

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	22APR2013 13:52:00
Data source version	GOMOS/6.01
Start time of products	16-02-2007 (16FEB2007 00:00:00)
Stop time of products	17-02-2007 (17FEB2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	300
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

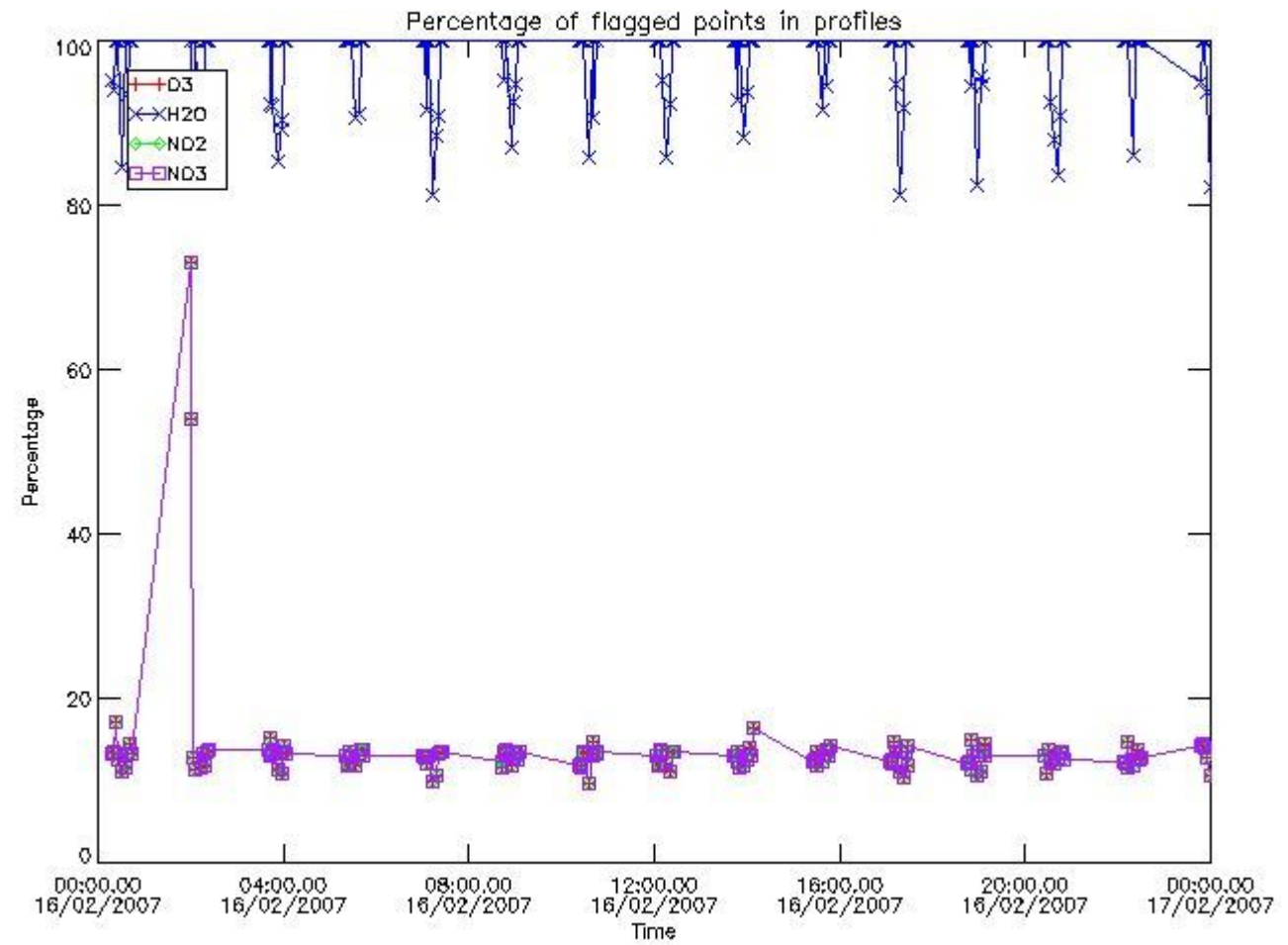
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070216_000438_000000352055_00345_25950_0061.N1	16-FEB-2007 00:04:38	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	25950	No
2	GOM_NL__2PRFIN20070216_001412_000000402055_00345_25950_0062.N1	16-FEB-2007 00:14:12	Twilight	40.000	155	41Pi Sgr	2.9000	6600.0	80	25950	No
3	GOM_NL__2PRFIN20070216_001551_000000412055_00345_25950_0063.N1	16-FEB-2007 00:15:51	Twilight	41.000	57	34Sig Sgr	2.0660	26000.	82	25950	No
4	GOM_NL__2PRFIN20070216_001837_000000422055_00345_25950_0064.N1	16-FEB-2007 00:18:37	Dark	42.000	38	20Eps Sgr	1.8360	11000.	84	25950	No
5	GOM_NL__2PRFIN20070216_002047_000000422055_00345_25950_0065.N1	16-FEB-2007 00:20:47	Dark	41.500	25	35Lam Sco	1.6200	28000.	83	25950	No
6	GOM_NL__2PRFIN20070216_002203_000000422055_00345_25950_0066.N1	16-FEB-2007 00:22:03	Dark	41.500	40	The Sco	1.8590	7100.0	83	25950	No
7	GOM_NL__2PRFIN20070216_002515_000000412055_00345_25950_0067.N1	16-FEB-2007 00:25:15	Dark	40.500	141	Bet Ara	2.8400	4600.0	81	25950	No
8	GOM_NL__2PRFIN20070216_003126_000000462055_00346_25951_0063.N1	16-FEB-2007 00:31:26	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	25951	No
9	GOM_NL__2PRFIN20070216_003548_000000442055_00346_25951_0064.N1	16-FEB-2007 00:35:48	Dark	44.000	12	Alp1Cru	0.77500	30000.	88	25951	No
10	GOM_NL__2PRFIN20070216_003813_000000392055_00346_25951_0065.N1	16-FEB-2007 00:38:13	Dark	38.500	29	Bet Car	1.6720	10200.	77	25951	No
11	GOM_NL__2PRFIN20070216_004051_000000362055_00346_25951_0066.N1	16-FEB-2007 00:40:51	Dark	35.500	71	lot Car	2.2460	7700.0	71	25951	No
12	GOM_NL__2PRFIN20070216_004229_000000392055_00346_25951_0067.N1	16-FEB-2007 00:42:29	Dark	38.500	46	Del Vel	1.9540	10600.	77	25951	No
13	GOM_NL__2PRFIN20070216_004451_000000392055_00346_25951_0068.N1	16-FEB-2007 00:44:51	Straylight	39.000	34	Gam2Vel	1.7930	23000.	78	25951	No
14	GOM_NL__2PRFIN20070216_004656_000000382055_00346_25951_0069.N1	16-FEB-2007 00:46:56	Straylight	37.500	70	Zet Pup	2.2460	39000.	75	25951	No
15	GOM_NL__2PRFIN20070216_005114_000000402055_00346_25951_0070.N1	16-FEB-2007 00:51:14	Straylight	39.500	132	15Rho Pup	2.8030	6900.0	79	25951	No
16	GOM_NL__2PRFIN20070216_005941_000000442055_00346_25951_0071.N1	16-FEB-2007 00:59:41	Bright	43.500	8	10Alp CMi	0.40000	6500.0	87	25951	No
17	GOM_NL__2PRFIN20070216_010557_000000382055_00346_25951_0072.N1	16-FEB-2007 01:05:57	Bright	38.000	17	78Bet Gem	1.1610	4500.0	76	25951	No
18	GOM_NL__2PRFIN20070216_012320_000000342055_00346_25951_0073.N1	16-FEB-2007 01:23:20	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	25951	No
19	GOM_NL__2PRFIN20070216_013018_000000352055_00346_25951_0074.N1	16-FEB-2007 01:30:18	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	25951	No
20	GOM_NL__2PRFIN20070216_013525_000000342055_00346_25951_0075.N1	16-FEB-2007 01:35:25	Bright	34.000	19	50Alp Cyg	1.2460	10500.	68	25951	No
21	GOM_NL__2PRFIN20070216_013701_000000522055_00346_25951_0076.N1	16-FEB-2007 01:37:01	Bright	52.000	66	37Gam Cyg	2.2080	5900.0	104	25951	No
22	GOM_NL__2PRFIN20070216_014514_000000342055_00346_25951_0077.N1	16-FEB-2007 01:45:14	Bright	34.000	168	17Zet Aql	2.9860	11000.	68	25951	No
23	GOM_NL__2PRFIN20070216_015448_000000412055_00346_25951_0078.N1	16-FEB-2007 01:54:48	Twilight	40.500	155	41Pi Sgr	2.9000	6600.0	81	25951	No
24	GOM_NL__2PRFIN20070216_015914_000000402055_00346_25951_0079.N1	16-FEB-2007 01:59:14	Dark	39.500	38	20Eps Sgr	1.8360	11000.	79	25951	No
25	GOM_NL__2PRFIN20070216_020124_000000442055_00346_25951_0080.N1	16-FEB-2007 02:01:24	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	25951	No
26	GOM_NL__2PRFIN20070216_020240_000000402055_00346_25951_0081.N1	16-FEB-2007 02:02:40	Dark	40.000	40	The Sco	1.8590	7100.0	80	25951	No
27	GOM_NL__2PRFIN20070216_020552_000000452055_00346_25951_0082.N1	16-FEB-2007 02:05:52	Dark	45.000	141	Bet Ara	2.8400	4600.0	90	25951	No
28	GOM_NL__2PRFIN20070216_021202_000000452055_00347_25952_0076.N1	16-FEB-2007 02:12:02	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	25952	No
29	GOM_NL__2PRFIN20070216_021625_000000392055_00347_25952_0077.N1	16-FEB-2007 02:16:25	Dark	38.500	12	Alp1Cru	0.77500	30000.	77	25952	No
30	GOM_NL__2PRFIN20070216_021850_000000432055_00347_25952_0078.N1	16-FEB-2007 02:18:50	Dark	43.000	29	Bet Car	1.6720	10200.	86	25952	No
31	GOM_NL__2PRFIN20070216_022127_000000382055_00347_25952_0079.N1	16-FEB-2007 02:21:27	Dark	37.500	71	lot Car	2.2460	7700.0	75	25952	No
32	GOM_NL__2PRFIN20070216_022305_000000372055_00347_25952_0080.N1	16-FEB-2007 02:23:05	Dark	37.000	46	Del Vel	1.9540	10600.	74	25952	No
33	GOM_NL__2PRFIN20070216_022527_000000412055_00347_25952_0081.N1	16-FEB-2007 02:25:27	Straylight	41.000	34	Gam2Vel	1.7930	23000.	82	25952	No
34	GOM_NL__2PRFIN20070216_022732_000000372055_00347_25952_0082.N1	16-FEB-2007 02:27:32	Straylight	37.000	70	Zet Pup	2.2460	39000.	74	25952	No
35	GOM_NL__2PRFIN20070216_023150_000000402055_00347_25952_0083.N1	16-FEB-2007 02:31:50	Straylight	40.000	132	15Rho Pup	2.8030	6900.0	80	25952	No
36	GOM_NL__2PRFIN20070216_024017_000000432055_00347_25952_0084.N1	16-FEB-2007 02:40:17	Bright	42.500	8	10Alp CMi	0.40000	6500.0	85	25952	No
37	GOM_NL__2PRFIN20070216_024633_000000382055_00347_25952_0085.N1	16-FEB-2007 02:46:33	Bright	38.000	17	78Bet Gem	1.1610	4500.0	76	25952	No
38	GOM_NL__2PRFIN20070216_030355_000000332055_00347_25952_0086.N1	16-FEB-2007 03:03:55	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	25952	No
39	GOM_NL__2PRFIN20070216_031054_000000362055_00347_25952_0087.N1	16-FEB-2007 03:10:54	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	25952	No
40	GOM_NL__2PRFIN20070216_031601_000000372055_00347_25952_0088.N1	16-FEB-2007 03:16:01	Bright	36.500	19	50Alp Cyg	1.2460	10500.	73	25952	No
41	GOM_NL__2PRFIN20070216_031738_000000472055_00347_25952_0089.N1	16-FEB-2007 03:17:38	Bright	46.500	66	37Gam Cyg	2.2080	5900.0	93	25952	No
42	GOM_NL__2PRFIN20070216_032550_000000342055_00347_25952_0090.N1	16-FEB-2007 03:25:50	Bright	34.000	168	17Zet Aql	2.9860	11000.	68	25952	No

279	GOM_NL__2PRFIN20070216_221921_000000442055_00359_25964_0568.N1	16-FEB-2007 22:19:21	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	25964	No
280	GOM_NL__2PRFIN20070216_222342_000000412055_00359_25964_0569.N1	16-FEB-2007 22:23:42	Dark	40.500	12	Alp1Cru	0.77500	30000.	81	25964	No
281	GOM_NL__2PRFIN20070216_222603_000000372055_00359_25964_0570.N1	16-FEB-2007 22:26:03	Dark	37.000	29	Bet Car	1.6720	10200.	74	25964	No
282	GOM_NL__2PRFIN20070216_222842_000000412055_00359_25964_0571.N1	16-FEB-2007 22:28:42	Dark	41.000	71	lot Car	2.2460	7700.0	82	25964	No
283	GOM_NL__2PRFIN20070216_223018_000000402055_00359_25964_0572.N1	16-FEB-2007 22:30:18	Dark	40.000	46	Del Vel	1.9540	10600.	80	25964	No
284	GOM_NL__2PRFIN20070216_223241_000000392055_00359_25964_0573.N1	16-FEB-2007 22:32:41	Straylight	39.000	34	Gam2Vel	1.7930	23000.	78	25964	No
285	GOM_NL__2PRFIN20070216_223445_000000382055_00359_25964_0574.N1	16-FEB-2007 22:34:45	Straylight	37.500	70	Zet Pup	2.2460	39000.	75	25964	No
286	GOM_NL__2PRFIN20070216_223903_000000402055_00359_25964_0575.N1	16-FEB-2007 22:39:03	Straylight	39.500	132	15Rho Pup	2.8030	6900.0	79	25964	No
287	GOM_NL__2PRFIN20070216_224731_000000442055_00359_25964_0576.N1	16-FEB-2007 22:47:31	Bright	43.500	8	10Alp CMi	0.40000	6500.0	87	25964	No
288	GOM_NL__2PRFIN20070216_225346_000000372055_00359_25964_0577.N1	16-FEB-2007 22:53:46	Bright	37.000	17	78Bet Gem	1.1610	4500.0	74	25964	No
289	GOM_NL__2PRFIN20070216_231107_000000332055_00359_25964_0578.N1	16-FEB-2007 23:11:07	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	25964	No
290	GOM_NL__2PRFIN20070216_231808_000000342055_00359_25964_0579.N1	16-FEB-2007 23:18:08	Bright	34.000	89	5Alp Cep	2.4510	8000.0	68	25964	No
291	GOM_NL__2PRFIN20070216_232315_000000362055_00359_25964_0580.N1	16-FEB-2007 23:23:15	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	25964	No
292	GOM_NL__2PRFIN20070216_232451_000000332055_00359_25964_0581.N1	16-FEB-2007 23:24:51	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	25964	No
293	GOM_NL__2PRFIN20070216_233304_000000352055_00359_25964_0582.N1	16-FEB-2007 23:33:04	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	25964	No
294	GOM_NL__2PRFIN20070216_234238_000000412055_00359_25964_0583.N1	16-FEB-2007 23:42:38	Twilight	40.500	155	41Pi Sgr	2.9000	6600.0	81	25964	No
295	GOM_NL__2PRFIN20070216_234418_000000402055_00359_25964_0584.N1	16-FEB-2007 23:44:18	Twilight	39.500	57	34Sig Sgr	2.0660	26000.	79	25964	No
296	GOM_NL__2PRFIN20070216_234706_000000402055_00359_25964_0585.N1	16-FEB-2007 23:47:06	Dark	39.500	38	20Eps Sgr	1.8360	11000.	79	25964	No
297	GOM_NL__2PRFIN20070216_234919_000000462055_00359_25964_0586.N1	16-FEB-2007 23:49:19	Dark	46.000	25	35Lam Sco	1.6200	28000.	92	25964	No
298	GOM_NL__2PRFIN20070216_235218_000000372055_00359_25964_0587.N1	16-FEB-2007 23:52:18	Dark	36.500	147	Alp Ara	2.8770	26000.	73	25964	No
299	GOM_NL__2PRFIN20070216_235344_000000402055_00359_25964_0588.N1	16-FEB-2007 23:53:44	Dark	40.000	141	Bet Ara	2.8400	4600.0	80	25964	No
300	GOM_NL__2PRFIN20070216_235957_000000482055_00360_25965_0595.N1	16-FEB-2007 23:59:57	Dark	48.000	4	Alp1Cen	-0.010000	5800.0	96	25965	No

3. Quality information per product

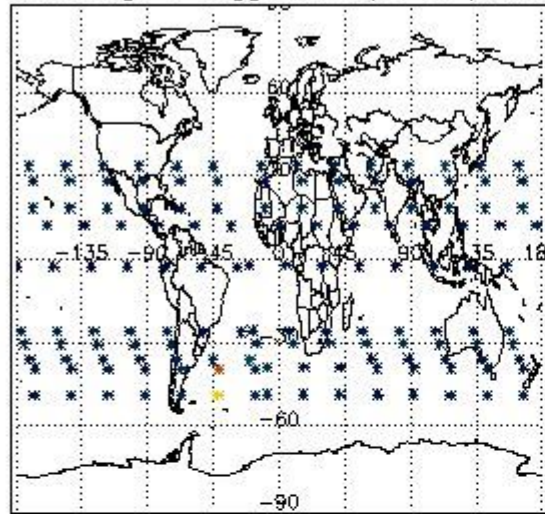
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

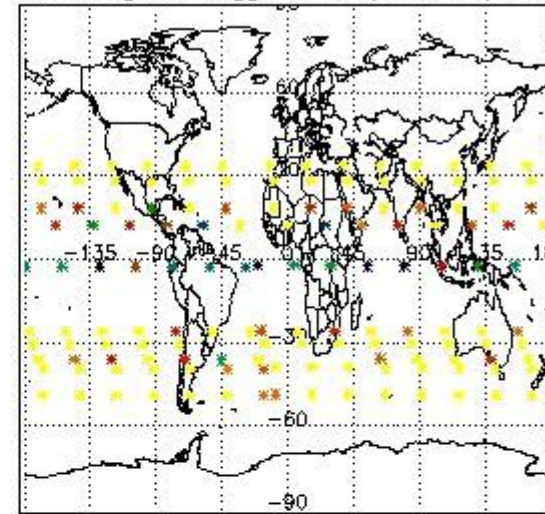


3.2 Plot quality information per product (world map)

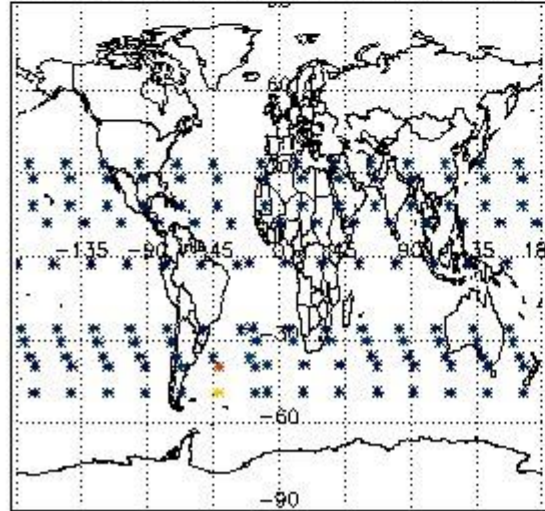
Percentage of flagged data per O3 profile



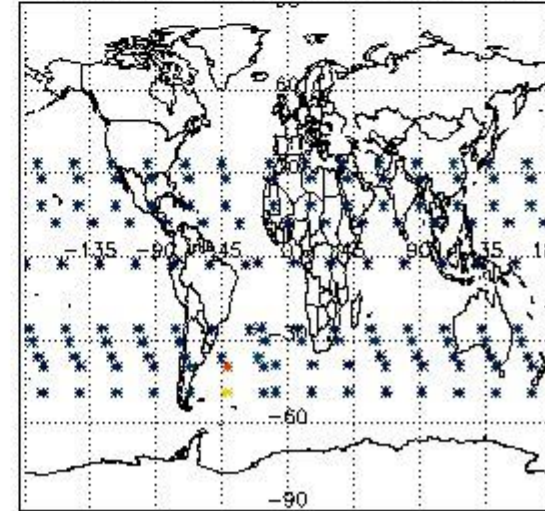
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

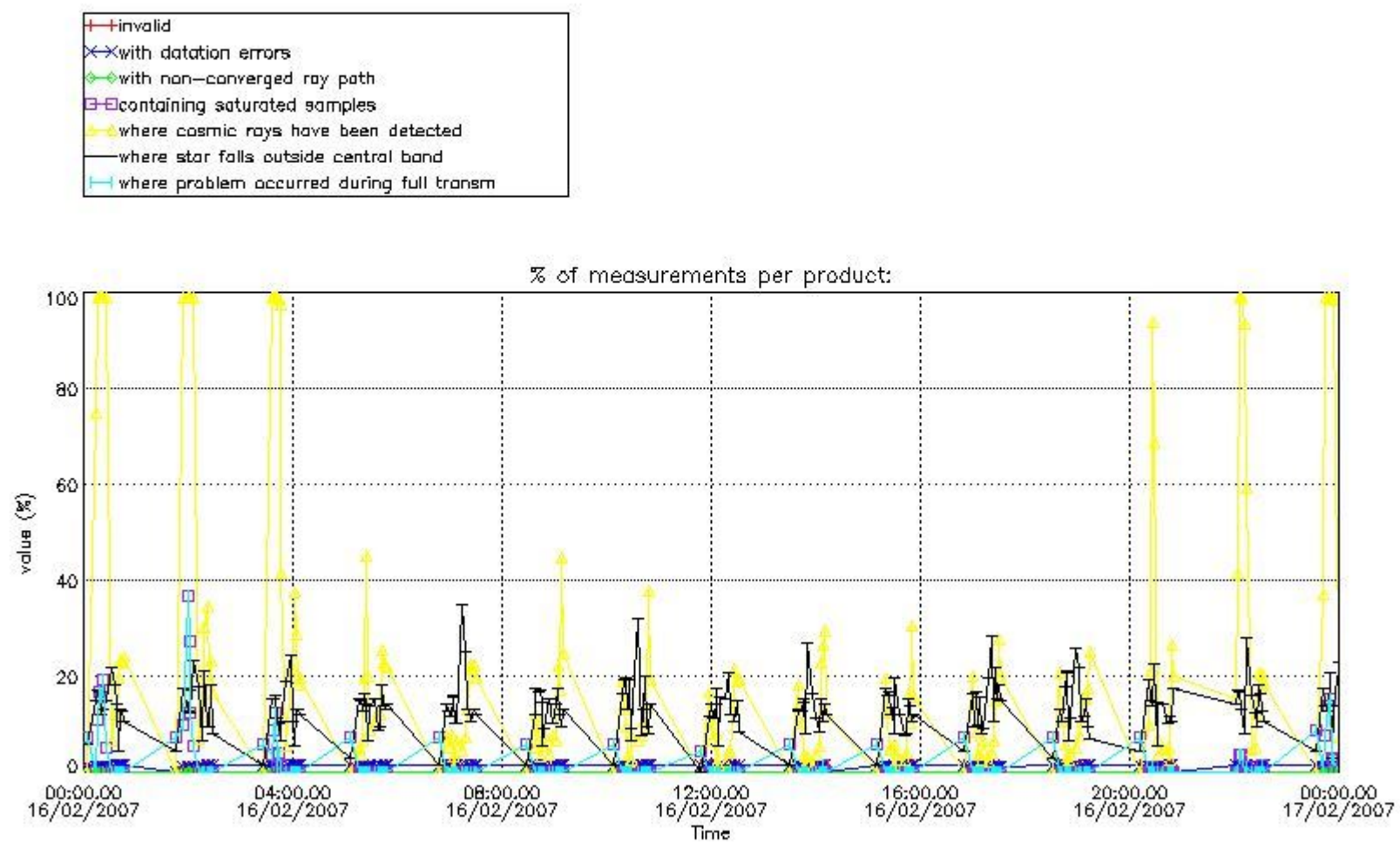


4. Level 1 quality information per product

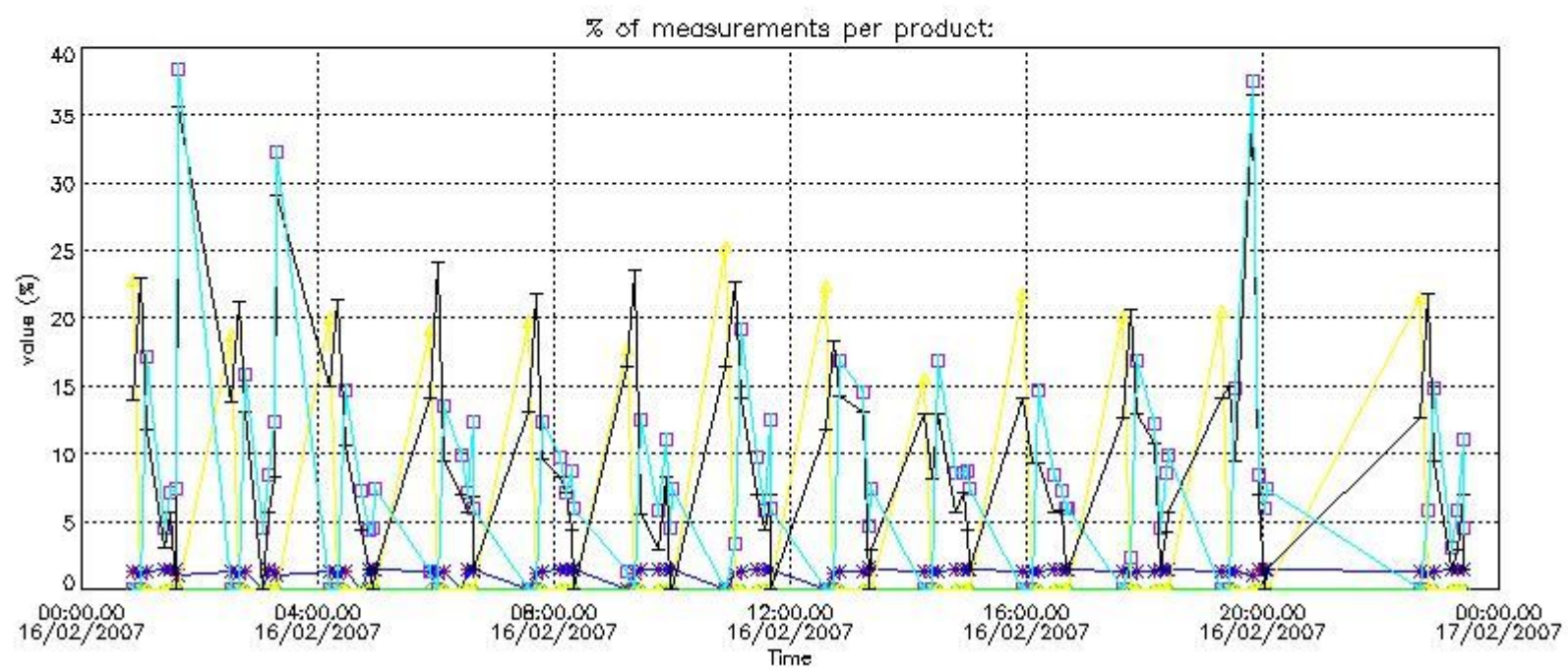
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



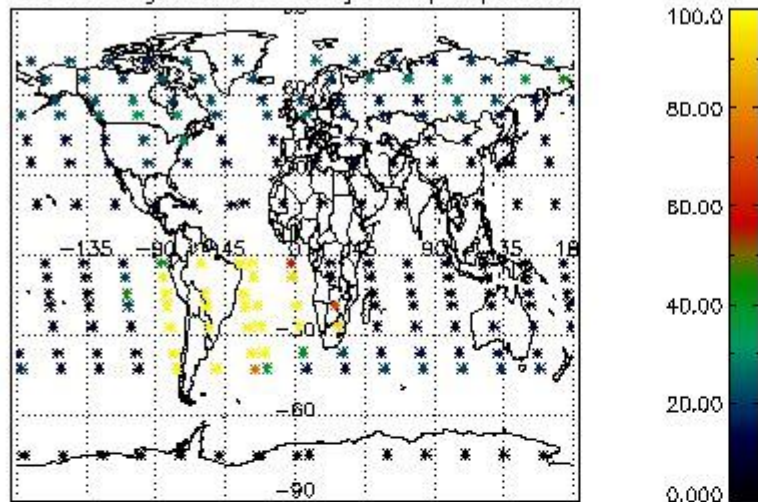
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



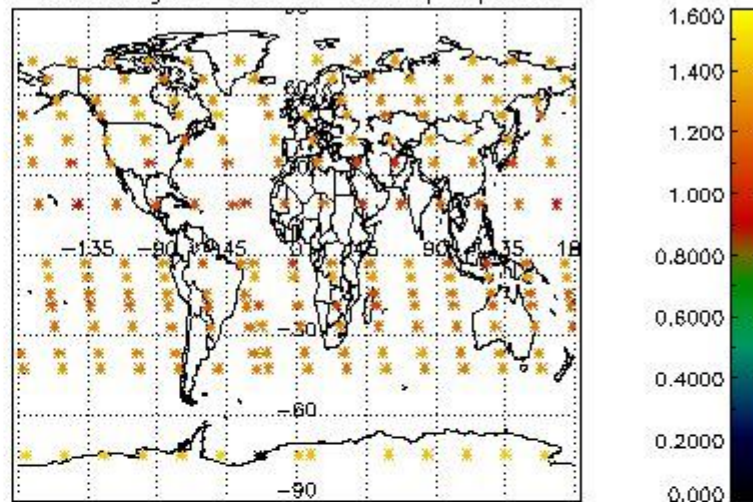
4.2 Plot quality information per product coming from level 1b processing (world map)

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

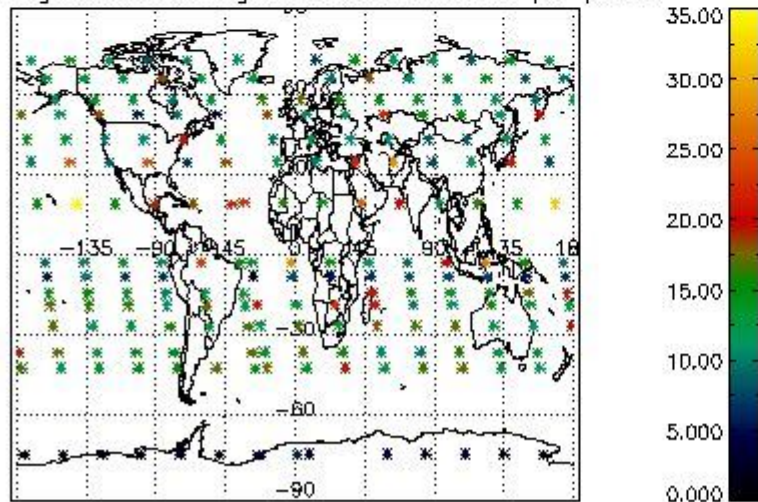
Percentage of cosmic ray hits per profile



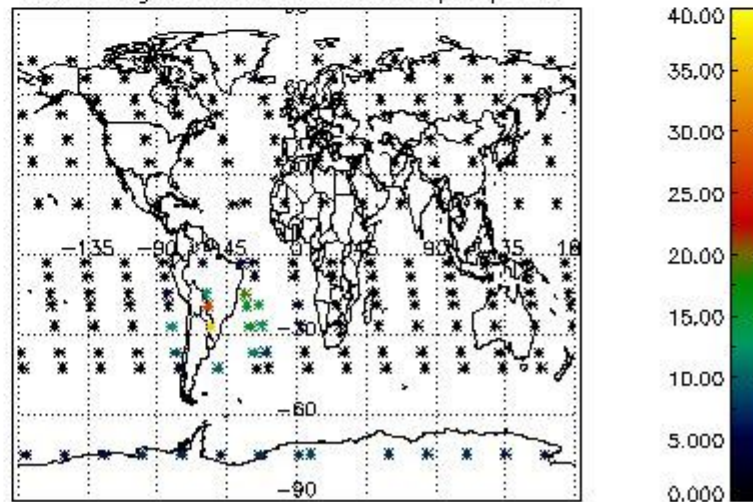
Percentage of datation errors per profile



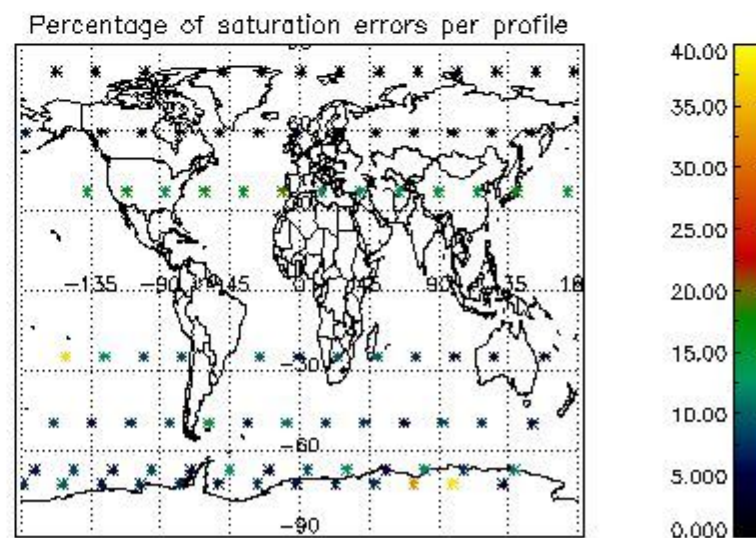
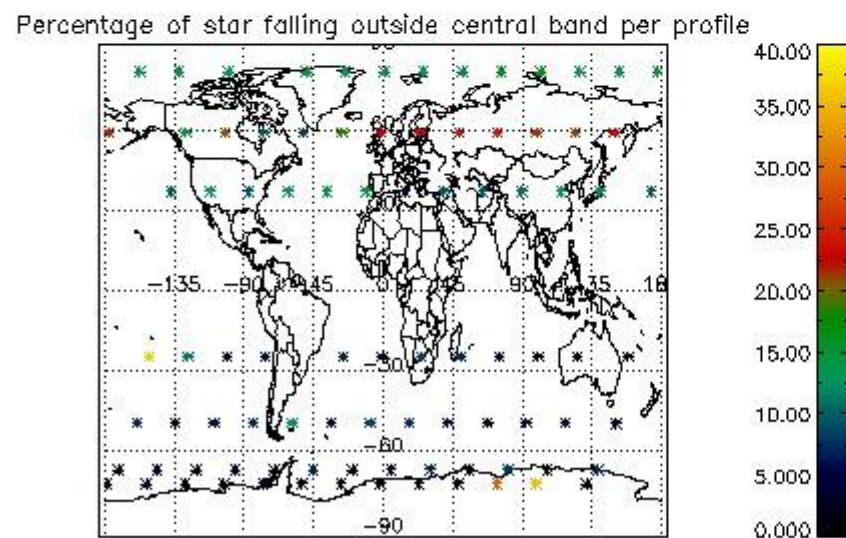
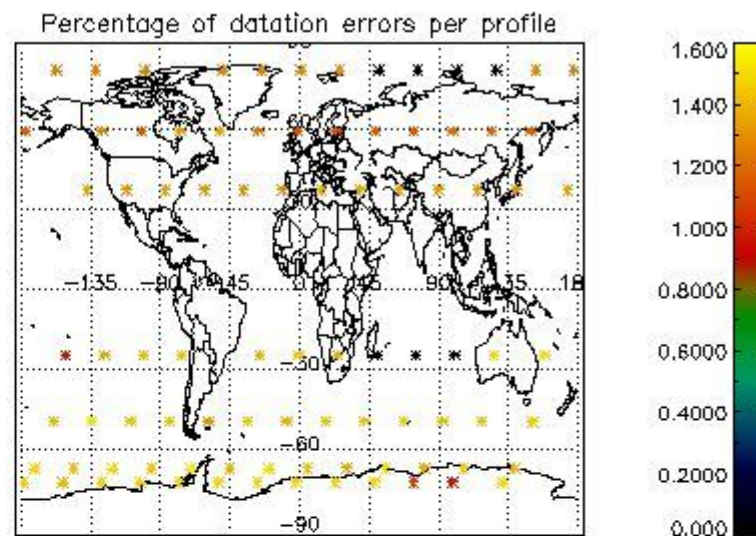
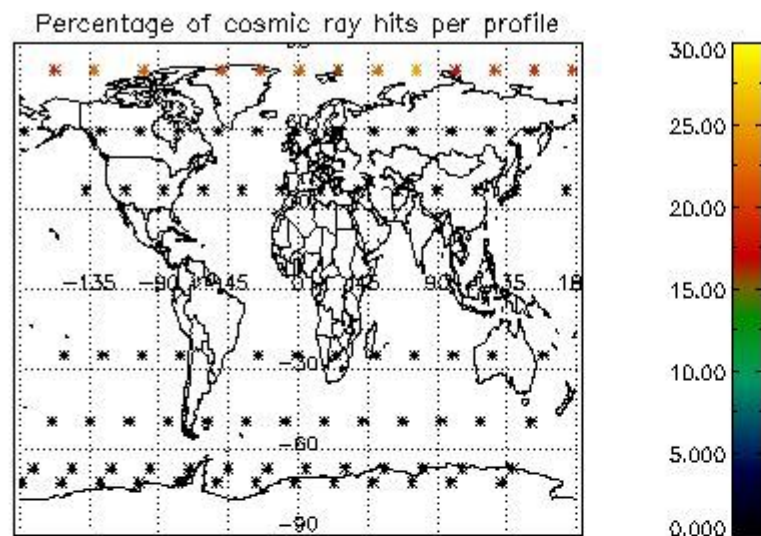
Percentage of star falling outside central band per profile



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

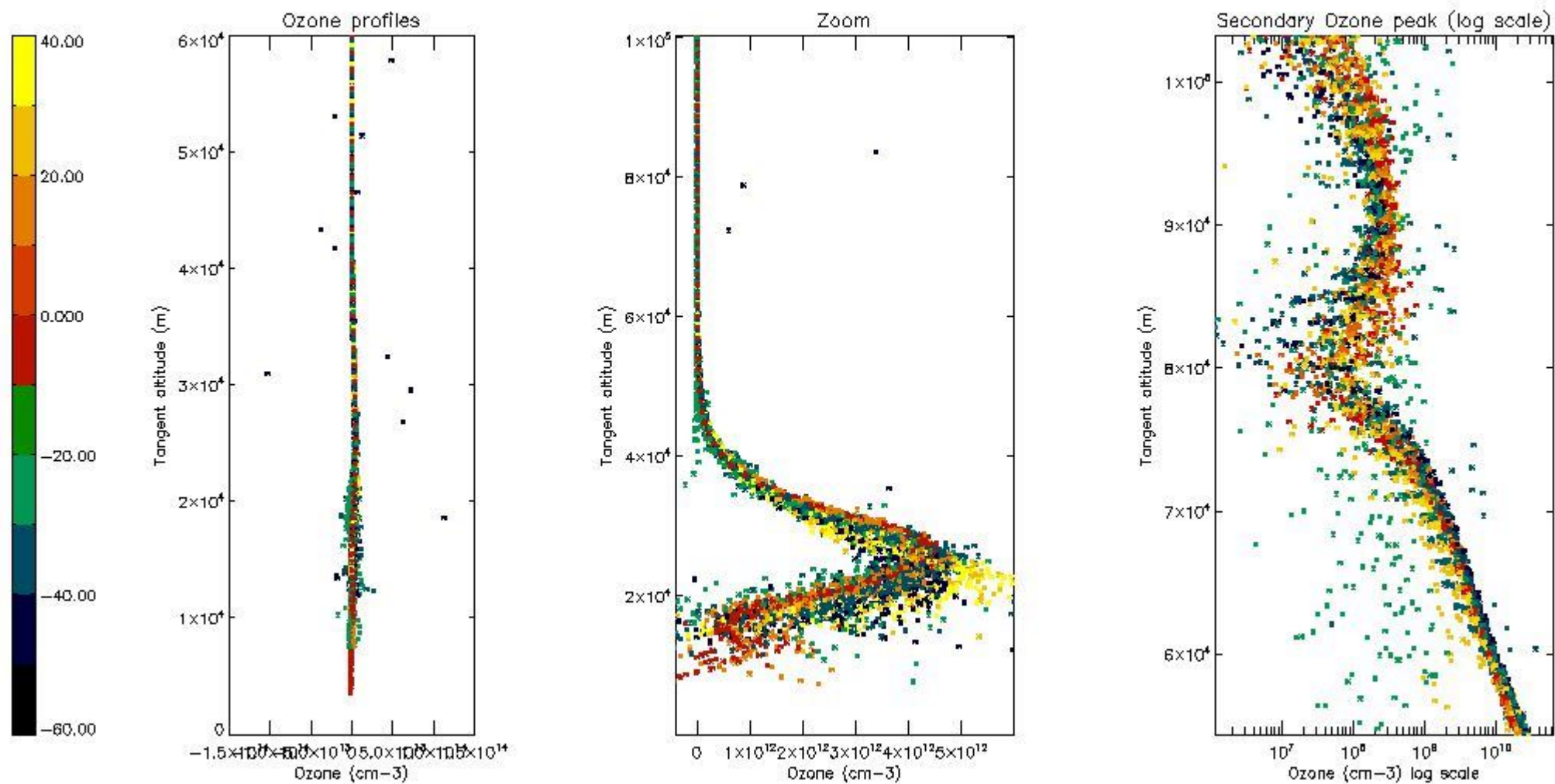
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	50
STD < 20	27

STD < 10	22
STD < 5	15

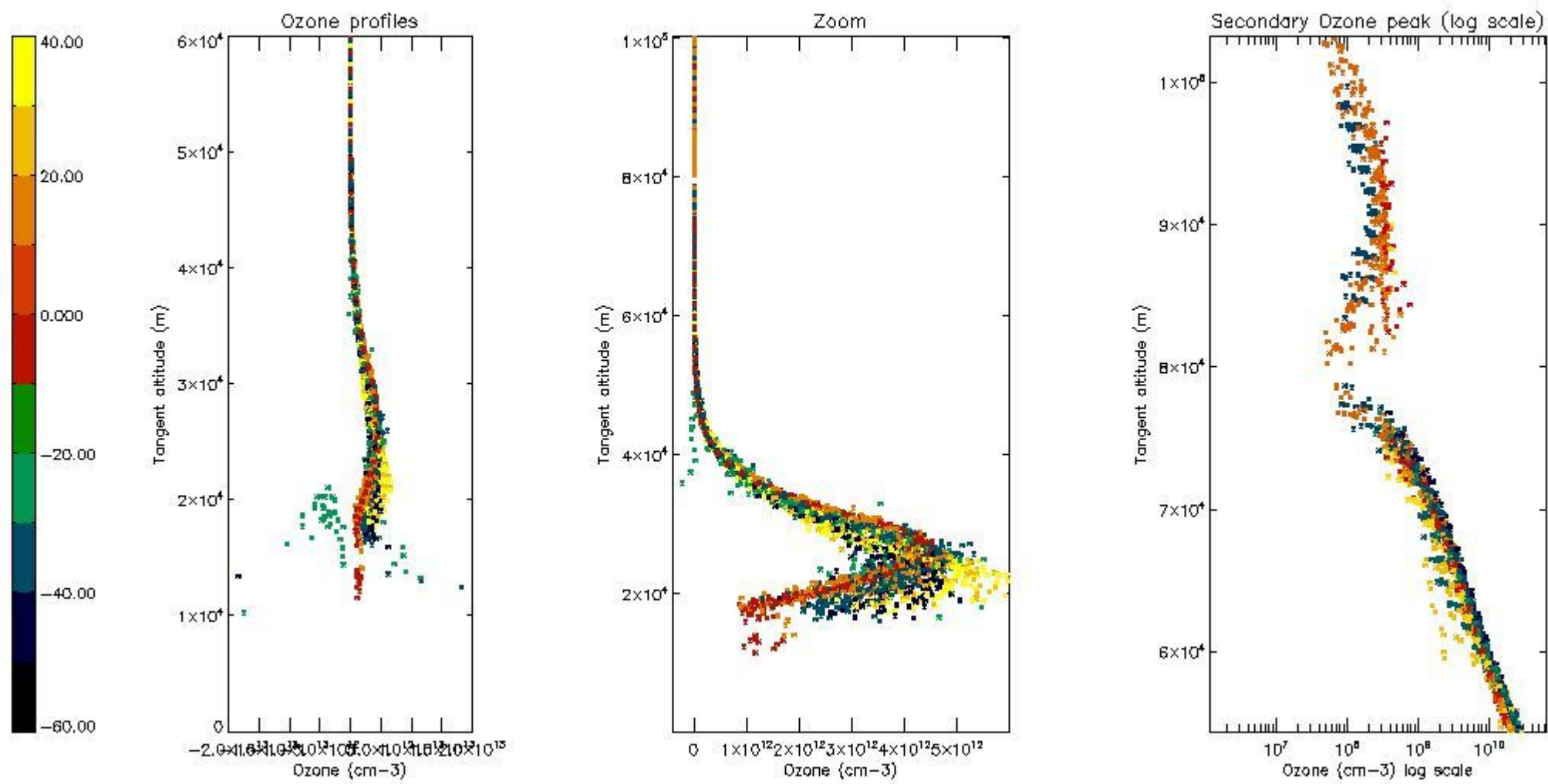
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



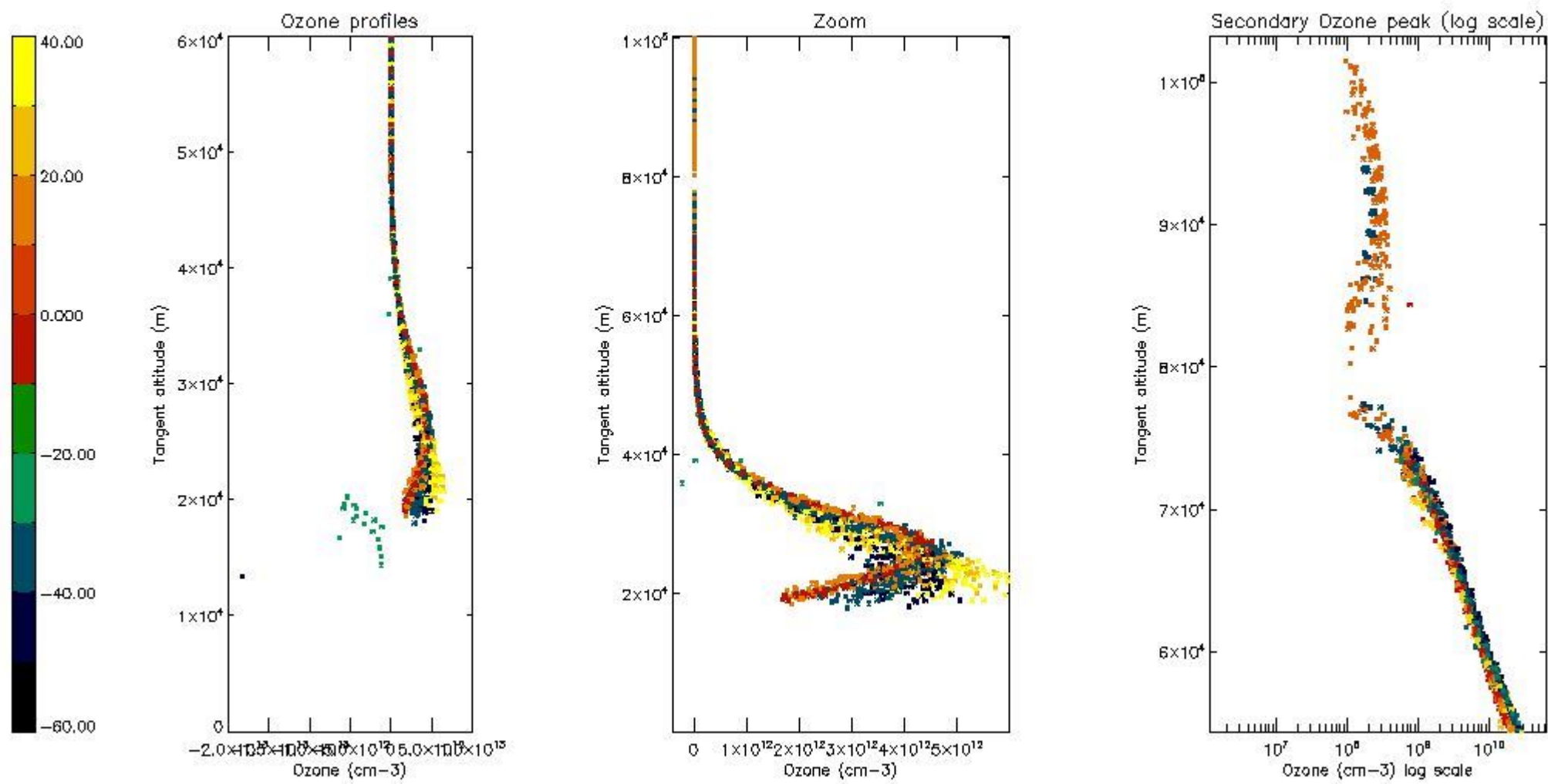
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



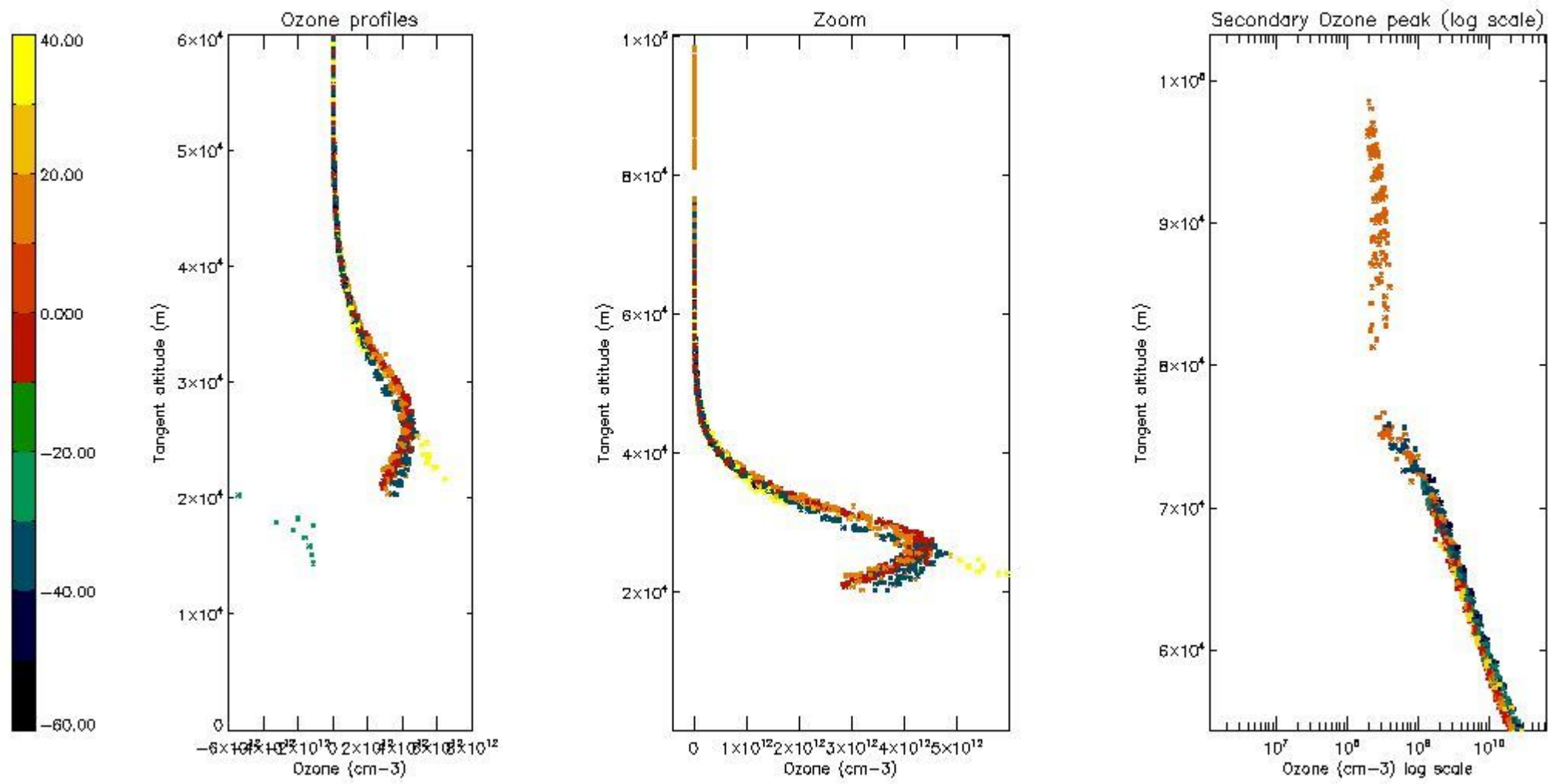
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



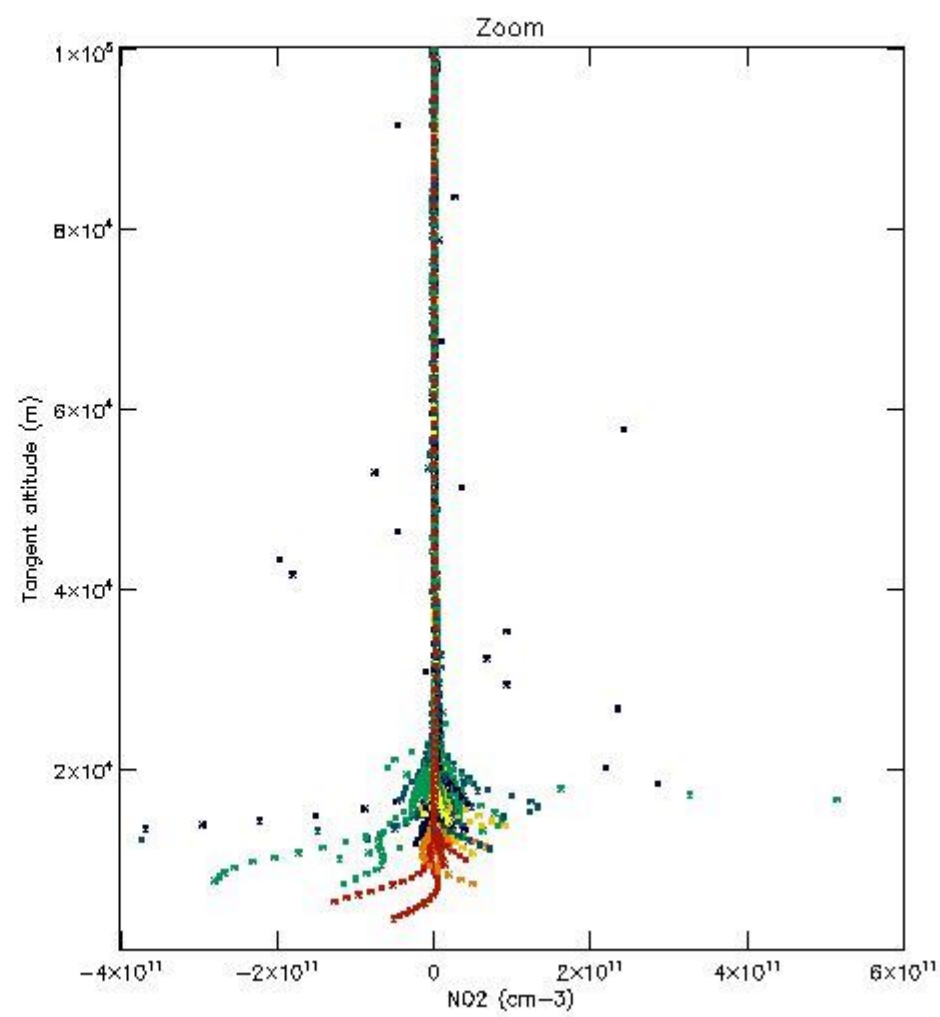
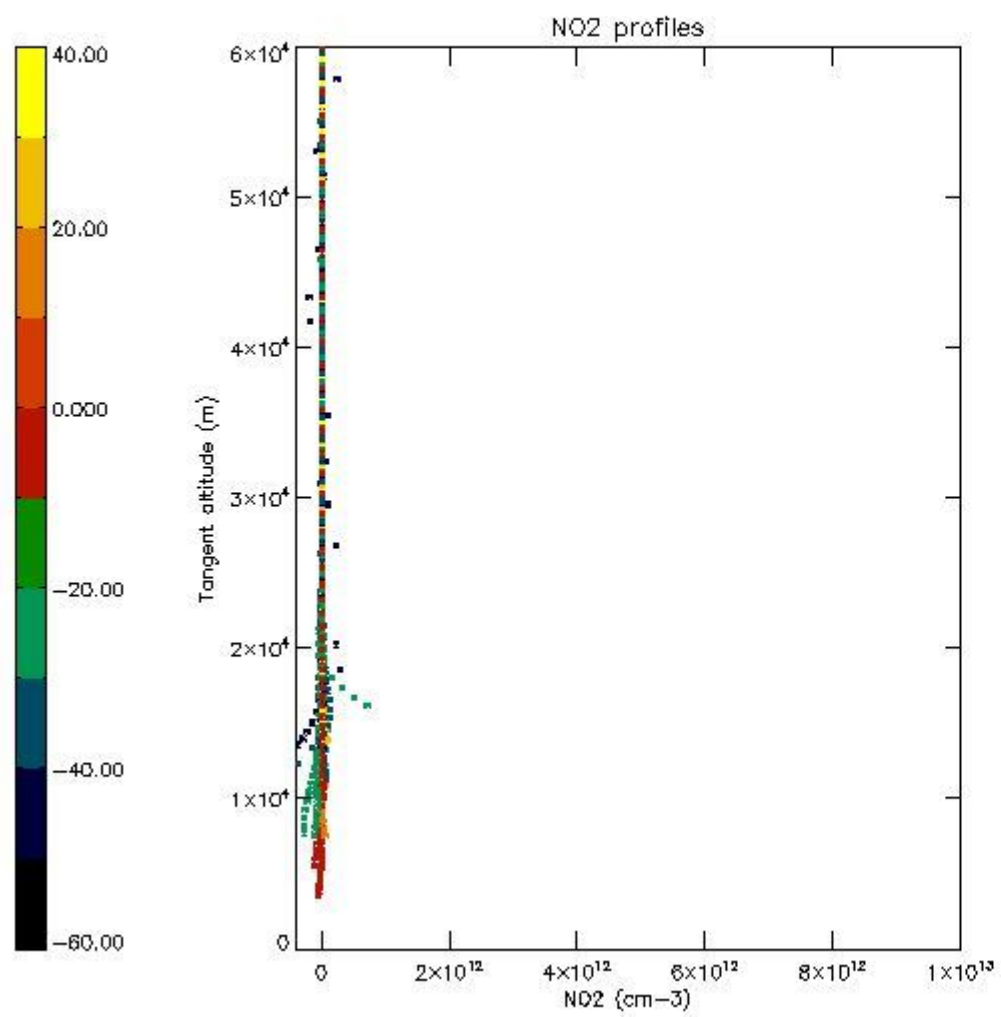
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



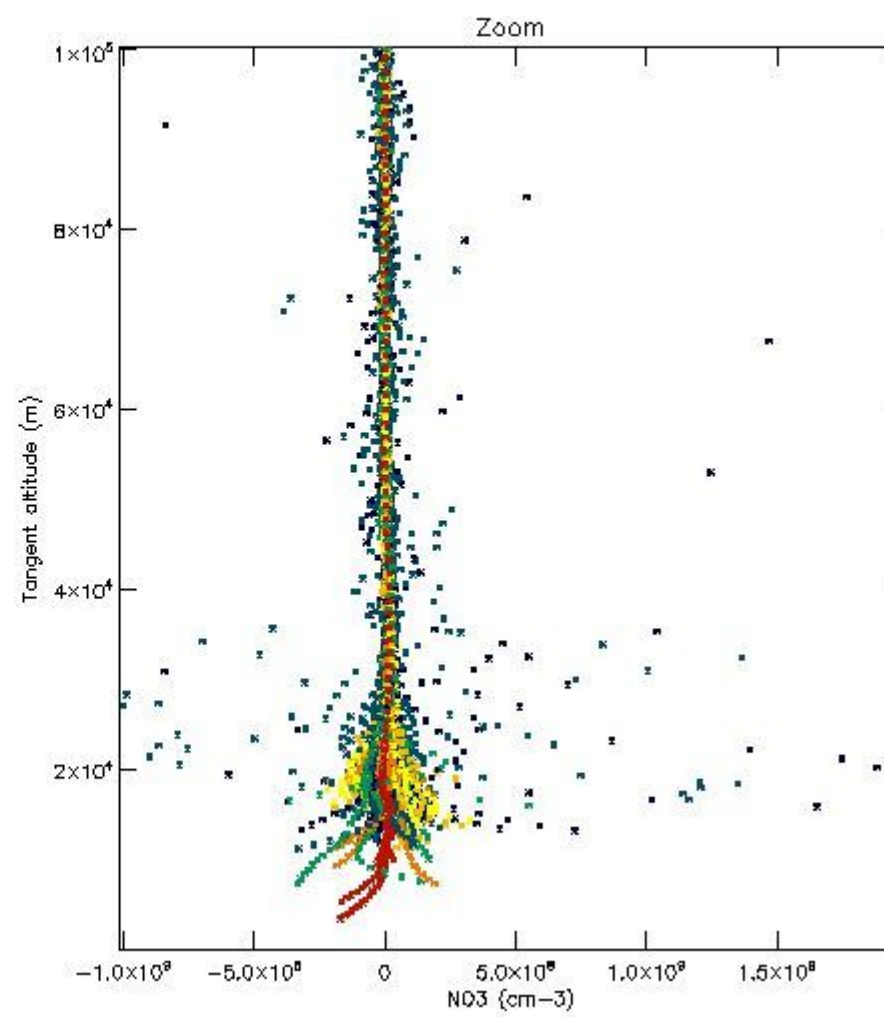
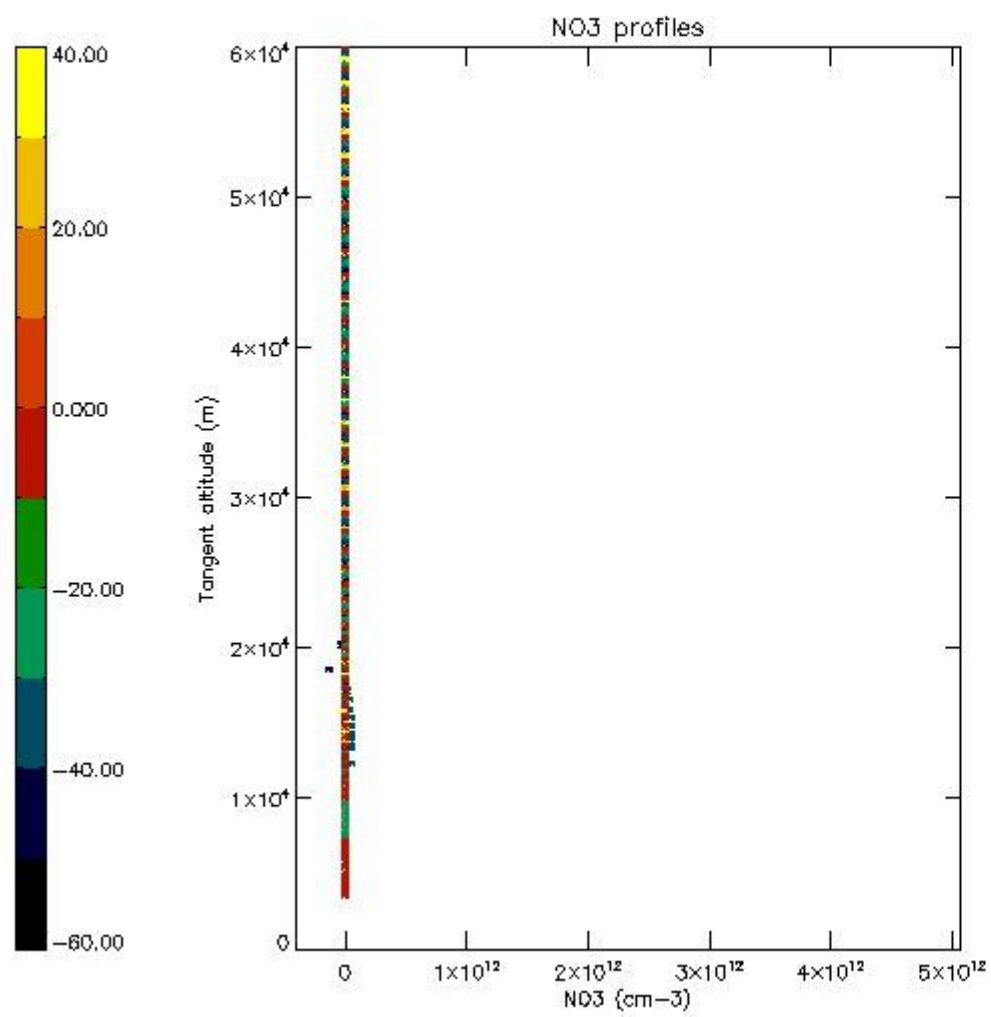
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



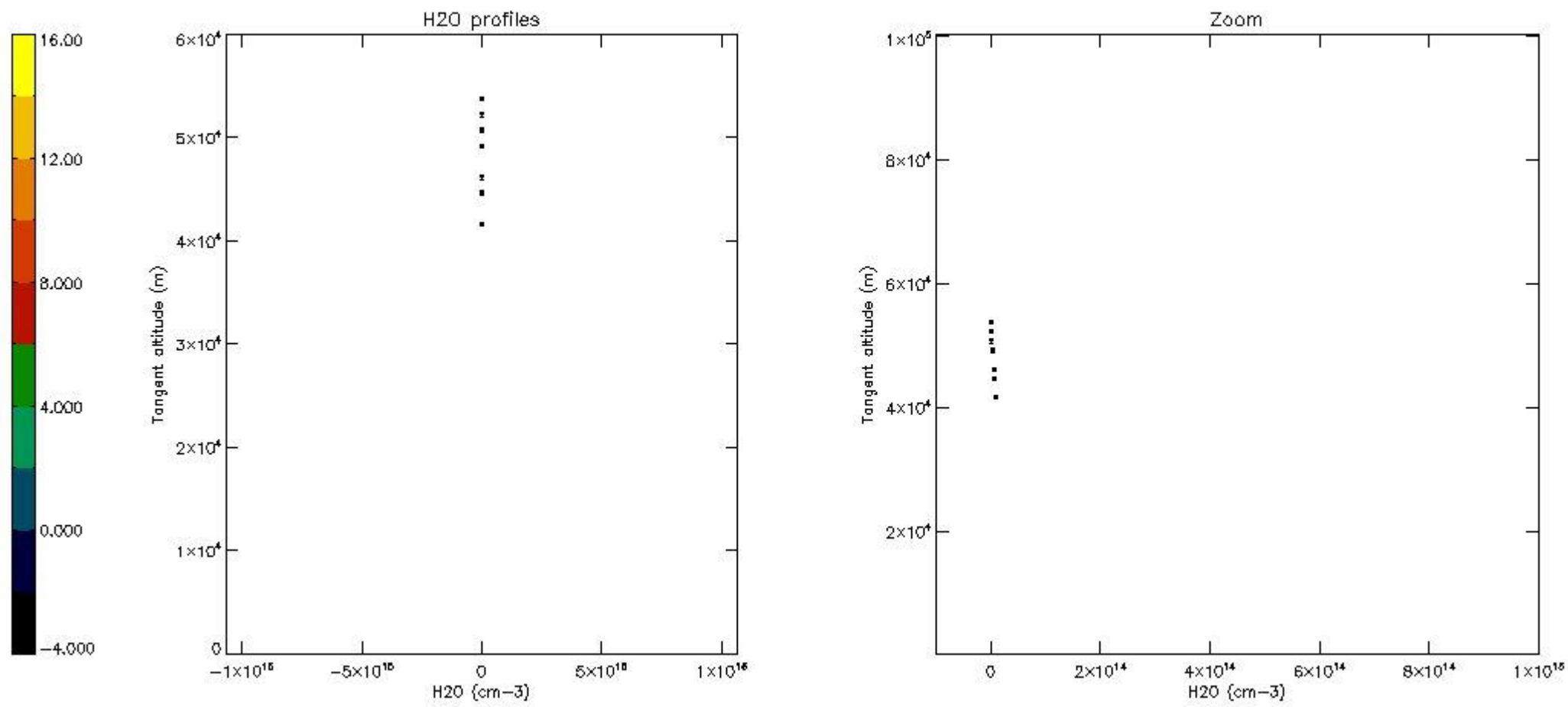
5.7 Plot NO3 profiles for all STD (dark without errors)

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	16-FEB-2007 00:04:38
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	16-FEB-2007 00:04:38
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	16-FEB-2007 00:04:38

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	22APR2013 13:52:00
Data source version	GOMOS/6.01
Start time of products	16-02-2007 (16FEB2007 00:00:00)
Stop time of products	17-02-2007 (17FEB2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	300
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

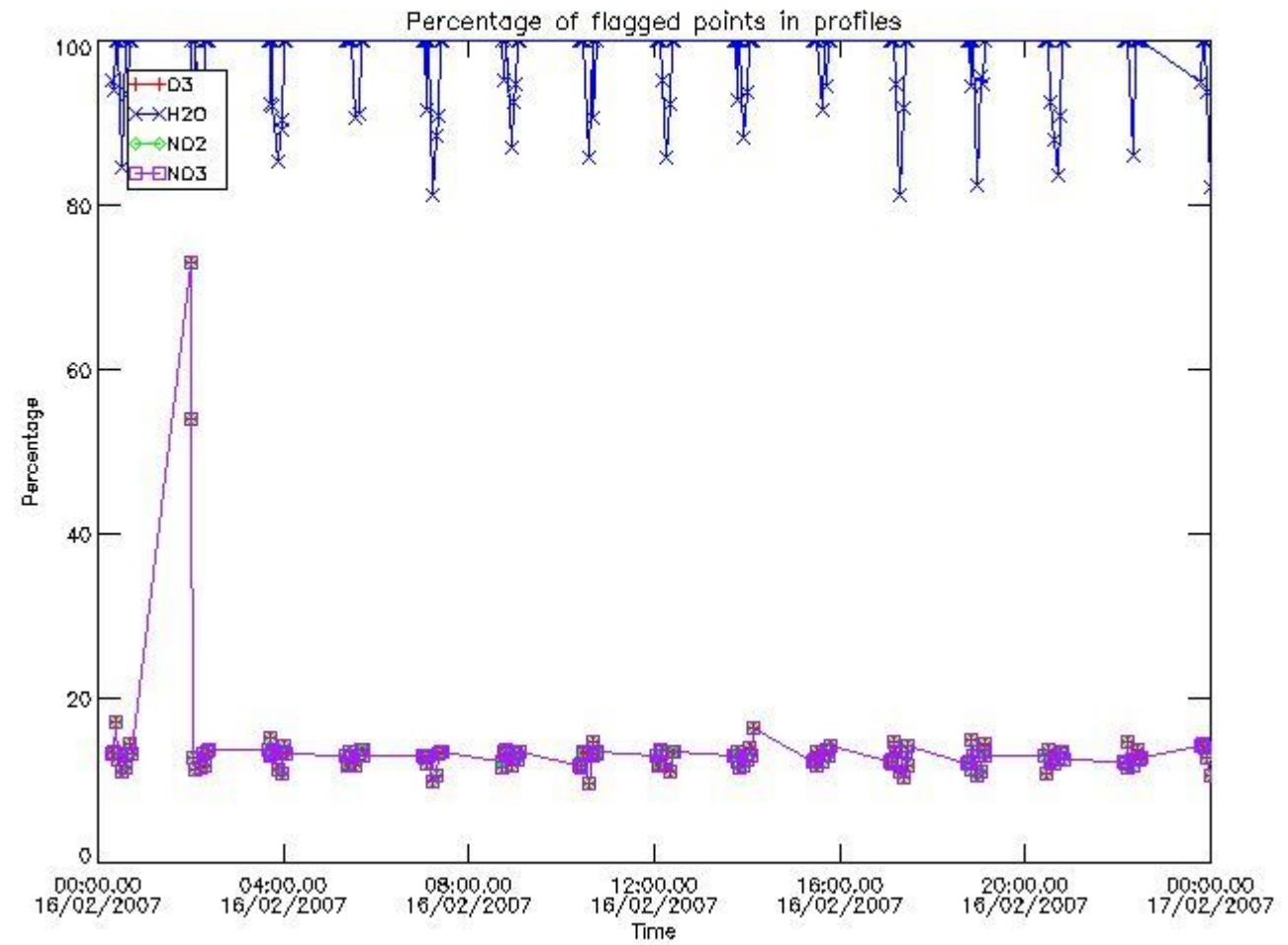
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070216_000438_000000352055_00345_25950_0061.N1	16-FEB-2007 00:04:38	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	25950	No
2	GOM_NL__2PRFIN20070216_001412_000000402055_00345_25950_0062.N1	16-FEB-2007 00:14:12	Twilight	40.000	155	41Pi Sgr	2.9000	6600.0	80	25950	No
3	GOM_NL__2PRFIN20070216_001551_000000412055_00345_25950_0063.N1	16-FEB-2007 00:15:51	Twilight	41.000	57	34Sig Sgr	2.0660	26000.	82	25950	No
4	GOM_NL__2PRFIN20070216_001837_000000422055_00345_25950_0064.N1	16-FEB-2007 00:18:37	Dark	42.000	38	20Eps Sgr	1.8360	11000.	84	25950	No
5	GOM_NL__2PRFIN20070216_002047_000000422055_00345_25950_0065.N1	16-FEB-2007 00:20:47	Dark	41.500	25	35Lam Sco	1.6200	28000.	83	25950	No
6	GOM_NL__2PRFIN20070216_002203_000000422055_00345_25950_0066.N1	16-FEB-2007 00:22:03	Dark	41.500	40	The Sco	1.8590	7100.0	83	25950	No
7	GOM_NL__2PRFIN20070216_002515_000000412055_00345_25950_0067.N1	16-FEB-2007 00:25:15	Dark	40.500	141	Bet Ara	2.8400	4600.0	81	25950	No
8	GOM_NL__2PRFIN20070216_003126_000000462055_00346_25951_0063.N1	16-FEB-2007 00:31:26	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	25951	No
9	GOM_NL__2PRFIN20070216_003548_000000442055_00346_25951_0064.N1	16-FEB-2007 00:35:48	Dark	44.000	12	Alp1Cru	0.77500	30000.	88	25951	No
10	GOM_NL__2PRFIN20070216_003813_000000392055_00346_25951_0065.N1	16-FEB-2007 00:38:13	Dark	38.500	29	Bet Car	1.6720	10200.	77	25951	No
11	GOM_NL__2PRFIN20070216_004051_000000362055_00346_25951_0066.N1	16-FEB-2007 00:40:51	Dark	35.500	71	lot Car	2.2460	7700.0	71	25951	No
12	GOM_NL__2PRFIN20070216_004229_000000392055_00346_25951_0067.N1	16-FEB-2007 00:42:29	Dark	38.500	46	Del Vel	1.9540	10600.	77	25951	No
13	GOM_NL__2PRFIN20070216_004451_000000392055_00346_25951_0068.N1	16-FEB-2007 00:44:51	Straylight	39.000	34	Gam2Vel	1.7930	23000.	78	25951	No
14	GOM_NL__2PRFIN20070216_004656_000000382055_00346_25951_0069.N1	16-FEB-2007 00:46:56	Straylight	37.500	70	Zet Pup	2.2460	39000.	75	25951	No
15	GOM_NL__2PRFIN20070216_005114_000000402055_00346_25951_0070.N1	16-FEB-2007 00:51:14	Straylight	39.500	132	15Rho Pup	2.8030	6900.0	79	25951	No
16	GOM_NL__2PRFIN20070216_005941_000000442055_00346_25951_0071.N1	16-FEB-2007 00:59:41	Bright	43.500	8	10Alp CMi	0.40000	6500.0	87	25951	No
17	GOM_NL__2PRFIN20070216_010557_000000382055_00346_25951_0072.N1	16-FEB-2007 01:05:57	Bright	38.000	17	78Bet Gem	1.1610	4500.0	76	25951	No
18	GOM_NL__2PRFIN20070216_012320_000000342055_00346_25951_0073.N1	16-FEB-2007 01:23:20	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	25951	No
19	GOM_NL__2PRFIN20070216_013018_000000352055_00346_25951_0074.N1	16-FEB-2007 01:30:18	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	25951	No
20	GOM_NL__2PRFIN20070216_013525_000000342055_00346_25951_0075.N1	16-FEB-2007 01:35:25	Bright	34.000	19	50Alp Cyg	1.2460	10500.	68	25951	No
21	GOM_NL__2PRFIN20070216_013701_000000522055_00346_25951_0076.N1	16-FEB-2007 01:37:01	Bright	52.000	66	37Gam Cyg	2.2080	5900.0	104	25951	No
22	GOM_NL__2PRFIN20070216_014514_000000342055_00346_25951_0077.N1	16-FEB-2007 01:45:14	Bright	34.000	168	17Zet Aql	2.9860	11000.	68	25951	No
23	GOM_NL__2PRFIN20070216_015448_000000412055_00346_25951_0078.N1	16-FEB-2007 01:54:48	Twilight	40.500	155	41Pi Sgr	2.9000	6600.0	81	25951	No
24	GOM_NL__2PRFIN20070216_015914_000000402055_00346_25951_0079.N1	16-FEB-2007 01:59:14	Dark	39.500	38	20Eps Sgr	1.8360	11000.	79	25951	No
25	GOM_NL__2PRFIN20070216_020124_000000442055_00346_25951_0080.N1	16-FEB-2007 02:01:24	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	25951	No
26	GOM_NL__2PRFIN20070216_020240_000000402055_00346_25951_0081.N1	16-FEB-2007 02:02:40	Dark	40.000	40	The Sco	1.8590	7100.0	80	25951	No
27	GOM_NL__2PRFIN20070216_020552_000000452055_00346_25951_0082.N1	16-FEB-2007 02:05:52	Dark	45.000	141	Bet Ara	2.8400	4600.0	90	25951	No
28	GOM_NL__2PRFIN20070216_021202_000000452055_00347_25952_0076.N1	16-FEB-2007 02:12:02	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	25952	No
29	GOM_NL__2PRFIN20070216_021625_000000392055_00347_25952_0077.N1	16-FEB-2007 02:16:25	Dark	38.500	12	Alp1Cru	0.77500	30000.	77	25952	No
30	GOM_NL__2PRFIN20070216_021850_000000432055_00347_25952_0078.N1	16-FEB-2007 02:18:50	Dark	43.000	29	Bet Car	1.6720	10200.	86	25952	No
31	GOM_NL__2PRFIN20070216_022127_000000382055_00347_25952_0079.N1	16-FEB-2007 02:21:27	Dark	37.500	71	lot Car	2.2460	7700.0	75	25952	No
32	GOM_NL__2PRFIN20070216_022305_000000372055_00347_25952_0080.N1	16-FEB-2007 02:23:05	Dark	37.000	46	Del Vel	1.9540	10600.	74	25952	No
33	GOM_NL__2PRFIN20070216_022527_000000412055_00347_25952_0081.N1	16-FEB-2007 02:25:27	Straylight	41.000	34	Gam2Vel	1.7930	23000.	82	25952	No
34	GOM_NL__2PRFIN20070216_022732_000000372055_00347_25952_0082.N1	16-FEB-2007 02:27:32	Straylight	37.000	70	Zet Pup	2.2460	39000.	74	25952	No
35	GOM_NL__2PRFIN20070216_023150_000000402055_00347_25952_0083.N1	16-FEB-2007 02:31:50	Straylight	40.000	132	15Rho Pup	2.8030	6900.0	80	25952	No
36	GOM_NL__2PRFIN20070216_024017_000000432055_00347_25952_0084.N1	16-FEB-2007 02:40:17	Bright	42.500	8	10Alp CMi	0.40000	6500.0	85	25952	No
37	GOM_NL__2PRFIN20070216_024633_000000382055_00347_25952_0085.N1	16-FEB-2007 02:46:33	Bright	38.000	17	78Bet Gem	1.1610	4500.0	76	25952	No
38	GOM_NL__2PRFIN20070216_030355_000000332055_00347_25952_0086.N1	16-FEB-2007 03:03:55	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	25952	No
39	GOM_NL__2PRFIN20070216_031054_000000362055_00347_25952_0087.N1	16-FEB-2007 03:10:54	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	25952	No
40	GOM_NL__2PRFIN20070216_031601_000000372055_00347_25952_0088.N1	16-FEB-2007 03:16:01	Bright	36.500	19	50Alp Cyg	1.2460	10500.	73	25952	No
41	GOM_NL__2PRFIN20070216_031738_000000472055_00347_25952_0089.N1	16-FEB-2007 03:17:38	Bright	46.500	66	37Gam Cyg	2.2080	5900.0	93	25952	No
42	GOM_NL__2PRFIN20070216_032550_000000342055_00347_25952_0090.N1	16-FEB-2007 03:25:50	Bright	34.000	168	17Zet Aql	2.9860	11000.	68	25952	No

279	GOM_NL__2PRFIN20070216_221921_000000442055_00359_25964_0568.N1	16-FEB-2007 22:19:21	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	25964	No
280	GOM_NL__2PRFIN20070216_222342_000000412055_00359_25964_0569.N1	16-FEB-2007 22:23:42	Dark	40.500	12	Alp1Cru	0.77500	30000.	81	25964	No
281	GOM_NL__2PRFIN20070216_222603_000000372055_00359_25964_0570.N1	16-FEB-2007 22:26:03	Dark	37.000	29	Bet Car	1.6720	10200.	74	25964	No
282	GOM_NL__2PRFIN20070216_222842_000000412055_00359_25964_0571.N1	16-FEB-2007 22:28:42	Dark	41.000	71	lot Car	2.2460	7700.0	82	25964	No
283	GOM_NL__2PRFIN20070216_223018_000000402055_00359_25964_0572.N1	16-FEB-2007 22:30:18	Dark	40.000	46	Del Vel	1.9540	10600.	80	25964	No
284	GOM_NL__2PRFIN20070216_223241_000000392055_00359_25964_0573.N1	16-FEB-2007 22:32:41	Straylight	39.000	34	Gam2Vel	1.7930	23000.	78	25964	No
285	GOM_NL__2PRFIN20070216_223445_000000382055_00359_25964_0574.N1	16-FEB-2007 22:34:45	Straylight	37.500	70	Zet Pup	2.2460	39000.	75	25964	No
286	GOM_NL__2PRFIN20070216_223903_000000402055_00359_25964_0575.N1	16-FEB-2007 22:39:03	Straylight	39.500	132	15Rho Pup	2.8030	6900.0	79	25964	No
287	GOM_NL__2PRFIN20070216_224731_000000442055_00359_25964_0576.N1	16-FEB-2007 22:47:31	Bright	43.500	8	10Alp CMi	0.40000	6500.0	87	25964	No
288	GOM_NL__2PRFIN20070216_225346_000000372055_00359_25964_0577.N1	16-FEB-2007 22:53:46	Bright	37.000	17	78Bet Gem	1.1610	4500.0	74	25964	No
289	GOM_NL__2PRFIN20070216_231107_000000332055_00359_25964_0578.N1	16-FEB-2007 23:11:07	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	25964	No
290	GOM_NL__2PRFIN20070216_231808_000000342055_00359_25964_0579.N1	16-FEB-2007 23:18:08	Bright	34.000	89	5Alp Cep	2.4510	8000.0	68	25964	No
291	GOM_NL__2PRFIN20070216_232315_000000362055_00359_25964_0580.N1	16-FEB-2007 23:23:15	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	25964	No
292	GOM_NL__2PRFIN20070216_232451_000000332055_00359_25964_0581.N1	16-FEB-2007 23:24:51	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	25964	No
293	GOM_NL__2PRFIN20070216_233304_000000352055_00359_25964_0582.N1	16-FEB-2007 23:33:04	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	25964	No
294	GOM_NL__2PRFIN20070216_234238_000000412055_00359_25964_0583.N1	16-FEB-2007 23:42:38	Twilight	40.500	155	41Pi Sgr	2.9000	6600.0	81	25964	No
295	GOM_NL__2PRFIN20070216_234418_000000402055_00359_25964_0584.N1	16-FEB-2007 23:44:18	Twilight	39.500	57	34Sig Sgr	2.0660	26000.	79	25964	No
296	GOM_NL__2PRFIN20070216_234706_000000402055_00359_25964_0585.N1	16-FEB-2007 23:47:06	Dark	39.500	38	20Eps Sgr	1.8360	11000.	79	25964	No
297	GOM_NL__2PRFIN20070216_234919_000000462055_00359_25964_0586.N1	16-FEB-2007 23:49:19	Dark	46.000	25	35Lam Sco	1.6200	28000.	92	25964	No
298	GOM_NL__2PRFIN20070216_235218_000000372055_00359_25964_0587.N1	16-FEB-2007 23:52:18	Dark	36.500	147	Alp Ara	2.8770	26000.	73	25964	No
299	GOM_NL__2PRFIN20070216_235344_000000402055_00359_25964_0588.N1	16-FEB-2007 23:53:44	Dark	40.000	141	Bet Ara	2.8400	4600.0	80	25964	No
300	GOM_NL__2PRFIN20070216_235957_000000482055_00360_25965_0595.N1	16-FEB-2007 23:59:57	Dark	48.000	4	Alp1Cen	-0.010000	5800.0	96	25965	No

3. Quality information per product

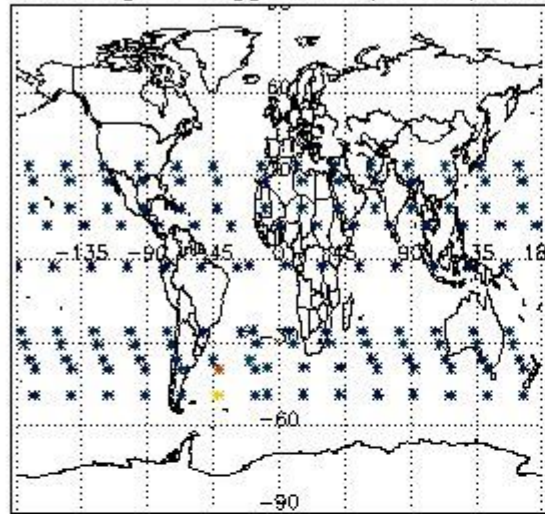
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

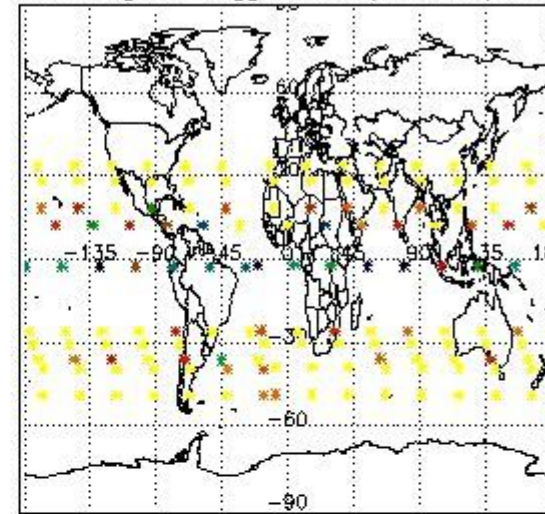


3.2 Plot quality information per product (world map)

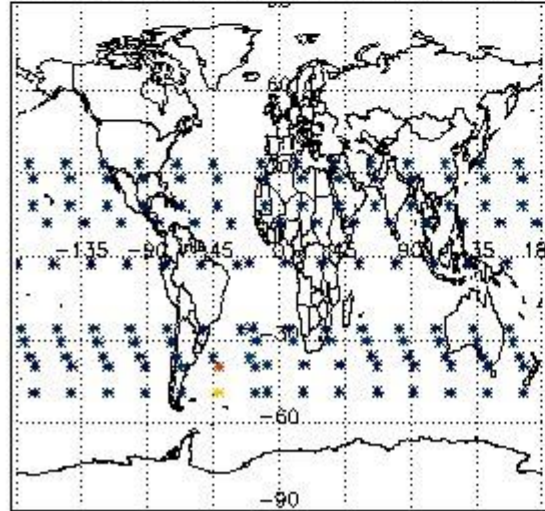
Percentage of flagged data per O3 profile



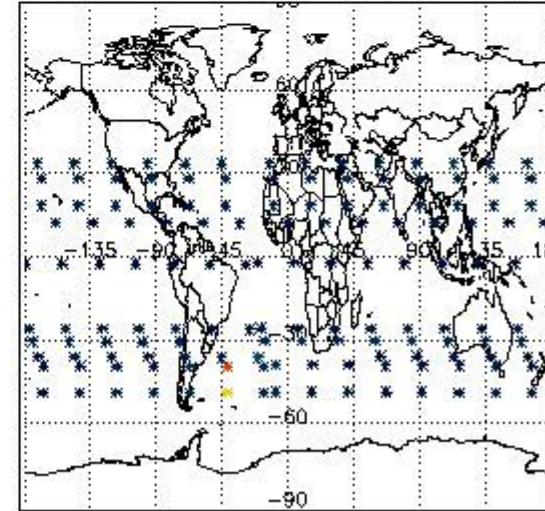
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

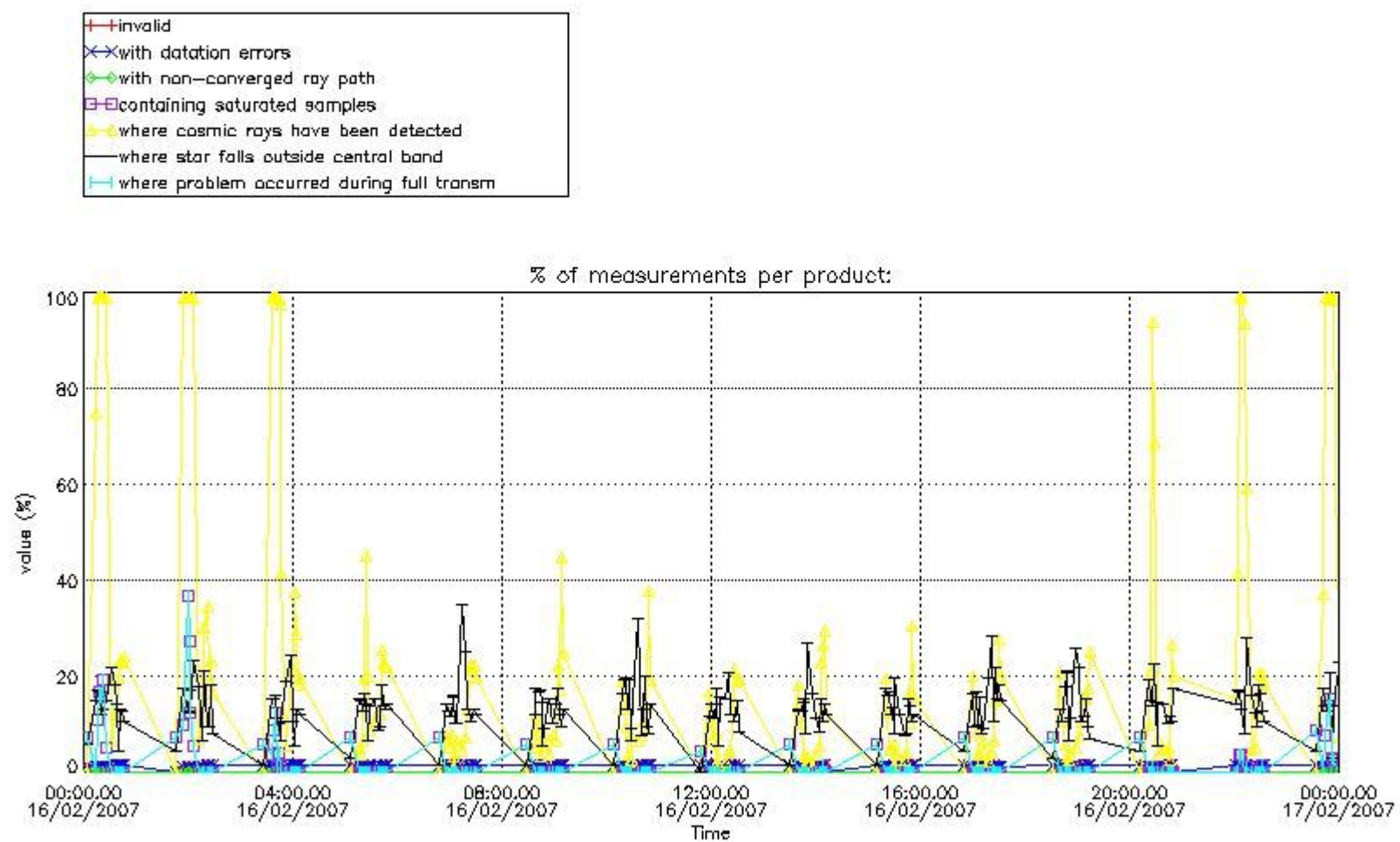


4. Level 1 quality information per product

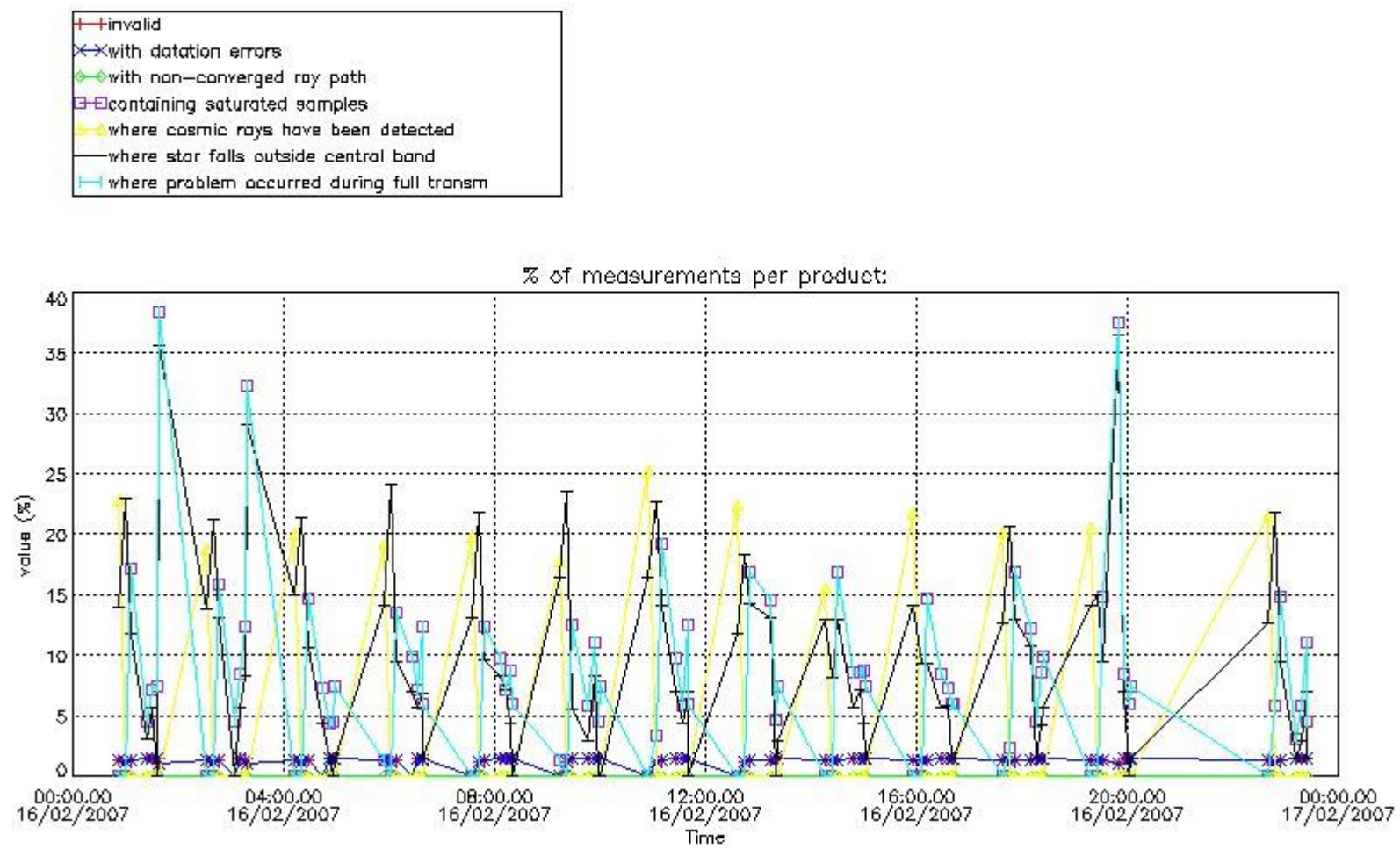
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



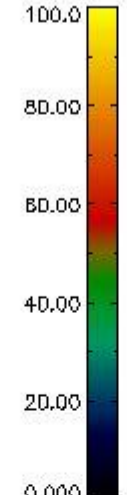
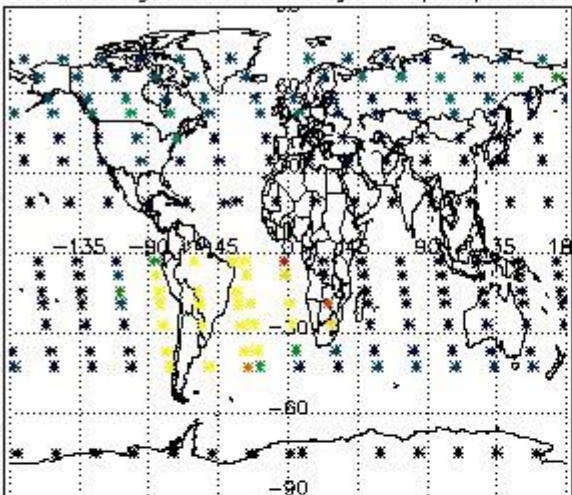
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



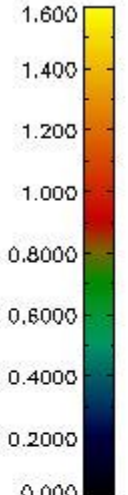
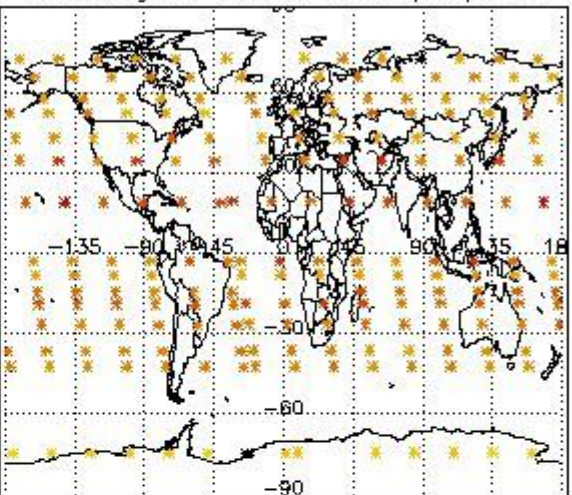
4.2 Plot quality information per product coming from level 1b processing (world map)

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

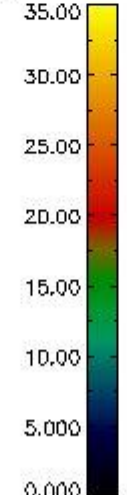
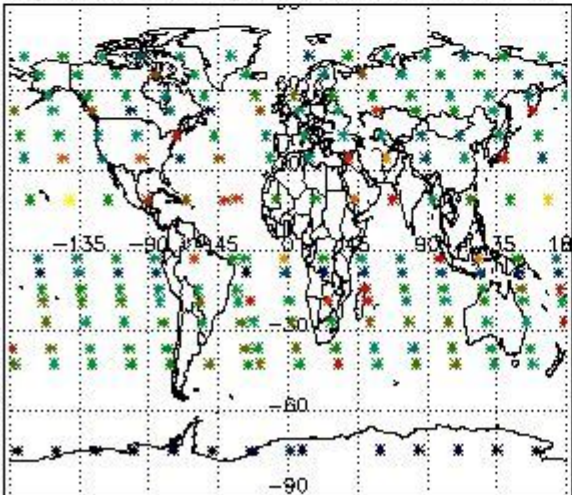
Percentage of cosmic ray hits per profile



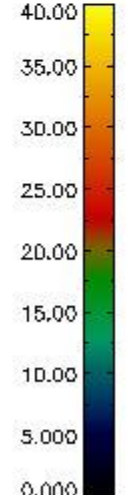
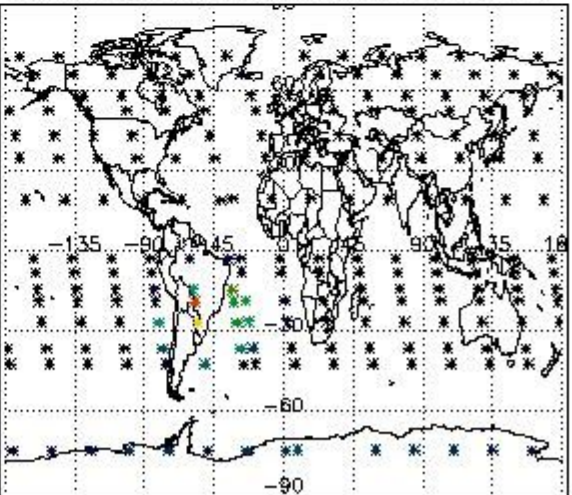
Percentage of datation errors per profile



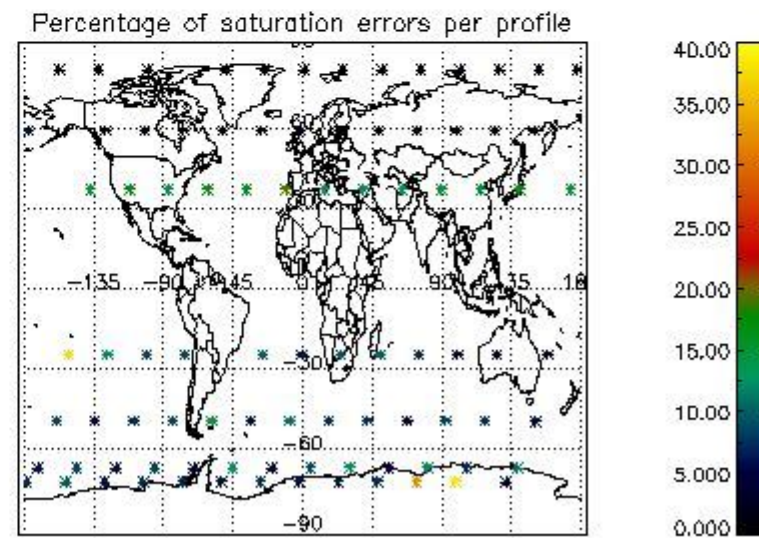
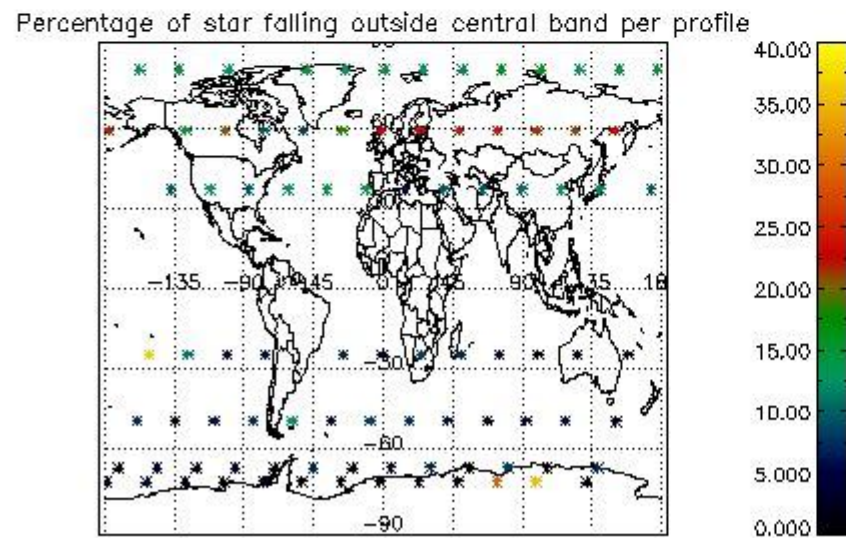
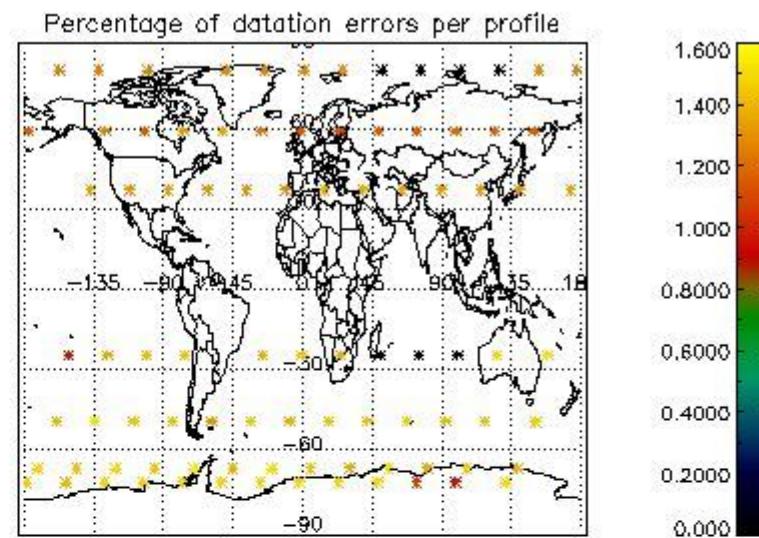
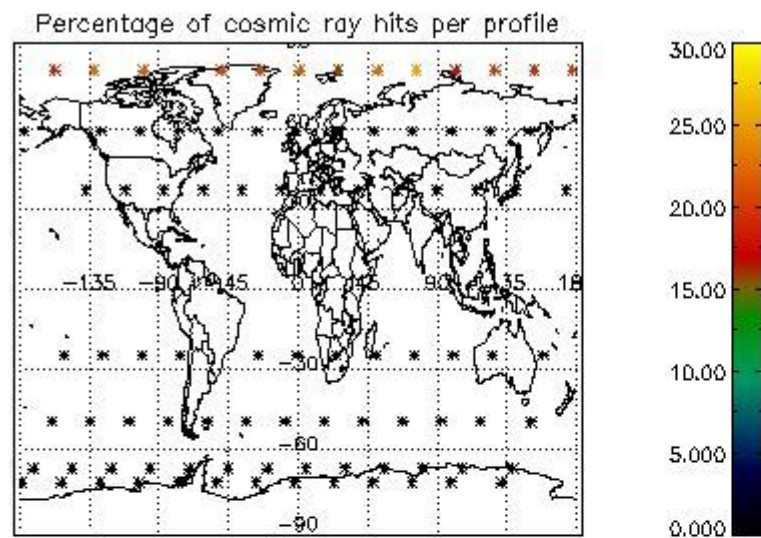
Percentage of star falling outside central band per profile



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

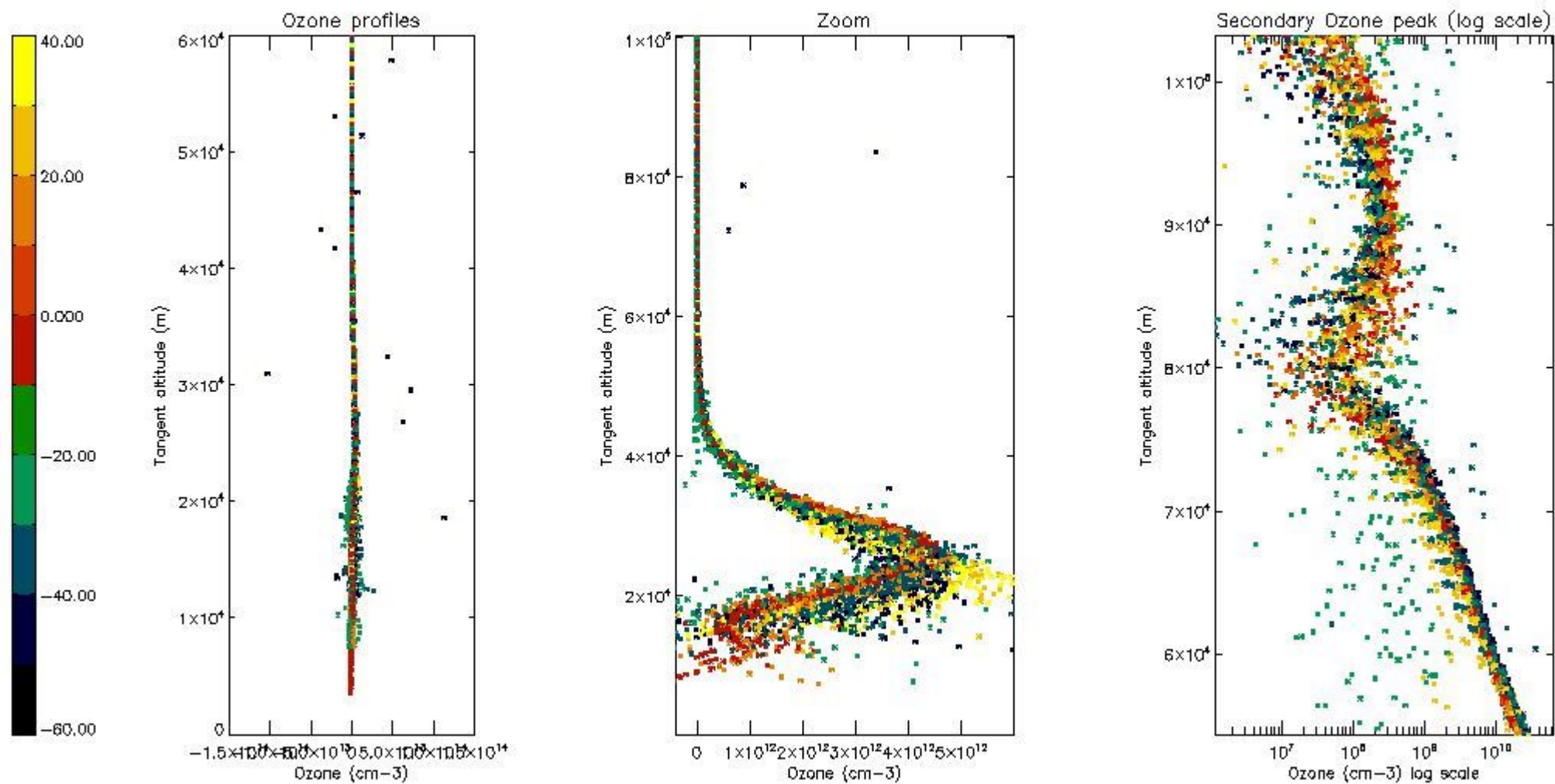
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	50
STD < 20	27

STD < 10	22
STD < 5	15

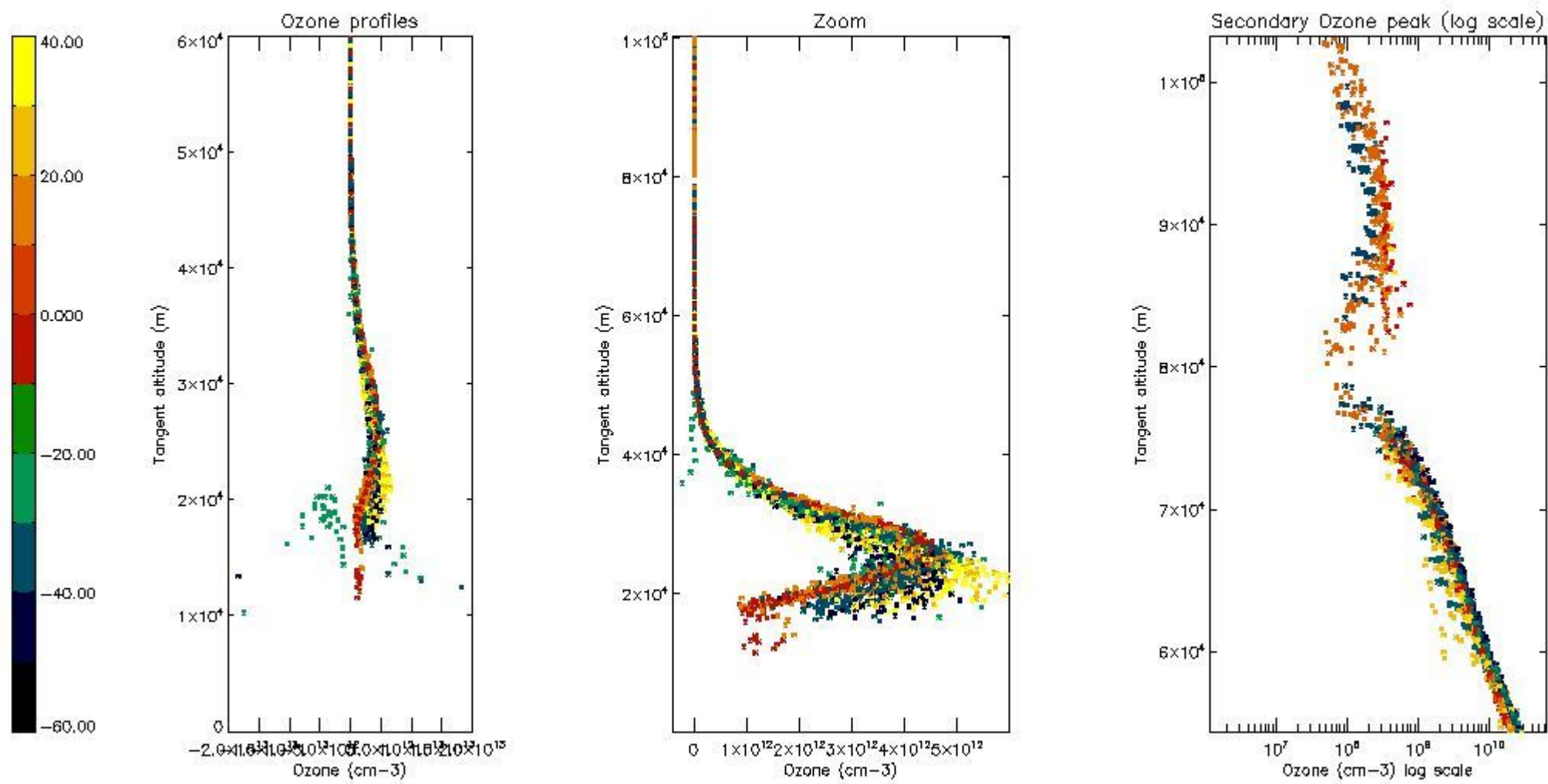
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



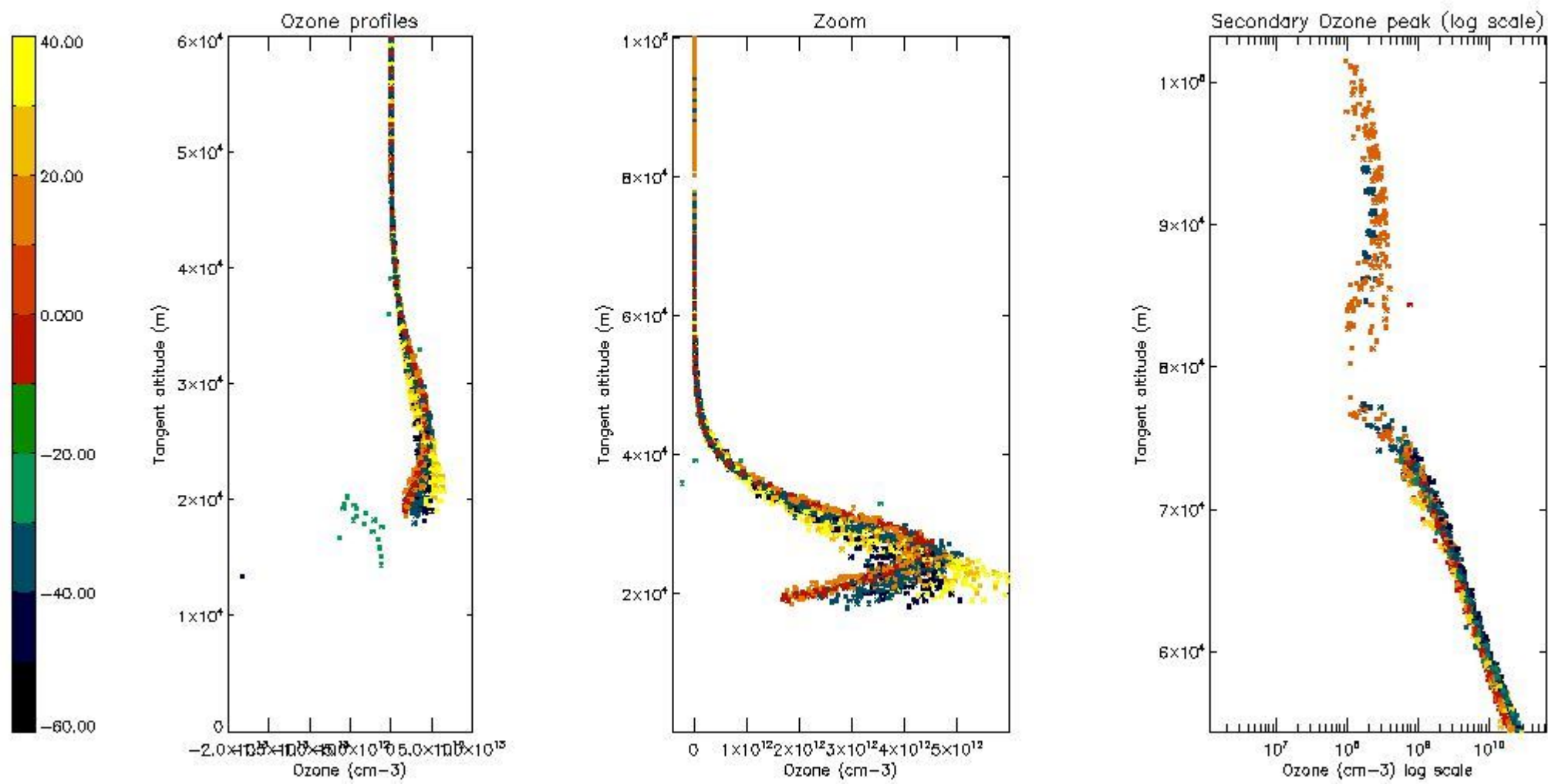
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



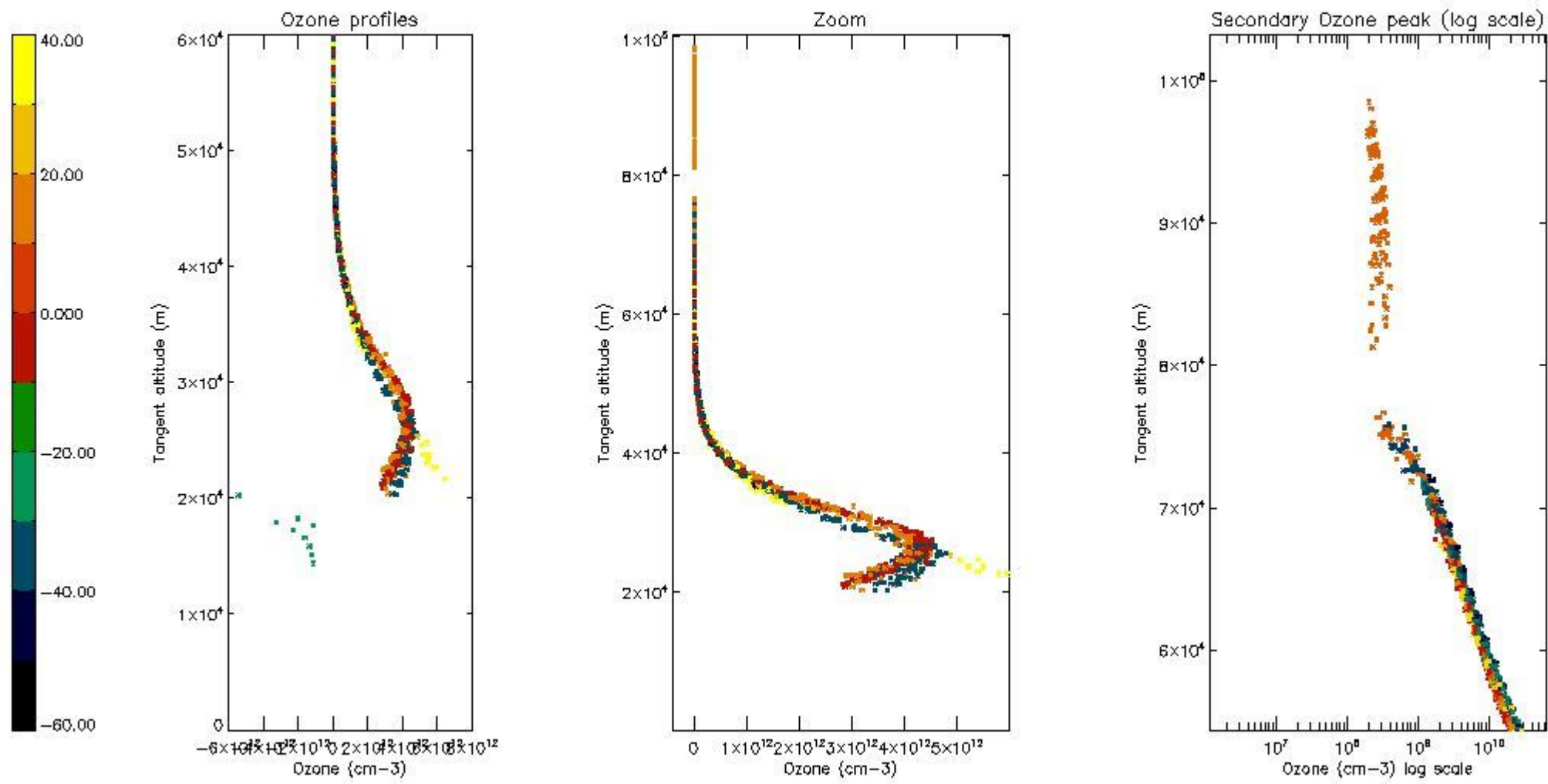
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



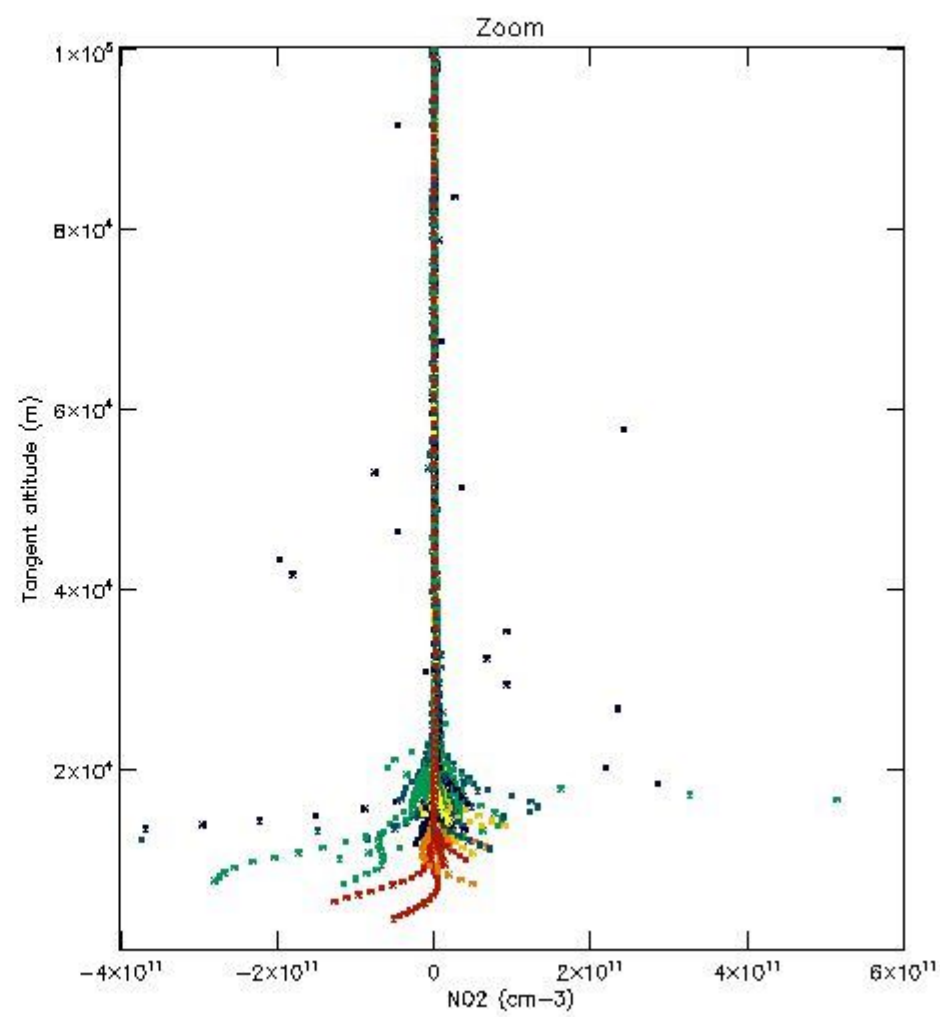
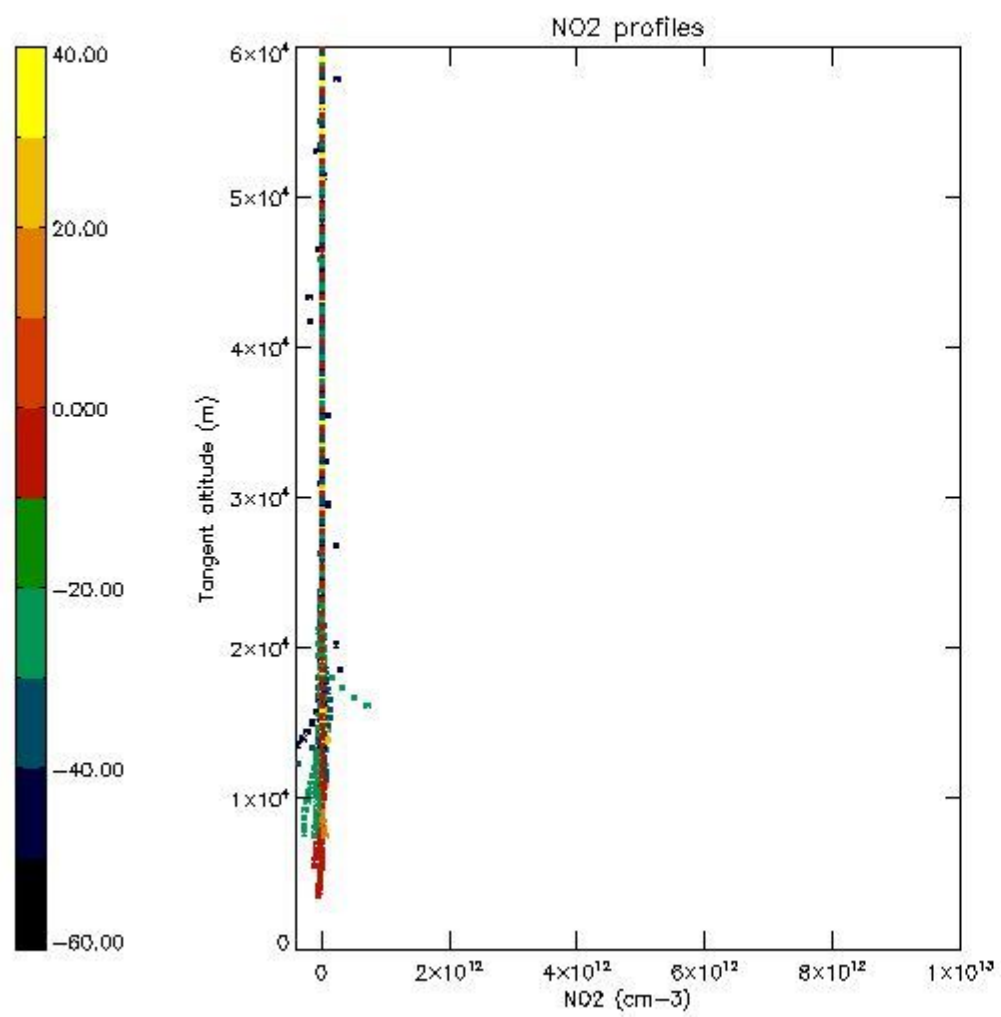
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



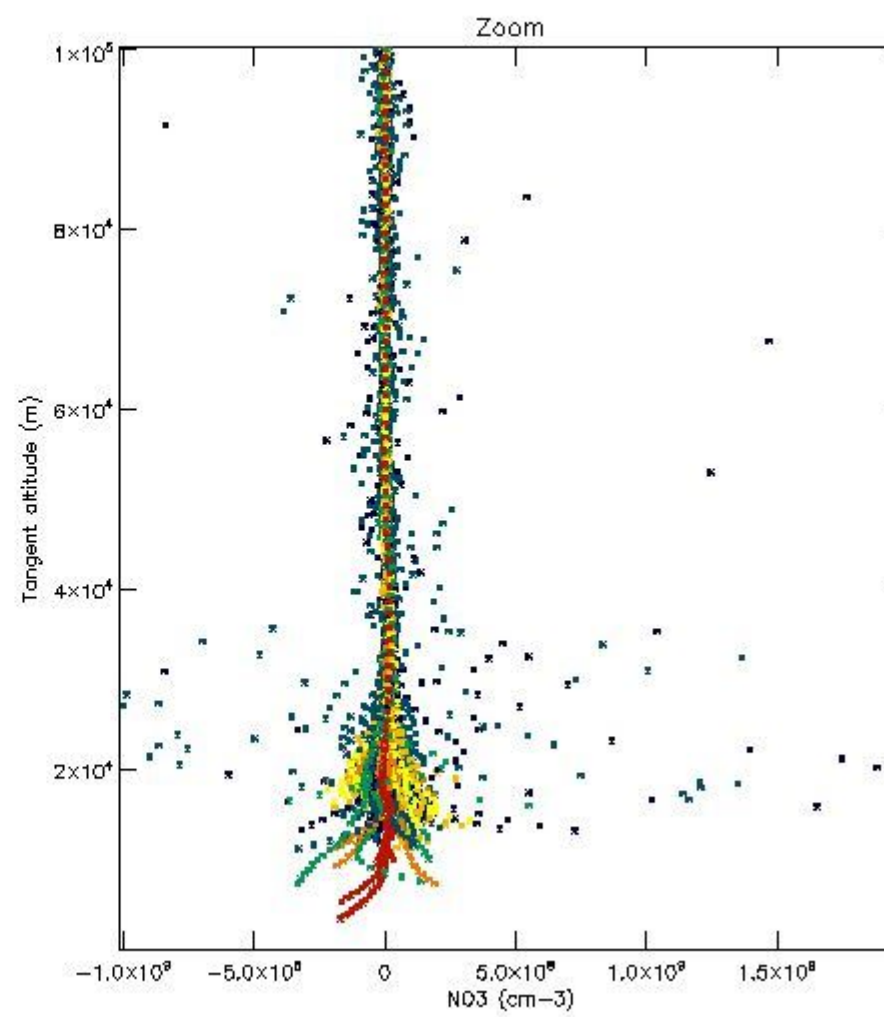
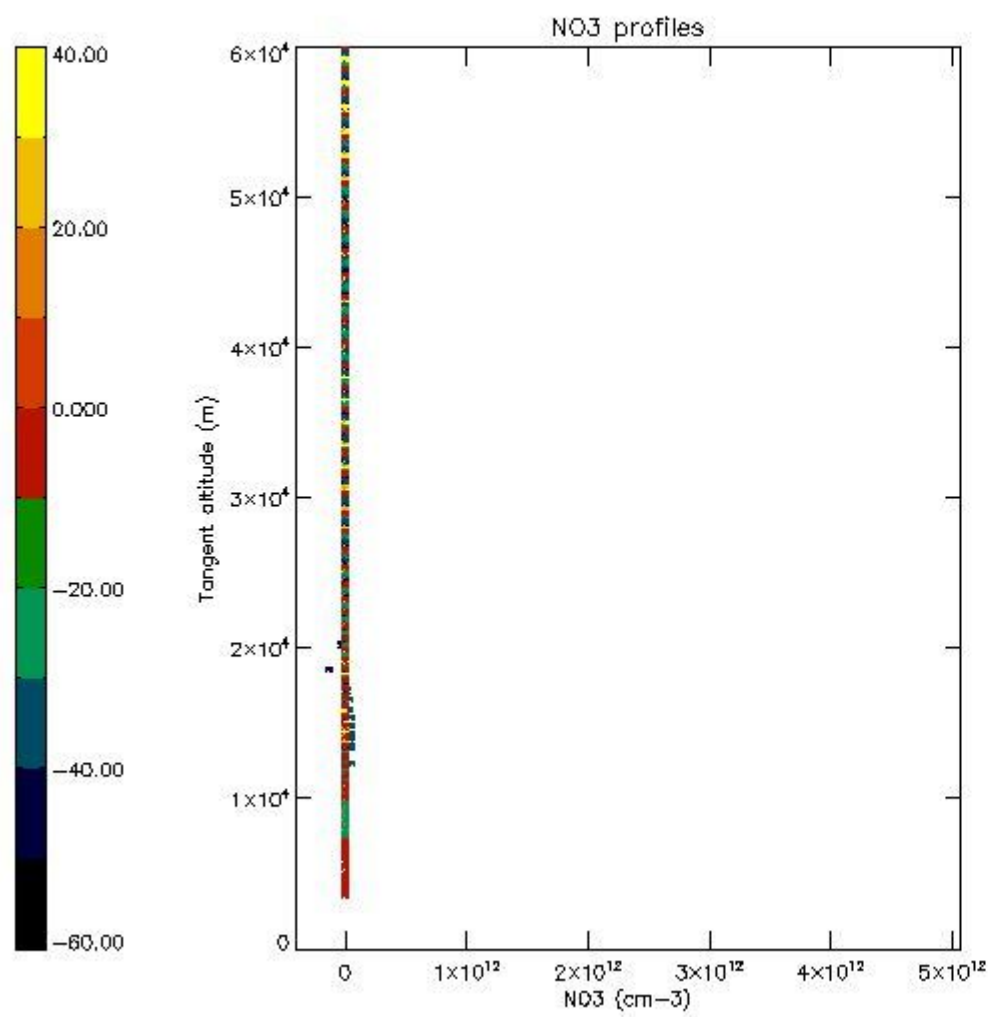
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



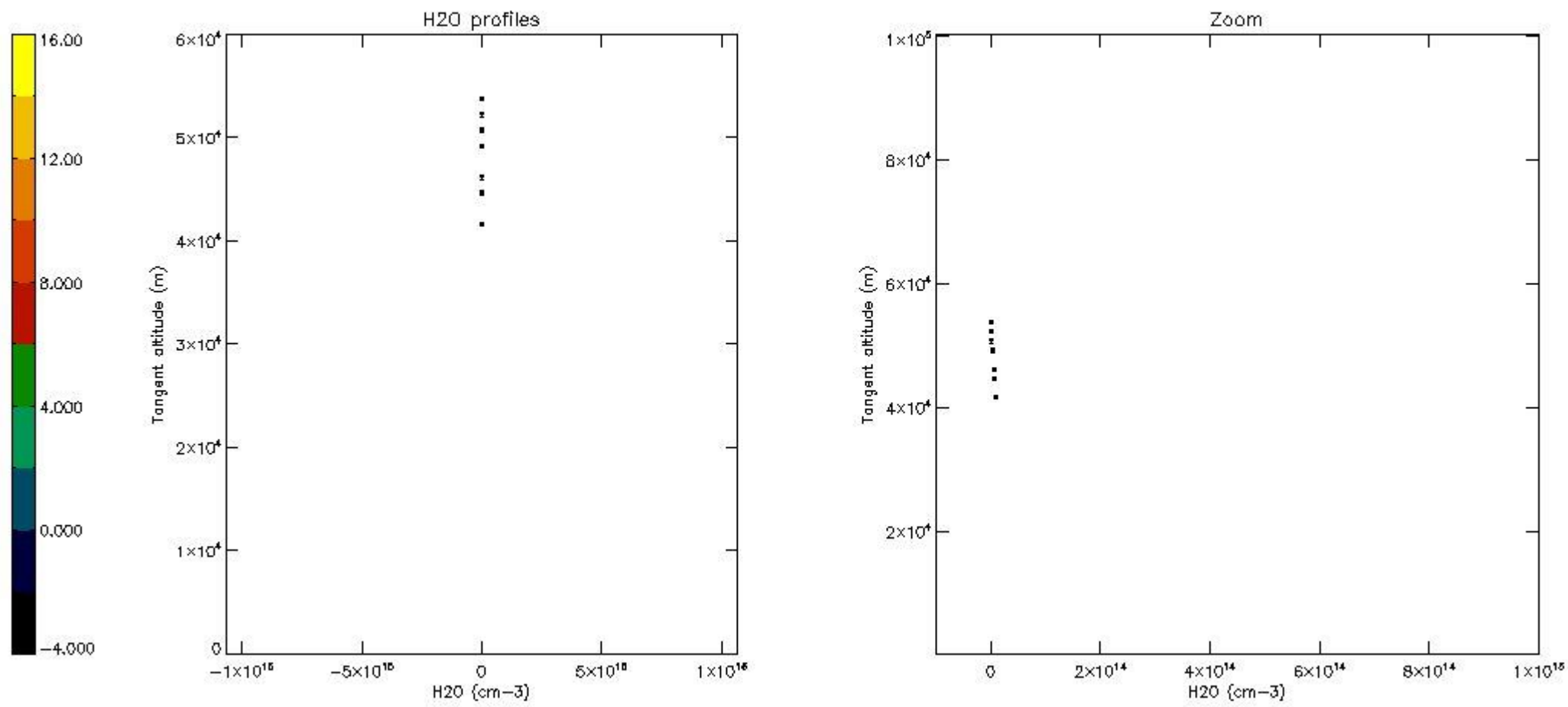
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

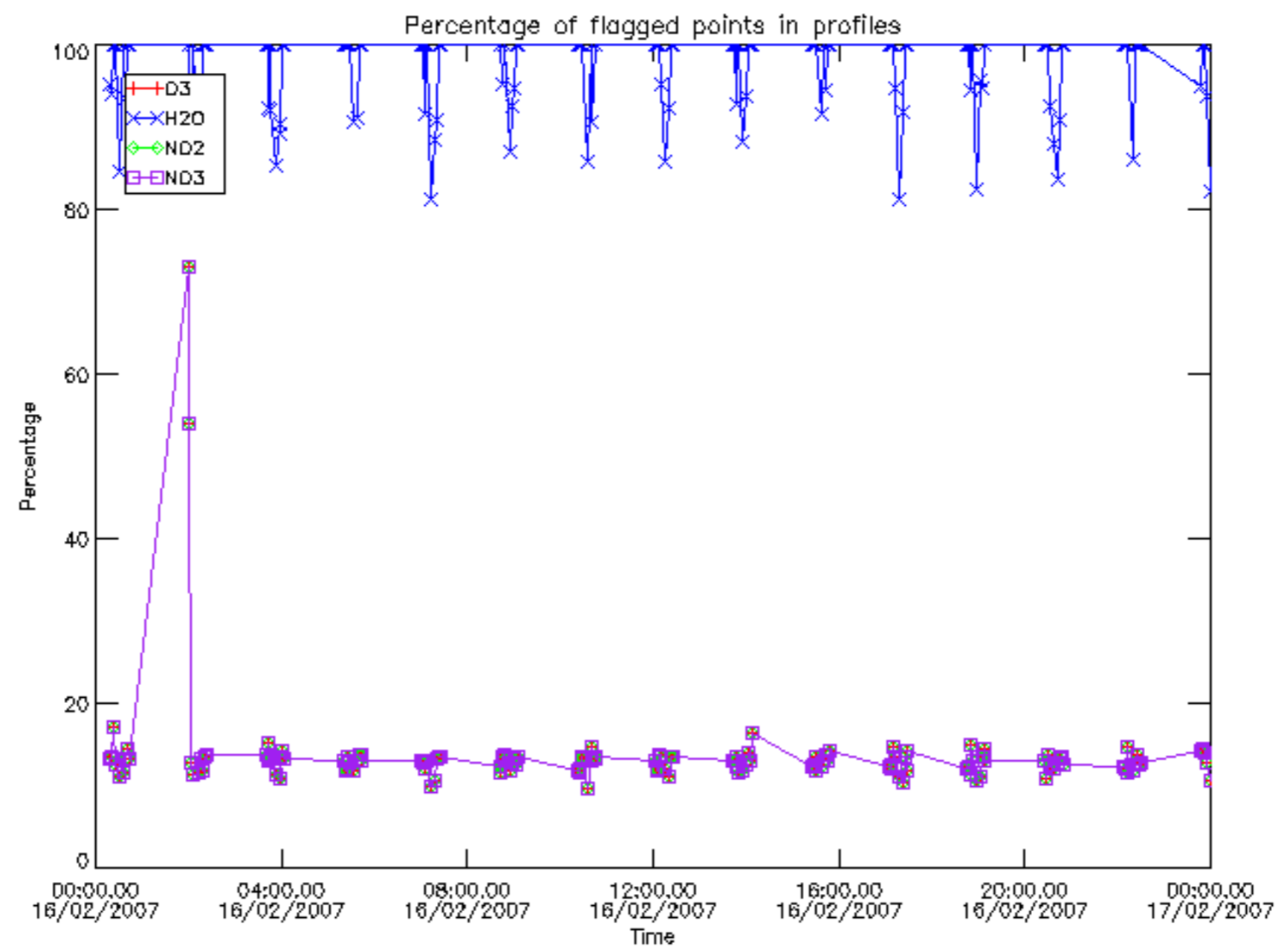
The colorbar represents the latitude.



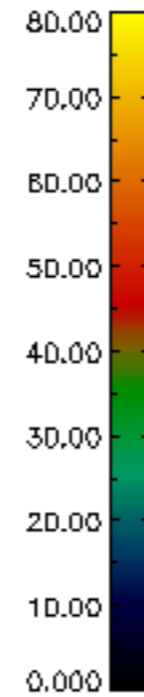
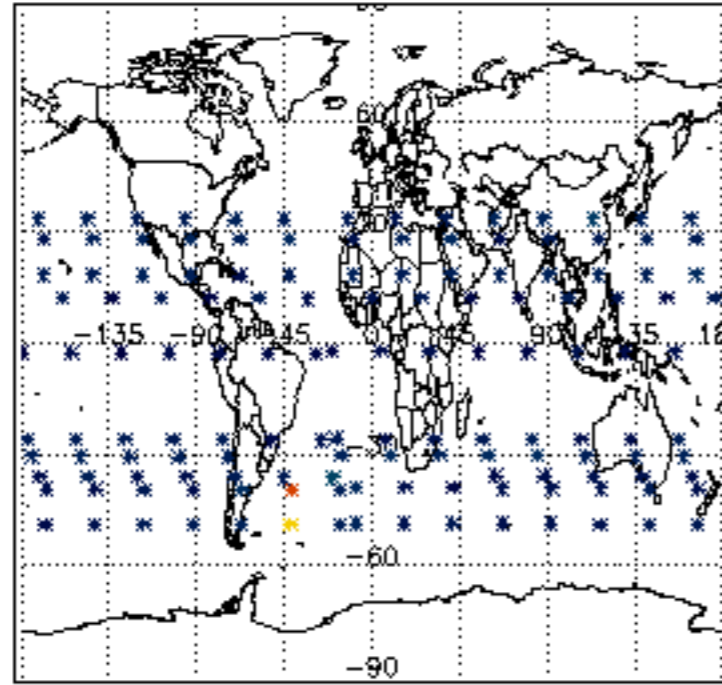
6. Auxiliary Data Files used for the production reported in section 2

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.

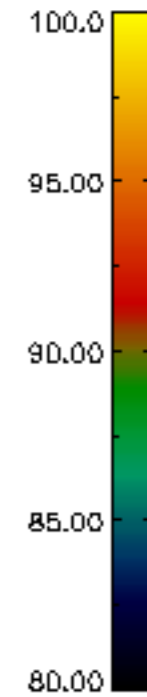
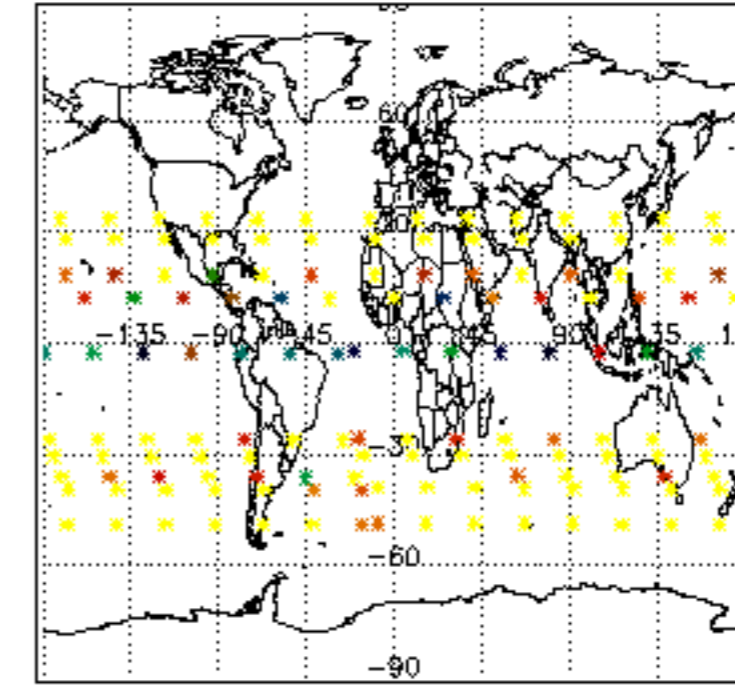
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	16-FEB-2007 00:04:38
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	16-FEB-2007 00:04:38
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	16-FEB-2007 00:04:38



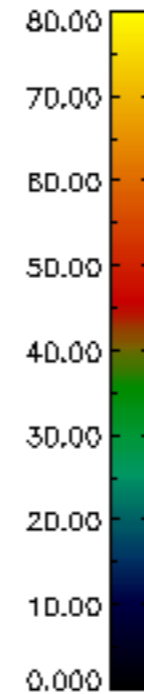
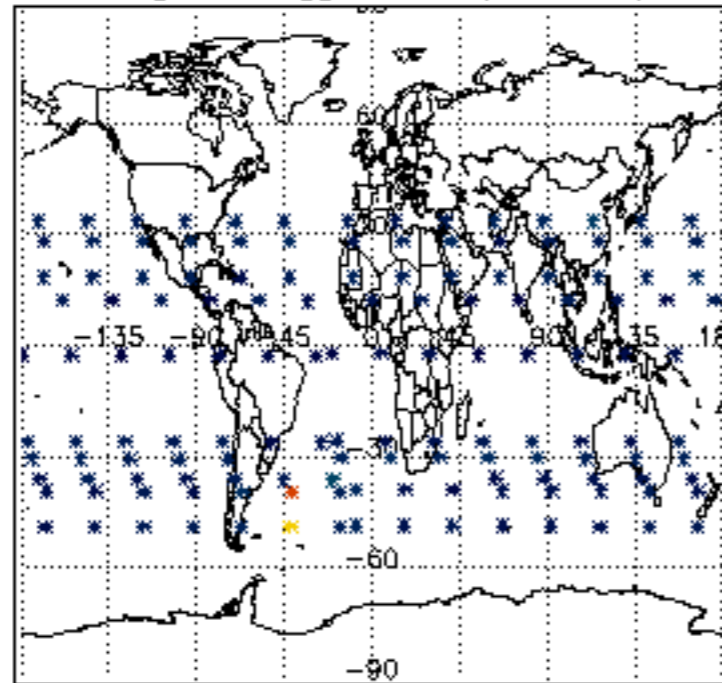
Percentage of flagged data per D3 profile



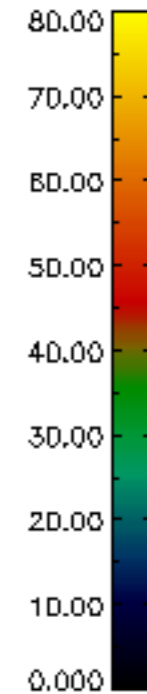
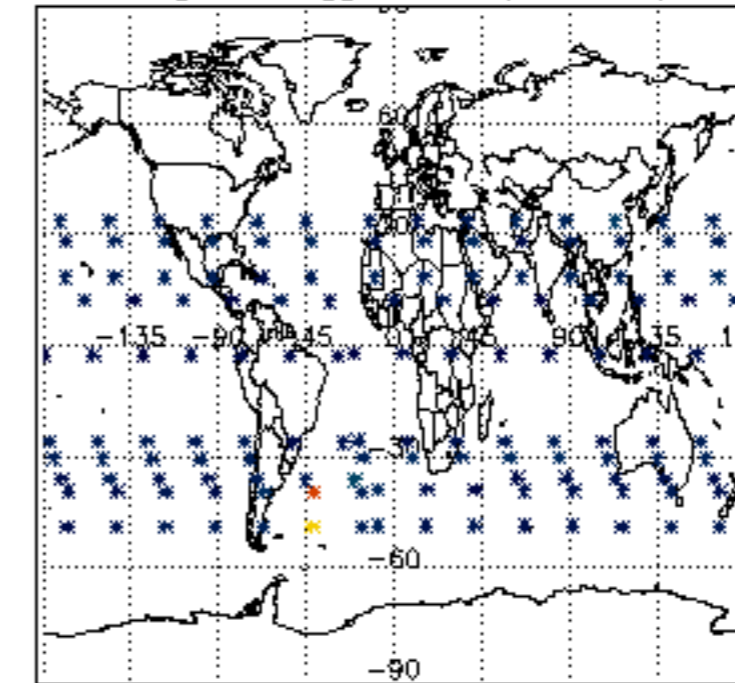
Percentage of flagged data per H2O profile

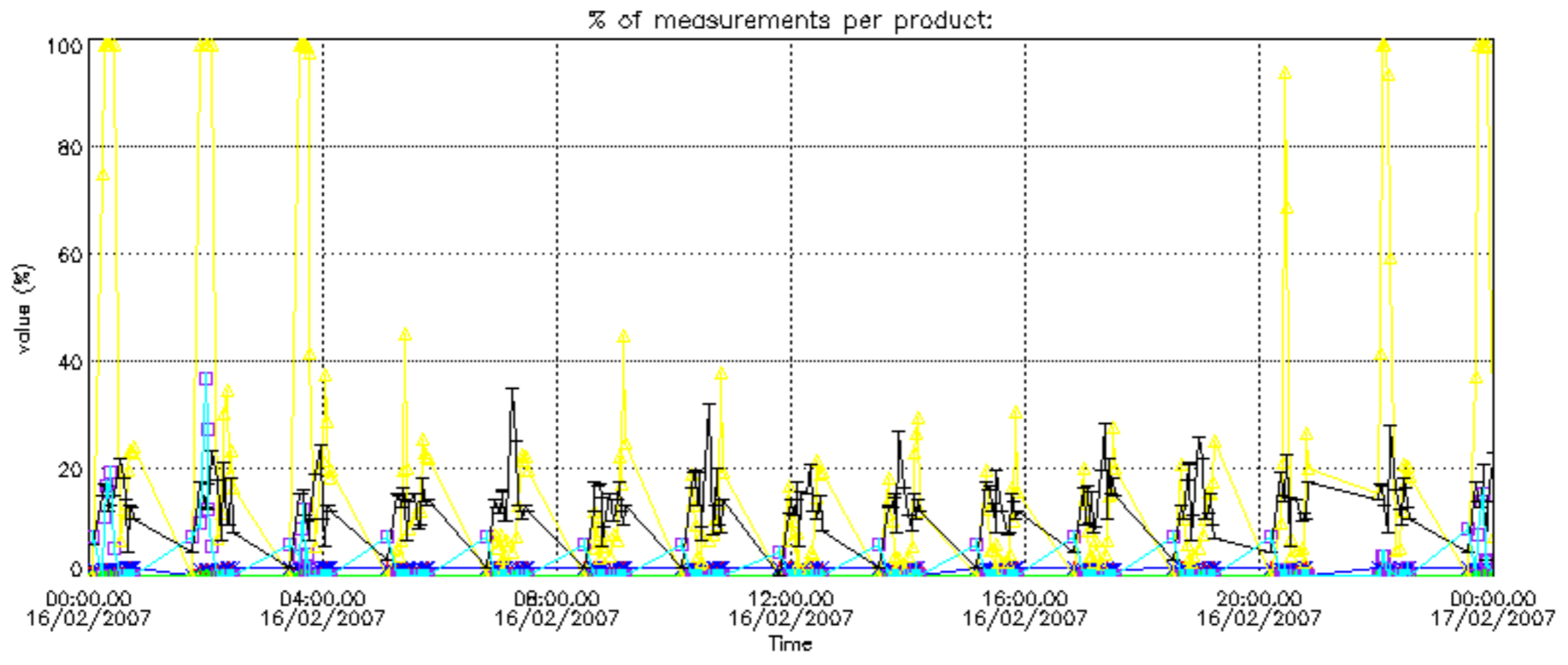


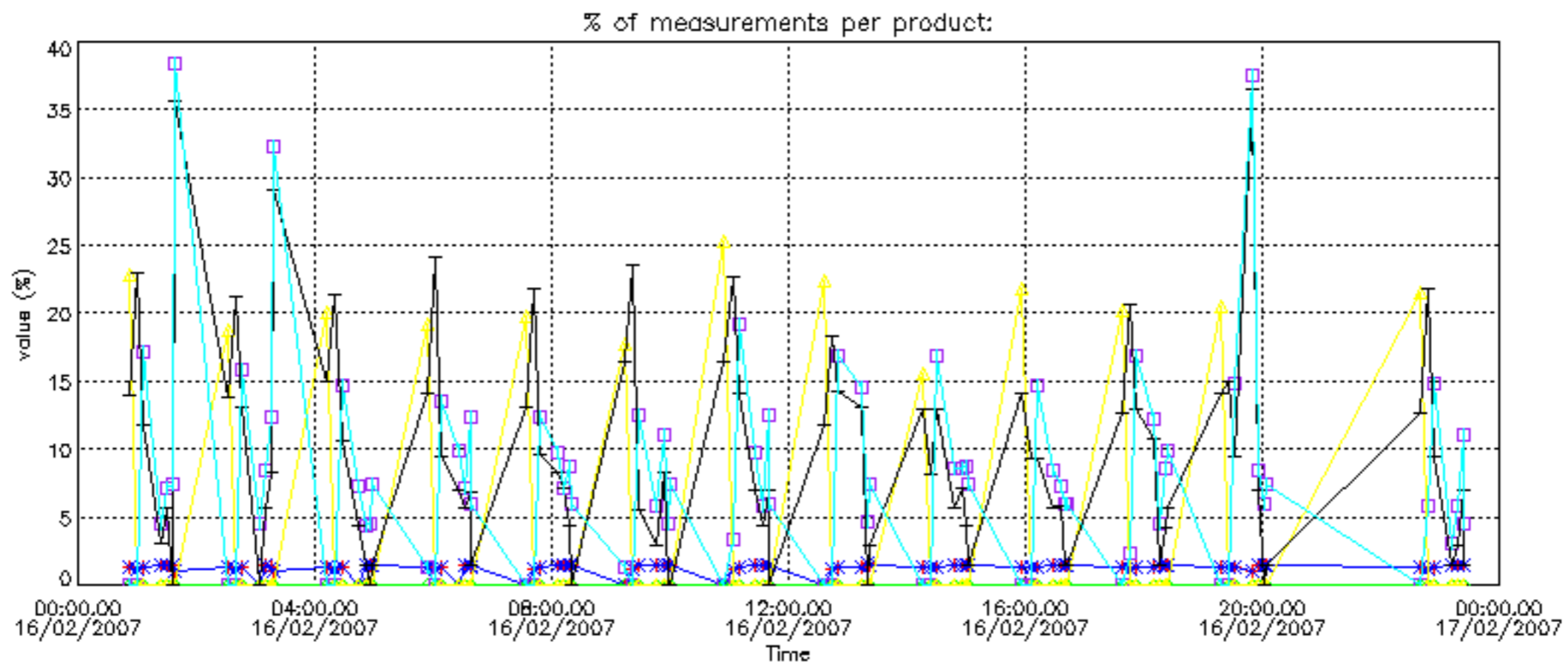
Percentage of flagged data per NO2 profile



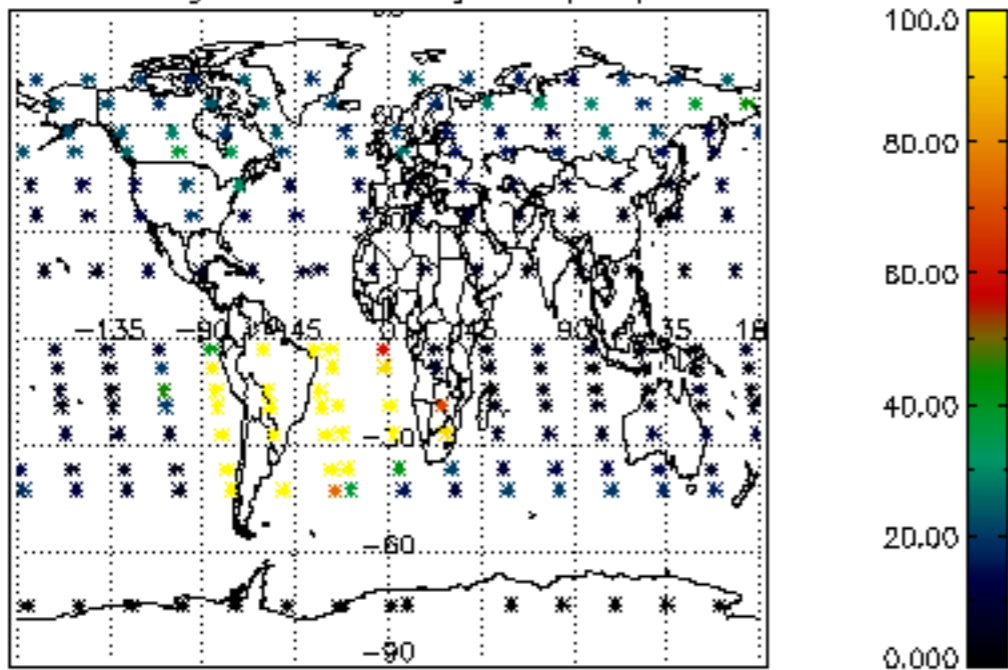
Percentage of flagged data per NO3 profile



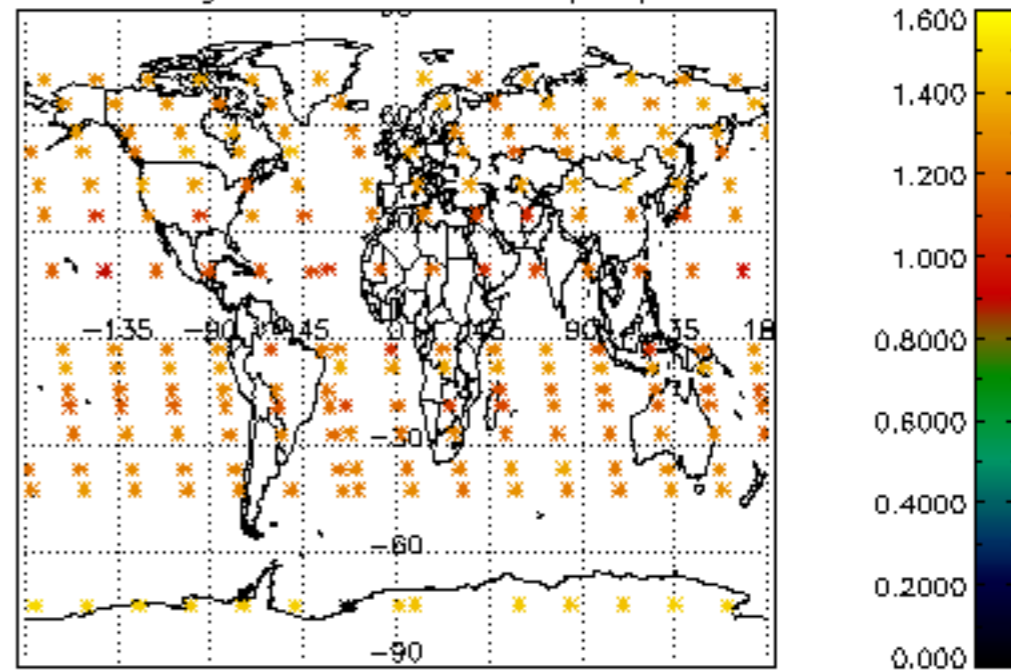




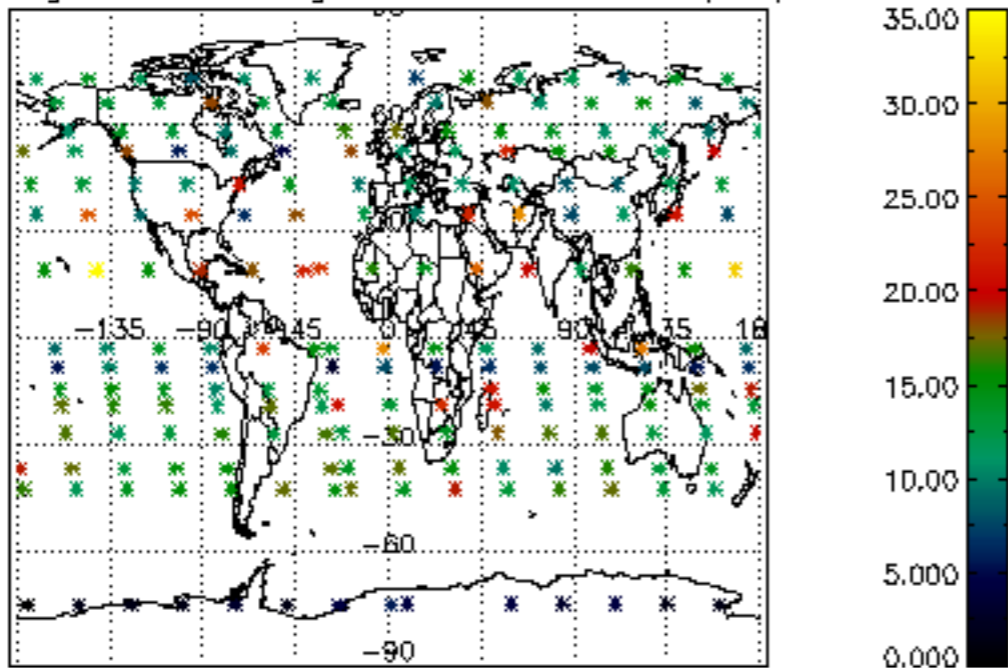
Percentage of cosmic ray hits per profile



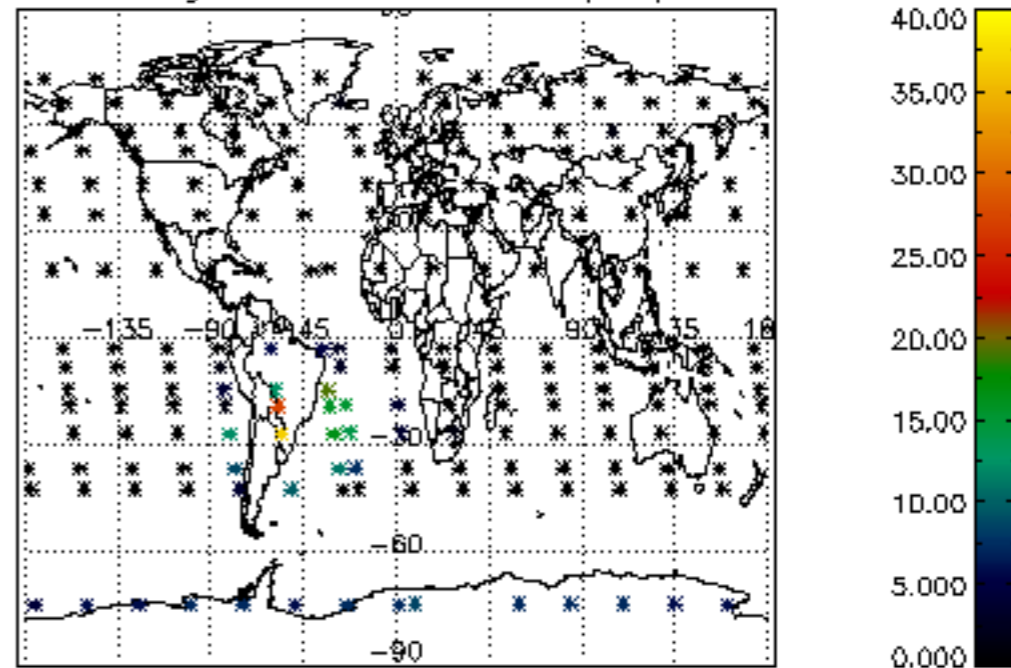
Percentage of datation errors per profile



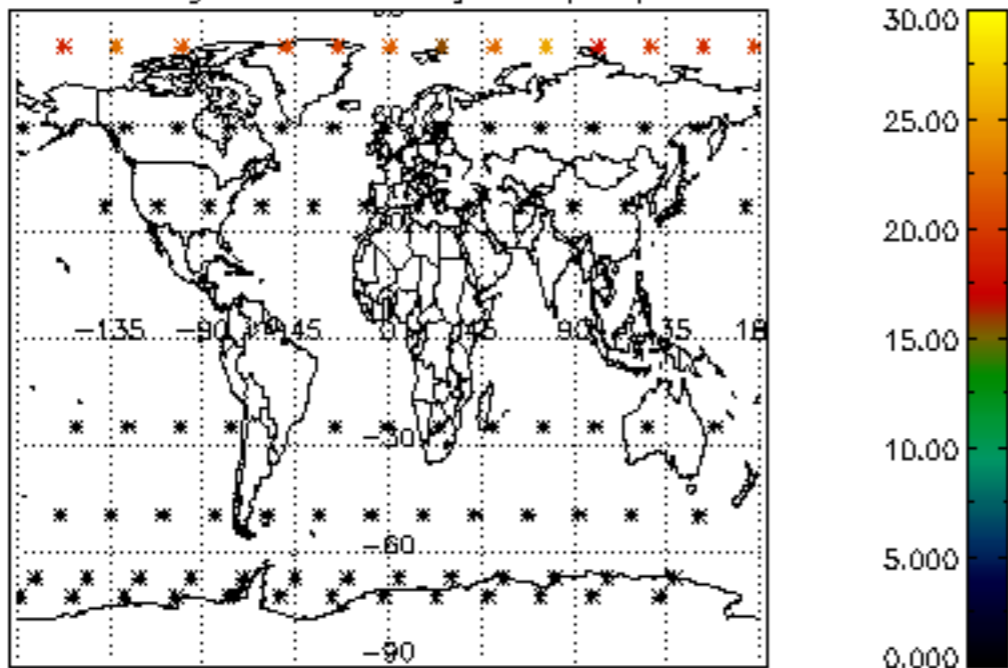
Percentage of star falling outside central band per profile



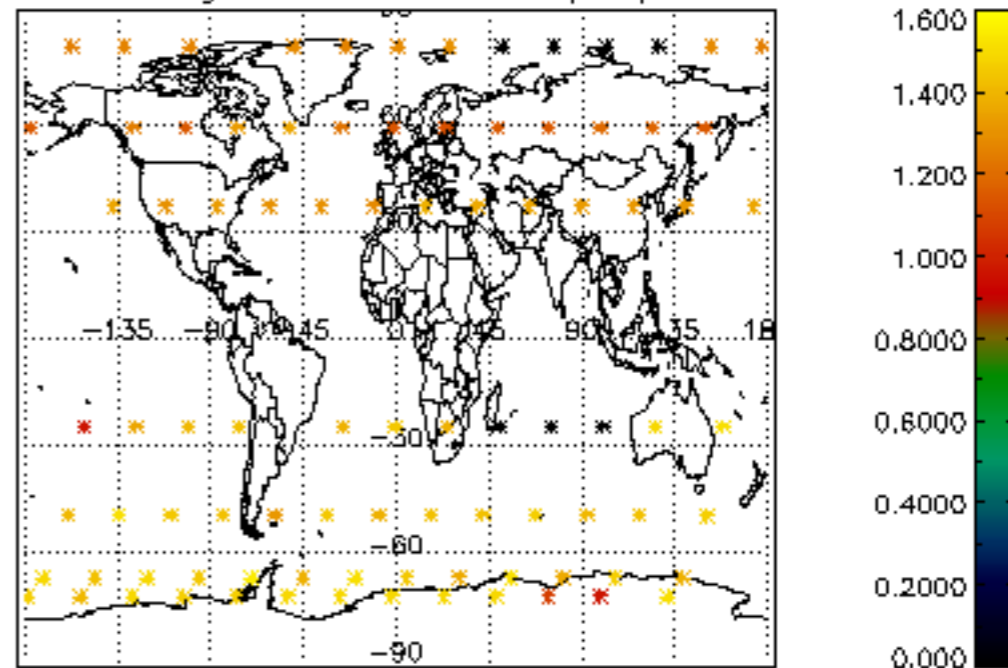
Percentage of saturation errors per profile



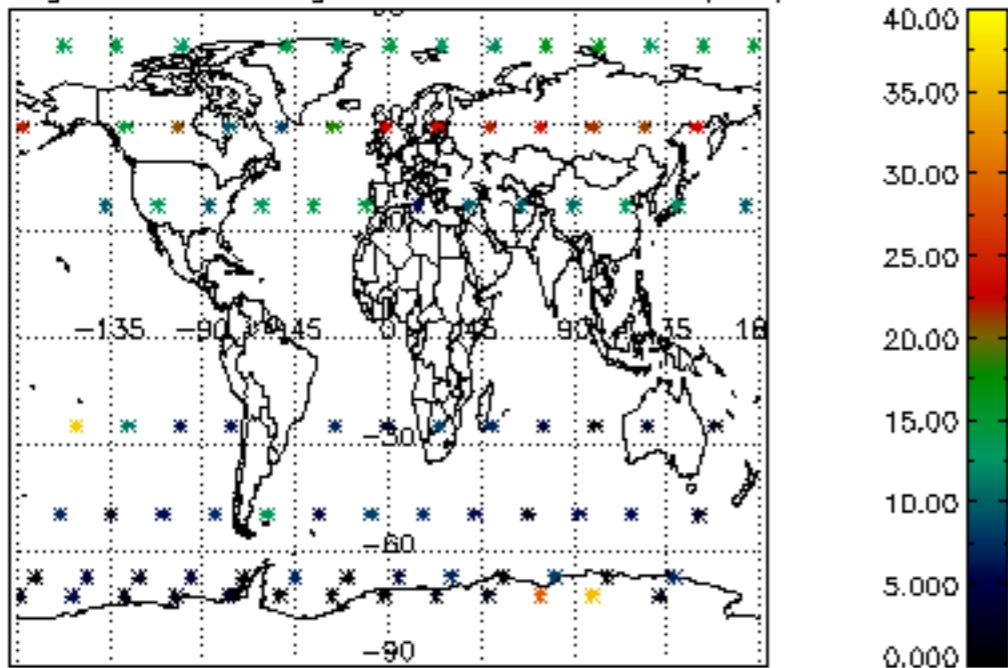
Percentage of cosmic ray hits per profile



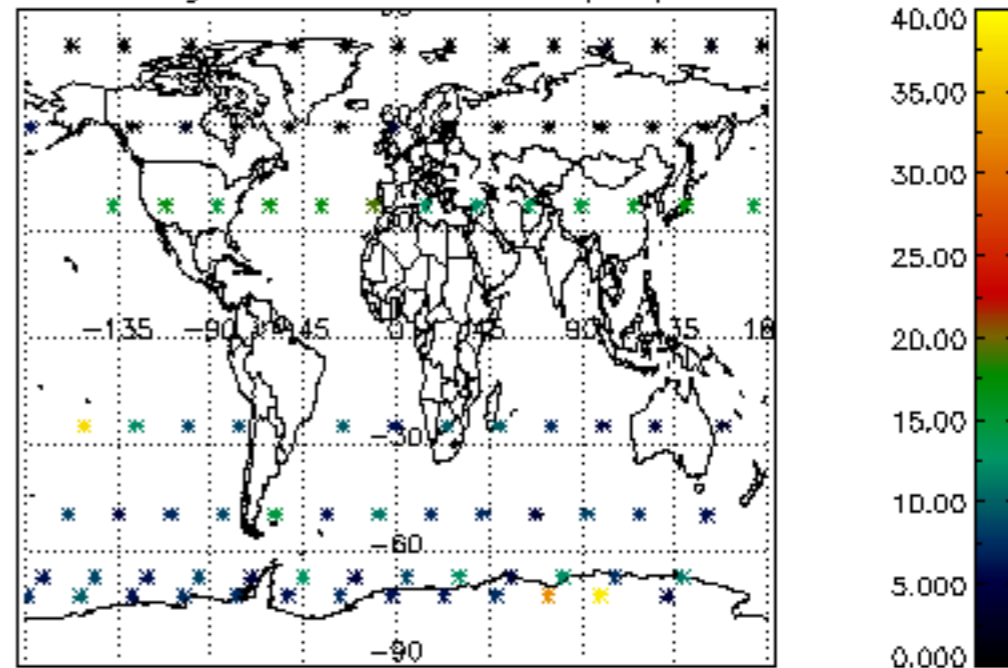
Percentage of datation errors per profile

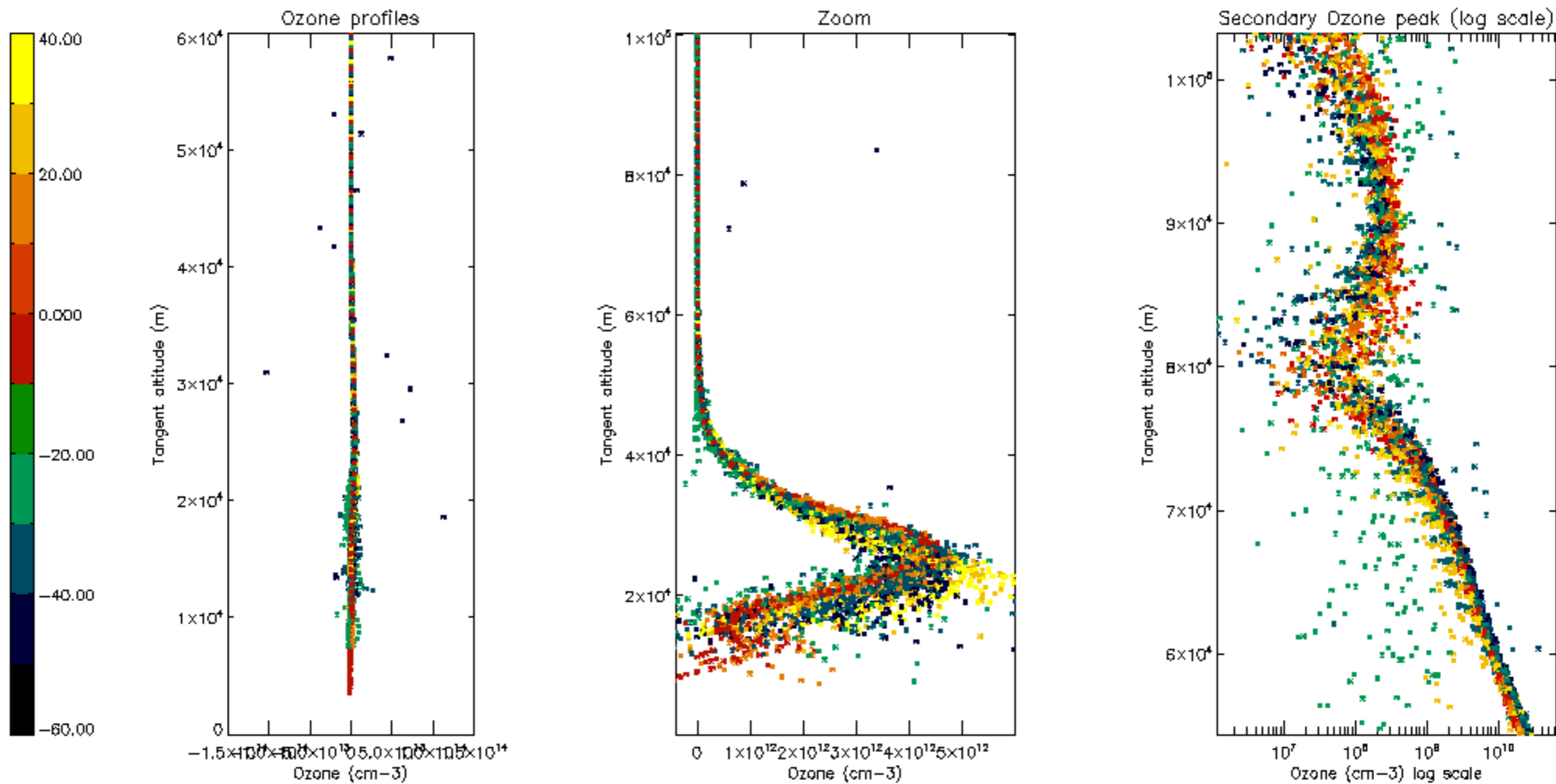


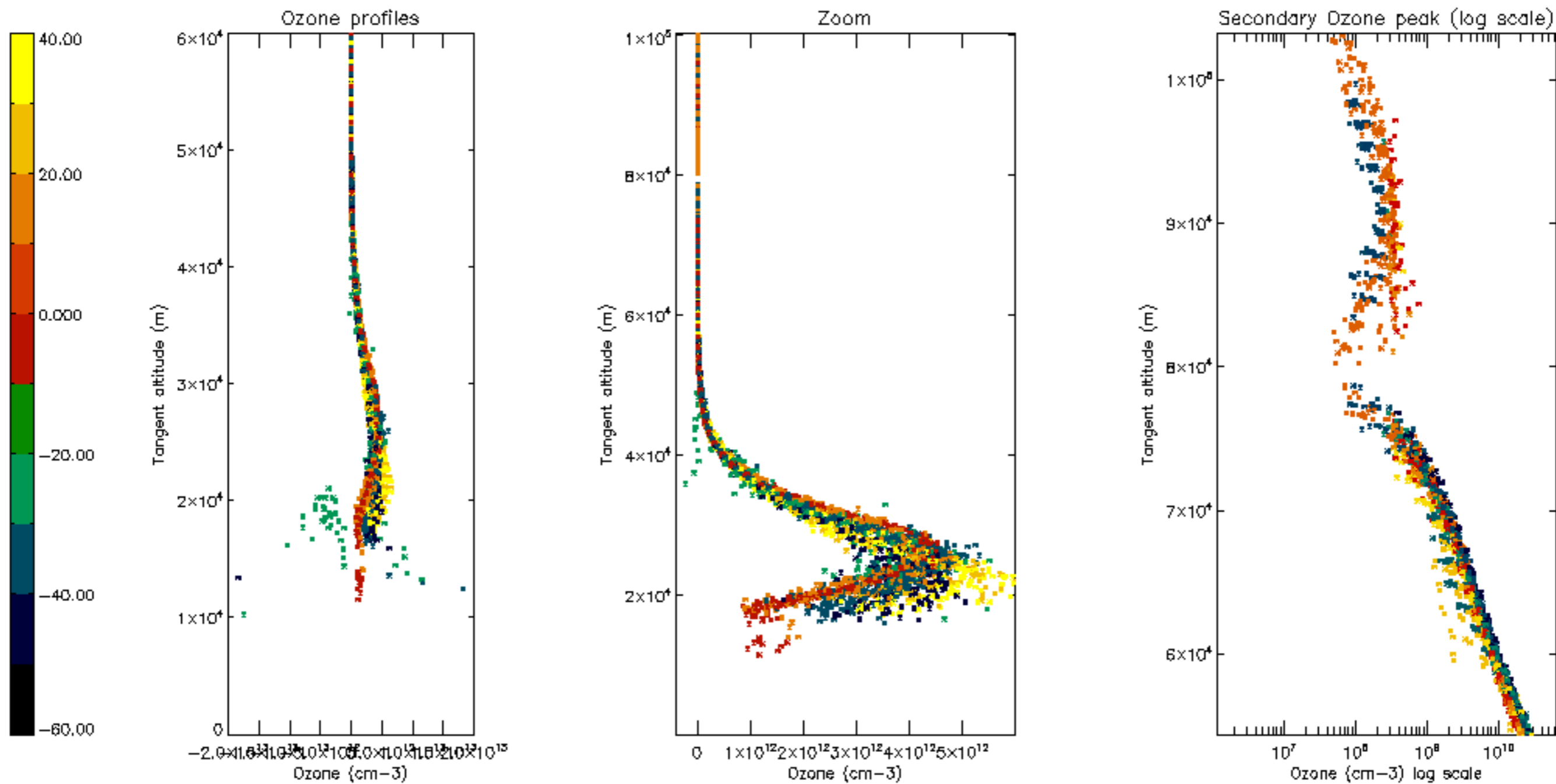
Percentage of star falling outside central band per profile

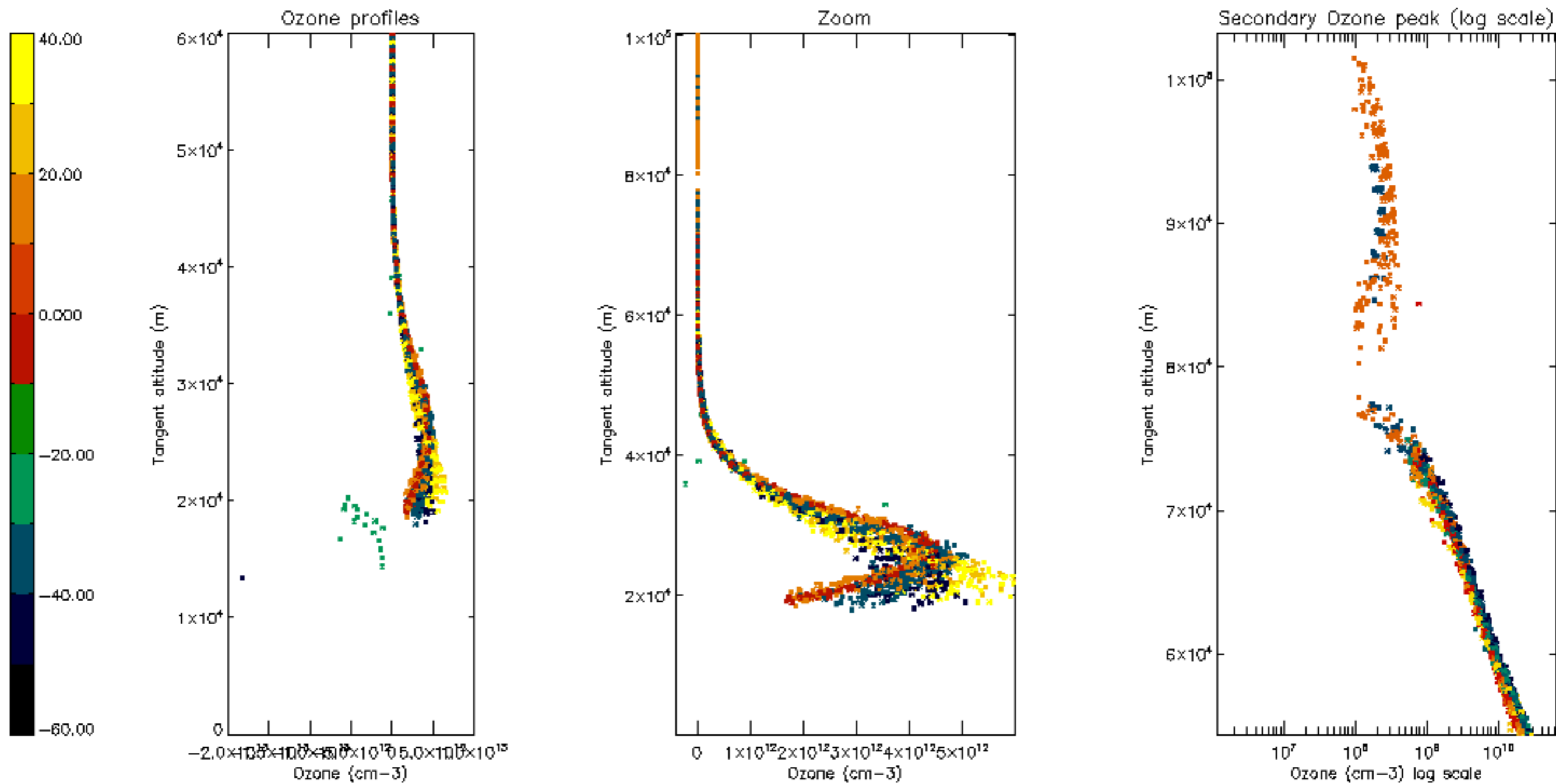


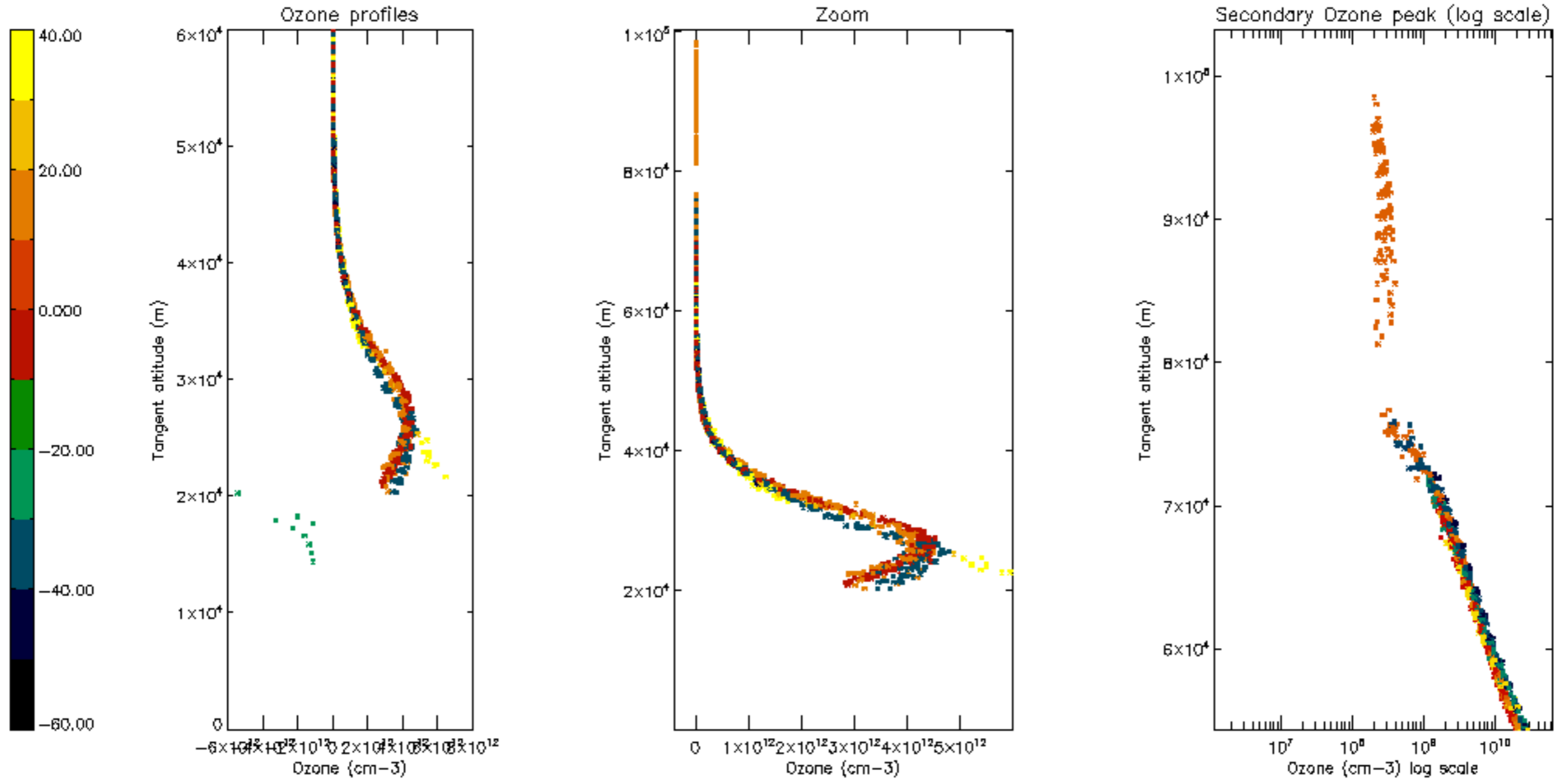
Percentage of saturation errors per profile

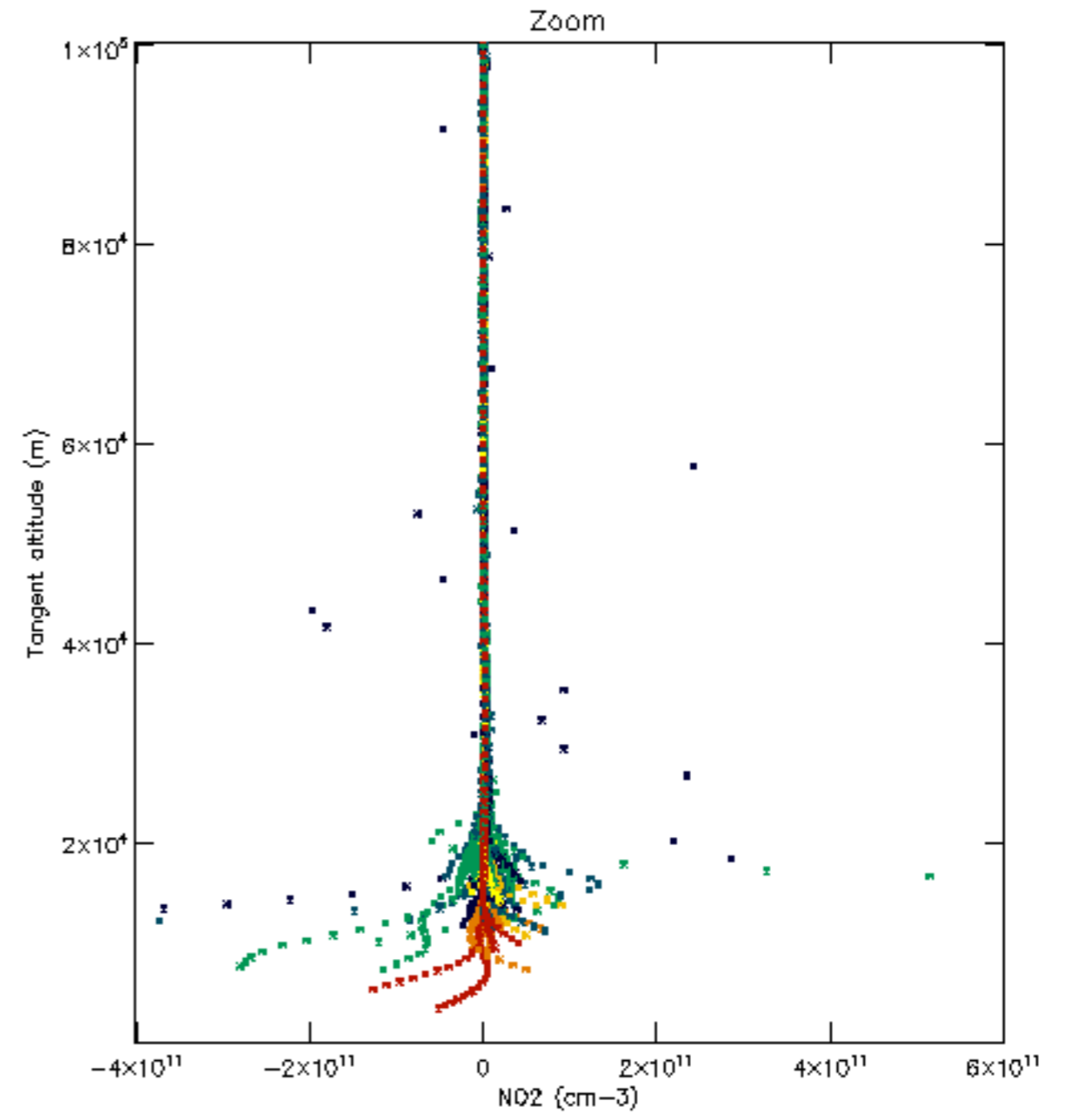
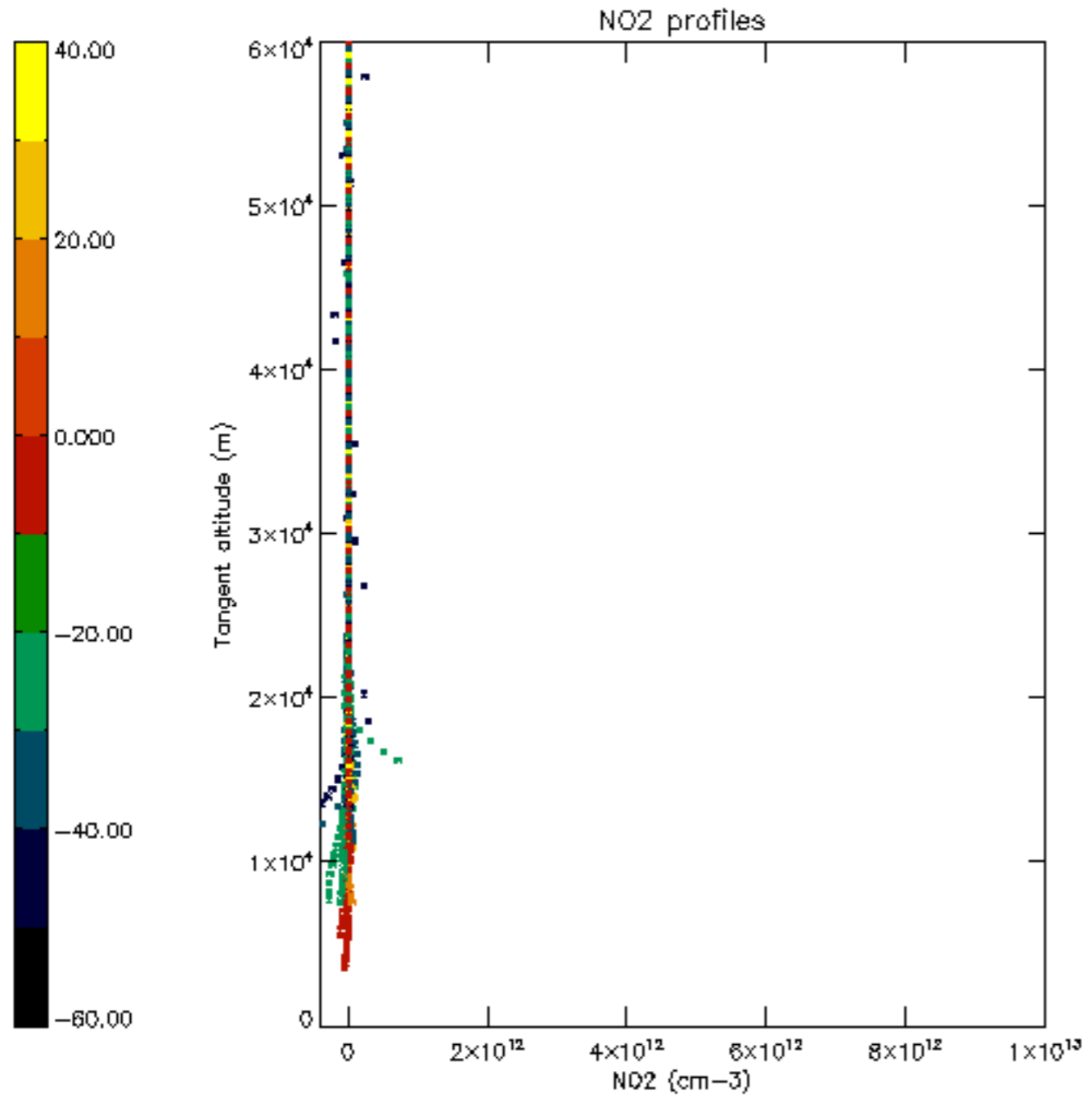


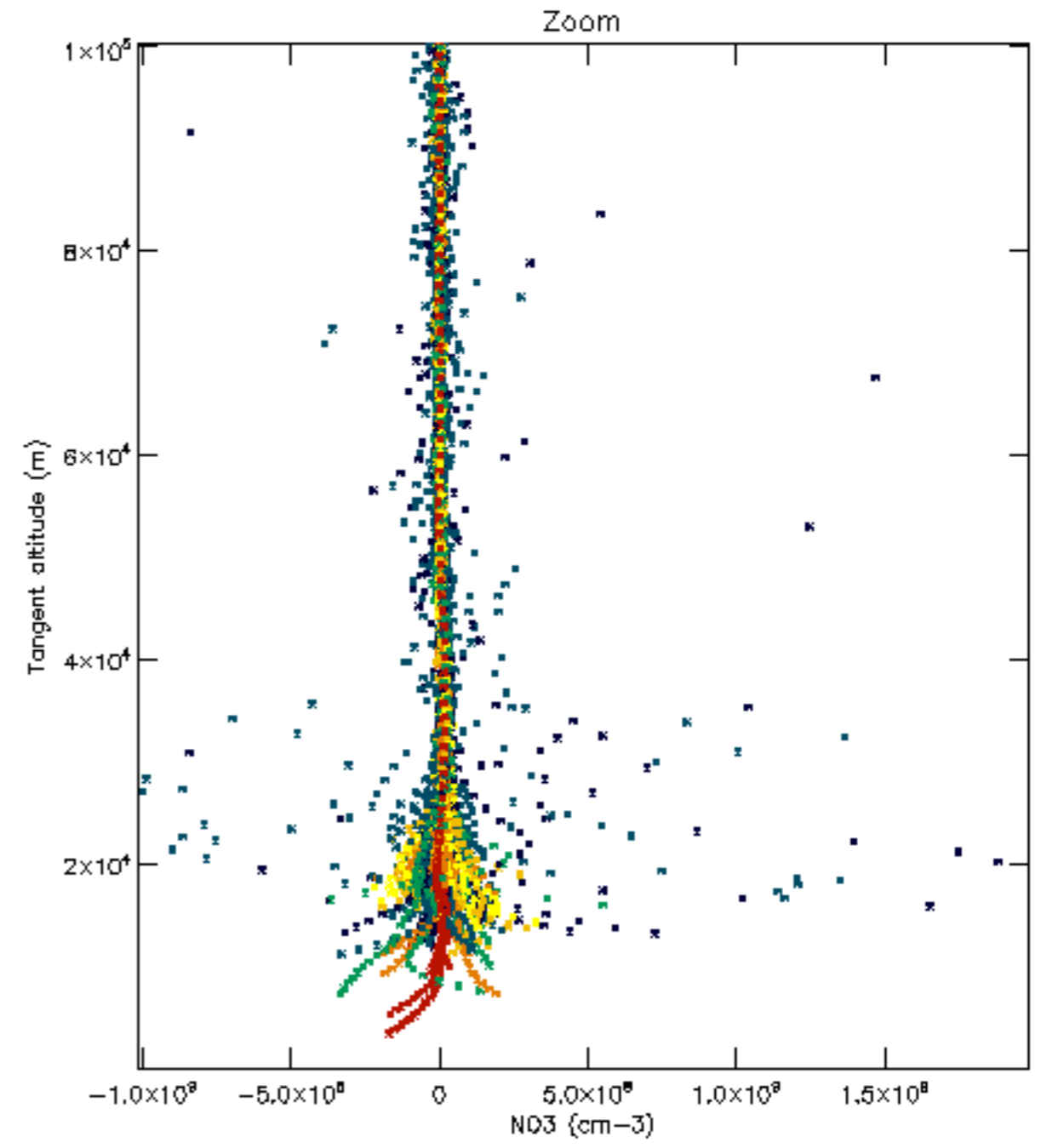
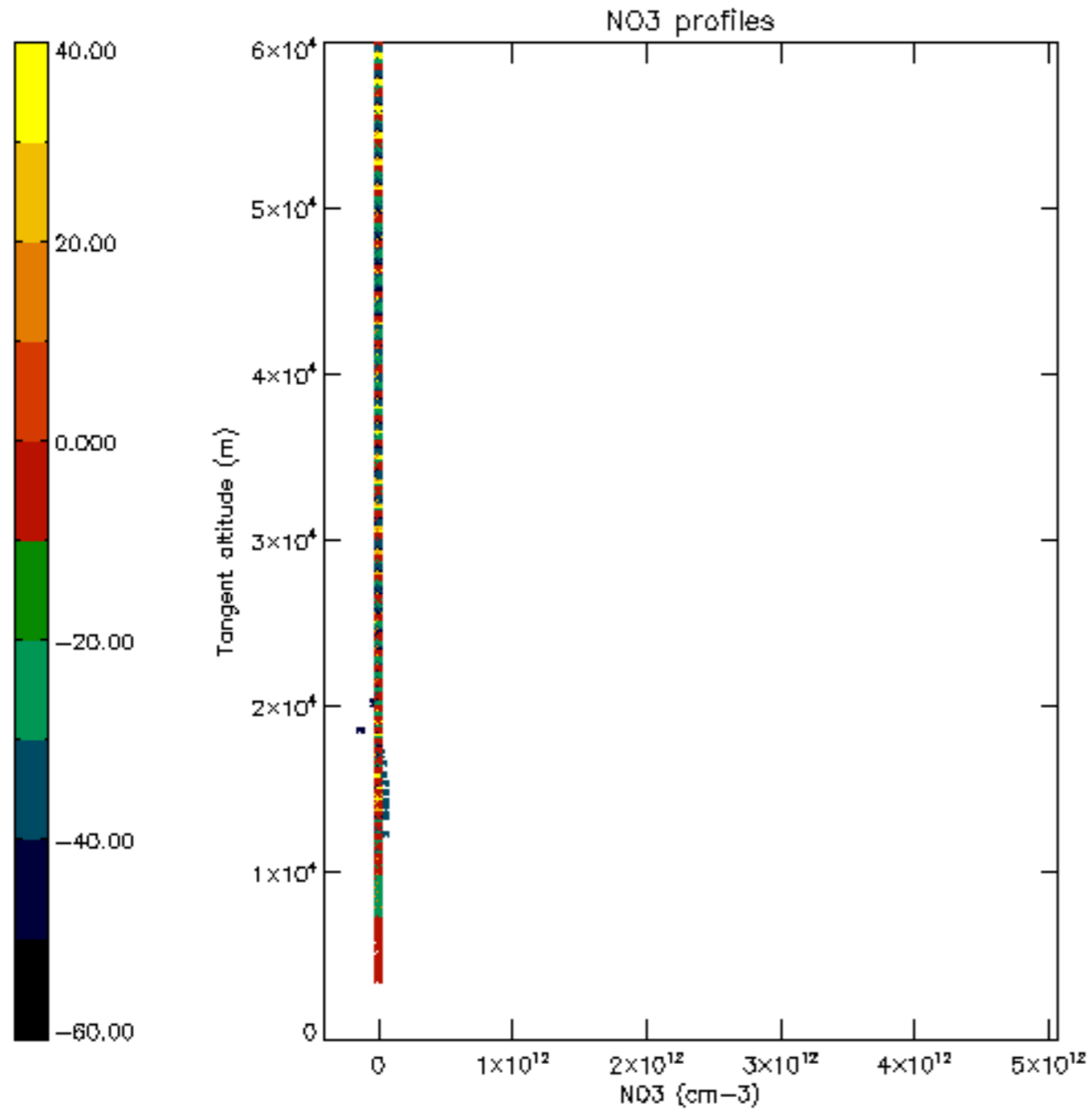


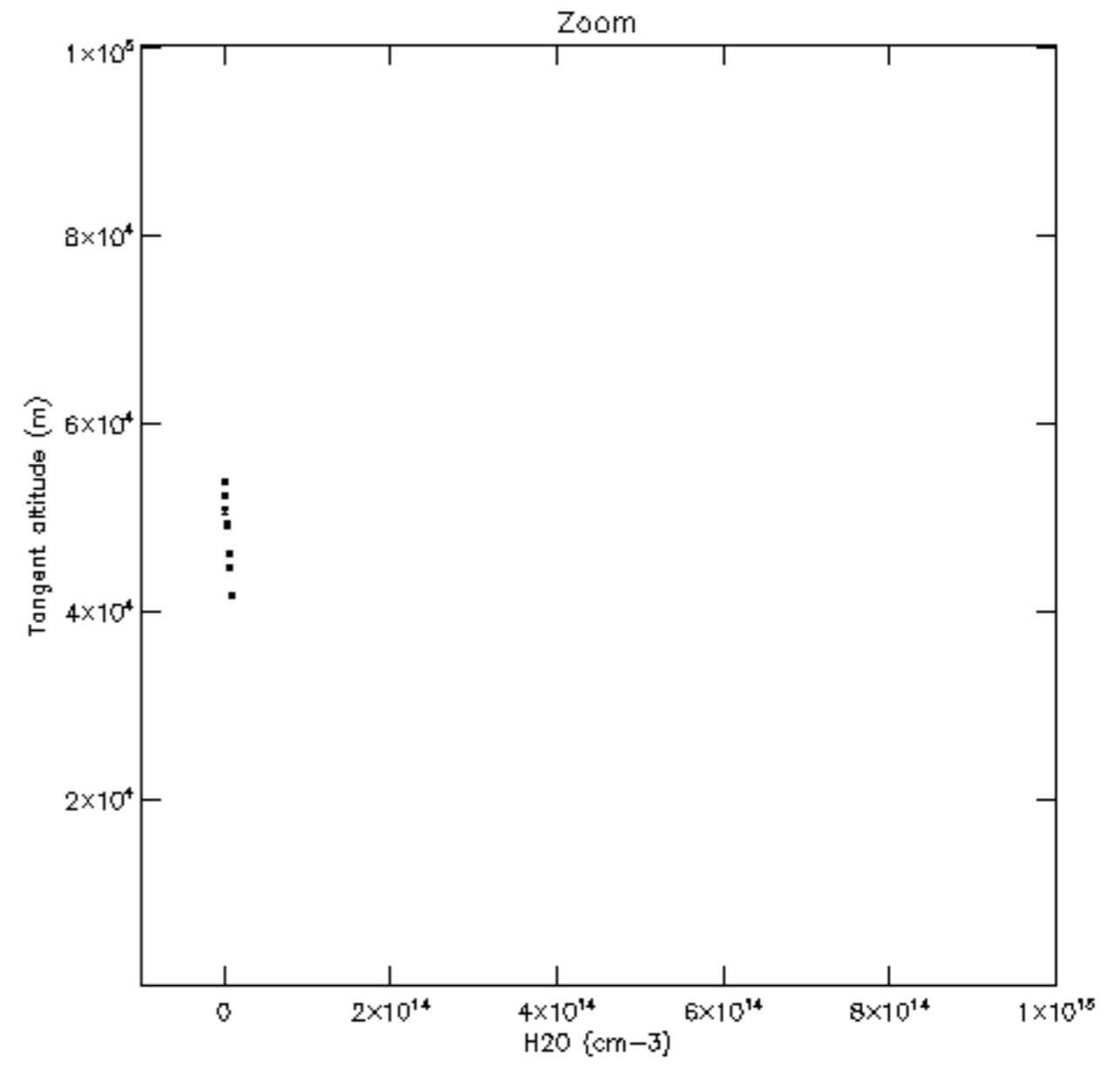
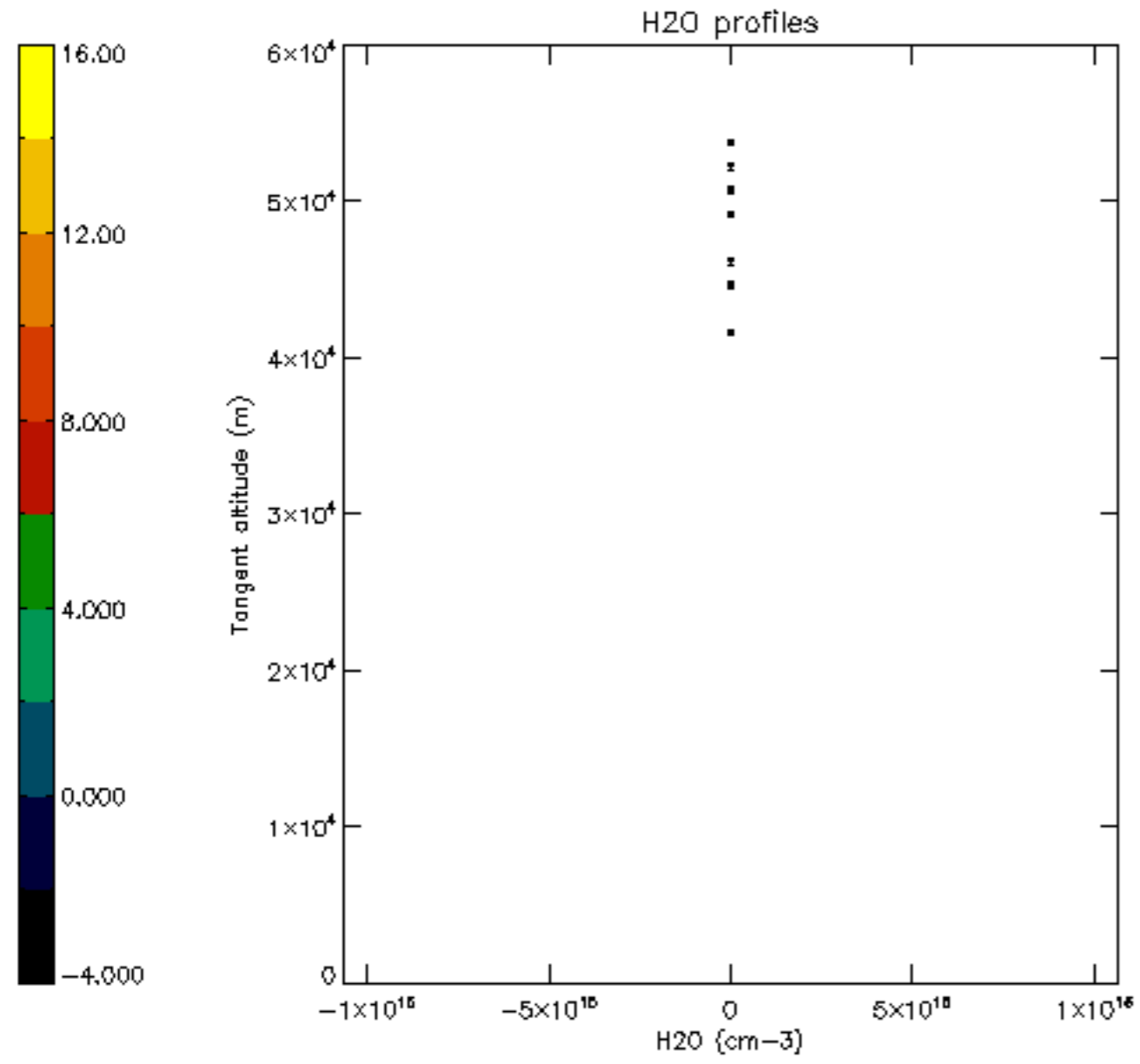


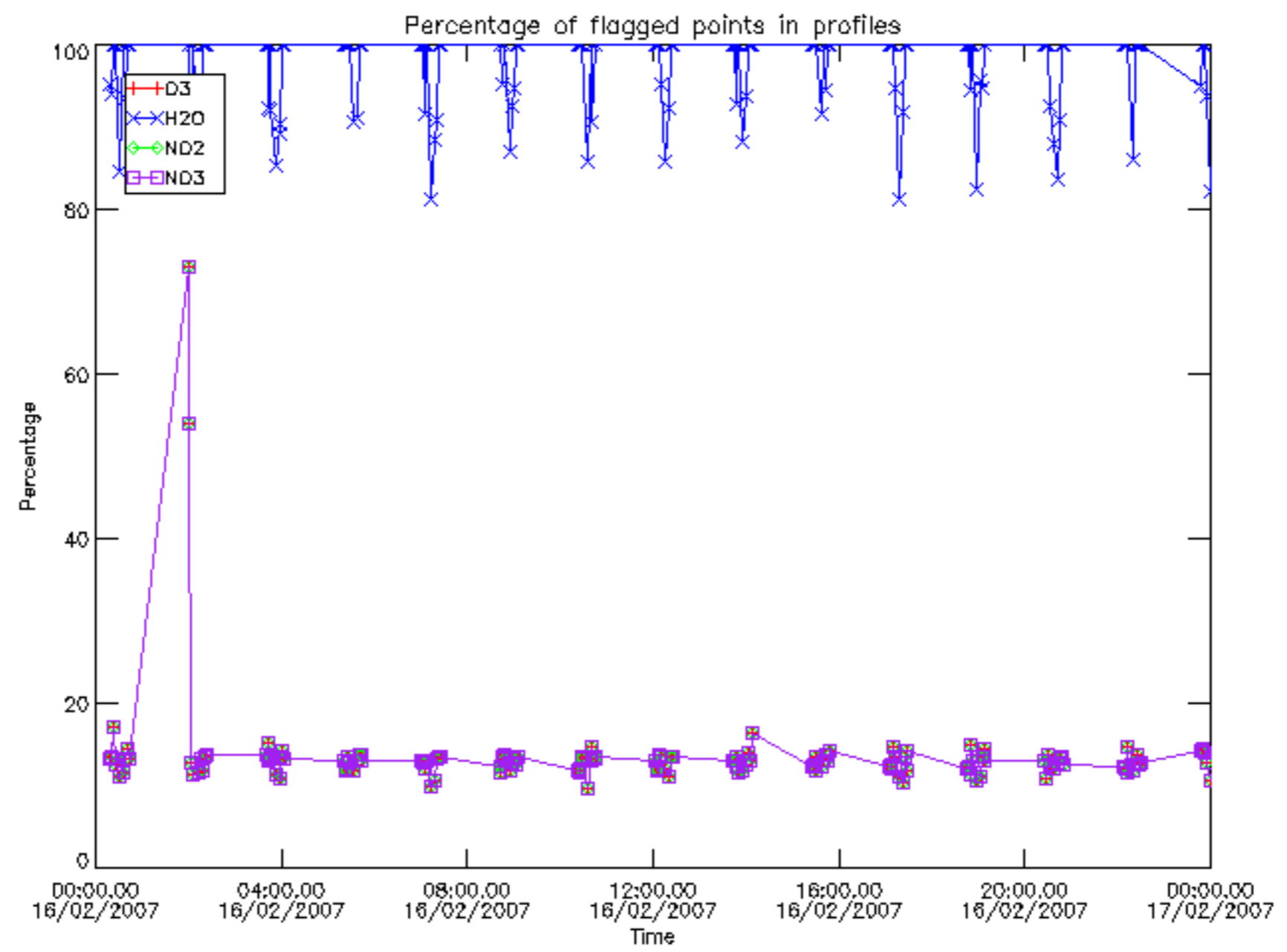




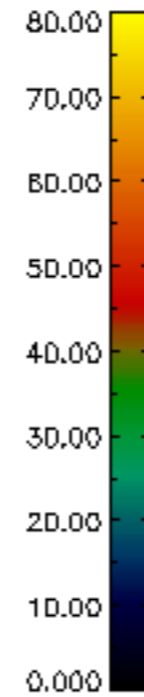
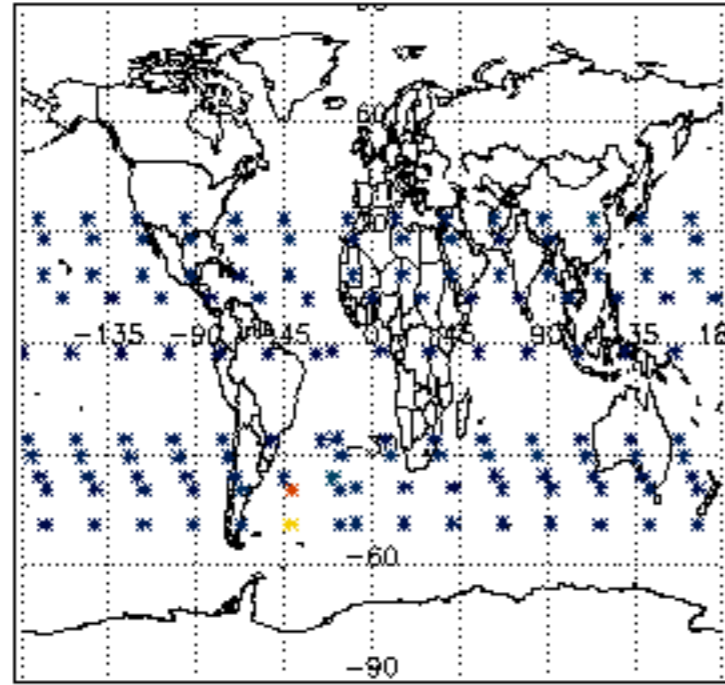




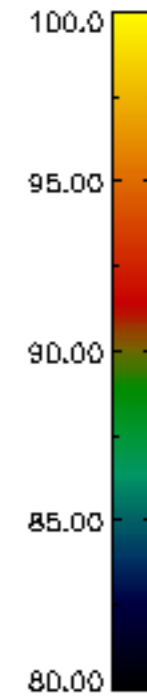
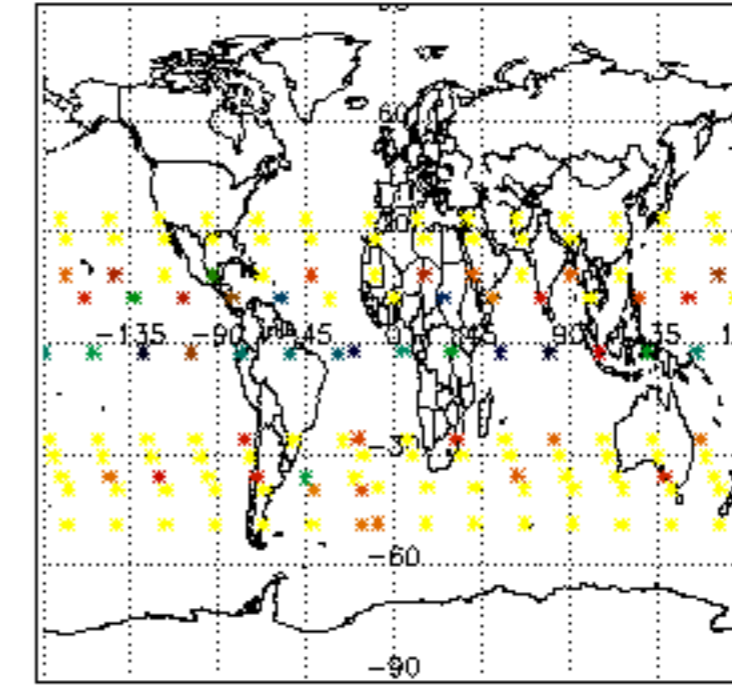




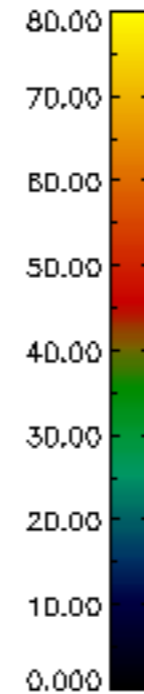
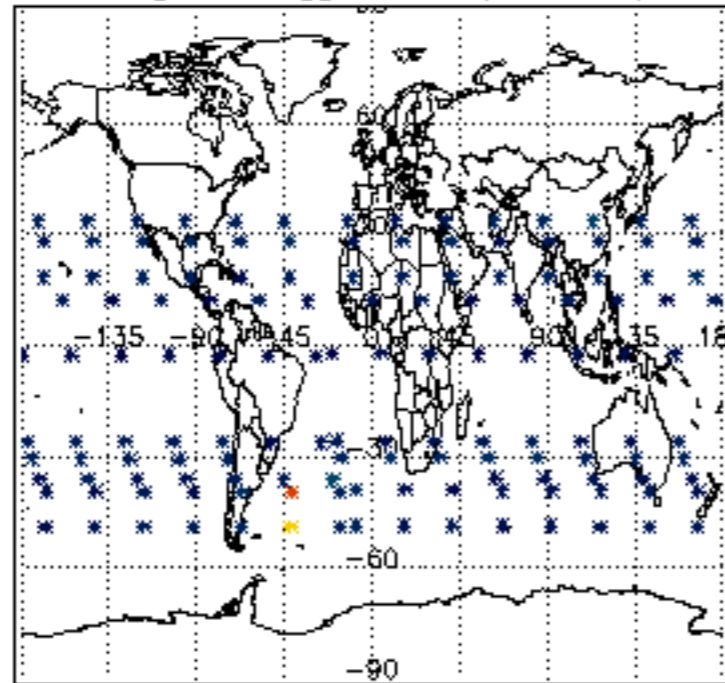
Percentage of flagged data per D3 profile



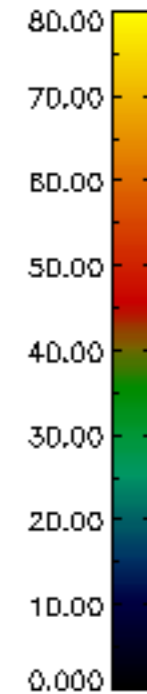
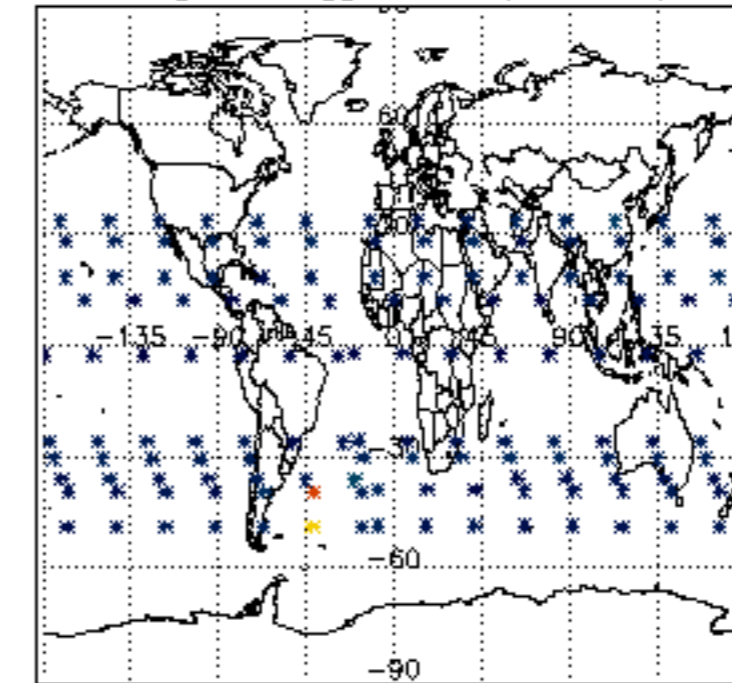
Percentage of flagged data per H2O profile

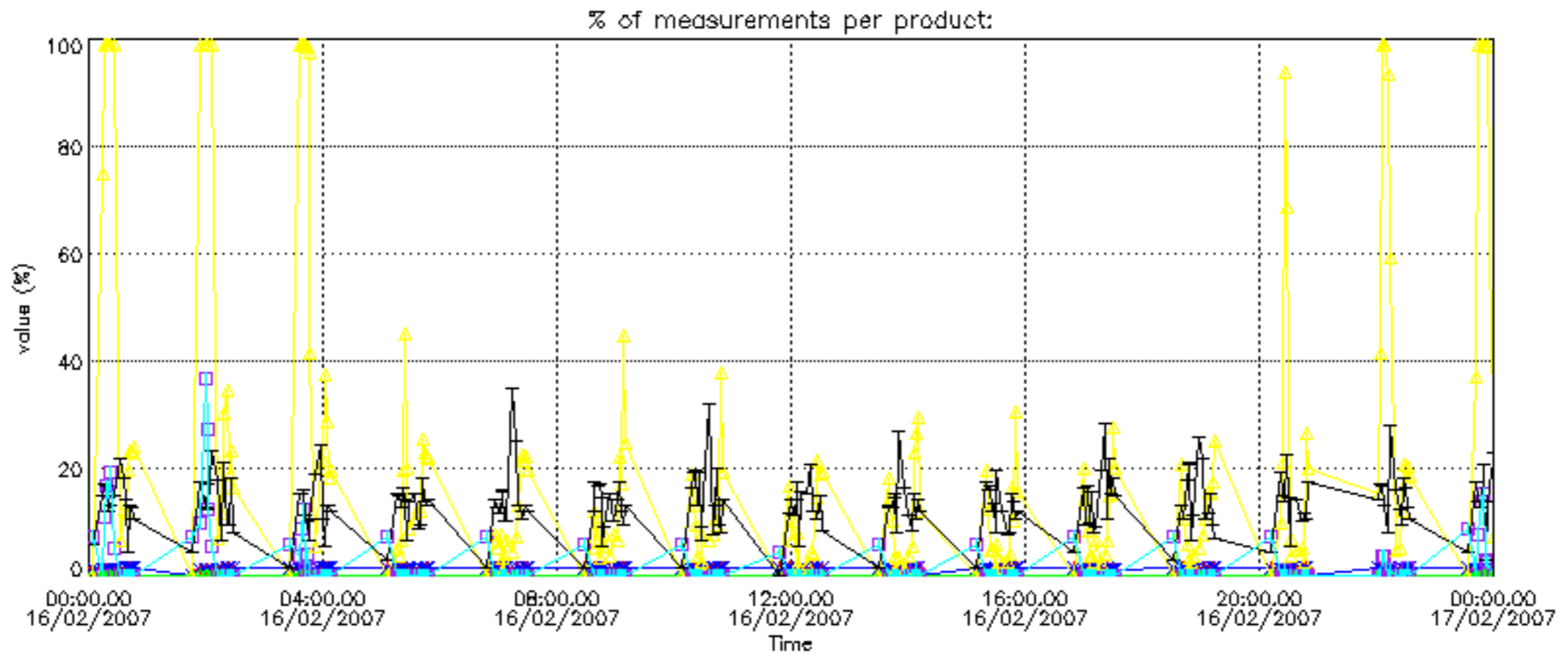


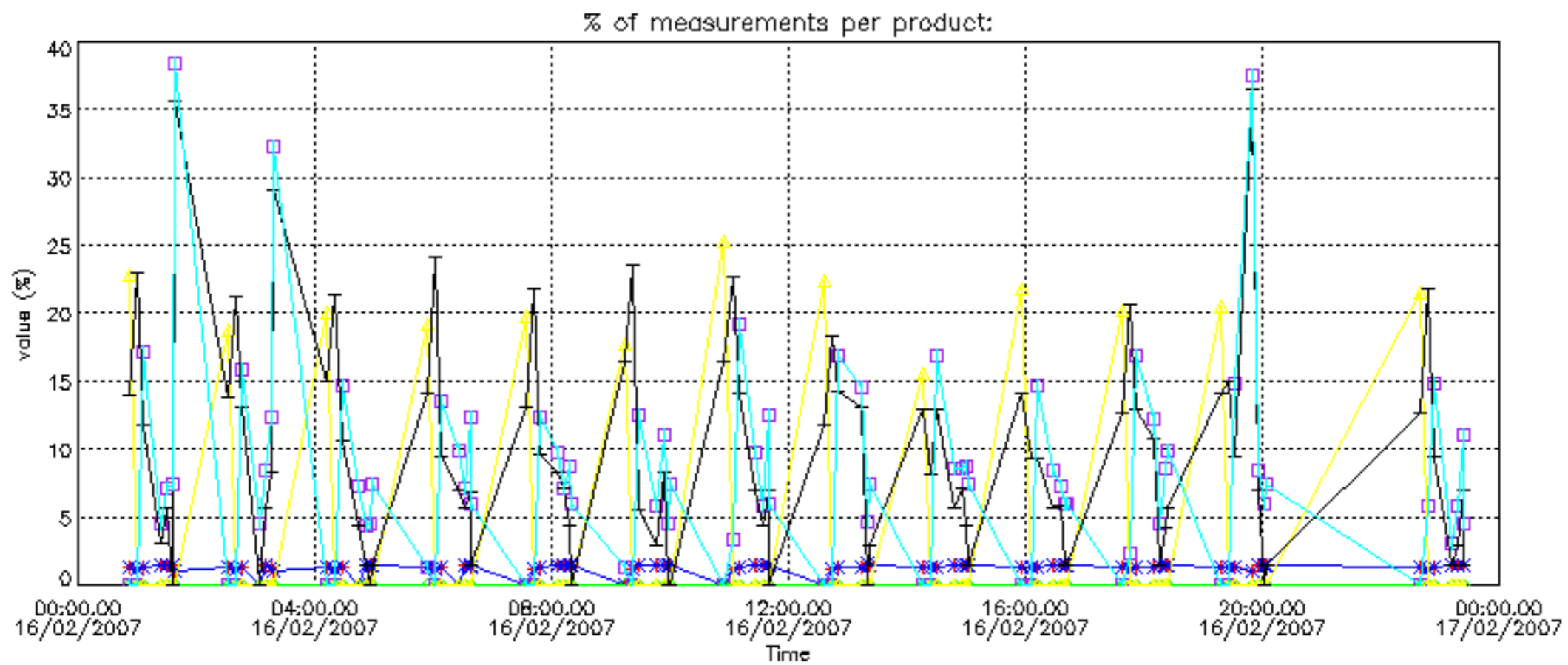
Percentage of flagged data per NO2 profile



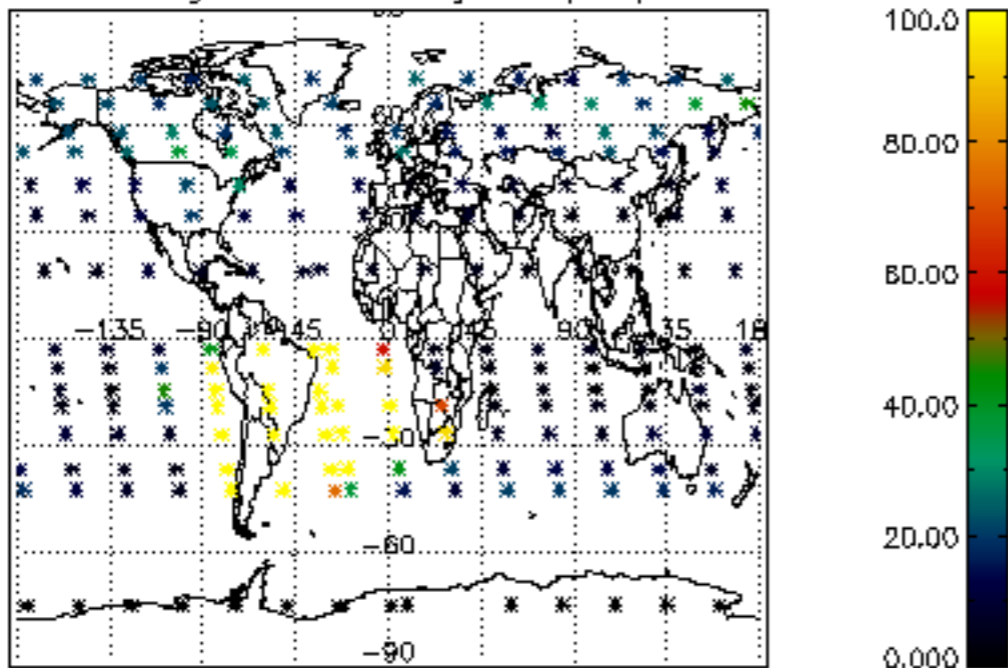
Percentage of flagged data per NO3 profile



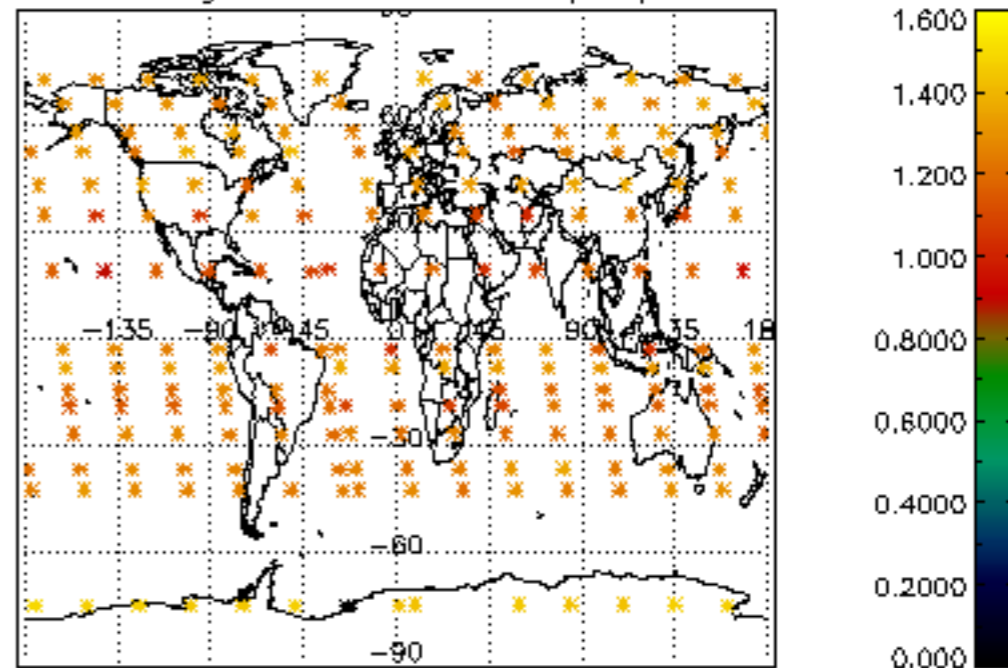




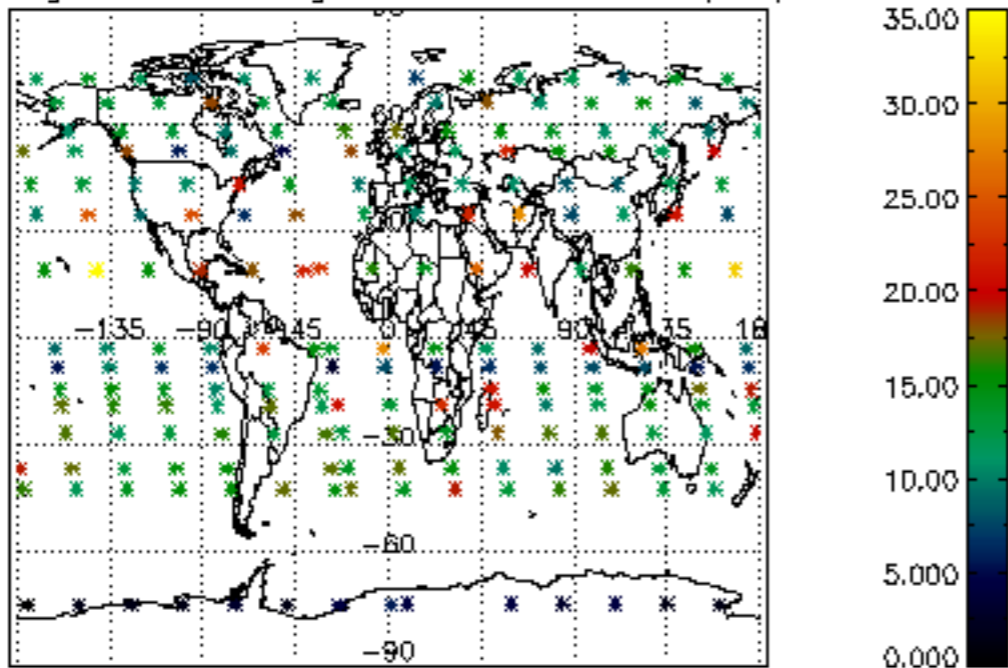
Percentage of cosmic ray hits per profile



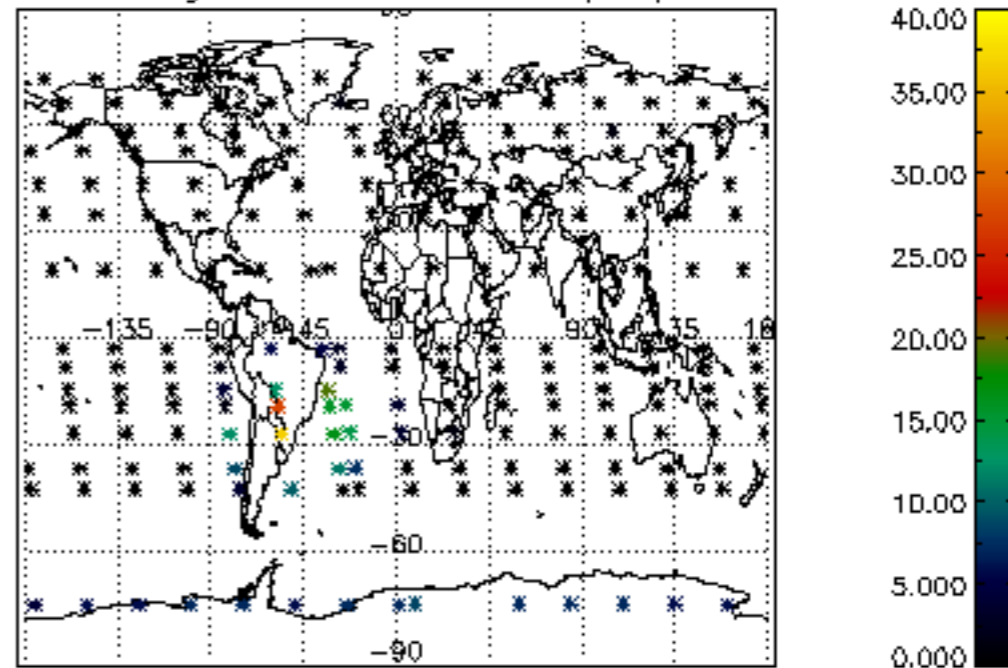
Percentage of datation errors per profile



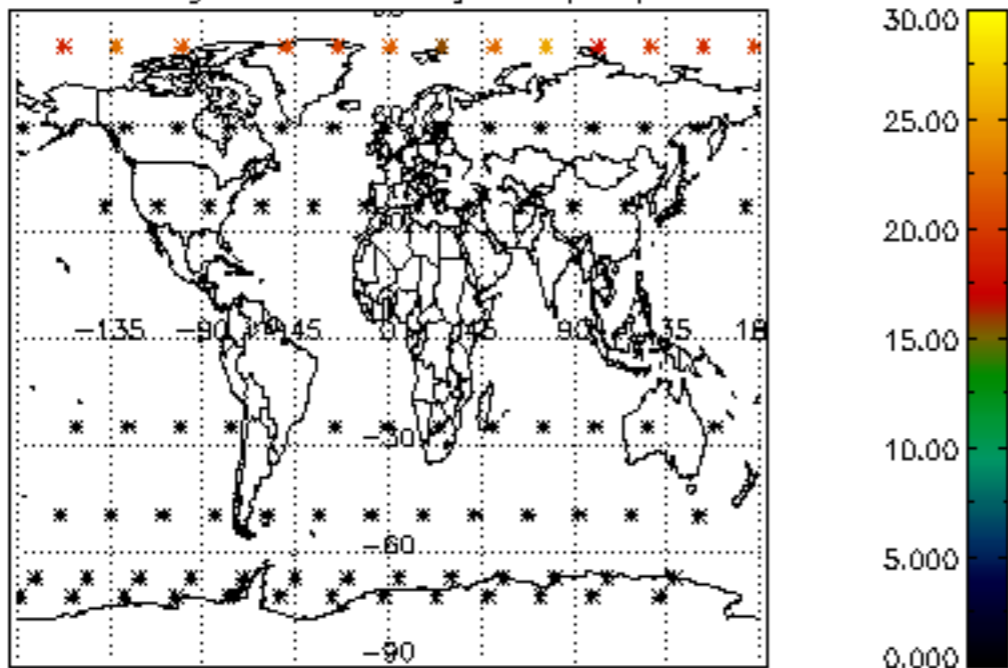
Percentage of star falling outside central band per profile



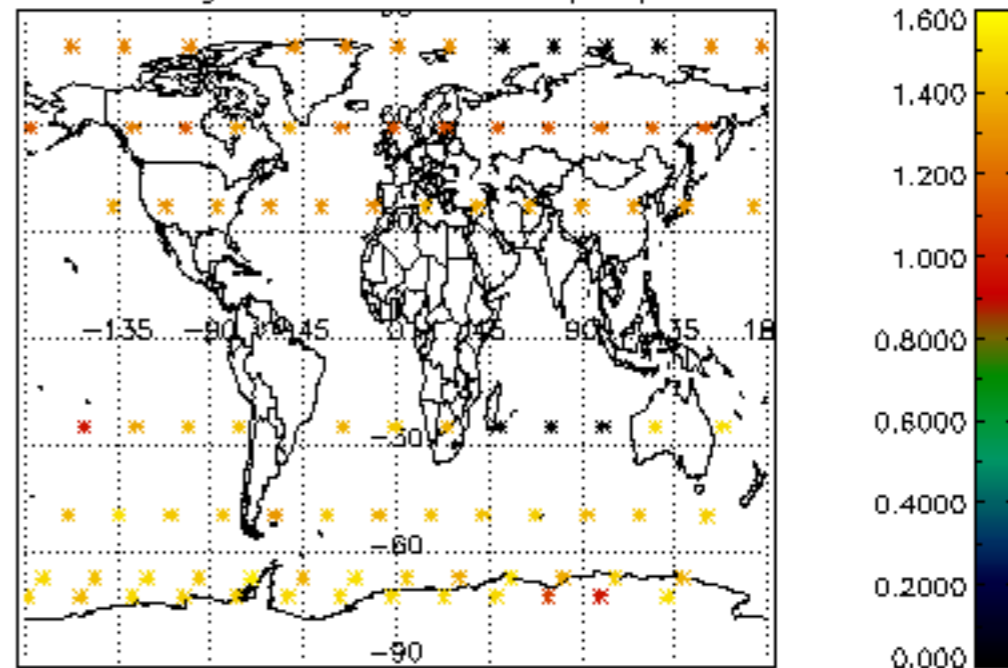
Percentage of saturation errors per profile



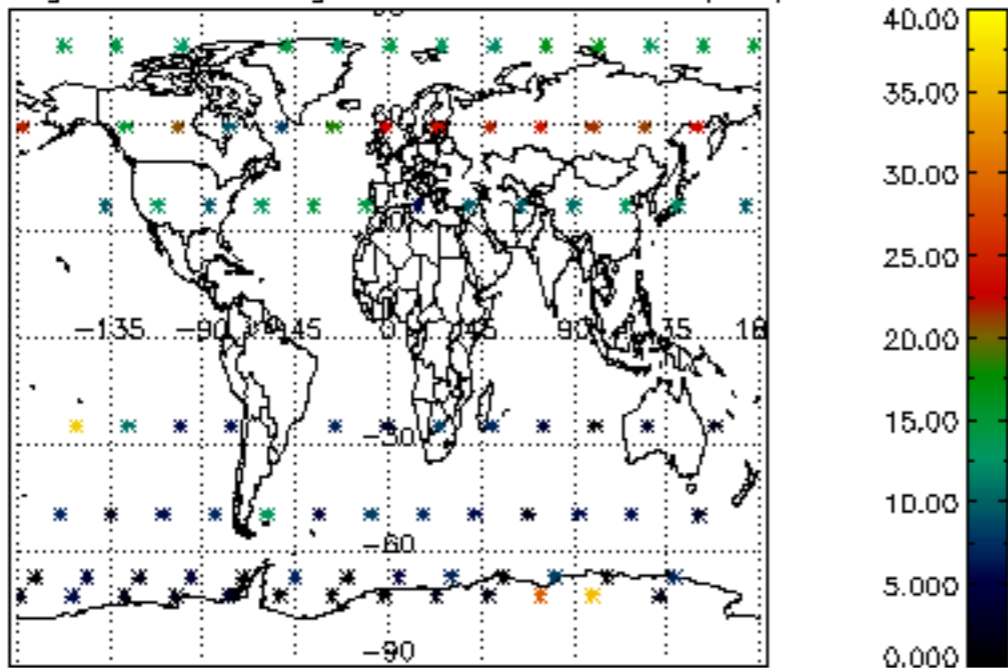
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

