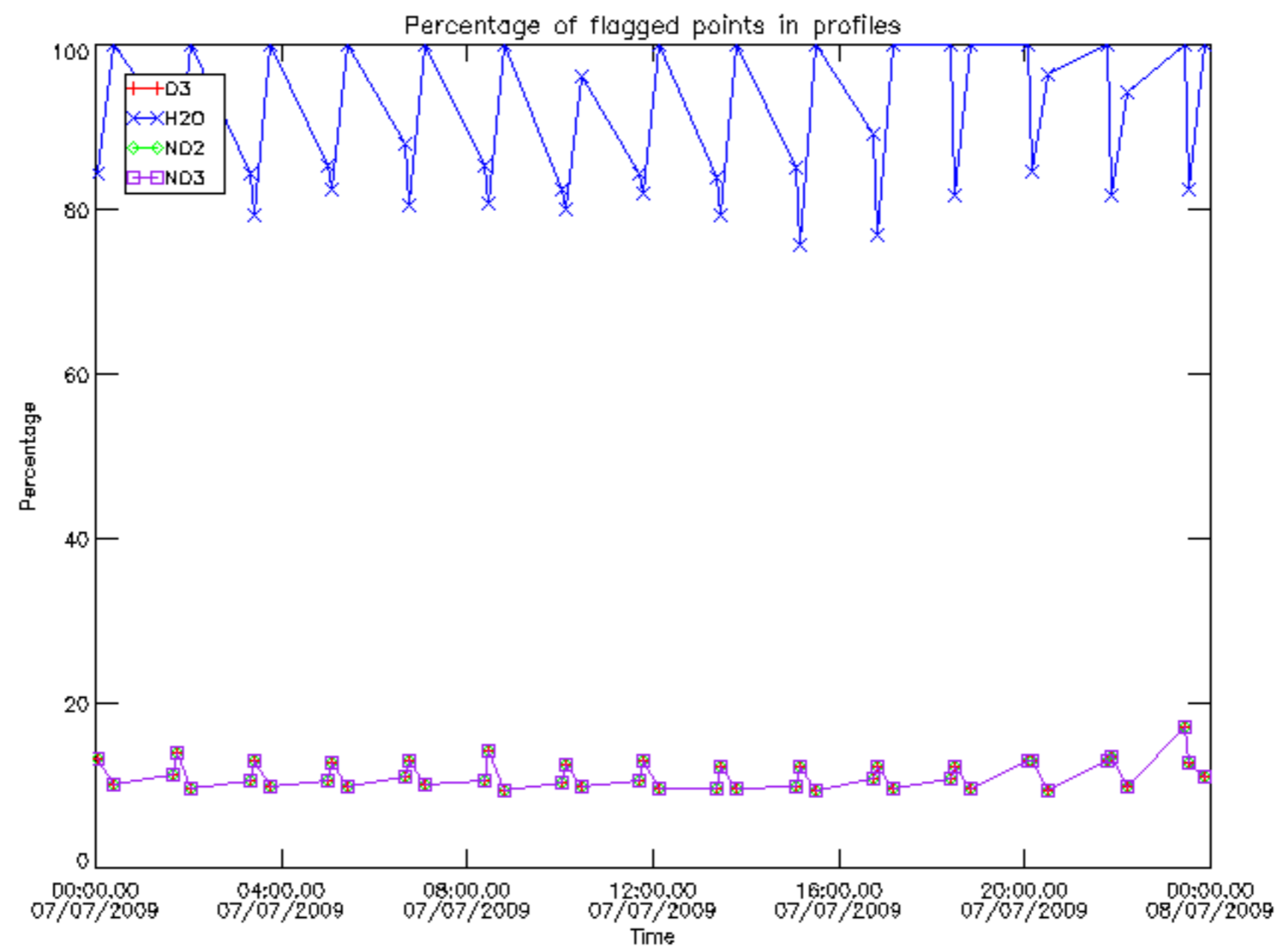




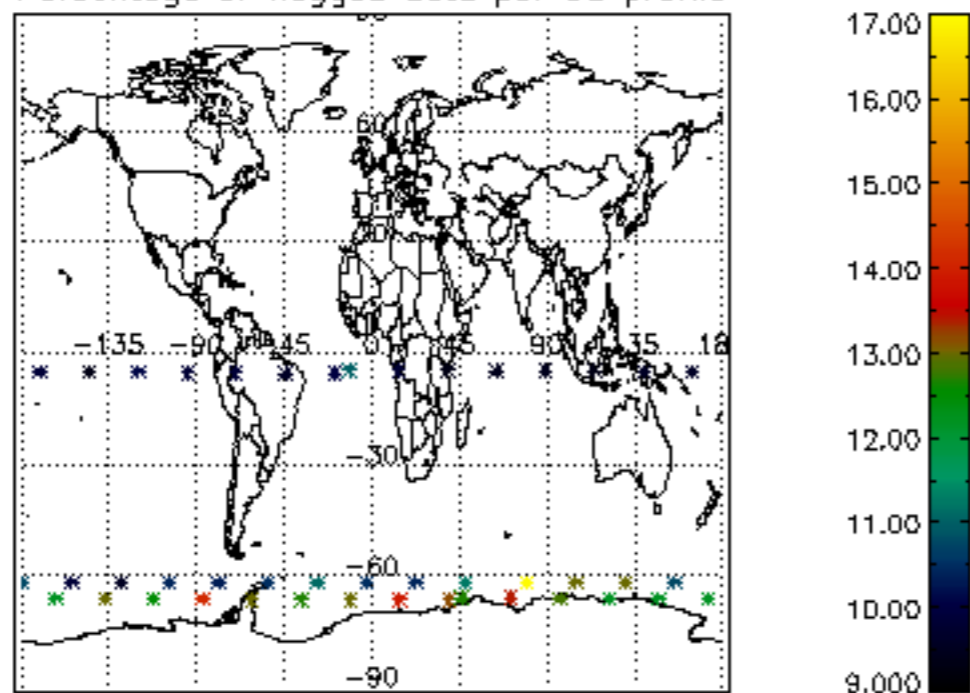




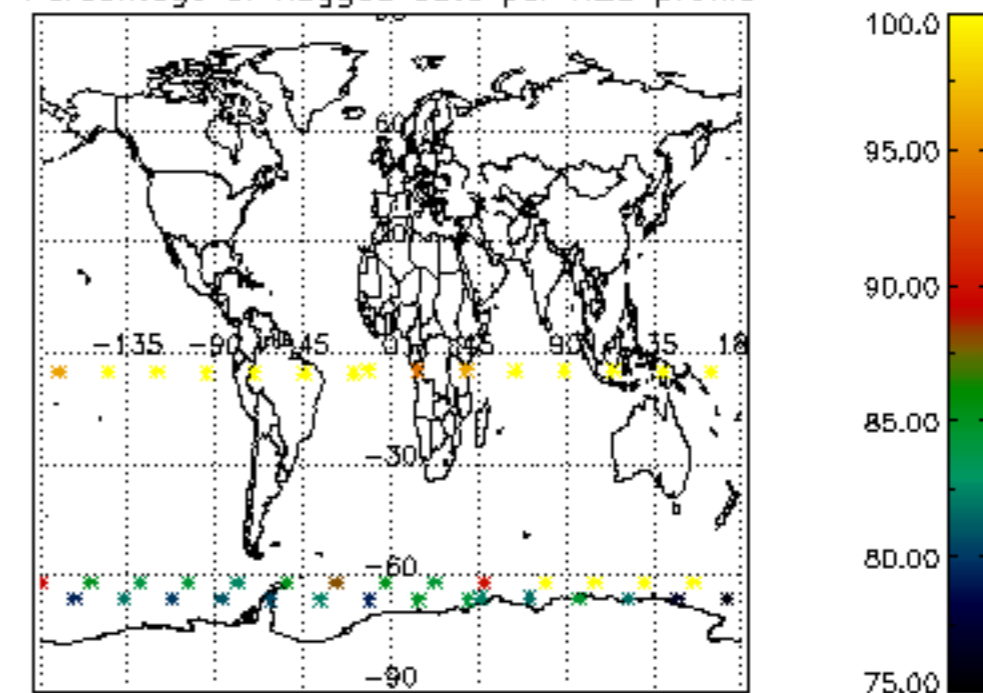




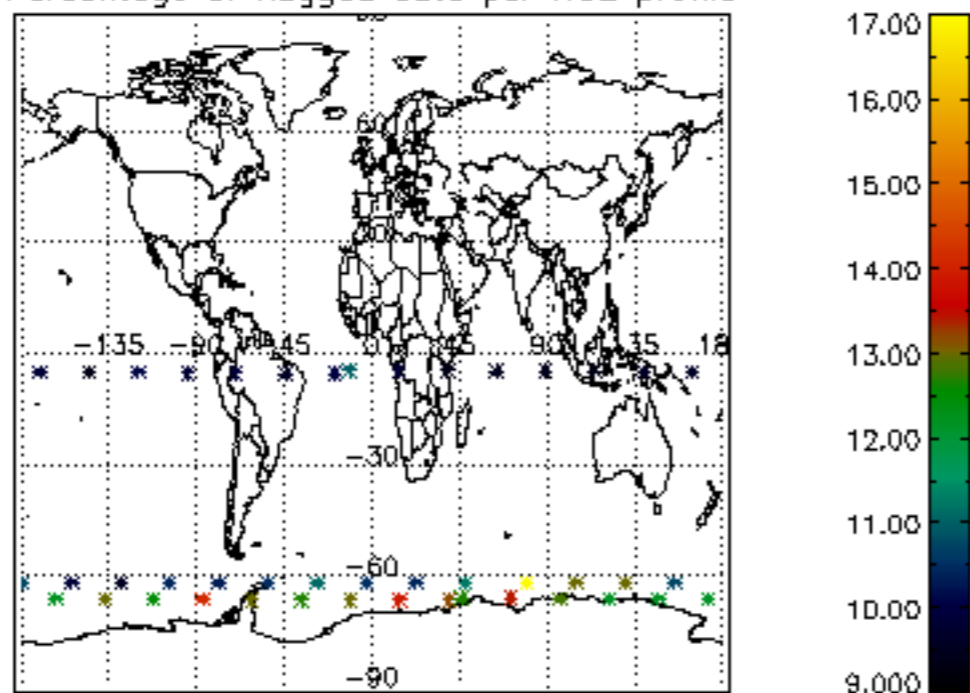
Percentage of flagged data per D3 profile



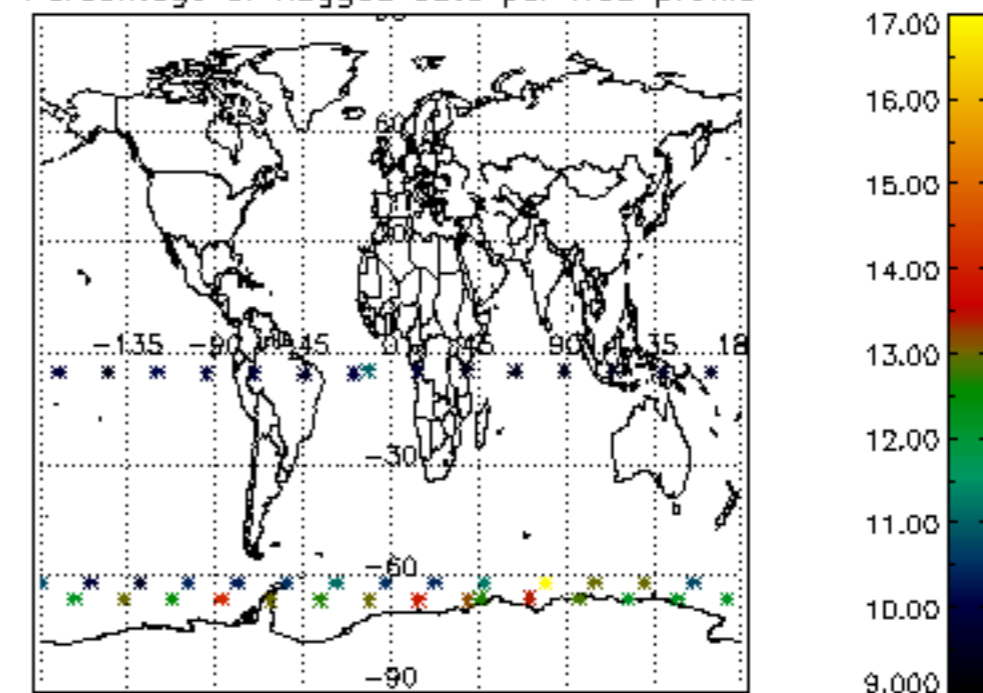
Percentage of flagged data per H2O profile

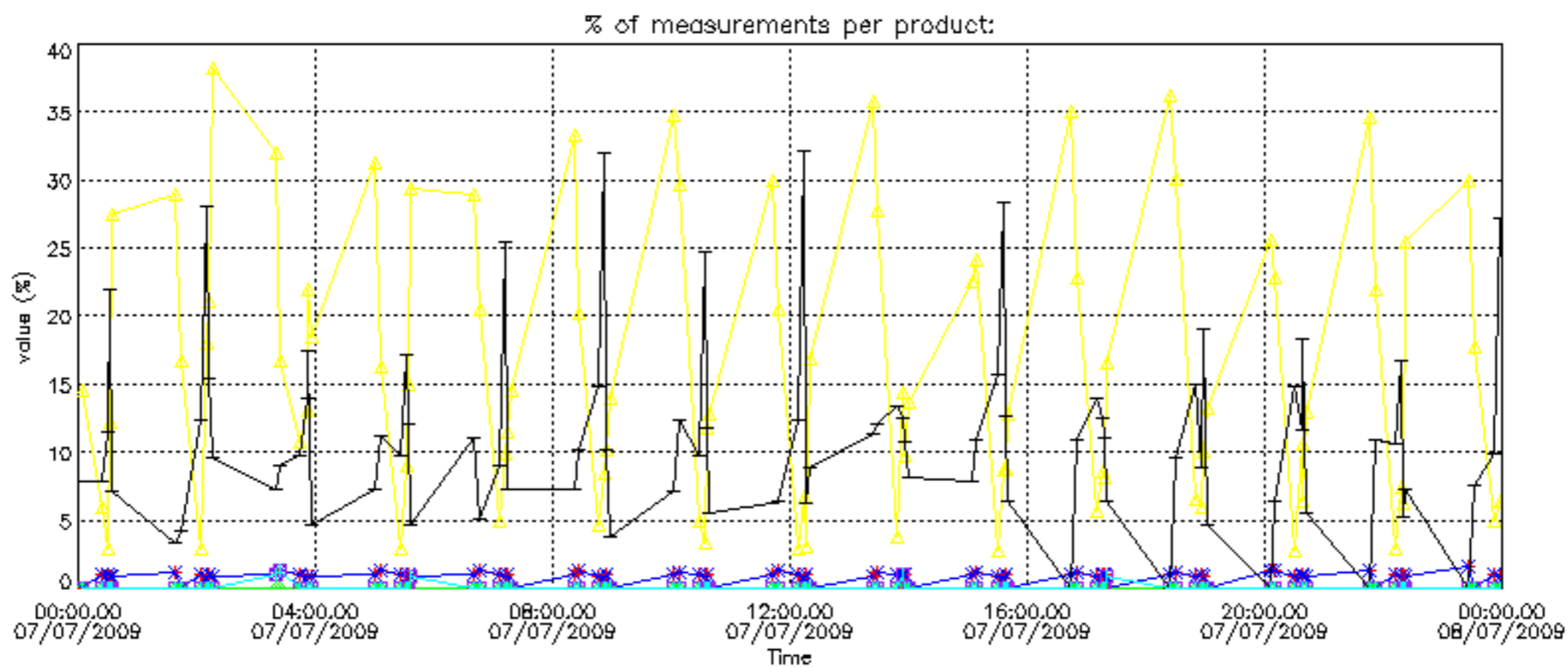


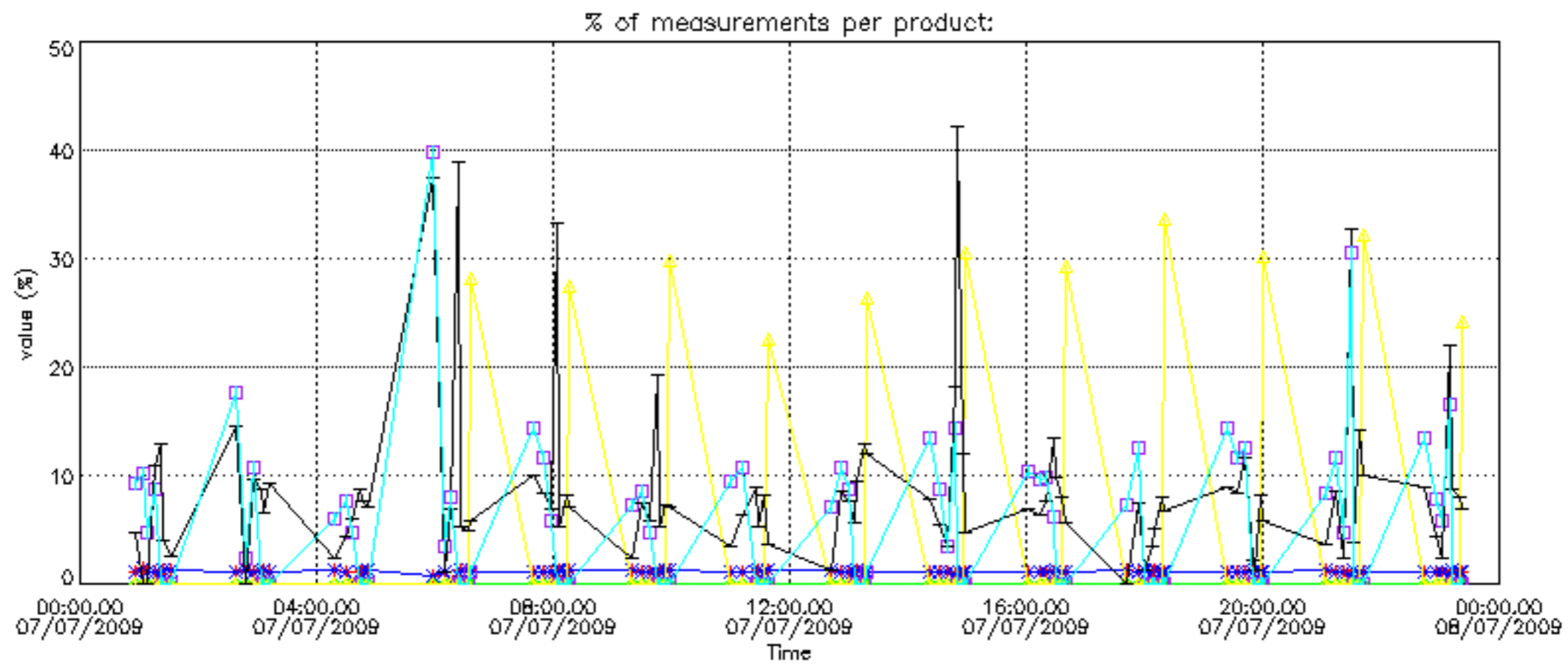
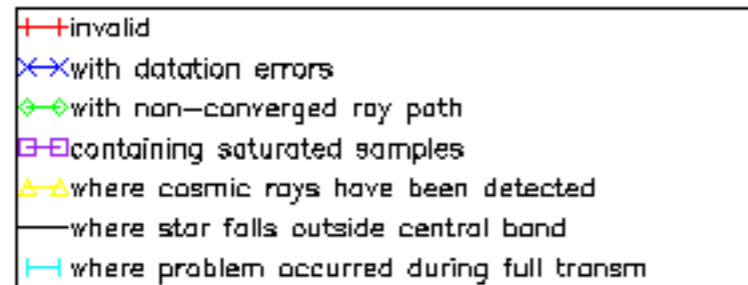
Percentage of flagged data per NO2 profile



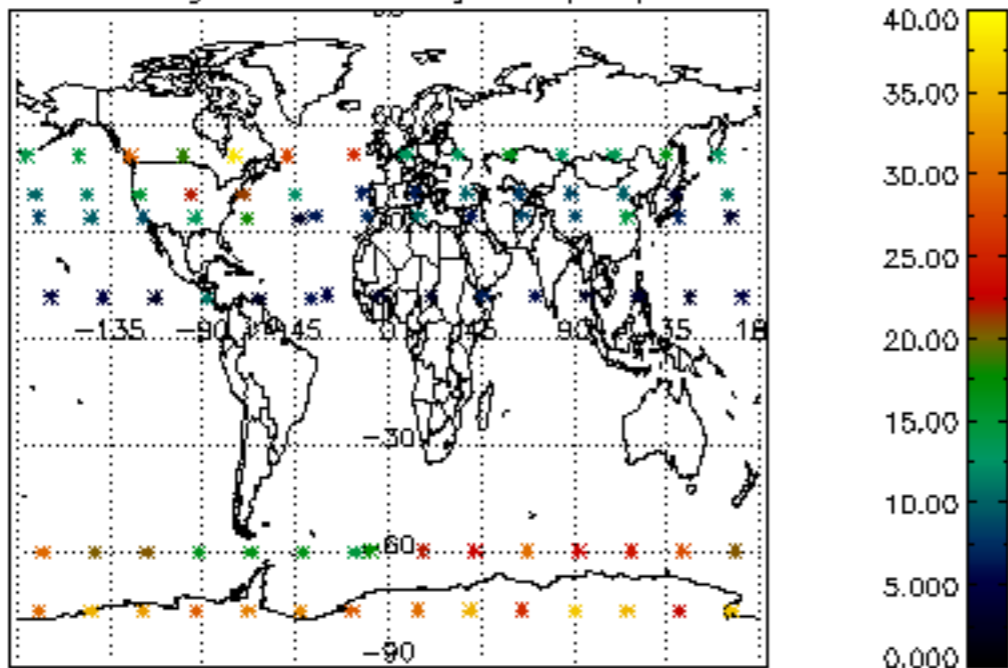
Percentage of flagged data per NO3 profile



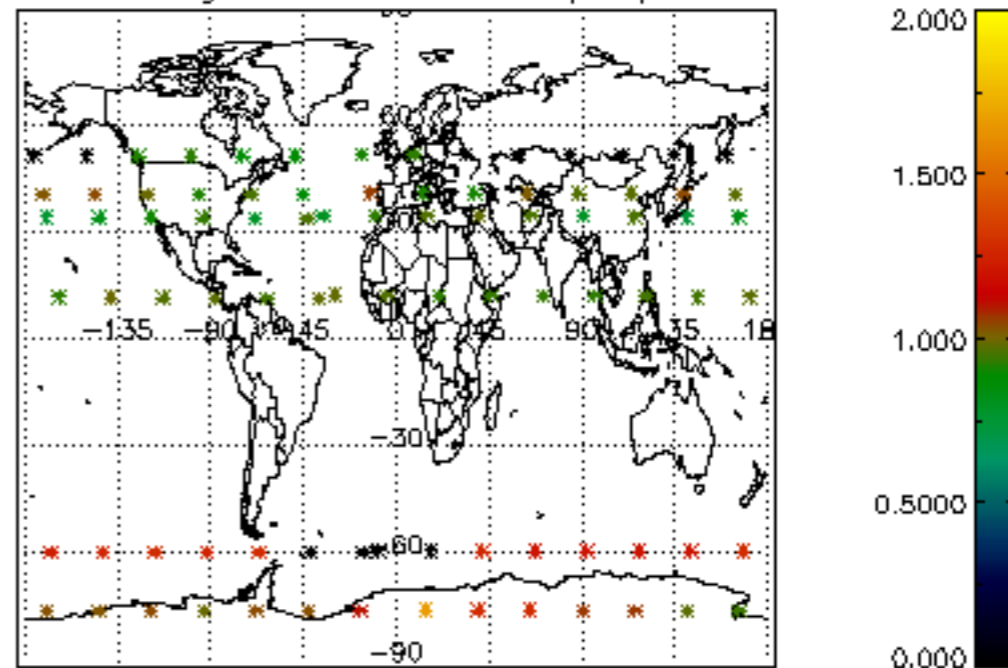




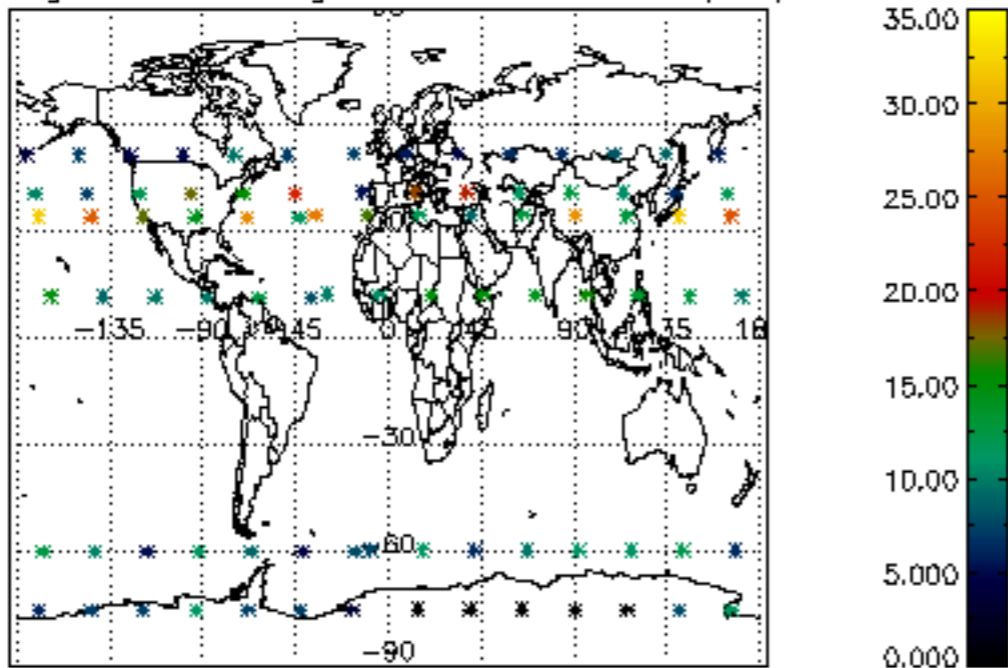
Percentage of cosmic ray hits per profile



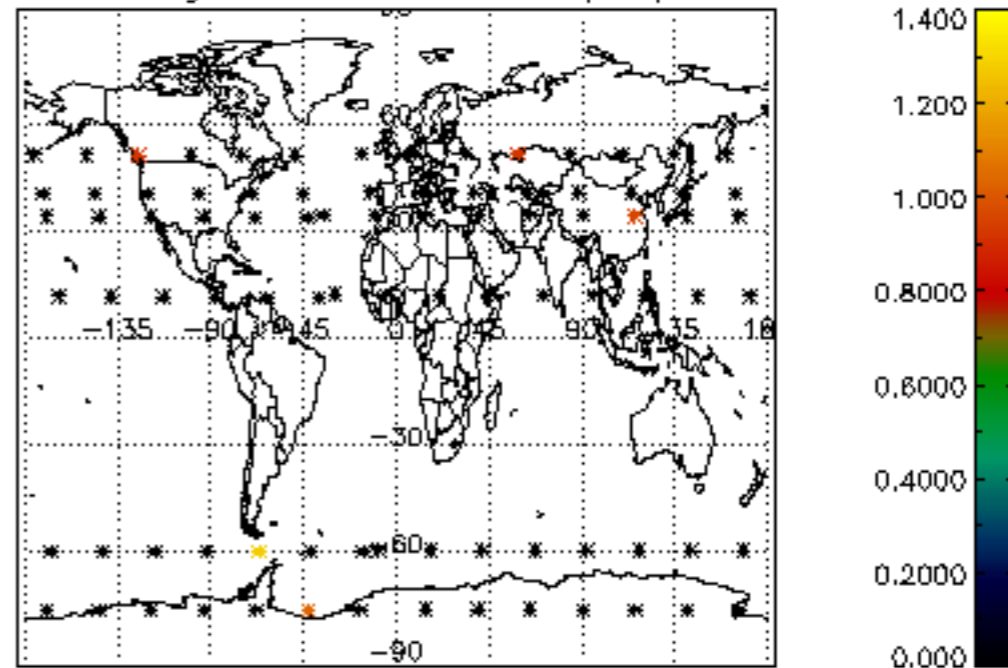
Percentage of datation errors per profile



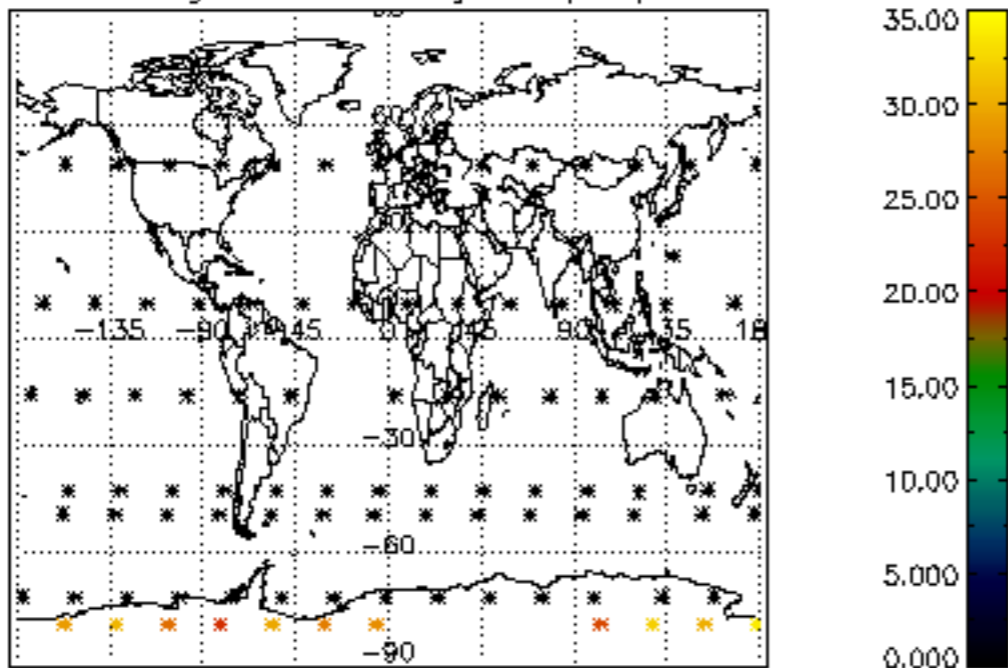
Percentage of star falling outside central band per profile



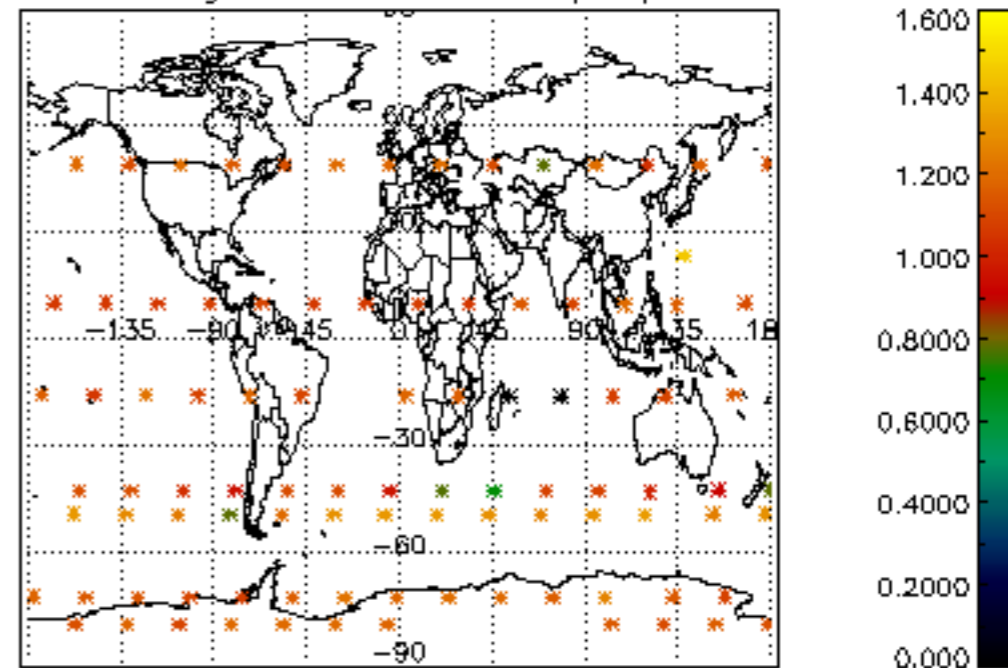
Percentage of saturation errors per profile



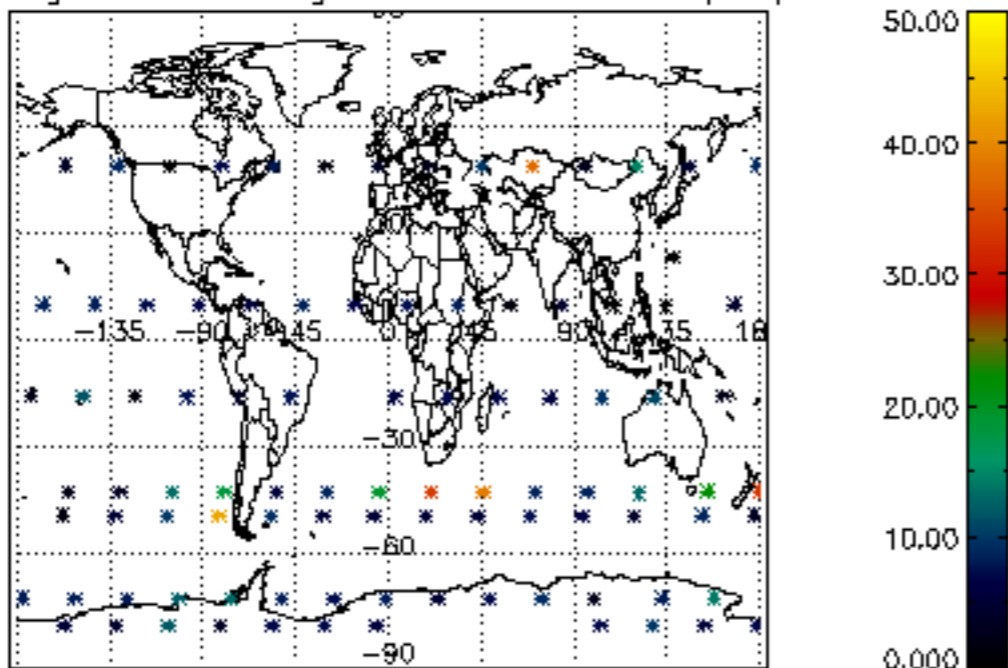
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

