

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

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

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

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

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

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

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

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

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

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

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

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[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	19APR2013 13:15:38
Data source version	GOMOS/6.01
Start time of products	14-04-2003 (14APR2003 00:00:00)
Stop time of products	15-04-2003 (15APR2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	421
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

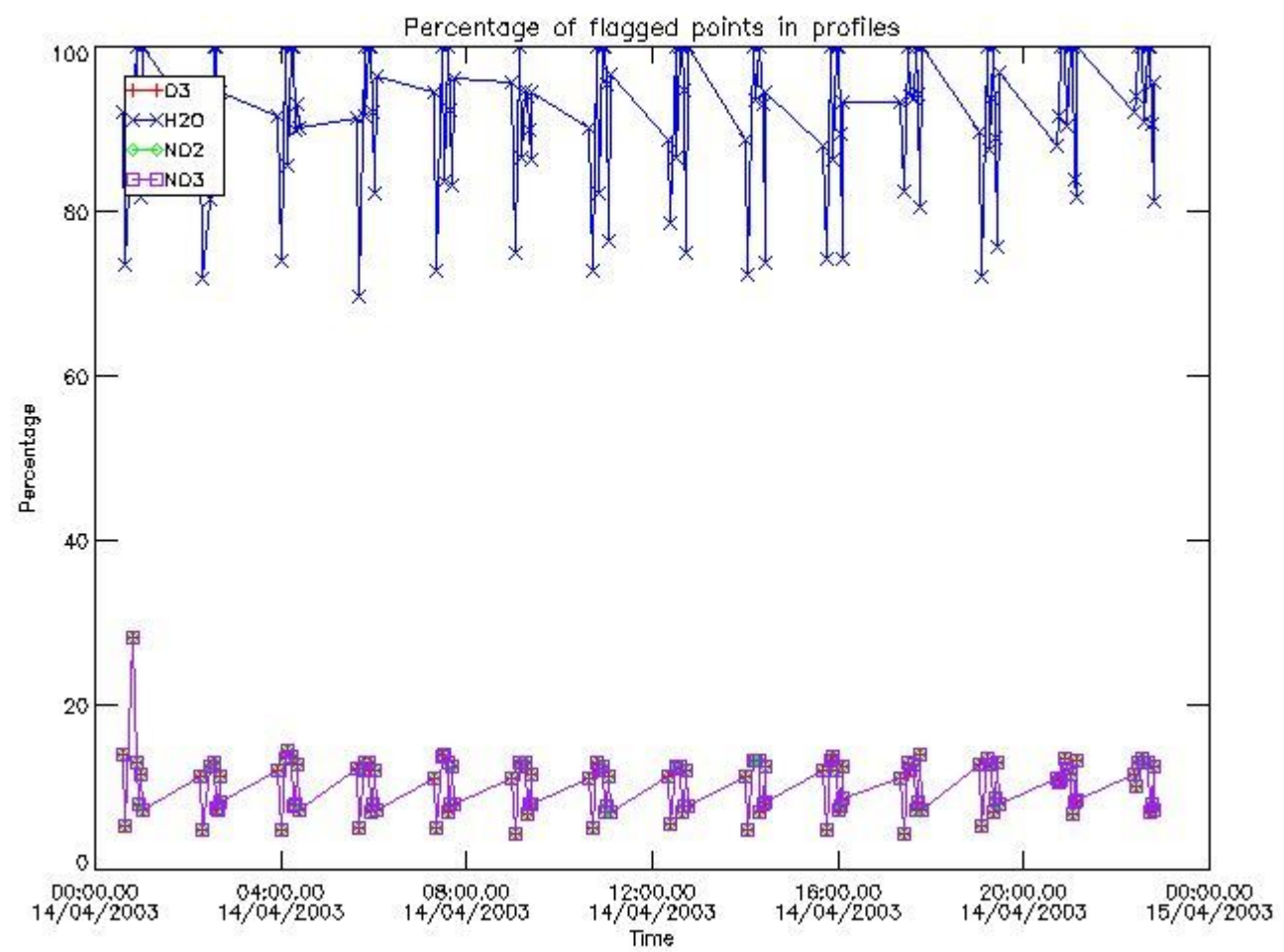
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20030414_000607_000000392015_00288_05853_6808.N1	14-APR-2003 00:06:07	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	5853	No
2	GOM_NL__2PRFIN20030414_000848_000000362015_00288_05853_6809.N1	14-APR-2003 00:08:48	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	5853	No
3	GOM_NL__2PRFIN20030414_001218_000000622015_00288_05853_6810.N1	14-APR-2003 00:12:18	Bright	61.500	130	23Bet Dra	2.7990	5800.0	123	5853	No
4	GOM_NL__2PRFIN20030414_002216_000001062015_00288_05853_6811.N1	14-APR-2003 00:22:16	Bright	105.50	5	3Alp Lyr	0.033000	11000.	211	5853	No
5	GOM_NL__2PRFIN20030414_002538_000000542015_00288_05853_6812.N1	14-APR-2003 00:25:38	Bright	53.500	92	53Eps Cyg	2.5000	4500.0	107	5853	No
6	GOM_NL__2PRFIN20030414_003252_000000522015_00288_05853_6813.N1	14-APR-2003 00:32:52	Twilight	52.000	61	8Eps Peg	2.1000	3900.0	104	5853	No
7	GOM_NL__2PRFIN20030414_003521_000000442015_00288_05853_6814.N1	14-APR-2003 00:35:21	Dark	44.000	162	34Alp Aqr	2.9440	5350.0	88	5853	No
8	GOM_NL__2PRFIN20030414_003856_000000952015_00288_05853_6815.N1	14-APR-2003 00:38:56	Dark	95.000	11	53Alp Aql	0.76500	8000.0	190	5853	No
9	GOM_NL__2PRFIN20030414_004746_000000422015_00288_05853_6816.N1	14-APR-2003 00:47:46	Dark	41.500	31	Alp Gru	1.7340	15200.	83	5853	No
10	GOM_NL__2PRFIN20030414_005237_000000402015_00289_05854_6791.N1	14-APR-2003 00:52:37	Dark	39.500	45	Alp Pav	1.9400	26000.	79	5854	No
11	GOM_NL__2PRFIN20030414_005725_000000642015_00289_05854_6792.N1	14-APR-2003 00:57:25	Dark	63.500	38	20Eps Sgr	1.8360	11000.	127	5854	No
12	GOM_NL__2PRFIN20030414_005948_000000442015_00289_05854_6793.N1	14-APR-2003 00:59:48	Dark	44.000	141	Bet Ara	2.8400	4600.0	88	5854	No
13	GOM_NL__2PRFIN20030414_010126_000000702015_00289_05854_6794.N1	14-APR-2003 01:01:26	Dark	70.000	25	35Lam Sco	1.6200	28000.	140	5854	No
14	GOM_NL__2PRFIN20030414_010433_000000542015_00289_05854_6795.N1	14-APR-2003 01:04:33	Straylight	54.000	4	Alp1Cen	-0.010000	5800.0	108	5854	No
15	GOM_NL__2PRFIN20030414_010945_000000392015_00289_05854_6796.N1	14-APR-2003 01:09:45	Straylight	39.000	64	Gam Cen	2.2000	10600.	78	5854	No
16	GOM_NL__2PRFIN20030414_011141_000000512015_00289_05854_6797.N1	14-APR-2003 01:11:41	Straylight	50.500	54	5The Cen	2.0550	4500.0	101	5854	No
17	GOM_NL__2PRFIN20030414_011333_000000892015_00289_05854_6798.N1	14-APR-2003 01:13:33	Tw_and_stray	89.000	80	7Del Sco	2.3160	30000.	178	5854	No
18	GOM_NL__2PRFIN20030414_011629_000000452015_00289_05854_6799.N1	14-APR-2003 01:16:29	Tw_and_stray	44.500	169	46Gam Hya	2.9910	4700.0	89	5854	No
19	GOM_NL__2PRFIN20030414_011807_000000742015_00289_05854_6800.N1	14-APR-2003 01:18:07	Bright	73.500	122	9Alp2Lib	2.7470	9700.0	147	5854	No
20	GOM_NL__2PRFIN20030414_012012_000000462015_00289_05854_6801.N1	14-APR-2003 01:20:12	Bright	45.500	15	67Alp Vir	0.97600	28000.	91	5854	No
21	GOM_NL__2PRFIN20030414_012316_000000392015_00289_05854_6802.N1	14-APR-2003 01:23:16	Bright	39.000	121	29Gam Vir	2.7400	7200.0	78	5854	No
22	GOM_NL__2PRFIN20030414_012708_000000412015_00289_05854_6803.N1	14-APR-2003 01:27:08	Bright	40.500	138	47Eps Vir	2.8280	4700.0	81	5854	No
23	GOM_NL__2PRFIN20030414_012953_000000362015_00289_05854_6804.N1	14-APR-2003 01:29:53	Bright	35.500	96	68Del Leo	2.5600	9300.0	71	5854	No
24	GOM_NL__2PRFIN20030414_013153_000000562015_00289_05854_6805.N1	14-APR-2003 01:31:53	Bright	56.000	3	16Alp Boo	-0.050000	4250.0	112	5854	No
25	GOM_NL__2PRFIN20030414_013519_000000382015_00289_05854_6806.N1	14-APR-2003 01:35:19	Bright	38.000	152	12Alp2CVn	2.8900	11000.	76	5854	No
26	GOM_NL__2PRFIN20030414_013903_000000372015_00289_05854_6807.N1	14-APR-2003 01:39:03	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	5854	No
27	GOM_NL__2PRFIN20030414_014035_000000402015_00289_05854_6808.N1	14-APR-2003 01:40:35	Bright	40.000	55	79Zet UMa	2.0600	10200.	80	5854	No
28	GOM_NL__2PRFIN20030414_014642_000000402015_00289_05854_6809.N1	14-APR-2003 01:46:42	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	5854	No
29	GOM_NL__2PRFIN20030414_014924_000000362015_00289_05854_6810.N1	14-APR-2003 01:49:24	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	5854	No
30	GOM_NL__2PRFIN20030414_015253_000000652015_00289_05854_6811.N1	14-APR-2003 01:52:53	Bright	65.000	130	23Bet Dra	2.7990	5800.0	130	5854	No
31	GOM_NL__2PRFIN20030414_020251_000001162015_00289_05854_6812.N1	14-APR-2003 02:02:51	Bright	116.00	5	3Alp Lyr	0.033000	11000.	232	5854	No
32	GOM_NL__2PRFIN20030414_020614_000000542015_00289_05854_6813.N1	14-APR-2003 02:06:14	Bright	53.500	92	53Eps Cyg	2.5000	4500.0	107	5854	No
33	GOM_NL__2PRFIN20030414_021329_000000492015_00289_05854_6814.N1	14-APR-2003 02:13:29	Twilight	49.000	61	8Eps Peg	2.1000	3900.0	98	5854	No
34	GOM_NL__2PRFIN20030414_021557_000000452015_00289_05854_6815.N1	14-APR-2003 02:15:57	Dark	45.000	162	34Alp Aqr	2.9440	5350.0	90	5854	No
35	GOM_NL__2PRFIN20030414_021934_000001072015_00289_05854_6816.N1	14-APR-2003 02:19:34	Dark	107.00	11	53Alp Aql	0.76500	8000.0	214	5854	No
36	GOM_NL__2PRFIN20030414_022822_000000412015_00289_05854_6817.N1	14-APR-2003 02:28:22	Dark	41.000	31	Alp Gru	1.7340	15200.	82	5854	No
37	GOM_NL__2PRFIN20030414_023314_000000402015_00290_05855_6792.N1	14-APR-2003 02:33:14	Dark	39.500	45	Alp Pav	1.9400	26000.	79	5855	No
38	GOM_NL__2PRFIN20030414_023502_000000692015_00290_05855_6793.N1	14-APR-2003 02:35:02	Dark	69.000	57	34Sig Sgr	2.0660	26000.	138	5855	No
39	GOM_NL__2PRFIN20030414_023802_000000712015_00290_05855_6794.N1	14-APR-2003 02:38:02	Dark	70.500	38	20Eps Sgr	1.8360	11000.	141	5855	No
40	GOM_NL__2PRFIN20030414_024025_000000452015_00290_05855_6795.N1	14-APR-2003 02:40:25	Dark	45.000	141	Bet Ara	2.8400	4600.0	90	5855	No
41	GOM_NL__2PRFIN20030414_024203_000000632015_00290_05855_6796.N1	14-APR-2003 02:42:03	Dark	63.000	25	35Lam Sco	1.6200	28000.	126	5855	No
42	GOM_NL__2PRFIN20030414_024509_000000442015_00290_05855_6797.N1	14-APR-2003 02:45:09	Straylight	43.500	4	Alp1Cen	-0.010000	5800.0	87	5855	No

397	GOM_NL__2PRFIN20030414_223331_000000382015_00301_05866_6851.N1	14-APR-2003 22:33:31	Dark	38.000	172	Gam Gru	3.0030	13100.	76	5866	No
398	GOM_NL__2PRFIN20030414_223537_000000392015_00301_05866_6852.N1	14-APR-2003 22:35:37	Dark	39.000	31	Alp Gru	1.7340	15200.	78	5866	No
399	GOM_NL__2PRFIN20030414_224031_000000392015_00302_05867_6825.N1	14-APR-2003 22:40:31	Dark	39.000	45	Alp Pav	1.9400	26000.	78	5867	No
400	GOM_NL__2PRFIN20030414_224236_000000722015_00302_05867_6826.N1	14-APR-2003 22:42:36	Dark	72.000	57	34Sig Sgr	2.0660	26000.	144	5867	No
401	GOM_NL__2PRFIN20030414_224532_000000642015_00302_05867_6827.N1	14-APR-2003 22:45:32	Dark	63.500	38	20Eps Sgr	1.8360	11000.	127	5867	No
402	GOM_NL__2PRFIN20030414_224755_000000412015_00302_05867_6828.N1	14-APR-2003 22:47:55	Dark	40.500	43	Alp TrA	1.9100	4250.0	81	5867	No
403	GOM_NL__2PRFIN20030414_224931_000000722015_00302_05867_6829.N1	14-APR-2003 22:49:31	Dark	71.500	25	35Lam Sco	1.6200	28000.	143	5867	No
404	GOM_NL__2PRFIN20030414_225225_000000462015_00302_05867_6830.N1	14-APR-2003 22:52:25	Straylight	46.000	4	Alp1Cen	-0.010000	5800.0	92	5867	No
405	GOM_NL__2PRFIN20030414_225803_000000962015_00302_05867_6831.N1	14-APR-2003 22:58:03	Straylight	96.000	16	21Alp Sco	1.0200	3000.0	192	5867	No
406	GOM_NL__2PRFIN20030414_230128_000000882015_00302_05867_6832.N1	14-APR-2003 23:01:28	Twilight_stray	87.500	80	7Del Sco	2.3160	30000.	175	5867	No
407	GOM_NL__2PRFIN20030414_230445_000000442015_00302_05867_6833.N1	14-APR-2003 23:04:45	Twilight_stray	43.500	106	9Bet Crv	2.6480	5600.0	87	5867	No
408	GOM_NL__2PRFIN20030414_230635_000000412015_00302_05867_6834.N1	14-APR-2003 23:06:35	Bright	41.000	100	4Gam Crv	2.5800	13100.	82	5867	No
409	GOM_NL__2PRFIN20030414_230800_000000472015_00302_05867_6835.N1	14-APR-2003 23:08:00	Bright	46.500	15	67Alp Vir	0.97600	28000.	93	5867	No
410	GOM_NL__2PRFIN20030414_231104_000000392015_00302_05867_6836.N1	14-APR-2003 23:11:04	Bright	38.500	121	29Gam Vir	2.7400	7200.0	77	5867	No
411	GOM_NL__2PRFIN20030414_231453_000000412015_00302_05867_6837.N1	14-APR-2003 23:14:53	Bright	40.500	138	47Eps Vir	2.8280	4700.0	81	5867	No
412	GOM_NL__2PRFIN20030414_231743_000000362015_00302_05867_6838.N1	14-APR-2003 23:17:43	Bright	35.500	96	68Del Leo	2.5600	9300.0	71	5867	No
413	GOM_NL__2PRFIN20030414_231930_000000532015_00302_05867_6839.N1	14-APR-2003 23:19:30	Bright	53.000	3	16Alp Boo	-0.050000	4250.0	106	5867	No
414	GOM_NL__2PRFIN20030414_232303_000000392015_00302_05867_6840.N1	14-APR-2003 23:23:03	Bright	38.500	152	12Alp2CVn	2.8900	11000.	77	5867	No
415	GOM_NL__2PRFIN20030414_232649_000000372015_00302_05867_6841.N1	14-APR-2003 23:26:49	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	5867	No
416	GOM_NL__2PRFIN20030414_232817_000000582015_00302_05867_6842.N1	14-APR-2003 23:28:17	Bright	58.000	55	79Zet UMa	2.0600	10200.	116	5867	No
417	GOM_NL__2PRFIN20030414_233426_000000362015_00302_05867_6843.N1	14-APR-2003 23:34:26	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	5867	No
418	GOM_NL__2PRFIN20030414_233559_000000462015_00302_05867_6844.N1	14-APR-2003 23:35:59	Bright	46.000	119	14Eta Dra	2.7270	4700.0	92	5867	No
419	GOM_NL__2PRFIN20030414_234026_000000602015_00302_05867_6845.N1	14-APR-2003 23:40:26	Bright	60.000	130	23Bet Dra	2.7990	5800.0	120	5867	No
420	GOM_NL__2PRFIN20030414_235031_000001152015_00302_05867_6846.N1	14-APR-2003 23:50:31	Bright	114.50	5	3Alp Lyr	0.033000	11000.	229	5867	No
421	GOM_NL__2PRFIN20030414_235402_000000522015_00302_05867_6847.N1	14-APR-2003 23:54:02	Bright	52.000	92	53Eps Cyg	2.5000	4500.0	104	5867	No

3. Quality information per product

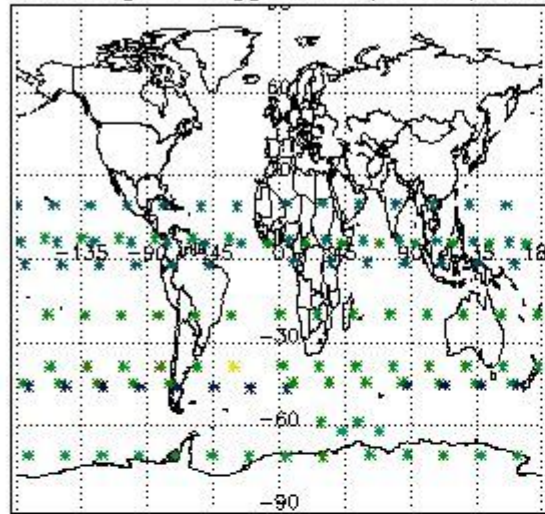
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

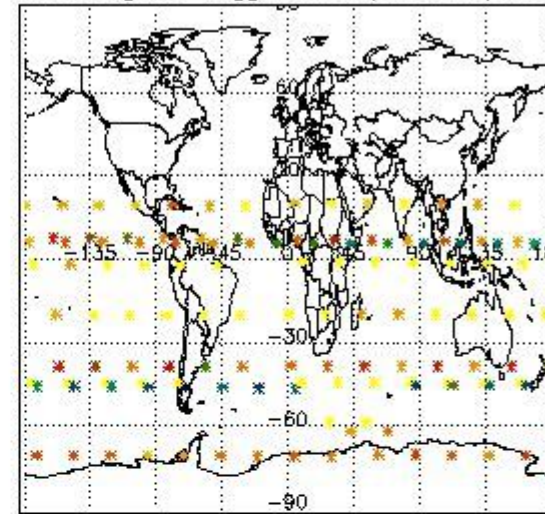


3.2 Plot quality information per product (world map)

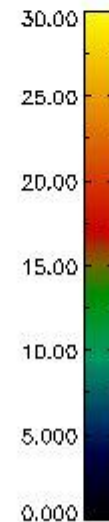
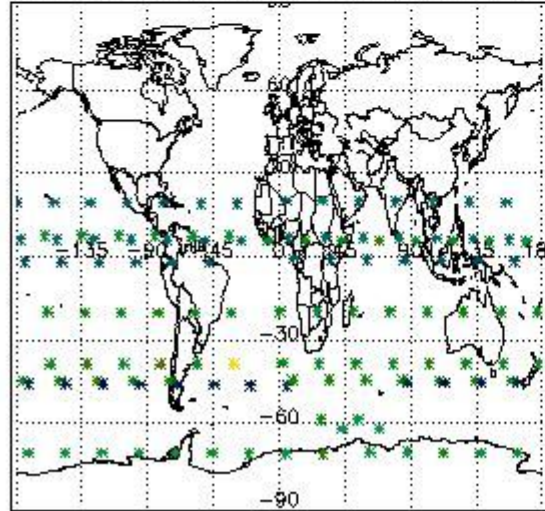
Percentage of flagged data per O3 profile



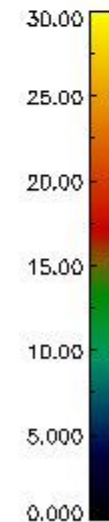
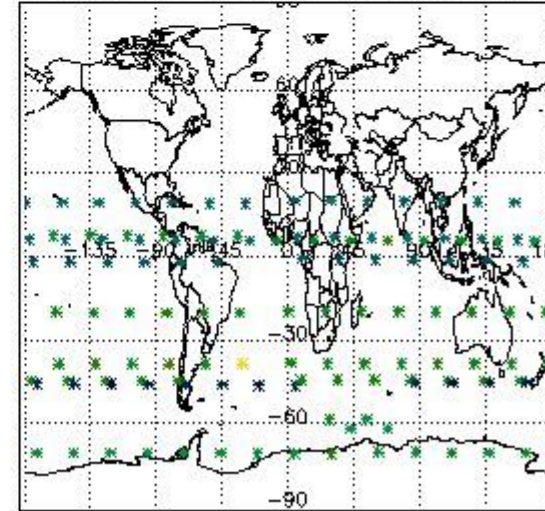
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

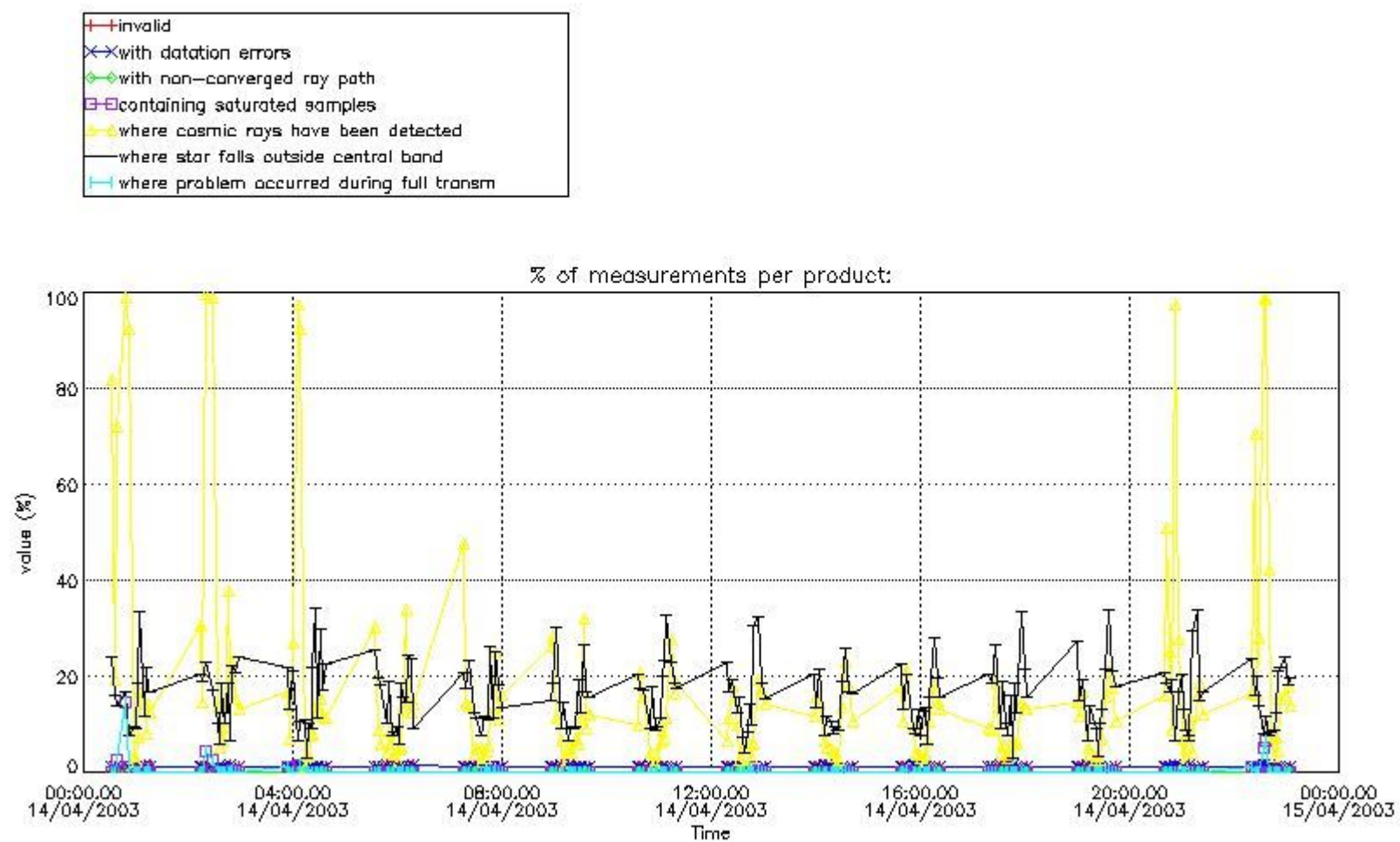


4. Level 1 quality information per product

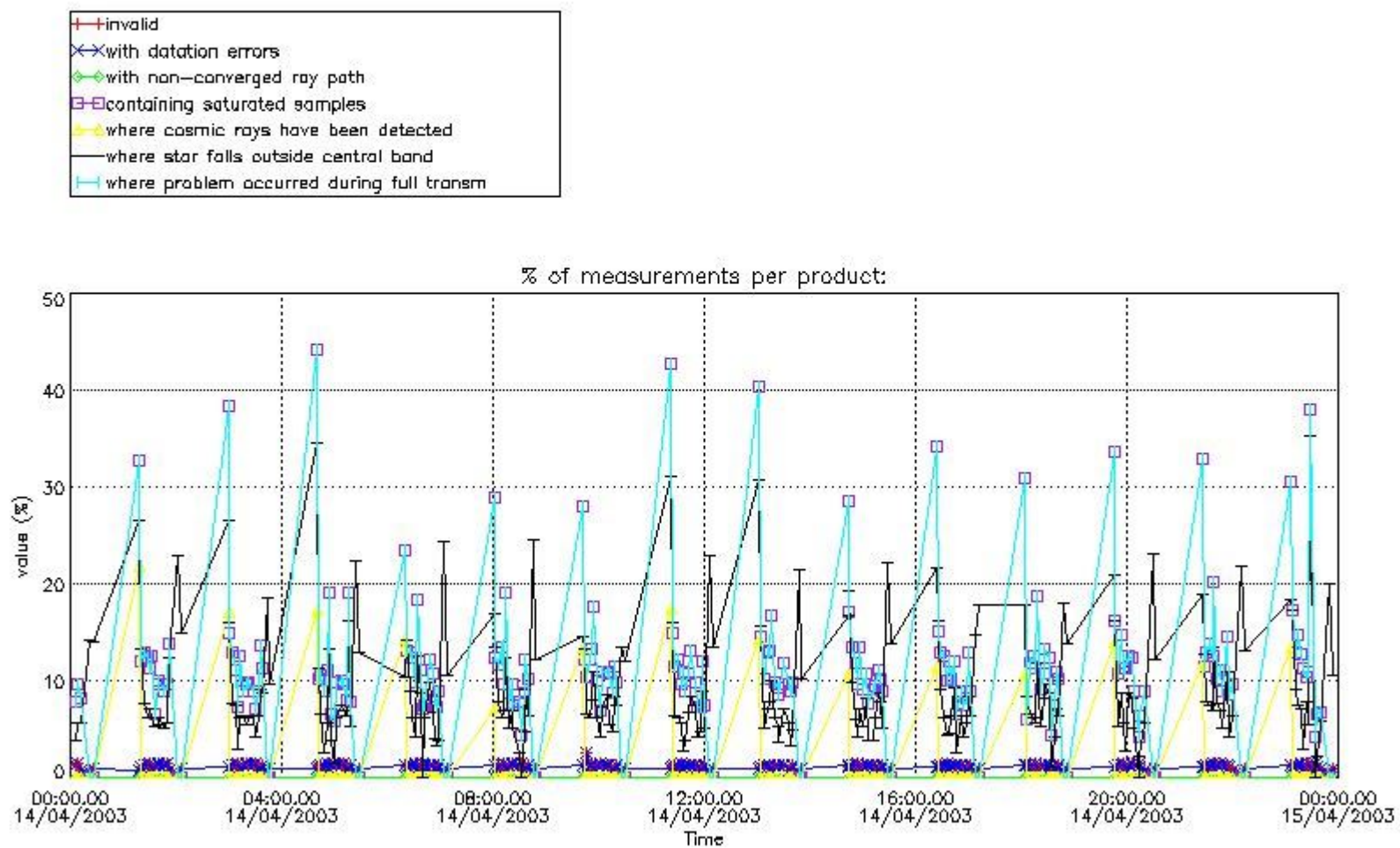
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

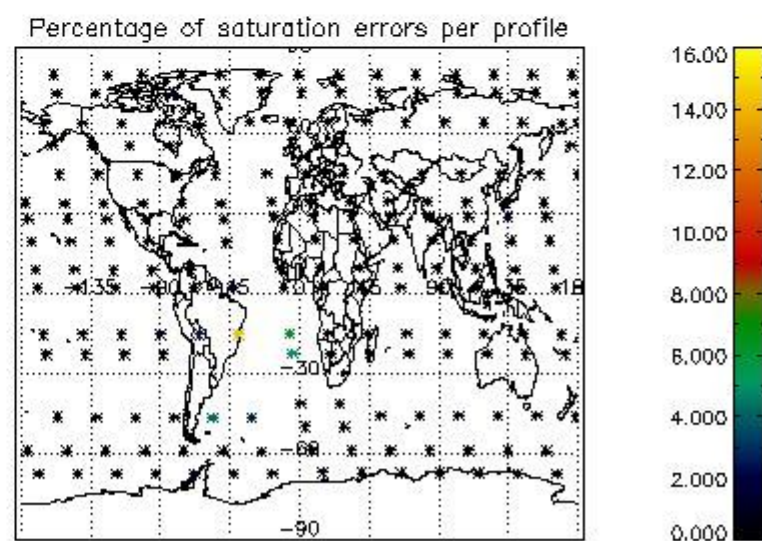
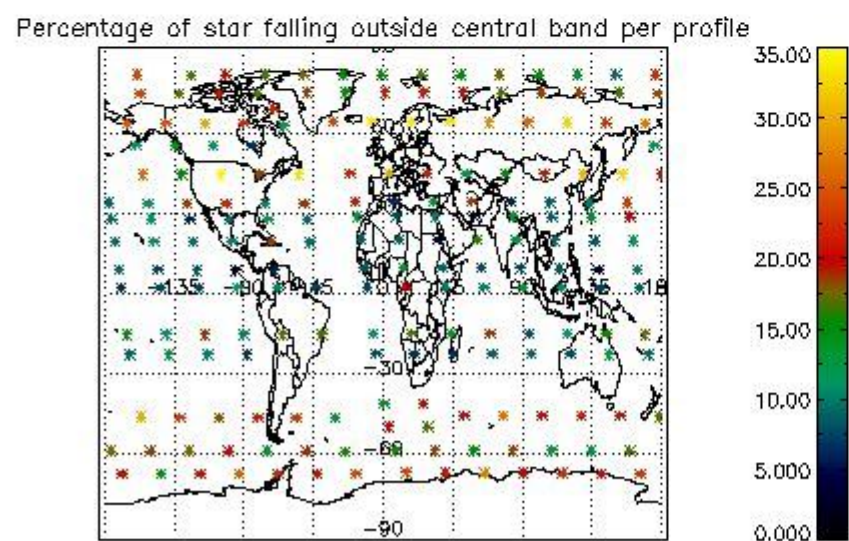
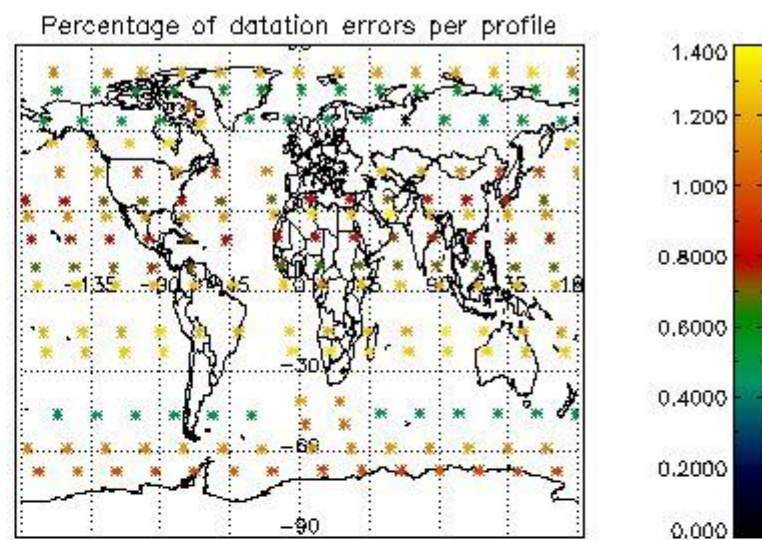
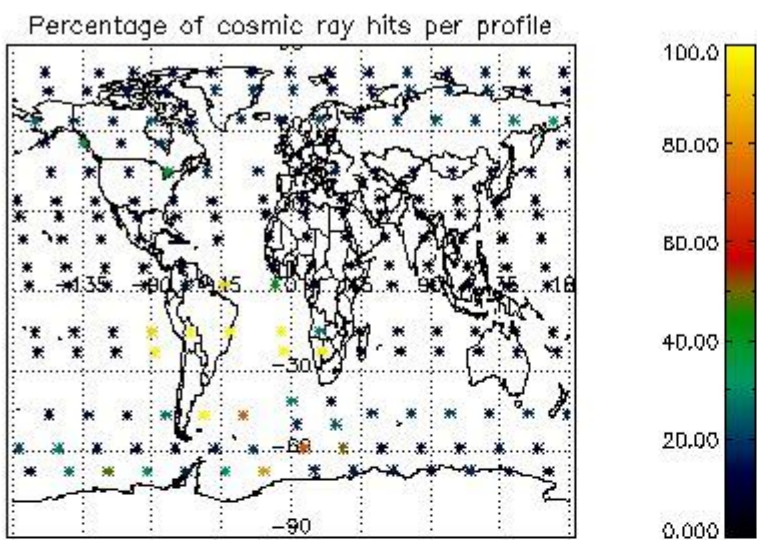


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

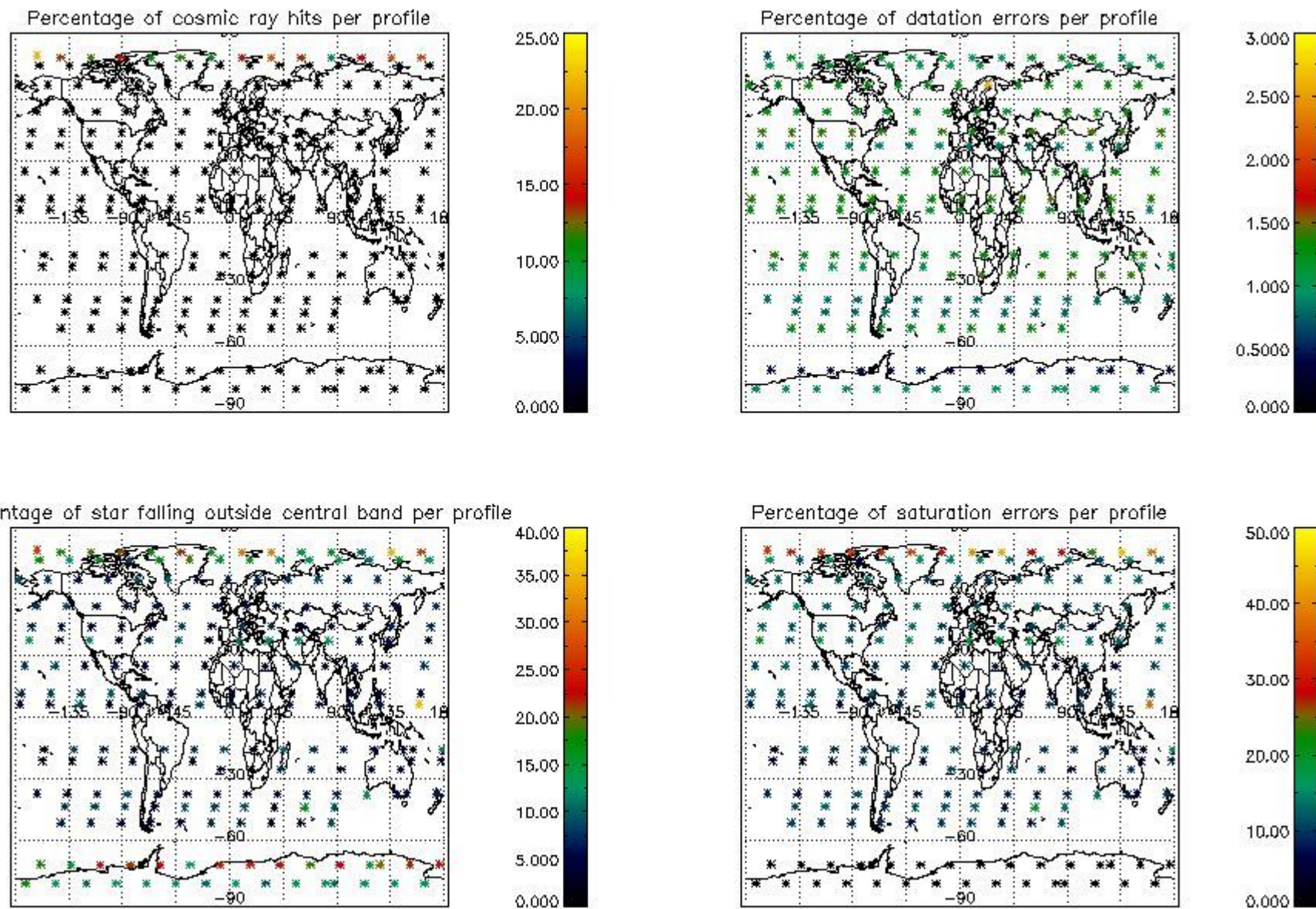


4.2 Plot quality information per product coming from level 1b processing (world map)

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

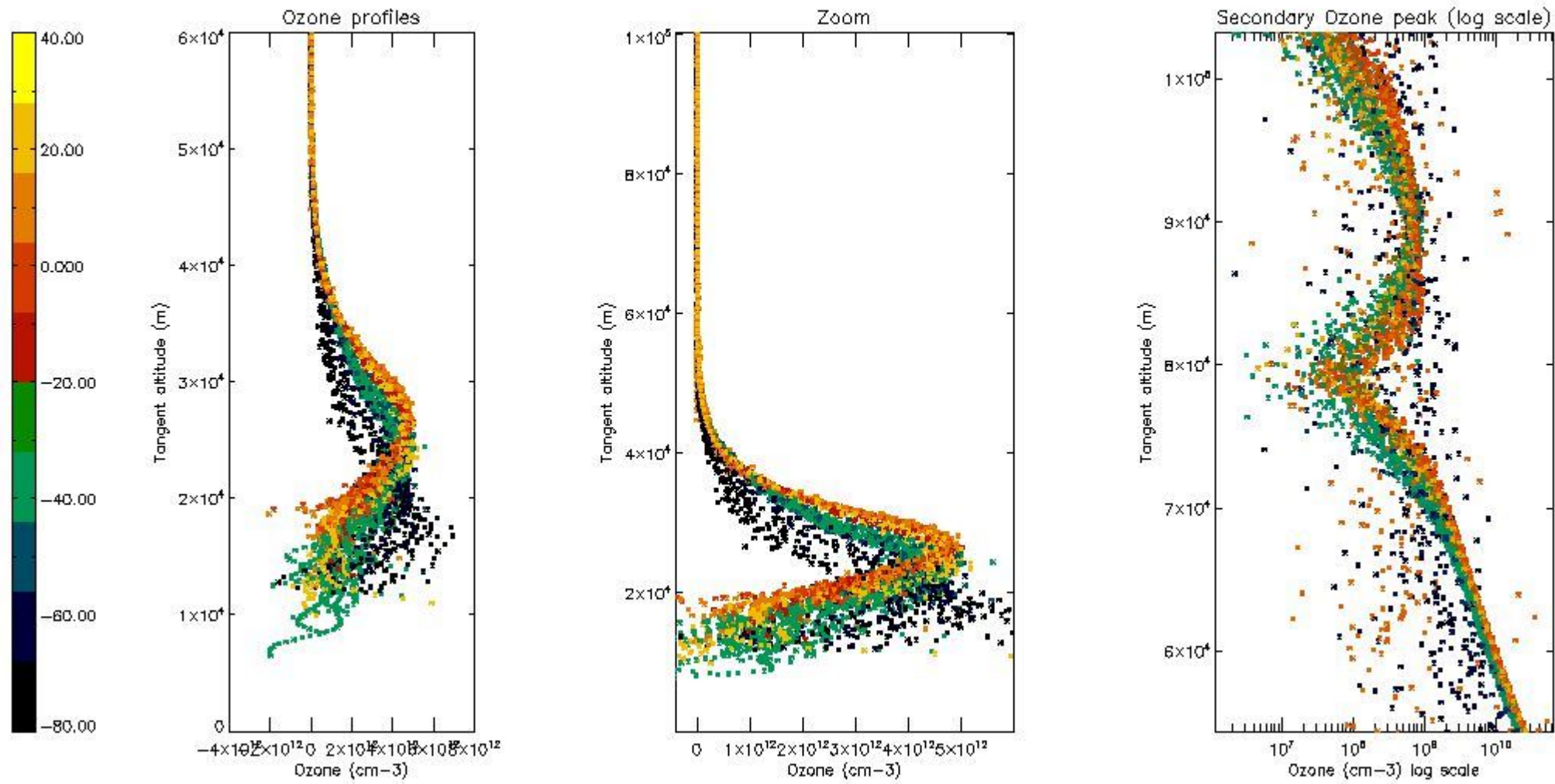
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	20

STD < 10	18
STD < 5	14

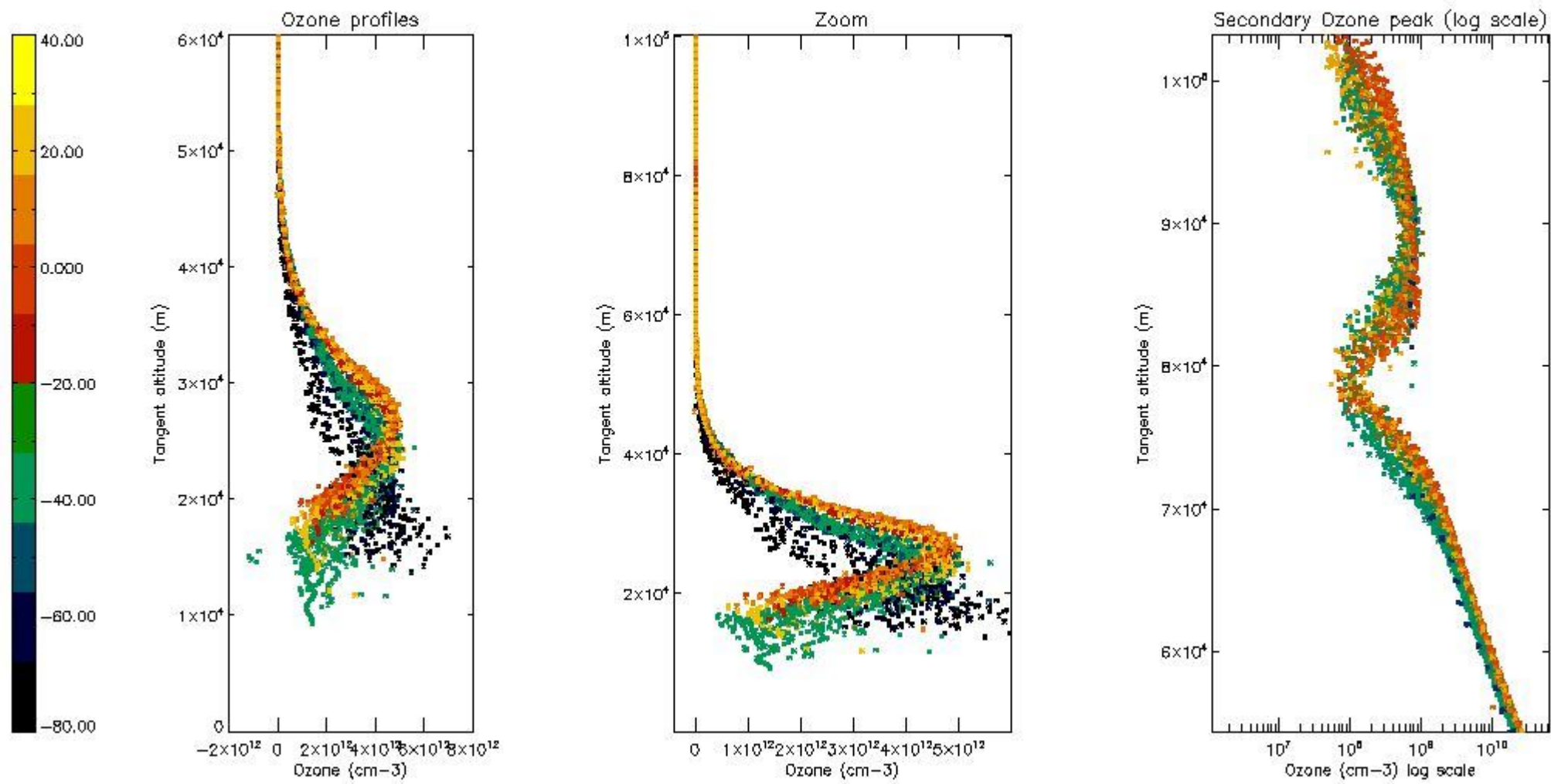
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



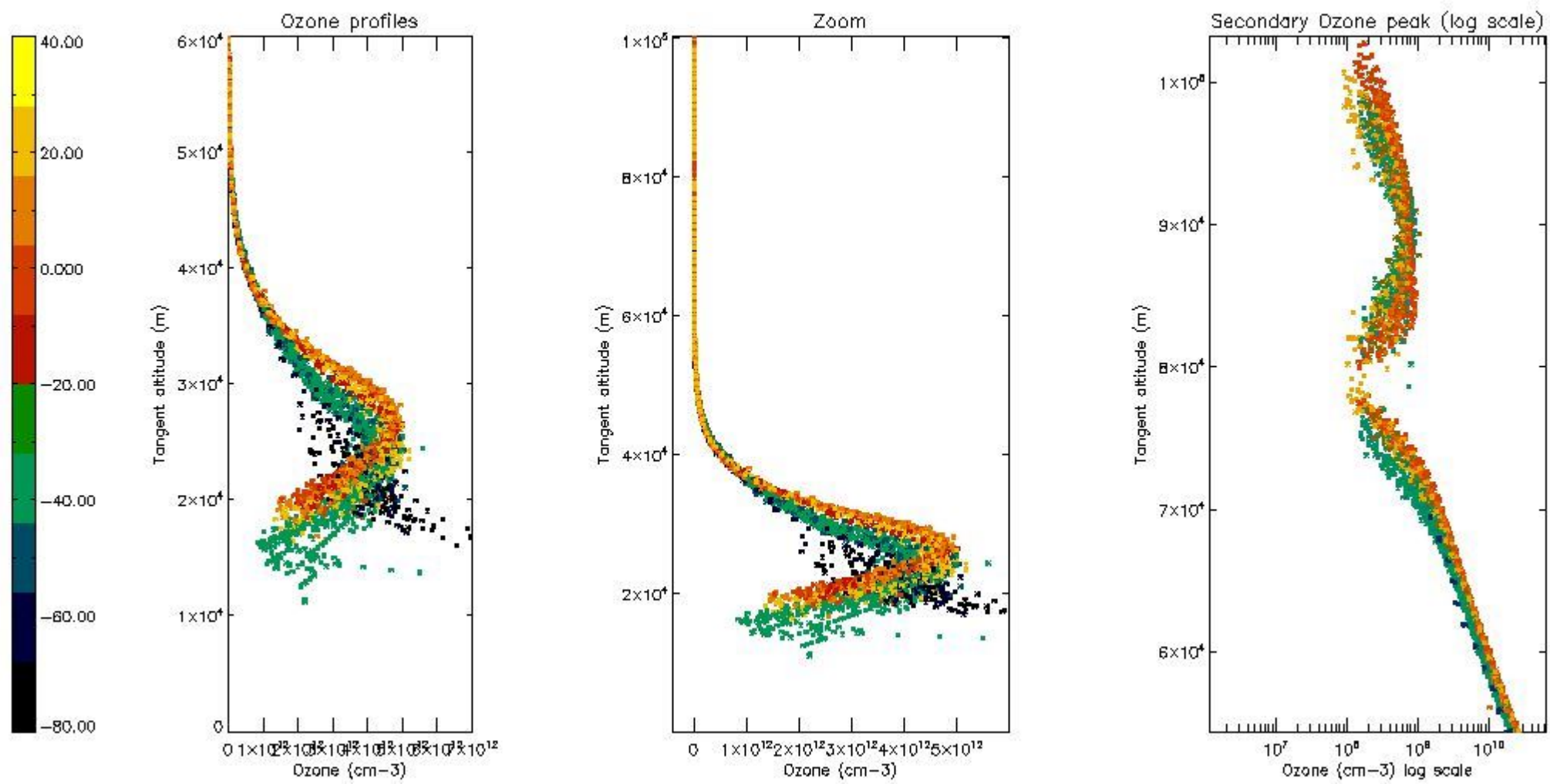
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



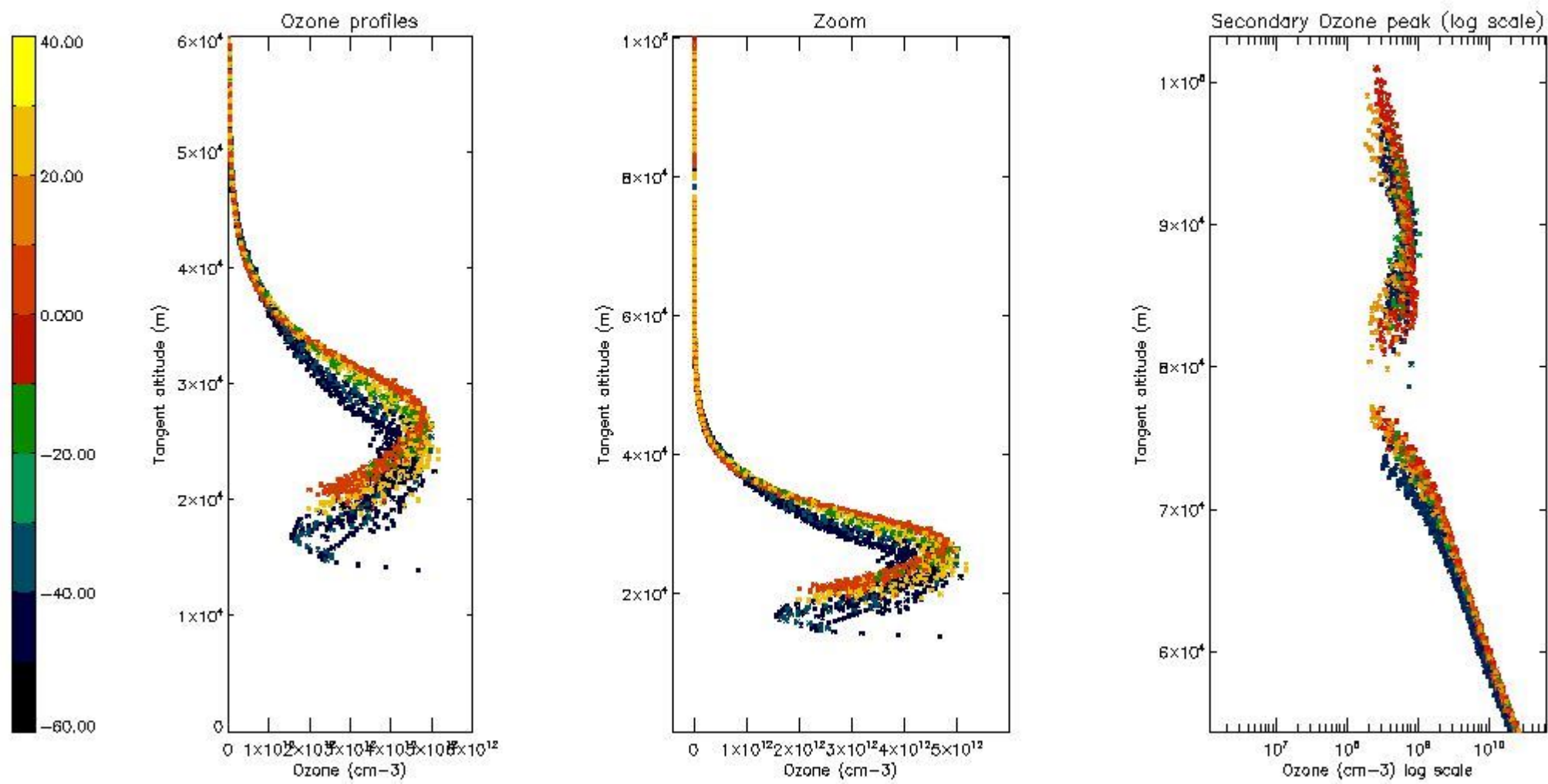
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



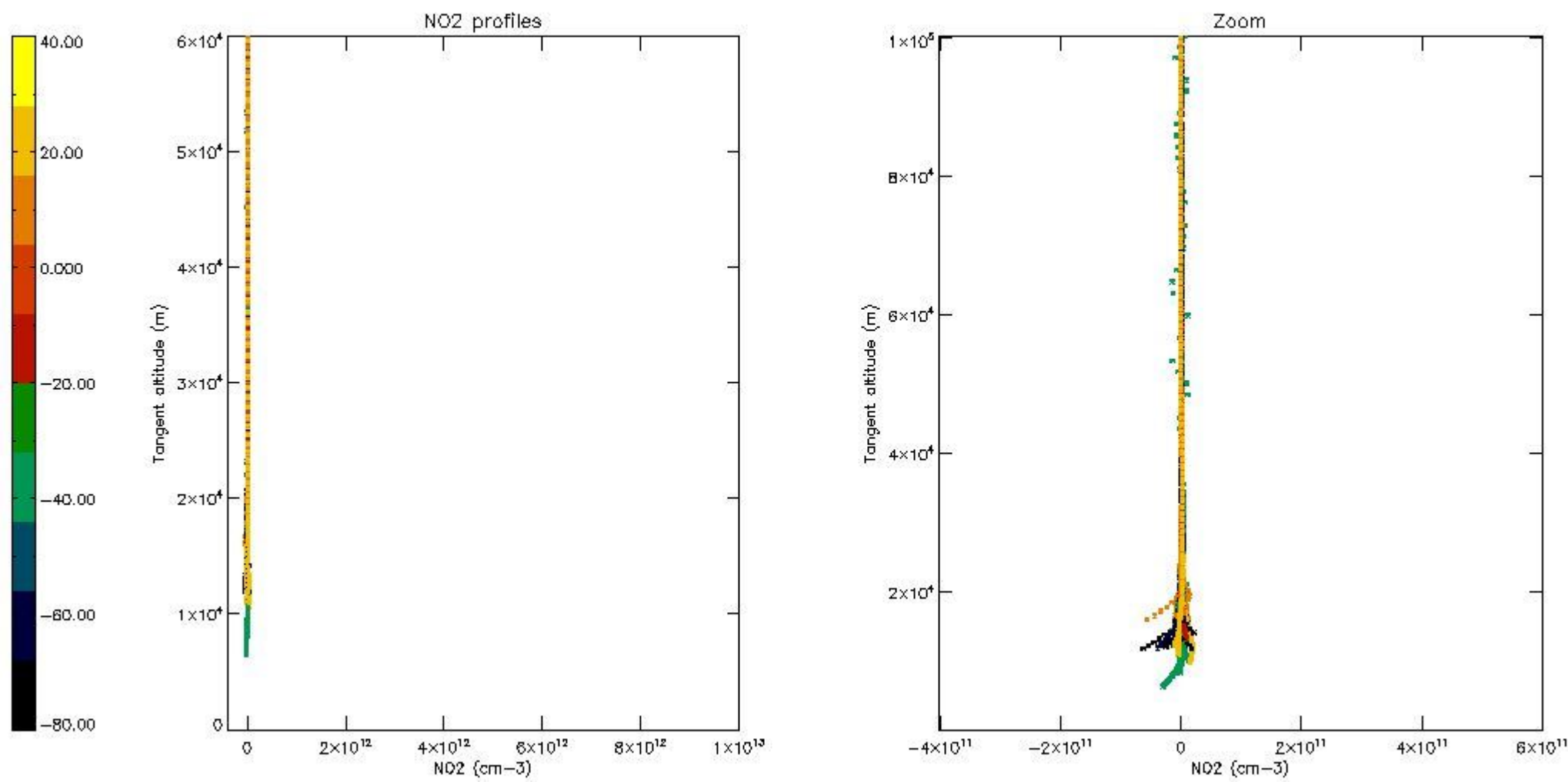
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



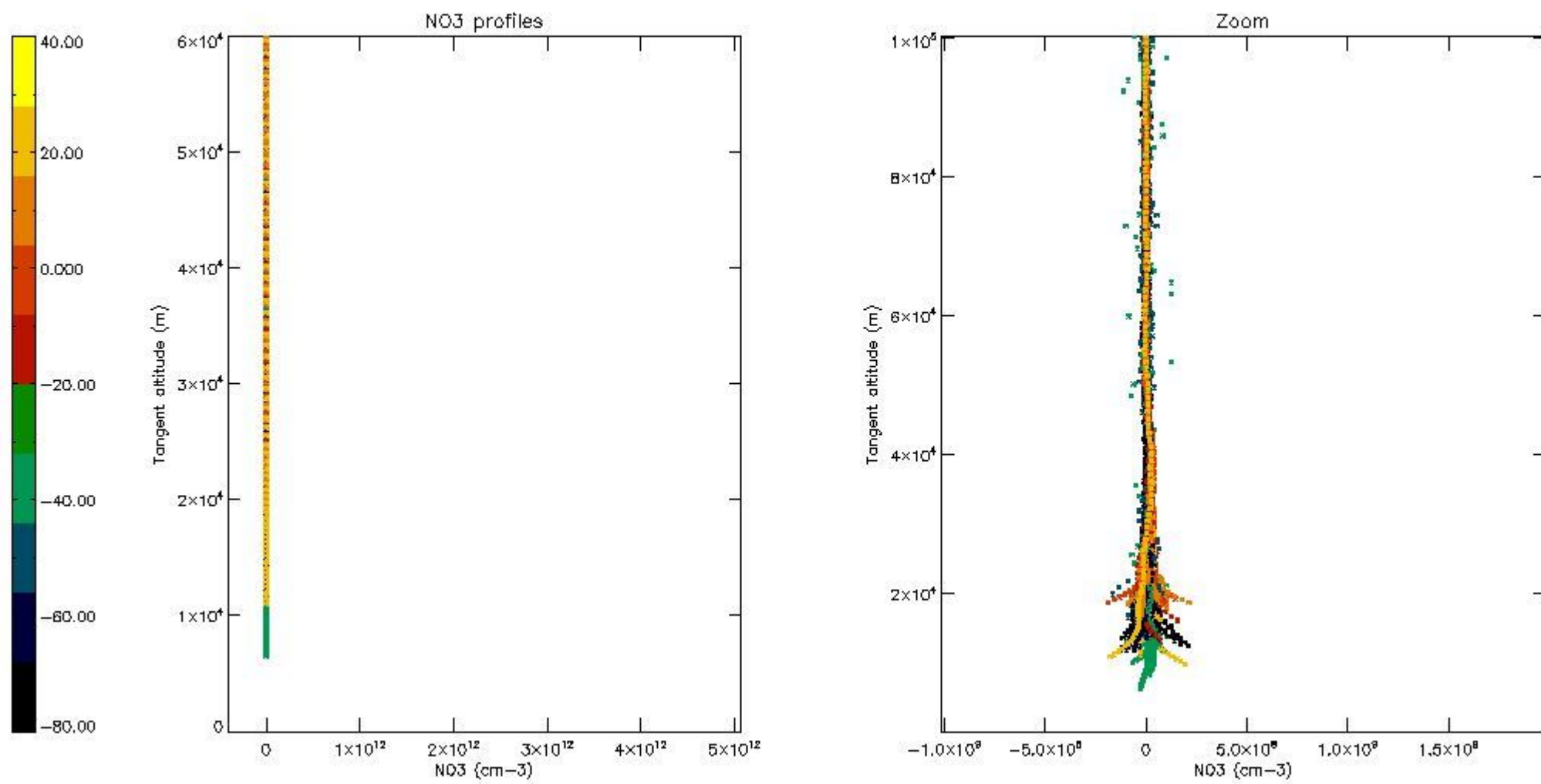
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



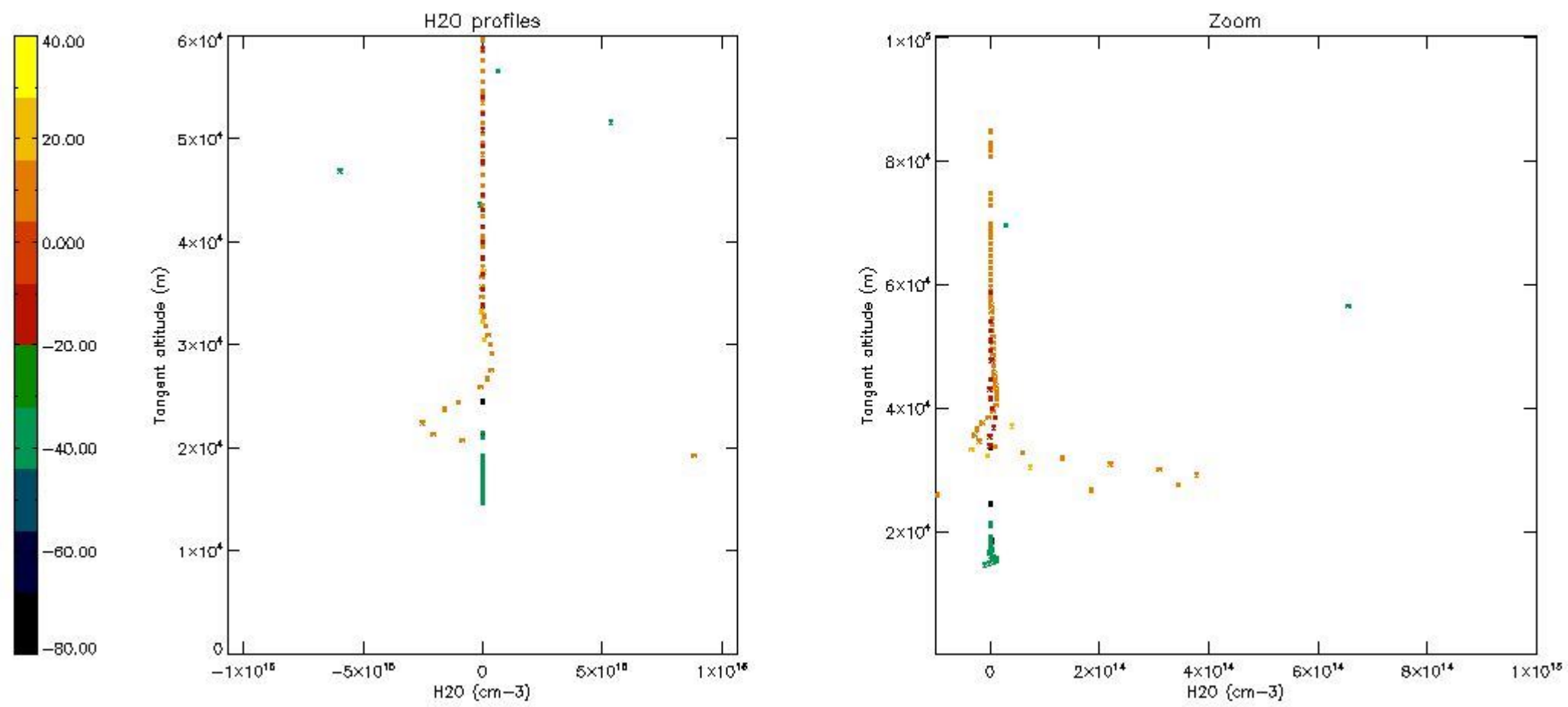
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	14-APR-2003 00:06:07
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	14-APR-2003 00:06:07
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	14-APR-2003 00:06:07

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

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

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

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

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

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

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

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

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

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

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

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[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	19APR2013 13:15:38
Data source version	GOMOS/6.01
Start time of products	14-04-2003 (14APR2003 00:00:00)
Stop time of products	15-04-2003 (15APR2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	421
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

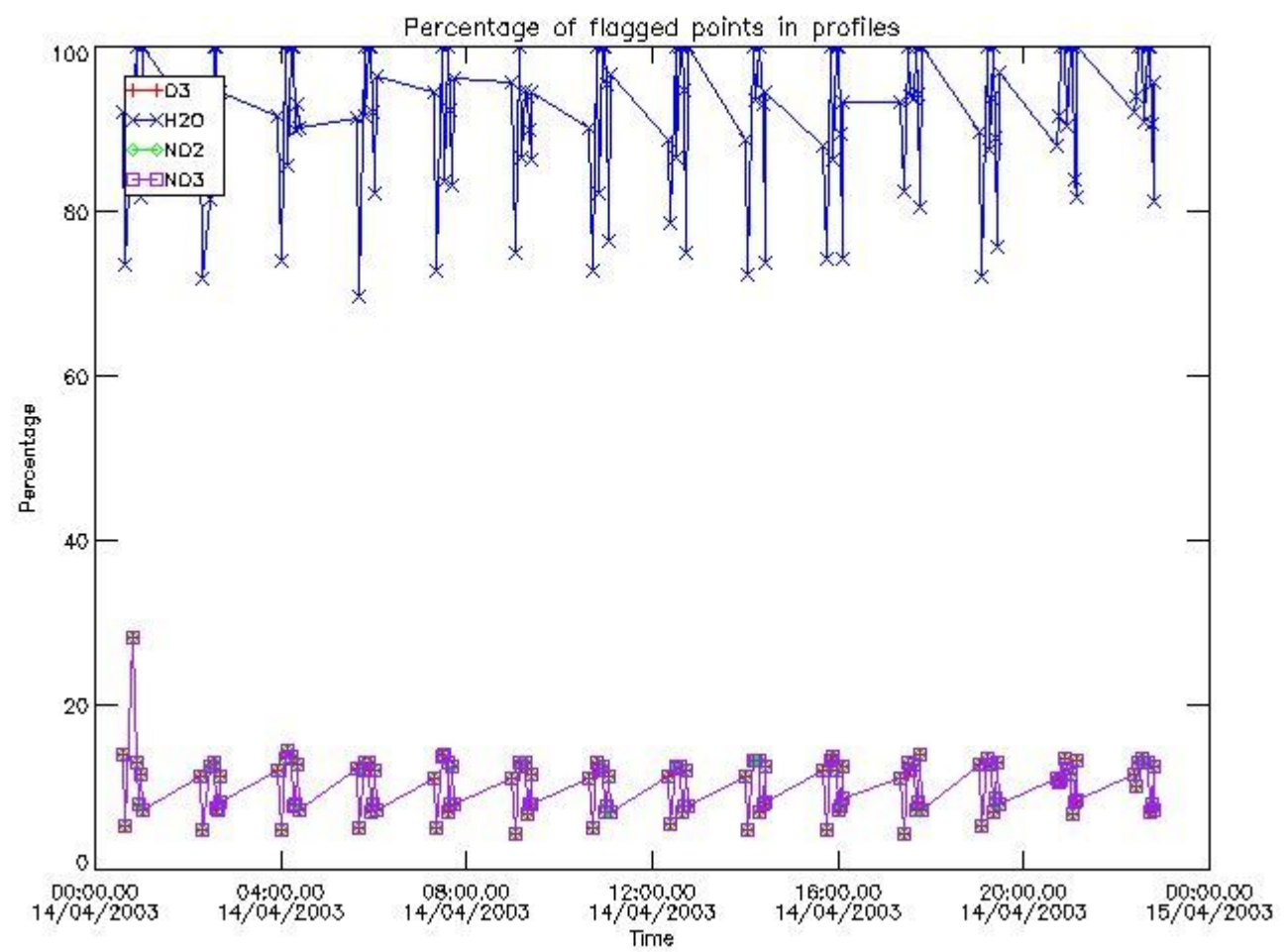
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20030414_000607_000000392015_00288_05853_6808.N1	14-APR-2003 00:06:07	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	5853	No
2	GOM_NL__2PRFIN20030414_000848_000000362015_00288_05853_6809.N1	14-APR-2003 00:08:48	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	5853	No
3	GOM_NL__2PRFIN20030414_001218_000000622015_00288_05853_6810.N1	14-APR-2003 00:12:18	Bright	61.500	130	23Bet Dra	2.7990	5800.0	123	5853	No
4	GOM_NL__2PRFIN20030414_002216_000001062015_00288_05853_6811.N1	14-APR-2003 00:22:16	Bright	105.50	5	3Alp Lyr	0.033000	11000.	211	5853	No
5	GOM_NL__2PRFIN20030414_002538_000000542015_00288_05853_6812.N1	14-APR-2003 00:25:38	Bright	53.500	92	53Eps Cyg	2.5000	4500.0	107	5853	No
6	GOM_NL__2PRFIN20030414_003252_000000522015_00288_05853_6813.N1	14-APR-2003 00:32:52	Twilight	52.000	61	8Eps Peg	2.1000	3900.0	104	5853	No
7	GOM_NL__2PRFIN20030414_003521_000000442015_00288_05853_6814.N1	14-APR-2003 00:35:21	Dark	44.000	162	34Alp Aqr	2.9440	5350.0	88	5853	No
8	GOM_NL__2PRFIN20030414_003856_000000952015_00288_05853_6815.N1	14-APR-2003 00:38:56	Dark	95.000	11	53Alp Aql	0.76500	8000.0	190	5853	No
9	GOM_NL__2PRFIN20030414_004746_000000422015_00288_05853_6816.N1	14-APR-2003 00:47:46	Dark	41.500	31	Alp Gru	1.7340	15200.	83	5853	No
10	GOM_NL__2PRFIN20030414_005237_000000402015_00289_05854_6791.N1	14-APR-2003 00:52:37	Dark	39.500	45	Alp Pav	1.9400	26000.	79	5854	No
11	GOM_NL__2PRFIN20030414_005725_000000642015_00289_05854_6792.N1	14-APR-2003 00:57:25	Dark	63.500	38	20Eps Sgr	1.8360	11000.	127	5854	No
12	GOM_NL__2PRFIN20030414_005948_000000442015_00289_05854_6793.N1	14-APR-2003 00:59:48	Dark	44.000	141	Bet Ara	2.8400	4600.0	88	5854	No
13	GOM_NL__2PRFIN20030414_010126_000000702015_00289_05854_6794.N1	14-APR-2003 01:01:26	Dark	70.000	25	35Lam Sco	1.6200	28000.	140	5854	No
14	GOM_NL__2PRFIN20030414_010433_000000542015_00289_05854_6795.N1	14-APR-2003 01:04:33	Straylight	54.000	4	Alp1Cen	-0.010000	5800.0	108	5854	No
15	GOM_NL__2PRFIN20030414_010945_000000392015_00289_05854_6796.N1	14-APR-2003 01:09:45	Straylight	39.000	64	Gam Cen	2.2000	10600.	78	5854	No
16	GOM_NL__2PRFIN20030414_011141_000000512015_00289_05854_6797.N1	14-APR-2003 01:11:41	Straylight	50.500	54	5The Cen	2.0550	4500.0	101	5854	No
17	GOM_NL__2PRFIN20030414_011333_000000892015_00289_05854_6798.N1	14-APR-2003 01:13:33	Twilight	89.000	80	7Del Sco	2.3160	30000.	178	5854	No
18	GOM_NL__2PRFIN20030414_011629_000000452015_00289_05854_6799.N1	14-APR-2003 01:16:29	Twilight	44.500	169	46Gam Hya	2.9910	4700.0	89	5854	No
19	GOM_NL__2PRFIN20030414_011807_000000742015_00289_05854_6800.N1	14-APR-2003 01:18:07	Bright	73.500	122	9Alp2Lib	2.7470	9700.0	147	5854	No
20	GOM_NL__2PRFIN20030414_012012_000000462015_00289_05854_6801.N1	14-APR-2003 01:20:12	Bright	45.500	15	67Alp Vir	0.97600	28000.	91	5854	No
21	GOM_NL__2PRFIN20030414_012316_000000392015_00289_05854_6802.N1	14-APR-2003 01:23:16	Bright	39.000	121	29Gam Vir	2.7400	7200.0	78	5854	No
22	GOM_NL__2PRFIN20030414_012708_000000412015_00289_05854_6803.N1	14-APR-2003 01:27:08	Bright	40.500	138	47Eps Vir	2.8280	4700.0	81	5854	No
23	GOM_NL__2PRFIN20030414_012953_000000362015_00289_05854_6804.N1	14-APR-2003 01:29:53	Bright	35.500	96	68Del Leo	2.5600	9300.0	71	5854	No
24	GOM_NL__2PRFIN20030414_013153_000000562015_00289_05854_6805.N1	14-APR-2003 01:31:53	Bright	56.000	3	16Alp Boo	-0.050000	4250.0	112	5854	No
25	GOM_NL__2PRFIN20030414_013519_000000382015_00289_05854_6806.N1	14-APR-2003 01:35:19	Bright	38.000	152	12Alp2CVn	2.8900	11000.	76	5854	No
26	GOM_NL__2PRFIN20030414_013903_000000372015_00289_05854_6807.N1	14-APR-2003 01:39:03	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	5854	No
27	GOM_NL__2PRFIN20030414_014035_000000402015_00289_05854_6808.N1	14-APR-2003 01:40:35	Bright	40.000	55	79Zet UMa	2.0600	10200.	80	5854	No
28	GOM_NL__2PRFIN20030414_014642_000000402015_00289_05854_6809.N1	14-APR-2003 01:46:42	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	5854	No
29	GOM_NL__2PRFIN20030414_014924_000000362015_00289_05854_6810.N1	14-APR-2003 01:49:24	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	5854	No
30	GOM_NL__2PRFIN20030414_015253_000000652015_00289_05854_6811.N1	14-APR-2003 01:52:53	Bright	65.000	130	23Bet Dra	2.7990	5800.0	130	5854	No
31	GOM_NL__2PRFIN20030414_020251_000001162015_00289_05854_6812.N1	14-APR-2003 02:02:51	Bright	116.00	5	3Alp Lyr	0.033000	11000.	232	5854	No
32	GOM_NL__2PRFIN20030414_020614_000000542015_00289_05854_6813.N1	14-APR-2003 02:06:14	Bright	53.500	92	53Eps Cyg	2.5000	4500.0	107	5854	No
33	GOM_NL__2PRFIN20030414_021329_000000492015_00289_05854_6814.N1	14-APR-2003 02:13:29	Twilight	49.000	61	8Eps Peg	2.1000	3900.0	98	5854	No
34	GOM_NL__2PRFIN20030414_021557_000000452015_00289_05854_6815.N1	14-APR-2003 02:15:57	Dark	45.000	162	34Alp Aqr	2.9440	5350.0	90	5854	No
35	GOM_NL__2PRFIN20030414_021934_000001072015_00289_05854_6816.N1	14-APR-2003 02:19:34	Dark	107.00	11	53Alp Aql	0.76500	8000.0	214	5854	No
36	GOM_NL__2PRFIN20030414_022822_000000412015_00289_05854_6817.N1	14-APR-2003 02:28:22	Dark	41.000	31	Alp Gru	1.7340	15200.	82	5854	No
37	GOM_NL__2PRFIN20030414_023314_000000402015_00290_05855_6792.N1	14-APR-2003 02:33:14	Dark	39.500	45	Alp Pav	1.9400	26000.	79	5855	No
38	GOM_NL__2PRFIN20030414_023502_000000692015_00290_05855_6793.N1	14-APR-2003 02:35:02	Dark	69.000	57	34Sig Sgr	2.0660	26000.	138	5855	No
39	GOM_NL__2PRFIN20030414_023802_000000712015_00290_05855_6794.N1	14-APR-2003 02:38:02	Dark	70.500	38	20Eps Sgr	1.8360	11000.	141	5855	No
40	GOM_NL__2PRFIN20030414_024025_000000452015_00290_05855_6795.N1	14-APR-2003 02:40:25	Dark	45.000	141	Bet Ara	2.8400	4600.0	90	5855	No
41	GOM_NL__2PRFIN20030414_024203_000000632015_00290_05855_6796.N1	14-APR-2003 02:42:03	Dark	63.000	25	35Lam Sco	1.6200	28000.	126	5855	No
42	GOM_NL__2PRFIN20030414_024509_000000442015_00290_05855_6797.N1	14-APR-2003 02:45:09	Straylight	43.500	4	Alp1Cen	-0.010000	5800.0	87	5855	No

397	GOM_NL__2PRFIN20030414_223331_000000382015_00301_05866_6851.N1	14-APR-2003 22:33:31	Dark	38.000	172	Gam Gru	3.0030	13100.	76	5866	No
398	GOM_NL__2PRFIN20030414_223537_000000392015_00301_05866_6852.N1	14-APR-2003 22:35:37	Dark	39.000	31	Alp Gru	1.7340	15200.	78	5866	No
399	GOM_NL__2PRFIN20030414_224031_000000392015_00302_05867_6825.N1	14-APR-2003 22:40:31	Dark	39.000	45	Alp Pav	1.9400	26000.	78	5867	No
400	GOM_NL__2PRFIN20030414_224236_000000722015_00302_05867_6826.N1	14-APR-2003 22:42:36	Dark	72.000	57	34Sig Sgr	2.0660	26000.	144	5867	No
401	GOM_NL__2PRFIN20030414_224532_000000642015_00302_05867_6827.N1	14-APR-2003 22:45:32	Dark	63.500	38	20Eps Sgr	1.8360	11000.	127	5867	No
402	GOM_NL__2PRFIN20030414_224755_000000412015_00302_05867_6828.N1	14-APR-2003 22:47:55	Dark	40.500	43	Alp TrA	1.9100	4250.0	81	5867	No
403	GOM_NL__2PRFIN20030414_224931_000000722015_00302_05867_6829.N1	14-APR-2003 22:49:31	Dark	71.500	25	35Lam Sco	1.6200	28000.	143	5867	No
404	GOM_NL__2PRFIN20030414_225225_000000462015_00302_05867_6830.N1	14-APR-2003 22:52:25	Straylight	46.000	4	Alp1Cen	-0.010000	5800.0	92	5867	No
405	GOM_NL__2PRFIN20030414_225803_000000962015_00302_05867_6831.N1	14-APR-2003 22:58:03	Straylight	96.000	16	21Alp Sco	1.0200	3000.0	192	5867	No
406	GOM_NL__2PRFIN20030414_230128_000000882015_00302_05867_6832.N1	14-APR-2003 23:01:28	Twilight_stray	87.500	80	7Del Sco	2.3160	30000.	175	5867	No
407	GOM_NL__2PRFIN20030414_230445_000000442015_00302_05867_6833.N1	14-APR-2003 23:04:45	Twilight_stray	43.500	106	9Bet Crv	2.6480	5600.0	87	5867	No
408	GOM_NL__2PRFIN20030414_230635_000000412015_00302_05867_6834.N1	14-APR-2003 23:06:35	Bright	41.000	100	4Gam Crv	2.5800	13100.	82	5867	No
409	GOM_NL__2PRFIN20030414_230800_000000472015_00302_05867_6835.N1	14-APR-2003 23:08:00	Bright	46.500	15	67Alp Vir	0.97600	28000.	93	5867	No
410	GOM_NL__2PRFIN20030414_231104_000000392015_00302_05867_6836.N1	14-APR-2003 23:11:04	Bright	38.500	121	29Gam Vir	2.7400	7200.0	77	5867	No
411	GOM_NL__2PRFIN20030414_231453_000000412015_00302_05867_6837.N1	14-APR-2003 23:14:53	Bright	40.500	138	47Eps Vir	2.8280	4700.0	81	5867	No
412	GOM_NL__2PRFIN20030414_231743_000000362015_00302_05867_6838.N1	14-APR-2003 23:17:43	Bright	35.500	96	68Del Leo	2.5600	9300.0	71	5867	No
413	GOM_NL__2PRFIN20030414_231930_000000532015_00302_05867_6839.N1	14-APR-2003 23:19:30	Bright	53.000	3	16Alp Boo	-0.050000	4250.0	106	5867	No
414	GOM_NL__2PRFIN20030414_232303_000000392015_00302_05867_6840.N1	14-APR-2003 23:23:03	Bright	38.500	152	12Alp2CVn	2.8900	11000.	77	5867	No
415	GOM_NL__2PRFIN20030414_232649_000000372015_00302_05867_6841.N1	14-APR-2003 23:26:49	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	5867	No
416	GOM_NL__2PRFIN20030414_232817_000000582015_00302_05867_6842.N1	14-APR-2003 23:28:17	Bright	58.000	55	79Zet UMa	2.0600	10200.	116	5867	No
417	GOM_NL__2PRFIN20030414_233426_000000362015_00302_05867_6843.N1	14-APR-2003 23:34:26	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	5867	No
418	GOM_NL__2PRFIN20030414_233559_000000462015_00302_05867_6844.N1	14-APR-2003 23:35:59	Bright	46.000	119	14Eta Dra	2.7270	4700.0	92	5867	No
419	GOM_NL__2PRFIN20030414_234026_000000602015_00302_05867_6845.N1	14-APR-2003 23:40:26	Bright	60.000	130	23Bet Dra	2.7990	5800.0	120	5867	No
420	GOM_NL__2PRFIN20030414_235031_000001152015_00302_05867_6846.N1	14-APR-2003 23:50:31	Bright	114.50	5	3Alp Lyr	0.033000	11000.	229	5867	No
421	GOM_NL__2PRFIN20030414_235402_000000522015_00302_05867_6847.N1	14-APR-2003 23:54:02	Bright	52.000	92	53Eps Cyg	2.5000	4500.0	104	5867	No

3. Quality information per product

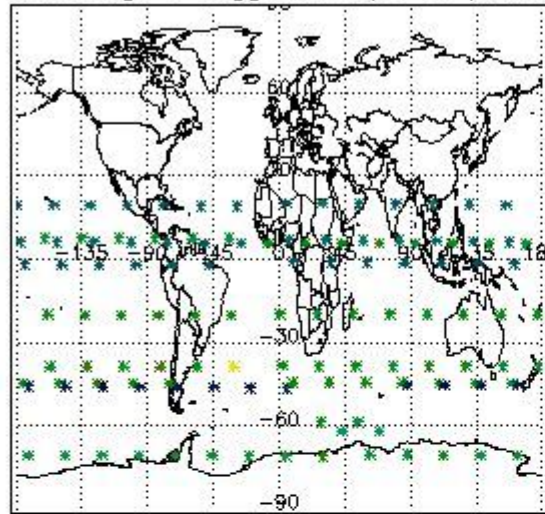
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

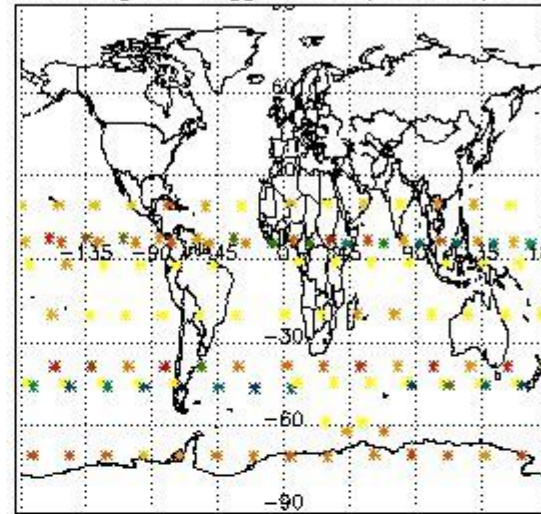


3.2 Plot quality information per product (world map)

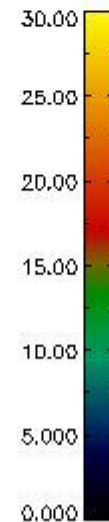
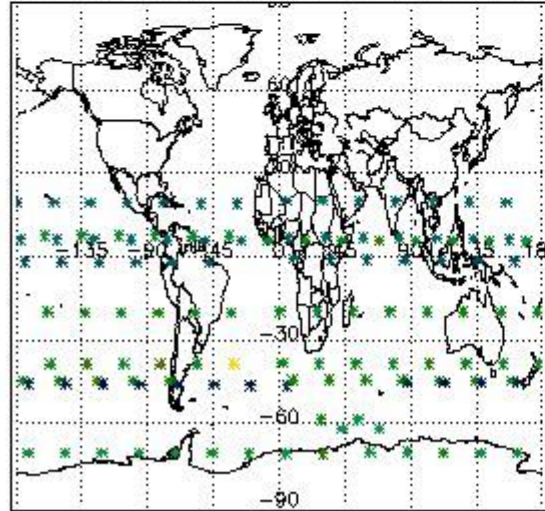
Percentage of flagged data per O3 profile



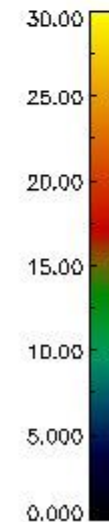
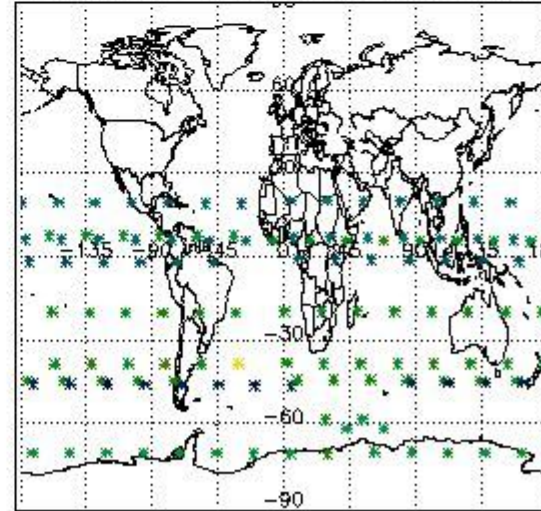
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

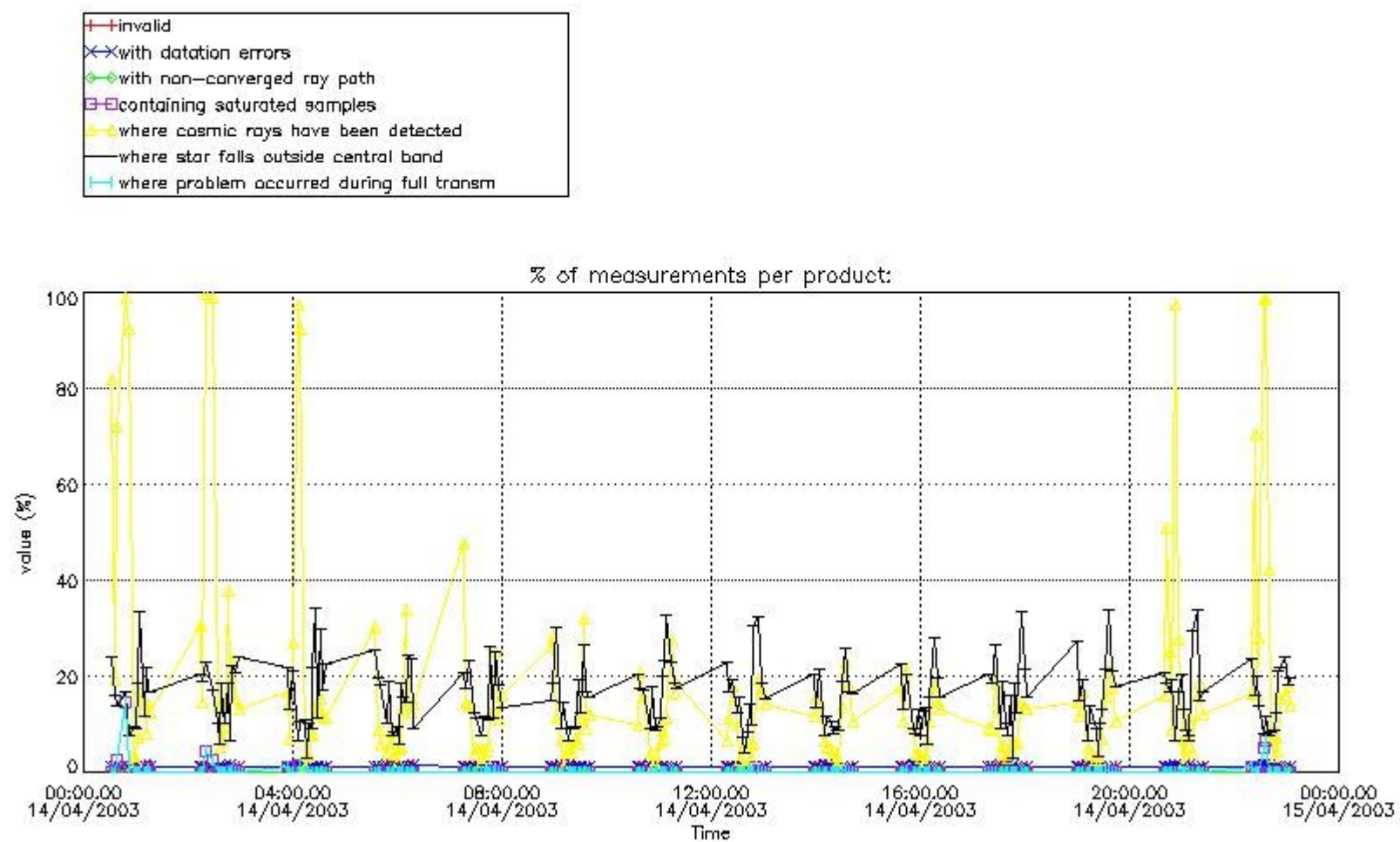


4. Level 1 quality information per product

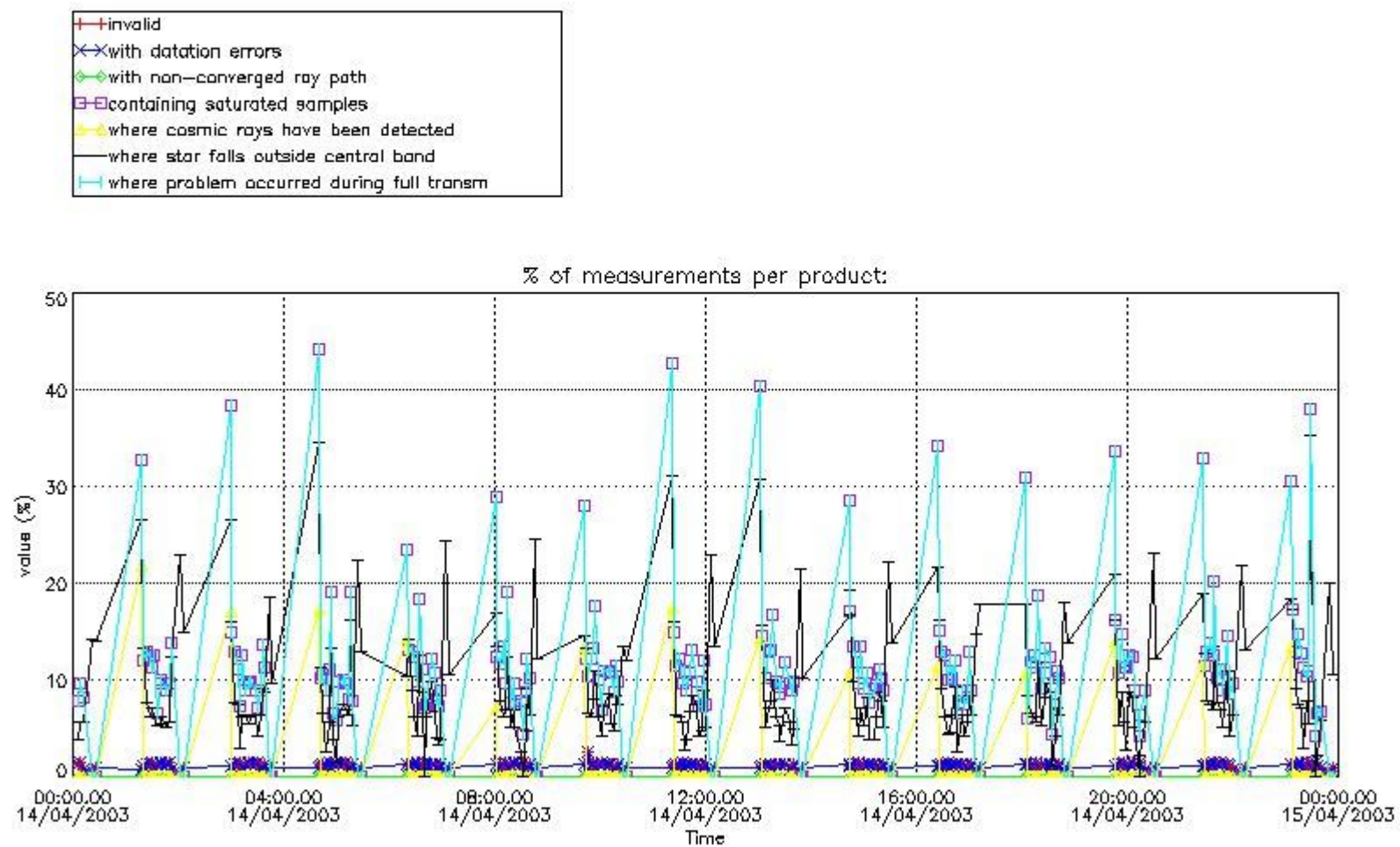
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



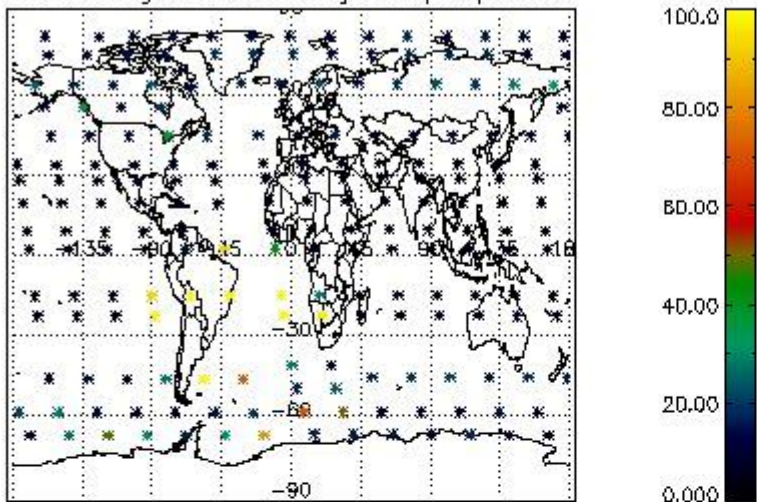
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



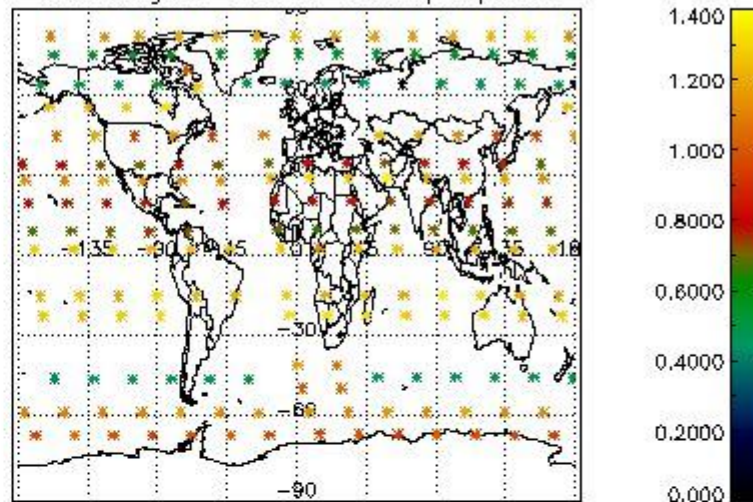
4.2 Plot quality information per product coming from level 1b processing (world map)

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

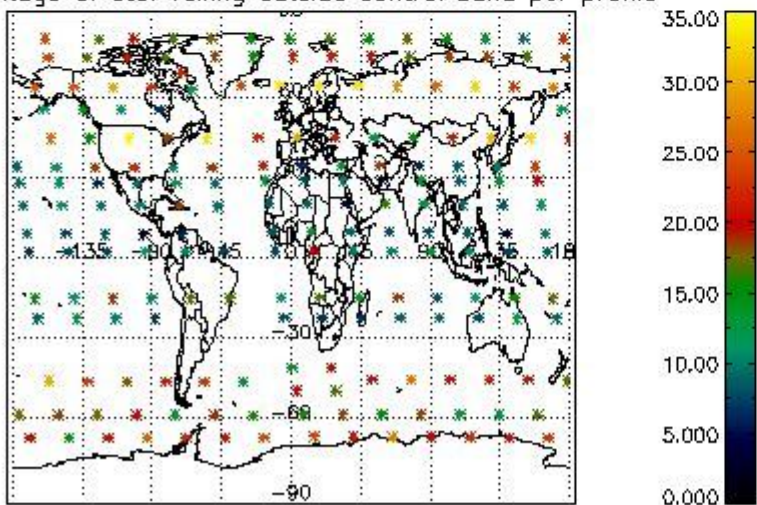
Percentage of cosmic ray hits per profile



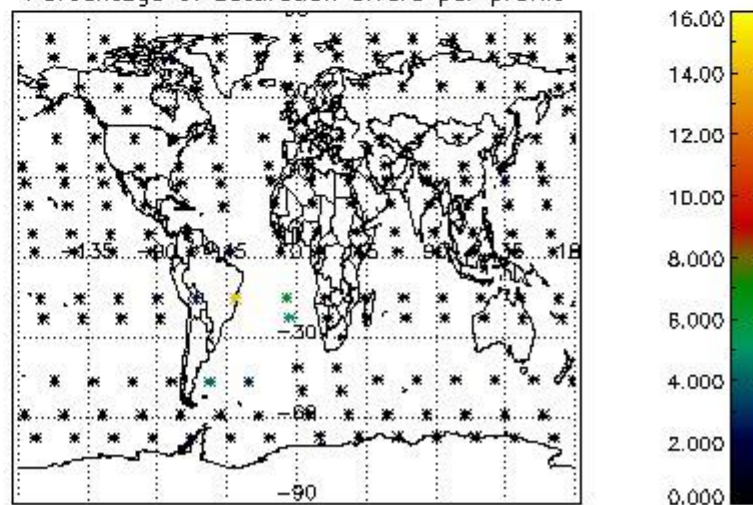
Percentage of datation errors per profile



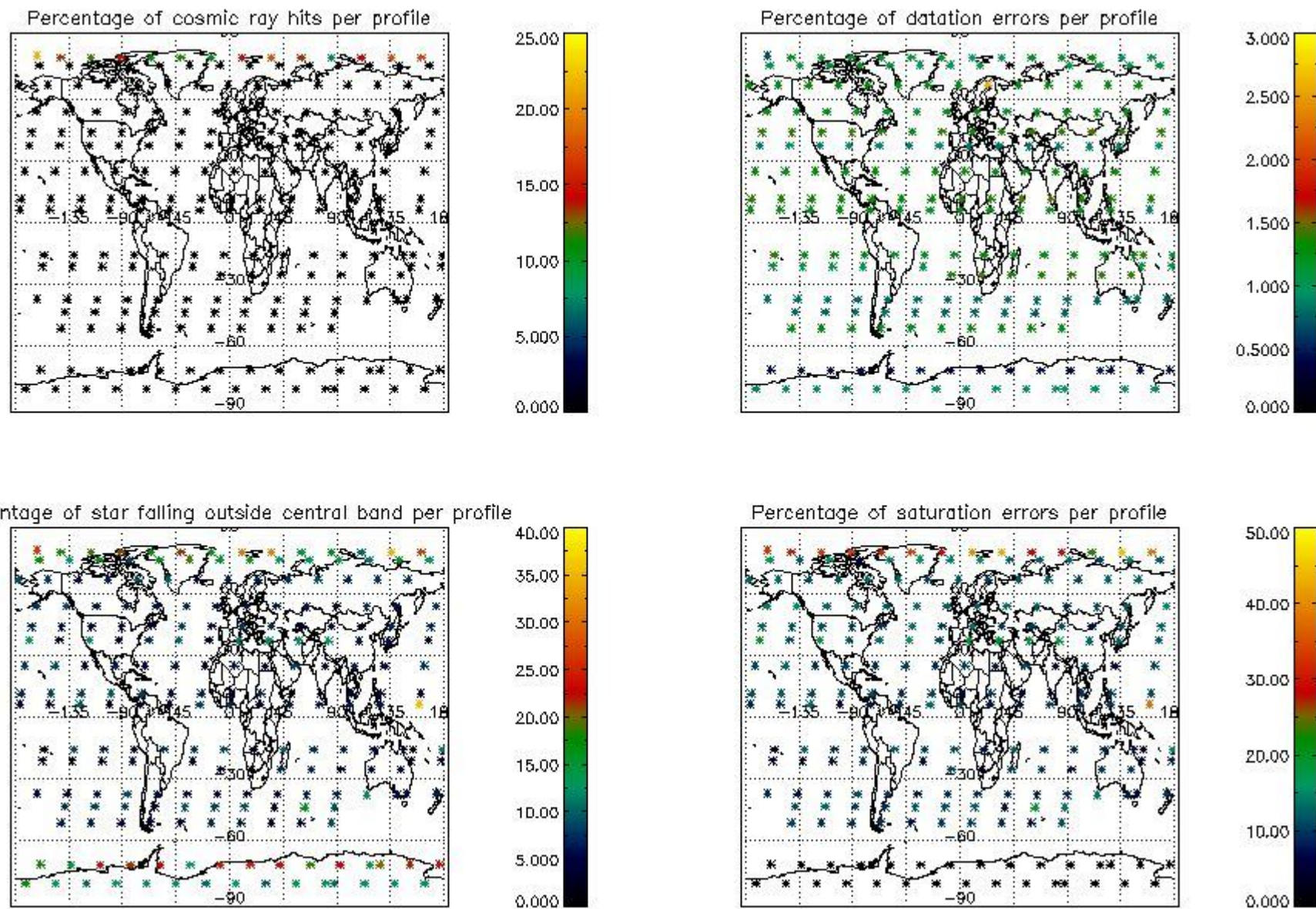
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

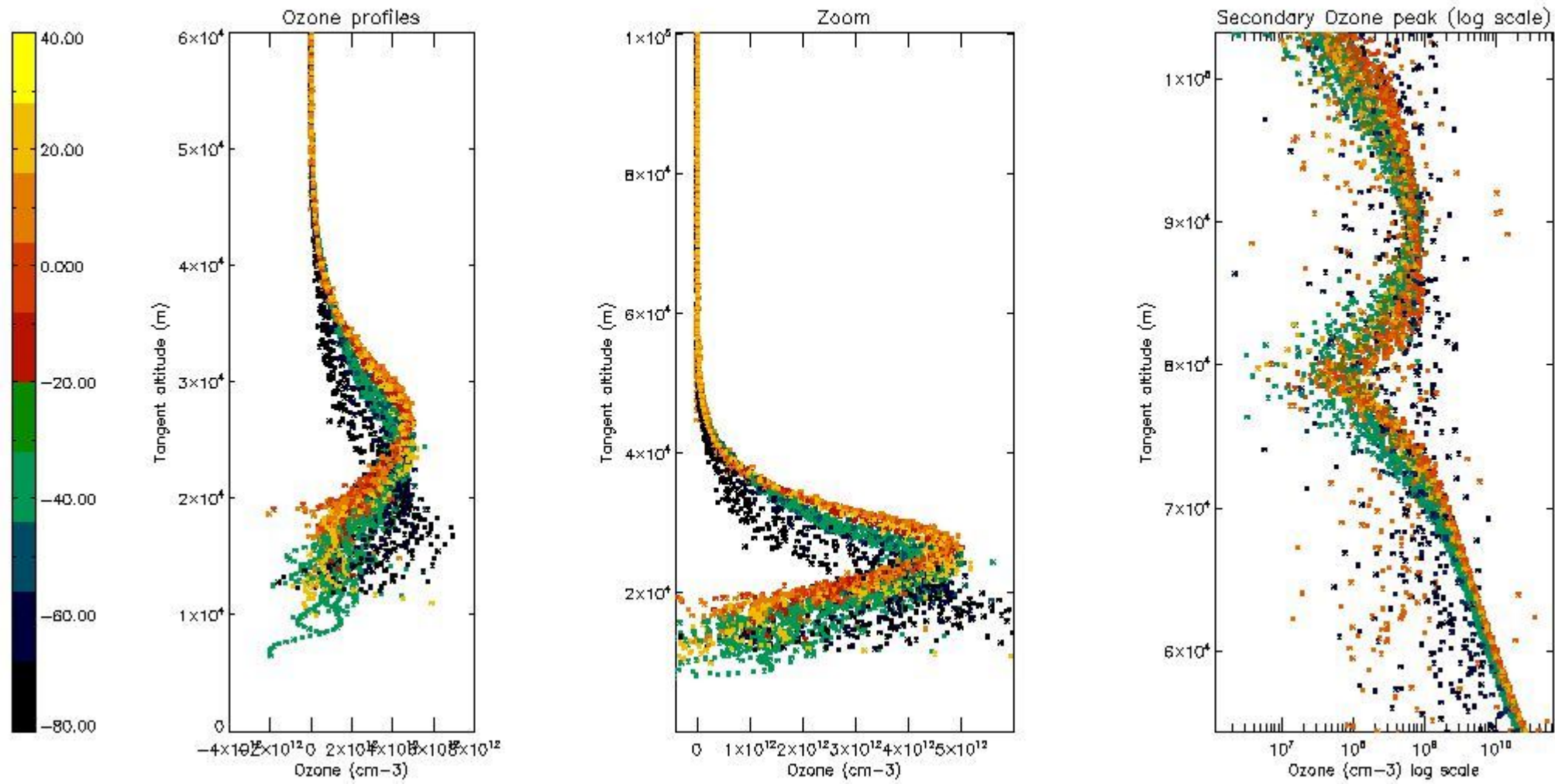
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	20

STD < 10	18
STD < 5	14

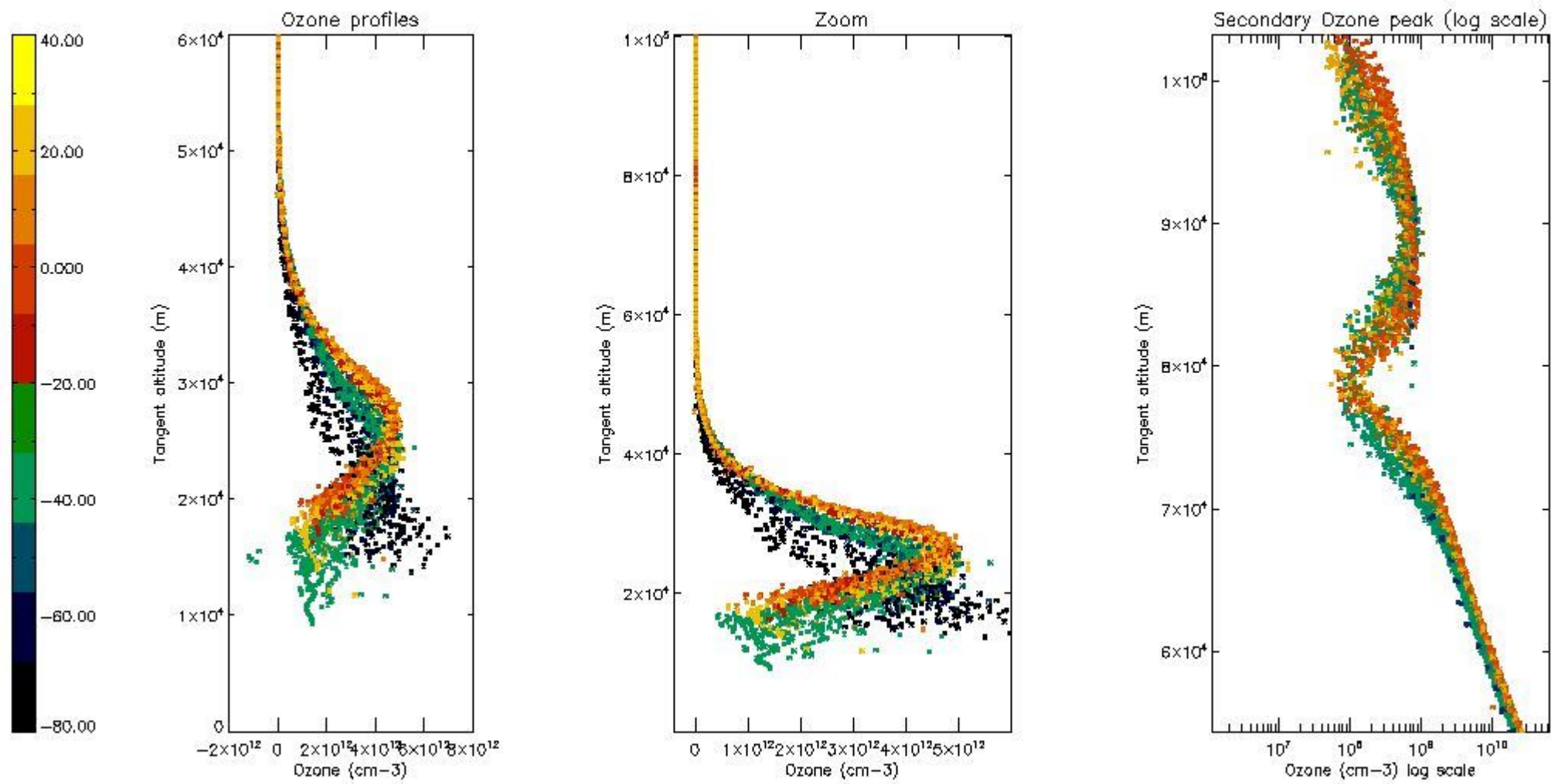
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



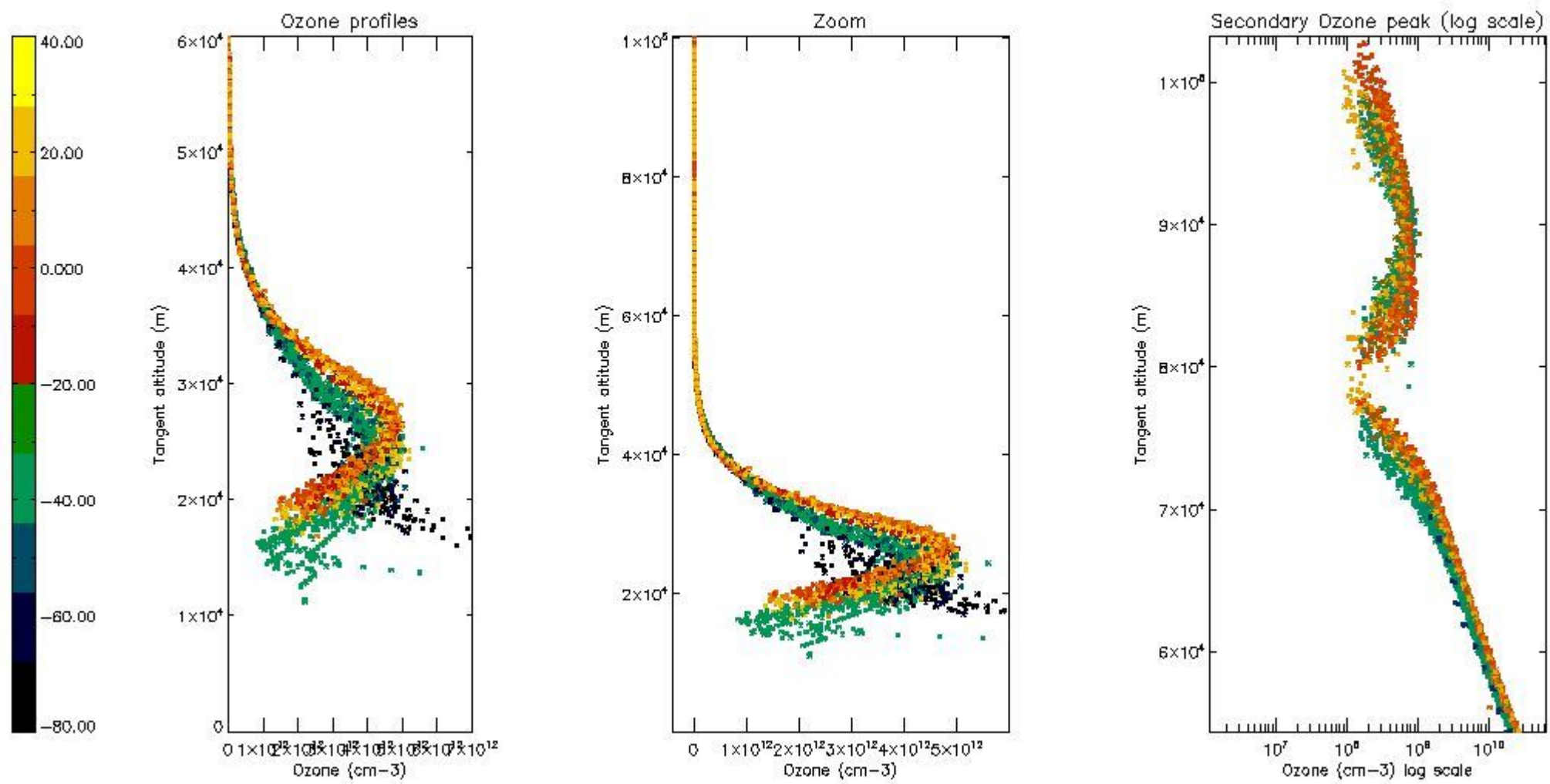
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



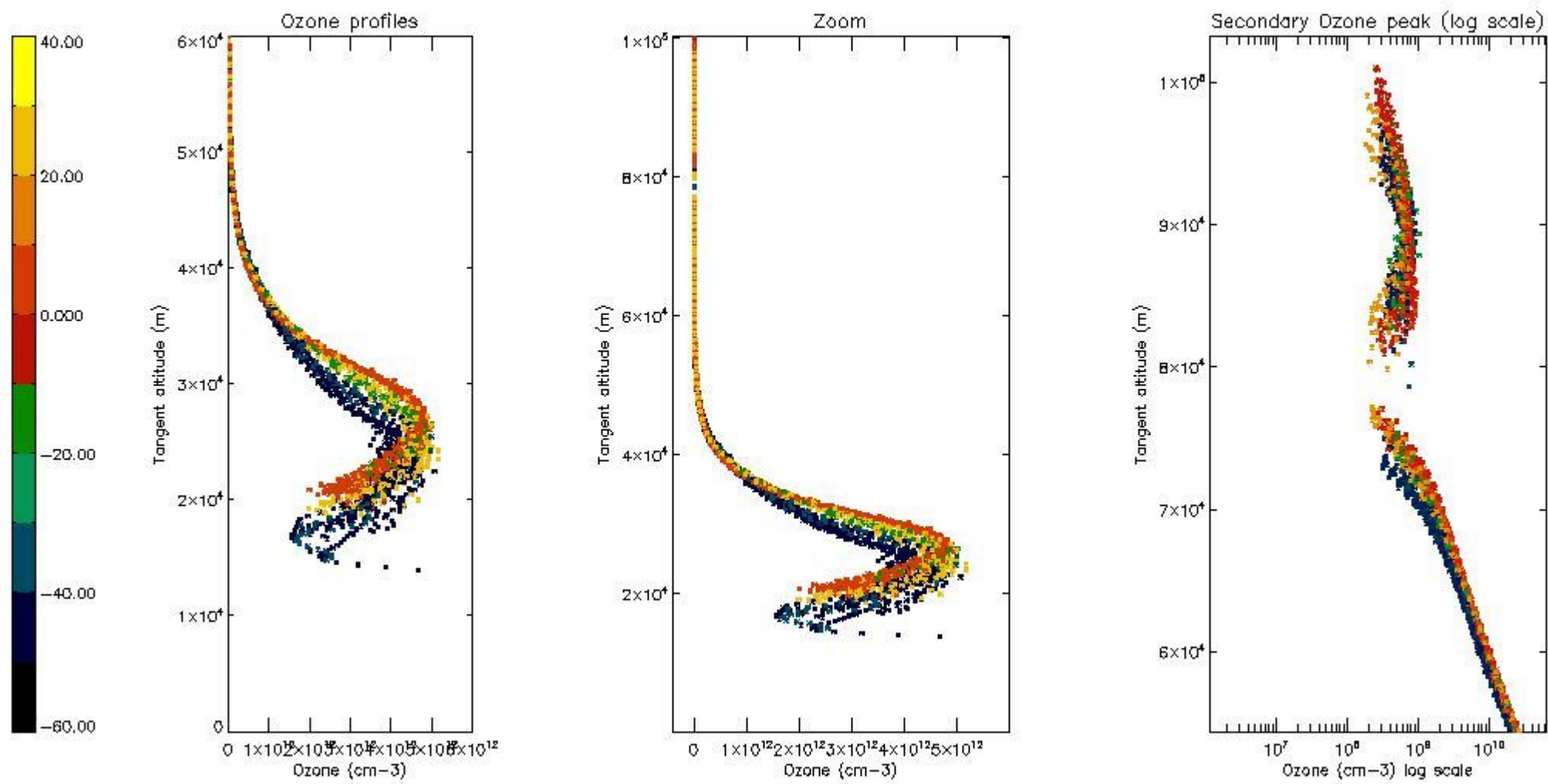
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



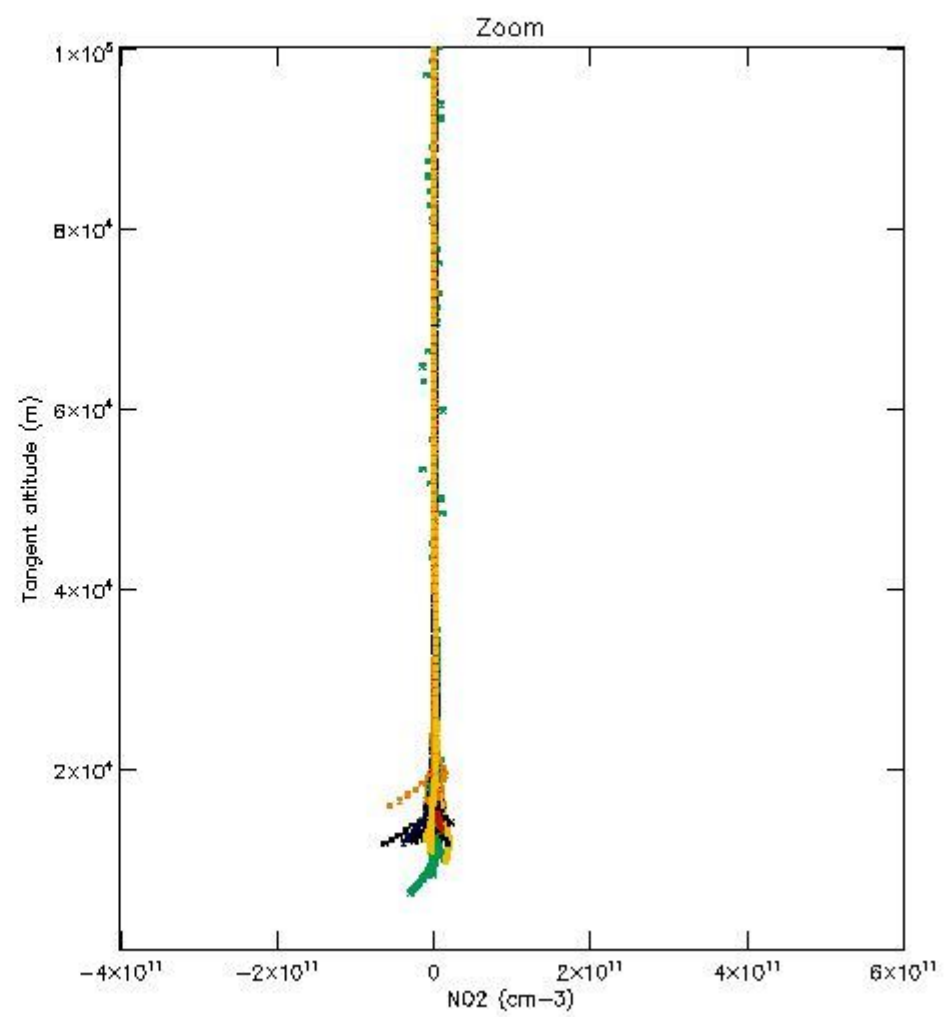
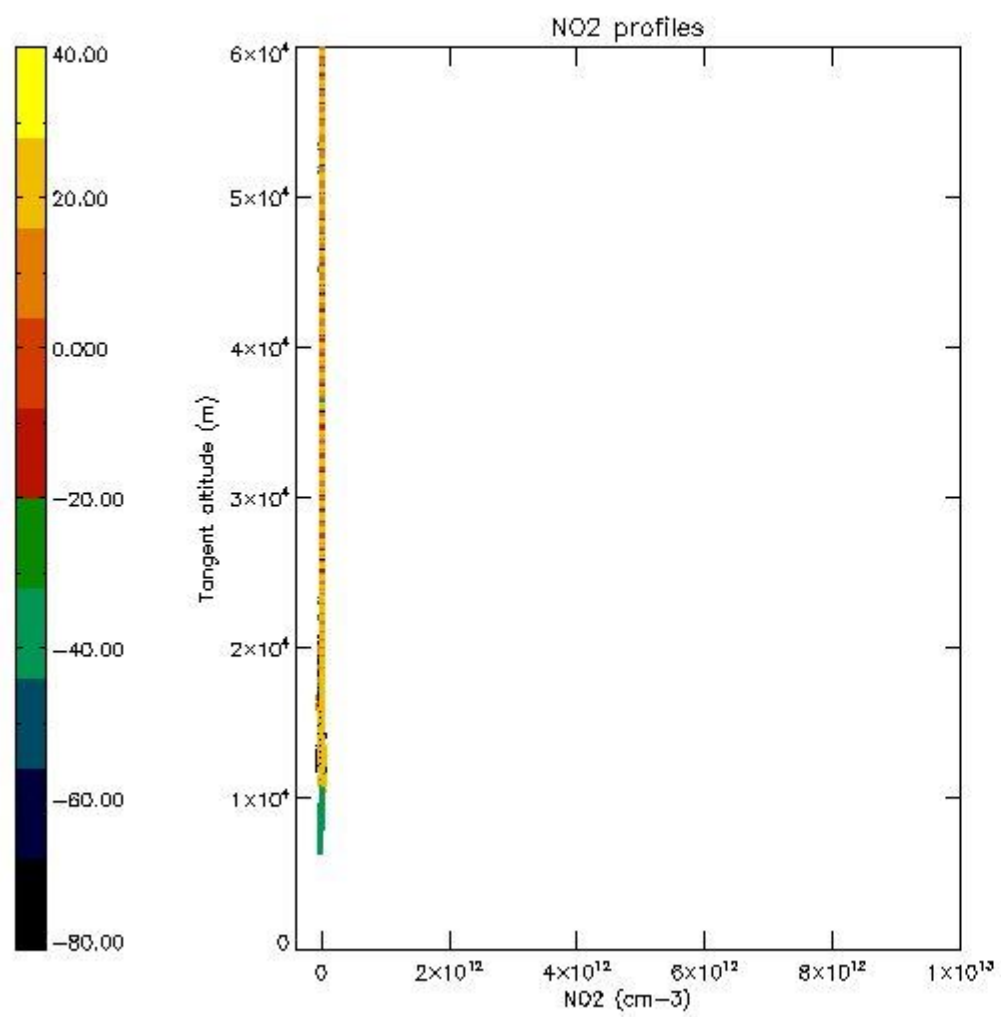
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



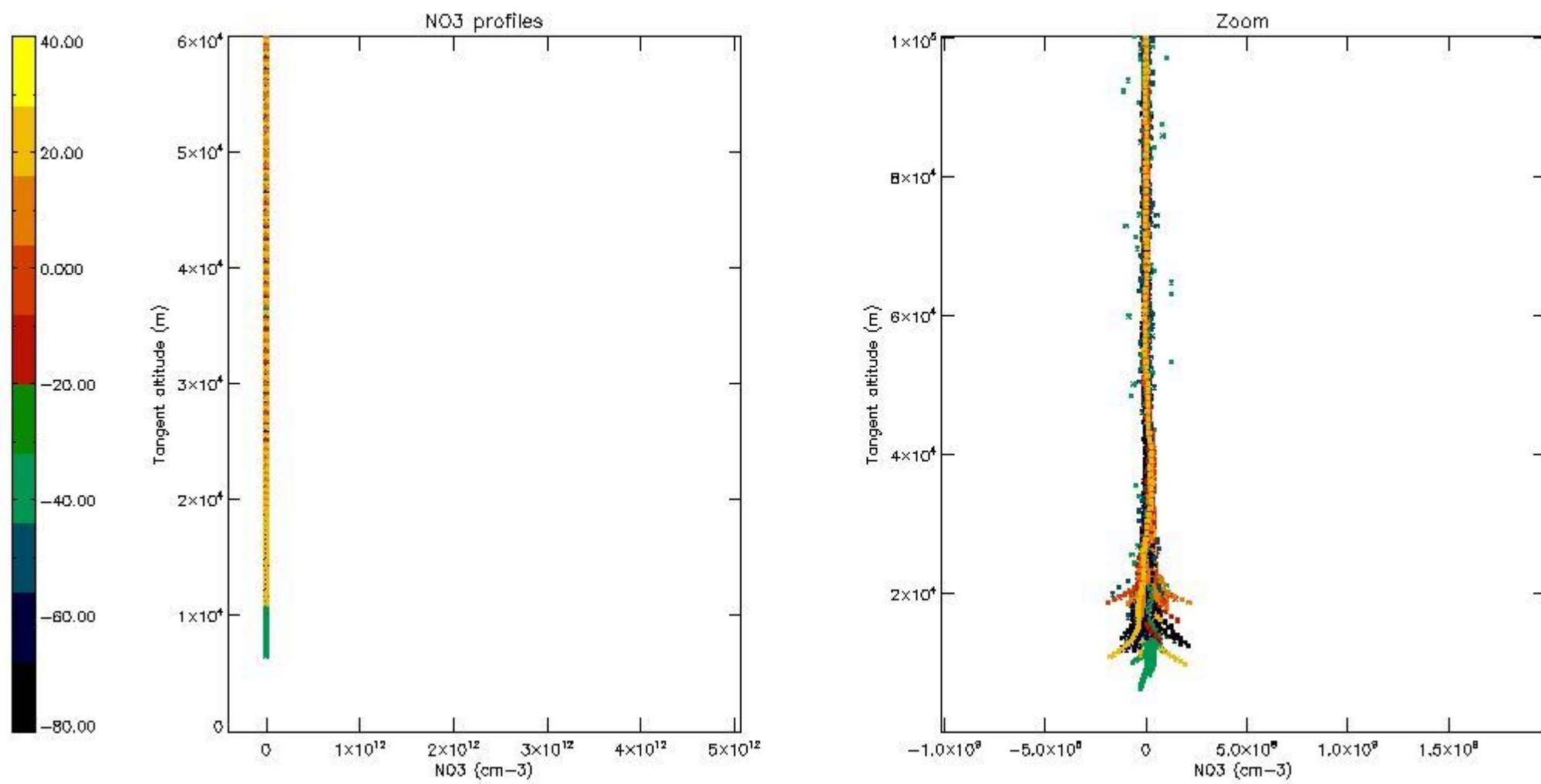
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



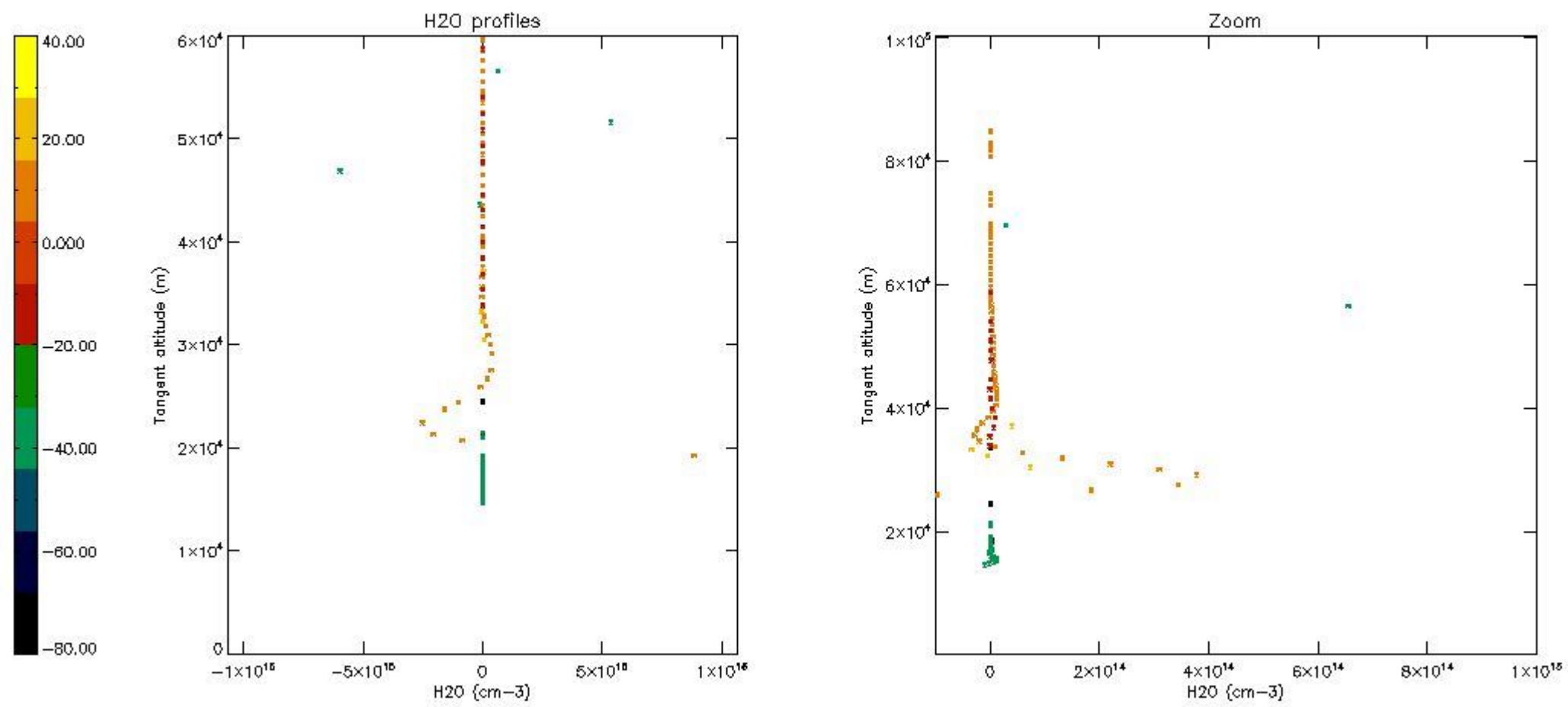
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

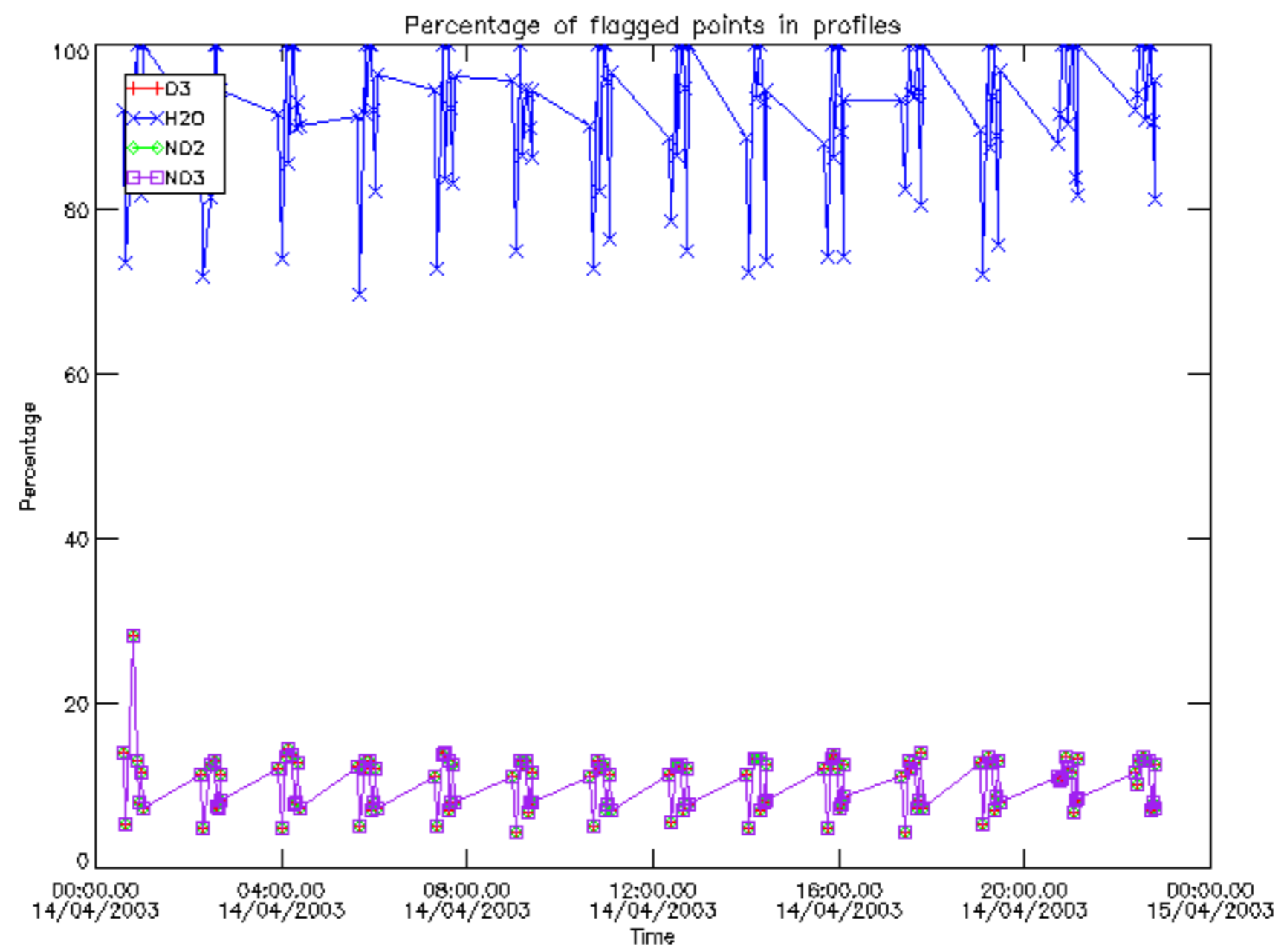
The colorbar represents the latitude.



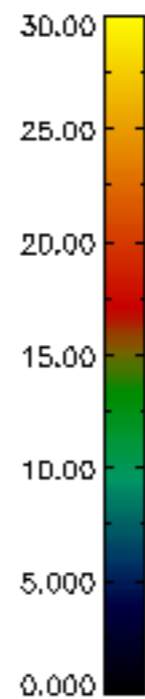
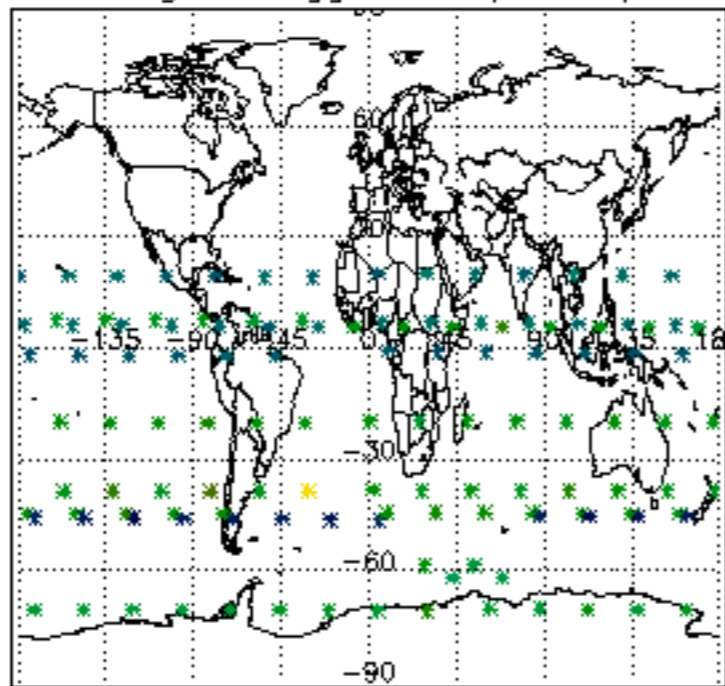
6. Auxiliary Data Files used for the production reported in section 2

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.

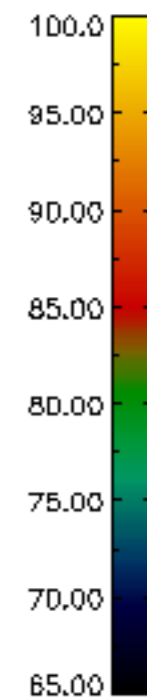
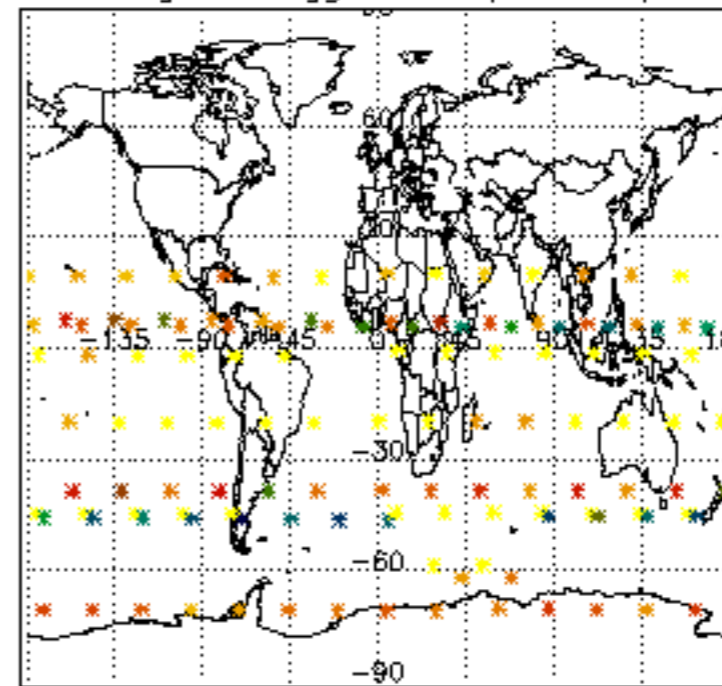
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	14-APR-2003 00:06:07
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	14-APR-2003 00:06:07
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	14-APR-2003 00:06:07



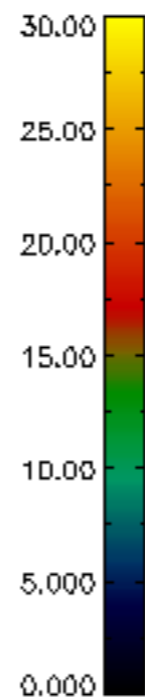
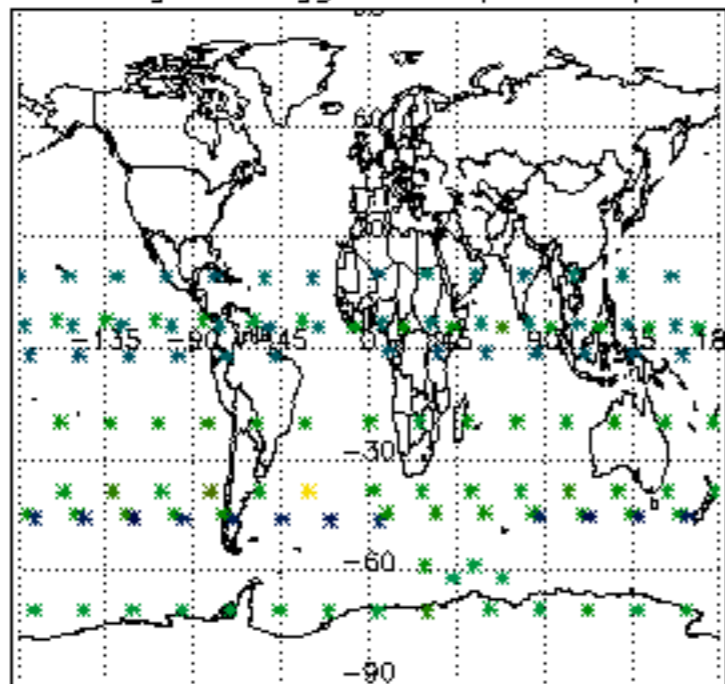
Percentage of flagged data per D3 profile



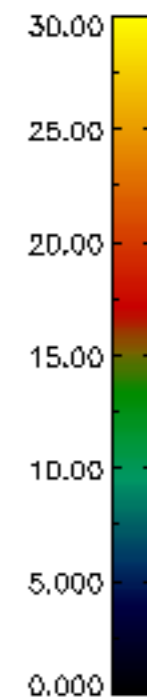
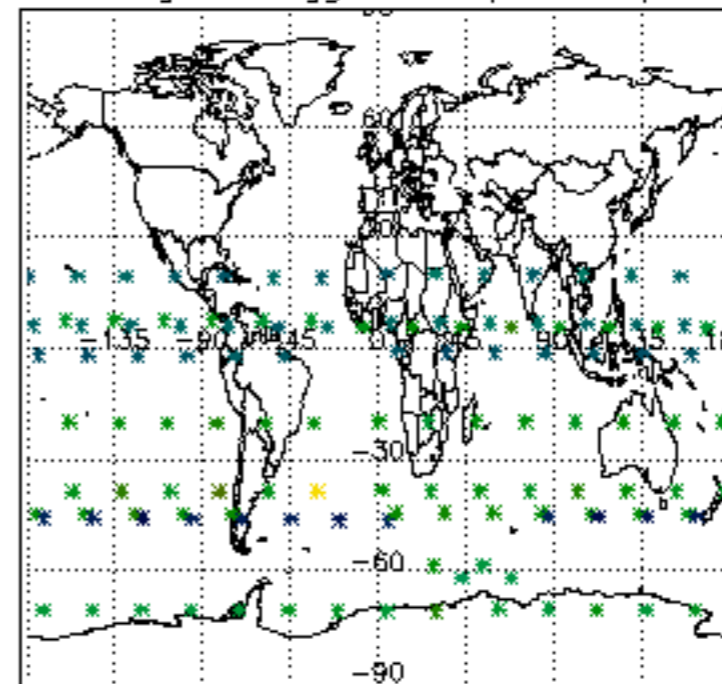
Percentage of flagged data per H2O profile

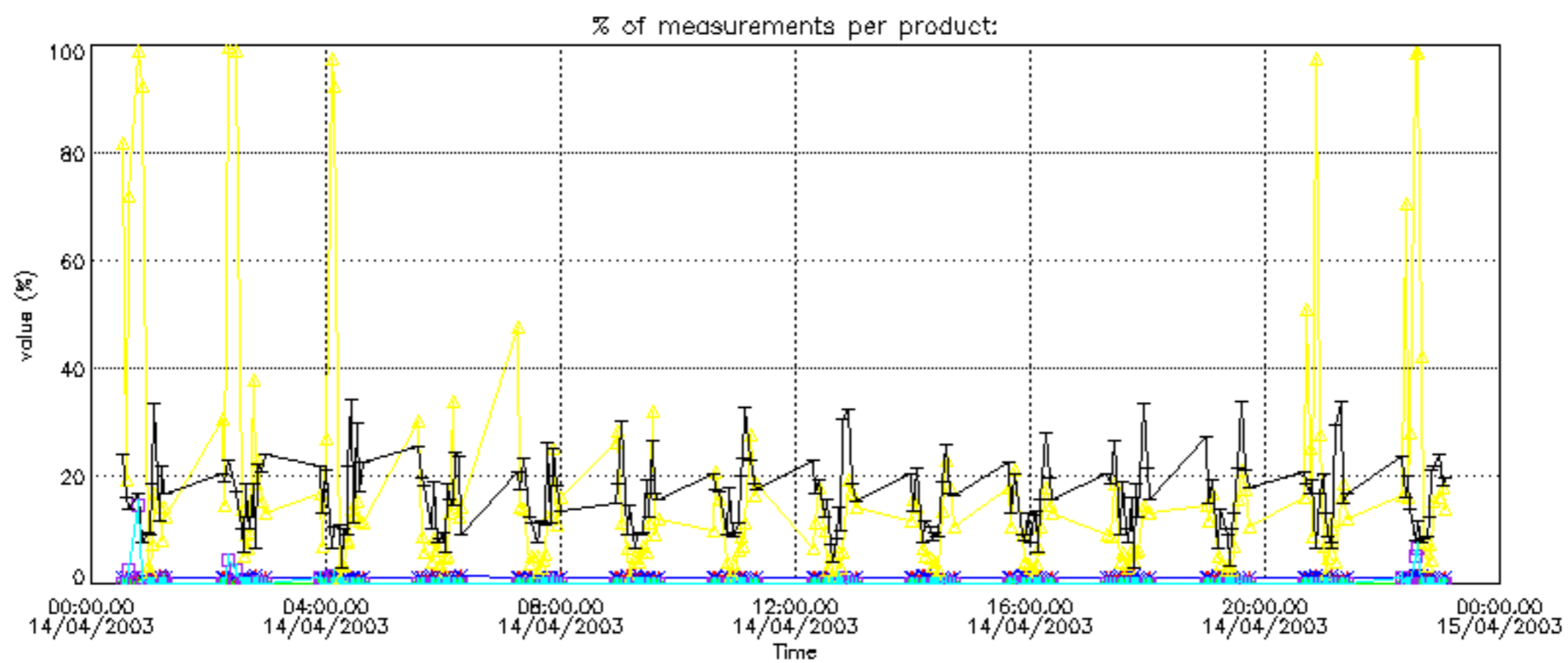
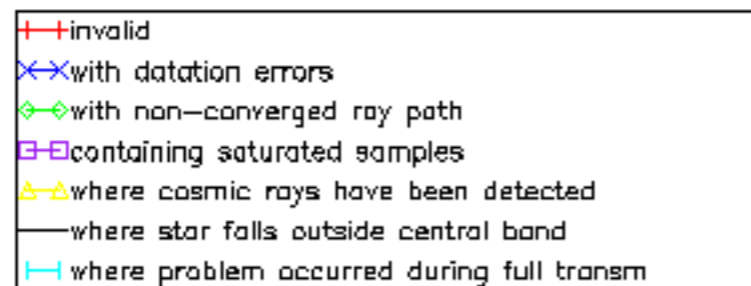


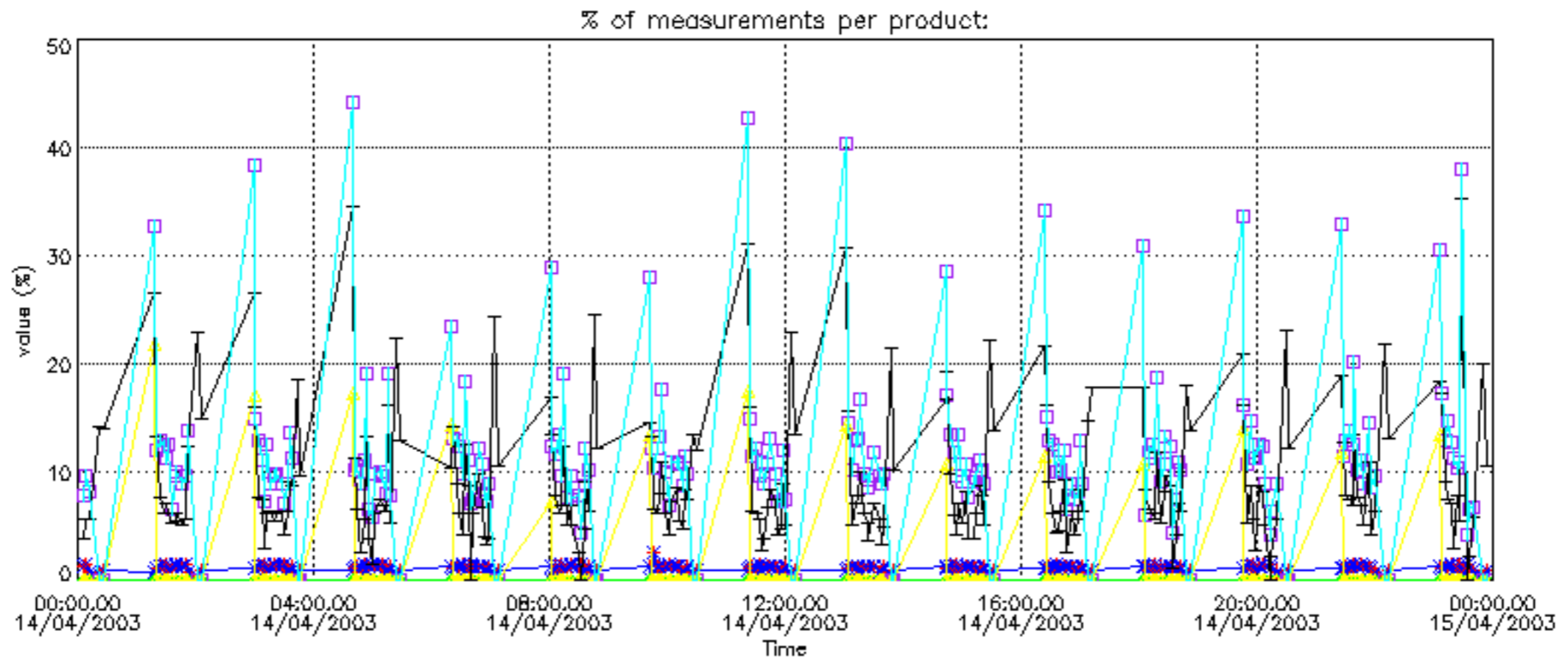
Percentage of flagged data per NO2 profile



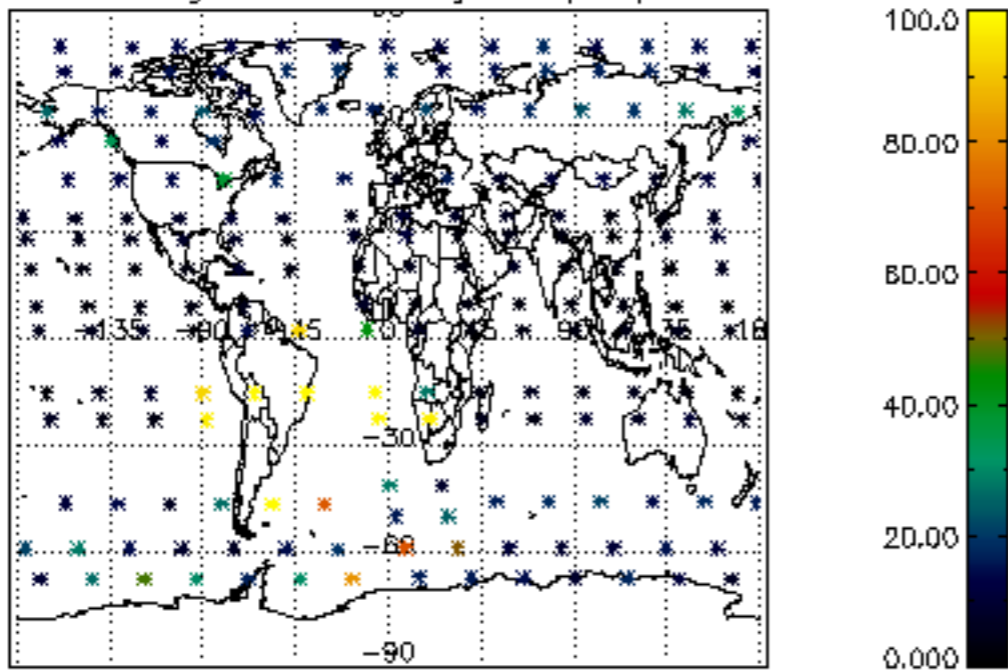
Percentage of flagged data per NO3 profile



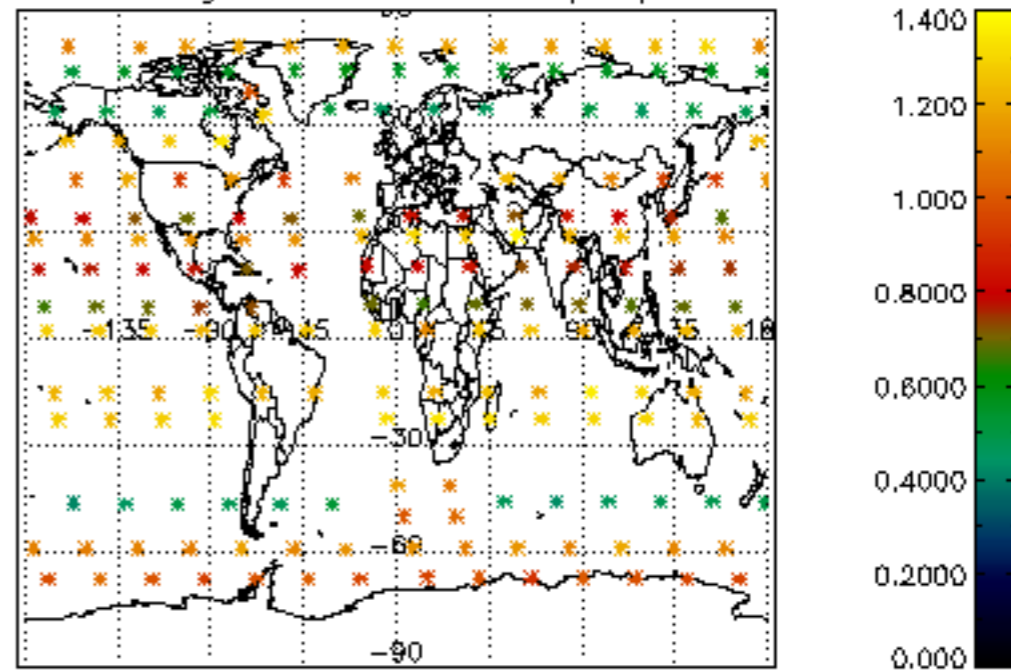




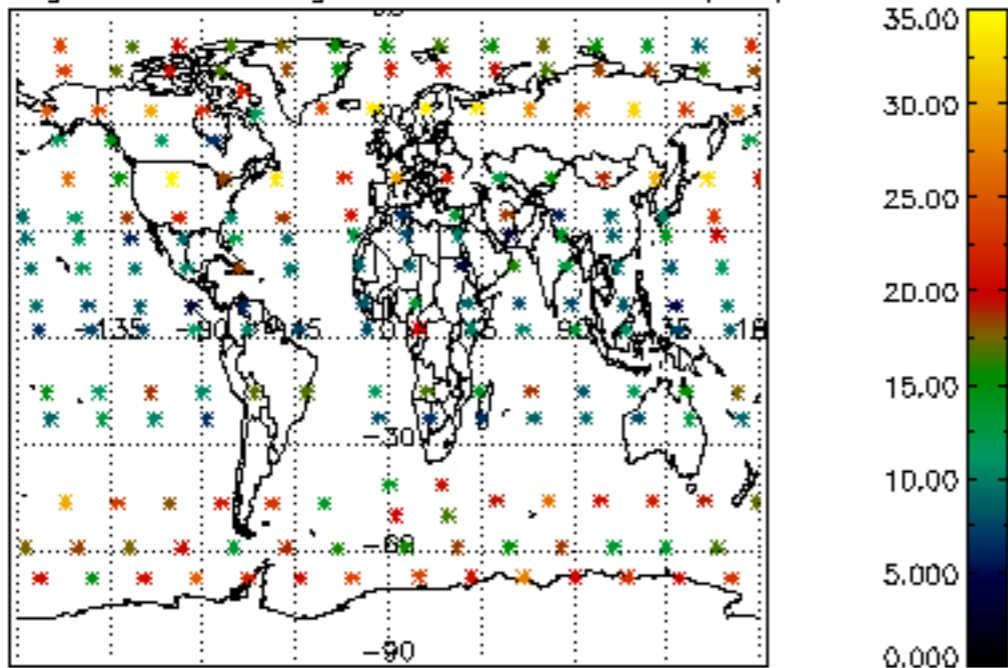
Percentage of cosmic ray hits per profile



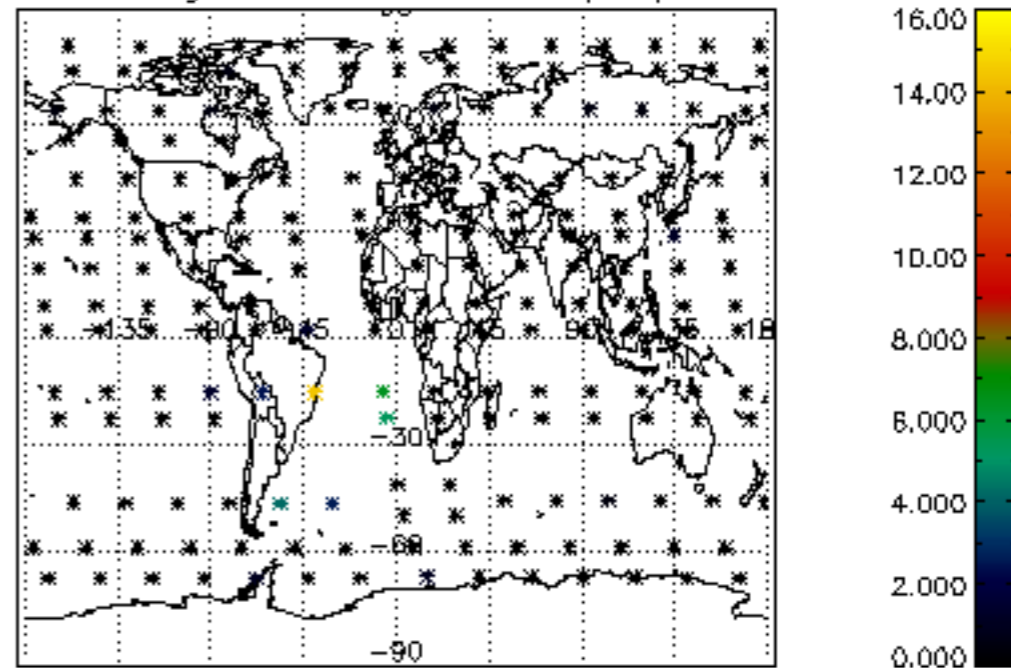
Percentage of datation errors per profile



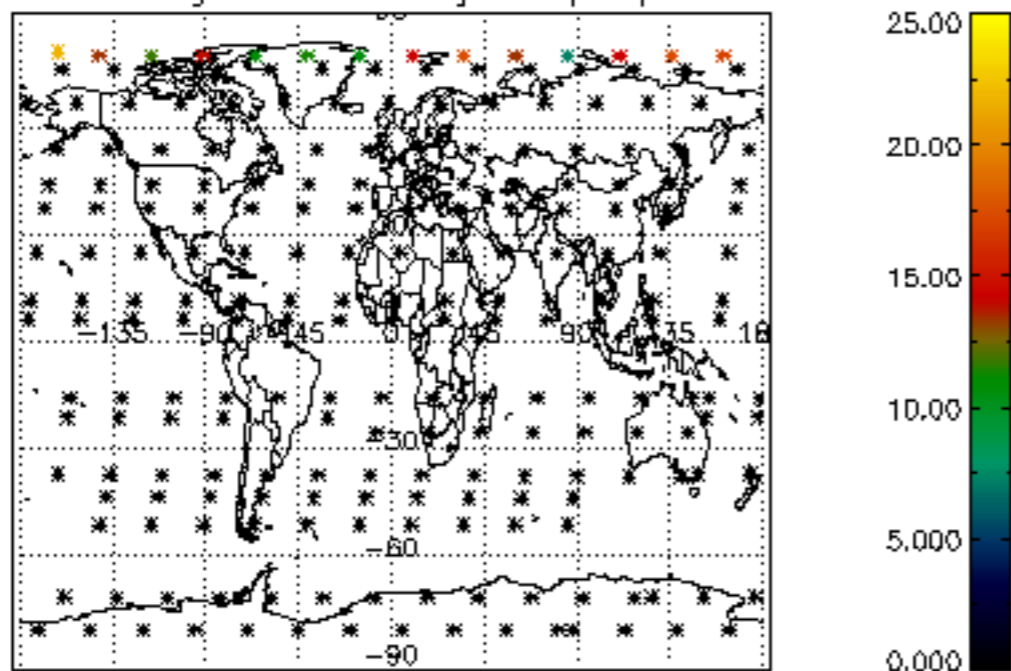
Percentage of star falling outside central band per profile



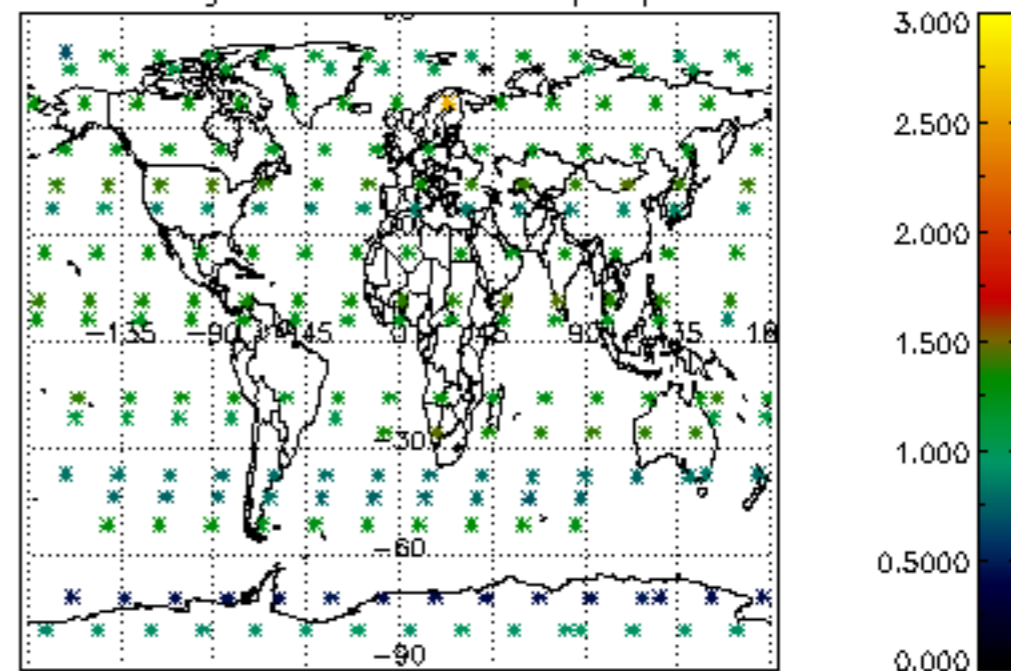
Percentage of saturation errors per profile



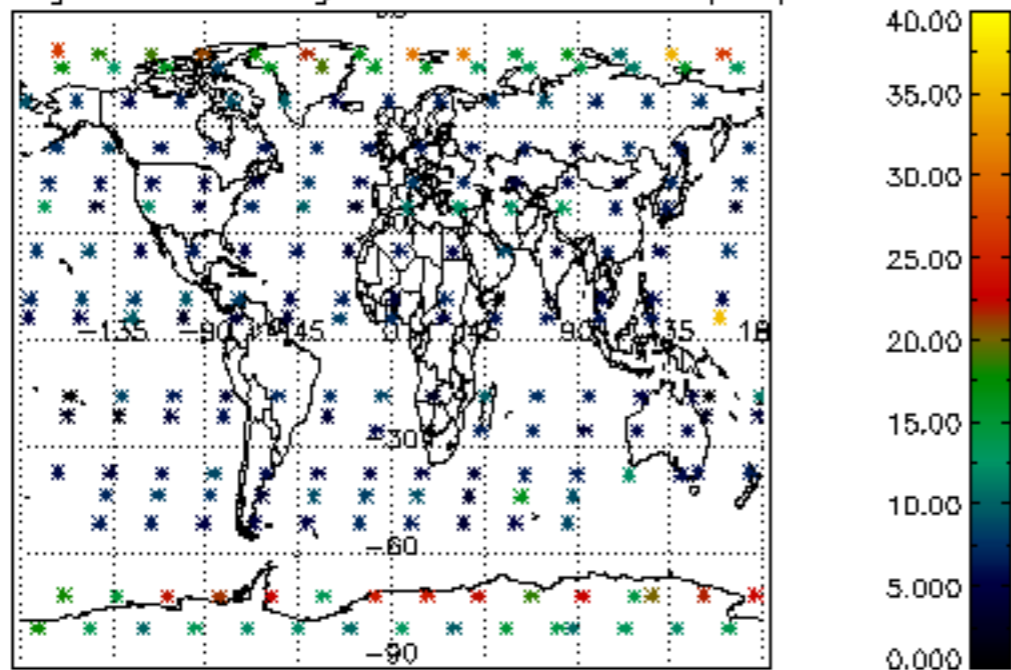
Percentage of cosmic ray hits per profile



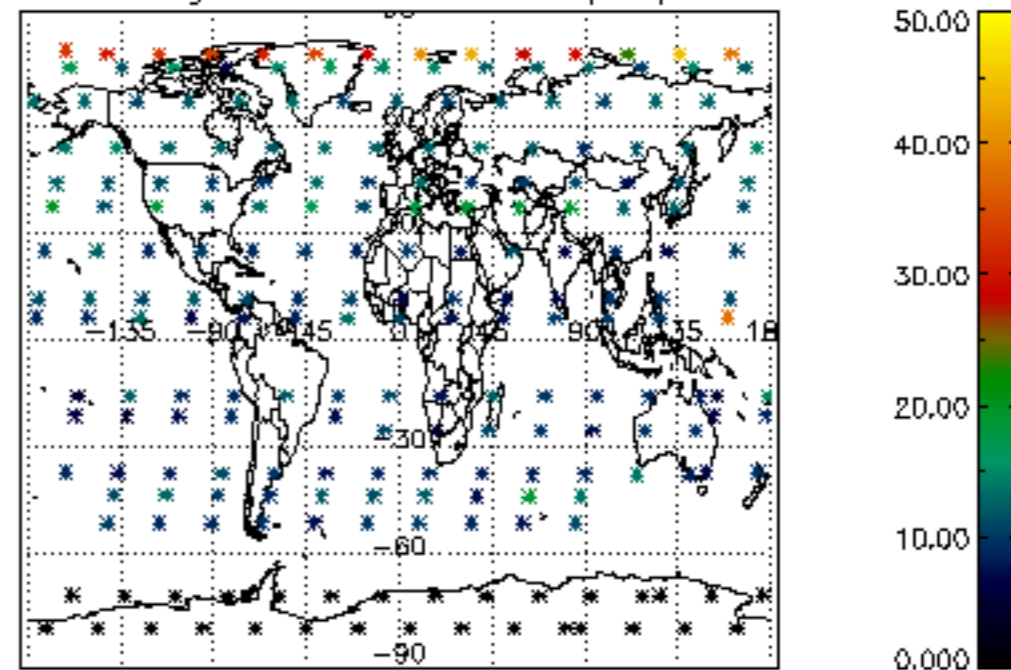
Percentage of datation errors per profile

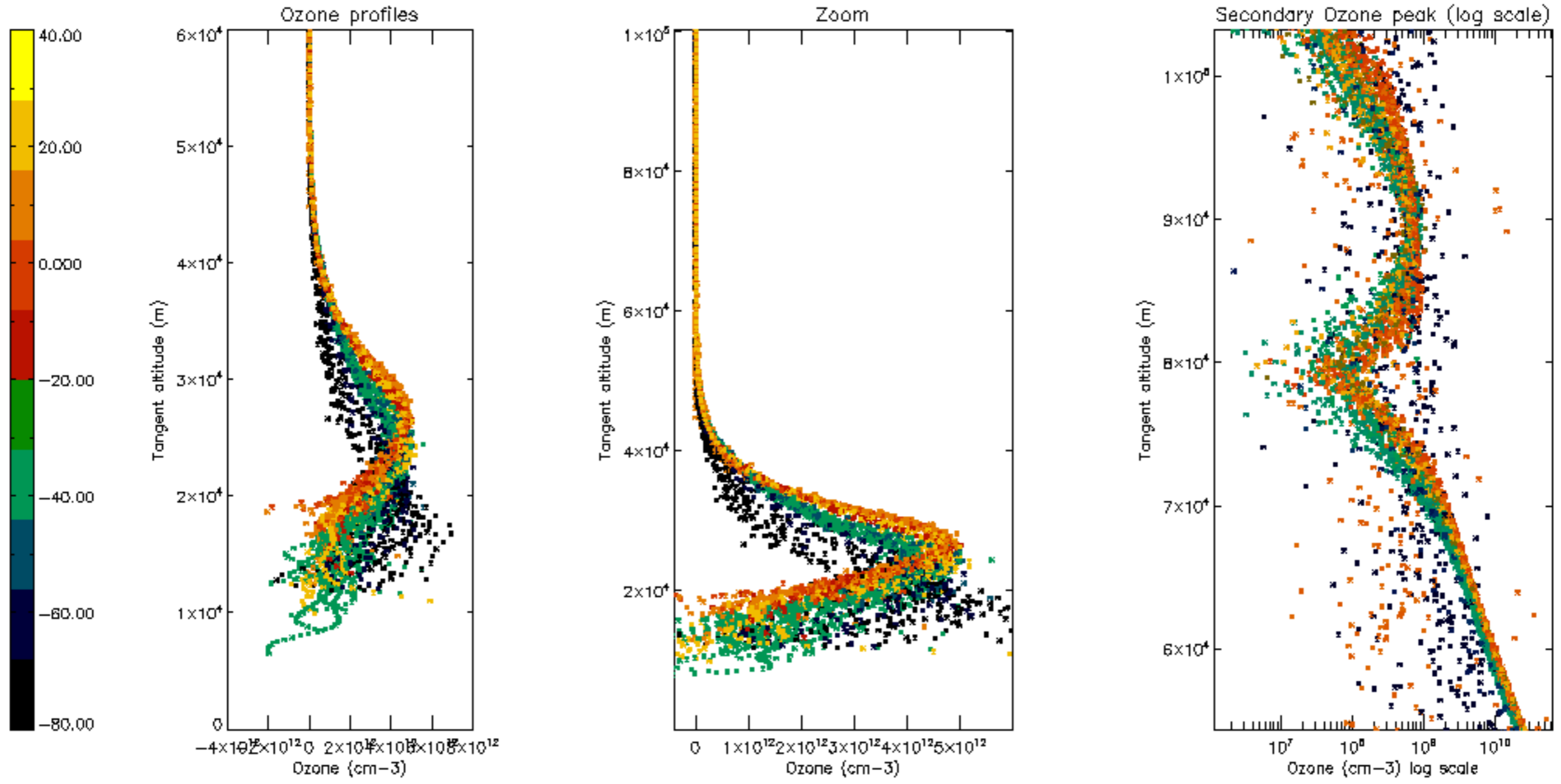


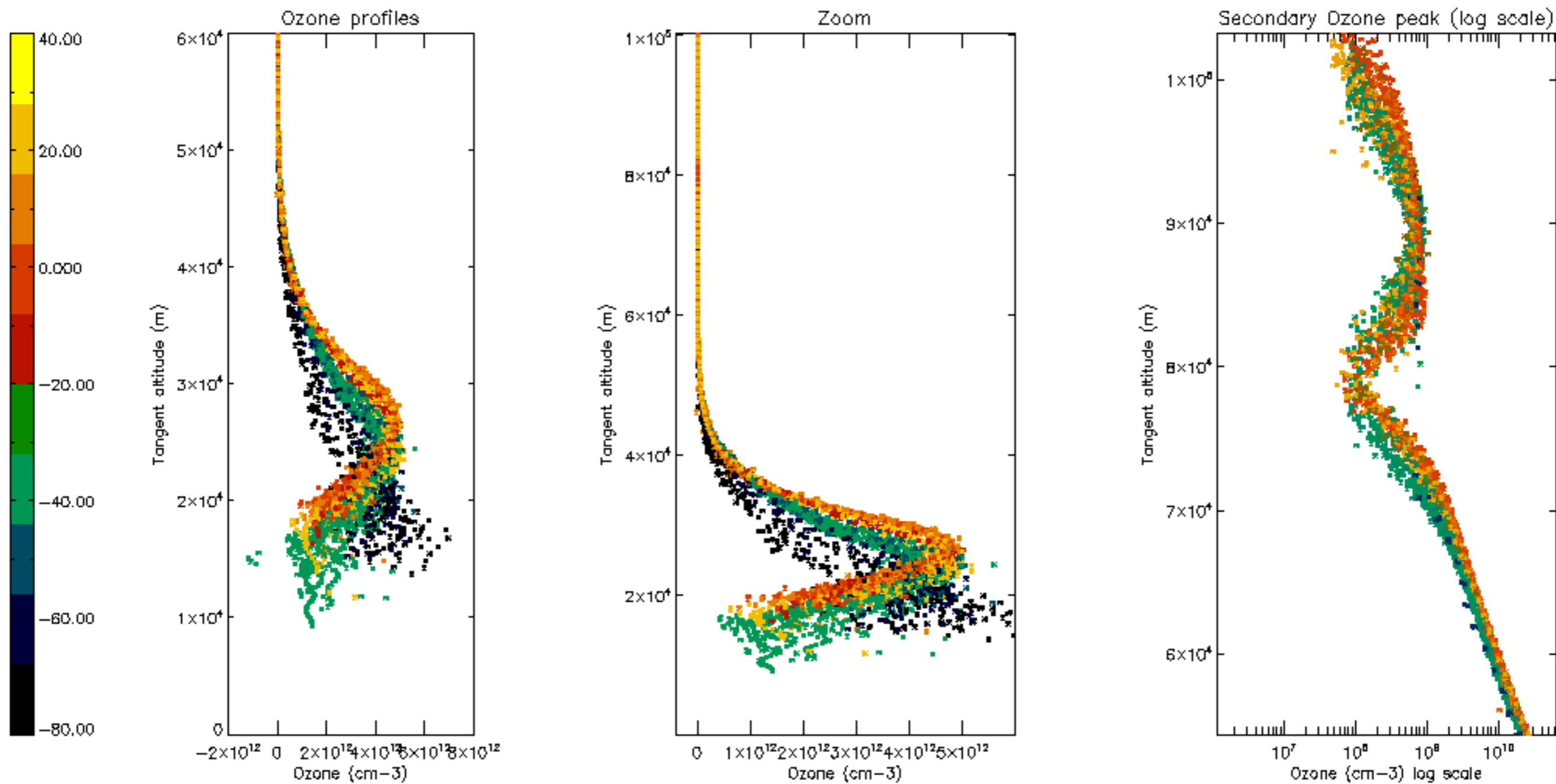
Percentage of star falling outside central band per profile

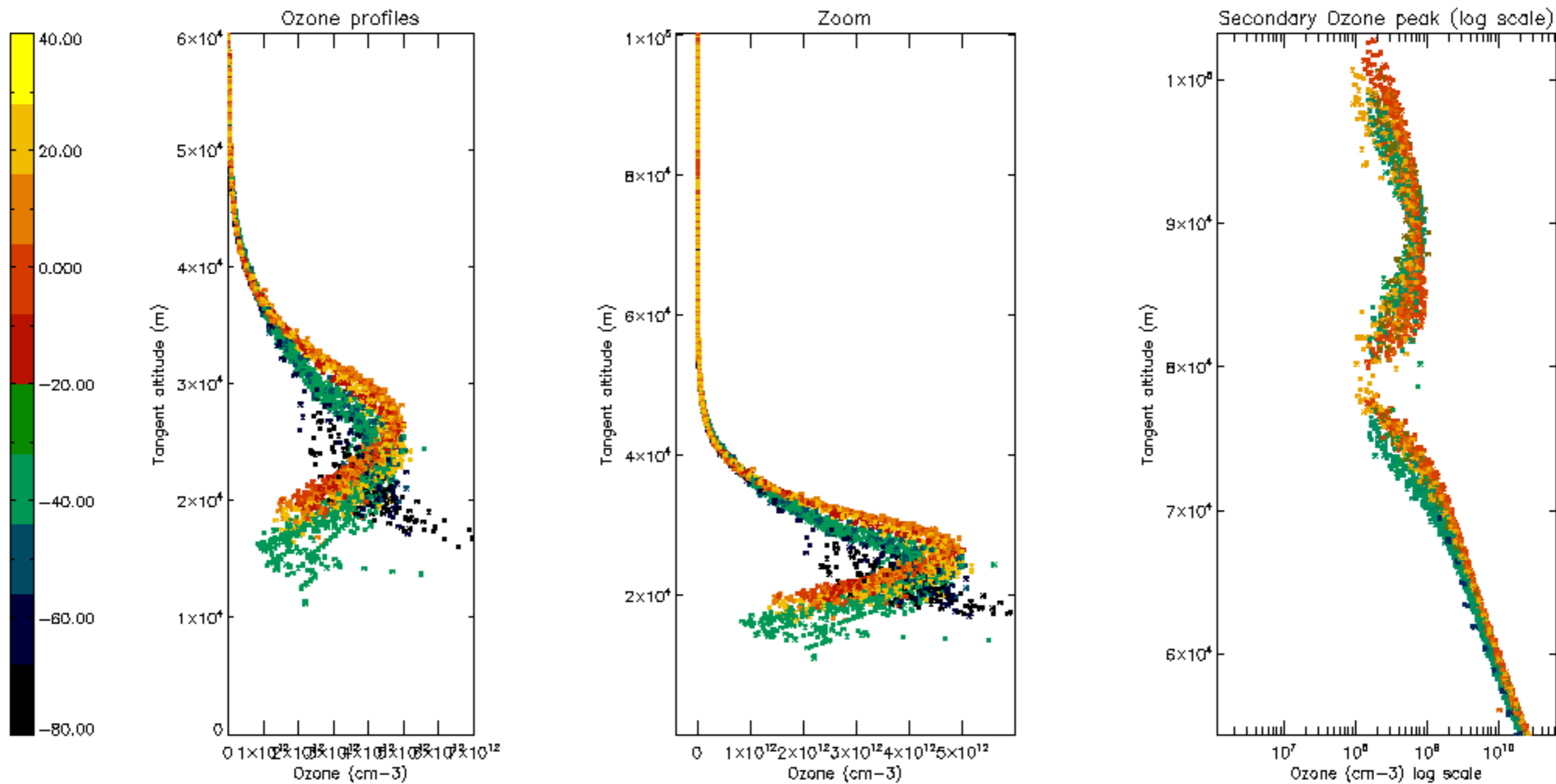


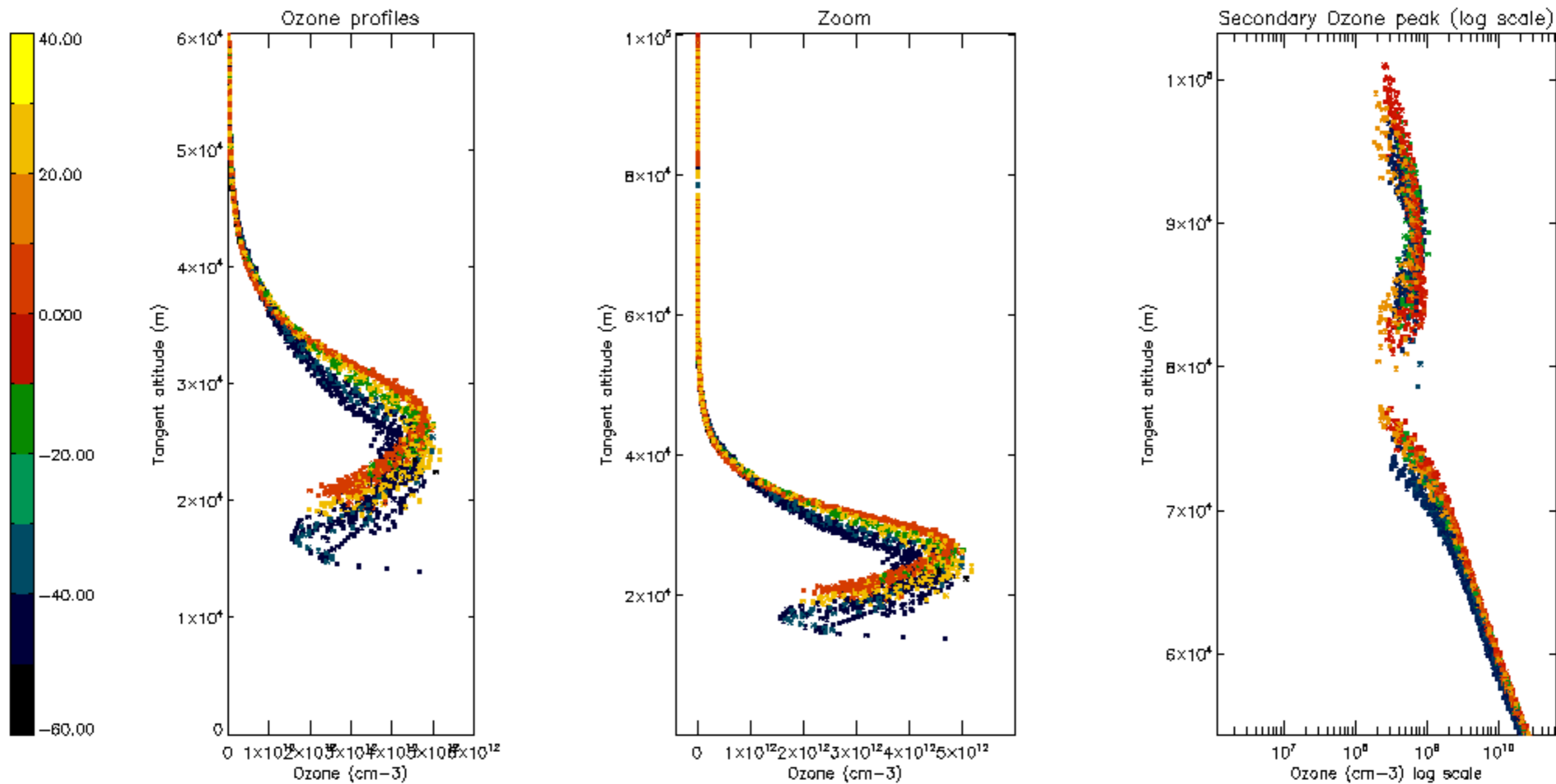
Percentage of saturation errors per profile

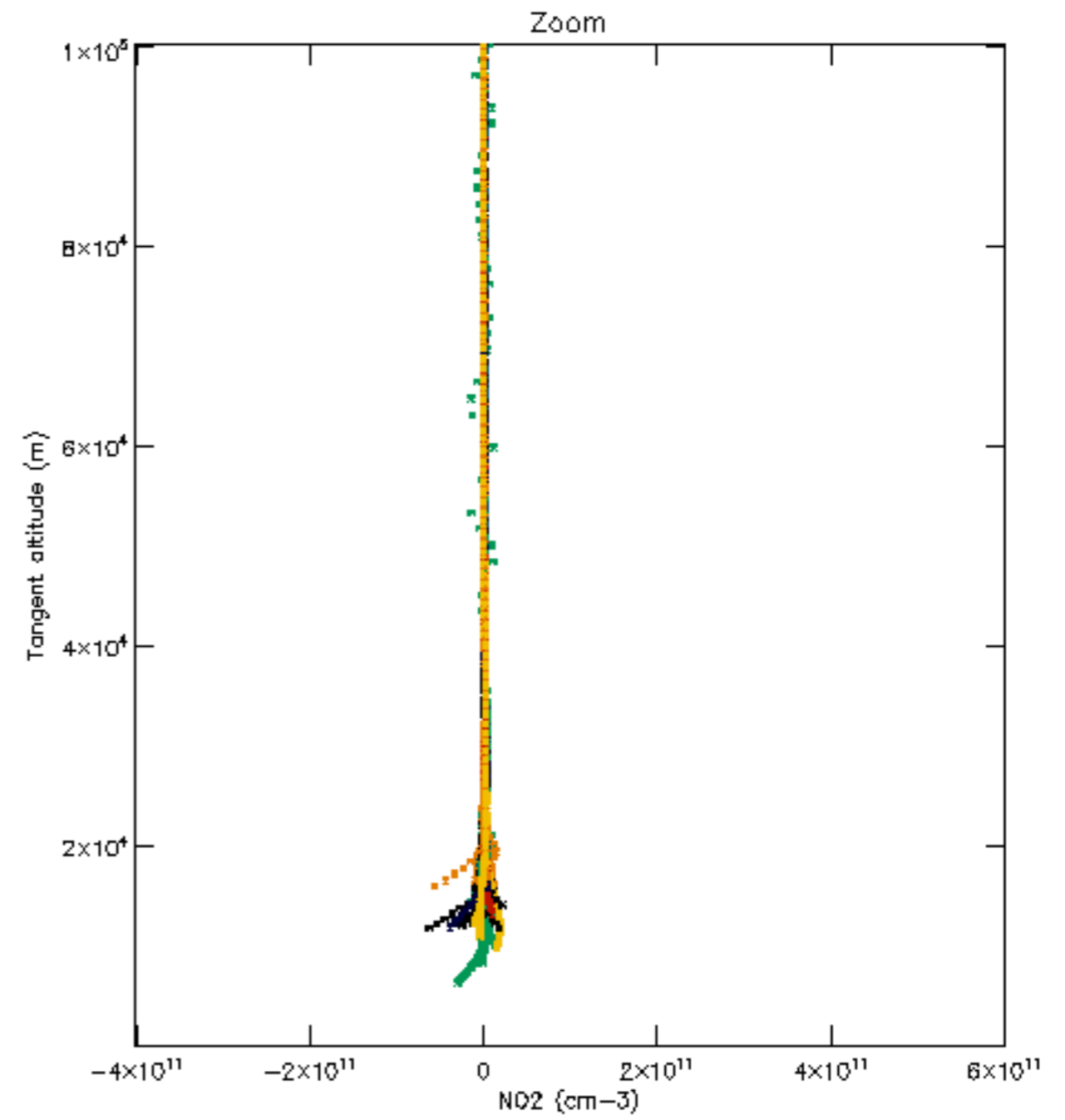
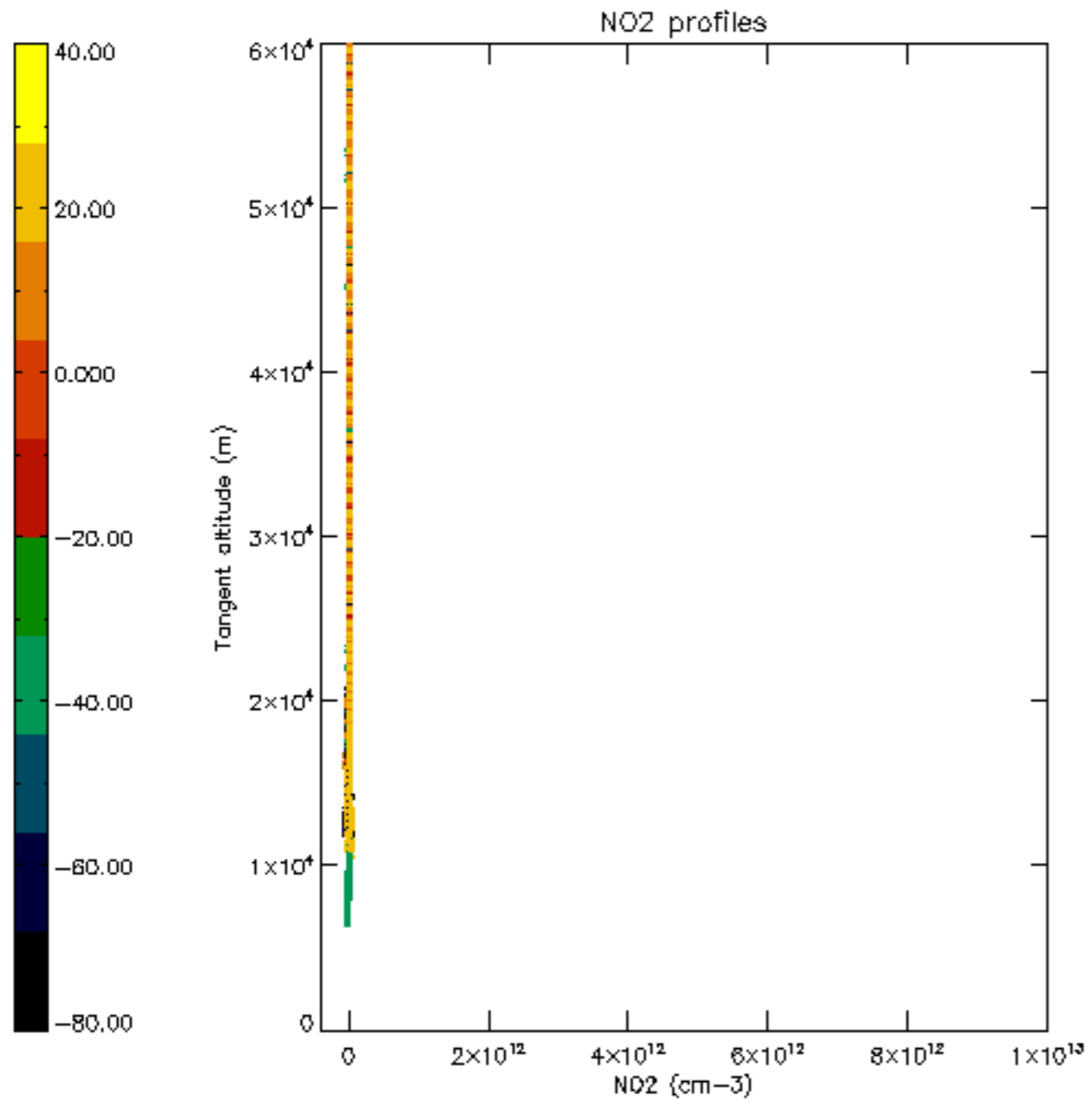


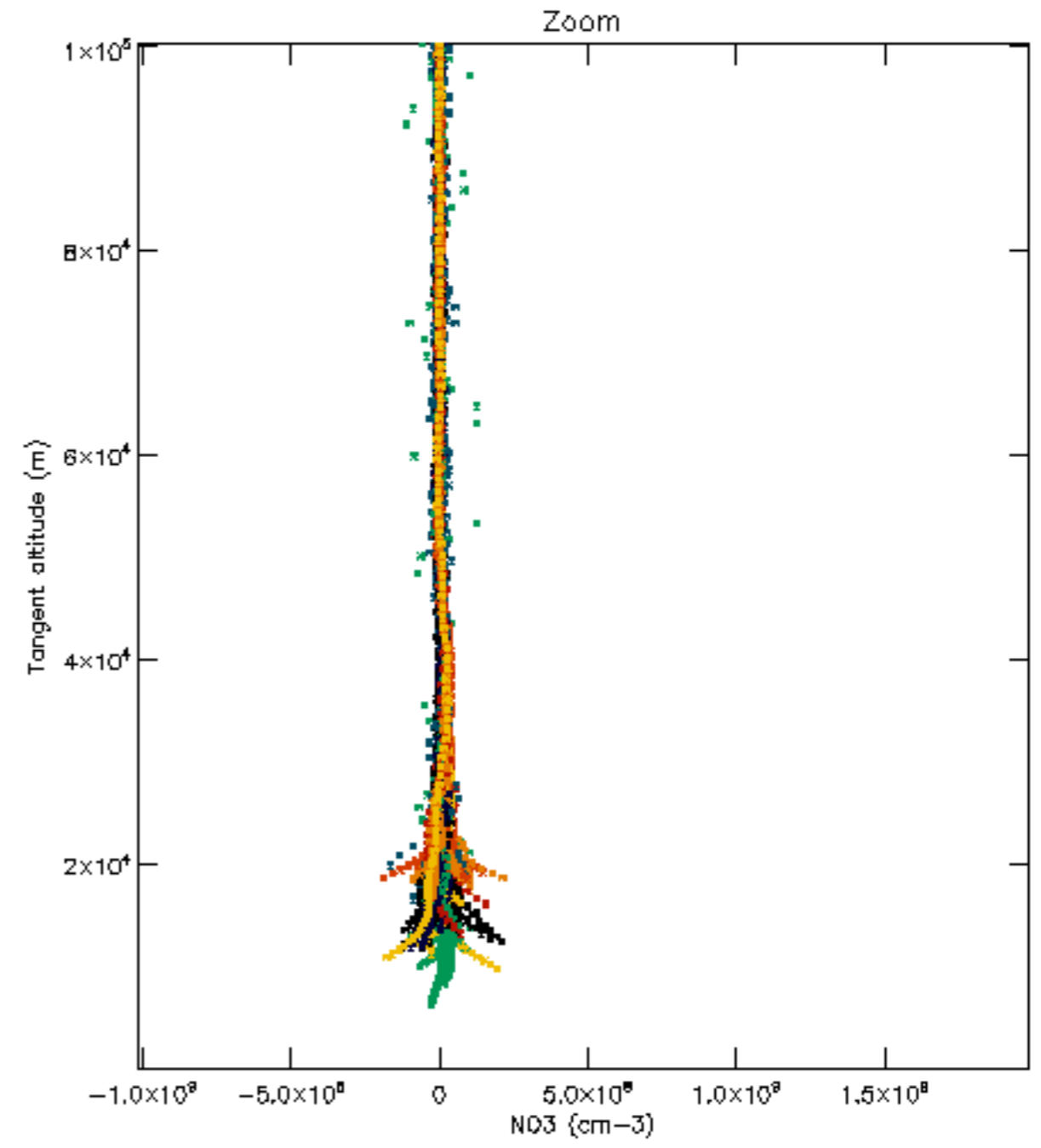
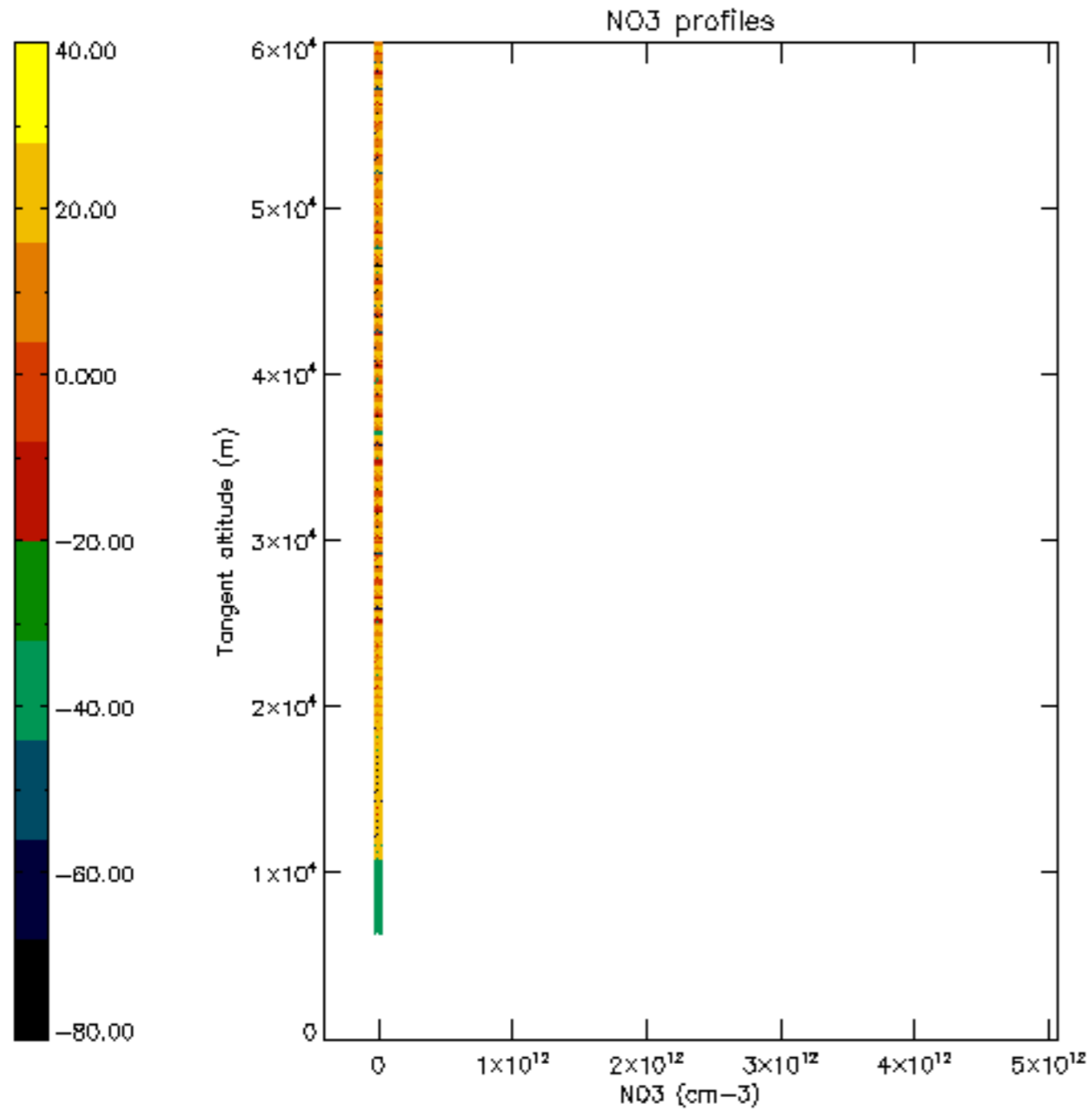


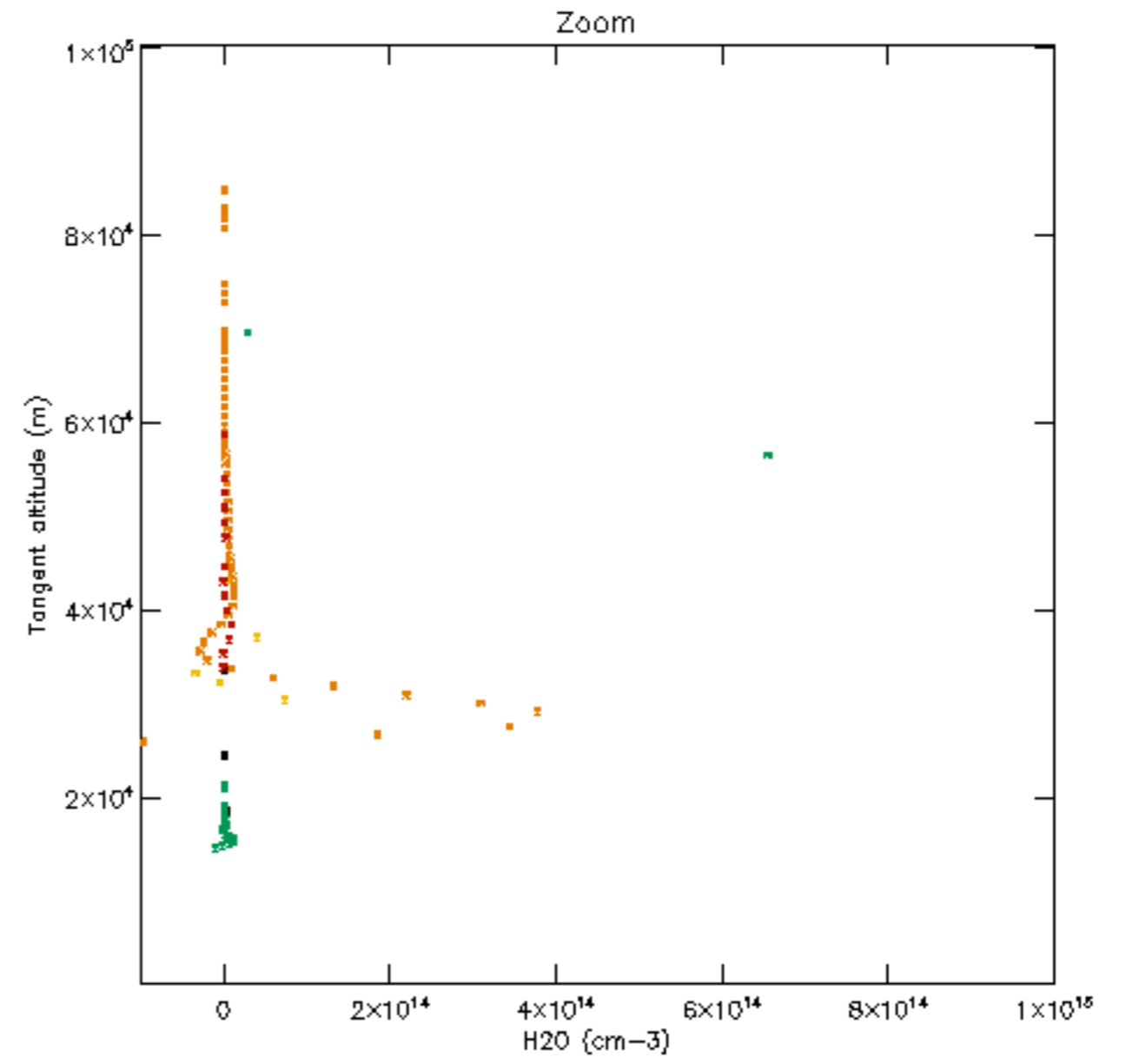
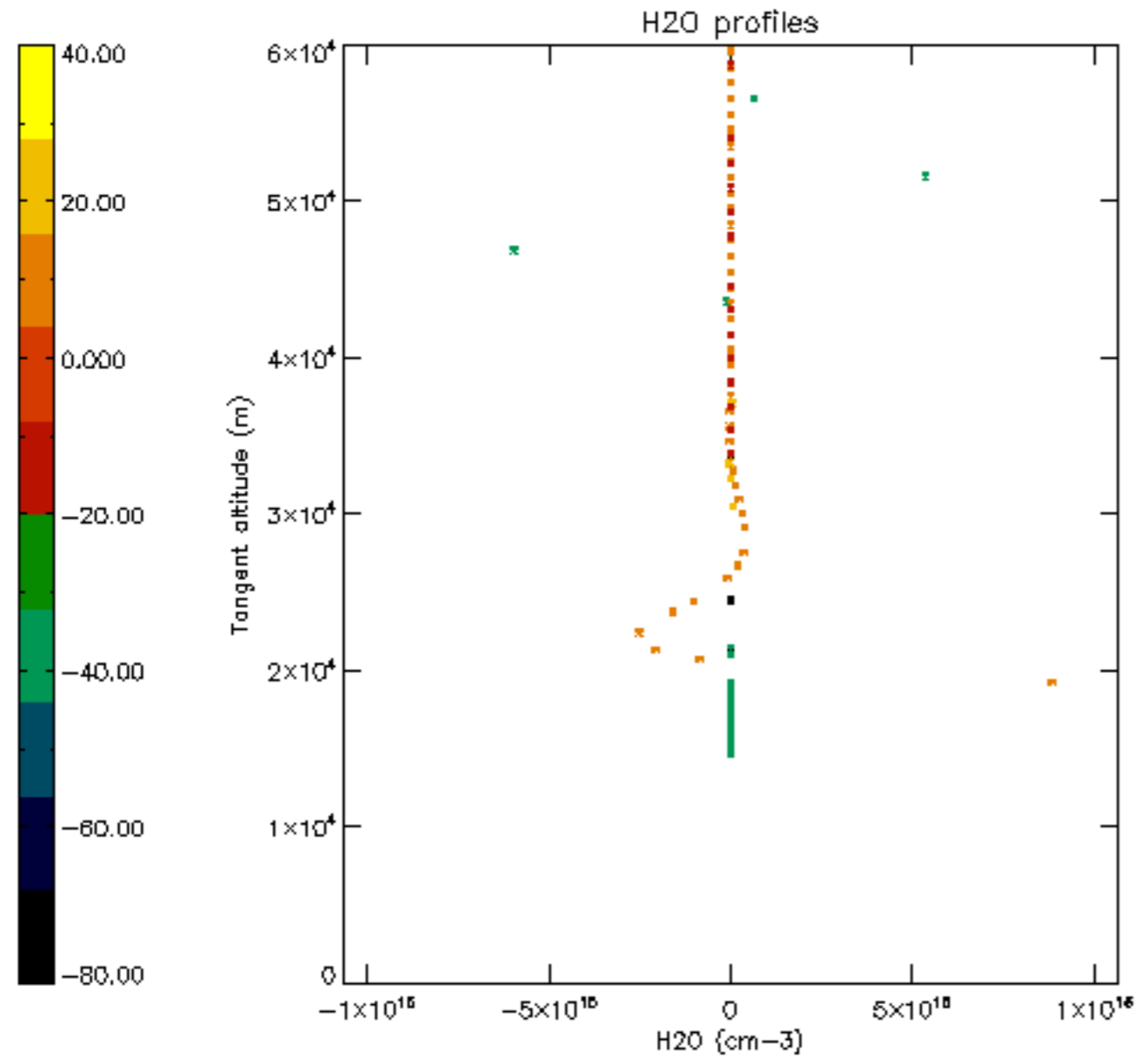


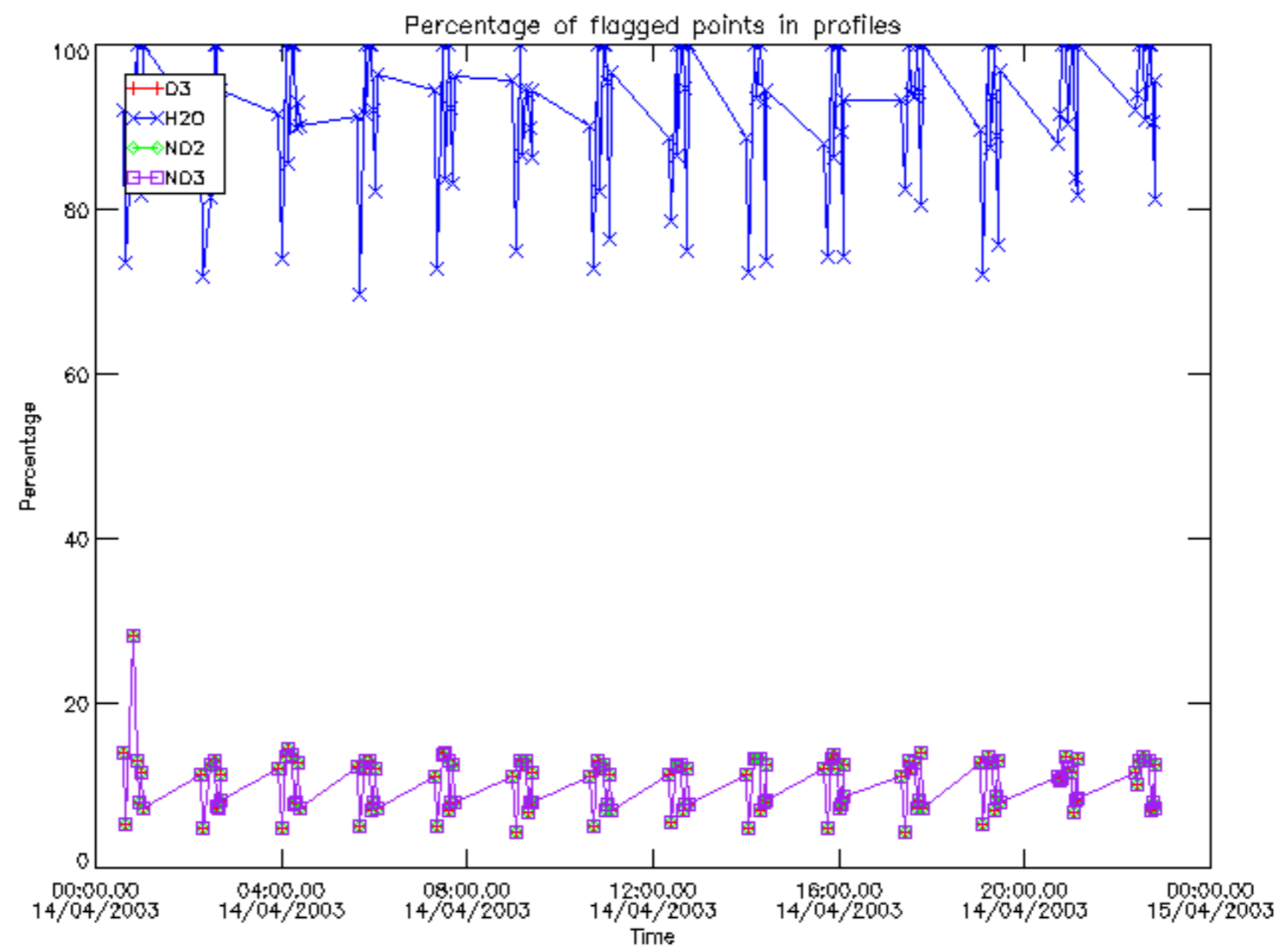




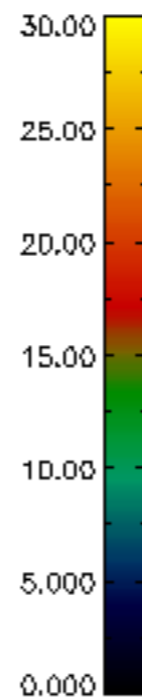
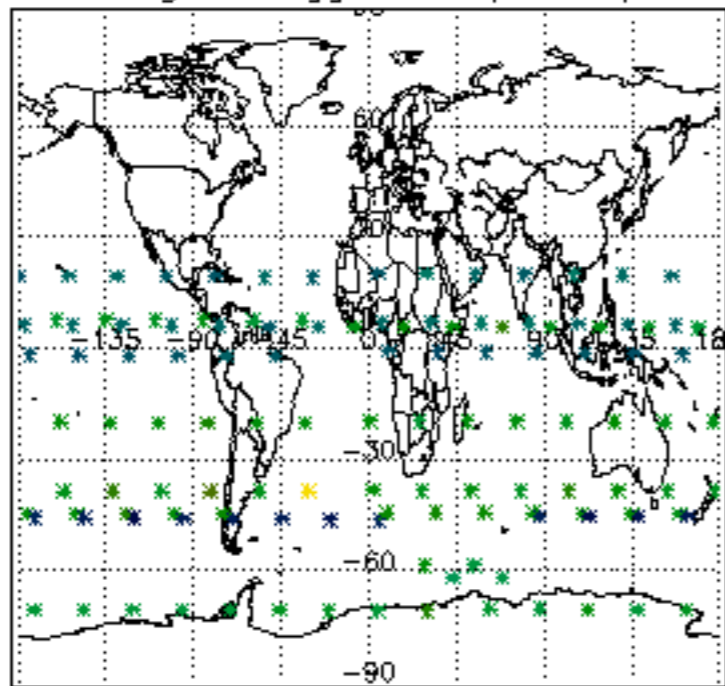




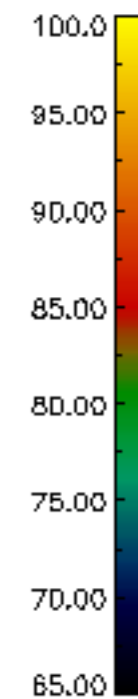
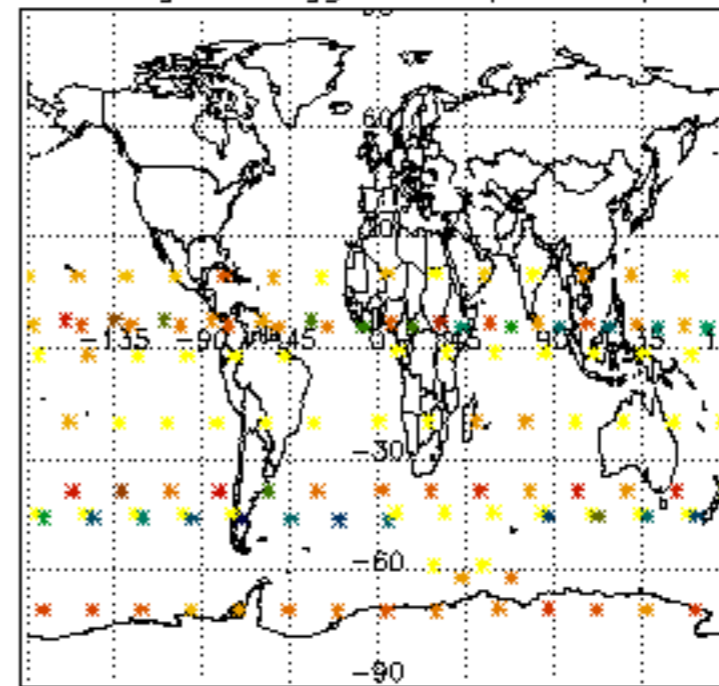




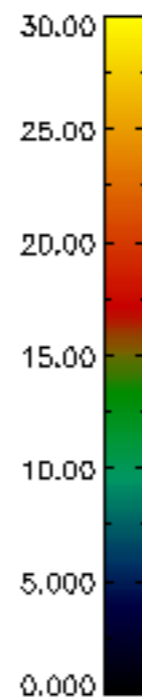
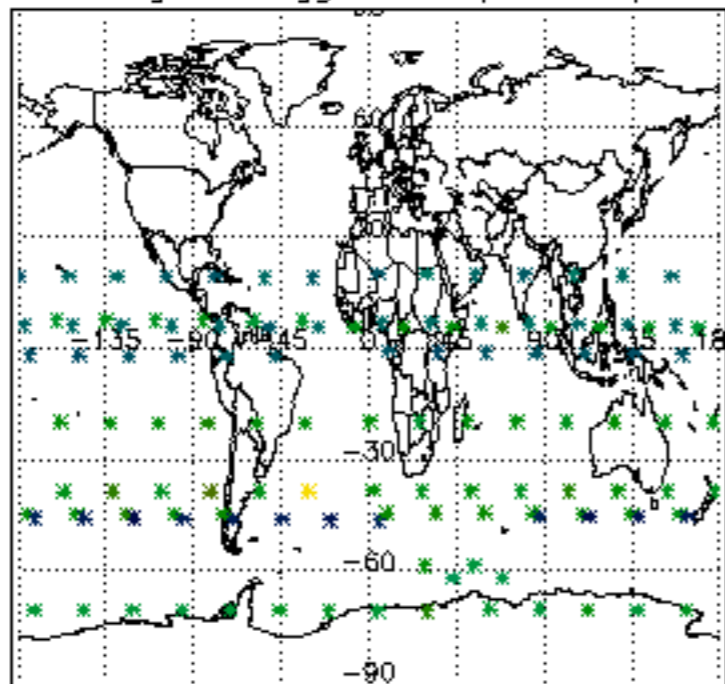
Percentage of flagged data per D3 profile



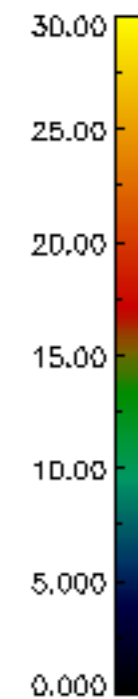
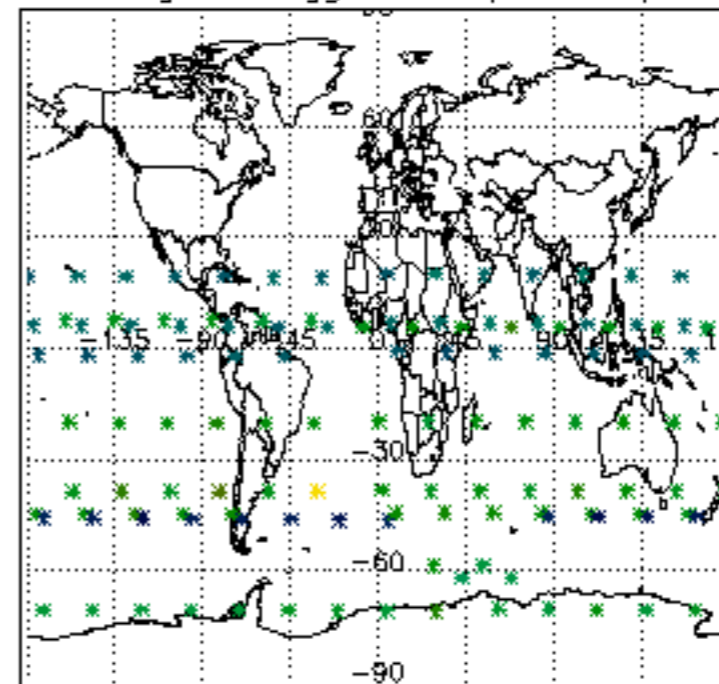
Percentage of flagged data per H2O profile

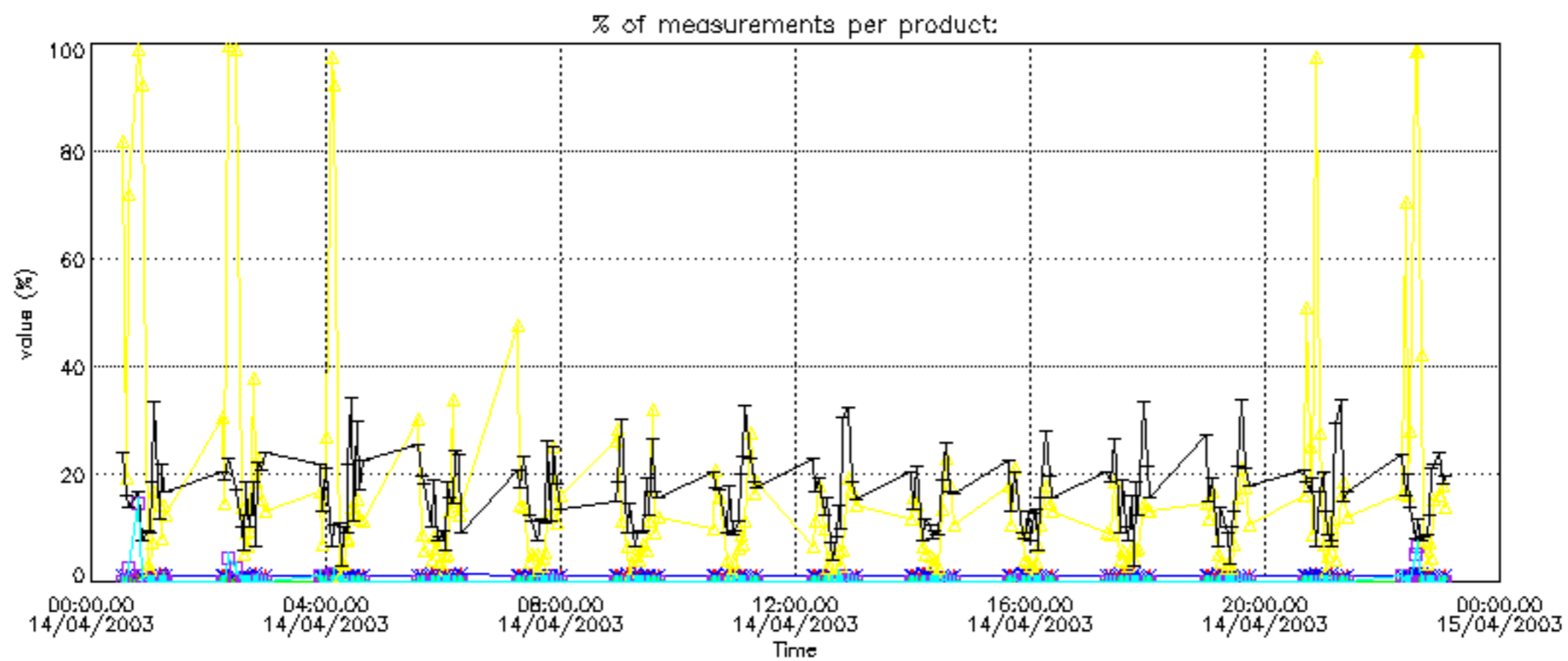


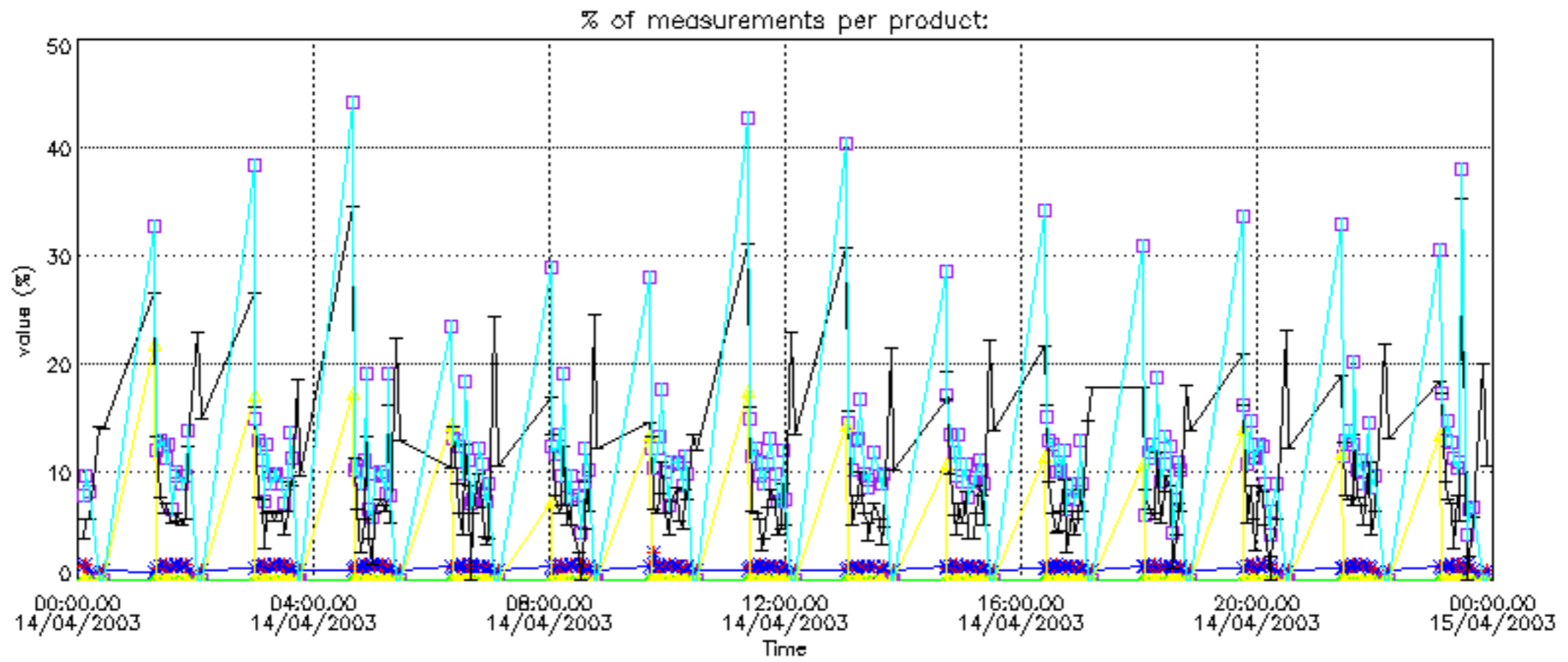
Percentage of flagged data per NO2 profile



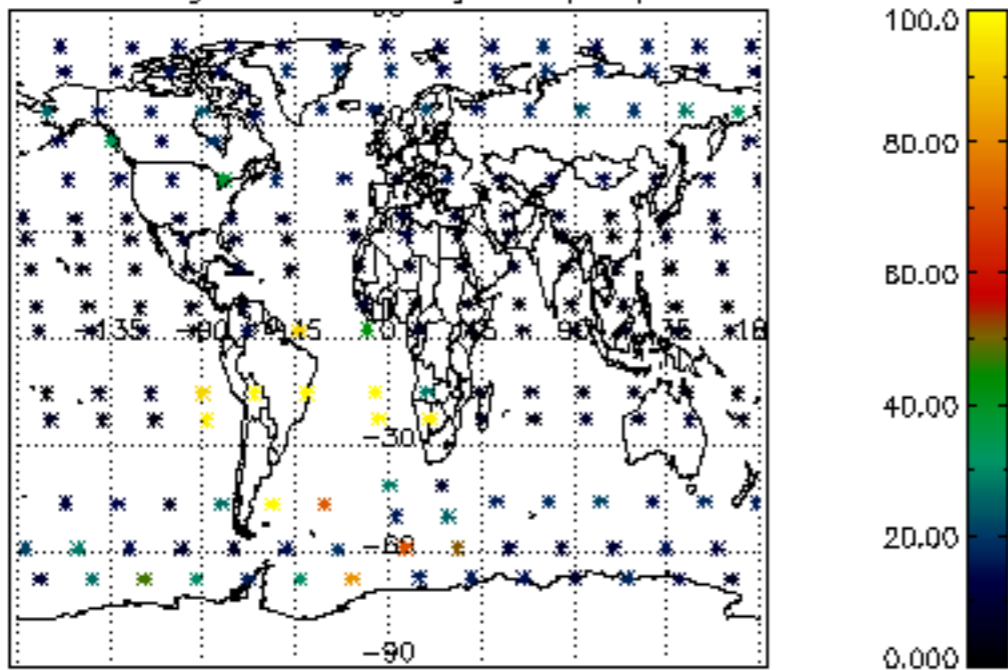
Percentage of flagged data per NO3 profile



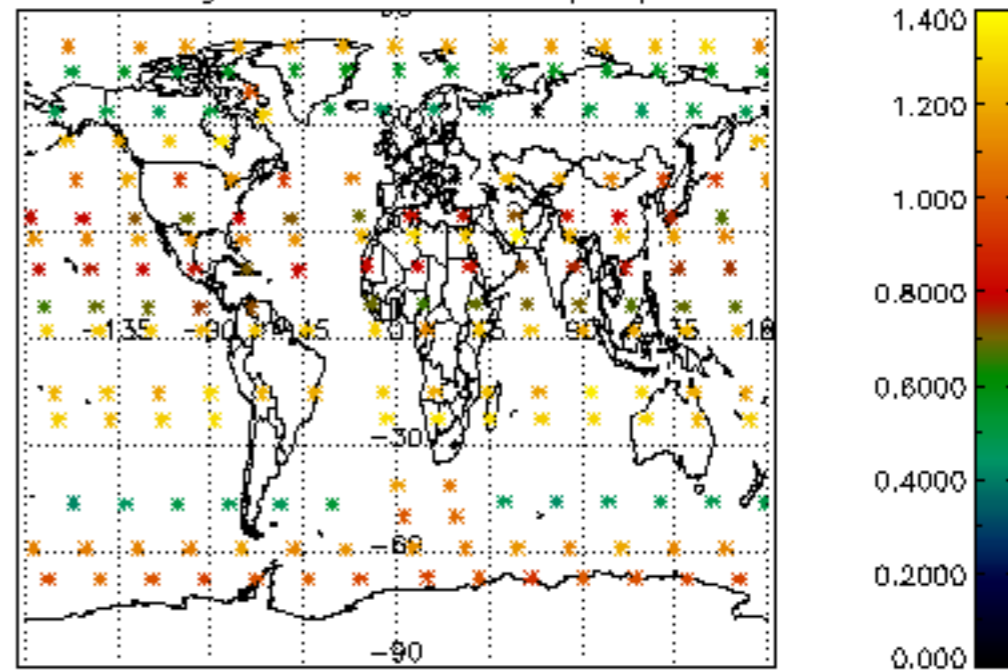




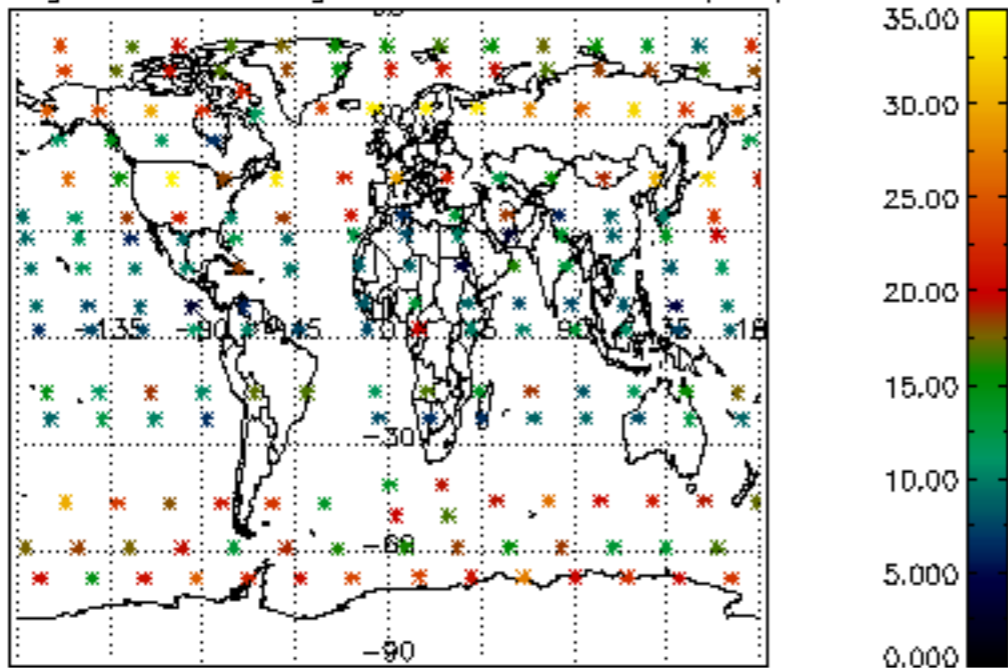
Percentage of cosmic ray hits per profile



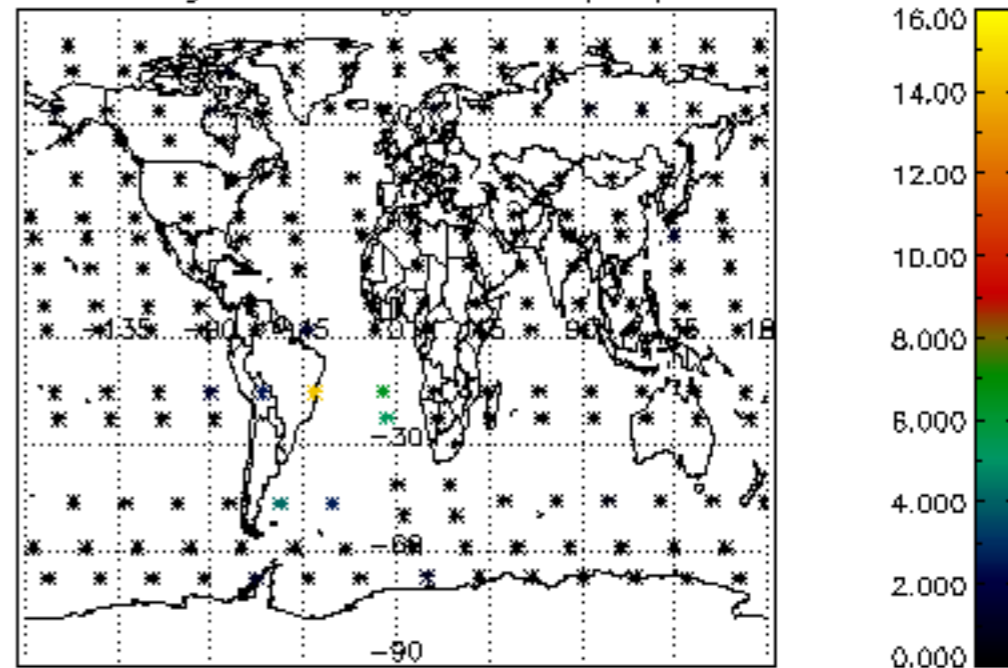
Percentage of datation errors per profile



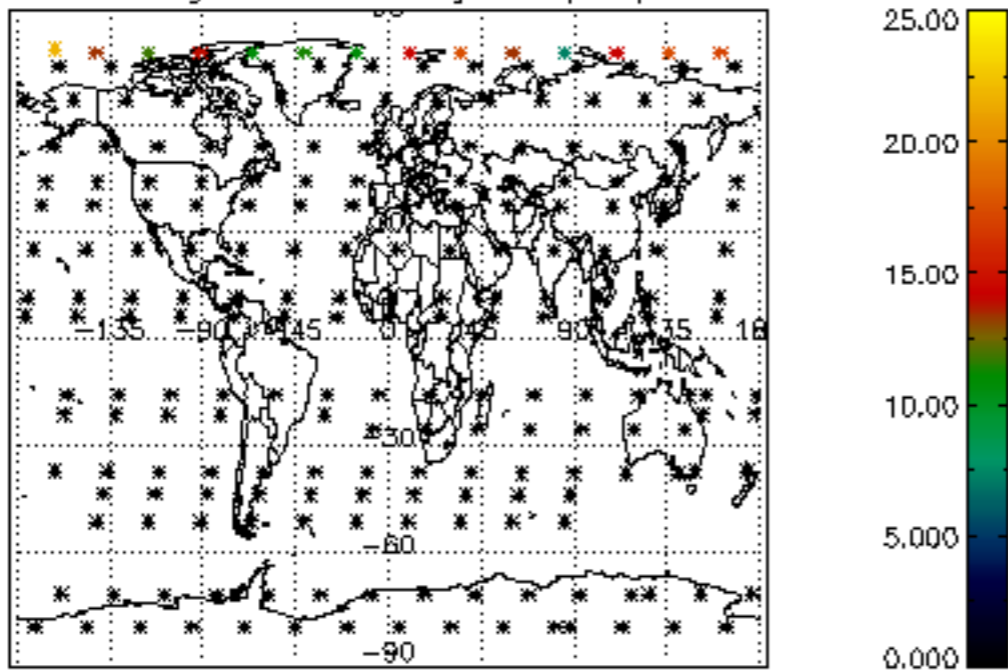
Percentage of star falling outside central band per profile



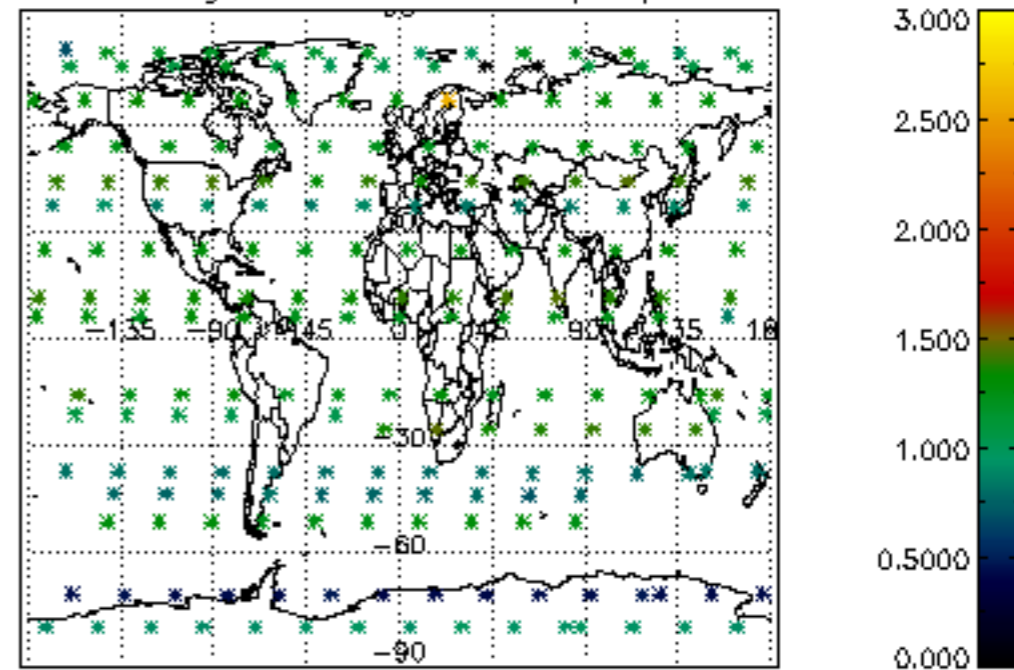
Percentage of saturation errors per profile



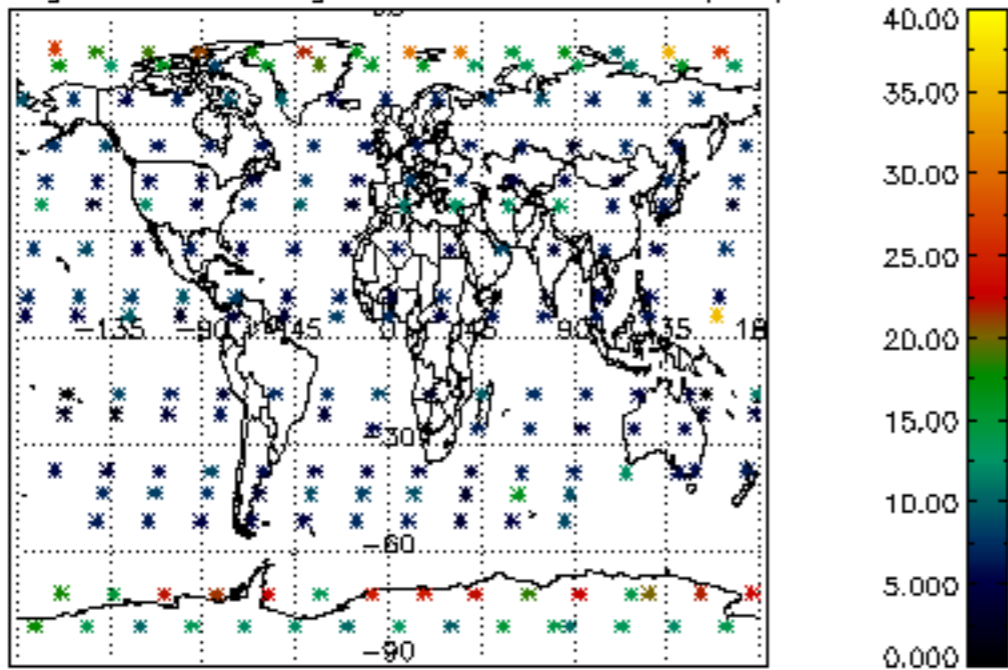
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

