

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	18APR2013 10:49:08
Data source version	GOMOS/6.01
Start time of products	08-09-2005 (08SEP2005 00:00:00)
Stop time of products	09-09-2005 (09SEP2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	200
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

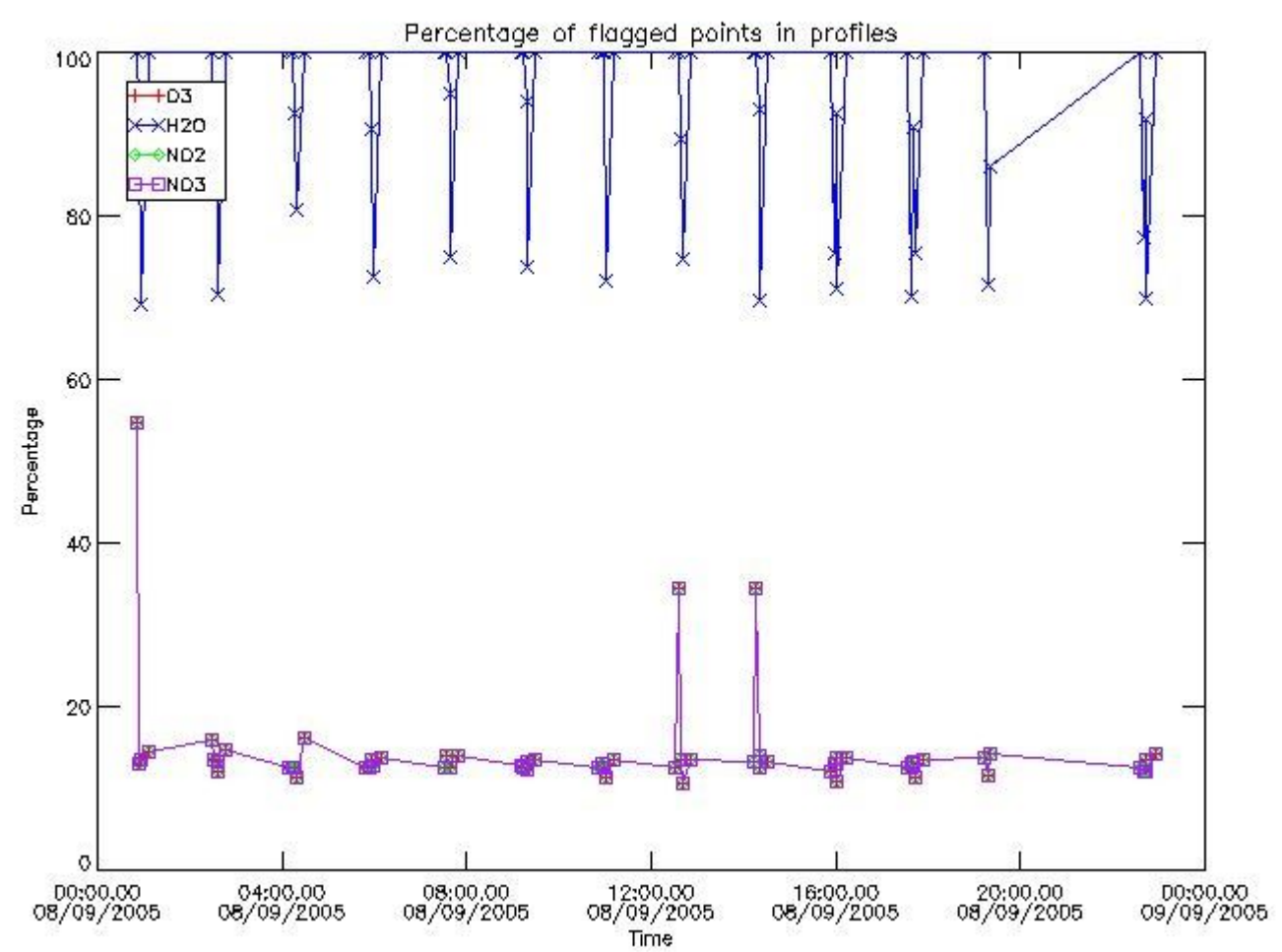
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050908_000054_000000362040_00331_18421_6567.N1	08-SEP-2005 00:00:54	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	18421	No
2	GOM_NL__2PRFIN20050908_000250_000000372040_00331_18421_6568.N1	08-SEP-2005 00:02:50	Bright	36.500	144	18Del Cyg	2.8600	11000.	73	18421	No
3	GOM_NL__2PRFIN20050908_001448_000000332040_00331_18421_6569.N1	08-SEP-2005 00:14:48	Bright	33.000	60	7Bet UMi	2.0810	3950.0	66	18421	No
4	GOM_NL__2PRFIN20050908_002121_000000372040_00331_18421_6570.N1	08-SEP-2005 00:21:21	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	18421	No
5	GOM_NL__2PRFIN20050908_002245_000000462040_00331_18421_6571.N1	08-SEP-2005 00:22:45	Bright	45.500	82	48Bet UMa	2.3650	10600.	91	18421	No
6	GOM_NL__2PRFIN20050908_005132_000000382040_00331_18421_6572.N1	08-SEP-2005 00:51:32	Dark	38.000	70	Zet Pup	2.2460	39000.	76	18421	No
7	GOM_NL__2PRFIN20050908_005500_000000402040_00331_18421_6573.N1	08-SEP-2005 00:55:00	Dark	39.500	46	Del Vel	1.9540	10600.	79	18421	No
8	GOM_NL__2PRFIN20050908_005627_000000492040_00331_18421_6574.N1	08-SEP-2005 00:56:27	Dark	49.000	41	Eps Car	1.8600	4100.0	98	18421	No
9	GOM_NL__2PRFIN20050908_010702_000000362040_00332_18422_6561.N1	08-SEP-2005 01:07:02	Dark	35.500	135	Bet Hyi	2.8200	5800.0	71	18422	No
10	GOM_NL__2PRFIN20050908_011237_000000402040_00332_18422_6562.N1	08-SEP-2005 01:12:37	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	18422	No
11	GOM_NL__2PRFIN20050908_011619_000000412040_00332_18422_6563.N1	08-SEP-2005 01:16:19	Straylight	41.000	31	Alp Gru	1.7340	15200.	82	18422	No
12	GOM_NL__2PRFIN20050908_011907_000000382040_00332_18422_6564.N1	08-SEP-2005 01:19:07	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	18422	No
13	GOM_NL__2PRFIN20050908_012505_000000392040_00332_18422_6565.N1	08-SEP-2005 01:25:05	Bright	39.000	142	49Del Cap	2.8500	8900.0	78	18422	No
14	GOM_NL__2PRFIN20050908_012810_000000372040_00332_18422_6566.N1	08-SEP-2005 01:28:10	Bright	36.500	154	22Bet Aqr	2.8990	5700.0	73	18422	No
15	GOM_NL__2PRFIN20050908_013930_000000352040_00332_18422_6567.N1	08-SEP-2005 01:39:30	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	18422	No
16	GOM_NL__2PRFIN20050908_014130_000000372040_00332_18422_6568.N1	08-SEP-2005 01:41:30	Bright	36.500	66	37Gam Cyg	2.2080	5900.0	73	18422	No
17	GOM_NL__2PRFIN20050908_014326_000000362040_00332_18422_6569.N1	08-SEP-2005 01:43:26	Bright	36.000	144	18Del Cyg	2.8600	11000.	72	18422	No
18	GOM_NL__2PRFIN20050908_015524_000000372040_00332_18422_6570.N1	08-SEP-2005 01:55:24	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	18422	No
19	GOM_NL__2PRFIN20050908_020157_000000372040_00332_18422_6571.N1	08-SEP-2005 02:01:57	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	18422	No
20	GOM_NL__2PRFIN20050908_020321_000000532040_00332_18422_6572.N1	08-SEP-2005 02:03:21	Bright	52.500	82	48Bet UMa	2.3650	10600.	105	18422	No
21	GOM_NL__2PRFIN20050908_022754_000000422040_00332_18422_6573.N1	08-SEP-2005 02:27:54	Dark	41.500	132	15Rho Pup	2.8030	6900.0	83	18422	No
22	GOM_NL__2PRFIN20050908_023208_000000382040_00332_18422_6574.N1	08-SEP-2005 02:32:08	Dark	38.000	70	Zet Pup	2.2460	39000.	76	18422	No
23	GOM_NL__2PRFIN20050908_023536_000000392040_00332_18422_6575.N1	08-SEP-2005 02:35:36	Dark	38.500	46	Del Vel	1.9540	10600.	77	18422	No
24	GOM_NL__2PRFIN20050908_023703_000000432040_00332_18422_6576.N1	08-SEP-2005 02:37:03	Dark	42.500	41	Eps Car	1.8600	4100.0	85	18422	No
25	GOM_NL__2PRFIN20050908_024738_000000382040_00333_18423_6562.N1	08-SEP-2005 02:47:38	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	18423	No
26	GOM_NL__2PRFIN20050908_025313_000000402040_00333_18423_6563.N1	08-SEP-2005 02:53:13	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	18423	No
27	GOM_NL__2PRFIN20050908_025655_000000372040_00333_18423_6564.N1	08-SEP-2005 02:56:55	Straylight	37.000	31	Alp Gru	1.7340	15200.	74	18423	No
28	GOM_NL__2PRFIN20050908_025943_000000372040_00333_18423_6565.N1	08-SEP-2005 02:59:43	Straylight	36.500	172	Gam Gru	3.0030	13100.	73	18423	No
29	GOM_NL__2PRFIN20050908_030541_000000442040_00333_18423_6566.N1	08-SEP-2005 03:05:41	Bright	43.500	142	49Del Cap	2.8500	8900.0	87	18423	No
30	GOM_NL__2PRFIN20050908_030846_000000372040_00333_18423_6567.N1	08-SEP-2005 03:08:46	Bright	37.000	154	22Bet Aqr	2.8990	5700.0	74	18423	No
31	GOM_NL__2PRFIN20050908_032006_000000352040_00333_18423_6568.N1	08-SEP-2005 03:20:06	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	18423	No
32	GOM_NL__2PRFIN20050908_032206_000000382040_00333_18423_6569.N1	08-SEP-2005 03:22:06	Bright	37.500	66	37Gam Cyg	2.2080	5900.0	75	18423	No
33	GOM_NL__2PRFIN20050908_032402_000000372040_00333_18423_6570.N1	08-SEP-2005 03:24:02	Bright	37.000	144	18Del Cyg	2.8600	11000.	74	18423	No
34	GOM_NL__2PRFIN20050908_033600_000000352040_00333_18423_6571.N1	08-SEP-2005 03:36:00	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	18423	No
35	GOM_NL__2PRFIN20050908_034233_000000352040_00333_18423_6572.N1	08-SEP-2005 03:42:33	Bright	34.500	36	50Alp UMa	1.8000	6300.0	69	18423	No
36	GOM_NL__2PRFIN20050908_034358_000000352040_00333_18423_6573.N1	08-SEP-2005 03:43:58	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	18423	No
37	GOM_NL__2PRFIN20050908_040830_000000412040_00333_18423_6574.N1	08-SEP-2005 04:08:30	Dark	40.500	132	15Rho Pup	2.8030	6900.0	81	18423	No
38	GOM_NL__2PRFIN20050908_041244_000000412040_00333_18423_6575.N1	08-SEP-2005 04:12:44	Dark	40.500	70	Zet Pup	2.2460	39000.	81	18423	No
39	GOM_NL__2PRFIN20050908_041612_000000412040_00333_18423_6576.N1	08-SEP-2005 04:16:12	Dark	40.500	46	Del Vel	1.9540	10600.	81	18423	No
40	GOM_NL__2PRFIN20050908_041740_000000502040_00333_18423_6577.N1	08-SEP-2005 04:17:40	Dark	49.500	41	Eps Car	1.8600	4100.0	99	18423	No
41	GOM_NL__2PRFIN20050908_042815_000000382040_00334_18424_6563.N1	08-SEP-2005 04:28:15	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	18424	No
42	GOM_NL__2PRFIN20050908_043349_000000372040_00334_18424_6564.N1	08-SEP-2005 04:33:49	Straylight	36.500	148	Alp Tuc	2.8780	4100.0	73	18424	No

161	GOM_NL__2PRFIN20050908_164853_000000362040_00341_18431_6672.N1	08-SEP-2005 16:48:53	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	18431	No
162	GOM_NL__2PRFIN20050908_170051_000000372040_00341_18431_6673.N1	08-SEP-2005 17:00:51	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	18431	No
163	GOM_NL__2PRFIN20050908_170723_000000522040_00341_18431_6674.N1	08-SEP-2005 17:07:23	Bright	52.000	36	50Alp UMa	1.8000	6300.0	104	18431	No
164	GOM_NL__2PRFIN20050908_170848_000000332040_00341_18431_6675.N1	08-SEP-2005 17:08:48	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	18431	No
165	GOM_NL__2PRFIN20050908_173321_000000412040_00341_18431_6676.N1	08-SEP-2005 17:33:21	Dark	40.500	132	15Rho Pup	2.8030	6900.0	81	18431	No
166	GOM_NL__2PRFIN20050908_173747_000000392040_00341_18431_6677.N1	08-SEP-2005 17:37:47	Dark	39.000	65	Lam Vel	2.2040	4400.0	78	18431	No
167	GOM_NL__2PRFIN20050908_174101_000000392040_00341_18431_6678.N1	08-SEP-2005 17:41:01	Dark	38.500	46	Del Vel	1.9540	10600.	77	18431	No
168	GOM_NL__2PRFIN20050908_174229_000000452040_00341_18431_6679.N1	08-SEP-2005 17:42:29	Dark	45.000	41	Eps Car	1.8600	4100.0	90	18431	No
169	GOM_NL__2PRFIN20050908_175304_000000382040_00342_18432_6664.N1	08-SEP-2005 17:53:04	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	18432	No
170	GOM_NL__2PRFIN20050908_175839_000000372040_00342_18432_6665.N1	08-SEP-2005 17:58:39	Straylight	37.000	148	Alp Tuc	2.8780	4100.0	74	18432	No
171	GOM_NL__2PRFIN20050908_180221_000000402040_00342_18432_6666.N1	08-SEP-2005 18:02:21	Straylight	40.000	31	Alp Gru	1.7340	15200.	80	18432	No
172	GOM_NL__2PRFIN20050908_180508_000000382040_00342_18432_6667.N1	08-SEP-2005 18:05:08	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	18432	No
173	GOM_NL__2PRFIN20050908_181106_000000402040_00342_18432_6668.N1	08-SEP-2005 18:11:06	Bright	40.000	142	49Del Cap	2.8500	8900.0	80	18432	No
174	GOM_NL__2PRFIN20050908_181411_000000372040_00342_18432_6669.N1	08-SEP-2005 18:14:11	Bright	36.500	154	22Bet Aqr	2.8990	5700.0	73	18432	No
175	GOM_NL__2PRFIN20050908_182532_000000352040_00342_18432_6670.N1	08-SEP-2005 18:25:32	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	18432	No
176	GOM_NL__2PRFIN20050908_182732_000000392040_00342_18432_6671.N1	08-SEP-2005 18:27:32	Bright	38.500	66	37Gam Cyg	2.2080	5900.0	77	18432	No
177	GOM_NL__2PRFIN20050908_182929_000000362040_00342_18432_6672.N1	08-SEP-2005 18:29:29	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	18432	No
178	GOM_NL__2PRFIN20050908_184127_000000372040_00342_18432_6673.N1	08-SEP-2005 18:41:27	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	18432	No
179	GOM_NL__2PRFIN20050908_184759_000000522040_00342_18432_6674.N1	08-SEP-2005 18:47:59	Bright	52.000	36	50Alp UMa	1.8000	6300.0	104	18432	No
180	GOM_NL__2PRFIN20050908_184924_000000332040_00342_18432_6675.N1	08-SEP-2005 18:49:24	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	18432	No
181	GOM_NL__2PRFIN20050908_191357_000000412040_00342_18432_6676.N1	08-SEP-2005 19:13:57	Dark	41.000	132	15Rho Pup	2.8030	6900.0	82	18432	No
182	GOM_NL__2PRFIN20050908_191823_000000452040_00342_18432_6677.N1	08-SEP-2005 19:18:23	Dark	44.500	65	Lam Vel	2.2040	4400.0	89	18432	No
183	GOM_NL__2PRFIN20050908_192137_000000392040_00342_18432_6678.N1	08-SEP-2005 19:21:37	Dark	39.000	46	Del Vel	1.9540	10600.	78	18432	No
184	GOM_NL__2PRFIN20050908_221036_000000332040_00344_18434_6711.N1	08-SEP-2005 22:10:36	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	18434	No
185	GOM_NL__2PRFIN20050908_223509_000000412040_00344_18434_6712.N1	08-SEP-2005 22:35:09	Dark	41.000	132	15Rho Pup	2.8030	6900.0	82	18434	No
186	GOM_NL__2PRFIN20050908_223935_000000432040_00344_18434_6713.N1	08-SEP-2005 22:39:35	Dark	42.500	65	Lam Vel	2.2040	4400.0	85	18434	No
187	GOM_NL__2PRFIN20050908_224249_000000382040_00344_18434_6714.N1	08-SEP-2005 22:42:49	Dark	37.500	46	Del Vel	1.9540	10600.	75	18434	No
188	GOM_NL__2PRFIN20050908_224417_000000422040_00344_18434_6715.N1	08-SEP-2005 22:44:17	Dark	42.000	41	Eps Car	1.8600	4100.0	84	18434	No
189	GOM_NL__2PRFIN20050908_225452_000000362040_00345_18435_6666.N1	08-SEP-2005 22:54:52	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	18435	No
190	GOM_NL__2PRFIN20050908_230027_000000392040_00345_18435_6667.N1	08-SEP-2005 23:00:27	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	18435	No
191	GOM_NL__2PRFIN20050908_230409_000000392040_00345_18435_6668.N1	08-SEP-2005 23:04:09	Straylight	39.000	31	Alp Gru	1.7340	15200.	78	18435	No
192	GOM_NL__2PRFIN20050908_230657_000000382040_00345_18435_6669.N1	08-SEP-2005 23:06:57	Straylight	37.500	172	Gam Gru	3.0030	13100.	75	18435	No
193	GOM_NL__2PRFIN20050908_231254_000000402040_00345_18435_6670.N1	08-SEP-2005 23:12:54	Bright	39.500	142	49Del Cap	2.8500	8900.0	79	18435	No
194	GOM_NL__2PRFIN20050908_231559_000000362040_00345_18435_6671.N1	08-SEP-2005 23:15:59	Bright	36.000	154	22Bet Aqr	2.8990	5700.0	72	18435	No
195	GOM_NL__2PRFIN20050908_232720_000000352040_00345_18435_6672.N1	08-SEP-2005 23:27:20	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	18435	No
196	GOM_NL__2PRFIN20050908_232920_000000352040_00345_18435_6673.N1	08-SEP-2005 23:29:20	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	18435	No
197	GOM_NL__2PRFIN20050908_233118_000000352040_00345_18435_6674.N1	08-SEP-2005 23:31:18	Bright	34.500	144	18Del Cyg	2.8600	11000.	69	18435	No
198	GOM_NL__2PRFIN20050908_234316_000000322040_00345_18435_6675.N1	08-SEP-2005 23:43:16	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	18435	No
199	GOM_NL__2PRFIN20050908_234948_000000372040_00345_18435_6676.N1	08-SEP-2005 23:49:48	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	18435	No
200	GOM_NL__2PRFIN20050908_235112_000000362040_00345_18435_6677.N1	08-SEP-2005 23:51:12	Bright	36.000	82	48Bet UMa	2.3650	10600.	72	18435	No

3. Quality information per product

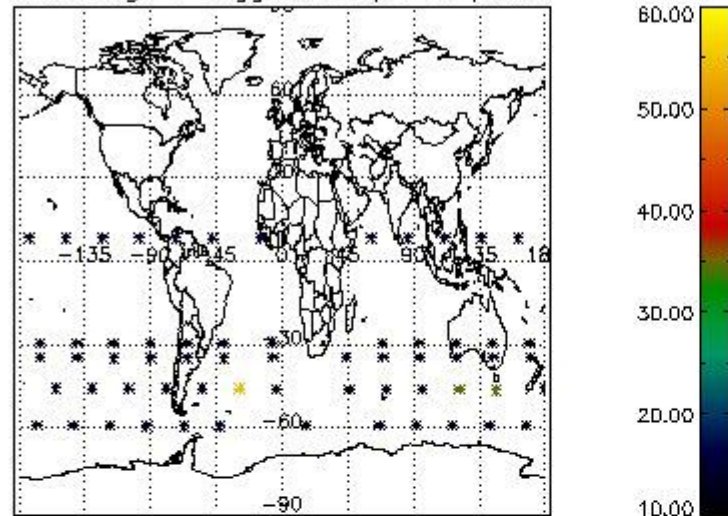
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

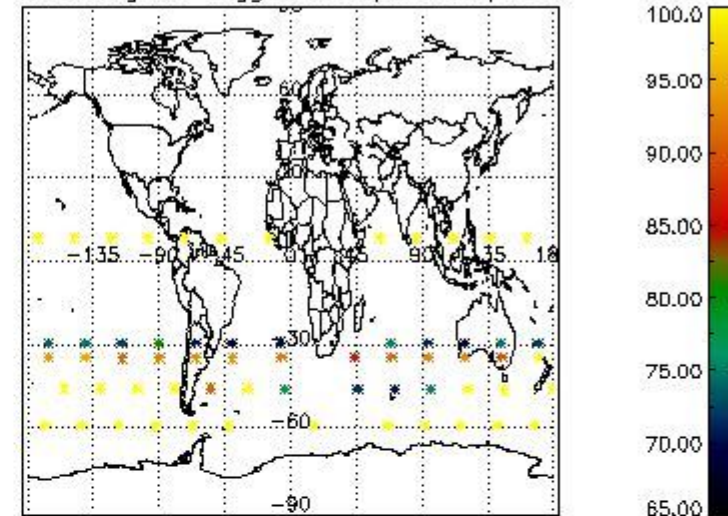


3.2 Plot quality information per product (world map)

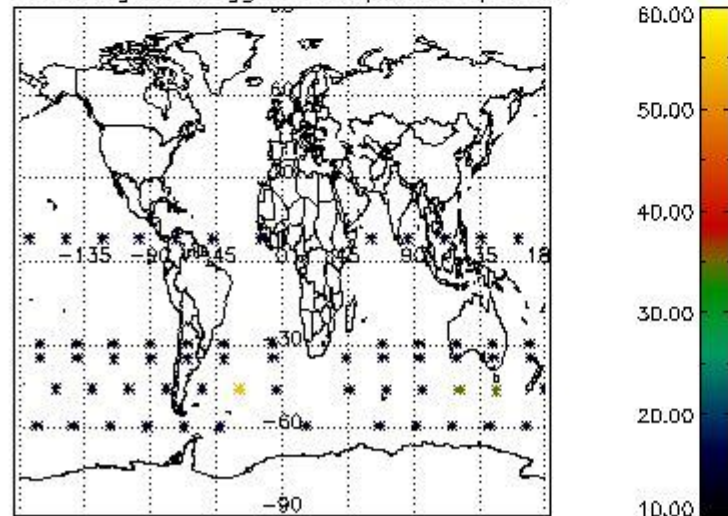
Percentage of flagged data per O3 profile



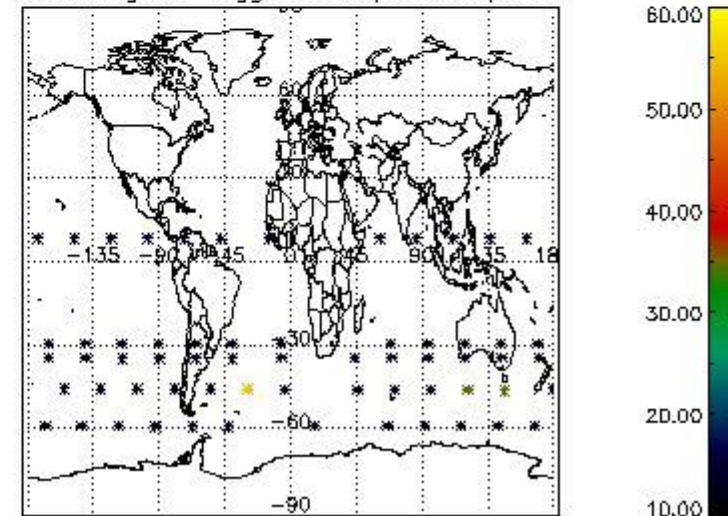
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

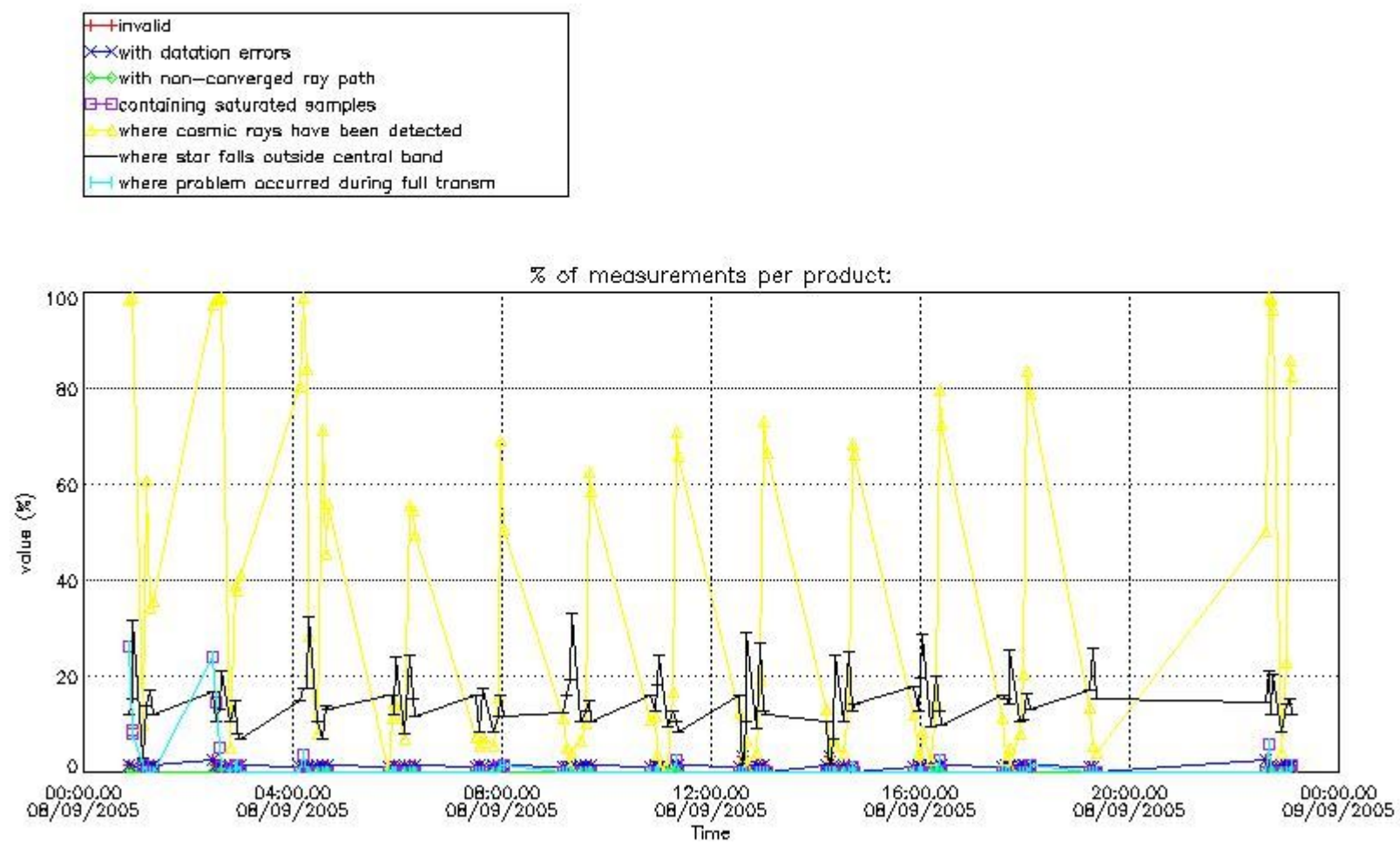


4. Level 1 quality information per product

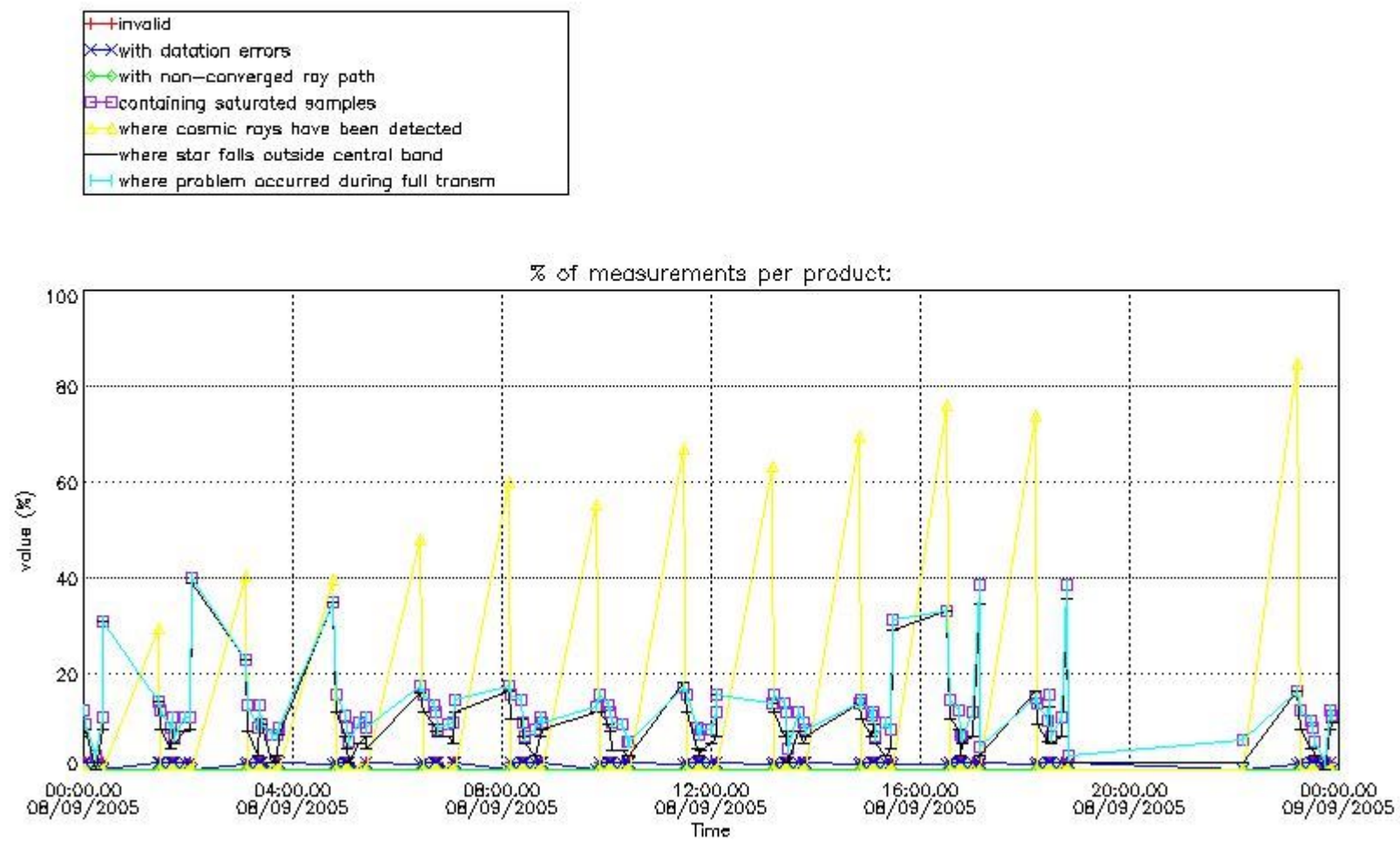
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



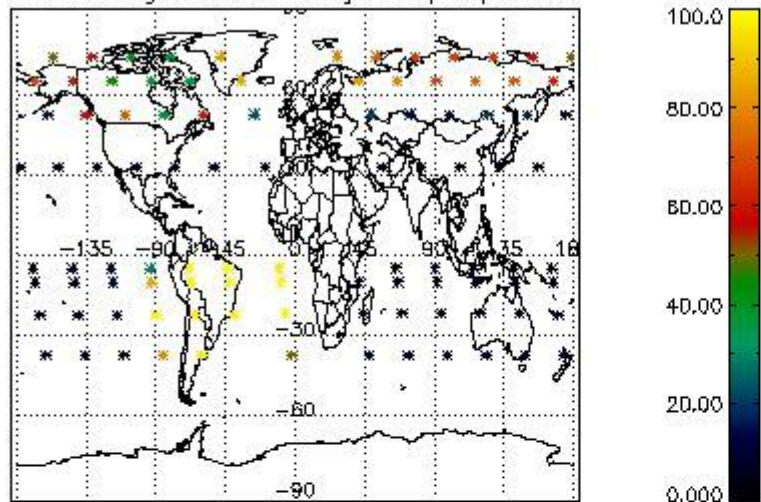
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



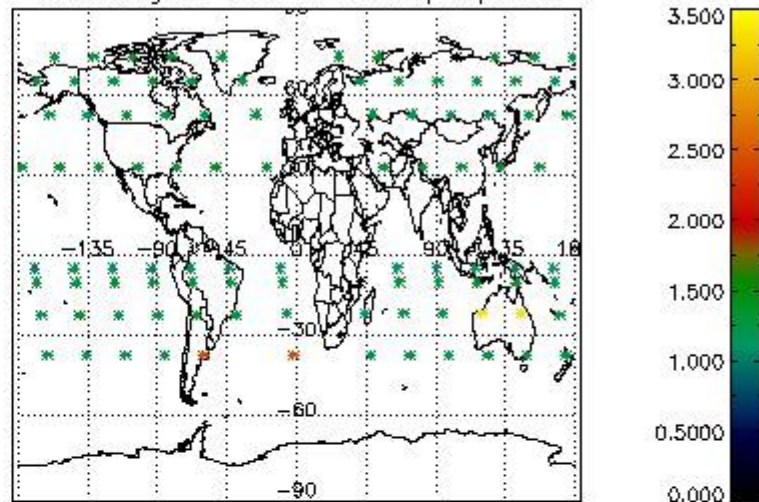
4.2 Plot quality information per product coming from level 1b processing (world map)

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

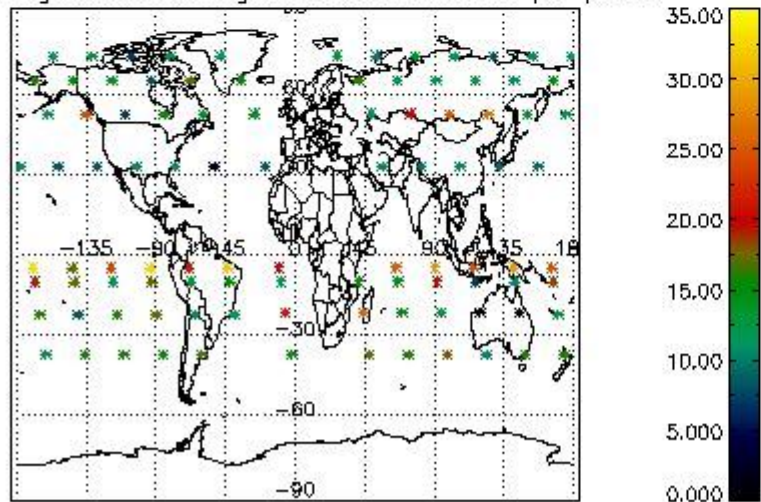
Percentage of cosmic ray hits per profile



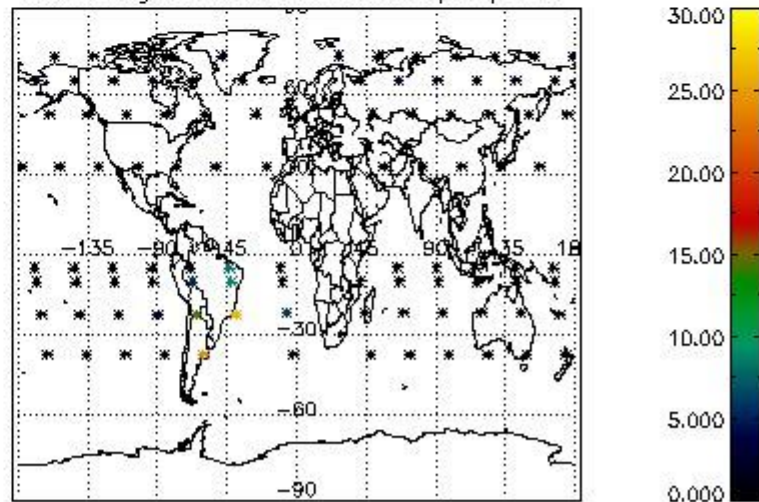
Percentage of datation errors per profile



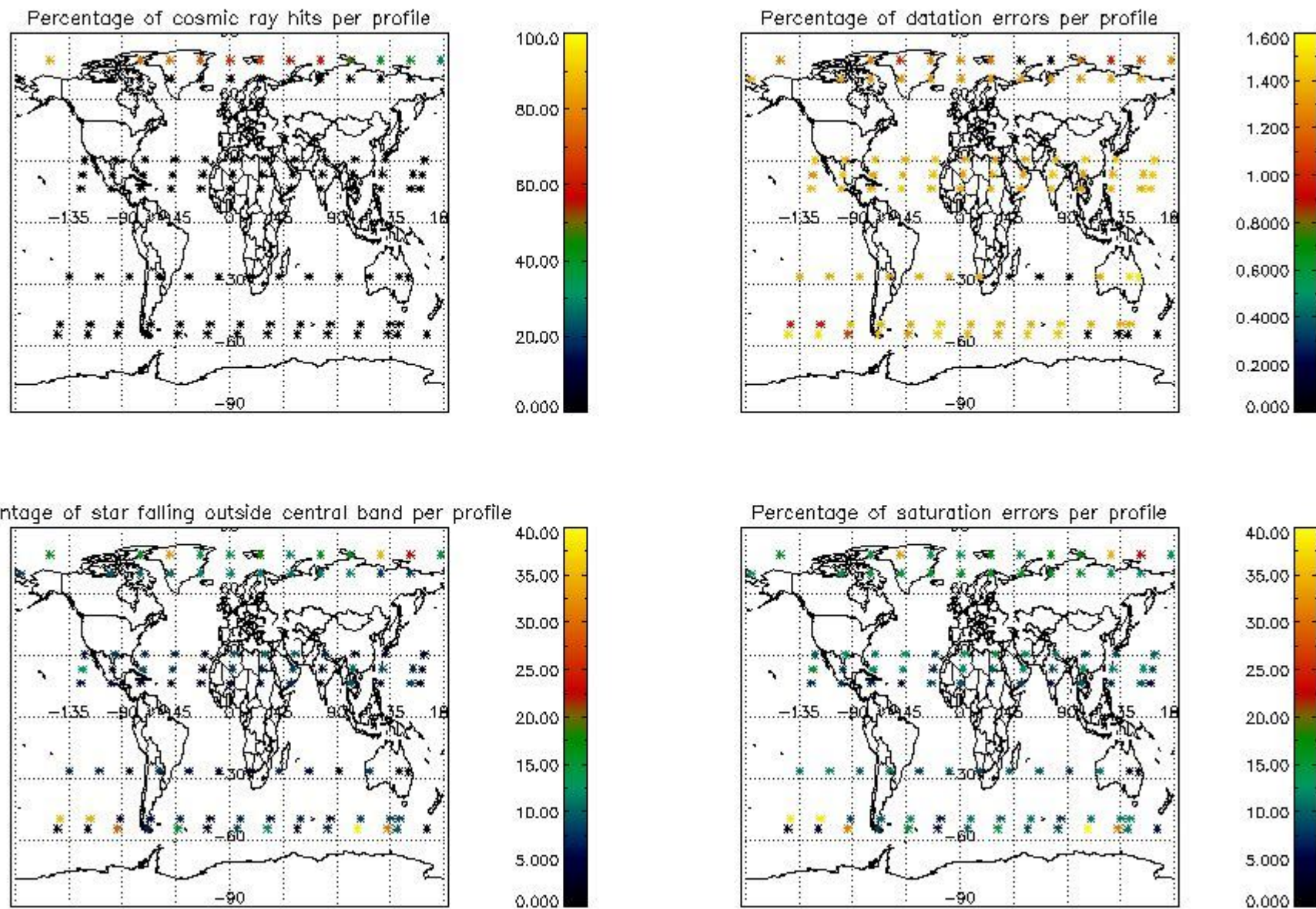
Percentage of star falling outside central band per profile



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

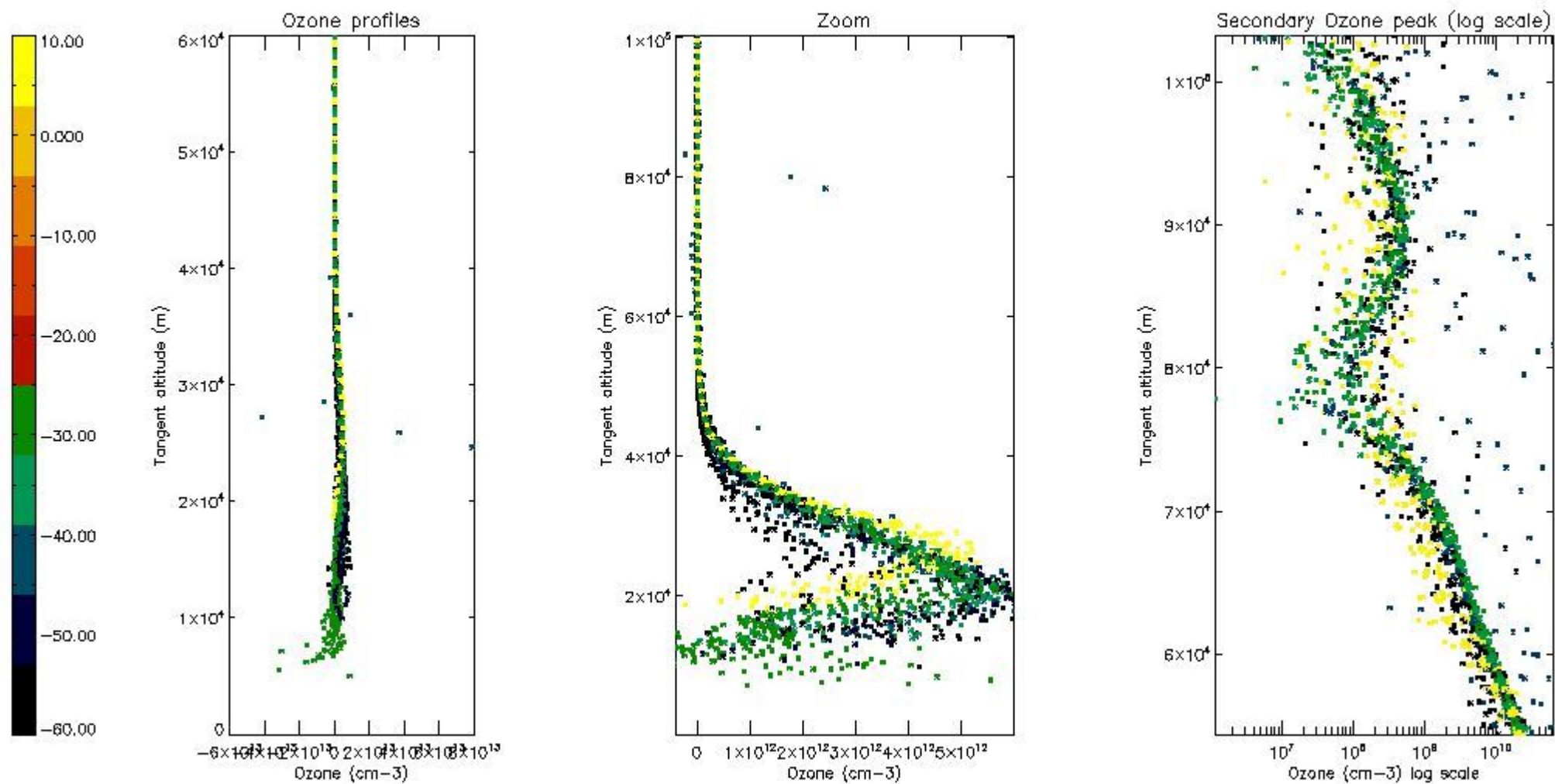
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	16

STD < 10	11
STD < 5	4

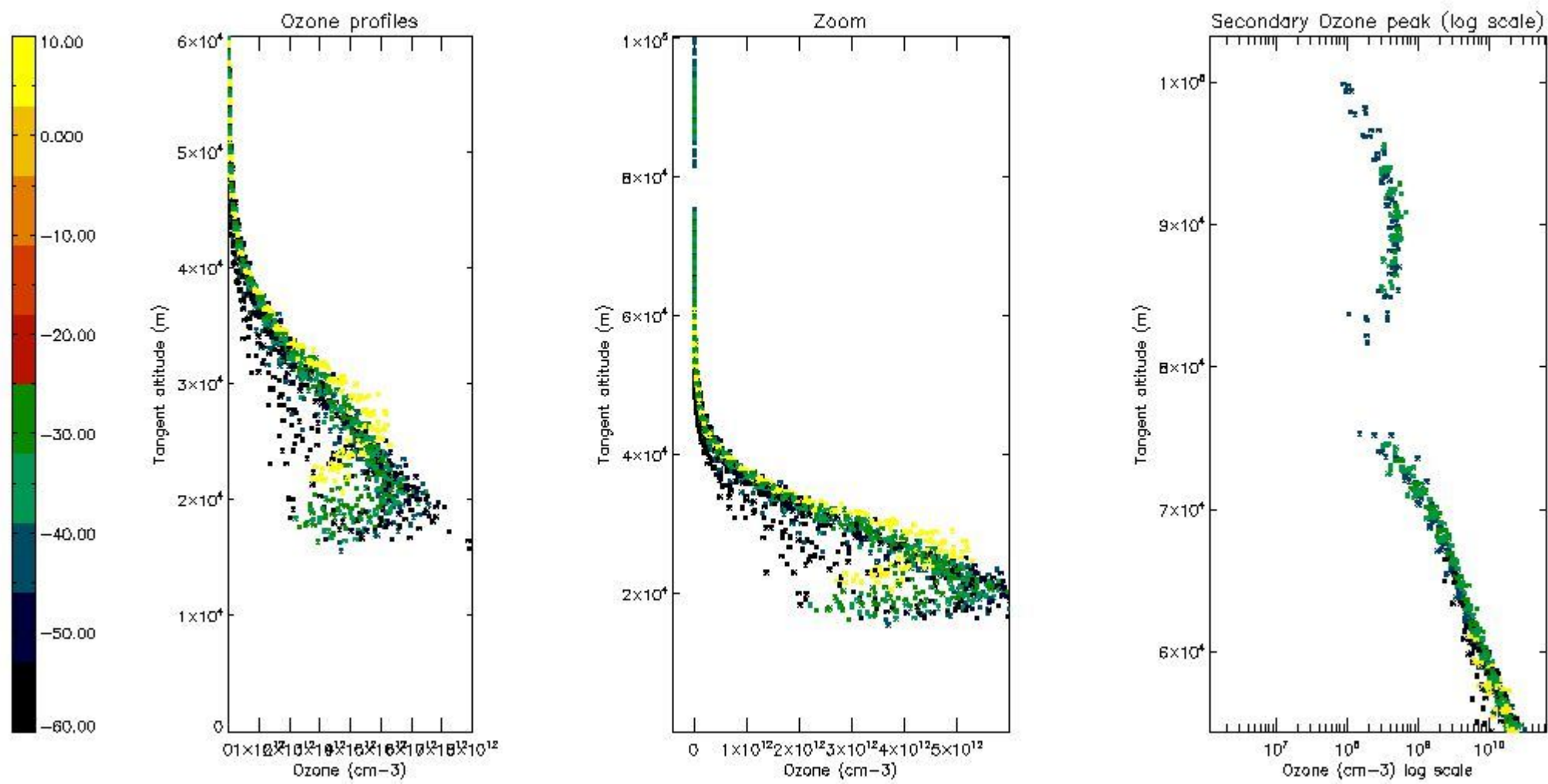
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



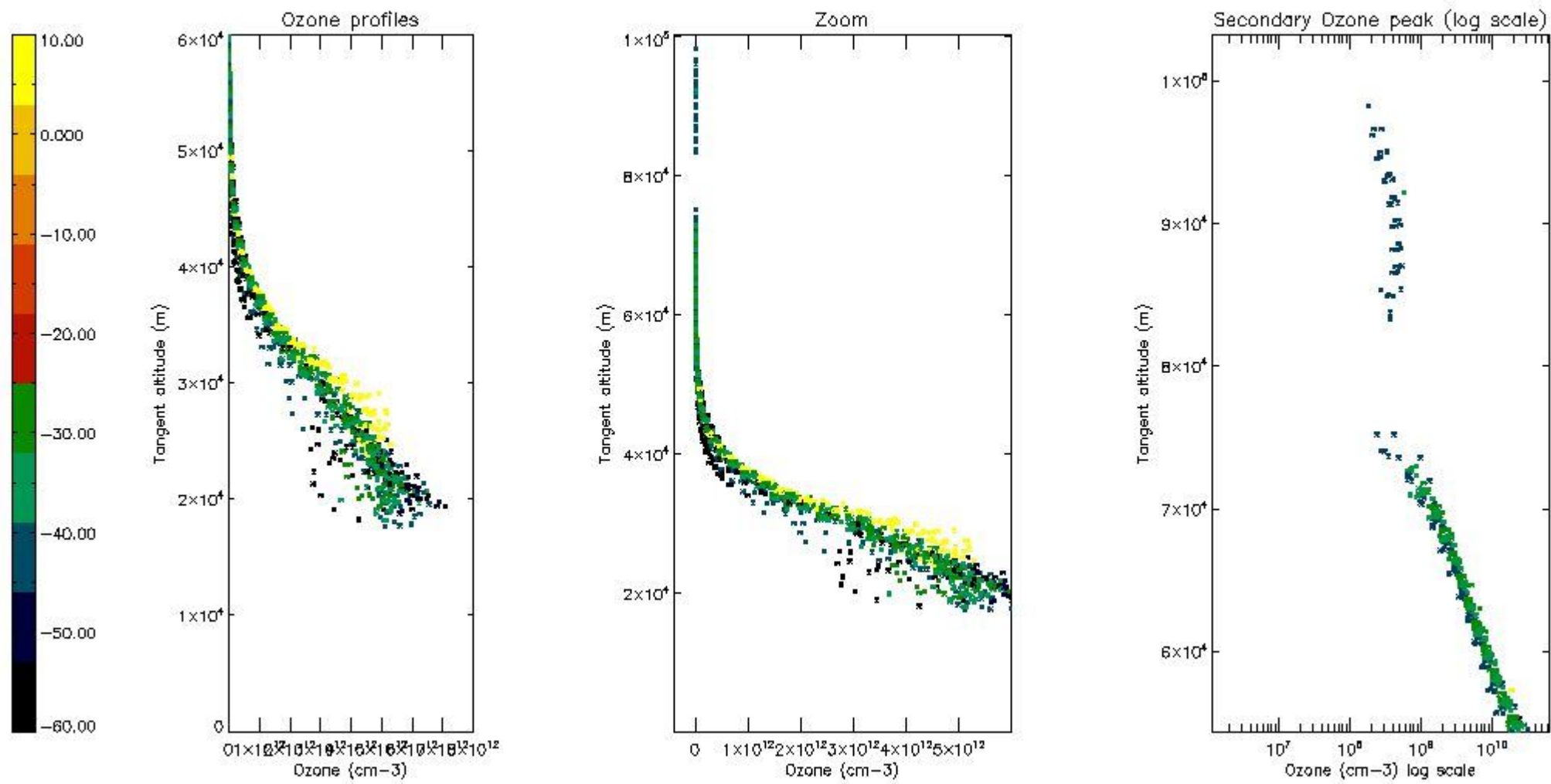
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



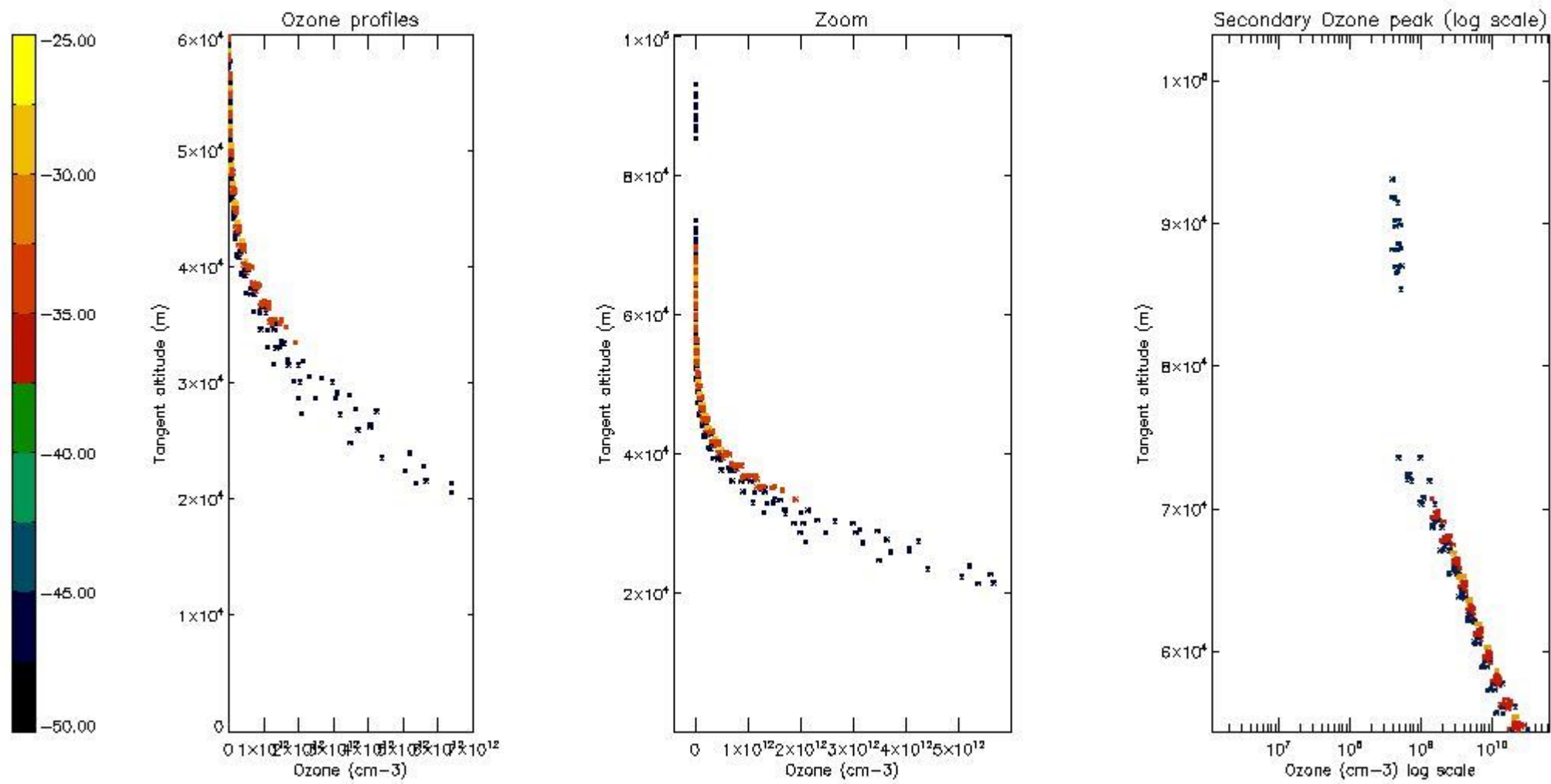
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



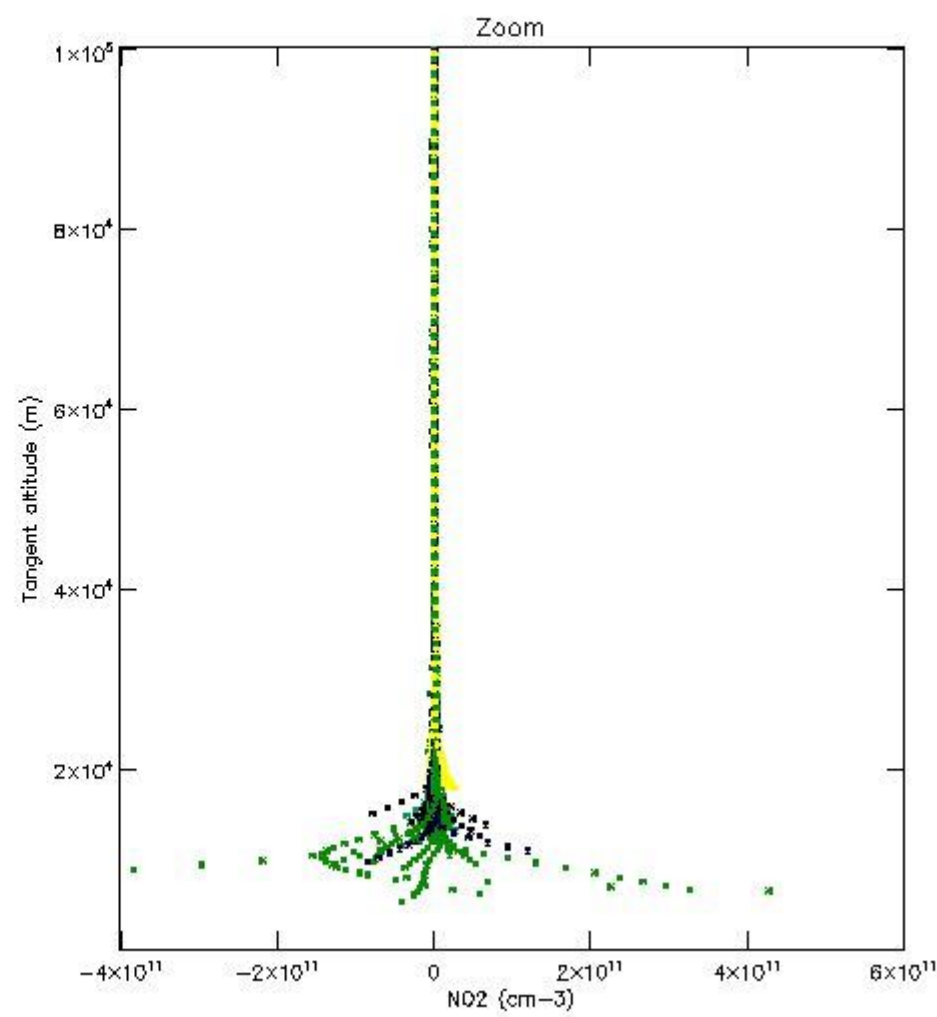
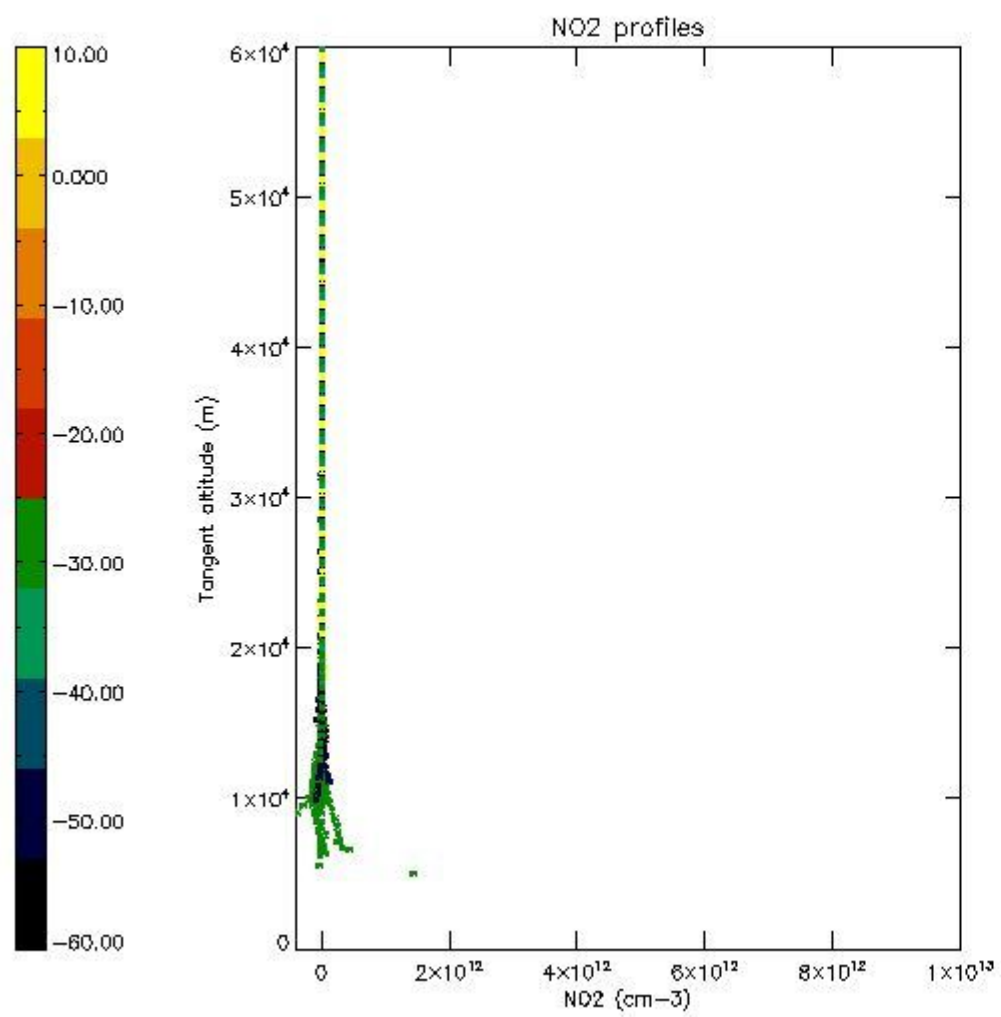
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



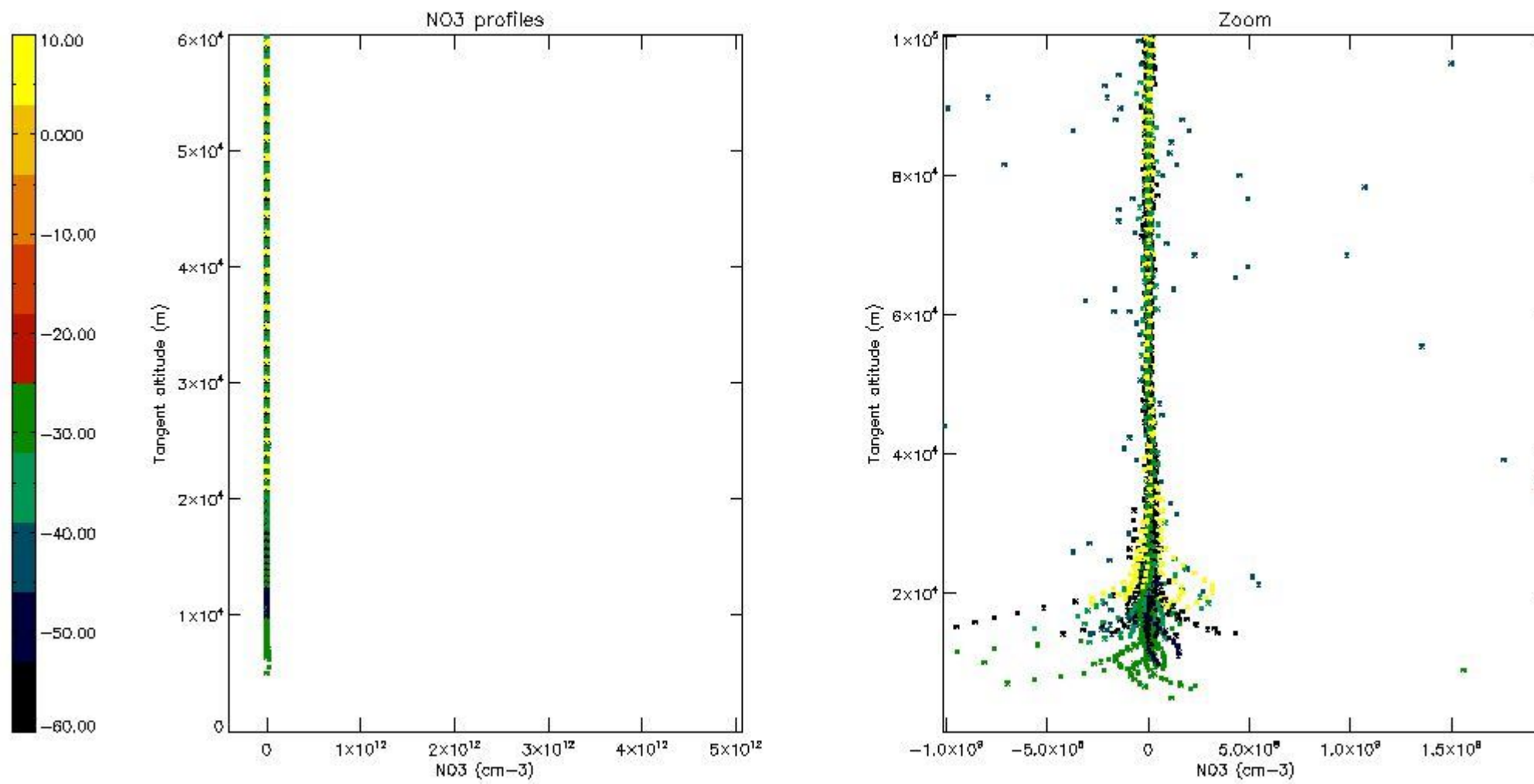
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	08-SEP-2005 00:00:54
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-SEP-2005 00:00:54
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-SEP-2005 00:00:54

GOMOS Level 2 Daily Report

SUMMARY

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[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

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

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

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

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

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

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[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

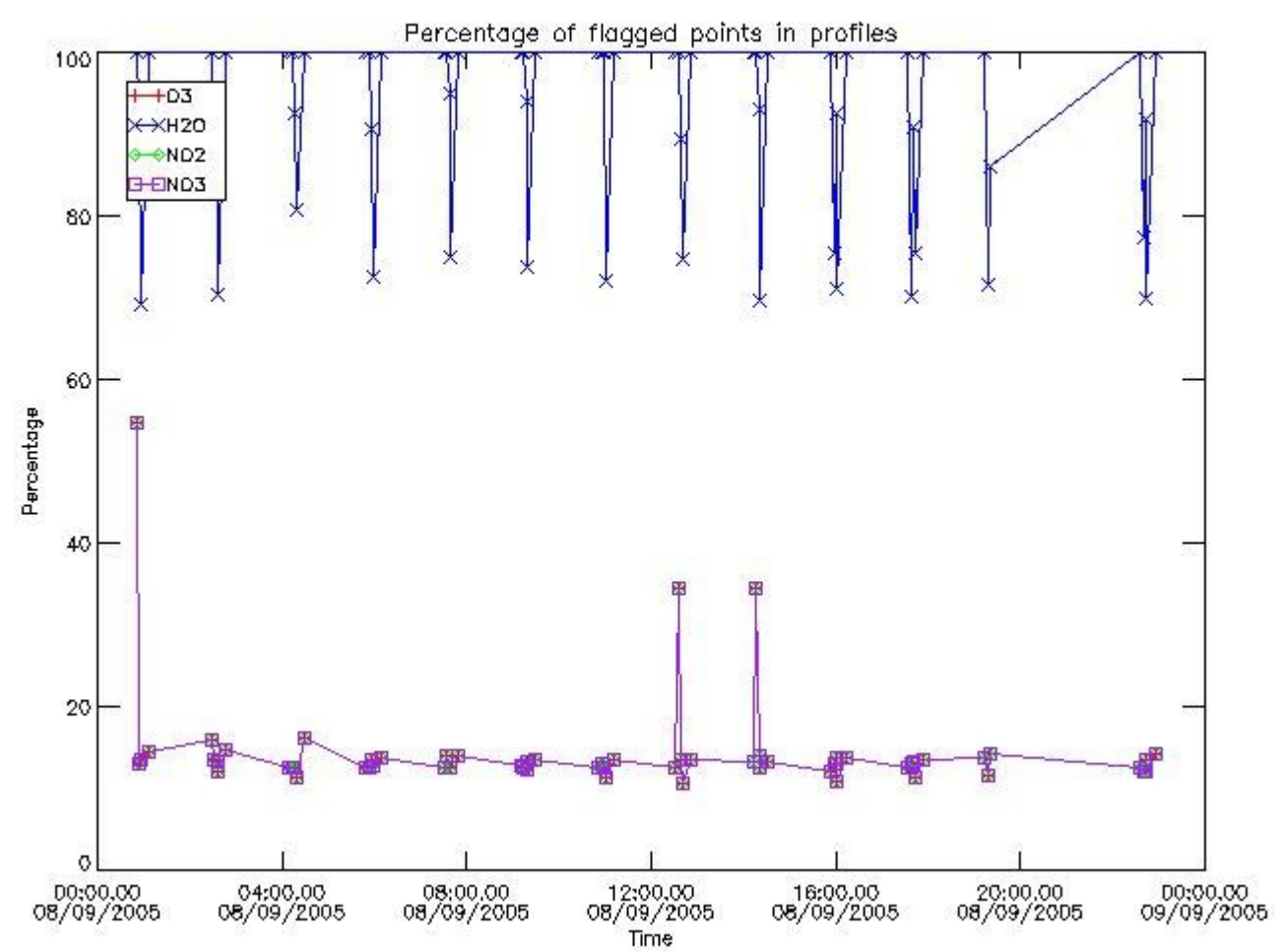
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20050908_164853_000000362040_00341_18431_6672.N1	08-SEP-2005 16:48:53	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	18431	No
162	GOM_NL__2PRFIN20050908_170051_000000372040_00341_18431_6673.N1	08-SEP-2005 17:00:51	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	18431	No
163	GOM_NL__2PRFIN20050908_170723_000000522040_00341_18431_6674.N1	08-SEP-2005 17:07:23	Bright	52.000	36	50Alp UMa	1.8000	6300.0	104	18431	No
164	GOM_NL__2PRFIN20050908_170848_000000332040_00341_18431_6675.N1	08-SEP-2005 17:08:48	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	18431	No
165	GOM_NL__2PRFIN20050908_173321_000000412040_00341_18431_6676.N1	08-SEP-2005 17:33:21	Dark	40.500	132	15Rho Pup	2.8030	6900.0	81	18431	No
166	GOM_NL__2PRFIN20050908_173747_000000392040_00341_18431_6677.N1	08-SEP-2005 17:37:47	Dark	39.000	65	Lam Vel	2.2040	4400.0	78	18431	No
167	GOM_NL__2PRFIN20050908_174101_000000392040_00341_18431_6678.N1	08-SEP-2005 17:41:01	Dark	38.500	46	Del Vel	1.9540	10600.	77	18431	No
168	GOM_NL__2PRFIN20050908_174229_000000452040_00341_18431_6679.N1	08-SEP-2005 17:42:29	Dark	45.000	41	Eps Car	1.8600	4100.0	90	18431	No
169	GOM_NL__2PRFIN20050908_175304_000000382040_00342_18432_6664.N1	08-SEP-2005 17:53:04	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	18432	No
170	GOM_NL__2PRFIN20050908_175839_000000372040_00342_18432_6665.N1	08-SEP-2005 17:58:39	Straylight	37.000	148	Alp Tuc	2.8780	4100.0	74	18432	No
171	GOM_NL__2PRFIN20050908_180221_000000402040_00342_18432_6666.N1	08-SEP-2005 18:02:21	Straylight	40.000	31	Alp Gru	1.7340	15200.	80	18432	No
172	GOM_NL__2PRFIN20050908_180508_000000382040_00342_18432_6667.N1	08-SEP-2005 18:05:08	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	18432	No
173	GOM_NL__2PRFIN20050908_181106_000000402040_00342_18432_6668.N1	08-SEP-2005 18:11:06	Bright	40.000	142	49Del Cap	2.8500	8900.0	80	18432	No
174	GOM_NL__2PRFIN20050908_181411_000000372040_00342_18432_6669.N1	08-SEP-2005 18:14:11	Bright	36.500	154	22Bet Aqr	2.8990	5700.0	73	18432	No
175	GOM_NL__2PRFIN20050908_182532_000000352040_00342_18432_6670.N1	08-SEP-2005 18:25:32	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	18432	No
176	GOM_NL__2PRFIN20050908_182732_000000392040_00342_18432_6671.N1	08-SEP-2005 18:27:32	Bright	38.500	66	37Gam Cyg	2.2080	5900.0	77	18432	No
177	GOM_NL__2PRFIN20050908_182929_000000362040_00342_18432_6672.N1	08-SEP-2005 18:29:29	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	18432	No
178	GOM_NL__2PRFIN20050908_184127_000000372040_00342_18432_6673.N1	08-SEP-2005 18:41:27	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	18432	No
179	GOM_NL__2PRFIN20050908_184759_000000522040_00342_18432_6674.N1	08-SEP-2005 18:47:59	Bright	52.000	36	50Alp UMa	1.8000	6300.0	104	18432	No
180	GOM_NL__2PRFIN20050908_184924_000000332040_00342_18432_6675.N1	08-SEP-2005 18:49:24	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	18432	No
181	GOM_NL__2PRFIN20050908_191357_000000412040_00342_18432_6676.N1	08-SEP-2005 19:13:57	Dark	41.000	132	15Rho Pup	2.8030	6900.0	82	18432	No
182	GOM_NL__2PRFIN20050908_191823_000000452040_00342_18432_6677.N1	08-SEP-2005 19:18:23	Dark	44.500	65	Lam Vel	2.2040	4400.0	89	18432	No
183	GOM_NL__2PRFIN20050908_192137_000000392040_00342_18432_6678.N1	08-SEP-2005 19:21:37	Dark	39.000	46	Del Vel	1.9540	10600.	78	18432	No
184	GOM_NL__2PRFIN20050908_221036_000000332040_00344_18434_6711.N1	08-SEP-2005 22:10:36	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	18434	No
185	GOM_NL__2PRFIN20050908_223509_000000412040_00344_18434_6712.N1	08-SEP-2005 22:35:09	Dark	41.000	132	15Rho Pup	2.8030	6900.0	82	18434	No
186	GOM_NL__2PRFIN20050908_223935_000000432040_00344_18434_6713.N1	08-SEP-2005 22:39:35	Dark	42.500	65	Lam Vel	2.2040	4400.0	85	18434	No
187	GOM_NL__2PRFIN20050908_224249_000000382040_00344_18434_6714.N1	08-SEP-2005 22:42:49	Dark	37.500	46	Del Vel	1.9540	10600.	75	18434	No
188	GOM_NL__2PRFIN20050908_224417_000000422040_00344_18434_6715.N1	08-SEP-2005 22:44:17	Dark	42.000	41	Eps Car	1.8600	4100.0	84	18434	No
189	GOM_NL__2PRFIN20050908_225452_000000362040_00345_18435_6666.N1	08-SEP-2005 22:54:52	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	18435	No
190	GOM_NL__2PRFIN20050908_230027_000000392040_00345_18435_6667.N1	08-SEP-2005 23:00:27	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	18435	No
191	GOM_NL__2PRFIN20050908_230409_000000392040_00345_18435_6668.N1	08-SEP-2005 23:04:09	Straylight	39.000	31	Alp Gru	1.7340	15200.	78	18435	No
192	GOM_NL__2PRFIN20050908_230657_000000382040_00345_18435_6669.N1	08-SEP-2005 23:06:57	Straylight	37.500	172	Gam Gru	3.0030	13100.	75	18435	No
193	GOM_NL__2PRFIN20050908_231254_000000402040_00345_18435_6670.N1	08-SEP-2005 23:12:54	Bright	39.500	142	49Del Cap	2.8500	8900.0	79	18435	No
194	GOM_NL__2PRFIN20050908_231559_000000362040_00345_18435_6671.N1	08-SEP-2005 23:15:59	Bright	36.000	154	22Bet Aqr	2.8990	5700.0	72	18435	No
195	GOM_NL__2PRFIN20050908_232720_000000352040_00345_18435_6672.N1	08-SEP-2005 23:27:20	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	18435	No
196	GOM_NL__2PRFIN20050908_232920_000000352040_00345_18435_6673.N1	08-SEP-2005 23:29:20	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	18435	No
197	GOM_NL__2PRFIN20050908_233118_000000352040_00345_18435_6674.N1	08-SEP-2005 23:31:18	Bright	34.500	144	18Del Cyg	2.8600	11000.	69	18435	No
198	GOM_NL__2PRFIN20050908_234316_000000322040_00345_18435_6675.N1	08-SEP-2005 23:43:16	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	18435	No
199	GOM_NL__2PRFIN20050908_234948_000000372040_00345_18435_6676.N1	08-SEP-2005 23:49:48	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	18435	No
200	GOM_NL__2PRFIN20050908_235112_000000362040_00345_18435_6677.N1	08-SEP-2005 23:51:12	Bright	36.000	82	48Bet UMa	2.3650	10600.	72	18435	No

3. Quality information per product

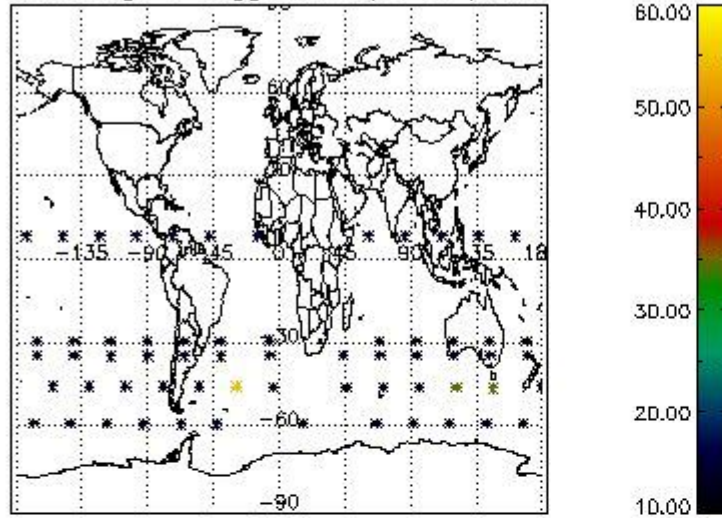
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

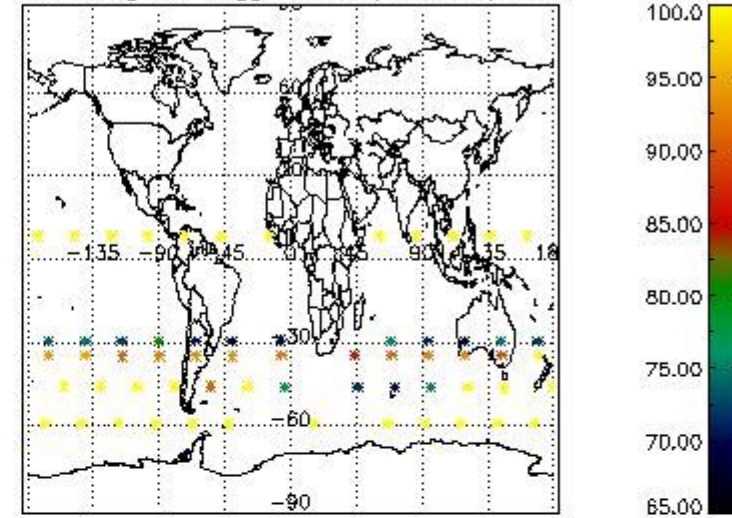


3.2 Plot quality information per product (world map)

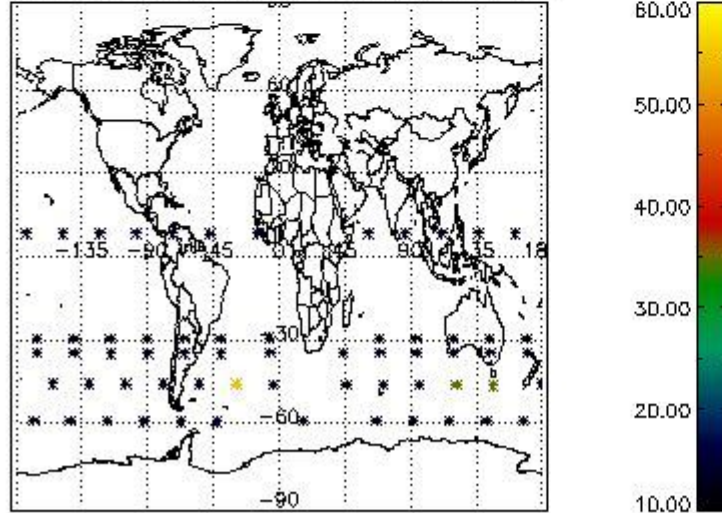
Percentage of flagged data per O3 profile



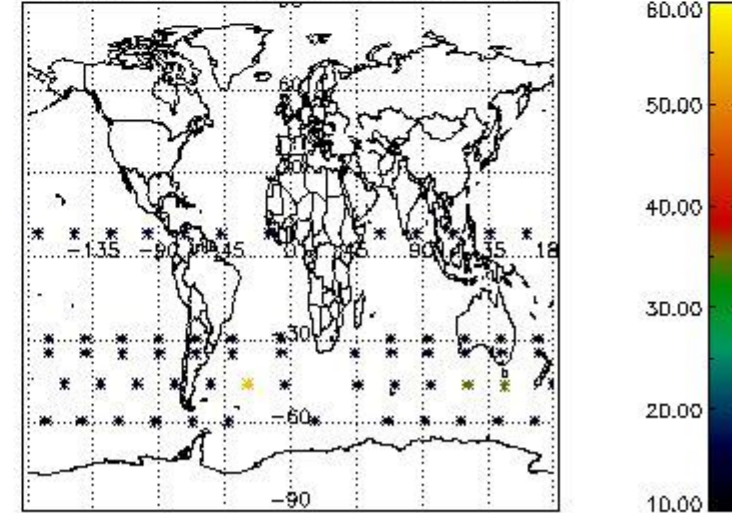
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

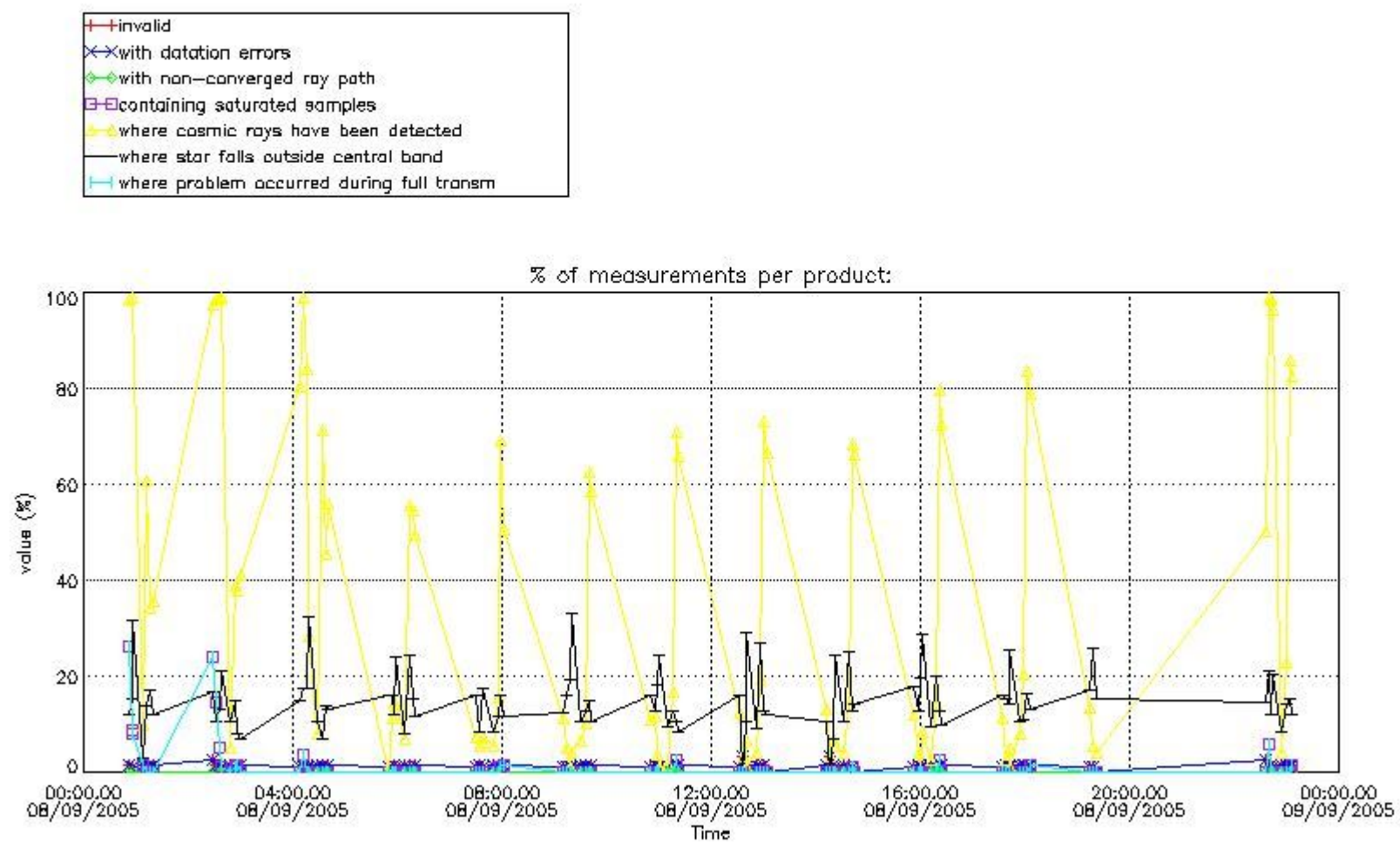


4. Level 1 quality information per product

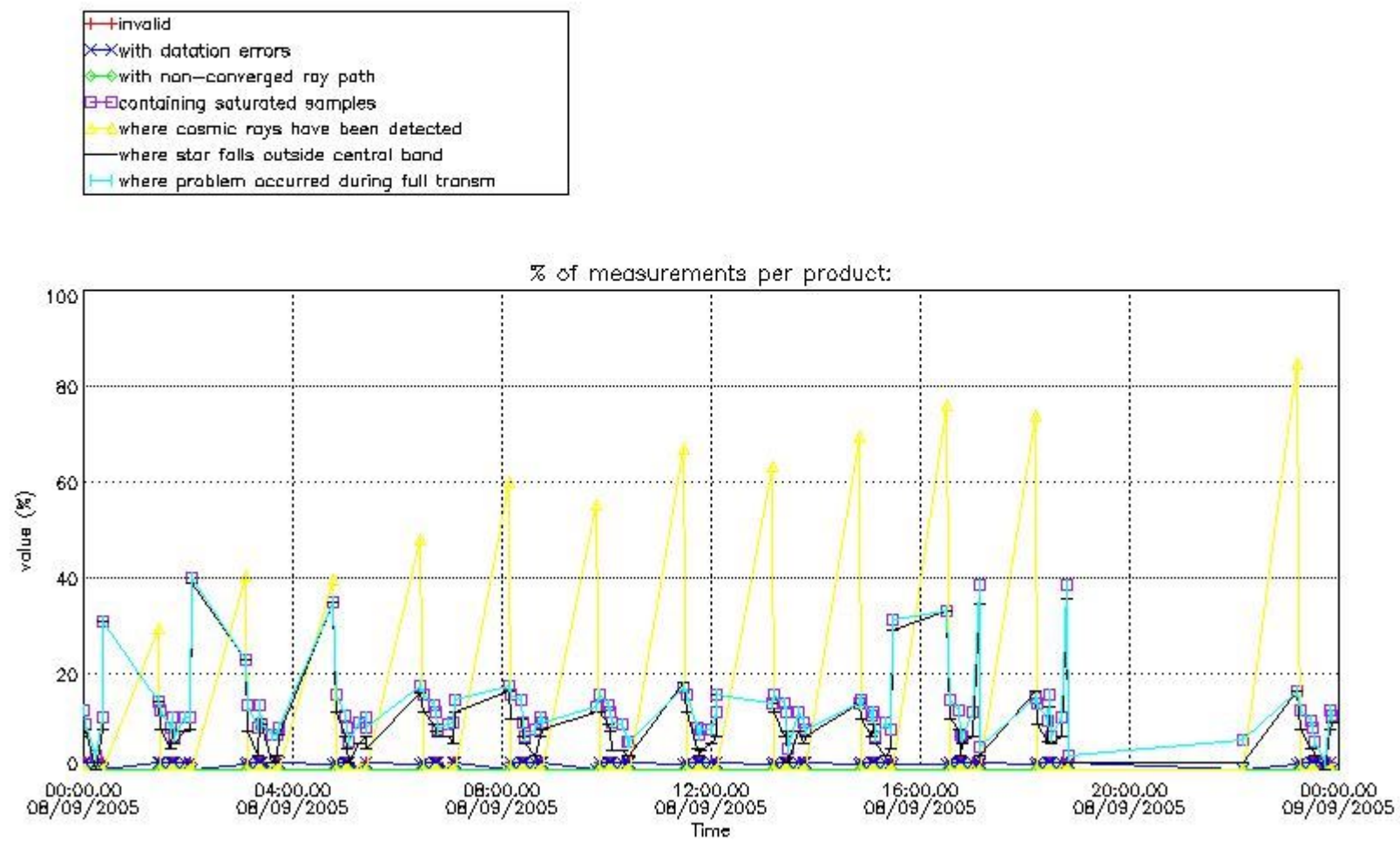
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



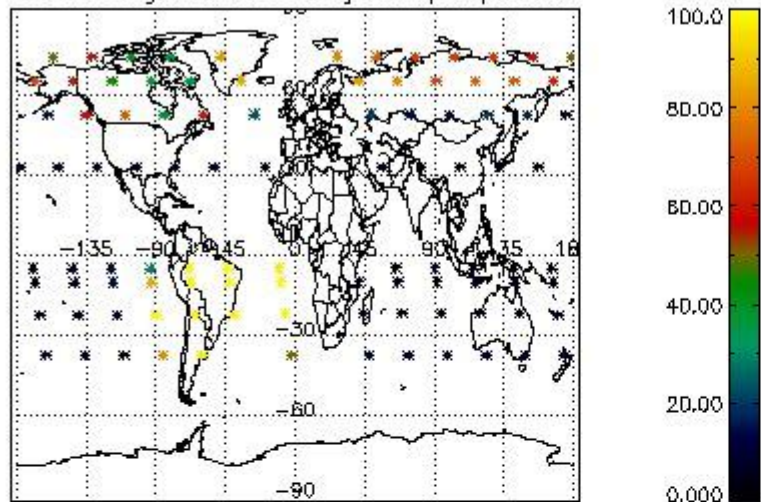
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



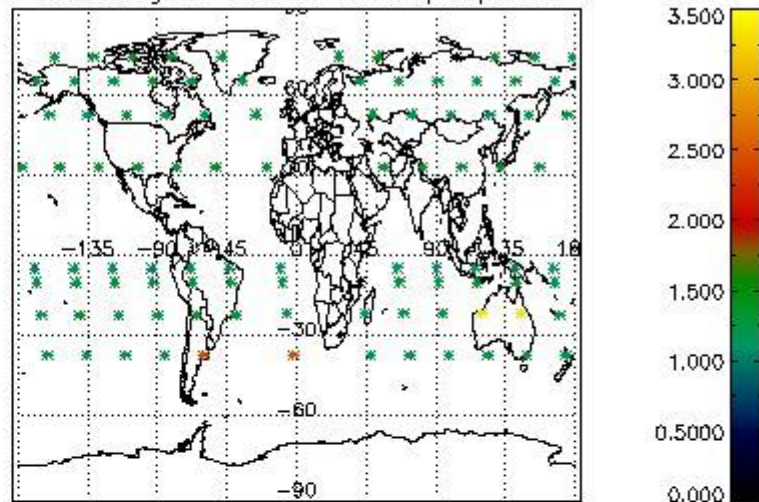
4.2 Plot quality information per product coming from level 1b processing (world map)

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

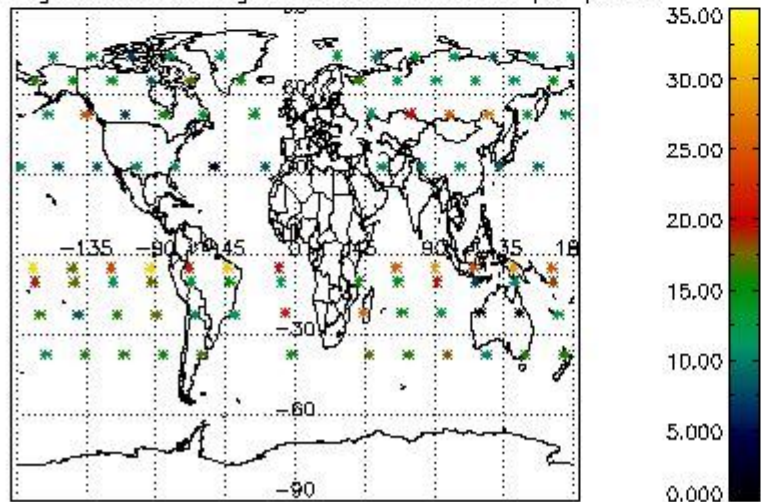
Percentage of cosmic ray hits per profile



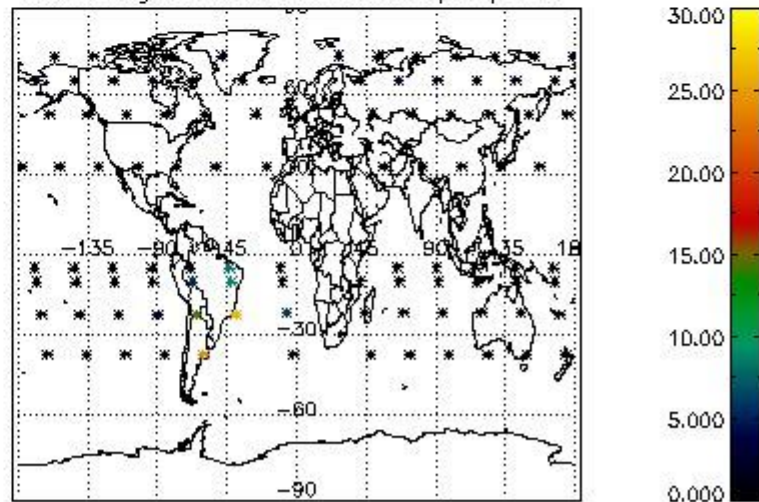
Percentage of datation errors per profile



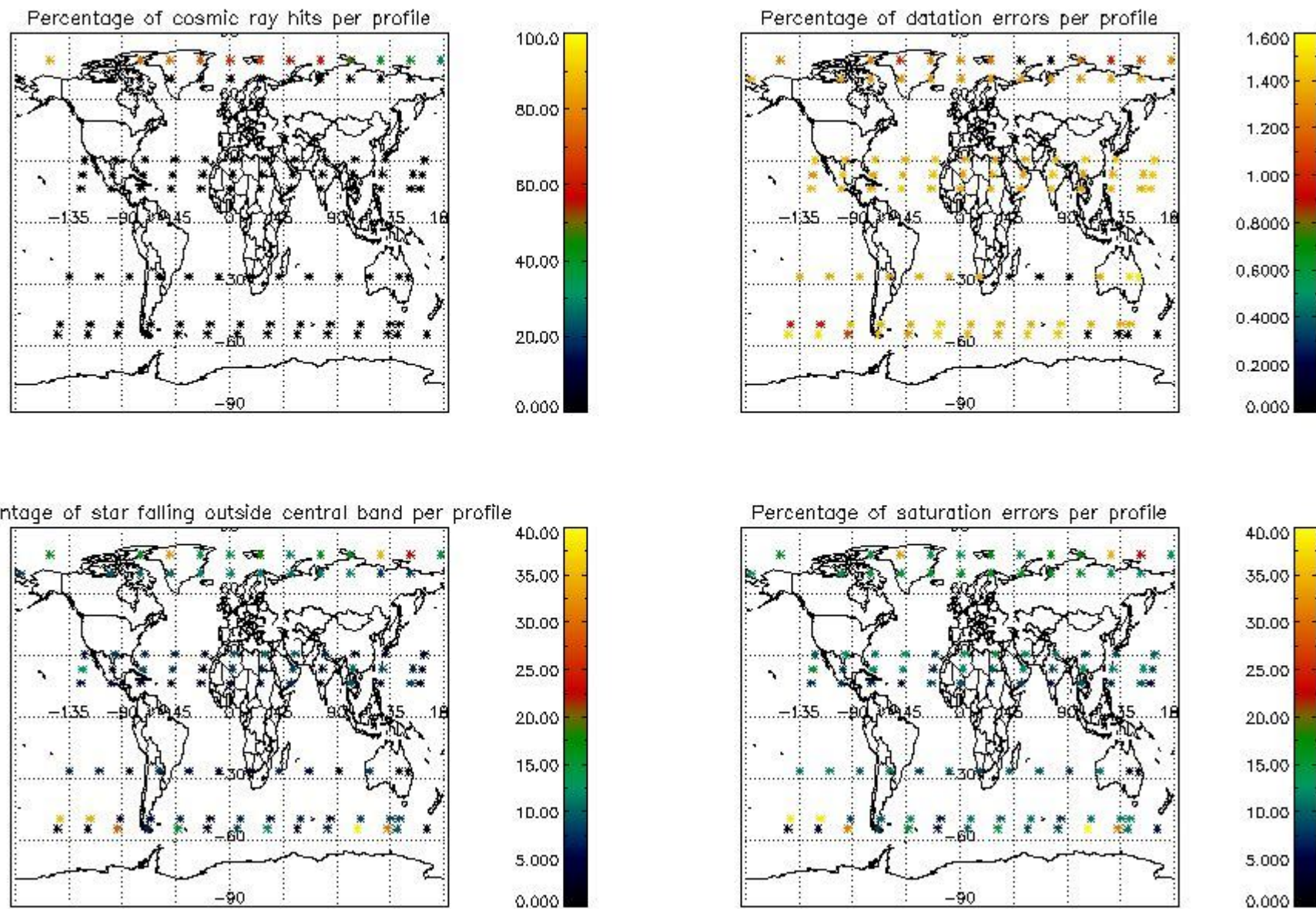
Percentage of star falling outside central band per profile



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

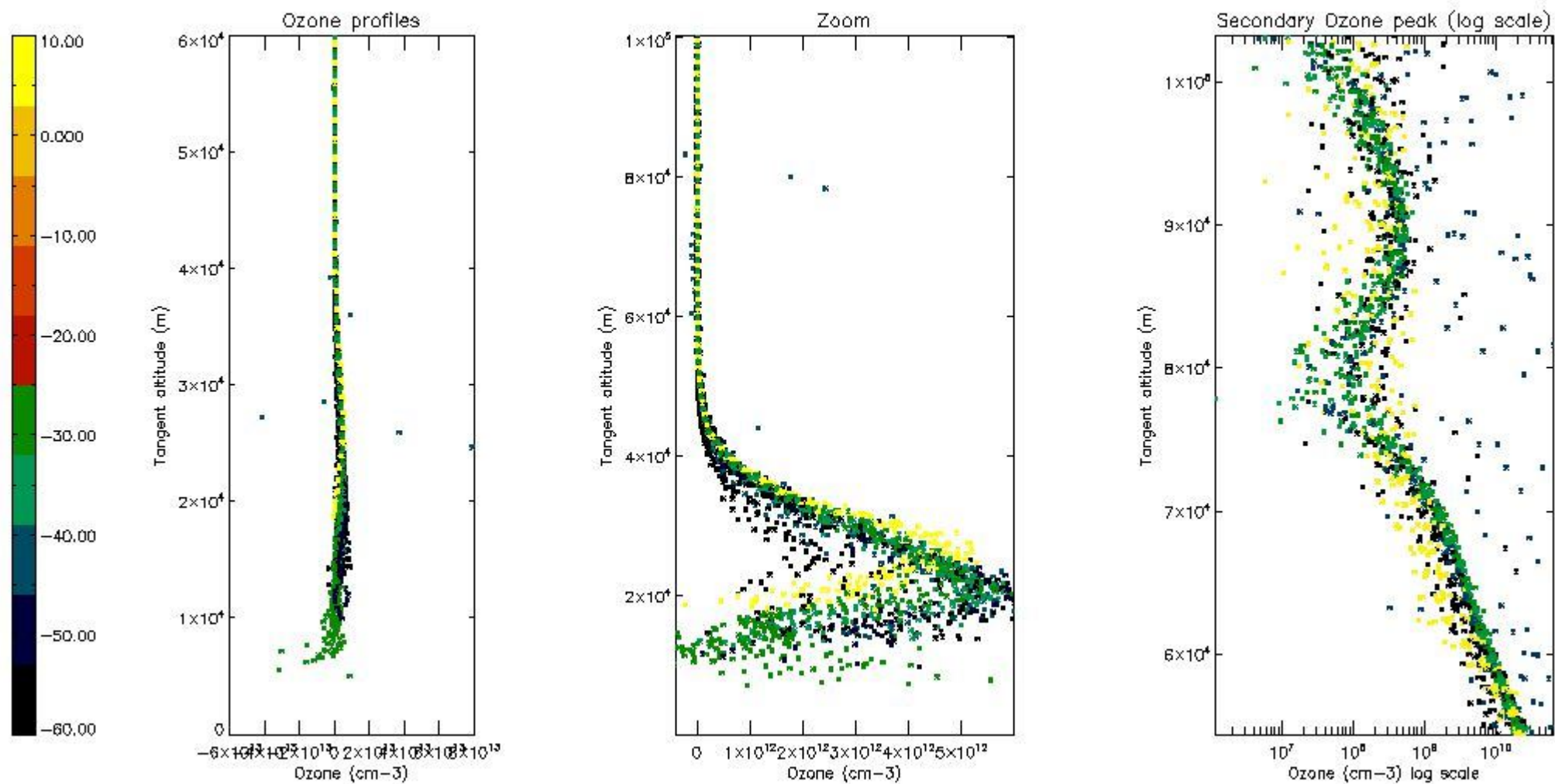
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	16

STD < 10	11
STD < 5	4

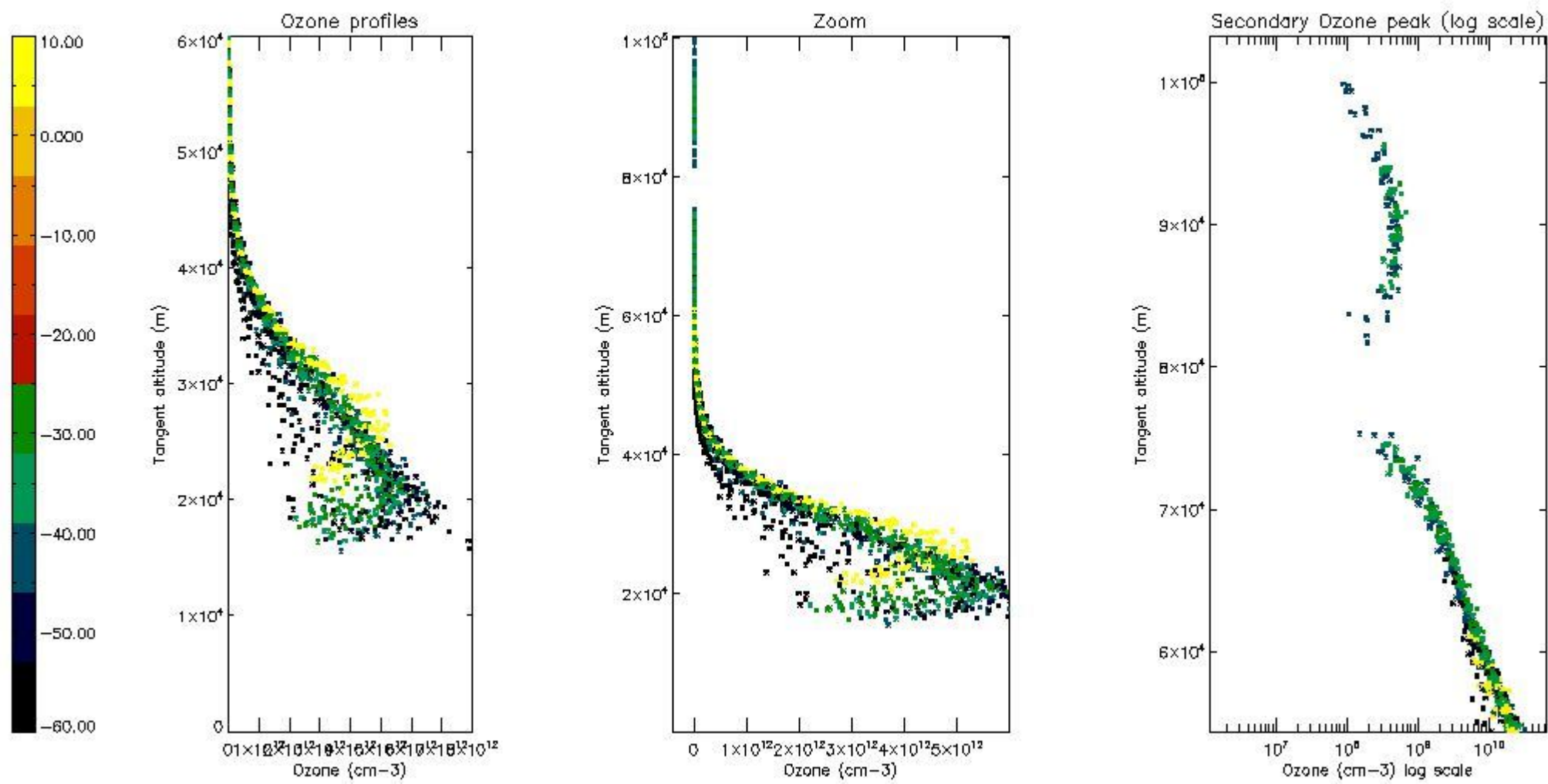
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



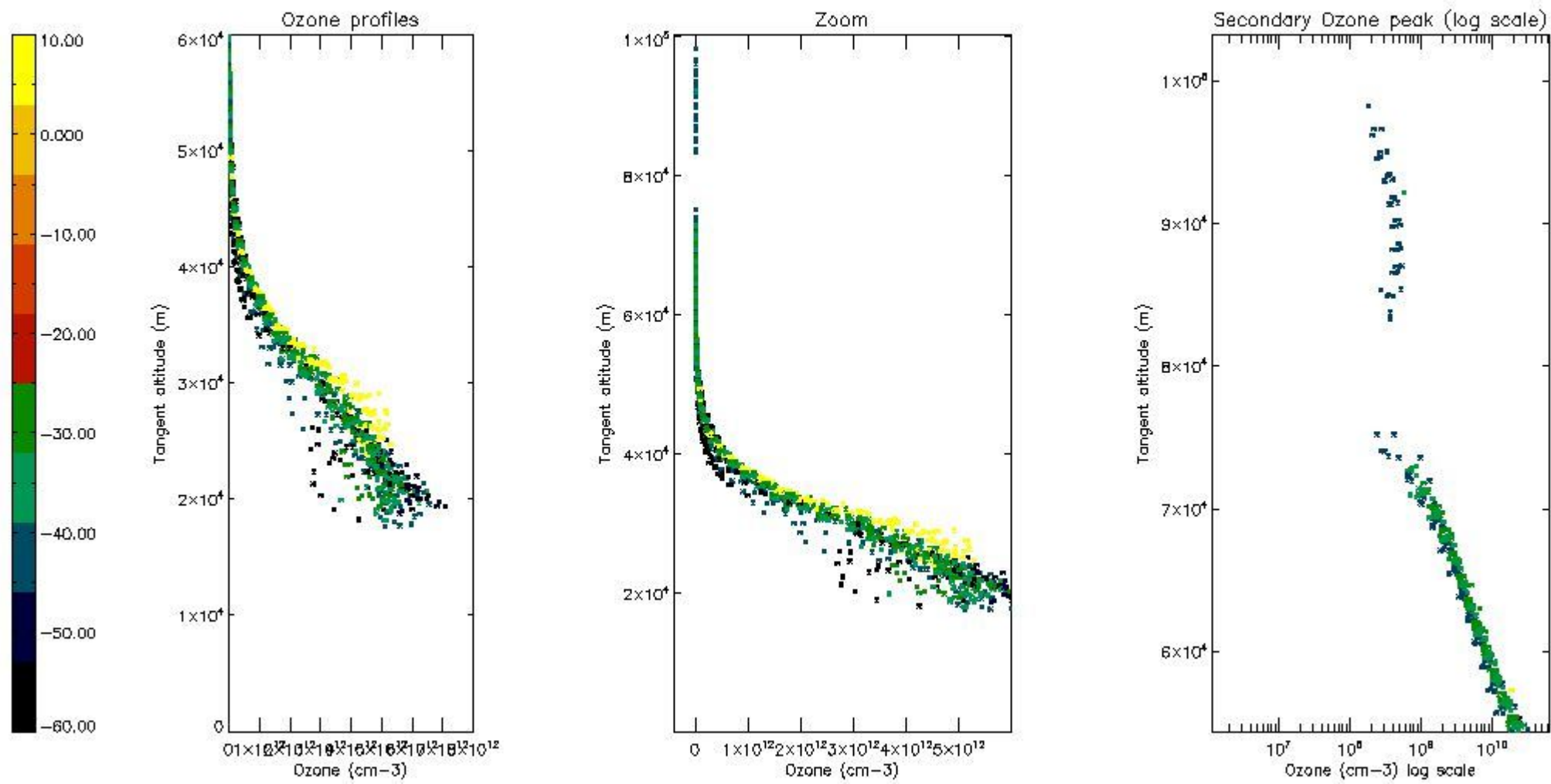
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



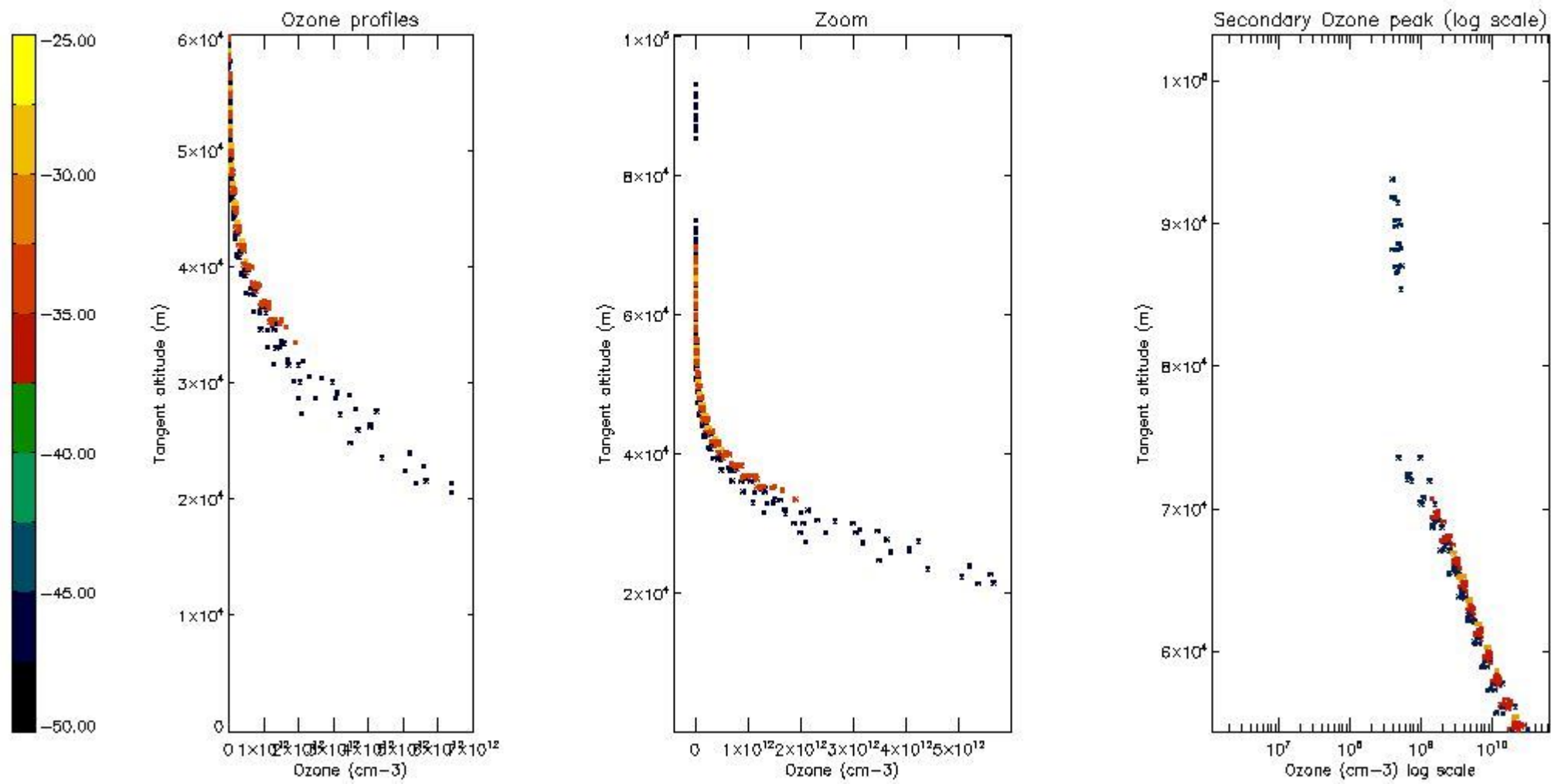
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



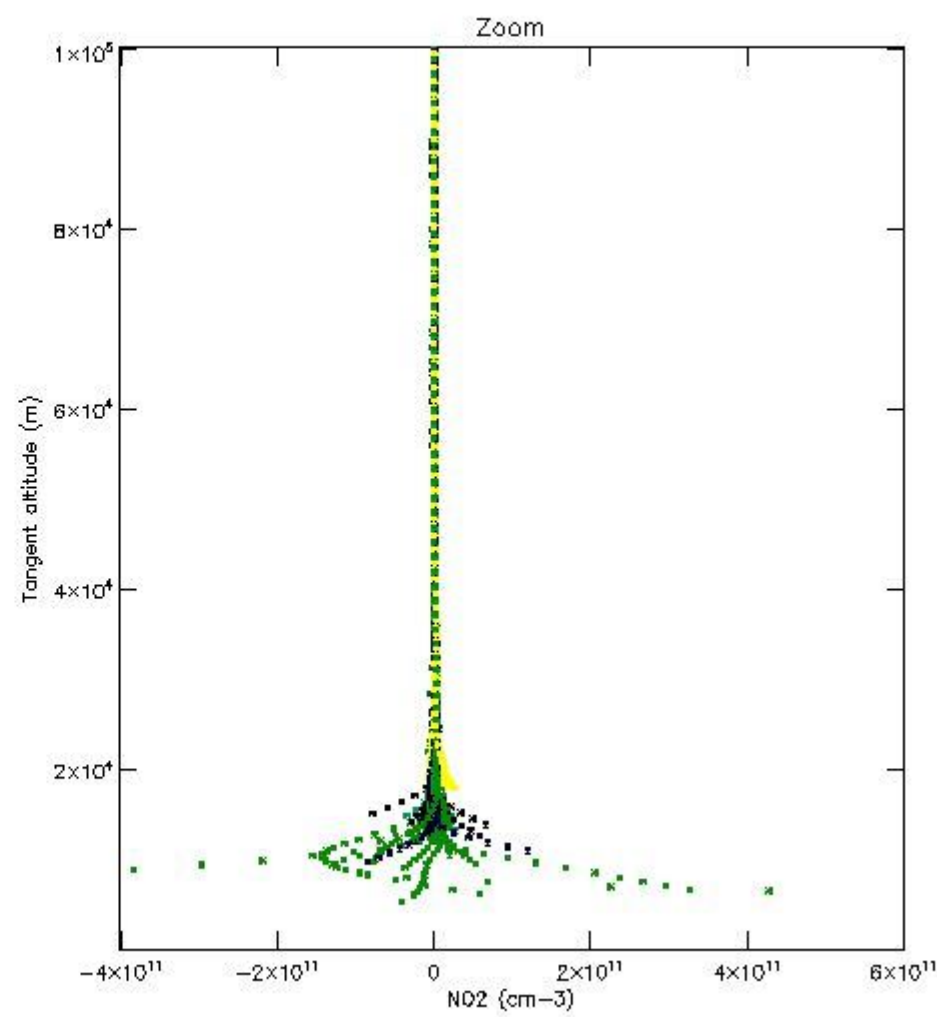
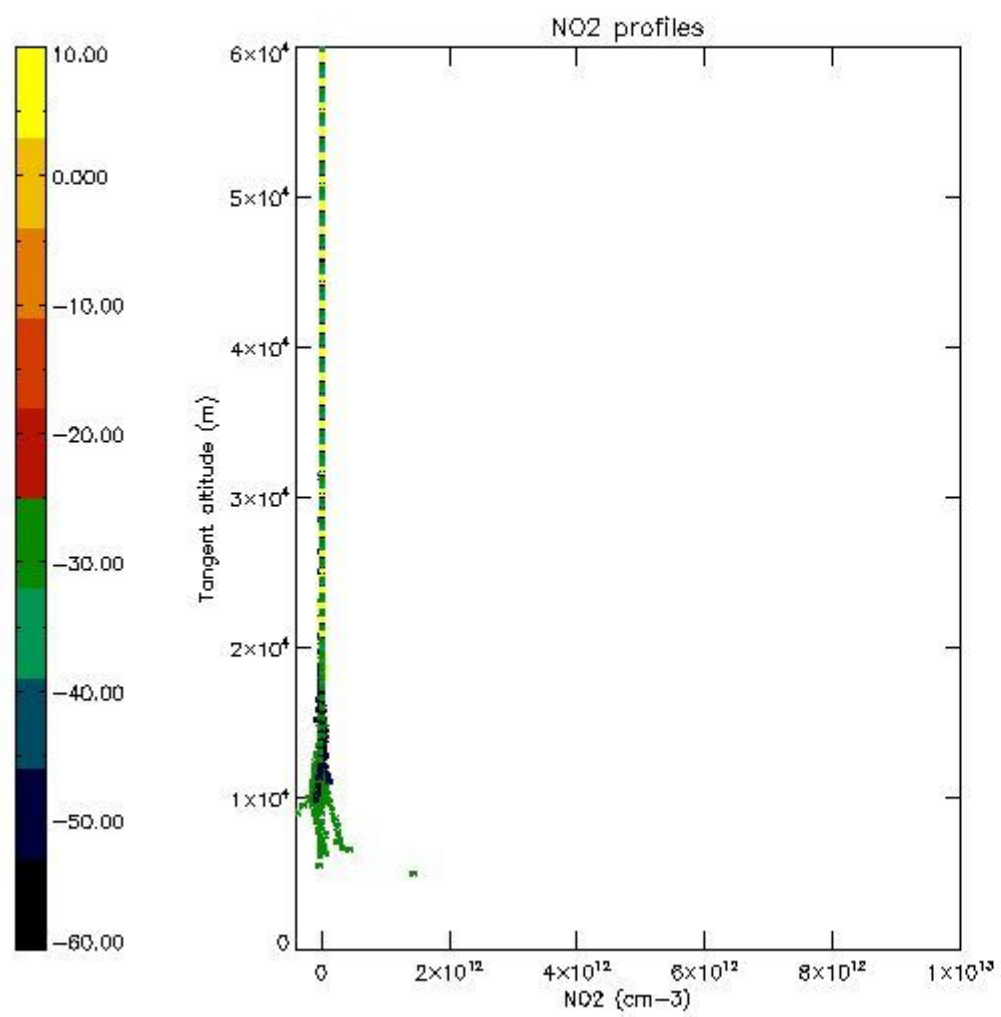
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



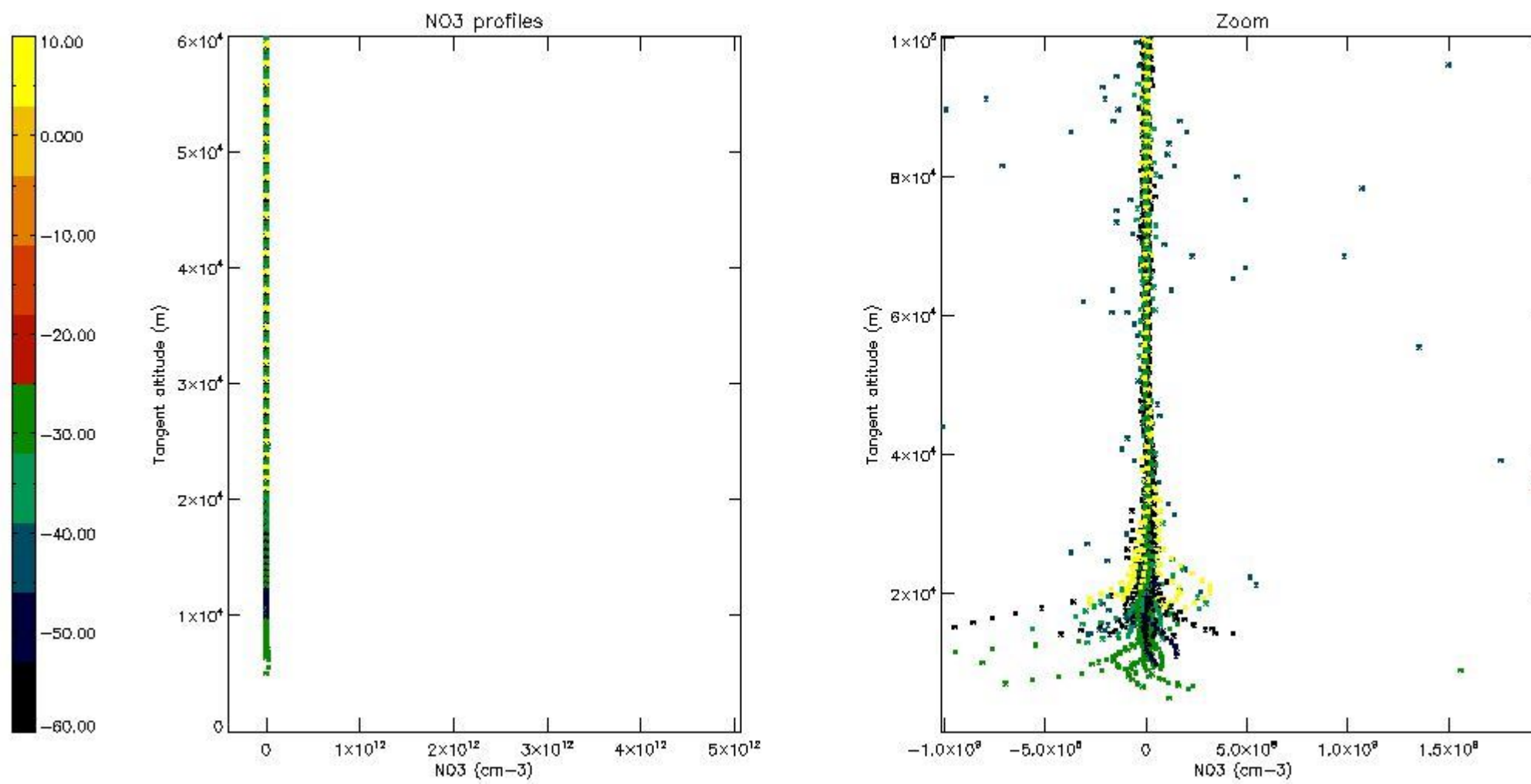
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

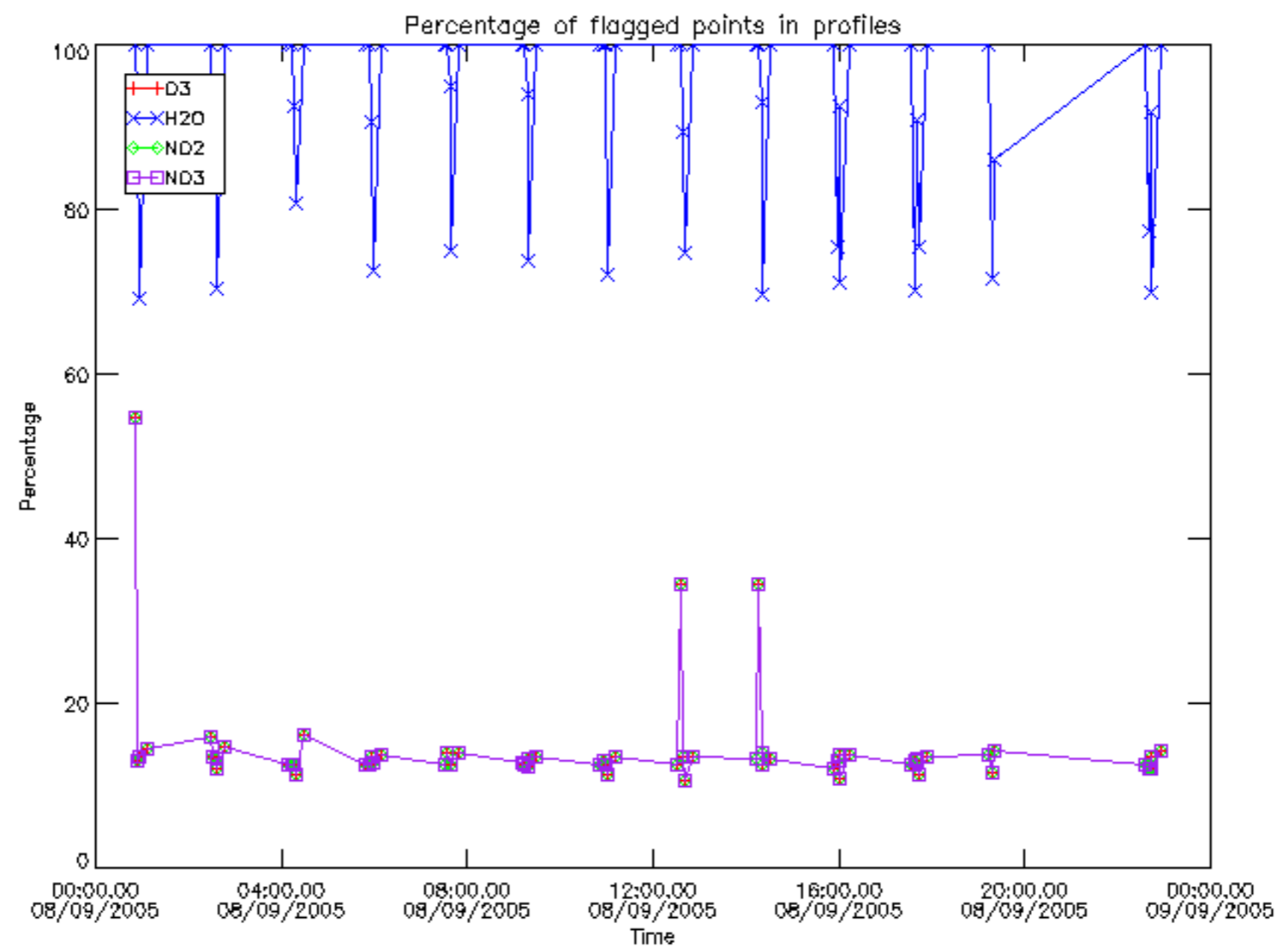
The colorbar represents the latitude.



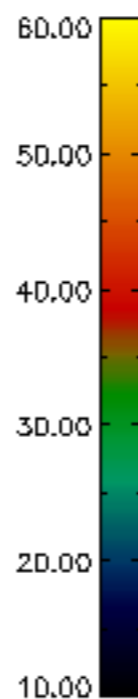
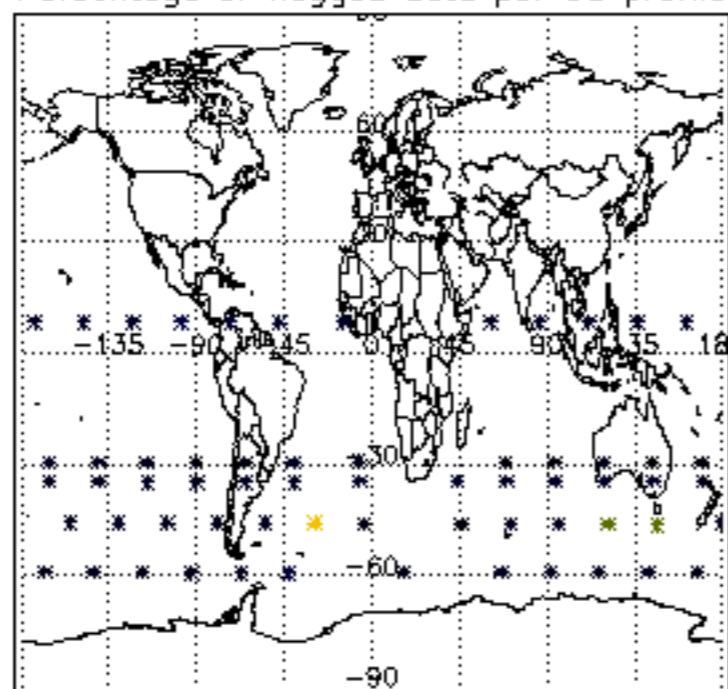
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

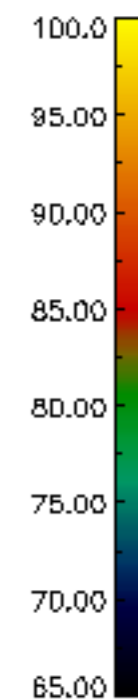
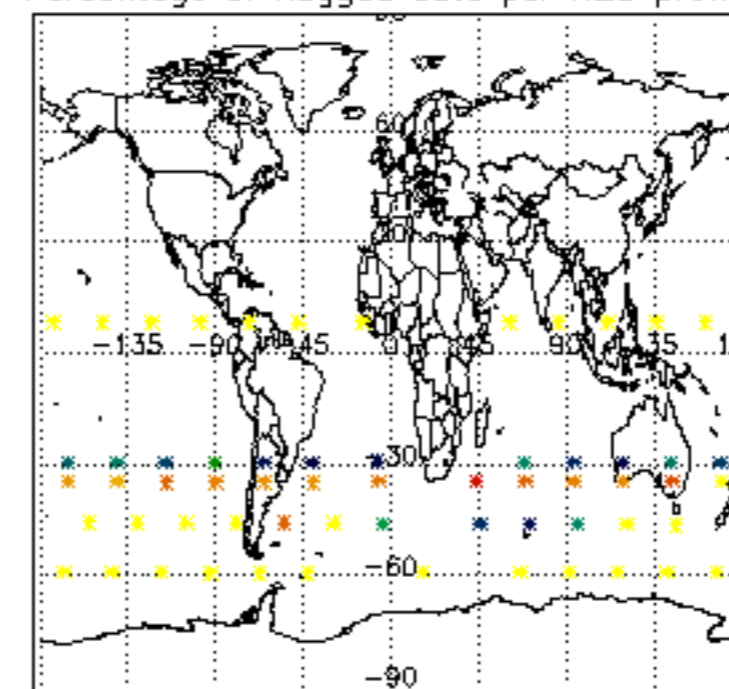
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	08-SEP-2005 00:00:54
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-SEP-2005 00:00:54
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-SEP-2005 00:00:54



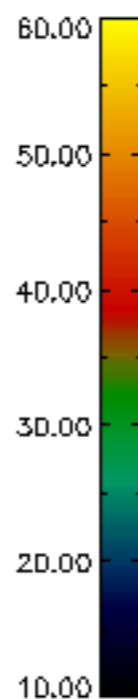
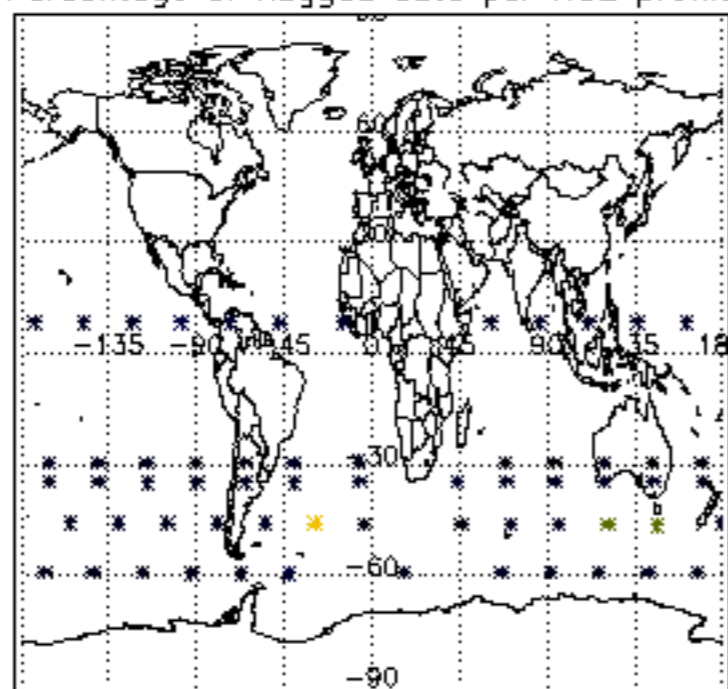
Percentage of flagged data per D3 profile



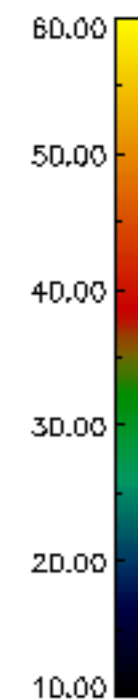
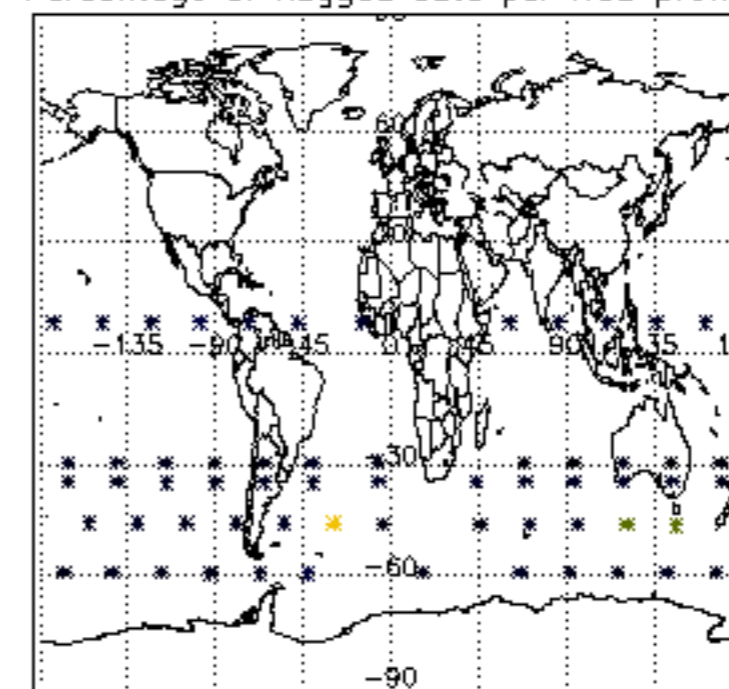
Percentage of flagged data per H2O profile

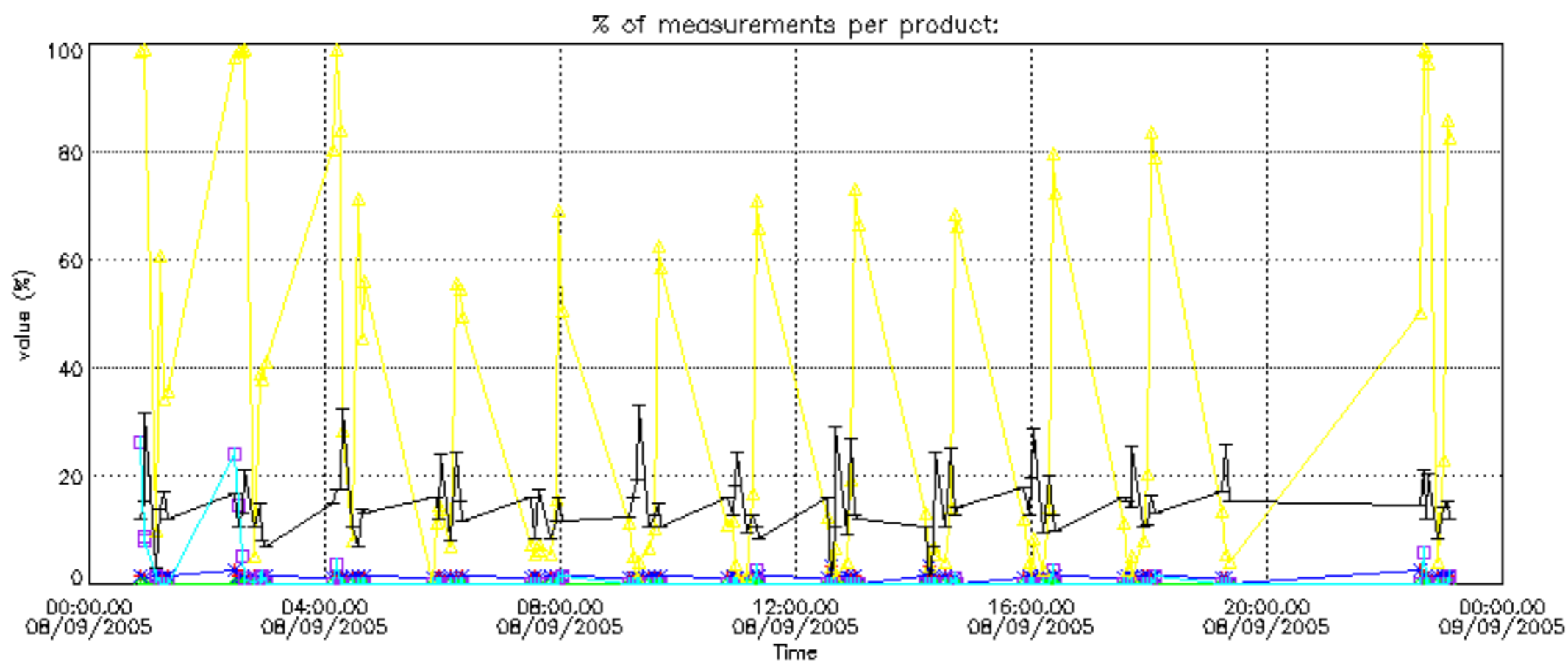


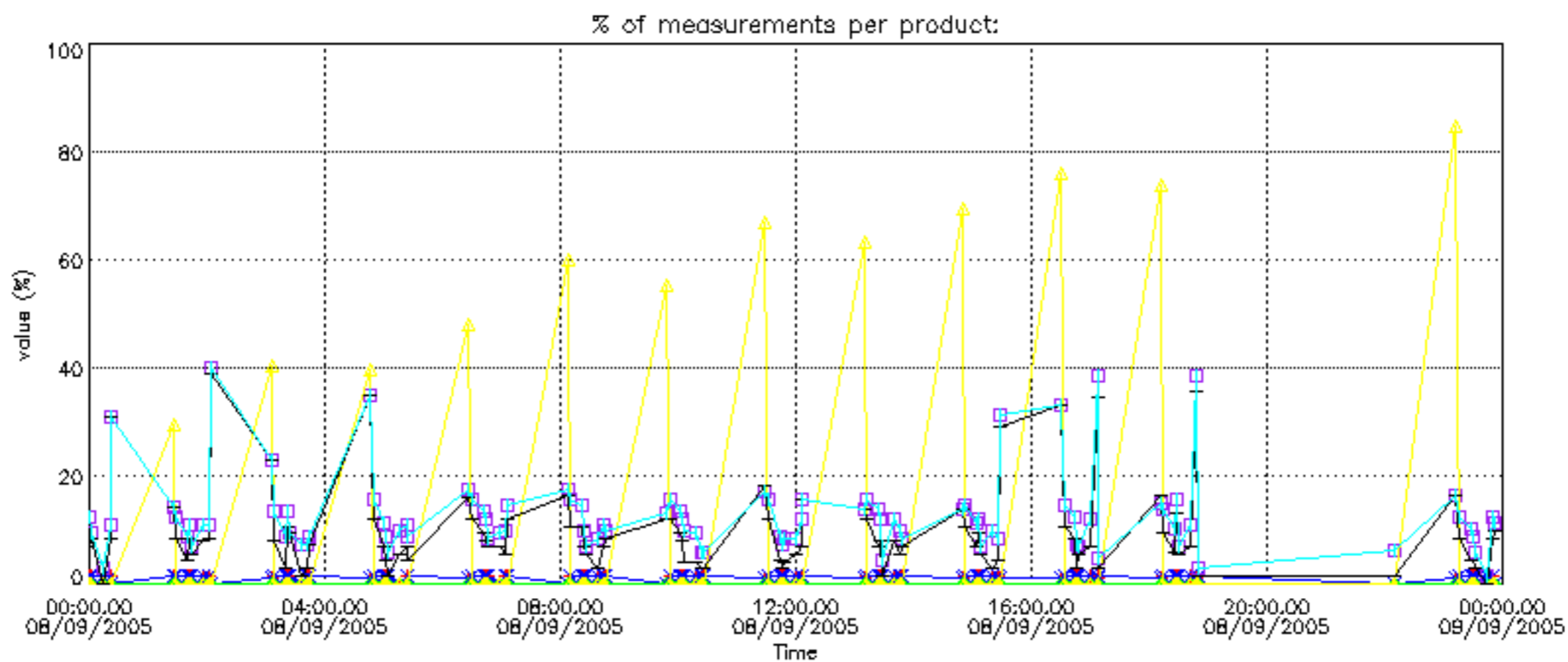
Percentage of flagged data per NO2 profile



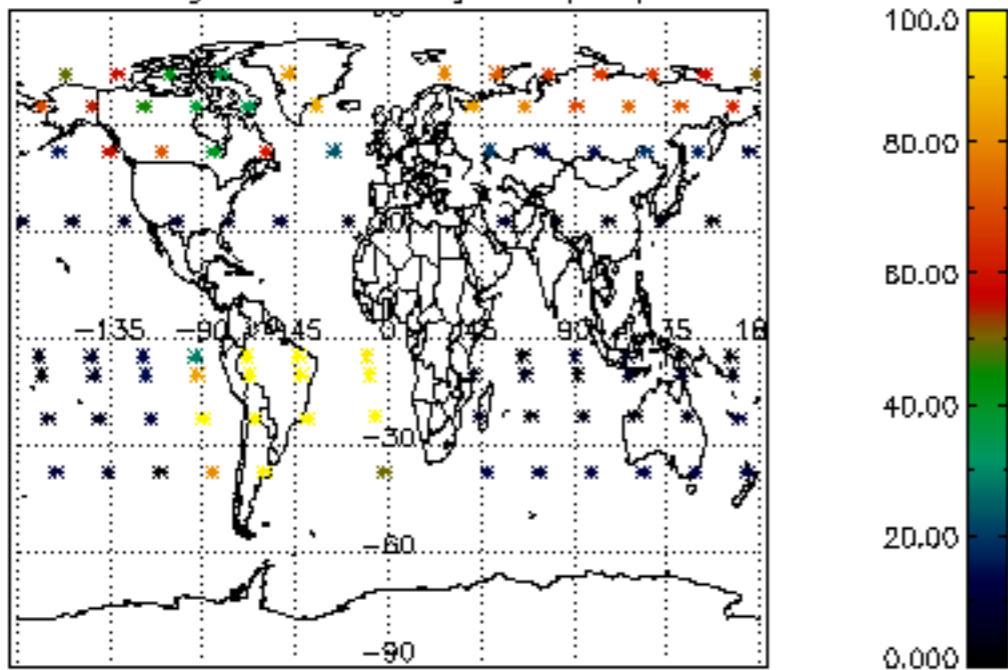
Percentage of flagged data per NO3 profile



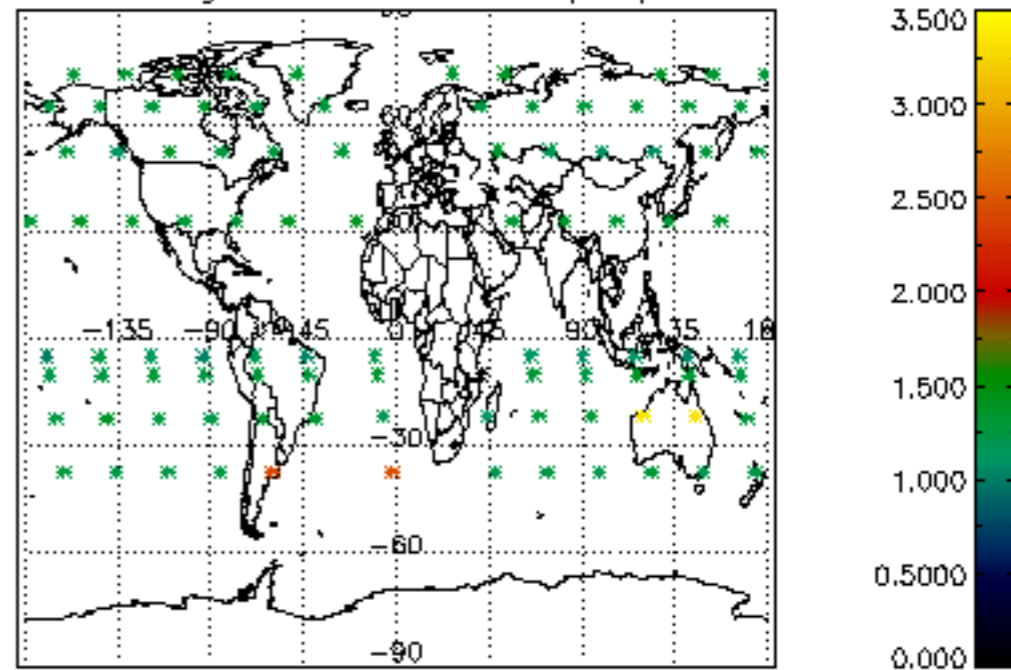




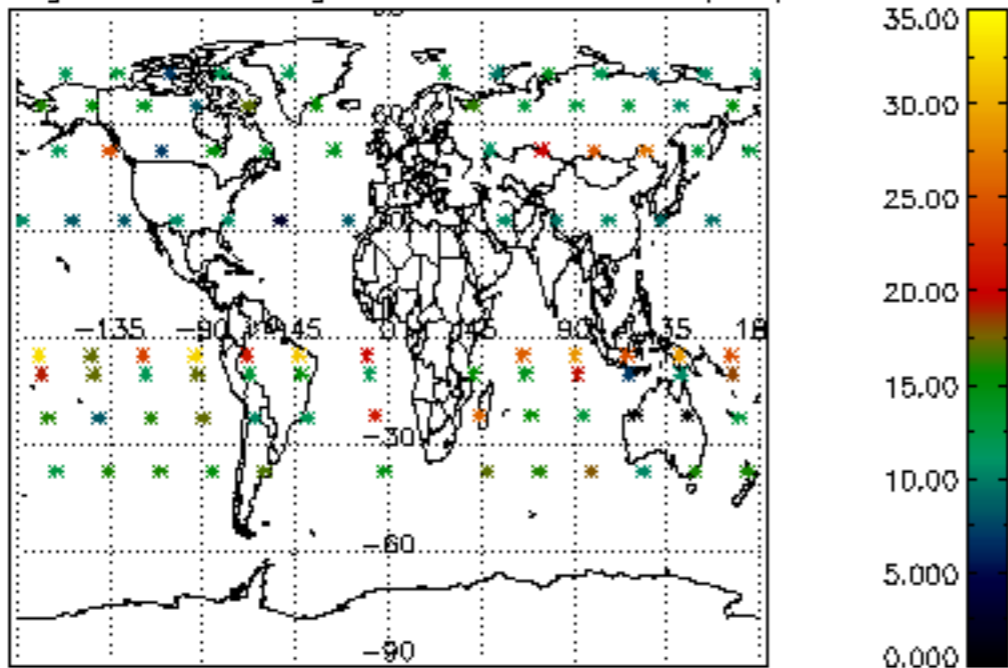
Percentage of cosmic ray hits per profile



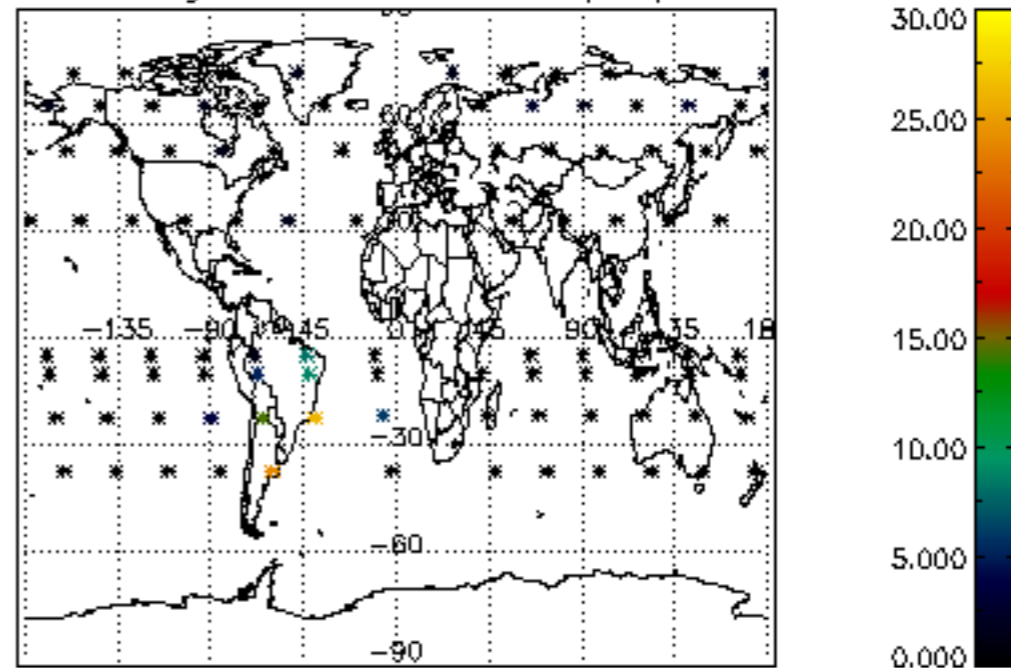
Percentage of datation errors per profile



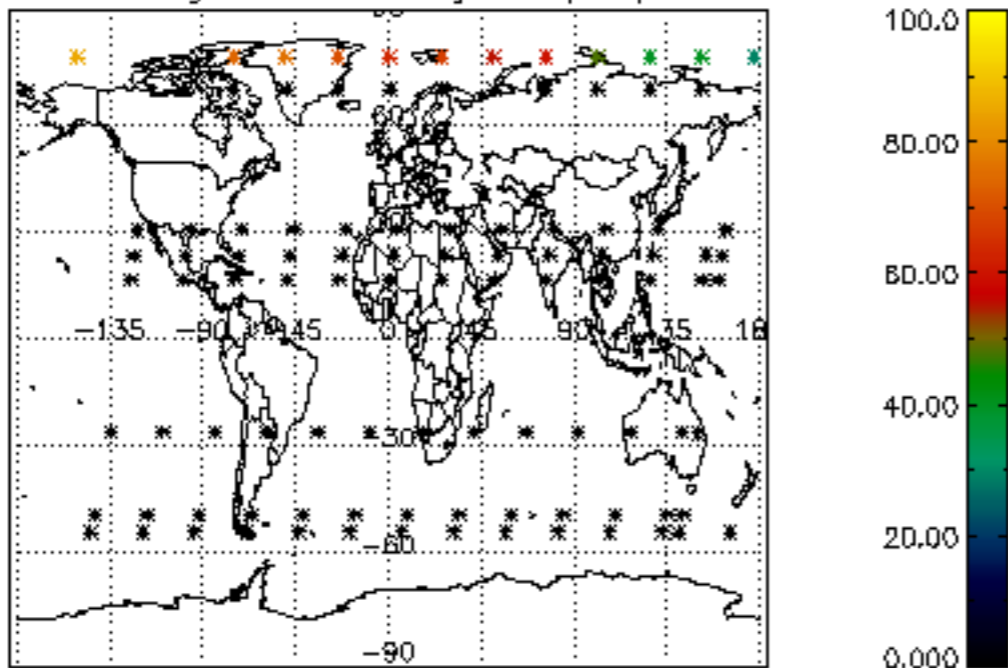
Percentage of star falling outside central band per profile



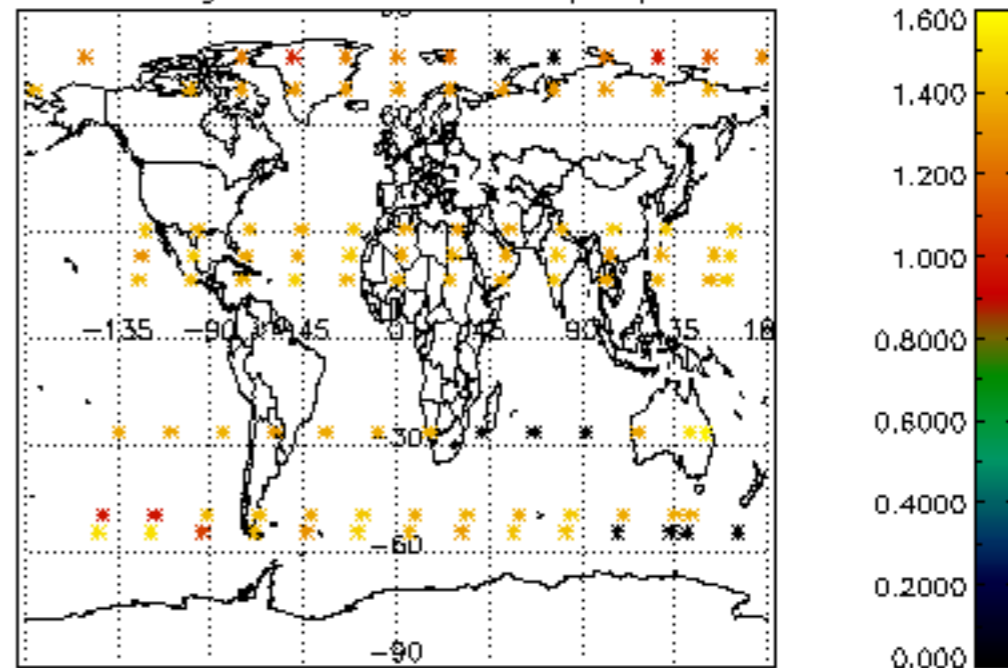
Percentage of saturation errors per profile



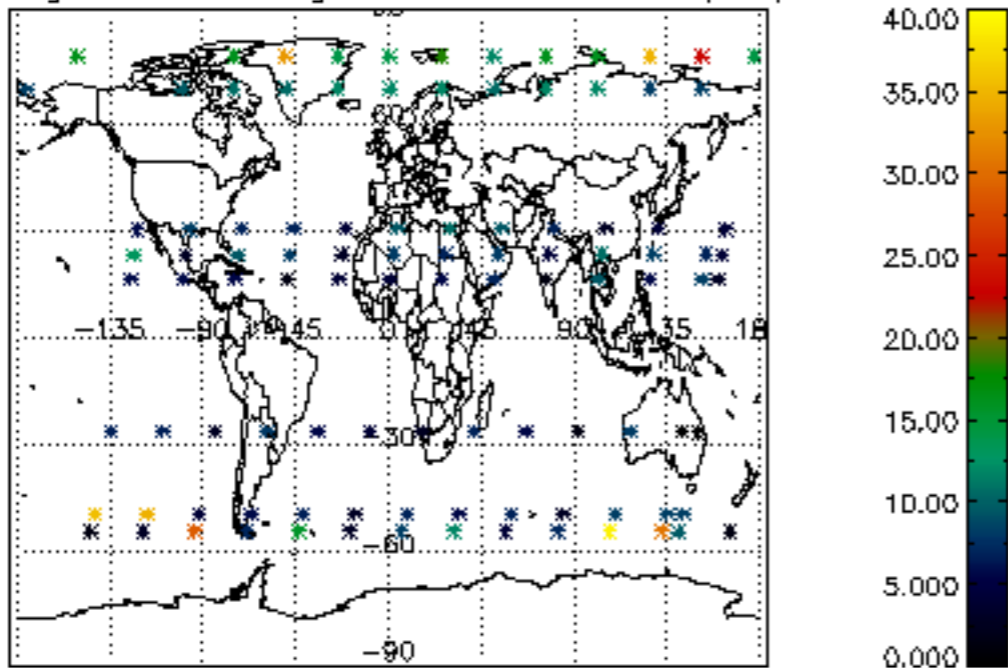
Percentage of cosmic ray hits per profile



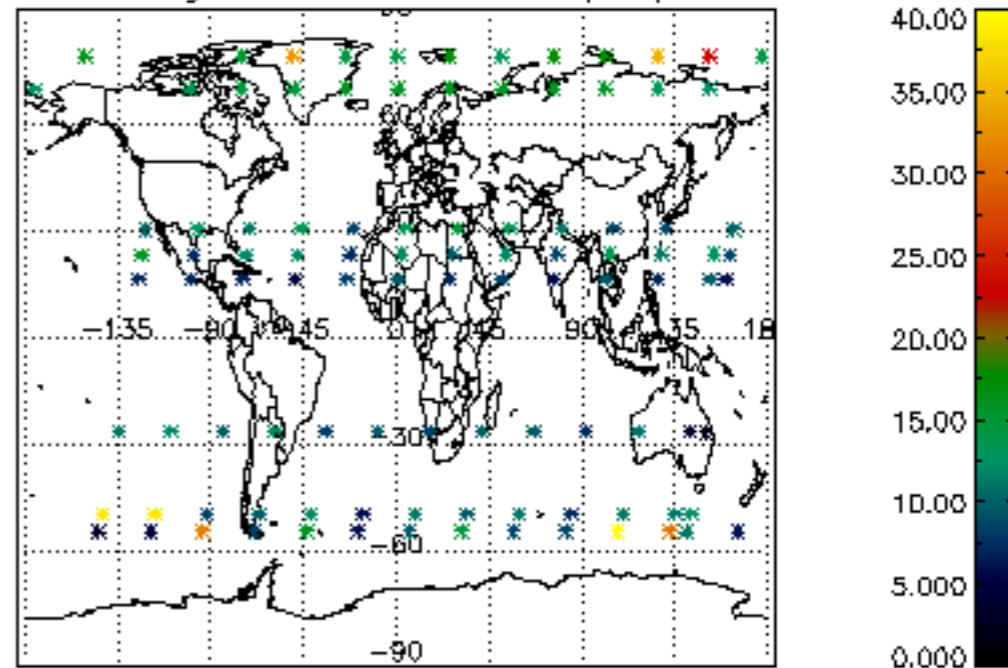
Percentage of datation errors per profile

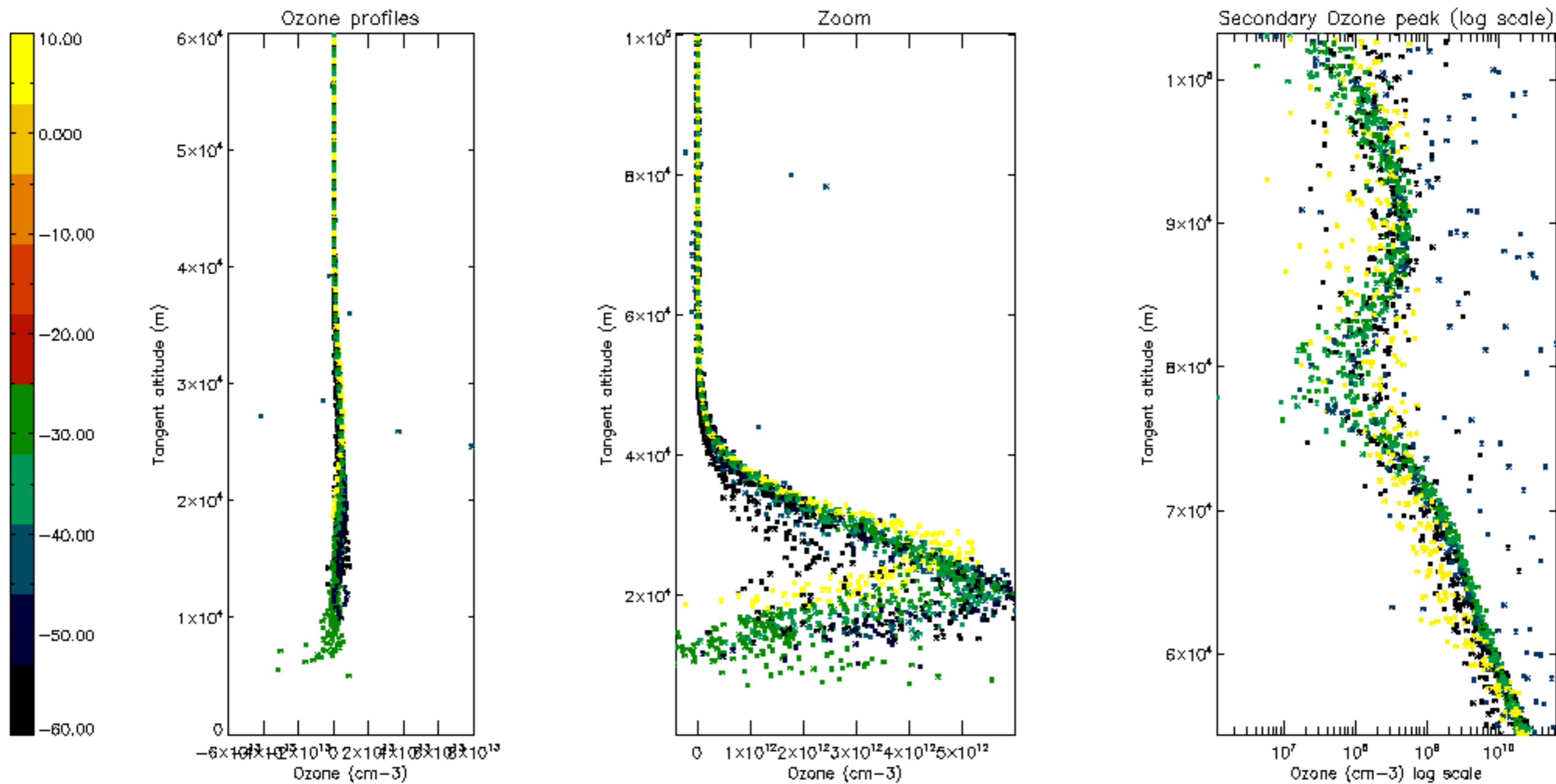


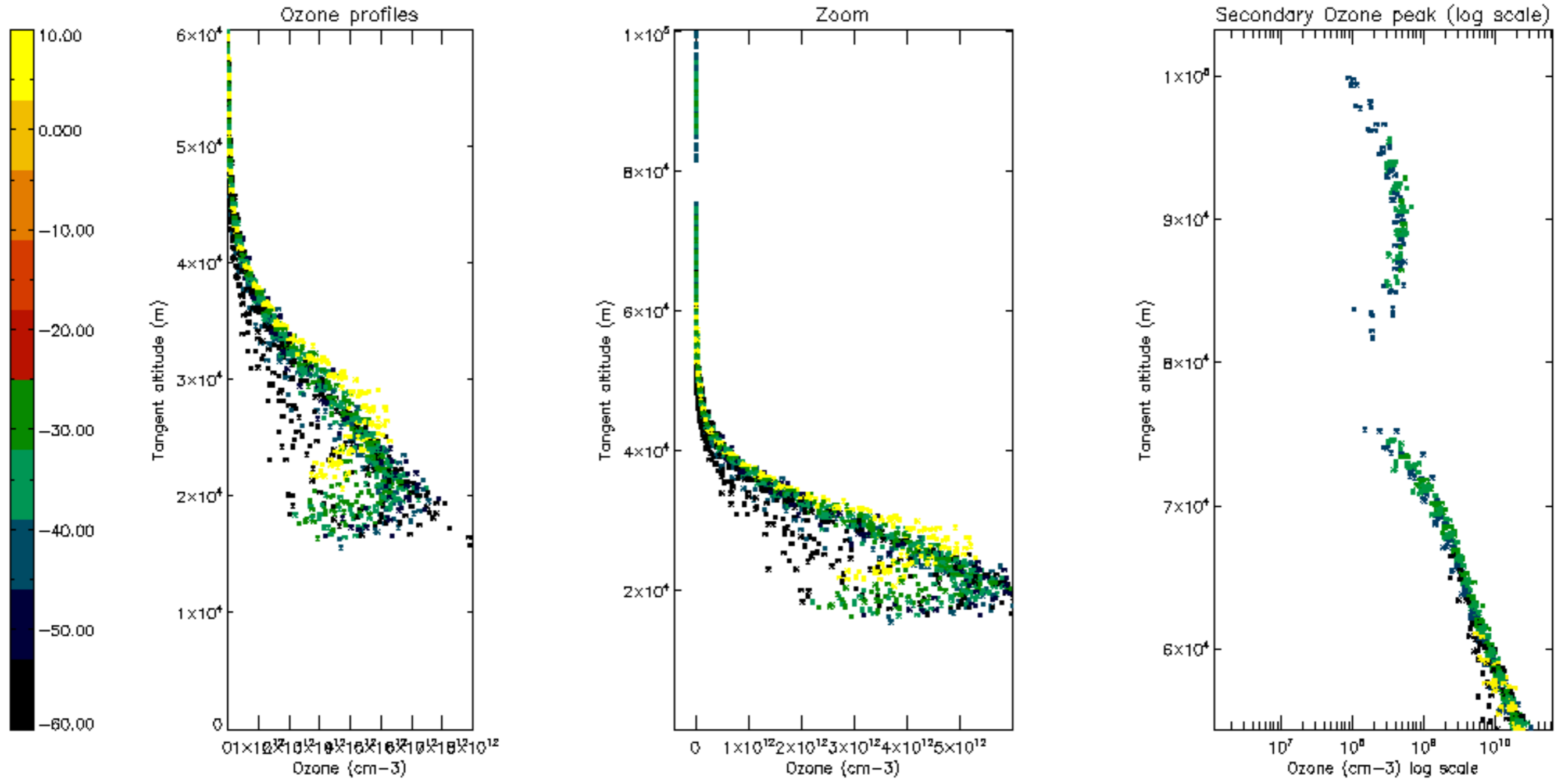
Percentage of star falling outside central band per profile

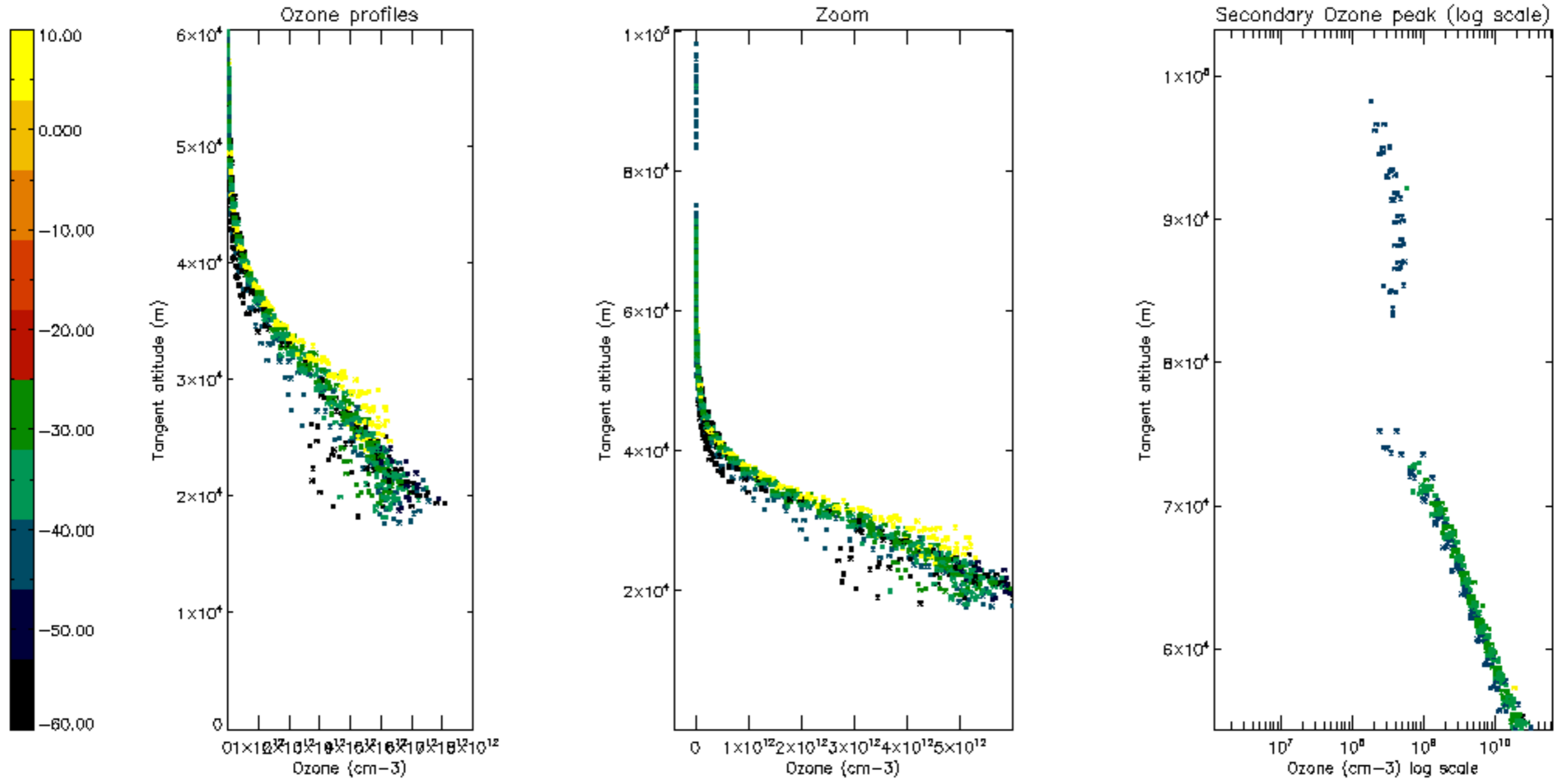


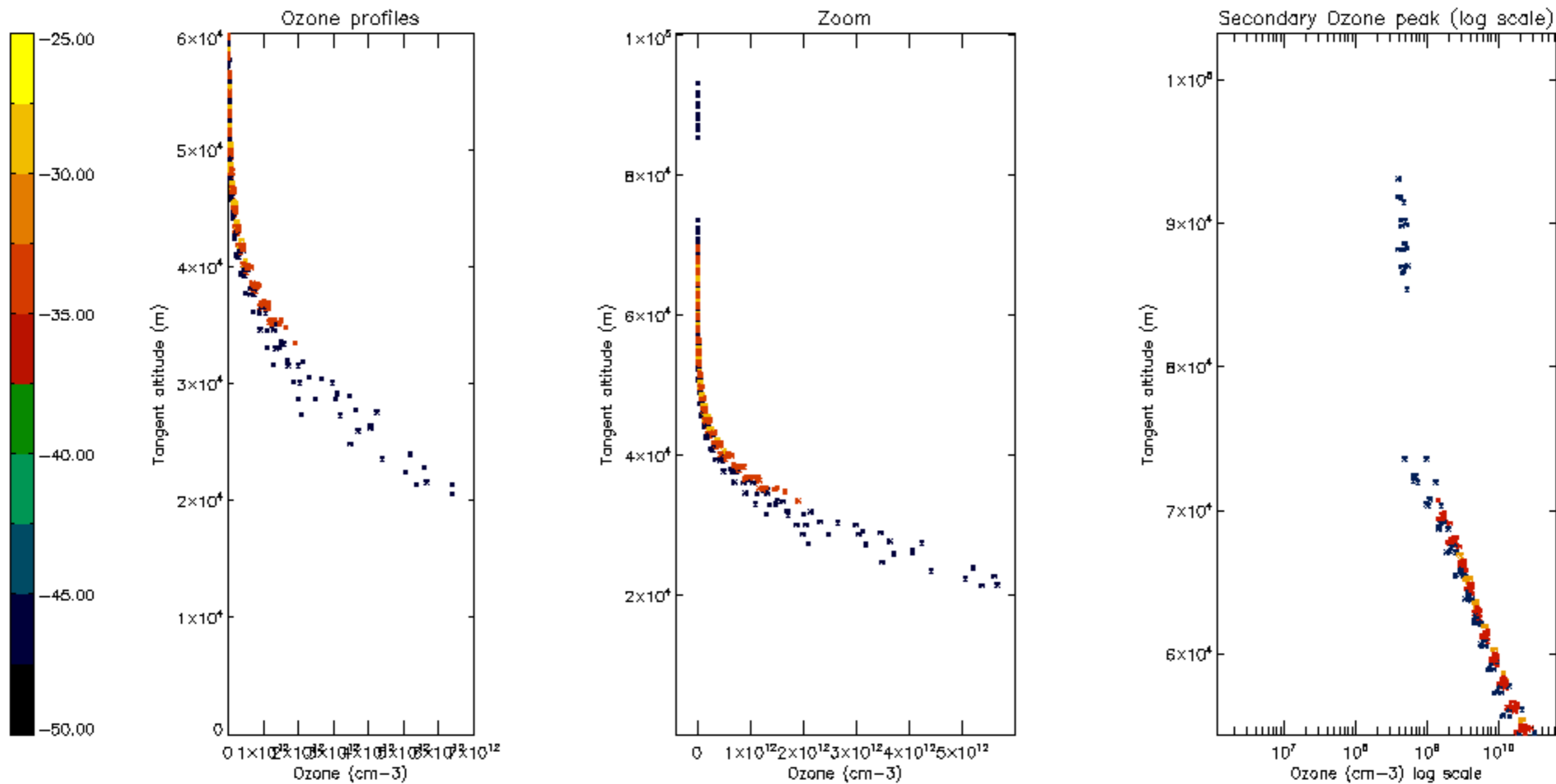
Percentage of saturation errors per profile

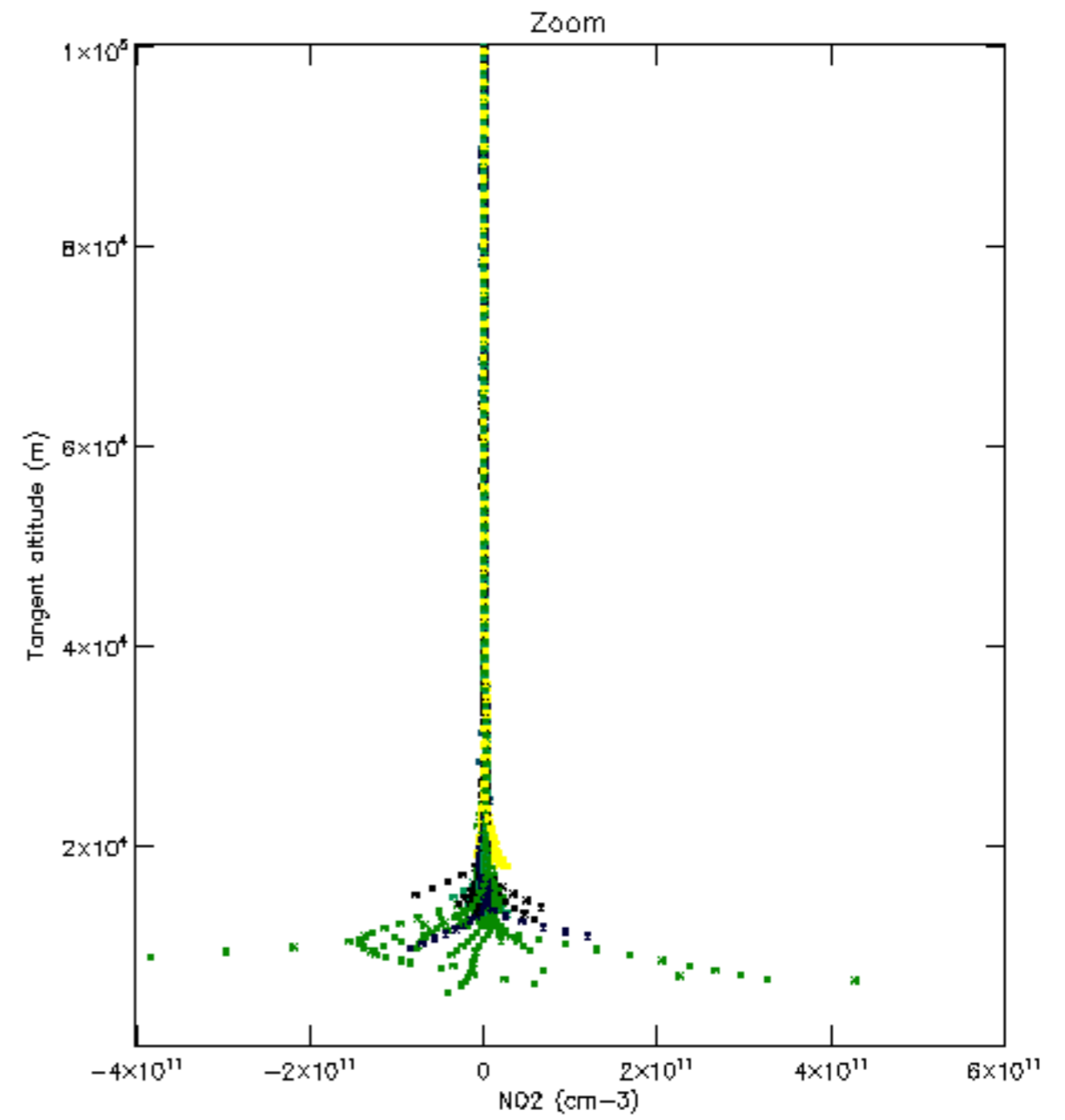
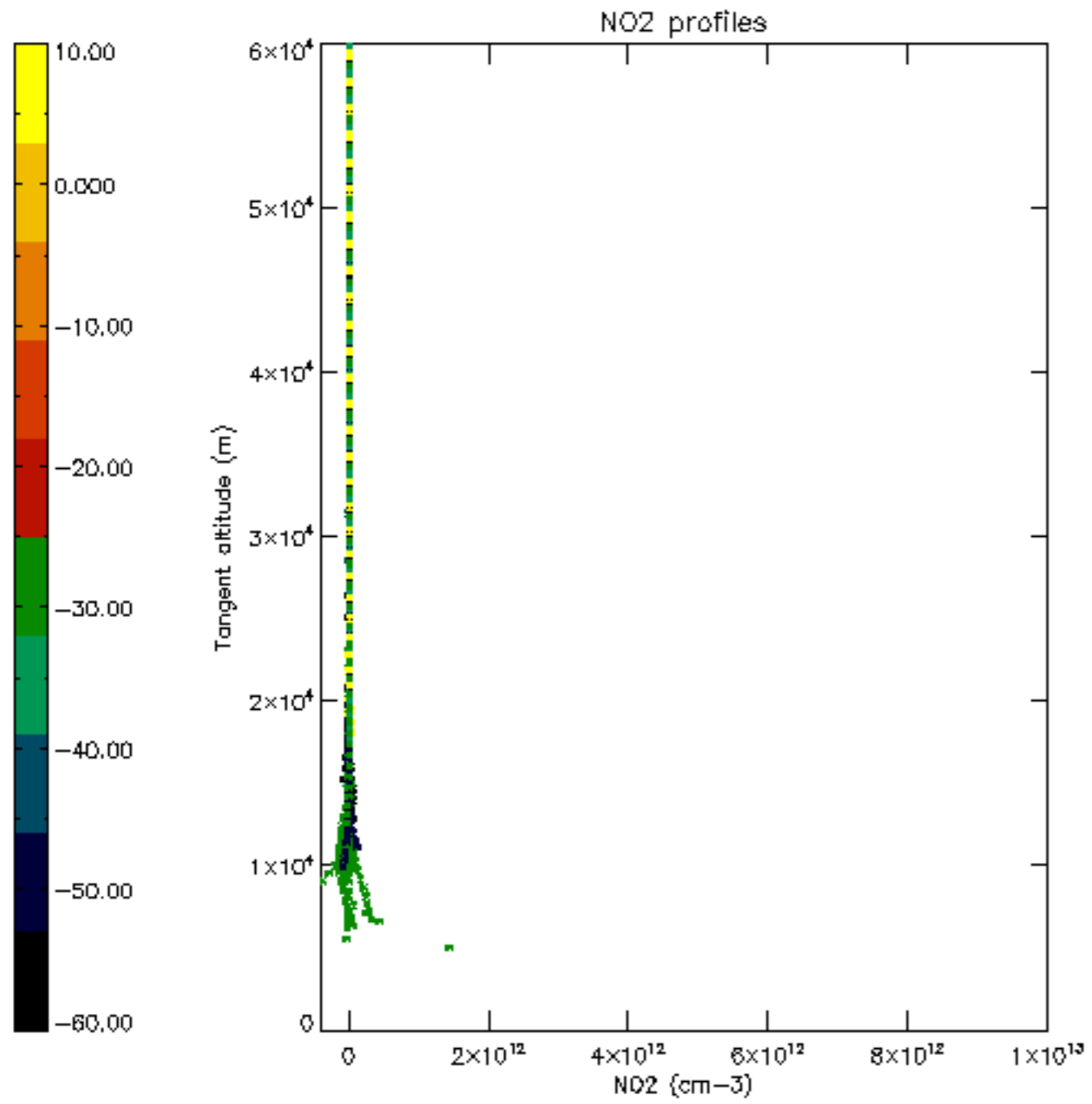


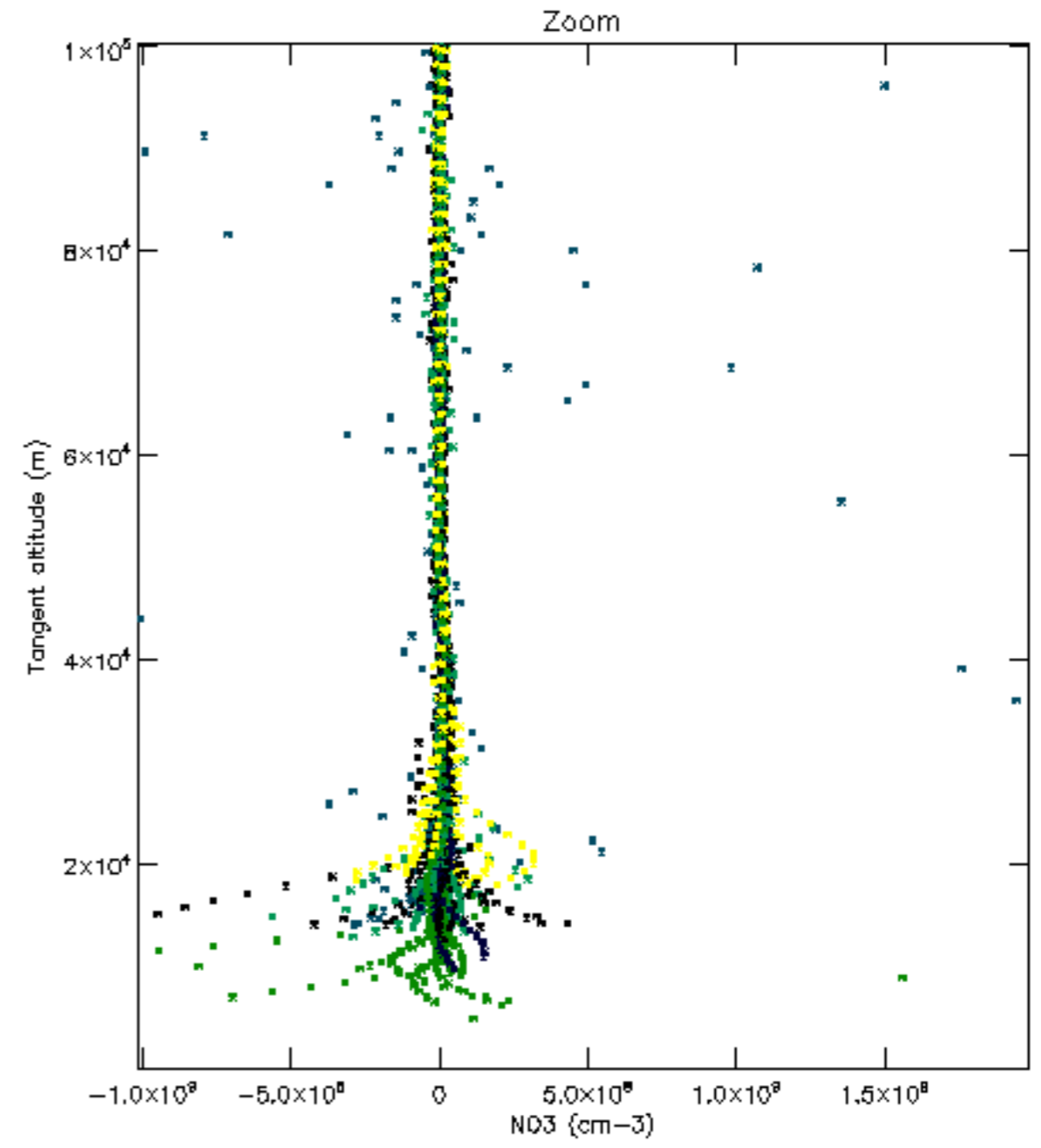
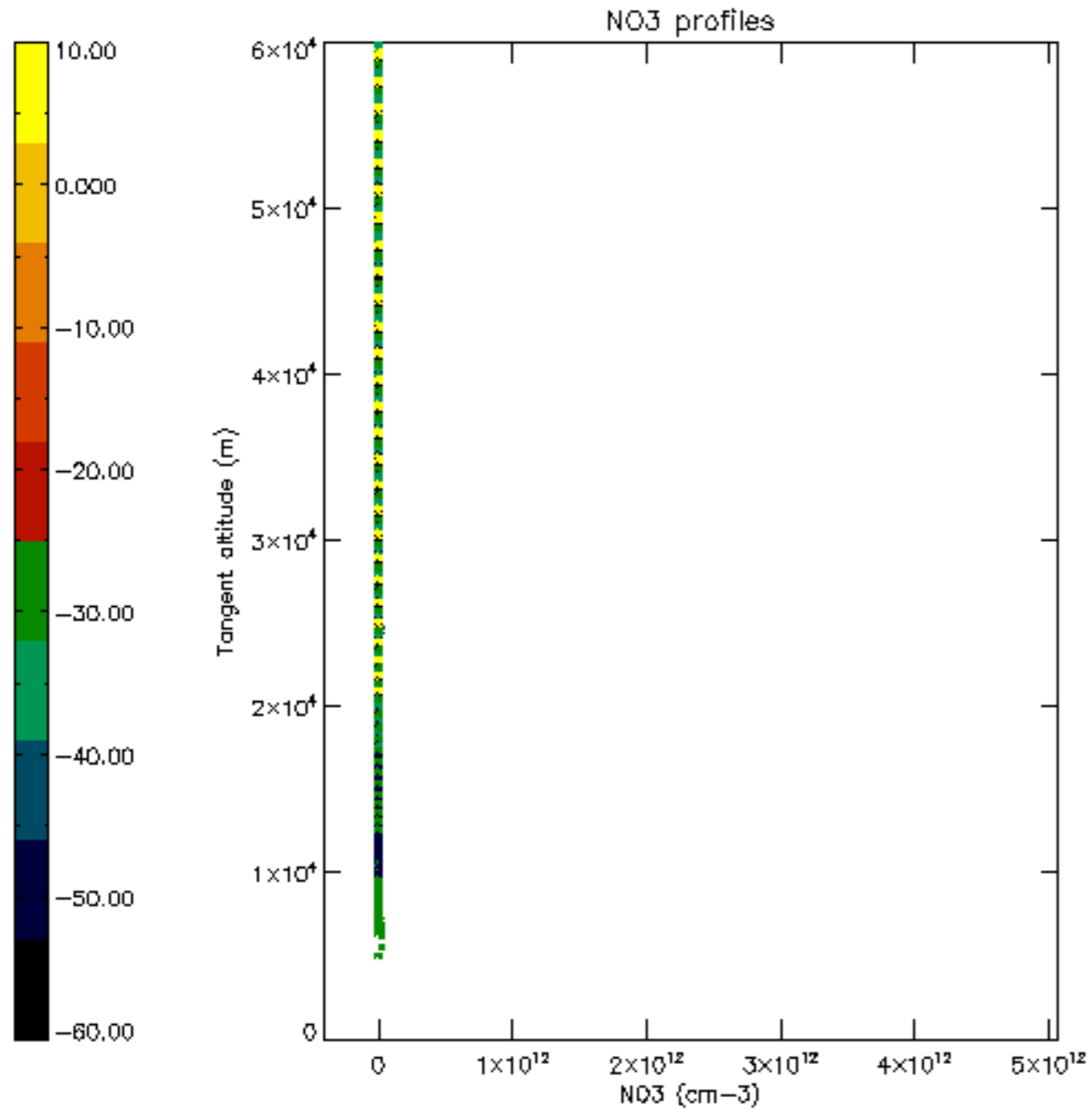


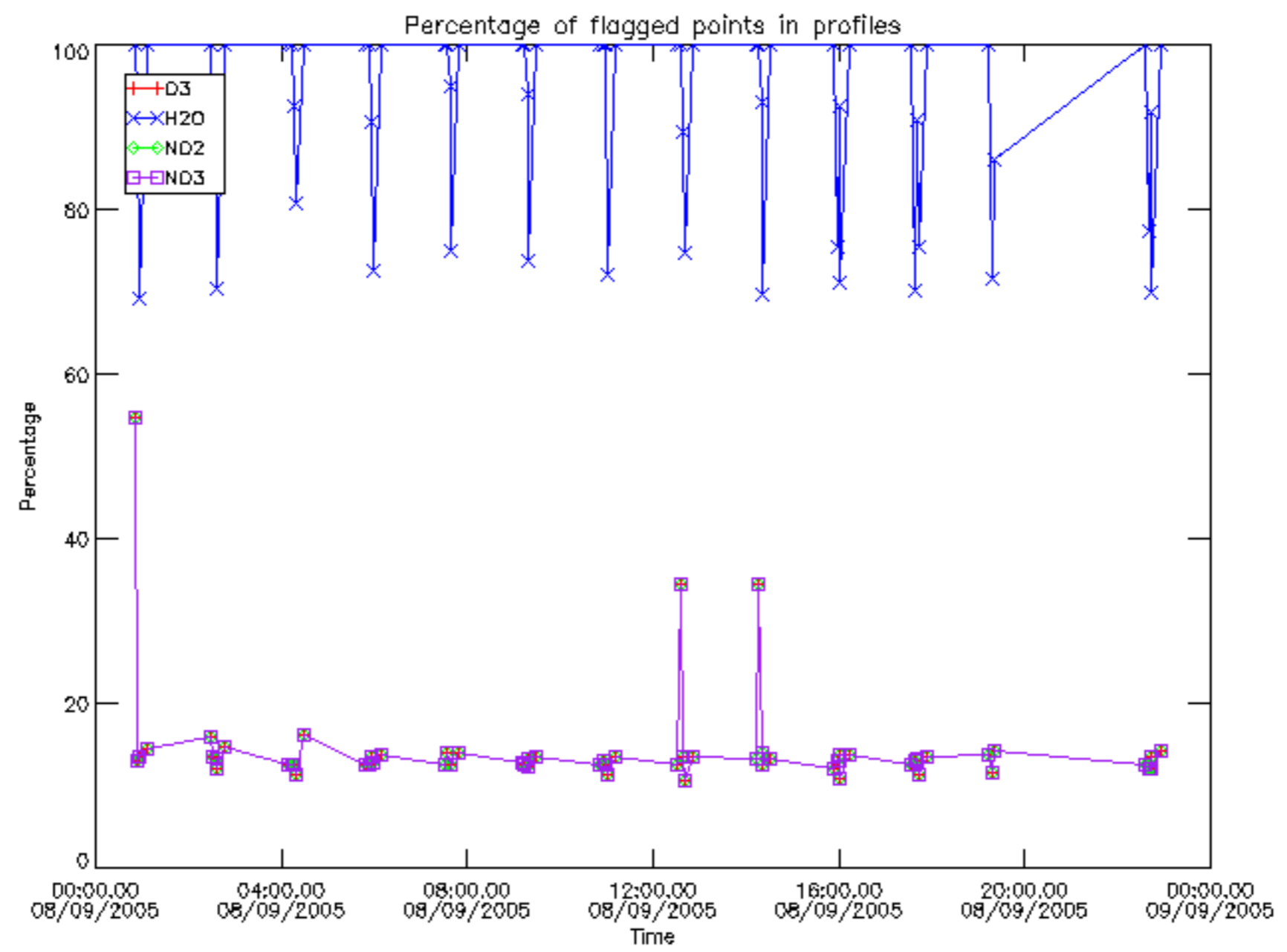




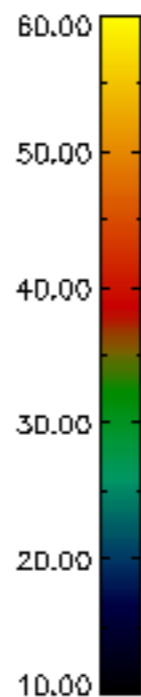
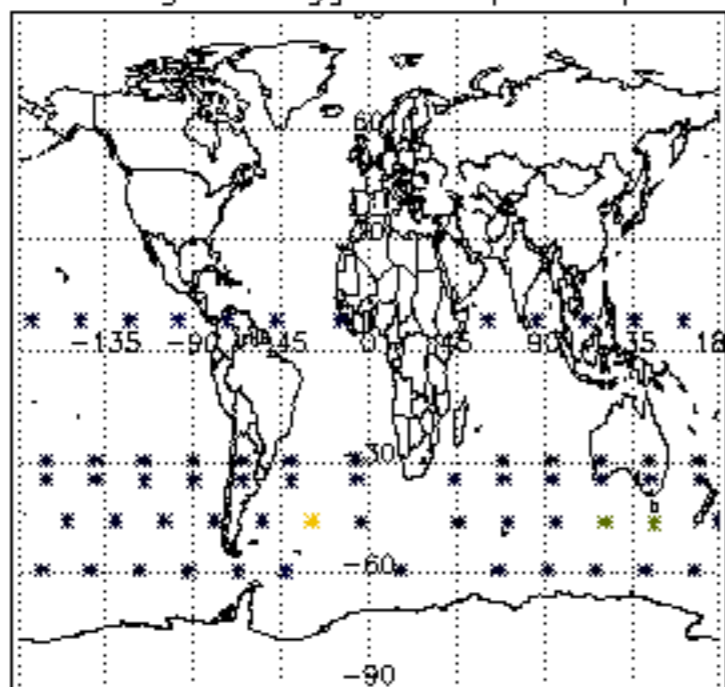




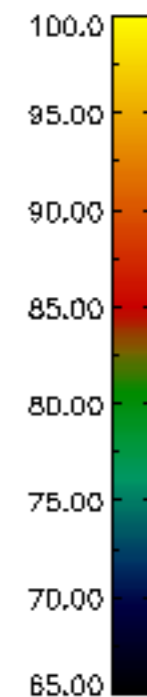
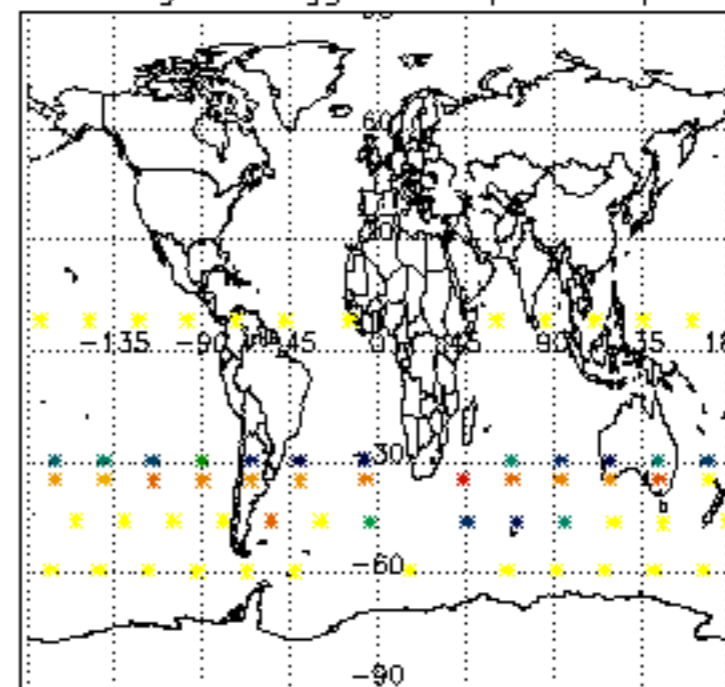




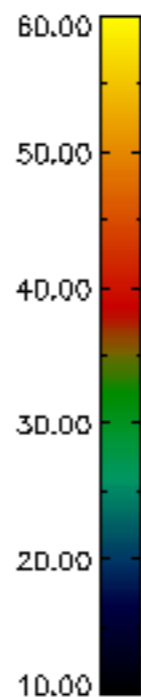
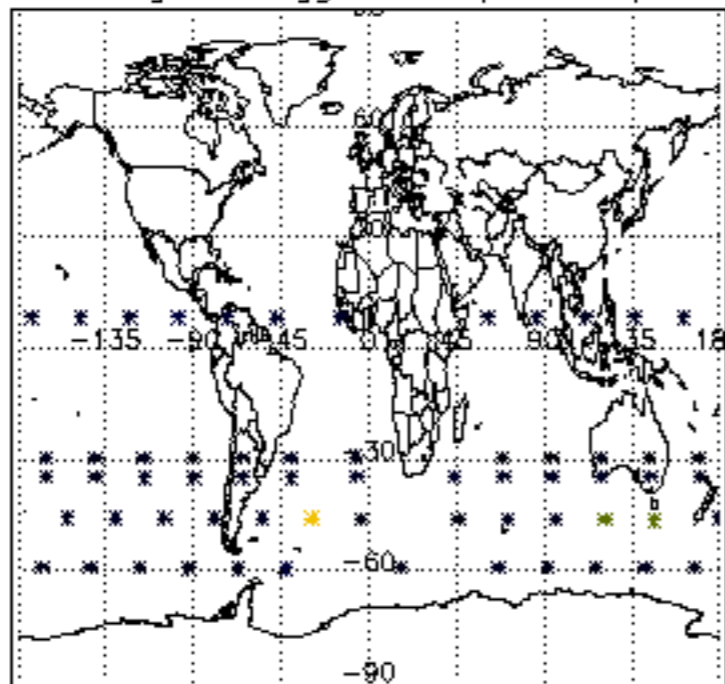
Percentage of flagged data per D3 profile



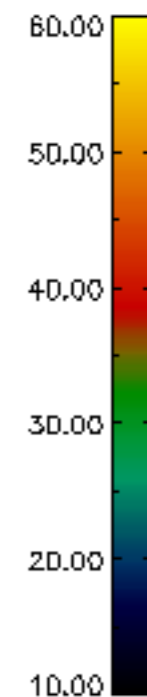
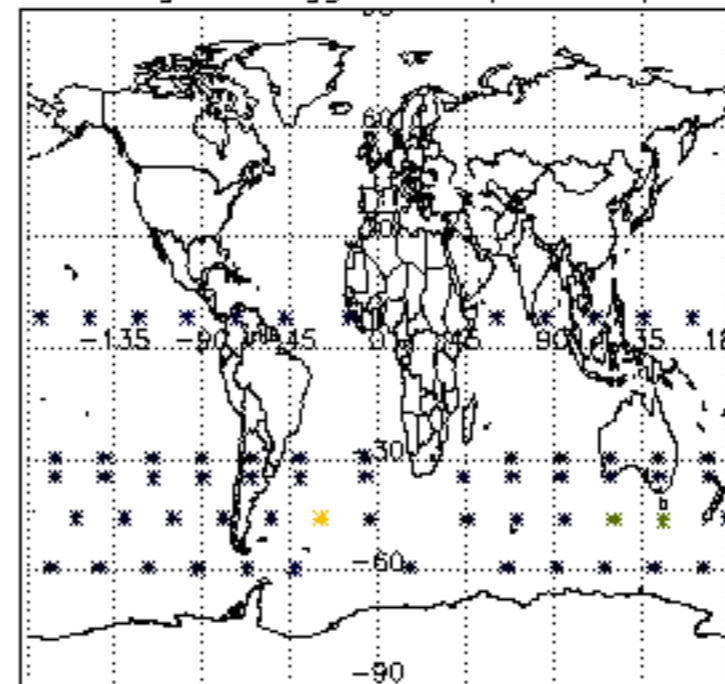
Percentage of flagged data per H2O profile

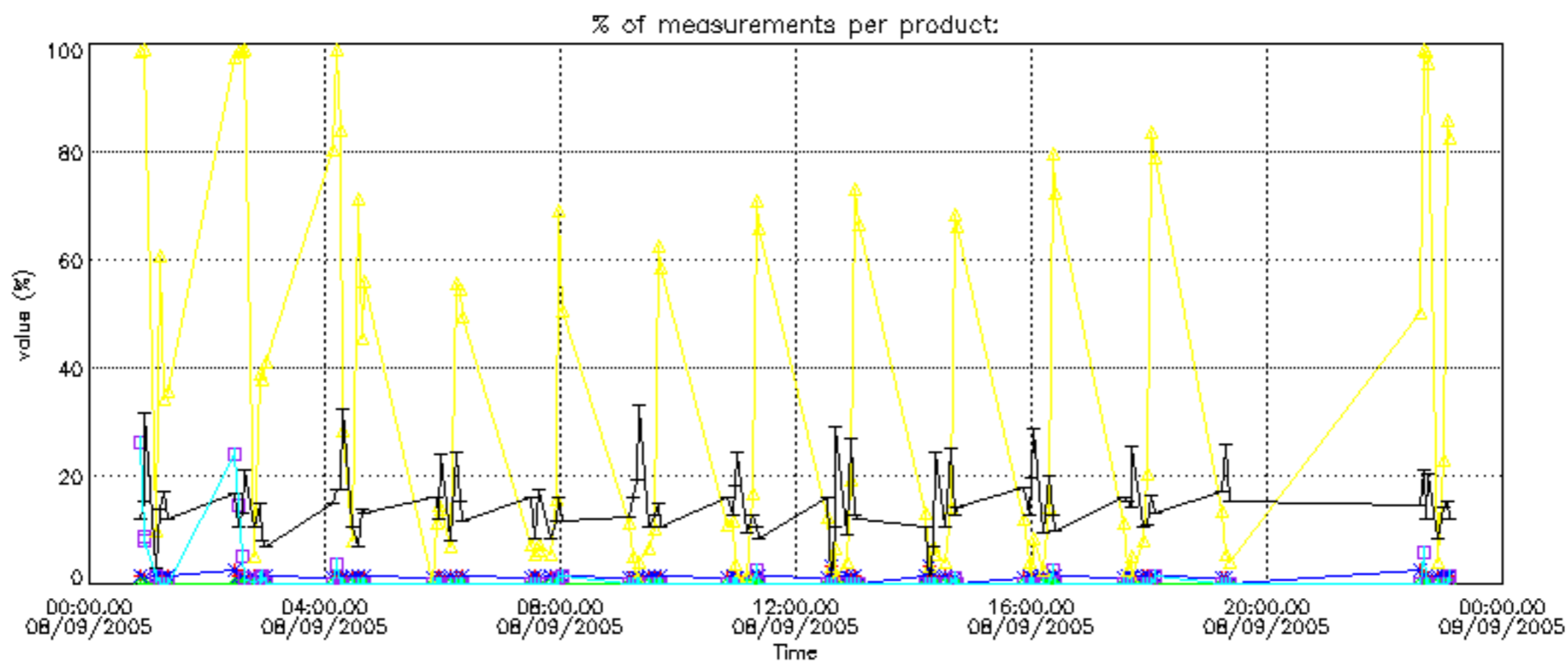


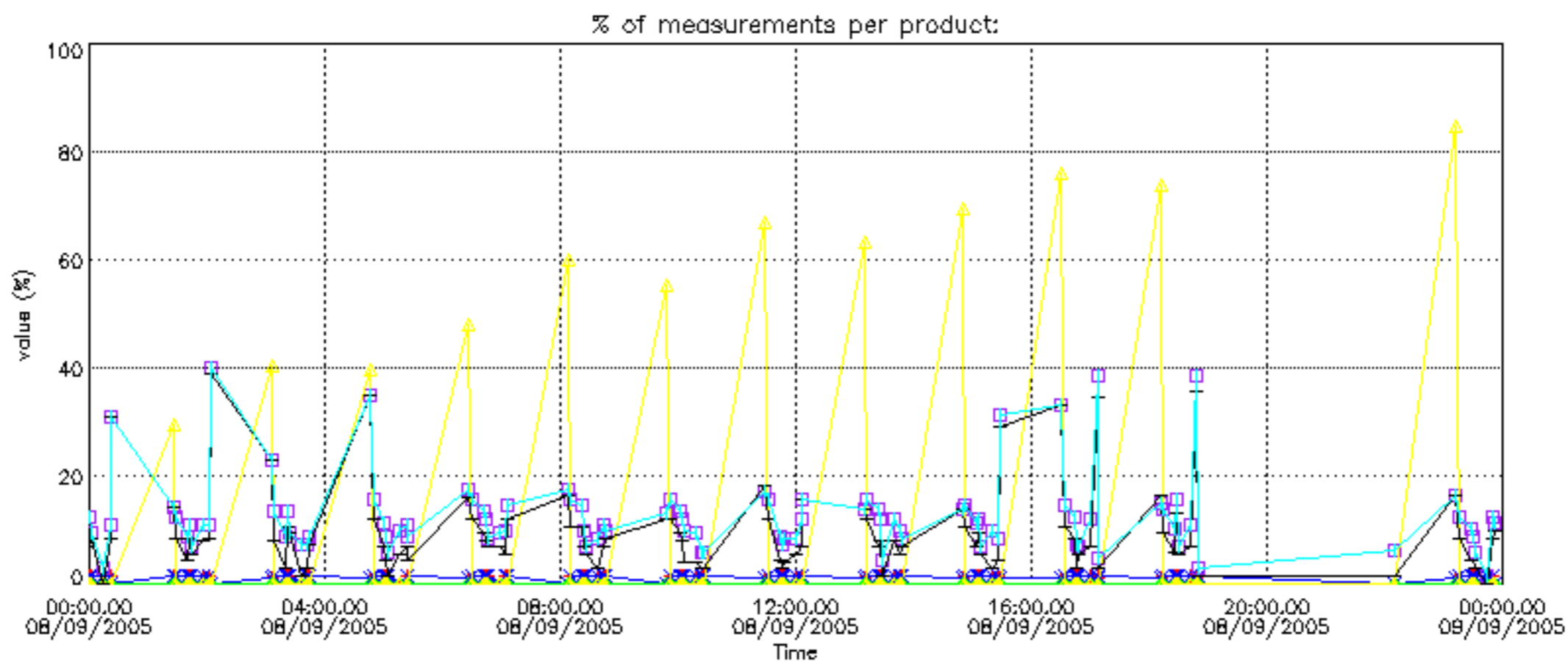
Percentage of flagged data per NO2 profile



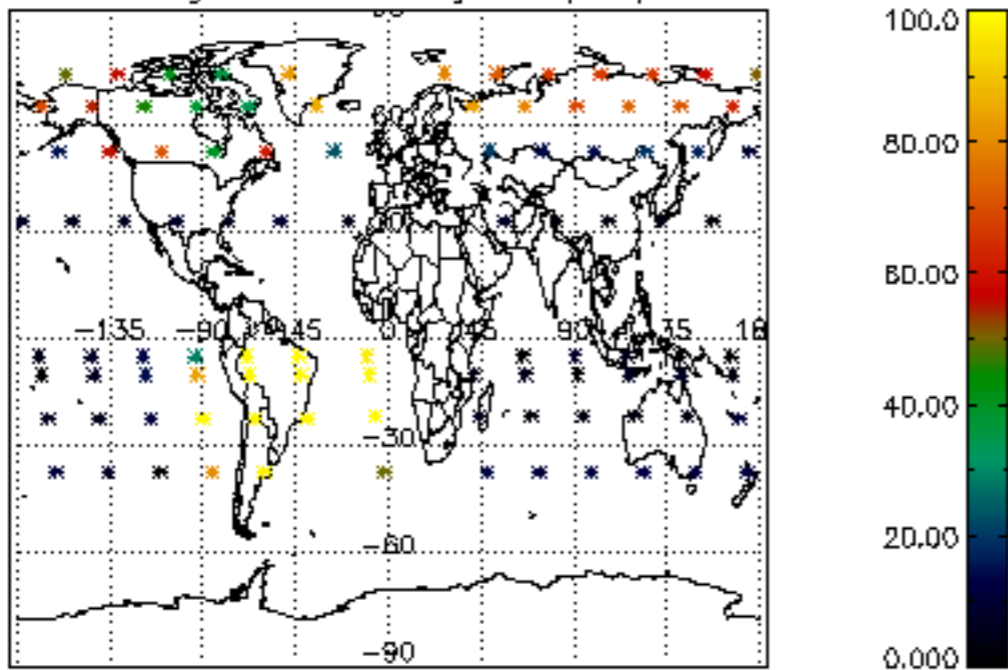
Percentage of flagged data per NO3 profile



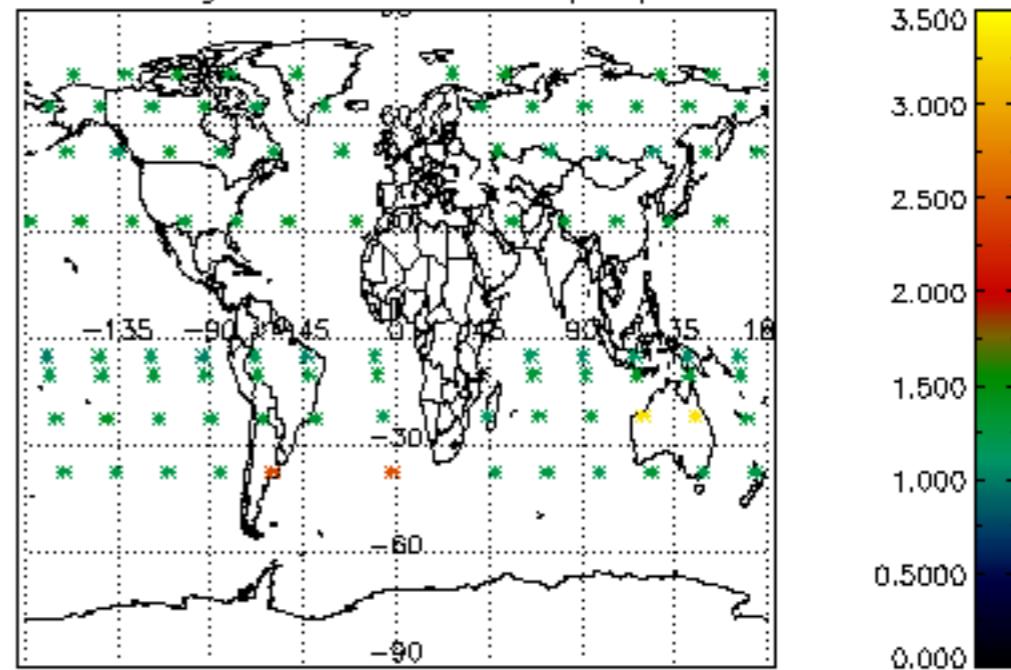




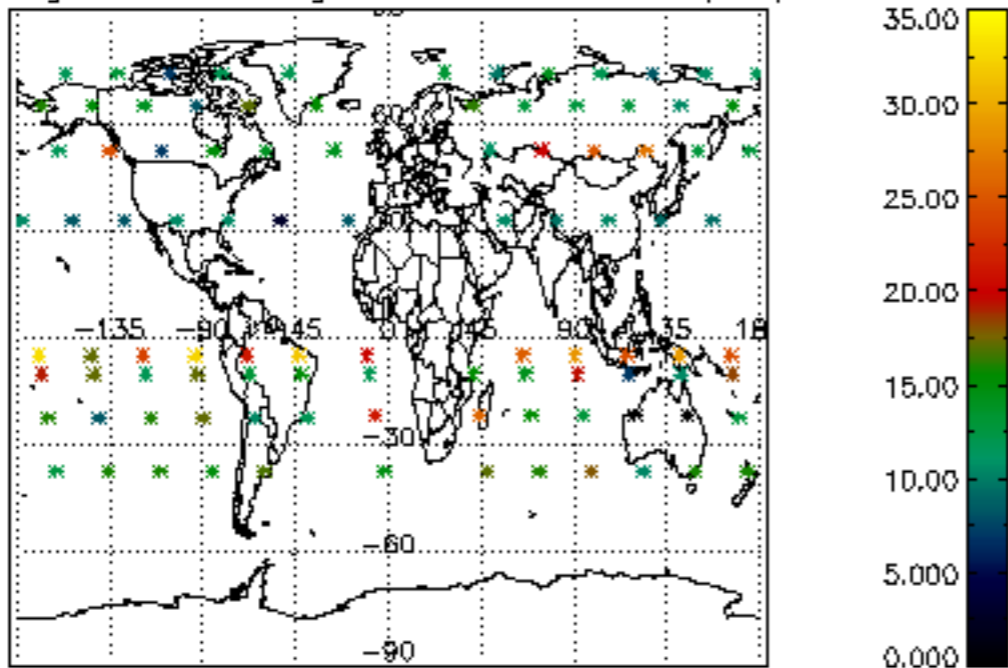
Percentage of cosmic ray hits per profile



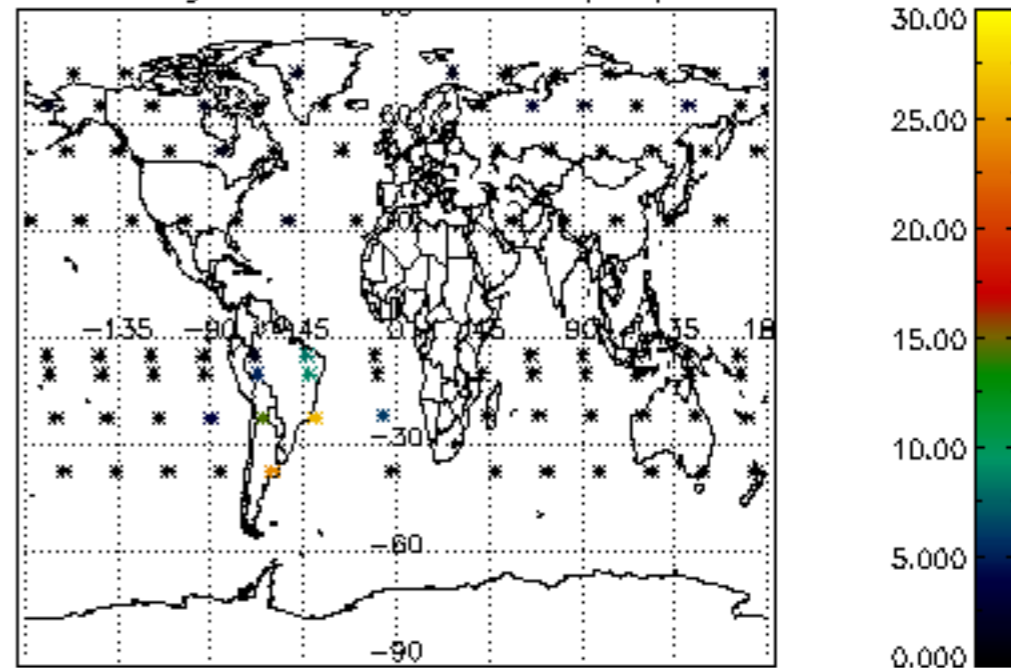
Percentage of datation errors per profile



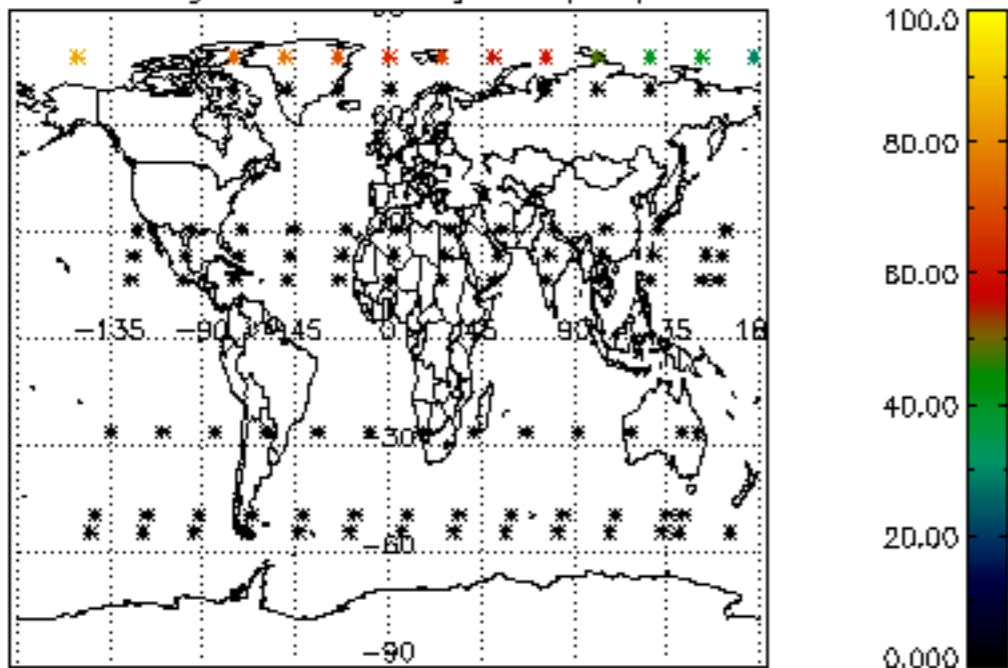
Percentage of star falling outside central band per profile



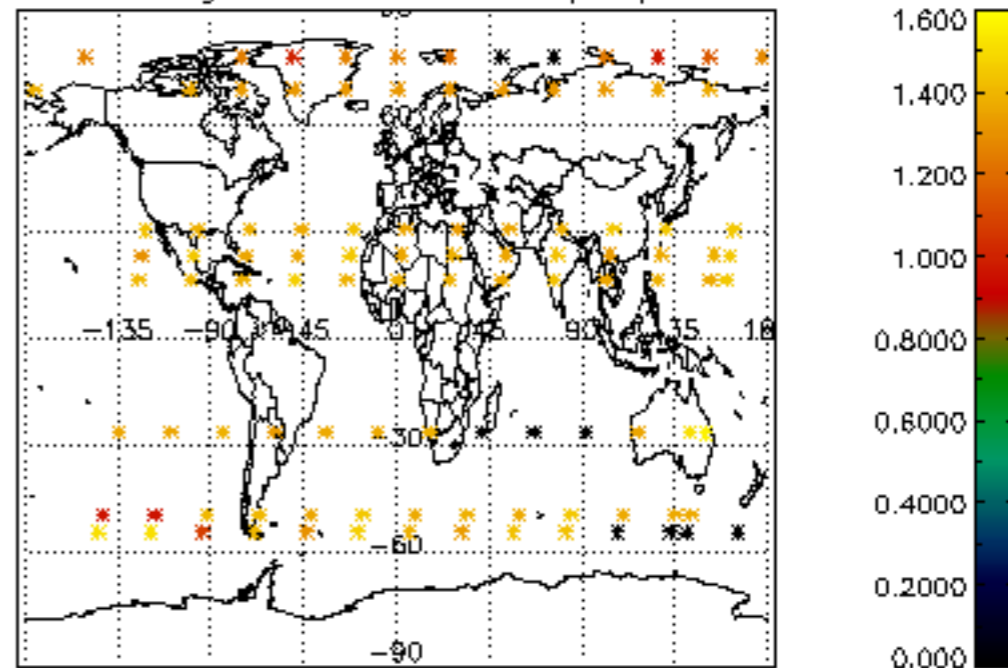
Percentage of saturation errors per profile



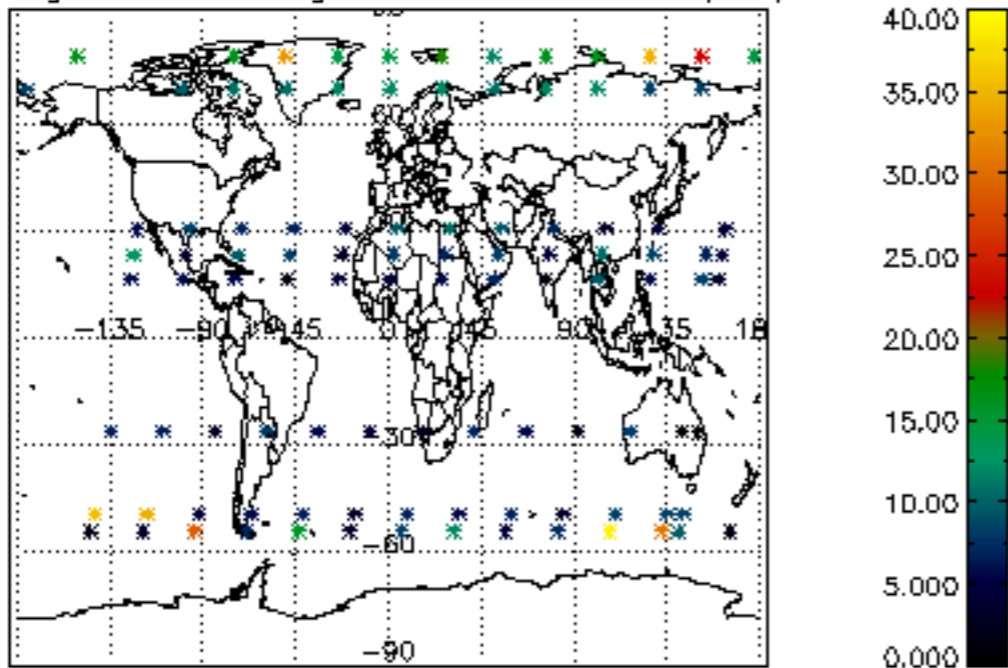
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

