

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	25APR2013 10:45:56
Data source version	GOMOS/6.01
Start time of products	22-02-2008 (22FEB2008 00:00:00)
Stop time of products	23-02-2008 (23FEB2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	303
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

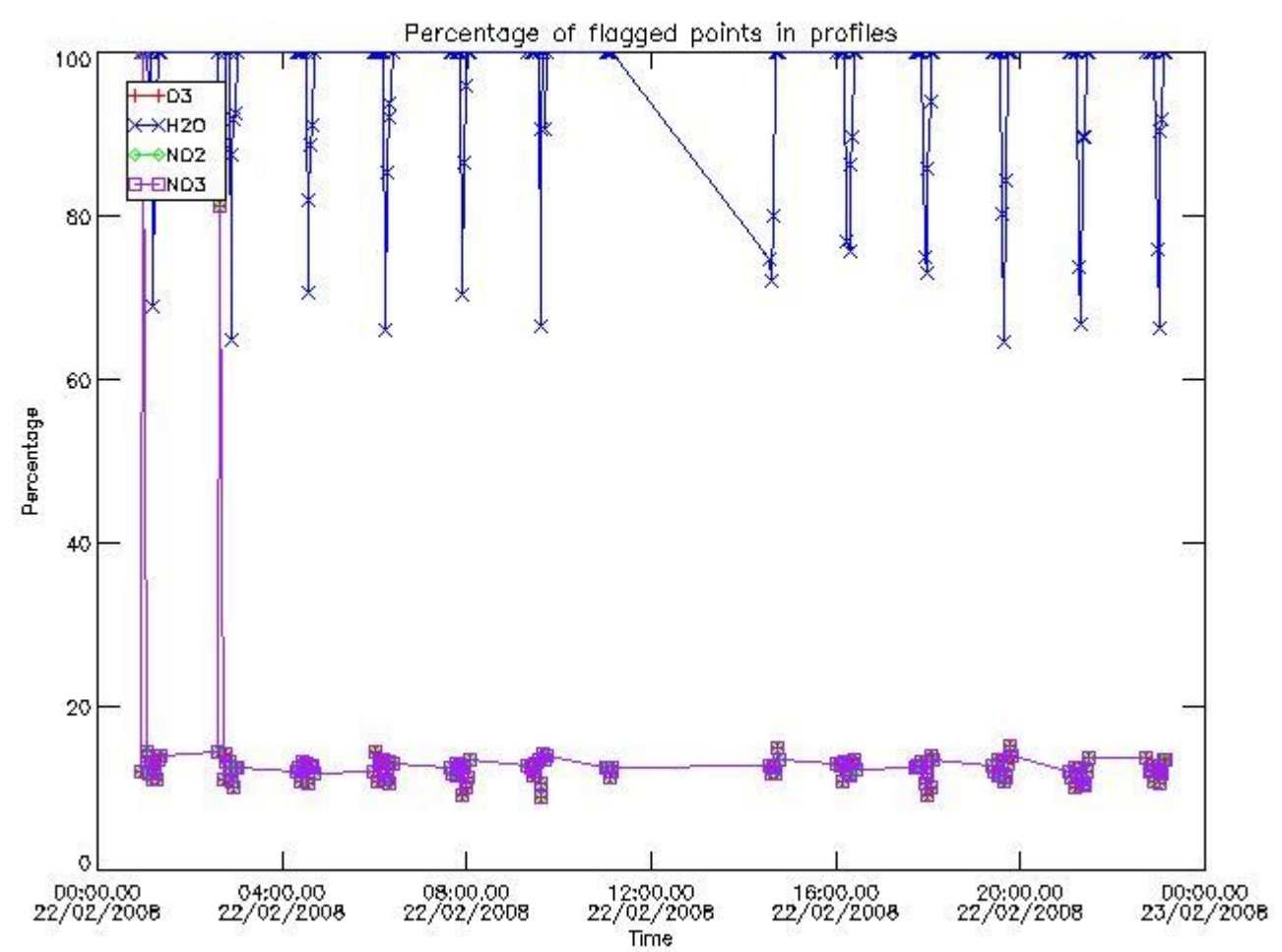
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080222_000543_000000372066_00145_31261_7520.N1	22-FEB-2008 00:05:43	Bright	37.000	17	78Bet Gem	1.1610	4500.0	74	31261	No
2	GOM_NL__2PRFIN20080222_000653_000000372066_00145_31261_7521.N1	22-FEB-2008 00:06:53	Bright	37.000	24	66Alp Gem	1.5800	10200.	74	31261	No
3	GOM_NL__2PRFIN20080222_002255_000000352066_00145_31261_7522.N1	22-FEB-2008 00:22:55	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	31261	No
4	GOM_NL__2PRFIN20080222_003009_000000362066_00145_31261_7523.N1	22-FEB-2008 00:30:09	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	31261	No
5	GOM_NL__2PRFIN20080222_003515_000000352066_00145_31261_7524.N1	22-FEB-2008 00:35:15	Bright	35.000	19	50Alp Cyg	1.2460	10500.	70	31261	No
6	GOM_NL__2PRFIN20080222_003650_000000352066_00145_31261_7525.N1	22-FEB-2008 00:36:50	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	31261	No
7	GOM_NL__2PRFIN20080222_003819_000000332066_00145_31261_7526.N1	22-FEB-2008 00:38:19	Bright	33.000	92	53Eps Cyg	2.5000	4500.0	66	31261	No
8	GOM_NL__2PRFIN20080222_004508_000000542066_00145_31261_7527.N1	22-FEB-2008 00:45:08	Bright	53.500	168	17Zet Aql	2.9860	11000.	107	31261	No
9	GOM_NL__2PRFIN20080222_005446_000000412066_00145_31261_7528.N1	22-FEB-2008 00:54:46	Twilight	41.000	155	41Pi Sgr	2.9000	6600.0	82	31261	No
10	GOM_NL__2PRFIN20080222_005629_000000422066_00145_31261_7529.N1	22-FEB-2008 00:56:29	Dark	42.000	57	34Sig Sgr	2.0660	26000.	84	31261	No
11	GOM_NL__2PRFIN20080222_005924_000000432066_00145_31261_7530.N1	22-FEB-2008 00:59:24	Dark	43.000	38	20Eps Sgr	1.8360	11000.	86	31261	No
12	GOM_NL__2PRFIN20080222_010300_000000442066_00145_31261_7531.N1	22-FEB-2008 01:03:00	Dark	44.000	40	The Sco	1.8590	7100.0	88	31261	No
13	GOM_NL__2PRFIN20080222_010440_000000392066_00145_31261_7532.N1	22-FEB-2008 01:04:40	Dark	38.500	147	Alp Ara	2.8770	26000.	77	31261	No
14	GOM_NL__2PRFIN20080222_010602_000000432066_00145_31261_7533.N1	22-FEB-2008 01:06:02	Dark	43.000	141	Bet Ara	2.8400	4600.0	86	31261	No
15	GOM_NL__2PRFIN20080222_011001_000000392066_00146_31262_7515.N1	22-FEB-2008 01:10:01	Dark	38.500	134	Bet TrA	2.8100	6600.0	77	31262	No
16	GOM_NL__2PRFIN20080222_011226_000000462066_00146_31262_7516.N1	22-FEB-2008 01:12:26	Dark	45.500	4	Alp1Cen	-0.010000	5800.0	91	31262	No
17	GOM_NL__2PRFIN20080222_011346_000000422066_00146_31262_7517.N1	22-FEB-2008 01:13:46	Dark	41.500	10	Bet Cen	0.61000	28000.	83	31262	No
18	GOM_NL__2PRFIN20080222_011638_000000462066_00146_31262_7518.N1	22-FEB-2008 01:16:38	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	31262	No
19	GOM_NL__2PRFIN20080222_011836_000000382066_00146_31262_7519.N1	22-FEB-2008 01:18:36	Dark	38.000	29	Bet Car	1.6720	10200.	76	31262	No
20	GOM_NL__2PRFIN20080222_012119_000000372066_00146_31262_7520.N1	22-FEB-2008 01:21:19	Dark	36.500	71	lot Car	2.2460	7700.0	73	31262	No
21	GOM_NL__2PRFIN20080222_012253_000000382066_00146_31262_7521.N1	22-FEB-2008 01:22:53	Straylight	37.500	46	Del Vel	1.9540	10600.	75	31262	No
22	GOM_NL__2PRFIN20080222_012513_000000392066_00146_31262_7522.N1	22-FEB-2008 01:25:13	Straylight	39.000	34	Gam2Vel	1.7930	23000.	78	31262	No
23	GOM_NL__2PRFIN20080222_012719_000000412066_00146_31262_7523.N1	22-FEB-2008 01:27:19	Straylight	40.500	70	Zet Pup	2.2460	39000.	81	31262	No
24	GOM_NL__2PRFIN20080222_013138_000000382066_00146_31262_7524.N1	22-FEB-2008 01:31:38	Straylight	37.500	132	15Rho Pup	2.8030	6900.0	75	31262	No
25	GOM_NL__2PRFIN20080222_014008_000000422066_00146_31262_7525.N1	22-FEB-2008 01:40:08	Bright	41.500	8	10Alp CMi	0.40000	6500.0	83	31262	No
26	GOM_NL__2PRFIN20080222_014619_000000372066_00146_31262_7526.N1	22-FEB-2008 01:46:19	Bright	37.000	17	78Bet Gem	1.1610	4500.0	74	31262	No
27	GOM_NL__2PRFIN20080222_014729_000000372066_00146_31262_7527.N1	22-FEB-2008 01:47:29	Bright	36.500	24	66Alp Gem	1.5800	10200.	73	31262	No
28	GOM_NL__2PRFIN20080222_020331_000000342066_00146_31262_7528.N1	22-FEB-2008 02:03:31	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	31262	No
29	GOM_NL__2PRFIN20080222_021045_000000362066_00146_31262_7529.N1	22-FEB-2008 02:10:45	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	31262	No
30	GOM_NL__2PRFIN20080222_021551_000000342066_00146_31262_7530.N1	22-FEB-2008 02:15:51	Bright	33.500	19	50Alp Cyg	1.2460	10500.	67	31262	No
31	GOM_NL__2PRFIN20080222_021726_000000342066_00146_31262_7531.N1	22-FEB-2008 02:17:26	Bright	33.500	66	37Gam Cyg	2.2080	5900.0	67	31262	No
32	GOM_NL__2PRFIN20080222_021855_000000342066_00146_31262_7532.N1	22-FEB-2008 02:18:55	Bright	33.500	92	53Eps Cyg	2.5000	4500.0	67	31262	No
33	GOM_NL__2PRFIN20080222_022545_000000362066_00146_31262_7533.N1	22-FEB-2008 02:25:45	Bright	36.000	168	17Zet Aql	2.9860	11000.	72	31262	No
34	GOM_NL__2PRFIN20080222_023522_000000382066_00146_31262_7534.N1	22-FEB-2008 02:35:22	Twilight	37.500	155	41Pi Sgr	2.9000	6600.0	75	31262	No
35	GOM_NL__2PRFIN20080222_023705_000000422066_00146_31262_7535.N1	22-FEB-2008 02:37:05	Dark	42.000	57	34Sig Sgr	2.0660	26000.	84	31262	No
36	GOM_NL__2PRFIN20080222_024000_000000412066_00146_31262_7536.N1	22-FEB-2008 02:40:00	Dark	40.500	38	20Eps Sgr	1.8360	11000.	81	31262	No
37	GOM_NL__2PRFIN20080222_024337_000000462066_00146_31262_7537.N1	22-FEB-2008 02:43:37	Dark	46.000	40	The Sco	1.8590	7100.0	92	31262	No
38	GOM_NL__2PRFIN20080222_024517_000000402066_00146_31262_7538.N1	22-FEB-2008 02:45:17	Dark	39.500	147	Alp Ara	2.8770	26000.	79	31262	No
39	GOM_NL__2PRFIN20080222_024639_000000392066_00146_31262_7539.N1	22-FEB-2008 02:46:39	Dark	38.500	141	Bet Ara	2.8400	4600.0	77	31262	No
40	GOM_NL__2PRFIN20080222_025037_000000392066_00147_31263_7533.N1	22-FEB-2008 02:50:37	Dark	38.500	134	Bet TrA	2.8100	6600.0	77	31263	No
41	GOM_NL__2PRFIN20080222_025302_000000482066_00147_31263_7534.N1	22-FEB-2008 02:53:02	Dark	47.500	4	Alp1Cen	-0.010000	5800.0	95	31263	No
42	GOM_NL__2PRFIN20080222_025422_000000412066_00147_31263_7535.N1	22-FEB-2008 02:54:22	Dark	40.500	10	Bet Cen	0.61000	28000.	81	31263	No

279	GOM_NL__2PRFIN20080222_222304_000000342066_00158_31274_7721.N1	22-FEB-2008 22:23:04	Bright	33.500	19	50Alp Cyg	1.2460	10500.	67	31274	No
280	GOM_NL__2PRFIN20080222_222439_000000332066_00158_31274_7722.N1	22-FEB-2008 22:24:39	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	31274	No
281	GOM_NL__2PRFIN20080222_222609_000000332066_00158_31274_7723.N1	22-FEB-2008 22:26:09	Bright	33.000	92	53Eps Cyg	2.5000	4500.0	66	31274	No
282	GOM_NL__2PRFIN20080222_223259_000000542066_00158_31274_7724.N1	22-FEB-2008 22:32:59	Bright	54.000	168	17Zet Aql	2.9860	11000.	108	31274	No
283	GOM_NL__2PRFIN20080222_224237_000000422066_00158_31274_7725.N1	22-FEB-2008 22:42:37	Twilight	42.000	155	41Pi Sgr	2.9000	6600.0	84	31274	No
284	GOM_NL__2PRFIN20080222_224421_000000412066_00158_31274_7726.N1	22-FEB-2008 22:44:21	Dark	40.500	57	34Sig Sgr	2.0660	26000.	81	31274	No
285	GOM_NL__2PRFIN20080222_224717_000000432066_00158_31274_7727.N1	22-FEB-2008 22:47:17	Dark	42.500	38	20Eps Sgr	1.8360	11000.	85	31274	No
286	GOM_NL__2PRFIN20080222_225055_000000462066_00158_31274_7728.N1	22-FEB-2008 22:50:55	Dark	45.500	40	The Sco	1.8590	7100.0	91	31274	No
287	GOM_NL__2PRFIN20080222_225234_000000402066_00158_31274_7729.N1	22-FEB-2008 22:52:34	Dark	40.000	147	Alp Ara	2.8770	26000.	80	31274	No
288	GOM_NL__2PRFIN20080222_225356_000000472066_00158_31274_7730.N1	22-FEB-2008 22:53:56	Dark	47.000	141	Bet Ara	2.8400	4600.0	94	31274	No
289	GOM_NL__2PRFIN20080222_225719_000000402066_00159_31275_7721.N1	22-FEB-2008 22:57:19	Dark	40.000	43	Alp TrA	1.9100	4250.0	80	31275	No
290	GOM_NL__2PRFIN20080222_230021_000000482066_00159_31275_7722.N1	22-FEB-2008 23:00:21	Dark	48.000	4	Alp1Cen	-0.010000	5800.0	96	31275	No
291	GOM_NL__2PRFIN20080222_230141_000000422066_00159_31275_7723.N1	22-FEB-2008 23:01:41	Dark	41.500	10	Bet Cen	0.61000	28000.	83	31275	No
292	GOM_NL__2PRFIN20080222_230431_000000442066_00159_31275_7724.N1	22-FEB-2008 23:04:31	Dark	43.500	12	Alp1Cru	0.77500	30000.	87	31275	No
293	GOM_NL__2PRFIN20080222_230625_000000382066_00159_31275_7725.N1	22-FEB-2008 23:06:25	Dark	38.000	29	Bet Car	1.6720	10200.	76	31275	No
294	GOM_NL__2PRFIN20080222_230909_000000382066_00159_31275_7726.N1	22-FEB-2008 23:09:09	Dark	37.500	71	lot Car	2.2460	7700.0	75	31275	No
295	GOM_NL__2PRFIN20080222_231043_000000412066_00159_31275_7727.N1	22-FEB-2008 23:10:43	Straylight	40.500	46	Del Vel	1.9540	10600.	81	31275	No
296	GOM_NL__2PRFIN20080222_231331_000000442066_00159_31275_7728.N1	22-FEB-2008 23:13:31	Straylight	43.500	65	Lam Vel	2.2040	4400.0	87	31275	No
297	GOM_NL__2PRFIN20080222_231928_000000382066_00159_31275_7729.N1	22-FEB-2008 23:19:28	Straylight	38.000	132	15Rho Pup	2.8030	6900.0	76	31275	No
298	GOM_NL__2PRFIN20080222_232311_000000472066_00159_31275_7730.N1	22-FEB-2008 23:23:11	Twl_and_stray	47.000	48	30Alp Hya	1.9770	4100.0	94	31275	No
299	GOM_NL__2PRFIN20080222_232758_000000382066_00159_31275_7731.N1	22-FEB-2008 23:27:58	Bright	37.500	8	10Alp CMi	0.40000	6500.0	75	31275	No
300	GOM_NL__2PRFIN20080222_233408_000000382066_00159_31275_7732.N1	22-FEB-2008 23:34:08	Bright	37.500	17	78Bet Gem	1.1610	4500.0	75	31275	No
301	GOM_NL__2PRFIN20080222_233519_000000372066_00159_31275_7733.N1	22-FEB-2008 23:35:19	Bright	36.500	24	66Alp Gem	1.5800	10200.	73	31275	No
302	GOM_NL__2PRFIN20080222_235118_000000362066_00159_31275_7734.N1	22-FEB-2008 23:51:18	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	31275	No
303	GOM_NL__2PRFIN20080222_235834_000000362066_00159_31275_7735.N1	22-FEB-2008 23:58:34	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	31275	No

3. Quality information per product

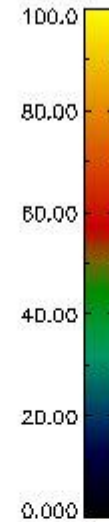
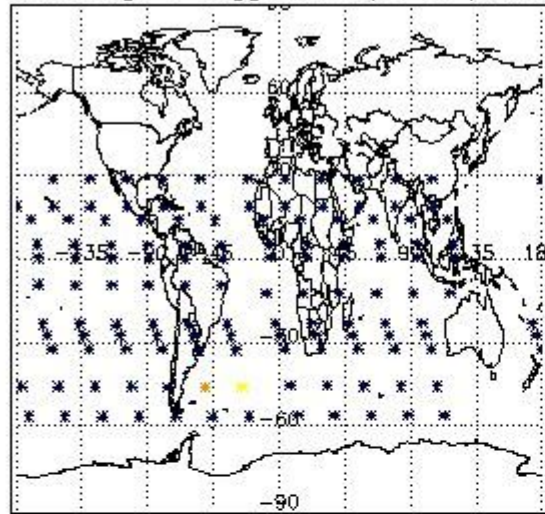
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

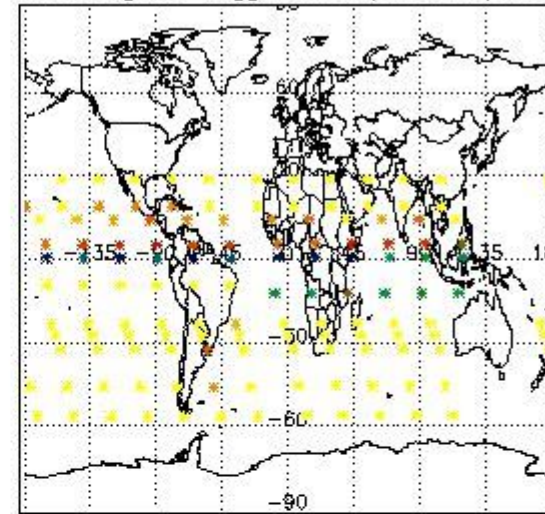


3.2 Plot quality information per product (world map)

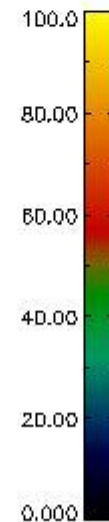
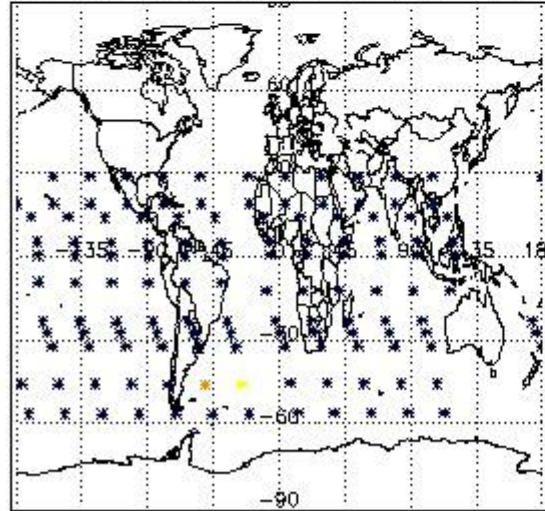
Percentage of flagged data per O3 profile



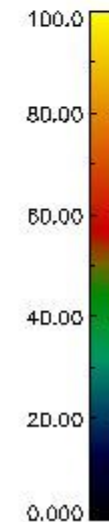
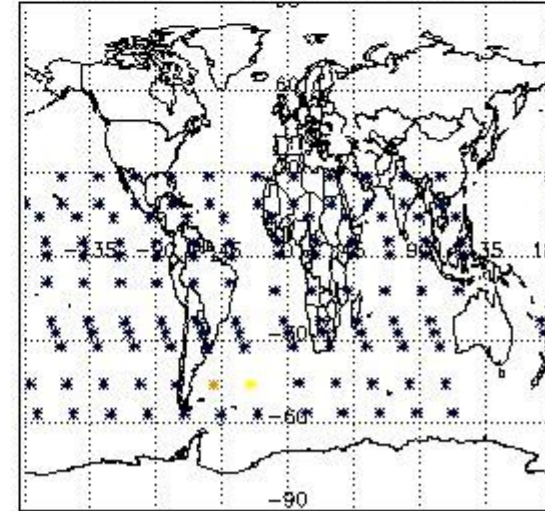
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

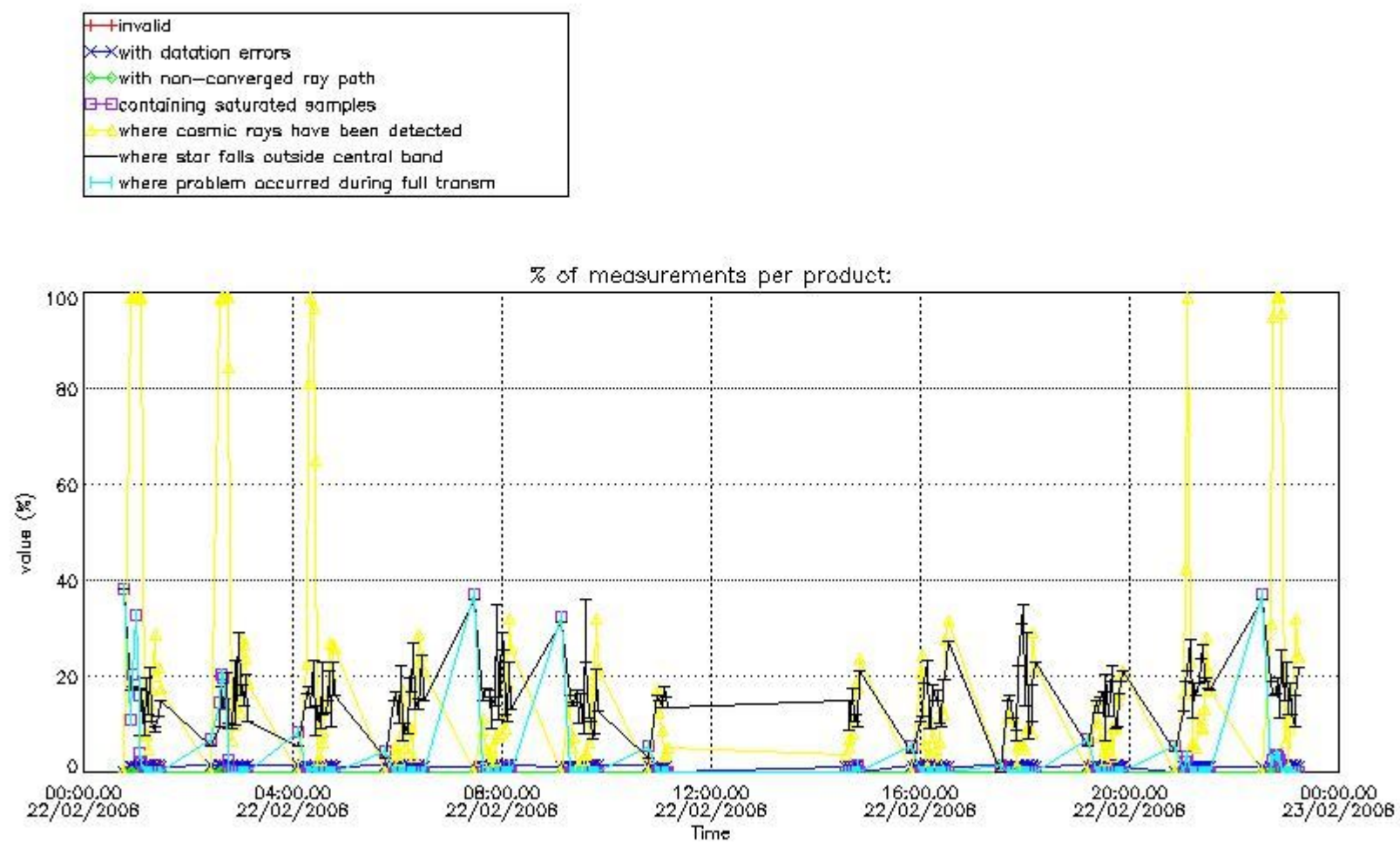


4. Level 1 quality information per product

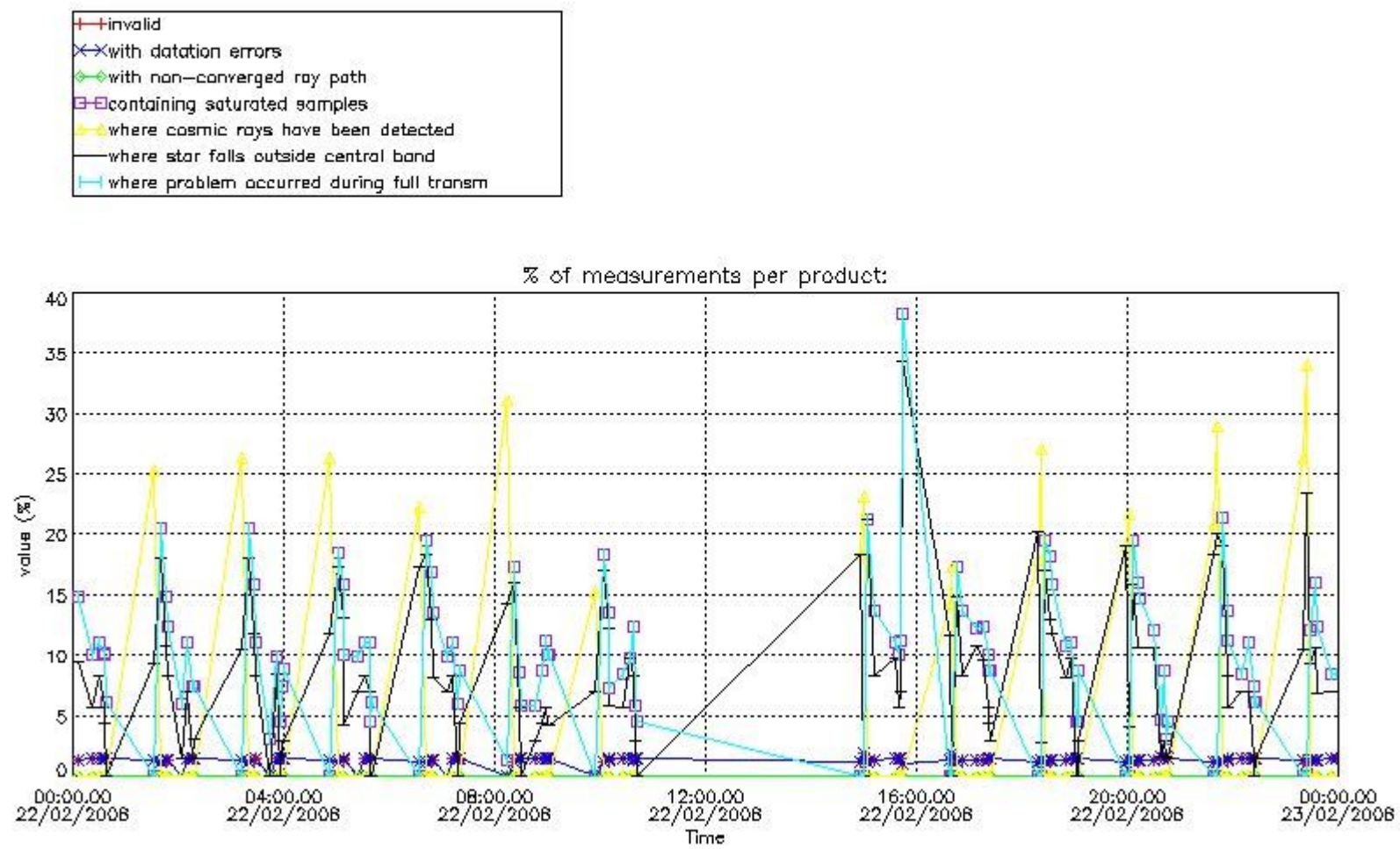
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

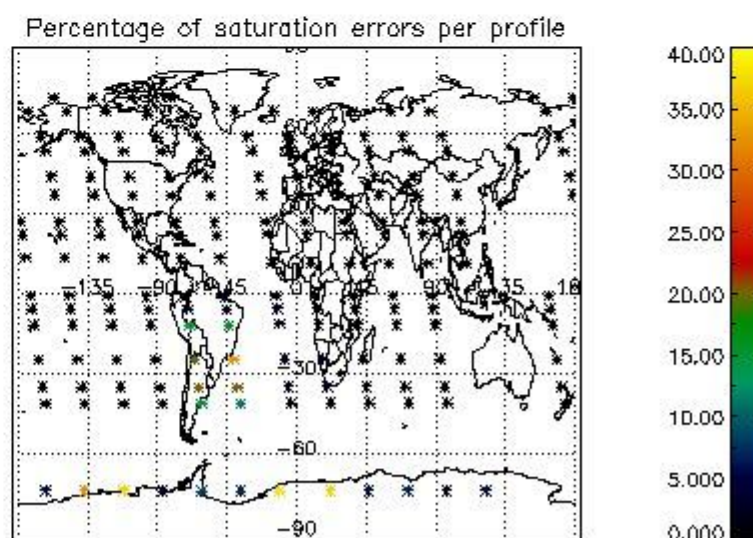
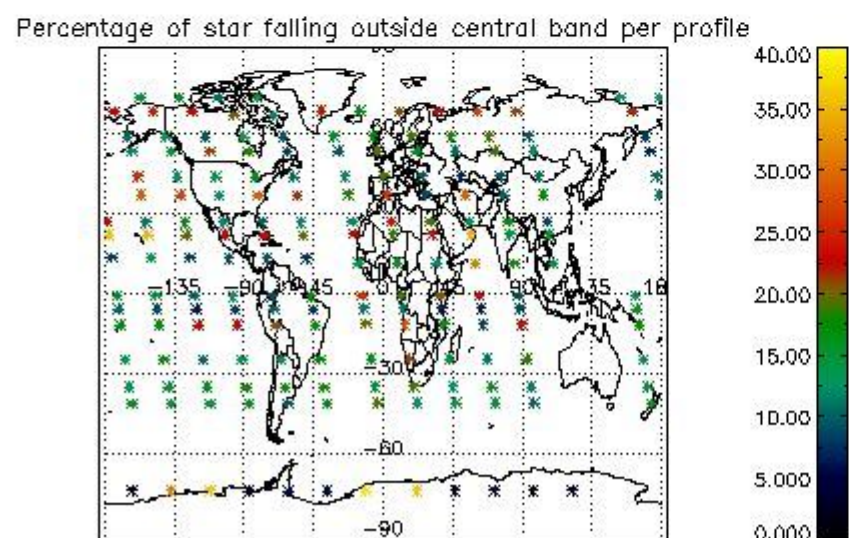
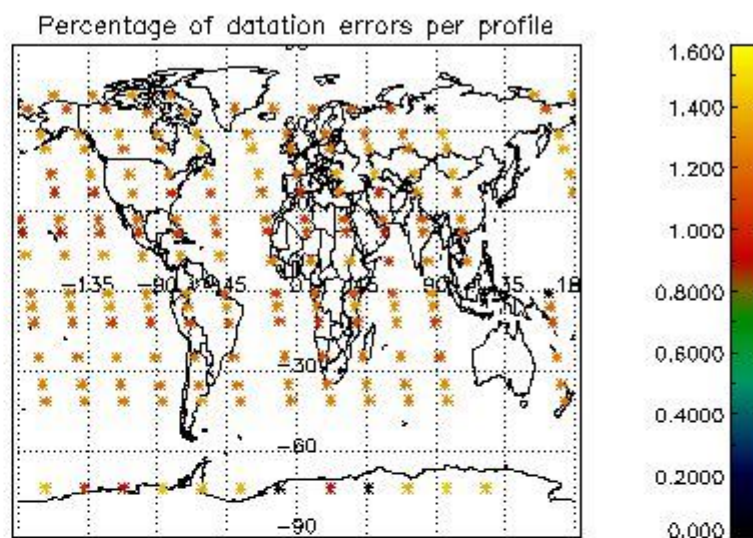
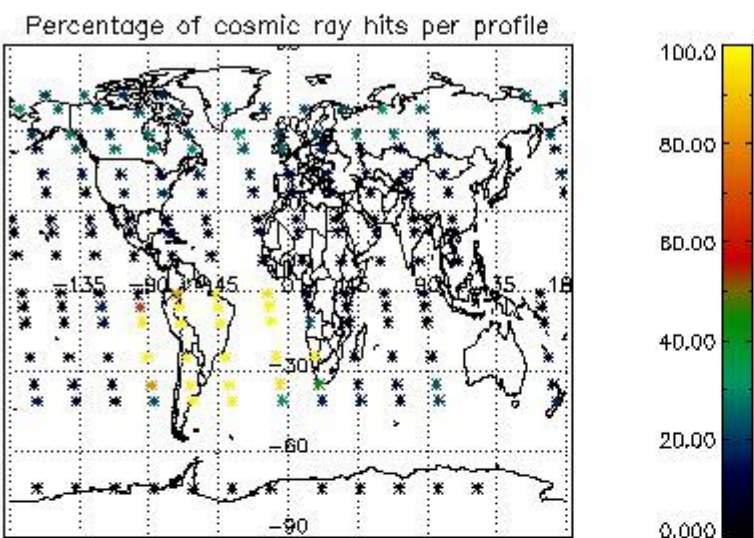


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

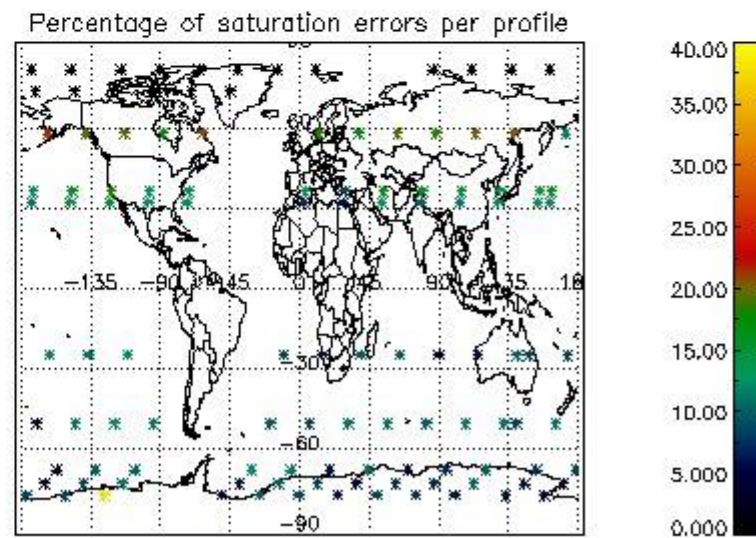
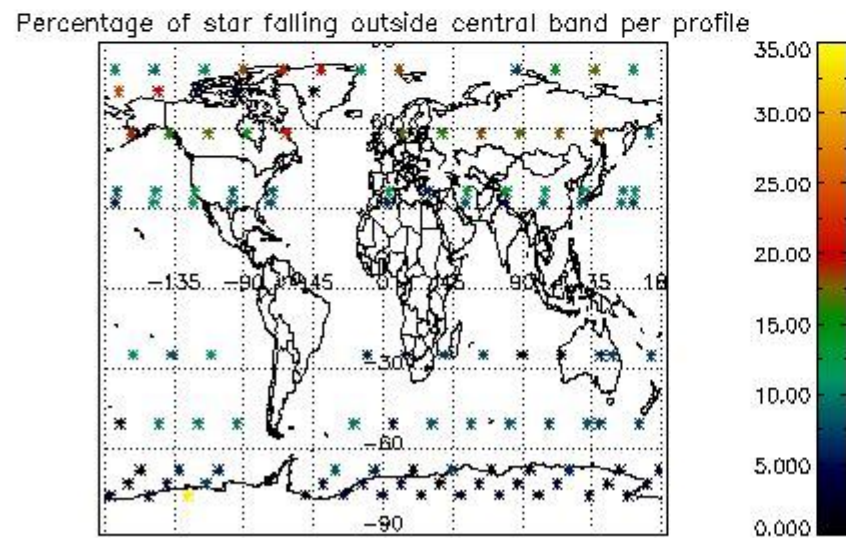
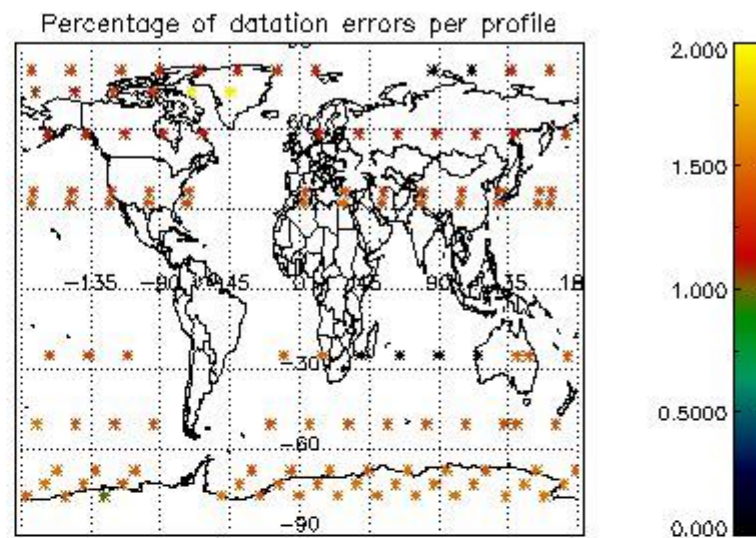
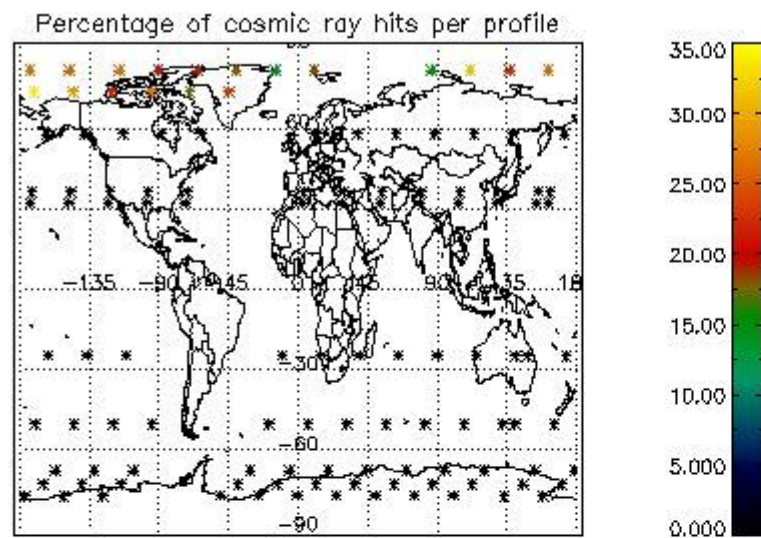


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

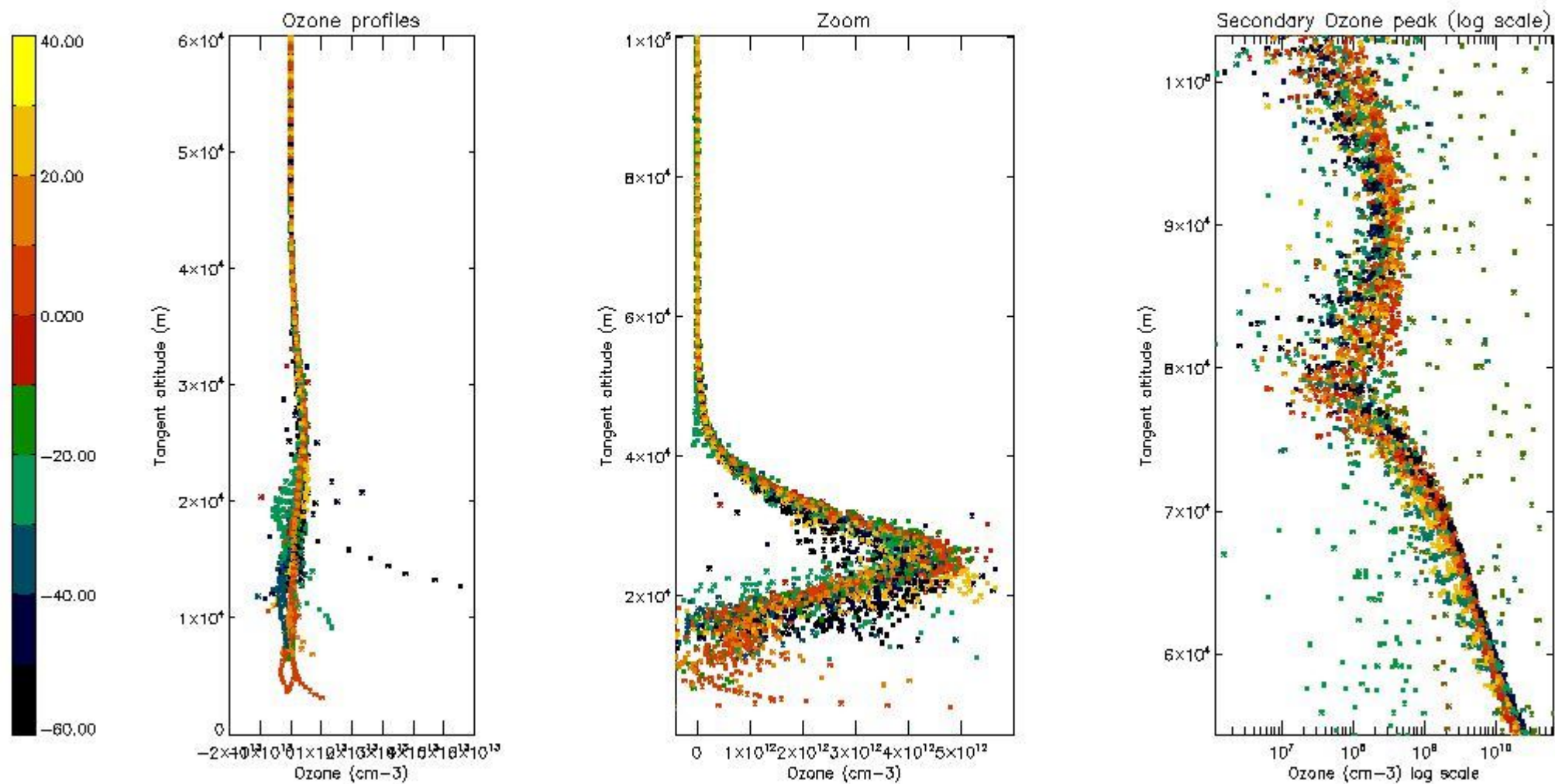
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	47
STD < 20	25

STD < 10	20
STD < 5	13

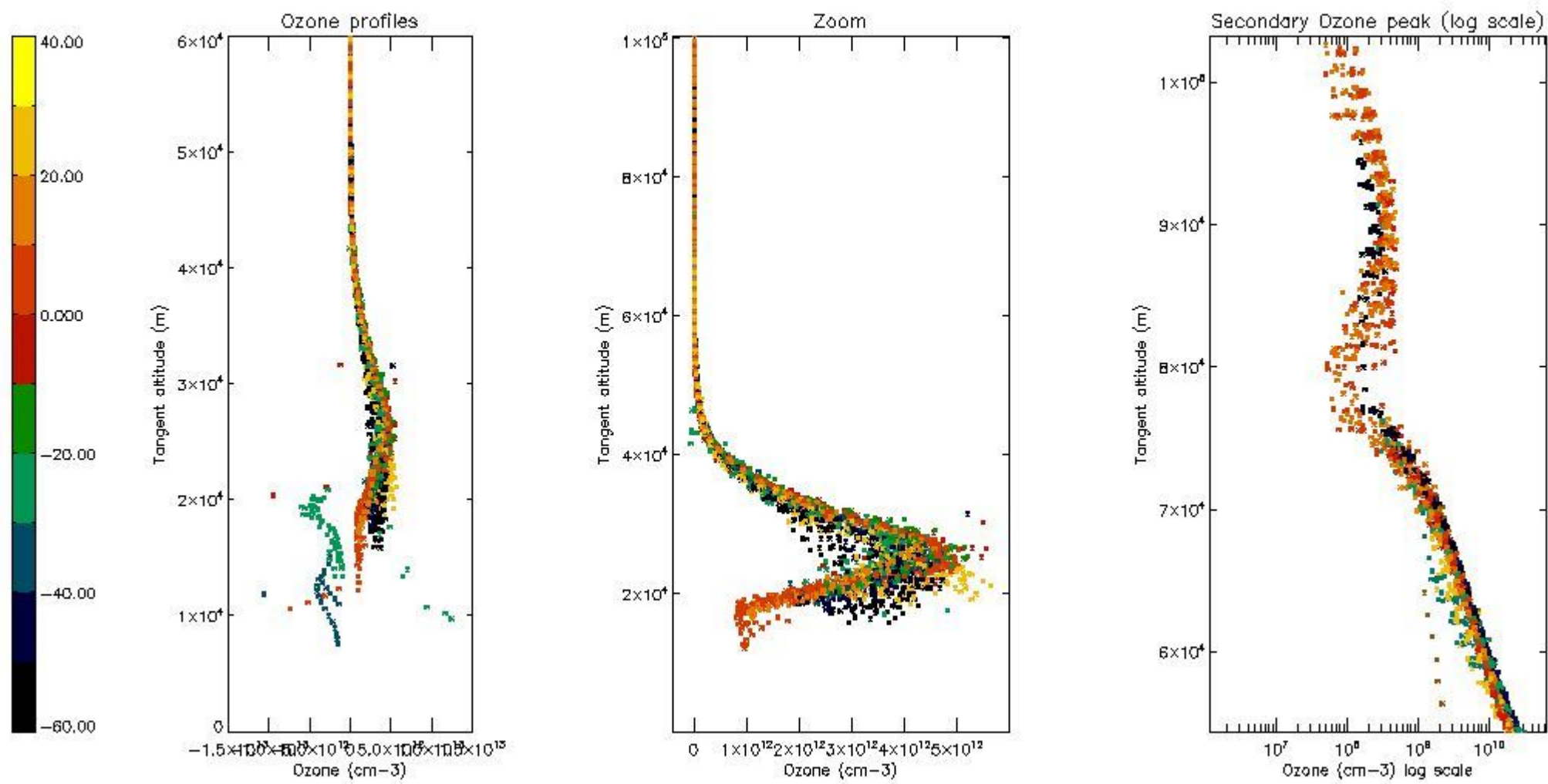
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



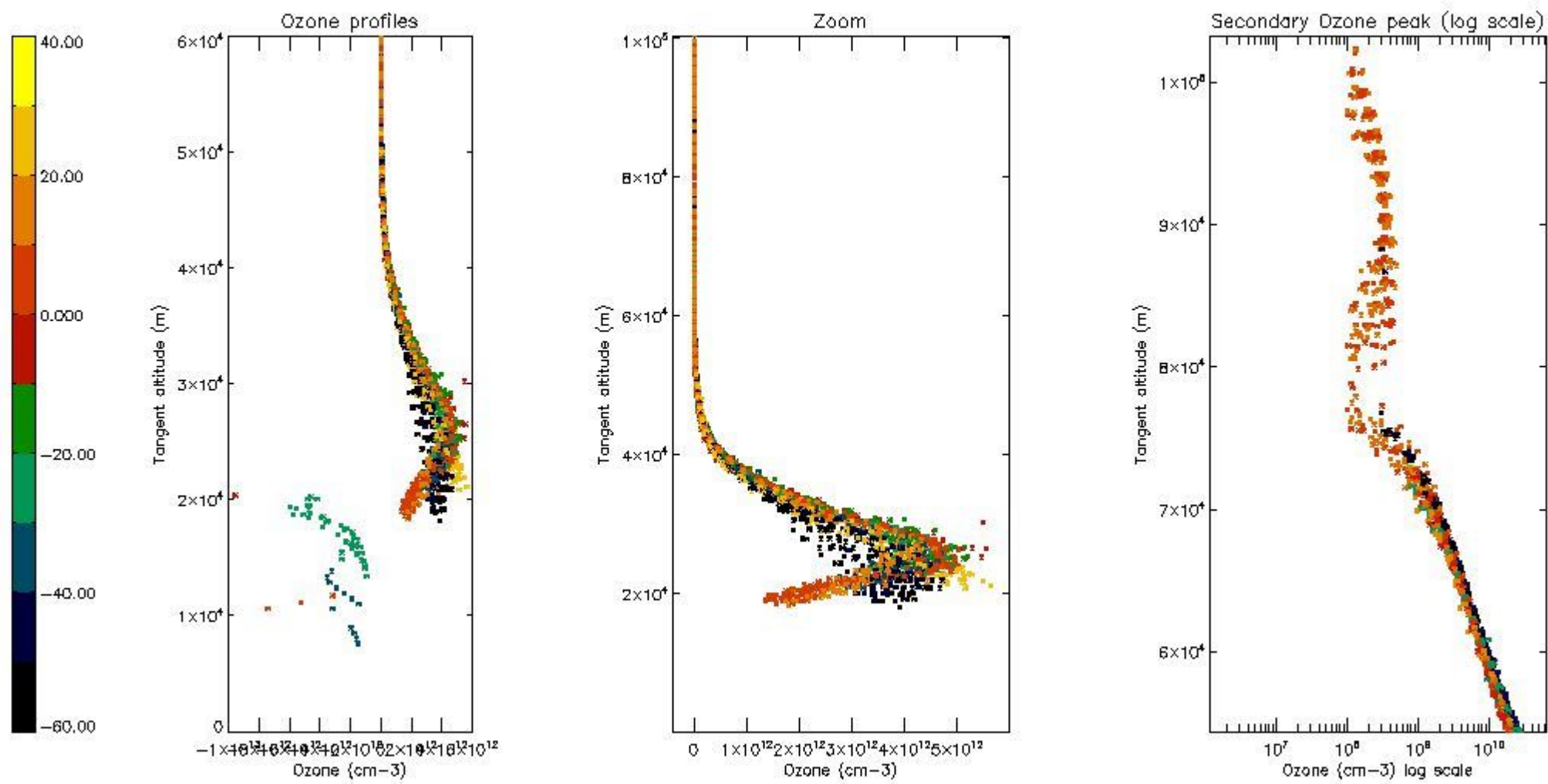
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



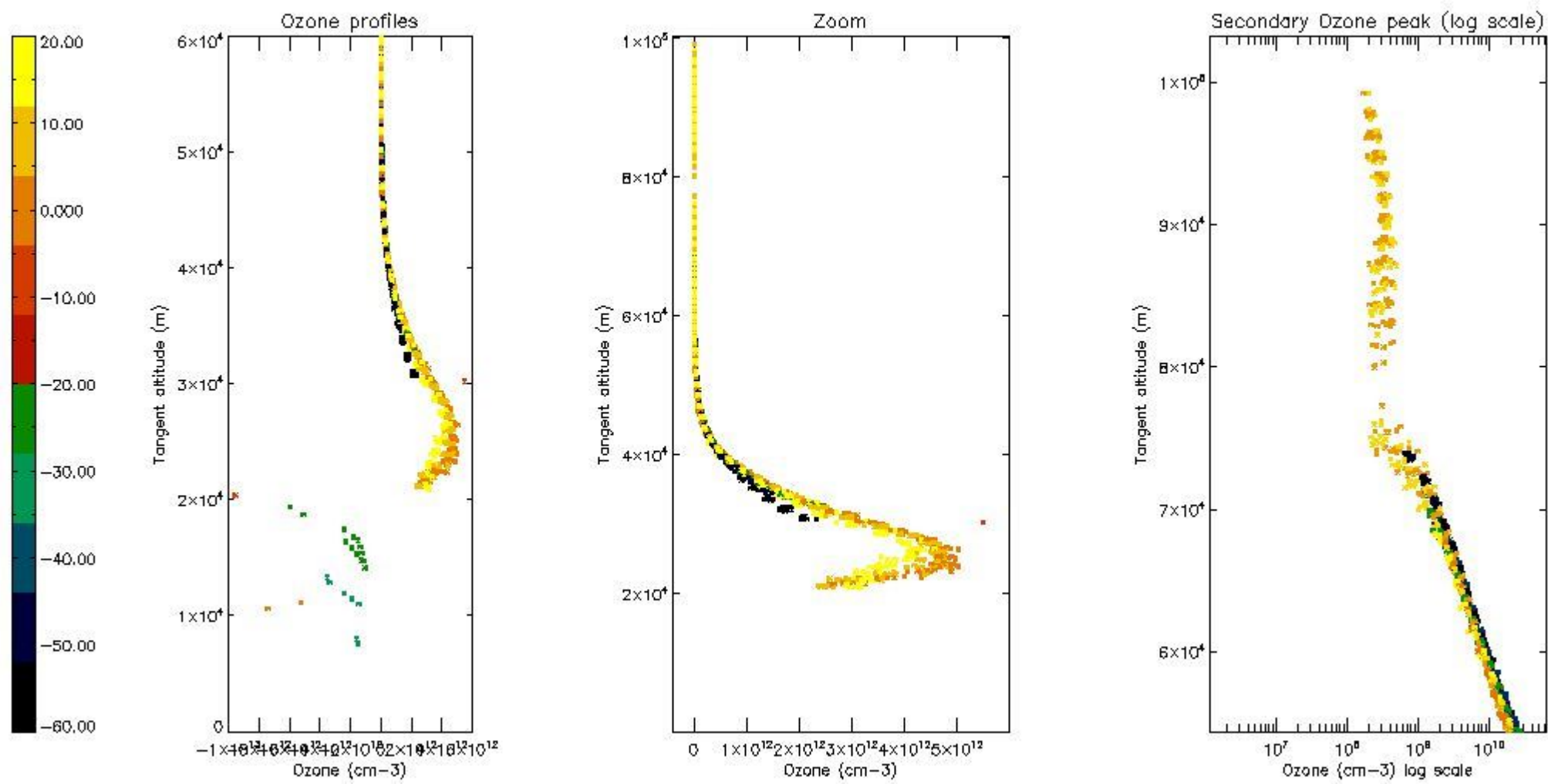
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



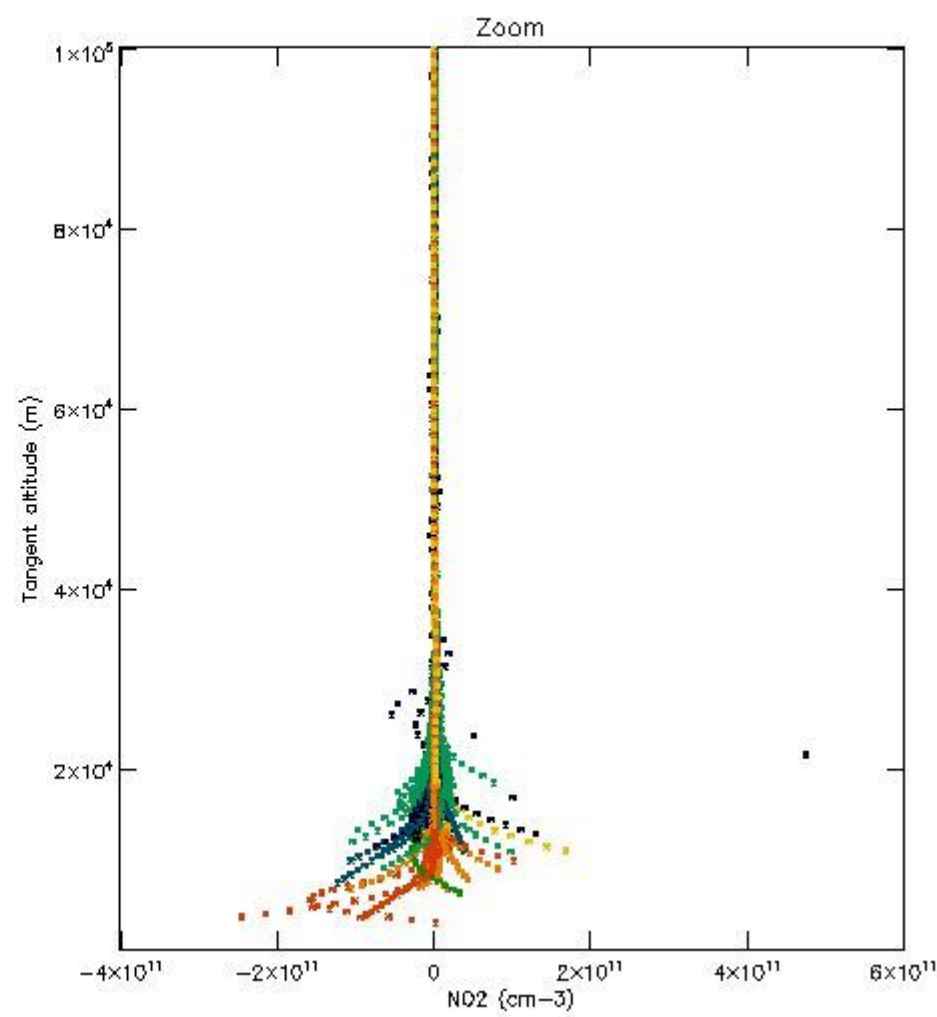
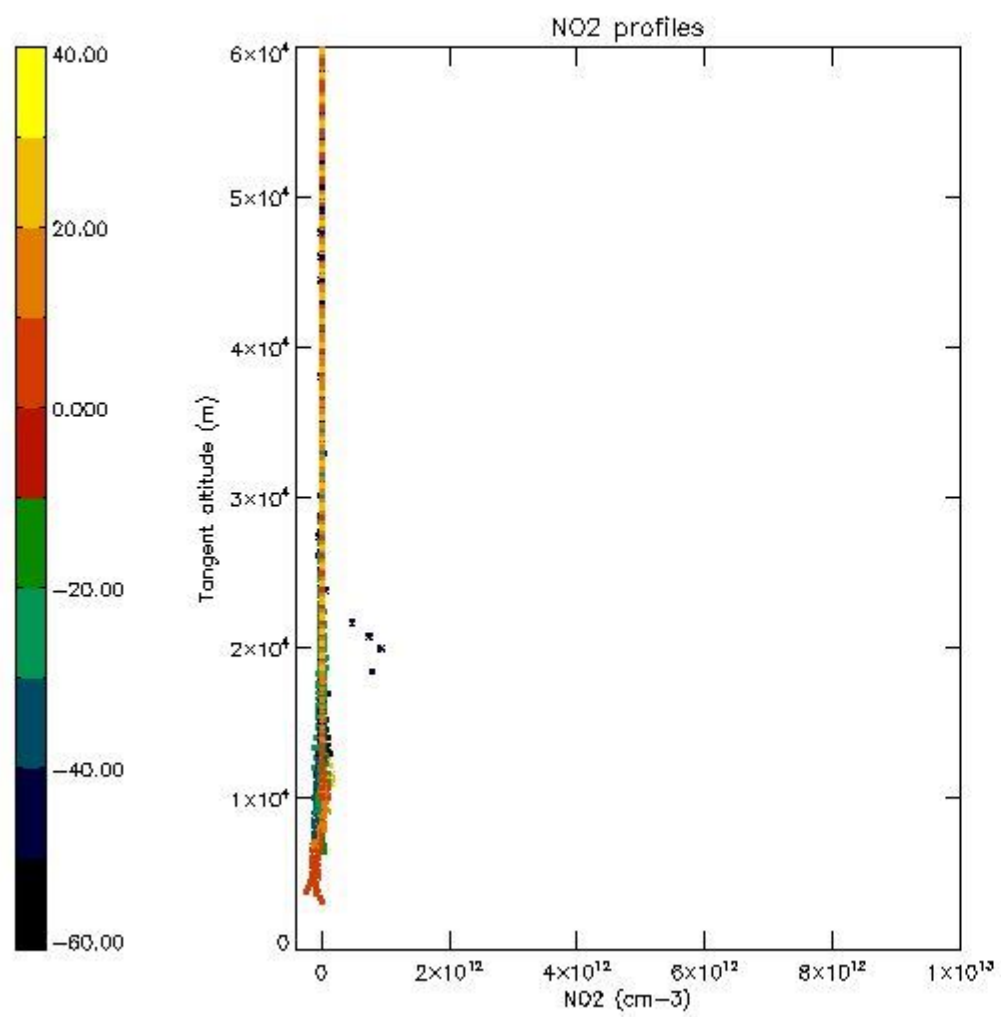
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



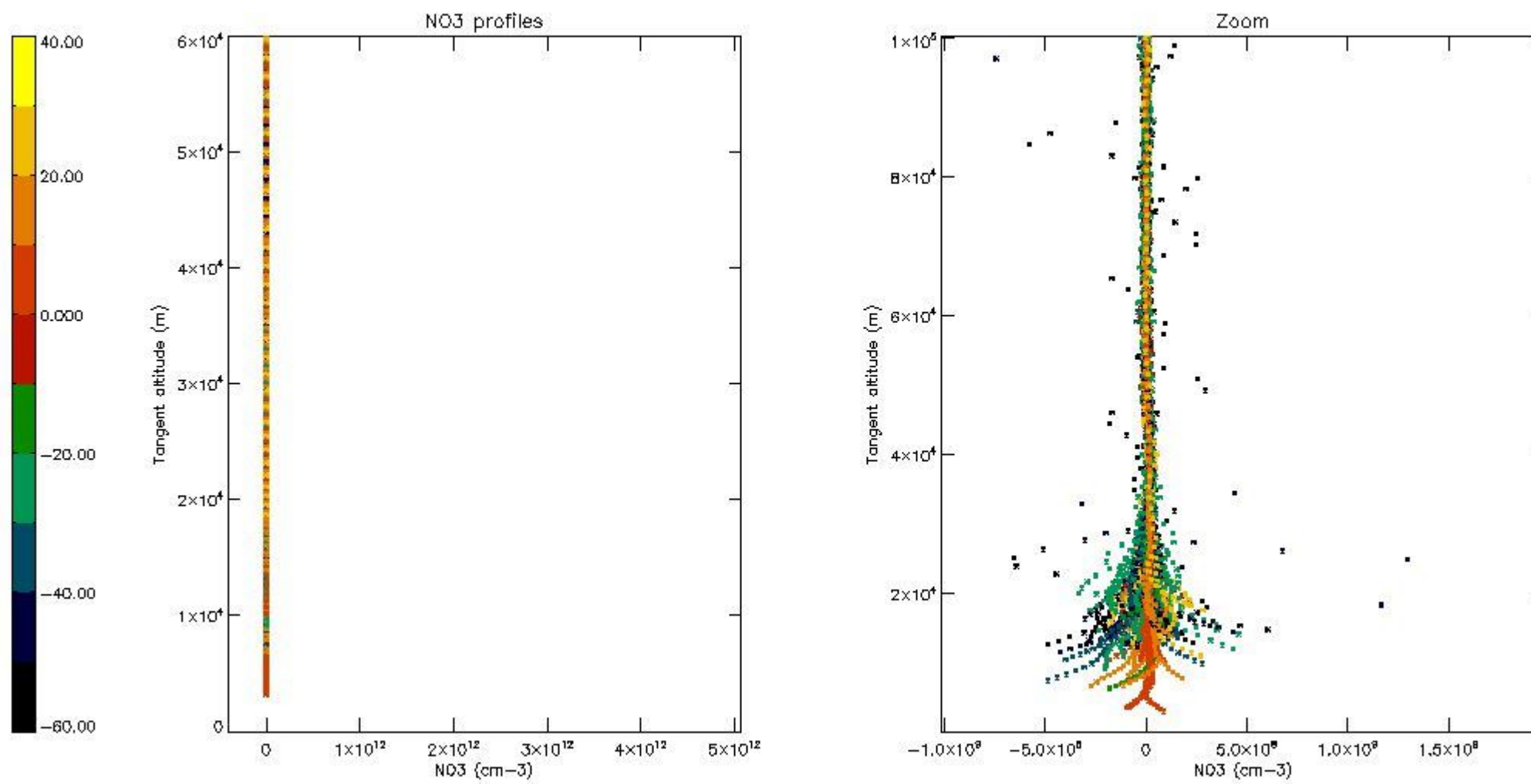
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



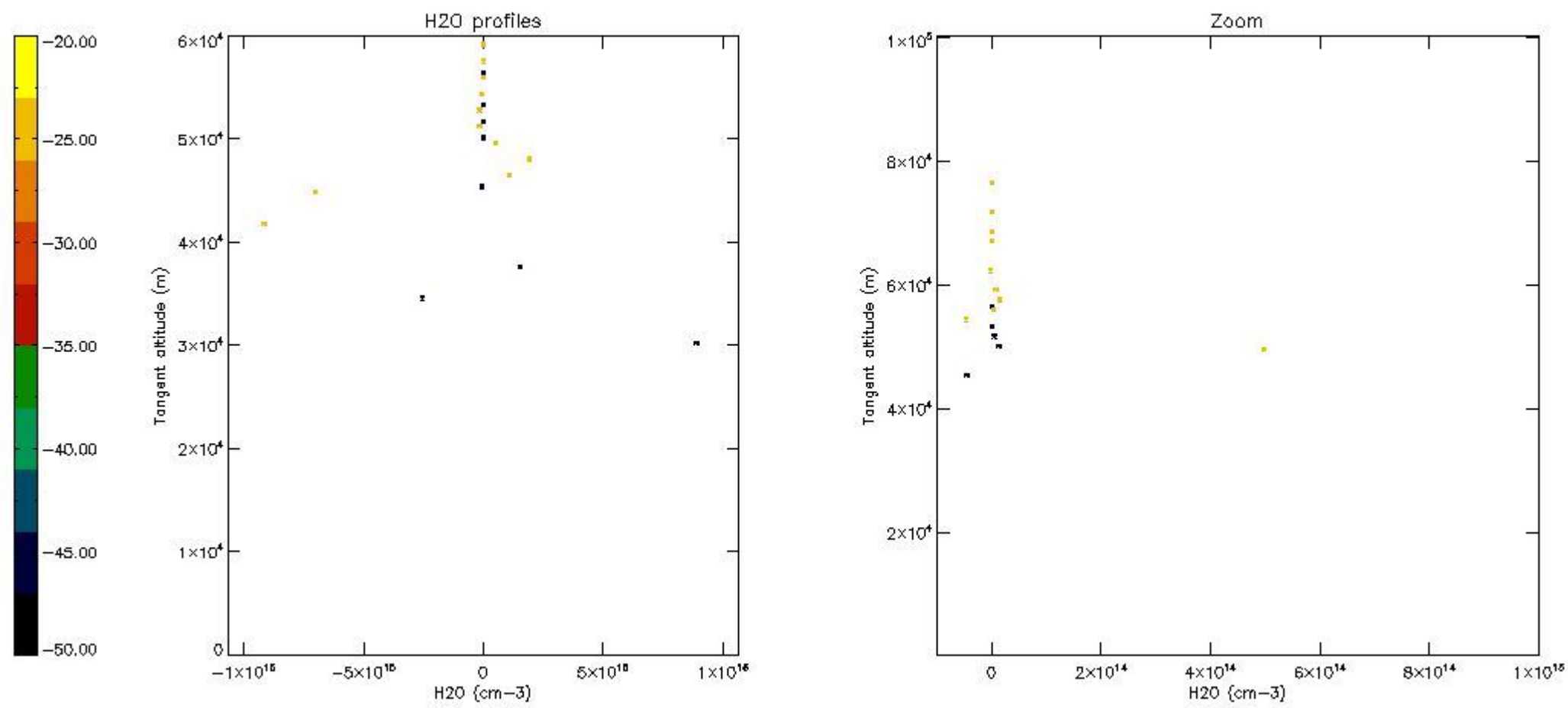
5.7 Plot NO3 profiles for all STD (dark without errors)

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	22-FEB-2008 00:05:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-FEB-2008 00:05:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-FEB-2008 00:05:43

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

[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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[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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

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

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	25APR2013 10:45:56
Data source version	GOMOS/6.01
Start time of products	22-02-2008 (22FEB2008 00:00:00)
Stop time of products	23-02-2008 (23FEB2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	303
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

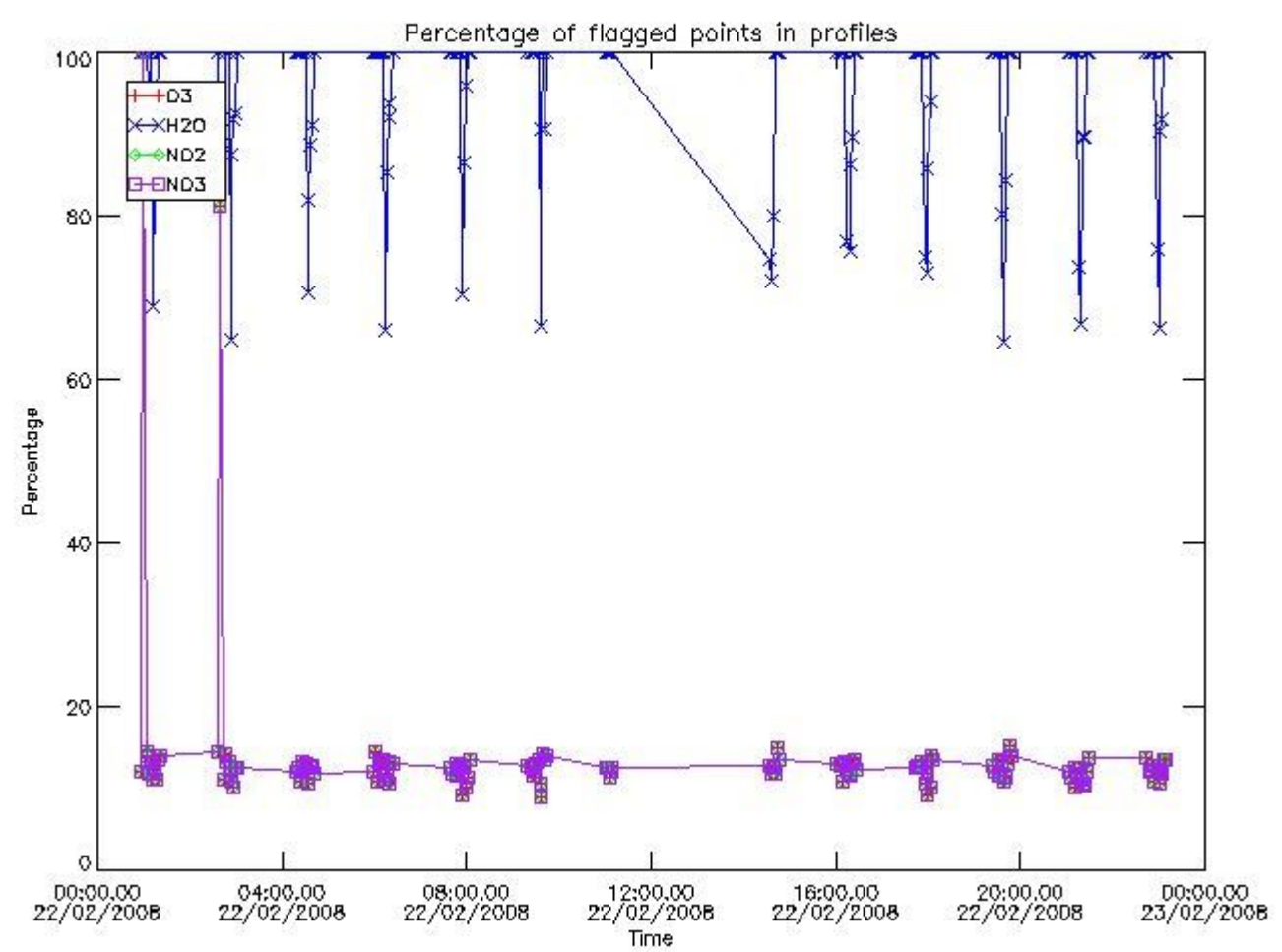
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080222_000543_000000372066_00145_31261_7520.N1	22-FEB-2008 00:05:43	Bright	37.000	17	78Bet Gem	1.1610	4500.0	74	31261	No
2	GOM_NL__2PRFIN20080222_000653_000000372066_00145_31261_7521.N1	22-FEB-2008 00:06:53	Bright	37.000	24	66Alp Gem	1.5800	10200.	74	31261	No
3	GOM_NL__2PRFIN20080222_002255_000000352066_00145_31261_7522.N1	22-FEB-2008 00:22:55	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	31261	No
4	GOM_NL__2PRFIN20080222_003009_000000362066_00145_31261_7523.N1	22-FEB-2008 00:30:09	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	31261	No
5	GOM_NL__2PRFIN20080222_003515_000000352066_00145_31261_7524.N1	22-FEB-2008 00:35:15	Bright	35.000	19	50Alp Cyg	1.2460	10500.	70	31261	No
6	GOM_NL__2PRFIN20080222_003650_000000352066_00145_31261_7525.N1	22-FEB-2008 00:36:50	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	31261	No
7	GOM_NL__2PRFIN20080222_003819_000000332066_00145_31261_7526.N1	22-FEB-2008 00:38:19	Bright	33.000	92	53Eps Cyg	2.5000	4500.0	66	31261	No
8	GOM_NL__2PRFIN20080222_004508_000000542066_00145_31261_7527.N1	22-FEB-2008 00:45:08	Bright	53.500	168	17Zet Aql	2.9860	11000.	107	31261	No
9	GOM_NL__2PRFIN20080222_005446_000000412066_00145_31261_7528.N1	22-FEB-2008 00:54:46	Twilight	41.000	155	41Pi Sgr	2.9000	6600.0	82	31261	No
10	GOM_NL__2PRFIN20080222_005629_000000422066_00145_31261_7529.N1	22-FEB-2008 00:56:29	Dark	42.000	57	34Sig Sgr	2.0660	26000.	84	31261	No
11	GOM_NL__2PRFIN20080222_005924_000000432066_00145_31261_7530.N1	22-FEB-2008 00:59:24	Dark	43.000	38	20Eps Sgr	1.8360	11000.	86	31261	No
12	GOM_NL__2PRFIN20080222_010300_000000442066_00145_31261_7531.N1	22-FEB-2008 01:03:00	Dark	44.000	40	The Sco	1.8590	7100.0	88	31261	No
13	GOM_NL__2PRFIN20080222_010440_000000392066_00145_31261_7532.N1	22-FEB-2008 01:04:40	Dark	38.500	147	Alp Ara	2.8770	26000.	77	31261	No
14	GOM_NL__2PRFIN20080222_010602_000000432066_00145_31261_7533.N1	22-FEB-2008 01:06:02	Dark	43.000	141	Bet Ara	2.8400	4600.0	86	31261	No
15	GOM_NL__2PRFIN20080222_011001_000000392066_00146_31262_7515.N1	22-FEB-2008 01:10:01	Dark	38.500	134	Bet TrA	2.8100	6600.0	77	31262	No
16	GOM_NL__2PRFIN20080222_011226_000000462066_00146_31262_7516.N1	22-FEB-2008 01:12:26	Dark	45.500	4	Alp1Cen	-0.010000	5800.0	91	31262	No
17	GOM_NL__2PRFIN20080222_011346_000000422066_00146_31262_7517.N1	22-FEB-2008 01:13:46	Dark	41.500	10	Bet Cen	0.61000	28000.	83	31262	No
18	GOM_NL__2PRFIN20080222_011638_000000462066_00146_31262_7518.N1	22-FEB-2008 01:16:38	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	31262	No
19	GOM_NL__2PRFIN20080222_011836_000000382066_00146_31262_7519.N1	22-FEB-2008 01:18:36	Dark	38.000	29	Bet Car	1.6720	10200.	76	31262	No
20	GOM_NL__2PRFIN20080222_012119_000000372066_00146_31262_7520.N1	22-FEB-2008 01:21:19	Dark	36.500	71	lot Car	2.2460	7700.0	73	31262	No
21	GOM_NL__2PRFIN20080222_012253_000000382066_00146_31262_7521.N1	22-FEB-2008 01:22:53	Straylight	37.500	46	Del Vel	1.9540	10600.	75	31262	No
22	GOM_NL__2PRFIN20080222_012513_000000392066_00146_31262_7522.N1	22-FEB-2008 01:25:13	Straylight	39.000	34	Gam2Vel	1.7930	23000.	78	31262	No
23	GOM_NL__2PRFIN20080222_012719_000000412066_00146_31262_7523.N1	22-FEB-2008 01:27:19	Straylight	40.500	70	Zet Pup	2.2460	39000.	81	31262	No
24	GOM_NL__2PRFIN20080222_013138_000000382066_00146_31262_7524.N1	22-FEB-2008 01:31:38	Straylight	37.500	132	15Rho Pup	2.8030	6900.0	75	31262	No
25	GOM_NL__2PRFIN20080222_014008_000000422066_00146_31262_7525.N1	22-FEB-2008 01:40:08	Bright	41.500	8	10Alp CMi	0.40000	6500.0	83	31262	No
26	GOM_NL__2PRFIN20080222_014619_000000372066_00146_31262_7526.N1	22-FEB-2008 01:46:19	Bright	37.000	17	78Bet Gem	1.1610	4500.0	74	31262	No
27	GOM_NL__2PRFIN20080222_014729_000000372066_00146_31262_7527.N1	22-FEB-2008 01:47:29	Bright	36.500	24	66Alp Gem	1.5800	10200.	73	31262	No
28	GOM_NL__2PRFIN20080222_020331_000000342066_00146_31262_7528.N1	22-FEB-2008 02:03:31	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	31262	No
29	GOM_NL__2PRFIN20080222_021045_000000362066_00146_31262_7529.N1	22-FEB-2008 02:10:45	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	31262	No
30	GOM_NL__2PRFIN20080222_021551_000000342066_00146_31262_7530.N1	22-FEB-2008 02:15:51	Bright	33.500	19	50Alp Cyg	1.2460	10500.	67	31262	No
31	GOM_NL__2PRFIN20080222_021726_000000342066_00146_31262_7531.N1	22-FEB-2008 02:17:26	Bright	33.500	66	37Gam Cyg	2.2080	5900.0	67	31262	No
32	GOM_NL__2PRFIN20080222_021855_000000342066_00146_31262_7532.N1	22-FEB-2008 02:18:55	Bright	33.500	92	53Eps Cyg	2.5000	4500.0	67	31262	No
33	GOM_NL__2PRFIN20080222_022545_000000362066_00146_31262_7533.N1	22-FEB-2008 02:25:45	Bright	36.000	168	17Zet Aql	2.9860	11000.	72	31262	No
34	GOM_NL__2PRFIN20080222_023522_000000382066_00146_31262_7534.N1	22-FEB-2008 02:35:22	Twilight	37.500	155	41Pi Sgr	2.9000	6600.0	75	31262	No
35	GOM_NL__2PRFIN20080222_023705_000000422066_00146_31262_7535.N1	22-FEB-2008 02:37:05	Dark	42.000	57	34Sig Sgr	2.0660	26000.	84	31262	No
36	GOM_NL__2PRFIN20080222_024000_000000412066_00146_31262_7536.N1	22-FEB-2008 02:40:00	Dark	40.500	38	20Eps Sgr	1.8360	11000.	81	31262	No
37	GOM_NL__2PRFIN20080222_024337_000000462066_00146_31262_7537.N1	22-FEB-2008 02:43:37	Dark	46.000	40	The Sco	1.8590	7100.0	92	31262	No
38	GOM_NL__2PRFIN20080222_024517_000000402066_00146_31262_7538.N1	22-FEB-2008 02:45:17	Dark	39.500	147	Alp Ara	2.8770	26000.	79	31262	No
39	GOM_NL__2PRFIN20080222_024639_000000392066_00146_31262_7539.N1	22-FEB-2008 02:46:39	Dark	38.500	141	Bet Ara	2.8400	4600.0	77	31262	No
40	GOM_NL__2PRFIN20080222_025037_000000392066_00147_31263_7533.N1	22-FEB-2008 02:50:37	Dark	38.500	134	Bet TrA	2.8100	6600.0	77	31263	No
41	GOM_NL__2PRFIN20080222_025302_000000482066_00147_31263_7534.N1	22-FEB-2008 02:53:02	Dark	47.500	4	Alp1Cen	-0.010000	5800.0	95	31263	No
42	GOM_NL__2PRFIN20080222_025422_000000412066_00147_31263_7535.N1	22-FEB-2008 02:54:22	Dark	40.500	10	Bet Cen	0.61000	28000.	81	31263	No

279	GOM_NL__2PRFIN20080222_222304_000000342066_00158_31274_7721.N1	22-FEB-2008 22:23:04	Bright	33.500	19	50Alp Cyg	1.2460	10500.	67	31274	No
280	GOM_NL__2PRFIN20080222_222439_000000332066_00158_31274_7722.N1	22-FEB-2008 22:24:39	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	31274	No
281	GOM_NL__2PRFIN20080222_222609_000000332066_00158_31274_7723.N1	22-FEB-2008 22:26:09	Bright	33.000	92	53Eps Cyg	2.5000	4500.0	66	31274	No
282	GOM_NL__2PRFIN20080222_223259_000000542066_00158_31274_7724.N1	22-FEB-2008 22:32:59	Bright	54.000	168	17Zet Aql	2.9860	11000.	108	31274	No
283	GOM_NL__2PRFIN20080222_224237_000000422066_00158_31274_7725.N1	22-FEB-2008 22:42:37	Twilight	42.000	155	41Pi Sgr	2.9000	6600.0	84	31274	No
284	GOM_NL__2PRFIN20080222_224421_000000412066_00158_31274_7726.N1	22-FEB-2008 22:44:21	Dark	40.500	57	34Sig Sgr	2.0660	26000.	81	31274	No
285	GOM_NL__2PRFIN20080222_224717_000000432066_00158_31274_7727.N1	22-FEB-2008 22:47:17	Dark	42.500	38	20Eps Sgr	1.8360	11000.	85	31274	No
286	GOM_NL__2PRFIN20080222_225055_000000462066_00158_31274_7728.N1	22-FEB-2008 22:50:55	Dark	45.500	40	The Sco	1.8590	7100.0	91	31274	No
287	GOM_NL__2PRFIN20080222_225234_000000402066_00158_31274_7729.N1	22-FEB-2008 22:52:34	Dark	40.000	147	Alp Ara	2.8770	26000.	80	31274	No
288	GOM_NL__2PRFIN20080222_225356_000000472066_00158_31274_7730.N1	22-FEB-2008 22:53:56	Dark	47.000	141	Bet Ara	2.8400	4600.0	94	31274	No
289	GOM_NL__2PRFIN20080222_225719_000000402066_00159_31275_7721.N1	22-FEB-2008 22:57:19	Dark	40.000	43	Alp TrA	1.9100	4250.0	80	31275	No
290	GOM_NL__2PRFIN20080222_230021_000000482066_00159_31275_7722.N1	22-FEB-2008 23:00:21	Dark	48.000	4	Alp1Cen	-0.010000	5800.0	96	31275	No
291	GOM_NL__2PRFIN20080222_230141_000000422066_00159_31275_7723.N1	22-FEB-2008 23:01:41	Dark	41.500	10	Bet Cen	0.61000	28000.	83	31275	No
292	GOM_NL__2PRFIN20080222_230431_000000442066_00159_31275_7724.N1	22-FEB-2008 23:04:31	Dark	43.500	12	Alp1Cru	0.77500	30000.	87	31275	No
293	GOM_NL__2PRFIN20080222_230625_000000382066_00159_31275_7725.N1	22-FEB-2008 23:06:25	Dark	38.000	29	Bet Car	1.6720	10200.	76	31275	No
294	GOM_NL__2PRFIN20080222_230909_000000382066_00159_31275_7726.N1	22-FEB-2008 23:09:09	Dark	37.500	71	lot Car	2.2460	7700.0	75	31275	No
295	GOM_NL__2PRFIN20080222_231043_000000412066_00159_31275_7727.N1	22-FEB-2008 23:10:43	Straylight	40.500	46	Del Vel	1.9540	10600.	81	31275	No
296	GOM_NL__2PRFIN20080222_231331_000000442066_00159_31275_7728.N1	22-FEB-2008 23:13:31	Straylight	43.500	65	Lam Vel	2.2040	4400.0	87	31275	No
297	GOM_NL__2PRFIN20080222_231928_000000382066_00159_31275_7729.N1	22-FEB-2008 23:19:28	Straylight	38.000	132	15Rho Pup	2.8030	6900.0	76	31275	No
298	GOM_NL__2PRFIN20080222_232311_000000472066_00159_31275_7730.N1	22-FEB-2008 23:23:11	Tw_i_and_stray	47.000	48	30Alp Hya	1.9770	4100.0	94	31275	No
299	GOM_NL__2PRFIN20080222_232758_000000382066_00159_31275_7731.N1	22-FEB-2008 23:27:58	Bright	37.500	8	10Alp CMi	0.40000	6500.0	75	31275	No
300	GOM_NL__2PRFIN20080222_233408_000000382066_00159_31275_7732.N1	22-FEB-2008 23:34:08	Bright	37.500	17	78Bet Gem	1.1610	4500.0	75	31275	No
301	GOM_NL__2PRFIN20080222_233519_000000372066_00159_31275_7733.N1	22-FEB-2008 23:35:19	Bright	36.500	24	66Alp Gem	1.5800	10200.	73	31275	No
302	GOM_NL__2PRFIN20080222_235118_000000362066_00159_31275_7734.N1	22-FEB-2008 23:51:18	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	31275	No
303	GOM_NL__2PRFIN20080222_235834_000000362066_00159_31275_7735.N1	22-FEB-2008 23:58:34	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	31275	No

3. Quality information per product

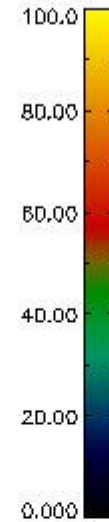
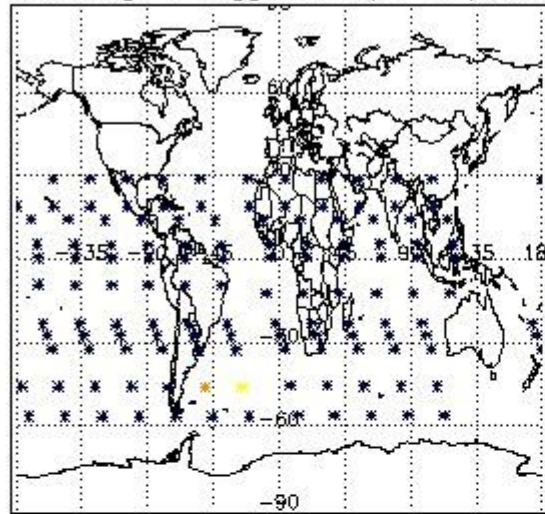
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

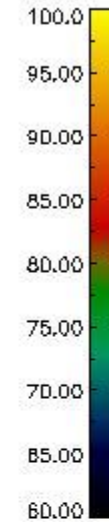
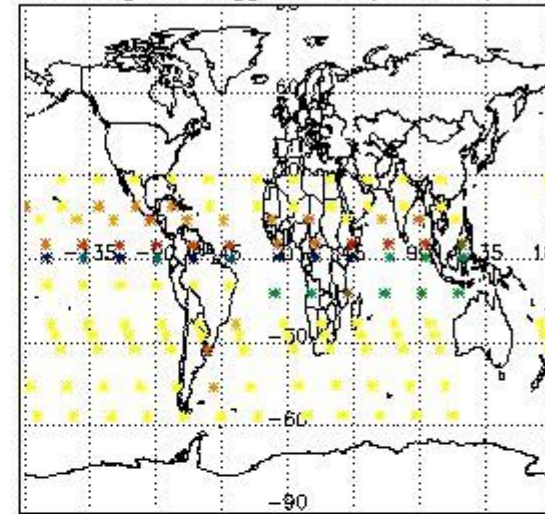


3.2 Plot quality information per product (world map)

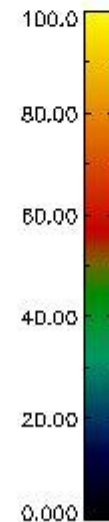
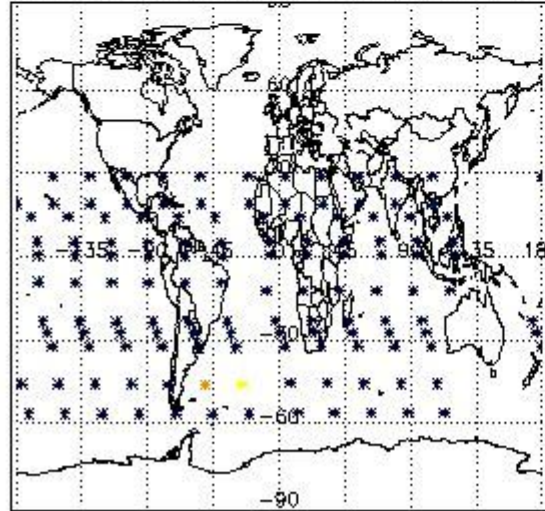
Percentage of flagged data per O3 profile



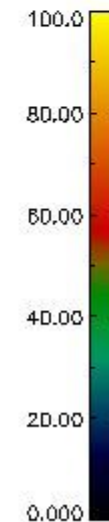
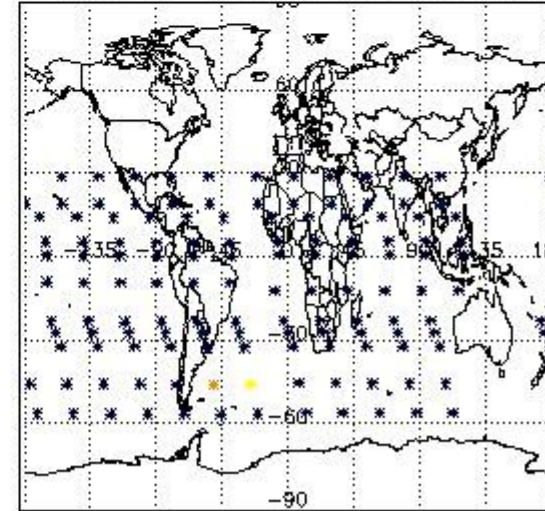
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

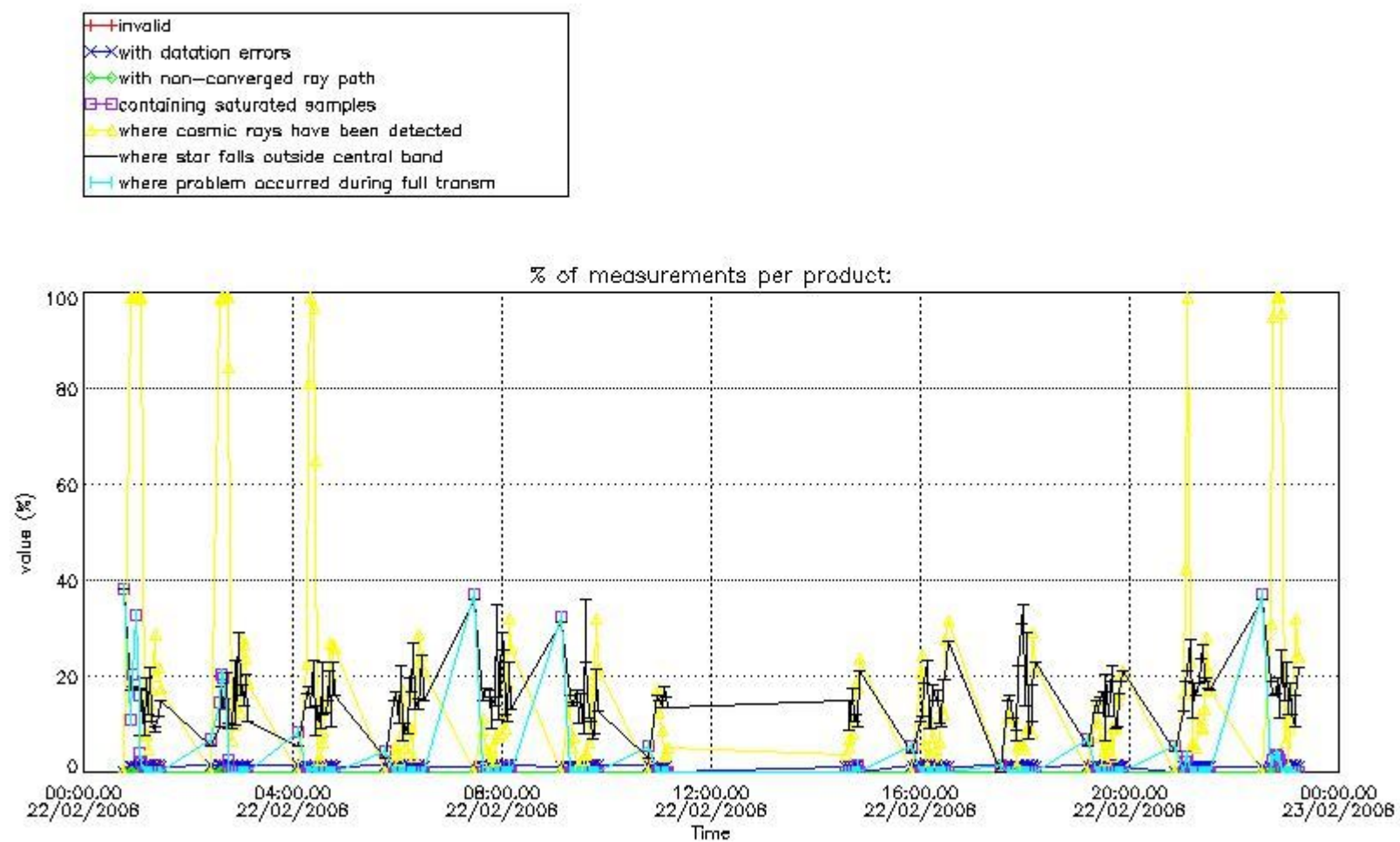


4. Level 1 quality information per product

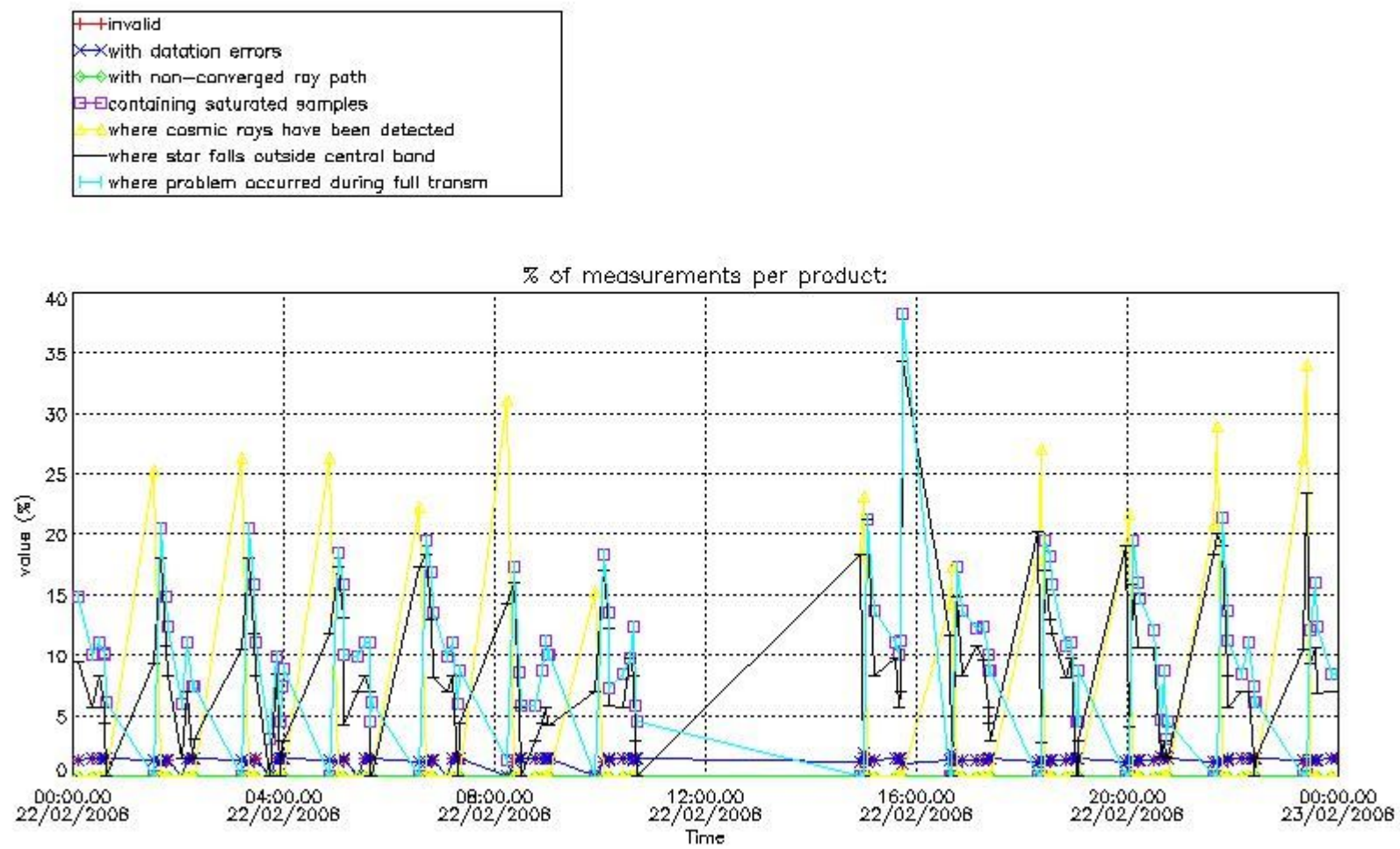
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

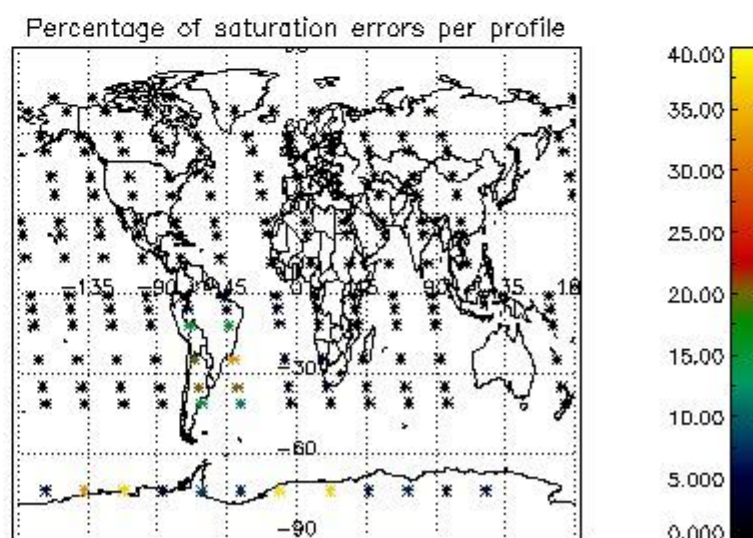
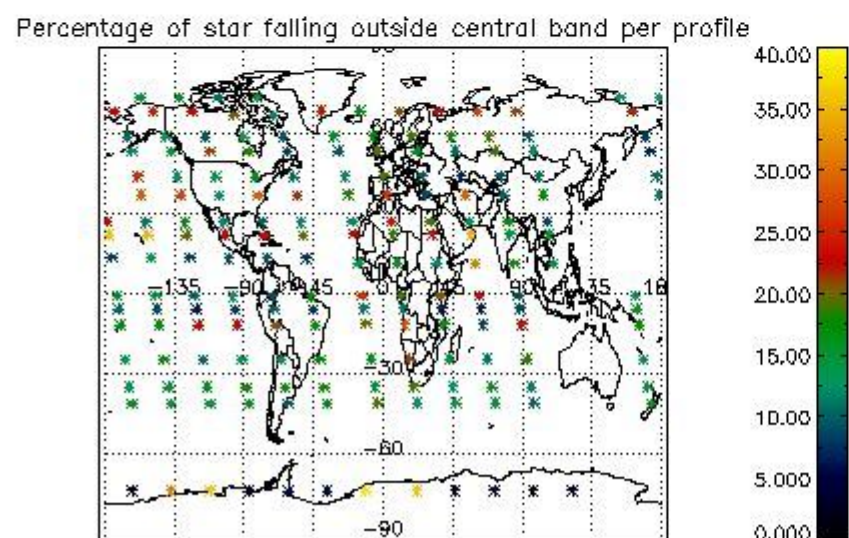
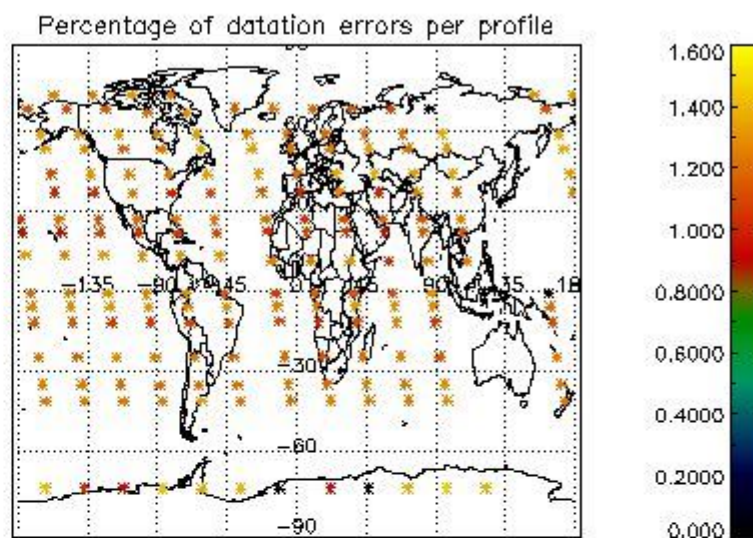
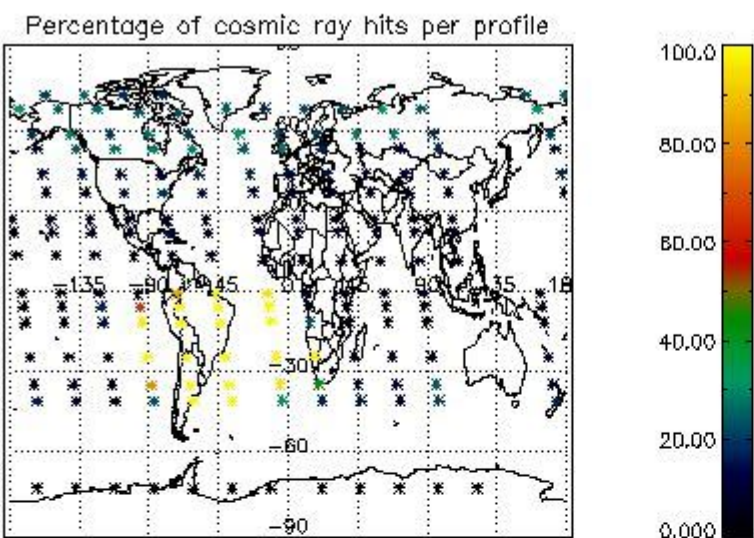


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

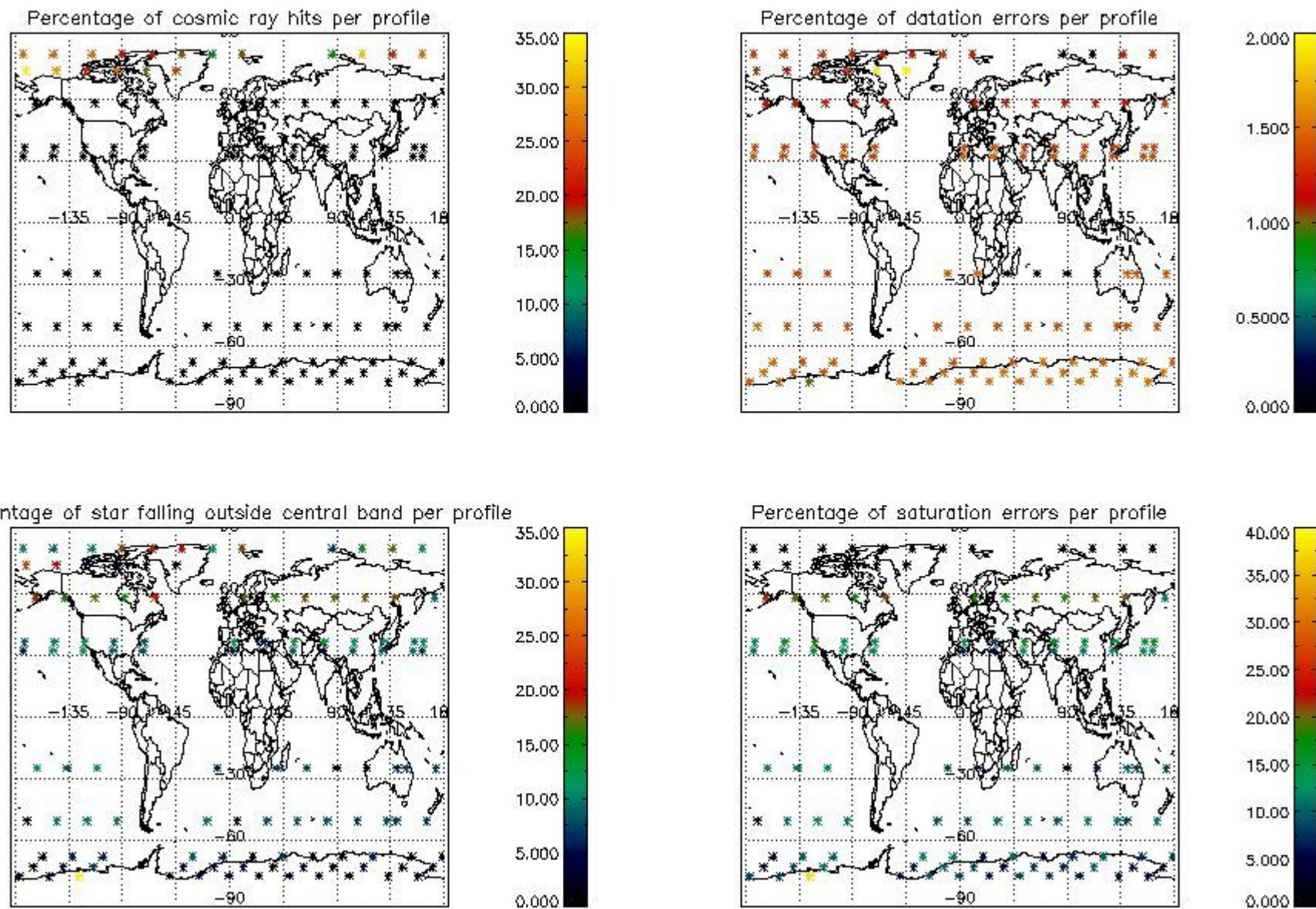


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

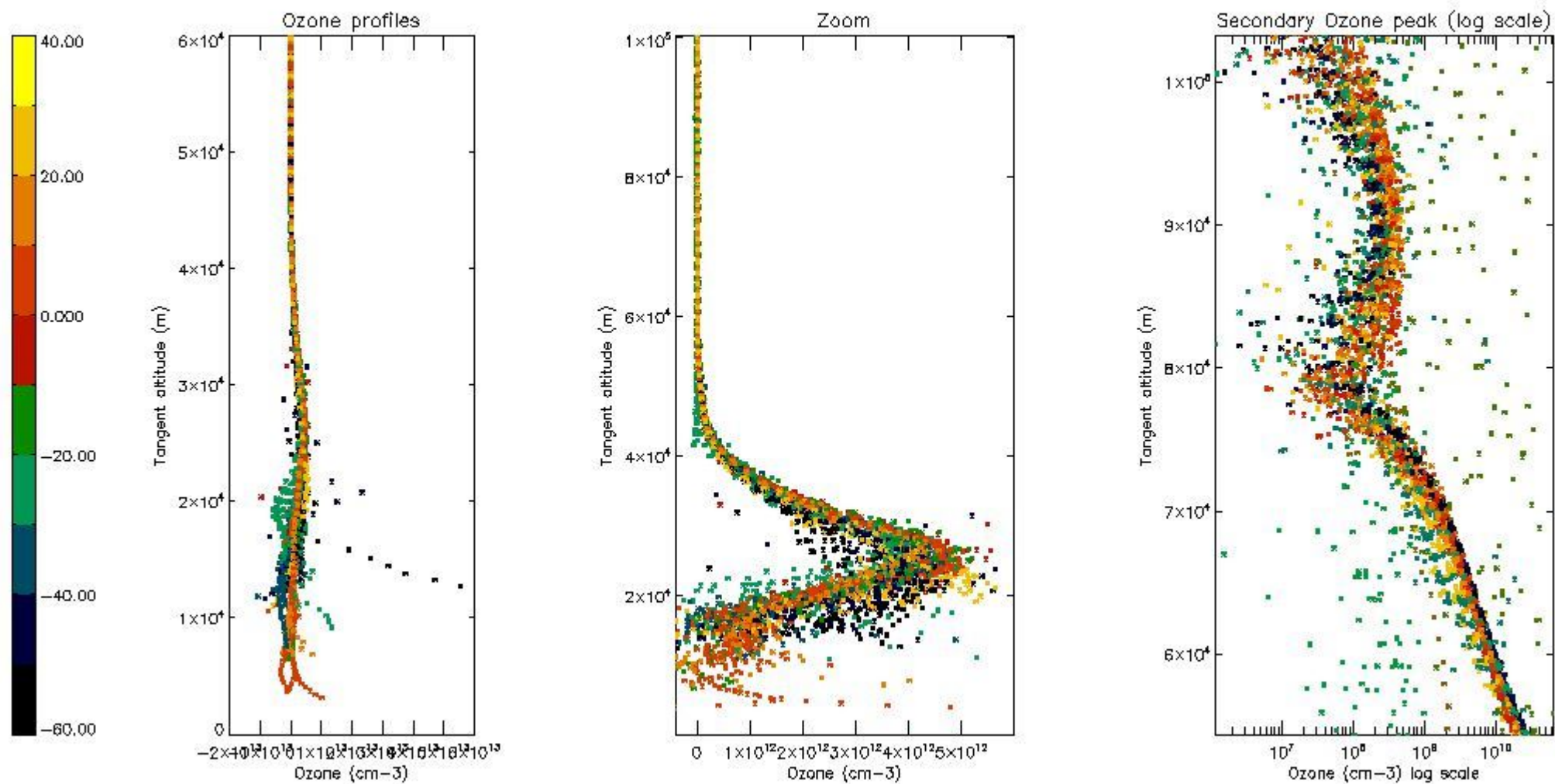
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	47
STD < 20	25

STD < 10	20
STD < 5	13

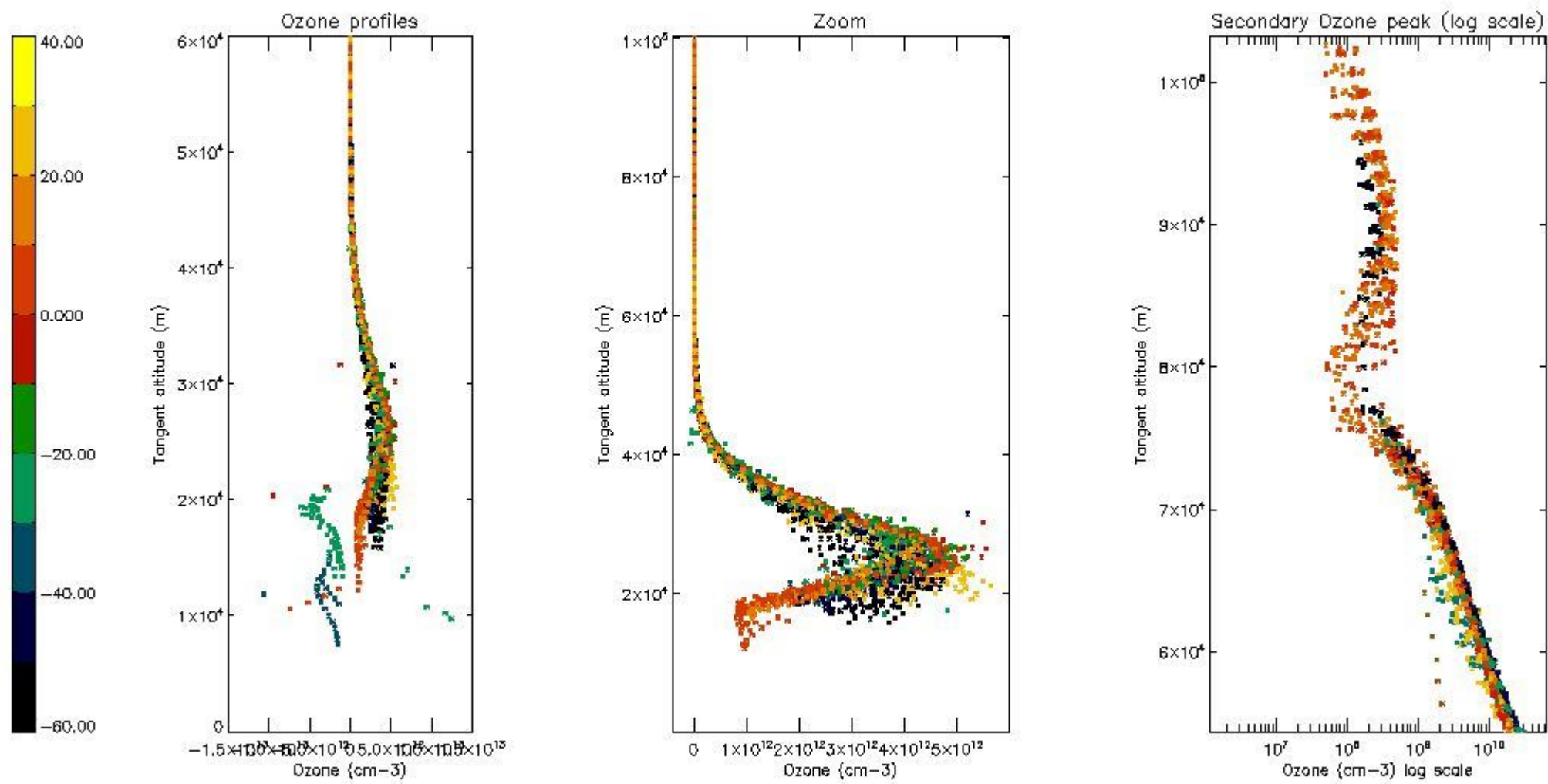
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



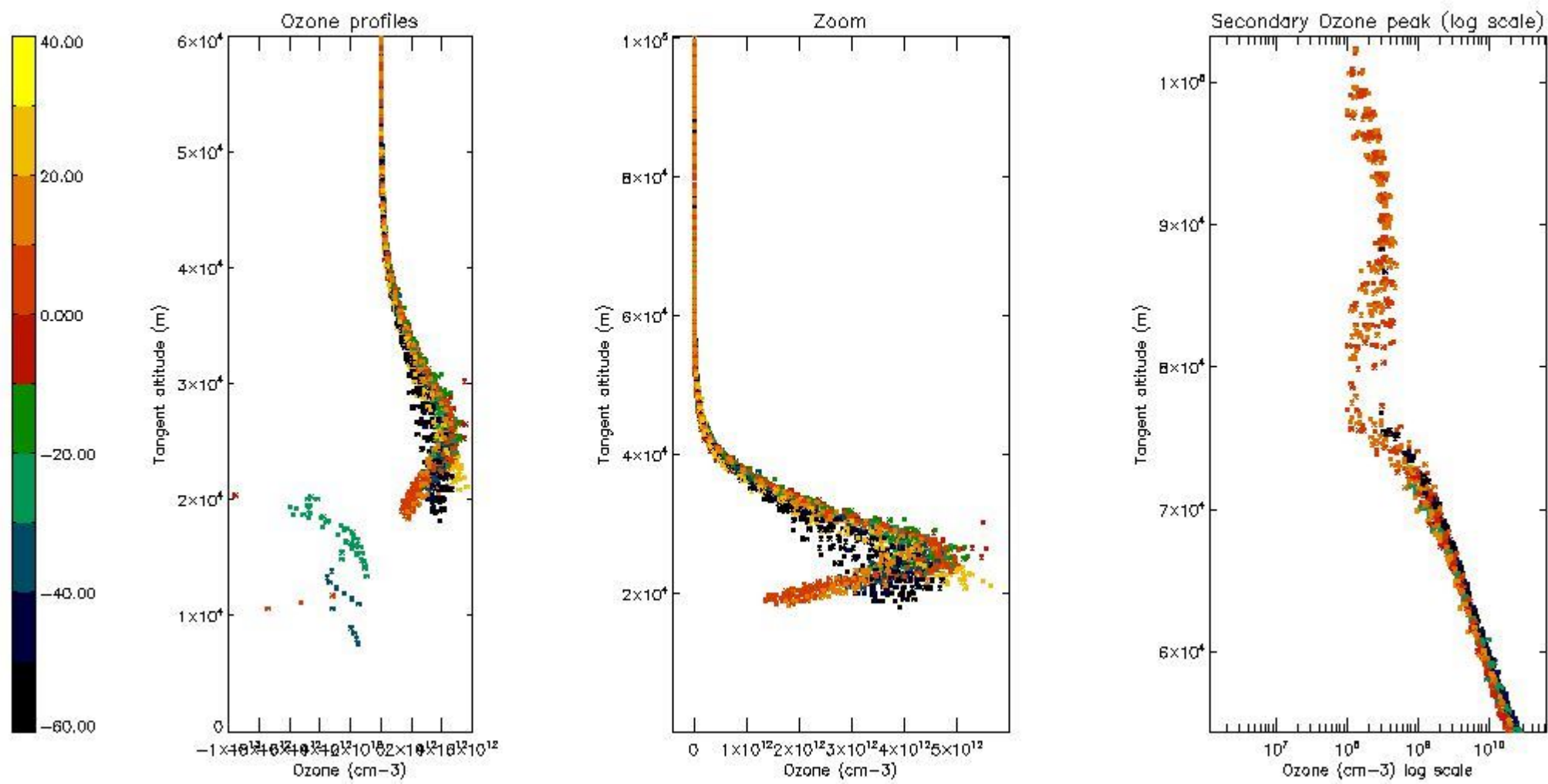
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



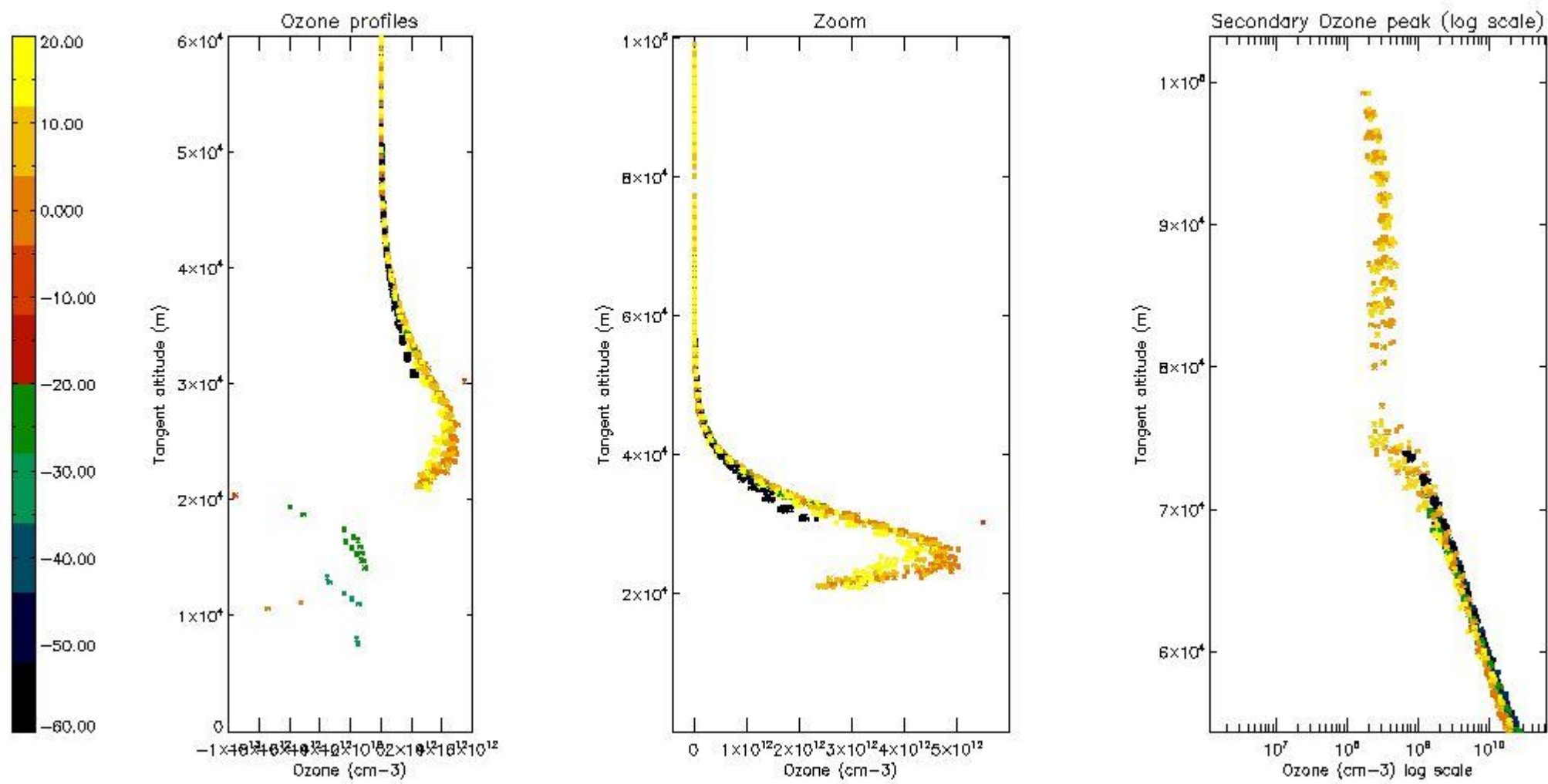
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



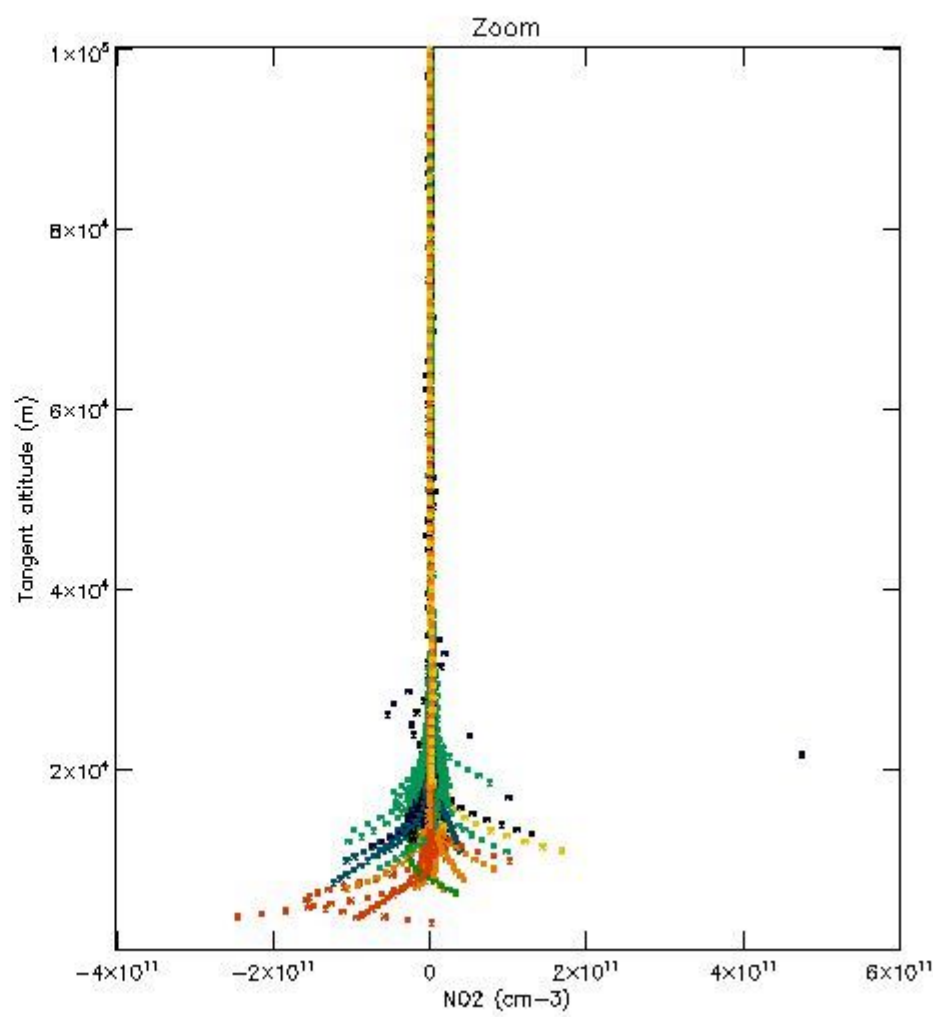
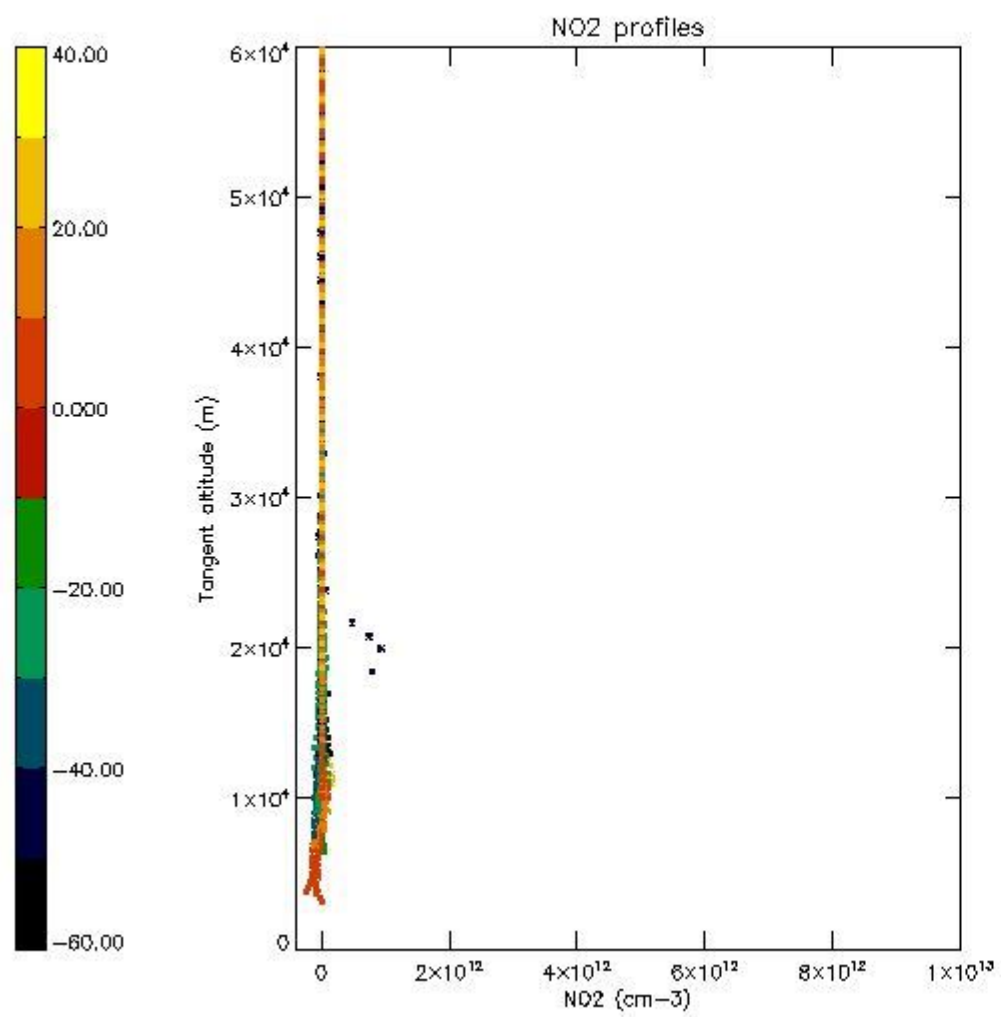
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



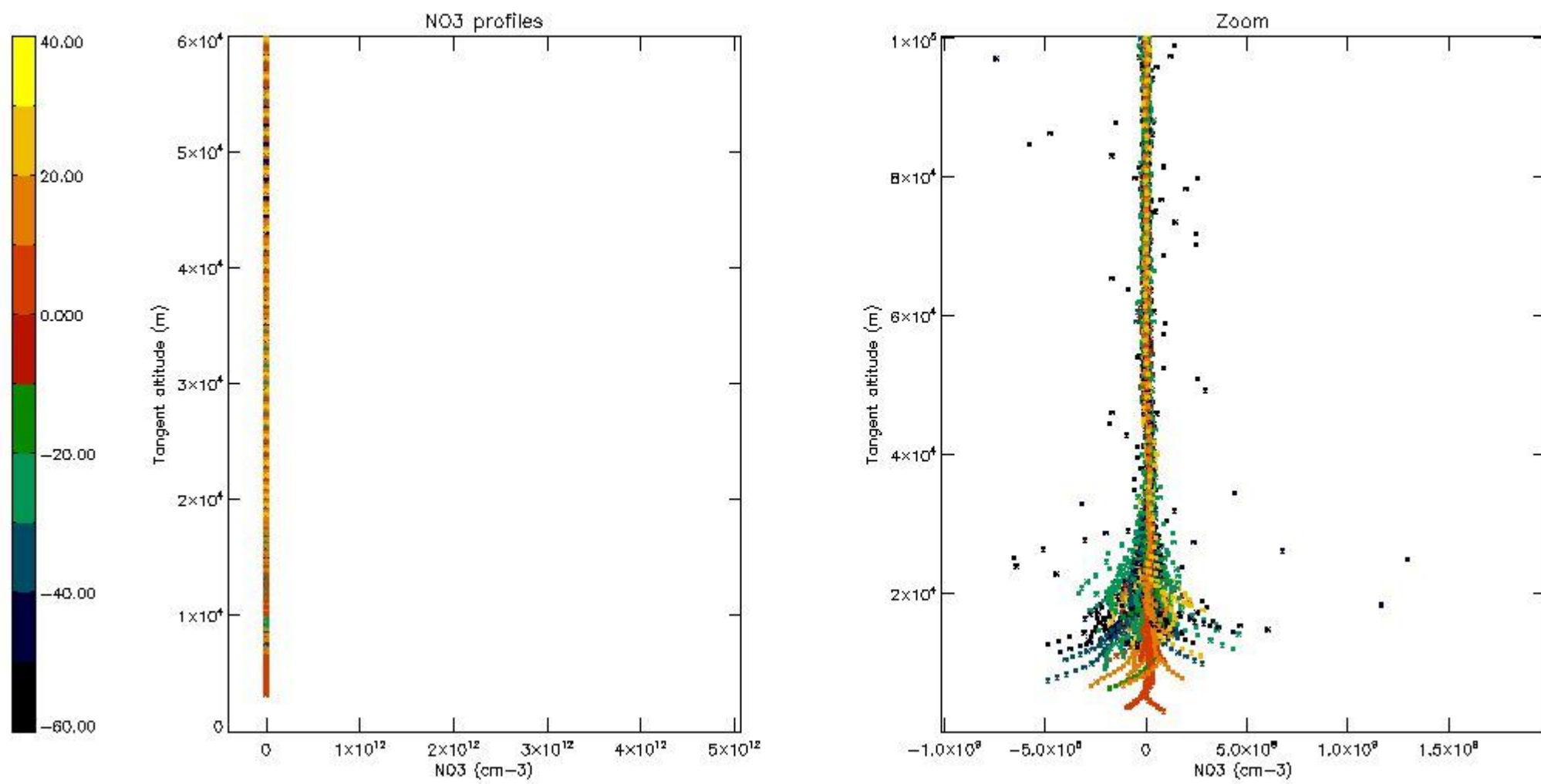
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



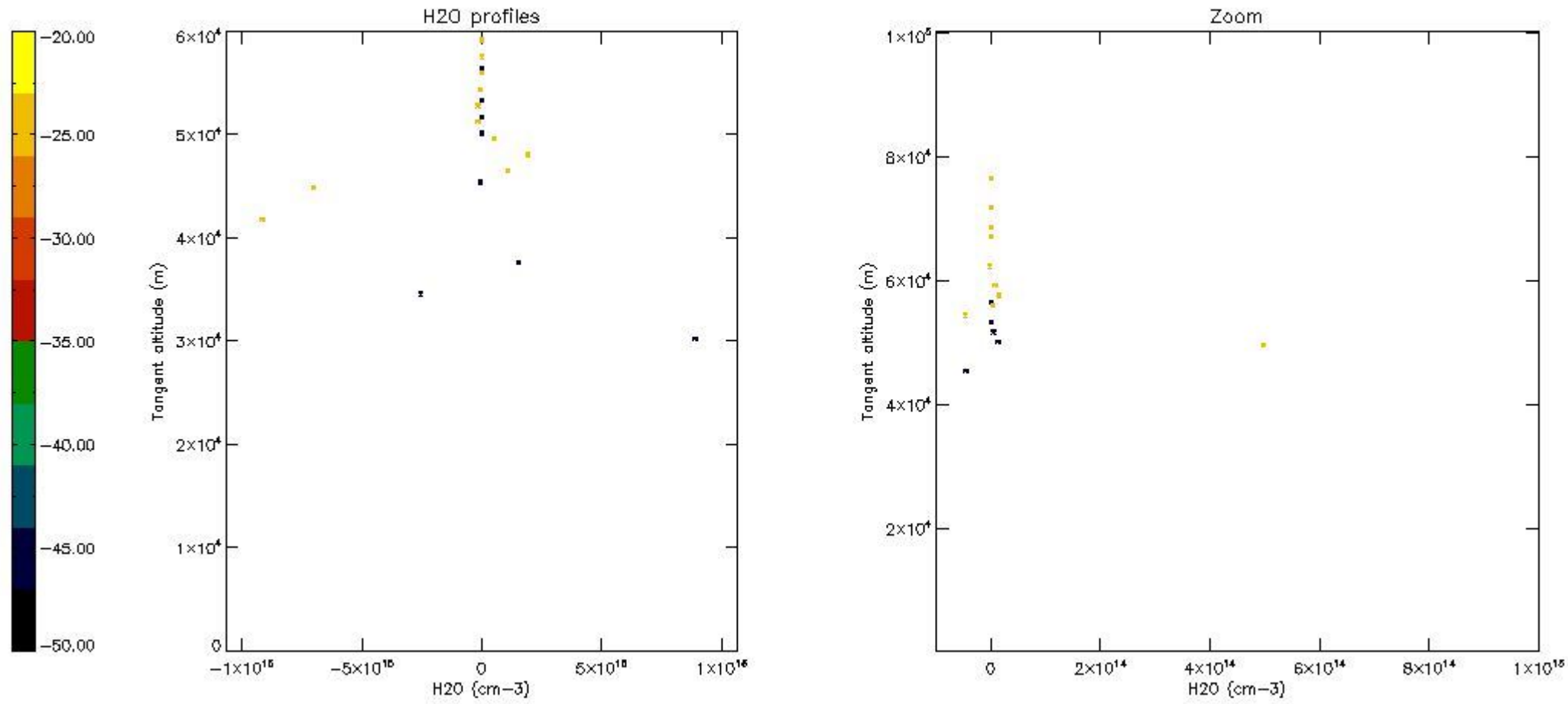
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

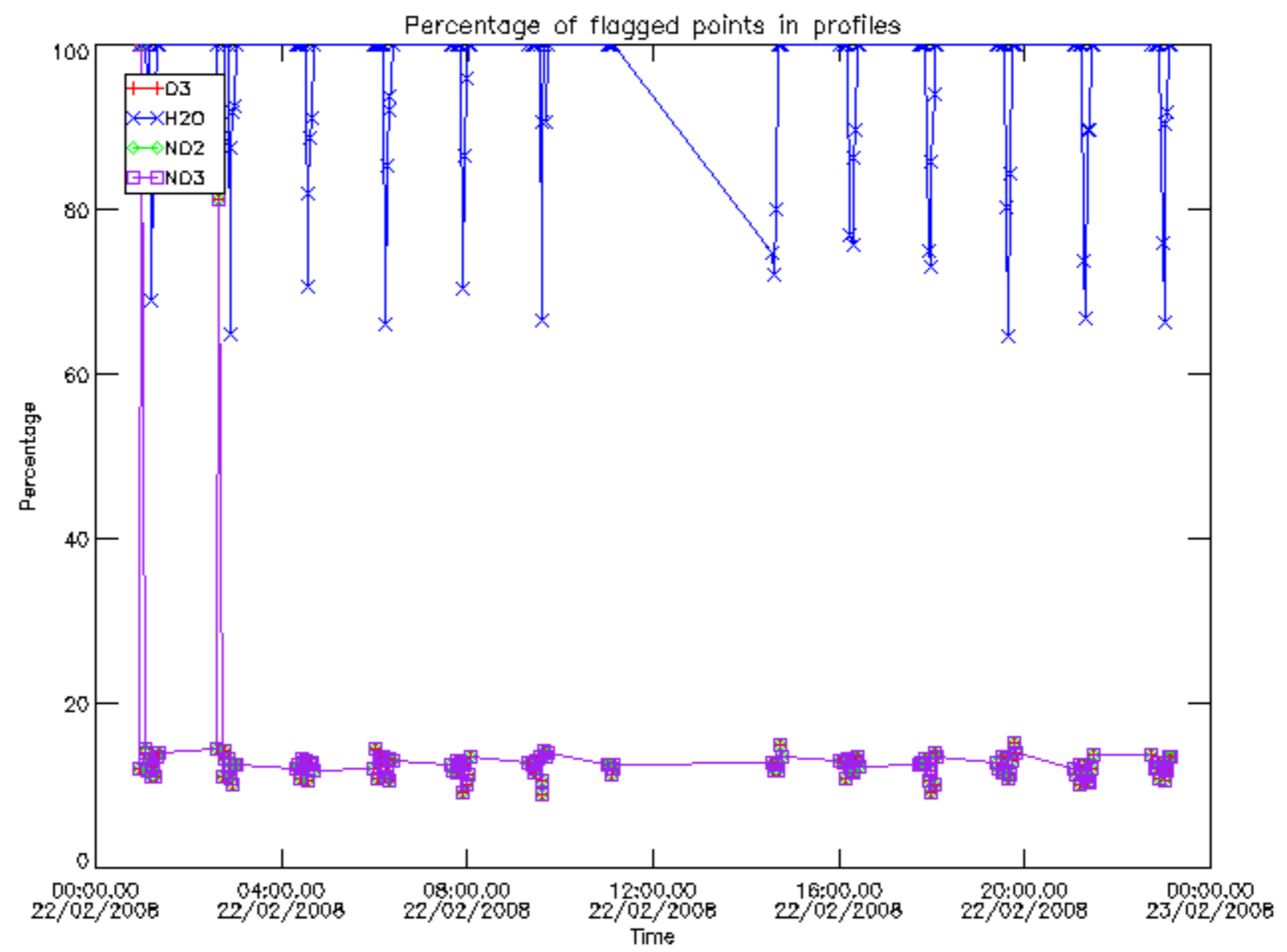
The colorbar represents the latitude.



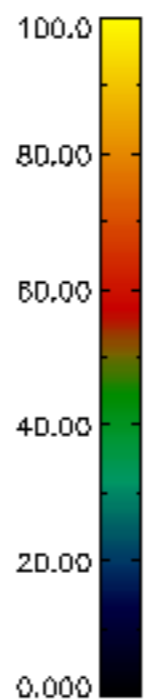
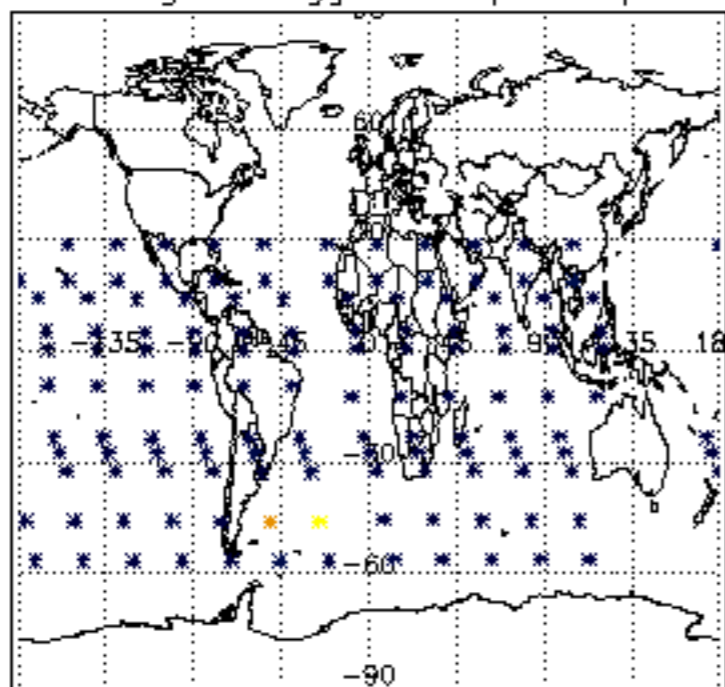
6. Auxiliary Data Files used for the production reported in section 2

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.

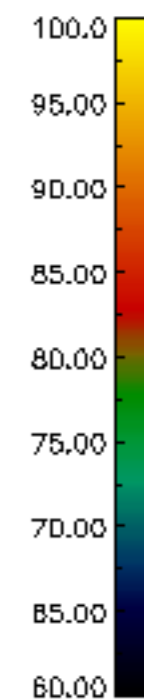
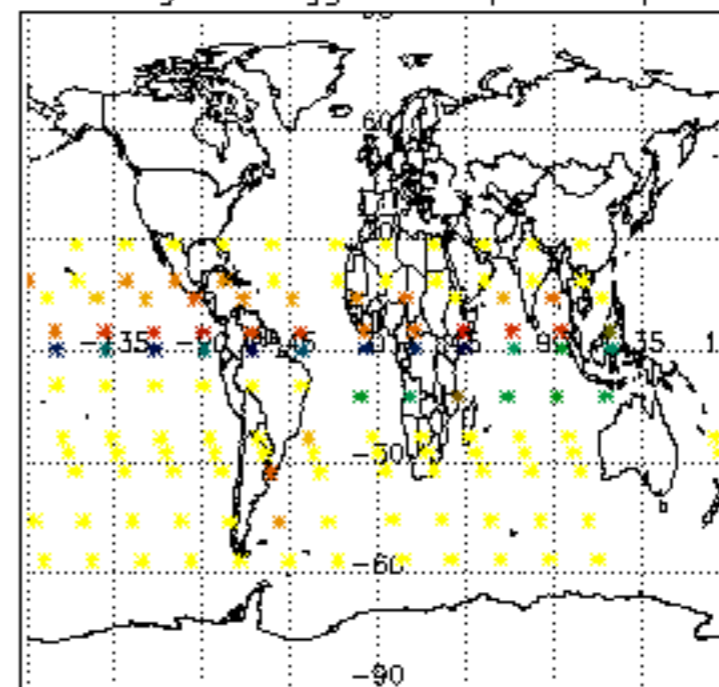
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	22-FEB-2008 00:05:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-FEB-2008 00:05:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-FEB-2008 00:05:43



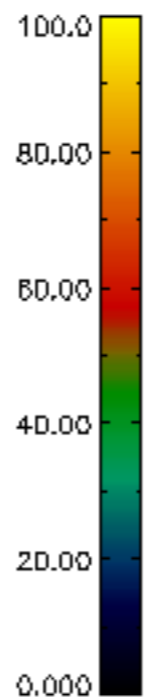
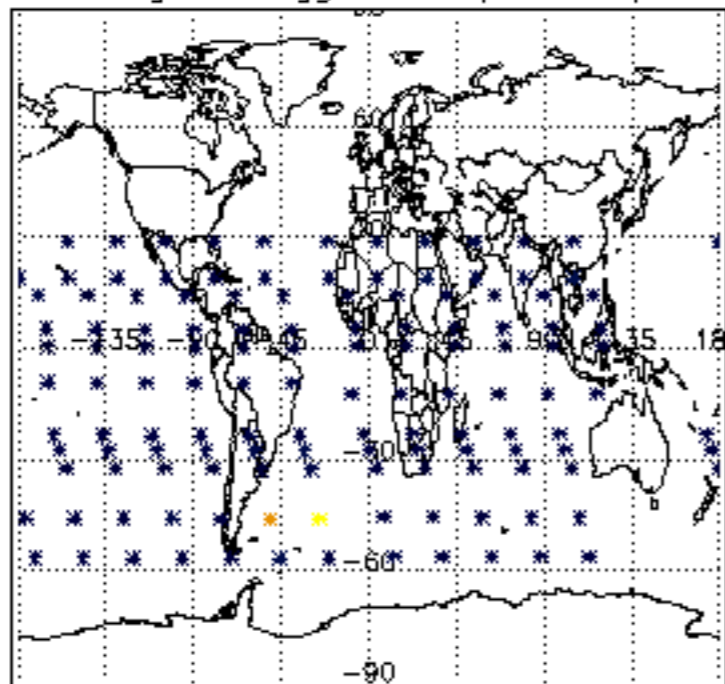
Percentage of flagged data per D3 profile



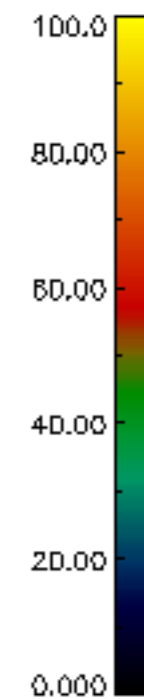
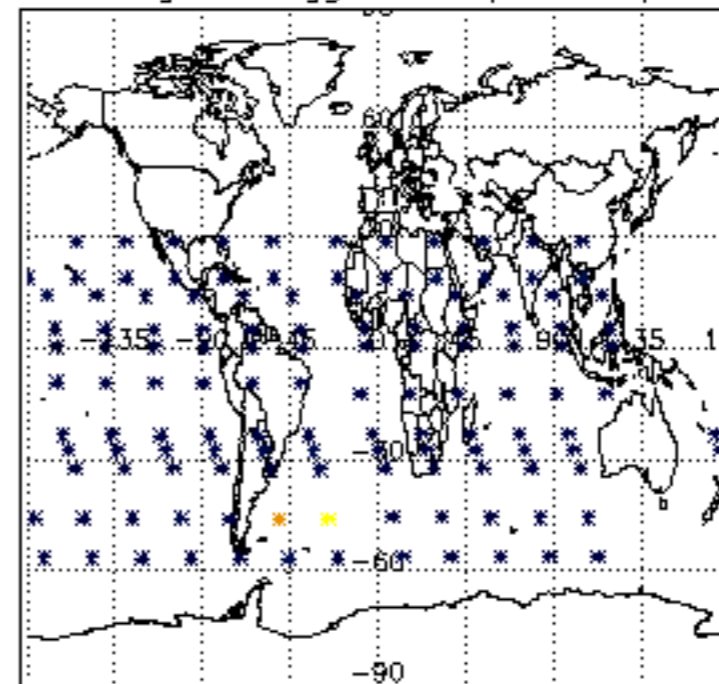
Percentage of flagged data per H2O profile

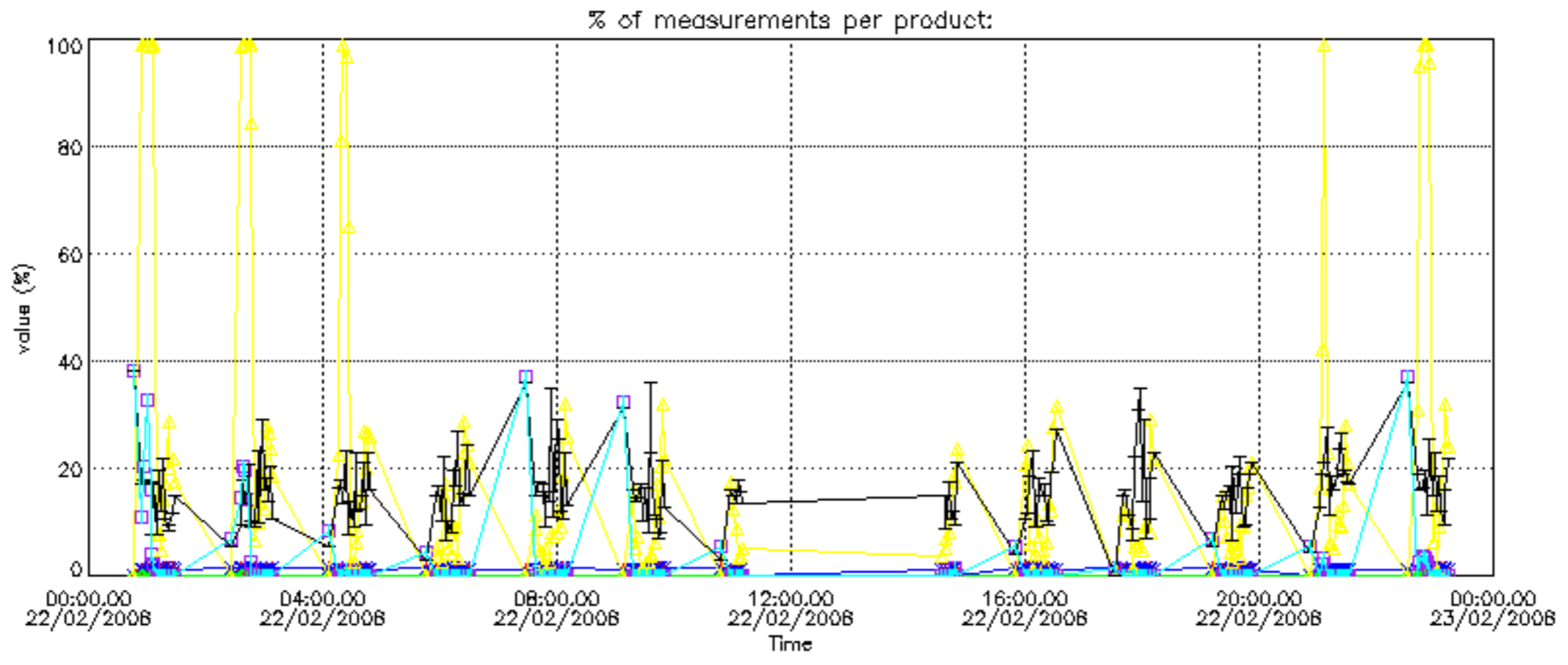


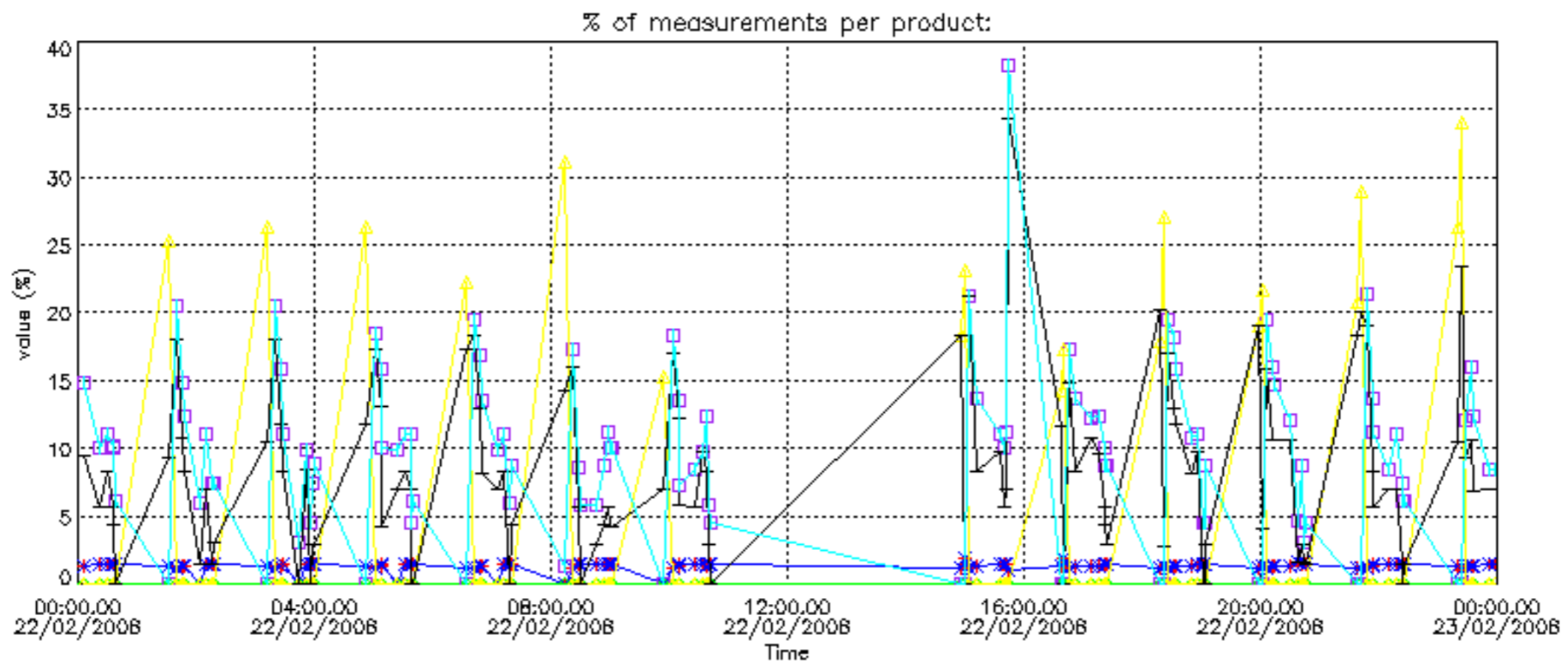
Percentage of flagged data per NO2 profile



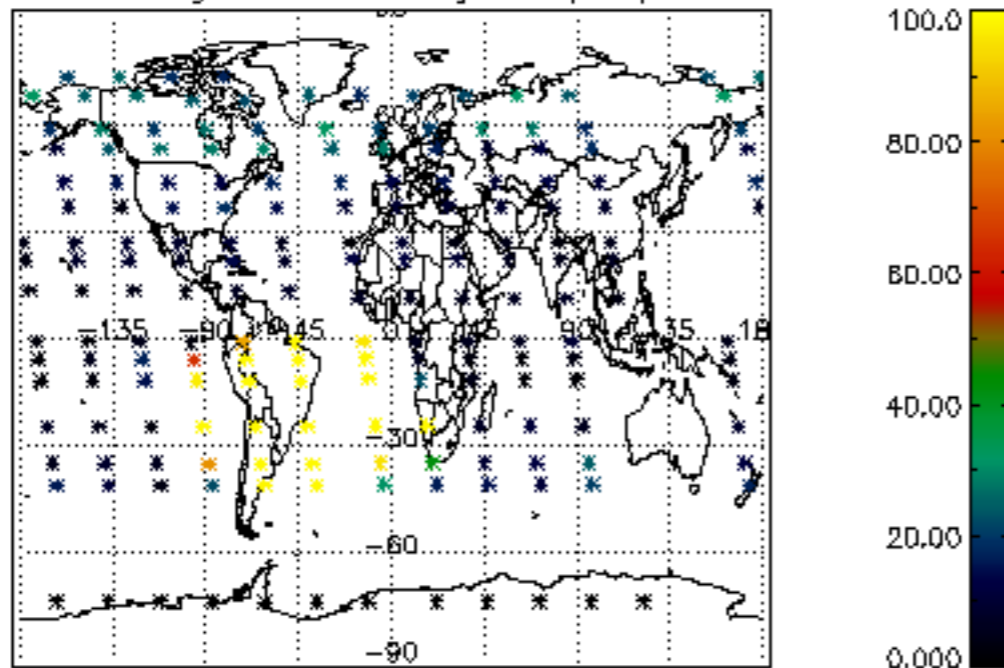
Percentage of flagged data per NO3 profile



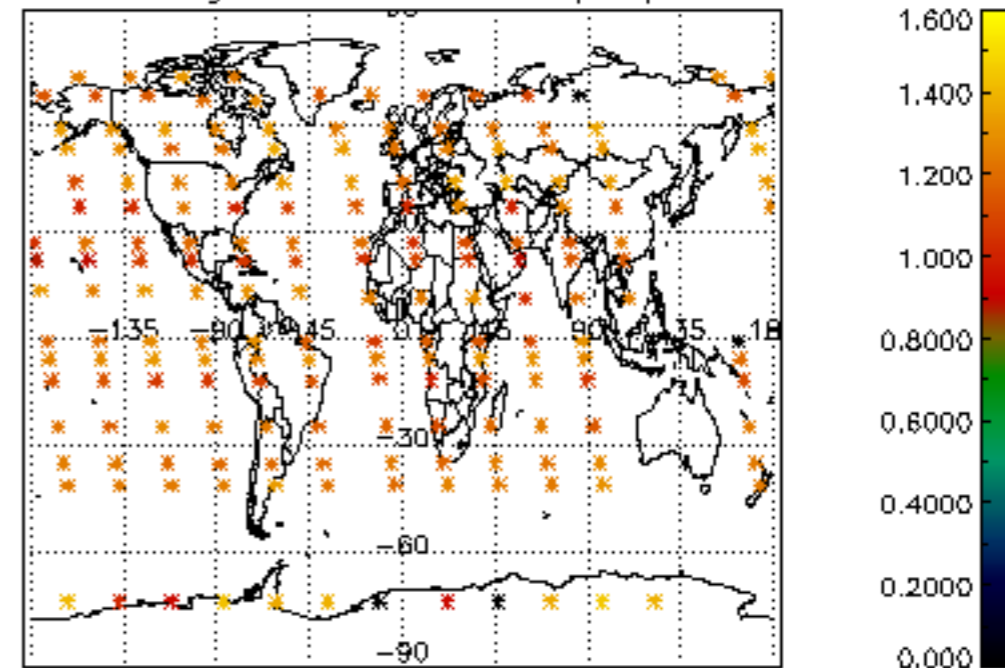




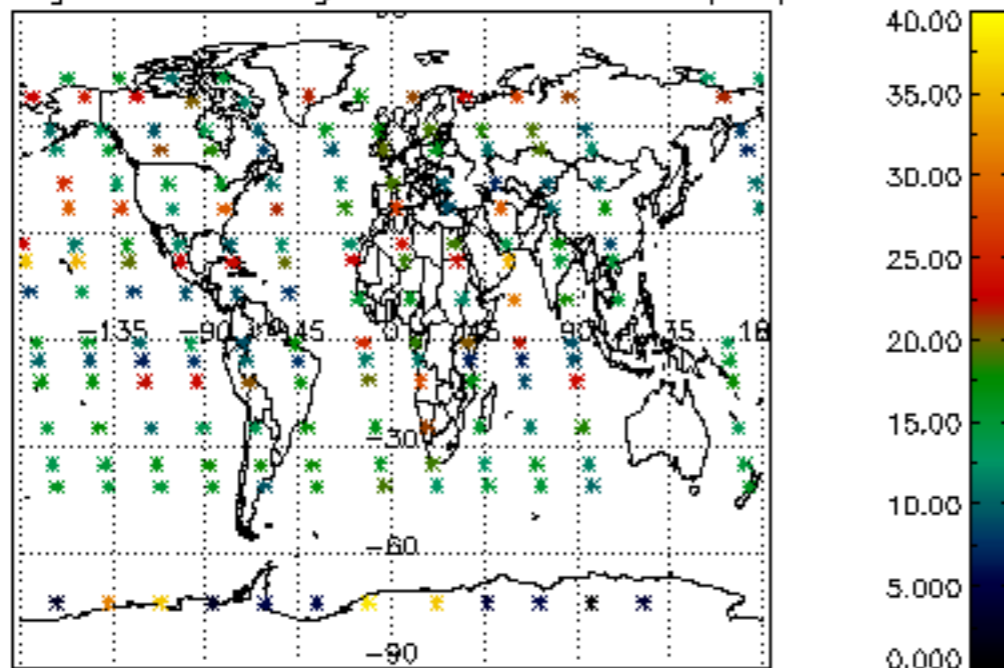
Percentage of cosmic ray hits per profile



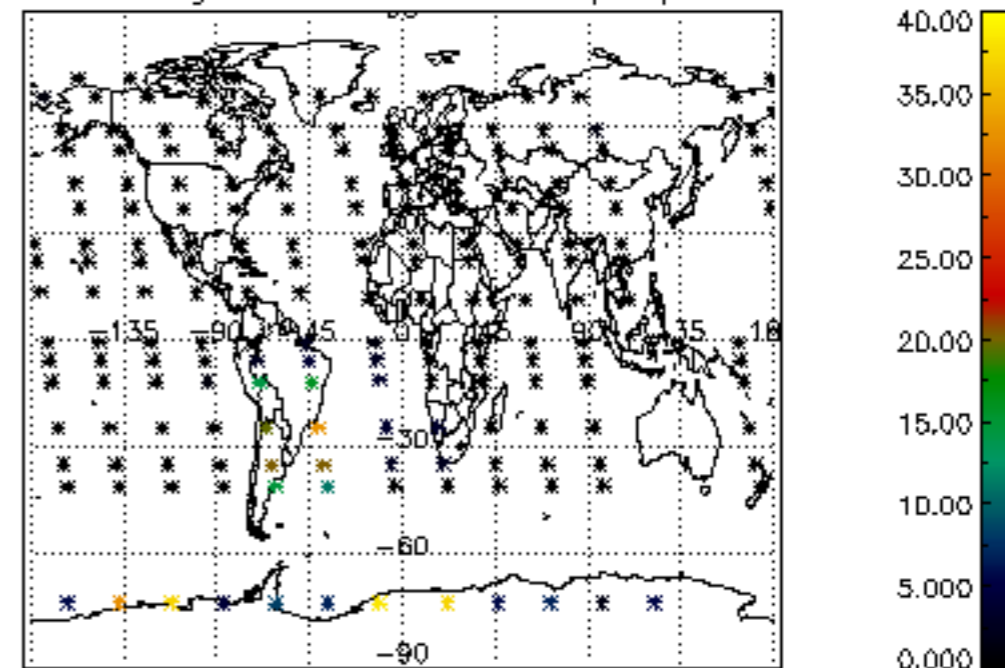
Percentage of datation errors per profile



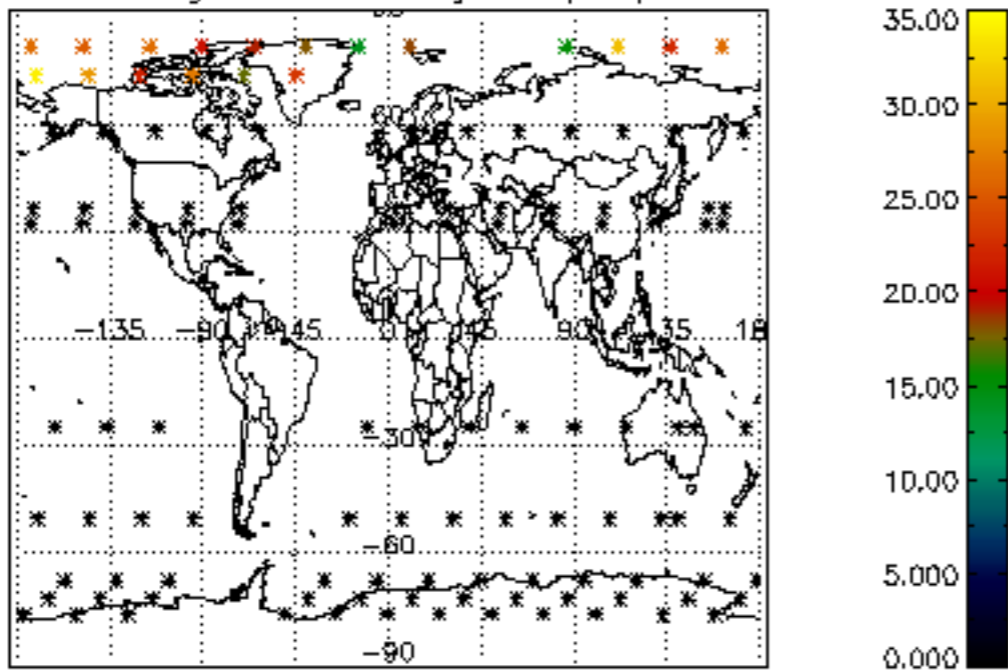
Percentage of star falling outside central band per profile



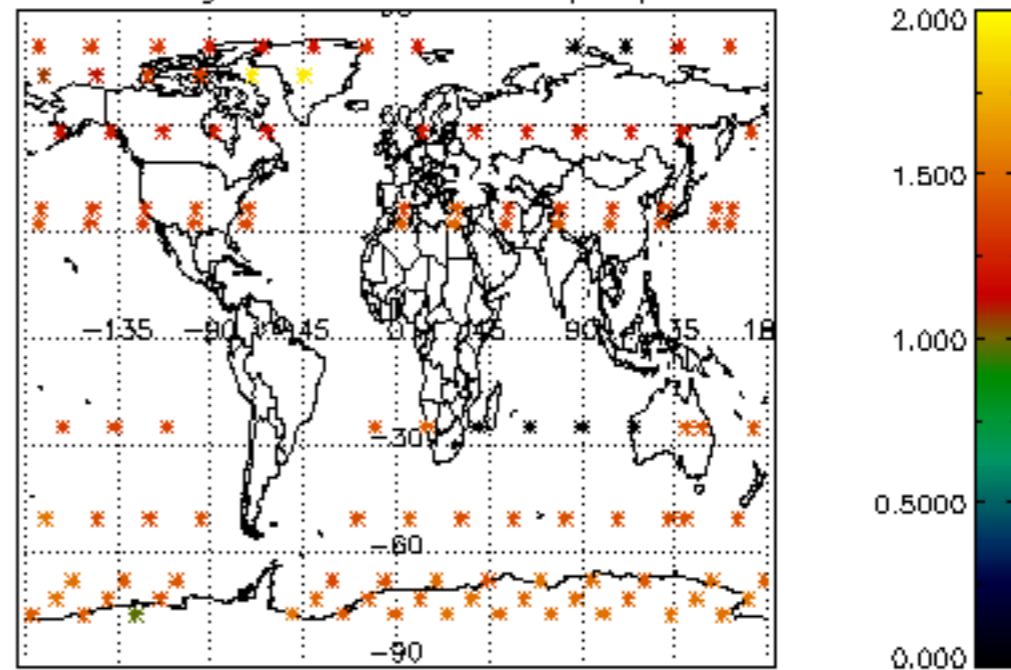
Percentage of saturation errors per profile



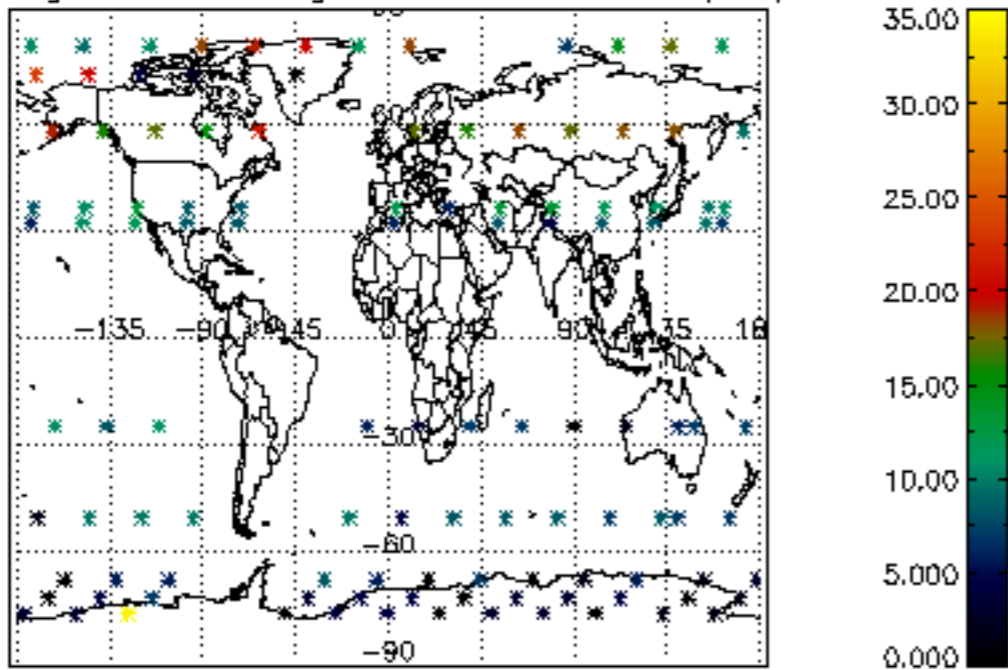
Percentage of cosmic ray hits per profile



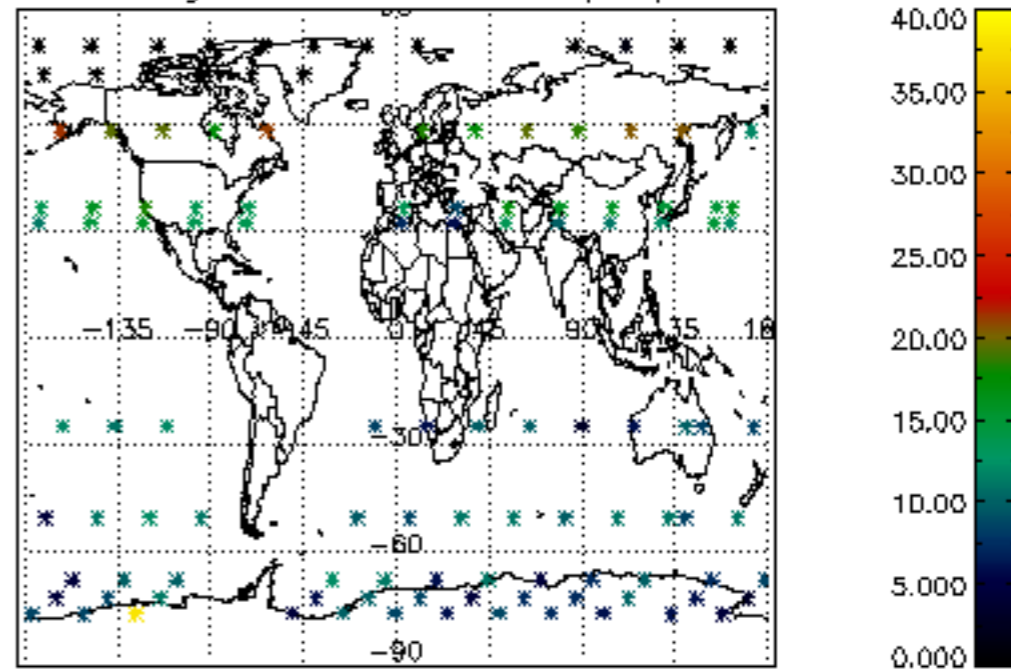
Percentage of datation errors per profile

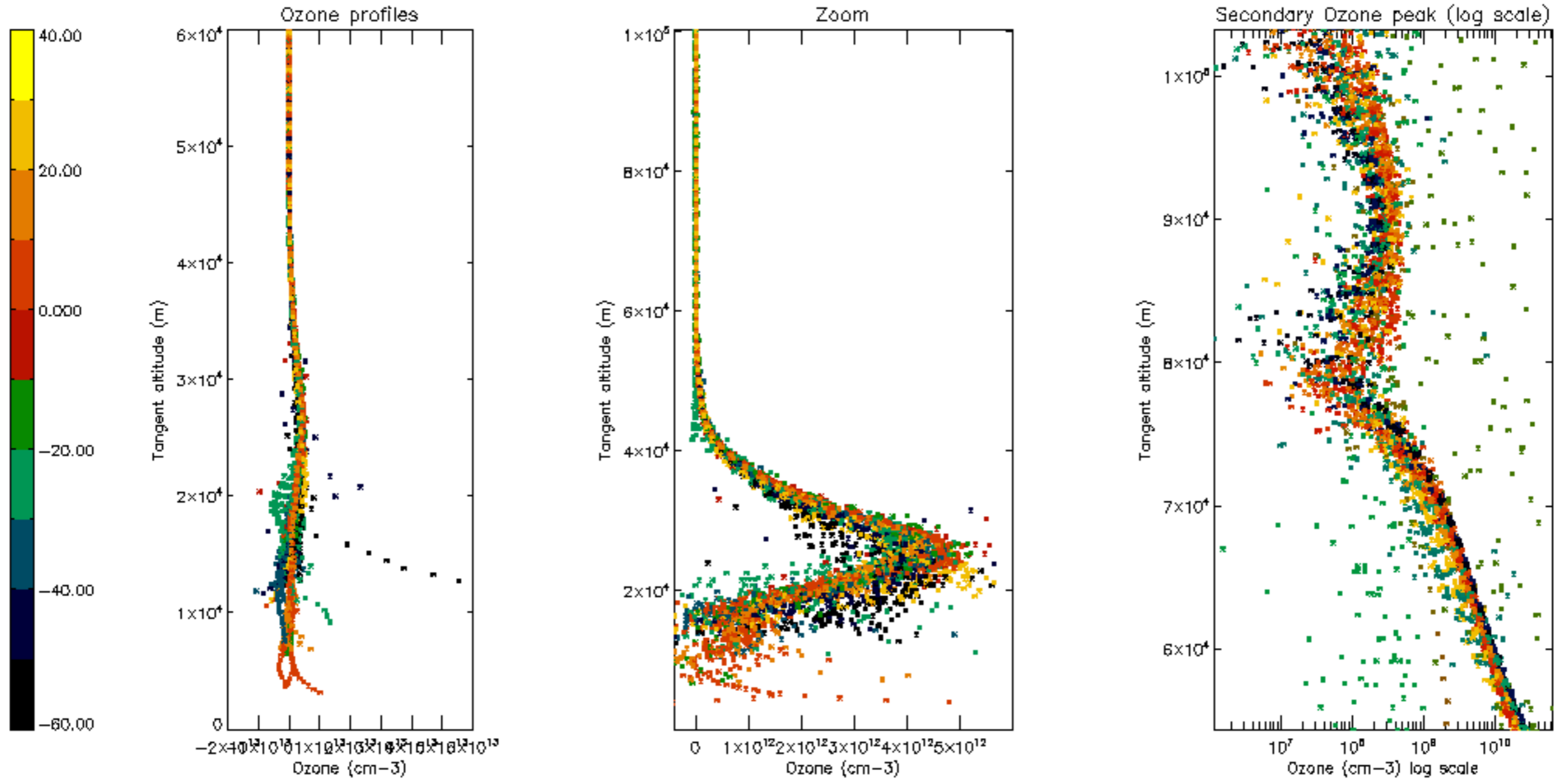


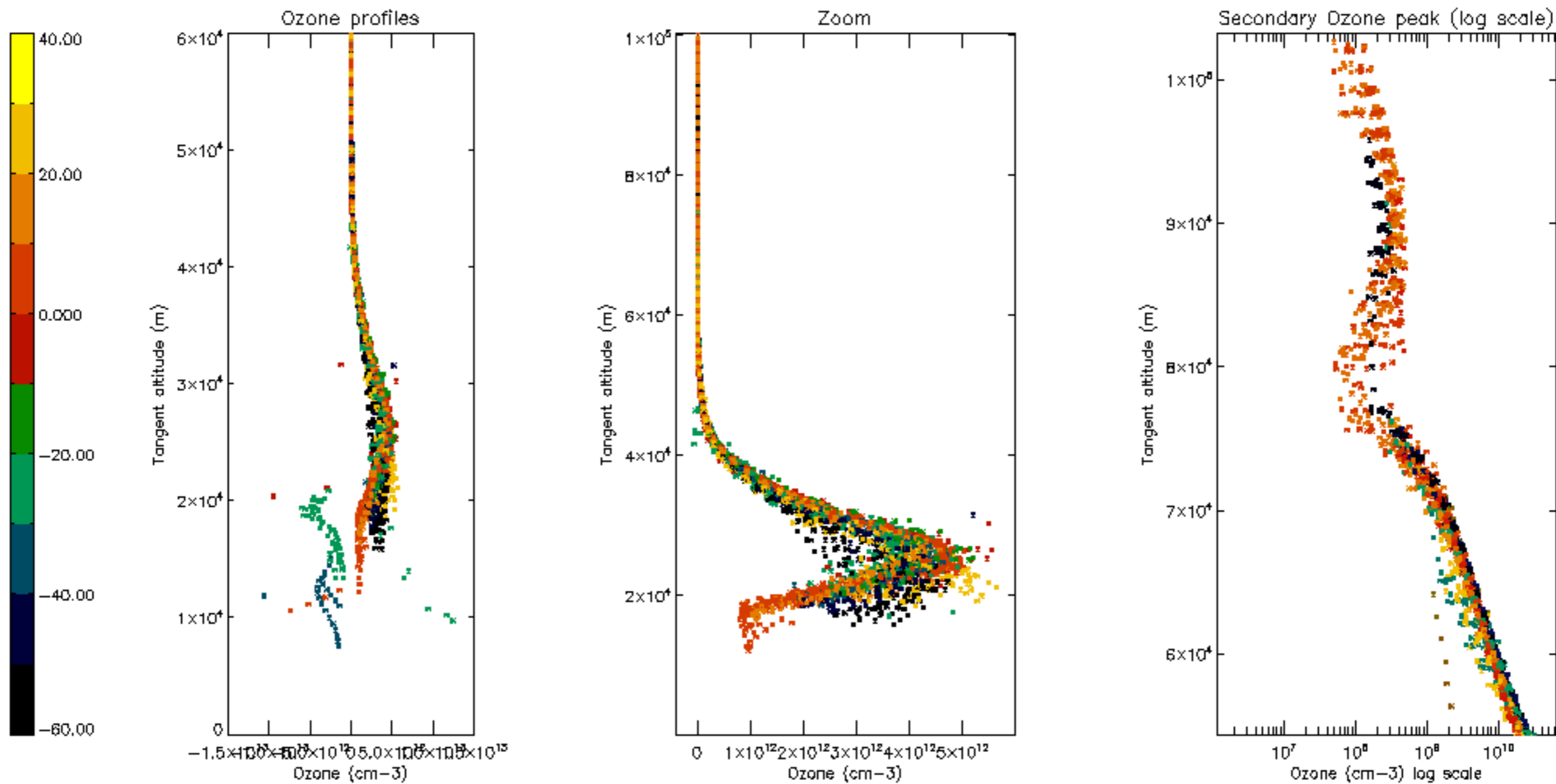
Percentage of star falling outside central band per profile

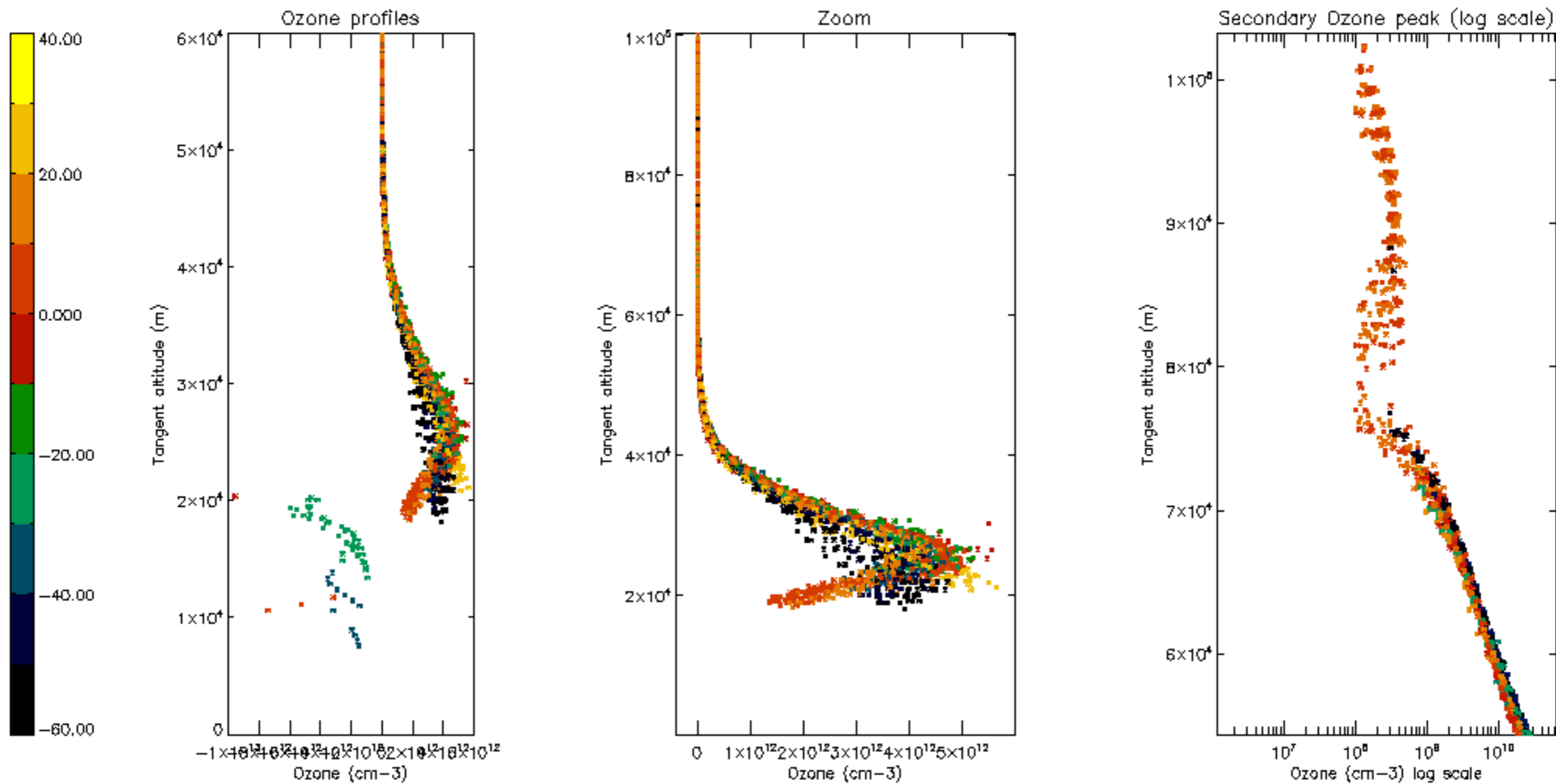


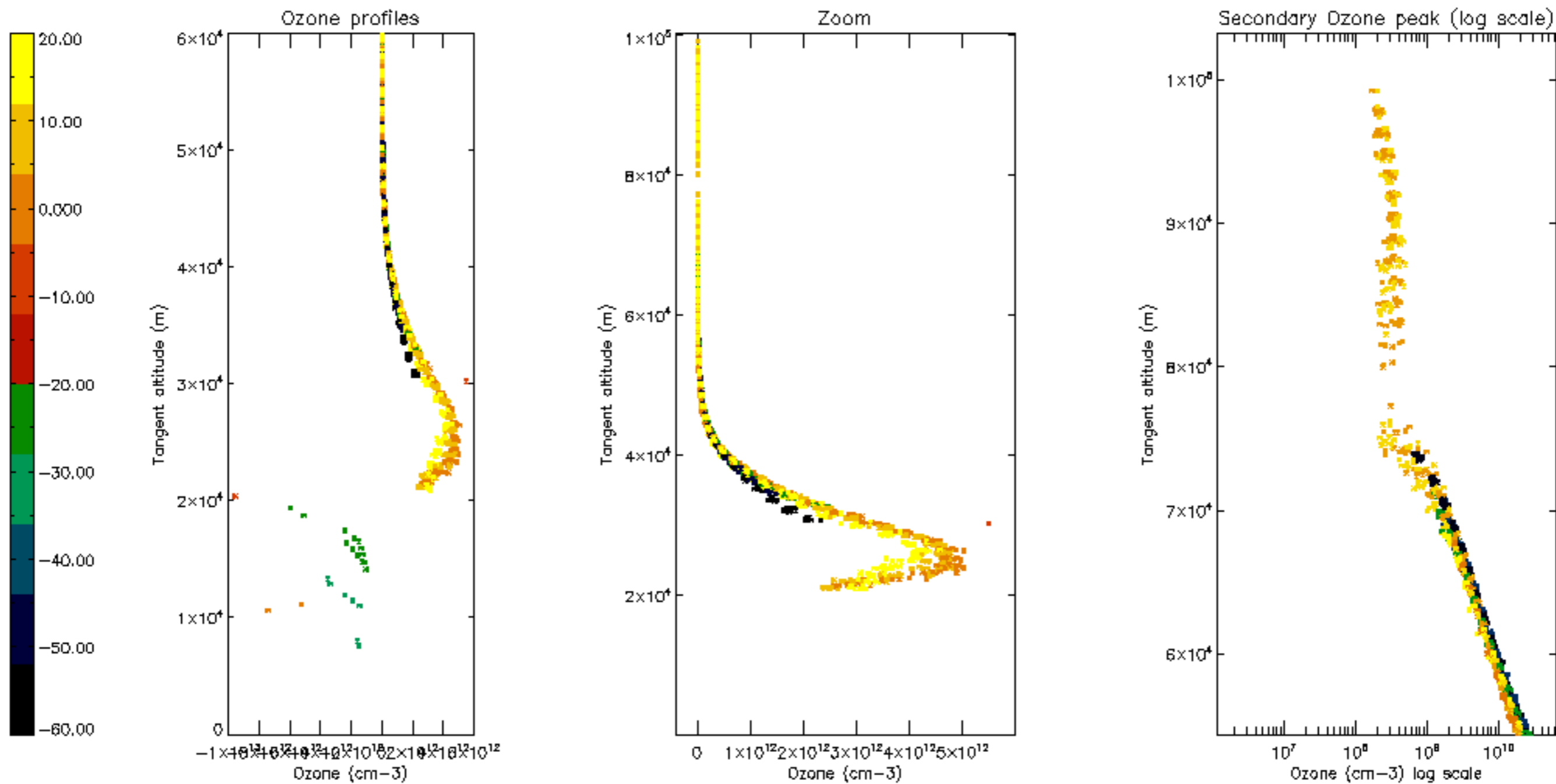
Percentage of saturation errors per profile

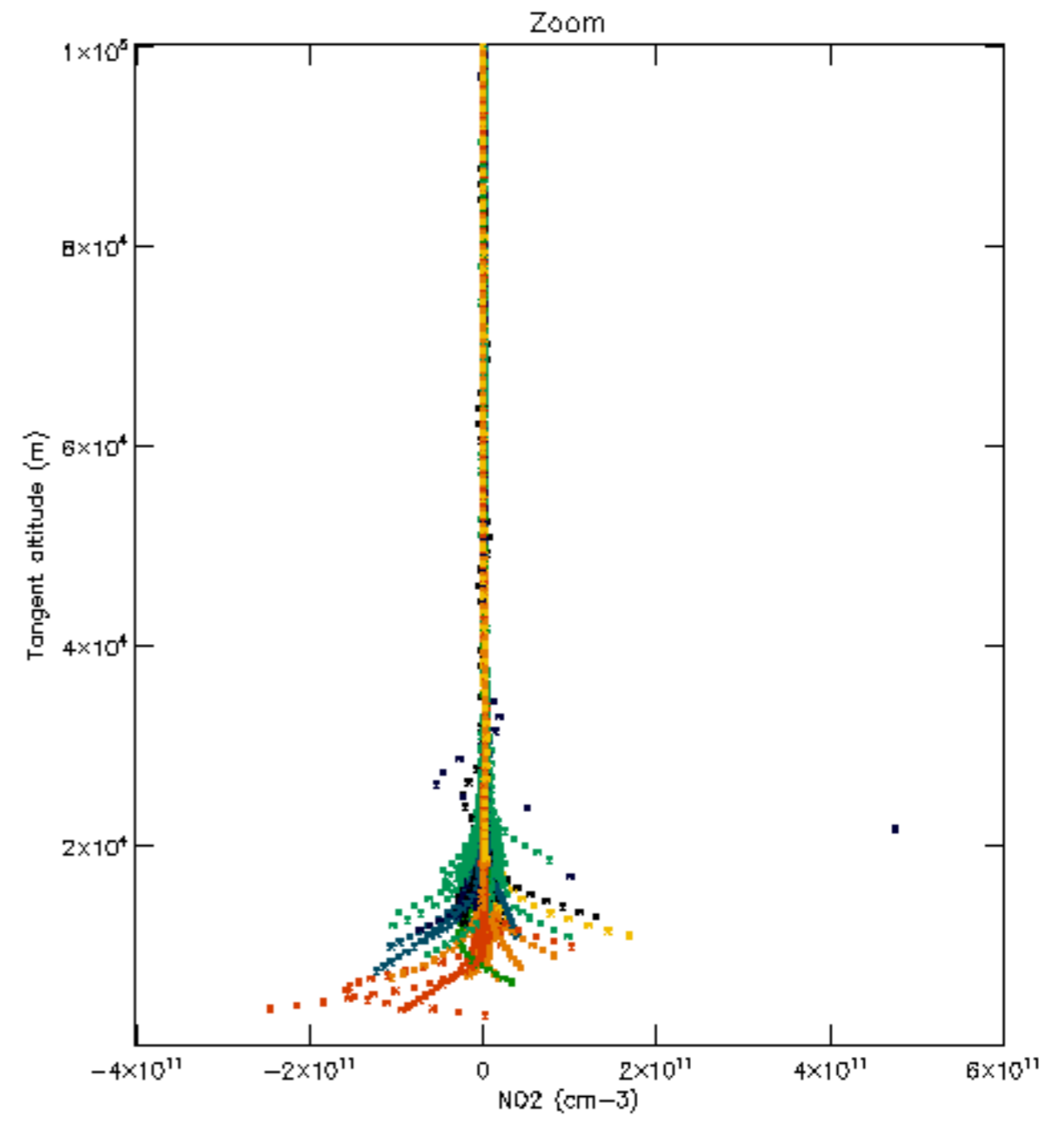
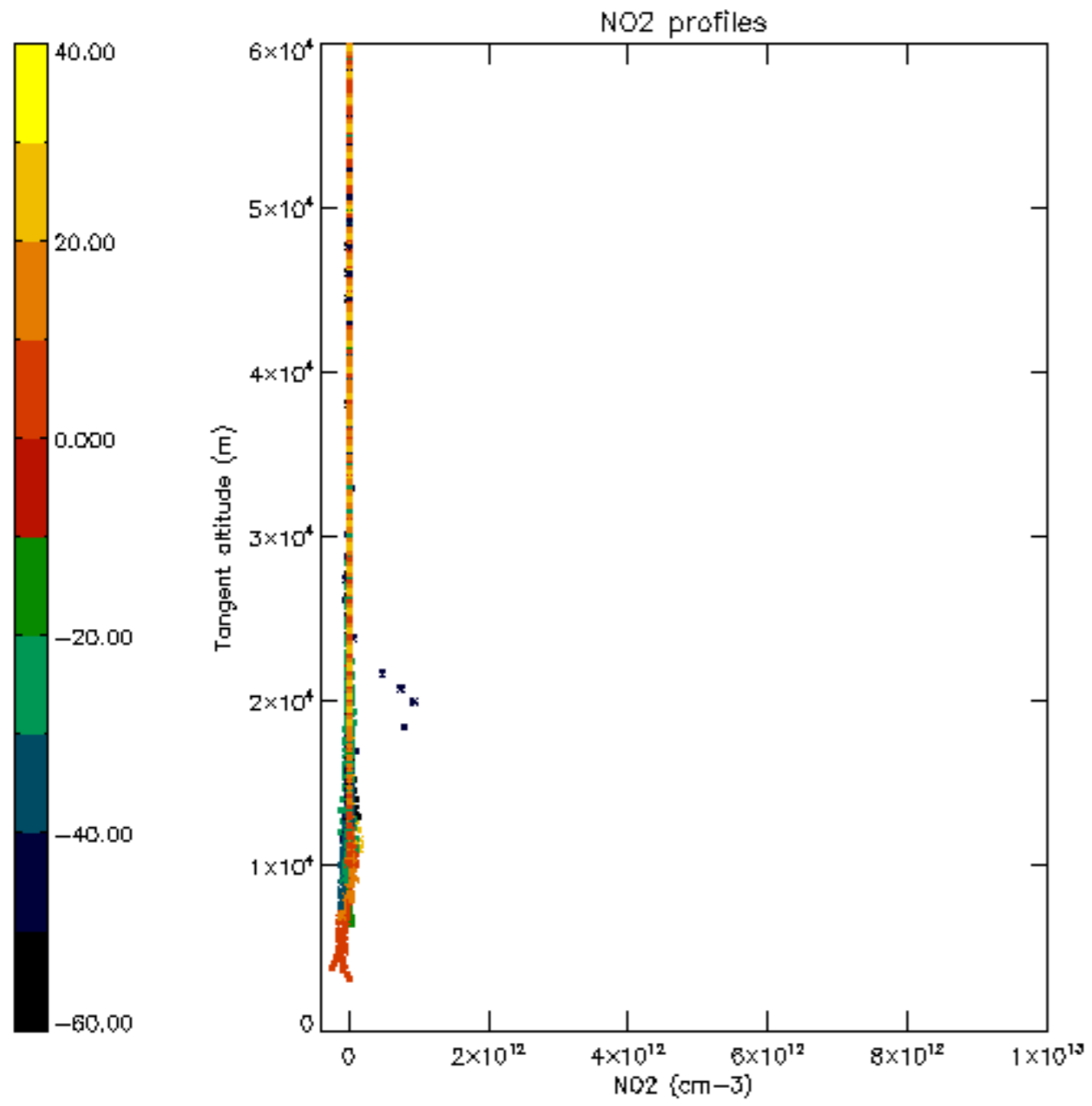


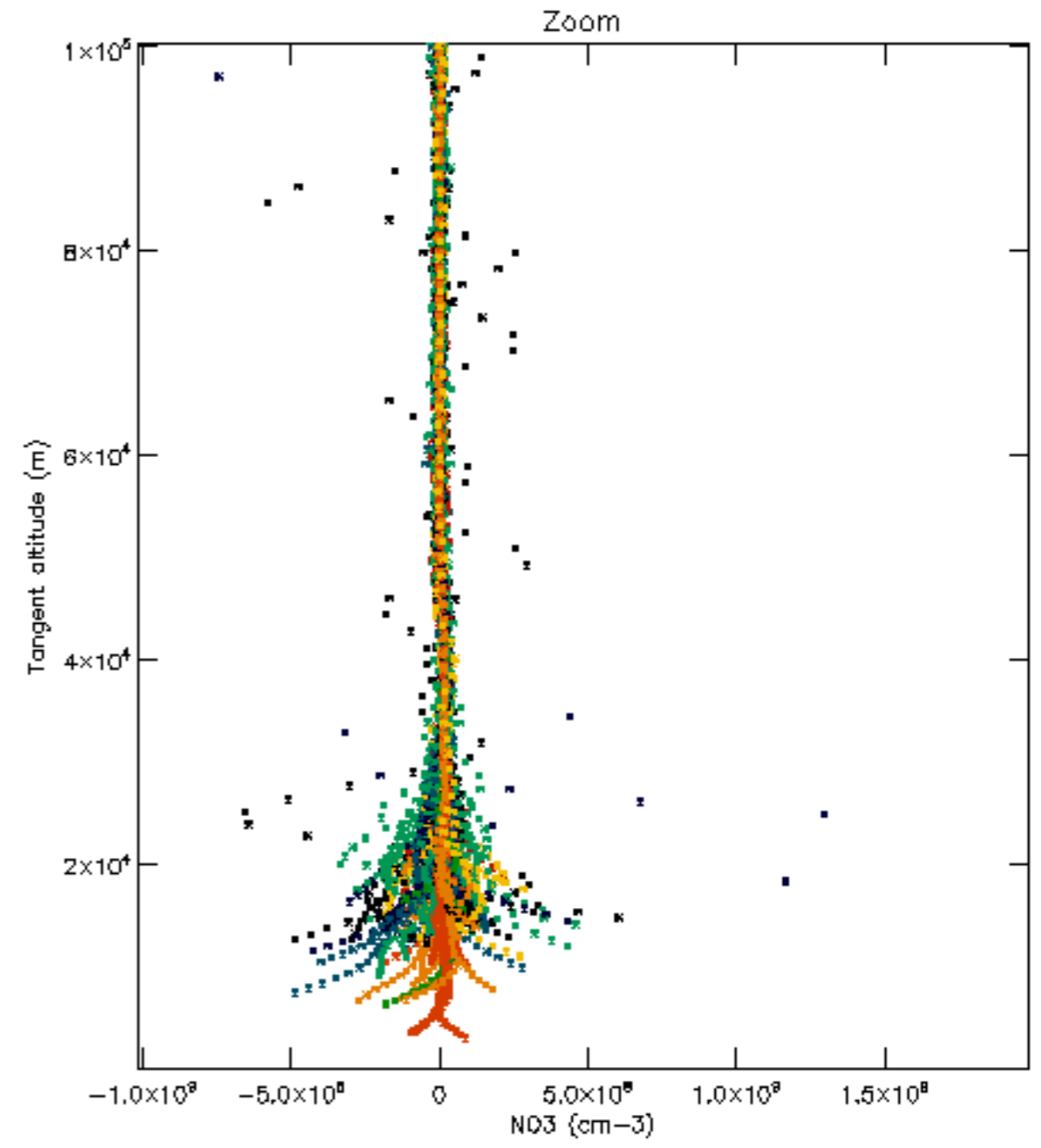
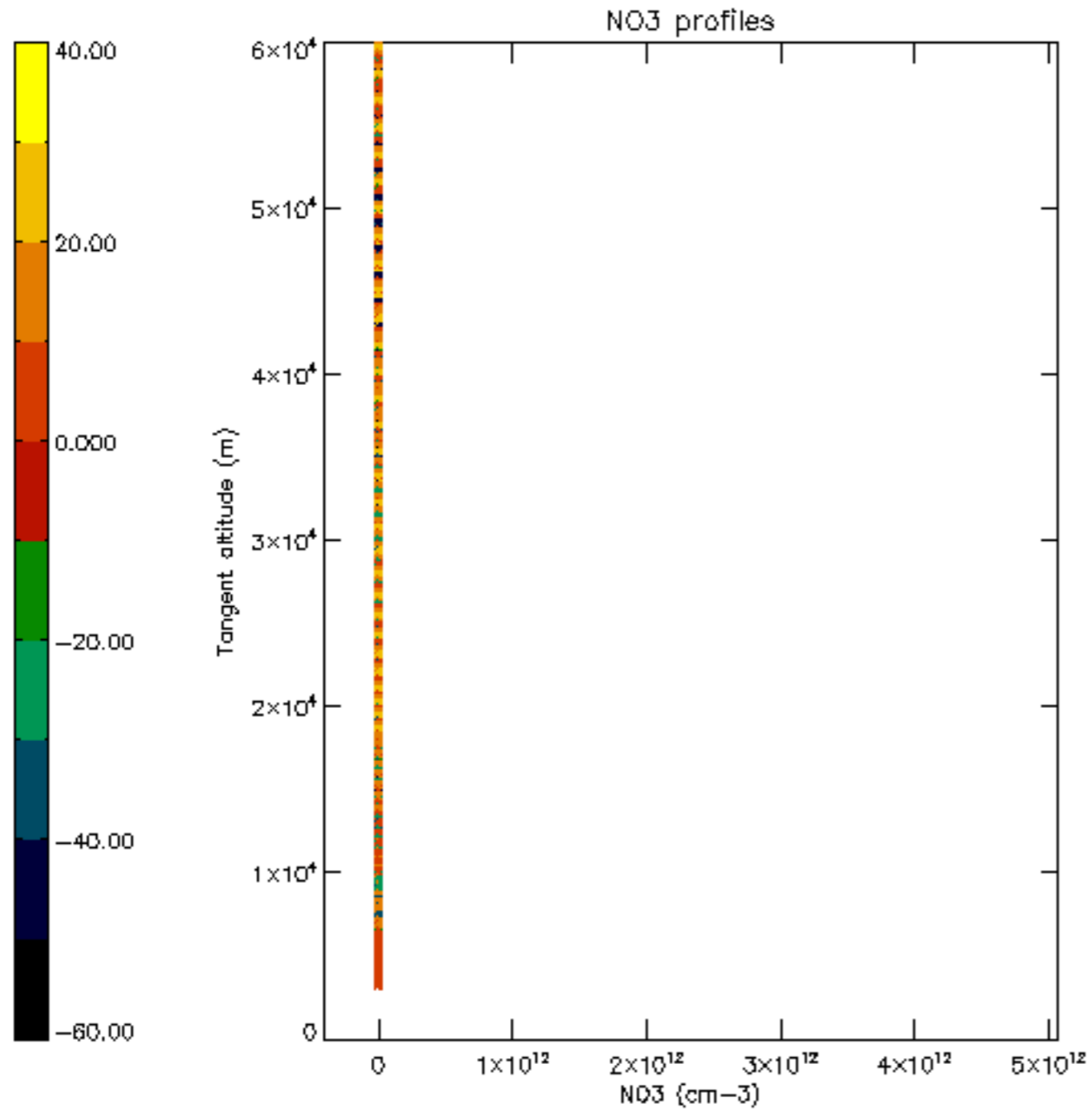


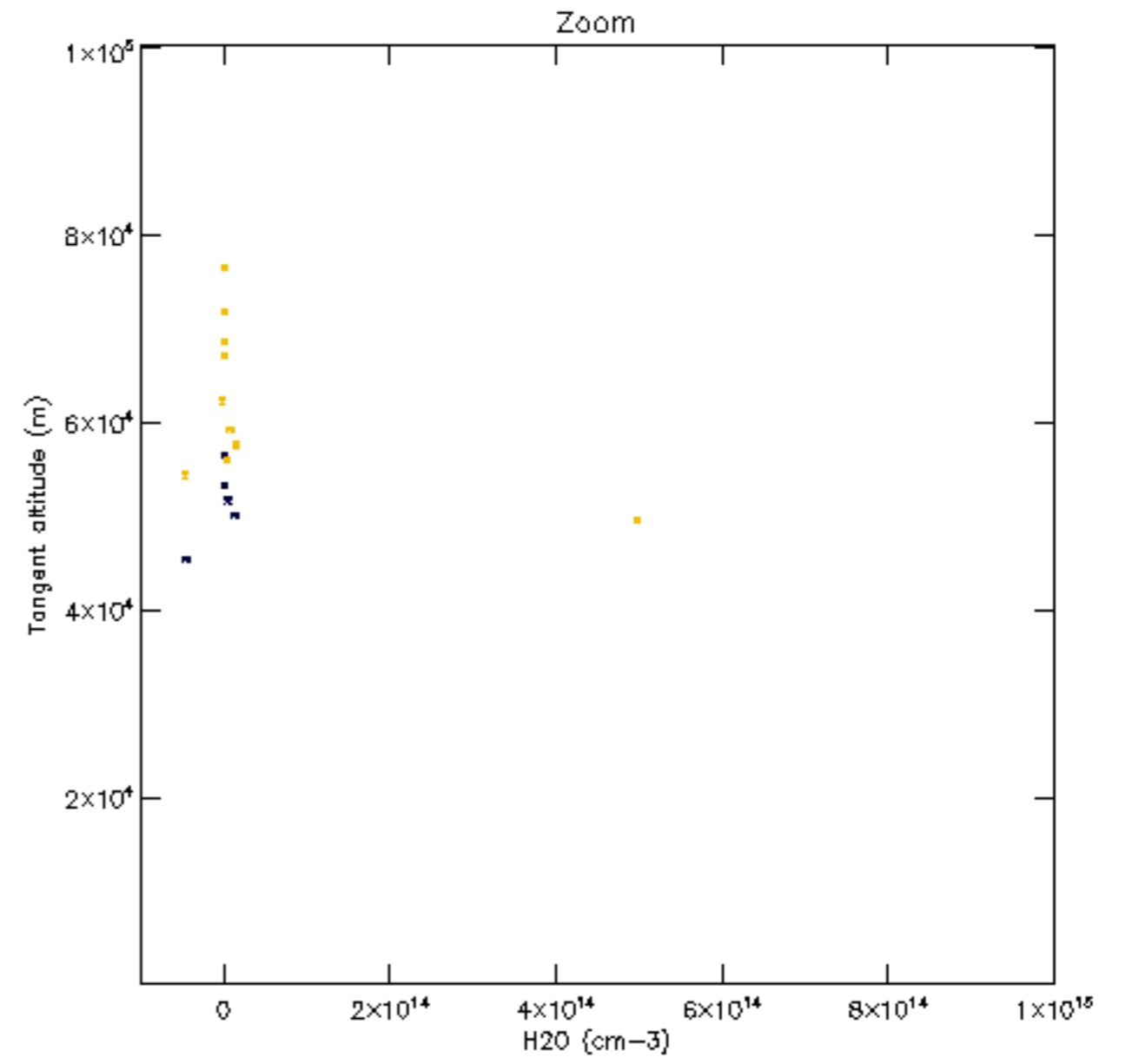
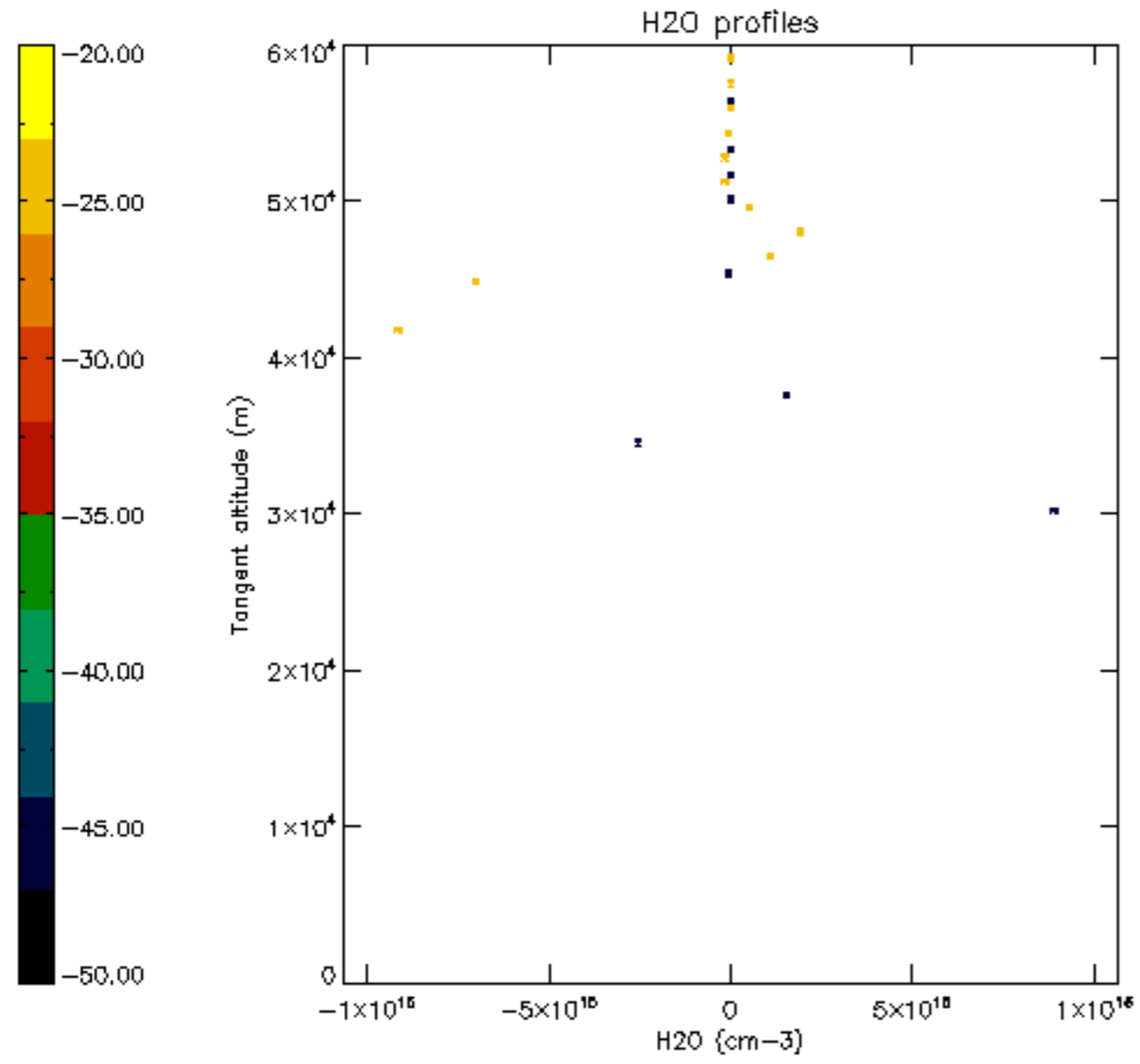


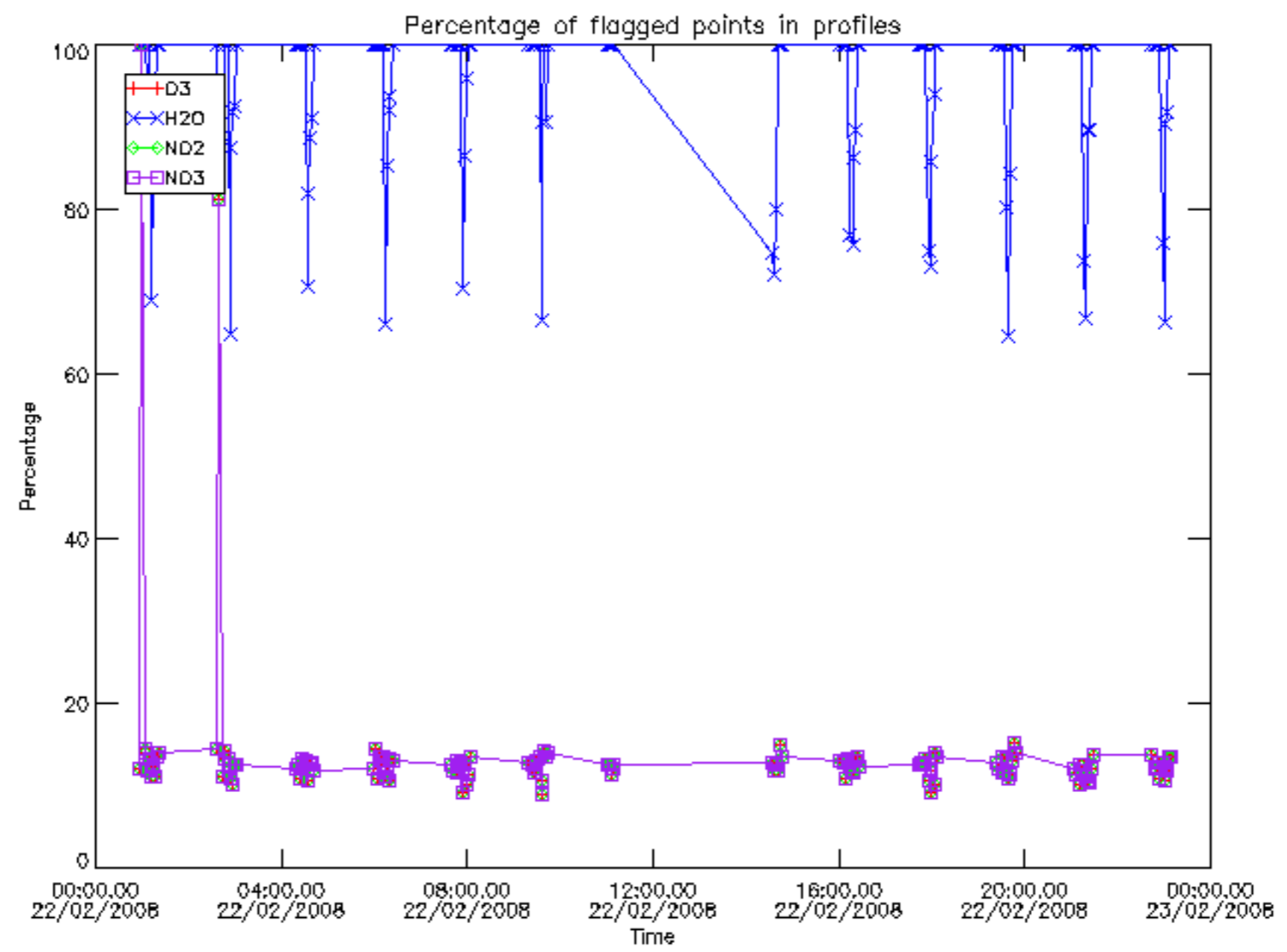




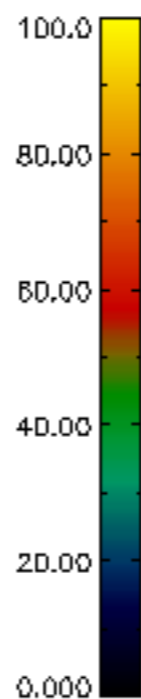
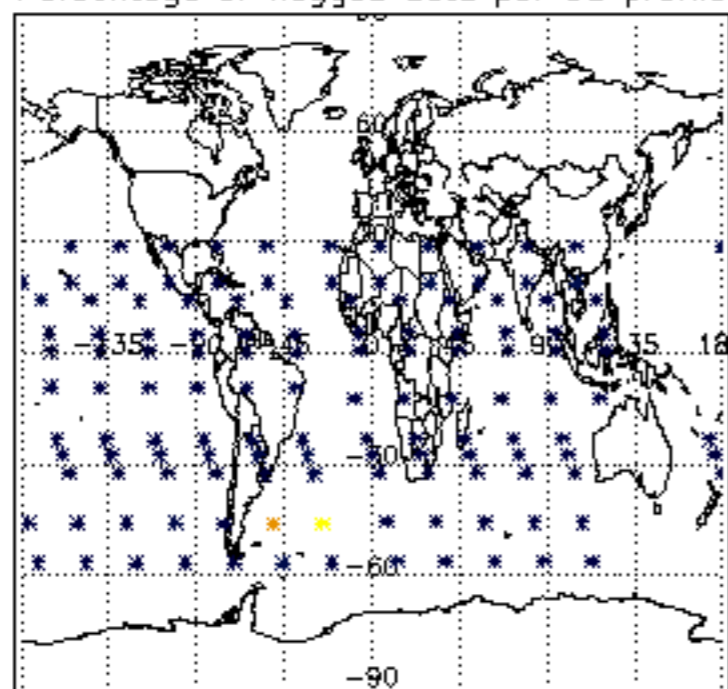




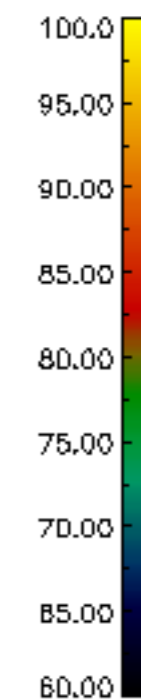
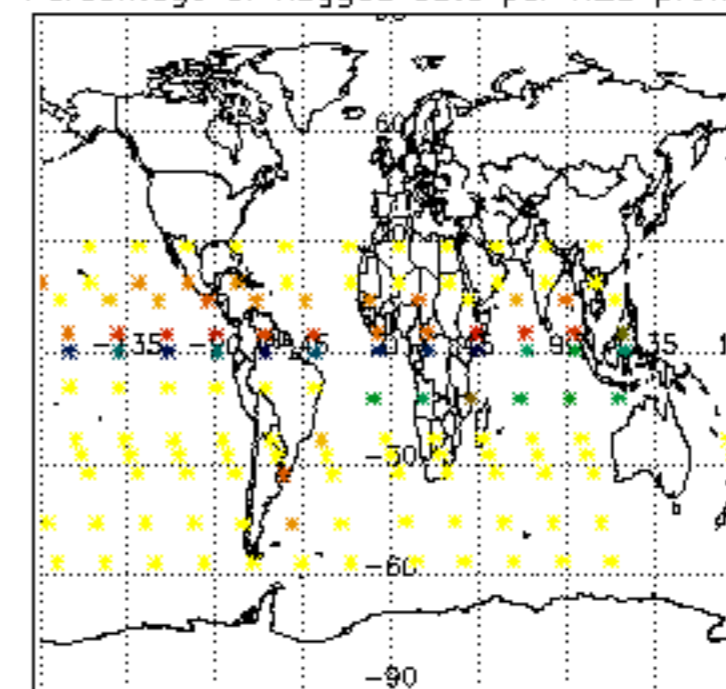




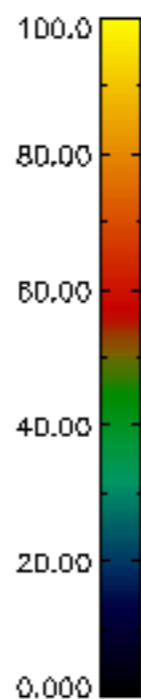
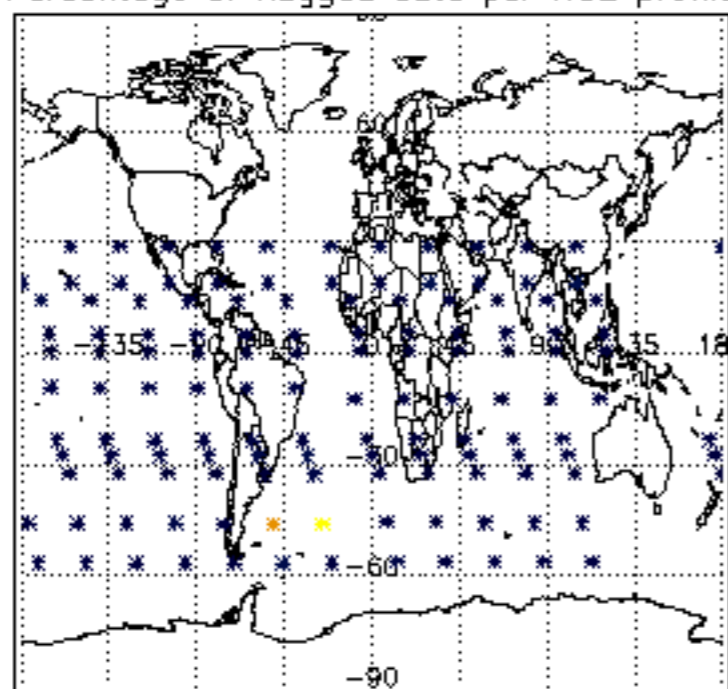
Percentage of flagged data per D3 profile



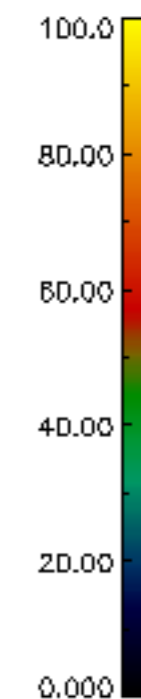
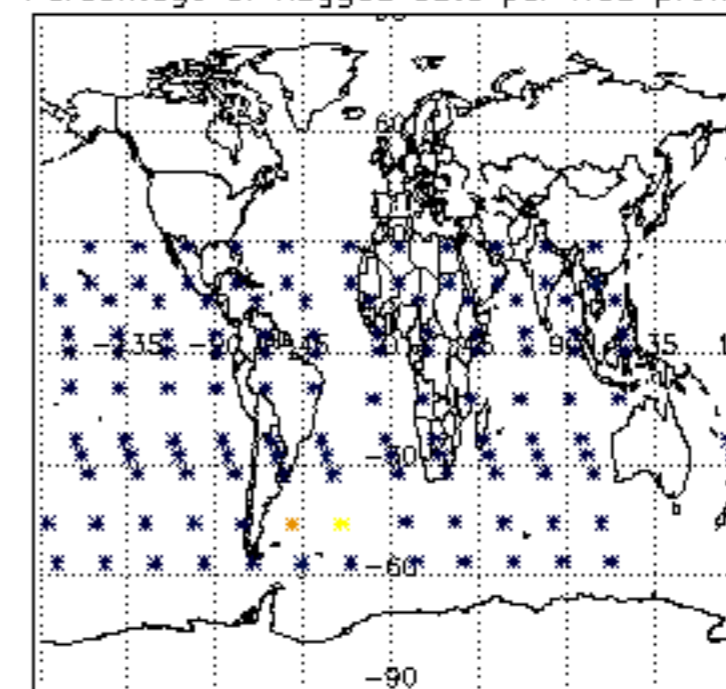
Percentage of flagged data per H2O profile

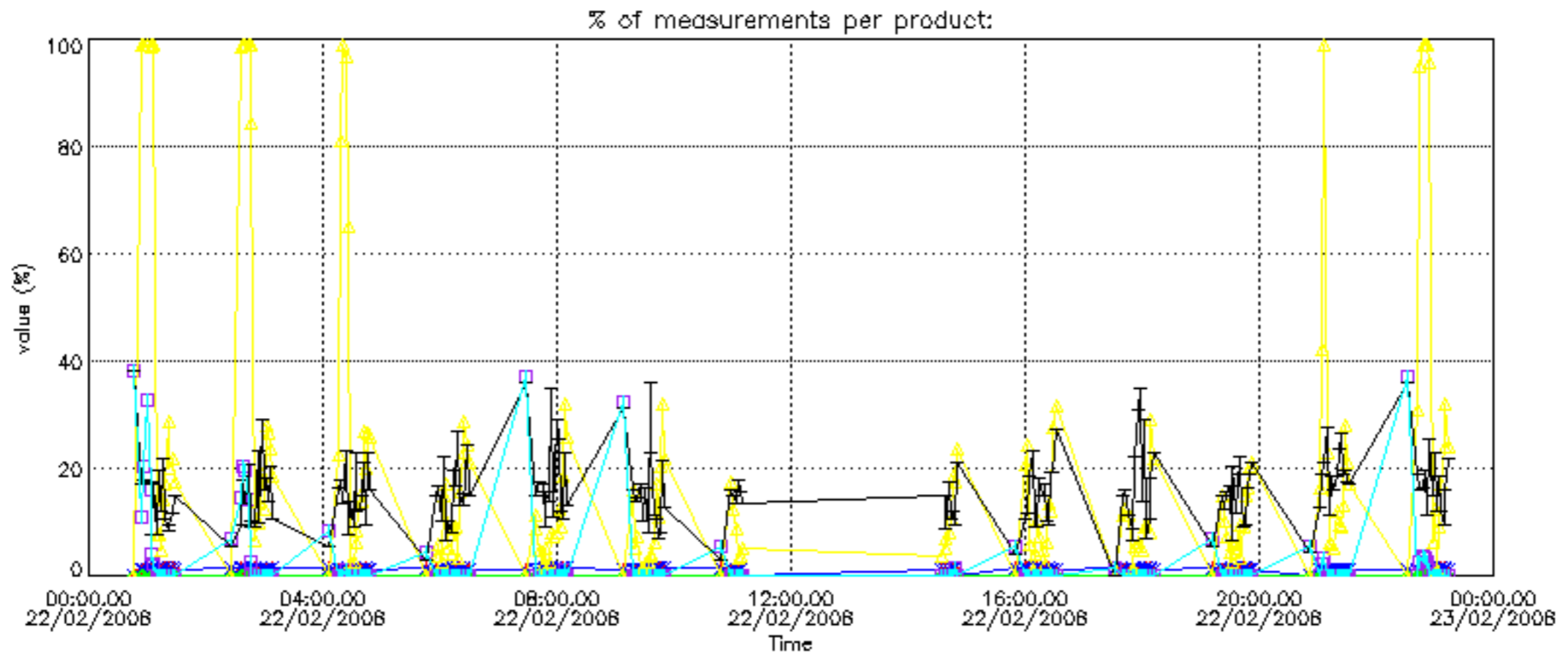


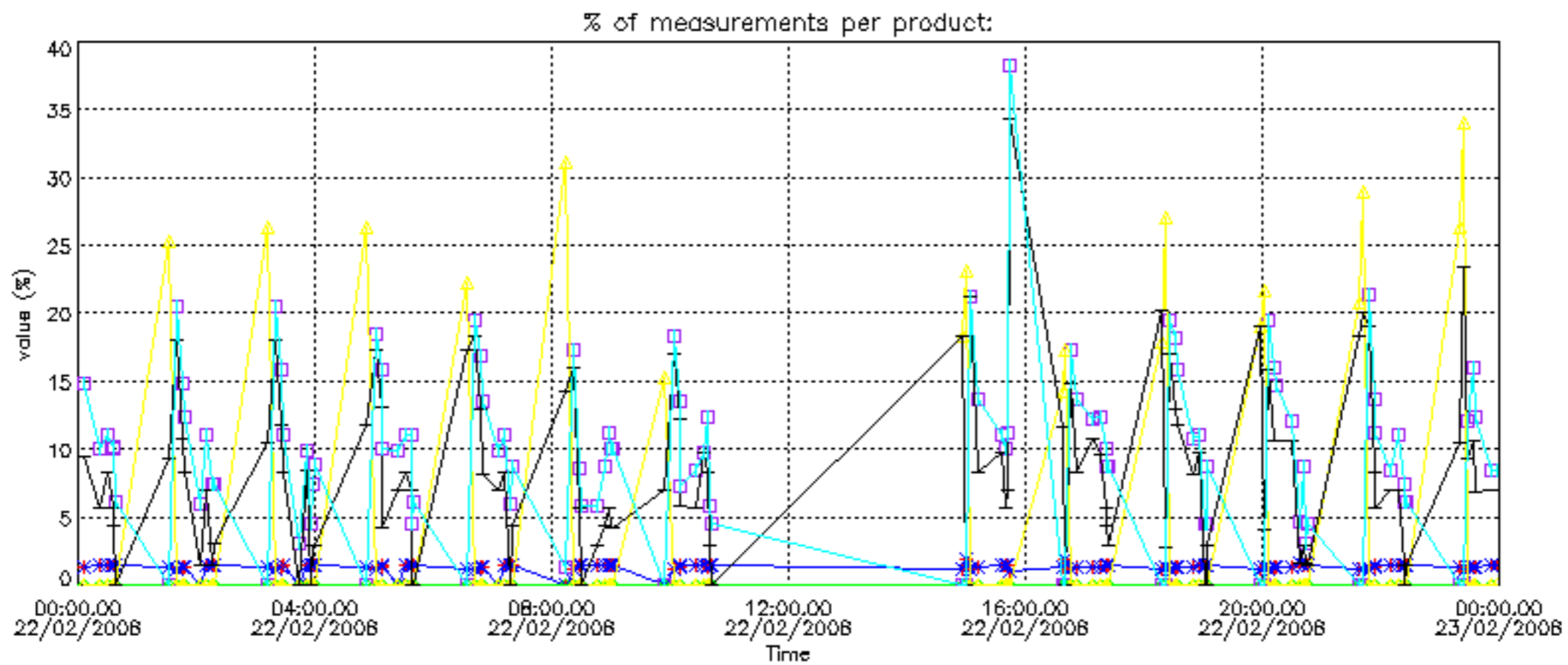
Percentage of flagged data per NO2 profile



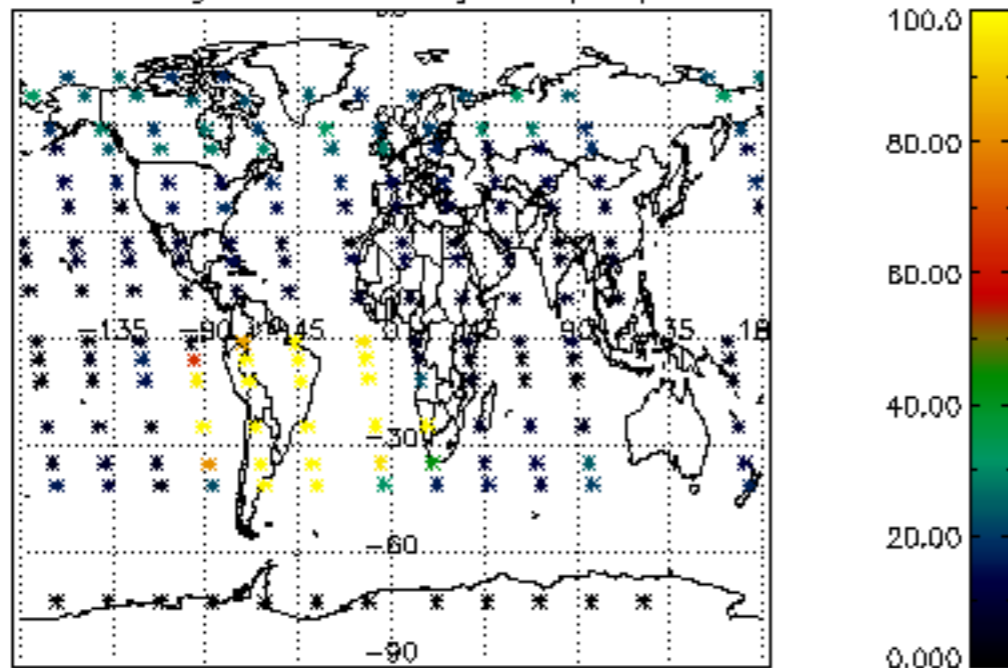
Percentage of flagged data per NO3 profile



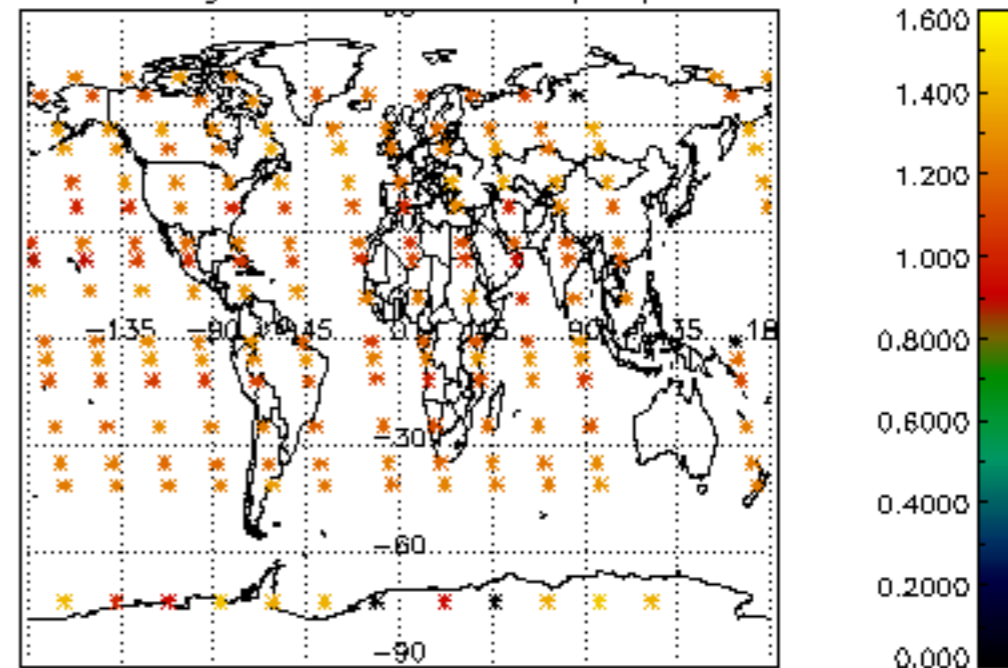




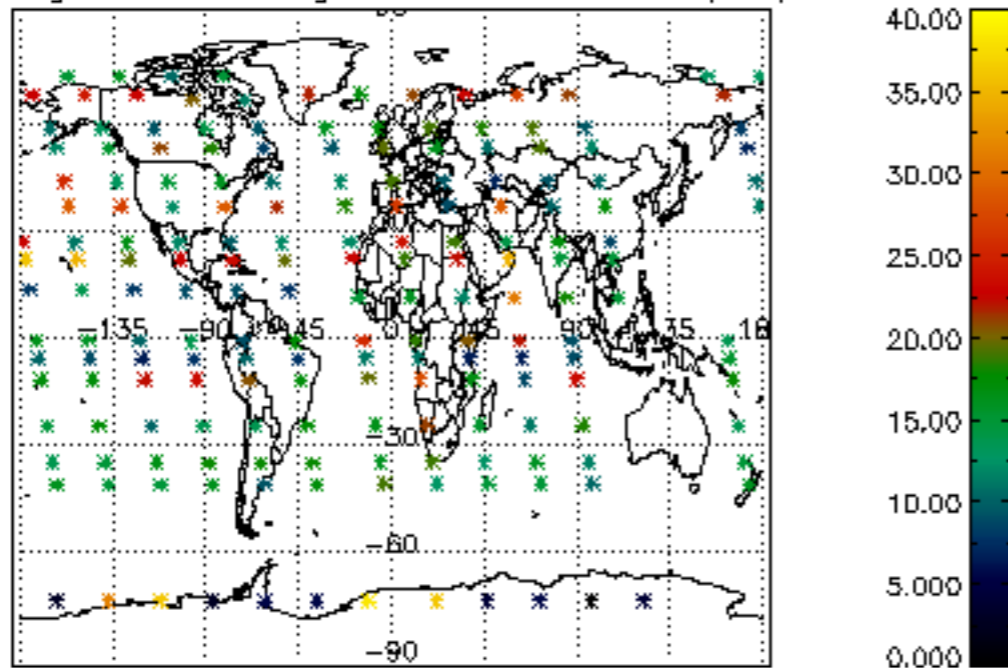
Percentage of cosmic ray hits per profile



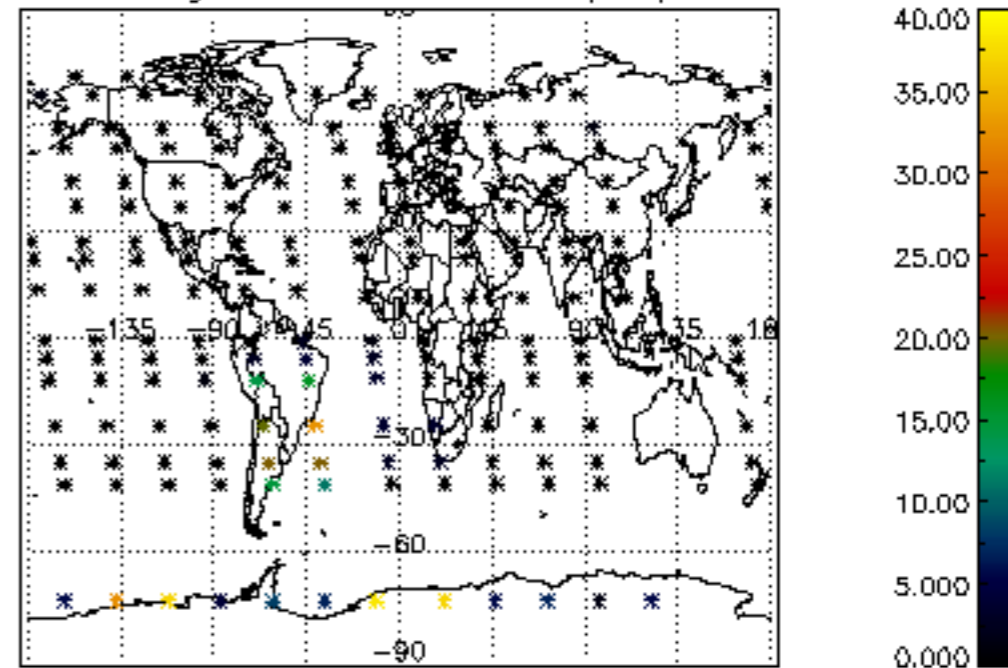
Percentage of datation errors per profile



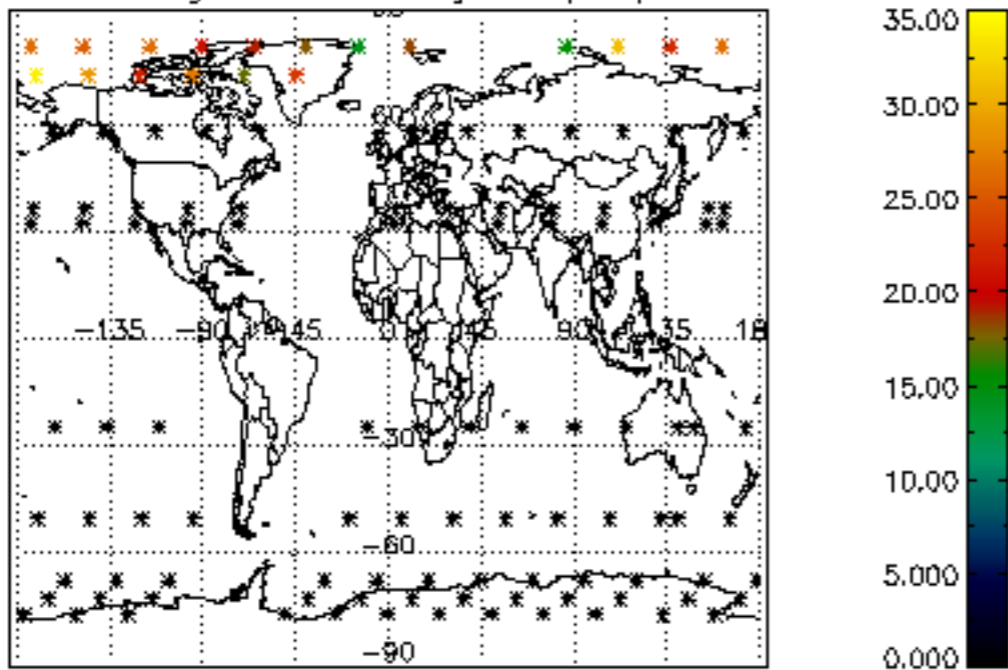
Percentage of star falling outside central band per profile



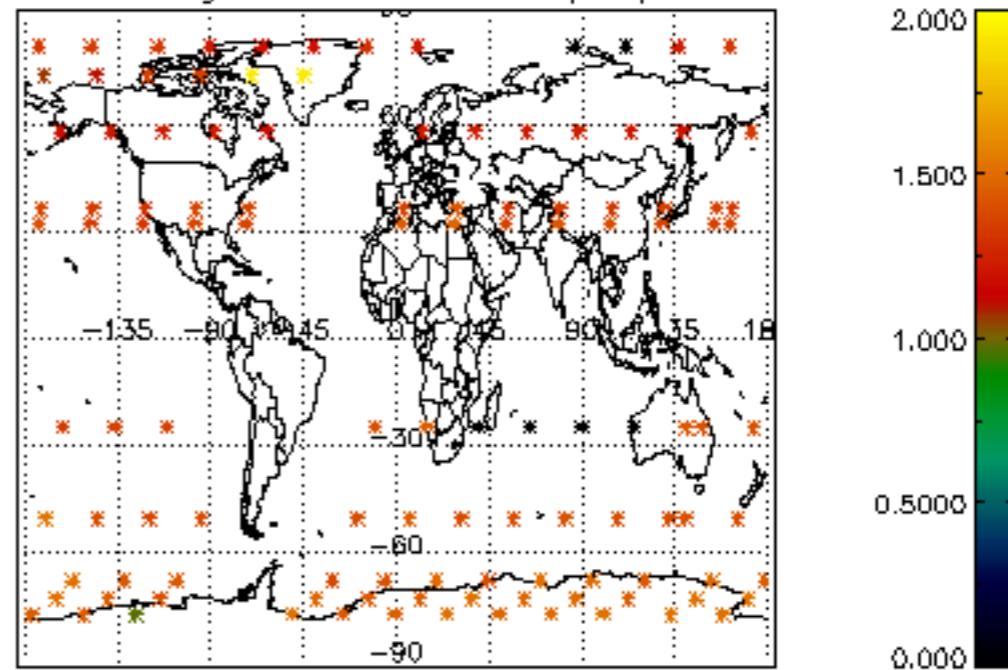
Percentage of saturation errors per profile



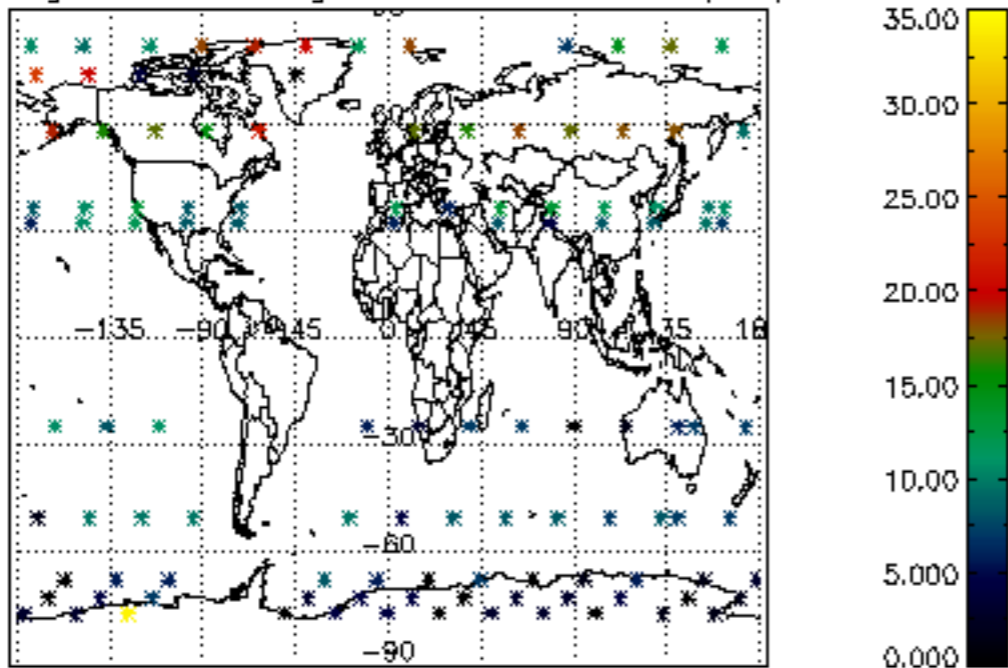
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

